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*By dehloptoxic at 1:31 pm, Jul 11, 2006*

May 15, 2006

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Subject: #RO0000346

Site Address: 3519 Castro Valley Boulevard, Castro Valley, CA  
Castro Valley Gasoline Service Station

Dear Mr. Hwang:

SOMA's "Second Quarter 2006 Groundwater Monitoring Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 734-6400.

Sincerely,

Mansour Sepehr, Ph.D., PE  
Principal Hydrogeologist



Enclosure

cc: Mr. Azim Shakoori w/enclosure  
Ms. Lynelle Onishi, URS Corporation

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*By dehloptoxic at 1:32 pm, Jul 11, 2006*



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**Second Quarter 2006**  
**Groundwater Monitoring Report**  
**Castro Valley Gasoline Service Station**  
**3519 Castro Valley Boulevard**  
**Castro Valley, California**

May 15, 2006

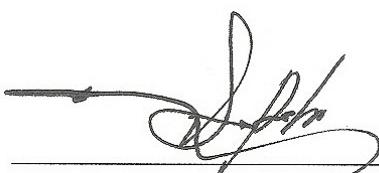
Project 2761

Prepared for  
**Mr. Mirazim Shakoori**  
**3519 Castro Valley Boulevard**  
**Castro Valley, California 94546**

Prepared by  
**SOMA Environmental Engineering, Inc.**  
**6620 Owens Drive, Suite A**  
**Pleasanton, California 94588**

## Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Mirazim Shakoori, the property owner of 3519 Castro Valley Boulevard, Castro Valley, California to comply with the Alameda County Health Care Services' requirements for the Second Quarter 2006 groundwater monitoring event.



Mansour Sepehr, Ph.D., P.E.  
Principal Hydrogeologist



## **Table of Contents**

<b>Certification.....</b>	<b>i</b>
<b>Table of Contents.....</b>	<b>ii</b>
<b>List of Tables.....</b>	<b>iii</b>
<b>List of Figures .....</b>	<b>iii</b>
<b>List of Appendices.....</b>	<b>iii</b>
<b>1.0 Introduction .....</b>	<b>1</b>
<b>1.1 Previous Activities.....</b>	<b>1</b>
<b>2.0 Results.....</b>	<b>2</b>
<b>2.1 Field Measurements .....</b>	<b>2</b>
<b>2.2 Laboratory Analyses.....</b>	<b>3</b>
<b>3.0 Conclusions &amp; Recommendations.....</b>	<b>4</b>

## **List of Tables**

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

## **List of Figures**

- Figure 1: Site vicinity map.
- Figure 2: Site map showing locations of existing monitoring wells, decommissioned wells, offsite temporary well boreholes, and monitoring wells installed by SOMA.
- Figure 3: Groundwater elevation contour map in feet. April 27, 2006.
- Figure 4: Contour map of TPH-g concentrations in groundwater.  
April 27, 2006.
- Figure 5: Contour map of MtBE concentrations in groundwater.  
(EPA Method 8260B). April 27, 2006.
- Figure 6: Contour map of TBA concentrations in groundwater.  
April 27, 2006.

## **List of Appendices**

- Appendix A: SOMA's Groundwater Monitoring Procedures
- Appendix B: Table of Elevations & Coordinates on Monitoring Wells  
Measured by Kier Wright Civil Engineers Surveyors, Inc.  
& Field measurements of physical and chemical properties of  
the groundwater samples collected during the Second Quarter 2006
- Appendix C: Chain of Custody form and laboratory report for the Second Quarter 2006 monitoring event

## **1.0 Introduction**

This report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Mirazim Shakoori, the property owner of the former BP gasoline station located at 3519 Castro Valley Boulevard, Castro Valley, California ("the Site"), as shown in Figure 1. The Site is located in an area consisting primarily of residential and commercial properties.

This report summarizes the results of the Second Quarter 2006 groundwater monitoring event conducted at the Site on April 27, 2006. Included in this report are the physical and chemical properties measured in the field for each groundwater sample. The physical and chemical properties consisted of measurements of pH, temperature, and electrical conductivity (EC). This report also includes the laboratory analytical results on the groundwater samples.

These activities were performed in accordance with the general guidelines of the California Regional Water Quality Control Board (CRWQCB) and the Alameda County Health Care Services (ACHCS). Appendix A details the procedures used by SOMA during this monitoring event.

### **1.1 Previous Activities**

In 1984, three single-walled fiberglass underground storage tanks (USTs) with capacities of 6,000 gallons, 8,000 gallons, and 10,000 gallons were installed in the southeastern portion of the Site. A former dispenser island reportedly existed on the west side of the Site; however, there was no available information on the date of the dispenser removal.

In 1988, a 1,000-gallon double-walled fiberglass waste oil tank (WOT) was installed to replace the previous 380-gallon WOT. In September 1988, Kaprealian Engineering, Inc. (KEI) removed the original 380-gallon WOT and observed holes in this UST. Due to holes observed in the former WOT, confirmation soil samples were collected from the bottom of the excavation. The following analytical soil results were observed: benzene and toluene were detected at 6.8 ug/Kg and 9.5 ug/Kg, respectively. Total petroleum hydrocarbons (TPH) and total oil and grease (TOG) constituents were not detected.

In September and October 1992, Environmental Science & Engineering, Inc. (ESE) drilled five soil boreholes and converted them into monitoring wells (ESE-1 through ESE-5). Soil and groundwater samples were collected during the well installation. In the soil samples, the maximum level of soil contamination was detected in monitoring well borehole ESE-5 at 220,000 ug/Kg total petroleum hydrocarbons as gasoline (TPH-g), 1,400 ug/Kg benzene, 8,200 ug/Kg toluene, 3,300 ug/Kg ethylbenzene, and 18,000 ug/Kg xylenes. In the groundwater samples collected from ESE-1, the maximum concentrations were TPH-g at 2,300 ug/L, benzene at 370 ug/L, toluene at 160 ug/L, ethylbenzene at

17 ug/L, and xylenes at 110 ug/L. Figure 2 shows the locations of the wells.

In July 1995, three additional monitoring wells were installed (two on-site wells, MW-6 and MW-8, and one off-site well, MW-7). In April 1996, well MW-8, which was located on the western margin of the Site, was decommissioned to accommodate the road-widening project along Redwood Boulevard. Figure 2 shows the locations of these wells.

On August 20, 2003, prior to the UST removal activities, SOMA oversaw Vironex drill two boreholes. The two boreholes were drilled in order to characterize the soil for landfill acceptance criteria. The borehole locations are shown in Figure 2. In September 2003, three single-walled fiberglass USTs, with capacities of 6,000 gallons, 8,000 gallons, and 10,000 gallons were removed and replaced with new double-walled fuel tanks. The new USTs consisted of double-walled fiberglass tanks with capacities of 12,000 gallons and 20,000 gallons. In addition to the removal and replacement of the USTs, the dispensers, product lines, and vent lines were also removed and replaced. During the Third Quarter 2003, two monitoring wells, ESE-3 and ESE-4, were decommissioned due to construction activities.

In December 2003, SOMA oversaw the drilling of off-site temporary well boreholes. The boreholes were drilled to determine the horizontal extent of the petroleum hydrocarbon contamination in the off-site areas. The locations of the temporary boreholes are displayed in Figure 2.

On June 10, 2004, SOMA installed on and off-site monitoring wells at the Site. SOMA-1 was installed in the southeastern section of the Site. SOMA-2 to SOMA-4 were installed south and southeast of the Site. Figure 2 shows the locations of these monitoring wells. Kier and Wright Engineers Surveyors, of Pleasanton, California, surveyed all site wells on June 21, 2004. Appendix B shows the elevations and coordinates of the surveyed wells.

## 2.0 Results

The following sections provide the results of the field measurements and laboratory analyses for the April 27, 2006 groundwater monitoring event.

### 2.1 Field Measurements

Table 1 presents the calculated groundwater elevation, as well as the depth to groundwater in each monitoring well. The depths to groundwater ranged from 5.71 feet in well ESE-5 to 10.95 feet in well SOMA-2. The corresponding groundwater elevations ranged from 167.81 feet in well SOMA-3 to 173.09 feet in well ESE-5. Table 1 also presents the historical groundwater elevations in the monitoring wells.

The groundwater elevation contour map is displayed in Figure 3. The groundwater flow direction is south to southeasterly across the Site. The groundwater gradient is approximately 0.010 feet/feet.

Refer to Table 1 for detailed historical groundwater elevation trends.

## 2.2 Laboratory Analyses

Table 1 also presents the total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, total xylenes (BTEX), and Methyl tertiary Butyl Ether (MtBE) laboratory analytical results on the groundwater samples. Table 2 presents the results of the gasoline oxygenate and lead scavenger laboratory analyses on the groundwater samples.

TPH-g was below the laboratory reporting limit in the groundwater samples collected from wells ESE-2, MW-6, MW-7, SOMA-2, and SOMA-3. Detectable TPH-g concentrations ranged from 81.6 ug/L in well SOMA-1 to 4,700 ug/L in well ESE-5.

Figure 4 displays a contour map of TPH-g concentrations in the groundwater. The most impacted TPH-g region was in the western section of the Site. The high TPH-g concentration in the western section of the Site may have originated from a former dispenser island.

All BTEX analytes were below the laboratory reporting limit in the groundwater sample collected from well ESE-2, with the exception of benzene. In wells MW-6, MW-7, SOMA-2, and SOMA-3 all BTEX analytes were below the laboratory reporting limit. In the groundwater samples collected from wells ESE-5, SOMA-1, and SOMA-4, both toluene and total xylenes were below the laboratory reporting limit.

The highest BTEX concentrations were detected in well ESE-1 at 519 ug/L, 23.2 ug/L, 32.4 ug/L, and 40.2 ug/L, respectively. Due to the low or non-detectable levels of benzene throughout the Site, no iso-concentration benzene figure was drawn.

MtBE was below the laboratory reporting limit in well MW-6 and SOMA-2. Detectable MtBE concentrations ranged from 11.7 ug/L in well SOMA-4 to 432 ug/L in well ESE-2. Figure 5 displays the contour map of MtBE concentrations in the groundwater. As illustrated in Figure 5, MtBE has only minimally impacted the site groundwater. The MtBE plume has migrated off-site; however, only trace concentrations were detected in wells SOMA-3 and SOMA-4.

The main gasoline oxygenates and lead scavengers of concern are tert-Butyl-Alcohol (TBA) and Methyl tert-Amyl Ether (TAME). All Isopropyl Ether (DIPE),

Ethyl tertiary Butyl Ether (EtBE), ethanol, 1,2-Dichloroethane (1,2-DCA), and 1,2-Dibromoethane (EDB) constituents were below the laboratory reporting limit in all of the groundwater samples collected during this monitoring event. TAME was detected at trace concentrations in well ESE-2 at 8.29 ug/L, in well MW-7 at 2.63 ug/L, and 3.48 ug/L in well SOMA-1; TAME was below the laboratory reporting limit in the remaining wells. Due to the low or non-detectable levels of TAME throughout the Site, no iso-concentration figure was drawn for this constituent.

Figure 6 displays a contour map of TBA concentrations in the groundwater. The TBA plume, with the exception of trace concentrations detected in wells ESE-1 and ESE-2, appears to be centralized around well SOMA-1.

Refer to Tables 1 and 2 for detailed historical concentration trends.

Appendix C displays the laboratory analytical results for each groundwater sample collected during this monitoring event.

### **3.0 Conclusions & Recommendations**

The findings of the Second Quarter 2006 groundwater monitoring event can be summarized as follows:

- The groundwater flow direction has remained south to southeasterly across the Site.
- Based on the results of the quarterly monitoring events, a hydrocarbon source may still be present in the western section of the Site, in the vicinity of well ESE-5. In 1996, in the vicinity of well ESE-5, elevated levels of petroleum hydrocarbons were encountered.
- 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. In general, both the MtBE and TBA plumes appear to be centrally located in southeastern section of the Site, around wells SOMA-1 and ESE-2. This can be attributed to a possible previous release in the western section of the Site and the south to southeasterly groundwater flow direction across the Site, as well as the locations of these wells to the former UST cavity.
- Due to the high mobility rate of MtBE, this constituent has migrated off-site and was detected at trace concentrations in wells SOMA-3 and SOMA-4. However, all TPH-g, BTEX, and gasoline oxygenates were at non-detectable levels in off-site wells SOMA-2 and SOMA-3. In well MW-7, all tested constituents, with the exception of trace MtBE and TAME concentrations, were below the laboratory reporting limit. In well SOMA-4, all toluene, total xylenes, and gasoline oxygenates were below the

laboratory reporting limit. All tested constituents were below the laboratory reporting limit in the northern section of the Site (in well MW-6).

Based on the results of the quarterly monitoring events, SOMA recommends a no further action (NFA) status be adopted by the ACHCS for this site. SOMA further recommends conducting a sensitive receptor survey within a 2,000-foot radius of the Site. Based on the results of this survey, all monitoring wells should be destroyed pursuant to the guidelines of the ACHCS and RWQCB.

# Tables

**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
	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

**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 ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ ) 8260B
<b>ESE-1 cont.</b>	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
	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
	<b>4/27/2006</b>	<b>180.24</b>	<b>9.14</b>	<b>171.10</b>	<b>1,600</b>	<b>519</b>	<b>23.2</b>	<b>32.4</b>	<b>40.20</b>	<b>63.4</b>
<b>ESE-2</b>	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	1700	260	24	110	23	NA
	6/29/1993	178.23	NM	NM	1300	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

**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.	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	1700	<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	1200	4	<2.5	<2.5	<5	NA
	7/28/1995	178.23	10.64	167.59	2000	<2.5	<2.5	<2.5	<5	NA
	11/17/1995	178.23	11.13	167.10	3600	<25	<25	<25	<50	12000
	11/17/1995	178.23	NM	NM	3400	<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	2900	<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	2700	<0.5	<1	<1	<1	15000
	7/18/1997	178.23	11.02	167.21	11000	<5	<10	<10	<10	11000
	10/27/1997	178.23	10.93	167.30	6100	<2.5	<5.0	<5.0	<5.0	7100
	10/27/1997	178.23	NM	NM	6600	<2.5	<5.0	<5.0	<5.0	7400
	1/22/1998	178.23	7.93	170.30	13000	<0.5	<1	<1	<1	10000
	1/22/1998	178.23	NM	NM	13000	<0.5	<1	<1	<1	10000
	4/23/1998	178.23	9.34	168.89	19000	<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	19000	<5	<10	<10	<10	36000
	12/17/1998	178.23	10.20	168.03	12000	<5	<5	<5	<5	13000
	3/19/1999	178.23	9.02	169.21	18000	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	1600	<0.5	0.73	<0.5	2.2	9400
	12/14/2000	178.23	11.15	167.08	6000	0.75	<0.5	<0.5	<0.5	11200
	3/21/2001	178.23	10.35	167.88	6900	786	45.7	37.7	71.5	3790
	6/18/2001	178.23	11.24	166.99	6400	<2.5	<2.5	<2.5	<7.5	9320
	9/18/2001	178.23	11.35	166.88	4800	<12.5	<12.5	<12.5	<37.5	6960
	12/13/2001	178.23	10.97	167.26	59000	0.592	<0.5	<0.5	<1	5940
	3/14/2002	178.23	10.13	168.10	4500	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	1500	<5	<5	<5	6.3	3100
	12/16/2002	178.23	7.87	170.36	1400	<5	<5	<5	<5	2400

**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 ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ ) 8260B
ESE-2 cont.	3/11/2003	178.23	10.24	167.99	2800	<10	<10	<10	<10	4800
	6/17/2003	178.23	10.19	168.04	10000	<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
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
	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

**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 ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ ) 8260B
ESE-3 cont.	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
ESE-4	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

**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.	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
	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
	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

**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.	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
	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
MW-6	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
	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

**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.	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
	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	<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	<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	<1.0	<0.5

**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 ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ ) 8260B
MW-7	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
	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

**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-7 cont.	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
MW-8	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
QC-2	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
2/7/1996	NM	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

**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 ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE ( $\mu\text{g/L}$ ) 8260B
<b>SOMA-1</b>	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	<b>180.95</b>	<b>9.64</b>	<b>171.31</b>	<b>81.6</b>	<b>1.14</b>	<b>&lt;2.0</b>	<b>2.8</b>	<b>&lt;1.0</b>	<b>189</b>
<b>SOMA-2</b>	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
	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	<b>178.99</b>	<b>10.95</b>	<b>168.04</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;2.0</b>	<b>&lt;0.5</b>	<b>&lt;1.0</b>	<b>&lt;0.5</b>
<b>SOMA-3</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	<b>176.81</b>	<b>9.00</b>	<b>167.81</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;2.0</b>	<b>&lt;0.5</b>	<b>&lt;1.0</b>	<b>14.2</b>
<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	<b>176.94</b>	<b>8.75</b>	<b>168.19</b>	<b>172</b>	<b>1.35</b>	<b>&lt;2.0</b>	<b>8.83</b>	<b>&lt;1.0</b>	<b>11.7</b>

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 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.

NM: Not Measured

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 (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>ETHANOL (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</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
	<b>4/27/2006</b>	<b>261</b>	<b>&lt;2.15</b>	<b>&lt;2.15</b>	<b>&lt;8.6</b>	<b>&lt;4300</b>	<b>&lt;2.15</b>	<b>&lt;2.15</b>
<b>ESE-2</b>	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
	<b>4/27/2006</b>	<b>47.7</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>8.29</b>	<b>&lt;2000</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>

**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)
ESE-3	6/17/2003	<200	<5.0	<5.0	<5.0	NA	NA	NA
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
	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
MW-6	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

**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>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
	<b>4/27/2006</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>2.63</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<hr/>								
<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
	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
	<b>4/27/2006</b>	<b>983</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>3.48</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<hr/>								
<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
	<b>4/27/2006</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;2.0</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<hr/>								
<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
	<b>4/27/2006</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;2.0</b>	<b>&lt;1000</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>

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

Monitoring Well	Date	TBA ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	ETHANOL ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )
SOMA-4	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

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.

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

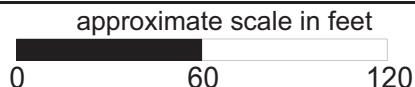
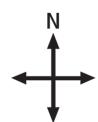
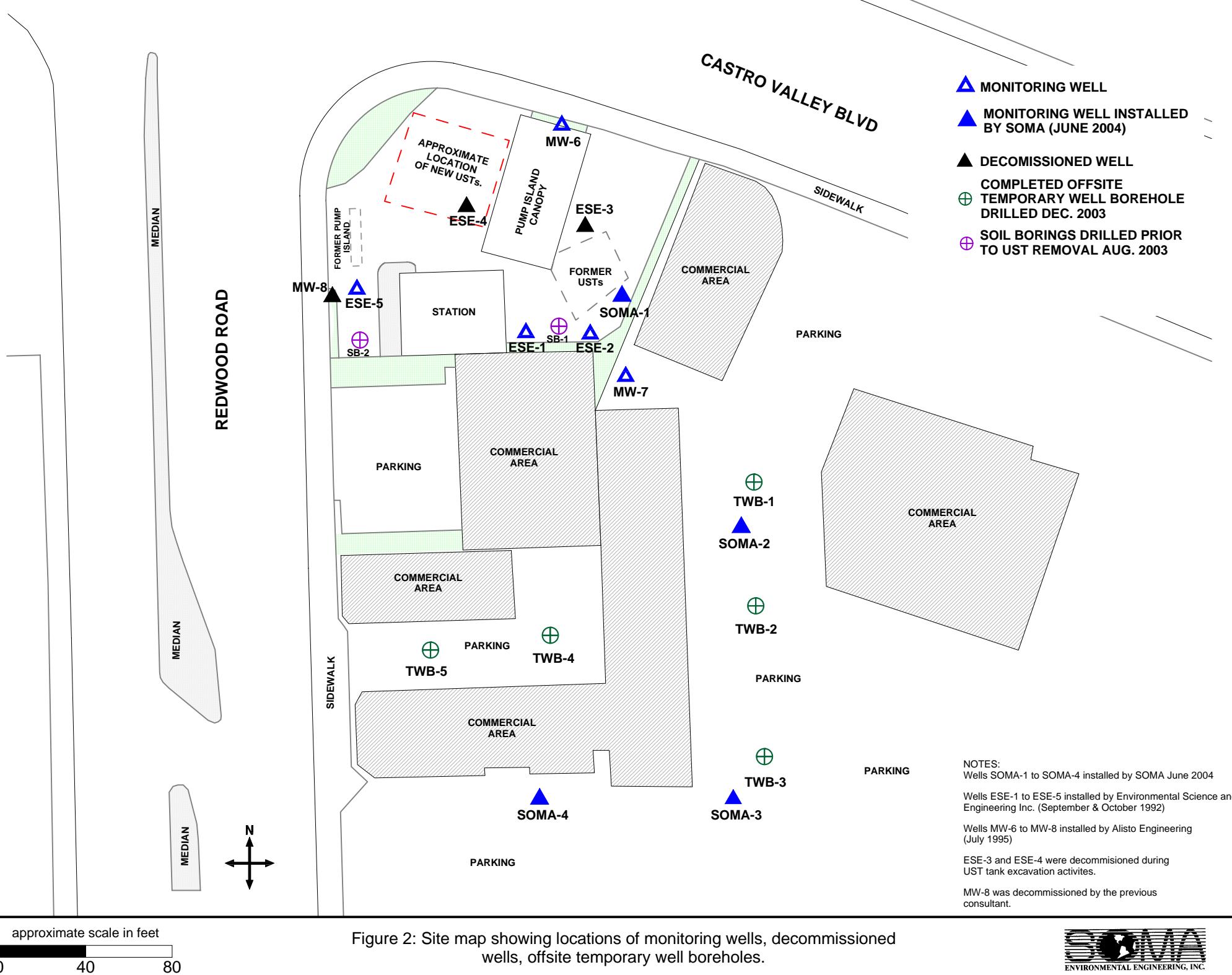
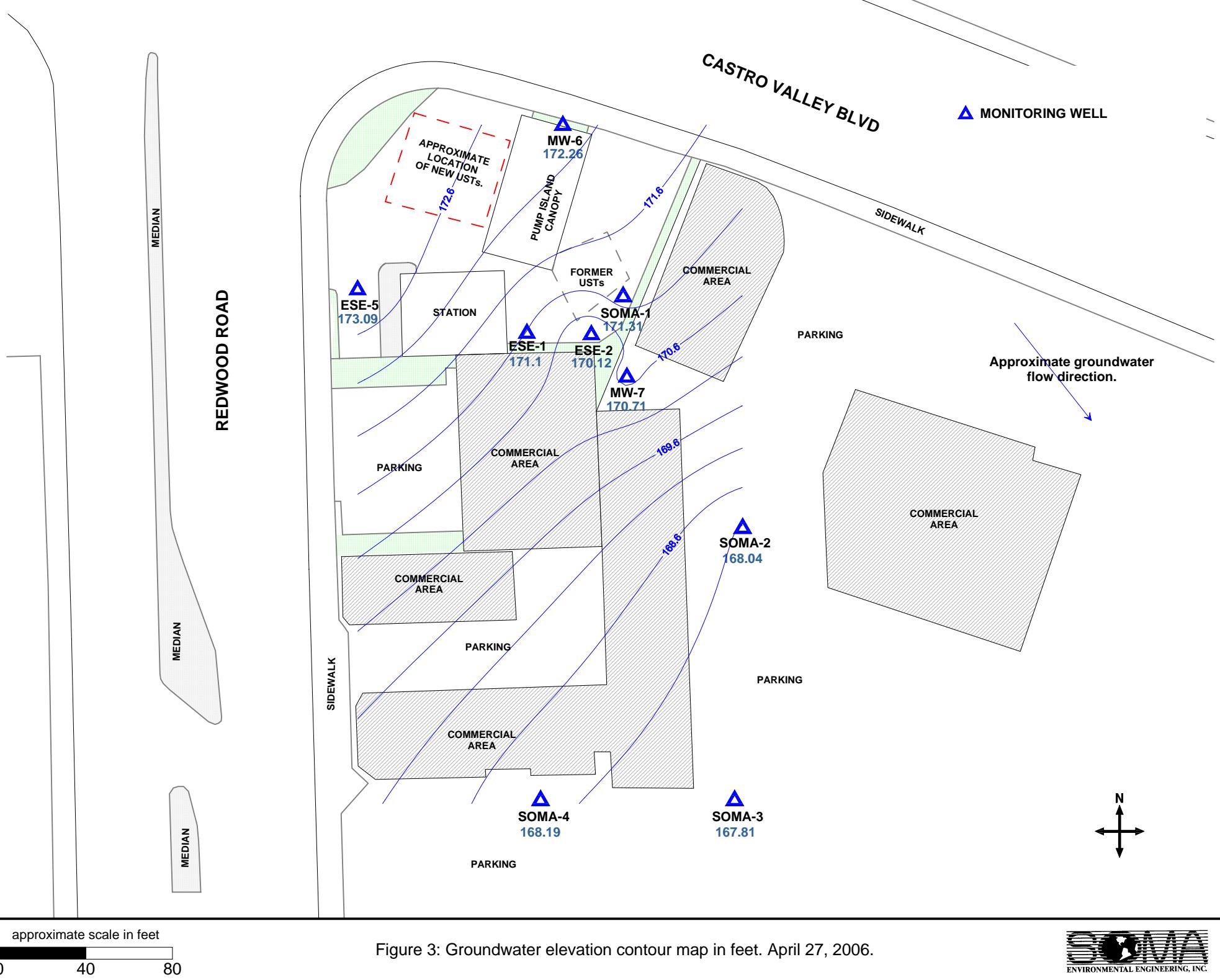


Figure 1: Site vicinity map.





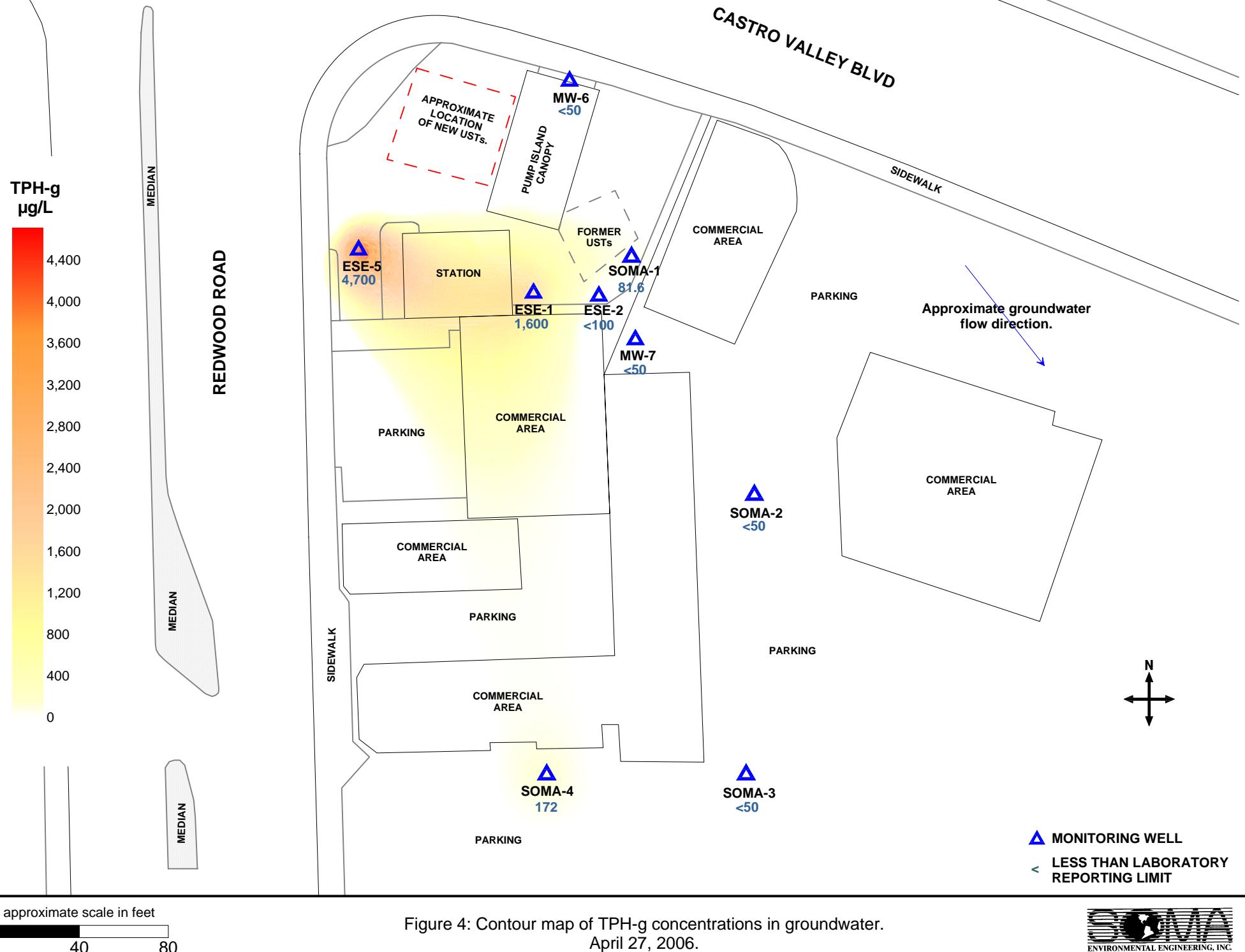


Figure 4: Contour map of TPH-g concentrations in groundwater.  
April 27, 2006.

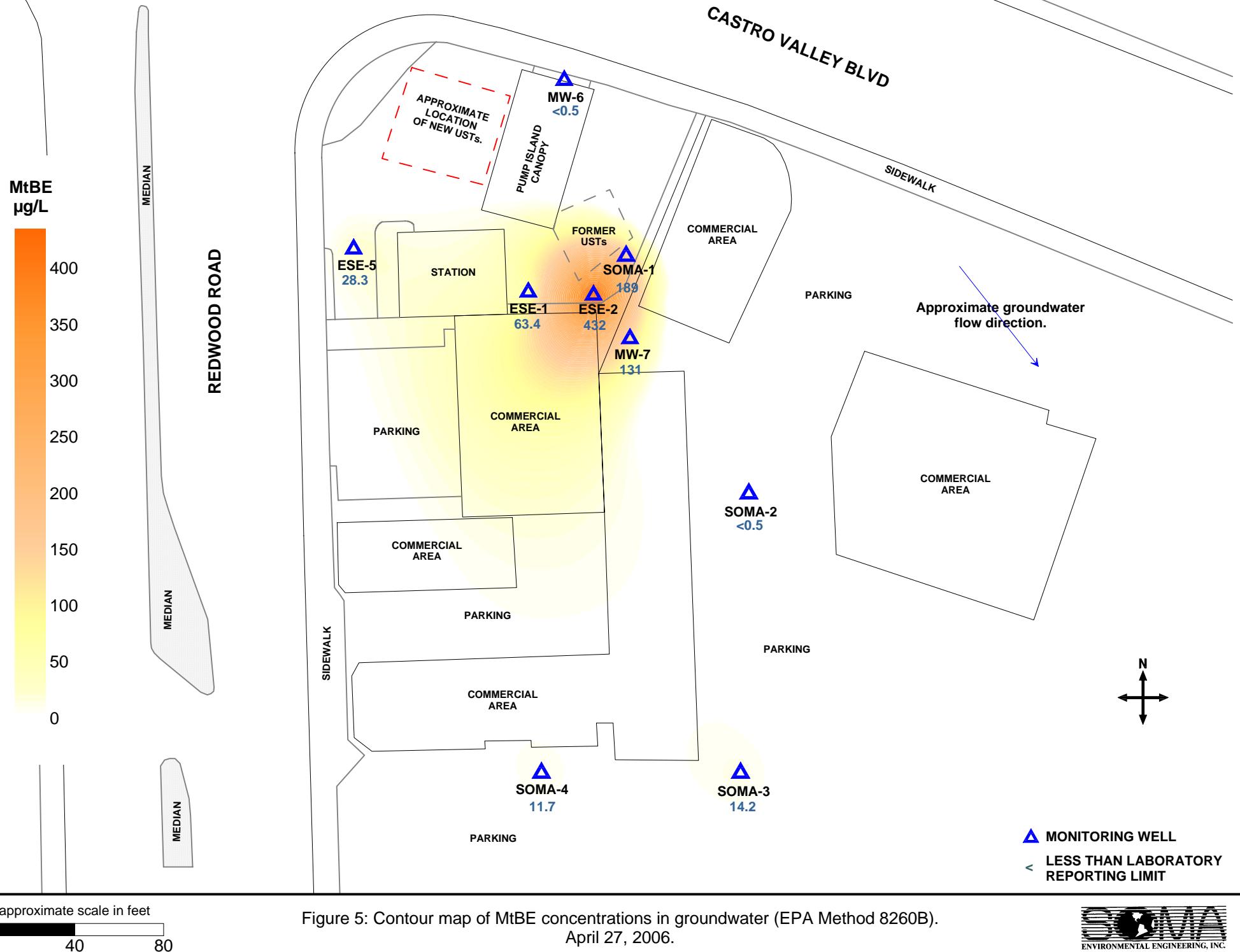


Figure 5: Contour map of MtBE concentrations in groundwater (EPA Method 8260B).  
April 27, 2006.

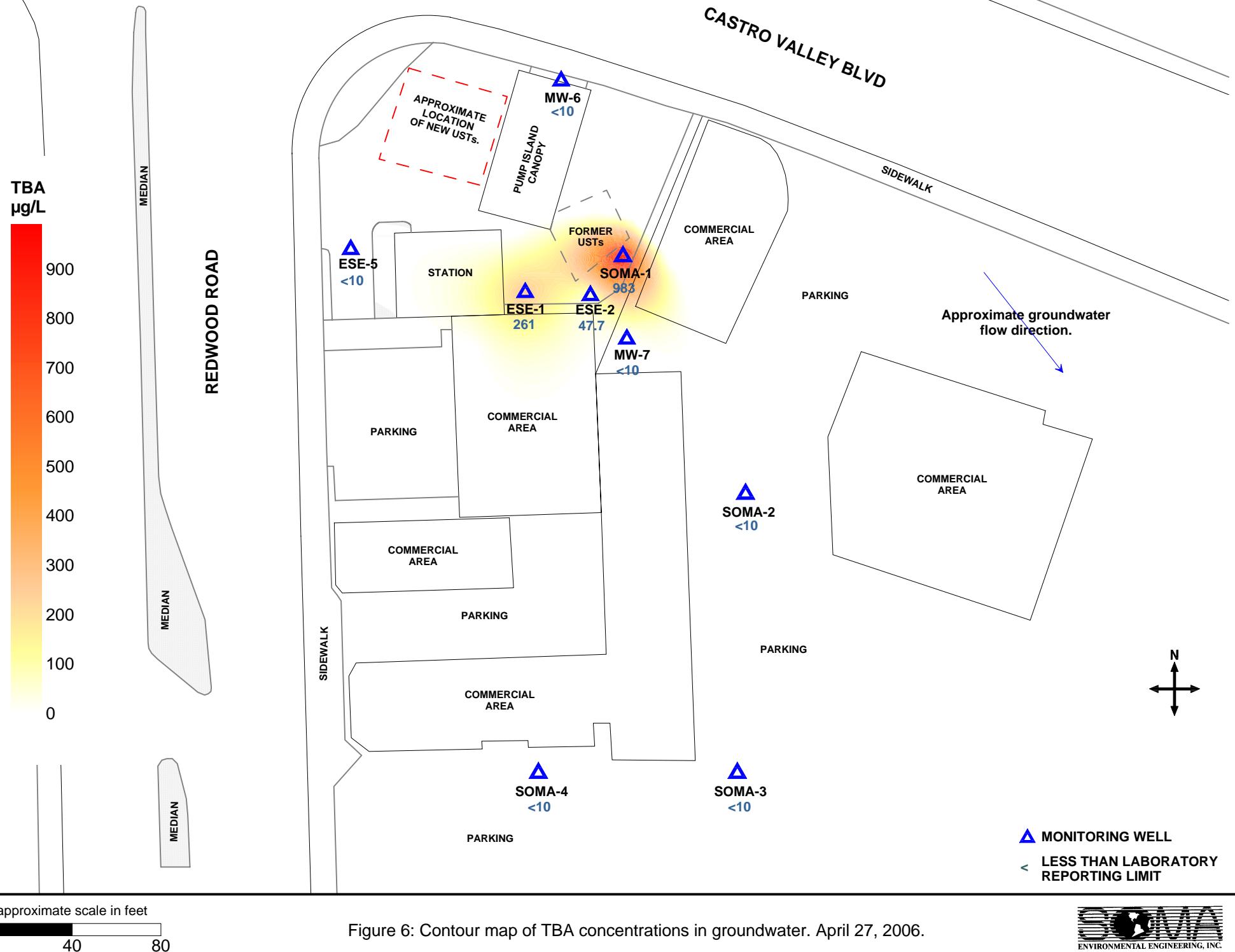


Figure 6: Contour map of TBA concentrations in groundwater. April 27, 2006.

# **APPENDIX A**

## SOMA's Groundwater Monitoring Procedures

## **Field Activities**

On April 27, 2006, a total of five on-site monitoring wells (ESE-1, ESE-2, ESE-5, MW-6, and SOMA-1) and four off-site monitoring wells (MW-7, SOMA-2 to SOMA-4) were measured for depth to groundwater. On April 27, 2006, additional field measurements and grab groundwater samples were collected from all of the monitoring wells. Figure 2 illustrates the locations of the wells.

This monitoring event was conducted in accordance with the procedures and guidelines of the California Regional Water Quality Control Board and the procedures and guidelines of the Alameda County Health Care Services.

Prior to measuring the groundwater depth at each well, equalization with the surrounding aquifer was achieved. The well cap was removed from each well, and the pressure in each well was then allowed to dissipate. This allowed for a more stable water table level within the well. After a few minutes, and once the water level in the well stabilized, the depth to groundwater in each monitoring well was measured from the top of the casing to the nearest 0.01 foot using an electric sounder.

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

Prior to the collection of samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC). In order to ensure that the final samples were in equilibrium with (and representative of) the surrounding groundwater, during purging, several samples were taken for field measurements of pH, temperature and EC. The field parameters were measured using a Hanna pH, conductivity, and temperature meter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

Appendix B details the field measurements taken during the monitoring event.

The purging of the wells continued until the parameters for pH, temperature and EC stabilized or three casing volumes were purged. A disposable polyethylene bailer was used to collect sufficient samples from each well for laboratory analyses. The groundwater sample was transferred to four 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace.

After the groundwater samples were collected, they were placed into an ice-filled

cooler. A chain of custody (COC) form was written for all of the samples and was submitted to the laboratory along with the groundwater samples. On April 27, 2006, SOMA's field crew delivered the groundwater samples to Pacific Analytical Laboratory in Alameda, California.

### **Laboratory Analysis**

Pacific Analytical Laboratory, a state certified laboratory, analyzed the groundwater samples for TPH-g, BTEX, MtBE, gasoline oxygenates, and lead scavengers. Samples for TPH-g, BTEX, MtBE, gasoline oxygenates, and lead scavengers measurements were prepared using EPA Method 5030B and analyzed using Method EPA 8260B.

# **Appendix B**

Table of Elevations & Coordinates on Monitoring Wells  
Measured by Kier Wright Civil Engineers Surveyors, Inc.

&

Field Measurements of Physical and Chemical  
Properties of the Groundwater Samples Collected  
During the Second Quarter 2006

**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.**  
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566  
Phone (925) 249-6555,  
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.

## ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE - 1 Project No.: 2761  
 Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd  
 Depth of Well: 28.00 feet Castro Valley, CA  
 Top of Casing Elevation: 180.24 feet Date: April 27, 2006  
 Depth to Groundwater: 9.14 feet Sampler: John Lohman  
 Groundwater Elevation: 171.10 feet Mehran Nowroozi  
 Water Column Height: 18.86 feet  
 Purged Volume: 16 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)
2:42 pm	START PURGE			
2:45 pm	4	6.72	23.4	1120
2:48 pm	8	6.61	21.1	1130
2:51 pm	12	6.58	21.0	1120
2:54 pm	16	6.57	20.9	1120
2:56 pm	SAMPLES			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: ESEZ  
 Casing Diameter: 2 inches  
 Depth of Well: 76.50 feet  
 Top of Casing Elevation: 80.79 feet  
 Depth to Groundwater: 10.67 feet  
 Groundwater Elevation: 70.12 feet  
 Water Column Height: 15.63 feet  
 Purged Volume: 16 gallons

Project No.: 2761  
 Address: 3519 Castro Valley Blvd  
 Castro Valley, CA  
 Date: April 27, 2006  
 Sampler: John Lohman  
 Mehran Nowroozi

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)
2:15 pm	START PURGE			
2:18 pm	4	6.91	20.0	1170
2:21 pm	8	6.92	19.3	1130
2:24 pm	12	6.94	20.0	1110
2:27 pm	16	6.73	20.0	1040
2:30 pm	SAMPLED			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE5 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: 176.80 feet Date: April 27, 2006  
 Depth to Groundwater: 5.71 feet Sampler: John Lohman  
 Groundwater Elevation: 173.09 feet Mehran Nowroozi  
 Water Column Height: 18.09 feet  
 Purged Volume: 16 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)
12:50 pm	START PURGE			
12:53 pm	4	6.79	21.9	1240
12:56 pm	8	6.75	20.7	1220
12:59 pm	12	6.81	21.6	1250
1:02 pm	16	6.83	21.0	1260
1:05 pm	SAMPLES			

DRY @ 16 gallons



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW6

Casing Diameter: 2 inches

Depth of Well: 30.00 feet

Top of Casing Elevation: 181.60 feet

Depth to Groundwater: 9.54 feet

Groundwater Elevation: 172.26 feet

Water Column Height: 20.46 feet

Purged Volume: 20 gallons

Project No.: 2761

Address: 3519 Castro Valley Blvd  
Castro Valley, CA

Date: April 27, 2006

Sampler: John Lohman  
Mehran Nowroozi

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)
1:19 pm	START PURGE			
1:22 pm	4	7.05	22.1	930
1:25 pm	8	6.84	20.7	910
1:28 pm	12	6.77	20.5	850
1:31 pm	16	6.72	20.4	850
1:34 pm	20	6.70	20.2	840
1:37 pm	SAMPLES			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: MW 7 Project No.: 2761  
 Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd  
 Depth of Well: 29.35 feet Castro Valley, CA  
 Top of Casing Elevation: 179.11 feet Date: April 27, 2006  
 Depth to Groundwater: 8.40 feet Sampler: John Lohman  
 Groundwater Elevation: 170.71 feet Mehran Nowroozi  
 Water Column Height: 70.95 feet  
 Purged Volume: 26 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)
12:08 pm	START PNEUMA			
12:11 pm	4	7.27	19.5	840
12:14 pm	8	7.13	18.6	626
12:17 pm	12	6.98	18.6	850
12:20 pm	16	6.96	18.4	820
12:23 pm	20	6.95	18.3	820
12:26 pm	SAMPLES			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: SomA1 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: April 27, 2006  
 Depth to Groundwater: 9.64 feet Sampler: John Lohman  
 Groundwater Elevation: 171.31 feet Mehran Nowroozi  
 Water Column Height: 20.10 feet  
 Purged Volume: 20 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)
1:50 pm	START PURGE			
1:53 pm	4	6.88	21.1	1060
1:56 pm	8	6.77	20.1	1070
1:59 pm	12	6.73	20.0	1100
2:02 pm	16	6.72	19.4	1030
2:05 pm	20	6.71	19.8	1030
2:07 pm	SAMPLE			

## ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMAZ  
 Casing Diameter: 2 inches  
 Depth of Well: 14.70 feet  
 Top of Casing Elevation: 174.99 feet  
 Depth to Groundwater: 10.95 feet  
 Groundwater Elevation: 168.04 feet  
 Water Column Height: 3.75 feet  
 Purged Volume: 3 gallons

Project No.: 2761  
 Address: 3519 Castro Valley Blvd  
 Castro Valley, CA  
 Date: April 27, 2006  
 Sampler: John Lohman  
 Mehran Nowroozi

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)
11:41 Am	START PURGE			
11:42 Am	1	7.74	16.7	710
11:45 Am	3	7.39	18.8	740
11:46 Am	DRY @ 3 gallons	5		
11:50 Am	SAMPLES			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA 3  
Casing Diameter: 2 inches  
Depth of Well: 14.70 feet  
Top of Casing Elevation: 176.81 feet  
Depth to Groundwater: 9.00 feet  
Groundwater Elevation: 167.81 feet  
Water Column Height: 5.70 feet  
Purged Volume: 6 gallons

Project No.: 2761  
Address: 3519 Castro Valley Blvd  
Castro Valley, CA  
Date: April 27, 2006  
Sampler: John Lohman  
Mehran Nowroozi

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)
11:14 AM	START PURGE			
11:15 AM	1	7.49	19.3	1210
11:17 AM	2	7.32	19.0	1210
11:20 AM	4	7.03	19.0	1210
11:24 AM	6	7.03	19.7	1260
11:27 AM	SAMPLE 9			



ENVIRONMENTAL ENGINEERING, INC

Well No.: Som A 4  
Casing Diameter: 2 inches  
Depth of Well: 22.65 feet  
Top of Casing Elevation: 176.94 feet  
Depth to Groundwater: 4.75 feet  
Groundwater Elevation: 168.19 feet  
Water Column Height: 13.90 feet  
Purged Volume: 16 gallons

Project No.: 2761  
Address: 3519 Castro Valley Blvd  
Castro Valley, CA  
Date: April 27, 2006  
Sampler: John Lohman  
Mehran Nowroozi

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)
10:42 Am	START PURGE			
10:45 Am	4	6.81	21.0	960
10:48 Am	8	6.66	20.8	990
10:51 Am	12	6.68	20.8	1000
10:54 Am	16	6.67	21.2	1000
10:56 Am	SAMPLING			

# **Appendix C**

Chain of Custody Form and Laboratory Report  
for the  
Second Quarter 2006 monitoring event

# CHAIN OF CUSTODY

Page 1 of 1

## Pacific Analytical Laboratory

851 West Midway Ave., Suite 201B

Alameda, CA 94501

510-864-0364 phone

510-864-0365 fax

PAL LOGIN # \_\_\_\_\_

Project No: 2761

Sampler: John Lohman / Mehran Nowroozi

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

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE
	ESE-1	4/27/06 2:56pm	X			4 VOAS	X			X
	ESE-2	2:30pm	X			4 VOAS	X			X
	ESE-5	1:05pm	X			4 VOAS	X			X
	MW-6	1:37pm	X			4 VOAS	X			X
	MW-7	12:26pm	X			4 VOAS	X			X
	SOMA-1	2:07pm	X			4 VOAS	X			X
	SOMA-2	11:50am	X			4 VOAS	X			X
	SOMA-3	11:27am	X			4 VOAS	X			X
	SOMA-4	10:56am	X			4 VOAS	X			X

## Notes: EDF OUTPUT REQUIRED

Gasoline Oxygenates: DIPE, ETBE, TAME, TBA

Lead Savengers: EDB, 1,2-DCA

## RELINQUISHED BY:

*[Signature]* 4/27/06  
DATE/TIME  
350

## RECEIVED BY:

*[Signature]* 4/27/06  
DATE/TIME  
3:50pm

DATE/TIME

DATE/TIME

## Analyses

TPHg, BTEX, MtBE 8260B	GASoline Oxygenates, Lead Scavengers 8260B	Ethanol								
X	X	X								
X	X	X								
X	X	X								
X	X	X								
X	X	X								
X	X	X								
X	X	X								
X	X	X								
X	X	X								
X	X	X								

## Analyses



PAL Pacific Analytical Laboratory

851 West Midway Ave. Suite 201

Alameda, CA 94501

Phone (510) 864-0364

---

04 May 2006

Mansour Sepehr  
SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton, CA 94588

RE: 3519 Castro Valley Blvd

Work Order Number: 6040015

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,

A handwritten signature in black ink, appearing to read "Maiid Akhavan".

---

Maiid Akhavan  
Laboratory Director



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd  
Project Number: 2761  
Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ESE-1	6040015-01	Water	27-Apr-06 14:56	27-Apr-06 16:01
ESE-2	6040015-02	Water	27-Apr-06 14:30	27-Apr-06 16:01
ESE-5	6040015-03	Water	27-Apr-06 13:05	27-Apr-06 16:01
MW-6	6040015-04	Water	27-Apr-06 13:37	27-Apr-06 16:01
MW-7	6040015-05	Water	27-Apr-06 12:26	27-Apr-06 16:01
SOMA-1	6040015-06	Water	27-Apr-06 14:07	27-Apr-06 16:01
SOMA-2	6040015-07	Water	27-Apr-06 11:50	27-Apr-06 16:01
SOMA-3	6040015-08	Water	27-Apr-06 11:27	27-Apr-06 16:01
SOMA-4	6040015-09	Water	27-Apr-06 10:56	27-Apr-06 16:01



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd  
Project Number: 2761  
Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

**Volatile Organic Compounds by EPA Method 8260B**  
**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>ESE-1 (6040015-01RE1) Water Sampled: 27-Apr-06 14:56 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	1600	215	ug/l	4.3	BE60201	27-Apr-06	02-May-06	EPA 8260B	
Benzene	519	2.15	"	"	"	"	"	"	"
Ethylbenzene	32.4	2.15	"	"	"	"	"	"	"
m&p-Xylene	24.2	4.30	"	"	"	"	"	"	"
o-xylene	16.0	2.15	"	"	"	"	"	"	"
Toluene	23.2	8.60	"	"	"	"	"	"	"
MTBE	63.4	2.15	"	"	"	"	"	"	"
DIPE	ND	2.15	"	"	"	"	"	"	"
ETBE	ND	2.15	"	"	"	"	"	"	"
TAME	ND	8.60	"	"	"	"	"	"	"
TBA	261	43.0	"	"	"	"	"	"	"
1,2-dichloroethane	ND	2.15	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	2.15	"	"	"	"	"	"	"
Ethanol	ND	4300	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	112 %	70-130		"	"	"	"	"	"
Surrogate: Dibromofluoromethane	106 %	70-130		"	"	"	"	"	"
Surrogate: Perdeuterotoluene	98.2 %	70-130		"	"	"	"	"	"
<b>ESE-2 (6040015-02) Water Sampled: 27-Apr-06 14:30 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	ND	100	ug/l	2	BE60201	27-Apr-06	27-Apr-06	EPA 8260B	
Benzene	1.71	1.00	"	"	"	"	"	"	"
Ethylbenzene	ND	1.00	"	"	"	"	"	"	"
m&p-Xylene	ND	2.00	"	"	"	"	"	"	"
o-xylene	ND	1.00	"	"	"	"	"	"	"
Toluene	ND	4.00	"	"	"	"	"	"	"
MTBE	432	1.00	"	"	"	"	"	"	"
DIPE	ND	1.00	"	"	"	"	"	"	"
ETBE	ND	1.00	"	"	"	"	"	"	"
TAME	8.29	4.00	"	"	"	"	"	"	"
TBA	47.7	20.0	"	"	"	"	"	"	"
1,2-dichloroethane	ND	1.00	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	1.00	"	"	"	"	"	"	"
Ethanol	ND	2000	"	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130		"	"	"	"	"	"

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd

Project Number: 2761

Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

### Volatile Organic Compounds by EPA Method 8260B

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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ESE-2 (6040015-02) Water Sampled: 27-Apr-06 14:30 Received: 27-Apr-06 16:01

Surrogate: Dibromofluoromethane	110 %	70-130	BE60201	27-Apr-06	27-Apr-06	EPA 8260B
Surrogate: Perdeuterotoluene	97.6 %	70-130	"	"	"	"

ESE-5 (6040015-03) Water Sampled: 27-Apr-06 13:05 Received: 27-Apr-06 16:01

Gasoline (C6-C12)	4700	50.0	ug/l	1	BE60201	27-Apr-06	02-May-06	EPA 8260B
Benzene	2.76	0.500	"	"	"	"	"	"
Ethylbenzene	4.77	0.500	"	"	"	"	"	"
m&p-Xylene	ND	1.00	"	"	"	"	"	"
o-xylene	ND	0.500	"	"	"	"	"	"
Toluene	ND	2.00	"	"	"	"	"	"
MTBE	28.3	0.500	"	"	"	"	"	"
DIPE	ND	0.500	"	"	"	"	"	"
ETBE	ND	0.500	"	"	"	"	"	"
TAME	ND	2.00	"	"	"	"	"	"
TBA	ND	10.0	"	"	"	"	"	"
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"
Ethanol	ND	1000	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	114 %	70-130	"	"	"	"	"	"
Surrogate: Dibromofluoromethane	101 %	70-130	"	"	"	"	"	"
Surrogate: Perdeuterotoluene	102 %	70-130	"	"	"	"	"	"

MW-6 (6040015-04) Water Sampled: 27-Apr-06 13:37 Received: 27-Apr-06 16:01

Gasoline (C6-C12)	ND	50.0	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B
Benzene	ND	0.500	"	"	"	"	"	"
Ethylbenzene	ND	0.500	"	"	"	"	"	"
m&p-Xylene	ND	1.00	"	"	"	"	"	"
o-xylene	ND	0.500	"	"	"	"	"	"
Toluene	ND	2.00	"	"	"	"	"	"
MTBE	ND	0.500	"	"	"	"	"	"
DIPE	ND	0.500	"	"	"	"	"	"
ETBE	ND	0.500	"	"	"	"	"	"
TAME	ND	2.00	"	"	"	"	"	"
TBA	ND	10.0	"	"	"	"	"	"
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"
Ethanol	ND	1000	"	"	"	"	"	"

Pacific Analytical Laboratory

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SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd

Project Number: 2761

Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

### Volatile Organic Compounds by EPA Method 8260B

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-6 (6040015-04) Water Sampled: 27-Apr-06 13:37 Received: 27-Apr-06 16:01</b>									
Surrogate: 4-Bromofluorobenzene	105 %	70-130		BE60201	27-Apr-06	28-Apr-06		EPA 8260B	
Surrogate: Dibromofluoromethane	111 %	70-130		"	"	"		"	
Surrogate: Perdeuterotoluene	97.0 %	70-130		"	"	"		"	
<b>MW-7 (6040015-05) Water Sampled: 27-Apr-06 12:26 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
<b>MTBE</b>	<b>131</b>	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
<b>TAME</b>	<b>2.63</b>	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	70-130		"	"	"		"	
Surrogate: Dibromofluoromethane	110 %	70-130		"	"	"		"	
Surrogate: Perdeuterotoluene	95.6 %	70-130		"	"	"		"	
<b>SOMA-1 (6040015-06) Water Sampled: 27-Apr-06 14:07 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	81.6	50.0	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
<b>Benzene</b>	<b>1.14</b>	0.500	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>2.80</b>	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
<b>MTBE</b>	<b>189</b>	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
<b>TAME</b>	<b>3.48</b>	2.00	"	"	"	"	"	"	
<b>TBA</b>	<b>983</b>	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	



SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd

Project Number: 2761

Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

### Volatile Organic Compounds by EPA Method 8260B

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SOMA-1 (6040015-06) Water Sampled: 27-Apr-06 14:07 Received: 27-Apr-06 16:01</b>									
Ethanol	ND	1000	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
Surrogate: 4-Bromofluorobenzene	106 %	70-130	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane	110 %	70-130	"	"	"	"	"	"	
Surrogate: Perdeuterotoluene	94.4 %	70-130	"	"	"	"	"	"	
<b>SOMA-2 (6040015-07) Water Sampled: 27-Apr-06 11:50 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	99.8 %	70-130	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane	122 %	70-130	"	"	"	"	"	"	
Surrogate: Perdeuterotoluene	107 %	70-130	"	"	"	"	"	"	
<b>SOMA-3 (6040015-08) Water Sampled: 27-Apr-06 11:27 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
<b>MTBE</b>	<b>14.2</b>	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	

Pacific Analytical Laboratory

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd

Project Number: 2761

Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

### Volatile Organic Compounds by EPA Method 8260B

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>SOMA-3 (6040015-08) Water Sampled: 27-Apr-06 11:27 Received: 27-Apr-06 16:01</b>									
1,2-Dibromoethane (EDB)	ND	0.500	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
Ethanol	ND	1000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	98.0 %	70-130		"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>	120 %	70-130		"	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>	106 %	70-130		"	"	"	"	"	
<b>SOMA-4 (6040015-09) Water Sampled: 27-Apr-06 10:56 Received: 27-Apr-06 16:01</b>									
Gasoline (C6-C12)	172	50.0	ug/l	1	BE60201	27-Apr-06	28-Apr-06	EPA 8260B	
Benzene	1.35	0.500	"	"	"	"	"	"	
Ethylbenzene	8.83	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	11.7	0.500	"	"	"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	106 %	70-130		"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>	108 %	70-130		"	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>	96.4 %	70-130		"	"	"	"	"	

SOMA Environmental Engineering Inc.  
6620 Owens Drive, Suite A  
Pleasanton CA, 94588

Project: 3519 Castro Valley Blvd  
Project Number: 2761  
Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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#### Batch BE60201 - EPA 5030 Water MS

##### Blank (BE60201-BLK1)

	Prepared & Analyzed: 02-May-06				
Surrogate: 4-Bromofluorobenzene	51.0	ug/l	50.0	102	70-130
Surrogate: Dibromofluoromethane	56.2	"	50.0	112	70-130
Surrogate: Perdeuterotoluene	48.5	"	50.0	97.0	70-130
MTBE	ND	0.500	"		
DIPE	ND	0.500	"		
ETBE	ND	0.500	"		
TAME	ND	2.00	"		
Gasoline (C6-C12)	ND	50.0	"		
TBA	ND	10.0	"		
1,2-dichloroethane	ND	0.500	"		
1,2-Dibromoethane (EDB)	ND	0.500	"		
Ethanol	ND	1000	"		
Benzene	ND	0.500	"		
Ethylbenzene	ND	0.500	"		
m&p-Xylene	ND	1.00	"		
o-xylene	ND	0.500	"		
Toluene	ND	2.00	"		

##### LCS (BE60201-BS1)

	Prepared & Analyzed: 02-May-06				
Surrogate: 4-Bromofluorobenzene	58.6	ug/l	50.0	117	70-130
Surrogate: Dibromofluoromethane	51.7	"	50.0	103	70-130
Surrogate: Perdeuterotoluene	46.9	"	50.0	93.8	70-130
MTBE	126	0.500	"	126	70-130
ETBE	116	0.500	"	116	70-130
TAME	106	2.00	"	106	70-130
Gasoline (C6-C12)	2510	50.0	"	126	70-130
TBA	565	10.0	"	113	70-130
Benzene	115	0.500	"	115	70-130
Toluene	118	2.00	"	118	70-130



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Reported:  
04-May-06 10:05

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit Notes
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**Batch BE60201 - EPA 5030 Water MS**

LCS Dup (BE60201-BSD1)							Prepared & Analyzed: 02-May-06			
Surrogate: 4-Bromofluorobenzene	59.8		ug/l	50.0		120	70-130			
Surrogate: Dibromofluoromethane	52.0		"	50.0		104	70-130			
Surrogate: Perdeuterotoluene	47.8		"	50.0		95.6	70-130			
MTBE	130	0.500	"	100		130	70-130	3.12	20	
ETBE	111	0.500	"	100		111	70-130	4.41	20	
TAME	104	2.00	"	100		104	70-130	1.90	20	
TBA	571	10.0	"	500		114	70-130	1.06	20	
Gasoline (C6-C12)	2010	50.0	"	2000		100	70-130	22.1	20	QR-02
Benzene	113	0.500	"	100		113	70-130	1.75	20	
Toluene	118	2.00	"	100		118	70-130	0.00	20	

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Project Manager: Mansour Sepehr

**Reported:**  
04-May-06 10:05

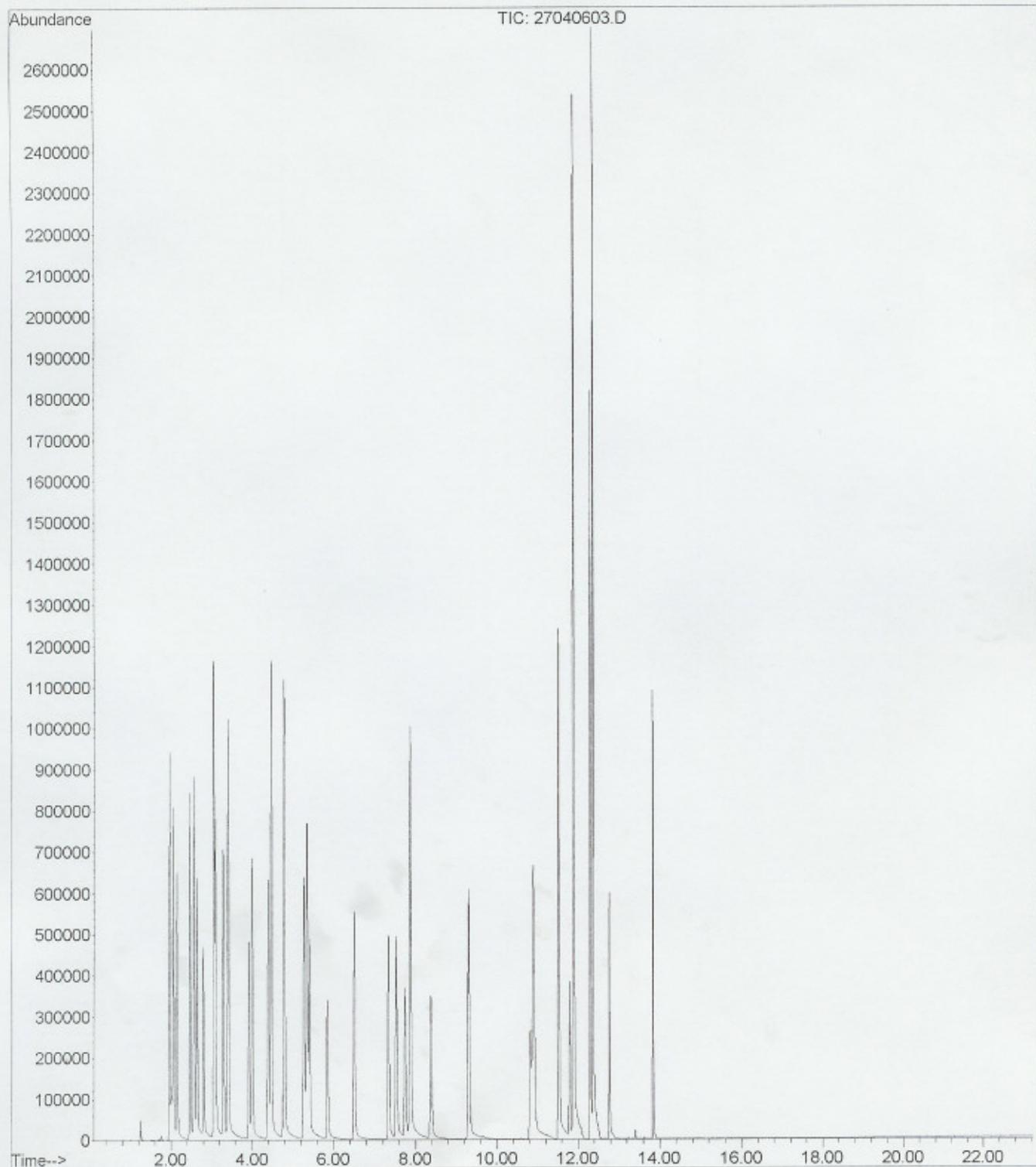
### Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

File : C:\MSDChem\1\DATA\2006-Apr-27-1022.b\27040602.D  
Operator :  
Acquired : 27 Apr 2006 11:08 am using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BE60201-BLK1  
Misc Info :  
Vial Number: 2



File : C:\MSDChem\1\DATA\2006-Apr-27-1022.b\27040603.D  
Operator :  
Acquired : 27 Apr 2006 11:50 am using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BE60201-BS1@voc  
Misc Info :  
Vial Number: 3



File : C:\MSDCHEM\1\DATA\2006-Apr-27-1022.b\27040604.D  
Operator :  
Acquired : 27 Apr 2006 12:24 pm using AcqMethod OXY21506.M  
Instrument : PAL GCMS  
Sample Name: BE60201-BS1@gas  
Misc Info :  
Vial Number: 4

