

March 20, 2008

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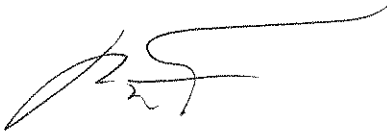
Mr. Steven Plunkett
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

SUBJECT: 2008 Annual Groundwater Monitoring Report
PSI Project No. 575-8G004
Alcopark Fueling Facility - Site No. 2
165 13th Street, Oakland, California

Dear Mr. Plunkett:

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

Respectfully submitted,



Rod Freitag
Environmental Program Manager
Alameda County General Services Agency



2008 ANNUAL
GROUNDWATER MONITORING REPORT
ALCOPARK FUELING FACILITY
OAKLAND, CALIFORNIA

**2008 ANNUAL
GROUNDWATER MONITORING REPORT
ALCOPARK FUELING FACILITY
OAKLAND, CALIFORNIA**

Prepared for

ALAMEDA COUNTY GENERAL SERVICES AGENCY
1401 Lakeside Drive, 11th Floor
Oakland, California

Prepared by

Professional Service Industries, Inc.
4703 Tidewater Avenue, Suite B
Oakland, California 94601
(510) 434-9200

March 17, 2008
575-8G004

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STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

Information provided in this report, prepared by Professional Service Industries, Inc. (PSI), is intended exclusively for the use of Alameda County General Services Agency (ACGSA), for the evaluation of subsurface conditions as they pertain to the subject site. The professional services provided have been performed in accordance with practices generally accepted by other geologists, hydrologists, hydrogeologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made. As with all subsurface investigations, there is no guarantee that the work conducted will identify any or all sources or locations of contamination.

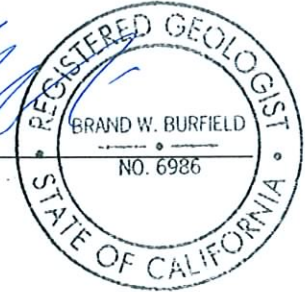
This report is issued with the understanding that ACGSA is responsible for ensuring that the information contained herein is brought to the attention of the appropriate regulatory agency.



Frank R. Poss, REA
Department Manager



Brand Burfield, PG
Project Geologist



1. INTRODUCTION

Professional Service Industries, Inc. (PSI) was retained by the Alameda County General Services Agency (ACGSA) to perform the annual groundwater monitoring at the ACGSA Alcopark Fueling Facility - Site No. 2, located at 165 13th Street in Oakland, California. The site location is presented on Figure 1.

The groundwater monitoring program was initially prompted by a request by the Alameda County Health Care Services Agency (ACHCSA), which requested additional information on the extent of petroleum hydrocarbon impacted groundwater (ACHCSA, 1997a).

1.1 SCOPE OF WORK

The scope of work consisted of the following tasks:

- Measure the depth to water in wells MW-1, MW-4 and MW-5 and prepare a groundwater elevation map.
- Determine the groundwater flow direction and gradient.
- Collect and chemically analyze groundwater samples from wells MW-1, MW-6 and MW-7.
- Prepare a report documenting the field procedures, analytical results, and presenting our conclusions regarding the data generated.

1.2 SITE BACKGROUND

The ACGSA operates two 10,000-gallon Underground Storage Tanks (USTs) at the Alcopark fueling station to fuel Alameda County vehicles. Three groundwater monitoring wells were installed at the site in March, 1989 to assess environmental conditions subsequent to the repair of a line leak at Dispenser No. 1. Initial sample results indicated the presence of BTEX (benzene, toluene, ethyl-benzene, and xylenes) in the groundwater. Subsequent sample results indicated the presence of Total Petroleum Hydrocarbons as Gasoline (TPH-G). Based on the analytical data, it was concluded that contaminants detected on-site had originated from a source area located upgradient of the site. Sampling activities were halted in 1992 pending investigation of an upgradient source (ACGSA, 1997).

In their letter dated May 30, 1997, the ACHCSA instructed ACGSA to resume groundwater monitoring at Alcopark (ACHCSA, 1997b). Sampling resumed in July, 1997. Analytical data from that sampling event indicated elevated TPH-G and BTEX concentrations in the

downgradient well. Methyl tert-Butyl ether (MTBE) was also detected. Additional samples collected in October, 1997 provided similar results (ACGSA, 1997). In their letter dated September 11, 1997, the ACHCSA directed ACGSA to investigate the extent and stability of the plume.

To better define groundwater conditions downgradient of the USTs, two borings were drilled on March 23, 1998. A grab groundwater sample was collected from one of the borings, and groundwater monitoring well MW-6 was installed in the other boring. One additional small-diameter groundwater monitoring well (MW-7) was installed by PSI in September, 1999 and the analytical results are presented in the PSI report dated October 14, 1999.

ACHCSA issued a letter, dated July 18, 2000, requiring ACGSA to prepare a Site Conceptual Model in accordance with the Regional Water Quality Control Board's final draft "Guideline for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates." The Site Conceptual Model, dated November 10, 2000, indicated that there are no drinking water wells within ½ mile of the site, and Lake Merritt, the nearest surface water receptor, is salt water and not a potential source of drinking water. Based on these findings, it was concluded that, "...an Interim Remedial Action should not be required for the subject site because the migration of MTBE contaminated groundwater to the nearest receptor, Lake Merritt, is unlikely. Furthermore, since no potential drinking water sources are at risk, a risk assessment is not necessary for the site."

After reviewing the Site Conceptual Model report, ACHCSA required that a supplemental fate and transport screening be done to assess potential MTBE impacts on the Lake Merritt ecosystem. On June 8, 2001, a report was issued indicating no expectation of a significant impact on the ecology of Lake Merritt.

In accordance with the e-mailed authorization of Mr. Steven Plunkett of the ACHCSA, dated July 27, 2006, groundwater sampling is currently being conducted annually.

1.2.1 STORAGE TANK SYSTEM UPDATES

In September of 1992, overflow protection, spill containment, and automatic tank gauging were installed on the two underground tanks. In July and August of 1996, additional upgrade work was done to comply with Title 23 of the California Code of Regulations. This included replacement of underground single-walled steel piping with double-wall fiberglass piping, and installation of dispenser sumps, piping sumps, and sump leak sensors (ACGSA, 1997).

2. GROUNDWATER MONITORING ACTIVITIES

A PSI representative performed groundwater-monitoring activities on February 14th and 27th, 2008. The activities were performed in accordance with PSI standard procedures presented in Appendix A, and procedures described in an ACHCSA letter describing collection of samples without purging the wells (ACHCSA, 1997a).

2.1 GROUNDWATER ELEVATION AND FLOW DIRECTION

Prior to groundwater sampling, on February 27, 2008, depth to groundwater was measured from the top of the well casings in monitoring wells MW-1, MW-4, and MW-5. The groundwater measurements were converted to groundwater elevations and the data were plotted on a groundwater elevation map (presented as Figure 2). The groundwater elevation data are presented in Table 1.

PSI's interpretation of the groundwater elevation data indicates the groundwater is flowing to the northeast under a hydraulic gradient of 0.02. The flow direction is consistent with the flow direction determined for previous quarterly monitoring events.

2.2 GROUNDWATER SAMPLING

Monitoring wells MW-1, MW-6, and MW-7 were sampled without purging, as requested in the ACHCSA letter dated September 11, 1997. The groundwater samples were collected with disposable polyethylene tubing equipped with a check valve. The groundwater samples were collected in general accordance with PSI's standard protocol, included in Appendix A, and were stored in an iced cooler through delivery to the analytical laboratory and maintained under Chain-of-Custody protocol. A copy of the Chain-of-Custody form is included in Appendix B.

To minimize the possibility of cross-contamination between sampling locations, most of the sampling equipment used is disposable. To further minimize the possibility of cross-contamination, the water sounder and all other reusable sampling equipment were cleaned with a non-phosphate detergent and rinsed twice with deionized water prior to their use in another well.

3. LABORATORY ANALYSIS PROGRAM

The groundwater samples collected during this investigation were submitted to McCampbell Analytical, Inc. of Pacheco, California. McCampbell Analytical is a State of California Department of Health Services certified environmental laboratory (Environmental Laboratory Accreditation Program #1644). A summary of the analytical methods is presented below. The groundwater samples collected at the site were analyzed for the following constituents by the methods indicated:

- Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) and Methyl Tert Butyl Ether (MTBE) by Environmental Protection Agency (EPA) Method 8021.
- Total Petroleum Hydrocarbons as Gasoline (TPH-G) by EPA Method 8015-M

3.1 ANALYTICAL RESULTS

Tested analytes were detected in the samples from all three groundwater-monitoring wells sampled for this monitoring event.

- TPH-G was detected in wells MW-1 (270 micrograms per liter ($\mu\text{g/l}$)) and MW-6 (780 $\mu\text{g/l}$) and was not detected in MW-7.
- Benzene was detected in wells MW-1 (49 $\mu\text{g/l}$) and MW-6 (11 $\mu\text{g/l}$). Benzene concentrations increased slightly in well MW-1 and decreased significantly in well MW-6 since the previous sampling event. Figure 3 depicts the benzene concentration with time in MW-1, MW-6, and MW-7. Benzene concentrations have varied with time and have not shown a consistent overall trend.
- MTBE was detected in wells MW-6 (80 $\mu\text{g/l}$) and MW-7 (13 $\mu\text{g/l}$). The MTBE concentrations decreased in wells MW-6 and MW-7 since the previous sampling event. Figure 4 depicts the MTBE concentration with time in MW-1, MW-6, and MW-7. In general, MTBE concentrations appear to be decreasing over time.
- Additional VOCs, commonly associated with gasoline-impacted groundwater, were detected in the groundwater samples. The maximum concentrations for each of the additional VOCs detected are presented below.
 - Ethylbenzene at 8.8 $\mu\text{g/l}$ in MW-6
 - Xylenes at 37 $\mu\text{g/l}$ in MW-6
 - Toluene at 1.3 $\mu\text{g/l}$ in MW-6

Current and historic analytical data is presented in Table 1. Laboratory reports are presented in Appendix B.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the information presented in this report, the following conclusions have been reached:

- Groundwater elevations measured at the site range from approximately 14.44 to 15.06 feet above msl.
- Groundwater flow direction is to the northeast under a hydraulic gradient of 0.02, which is consistent with historic conditions.
- The groundwater samples collected from wells MW-1, MW-6 and MW-7 contained measurable concentrations of TPH-G, BTEX, and MTBE with benzene and MTBE being the primary contaminants of concern.

Based on the groundwater sampling since 1989, the lack of sensitive receptors, and the stability of the plume, PSI has recommended that the site be considered for closure. PSI understands that closure proceedings have been initiated by the ACHCSA.

5. REFERENCES

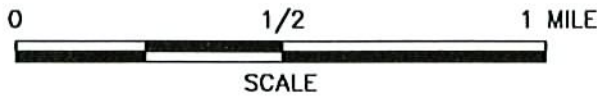
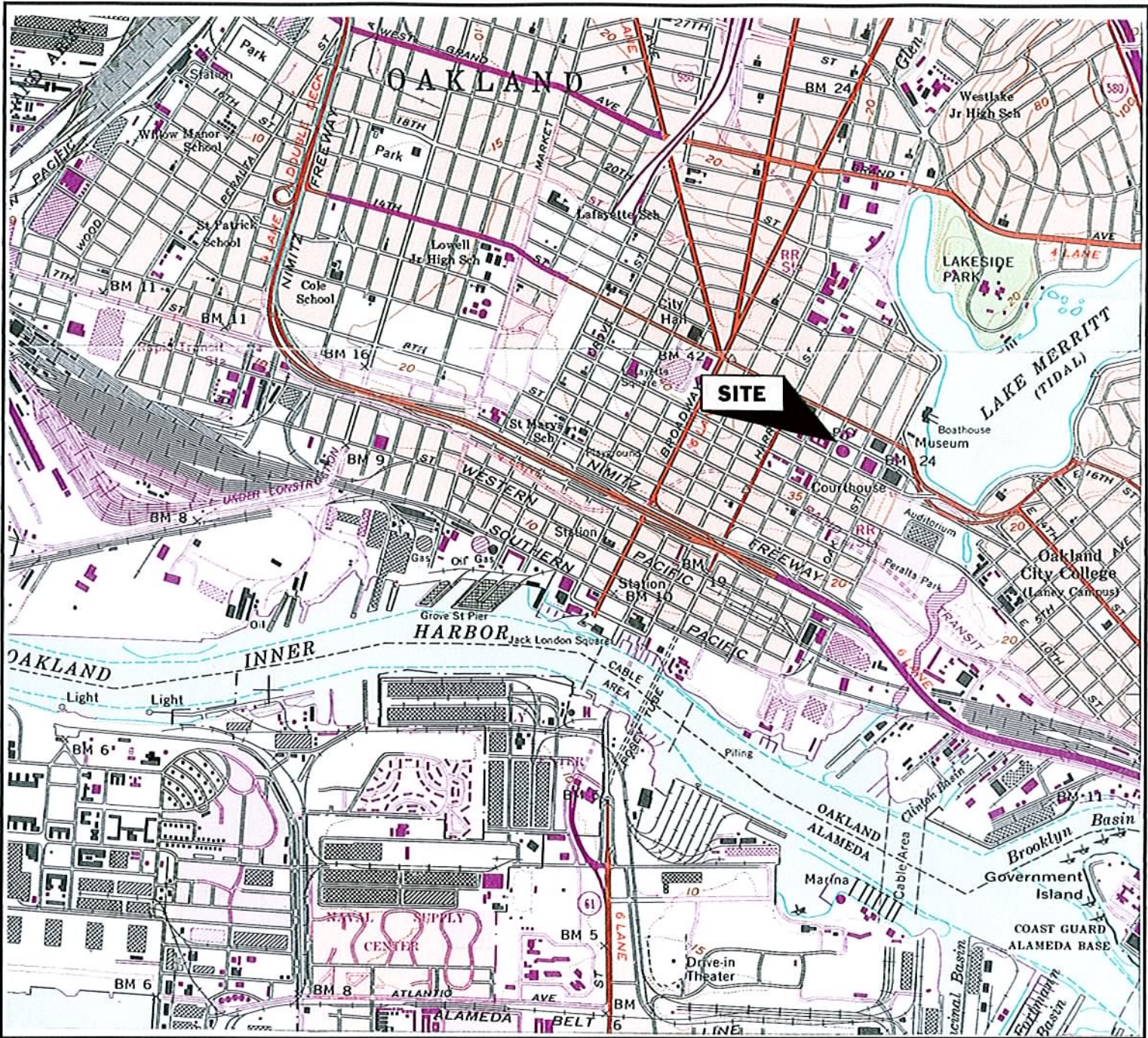
ACGSA, 1997, Request For Proposal (RFP) for Groundwater Services, December 2.

ACHCSA, 1997a, Workplan Request Letter to Mr. Rodman Freitag, September 11.

ACHCSA, 1997b, Continuation of Groundwater Monitoring Request, Letter to Mr. Jim DeVos, May 20.

USGS, 1980, Oakland West, California, topographic map.

FIGURES

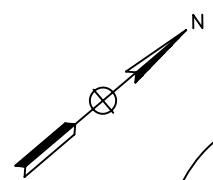


REFERENCE:
 U.S.G.S. OAKLANDWEST, CALIFORNIA, 1959
 PHOTOREVISED 1980



SITE LOCATION
 ALCOPARK FUELING STATION
 165 13TH STREET
 OAKLAND, CALIFORNIA
 PROJECT NUMBER: 575-4G009

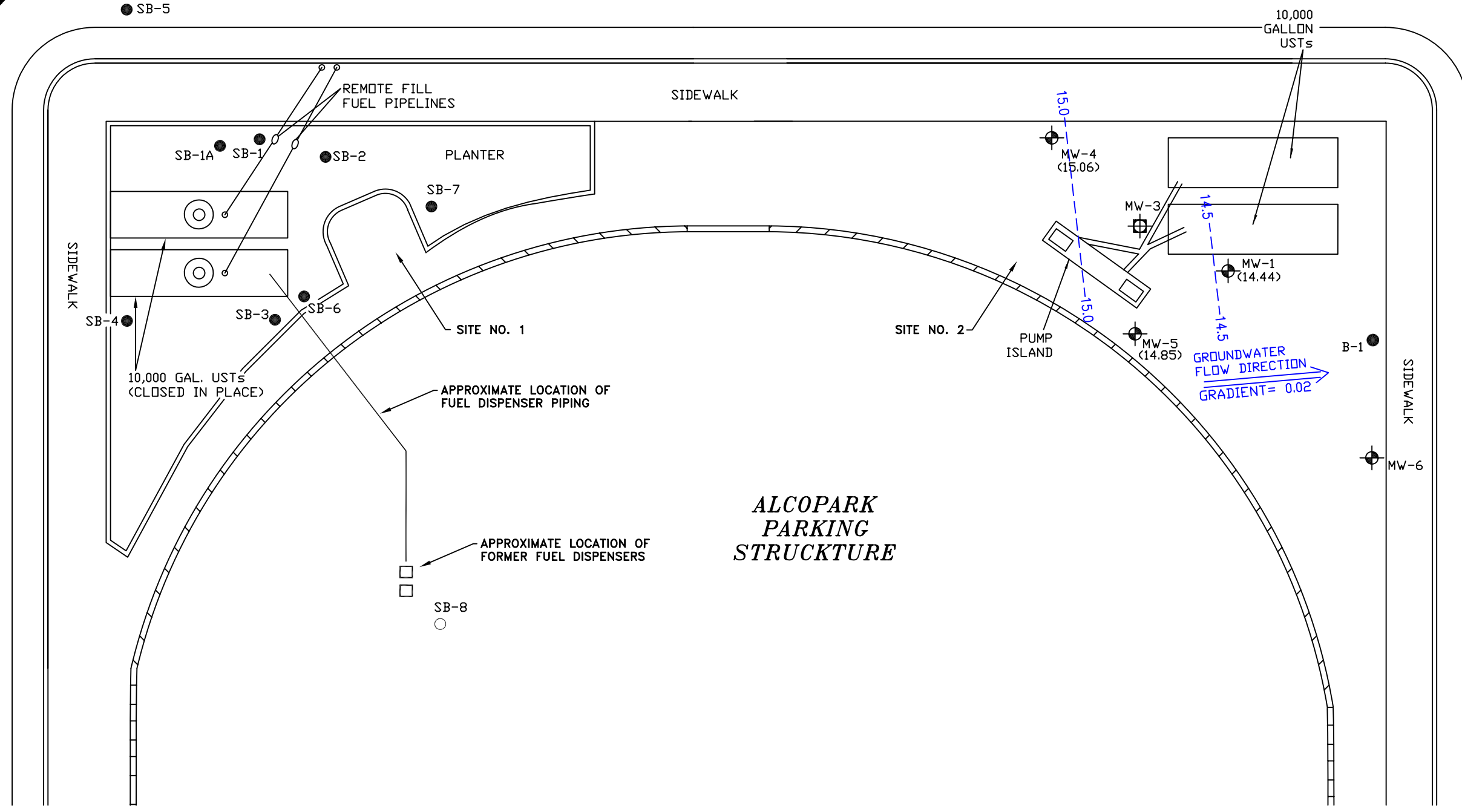
DATE: 3/04	CKD BY: F.P.	FIGURE NO: 1
FILE NO: 4G009-1		DRAWN BY: B.S.



JACKSON STREET

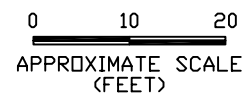
12TH STREET

13TH STREET



LEGEND:

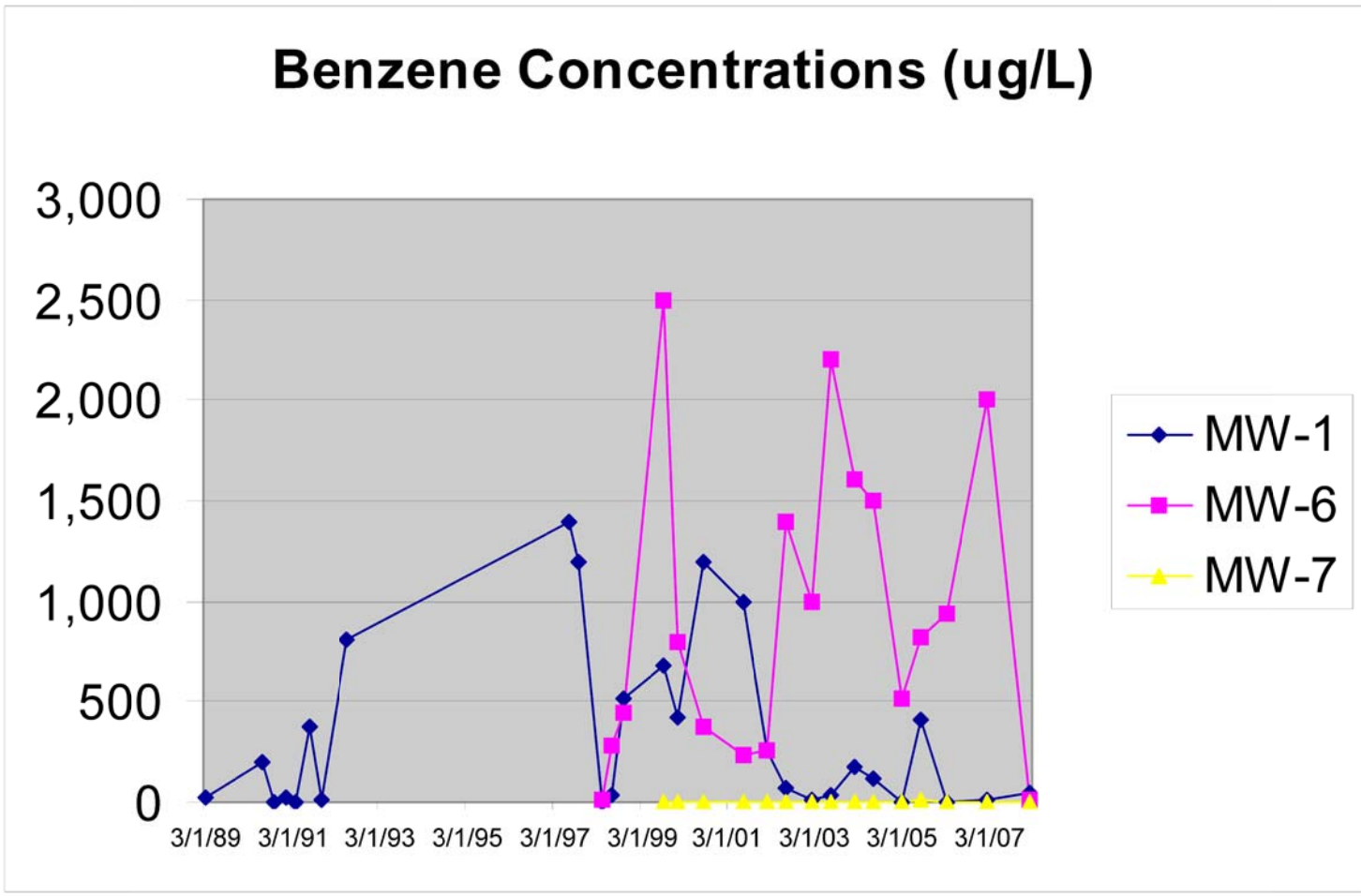
- MW-5 (14.85) - MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION INDICATED IN FEET MSL
- 15.0 - GROUNDWATER CONTOUR (ELEVATION INDICATED IN FEET MSL)
- MW-3 - VADOSE MONITORING WELL LOCATION
- B-1 - SOIL BORING
- UNDERGROUND PIPING



GROUNDWATER ELEVATION MAP - 2/27/07
ALCOPARK PARKING FACILITY
INTERSECTION OF JACKSON AND 13TH STREETS
OAKLAND, CALIFORNIA
PROJECT NUMBER: 575-8G004

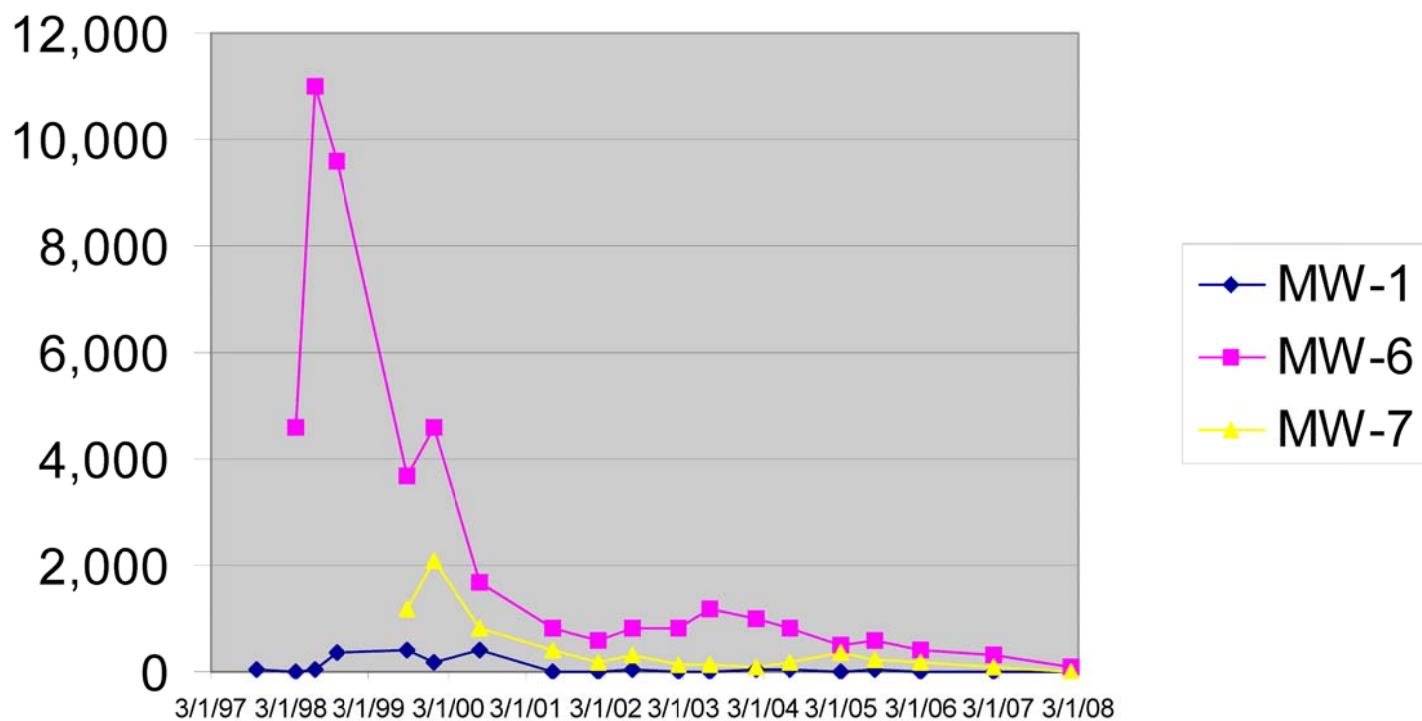
DATE: 3/08	CKD BY: F.P.	FIGURE NO.: 2
FILE NO.: 8G004-08		DRAWN BY: B. BURFIELD

Benzene Concentrations (ug/L)



ENVIRONMENTAL GEOTECHNICAL <small>CONSULTING · ENGINEERING · TESTING</small>		
BENZENE VS. TIME ALCOPARK PARKING FACILITY INTERSECTION OF JACKSON AND 13TH STREETS OAKLAND, CALIFORNIA PROJECT NUMBER: 575-8G004		
DATE: 4/08	CKD BY: F.P.	FIGURE NO.: 3
FILE NO.: 8G004-BEN		DRAWN BY: F.Poss

MTBE Concentrations (ug/L)



PSI ENVIRONMENTAL
 GEOTECHNICAL
 CONSTRUCTION
 CONSULTING · ENGINEERING · TESTING

MTBE VS. TIME
 ALCOPARK PARKING FACILITY
 INTERSECTION OF JACKSON AND 13TH STREETS
 OAKLAND, CALIFORNIA
 PROJECT NUMBER: 575-8G004

DATE: 4/08	CKD BY: F.P.	FIGURE NO.: 4
FILE NO.: 8G004-MTBE		DRAWN BY: F. Poss

TABLE

**TABLE 1
GROUNDWATER ELEVATION AND ANALYTICAL DATA SUMMARY
ALCOPARK FUELING FACILITY SITE NO. 2
OAKLAND, CALIFORNIA**

<i>All concentrations in ug/l (PPB).</i>								
Well	Date	Groundwater Elevation	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1	3/21/1989	12.2	ND	NA	21	3.9	0.4	4.5
	7/26/1990	12.3	1,400	NA	200	45	ND	53
	10/25/1990	12.1	1,200	NA	ND	7.3	2.2	46
	1/25/1991	11.9	270	NA	23	1.5	ND	3.1
	4/25/1991	11.8	230	NA	ND	ND	ND	ND
	8/27/1991	11.8	8,300	NA	370	64	ND	120
	11/25/1991	11.7	810	NA	9.3	ND	7.8	32
	6/11/1992	12.85	2,600	NA	810	16	21	42
	7/16/1997	14.36	19,000	ND (150)	1,400	2,800	500	2,600
	10/21/1997	13.92	14,000	29	1,200	1,000	590	2,800
	3/11/1998	17.14	NS	NS	NS	NS	NS	NS
	4/1/1998	17.14	ND (50)	6.3	5.4	ND (0.5)	ND (0.5)	0.82
	7/15/1998	16.41	71	57	31	ND (0.5)	ND (0.5)	3.1
	10/22/1998	15.62	5,100	360	520	140	250	950
	9/9/1999	15.42	2,400	400	680	140	130	370
	1/18/2000	14.49	4,100	180	420	11	210	350
	5/4/2000	16.19	NS	NS	NS	NS	NS	NS
	8/22/2000	15.34	9,400	410	1,200	130	410	920
	2/8/2001	14.53	NS	NS	NS	NS	NS	NS
	7/20/2001	14.60	9,600	ND (50)	1,000	300	350	2,000
	2/18/2002	15.08	1,500	ND (100)	260	6.5	2.8	49
	7/19/2002	14.84	180	28	68	ND (1.7)	ND (1.7)	6.8
	2/10/2003	14.83	210	11	14	0.75	ND (0.5)	4.0
	7/15/2003	14.80	370	4.6	31	0.99	22	75
	2/12/2004	14.87	1,800	29	170	2.7	140	87
	7/7/2004	14.81	800	37	120	ND (2.5)	67	38
	3/24/2005	15.92	ND (50)	4.7	4	ND (0.5)	2.5	2
	8/17/2005	15.60	4,100	59	410	35	380	1,500
3/29/2006	16.97	NA	2.4	4.7	ND (0.5)	ND (0.5)	ND (0.5)	
2/8/2007	14.93	100	3.7	13	ND (0.5)	1.1	3.9	
2/27/2008	14.44	270	ND (10)	49	0.81	3.2	17.0	
MW-4	3/21/1989	12.4	ND	NA	13	1.4	1.0	ND
	7/26/1990	12.5	NA	NA	0.8	ND	ND	ND
	10/25/1990	12.2	NA	NA	120	1.2	1.1	0.9
	1/25/1991	12.0	NA	NA	230	2.8	1.2	2.0
	4/25/1991	13.0	170	NA	12	ND	ND	2.3
	8/27/1991	11.8	ND	NA	87	1.3	0.8	0.8
	11/25/1991	11.8	1,400	NA	ND	1.7	8.6	3.6
	6/11/1992	12.93	560	NA	150	1.8	1.8	1.1
	7/16/1997	14.46	50	ND	ND	ND	ND	ND
	10/21/1997	14.10	ND	ND	ND	ND	ND	ND
	3/11/1998	17.39	NS	NS	NS	NS	NS	NS
	4/1/1998	17.40	ND (50)	ND (5.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	7/15/1998	16.92	ND (50)	ND (5.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	10/22/1998	15.75	ND (50)	ND (5.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	9/9/1999	15.57	NS	NS	NS	NS	NS	NS
	1/18/2000	14.32	NS	NS	NS	NS	NS	NS
5/4/2000	16.34	NS	NS	NS	NS	NS	NS	

TABLE 1
GROUNDWATER ELEVATION AND ANALYTICAL DATA SUMMARY
ALCOPARK FUELING FACILITY SITE NO. 2
OAKLAND, CALIFORNIA

<i>All concentrations in ug/l (PPB).</i>								
Well	Date	Groundwater Elevation	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
MW-4 cont	8/22/2000	15.47	NS	NS	NS	NS	NS	NS
	2/8/2001	14.73	NS	NS	NS	NS	NS	NS
	7/20/2001	14.72	NS	NS	NS	NS	NS	NS
	2/18/2002	15.05	NS	NS	NS	NS	NS	NS
	7/19/2002	14.97	NS	NS	NS	NS	NS	NS
	2/10/2003	14.94	NS	NS	NS	NS	NS	NS
	7/15/2003	14.94	NS	NS	NS	NS	NS	NS
	2/12/2004	14.93	NS	NS	NS	NS	NS	NS
	7/7/2004	14.94	NS	NS	NS	NS	NS	NS
	3/24/2005	16.05	NS	NS	NS	NS	NS	NS
	8/17/2005	15.82	NS	NS	NS	NS	NS	NS
	3/29/2006	17.22	NS	NS	NS	NS	NS	NS
	2/8/2007	15.15	NS	NS	NS	NS	NS	NS
2/27/2008	15.06	NS	NS	NS	NS	NS	NS	
MW-5	3/21/1989	12.2	ND	NA	ND	ND	ND	ND
	7/26/1990	12.4	670	NA	0.8	ND	ND	ND
	10/25/1990	12.1	120	NA	13	ND	ND	ND
	1/25/1991	11.9	120	NA	3.2	ND	ND	ND
	4/25/1991	12.3	ND	NA	ND	ND	ND	ND
	8/27/1991	11.5	ND	NA	20	ND	0.5	ND
	11/25/1991	11.7	190	NA	2.7	ND	0.8	2.5
	6/11/1992	12.85	150	NA	37	ND	ND	ND
	7/16/1997	14.33	ND	22	ND	ND	ND	ND
	10/21/1997	13.88	ND	14	ND	ND	ND	ND
	3/11/1998	17.14	NS	NS	NS	NS	NS	NS
	4/1/1998	17.14	ND (50)	11	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	7/15/1998	16.43	ND (50)	ND (5.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	10/22/1998	15.60	ND (50)	ND (5.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	9/9/1999	15.44	NS	NS	NS	NS	NS	NS
	1/18/2000	14.67	NS	NS	NS	NS	NS	NS
	5/4/2000	16.18	NS	NS	NS	NS	NS	NS
	8/22/2000	15.32	NS	NS	NS	NS	NS	NS
	2/8/2001	14.53	NS	NS	NS	NS	NS	NS
	7/20/2001	14.59	NS	NS	NS	NS	NS	NS
	2/18/2002	14.94	NS	NS	NS	NS	NS	NS
	7/19/2002	14.83	NS	NS	NS	NS	NS	NS
	2/10/2003	14.83	NS	NS	NS	NS	NS	NS
	7/15/2003	14.80	NS	NS	NS	NS	NS	NS
	2/12/2004	14.87	NS	NS	NS	NS	NS	NS
	7/7/2004	14.82	NS	NS	NS	NS	NS	NS
	3/24/2005	15.91	NS	NS	NS	NS	NS	NS
	8/17/2005	15.59	NS	NS	NS	NS	NS	NS
	3/29/2006	16.97	NS	NS	NS	NS	NS	NS
	2/8/2007	14.93	NS	NS	NS	NS	NS	NS
2/27/2008	14.85	NS	NS	NS	NS	NS	NS	

TABLE 1
GROUNDWATER ELEVATION AND ANALYTICAL DATA SUMMARY
ALCOPARK FUELING FACILITY SITE NO. 2
OAKLAND, CALIFORNIA

<i>All concentrations in ug/l (PPB).</i>								
Well	Date	Groundwater Elevation	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
MW-6	4/1/1998	NA	740	4,600	9.8	3.2	3.0	15
	7/15/1998	NA	6,200	11,000	280	43	180	350
	7/15/1998	NA	NA	13,000	ND (500)	ND (500)	ND (500)	ND (500)
	10/22/1998	NA	4,700	9,600	450	13	200	200
	10/22/1998	NA	NA	9,100	470	ND (250)	ND (250)	ND (250)
	9/9/1999	NA	6,600	3,700	2,500	43	310	250
	1/18/2000	NA	3,500	4,600	800	ND (5.0)	40	13
	5/4/2000	NA	NS	NS	NS	NS	NS	NS
	8/22/2000	NA	1,400	1,700	370	4.8	12	35
	2/8/2001	NA	NS	NS	NS	NS	NS	NS
	7/20/2001	NA	1,100	800	240	2.9	2.3	3.4
	2/18/2002	NA	1,500	570	260	ND (2.0)	11	4.3
	7/19/2002	NA	1,800	800	1,400	ND (50)	ND (50)	ND (50)
	2/10/2003	NA	4,000	830	1,000	ND (50)	ND (50)	ND (50)
	7/15/2003	NA	4,100	1,200	2,200	ND (25)	180	260
	2/12/2004	NA	7,200	980	1,600	ND (25)	100	440
	7/7/2004	NA	4,000	840	1,500	ND (25)	150	210
	3/24/2005	NA	4,600	480	520	ND (10)	86	280
	8/17/2005	NA	2,800	610	820	ND (17)	190	250
	3/29/2006	NA	NA	410	940	ND (50)	85	140
2/15/2007	NA	6,800	340	2,000	ND (50)	130	190	
2/14/2008	NA	780	80	80	11	1.3	8.8	37
MW-7	9/9/1999	NA	92	1,200	1.6	ND (0.5)	ND (0.5)	ND (0.5)
	1/18/2000	NA	ND	2,100	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	5/4/2000	NA	140	1,100	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	8/22/2000	NA	160	830	0.62	ND (0.5)	ND (0.5)	ND (0.5)
	2/8/2001	NA	130	650	ND (0.5)	0.53	ND (0.5)	ND (0.5)
	7/20/2001	NA	56	400	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	2/18/2002	NA	ND (50)	200	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
	7/19/2002	NA	ND (50)	300	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
	2/10/2003	NA	ND (50)	140	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
	7/15/2003	NA	ND (50)	140	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)
	2/12/2004	NA	ND (50)	100	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)
	7/7/2004	NA	56	200	ND (2.5)	ND (2.5)	ND (2.5)	ND (2.5)
	3/24/2005	NA	ND (50)	350	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
	8/17/2005	NA	66	230	9	ND (5.0)	ND (5.0)	7
	3/29/2006	NA	NA	160	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2/15/2007	NA	70	87	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	
2/14/2008	NA	ND (50)	13	13	ND (0.5)	ND (0.5)	ND (0.5)	
W-B1	3/23/1998	NA	3,100	4,200	250	18	160	290

Notes:

TPH-G denotes Total Petroleum Hydrocarbons as Gasoline. MTBE denotes Methyl tert-Butyl Ether.
 NA denotes Not Analyzed. NS denotes Not Sampled. ND denotes Not Detected. () denotes detection limit.
 Data collected prior to 1998 was reported in Alameda County Request for Proposal dated December 2, 1997.

APPENDIX A

GROUNDWATER SAMPLING FIELD PROCEDURES
AND WATER ELEVATIONS

APPENDIX A

GROUNDWATER SAMPLING

The following procedures will be used for groundwater sampling:

1. All non-dedicated equipment shall be washed prior to entering the well with an Alconox solution, followed by two deionized water rinses.
2. Prior to purging wells, depth-to-water will be measured using an electronic sounder with an accuracy of approximately 0.01 foot. The measurements will be made to the top of the well casing on the north side.
4. Free floating product thickness and depth-to-groundwater will be measured in wells containing free floating product using a Solinst oil-water interface probe to an accuracy of approximately 0.01 foot. The measurements will be made to the top of the well casing on the north side.
5. Water samples will be collected with a Teflon disposable bailer. In the case of grab groundwater sampling, samples will be collected with a disposable Teflon lined plastic tube equipped with a check valve. The water collected will be immediately decanted into laboratory-supplied vials and bottles. The containers will be overfilled, capped, labeled, and placed in a chilled cooler, prior to delivery to the laboratory for analysis.
6. Chain of custody procedures, including chain of custody forms, will be used to document water sample handling and transport from collection to delivery to the laboratory for analysis.
7. Groundwater samples will be delivered to a State-certified environmental laboratory within approximately 24 hours of collection.

APPENDIX B

LABORATORY REPORT AND CHAIN OF CUSTODY



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Professional Service Industries 4703 Tidewater Ave., Suite B Oakland, CA 94601	Client Project ID: #575-86004	Date Sampled: 02/14/08
		Date Received: 02/19/08
	Client Contact: Frank Poss	Date Reported: 02/25/08
	Client P.O.:	Date Completed: 02/25/08

WorkOrder: 0802380

February 25, 2008

Dear Frank:

Enclosed within are:

- 1) The results of the **2** analyzed samples from your project: **#575-86004**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

McC Campbell Analytical, Inc.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0802380

ClientCode: PSIO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Frank Poss
 Professional Service Industries
 4703 Tidewater Ave., Suite B
 Oakland, CA 94601

Email: frank.poss@psiusa.com
 TEL: (510) 434-9200 FAX: (510) 434-7676
 PO:
 ProjectNo: #575-86004

Bill to:

Accounts Payable
 Professional Service Industries
 4703 Tidewater Ave., Suite B
 Oakland, CA 94601

Requested TAT: 5 days

Date Received: 02/19/2008

Date Printed: 02/19/2008

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0802380-001	MW6	Water	2/14/2008 14:09	<input type="checkbox"/>	A												
0802380-002	MW7	Water	2/14/2008 12:35	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTX_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Professional Service Industries**

Date and Time Received: **02/19/08 2:46:41 PM**

Project Name: **#575-86004**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0802380** Matrix Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 7.8°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

Client contacted:

Date contacted:

Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0802380

EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 33849			Spiked Sample ID: 0802398-003A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	92.3	93.2	0.940	108	102	5.71	70 - 130	30	70 - 130	30
MTBE	ND	10	97.2	98.1	0.890	107	95.2	11.7	70 - 130	30	70 - 130	30
Benzene	ND	10	95.7	102	6.10	108	100	7.49	70 - 130	30	70 - 130	30
Toluene	ND	10	95.3	101	5.78	119	111	6.89	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	99.9	106	5.55	114	106	6.48	70 - 130	30	70 - 130	30
Xylenes	ND	30	111	117	4.83	122	115	5.77	70 - 130	30	70 - 130	30
%SS:	109	10	90	95	5.98	96	97	0.975	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 33849 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0802380-001A	02/14/08 2:09 PM	02/20/08	02/20/08 1:43 AM	0802380-002A	02/14/08 12:35 PM	02/20/08	02/20/08 2:35 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

SunStar Laboratories, Inc.
 3002 Dow Ave., Ste. 212
 Tustin, CA 92780
 714-505-4010

McC Campbell Analytical
 1534 Willow Pass Rd
 Pittsburg CA 94565

0802380
 Chain of Custody Record

Client: PSI
 Address: 4703 Tidewater Ave Ste B Oakland CA
 Phone: 510 934 9200 Fax: 434 7676
 Project Manager: F. Poss

Date: 2/19/03 Page: _____ Of _____
 Project Name: 9/co Park
 Collector: C.C. Client Project #: 575-8604
 Batch #: _____ COC **71857**

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative	Total # of containers
MW 6	2/14/03	2:09	water	Vofl					X	X						5
MW 7	2/14/03	12:35pm	water	Vofl					X	X						5

ICE # 7.8
 GOOD CONDITION APPROPRIATE
 HEADSPACE ABSENT CONTAINERS
 DECHLORINATED IN LAB PRESERVED IN LAB
 PRESERVATION VOAS O&G METALS OTHER

Relinquished by: (signature) <u>Cheta Cadala</u>	Date / Time <u>2/19/03</u>	Received by: (signature) <u>[Signature]</u>	Date / Time <u>2/19/03 110</u>
Relinquished by: (signature) <u>[Signature]</u>	Date / Time <u>2/19/03 20</u>	Received by: (signature) <u>Maria V...</u>	Date / Time <u>2/19/03 245</u>
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time

Total # of containers 3
 Chain of Custody seals Y/N/NA _____
 Seals intact? Y/N/NA _____
 Received good condition/cold _____
 Turn around time: standard

Notes



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Professional Service Industries 4703 Tidewater Ave., Suite B Oakland, CA 94601	Client Project ID: 57586004; Alco Park	Date Sampled: 02/27/08
		Date Received: 02/28/08
	Client Contact: Frank Poss	Date Reported: 03/05/08
	Client P.O.:	Date Completed: 03/05/08

WorkOrder: 0802707

March 05, 2008

Dear Frank:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **57586004; Alco Park,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

McC Campbell Analytical, Inc.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0802707

ClientCode: PSIO

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:		Bill to:	Requested TAT: 5 days
Frank Poss	Email: frank.poss@psiusa.com	Accounts Payable	
Professional Service Industries	TEL: (510) 434-9200 FAX: (510) 434-7676	Professional Service Industries	<i>Date Received: 02/28/2008</i>
4703 Tidewater Ave., Suite B	PO:	4703 Tidewater Ave., Suite B	<i>Date Printed: 02/28/2008</i>
Oakland, CA 94601	ProjectNo: 57586004; Alco Park	Oakland, CA 94601	

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
0802707-001	MW-1	Water	2/27/2008 16:00	<input type="checkbox"/>	A													

Test Legend:

1	G-MBTX_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Professional Service Industries**

Date and Time Received: **02/28/08 9:02:05 PM**

Project Name: **57586004; Alco Park**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0802707** Matrix Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 10.4°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

Client contacted:

Date contacted:

Contacted by:

Comments:



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0802707

EPA Method SW8021B/8015Cm	Extraction SW5030B			BatchID: 34054			Spiked Sample ID: 0802679-008A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	690	60	NR	NR	NR	78.8	82.4	4.45	70 - 130	30	70 - 130	30
MTBE	680	10	NR	NR	NR	96	82.9	14.7	70 - 130	30	70 - 130	30
Benzene	5.6	10	97.3	97.7	0.368	86.1	87.3	1.36	70 - 130	30	70 - 130	30
Toluene	3.5	10	121	122	0.977	86.5	88.8	2.65	70 - 130	30	70 - 130	30
Ethylbenzene	270	10	63.6, F1	65.6, F1	0.145	90.6	91.5	0.898	70 - 130	30	70 - 130	30
Xylenes	230	30	NR	NR	NR	87.3	86.9	0.524	70 - 130	30	70 - 130	30
%SS:	---#	10	---#	---#	---#	95	100	5.05	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

F1 = MS / MSD outside of acceptance criteria. LCS - LCSD validate prep batch.

BATCH 34054 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0802707-001A	02/27/08 4:00 PM	03/01/08	03/01/08 8:49 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

