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1:28 pm, Jun 18, 2012

Alameda County
Environmental Health

Barbara Jakub
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577


Re: BPS Reprographics (Formerly City Blue Print)
RWQCB Case #01-0210
1700 Jefferson St
Oakland CA, 94612

Dear Barbara Jakub,

BPS had directed MACTEC to provide, on our behalf, professional environmental consulting services to the best of their ability. To the best of my knowledge the information in this report is accurate and all local Agency and/or Regional Water Quality Control Board regulations and guidelines have been followed.

This report was prepared by MACTEC and BPS has relied on their advice and assistance. I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,



Authorized Representative

Attachment: Report



September 27, 2006

Project 4097041918 Task 01

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

**Groundwater Remediation and Monitoring Report
Second Quarter 2006
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 2006 (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. Subsequent investigation indicated the presence of free phase hydrocarbons (FPH) in groundwater beneath the site and a local groundwater gradient direction that ranges from north-northwest to west.

The existing groundwater monitoring wells (MW-1, MW-3, MW-5, and MW-6) and extraction wells (MW-1A and MW-4) are shown on Plate 1. Groundwater extraction and treatment began in 1992. The treatment system consisted of an oil-water separator that removed the FPH, a 3,000-gallon bioreactor tank for treatment by hydrocarbon reducing microbes, and three granular activated carbon vessels. The treated water was discharged under a wastewater discharge permit from the East Bay Municipal Utility District to the sanitary sewer. During its operation, 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. In June of 1999, as approved by the ACHCS, groundwater extraction and treatment ceased. In September 1999, MACTEC implemented *in-situ* bioremediation using ORC™ in treatment wells MW-1A, MW-3, MW-4, and MW-5. The ORC™ is contained in fabric "socks" which release oxygen over time to encourage aerobic microbes to metabolize the hydrocarbons. As described in the Groundwater Monitoring Plan, the ORC™ socks were removed from the treatment wells two weeks before each quarterly groundwater monitoring event, then replaced after sampling is complete. *In-situ* bioremediation continued until the Fourth Quarter 2002. In late 2002 and early 2003, MACTEC

removed the ORC™ socks from the monitoring wells, as requested by the ACHCS in their letter dated September 27, 2002. Since then, the ORC has not been replaced; however, quarterly monitoring has continued.

SECOND QUARTER 2006 GROUNDWATER SAMPLING AND ANALYSIS

On June 29, 2006, MACTEC conducted quarterly groundwater monitoring of MW-1, MW-3, MW-5, and MW-6 (Plate 1) using a non-purge method, in accordance with the SFBRWQCB January 31, 1997 letter *Utilization of Non-Purge Approach for Sampling of Monitoring Wells Impacted by Petroleum Hydrocarbons, BTEX and MTBE*, file No. 1123.64.

Table 1 shows groundwater field parameters, including DO, collected prior to sampling. During the second quarter 2006 event, the DO concentrations ranged from 0.7 mg/L in MW-5 to 1.2 mg/L in MW-6. 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. Current and historical measurements and calculated groundwater elevations are displayed on Plate 2 and tabulated in Table 2. As shown in Table 2, the groundwater surface elevation increased an average of 0.5 feet across the site, as compared to last quarter's measurements. Groundwater elevations at the site have generally been increasing since groundwater monitoring began and the Second Quarter 2006 elevations are the highest measured to date. There were no observable potential causes for the high groundwater elevations in the area of the site (such as sub-grade construction). MACTEC will continue to monitor groundwater elevations in these wells.

The groundwater elevation contours shown on Plate 3 were drawn using the June 29, 2006 groundwater measurements from MW-1, MW-3, MW-5 and MW-6. Based on the groundwater elevations, the groundwater gradient is approximately 0.004 ft/ft. The direction of flow appears to be in the west-northwesterly 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 TPHg, BTEX and MTBE collected through September 29, 1999 are shown in Table 3. Second Quarter 2006 analytical results for TPHg, BTEX, MTBE and EDC are displayed on Plate 4. Analytical results collected since September 29, 1999 are shown in Table 4 and presented graphically on Plate 5. The certified analytical reports (CARs) are presented in Appendix A.

DISCUSSION

As shown in Table 4 and Plate 5, Second Quarter 2006 monitoring event concentrations of TPHg and BTEX are within the range of historical concentrations of these compounds. The range of chemical concentrations detected in samples collected during the Second Quarter 2006 event are as follows:

- TPHg ranged from non-detectable with a detection limit of 0.05 mg/L (MW-6) to 23 mg/l (MW-1).
- Benzene ranged from non-detectable with a detection limit of 0.5 micrograms per liter (ug/L; MW-6) to 4,800 ug/L (MW-1).
- Toluene ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 4,000 ug/L (MW-1).
- Ethylbenzene ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 330 ug/L (MW-1).
- Total Xylenes ranged from non-detectable with a detection limit of 0.5 ug/L (MW-6) to 1,200 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-3, 5 and 6) to 500 ug/L (MW-1).
- EDC was not detected in a samples collected from MW-1 and MW-5 this quarter, with a detection limit of 50 ug/L.

An overview of recent concentration trends observed in each monitoring well is presented below.

As indicated on Plate 5, chemical concentrations at MW-1 peaked during the Second Quarter 2003 monitoring event, decreased to unusually low levels during the Third Quarter 2005, and increased again through the First Quarter 2006. Second Quarter 2006 concentrations of TPHg and BTEX in MW-1 have all decreased since First Quarter 2006.

Significant spikes in TPHg, ethylbenzene, toluene, and xylenes concentrations occurred in MW-3 during the Second Quarter 2003 monitoring event and spikes in benzene in MW-3 occurred during the Fourth Quarter 2004 and Third Quarter 2005 monitoring events. However, since Second Quarter 2004, the overall concentrations in MW-3 have been low and relatively stable. Second Quarter 2006 concentration data in MW-3 indicate a slight increase in TPHg, benzene and ethylbenzene and a slight decrease in toluene and total xylenes compared to First Quarter 2006.

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Chemical concentrations in MW-5 increased significantly in the Third Quarter 2003 and remained elevated through the Third Quarter 2005. Since then, TPHg and BTEX concentrations have followed decreasing trends. Concentrations of BTEX in samples collected during the Second Quarter 2006 were the lowest measured since 2002. TPHg was not detected above an elevated detection limit in the First Quarter 2006 sample from MW-5, but was detected in the Second Quarter 2006 sample at the lowest concentration ever reported for this well [1.2 milligrams per liter (mg/L)].

Typically groundwater collected from MW-6 contains no detectable concentrations of TPHg or BTEX compounds. Second Quarter 2006 monitoring data for MW-6 indicates no TPHg or BTEX compounds were detected in this well. MW-6 will continue to be monitored for these analytes.

Beginning in the Fourth Quarter 2002, EDC was added to the list of analytes monitored at MW-1 and MW-5. The Second Quarter 2006 monitoring data indicated that EDC was not detected above a detection limit of 0.5 ug/L in either MW-1 or MW-5. These results indicated a significant decrease from the First Quarter 2006 sample results.

RECOMMENDATIONS

MACTEC recommends continued groundwater monitoring at the Site to satisfy the quarterly groundwater monitoring requirements of the ACHCS and continued evaluation of monitoring parameters for more favorable conditions under which to make a monitoring frequency reduction request. 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 ACHCS.

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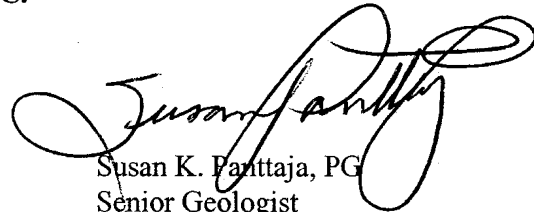
If you have any questions, please contact David S. Nanstad at (415) 278-2118.

Sincerely,

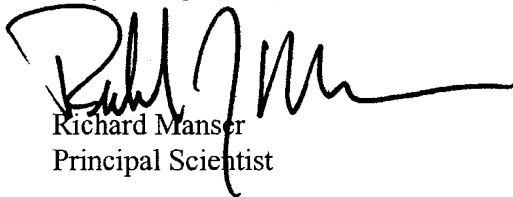
MACTEC ENGINEERING AND CONSULTING, INC.



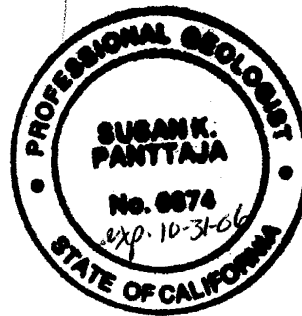
David S. Nanstad, REA
Project Engineer



Susan K. Panttaja, PG
Senior Geologist



Richard Manser
Principal Scientist



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

Plate 1 – Site Map
Plate 2 – Groundwater Elevation Data
Plate 3 – Groundwater Contours
Plate 4 – TPHg, 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

TABLES

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

Temperature (deg F)	MW-1	MW-3	MW-5	MW-6
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 ²	41.7
4/1/2003 ^b	64.6	67.6	NA ²	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
9/9/2005	69.0	70.3	69.8	71.0
12/2/2005	61.5	63.7	62.2	62.1
3/24/2006	63.7	66.4	65.3	62.6
6/29/2006	69.3	68.2	71.2	72.1
pH				
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
9/9/2005	6.5	6.1	6.1	7.0
12/2/2005	6.5	5.9	7.6	7.1
3/24/2006	7.1	7.6	6.8	7.4
6/29/2006	6.5	6.1	7.3	7.0
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

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

Specific Conductance ($\mu\text{S}/\text{cm}$)	MW-1	MW-3	MW-5	MW-6
4/1/2003 ^b	1128	800	NA ²	1021
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
9/9/2005	852	103	817	881
12/2/2005	891	39	750	811
3/24/2006	1156	208	996	1042
6/29/2006	1113	658	795	932

Note:

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

mg/l = milligrams per liter

mvolts = millivolts

deg F = degrees Fahrenheit

$\mu\text{S}/\text{cm}$ = 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 32.36		MW-3 31.77		MW-5 30.56		MW-6 31.26		Average Change Since Preceding Quarter	
	TOC Elev.	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
9/9/2005	23.27	9.09		22.63	9.14	21.68	8.88	22.55	8.71	-0.34
12/2/2005	23.75	8.61		23.03	8.74	22.19	8.37	23.05	8.21	-0.47
3/24/2006	23.05	9.31		22.57	9.20	21.01	9.55	22.50	8.76	0.72
6/29/2006	22.56	9.80		21.93	9.84	20.78	9.78	21.85	9.41	0.50



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.

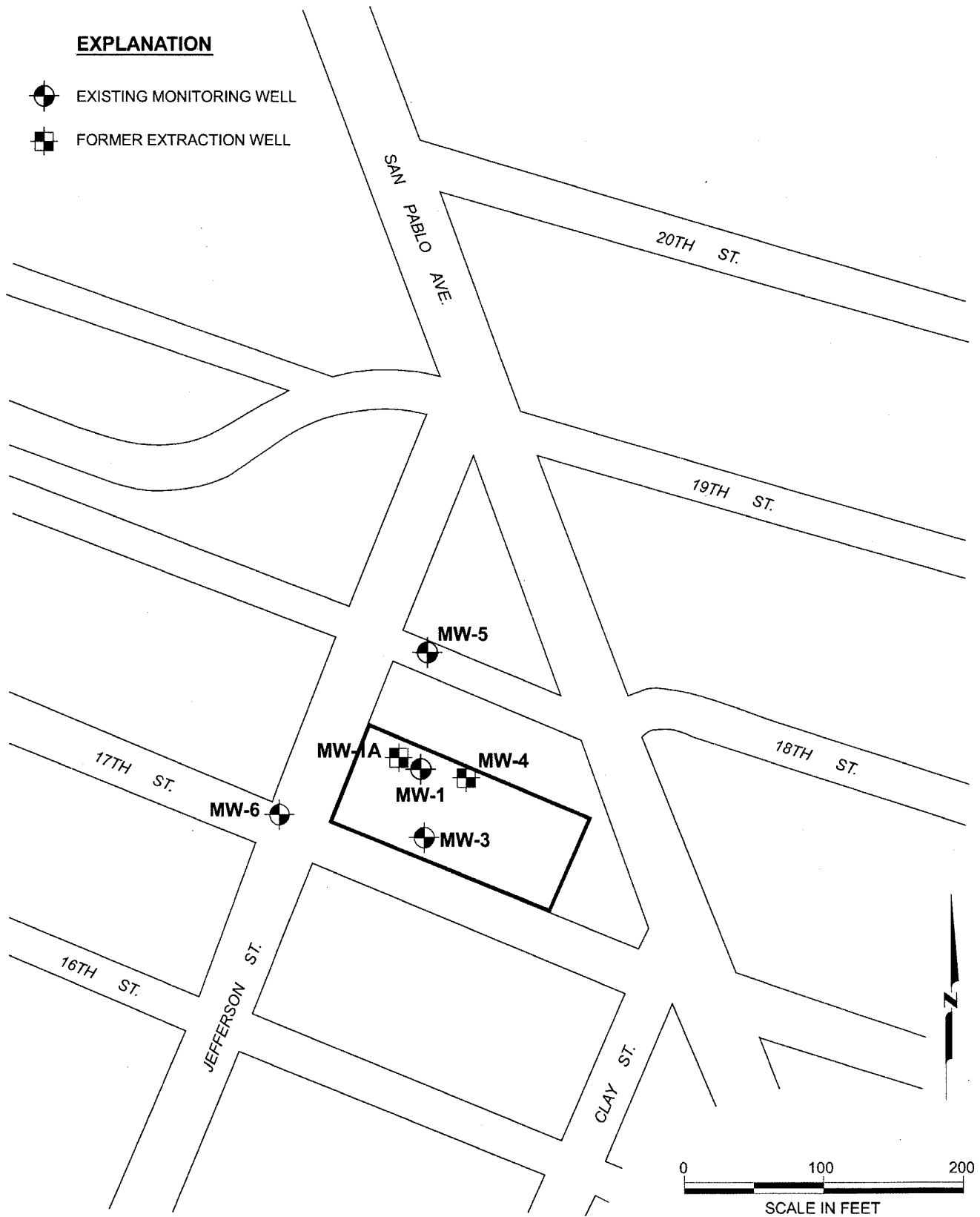
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 Approved SUF

PLATES

EXPLANATION

-  EXISTING MONITORING WELL
-  FORMER EXTRACTION WELL



Site Map
 Second Quarter 2006
 1700 Jefferson Street
 BPS Reprographic Services Facility
 Oakland, California

PLATE

1

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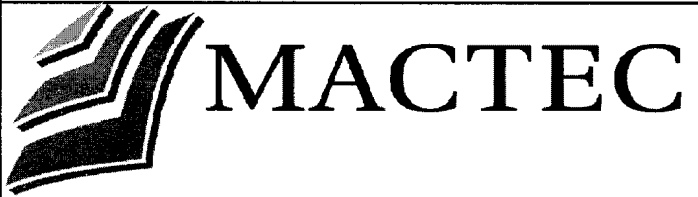
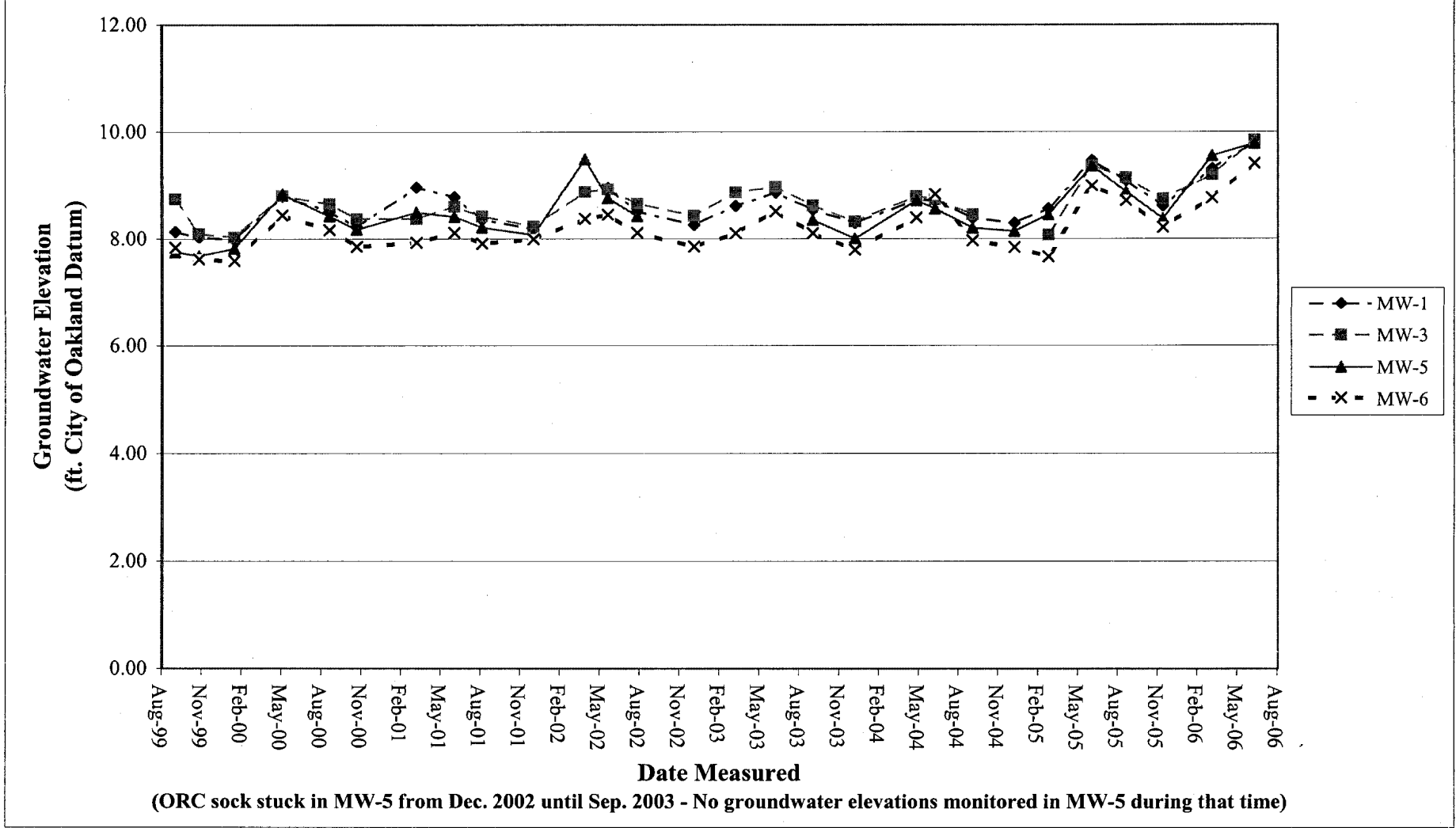
PROJECT NUMBER
 4097041918 01

CHECKED
DSW

CHECKED DATE
 8/8/06

APPROVED
SLP

APPROVED DATE
 9/27/06






Groundwater Elevation Data
 Second Quarter 2006
 BPS Reprographic Services Facility
 1700 Jefferson Steet
 Oakland, California

Plate

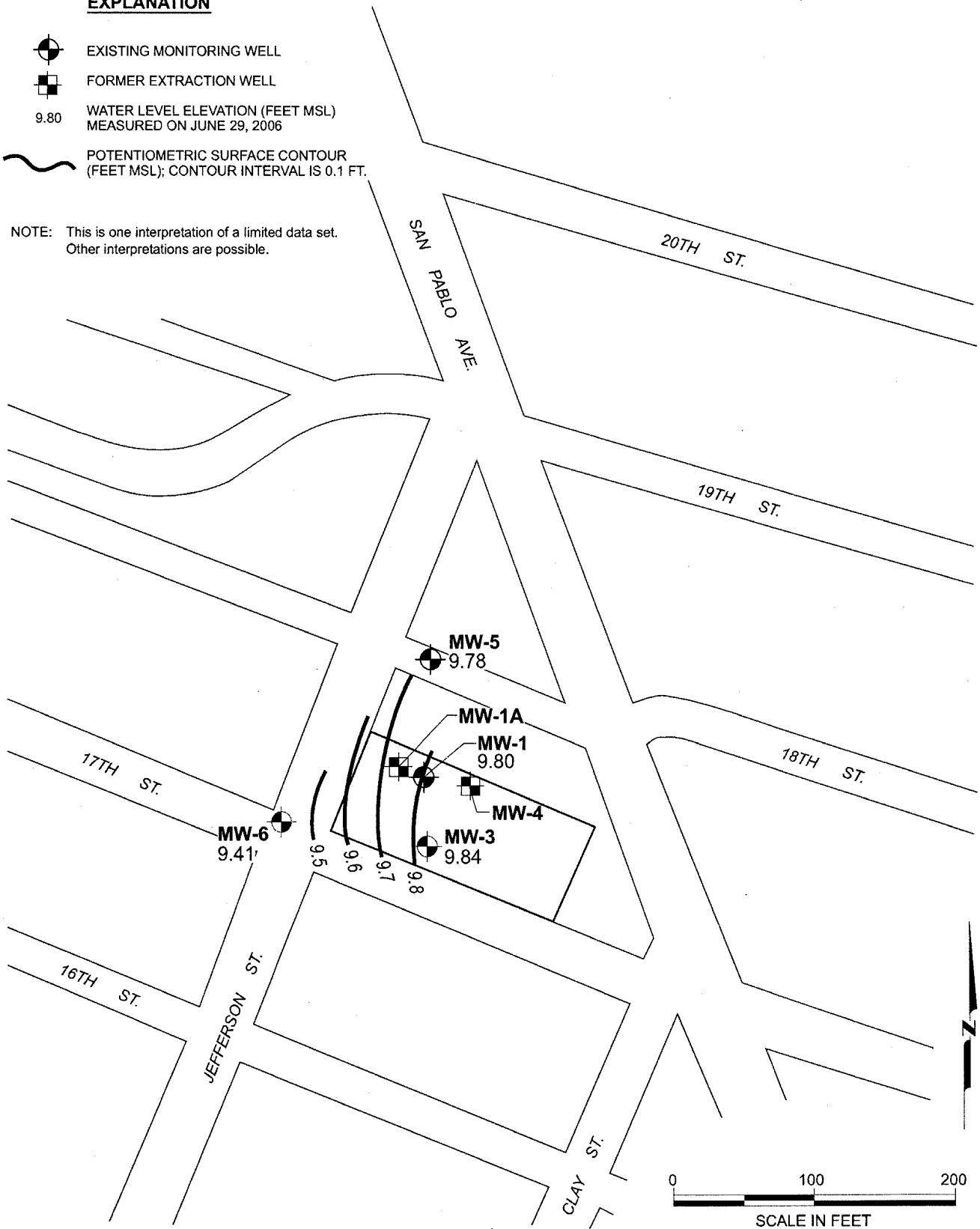
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DRAWN DSN	JOB NUMBER 4097041918	APPROVED <i>DSN SKC</i>	DATE August-06	REVISION DATE 8.06
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EXPLANATION

-  EXISTING MONITORING WELL
-  FORMER EXTRACTION WELL
- 9.80
WATER LEVEL ELEVATION (FEET MSL)
MEASURED ON JUNE 29, 2006
-  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.



Groundwater Contours
Second Quarter 2006
 1700 Jefferson Street
 BPS Reprographic Services Facility
 Oakland, California

PLATE

3

DRAWN
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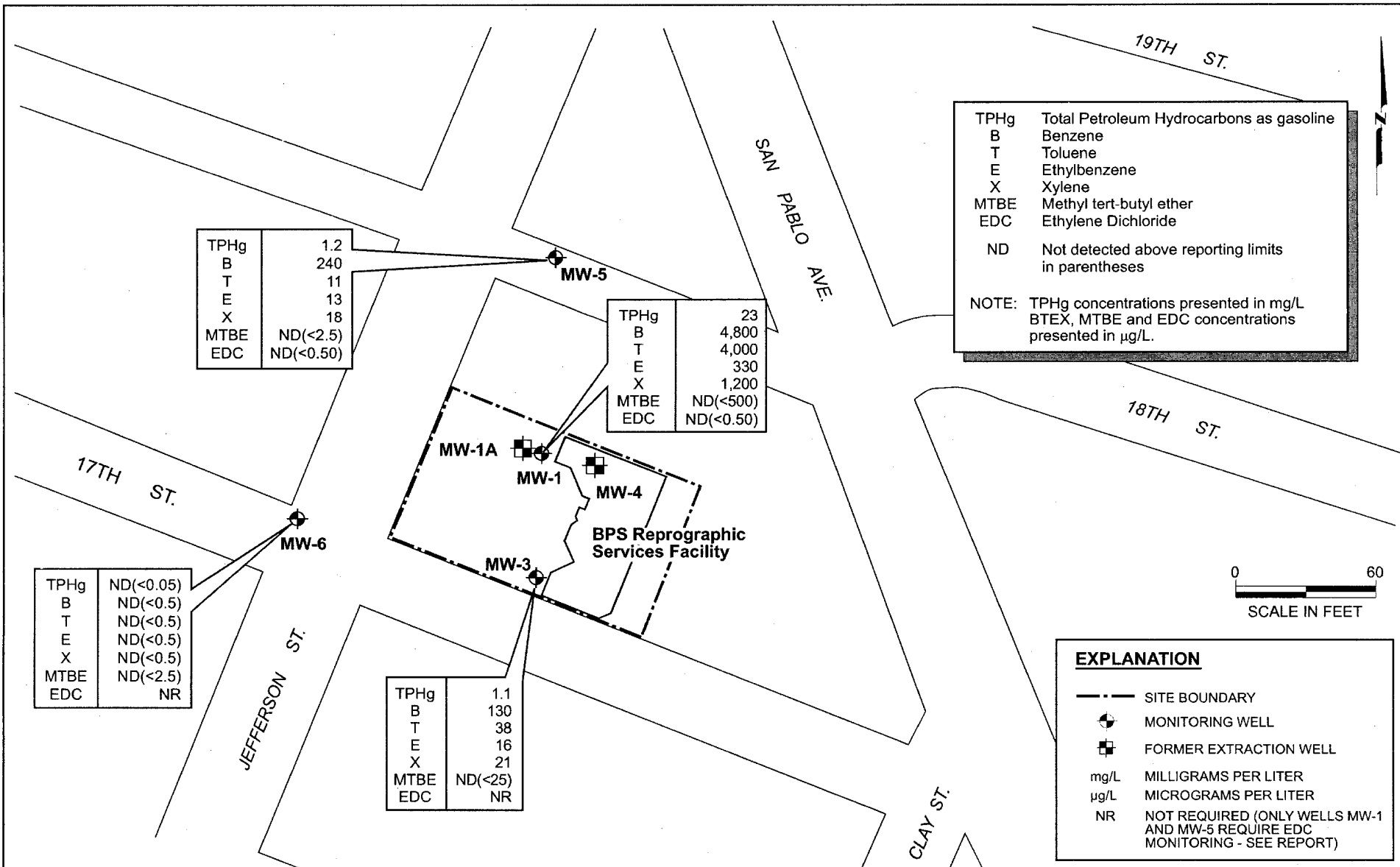
PROJECT NUMBER
4097041918 01

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CHECKED DATE
8/8/06

APPROVED
SKP

APPROVED DATE
9/06



TPHg	1.2
B	240
T	11
E	13
X	18
MTBE	ND(<2.5)
EDC	ND(<0.50)

TPHg	23
B	4,800
T	4,000
E	330
X	1,200
MTBE	ND(<500)
EDC	ND(<0.50)

TPHg	ND(<0.05)
B	ND(<0.5)
T	ND(<0.5)
E	ND(<0.5)
X	ND(<0.5)
MTBE	ND(<2.5)
EDC	NR

TPHg	1.1
B	130
T	38
E	16
X	21
MTBE	ND(<25)
EDC	NR

TPHg Total Petroleum Hydrocarbons as gasoline
 B Benzene
 T Toluene
 E Ethylbenzene
 X Xylene
 MTBE Methyl tert-butyl ether
 EDC Ethylene Dichloride
 ND Not detected above reporting limits in parentheses
 NOTE: TPHg concentrations presented in mg/L
 BTEX, MTBE and EDC concentrations presented in µg/L.

EXPLANATION

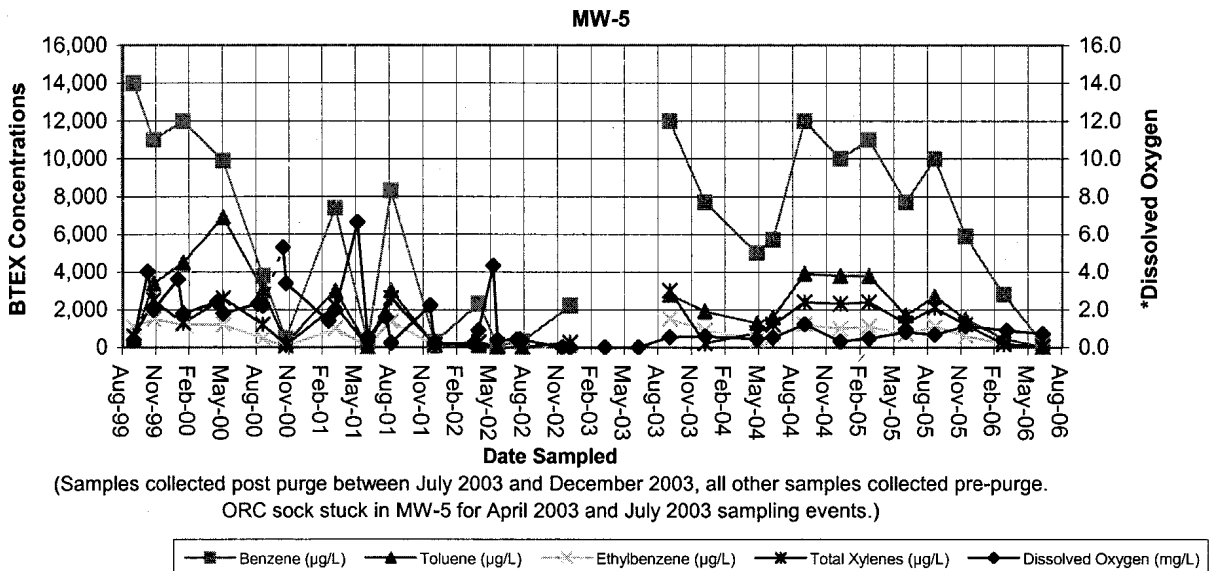
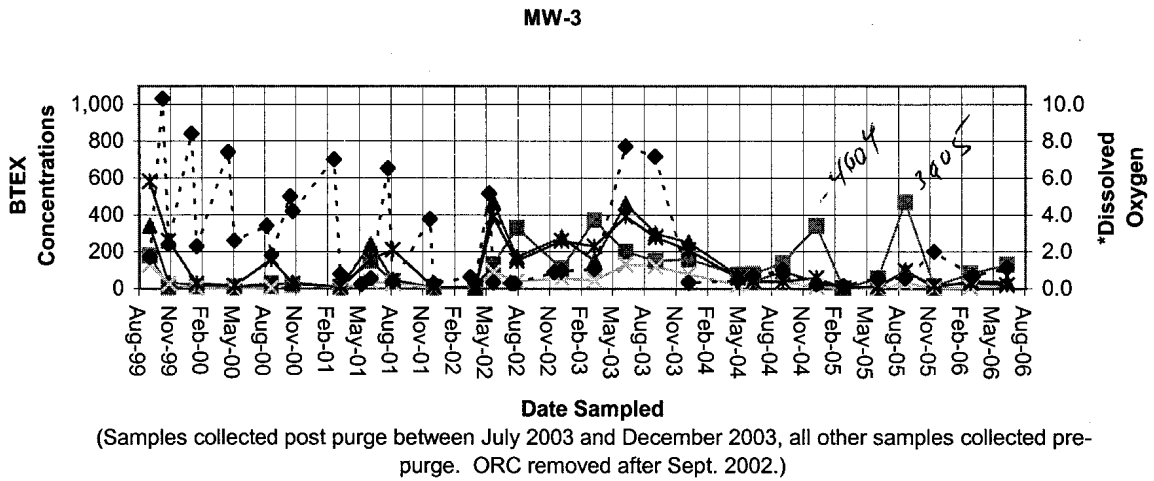
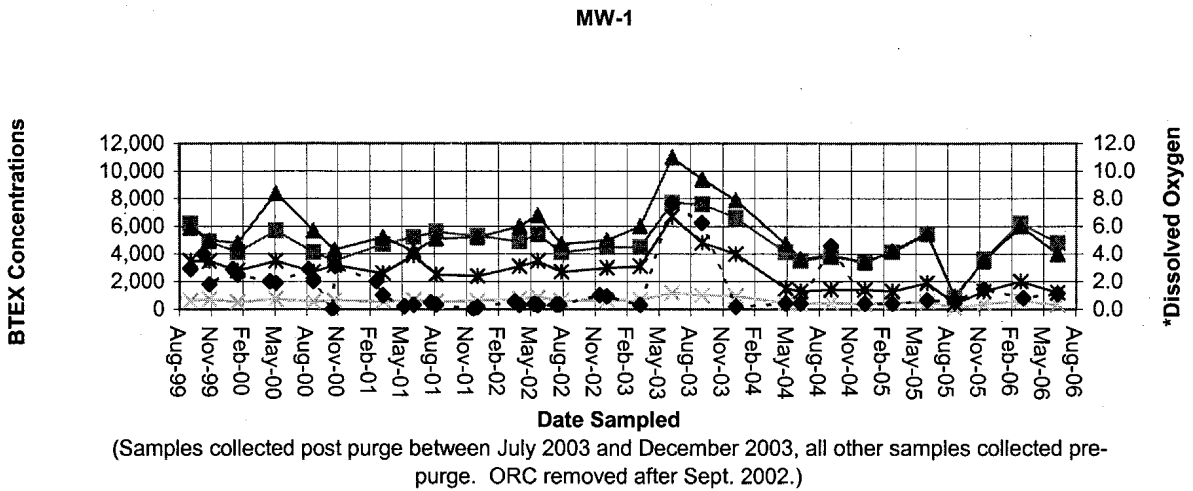
- - - - - SITE BOUNDARY
 MONITORING WELL
 FORMER EXTRACTION WELL
 mg/L MILLIGRAMS PER LITER
 µg/L MICROGRAMS PER LITER
 NR NOT REQUIRED (ONLY WELLS MW-1 AND MW-5 REQUIRE EDC MONITORING - SEE REPORT)



TPHg, BTEX, MTBE and EDC Concentrations in Groundwater
 Second Quarter 2006
 1700 Jefferson Street
 BPS Reprographic Services Facility
 Oakland, California

PLATE
4

DRAWN CN	JOB NUMBER 4097041918 01	CHECKED <i>[Signature]</i>	CHECKED DATE 8/8/06	APPROVED SKP	APPROVED DATE 9/06
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* DO values collected after ORC removal and prior to sampling between Sept. 99 and Sept. 2002.



MACTEC

BTEX and DO Results
 Second Quarter 2006
 BPS Reprographic Services Facility
 1700 Jefferson Steet
 Oakland, California

Plate
5

Drawn by
DSN

JOB NUMBER
4097041918

APPROVED
RAM Silp

DATE
Aug-06

REVISION DATE
8-06

APPENDIX A

LABORATORY REPORTS

20 July, 2006

David Nanstad
MACTEC Engineering & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma, CA 94954

RE: BPS City Blue
Work Order: MPF0983

Enclosed are the results of analyses for samples received by the laboratory on 07/01/06 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 & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
06264097-4	MPF0983-01	Water	06/29/06 11:00	07/01/06 08:30
06264097-2	MPF0983-02	Water	06/29/06 11:45	07/01/06 08:30
06264097-3	MPF0983-03	Water	06/29/06 12:20	07/01/06 08:30
06264097-1	MPF0983-04	Water	06/29/06 12:55	07/01/06 08:30
06264097-5	MPF0983-05	Water	06/29/06 13:30	07/01/06 08:30

MACTEC Engineering & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06264097-4 (MPF0983-01) Water Sampled: 06/29/06 11:00 Received: 07/01/06 08:30									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6G10001	07/10/06	07/10/06	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		108 %		85-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %		75-125	"	"	"	"	
06264097-2 (MPF0983-02) Water Sampled: 06/29/06 11:45 Received: 07/01/06 08:30									
Gasoline Range Organics (C4-C12)	1100	500	ug/l	10	6G10001	07/10/06	07/10/06	EPA 8015B/8021B	
Benzene	130	5.0	"	"	"	"	"	"	
Toluene	38	5.0	"	"	"	"	"	"	
Ethylbenzene	16	5.0	"	"	"	"	"	"	
Xylenes (total)	21	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		100 %		85-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %		75-125	"	"	"	"	
06264097-3 (MPF0983-03) Water Sampled: 06/29/06 12:20 Received: 07/01/06 08:30									
Gasoline Range Organics (C4-C12)	1200	500	ug/l	10	6G11002	07/11/06	07/11/06	EPA 8015B/8021B	
Benzene	240	5.0	"	"	"	"	"	"	
Toluene	11	5.0	"	"	"	"	"	"	
Ethylbenzene	13	5.0	"	"	"	"	"	"	
Xylenes (total)	18	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		99 %		85-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %		75-125	"	"	"	"	

MACTEC Engineering & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06264097-1 (MPF0983-04) Water Sampled: 06/29/06 12:55 Received: 07/01/06 08:30									
Gasoline Range Organics (C4-C12)	23000	10000	ug/l	200	6G11002	07/11/06	07/11/06	EPA 8015B/8021B	
Benzene	4800	100	"	"	"	"	"	"	
Toluene	4000	100	"	"	"	"	"	"	
Ethylbenzene	330	100	"	"	"	"	"	"	
Xylenes (total)	1200	100	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	500	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		104 %		85-120	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %		75-125	"	"	"	"	

MACTEC Engineering & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Volatile Organic Compounds by EPA Method 8260B
TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06264097-3 (MPF0983-03) Water Sampled: 06/29/06 12:20 Received: 07/01/06 08:30									
1,2-Dichloroethane	ND	0.50	ug/l	1	6G11029	07/11/06	07/12/06	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		112 %	60-145		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		106 %	60-115		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		99 %	75-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		109 %	70-130		"	"	"	"	
06264097-1 (MPF0983-04) Water Sampled: 06/29/06 12:55 Received: 07/01/06 08:30									
1,2-Dichloroethane	ND	0.50	ug/l	1	6G11029	07/11/06	07/12/06	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		61 %	60-145		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		109 %	60-115		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		94 %	75-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		128 %	70-130		"	"	"	"	

MACTEC Engineering & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control
TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6G10001 - EPA 5030B [P/T] / EPA 8015B/8021B

Blank (6G10001-BLK1)

Prepared & Analyzed: 07/10/06

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	"							
Surrogate: a,a,a-Trifluorotoluene	43.2		"	40.0		108	85-120			
Surrogate: 4-Bromofluorobenzene	41.9		"	40.0		105	75-125			

Laboratory Control Sample (6G10001-BS1)

Prepared & Analyzed: 07/10/06

Gasoline Range Organics (C4-C12)	259	50	ug/l	275		94	60-115			
Benzene	3.95	0.50	"	4.85		81	45-150			
Toluene	22.7	0.50	"	23.5		97	70-115			
Ethylbenzene	4.45	0.50	"	4.70		95	65-115			
Xylenes (total)	25.3	0.50	"	26.5		95	70-115			
Surrogate: a,a,a-Trifluorotoluene	43.1		"	40.0		108	85-120			
Surrogate: 4-Bromofluorobenzene	44.3		"	40.0		111	75-125			

Matrix Spike (6G10001-MS1)

Source: MPG0029-01

Prepared & Analyzed: 07/10/06

Gasoline Range Organics (C4-C12)	239	50	ug/l	275	ND	87	60-115			
Benzene	3.82	0.50	"	4.85	ND	79	45-150			
Toluene	22.3	0.50	"	23.5	ND	95	70-115			
Ethylbenzene	4.38	0.50	"	4.70	ND	93	65-115			
Xylenes (total)	24.8	0.50	"	26.5	ND	94	70-115			
Surrogate: a,a,a-Trifluorotoluene	41.4		"	40.0		104	85-120			
Surrogate: 4-Bromofluorobenzene	44.0		"	40.0		110	75-125			

Matrix Spike Dup (6G10001-MSD1)

Source: MPG0029-01

Prepared & Analyzed: 07/10/06

Gasoline Range Organics (C4-C12)	223	50	ug/l	275	ND	81	60-115	7	20	
Benzene	3.64	0.50	"	4.85	ND	75	45-150	5	25	
Toluene	21.7	0.50	"	23.5	ND	92	70-115	3	20	
Ethylbenzene	4.21	0.50	"	4.70	ND	90	65-115	4	25	
Xylenes (total)	24.2	0.50	"	26.5	ND	91	70-115	2	25	
Surrogate: a,a,a-Trifluorotoluene	41.7		"	40.0		104	85-120			
Surrogate: 4-Bromofluorobenzene	44.0		"	40.0		110	75-125			

TestAmerica - Morgan Hill, CA

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 & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control
TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 6G11002 - EPA 5030B [P/T] / EPA 8015B/8021B

Blank (6G11002-BLK1)

Prepared & Analyzed: 07/11/06

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>	43.2		"	40.0		108	85-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	40.4		"	40.0		101	75-125			

Laboratory Control Sample (6G11002-BS1)

Prepared & Analyzed: 07/11/06

Gasoline Range Organics (C4-C12)	246	50	ug/l	275		89	60-115			
Benzene	3.96	0.50	"	4.85		82	45-150			
Toluene	22.8	0.50	"	23.5		97	70-115			
Ethylbenzene	4.49	0.50	"	4.70		96	65-115			
Xylenes (total)	25.4	0.50	"	26.5		96	70-115			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	42.7		"	40.0		107	85-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	42.9		"	40.0		107	75-125			

Matrix Spike (6G11002-MS1)

Source: MPG0006-01

Prepared & Analyzed: 07/11/06

Gasoline Range Organics (C4-C12)	298	50	ug/l	275	67	84	60-115			
Benzene	4.43	0.50	"	4.85	0.46	82	45-150			
Toluene	23.7	0.50	"	23.5	ND	101	70-115			
Ethylbenzene	4.55	0.50	"	4.70	ND	97	65-115			
Xylenes (total)	26.7	0.50	"	26.5	ND	101	70-115			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	44.0		"	40.0		110	85-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	43.8		"	40.0		110	75-125			

Matrix Spike Dup (6G11002-MSD1)

Source: MPG0006-01

Prepared & Analyzed: 07/11/06

Gasoline Range Organics (C4-C12)	301	50	ug/l	275	67	85	60-115	1	20	
Benzene	4.43	0.50	"	4.85	0.46	82	45-150	0	25	
Toluene	23.8	0.50	"	23.5	ND	101	70-115	0.4	20	
Ethylbenzene	4.60	0.50	"	4.70	ND	98	65-115	1	25	
Xylenes (total)	26.6	0.50	"	26.5	ND	100	70-115	0.4	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	43.0		"	40.0		108	85-120			
<i>Surrogate: 4-Bromofluorobenzene</i>	43.8		"	40.0		110	75-125			

TestAmerica - Morgan Hill, CA

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 & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control
TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 6G11029 - EPA 5030B P/T / EPA 8260B

Blank (6G11029-BLK1)

Prepared & Analyzed: 07/11/06

1,2-Dichloroethane	ND	0.50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.94		"	2.50		118	60-145			
Surrogate: 4-Bromofluorobenzene	2.03		"	2.50		81	60-115			
Surrogate: Dibromofluoromethane	2.72		"	2.50		109	75-130			
Surrogate: Toluene-d8	2.24		"	2.50		90	70-130			

Laboratory Control Sample (6G11029-BS1)

Prepared & Analyzed: 07/11/06

1,2-Dichloroethane	12.0	0.50	ug/l	10.0		120	75-125			
Surrogate: 1,2-Dichloroethane-d4	2.74		"	2.50		110	60-145			
Surrogate: 4-Bromofluorobenzene	2.47		"	2.50		99	60-115			
Surrogate: Dibromofluoromethane	2.60		"	2.50		104	75-130			
Surrogate: Toluene-d8	2.53		"	2.50		101	70-130			

Laboratory Control Sample (6G11029-BS2)

Prepared & Analyzed: 07/11/06

1,2-Dichloroethane	17.4	0.50	ug/l	14.7		118	75-125			
Surrogate: 1,2-Dichloroethane-d4	2.59		"	2.50		104	60-145			
Surrogate: 4-Bromofluorobenzene	2.47		"	2.50		99	60-115			
Surrogate: Dibromofluoromethane	2.46		"	2.50		98	75-130			
Surrogate: Toluene-d8	2.47		"	2.50		99	70-130			

Matrix Spike (6G11029-MS1)

Source: MPF0957-02

Prepared: 07/11/06 Analyzed: 07/12/06

1,2-Dichloroethane	12.4	0.50	ug/l	10.0	ND	124	75-125			
Surrogate: 1,2-Dichloroethane-d4	2.80		"	2.50		112	60-145			
Surrogate: 4-Bromofluorobenzene	2.44		"	2.50		98	60-115			
Surrogate: Dibromofluoromethane	2.67		"	2.50		107	75-130			
Surrogate: Toluene-d8	2.46		"	2.50		98	70-130			

Matrix Spike Dup (6G11029-MSD1)

Source: MPF0957-02

Prepared: 07/11/06 Analyzed: 07/12/06

1,2-Dichloroethane	12.5	0.50	ug/l	10.0	ND	125	75-125	0.8	10	
Surrogate: 1,2-Dichloroethane-d4	2.76		"	2.50		110	60-145			
Surrogate: 4-Bromofluorobenzene	2.49		"	2.50		100	60-115			
Surrogate: Dibromofluoromethane	2.65		"	2.50		106	75-130			
Surrogate: Toluene-d8	2.48		"	2.50		99	70-130			

MACTEC Engineering & Consulting [Petaluma]
5341 Old Redwood Highway, Suite 300
Petaluma CA, 94954

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

MPF0983
Reported:
07/20/06 16:32

Notes and Definitions

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 - SRM

Seq. No.: No 2049

Samplers: Anthony S. Dealet

Lab: Sequoia

Job Number: 4097041918-01

Name/Location: BPS / City Blue

Project Manager: David Nanstad Recorder: [Signature]
(Signature Required)

Water	MATRIX			# CONTAINERS & PRESERV.			SAMPLE NUMBER				DATE				
	Soil	Air		Unpres.	H2SO4	HNO3	HCL	YR	SEQ			YR	MO	DAY	TIME
X								06	264097	-4	06	06	29	11	00
X								06	264097	-2	06	06	29	11	45
X								06	264097	-3	06	06	29	12	20
X								06	264097	-1	06	06	29	12	55
X								06	264097	-5	06	06	29	13	30

MPF0983
STATION DESCRIPTION

DEPTH
-01
-02
-03
-04
-05

ANALYSIS REQUESTED			
TPHg 8015	BTEX 8020	MTBE 8020 *	Ethylene Dichloride
X	X	X	
X	X	X	
X	X	X	X
X	X	X	X
X	X	X	

[Signature] 6-29-06

SAMPLE NUMBER		TURNAROUND TIME/ REMARKS
YR	SEQ	
		Standard TAT
		* MTBE to be confirmed using EPA Method 8260
06	264097-5	Hold Sample

CHAIN OF CUSTODY RECORD

<u>[Signature]</u> Relinquished By (Signature)	<u>Anthony S. Dealet</u> (Print Name)	<u>MACTEC</u> (Company)	<u>6-29-06 1435</u> Date/Time
<u>[Signature]</u> Received By (Signature)	<u>GAIL HERRMANN</u> (Print Name)	<u>Sequoia</u> (Company)	<u>6/29/06 1435</u> Date/Time
<u>[Signature]</u> Relinquished By (Signature)	<u>GAIL HERRMANN</u> (Print Name)	<u>Sequoia</u> (Company)	<u>7/1/06 10:30</u> Date/Time
<u>[Signature]</u> Received By (Signature)	<u>ERIN HOOVER SA.</u> (Print Name)	<u>[Company]</u> (Company)	<u>7/1/06 8:00</u> Date/Time
<u>[Signature]</u> Relinquished By (Signature)	<u>[Print Name]</u> (Print Name)	<u>[Company]</u> (Company)	<u>[Date/Time]</u> Date/Time
<u>[Signature]</u> Received By (Signature)	<u>[Print Name]</u> (Print Name)	<u>[Company]</u> (Company)	<u>[Date/Time]</u> Date/Time

Method of Shipment:

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	6264097-1
MW-3	6264097-2
MW-5	6264097-3
MW-6	6264097-4



GROUNDWATER SAMPLING FORM

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

Well Number: MW-1
 Well Type: Monitor Extraction Other
 PVC St. Steel Other
 Date: 6/29/2006
 Sampled By: [Signature]
 (Initials)

Reviewed by _____

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches): 2.4"
 Total Depth of Casing (TD in ft BTOC): 33.5
 Water Level Depth (WL in ft BTOC): 22.56
 No. of Well Volumes to be purged (#V) 3

Screen Interval = 22-32 ft.

PURGE VOLUME CALCULATION

(-) X ² X 3 X 0.0408 = gals
 TD (feet) WL (Feet) D (inches) #V Calculated Purge Volume

PURGE METHOD

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

PUMP INTAKE SETTING

Near Bottom Near Top
 Other Middle of screen
 Depth in feet (BTOC): _____
 Screen Interval in feet (BTOC): from _____ to _____

Field Parameter Measurement

Minutes	pH	Conductivity (µS)	Temp. <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	Turbidity (NTU)
<u>Initial 1 Ltr</u>	<u>6.47</u>	<u>1113</u>	<u>20.7</u>	<u>44.7</u>
<u>10</u>				
Meter S/N				

PURGE TIME

Purge Start: 1245 GPM: _____
 Purge Stop: 1250 GPM: _____
 Elapsed: 5

PURGE RATE

PURGE VOLUME

Volume: 1 LTR gallons
 D.O.: 1.12 Redox 202
 Observations During Purging (Well Condition, Color, Odor):
Water Grey in color Strong odor of Product
 Discharge Water Disposal: Sanitary Sewer
 Storm Sewer Other 55 Gal. drum on site

WELL SAMPLING

Bailer - Type: Micro Purge Sample Time: 1255

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
<u>06264097-1</u>	<u>6 VOA's</u>	<u>T.P.H gas (8015 Modified)</u>	<u>HCL</u>	<u>Sequoia</u>	
		<u>BTEX (8020)</u>			
		<u>MTBE (8020)</u>			
		<u>Ethylene Dichloride</u>			

QUALITY CONTROL SAMPLES

Duplicate Samples	
Original Sample No.	Dupl. Sample No.

Blank Samples	
Type	Sample No.

Other Samples	
Type	Sample No.



GROUNDWATER SAMPLING FORM

Job Name: BPS
Job Number: 4097041918.01
Recorded By: [Signature]

Well Number: MW-6
Well Type: [X] Monitor [] Extraction [] Other
[X] PVC [] St. Steel [] Other
Date: 6/29/2006
Sampled By: [Initials]

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches): 2
Total Depth of Casing (TD in ft BTOC): 32.5
Water Level Depth (WL in ft BTOC): 21.85
No. of Well Volumes to be purged (# V): 3

No Construction logs

PURGE VOLUME CALCULATION

() X ^2 X 3 X 0.0408 = gals
TD (feet) WL (Feet) D (inches) # V Calculated Purge Volume

PURGE METHOD

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

PUMP INTAKE SETTING

[] Near Bottom [] Near Top
[X] Other Middle of screen
Depth in feet (BTOC):
Screen Interval in feet (BTOC): from to

Field Parameter Measurement

Table with 5 columns: L+R Minutes, pH, Conductivity (µS), Temp. (°C/°F), Turbidity (NTU). Row 1: Initial/LTR, 6.99, 932, 22.3, 806.

PURGE TIME

Purge Start: 1050
Purge Stop: 1055
Elapsed: 5

PURGE RATE

GPM: 1 LTR

PURGE VOLUME

Volume: 1 LTR gallons
D.O. 1.19 Redox 006

Observations During Purging (Well Condition, Color, Odor):

Started Dark Brown then got clear. No odor.

Discharge Water Disposal: [] Sanitary Sewer [] Storm Sewer [] Other 55 Gal. drum on site

WELL SAMPLING

[] Bailer - Type: Micro Purge Sample Time: 1100

Table with 6 columns: Sample No., Volume/Cont., Analysis Requested, Preservatives, Lab, Comments. Row 1: 06264097-4, 3 VOA's, T.P.H gas (8015 Modified), HCL, Sequoia.

QUALITY CONTROL SAMPLES

Table for Duplicate Samples with columns: Original Sample No., Dupl. Sample No.

Table for Blank Samples with columns: Type, Sample No.

Table for Other Samples with columns: Type, 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	6-29-06	1020	22.56	22.56	Y	-	OK	OK	4"	
MW-3		0945	21.93	21.93	Y	-	OK	OK	4"	
MW-5		0959	20.78	20.78	Y	-	OK	OK	2"	
MW-6		0930	21.85	21.85	Y	E	OK	OK	2"	
MW-1A		1016	20.99	20.99	Y	-	OK	OK	4"	
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: Oxion SA 230 ^{SN#} 4717 6-29-06

Temperature: YSI 30 ^{SN#} 97D0953 6-29-06

Specific Conductance: YSI 30 ^{SN#} 97D0953 6-29-06

Dissolved Oxygen: YSI 55 ^{SN#} 01D0873 6-29-06

Turbidity: Hach 2100P ^{SN#} 920300000714 6-29-06