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Alameda County
Environmental Health

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

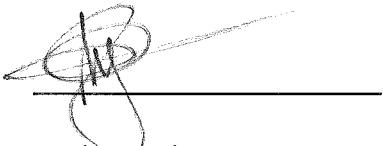
Re: BPS Reprographics' (Formerly City Blue Print)
RWQCB Case #01-0210
1700 Jefferson St
Oakland CA, 94612

Dear Barbara Jakub,

BPS had directed ERS Corporation 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 ERS Corporation 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

June 28, 2012

Christopher Payne
BPS Reprographic Services
945 Bryant Street
San Francisco, CA 94103

RE: Semi-Annual Ground Water Monitoring Report, April 2012
1700 Jefferson Street, Oakland, California
Fuel Leak Case No. RO 151
ERS Project No 1015-01.00

Dear Mr. Payne:

Environmental Risk Specialties Corporation (ERS) encloses herein one hard copy of the Semi-Annual Ground Water Monitoring Report, April 2012 for 1700 Jefferson Street, Oakland, California. ERS will also upload the Report along with monitor well sampling and analytical data to the Regional Water Quality Control Board's GeoTracker database.

If you have any questions regarding this report or the findings of the work, please contact me at (925) 938-1600, extension 102 or email me at smichelson@erscorp.us.

Sincerely,



Steven Michelson, PG
Principal Geologist

cc: Ms. Barbara Jakub, Alameda County Department of Environmental Health

**SEMI-ANNUAL GROUND WATER
MONITORING REPORT
APRIL 2012**

**BPS REPROGRAPHICS
1700 Jefferson Street
Oakland, California**



ers

**Environmental Risk Specialties
Corporation**

SEMI-ANNUAL
GROUND WATER MONITORING REPORT
APRIL 2012

**1700 Jefferson Street
Oakland, California**

Prepared for:

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

Prepared by:

Environmental Risk Specialties Corporation
Walnut Creek, California
June 28, 2012

Reviewed By:



Steven Michelson, PG
Principal Geologist



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1.0 INTRODUCTION

This Semi-Annual Ground Water Monitoring Report was prepared by Environmental Risk Specialties Corporation (ERS) on behalf of BPS Reprographic Services. This Report describes ground water monitoring work performed at 1700 Jefferson Street, Oakland, California (Site). The project objectives were to sample and analyze ground water from five existing monitor wells, measure the depth to ground water in all existing wells to calculate ground water gradient magnitude and direction, evaluate analytical results, and report the findings.

2.0 BACKGROUND

The Site is located on the northeast corner of the intersection of Jefferson Street and 17th Street in Oakland, California. The Site is a former gas station that had two 1,000 gallon gasoline underground storage tanks (USTs) and one 550 gallon waste oil UST. On February 20, 1987, three borings (Borings 1 through 3) were advanced for a geotechnical investigation. Two additional borings (Borings 4 and 5) were advanced near the former USTs. On June 16, 1987, three gasoline USTs, product lines and dispensers were removed, overexcavated, and backfilled without confirmation sampling. Soil was excavated to approximately 9.5 feet, which was the maximum reach of the excavation equipment. The soil was stockpiled and then spread out for aeration. The excavation was subsequently backfilled on August 5 and 6, 1987 with the aerated soil.

Three ground water monitor wells were installed in June 1987 (MW-1 to MW-3) and well MW-1 initially contained 30 inches of free-phase floating product (free product). Well MW-2 was subsequently destroyed on November 9, 1987 when the current building was constructed. On August 12, 1987, Boring 6 was advanced to investigate soil permeability. In January 1988, ground water extraction wells MW-1A and MW-4 were installed to remove free product. In August 1988, offsite well MW-5 was installed.

Free product was removed from well MW-1 on a daily basis yielding an estimated 2,300 gallons of free product from September 1987 to March 1991. A ground water extraction and treatment system was installed in June 1992. The system was removed in July 1999, after extracting an additional 867 gallons of free product. Five Cone Penetrometer Test (CPT) borings both south of the Site and north of well MW-5 were advanced in March 1995. In April 1996, well MW-6 was installed. In April 1998, analyses showed the free product was comprised of leaded gasoline. Measurable thickness free product has not been observed in the wells since 1999.

In 1999, oxygen release compound (ORC®) socks were placed in wells MW-1A, MW-3, MW-4, and MW-5. The ORC® socks were removed at the request of Alameda County Department of Environmental Health in 2002.

Quarterly ground water monitoring of wells MW-1, MW-3, MW-5, and MW-6 has been conducted from January 1994 through March 2009, when semi-annual monitoring commenced. Ground water extraction wells MW-1A and MW-4 were periodically sampled from August 1991 to June 1999. MW-4 was also sampled during this most recent ground water monitoring event.

All monitor wells were previously surveyed on the City of Oakland datum, which has a discrepancy of -5.7 feet from NAVD88, the standard national datum. On April 15, 2010, all monitor wells were resurveyed by Muir Consulting of Oakdale, California to Geotracker specifications using NAVD88 datum.

In April of 2011, three wells were installed in association with the Merrill Sign Company, a RWQCB site located on the corner of 18th and Jefferson St (PDE, 2011) and ERS coordinated with PDE to measure in the same datum as the 1700 Jefferson monitor wells.

2.1 Subsurface Conditions

Boring logs indicate that silty sand and clayey sand are present from the surface to a depth of approximately 17.5 feet below ground surface (bgs). Sand was reported in the borings from approximately 17.5 to 31.0 feet bgs with the exception of MW-5 where sand was reported from the surface to 31.0 feet bgs with a layer of silty sand from 6 to 12 feet bgs. These soils are underlain by stiff to very stiff, saturated silty clays to the maximum explored depth of 41.5 feet bgs. Ground water was encountered at approximately 23 feet bgs in the boreholes.

3.0 GROUND WATER MONITORING AND SAMPLING

Ground water monitoring and sampling of the Site was performed on April 12, 2012 by ERS personnel. Work at the Site included measuring depth to water, subjectively evaluating the possible presence of petroleum in ground water in the wells, purging and sampling the wells using EPA approved low-flow techniques, and submitting the samples to a state-certified laboratory for analysis.

Ground water elevation data are summarized in Table 1, gradient data are summarized in Table 2, and analytical data are summarized in Table 3. Field sheets of recently recorded ground water monitoring data are included in Appendix A

3.1 Ground Water Monitoring

Before ground water purging and sampling, the depth to the water table was measured from the top of each well casing using an electronic water level meter. The water level measurements were recorded to the nearest 0.01 foot with respect to mean sea level (MSL).

3.2 Ground Water Gradient

Ground water elevation contours measured on April 12, 2012 are illustrated on Figure 3. The ground water gradient direction is to the northwest at an average of 0.004 ft/ft. A rose diagram depicting ground water gradients over time is presented in Figure 6.

3.3 Ground Water Sampling

Before ground water sampling, each well was purged using low-flow techniques described in the "Low-Flow (Minimal Drawdown) Ground Water Sampling Procedures" (ASTM No 6771-02,

2002). Dedicated tubing, attached to a peristaltic pump, was lowered to the mid-point of the reported screen zone. The pump was set to a rate of less than 1 liter per minute and pH, dissolved oxygen (DO), specific conductance (SC), oxidation reduction potential (ORP), depth to water (DTW) and temperature were measured in three to five minute intervals within a flow-through cell. When depth to water remained constant and parameters stabilized to within $\pm 10\%$ in consecutive readings, the pump rate was reduced, the tube was disconnected from the flow-through cell and samples were collected directly from the dedicated tubing.

From each monitor well, four laboratory-supplied 40-milliliter HCL-preserved sample vials were filled with ground water and sealed with zero headspace. Once filled, sample vials were inverted and tapped to test for air bubbles. Sample containers were labeled and stored in a pre-chilled, insulated container and returned to ERS's Walnut Creek office where they were stored at 4°C. The samples were transported to TestAmerica, a state-certified analytical laboratory, following standard COC protocols for the requested analyses.

Water purged during the development and sampling of the monitor wells is being temporarily stored onsite in a 55-gallon drum pending laboratory analysis and proper disposal.

4.0 RESULTS OF GROUND WATER SAMPLING

Ground water samples collected from wells MW-1, MW-3, MW-4, MW-5, and MW-6 were analyzed for Total Petroleum Hydrocarbon Gasoline Range Organics (TPH (GRO)), benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260B. TPH (GRO) represents the total petroleum concentration from carbon range C5 to C12. Copies of the chain of custody record and laboratory analytical reports with individual and standard chromatograms are included as Appendix B. TPH (GRO), BTEX, and MTBE analytical results are summarized in Table 3.

5.0 DISCUSSION

The available data collected at 1700 Jefferson Street indicates that ground water has been affected by the former USTs. Ground water use as a potential drinking source in this area is highly unlikely due to site location and the high quality public drinking water supplied by EBMUD. In Table 3, the concentrations of petroleum hydrocarbons in the ground water are compared with the Environmental Screening Levels (ESLs) for ground water that is not a potential drinking water source published in 2008 by the San Francisco Bay Regional Water Quality Control Board (RWQCB-SF).

Charts 1 and 2 depict the trends of TPH (GRO) and benzene respectively in the monitor wells MW-1, MW-3, and MW-5 over time. Figures 4 and 5 show the distribution of TPH (GRO) and benzene in ground water at the Site.

6.0 SUMMARY

Based on the results of ground water monitoring performed at 1700 Jefferson Street:

- Ground water gradient direction is to the northwest at an average of 0.004 ft/ft.
- Concentrations of TPH (GRO) increased in wells MW-1, MW-3 and MW-5.
- Concentrations of benzene increased in only MW-5.
- No detectable TPH (GRO) and BTEX concentrations were reported in downgradient well MW-6.
- From 1999 to 2012, concentrations of TPH (GRO), benzene, toluene, and total xylenes all decreased by an order of magnitude.
- Despite seasonal fluctuations, plume concentrations have remained relatively stable over the past 10 years (Charts 1 and 2).

7.0 REFERENCES

ASTM 2002. *Standard Practice for Low-Flow Purgning and Sampling for Wells and Devices Used for Ground-Water Quality Investigations.* Designation: D 6771-02

California Regional Water Quality Control Board Region 2 – Environmental Screening Levels, San Francisco Bay Regional Water Quality Control Board, California Environmental Protection Agency, 2008

P&D Environmental (PDE), Ground Water Monitoring Well Installation Report, Merrill Sign Company, May 2011

TABLES

Table 1
GROUND WATER ELEVATIONS
1700 Jefferson Street, Oakland, California

Well ID	MW-1		MW-1A		MW-3		MW-4		MW-5		MW-6	
Top of Casing (ft above MSL)	36.81		35.25		36.23		36.77		35.21		35.91	
Date	DTW (ft bgs)	GWE (ft bgs)										
7/8/1987	25.75	5.69	--	--	25.50	6.27	--	--	--	--	--	--
7/12/1989	26.00	5.44	--	--	24.44	7.33	--	--	24.91	4.31	--	--
Data not available from 1990 to 1995												
3/6/1996	NS	--	--	--	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
9/19/1996	FP	--	--	--	26.09	5.68	--	--	24.48	6.08	25.76	5.50
12/23/1996	FP	--	--	--	FP	---	--	--	24.83	5.73	25.88	5.38
3/27/1997	FP	--	--	--	FP	---	--	--	23.82	6.74	24.78	6.48
6/4/1997	26.41	5.95	--	--	25.11	6.66	--	--	23.92	6.64	24.60	6.66
9/26/1997	26.80	5.56	--	--	25.41	6.36	--	--	24.29	6.27	24.80	6.46
12/22/1997	26.00	6.36	--	--	24.91	6.86	--	--	24.02	6.54	24.71	6.55
3/31/1998	26.06	6.30	--	--	24.05	7.72	--	--	22.78	7.78	23.75	7.51
6/18/1998	25.60	6.76	--	--	23.71	8.06	--	--	22.51	8.05	23.22	8.04
8/28/1998	25.45	6.91	--	--	23.70	8.07	--	--	22.74	7.82	22.23	9.03
12/2/1998	24.92	7.44	--	--	23.60	8.17	--	--	23.16	7.40	23.72	7.54
3/10/1999	24.90	7.46	--	--	22.65	9.12	--	--	22.82	7.74	23.54	7.72
6/30/1999	25.53	6.83	--	--	23.07	8.70	--	--	22.41	8.15	23.04	8.22
9/29/1999	24.23	8.13	--	--	23.03	8.74	--	--	22.81	7.75	23.42	7.84
11/22/1999	24.33	8.03	--	--	23.68	8.09	--	--	22.88	7.68	23.64	7.62
2/11/2000	24.38	7.98	--	--	23.74	8.03	--	--	22.74	7.82	23.67	7.59
5/30/2000	23.57	8.79	--	--	22.97	8.80	--	--	21.73	8.83	22.82	8.44
9/15/2000	23.85	8.51	--	--	23.12	8.65	--	--	22.14	8.42	23.10	8.16
11/16/2000	24.14	8.22	--	--	23.40	8.37	--	--	22.39	8.17	23.41	7.85
4/2/2001	23.40	8.96	--	--	23.40	8.37	--	--	22.07	8.49	23.33	7.93
6/28/2001	23.58	8.78	--	--	23.17	8.60	--	--	22.15	8.41	23.15	8.11
8/30/2001	24.00	8.36	--	--	23.35	7.42	--	--	22.35	8.21	23.35	7.91
12/26/2001	24.18	8.18	--	--	23.54	8.23	--	--	22.49	8.07	23.27	7.99
4/23/2002	NA	--	--	--	22.89	8.88	--	--	21.07	9.49	22.89	8.37
6/14/2002	23.41	8.95	--	--	22.85	8.92	--	--	21.80	8.76	22.81	8.45
8/20/2002	23.85	8.51	--	--	23.11	8.66	--	--	22.14	8.42	23.15	8.11
12/27/2002	24.10	8.26	--	--	23.34	8.43	--	--	NA ¹	NA ¹	23.41	7.85
4/1/2003	23.75	8.61	--	--	22.90	8.87	--	--	NA ¹	NA ¹	23.16	8.10
7/1/2003	23.50	8.86	--	--	22.80	8.97	--	--	NA ¹	NA ¹	22.75	8.51
9/24/2003	23.82	8.54	--	--	23.15	8.62	--	--	22.21	8.35	23.16	8.10
12/29/2003	24.07	8.29	--	--	23.45	8.32	--	--	22.56	8.00	23.47	7.79
5/18/2004	23.64	8.72	--	--	22.98	8.79	--	--	21.85	8.71	22.87	8.39
6/30/2004	23.64	8.72	--	--	23.04	8.73	--	--	22.00	8.56	22.43	8.83
9/23/2004	23.98	8.38	--	--	23.32	8.45	--	--	22.36	8.20	23.30	7.96
12/28/2004	24.07	8.29	--	--	28.71	3.06	--	--	22.42	8.14	23.42	7.84
3/16/2005	23.80	8.56	--	--	23.70	8.07	--	--	22.11	8.45	23.60	7.66
6/23/2005	22.90	9.46	--	--	22.40	9.37	--	--	21.20	9.36	22.27	8.99
9/9/2005	23.27	9.09	--	--	22.63	9.14	--	--	21.68	8.88	22.55	8.71
12/2/2005	23.75	8.61	--	--	23.06	8.74	--	--	22.19	8.37	23.05	8.21
3/24/2006	23.05	9.31	--	--	22.57	9.20	--	--	21.01	9.55	22.50	8.76
6/29/2006	22.56	9.80	--	--	23.91	9.84	--	--	20.78	9.78	21.85	9.41
9/13/2006	23.00	9.36	--	--	22.35	9.42	--	--	21.35	9.21	22.31	8.95
12/27/2006	23.47	8.89	--	--	22.82	8.95	--	--	21.82	8.74	22.85	8.41
3/30/2007	23.51	8.85	--	--	22.91	8.86	--	--	21.70	8.86	22.88	8.38
7/2/2007	23.39	8.97	--	--	22.88	8.89	--	--	21.81	8.75	22.75	8.51
10/2/2007	23.87	8.49	--	--	23.20	8.57	--	--	22.22	8.34	23.17	8.09
12/13/2007	24.05	8.31	--	--	23.40	8.37	--	--	22.31	8.25	23.37	7.89
3/26/2008	23.56	8.80	--	--	23.00	8.77	--	--	21.77	8.79	22.97	8.29
6/2/2008	23.70	8.66	--	--	23.08	8.69	--	--	22.04	8.52	23.07	8.19
9/10/2008	24.07	8.29	--	--	23.55	8.22	--	--	22.52	8.04	23.49	7.77
11/19/2008	24.33	8.03	--	--	23.68	8.09	--	--	22.63	7.93	23.64	7.62
3/3/2009	24.31	8.05	--	--	23.78	7.99	--	--	22.51	8.05	22.51	7.51
9/3/2009	24.16	8.20	--	--	23.55	8.22	--	--	22.36	8.20	23.49	-15.44
3/3/2010	23.99	12.82	22.42	12.83	23.45	12.78	23.87	12.90	22.14	13.07	23.49	12.42
9/8/2010	23.75	13.06	22.31	12.94	23.09	13.14	23.63	13.14	22.05	13.16	23.11	12.80
3/16/2011	23.63	13.18	22.09	13.16	23.05	13.18	23.55	13.22	21.85	13.36	23.06	12.85
9/9/2011												

Table 2
GROUND WATER GRADIENT AND FLOW DIRECTION
1700 Jefferson Street, Oakland, California

Date Monitored	Ground Water Gradient	Ground Water Direction
6/11/1996	0.003	SW
6/4/1997	0.009	NW
3/31/1998	0.002	W
8/28/1998	0.007	E
12/2/1998	0.006	NW
3/10/1999	0.011	NW
9/29/1999	0.004	NW
2/11/2000	0.001	NW
5/30/2000	0.003	W
11/16/2000	0.044	W
4/2/2001	0.001	SW
6/28/2001	0.005	SW
8/30/2001	0.004	SW
4/23/2002	0.006	W-SW
6/14/2002	0.004	W- SW
8/20/2002	0.005	W- SW
12/27/2002	0.005	W- SW
4/1/2003	0.007	W- SW
7/1/2003	0.006	W-NW
9/24/2003	0.005	W-NW
12/29/2003	0.003	W-NW
5/18/2004	0.006	W
6/30/2004	0.002	N
9/23/2004	0.005	W
12/28/2004	0.0451	SE ¹
3/16/2005	0.01	SW
6/23/2005	0.005	W
9/9/2005	0.005	W
12/2/2005	0.006	NW
3/24/2006	0.006	NW
9/13/2006	0.005	W-NW
12/13/2007	0.004	W-NW
3/26/2008	0.004	W
6/2/2008	0.004	W
9/10/2008	0.005	W
3/3/2009	0.004	W
9/3/2009	0.003	W-NW
3/3/2010	0.002	SW
9/8/2010	0.0015	W-SW
3/16/2011	0.0024	W-SW
9/9/2011	0.0031	NW
4/12/2012	0.004	NW

Notes:

¹ MACTEC reported an error in groundwater measurement

Table 3
GROUND WATER ANALYTICAL RESULTS
1700 Jefferson Street, Oakland, California

Well ID	Date Sampled	TPH (GRO)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Free Product							
									(µg/L)						
ESLs		210	46	130	43	100	1800	--							
		(µg/L)							(inches)						
MW-1	7/8/1987	190,000	18,000	26,000	--	3,700	--	30							
	9/12/1988	--	--	--	--	--	--	25							
	7/12/1989	190,000	1,000	8,900	2,900	19,000	--	21.6							
	8/1/1991	--	--	--	--	--	--	12							
	6/18/1992	--	--	--	--	--	--	34							
	7/2/1992	--	--	--	--	--	--	18							
	7/23/1992	--	--	--	--	--	--	10							
	8/18/1992	--	--	--	--	--	--	10							
	11/11/1992	--	--	--	--	--	--	13							
	1/29/1993	--	--	--	--	--	--	25.2							
MW-1A	2/12/1993	--	--	--	--	--	--	10.2							
	1/6/1994	--	--	--	--	--	--	14.8							
	3/17/1994	--	--	--	--	--	--	23.4							
	4/13/1994	--	--	--	--	--	--	12							
	6/29/1994	--	--	--	--	--	--	0							
	12/8/1994	--	--	--	--	--	--	FP							
	4/3/1995	--	--	--	--	--	--	FP							
	6/27/1995	--	--	--	--	--	--	FP							
	9/19/1995	--	--	--	--	--	--	FP							
	12/13/1995	--	--	--	--	--	--	FP							
MW-2	3/6/1996	--	--	--	--	--	--	FP							
	6/11/1996	140,000	18,000	28,000	2,800	19,000	--	NA							
	9/19/1996	100,000	16,000	22,000	2,100	14,000	--	NA							
	12/23/1996	FP	FP	FP	FP	FP	--	NA							
	3/27/1997	66,000	12,000	15,000	1,400	100	--	1,800							
	6/4/1997	54,000	11,000	12,000	1,000	7,200	--	<500							
	9/26/1997	73,000	10,000	16,000	1,400	8,500	--	<500							
	12/23/1997	66,000	10,000	16,000	1,400	12,000	--	1,900							
	3/31/1998	51,000	9,100	11,000	1,100	6,800	--	300							
	6/18/1998	50,000	11,000	15,000	870	5,800	--	<50							
	8/28/1998	15,000	1,100	830	31	3,000	--	<50							
MW-3	12/2/1998	41,000	8,500	11,000	720	6,700	--	<50							
	3/10/1999	10,000	2,300	1,900	1,600	2,300	--	<50							
	6/30/1999	18,000	6,400	7,800	660	4,100	--	<25							
	7/8/1987	8,200	1,500	340	--	87	--	--							
	11/9/1987	WELL DESTROYED													
	7/8/1987	6,200	180	500	--	170	--	0							
	7/12/1989	13,000	4	160	210	420	--	0							
	8/1/1991	74,000	1,600	4,600	670	4,300	--	4							
	9/30/1992	--	--	--	--	--	--	--							
	11/1/1992	--	--	--	--	--	--	--							
MW-1A	1/29/1993	--	--	--	--	--	--	--							
	2/12/1993	--	--	--	--	--	--	--							
	1/6/1994	--	--	--	--	--	--	--							
	3/17/1994	--	--	--	--	--	--	--							
	4/13/1994	--	--	--	--	--	--	--							
	6/29/1994	39,000	3,200	2,900	580	4,300	--	0.5							
	12/8/1994	4,600,000	1,500	4,200	6,000	95,000	--	--							
	4/3/1995	51,000	1,100	2,300	580	4,800	--	--							
	6/27/1995	20,000	270	550	190	1,700	--	--							
	9/19/1995	6,200	70	140	68	500	--	--							
MW-2	12/														

Table 3
GROUND WATER ANALYTICAL RESULTS
1700 Jefferson Street, Oakland, California

Well ID	Date Sampled	TPH (GRO)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Free Product							
			(µg/L)												
ESLs		210	46	130	43	100	1800								
MW-4	9/12/1988	--	--	--	--	--	--	5.9							
	7/12/1989	93,000	460	4,200	1,200	9700	NA	25.2							
	8/1/1991	86,000	1,500	6,200	1,000	FP	NA	18							
	9/30/1992	FP	FP	FP	FP	FP	NA	FP							
	2/12/1993	FP	FP	FP	FP	FP	NA	8.8							
	1/6/1994	FP	FP	FP	FP	3,200	NA	6.2							
	4/13/1994	58,000	1,500	2,500	520	7,300	NA	--							
	6/29/1994	16,000	1,300	790	51	3,400	NA	--							
	12/8/1994	92,000	1,700	4,100	310	5,400	NA	--							
	4/3/1995	35,000	1,200	3,400	280	5,800	NA	--							
	6/27/1995	13,000	1,300	1,600	77	1,800	NA	--							
	9/19/1995	14,000	630	470	14	1,800	NA	--							
	12/13/1995	11,000	2,200	2,100	110	2,100	NA	--							
	3/6/1996	110,000	2,600	3,600	780	10,000	NA	--							
	6/11/1996	260,000	6,600	19,000	3,700	28,000	NA	--							
	9/19/1996	95,000	9,900	19,000	2,000	13,000	NA	--							
	12/23/1996	FP	FP	FP	FP	FP	NA	FP							
	3/27/1997	37,000	2,600	6,900	540	5,500	1,400	--							
	6/4/1997	24,000	2,600	3,200	140	3,500	<300	--							
	9/26/1997	41,000	2,900	5,000	350	4,800	<500	--							
	12/23/1997	48,000	6,000	11,000	580	8,200	270	--							
	6/18/1998	25,000	2,000	460	<15	6,400	<50	--							
	8/28/1998	48,000	9,700	11,000	890	5,000	<50	--							
	12/2/1998	10,000	1,700	610	<15	2,300	<50	--							
	3/10/1999	11,000	2,300	2,100	88	1,600	<25	--							
	6/30/1999	88,000	1,800	3,000	150	2,700	<25	--							
	4/12/2012	2,700	380	160	100	100	<0.5	--							
MW-5	9/12/1988	--	--	--	--	--	--	0.5							
	7/12/1989	14,000	7	190	210	500	--	0.4							
	8/1/1991	120,000	20,000	14,000	1,900	4,900	--	0							
	9/30/1992	51,000	13,000	5,900	1,400	2,600	--	0							
	3/30/1993	74,000	16,000	5,000	1,800	2,700	--	0.06							
	1/6/1994	80,000	19,000	8,200	1,400	2,700	--	0							
	4/13/1994	63,000	14,000	3,500	1,500	2,100	--	0							
	6/29/1994	64,000	29,000	5,400	2,800	4,500	--	0							
	12/8/1994	59,000	13,000	3,800	1,800	2,900	--	--							
	4/3/1995	51,000	15,000	2,200	2,800	4,500	--	--							
	6/27/1995	41,000	12,000	2,100	1400	1600	--	--							
	9/19/1995	50,000	1600	2700	2000	2100	--	--							
	12/13/1995	45,000	13000	2100	16000	1900	--	--							
	3/6/1996	51000	15000	2800	2000	2400	--	--							
	6/11/1996	48000	12000	2900	2000	2700	--	--							
	9/19/1996	48000	12000	4500	2300	4000	--	--							
	12/23/1996	45000	12000	2200	2700	6500	600	--							
	3/27/1997	44000	11000	1100	1900	2800	300	--							
	6/4/1997	35000	8900	560	1500	1700	<100	--							
	9/26/1997	36000	7900	270	1500	1300	<500	--							
	12/23/1997	39000	13000	500	1900	1700	<1,000	--							
	3/31/1998	48000	10000	400	2000	2200	350	--							
	6/18/1998	17000	9500	310	420	850	<10	--							
	8/28/1998	16000	5400	160	1100	900	<50	--							
	12/2/1998	15000	8400	120	1500	840	<50	--							
	3/10/1999	23000	14000	300	1800	1100	<50	--							
	6/30/1999	7700	5200	270	1100	690	<25	--							
	9/29/1999	11000	9600	710	1100	1100	<100	--							
	9/29/1999	10000	14000	470	1100	600	<100	--							
MW-1*	11/22/1999	30000	11000	3400	1500	2500	<100	--							
	2/11/2000	23000	12000	4500	1200	1300	6.6	--							
	5/30/2000	19000	9900	6900	1200	2600	<200	--							
	9/15/2000	24,000	3,800	3,000	460	1,200</									

CHARTS

CHART 1
Concentrations of TPH (GRO) vs. Time in MW-1, MW-3, and MW-5
1700 Jefferson, Oakland, California

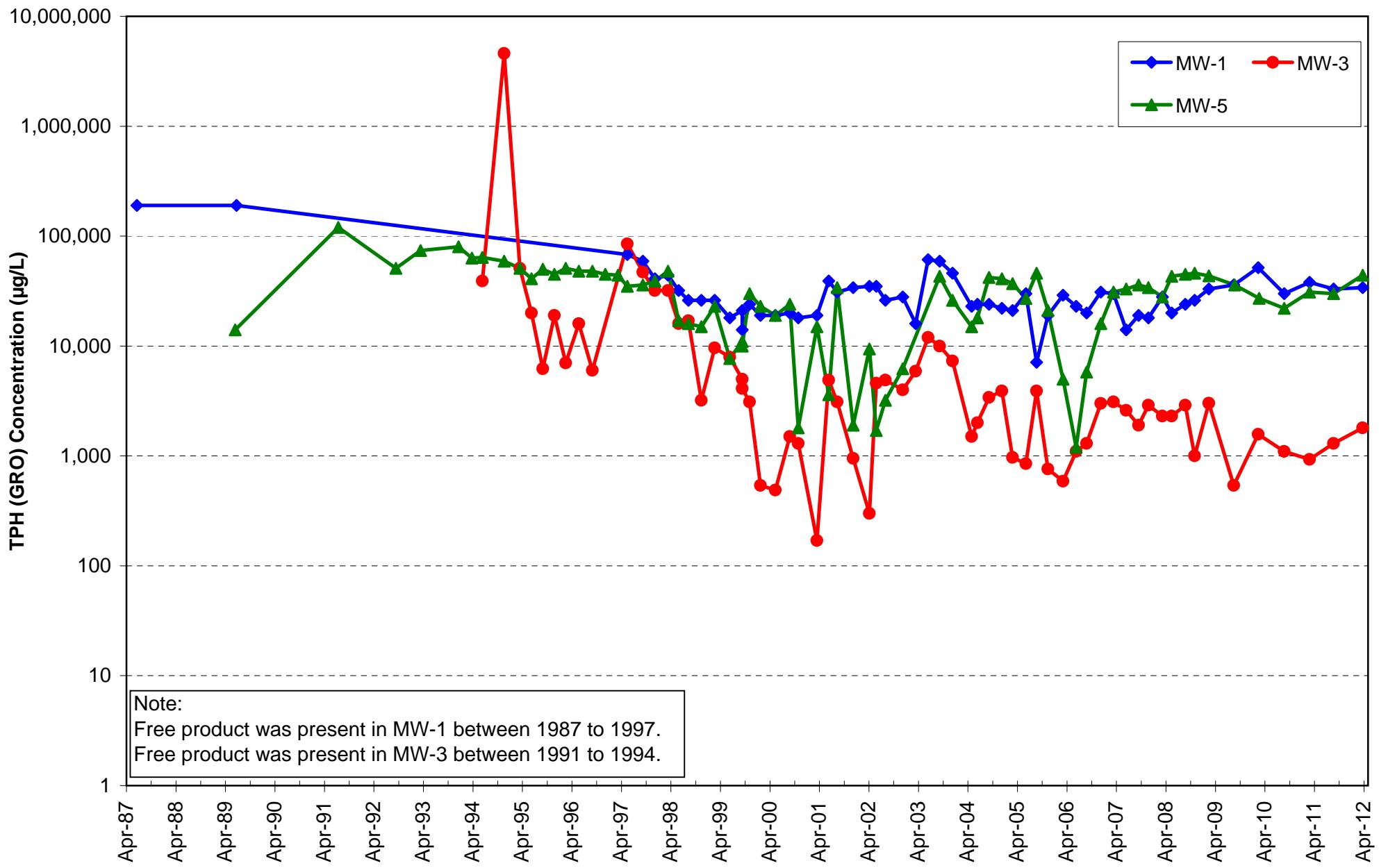
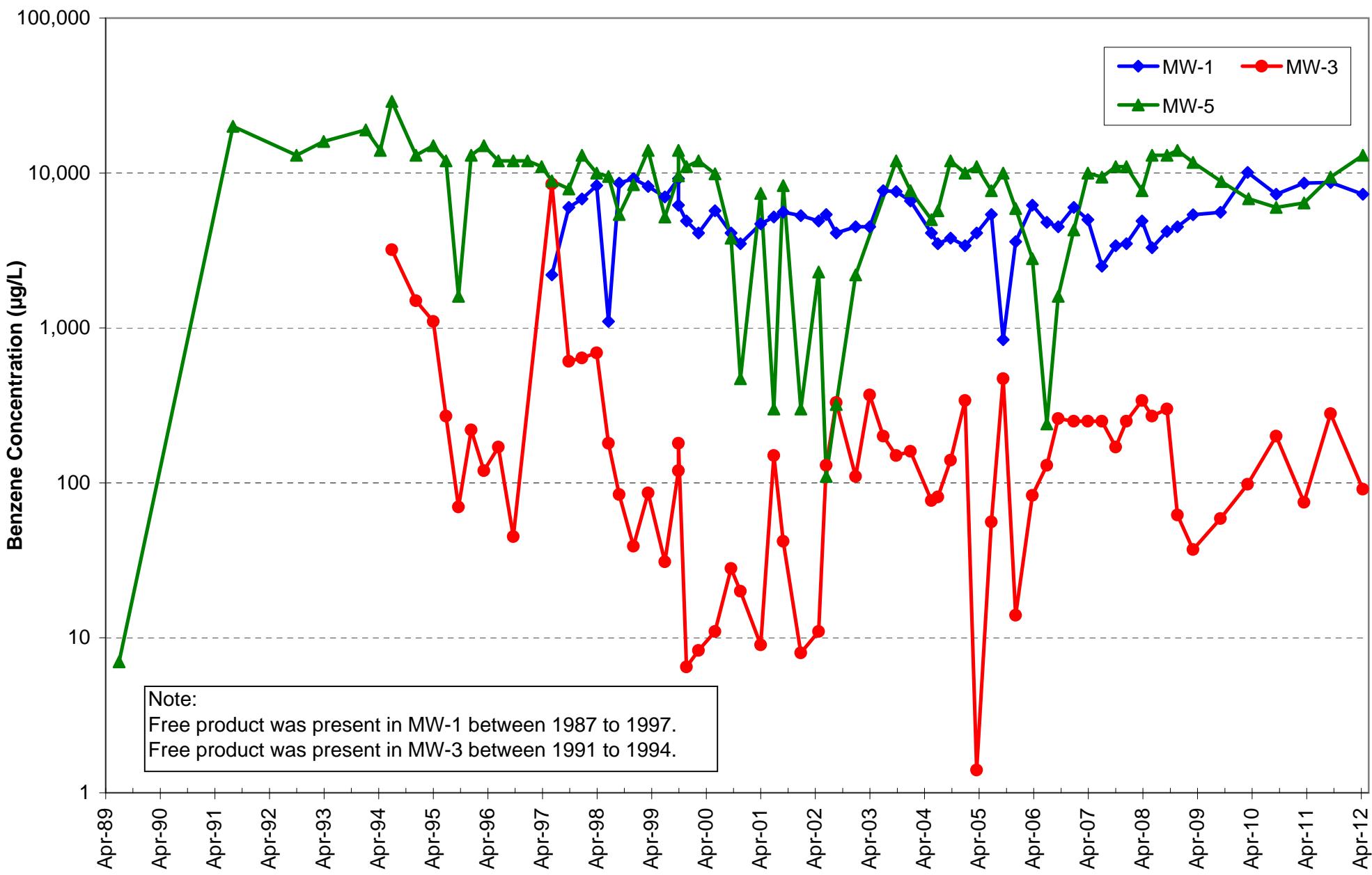
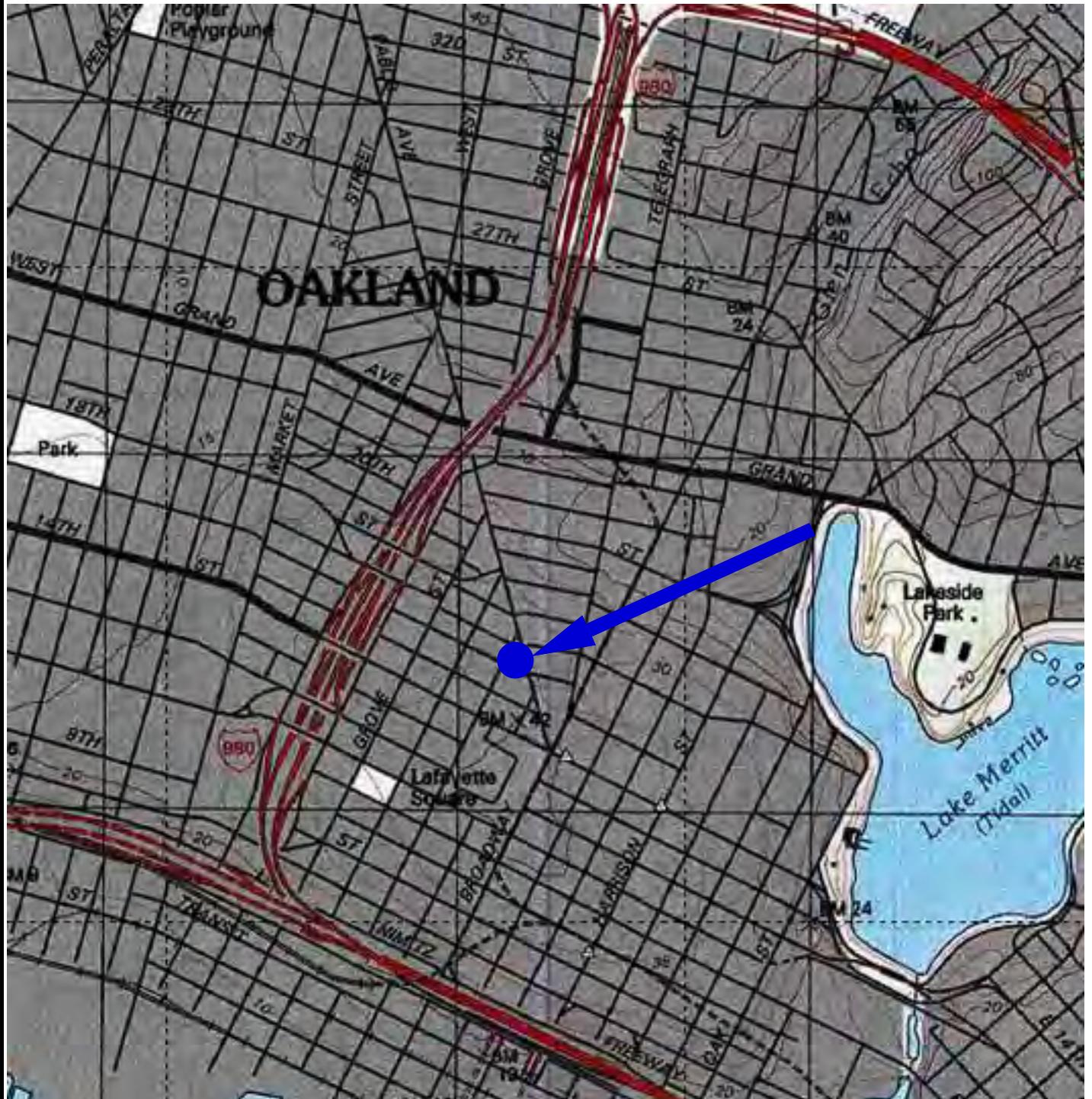


CHART 2
Concentrations of Benzene vs. Time in MW-1, MW-3, and MW-5
1700 Jefferson, Oakland, California



FIGURES

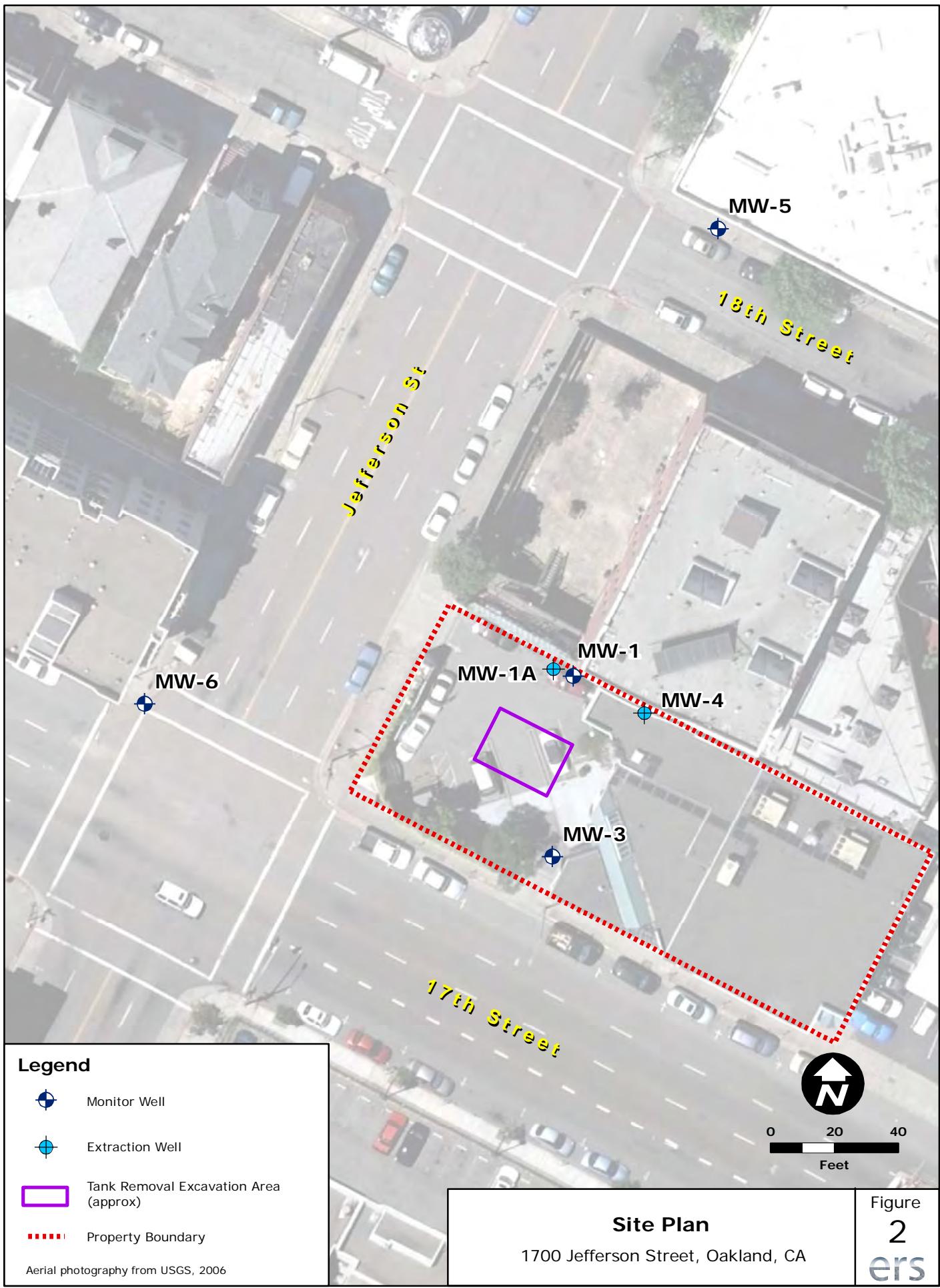


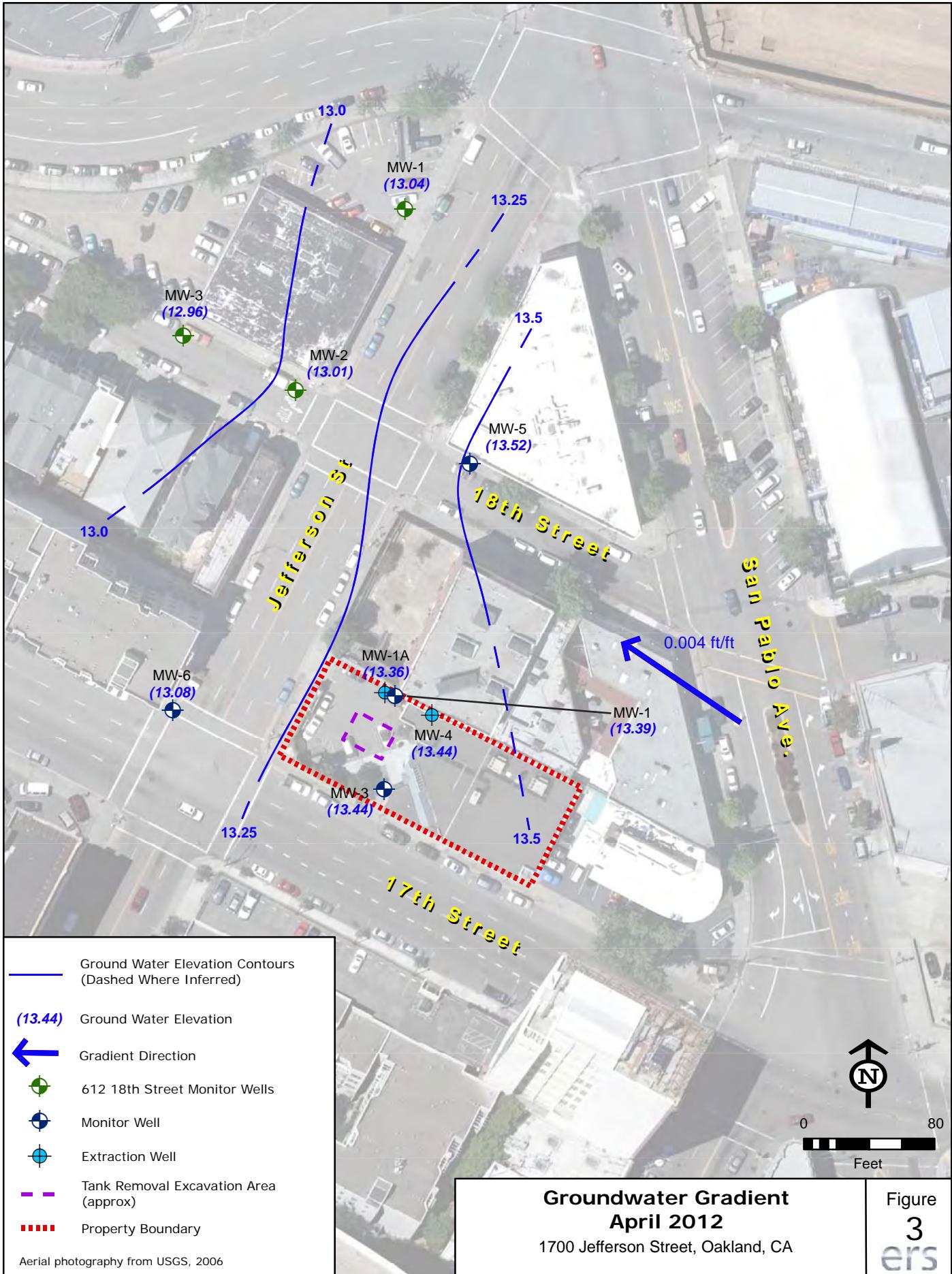
Location Map
1700 Jefferson Street
Oakland, California

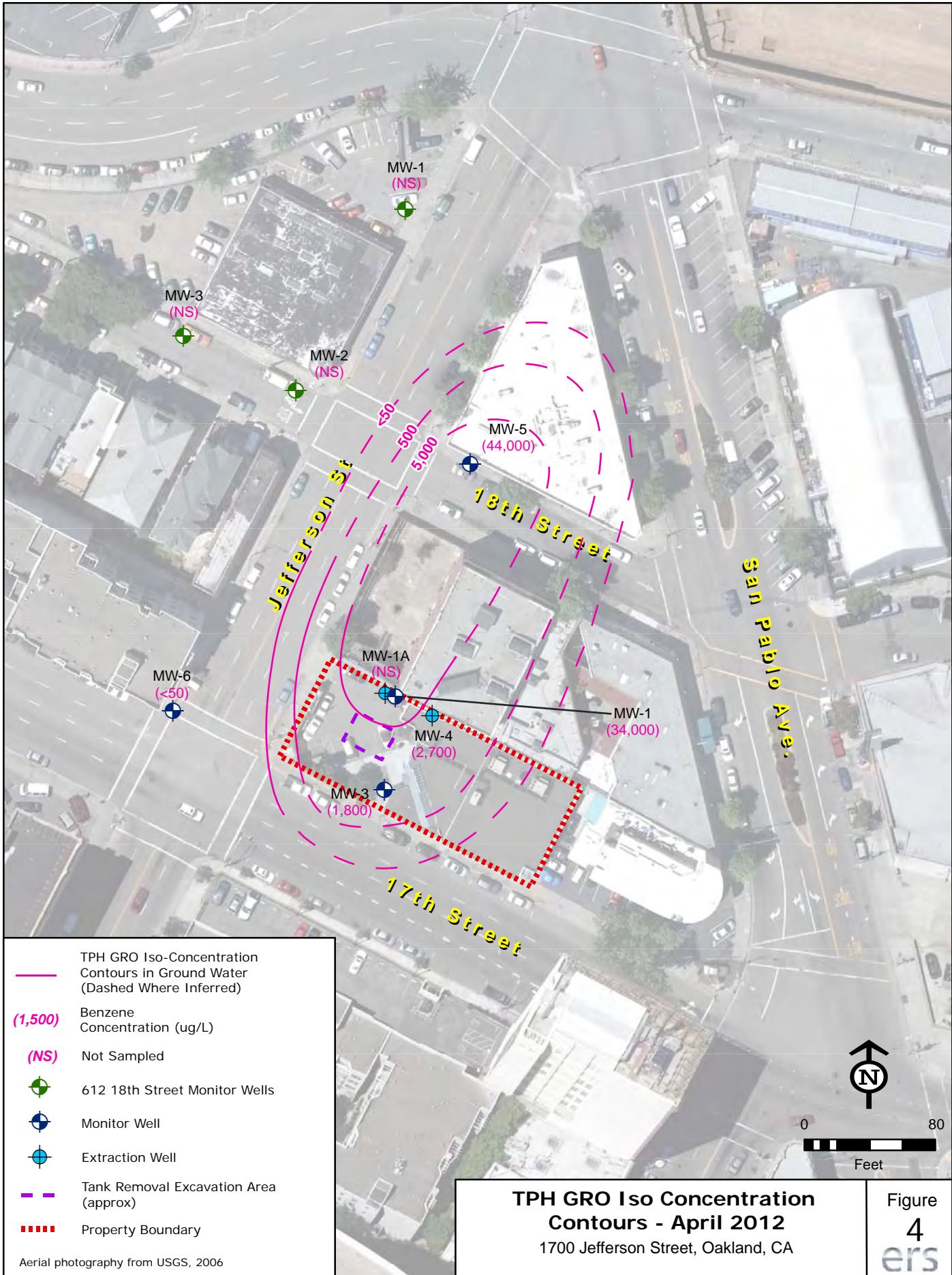
Source: National Geographic TOPO!

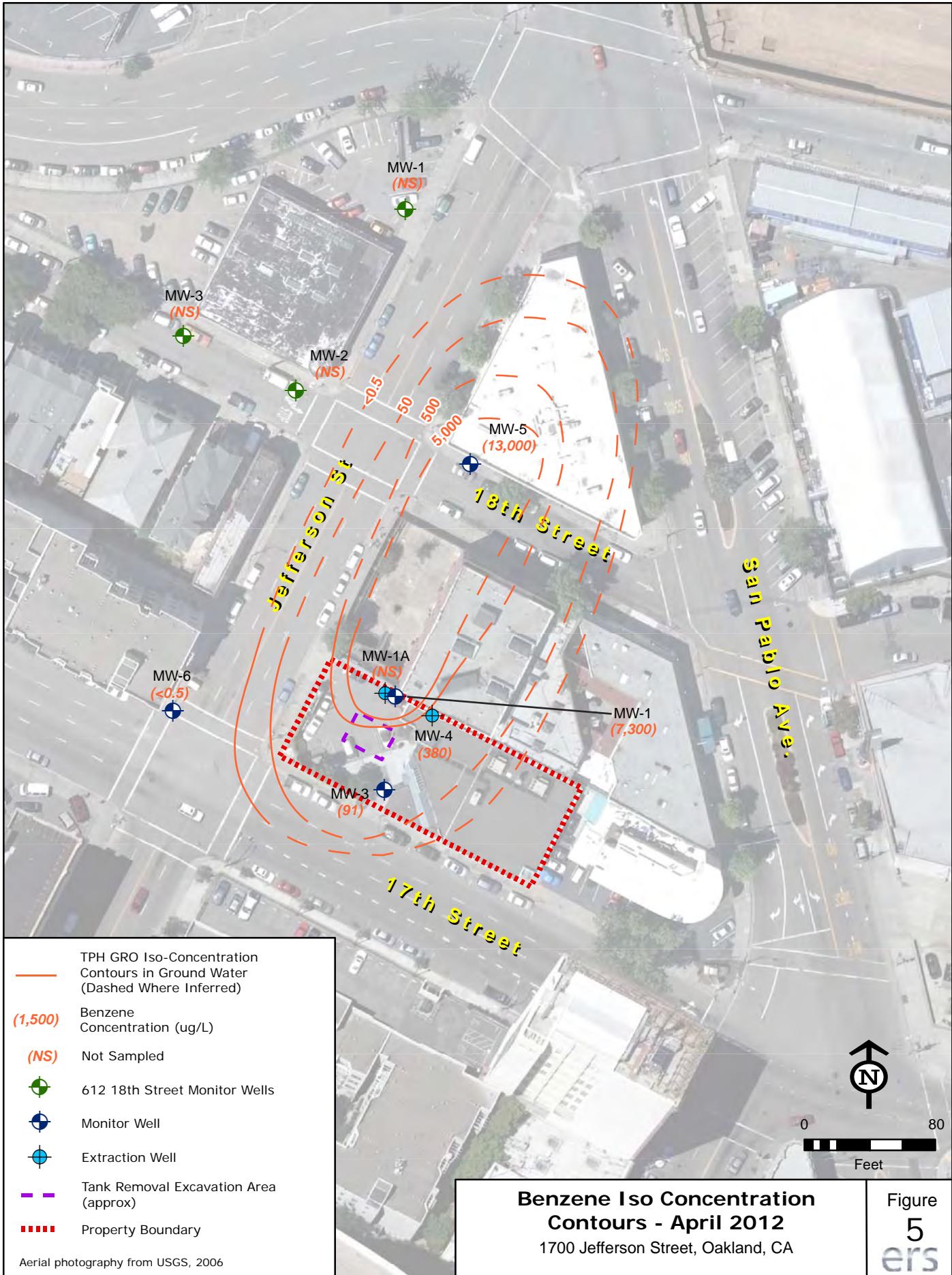
Figure
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ERS Corporation









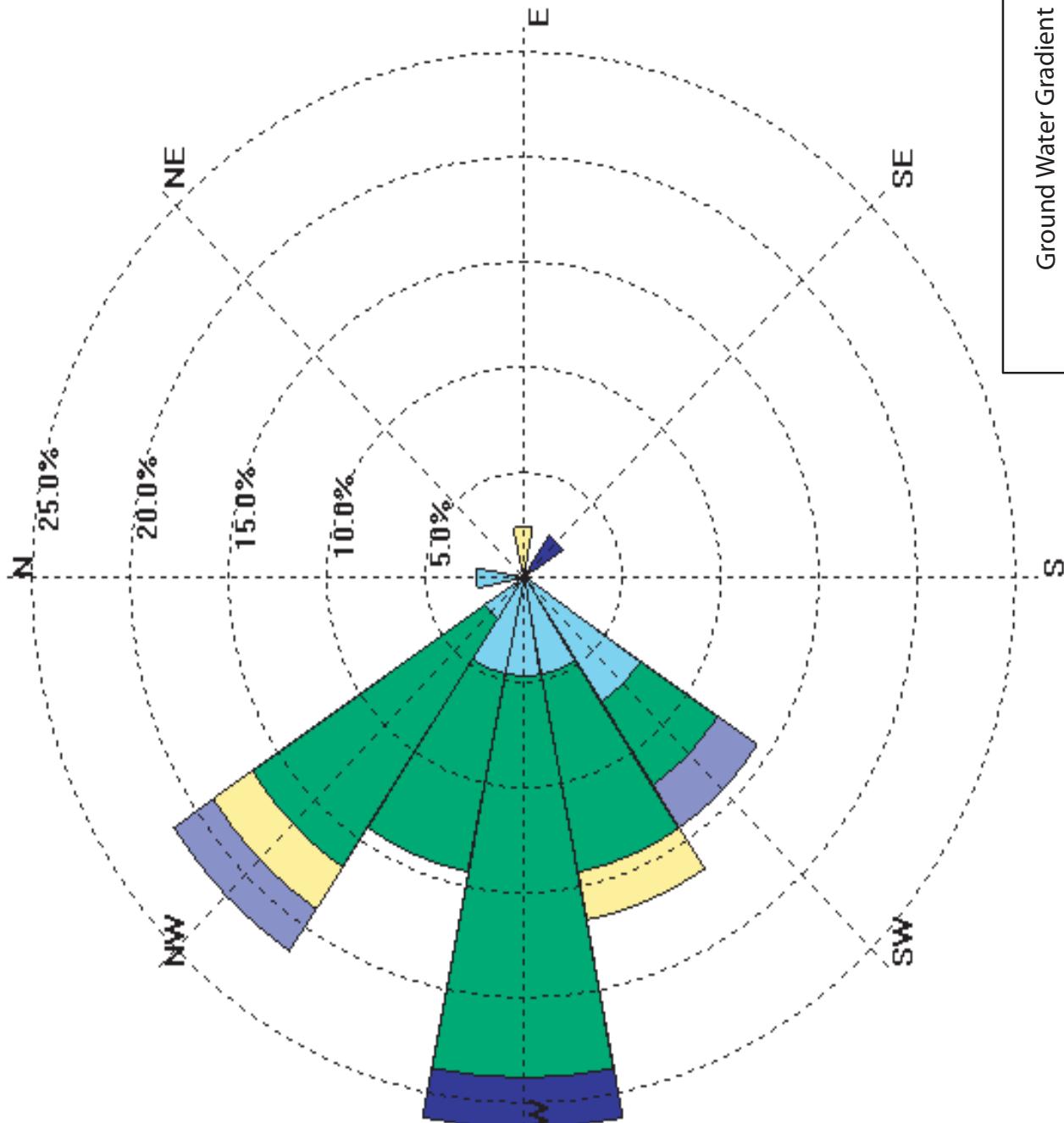
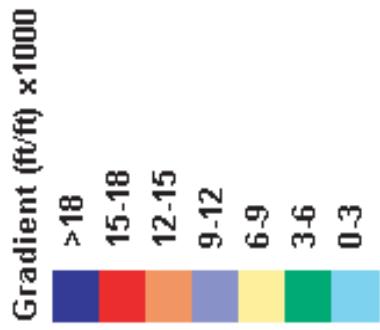


Figure 6
Ground Water Gradient Rose Diagram
1700 Jefferson Street, Oakland, CA

APPENDIX A:
MONITOR WELL WORKSHEETS

Monitor Well Data Sheet

Site Name: BPS Repographics	Well/Sample ID: MW-1
Location: 1700 Jefferson, Oakland	Initial Depth to Water (DTW): 23.42
Client: BPS Repographics	Total Well Depth (TD): 32.35
Sampler: YJB	Well Diameter: 4
Date: 4.12-12	Purge Rate: 0.3
Purge Method: Peristaltic Pump	Sampling Rate: 0.25
Sample Method: Low Flow	

Time	pH	SC	DO	Temp	DTW	Cumulative Volume	ORP	Notes
hh:mm	SU	µmhos/cm	mg/l	°C	feet	liters	mV	
1136	6.19	1860	2.97	13.67	23.50	0.9	-214	
1139	6.17	1860	2.25	13.78	23.51	1.8	-213	
1142	6.20	1860	1.91	13.85	23.54	2.7	-218	
1145	6.16	1860	1.75	13.80	23.56	3.6	-221	
1148	6.21	1870	1.69	13.83	23.56	4.5	-222	
1151	6.16	1870	1.68	13.83	23.56	5.4	-223	
Did Well Dewater?	N	Start Purge Time:	1133	DTW prior to sample:	23.56			
Length of Tubing (ft):	33'	Stop Purge Time:	1151	Start Sample Time:	1151			
Sheen:	NO	Total Liters Purged:	5.4	Total Sample Volume:	120mL			
Odor:	Yes	Turbidity:	low	Color:	clear			

Notes:

Monitor Well Data Sheet

Site Name: 1700 Jefferson	Well/Sample ID: MW-3
Location: 1700 Jefferson, Oakland	Initial Depth to Water (DTW): 22.79
Client: BPS Reprographics	Total Well Depth (TD): 31.77
Sampler: YJB	Well Diameter: 4
Date: 4/12/12	Purge Rate: 0.3
Purge Method: Peristaltic Pump	Sampling Rate: 0.25
Sample Method: Low Flow	

2" well x 1 foot = 0.6 liters

4" well x 1 foot = 2.4L

Time	pH	SC	DO	Temp	DTW	Cumulative Volume	ORP	Notes
hh:mm	SU	µmhos/cm	mg/l	°C	feet	liters	mV	
1205	6.80	236	2.74	14.11	23.01	0.9	-160	
1208	6.41	231	1.28	14.49	23.01	1.8	-172	
1211	6.28	229	0.95	14.68	23.01	2.7	-178	
1214	6.16	229	0.84	14.79	23.01	3.6	-182	
1217	6.19	231	0.79	14.78	23.01	4.5	-184	
1220	6.19	231	0.80	14.77	23.01	5.4	-183	
Did Well Dewater?	N	Start Purge Time:	1202	DTW prior to sample:	23.01			
Length of Tubing (ft):	32	Stop Purge Time:	1220	Start Sample Time:	1220			
Odor:	Slight	Total Liters Purged:	5.4	Total Sample Volume:	120mL			
Turbidity:	low	Sheen:	NO	Color:	Clear			

Notes:

Monitor Well Data Sheet

Site Name: 1700 Jefferson	Well/Sample ID: MW-4
Location: 1700 Jefferson, Oakland	Initial Depth to Water (DTW): 23.33
Client: BPS Reprographics	Total Well Depth (TD): 33.76
Sampler: YJB	Well Diameter: 4
Date: 4/12/12	Purge Rate: 0.3
Purge Method: Peristaltic Pump	Sampling Rate: 0.25
Sample Method: Low Flow	

2" well x 1 foot = 0.6 liters

4" well x 1 foot = 2.4L

Time	pH	SC	DO	Temp	DTW	Cumulative Volume	ORP	Notes
hh:mm	SU	µmhos/cm	mg/l	°C	feet	liters	mV	
1104	6.06	1650	3.93	14.99	23.67	1.0	-179	
1107	6.33	1680	2.29	14.58	23.68	2.1	-205	
1110	6.49	1690	1.98	14.44	23.68	3.0	-229	
1113	6.75	1700	1.96	14.31	23.68	3.9	-262	
1116	6.88	1700	1.79	14.16	23.68	4.8	-286	
1121	6.89	1700	1.58	14.12	23.68	6.3	-296	
1124	6.91	1700	1.49	14.10	23.68	7.2	-301	
1127	6.93	1700	1.48	14.09	23.68	8.1	-303	
Did Well Dewater?	N	Start Purge Time:	1100	DTW prior to sample:	23.68			
Length of Tubing (ft):	~34	Stop Purge Time:	1127	Start Sample Time:	1127			
Odor:	Yes	Total Liters Purged:	8.1	Total Sample Volume:	120mL			
Turbidity:	Low	Sheen:	NO	Color:	Clear			

Notes:

Monitor Well Data Sheet

Site Name: 1700 Jefferson	Well/Sample ID: MW-5
Location: 1700 Jefferson, Oakland	Initial Depth to Water (DTW): 21.69
Client: BPS Reprographics	Total Well Depth (TD): 41.40
Sampler: YJB	Well Diameter: 2
Date: 4/12/12	Purge Rate: 0.3
Purge Method: Peristaltic Pump	Sampling Rate: 0.25
Sample Method: Low Flow	

2" well x 1 foot = 0.6 liters

4" well x 1 foot = 2.4L

Time	pH	SC	DO	Temp	DTW	Cumulative Volume	ORP	Notes
hh:mm	SU	μmhos/cm	mg/l	°C	feet	liters	mV	
1310	6.93	1360	2.82	15.49	21.74	0.9	-189	
1313	7.03	1360	2.28	15.29	21.74	1.8	-198	
1316	7.01	1370	1.92	15.35	21.75	2.7	-200	
1319	6.94	1360	1.73	15.34	21.75	3.6	-200	
1322	6.90	1360	1.65	15.32	21.75	4.5	-199	
1325	6.90	1360	1.59	15.33	21.75	5.4	-199	
1328	6.88	1360	1.58	15.33	21.75	6.3	-197	

Did Well Dewater?	N	Start Purge Time:	1307	DTW prior to sample:	21.75
Length of Tubing (ft):	~42	Stop Purge Time:	1328	Start Sample Time:	1328
Odor:	yes	Total Liters Purged:	6.3	Total Sample Volume:	120mL
Turbidity:	Low	Sheen:	No	Color:	Clear

Notes:

Monitor Well Data Sheet

Site Name: BPS Repographics	Well/Sample ID: MW-6
Location: 1700 Jefferson, Oakland	Initial Depth to Water (DTW): 22.83
Client: BPS Repographics	Total Well Depth (TD): 31.26
Sampler: YJB	Well Diameter: 2
Date: 4-12-12	Purge Rate: 0.3
Purge Method: Peristaltic Pump	Sampling Rate: 0.25
Sample Method: Low Flow	

Time	pH	SC	DO	Temp	DTW	Cumulative Volume	ORP	Notes
hh:mm	SU	umhos/cm	mg/l	°C	feet	liters	mV	
1237	6.65	1180	1.27	14.59	23.17	0.9	-123	
1240	6.68	1190	0.89	14.37	23.25	1.8	-154	
1243	6.68	1190	0.57	14.34	23.26	2.7	-171	
1246	6.68	1200	0.34	14.33	23.26	3.4	-175	
1249	6.67	1200	0.32	14.32	23.26	4.5	-178	
1252	6.67	1200	0.30	14.31	23.26	5.4	-180	
Did Well Dewater?	N	Start Purge Time:	1234	DTW prior to sample:	23.26			
Length of Tubing (ft):	~32'	Stop Purge Time:	1252	Start Sample Time:	1252			
Sheen:	NO	Total Liters Purged:	5.4	Total Sample Volume:	120mL			
Odor:	NO	Turbidity:	low	Color:	clear			

Notes:

APPENDIX B:

LABORATORY ANALYTICAL RESULTS

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-41567-1

Client Project/Site: 1700 Jefferson, Oakland

For:

Environmental Risk Services, Corp.

1600 Riviera Ave

Suite 310

Walnut Creek, California 94596

Attn: Mr. Steven Michelson

A handwritten signature in black ink, appearing to read "Onieka Howard", is centered above a horizontal line.

Authorized for release by:

4/20/2012 4:38:45 PM

Onieka Howard

Project Manager I

onieka.howard@testamericainc.com

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Expert

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Environmental Risk Services, Corp.

Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

✉	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Job ID: 720-41567-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-41567-1

Comments

No additional comments.

Receipt

The samples were received on 4/13/2012 11:25 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.20 C.

Except: Two of three vials for the following sample(s)broke in transit: MW-4.

GC/MS VOA

No analytical or quality issues were noted.

Detection Summary

Client: Environmental Risk Services, Corp.

Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Client Sample ID: MW-1

Lab Sample ID: 720-41567-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7300		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Ethylbenzene	570		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Toluene	4700		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Xylenes, Total	4300		100		ug/L	100		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	34000		5000		ug/L	100		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 720-41567-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	91		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Ethylbenzene	9.7		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Toluene	21		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	26		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	1800		50		ug/L	1		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 720-41567-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	380		5.0		ug/L	10		8260B/CA_LUFTM	Total/NA
Ethylbenzene	100		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Toluene	160		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	100		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	2700		500		ug/L	10		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 720-41567-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	13000		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Ethylbenzene	1700		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Toluene	5000		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Xylenes, Total	2900		100		ug/L	100		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	44000		5000		ug/L	100		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 720-41567-5

No Detections

Client Sample Results

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: MW-1

Date Collected: 04/12/12 11:51

Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50		ug/L			04/17/12 19:26	100
Benzene	7300		50		ug/L			04/17/12 19:26	100
Ethylbenzene	570		50		ug/L			04/17/12 19:26	100
Toluene	4700		50		ug/L			04/17/12 19:26	100
Xylenes, Total	4300		100		ug/L			04/17/12 19:26	100
Gasoline Range Organics (GRO) -C5-C12	34000		5000		ug/L			04/17/12 19:26	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130					04/17/12 19:26	100
1,2-Dichloroethane-d4 (Surr)	105		75 - 138					04/17/12 19:26	100
Toluene-d8 (Surr)	100		70 - 130					04/17/12 19:26	100

Client Sample ID: MW-3

Date Collected: 04/12/12 12:20

Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/17/12 21:50	1
Benzene	91		0.50		ug/L			04/17/12 21:50	1
Ethylbenzene	9.7		0.50		ug/L			04/17/12 21:50	1
Toluene	21		0.50		ug/L			04/17/12 21:50	1
Xylenes, Total	26		1.0		ug/L			04/17/12 21:50	1
Gasoline Range Organics (GRO) -C5-C12	1800		50		ug/L			04/17/12 21:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		67 - 130					04/17/12 21:50	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 138					04/17/12 21:50	1
Toluene-d8 (Surr)	101		70 - 130					04/17/12 21:50	1

Client Sample ID: MW-4

Date Collected: 04/12/12 11:27

Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/16/12 14:03	1
Benzene	380		5.0		ug/L			04/16/12 18:20	10
Ethylbenzene	100		0.50		ug/L			04/16/12 14:03	1
Toluene	160		0.50		ug/L			04/16/12 14:03	1
Xylenes, Total	100		1.0		ug/L			04/16/12 14:03	1
Gasoline Range Organics (GRO) -C5-C12	2700		500		ug/L			04/16/12 18:20	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		67 - 130					04/16/12 14:03	1
4-Bromofluorobenzene	101		67 - 130					04/16/12 18:20	10
1,2-Dichloroethane-d4 (Surr)	88		75 - 138					04/16/12 14:03	1
1,2-Dichloroethane-d4 (Surr)	83		75 - 138					04/16/12 18:20	10
Toluene-d8 (Surr)	103		70 - 130					04/16/12 14:03	1
Toluene-d8 (Surr)	102		70 - 130					04/16/12 18:20	10

Client Sample Results

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: MW-5

Date Collected: 04/12/12 13:28

Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50		ug/L			04/17/12 19:55	100
Benzene	13000		50		ug/L			04/17/12 19:55	100
Ethylbenzene	1700		50		ug/L			04/17/12 19:55	100
Toluene	5000		50		ug/L			04/17/12 19:55	100
Xylenes, Total	2900		100		ug/L			04/17/12 19:55	100
Gasoline Range Organics (GRO) -C5-C12	44000		5000		ug/L			04/17/12 19:55	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130					04/17/12 19:55	100
1,2-Dichloroethane-d4 (Surr)	108		75 - 138					04/17/12 19:55	100
Toluene-d8 (Surr)	101		70 - 130					04/17/12 19:55	100

Client Sample ID: MW-6

Date Collected: 04/12/12 12:52

Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			04/17/12 22:18	1
Benzene	ND		0.50		ug/L			04/17/12 22:18	1
Ethylbenzene	ND		0.50		ug/L			04/17/12 22:18	1
Toluene	ND		0.50		ug/L			04/17/12 22:18	1
Xylenes, Total	ND		1.0		ug/L			04/17/12 22:18	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			04/17/12 22:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130					04/17/12 22:18	1
1,2-Dichloroethane-d4 (Surr)	114		75 - 138					04/17/12 22:18	1
Toluene-d8 (Surr)	99		70 - 130					04/17/12 22:18	1

QC Sample Results

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-111780/5

Matrix: Water

Analysis Batch: 111780

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		0.50		ug/L			04/16/12 09:17	1
Benzene	ND		0.50		ug/L			04/16/12 09:17	1
Ethylbenzene	ND		0.50		ug/L			04/16/12 09:17	1
Toluene	ND		0.50		ug/L			04/16/12 09:17	1
Xylenes, Total	ND		1.0		ug/L			04/16/12 09:17	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			04/16/12 09:17	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene	96		67 - 130					04/16/12 09:17	1
1,2-Dichloroethane-d4 (Surr)	90		75 - 138					04/16/12 09:17	1
Toluene-d8 (Surr)	99		70 - 130					04/16/12 09:17	1

Lab Sample ID: LCS 720-111780/6

Matrix: Water

Analysis Batch: 111780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Methyl tert-butyl ether	25.0	24.5		ug/L		98	62 - 130
Benzene	25.0	22.8		ug/L		91	79 - 130
Ethylbenzene	25.0	22.4		ug/L		90	80 - 120
Toluene	25.0	22.9		ug/L		92	78 - 120
m-Xylene & p-Xylene	50.0	47.1		ug/L		94	70 - 142
o-Xylene	25.0	23.1		ug/L		92	70 - 130
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
4-Bromofluorobenzene	100		67 - 130				
1,2-Dichloroethane-d4 (Surr)	88		75 - 138				
Toluene-d8 (Surr)	101		70 - 130				

Lab Sample ID: LCS 720-111780/8

Matrix: Water

Analysis Batch: 111780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spikes	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C5-C12	500	449		ug/L		90	62 - 120
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
4-Bromofluorobenzene	102		67 - 130				
1,2-Dichloroethane-d4 (Surr)	90		75 - 138				
Toluene-d8 (Surr)	103		70 - 130				

Lab Sample ID: LCSD 720-111780/7

Matrix: Water

Analysis Batch: 111780

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spikes	LCSD	LCSD	Unit	D	%Rec.	RPD
	Added	Result	Qualifier				
Methyl tert-butyl ether	25.0	24.7		ug/L		99	62 - 130

QC Sample Results

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-111780/7

Matrix: Water

Analysis Batch: 111780

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Benzene	25.0	23.1		ug/L		92	79 - 130	1.31	20
Ethylbenzene	25.0	22.2		ug/L		89	80 - 120	1.00	20
Toluene	25.0	22.8		ug/L		91	78 - 120	0.000	20
m-Xylene & p-Xylene	50.0	46.7		ug/L		93	70 - 142	1.00	20
o-Xylene	25.0	22.9		ug/L		92	70 - 130	1.00	20

LCSD LCSD

Surrogate	%Recovery	LCSD		Limits
		Qualifier		
4-Bromofluorobenzene	101			67 - 130
1,2-Dichloroethane-d4 (Surr)	89			75 - 138
Toluene-d8 (Surr)	102			70 - 130

Lab Sample ID: LCSD 720-111780/9

Matrix: Water

Analysis Batch: 111780

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Gasoline Range Organics (GRO) -C5-C12	500	441		ug/L		88	62 - 120	1.75	20

LCSD LCSD

Surrogate	%Recovery	LCSD		Limits
		Qualifier		
4-Bromofluorobenzene	100			67 - 130
1,2-Dichloroethane-d4 (Surr)	91			75 - 138
Toluene-d8 (Surr)	102			70 - 130

Lab Sample ID: MB 720-111895/4

Matrix: Water

Analysis Batch: 111895

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
							Prepared	Analyzed		
Methyl tert-butyl ether	ND		0.50		ug/L				04/17/12 16:05	1
Benzene	ND		0.50		ug/L				04/17/12 16:05	1
Ethylbenzene	ND		0.50		ug/L				04/17/12 16:05	1
Toluene	ND		0.50		ug/L				04/17/12 16:05	1
Xylenes, Total	ND		1.0		ug/L				04/17/12 16:05	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L				04/17/12 16:05	1

MB MB

Surrogate	%Recovery	MB		Limits
		Qualifier		
4-Bromofluorobenzene	105			67 - 130
1,2-Dichloroethane-d4 (Surr)	107			75 - 138
Toluene-d8 (Surr)	100			70 - 130

Lab Sample ID: LCS 720-111895/5

Matrix: Water

Analysis Batch: 111895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec.		RPD	Limit
		Result	Qualifier			%Rec.	Limits		
Methyl tert-butyl ether	25.0	26.2		ug/L		105	62 - 130		
Benzene	25.0	24.6		ug/L		98	79 - 130		

QC Sample Results

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-111895/5

Matrix: Water

Analysis Batch: 111895

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
Ethylbenzene	25.0	22.0		ug/L		88	80 - 120
Toluene	25.0	22.2		ug/L		89	78 - 120
m-Xylene & p-Xylene	50.0	45.8		ug/L		92	70 - 142
o-Xylene	25.0	23.8		ug/L		95	70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		75 - 138
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCS 720-111895/7

Matrix: Water

Analysis Batch: 111895

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
Gasoline Range Organics (GRO)	500	529		ug/L		106	62 - 120
-C5-C12							

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	106		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		75 - 138
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 720-111895/6

Matrix: Water

Analysis Batch: 111895

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	RPD Limit
		Result	Qualifier						
Methyl tert-butyl ether	25.0	26.9		ug/L		108	62 - 130	2.64	20
Benzene	25.0	24.7		ug/L		99	79 - 130	0.000	20
Ethylbenzene	25.0	22.0		ug/L		88	80 - 120	0.000	20
Toluene	25.0	22.3		ug/L		89	78 - 120	0.000	20
m-Xylene & p-Xylene	50.0	45.5		ug/L		91	70 - 142	1.00	20
o-Xylene	25.0	23.6		ug/L		94	70 - 130	1.00	20

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		75 - 138
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 720-111895/8

Matrix: Water

Analysis Batch: 111895

Analyte	Spike Added	LCSD		Unit	D	%Rec	Limits	RPD	RPD Limit
		Result	Qualifier						
Gasoline Range Organics (GRO)	500	521		ug/L		104	62 - 120	1.41	20
-C5-C12									

QC Sample Results

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-111895/8

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 111895

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		75 - 138
Toluene-d8 (Surr)	100		70 - 130

QC Association Summary

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

GC/MS VOA

Analysis Batch: 111780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-41567-3	MW-4	Total/NA	Water	8260B/CA_LUFT MS	5
720-41567-3	MW-4	Total/NA	Water	8260B/CA_LUFT MS	6
LCS 720-111780/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	7
LCS 720-111780/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	8
LCSD 720-111780/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	9
LCSD 720-111780/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	10
MB 720-111780/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	11

Analysis Batch: 111895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-41567-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	12
720-41567-2	MW-3	Total/NA	Water	8260B/CA_LUFT MS	13
720-41567-4	MW-5	Total/NA	Water	8260B/CA_LUFT MS	14
720-41567-5	MW-6	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-111895/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-111895/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-111895/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-111895/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-111895/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Lab Chronicle

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Client Sample ID: MW-1

Date Collected: 04/12/12 11:51
Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		100	111895	04/17/12 19:26	AC	TAL SF

Client Sample ID: MW-3

Date Collected: 04/12/12 12:20
Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	111895	04/17/12 21:50	AC	TAL SF

Client Sample ID: MW-4

Date Collected: 04/12/12 11:27
Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	111780	04/16/12 14:03	AC	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		10	111780	04/16/12 18:20	AC	TAL SF

Client Sample ID: MW-5

Date Collected: 04/12/12 13:28
Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		100	111895	04/17/12 19:55	AC	TAL SF

Client Sample ID: MW-6

Date Collected: 04/12/12 12:52
Date Received: 04/13/12 11:25

Lab Sample ID: 720-41567-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	111895	04/17/12 22:18	AC	TAL SF

Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pleasanton	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Environmental Risk Services, Corp.
Project/Site: 1700 Jefferson, Oakland

TestAmerica Job ID: 720-41567-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-41567-1	MW-1	Water	04/12/12 11:51	04/13/12 11:25
720-41567-2	MW-3	Water	04/12/12 12:20	04/13/12 11:25
720-41567-3	MW-4	Water	04/12/12 11:27	04/13/12 11:25
720-41567-4	MW-5	Water	04/12/12 13:28	04/13/12 11:25
720-41567-5	MW-6	Water	04/12/12 12:52	04/13/12 11:25

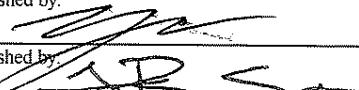
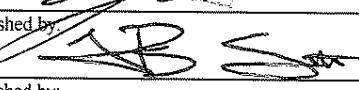
San Francisco
1220 Quarry Lane

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

720-41567

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
137740
TestAmerica Laboratories, Inc.

Client Contact		Project Manager: STEVE MICHELSON Tel/Fax: 925-938-1600			Site Contact: Yola Bayram Lab Contact: Yola Bayram		Date: 4-13-12		COC No: <u>1</u> of <u>1</u> COCs	
Environmental Risk Services 1600 Riviera Avenue Walnut Creek, CA 94596 (925) 938-1600 x106 Phone (925) 938-1610 FAX Project Name: 1700 JEFFERSON Site: 1700 JEFFERSON P.O. #		Analysis Turnaround Time Calendar (C) or Work Days (W) <u>STD</u> TAT if different from Below <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day					Carrier:		Job No.	
									SDG No.	
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Field Summary THREE, TEXAS (8/26/0)	Sample Specific Notes:		
MW-1		4/12/12	1151	GW	W	3	x			
MW-3		4/12/12	1220	GW	W	3	x			
MW-4		4/12/12	1127	GW	W	3	x			
MW-5		4/12/12	1328	GW	W	3	x			
MW-6		4/12/12	1252	GW	W	3	x			
Preservation Used: 1=Ice, 2=HCl; 3=H ₂ SO ₄ ; 4=HNO ₃ ; 5=NaOH; 6= Other <u>1/2</u>										
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant Poison B <input type="checkbox"/> Unknown <input type="checkbox"/>						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Special Instructions/QC Requirements & Comments: Please email analytical results to ybayram@erscorp.us and smichelson@erscorp.us Please issue GEOTRACKER EDF										
Relinquished by: 	Company: <u>ERS</u>	Date/Time: <u>4-13-12 836</u>	Received by: <u>BS</u>	Company: <u>TASF</u>	Date/Time: <u>4-13-12 0836</u>					
Relinquished by: 	Company: <u>TASF</u>	Date/Time: <u>4-13-12 1125</u>	Received by: <u>Jeanne Miller</u>	Company: <u>ERS</u>	Date/Time: <u>4-13-12 1125</u>					
Relinquished by: 	Company: 4/20/2012	Date/Time:	Received by:	Company: 6/1/2012	Date/Time:					

4.3 °C

14 13 12 11 10 9 8 7 6 5 4 3 2 1

Login Sample Receipt Checklist

Client: Environmental Risk Services, Corp.

Job Number: 720-41567-1

Login Number: 41567

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Thomas, Bryan

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	