ENVIRONMENTAL ENGINEERING, INC.

R0346

Second Quarter 2004

Groundwater Monitoring Report

Castro Valley Gasoline Service Station

3519 Castro Valley Boulevard

Castro Valley, California

June 11, 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

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ENVIRONMENTAL ENGINEERING, INC
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June 9, 2004

Ms. Donna Drogos
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

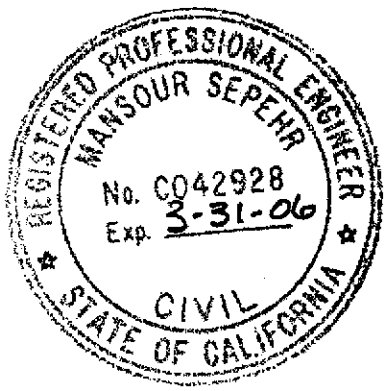
Dear Ms. Drogos:

Enclosed for your review is SOMA's "Second 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

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 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 May 21, 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.

2.0 Field Activities

On May 21, 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, four on-site monitoring wells (ESE-1, ESE-2, ESE-5, and MW-6) and one off-site monitoring well (MW-7) were monitored. Figure 2 illustrates the locations of the wells.

The depth to groundwater at 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 at each monitoring well were used to calculate the groundwater elevation.

During the monitoring event, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC) prior to the collection of samples. 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 May 21, 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 May 21, 2004 groundwater monitoring event.

4.1 Field Measurements

Table 1 presents the calculated groundwater elevations at each monitoring well. The groundwater elevations ranged from 167.50 feet in monitoring well ESE-1 to 169.49 feet in monitoring well MW-6. Table 1 also presents the historical groundwater elevations at different groundwater monitoring wells. All the groundwater elevations have decreased since the previous monitoring event. Variations in groundwater elevations are typically due to seasonal fluctuations and also local recharge rates at each well location. During drier periods of the year the groundwater elevations decrease as the watertable descends.

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 0.011 feet/feet. The groundwater flow direction and gradient are consistent with the previous monitoring event (First Quarter 2004).

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, and MW-7. The highest TPH-g concentration detected was 1,500 µg/L, which was detected in both wells ESE-1 and ESE-5. Figure 4 displays the contour map of TPH-g concentrations in the groundwater on May 21, 2004. The TPH-g concentration detected in well ESE-1 can be attributed to a possible earlier release, (in 1996,

in the vicinity of the former western pump, petroleum hydrocarbons were encountered), the plume migration to ESE-1 was caused by the southeasterly groundwater flow direction.

As shown in Table 1, all BTEX analytes were below the laboratory reporting limit in wells ESE-2, MW-6, and MW-7. The highest BTEX concentrations were detected in well ESE-1. Figure 5 displays the contour map of benzene concentrations in the groundwater on May 21, 2004.

MtBE was below the laboratory reporting limit in well MW-6. The highest MtBE concentration was detected in well ESE-2 at 1,100 µg/L. Figure 6 displays the contour map of MtBE concentrations in the groundwater on May 21, 2004. The high MtBE concentration in well ESE-2 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 also impacted off-site well MW-7.

As shown in Table 2, TBA was below the laboratory reporting limit in wells ESE-5 and MW-6. The highest TBA concentration was detected in well ESE-2 at 2,400 µg/L. Figure 7 displays the contour map of TBA concentrations in the groundwater on May 21, 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 Second Quarter 2004.

TAME was below the laboratory reporting limit in wells ESE-1, ESE-5 and MW-6. The highest TAME concentration was detected in well ESE-2 at 25 µg/L. Figure 8 displays the map of TAME concentrations in the groundwater on May 21, 2004.

The following TPH-g, BTEX, and MtBE concentration trends were observed since the previous monitoring event.

- TPH-g decreased in wells ESE-1 and ESE-5. TPH-g remained below the laboratory reporting limit in wells ESE-2, MW-6, and MW-7.
- In well ESE-1 all BTEX analytes decreased. In wells ESE-2, MW-6, and MW-7, all BTEX analytes remained below the laboratory reporting limit. In well ESE-5 all BTEX analytes decreased. However, the BTEX constituent results, with the exception of toluene, may have been misrepresentative due to matrix interferences. The BTEX results were "C" flagged; see the laboratory report in Appendix B for further clarification.
- MtBE remained below the laboratory reporting limit in well MW-6, decreased in wells ESE-1, ESE-2, and ESE-5, and increased in well MW-7.

The following gasoline oxygenate and lead scavenger concentration trends were observed since the previous monitoring event.

- TBA decreased in well ESE-1, increased in wells ESE-2 and MW-7, and remained below the laboratory reporting limit in wells ESE-5 and MW-6.
- DIPE, ETBE, Ethanol, 1,2-DCA, and EDB all remained below the laboratory reporting limit.
- TAME decreased in wells ESE-1 and ESE-2, increased in well MW-7, and remained below the laboratory reporting limit in wells ESE-5 and MW-6.

Appendix B displays the laboratory analytical results for each groundwater sample collected during the Second 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 Second 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 in well MW-7. TAME was also detected off-site in well MW-7.
- Due to a possible previous release in the western section of the Site and the south to southeasterly groundwater flow direction, the highest BTEX concentrations were detected in well ESE-1.
- SOMA proposes installing additional off-site groundwater monitoring wells to determine the extent of the groundwater plume.

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**
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**
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**
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**
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**

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

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**
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**
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**
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**
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	<2,500	<1.3	<1.3
	Feb-04	<10	<0.5	<0.5	9.9	<1000	<0.5	<0.5
	May-04	**60**	**<0.5**	**<0.5**	**17**	**<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.

Gasoline Oxygenates:
TBA: tertiary butyl alcohol
DIPE: isopropyl ether
ETBE: ethyl tertiary butyl ether
TAME: methyl tertiary amyl ether
Ethanol

Lead Scavengers:
1,2-DCA: 1,2-Dichloroethane
EDB: 1,2-Dibromoethane

Figures

Figure 1: Site vicinity map.

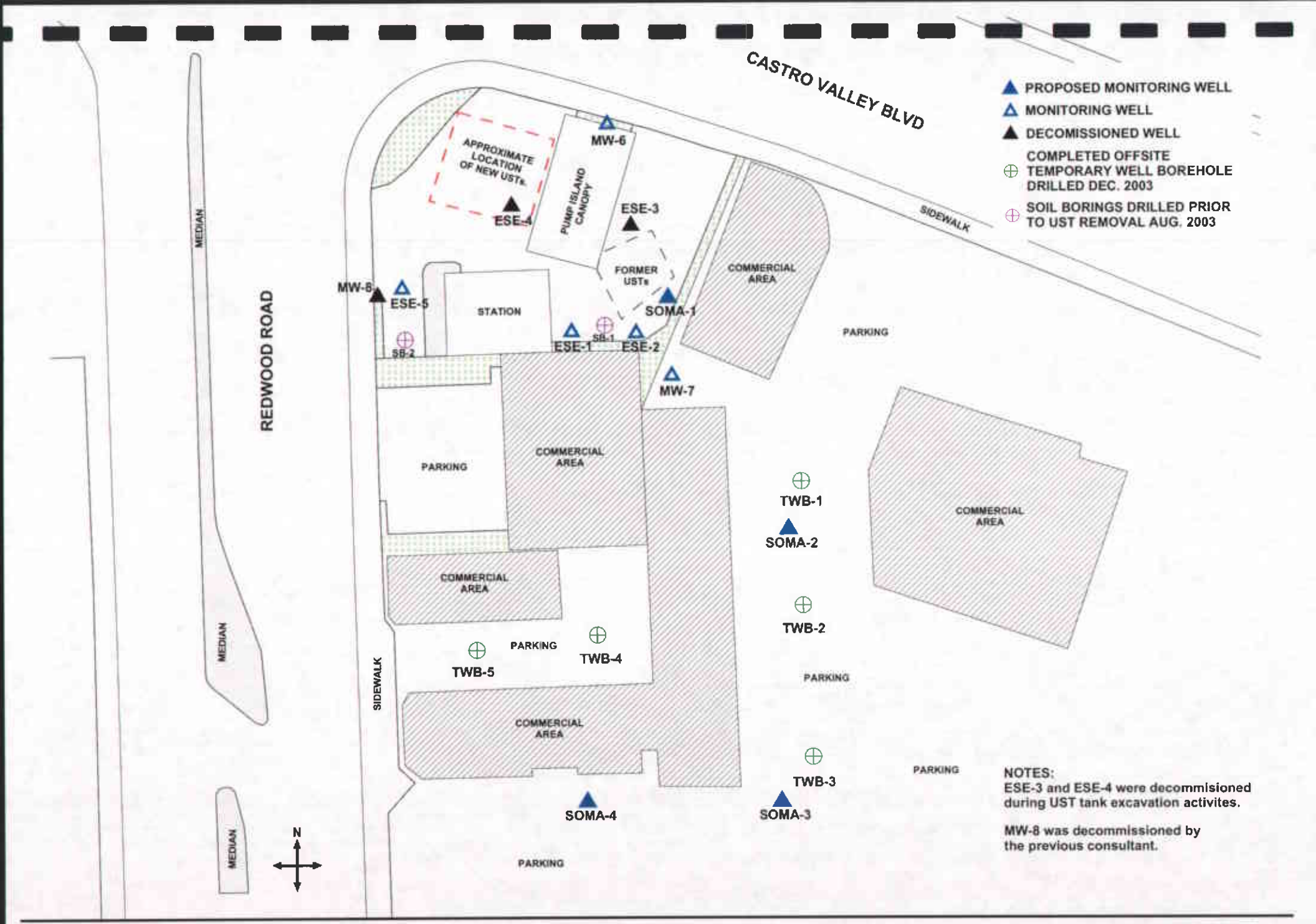

Figure 2: Site map showing locations of existing monitoring wells, decomissioned wells, offsite temporary well boreholes, and proposed monitoring wells.

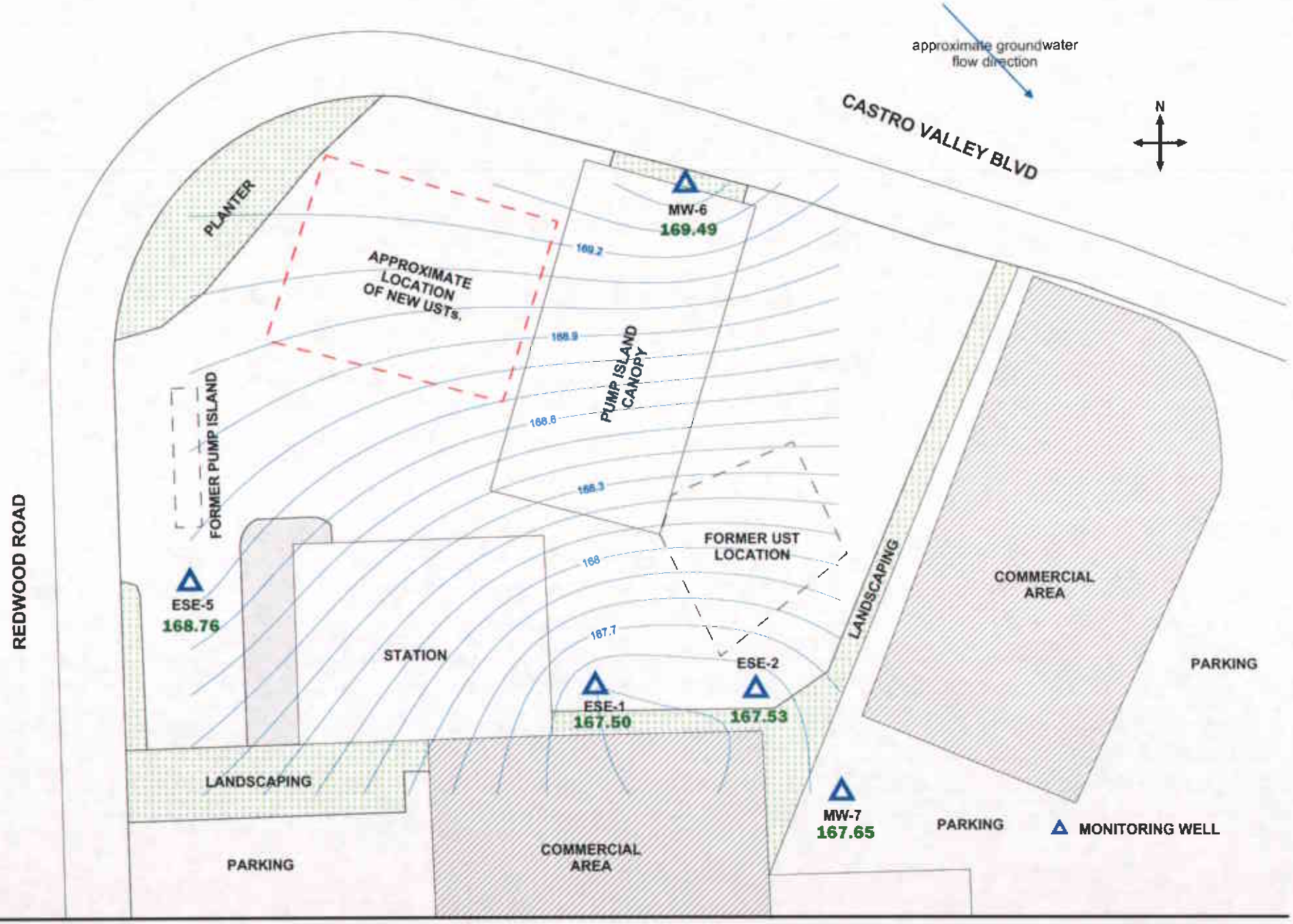

Figure 3: Groundwater elevation contour map in feet. May, 2004.

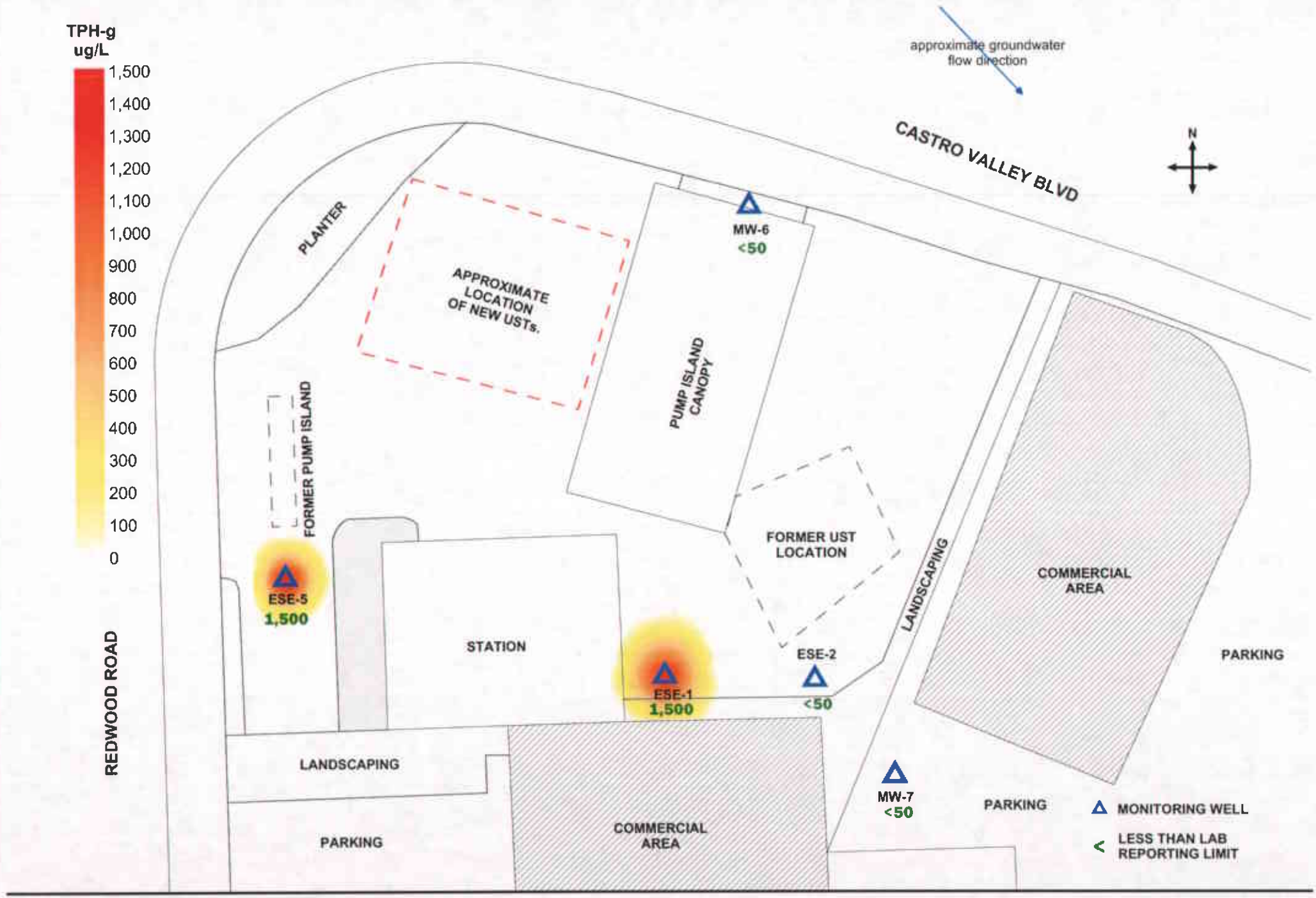

Figure 4: Contour map of TPH-g concentrations in the groundwater. May, 2004.

Figure 5: Contour map of Benzene concentrations in the groundwater. May, 2004.

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

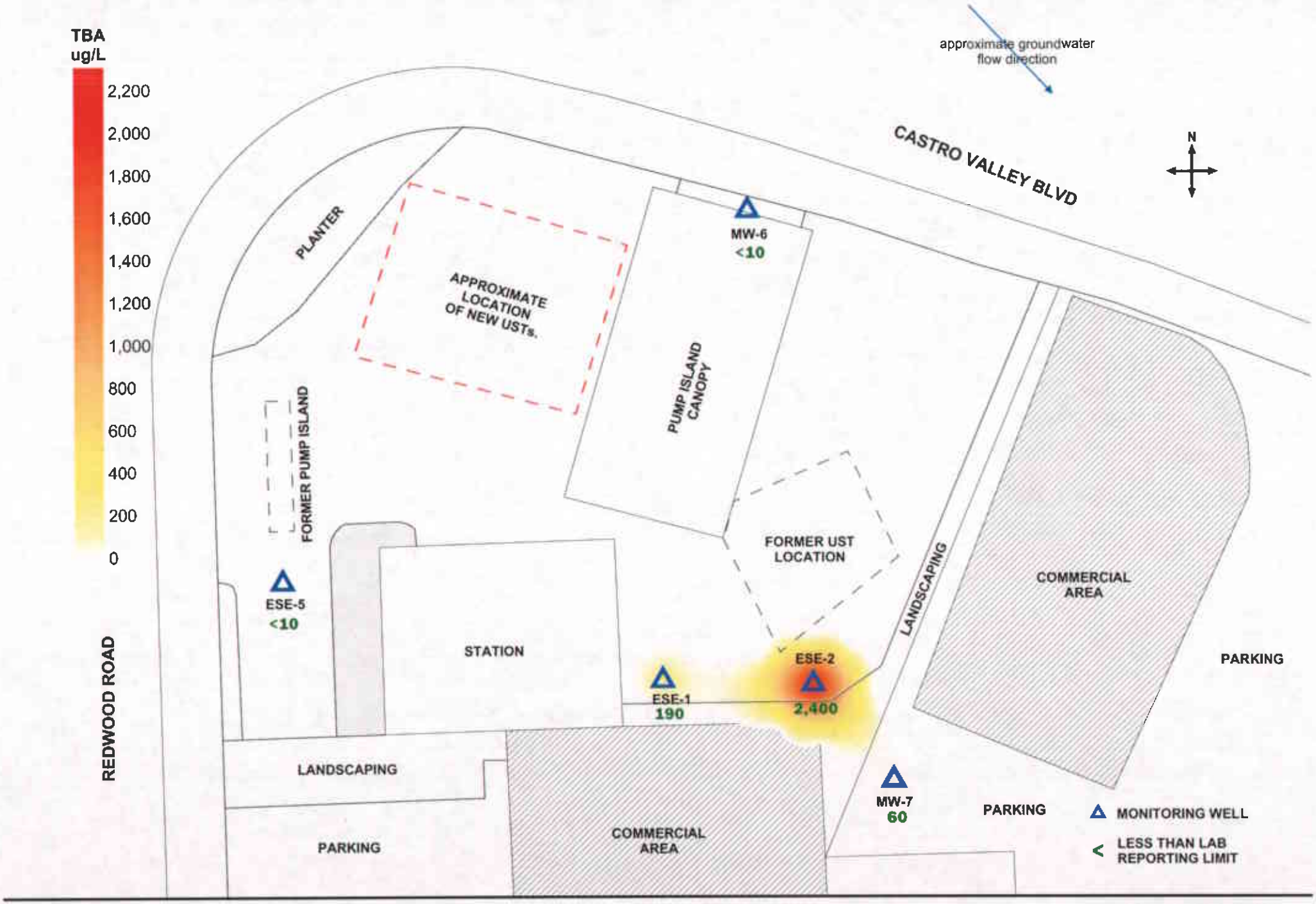

Figure 7: Contour map of TBA concentrations in the groundwater. May, 2004.

Figure 8: Map of TAME concentrations in the groundwater. May, 2004.

APPENDIX A

Field measurements of physical and chemical properties of groundwater samples collected during the Second Quarter 2004

ENVIRONMENTAL ENGINEERING, INC

Well No.:	ESE-1	**Project No.:**	2761
Casing Diameter:	2 inches	**Address:**	3519 Castro Valley Blvd
Depth of Well:	27.95 feet		Castro Valley, CA
Top of Casing Elevation:	177.69 feet	**Date:**	May 24, 2004
Depth to Groundwater:	10.19 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	167.50 feet		Mehran Nowroozi
Water Column Height:	17.76 feet		
Purged Volume:	12 gallons		

Purging Method:	**Bailer** ☐		**Pump** ☑		
Sampling Method:	**Bailer** ☑		**Pump** ☐		
Color:	**No** ☑		**Yes** ☐	**Describe:**	
Sheen:	**No** ☑		**Yes** ☐	**Describe:**	
Odor:	**No** ☑		**Yes** ☐	**Describe:**	

Field Measurements:

Time	Vol (gallons)	pH	Temp (^{0}C)	E.C. (µs/cm)
1:10 PM	Started purging well			
1:14 PM	4.0	6.78	19.00	926
1:16 PM	8.0	6.64	19.10	949
1:18 PM	12	6.64	19.10	940
1:20 PM	Sampled			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	ESE-2	**Project No.:**	2761
Casing Diameter:	2 inches	**Address:**	3519 Castro Valley Blvd
Depth of Well:	26.45 feet		Castro Valley, CA
Top of Casing Elevation:	178.23 feet	**Date:**	May ~~20~~ 21, 2004
Depth to Groundwater:	10.70 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	164.53 feet		Mehran Nowroozi
Water Column Height:	15.75 feet		
Purged Volume:	12 gallons		

Purging Method:	**Bailer** ☐		**Pump** ☑		
Sampling Method:	**Bailer** ☑		**Pump** ☐		
Color:	**No** ☑		**Yes** ☐	**Describe:**	
Sheen:	**No** ☑		**Yes** ☐	**Describe:**	
Odor:	**No** ☑		**Yes** ☐	**Describe:**	

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
12:48 PM	Started purging wells			
12:51 PM	4.0	6.75	18.60	980
12:53 PM	8.0	6.72	19.00	949
12:56 PM	12	6.71	19.00	932
1 PM	Sampled			

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Well No.:	ESC5	**Project No.:**	2761
Casing Diameter:	2 inches	**Address:**	3519 Castro Valley Blvd
Depth of Well:	23.80 feet		Castro Valley, CA
Top of Casing Elevation:	176.26 feet	**Date:**	May 21, 2004
Depth to Groundwater:	7.50 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	168.76 feet		Mehran Nowroozi
Water Column Height:	16.30 feet		
Purged Volume:	10 gallons		

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)
11:04 AM	started purging well			
11:06 AM	4.0	6.77	19.10	1063
11:09 AM	8.0	6.68	20.00	1122
11:12 AM	10	DRIED		
11:15 AM	sampled			

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Well No.:	MW-6	**Project No.:**	2761
Casing Diameter:	2 inches	**Address:**	3519 Castro Valley Blvd
Depth of Well:	29.50 feet		Castro Valley, CA
Top of Casing Elevation:	179.24 feet	**Date:**	May ~~26~~ 21, 2004
Depth to Groundwater:	9.75 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	169.49 feet		Mehran Nowroozi
Water Column Height:	19.75 feet		
Purged Volume:	14 gallons		

Purging Method:	**Bailer** ☐	**Pump** ☑		
Sampling Method:	**Bailer** ☑	**Pump** ☐		
Color:	**No** ☑	**Yes** ☐	**Describe:**	
Sheen:	**No** ☑	**Yes** ☐	**Describe:**	
Odor:	**No** ☑	**Yes** ☐	**Describe:**	

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:30 AM	started purging well			
11:33 AM	5.0	6.84	19.20	765
11:36 AM	10	6.75	19.60	756
11:38 AM	14	6.74	19.80	761
11:41 AM	samples			

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Well No.:	MW-7	**Project No.:**	2761
Casing Diameter:	2 inches	**Address:**	3519 Castro Valley Blvd
Depth of Well:	29.03 feet		Castro Valley, CA
Top of Casing Elevation:	176.55 feet	**Date:**	May 21, 2004
Depth to Groundwater:	8.90 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	167.65 feet		Mehran Nowroozi
Water Column Height:	20.13 feet		
Purged Volume:	9.0 gallons		

Purging Method:	**Bailer** ☐	**Pump** ☑		
Sampling Method:	**Bailer** ☑	**Pump** ☐		
Color:	**No** ☑	**Yes** ☐	**Describe:**	
Sheen:	**No** ☑	**Yes** ☐	**Describe:**	
Odor:	**No** ☑	**Yes** ☐	**Describe:**	

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:34 Am	started purging well			
10:36 Am	4.0	6.84	17.70	770
10:39 Am	9.0	6.84	18.30	794
10:42 Am	samples			

Appendix B

Chain of Custody form and laboratory report

for the Second Quarter 2004 monitoring event

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

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: 04-JUN-04
Lab Job Number: 172446
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

CHAIN OF CUSTODY

Page _____ of _____

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

C&T LOGIN # 172446

Sampler: TONY PERINI / Mehran Nourooz

Project No: 2761

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

Analyses

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	TPHg 8015	BTEX 8021 GC	Gasoline Oxygenates & Lead Scavengers	Ethanol
-1	ESE-1	5/21/04 1:20 PM		✓		4-VOAs	✓			✓	✓	✓	✓	✓
-2	ESE-2	1 PM		↓		↓	↓			↓	↓	↓	↓	↓
-3	ESE-5	11:15 AM		↓		↓	↓			↓	↓	↓	↓	↓
-4	MW-6	11:41 AM		↓		↓	↓			↓	↓	↓	↓	↓
-5	MW-7	10:42 AM		✓		↓	↓			✓	↓	↓	↓	↓

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

Received ☐ On ice ☐ Cold ☐ Ambient ☑ Intact

RELINQUISHED BY:	RECEIVED BY:
TONY PERINI 5/21/04	[signature] 5/21/04 2PM
Tony Perini 2PM DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Field ID:	ESE-1	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	91333
Lab ID:	172446-001	Analyzed:	05/21/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,500	250	EPA 8015B
Benzene	370	2.5	EPA 8021B
Toluene	10	2.5	EPA 8021B
Ethylbenzene	14	2.5	EPA 8021B
m,p-Xylenes	20	2.5	EPA 8021B
o-Xylene	5.2	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	85	74-142	EPA 8015B
Bromofluorobenzene (FID)	97	80-139	EPA 8015B
Trifluorotoluene (PID)	79	55-139	EPA 8021B
Bromofluorobenzene (PID)	95	62-134	EPA 8021B

Field ID:	ESE-2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	91333
Lab ID:	172446-002	Analyzed:	05/21/04

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)	81	74-142	EPA 8015B
Bromofluorobenzene (FID)	104	80-139	EPA 8015B
Trifluorotoluene (PID)	78	55-139	EPA 8021B
Bromofluorobenzene (PID)	96	62-134	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Field ID:	ESE-5	Lab ID:	172446-003
Type:	SAMPLE	Diln Fac:	1.000

Analyte	Result	RL	Batch#	Analyzed	Analysis
Gasoline C7-C12	1,500	50	91333	05/21/04	EPA 8015B
Benzene	2.6 C	0.50	91381	05/24/04	EPA 8021B
Toluene	ND	0.50	91333	05/21/04	EPA 8021B
Ethylbenzene	2.1 C	0.50	91333	05/21/04	EPA 8021B
m,p-Xylenes	2.1 C	0.50	91333	05/21/04	EPA 8021B
o-Xylene	ND	0.50	91333	05/21/04	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	122	74-142	91333	05/21/04	EPA 8015B
Bromofluorobenzene (FID)	112	80-139	91333	05/21/04	EPA 8015B
Trifluorotoluene (PID)	103	55-139	91333	05/21/04	EPA 8021B
Bromofluorobenzene (PID)	104	62-134	91333	05/21/04	EPA 8021B

Field ID:	MW-6	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	91333
Lab ID:	172446-004	Analyzed:	05/21/04

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)	82	74-142	EPA 8015B
Bromofluorobenzene (FID)	106	80-139	EPA 8015B
Trifluorotoluene (PID)	76	55-139	EPA 8021B
Bromofluorobenzene (PID)	101	62-134	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%
NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761		
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	91333
Lab ID:	172446-005	Analyzed:	05/21/04

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)	79	74-142	EPA 8015B
Bromofluorobenzene (FID)	100	80-139	EPA 8015B
Trifluorotoluene (PID)	76	55-139	EPA 8021B
Bromofluorobenzene (PID)	95	62-134	EPA 8021B

Type:	BLANK	Batch#:	91333
Lab ID:	QC251883	Analyzed:	05/21/04
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)	81	74-142	EPA 8015B
Bromofluorobenzene (FID)	97	80-139	EPA 8015B
Trifluorotoluene (PID)	75	55-139	EPA 8021B
Bromofluorobenzene (PID)	93	62-134	EPA 8021B

Type:	BLANK	Batch#:	91381
Lab ID:	QC252066	Analyzed:	05/24/04
Diln Fac:	1.000	Analysis:	EPA 8021B

Analyte	Result	RL
Benzene	ND	0.50

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		88	55-139
Bromofluorobenzene (PID)		93	62-134

C= Presence confirmed, but RPD between columns exceeds 40%
NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

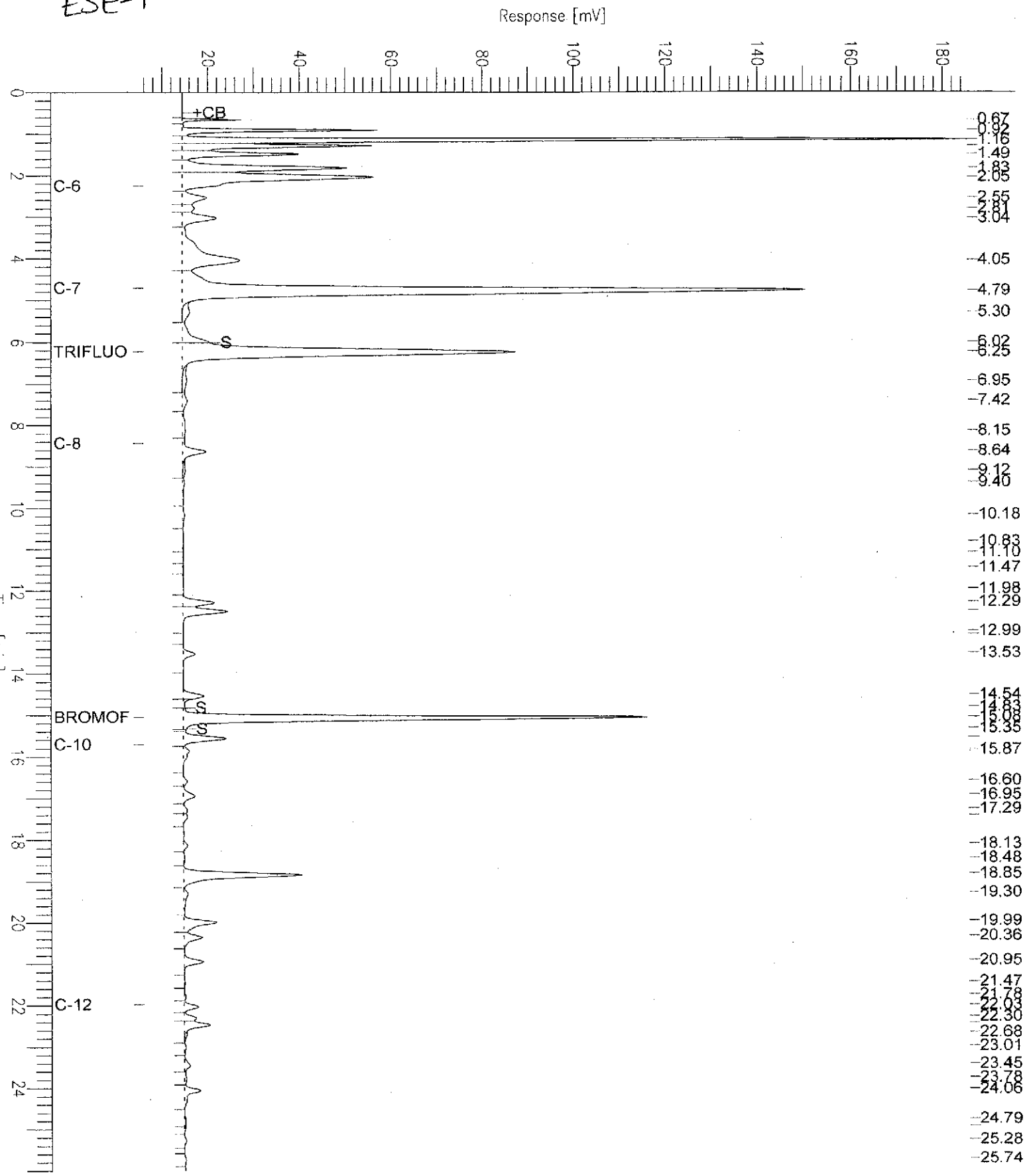
2.2

GC07 TVH 'A' Data File RTX 502

Sample Name : 172446-001,91333
FileName : G:\GC07\DATA\142A015.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: a1.0 Page 1 of 1
Date : 5/21/04 09:58 PM
Time of Injection: 5/21/04 07:18 PM
Low Point : 5.88 mV High Point : 185.45 mV
Plot Scale: 179.6 mV

ESE-1

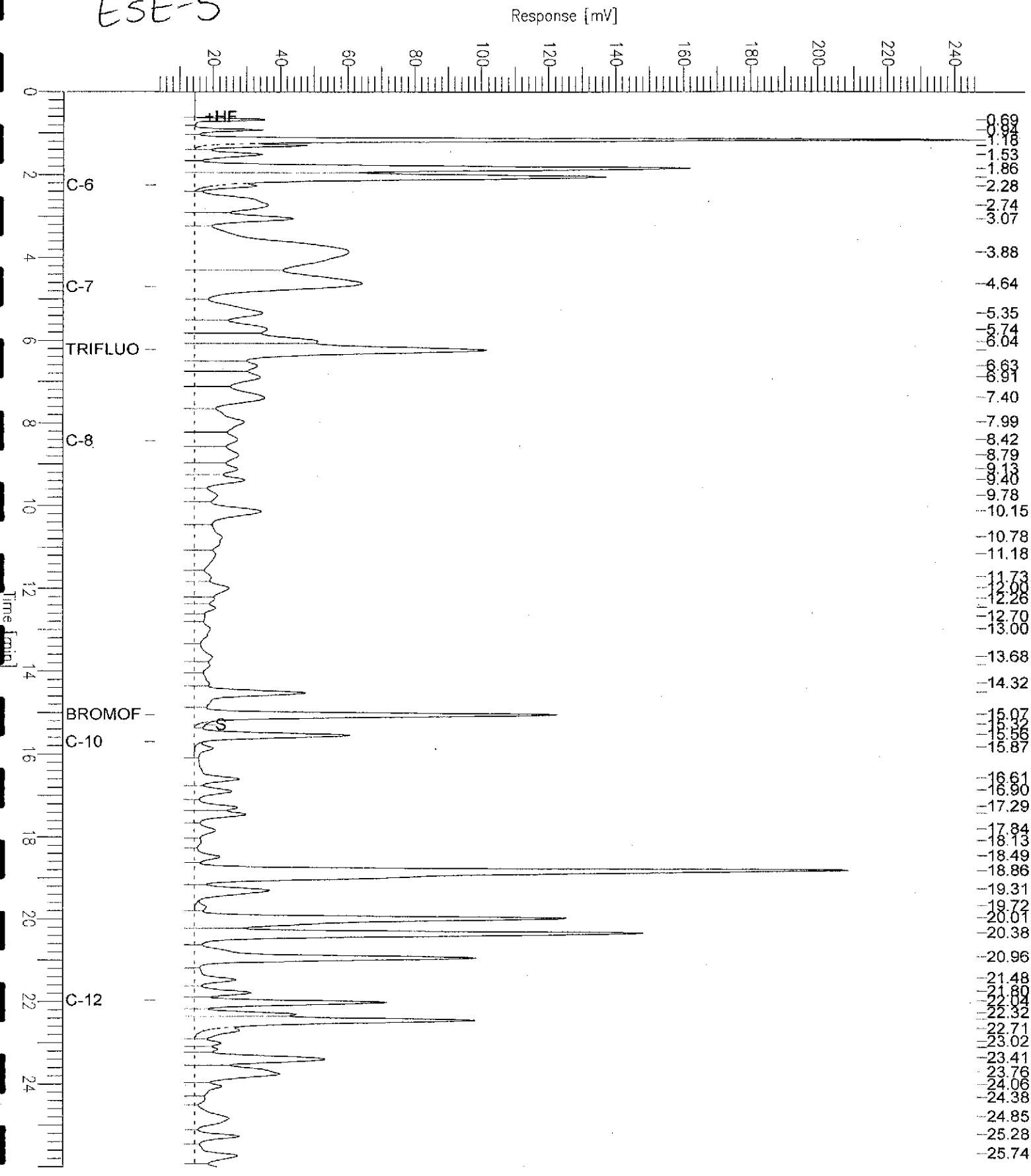


GC07 TVH 'A' Data File RTX 502

Sample Name : 172446-003,91333
FileName : G:\GC07\DATA\142A016.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 3 mV

Sample #: a1.0 Page 1 of 1
Date : 5/21/04 09:58 PM
Time of Injection: 5/21/04 07:52 PM
Low Point : 2.87 mV High Point : 246.52 mV
Plot Scale: 243.7 mV

ESE-5

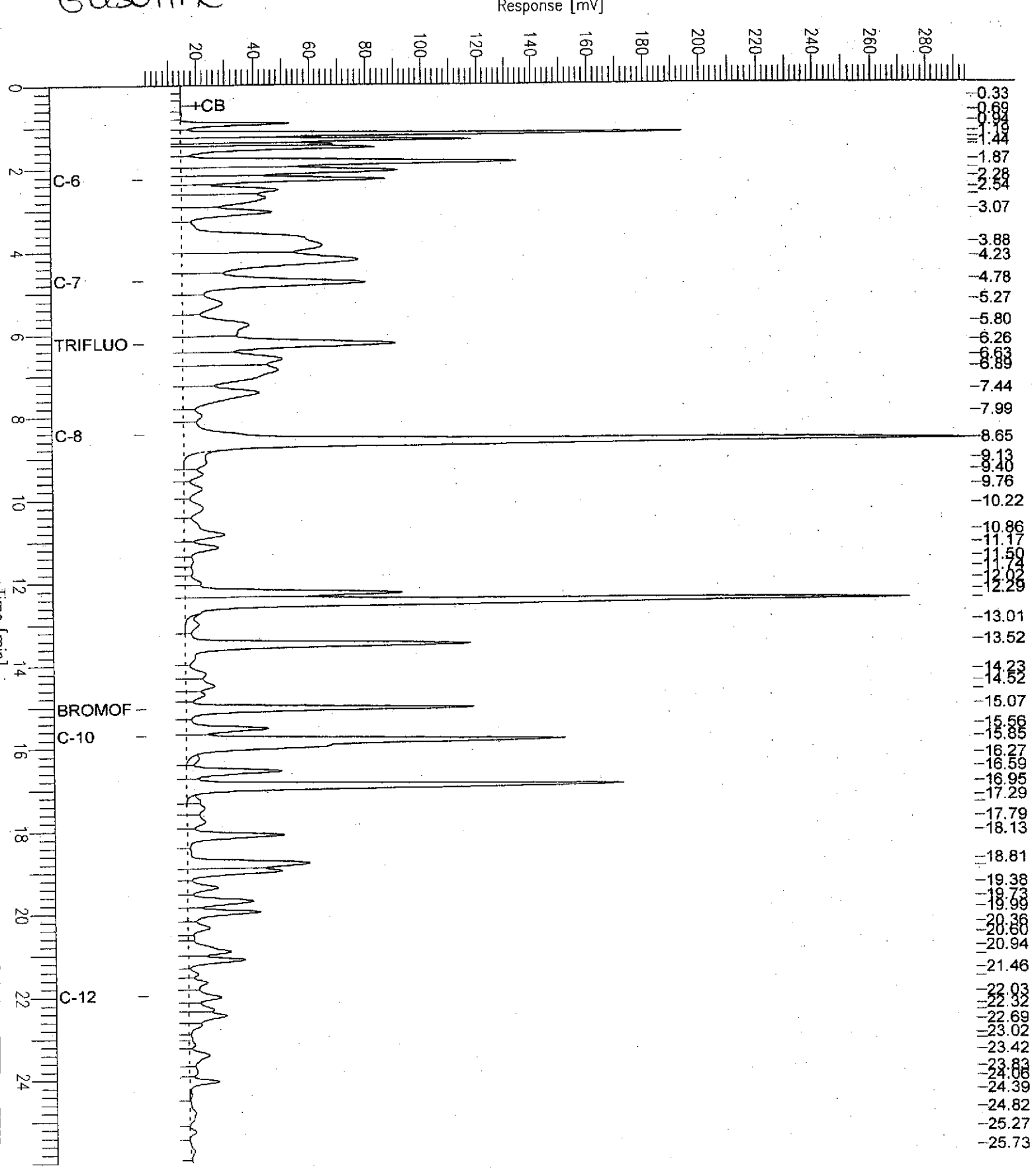


GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc251885,91333,04ws0931,5/5000
FileName : G:\GC07\DATA\142A002.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 : 5/21/04 11:56 AM
Time of Injection: 5/21/04 11:30 AM
Low Point : 0.63 mV High Point : 294.72 mV
Plot Scale: 294.1 mV

Gasoline



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	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:	QC251884	Batch#:	91333
Matrix:	Water	Analyzed:	05/21/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	19.25	96	80-120
Toluene	20.00	19.99	100	80-120
Ethylbenzene	20.00	20.64	103	80-120
m,p-Xylenes	20.00	20.45	102	80-120
o-Xylene	20.00	20.75	104	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	76	55-139
Bromofluorobenzene (PID)	96	62-134

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	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:	QC251885	Batch#:	91333
Matrix:	Water	Analyzed:	05/21/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,145	107	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	74-142
Bromofluorobenzene (FID)	101	80-139

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8021B
Type:	BS	Diln Fac:	1.000
Lab ID:	QC252067	Batch#:	91381
Matrix:	Water	Analyzed:	05/24/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	18.36	92	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	80	55-139
Bromofluorobenzene (PID)	84	62-134

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8021B
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC252175	Batch#:	91381
Matrix:	Water	Analyzed:	05/24/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	20.87	104	80-120	13	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	92	55-139
Bromofluorobenzene (PID)	96	62-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	91333
MSS Lab ID:	172439-001	Sampled:	05/21/04
Matrix:	Water	Received:	05/21/04
Units:	ug/L	Analyzed:	05/21/04
Diln Fac:	1.000		

Type: MS Lab ID: QC251958

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	86.89	2,000	2,250	108	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	74-142
Bromofluorobenzene (FID)	103	80-139

Type: MSD Lab ID: QC251959

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,219	107	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	74-142
Bromofluorobenzene (FID)	106	80-139

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Field ID:	ESE-1	Lab ID:	172446-001
Type:	SAMPLE	Batch#:	91400

Analyte	Result	RL	Dil Fac	Analyzed
tert-Butyl Alcohol (TBA)	190	10	1.000	05/24/04
MTBE	140	1.0	2.000	05/25/04
Isopropyl Ether (DIPE)	ND	0.5	1.000	05/24/04
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	05/24/04
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000	05/24/04
1,2-Dichloroethane	ND	0.5	1.000	05/24/04
1,2-Dibromoethane	ND	0.5	1.000	05/24/04
Ethanol	ND	1,000	1.000	05/24/04

Surrogate	%REC	Limits	Dil Fac	Analyzed
Dibromofluoromethane	93	80-120	1.000	05/24/04
1,2-Dichloroethane-d4	96	80-124	1.000	05/24/04
Toluene-d8	101	80-120	1.000	05/24/04
Bromofluorobenzene	102	80-120	1.000	05/24/04

Field ID:	ESE-2	Dil Fac:	20.00
Type:	SAMPLE	Batch#:	91400
Lab ID:	172446-002	Analyzed:	05/25/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	2,400	200
MTBE	1,100	10
Isopropyl Ether (DIPE)	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	10
Methyl tert-Amyl Ether (TAME)	25	10
1,2-Dichloroethane	ND	10
1,2-Dibromoethane	ND	10
Ethanol	ND	20,000

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	98	80-124
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Field ID:	ESE-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	91400
Lab ID:	172446-003	Analyzed:	05/24/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	25	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	93	80-120
1,2-Dichloroethane-d4	96	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

Field ID:	MW-6	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	91439
Lab ID:	172446-004	Analyzed:	05/25/04

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	93	80-120
1,2-Dichloroethane-d4	96	80-124
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Field ID:	MW-7	Lab ID:	172446-005
Type:	SAMPLE	Batch#:	91400

Analyte	Result	RL	Diln Fac	Analyzed
tert-Butyl Alcohol (TBA)	60	10	1.000	05/24/04
MTBE	630	4.2	8.333	05/25/04
Isopropyl Ether (DIPE)	ND	0.5	1.000	05/24/04
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	05/24/04
Methyl tert-Amyl Ether (TAME)	17	0.5	1.000	05/24/04
1,2-Dichloroethane	ND	0.5	1.000	05/24/04
1,2-Dibromoethane	ND	0.5	1.000	05/24/04
Ethanol	ND	1,000	1.000	05/24/04

Surrogate	%REC	Limits	Diln Fac	Analyzed
Dibromofluoromethane	94	80-120	1.000	05/24/04
1,2-Dichloroethane-d4	95	80-124	1.000	05/24/04
Toluene-d8	100	80-120	1.000	05/24/04
Bromofluorobenzene	106	80-120	1.000	05/24/04

Type:	BLANK	Batch#:	91400
Lab ID:	QC252132	Analyzed:	05/24/04
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	94	80-120
1,2-Dichloroethane-d4	96	80-124
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	05/21/04
Units:	ug/L	Received:	05/21/04

Type:	BLANK	Batch#:	91400
Lab ID:	QC252133	Analyzed:	05/24/04
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	92	80-120
1,2-Dichloroethane-d4	95	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-120

Type:	BLANK	Batch#:	91439
Lab ID:	QC252279	Analyzed:	05/25/04
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	94	80-120
1,2-Dichloroethane-d4	97	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	91400
Units:	ug/L	Analyzed:	05/24/04
Diln Fac:	1.000		

Type: BS Lab ID: QC252130

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	122.6	98	80-140
MTBE	50.00	42.14	84	76-123
Isopropyl Ether (DIPE)	25.00	21.20	85	80-124
Ethyl tert-Butyl Ether (ETBE)	25.00	21.53	86	80-120
Methyl tert-Amyl Ether (TAME)	25.00	21.65	87	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	96	80-124
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC252131

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	120.5	96	80-140	2	20
MTBE	50.00	41.76	84	76-123	1	20
Isopropyl Ether (DIPE)	25.00	21.53	86	80-124	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.70	87	80-120	1	20
Methyl tert-Amyl Ether (TAME)	25.00	21.49	86	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	96	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	172446	Location:	3519 Castro Valley Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	91439
Units:	ug/L	Analyzed:	05/25/04
Diln Fac:	1.000		

Type: BS Lab ID: QC252277

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	111.8	89	80-140
MTBE	50.00	42.43	85	76-123
Isopropyl Ether (DIPE)	25.00	21.40	86	80-124
Ethyl tert-Butyl Ether (ETBE)	25.00	22.10	88	80-120
Methyl tert-Amyl Ether (TAME)	25.00	21.72	87	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	98	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC252278

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	125.0	100	80-140	11	20
MTBE	50.00	43.63	87	76-123	3	20
Isopropyl Ether (DIPE)	25.00	22.67	91	80-124	6	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.02	92	80-120	4	20
Methyl tert-Amyl Ether (TAME)	25.00	22.91	92	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	99	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

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 (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 (c)	10/5/1992	177.69	11.22	166.47	2100	370	150	17	110	---	(j) ---	PACE
ESE-1D (d)	10/5/1992	---	---	---	2300	370	160	16	110	---	(j) ---	PACE
ESE-1	4/1/1993	177.69	8.79	168.90	5900	1500	410	110	390	---	(j) ---	PACE
ESE-1	6/29/1993	177.69	10.34	167.35	7600	2900	390	130	460	---	(j) ---	PACE
ESE-1	9/23/1993	177.69	10.91	166.78	2000	490	40	20	56	600	(e)(j) ---	PACE
QC-1 (d)	9/23/1993	---	---	---	1500	420	39	19	56	550	(e)(j) ---	PACE
ESE-1	12/10/1993	177.69	9.93	167.76	1800	480	42	19	66	921	(e)(j) 3.2	PACE
QC-1 (d)	12/10/1993	---	---	---	1500	380	38	17	55	770	(e)(j) ---	PACE
ESE-1	2/17/1994	177.69	9.64	168.05	1900	380	48	24	80	585	(e)(j) ---	PACE
QC-1 (d)	2/17/1994	---	---	---	2200	430	42	19	65	491	(e)(j) ---	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	4.0	SPL
ESE-1	12/17/1998	177.69	9.51	168.18	2400	73	1.0	2.8	4.6	2000/2500*	---	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	---	PACE
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

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
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

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
ESE-2		10/5/1992	178.23	11.68	166.55	300	5.4	16	3.9	45	—	(l)	—	PACE
ESE-2		4/1/1993	178.23	9.17	169.06	240	27	ND<0.5	17	2.6	123	(e)(l)	—	PACE
ESE-2		6/29/1993	178.23	10.88	167.35	1700	260	24	110	23	—	(l)	—	PACE
QC-1	(d)	6/29/1993		—	—	1300	240	17	110	25	—	(l)	—	PACE
ESE-2		9/23/1993	178.23	11.56	166.67	240	3.1	0.5	0.6	2.5	643	(e)(l)	—	PACE
ESE-2		12/10/1993	178.23	10.48	167.75	250	2.4	2.4	1.5	11	940	(e)(l)	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)(l)	—	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)	5.1	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)	3.6	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	—	—	—	—	—	—		—	—
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	—	—	—	—	—	—	—	—		—	—
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

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
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)	178.23	10.19	168.04	10000	ND<100	ND<100	ND<100	ND<100	4400	---	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
ESE-3	10/5/1992	178.20	10.58	167.62	430	57	31	3.6	34	---	(l)	---	PACE
ESE-3	4/1/1993	178.20	8.14	170.06	2400	460	220	74	210	---	(l)	---	PACE
ESE-3	6/29/1993	178.20	9.72	168.48	280	56	14	15	13	---	(l)	---	PACE
ESE-3	9/23/1993	178.20	10.46	167.74	72	13	3.5	1.7	4.1	---	(l)	---	PACE
ESE-3	12/10/1993	178.20	9.30	168.90	270	71	32	6.1	33	---	(l)	2.7	PACE
ESE-3	2/17/1994	178.20	8.97	169.23	520	140	10	20	33	5.74	(l)	---	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	(l)	6.2	PACE
ESE-3	10/12/1994	178.20	10.32	167.88	470	190	6.4	15	18	ND<5.0	(l)	3.5	PACE
ESE-3	1/19/1995	178.20	7.40	170.80	330	260	27	21	20	---		6.7	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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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-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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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	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	(f)	8.33	169.33	150	23	0.6	5.4	0.5	54	(e)(l)	—	PACE
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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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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ESE-5	10/5/1992	176.08	9.22	166.86	1300	200	3.8	1.2	18	—	(f) —	PACE
ESE-5	4/1/1993	176.08	7.02	169.06	13000	2200	26	730	1000	—	(f) —	PACE
QC-1 (d)	4/1/1993	—	—	—	13000	2500	25	740	1100	—	(f) —	PACE
ESE-5	6/29/1993	176.08	10.21	165.87	7600	1500	9.3	170	100	—	(f) —	PACE
ESE-5	9/23/1993	176.08	10.64	165.44	560	19	1.2	0.9	1.8	—	(f) —	PACE
ESE-5	12/10/1993	176.08	9.42	166.66	1700	300	3	76	110	14.07	(f) 2.5	PACE
ESE-5	2/7/1994	176.08	9.35	166.73	3500	640	7.8	90	130	45.13	(f) —	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	(f) 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	—	—	—	—	—	—	—	—
ESE-5	4/28/1997	176.08	—	—	ND<250	7.9	ND<5.0	ND<5.0	ND<5.0	ND<50	4.9	SPL
ESE-5	7/18/1997	176.08	7.86	168.22	1200	ND<5	ND<10	ND<10	ND<10	ND<100	5.0	SPL
QC-1 (d)	7/18/1997	—	—	—	630	31	ND<5.0	ND<5.0	ND<5.0	130	—	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	ND<50	5.2	SPL
ESE-5	1/22/1998	176.08	4.64	171.44	170	7.7	ND<1.0	ND≤1.0	ND<1.0	130	4.6	SPL
ESE-5	4/23/1998	176.08	6.31	169.77	720	79	ND<5.0	9.0	ND<5.0	180	4.6	SPL
ESE-5	7/29/1998	176.08	7.43	168.65	—	—	—	—	—	—	—	—
ESE-5	7/30/1998	—	—	—	840	9.8	ND<1.0	4.0	ND<1.0	710	4.3	SPL
ESE-5	12/17/1998	176.08	7.05	169.03	—	—	—	—	—	—	—	—
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	ND<5.0	—	SPL
ESE-5	6/23/1999	176.08	7.77	168.31	—	—	—	—	—	—	—	SPL

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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	—	—	—	—	—	—	—	—

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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	—	—	—	—	—	—	—	—

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	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	—	—	—	—	—	—	—	—

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Groundwater Elevation and Analytical Data
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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-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	—	(l)	—	PACE
QC-2	(i)	6/29/1993	—	—	—	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	(l)	—	PACE
QC-2	(i)	9/23/1993	—	—	—	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	(l)	—	PACE
QC-2	(i)	12/10/1993	—	—	—	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(l)	—	PACE
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 (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/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
µg/L = micrograms per liter
ND< = Not detected at or above specified laboratory method detection limit