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Alameda County  
Environmental Health



August 26, 2010

Mr. Paresh C. Khatri  
Alameda County Env. Health Services  
1131 Harbor Bay Parkway, Suite 250  
Oakland, California 94502

Subject: Fuel Leak Case#RO0000346

Site Location: 3519 Castro Valley Boulevard, Castro Valley

Dear Paresh:

SOMA's "Second Semi-Annual 2010 Groundwater Monitoring Report" for the subject site has been uploaded to the State's GeoTracker database and to the Alameda County ftp site for your review.

If you have any questions or comments, please do not hesitate to call me. Your time is greatly appreciated in reviewing our report.

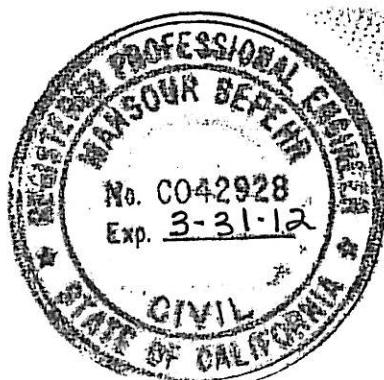
Sincerely,

A handwritten signature in black ink, appearing to read "Mansour Sepehr".

Mansour Sepehr, Ph.D., PE  
Principal Hydrogeologist

Enclosure

cc: Mr. Mirazim Shakoori w/enclosure



**Second Semi-Annual 2010  
Groundwater Monitoring Report**

**Castro Valley Chevron  
3519 Castro Valley Boulevard  
Castro Valley, California**

**August 26, 2010**

**Project 2761**

**Prepared for  
Mr. Mirazim Shakoori  
4313 Mansfield Drive  
Danville, California 94506**



ENVIRONMENTAL ENGINEERING, INC.

6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 [www.somaenv.com](http://www.somaenv.com)

PERJURY STATEMENT

Site Location: 3519 Castro Valley Boulevard, Castro Valley, CA

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

  
\_\_\_\_\_  
Mirazim Shakoori  
4313 Mansfield Drive  
Danville, California 94506  
Responsible Party

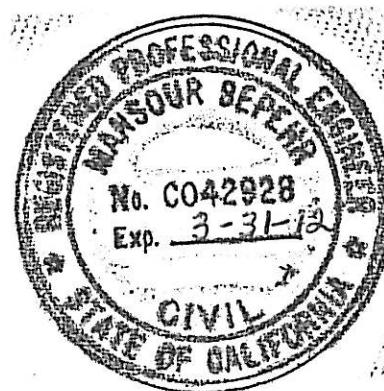
## CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Mirazim Shakoori, property owner of 3519 Castro Valley Boulevard, Castro Valley, California to comply with requirements of Alameda County Environmental Health Services for the Second Semi-Annual 2010 groundwater monitoring event.



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Mansour Sepehr, PhD, PE  
Principal Hydrogeologist



## **TABLE OF CONTENTS**

CERTIFICATION .....	i
TABLE OF CONTENTS .....	ii
LIST OF TABLES.....	iii
LIST OF FIGURES .....	iii
LIST OF APPENDICES .....	iv
1. INTRODUCTION .....	1
1.1 Overview .....	1
1.2 Summary of Field Activities and Laboratory Analysis.....	1
1.2.1 Field Activities .....	1
1.2.2 Laboratory Analysis.....	2
2. RESULTS .....	2
2.1 Field Measurements.....	2
2.2 Laboratory Analyses .....	2
3. CONCLUSIONS AND RECOMMENDATIONS.....	4
3.1 Conclusions .....	4
3.2 Recommendation.....	4
4. MONITORING SCHEDULE .....	5

## **LIST OF TABLES**

- Table 1: Historical Groundwater Elevations and Analytical Data  
TPH-g, BTEX, and MtBE
- Table 2: Historical Groundwater Analytical Data, Gasoline Oxygenates and Lead Scavengers

## **LIST OF FIGURES**

- Figure 1: Site Vicinity Map
- Figure 2: Site Map Showing Locations of Existing Monitoring Wells, Decommissioned Wells, Off-site Temporary Well Boreholes, Monitoring Wells Installed by SOMA, and Monitoring Wells Located at Neighboring Service Station
- Figure 3: Groundwater Elevation Contour Map in Feet. July 26, 2010
- Figure 4: Contour Map of TPH-g Concentrations in Groundwater. July 26, 2010
- Figure 5: Contour Map of Benzene Concentrations in Groundwater July 26, 2010
- Figure 6: Contour Map of MtBE Concentrations in Groundwater (EPA Method 8260B). July 26, 2010
- Figure 7: Map Showing TBA Concentrations in Groundwater July 26, 2010

## **LIST OF APPENDICES**

- Appendix A: Standard Operating Procedures for Conducting Groundwater Monitoring Activities
- Appendix B: Table of Elevations and Coordinates for Monitoring Wells and Field Measurements of Groundwater Sample Properties for Second Semi-annual 2010 Monitoring Event
- Appendix C: Chain of Custody Form and Laboratory Report for the Second Semi-annual 2010 Monitoring Event
- Appendix D: Email from P&D Environmental Inc., (Consultants for Neighboring Service Station at 3495 Castro Valley Blvd.)
- Appendix E: Non-Hazardous Waste Manifest for Groundwater Removal

# **1. INTRODUCTION**

## **1.1 Overview**

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report on behalf of Mr. Mirazim Shakoori, property owner of the former BP gasoline service station located at 3519 Castro Valley Boulevard, Castro Valley, California. The site is located in an area of primarily residential and commercial properties (Figure 1).

This report summarizes results of the Second Semi-Annual 2010 groundwater monitoring event conducted at the site on July 26, 2010. Included are laboratory analytical results for groundwater samples, and physical and chemical properties measured in the field for each groundwater sample including pH, temperature, and electrical conductivity (EC).

A joint monitoring event was conducted in coordination with the neighboring service station at 3459 Castro Valley Boulevard. However, this report does not include groundwater monitoring data and analytical results for the neighboring site as per correspondence from P&D Environmental Inc., dated September 24, 2008 (Appendix D).

## **1.2 Summary of Field Activities and Laboratory Analysis**

### **1.2.1 Field Activities**

On July 26, 2010, five on-site monitoring wells (ESE-1, ESE-2, ESE-5, MW-6, and SOMA-1) and five off-site monitoring wells (MW-7, SOMA-2, SOMA-3, SOMA-4, and SOMA-5) were measured for depth to groundwater, and additional field measurements and grab groundwater samples were collected from all monitoring wells. Figure 2 shows well locations.

Top of casing elevation data and depth to groundwater in each monitoring well were used to calculate groundwater elevation. The top of casing elevation was based on an elevation datum of 56.33 feet NAVD88. Appendix B includes survey data.

Activities were performed in accordance with general guidelines of California Regional Water Quality Control Board (CRWQCB) and Alameda County Environmental Health Services (ACEHS). Appendix A details standard procedures followed by SOMA during this monitoring event.

Purged groundwater from each well was stored on-site in one 55-gallon drums generated during this event. Appendix E includes the non-hazardous waste manifests for removal of purged groundwater from the site on March 12, 2010,

two drums containing purged groundwater generated during First Semi-Annual 2010 were transported to an appropriate disposal facility.

### **1.2.2 Laboratory Analysis**

Curtis & Tompkins, Ltd., a California state-certified environmental laboratory, analyzed groundwater samples for the following: total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX); methyl tertiary-butyl ether (MtBE); gasoline oxygenates, and lead scavengers. All were prepared using EPA Method 5030B and analyzed using EPA Method 8260B.

## **2. RESULTS**

Following are results of field measurements and laboratory analysis for the July 26, 2010 groundwater monitoring event.

### **2.1 Field Measurements**

Table 1 presents calculated groundwater elevation and depth to groundwater in each monitoring well. Depths to groundwater ranged from 7.01 feet in ESE-5 to 10.49 feet in SOMA-1. Groundwater elevations ranged from 167.14 feet in SOMA-3 to 172.16 feet in MW-6. Table 1 also presents historical groundwater elevations in monitoring wells.

The groundwater elevation contour map is displayed in Figure 3. Groundwater flows southeasterly across the site at an approximate gradient of 0.014 feet/feet.

Since the previous monitoring event (January 2010), the groundwater flow direction and gradient have remained unchanged. Refer to Table 1 for detailed historical groundwater elevation trends.

### **2.2 Laboratory Analyses**

Table 1 presents laboratory analytical results of groundwater samples for TPH-g, BTEX, and MtBE. Table 2 presents laboratory analytical results of groundwater samples for gasoline oxygenates and lead scavengers.

TPH-g was below the laboratory-reporting limit in groundwater samples from throughout the site except at wells ESE-1, ESE-5, SOMA-4, and SOMA-5. Detectable TPH-g concentrations ranged from 220 µg/L in SOMA-4 to 14,000 µg/L in SOMA-5. Figure 4 displays the contour map of TPH-g concentrations in groundwater. The highest TPH-g concentration was observed in the vicinity of the former UST cavity. Since the previous monitoring event (January 2010),

TPH-g has increased in ESE-5 and SOMA-4, decreased in ESE-1, and remained same in SOMA-5.

The following BTEX analytes were observed during this monitoring event:

- In ESE-5, toluene and xylenes were below laboratory-reporting limits and benzene and ethylbenzene were at low levels.
- In ESE-2, MW-6 and off-site wells MW-7, SOMA-1, SOMA-2, SOMA-3 and SOMA-4, all BTEX analytes were below laboratory-reporting limits.
- The highest benzene, ethylbenzene, and total xylenes were detected in SOMA-5 at 3,300 µg/L, 1,100 µg/L, and 1,340 µg/L, respectively.
- Toluene was detected only in ESE-1 at a low level.

Figure 5 displays the contour map of benzene concentrations in groundwater. As illustrated, the highest benzene concentration was observed in the vicinity of the former UST cavity. However, benzene has only minimally impacted groundwater throughout the site. Since the previous monitoring event (January 2010), benzene has increased in SOMA-5 and decreased in ESE-1 and ESE-5.

MtBE was below the laboratory-reporting limit in MW-6 and SOMA-2. Detectable MtBE concentrations ranged from 2.0 µg/L in ESE-5 to 150 µg/L in SOMA-5. Figure 6 displays the contour map of MtBE concentrations in groundwater. Based on the concentrations observed in MW-7, SOMA-3 and SOMA-4, the MtBE plume has migrated off-site. However, detectable MtBE concentrations have decreased since the previous monitoring event (January 2010).

The following gasoline oxygenate and lead scavenger analytes were observed during this monitoring event.

- Isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), Tertiary-amyl methyl ether (TAME), ethanol, 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) were below laboratory-reporting limits in all groundwater samples.
- Tertiary-butyl alcohol (TBA) was detected in wells ESE-1 and SOMA-1 at 110 µg/L and 68 µg/L, respectively. It was below the laboratory-reporting limit in all other tested wells.

Figure 7 displays the map showing TBA concentrations in groundwater. As illustrated, the highest TBA concentration was observed in the southern portion of the site at ESE-1. Since the previous monitoring event (January 2010), TBA has decreased in ESE-1, SOMA-1, and SOMA-5.

Refer to Tables 1 and 2 for detailed historical concentration trends. Appendix C includes the laboratory report and chain of custody form for the Second Semi-Annual 2010 monitoring event.

### **3. CONCLUSIONS AND RECOMMENDATIONS**

#### **3.1 Conclusions**

Conclusions based on the Second Semi-Annual 2010 groundwater monitoring event are summarized as follows:

- The groundwater flow direction has remained southeasterly across the site.
- In general, TPH-g, benzene, and MtBE plumes appear to be centrally located in the southern section of the site in the vicinity of the former UST cavity, at SOMA-5. TBA is formed in the environment through oxidation of MtBE in the atmosphere followed by hydrolysis, or through microbial oxidation of MtBE in impacted aquifer materials. Highest TBA concentration was observed at ESE-1. Since SOMA-5 has been screened in the perched WBZ, elevated TPH-g and BTEX concentrations at this well suggest that the perched WBZ is significantly impacted by petroleum hydrocarbons.
- Due to its high mobility and south-to-southeasterly groundwater flow direction across the site from the former UST cavity, MtBE has migrated off-site. However, in the northern section of the site, at MW-6, all tested constituents were at non-detectable levels.
- TPH-g was detected at 1,800 µg/L in ESE-5, where there was once a source area, and has increased since the previous monitoring event (January 2010); other tested constituents (BTEX, MtBE, and gasoline oxygenates) were at low or non-detectable levels.

#### **3.2 Recommendation**

- Based on results of this monitoring event, SOMA will continue groundwater monitoring at the site on a semi-annual basis, during first and third quarters, as suggested by ACEHS directive dated July 10, 2009.

Other ongoing activities: Based on ACEHS approval dated July 1, 2010, SOMA is currently conducting field activities to replace wells that are screened across the shallow and deeper confined water bearing zones with well clusters, which includes well pairs with one well screened in the shallow and the other in the deeper confined water-bearing zone. Details of field activities and the results of investigation will be documented in 'Soil and Water Investigation Report'.

#### **4. MONITORING SCHEDULE**

The next joint monitoring event (First Semi-Annual 2011) for the site will be conducted during First Quarter 2011.

# Tables

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Second Semi-Annual 2010 Groundwater Monitoring Report

SOMA Environmental Engineering, Inc.

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-1	10/5/1992	177.69	11.22	166.47	2100	370	150	17	110	NA
	10/5/1992	177.69	NM	NM	2300	370	160	16	110	NA
	4/1/1993	177.69	8.79	168.90	5900	1500	410	110	390	NA
	6/29/1993	177.69	10.34	167.35	7600	2900	390	130	460	NA
	9/23/1993	177.69	10.91	166.78	2000	490	40	20	56	600
	9/23/1993	177.69	NM	NM	1500	420	39	19	56	550
	12/10/1993	177.69	9.93	167.76	1800	480	42	19	66	921
	12/10/1993	177.69	NM	NM	1500	380	38	17	55	770
	2/17/1994	177.69	9.64	168.05	1900	380	48	24	80	585
	2/17/1994	177.69	NM	NM	2200	430	42	19	65	491
	8/8/1994	177.69	11.72	165.97	2100	450	46	16	50	760
	10/12/1994	177.69	10.48	167.21	760	240	16	51	39	230
	1/19/1995	177.69	7.77	169.92	840	600	120	22	58	NA
	5/2/1995	177.69	8.69	169.00	2000	640	67	24	98	NA
	7/28/1995	177.69	10.12	167.57	190	<0.50	<0.50	<0.50	<1.0	NA
	11/17/1995	177.69	10.57	167.12	200	3.4	<1.0	1	<2.0	600
	2/7/1996	177.69	7.41	170.28	750	370	23	21	64	680
	4/23/1996	177.69	9.12	168.57	310	100	<1.0	<1.0	<1.0	1500
	7/9/1996	177.69	10.12	167.57	730	230	74	13	63	750
	10/10/1996	177.69	10.80	166.89	420	26	1.6	7.3	12	430

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-1 cont.	1/20/1997	177.69	10.52	167.17	660	290	4.2	13	36	450
	4/25/1997	177.69	9.77	167.92	410	<0.5	<1.0	<1.0	<1.0	580
	7/18/1997	177.69	10.55	167.14	420	<0.5	<1.0	<1.0	<1.0	370
	10/27/1997	177.69	10.36	167.33	300	56	<1.0	6.5	<1.0	220
	1/22/1998	177.69	7.52	170.17	4200	440	9	15	17.7	1300
	4/23/1998	177.69	8.80	168.89	15000	3400	190	910	900	4900
	4/23/1998	177.69	NM	NM	15000	2800	140	730	730	4400
	7/29/1998	177.69	9.73	167.96	NA	NA	NA	NA	NA	NA
	7/30/1998	177.69	NM	NM	15000	<2.5	<5.0	<5.0	<5.0	15000
	12/17/1998	177.69	9.51	168.18	2400	73	1	2.8	4.6	2000
	3/19/1999	177.69	8.65	169.04	4700	58	<1.0	<1.0	<1.0	4700
	6/23/1999	177.69	10.51	167.18	600	170	<1.0	7.2	5	3900
	9/27/1999	177.69	10.32	167.37	920	200	<25	<25	<25	4900
	12/9/1999	177.69	10.24	167.45	460	130	1.2	5.2	1.5	5100
	3/9/2000	177.69	7.72	169.97	3000	1300	120	80	140	7300
	6/8/2000	177.69	9.40	168.29	2900	540	9.7	20	17	5200
	9/18/2000	177.69	10.05	167.64	890	3.4	<0.5	1.4	<0.5	2800
	12/14/2000	177.69	8.20	169.49	1600	11.1	<0.5	<0.5	<0.5	2730
	3/21/2001	177.69	9.75	167.94	5700	2.28	<0.5	0.51	<1.5	6810
	6/18/2001	177.69	10.21	167.48	2000	152	0.669	3.62	2.34	1980
	9/18/2001	177.69	10.30	167.39	2500	57.1	<5.0	6.25	<15	2090
	12/13/2001	177.69	9.82	167.87	2800	208	6.05	8.54	9.66	2030
	3/14/2002	177.69	9.10	168.59	1800	140	6.31	4.5	9.41	1970
	6/19/2002	177.69	9.92	167.77	1100	220	2.02	4.23	3.8	1280
	9/10/2002	177.69	10.21	167.48	490	39	2.9	<2.0	4.9	670
	12/16/2002	177.69	8.56	169.13	730	140	6	3.2	9.1	670

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-1 cont.	3/11/2003	177.69	9.40	168.29	1700	490	21	22	41	530
	6/17/2003	177.69	9.86	167.83	1300	140	<10	<10	<10	480
	12/9/2003	177.69	9.32	168.37	1400	390	12	14	26.1	260
	2/26/2004	177.69	7.71	169.98	3200	880	50	44	89	200
	5/21/2004	177.69	10.19	167.50	1500	370	10	14	25.2	140
	8/10/2004	180.24	10.41	169.83	460	390	7	8.1	15.4	110
	10/19/2004	180.24	10.40	169.84	1600	490	13	12	25.3	110
	1/14/2005	180.24	8.26	171.98	790 Z	420	26	19	52	91
	4/14/2005	180.24	8.77	171.47	3020	766	25.6	21.3	25.26	88.2
	7/7/2005	180.24	9.94	170.30	1940	440	15.5	15.7	21	80.6
	11/15/2005	180.24	10.21	170.03	1260	259	6.2	8.2	10.81	45.8
	2/8/2006	180.24	9.01	171.23	1430	332	13.6	18.1	25.03	43
	4/27/2006	180.24	9.14	171.10	1,600	519	23.2	32.4	40.20	63.4
	8/1/2006	180.24	9.92	170.32	1,530	395	11.8	25.4	28.01	40
	10/19/2006	180.24	10.34	169.90	1,230	327	10.2	21.6	21.19	29.6
	1/12/2007	180.24	9.84	170.40	561	153	7.18	14.4	14.95	30.9
	4/17/2007	180.24	9.78	170.46	467	192	7.59	13.8	16.42	30.4
	7/17/2007	180.24	9.82	170.42	755	271	8.6	17.8	22.06	26.7
	10/16/2007	180.24	8.99	171.25	164	80.2	<2.0	5.24	2.47	16.6
	1/17/2008	180.24	9.35	170.89	70	10.8	<2.0	<0.50	<2.0	19.3
	4/17/2008	180.24	9.80	170.44	687	89.7	<2.0	4.01	5.30	8.79
	7/16/2008	180.24	10.17	170.07	1,400	223	3.88	12.6	17.88	18.1
	10/14/2008	180.24	10.86	169.38	540	95	2.7	7.7	18	15
	1/6/2009	180.24	10.10	170.14	500 Y	130	3	8.8	17.1	13
	4/6/2009	180.24	10.05	170.19	910 Y	230	2.4	11	12.1	17
	7/7/2009	180.24	10.42	169.82	850 Y	89	1.9	7.8	15.1	15
	1/27/2010	180.24	7.94	172.30	1,600	250	8.8	30	69	23
	7/26/2010	180.24	9.95	170.29	1,000	96	1.2	4.2	6	17

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-2	10/5/1992	178.23	11.68	166.55	300	5.4	16	3.9	45	NA
	4/1/1993	178.23	9.17	169.06	240	27	<0.5	17	2.6	123
	6/29/1993	178.23	10.88	167.35	1,700	260	24	110	23	NA
	6/29/1993	178.23	NM	NM	1,300	240	17	110	25	NA
	9/23/1993	178.23	11.56	166.67	240	3.1	0.5	0.6	2.5	643
	12/10/1993	178.23	10.48	167.75	250	2.4	2.4	1.5	11	940
	2/17/1994	178.23	10.06	168.17	900	<0.5	<0.5	<0.5	<0.5	930
	8/8/1994	178.23	11.11	167.12	750	<0.5	<0.5	<0.5	<0.5	1400
	10/12/1994	178.23	11.31	166.92	1,700	<0.5	<0.5	<0.5	<0.5	3000
	1/19/1995	178.23	8.25	169.98	300	2	0.9	0.7	1	NA
	5/2/1995	178.23	9.21	169.02	1,200	4	<2.5	<2.5	<5	NA
	7/28/1995	178.23	10.64	167.59	2,000	<2.5	<2.5	<2.5	<5	NA
	11/17/1995	178.23	11.13	167.10	3,600	<25	<25	<25	<50	12000
	11/17/1995	178.23	NM	NM	3,400	<25	<25	<25	<50	12000
	2/7/1996	178.23	7.94	170.29	450	<0.5	<1	<1	<1	2300
	4/23/1996	178.23	9.73	168.50	260	0.9	<1	<1	<1	8600
	7/9/1996	178.23	10.70	167.53	780	<2.5	<5	<5	<5	13393
	10/10/1996	178.23	11.39	166.84	2,900	<0.5	<1	<1	<1	12000
	1/20/1997	178.23	9.04	169.19	<250	<2.5	<5	<5	<5	13000
	4/25/1997	178.23	10.31	167.92	2,700	<0.5	<1	<1	<1	15000
	7/18/1997	178.23	11.02	167.21	11,000	<5	<10	<10	<10	11000
	10/27/1997	178.23	10.93	167.30	6,100	<2.5	<5.0	<5.0	<5.0	7100
	10/27/1997	178.23	NM	NM	6,600	<2.5	<5.0	<5.0	<5.0	7400
	1/22/1998	178.23	7.93	170.30	13,000	<0.5	<1	<1	<1	10000
	1/22/1998	178.23	NM	NM	13,000	<0.5	<1	<1	<1	10000
	4/23/1998	178.23	9.34	168.89	19,000	<5	<10	<10	<10	36000
	7/29/1998	178.23	10.29	167.94	NA	NA	NA	NA	NA	NA
	7/30/1998	178.23	NM	NM	19,000	<5	<10	<10	<10	36000
	12/17/1998	178.23	10.20	168.03	12,000	<5	<5	<5	<5	13000

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-2 cont	3/19/1999	178.23	9.02	169.21	18,000	160	<1	<1	<1	18000
	6/23/1999	178.23	9.99	168.24	280	<1	<1	<1	<1	16000
	9/27/1999	178.23	10.69	167.54	<500	<25	<25	<25	<25	12000
	12/9/1999	178.23	11.26	166.97	<50	<0.3	<0.3	<0.3	<0.6	12000
	3/9/2000	178.23	7.95	170.28	<50	1.6	<0.5	<0.5	<0.5	7900
	6/8/2000	178.23	9.66	168.57	1,600	<0.5	0.73	<0.5	2.2	9400
	12/14/2000	178.23	11.15	167.08	6,000	0.75	<0.5	<0.5	<0.5	11200
	3/21/2001	178.23	10.35	167.88	6,900	786	45.7	37.7	71.5	3790
	6/18/2001	178.23	11.24	166.99	6,400	<2.5	<2.5	<2.5	<7.5	9320
	9/18/2001	178.23	11.35	166.88	4,800	<12.5	<12.5	<12.5	<37.5	6960
	12/13/2001	178.23	10.97	167.26	59,000	0.592	<0.5	<0.5	<1	5940
	3/14/2002	178.23	10.13	168.10	4,500	76	<0.5	<0.5	<1	6660
	6/19/2002	178.23	10.91	167.32	250	<12.5	<12.5	<12.5	<25	4900
	9/10/2002	178.23	10.82	167.41	1,500	<5	<5	<5	6.3	3100
	12/16/2002	178.23	7.87	170.36	1,400	<5	<5	<5	<5	2400
	3/11/2003	178.23	10.24	167.99	2,800	<10	<10	<10	<10	4800
	6/17/2003	178.23	10.19	168.04	10,000	<100	<100	<100	<100	4400
	12/9/2003	178.23	9.97	168.26	<50	<0.5	<0.5	<0.5	<0.5	3400
	2/26/2004	178.23	7.89	170.34	<50	<0.5	<0.5	<0.5	<0.5	3000
	5/21/2004	178.23	10.70	167.53	<50	<0.5	<0.5	<0.5	<0.5	1100
	8/10/2004	180.79	10.99	169.80	<50	<0.5	<0.5	<0.5	<0.5	550
	10/19/2004	180.79	10.46	170.33	<50	<0.5	<0.5	<0.5	<0.5	410
	1/14/2005	180.79	8.66	172.13	<50	<8.3	<8.3	<8.3	<8.3	1200
	4/14/2005	180.79	9.38	171.41	<860	<2.15	<2.15	<2.15	<4.30	1020
	7/7/2005	180.79	10.46	170.33	<860	<2.15	<8.60	<2.15	<4.30	378
	11/15/2005	180.79	10.55	170.24	<50	<0.5	<2.0	<0.5	<1.0	210
	2/8/2006	180.79	9.46	171.33	<215	<2.15	<8.6	<2.15	<4.3	419
	4/27/2006	180.79	10.67	170.12	<100	1.71	<4.0	<1.0	<2.0	432
	8/1/2006	180.79	10.29	170.50	<100	2.83	<4.0	<1.0	<2.0	222
	10/19/2006	180.79	10.65	170.14	<50	0.8	<2.0	<0.5	<1.0	221

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-2 cont	1/12/2007	180.79	NM	NM	NA	NA	NA	NA	NA	NA
	4/17/2007	180.79	10.20	170.59	<50	3.17	<2.0	4.49	<2.0	158
	7/17/2007	180.79	10.31	170.48	<50	1.65	<2.0	<0.5	<2.0	105
	10/16/2007	180.79	9.22	171.57	<50	5.67	<2.0	<0.5	<2.0	73.9
	1/17/2008	180.79	9.88	170.91	<50.0	<0.50	<2.0	<0.50	<2.0	80.2
	4/17/2008	180.79	10.29	170.50	<50	<0.5	<2.0	<0.5	<2.0	45
	7/16/2008	180.79	10.64	170.15	<50	<0.5	<2.0	<0.5	<2.0	54
	10/14/2008	180.79	11.41	169.38	<50	<0.5	<0.5	<0.5	<0.5	41
	1/6/2009	180.79	10.60	170.19	<50	<0.5	<0.5	<0.5	<0.5	36
	4/6/2009	180.79	10.62	170.17	<50	<0.5	<0.5	<0.5	<0.5	30
	7/7/2009	180.79	10.92	169.87	<50	2.4	<0.5	<0.5	<0.5	32
	1/27/2010	180.79	8.36	172.43	<50	<0.5	<0.5	<0.5	<0.5	26
	7/26/2010	180.79	10.44	170.35	<50	<0.5	<0.5	<0.5	<0.5	13
ESE-3	10/5/1992	178.20	10.58	167.62	430	57	31	3.6	34	NA
	4/1/1993	178.20	8.14	170.06	2400	460	220	74	210	NA
	6/29/1993	178.20	9.72	168.48	280	56	14	15	13	NA
	9/23/1993	178.20	10.46	167.74	72	13	3.5	1.7	4.1	NA
	12/10/1993	178.20	9.30	168.90	270	71	32	6.1	33	NA
	2/17/1994	178.20	8.97	169.23	520	140	10	20	33	5.74
	8/8/1994	178.20	10.02	168.18	<50	8.8	1.6	1.6	2.3	<5.0
	10/12/1994	178.20	10.32	167.88	470	190	6.4	15	18	<5.0
	1/19/1995	178.20	7.40	170.80	330	260	27	21	20	NA
	5/2/1995	178.20	8.26	169.94	530	180	30	23	44	NA
	7/28/1995	178.20	9.54	168.66	<50	<0.50	<0.50	<0.50	<1	NA
	11/17/1995	178.20	10.04	168.16	<50	1.7	<0.50	<0.50	<1	<5.0
	2/7/1996	178.20	7.08	171.12	<50	8.6	<1	<1	<1	<10
	4/1/1996	178.20	8.79	169.41	<50	7.6	<1	<1	<1	65
	7/9/1996	178.20	10.09	168.11	<50	12	2.6	2	3.9	26
	10/10/1996	178.20	10.48	167.72	NA	NA	NA	NA	NA	NA
	10/11/1996	178.20	NM	NM	260	140	<1	<1	2.6	<10

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>ESE-3 cont.</b>	1/20/1997	178.20	8.65	169.55	<50	1.5	1.7	<1	<1	14
	4/25/1997	178.20	10.02	168.18	<50	<0.5	<1	<1	<1	14
	7/18/1997	178.20	10.66	167.54	10000	1400	1400	300	1280	<250
	10/27/1997	178.20	9.83	168.37	<250	<2.5	<5.0	<5.0	36	<50
	1/22/1998	178.20	7.06	171.14	130	<0.5	<1.0	<1.0	<1.0	120
	4/23/1998	178.20	8.44	169.76	4800	560	<10	15	<10	4000
	7/29/1998	178.20	9.27	168.93	NA	NA	NA	NA	NA	NA
	7/30/1998	178.20	NM	NM	1800	6.2	<5.0	<5.0	<5.0	1700
	12/17/1998	178.20	9.15	169.05	600	54	<1.0	2.1	4.9	340/480
	3/19/1999	178.20	8.14	170.06	2000	260	4.4	13	28	870
	6/23/1999	178.20	9.44	168.76	290	91	<1.0	8.3	16	240
	9/27/1999	178.20	9.69	168.51	130	35	<1.0	2.7	3.8	100
	12/9/1999	178.20	10.99	167.21	380	84	1.7	8.7	6.3	160
	3/9/2000	178.20	7.12	171.08	950	190	4.6	39	62	350
	6/8/2000	178.20	10.92	167.28	300	37	<0.5	2.3	1.3	400
	9/18/2000	178.20	11.12	167.08	920	140	1.3	15	4.8	170
	12/14/2000	178.20	9.70	168.50	320	64	<0.5	6.24	1.76	201
	3/21/2001	178.20	10.07	168.13	680	80.5	0.546	21.1	18.2	398
	6/18/2001	178.20	11.42	166.78	380	47	<0.5	3.11	<1.5	242
	9/18/2001	178.20	11.55	166.65	340	54.8	<0.5	4.36	<1.5	79.7
	12/13/2001	178.20	10.12	168.08	270	31.4	<0.5	1.31	2.24	129
	3/14/2002	178.20	9.84	168.36	670	89.8	0.769	23.4	30.4	413
	6/19/2002	178.20	10.57	167.63	130	18.6	<0.5	<0.5	<1	166
	9/10/2002	178.20	9.90	168.30	88	12	<0.5	<0.5	<0.5	93
	12/16/2002	178.20	9.23	168.97	290	55	17	3.7	14	78
	3/11/2003	178.20	9.05	169.15	100	3.4	<0.5	0.54	<0.50	140
	6/17/2003	178.20	9.30	168.90	520	17	<5	5.3	<5	130

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>ESE-4</b>	10/5/1992	177.73	10.33	167.40	98	7.2	1.3	1.1	6.1	NA
	4/1/1993	177.73	7.88	169.85	550	93	20	23	33	NA
	6/29/1993	177.66	8.33	169.33	150	23	0.6	5.4	0.5	54
	9/23/1993	177.66	10.05	167.61	110	14	1.7	3.2	4.6	NA
	12/10/1993	177.66	8.95	168.71	110	21	7.2	4.2	10	28.75
	2/17/1994	177.66	8.65	169.01	210	26	1.2	4.7	11	113
	8/8/1994	177.66	9.76	167.90	76	9.6	<0.5	2	<0.5	62
	10/12/1994	177.66	9.62	168.04	<50	<0.5	<0.5	<0.5	<0.5	44
	1/19/1995	177.66	6.97	170.69	140	56	14	24	23	NA
	5/2/1995	177.66	7.85	169.81	130	21	2.8	8.6	8.2	NA
	7/28/1995	177.66	9.20	168.46	<50	<0.5	<0.5	<0.5	<1	NA
	11/17/1995	177.66	9.68	167.98	<50	<0.5	0.6	<0.5	<1	18
	2/7/1996	177.66	6.59	171.07	100	2.6	<1	1.6	4.1	42
	4/23/1996	177.66	8.30	169.36	160	37	15	16	31	43
	7/9/1996	177.66	9.21	168.45	60	17	1.5	6.8	11.6	27
	10/10/1996	177.66	9.97	167.69	NA	NA	NA	NA	NA	NA
	10/11/1996	177.66	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	18
	1/20/1997	177.66	7.68	169.98	<50	<0.5	<1.0	<1.0	<1.0	130
	4/25/1997	177.66	9.15	168.51	<250	<2.5	<5.0	<5.0	<5.0	<50
	7/18/1997	177.66	9.71	167.95	<50	15	<10	<10	<10	<100
	10/27/1997	177.66	9.38	168.28	<250	<2.5	<5.0	<5.0	<5.0	<50
	1/22/1998	177.66	6.59	171.07	<50	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1998	177.66	7.90	169.76	<250	<2.5	<5.0	<5.0	<5.0	<50
	7/29/1998	177.66	8.96	168.70	NA	NA	NA	NA	NA	NA
	7/30/1998	177.66	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
	12/17/1998	177.66	8.32	169.34	NA	NA	NA	NA	NA	NA

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-4 cont.	3/19/1999	177.66	7.71	169.95	NA	NA	NA	NA	NA	NA
	6/23/1999	177.66	8.78	168.88	NA	NA	NA	NA	NA	NA
	9/27/1999	177.66	9.27	168.39	NA	NA	NA	NA	NA	NA
	12/9/1999	177.66	9.21	168.45	NA	NA	NA	NA	NA	NA
	3/9/2000	177.66	6.82	170.84	NA	NA	NA	NA	NA	NA
	6/8/2000	177.66	8.72	168.94	NA	NA	NA	NA	NA	NA
	9/18/2000	177.66	8.72	168.94	NA	NA	NA	NA	NA	NA
	12/14/2000	177.66	8.61	169.05	NA	NA	NA	NA	NA	NA
	3/21/2001	177.66	8.61	169.05	NA	NA	NA	NA	NA	NA
	6/18/2001	177.66	9.24	168.42	NA	NA	NA	NA	NA	NA
	9/18/2001	177.66	9.35	168.31	NA	NA	NA	NA	NA	NA
	12/13/2001	177.66	8.53	169.13	NA	NA	NA	NA	NA	NA
	3/14/2002	177.66	8.44	169.22	NA	NA	NA	NA	NA	NA
	6/19/2002	177.66	10.97	166.69	NA	NA	NA	NA	NA	NA
	9/10/2002	177.66	9.27	168.39	NA	NA	NA	NA	NA	NA
	12/16/2002	177.66	6.90	170.76	NA	NA	NA	NA	NA	NA
	3/11/2003	177.66	8.83	168.83	NA	NA	NA	NA	NA	NA
	6/17/2003	177.66	8.84	168.82	NA	NA	NA	NA	NA	NA
ESE-5	10/5/1992	176.08	9.22	166.86	1300	200	3.8	1.2	18	NA
	4/1/1993	176.08	7.02	169.06	13000	2200	26	730	1000	NA
	4/1/1993	176.08	NM	NM	13000	2500	25	740	1100	NA
	6/29/1993	176.08	10.21	165.87	7600	1500	9.3	170	100	NA
	9/23/1993	176.08	10.64	165.44	560	19	1.2	0.9	1.8	NA
	12/10/1993	176.08	9.42	166.66	1700	300	3	76	110	14.07

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-5 cont	2/7/1994	176.08	9.35	166.73	3500	640	7.8	90	130	45.13
	8/8/1994	176.08	8.76	167.32	2600	210	4.6	9.4	4.4	33
	8/8/1994	176.08	NM	NM	2500	230	4.6	13	4.8	32
	10/12/1994	176.08	8.95	167.13	5600	560	9.5	75	21	79.2
	10/12/1994	176.08	NM	NM	6000	550	10	78	22	77
	1/19/1995	176.08	5.40	170.68	1900	620	<5	95	15	NA
	1/19/1995	176.08	NM	NM	1600	620	<5	93	17	NA
	5/2/1995	176.08	6.48	169.60	5700	1100	<10	180	58	NA
	5/2/1995	176.08	NM	NM	5300	1100	<10	180	58	NA
	7/28/1995	176.08	7.97	168.11	520	15	<0.50	1.7	1.3	NA
	7/28/1995	176.08	NM	NM	460	7.2	<0.50	1.9	1.5	NA
	11/17/1995	176.08	8.39	167.69	850	39	1.8	7.6	2.7	24
	2/7/1996	176.08	4.71	171.37	4100	670	6	190	140	<50
	4/23/1996	176.08	7.35	168.73	3000	570	<5	79	100	84
	7/9/1996	176.08	9.40	166.68	620	150	1.7	9.3	6.4	25
	10/10/1996	176.08	9.04	167.04	1100	29	<5	<5	<5	<50
	10/10/1996	176.08	NM	NM	1100	31	<5	<5	<5	<50
	1/20/1997	176.08	5.82	170.26	2100	980	<25	280	80	<250
	1/20/1997	176.08	NM	NM	2700	910	8.8	280	84	180
	4/25/1997	176.08	7.24	168.84	NA	NA	NA	NA	NA	NA
	4/28/1997	176.08	NM	NM	<250	7.9	<5.0	<5.0	<5.0	<50
	7/18/1997	176.08	7.86	168.22	1200	<5	<10	<10	<10	<100
	7/18/1997	176.08	NM	NM	630	31	<5.0	<5.0	<5.0	130
	10/27/1997	176.08	7.91	168.17	<250	5.4	<5.0	<5.0	<5.0	<50

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>ESE-5 cont.</b>	1/22/1998	176.08	4.64	171.44	170	7.7	<1.0	<1.0	<1.0	130
	4/23/1998	176.08	6.31	169.77	720	79	<5.0	9	<5.0	180
	7/29/1998	176.08	7.43	168.65	NA	NA	NA	NA	NA	NA
	7/30/1998	176.08	NM	NM	840	9.8	<1.0	4	<1.0	710
	12/17/1998	176.08	7.05	169.03	NA	NA	NA	NA	NA	NA
	3/19/1999	176.08	5.00	171.08	<250	<5.0	<5.0	<5.0	<5.0	<5.0
	6/23/1999	176.08	7.77	168.31	NA	NA	NA	NA	NA	NA
	9/27/1999	176.08	8.11	167.97	450	10	<5.0	6.3	<5.0	220
	12/9/1999	176.08	7.66	168.42	NA	NA	NA	NA	NA	NA
	3/9/2000	176.08	5.08	171.00	1700	170	2.5	45	6.4	140
	6/8/2000	176.08	7.36	168.72	NA	NA	NA	NA	NA	NA
	9/18/2000	176.08	7.71	168.37	130	0.65	<0.50	0.71	<0.50	51
	12/14/2000	176.08	2.36	173.72	NA	NA	NA	NA	NA	NA
	3/21/2001	176.08	7.42	168.66	1000	10.3	<2.5	11	<7.5	70.8
	6/18/2001	176.08	7.92	168.16	NA	NA	NA	NA	NA	NA
	9/18/2001	176.26	8.23	168.03	200	0.868	<0.50	0.55	<1.5	57.5
	12/13/2001	176.26	7.80	168.46	NA	NA	NA	NA	NA	NA
	3/14/2002	176.26	6.55	169.71	1300	17.1	1.35	15.4	1.42	37.4
	6/19/2002	176.26	7.83	168.43	NA	NA	NA	NA	NA	NA
	9/10/2002	176.26	8.22	168.04	680	9.9	<5.0	<5.0	<5.0	44
	12/16/2002	176.26	6.58	169.68	NA	NA	NA	NA	NA	NA
	3/11/2003	176.26	6.77	169.49	2100	14	<2.5	15	3	80
	6/17/2003	176.26	6.75	169.51	NA	NA	NA	NA	NA	NA
	9/17/2003	176.26	8.48	167.78	970	10 C	<0.5	<0.5	5.3	34
	12/9/2003	176.26	7.32	168.94	700	6.5	<0.5	3.1	2.7 C	34

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>ESE-5 cont.</b>	2/26/2004	176.26	5.21	171.05	2400 H	41	2.8 C	18	2.4 C	29
	5/21/2004	176.26	7.50	168.76	1500	2.6 C	<0.5	2.1 C	2.1 C	25
	8/10/2004	178.80	8.28	170.52	680	<0.5	<0.5	<0.5	<0.5	33
	10/19/2004	178.80	8.26	170.54	380	<0.5	<0.5	<0.5	1.4	39
	1/14/2005	178.80	5.16	173.64	2400	18	1.4	22	2.1	26
	4/14/2005	178.80	6.13	172.67	4800	7.75	1.26	14.3	<1.0	23.1
	7/7/2005	178.80	7.52	171.28	3240	0.78	<2.0	1.18	<1.0	36.6
	11/15/2005	178.80	7.85	170.95	1190	0.51	<2.0	<0.5	<1.0	30
	2/8/2006	178.80	5.83	172.97	2510	1.91	<2.0	2.82	<1.0	20.7
	4/27/2006	178.80	5.71	173.09	4,700	2.76	<2.0	4.77	<1.0	28.3
	8/1/2006	178.80	7.71	171.09	1,890	0.7	<2.0	0.75	<1.0	24.7
	10/19/2006	178.80	8.00	170.80	474	<0.5	<2.0	3.39	<1.0	29
	1/12/2007	178.80	7.41	171.39	868	2.18	<2.0	2.66	<2.0	16.3
	4/17/2007	178.80	7.51	171.29	1,240	10.2	<2.0	10.4	2.37	17.2
	7/17/2007	178.80	7.47	171.33	836	3.1	<2.0	4.91	2.35	25.8
	10/16/2007	178.80	6.26	172.54	2,120	2.5	<2.0	6.19	2.61	17.5
	1/17/2008	178.80	6.59	172.21	2,730	5.74	<2.0	14.3	<2.0	13.1
	4/17/2008	178.80	6.81	171.99	2,770	4.7	<2.0	15.9	<2.0	<0.5
	7/16/2008	178.80	7.76	171.04	2,160	0.9	<2.0	1.1	<2.0	6.28
	10/14/2008	178.80	8.40	170.40	1,300	<0.5	<0.5	0.6	<0.5	9.9
	1/6/2009	178.80	7.66	171.14	1,100 Y	0.61	<0.5	1.6	<0.5	8
	4/6/2009	178.80	7.79	171.01	1,900 Y	4.6	<0.5	9.3	0.59	5.3
	7/7/2009	178.80	7.84	170.96	2,700 Y	3.0	<0.5	2.3	<0.5	6.6
	1/27/2010	178.80	4.82	173.98	1,300 Y	0.76	<0.5	1.0	<0.5	3.5
	7/26/2010	<b>178.80</b>	<b>7.01</b>	<b>171.79</b>	<b>1,800</b>	<b>0.75</b>	<b>&lt;0.5</b>	<b>1.8</b>	<b>&lt;0.5</b>	<b>2</b>
<b>MW-6</b>	7/28/1995	179.24	10.00	169.24	<50	<0.50	<0.50	<0.50	<1.0	NA
	11/17/1995	179.24	10.44	168.80	<50	<0.50	<0.50	<0.50	<1.0	<5.0

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
MW-6 cont.	2/7/1996	179.24	7.68	171.56	<50	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1996	179.24	9.33	169.91	<50	<0.5	<1.0	<1.0	<1.0	<10
	7/9/1996	179.24	10.10	169.14	<50	<0.5	<1.0	<1.0	<1.0	<10
	10/10/1996	179.24	11.00	168.24	<50	<0.5	<1.0	<1.0	<1.0	<10
	1/20/1997	179.24	8.70	170.54	<50	<0.5	<1.0	<1.0	<1.0	<10
	4/25/1997	179.24	10.16	169.08	<50	<0.5	<1.0	<1.0	<1.0	<10
	7/18/1997	179.24	10.66	168.58	<50	<0.5	<1.0	<1.0	<1.0	<10
	10/27/1997	179.24	10.25	168.99	<50	<0.5	<1.0	<1.0	<1.0	<10
	1/22/1998	179.24	7.76	171.48	<50	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1998	179.24	9.10	170.14	<50	<0.5	<1.0	<1.0	<1.0	<10
	7/29/1998	179.24	10.40	168.84	NA	NA	NA	NA	NA	NA
	7/30/1998	179.24	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
	12/17/1998	179.24	9.40	169.84	NA	NA	NA	NA	NA	NA
	3/19/1999	179.24	9.10	170.14	NA	NA	NA	NA	NA	NA
	6/23/1999	179.24	9.79	169.45	NA	NA	NA	NA	NA	NA
	9/27/1999	179.24	10.10	169.14	NA	NA	NA	NA	NA	NA
	12/9/1999	179.24	9.97	169.27	NA	NA	NA	NA	NA	NA
	3/9/2000	179.24	8.56	170.68	NA	NA	NA	NA	NA	NA
	6/8/2000	179.24	9.11	170.13	NA	NA	NA	NA	NA	NA
	9/18/2000	179.24	9.77	169.47	NA	NA	NA	NA	NA	NA
	12/14/2000	179.24	9.17	170.07	NA	NA	NA	NA	NA	NA
	3/21/2001	179.24	9.82	169.42	NA	NA	NA	NA	NA	NA
	6/18/2001	179.24	10.19	169.05	NA	NA	NA	NA	NA	NA
	9/18/2001	179.24	10.25	168.99	NA	NA	NA	NA	NA	NA
	12/13/2001	179.24	9.75	169.49	NA	NA	NA	NA	NA	NA
	3/14/2002	179.24	9.53	169.71	NA	NA	NA	NA	NA	NA
	6/19/2002	179.24	9.87	169.37	NA	NA	NA	NA	NA	NA
	9/10/2002	179.24	9.49	169.75	NA	NA	NA	NA	NA	NA
	12/16/2002	179.24	8.39	170.85	NA	NA	NA	NA	NA	NA

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>MW-6 cont.</b>	3/11/2003	179.24	9.40	169.84	NA	NA	NA	NA	NA	NA
	6/17/2003	179.24	9.71	169.53	NA	NA	NA	NA	NA	NA
	9/17/2003	179.24	10.21	169.03	<50	<0.5	<0.5	<0.5	<0.5	<2.0
	12/9/2003	179.24	9.66	169.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	2/26/2004	179.24	7.83	171.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	5/21/2004	179.24	9.75	169.49	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/10/2004	181.80	10.28	171.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	10/19/2004	181.80	9.91	171.89	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/14/2005	181.80	8.40	173.40	<50	0.6	<0.5	<0.5	<0.5	<0.5
	4/14/2005	181.80	9.04	172.76	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	7/7/2005	181.80	9.94	171.86	<200	<0.5	<2.00	<0.5	<1.00	<0.5
	11/15/2005	181.80	9.98	171.82	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	2/8/2006	181.80	9.91	171.89	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	4/27/2006	181.80	9.54	172.26	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	8/1/2006	181.80	9.61	172.19	<50	<0.5	<2.0	<0.5	<1.0	0.51
	10/19/2006	181.80	10.23	171.57	<50	<0.5	<2.0	<0.5	<1.0	0.63
	1/12/2007	181.80	10.13	171.67	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/17/2007	181.80	10.22	171.58	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/17/2007	181.80	9.76	172.04	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2007	181.80	9.82	171.98	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/17/2008	181.80	9.43	172.37	<50	<0.50	<2.0	<0.50	<2.0	<0.5
	4/17/2008	181.80	9.54	172.26	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/16/2008	181.80	9.80	172.00	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/14/2008	181.80	10.48	171.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/6/2009	181.80	10.01	171.79	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/6/2009	181.80	10.15	171.65	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	7/7/2009	181.80	10.28	171.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/27/2010	181.80	8.28	173.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	7/26/2010	<b>181.80</b>	<b>9.64</b>	<b>172.16</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>MW-7</b>	7/28/1995	176.55	9.25	167.30	<50	0.54	0.54	<0.50	<1.0	NA
	11/17/1995	176.55	9.73	166.82	1100	<10	<10	<10	<20	4000
	2/7/1996	176.55	6.48	170.07	610	<0.50	<1.0	<1.0	<1.0	2500
	2/7/1996	176.55	NM	NM	280	<0.50	<1.0	<1.0	<1.0	2600
	4/23/1996	176.55	8.37	168.18	110	<0.50	<1.0	<1.0	<1.0	3500
	4/23/1996	176.55	NM	NM	230	<0.50	<1.0	<1.0	<1.0	3500
	7/9/1996	176.55	9.24	167.31	230	<0.50	<1.0	<1.0	<1.0	4296
	7/9/1996	176.55	NM	NM	220	<0.50	<1.0	<1.0	<1.0	4400
	10/10/1996	176.55	10.05	166.50	NA	NA	NA	NA	NA	NA
	10/11/1996	176.55	NM	NM	1600	<0.50	<1.0	<1.0	<1.0	3000
	1/20/1997	176.55	7.51	169.04	<50	0.63	<1.0	<1.0	<1.0	2600
	4/25/1997	176.55	8.79	167.76	NA	NA	NA	NA	NA	NA
	4/28/1997	176.55	NM	NM	1500	<0.50	<1.0	<1.0	<1.0	3600
	4/28/1997	176.55	NM	NM	7700	3500	<25	74	37	<250
	7/18/1997	176.55	9.50	167.05	1400	<0.50	<1.0	<1.0	<1.0	2600
	10/27/1997	176.55	9.19	167.36	420	<0.50	<1.0	<1.0	<1.0	560
	1/22/1998	176.55	6.45	170.10	3100	<0.50	<1.0	<1.0	1.4	2300
	4/23/1998	176.55	8.02	168.53	3800	<0.50	<1.0	<1.0	<1.0	3800
	7/29/1998	176.55	8.88	167.67	NA	NA	NA	NA	NA	NA
	7/30/1998	176.55	NM	NM	500	<2.5	<5.0	<5.0	<5.0	<50
	7/30/1998	176.55	NM	NM	4700	<12	<25	<25	<25	4700
	12/17/1998	176.55	8.62	167.93	NA	NA	NA	NA	NA	NA
	3/19/1999	176.55	7.52	169.03	3800	<1.0	<1.0	<1.0	<1.0	3800
	6/23/1999	176.55	9.63	166.92	NA	NA	NA	NA	NA	NA
	9/27/1999	176.55	9.39	167.16	140	<10	<10	<10	<10	3800
	12/9/1999	176.55	9.94	166.61	NA	NA	NA	NA	NA	NA

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>MW-7 cont.</b>	3/9/2000	176.55	6.72	169.83	<50	<0.50	<0.50	<0.50	<0.50	1400
	6/8/2000	176.55	7.38	169.17	NA	NA	NA	NA	NA	NA
	9/18/2000	176.55	9.18	167.37	190	<0.50	<0.50	<0.50	<0.50	580
	12/14/2000	176.55	8.13	168.42	NA	NA	NA	NA	NA	NA
	3/21/2001	176.55	8.98	167.57	1300	<0.50	<0.50	<0.50	<1.5	1460
	6/18/2001	176.55	9.68	166.87	NA	NA	NA	NA	NA	NA
	9/18/2001	176.55	9.80	166.75	<0.50	<0.50	<0.50	<0.50	<1.5	94.9
	12/13/2001	176.55	9.26	167.29	NA	NA	NA	NA	NA	NA
	3/14/2002	176.55	8.69	167.86	800	<0.50	<0.50	<0.50	<1.0	952
	6/19/2002	176.55	9.06	167.49	NA	NA	NA	NA	NA	NA
	9/10/2002	176.55	9.23	167.32	260	<2.0	<2.0	<2.0	<2.0	580
	12/16/2002	176.55	7.77	168.78	NA	NA	NA	NA	NA	NA
	3/11/2003	176.55	8.30	168.25	620	<2.5	<2.5	<2.5	<2.5	1100
	6/17/2003	176.55	9.51	167.04	NA	NA	NA	NA	NA	NA
	9/17/2003	176.55	9.52	167.03	<50	<0.5	<0.5	<0.5	<0.5	460
	12/9/2003	176.55	8.99	167.56	<50	<0.5	<0.5	<0.5	<0.5	420
	2/26/2004	176.55	6.55	170.00	<50	<0.5	<0.5	<0.5	<0.5	330
	5/21/2004	176.55	8.90	167.65	<50	<0.5	<0.5	<0.5	<0.5	630
	8/10/2004	179.11	9.58	169.53	<50	<0.5	<0.5	<0.5	<0.5	750
	10/19/2004	179.11	9.20	169.91	<50	<0.5	<0.5	<0.5	<0.5	550
	1/14/2005	179.11	7.25	171.86	<50	<2.0	<2.0	<2.0	<2.0	250
	4/14/2005	179.11	7.94	171.17	<200	<0.5	<0.5	<0.5	<1.0	285
	7/7/2005	179.11	9.08	170.03	<400	<1.0	<4.0	<1.0	<2.0	452
	11/15/2005	179.11	9.14	169.97	<50	<0.5	<2.0	<0.5	<1.0	110
	2/8/2006	179.11	7.93	171.18	<50	<0.5	<2.0	<0.5	<1.0	101
	4/27/2006	179.11	8.40	170.71	<50	<0.5	<2.0	<0.5	<1.0	131
	8/1/2006	179.11	8.89	170.22	<50	<0.5	<2.0	<0.5	<1.0	68.6
	10/19/2006	179.11	9.44	169.67	<50	<0.5	<2.0	<0.5	<1.0	65.5

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
<b>MW-7 cont.</b>	1/12/2007	179.11	8.91	170.20	<50	<0.5	<2.0	<0.5	<2.0	38
	4/17/2007	179.11	8.58	170.53	<50	<0.5	<2.0	<0.5	<2.0	24.7
	7/17/2007	179.11	9.04	170.07	<50	2.07	<2.0	<0.5	<2.0	29.3
	10/6/2007	179.11	7.88	171.23	<50	0.88	<2.0	<0.5	<2.0	5.26
	1/17/2008	179.11	NM	NM	NA	NA	NA	NA	NA	NA
	4/17/2008	179.11	8.85	170.26	<50	1.87	<2.0	<0.5	<2.0	21.6
	7/16/2008	179.11	9.34	169.77	<50	<0.5	<2.0	<0.5	<2.0	11.4
	10/14/2008	179.11	10.06	169.05	<50	0.78	<0.5	<0.5	<0.5	12
	1/6/2009	179.11	9.12	169.99	<50	<0.5	<0.5	<0.5	<0.5	14
	4/6/2009	179.11	9.28	169.83	<50	<0.5	<0.5	<0.5	<0.5	13
	7/7/2009	179.11	9.59	169.52	<50	<0.5	<0.5	<0.5	<0.5	15
	1/27/2010	179.11	6.98	172.13	<50	<0.5	<0.5	<0.5	<0.5	6.3
	7/26/2010	179.11	9.11	170.00	<50	<0.5	<0.5	<0.5	<0.5	6
<b>MW-8</b>	7/28/1995	176.34	7.80	168.54	1,100	<2.5	<2.5	<2.5	<5.0	NA
	11/17/1995	176.34	8.29	168.05	8,300	75	5.3	670	240	140
	2/7/1996	176.34	4.99	171.35	2,300	33	<10	190	216	<100
	4/23/1996	176.34	6.09	170.25	2,000	390	<10	150	26	<250
<b>QC-2</b>	4/1/1993	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	6/29/1993	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	9/23/1993	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	12/10/1993	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	2/17/1994	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	8/8/1994	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	10/12/1994	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	1/19/1995	NM	NM	NM	<50	<0.5	<0.5	<0.5	<1.0	NA
	5/2/1995	NM	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	NA
	7/28/1995	NM	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	NA
	11/17/1995	NM	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	<5.0

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
QC-2 cont.	2/7/1996	NM	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1996	NM	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
	7/9/1996	NM	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
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SOMA-1	8/10/2004	180.95	11.53	169.42	84	<0.5	<0.5	1.5 C	2.2	2100
	10/19/2004	180.95	10.41	170.54	56	<0.5	<0.5	1.3 C	1.4 C	1600
	1/14/2005	180.95	9.68	171.27	58	<3.1	<3.1	<3.1	<3.1	330
	4/14/2005	180.95	9.37	171.58	<2200	<5.5	<5.5	<5.5	<11	668
	7/7/2005	180.95	10.21	170.74	<860	<2.15	<8.6	<2.15	<4.3	591
	11/15/2005	180.95	10.70	170.25	<50	<0.5	<2.0	1.1	<1.0	256
	2/8/2006	180.95	9.30	171.65	127	1.56	<2.0	3.23	3.12	176
	4/27/2006	180.95	9.64	171.31	81.6	1.14	<2.0	2.8	<1.0	189
	8/1/2006	180.95	10.25	170.70	<50	1.07	<2.0	1.46	<1.0	122
	10/19/2006	180.95	10.73	170.22	<50	0.68	<2.0	4.17	<1.0	116
	1/12/2007	180.95	10.38	170.57	<50	<0.5	<2.0	<0.5	<2.0	68.7
	4/17/2007	180.95	10.09	170.86	<50	5.76	<2.0	4.33	2.59	33.4
	7/17/2007	180.95	10.35	170.60	<50	14.8	<2.0	4.63	3.32	39.4
	10/16/2007	180.95	9.71	171.24	<50	5.7	<2.0	<0.5	<2.0	14.2
	1/17/2008	180.95	10.01	170.94	<50	1.02	<2.0	<0.5	<2.0	12.8
	4/17/2008	180.95	10.17	170.78	<50	3.13	<2.0	<0.5	<2.0	12.8
	7/16/2008	180.95	10.63	170.32	<50	10.6	<2.0	<0.5	<2.0	15.8
	10/14/2008	180.95	11.36	169.59	<50	1.1	<0.5	<0.5	<0.5	15
	1/6/2009	180.95	10.81	170.14	<50	0.6	<0.5	<0.5	<0.5	14
	4/6/2009	180.95	10.69	170.26	<50	<0.5	<0.5	<0.5	<0.5	12
	7/7/2009	180.95	11.01	169.94	<50	0.57	<0.5	1.2	0.91	12
	1/27/2010	180.95	8.81	172.14	<50	<0.5	<0.5	<0.5	<0.5	9.9
	7/26/2010	180.95	10.49	170.46	<50	<0.5	<0.5	<0.5	<0.5	5.9
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SOMA-2	8/10/2004	178.99	10.69	168.30	<50	<0.5	<0.5	<0.5	<0.5	0.8
	10/19/2004	178.99	10.75	168.24	<50	<0.5	<0.5	<0.5	<0.5	2.4

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
<b>SOMA-2 cont</b>	1/14/2005	178.99	9.45	169.54	<50	<0.5	<0.5	<0.5	<0.5	1.1
	4/14/2005	178.99	10.46	168.53	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	7/7/2005	178.99	11.81	167.18	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	11/15/2005	178.99	12.02	166.97	<50	<0.5	<2.0	<0.5	<1.0	1.61
	2/8/2006	178.99	11.88	167.11	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	4/27/2006	178.99	10.95	168.04	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	8/1/2006	178.99	11.85	167.14	<50	<0.5	<2.0	<0.5	<1.0	1.11
	10/19/2006	178.99	10.62	168.37	<50	<0.5	<2.0	<0.5	<1.0	1.36
	1/12/2007	178.99	10.26	168.73	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/17/2007	178.99	11.88	167.11	<50	<0.5	<2.0	<0.5	<2.0	0.87
	7/17/2007	178.99	10.84	168.15	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2007	178.99	9.69	169.30	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/17/2008	178.99	9.62	169.37	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/17/2008	178.99	10.06	168.93	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/16/2008	178.99	10.63	168.36	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/14/2008	178.99	11.26	167.73	<50	<0.5	<0.5	<0.5	<0.5	<0.5
<b>SOMA-3</b>	1/6/2009	178.99	10.22	168.77	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/6/2009	178.99	10.38	168.61	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	7/7/2009	178.99	10.40	168.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/27/2010	178.99	8.19	170.80	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	<b>7/26/2010</b>	<b>178.99</b>	<b>10.24</b>	<b>168.75</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
	8/10/2004	176.81	9.97	166.84	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	10/19/2004	176.81	9.59	167.22	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/14/2005	176.81	8.23	168.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2005	176.81	8.64	168.17	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	7/7/2005	176.81	9.60	167.21	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	11/15/2005	176.81	10.01	166.80	<50	<0.5	<2.0	<0.5	<1.0	5.1
	2/8/2006	176.81	8.80	168.01	<50	<0.5	<2.0	<0.5	<1.0	7.16
	4/27/2006	176.81	9.00	167.81	<50	<0.5	<2.0	<0.5	<1.0	14.2
	8/1/2006	176.81	9.91	166.90	<50	<0.5	<2.0	<0.5	<1.0	7.29
	10/19/2006	176.81	10.21	166.60	<50	<0.5	<2.0	<0.5	<1.0	41.4

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>Top of casing elevation<sup>1</sup> (feet)</b>	<b>Depth to Groundwater (feet)</b>	<b>Groundwater Elevation (feet)</b>	<b>TPH-g (µg/L)</b>	<b>Benzene (µg/L)</b>	<b>Toluene (µg/L)</b>	<b>Ethyl benzene (µg/L)</b>	<b>Total Xylenes (µg/L)</b>	<b>MtBE (µg/L) 8260B</b>
<b>SOMA-3 cont.</b>	1/12/2007	176.81	9.73	167.08	<50	<0.5	<2.0	<0.5	<2.0	20.9
	4/17/2007	176.81	9.81	167.00	<50	<0.5	<2.0	<0.5	<2.0	32.1
	7/17/2007	176.81	10.06	166.75	<50	<0.5	<2.0	<0.5	<2.0	23.6
	10/16/2007	176.81	9.54	167.27	<50	<0.5	<2.0	<0.5	<2.0	22.3
	1/17/2008	176.81	9.06	167.75	<50	<0.5	<2.0	<0.5	<2.0	11.1
	4/17/2008	176.81	9.57	167.24	<50	<0.5	<2.0	<0.5	<2.0	23.7
	7/16/2008	176.81	10.25	166.56	<50	<0.5	<2.0	<0.5	<2.0	10.6
	10/14/2008	176.81	10.76	166.05	<50	<0.5	<0.5	<0.5	<0.5	19
	1/6/2009	176.81	9.53	167.28	<50	<0.5	<0.5	<0.5	<0.5	1.1
	4/6/2009	176.81	9.65	167.16	<50	<0.5	<0.5	<0.5	<0.5	5.7
	7/7/2009	176.81	10.19	166.62	<50	<0.5	<0.5	<0.5	<0.5	6
	1/27/2010	176.81	7.80	169.01	<50	<0.5	<0.5	<0.5	<0.5	56
	7/26/2010	176.81	9.67	167.14	<50	<0.5	<0.5	<0.5	<0.5	9.8
<b>SOMA-4</b>	8/10/2004	176.94	9.44	167.50	140	0.98	<0.5	7.8	<0.5	11
	10/19/2004	176.94	9.91	167.03	150	<0.5	<0.5	10	<0.5	8.8
	1/14/2005	176.94	8.36	168.58	500	3.7	<0.5	53	<0.5	7.6
	4/14/2005	176.94	7.89	169.05	<200	0.74	<0.5	3.21	<1.0	5.65
	7/7/2005	176.94	11.62	165.32	<200	<0.5	<2.0	0.56	<1.0	7.09
	11/15/2005	176.94	9.33	167.61	<50	<0.5	<2.0	<0.5	<1.0	8.6
	2/8/2006	176.94	9.18	167.76	55.8	<0.5	<2.0	0.85	<1.0	10.4
	4/27/2006	176.94	8.75	168.19	172	1.35	<2.0	8.83	<1.0	11.7
	8/1/2006	176.94	9.52	167.42	<50	0.52	<2.0	1.53	<1.0	14.1
	10/19/2006	176.94	9.51	167.43	<50	<0.5	<2.0	<0.5	<1.0	19.2
	1/12/2007	176.94	8.98	167.96	<50	<0.5	<2.0	<0.5	<2.0	20.4
	4/17/2007	176.94	8.96	167.98	<50	<0.5	<2.0	4.33	<2.0	15.8
	7/17/2007	176.94	9.31	167.63	<50	<0.5	<2.0	4.47	<2.0	13.3
	10/16/2007	176.94	8.96	167.98	<50	<0.5	<2.0	4.5	<2.0	8.57
	1/17/2008	176.94	8.84	168.10	<50	<0.5	<2.0	<0.5	<2.0	8.87
	4/17/2008	176.94	9.44	167.50	<50	<0.5	<2.0	<0.5	<2.0	1.22
	7/16/2008	176.94	9.52	167.42	<50	<0.5	<2.0	<0.5	<2.0	8.58
	10/14/2008	176.94	9.98	166.96	<50	<0.5	<0.5	<0.5	<0.5	9.7

**Table 1**  
**Historical Groundwater Elevations & Analytical Data**  
**TPH-g, BTEX, MtBE**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	Top of casing elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-4 cont	1/6/2009	176.94	9.29	167.65	<50	<0.5	<0.5	<0.5	<0.5	10
	4/6/2009	176.94	9.31	167.63	<50	<0.5	<0.5	<0.5	<0.5	5.3
	7/7/2009	176.94	9.54	167.40	<50	<0.5	<0.5	<0.5	<0.5	7
	1/27/2010	176.94	7.35	169.59	<50	<0.5	<0.5	<0.5	<0.5	5.1
	7/26/2010	176.94	9.13	167.81	220	<0.5	<0.5	<0.5	<0.5	2.3
SOMA-5	1/27/2010	180.31	7.94	172.37	14,000	2,600	1.5	800	914	190
	7/26/2010	180.31	9.99	170.32	14,000	3,300	<20	1,100	1,340	150
<b>Equipment Blanks</b>										
EB-PMP	1/17/2008	NA	NA	NA	<50	<0.5	<2.0	<0.5	<2.0	<0.5
EB-PRB	1/17/2008	NA	NA	NA	<50	<0.5	<2.0	<0.5	<2.0	<0.5
EB-PMP2	1/17/2008	NA	NA	NA	<50	<0.5	<2.0	<0.5	<2.0	<0.5
EB-PRB2	1/17/2008	NA	NA	NA	<50	<0.5	<2.0	<0.5	<2.0	<0.5

Notes:

< : Not detected above laboratory reporting limit.

1 Top of Casing Elevations were resurveyed by Kier & Wright Engineers Surveyors of Pleasanton, CA on June 21, 2004.

C: Presence confirmed, but RPD between columns exceeds 40%.

H: Heavier hydrocarbons contributed to the quantitation.

NA: Not Applicable/Not Analyzed. Due to construction activities in the Third Quarter 2003, which consisted of the replacement of the USTs and dispensers, wells ESE-1 & ESE-2 were inaccessible. Well ESE-2 also inaccessible during the First Quarter 2007. Well MW-7 had a car parked over it and was inaccessible during the First Quarter 2008 monitoring event

NM: Not Measured

Well ESE-2 was covered over with dirt during the First Quarter 2007 monitoring event.

Well MW-7 had a car parked over it and was inaccessible during the First Quarter 2008 monitoring event.

Equipment Blanks (EB-PRB & EB-PMP) were done to make sure decon efforts were adequate.

Z: Sample exhibits unknown single peak or peaks.

The Third Quarter 2003 was the first time that SOMA analyzed groundwater samples at the site.

The Third Quarter 2004 was the first time that SOMA analyzed groundwater samples at wells SOMA-1 to SOMA-4.

**Table 2**  
**Historical Groundwater Analytical Data**  
**Gasoline Oxygenates & Lead Scavengers**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>ETHANOL (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>
<b>ESE-1</b>	6/17/2003	<400	<10	<10	18	NA	NA	NA
	9/17/2003	NA	NA	NA	NA	NA	NA	NA
	12/9/2003	290	<1.0	<1.0	9.5	<2,000	<1.0	<1.0
	2/26/2004	410	<0.5	<0.5	9.7	<1000	<0.5	<0.5
	5/21/2004	190	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	8/10/2004	180	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	270	<0.7	<0.7	4.4	<1400	9.9	<0.7
	1/14/2005	280	<1.3	<1.3	<1.3	<2,500	<1.3	<1.3
	4/14/2005	144	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	7/7/2005	119	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	11/15/2005	107	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	181	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	4/27/2006	261	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	8/1/2006	165	<1.0	<1.0	<4.0	<2000	<1.0	<1.0
	10/19/2006	154	<1.0	<1.0	<4.0	<2000	<1.0	<1.0
	1/12/2007	103	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	80.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	128	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	98.7	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	61.5	<0.5	<0.5	2.52	<1000	<0.5	<0.5
	4/17/2008	76.4	<0.5	<0.5	<2.0	<1000	59.2	<0.5
	7/16/2008	179	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	87	<0.5	<0.5	2.6	<1000	<0.5	<0.5
	1/6/2009	93	<1.0	<1.0	<1.0	<2000	<1.0	<1.0
	4/6/2009	130	<1.0	<1.0	<1.0	<2000	<1.0	<1.0
	7/7/2009	100	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/27/2010	200	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/26/2010	110	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5

**Table 2**  
**Historical Groundwater Analytical Data**  
**Gasoline Oxygenates & Lead Scavengers**  
**3519 Castro Valley Blvd, Castro Valley, CA**

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	ETHANOL (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
<hr/>								
ESE-2	6/17/2003	<4000	<100	<100	<100	NA	NA	NA
	9/17/2003	NA	NA	NA	NA	NA	NA	NA
	12/9/2003	500	<13	<13	77	<25,000	<13	<13
	2/26/2004	1200	<0.5	<0.5	92	<1000	<0.5	<0.5
	5/21/2004	2400	<10	<10	25	<20,000	<10	<10
	8/10/2004	2300	<2.5	<2.5	12	<5000	<2.5	<2.5
	10/19/2004	1800	<3.6	<3.6	8.6	<7100	<3.6	<3.6
	1/14/2005	470	<8.3	<8.3	28	<17,000	<8.3	<8.3
	4/14/2005	<10.8	<2.15	<2.15	17.9	<4300	<2.15	<2.15
	7/7/2005	109	<2.15	<2.15	9.7	<4300	<2.15	<2.15
	11/15/2005	64.7	<0.5	<0.5	3.43	<1000	<0.5	<0.5
	2/8/2006	46.4	<2.15	<2.15	11	<4300	<2.15	<2.15
	4/27/2006	47.7	<1.0	<1.0	8.29	<2000	<1.0	<1.0
	8/1/2006	20.6	<1.0	<1.0	4.67	<2000	<1.0	<1.0
	10/19/2006	28.9	<0.5	<0.5	4.55	<1000	<0.5	<0.5
	1/12/2007	NA	NA	NA	NA	NA	NA	NA
	4/17/2007	60.8	<0.5	<0.5	3.85	<1000	<0.5	<0.5
	7/17/2007	62.3	<0.5	<0.5	2.95	<1000	<0.5	<0.5
	10/16/2007	46	<0.5	<0.5	2.21	<1000	<0.5	<0.5
	1/17/2008	18.8	<0.5	<0.5	3.38	<1000	<0.5	<0.5
	4/17/2008	18.8	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	9.95	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	0.85	<1000	<0.5	<0.5
	1/6/2009	27	<0.5	<0.5	0.83	<1000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	18	<0.5	<0.5	0.56	<1,000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
<hr/>								
ESE-3	6/17/2003	<200	<5.0	<5.0	<5.0	NA	NA	NA
<hr/>								
ESE-5	9/17/2003	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	12/9/2003	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/26/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	5/21/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	8/10/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5

**Table 2**  
**Historical Groundwater Analytical Data**  
**Gasoline Oxygenates & Lead Scavengers**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>ETHANOL (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>
<b>ESE-5 cont.</b>	1/14/2005	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/14/2005	17	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	8.7	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	15.4	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	11.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	17.2	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	5.44	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
<b>MW-6</b>	1/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/26/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	9/17/2003	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	12/9/2003	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/26/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	5/21/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	8/10/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5

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**Historical Groundwater Analytical Data**  
**Gasoline Oxygenates & Lead Scavengers**  
**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>ETHANOL (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>
<b>MW-6 contd.</b>	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	<b>7/26/2010</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>MW-7</b>	9/17/2003	<10	<0.5	<0.5	9.8	<1000	<0.5	<0.5
	12/9/2003	<25	<1.3	<1.3	8.1	<2500	<1.3	<1.3
	2/26/2004	<10	<0.5	<0.5	9.9	<1000	<0.5	<0.5
	5/21/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	8/10/2004	<25	<1.3	<1.3	19	<2500	<1.3	<1.3
	10/19/2004	<100	<5.0	<5.0	11	<10,000	<5.0	<5.0
	1/14/2005	<40	<2.0	<2.0	5.1	<4,000	<2.0	<2.0
	4/14/2005	2.62	<0.5	<0.5	4.57	<1000	<0.5	<0.5
	7/7/2005	55.6	<1.0	<1.0	10.2	<2000	<1.0	<1.0
	11/15/2005	10.6	<0.5	<0.5	2.07	<1000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	2.19	<1000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	2.63	<1000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	11.6	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	13.3	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	NA	NA	NA	NA	NA	NA	NA
	4/17/2008	8.63	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	<b>7/26/2010</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>SOMA-1</b>	8/10/2004	2300	<6.3	<6.3	53	<13000	<6.3	<6.3
	10/19/2004	2400	<13	<13	36	<25,000	<13	<13

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**3519 Castro Valley Blvd, Castro Valley, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>ETHANOL (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>
<b>SOMA-1 contd.</b>	1/14/2005	530	<3.1	<3.1	7.1	<6,300	<3.1	<3.1
	4/14/2005	<27.5	<5.5	<5.5	<22	<11000	<5.5	<5.5
	7/7/2005	2180	<2.15	<2.15	12.9	<4300	<2.15	<2.15
	11/15/2005	792	<0.5	<0.5	5.01	<1000	<0.5	<0.5
	2/8/2006	618	<0.5	<0.5	3.67	<1000	<0.5	<0.5
	4/27/2006	983	<0.5	<0.5	3.48	<1000	<0.5	<0.5
	8/1/2006	639	<0.5	<0.5	2.27	<1000	<0.5	<0.5
	10/19/2006	603	<0.5	<0.5	2.25	<1000	<0.5	<0.5
	1/12/2007	396	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	148	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	555	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	65	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	29.6	<0.5	<0.5	2.06	<1000	<0.5	<0.5
	4/17/2008	339	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	264	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	250	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/6/2009	180	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/6/2009	120	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	250	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/27/2010	310	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/26/2010	68	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
<b>SOMA-2</b>	8/10/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	14.6	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	2.58	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5

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<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>ETHANOL (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>
<b>SOMA-2 cont.</b>	1/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/26/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
<b>SOMA-3</b>	8/10/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	6.72	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	7.6	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	9.96	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2008	6.05	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
<b>SOMA-4</b>	8/10/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5

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<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>ETHANOL (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>
<b>SOMA-4 contd</b>	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	3.98	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	6.31	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	<b>7/26/2010</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<hr/>								
<b>SOMA-5</b>	1/27/2010	500	<13	<13	<13	<25,000	<13	<13
	<b>7/26/2010</b>	<b>&lt;400</b>	<b>&lt;20</b>	<b>&lt;20</b>	<b>&lt;20</b>	<b>&lt;40,000</b>	<b>&lt;20</b>	<b>&lt;20</b>
<hr/>								
<b>Equipment Blanks</b>								
EB-PMP	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
EB-PRB	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
EB-PMP2	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
EB-PRB2	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
<hr/>								

Notes:

< : Not detected above laboratory reporting limit.

NA: Not Analyzed. Due to construction activities in the Third Quarter 2003, which consisted of the replacement of the USTs and dispensers, wells ESE-1 & ESE-2 were inaccessible.

Well ESE-2 was inaccessible during the First Quarter 2007, dirt was covered over well

Well MW-7 had a car parked over it and was inaccessible during the First Quarter 2008 monitoring event.

The Third Quarter 2003 was the first time that SOMA analyzed groundwater samples at the Site.

The Third Quarter 2004 was the first time that SOMA analyzed groundwater samples at wells SOMA-1 to SOMA-4.

Gasoline Oxygenates:

TBA: tertiary butyl alcohol

DIPE: isopropyl ether

ETBE: ethyl tertiary butyl ether

TAME: methyl tertiary amyl ether

Ethanol

Lead Scavengers:

1,2-DCA: 1,2-Dichloroethane

EDB: 1,2-Dibromoethane

# Figures

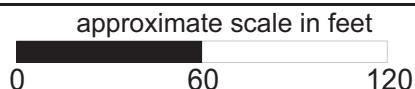
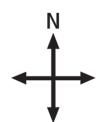


Figure 1: Site vicinity map.

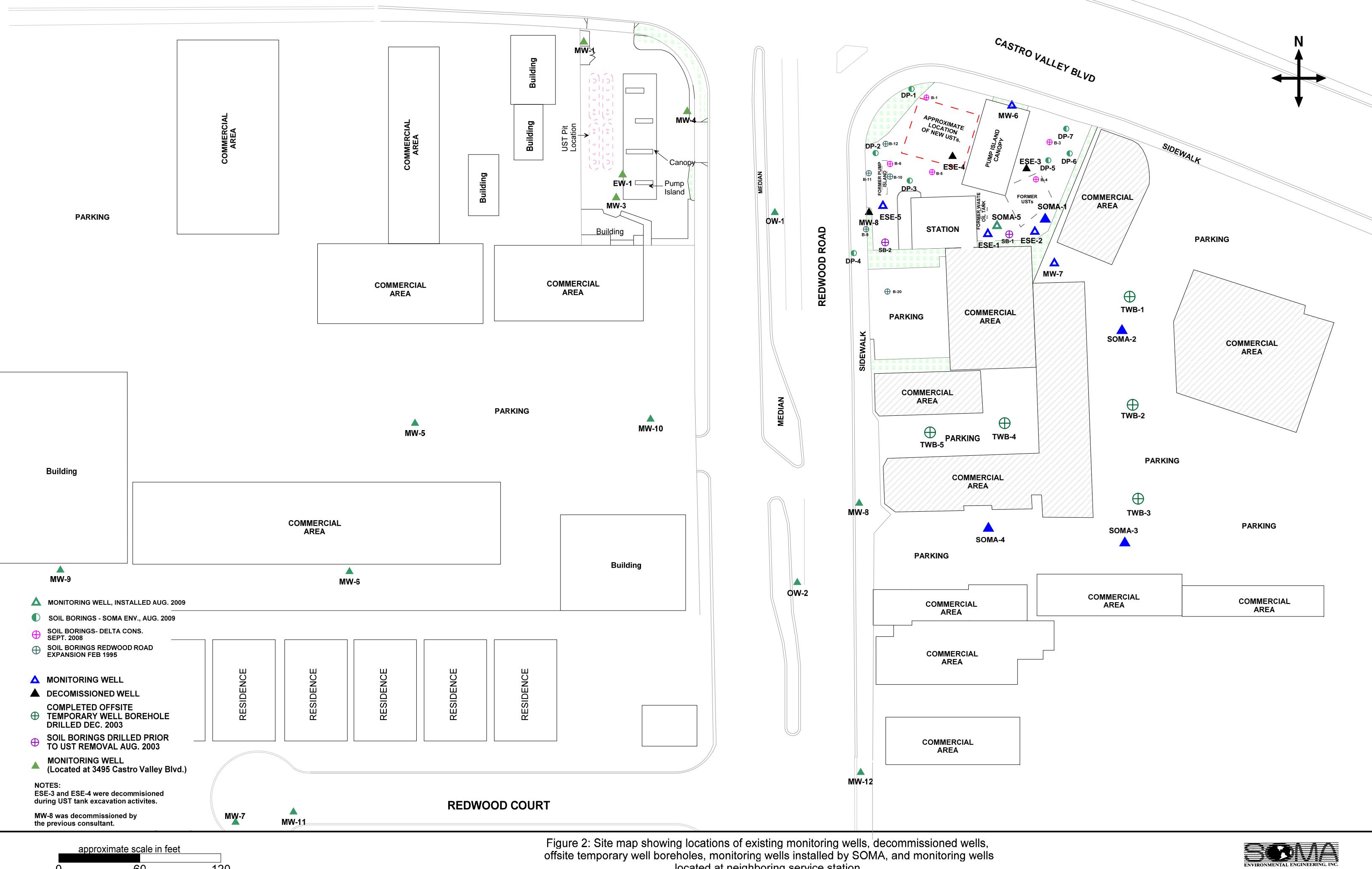
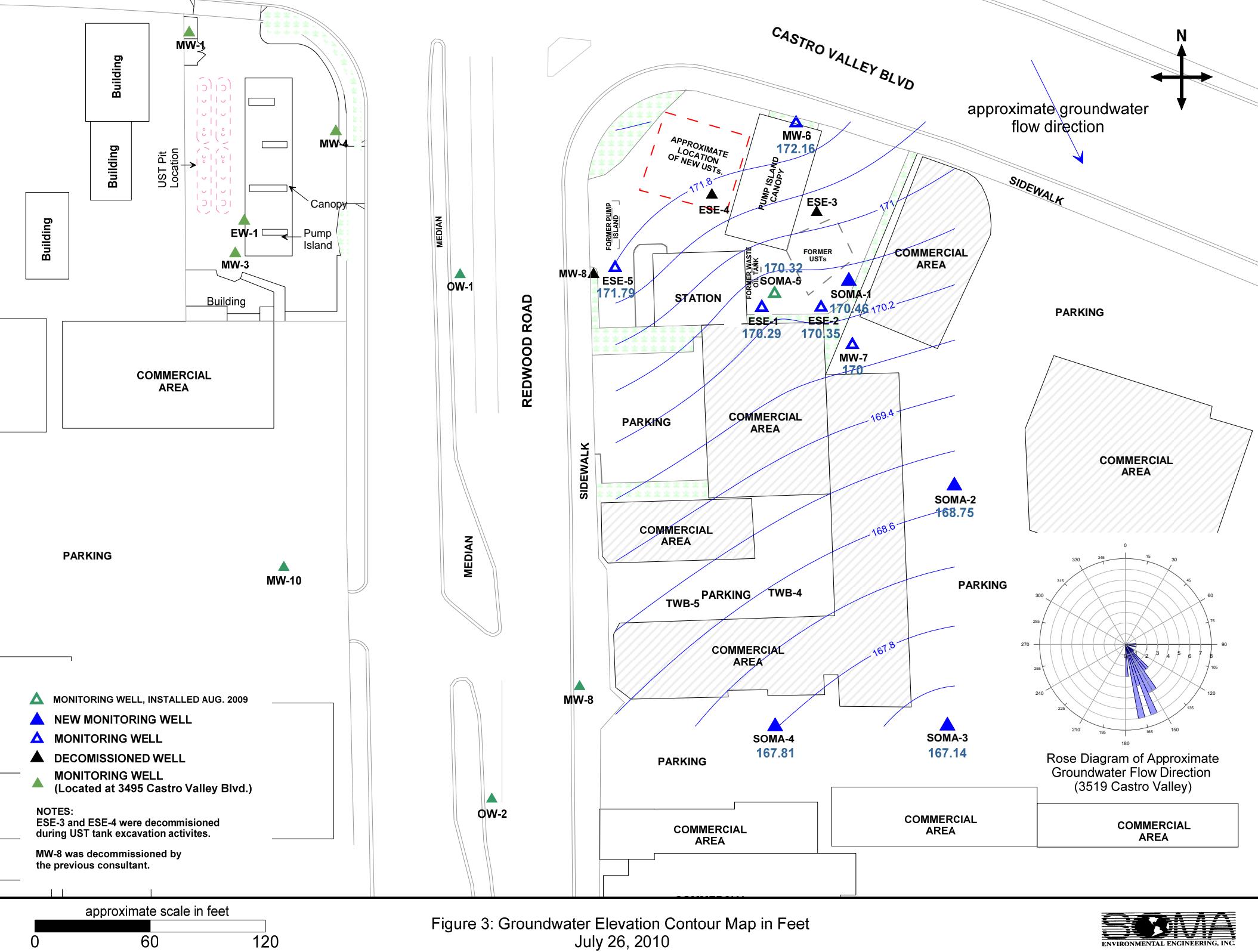


Figure 2: Site map showing locations of existing monitoring wells, decommissioned wells, offsite temporary well boreholes, monitoring wells installed by SOMA, and monitoring wells located at neighboring service station.



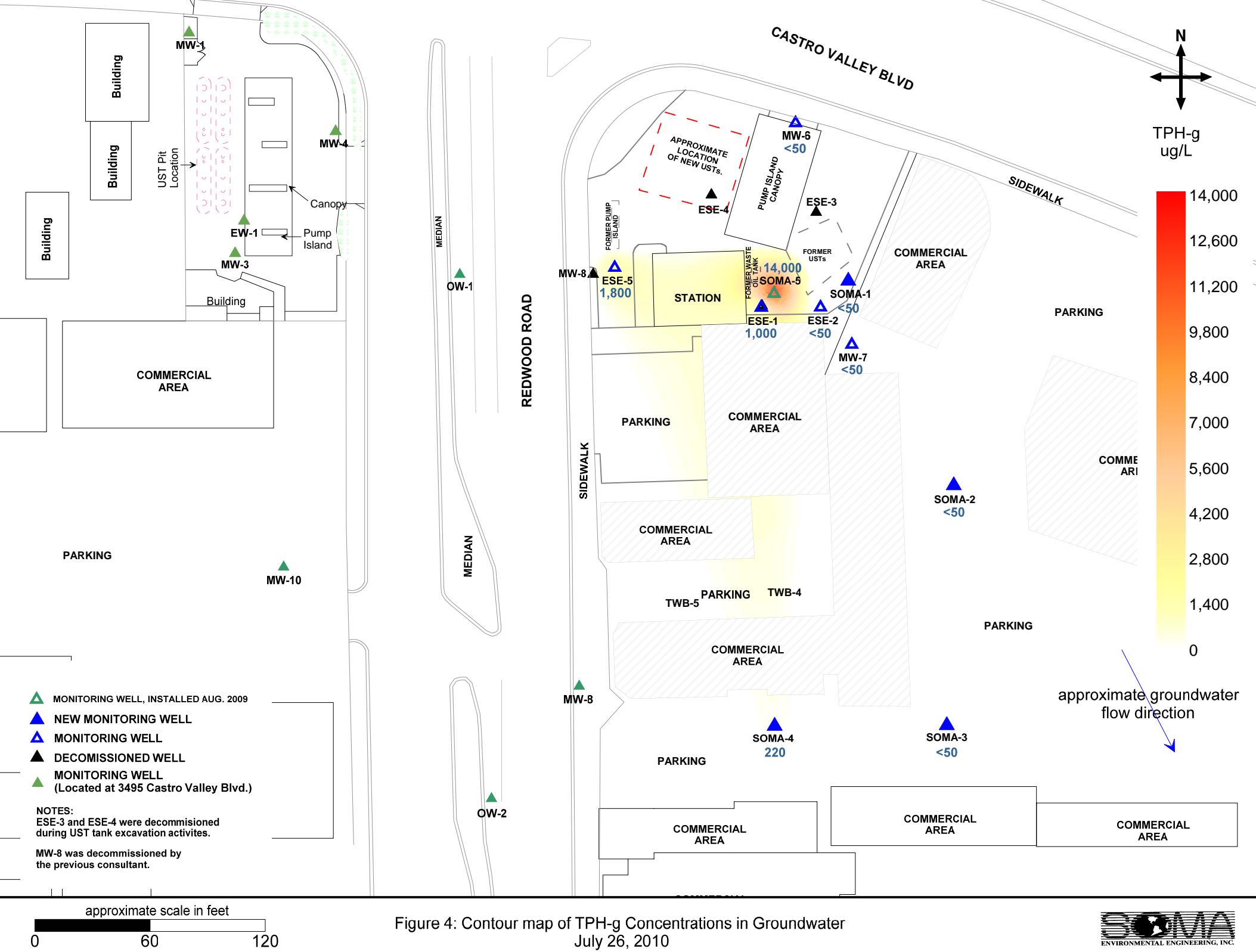


Figure 4: Contour map of TPH-g Concentrations in Groundwater  
July 26, 2010

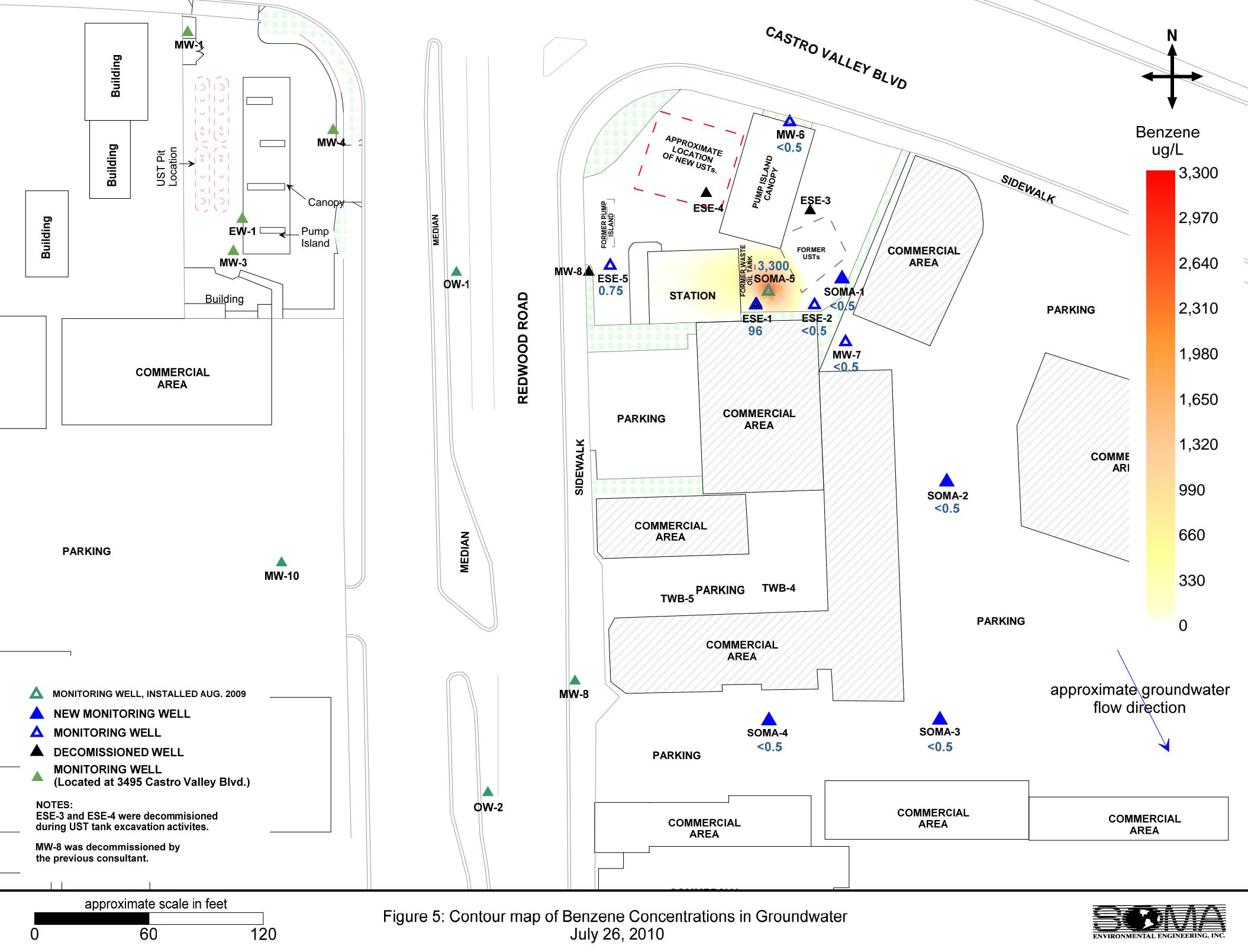


Figure 5: Contour map of Benzene Concentrations in Groundwater  
July 26, 2010

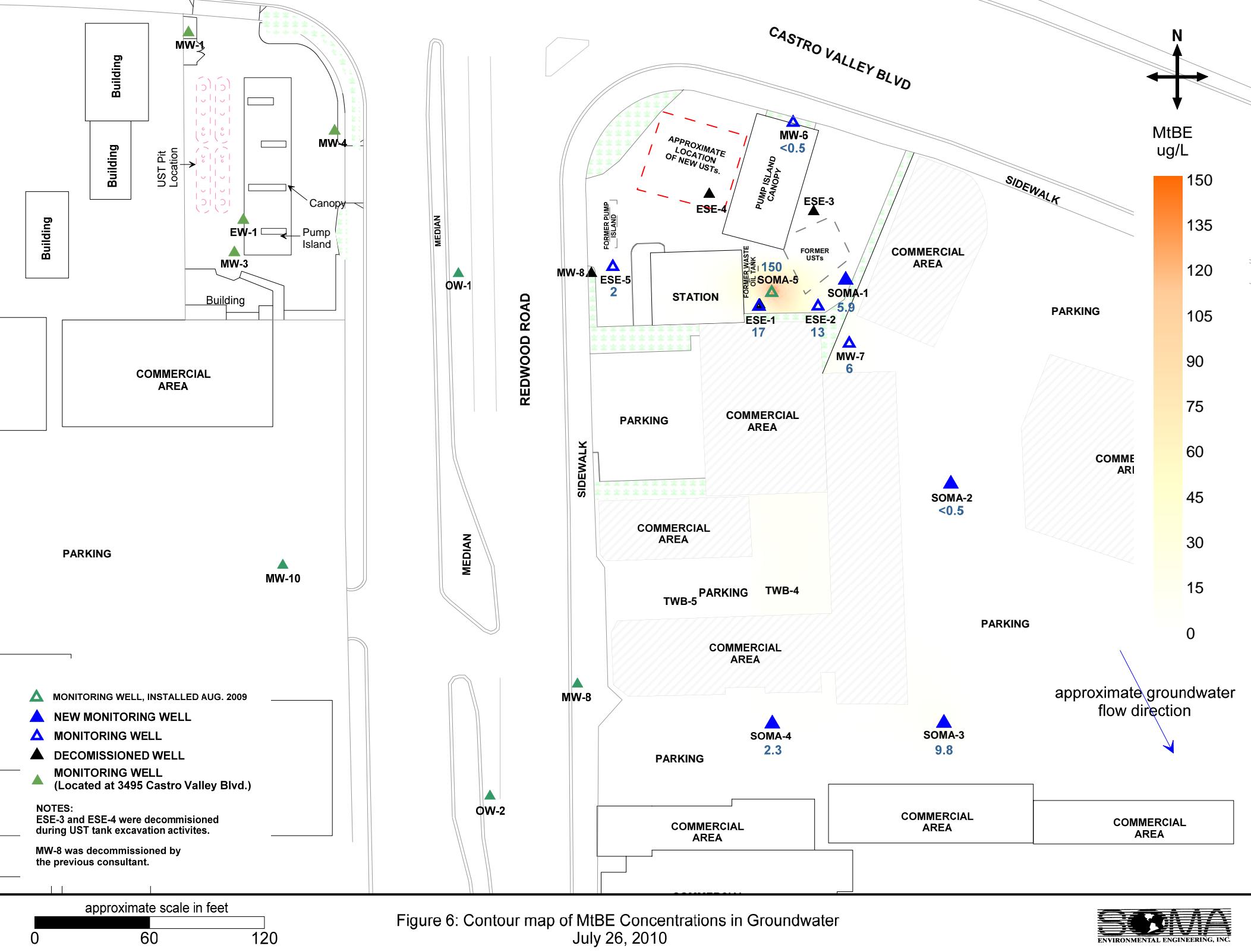
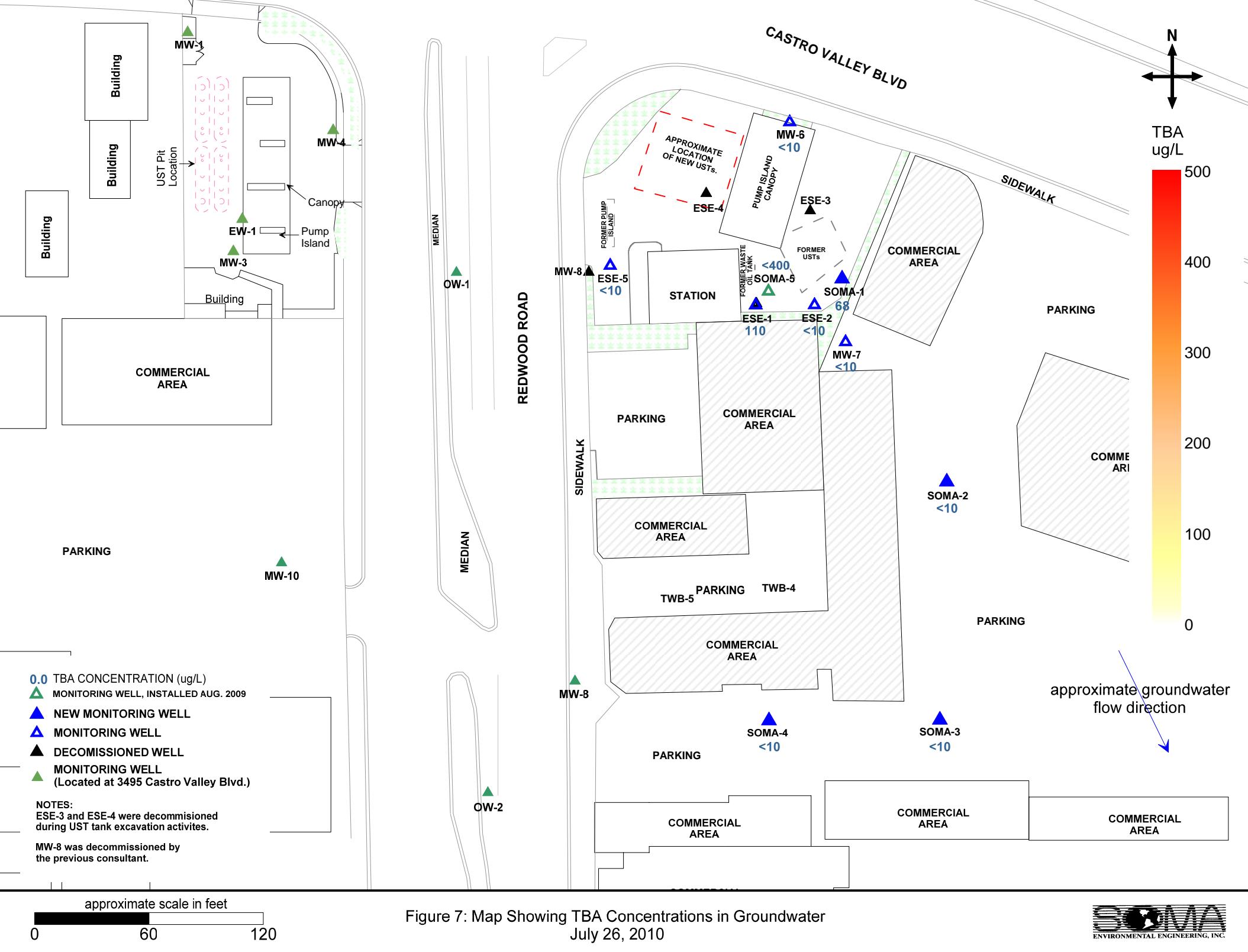


Figure 6: Contour map of MtBE Concentrations in Groundwater  
July 26, 2010



# Appendix A

Standard Operating Procedures for  
Conducting Groundwater Monitoring Activities

# **Standard Operating Procedures for Conducting Groundwater Monitoring Activities**

## **Water Level Measurements**

Prior to measurement of groundwater depth at each monitoring well, equalization with the surrounding aquifer must be achieved. Initially, the well cap is removed and the pressure is allowed to dissipate, creating a more stable water table level within the well. After about 10-15 minutes, once the water level in the well stabilizes, the depth to groundwater in each monitoring well is measured from the top of the casing to the nearest 0.01 foot using an electric sounder.

## **Purging and Field Measurements**

Prior to sample collection, each monitoring well is purged using a battery-operated, 2-inch-diameter pump (Model ES-60 DC). To ensure that final samples are in equilibrium with, and representative of, the surrounding groundwater, during purging several samples are taken for field measurements of pH, temperature and electrical conductivity (EC). These parameters are measured with a Hanna pH, conductivity, and temperature meter. Equipment is calibrated on-site using standard solutions and procedures provided by the manufacturer.

The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

Purging continues until these parameters stabilize or three casing volumes are purged.

## **Sampling**

For sampling purposes, after purging a disposable polyethylene bailer is used to collect sufficient samples from each monitoring well for laboratory analyses. Groundwater samples are transferred to 40-mL VOA vials and preserved with hydrochloric acid. The vials are sealed to prevent air bubbles from forming within the headspace. For TPH-d analysis, groundwater samples are collected using 1-L, amber, nonpreserved glass containers. Samples are placed in an ice-filled cooler and maintained at 4°C. A chain of custody form for all samples is prepared to accompany the samples, which are promptly delivered to a California state-certified analytical laboratory.

# Appendix B

Table of Elevations and Coordinates for  
Monitoring Wells and  
Field Measurements of Groundwater Sample  
Properties for Second Semi-annual 2010  
Monitoring Event

**TABLE OF ELEVATIONS & COORDINATES  
ON MONITORING WELLS**  
SOMA ENVIRONMENTAL  
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
ESE-1	2079361.15	6106465.13	180.24	2" PVC, NOTVH N. SIDE
	N 37° 41' 42.07112"	W 122° 04' 24.07899"	180.71	SET PUNCH NORTH SIDE RIM
			180.69	PAVEMENT NORTH SIDE
ESE-2	2079361.30	6106501.97	180.79	2" PVC, NOTVH N. SIDE
	N 37° 41' 42.07873"	W 122° 04' 23.62071"	181.16	SET PUNCH NORTH SIDE RIM
			181.14	CONC. NORTH SIDE
ESE-5	2079381.46	6106387.63	178.80	2" PVC, NOTVH N. SIDE
	N 37° 41' 42.25902"	W 122° 04' 25.04739"	179.07	FELT X ON NORTH SIDE RIM
			179.10	CONC. NORTH SIDE
MW-6	2079451.94	6106492.77	181.80	2" PVC, NOTVH N. SIDE
	N 37° 41' 42.97323"	W 122° 04' 23.75412"	181.97	SET PUNCH NORTH SIDE RIM
			181.88	GROUND NORTH SIDE
MW-7	2079337.18	6106516.12	179.11	2" PVC, NOTVH N. SIDE
	N 37° 41' 41.84264"	W 122° 04' 23.43963"	179.55	SET PUNCH NORTH SIDE RIM
			179.49	CONC. NORTH SIDE
SOMA-1	2079370.39	6106506.79	180.95	2" PVC, NOTVH N. SIDE
	N 37° 41' 42.16939"	W 122° 04' 23.56265"	181.25	SET PUNCH NORTH SIDE RIM
			181.22	CONC. NORTH SIDE
SOMA-2	2079297.44	6106567.02	178.99	2" PVC, NOTVH N. SIDE
	N 37° 41' 41.45825"	W 122° 04' 22.79809"	179.29	SET PUNCH NORTH SIDE RIM
			179.28	CONC. NORTH SIDE
SOMA-3	2079130.83	6106567.48	176.81	2" PVC, NOTVH N. SIDE
	N 37° 41' 39.81129"	W 122° 04' 22.75752"	177.18	SET PUNCH NORTH SIDE RIM
			177.12	PAVEMENT NORTH SIDE
SOMA-4	2079141.57	6106464.22	176.94	2" PVC, NOTVH N. SIDE
	N 37° 41' 39.9003"	W 122° 04' 24.04438"	177.43	SET PUNCH NORTH SIDE RIM
			177.44	PAVEMENT NORTH SIDE

Kier & Wright Engineers Surveyors, Inc.

6/21/2005

10:19 AM

3519 Castro Valley

1233 Quarry Lane, Suite 145, Pleasanton, CA 94566

Phone (925) 249-6555,

Fax (925) 249-6563

1 OF 3

**TABLE OF ELEVATIONS & COORDINATES  
ON MONITORING WELLS**  
SOMA ENVIRONMENTAL  
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

**ADDITIONAL POINTS**

PT#	NORTHING (FT.)	EASTING (FT.)	ELEVATION (FT.)	DESCRIPTION
320	2079386.87	6106408.85	N/A	BL. INTX
321	2079387.18	6106455.22	N/A	BL. INTX
331	2079351.06	6106409.27	N/A	BL<
318	2079384.55	6106369.10	N/A	DWY
329	2079106.74	6106368.58	N/A	DWY
330	2079148.74	6106368.66	N/A	DWY
317	2079424.72	6106369.39	N/A	DWY E-C
315	2079481.34	6106432.38	N/A	DWY PCC
310	2079415.57	6106624.48	N/A	DWY POC
311	2079423.23	6106606.56	N/A	DWY POC
312	2079447.91	6106542.76	N/A	DWY POC
313	2079461.36	6106504.01	N/A	DWY POC
314	2079472.67	6106468.07	N/A	DWY POC
316	2079466.76	6106389.18	N/A	HCRMP POC
319	2079237.38	6106368.78	N/A	TC

**BENCH MARK:** NGS Bench mark No.PID# HT0223

THE STATION IS LOCATED IN THE CITY OF HAYWARD AT THE RAILROAD CROSSING OF THE SOUTHERN PACIFIC RAIL-ROAD AND BLOSSOM WAY, IN THE TOP OF THE NORTHWEST CURB OF BLOSSOM WAY.

TO REACH THE STATION FROM THE JUNCTION OF U S HIGHWAY 880 ON WEST A STREET, GO SOUTHEAST ON WEST A STREET FOR 0.2 MILES TO A CROSSROAD, HATHAWAY AVE ON THE LEFT, SANTA CLARA STREET ON THE RIGHT. TURN LEFT, NORTH, ON HATHAWAY AVENUE AND CONTINUE FOR 0.7 MILES TO WEST BLOSSOM WAY. TURN RIGHT, NORTH, ON WEST BLOSSOM WAY AND CONTINUE FOR 0.25 MILES TO THE STATION ON THE LEFT, JUST PAST THE RAIL-ROAD TRACKS.

THE STATION IS 48.95 M (160.6 FT) NORTHEAST OF THE NORTHEAST RAIL,  
7.01 M NORTHWEST OF THE CENTER OF BLOSSOM WAY, 0.24 M (0.8 FT)  
NORTH OF THE NORTH CORNER OF A STEEL GRATE IN THE STREET, 5.6 M  
(18.5 FT) SOUTHWEST OF A POWER POLE AND 0.12 M (0.4 FT) HIGHER THAN  
THE STREET.

Elevation =56.33 FEET NAVD88 Datum  
ADJUSTED

**HORIZONTAL CONTROL:**

PID - HT0223

NORTHING =2,072,670.26 , EASTING = 6,095,650.79 FEET; EPOCH DATE = 1998.50

PID - HT 2583

**Kier & Wright Engineers Surveyors, Inc.**

6/21/2005

1233 Quarry Lane, Suite 145, Pleasanton, CA 94566

10:19 AM

Phone (925) 249-6555,

3519 Castro Valley

Fax (925) 249-6563

DATE: 6/21/04  
JOB# A0459

**TABLE OF ELEVATIONS & COORDINATES  
ON MONITORING WELLS  
SOMA ENVIRONMENTAL  
3519 CASTRO VALLEY BLVD., CASTRO VALLEY**

NORTHING =2,082,510.30 , EASTING = 6,116,892.13 FEET; EPOCH DATE = 1991.35

Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.

***Ben Harrington PLS***  
***Land Surveying & Mapping***  
2278 Larkey Lane, Walnut Creek, Ca. 94596 Phone (925)935-7228 Fax (925)935-5718  
Cel (925)788-7359 E-Mail (ben5132@pacbell.net)

Soma Environmental Engineering  
6620 Owens Dr  
Suite A  
Pleasanton Ca. 94588

Sept 04, 2009

Attn: Elena  
Job # 2903

Ref: 3519 Castro Valley Blvd. Castro Valley Ca.

HORIZONTAL CONTROL, NAD 88:

Survey based previous survey dated 6/21/04 by Kier & Wright Surveyors on California Coordinate System, Zone 3, NAD 83.

ESE-1 NOTCH IN TOP OF 2" PVC, NORTH 2,079,361.15 EAST 6,106,465.13 LAT.  
N37°41'42.17112" W122°04'24.07899", NAVD 88, ELEV. 180.24.

ESE-2 NOTCH IN TOP OF 2" PVC, NORTH 2,079,361.30 EAST 6,106,501.97, LAT.  
N37°41'42.07873" W122°04'23.62071", NAVD 88, ELEV. 180.79.

GPS: TRIMBLE 5800, LEICA TCA 1800, 1" HORZ. & VERT.

EPOCH DATE 2007.00

OBSERVATION: EPOCH=180.

FIELD SURVEY: 9-04-09.

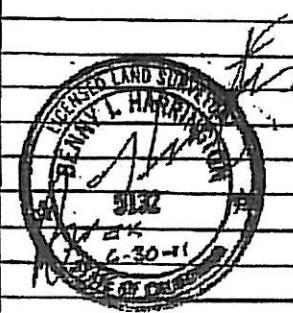
Ben Harrington  
PLS 5132



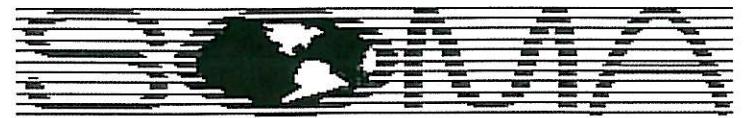
**NEW MONITORING WELL  
3519 CASTRO VALLEY BLVD.  
CASTRO VALLEY CA.**

**BEN HARRINGTON PLS  
2278 LARKEY LANE  
WALNUT CREEK CA 94597**

JOB # 2913  
DATE: 09/04/09



1 Drum



ENVIRONMENTAL ENGINEERING, INC.

Well No.: ESE-1  
Casing Diameter: 2 inches  
Depth of Well: 28.00 feet  
Top of Casing Elevation: 180.24 feet  
Depth to Groundwater: 9.95 feet  
Groundwater Elevation: 170.29 feet  
Water Column Height: 18.05 feet  
Purged Volume: 9 gallons

Project No.: 2761  
Address: 3519 Castro Valley Blvd  
Castro Valley, CA  
Date: July 26, 2010  
Sampler: Lizzie Hightower  
Parisa Montavalli

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_  
Sheen: No  Yes  Describe: \_\_\_\_\_  
Odor: No  Yes  Describe: Slight pef/0 over

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (μs/cm)
12:13	Started purging well			
12:14	3	6.56	23.00	1090
12:15	6	6.70	21.5	960
12:16	9	6.74	21.3	960
12:21	Finish	purging		



ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-2  
 Casing Diameter: 2 inches  
 Depth of Well: 26.50 feet  
 Top of Casing Elevation: 180.79 feet  
 Depth to Groundwater: 10.44 feet  
 Groundwater Elevation: 170.35 feet  
 Water Column Height: 16.06 feet  
 Purged Volume: 9 gallons

Project No.: 2761  
 Address: 3519 Castro Valley Blvd  
 Castro Valley, CA  
 Date: July 26, 2010  
 Sampler: Lizzie Hightower  
 Parisa Montavalli

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump   
 Color: No  Yes  Describe: \_\_\_\_\_  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:36	Started purging well			
11:37	3	6.67	20.25	1050
11:38	6	6.45	19.7	1060
11:39	9	6.43	19.5	1030
11:44	Sampled			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-5 Project No.: 2761  
 Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd  
 Depth of Well: 23.80 feet Castro Valley, CA  
 Top of Casing Elevation: 178.80 feet Date: July 26, 2010  
 Depth to Groundwater: 7.01 feet Sampler: Lizzie Hightower  
 Groundwater Elevation: 171.79 feet Parsa Montavalli  
 Water Column Height: 16.79 feet  
 Purged Volume: 9 gallons

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: ~~hydro~~ petro

## Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:50	Started purging well			
12:51	7	6.98	22.0	920
12:52	6	6.79	21.9	700
12:53	9	6.56	21.4	870
12:58	Finish	sample		



ENVIRONMENTAL ENGINEERING, INC

Well No.:	<u>MW-6</u>	Project No.:	2761
Casing Diameter:	<u>2</u> inches	Address:	3519 Castro Valley Blvd
Depth of Well:	<u>30.00</u> feet		Castro Valley, CA
Top of Casing Elevation:	<u>181.80</u> feet	Date:	July 26, 2010
Depth to Groundwater:	<u>9.64</u> feet	Sampler:	Lizzie Hightower
Groundwater Elevation:	<u>172.16</u> feet		Parsa Montavalli
Water Column Height:	<u>20.36</u> feet		
Purged Volume:	<u>9</u> gallons		

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:56	Started purging well			
10:57	3	6.66	18.90	750
10:58	6	6.59	18.9	750
10:59	9	6.57	18.9	750
11:04	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-7 Project No.: 2761  
Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd  
Depth of Well: 29.36 feet Castro Valley, CA  
Top of Casing Elevation: 179.11 feet Date: July 26, 2010  
Depth to Groundwater: 9.11 feet Sampler: Lizzie Hightower  
Groundwater Elevation: 170.00 feet *Parisa Montavalli*  
Water Column Height: 20.25 feet  
Purged Volume: 9 gallons

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

#### Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
09:27	Start purging well			
09:28	3	6.24	18.2	760
09:29	6	6.30	18.2	770
09:30	9	6.31	18.2	780
09:35	Sampled			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-1 Project No.: 2761  
 Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd  
 Depth of Well: 29.74 feet Castro Valley, CA  
 Top of Casing Elevation: 180.95 feet Date: July 26, 2010  
 Depth to Groundwater: 10.49 feet Sampler: Lizzie Hightower  
 Groundwater Elevation: 170.46 feet *Parsa Montavalli*  
 Water Column Height: 19.25 feet  
 Purged Volume: 9 gallons

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

## Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:19	Started purging well			
11:20	7	6.62	19.16	950
11:21	6	6.50	19.1	980
11:22	9	6.46	19.8	990
11:27	Finish			sample



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-2  
Casing Diameter: 2 inches  
Depth of Well: 14.70 feet  
Top of Casing Elevation: 178.99 feet  
Depth to Groundwater: 10.24 feet  
Groundwater Elevation: 168.75 feet  
Water Column Height: 4.46 feet  
Purged Volume: 2 gallons

Project No.: 2761  
Address: 3519 Castro Valley Blvd  
Castro Valley, CA  
Date: July 26, 2010  
Sampler: Lizzie Hightower  
Parsa Montavall

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: cloudy / brown

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
9:46	Start	purging		
9:47	.5	6.77	19.3	620
9:48	1	6.73	19.3	620
9:49	1.5	6.73	19.3	620
9:56	2	6.72	19.4	620
10:01	Finish	purging	/ sample	



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOM A-3 Project No.: 2761  
Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd  
Depth of Well: 14.70 feet Castro Valley, CA  
Top of Casing Elevation: 176.31 feet Date: July 26, 2010  
Depth to Groundwater: 9.67 feet Sampler: Lizzie Hightower  
Groundwater Elevation: 167.14 feet Parsha Montavalli  
Water Column Height: 5.03 feet  
Purged Volume: 2.5 gallons

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Cloudy / Brownish

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:08	Started purging well			
10:09	0.5	6.60	21.3	970
10:11	1.0	6.52	21.5	990
10:12	1.5	6.50	21.2	1010
10:15	2.5	6.48	21.2	1010
10:20	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.:	<u>SOMA-4</u>	Project No.:	2761
Casing Diameter:	<u>2</u> inches	Address:	3519 Castro Valley Blvd
Depth of Well:	<u>22.65</u> feet		Castro Valley, CA
Top of Casing Elevation:	<u>176.94</u> feet	Date:	July 26, 2010
Depth to Groundwater:	<u>9.13</u> feet	Sampler:	Lizzie Hightower
Groundwater Elevation:	<u>167.81</u> feet		<i>Parisa Montavalli</i>
Water Column Height:	<u>13.52</u> feet		
Purged Volume:	<u>9</u> gallons		

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: \_\_\_\_\_

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: slight petro

#### Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (μs/cm)
10:29	Started purging well			
10:30	3	6.93	20.0	740
10:31	6	6.76	20.7	740
10:32	9	6.32	20.6	750
10:37	Finish		sampled	



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-5  
 Casing Diameter: 2 inches  
 Depth of Well: 14.87 feet  
 Top of Casing Elevation: 180.31 feet  
 Depth to Groundwater: 9.99 feet  
 Groundwater Elevation: 170.32 feet  
 Water Column Height: 4.88 feet  
 Purged Volume: 2 gallons

Project No.: 2761  
 Address: 3519 Castro Valley Blvd  
 Castro Valley, CA  
 Date: July 26, 2010  
 Sampler: Lizzie Hightower

*Parsa Montavalli*

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Cloudy/Brownish

Sheen: No  Yes  Describe: \_\_\_\_\_

Odor: No  Yes  Describe: Petro Oder

#### Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:30	Started purging well			
12:31	0.5	6.49	20.7	1620
12:33	1.0	6.40	20.2	1630
12:34	1.5	6.42	19.9	1650
12:35	2.0	6.43	19.9	1670
12:40	Sampled			

# Appendix C

Chain of Custody Form and Laboratory Report  
for the  
Second Semi-annual 2010 Monitoring Event



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 221462**  
**ANALYTICAL REPORT**

SOMA Environmental Engineering Inc.  
6620 Owens Dr.  
Pleasanton, CA 94588

Project : 2761  
Location : 3519 Castro Valley Blvd.  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
ESE-1	221462-001
ESE-2	221462-002
ESE-5	221462-003
MW-6	221462-004
MW-7	221462-005
SOMA-1	221462-006
SOMA-2	221462-007
SOMA-3	221462-008
SOMA-4	221462-009
SOMA-5	221462-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Project Manager

Date: 08/03/2010

NELAP # 01107CA

**CASE NARRATIVE**

Laboratory number: **221462**  
Client: **SOMA Environmental Engineering Inc.**  
Project: **2761**  
Location: **3519 Castro Valley Blvd.**  
Request Date: **07/26/10**  
Samples Received: **07/26/10**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 07/26/10. The samples were received cold and intact.

**Volatile Organics by GC/MS (EPA 8260B):**

High surrogate recovery was observed for 1,2-dichloroethane-d4 in SOMA-4 (lab # 221462-009). No other analytical problems were encountered.

# **CHAIN OF CUSTODY**

Page 1 of 1

## **Curtis & Tompkins, Ltd.**

Analytical Laboratory Since 1878

2323 Fifth Street  
Berkeley, CA 94710  
(510)486-0900 Phone  
(510)486-0532 Fax

Project No: 2761

C&T LOGIN # 221462

## **Analyses**

**Project Name:** 3519 Castro Valley Blvd., Castro Valley **Company :** SOMA Environmental

**Turnaround Time: Standard**      **Telephone:** 925-734-6400

**Report To:** Joyce Bobek

**Telephone:** 925-734-6400

**Fax:** 925-734-6401

Lab No.	Sample ID.	Sampling Date	Time	Matrix			Preservative			
				Soil	Water	Waste	# of Containers	HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>
1	ESE-1	7/26/10	12:21	*	*		4-VOAs	*		*
2	ESE-2		11:44	*	*		4-VOAs	*		*
3	ESE-5		12:58	*			4-VOAs	*		*
4	MW-6		11:04	*			4-VOAs	*		*
5	MW-7		09:35	*			4-VOAs	*		*
6	SOMA-1		11:27	*			4-VOAs	*		*
7	SOMA-2		10:01	*			4-VOAs	*		*
8	SOMA-3		10:20	*			4-VOAs	*		*
9	SOMA-4		10:37	*			4-VOAs	*		*
10	SOMA-5		12:40	*			4-VOAs	*		*

**Notes: EDF OUTPUT REQUIRED  
GASOLINE OXYGENATES: TBA, DIPE, ETBE, TAME  
LEAD SCAVENGERS: 1,2-DCA, EDB**

**RELINQUISHED BY:**

E. A. lighton 7/26/10  
160-18 DATE/TIME

**RECEIVED BY:**

**DATE/TIME**

**DATE/TIME**

**DATE/TIME**

DATE/TIME

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 221962 Date Received 7-26-10 Number of coolers 1  
 Client SOMA ENV. Project 3519 CASTRO VALLEY BLVD.

Date Opened 7-26-10 By (print) S. EVANS (sign) Jas  
 Date Logged in J By (print) J (sign) J

1. Did cooler come with a shipping slip (airbill, etc) YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ...  YES (circle) on cooler  on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

Bubble Wrap  Foam blocks  Bags  None  
 Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation:

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ESE-1	Batch#:	165453
Lab ID:	221462-001	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	08/02/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,000	50
tert-Butyl Alcohol (TBA)	110	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	17	0.50
1,2-Dichloroethane	ND	0.50
Benzene	96	0.50
Toluene	1.2	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	4.2	0.50
m,p-Xylenes	4.9	0.50
o-Xylene	1.1	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-122
1,2-Dichloroethane-d4	131	71-140
Toluene-d8	111	80-120
Bromofluorobenzene	112	80-121

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ESE-2	Batch#:	165350
Lab ID:	221462-002	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	13	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-122
1,2-Dichloroethane-d4	133	71-140
Toluene-d8	114	80-120
Bromofluorobenzene	110	80-121

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ESE-5	Batch#:	165350
Lab ID:	221462-003	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,800	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	2.0	0.50
1,2-Dichloroethane	ND	0.50
Benzene	0.75	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	1.8	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	134	71-140
Toluene-d8	112	80-120
Bromofluorobenzene	110	80-121

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	165350
Lab ID:	221462-004	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	126	71-140
Toluene-d8	112	80-120
Bromofluorobenzene	107	80-121

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

6.0

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	165350
Lab ID:	221462-005	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	6.0	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-122
1,2-Dichloroethane-d4	130	71-140
Toluene-d8	118	80-120
Bromofluorobenzene	111	80-121

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-1	Batch#:	165350
Lab ID:	221462-006	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	68	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	5.9	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	130	71-140
Toluene-d8	116	80-120
Bromofluorobenzene	108	80-121

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-2	Batch#:	165350
Lab ID:	221462-007	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-122
1,2-Dichloroethane-d4	135	71-140
Toluene-d8	118	80-120
Bromofluorobenzene	110	80-121

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-3	Batch#:	165350
Lab ID:	221462-008	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	9.8	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-122
1,2-Dichloroethane-d4	140	71-140
Toluene-d8	117	80-120
Bromofluorobenzene	114	80-121

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

10.0

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-4	Batch#:	165350
Lab ID:	221462-009	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	220	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	2.3	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-122
1,2-Dichloroethane-d4	151 *	71-140
Toluene-d8	118	80-120
Bromofluorobenzene	116	80-121

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-5	Batch#:	165350
Lab ID:	221462-010	Sampled:	07/26/10
Matrix:	Water	Received:	07/26/10
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	40.00		

Analyte	Result	RL
Gasoline C7-C12	14,000	2,000
tert-Butyl Alcohol (TBA)	ND	400
Isopropyl Ether (DIPE)	ND	20
Ethyl tert-Butyl Ether (ETBE)	ND	20
Methyl tert-Amyl Ether (TAME)	ND	20
Ethanol	ND	40,000
MTBE	150	20
1,2-Dichloroethane	ND	20
Benzene	3,300	20
Toluene	ND	20
1,2-Dibromoethane	ND	20
Ethylbenzene	1,100	20
m,p-Xylenes	1,200	20
o-Xylene	140	20

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-122
1,2-Dichloroethane-d4	136	71-140
Toluene-d8	117	80-120
Bromofluorobenzene	111	80-121

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

12.0

**Batch QC Report**
**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	165350
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Type: BS Lab ID: QC553830

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	95.94	77	45-152
Isopropyl Ether (DIPE)	25.00	22.87	91	56-134
Ethyl tert-Butyl Ether (ETBE)	25.00	21.48	86	60-124
Methyl tert-Amyl Ether (TAME)	25.00	21.29	85	66-120
MTBE	25.00	20.58	82	66-120
1,2-Dichloroethane	25.00	25.29	101	70-135
Benzene	25.00	24.25	97	80-122
Toluene	25.00	24.11	96	80-120
1,2-Dibromoethane	25.00	21.32	85	80-120
Ethylbenzene	25.00	25.29	101	80-123
m,p-Xylenes	50.00	50.49	101	80-126
o-Xylene	25.00	23.50	94	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-122
1,2-Dichloroethane-d4	133	71-140
Toluene-d8	114	80-120
Bromofluorobenzene	110	80-121

Type: BSD Lab ID: QC553831

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	99.52	80	45-152	4	30
Isopropyl Ether (DIPE)	25.00	22.86	91	56-134	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.40	86	60-124	0	20
Methyl tert-Amyl Ether (TAME)	25.00	22.10	88	66-120	4	20
MTBE	25.00	20.08	80	66-120	2	20
1,2-Dichloroethane	25.00	25.59	102	70-135	1	20
Benzene	25.00	24.63	99	80-122	2	20
Toluene	25.00	23.75	95	80-120	2	20
1,2-Dibromoethane	25.00	21.42	86	80-120	0	20
Ethylbenzene	25.00	25.40	102	80-123	0	20
m,p-Xylenes	50.00	48.58	97	80-126	4	20
o-Xylene	25.00	23.13	93	80-122	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-122
1,2-Dichloroethane-d4	132	71-140
Toluene-d8	110	80-120
Bromofluorobenzene	112	80-121

RPD= Relative Percent Difference

Page 1 of 1

13.0

**Batch QC Report**
**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC553832	Batch#:	165350
Matrix:	Water	Analyzed:	07/29/10
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	129	71-140
Toluene-d8	115	80-120
Bromofluorobenzene	111	80-121

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	165350
Units:	ug/L	Analyzed:	07/29/10
Diln Fac:	1.000		

Type: BS Lab ID: QC553833

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,002	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-122
1,2-Dichloroethane-d4	129	71-140
Toluene-d8	113	80-120
Bromofluorobenzene	111	80-121

Type: BSD Lab ID: QC553834

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	941.6	94	80-120	6 20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	128	71-140
Toluene-d8	113	80-120
Bromofluorobenzene	109	80-121

RPD= Relative Percent Difference

Page 1 of 1

15.0

**Batch QC Report**
**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	165453
Units:	ug/L	Analyzed:	08/02/10
Diln Fac:	1.000		

Type: BS Lab ID: QC554251

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	84.14	84	45-152
Isopropyl Ether (DIPE)	20.00	18.71	94	56-134
Ethyl tert-Butyl Ether (ETBE)	20.00	18.00	90	60-124
Methyl tert-Amyl Ether (TAME)	20.00	17.37	87	66-120
MTBE	20.00	17.22	86	66-120
1,2-Dichloroethane	20.00	21.39	107	70-135
Benzene	20.00	20.01	100	80-122
Toluene	20.00	19.28	96	80-120
1,2-Dibromoethane	20.00	17.89	89	80-120
Ethylbenzene	20.00	19.87	99	80-123
m,p-Xylenes	40.00	39.10	98	80-126
o-Xylene	20.00	18.46	92	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-122
1,2-Dichloroethane-d4	123	71-140
Toluene-d8	107	80-120
Bromofluorobenzene	109	80-121

Type: BSD Lab ID: QC554252

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	84.12	84	45-152	0	30
Isopropyl Ether (DIPE)	20.00	18.38	92	56-134	2	20
Ethyl tert-Butyl Ether (ETBE)	20.00	18.28	91	60-124	1	20
Methyl tert-Amyl Ether (TAME)	20.00	17.18	86	66-120	1	20
MTBE	20.00	16.82	84	66-120	2	20
1,2-Dichloroethane	20.00	20.37	102	70-135	5	20
Benzene	20.00	19.59	98	80-122	2	20
Toluene	20.00	18.98	95	80-120	2	20
1,2-Dibromoethane	20.00	17.57	88	80-120	2	20
Ethylbenzene	20.00	19.17	96	80-123	4	20
m,p-Xylenes	40.00	38.57	96	80-126	1	20
o-Xylene	20.00	17.86	89	80-122	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-122
1,2-Dichloroethane-d4	122	71-140
Toluene-d8	107	80-120
Bromofluorobenzene	108	80-121

RPD= Relative Percent Difference

Page 1 of 1

16.0

**Batch QC Report**
**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC554253	Batch#:	165453
Matrix:	Water	Analyzed:	08/02/10
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	131	71-140
Toluene-d8	108	80-120
Bromofluorobenzene	110	80-121

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

**Gasoline by GC/MS**

Lab #:	221462	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	165453
Units:	ug/L	Analyzed:	08/02/10
Diln Fac:	1.000		

Type: BS Lab ID: QC554257

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	806.8	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	123	71-140
Toluene-d8	110	80-120
Bromofluorobenzene	109	80-121

Type: BSD Lab ID: QC554258

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	800.0	785.1	98	80-120	3 20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-122
1,2-Dichloroethane-d4	121	71-140
Toluene-d8	107	80-120
Bromofluorobenzene	110	80-121

RPD= Relative Percent Difference

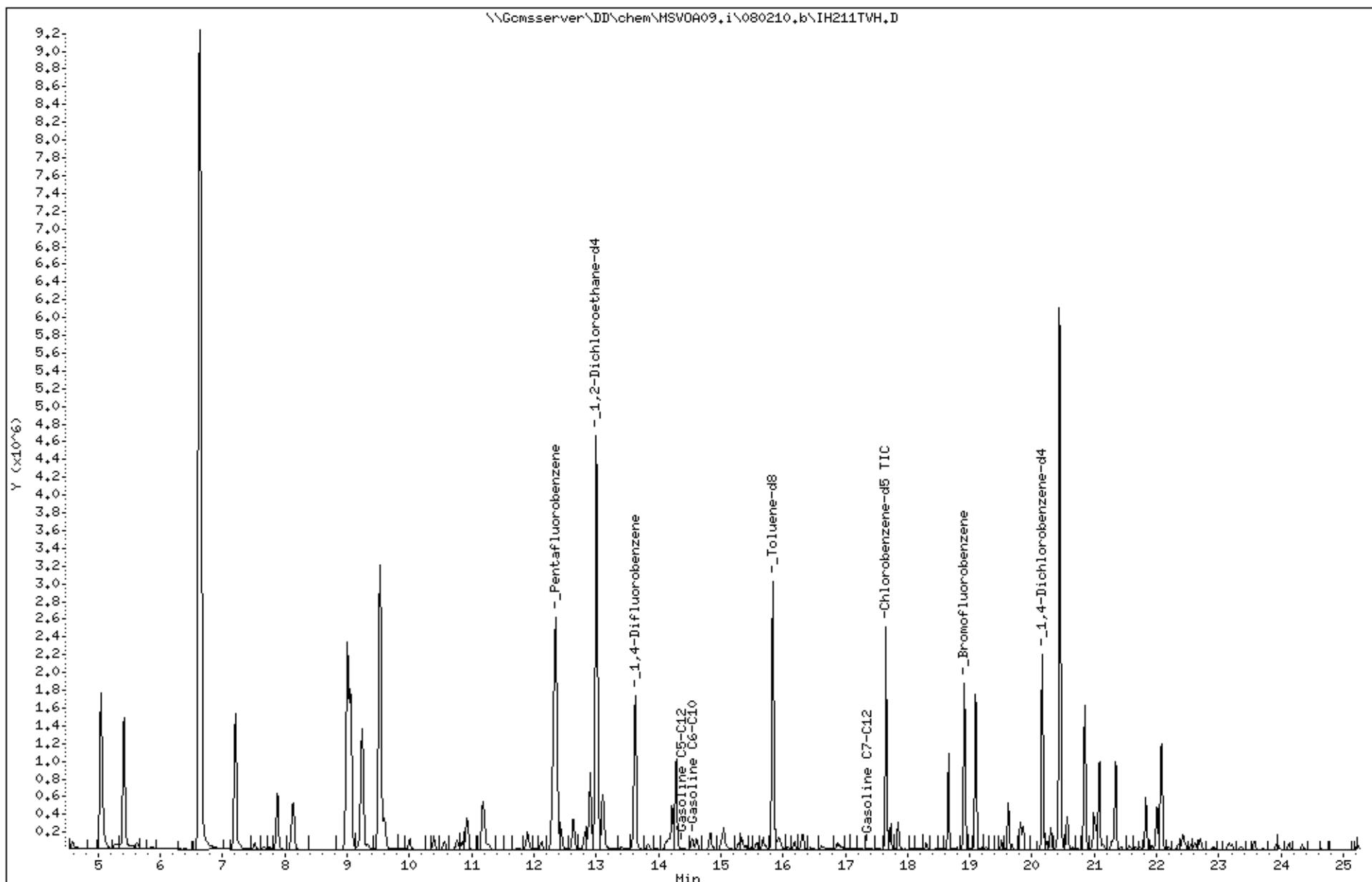
Page 1 of 1

18.0

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Instrument: MSV0A09.i  
Operator: VOC  
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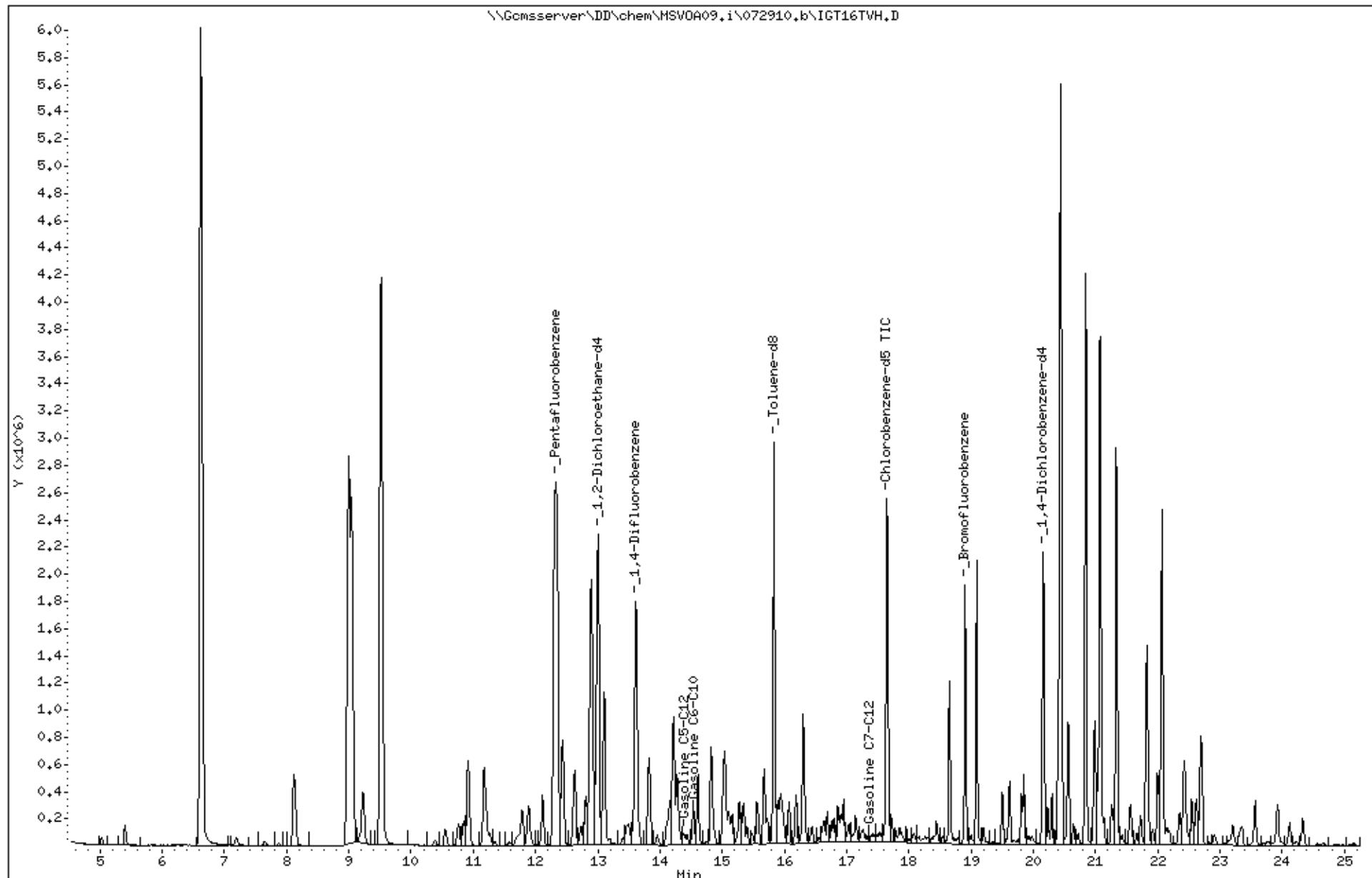
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Instrument: MSV0A09.i  
Operator: VOC  
Column diameter: 2.00

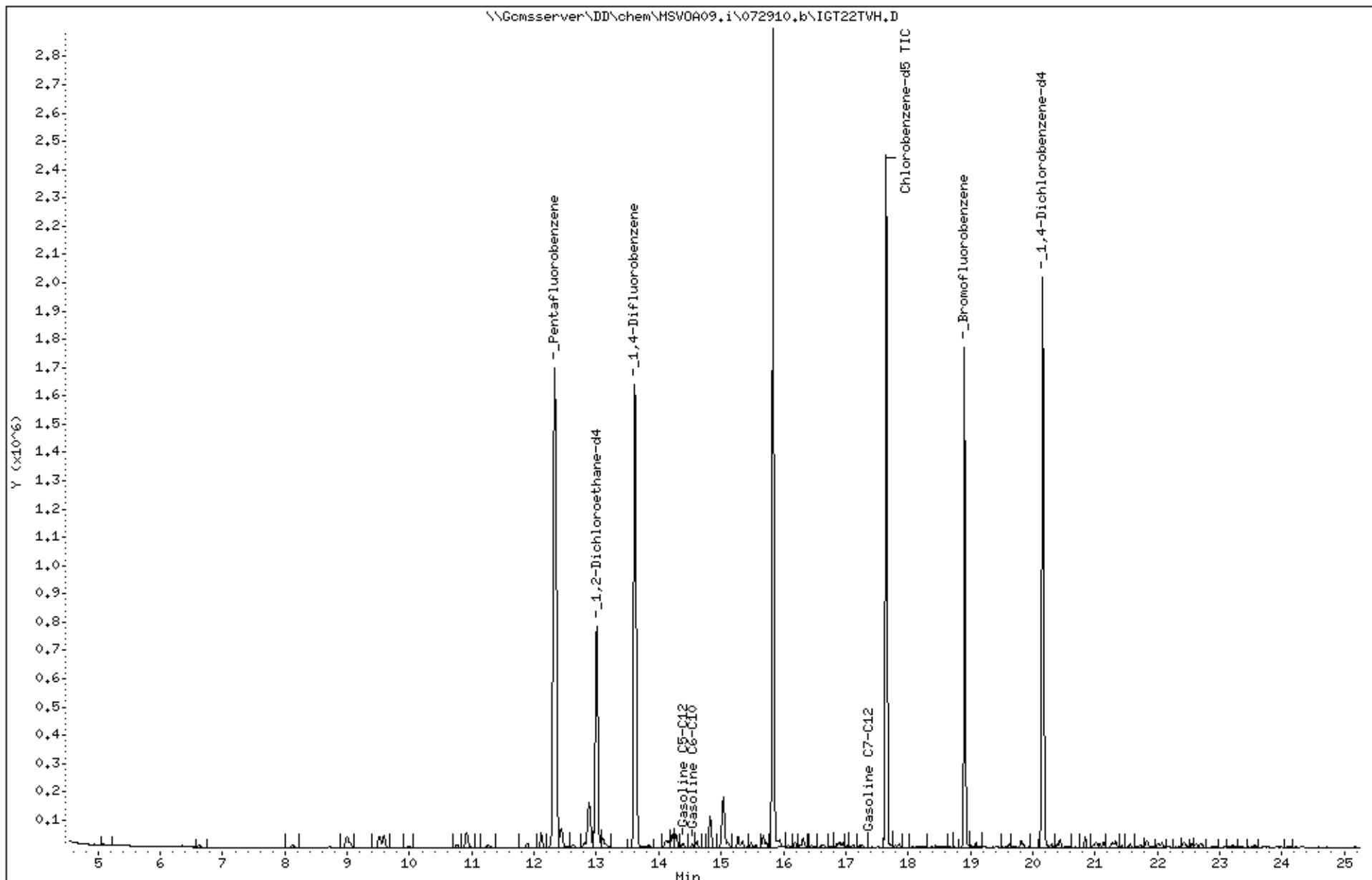
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Sample Info: S\_221462-009,

Instrument: MSV0A09.i  
Operator: VOC  
Column diameter: 2.00

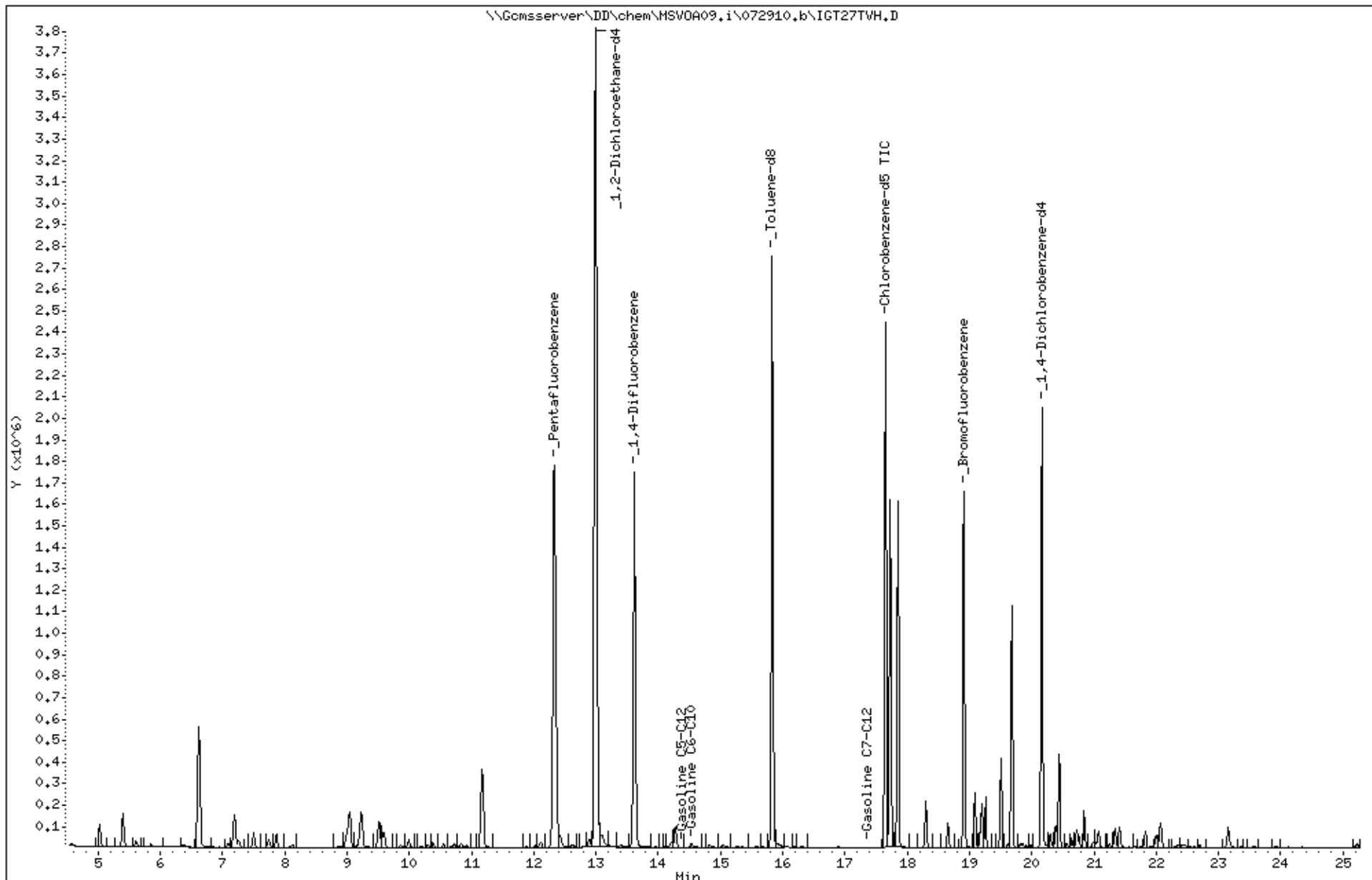
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Instrument: MSV0A09.i  
Operator: VOC  
Column diameter: 2.00

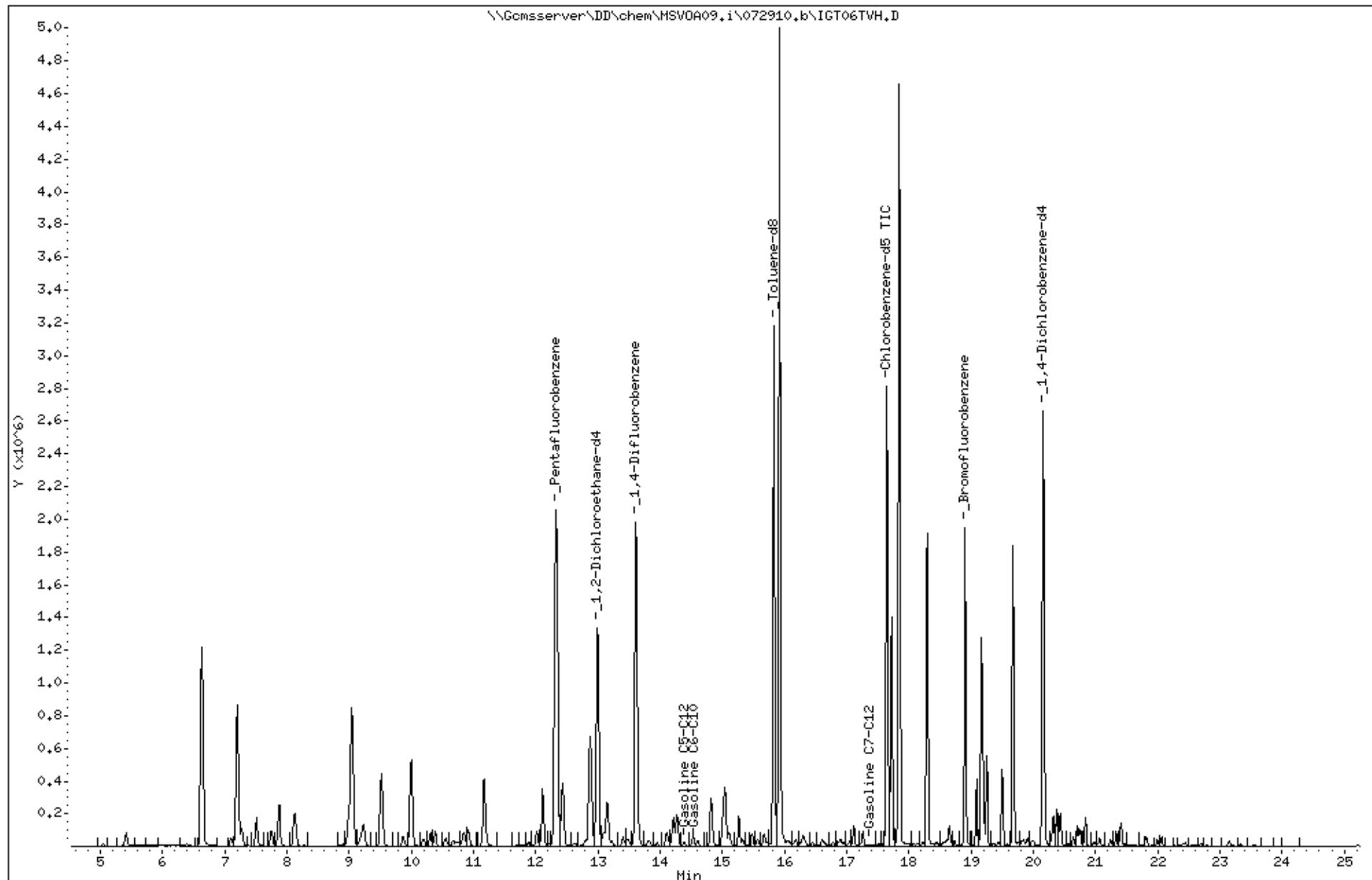
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Sample Info: cov/BS,QC553833,165350,S14540,.010/100

Instrument: MSV0A09.i  
Operator: VOC  
Column diameter: 2.00

Column phase:



# Appendix D

Email from P&D Environmental Inc.  
(Consultants for Neighboring Service Station,  
3495 Castro Valley Blvd.)

## Ruchi Mathur

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**From:** steven.carmack@pdenviro.com  
**Sent:** Wednesday, September 24, 2008 11:18 AM  
**To:** rmathur@somaenv.com  
**Cc:** Paul King  
**Subject:** [FWD: RO285 Xtra Oil Castro Valley Confirmation of Discontinued Use of Other Consultant Data]

Good morning Ruchi,

please see the email below from my boss to the Alameda County DEH case worker. While we still will coordinate our monitoring & sampling activities, it is no longer necessary to include each others tables in our reports, especially since they can be accessed on Geotracker or the Alameda county LOP website. If you have any problems or concerns, or we can help you in any other way give us a call.

Steve Carmack  
Project Scientist  
P&D Environmental, Inc.  
510.658.6916  
510.834.0152 (Fax)

----- Original Message -----

**Subject:** Fwd: RO285 Xtra Oil Castro Valley Confirmation of Discontinued Use of Other Consultant Data  
**From:** [pdking0000@aol.com](mailto:pdking0000@aol.com)  
**Date:** Wed, September 24, 2008 10:12 am  
**To:** [steven.carmack@pdenviro.com](mailto:steven.carmack@pdenviro.com)

-----Original Message-----

**From:** pdking0000@aol.com  
**To:** [steven.plunkett@acgov.org](mailto:steven.plunkett@acgov.org)  
**Cc:** [xtraoil@hotmail.com](mailto:xtraoil@hotmail.com); [xtraoil@sbcglobal.net](mailto:xtraoil@sbcglobal.net)  
**Sent:** Wed, 17 Sep 2008 4:45 pm  
**Subject:** RO285 Xtra Oil Castro Valley Confirmation of Discontinued Use of Other Consultant Data

Hi Steven,

As we have recently discussed on the telephone on 9/10/08 and 9/15/08 this e-mail confirms that P&D Environmental, Inc. (P&D) will discontinue including quarterly monitoring and sampling data generated by other consultants for nearby sites associated with coordinated sampling events. P&D will continue to coordinate sampling events with the other consultants so that monitoring data for the wells will be obtained on the same dates that monitoring data is obtained by the other consultants for the nearby sites.

Should you have any questions or need additional information, please do not hesitate to give me a call. Thank you!

Best Regards,  
Paul King

P&D Environmental, Inc.  
55 Santa Clara Avenue, Suite 240  
Oakland, CA 94610

# Appendix E

## Non-Hazardous Waste Manifests for Groundwater Removal

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 909-721-2030	4. Waste Tracking Number NH63444-N	
5. Generator's Name and Mailing Address MIRAZIM SHAKOORI 3519 CASTRO VALLEY BLVD CASTRO VALLEY, CA 94548 Generator's Phone: 925-654-6760						
Generator's Site Address (if different than mailing address)						
6. Transferor 1 Company Name ENVIRONMENTAL LOGISTICS, INC U.S. EPA ID Number CAR00017247B						
7. Transporter 2 Company Name U.S. EPA ID Number						
8. Designated Facility Name and Site Address U.S. EPA ID Number FILTER RECYCLING SERVICES, INC. 180 WEST MONTE AVENUE RIALTO, CA 92316 USA CAD982444481						
Facility's Phone: 800-698-4377						
GENERATOR	9. Waste Shipping Name and Description		10. Containers	11. Total Quantity	12. Unit Wt/Vol	
	1. NON HAZARDOUS WASTE LIQUID (WATER)		No. 2	DM 100	G	
	2.					
	3.					
	4.					
13. Special Handling Instructions and Additional Information 9B1) WATER # 10030822 (Z455) WEAR APPROPRIATE PPE INV# 63444-N						
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Generator/Coffer's Printed/Typed Name F O B O WADE RIDDERING		Signature <i>Vale Riddering</i>		Month 3	Day 12 Year 10	
15. International Shipment <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Transporter Signature (for imports only):						
16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name SETH ROSEN Signature <i>SLR</i> Month 3 Day 12 Year 10 Transporter 2 Printed/Typed Name Signature Month Day Year						
TRANSPORTER	17. Discrepancy 17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Rejection <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number:					
	17b. Alternate Facility (or Generator) U.S. EPA ID Number					
	Facility's Phone: Month Day Year 17c. Signature of Alternate Facility (or Generator)					
DESIGNATED FACILITY	18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a Printed/Typed Name <i>Erica Foster Steven Masters</i> Signature <i>3/16/10</i> Month Day Year 3/16/10					
	DESIGNATED FACILITY TO GENERATOR					