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April 17, 2008

Mr. Jerry Wickham  
Alameda County  
Department of Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Subject: **StID#3337**  
Site Address: 3609 International Blvd., Oakland, California

Dear Mr. Wickham:

SOMA's "First Quarter 2008 Groundwater Monitoring and Remediation System Operation Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 734-6400.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mansour Sepehr'.

Mansour Sepehr, Ph.D., PE  
Principal Hydrogeologist

Enclosure

cc: Mr. Abolghassem Razi w/report enclosure  
Tony's Express Auto Service

Mr. Vince Tong w/report enclosure  
Traction International



**First Quarter 2008  
Groundwater Monitoring and  
Remediation System Operation Report**

**Tony's Express Auto Service  
3609 International Boulevard  
Oakland, California**

**April 17, 2008**

**Project 2331**

**Prepared for  
Mr. Abolghassem Razi  
3609 International Boulevard  
Oakland, California 94601**



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## CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Abolghassem Razi, property owner of 3609 International Boulevard, Oakland, California, to comply with Alameda County Environmental Health Services requirements for the First Quarter 2008 groundwater monitoring event.



Mansour Sepehr, Ph.D., P.E.  
Principal Hydrogeologist



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# 1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this monitoring report on behalf of Mr. Abolghassem Razi, owner of the property at 3609 International Boulevard at the intersection of 36<sup>th</sup> Avenue in Oakland, California (the Site, Figure 1). Tony's Express Auto Service operates on the property.

This report summarizes results of the First Quarter 2008 groundwater monitoring event conducted at the Site on February 21 and 22, 2008, and includes laboratory analytical results for the groundwater samples.

This report also describes operation of the groundwater extraction system installed by SOMA in December 1999 and the vapor extraction system installed by SOMA in July 2000. System locations are shown in Figure 2.

## 1.1 Summary of Field Activities

On February 21, 2008 eight on site monitoring wells (MW-1 through MW-3, MW-4R, MW-5 through MW-8), two off-site wells (MW-10, MW-12), three French drain risers (FD Center, FD East, and FD West), and one extraction well (EX-1) were measured for depth to groundwater.

On February 21 and 22, 2008, additional field measurements and grab groundwater samples were collected from all monitoring wells except MW-11. SOMA field crew was unable to monitor well MW-11 because the gate with access to this well was locked at the time of this monitoring event.

Groundwater monitoring activities were performed in accordance with general guidelines of the California Regional Water Quality Control Board (CRWQCB) and the Alameda County Environmental Health Services (ACEHS). A description of SOMA's groundwater monitoring procedures is included in Appendix A. Figure 2 shows well and riser locations.

A natural attenuation study was conducted during this monitoring event to evaluate whether petroleum hydrocarbons found in the groundwater were biodegrading.

## 1.2 Summary of Laboratory Analysis

Pacific Analytical Laboratory, a state-certified laboratory, analyzed groundwater samples for the following:

- Total petroleum hydrocarbons as gasoline (TPH-g)
- Benzene, toluene, ethylbenzene, total xylenes (BTEX)

- Methyl tertiary-butyl ether (MtBE)

Samples were prepared using EPA Method 5030 and analyzed using EPA Method 8260B.

## 2. RESULTS

Following are results of field measurements and laboratory analyses for the February 21 and 22, 2008 groundwater monitoring event.

### 2.1 Field Measurements

As shown in Table 1, depths to groundwater for the monitoring wells ranged from 8.51 feet in well MW-8 to 10.07 feet in MW-3. Corresponding groundwater elevations ranged from 27.98 feet in MW-12 to 32.49 feet in MW-5. Groundwater elevations for the center, east, and west risers, and the extraction well EX-1 were 29.13 feet, 30.20 feet, 30.23 feet, and 23.60 feet, respectively.

Figure 3 shows the groundwater elevation contour map. Groundwater flows toward the extraction well EX-1 at an approximate gradient of 0.115 feet/foot. The lowest site-wide groundwater elevation was measured in EX-1. EX-1 is providing a capture zone within the region of the UST cavity and in general has reduced off-site contaminant migration.

Field notes for physical, chemical and biodegradation parameters measured during this monitoring event are included in Appendix B.

Oxidation-reduction potential (ORP) showed positive redox potentials in MW-2. The more positive the redox potential of an electron acceptor, the more energetically favorable is the reaction utilizing that electron acceptor. The most energetically preferred electron acceptor for redox reactions is dissolved oxygen (DO). Evaluating distribution of electron acceptors can provide evidence of where, and to what extent, hydrocarbon biodegradation is occurring.

Upon equalization of the surrounding aquifer, when the purge cycle was terminated, DO concentrations ranged from 0.20 mg/L in well MW-10 to 0.22 mg/L in wells MW-1, MW-2, MW-4R, MW-5, and MW-7. Oxidation-reduction potential (ORP) showed negative redox potentials in all wells except MW-2. Oxidation of petroleum hydrocarbons could have occurred in these monitoring wells with negative redox potential, because it indicates that contaminants in groundwater are conducive to anaerobic biodegradation.

Ferrous iron concentrations were detected throughout the site. Ferrous iron concentrations, which can indicate anaerobic biodegradation, ranged from 0.07 mg/L in well MW-7 to 3.14 mg/L in MW-3.

Nitrate concentrations were non-detectable in all wells except MW-2 and MW-5.

High ferrous iron concentrations in combination with non-detectable nitrate levels indicate anaerobic biodegradation beneath the Site.

The absence of sulfate in the groundwater samples may indicate an anaerobic methanogenesis process. Sulfate was below the equipment tolerance level in wells MW-8 and MW-12. Detectable sulfate concentrations ranged from 1 mg/L in MW-3 to 33 mg/L in MW-5.

## 2.2 Laboratory Analysis

Table 1 presents laboratory analysis results for groundwater samples collected during this monitoring event, and Appendix C contains chain of custody documentation and laboratory analytical reports.

TPH-g was detected throughout the Site except at well MW-2 and MW-7. Detectable TPH-g concentrations ranged from 122 µg/L in MW-4R to 7,840 µg/L in MW-3.

In the more impacted wells MW-1, MW-3, MW-6 and MW-8 the following concentration trends were observed.

- At MW-1 in the vicinity of the UST cavity, TPH-g has decreased significantly since the previous monitoring event and the current TPH-g concentration is significantly lower than in Fourth Quarter 2006.
- At MW-3 in the vicinity of the UST cavity, TPH-g has increased since the previous monitoring event.
- Since the previous monitoring event, TPH-g has decreased slightly at MW-6.
- The groundwater sample collected from MW-8 indicated a decrease in the TPH-g concentrations.
- In comparison with the last several groundwater monitoring events, TPH-g concentrations showed a continuous declining pattern.

Refer to Table 1 for detailed TPH-g site concentration trends.

Figure 4 displays the contour map of TPH-g concentrations in groundwater. The majority of the TPH-g plume was in the vicinity of the UST cavity at wells MW-3, MW-6 and MW-1, as well as in MW-8 southwest of MW-1 and MW-3. Capture



zones have been established at the French drain and extraction well, which have decreased off-site migration. TPH-g decreased at both off-site wells, MW-10 and MW-12, since First Quarter 2007.

The following BTEX concentration trends were observed during this monitoring event:

- All BTEX analytes were below laboratory-reporting limits in MW-5.
- The maximum concentration of benzene was reported in MW-3 at 402 µg/L. The benzene concentration was below the laboratory-detection limit in MW-2 and MW-5.
- Toluene and xylenes were non-detectable in MW-2, MW-4R, MW-7, and MW-12.
- The highest benzene, toluene, ethylbenzene, and total xylenes were detected at MW-3 at 402 µg/L, 64.5 µg/L, 496 µg/L, and 430 µg/L, respectively.

Figure 5 shows the contour map of benzene concentrations in the groundwater. The majority of the benzene plume appears to be in the vicinity of the pump islands and USTs, at well MW-3. Refer to Table 1 for benzene concentration trends.

MtBE was below the laboratory detection limit in all tested wells except MW-1, MW-10 and MW-12. Detectable MtBE concentrations ranged from 2.52 µg/L in MW-12 to 11 µg/L in MW-10. Figure 6 shows the contour map of MtBE concentrations in the groundwater.

### **3. GROUNDWATER TREATMENT SYSTEM OPERATION**

The treatment system began operating on December 9, 1999. Since startup, 3,867,875 gallons of groundwater have been treated and discharged (as of March 28, 2008) into the East Bay Municipal Utility District (EBMUD) sewer system under the existing discharge permit.

As of January 9, 2004, the previously installed pneumatic downhole pumps in the western and center French drain risers were removed and replaced with electrical submersible pumps. On May 4, 2005, to maintain accurate recordings of the total flow through the system, a newer totalizer meter was installed. On September 29, 2005, the existing 2,000-pound carbon vessel was replaced with a newer 2,000-pound carbon vessel that was refurbished with new carbon; the 200-pound carbon drum was also replaced. The former 2,000-pound vessel had become rusted from prolonged use. A schematic diagram of the remediation system is displayed in Figure 7.

On February 19, 2007, a carbon change-out was conducted on the remedial system, during which the 2,000-pound vessel was refurbished with new carbon and the 200-pound carbon drum was replaced.

To reduce the hydrocarbon source region in the vicinity of the UST cavity, SOMA oversaw installation of extraction well EX-1 by Gregg Drilling & Testing, Inc. on February 5, 2007. On April 20, 2007, SOMA installed an electric submersible pump in well EX-1, connected it to the existing groundwater remediation system, and began extracting groundwater from the well. The pump is powered on the same electrical circuit as the two existing pumps inside the French drain risers. Underground piping to the existing system influent surge tank conveys the extracted groundwater, which is then treated using GAC and discharged to the local sanitary sewer system, in accordance with the Site EBMUD discharge permit. Figure 2 shows the location of EX-1.

Table 2 presents the total volume of treated groundwater and the groundwater analytical results. The table shows that all effluent samples have remained below discharge limits set forth by EBMUD. The most current laboratory reports for the groundwater treatment system are included in Appendix D.

Since startup, the treatment system has removed approximately 239.41 pounds of hydrocarbons and 87.50 pounds of MtBE from the groundwater at the Site. Figure 8 shows approximate masses of TPH-g and MtBE removed from impacted groundwater during operation of the treatment system.

#### **4. OPERATION OF AIR SPARGING SYSTEM**

From February 22, 2006 to March 6, 2006, SOMA oversaw installation of the air sparging system, which consists of nine vapor extraction wells and three air sparge wells. The air sparge wells were installed in the vicinity of the UST cavity, pump islands, and near MW-6 (Figure 2). Figures 9 and 10 show the block diagrams of the air sparging and vapor extraction units. The operating permit for the soil vapor extraction (SVE) system was extended to August 2008 by the Bay Area Air Quality Management District.

Prior to installation of the air sparging wells in November 2005, SOMA collected air samples from previously existing SVE wells. Based on sample results, which were non-detectable, the lines from SVE wells P-4 and ISL-1 to the vacuum pump were closed. This allowed for greater vacuum at the more impacted SVE wells.

The air sparging system was initially started on March 15, 2006. However, due to close proximity of the system to a residential area, the system was modified to reduce noise level. Specifically, a timer was installed on the compressor to

control operation hours of the air sparging system and limit operation to daytime hours. Currently, the system operates from 8 a.m. to 7 p.m. To further suppress noise, the existing blower unit, installed in 2000, was rebuilt and foam was placed around it as a noise suppressant.

To more effectively increase removal of contaminants in the soil, an additional vacuum blower was installed in series to the existing vacuum blower on July 24, 2006. Rain causes the water table to rise, thereby decreasing the actual layer of the unsaturated zone. Therefore, the actual mass of contaminants in the soil that can be removed by the remedial system is greatly reduced. Based on the reduction in the unsaturated region, as well as a reduction in the mass of contaminant vapors removed from the soil, the remedial system was shut down on November 7, 2006.

On May 23, 2007, SOMA restarted the SVE and air sparge systems and resumed recording of field readings for these systems. Based on field measurements, it appeared that using both vacuum blowers in series on the same extraction manifold had little effect on the air flow rate into the system or the concentrations of hydrocarbons in the extracted gases. Therefore, the inlet piping from the well field was divided into two manifolds with the intent to use each vacuum pump to extract from a separate set of wells. However, due to alterations made by non-SOMA personnel in the facility's main electrical supply panel without SOMA's knowledge, the operation of both vacuum pumps at the same time was not possible because the resultant electrical load tripped the circuit breaker that includes the SVE system. Subsequent operation of the SVE system has been limited to one blower at a time.

As shown in Table 3, approximately 967.2 pounds of hydrocarbons as vapor have been removed from the impacted soil, as of September 28, 2007. Table 3 also outlines the history of the SVE system. The remedial system has been shut down since then because of the wet weather.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

Findings of the First Quarter 2008 groundwater monitoring event are summarized below.

1. In general, based on low groundwater elevations observed at EX-1, a capture zone remains established at this location.
2. Groundwater contaminants remained almost the same in comparison with the previous monitoring event. It appears that MW-3 and MW-6 are located within the remaining hotspots of the groundwater chemical plume.
3. It appears that MtBE concentrations in groundwater are diminishing across the Site and that current maximum concentrations are below the

Environmental Screening Levels (ESLs) for industrial land use type where groundwater is not a potential drinking water source.

4. The bioattenuation study confirmed occurrence of biodegradation beneath the Site. Based on this study, affected areas appear to be in the vicinity of the USTs, around wells MW-1 and MW-3 and the eastern section of the Site, around MW-6.
5. The source area remains in the vicinity of the UST cavity, pump islands, and eastern section of the mechanic shop at wells MW-1, MW-3, and MW-6. However, during this monitoring highest benzene, toluene, ethylbenzene, and total xylenes were detected at MW-3 at 402 µg/L, 64.5 µg/L, 496 µg/L, and 430 µg/L, respectively.
6. In general, the GAC and SVE systems have effectively reduced the peak contaminant levels beneath the Site. Since initial startup, approximately 239.41 pounds of hydrocarbons and 87.50 pounds of MtBE have been removed from the groundwater. Approximately 967.2 pounds of petroleum hydrocarbons have been removed from the vadose zone.

Based on results of this monitoring event, SOMA recommends:

1. Continuing operation of the pump-and-treat system to maintain the removal rate of contaminant masses in groundwater.
2. Continuing operation of the SVE and air sparging remedial systems to maintain the removal rate of contaminants in soil in the unsaturated region.
3. Temporarily discontinuing testing for ferrous iron, nitrate, and sulfate parameters. Due to the extent of biodegradation data generated during quarterly monitoring events, SOMA has adequately characterized Site groundwater.
4. Continuing the quarterly monitoring programs to better understand seasonal variations in groundwater quality conditions.
5. Continued monthly MPE events. SOMA conducted MPE pilot test in December 2007. Another MPE event was conducted in March 2008. Approximately 64 lbs of volatile organic compounds (VOCs) were removed during the MPE pilot test conducted in December 2007.

## 6. REPORT LIMITATIONS

This report is the summary of work done by SOMA including observations and descriptions of Site conditions. It includes analytical results produced by state-certified laboratories for the current and previous monitoring events and summaries of data produced by environmental consultants for previous monitoring events. Numbers and locations of wells were selected to provide the

required information, but may not be completely representative of entire Site conditions. All conclusions and recommendations are based on laboratory analysis results. Conclusions beyond those specifically stated in this document should not be inferred from this report.

SOMA warrants that the services were provided in accordance with generally accepted practices in the environmental engineering and consulting field at the time of this sampling.

# **TABLES**

**Table 1**  
**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-1	10/5/1994	97.99	15.39	82.60	320,000	24,000	21,000	2,600	15,000	NA
	12/5/1994	97.99	9.32	88.67	80,000	3,800	6,600	2,300	11,000	NA
	3/2/1995	97.99	8.07	89.92	32,000	190	160	150	490	NA
	6/6/1995	97.99	9.53	88.46	21,000	950	650	570	150	NA
	10/5/1995	97.99	13.29	84.70	59,000	140	130	140	390	NA
	1/2/1996	97.99	10.07	87.92	30,000	71	73	50	120	NA
	4/1/1996	97.99	8.29	89.70	31,000	98	120	63	170	NA
	12/3/1996	97.99	11.67	86.32	NA	NA	NA	NA	NA	NA
	4/9/1997	97.99	11.14	86.85	NA	NA	NA	NA	NA	NA
	12/10/1997	97.99	9.30	88.69	27,000	2,300	2,100	1,400	5,100	NA
	9/10/1998	97.99	13.58	84.41	NA	NA	NA	NA	NA	NA
	12/16/1998	97.99	11.10	86.89	65,000	2,500	2,400	2,300	9,500	160
	3/16/1999	97.99	9.91	88.08	17,000	480	860	850	3,000	190
	6/10/1999	97.99	11.10	86.89	25,000	1,110	1,460	1,330	5,265	77
	8/23/1999	97.99	13.35	84.64	19,750	678	463	893	2,938	38
	11/9/1999	97.99	14.45	83.54	10,000	693	15	<5	3,471	50
	2/7/2000	97.99	11.20	86.79	40,000	2,280	1,380	8	6,130	47
	5/31/2000	97.99	11.49	86.50	15,610	610	350	310	1,400	<5
8/9/2000	97.99	13.36	84.63	11,000	638	<5	<5	<5	17.1	
11/2/2000	97.99	13.20	84.79	7,050	435	52	ND	689	10	

**Table 1**  
**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-1 cont.	3/13/2001	97.99	8.96	89.03	14,570	1,005	440	108	2,030	16
	5/22/2001	97.99	11.50	86.49	4,900	310	81	82	388	150
	8/8/2001	97.99	13.51	84.48	14,820	852	342	568	1,606	2,000
	11/19/2001	97.99	14.01	83.98	41,000	2,700	5,100	1,000	4,570	74,000
	2/21/2002	97.99	10.11	87.88	260,000	3,700	12,000	3,700	19,200	23,000
	5/7/2002	97.99	10.86	87.13	53,000	4,400	5,100	1300	7,000	32,000
	7/30/2002	40.11	12.80	27.31	29,000	2,400	2,500	920	4,400	13,000
	10/2/2002	40.11	15.50	24.61	27,000	2,200	2,400	950	4,500	34,000
	1/3/2003	40.11	9.73	30.38	62,000	3,500	6,000	1600	9,700	48,000
	5/3/2003	40.11	9.71	30.40	59,000	3,100	2,700	1500	7,000	14,000
	7/24/2003	40.11	12.44	27.67	36,000	4,800	1,800	1300	5,600	25,000
	10/22/2003	40.11	13.89	26.22	630,000 H	3,300	1900 C	3600	27,700	15,000
	1/22/2004	40.11	10.45	29.66	39,000	3,100	1,600	950	4,300	8,500
	4/1/2004	40.11	11.49	28.62	41,000	1,200	350C	830	2,740	4,300
	8/20/2004	40.11	13.81	26.30	22,000	2,000	220	560	3,090	6,900
	12/8/2004	40.11	11.10	29.01	22,790	1,634	319	895	2,851	5,504
	3/16/2005	40.11	8.40	31.71	44,400	3,150	811	1,090	2,856	7,180
	5/16/2005	40.11	9.72	30.39	33,900	3,440	1,700	1,090	2,276	3,210
	7/14/2005	40.11	11.31	28.80	50,100	4,350	1,760	1,500	2,853	3,980
	10/13/2005	40.11	13.51	26.60	43,100	1,960	325	639	3,080	3,000
	1/3/2006	40.11	8.82	31.29	55,000	1,100	510	1,100	4,070	2,200
	4/7/2006	40.11	7.12	32.99	42,500	1,780	1,010	1,610	2,449	2,110
	9/8/2006	40.11	12.64	27.47	37,200	3,280	1,460	1,290	2,685	2,180
	11/29/2006	40.11	12.49	27.62	29,400	2,490	782	1,510	1,815	1,540
	2/27/2007	40.11	9.68	30.43	17,000	1,400	452	989	1,583	1,150
	5/24/2007	40.11	11.58	28.53	8,630	575	121	306	687	235
	8/21/2007	40.11	13.34	26.77	7,480	544	87	356	537	172
11/15/2007	40.11	12.73	27.38	18,500	413	93.1	523	627	86.6	
<b>2/22/2008</b>	<b>40.11</b>	<b>9.82</b>	<b>30.29</b>	<b>3,450</b>	<b>20.7</b>	<b>3.73</b>	<b>60.2</b>	<b>78.0</b>	<b>8.11</b>	



**Table 1**  
**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-2	10/1/1994	98.58	15.36	83.22	NA	NA	NA	NA	NA	NA
	12/1/1994	98.58	8.60	89.98	NA	NA	NA	NA	NA	NA
	3/6/1995	98.58	7.68	90.90	490	3	3	3	1	NA
	6/5/1995	98.58	9.59	88.99	8,000	220	330	350	660	NA
	10/2/1995	98.58	13.42	85.16	46,000	160	130	93	240	NA
	1/3/1996	98.58	9.93	88.65	46,000	160	130	93	240	NA
	4/3/1996	98.58	8.13	90.45	27,000	0.1	92	44	13	NA
	12/9/1996	98.58	11.67	86.91	6,200	11	7	2	14	ND
	4/10/1997	98.58	11.40	87.18	53,000	150	110	37	0.12	ND
	12/30/1997	98.58	9.04	89.54	35,000	4,900	4,900	1,600	7,000	NA
	6/30/1998	98.58	NM	NM	25,000	2,000	2,000	1,300	4,300	NA
	9/29/1998	98.58	13.58	85.00	29,000	290	180	160	360	<0.5
	12/16/1998	98.58	10.94	87.64	26,000	1,400	1,600	880	9,500	<5
	3/16/1999	98.58	7.60	90.98	7,600	730	830	610	1,900	55
	6/10/1999	98.58	11.24	87.34	3,500	290	428	211	744	ND
	8/23/1999	98.58	13.50	85.08	60	6	9	4	11	ND
	11/9/1999	98.58	14.10	84.48	<50	<5	<5	<5	<5	<5
	2/7/2000	98.58	9.85	88.73	6,400	372	639	46	134	8
	5/31/2000	98.58	10.88	87.70	2,930	130	330	130	570	<5
	8/9/2000	98.58	13.03	85.55	<50	<5	<5	<5	<5	<5
	11/2/2000	98.58	12.60	85.98	ND	ND	ND	ND	ND	ND
	3/13/2001	98.58	8.55	90.03	932	18	34	1.3	225	ND
	5/22/2001	98.58	11.00	87.58	870	37	75	55	179	2.7
8/8/2001	98.58	13.53	85.05	125	4	4	3	11	ND	
11/19/2001	98.58	13.43	85.15	470	13	64	22	83	14	
2/21/2002	98.58	8.99	89.59	1,700	26	180	95	360	<2	
5/7/2002	98.58	10.59	87.99	1,800	31	140	110	348	<2	
7/30/2002	40.71	12.70	28.01	180	11	6.3	9.4	27	<2.0	
10/2/2002	40.71	14.23	26.48	<50	<0.5	<0.5	<0.5	0.64	<2.0	

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**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-2 cont.	1/3/2003	40.71	8.66	32.05	510	5	30.0	24.0	92	<2.0
	5/3/2003	40.71	9.17	31.54	1,300	14	88.0	78.0	271	<2.0
	7/24/2003	40.71	12.23	28.48	220	3.9	4.3	7	14.5	<2.0
	10/22/2003	40.71	13.65	27.06	170 H	1.9	<0.5	2.2	2.2	<2.0
	1/22/2004	40.71	9.54	31.17	860	7.2	37	50	151	<2.0
	4/1/2004	40.71	10.80	29.91	730	6.6	19	38	87	<2.0
	8/20/2004	40.71	13.54	27.17	220	2.2	1.9	7	11.7	<0.5
	12/8/2004	40.71	10.52	30.19	99	1.7	3.3	8.3	25.1	<0.5
	3/15/2005	40.71	8.06	32.65	5,690	18.7	120	315	876	<1.0
	5/17/2005	40.71	9.10	31.61	6,320	12.5	75	429	557	<2.15
	7/14/2005	40.71	11.10	29.61	7,680	14.1	46.3	522	471	<2.15
	10/13/2005	40.71	13.25	27.46	562	4.25	3.28	15	8.29	<0.50
	1/3/2006	40.71	6.72	33.99	340	2.5	4.4	22	50.2	<0.5
	4/7/2006	40.71	5.75	34.96	6,160	24	84.8	385	474	<2.15
	9/7/2006	40.71	12.58	28.13	114	2.45	<2.0	8.62	6.85	<0.5
	11/29/2006	40.71	12.26	28.45	293	5.02	3.25	24	15.15	<0.5
	2/27/2007	40.71	8.78	31.93	3,190	18.30	49.20	396	466	<1.0
	5/23/2007	40.71	11.09	29.62	<50.0	<0.500	<2.00	6.22	4.68	<0.500
	8/21/2007	40.71	13.31	27.40	241	3.12	<2.00	17.6	7.59	<0.500
11/16/2007	40.71	12.59	28.12	61.1	5.09	<2.00	1.67	<2.00	<0.5	
<b>2/21/2008</b>	<b>40.71</b>	<b>8.56</b>	<b>32.15</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;2.00</b>	<b>1.41</b>	<b>&lt;2.00</b>	<b>&lt;0.5</b>	
MW-3	10/5/1994	97.78	15.79	81.99	3,000,000	190,000	740,000	310,000	130,000	NA
	12/2/1994	97.78	9.79	87.99	250,000	19,000	22,000	4,400	28,000	NA
	3/6/1995	97.78	8.69	89.09	350,000	20,000	42,000	5,800	36,000	NA
	6/5/1995	97.78	10.25	87.53	350,000	20,000	42,000	5,800	36,000	NA
	10/2/1995	97.78	12.91	84.87	150,000	510	410	210	65	NA
	1/3/1996	97.78	10.55	87.23	150,000	510	410	210	650	NA
	4/3/1996	97.78	8.76	89.02	NA	NA	NA	NA	NA	NA
	12/3/1996	97.78	12.02	85.76	NA	NA	NA	NA	NA	NA

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**3609 International Boulevard, Oakland, California**

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MW-3 cont.	4/1/1997	97.78	11.73	86.05	NA	NA	NA	NA	NA	NA
	12/1/1997	97.78	NM	NM	NA	NA	NA	NA	NA	NA
	9/1/1998	97.78	14.68	83.10	NA	NA	NA	NA	NA	NA
	12/16/1998	97.78	11.55	86.23	51,000	5,700	3,900	1,200	6,300	410
	3/16/1999	97.78	8.44	89.34	45,000	4,100	6,400	1,000	6,100	470
	6/10/1999	97.78	11.8	85.98	46,000	8,245	6,425	1,015	7,173	274
	8/23/1999	97.78	13.85	83.93	64,000	7,484	8,052	1,744	9,749	141
	11/9/1999	97.78	14.7	83.08	26,000	3,218	1,319	<5	6,697	126
	2/7/2000	97.78	10.95	86.83	44,000	6,090	3,360	<5	5,780	276
	5/31/2000	97.78	11.68	86.10	68,000	15,000	8,900	1,500	7,400	<5
	8/9/2000	97.78	13.73	84.05	76,000	8,900	5,636	883	7,356	176
	11/2/2000	97.78	13.4	84.38	48,000	6,789	4,816	676	7,258	83
	3/13/2001	97.78	9.43	88.35	14,754	2,250	140	ND	1,284	110
	5/22/2001	97.78	11.81	85.97	44,000	5,400	3,100	1,400	6,400	200
	8/8/2001	97.78	14.1	83.68	41,750	3,485	2,670	1,255	5,420	52
	11/19/2001	97.78	14.32	83.46	NA	NA	NA	NA	NA	NA
	2/21/2002	97.78	10.01	87.77	62,000	6,000	7,600	1,900	9,200	12,000
	5/7/2002	97.78	11.28	86.50	54,000	6,700	3,200	1,800	7,100	9,100
	7/30/2002	40.91	13.25	27.66	45,000	8,900	1,700	1,600	5,600	2,600
	10/2/2002	40.91	14.98	25.93	70,000	4,900	5,100	2,100	11,900	21,000
	1/3/2003	40.91	9.79	31.12	35,000	2,900	1,300	860	5,200	13,000
	5/3/2003	40.91	10.01	30.90	48,000	5,800	1,400	1,600	7,400	5,900
	7/24/2003	40.91	12.94	27.97	31,000	4,700	990	1,400	5,200	16,000
	10/22/2003	40.91	14.29	26.62	30,000	4,400	930	1,600	5,400	7,400
	1/22/2004	40.91	10.57	30.34	45,000	2,100	850	1,500	5,700	2,900
	4/1/2004	40.91	11.84	29.07	31,000	4,200	590	1,600	4,370	900
	8/20/2004	40.91	14.24	26.67	21,000	3,400	370	1,000	2,350	1,100
	12/8/2004	40.91	11.32	29.59	6,441	978	109	490	941	201
	3/16/2005	40.91	8.87	32.04	22,300	1,280	456	729	1,870	2,400
	5/17/2005	40.91	9.96	30.95	17,600	764	302	735	1,227	1,800
7/14/2005	40.91	11.50	29.41	34,600	1,390	492	1,460	2,054	1,090	
10/13/2005	40.91	13.78	27.13	15,000	1,290	267	675	838	893	

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MW-3 cont.	1/3/2006	40.91	7.50	33.41	8,700	650	98	330	860	280
	4/7/2006	40.91	6.74	34.17	16,800	677	239	802	1,018	564
	9/8/2006	40.91	12.95	27.96	26,400	1,660	381	933	1,545	332
	11/29/2006	40.91	12.78	28.13	15,100	2,080	381	1,290	1,624	247
	2/27/2007	40.91	9.43	31.48	5,950	1,100	116	531	500	170
	5/24/2007	40.91	11.63	29.28	8,240	1,360	116	540	696	37
	8/21/2007	40.91	13.75	27.16	13,200	2,240	119	868	983	36.4
	11/16/2007	40.91	13.25	27.66	5,490	2,360	52	523	213.9	43
	<b>2/22/2008</b>	<b>40.91</b>	<b>10.07</b>	<b>30.84</b>	<b>7,840</b>	<b>402</b>	<b>64.5</b>	<b>496</b>	<b>430.0</b>	<b>&lt;1</b>
MW-4	1/3/1996	97.85	10.11	87.74	9,300	230	110	10	29	NA
	4/3/1996	97.85	8.35	89.50	1,900	12	8	5	14	NA
	12/9/1996	97.85	11.58	86.27	4,000	14	6	4	12	ND
	4/10/1997	97.85	11.23	86.62	ND	ND	ND	ND	ND	ND
	12/30/1997	97.85	9.43	88.42	2,300	410	270	100	1,500	NA
	6/30/1998	97.85	NM	NM	1,700	780	160	54	200	NA
	9/29/1998	97.85	13.64	84.21	6,200	910	77	68	200	18
	12/16/1998	97.85	11.13	86.72	1,400	590	33	28	94	24
	3/16/1999	97.85	8.46	89.39	600	200	35	19	56	11
	6/10/1999	97.85	11.30	86.55	1,000	298	44	19	64	13
	8/23/1999	97.85	13.20	84.65	660	497	41	54	145	6
	11/9/1999	97.85	14.10	83.75	<50	<5	<5	<5	<5	<5
	2/7/2000	97.85	11.25	86.60	7,800	1,200	61	<5	781	<5
	5/31/2000	97.85	11.46	86.39	552	42	19	16	67	<5
	8/9/2000	97.85	13.35	84.50	370	5.08	<5	<5	<5	<5
	11/2/2000	97.85	13.05	84.80	ND	5.30	ND	ND	8	ND
	3/13/2001	97.85	9.24	88.61	62	ND	ND	3.2	8.7	ND
5/22/2001	97.85	11.50	86.35	80	12	1.9	4.1	9.8	ND	
8/8/2001	97.85	13.80	84.05	133	12	2.2	3.9	9	ND	
11/19/2001	97.85	13.68	84.17	670	180	5	17	53	ND	

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MW-4 cont.	2/21/2002	97.85	9.97	87.88	450	63	4.1	22	28.7	<2
	5/7/2002	97.85	10.81	87.04	570	72	29	27	74	<2
	7/30/2002	40.01	12.62	27.39	450	20	24	19	74	<2.0
	10/2/2002	40.01	14.34	25.67	320	69	0.99	9	5.49	<2.0
	1/3/2003	40.01	9.79	30.22	310	49	2.5	13	26.7	<2.0
	7/24/2003	40.01	12.44	27.57	<50	1	<0.5	<0.5	<0.5	<0.5
	10/22/2003	40.01	13.72	26.29	70	12	<0.5	4.7	3.0	<2.0
	1/22/2004	40.01	10.55	29.46	230	18	2.1	8.1	17.1	<2.0
	4/1/2004	40.01	11.39	28.62	<50	3.8	<0.5	1.6	1.9	<2.0
	8/20/2004	40.01	13.68	26.33	<50	1.6	<0.5	0.66	0.53	<2.0
	12/7/2004	40.01	10.95	29.06	<50	1.3	<0.5	2.80	<1.0	<0.5
	3/15/2005	40.01	8.61	31.40	661	72	4.13	39.7	48.42	<0.5
MW-4R	5/17/2005	40.34	9.88	30.46	7,780	170	11.1	192	121.2	<0.5
	7/14/2005	40.34	11.61	28.73	847	25.3	<2.0	28.2	10.9	<0.5
	10/13/2005	40.34	13.73	26.61	785	35.5	<2.0	48.2	8.35	<0.50
	1/3/2006	40.34	9.18	31.16	2,500	65	3.8	70	62	<0.5
	4/6/2006	40.34	7.70	32.64	852	42.4	2.25	28.4	17.13	<0.5
	9/7/2006	40.34	12.96	27.38	97.7	9.29	<2.0	4.05	1.03	<0.5
	11/28/2006	40.34	12.70	27.64	914	87	<2.0	15.10	10.40	<0.5
	2/26/2007	40.34	9.78	30.56	561	38.4	<2.0	41.30	9.67	<0.5
	5/23/2007	40.34	11.36	28.98	351	35.8	<2.00	23.20	4.82	<0.500
	8/20/2007	40.34	13.45	26.89	223	24.7	<2.00	9.15	2.54	<0.500
	11/15/2007	40.34	13.01	27.33	1,740	94.5	<2.00	41	15.52	<0.5
	<b>2/22/2008</b>	<b>40.34</b>	<b>9.68</b>	<b>30.66</b>	<b>122</b>	<b>8.12</b>	<b>&lt;2.0</b>	<b>3.14</b>	<b>&lt;2.0</b>	<b>&lt;0.5</b>
MW-5	10/2/1995	99.04	13.57	85.47	1,500	1	1	4	5	NA
	1/3/1996	99.04	10.03	89.01	1,500	1	1	4	5	NA
	4/3/1996	99.04	8.24	90.80	780	1	1	5	4	NA
	12/9/1996	99.04	11.48	87.56	NA	NA	NA	NA	NA	NA
	4/10/1997	99.04	11.35	87.69	NA	NA	NA	NA	NA	NA

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MW-5 cont.	12/30/1997	99.04	9.15	89.89	790	82	66	59	160	NA
	6/30/1998	99.04	NM	NM	400	<5	<5	15	<10	NA
	9/29/1998	99.04	13.82	85.22	270	2	1	3	3	<.5
	12/16/1998	99.04	11.20	87.84	1,400	1	1	ND	2	ND
	3/16/1999	99.04	7.73	91.31	650	3	1	16	2	10
	6/10/1999	99.04	11.50	87.54	270	4	3	6	4	ND
	8/23/1999	99.04	13.55	85.49	120	ND	4	ND	4	ND
	11/9/1999	99.04	14.30	84.74	<50	<5	<5	<5	<5	<5
	2/7/2000	99.04	9.85	89.19	70	<5	<5	<5	7	<5
	5/31/2000	99.04	11.03	88.01	627.4	7.4	24	12	32.4	<5
	8/9/2000	99.04	13.22	85.82	<50	<5	<5	<5	<5	<5
	11/2/2000	99.04	13.55	85.49	ND	ND	ND	ND	ND	ND
	3/13/2001	99.04	8.67	90.37	382	6.1	1.9	6.6	5.9	ND
	5/22/2001	99.04	11.12	87.92	180	ND	ND	2.1	0.57	4.4
	8/8/2001	99.04	13.79	85.25	258	1	1.1	3.4	7.3	1.4
	11/19/2001	99.04	13.72	85.32	920	17	160	26	135	40
	2/21/2002	99.04	9.04	90.00	290	3.5	2	6.2	6.2	<0.5
	5/7/2002	99.04	10.69	88.35	160	<0.5	0.78 C	2	2.15	2.3
	7/30/2002	41.16	12.94	28.22	110	<0.5	<0.5	0.77	<0.5	<0.5
	10/20/2002	41.16	14.51	26.65	77	<0.5	<0.5	<0.5	<0.5	<2.0
	1/3/2003	41.16	8.73	32.43	450 Y	<0.5	<0.5	4	0.54	2.1
	5/3/2003	41.16	9.24	31.92	130	<0.5	<0.5	1	<0.5	3.1
	7/24/2003	41.16	12.45	28.71	300	<0.5	1.9 C	0.76	<0.5	<2.0
10/22/2003	41.16	13.89	27.27	460 H	<0.5	<0.5	<0.5	<0.5	1.9	
1/22/2004	41.16	9.60	31.56	160	<0.5	<0.5	0.55 C	<0.5	<5.0	
4/1/2004	41.16	11.06	30.10	280	<0.5	0.74C	0.62	<0.5	2.1	
8/20/2004	41.16	13.75	27.41	250	<0.5	<0.5	<0.5	<0.5	2	
12/7/2004	41.16	10.73	30.43	150	<0.5	<0.5	<0.5	<1.0	2.6	

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MW-5 cont.	3/15/2005	41.16	8.18	32.98	496	<0.5	<0.5	<0.5	<1.0	1.91
	5/17/2005	41.16	9.22	31.94	360	<0.5	<0.5	<0.5	<1.0	1.72
	7/14/2005	41.16	11.30	29.86	267	<0.5	<2.0	<0.5	<1.0	1.74
	10/13/2005	41.16	13.57	27.59	404	<0.50	<2.0	<0.50	<1.0	0.93
	1/3/2006	41.16	6.81	34.35	170	2.2	<0.5	1.8	3.1	1.1
	4/7/2006	41.16	5.81	35.35	449	<0.5	<2.0	0.53	<1.0	1.16
	9/7/2006	41.16	12.78	28.38	185	<0.5	<2.0	2.02	<1.0	<0.5
	11/28/2006	41.16	12.62	28.54	158	0.64	<2.0	<0.5	<2.0	<0.5
	2/26/2007	41.16	8.92	32.24	78.2	<0.5	<2.0	<0.5	<2.0	0.52
	5/23/2007	41.16	11.36	29.80	58.4	<0.5	<2.0	4.36	<2.0	<0.5
	8/20/2007	41.16	13.52	27.64	82.4	0.52	<2.0	4.49	2.3	<0.5
	11/16/2007	41.16	12.74	28.42	<50	3.45	<2.00	<0.5	<2.0	0.58
	<b>2/21/2008</b>	<b>41.16</b>	<b>8.67</b>	<b>32.49</b>	<b>131.0</b>	<b>&lt;0.5</b>	<b>&lt;2.0</b>	<b>&lt;0.5</b>	<b>&lt;2.0</b>	<b>&lt;0.5</b>
	MW-6	10/1/1995	98.77	13.94	84.83	NA	NA	NA	NA	NA
1/1/1996		98.77	10.55	88.22	120,000	350	310	200	610	NA
4/1/1996		98.77	8.76	90.01	NA	NA	NA	NA	NA	NA
12/1/1996		98.77	12.04	86.73	NA	NA	NA	NA	NA	NA
4/1/1997		98.77	11.76	87.01	NA	NA	NA	NA	NA	NA
12/1/1997		98.77	9.30	89.47	NA	NA	NA	NA	NA	NA
9/1/1998		98.77	14.10	84.67	NA	NA	NA	NA	NA	NA
12/1/1998		98.77	11.60	87.17	NA	NA	NA	NA	NA	NA
3/16/1999		98.77	8.40	90.37	37,000	3,900	4,300	1,600	7,000	180
6/10/1999		98.77	11.90	86.87	18,500	2,060	1,650	735	3,170	ND
8/23/1999		98.77	13.90	84.87	42,000	3,806	3,649	1,554	7,996	10
11/9/1999		98.77	14.75	84.02	40,000	1,084	130	<5	10,940	<5
2/7/2000		98.77	10.95	87.82	17,000	1,360	521	<5	4,150	6
8/9/2000		98.77	13.78	84.99	24,000	1,306	870	<5	5,162	<5
11/2/2000	98.77	13.40	85.37	19,000	1,387	618	ND	5,250	ND	

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**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-6 cont.	3/13/2001	98.77	9.49	89.28	15,637	713	459	238	2,363	ND
	5/22/2001	98.77	11.82	86.95	27,000	760	450	1,600	4,270	ND
	8/8/2001	98.77	NM	NM	NA	NA	NA	NA	NA	NA
	11/19/2001	98.77	NM	NM	NA	NA	NA	NA	NA	NA
	2/21/2002	98.77	9.92	88.85	14,000	440	180	750	1,020	<10
	5/7/2002	98.77	11.33	87.44	10,000	400	160	470	970	<2
	7/30/2002	40.92	13.28	27.64	24,000	1,000	410	1,400	3,770	<20
	10/20/2002	40.92	14.93	25.99	22,000	1,200	620	1,300	2,800	<20
	1/3/2003	40.92	9.78	31.14	12,000	730	230	740	1,690	<20
	5/3/2003	40.92	9.92	31.00	150,000 H	1,400	780	2,500	8,700	<40
	7/24/2003	40.92	12.98	27.94	29,000	1,600	520	1,500	4,400	<200
	10/22/2003	40.92	14.35	26.57	36,000	1,300	430	1,600	4,570	<40
	1/22/2004	40.92	10.60	30.32	30,000	1,300	320	1,500	3,040	<50
	4/1/2004	40.92	11.80	29.12	99,000	1,700	580 C	2,200	5,200	<50
	8/20/2004	40.92	14.36	26.56	12,000	580	130	520	1,020	<10
	12/8/2004	40.92	11.22	29.70	12,631	649	134	1,009	2,037	<2.15
	3/16/2005	40.92	8.94	31.98	18,300	546	126	705	1,069	<2.15
	5/17/2005	40.92	10.02	30.90	38,500	1,290	395	1,550	1,652	<5.50
	7/15/2005	40.92	11.78	29.14	50,100	1,510	409	1,900	1,920	<5.50
	10/13/2005	40.92	14.04	26.88	9,620	513	97.4	523	422.3	<2.15
	1/3/2006	40.92	7.86	33.06	13,000	260	79.0	680	750	<4.2
	4/7/2006	40.92	6.93	33.99	18,200	650	151	918	715	<5.5
	9/8/2006	40.92	13.12	27.80	18,600	604	98.80	639	659	<2.15
	11/28/2006	40.92	12.95	27.97	20,300	656	96.30	1,060	760	7.86
	2/27/2007	40.92	9.68	31.24	8,440	249	36.30	697	316.8	<2.15
	5/24/2007	40.92	11.59	29.33	11,400	292	34.8	493	278.5	<2.15
8/21/2007	40.92	13.88	27.04	9,480	727	87.6	761	590	<2.15	
11/16/2007	40.92	13.29	27.63	5,430	436	29.8	439	147.8	<2.15	
<b>2/22/2008</b>	<b>40.92</b>	<b>9.41</b>	<b>31.51</b>	<b>4,870</b>	<b>100</b>	<b>9.56</b>	<b>331</b>	<b>76.9</b>	<b>&lt;1.0</b>	



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**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-7	10/2/1995	97.83	12.95	84.88	NA	10	12	17	NA	3,300
	1/3/1996	97.83	9.57	88.26	3,300	9	12	17	45	NA
	4/3/1996	97.83	7.75	90.08	1,900	2	3	5	7	NA
	12/9/1996	97.83	10.97	86.86	NA	NA	NA	NA	NA	NA
	4/10/1997	97.83	12.95	84.88	NA	NA	NA	NA	NA	NA
	12/30/1997	97.83	8.65	89.18	1,400	130	98	75	200	NA
	6/30/1998	97.83	NM	NM	620	4	<5	9	<10	NA
	9/29/1998	97.83	13.09	84.74	1,800	1	1	1	2	68
	12/16/1998	97.83	10.52	87.31	990	5	10	5	20	160
	3/16/1999	97.83	7.00	90.83	300	3	1	1	1	62
	6/10/1999	97.83	10.70	87.13	320	3	7	4	3	26
	8/23/1999	97.83	12.80	85.03	570	5	10	ND	ND	ND
	11/9/1999	97.83	13.25	84.58	290	<5	9	<5	<5	12
	2/7/2000	97.83	9.50	88.33	80	<5	<5	<5	<5	23
	5/31/2000	97.83	10.52	87.31	494.9	4.9	22	4.2	21.9	29
	8/9/2000	97.83	12.63	85.20	80	<5	<5	<5	<5	11.7
	11/2/2000	97.83	11.95	85.88	50	ND	ND	ND	ND	9.1
	3/13/2001	97.83	8.04	89.79	82	0.97	ND	0.76	ND	78
	5/22/2001	97.83	10.60	87.23	370	ND	9.1	1.3	2.3	28
	8/8/2001	97.83	13.02	84.81	610	3.7	3	6.2	18.9	10
	11/19/2001	97.83	12.83	85.00	1,700	24	220	41	205	69
	2/21/2002	97.83	8.91	88.92	380	<0.5	2.5	2	3.8	78
	5/7/2002	97.83	10.13	87.70	560	15	28.0	9.2	44.0	37
	7/30/2002	39.94	12.15	27.79	270	5.3	1.3 C	2.3	8.1	46
10/20/2002	39.94	13.74	26.20	350	<0.5	2.1 C	<0.5	3.1 C	43	
1/3/2003	39.94	8.45	31.49	220 Y	<0.5	<0.5	0.78	0.55	19	
5/3/2003	39.94	7.69	32.25	280	<0.5	<0.5	<0.5	<0.5	11	
7/24/2003	39.94	11.72	28.22	230	<0.5	1.3 C	<0.5	0.63	5.9	
10/22/2003	39.94	13.10	26.84	460	<0.5	<0.5	<0.5	<0.5	5.0	

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Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-7 cont.	1/22/2004	39.94	9.23	30.71	380	<0.5	1.4 C	<0.5	<0.5	<5.0
	4/1/2004	39.94	10.40	29.54	480	<0.5	2.5 C	<0.5	0.90	0.62
	8/20/2004	39.94	12.92	27.02	410	<0.5	.81 C	<0.5	<0.5	1.70
	12/7/2004	39.94	10.28	29.66	96	<0.5	<0.5	<0.5	<1.0	<0.5
	3/16/2005	39.94	7.44	32.50	209	<0.5	<0.5	<0.5	<1.0	1.74
	5/16/2005	39.94	8.53	31.41	262	4.85	2.19	2.36	4.24	0.73
	7/14/2005	39.94	10.61	29.33	753	20.6	11.9	16.8	33.23	2.36
	10/13/2005	39.94	12.80	27.14	1,690	5.3	2.71	12.6	54	1.93
	1/3/2006	39.94	6.39	33.55	250 Y	0.80	<0.5	0.61	<0.5	1.1
	4/7/2006	39.94	8.10	31.84	3,440	0.64	<2.0	17	<1.0	<0.5
	9/7/2006	39.94	14.52	25.42	320	2.87	<2.0	4.76	1.34	<0.5
	11/28/2006	39.94	12.17	27.77	774	1.81	<2.0	6.76	3.03	<0.5
	2/26/2007	39.94	10.41	29.53	1,240	<0.5	<2.0	6.83	<2.0	<0.5
	5/23/2007	39.94	10.16	29.78	265	<0.5	<2.0	5.38	<2.0	<0.5
	8/20/2007	39.94	12.98	26.96	<50.0	0.78	<2.0	4.87	2.36	<0.5
	11/15/2007	39.94	12.45	27.49	135	<0.5	<2.00	0.54	<2.0	<0.5
<b>2/21/2008</b>	<b>39.94</b>	<b>8.79</b>	<b>31.15</b>	<b>&lt;50</b>	<b>3.18</b>	<b>&lt;2.0</b>	<b>1.69</b>	<b>&lt;2.0</b>	<b>&lt;0.5</b>	
MW-8	10/2/1995	97.25	12.86	84.39	NA	NA	NA	NA	NA	NA
	1/3/1996	97.25	9.79	87.46	94,000	310	250	180	480	NA
	4/3/1996	97.25	7.98	89.27	58,000	250	170	140	330	NA
	12/9/1996	97.25	11.13	86.12	27,000	88	43	44	80	ND
	4/10/1997	97.25	12.95	84.30	24,000	86	55	50	100	ND
	12/30/1997	97.25	8.95	88.30	28,000	6,000	1,600	2,100	4,700	NA
	6/30/1998	97.25	NM	NM	54,000	4,600	2,800	3,500	7,300	NA
	9/29/1998	97.25	13.02	84.23	NA	NA	NA	NA	NA	NA
	12/16/1998	97.25	10.75	86.50	61,000	6,300	1,700	2,200	4,400	1,300
	3/16/1999	97.25	7.58	89.67	22,000	1,800	470	2,000	2,000	820
	6/10/1999	97.25	10.80	86.45	39,500	3,610	1,635	2,175	5,913	988
	8/23/1999	97.25	12.75	84.50	58,000	5,379	2,438	3,001	6,960	639
	11/9/1999	97.25	13.65	83.60	10,500	92	<5	<5	3,414	769
	2/7/2000	97.25	10.85	86.40	44,200	1,080	617	<5	4,160	240
	5/31/2000	97.25	11.15	86.10	25,940	940	130	1,600	3,960	75
8/9/2000	97.25	12.87	84.38	22,000	632	5.38	<5	2,686	37.3	
11/2/2000	97.25	12.55	84.70	3,000	278	350	209	980	21	

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MW-8 cont.	3/13/2001	97.25	8.75	88.50	2,360	81	16	71	270	221
	8/8/2001	97.25	12.97	84.28	5,620	153	46	373	345	174
	11/19/2001	97.25	13.19	84.06	13,000	600	270	750	1,200	400
	2/21/2002	97.25	9.88	87.37	240,000	1,400	<25	4,200	6,560	<100
	5/7/2002	97.25	10.32	86.93	9,000	360	56	560	622	2,100
	7/30/2002	39.38	11.79	27.59	8,400	340	78	530	517	1,200
	10/20/2002	39.38	13.80	25.58	18,000	950	75	1,400	1,269	700
	1/3/2003	39.38	9.48	29.90	8,100	300	29	370	302	1,100
	5/3/2003	39.38	9.48	29.90	18,000	380	33 C	1,000	516	540
	7/24/2003	39.38	11.92	27.46	12,000	460	54 C	910	435	890
	10/22/2003	39.38	13.09	26.29	16,000	830	87	2,000	675	280
	1/22/2004	39.38	10.32	29.06	18,000	330	37 C	860	239	500
	4/1/2004	39.38	11.23	28.15	12,000	240	26 C	650	128.8 C	<4
	8/20/2004	39.38	13.02	26.36	6,000	310	27	660	56.8 C	<4
	12/8/2004	39.38	10.79	28.59	6,650	171	15	360	35	166
	3/15/2005	39.38	7.62	31.76	11,400	125	21	418	55.3	865
	5/16/2005	39.38	9.15	30.23	10,100	122	13.2	440	34.73	406
	7/14/2005	39.38	10.81	28.57	11,600	213	27.8	854	71.51	184
	10/13/2005	39.38	12.81	26.57	6,590	256	27.7	655	48.50	375
	1/3/2006	39.38	7.40	31.98	4,800	53	5.2	130	21	210
	4/6/2006	39.38	6.04	33.34	8,240	82.5	14.6	364	28.06	771
	9/7/2006	39.38	12.15	27.23	4,130	86.80	7.32	173	19.73	48.60
	11/28/2006	39.38	11.92	27.46	3,680	198	15.10	313	23.82	149
	2/27/2007	39.38	8.52	30.86	5,690	122	15.10	455	33.62	203
	5/24/2007	39.38	10.79	28.59	3,400	32.60	4.35	177	14.65	69.5
	8/20/2007	39.38	12.71	26.67	1,310	58.60	4.22	106	7.20	26.8
11/15/2007	39.38	12.13	27.25	10,300	169	11.1	281	12.0	60.4	
<b>2/22/2008</b>	<b>39.38</b>	<b>8.51</b>	<b>30.87</b>	<b>5,130</b>	<b>33.3</b>	<b>4.12</b>	<b>218</b>	<b>5.87</b>	<b>&lt;0.5</b>	
MW-10	12/1/1996	94.54	10.44	84.10	NA	NA	NA	NA	NA	NA
	4/10/1997	94.54	10.07	84.47	1,000	21	9	3	3	ND
	12/30/1997	94.54	8.78	85.76	10,000	5,300	76	1,100	780	NA

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MW-10 cont.	9/29/1998	94.54	11.93	82.61	9,900	5,400	66	970	620	2,600
	12/16/1998	94.54	10.19	84.35	8,700	3,800	51	790	420	1,800
	3/16/1999	94.54	7.30	87.24	4,100	15	28	420	250	2,800
	6/10/1999	94.54	9.95	84.59	4,200	1,168	34	264	154	1,195
	8/23/1999	94.54	11.60	82.94	3,250	2,135	97	600	248	1,800
	11/9/1999	94.54	12.50	82.04	2,950	1,134	20	<5	70	652
	2/7/2000	94.54	9.25	85.29	<50	<5	<5	<5	<5	448
	5/31/2000	94.54	9.45	85.09	4,400	1,500	25	390	107.1	580
	8/9/2000	94.54	11.52	83.02	6,800	1,055	26	54	53.8	1,283
	11/2/2000	94.54	11.35	83.19	ND	ND	ND	ND	ND	145
	3/13/2001	94.54	8.07	86.47	4,935	969	18	41	72	630
	5/22/2001	94.54	9.80	84.74	2,900	630	11	200	31	270
	8/8/2001	94.54	11.64	82.90	242	35	1	11	2	64
	11/19/2001	94.54	12.06	82.48	3,500	900	260	310	258	410
	2/21/2002	94.54	8.28	86.26	4,700	1,100	20	370	63.7	500
	5/7/2002	94.54	9.49	85.05	3,400	660	13	260	48.0	270
	7/30/2002	36.71	10.93	25.78	160	26	0.55	8.1	1.0	72
	10/20/2002	36.71	12.54	24.17	550	130	3.00	31.0	2.7	70
	1/3/2003	36.71	8.23	28.48	17,000	870	11	290	27	270
	5/3/2003	36.71	8.30	28.41	2,500	650	10	190	15.81 C	180
7/24/2003	36.71	10.76	25.95	750	160	4	58	6.66 C	79	
10/22/2003	36.71	11.91	24.80	2,000	410	11	170	9.14 C	110	
1/22/2004	36.71	8.91	27.80	4,000	600	15	280	15.3 C	110	
4/1/2004	36.71	9.62	27.09	5,100	580	<1	330	26.4	160	
8/20/2004	36.71	11.50	25.21	3,400	550	13	240	17.0	100	
12/7/2004	36.71	9.29	27.42	2,524	556	10	184	16.0	144	

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MW-10 cont.	3/15/2005	36.71	7.48	29.23	4,340	354	6.07	166	17.1	258
	5/16/2005	36.71	8.24	28.47	4,750	415	6.87	254	10.4	126
	7/14/2005	36.71	9.78	26.93	6,050	594	9.53	297	10.7	190
	10/13/2005	36.71	11.32	25.39	6,230	811	11.3	355	5.6	167
	1/3/2006	36.71	6.81	29.90	2,000	350	6.0	210	16	88
	4/6/2006	36.71	6.03	30.68	600	86.5	<2.0	59.1	2.36	30.4
	9/7/2006	36.71	10.90	25.81	6,960	360	<8.60	253	11.30	103
	11/28/2006	36.71	10.92	25.79	2,800	305	<8.6	228	<8.6	72.8
	2/26/2007	36.71	8.02	28.69	9,470	1,400	29.3	1,260	32.60	263.0
	5/23/2007	36.71	9.54	27.17	860	138	2.45	69.2	4.65	30.9
	8/20/2007	36.71	11.47	25.24	86.6	2.88	<2.00	5.98	2.30	2.68
	11/15/2007	36.71	11.12	25.59	492	104	<2.00	41.2	<2.0	18.7
	<b>2/21/2008</b>	<b>36.71</b>	<b>7.85</b>	<b>28.86</b>	<b>2,040</b>	<b>228</b>	<b>4.44</b>	<b>193.0</b>	<b>2.68</b>	<b>11.0</b>
MW-11	12/1/1996	95.94	11.99	83.95	NA	NA	NA	NA	NA	NA
	4/1/1997	95.94	11.47	84.47	NA	NA	NA	NA	NA	NA
	12/30/1997	95.94	10.40	85.54	710	66	97	59	190	NA
	6/30/1998	95.94	NM	NM	1,100	45	24	71	100	NA
	9/29/1998	95.94	13.24	82.70	170	7	1	4	9	22
	12/16/1998	95.94	11.58	84.36	650	27	4	25	33	>0.5
	3/16/1999	95.94	8.81	87.13	710	30	6	53	84	8
	6/10/1999	95.94	11.50	84.44	4,600	1,240	35	290	159	1,291
	8/23/1999	95.94	12.75	83.19	170	4	4	ND	6	ND
	11/9/1999	95.94	13.85	82.09	<50	<5	<5	<5	<5	<5
	2/7/2000	95.94	13.60	82.34	700	20	15	<5	35	<5
	8/9/2000	95.94	14.87	81.07	590	10.5	5.94	<5	7.75	<5
	11/2/2000	95.94	12.55	83.39	60	ND	ND	ND	ND	ND
	3/13/2001	95.94	9.61	86.33	273	8.6	2.1	10	14	ND
	5/22/2001	95.94	11.15	84.79	280	12	8.3	3.3	9.8	12
	8/8/2001	95.94	13.04	82.90	NA	NA	NA	NA	NA	NA
	11/19/2001	95.94	13.48	82.46	300	7.9	26	5.1	28.9	ND
2/21/2002	95.94	9.69	86.25	560	34	20	32	37.3	< 0.5	
5/7/2002	95.94	10.99	84.95	280	16	3	7.6	7.6	<2	
7/30/2002	NS	13.24	NC	120	5.6	<0.5	0.61	0.53	<2.0	
10/20/2002	NS	NM	NC	NA	NA	NA	NA	NA	NA	

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**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-11 cont.	1/3/2003	NS	9.76	NC	700	32	5.7	25	14.10	<2.0
	5/3/2003	NS	9.66	NC	280	17	1.5 C	8	4.10	<2.0
	7/24/2003	NS	12.30	NC	340	19 C	3.2	0.58	0.89	<2.0
	10/22/2003	NS	13.38	NC	210	5.0 C	<0.5	<0.5	<0.5	<0.5
	1/22/2004	NS	NM	NC	NA	NA	NA	NA	NA	NA
	4/1/2004	NS	NM	NC	NA	NA	NA	NA	NA	NA
	8/20/2004	NS	NM	NC	NA	NA	NA	NA	NA	NA
	12/7/2004	NS	10.54	NC	486	24	3.0	18	4.00	<0.5
	3/15/2005	NS	NM	NC	NA	NA	NA	NA	NA	NA
	5/16/2005	NS	NM	NC	NA	NA	NA	NA	NA	NA
	7/14/2005	NS	NM	NC	NA	NA	NA	NA	NA	NA
	10/13/2005	NS	NM	NC	NA	NA	NA	NA	NA	NA
	1/3/2006	NS	NM	NC	NA	NA	NA	NA	NA	NA
	4/6/2006	NS	7.72	NC	872	19.8	3.63	37.5	3.28	<0.5
MW-12	11/9/1999	94.84	13.20	81.64	80	<5	<5	<5	<5	229
	2/7/2000	94.84	10.20	84.64	4,000	351	37	<5	24	513
	5/31/2000	94.84	10.48	84.36	3,930	230	10	34	12	200
	8/9/2000	94.84	12.07	82.77	1,730	15.4	12.4	<5	<5	185
	11/2/2000	94.84	12.05	82.79	1,010	9.3	19.0	ND	7.40	215
	3/13/2001	94.84	9.04	85.80	1,517	13	5.6	5.5	11	214
	5/22/2001	94.84	10.52	84.32	31,000	1,200	ND	95	165	1,900
	8/8/2001	94.84	12.24	82.60	2,090	71	1.8	3	4	142
	11/19/2001	94.84	12.76	82.08	3,000	81	69	13	73	120
	2/21/2002	94.84	8.78	86.06	2,500	77	<0.5	5.7	7.4	95
	5/7/2002	94.84	10.26	84.58	2,700	74	<0.5	20	5.1	94
	7/30/2002	36.84	10.93	25.91	2,200	57	<0.5	11	2.6	100
	10/20/2002	36.84	13.13	23.71	2,600	71	<0.5	<0.5	10.3	84

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**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
MW-12 cont.	1/3/2003	36.84	9.23	27.61	2,300	65	<0.5	1	4.00	86
	5/3/2003	36.84	9.24	27.60	2,200	58	<0.5	4.2 C	4.1 C	96
	7/24/2003	36.84	11.44	25.40	2,200	32 C	16 C	<0.5	9.20	66
	10/22/2003	36.84	12.50	24.34	2200 H	31 C	<0.5	<0.5	3.5 C	49
	1/22/2004	36.84	9.56	27.28	1,700	24 C	14 C	3	5.00	72
	4/1/2004	36.84	10.21	26.63	2,000	11 C	<0.5	<0.5	5 C	36
	8/20/2004	36.84	12.00	24.84	1,900	8.9 C	<0.5	<0.5	1.1 C	26
	12/7/2004	36.84	10.03	26.81	1,018	2	<0.5	<0.5	<1.0	26
	3/15/2005	36.84	8.49	28.35	1,890	4.25	<0.5	6.38	<1.0	30.6
	5/16/2005	36.84	9.07	27.77	1,080	<0.5	<0.5	<0.5	<1.0	20.6
	7/14/2005	36.84	10.43	26.41	1,580	2.71	<2.0	3.33	<1.0	29.3
	10/13/2005	36.84	12.08	24.76	1,560	0.74	<2.0	<0.50	<1.0	28.1
	1/3/2006	36.84	7.89	28.95	480 Y	13	<0.5	<0.5	<0.5	30
	4/6/2006	36.84	7.92	28.92	1,310	<0.5	<2.0	<0.5	<1.0	31.1
	9/7/2006	36.84	11.44	25.40	1,220	0.61	<2.0	2.69	<1.0	23.7
	11/28/2006	36.84	11.61	25.23	543	2.15	<2.0	1.72	<2.0	27.6
	2/26/2007	36.84	9.04	27.80	5,580	9.81	11	8.52	31.3	14.2
	5/23/2007	36.84	10.37	26.47	350	<0.5	<2.0	4.74	2.32	18.9
	8/20/2007	36.84	12.03	24.81	556	0.68	<2.0	4.81	2.41	20.3
	11/15/2007	36.84	11.84	25.00	678	0.79	<2.0	0.51	<2.0	20.4
<b>2/21/2008</b>	<b>36.84</b>	<b>8.86</b>	<b>27.98</b>	<b>375</b>	<b>0.59</b>	<b>&lt;2.0</b>	<b>1.06</b>	<b>&lt;2.0</b>	<b>2.52</b>	
FDC	2/7/2000	97.10	15.40	81.70	NA	NA	NA	NA	NA	NA
	5/31/2000	97.10	12.41	84.69	NA	NA	NA	NA	NA	NA
	8/9/2000	97.10	15.70	81.40	NA	NA	NA	NA	NA	NA
	11/2/2000	97.10	16.85	80.25	NA	NA	NA	NA	NA	NA
	3/13/2001	97.10	9.39	87.71	NA	NA	NA	NA	NA	NA
	5/22/2001	97.10	15.85	81.25	NA	NA	NA	NA	NA	NA
	8/8/2001	97.10	13.30	83.80	NA	NA	NA	NA	NA	NA
	11/19/2001	97.10	17.82	79.28	NA	NA	NA	NA	NA	NA

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**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
FDC cont.	2/21/2002	97.10	16.74	80.36	NA	NA	NA	NA	NA	NA
	5/7/2002	97.10	10.36	86.74	NA	NA	NA	NA	NA	NA
	7/30/2002	39.35	11.93	27.42	NA	NA	NA	NA	NA	NA
	10/20/2002	39.35	13.74	25.61	NA	NA	NA	NA	NA	NA
	1/3/2003	39.35	15.18	24.17	NA	NA	NA	NA	NA	NA
	5/3/2003	39.35	16.20	23.15	NA	NA	NA	NA	NA	NA
	7/24/2003	39.35	16.45	22.90	NA	NA	NA	NA	NA	NA
	10/22/2003	39.35	16.53	22.82	NA	NA	NA	NA	NA	NA
	1/22/2004	39.35	13.74	25.61	NA	NA	NA	NA	NA	NA
	4/1/2004	39.35	16.30	23.05	NA	NA	NA	NA	NA	NA
	8/20/2004	39.35	16.05	23.30	NA	NA	NA	NA	NA	NA
	12/7/2004	39.35	14.56	24.79	NA	NA	NA	NA	NA	NA
	3/16/2005	39.35	13.55	25.80	NA	NA	NA	NA	NA	NA
	5/17/2005	39.35	14.88	24.47	NA	NA	NA	NA	NA	NA
	7/14/2005	39.35	14.32	25.03	NA	NA	NA	NA	NA	NA
	10/13/2005	39.35	14.99	24.36	NA	NA	NA	NA	NA	NA
	1/3/2006	39.35	11.82	27.53	NA	NA	NA	NA	NA	NA
	4/6/2006	39.35	13.60	25.75	NA	NA	NA	NA	NA	NA
	9/7/2006	39.35	15.05	24.30	NA	NA	NA	NA	NA	NA
	11/28/2006	39.35	15.47	23.88	NA	NA	NA	NA	NA	NA
2/26/2007	39.35	13.01	26.34	NA	NA	NA	NA	NA	NA	
5/23/2007	39.35	14.23	25.12	NA	NA	NA	NA	NA	NA	
8/20/2007	39.35	15.92	23.43	NA	NA	NA	NA	NA	NA	
11/15/2007	39.35	15.98	23.37	NA	NA	NA	NA	NA	NA	
<b>2/21/2008</b>	<b>39.35</b>	<b>10.22</b>	<b>29.13</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
FDE	5/31/2000	97.90	13.22	84.68	NA	NA	NA	NA	NA	NA
	8/9/2000	97.90	NM	NM	NA	NA	NA	NA	NA	NA
	11/2/2000	97.90	12.75	85.15	NA	NA	NA	NA	NA	NA
	3/13/2001	97.90	9.14	88.76	NA	NA	NA	NA	NA	NA
	5/22/2001	97.90	13.05	84.85	NA	NA	NA	NA	NA	NA
	8/8/2001	97.90	13.69	84.21	NA	NA	NA	NA	NA	NA
	11/19/2001	97.90	13.92	83.98	NA	NA	NA	NA	NA	NA



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Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
FDE cont.	2/21/2002	97.90	13.18	84.72	NA	NA	NA	NA	NA	NA
	5/7/2002	97.90	11.18	86.72	NA	NA	NA	NA	NA	NA
	7/30/2002	40.06	12.81	27.25	NA	NA	NA	NA	NA	NA
	10/20/2002	40.06	14.53	25.53	NA	NA	NA	NA	NA	NA
	1/3/2003	40.06	13.13	26.93	NA	NA	NA	NA	NA	NA
	5/3/2003	40.06	11.79	28.27	NA	NA	NA	NA	NA	NA
	7/24/2003	40.06	13.10	26.96	NA	NA	NA	NA	NA	NA
	10/22/2003	40.06	13.85	26.21	NA	NA	NA	NA	NA	NA
	1/22/2004	40.06	13.27	26.79	NA	NA	NA	NA	NA	NA
	4/1/2004	40.06	13.20	26.86	NA	NA	NA	NA	NA	NA
	8/20/2004	40.06	14.97	25.09	NA	NA	NA	NA	NA	NA
	12/7/2004	40.06	14.25	25.81	NA	NA	NA	NA	NA	NA
	3/16/2005	40.06	12.50	27.56	NA	NA	NA	NA	NA	NA
	5/17/2005	40.06	13.93	26.13	NA	NA	NA	NA	NA	NA
	7/14/2005	40.06	13.98	26.08	NA	NA	NA	NA	NA	NA
	10/13/2005	40.06	13.60	26.46	NA	NA	NA	NA	NA	NA
	1/3/2006	40.06	9.83	30.23	NA	NA	NA	NA	NA	NA
	4/6/2006	40.06	11.30	28.76	NA	NA	NA	NA	NA	NA
	9/7/2006	40.06	13.52	26.54	NA	NA	NA	NA	NA	NA
	11/28/2006	40.06	13.73	26.33	NA	NA	NA	NA	NA	NA
2/26/2007	40.06	11.20	28.86	NA	NA	NA	NA	NA	NA	
5/23/2007	40.06	12.72	27.34	NA	NA	NA	NA	NA	NA	
8/20/2007	40.06	13.49	26.57	NA	NA	NA	NA	NA	NA	
11/15/2007	40.06	13.28	26.78	NA	NA	NA	NA	NA	NA	
	<b>2/21/2008</b>	<b>40.06</b>	<b>9.86</b>	<b>30.20</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
FDW	5/31/2000	96.90	12.20	84.70	NA	NA	NA	NA	NA	NA
	8/9/2000	96.90	NM	NM	NA	NA	NA	NA	NA	NA
	11/2/2000	96.90	15.50	81.40	NA	NA	NA	NA	NA	NA
	3/13/2001	96.90	10.12	86.78	NA	NA	NA	NA	NA	NA
	5/22/2001	96.90	13.50	83.40	NA	NA	NA	NA	NA	NA
	8/8/2001	96.90	13.08	83.82	NA	NA	NA	NA	NA	NA
	11/19/2001	96.90	14.31	82.59	NA	NA	NA	NA	NA	NA

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Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
FDW cont.	2/21/2002	96.90	12.78	84.12	NA	NA	NA	NA	NA	NA
	5/7/2002	96.90	10.14	86.76	NA	NA	NA	NA	NA	NA
	7/30/2002	39.16	11.79	27.37	NA	NA	NA	NA	NA	NA
	10/20/2002	39.16	13.50	25.66	NA	NA	NA	NA	NA	NA
	1/3/2003	39.16	12.13	27.03	NA	NA	NA	NA	NA	NA
	5/3/2003	39.16	10.84	28.32	NA	NA	NA	NA	NA	NA
	7/24/2003	39.16	12.12	27.04	NA	NA	NA	NA	NA	NA
	10/22/2003	39.16	13.48	25.68	NA	NA	NA	NA	NA	NA
	1/22/2004	39.16	13.58	25.58	NA	NA	NA	NA	NA	NA
	4/1/2004	39.16	13.90	25.26	NA	NA	NA	NA	NA	NA
	8/20/2004	39.16	15.69	23.47	NA	NA	NA	NA	NA	NA
	12/7/2004	39.16	14.85	24.31	NA	NA	NA	NA	NA	NA
	3/16/2005	39.16	13.10	26.06	NA	NA	NA	NA	NA	NA
	5/17/2005	39.16	14.60	24.56	NA	NA	NA	NA	NA	NA
	7/14/2005	39.16	15.10	24.06	NA	NA	NA	NA	NA	NA
	10/13/2005	39.16	13.34	25.82	NA	NA	NA	NA	NA	NA
	1/3/2006	39.16	12.61	26.55	NA	NA	NA	NA	NA	NA
	4/6/2006	39.16	12.80	26.36	NA	NA	NA	NA	NA	NA
	9/7/2006	39.16	15.80	23.36	NA	NA	NA	NA	NA	NA
	11/28/2006	39.16	14.10	25.06	NA	NA	NA	NA	NA	NA
2/26/2007	39.16	10.21	28.95	NA	NA	NA	NA	NA	NA	
5/23/2007	39.16	12.44	26.72	NA	NA	NA	NA	NA	NA	
8/20/2007	39.16	15.08	24.08	NA	NA	NA	NA	NA	NA	
11/15/2007	39.16	15.12	24.04	NA	NA	NA	NA	NA	NA	
	<b>2/21/2008</b>	<b>39.16</b>	<b>8.93</b>	<b>30.23</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
EX-1	2/27/2007	40.51	9.05	31.46	15,900	1,400	1,190	725	2,880	185
	5/23/2007	40.51	15.37	25.14	NA	NA	NA	NA	NA	NA
	8/20/2007	40.51	17.42	23.09	NA	NA	NA	NA	NA	NA
	11/15/2007	40.51	13.28	27.23	NA	NA	NA	NA	NA	NA
		<b>2/21/2008</b>	<b>40.51</b>	<b>16.91</b>	<b>23.60</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

**Table 1**  
**Historical Groundwater Elevation Data & Analytical Results**  
**3609 International Boulevard, Oakland, California**

Monitoring Well	Date	Top Of Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE <sup>2</sup> EPA 8260B (µg/L)
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Notes:

<sup>1</sup> Top of casing elevations were re-surveyed to comply with the EDF requirements for electronic reporting of data to the State Water Resources Control Board Database on August 9, 2002.

<sup>2</sup> MtBE was analyzed using the EPA Method 8021B and confirmed using 8260B.

C Presence confirmed, but confirmation concentration differed by more than a factor of two.

H: Heavier hydrocarbons may have contributed to the quantitation.

NA: Not Analyzed

NA: Not Applicable, Well/Drain did not exist at time of sampling

NC: Not calculated. No top of casing elevation was available for MW-11.

ND, < : Not Detected above laboratory reporting limits.

NM: Not Measured

NS: Not Surveyed.

Y: Sample exhibits fuel pattern which does not resemble standard.

FDC: French drain center riser.

FDE: French drain east riser.

FDW: French drain west riser.

Well MW-4R replaced damaged well MW-4 on April 11, 2005. The first time well MW-4R was monitored was in the Second Quarter 2005

NS: Not surveyed. Well MW-11 was not surveyed due to obstructions surrounding well.

Well EX-1 was installed in the First Quarter 2007 and initially monitored in February 2007.

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2008</b>								
March	3/4/2008	3,839,508	<0.5	<50	<0.5	<2.0	<0.5	<2.0
			<0.5	<50	<0.5	<2.0	<0.5	<2.0
<b>2007</b>								
October	10/31/2007	3,673,410	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
July	7/27/2007	3,643,880	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
May	5/17/2007	3,590,070	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
April	4/27/2007	3,561,230	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
	4/20/2007	3,546,800	Startup of groundwater extraction from the new extraction well EX-1. As of this date, groundwater is being extracted from three wells at the site (EX-1, West Riser, and Center Riser).					
March	3/16/2007	3,528,090	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
February	2/22/2007	3,510,560	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
	2/19/2007	3,508,300	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
January	1/16/2007	3,488,140	<0.5 1.37	<50 <50	<0.5 1.68	<2.0 <2.0	<0.5 1.25	<2.0 <2.0

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2006</b>								
December	12/22/2006	3,469,890	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
November	11/20/2006	3,455,980	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
October	10/18/2006	3,447,850	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
September	9/27/2006	3,441,500	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
August	8/14/2006	3,425,340	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
July	7/24/2006	3,414,800	<0.5 <0.5	<50 <50	<0.5 0.94	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
June	6/15/2006	3,387,940	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
	6/7/2006	3,379,880	<0.5 2.89	<50 <50	<0.5 5.3	<2.0 <2.0	<0.5 1.24	<1.0 4.91
May	5/18/2006	3,350,260	replaced existing 200 gallon holding tank with newer 200 gallon tank					
May	5/11/2006	3,337,750	<0.5 0.61	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
April	4/19/2006	3,268,110	<0.5 1.66	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
	4/10/2006	3,236,770	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2006</b>								
March	3/10/2006	3,220,570	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
February	2/10/2006	3,186,590	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
January	1/4/2006	3,122,610	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
<b>2005</b>								
December	12/9/2005	3,081,750	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
November	11/14/2005	3,072,540	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
October	10/17/2005	3,065,260	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
September	9/29/2005	3,060,640	Replaced existing 2000 lb carbon vessel with newer 2000 lb vessel, also replaced 55 gallon polishing vessel					
	9/12/2005	3,055,676	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
August	8/8/2005	3,042,586	<0.5 0.51	<200 <200	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
July	7/7/2005	3,026,010	<0.5 <0.5	<200 <200	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
June	6/9/2005	3,000,386	<0.5 0.61	<200 <200	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
May	5/9/2005	2,971,430	<0.5 <0.5	<200 <200	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0
	5/4/2005	2,964,270	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel totalizer changed at meter reading of 2,189,270					
April	4/4/2005	2,904,500	<0.5 <0.5	<200 <200	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2005</b>								
March	3/21/2005	2,874,170	<0.5 <0.5	<200 <200	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0
February	2/14/2005	2,828,000	55 Gallon Drum Changed Out					
	2/7/2005	2,819,000	<5.0 <5.0	<50 <50	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0
January	1/19/2005	2,775,000	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
	1/3/2005	2,730,480	3.6 3.8	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
<b>2004</b>								
December	12/6/2004	2,667,620	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0
November	11/8/2004	2,631,600	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
October	10/13/2004	2,606,420	< 2.0 <2.0	< 50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
September	9/13/2004	2,594,390	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
August	8/25/2004	2,586,010	55 Gallon Drum Changed Out					
	8/9/2004	2,581,250	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
July	7/13/2004	2,568,830	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
	7/21/2004	2,564,710	55 Gallon Drum Changed Out					
June	6/14/2004	2,549,470	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
May	5/26/2004	2,530,000	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel Semi Annual Treatment System Meeting With Ebmud Replaced 55-gallon polishing vessel and restarted the system Carbon Changed Out and 55 Gallon Drum Changed Out					
	5/10/2004	2,488,760						
	5/17/2004	2,518,910						
	5/5/2004	2,500,650						
	5/3/2004	2,497,350	< 2.0 < 2.0	< 50 < 50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
April	4/15/2004	2,436,190	< 5.0 <5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2004</b>								
March	3/17/2004	2,376,200	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
February	2/24/2004	2,276,770	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
January	1/27/2004	2,165,220	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	1/13/2004	2,116,720	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
<b>2003</b>								
December	12/8/2003	2,092,330	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
November	11/17/2003	2,087,670	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	11/3/2003	2,079,460	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
October	10/13/2003	2,073,060	5.3 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	10/1/2003	2,072,610	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
September	9/15/2003	2,056,910	<5.0 6	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	9/2/2003	2,040,040	<5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
August	8/19/2003	2,021,040	<5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
July	7/21/2003	1,995,240	< 5.0 40	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	7/9/2003	1,990,260	< 5.0 36	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
June	6/18/2003	1,978,560	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
	6/10/2003	1,972,780	< 5.0 <5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
May	5/21/2003	1,951,830	< 5.0 < 5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	5/1/2003	1,918,270	< 5.0 < 5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
April	4/11/2003	1,882,440	< 5.0 < 5.0	< 5.0 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0



**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples						
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	
<b>2003</b>									
March	3/19/2003	1,846,490	< 5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	
February	2/25/2003 2/19/2003	1,804,960 1,791,720	replaced 55-gallon polishing vessel with new 55 gallon carbon drum						< 5.0 < 5.0
January	1/27/2003	1,733,500	< 5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	
	1/2/2003	1,675,600	< 5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	
<b>2002</b>									
December	12/10/2002	1,672,870	< 5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	
November	11/22/2002	1,668,650	< 5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	
	11/13/2002	1,664,780	replaced gasket on top of 2000 lb GAC vessel, slight leak was detected						
	11/7/2002	1,663,880	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel						
October	10/16/02 <sup>3</sup>	1,661,590	< 310 < 0.5	2,000 Y Z < 50	< 310 < 0.5	< 310 < 0.5	< 310 < 0.5	< 310 < 0.5	
September	9/19/2002	1,653,600	< 5 < 5	< 50 < 50	< 5 < 5	< 5 < 5	< 5 < 5	< 5 < 5	
August	8/23/2002	1,641,650	1 < 0.5	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	
July	7/23/2002	1,632,834	<5.0 < 5.0	< 50 < 50	<5.0 < 5.0	<5.0 < 5.0	<5.0 < 5.0	<5.0 < 5.0	
June	6/24/2002	1,610,050	1.7 < 0.5	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	
May	5/30/2002	1,571,630	< 0.5 < 0.5	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	
	5/20/2002	1,548,000	removed newly installed compressor, installed another compressor						
	5/8/2002	1,538,850	installed new compressor						
	5/1/2002	1,529,650	installed new 55 gallon GAC Vessel						
April	4/24/2002	1,528,740	< 0.5 < 0.5	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	
	4/1/2002	1,478,500	repaired valve plate assembly on compressor						

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2002</b>								
March	3/25/2002 3/18/2002 3/14/2002	1,478,420 NR 1,478,330	performed carbon change-out on treatment system replaced piston on compressor compressor not building up pressure					
February	2/27/2002	1,449,830	< 0.5 1.1	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5
January	1/22/2002	1,381,370	< 2.0 < 2.0	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5
<b>2001</b>								
December	12/12/2001	1,311,340	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
November	11/2/2001	1,272,660	ND 0.6	ND ND	ND ND	ND ND	ND ND	ND ND
September	9/28/2001	NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
August	8/22/2001	1,243,100	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
July	7/26/2001 7/11/2001	1,227,270 1,226,730	ND ND NA NA	ND ND NA NA	ND ND NA NA	ND ND NA NA	ND ND NA NA	ND ND NA NA
June	6/29/2001 6/26/2001 6/16/2001 6/7/2001	1,224,600 NR 1,216,580 1,216,580	NA ND NA NA	NA ND NA NA	NA ND NA NA	NA ND NA NA	NA ND NA NA	NA ND NA NA
			installed new compressor					
			compressor not working, repaired compressor					
May	5/30/2001 5/23/2001 5/17/2001 5/10/2001 5/5/2001	1,205,198 1,194,390 1,182,360 1,166,850 1,151,600	NA NA ND NA NA	NA NA ND NA NA	NA NA ND NA NA	NA NA ND NA NA	NA NA ND NA NA	NA NA ND NA NA
April	4/28/2001 4/21/2001 4/11/2001 4/6/2001	1,135,690 1,113,570 1,082,700 1,065,540	NA NA NA NA	NA NA ND ND	NA NA ND ND	NA NA ND ND	NA NA ND ND	NA NA ND ND

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples						
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)	
<b>2001</b>									
March	3/29/2001	1,036,330	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	
	3/21/2001	1,036,070	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	
				system was re-started					
	3/17/2001	1,035,100	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	
				belt replaced on compressor					
	3/13/2001	1,032,500	ND NA	ND NA	ND NA	ND NA	ND NA	ND NA	
	3/2/2001	996,520	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	
	3/1/2001	NR	system re-started after carbon change-out						
February	2/28/2001	NR	Carbon Change-out was performed on GAC-1, washed algae from holding tank, cleaned 2000 lb GAC, re-started system System shut down for maintenance and cleaning.						
	2/10/2001	975,490							
January	1/29/2001	957,880	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
<b>2000</b>									
December	12/5/2000	883,000	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
November	11/24/2000	NR	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
	11/1/2000	842,000	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
October	10/1/2000	809,000	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
August	8/27/2000	781,000	ND	ND	ND	ND	ND	ND	
	8/24/2000	778,000							totalizer changed at meter reading of 775,000
July	7/26/2000	726,000	ND	ND	ND	ND	ND	ND	
	7/19/2000	718,000	ND	ND	ND	ND	ND	ND	
	7/13/2000	712,000	ND	ND	ND	ND	ND	ND	
	7/7/2000	706,000	ND	ND	ND	ND	ND	ND	

**Table 2**  
**Total Volume of Water Treated, Historical Operational Data,**  
**and Laboratory Analytical Results for PSP #1 and GAC-1 Samples**  
**3609 International Boulevard, Oakland, California**

Month	Date	Effluent Totalizer Reading (gallons)	Lab Results For <b>PSP #1</b> <sup>1</sup> and <b>GAC-1</b> Samples					
			MtBE <sup>2</sup> (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
<b>2000</b>								
June	6/29/2000	700,000	ND	ND	ND	ND	ND	ND
	6/21/2000	682,220	ND	ND	ND	ND	ND	ND
May	6/16/2000	669,720	ND	ND	ND	ND	ND	ND
	6/10/2000	651,200	ND	ND	ND	ND	ND	ND
	5/31/2000	629,000	ND	ND	ND	ND	ND	ND
	5/23/2000	603,700	ND	ND	ND	ND	ND	ND
	5/18/2000	570,000	ND	ND	ND	ND	ND	ND
April	5/10/2000	530,400	ND	ND	ND	ND	ND	ND
	4/30/2000	488,300	ND	ND	ND	ND	ND	ND
	4/18/2000	485,300	ND	ND	ND	ND	ND	0.51
	4/10/2000	440,200	ND	ND	ND	ND	ND	ND
	4/4/2000	390,100	ND	ND	ND	ND	ND	ND
	4/2/2000	NR	performed a carbon change-out on GAC-1					
March	3/31/2000	NR	replaced GAC-2 with a special GAC designed for removal of MtBE					
	3/24/2000	388,000	ND	ND	ND	ND	ND	ND
	3/17/2000	357,100	ND	ND	ND	ND	ND	ND
	3/10/2000	329,000	ND	ND	ND	ND	ND	ND
	3/3/2000	300,000	transfer overheated, repaired pump, restarted system 3/6/00					
February	2/25/2000	274,000	ND	ND	ND	ND	ND	ND
	2/18/2000	233,000	ND	ND	ND	ND	ND	ND
	2/11/2000	190,000	ND	ND	ND	ND	ND	ND
	2/4/2000	160,800	ND	ND	ND	ND	ND	ND
January	1/28/2000	130,600	ND	ND	ND	ND	ND	ND
	1/21/2000	103,435	ND	ND	ND	ND	ND	ND
	1/17/2000	NR	GAC-1 was replaced with 2,000 lb GAC unit					
	1/14/2000	83,500	185	ND	ND	ND	ND	ND
<b>1999</b>								
December	12/23/1999	51,680	1486	NA	ND	ND	ND	ND
			ND	NA	ND	ND	ND	ND
	12/16/1999	30,450	963	NA	ND	ND	ND	ND
			ND	NA	ND	ND	ND	ND
	12/9/1999	9,000	230	ND	ND	ND	ND	ND
Pumping began on December 6, 1999								

Notes:

- The designator "Effluent" used on sampling and laboratory documents refers to samples collected from PSP #1.
  - MTBE was analyzed using EPA Method 8260B, prior to the September 2003. After September 2003, MtBE was only analyzed by EPA Method 8021B.
  - Lab data as shown for Oct. 2002 is erroneous data. During lab analysis a high detection of 2-Butanone was detected in only the effluent sample. The influent sample for 2-Butanone was at only 20 ppb. This caused a high dilution factor causing a high non-detectable value. The high TPH-g value was misrepresentative due to the Y and Z flags.
- ND, < : Not Detected above laboratory reporting limits  
 NA: Not Analyzed  
 NR: Not recorded. Totalizer reading not recorded.  
 Y: Sample exhibits fuel pattern which does not resemble standard  
 Z: Sample exhibits unknown single peak or peaks

**Table 3**  
**Total Mass of Petroleum Hydrocarbons Removed**  
**by the Vapor Extraction System & Historical Operational Data**  
**3609 International Boulevard, Oakland, California**

Date	Time	PID (ppmv)		Flow Rate (ft <sup>3</sup> /min)	Time Elapsed (Hours)	Air Flow (Liters)	Air Flow (ft <sup>3</sup> )	Mass Removed <sup>1</sup> (Pounds)
		Influent	Effluent					
<b>2000</b>								
7/24/2000	5:00 PM	394	0	85	0.0	0	0	0.00
7/25/2000	5:15 PM	38	2	95	24.3	3,911,768	138,225	1.35
7/26/2000	5:05 PM	207	1	80	24.0	3,260,160	115,200	6.15
7/27/2000	9:00 AM	160	5	92	16.0	2,499,456	88,320	3.64
7/28/2000	4:30 PM	141	7	87	31.5	4,653,369	164,430	5.98
7/29/2000	1:30 PM	225	8	85	21.0	3,030,930	107,100	6.21
7/30/2000	9:00 AM	226	12	85	19.5	2,814,435	99,450	5.79
7/31/2000	3:00 PM	141	5	85	30.0	4,329,900	153,000	5.56
8/1/2000	5:00 PM	135	4	80	26.0	3,531,840	124,800	4.34
8/2/2000	4:00 PM	80	4	80	23.0	3,124,320	110,400	2.28
8/3/2000	5:00 PM	60	5	85	25.0	3,608,250	127,500	1.97
8/4/2000	3:00 PM	57	4	85	22.0	3,175,260	112,200	1.65
8/5/2000	2:00 PM	97	8	87	23.0	3,397,698	120,060	3.00
8/6/2000	12:00 PM	114	8	80	22.0	2,988,480	105,600	3.10
8/7/2000	12:00 PM	93	9	85	24.0	3,463,920	122,400	2.93
8/8/2000	4:30 PM	152	10	85	28.5	4,113,405	145,350	5.70
8/10/2000	10:00 AM	173	1	85	41.5	5,989,695	211,650	9.44
8/11/2000	7:00 AM	78	4	70	21.0	2,496,060	88,200	1.77
8/12/2000	9:00 AM	100	6	70	26.0	3,090,360	109,200	2.82
8/13/2000	5:00 PM	107	9	70	32.0	3,803,520	134,400	3.71
8/14/2000	12:30 PM	122	5	70	19.5	2,317,770	81,900	2.58
8/15/2000	6:00 PM	103	12	70	29.5	3,506,370	123,900	3.29
8/16/2000	12:30 PM	112	0	70	18.5	2,198,910	77,700	2.24
8/18/2000	9:00 AM	90	0	75	44.5	5,667,075	200,250	4.65
8/21/2000	12:00 PM	74	5	80	75.0	10,188,000	360,000	6.87
8/24/2000	12:00 PM	68	13	80	72.0	9,780,480	345,600	6.06
8/27/2000	12:30 PM	68.5	2	80	72.5	9,848,400	348,000	6.15
8/31/2000	1:30 PM	52	6	80	97.0	13,176,480	465,600	6.24

**Table 3**  
**Total Mass of Petroleum Hydrocarbons Removed**  
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**3609 International Boulevard, Oakland, California**

Date	Time	PID (ppmv)		Flow Rate (ft <sup>3</sup> /min)	Time Elapsed (Hours)	Air Flow (Liters)	Air Flow (ft <sup>3</sup> )	Mass Removed <sup>1</sup> (Pounds)
		Influent	Effluent					
<b>2000</b>								
9/4/2000	12:30 PM	54	5	80	95.0	12,904,800	456,000	6.35
9/7/2000	12:00 PM	55	3	80	71.5	9,712,560	343,200	4.87
9/11/2000	4:30 PM <sup>2</sup>	141	0	80	100.5	13,651,920	482,400	17.54
9/14/2000	9:30 AM	56	5	80	65.0	8,829,600	312,000	4.50
9/18/2000	2:00 PM	46	9.5	80	100.5	13,651,920	482,400	5.72
9/18/2000	4:30 PM <sup>3</sup>	34	0	80	2.5	339,600	12,000	0.11
9/21/2000	4:30 PM	43	1	80	72.0	9,780,480	345,600	3.83
9/25/2000	5:30 PM	55	6	80	97.0	13,176,480	465,600	6.60
9/28/2000	9:00 AM	47.5	7.5	80	63.5	8,625,840	304,800	3.73
10/1/2000	1:00 PM	38.5	6	80	76.0	10,323,840	364,800	3.62
10/5/2000	3:00 PM <sup>4</sup>	28.5	3	80	98.0	13,312,320	470,400	3.46
10/5/2000	5:00 PM	36	0	80	2.0	271,680	9,600	0.09
10/8/2000	3:00 PM	28.5	3	80	70.0	9,508,800	336,000	2.47
10/14/2000	3:00 PM	24.5	2.5	80	144.0	19,560,960	691,200	4.37
10/17/2000	2:00 PM	36.5	3.5	80	71.0	9,644,640	340,800	3.21
10/20/2000	8:30 AM	18.5	3.5	80	66.5	9,033,360	319,200	1.52
10/25/2000	2:00 PM	38	3.7	80	125.5	17,047,920	602,400	5.90
10/29/2000	10:00 AM	35	4	80	93.0	12,633,120	446,400	4.03
11/2/2000	4:00 PM	30.5	4	80	102.0	13,855,680	489,600	3.85
11/7/2000	4:00 PM	30	6	80	120.0	16,300,800	576,000	4.46
11/19/2000	12:00 PM	92.7	5.5	80	284.0	38,578,560	1,363,200	32.57
11/24/2000	1:30 PM	25	6.5	80	121.5	16,504,560	583,200	3.76
11/29/2000	3:00 PM	14.5	3.5	80	121.5	16,504,560	583,200	2.18
12/4/2000	4:30 PM	10.7	1	80	121.5	16,504,560	583,200	1.61
12/13/2000	3:30 PM	24	3	80	263.0	35,725,920	1,262,400	7.81
12/28/2000	2:30 PM	10	6	85	359.0	51,814,470	1,830,900	4.72

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		Influent	Effluent					
<b>2001</b>								
1/4/2001 <sup>5</sup>	2:00 PM	8.7	3.7	85	167.5	24,175,275	854,250	1.92
8/8/2001	3:00 PM	217	0	85	0.5	72,165	2,550	0.14
9/6/2001	12:00 PM	85	0	85	693.0	100,020,690	3,534,300	77.45
9/13/2001	4:00 PM	186	8	85	172.0	24,824,760	877,200	42.07
9/18/2001	3:00 PM	184	9	85	119.0	17,175,270	606,900	28.79
9/21/2001 <sup>6</sup>		--	--	--	NC	NC	NC	NC
10/12/01 <sup>7</sup>		--	--	--	NC	NC	NC	NC
10/23/2001	5:00 PM	114	58	87	0.5	73,863	2,610	0.08
10/25/01 <sup>4</sup>	3:00 PM	133	0	85	46.0	6,639,180	234,600	8.04
10/29/2001 <sup>8</sup>	1:20 PM	569	0	85	94.5	13,639,185	481,950	70.70
11/7/2001	3:30 PM	177	0	87	218.0	32,204,268	1,137,960	51.93
11/16/2001	3:00 PM	117	0	87	215.5	31,834,953	1,124,910	33.93
11/21/01 <sup>9</sup>	12:00 PM	85	72	87	117.0	17,283,942	610,740	13.38
<b>2002</b>								
2/15/02 <sup>10</sup>	4:30 PM	49	0	80	0.5	67,920	2,400	0.03
2/16/2002	3:45 PM	50	0	80	23.3	3,158,280	111,600	1.44
2/21/2002	4:00 PM	37	4	80	120.3	16,334,760	577,200	5.51
2/27/2002	10:30 AM	11	0	83	138.5	19,519,359	689,730	1.96
3/7/02 <sup>11</sup>	12:20 PM	10		80	194.0	26,352,960	931,200	2.40
6/12/2002 <sup>12</sup>	4:15 PM	53	2	75	NA	NA	NA	NA
6/17/2002	11:00 AM	28	2	80	120.0	16,306,560	576,204	4.16
6/24/2002	11:20 AM	24	3.1	80	168.3	22,866,400	808,000	5.00
7/5/2002	1:25 PM	20	5	80	266.0	36,133,440	1,276,800	6.58
7/11/2002	3:30 PM	26	8.0	80	146.0	19,832,640	700,800	4.70
7/23/2002	10:10 AM	28	7.5	83	282.8	39,849,089	1,408,095	10.16
8/9/2002	12:20 PM	7.5	0	80	410.3	55,728,360	1,969,200	3.81
8/15/2002 <sup>11</sup>	3:00 PM	7.0	1	80	146.5	19,900,560	703,200	1.27
8/23/2002 <sup>13</sup>	3:20 PM	NC	NC	NC	NC	NC	NC	NC
8/26/2002	11:15 AM	14.0	2.0	80	71.0	9,644,640	340,800	1.23
9/11/2002	10:10 AM	34.4	0	80	383.0	52,020,588	1,838,183	16.30
9/19/2002	10:55 AM	8.8	1.1	80	192.8	26,183,160	925,200	2.10
9/25/2002	10:30 AM	18.8	1.8	80	143.5	19,493,040	688,800	3.34

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Date	Time	PID (ppmv)		Flow Rate (ft <sup>3</sup> /min)	Time Elapsed (Hours)	Air Flow (Liters)	Air Flow (ft <sup>3</sup> )	Mass Removed <sup>1</sup> (Pounds)
		Influent	Effluent					
<b>2002</b>								
10/2/2002	8:10 AM	17.1	2.5	80	165.70	22,508,688	795,360	3.51
10/9/2002		PID malfunction		80	NC	NC	NC	NC
10/16/2002	1:45 PM	17.0	4.0	80	341.50	46,389,360	1,639,200	7.18
10/24/2002	10:00 AM	16.5	6.4	80	188.25	25,571,880	903,600	3.84
11/1/2002	10:00 AM	21.1	0.0	85	192.00	27,711,360	979,200	5.33
11/6/2002	10:12 AM	PID malfunction		87	NC	NC	NC	NC
11/7/2002	11:00 AM	17.5	0.0	85	24.75	3,572,168	126,225	0.57
11/13/2002	11:30 AM	15.0	0.0	85	144.50	20,855,685	736,950	2.85
11/22/2002	2:30 PM	6.6	0.0	80	219.00	29,748,960	1,051,200	1.79
11/22/2002		system shut-down due to rainy season and low influent readings						
<b>2003</b>								
5/9/2003	10:30 AM	0.1	0.0	82	0.5	69,618	2,460	0.00
5/12/2003	10:30 AM	0.4	0.3	85	72.00	10,391,760	367,200	0.04
5/21/2003	11:00 AM	2.2	2.2	83	216.50	30,512,211	1,078,170	0.61
6/4/2003	10:30 AM	2.5	0.1	82	335.50	46,713,678	1,650,660	1.06
6/10/2003	10:30 AM	2.2	0.08	82	144.00	20,049,984	708,480	0.40
6/16/2003	12:15 PM	2.1	0.07	82	146.25	20,363,265	719,550	0.39
6/24/2003	4:55 PM	2.6	0.08	82	196.75	27,394,683	968,010	0.65
6/30/2003	11:30 AM	2.2	0.1	82	138.50	19,284,186	681,420	0.39
7/16/2003	12:00 PM	2.2	0.22	82	384.50	53,536,242	1,891,740	1.07
7/21/2003	10:50 AM	2.1	0.21	82	119.00	16,569,084	585,480	0.32
7/28/2003	11:15 AM	2.2	0.22	82	168.25	23,426,457	827,790	0.47
8/11/2003	12:15 PM	2.1	0.21	82	337.00	46,922,532	1,658,040	0.90
8/19/2003	10:05 AM	2.1	0.22	82	190.00	26,454,840	934,800	0.51
8/25/2003	11:30 AM	2.2	0.23	81	145.50	20,011,779	707,130	0.40
9/2/2003	10:50 AM	2.1	0.21	80	191.50	26,013,360	919,200	0.50
9/8/2003	2:10 PM	9.1	3.19	83	147.30	20,759,578	733,554	1.72
9/11/2003	10:00 AM	All 4 SVE carbon drums changed-out						
9/22/2003	1:30 PM	7	0.2	88	334.25	49,944,972	1,764,840	3.19



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		Influent	Effluent					
<b>2003</b>								
10/1/2003	10:30 AM	6.5	0.2	85	213.00	30,742,290	1,086,300	1.82
10/6/2003	11:00 AM	7	0.3	85	120.50	17,391,765	614,550	1.11
10/13/2003	11:15 AM	5	0.2	85	168.25	24,283,523	858,075	1.11
10/29/2003	10:00 AM	2.4	0	85	382.75	55,242,308	1,952,025	1.21
11/3/2003	11:30 AM	3	0	85	121.50	17,536,095	619,650	0.48
11/10/2003	11:10 AM	3.5	0	85	167.67	24,199,330	855,100	0.77
11/17/2003	1:50 PM	4.1	0	85	170.70	24,637,131	870,570	0.92
11/24/2003	11:00 AM	3.8	0	85	165.20	23,843,316	842,520	0.83
11/24/2003	system shut-down due to rainy season and low influent readings							
<b>2004</b>								
4/5/2004	1:00 PM	5.6	0.11	85	0.5	72165	2550	0.004
4/12/2004	10:30 AM	6.5	0.2	83	165.5	23,324,577	824,190	1.38
4/20/2004	12:00 PM	7.1	0.9	84	193.5	27,599,292	975,240	1.79
4/23/2004	11:00 AM	7.2	2.3	80	71	9,644,640	340,800	0.63
5/3/2004	12:00 PM	7.1	3.4	80	241	32,737,440	1,156,800	2.12
5/5/2004	11:00 PM	All 4 SVE carbon drums changed-out						
5/17/2004	12:00 PM	2.7	0.8	82	336	46,783,296	1,653,120	1.15
5/26/2004	11:00 AM	3.8	0.5	82	215	29,935,740	1,057,800	1.04
6/1/2004	1:00 PM	3.6	0.9	82	146	20,328,456	718,320	0.67
6/7/2004	11:50 AM	3.2	0	82	142.75	19,875,939	702,330	0.58
6/14/2004	11:50 AM	10.9	0	86	168	24,532,704	866,880	2.44
6/21/2004	10:50: AM	13.5	0	83	167	23,535,978	831,660	2.89
6/28/2004	11:50 AM	10.9	0.5	85	169	24,391,770	861,900	2.42
7/2/2004	11:30 AM	8.7	0	85	95.8	13,826,814	488,580	1.10
7/13/2004	2:00 PM	9.1	0.22	85	266.5	38,463,945	1,359,150	3.19
7/21/2004	12:00 PM	8.9	0.5	85	190	27,422,700	969,000	2.22
7/26/2004	11:50 AM	8.5	0.4	85	119.5	17,247,435	609,450	1.34
8/2/2004	11:30 AM	4.9	0.1	85	167.8	24,218,574	855,780	1.08
8/9/2004	11:50 AM	5.6	0.2	85	168.3	24,290,739	858,330	1.24
8/16/2004	12:00 PM	6	0.4	85	168.1	24,261,873	857,310	1.33
8/24/2004	11:50 AM	6.2	1.2	85	191.9	27,696,927	978,690	1.56
8/30/2004	11:30 AM	6	0.4	85	143.66	20,734,448	732,666	1.13
9/7/2004	1:05 PM	5.5	0.8	85	193.5	27,927,855	986,850	1.40
9/13/2004	12:05 PM	5.3	0.9	85	143	20,639,190	729,300	1.00
9/20/2004	11:08 AM	7	2.9	85	167	24,103,110	851,700	1.54
9/27/2004	2:50 PM	6.5	2.1	85	171.75	24,788,678	875,925	1.47

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		Influent	Effluent					
<b>2004</b>								
10/4/2004	11:30 AM	6.9	3	85	164.55	23,749,502	839,205	1.49
10/13/2004	10:30 AM	6.5	2.9	85	215	31,030,950	1,096,500	1.84
10/18/2004	2:30 PM	6	1.5	85	124	17,896,920	632,400	0.98
10/28/2004	2:00 PM	3.1	0.9	85	239.5	34,567,035	1,221,450	0.98
10/28/2004	system shut-down due to rainy season and low influent readings							
<b>2005</b>								
4/11/2005	system re-started, all four vapor phase carbon drums replaced with new carbon							
4/18/2005	10:50 AM	6.5	0.8	85	167.83	24,223,481	855,953	1.43
4/25/2005	5:30 PM	6	0.7	85	174.33	25,161,626	889,103	1.38
5/4/2005	11:20 AM	0.4	0	85	209.83	30,285,341	1,070,153	0.11
5/9/2005	11:00 AM	1	0.4	85	119.67	17,271,538	610,302	0.16
5/16/2005	10:15 AM	3	0	85	167.25	24,139,193	852,975	0.66
5/23/2005	11:05 AM	0.4	0	90	168.83	25,801,110	911,700	0.09
6/3/2005	3:30 PM	0.2	0	90	268.48	41,029,114	1,449,792	0.07
6/9/2005	3:00 PM	0.2	0	90	143.50	21,929,670	774,900	0.04
6/15/2005	2:15 PM	1	0	85	143.25	20,675,273	730,575	0.19
6/20/2005	12:00 PM	0.6	0	88	117.75	17,594,676	621,720	0.10
6/26/2005	12:00 PM	0.5	0	85	144.00	20,783,520	734,400	0.09
7/7/2005	2:45 PM	0.2	0	90	266.75	40,764,735	1,440,450	0.07
7/11/2005	3:00 PM	0.3	0	90	96.25	14,708,925	519,750	0.04
7/18/2005	1:00 PM	1	0	85	166.00	23,958,780	846,600	0.22
7/25/2005	12:00 PM	1.5	0	87	167.00	24,670,242	871,740	0.34
8/1/2005	1:30 PM	1	0	85	169.50	24,463,935	864,450	0.22
8/8/2005	11:50 AM	0.7	0	80	166.40	22,603,776	798,720	0.14
8/15/2005	1:30 PM	0.9	0	83	169.60	23,902,406	844,608	0.20
8/24/2005	12:00 PM	0.8	0	85	214.50	30,958,785	1,093,950	0.23
8/29/2005	11:45 AM	0.7	0	85	119.75	17,283,518	610,725	0.11
9/6/2005	12:15 PM	0.8	0	85	192.50	27,783,525	981,750	0.20
9/12/2005	12:10 PM	1.2	0	85	144.00	20,783,520	734,400	0.23
9/20/2005	11:30 AM	1.1	0	84	192.60	27,470,923	970,704	0.28

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		Influent	Effluent						
<b>2005</b>									
10/6/2005	3:00 PM	all 4 vapor phase carbon drums replaced with new carbon drums							
10/14/2005	3:30 PM	33	5	83	192.5	27,129,795	958,650	8.16	
10/17/2005	12:00 PM	33	5	86	68.5	10,002,918	353,460	3.01	
10/28/2005	11:00 AM	77	1.5	83	263	37,065,642	1,309,740	26.00	
11/1/2005	9:40 AM	33	7	86	94.75	13,836,153	488,910	4.16	
11/3/2005	3:30 PM	33	7	87	54	7,977,204	281,880	2.40	
11/9/2005	3:15 PM	all 4 vapor phase carbon drums replaced with new carbon drums							
11/14/2005	11:30 AM	0.3	0	89	260	39,291,720	1,388,400	0.11	
11/22/2005	2:40 PM	0.8	0	88	195	29,137,680	1,029,600	0.21	
11/17/2005-11/23/2005		3 new vapor wells installed onsite							
<b>2006</b>									
1/6/2006	10:00 AM	System shut-down due to rainy conditions							
2/22/2006-3/6/2006		Air Sparge and Additional SVE system installed							
4/8/2006		Existing vacuum eductor, which was built and installed in 2000, was rebuilt. To reduce the noise level, foam was placed around the vacuum eductor to act as a noise suppressant							
4/14/2006	2:00 PM	system re-started, all 4 vapor phase carbon drums replaced with new carbon drums							
4/14/2006	2:30 PM	33	0	85	0.5	72,165	2,550	0.02	
5/18/2006	12:00 PM	14	0	87	813.5	120,175,101	4,246,470	15.33	
5/31/2006	12:30 PM	15	2	83	312.5	44,041,875	1,556,250	6.02	
6/7/2006	10:00 AM	17.7	5.8	85	165.5	23,886,615	844,050	3.85	
6/14/2006	10:00 AM	8.2	0	89	168	25,388,496	897,120	1.90	
6/19/2006	2:30 PM	220	0	88	124.5	18,603,288	657,360	37.29	
6/22/2006	11:00 AM	18	0	85	68.5	9,886,605	349,350	1.62	
7/6/2006	2:45 PM	3.2	0	80	339.75	46,151,640	1,630,800	1.35	
7/24/2006	2:00 PM	Additional vacuum eductor installed in series with the existing blower							
8/2/2006	11:00 AM	25	0	65	644.25	71,105,873	2,512,575	16.19	
8/9/2006	11:30 AM	7.3	3.5	110	168.5	31,472,430	1,112,100	2.09	
8/14/2006	12:00 PM	8	2.3	100	120.5	20,460,900	723,000	1.49	
8/25/2006	12:30 PM	2	0	100	264.5	44,912,100	1,587,000	0.82	
8/28/2006	2:30 PM	2.5	0	110	74.5	13,915,110	491,700	0.32	
9/7/2006	2:30 PM	1.4	0	105	240	42,789,600	1,512,000	0.55	
9/13/2006	12:45 PM	1.6	0	105	142.25	25,361,753	896,175	0.37	
9/22/2006	3:00 PM	1.3	0	115	219.25	42,812,948	1,512,825	0.51	
9/27/2006	2:15 PM	5.6	1.1	110	119.25	22,273,515	787,050	1.14	

**Table 3**  
**Total Mass of Petroleum Hydrocarbons Removed**  
**by the Vapor Extraction System & Historical Operational Data**  
**3609 International Boulevard, Oakland, California**

Date	Time	PID (ppmv)		Flow Rate (ft <sup>3</sup> /min)	Time Elapsed (Hours)	Air Flow (Liters)	Air Flow (ft <sup>3</sup> )	Mass Removed <sup>1</sup> (Pounds)	
		Influent	Effluent						
<b>2006</b>									
10/4/2006	11:15 AM	5.9	1.6	105	165	29,417,850	1,039,500	1.58	
10/10/2006	11:30 AM	0.9	0	105	144.25	25,718,333	908,775	0.21	
10/18/2006	3:15 PM	0.9	0	105	195.75	34,900,268	1,233,225	0.29	
10/27/2006	10:00 AM	303	0	60	210.75	21,471,210	758,700	59.27	
11/1/2006	10:00 AM	0.2	0	90	120	18,338,400	648,000	0.03	
11/7/2006	12:00 PM	0.2	0	80	146	19,832,640	700,800	0.04	
11/7/2006	12:00 PM	System shut-down due to rainy conditions							
<b>2007</b>									
5/23/2007	System Re-started								
5/23/2007	10:45 AM	31.3	0	85	1	144,330	5,100	0.04	
5/29/2007	11:00 AM	11.2	1.7	80	144.25	19,594,920	692,400	2.00	
6/11/2007	12:00 PM	8.1	1.1	80	313	42,517,920	1,502,400	3.14	
6/20/2007	3:00 PM	1.4	0.5	75	219	27,889,650	985,500	0.36	
7/3/2007	12:00 PM	1.5	0.4	75	1	127,350	4,500	0.00	
7/12/2007	12:00 PM	8	0.3	80	144.25	19,594,920	692,400	1.43	
7/27/2007	9:30 AM	8.5	0.4	85	313	45,175,290	1,596,300	3.50	
8/7/2007	3:30 PM	14	0.9	105	219	39,045,510	1,379,700	4.98	
8/21/2007	2:00 PM	16.5	0	110	1	186,780	6,600	0.03	
9/7/2007	12:30 PM	12.2	0.1	105	144.25	25,718,333	908,775	2.86	
9/21/2007	10:00 AM	1.9	0.3	84	313	44,643,816	1,577,520	0.77	
9/28/2007	11:00 AM	1.9	0.3	85	219	31,608,270	1,116,900	0.55	
<b>Total Mass of Petroleum Hydrocarbons Removed =</b>								<b>967.20</b>	
<b>Average Daily Removal Rate (pounds / day)=</b>								<b>0.37</b>	

Notes:

- <sup>1</sup> The representative molecular weight of hydrocarbons was assumed to be 150 gram/mole and use the measured temperature of Vapor (25°C) in converting ppm-v to ppm on mass basis.
  - <sup>2</sup> System accidentally shut down from main box. readings taken 30 minutes after startup
  - <sup>3</sup> GAC Replaced
  - <sup>4</sup> GAC-1 removed. new GAC installed at effluent end
  - <sup>5</sup> SVE System turned off for rainy season due to low influent concentration
  - <sup>6</sup> system down. hoses disconnected and GAC moved for replacement
  - <sup>7</sup> system down for electrical repair
  - <sup>8</sup> Carbon change-out of three drums. moved new effluent drum on 10/25/01 to GAC-
  - <sup>9</sup> system shut-down due to high effluent value
  - <sup>10</sup> System re-started (since November 21, 2001). installed new 4-55 gallon vapor phase carbon vessels. repaired blow
  - <sup>11</sup> System was shut-down due to low influent reading
  - <sup>12</sup> System was restarted on 6/12/02
  - <sup>13</sup> System was re-started but no readings were taken
- Data for October 28, 2005 based on lab data

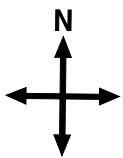
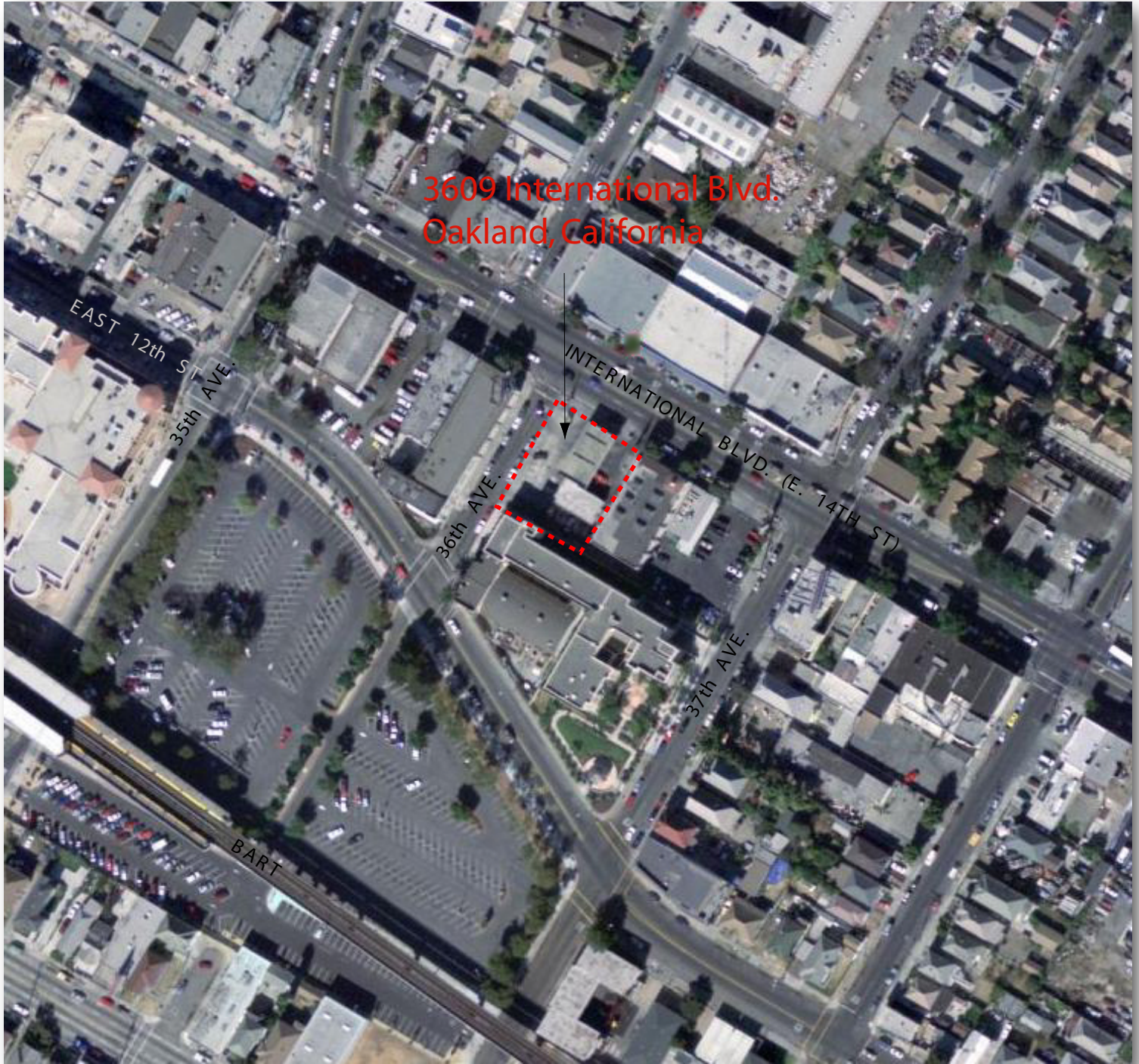
NC: Not Calculated

Calculations

Airflow: Flowrate (ft<sup>3</sup>/min) \* 60 min \* Time Elapsed (hrs) \* 28.3 liters/ft<sup>3</sup>

Mass Removed: Time Elapsed (hrs) \* 60 min \* Flowrate (ft<sup>3</sup>/min) \* (28.3 m<sup>3</sup>/ft<sup>3</sup>) \* ((PID reading \* (102 grams TPH-g /mole) \* (1 mole / 24.4 L)) \* (1/1000 m<sup>3</sup>)) \* (1 lb/454 grams)

# FIGURES



approximate scale in feet

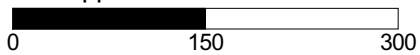
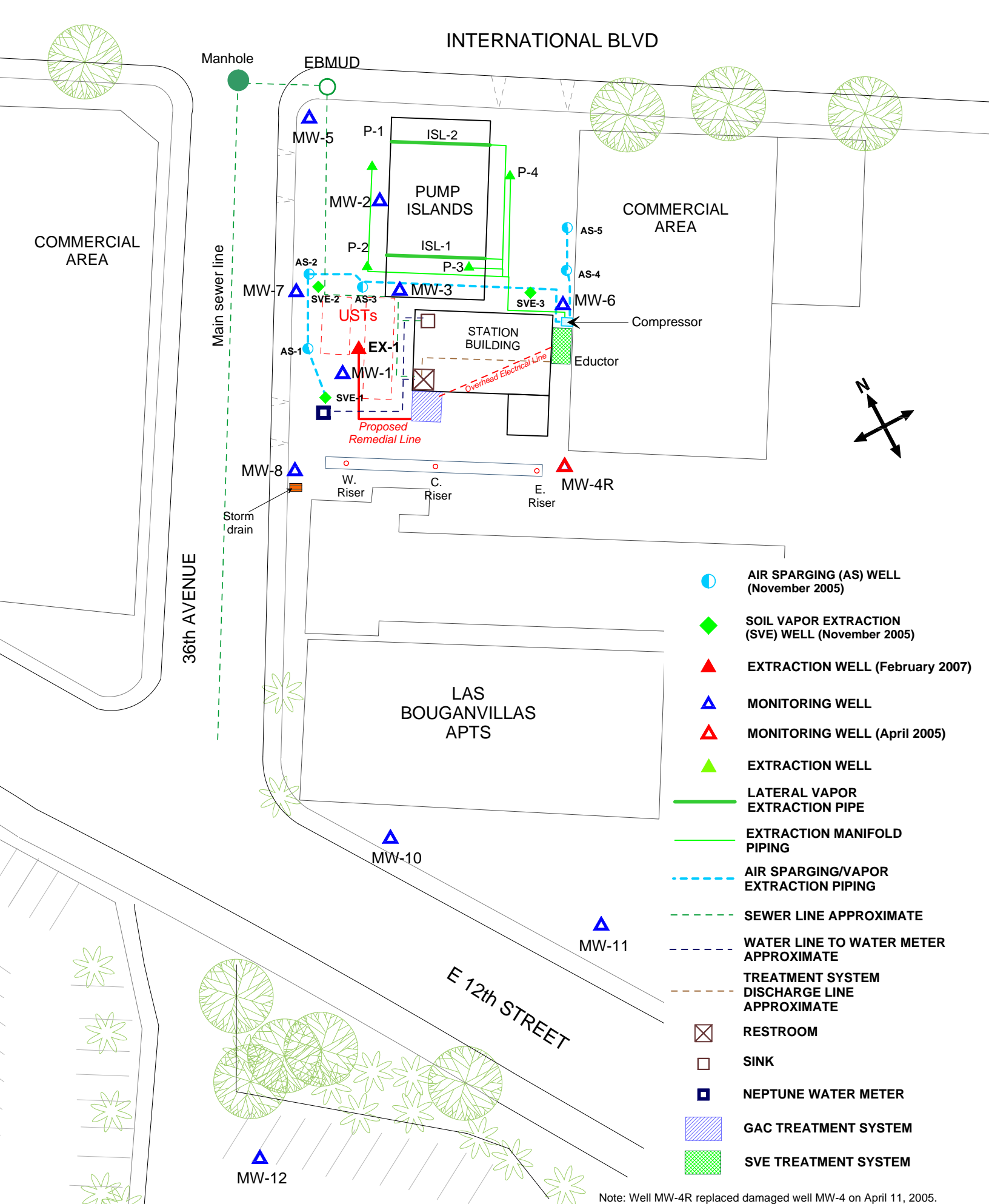


Figure 1: Site vicinity map.



- AIR SPARGING (AS) WELL (November 2005)
- ◆ SOIL VAPOR EXTRACTION (SVE) WELL (November 2005)
- ▲ EXTRACTION WELL (February 2007)
- ▲ MONITORING WELL
- ▲ MONITORING WELL (April 2005)
- ▲ EXTRACTION WELL
- LATERAL VAPOR EXTRACTION PIPE
- EXTRACTION MANIFOLD PIPING
- - - AIR SPARGING/VAPOR EXTRACTION PIPING
- - - SEWER LINE APPROXIMATE
- - - WATER LINE TO WATER METER APPROXIMATE
- - - TREATMENT SYSTEM DISCHARGE LINE APPROXIMATE
- ⊗ RESTROOM
- SINK
- NEPTUNE WATER METER
- GAC TREATMENT SYSTEM
- SVE TREATMENT SYSTEM

Note: Well MW-4R replaced damaged well MW-4 on April 11, 2005.

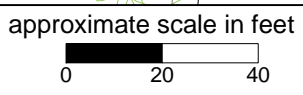


Figure 2: Site map showing locations of air sparging wells, groundwater monitoring wells, additional soil vapor wells, GAC system, & SVE system.



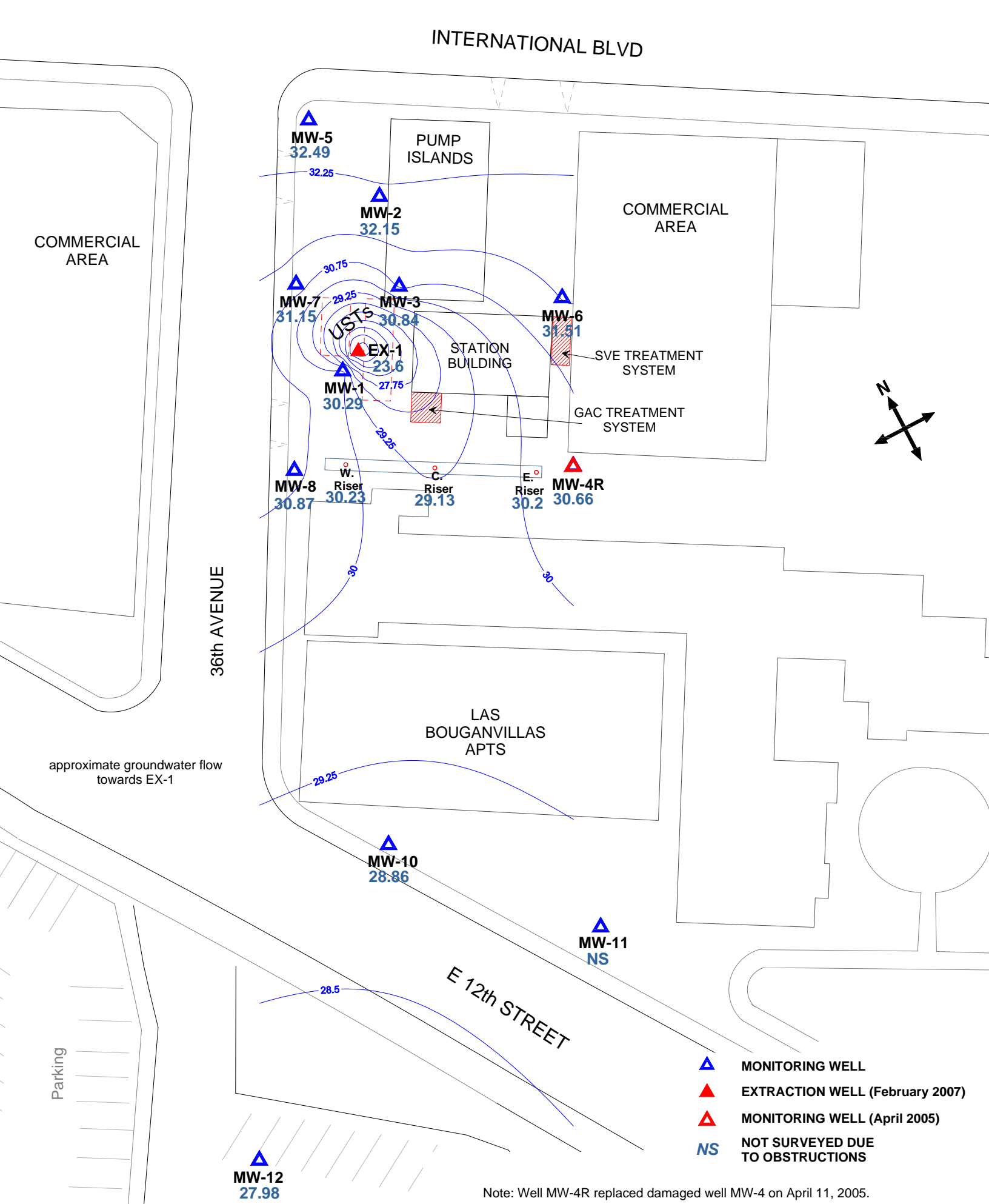
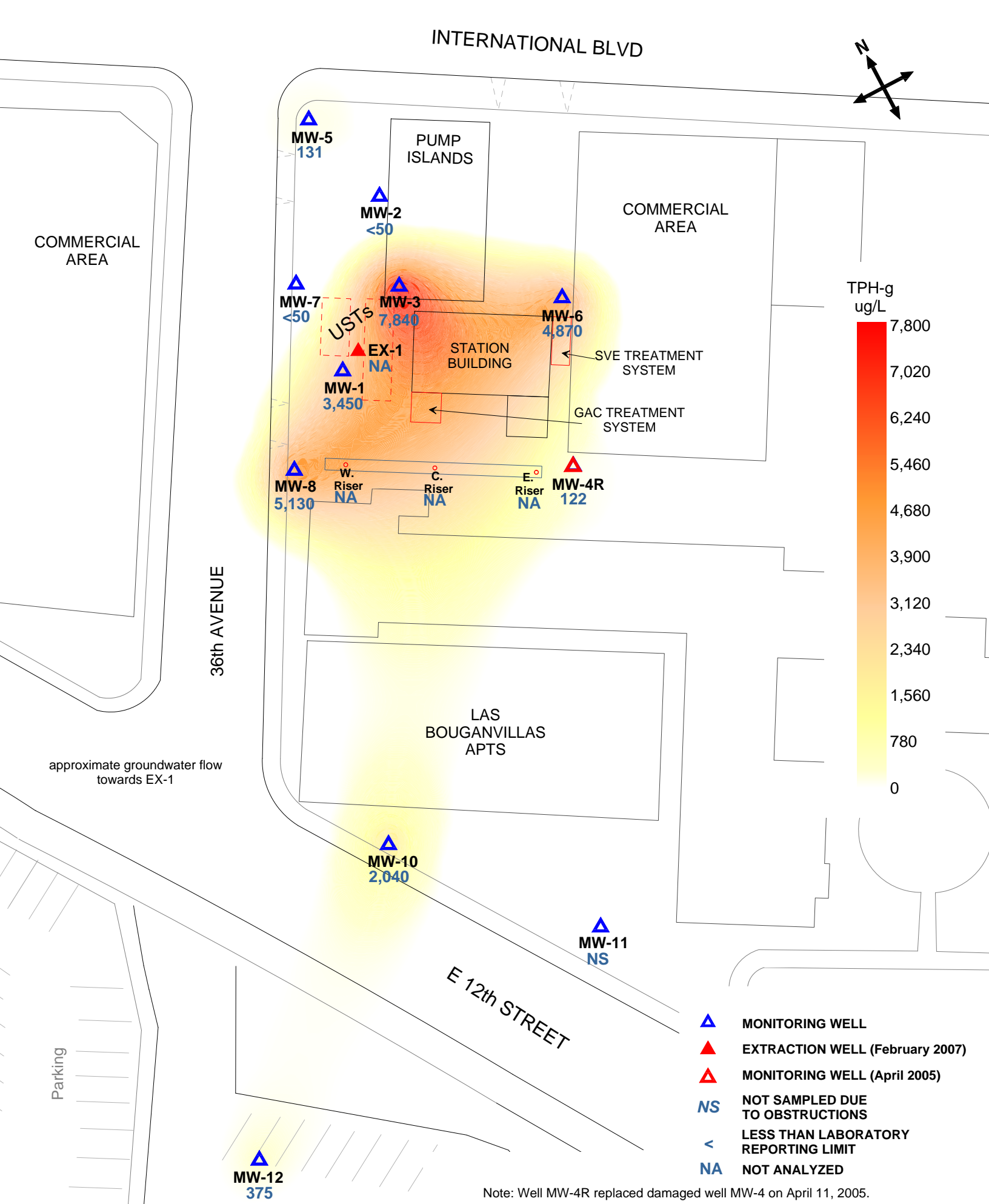


Figure 3: Groundwater elevation contour map in feet, February 22, 2008.

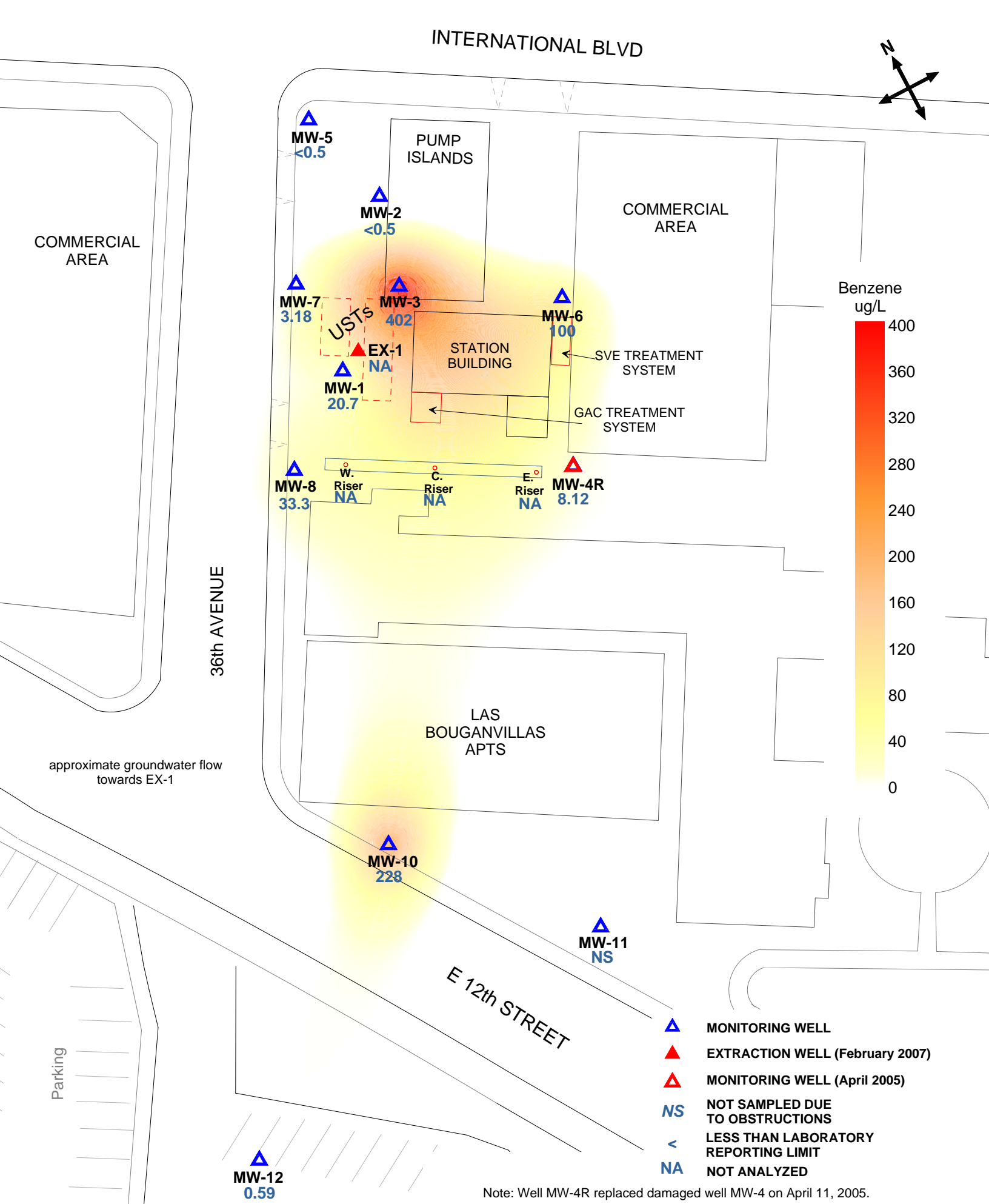




approximate scale in feet



Figure 4: Contour map of TPH-g concentrations in the groundwater. February 21 and 22, 2008.



approximate scale in feet  
0 20 40

Figure 5: Contour map of benzene concentrations in the groundwater. February 21 and 22, 2008.



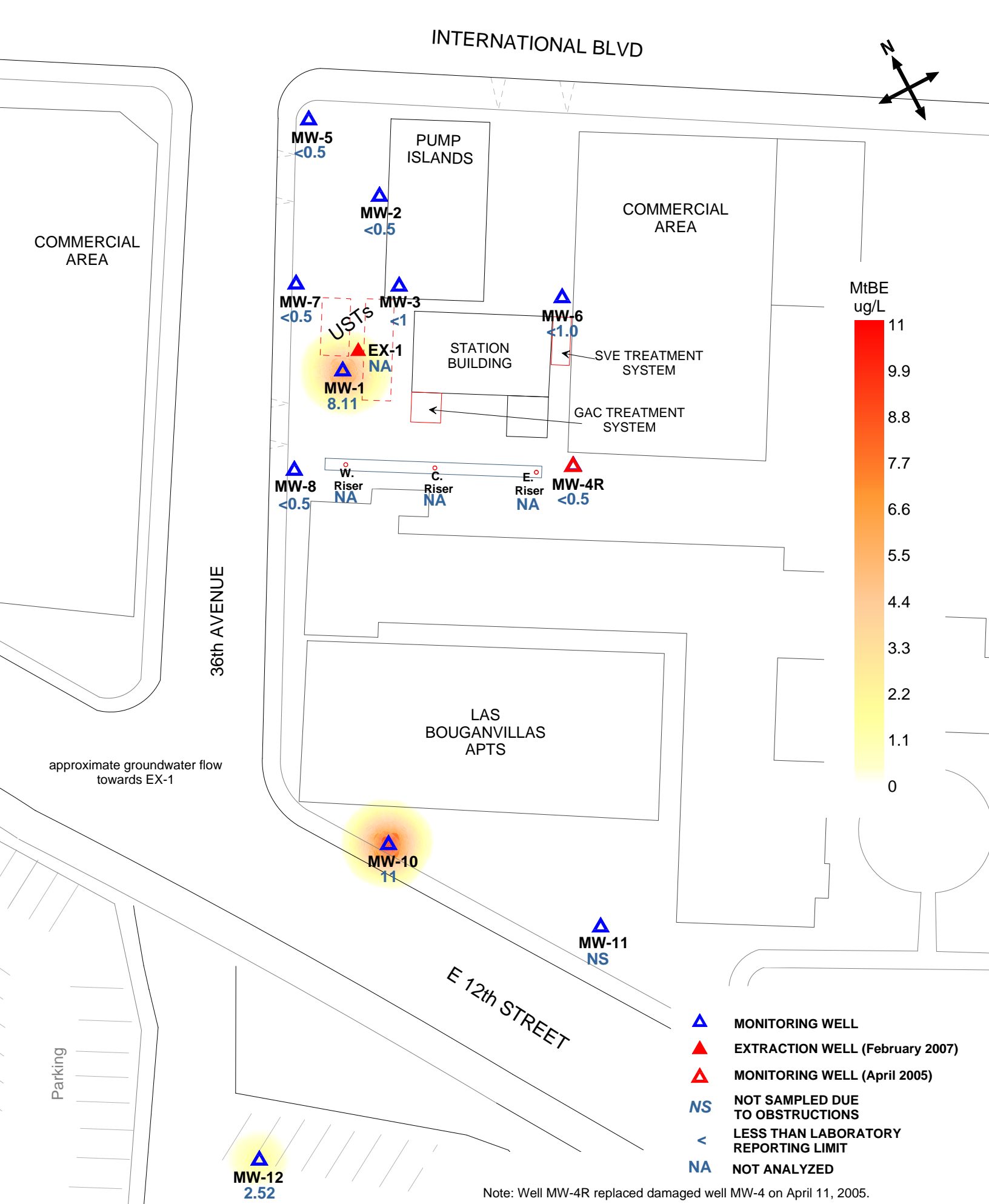
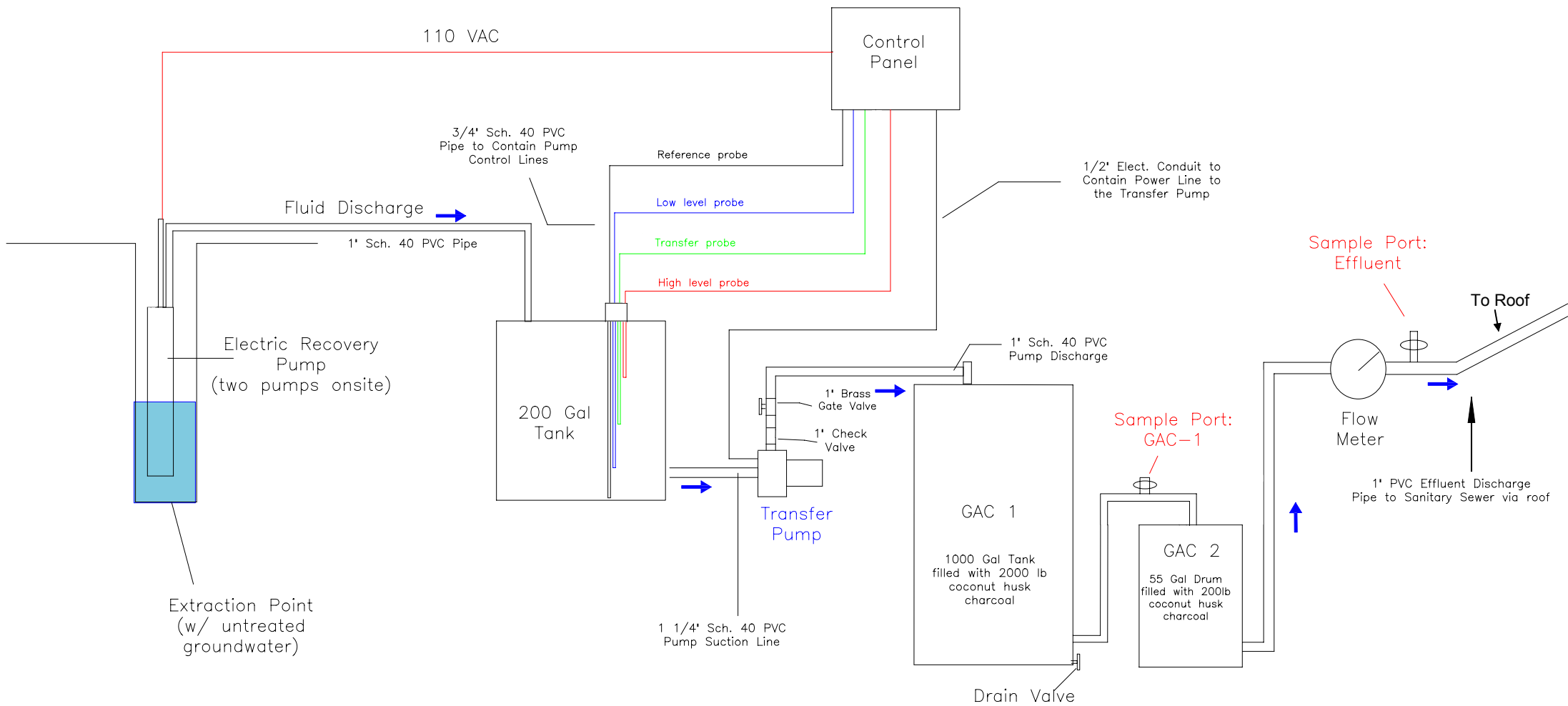


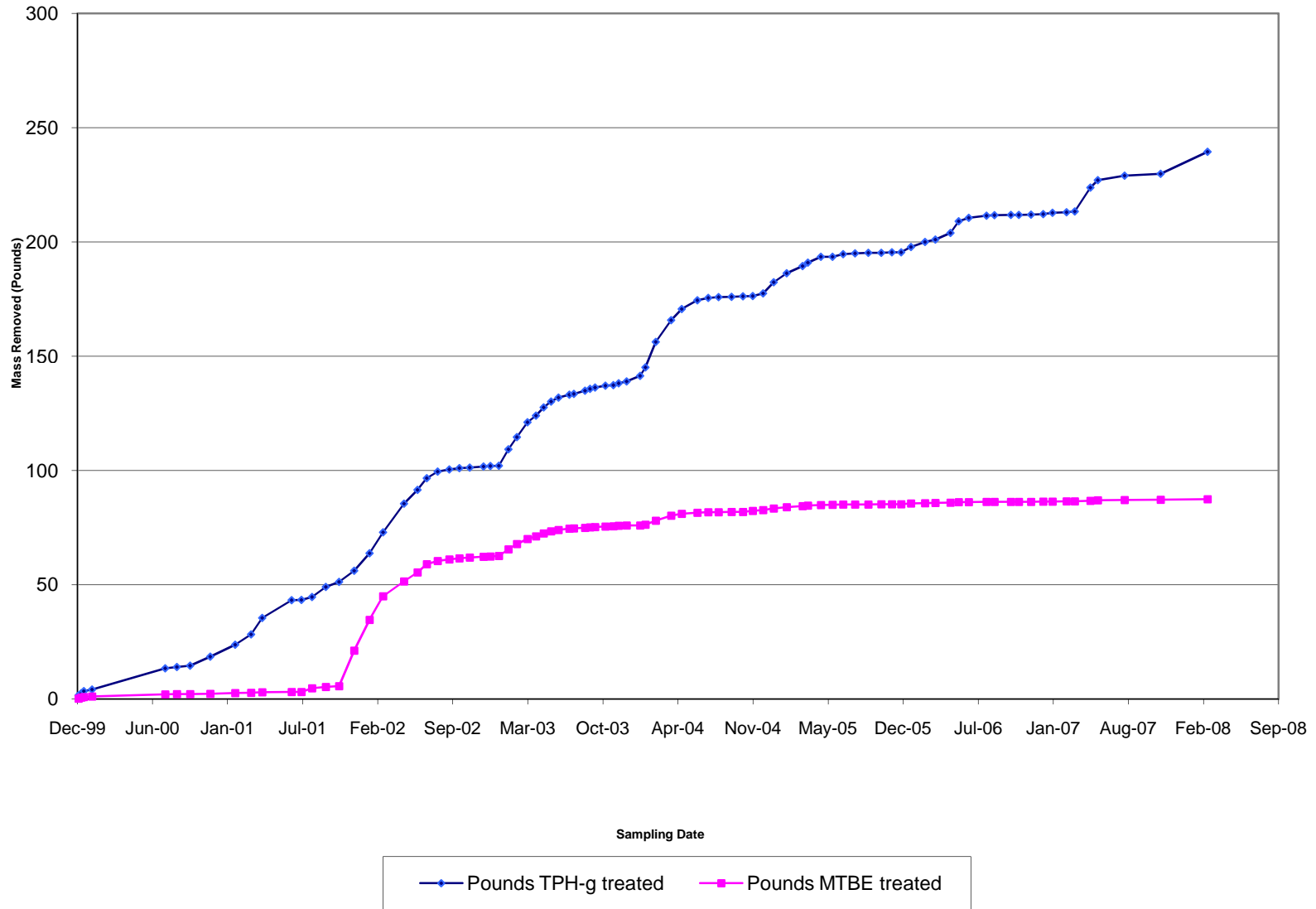
Figure 6: Contour map of MtBE concentrations in the groundwater (EPA Method 8260B). February 21 and 22, 2008.



(Discharge permit No: 504-27421)  
 Tony's Express Auto Service. November 14, 2011 permit expires

Figure 7: Schematic of the Groundwater Remediation System.  
 3609 International Blvd., Oakland, CA

Figure 8: Cumulative Mass of TPH-g and MtBE Removed from Groundwater since the Installation of the Treatment System



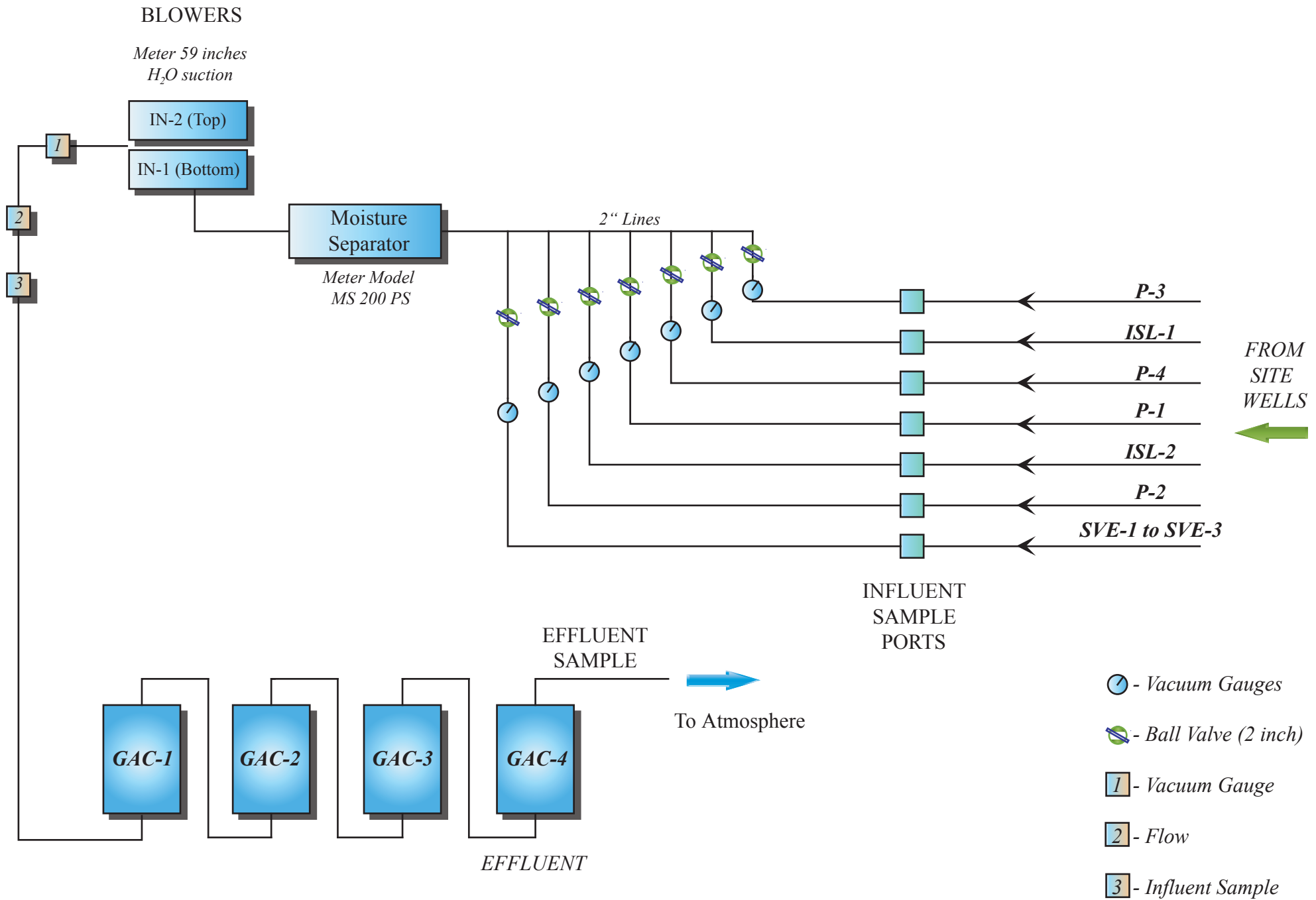


Figure 9: Block Diagram of SVE System

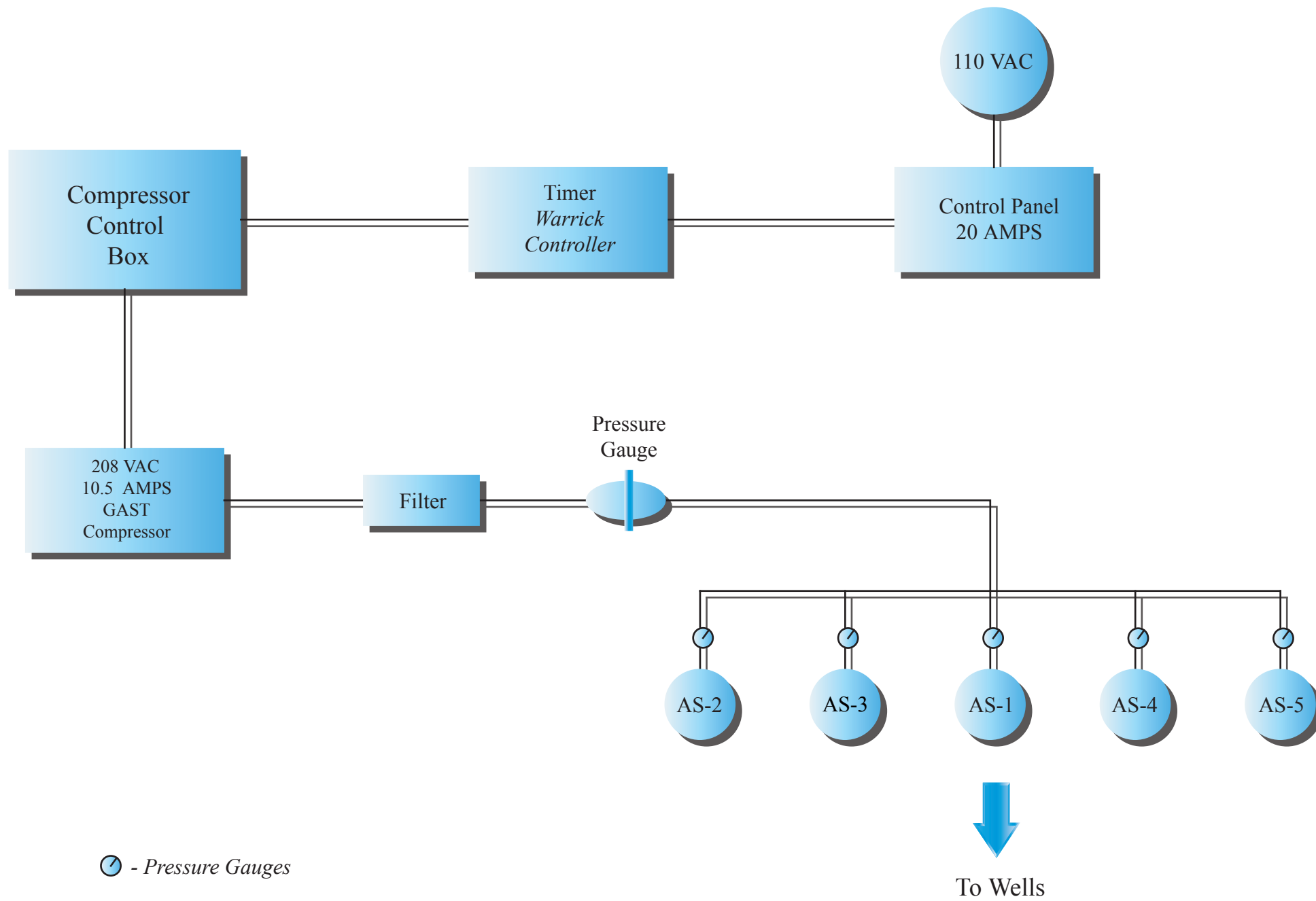


Figure 10: Block diagram of the Air Sparge System

# **APPENDIX A**

## **Standard Operating Procedures for Conducting Groundwater Monitoring Activities**



## Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Prior to measurement of groundwater depth at each well, equalization with the surrounding aquifer must be achieved. Initially, the well cap is removed and the pressure is allowed to dissipate, creating a more stable water table level within the well. After about 10-15 minutes, once the water level in the well stabilizes, the depth to groundwater is measured from the top of the casing to the nearest 0.01 foot using an electric sounder.

Prior to sample collection, each well is purged using a battery-operated, 2-inch-diameter pump (Model ES-60 DC). During purging, groundwater is measured for parameters such as dissolved oxygen (DO), pH, temperature, electrical conductivity (EC), and oxygen-reduction potential (ORP) using a Hanna HI-9828 multi-parameter instrument. Turbidity is measured using a Hanna HI-98703 portable turbidimeter. The equipment is calibrated at the Site using standard solutions and procedures provided by the manufacturer.

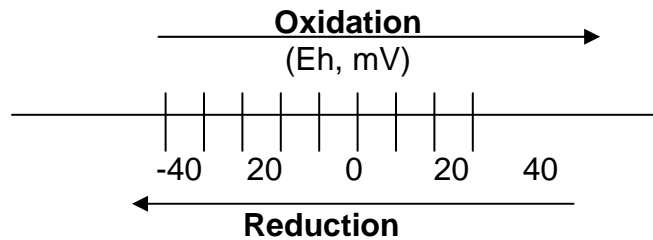
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

There is a strong correlation between the turbidity level and the biological oxygen demand of natural water bodies. The main purpose for checking the turbidity level is to provide a general overview of the extent of the suspended solids in the groundwater.

ORP is the measure of the potential for an oxidation or reduction process to occur. In the oxidation process, a molecule or ion loses one or several electrons. In the reduction process, a molecule or ion gains one or several electrons. The unit of the redox potential is the volt or millivolt. The most important redox reaction in petroleum-contaminated groundwater is the oxidation of petroleum hydrocarbons in the presence of bacteria and free molecular oxygen. Because the solubility of O<sub>2</sub> in water is low (9 mg/L at 25 °C and 11 mg/L at 5 °C), and because the rate of O<sub>2</sub> replenishment in subsurface environments is limited, DO can be entirely consumed when the oxidation of only a small amount of petroleum hydrocarbons occurs.

Oxidation of petroleum hydrocarbons can still occur when all the dissolved O<sub>2</sub> in the groundwater is consumed; however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO<sub>3</sub><sup>-</sup>, MnO<sub>2</sub>, Fe (OH)<sub>3</sub>, SO<sub>4</sub><sup>2-</sup> and others (Freeze and Cherry, 1979). As these oxidizing agents are consumed, the groundwater environment becomes more and more reduced. If the process advances far enough, the environment may become so strongly reduced that the

petroleum hydrocarbons undergo anaerobic degradation, resulting in the production of methane and carbon dioxide. The concept of oxidation and reduction in terms of changes in oxidation states is illustrated below.



Purging of wells continues until the parameters for DO, pH, temperature, EC, turbidity, and redox stabilize, or three casing volumes are purged.

Once stabilization occurs, the groundwater samples are also tested on-site for ferrous iron ( $\text{Fe}^{+2}$ ), nitrate ( $\text{NO}_3^-$ ), and sulfate ( $\text{SO}_4^{-2}$ ) concentrations.

$\text{Fe}^{+2}$ ,  $\text{NO}_3^-$ , and  $\text{SO}_4^{-2}$  are measured colorimetrically using the Hach Colorimeter Model 890, a microprocessor-controlled photometer suitable for colorimetric testing in the laboratory or the field. The required reagents for each specific test are provided in AccuVac ampuls.

For sampling purposes, after purging a disposable polyethylene bailer is used to collect sufficient samples from each monitoring well for laboratory analyses. Groundwater samples are transferred into 40-mL VOA vials and preserved with hydrochloric acid. The vials are sealed to prevent development of air bubbles within the headspace. For TPH-d analysis, groundwater samples are collected using 1-L, amber, nonpreserved glass containers. Samples are placed in an ice-filled cooler and maintained at 4°C. A chain of custody form is prepared to be delivered with the samples, which are delivered promptly to a California state-certified analytical laboratory.

# Appendix B

Table of Elevations and Coordinates of Monitoring Wells  
and Field Measurements of Physical, Chemical, and  
Biodegradation Parameters of Groundwater

**TABLE OF ELEVATIONS & COORDINATES  
 ON MONITORING WELLS**  
 SOMA ENVIRONMENTAL  
 Oakland-E. 14 the St. "International Blvd"

WELL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
FD-C	2109299.85	6064039.85	39.35 40.25	Notch on north side of PVC Punch north rim of box
FD-E	2109281.13	6064067.87	40.06 40.55	Notch on north side of PVC Punch north rim of box
FD-W	2109314.99	6064017.59	39.16 39.95	Notch on north side of PVC Punch north rim of box
MW-1	2109338.74	6064025.97	40.11 40.76	Notch on north side of PVC Punch north rim of box
MW-2	2109383.20	6064073.06	40.71 41.61	Notch on north side of PVC Punch north rim of box
MW-3	2109351.11	6064064.63	40.91 41.68	Notch on north side of PVC Punch north rim of box
MW-4	2109278.18	6064076.40	40.01 40.67	Notch on north side of PVC Punch north rim of box
MW-5	2109410.84	6064058.46	41.16 41.60	Notch on south side of PVC Punch south rim of box
MW-6	2109320.46	6064105.06	40.92 41.52	Notch on north side of PVC Punch north rim of box
MW-7	2109368.19	6064025.54	39.94 40.54	Notch on north side of PVC Punch north rim of box
MW-8	2109321.68	6064000.46	39.38 39.72	Notch on north side of PVC Punch north rim of box

**Kier Wright Civil Engineers Surveyors, Inc.**  
 1233 Quarry Lane, Suite 145, Pleasanton, CA 94566  
 (925) 249-6555 (925) 249-6563

**TABLE OF ELEVATIONS & COORDINATES  
ON MONITORING WELLS**SOMA ENVIRONMENTAL  
Oakland-E. 14 the St. "International Blvd"

WELL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
MW-10	2109193.97	6063957.39	36.71 37.70	Notch on north side of PVC Punch north rim of box
MW-11	2109125.26	6064007.52	XXXX	NO ELEVATION , BOAT ON TOP
MW-12	2109121.85	6063865.00	36.84 36.87	Notch on north side of PVC

Bench mark: NGS Bench mark No.M 554. To reach the station from the intersection of Interstate Highway 880 and Hegenberger Rd in South Oakland go northeast on Hegenberger Rd for 0.5 MI to a side road right Baldwin St. Turn right and go south on Baldwin St for 0.35 MI to a T-intersection, 85th Ave. for 0.1 MI to a side road right, Railroad Ave. Turn right and go south on Railroad Ave. for 0.1 MI to the station on the left, east, side of the road in a large concrete headwall for a culvert.

Elevation = 14.20 NAVD88 Datum

Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.

**Harrington Surveys Inc.**  
**Land Surveying & Mapping**

2278 Larkey Lane, Walnut Creek, Ca. 94597 Phone (925)935-7228 Fax (925)935-5118  
Cell (925)788-7359 E-Mail (ben5132@pacbell.net)

SOMA ENVIRONMENTAL ENGINEERING  
2680 BISHOP DR. # 203  
SAN RAMON, CA. 94583

MAY 20, 2005

ATTN: ELENA

3609 INTERNATIONAL BLVD.  
OAKLAND CA.

**SURVEY REPORT**


CONTROLLING POINTS FROM SURVEY BY KIER & WRIGHT, DATED 08-27-02:

MW-5 NOTCH, CALIFORNIA COORDINATE SYSTEM, ZONE 3. NAD 83.  
NORTH 2,109,410.84 - EAST 6,064,058.45, LAT. N37°46'17.42024"  
W122°13'18.51054".  
ELEVATION 41.06, NAVD 88,

MW-7 NOTCH, CALIFORNIA COORDINATE SYSTEM, ZONE 3,  
NORTH 2,109,368.19 - EAST 6,064,025.54. LAT N37°46'30.32592",  
W122°13'18.88771"  
ELEVATION 39.94 NAVD 88,

INSTRUMENTATION:  
TRIMBLE GPS, MODEL 5800 AND LEICA TCA 1800, 1" HORZ. & VERT.  
OBSERVATION: EPOCH = 180.

FIELD SURVEY: APRIL 20, 2005.

  
BEN HARRINGTON  
PLS 5132





DATE: 8/17/05

Job No. 07-014

DATE OF SURVEY 3/8/07

INSTRUMENTS: Leica SR530 L530, Leica -

TCRA 1102 - Total Station,

Leica - NA 3003 - Level

### TABLE OF ELEVATIONS & COORDINATES

**3609 International Blvd., Oakland**  
SOMA ENVIRONMENTAL, PROJECT # 2331

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
EX-1	2109341.80	6064034.13	40.51	Casing
			40.93	Vault
EX-1 DECIMAL DEGREES	37.7752931	-122.2218880		

#### LOCAL CONTROL

MW-7	2109368.62	6064025.48	39.94	Casing
			40.54	Vault
MW-8	2109321.68	6064000.47	39.38	Casing
			39.72	Vault

**NOTE**

THE VALUES FOR EX-1 ARE DERIVED FROM LOCAL CONTROL BASED UPON CONTROL VALUES  
USED FROM THE PREVIOUS SITE SURVEY AS PROVIDED BY KIER AND WRIGHT DATED 08-27-2002

**BENCH MARK:** NGS Bench mark No.M 554

TO REACH THE STATION FROM THE INTERSECTION OF INTERSTATE HIGHWAY 880 AND HEGENBERGER RD IN SOUTH OAKLAND  
GO NORTHEAST ON HEGENBERGER ROAD FOR 0.5MI TO A SITE ROAD RIGHT BALDWIN ST. TURN RIGHT AND GO SOUTH ON BALDWIN ST.  
FOR 0.35MI TO A T-INTERSECTION, 85TH AVE. FOR 0.1MI TO A SIDE ROAD RIGHT, RAILROAD AVE. TURN RIGHT AND GO  
SOUTH ON RAILROAD AVE. FOR 0.1MI TO THE STATION ON THE LEFT, EAST, SIDE OF THE ROAD IN A LARGE CONCRETE HEADWALL FOR A  
CULVERT.

Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.  
Elevation =14.20 FEET NAVD88 Datum



PLS Surveys, Inc.  
2220 Livingston Street, Suite 202  
Oakland, CA 94606  
510.261.0900

PRINTED: 3/19/2007  
9:24 AM



# Appendix C

## Chain of Custody Form and Laboratory Report

# CHAIN OF CUSTODY FORM

**PAL** Pacific Analytical Laboratory  
 851 West Midway Ave., Suite 201B  
 Alameda, CA 94501  
 510-864-0364 Telephone  
 510-864-0365 Fax

PAL  
 Login# 8020023

Project No: 2331				Sampler: <u>Lizzie Hightower / Eric Gassner-Wollwage</u>								Analyses/Method							
Project Name: 3609 International Blvd Oakland				Report To: Joyce Bobek								TPH-g, BTEX, MIBE 8260B							
				Company: SOMA Environmental Engineering, Inc.															
Turnaround Time: Standard				Tel: 925-734-6400 Fax: 925-734-6401															
		Sampling Date/Time		Matrix			# of Containers	Preservatives											
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H <sub>2</sub> So <sub>4</sub>	HNO <sub>3</sub>	ICE	Field Notes							
	MW-1	<u>2/22/08</u>	<u>12:09</u>		X		3 VOAS	X			X	Grab Sample							
	MW-2	<u>2/21/08</u>	<u>15:14</u>		X		3 VOAS	X			X	↓							
	MW-3	<u>2/22/08</u>	<u>11:45</u>		X		3 VOAS	X			X								
	MW-4R	<u>2/22/08</u>	<u>10:30</u>		X		3 VOAS	X			X								
	MW-5	<u>2/21/08</u>	<u>14:39</u>		X		3 VOAS	X			X								
	MW-6	<u>2/22/08</u>	<u>11:15</u>		X		3 VOAS	X			X								
	MW-7	<u>2/21/08</u>	<u>16:06</u>		X		3 VOAS	X			X								
	MW-8	<u>2/22/08</u>	<u>10:56</u>		X		3 VOAS	X			X								
	MW-10	<u>2/21/08</u>	<u>13:58</u>		X		3 VOAS	X			X								
	MW-11				X		3 VOAS	X			X								
	MW-12	<u>2/21/08</u>	<u>13:05</u>		X		3 VOAS	X			X					Grab Sample			
Sampler Remarks:  EDF REQUIRED Hold EB-PMP, EB-PMP2 Hold EB-PRB, EB-PRB2							Relinquished by: <u>E. Hightower</u>			Date/Time: <u>2/22/08</u> <u>13:44</u>						Received by: <u>[Signature]</u>		Date/Time: <u>2.22.08</u> <u>14:00</u>	

# CHAIN OF CUSTODY FORM

**PAL** Pacific Analytical Laboratory  
 851 West Midway Ave., Suite 201B  
 Alameda, CA 94501  
 510-864-0364 Telephone  
 510-864-0365 Fax

PAL  
 Login# 8020023

Project No: 2331				Sampler: Lizzie Hightower / Eric Gassner-Wollwage								Analyses/Method				
Project Name: 3609 International Blvd Oakland				Report To: Joyce Bobek								TPH-g, BTEX, MIBE 8260B				
				Company: SOMA Environmental Engineering, Inc.												
Turnaround Time: Standard				Tel: 925-734-6400 Fax: 925-734-6401												
		Sampling Date/Time		Matrix			# of Containers		Preservatives							
Lab No.	Sample ID		Date	Time	Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE	Field Notes			
	EB-PMP		2/21/08			X		3 VOAS	X			X	Equipment Blank			
	EB-PRB		2/21/08			X		3 VOAS	X			X	<div style="display: flex; align-items: center; justify-content: center;"> <div style="font-size: 2em; margin-right: 10px;">}</div> <span style="font-size: 1.5em;">Hold</span> </div>			
	EB-PMP2		2/22/08			X		3 VOAS	X			X				
	EB-PRB2		2/22/08			X		3 VOAS	X			X				
Sampler Remarks:					Relinquished by:				Date/Time:		Received by:			Date/Time:		
EDF REQUIRED Hold EB-PMP, EB-PMP2 Hold EB-PRB, EB-PRB2					E. Hightower				2/22/08 13:44		<i>[Signature]</i>			2.22.08 14:00		

11 March 2008

Mansour Sepehr  
SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton, CA 94588

RE: 3609 International Blvd, Oakland

Work Order Number: 8020023

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



---

Maiid Akhavan  
Laboratory Director



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2331  
Project Manager: Mansour Sepehr

**Reported:**  
11-Mar-08 11:24

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	8020023-01	Water	22-Feb-08 12:09	22-Feb-08 14:00
MW-2	8020023-02	Water	21-Feb-08 15:14	22-Feb-08 14:00
MW-3	8020023-03	Water	22-Feb-08 11:45	22-Feb-08 14:00
MW-4R	8020023-04	Water	22-Feb-08 10:30	22-Feb-08 14:00
MW-5	8020023-05	Water	21-Feb-08 14:39	22-Feb-08 14:00
MW-6	8020023-06	Water	22-Feb-08 11:15	22-Feb-08 14:00
MW-7	8020023-07	Water	21-Feb-08 16:06	22-Feb-08 14:00
MW-8	8020023-08	Water	22-Feb-08 10:56	22-Feb-08 14:00
MW-10	8020023-09	Water	21-Feb-08 13:58	22-Feb-08 14:00
MW-12	8020023-10	Water	21-Feb-08 13:05	22-Feb-08 14:00



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2331  
Project Manager: Mansour Sepehr

Reported:  
11-Mar-08 11:24

**Volatile Organic Compounds by EPA Method 8260B**  
**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (8020023-01) Water</b> <b>Sampled: 22-Feb-08 12:09</b> <b>Received: 22-Feb-08 14:00</b>									
<b>Gasoline (C6-C12)</b>	<b>3450</b>	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>20.7</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>60.2</b>	0.500	"	"	"	"	"	"	
<b>m&amp;p-Xylene</b>	<b>47.7</b>	2.00	"	"	"	"	"	"	
<b>o-xylene</b>	<b>30.3</b>	0.500	"	"	"	"	"	"	
<b>Toluene</b>	<b>3.73</b>	2.00	"	"	"	"	"	"	
<b>MTBE</b>	<b>8.11</b>	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	70-130	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		107 %	70-130	"	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		103 %	70-130	"	"	"	"	"	
<b>MW-2 (8020023-02) Water</b> <b>Sampled: 21-Feb-08 15:14</b> <b>Received: 22-Feb-08 14:00</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>1.41</b>	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.2 %	70-130	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		111 %	70-130	"	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		101 %	70-130	"	"	"	"	"	
<b>MW-3 (8020023-03RE1) Water</b> <b>Sampled: 22-Feb-08 11:45</b> <b>Received: 22-Feb-08 14:00</b>									
<b>Gasoline (C6-C12)</b>	<b>7840</b>	100	ug/l	2	BB82702	22-Feb-08	28-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>402</b>	1.00	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>496</b>	1.00	"	"	"	"	"	"	
<b>m&amp;p-Xylene</b>	<b>247</b>	4.00	"	"	"	"	"	"	
<b>o-xylene</b>	<b>183</b>	1.00	"	"	"	"	"	"	
<b>Toluene</b>	<b>64.5</b>	4.00	"	"	"	"	"	"	
MTBE	ND	1.00	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		116 %	70-130	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		106 %	70-130	"	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		108 %	70-130	"	"	"	"	"	

Pacific Analytical Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588	Project: 3609 International Blvd, Oakland Project Number: 2331 Project Manager: Mansour Sepehr	<b>Reported:</b> 11-Mar-08 11:24
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**Volatile Organic Compounds by EPA Method 8260B**

**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-4R (8020023-04) Water    Sampled: 22-Feb-08 10:30    Received: 22-Feb-08 14:00</b>									
<b>Gasoline (C6-C12)</b>	<b>122</b>	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>8.12</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>3.14</b>	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		114 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		104 %		70-130	"	"	"	"	
<b>MW-5 (8020023-05) Water    Sampled: 21-Feb-08 14:39    Received: 22-Feb-08 14:00</b>									
<b>Gasoline (C6-C12)</b>	<b>131</b>	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>ND</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>ND</b>	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.4 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		114 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		105 %		70-130	"	"	"	"	
<b>MW-6 (8020023-06) Water    Sampled: 22-Feb-08 11:15    Received: 22-Feb-08 14:00</b>									
<b>Gasoline (C6-C12)</b>	<b>4870</b>	100	ug/l	2	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>100</b>	1.00	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>331</b>	1.00	"	"	"	"	"	"	
<b>m&amp;p-Xylene</b>	<b>63.0</b>	4.00	"	"	"	"	"	"	
<b>o-xylene</b>	<b>13.9</b>	1.00	"	"	"	"	"	"	
<b>Toluene</b>	<b>9.56</b>	4.00	"	"	"	"	"	"	
MTBE	ND	1.00	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		111 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		106 %		70-130	"	"	"	"	

Pacific Analytical Laboratory The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2331  
Project Manager: Mansour Sepehr

Reported:  
11-Mar-08 11:24

**Volatile Organic Compounds by EPA Method 8260B**

**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-7 (8020023-07) Water</b> <b>Sampled: 21-Feb-08 16:06</b> <b>Received: 22-Feb-08 14:00</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>3.18</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>1.69</b>	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		111 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		103 %		70-130	"	"	"	"	
<b>MW-8 (8020023-08) Water</b> <b>Sampled: 22-Feb-08 10:56</b> <b>Received: 22-Feb-08 14:00</b>									
Gasoline (C6-C12)	5130	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>33.3</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>218</b>	0.500	"	"	"	"	"	"	
<b>m&amp;p-Xylene</b>	<b>5.08</b>	2.00	"	"	"	"	"	"	
<b>o-xylene</b>	<b>0.790</b>	0.500	"	"	"	"	"	"	
<b>Toluene</b>	<b>4.12</b>	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		111 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		105 %		70-130	"	"	"	"	
<b>MW-10 (8020023-09) Water</b> <b>Sampled: 21-Feb-08 13:58</b> <b>Received: 22-Feb-08 14:00</b>									
Gasoline (C6-C12)	2040	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>228</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>193</b>	0.500	"	"	"	"	"	"	
<b>m&amp;p-Xylene</b>	<b>2.68</b>	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
<b>Toluene</b>	<b>4.44</b>	2.00	"	"	"	"	"	"	
MTBE	11.0	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		105 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		112 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		105 %		70-130	"	"	"	"	





SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588	Project: 3609 International Blvd, Oakland Project Number: 2331 Project Manager: Mansour Sepehr	<b>Reported:</b> 11-Mar-08 11:24
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**Volatile Organic Compounds by EPA Method 8260B**  
**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-12 (8020023-10) Water    Sampled: 21-Feb-08 13:05    Received: 22-Feb-08 14:00</b>									
<b>Gasoline (C6-C12)</b>	<b>375</b>	50.0	ug/l	1	BB82702	22-Feb-08	25-Feb-08	EPA 8260B	
<b>Benzene</b>	<b>0.590</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>1.06</b>	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
<b>MTBE</b>	<b>2.52</b>	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.4 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		111 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		104 %		70-130	"	"	"	"	



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2331  
Project Manager: Mansour Sepehr

Reported:  
11-Mar-08 11:24

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BB82702 - EPA 5030 Water MS**

**Blank (BB82702-BLK1)**

Prepared & Analyzed: 27-Feb-08

Surrogate: 4-Bromofluorobenzene	46.9		ug/l	50.0		93.8	70-130			
Surrogate: Dibromofluoromethane	58.9		"	50.0		118	70-130			
Surrogate: Perdeuterotoluene	49.9		"	50.0		99.8	70-130			
Gasoline (C6-C12)	ND	50.0	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	2.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.00	"							
MTBE	ND	0.500	"							

**LCS (BB82702-BS1)**

Prepared & Analyzed: 27-Feb-08

Surrogate: 4-Bromofluorobenzene	52.4		ug/l	50.0		105	70-130			
Surrogate: Dibromofluoromethane	54.9		"	50.0		110	70-130			
Surrogate: Perdeuterotoluene	50.0		"	50.0		100	70-130			
Gasoline (C6-C12)	1650	50.0	"	2000		82.5	70-130			
Benzene	73.6	0.500	"	100		73.6	70-130			
Toluene	80.5	2.00	"	100		80.5	70-130			
MTBE	73.2	0.500	"	100		73.2	70-130			

**LCS Dup (BB82702-BSD1)**

Prepared & Analyzed: 27-Feb-08

Surrogate: 4-Bromofluorobenzene	56.5		ug/l	50.0		113	70-130			
Surrogate: Dibromofluoromethane	56.8		"	50.0		114	70-130			
Surrogate: Perdeuterotoluene	49.7		"	50.0		99.4	70-130			
Gasoline (C6-C12)	1700	50.0	"	2000		85.0	70-130	2.99	20	
Benzene	71.3	0.500	"	100		71.3	70-130	3.17	20	
Toluene	81.7	2.00	"	100		81.7	70-130	1.48	20	
MTBE	117	0.500	"	100		117	70-130	46.1	20	

QR-02



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2331  
Project Manager: Mansour Sepehr

**Reported:**  
11-Mar-08 11:24

### Notes and Definitions

- QR-02      The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- DET        Analyte DETECTED
- ND        Analyte NOT DETECTED at or above the reporting limit
- NR        Not Reported
- dry        Sample results reported on a dry weight basis
- RPD        Relative Percent Difference

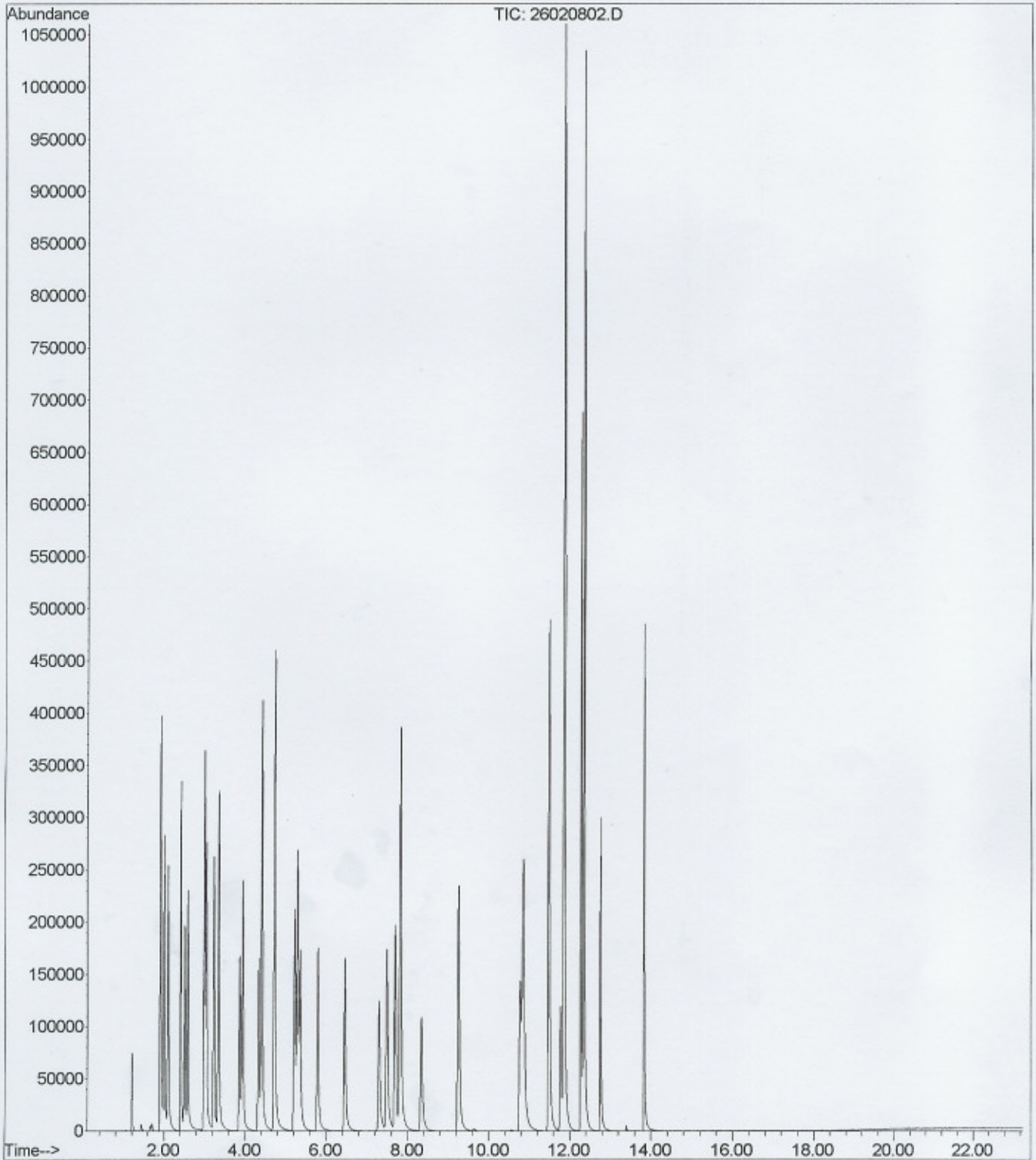
### Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
BB82702-BSD1	TPHg/BTEX/MTBE/By EPA	MTBE	QR-02
BB82702-BSD1	TPHg/BTEX/MTBE/By EPA	MTBE	Exceeds RPD limit VERSION 5.6.5:2686 Default Report (not modified)

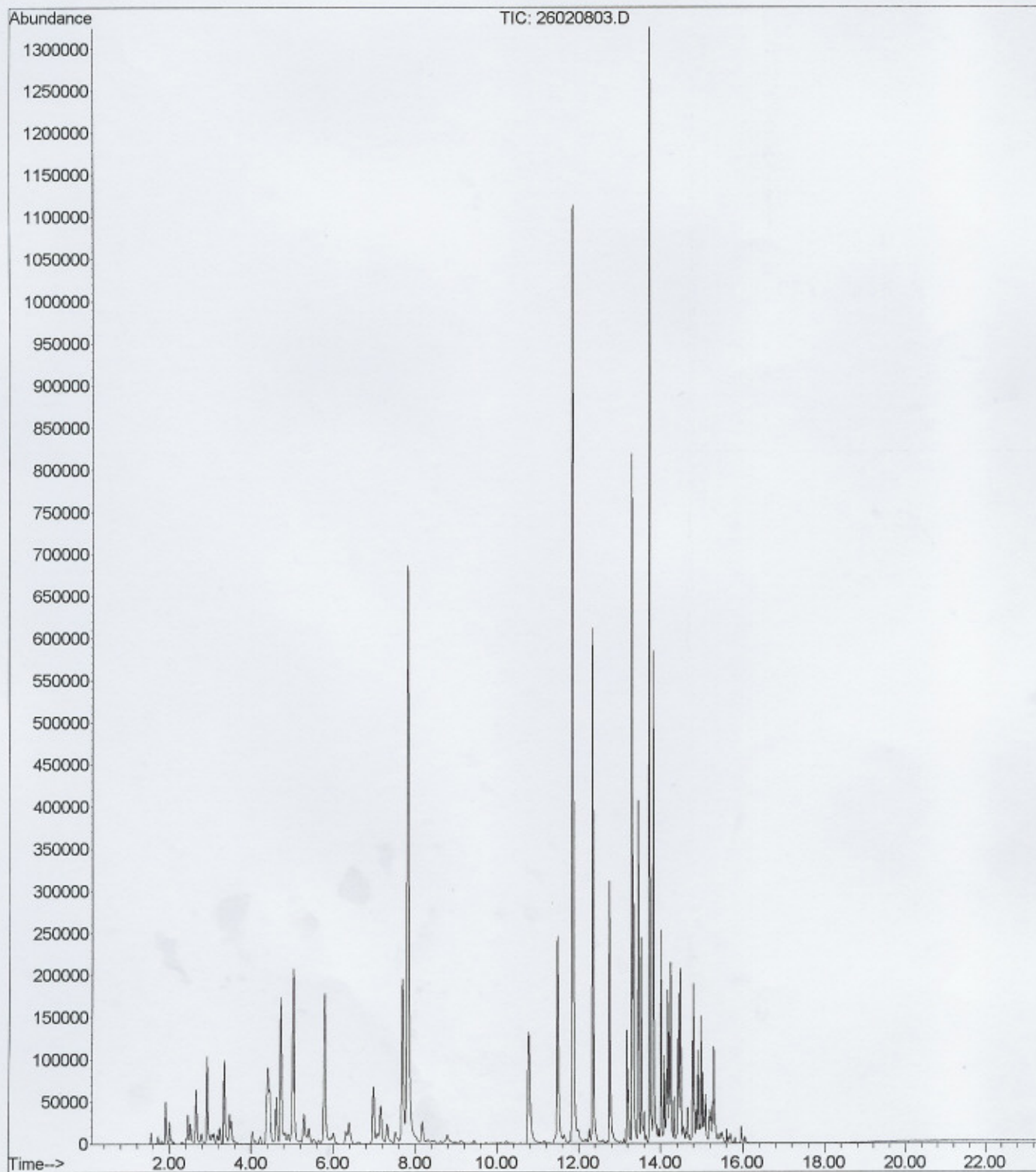
File : C:\MSDCHEM\1\DATA\2008-Feb-26-1807.b\26020805.D  
Operator :  
Acquired : 26 Feb 2008 8:28 pm using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BB82702-BLK1  
Misc Info :  
Vial Number: 5



File :C:\MSDCHEM\1\DATA\2008-Feb-26-1807.b\26020802.D  
Operator :  
Acquired : 26 Feb 2008 6:54 pm using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BB82702-BS1@voc  
Misc Info :  
Vial Number: 2



File :C:\MSDCHEM\1\DATA\2008-Feb-26-1807.b\26020803.D  
Operator :  
Acquired : 26 Feb 2008 7:25 pm using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BB82702-BS1@gas  
Misc Info :  
Vial Number: 3



# Appendix D

Chain of Custody Forms and Laboratory Reports  
for the Groundwater Extraction Treatment System



# CHAIN OF CUSTODY FORM

**PAL** Pacific Analytical Laboratory  
 851 West Midway Ave., Suite 201B  
 Alameda, CA 94501  
 510-864-0364 Telephone  
 510-864-0365 Fax

PAL  
 Login# 8030007

Project No: 2333				Sampler: ERIC GASSNER-WOLLWAGE						Analyses/Method									
Project Name: 3609 International Blvd., Oakland				Report To: JOYCE BOBER						TPH-9, BTEX, MTBE 8260B									
				Company: SOMA Environmental Engineering, Inc.															
Turnaround Time: Standard				Tel: 925-734-6400 Fax: 925-734-6401															
		Sampling Date/Time		Matrix			# of Containers	Preservatives				Field Notes							
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE								
	PSP-1	3/4/08	10:15		x		3 VOAs	x			x								
	GAC-1	↓	10:18		x		3 VOAs	x			x								
	IN-1	↓	10:21		x		3 VOAs	x			x								
Sampler Remarks: EDF output required PSP-1 → effluent IN-1 → influent				Relinquished by: <i>[Signature]</i>				Date/Time: 3/4/08 @ 15:08				Received by: V. Vasquez				Date/Time: 3/4/08 @ 1515			

26 March 2008

Mansour Sepehr  
SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton, CA 94588

RE: 3609 International Blvd, Oakland

Work Order Number: 8030007

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



---

Maiid Akhavan  
Laboratory Director



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2333  
Project Manager: Mansour Sepehr

**Reported:**  
26-Mar-08 18:45

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PSP-1	8030007-01	Water	04-Mar-08 10:15	05-Mar-08 15:15
GAC-1	8030007-02	Water	04-Mar-08 10:18	05-Mar-08 15:15
IN-1	8030007-03	Water	04-Mar-08 10:21	05-Mar-08 15:15



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2333  
Project Manager: Mansour Sepehr

Reported:  
26-Mar-08 18:45

**Volatile Organic Compounds by EPA Method 8260B**  
**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PSP-1 (8030007-01) Water    Sampled: 04-Mar-08 10:15    Received: 05-Mar-08 15:15</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BC81601	05-Mar-08	16-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		104 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		96.0 %		70-130	"	"	"	"	
<b>GAC-1 (8030007-02) Water    Sampled: 04-Mar-08 10:18    Received: 05-Mar-08 15:15</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BC81601	05-Mar-08	16-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		104 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		96.8 %		70-130	"	"	"	"	
<b>IN-1 (8030007-03) Water    Sampled: 04-Mar-08 10:21    Received: 05-Mar-08 15:15</b>									
<b>Gasoline (C6-C12)</b>	<b>6880</b>	50.0	ug/l	1	BC81601	05-Mar-08	16-Mar-08	EPA 8260B	
<b>Benzene</b>	<b>322</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>12.7</b>	0.500	"	"	"	"	"	"	
<b>m&amp;p-Xylene</b>	<b>726</b>	2.00	"	"	"	"	"	"	
<b>o-xylene</b>	<b>489</b>	0.500	"	"	"	"	"	"	
<b>Toluene</b>	<b>35.1</b>	2.00	"	"	"	"	"	"	
<b>MTBE</b>	<b>198</b>	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		121 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		99.4 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		98.0 %		70-130	"	"	"	"	

Pacific Analytical Laboratory

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland

Project Number: 2333

Project Manager: Mansour Sepehr

**Reported:**  
26-Mar-08 18:45

**Volatile Organic Compounds by EPA Method 8260B**

**Pacific Analytical Laboratory**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3609 International Blvd, Oakland  
Project Number: 2333  
Project Manager: Mansour Sepehr

**Reported:**  
26-Mar-08 18:45

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch BC81601 - EPA 5030 Water MS**

**Blank (BC81601-BLK2)**

Prepared & Analyzed: 11-Mar-08

Surrogate: 4-Bromofluorobenzene	41.1		ug/l	50.0		82.2	70-130			
Surrogate: Dibromofluoromethane	57.8		"	50.0		116	70-130			
Surrogate: Perdeuterotoluene	44.1		"	50.0		88.2	70-130			
Gasoline (C6-C12)	ND	50.0	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	2.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.00	"							
MTBE	ND	0.500	"							

**LCS (BC81601-BS1)**

Prepared & Analyzed: 11-Mar-08

Surrogate: 4-Bromofluorobenzene	45.9		ug/l	50.0		91.8	70-130			
Surrogate: Dibromofluoromethane	53.4		"	50.0		107	70-130			
Surrogate: Perdeuterotoluene	41.7		"	50.0		83.4	70-130			
Gasoline (C6-C12)	1830	50.0	"	2000		91.5	70-130			
Benzene	86.1	0.500	"	100		86.1	70-130			
Toluene	80.2	2.00	"	100		80.2	70-130			
MTBE	118	0.500	"	100		118	70-130			

**LCS Dup (BC81601-BSD1)**

Prepared: 11-Mar-08 Analyzed: 16-Mar-08

Surrogate: 4-Bromofluorobenzene	49.8		ug/l	50.0		99.6	70-130			
Surrogate: Dibromofluoromethane	53.6		"	50.0		107	70-130			
Surrogate: Perdeuterotoluene	44.9		"	50.0		89.8	70-130			
Gasoline (C6-C12)	1860	50.0	"	2000		93.0	70-130	1.63	20	
Benzene	83.8	0.500	"	100		83.8	70-130	2.71	20	
Toluene	87.7	2.00	"	100		87.7	70-130	8.93	20	
MTBE	76.9	0.500	"	100		76.9	70-130	42.2	20	QR-02



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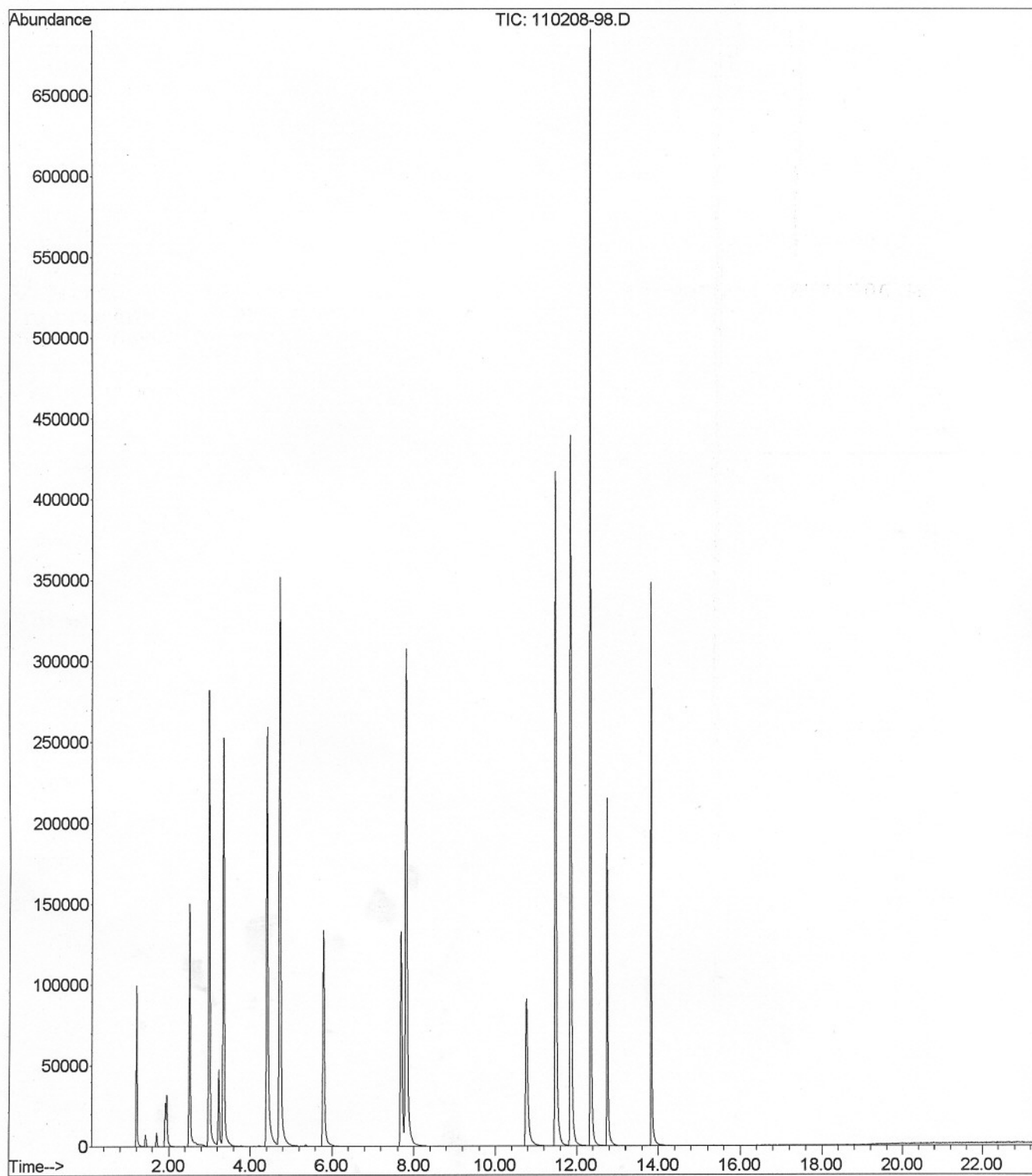
Project: 3609 International Blvd, Oakland  
Project Number: 2333  
Project Manager: Mansour Sepehr

**Reported:**  
26-Mar-08 18:45

### Notes and Definitions

- QR-02      The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- DET        Analyte DETECTED
- ND        Analyte NOT DETECTED at or above the reporting limit
- NR        Not Reported
- dry        Sample results reported on a dry weight basis
- RPD        Relative Percent Difference

File :C:\MSDCHEM\1\DATA\2008-Mar-11-1036.b\110208-98.D  
Operator :  
Acquired : 16 Mar 2008 10:32 pm using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BC81601-BSD1  
Misc Info :  
Vial Number: 98





File :C:\MSDChem\1\DATA\2008-Mar-11-1036.b\110208-99.D  
Operator :  
Acquired : 16 Mar 2008 11:03 pm using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BC81601-BSD1  
Misc Info :  
Vial Number: 99

