ConocoPhillips
76 Broadway
Sacramento, California 95818

November 12, 2008

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

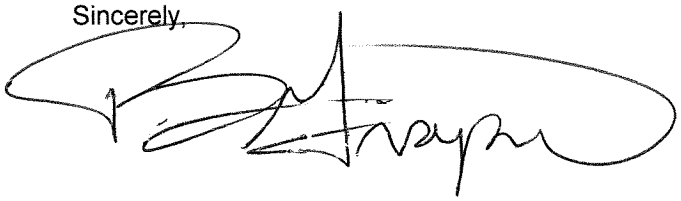
Re: ***Quarterly Summary Report—Third Quarter 2008***
76 Service Station # 1871 RO # 0455
96 MacArthur Blvd
Oakland, CA

Dear Ms. Jakub:

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

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

Sincerely,



Terry L. Grayson
Site Manager
Risk Management & Remediation

November 10, 2008

Ms. Barbara J. Jakubs
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: Quarterly Summary Report – Third Quarter 2008
76 Service Station No. 1871
96 MacArthur Boulevard
Oakland, California

DELTA

Dear Ms. Jakubs,

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) is submitting the subject report and forwarding a copy of TRC's *Quarterly Monitoring Report July through September 2008,* dated October 17, 2008 for the above site. TRC has uploaded a copy of their report to the GeoTracker database.

Please contact me at (626) 256-6662 if you have questions.

Sincerely,

Delta Consultants

PROFESSIONAL GEOLOGIST
JOHN R. REAY
NO. 4716
STATE OF CALIFORNIA

John Reay, P.G.
Senior Project Manager

Enclosure

cc: Mr. Bill Borgh– ConocoPhillips (electronic copy only)

a member of: Inogen Environmental Alliance

11050 White Rock Road Suite 110 Rancho Cordova, California 95670 USA
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QUARTERLY SUMMARY REPORT
Third Quarter 2008

76 Service Station No. 1871
96 MacArthur Boulevard
Oakland, California

County: Alameda

SITE DESCRIPTION

The site is an operating service station located on the north corner of the intersection of MacArthur Boulevard and Harrison Street in Oakland, California. The site is currently a QuikStop market and petroleum dispensing facility. There are four dispenser islands, one station building, and two gasoline underground storage tanks (USTs).

SITE BACKGROUND AND ACTIVITY

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 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).

November 2007 At the request of the ACHCSA, TRC submitted a Site Conceptual Model.

October 2007 Site environmental consulting responsibilities were transferred to Delta Consultants.

SENSITIVE RECEPTORS

No potential receptors for impacted groundwater were identified within one-quarter mile distance of the site during the 1999 RBCA evaluation. No other sensitive receptor surveys have been conducted for the site.

GROUNDWATER MONITORING AND SAMPLING

The groundwater monitoring well network, consisting of one onsite and six offsite monitoring wells, has been monitored and sampled on a quarterly basis since January 2002. During the most recent groundwater sampling event conducted on September 25, 2008, reported depth to groundwater ranged from 7.70 feet (MW-10) to 16.48 feet (MW-9) below top of casing (TOC).

The groundwater flow direction was reported southwest at a gradient of 0.05. This is consistent with a gradient of 0.04 west to south during the previous sampling event (6/12/2008). Reported historical groundwater flow direction has been strongly to the southwest.

Dissolved groundwater concentrations are reported as follows.

TPH-G Detected in four of the seven sampled wells with a maximum concentration of 2200 µg/L (MW-1). This is a decrease from the maximum concentration of 4900 µg/L, reported in the sample from well MW-1 during the previous sampling event.

Benzene Detected in one of the seven sampled wells with a maximum concentration of 2.1 µg/L in the sample from well MW-1. This is a decrease from the maximum concentration of 6.4 µg/L, reported in the sample from well MW-1 during the previous sampling event. Benzene concentrations have been decreasing steadily since the start of the ozone injection system in 2003, from a maximum detected concentration of 7700 µg/L in 1997 to the currently detected concentration of 2.1 µg/L for this sampling event.

MTBE Detected in six of the seven sampled wells with a maximum concentration of 320 µg/L (MW-9). This is a increase from a maximum concentration of 270 µg/L in the sample from well MW-9 during the previous sampling event. MTBE concentrations have shown steady decrease in all wells monitored with exception of MW-9 which has shown no clear trend and MW-10 which has shown low concentrations since 2006.

REMEDIATION STATUS

April 2002 GR installed an ozone sparge 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 209 pounds of ozone have been injected.

CHARACTERIZATION STATUS

Soil samples have shown maximum TPH-G, benzene, and MTBE concentrations of 7,400 mg/kg, 3.1 mg/kg and 1 mg/kg, respectively. During the most recent monitoring and sampling event, the maximum TPH-G and MTBE concentrations were 2200 µg/L (MW-1) and 320 µg/L (MW-9).

As noted, an ozone sparge was activated on April 8, 2002. At that time one monitoring well (MW-1) was onsite; monitoring wells MW-2 through MW-5 had been destroyed. Ozone sparging initially had some definite effect on lowering petroleum hydrocarbon concentrations in groundwater, especially evidenced in the TPH-G concentrations in MW-1. Concentrations of TPH-G have been steady to decreasing in all wells monitored since activation of the ozone sparge system, Attachment A.

Downgradient offsite migration of MTBE is evident based on the historical analytical results of groundwater samples from monitoring wells MW-6, MW-7, and MW-8, located adjacent to the site, and MW-9, located more than 150 feet, and cross groundwater gradient, from the onsite source. With the exception of MW-9, MTBE concentrations are noted to be steadily decreasing in all wells monitored since the activation of the ozone sparge system, Attachment B. Assessment of downgradient migration of MTBE, e.g., rate of migration, has not yet been addressed.

RECENT CORRESPONDENCE

No regulatory correspondence were received or sent during the second quarter 2008.

THIS QUARTER ACTIVITIES (Third Quarter 2008)

- Delta prepared the *Quarterly Status Report, Third Quarter 2008, dated* November 10, 2008.

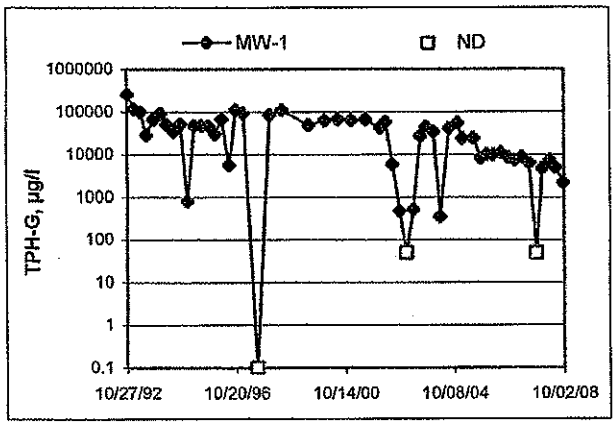
- Monitoring and sampling of the groundwater monitoring well network was conducted by TRC on September 25, 2008.

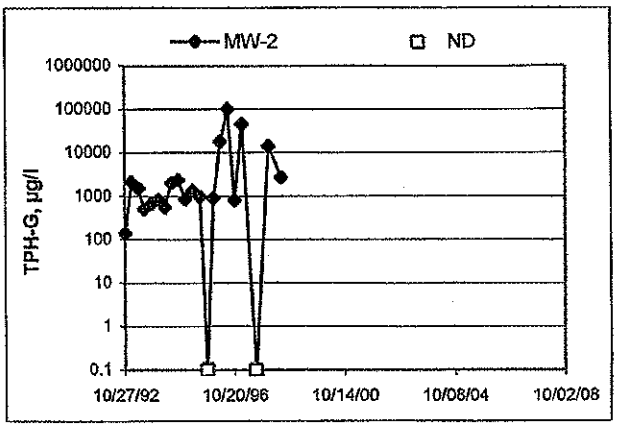
NEXT QUARTER ACTIVITIES (Fourth Quarter 2008)

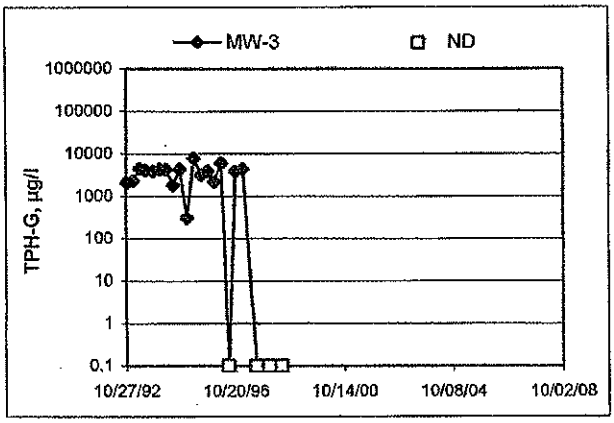
- TRC will perform the fourth quarter 2008 groundwater monitoring and sampling event and will prepare a quarterly monitoring report.

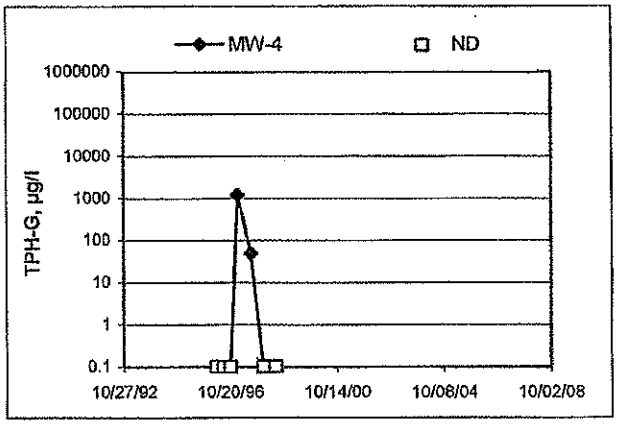
CONSULTANT: Delta Consultants

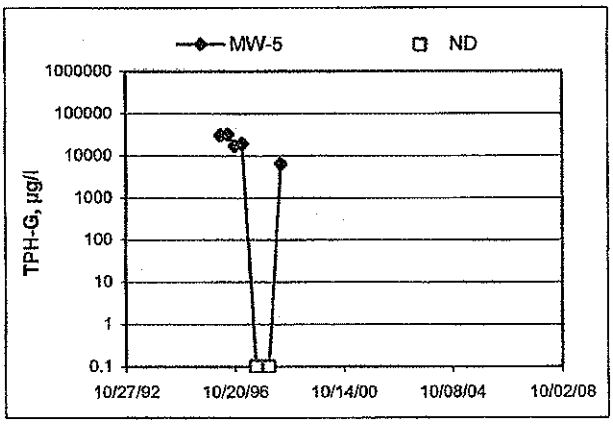
TPH-G Concentrations vs Time
76 Station 1871

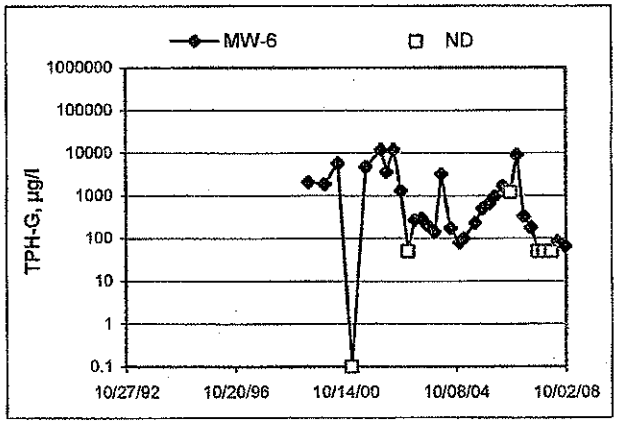


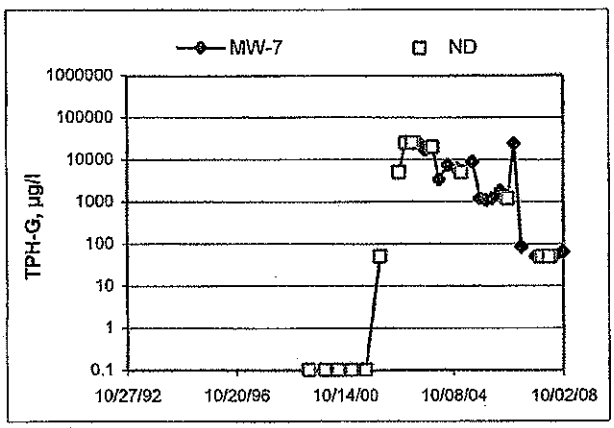


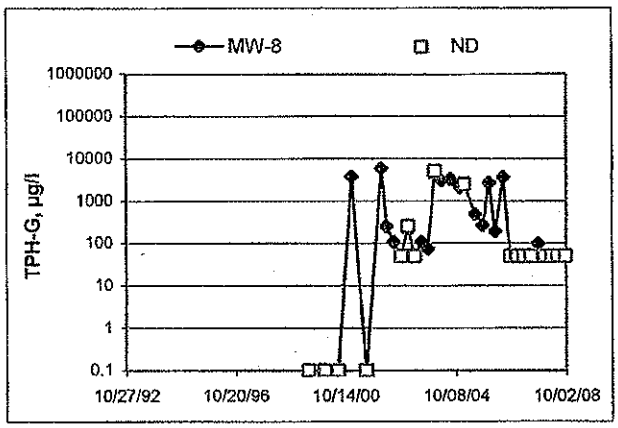




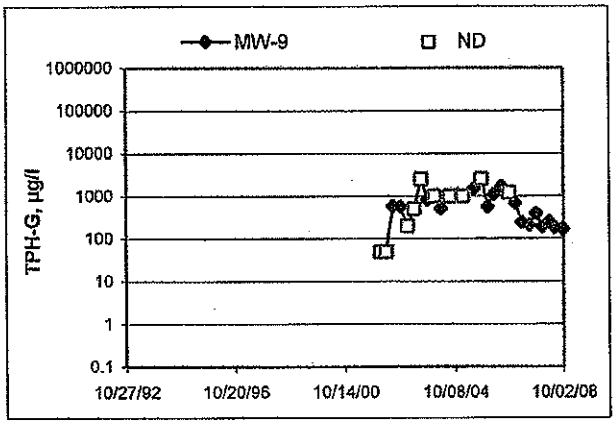


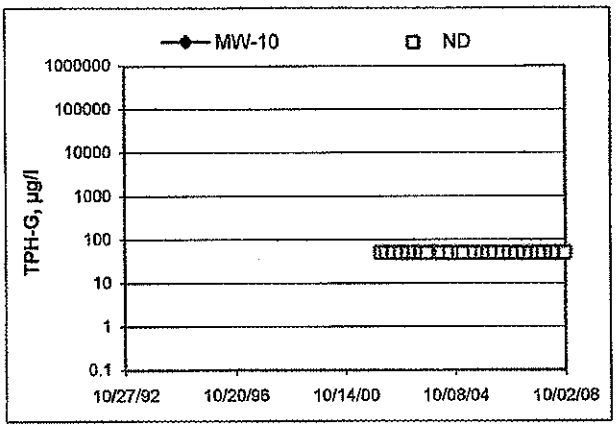


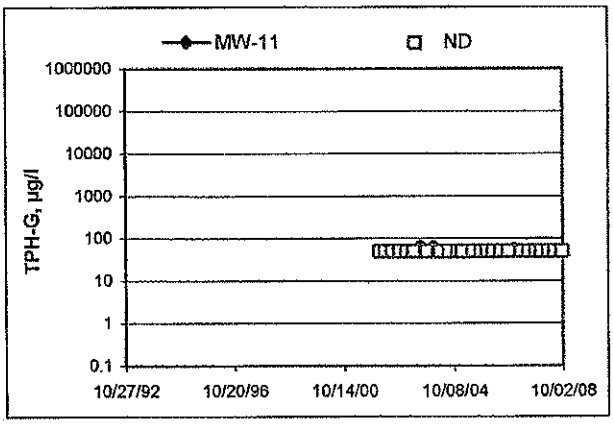




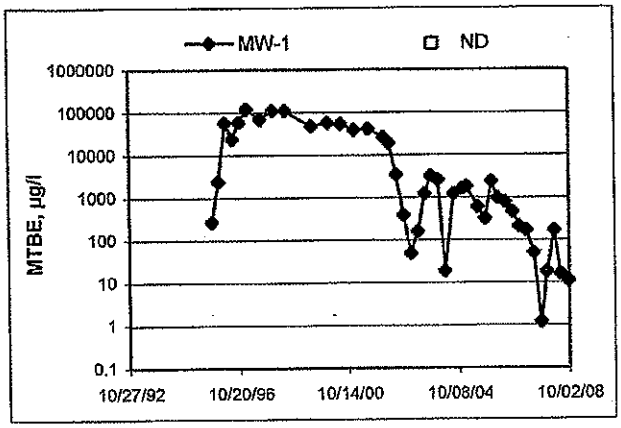
TPH-G Concentrations vs Time
76 Station 1871

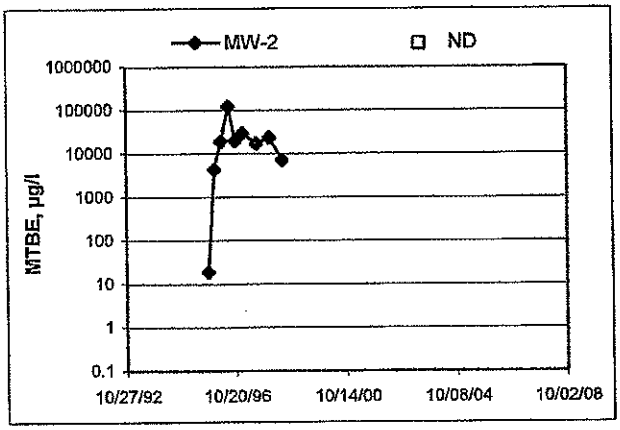


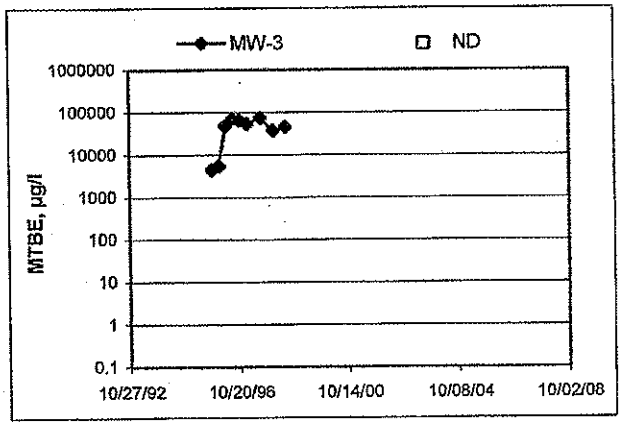


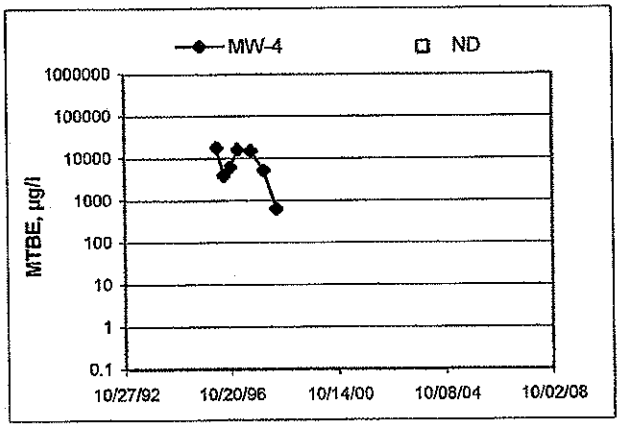


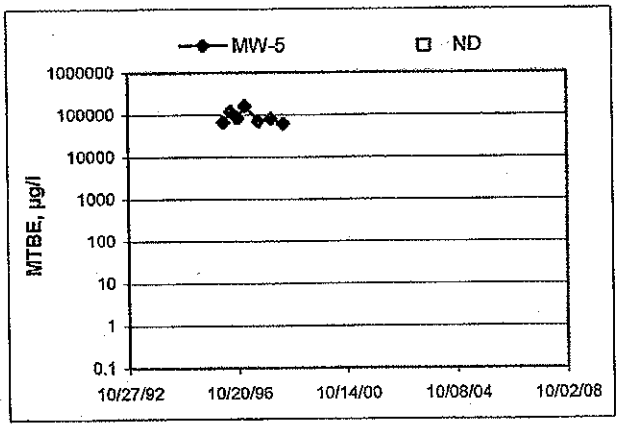
MTBE Concentrations vs Time
76 Station 1871

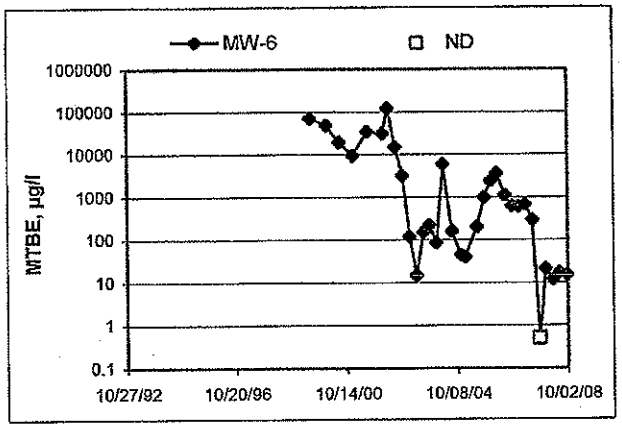


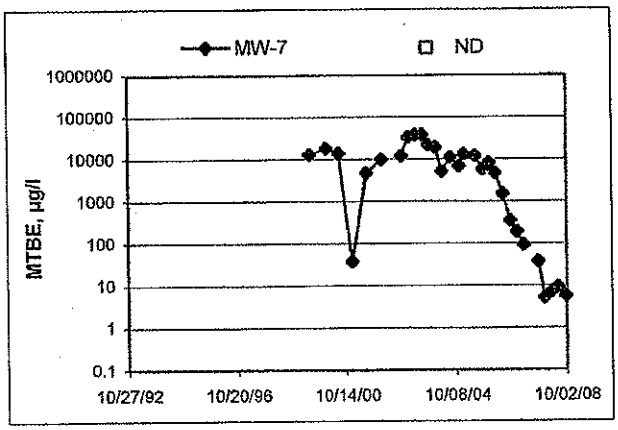


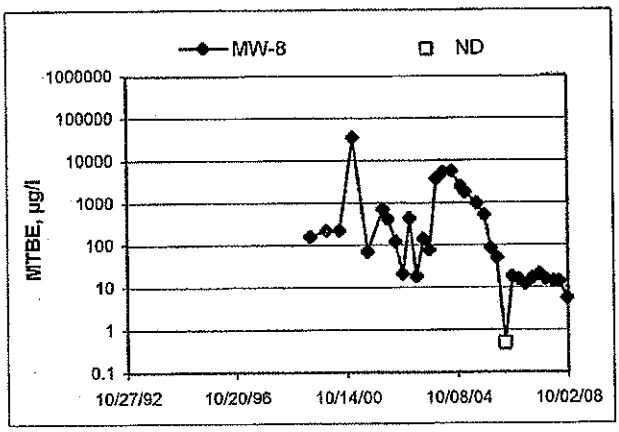




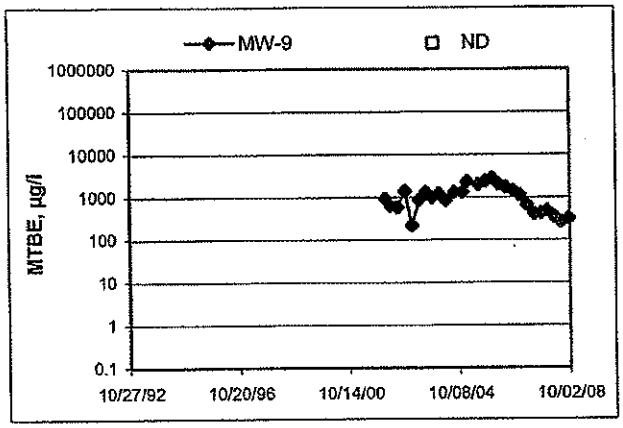


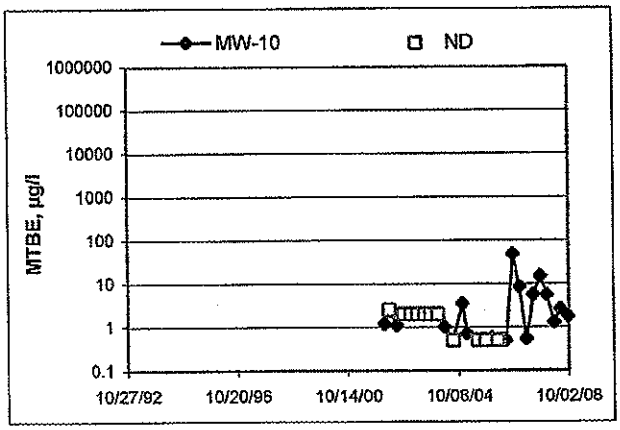


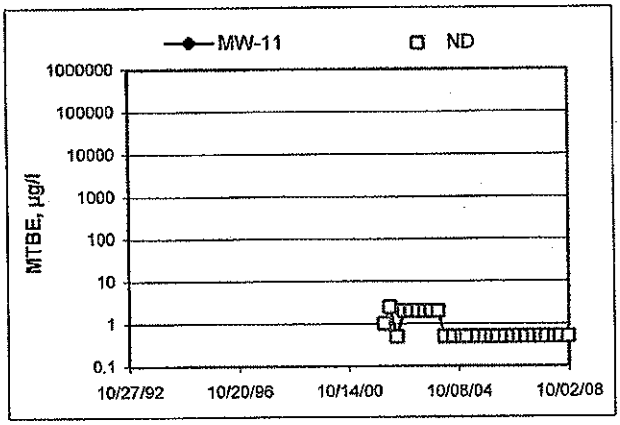




MTBE Concentrations vs Time
76 Station 1871







21 Technology Drive
Irvine, CA 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCsolutions.com

DATE: October 17, 2008

TO: ConocoPhillips Company
76 Broadway
Sacramento, California 95818

ATTN: MR. TERRY GRAYSON

SITE: 76 STATION 1871
96 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 2008

Dear Mr. Grayson:

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

Anju Farfan
Groundwater Program Operations Manager

CC: Ms. Caitlin Morgan, Delta Consultants (3 copies)

Enclosures
20-0400/1871R20.QMS

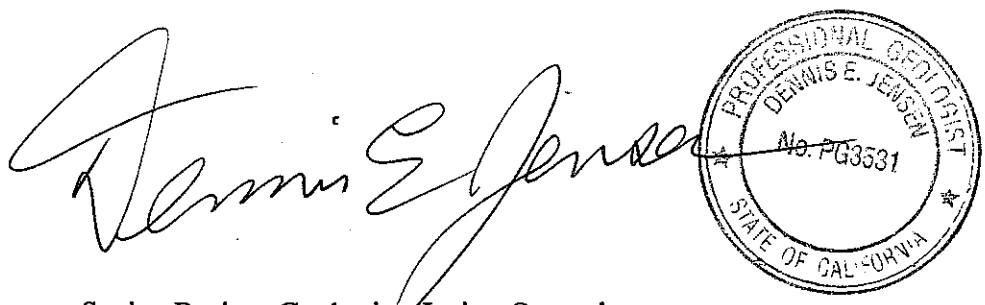
QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 2008

76 STATION 1871
96 MacArthur Boulevard
Oakland, California

Prepared For:

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

By:



Senior Project Geologist, Irvine Operations

Date: 10/16/08

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 Table 2b: 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 – 09/25/08 Groundwater Sampling Field Notes – 09/25/08
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

Summary of Gauging and Sampling Activities
July 2008 through September 2008
76 Station 1871
96 MacArthur Boulevard
Oakland, CA

Project Coordinator: **Terry Grayson**
Telephone: **916-558-7666**
Water Sampling Contractor: ***TRC***
Compiled by: **Christina Carrillo**
Date(s) of Gauging/Sampling Event: **09/25/08**

Sample Points

Groundwater wells: **1** onsite, **6** offsite Points gauged: **7** Points sampled: **7**
Purging method: **Bailer/submersible pump**
Purge water disposal: **Veolia/Rodeo Unit 100**
Other Sample Points: **0** Type: --

Liquid Phase Hydrocarbons (LPH)

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

Hydrogeologic Parameters

Depth to groundwater (below TOC): Minimum: **7.7 feet** Maximum: **16.48 feet**
Average groundwater elevation (relative to available local datum): **68.38 feet**
Average change in groundwater elevation since previous event: **-0.87 feet**
Interpreted groundwater gradient and flow direction:
Current event: **0.05 ft/ft, southwest**
Previous event: **0.04 ft/ft, west to south (06/12/08)**

Selected Laboratory Results

Sample Points with detected **Benzene:** **1** Sample Points above MCL (1.0 µg/l): **1**
Maximum reported benzene concentration: **2.1 µg/l (MW-1)**

Sample Points with **TPH-G by GC/MS** **4** Maximum: **2,200 µg/l (MW-1)**
Sample Points with **MTBE 8260B** **6** Maximum: **320 µg/l (MW-9)**

Notes:

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

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

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

ANALYTES

BTEX	=	benzene, toluene, ethylbenzene, and (total) xylenes
DIPE	=	di-isopropyl ether
ETBE	=	ethyl tertiary butyl ether
MTBE	=	methyl tertiary butyl ether
PCB	=	polychlorinated biphenyls
PCE	=	tetrachloroethene
TBA	=	tertiary butyl alcohol
TCA	=	trichloroethane
TCE	=	trichloroethene
TPH-G	=	total petroleum hydrocarbons with gasoline distinction
TPH-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: Surface Elevation - Measured Depth to Water + (Dp x 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)
Table 1a	Well/ Date	TBA	Ethanol (8260B)	Pre-purge Dissolved Oxygen	Pre-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)
Table 2a	Well/ Date	TPH-D	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	pH (lab)	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP
Table 2b	Well/ Date	Post-purge ORP											

Table 1

CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

September 25, 2008

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
MW-1			**(Screen Interval in feet: 9.5-24.5)**											
09/25/08	86.99	14.55	0.00	72.44	-0.48	--	2200	2.1	ND<0.50	72	110	--	11	
MW-6			**(Screen Interval in feet: 5.0-25.0)**											
09/25/08	79.67	9.95	0.00	69.72	-0.48	--	66	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	15	
MW-7			**(Screen Interval in feet: 5.0-25.0)**											
09/25/08	80.67	9.55	0.00	71.12	-0.63	--	65	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	
MW-8			**(Screen Interval in feet: 5.0-25.0)**											
09/25/08	81.71	10.24	0.00	71.47	-0.71	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	
MW-9			**(Screen Interval in feet:--)**											
09/25/08	82.07	16.48	0.00	65.59	-0.78	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	320	
MW-10			**(Screen Interval in feet:--)**											
09/25/08	74.98	7.70	0.00	67.28	-0.59	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.8	
MW-11			**(Screen Interval in feet:--)**											
09/25/08	77.31	16.30	0.00	61.01	-2.43	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

TRC

Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-1				
09/25/08	740	ND<250	1.16	105
MW-6				
09/25/08	ND<10	ND<250	1.05	118
MW-7				
09/25/08	ND<10	ND<250	1.11	115
MW-8				
09/25/08	ND<10	ND<250	1.33	98
MW-9				
09/25/08	ND<10	ND<250	1.44	26
MW-10				
09/25/08	ND<10	ND<250	52.15	94
MW-11				
09/25/08	ND<10	ND<250	4.28	115

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-1			**(Screen Interval in feet: 9.5-24.5)**											
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	

TRC

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-1 continued														
01/21/00	86.24	15.05	0.00	71.19	-1.12	63700	--	5520	2000	2640	13100	57100	--	
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	

TRC

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-1 continued														
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	
06/29/07	86.99	13.47	0.00	73.52	-0.22	--	6300	16	ND<2.5	300	650	--	50	
09/28/07	86.99	13.92	0.00	73.07	-0.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.2	
12/17/07	86.99	14.57	0.00	72.42	-0.65	--	4700	ND<5.0	ND<5.0	71	160	--	18	
03/25/08	86.99	13.56	0.00	73.43	1.01	--	7400	28	ND<2.5	430	540	--	170	
06/12/08	86.99	14.07	0.00	72.92	-0.51	--	4900	6.4	ND<2.5	170	280	--	16	
09/25/08	86.99	14.55	0.00	72.44	-0.48	--	2200	2.1	ND<0.50	72	110	--	11	
MW-2			**(Screen Interval in feet: --)**											
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	--	

TRC

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-2 continued														
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
MW-3			**(Screen Interval in feet: --)**											
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	--	

TRC

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-3 continued														
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
MW-4			**(Screen Interval in feet: --)**											
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
MW-5			**(Screen Interval in feet: --)**											
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	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-5 continued														
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
MW-6			**(Screen Interval in feet: 5.0-25.0)**											
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	
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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through September 2008
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
MW-6 continued														
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	
09/28/07	79.67	9.65	0.00	70.02	-0.63	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/17/07	79.67	9.62	0.00	70.05	0.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	21	
03/25/08	79.67	8.63	0.00	71.04	0.99	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	12	
06/12/08	79.67	9.47	0.00	70.20	-0.84	--	84	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	17	
09/25/08	79.67	9.95	0.00	69.72	-0.48	--	66	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	15	
MW-7			**(Screen Interval in feet: 5.0-25.0)**											
06/18/99	79.92	8.70	0.00	71.22	--	ND	--	ND	ND	ND	ND	16000	13000	
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	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-7 continued														
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	
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
09/28/07	80.67	9.05	0.00	71.62	--	--	50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	37	
12/19/07	80.67	9.23	0.00	71.44	-0.18	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.2	
03/25/08	80.67	8.45	0.00	72.22	0.78	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	7.3	
06/12/08	80.67	8.92	0.00	71.75	-0.47	--	52	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.4	
09/25/08	80.67	9.55	0.00	71.12	-0.63	--	65	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-8			**(Screen Interval in feet: 5.0-25.0)**											
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	
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	

TRC

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-8 continued														
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	
09/28/07	81.71	9.89	0.00	71.82	-0.79	--	99	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	21	
12/17/07	81.71	9.81	0.00	71.90	0.08	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	16	
03/25/08	81.71	8.40	0.00	73.31	1.41	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	14	
06/12/08	81.71	9.53	0.00	72.18	-1.13	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	14	
09/25/08	81.71	10.24	0.00	71.47	-0.71	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	
MW-9			**(Screen Interval in feet: --)**											
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	

TRC

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through September 2008
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
MW-9 continued														
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	
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	
09/28/07	82.07	15.48	0.00	66.59	-0.59	--	390	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	430	
12/17/07	82.07	15.72	0.00	66.35	-0.24	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	480	
03/25/08	82.07	14.91	0.00	67.16	0.81	--	250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	340	
06/12/08	82.07	15.70	0.00	66.37	-0.79	--	180	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	270	
09/25/08	82.07	16.48	0.00	65.59	-0.78	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	320	
MW-10			**(Screen Interval in feet: --)**											
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	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-10 continued														
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	
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	
09/28/07	74.98	7.24	0.00	67.74	-0.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	15	
12/17/07	74.98	6.92	0.00	68.06	0.32	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	
03/25/08	74.98	6.74	0.00	68.24	0.18	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.3	
06/12/08	74.98	7.11	0.00	67.87	-0.37	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.6	
09/25/08	74.98	7.70	0.00	67.28	-0.59	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.8	
MW-11			**(Screen Interval in feet: --)**											
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	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-11 continued														
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	
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	
09/28/07	77.31	16.02	0.00	61.29	-0.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/17/07	77.31	15.75	0.00	61.56	0.27	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.0	--	ND<0.50	
03/25/08	77.31	15.74	0.00	61.57	0.01	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/12/08	77.31	13.87	0.00	63.44	1.87	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

TRC

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1992 Through September 2008

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
MW-11	**continued**													
09/25/08	77.31	16.30	0.00	61.01	-2.43	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-1												
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
01/07/04	--	--	ND<20000	--	--	--	--	--	--	12.12	12.31	142
04/02/04	--	--	ND<50	--	--	--	--	--	--	11.33	13.42	36
07/29/04	--	--	ND<2000	--	--	--	--	--	--	5.37	5.51	-2
11/24/04	--	--	ND<2000	--	--	--	--	--	6.58	3.08	4.73	-43
01/24/05	--	--	ND<2000	--	--	--	--	--	--	14.3	17.0	100
06/23/05	--	--	ND<50000	--	--	--	--	--	--	--	4.79	-103
09/28/05	--	--	ND<1000	--	--	--	--	--	--	3.45	4.73	-91
12/20/05	--	--	ND<250	--	--	--	--	--	--	4.16	2.76	-210
03/10/06	--	--	ND<2500	--	--	--	--	--	--	1.45	1.64	-511
06/23/06	--	--	ND<2500	--	--	--	--	--	--	--	4.31	-030
09/27/06	--	--	ND<5000	--	--	--	--	--	--	4.50	4.72	-32
12/22/06	--	--	ND<2500	--	--	--	--	--	--	6.80	2.35	-121
03/23/07	--	--	ND<1200	--	--	--	--	--	--	3.22	3.45	-135
06/29/07	--	--	ND<1200	--	--	--	--	--	--	6.64	7.11	-131
09/28/07	--	--	ND<250	--	--	--	--	--	--	--	7.84	-167
12/17/07	--	--	ND<2500	--	--	--	--	--	--	9.74	6.51	-63
03/25/08	--	--	ND<1200	--	--	--	--	--	--	6.70	6.50	-60
06/12/08	--	330	ND<1200	--	--	--	--	--	--	--	4.33	65
09/25/08	--	740	ND<250	--	--	--	--	--	--	--	1.16	105
MW-4												

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-4 continued												
04/18/96	110	--	--	--	--	--	--	--	--	--	--	--
07/24/96	ND	--	--	--	--	--	--	--	--	--	--	--
10/24/96	ND	--	--	--	--	--	--	--	--	--	--	--
01/28/97	210	--	--	--	--	--	--	--	--	--	--	--
07/29/97	ND	--	--	--	--	--	--	--	--	--	--	--
01/14/98	ND	--	--	--	--	--	--	--	--	--	--	--
07/01/98	ND	--	--	--	--	--	--	--	--	--	--	--
MW-6												
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
01/07/04	--	--	ND<1000	--	--	--	--	--	--	12.63	14.29	-12
04/02/04	--	--	ND<2000	--	--	--	--	--	--	12.63	12.72	9
07/29/04	--	--	ND<100	--	--	--	--	--	--	4.74	4.79	-19
11/24/04	--	--	ND<50	--	--	--	--	--	6.99	2.81	5.54	-29
01/24/05	--	--	ND<50	--	--	--	--	--	--	14.5	15.3	72
06/23/05	--	--	ND<1000	--	--	--	--	--	--	1.86	1.73	70
09/28/05	--	--	ND<1000	--	--	--	--	--	--	2.63	2.57	-74
12/20/05	--	--	ND<250	--	--	--	--	--	--	1.52	2.30	-280
03/10/06	--	--	ND<250	--	--	--	--	--	--	5.25	0.80	173
06/23/06	--	--	ND<6200	--	--	--	--	--	--	--	3.39	-105
09/27/06	--	--	ND<6200	--	--	--	--	--	--	2.54	3.01	-109

TRC

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-6 continued												
12/22/06	--	--	ND<5000	--	--	--	--	--	--	1.22	4.03	-46
03/23/07	--	--	ND<250	--	--	--	--	--	--	3.64	3.62	-101
06/29/07	--	--	ND<250	--	--	--	--	--	--	8.49	6.78	171
09/28/07	--	--	ND<250	--	--	--	--	--	--	8.36	8.40	167
12/17/07	--	--	ND<250	--	--	--	--	--	--	10.19	9.38	-23
03/25/08	--	--	ND<250	--	--	--	--	--	--	10.03	10.10	-20
06/12/08	--	ND<10	ND<250	--	--	--	--	--	--	--	0.80	30
09/25/08	--	ND<10	ND<250	--	--	--	--	--	--	--	1.05	118
MW-7												
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	--	--	--	--
07/16/03	--	--	ND<250000	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<100000	--	--	--	--	--	--	24.3	28.2	109
01/07/04	--	--	ND<200000	--	--	--	--	--	--	10.79	10.85	23
04/02/04	--	--	ND<2000	--	--	--	--	--	--	12.41	11.32	24
07/29/04	--	--	ND<5000	--	--	--	--	--	--	4.10	3.96	17
11/24/04	--	--	ND<5000	--	--	--	--	--	6.60	1.99	3.29	-43
01/24/05	--	--	ND<5000	--	--	--	--	--	--	17.2	14.5	71
06/23/05	--	--	ND<50000	--	--	--	--	--	--	2.84	2.18	-37
09/28/05	--	--	ND<1000	--	--	--	--	--	--	3.45	3.63	-81
12/20/05	--	--	ND<250	--	--	--	--	--	--	2.04	2.03	-263
03/10/06	--	--	ND<250	--	--	--	--	--	--	1.28	0.95	164
06/23/06	--	--	ND<6200	--	--	--	--	--	--	--	3.95	-119
09/27/06	--	--	ND<6200	--	--	--	--	--	--	3.16	3.98	-107

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-7 continued												
12/22/06	--	--	ND<25000	--	--	--	--	--	--	2.25	2.03	-86
03/23/07	--	--	ND<250	--	--	--	--	--	--	3.38	3.75	-49
09/28/07	--	--	ND<250	--	--	--	--	--	--	8.16	7.96	30
12/19/07	--	--	ND<250	--	--	--	--	--	--	6.70	6.72	-17
03/25/08	--	--	ND<250	--	--	--	--	--	--	4.77	4.81	-30
06/12/08	--	30	ND<250	--	--	--	--	--	--	--	3.96	55
09/25/08	--	ND<10	ND<250	--	--	--	--	--	--	--	1.11	115
MW-8												
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
01/07/04	--	--	ND<50000	--	--	--	--	--	--	9.94	13.13	-15
04/02/04	--	--	ND<2000	--	--	--	--	--	--	13.37	12.82	-10
07/29/04	--	--	ND<2500	--	--	--	--	--	--	3.68	3.73	18
11/24/04	--	--	ND<1000	--	--	--	--	--	6.67	3.97	2.71	-36
01/24/05	--	--	ND<2500	--	--	--	--	--	--	41.6	41.2	56
06/23/05	--	--	ND<1000	--	--	--	--	--	--	2.05	2.13	58
09/28/05	--	--	ND<1000	--	--	--	--	--	--	2.12	1.98	-40
12/20/05	--	--	ND<250	--	--	--	--	--	--	2.02	3.72	-402
03/10/06	--	--	ND<250	--	--	--	--	--	--	1.51	0.99	-182
06/23/06	--	--	ND<250	--	--	--	--	--	--	--	2.81	-135
09/27/06	--	--	ND<250	--	--	--	--	--	--	4.87	4.91	-155
12/22/06	--	--	ND<250	--	--	--	--	--	--	1.80	2.40	16

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-8 continued												
03/23/07	--	--	ND<250	--	--	--	--	--	--	3.52	3.90	25
06/29/07	--	--	ND<250	--	--	--	--	--	--	5.35	5.29	98
09/28/07	--	--	ND<250	--	--	--	--	--	--	7.18	7.24	16
12/17/07	--	--	ND<250	--	--	--	--	--	--	6.95	5.26	26
03/25/08	--	--	ND<250	--	--	--	--	--	--	5.22	5.15	70
06/12/08	--	ND<10	ND<250	--	--	--	--	--	--	--	9.40	38
09/25/08	--	ND<10	ND<250	--	--	--	--	--	--	--	1.33	98
MW-9												
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
01/07/04	--	--	ND<10000	--	--	--	--	--	--	10.45	12.00	9
04/02/04	--	--	ND<500	--	--	--	--	--	--	16.37	13.21	12
07/29/04	--	--	ND<1000	--	--	--	--	--	--	--	--	--
11/24/04	--	--	ND<500	--	--	--	--	--	6.47	3.24	1.71	-68
01/24/05	--	--	ND<1000	--	--	--	--	--	--	26.0	22.5	-45
06/23/05	--	--	ND<10000	--	--	--	--	--	--	1.50	1.44	-136
09/28/05	--	--	ND<50000	--	--	--	--	--	--	2.51	1.67	-94
12/20/05	--	--	ND<250	--	--	--	--	--	--	5.05	4.67	-102
03/10/06	--	--	ND<2500	--	--	--	--	--	--	2.82	2.13	160
06/23/06	--	--	ND<6200	--	--	--	--	--	--	--	0.84	-65
09/27/06	--	--	ND<6200	--	--	--	--	--	--	0.68	0.75	-61
12/22/06	--	--	ND<250	--	--	--	--	--	--	9.00	4.89	-44
03/23/07	--	--	ND<250	--	--	--	--	--	--	6.85	5.33	-114

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-9 continued												
06/29/07	--	--	ND<250	--	--	--	--	--	--	6.87	6.25	23
09/28/07	--	--	ND<1200	--	--	--	--	--	--	7.17	7.04	30
12/17/07	--	--	ND<250	--	--	--	--	--	--	5.05	4.81	-27
03/25/08	--	--	ND<1200	--	--	--	--	--	--	6.55	6.67	-10
06/12/08	--	250	ND<250	--	--	--	--	--	--	--	2.55	86
09/25/08	--	ND<10	ND<250	--	--	--	--	--	--	--	1.44	26
MW-10												
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
01/07/04	--	--	ND<500	--	--	--	--	--	--	10.04	11.62	35
04/02/04	--	--	ND<50	--	--	--	--	--	--	11.91	12.02	42
07/29/04	--	--	ND<50	--	--	--	--	--	--	4.81	4.83	83
11/24/04	--	--	ND<50	--	--	--	--	--	6.89	2.59	3.07	-39
01/24/05	--	--	ND<50	--	--	--	--	--	--	27.5	25.5	87
06/23/05	--	--	ND<1000	--	--	--	--	--	--	7.83	176	40
09/28/05	--	--	ND<1000	--	--	--	--	--	--	6.95	2.37	-66
12/20/05	--	--	ND<250	--	--	--	--	--	--	3.85	3.45	59
03/10/06	--	--	ND<250	--	--	--	--	--	--	2.52	4.48	87
06/23/06	--	--	ND<250	--	--	--	--	--	--	--	1.49	-68
09/27/06	--	--	ND<250	--	--	--	--	--	--	1.79	1.55	-85
12/22/06	--	--	ND<250	--	--	--	--	--	--	3.20	3.00	107
03/23/07	--	--	ND<250	--	--	--	--	--	--	5.09	5.01	-60
06/29/07	--	--	ND<250	--	--	--	--	--	--	9.12	6.27	165

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-10 continued												
09/28/07	--	--	ND<250	--	--	--	--	--	--	8.34	8.21	124
12/17/07	--	--	ND<250	--	--	--	--	--	--	4.97	4.46	-15
03/25/08	--	--	ND<250	--	--	--	--	--	--	4.35	4.40	-10
06/12/08	--	ND<10	ND<250	--	--	--	--	--	--	--	1.42	75
09/25/08	--	ND<10	ND<250	--	--	--	--	--	--	--	52.15	94
MW-11												
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
01/07/04	--	--	ND<500	--	--	--	--	--	--	11.69	13.82	99
04/02/04	--	--	ND<50	--	--	--	--	--	--	11.94	14.08	-1
07/29/04	--	--	ND<50	--	--	--	--	--	--	--	--	--
11/24/04	--	--	ND<50	--	--	--	--	--	6.75	3.85	4.32	82
01/24/05	--	--	ND<50	--	--	--	--	--	--	30.01	32.6	79
06/23/05	--	--	ND<1000	--	--	--	--	--	--	2.17	2.16	76
09/28/05	--	--	ND<1000	--	--	--	--	--	--	4.97	4.59	-4
12/20/05	--	--	ND<250	--	--	--	--	--	--	5.16	4.77	35
03/10/06	--	--	ND<250	--	--	--	--	--	--	5.11	9.99	68
06/23/06	--	--	ND<250	--	--	--	--	--	--	--	7.74	-26
09/27/06	--	--	ND<250	--	--	--	--	--	--	5.72	5.98	32
12/22/06	--	--	ND<250	--	--	--	--	--	--	3.81	4.35	46
03/23/07	--	--	ND<250	--	--	--	--	--	--	5.47	5.85	38
06/29/07	--	--	ND<250	--	--	--	--	--	--	7.87	7.80	242
09/28/07	--	--	ND<250	--	--	--	--	--	--	7.24	7.30	280

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 (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-11 continued												
12/17/07	--	--	ND<250	--	--	--	--	--	--	8.71	8.01	47
03/25/08	--	--	ND<250	--	--	--	--	--	--	8.41	8.40	45
06/12/08	--	ND<10	ND<250	--	--	--	--	--	--	--	3.33	160
09/25/08	--	ND<10	ND<250	--	--	--	--	--	--	--	4.28	115

Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	Post-purge ORP (mV)
MW-1	
10/02/03	21.0
01/07/04	24
04/02/04	34
07/29/04	-4
11/24/04	-39
01/24/05	96
09/28/05	-94
12/20/05	-328
03/10/06	-615
09/27/06	-25
12/22/06	-72
03/23/07	-141
06/29/07	-65
12/17/07	-46
03/25/08	-64
MW-6	
10/02/03	175
01/07/04	24
04/02/04	23
07/29/04	-8
11/24/04	-12
01/24/05	70
06/23/05	71
09/28/05	-80
12/20/05	-217

Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	Post-purge ORP (mV)
MW-6 continued	
03/10/06	224
09/27/06	-104
12/22/06	-67
03/23/07	-92
06/29/07	84
09/28/07	154
12/17/07	-14
03/25/08	-18
MW-7	
10/02/03	153
01/07/04	5
04/02/04	10
07/29/04	18
11/24/04	-24
01/24/05	48
06/23/05	-32
09/28/05	-85
12/20/05	-256
03/10/06	-179
09/27/06	-95
12/22/06	-101
03/23/07	-47
09/28/07	26
12/19/07	-13
03/25/08	-34

Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	Post-purge ORP (mV)
MW-8	
10/02/03	197
01/07/04	21
04/02/04	16
07/29/04	30
11/24/04	-20
01/24/05	60
06/23/05	56
09/28/05	-26
12/20/05	-326
03/10/06	-181
09/27/06	-139
12/22/06	12
03/23/07	22
06/29/07	92
09/28/07	22
12/17/07	24
03/25/08	77
MW-9	
10/02/03	203
01/07/04	27
04/02/04	32
11/24/04	-67
01/24/05	-45
06/23/05	-144
09/28/05	-119

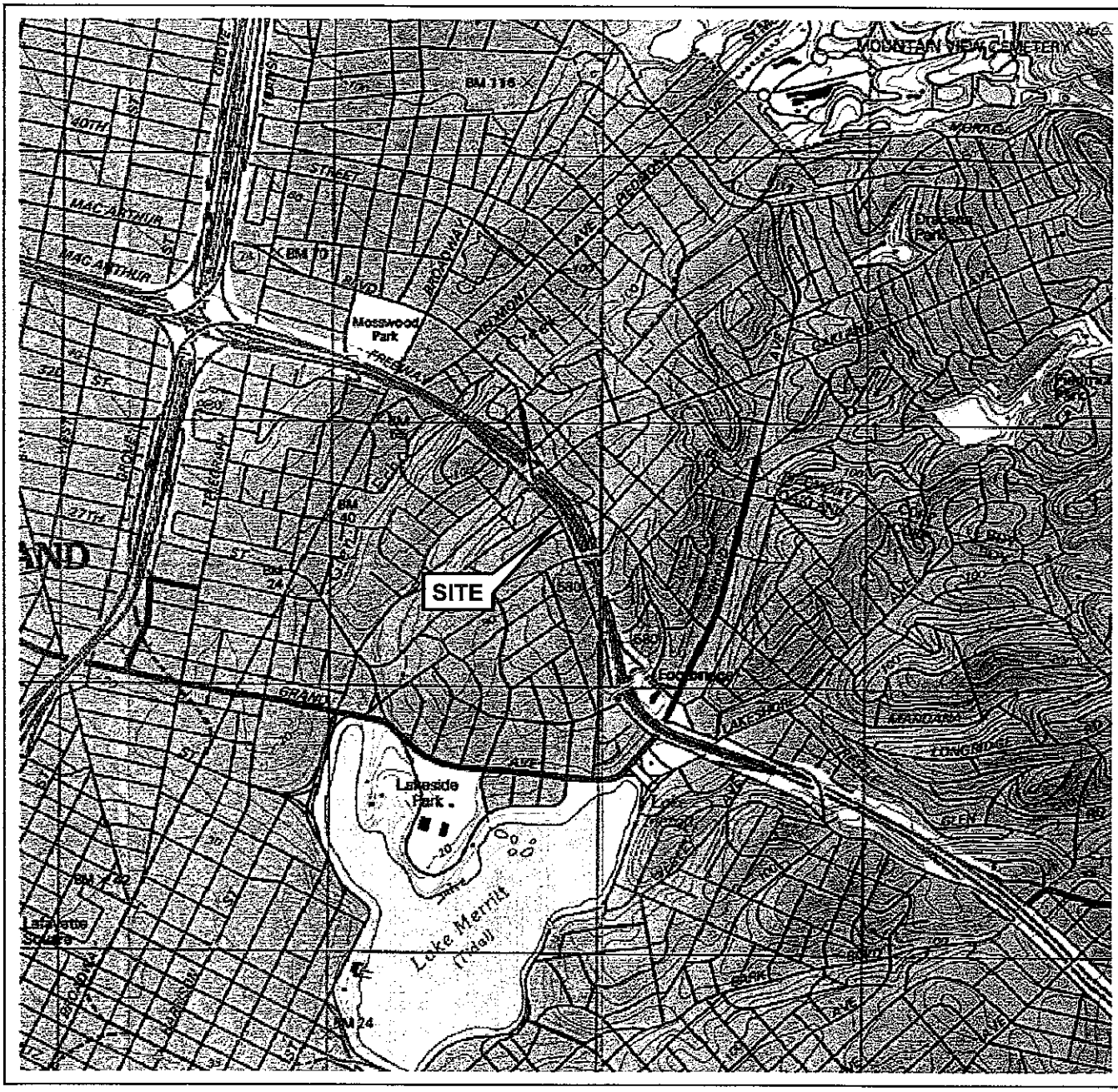
Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	Post-purge ORP (mV)
MW-9 continued	
12/20/05	-42
03/10/06	161
09/27/06	-43
12/22/06	-70
03/23/07	-82
06/29/07	22
09/28/07	30
12/17/07	-35
03/25/08	-14
MW-10	
10/02/03	213
01/07/04	59
04/02/04	45
07/29/04	102
11/24/04	-29
01/24/05	84
06/23/05	44
09/28/05	-64
12/20/05	58
03/10/06	83
09/27/06	-65
12/22/06	85
06/29/07	172
09/28/07	126
12/17/07	-2

Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	Post-purge ORP (mV)
MW-10 continued	
03/25/08	-12
MW-11	
10/02/03	255
01/07/04	103
04/02/04	108
11/24/04	143
01/24/05	83
06/23/05	82
09/28/05	-1
12/20/05	070
03/10/06	97
09/27/06	40
12/22/06	44
03/23/07	34
06/29/07	223
09/28/07	244
12/17/07	46
03/25/08	44

FIGURES



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

SCALE 1: 24,000

N

SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Oakland Quadrangle

TRC

PROJECT: 154771

FACILITY:

76 STATION 1871
96 MacARTHUR BOULEVARD
OAKLAND, CALIFORNIA

VICINITY MAP

FIGURE 1

PS=1:1 L:\QMS VICINITY MAPS\1871vm.dwg Oct 14, 2008 - 2:33pm bschmidt

LEGEND

MW-11 ⊕ Monitoring Well with Groundwater Elevation (feet)

SP-H ⊕ Ozone Sparge Well

72.00 —— Groundwater Elevation Contour

General Direction of Groundwater Flow

INTERSTATE HIGHWAY 580

WESTBOUND ON-RAMP TO I-580

SIDEWALK

SANTA CLARA AVENUE

MW-9
65.59

MACARTHUR BLVD. OVERCROSSING EASTBOUND ON-RAMP

PLANTER

MACARTHUR BOULEVARD

SIDEWALK

DRIVEWAY

QUICK STOP MARKET BUILDING

FORMER WASTE OIL TANK

FORMER PROPERTY BOUNDARY

MW-8
71.47

SP-H

DRIVEWAY

FORMER STATION BUILDING

UST

UST

96 MACARTHUR BLVD. (FORMERLY 66 MACARTHUR)

MW-7
71.12

SP-G

SP-DS

FORMER DISPENSER ISLAND

SP-F

DRIVEWAY

CANOPY

DISPENSER ISLANDS

SP-A

MW-6
69.72

SP-E

SP-DS
SP-DD

SP-C

SP-BS
SP-BD

MW-1
72.44

FORMER UNDERGROUND STORAGE TANKS

FORMER DISPENSER ISLAND

DRIVEWAY

SIDEWALK

72.00

HARRISON STREET

67.00

SIDEWALK

MACARTHUR BOULEVARD

62.00

CONCRETE ISLAND

CONC. DRAINAGE DITCH

SIDEWALK

MW-10
67.28

CONC. BRIDGE COLUMNS (TYP.)

OVERHEAD FREEWAY STRUCTURE

OVERHEAD RAMP

WESTBOUND ON-RAMP TO I-580

MW-11
61.01

CONC. BRIDGE COLUMNS (TYP.)

DIRT & LANDSCAPING

WESTBOUND ON-RAMP TO I-580

LANDSCAPING

N

SCALE (FEET)

0 40

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.

PROJECT:	154771
FACILITY:	76 STATION 1871 96 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA
GROUNDWATER ELEVATION CONTOUR MAP September 25, 2008	
TRC	**FIGURE 2**

MS=1:40 1871-003 L:\Graphics\QMS NORTH-SOUTH\x-1000\1871+\1871-QMS.DWG Oct 16, 2008 - 9:25am 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)

INTERSTATE HIGHWAY 580

WESTBOUND ON-RAMP TO I-580

SIDEWALK

SANTA CLARA AVENUE

MACARTHUR BLVD. OVERCROSSING EASTBOUND ON-RAMP

PLANTER

MACARTHUR BOULEVARD

DRIVEWAY

SIDEWALK

QUICK STOP MARKET BUILDING

FORMER WASTE OIL TANK

MW-9 170

100

MW-8 ND<50

SP-H

FORMER PROPERTY BOUNDARY

FORMER STATION BUILDING

UST

UST

SP-G

MW-7 65

96 MACARTHUR BLVD. (FORMERLY 66 MACARTHUR)

OVERHEAD RAMP

CONCRETE ISLAND

SP-DS

FORMER DISPENSER ISLAND

SP-F

DRIVEWAY

CANOPY

DISPENSER ISLANDS

SP-A

100

1,000

SP-BS

SP-BD

FORMER UNDERGROUND STORAGE TANKS

MW-6 66

SP-DS

SP-DD

SP-E

SP-C

MW-1 2200

?

FORMER DISPENSER ISLAND

DRIVEWAY

SIDEWALK

?

HARRISON STREET

CONC. DRAINAGE DITCH

SIDEWALK

MW-10 ND<50

CONC. BRIDGE COLUMNS (TYP.)

OVERHEAD FREEWAY STRUCTURE

WESTBOUND ON-RAMP TO I-580

MW-11 ND<50

CONC. BRIDGE COLUMNS (TYP.)

DIRT & LANDSCAPING

WESTBOUND ON-RAMP TO I-580

LANDSCAPING

MACARTHUR BOULEVARD

SIDEWALK

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.

SCALE (FEET)

0 40

PROJECT:	154771
FACILITY:	76 STATION 1871 96 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA
DISSOLVED-PHASE TPH-G (GC/MS) CONCENTRATION MAP September 25, 2008	
TRC	**FIGURE 3**

MS=1:40 1871-003 L:\Graphics\GMS NORTH-SOUTH\tx-1000\1871+\1871-QMS.DWG Oct 16, 2008 - 9:33am bschmidt

LEGEND

MW-11 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

SP-H ⊕ Ozone Sparge Well

—1.0— Dissolved-Phase Benzene Contour (µg/l)

INTERSTATE HIGHWAY 580

WESTBOUND ON-RAMP TO I-580

SIDEWALK

SANTA CLARA AVENUE

MACARTHUR BLVD. OVERCROSSING EASTBOUND ON-RAMP

PLANTER

MACARTHUR BOULEVARD

SIDEWALK

DRIVEWAY

QUICK STOP MARKET BUILDING

FORMER WASTE OIL TANK

FORMER PROPERTY BOUNDARY

FORMER STATION BUILDING

96 MACARTHUR BLVD. (FORMERLY 66 MACARTHUR)

MW-9 ND<0.50

MW-8 ND<0.50

MW-7 ND<0.50

MW-6 ND<0.50

MW-10 ND<0.50

MW-11 ND<0.50

MW-1 2.1

SP-H

SP-G

SP-DS

SP-F

SP-A

SP-E

SP-DD

SP-C

SP-BS

SP-BD

UST

UST

DISPENSER ISLANDS

CANOPY

1.0

FORMER DISPENSER ISLAND

FORMER UNDERGROUND STORAGE TANKS

OVERHEAD RAMP

CONCRETE ISLAND

CONC. DRAINAGE DITCH

SIDEWALK

CONC. BRIDGE COLUMNS (TYP.)

OVERHEAD FREEWAY STRUCTURE

WESTBOUND ON-RAMP TO I-580

CONC. BRIDGE COLUMNS (TYP.)

DIRT & LANDSCAPING

WESTBOUND ON-RAMP TO I-580

LANDSCAPING

HARRISON STREET

MACARTHUR BOULEVARD

SIDEWALK

N

SCALE (FEET)

0 40

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. Dashes indicate contour based on non-detect at elevated detection limit. UST = underground storage tank.

PROJECT:	154771
FACILITY:	76 STATION 1871 96 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
September 25, 2008

TRC

FIGURE 4

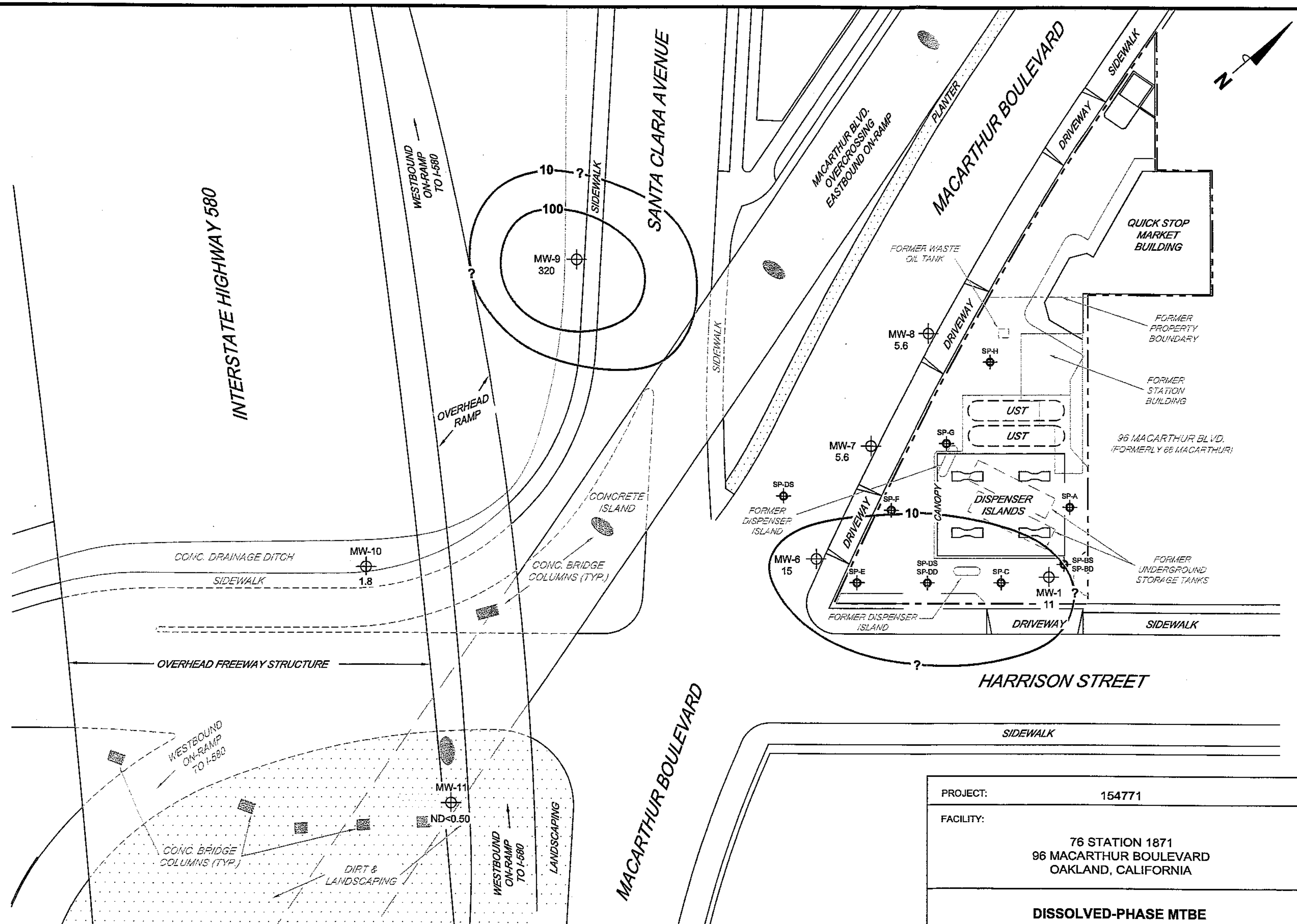
MS=1:40 1871-003 L:\Graphics\GMS NORTH-SOUTH\x-1000\1871+\1871-GMS.DWG Oct 16, 2008 - 9:44am bschmidt

LEGEND

MW-11 — Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

SP-H — Ozone Sparge Well

—100— Dissolved-Phase MTBE Contour (µg/l)



NOTES:

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

SCALE (FEET)
0 — 40

PROJECT:	154771
FACILITY:	76 STATION 1871 96 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA

DISSOLVED-PHASE MTBE CONCENTRATION MAP
September 25, 2008

TRC

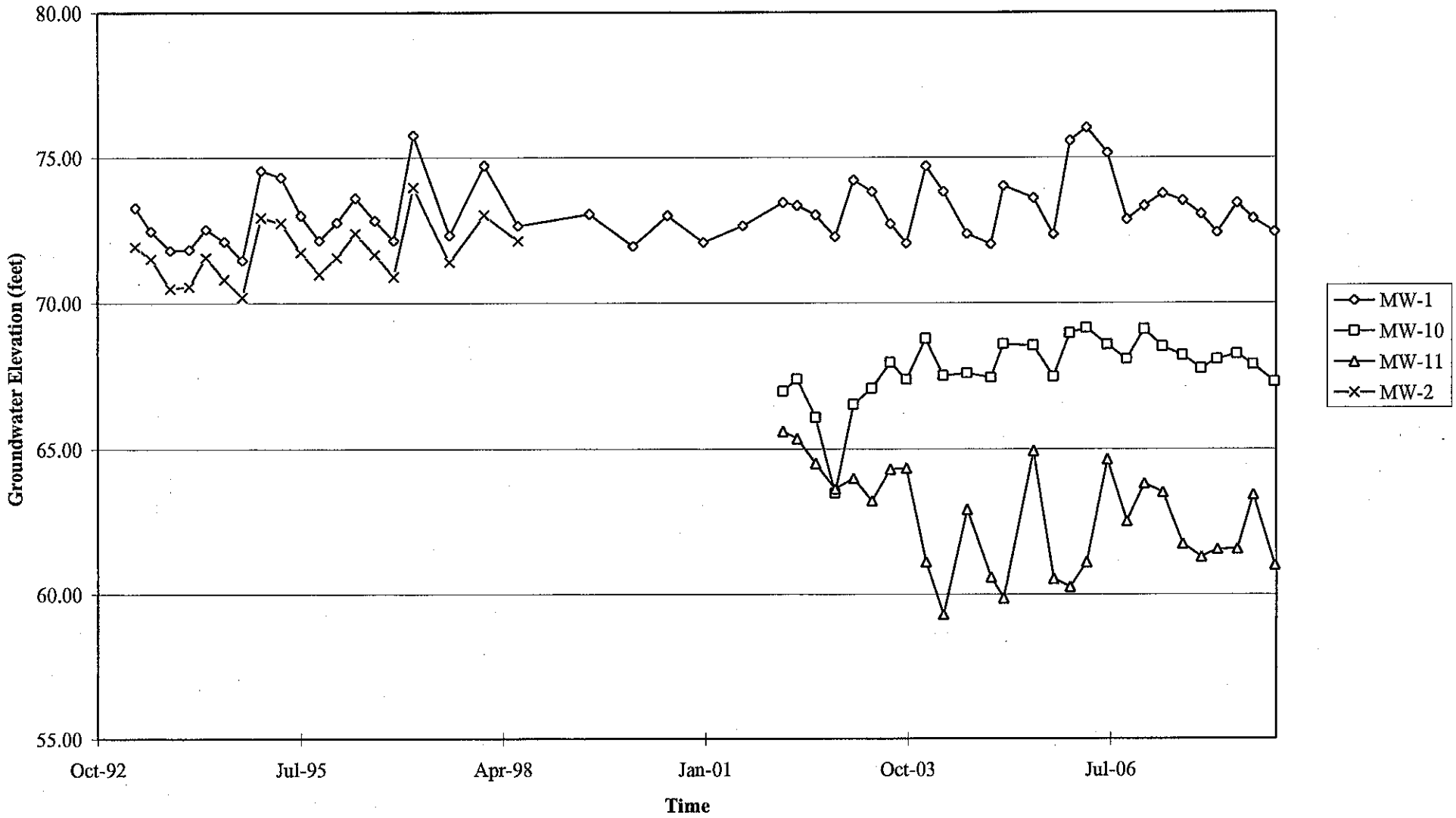
FIGURE 5

L:\Graphics\QMS NORTH-SOUTH\x-1000\1871+\1871-QMS.DWG Oct 16, 2008 - 9:57am bschmidt

MS=1:40 1871-003

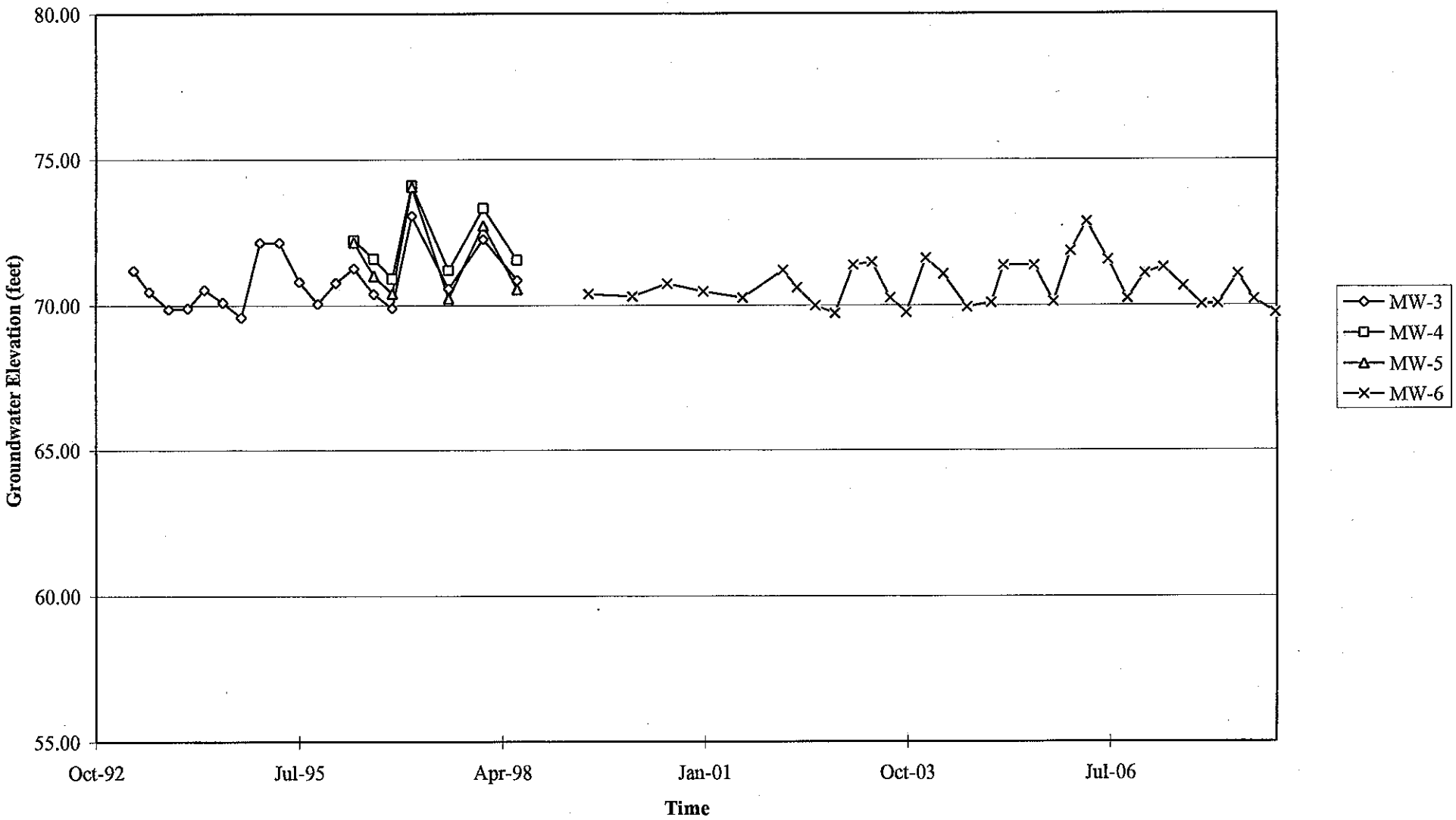
GRAPHS

Groundwater Elevations vs. Time
76 Station 1871



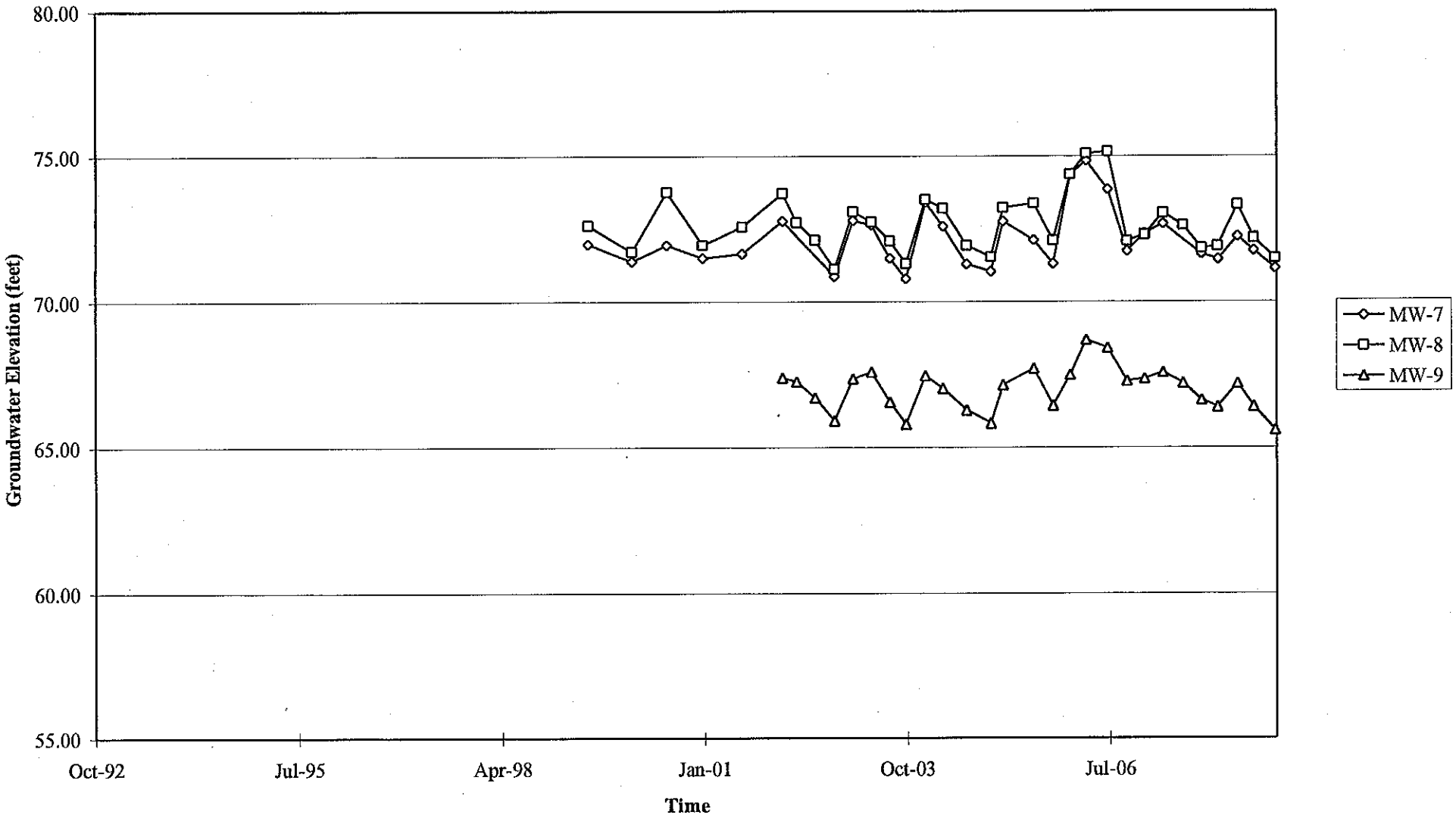
Elevations may have been corrected for apparent changes due to resurvey

Groundwater Elevations vs. Time
76 Station 1871



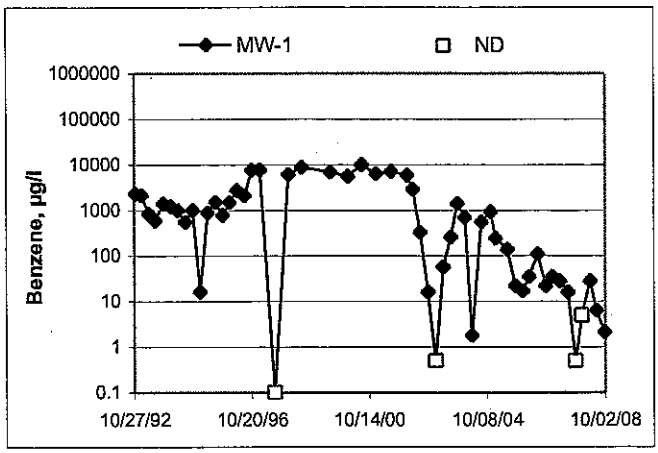
Elevations may have been corrected for apparent changes due to resurvey

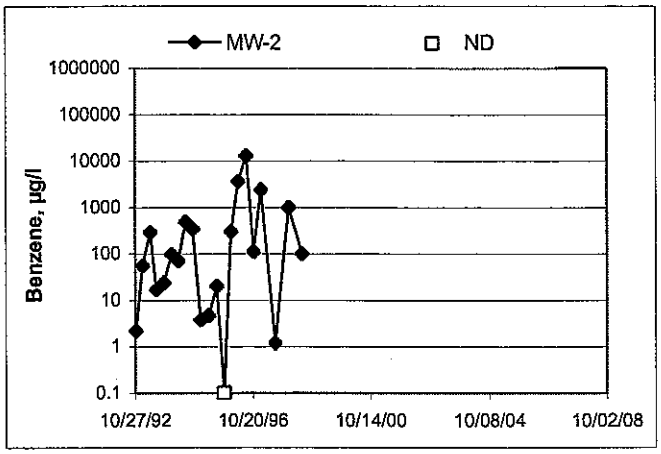
Groundwater Elevations vs. Time
76 Station 1871

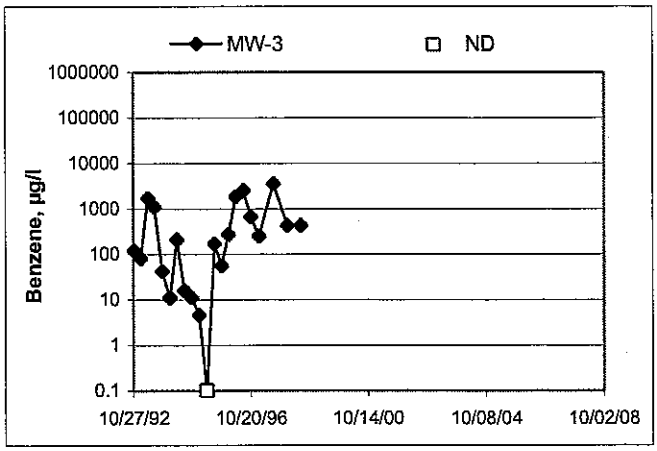


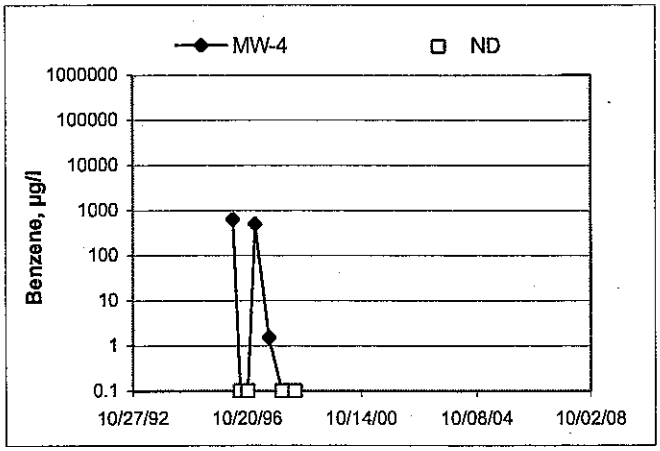
Elevations may have been corrected for apparent changes due to resurvey

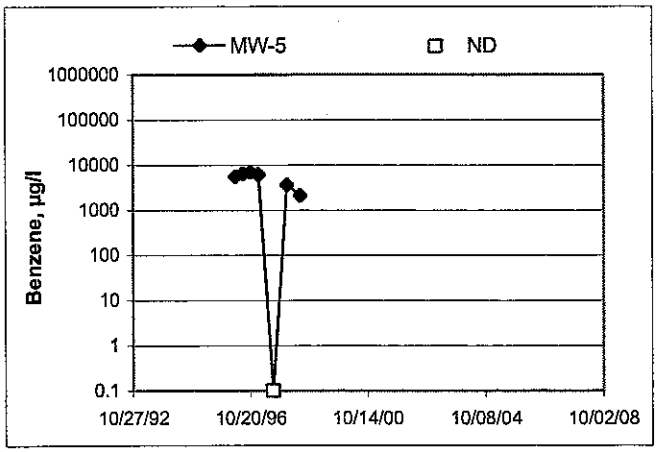
Benzene Concentrations vs Time
76 Station 1871

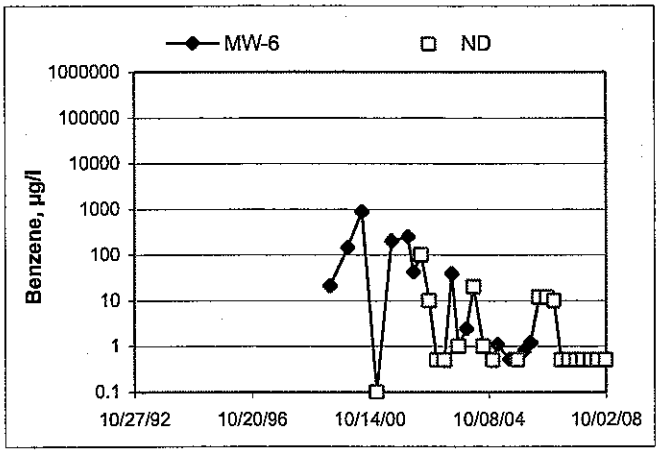


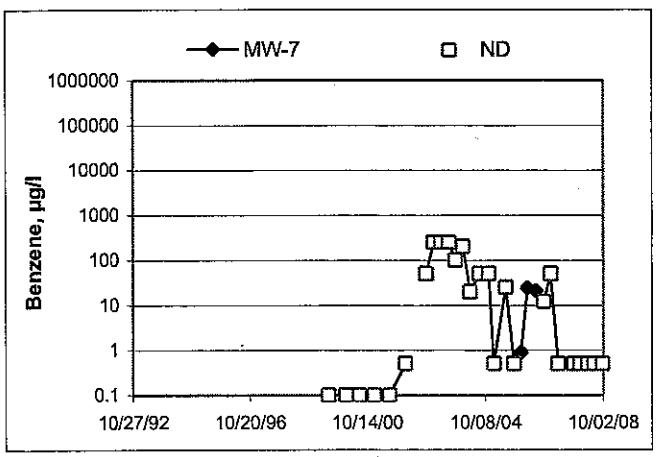


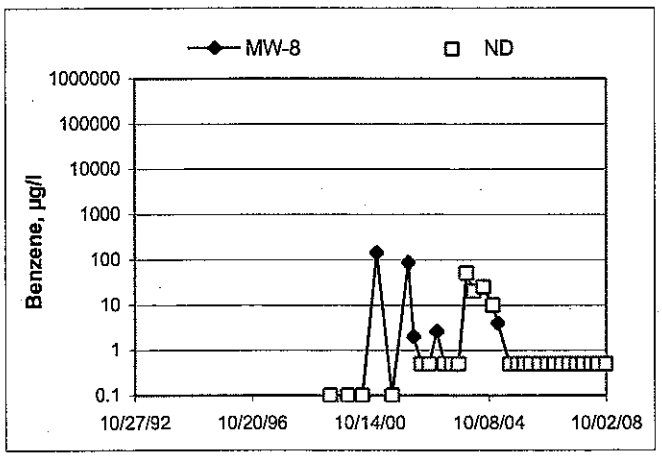




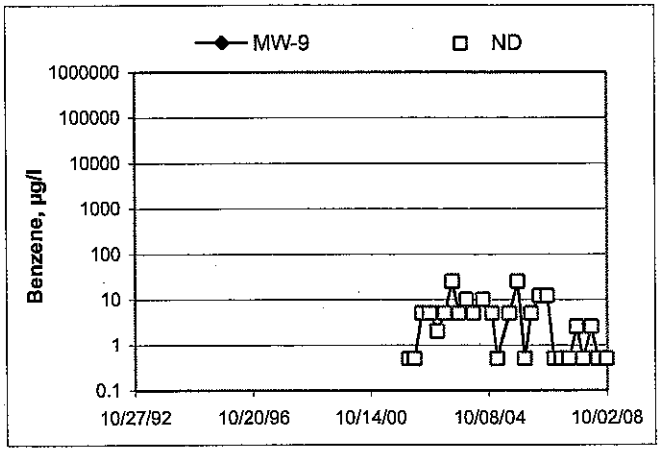


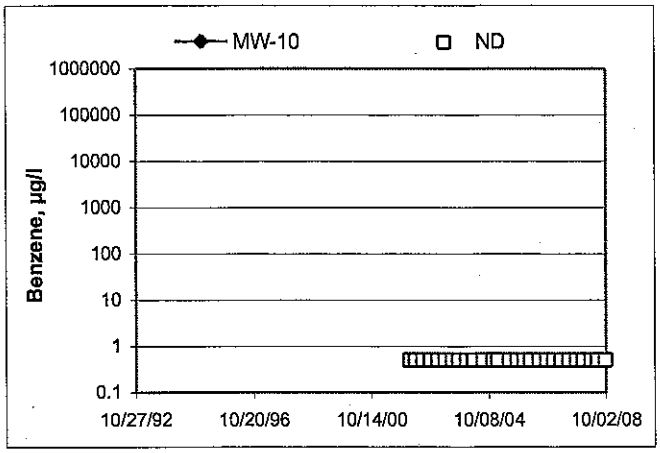


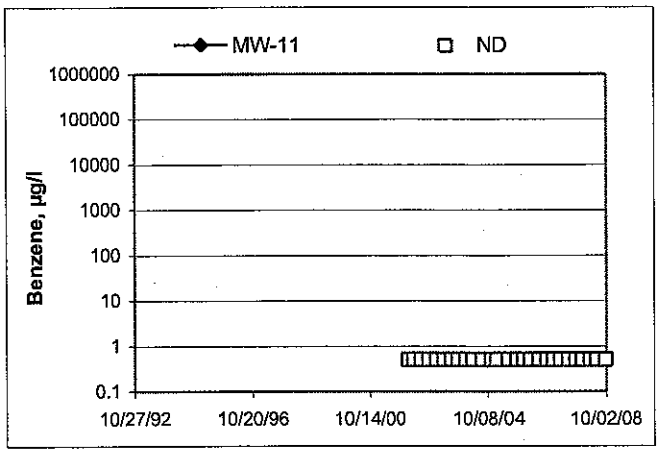




Benzene Concentrations vs Time
76 Station 1871







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 car e is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

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

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

Sequence of Gauging, Purging and Sampling

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

Decontamination

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

Exceptions

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

FIELD MONITORING DATA SHEET

Technician: Basilio Job #/Task #: 154771-FA20 Date: 9-25-08

Site # 1871 Project Manager 154771 FA20 Page 1 of 1

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-11	✓	0530	30.10	16.30	—	—	0932	2"
MW-10	✓	0535	20.00	7.70	—	—	0941	2"
MW-7	✓	0547	24.35	9.55	—	—	0957	2"
MW-8	✓	0553	24.35	10.24	—	—	1006	2"
MW-6	✓	0556	24.80	9.95	—	—	1010	2"
MW-9	✓	0605	19.90	16.48	—	—	0915	2"
MW-1	✓	0610	24.05	14.55	—	—	1050	2"

FIELD DATA COMPLETE QA/QC COC WELL BOX CONDITION SHEETS

MANIFEST DRUM INVENTORY TRAFFIC CONTROL

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: Basilio

Site: 1871 Project No.: 154771 Date: 9-25-08

Well No. MW-11 Purge Method: Sub

Depth to Water (feet): 16.30 Depth to Product (feet): —

Total Depth (feet) 30.10 LPH & Water Recovered (gallons): —

Water Column (feet): 13.80 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 19.06 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. (mg/L)	ORP	Turbidity
0708			3	2845	15.3	6.58	4.28	115	
			6	2856	15.9	6.64	2.83	99	
	0714		9	2874	16.1	6.62	2.19	100	

Static at Time Sampled	Total Gallons Purged	Sample Time
19.80	9	0932

Comments: Well did not recover in 2 hrs.

Well No. MW-10 Purge Method: Sub

Depth to Water (feet): 7.70 Depth to Product (feet): —

Total Depth (feet) 20.00 LPH & Water Recovered (gallons): —

Water Column (feet): 12.30 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 10.16 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. (mg/L)	ORP	Turbidity
0730			2	938.8	15.7	7.67	2.15	94	
			4	747.0	16.3	7.52	1.95	91	
	0736		6	712.6	16.3	7.11	2.39	100	

Static at Time Sampled	Total Gallons Purged	Sample Time
14.90	6	0941

Comments: Well did not recover in 2 hrs.

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: Basilio

Site: 1871 Project No.: 154771 Date: 9-25-08

Well No. MW-7 Purge Method: S4S

Depth to Water (feet): 9.55 Depth to Product (feet): —

Total Depth (feet) 24.35 LPH & Water Recovered (gallons): —

Water Column (feet): 14.80 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 12.51 1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
0748			3	624.0	16.5	7.04	1.11	115	
			6	606.7	18.9	6.87	4.04	111	
	0754		9	621.9	19.7	6.78	4.08	108	

Static at Time Sampled	Total Gallons Purged	Sample Time
9.80	9	0957

Comments:

Well No. MW-8 Purge Method: S4S

Depth to Water (feet): 10.24 Depth to Product (feet): —

Total Depth (feet) 24.35 LPH & Water Recovered (gallons): —

Water Column (feet): 14.11 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 13.06 1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
0805			3	409.9	18.8	6.82	1.33	98	
			6	381.9	20.1	6.80	0.42	97	
	0812		9	382.7	20.5	6.71	0.67	95	

Static at Time Sampled	Total Gallons Purged	Sample Time
10.33	9	1006

Comments:

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: Basilio

Site: 1871 Project No.: 154771 Date: 9-25-08

Well No. MW-6 Purge Method: Sub

Depth to Water (feet): 9.95 Depth to Product (feet): —

Total Depth (feet) 24.80 LPH & Water Recovered (gallons): —

Water Column (feet): 14.85 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 12.92 1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
0823			3	782.6	18.7	6.54	1.05	118	
	0820		6	799.6	20.2	6.42	1.43	107	
	~~0828~~		9						

Static at Time Sampled	Total Gallons Purged	Sample Time
11.02	8	1010

Comments: Dry at 8 Gls purged

Well No. MW-9 Purge Method: HB

Depth to Water (feet): 16.48 Depth to Product (feet): —

Total Depth (feet) 19.90 LPH & Water Recovered (gallons): —

Water Column (feet): 3.42 Casing Diameter (Inches): 2

80% Recharge Depth(feet): 17.16 1 Well Volume (gallons): 1

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F C)	pH	D.O. (mg/L)	ORP	Turbidity
0642			1	861.0	15.9	11.02	1.44	26	
	0656		2	618.4	16.6	8.87	1.72	29	
			3						

Static at Time Sampled	Total Gallons Purged	Sample Time
16.59	2.5	0915

Comments: Dry after purging 2½ Gls.

TRC

GROUNDWATER SAMPLING FIELD NOTES

Technician: Barlow

Site: 1871 Project No.: 154771 Date: 9-25-08

Well No. MW-1 Purge Method: S&S

Depth to Water (feet): 14.55 Depth to Product (feet): —

Total Depth (feet) 24.05 LPH & Water Recovered (gallons): —

Water Column (feet): 9.5 Casing Diameter (Inches): 4

80% Recharge Depth(feet): 16.45 1 Well Volume (gallons): 7

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F , C)	pH	D.O (mg/L)	ORP	Turbidity
0842			7	436.6	19.0	7.34	1.16	105	
	0850		14	376.2	20.3	6.83	1.07	85	
			21						

Static at Time Sampled	Total Gallons Purged	Sample Time
8.40	14	1050

Comments: Dry after 14 GAL purged. Did not recover after 2 hrs.

Well No. Purge Method:

Depth to Water (feet): Depth to Product (feet):

Total Depth (feet) LPH & Water Recovered (gallons):

Water Column (feet): Casing Diameter (Inches):

80% Recharge Depth(feet): 1 Well Volume (gallons):

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F , C)	pH	D.O. (mg/L)	ORP	Turbidity

Static at Time Sampled	Total Gallons Purged	Sample Time

Comments:

TRC

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 10/07/2008

Anju Farfan

TRC
21 Technology Drive
Irvine, CA 92618

RE: 1871
BC Work Order: 0812752

Enclosed are the results of analyses for samples received by the laboratory on 9/25/2008. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

TRC 21 Technology Drive Irvine, CA 92618	Project: 1871 Project Number: [none] Project Manager: Anju Farfan	**Reported:** 10/07/2008 17:27

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0812752-01	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 09:32	Global ID: T0600101493
	Sampling Location:	MW-11	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-11	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:
0812752-02	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 09:41	Global ID: T0600101493
	Sampling Location:	MW-10	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-10	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:
0812752-03	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 09:57	Global ID: T0600101493
	Sampling Location:	MW-7	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-7	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:
0812752-04	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 10:06	Global ID: T0600101493
	Sampling Location:	MW-8	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-8	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:
0812752-05	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 10:10	Global ID: T0600101493
	Sampling Location:	MW-6	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-6	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:

TRC 21 Technology Drive Irvine, CA 92618	Project: 1871 Project Number: [none] Project Manager: Anju Farfan	**Reported:** 10/07/2008 17:27

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0812752-06	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 09:15	Global ID: T0600101493
	Sampling Location:	MW-9	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-9	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:
0812752-07	**COC Number:**	---	**Receive Date:**	09/25/2008 21:10	Delivery Work Order:
	Project Number:	1871	**Sampling Date:**	09/25/2008 10:50	Global ID: T0600101493
	Sampling Location:	MW-1	**Sample Depth:**	---	Matrix: W
	Sampling Point:	MW-1	**Sample Matrix:**	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:

TRC
21 Technology Drive
Irvine, CA 92618

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

Reported: 10/07/2008 17:27

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-01 | **Client Sample Name:** 1871, MW-11, MW-11, 9/25/2008 9:32:00AM

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	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993	ND	
1,2-Dichloroethane-d4 (Surrogate)	102	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993		
4-Bromofluorobenzene (Surrogate)	98.1	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:51	KEA	MS-V12	1	BRI1993		

TRC	Project: 1871	**Reported:** 10/07/2008 17:27
21 Technology Drive	Project Number: [none]	
Irvine, CA 92618	Project Manager: Anju Farfan	

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-02 | **Client Sample Name:** 1871, MW-10, MW-10, 9/25/2008 9:41:00AM

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	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	1.8	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993	ND	
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993		
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:27	KEA	MS-V12	1	BRI1993		

TRC
21 Technology Drive
Irvine, CA 92618

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

Reported: 10/07/2008 17:27

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-03 | **Client Sample Name:** 1871, MW-7, MW-7, 9/25/2008 9:57:00AM

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	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	5.6	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	65	ug/L	50		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993	ND	
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993		
4-Bromofluorobenzene (Surrogate)	97.8	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 07:02	KEA	MS-V12	1	BRI1993		

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Irvine, CA 92618

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

Reported: 10/07/2008 17:27

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-04 | **Client Sample Name:** 1871, MW-8, MW-8, 9/25/2008 10:06:00AM

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	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	5.6	ug/L	0.50		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993	ND	
1,2-Dichloroethane-d4 (Surrogate)	103	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	99.6	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993		
4-Bromofluorobenzene (Surrogate)	95.2	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 06:38	KEA	MS-V12	1	BRI1993		

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Project Number: [none]
Project Manager: Anju Farfan

Reported: 10/07/2008 17:27

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-05 | **Client Sample Name:** 1871, MW-6, MW-6, 9/25/2008 10:10:00AM

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	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	15	ug/L	0.50		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	66	ug/L	50		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993	ND	
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	99.9	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 06:14	KEA	MS-V12	1	BRI1993		

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

Reported: 10/07/2008 17:27

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-06 | **Client Sample Name:** 1871, MW-9, MW-9, 9/25/2008 9:15:00AM

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	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	320	ug/L	2.5		EPA-8260	10/02/08	10/04/08 00:24	KEA	MS-V12	5	BRI1993	ND	A01
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	170	ug/L	50		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993	ND	A90
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993		
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/04/08 00:24	KEA	MS-V12	5	BRI1993		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/04/08 00:24	KEA	MS-V12	5	BRI1993		
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 05:49	KEA	MS-V12	1	BRI1993		
4-Bromofluorobenzene (Surrogate)	97.0	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/04/08 00:24	KEA	MS-V12	5	BRI1993		

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Project Manager: Anju Farfan

Reported: 10/07/2008 17:27

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0812752-07 | **Client Sample Name:** 1871, MW-1, MW-1, 9/25/2008 10:50:00AM

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	2.1	ug/L	0.50		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
Ethylbenzene	72	ug/L	0.50		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
Methyl t-butyl ether	11	ug/L	0.50		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
Toluene	ND	ug/L	0.50		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
Total Xylenes	110	ug/L	1.0		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
t-Butyl alcohol	740	ug/L	10		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
Ethanol	ND	ug/L	250		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993	ND	
Total Purgeable Petroleum Hydrocarbons	2200	ug/L	100		EPA-8260	10/02/08	10/07/08 00:14	KEA	MS-V12	2	BRI1993	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	103	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993		
1,2-Dichloroethane-d4 (Surrogate)	102	%	76 - 114 (LCL - UCL)		EPA-8260	10/02/08	10/07/08 00:14	KEA	MS-V12	2	BRI1993		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	10/02/08	10/07/08 00:14	KEA	MS-V12	2	BRI1993		
4-Bromofluorobenzene (Surrogate)	104	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/07/08 00:14	KEA	MS-V12	2	BRI1993		
4-Bromofluorobenzene (Surrogate)	106	%	86 - 115 (LCL - UCL)		EPA-8260	10/02/08	10/03/08 17:13	KEA	MS-V12	1	BRI1993		

TRC	Project: 1871	**Reported:** 10/07/2008 17:27
21 Technology Drive	Project Number: [none]	
Irvine, CA 92618	Project Manager: Anju Farfan	

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	Control Limits Percent Recovery	Lab Quals
Benzene	BRI1993	Matrix Spike	0811604-78	0	25.770	25.000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0811604-78	0	26.970	25.000	ug/L	4.7	108	20	70 - 130	
Toluene	BRI1993	Matrix Spike	0811604-78	0	24.960	25.000	ug/L		99.8		70 - 130	
		Matrix Spike Duplicate	0811604-78	0	27.300	25.000	ug/L	8.8	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BRI1993	Matrix Spike	0811604-78	ND	10.350	10.000	ug/L		104		76 - 114	
		Matrix Spike Duplicate	0811604-78	ND	9.9600	10.000	ug/L		99.6		76 - 114	
Toluene-d8 (Surrogate)	BRI1993	Matrix Spike	0811604-78	ND	9.7900	10.000	ug/L		97.9		88 - 110	
		Matrix Spike Duplicate	0811604-78	ND	9.7900	10.000	ug/L		97.9		88 - 110	
4-Bromofluorobenzene (Surrogate)	BRI1993	Matrix Spike	0811604-78	ND	9.9400	10.000	ug/L		99.4		86 - 115	
		Matrix Spike Duplicate	0811604-78	ND	10.180	10.000	ug/L		102		86 - 115	

TRC 21 Technology Drive Irvine, CA 92618	Project: 1871 Project Number: [none] Project Manager: Anju Farfan	**Reported:** 10/07/2008 17:27

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	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Benzene	BRI1993	BRI1993-BS1	LCS	26.510	25.000	0.50	ug/L	106		70 - 130		
Toluene	BRI1993	BRI1993-BS1	LCS	26.100	25.000	0.50	ug/L	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BRI1993	BRI1993-BS1	LCS	10.200	10.000		ug/L	102		76 - 114		
Toluene-d8 (Surrogate)	BRI1993	BRI1993-BS1	LCS	9.8700	10.000		ug/L	98.7		88 - 110		
4-Bromofluorobenzene (Surrogate)	BRI1993	BRI1993-BS1	LCS	10.110	10.000		ug/L	101		86 - 115		

TRC	Project: 1871	**Reported:** 10/07/2008 17:27
21 Technology Drive	Project Number: [none]	
Irvine, CA 92618	Project Manager: Anju Farfan	

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	BRI1993	BRI1993-BLK1	ND	ug/L	0.50		
Ethylbenzene	BRI1993	BRI1993-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BRI1993	BRI1993-BLK1	ND	ug/L	0.50		
Toluene	BRI1993	BRI1993-BLK1	ND	ug/L	0.50		
Total Xylenes	BRI1993	BRI1993-BLK1	ND	ug/L	1.0		
t-Butyl alcohol	BRI1993	BRI1993-BLK1	ND	ug/L	10		
Ethanol	BRI1993	BRI1993-BLK1	ND	ug/L	250		
Total Purgeable Petroleum Hydrocarbons	BRI1993	BRI1993-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BRI1993	BRI1993-BLK1	102	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BRI1993	BRI1993-BLK1	99.1	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BRI1993	BRI1993-BLK1	91.2	%	86 - 115 (LCL - UCL)		

TRC	Project: 1871	**Reported:** 10/07/2008 17:27
21 Technology Drive	Project Number: [none]	
Irvine, CA 92618	Project Manager: Anju Farfan	

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.

BC LABORATORIES INC. **SAMPLE RECEIPT FORM** Rev. No. 12 06/24/08 Page 1 Of 1

Submission #: 08-12752

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest Intact? Yes No Containers Intact? Yes No None ☑ Comments:

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

COC Received ☑ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: 48

Temperature: A 1.8 °C / C 0.9 °C

Date/Time 2125 9-25-08

Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A3	A3	A3	A3	A3	A3	A3	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

SHIP BY JSK DISTRIBUTION WHT CLNT

Comments:

Sample Numbering Completed By: JDW Date/Time: 9/25/08 2343

A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

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**
Address: 96 MacArthur BLVD.	21 Technology Drive Irvine, CA 92618-2302 Attn: Anju Farfan
City: Oakland	**4-digit site#:** 1871
	Workorder # 01120-450911-7982
State: CA **Zip:**	**Project #:** 54771
Conoco Phillips Mgr:	**Sampler Name:** Basilio Del Real

MATRIX: (GW) Groundwater; (S) Soil; (WW) Wastewater; (SL) Sludge

Lab#	Sample Description	Field Point Name	Date & Time Sampled	MATRIX	BTEX/MTBE by 8021B, Gas by 8015	TPH GAS by 8015M	TPH DIESEL by 8015	8260 full list w/ oxygenates	BTEX/MTBE by 8260B TBA	ETHANOL by 8260B	TPH –G by GC/MS				Turnaround Time Requested
	-1	MW-11	9-25-08 0932	GW					X	X	X				5D
	-2	MW-10	0941						↓	↓	↓				↓
	-3	MW-7	0957												
	-4	MW-8	1006												
	-5	MW-6	1010												
	-6	MW-9	0915												
	-7	MW-1	↓ 1050	↓					↓	↓	↓				

Comments:

GLOBAL ID:
T0600101493

Relinquished by: (Signature)	Received by:	Date & Time
	Alejandro	9-25-08 1139
Relinquished by: (Signature)	Received by:	Date & Time
	Ross Dicky	9/25/08 1345
Relinquished by: (Signature)	Received by:	Date & Time
R. Ruyle	R. Ruyle	9-25-08 1740
R. Ruyle 9-25-08 2110		9-25-08 2110

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.

environ strategy consultants, inc.

September 15, 2008

One Technology, Suite B-123
Irvine, California 92618
tel 949.486.0884
fax 949.486.0885
environstrategy.com

Mr. Daniel Davis
Project Manager
Delta Environmental Consultants Inc.
3164 Gold Camp Rd Suite 200
Rancho Cordova, CA 95670

Project No. 400-A

Third Quarter 2008
Ozone Injection System O&M Report
76 Service Station No. 1871
96 MacArthur Boulevard
Oakland, California

Dear Mr. Davis:

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.

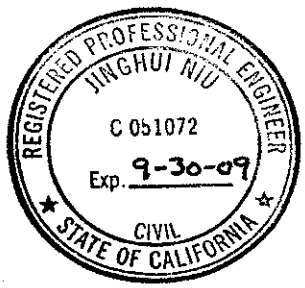
Type of Remediation System:	Ozone Injection System
Operation Data During: Reporting Period: Jun. 1, 2008 – Aug. 31, 2008	Operated 92 days during the period Hours of Operation: 2,269
System Operation Data Since Startup: June 23, 2003	Total Hours of Operation: 22,338
Note:	

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) 486-0884.

Respectfully submitted,

Tyler Colopy
Staff Scientist

Jinghui Niu, P.E.
Principal Engineer



Attachments: Figure - Site Plan

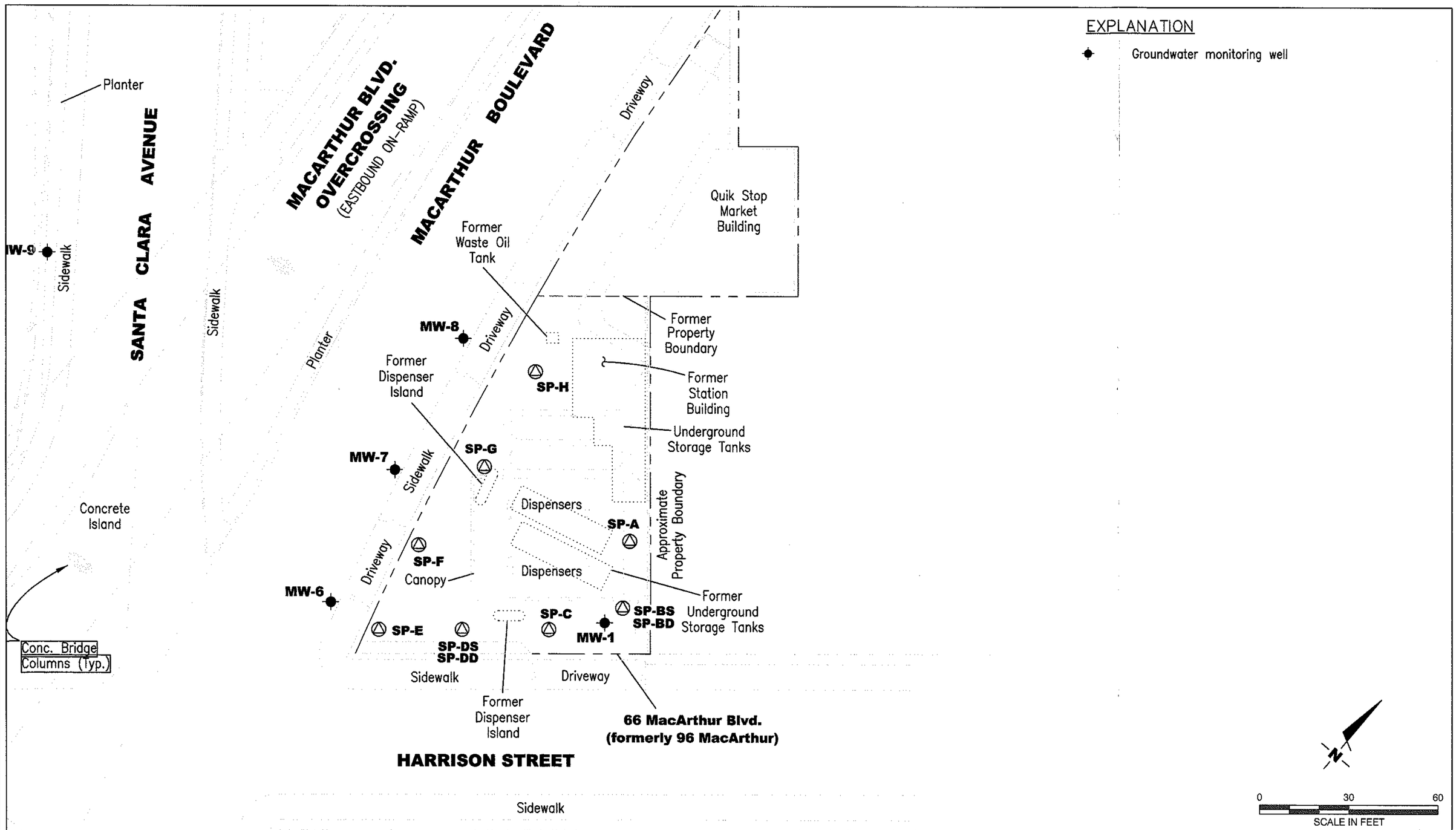
Table 1 - Ozone Injection - System Operation Data
Table 2 - Ozone Injection - Groundwater Monitoring Data

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



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.60004.01
CAD FILE:	SITEPLAN

environ strategy consultants, inc. es

ONE TECHNOLOGY, SUITE B-123
IRVINE, CA

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

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	Period Online	Cumulative	Ozone Injected	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
		Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
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

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

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	Period Online	Cumulative	Ozone Injected	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
		Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
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
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	1,042	0.71	0.65	1.87	20	19	18	17	19	20	23	20	22	20
6/20/06	w	Off	On	1,206	0.56	0.65	1.48	19	20	18	18	19	20	25	21	23	21
7/7/06	x	Off	Off	1,313	0.30	0.65	0.96	--	--	--	--	--	--	--	--	--	--
7/28/06	y	Off	On	1,313	0.00	0.64	0.00	19	17	16	19	24	17	22	19	21	23
8/15/06	u	Off	On	1,616	0.80	0.64	2.73	19	17	17	16	19	19	23	19	21	21
8/29/06	u	Off	On	1,801	0.63	0.64	1.67	19	19	17	17	21	18	21	19	22	23
9/12/06	u	Off	On	2,022	0.75	0.64	1.99	23	19	17	16	19	19	25	19	22	21
9/22/06	u	Off	On	2,204	0.87	0.64	1.64	21	21	19	20	23	21	26	23	25	27
10/4/06	u	Off	On	2,313	0.43	0.64	0.98	18	18	17	18	18	18	25	23	22	21
10/18/06	u	Off	On	2,401	0.30	0.64	0.79	20	19	17	16	18	19	20	20	21	27
10/31/06	w	Off	On	2,516	0.42	0.63	1.04	22	20	19	20	19	19	23	21	25	23
11/14/06	u	Off	On	2,636	0.41	0.63	1.08	18	18	17	17	18	18	22	24	22	24
11/28/06	u	Off	On	2,744	0.37	0.63	0.97	20	20	19	20	22	21	25	25	22	23
12/14/06	u	Off	On	2,801	0.17	0.63	0.51	19	19	18	18	19	19	22	22	23	22
12/26/06	u	Off	On	2,906	0.42	0.62	0.95	20	20	19	20	21	20	25	25	20	24
1/15/07	u	Off	On	2,983	0.18	0.62	0.69	19	20	18	18	19	19	22	23	22	22
1/29/07	v	Off	On	3,076	0.32	0.62	0.84	20	20	19	20	20	20	24	21	23	24
2/6/07	u	Off	On	3,156	0.48	0.62	0.72	19	20	18	17	19	19	21	24	21	23
2/21/07	u	Off	On	3,303	0.47	0.62	1.32	20	21	20	20	18	21	23	21	25	23
3/5/07	u	Off	On	3,378	0.30	0.61	0.68	19	20	18	18	18	20	21	23	22	22
3/19/07	u	Off	On	3,476	0.33	0.61	0.88	20	21	20	19	18	21	23	24	23	24
4/4/07	u	Off	On	3,515	0.12	0.61	0.35	19	20	18	17	18	19	21	21	21	22
4/18/07	u	Off	On	3,606	0.31	0.60	0.82	21	21	20	20	18	21	24	24	24	23
5/10/07	u	Off	On	3,676	0.15	0.60	0.63	19	20	19	17	18	19	20	23	20	21
5/25/07	u	Off	On	3,758	0.26	0.60	0.74	22	21	20	19	19	21	22	22	22	23
6/4/07	u	Off	On	3,801	0.18	0.59	0.39	18	20	18	18	17	19	19	20	21	20
6/18/07		On	On	4,137	1.00	0.60	3.02	20	20	19	19	19	20	22	22	20	22
7/2/07		On	On	4,373	0.70	0.60	2.12	15	21	19	18	20	19	24	21	21	23
7/16/07		On	On	4,409	0.11	0.59	0.32	18	20	20	19	21	20	26	23	22	25
8/8/07		On	On	4,961	1.00	0.60	4.97	13	20	20	18	20	18	29	22	20	24
8/27/07		On	On	5,411	0.99	0.60	4.05	14	21	19	20	21	19	30	20	21	21
9/13/07		On	On	5,822	1.01	0.61	3.70	22	21	21	23	21	22	30	20	21	21
9/27/07		On	On	6,155	0.99	0.61	3.00	28	25	25	27	25	26	32	21	26	25
10/29/07		On	On	6,917	0.99	0.62	6.86	28	25	24	25	33	32	32	21	30	30

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

		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	Period Online	Cumulative	Ozone Injected	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
Date	**Notes**	Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
11/26/07		On	On	7,591	1.00	0.62	6.07	26	22	24	25	31	30	32	22	30	30
12/31/07		On	On	8,425	0.99	0.63	7.51	26	20	24	24	30	32	32	30	28	30
1/28/08		On	On	9,103	1.01	0.63	6.10	26	21	22	21	26	30	28	26	27	27
2/25/08		On	On	9,778	1.00	0.64	6.08	23	19	22	20	25	30	30	28	27	28
3/24/08		On	On	10,475	1.00	0.64	6.27	25	20	21	20	24	30	28	27	26	27
4/28/08		On	On	11,317	1.00	0.65	7.58	24	22	20	22	22	30	29	24	26	26
5/26/08		On	On	11,992	1.00	0.65	6.08	23	20	22	22	23	30	30	25	27	28
6/30/08		On	On	12,828	1.00	0.66	7.52	25	22	21	23	22	31	29	26	27	26
7/28/08		On	On	13,498	1.00	0.66	6.03	22	26	24	28	23	30	22	27	29	21
8/25/08		On	On	14,261	1.00	0.66	6.87	18	15	25	14	19	22	23	25	24	20
							Sparge time per cycle (min)	7	7	7	7	7	7	7	7	7	7
							Number of Cycles per Day	20	20	20	20	20	20	20	20	20	20

Reporting Period: Third Quarter 2008 (06/01/08 to 08/31/08)
Total Hours Operational: 22,338
Total Pounds Ozone Injected: 209
Period Hours Operational: 2269
Period Percent Operational: 100%
Period Pounds Ozone Injected: 20.42

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

Definitions:

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

Notes:

	Hour Meter Formula adjusted 12/19/07
	June 4, 2007 - Control Panel retrofit installed.
	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

		Monitoring Well: MW-1								Monitoring Well: MW-7							
Date	Notes	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	**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:

TPHg = Total petroleum hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
µg/L = Micrograms per liter

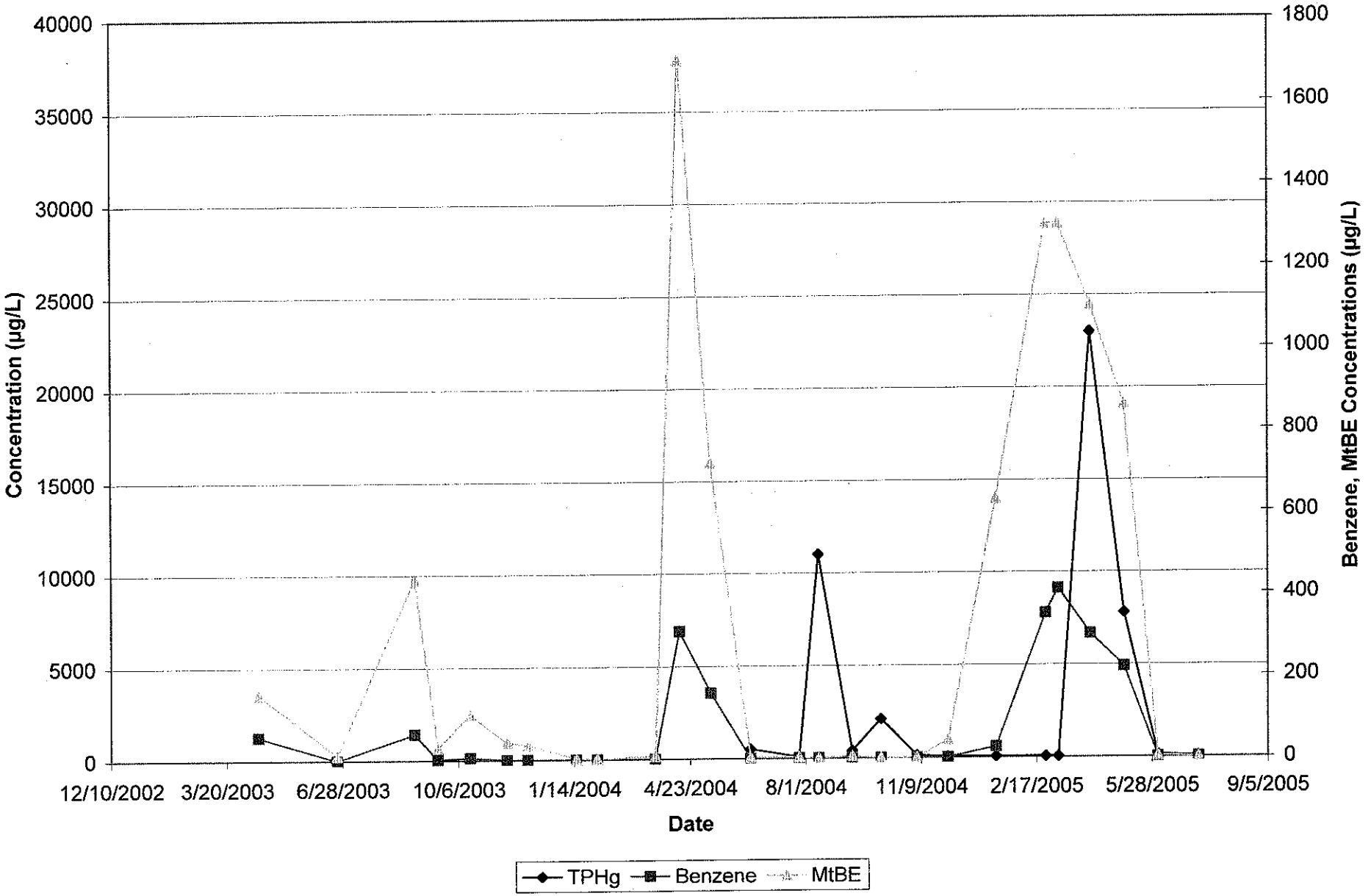
ORP = Oxidation Reduction Potential
DO = Dissolved Oxygen
mV = Millivolts
mg/l = Milligrams per liter

Notes:

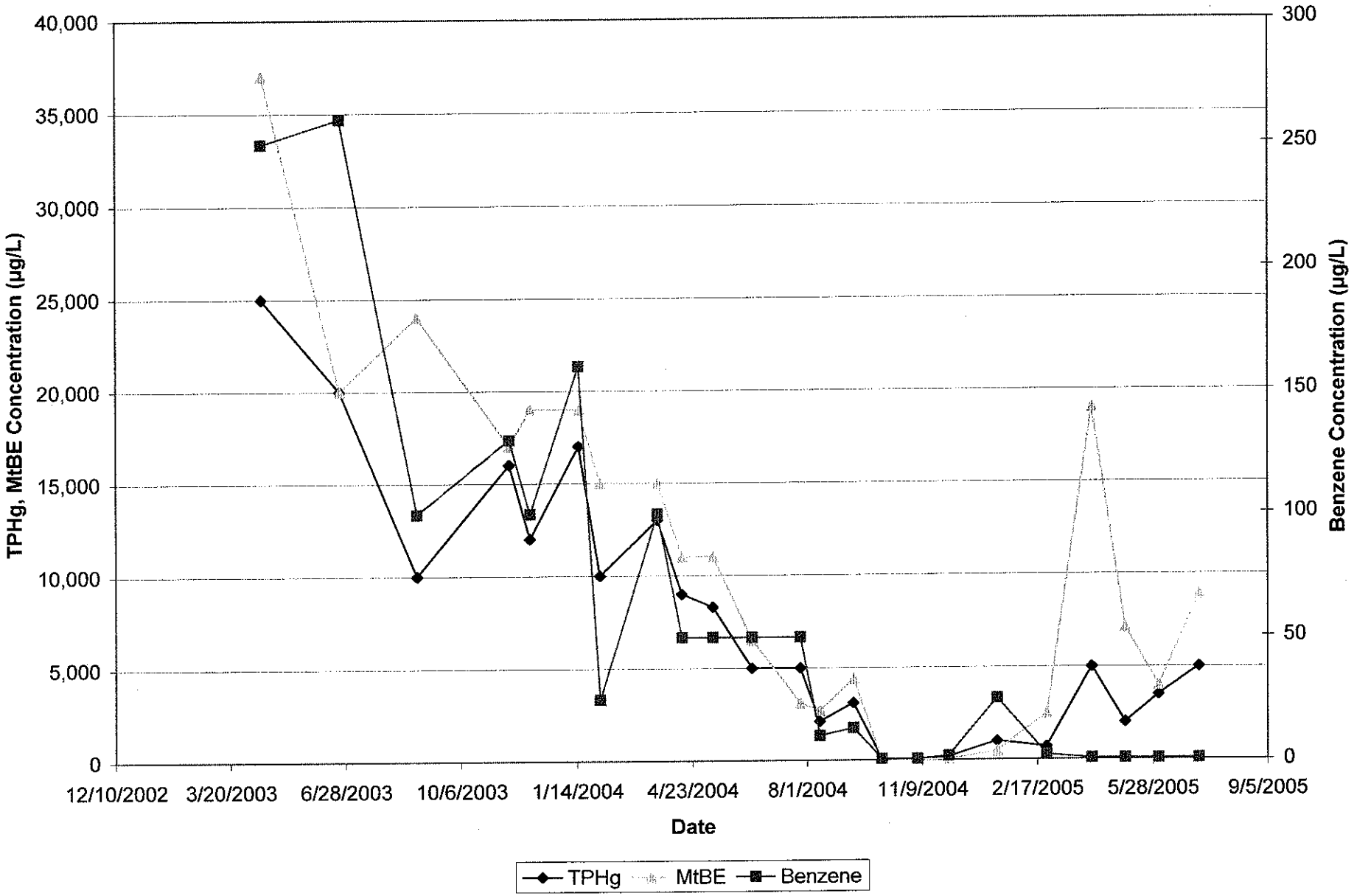
--	Data not available
NM	Not Measured
a	Sampled by Gettler-Ryan, Inc.
b	Hydrocarbon in gasoline range does not match laboratory gasoline standard.
c	ORP reading under the range
d	Quantity of unknown hydrocarbon(s) in sample based on gasoline.
e	Data not available at time of reporting
f	MW-7 Estimated 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

Ozone Injection System Data Sheet

Station No.: **1871**

City: **Oakland**

Date	Notes	Status ON/OFF	Cycles/ Day	Hour Meter	Well I.D. 02-1 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-2 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-3 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)
30 Jun 06		on/off	20	17028	25		7		22		7		21		7	
28 Jul 06		on/off	20	13498	22		7		26		7		24		7	
25 Aug 06		on/off	20	14261	16		7		15		7		20		7	

Date	Well I.D. 02-4 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-5 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-6 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-7 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)
30 Jun 06	23		7		22		7		31		7		29		7	
28 Jul 06	26		7		23		7		30		7		22		7	
25 Aug 06	14		7		19		7		22		7		23		7	

Date	Well I.D. 02-8 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-9 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. 02-10 Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Well I.D. Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)
30 Jun 06	26		7		27		7		26		7					
28 Jul 06	27		7		24		7		21		7					
25 Aug 06	25		7		24		7		20		7					

Ozone System Maintenance and Inspection Log

Date	Check/ Repair Leaks	Check Hoses Fittings & Pipes	Check Air Filter (Document Date Replaced)	Check & Test Saftey Interlock	Check Sparge Blower V-Belt Tension & Conditions	Check Controller Program	Change Blower Oil	Sparge Blower Grease Bearings	Sparge Blower Repair/Replace	Comments
30 Jun 06	ok	ok	ok	ok	N/A	ok	N/A	N/A	ok	
28 Jul 06	ok	ok	ok	ok	N/A	ok	N/A	N/A	ok	
25 Aug 06	ok	ok	ok	ok	N/A	ok	N/A	N/A	ok	

Notes: A = System down-breaker thrown B = Compressor Overload. C = Ozone sensor Tripped. D = Temp. sensor tripped.