



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

Third Quarter 2004
Groundwater Monitoring Report
Castro Valley Gasoline Service Station
3519 Castro Valley Boulevard
Castro Valley, California

September 13, 2004

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



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

September 13, 2004

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

Subject: #RO0000346

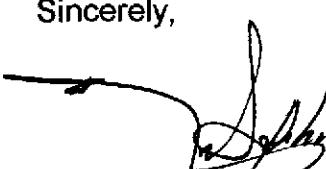
Site Address: 3519 Castro Valley Boulevard, Castro Valley, CA
Castro Valley Gasoline Service Station

Dear Mr. Schultz:

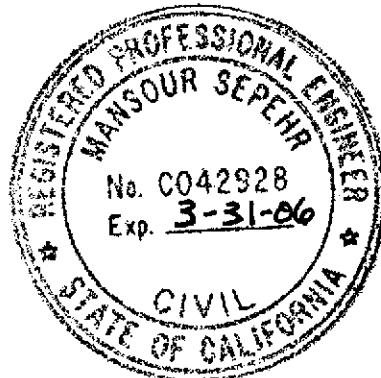
Enclosed for your review is SOMA's "Third Quarter 2004 Groundwater Monitoring Report" for the subject site.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 244-6600.

Sincerely,



Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

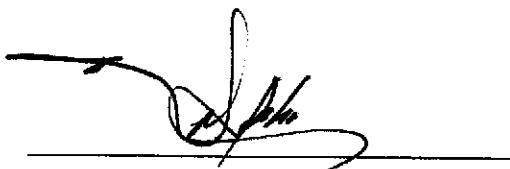


Enclosure

cc: Mr. Azim Shakoori w/enclosure
Mr. Leonard P. Niles, R.G./C.H.G., URS Corporation

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 Third Quarter 2004 groundwater monitoring event.



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



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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 is elevated 178 feet above mean sea level (msl).

This report summarizes the results of the groundwater monitoring event conducted at the Site on August 10, 2004. 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).

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 from the bottom of the excavation due to holes observed in former WOT, 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.

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.

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 location is 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 location of the newly installed wells. All site wells, which included newly installed wells SOMA-1 to SOMA-4, were surveyed by Kier and Wright Engineers Surveyors, of Pleasanton, California, on June 21, 2004. Appendix A shows the elevations and coordinates of the surveyed wells.

2.0 Field Activities

On August 10, 2004, 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 well (MW-7, SOMA-2 to

SOMA-4) were monitored. This was the first time SOMA monitored wells SOMA-1 to SOMA-4. 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.

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 A 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. SOMA's field crew delivered the groundwater samples to Curtis & Tompkins Laboratory, in Berkeley, California, on August 10, 2004.

3.0 Laboratory Analysis

Curtis & Tompkins, Ltd., a state certified laboratory, analyzed the groundwater samples for TPH-g, BTEX, MtBE, gasoline oxygenates, and lead scavengers. Samples for TPH-g measurement were prepared using EPA Method 5030B and analyzed using Method EPA 8015B. Samples for BTEX measurements were prepared using EPA Method 5030B and analyzed using EPA Method 8021B. Samples for MtBE, gasoline oxygenates, and lead scavengers were prepared using EPA Method 5030B and analyzed using EPA Method 8260B.

4.0 Results

The following sections provide the results of the field measurements and laboratory analyses for the August 10, 2004 groundwater monitoring event.

4.1 Field Measurements

Table 1 presents the calculated groundwater elevations in each monitoring well. The groundwater elevations ranged from 166.84 feet in monitoring well SOMA-3 to 171.52 feet in monitoring well MW-6. Table 1 also presents the historical groundwater elevations in different groundwater monitoring wells. As previously stated, the wells were surveyed on June 21, 2004. Further monitoring events will aid in determining the groundwater elevation trends in these new survey coordinates.

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 0.013 feet/feet. The groundwater flow direction is consistent with the previous monitoring event (Second Quarter 2004). Based on this new survey datum and newly installed well datum, the trend in the groundwater gradient will be better established in further monitoring events.

4.2 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 for monitoring wells ESE-2, MW-6, MW-7, SOMA-2, and SOMA-3. The highest TPH-g concentration was detected at 680 µg/L in well ESE-5. Figure 4 displays a contour map of the TPH-g concentrations in the groundwater on August 10, 2004.

As shown in Table 1, all BTEX analytes were either at low concentration levels or below the laboratory reporting limit throughout the Site. Figure 5 displays the contour map of benzene concentrations in the groundwater on August 10, 2004.

MtBE was below the laboratory reporting limit in wells MW-6 and SOMA-3. The highest MtBE concentration was detected in well SOMA-1 at 2,100 µg/L. Figure 6 displays the contour map of MtBE concentrations in the groundwater on August 10, 2004. The high MtBE concentrations in wells ESE-2 and SOMA-1 can be attributed 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 the 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, in general, TBA was below the laboratory reporting limit throughout the Site, with the exception of wells ESE-1, ESE-2, and SOMA-1. Figure 7 displays the contour map of TBA concentrations in the groundwater on August 10, 2004.

Gasoline oxygenates DIPE, ETBE, and ethanol, and lead scavengers 1,2-DCA and EDB were below the laboratory reporting limit in all of the groundwater samples collected during the Third Quarter 2004.

TAME was below the laboratory reporting limit throughout the Site, with the exception of wells ESE-2, SOMA-1, and off-site well MW-7. Figure 8 displays the map of TAME concentrations in the groundwater on August 10, 2004.

The following concentration trends were observed since the previous monitoring event.

- In well ESE-1, benzene was the only constituent that increased.
- In well ESE-2, MtBE, TBA, and TAME all decreased.
- In well ESE-5, TPH-g decreased and MtBE increased.
- In well MW-7, both MtBE and TAME increased.

Further monitoring events will aid in determining more detailed concentration trends for newly installed wells SOMA-1 to SOMA-4.

Tables 1 and Table 2 show further detailed concentration trends.

Appendix B displays the laboratory analytical results for each groundwater sample collected during the Third Quarter 2004 monitoring event.

Appendix C displays the historical groundwater elevations and the historical groundwater analytical data for the Site.

5.0 Conclusions & Recommendations

The findings of the Third Quarter 2004 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.

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)	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	Sep-03	177.69	NM	NA	NA	NA	NA	NA	NA
	Dec-03	177.69	168.37	1400	390	12	14	26.1	260
	Feb-04	177.69	169.98	3200	880	50	44	89	200
	May-04	177.69	167.50	1500	370	10	14	25.2	140
	Aug-04	180.24	169.83	460	390	7	8.1	15.4	110
ESE-2	Sep-03	178.23	NM	NA	NA	NA	NA	NA	NA
	Dec-03	178.23	168.26	<50	<0.5	<0.5	<0.5	<0.5	3400
	Feb-04	178.23	170.34	<50	<0.5	<0.5	<0.5	<0.5	3000
	May-04	178.23	167.53	<50	<0.5	<0.5	<0.5	<0.5	1100
	Aug-04	180.79	169.80	<50	<0.5	<0.5	<0.5	<0.5	550
ESE-5	Sep-03	176.26	167.78	970	10 C	<0.5	<0.5	5.3	34
	Dec-03	176.26	168.94	700	6.5	<0.5	3.1	2.7 C	34
	Feb-04	176.26	171.05	2400 H	41	2.8 C	18	2.4 C	29
	May-04	176.26	168.76	1500	2.6 C	<0.5	2.1 C	2.1 C	25
	Aug-04	178.80	170.52	680	<0.5	<0.5	<0.5	<0.5	33
MW-6	Sep-03	179.24	169.03	<50	<0.5	<0.5	<0.5	<0.5	<2.0
	Dec-03	179.24	169.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-04	179.24	171.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	May-04	179.24	169.49	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Aug-04	181.80	171.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	Sep-03	176.55	167.03	<50	<0.5	<0.5	<0.5	<0.5	460
	Dec-03	176.55	167.56	<50	<0.5	<0.5	<0.5	<0.5	420
	Feb-04	176.55	170.00	<50	<0.5	<0.5	<0.5	<0.5	330
	May-04	176.55	167.65	<50	<0.5	<0.5	<0.5	<0.5	630
	Aug-04	179.11	169.53	<50	<0.5	<0.5	<0.5	<0.5	750

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)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-1	Aug-04	180.95	169.42	84	<0.5	<0.5	1.5 C	2.2	2100
SOMA-2	Aug-04	178.99	168.30	<50	<0.5	<0.5	<0.5	<0.5	0.8
SOMA-3	Aug-04	176.81	166.84	<50	<0.5	<0.5	<0.5	<0.5	<0.5
SOMA-4	Aug-04	176.94	167.50	140	0.98	<0.5	7.8	<0.5	11

Notes:

< : Not detected above laboratory reporting limit.

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

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.

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

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	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
ESE-2	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
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
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
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

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-1	Aug-04	2300	<6.3	<6.3	53	<13000	<6.3	<6.3
SOMA-2	Aug-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
SOMA-3	Aug-04	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
SOMA-4	Aug-04	<10	<0.5	<0.5	<0.5	<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

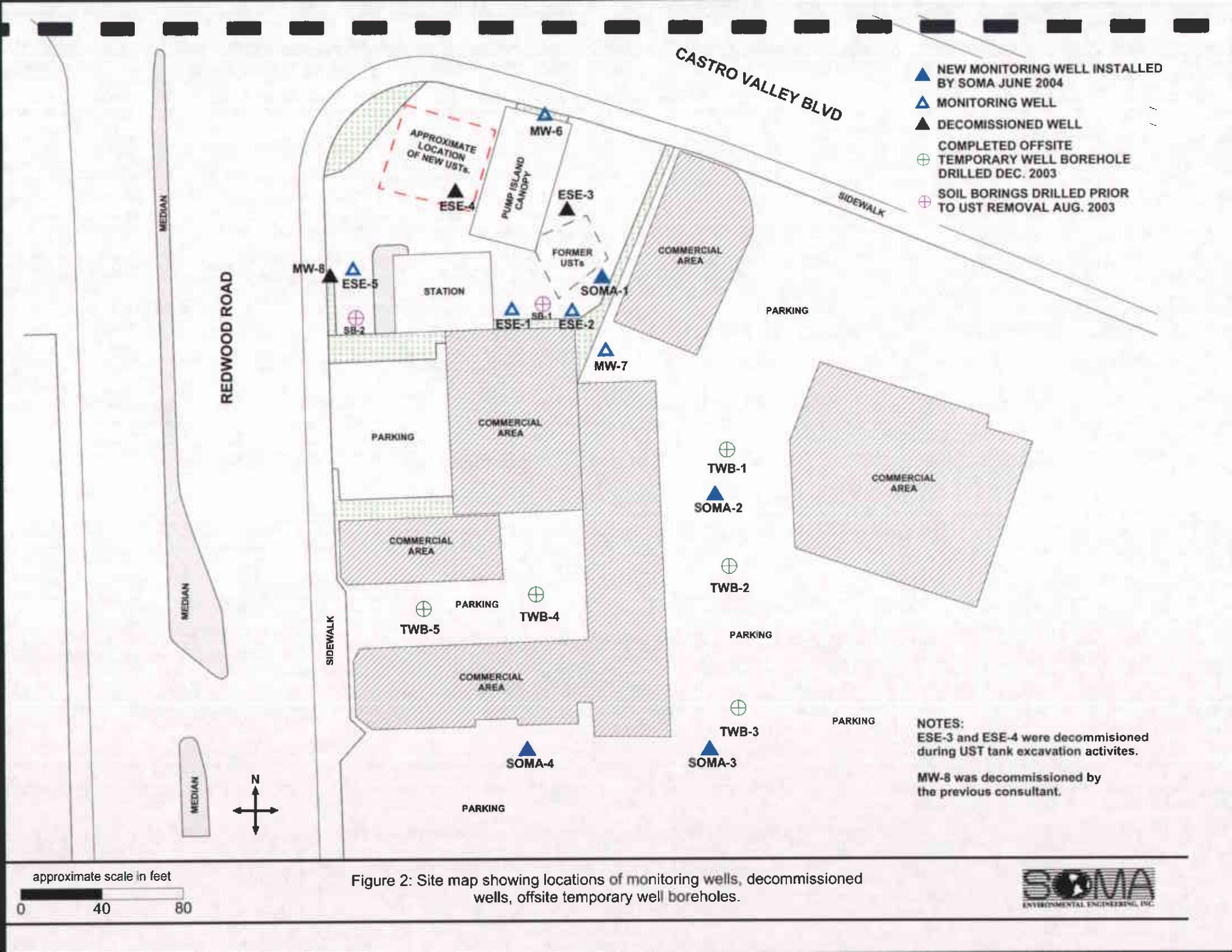
Figures



approximate scale in feet



Figure 1: Site vicinity map.



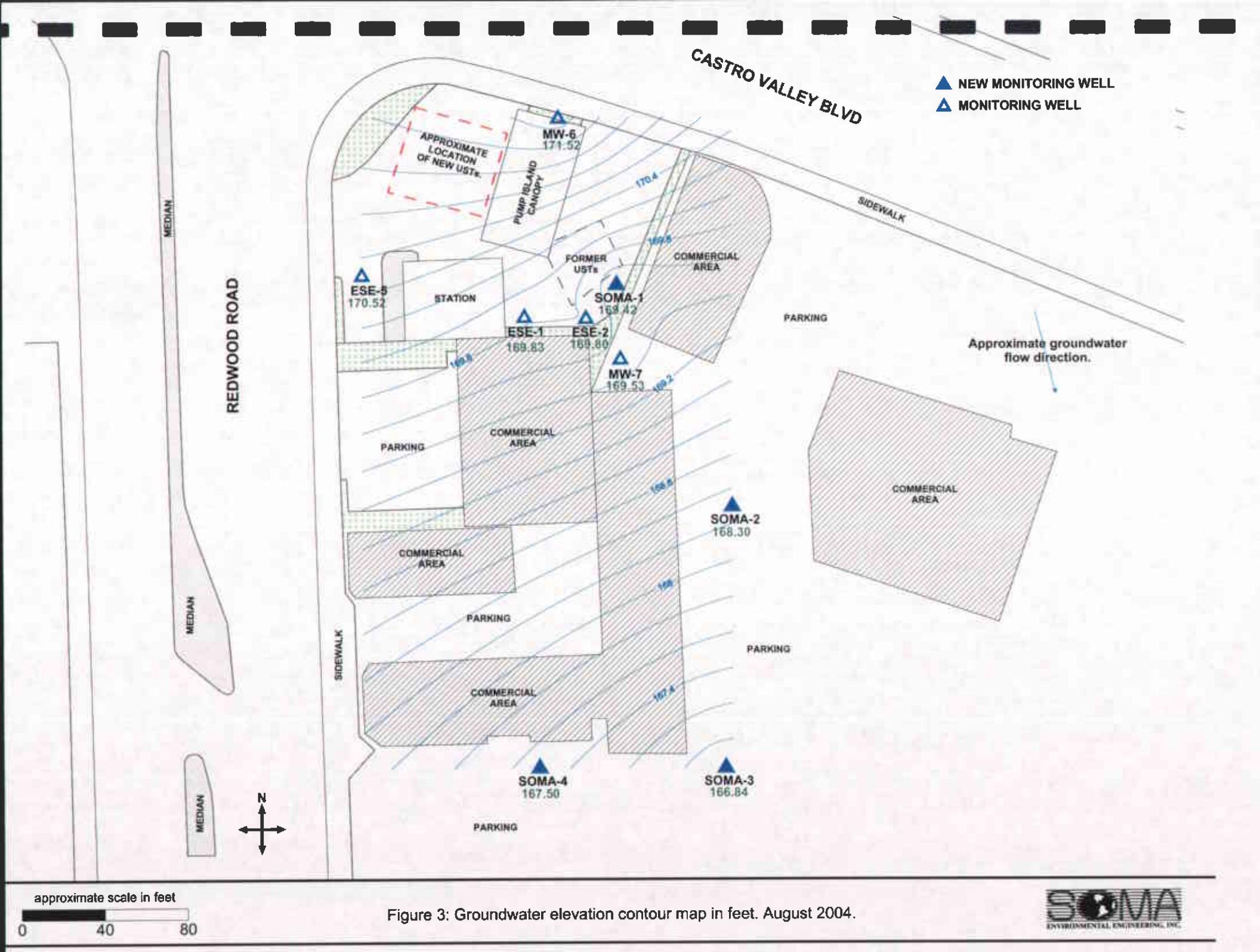


Figure 3: Groundwater elevation contour map in feet. August 2004.

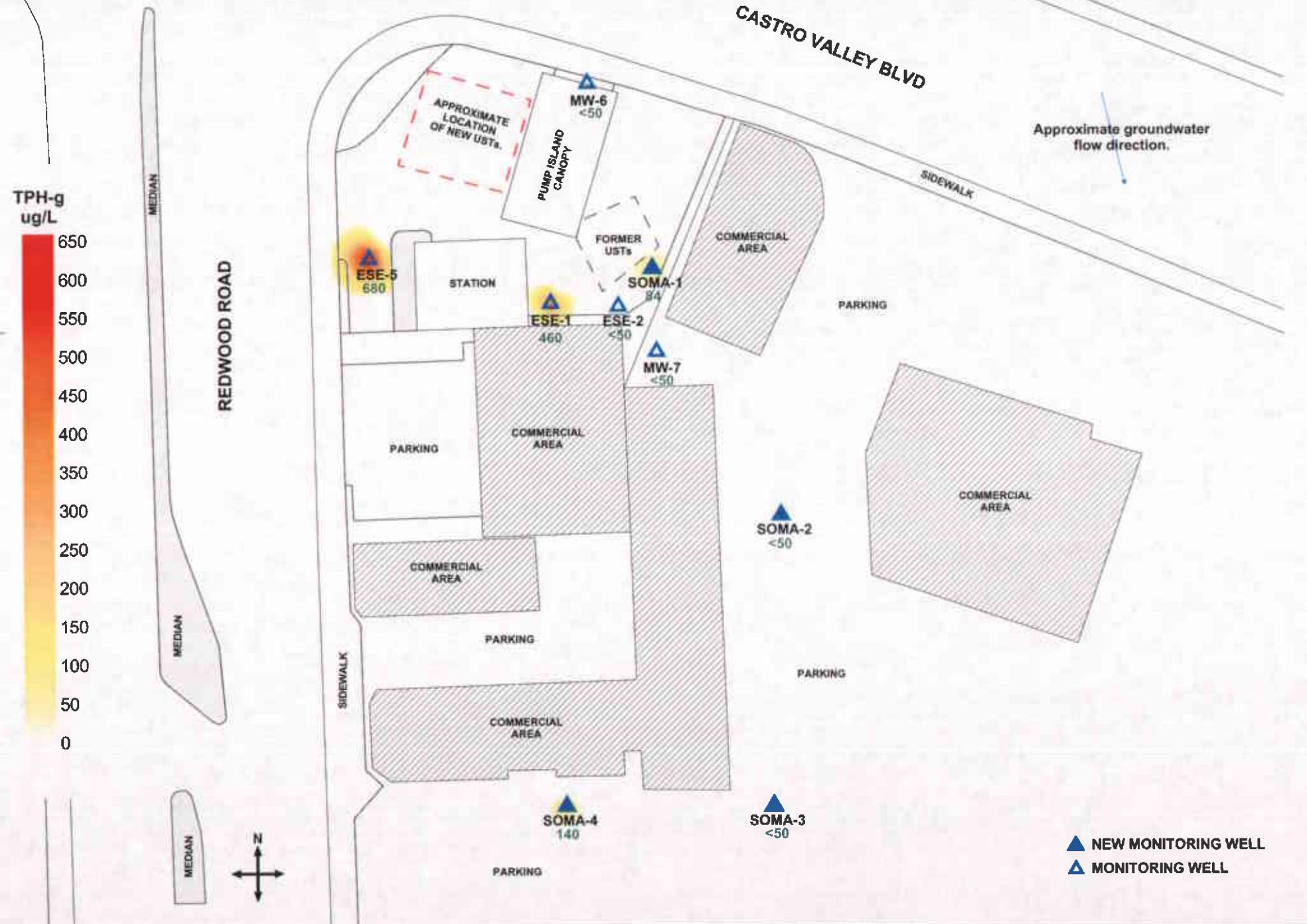


Figure 4: Contour map of TPH-g concentrations in groundwater. August 2004.

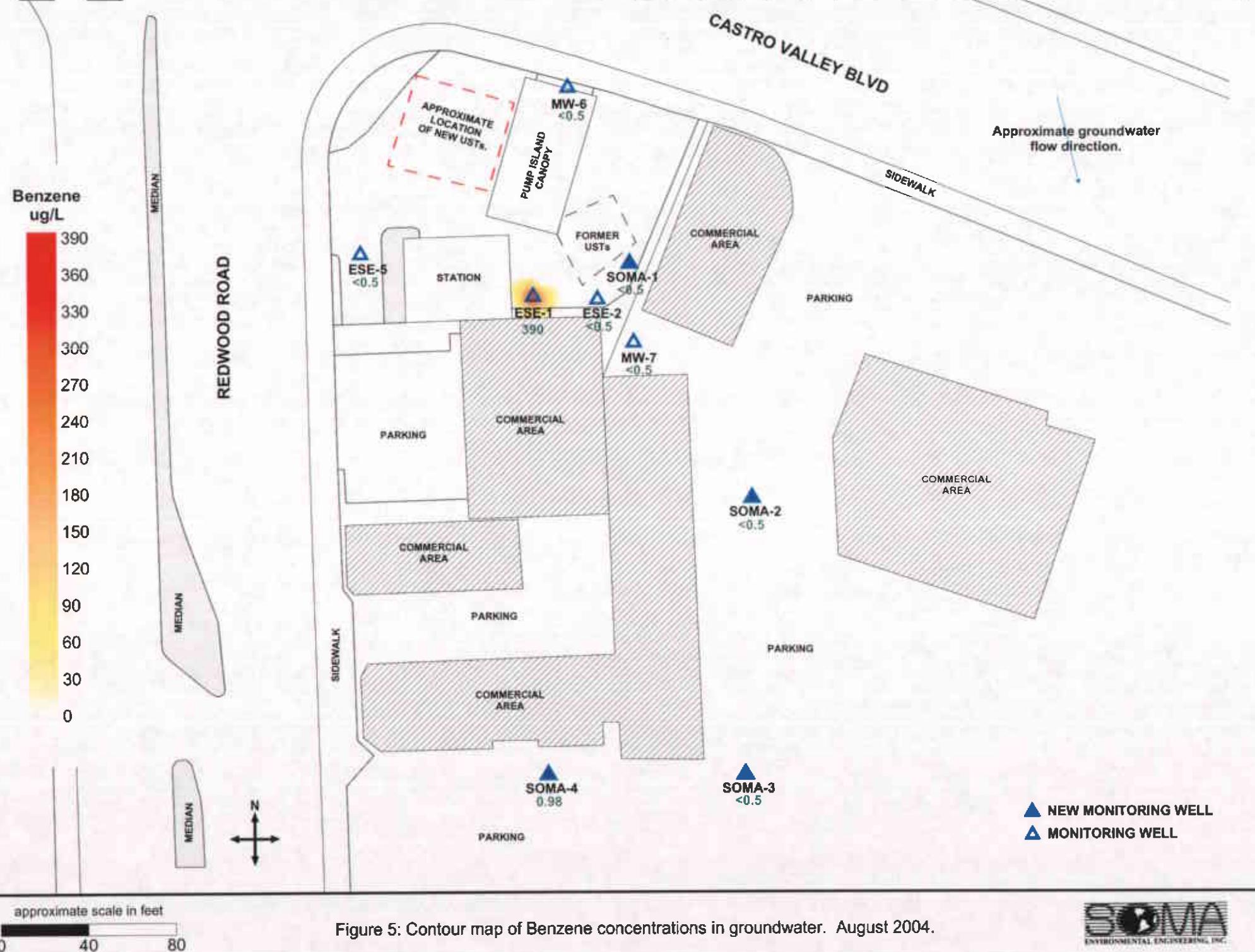


Figure 5: Contour map of Benzene concentrations in groundwater. August 2004.

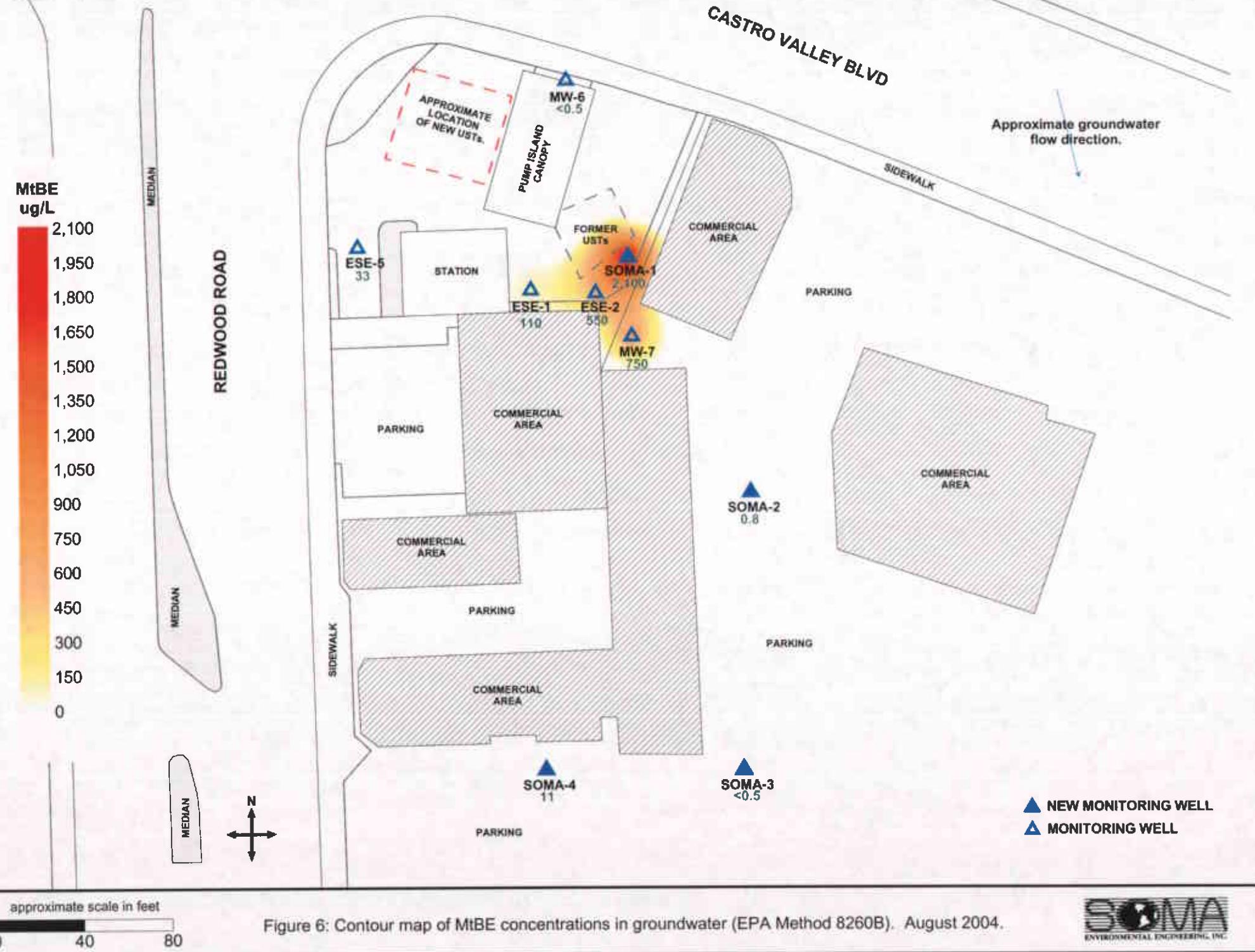


Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B). August 2004.

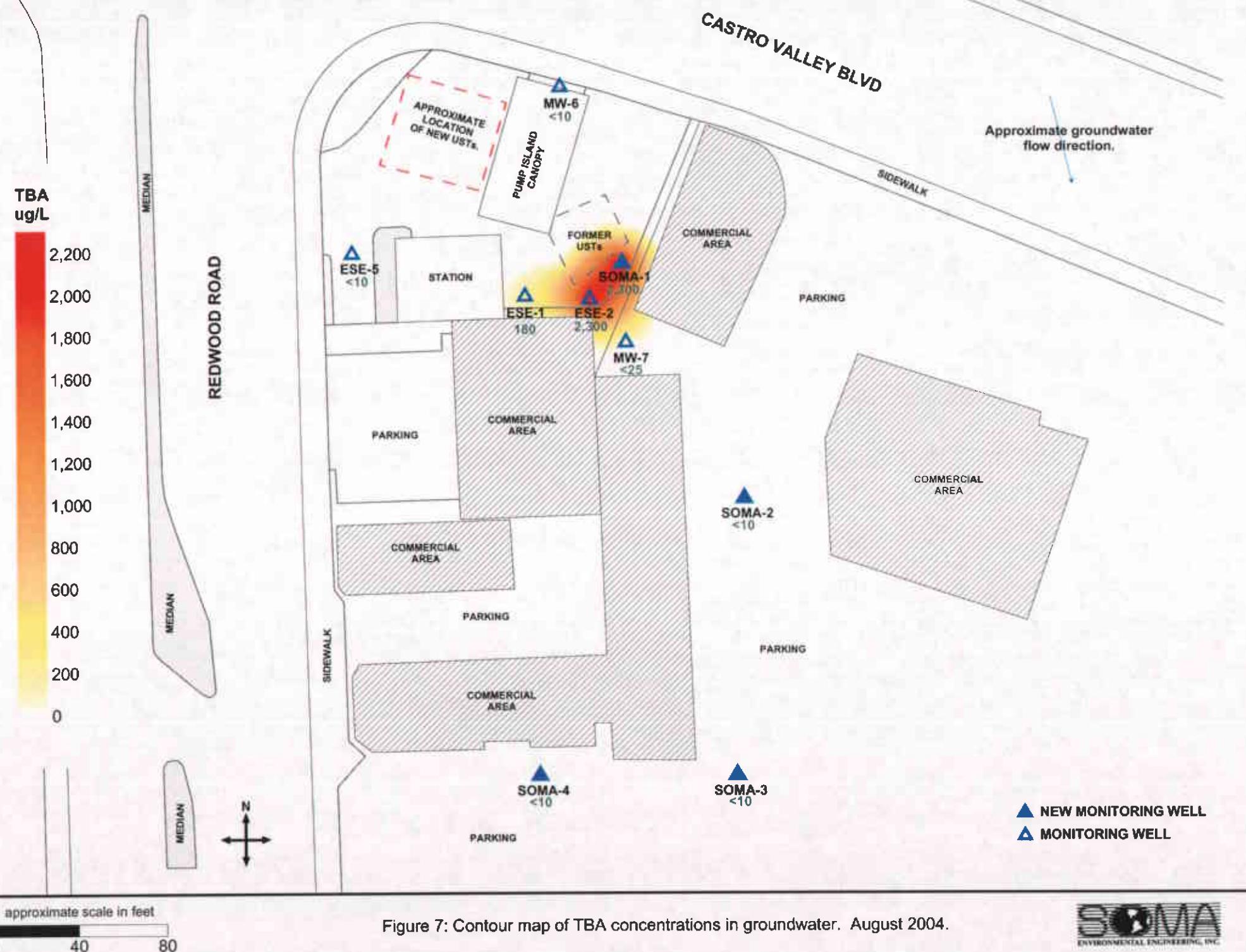


Figure 7: Contour map of TBA concentrations in groundwater. August 2004.



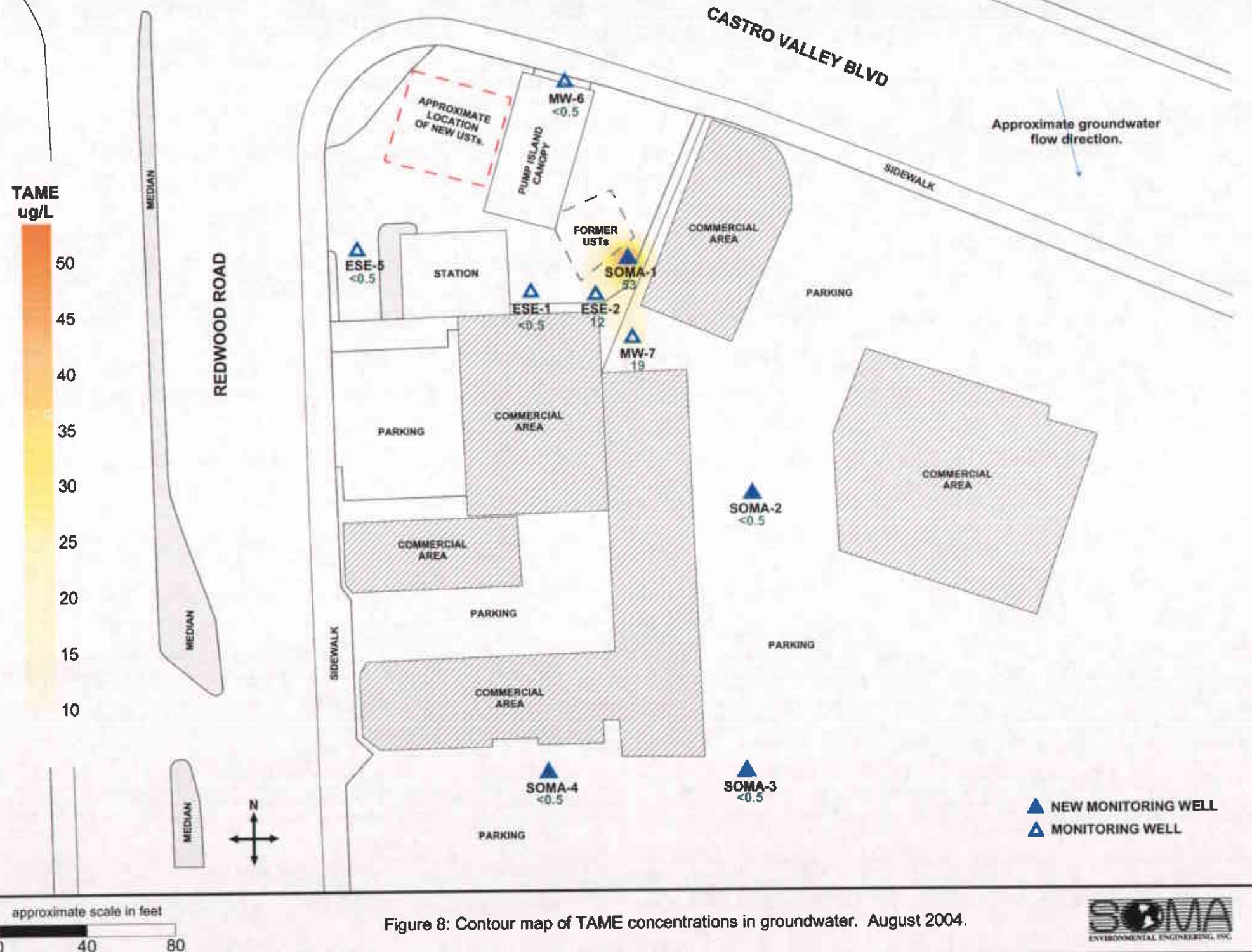


Figure 8: Contour map of TAME concentrations in groundwater. August 2004.



APPENDIX A

Table of Elevations & Coordinates on Monitoring Wells

Measured by Kier Wright Civil Engineers Surveyors, Inc.

&

Field measurements of physical and chemical properties of

groundwater samples collected during the

Third Quarter 2004

**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.

Kier & Wright Engineers Surveyors, Inc.
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
Fax (925) 249-6563

7/7/2004
9:01 AM
A04594-WELLS



ENVIRONMENTAL ENGINEERING, INC

ESE-1

Well No.: 2761 Project No.: 2761
Casing Diameter: 2 inches Address: 3519 Castro Valley Blvd
Depth of Well: 27.94 feet Castro Valley, CA
Top of Casing Elevation: 180.24 feet Date: August 10, 2004
Depth to Groundwater: 10.41 feet Sampler: Rouzbeh Alani
Groundwater Elevation: 169.83 feet
Water Column Height: 17.53 feet
Purged Volume: 9 gallons

*Terry Petruzzelli*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)
3:28 pm	Started Purging water			
3:30 pm	2.5	6.61	22.10	1030
3:32 PM	5.5	6.60	20.60	1010
3:35 PM	9	6.61	20.30	1030
3:38 PM	Samples			



ENVIRONMENTAL ENGINEERING, INC

Well No.: FSE-2
Casing Diameter: 2 inches
Depth of Well: 26.45 feet
Top of Casing Elevation: 180.79 feet
Depth to Groundwater: 10.99 feet
Groundwater Elevation: 169.80 feet
Water Column Height: 15.46 feet
Purged Volume: 8 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: August 10, 2004
Sampler: Rouzbeh Alani

Tony Perrini

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)
2:31 PM	Started		Purging well	
2:33 PM	2.0	6.74	24.10	1040
2:35 PM	4.5	6.68	21.30	1010
2:37 PM	8.0	6.68	20.70	1020
2:40 PM	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-5
Casing Diameter: 2 inches
Depth of Well: 23.80 feet
Top of Casing Elevation: 178.80 feet
Depth to Groundwater: 8.28 feet
Groundwater Elevation: 170.52 feet
Water Column Height: 15.52 feet
Purged Volume: 12 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: August 10, 2004
Sampler: Rouzbeh Alani

only period

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: cloudy

Sheen: No Yes Describe: _____

Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:06 PM	starts purging well			
12:08 PM	3.0	6.77	24.00	990
12:10 PM	6.0	6.71	22.50	1160
12:15 PM	12	6.77 6.71	22.10	1170
12:18 PM	Samples			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-6
 Casing Diameter: 2 inches
 Depth of Well: 29.30 feet
 Top of Casing Elevation: 186.80 feet
 Depth to Groundwater: 10.28 feet
 Groundwater Elevation: 171.52 feet
 Water Column Height: 19.02 feet
 Purged Volume: 12 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: August 10, 2004
 Sampler: Rouzbeh Alani

Tony Perini

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)
2:05 PM	Stirred	Sampling		
2:06 PM	1.5	7.07	24.0	830
2:09 PM	4.0	6.85	21.6	830
2:11 PM	8.0	6.85	20.5	820
2:14 PM	12	6.84	19.8	810
2:17 PM	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-7
Casing Diameter: 2 inches
Depth of Well: 29.00 feet
Top of Casing Elevation: 129.11 feet
Depth to Groundwater: 9.58 feet
Groundwater Elevation: 169.53 feet
Water Column Height: 19.42 feet
Purged Volume: 9 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: August 10, 2004
Sampler: Rouzbeh Alani

Tony Perini

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: cloudy

Sheen: No Yes Describe: _____

Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:38 AM	Started Purging			
11:39 AM	2.0	7.24	20.80	850
11:42 AM	5.5	6.73	19.40	870
11:45 AM	9	6.73	19.00	880
11:48 AM	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA 1
Casing Diameter: 2 inches
Depth of Well: 30.00 feet
Top of Casing Elevation: 180.95 feet
Depth to Groundwater: 11.53 feet
Groundwater Elevation: 169.42 feet
Water Column Height: 18.47 feet
Purged Volume: 11 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: August 10, 2004
Sampler: Rouzbeh Alani

Tony Perini

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)
2:53 PM	3 started	pumping	well	
2:54 PM	2.0	6.73	22.48	990
2:57 PM	6.0	6.70	22.10	1030
3:01 PM	11	6.70	20.30	1020
3:05 PM	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA 2
 Casing Diameter: 2 inches
 Depth of Well: 15.00 feet
 Top of Casing Elevation: 178.99 feet
 Depth to Groundwater: 10.69 feet
 Groundwater Elevation: 168.30 feet
 Water Column Height: 4.31 feet
 Purged Volume: 3.0 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: August 10, 2004
 Sampler: Rouzbeh Alani

Tony Perini

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)
11:12 AM	Scrubbed	Purging		
11:13 AM	1.0	7.51	20.60	1010
11:14 AM	3.0	7.34	20.40	1020
11:17 AM	Samples			DRIED



ENVIRONMENTAL ENGINEERING, INC

Well No.: 501A-3
 Casing Diameter: 2 inches
 Depth of Well: 15.00 feet
 Top of Casing Elevation: 176.81 feet
 Depth to Groundwater: 9.97 feet
 Groundwater Elevation: 166.84 feet
 Water Column Height: 5.03 feet
 Purged Volume: 7.0 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: August 10, 2004
 Sampler: Rouzbeh Alani

Tony Perini

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: nuddy

Sheen: No Yes Describe: _____

Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:51 AM	Started		Purging	
10:52 AM	1.0	7.00	21.50	1080
10:54 AM	4.0	6.90	21.60	1020
10:56 AM	7.0	6.84	21.10	990
11 AM	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: 50MA4
Casing Diameter: 2 inches
Depth of Well: 24.5 feet
Top of Casing Elevation: 176.94 feet
Depth to Groundwater: 9.44 feet
Groundwater Elevation: 167.50 feet
Water Column Height: 15.06 feet
Purged Volume: 13 gallons

Project No.: 2761
Address: 3519 Castro Valley Blvd
Castro Valley, CA
Date: August 10, 2004
Sampler: Rouzbeh Alani

Tony Perini

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: No Yes Describe: muddy

Sheen: No Yes Describe: _____

Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:21 AM	start to purging well			
10:23 AM	2.0	7.06	20.70	1000
10:26 AM	7.0	6.80	21.00	1040
10:28 AM	10	6.71	21.10	1060
10:32 AM	13	6.72	20.80	1050
10:35 AM	samples			

Appendix B

Chain of Custody form and laboratory report
for the Third Quarter 2004 monitoring event

A N A L Y T I C A L R E P O R T

Prepared for:

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

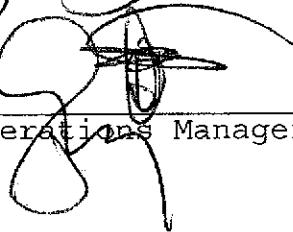
Date: 26-AUG-04
Lab Job Number: 173919
Project ID: 2761
Location: 3519 Castro Valley Blvd.

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

Reviewed by:


Project Manager

Reviewed by:


Operations Manager

This package may be reproduced only in its entirety.

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd.

Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

Project No: 2761

C&T LOGIN # } 770

Sampler: Tony Perkins / Courses
Plastic

Report To: Tony Perini

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

Turnaround Time: Standard

Telephone: 925-244-6600

Fax: 925-244-6601

Notes: EDF OUTPUT REQUIRED

GASOLINE OXYGENATES: TBA, DIPE, ETBE, TAME and MtBE

LEAD SCAVENGERS: 1,2-DCA, EDB

RELINQUISHED BY:

TONY PERCIVAL 8/10/04
Tony from 4:30 PM DATE/TIME

RECEIVED BY:

Lavanna Curtis 8/10/09 4:30
LAVANNA CURTIS DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

Received On ice
 Cold Ambient Infect



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04
Batch#:	93648	Analyzed:	08/11/04

Field ID: ESE-1 Lab ID: 173919-001
Type: SAMPLE Diln Fac: 5.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	460	250	EPA 8015B
Benzene	390	2.5	EPA 8021B
Toluene	7.0	2.5	EPA 8021B
Ethylbenzene	8.1	2.5	EPA 8021B
m,p-Xylenes	12	2.5	EPA 8021B
o-Xylene	3.4	2.5	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	105	70-141	EPA 8015B
Bromofluorobenzene (FID)	95	80-143	EPA 8015B
Trifluorotoluene (PID)	97	59-133	EPA 8021B
Bromofluorobenzene (PID)	94	76-128	EPA 8021B

Field ID: ESE-2 Lab ID: 173919-002
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	98	70-141	EPA 8015B
Bromofluorobenzene (FID)	101	80-143	EPA 8015B
Trifluorotoluene (PID)	96	59-133	EPA 8021B
Bromofluorobenzene (PID)	97	76-128	EPA 8021B

Field ID: ESE-5 Lab ID: 173919-003
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	680	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	124	70-141	EPA 8015B
Bromofluorobenzene (FID)	102	80-143	EPA 8015B
Trifluorotoluene (PID)	111	59-133	EPA 8021B
Bromofluorobenzene (PID)	97	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

D= Not Detected

RL= Reporting Limit

Page 1 of 4

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04
Batch#:	93648	Analyzed:	08/11/04

Field ID: MW-6 Lab ID: 173919-004
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	96	70-141	EPA 8015B
Bromofluorobenzene (FID)	102	80-143	EPA 8015B
Trifluorotoluene (PID)	94	59-133	EPA 8021B
Bromofluorobenzene (PID)	99	76-128	EPA 8021B

Field ID: MW-7 Lab ID: 173919-005
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	96	70-141	EPA 8015B
Bromofluorobenzene (FID)	97	80-143	EPA 8015B
Trifluorotoluene (PID)	95	59-133	EPA 8021B
Bromofluorobenzene (PID)	94	76-128	EPA 8021B

Field ID: SOMA-1 Lab ID: 173919-006
 Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	84	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	1.5 C	0.50	EPA 8021B
m,p-Xylenes	2.2	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	106	70-141	EPA 8015B
Bromofluorobenzene (FID)	101	80-143	EPA 8015B
Trifluorotoluene (PID)	98	59-133	EPA 8021B
Bromofluorobenzene (PID)	100	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Page 2 of 4



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04
Batch#:	93648	Analyzed:	08/11/04

Field ID: SOMA-2 Lab ID: 173919-007
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analyte
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analyses
Trifluorotoluene (FID)	93	70-141	EPA 8015B
Bromofluorobenzene (FID)	101	80-143	EPA 8015B
Trifluorotoluene (PID)	94	59-133	EPA 8021B
Bromofluorobenzene (PID)	97	76-128	EPA 8021B

Field ID: SOMA-3 Lab ID: 173919-008
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analyte
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analyses
Trifluorotoluene (FID)	95	70-141	EPA 8015B
Bromofluorobenzene (FID)	100	80-143	EPA 8015B
Trifluorotoluene (PID)	93	59-133	EPA 8021B
Bromofluorobenzene (PID)	98	76-128	EPA 8021B

Field ID: SOMA-4 Lab ID: 173919-009
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analyte
Gasoline C7-C12	140	50	EPA 8015B
Benzene	0.98	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	7.8	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analyses
Trifluorotoluene (FID)	102	70-141	EPA 8015B
Bromofluorobenzene (FID)	100	80-143	EPA 8015B
Trifluorotoluene (PID)	96	59-133	EPA 8021B
Bromofluorobenzene (PID)	101	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04
Batch#:	93648	Analyzed:	08/11/04

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC260781		

Analyst	Result	RL	Analyst
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analyst
Trifluorotoluene (FID)	97	70-141	EPA 8015B
Bromofluorobenzene (FID)	97	80-143	EPA 8015B
Trifluorotoluene (PID)	94	59-133	EPA 8021B
Bromofluorobenzene (PID)	93	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

D= Not Detected

RL= Reporting Limit

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GC07 TVH 'A' Data File RTX 502

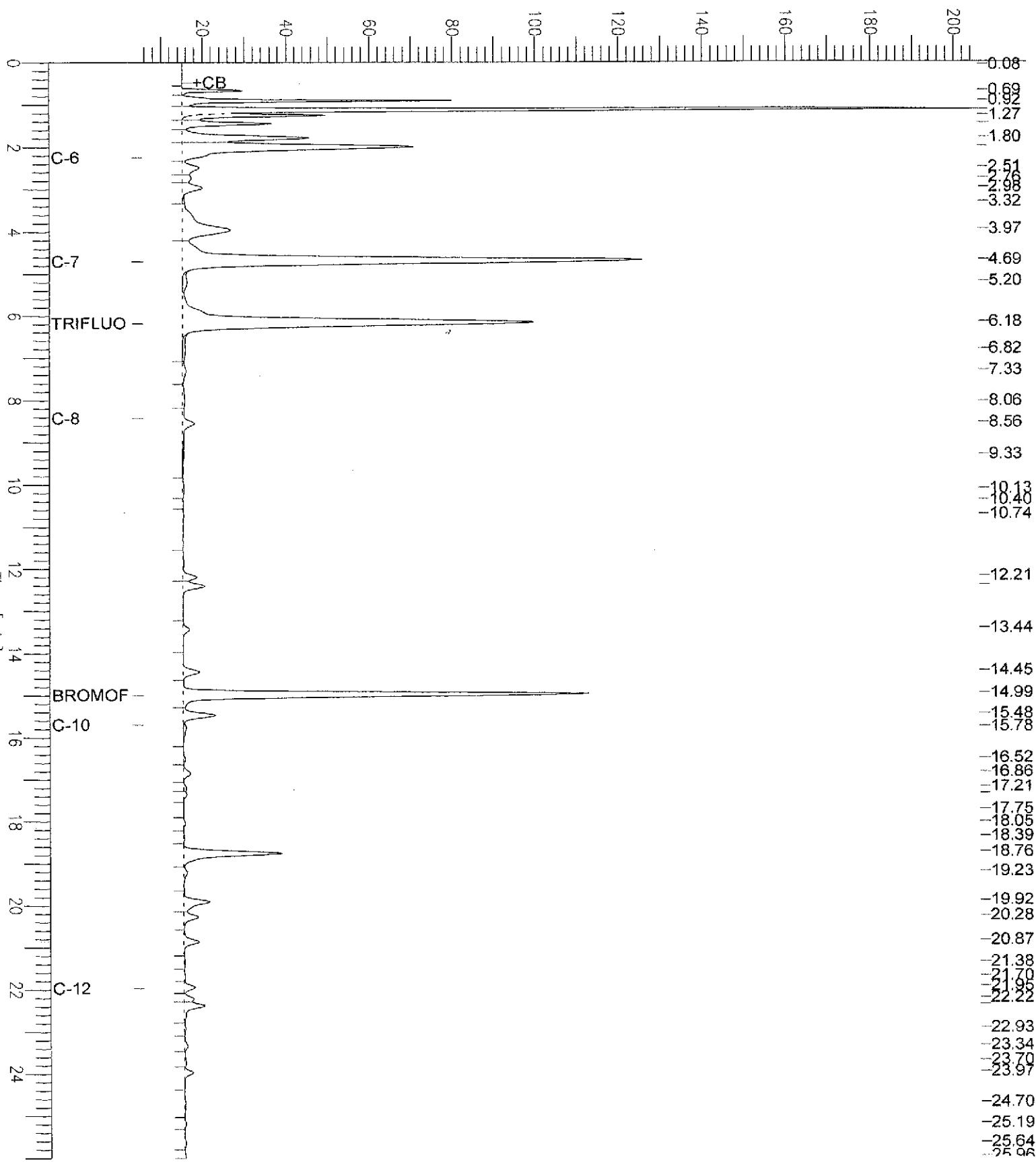
Sample Name : 173919-001,93648
 File Name : g:\gc07\data\224a005.raw
 Method : TVHBTEXE
 Start Time : 0.00 min
 Scale Factor: 1.0

Sample #: b1.3
 Date : 8/11/04 11:40 AM
 Time of Injection: 8/11/04 11:08 AM
 Low Point : 5.46 mV
 High Point : 205.81 mV
 Plot Offset: 5 mV
 Plot Scale: 200.4 mV

Page 1 of 1

ESE-1

Response [mV]



GC07 TVH 'A' Data File RTX 502

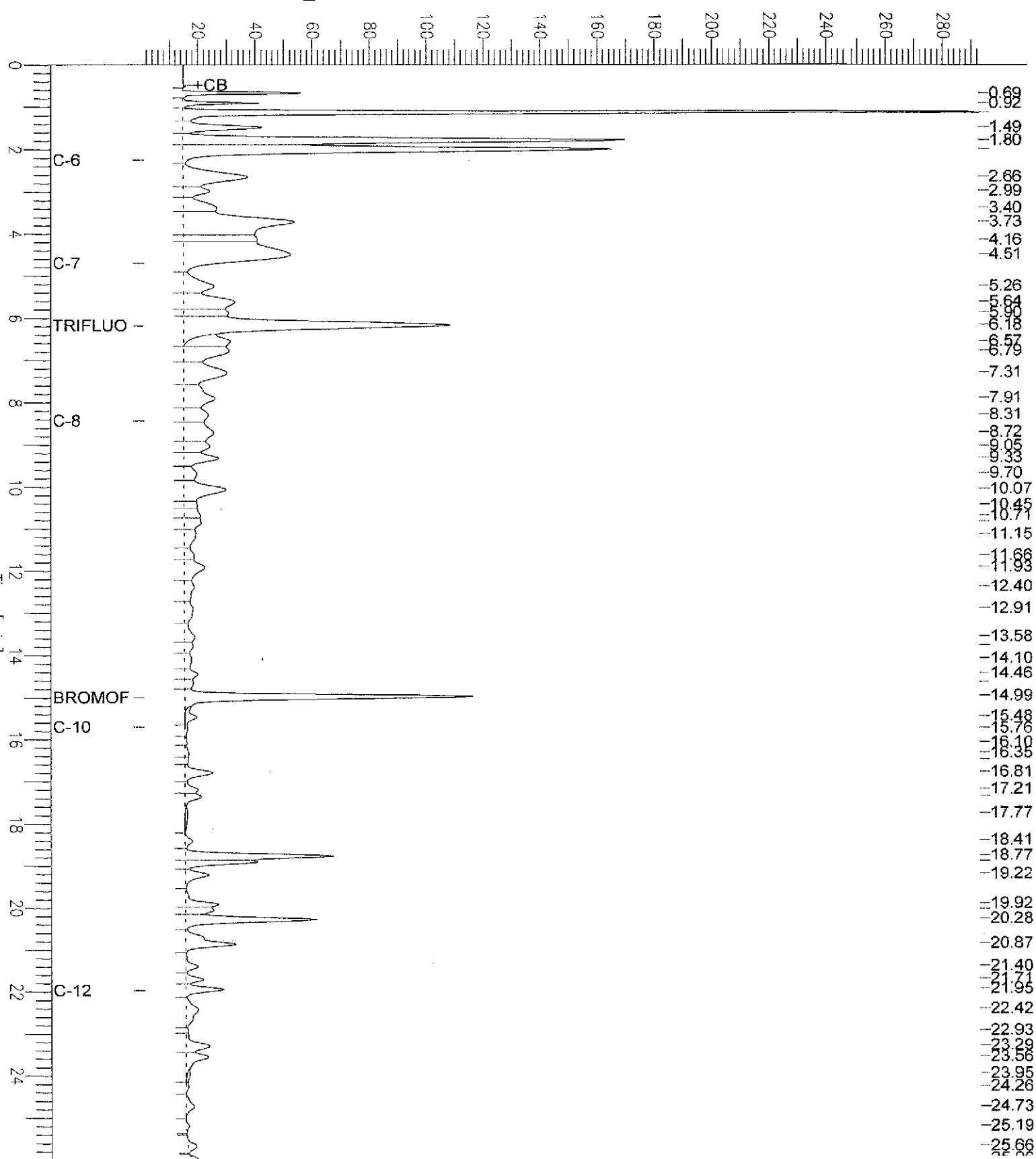
Sample Name : 173919-003,93648
 fileName : G:\GC07\DATA\224A007.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor: 1.0

Sample #: b1.3
 Date : 8/11/04 12:43 PM
 Time of Injection: 8/11/04 12:17 PM
 Low Point : 0.93 mV High Point : 292.47 mV
 Plot Offset: 1 mV Plot Scale: 291.5 mV

Page 1 of 1

ESE-5

Response [mV]



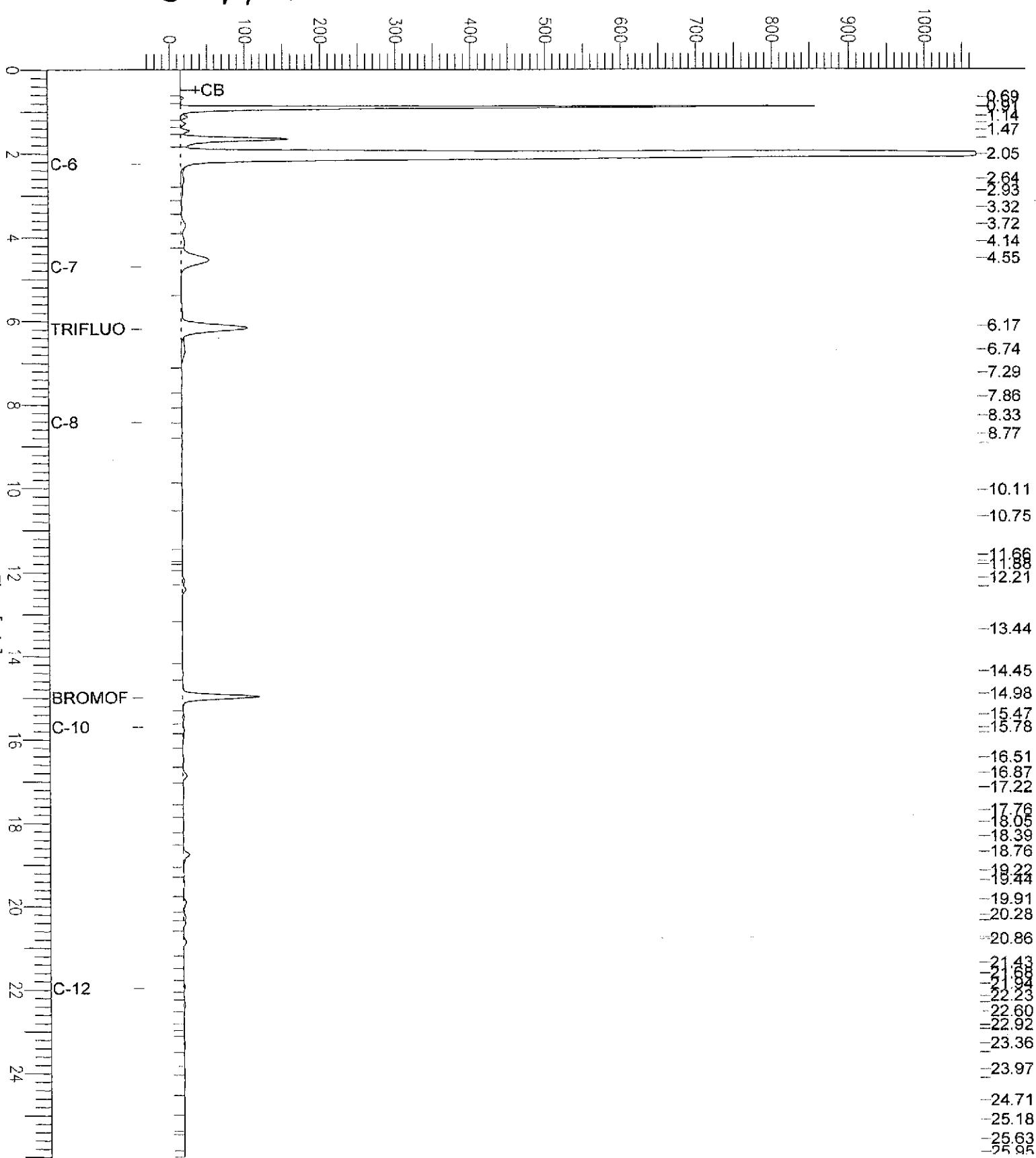
GC07 TVH 'A' Data File RTX 502

Sample Name : 173919-006,93648
File Name : G:\GC07\DATA\224A010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -38 mV

Sample #: b1.3 Page 1 of 1
Date : 8/11/04 02:28 PM
Time of Injection: 8/11/04 02:02 PM
Low Point : -37.96 mV High Point : 1068.32 mV
Plot Scale: 1106.3 mV

SOMA-1

Response [mV]



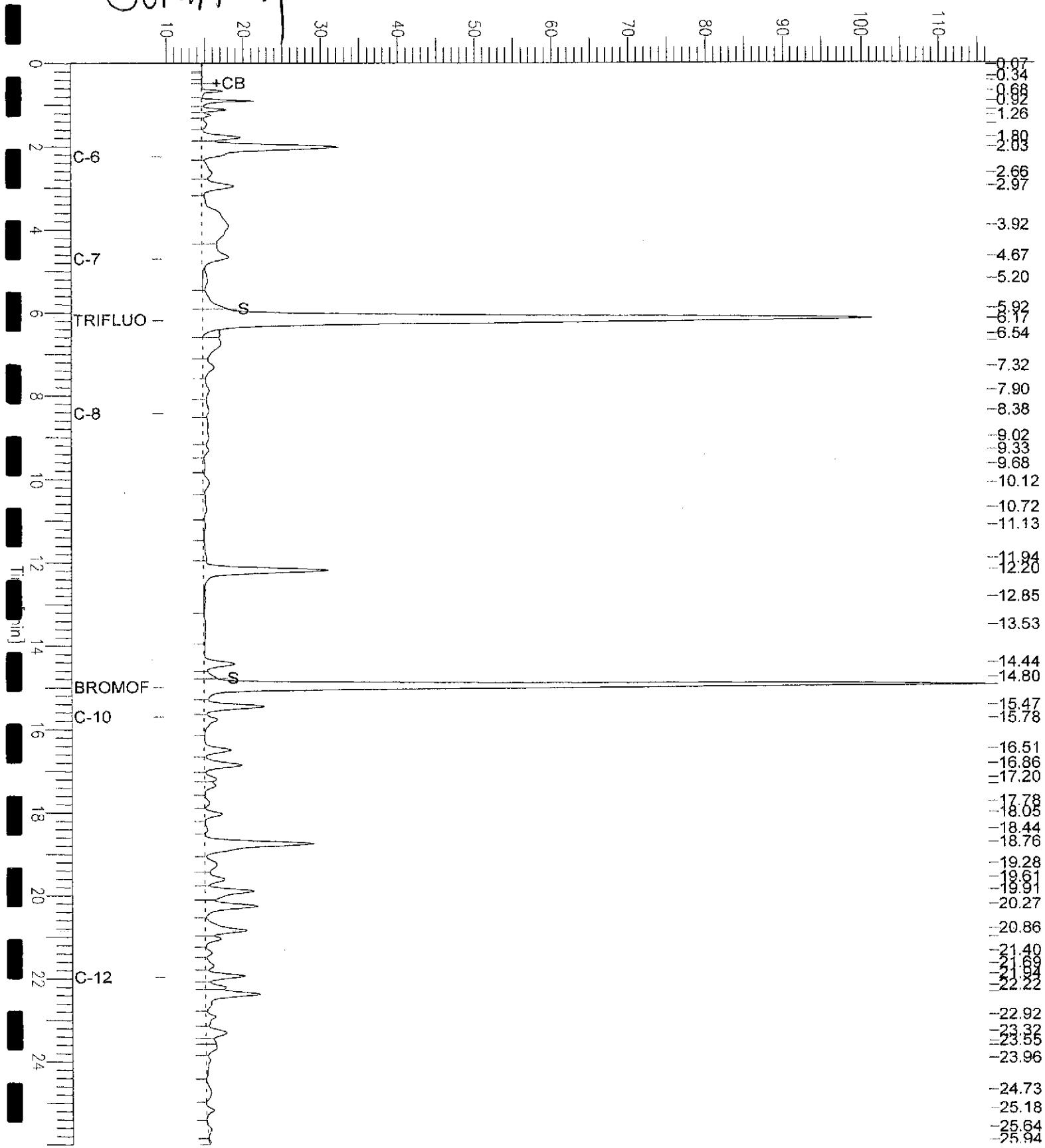
GC07 TVH 'A' Data File RTX 502

Sample Name : 173919-009,93648
 File Name : G:\GC07\DATA\224A017.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: b1.3 Page 1 of 1
 Date : 8/13/04 09:30 AM
 Time of Injection: 8/11/04 06:28 PM
 Low Point : 9.47 mV High Point : 116.18 mV
 Plot Scale: 106.7 mV

SOMA-A

Response [mV]



GC07 TVH 'A' Data File RTX 502

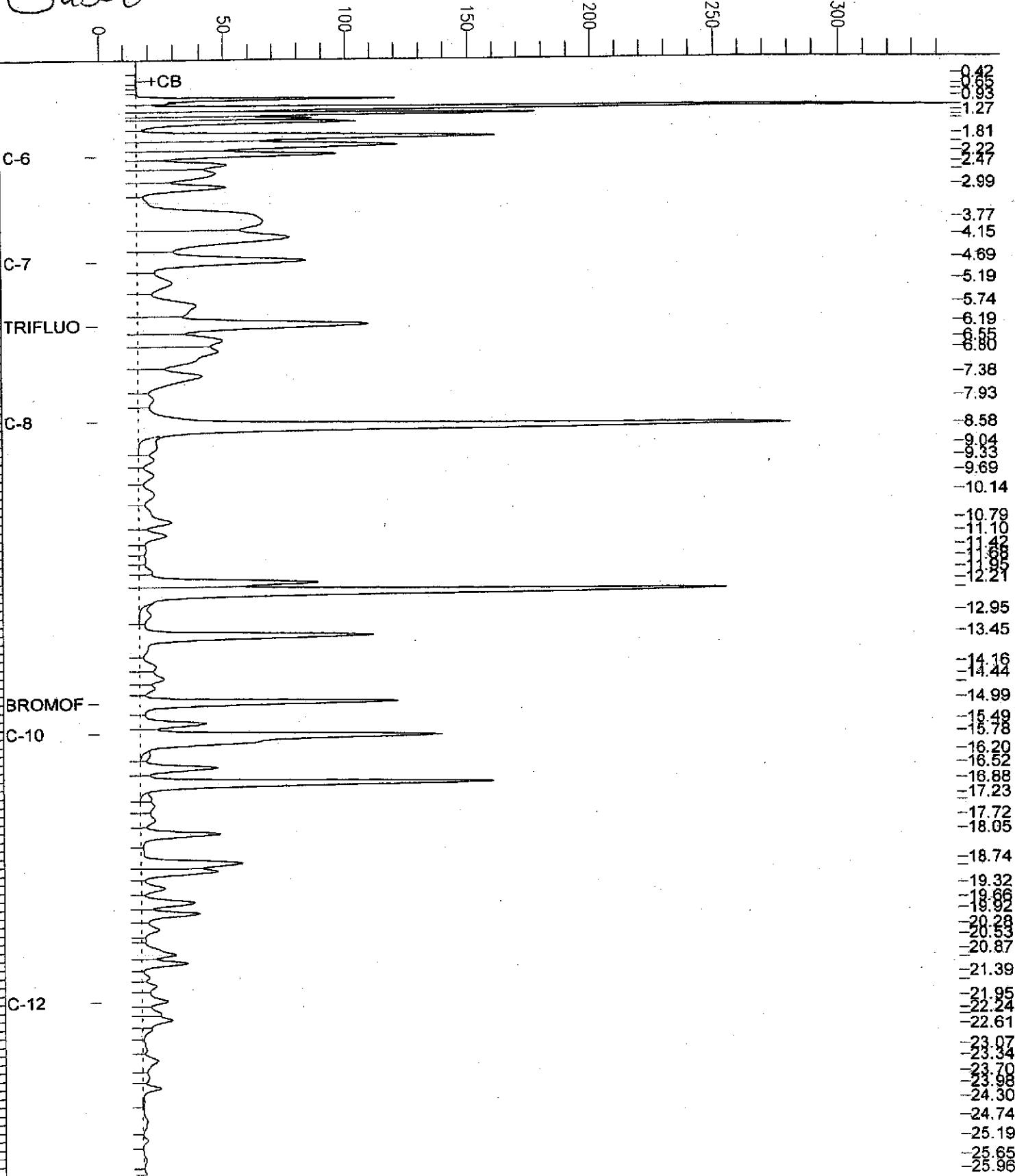
Sample Name : ccv/lcs qc260783, 93648, 04ws1486, 5/5000
 File Name : G:\GC07\DATA\224A003.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -1 mV

Sample #: Page 1 of 1
 Date : 8/11/04 10:23 AM
 Time of Injection: 8/11/04 09:57 AM
 Low Point : -1.22 mV High Point : 345.64 mV
 Plot Scale: 346.9 mV

Gasoline

Response [mV]

0 50 100 150 200 250 300





Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC260782	Batch#:	93648
Matrix:	Water	Analyzed:	08/11/04
Units:	ug/L		

Analyte	Spiked	Result	REC	limits
Benzene	20.00	19.69	98	80-120
Toluene	20.00	20.32	102	80-120
Ethylbenzene	20.00	20.83	104	80-120
m,p-Xylenes	20.00	20.52	103	80-120
o-Xylene	20.00	20.99	105	80-120

Surrogate	REC	limits
Trifluorotoluene (PID)	91	59-133
Bromofluorobenzene (PID)	99	76-128



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC260783	Batch#:	93648
Matrix:	Water	Analyzed:	08/11/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,937	97	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	70-141
Bromofluorobenzene (FID)	108	80-143



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	93648
MSS Lab ID:	173935-002	Sampled:	08/10/04
Matrix:	Water	Received:	08/11/04
Units:	ug/L	Analyzed:	08/11/04
Diln Fac:	1.000		

Type: MS Lab ID: QC260888

Analyte	MSS	Result	Spiked	Result	%REC	Limits
Gasoline C7-C12		12.28	2,000	1,868	93	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	70-141
Bromofluorobenzene (FID)	92	80-143

Type: MSD Lab ID: QC260889

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,892	94	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	70-141
Bromofluorobenzene (FID)	95	80-143

RPD= Relative Percent Difference

Page 1 of 1



Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Field ID: ESE-1 Diln Fac: 1.000
Type: SAMPLE Batch#: 93696
Lab ID: 173919-001 Analyzed: 08/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	180	10
MTBE	110	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-120
1,2-Dichloroethane-d4	85	80-120
Toluene-d8	97	80-120
Bromofluorobenzene	111	80-122

Field ID: ESE-2 Diln Fac: 5.000
Type: SAMPLE Batch#: 93650
Lab ID: 173919-002 Analyzed: 08/11/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	2,300	50
MTBE	550	2.5
Isopropyl Ether (DIPE)	ND	2.5
Ethyl tert-Butyl Ether (ETBE)	ND	2.5
Methyl tert-Amyl Ether (TAME)	12	2.5
1,2-Dichloroethane	ND	2.5
1,2-Dibromoethane	ND	2.5
Ethanol	ND	5,000

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	85	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	117	80-122

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Field ID: ESE-5 Diln Fac: 1.000
Type: SAMPLE Batch#: 93650
Lab ID: 173919-003 Analyzed: 08/11/04

Analyte	Result	RI
tert-Butyl Alcohol (TBA)	ND	10
MTBE	33	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	85	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	111	80-122

Field ID: MW-6 Diln Fac: 1.000
Type: SAMPLE Batch#: 93650
Lab ID: 173919-004 Analyzed: 08/11/04

Analyte	Result	RI
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	114	80-122

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Field ID: MW-7 Lab ID: 173919-005
Type: SAMPLE

Analyte	Result	RI	Diln Fac	Batch#	Analyzed
tert-Butyl Alcohol (TBA)	ND	25	2.500	93650	08/11/04
MTBE	750	2.5	5.000	93696	08/13/04
Isopropyl Ether (DIPE)	ND	1.3	2.500	93650	08/11/04
Ethyl tert-Butyl Ether (ETBE)	ND	1.3	2.500	93650	08/11/04
Methyl tert-Amyl Ether (TAME)	19	1.3	2.500	93650	08/11/04
1,2-Dichloroethane	ND	1.3	2.500	93650	08/11/04
1,2-Dibromoethane	ND	1.3	2.500	93650	08/11/04
Ethanol	ND	2,500	2.500	93650	08/11/04

Surrogate	REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	87	80-120	2.500	93650	08/11/04
1,2-Dichloroethane-d4	84	80-120	2.500	93650	08/11/04
Toluene-d8	96	80-120	2.500	93650	08/11/04
Bromofluorobenzene	113	80-122	2.500	93650	08/11/04

Field ID: SOMA-1 Diln Fac: 12.50
Type: SAMPLE Batch#: 93696
Lab ID: 173919-006 Analyzed: 08/13/04

Analyte	Result	RI
tert-Butyl Alcohol (TBA)	2,300	130
MTBE	2,100	6.3
Isopropyl Ether (DIPE)	ND	6.3
Ethyl tert-Butyl Ether (ETBE)	ND	6.3
Methyl tert-Amyl Ether (TAME)	53	6.3
1,2-Dichloroethane	ND	6.3
1,2-Dibromoethane	ND	6.3
Ethanol	ND	13,000

Surrogate	REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	117	80-122

A= Not Analyzed

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Field ID: SOMA-2 Diln Fac: 1.000
Type: SAMPLE Batch#: 93650
Lab ID: 173919-007 Analyzed: 08/11/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	0.8	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1.000

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	83	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	114	80-122

Field ID: SOMA-3 Diln Fac: 1.000
Type: SAMPLE Batch#: 93650
Lab ID: 173919-008 Analyzed: 08/11/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1.000

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	113	80-122

A= Not Analyzed

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Field ID: SOMA-4 Diln Fac: 1.000
Type: SAMPLE Batch#: 93650
Lab ID: 173919-009 Analyzed: 08/11/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	11	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	86	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	112	80-122

Type: BLANK Batch#: 93650
Lab ID: QC260790 Analyzed: 08/11/04
Diln Fac: 1.000

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	115	80-122

A= Not Analyzed

D= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Type: BLANK Lab ID: QC260791

Analyte	Result
tert-Butyl Alcohol (TBA)	NA
MTBE	NA
Isopropyl Ether (DIPE)	NA
Ethyl tert-Butyl Ether (ETBE)	NA
Methyl tert-Amyl Ether (TAME)	NA
1,2-Dichloroethane	NA
1,2-Dibromoethane	NA
Ethanol	NA

Surrogate	Result
Dibromofluoromethane	NA
1,2-Dichloroethane-d4	NA
Toluene-d8	NA
Bromofluorobenzene	NA

Type: BLANK Batch #: 93696
Lab ID: QC260985 Analyzed: 08/12/04
Fill Fac: 1.000

Analyte	Result	PPM
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1.000

Surrogate	REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	114	80-122

A= Not Analyzed
D= Not Detected
RL= Reporting Limit
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Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	08/10/04
Units:	ug/L	Received:	08/10/04

Type: BLANK Batch#: 93696
Lab ID: QC260986 Analyzed: 08/12/04
Miln Fac: 1.000

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	REC	Lim/RL
Dibromofluoromethane	86	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	112	80-122

A= Not Analyzed

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC260789	Batch#:	93650
Matrix:	Water	Analyzed:	08/11/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	124.6	100	74-135
MTBE	50.00	44.28	89	74-128
Isopropyl Ether (DIPE)	25.00	21.77	87	80-120
Ethyl tert-Butyl Ether (ETBE)	25.00	22.20	89	80-120
Methyl tert-Amyl Ether (TAME)	25.00	22.89	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	83	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	107	80-122



Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	93696
Units:	ug/L	Analyzed:	08/12/04
Diln Fac:	1.000		

Type: BS Lab ID: QC260983

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	118.0	94	74-135
MTBE	50.00	44.36	89	74-128
Isopropyl Ether (DIPE)	25.00	22.00	88	80-120
Ethyl tert-Butyl Ether (ETBE)	25.00	22.66	91	80-120
Methyl tert-Amyl Ether (TAME)	25.00	23.12	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	83	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC260984

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	109.0	87	74-135	8	25
MTBE	50.00	45.28	91	74-128	2	20
Isopropyl Ether (DIPE)	25.00	22.28	89	80-120	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	22.75	91	80-120	0	20
Methyl tert-Amyl Ether (TAME)	25.00	23.07	92	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	109	80-122

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173919	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	93650
MSS Lab ID:	173916-001	Sampled:	08/09/04
Matrix:	Water	Received:	08/10/04
Units:	ug/L	Analyzed:	08/11/04
Diln Fac:	1.000		

Type: MS Lab ID: QC260792

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.600	125.0	122.8	98	53-153
MTBE	<0.06800	50.00	44.46	89	73-120
Isopropyl Ether (DIPE)	<0.04500	25.00	21.64	87	70-120
Ethyl tert-Butyl Ether (ETBE)	<0.06100	25.00	22.25	89	71-120
Methyl tert-Amyl Ether (TAME)	<0.06500	25.00	22.44	90	72-120

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-120
1,2-Dichloroethane-d4	85	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	115	80-122

Type: MSD Lab ID: QC260793

Analyte	Spiked	Result	%REC	Limits	RPD	Limits
tert-Butyl Alcohol (TBA)	125.0	117.3	94	53-153	5	26
MTBE	50.00	44.76	90	73-120	1	20
Isopropyl Ether (DIPE)	25.00	21.59	86	70-120	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	22.29	89	71-120	0	20
Methyl tert-Amyl Ether (TAME)	25.00	22.22	89	72-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-120
1,2-Dichloroethane-d4	86	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	112	80-122

RPD= Relative Percent Difference

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Appendix C

Historical groundwater elevations
and
Groundwater analytical results

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB	
ESE-1 (c)	10/5/1992	177.69	11.22	166.47	2100	370	150	17	110	—	(e)	— PACE	
ESE-1D (d)	10/5/1992	—	—	—	2300	370	160	16	110	—	(e)	— PACE	
ESE-1	4/1/1993	177.69	8.79	168.90	5900	1500	410	110	390	—	(e)	— PACE	
ESE-1	6/29/1993	177.69	10.34	167.35	7600	2900	390	130	460	—	(e)	— PACE	
ESE-1	9/23/1993	177.69	10.91	166.78	2000	490	40	20	56	600	(e)(l)	— PACE	
QC-1 (d)	9/23/1993	—	—	—	1500	420	39	19	56	550	(e)(l)	— PACE	
ESE-1	12/10/1993	177.69	9.93	167.76	1800	480	42	19	66	921	(e)(l)	3.2 PACE	
QC-1 (d)	12/10/1993	—	—	—	1500	380	38	17	55	770	(e)(l)	— PACE	
ESE-1	2/17/1994	177.69	9.64	168.05	1900	380	48	24	80	585	(e)(l)	— PACE	
QC-1 (d)	2/17/1994	—	—	—	2200	430	42	19	65	491	(e)(l)	— PACE	
ESE-1	8/8/1994	177.69	11.72	165.97	2100	450	46	16	50	760	(e)	5.1 PACE	
ESE-1	10/12/1994	177.69	10.48	167.21	760	240	16	51	39	230	(e)	3.5 PACE	
ESE-1	1/19/1995	177.69	7.77	169.92	.840	600	120	22	58	—	8.0	ATI	
ESE-1	5/2/1995	177.69	8.69	169.00	2000	640	67	24	98	—	8.5	ATI	
ESE-1	7/28/1995	177.69	10.12	167.57	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	7.9	ATI	
ESE-1	11/17/1995	177.69	10.57	167.12	200	3.4	ND<1.0	1	ND<2.0	600	7.7	ATI	
ESE-1	2/7/1996	177.69	7.41	170.28	750	370	23	21	64	680	2.5	SPL	
ESE-1	4/23/1996	177.69	9.12	168.57	310	100	ND<1	ND<1	ND<1	1500	6.3	SPL	
ESE-1	7/9/1996	177.69	10.12	167.57	730	230	74	13	63	750	2.9	SPL	
ESE-1	10/10/1996	177.69	10.80	166.89	420	26	1.6	7.3	12	430	7.4	SPL	
ESE-1	1/20/1997	177.69	8.52	169.17	660	290	4.2	13	36	450	5.9	SPL	
ESE-1	4/25/1997	177.69	9.77	167.92	410	ND<0.5	ND<1.0	ND<1.0	ND<1.0	580	5.3	SPL	
ESE-1	7/18/1997	177.69	10.55	167.14	420	ND<0.5	ND<1.0	ND<1.0	ND<1.0	370	5.0	SPL	
ESE-1	10/27/1997	177.69	10.36	167.33	300	56	ND<1.0	6.5	ND<1.0	220	4.8	SPL	
ESE-1	1/22/1998	177.69	7.52	170.17	4200	440	9	15	17.7	1300	4.2	SPL	
ESE-1	4/23/1998	177.69	8.80	168.89	15000	3400	190	910	900	4900	4.2	SPL	
QC-1	4/23/1998	—	—	—	15000	2800	140	730	730	4400	—	SPL	
ESE-1	7/29/1998	177.69	9.73	167.96	—	—	—	—	—	—	—	—	
ESE-1	7/30/1998	—	—	—	15000	ND<2.5	ND<5.0	ND<5.0	ND<5.0	15000	—	—	
ESE-1	12/17/1998	177.69	9.51	168.18	2400	73	1.0	2.8	4.6	2000/2500*	4.0	SPL	
ESE-1	3/19/1999	177.69	8.65	169.04	4700	58	ND<1.0	ND>1.0	ND<1.0	4700	—	SPL	
ESE-1	6/23/1999	177.69	10.51	167.18	600	170	ND<1.0	7.2	5.0	3900	—	SPL	
ESE-1	9/27/1999	177.69	10.32	167.37	920	200	ND<25	ND<25	ND<25	4900	—	SPL	
ESE-1	12/9/1999	177.69	10.24	167.45	460	130	1.2	5.2	1.5	5100	—	SPL	
ESE-1	3/9/2000	177.69	7.72	169.97	3000	(j)	1300	120	80	140	7300	—	PACE
ESE-1	6/8/2000	177.69	9.40	168.29	2900	540	9.7	20	17	5200	—	PACE	
ESE-1	9/18/2000	177.69	10.05	167.64	890	3.4	ND<0.5	1.4	ND<0.5	2800	—	PACE	

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB	
ESE-1	12/14/2000	177.69	8.20	169.49	1600	11.1	ND<0.5	ND<0.5	ND<0.5	2730	—	PACE	
ESE-1	3/21/2001	177.69	9.75	167.94	5700	2.28	ND<0.5	0.51	ND<1.5	6810	—	PACE	
ESE-1	6/18/2001	177.69	10.21	167.48	2000	152	0.669	3.62	2.34	1980	—	PACE	
ESE-1	9/18/2001	177.69	10.30	167.39	2500	57.1	ND<5.0	6.25	ND<15	2090	—	PACE	
ESE-1	12/13/2001	177.69	9.82	167.87	2800	208	6.05	8.54	9.66	2030	—	PACE	
ESE-1	3/14/2002	177.69	9.10	168.59	1800	140	6.31	4.5	9.41	1970	—	PACE	
ESE-1	6/19/2002	177.69	9.92	167.77	1100	220	2.02	4.23	3.8	1280	—	PACE	
ESE-1	9/10/02*	177.69	10.21	167.48	490	39	2.9	ND<2.0	4.9	670	—	SEQ	
ESE-1	12/16/2002	177.69	8.56	169.13	730	140	6.0	3.2	9.1	670	—	SEQ	
ESE-1	3/11/2003	177.69	9.40	168.29	1700	490	21	22	41	530	—	SEQ	
ESE-1	6/17/2003	(n)	177.69	9.86	167.83	1300	140	ND<10	ND<10	ND<10	480	—	SEQ

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-2	10/5/1992	178.23	11.68	166.55	300	5.4	16	3.9	.45	—	(i)	— PACE
ESE-2	4/1/1993	178.23	9.17	169.06	240	27	ND<0.5	17	2.6	123	(e)(i)	— PACE
ESE-2	6/29/1993	178.23	10.88	167.35	1700	260	24	110	23	—	(i)	— PACE
QC-1 (d)	6/29/1993	—	—	1300	240	17	110	25	—	(i)	—	PACE
ESE-2	9/23/1993	178.23	11.56	166.67	240	3.1	0.5	0.6	2.5	643	(e)(i)	— PACE
ESE-2	12/10/1993	178.23	10.48	167.75	250	2.4	2.4	1.5	11	940	(e)(i)	2.6 PACE
ESE-2	2/17/1994	178.23	10.06	168.17	900	ND<0.5	ND<0.5	ND<0.5	ND<0.5	930	(e)(i)	— PACE
ESE-2	8/8/1994	178.23	11.11	167.12	750	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1400	(e)(i)	— PACE
ESE-2	10/12/1994	178.23	11.31	166.92	1700	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3000	(e)	5.1 PACE
ESE-2	1/19/1995	178.23	8.25	169.98	300	2	0.9	0.7	1	—	—	8.1 ATI
ESE-2	5/2/1995	178.23	9.21	169.02	1200	4	ND<2.5	ND<2.5	ND<5.0	—	—	8.4 ATI
ESE-2	7/28/1995	178.23	10.64	167.59	2000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	—	—	7.7 ATI
ESE-2	11/17/1995	178.23	11.13	167.10	3600	ND<25	ND<25	ND<25	ND<50	12000	—	7.4 ATI
QC-1 (d)	11/17/1995	—	—	—	3400	ND<25	ND<25	ND<25	ND<50	12000	—	ATI
ESE-2	2/7/1996	178.23	7.94	170.29	450	ND<0.5	ND<1	ND<1	ND<1	2300	—	1.8 SPL
ESE-2	4/23/1996	178.23	9.73	168.50	260	0.9	ND<1	ND<1	ND<1	8600	—	7.2 SPL
ESE-2	7/9/1996	178.23	10.70	167.53	780	ND<2.5	ND<5	ND<5	ND<5	13393	—	3.0 SPL
ESE-2	10/10/1996	178.23	11.39	166.84	2900	ND<0.5	ND<1.0	ND<1.0	ND<1.0	12000	—	7.0 SPL
ESE-2	1/20/1997	178.23	9.04	169.19	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	13000	—	6.2 SPL
ESE-2	4/25/1997	178.23	10.31	167.92	2700	ND<0.5	ND<1.0	ND<1.0	ND<1.0	15000	—	5.9 SPL
ESE-2	7/18/1997	178.23	11.02	167.21	11000	ND<5	ND<10	ND<10	ND<10	11000	—	5.0 SPL
ESE-2	10/27/1997	178.23	10.93	167.30	6100	ND<2.5	ND<5.0	ND<5.0	ND<5.0	7100	—	4.8 SPL
QC-1 (d)	10/27/1997	—	—	—	6600	ND<2.5	ND<5.0	ND<5.0	ND<5.0	7400	—	SPL
ESE-2	1/22/1998	178.23	7.93	170.30	13000	ND<0.5	ND<1.0	ND<1.0	ND<1.0	10000	—	4.6 SPL
QC-1 (d)	1/22/1998	—	—	—	13000	ND<0.5	ND<1.0	ND<1.0	ND<1.0	10000	—	SPL
ESE-2	4/23/1998	178.23	9.34	168.89	19000	ND<5	ND<10	ND<10	ND<10	36000	—	4.2 SPL
ESE-2	7/29/1998	178.23	10.29	167.94	—	—	—	—	—	—	—	— SPL
ESE-2	7/30/1998	—	—	—	19000	ND<5	ND<10	ND<10	ND<10	36000	—	4.2 SPL
ESE-2	12/17/1998	178.23	10.20	168.03	12000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	13000/17000*	—	SPL
ESE-2	3/19/1999	178.23	9.02	169.21	18000	160	ND<1.0	ND<1.0	ND<1.0	18000	—	SPL
ESE-2	6/23/1999	178.23	9.99	168.24	280	ND<1.0	ND<1.0	ND<1.0	ND<1.0	16000	—	SPL
ESE-2	9/27/1999	178.23	10.69	167.54	ND<500	ND<25	ND<25	ND<25	ND<25	12000	—	SPL
ESE-2	12/9/1999	178.23	11.26	166.97	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.6	12000	—	PACE
ESE-2	3/9/2000	178.23	7.95	170.28	ND<50	1.6	ND<0.5	ND<0.5	ND<0.5	7900	—	PACE
ESE-2	6/8/2000	178.23	9.66	168.57	1600	ND<0.5	0.73	ND<0.5	2.2	9400	—	PACE
ESE-2 (k)	9/18/2000	178.23	—	—	—	—	—	—	—	—	—	PACE
ESE-2	12/14/2000	178.23	11.15	167.08	6000	0.75	ND<0.5	ND<0.5	ND<0.5	11200	—	PACE

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ESE-2	3/21/2001	178.23	10.35	167.88	6900	786	45.7	37.7	71.5	3790	—	PACE
ESE-2	6/18/2001	178.23	11.24	166.99	6400	ND<2.5	ND<2.5	ND<2.5	ND<7.5	9320	—	PACE
ESE-2	9/18/2001	178.23	11.35	166.88	4800	ND<12.5	ND<12.5	ND<12.5	ND<37.5	6960	—	PACE
ESE-2	12/13/2001	178.23	10.97	167.26	59000	0.592	ND<0.5	ND<0.5	ND<1.0	5940	—	PACE
ESE-2	3/14/2002	178.23	10.13	168.10	4500	76	ND<0.5	ND<0.5	ND<1.0	6660	—	PACE
ESE-2	6/19/2002	178.23	10.91	167.32	250	ND<12.5	ND<12.5	ND<12.5	ND<25	4900	—	PACE
ESE-2	9/10/02*	178.23	10.82	167.41	1500	ND<5.0	ND<5.0	ND<5.0	6.3	3100	—	SEQ
ESE-2	12/16/2002	178.23	7.87	170.36	1400	ND<5.0	ND<5.0	ND<5.0	ND<5.0	2400	—	SEQ
ESE-2	3/11/2003	178.23	10.24	167.99	2800	ND<10	ND<10	ND<10	ND<10	4800	—	SEQ
ESE-2	6/17/2003	(n)	10.19	168.04	10000	ND<100	ND<100	ND<100	ND<100	4400	—	SEQ

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ESE-3	10/5/1992	178.20	10.58	167.62	430	57	31	3.6	34	—	(0)	— PACE
ESE-3	4/1/1993	178.20	8.14	170.06	2400	460	220	74	210	—	(0)	— PACE
ESE-3	6/29/1993	178.20	9.72	168.48	280	56	14	15	13	—	(0)	— PACE
ESE-3	9/23/1993	178.20	10.46	167.74	72	13	3.5	1.7	4.1	—	(0)	— PACE
ESE-3	12/10/1993	178.20	9.30	168.90	270	71	32	6.1	33	—	(0)	— PACE
ESE-3	2/17/1994	178.20	8.97	169.23	520	140	10	20	33	5.74	(0)	2.7 PACE
ESE-3	8/8/1994	178.20	10.02	168.18	ND<50	8.8	1.6	1.6	2.3	ND<5.0	(0)	6.2 PACE
ESE-3	10/12/1994	178.20	10.32	167.88	470	190	6.4	15	18	ND<5.0	(0)	3.5 PACE
ESE-3	1/19/1995	178.20	7.40	170.80	330	260	27	21	20	—	—	ATI
ESE-3	5/2/1995	178.20	8.26	169.94	530	180	30	23	44	—	8.6	ATI
ESE-3	7/28/1995	178.20	9.54	168.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	—	8.8 ATI
ESE-3	11/17/1995	178.20	10.04	168.16	ND<50	1.7	ND<0.50	ND<0.50	ND<1.0	ND<5.0	—	7.3 ATI
ESE-3	2/7/1996	178.20	7.08	171.12	ND<50	8.6	ND<1	ND<1	ND<1	ND<10	—	3.9 SPL
ESE-3	4/23/1996	178.20	8.79	169.41	ND<50	7.6	ND<1	ND<1	ND<1	65	—	6.9 SPL
ESE-3	7/9/1996	178.20	10.09	168.11	ND<50	12	2.6	2	3.9	26	—	3.4 SPL
ESE-3	10/10/1996	178.20	10.48	167.72	—	—	—	—	—	—	—	—
ESE-3	10/11/1996	178.20	—	—	260	140	ND<1.0	ND<1.0	2.6	ND<10	7.2	SPL
ESE-3	1/20/1997	178.20	8.65	169.55	ND<50	1.5	1.7	ND<1.0	ND<1.0	14	—	5.7 SPL
ESE-3	4/25/1997	178.20	10.02	168.18	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	14	—	5.4 SPL
ESE-3	7/18/1997	178.20	10.66	167.54	10000	1400	1400	300	1280	ND<250	—	5.2 SPL
ESE-3	10/27/1997	178.20	9.83	168.37	ND<250	ND<2.5	ND<5.0	ND<5.0	36	ND<50	—	5.0 SPL
ESE-3	1/22/1998	178.20	7.06	171.14	130	ND<0.5	ND<1.0	ND<1.0	ND<1.0	120	—	4.3 SPL
ESE-3	4/23/1998	178.20	8.44	169.76	4800	560	ND<10	15	ND<10	4000	—	3.9 SPL
ESE-3	7/29/1998	178.20	9.27	168.93	—	—	—	—	—	—	—	—
ESE-3	7/30/1998	—	—	—	1800	6.2	ND<5.0	ND<5.0	ND<5.0	1700	—	4.1 SPL
ESE-3	12/17/1998	178.20	9.15	169.05	600	54	ND<1.0	2.1	4.9	340/480*	—	SPL
ESE-3	3/19/1999	178.20	8.14	170.06	2000	260	4.4	13	28	870	—	SPL
ESE-3	6/23/1999	178.20	9.44	168.76	290	91	ND<1.0	8.3	16	240	—	SPL
ESE-3	9/27/1999	178.20	9.69	168.51	130	35	ND<1.0	2.7	3.8	100	—	SPL
ESE-3	12/9/1999	178.20	10.99	167.21	380	84	1.7	8.7	6.3	160	—	PACE
ESE-3	3/9/2000	178.20	7.12	171.08	950	190	4.6	39	62	350	—	PACE
ESE-3	6/8/2000	178.20	10.92	167.28	300	37	ND<0.5	2.3	1.3	400	—	PACE
ESE-3	9/18/2000	178.20	11.12	167.08	920	140	1.3	15	4.8	170	—	PACE
ESE-3	12/14/2000	178.20	9.70	168.50	320	64	ND<0.5	6.24	1.76	201	—	PACE
ESE-3	3/21/2001	178.20	10.07	168.13	680	80.5	0.546	21.1	18.2	398	—	PACE
ESE-3	6/18/2001	178.20	11.42	166.78	380	47	ND<0.5	3.11	ND<1.5	242	—	PACE
ESE-3	9/18/2001	178.20	11.55	166.65	340	54.8	ND<0.5	4.36	ND<1.5	79.7	—	PACE

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ESE-3	12/13/2001	178.20	10.12	168.08	270	31.4	ND<0.5	1.31	2.24	129	—	PACE
ESE-3	3/14/2002	178.20	9.84	168.36	670	89.8	0.769	23.4	30.4	413	—	PACE
ESE-3	6/19/2002	178.20	10.57	167.63	130	18.6	ND<0.5	ND<0.5	ND<1.0	166	—	PACE
ESE-3	9/10/02*	178.20	9.90	168.30	88	12	ND<0.5	ND<0.5	ND<0.5	93	—	SEQ
ESE-3	12/16/2002	178.20	9.23	168.97	290	55	17	3.7	14	78	—	SEQ
ESE-3	3/11/2003	178.20	9.05	169.15	100	3.4	ND<0.50	0.54	ND<0.50	140	—	SEQ
ESE-3	6/17/2003 (n)	178.20	9.30	168.90	520	17	ND<5.0	5.3	ND<5.0	130	—	SEQ

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ESE-4	10/5/1992	177.73	10.33	167.40	98	7.2	1.3	1.1	6.1	—	(l)	— PACE
ESE-4	4/1/1993	177.73	7.88	169.85	550	93	20	23	33	—	(l)	— PACE
ESE-4	6/29/1993	177.66	(l)	8.33	169.33	150	23	0.6	5.4	0.5	54	(e)(l)
ESE-4	9/23/1993	177.66	10.05	167.61	110	14	1.7	3.2	4.6	—	(l)	— PACE
ESE-4	12/10/1993	177.66	8.95	168.71	110	21	7.2	4.2	10	28.75	(l)	2.8 PACE
ESE-4	2/17/1994	177.66	8.65	169.01	210	26	1.2	4.7	11	113	(e)(l)	— PACE
ESE-4	8/8/1994	177.66	9.76	167.90	76	9.6	ND<0.5	2	ND<0.5	62	(e)	7.0 PACE
ESE-4	10/12/1994	177.66	9.62	168.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	44	(e)	3.2 PACE
ESE-4	1/19/1995	177.66	6.97	170.69	140	56	14	24	23	—	6.9	ATI
ESE-4	5/2/1995	177.66	7.85	169.81	130	21	2.8	8.6	8.2	—	9.1	ATI
ESE-4	7/28/1995	177.66	9.20	168.46	ND<50	ND<0.5	ND<0.50	ND<0.50	ND<1.0	—	8.1	ATI
ESE-4	11/17/1995	177.66	9.68	167.98	ND<50	ND<0.5	0.6	ND<0.50	ND<1.0	18	5.7	ATI
ESE-4	2/7/1996	177.66	6.59	171.07	100	2.6	ND<1	1.6	4.1	42	2.0	SPL
ESE-4	4/23/1996	177.66	8.30	169.36	160	37	15	16	31	43	5.4	SPL
ESE-4	7/9/1996	177.66	9.21	168.45	60	17	1.5	6.8	11.6	27	3.9	SPL
ESE-4	10/10/1996	177.66	9.97	167.69	—	—	—	—	—	—	—	—
ESE-4	10/11/1996	177.66	—	—	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	18	5.5	SPL
ESE-4	1/20/1997	177.66	7.68	169.98	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	130	4.9	SPL
ESE-4	4/25/1997	177.66	9.15	168.51	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.3	SPL
ESE-4	7/18/1997	177.66	9.71	167.95	ND<50	15	ND<10	ND<10	ND<10	ND<100	4.5	SPL
ESE-4	10/27/1997	177.66	9.38	168.28	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.9	SPL
ESE-4	1/22/1997	177.66	6.59	171.07	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.3	SPL
ESE-4	4/23/1998	177.66	7.90	169.76	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.0	SPL
ESE-4	7/29/1998	177.66	8.96	168.70	—	—	—	—	—	—	—	—
ESE-4	7/30/1998	—	—	—	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.2	SPL
ESE-4	12/17/1998	177.66	8.32	169.34	—	—	—	—	—	—	—	—
ESE-4	3/19/1999	177.66	7.71	169.95	—	—	—	—	—	—	—	—
ESE-4	6/23/1999	177.66	8.78	168.88	—	—	—	—	—	—	—	—
ESE-4	9/27/1999	177.66	9.27	168.39	—	—	—	—	—	—	—	—
ESE-4	12/9/1999	177.66	9.21	168.45	—	—	—	—	—	—	—	—
ESE-4	3/9/2000	177.66	6.82	170.84	—	—	—	—	—	—	—	—
ESE-4	6/8/2000	177.66	8.72	168.94	—	—	—	—	—	—	—	—
ESE-4	9/18/2000	177.66	9.02	168.64	—	—	—	—	—	—	—	—
ESE-4	12/14/2000	177.66	8.61	169.05	—	—	—	—	—	—	—	—
ESE-4	3/21/2001	177.66	8.61	169.05	—	—	—	—	—	—	—	—
ESE-4	6/18/2001	177.66	9.24	168.42	—	—	—	—	—	—	—	—
ESE-4	9/18/2001	177.66	9.35	168.31	—	—	—	—	—	—	—	—

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Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-4	12/13/2001	177.66	8.53	169.13	—	—	—	—	—	—	—	—
ESE-4	3/14/2002	177.66	8.44	169.22	—	—	—	—	—	—	—	—
ESE-4	6/19/2002	177.66	10.97	166.69	—	—	—	—	—	—	—	—
ESE-4	9/10/02*	177.66	9.27	168.39	—	—	—	—	—	—	—	—
ESE-4	12/16/2002	177.66	6.90	170.76	—	—	—	—	—	—	—	—
ESE-4	3/11/2003	177.66	8.83	168.83	—	—	—	—	—	—	—	—
ESE-4	6/17/2003	177.66	8.84	168.82	—	—	—	—	—	—	—	—

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (Feet) (a)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet) (b)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-5	10/5/1992	176.08	9.22	166.86	1300	200	3.8	1.2	18	—	(l)	— PACE
ESE-5	4/1/1993	176.08	7.02	169.06	13000	2200	26	730	1000	—	(l)	— PACE
QC-1 (d)	4/1/1993	—	—	—	13000	2500	25	740	1100	—	(l)	— PACE
ESE-5	6/29/1993	176.08	10.21	165.87	7600	1500	9.3	170	100	—	(l)	— PACE
ESE-5	9/23/1993	176.08	10.64	165.44	560	19	1.2	0.9	1.8	—	(l)	— PACE
ESE-5	12/10/1993	176.08	9.42	166.66	1700	300	3	76	110	14.07	(l)	2.5 PACE
ESE-5	2/7/1994	176.08	9.35	166.73	3500	640	7.8	90	130	45.13	(l)	— PACE
ESE-5	8/8/1994	176.08	8.76	167.32	2600	210	4.6	9.4	4.4	33	(e)	5.8 PACE
QC-1 (d)	8/8/1994	—	—	—	2500	230	4.6	13	4.8	32	(e)	— PACE
ESE-5	10/12/1994	176.08	8.95	167.13	5600	560	9.5	75	21	79.2	(l)	3.6 PACE
QC-1 (d)	10/12/1994	—	—	—	6000	550	10	78	22	77	(e)	— PACE
ESE-5	1/19/1995	176.08	5.40	170.68	1900	620	ND<5	95	15	—	—	7.6 ATI
QC-1 (d)	1/19/1995	—	—	—	1600	620	ND<5	93	17	—	—	— ATI
ESE-5	5/2/1995	176.08	6.48	169.60	5700	1100	ND<10	180	58	—	—	8.2 ATI
QC-1 (d)	5/2/1995	—	—	—	5300	1100	ND<10	180	58	—	—	— ATI
ESE-5	7/28/1995	176.08	7.97	168.11	520	15	ND<0.50	1.7	1.3	—	—	8.2 ATI
QC-1 (d)	7/28/1995	—	—	—	460	7.2	ND<0.50	1.9	1.5	—	—	— ATI
ESE-5	11/17/1995	176.08	8.39	167.69	850	39	1.8	7.6	2.7	24	—	6.3 ATI
ESE-5	2/7/1996	176.08	4.71	171.37	4100	670	6	190	140	ND<50	—	1.5 SPL
ESE-5	4/23/1996	176.08	7.35	168.73	3000	570	ND<5	79	100	84	—	6.5 SPL
ESE-5	7/9/1996	176.08	9.40	166.68	620	150	1.7	9.3	6.4	25	—	3.7 SPL
ESE-5	10/10/1996	176.08	9.04	167.04	1100	29	ND<5.0	ND<5.0	ND<5.0	ND<50	—	6.3 SPL
QC-1 (d)	10/10/1996	—	—	—	1100	31	ND<5.0	ND<5.0	ND<5.0	ND<50	—	SPL
ESE-5	1/20/1997	176.08	5.82	170.26	2100	980	ND<25	280	80	ND<250	—	5.4 SPL
QC-1 (d)	1/20/1997	—	—	—	2700	910	8.8	280	84	180	—	SPL
ESE-5	4/25/1997	176.08	7.24	168.84	—	—	—	—	—	—	—	SPL
ESE-5	4/28/1997	176.08	—	—	ND<250	7.9	ND<5.0	ND<5.0	ND<5.0	ND<50	—	—
ESE-5	7/18/1997	176.08	7.86	168.22	1200	ND<5	ND<10	ND<10	ND<10	ND<100	—	4.9 SPL
QC-1 (d)	7/18/1997	—	—	—	630	31	ND<5.0	ND<5.0	ND<5.0	ND<50	—	5.0 SPL
ESE-5	10/27/1997	176.08	7.91	168.17	ND<250	5.4	ND<5.0	ND<5.0	ND<5.0	130	—	SPL
ESE-5	1/22/1998	176.08	4.64	171.44	170	7.7	ND<1.0	ND<1.0	ND<1.0	ND<50	—	5.2 SPL
ESE-5	4/23/1998	176.08	6.31	169.77	720	79	ND<5.0	9.0	ND<5.0	130	—	4.6 SPL
ESE-5	7/29/1998	176.08	7.43	168.65	—	—	—	—	—	180	—	4.6 SPL
ESE-5	7/30/1998	—	—	—	—	—	—	—	—	—	—	—
ESE-5	12/17/1998	176.08	7.05	169.03	840	9.8	ND<1.0	4.0	ND<1.0	710	4.3	SPL
ESE-5	3/19/1999	176.08	5.00	171.08	ND<250	ND<5.0	ND<5.0	ND<5.0	ND<5.0	—	—	SPL
ESE-5	6/23/1999	176.08	7.77	168.31	—	—	—	—	—	—	—	SPL

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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
ESE-5	9/27/1999	176.08	8.11	167.97	450	10	ND<5.0	6.3	ND<5.0	220	—	SPL
ESE-5	12/9/1999	176.08	7.66	168.42	—	—	—	—	—	—	—	—
ESE-5	3/9/2000	176.08	5.08	171.00	1700	170	2.5	45	6.4	140	—	PACE
ESE-5	6/8/2000	176.08	7.36	168.72	—	—	—	—	—	—	—	—
ESE-5	9/18/2000	176.08	7.71	168.37	130	0.65	ND<0.5	0.71	ND<0.5	51	—	PACE
ESE-5	12/14/2000	176.08	2.36	173.72	—	—	—	—	—	—	—	—
ESE-5	3/21/2001	176.08	7.42	168.66	1000	10.3	ND<2.5	11	ND<7.5	70.8	—	PACE
ESE-5	6/18/2001	176.08	7.92	168.16	—	—	—	—	—	—	—	—
ESE-5	9/18/2001	176.08	8.05	168.03	200	0.868	ND<0.5	0.55	ND<1.5	57.5	—	PACE
ESE-5	12/13/2001	176.26 (m)	7.80	168.46	—	—	—	—	—	—	—	—
ESE-5	3/14/2002	176.26	6.55	169.71	1300	17.1	1.35	15.4	1.42	37.4	—	PACE
ESE-5	6/19/2002	176.26	7.83	168.43	—	—	—	—	—	—	—	—
ESE-5	9/10/02*	176.26	8.22	168.04	680	9.9	ND<5.0	ND<5.0	ND<5.0	44	—	SEQ
ESE-5	12/16/2002	176.26	6.58	169.68	—	—	—	—	—	—	—	—
ESE-5	3/11/2003	176.26	6.77	169.49	2100	14	ND<2.5	15	3.0	80	—	—
ESE-5	6/17/2003	176.26	6.75	169.51	—	—	—	—	—	—	—	—

Table I
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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH:G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-6	7/28/1995	179.24	10.00	169.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	—	8.1	ATI
MW-6	11/17/1995	179.24	10.44	168.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	6.8	ATI
MW-6	2/7/1996	179.24	7.68	171.56	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	2.4	SPL
MW-6	4/23/1996	179.24	9.33	169.91	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	6.6	SPL
MW-6	7/9/1996	179.24	10.10	169.14	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	2.7	SPL
MW-6	10/10/1996	179.24	11.00	168.24	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	6.9	SPL
MW-6	1/20/1997	179.24	8.70	170.54	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.5	SPL
MW-6	4/25/1997	179.24	10.16	169.08	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.1	SPL
MW-6	7/18/1997	179.24	10.66	168.58	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL
MW-6	10/27/1997	179.24	10.25	168.99	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.8	SPL
MW-6	1/22/1998	179.24	7.76	171.48	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.0	SPL
MW-6	4/23/1998	179.24	9.10	170.14	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.2	SPL
MW-6	7/29/1998	179.24	10.40	168.84	—	—	—	—	—	—	—	—
MW-6	7/30/1998	—	—	—	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	3.8	SPL
MW-6	12/17/1998	179.24	9.40	169.84	—	—	—	—	—	—	—	—
MW-6	3/19/1999	179.24	9.10	170.14	—	—	—	—	—	—	—	—
MW-6	6/23/1999	179.24	9.79	169.45	—	—	—	—	—	—	—	—
MW-6	9/27/1999	179.24	10.10	169.14	—	—	—	—	—	—	—	—
MW-6	12/9/1999	179.24	9.97	169.27	—	—	—	—	—	—	—	—
MW-6	3/9/2000	179.24	8.56	170.68	—	—	—	—	—	—	—	—
MW-6	6/8/2000	179.24	9.11	170.13	—	—	—	—	—	—	—	—
MW-6	9/18/2000	179.24	9.77	169.47	—	—	—	—	—	—	—	—
MW-6	12/14/2000	179.24	9.17	170.07	—	—	—	—	—	—	—	—
MW-6	3/21/2001	179.24	9.82	169.42	—	—	—	—	—	—	—	—
MW-6	6/18/2001	179.24	10.19	169.05	—	—	—	—	—	—	—	—
MW-6	9/18/2001	179.24	10.25	168.99	—	—	—	—	—	—	—	—
MW-6	12/13/2001	179.24	9.75	169.49	—	—	—	—	—	—	—	—
MW-6	3/14/2002	179.24	9.53	169.71	—	—	—	—	—	—	—	—
MW-6	6/19/2002	179.24	9.87	169.37	—	—	—	—	—	—	—	—
MW-6	9/10/02*	179.24	9.49	169.75	—	—	—	—	—	—	—	—
MW-6	12/16/2002	179.24	8.39	170.85	—	—	—	—	—	—	—	—
MW-6	3/11/2003	179.24	9.40	169.84	—	—	—	—	—	—	—	—
MW-6	6/17/2003	179.24	9.71	169.53	—	—	—	—	—	—	—	—

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MW-7	7/28/1995	176.55	9.25	167.30	ND<50	0.54 (g)	0.54	ND<0.50	ND<1.0	—	7.1	ATI
MW-7	11/17/1995	176.55	9.73	166.82	1100	ND<10	ND<10	ND<10	ND<20	4000	6.3	ATI
MW-7	2/7/1996	176.55	6.48	170.07	610	ND<0.5	ND<1	ND<1	ND<1	2500	4.1	SPL
QC-1 (d)	2/7/1996	—	—	—	280	ND<0.5	ND<1	ND<1	ND<1	2600	—	SPL
MW-7	4/23/1996	176.55	8.37	168.18	110	ND<0.5	ND<1	ND<1	ND<1	3500	6.4	SPL
QC-1 (d)	4/23/1996	—	—	—	230	ND<0.5	ND<1	ND<1	ND<1	3500	—	SPL
MW-7	7/9/1996	176.55	9.24	167.31	230	ND<0.5	ND<1	ND<1	ND<1	4296	3.1	SPL
QC-1 (d)	7/9/1996	—	—	—	220	ND<0.5	ND<1	ND<1	ND<1	4400	—	SPL
MW-7	10/10/1996	176.55	10.05	166.50	—	—	—	—	—	—	—	—
MW-7	10/11/1996	176.55	—	—	1600	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3000	6.9	SPL
MW-7	1/20/1997	176.55	7.51	169.04	ND<50	0.63	1	ND<1.0	ND<1.0	2600	5.7	SPL
MW-7	4/25/1997	176.55	8.79	167.76	—	—	—	—	—	—	—	—
MW-7	4/28/1997	176.55	—	—	1500	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3600	5.1	SPL
QC-1 (d)	4/28/1997	—	—	—	7700	3500	ND<25	74	37	ND<250	—	SPL
MW-7	7/18/1997	176.55	9.50	167.05	1400	ND<0.5	ND<1.0	ND<1.0	ND<1.0	2600	5.2	SPL
MW-7	10/27/1997	176.55	9.19	167.36	420	ND<0.5	ND<1.0	ND<1.0	ND<1.0	560	4.9	SPL
MW-7	1/22/1998	176.55	6.45	170.10	3100	ND<0.5	ND<1.0	ND<1.0	1.4	2300	4.2	SPL
MW-7	4/23/1998	176.55	8.02	168.53	3800	ND<0.5	ND<1.0	ND<1.0	ND<1.0	3800	3.9	SPL
MW-7	7/29/1998	176.55	8.88	167.67	—	—	—	—	—	—	—	—
MW-7	7/30/1998	—	—	—	500	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.1	SPL
QC-1 (d)	7/30/1998	—	—	—	4700	ND<12	ND<25	ND<25	ND<25	4700	—	SPL
MW-7	12/17/1998	176.55	8.62	167.93	—	—	—	—	—	—	—	—
MW-7	3/19/1999	176.55	7.52	169.03	3800	ND<1.0	ND<1.0	ND<1.0	ND<1.0	3800	—	SPL
MW-7	6/23/1999	176.55	9.63	166.92	—	—	—	—	—	—	—	—
MW-7	9/27/1999	176.55	9.39	167.16	140	ND<10	ND<10	ND<10	ND<10	3800	—	SPL
MW-7	12/9/1999	176.55	9.94	166.61	—	—	—	—	—	—	—	—
MW-7	3/9/2000	176.55	6.72	169.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1400	—	PACE
MW-7	6/8/2000	176.55	7.38	169.17	—	—	—	—	—	—	—	—
MW-7	9/18/2000	176.55	9.18	167.37	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	580	—	PACE
MW-7	12/14/2000	176.55	8.13	168.42	—	—	—	—	—	—	—	—
MW-7	3/21/2001	176.55	8.98	167.57	1300	ND<0.5	ND<0.5	ND<0.5	ND<1.5	1460	—	PACE
MW-7	6/18/2001	176.55	9.68	166.87	—	—	—	—	—	—	—	—
MW-7	9/18/2001	176.55	9.80	166.75	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.5	94.9	—	PACE
MW-7	12/13/2001	176.55	9.26	167.29	—	—	—	—	—	—	—	—
MW-7	3/14/2002	176.55	8.69	167.86	800	ND<0.5	ND<0.5	ND<0.5	ND<1.0	952	—	PACE
MW-7	6/19/2002	176.55	9.06	167.49	—	—	—	—	—	—	—	—
MW-7	9/10/02*	176.55	9.23	167.32	260	ND<2.0	ND<2.0	ND<2.0	ND<2.0	580	—	SEQ

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-7	12/16/2002	176.55	7.77	168.78	—	—	—	—	—	—	—	—
MW-7	3/11/2003	176.55	8.30	168.25	620	ND<2.5	ND<2.5	ND<2.5	ND<2.5	1100	—	—
MW-7	6/17/2003	176.55	9.51	167.04	—	—	—	—	—	—	—	—

Table 1
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WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/E)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-8	7/28/1995	176.34	7.80	168.54	1100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	7.2	ATI
MW-8	11/17/1995	176.34	8.29	168.05	8300	75	5.3	670	240	140	7.0	ATI
MW-8	2/7/1996	176.34	4.99	171.35	2300	33	ND<10	190	216	ND<100	1.7	SPL
MW-8	4/23/1996	176.34	6.09	170.25	2000	390	ND<20	150	26	ND<250	5.1	SPL
MW-8 (h)	7/9/1996	--	--	--	--	--	--	--	--	--	--	--
QC-2 (i)	4/1/1993	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(0)	--
QC-2 (i)	6/29/1993	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(0)	--
QC-2 (i)	9/23/1993	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(0)	--
QC-2 (i)	12/10/1993	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(0)	--
QC-2 (i)	2/17/1994	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	PACE
QC-2 (i)	8/8/1994	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	PACE
QC-2 (i)	10/12/1994	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	PACE
QC-2 (i)	1/19/1995	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	--	ATI
QC-2 (i)	5/2/1995	--	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	ATI
QC-2 (i)	7/28/1995	--	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	ATI
QC-2 (i)	11/17/1995	--	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	--	ATI
QC-2 (i)	2/7/1996	--	--	--	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	--	SPL
QC-2 (i)	4/23/1996	--	--	--	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	--	SPL
QC-2 (i)	7/9/1996	--	--	--	ND<50	ND<0.5	ND<1	ND<1	ND<1	ND<10	--	SPL

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DO	Dissolved oxygen
ug/L	Micrograms per liter
ppm	Parts per million
ND	Not detected above reported detection limit
--	Not applicable/available/measured/analyzed
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories
SEQ	Sequoia Analytical

Table 1
Groundwater Elevation and Analytical Data
Former BP Service Station #11105
3519 Castro Valley Blvd, Castro Valley, CA

NOTES:

- (a) Top of casing elevations surveyed relative to mean sea level.
- (b) Groundwater elevations in feet relative to mean sea level.
- (c) Additional analysis of the sample collected from ESE-1 on 10/5/92 detected 96 ug/L total petroleum hydrocarbons as diesel and 1.8 ug/L 1,2-dichloroethane.
- (d) Blind duplicate.
- (e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-138-09-004.
- (f) Top of casing lowered by 0.07 foot after the monitoring event on 4/01/93.
- (g) Sample result may be falsely elevated due to matrix interference.
- (h) Well destroyed.
- (i) Travel blank.
- (j) Gasoline does not include MTBE.
- (k) Well Inaccessible.
- (l) A copy of the documentation for this data can be found in Blaine Tech Services report 010618-J-1. MTBE data for the September 28, 1992, September 29, 1992, October 5, 1992, and April 1, 1993 sampling events have been destroyed.
No chromatograms could be located for MTBE data from wells sampled on June 29, 1993; wells ESE-1, ESE-3, ESE-4, ESE-5, and the Trip Blank, sampled on September 23, 1993; and wells ESE-1, ESE-2, and ESE-3, sampled on December 10, 1993.
- (m) Top of casing altered due to wellhead maintenance.
- (n) Analyzed for TPH-g, BTEX, MTBE and fuel oxygenates by EPA Method 8260B on 6/17/03 sampling event.
- (*) MTBE by EPA 8020/8260.

* During the second quarter of 2002, URS Corporation assumed groundwater monitoring activities for BP.

Source: The data within this table collected prior to June 2002 was provided to URS by BP Group Environmental Management company and their previous consultants. URS has not verified the accuracy of this information.

Table 2
 Fuel Oxygenates Analytical Data
 Former BP Service Station #11105
 3519 Castro Valley Blvd, Castro Valley, CA

Well Number	Date Sampled	Ethanol ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	DIPE ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)
ESE-1	06/17/03	ND<2,000	ND<400	480	ND<10	ND<10	18
ESE-2	06/17/03	ND<20,000	ND<4,000	4,400	ND<100	ND<100	ND<100
ESE-3	06/17/03	ND<1,000	ND<200	130	ND<5.0	ND<5.0	ND<5.0

Note = All fuel oxygenate compounds analyzed using EPA Method 8260B
 TBA = tert-Butyl alcohol
 MTBE = Methyl tert-Butyl ether
 DIPE = Di-isopropyl ether
 ETBE = Ethyl tert Butyl ether
 TAME = tert-Amyl Methyl ether
 $\mu\text{g/L}$ = micrograms per liter
 ND< = Not detected at or above specified laboratory method detection limit