



July 26, 2005

Project 4097041918 Task 01

Mr. David Blain
BPS Reprographic Services
945 Bryant Street
San Francisco, California 94103

Groundwater Remediation and Monitoring Report
Second Quarter 2005
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California

Dear Mr. Blain:

MACTEC Engineering and Consulting, Inc., presents this quarterly status letter-report on the groundwater monitoring and remedial activities at the BPS Reprographic Services (BPS) facility located at 1700 Jefferson Street in Oakland, California (Plate 1). Information presented in this letter-report represents groundwater conditions at the subject site during the Second Quarter 2005 (April through June), and was prepared to satisfy the quarterly groundwater monitoring requirements of the Alameda County Department of Health Care Services (ACHCS).

BACKGROUND

Three underground gasoline storage tanks were removed from the property in 1987 and a preliminary soil and groundwater investigation indicated that a release of fuel into the subsurface had occurred. Three groundwater-monitoring wells (MW-1, MW-2, and MW-3) were installed on the property to evaluate the distribution of *petroleum hydrocarbons in the groundwater* and to determine the direction of groundwater flow. Free phase hydrocarbon (FPH) was found in MW-1. Groundwater level measurements at that time indicated that the local groundwater gradient was in a north to northwest direction. Groundwater level measurements would later indicate the direction of the local groundwater gradient changing (to typically east to west or north to northwest).

In November 1987, monitoring well MW-2 was abandoned to facilitate the construction of the present BPS facility and, in January 1988, two additional wells, MW-1A and MW-4, were installed as groundwater extraction wells. MACTEC also installed one offsite monitoring well, MW-5, in August 1988 and a second offsite well, MW-6, in April 1996. The monitoring well locations are shown on Plate 1.

In 1992, a groundwater extraction system was constructed at the site to remove FPH from the groundwater surface. Groundwater was extracted from MW-1A and MW-4 and passed through an

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oil-water separator that removed the FPH. The water was then drawn into a 3,000-gallon bioreactor tank for treatment by hydrocarbon reducing microbes. Air and nutrients were supplied to the water within the bioreactor to facilitate microbial growth. The treated water from the bioreactor was pumped in batches of approximately 500 gallons through three granular activated carbon vessels before discharge under a wastewater discharge permit from the East Bay Municipal Utility District to the sanitary sewer. The treatment system processed approximately 1,385,490 gallons of groundwater and an estimated 5,062 pounds of FPH were recovered.

By 1999, the oil-water separator was no longer recovering FPH and FPH was no longer present in any of the groundwater monitoring wells. Dissolved hydrocarbon concentrations were decreasing and MACTEC requested approval from the ACHCS to terminate groundwater extraction and to modify the remediation technique to in situ-bioremediation using an oxygen-releasing compound (ORC™). ORC™ is manufactured and distributed by Regensis, Inc.; its purpose is to increase the concentration of dissolved oxygen (DO) in the groundwater and to augment the ability of naturally occurring microbial organisms in the groundwater to biodegrade the dissolved petroleum hydrocarbons. The ACHCS approved this plan in a letter dated September 28, 1999, following the submittal of an ORC™ calculation sheet and a Groundwater Monitoring Plan, dated September 23, 1999.

MACTEC implemented the in situ bioremediation technique by placing ORC™ in treatment wells: MW-1A, MW-3, MW-4, and MW-5 on September 29, 1999. The ORC™ is contained in fabric "socks" which release oxygen over time until the compound's oxygen releasing potential is depleted. MACTEC installed five socks in each treatment well at the approximate depth of the well's screened interval. As described in the Groundwater Monitoring Plan, the ORC™ socks are removed from the treatment wells two weeks before each quarterly groundwater monitoring event, then replaced after sampling is complete.

The Groundwater Monitoring Plan outlined procedures for groundwater sampling using a non-purge method approved by the Regional Water Quality Control Board in a letter dated January 31, 1997. The first quarter that the new Groundwater Monitoring Plan was implemented, sampling included duplicate sampling using both the purge and non-purge methods (see MACTEC's quarterly report, dated October 25, 1999).

During the Fourth Quarter 2002 groundwater monitoring event MACTEC removed the ORC™ socks from the treatment wells per a request from the ACHCS in a September 27, 2002 letter to BPS. The ACHCS suggested that contaminant concentrations may not be accurate due to the presence of the ORC™ socks and requested the socks be removed and DO allowed to return to back ground levels. Additionally, the ACHCS suggested in the same letter that the ORC™ socks appear to be ineffective as contaminant concentrations continue to be high in MW-1 and MW-5.

During the Fourth Quarter 2002 groundwater monitoring event MACTEC monitored groundwater monitoring MW-1, MW-3, MW-5 and MW-6 for tert Amyl Methyl Ether, Ethyl tert Butyl Ether, Diisopropyl Ether, tert Butyl Alcohol, Ethylene Dibromide, and Ethylene Dichloride (EDC) per a request from the ACHCS in the September 27, 2002 letter to BPS. Analytical results indicated none of these analytes were detected in any wells except EDC in MW-1 and MW-5. EDC is monitored in MW-1 and MW-5 quarterly now as required by the ACHCS.

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During the ORC™ socks removal effort from MW-5 it was discovered that the socks were stuck. ORC™ socks can become stuck in monitoring wells when the well casing has become disturbed or bent. This can typically be caused by even minor seismic occurrences in the area of the well. The ORC™ socks remained stuck in MW-5 despite three removal attempts including attempts incorporating an industrial winch and tripod. An ORC™ sock removal effort was performed on September 17, 2003 utilizing a drill rig. The socks were successfully removed with no apparent damage to the monitoring well.

SECOND QUARTER 2005 GROUNDWATER SAMPLING AND ANALYSIS

On June 23, 2005, MACTEC conducted the quarterly groundwater monitoring of MW-1, MW-3, MW-5 and MW-6 (Plate 1) using the non-purge sampling method as described in the Enhanced Insitu-Bioremediation and Groundwater Monitoring Procedures letter dated August 17, 1999. The non-purge sampling method was re-evaluated as requested by the ACHCS in a letter dated September 27, 2002. After review of the evaluation data and analysis presented in the Second Quarter 2003 Groundwater Monitoring Report, the ACHCS approved non-purge sampling for use at the site in a letter dated February 13, 2004.

Table 1 shows groundwater parameters collected during sampling including DO concentrations. As described above, the ORC™ socks were removed from all treatment wells during the Fourth Quarter 2002 monitoring event per ACHCS request (except MW-5, ORC™ socks removed from this well September 17, 2003). The ORC™ socks were removed to allow the DO concentrations in each well to return to background levels. Prior to sampling during the Second Quarter 2005 event, DO was monitored in each well. The DO concentrations ranged from 0.6 mg/L in MW-1, MW-3 and MW-6 to 0.8 mg/L in MW-5. MACTEC will continue to monitor DO in these wells.

Prior to sampling, MACTEC measured the depth to groundwater from the top of casing (TOC) of wells MW-1, MW-3, MW-5 and MW-6 using an electronic water level indicator. These measurements are displayed on Plate 2 and tabulated in Table 2. As shown in Table 2, the groundwater surface elevation increased an average of 1.11 feet across the site as compared to last quarter's measurements. This average change in elevation is the single largest change in coinciding quarterly groundwater elevation values since the site began being monitored [ignoring the First Quarter 2005/Fourth Quarter 2004 groundwater elevation change value as it was based on erroneous data (groundwater elevation measured in MW-3 during the Fourth Quarter 2004 event) as explained in the First Quarter 2005 Groundwater Monitoring Report]. The measured groundwater elevations in wells MW-1, MW-3 and MW-6 are the highest measured in these wells to date. The groundwater elevation in MW-5 is the second highest measured to date. Groundwater elevations at the site have generally been increasing since groundwater monitoring began. MACTEC will continue to monitor groundwater elevations in these wells.

Using the groundwater elevations from MW-1, MW-3, MW-5 and MW-6 as measured on June 23, 2005, groundwater contours were created and are shown on Plate 3. Based on the groundwater elevations, the groundwater gradient is approximately 0.005 ft/ft. The direction of flow appears to be in the Westerly direction.

Immediately after sample collection, MACTEC labeled and stored the samples in a cooler with ice. The groundwater samples were kept chilled until submitted to Sequoia Analytical Laboratory (Sequoia), a California state-certified laboratory (CA ELAP Certificate #2374), under chain-of-custody protocol for the following analyses:

- Total petroleum hydrocarbons as gasoline (TPHg) in accordance with EPA Method 8015 modified.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) in accordance with EPA Method 8020.
- Methyl tertiary butyl ether (MTBE) in accordance with EPA Method 8020 with confirmation of detections by EPA Method 8260.
- Ethylene Dichloride (EDC) by EPA Method 8260.

Historical analytical results for TPH-g, BTEX and MTBE collected through September 29, 1999 are shown on Table 3. Second Quarter 2005 analytical results for TPH-g, BTEX, MTBE and EDC are displayed on Plate 4. Analytical results collected since September 29, 1999 are shown on Table 4 and presented graphically on Plate 5. Analytical results for Tert-amyl methyl ether (TAME), Tert-butyl alcohol (TBA), Di-isopropyl ether (DIPE), Ethylene Dibromide (EDB), Ethyl tert Butyl Ether (ETBE) and EDC are displayed on Table 5. The certified analytical reports (CARs) are presented in Appendix A.

DISCUSSION

As shown on Table 4 and Plate 5, Second Quarter 2005 monitoring event concentrations of TPH-g and BTEX appear generally within the wells historical fluctuation ranges respectively. These results are discussed further below.

Significant spikes in TPH-g and BTEX concentrations occurred in MW-1 during the Second Quarter 2003 monitoring event. Since that event concentrations in MW-1 appear to be trending down. Second Quarter 2005 concentration data in MW-1 indicate an overall slight increase in TPH-g and BTEX concentrations compared to First Quarter 2005 concentration data.

Significant spikes in TPH-g and TEX concentrations occurred in MW-3 during the Second Quarter 2003 monitoring event and a significant spike in Benzene in MW-3 occurred during the First Quarter 2003 monitoring event. Except for the spike in benzene concentration detected Fourth Quarter 2004 overall concentrations in MW-3 appear to be trending down since the Second Quarter 2003. Second Quarter 2005 concentration data in MW-3 indicate slight decreases in TPH-g and Ethylbenzene compared to First Quarter 2005 data. The Second Quarter 2005 data in MW-3 indicate Benzene increased to 56 ug/L from 1.4 ug/L (First Quarter 2005 data), Toluene increased to 7.3 ug/L from 1.8 ug/L, and Total Xylenes increased to 12 ug/l from 2.9 ug/L.

Significant spikes in TPH-g and BTEX concentrations occurred in MW-5 during the Third Quarter 2003 monitoring event. Since that event, TPH-g and BTEX concentrations appeared to be trending down until the Third Quarter 2004. The Third Quarter 2004 monitoring data indicated that TPH-g and BTEX concentrations increased significantly and were approaching high concentration levels monitored during

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the Third Quarter 2003. Second Quarter 2005 concentration data indicate an overall reduction in TPH-g and BTEX concentrations compared to First Quarter 2005 concentration data.

Typically groundwater collected from MW-6 contains no detectable concentrations of TPH-g or BTEX compounds. Second Quarter 2005 monitoring data for MW-6 indicates no concentrations of TPH-g or BTEX compounds were detected in this well. MW-6 will continue to be monitored for these analytes.

The following show the range of monitored data for the Second Quarter 2005 event as shown on Table 4:

TPH-g ranged from non-detectable [with a detection limit of 0.05 mg/L (MW-6)] to 30 mg/l (MW-1). Benzene ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 7,700 ug/L (MW-5). Toluene ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 5,500 ug/L (MW-1). Ethylbenzene ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 680 ug/L (MW-5). Total Xylenes ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 1,900 ug/L (MW-1). MTBE was not detected in samples from any of the groundwater monitoring wells this quarter with detection limits ranging from 2.5 ug/L (MW-6) to 1,200 ug/L (MW-1 and MW-5).

Analytical results for TAME, TBA, DIPE, EDB, ETBE and EDC are displayed on Table 5. As described in the ACHCS September 27, 2002 letter to BPS these analyses were performed per ACHCS request during the Fourth Quarter 2002 monitoring event. None of these analytes were detected in any of the groundwater samples collected from MW-1, MW-3, MW-5 and MW-6 except for EDC. EDC was detected in the samples collected from MW-1 at a concentration of 370 ug/L and MW-5 at a concentration of 220 ug/L. Per ACHCS direction, if any of these analytes were not detected during the Fourth Quarter 2002 monitoring event then the analyte does not need subsequent monitoring. Analysis for EDC was performed in groundwater samples from MW-1 and MW-5 during the Second Quarter 2005 event. Concentrations of EDC in MW-1 and MW-5 remain within a similar range as previously detected. EDC was detected in the sample from MW-1 at a concentration of 240 ug/L, a slight increase from last quarter results of 190 ug/L. EDC was detected in MW-5 at a concentration of 190 ug/L, which is a considerable decrease from First Quarter 2005 results of 610 ug/L.

RECOMMENDATIONS

MACTEC recommends continued groundwater monitoring at the Site. MACTEC recommends that BPS send a copy of this report to the following address:

Mr. Don Hwang
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California, 94502-6577

While under contract to BPS, MACTEC will continue to provide quarterly groundwater monitoring and reporting as required by The County.

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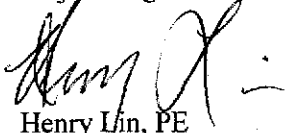
If you have any questions, please contact David S. Nanstad at (415) 278-2118.

Sincerely,

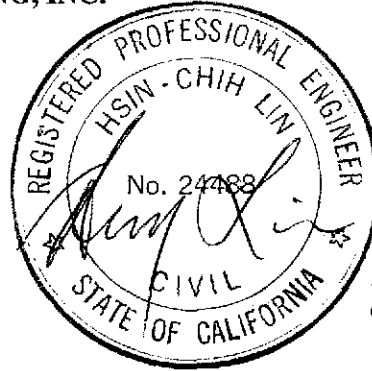
MACTEC ENGINEERING AND CONSULTING, INC.



David S. Nanstad, REA
Project Engineer



Henry Lin, PE
Principal Engineer



Exp. 12/31/2005

4 copies submitted

- Attachments: Table 1 – Groundwater Parameters
Table 2 – Groundwater Elevation Data
Table 3 – Historical Groundwater Monitoring Analytical Results - Using Purge Method
Table 4 – Groundwater Monitoring Analytical Results
Table 5 – Groundwater Monitoring Analytical Results – EPA Method 8260

- Plate 1 – Site Map
Plate 2 – Groundwater Elevation Data
Plate 3 – Groundwater Contours
Plate 4 – TPH-g, BTEX, MTBE and EDC Concentrations in Groundwater
Plate 5 – BTEX and DO Results

- Appendix A – Laboratory Reports
Appendix B – Groundwater Sampling Forms
Table B1. Sample Location/Sample Description Cross-Reference

DSN:/Cityblue/2Q05

Table 1.
Groundwater Parameters
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California

<u>Dissolved Oxygen (mg/L)</u>	<u>MW-1</u>	<u>MW-3</u>	<u>MW-5</u>	<u>MW-6</u>
9/29/1999	2.9	1.7	0.4	1.8
11/5/1999	4.0	10.3	4.0	2.8
11/22/1999	1.8	2.4	2.0	3.2
1/28/2000	2.9	8.4	3.6	2.2
2/11/2000	2.5	2.3	1.8	3.5
5/12/2000	2.0	7.4	2.4	1.7
5/30/2000	1.9	2.6	1.8	3.2
9/1/2000	2.9	3.4	2.3	2.7
9/15/2000	2.0	1.8	2.2	3.8
11/9/2000	NA	5.0	5.3	NA
11/17/2000	3.1	4.2	3.4	6.0
3/15/2001	2.0	7.0	1.4	2.1
4/2/2001	1.0	0.8	2.0	1.0
6/1/2001	0.2	0.2	6.6	0.3
6/28/2001	0.3	0.6	0.5	0.7
8/16/2001	0.5	6.5	1.6	0.8
8/30/2001	0.3	0.4	0.2	0.5
12/14/2001	0.0	3.8	2.2	0.2
12/26/2001	0.2	0.3	0.2	0.2
4/10/2002	0.6	0.6	0.2	0.4
4/23/2002	0.3	0.4	0.9	0.5
6/3/2002	0.4	5.2	4.3	0.7
6/14/2002	0.3	0.3	0.4	0.3
8/5/2002	0.3	0.3	0.4	0.4
8/14/2002	0.3	0.3	0.4	0.6
12/6/2002	1.0	0.9	NA ²	0.6
12/27/2002	0.9	1.0	NA ²	1.2
4/1/2003	0.3	1.1	NA ²	NA
7/1/2003	7.7	7.7	NA ²	7.2
9/24/2003	6.3	7.2	0.6	0.9
12/29/2003	0.2	0.3	0.6	0.6
5/18/2004	0.4	0.5	0.4	0.4
6/30/2004	0.4	0.7	0.5	1.1
9/23/2004	4.6	1.0	1.2	1.8
12/28/2004	0.4	0.2	0.3	4.3
3/16/2005	0.4	0.1	0.5	0.5
6/23/2005	0.6	0.6	0.8	0.6
<u>REDOX (mvvols)</u>				
5/30/2000	-322	197	-128	203
9/15/2000	-269	3	-89	206
11/17/2000	64	178	296	230
4/2/2001	-194	26	-36	102
6/28/2001	-310	-283	-360	107
8/30/2001	NA ¹	NA ¹	NA ¹	NA ¹
12/26/2001	12	11	11	11
4/23/2002	3	62	-299	158
6/14/2002	0	245	-215	254
8/20/2002	-294	-315	-238	228
12/27/2002	-315	-357	NA ²	-12
4/1/2003 ^a	-82	-75	NA ²	172
7/1/2003 ^b	212	230	NA ²	227
9/24/2003 ^b	-166	-300	-183	50
12/29/2003 ^b	-329	-198	-269	114
5/18/2004	-309	-189	-248	115
6/30/2004	-270	-343	-165	104
9/23/2004	-314	-284	-162	96
12/28/2004	-303	101	-110	127
3/16/2005	-36	-50	-162	177
6/23/2005	-225	-42	-117	109
<u>Temperature (deg F)</u>				
9/29/1999	67.0	72.6	67.7	73.8
11/22/1999	66.4	62.9	65.0	69.8
2/11/2000	61.3	63.2	62.0	68.5
5/30/2000	77.7	74.8	76.3	76.2
9/15/2000	64.4	64.3	64.7	67.0
11/17/2000	54.5	58.1	68.1	65.9
4/2/2001	63.5	64.9	66.2	66.4
6/28/2001	73.0	71.2	74.7	74.3
8/30/2001	74.8	77.6	78.3	78.7
12/26/2001	65.7	65.8	65.8	65.1
4/23/2002	64.4	69.8	37.1	71.6
6/14/2002	66.7	67.5	66.7	68.0
8/20/2002	64.6	67.6	66.2	68.0
12/27/2002	41.7	42.5	NA ³	41.7
4/1/2003 ^b	64.6	67.6	NA ³	68.0
7/1/2003 ^{ab}	79.4	80.3	NA ²	81.9
9/24/2003 ^b	65.1	67.1	65.7	68.5
12/29/2003 ^b	65.0	67.5	67.1	68.0
5/18/2004	69.0	69.0	63.0	68.0
6/30/2004	65.8	68.0	69.1	70.0
9/23/2004	67.6	69.3	68.9	74.5
12/28/2004	60.3	60.4	59.2	62.6
3/16/2005	63.3	66.0	64.4	66.0
6/23/2005	64.4	66.7	65.8	66.9

Table 1.
Groundwater Parameters
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California

pH	MW-1	MW-3	MW-5	MW-6
9/29/1999	8.4	8.5	8.4	8.4
11/22/1999	6.9	8.4	6.8	6.8
2/11/2000	6.8	6.9	6.8	6.7
5/30/2000	7.0	7.4	7.5	7.6
9/15/2000	7.1	7.5	6.8	6.6
11/17/2000	7.4	7.7	7.1	7.3
4/2/2001	7.0	6.6	7.1	7.0
6/28/2001	6.9	6.7	6.8	6.8
8/30/2001	7.9	7.9	7.9	8.4
12/26/2001	6.2	6.9	7.1	6.7
4/23/2002	6.9	7.0	6.9	6.9
6/14/2002	7.1	7.2	7.1	6.9
8/20/2002	NA ¹	6.9	NA ¹	6.9
12/27/2002	6.3	6.4	NA ²	6.5
4/1/2003 ^b	6.9	7.1	NA ²	6.7
7/1/2003 ^b	7.4	7.6	NA ²	7.7
9/24/2003 ^b	7.1	7.3	7.3	7.2
12/29/2003 ^b	6.7	6.5	6.8	6.7
5/18/2004	6.7	6.5	6.7	6.5
6/30/2004	6.6	6.6	6.3	NA ¹
9/23/2004	6.7	6.6	6.5	6.5
12/28/2004	6.5	5.3	6.6	6.8
3/16/2005	6.3	5.7	5.8	6.2
6/23/2005	6.4	6.1	6.5	6.6
Specific Conductance (µS/cm)				
9/29/1999	976	880	1,577	966
11/22/1999	1,004	1,500	1,352	1,038
2/11/2000	992	1,327	1,275	1,149
5/30/2000	845	1,020	758	924
9/15/2000	800	917	989	1,009
11/17/2000	785	970	742	886
4/2/2001	725	365	839	821
6/28/2001	1080	704	876	1021
8/30/2001	924	1015	975	931
12/26/2001	848	496	333	891
4/23/2002	922	601	848	977
6/14/2002	932	767	810	961
8/20/2002	1015	809	891	985
12/27/2002	956	791	NA ²	903
4/1/2003 ^b	1128	800	NA ²	1031
7/1/2003 ^b	1020	690	NA ²	970
9/24/2003 ^b	951	697	987	890
12/29/2003 ^b	1143	396	993	934
5/18/2004	1060	692	922	1037
6/30/2004	1006	725	970	962
9/23/2004	1027	656	966	1007
12/28/2004	875	69	807	873
3/16/2005	899	69	831	872
6/23/2005	799	102	718	814

Note:

Baseline dissolved oxygen measurement taken on 09/29/99, prior to initial installation of oxygen releasing compound

mg/l = milligrams per liter

mVols = millivolts

deg F = degrees Fahrenheit

µS/cm = micro-ohms per centimeter

NA = Not Available

1 = indicates data not available due to equipment malfunction

2 = not available due to ORC socks stuck in well on these dates

a = indicates dissolved oxygen and temperature readings collected on this date above typical range and should be considered suspect

b = indicates this data collected post purge

**Table 2. Groundwater Elevation Data
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California**

Date Sampled	MW-1 TOC Elev. 32.36		MW-3 TOC Elev. 31.77		MW-5 TOC Elev. 30.56		MW-6 TOC Elev. 31.26		Average Change Since Preceding Quarter
	Water Level	Water Elevation	Water Level	Water Elevation	Water Level	Water Elevation	Water Level	Water Elevation	
3/6/1996	NM	--	24.79	6.98	23.53	7.03	NA	--	
6/11/1996	FP	--	25.60	6.17	23.78	6.78	25.16	6.10	-0.53
9/19/1996	FP	--	26.09	5.68	24.48	6.08	25.76	5.50	-0.60
12/23/1996	FP	--	FP	--	24.83	5.73	25.88	5.38	-0.23
3/27/1997	FP	--	FP	--	23.82	6.74	24.78	6.48	1.06
6/4/1997	26.41	5.95	25.11	6.66	23.92	6.64	24.60	6.66	0.04
9/26/1997	26.80	5.56	25.41	6.36	24.29	6.27	24.80	6.46	-0.32
12/22/1997	26.00	6.36	24.91	6.86	24.02	6.54	24.71	6.55	0.42
3/31/1998	26.06	6.30	24.05	7.72	22.78	7.78	23.75	7.51	0.75
6/18/1998	25.60	6.76	23.71	8.06	22.51	8.05	23.22	8.04	0.40
8/28/1998	25.45	6.91	23.70	8.07	22.74	7.82	22.23	9.03	0.23
12/2/1998	24.92	7.44	23.60	8.17	23.16	7.40	23.72	7.54	-0.32
3/10/1999	24.90	7.46	22.65	9.12	22.82	7.74	23.54	7.72	0.37
6/30/1999	25.53	6.83	23.07	8.70	22.41	8.15	23.04	8.22	-0.04
9/29/1999	24.23	8.13	23.03	8.74	22.81	7.75	23.42	7.84	0.14
11/22/1999	24.33	8.03	23.68	8.09	22.88	7.68	23.64	7.62	-0.26
2/11/2000	24.38	7.98	23.74	8.03	22.74	7.82	23.67	7.59	0.00
5/30/2000	23.57	8.79	22.97	8.80	21.73	8.83	22.82	8.44	0.86
9/15/2000	23.85	8.51	23.12	8.65	22.14	8.42	23.10	8.16	-0.28
11/16/2000	24.14	8.22	23.40	8.37	22.39	8.17	23.41	7.85	-0.28
4/2/2001	23.40	8.96	23.40	8.37	22.07	8.49	23.33	7.93	0.29
6/28/2001	23.58	8.78	23.17	8.60	22.15	8.41	23.15	8.11	0.04
8/30/2001	24.00	8.36	23.35	8.42	22.35	8.21	23.35	7.91	-0.25
12/26/2001	24.18	8.18	23.54	8.23	22.49	8.07	23.27	7.99	-0.11
4/23/2002	NA	NA	22.89	8.88	21.07	9.49	22.89	8.37	0.82
6/14/2002	23.41	8.95	22.85	8.92	21.80	8.76	22.81	8.45	-0.20
8/20/2002	23.85	8.51	23.11	8.66	22.14	8.42	23.15	8.11	-0.31
12/27/2002	24.10	8.26	23.34	8.43	*NA	*NA	23.41	7.85	-0.24
4/1/2003	23.75	8.61	22.90	8.87	*NA	*NA	23.16	8.10	0.35
7/1/2003	23.50	8.86	22.80	8.97	*NA	*NA	22.75	8.51	0.25
9/24/2003	23.82	8.54	23.15	8.62	22.21	8.35	23.16	8.10	-0.27
12/29/2003	24.07	8.29	23.45	8.32	22.56	8.00	23.47	7.79	-0.30
5/18/2004	23.64	8.72	22.98	8.79	21.85	8.71	22.87	8.39	0.55
6/30/2004	23.64	8.72	23.04	8.73	22.00	8.56	22.43	8.83	0.06
9/23/2004	23.98	8.38	23.32	8.45	22.36	8.20	23.30	7.96	-0.46
12/28/2004	24.07	8.29	28.71	3.06**	22.42	8.14	23.42	7.84	-1.42
3/16/2005	23.80	8.56	23.70	8.07	22.11	8.45	23.60	7.66	1.35
6/23/2005	22.90	9.46	22.40	9.37	21.20	9.36	22.27	8.99	1.11

Note: All measurements shown in feet.
 TOC Elev. = top of casing elevation
 NM = not monitored
 FP = free product
 -- = no data collected
 NA = not available
 * This data not available due to ORC socks stuck in well
 ** This data is suspect due to probable equipment malfunction or operator error.

Table 3. Groundwater Monitoring Analytical Results - Using Purge Method

8/1/1991 to 9/29/1999

BPS Reprographic Services Facility

1700 Jefferson Street

Oakland, California

TPHg (mg/L)	Date Sampled														Date Sampled												
	8/1/1991	9/30/1992	3/30/1993	1/13/1994	4/13/1994	6/29/1994	12/8/1994	4/3/1995	6/27/1995	9/19/1995	12/13/1995	3/6/1996	6/11/1996	9/19/1996	12/23/1996	3/27/1997	6/4/1997	9/26/1997	12/23/1997	3/31/1998	6/18/1998	8/28/1998	12/2/1998	3/10/1999	6/30/1999	9/29/1999 ¹	
MW-1	FP	FP	FP	FP	FP	FP	FP	NA	NA	NA	NA	NA	FP	FP	FP	FP	68	59	41	44	32	26	26	26	18	21	
MW-1A	350	FP	FP	FP	170	95	190	67	53	52	62	200	140	100	FP	66	54	73	66	51	50	15	41	10	18	NA	
MW-3	74	FP	FP	FP	FP	39	4,600	51	20	6.2	19	7	16	6	FP	FP	85	47	32	32	16	17	3.2	9.6	7.9	5.0	
MW-4	86	FP	FP	FP	58	16	92	35	13	14	11	110	260	95	FP	37	24	41	48	NA	25	48	10	11	8.8	NA	
MW-5	120	51	74	80	63	64	59	51	41	50	45	51	48	48	45	44	35	36	39	48	17	16	15	23	7.7	11	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)	
Benzene (µg/L)																											
MW-1	FP	FP	FP	FP	FP	FP	FP	NA	NA	NA	NA	NA	FP	FP	FP	FP	2,200	6,000	6,800	8,300	1,100	8,600	9,200	8,200	7,000	9,200	
MW-1A	17,000	FP	FP	FP	17,000	16,000	13,000	11,000	11,000	8,900	9,900	14,000	18,000	16,000	FP	12,000	11,000	10,000	10,000	9,100	11,000	1,100	8,500	2,300	6,400	NA	
MW-3	1,600	FP	FP	FP	FP	3,200	1,500	1,100	270	70	220	120	170	45	FP	FP	8,500	610	640	690	180	84	39	86	31	120	
MW-4	1,500	FP	FP	FP	1,500	1,300	1,700	1,200	1,300	2,200	630	2,600	6,600	9,900	FP	2,600	2,600	2,900	6,000	NA	2,000	9,700	1,700	2,300	1,800	NA	
MW-5	20,000	13,000	16,000	19,000	14,000	29,000	13,000	15,000	12,000	1,600	13,000	15,000	12,000	12,000	12,000	11,000	8,900	7,900	13,000	10,000	9,500	5,400	8,400	14,000	5,200	9,600	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	
Toluene (µg/L)																											
MW-1	FP	FP	FP	FP	FP	FP	FP	NA	NA	NA	NA	NA	FP	FP	FP	FP	14,000	4,500	3,000	3,000	3,700	3,800	2,300	4,300	5,900	5,800	10,000
MW-1A	31,000	FP	FP	FP	31,000	21,000	21,000	13,000	9,900	9,200	11,000	22,000	28,000	22,000	FP	15,000	12,000	16,000	16,000	11,000	15,000	830	11,000	1,900	7,800	NA	
MW-3	4,600	FP	FP	FP	FP	2,900	4,200	2,300	550	140	480	170	270	30	FP	FP	13,000	6,000	5,300	3,800	1,500	1,100	85	540	330	340	
MW-4	6,200	FP	FP	FP	2,500	790	4,100	3,400	1,600	2,100	470	3,600	19,000	19,000	FP	6,900	3,200	5,000	11,000	NA	460	11,000	610	2,100	3,000	NA	
MW-5	14,000	5,900	5,000	8,200	3,500	5,400	3,800	2,200	2,100	2,700	2,100	2,800	2,900	4,500	2,200	1,100	560	270	500	400	310	160	120	300	270	710	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	
Ethylbenzene (µg/L)																											
MW-1	FP	FP	FP	FP	FP	FP	FP	NA	NA	NA	NA	NA	FP	FP	FP	FP	1,500	1,600	1,400	1,100	550	730	820	870	950	1,200	
MW-1A	3,000	FP	FP	FP	2,100	1,500	1,400	910	500	710	790	2,700	2,800	2,100	FP	1,400	1,000	1,400	1,400	1,100	870	31	720	1,600	660	NA	
MW-3	670	FP	FP	FP	FP	580	6,000	580	190	68	140	49	68	15	FP	FP	2,400	930	800	870	490	430	25	250	200	230	
MW-4	1,000	FP	FP	FP	520	51	310	280	77	110	14	780	3,700	2,000	FP	540	140	350	580	NA	ND(15)	890	ND(15)	88	150	NA	
MW-5	1,900	1,400	1,800	1,400	1,500	2,800	1,800	2,800	1,400	2,000	16,000	2,000	2,000	2,300	2,700	1,900	1,500	1,500	1,900	2,900	420	1,100	1,500	1,800	1,100	1,100	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.5	ND(0.5)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	ND(0.30)	
Xylenes (µg/L)																											
MW-1	FP	FP	FP	FP	FP	FP	FP	NA	NA	NA	NA	NA	FP	FP	FP	FP	11,000	8,600	6,600	4,300	3,000	2,100	2,800	3,500	2,500	5,500	
MW-1A	22,000	FP	FP	FP	14,000	12,000	11,000	9,800	6,300	6,800	5,300	22,000	19,000	14,000	FP	100	7,200	8,500	12,000	6,800	5,800	3,000	6,700	2,300	4,100	NA	
MW-3	4,300	FP	FP	FP	FP	4,300	95,000	4,800	1,700	500	1,700	440	1,500	300	FP	FP	16,000	5,900	5,900	5,200	3,700	3,800	360	2,300	1,800	1,300	
MW-4	7,300	FP	FP	FP	3,200	3,400	5,400	5,800	1,800	2,100	1,800	10,000	28,000	13,000	FP	5,500	3,500	4,800	8,200	NA	6,400	5,000	2,300	1,600	2,700	NA	
MW-5	4,900	2,600	2,700	2,700	2,100	4,500	2,900	4,500	1,600	2,100	1,900	2,400	2,700	4,000	6,500	2,800	1,700	1,300	1,700	2,200	850	900	840	1,100	690	1,100	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(0.60)	ND(0.60)	ND(0.60)	ND(0.60)	ND(0.60)	ND(0.60)	
MTBE (µg/L)																											
MW-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	FP	FP	ND(500)	ND(500)	300	420	ND(50)	ND(50)	ND(50)	ND(50)	ND(25)	ND(250)	
MW-1A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,800	ND(500)	ND(500)	1,900	300	ND(50)	ND(50)	ND(50)	ND(50)	ND(25)	NA	
MW-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	FP	FP	ND(500)	ND(100)	ND(300)	350	ND(25)	ND(50)	ND(50)	ND(25)	ND(25)	10	
MW-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,400	ND(300)	ND(500)	270	NA	ND(50)	ND(50)	ND(50)	ND(25)	ND(25)	NA	
MW-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	600	300	ND(100)	ND(500)	ND(1000)	350	ND(10)	ND(50)	ND(50)	ND(50)	ND(25)	ND(100)	
MW-6	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	

TPHg = total petroleum hydrocarbons as gasoline
 MTBE = methyl t-butyl ether
 (mg/l) milligrams per liter
 (µg/l) micrograms per liter

ND = Not detected above the reporting limit in parenthesis
 NA = Not analyzed
 FP = Free Product - well not sampled
 -- = Well did not exist at date indicated

¹ A sample was collected on this date both post and pre purge. Sample results collected pre purge are shown on Table 3. Sample results collected post purge are shown on Table 4.

**Table 4. Groundwater Monitoring Analytical Results
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California**

	9/29/1999 ⁶	11/22/1999	2/11/2000	5/30/2000	9/15/2000	11/16/2000	4/2/2001	6/28/2001	8/30/2001	12/26/2001	4/24/2002	6/14/2002	8/20/2002	12/27/2002	4/1/2003	7/1/2003 ⁵	9/25/2003 ⁵	12/29/2003 ⁵	5/18/2004	6/30/2004	9/23/2004	12/28/2004	3/16/2005	6/23/2005
TPHg (mg/L)																								
MW-1	14	24	19	19	20	18	19	39	31	34	35	35	26	28	16	61	59	46	23	24	24	22	21	30
MW-3	4.1	3.1	0.54	0.49	1.5	1.3	0.17	4.9	3.1	0.95	300	4.6	4.9	4	5.9	12	10	7.3	1.5	2.0	3.4	3.9	0.97	0.85
MW-5	10	30	23	19	24	1.8	15	3.6	34	1.9	9.4	1.7	3.2	*6.2	NA ⁴	NA ⁴	43	26	15	18	42	41	37	27
MW-6	ND<0.5	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.066	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	0.059	ND<0.05	ND<0.05
Benzene (µg/L)																								
MW-1	6,200	4,900	4,100	5,700	4,100	3,500	4,700	5,200	5,600	5,300	4,900	5,400	4,100	4,500	4,500	7,700	7,600	6,600	4,100	3,500	3,800	3,400	4,100	5,400
MW-3	180	6.5	8.3	11	28	20	9	150	42	8	11	130	330	110	370	200	150	160	77	81	140	340	1.4	56
MW-5	14,000	11,000	12,000	9,900	3,800	470	7,400	300	8,300	300	2,300	110	320	*2200	NA ⁴	NA ⁴	12,000	7,700	5,000	5,700	12,000	10,000	11,000	7,700
MW-6	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.30	ND<0.30	ND<0.50	ND<0.50	3.6	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Toluene (µg/L)																								
MW-1	5,900	5,000	4,800	8,400	5,700	4,300	5,200	4,200	5,100	5,200	6,000	6,800	4,700	5,000	6,000	11,000	9,400	7,900	4,700	3,600	3,900	3,400	4,200	5,500
MW-3	340	33	20	5.6	14	34	6.2	240	48	5.2	4.8	470	170	280	150	460	300	250	72	37	95	37	1.8	7.3
MW-5	470	3,400	4,500	6,900	3,000	220	3,000	11	3,000	110	130	ND<2.5	8.6	*140	NA ⁴	NA ⁴	2,800	1,900	1,300	1,600	3,900	3,800	3,800	1,700
MW-6	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.30	ND<0.30	2.9	ND<0.50	3.6	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethylbenzene (µg/L)																								
MW-1	620	730	530	730	540	640	570	660	560	630	740	870	620	660	680	1,200	1,000	960	450	390	470	380	470	520
MW-3	130	27	2.4	0.45	2.6	25	1.4	38	26	1.1	0.72	91	40	57	44	130	120	79	19.00	34.0	36	11	0.66	ND<5
MW-5	1,100	1,500	1,200	1,200	460	39	1,000	16	1,400	55	300	7.2	22	*160	NA ⁴	NA ⁴	1,500	910	380	540	1,200	1,000	1,100	680
MW-6	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.30	ND<0.30	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Total Xylenes (µg/L)																								
MW-1	3,500	3,500	2,800	3,500	2,700	3,200	2,600	3,900	2,500	2,400	3,100	3,500	2,700	3,000	3,100	6,700	4,800	4,000	1,500	1,300	1,400	1,400	1,300	1,900
MW-3	580	260	28	17	160	28	8.1	160	210	7	1.4	390	150	260	230	390	280	210	59	40	40	60	2.9	12
MW-5	600	2,500	1,300	2,600	1,200	100	2,200	15	2,600	120	270	ND<2.5	19	*250	NA ⁴	NA ⁴	3,000	210	770	1,200	2,400	2,300	2,400	1,300
MW-6	ND<0.6	ND<0.6	ND<0.6	ND<0.6	ND<0.6	ND<0.60	ND<0.30	2.7	ND<0.50	8.7	ND<0.50	ND<0.50	ND<0.50	ND<0.5	ND<0.5	ND<2.5	ND<2.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5
MTBE (µg/L) (EPA Method 8020)																								
MW-1	ND<250	ND<100	6.6	ND<5.0 ¹	ND<12 ^{1,2}	ND<40 ^{1,2}	50 ¹	8.5 ¹	ND<100 ^{1,2}	ND<120	ND<120	ND<250	ND<120	ND<120	ND<120	ND<250	ND<1200	ND<250	ND<50	ND<50	ND<25	ND<250	ND<50 ¹	ND<1200
MW-3	14	ND<1.0	31	ND<5.0 ¹	ND<5 ¹	ND<5 ¹	77 ¹	ND<2 ¹	ND<1.2 ¹	ND<0.50 ¹	ND<0.50 ¹	ND<0.50 ¹	ND<0.50 ¹	19	ND<1.0 ¹	ND<5 ¹	ND<2.5 ¹	ND<2.5 ¹	ND<12	ND<1.0	ND<10	ND<5 ¹	ND<2.5	ND<25
MW-5	ND<100	ND<100	6.6	ND<200	ND<10 ^{1,2}	ND<5 ¹	ND<50 ¹	4.4 ¹	ND<50 ¹	ND<10 ¹	ND<50	ND<0.50 ¹	ND<0.50 ¹	*ND(25)	NA ⁴	NA ⁴	ND<1200	ND<2.5 ¹	ND<50	ND<50	ND<120	ND<250	ND<120	ND<1,200
MW-6	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	5 ^{1,3}	17 ¹	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5

mg/L = milligrams per liter
µg/L = micrograms per liter
ND = Not detected above the reporting limit following the less than sign
NA = Not Available

* = Fourth Quarter 2002 analytical data for MW-5 collected on January 3, 2003

- MTBE = methyl t-butyl ether
1 Result of MTBE confirmation by EPA Method 8260.
2 Reporting limits elevated due to matrix interference.
3 Detection limit = 5 µg/L, backup sample analyzed after hold time had a result of ND<5 µg/L
4 Data from April 1 and July 1, 2003 sampling event not available due to ORC sock obstruction in well (see report for details)
5 Samples collected post purge on this date, all other samples collected without purging (see report for details)
6 A sample was collected on this date both post and pre purge. The sample results collected post purge are shown on Table 3.

Table 5. Groundwater Monitoring Analytical Results
EPA Method 8260
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California

	¹ 12/27/2002	² 4/1/2003	² 7/1/2003	² 9/25/2003	² 12/29/2003	¹ 5/18/2004	¹ 6/30/2004	¹ 9/23/2004	¹ 12/28/2004	¹ 3/16/2005	6/23/2005	
tert Amyl Methyl Ether (µg/L)												
MW-1	ND<250	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-3	ND<25	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-5	*ND<100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-6	ND<1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethyl tert Butyl Ether (µg/L)												
MW-1	ND<250	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-3	ND<25	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-5	*ND<100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-6	ND<1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Di-isopropyl Ether (µg/L)												
MW-1	ND<250	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-3	ND<25	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-5	*ND<100	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-6	ND<1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
tert Butyl Alcohol (µg/L)												
MW-1	ND<5000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-3	ND<500	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-5	*ND<2000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-6	ND<20	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylene Dibromide (µg/L)												
MW-1	ND<120	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-3	ND<12	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-5	*ND<50	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-6	ND<0.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ethylene Dichloride (µg/L)												
MW-1	370	ND<120	400	*500	360	320	320	260	180	190	240	
MW-3	ND<12	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
MW-5	*220	² NA	² NA	610	410	290	610	670	290	610	190	
MW-6	ND<0.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Notes:

Analytes shown on this table monitored per ACHCS requirement described in the September 27, 2002 letter to BPS from the ACHCS (see report text for details).

µg/l = micrograms per liter

NA = Not Applicable

ND = Not detected above the reporting limit

NR = Not Required per ACHCS direction indicating if analyte not detected during 12/27/02 sampling event then the analyte does not need continued monitoring/MW-1 and MW-5 are the only wells currently sampled for Ethylene Dichloride (see report text for details)

* = Analytical data collected for MW-5 on January 3, 2003



a = EDC detected at same concentration as detection limit

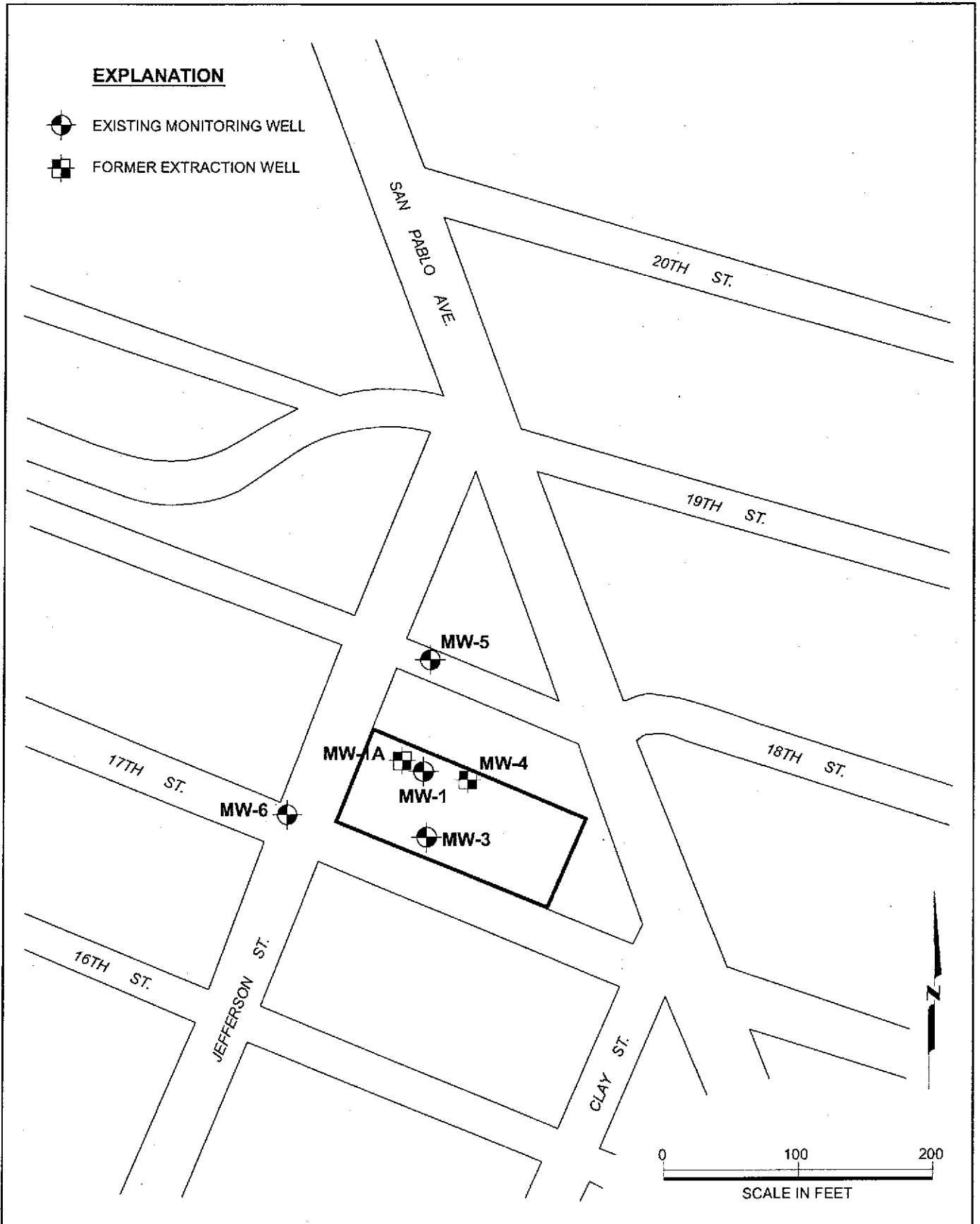
1 = Samples on this date collected without purging

2 = Samples on this date collected post purge

3 = Data from April 1 and July 1, 2003 sampling event not available due to stuck ORC socks obstructing well (see Report for details).

EXPLANATION

-  EXISTING MONITORING WELL
-  FORMER EXTRACTION WELL



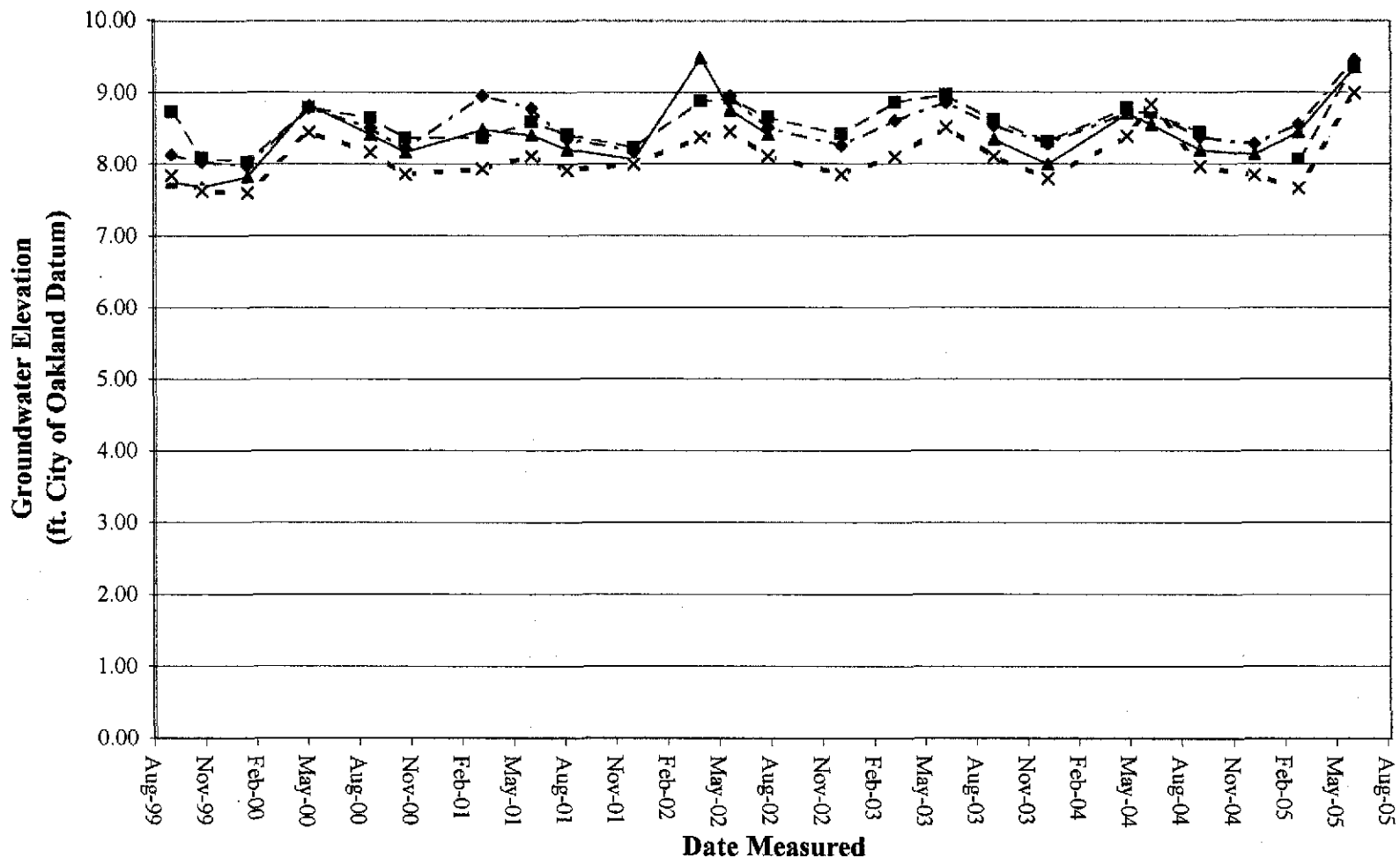
MACTEC

Site Map
Second Quarter 2005
1700 Jefferson Street
BPS Reprographic Services Facility
Oakland, California

PLATE

1

DRAWN CN	PROJECT NUMBER 4097041918 02	CHECKED	DATE 07/05	APPROVED	DATE
-------------	---------------------------------	---------	---------------	----------	------



(ORC sock stuck in MW-5 from Dec. 2002 until Sep. 2003 - No groundwater elevations monitored in MW-5 during that time)



Groundwater Elevation Data
 Second Quarter 2005
 BPS Reprographic Services Facility
 1700 Jefferson Street
 Oakland, California

Plate

2

DRAWN
DSN




JOB NUMBER
4097041918

APPROVED

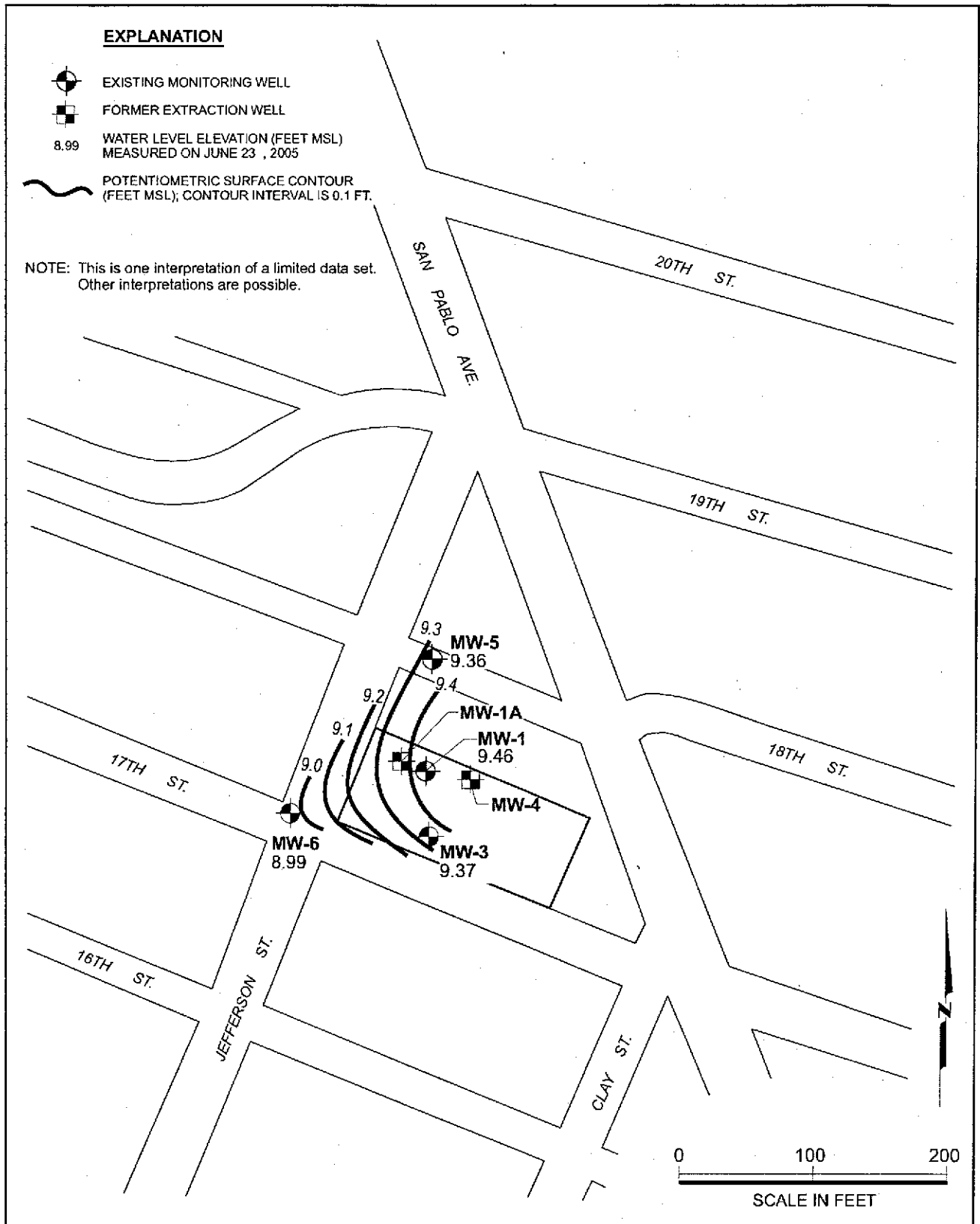
DATE
July-05

REVISION DATE

EXPLANATION

-  EXISTING MONITORING WELL
-  FORMER EXTRACTION WELL
- 8.99 WATER LEVEL ELEVATION (FEET MSL)
MEASURED ON JUNE 23, 2005
-  POTENTIOMETRIC SURFACE CONTOUR
(FEET MSL), CONTOUR INTERVAL IS 0.1 FT.

NOTE: This is one interpretation of a limited data set.
Other interpretations are possible.



MACTEC

Groundwater Contours
Second Quarter 2005
1700 Jefferson Street
BPS Reprographic Services Facility
Oakland, California

PLATE

3

DRAWN
CN

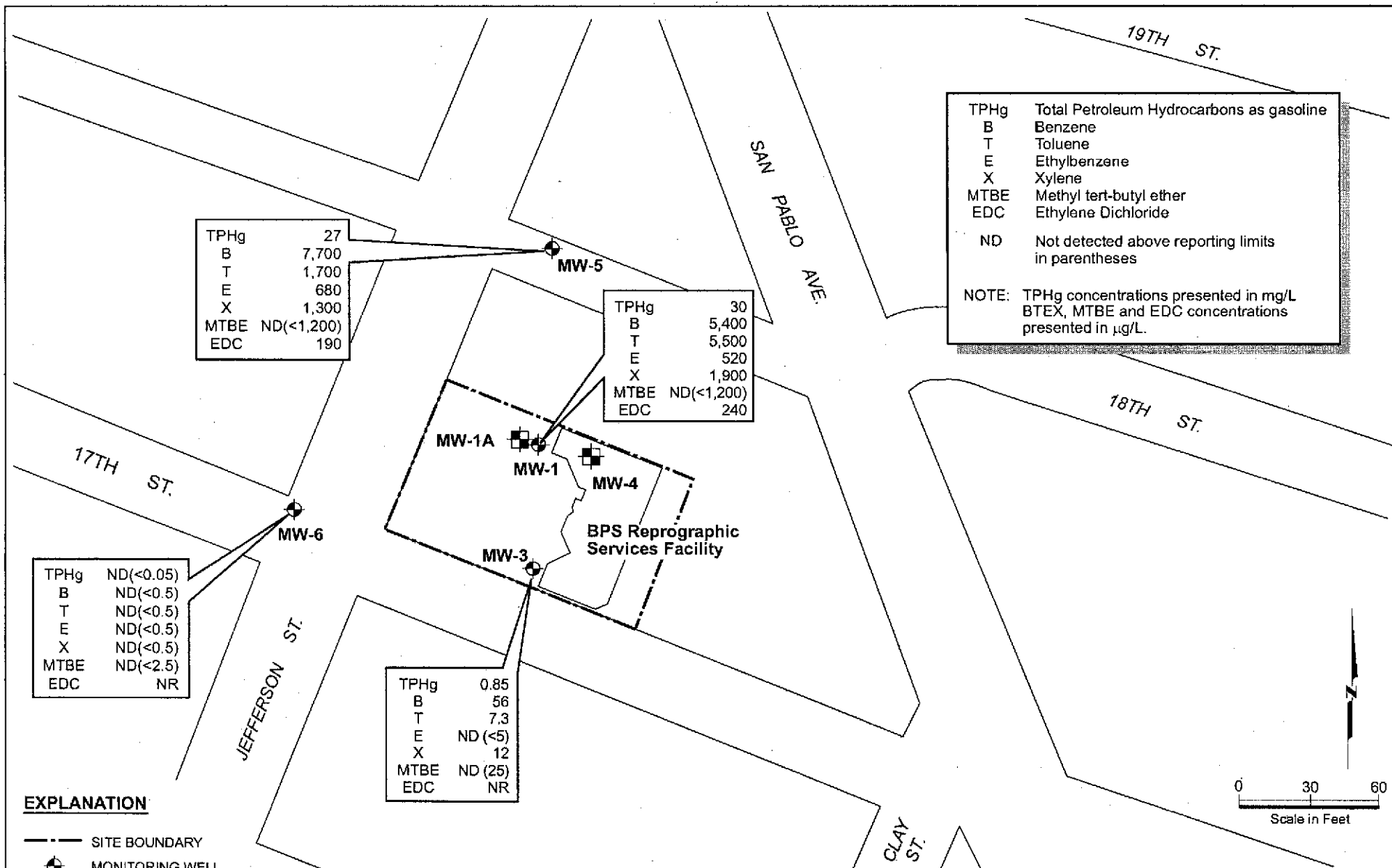
PROJECT NUMBER
4097041918 02

CHECKED

DATE
07/05

APPROVED

DATE



EXPLANATION

- SITE BOUNDARY
- ◆ MONITORING WELL
- ⊠ FORMER EXTRACTION WELL
- mg/L MILLIGRAMS PER LITER
- µg/L MICROGRAMS PER LITER
- NR NOT REQUIRED (ONLY WELLS MW-1 AND MW-5 REQUIRE EDC MONITORING - SEE REPORT)

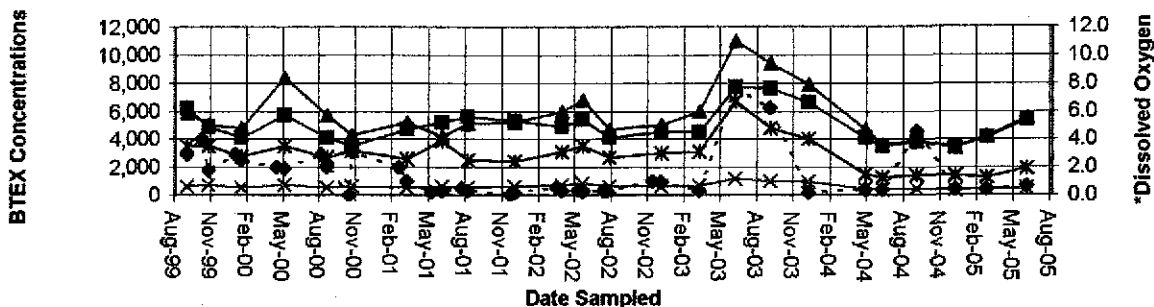


MACTEC

TPHg, BTEX, MTBE and EDC Concentrations in Groundwater PLATE
 Second Quarter 2005
 1700 Jefferson Street
 BPS Reprographic Services Facility
 Oakland, California

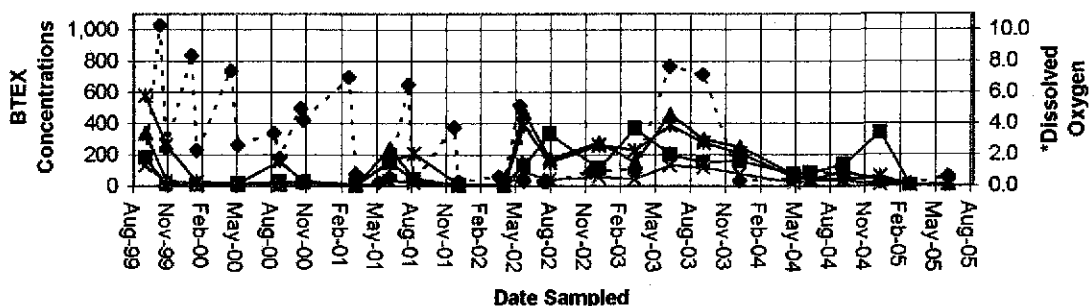
DRAWN CN	PROJECT NUMBER 4097041918 02	CHECKED	DATE 07/05	APPROVED	DATE
-------------	---------------------------------	---------	---------------	----------	------

MW-1



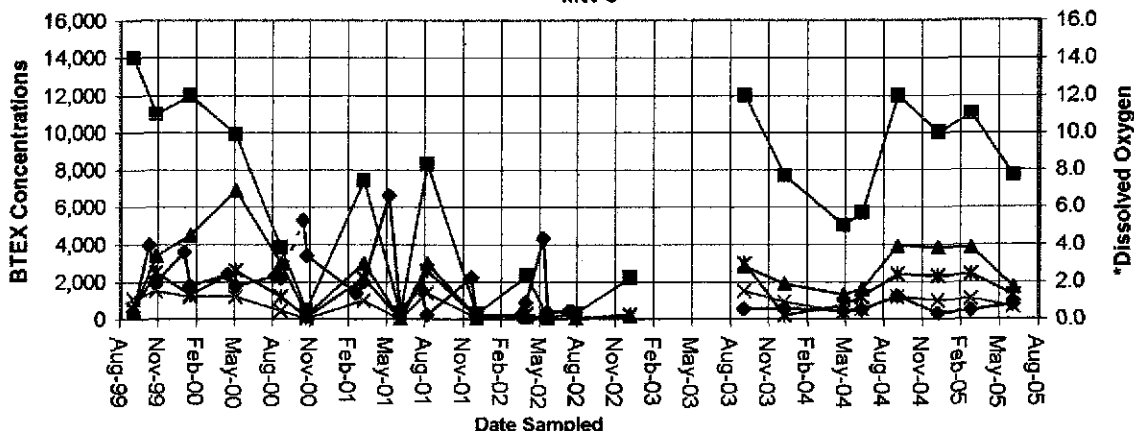
(Samples collected post purge between July 2003 and December 2003, all other samples collected pre-purge. ORC removed after Sept. 2002.)

MW-3



(Samples collected post purge between July 2003 and December 2003, all other samples collected pre-purge. ORC removed after Sept. 2002.)

MW-5



(Samples collected post purge between July 2003 and December 2003, all other samples collected pre-purge. ORC sock stuck in MW-5 for April 2003 and July 2003 sampling events.)

Benzene (µg/L)
 Toluene (µg/L)
 Ethylbenzene (µg/L)
 Total Xylenes (µg/L)
 Dissolved Oxygen (mg/L)

* DO values collected after ORC removal and prior to sampling between Sept. 99 and Sept. 2002.



MACTEC

BTEX and DO Results
 Second Quarter 2005
 BPS Reprographic Services Facility
 1700 Jefferson Steet
 Oakland, California

Plate
5

Drawn by
 DSN

JOB NUMBER
 4097041918

APPROVED

DATE
 Jul-05

REVISION DATE

APPENDIX A

LABORATORY REPORTS



7 July, 2005

David Nanstad
MACTEC Engineering and Consulting - SF
28 Second Street, Suite 700
San Francisco, CA 94105

RE: BPS City Blue
Work Order: MOF0878

Enclosed are the results of analyses for samples received by the laboratory on 06/24/05 08:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race
Senior Project Manager

CA ELAP Certificate #1210



MACTEC Engineering and Consulting - SF
28 Second Street, Suite 700
San Francisco CA, 94105

Project: BPS City Blue
Project Number: 4097041918.01
Project Manager: David Nanstad

MOF0878
Reported:
07/07/05 17:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-6-409704	MOF0878-01	Water	06/23/05 08:50	06/24/05 08:30
MW-3-409702	MOF0878-02	Water	06/23/05 09:15	06/24/05 08:30
MW-5-409703	MOF0878-03	Water	06/23/05 10:05	06/24/05 08:30
MW-1-409701	MOF0878-04	Water	06/23/05 09:40	06/24/05 08:30
409705	MOF0878-05	Water	06/23/05 10:20	06/24/05 08:30

MACTEC Engineering and Consulting - SF
 28 Second Street, Suite 700
 San Francisco CA, 94105

 Project: BPS City Blue
 Project Number: 4097041918.01
 Project Manager: David Nanstad

 MOF0878
 Reported:
 07/07/05 17:26

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6-409704 (MOF0878-01) Water Sampled: 06/23/05 08:50 Received: 06/24/05 08:30									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5F28026	06/28/05	06/28/05	EPA 8015B/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		105 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %		80-120	"	"	"	"	
MW-3-409702 (MOF0878-02) Water Sampled: 06/23/05 09:15 Received: 06/24/05 08:30									
Gasoline Range Organics (C4-C12)	850	500	ug/l	10	5F28026	06/28/05	06/28/05	EPA 8015B/8021B	
Benzene	56	5.0	"	"	"	"	"	"	
Toluene	7.3	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	12	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		90 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %		80-120	"	"	"	"	
MW-5-409703 (MOF0878-03) Water Sampled: 06/23/05 10:05 Received: 06/24/05 08:30									
Gasoline Range Organics (C4-C12)	27000	25000	ug/l	500	5F28026	06/28/05	06/28/05	EPA 8015B/8021B	
Benzene	7700	250	"	"	"	"	"	"	
Toluene	1700	250	"	"	"	"	"	"	
Ethylbenzene	680	250	"	"	"	"	"	"	
Xylenes (total)	1300	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1200	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		102 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %		80-120	"	"	"	"	

MACTEC Engineering and Consulting - SF
 28 Second Street, Suite 700
 San Francisco CA, 94105

 Project: BPS City Blue
 Project Number: 4097041918.01
 Project Manager: David Nanstad

 MOF0878
 Reported:
 07/07/05 17:26

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-409701 (MOF0878-04) Water Sampled: 06/23/05 09:40 Received: 06/24/05 08:30									
Gasoline Range Organics (C4-C12)	30000	25000	ug/l	500	5F28026	06/28/05	06/28/05	EPA 8015B/8021B	
Benzene	5400	250	"	"	"	"	"	"	
Toluene	5500	250	"	"	"	"	"	"	
Ethylbenzene	520	250	"	"	"	"	"	"	
Xylenes (total)	1900	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1200	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		102 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80-120		"	"	"	"	
409705 (MOF0878-05) Water Sampled: 06/23/05 10:20 Received: 06/24/05 08:30									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5F28026	06/28/05	06/28/05	EPA 8015B/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		105 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	80-120		"	"	"	"	



MACTEC Engineering and Consulting - SF
28 Second Street, Suite 700
San Francisco CA, 94105

Project: BPS City Blue
Project Number: 4097041918.01
Project Manager: David Nanstad

MOF0878
Reported:
07/07/05 17:26

**Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5-409703 (MOF0878-03) Water Sampled: 06/23/05 10:05 Received: 06/24/05 08:30									
1,2-Dichloroethane	190	25	ug/l	50	5F29011	06/29/05	06/29/05	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		71 %	60-135		"	"	"	"	
MW-1-409701 (MOF0878-04) Water Sampled: 06/23/05 09:40 Received: 06/24/05 08:30									
1,2-Dichloroethane	240	50	ug/l	100	5F29011	06/29/05	06/29/05	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		75 %	60-135		"	"	"	"	

MACTEC Engineering and Consulting - SF
 28 Second Street, Suite 700
 San Francisco CA, 94105

 Project: BPS City Blue
 Project Number: 4097041918.01
 Project Manager: David Nanstad

 MOF0878
 Reported:
 07/07/05 17:26

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 5F28026 - EPA 5030B [P/T] / EPA 8015B/8021B
Blank (5F28026-BLK1)

Prepared & Analyzed: 06/28/05

Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
<i>Surrogate: a, a, a-Trifluorotoluene</i>	42.1		"	40.0		105	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	39.7		"	40.0		99	80-120			

Laboratory Control Sample (5F28026-BS1)

Prepared & Analyzed: 06/28/05

Gasoline Range Organics (C4-C12)	239	50	ug/l	275		87	55-130			
Benzene	4.08	0.50	"	3.80		107	75-150			
Toluene	19.4	0.50	"	20.6		94	80-115			
Ethylbenzene	4.35	0.50	"	4.90		89	85-120			
Xylenes (total)	21.1	0.50	"	24.0		88	85-115			
<i>Surrogate: a, a, a-Trifluorotoluene</i>	41.1		"	40.0		103	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	42.6		"	40.0		106	80-120			

Matrix Spike (5F28026-MS1)

Source: MOF0878-01

Prepared & Analyzed: 06/28/05

Gasoline Range Organics (C4-C12)	219	50	ug/l	275	ND	80	55-130			
Benzene	3.90	0.50	"	3.80	ND	103	75-150			
Toluene	18.3	0.50	"	20.6	ND	89	80-115			
Ethylbenzene	4.14	0.50	"	4.90	ND	84	85-120			QM02
Xylenes (total)	20.0	0.50	"	24.0	ND	83	85-115			QM02
<i>Surrogate: a, a, a-Trifluorotoluene</i>	41.1		"	40.0		103	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	42.4		"	40.0		106	80-120			

Matrix Spike Dup (5F28026-MSD1)

Source: MOF0878-01

Prepared & Analyzed: 06/28/05

Gasoline Range Organics (C4-C12)	197	50	ug/l	275	ND	72	55-130	11	35	
Benzene	3.49	0.50	"	3.80	ND	92	75-150	11	25	
Toluene	16.8	0.50	"	20.6	ND	82	80-115	9	25	
Ethylbenzene	3.80	0.50	"	4.90	ND	78	85-120	9	25	QM02
Xylenes (total)	18.5	0.50	"	24.0	ND	77	85-115	8	25	QM02
<i>Surrogate: a, a, a-Trifluorotoluene</i>	39.0		"	40.0		98	80-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	42.5		"	40.0		106	80-120			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

MACTEC Engineering and Consulting - SF
 28 Second Street, Suite 700
 San Francisco CA, 94105

 Project: BPS City Blue
 Project Number: 4097041918.01
 Project Manager: David Nanstad

 MOF0878
 Reported:
 07/07/05 17:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 5F29011 - EPA 5030B P/T / EPA 8260B									
Blank (5F29011-BLK1)					Prepared & Analyzed: 06/29/05				
1,2-Dichloroethane	ND	0.50	ug/l						
Surrogate: 1,2-Dichloroethane-d4	1.85		"	2.50		74		60-135	
Blank (5F29011-BLK2)					Prepared & Analyzed: 06/29/05				
1,2-Dichloroethane	ND	0.50	ug/l						
Surrogate: 1,2-Dichloroethane-d4	1.88		"	2.50		75		60-135	
Laboratory Control Sample (5F29011-BS1)					Prepared & Analyzed: 06/29/05				
1,2-Dichloroethane	8.99	0.50	ug/l	10.0		90		85-130	
Surrogate: 1,2-Dichloroethane-d4	1.86		"	2.50		74		60-135	
Laboratory Control Sample Dup (5F29011-BSD1)					Prepared: 06/29/05 Analyzed: 06/30/05				
1,2-Dichloroethane	9.49	0.50	ug/l	10.0		95	5	85-130	20
Surrogate: 1,2-Dichloroethane-d4	1.78		"	2.50		71		60-135	

MACTEC Engineering and Consulting - SF
28 Second Street, Suite 700
San Francisco CA, 94105

Project: BPS City Blue
Project Number: 4097041918.01
Project Manager: David Nanstad

MOF0878
Reported:
07/07/05 17:26

Notes and Definitions

QM02 The spike recovery was below control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



5341 Old Redwood Highway
 Suite 300
 Petaluma, CA 94954
 (707) 793-3800

CHAIN OF CUSTODY FORM

Seq. No.: No 1467

Samplers: Chad Simpson (C.C.S.)

Lab: Seq

Job Number: 4097041918.01

Site/Location: BPS City Blue

Project Manager: David Nanstad

Recorder: [Signature]
 (Signature Required)

MOF 0878

MATRIX		# CONTAINERS & PRESERV.				SAMPLE NUMBER				DATE			
Soil	Air	Unpres.	H2SO4	HNO3	HCL	YR	SEQ	YR	MO	DAY	TIME		
					3	40	9704	05	06	23	0850		
					3	40	9702	05	06	23	0915		
					5	40	9703	05	06	23	1005		
					5	40	9701	05	06	23	0940		
					3	40	9705	05	06	23	1020		

STATION DESCRIPTION		DEPTH
MW-6		
MW-3		
MW-5		
MW-1		

ANALYSIS REQUESTED											
TPH-g 8015											
BTX-g 8020	X	X	X								
MIB-g 8020	X	X	X								
Chlorides, Oxidant	X	X	X	X							
1,2-DCP	X	X	X								
per David											
Nanusad											
612465 LR											

ADDITIONAL INFORMATION		
SAMPLE NUMBER	TURNAROUND TIME/ REMARKS	
	Standard TAT	
	Confirm all MIBR by 8260 per D. Nanstad 6/24/05 LR	

CHAIN OF CUSTODY RECORD			
<u>[Signature]</u>	Chad Simpson	Maetec	6/23/05 1140
Relinquished By (Signature)	(Print Name)	(Company)	Date/Time
<u>[Signature]</u>	Alfredo Lorenzo	SCADA	6/23/05 1140
Received By (Signature)	(Print Name)	(Company)	Date/Time
<u>[Signature]</u>	Alfredo Lorenzo	Seq	6/23/05 1650
Relinquished By (Signature)	(Print Name)	(Company)	Date/Time
<u>[Signature]</u>			6:24:05 08:30
Received By (Signature)	(Print Name)	(Company)	Date/Time
Relinquished By (Signature)	(Print Name)	(Company)	Date/Time
Received By (Signature)	(Print Name)	(Company)	Date/Time
Method of Shipment:	Cal Over Night		

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Mactec
 REC. BY (PRINT): Marcos
 WORKORDER: MOF 0878

DATE REC'D AT LAB: 6-24-05
 TIME REC'D AT LAB: 08:30
 DATE LOGGED IN: 6-25-05

For Regulatory Purposes?
 DRINKING WATER YES / NO
 WASTE WATER YES / NO

(For clients requiring preservation checks at receipt, document here ↓)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / <input checked="" type="radio"/> Absent Intact / Broken*			409704	3-VOA	HCL	—	L	6-23-05	MF 6-24-05
			409702	↓	↓	↓	↓		
2. Chain-of-Custody <input checked="" type="radio"/> Present / Absent*			409703	5-VOA	↓	↓	↓		
3. Traffic Reports or Packing List: Present / <input checked="" type="radio"/> Absent			409701	↓	↓	↓	↓		
4. Airbill: <input checked="" type="radio"/> Airbill / Sticker <input checked="" type="radio"/> Present / Absent			409705	3-VOA	↓	↓	↓		
5. Airbill #: <u>D10010059090468</u>									
6. Sample Labels: <input checked="" type="radio"/> Present / Absent									
7. Sample IDs: <input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody									
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / No*									
10. Sample received within hold time? <input checked="" type="radio"/> Yes / No*									
11. Adequate sample volume received? <input checked="" type="radio"/> Yes / No*									
12. Proper Preservatives used? <input checked="" type="radio"/> Yes / No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / <input checked="" type="radio"/> No*									
14. Temp Rec. at Lab: <u>4.9</u> Is temp 4 +/- 2°C? <input checked="" type="radio"/> Yes / No**									

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

APPENDIX B

GROUNDWATER SAMPLING FORM

**Table B1. Sample Location/Sample Description Cross-Reference
BPS Reprographic Services Facility
1700 Jefferson Street
Oakland, California**

Well/Sample Number	Sample ID
MW-1	MW-1-409701
MW-3	MW-3-409701
MW-5	MW-5-409701
MW-6	MW-6-409701
Trip Blank	409701



GROUNDWATER SAMPLING FORM

Job Name: City Blue (BPS)
Job Number: 4097041918.01
Recorded By: [Signature]

Well Number: MW-1
Well Type: Monitor, PVC
Date:
Sampled By: C.C.S

WELL PURGING

METER CALIBRATION

Initial Time:
pH S/N [x] 4 [x] 7 [] 10
EC S/N [] redline [x] STD
Turb S/N [x] 0-10 [x] 10-100 [x] 100-1,000
Final Time:
pH [x] 4 [x] 7 [] 10
EC [] redline [x] STD
Turb [x] 0-10 [x] 10-100 [x] 100-1,000

PURGE VOLUME CALCULATION

() X 3 X 0.0408 = _____ gals
TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume
Purge Start: 0930
Purge Stop: 0940
Elapsed: 10
GPM:
GPM:
Volume: 1LT

Field Parameters

Table with 5 columns: Minutes, pH, Conductivity, Temp. (C/F), Turbidity (NTU). Includes handwritten data for initial and 1LT samples.

PURGE METHOD

[] Bailer - Type:
[] Submersible - Type:
[X] Other - Type: Micro Purge

PUMP INTAKE SETTING

[] Near Bottom [] Near Top
[] Other
Depth in feet (BTOC):
Screen Interval in feet (BTOC): from to
Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: [] Sanitary Sewer [] Storm Sewer [] Other

WELL SAMPLING

[x] Bailer - Type: Grab Sample Time: 0940

Table with 6 columns: Sample No., Volume/Cont., Analysis Requested, Preservatives, Lab, Comments. Includes handwritten sample 409701 with analysis requests like TPH-g, BTEX, M+BE, EDC.

QUALITY CONTROL SAMPLES

Table with 3 main sections: Duplicate Samples, Blank Samples, Other Samples. Each section has columns for Type and Sample No.



GROUNDWATER SAMPLING FORM

Job Name:

City Blue (BPS)

Job Number:

4097041918.01

Recorded By:

C.C.S. (Signature)

Well Number:

MW-3

Well Type:

- Monitor, Extraction, Other, PVC, St. Steel, Other

Date:

Sampled By:

C.C.S. (initials)

WELL PURGING

METER CALIBRATION

Initial Time:

- pH S/N, EC S/N, Turb S/N calibration options

Final Time:

- pH, EC, Turb calibration options

Field Parameters

Table with 5 columns: Minutes, pH, Conductivity, Temp. (C/F), Turbidity (NTU). Includes handwritten data for Initial and 1st readings.

PURGE VOLUME CALCULATION

Formula for Purge Volume Calculation: () X 2 X 3 X 0.0408 = gals

Purge Start: 0905, Purge Stop: 0915, Elapsed: 10, Volume: 1.67

PURGE METHOD

- Bailer - Type, Submersible - Type, Other - Type: Micro Purge

PUMP INTAKE SETTING

- Near Bottom, Near Top, Other

Depth in feet (BTOC):, Screen Interval in feet (BTOC): from to, Observations During Purging

- Discharge Water Disposal: Sanitary Sewer, Storm Sewer, Other

WELL SAMPLING

Bailer - Type: Grab, Sample Time: 0915

Table with 6 columns: Sample No., Volume/Cont., Analysis Requested, Preservatives, Lab, Comments. Includes handwritten entry for sample 409702.

QUALITY CONTROL SAMPLES

Table for Duplicate Samples with columns for Original and Duplicate Sample No.

Table for Blank Samples with columns for Type and Sample No.

Table for Other Samples with columns for Type and Sample No.



GROUNDWATER SAMPLING FORM

Job Name: City Blue (BPS)
Job Number: 4097041918.01
Recorded By: CWG

Well Number: MW-5
Well Type: Monitor, PVC
Date:
Sampled By: C.C.S

WELL PURGING

METER CALIBRATION

Initial Time:
pH S/N: 4, 7, 10
EC S/N: redline, STD
Turb S/N: 0-10, 10-100, 100-1,000

Final Time:
pH: 4, 7, 10
EC: redline, STD
Turb: 0-10, 10-100, 100-1,000

Field Parameters

Table with 5 columns: Minutes, pH, Conductivity, Temp. (C/F), Turbidity (NTU). Includes handwritten data for Initial and 1LT samples.

PURGE VOLUME CALCULATION

TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume
Purge Start: 0950 GPM:
Purge Stop: 1005 GPM:
Elapsed: 15 Volume: 1LT

PURGE METHOD

Bailer - Type:
Submersible - Type:
Other - Type: Micro Purge

PUMP INTAKE SETTING

Near Bottom Near Top
Other
Depth in feet (BTOC):
Screen Interval in feet (BTOC): from to
Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: Sanitary Sewer, Storm Sewer, Other

WELL SAMPLING

Bailer - Type: grab Sample Time: 1005

Table with 6 columns: Sample No., Volume/Cont., Analysis Requested, Preservatives, Lab, Comments. Includes handwritten data for sample 409703.

QUALITY CONTROL SAMPLES

Table with 3 main sections: Duplicate Samples, Blank Samples, Other Samples. Each section has columns for Type and Sample No.



GROUNDWATER SAMPLING FORM

Job Name: City Blue (BPS)
Job Number: 4097041918.01
Recorded By: CWJ

Well Number: MW-6
Well Type: Monitor, PVC
Date:
Sampled By: C.C.S

WELL PURGING

METER CALIBRATION

Initial Time:
pH S/N: 4, 7, 10
EC S/N: redline, STD
Turb S/N: 0-10, 10-100, 100-1,000
Final Time:
pH: 4, 7, 10
EC: redline, STD
Turb: 0-10, 10-100, 100-1,000

PURGE VOLUME CALCULATION

() X 2 X 3 X 0.0408 = gals
TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume
Purge Start: 0800
Purge Stop: 0850
Elapsed: 10
GPM:
Volume: 1 Lt.

Field Parameters

Table with 5 columns: Minutes, pH, Conductivity, Temp. (C/F), Turbidity (NTU). Includes handwritten data for Initial and 1 Lt. samples.

PURGE METHOD

Bailer - Type:
Submersible - Type:
Other - Type: Micro Purge

PUMP INTAKE SETTING

Near Bottom, Near Top, Other
Depth in feet (BTOC):
Screen Interval in feet (BTOC): from to
Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: Sanitary Sewer, Storm Sewer, Other

WELL SAMPLING

Bailer - Type: Grab Sample Time: 0850

Table with 6 columns: Sample No., Volume/Cont., Analysis Requested, Preservatives, Lab, Comments. Includes handwritten data for sample 409704.

QUALITY CONTROL SAMPLES

Table for Duplicate Samples with columns for Original and Duplicate Sample No.

Table for Blank Samples with columns for Type and Sample No.

Table for Other Samples with columns for Type and Sample No.

Groundwater Monitoring Data Sheet

City Blue
1700 Jefferson Street
Oakland, CA

Well Number	Date	Time	Water Depth First Reading (TOC)	Water Depth Second Reading (TOC)	Cap	Lock	Casing	Box/Lid	Well Diameter	Comments
MW-1	6/23	0810	22.90	22.90	Y	N	g	g	4"	
MW-3	6/23	0745	22.40	22.40	Y	N	g	g	4"	
MW-5	6/23	0800	21.20	21.20	Y	N	g	g	2"	
MW-6	6/23	0730	22.27	22.27	Y	N	g	N	2"	
MW-1A										
MW-4										

Please record all monitoring equipment model numbers, serial numbers and calibration dates here. Also record expiration dates of calibration fluids if applicable:

pH: _____

Temperature: _____

Specific Conductance: _____

Dissolved Oxygen: _____

Turbidity: _____

Project: BPS City Blue Oakland, Ca Job No.: 4097041918.01
 Subject: FIELD INVESTIGATION DAILY REPORT Date: 6/23/05
 Equipment Rental: N/A Company: Mactec To: D. Nanstad
 Equipment Hours: N/A F.E. Time from: to: By: C. Simpson

(Outside service and expense record must be attached for any outside costs)

0530 leave Suisun City
 0710 arrive BPS (City Blue) Oakland, Ca
 0715 Calibrate Meters.

ph Meter SN# 13652 at 7.00 / 4.00
 YSE SN# 9910249 to 1000 micron
 Temp = 18.9°C Conduct = 870

Turbidity
 0-10 = 5.02 10-100 = 51.9 100-1000 = 546

YSE 00 55 SN# 0100673 set to 1pt elevation

0730 MW-6 WL = 22.27
 DO = .64 Redox = 109 Temp = 19.4°C
 0745 MW-3 WL = 22.40
 DO = .66 Redox = 042 Temp = 19.3°C
 0800 MW-5 WL = 21.20
 DO = .80 Redox = -117 Temp = 18.9°C
 0910 MW-1 WL = 22.90
 DO = .64 Redox = -225 Temp = 18.0°C

0850 MW-6 Sample # 409704
 0915 MW-3 Sample # 409702
 0940 MW-1 Sample # 409701
 1005 MW-5 Sample # 409703

1020 Trip Blank Sample # 409705
 1100 off site to Petaluma to drop off samples.
 1140 at Sequoia lab.

CJS 6/23/05

Attachments:

Initial