April 29, 2011

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

Re: Semi-Annual Ground Water Monitoring Report, March 2011
BPS Reprographics (Formerly City Blue Print)
RWQCB Case #01-0210
1700 Jefferson St
Oakland CA, 94612

Dear Barbara Jakub,

I have directed ERS 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 and I have 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,

David Blain
Authorized Representative

Attachment: Report

SEMI-ANNUAL GROUND WATER MONITORING REPORT MARCH 2011

BPS REPROGRAPHICS
1700 Jefferson Street
Oakland, California

Environmental Risk Specialties Corporation

April 29, 2011
Mr. David Blain
BPS Reprographic Services
945 Bryant Street
San Francisco, CA 94103

RE: Semi-Annual Ground Water Monitoring Report, March 2011
1700 Jefferson Street, Oakland, California
Fuel Leak Case No. RO 151
ERS Project No 1015-01.00

Dear Mr. Blain:

Environmental Risk Specialties Corporation (ERS) encloses herein one hard copy of the Semi-Annual Ground Water Monitoring Report, March 2011 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

March 2011

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
April 29, 2011

Reviewed By:

Steven Michelson, PG

Principal Geologist

TABLE OF CONTENTS

LIST OF TABLES

LIST OF CHARTS

LIST OF FIGURES

LIST OF APPENDICES

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 four 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.

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.

2.1 Subsurface Conditions

Boring logs indicate that silty sand and clayey sand are present from the surface to a depth of approximately 27.0 to 30.5 feet below ground surface (bgs). Sand was reported in the boring for well MW-4 from approximately 27.0 to 30.5 feet bgs. These soils are underlain by stiff to very stiff, saturated silty clays to the maximum explored depth of 33.0 feet bgs. Ground water was encountered at approximately 25 feet bgs in the boreholes.

3.0 GROUND WATER MONITORING AND SAMPLING

Ground water monitoring and sampling of the Site was performed on March 16, 2011 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 March 16, 2011 are illustrated on Figure 3. The ground water gradient direction is to the west-southwest at an average of 0.0024 ft/ft.

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 ±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-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 southwest at an average of 0.0024.
- Silty sand and clayey sand are present from the surface to a depth of approximately 27.0 to 30.5 feet below ground surface.
- Concentrations of TPH (GRO) and benzene increased in wells MW-1, MW-3, and MW-5.
- No detectable TPH (GRO), ethylbenzene, toluene or xylenes concentrations were reported in downgradient well MW-6. However, benzene was detected for the first time at a concentration well below the ESLs.
- Despite seasonal fluctuations, plume concentrations have remained relatively stable over the past 10 years (Charts 1 and 2).
- Based on the recent detection of benzene in well MW-6, the plume appears to be migrating in the down gradient direction (Figure 5).

7.0 REFERENCES

ASTM 2002. *Standard Practice for Low-Flow Purging 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

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)	DTW (ft bgs)	GWE (ft bgs)	DTW (ft bgs)	GWE (ft bgs)	DTW (ft bgs)	GWE (ft bgs)	DTW (ft bgs)	GWE (ft bgs)	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

Notes:

Well elevations prior to 2010 are in City of Oakland Datum; After 2010, all elevations are in NAVD 88 Datum.

NS: Not Sampled
FP: Free Product
NA: Not Available
MSL: Mean sea level
ft: feet
bgs: below ground surface
1: Data not available due to ORC socks in well
2: Data not available due to probable equipment malfunction or operator error

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

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)						(inches)
ESLs		210	46	130	43	100	1800	--
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
	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
	3/6/1996	--	--	--	--	--	--	FP
	6/11/1996	--	--	--	--	--	--	FP
	9/19/1996	--	--	--	--	--	--	FP
	12/23/1996	--	--	--	--	--	--	FP
	3/27/1997	--	--	--	--	--	--	FP
	6/4/1997	68,000	2,200	4,500	1,500	11,000	<500	--
	9/26/1997	59,000	6,000	3,000	1,600	8,600	<500	--
	12/23/1997	41,000	6,800	3,000	1,400	6,600	300	--
	3/31/1998	44,000	8,300	3,700	1,100	4,300	420	--
	6/18/1998	32,000	1,100	3,800	550	3,000	<50	--
	8/28/1998	26,000	8,600	2,300	730	2,100	<50	--
	12/2/1998	26,000	9,200	4,300	820	2,800	<50	--
	3/10/1999	26,000	8,200	5,900	870	3,500	<50	--
	6/30/1999	18,000	7,000	5,800	950	2,500	<25	--
	9/29/1999	21,000	9,200	10,000	1,200	5,500	<250	--
	9/29/1999	14,000	6,200	5,900	620	3,500	<250	--
	11/22/1999	24,000	4,900	5,000	730	3,500	<100	--
	2/11/2000	19,000	4,100	4,800	530	2,800	7	--
	5/30/2000	19,000	5,700	8,400	730	3,500	<5.0	--
	9/15/2000	20,000	4,100	5,700	540	2,700	<12	--
	11/16/2000	18,000	3,500	4,300	640	3,200	<40	--
	4/2/2001	19,000	4,700	5,200	570	2,600	50	--
	6/28/2001	39,000	5,200	4,200	660	3,900	9	--
	8/30/2001	31,000	5,600	5,100	560	2,500	<100	--
	12/26/2001	34,000	5,300	5,200	630	2,400	<120	--
	4/24/2002	35,000	4,900	6,000	740	3,100	<120	--
	6/14/2002	35,000	5,400	6,800	870	3,500	<250	--
	8/20/2002	26,000	4,100	4,700	620	2,700	<120	--
	12/27/2002	28,000	4,500	5,000	660	3,000	<120	--
	4/1/2003	16,000	4,500	6,000	680	3,100	<120	--
	7/1/2003	61,000	7,700	11,000	1,200	6,700	<250	--
	9/25/2003	59,000	7,600	9,400	1,000	4,800	<1,200	--
	12/29/2003	46,000	6,600	7,900	960	4,000	<250	--
	5/18/2004	23,000	4,100	4,700	450	1,500	<50	--
	6/30/2004	24,000	3,500	3,600	390	1,300	<50	--
	9/23/2004	24,000	3,800	3,900	470	1,400	<25	--
	12/28/2004	22,000	3,400	3,400	380	1,400	<250	--
	3/16/2005	21,000	4,100	4,200	470	1,300	<50	--
	6/23/2005	30,000	5,400	5,500	520	1,900	<1,200	--
	9/9/2005	7,100	840	950	120	410	<120	--
	12/2/2005	19,000	3,600	3,500	410	1,300	<2.5	--
	3/24/2006	29,000	6,200	6,000	620	2,000	<500	--
	6/29/2006	23,000	4,800	4,000	330	1,200	<500	--
	9/13/2006	20,000	4,500	3,900	400	1,400	<250	--
	12/27/2006	31,000	6,000	5,300	710	2,500	<500	--
	3/30/2007	30,000	5,000	4,600	520	1,700	<500	--
	7/2/2007	14,000	2,500	2,000	280	930	<500	--
	10/2/2007	19,000	3,400	2,700	400	1,200	<500	--
	12/13/2007	18,000	3,500	2,700	390	1,100	<500	--
	3/26/2008	28,000	4,900	4,900	530	2,100	<500	--
	6/2/2008	20,000	3,300	3,300	380	1,700	<500	--
	9/10/2008	24,000	4,200	4,200	470	2,200	<500	--
	11/19/2008	26,000	4,500	4,500	490	2,500	<500	--
	3/3/2009	33,100	5,380	5,380	603	2,800	<100	--
	9/3/2009	35,900	5,570	5,180	620	3,270	<100	--
	3/3/2010	51,700	10,100	8,050	952	4,560	<200	--
	9/8/2010	30,000	7,300	6,300	550	3,700	<50	--
	3/16/2011	38,000	8,600	6,900	670	4,300	<50	--
MW-1A	9/12/1988	--	--	--	--	--	--	28.2
	7/12/1989	220,000	1,200	9,210	3,100	24,000	NA	18.6
	8/1/1991	350,000	17,000	31,000	3,000	FP	NA	FP
	7/2/1992	FP	FP	FP	FP	FP	NA	18
	9/30/1992	FP	FP	FP	FP	FP	NA	10 - 13
	2/12/1993	FP	FP	FP	FP	FP	NA	13
	3/30/1993	FP	FP	FP	FP	FP	NA	10.2-14.8
	1/6/1994	FP	FP	FP	FP	14,000	NA	16.2
	4/13/1994	170,000	17,000	31,000	2,100	22,000	NA	12
	6/29/1994	95,000	16,000	21,000	1,500	12,000	NA	4.5+/-
	12/8/1994	190,000	13,000	21,000	1,400	11,000	NA	--
	4/3/1995	67,000	11,000	13,000	910	9,800	NA	--
	6/27/1995	53,000	11,000	9,900	500	6,300	NA	--
	9/19/1995	52,000	8,900	11,000	790	5,300	NA	--
	12/13/1995	62,000	9,900	9,200	710	6,800	NA	--
	3/6/1996	200,000	14,000	22,000	2,700	22,000	NA	--
	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	--
	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	--
MW-2	7/8/1987	8,200	1,500	340	--	87	--	--
	11/9/1987	WELL DESTROYED						
MW-3	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	--	--	--	--	--	--	4.1
	11/11/1992	--	--	--	--	--	--	2
	1/29/1993	--	--	--	--	--	--	1.7
	2/12/1993	--	--	--	--	--	--	1.3
	1/6/1994	--	--	--	--	--	--	2.2
	3/17/1994	--	--	--	--	--	--	2.4
	4/13/1994	--	--	--	--	--	--	1.8
	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	--	--
	12/13/1995	19,000	220	480	140	1,700	--	--
	3/6/1996	7,000	120	170	49	440	--	--
	6/11/1996	16,000	170	270	68	1,500	--	--
	9/19/1996	6,000	45	30	15	300	--	--
	6/4/1997	85,000	8,500	13,000	2,400	16,000	<500	--
	9/26/1997	47,000	610	6,000	930	5,900	<100	--
	12/23/1997	32,000	640	5,300	800	5,900	<300	--
	3/31/1998	32,000	690	3,800	870	5,200	350	--
	6/18/1998	16,000	180	1,500	490	3,700	<25	--
	8/28/1998	17,000	84	1,100	430	3,800	<50	--
	12/2/1998	3,200	39	85	25	360	<50	--
	3/10/1999	9,600	86	540	250	2,300	<25	--
	6/30/1999	7,900	31	330	200	1,800	<25	--
	9/29/1999	5,000	120	340	230	1,300	10	--
	9/29/1999	4,100	180	340	130	580	14	--
	11/22/1999	3,100	7	33	27	260	<1.0	--
	2/11/2000	540	8	20	2	28	31	--
	5/30/2000	490	11	6	0	17	<5.0	--
	9/15/2000	1,500	28	14	3	160	<5.0	--
	11/16/2000	1,300	20	34	25	28	<5.0	--
	4/2/2001	170	9	6	1	8	77	--
	6/28/2001	4,900	150	240	38	160	<2	--
	8/30/2001	3,100	42	48	26	210	<1.2	--
	12/26/2001	950	8	5	1	7	<0.5	--
	4/24/2002	300	11	5	1	1	<0.5	--
	6/14/2002	4,600	130	470	91	390	<0.5	--
	8/20/2002	4,900	330	170	40	150	<5.0	--
	12/27/2002	4,000	110	280	57	260	19	--
	4/1/2003	5,900	370	150	44	230	<1.0	--
	7/1/2003	12,000	200	460	130	390	<5.0	--
	9/25/2003	10,000	150	300	120	280	<2.5	--
	12/29/2003	7,300	160	250	79	210	<2.5	--
	5/18/2004	1,500	77	72	19	59	<12	--
	6/30/2004	2,000	81	37	34	40	<1.0	--
	9/23/2004	3,400	140	95	36	40	<10	--
	12/28/2004	3,900	340	37	11	60	<5.0	--
	3/16/2005	970	1	2	1	3	<2.5	--
	6/23/2005	850	56	7	<5	12	<25	--
	9/9/2005	3,900	470	100	33	96	<62	--
	12/2/2005	760	14	8	2	17	<0.5	--
	3/24/2006	590	83	41	7	33	<12	--
	6/29/2006	1,100	130	38	16	21	<25	--
	9/13/2006	1,300	260	71	44	28	<25	--
	12/27/2006	3,000	250	160	49	140	<25	--
	3/30/2007	3,100	250	260	46	110	<25	--
	7/2/2007	2,600	250	250	54	130	<25	--
	10/2/2007	1,900	170	140	24	48	<25	--
	12/13/2007	2,900	250	170	66	120	<25	--
	3/26/2008	2,300	340	95	26	64	<25	--
	6/2/2008	2,300	270	250	59	130	<25	--
	9/10/2008	2,900	300	180	88	220	<25	--
	11/19/2008	1,000	62	55	21	32	<25	--
	3/3/2009	3,020	37	10	3.8J	12.3J	<10	--
	9/3/2009	538	59	1	13	2	<1.0	--
	3/3/2010	1,570	98	12	20	14	<1.0	--
	9/8/2010	1,100	200	23	23	11	<0.5	--
	3/16/2011	930	75	19	8	6	<2.5	

Notes:

µg/L: micrograms per liter (approximately equivalent to ppb)

<: Concentration is below the reporting limit of the lab

J: Estimated value

--: not applicable or none

ESLs: Environ

FP: Free product measured (amount unknown)

Concentration is above selected screening criteria

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)						(inches)
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	--
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	59000	13000	3800	1800	2900	--	--
	4/3/1995	51,000	15,000	2,200	2,800	4,500	--	--
	6/27/1995	41000	12000	2100	1400	1600	--	--
	9/19/1995	50000	1600	2700	2000	2100	--	--
	12/13/1995	45000	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	--
	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	<10	--
	11/16/2000	1,800	470	220	39	100	<5	--
	4/2/2001	15,000	7,400	3,000	1,000	2,200	<50	--
	6/28/2001	3,600	300	11	16	15	4	--
	8/30/2001	34,000	8,300	3,000	1,400	2,600	<50	--
	12/26/2001	1,900	300	110	55	120	<10	--
	4/24/2002	9,400	2,300	130	300	270	<50	--
	6/14/2002	1,700	110	<2.5	7	<2.5	<0.50	--
	8/20/2002	3,200	320	9	22	19	<0.50	--
	12/27/2002	6,200	2,200	140	160	250	<25	--
	9/25/2003	43,000	12,000	2,800	1,500	3,000	<1,200	--
	12/29/2003	26,000	7,700	1,900	910	210	<2.5	--
	5/18/2004	15,000	5,000	1,300	380	770	<50	--
	6/30/2004	18,000	5,700	1,600	540	1,200	<50	--
	9/23/2004	42,000	12,000	3,900	1,200	2,400	<120	--
	12/28/2004	41,000	10,000	3,800	1,000	2,300	<250	--
	3/16/2005	37,000	11,000	3,800	1,100	2,400	<120	--

Well ID	Date Sampled	TPH (GRO)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Free Product
		(µg/L)						(inches)
ESLs		210	46	130	43	100	1800	--
MW-5	6/23/2005	27,000	7,700	1,700	680	1,300	<1,200	--
	9/9/2005	46,000	10,000	2,700	1,100	2,100	<1,200	--
	12/2/2005	21,000	5,900	1,500	600	1,200	<500	--
	3/24/2006	<10,000	2,800	450	190	180	<500	--
	6/29/2006	1,200	240	11	13	18	<2.5	--
	9/13/2006	5,800	1,600	210	180	270	<120	--
	12/27/2006	16,000	4,300	610	460	750	<500	--
	3/30/2007	31,000	10,000	1,400	1,100	1,600	<500	--
	7/2/2007	33,000	9,400	1,400	1,000	1,500	<500	--
	10/2/2007	36,000	11,000	2,100	1,100	1,700	<620	--
	12/13/2007	34,000	11,000	2,600	1,200	1,900	<1,200	--
	3/26/2008	28,000	7,700	1,900	860	1,300	<1,200	--
	6/2/2008	43,000	13,000	3,800	1,400	2,400	<1,200	--
	9/10/2008	45,000	13,000	3,700	1,200	2,200	<1,200	--
	11/19/2008	46,000	14,000	3,900	3,900	2,700	<1,200	--
	3/3/2009	43,400	11,700	3,560	1,290	2,200	<250	--
	9/3/2009	35,900	8,800	1,240	1,720	2,420	<100	--
	3/3/2010	27,200	6,820	279	1,870	2,050	<100	--
	9/8/2010	22,000	6,000	250	1,700	1,900	<50	--
	3/16/2011	31,000	6,400	500	1,900	2,600	<50	--
MW-6	6/11/1996	<50	<0.5	<0.5	<0.5	<2	--	--
	9/19/1996	<50	<0.5	<0.5	<0.5	<2	--	--
	12/23/1996	<50	<0.5	<0.5	<0.5	<2	<5	--
	3/27/1997	<50	<0.5	<0.5	<0.5	<2	<5	--
	6/4/1997	<50	<0.5	<0.5	<0.5	<2	<5	--
	9/26/1997	<50	<0.5	<0.5	<0.5	<2	<5	--
	12/23/1997	<50	<0.5	<0.5	<0.5	<2	<5	--
	3/31/1998	<50	<0.5	<0.5	<0.5	<2	<5	--
	6/18/1998	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	8/28/1998	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	12/2/1998	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	3/10/1999	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	6/30/1999	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	9/29/1999	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	9/29/1999	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	11/22/1999	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	2/11/2000	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	5/30/2000	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	9/15/2000	<50	<0.3	<0.3	<0.3	<0.6	<1.0	--
	11/16/2000	<50	<0.3	<0.3	<0.3	<0.3	<1.0	--
	4/2/2001	<50	<0.3	<0.3	<0.3	2.7	5	--
	6/28/2001	<50	<0.5	<0.5	<0.3	<0.5	17	--
	8/30/2001	<50	<0.5	<0.5	<0.3	8.7	<2.5	--
	12/26/2001	66	3.6	3.6	3.6	<0.5	<2.5	--
	4/24/2002	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	6/14/2002	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	8/20/2002	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	12/27/2002	<50	<0.5	<0.05	<0.5	<0.5	<2.5	--
	4/1/2003	<50	<0.5	<0.05	<0.5	<0.5	<2.5	--
	7/1/2003	<50	<0.5	<0.05	<0.5	<2.5	<2.5	--
	9/25/2003	<50	<0.5	<0.05	<0.5	<2.5	<2.5	--
	12/29/2003	<50	<0.5	<0.05	<0.5	<0.5	<2.5	--
	5/18/2004	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	6/30/2004	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	9/23/2004	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	12/28/2004	59	<0.5	<0.5	<0.5	2	<2.5	--
	3/16/2005	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	6/23/2005	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	9/9/2005	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	12/2/2005	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	3/24/2006	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	6/29/2006	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	9/13/2006	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	12/27/2006	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	3/30/2007	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	7/2/2007	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	10/2/2007	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	12/13/2007	<50	<0.5	1	<0.5	<0.5	<2.5	--
	3/26/2008	<50	<0.5	<0.5	<0.5	1	<2.5	--
	6/2/2008	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	9/10/2008	<51	<0.5	<0.5	<0.5	<0.5	<2.6	--
	11/19/2008	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	3/3/2009	<50	<1.0	0.53J	<1.0	<2.0	<1.0	--
	9/3/2009	<50	<1.0	<1.0	<1.0	<2.0	<1.0	--
	3/3/2010	<50	<1.0	<1.0	<1.0	<2.0	<1.0	--
	9/8/2010	<50	<0.5	<0.5	<0.5	<1.0	<0.5	--
	3/16/2011	<50	0.67	<0.5	<0.5	<1.0	<0.5	

Notes:

µg/L: micrograms per liter (approximately equivalent to ppb)

<: Concentration is below the reporting limit of the lab

J: Estimated value

--: not applicable or none

ESLs: Environmental Screening Levels

FP: Free product measured (amount unknown)

Concentration is above selected screening criteria

CHARTS

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

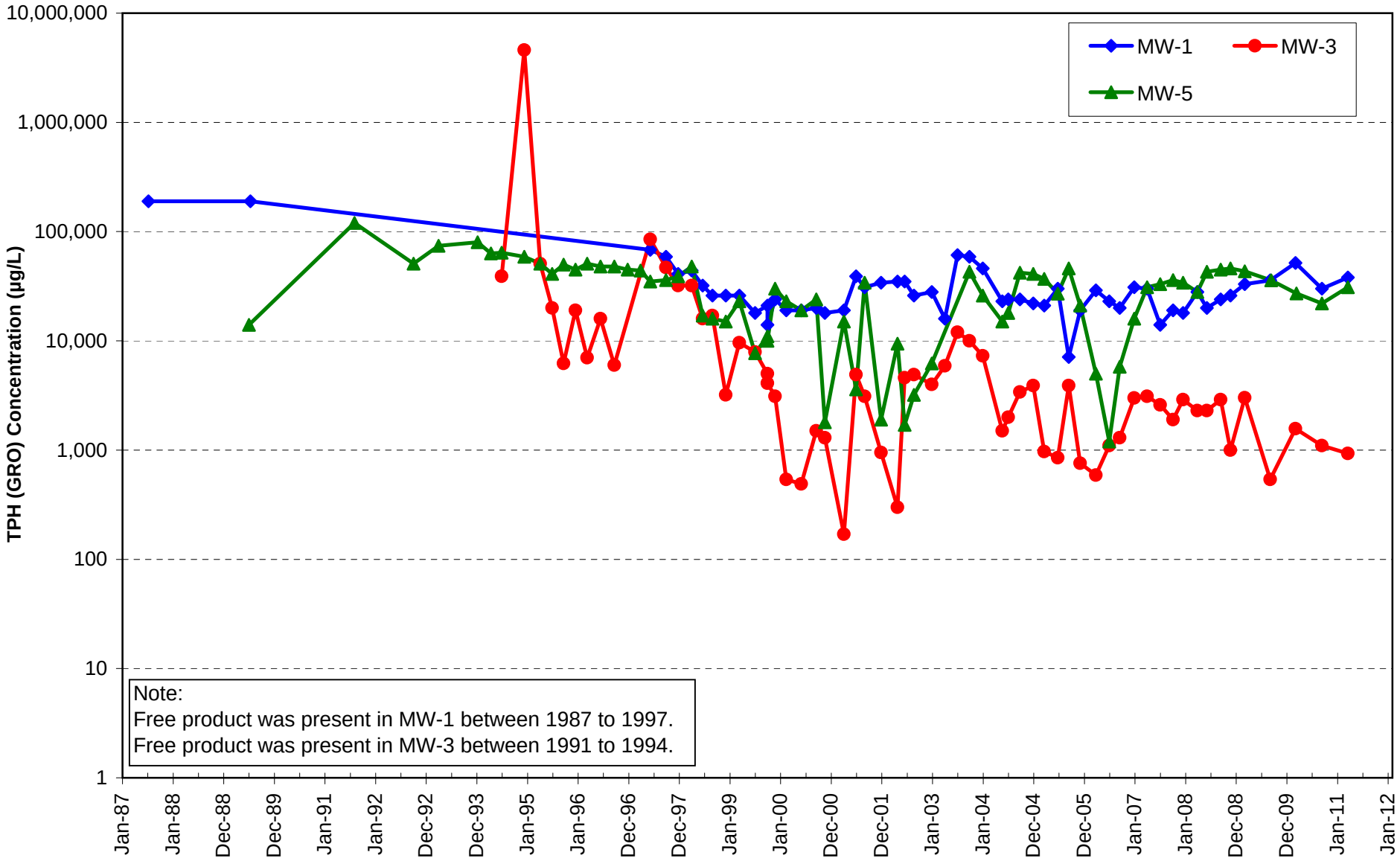
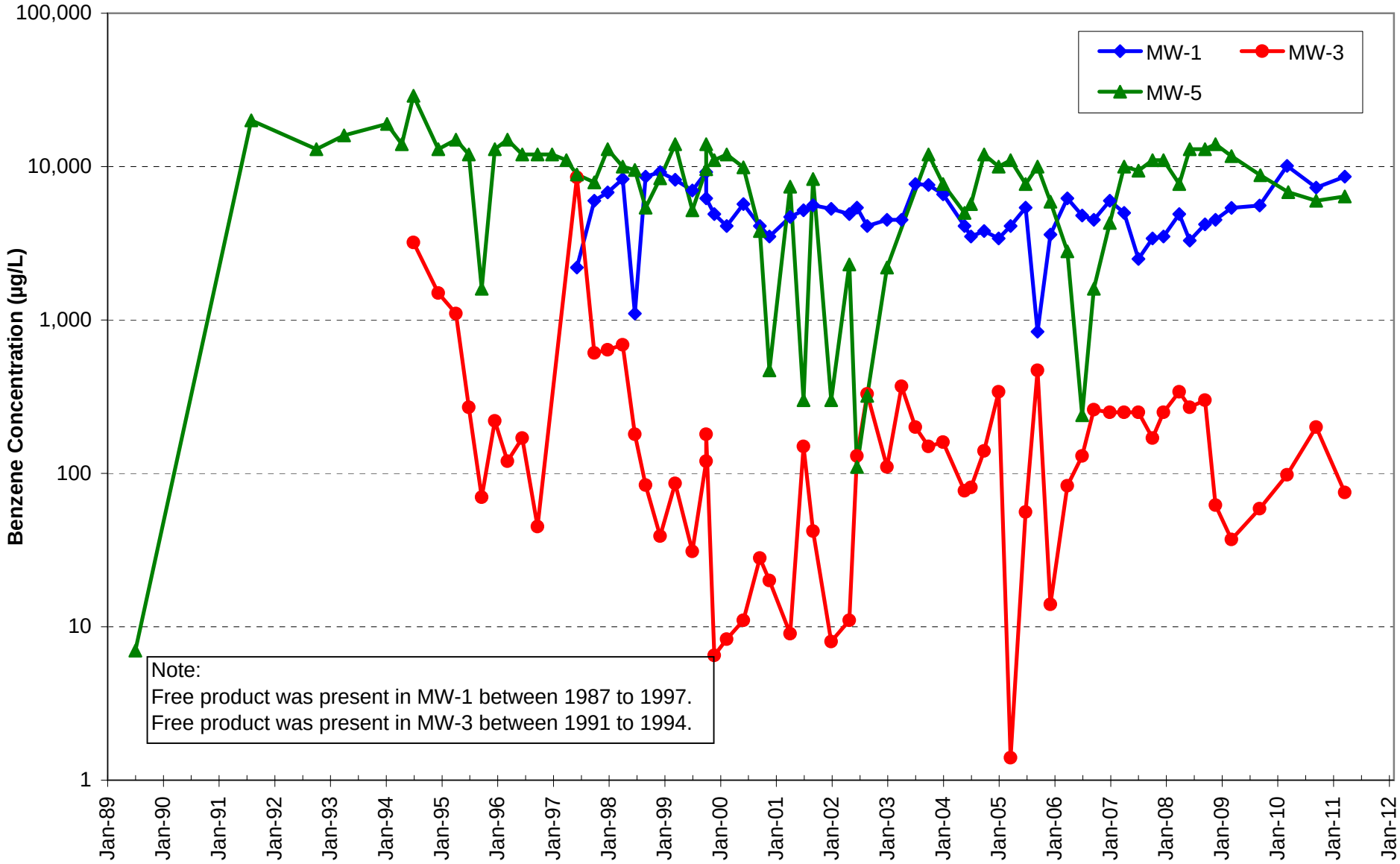
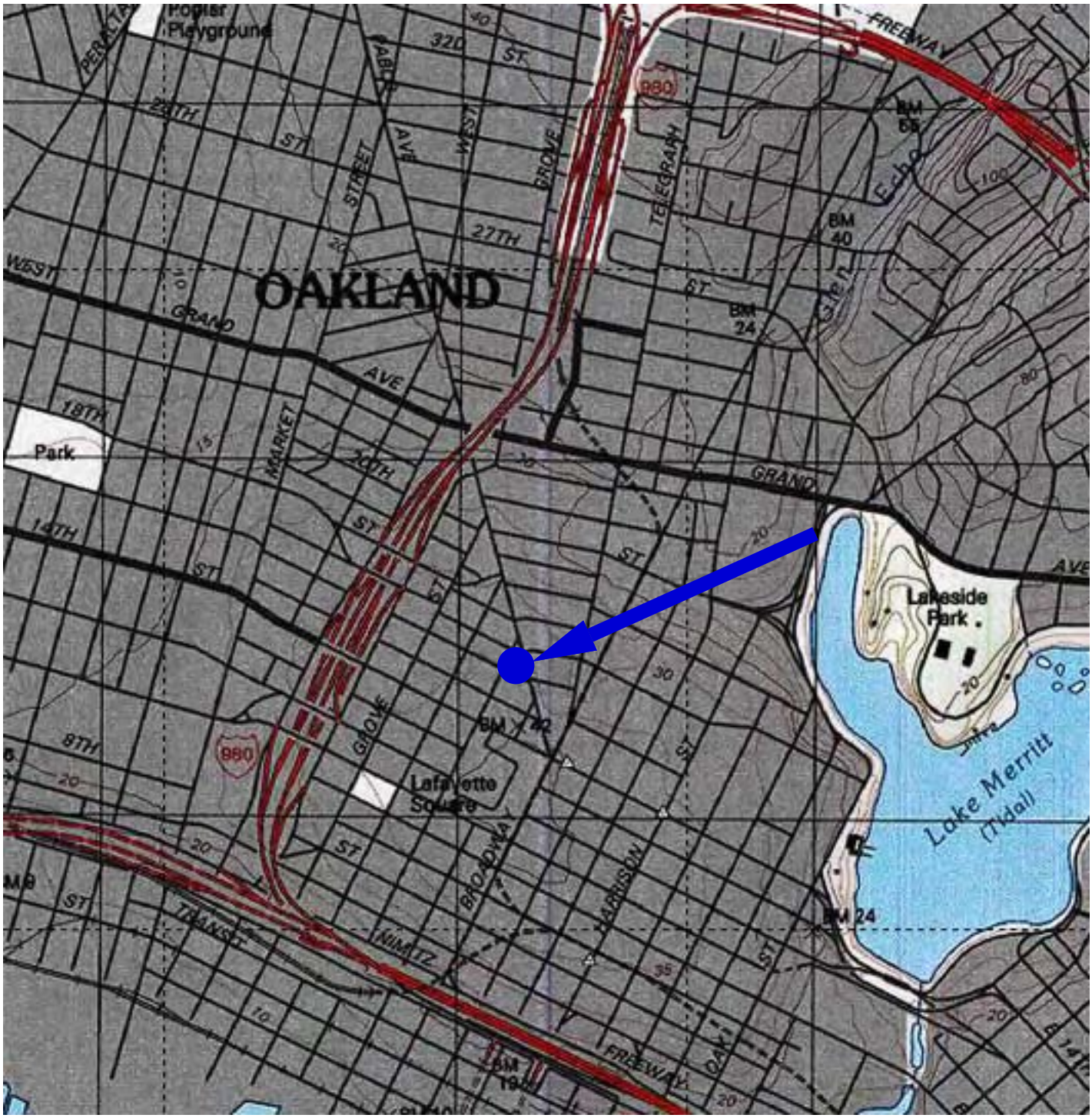


CHART 2
Concentrations of Benzene vs. Time in MW-1, MW-3, and MW-5
1700 Jefferson, Oakland, California



FIGURES



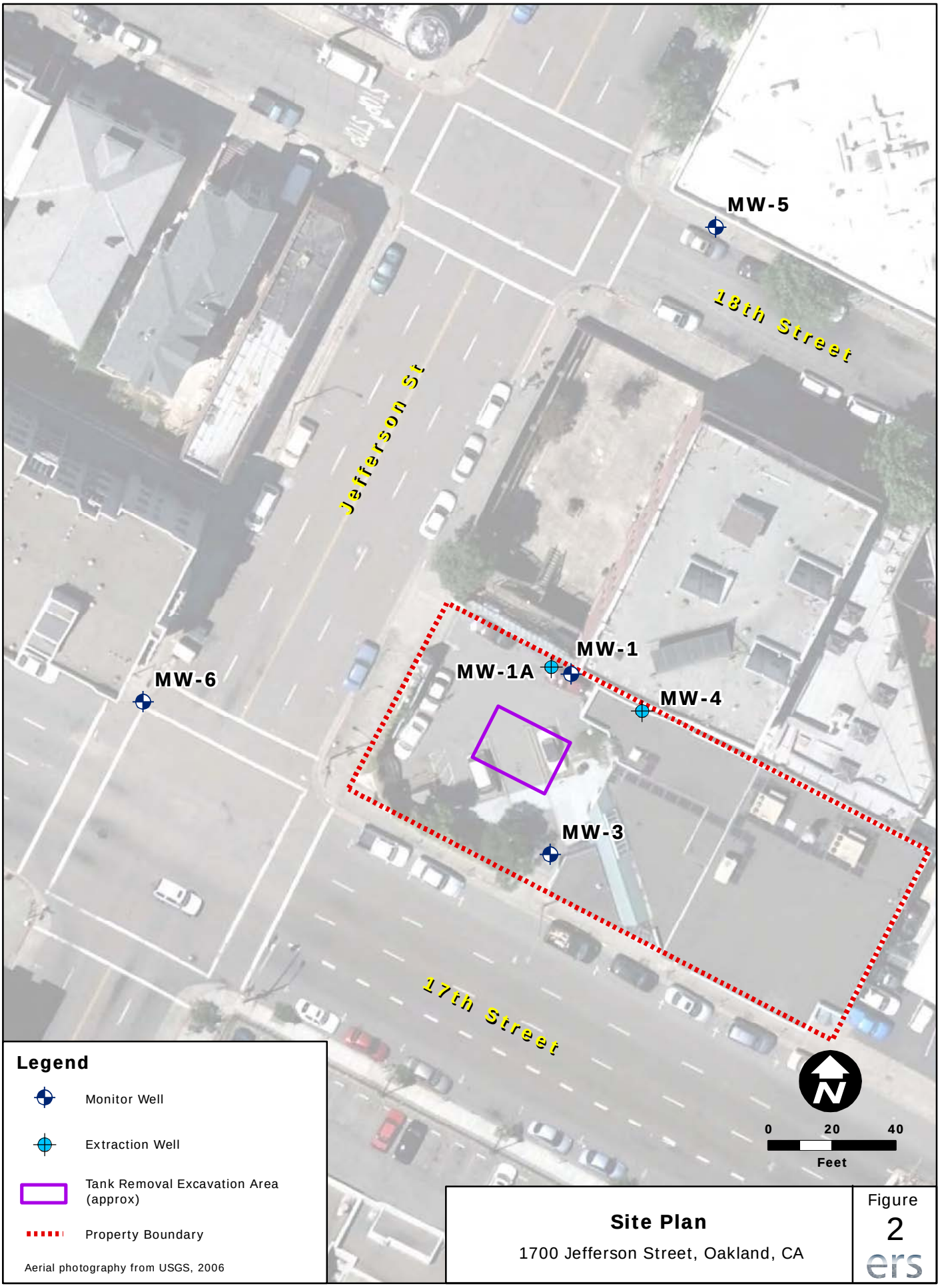
N

Location Map
1700 Jefferson Street
Oakland, California
Source: National Geographic TOPO!

Figure 1

ers

ERS Corporation

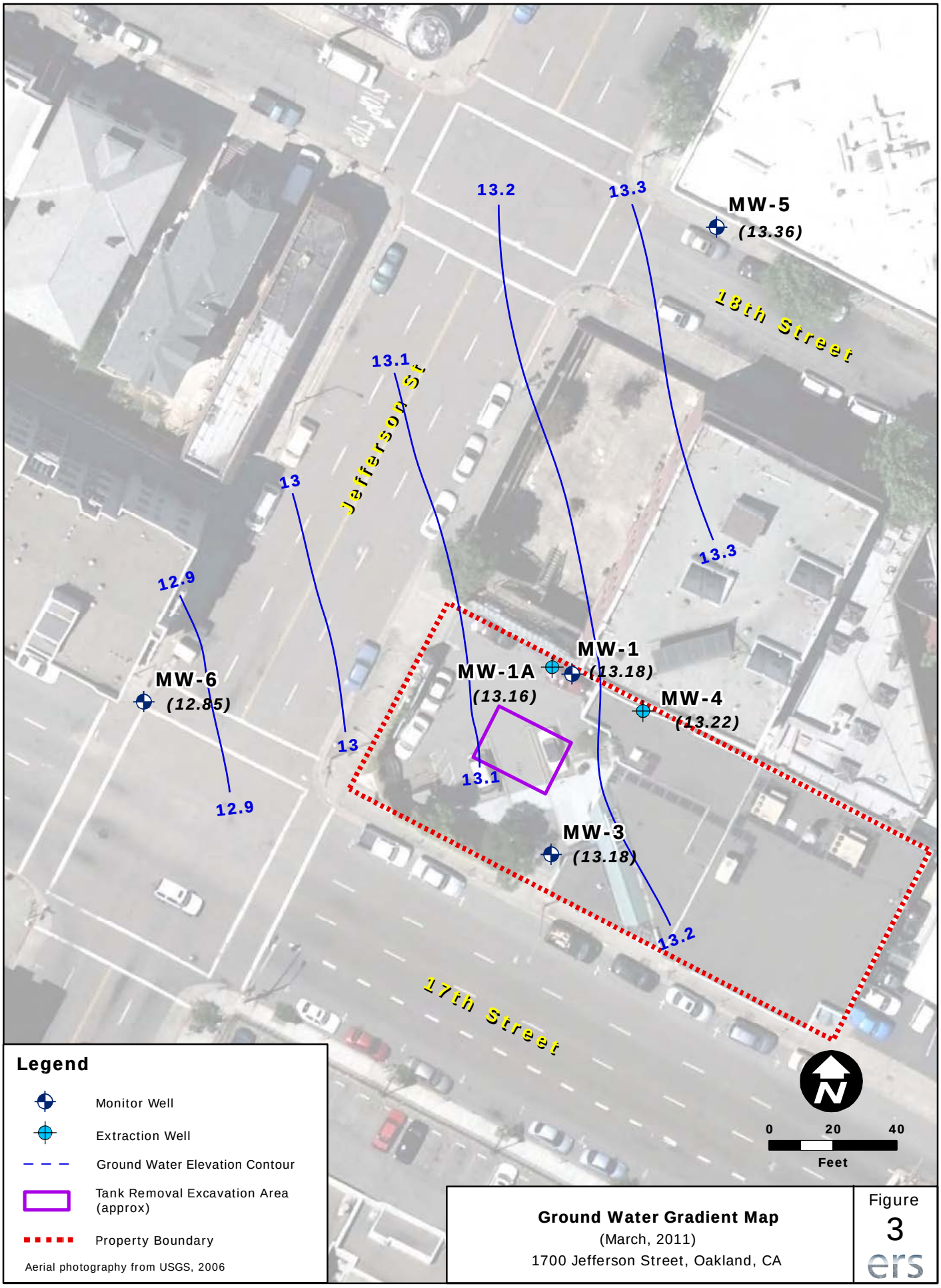


Site Plan

1700 Jefferson Street, Oakland, CA

Figure 2

ERS Corporation

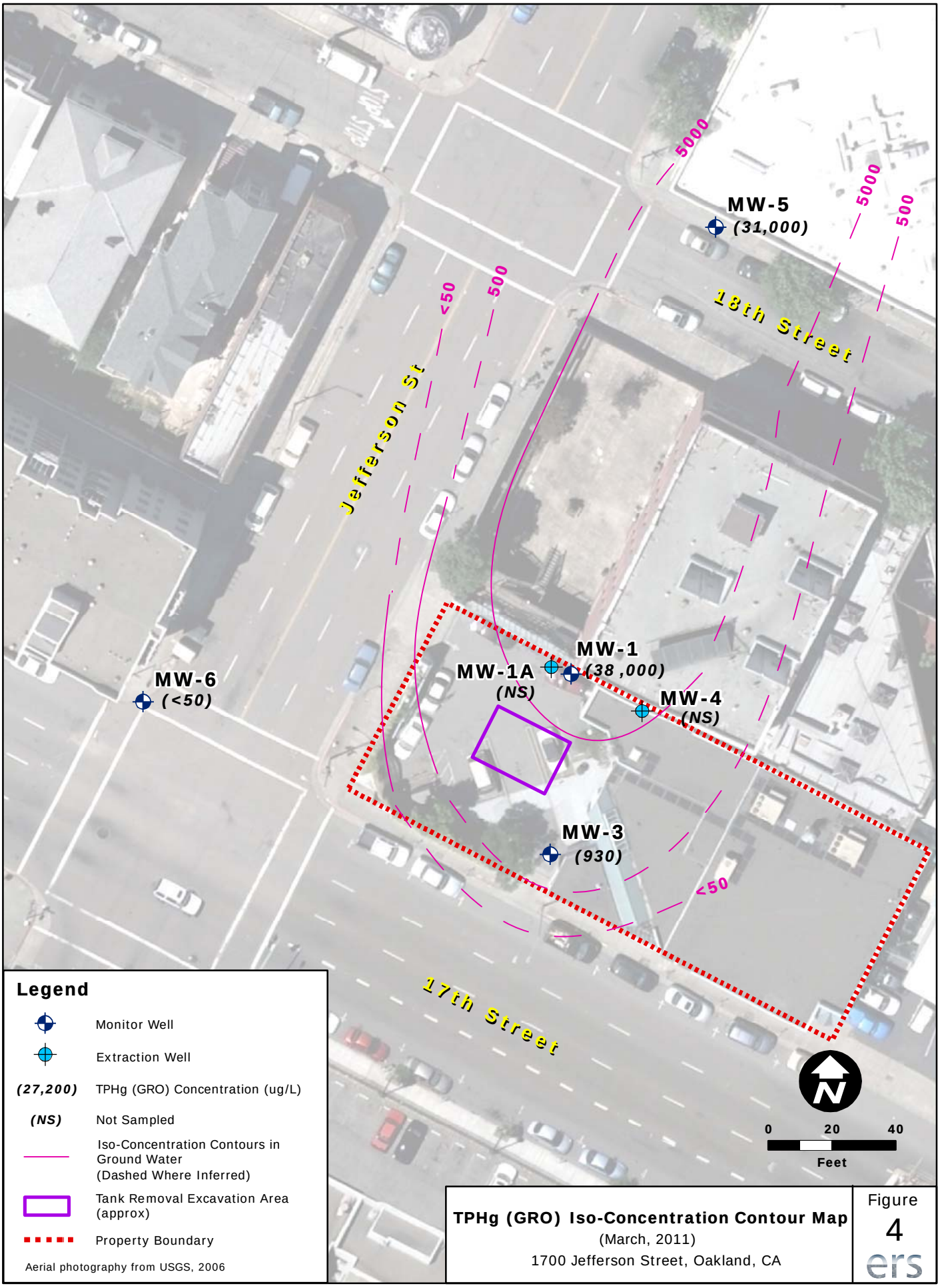


Ground Water Gradient Map
(March, 2011)
1700 Jefferson Street, Oakland, CA

Figure 3

ers

ERS Corporation

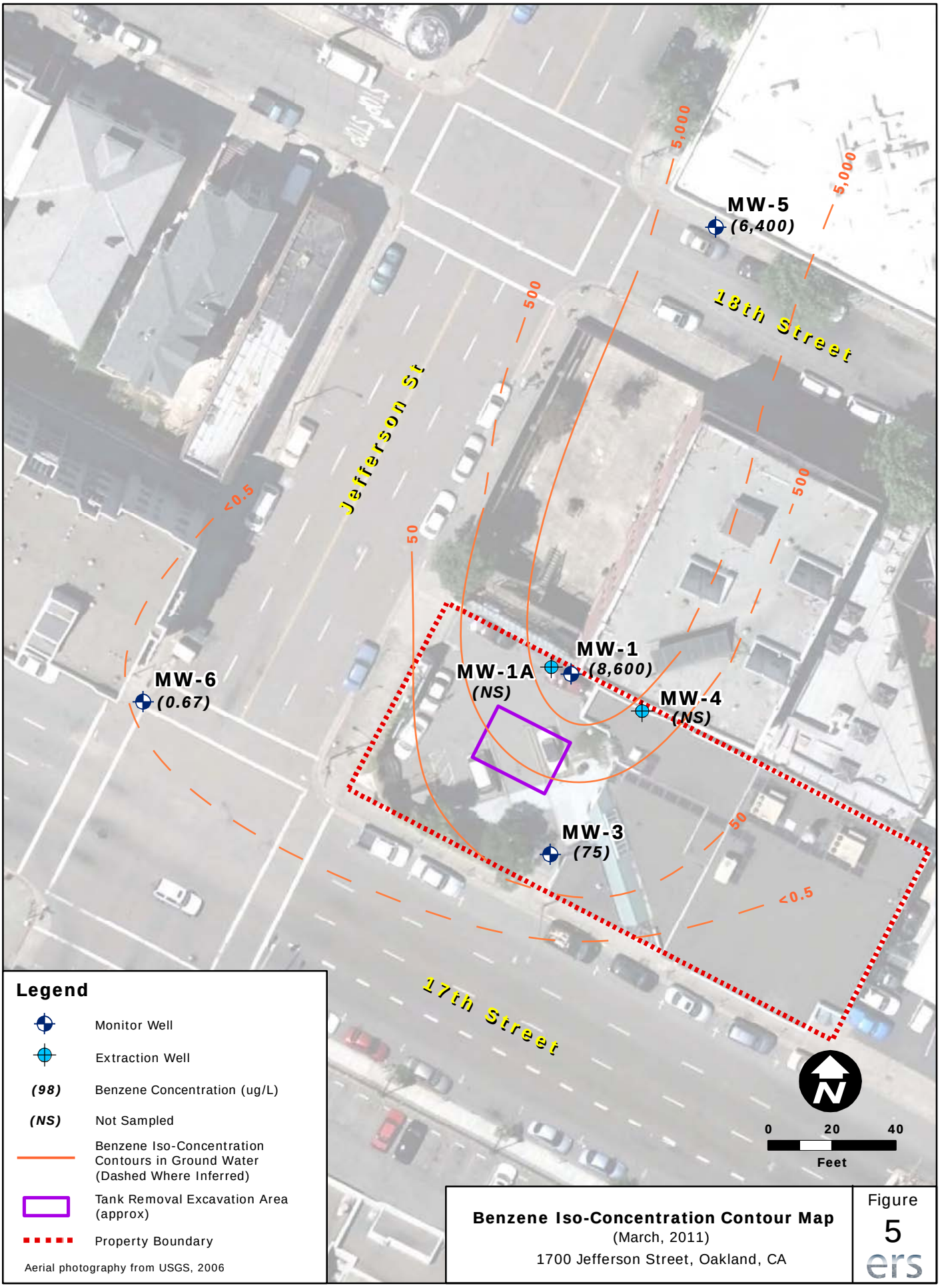


TPHg (GRO) Iso-Concentration Contour Map
(March, 2011)
1700 Jefferson Street, Oakland, CA

Figure 4

ers

ERS Corporation



Benzene Iso-Concentration Contour Map
(March, 2011)
1700 Jefferson Street, Oakland, CA

Figure 5

ers

ERS Corporation

APPENDIX A:

MONITOR WELL WORKSHEETS

Monitoring Well Gauging and Purging Data Sheet

Date:	Project No.	Site:		Location:				Initials:
3·16·11	BPS	1700 Jefferson		1700 Jefferson, Oakland CA				TRE
Purge Method:		Gauging Time:	Gauging Time:	Purge Starting Time:		Purge Ending Time:		Sampling Method:
Peristaltic		1245	1300	1300				Peristaltic
Well ID	Diameter (in)	Depth to Bottom (ft)	Initial Depth to Water from TOC (ft)	Equilibrated Depth to Water from TOC (ft)	Static Water Column (ft)	Casing Volume ~~(gal)~~ ℓ	Purged Volume ~~(gal)~~ ℓ	Depth to Product (ft)	Note:
MW-1	4	32.36	23.63	23.63	8.73	5.2	3	None	Strong Odor
MW-1A	4	–	22.09	22.09	–	–	–	↓	" "
MW-3	4	31.77	23.05	23.05	8.72	5.2	5		" "
MW-4	4	–	23.55	23.55	–	–	–		Strong odor
MW-5	2	30.56	22.85	22.85	8.71	5.2	5		
MW-6	2	31.26	23.06	23.06	8.2	4.92	3	↓	
Casing Volume = Static Water Column x Conversion Factor				Conversion Factor: 2-in well = 0.163 gal/ft, 4-in well = 0.653 gal/ft, 6-in well = 1.469 gal/ft					
Total purged volume from all wells (~~gals~~ ℓ): 16ℓ									

Monitor Well Data Sheet

Site Name: BPS	Well/Sample ID: MW-1
Location: 1700 Jefferson	Initial Depth to Water (DTW): 23.63
Client: BPS Reprographics	Total Well Depth (TD): 32.36
Sampler: TRF	Well Diameter: 4"
Date: 3/16/11	1 Casing Volume: 5.2 l
Purge Method: Peristaltic	Purge Rate: 0.15 l/min
Sample Method: "	Sampling Rate: "
2" well x 1 foot = 0.6 liters	4" well x 1 foot = 2.4L

Time	pH	SC/EC	DO	Temp	DTW	Cumulative Volume	Observations ORP
1310	6.73	1565	1.24	17.41	23.77	1 l	-202
1313	6.73	1560	0.83	17.46	23.77	1.5	-203
1316	6.73	1558	0.83	17.51	23.77	2	-204
1319	6.73	1558	0.81	17.52	23.77	2.5	-205

Did Well Dewater?	No	Start Purge Time:	1305	DTW prior to sample:	23.77
Casing volumes Purged	1/2	Stop Purge Time:	1325	Start Sample Time:	1330
Length of Tubing (ft):	33'	Total Liters Purged:	3	Total Sample Volume:	120ml
Instrument ID(s): 061696 YSI-556				Last Calibrated: 3-16-11 7:00	

Notes: Strong odor, TPH gasoline

ERS Corp., 1600 Riviera Ave Suite 310, Walnut Creek CA, 94596

Monitor Well Data Sheet

Site Name: BPS	Well/Sample ID: MW-3
Location: 1700 Jefferson	Initial Depth to Water (DTW): 23.05
Client: BPS Reprographics	Total Well Depth (TD): 31.77
Sampler: TRF	Well Diameter: 4"
Date: 3.16.11	1 Casing Volume: 5l
Purge Method: Peristaltic	Purge Rate: 0.2 l/min
Sample Method: "	Sampling Rate: "
2" well x 1 foot = 0.6 liters	4" well x 1 foot = 2.4L

Time	pH	SC/EC uS/cm	DO mg/l	Temp °C	DTW feet	Cumulative Volume	Observations ORP
1342	6.59	719	0.90	18.94	23.19	1.5l	-200.3
1345	6.53	717	0.80	18.88	23.20	2l	-198.7
1348	6.52	717	0.75	18.89	23.20	2.5l	-190.5
1351	6.49	717	0.58	18.98	23.20	3l	-187.9
1354	6.48	717	0.53	19.01	23.20	4l	-188.7
1357	6.48	717	0.54	19.02	23.20	4.5l	-190

Did Well Dewater?	No	Start Purge Time:	1335	DTW prior to sample:	23.20
Casing volumes Purged	1	Stop Purge Time:	1359	Start Sample Time:	1400
Length of Tubing (ft):	32	Total Liters Purged:	5	Total Sample Volume:	120ml
Instrument ID(s):	06HB96 - YSI 556			Last Calibrated:	3.16.11 9:00

Notes: Odor present TPH gasoline

Monitor Well Data Sheet

Site Name: BPS	Well/Sample ID: MW-5
Location: 1700 Jefferson	Initial Depth to Water (DTW): 21.85
Client: BPS	Total Well Depth (TD): 30.55
Sampler: TRF	Well Diameter: 2"
Date: 3.16.11	1 Casing Volume: 5.2
Purge Method: Peristaltic	Purge Rate: 0.2 l/min
Sample Method: "	Sampling Rate: "
2" well x 1 foot = 0.6 liters	4" well x 1 foot = 2.4L

Time	pH	SC/EC	DO	Temp	DTW	Cumulative Volume	Observations ORP
1442	6.80	1223	0.73	18.98	21.91	0.5l	-130.7
1446	6.79	1227	0.49	19.18	21.95	1	-139.3
1449	6.78	1243	0.48	19.24	21.95	1.5l	-140.1
1452	6.78	1245	0.44	19.24	21.95	2l	-142.3
1455	6.78	1240	0.45	19.25	21.95	2.5	-141.1

Did Well Dewater?	No	Start Purge Time:	1437	DTW prior to sample:	21.95
Casing volumes Purged	1	Stop Purge Time:	1458	Start Sample Time:	1500
Length of Tubing (ft):	31	Total Liters Purged:	5	Total Sample Volume:	120ml
Instrument ID(s): 061696 -451556				Last Calibrated:	3.16.11 9:00

Notes:

Monitor Well Data Sheet

Site Name: BP S	Well/Sample ID: MW-6
Location: 1700 Jefferson	Initial Depth to Water (DTW): 23.06
Client: BP S	Total Well Depth (TD): 31.26
Sampler: TRF	Well Diameter: 2"
Date: 3.16.11	1 Casing Volume: 4.9 l
Purge Method: Peristaltic	Purge Rate: 0.2 l/min
Sample Method: "	Sampling Rate: "
2" well x 1 foot = 0.6 liters	4" well x 1 foot = 2.4L

Time	pH	SC/EC	DO	Temp	DTW	Cumulative Volume	Observations ORP
1413	6.62	1182	1.14	19.59	23.15	0.5	-122.3
1416	6.62	1193	0.73	19.82	23.16	1	-121.5
1419	6.62	1198	0.62	19.92	23.20	1.5	-120.7
1422	6.62	1202	0.36	19.96	23.21	2	-120.2
1425	6.61	1205	0.33	19.94	23.21	2.5	-121.5
1428	6.61	1207	0.31	19.93	23.21	3	-121.0

Did Well Dewater?	No	Start Purge Time:	1410	DTW prior to sample:	23.21
Casing volumes Purged	1/2	Stop Purge Time:	1429	Start Sample Time:	1430
Length of Tubing (ft):	32'	Total Liters Purged:	3	Total Sample Volume:	120ml
Instrument ID(s):	66k1896-451556			Last Calibrated:	3.16.11 9:00

Notes:

APPENDIX B:

LABORATORY ANALYTICAL RESULTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica San Francisco
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-33926-1
Client Project/Site: 1700 Jefferson, Oakland

For:
Environmental Risk Services, Corp.
1600 Riviera Ave
Suite 310
Walnut Creek, California 94596

Attn: Tyson Fulmer

Surinder Sidhu

Authorized for release by:
03/24/2011 02:28:10 PM

Surinder Sidhu
Customer Service Manager
surinder.sidhu@testamericainc.com

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.

Table of Contents

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

TestAmerica Job ID: 720-33926-1

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.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

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

TestAmerica Job ID: 720-33926-1

Job ID: 720-33926-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative
720-33926-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

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: 720-33926-1

Client Sample ID: MW-1 — Lab Sample ID: 720-33926-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8600		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Ethylbenzene	670		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Toluene	6900		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	38000		5000		ug/L	100		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 720-33926-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	75		2.5		ug/L	5		8260B/CA_LUFTM	Total/NA
Ethylbenzene	7.8		2.5		ug/L	5		8260B/CA_LUFTM	Total/NA
Toluene	19		2.5		ug/L	5		8260B/CA_LUFTM	Total/NA
Xylenes, Total	5.9		5.0		ug/L	5		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	930		250		ug/L	5		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 720-33926-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6400		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Ethylbenzene	1900		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Toluene	500		50		ug/L	100		8260B/CA_LUFTM	Total/NA
Xylenes, Total	2600		100		ug/L	100		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	31000		5000		ug/L	100		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 720-33926-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.67		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA

Client Sample ID: MW-1

Lab Sample ID: 720-33926-1

Date Collected: 03/16/11 13:30

Matrix: Water

Date Received: 03/17/11 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50		ug/L			03/17/11 18:40	100
Benzene	**8600**		50		ug/L			03/17/11 18:40	100
Ethylbenzene	**670**		50		ug/L			03/17/11 18:40	100
Toluene	**6900**		50		ug/L			03/17/11 18:40	100
Xylenes, Total	**4300**		100		ug/L			03/17/11 18:40	100
Gasoline Range Organics (GRO) -C5-C12	**38000**		5000		ug/L			03/17/11 18:40	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*67 - 130*		*03/17/11 18:40*	*100*
1,2-Dichloroethane-d4 (Surr)	*105*		*67 - 130*		*03/17/11 18:40*	*100*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/17/11 18:40*	*100*

Client Sample ID: MW-3

Lab Sample ID: 720-33926-2

Date Collected: 03/16/11 14:00

Matrix: Water

Date Received: 03/17/11 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.5		ug/L			03/17/11 19:11	5
Benzene	**75**		2.5		ug/L			03/17/11 19:11	5
Ethylbenzene	**7.8**		2.5		ug/L			03/17/11 19:11	5
Toluene	**19**		2.5		ug/L			03/17/11 19:11	5
Xylenes, Total	**5.9**		5.0		ug/L			03/17/11 19:11	5
Gasoline Range Organics (GRO) -C5-C12	**930**		250		ug/L			03/17/11 19:11	5

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*67 - 130*		*03/17/11 19:11*	*5*
1,2-Dichloroethane-d4 (Surr)	*109*		*67 - 130*		*03/17/11 19:11*	*5*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/17/11 19:11*	*5*

Client Sample ID: MW-5

Lab Sample ID: 720-33926-3

Date Collected: 03/16/11 15:00

Matrix: Water

Date Received: 03/17/11 09:33

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50		ug/L			03/17/11 19:42	100
Benzene	**6400**		50		ug/L			03/17/11 19:42	100
Ethylbenzene	**1900**		50		ug/L			03/17/11 19:42	100
Toluene	**500**		50		ug/L			03/17/11 19:42	100
Xylenes, Total	**2600**		100		ug/L			03/17/11 19:42	100
Gasoline Range Organics (GRO) -C5-C12	**31000**		5000		ug/L			03/17/11 19:42	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*67 - 130*		*03/17/11 19:42*	*100*
1,2-Dichloroethane-d4 (Surr)	*106*		*67 - 130*		*03/17/11 19:42*	*100*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/17/11 19:42*	*100*

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

TestAmerica Job ID: 720-33926-1

Client Sample ID: MW-6
Date Collected: 03/16/11 14:30
Date Received: 03/17/11 09:33

Lab Sample ID: 720-33926-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/17/11 20:13	1
Benzene	**0.67**		0.50		ug/L			03/17/11 20:13	1
Ethylbenzene	ND		0.50		ug/L			03/17/11 20:13	1
Toluene	ND		0.50		ug/L			03/17/11 20:13	1
Xylenes, Total	ND		1.0		ug/L			03/17/11 20:13	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/17/11 20:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*67 - 130*		*03/17/11 20:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*67 - 130*		*03/17/11 20:13*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/17/11 20:13*	*1*

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

TestAmerica Job ID: 720-33926-1

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

Lab Sample ID: MB 720-87840/4
Matrix: Water
Analysis Batch: 87840

Client Sample ID: MB 720-87840/4
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/17/11 10:31	1
Benzene	ND		0.50		ug/L			03/17/11 10:31	1
Ethylbenzene	ND		0.50		ug/L			03/17/11 10:31	1
Toluene	ND		0.50		ug/L			03/17/11 10:31	1
m-Xylene & p-Xylene	ND		1.0		ug/L			03/17/11 10:31	1
o-Xylene	ND		0.50		ug/L			03/17/11 10:31	1
Xylenes, Total	ND		1.0		ug/L			03/17/11 10:31	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/17/11 10:31	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*67 - 130*		*03/17/11 10:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*67 - 130*		*03/17/11 10:31*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/17/11 10:31*	*1*

Lab Sample ID: LCS 720-87840/5
Matrix: Water
Analysis Batch: 87840

Client Sample ID: LCS 720-87840/5
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Methyl tert-butyl ether	25.0	24.8		ug/L		99	62 - 130
Benzene	25.0	26.8		ug/L		107	82 - 127
Ethylbenzene	25.0	26.7		ug/L		107	86 - 135
Toluene	25.0	26.4		ug/L		106	83 - 129
m-Xylene & p-Xylene	50.0	54.6		ug/L		109	70 - 142
o-Xylene	25.0	26.8		ug/L		107	89 - 136

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 720-87840/7
Matrix: Water
Analysis Batch: 87840

Client Sample ID: LCS 720-87840/7
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	500	511		ug/L		102	62 - 117

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: LCSD 720-87840/6
Matrix: Water
Analysis Batch: 87840

Client Sample ID: LCSD 720-87840/6
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	25.5		ug/L		102	62 - 130	3	20
Benzene			25.0	26.6		ug/L		107	82 - 127	0	20
Ethylbenzene			25.0	27.3		ug/L		109	86 - 135	2	20
Toluene			25.0	26.7		ug/L		107	83 - 129	1	20
m-Xylene & p-Xylene			50.0	55.4		ug/L		111	70 - 142	1	20
o-Xylene			25.0	27.3		ug/L		109	89 - 136	2	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-87840/8
Matrix: Water
Analysis Batch: 87840

Client Sample ID: LCSD 720-87840/8
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	489		ug/L		98	62 - 117	4	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

TestAmerica Job ID: 720-33926-1

GC/MS VOA

Analysis Batch: 87840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-33926-1	MW-1	Total/NA	Water	8260B/CA_LUFTMS	
720-33926-2	MW-3	Total/NA	Water	8260B/CA_LUFTMS	
720-33926-3	MW-5	Total/NA	Water	8260B/CA_LUFTMS	
720-33926-4	MW-6	Total/NA	Water	8260B/CA_LUFTMS	
MB 720-87840/4	MB 720-87840/4	Total/NA	Water	8260B/CA_LUFTMS	
LCS 720-87840/5	LCS 720-87840/5	Total/NA	Water	8260B/CA_LUFTMS	
LCSD 720-87840/6	LCSD 720-87840/6	Total/NA	Water	8260B/CA_LUFTMS	
LCS 720-87840/7	LCS 720-87840/7	Total/NA	Water	8260B/CA_LUFTMS	
LCSD 720-87840/8	LCSD 720-87840/8	Total/NA	Water	8260B/CA_LUFTMS	

Certification Summary

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

TestAmerica Job ID: 720-33926-1

Laboratory	Authority	Program	EPA Region	Certification ID	* Expiration Date
TestAmerica San Francisco	California	State Program	9	2496	01/31/12

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.
* Any expired certifications in this list are currently pending renewal and are considered valid.

Method Summary

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

TestAmerica Job ID: 720-33926-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFT MS	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 San Francisco, 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: 720-33926-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-33926-1	MW-1	Water	03/16/11 13:30	03/17/11 09:33
720-33926-2	MW-3	Water	03/16/11 14:00	03/17/11 09:33
720-33926-3	MW-5	Water	03/16/11 15:00	03/17/11 09:33
720-33926-4	MW-6	Water	03/16/11 14:30	03/17/11 09:33

720-33926

ERS Corp.

SAMPLE ANALYSIS/COMPOSITE REQUEST FORM
CHAIN-OF-CUSTODY

130219

Invoice to: ERS Corp		Date: 3·16·11	Page: 1 of 1
Project Name: BPS Reprographics		Location: 1700 Jefferson, Oakland	
Project #: BPS		EDF report: y / n email: ybayrami@erscorp.us	
Project Manager: Yola Bayrami		Tel: 925-938-1600x108	Fax: (925) 938-1610
Laboratory: Test America		Turnaround Time (days)	1 / 2 / 3 / 4 / 5 / 6 / 7 / 14 / Std: X
Sampler Signature:		Analyses Required	

Sample ID	Date	Depth	Time	Sample Matrix	# Containers	Type of Container	Preservative	TPHg, BTEX MTBE by 8260				
MW-1	3.16.11	NA	1330	Water	3	Vials	HCl	X				
MW-3	↓	↓	1400					X				
MW-5			1500					X				
MW-6			1430					X				
												5.7 °C

Notes: Please email analytical to tfulmer@erscorp.us
Issue Geotracker EDF for Global ID #
T0600100196

Relinquished by:	Date	Time	Received by:	Date	Time
Tyson Fulmer	3·17·11	9:33	[signature]	3-17-11	933
Relinquished by:	Date	Time	Received by:	Date	Time

1600 Riviera Ave Suite 310, Walnut Creek, CA 94596
(925)938-1600 Fax (925)938-1610

Login Sample Receipt Checklist

Client: Environmental Risk Services, Corp.

Job Number: 720-33926-1

Login Number: 33926

List Source: TestAmerica San Francisco

List Number: 1

Creator: Mullen, Joan

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.	True	
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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	