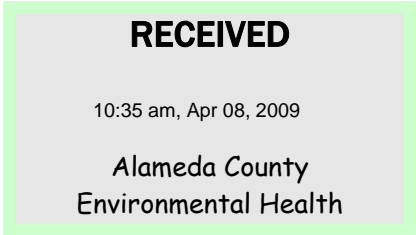


December 15, 2008



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

**Fourth 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: Sept. 1, 2008 – Nov. 30, 2008	Operated 74 days during the period Hours of Operation: 1,767
System Operation Data Since Startup: June 23, 2003	Total Hours of Operation: 24,105
Note: September 10 – 27, 2008 – Ozone system down for well box repair.	

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



**Fourth Quarter 2008 O&M Report**

**76 Service Station No. 1871**

December 15, 2008

Page 2

Attachments: Figure - Site Plan

Table 1 - Ozone Injection - System Operation Data

Table 2 - Ozone Injection - Groundwater Monitoring Data

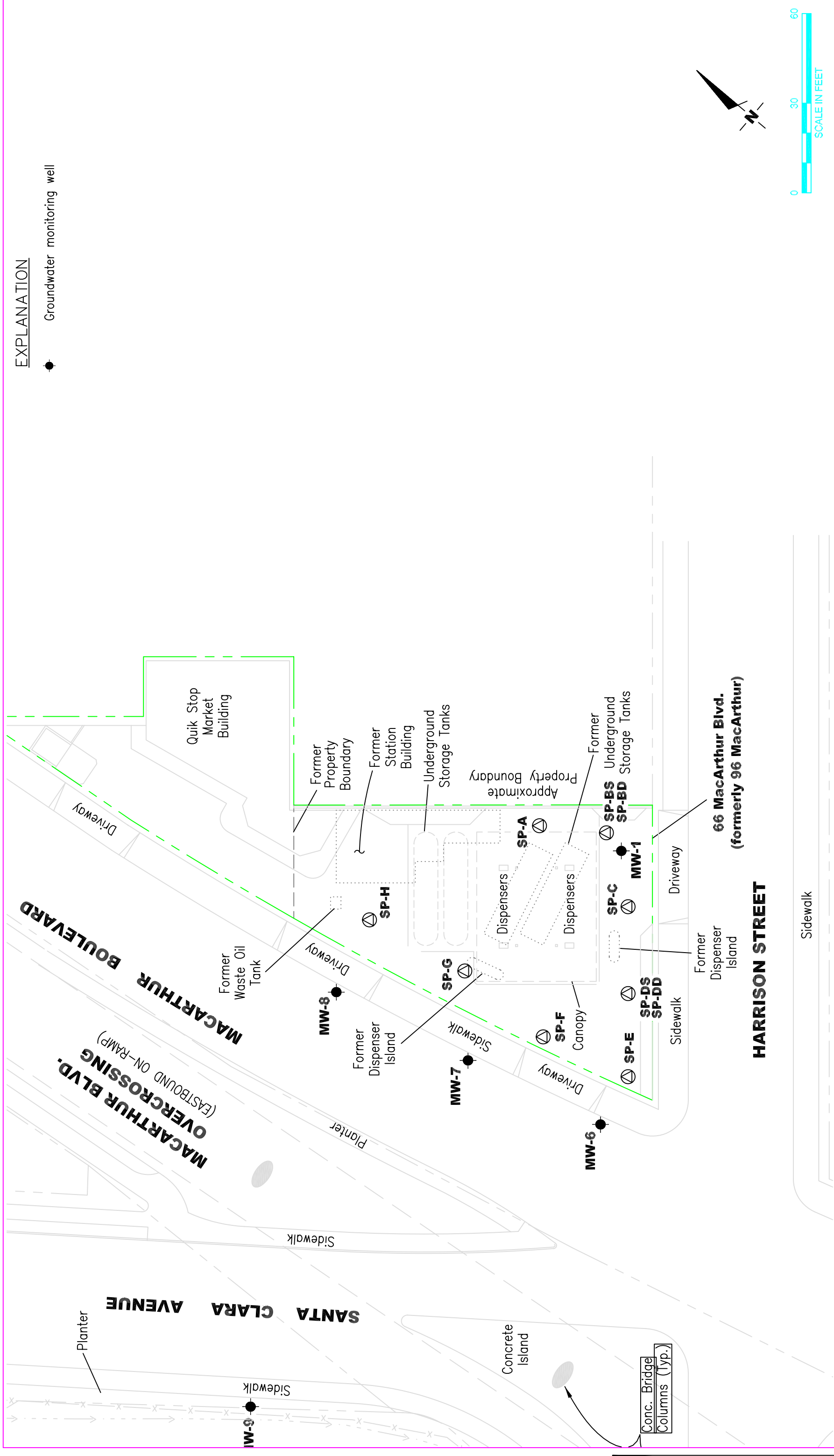
Graph 1 - MW-1 TPHg, Benzene, and MtBE Groundwater Concentrations

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

Appendix A – Field Notes

cc: Bill Borgh, ConocoPhillips Company (electronic copy)

**Figure**



**EXPLANATION**

- Groundwater monitoring well

DRAWN BY:	MD
CHECKED:	AD
APPROVED:	RB
DATE:	3/22/04 PR
JOB NO.:	77CP.60004.01
CAD FILE:	SITEPLAN

  
 environ strategy consultants, inc.  
 ONE TECHNOLOGY, SUITE B-123  
 IRVINE, CA

PREPARED FOR:  
**CONOCOPHILLIPS**  
**76 STATION #1871**  
 96 MACARTHUR BOULEVARD  
 OAKLAND, CALIFORNIA

**FIGURE 1**  
**SITE PLAN**

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

## **Tables**

**Table 1**  
**Ozone Injection - System Operation Data**  
76 Service Station No. 1871  
96 MacArthur Blvd., Oakland, California  
Page 1 of 4

Date	Notes	OZONE SPARGE SYSTEM						OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10
		System Status (On/Off)		Hourmeter Reading	Period Online Factor	Cumulative Online Factor	Ozone Injected (lbs)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)
		Arrival	Departure														
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  
Page 2 of 4

Date	Notes	OZONE SPARGE SYSTEM						OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10
		System Status (On/Off)		Hourmeter Reading	Period Online Factor	Cumulative Online Factor	Ozone Injected (lbs)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)
		Arrival	Departure														
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  
Page 3 of 4

Date	Notes	OZONE SPARGE SYSTEM						OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10	
		System Status (On/Off)		Hourmeter Reading	Period Online Factor	Cumulative Online Factor	Ozone Injected (lbs)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	
		Arrival	Departure															
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	
9/29/08		On	On	15,100	1.00	0.67	7.55	20	14	15	16	18	28	28	20	19	22	
10/27/08		On	On	15,358	0.38	0.67	2.32	20	16	16	17	20	28	28	18	19	21	
11/24/08		On	On	16,028	1.00	0.67	6.03	20	15	15	15	18	25	25	18	16	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	20
<b>Reporting Period: Fourth Quarter 2008 (09/01/2008 to 11/30/2008)</b>																		
Total Hours Operational: 24,105																		
Total Pounds Ozone Injected: 225																		
Period Hours Operational: 1767																		
Period Percent Operational: 81%																		
Period Pounds Ozone Injected: 16																		



**Table 1**  
**Ozone Injection - System Operation Data**  
76 Service Station No. 1871  
96 MacArthur Blvd., Oakland, California  
Page 4 of 4

**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  
Page 1 of 1

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

**Definitions:**

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

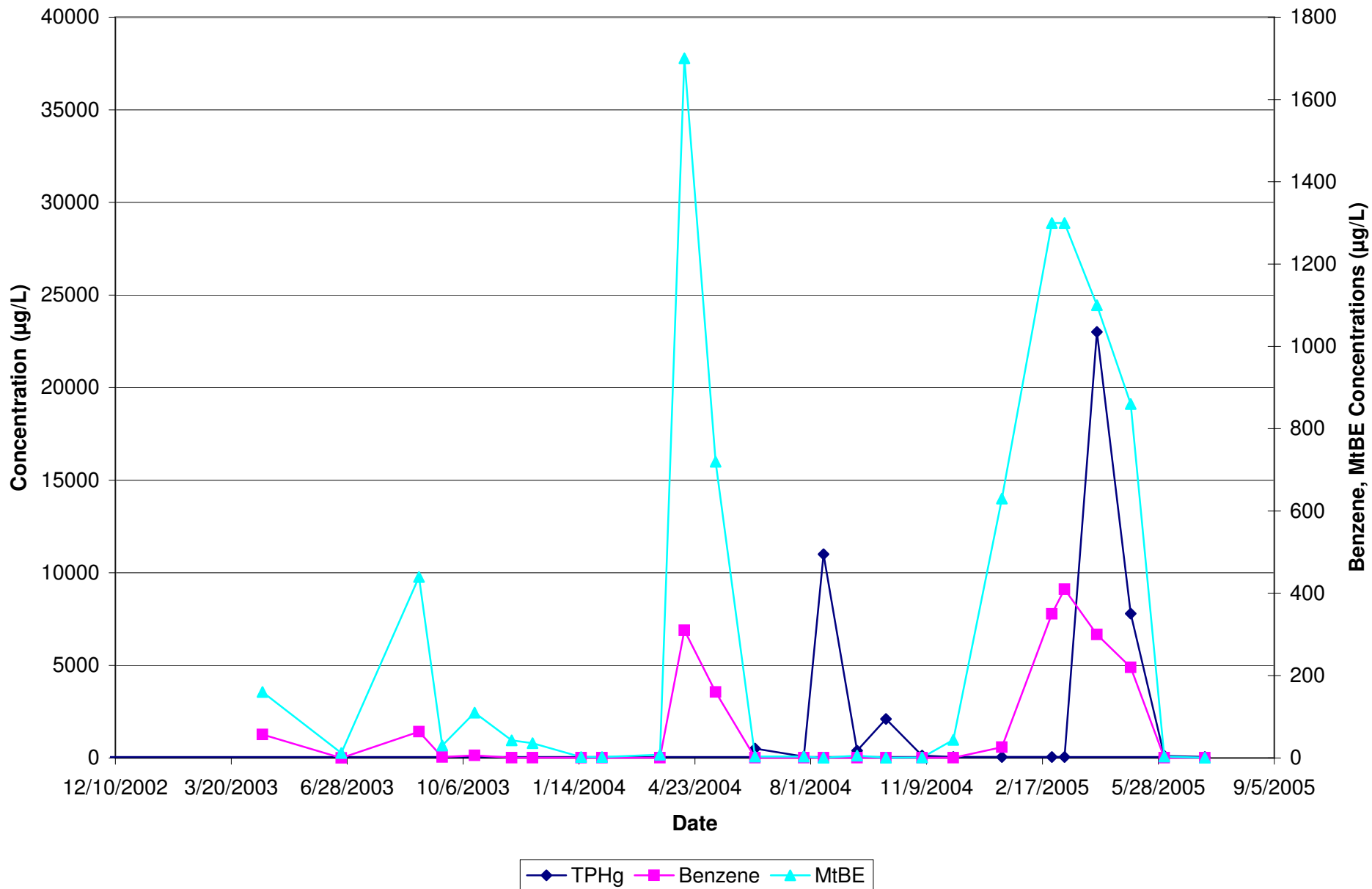
ORP = Oxidation Reduction Potential  
DO = Dissolved Oxygen  
mV = Millivolts  
mg/l = Milligrams per liter

**Notes:**

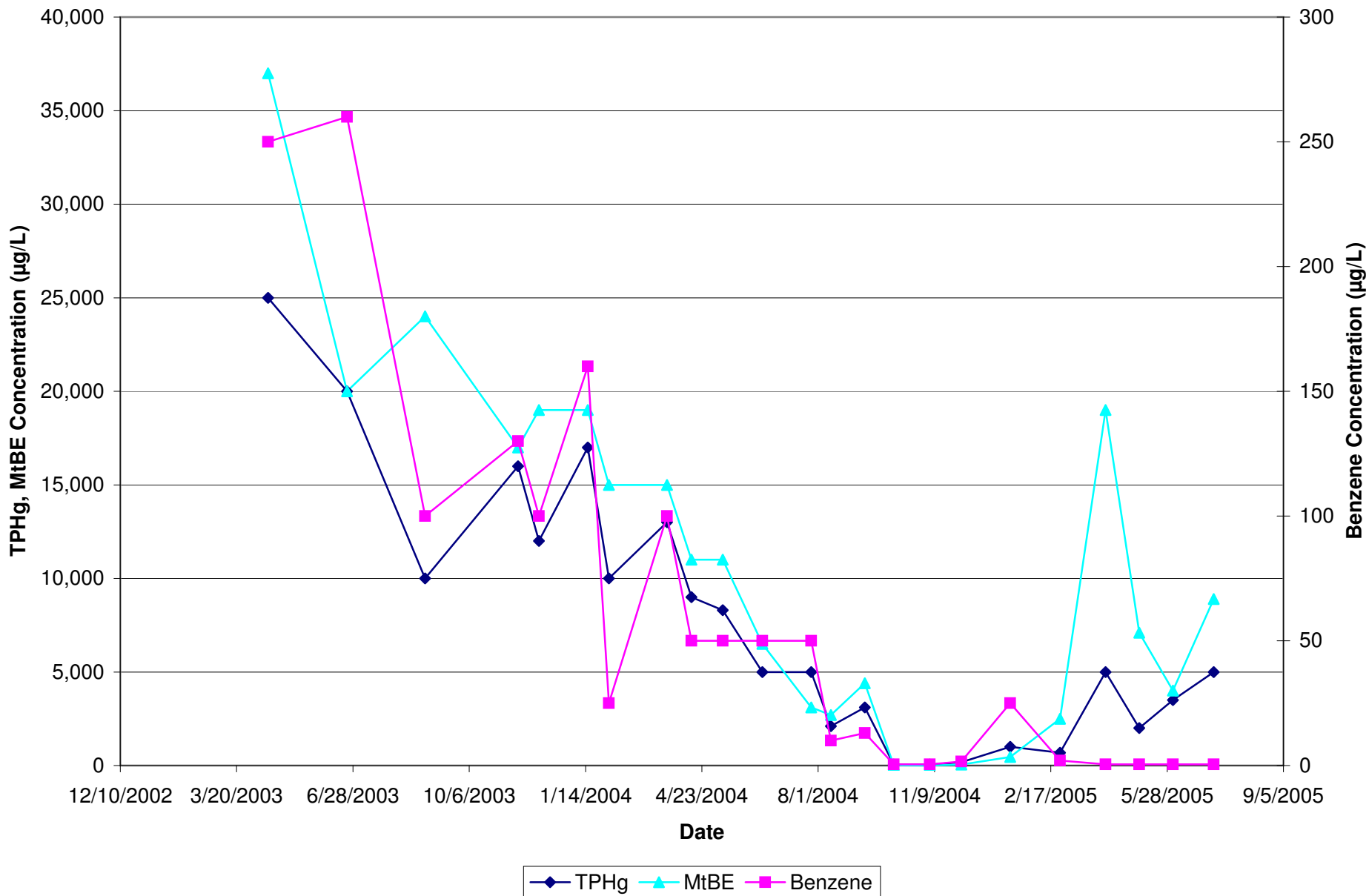
- Data not available
- NM Not Measured
- a Sampled by Gettler-Ryan, Inc.
- b Hydrocarbon in gasoline range does not match laboratory gasoline standard.
- c ORP reading under the range
- d Quantity of unknown hydrocarbon(s) in sample based on gasoline.
- e Data not available at time of reporting
- f MW-7 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				Well I.D. 02-2				Well I.D. 02-3			
					Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate
					(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)
29 Sept 06		on/off	20	15100	20		7		14		7		15		7	
27 Sept 06		on/off	20	15308	20		7		16		7		16		7	
24 Nov 06		on/off	20	16028	20		7		15		7		15		7	

Date	Well I.D. 02-4				Well I.D. 02-5				Well I.D. 02-6				Well I.D. 02-7			
	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate
	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)
29 Sept 06	16		7		16		7		28		7		28		7	
27 Sept 06	17		7		20		7		28		7		28		7	
24 Nov 06	15		7		16		7		28		7		28		7	

Date	Well I.D. 02-8				Well I.D. 02-9				Well I.D. 02-10				Well I.D.			
	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate
	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)
29 Sept 06	20		7		19		7		22		7					
27 Sept 06	16		7		19		7		21		7					
24 Nov 06	16		7		16		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 Safety Interlock	Check Sparge Blower V-Belt Tension & Conditions	Check Controller Program	Change Blower Oil	Sparge Blower Grease Bearings	Sparge Blower Repair/Replace	Comments
29 Sept 06	OK	OK	OK	OK	N/A	OK	N/A	N/A	OK	10-27 Sept O3 down
27 Sept 06	OK	OK	OK	OK	N/A	OK	N/A	N/A	OK	for well but repair
24 Nov 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.