

Alameda County

MAY 12 2005

Environmental Health



2680 Bishop Drive, Suite 203, San Ramon, CA 94583
TEL (925) 244-6600 FAX (925) 244-6601

Second Quarter 2005
Groundwater Monitoring Report
Castro Valley Gasoline Service Station
3519 Castro Valley Boulevard
Castro Valley, California

May 10, 2005

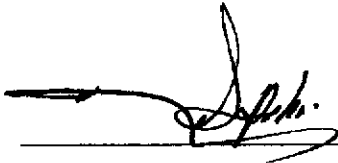
Project 2761

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

Prepared by
SOMA Environmental Engineering, Inc.
2680 Bishop Drive, Suite 203
San Ramon, California 94583

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 2005 groundwater monitoring event.



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



Table of Contents

Certification	i
Table of Contents	ii
List of Tables	iii
List of Figures	iii
List of Appendices	iii
1.0 Introduction	1
1.1 Previous Activities	1
2.0 Results	3
2.1 Field Measurements	3
2.2 Laboratory Analyses	3
2.3 Historical Site Concentration Trends	5
3.0 Conclusions & Recommendations	5

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 2005.
- Figure 4: Contour map of TPH-g concentrations in groundwater. April 2005.
- Figure 5: Contour map of Benzene concentrations in groundwater. April 2005.
- Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B). April 2005.
- Figure 7: Contour map of TBA concentrations in groundwater. April 2005.
- Figure 8: Contour Map of TAME concentrations in groundwater. April 2005.

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 2005
- Appendix C: Chain of Custody form and laboratory report for the Second Quarter
2005 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 on the southeast corner of Castro Valley Boulevard and Redwood Road, in a commercial and residential area. The Site elevation is approximately 178 feet above mean sea level (msl).

This report summarizes the results of the groundwater monitoring event conducted at the Site on April 14, 2005. It includes 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). Also included in this report are the results of the laboratory analyses for each groundwater sample, which was analyzed for:

- Total petroleum hydrocarbons as gasoline (TPH-g),
- Benzene, toluene, ethylbenzene, total xylenes (collectively referred to as BTEX),
- Methyl tertiary Butyl Ether (MtBE),
- Gasoline oxygenates, which included tertiary butyl alcohol (TBA), isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE) and methyl tertiary amyl ether (TAME), Ethanol, and
- Lead scavengers, which included 1,2-Dichloroethane (1,2-DCA) and 1,2-Dibromoethane (EDB).

These activities were performed in accordance with the general guidelines of the Alameda County Health Care Services (ACHCS). Appendix A details the groundwater monitoring procedures used during the Second Quarter 2005 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. Confirmation soil samples were collected from the bottom of the excavation, due to holes observed in former WOT. 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 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 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, at ESE-1, the maximum concentrations were TPH-g 2,300 ug/L, benzene 370 ug/L, toluene 160 ug/L, ethylbenzene 17 ug/L, and xylenes 110 ug/L. Figure 2 shows the location of wells ESE-1 to ESE-5.

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 was decommissioned on the western margin of the Site to accommodate the road-widening project along Redwood Boulevard. Figure 2 shows the location of wells MW-6 to MW-8.

On August 20, 2003, prior to UST removal activities, SOMA oversaw the drilling of two boreholes by Vironex. 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 the 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 14, 2005 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 6.13 feet in well ESE-5 to 10.46 feet in well SOMA-2. The corresponding groundwater elevations ranged from 168.17 feet in well SOMA-3 to 172.76 feet in monitoring well MW-6. Table 1 also presents the historical groundwater elevations in the monitoring wells.

As previously stated, the wells were re-surveyed on June 21, 2004. Since the First Quarter 2005, the groundwater elevations decreased throughout the Site, with the exception of wells SOMA-1 and SOMA-4. Local recharge rates, as well as seasonal fluctuations greatly affect the groundwater elevations.

The groundwater elevation contour map, as measured for the Second Quarter 2005 monitoring event, is displayed in Figure 3. The groundwater flow direction is south to slightly southeasterly across the Site. The groundwater gradient is approximately 0.015 feet/feet. The groundwater flow direction and gradient have remained consistent with the previous monitoring event (First Quarter 2005).

2.2 Laboratory Analyses

Table 1 also presents the results of the TPH-g, BTEX, and MtBE laboratory analyses on the groundwater samples.

As shown in Table 1, TPH-g was below the laboratory reporting limit in all of the groundwater samples collected during the Second Quarter 2005 monitoring event, with the exception of the samples collected from wells ESE-1 and ESE-5. TPH-g was detected in wells ESE-1 and ESE-5 at 3,020 ug/L and 4,800 ug/L, respectively. Figure 4 displays the contour map of the TPH-g concentrations in the groundwater, as analyzed during the Second Quarter 2005 monitoring event. The TPH-g concentration detected in well ESE-5 can be attributed to a possible earlier release (in 1996, in the vicinity of the former western pump, petroleum hydrocarbons were encountered). TPH-g was not detected in any of the off-site wells.

As shown in Table 1, in general, all BTEX analytes were below the laboratory reporting limit in wells ESE-2, MW-6, MW-7, and SOMA-1 to SOMA-3. In well ESE-5, all BTEX analytes were at low levels, with the exception of total xylenes,

which was below the laboratory reporting limit. In well SOMA-4, both toluene and total xylenes were below the laboratory reporting limit. The highest BTEX concentrations were detected in well ESE-1 at 766 ug/L, 25.6 ug/L, 21.3 ug/L, and 25.26 ug/L, respectively. Figure 5 displays the contour map of benzene concentrations in the groundwater, as analyzed during the Second Quarter 2005 monitoring event. As illustrated in Figure 5, the majority of the benzene plume appears to be centrally located in the vicinity south of the pump islands, around well ESE-1. However, with the exception of well ESE-1, benzene was either at low levels or at non-detectable levels throughout the Site.

As shown in Table 1, MtBE was below the laboratory reporting limit in wells MW-6, SOMA-2, and SOMA-3. MtBE concentrations ranged from 5.65 $\mu\text{g/L}$ in well SOMA-4 to 1,020 ug/L in well ESE-2. Figure 6 displays the contour map of MtBE concentrations in the groundwater, as analyzed during the Second Quarter 2005 monitoring event. The high MtBE concentrations in the southeastern section of the Site, especially in well ESE-2, can be attributed to a possible earlier release in the vicinity of the former UST cavity. The migration of the MtBE plume can be attributed to the south/southeasterly groundwater flow direction and the high solubility of MtBE in groundwater. MtBE has migrated off-site as far as SOMA-4; however, MtBE was only detected at a trace concentration in this southernmost off-site region.

As shown in Table 2, the main gasoline oxygenates and lead scavengers of concern are TBA and TAME. All DIPE, ETBE, ethanol, 1,2-DCA, and EDB constituents were below the laboratory reporting limit in all of the groundwater samples collected during the Second Quarter 2005 monitoring event.

Figure 7 displays the contour map of TBA concentrations in the groundwater, as analyzed during the Second Quarter 2005 monitoring event. As displayed in Figure 7, the most impacted TBA region was in the southern section of the Site, around well ESE-1. The TBA plume, with the exception of trace concentrations detected in wells ESE-5 and MW-7, appears to be centralized around well ESE-1.

Figure 8 displays the contour map of TAME concentrations in the groundwater, as analyzed during the Second Quarter 2005 monitoring event. As displayed in Figure 8, only trace TAME concentrations were detected in the southeastern section of the Site, in well ESE-2, and off-site well MW-7.

2.3 Historical Site Concentration Trends

The following concentration trends were observed since the previous (First Quarter 2005) monitoring event, for the more impacted wells, ESE-1, ESE-2, and SOMA-1, which are in the southeastern section of the Site.

- In well ESE-1, TPH-g, benzene, and ethylbenzene all increased, and toluene, total xylenes, MtBE, and TBA all decreased.
- In well ESE-2, MtBE, TBA, and TAME constituents all decreased, all other referenced constituents remained below the laboratory reporting limit.
- In well SOMA-1, TPH-g, TBA, and TAME all decreased, and MtBE increased. All other referenced constituents remained below the laboratory reporting limit.

For off-site wells MW-7, SOMA-2 to SOMA-4 the results were as follows.

- In well MW-7, both MtBE and TBA slightly increased, TAME decreased, all other referenced constituents remained below the laboratory reporting limit.
- In well SOMA-2, MtBE decreased, all other referenced constituents remained below the laboratory reporting limit.
- In well SOMA-3, all referenced constituents remained below the laboratory reporting limit.
- In well SOMA-4, TPH-g, benzene, ethylbenzene, and MtBE all decreased, and all other referenced constituents remained below the laboratory reporting limit.

For more detailed concentration trends refer to Tables 1 and 2.

Appendix C displays the laboratory analytical results for each groundwater sample collected during the Second Quarter 2005 monitoring event.

3.0 Conclusions & Recommendations

The findings of the Second Quarter 2005 groundwater monitoring event can be summarized as follows:

- The groundwater flow direction has remained south to southeasterly across the Site. Due to the high mobility rate of MtBE, this constituent has migrated off-site and was detected at a trace concentration in the southernmost well, SOMA-4.

- The highest TPH-g concentration was detected in well ESE-5. This may be the result of a hydrocarbon source still present at this location. In 1996, in the region of well ESE-5, petroleum hydrocarbons were encountered at a former western pump.
- The impacted southeastern and southern on-site regions 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.
- Based on the results from the Second Quarter 2005 monitoring event, impacted groundwater does not appear to have migrated southeasterly to off-site wells SOMA-2 and SOMA-3. However, slight benzene, ethylbenzene, and MtBE concentrations were detected at the southernmost off-site well SOMA-4.

Based on the results of the Second Quarter 2005 monitoring event, SOMA recommends the continuation of the quarterly monitoring programs to better understand the seasonal variation in the groundwater quality conditions, extent of on-site contamination and rate of contaminant migration to off-site regions.

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 ¹ (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	Oct-92	177.69	11.22	166.47	2100	370	150	17	110	NA
	Oct-92	177.69	NM	NM	2300	370	160	16	110	NA
	Apr-93	177.69	8.79	168.90	5900	1500	410	110	390	NA
	Jun-93	177.69	10.34	167.35	7600	2900	390	130	460	NA
	Sep-93	177.69	10.91	166.78	2000	490	40	20	56	600
	Sep-93	177.69	NM	NM	1500	420	39	19	56	550
	Dec-93	177.69	9.93	167.76	1800	480	42	19	66	921
	Dec-93	177.69	NM	NM	1500	380	38	17	55	770
	Feb-94	177.69	9.64	168.05	1900	380	48	24	80	585
	Feb-94	177.69	NM	NM	2200	430	42	19	65	491
	Aug-94	177.69	11.72	165.97	2100	450	46	16	50	760
	Oct-94	177.69	10.48	167.21	760	240	16	51	39	230
	Jan-95	177.69	7.77	169.92	840	600	120	22	58	NA
	May-95	177.69	8.69	169.00	2000	640	67	24	98	NA
	Jul-95	177.69	10.12	167.57	190	<0.50	<0.50	<0.50	<1.0	NA
	Nov-95	177.69	10.57	167.12	200	3.4	<1.0	1	<2.0	600
	Feb-96	177.69	7.41	170.28	750	370	23	21	64	680
	Apr-96	177.69	9.12	168.57	310	100	<1.0	<1.0	<1.0	1500
	Jul-96	177.69	10.12	167.57	730	230	74	13	63	750
	Oct-96	177.69	10.80	166.89	420	26	1.6	7.3	12	430
	Jan-97	177.69	10.52	167.17	660	290	4.2	13	36	450
	Apr-97	177.69	9.77	167.92	410	<0.5	<1.0	<1.0	<1.0	580
	Jul-97	177.69	10.55	167.14	420	<0.5	<1.0	<1.0	<1.0	370
	Oct-97	177.69	10.36	167.33	300	56	<1.0	6.5	<1.0	220
	Jan-98	177.69	7.52	170.17	4200	440	9	15	17.7	1300
	Apr-98	177.69	8.80	168.89	15000	3400	190	910	900	4900
	Apr-98	177.69	NM	NM	15000	2800	140	730	730	4400
	Jul-98	177.69	9.73	167.96	NA	NA	NA	NA	NA	NA
	Jul-98	177.69	NM	NM	15000	<2.5	<5.0	<5.0	<5.0	15000
	Dec-98	177.69	9.51	168.18	2400	73	1	2.8	4.6	2000
	Mar-99	177.69	8.65	169.04	4700	58	<1.0	<1.0	<1.0	4700
	Jun-99	177.69	10.51	167.18	600	170	<1.0	7.2	5	3900
	Sep-99	177.69	10.32	167.37	920	200	<25	<25	<25	4900
	Dec-99	177.69	10.24	167.45	460	130	1.2	5.2	1.5	5100
	Mar-00	177.69	7.72	169.97	3000	1300	120	80	140	7300
	Jun-00	177.69	9.40	168.29	2900	540	9.7	20	17	5200
	Sep-00	177.69	10.05	167.64	890	3.4	<0.5	1.4	<0.5	2800
	Dec-00	177.69	8.20	169.49	1600	11.1	<0.5	<0.5	<0.5	2730
	Mar-01	177.69	9.75	167.94	5700	2.28	<0.5	0.51	<1.5	6810
	Jun-01	177.69	10.21	167.48	2000	152	0.669	3.62	2.34	1980
	Sep-01	177.69	10.30	167.39	2500	57.1	<5.0	6.25	<15	2090
	Dec-01	177.69	9.82	167.87	2800	208	6.05	8.54	9.66	2030
	Mar-02	177.69	9.10	168.59	1800	140	6.31	4.5	9.41	1970
	Jun-02	177.69	9.92	167.77	1100	220	2.02	4.23	3.8	1280
	Sep-02	177.69	10.21	167.48	490	39	2.9	<2.0	4.9	670
	Dec-02	177.69	8.56	169.13	730	140	6	3.2	9.1	670
	Mar-03	177.69	9.40	168.29	1700	490	21	22	41	530
	Jun-03	177.69	9.86	167.83	1300	140	<10	<10	<10	480
	Dec-03	177.69	9.32	168.37	1400	390	12	14	26.1	260
	Feb-04	177.69	7.71	169.98	3200	880	50	44	89	200
	May-04	177.69	10.19	167.50	1500	370	10	14	25.2	140
	Aug-04	180.24	10.41	169.83	460	390	7	8.1	15.4	110
	Oct-04	180.24	10.40	169.84	1600	490	13	12	25.3	110
	Jan-05	180.24	8.26	171.98	790 Z	420	26	19	52	91
	Apr-05	180.24	8.77	171.47	3020	766	25.6	21.3	25.28	88.2

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 ¹ (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)	MIBE (µg/L) 8260B
ESE-2	Oct-92	178.23	11.68	166.55	300	5.4	16	3.9	45	NA
	Apr-93	178.23	9.17	169.06	240	27	<0.5	17	2.6	123
	Jun-93	178.23	10.88	167.35	1700	260	24	110	23	NA
	Jun-93	178.23	NM	NM	1300	240	17	110	25	NA
	Sep-93	178.23	11.56	166.67	240	3.1	0.5	0.6	2.5	643
	Dec-93	178.23	10.48	167.75	250	2.4	2.4	1.5	11	940
	Feb-94	178.23	10.06	168.17	900	<0.5	<0.5	<0.5	<0.5	930
	Aug-94	178.23	11.11	167.12	750	<0.5	<0.5	<0.5	<0.5	1400
	Oct-94	178.23	11.31	166.92	1700	<0.5	<0.5	<0.5	<0.5	3000
	Jan-95	178.23	8.25	169.98	300	2	0.9	0.7	1	NA
	May-95	178.23	9.21	169.02	1200	4	<2.5	<2.5	<5	NA
	Jul-95	178.23	10.64	167.59	2000	<2.5	<2.5	<2.5	<5	NA
	Nov-95	178.23	11.13	167.10	3600	<25	<25	<25	<50	12000
	Nov-95	178.23	NM	NM	3400	<25	<25	<25	<50	12000
	Feb-96	178.23	7.94	170.29	450	<0.5	<1	<1	<1	2300
	Apr-96	178.23	9.73	168.50	260	0.9	<1	<1	<1	8600
	Jul-96	178.23	10.70	167.53	780	<2.5	<5	<5	<5	13393
	Oct-96	178.23	11.39	166.84	2900	<0.5	<1	<1	<1	12000
	Jan-97	178.23	9.04	169.19	<250	<2.5	<5	<5	<5	13000
	Apr-97	178.23	10.31	167.92	2700	<0.5	<1	<1	<1	15000
	Jul-97	178.23	11.02	167.21	11000	<5	<10	<10	<10	11000
	Oct-97	178.23	10.93	167.30	6100	<2.5	<5.0	<5.0	<5.0	7100
	Oct-97	178.23	NM	NM	6600	<2.5	<5.0	<5.0	<5.0	7400
	Jan-98	178.23	7.93	170.30	13000	<0.5	<1	<1	<1	10000
	Jan-98	178.23	NM	NM	13000	<0.5	<1	<1	<1	10000
	Apr-98	178.23	9.34	168.89	19000	<5	<10	<10	<10	36000
	Jul-98	178.23	10.29	167.94	NA	NA	NA	NA	NA	NA
	Jul-98	178.23	NM	NM	19000	<5	<10	<10	<10	36000
	Dec-98	178.23	10.20	168.03	12000	<5	<5	<5	<5	13000
	Mar-99	178.23	9.02	169.21	18000	180	<1	<1	<1	18000
	Jun-99	178.23	9.99	168.24	280	<1	<1	<1	<1	16000
	Sep-99	178.23	10.69	167.54	<500	<25	<25	<25	<25	12000
	Dec-99	178.23	11.26	166.97	<50	<0.3	<0.3	<0.3	<0.6	12000
	Mar-00	178.23	7.95	170.28	<50	1.6	<0.5	<0.5	<0.5	7900
	Jun-00	178.23	9.66	168.57	1600	<0.5	0.73	<0.5	2.2	9400
	Dec-00	178.23	11.15	167.08	6000	0.75	<0.5	<0.5	<0.5	11200
	Mar-01	178.23	10.35	167.88	6900	786	45.7	37.7	71.5	3790
	Jun-01	178.23	11.24	166.99	6400	<2.5	<2.5	<2.5	<7.5	9320
	Sep-01	178.23	11.35	166.88	4800	<12.5	<12.5	<12.5	<37.5	6960
	Dec-01	178.23	10.97	167.26	59000	0.592	<0.5	<0.5	<1	5940
	Mar-02	178.23	10.13	168.10	4500	76	<0.5	<0.5	<1	6660
	Jun-02	178.23	10.91	167.32	250	<12.5	<12.5	<12.5	<25	4900
	Sep-02	178.23	10.82	167.41	1500	<5	<5	<5	6.3	3100
	Dec-02	178.23	7.87	170.36	1400	<5	<5	<5	<5	2400
	Mar-03	178.23	10.24	167.99	2800	<10	<10	<10	<10	4800
	Jun-03	178.23	10.19	168.04	10000	<100	<100	<100	<100	4400
	Dec-03	178.23	9.97	168.26	<50	<0.5	<0.5	<0.5	<0.5	3400
	Feb-04	178.23	7.89	170.34	<50	<0.5	<0.5	<0.5	<0.5	3000
	May-04	178.23	10.70	167.53	<50	<0.5	<0.5	<0.5	<0.5	1100
	Aug-04	180.79	10.99	169.80	<50	<0.5	<0.5	<0.5	<0.5	550
	Oct-04	180.79	10.46	170.33	<50	<0.5	<0.5	<0.5	<0.5	410
	Jan-05	180.79	8.66	172.13	<50	<8.3	<8.3	<8.3	<8.3	1200
	Apr-05	180.79	9.38	171.41	<860	<2.15	<2.15	<2.15	<4.30	1020

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 ¹ (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-3	Oct-92	178.20	10.58	167.62	430	57	31	3.6	34	NA
	Apr-93	178.20	8.14	170.06	2400	460	220	74	210	NA
	Jun-93	178.20	9.72	168.48	280	56	14	15	13	NA
	Sep-93	178.20	10.46	167.74	72	13	3.5	1.7	4.1	NA
	Dec-93	178.20	9.30	168.90	270	71	32	6.1	33	NA
	Feb-94	178.20	8.97	169.23	520	140	10	20	33	5.74
	Aug-94	178.20	10.02	168.18	<50	8.8	1.6	1.6	2.3	<5.0
	Oct-94	178.20	10.32	167.88	470	190	6.4	15	18	<5.0
	Jan-95	178.20	7.40	170.80	330	260	27	21	20	NA
	May-95	178.20	8.26	169.94	530	180	30	23	44	NA
	Jul-95	178.20	9.54	168.66	<50	<0.50	<0.50	<0.50	<1	NA
	Nov-95	178.20	10.04	168.16	<50	1.7	<0.50	<0.50	<1	<5.0
	Feb-96	178.20	7.08	171.12	<50	8.6	<1	<1	<1	<10
	Apr-96	178.20	8.79	169.41	<50	7.6	<1	<1	<1	65
	Jul-96	178.20	10.09	168.11	<50	12	2.6	2	3.9	26
	Oct-96	178.20	10.48	167.72	NA	NA	NA	NA	NA	NA
	Oct-96	178.20	NM	NM	260	140	<1	<1	2.6	<10
	Jan-97	178.20	8.65	169.55	<50	1.5	1.7	<1	<1	14
	Apr-97	178.20	10.02	168.18	<50	<0.5	<1	<1	<1	14
	Jul-97	178.20	10.66	167.54	10000	1400	1400	300	1280	<250
	Oct-97	178.20	9.83	168.37	<250	<2.5	<5.0	<5.0	36	<50
	Jan-98	178.20	7.06	171.14	130	<0.5	<1.0	<1.0	<1.0	120
	Apr-98	178.20	8.44	169.76	4800	560	<10	15	<10	4000
	Jul-98	178.20	9.27	168.93	NA	NA	NA	NA	NA	NA
	Jul-98	178.20	NM	NM	1800	6.2	<5.0	<5.0	<5.0	1700
	Dec-98	178.20	9.15	169.05	600	54	<1.0	2.1	4.9	340/480
	Mar-99	178.20	8.14	170.06	2000	260	4.4	13	28	870
	Jun-99	178.20	9.44	168.76	290	91	<1.0	8.3	16	240
	Sep-99	178.20	9.69	168.51	130	35	<1.0	2.7	3.8	100
	Dec-99	178.20	10.99	167.21	380	84	1.7	8.7	6.3	160
	Mar-00	178.20	7.12	171.08	950	190	4.6	39	62	350
	Jun-00	178.20	10.92	167.28	300	37	<0.5	2.3	1.3	400
	Sep-00	178.20	11.12	167.08	920	140	1.3	15	4.8	170
	Dec-00	178.20	9.70	168.50	320	64	<0.5	6.24	1.76	201
	Mar-01	178.20	10.07	168.13	680	80.5	0.546	21.1	18.2	398
	Jun-01	178.20	11.42	166.78	380	47	<0.5	3.11	<1.5	242
	Sep-01	178.20	11.55	166.65	340	54.8	<0.5	4.36	<1.5	79.7
	Dec-01	178.20	10.12	168.08	270	31.4	<0.5	1.31	2.24	129
	Mar-02	178.20	9.84	168.36	670	89.8	0.769	23.4	30.4	413
	Jun-02	178.20	10.57	167.63	130	18.6	<0.5	<0.5	<1	166
	Sep-02	178.20	9.90	168.30	88	12	<0.5	<0.5	<0.5	93
	Dec-02	178.20	9.23	168.97	290	55	17	3.7	14	78
Mar-03	178.20	9.05	169.15	100	3.4	<0.5	0.54	<0.50	140	
Jun-03	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

Monitoring Well	Date	Top of casing elevation ¹ (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	Oct-92	177.73	10.33	167.40	98	7.2	1.3	1.1	6.1	NA
	Apr-93	177.73	7.88	169.85	550	93	20	23	33	NA
	Jun-93	177.66	8.33	169.33	150	23	0.6	5.4	0.5	54
	Sep-93	177.66	10.05	167.61	110	14	1.7	3.2	4.6	NA
	Dec-93	177.66	8.95	168.71	110	21	7.2	4.2	10	28.75
	Feb-94	177.66	8.65	169.01	210	26	1.2	4.7	11	113
	Aug-94	177.66	9.76	167.90	76	9.6	<0.5	2	<0.5	62
	Oct-94	177.66	9.62	168.04	<50	<0.5	<0.5	<0.5	<0.5	44
	Jan-95	177.66	6.97	170.69	140	56	14	24	23	NA
	May-95	177.66	7.85	169.81	130	21	2.8	8.6	8.2	NA
	Jul-95	177.66	9.20	168.46	<50	<0.5	<0.5	<0.5	<1	NA
	Nov-95	177.66	9.68	167.98	<50	<0.5	0.6	<0.5	<1	18
	Feb-96	177.66	6.59	171.07	100	2.6	<1	1.6	4.1	42
	Apr-96	177.66	8.30	169.36	160	37	15	16	31	43
	Jul-96	177.66	9.21	168.45	60	17	1.5	6.8	11.6	27
	Oct-96	177.66	9.97	167.69	NA	NA	NA	NA	NA	NA
	Oct-96	177.66	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	18
	Jan-97	177.66	7.68	169.98	<50	<0.5	<1.0	<1.0	<1.0	130
	Apr-97	177.66	9.15	168.51	<250	<2.5	<5.0	<5.0	<5.0	<50
	Jul-97	177.66	9.71	167.95	<50	15	<10	<10	<10	<100
	Oct-97	177.66	9.38	168.28	<250	<2.5	<5.0	<5.0	<5.0	<50
	Jan-98	177.66	6.59	171.07	<50	<0.5	<1.0	<1.0	<1.0	<10
	Apr-98	177.66	7.90	169.76	<250	<2.5	<5.0	<5.0	<5.0	<50
	Jul-98	177.66	8.96	168.70	NA	NA	NA	NA	NA	NA
	Jul-98	177.66	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
	Dec-98	177.66	8.32	169.34	NA	NA	NA	NA	NA	NA
	Mar-99	177.66	7.71	169.95	NA	NA	NA	NA	NA	NA
	Jun-99	177.66	8.78	168.88	NA	NA	NA	NA	NA	NA
	Sep-99	177.66	9.27	168.39	NA	NA	NA	NA	NA	NA
	Dec-99	177.66	9.21	168.45	NA	NA	NA	NA	NA	NA
	Mar-00	177.66	6.82	170.84	NA	NA	NA	NA	NA	NA
	Jun-00	177.66	8.72	168.94	NA	NA	NA	NA	NA	NA
	Sep-00	177.66	8.72	168.94	NA	NA	NA	NA	NA	NA
	Dec-00	177.66	8.61	169.05	NA	NA	NA	NA	NA	NA
	Mar-01	177.66	8.61	169.05	NA	NA	NA	NA	NA	NA
	Jun-01	177.66	9.24	168.42	NA	NA	NA	NA	NA	NA
	Sep-01	177.66	9.35	168.31	NA	NA	NA	NA	NA	NA
	Dec-01	177.66	8.53	169.13	NA	NA	NA	NA	NA	NA
	Mar-02	177.66	8.44	169.22	NA	NA	NA	NA	NA	NA
	Jun-02	177.66	10.97	166.69	NA	NA	NA	NA	NA	NA
Sep-02	177.66	9.27	168.39	NA	NA	NA	NA	NA	NA	
Dec-02	177.66	6.90	170.76	NA	NA	NA	NA	NA	NA	
Mar-03	177.66	8.83	168.83	NA	NA	NA	NA	NA	NA	
Jun-03	177.66	8.84	168.82	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 ¹ (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	Oct-92	176.08	9.22	166.86	1300	200	3.8	1.2	18	NA
	Apr-93	176.08	7.02	169.06	13000	2200	26	730	1000	NA
	Apr-93	176.08	NM	NM	13000	2500	25	740	1100	NA
	Jun-93	176.08	10.21	165.87	7600	1500	9.3	170	100	NA
	Sep-93	176.08	10.64	165.44	560	19	1.2	0.9	1.8	NA
	Dec-93	176.08	9.42	166.66	1700	300	3	76	110	14.07
	Feb-94	176.08	9.35	166.73	3500	640	7.8	90	130	45.13
	Aug-94	176.08	8.76	167.32	2600	210	4.6	9.4	4.4	33
	Aug-94	176.08	NM	NM	2500	230	4.6	13	4.8	32
	Oct-94	176.08	8.95	167.13	5600	560	9.5	75	21	79.2
	Oct-94	176.08	NM	NM	6000	550	10	78	22	77
	Jan-95	176.08	5.40	170.68	1900	620	<5	95	15	NA
	Jan-95	176.08	NM	NM	1600	620	<5	93	17	NA
	May-95	176.08	6.48	169.60	5700	1100	<10	180	58	NA
	May-95	176.08	NM	NM	5300	1100	<10	180	58	NA
	Jul-95	176.08	7.97	168.11	520	15	<0.50	1.7	1.3	NA
	Jul-95	176.08	NM	NM	460	7.2	<0.50	1.9	1.5	NA
	Nov-95	176.08	8.39	167.69	850	39	1.8	7.6	2.7	24
	Feb-96	176.08	4.71	171.37	4100	670	6	190	140	<50
	Apr-96	176.08	7.35	168.73	3000	570	<5	79	100	84
	Jul-96	176.08	9.40	166.68	620	150	1.7	9.3	6.4	25
	Oct-96	176.08	9.04	167.04	1100	29	<5	<5	<5	<50
	Oct-96	176.08	NM	NM	1100	31	<5	<5	<5	<50
	Jan-97	176.08	5.82	170.26	2100	980	<25	280	80	<250
	Jan-97	176.08	NM	NM	2700	910	8.8	280	84	180
	Apr-97	176.08	7.24	168.84	NA	NA	NA	NA	NA	NA
	Apr-97	176.08	NM	NM	<250	7.9	<5.0	<5.0	<5.0	<50
	Jul-97	176.08	7.86	168.22	1200	<5	<10	<10	<10	<100
	Jul-97	176.08	NM	NM	630	31	<5.0	<5.0	<5.0	130
	Oct-97	176.08	7.91	168.17	<250	5.4	<5.0	<5.0	<5.0	<50
	Jan-98	176.08	4.84	171.44	170	7.7	<1.0	<1.0	<1.0	130
	Apr-98	176.08	6.31	169.77	720	79	<5.0	9	<5.0	180
	Jul-98	176.08	7.43	168.65	NA	NA	NA	NA	NA	NA
	Jul-98	176.08	NM	NM	840	9.8	<1.0	4	<1.0	710
	Dec-98	176.08	7.05	169.03	NA	NA	NA	NA	NA	NA
	Mar-99	176.08	5.00	171.08	<250	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-99	176.08	7.77	168.31	NA	NA	NA	NA	NA	NA
	Sep-99	176.08	8.11	167.97	450	10	<5.0	6.3	<5.0	220
	Dec-99	176.08	7.66	168.42	NM	NA	NA	NA	NA	NA
	Mar-00	176.08	5.08	171.00	1700	170	2.5	45	6.4	140
	Jun-00	176.08	7.36	168.72	NM	NA	NA	NA	NA	NA
	Sep-00	176.08	7.71	168.37	130	0.65	<0.50	0.71	<0.50	51
	Dec-00	176.08	2.36	173.72	NM	NA	NA	NA	NA	NA
	Mar-01	176.08	7.42	168.66	1000	10.3	<2.5	11	<7.5	70.8
	Jun-01	176.08	7.92	168.16	NM	NA	NA	NA	NA	NA
	Sep-01	176.26	8.23	168.03	200	0.868	<0.50	0.55	<1.5	57.5
	Dec-01	176.26	7.80	168.46	NM	NA	NA	NA	NA	NA
	Mar-02	176.26	6.55	169.71	1300	17.1	1.35	15.4	1.42	37.4
	Jun-02	176.26	7.83	168.43	NM	NA	NA	NA	NA	NA
	Sep-02	176.26	8.22	168.04	680	9.9	<5.0	<5.0	<5.0	44
	Dec-02	176.26	6.58	169.68	NM	NA	NA	NA	NA	NA
Mar-03	176.26	6.77	169.49	2100	14	<2.5	15	3	80	
Jun-03	176.26	6.75	169.51	NM	NA	NA	NA	NA	NA	
Sep-03	176.26	8.48	167.78	970	10 C	<0.5	<0.5	5.3	34	
Dec-03	176.26	7.32	168.94	700	6.5	<0.5	3.1	2.7 C	34	
Feb-04	176.26	5.21	171.05	2400 H	41	2.8 C	18	2.4 C	29	
May-04	176.26	7.50	168.76	1500	2.6 C	<0.5	2.1 C	2.1 C	25	
Aug-04	178.80	8.28	170.52	680	<0.5	<0.5	<0.5	<0.5	33	
Oct-04	178.80	8.26	170.54	380	<0.5	<0.5	<0.5	1.4	39	
Jan-05	178.80	5.16	173.64	2400	18	1.4	22	2.1	26	
Apr-05	178.80	6.13	172.67	4800	7.75	1.26	14.3	<1.0	23.1	

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 ¹ (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	Jul-95	179.24	10.00	169.24	<50	<0.50	<0.50	<0.50	<1.0	NA
	Nov-95	179.24	10.44	168.80	<50	<0.50	<0.50	<0.50	<1.0	<5.0
	Feb-96	179.24	7.68	171.56	<50	<0.5	<1.0	<1.0	<1.0	<10
	Apr-96	179.24	9.33	169.91	<50	<0.5	<1.0	<1.0	<1.0	<10
	Jul-96	179.24	10.10	169.14	<50	<0.5	<1.0	<1.0	<1.0	<10
	Oct-96	179.24	11.00	168.24	<50	<0.5	<1.0	<1.0	<1.0	<10
	Jan-97	179.24	8.70	170.54	<50	<0.5	<1.0	<1.0	<1.0	<10
	Apr-97	179.24	10.16	169.08	<50	<0.5	<1.0	<1.0	<1.0	<10
	Jul-97	179.24	10.66	168.58	<50	<0.5	<1.0	<1.0	<1.0	<10
	Oct-97	179.24	10.25	168.99	<50	<0.5	<1.0	<1.0	<1.0	<10
	Jan-98	179.24	7.76	171.48	<50	<0.5	<1.0	<1.0	<1.0	<10
	Apr-98	179.24	9.10	170.14	<50	<0.5	<1.0	<1.0	<1.0	<10
	Jul-98	179.24	10.40	168.84	NA	NA	NA	NA	NA	NA
	Jul-98	179.24	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<10
	Dec-98	179.24	9.40	169.84	NA	NA	NA	NA	NA	NA
	Mar-99	179.24	9.10	170.14	NA	NA	NA	NA	NA	NA
	Jun-99	179.24	9.79	169.45	NA	NA	NA	NA	NA	NA
	Sep-99	179.24	10.10	169.14	NA	NA	NA	NA	NA	NA
	Dec-99	179.24	9.97	169.27	NA	NA	NA	NA	NA	NA
	Mar-00	179.24	8.56	170.68	NA	NA	NA	NA	NA	NA
	Jun-00	179.24	9.11	170.13	NA	NA	NA	NA	NA	NA
	Sep-00	179.24	9.77	169.47	NA	NA	NA	NA	NA	NA
	Dec-00	179.24	9.17	170.07	NA	NA	NA	NA	NA	NA
	Mar-01	179.24	9.82	169.42	NA	NA	NA	NA	NA	NA
	Jun-01	179.24	10.19	169.05	NA	NA	NA	NA	NA	NA
	Sep-01	179.24	10.25	168.99	NA	NA	NA	NA	NA	NA
	Dec-01	179.24	9.75	169.49	NA	NA	NA	NA	NA	NA
	Mar-02	179.24	9.53	169.71	NA	NA	NA	NA	NA	NA
	Jun-02	179.24	9.87	169.37	NA	NA	NA	NA	NA	NA
	Sep-02	179.24	9.49	169.75	NA	NA	NA	NA	NA	NA
	Dec-02	179.24	8.39	170.85	NA	NA	NA	NA	NA	NA
	Mar-03	179.24	9.40	169.84	NA	NA	NA	NA	NA	NA
	Jun-03	179.24	9.71	169.53	NA	NA	NA	NA	NA	NA
	Sep-03	179.24	10.21	169.03	<50	<0.5	<0.5	<0.5	<0.5	<2.0
	Dec-03	179.24	9.66	169.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-04	179.24	7.83	171.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	May-04	179.24	9.75	169.49	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Aug-04	181.80	10.28	171.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Oct-04	181.80	9.91	171.89	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Jan-05	181.80	8.40	173.40	<50	0.6	<0.5	<0.5	<0.5	<0.5
Apr-05	181.80	9.04	172.76	<200	<0.5	<0.5	<0.5	<1.0	<0.5	

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

Monitoring Well	Date	Top of casing elevation (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)	MBE (µg/L) 8260B
MW-7	Jul-95	176.55	9.25	167.30	<50	0.54	0.54	<0.50	<1.0	NA
	Nov-95	176.55	9.73	166.82	1100	<10	<10	<10	<20	4000
	Feb-96	176.55	6.48	170.07	610	<0.50	<1.0	<1.0	<1.0	2500
	Feb-96	176.55	NM	NM	280	<0.50	<1.0	<1.0	<1.0	2600
	Apr-96	176.55	8.37	168.18	110	<0.50	<1.0	<1.0	<1.0	3500
	Apr-96	176.55	NM	NM	230	<0.50	<1.0	<1.0	<1.0	3500
	Jul-96	176.55	9.24	167.31	230	<0.50	<1.0	<1.0	<1.0	4296
	Jul-96	176.55	NM	NM	220	<0.50	<1.0	<1.0	<1.0	4400
	Oct-96	176.55	10.05	166.50	NA	NA	NA	NA	NA	NA
	Oct-96	176.55	NM	NM	1600	<0.50	<1.0	<1.0	<1.0	3000
	Jan-97	176.55	7.51	169.04	<50	0.63	<1.0	<1.0	<1.0	2600
	Apr-97	176.55	8.79	167.76	NA	NA	NA	NA	NA	NA
	Apr-97	176.55	NM	NM	1500	<0.50	<1.0	<1.0	<1.0	3600
	Apr-97	176.55	NM	NM	7700	3500	<25	74	37	<250
	Jul-97	176.55	9.50	167.05	1400	<0.50	<1.0	<1.0	<1.0	2600
	Oct-97	176.55	9.19	167.38	420	<0.50	<1.0	<1.0	<1.0	560
	Jan-98	176.55	6.45	170.10	3100	<0.50	<1.0	<1.0	1.4	2300
	Apr-98	176.55	8.02	168.53	3800	<0.50	<1.0	<1.0	<1.0	3800
	Jul-98	176.55	8.88	167.67	NA	NA	NA	NA	NA	NA
	Jul-98	176.55	NM	NM	500	<2.5	<5.0	<5.0	<5.0	<50
	Jul-98	176.55	NM	NM	4700	<12	<25	<25	<25	4700
	Dec-98	176.55	8.62	167.93	NA	NA	NA	NA	NA	NA
	Mar-99	176.55	7.52	169.03	3800	<1.0	<1.0	<1.0	<1.0	3800
	Jun-99	176.55	9.63	166.92	NA	NA	NA	NA	NA	NA
	Sep-99	176.55	9.39	167.16	140	<10	<10	<10	<10	3800
	Dec-99	176.55	9.94	166.61	NA	NA	NA	NA	NA	NA
	Mar-00	176.55	6.72	169.83	<50	<0.50	<0.50	<0.50	<0.50	1400
	Jun-00	176.55	7.38	169.17	NA	NA	NA	NA	NA	NA
	Sep-00	176.55	9.18	167.37	190	<0.50	<0.50	<0.50	<0.50	580
	Dec-00	176.55	8.13	168.42	NA	NA	NA	NA	NA	NA
	Mar-01	176.55	8.98	167.57	1300	<0.50	<0.50	<0.50	<1.5	1460
	Jun-01	176.55	9.68	166.87	NA	NA	NA	NA	NA	NA
	Sep-01	176.55	9.80	166.75	<0.50	<0.50	<0.50	<0.50	<1.5	94.9
	Dec-01	176.55	9.26	167.29	NA	NA	NA	NA	NA	NA
	Mar-02	176.55	8.69	167.86	800	<0.50	<0.50	<0.50	<1.0	952
	Jun-02	176.55	9.06	167.49	NA	NA	NA	NA	NA	NA
	Sep-02	176.55	9.23	167.32	260	<2.0	<2.0	<2.0	<2.0	580
	Dec-02	176.55	7.77	168.78	NA	NA	NA	NA	NA	NA
	Mar-03	176.55	8.30	168.25	620	<2.5	<2.5	<2.5	<2.5	1100
	Jun-03	176.55	9.51	167.04	NA	NA	NA	NA	NA	NA
	Sep-03	176.55	9.52	167.03	<50	<0.5	<0.5	<0.5	<0.5	460
	Dec-03	176.55	8.99	167.56	<50	<0.5	<0.5	<0.5	<0.5	420
	Feb-04	176.55	6.55	170.00	<50	<0.5	<0.5	<0.5	<0.5	330
	May-04	176.55	8.90	167.65	<50	<0.5	<0.5	<0.5	<0.5	630
	Aug-04	179.11	9.58	169.53	<50	<0.5	<0.5	<0.5	<0.5	750
	Oct-04	179.11	9.20	169.91	<50	<0.5	<0.5	<0.5	<0.5	550
	Jan-05	179.11	7.25	171.86	<50	<2.0	<2.0	<2.0	<2.0	250
	Apr-05	179.11	7.94	171.17	<200	<0.5	<0.5	<0.5	<1.0	285

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 ¹ (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-8	Jul-95	176.34	7.80	168.54	1,100	<2.5	<2.5	<2.5	<5.0	NA
	Nov-95	176.34	8.29	168.05	8,300	75	5.3	670	240	140
	Feb-96	176.34	4.99	171.35	2,300	33	<10	190	216	<100
	Apr-96	176.34	6.09	170.25	2,000	390	<10	150	26	<250
QC-2	Apr-93	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	Jun-93	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	Sep-93	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	Dec-93	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	Feb-94	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	Aug-94	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	Oct-94	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NA
	Jan-95	NM	NM	NM	<50	<0.5	<0.5	<0.5	<1.0	NA
	May-95	NM	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	NA
	Jul-95	NM	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	NA
	Nov-95	NM	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	<5.0
	Feb-96	NM	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<1.0
	Apr-96	NM	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<1.0
Jul-96	NM	NM	NM	<50	<0.5	<1.0	<1.0	<1.0	<1.0	
SOMA-1	Aug-04	180.95	11.53	169.42	84	<0.5	<0.5	1.5 C	2.2	2100
	Oct-04	180.95	10.41	170.54	56	<0.5	<0.5	1.3 C	1.4 C	1600
	Jan-05	180.95	9.68	171.27	58	<3.1	<3.1	<3.1	<3.1	330
	Apr-05	180.95	9.37	171.58	<2200	<5.5	<5.5	<5.5	<11	668
SOMA-2	Aug-04	178.99	10.69	168.30	<50	<0.5	<0.5	<0.5	<0.5	0.8
	Oct-04	178.99	10.75	168.24	<50	<0.5	<0.5	<0.5	<0.5	2.4
	Jan-05	178.99	9.45	169.54	<50	<0.5	<0.5	<0.5	<0.5	1.1
	Apr-05	178.99	10.46	168.53	<200	<0.5	<0.5	<0.5	<1.0	<0.5
SOMA-3	Aug-04	176.81	9.97	166.84	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Oct-04	176.81	9.59	167.22	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Jan-05	176.81	8.23	168.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Apr-05	176.81	8.64	168.17	<200	<0.5	<0.5	<0.5	<1.0	<0.5
SOMA-4	Aug-04	176.94	9.44	167.50	140	0.98	<0.5	7.8	<0.5	11
	Oct-04	176.94	9.91	167.03	150	<0.5	<0.5	10	<0.5	8.8
	Jan-05	176.94	8.36	168.58	500	3.7	<0.5	53	<0.5	7.6
	Apr-05	176.94	7.89	169.05	<200	0.74	<0.5	3.21	<1.0	5.85

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

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-1	Jun-03	<400	<10	<10	18	NA	NA	NA
	Sep-03	NA	NA	NA	NA	NA	NA	NA
	Dec-03	290	<1.0	<1.0	9.5	<2,000	<1.0	<1.0
	Feb-04	410	<0.5	<0.5	9.7	<1000	<0.5	<0.5
	May-04	190	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Aug-04	180	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Oct-04	270	<0.7	<0.7	4.4	<1400	9.9	<0.7
	Jan-05	280	<1.3	<1.3	<1.3	<2,500	<1.3	<1.3
	Apr-05	144	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
ESE-2	Jun-03	<4000	<100	<100	<100	NA	NA	NA
	Sep-03	NA	NA	NA	NA	NA	NA	NA
	Dec-03	500	<13	<13	77	<25,000	<13	<13
	Feb-04	1200	<0.5	<0.5	92	<1000	<0.5	<0.5
	May-04	2400	<10	<10	25	<20,000	<10	<10
	Aug-04	2300	<2.5	<2.5	12	<5000	<2.5	<2.5
	Oct-04	1800	<3.6	<3.6	8.6	<7100	<3.6	<3.6
	Jan-05	470	<8.3	<8.3	28	<17,000	<8.3	<8.3
	Apr-05	<10.8	<2.15	<2.15	17.9	<4300	<2.15	<2.15
ESE-3	Jun-03	<200	<5.0	<5.0	<5.0	NA	NA	NA
ESE-5	Sep-03	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Dec-03	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Feb-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	May-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Aug-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Oct-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Jan-05	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Apr-05	17	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
MW-6	Sep-03	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Dec-03	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Feb-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	May-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Aug-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Oct-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Apr-05	<2.5	<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

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)
MW-7	Sep-03	<10	<0.5	<0.5	9.8	<1000	<0.5	<0.5
	Dec-03	<25	<1.3	<1.3	8.1	<2500	<1.3	<1.3
	Feb-04	<10	<0.5	<0.5	9.9	<1000	<0.5	<0.5
	May-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Aug-04	<25	<1.3	<1.3	19	<2500	<1.3	<1.3
	Oct-04	<100	<5.0	<5.0	11	<10,000	<5.0	<5.0
	Jan-05 Apr-05	<40 2.62	<2.0 <0.5	<2.0 <0.5	5.1 4.57	<4,000 <1000	<2.0 <0.5	<2.0 <0.5
SOMA-1	Aug-04	2300	<6.3	<6.3	53	<13000	<6.3	<6.3
	Oct-04	2400	<13	<13	36	<25,000	<13	<13
	Jan-05	530	<3.1	<3.1	7.1	<6,300	<3.1	<3.1
	Apr-05	<27.5	<5.5	<5.5	<22	<11000	<5.5	<5.5
SOMA-2	Aug-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Oct-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Jan-05	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Apr-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
SOMA-3	Aug-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Oct-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Jan-05	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Apr-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
SOMA-4	Aug-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Oct-04	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Jan-05	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	Apr-05	<2.5	<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

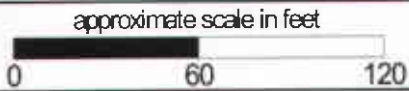


Figure 1: Site vicinity map.

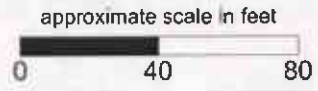
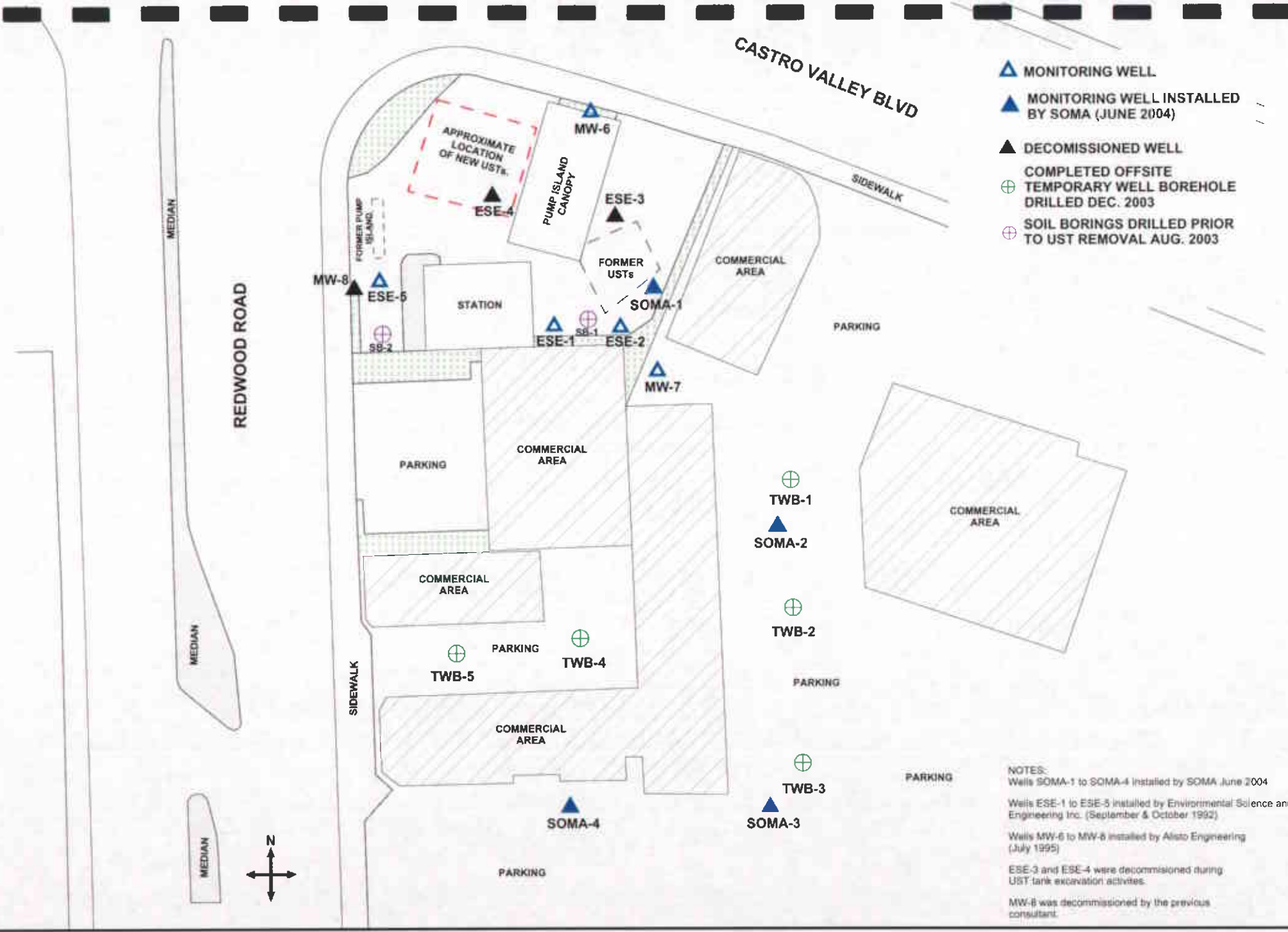


Figure 2: Site map showing locations of monitoring wells, decommissioned wells, offsite temporary well boreholes.



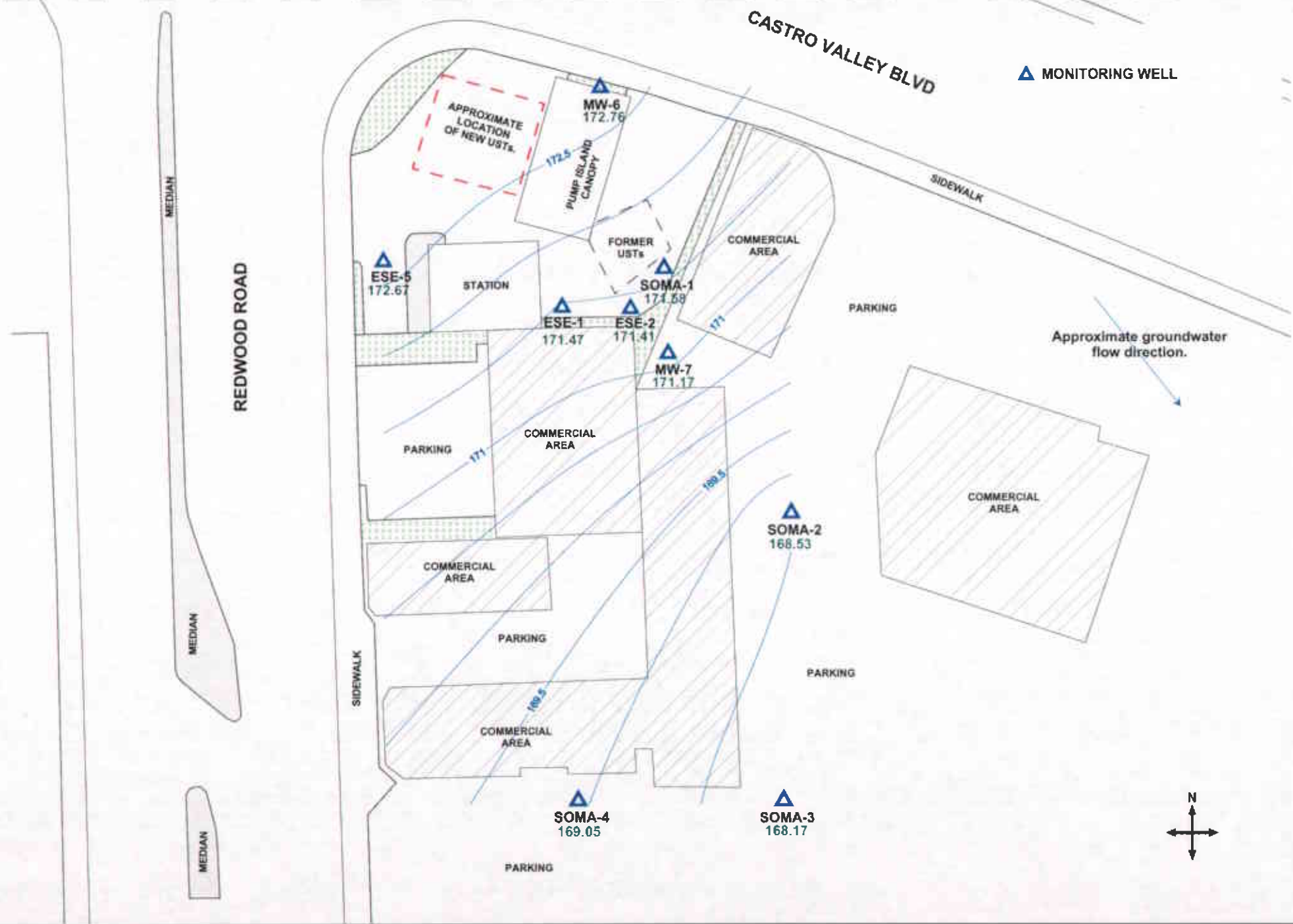
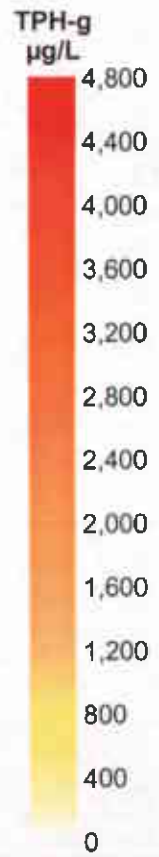


Figure 3: Groundwater elevation contour map in feet. April 2005.



REDWOOD ROAD

CASTRO VALLEY BLVD

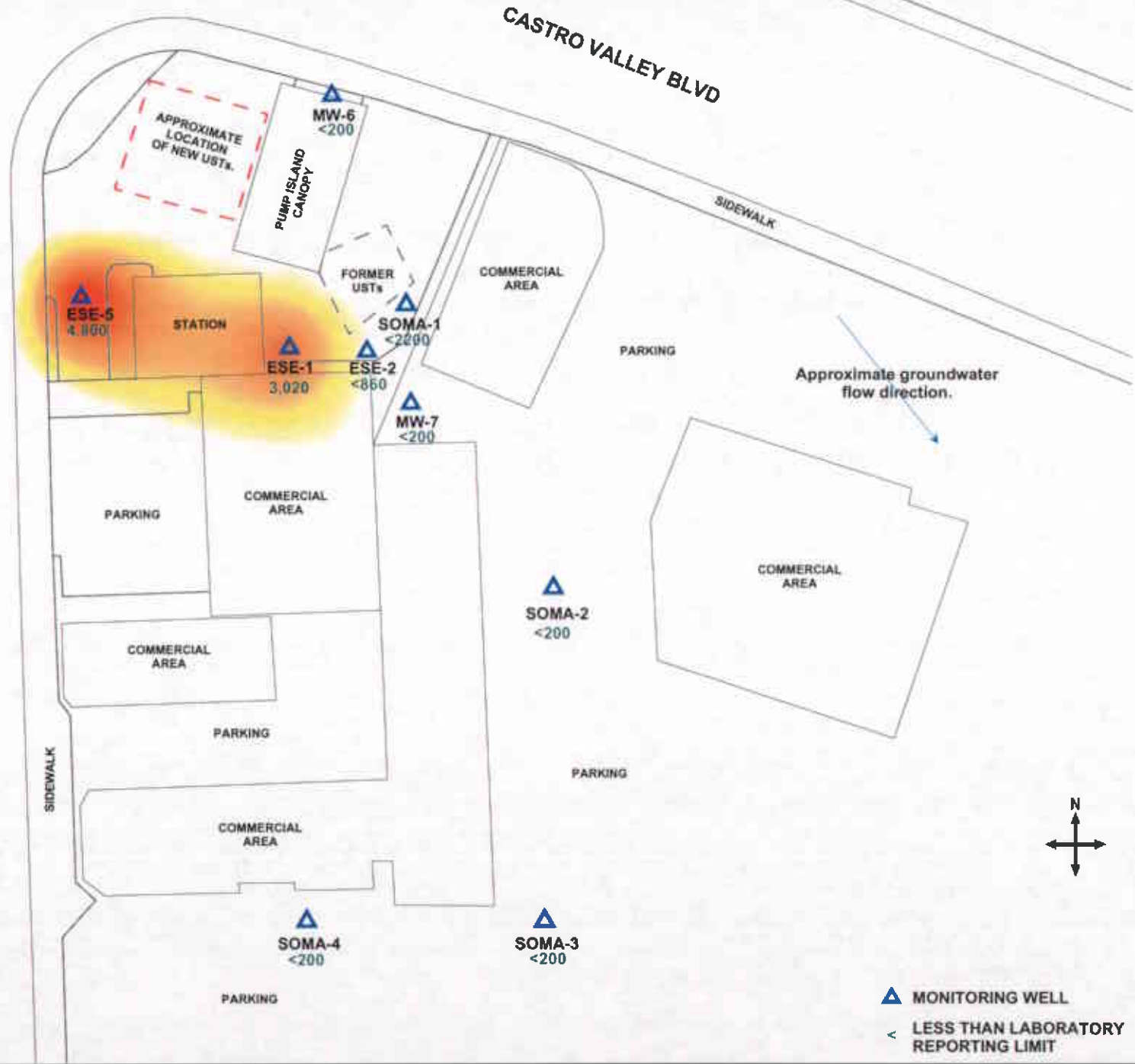
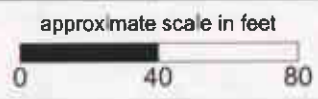
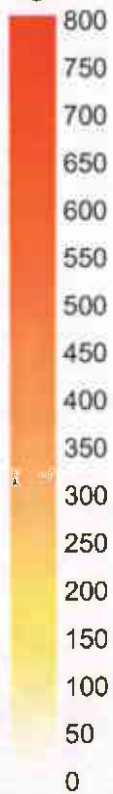


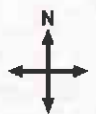
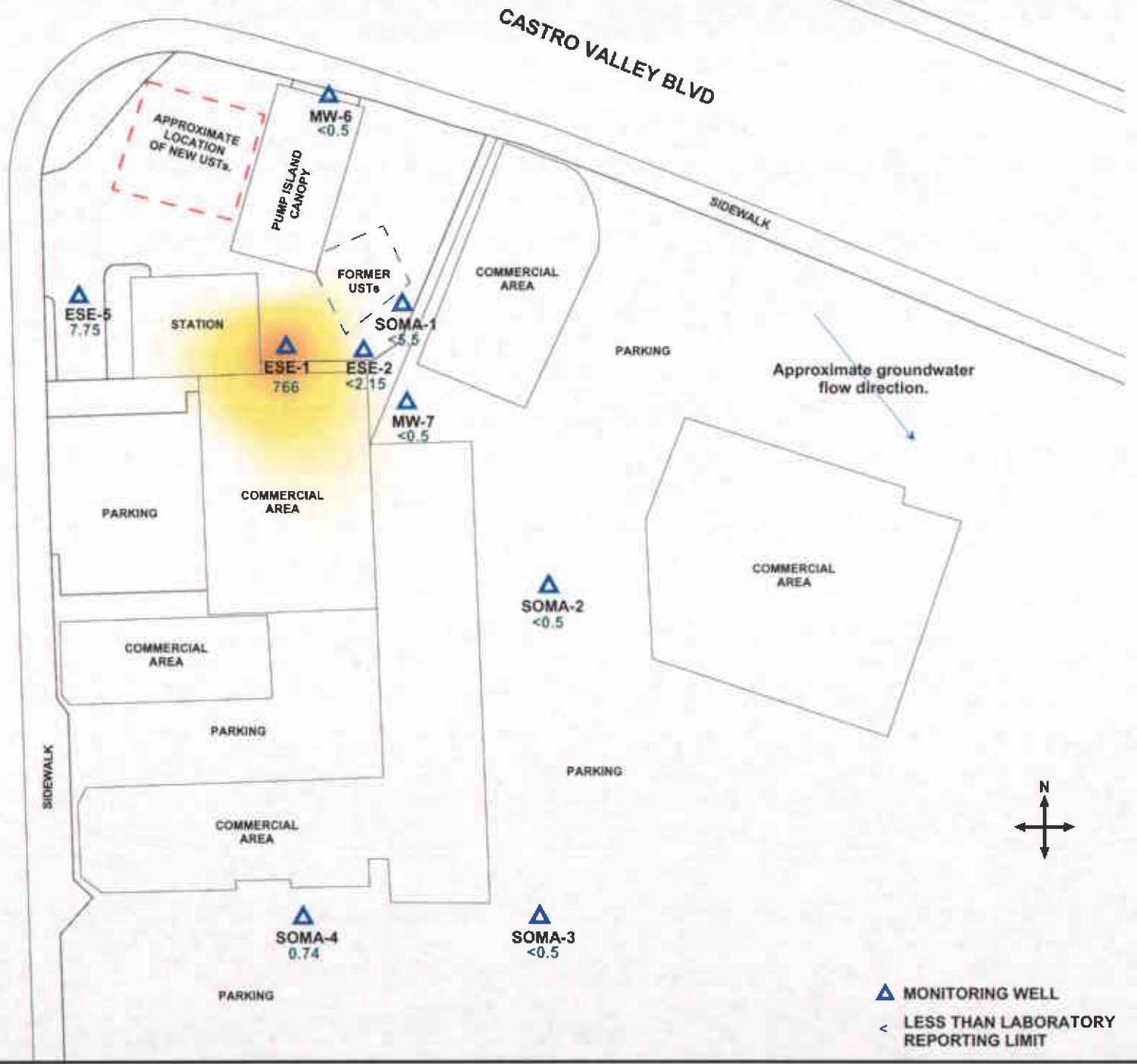
Figure 4: Contour map of TPH-g concentrations in groundwater. April 2005.



Benzene
ug/L



CASTRO VALLEY BLVD



- ▲ MONITORING WELL
- < LESS THAN LABORATORY REPORTING LIMIT

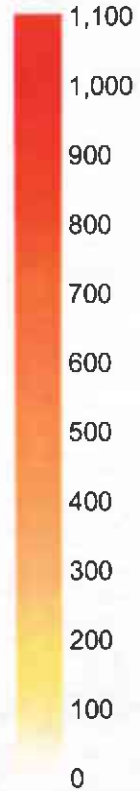
approximate scale in feet



Figure 5: Contour map of Benzene concentrations in groundwater. April 2005.



MtBE
µg/L



REDWOOD ROAD

CASTRO VALLEY BLVD

MEDIAN

MEDIAN

MEDIAN

SIDEWALK

SIDEWALK

APPROXIMATE LOCATION OF NEW USTs

PUMP ISLAND CANOPY

FORMER USTs

COMMERCIAL AREA

STATION

PARKING

Approximate groundwater flow direction.

PARKING

COMMERCIAL AREA

COMMERCIAL AREA

COMMERCIAL AREA

PARKING

PARKING

COMMERCIAL AREA

PARKING

ESE-5
23.1

ESE-1
88.2

ESE-2
1,020

MW-7
285

SOMA-4
5.65

MW-6
<0.5

SOMA-1
66%

SOMA-2
<0.5

SOMA-3
<0.5



▲ MONITORING WELL
 < LESS THAN LABORATORY REPORTING LIMIT

approximate scale in feet



Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B).
 April 2005.



CASTRO VALLEY BLVD

SIDEWALK

REDWOOD ROAD

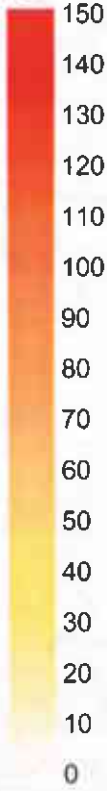
MEDIAN

MEDIAN

MEDIAN

SIDEWALK

TBA
µg/L



APPROXIMATE LOCATION OF NEW USTs.

PUMP ISLAND CANOPY

FORMER USTs

COMMERCIAL AREA

PARKING

Approximate groundwater flow direction.

COMMERCIAL AREA

PARKING

COMMERCIAL AREA

COMMERCIAL AREA

PARKING

COMMERCIAL AREA

PARKING

PARKING



MW-6
<2.5

ESE-5
17

STATION

ESE-1
144

ESE-2
<10.8

MW-7
2.62

SOMA-1
<27.5

SOMA-2
<2.5

SOMA-4
<2.5

SOMA-3
<2.5

▲ MONITORING WELL
 < LESS THAN LABORATORY REPORTING LIMIT

approximate scale in feet.

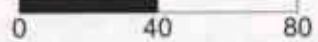
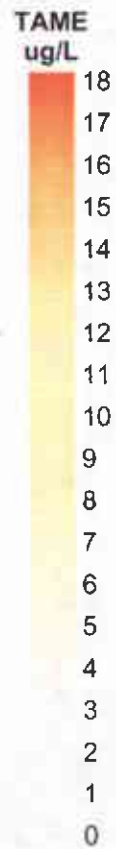


Figure 7: Contour map of TBA concentrations in groundwater. April 2005.





▲ MONITORING WELL
< LESS THAN LABORATORY REPORTING LIMIT

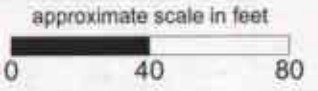


Figure 8: Contour map of TAME concentrations in groundwater. April 2005.



APPENDIX A

SOMA's Groundwater Monitoring Procedures

Field Activities

On April 14, 2005, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the ACHCS. During this groundwater monitoring event, 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 monitored. Figure 2 illustrates the locations of the wells.

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.

Appendix B details 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. Once the purging at each location was complete, a groundwater sample was collected. The groundwater samples were transferred into 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 14, 2005, 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 2005

**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

**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
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.: FSE-1
 Casing Diameter: 2 inches
 Depth of Well: 28.00 feet
 Top of Casing Elevation: 180.24 feet
 Depth to Groundwater: 8.77 feet
 Groundwater Elevation: 171.47 feet
 Water Column Height: 19.23 feet
 Purged Volume: 14 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: _____

Sheen: No Yes Describe: _____

Odor: No Yes Describe: SLIGHT PUL OR

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
1:04 PM	START PURGING WELL			
1:06	4	6.93	17.0	1110
1:08	8	6.84	18.8	1120
1:10	12	6.79	18.7	1140
1:12	16	6.78	18.7	1130
1:15	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-2
Casing Diameter: 2 inches
Depth of Well: 28.50 feet
Top of Casing Elevation: 180.79 feet
Depth to Groundwater: 9.38 feet
Groundwater Elevation: 171.41 feet
Water Column Height: 17.12 feet
Purged Volume: 12 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: April 14, 2005
Sampler: Eric Jennings
John Lohman

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)
1:17 PM	START PURGING WELL			
1:19	4	7.03	18.6	1200
1:21	8	6.93	18.6	1170
1:23	12	7.01	18.6	1150
1:27	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: E4E-5
 Casing Diameter: 2 inches
 Depth of Well: 24.00 feet
 Top of Casing Elevation: 178.80 feet
 Depth to Groundwater: 6.13 feet
 Groundwater Elevation: 172.67 feet
 Water Column Height: 17.67 feet
 Purged Volume: 16 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: _____

Sheen: No Yes Describe: _____

Odor: No Yes Describe: slight PVC odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
#2 ¹³	GRAB (NOINL WFL)			
#2 ¹⁵	4	7.04	18.2 20.2	330
#2 ¹⁸	8	6.90	20.2	1140
#2 ²⁰	12	6.92	20.2	1160
#2 ²²	16	6.96	20.2	1170
#2 ²⁵	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: NW-6
 Casing Diameter: 2 inches
 Depth of Well: 29.60 feet
 Top of Casing Elevation: 181.80 feet
 Depth to Groundwater: 9.04 feet
 Groundwater Elevation: 172.76 feet
 Water Column Height: 20.56 feet
 Purged Volume: 16 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: light yellow
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
147	START PURGING WELL			
150	4	7.05	19.1	930
152	8	6.91	19.3	920
154	12	6.87	19.3	920
156	16	6.87	19.2	930
200	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-7
Casing Diameter: 2 inches
Depth of Well: 30.32 feet
Top of Casing Elevation: 179.11 feet
Depth to Groundwater: 7.94 feet
Groundwater Elevation: 171.17 feet
Water Column Height: 22.38 feet
Purged Volume: 16 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: April 14, 2005
Sampler: Eric Jennings
John Lohman

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 ⁰⁰	START PURGING WELL			
12 ⁰³	4	7.3	12.4	880
12 ⁰⁶	8	7.06	18.6	880
12 ⁰⁹	12	7.08	18.1	900
12 ¹²	16	7.06	18.7	910
12 ¹⁵	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: 60MA-1
 Casing Diameter: 2 inches
 Depth of Well: 29.40 / 20.90 feet
 Top of Casing Elevation: 180.95 feet
 Depth to Groundwater: 9.37 feet
 Groundwater Elevation: 171.58 feet
 Water Column Height: 20.03 feet
 Purged Volume: 12 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

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)
1:35 PM	START PURGING WELL			
1:36	4	7.01	19.5	1080
1:38	8	6.96	19.1	1080
1:40	12	6.91	19.2	1090
1:43	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: 90MA-2
 Casing Diameter: 2 inches
 Depth of Well: 14.70 feet
 Top of Casing Elevation: 178.99 feet
 Depth to Groundwater: 10.46 feet
 Groundwater Elevation: 168.53 feet
 Water Column Height: 4.24 feet
 Purged Volume: 3 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

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)
11:49 AM	START PURGING WELL			
11:50	1.5	7.02	17.5	800
11:51	3	7.35	17.5	810
DRY AT 3 GAL				
11:55	4 SAMPLED			



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: 8.64 feet
 Groundwater Elevation: 168.17 feet
 Water Column Height: 6.06 feet
 Purged Volume: 6.5 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

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)
11:32 AM	START PURGING WELL			
11:33	2	7.23	18.6	1250
11:34	4	7.09	18.7	1270
11:36	6.5	6.97	18.6	1270
11:40	SAMPLED			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-4
 Casing Diameter: 2 inches
 Depth of Well: 22.65 feet
 Top of Casing Elevation: 176.94 feet
 Depth to Groundwater: 7.89 feet
 Groundwater Elevation: 169.05 feet
 Water Column Height: 14.76 feet
 Purged Volume: 12 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: April 14, 2005
 Sampler: Eric Jennings
 John Lohman

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 AM	START PURGING WELL			
11:14	4	6.68	19.4	930
11:17	8	6.68	20.0	970
11:20	12	6.70	20.2	1060
11:23	SAMPLED			

Appendix C

Chain of Custody Form and Laboratory Report
for the
Second Quarter 2005 monitoring event

PAL

Pacific Analytical Laboratory

851 West Midway Ave. Suite 201
Alameda, CA 94501

Phone (510) 864-0364

02 May 2005

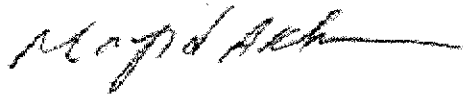
Joyce Bobek
SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon, CA 94583

RE: 3519 Castro Valley Blvd

Work Order Number: 5040014

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,



Maiid Akhavan
Laboratory Director

CHAIN OF CUSTODY

Pacific Analytical Laboratory
 851 West Midway Ave., Suite 201B
 Alameda, CA 94501
 510-864-0364 phone
 510-864-0365 fax

C&T LOGIN # 5040014

Analyses

Project No: 2761

Sampler: Eric Jennings / John Lohman

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

Report To: Tony Perini

Turnaround Time: Standard

Telephone: 925-244-6600

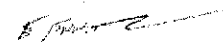
Fax: 925-244-6601

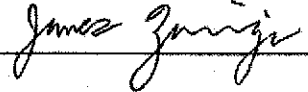
Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
	ESE-1	APRIL 14, 2005 11:15		X		5 VOAS	X			X
	ESE-2	127		X		5 VOAS	X			X
	ESE-5	2:25		X		5 VOAS	X			X
	MW-6	2:20		X		5 VOAS	X			X
	MW-7	12:19		X		5 VOAS	X			X
	SOMA-1	4:3		X		5 VOAS	X			X
	SOMA-2	4:40		X		5 VOAS	X			X
	SOMA-3	11:40				5 VOAS				
	SOMA-4	11:25								

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																	

Notes: EDF OUTPUT REQUIRED
 Gasoline Oxygenates: DIPE, ETBE, TAME, TBA
 Lead Savengers: EDB, 1,2-DCA

 Ethanol

RELINQUISHED BY:

 DATE/TIME: 4/14/05 3:25 PM

RECEIVED BY:

 DATE/TIME: 4/14/05 3:25 PM



SOMA Environmental Engineering Inc.
2680 Bishop Dr., Suite 203
San Ramon CA, 94583

Project: 3519 Castro Valley Blvd
Project Number: 2761
Project Manager: Joyce Bobek

Reported:
02-May-05 11:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
ESE-1	5040014-01	Water	14-Apr-05 13:15	14-Apr-05 15:31
ESE-2	5040014-02	Water	14-Apr-05 13:27	14-Apr-05 15:31
ESE-5	5040014-03	Water	14-Apr-05 14:25	14-Apr-05 15:31
MW-6	5040014-04	Water	14-Apr-05 14:00	14-Apr-05 15:31
MW-7	5040014-05	Water	14-Apr-05 12:15	14-Apr-05 15:31
SOMA-1	5040014-06	Water	14-Apr-05 13:43	14-Apr-05 15:31
SOMA-2	5040014-07	Water	14-Apr-05 11:55	14-Apr-05 15:31
SOMA-3	5040014-08	Water	14-Apr-05 11:40	14-Apr-05 15:31
SOMA-4	5040014-09	Water	14-Apr-05 11:23	14-Apr-05 15:31



SOMA Environmental Engineering Inc.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 3519 Castro Valley Blvd
 Project Number: 2761
 Project Manager: Joyce Bobek

Reported:
 02-May-05 11:45

Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
ESE-1 (5040014-01RE1) Water Sampled: 14-Apr-05 13:15 Received: 14-Apr-05 15:31									
MTBE	88.2	2.15	ug/l	4.3	BDS1401	14-Apr-05	18-Apr-05	EPA 8260B	
DIPE	ND	2.15	"	"	"	"	"	"	
ETBE	ND	2.15	"	"	"	"	"	"	
TAME	ND	8.60	"	"	"	"	"	"	
TBA	144	10.8	"	"	"	"	"	"	
1,2-dichloroethane	ND	2.15	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.15	"	"	"	"	"	"	
Ethanol	ND	4300	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		91.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		120 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		94.2 %		70-130	"	"	"	"	
Gasoline (C6-C12)	3020	860	"	4.3	"	"	"	"	
Benzene	766	2.15	"	"	"	"	"	"	
Ethylbenzene	21.3	2.15	"	"	"	"	"	"	
m&p-Xylene	17.3	4.30	"	"	"	"	"	"	
o-xylene	7.96	2.15	"	"	"	"	"	"	
Toluene	25.6	2.15	"	"	"	"	"	"	
ESE-2 (5040014-02) Water Sampled: 14-Apr-05 13:27 Received: 14-Apr-05 15:31									
MTBE	1020	2.15	ug/l	4.3	BDS1401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	2.15	"	"	"	"	"	"	
ETBE	ND	2.15	"	"	"	"	"	"	
TAME	17.9	8.60	"	"	"	"	"	"	
TBA	ND	10.8	"	"	"	"	"	"	
1,2-dichloroethane	ND	2.15	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.15	"	"	"	"	"	"	
Ethanol	ND	4300	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.6 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		128 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		97.2 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	860	"	4.3	"	"	"	"	
Benzene	ND	2.15	"	"	"	"	"	"	
Ethylbenzene	ND	2.15	"	"	"	"	"	"	
m&p-Xylene	ND	4.30	"	"	"	"	"	"	

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.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 3519 Castro Valley Blvd
 Project Number: 2761
 Project Manager: Joyce Bobek

Reported:
 02-May-05 11:45

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

ESE-2 (5040014-02) Water Sampled: 14-Apr-05 13:27 Received: 14-Apr-05 15:31

o-xylene	ND	2.15	ug/l	4.3	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
Toluene	ND	2.15	"	"	"	"	"	"	

ESE-5 (5040014-03) Water Sampled: 14-Apr-05 14:25 Received: 14-Apr-05 15:31

MTBE	23.1	0.500	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	17.0	2.50	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	

<i>Surrogate: 4-Bromofluorobenzene</i>		92.8 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		116 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		109 %		70-130	"	"	"	"	
Gasoline (C6-C12)	4800	200	"	"	"	"	"	"	
Benzene	7.75	0.500	"	"	"	"	"	"	
Ethylbenzene	14.3	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	1.26	0.500	"	"	"	"	"	"	

MW-6 (5040014-04) Water Sampled: 14-Apr-05 14:00 Received: 14-Apr-05 15:31

MTBE	ND	0.500	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	2.50	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	

<i>Surrogate: 4-Bromofluorobenzene</i>		87.8 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		116 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		94.4 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	200	"	"	"	"	"	"	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	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. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 3519 Castro Valley Blvd Project Number: 2761 Project Manager: Joyce Bobek	Reported: 02-May-05 11:45
--	--	------------------------------

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (5040014-04) Water Sampled: 14-Apr-05 14:00 Received: 14-Apr-05 15:31									
m&p-Xylene	ND	1.00	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
MW-7 (5040014-05RE1) Water Sampled: 14-Apr-05 12:15 Received: 14-Apr-05 15:31									
MTBE	285	0.500	ug/l	1	BD51401	14-Apr-05	18-Apr-05	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	4.57	2.00	"	"	"	"	"	"	
TBA	2.62	2.50	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.0 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		130 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		99.8 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	200	"	"	"	"	"	"	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
SOMA-1 (5040014-06) Water Sampled: 14-Apr-05 13:43 Received: 14-Apr-05 15:31									
MTBE	668	5.50	ug/l	11	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	5.50	"	"	"	"	"	"	
ETBE	ND	5.50	"	"	"	"	"	"	
TAME	ND	22.0	"	"	"	"	"	"	
TBA	ND	27.5	"	"	"	"	"	"	
1,2-dichloroethane	ND	5.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.50	"	"	"	"	"	"	
Ethanol	ND	11000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		81.6 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		125 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		101 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	2200	"	11	"	"	"	"	
Benzene	ND	5.50	"	"	"	"	"	"	

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. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 3519 Castro Valley Blvd Project Number: 2761 Project Manager: Joyce Bobek	Reported: 02-May-05 11:45
--	--	------------------------------

Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SOMA-1 (5040014-06) Water Sampled: 14-Apr-05 13:43 Received: 14-Apr-05 15:31									
Ethylbenzene	ND	5.50	ug/l	11	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
m&p-Xylene	ND	11.0	"	"	"	"	"	"	
o-xylene	ND	5.50	"	"	"	"	"	"	
Toluene	ND	5.50	"	"	"	"	"	"	
SOMA-2 (5040014-07) Water Sampled: 14-Apr-05 11:55 Received: 14-Apr-05 15:31									
MTBE	ND	0.500	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	2.50	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.2 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		125 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		96.2 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	200	"	"	"	"	"	"	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
SOMA-3 (5040014-08) Water Sampled: 14-Apr-05 11:40 Received: 14-Apr-05 15:31									
MTBE	ND	0.500	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	2.50	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		82.8 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		128 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		98.0 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	200	"	"	"	"	"	"	

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.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 3519 Castro Valley Blvd
 Project Number: 2761
 Project Manager: Joycc Bobek

Reported:
 02-May-05 11:45

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

SOMA-3 (5040014-08) Water **Sampled: 14-Apr-05 11:40** **Received: 14-Apr-05 15:31**

Benzene	ND	0.500	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	

SOMA-4 (5040014-09) Water **Sampled: 14-Apr-05 11:23** **Received: 14-Apr-05 15:31**

MTBE	5.65	0.500	ug/l	1	BD51401	14-Apr-05	15-Apr-05	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	2.50	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84.8 %		70-130	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		114 %		70-130	"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		99.6 %		70-130	"	"	"	"	
Gasoline (C6-C12)	ND	200	"	"	"	"	"	"	
Benzene	0.740	0.500	"	"	"	"	"	"	
Ethylbenzene	3.21	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	1.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	



SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 3519 Castro Valley Blvd Project Number: 2761 Project Manager: Joyce Bobek	Reported: 02-May-05 11:45
--	--	------------------------------

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch BD51401 - EPA 5030 Water MS

Blank (BD51401-BLK1)			Prepared & Analyzed: 14-Apr-05							
Surrogate: 4-Bromofluorobenzene	42.7		ug/l	50.0		83.4	70-130			
Surrogate: Dibromofluoromethane	62.4		"	50.0		125	70-130			
Surrogate: Perdeuterotoluene	48.1		"	50.0		96.2	70-130			
MTBE	ND	0.500	"							
DIPE	ND	0.500	"							
ETBE	ND	0.500	"							
TAME	ND	2.00	"							
Gasoline (C6-C12)	ND	200	"							
TBA	ND	2.50	"							
1,2-dichloroethane	ND	0.500	"							
1,2-Dibromoethane (EDB)	ND	0.500	"							
Ethanol	ND	1000	"							
Benzene	ND	0.500	"							
Ethylbenzenc	ND	0.500	"							
m&p-Xylene	ND	1.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	0.500	"							

LCS (BD51401-BS1)			Prepared: 14-Apr-05 Analyzed: 15-Apr-05							
Surrogate: 4-Bromofluorobenzene	50.9		ug/l	50.0		102	70-130			
Surrogate: Dibromofluoromethane	56.2		"	50.0		112	70-130			
Surrogate: Perdeuterotoluene	44.6		"	50.0		89.2	70-130			
MTBE	111	0.500	"	100		111	70-130			
DIPE	113	0.500	"	100		113	70-130			
ETBE	96.4	0.500	"	100		96.4	70-130			
TAME	86.6	2.00	"	100		86.6	70-130			
TBA	542	2.50	"	500		108	70-130			
Gasoline (C6-C12)	2040	200	"	2000		102	70-130			
Benzene	103	0.500	"	100		103	70-130			
Ethylbenzene	124	0.500	"	100		124	70-130			
m&p-Xylene	73.1	1.00	"	100		73.1	70-130			
o-xylene	118	0.500	"	100		118	70-130			
Toluene	101	0.500	"	100		101	70-130			



SOMA Environmental Engineering Inc.
 2680 Bishop Dr., Suite 203
 San Ramon CA, 94583

Project: 3519 Castro Valley Blvd
 Project Number: 2761
 Project Manager: Joyce Bobek

Reported:
 02-May-05 11:45

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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch BD51401 - EPA 5030 Water MS

LCS Dup (BD51401-BSD1)

Prepared: 14-Apr-05 Analyzed: 19-Apr-05

Surrogate: 4-Bromofluorobenzene	51.4		ug/l	50.0		103	70-130			
Surrogate: Dibromofluoromethane	56.4		"	50.0		113	70-130			
Surrogate: Perdeuterotoluene	44.0		"	50.0		88.0	70-130			
MTBE	113	0.500	"	100		113	70-130	1.79	20	
DIPE	113	0.500	"	100		113	70-130	0.00	20	
ETBE	97.4	0.500	"	100		97.4	70-130	1.03	20	
TAME	90.2	2.00	"	100		90.2	70-130	4.07	20	
TBA	647	2.50	"	500		129	70-130	17.7	20	
Gasoline (C6-C12)	1850	200	"	2000		92.5	70-130	9.77	20	
Benzene	103	0.500	"	100		103	70-130	0.00	20	
Ethylbenzene	101	0.500	"	100		101	70-130	20.4	20	QR-02
m&p-Xylene	127	1.00	"	100		127	70-130	53.9	20	QR-02
o-xylene	126	0.500	"	100		126	70-130	6.56	20	
Toluene	103	0.500	"	100		103	70-130	1.96	20	

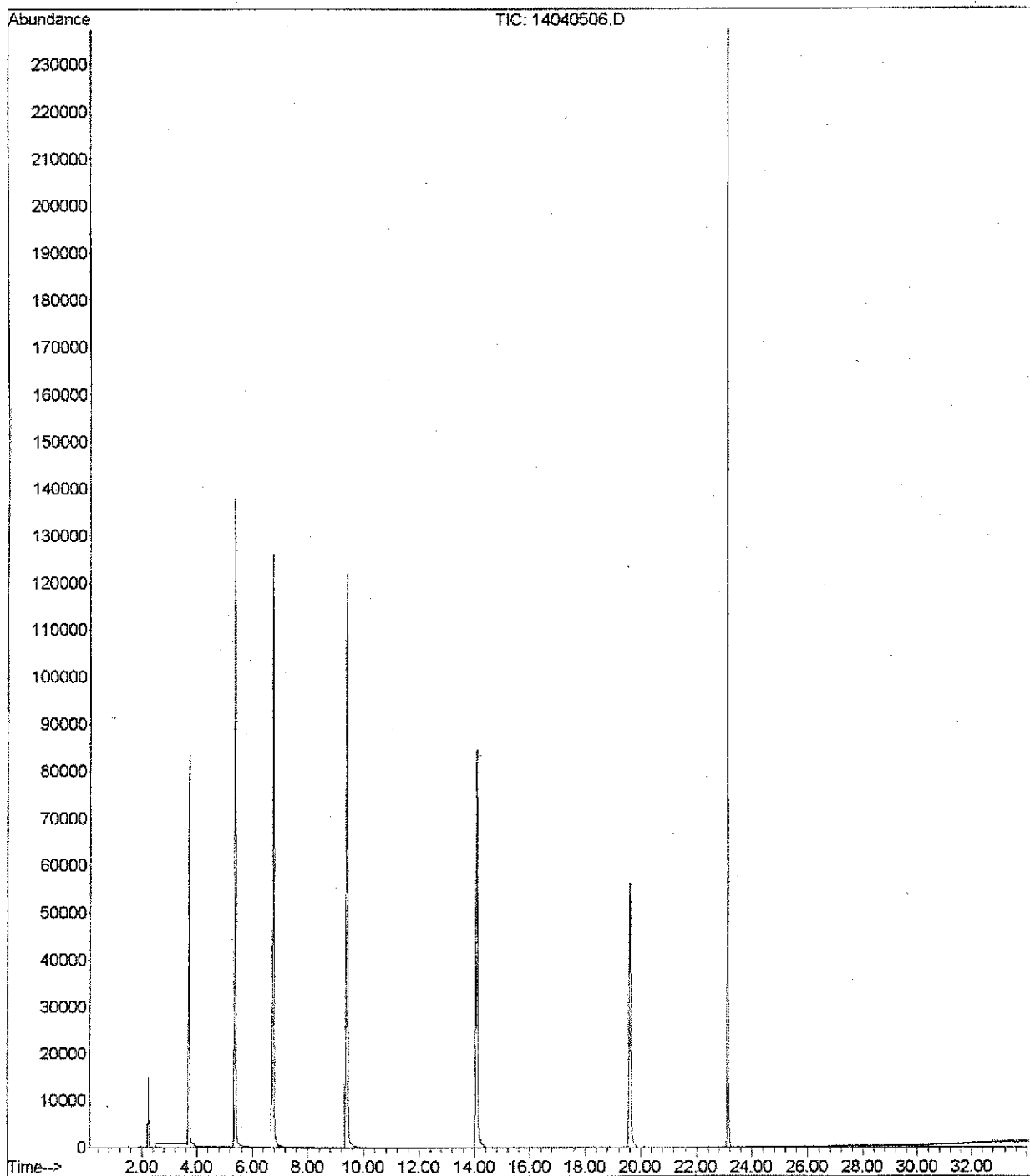


SOMA Environmental Engineering Inc. 2680 Bishop Dr., Suite 203 San Ramon CA, 94583	Project: 3519 Castro Valley Blvd Project Number: 2761 Project Manager: Joyce Bobek	Reported: 02-May-05 11:45
--	--	------------------------------

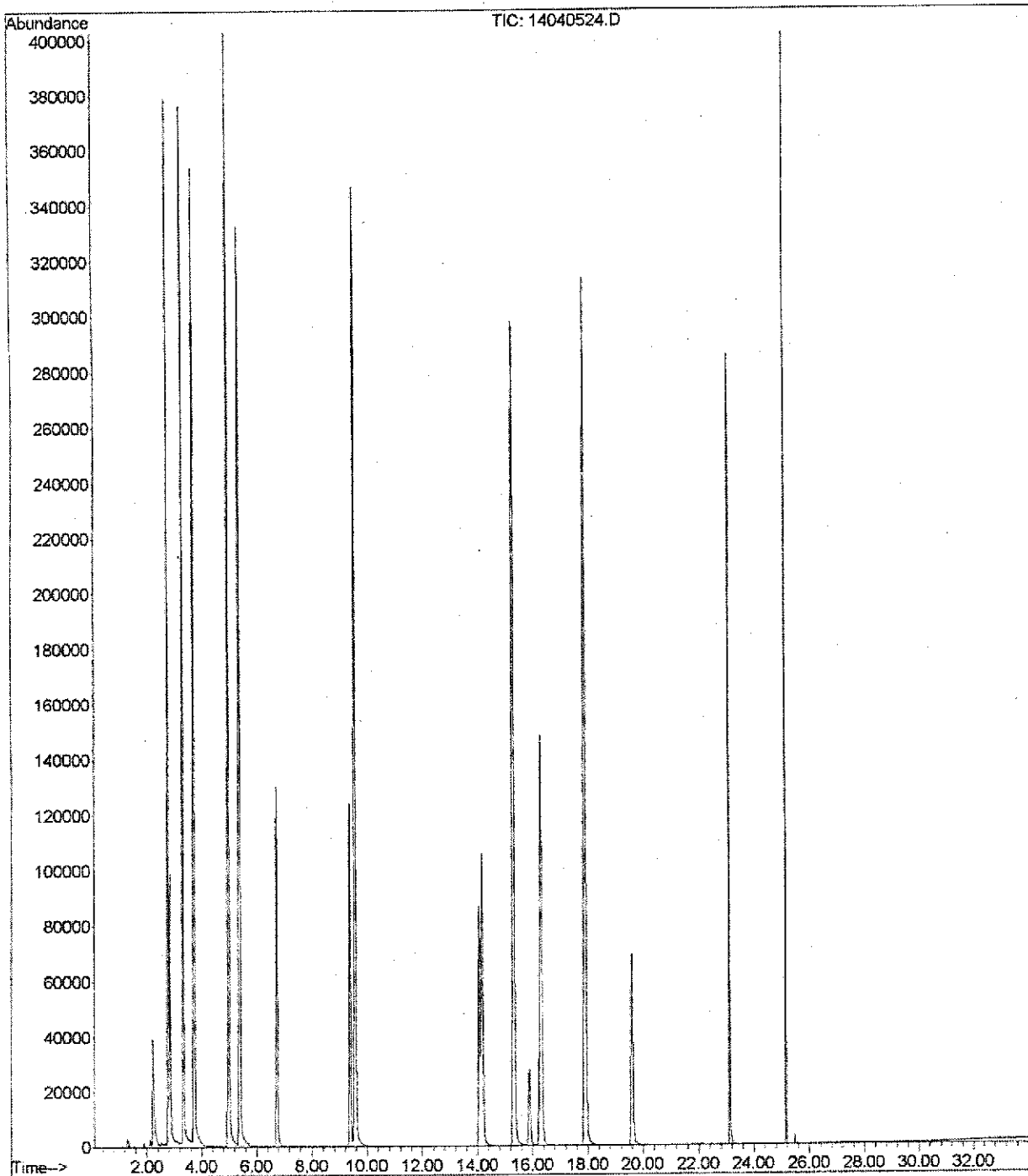
Notes and Definitions

- 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\2005-Apr-14-1453.b\14040506.D
Operator :
Acquired : 14 Apr 2005 6:53 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BD51401-BLK1
Misc Info :
Vial Number: 6



File :C:\MSDCHEM\1\DATA\2005-Apr-14-1453.b\14040524.D
Operator :
Acquired : 15 Apr 2005 8:05 am using AcqMethod VOCCOXY.M
Instrument : PAL GCMS
Sample Name: BD51401-BS1@btex
Misc Info :
Vial Number: 24



File :C:\MSDChem\1\DATA\2005-Apr-14-1453.b\14040503.D
Operator :
Acquired : 14 Apr 2005 4:39 pm using AcqMethod VOCOXY.M
Instrument : PAL GCMS
Sample Name: BD51401-BS1@gas
Misc Info :
Vial Number: 3

