#### **RECEIVED**

1/6/2011

2:08 pm, Jan 20, 2011 Alameda County Environmental Health

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

Re:

Semi-Annual Ground Water Monitoring Report September 2010

BPS Reprographics ACEH Case # RO151 1700 Jefferson Oakland, CA

Dear Ms. 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,

avid Blain

President

Attachment: Report



January 4, 2011

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

RE: Semi-Annual Ground Water Monitoring Report, September 2010

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) has enclosed one hard copy of the Semi-Annual Ground Water Monitoring Report, September 2010 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 <a href="mailto:smichelson@erscorp.us">smichelson@erscorp.us</a>.

Sincerely,

Steven Michelson, PG

Principal Geologist

cc: Ms. Barbara Jakub, Alameda County Health Care Services Agency

**Enclosure** 

# SEMI-ANNUAL GROUND WATER MONITORING REPORT SEPTEMBER 2010

## BPS REPROGRAPHICS 1700 Jefferson Street Oakland, California











**Environmental Risk Specialties Corporation** 

# SEMI-ANNUAL GROUND WATER MONITORING REPORT SEPTEMBER 2010

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

January 4, 2011

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 four existing monitor wells, measure the depth to ground water in all existing wells in order to calculate ground water gradient and flow 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 17<sup>th</sup> 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. Contamination was found in soil down to the water table. On June 16, 1987, three gasoline USTs were removed from the Site and a suspected unauthorized release was confirmed. The 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 in order to investigate soil permeability. In January 1988, ground water extraction wells MW-1A and MW-4 were installed to specifically 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 and by July 1999, the system removed an additional 867 gallons of free product. In April 1996, well MW-6 was installed and five Cone Penetrometer Test (CPT) borings both south of the Site and north of well MW-5 were advanced in March 1995. In April 1998, analyses showed the free product

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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 since January 1994. 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 been found to have 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 on the 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 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 25.0 feet bgs.

#### 3.0 GROUND WATER MONITORING AND SAMPLING

Ground water monitoring and sampling of the Site was performed on September 8, 2010 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.

#### 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). Field sheets of recently recorded ground water monitoring data are included in Appendix A. Information regarding well elevations and depth to ground water at the Site is summarized in Table 1.

#### 3.2 Ground Water Gradient

Ground water elevation contours based on ground water elevations measured on September 8, 2010, are illustrated on Figure 3 and reveal a ground water gradient direction to the west-southwest at an average of 0.002 foot per foot. Historical ground water gradients and flow directions are summarized in Table 2.

#### 3.3 Ground Water Sampling

Before ground water sampling, each well was purged using EPA approved low-flow techniques summarized in the "Low-Flow (Minimal Drawdown) Ground Water Sampling Procedures" (EPA, 1996). 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 were 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. Ground water conditions monitored during purging and sampling were recorded on field sheets, included in Appendix A.

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 AccuTest, 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 gasoline-range petroleum hydrocarbons (TPHg), benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260B. Copies of the chain of custody record and laboratory analytical reports are included as Appendix B. TPHg, 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 site activities that occurred there historically. 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).

Chart 1 depicts the trend of TPHg in the monitor wells MW-1, MW-3, and MW-5 over time. Recent sampling reveals that concentrations of TPHg in all three monitor wells have decreased since the previous sampling event. Chart 2 depicts the trend of benzene in the monitor wells MW-1, MW-3, and MW-5 over time. Concentrations of benzene have increased in MW-3 in the most recent sampling event while concentrations of benzene have decreased in MW-1 and MW-5 with the most recent sampling event. The most downgradient well, MW-6, did not contain TPHg, BTEX, or MTBE above the reporting limit; this is consistent with prior results. Figures 4 and 5 depict the distribution of TPHg and benzene in ground water.

#### 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 0.002 feet per foot and continues to be consistent with historical trends and regional topography;
- Silty sand and clayey sand are present from the surface to a depth of approximately 27.0 to 30.5 feet below ground surface;

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- Concentrations of TPHg decreased in wells MW-1, MW-3, and MW-5 and concentrations of benzene decreased in wells MW-1 and MW-5 and increased in MW-3.
- Consistent with recent trends, no detectable TPHg and BTEX concentrations were reported in downgradient well MW-6.
- Although concentrations have fluctuated recently, the plume appears stable.

# **TABLES**

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

	l						alifornia					
Well ID	MW			/-1A		V-3		N-4	MV			V-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		
27/11007	NC			a not avail			1		22.52	7.00	NIA	
3/6/1996 6/11/1996	NS FP				24.79 25.60	6.98 6.17			23.53 23.78	7.03 6.78	NA 25.16	6.10
9/19/1996	FP FP				26.09	5.68			24.48	6.08	25.76	5.50
12/23/1996	FP				FP				24.43	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 9/29/1999	25.53 24.23	6.83 8.13			23.07 23.03	8.70 8.74			22.41 22.81	8.15 7.75	23.04 23.42	8.22 7.84
11/22/1999	24.23	8.03			23.68	8.09			22.88	7.73	23.42	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 <sup>1</sup>	NA <sup>1</sup>	23.41	7.85
4/1/2003	23.75	8.61			22.90	8.87			NA <sup>1</sup>	NA <sup>1</sup>	23.16	8.10
7/1/2003	23.50	8.86			22.80	8.97			NA <sup>1</sup>	NA <sup>1</sup>	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 9/23/2004	23.64 23.98	8.72 8.38			23.04 23.32	8.73 8.45			22.00 22.36	8.56 8.20	22.43 23.30	8.83 7.96
12/28/2004	23.98	8.29			28.71	3.06			22.30	8.14	23.42	7.96
3/16/2005	23.80	8.56			23.70	8.07			22.42	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 3/26/2008	24.05 23.56	8.31 8.80			23.40 23.00	8.37 8.77			22.31 21.77	8.25 8.79	23.37 22.97	7.89 8.29
6/2/2008	23.30	8.66			23.00	8.69			21.77	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
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

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

	Ground	Ground
	Water	Water
Date Monitored	Gradient	Direction
6/11/1996	0.003	SW
6/4/1997	0.009	NW
3/31/1998	0.002	W
8/28/1998	0.007	Е
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 <sup>1</sup>
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

Notes:

<sup>&</sup>lt;sup>1</sup> MACTEC reported an error in groundwater measurement

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

Well ID	Date Sampled	ТРНд	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Free Product
	FCI -	210	47	(µg/L)	42	100	1000	(inches)
	ESLs 7/8/1987	210 190,000	46 18,000	130 26,000	43	100 3,700	1800	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 8/18/1992							10 10
	11/11/1992							13
	1/29/1993	-						25.2
	2/12/1993							10.2
	1/6/1994							14.8
	3/17/1994 4/13/1994							23.4 12
	6/29/1994							0
	12/8/1994	1						FP
	4/3/1995							FP
	6/27/1995							FP
	9/19/1995 12/13/1995							FP FP
	3/6/1996							FP
	6/11/1996							FP
	9/19/1996							FP
	12/23/1996							FP
	3/27/1997 6/4/1997	 68 000	2 200	 4 500	1 500	 11 000	 <500	FP 
	9/26/1997	68,000 59,000	2,200 6,000	4,500 3,000	1,500 1,600	11,000 8,600	<500 <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 3/10/1999	26,000 26,000	9,200 8,200	4,300 5,900	820 870	2,800 3,500	<50 <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	
N AN A / 1	2/11/2000	19,000	4,100	4,800	530	2,800	7	
MW-1	5/30/2000 9/15/2000	19,000 20,000	5,700 4,100	8,400 5,700	730 540	3,500 2,700	<5.0 <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 6/14/2002	35,000 35,000	4,900 5,400	6,000 6,800	740 870	3,100 3,500	<120 <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 12/29/2003	59,000 46,000	7,600 6,600	9,400 7,900	1,000 960	4,800 4,000	<1,200 <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 9/9/2005	30,000 7,100	5,400 840	5,500 950	520 120	1,900 410	<1,200 <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 3/30/2007	31,000 30,000	6,000 5,000	5,300 4,600	710 520	2,500 1,700	<500 <500	
	7/2/2007	14,000	2,500	2,000	280	930	<500 <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 11/19/2008	24,000 26,000	4,200 4,500	4,200 4,500	470 490	2,200 2,500	<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	
	9/12/1988 7/12/1989	220,000	1,200	9,210	3,100	24000	 NA	28.2 18.6
	8/1/1991	350,000	17,000	31,000	3,000	24000 FP	NA NA	18.6 FP
	7/2/1992	FP	FP	51,000 FP	5,000 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
/W-1A	3/30/1993	FP	FP	FP	FP	FP	NA	10.2-14.8
		FP		FP				
	1/6/1994 4/13/1994	170,000	FP 17,000	31,000	FP 2,100	14,000 22,000	NA NA	16.2 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	

Well ID	Date Sampled	ТРНд	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Free Product
Г	21.0	210	47		g/L)	100	1000	(inches)
EX	SLs 9/19/1995	210 52,000	46 8,900	130 11,000	43 790	100 5,300	1800 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 12/23/1996	100,000 FP	16,000 FP	22,000 FP	2,100 FP	14,000 FP	NA NA	
	3/27/1997	66,000	12,000	15,000	1,400	100	1,800	
MW-1A	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 3/31/1998	66,000 51,000	10,000 9,100	16,000 11,000	1,400 1,100	12,000 6,800	1,900 300	
	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 6/30/1999	10,000 18,000	2,300 6,400	1,900 7,800	1,600 660	2,300 4,100	<50 <25	
1414.0	7/8/1987	8,200	1,500	340		87		
MW-2	11/9/1987	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		L DESTRO			
	3/24/2006	590	83	41	7	33	<12	
	6/29/2006	1,100 1,300	130 260	38 71	16 44	21 28	<25 <25	
	9/13/2006 12/27/2006	3,000	250	160	44	28 140	<25 <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 3/26/2008	2,900 2,300	250 340	170 95	66 26	120 64	<25 <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 9/3/2009	3,020 538	37 59	10 1	3.8J 13	12.3J 2	<10 <1.0	
	3/3/2010	1,570	98	12	20	14	<1.0 <1.0	
	9/8/2010	1,100	200	23	23	11	<0.5	
	7/8/1987	6,200	180	500		170		0
	7/12/1989	13000	1 (00	160	210	420		0
	8/1/1991 9/30/1992	74,000	1,600	4,600	670	4,300		4.1
	11/11/1992							2
	1/29/1993							1.7
	2/12/1993							1.3
	1/6/1994 3/17/1994							2.2
	4/13/1994							1.8
	6/29/1994	39000	3200	2900	580	4300		0.5
	12/8/1994	4600000	1500	4200	6000	95000		
	4/3/1995 6/27/1995	51000 20000	1100 270	2300 550	580 190	4800 1700		
	9/19/1995	6200	70	140	68	500		
	12/13/1995	19000	220	480	140	1700		
	3/6/1996	7000	120	170	49	440		
	6/11/1996 9/19/1996	16000 6000	170 45	270 30	68 15	1500 300		
MW-3	6/4/1997	85000	8500	13000	2400	16000	<500	
IVIVV-3	9/26/1997	47000	610	6000	930	5900	<100	
	12/23/1997 3/31/1998	32000 32000	640 690	5300 3800	800 870	5900 5200	<300 350	
	6/18/1998	16000	180	1500	490	3700	<25	
	8/28/1998	17000	84	1100	430	3800	<50	
	12/2/1998	3,200	39	85	25	360	<50	
	3/10/1999 6/30/1999	9,600 7,900	86 31	540 330	250 200	2,300	<25 <25	
	9/29/1999	5,000	120	330	230	1,800 1,300	<25 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	540 490	8 11	20	0	28 17	31 <5.0	
	5/30/2000 9/15/2000	1,500	28	6 14	3	160	<5.0 <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 12/26/2001	3,100 950	42 8	48 5	26 1	210 7	<1.2 <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 4/1/2003	4,000 5,900	110 370	280 150	57 44	260 230	19 <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 6/30/2004	1,500 2,000	77 81	72 37	19 34	59 40	<12 <1.0	
		2,000	01					
		2.400	1.10		36	40	<10	
	9/23/2004	3,400	140	95				
	9/23/2004	3,900	340	37	11	60	<5.0	
	9/23/2004							
	9/23/2004 12/28/2004 3/16/2005	3,900 970	340 1	37	11 1	60	<5.0 <2.5	

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

		1	ЭС	9	Ethylbenzene	enes	17.1	_
Well ID	Date Sampled	TPHg	Benzene	Toluene	penz	Xyle	MTBE	Free
well ID	Date Sampleu	Τ	Bel	To	:thyll	Total Xylenes	Σ	Product
				(µg/L)	ш			(inches)
	ESLs	210	46	130	43	100	1800	
	9/12/1988 7/12/1989	93,000	460	4,200	1,200	9700	NA	5.9 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 4/13/1994	FP 58,000	FP 1,500	FP 2,500	FP 520	3,200 7,300	NA NA	6.2
	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	
MW-4	6/27/1995 9/19/1995	13,000 14,000	1,300 630	1,600 470	77 14	1,800 1,800	NA 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 12/23/1996	95,000 FP	9,900 FP	19,000 FP	2,000 FP	13,000 FP	NA 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 8/28/1998	25,000 48,000	2,000 9,700	460 11,000	<15 890	6,400 5,000	<50 <50	
	12/2/1998	10,000	1,700	610	<15	2,300	<50 <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	
	9/12/1988	1						0.5
	7/12/1989	14,000	7	190	210	500		0.4
	8/1/1991 9/30/1992	120,000 51,000	20,000 13,000	14,000 5,900	1,900 1,400	4,900 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 4/3/1995	59000	13000	3800 2.200	1800 2,800	2900		
	6/27/1995	51,000 41000	15,000 12000	2,200	1400	4,500 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 9/19/1996	48000 48000	12000 12000	2900 4500	2000 2300	2700 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 6/18/1998	48000 17000	10000 9500	400 310	2000 420	2200 850	350 <10	
	8/28/1998	16000	5400	160	1100	900	<50	
MW-5	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 9/29/1999	11000 10000	9600 14000	710 470	1100 1100	1100 600	<100 <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 4/2/2001	1,800 15,000	470 7,400	220 3,000	39 1,000	100 2,200	<5 <50	
	6/28/2001	3,600	300	11	1,000	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 -0.50	
	6/14/2002 8/20/2002	1,700 3,200	110 320	<2.5 9	7 22	<2.5 19	<0.50 <0.50	
	12/27/2002	6,200	2,200	140	160	250	<0.50	
	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 12/28/2004	42,000	12,000	3,900	1,200	2,400	<120 <250	
	12/20/2004	41,000	10,000	3,800	1,000	2,300	<20U	

Well ID	Date Sampled	рнчт	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Free Product
	SLs	210	46	(µç 130	g/L) 43	100	1800	(inches)
L	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 6/29/2006	<10,000 1,200	2,800 240	450 11	190 13	180 18	<500 <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	
MW-5	7/2/2007 10/2/2007	33,000 36,000	9,400 11,000	1,400 2,100	1,000 1,100	1,500 1,700	<500 <620	
10100 5	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 11/19/2008	45,000 46.000	13,000 14,000	3,700 3,900	1,200 3,900	2,200 2,700	<1,200 <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 6/11/1996	22,000 <50	6,000 <0.5	250 <0.5	1,700 <0.5	1,900 <2	<50 	
	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 .E0	<0.5	< 0.5	<0.5	<2	<5 .F	
	6/4/1997 9/26/1997	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<2 <2	<5 <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 8/28/1998	<50 <50	<0.3 <0.3	<0.3	<0.3	<0.6 <0.6	<1.0 <1.0	
	12/2/1998	<50 <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 .E0	<0.3	<0.3	<0.3	<0.6	<1.0	
	9/29/1999 11/22/1999	<50 <50	<0.3	<0.3 <0.3	<0.3	<0.6 <0.6	<1.0 <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 11/16/2000	<50 <50	<0.3 <0.3	<0.3 <0.3	<0.3 <0.3	<0.6 <0.3	<1.0 <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 4/24/2002	66 <50	3.6 <0.5	3.6 <0.5	3.6 <0.5	<0.5 <0.5	<2.5 <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	
MW-6	12/27/2002	<50	<0.5	< 0.05	<0.5	<0.5	<2.5	
	4/1/2003 7/1/2003	<50 <50	<0.5 <0.5	<0.05 <0.05	<0.5 <0.5	<0.5 <2.5	<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 <50	< 0.5	< 0.5	< 0.5	< 0.5	<2.5	
	6/30/2004 9/23/2004	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<2.5 <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 9/9/2005	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<2.5 <2.5	
	12/2/2005	<50 <50	<0.5 <0.5	<0.5	<0.5	<0.5	<2.5 <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 12/27/2006	<50 <50	<0.5 <0.5	<0.5 <0.5	< 0.5	<0.5 <0.5	<2.5 <2.5	
	3/30/2007	<50 <50	<0.5	<0.5	<0.5 <0.5	<0.5	<2.5 <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 3/26/2008	<50 <50	<0.5 <0.5	1 <0.5	<0.5 <0.5	<0.5 1	<2.5 <2.5	
	6/2/2008	<50 <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		<0.5	<0.5	<0.5	<0.5	<2.5	
	3/3/2009 9/3/2009	<50 <50	<1.0 <1.0	0.53J <1.0	<1.0 <1.0	<2.0 <2.0	<1.0 <1.0	
	3/3/2010	<50 <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	

#### Notes

 $\mu\text{g/L:}\,$  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 for non-drinking water sources - May 2008

FP: Free product measured (amount unknown)

Concentration is above selected screening criteria

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# **CHARTS**

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

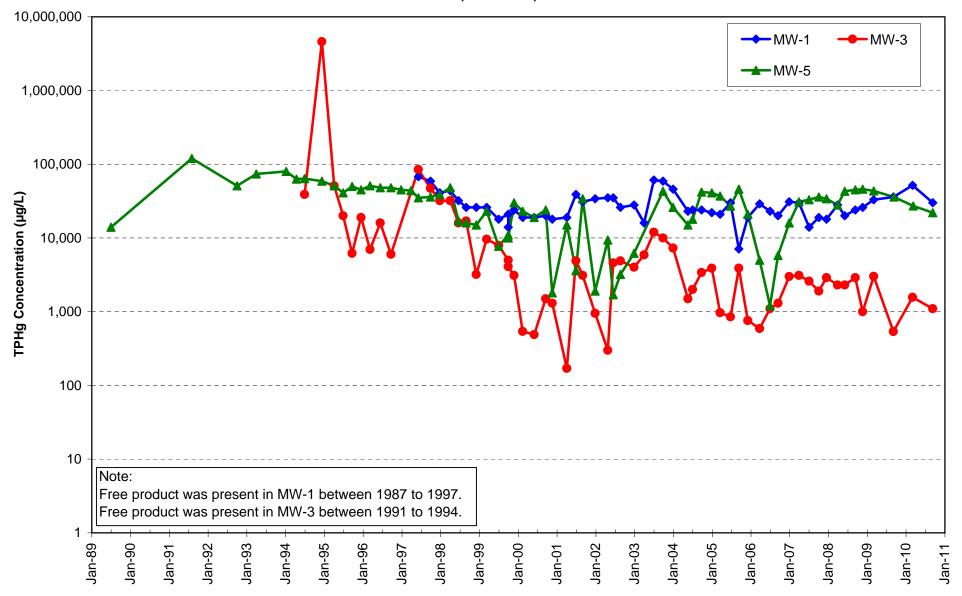
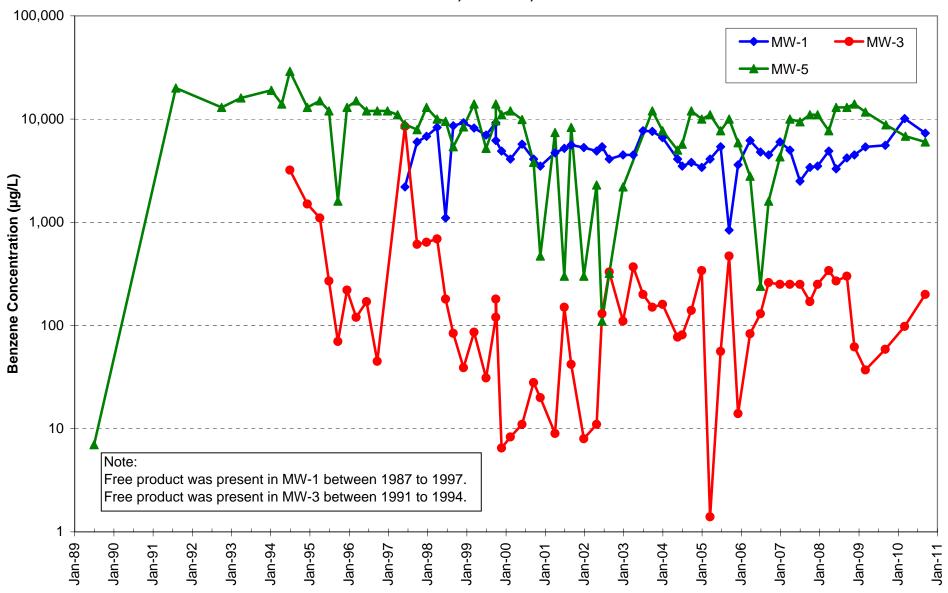
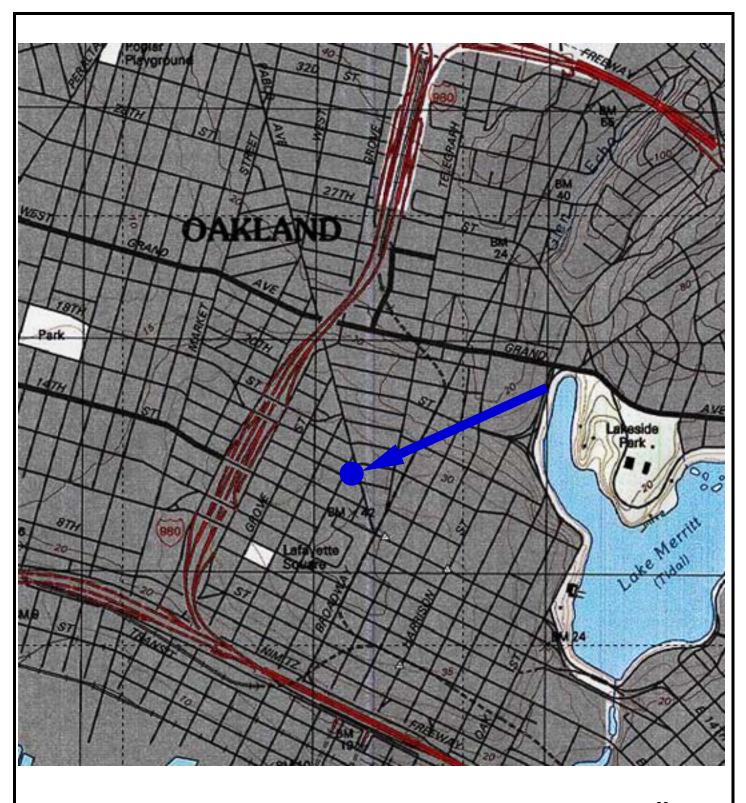


CHART 2
Concentrations of Benzene vs. Time in MW-1, MW-3, and MW-5
1700 Jefferson, Oakland, California



# **FIGURES**

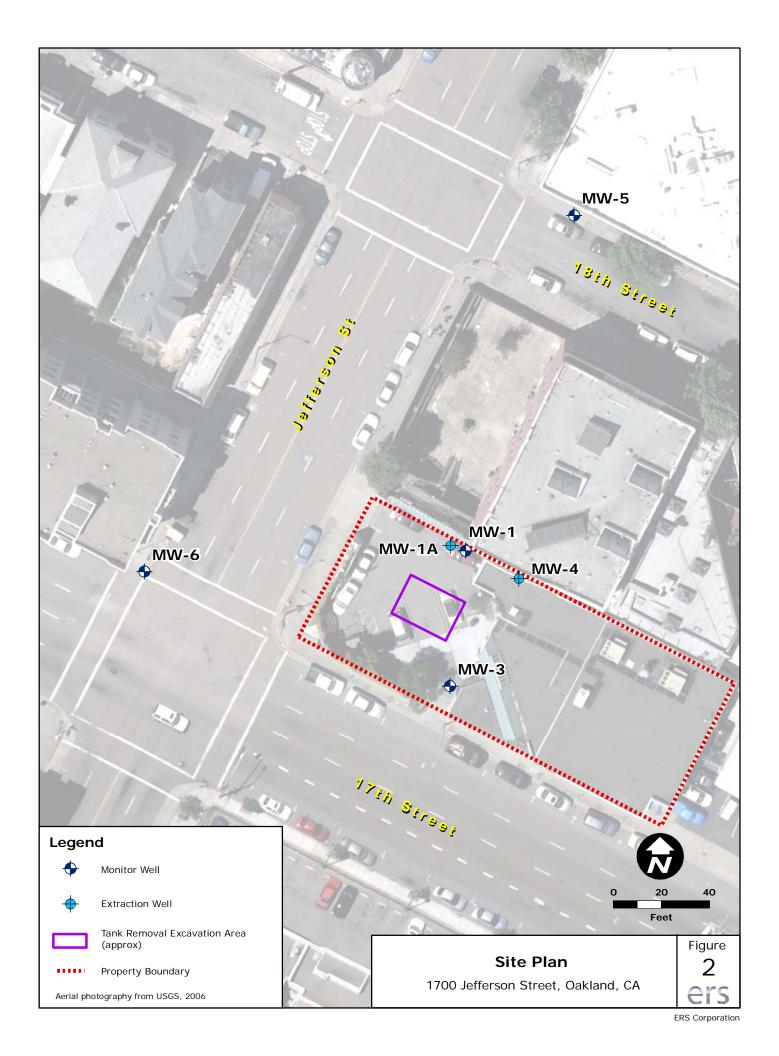


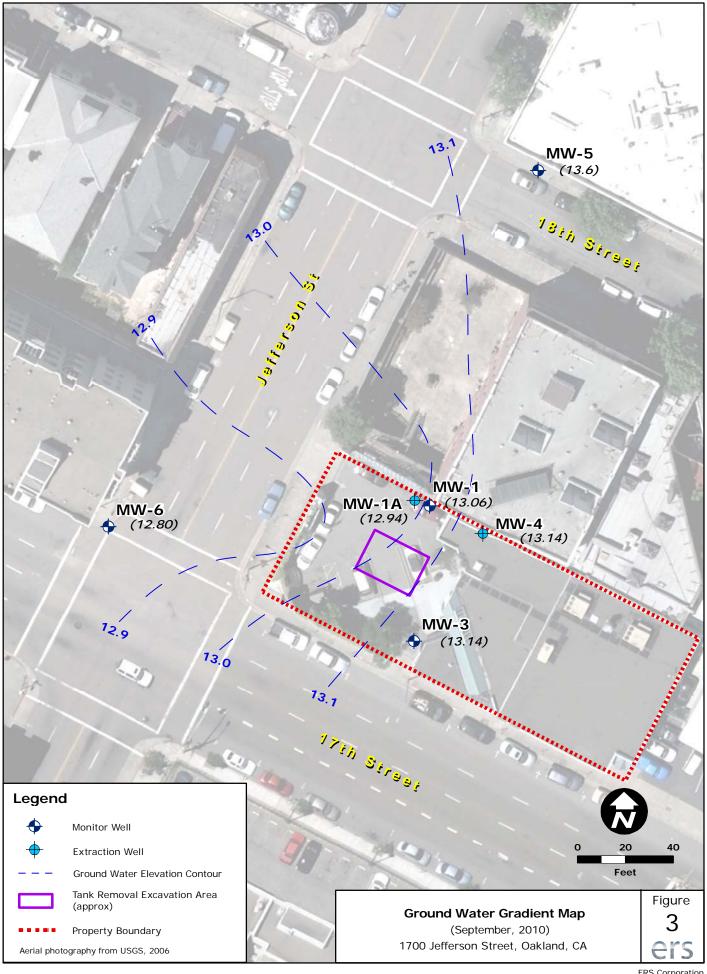


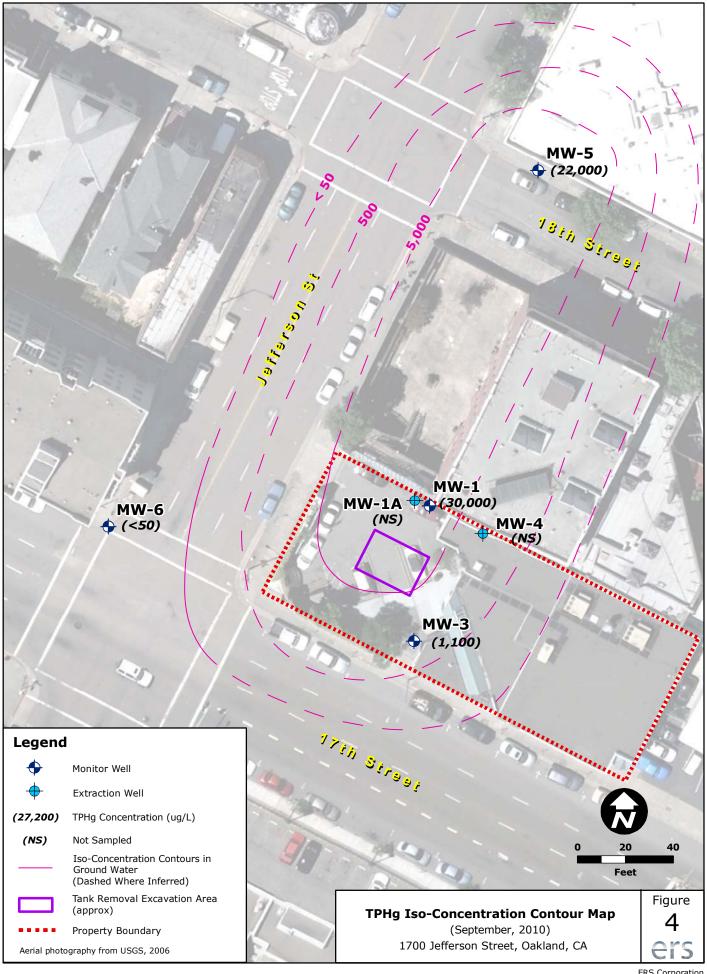
Location Map 1700 Jefferson Street Oakland, California

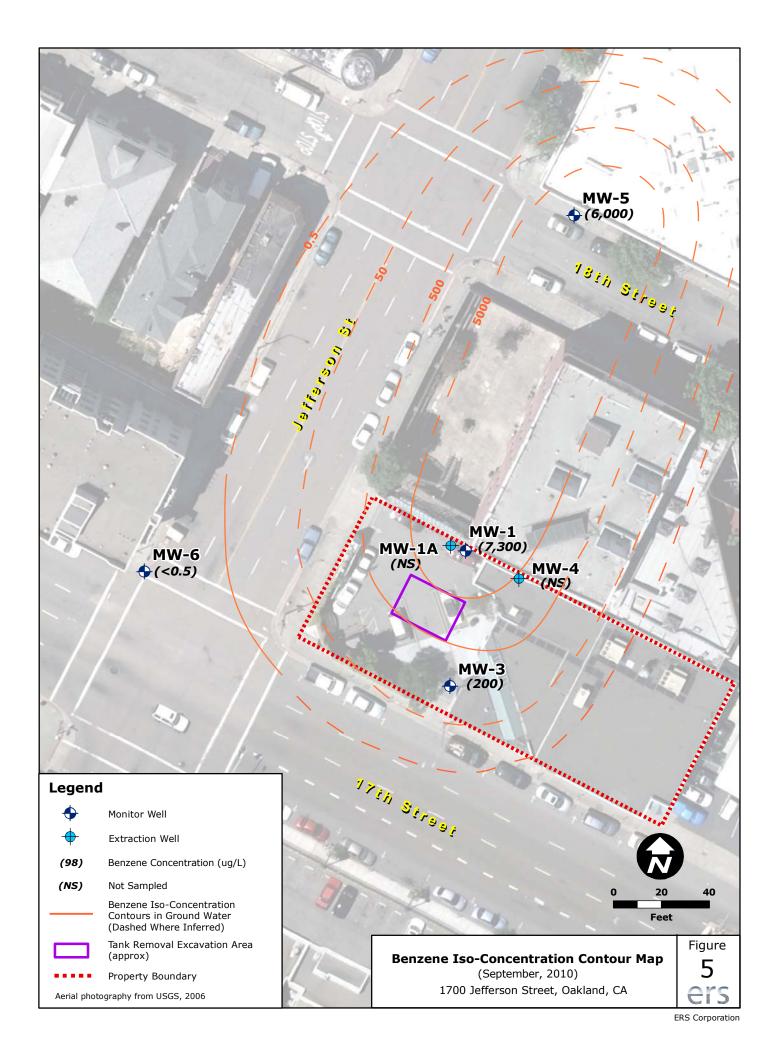
Source: National Geographic TOPO!

Figure 1









# **APPENDIX A**

		Depth to	Water Data	Sheet	
Site Name: 1700	Jeffe	uson		Date:	7-8-10
Location:	Kland,	CA		Field Tech:	BTY
Client:	BPS				
Well ID	Well Diameter	Time	DTW	Total Depth	Comments
MW-1	4	1230	23.75		
MW-1A	4	1231	22.31		
Mw-3	4	1229	23.09		
MW.4	4	1234	23,63		
MW-5	7	MBO 1341	27.05		
MW-5 MW-6	3	1224	23.11		
			,		
Notes:					

Site Name: 17	'00 Jefferson				Well/Sample ID: MW − 1					
Location: 1	700 Jefferson	Oakland, CA			Initial Depth to Water (DTW): 23.75					
Client: BPS F	Reprographics				Total Well De	pth (TD):	<u> </u>			
Sampler: YJE	3				Well Diameter (inches):					
Date:	9-8-10				Did Well Dewater? N					
Purge & Samp	ole Method:	Peristalic p	oump with dedi	cated tubing	Purge Rate (li	iters/min): 💍	.25			
					Sample Rate	(liters/min):	0,2			
Time	рН	sc	DO	Temp	ORP	DTW	Cumulative Volume	Notes		
hh:mm	SU	µmhos/cm	mg/l	°C	mV	feet bgs	liters	***************************************		
1237	7.18	762	(e.71	90'r0	-113.0	23:81	0.75			
1340	1.21	1496	1.20	19.30	-136.1	23.81	1.5	·		
1243	7.20	1494	0,92	19.37	-127.6	23.81	2.25			
1246	7.21	1494	0.59	19.38	127.73	23.81	3			
1249	7,4	1497	0.88	9.50	-122.8	2381	3.75			
		, ,								
	٠									
							:	1		
							·	· ·		
-										
Total Liters Pu	ırged:	Q.75	Start Purge Ti	me:	1234	DTW prior to	sample (ft):	23-81		
Total Sample	Volume:	190mr	Stop Purge Ti	me:	1249	Start Sample	Time:	1249		
Turbidity:		Low	Color:		Clear	Odor:		S194+ TP#		
Length of Tub	ing	MAN	Sheen:	NO	Product:		No			
Instrument ID:	126	·			Last Calibrate	d: 900				
Notes:										
	,					•				

Site Name: 17	700 Jefferson	•			Well/Sample ID: MW - 3					
Location: 1	700 Jefferson (	Dakland, CA			Initial Depth to Water (DTW): 23.09					
Client: BPS R	Reprographics				Total Well Depth (TD):					
Sampler: YJE	3				Well Diameter (inches):					
Date: G	-8-10				Did Well Dewa	ater? N				
Purge & Samp	ple Method:	Peristalic p	ump with dedi	cated tubing	Purge Rate (lit					
					Sample Rate	(liters/min): 💍	·25			
Time	рН	sc	DO	Temp	ORP	DTW	Cumulative Volume	Notes		
hh:mm	SU	µmhos/cm	mg/l	°C	mV	feet bgs	liters			
1402	7,09	700	1.09	20,24	-(76.2	23.19	,9			
1405	707	696	0.86	20,13	-1770	23.20	1.8			
1406	7.04	692	0.91	10.06	-180.4	23.20	2.7	-		
1411	7 1 200				-1814	23.20	3,6			
			i							
	-							1		
Total Liters P	urged:	310	Start Purge Ti	ime:	1359	DTW prior to	sample (ft):	33.20		
Total Sample	Volume:	190Wr	Stop Purge Ti	ime:	1411	Start Sample	Time:	1411		
Turbidity:		LOW	Color:		Clear	Odor:		No		
Length of Tub	oing		Sheen:		NO	Product:		No		
Instrument ID	: 12	6			Last Calibrated: 900					
Notes:										
				•		•				
					····					
				· · · · · · · · · · · · · · · · · · ·						

Sample: YJB						
Sampler: YJB						
Date:   9 - 8 - 10   Purge & Sample Method:   Peristalic pump with dedicated tubing   Purge Rate (liters/min):   0 - 3						
Purge & Sample Method:  Peristalic pump with dedicated tubing  Purge Rate (liters/min): 0.3  Sample Rate (liters/min): 0.3  Time pH SC DO Temp ORP DTW Cumulative Volume Volume  hh:mm SU pumbos/cm mg/l °C mV feet bgs liters  1200 7.07 1157 2.70 20.30 -145.3 22.21 0.9  1209 7.19 1143 1.71 11.94 -146.4 22.22 1.8  1218 7.12 1137 1.30 20.13 -132.0 22.21 2.7  1215 7.12 1135 1.14 20.20 -127.4 22.21 3.4  1218 7.12 1135 1.10 20.27 -116.7 22.21 5.4  Total Liters Purged: 5.4 Start Purge Time: 1221 Start Sample (ft): Color:  Total Sample Volume: 120 Color: Cleac Odor:  Length of Tubing  Purge Rate (liters/min): 0.3  Sample Rate (liters/min): 0.3  Sample Rate (liters/min): 0.35  Temp DTW Cumulative Volume (https://www.policy.com/product)  Purge Rate (liters/min): 0.35  Temp DTW Cumulative Volume (https://www.policy.com/product)  Purge Rate (liters/min): 0.35  Sample Rate (liters/min): 0.35  Sample Rate (liters/min): 0.35  Temp DTW Cumulative Volume (https://www.policy.com/product)  Purge Rate (liters/min): 0.35  Iters  120						
Sample Rate (liters/min): O . → €						
Time         pH         sc         DO         Temp         ORP         DTW         Cumulative Volume           hh.mm         SU         µmhos/cm         mg/l         °C         mV         feet bgs         liters           1∂00         7.07         1/57         2.70         20.30         -145.3         20.21         0.9           1∂09         7.19         1/43         1.31         19.94         -140.4         20.22         1.8           1∂10         7.12         1/37         1.20         20.13         -1320         22.21         3.4           1∂15         7.12         1/35         1.14         20.20         -127.4         22.21         3.4           1∂21         7.12         1/35         1.10         20.27         -110.7         20.21         5.4           1∂21         7.12         1/35         1.10         20.27         -110.7         20.21         5.4           1∂21         7.12         1/35         1.10         20.27         -110.7         20.21         5.4           1∂21         7.12         1/35         1.10         20.27         -110.7         20.21         5.4           1∂21         7.12	Purge Rate (liters/min): 0.3					
Time         pH         SC         DO         Temp         ORP         DIW         Volume           hh:mm         SU         µmhos/cm         mg/l         °C         mV         feet bgs         liters           1∂00         7.07         1157         2.70         20.30         -145.3         20.21         0.9           1∂09         7.19         1143         1.31         19.94         -1464         20.22         1.8           1∂10         7.12         1137         1.30         20.13         -1320         22.21         2.7           1∂15         7.12         1137         1.00         20.27         123.2         22.21         3.4           1∂21         7.12         1135         1.10         20.27         -116.7         20.21         5.4           1∂21         7.12         1135         1.10         20.27         -116.7         20.21         5.4           1∂21         7.12         1135         1.10         20.27         -116.7         20.21         5.4           1∂21         7.12         1135         1.10         20.27         20.27         20.21         5.4           1∂21         7.12         1135	Sample Rate (liters/min): 0 . 25					
130   7.07   1157   3.70   30.30   -145.3   32.21   0.9   130   7.19   1143   1.31   19.94   -1464   32.22   1.8   1315   7.12   1137   1.30   30.10   -127.4   32.21   3.6   1318   7.12   1135   1.14   20.20   -127.4   22.21   3.6   1321   7.12   1135   1.10   30.27   -116.7   22.21   5.4   1321   7.12   1135   1.10   30.27   -116.7   22.21   5.4   1321   7.12   135   1.10   30.27   -116.7   22.21   5.4   1321   5.4	Notes					
1300   7.19   1143   1.71   19.94   -1464   32.22   1.8     1313   7.12   1137   1.33   20.13   -132.0   22.21   3.6     1315   7.12   1135   1.14   20.20   -127.4   22.21   3.6     1321   7.12   1135   1.10   30.27   -116. 7   32.21   5.4     1321   7.12   1135   1.10   30.27   -116. 7   32.21   5.4     Total Liters Purged:   5.4   Start Purge Time:   1203   DTW prior to sample (ft):   6     Total Sample Volume:   120						
1310 7.13 1131 1.33 20.13 -1320 22.21 2.7  1315 7.13 1137 1.30 20.16 -127.4 22.21 3.40  1318 7.13 1135 1.14 20.20 -123.2 22.21 4.5  1221 7.13 1135 1.10 20.27 -116.7 22.21 5.4  Total Liters Purged: 5.4 Start Purge Time: 1203 DTW prior to sample (ft): 6  Total Sample Volume: 120 NL Stop Purge Time: 1221 Start Sample Time: 1201 Start Sample Time: 1221 Start Sample Ti	<u> </u>					
13   13   13   13   20   3   -13   0   22   21   3   0     13   5   7   12   1   13   1   1   20   20   -12   3   22   21   21   21     13   1   13   1   13   1   10   20   20   -12   3   22   21   21     13   1   13   1   10   20   27   -11   2   22   21   5   4      12   1   7   12   1   13   1   10   20   27   -11   2   22   21   5   4      13   1   13   1   13   1   10   20   27   -11   2   22   21   5   4      14   15   16   17   18   18   18   18   18   18      15   16   17   18   18   18   18   18   18      16   17   18   18   18   18   18   18      17   18   18   18   18   18   18      18   18						
1315 7.13 1137 1.30 30.16 -127.4 20.21 3.0  1318 7.12 1135 1.14 20.20 -123.2 22.21 4.5  1221 7.12 1135 1.10 30.27 -116.7 22.21 5.4  Total Liters Purged: 5.4 Start Purge Time: 1221 Start Sample (ft): 6  Total Sample Volume: 120						
1221 7.12						
1221         7.12         1135         1.10         20.27         -116. 7         22.21         5.4           Total Liters Purged:         5.4         Start Purge Time:         1203         DTW prior to sample (ft):         6           Total Sample Volume:         120         Stop Purge Time:         122         Start Sample Time:           Turbidity:         Low         Color:         Clear         Odor:           Length of Tubing         Sheen:         NO         Product:         I						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: NO Product:						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: NO Product:						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: No Product:						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: No Product:						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: No Product:	,					
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: No Product:						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: NO Product:						
Total Sample Volume: 120mL Stop Purge Time: 1221 Start Sample Time:  Turbidity: Color: Clear Odor:  Length of Tubing Sheen: NO Product:	32.21					
Turbidity: Low Color: Clear Odor:  Length of Tubing Sheen: No Product: /	1221					
Length of Tubing Sheen: NO Product:	TPH					
	None					
Instrument ID: Last Calibrated: 900						
Notes:						

					Well/Sample ID:	MW.	Le			
Name: 1700					nitial Depth to V					
	) Jefferson Oa	kland, CA			Total Well Depth (TD):					
nt: BPS Rep	orographics				Well Diameter (	(inches): $2$	<i>1</i>			
npler: YJB					Did Well Dewater?					
	8-10		np with dedica	ted tubing	Purge Rate (lite	ers/min): O	3			
ge & Sample	e Method:	Peristalic pui	np will do		Sample Rate (	ن ک:(liters/min				
	pН	SC	DO	Temp	ORP	WTQ	Cumulative Volume	Notes		
Time	SU	umhos/cm	mg/l	°C	mV	feet bgs	liters 0,9			
hh:mm			7.11	10.05	-110.1	2320	10.1			
1331	7.0	901	3.01	20.00	-111.1	23,21	1.8			
334			0.91	20.00	0.111-	23.21	27			
1337	le.98	903	0.11	20.0		2321	3.6	1		
1340	6.98	903		20.00	<del></del>	2321	45			
1343	698	902	0.87	000		2501				
						<u> </u>				
	<del> </del>									
	<del>                                     </del>									
			1	+						
						_				
<b></b>	1									
	-	_								
			<u>-                                    </u>		)33	DTW pric	or to sample (ft):	23.2		
Total Liters	s Purged:	4.5	Start Purge		134	1	nple Time:	1343		
Total Sam	ple Volume:	120M		e lime:		Odori		No		
Turbidity:		low	Color:		Clea	Product		No		
Length of	Tubing		Sheen:		Last Calibrated: 900					
instrumer	nt ID: . o	2le								
Notes:						3				

# **APPENDIX B**



#### **ANALYTICAL REPORT**

Job Number: 720-30398-1

Job Description: 1700 Jefferson, Oakland

For:

Environmental Risk Services, Corp. 1600 Riviera Ave Suite 310 Walnut Creek, CA 94596

Attention: Mr. Steven Michelson

Surmider Sidhu

Approved for release. Surinder Sidhu Customer Service Manager 9/17/2010 4:40 PM

Designee for
Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
09/17/2010

#### CA ELAP Certification # 2496

The Chain(s) of Custody are included and are an integral part of this report.

The report shall not be reproduced except in full, without the written approval of the laboratory. The client, by accepting this report, also agrees not to alter any reports whether in the hard copy or electronic format and to use reasonable efforts to preserve the reports in the form and substance originally provided by TestAmerica.

A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

## Job Narrative 720-30398-1

#### 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.

#### **EXECUTIVE SUMMARY - Detections**

Job Number: 720-30398-1

Client: Environmental Risk Services, Corp.

Lab Sample ID Client Sample ID Analyte	Result / Qualifier	Reporting Limit	Units	Method
720-30398-1 MW-1				
Benzene	7300	50	ug/L	8260B/CA_LUFTMS
Ethylbenzene	550	50	ug/L	8260B/CA_LUFTMS
Toluene	6300	50	ug/L	8260B/CA_LUFTMS
Xylenes, Total	3700	100	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12	30000	5000	ug/L	8260B/CA_LUFTMS
720-30398-2 MW-3				
Benzene	200	2.5	ug/L	8260B/CA LUFTMS
Ethylbenzene	23	0.50	ug/L	8260B/CA_LUFTMS
Toluene	23	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total	11	1.0	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12	1100	250	ug/L	8260B/CA_LUFTMS
720-30398-3 MW-5				
Benzene	6000	50	ug/L	8260B/CA LUFTMS
Ethylbenzene	1700	50	ug/L	8260B/CA_LUFTMS
Toluene	250	50	ug/L	8260B/CA_LUFTMS
Xylenes, Total	1900	100	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12	22000	5000	ug/L	8260B/CA_LUFTMS

#### **METHOD SUMMARY**

Job Number: 720-30398-1

Client: Environmental Risk Services, Corp.

Description	Lab Location	Method Preparation Method
Matrix Water		
8260B / CA LUFT MS	TAL SF	SW846 8260B/CA_LUFTMS
Purge and Trap	TAL SF	SW846 5030B

#### Lab References:

TAL SF = TestAmerica San Francisco

#### **Method References:**

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

#### **SAMPLE SUMMARY**

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

			Date/Time	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	Received
720-30398-1	MW-1	Water	09/08/2010 1249	09/09/2010 1130
720-30398-2	MW-3	Water	09/08/2010 1411	09/09/2010 1130
720-30398-3	MW-5	Water	09/08/2010 1221	09/09/2010 1130
720-30398-4	MW-6	Water	09/08/2010 1343	09/09/2010 1130

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Client Sample ID: MW-1

Lab Sample ID: 720-30398-1 Date Sampled: 09/08/2010 1249

Client Matrix: Water Date Received: 09/09/2010 1130

8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS Analysis Batch: 720-78077 Instrument ID: HP4

Preparation:5030BLab File ID:091610015.DDilution:100Initial Weight/Volume:10 mL

Date Analyzed: 09/16/2010 1621 Final Weight/Volume: 10 mL

Date Prepared: 09/16/2010 1621

Result (ug/L) Qualifier RL Analyte Methyl tert-butyl ether ND 50 50 Benzene 7300 550 50 Ethylbenzene 50 Toluene 6300 Xylenes, Total 3700 100 Gasoline Range Organics (GRO)-C5-C12 30000 5000

 Surrogate
 %Rec
 Qualifier
 Acceptance Limits

 4-Bromofluorobenzene
 101
 67 - 130

 1,2-Dichloroethane-d4 (Surr)
 102
 67 - 130

 Toluene-d8 (Surr)
 89
 70 - 130

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Client Sample ID: MW-3

Lab Sample ID: 720-30398-2 Date Sampled: 09/08/2010 1411 Client Matrix:

Water Date Received: 09/09/2010 1130

8260B/CA\_LUFTMS 8260B / CA LUFT MS

HP9 Method: 8260B/CA\_LUFTMS Analysis Batch: 720-78006 Instrument ID:

Preparation: Lab File ID: 09151011.D 5030B Dilution: Initial Weight/Volume: 10 mL 09/15/2010 1336 Final Weight/Volume: Date Analyzed: 10 mL

Date Prepared: 09/15/2010 1336

Result (ug/L) Qualifier RL Analyte Methyl tert-butyl ether ND 0.50 Ethylbenzene 23 0.50 23 0.50 Toluene Xylenes, Total 11 1.0

Surrogate %Rec Qualifier Acceptance Limits 4-Bromofluorobenzene 97 67 - 130 1,2-Dichloroethane-d4 (Surr) 93 67 - 130 70 - 130 Toluene-d8 (Surr) 97

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Client Sample ID: MW-3

 Lab Sample ID:
 720-30398-2
 Date Sampled: 09/08/2010 1411

 Client Matrix:
 Water
 Date Received: 09/09/2010 1130

8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS Analysis Batch: 720-78077 Instrument ID: HP4

Preparation:5030BLab File ID:091610016.DDilution:5.0Initial Weight/Volume:10 mL

Date Analyzed: 09/16/2010 1653 Final Weight/Volume: 10 mL Date Prepared: 09/16/2010 1653

Analyte Result (ug/L) Qualifier RL

 Benzene
 200
 2.5

 Gasoline Range Organics (GRO)-C5-C12
 1100
 250

Surrogate%RecQualifierAcceptance Limits4-Bromofluorobenzene9767 - 1301,2-Dichloroethane-d4 (Surr)10167 - 130

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Client Sample ID: MW-5

Date Sampled: 09/08/2010 1221 Lab Sample ID: 720-30398-3 Client Matrix:

Water Date Received: 09/09/2010 1130

8260B/CA\_LUFTMS 8260B / CA LUFT MS

HP4 Method: 8260B/CA\_LUFTMS Analysis Batch: 720-78077 Instrument ID:

Preparation: Lab File ID: 091610017.D 5030B Dilution: Initial Weight/Volume: 10 mL 100 09/16/2010 1725 Date Analyzed: Final Weight/Volume: 10 mL

Date Prepared: 09/16/2010 1725

Result (ug/L) Qualifier RL Analyte Methyl tert-butyl ether ND 50 50 Benzene 6000 Ethylbenzene 1700 50 50 Toluene 250 Xylenes, Total 1900 100

Gasoline Range Organics (GRO)-C5-C12 22000 5000

Surrogate %Rec Qualifier Acceptance Limits 4-Bromofluorobenzene 101 67 - 130 1,2-Dichloroethane-d4 (Surr) 104 67 - 130 Toluene-d8 (Surr) 90 70 - 130

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Client Sample ID: MW-6

Lab Sample ID: 720-30398-4 Date Sampled: 09/08/2010 1343

Client Matrix: Water Date Received: 09/09/2010 1130

8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS Analysis Batch: 720-78006 Instrument ID: HP9

 Preparation:
 5030B
 Lab File ID:
 09151013.D

 Dilution:
 1.0
 Initial Weight/Volume:
 10
 mL

 Date Analyzed:
 09/15/2010
 1440
 Final Weight/Volume:
 10
 mL

Date Prepared: 09/15/2010 1440

Result (ug/L) Qualifier RL Analyte Methyl tert-butyl ether ND 0.50 Benzene ND 0.50 ND 0.50 Ethylbenzene Toluene ND 0.50 Xylenes, Total ND 1.0 Gasoline Range Organics (GRO)-C5-C12 ND 50

Surrogate%RecQualifierAcceptance Limits4-Bromofluorobenzene9367 - 130

1,2-Dichloroethane-d4 (Surr) 96 67 - 130
Toluene-d8 (Surr) 90 70 - 130

# **DATA REPORTING QUALIFIERS**

Lab Section Qualifier Description

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

## **QC Association Summary**

		Report			
Lab Sample ID	Client Sample ID	Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-78006	5				
LCS 720-78006/5	Lab Control Sample	Т	Water	8260B/CA_LUFT	
LCS 720-78006/7	Lab Control Sample	Т	Water	8260B/CA_LUFT	
LCSD 720-78006/6	Lab Control Sample Duplicate	Т	Water	8260B/CA_LUFT	
LCSD 720-78006/8	Lab Control Sample Duplicate	Т	Water	8260B/CA_LUFT	
MB 720-78006/4	Method Blank	Т	Water	8260B/CA_LUFT	
720-30398-2	MW-3	Т	Water	8260B/CA_LUFT	
720-30398-4	MW-6	Т	Water	8260B/CA_LUFT	
Analysis Batch:720-78077	7				
LCS 720-78077/5	Lab Control Sample	Т	Water	8260B/CA_LUFT	
LCS 720-78077/7	Lab Control Sample	Т	Water	8260B/CA_LUFT	
LCSD 720-78077/6	Lab Control Sample Duplicate	Т	Water	8260B/CA_LUFT	
LCSD 720-78077/8	Lab Control Sample Duplicate	Т	Water	8260B/CA_LUFT	
MB 720-78077/4	Method Blank	Т	Water	8260B/CA_LUFT	
720-30398-1	MW-1	Т	Water	8260B/CA_LUFT	
720-30398-2	MW-3	Т	Water	8260B/CA_LUFT	
720-30398-3	MW-5	Т	Water	8260B/CA_LUFT	

#### Report Basis

T = Total

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Method Blank - Batch: 720-78006

Method: 8260B/CA\_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-78006/4

Client Matrix: Water Dilution: 1.0

Date Analyzed: 09/15/2010 0938 Date Prepared: 09/15/2010 0938 Analysis Batch: 720-78006

Prep Batch: N/A Units: ug/L

Instrument ID: HP9

Lab File ID: 09151004.D Initial Weight/Volume: 10 mL

Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	95	67 - 130	
1,2-Dichloroethane-d4 (Surr)	93	67 - 130	
Toluene-d8 (Surr)	94	70 - 130	

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Lab Control Sample/ Method: 8260B/CA\_LUFTMS

Lab Control Sample Duplicate Recovery Report - Batch: 720-78006 Preparation: 5030B

LCS Lab Sample ID: LCS 720-78006/5 Analysis Batch: 720-78006 Instrument ID: HP9

Client Matrix: Water Prep Batch: N/A Lab File ID: 09151005.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

 Date Analyzed:
 09/15/2010 1010
 Final Weight/Volume:
 10 mL

 Date Prepared:
 09/15/2010 1010
 1010

LCSD Lab Sample ID: LCSD 720-78006/6 Analysis Batch: 720-78006 Instrument ID: HP9
Client Matrix: Water Prep Batch: N/A Lab File ID: 09151006.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL Date Analyzed: 09/15/2010 1042 Final Weight/Volume: 10 mL

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual Methyl tert-butyl ether 97 62 - 130 20 96 0.3 Benzene 101 101 82 - 127 0.05 20 86 - 135 Ethylbenzene 101 100 1 20 20 Toluene 102 101 83 - 129 0.3 m-Xylene & p-Xylene 96 95 70 - 142 8.0 20 98 98 89 - 136 20 o-Xylene 0.3 LCS % Rec Surrogate LCSD % Rec Acceptance Limits 4-Bromofluorobenzene 96 95 67 - 130 67 - 130 88 91 1,2-Dichloroethane-d4 (Surr) 70 - 130 Toluene-d8 (Surr) 96 96

Date Prepared:

09/15/2010 1042

70 - 130

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Lab Control Sample/ Method: 8260B/CA\_LUFTMS

Lab Control Sample Duplicate Recovery Report - Batch: 720-78006 Preparation: 5030B

LCS Lab Sample ID: LCS 720-78006/7 Analysis Batch: 720-78006 Instrument ID: HP9

Client Matrix: Water Prep Batch: N/A Lab File ID: 09151007.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

Date Analyzed: 09/15/2010 1115 Final Weight/Volume: 10 mL Date Prepared: 09/15/2010 1115

LCSD Lab Sample ID: LCSD 720-78006/8 Analysis Batch: 720-78006 Instrument ID: HP9
Client Matrix: Water Prep Batch: N/A Lab File ID: 09151008.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

Date Analyzed: 09/15/2010 1147 Final Weight/Volume: 10 mL
Date Prepared: 09/15/2010 1147

97

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual Gasoline Range Organics (GRO)-C5-C12 92 88 59 - 111 20 4 Surrogate LCS % Rec LCSD % Rec Acceptance Limits 4-Bromofluorobenzene 96 97 67 - 130 1,2-Dichloroethane-d4 (Surr) 92 93 67 - 130

96

Toluene-d8 (Surr)

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Method Blank - Batch: 720-78077

Method: 8260B/CA\_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-78077/4

Water

Dilution: 1.0

Date Analyzed: 09/16/2010 1012

Date Prepared: 09/16/2010 1012

Client Matrix:

4 Analysis Batch: 720-78077

Prep Batch: N/A Units: ug/L

Instrument ID: HP4

Lab File ID: 091610004.D Initial Weight/Volume: 10 mL

Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	91	67 - 130	
1,2-Dichloroethane-d4 (Surr)	99	67 - 130	
Toluene-d8 (Surr)	85	70 - 130	

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Lab Control Sample/ Method: 8260B/CA\_LUFTMS

Lab Control Sample Duplicate Recovery Report - Batch: 720-78077 Preparation: 5030B

LCS Lab Sample ID: LCS 720-78077/5 Analysis Batch: 720-78077 Instrument ID: HP4

Client Matrix: Water Prep Batch: N/A Lab File ID: 091610005.D Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

Date Analyzed: 09/16/2010 1044 Final Weight/Volume: 10 mL Date Prepared: 09/16/2010 1044

LCSD Lab Sample ID: LCSD 720-78077/6 Analysis Batch: 720-78077 Instrument ID: HP4
Client Matrix: Water Prep Batch: N/A Lab File ID: 091610006.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

Date Analyzed: 09/16/2010 1116 Final Weight/Volume: 10 mL

Date Prepared: 09/16/2010 1116

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual Methyl tert-butyl ether 104 106 62 - 130 20 3 Benzene 98 95 82 - 127 3 20 86 - 135 Ethylbenzene 104 99 4 20 Toluene 103 100 83 - 129 3 20 m-Xylene & p-Xylene 102 97 70 - 142 5 20 104 100 89 - 136 20 o-Xylene 4 LCS % Rec Surrogate LCSD % Rec Acceptance Limits 4-Bromofluorobenzene 107 105 67 - 130 67 - 130 95 1,2-Dichloroethane-d4 (Surr) 95 70 - 130 Toluene-d8 (Surr) 93 93

Client: Environmental Risk Services, Corp. Job Number: 720-30398-1

Lab Control Sample/ Method: 8260B/CA LUFTMS

Lab Control Sample Duplicate Recovery Report - Batch: 720-78077 Preparation: 5030B

LCS Lab Sample ID: LCS 720-78077/7 Analysis Batch: 720-78077 Instrument ID: HP4

Client Matrix: Water Prep Batch: N/A Lab File ID: 091610007.D Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

09/16/2010 1148 Final Weight/Volume: Date Analyzed: 10 mL Date Prepared: 09/16/2010 1148

LCSD Lab Sample ID: LCSD 720-78077/8 HP4 Analysis Batch: 720-78077 Instrument ID: Prep Batch: N/A Lab File ID: 091610008.D Client Matrix: Water

Units: ug/L Initial Weight/Volume: Dilution: 1.0 10 mL 09/16/2010 1220 Date Analyzed: Final Weight/Volume: 10 mL 09/16/2010 1220

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual Gasoline Range Organics (GRO)-C5-C12 88 59 - 111 20 87 1 Surrogate LCS % Rec LCSD % Rec Acceptance Limits 4-Bromofluorobenzene 104 100 67 - 130 1,2-Dichloroethane-d4 (Surr) 100 95 67 - 130 Toluene-d8 (Surr) 92 90 70 - 130

Date Prepared:

#### San Francisco

,1220 Quarry Lane

<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING
Test America Laboratories Laboratories

Pleasanton, CA 94566

phone 925.484.1919 fax 925.600.3002		·····																		1 estAmerica Laboratories, II	je.
Client Contact	Project Manager: Steve Michelson				Site								2017/0/2010						COC No:		
Environmental Risk Services	Tel/Fax: 925-938-1600				Lab	Lab Contact: Carrie							rier:						1 of1 COCs		
1600 Riviera Avenue	Analysis Turnaround Time													İ					Job No.	. 1	
Walnut Creek, CA 94596	Calendar ( C ) or Work Days (W)W								***************************************												· I
(925) 938-1600 x103 Phone	TAT if different from Below																		ODON	<b>—</b>	
(925) 938-1610 FAX	2 weeks						8260													SDG No.	
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Site: 1700 Jefferson Oakland, CA	x	x 5 days				a	MT														- 1
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Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered S.	TPHg, BTEX, MTBE(8260)													3.3°C Sample Specific Notes:	
MW-I	9/8/2010	1249		GW	3		x														
MW-3	9/8/2010	1411		GW	3		x L														
MW-5	9/8/2010	1881		GW	3	L.	x L					_					_				
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=N	aOH; 6= Othe	r				П													The state of the s	Ì	
Possible Hazard Identification  Non-Hazard Flammable Skin Irritant Poison B Unknown						Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Disposal By Lab Archive For Months															
Special Instructions/QC Requirements & Com					onlte f	to x						~~~	υιορ	JUG1 1	-y			7 17 01	.,,,	7 9	
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## **Login Sample Receipt Check List**

Client: Environmental Risk Services, Corp.

List Source: TestAmerica San Francisco

Job Number: 720-30398-1

Login Number: 30398 Creator: Mullen, Joan List Number: 1

Question	T / F/ NA 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	True
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