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July 31, 2012

Ms. Dilan Roe
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Oakland, California 94502

Subject: Fuel Leak Case#RO0000346
Site Location: 3519 Castro Valley Boulevard, Castro Valley

Dear Ms. Roe:

SOMA's "Second Semi-Annual 2012 Groundwater Monitoring Report" for the subject site has been uploaded to the State's GeoTracker database and to the Alameda County ftp site for your review.

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

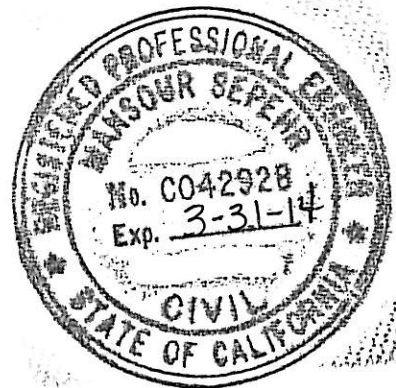
Sincerely,

A handwritten signature in black ink, appearing to read "Mansour Sepehr", written over a horizontal line.

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

Enclosure

cc: Mr. Mirazim Shakoori w/enclosure



**Second Semi-Annual 2012
Groundwater Monitoring Report**

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

July 31, 2012

Project 2761

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



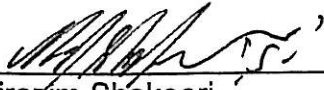
ENVIRONMENTAL ENGINEERING, INC.

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PERJURY STATEMENT

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


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



Mirazim Shakoori
4313 Mansfield Drive
Danville, California 94506
Responsible Party

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Mirazim Shakoori, property owner of 3519 Castro Valley Boulevard, Castro Valley, California to comply with requirements of Alameda County Environmental Health Services for the Second Semi-Annual 2012 groundwater monitoring event.



Mansour Sepehr, PhD, PE
Principal Hydrogeologist

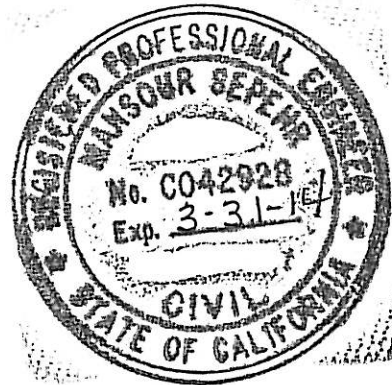


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1. INTRODUCTION

1.1 Overview

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

This report summarizes results of the Second Semi-Annual 2012 groundwater monitoring event conducted at the site on July 10 and 11, 2012. Included are laboratory analytical results for groundwater samples and physical and chemical properties measured in the field for each groundwater sample including pH, temperature, and electrical conductivity (EC).

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

1.2 Summary of Field Activities and Laboratory Analysis

1.2.1 Field Activities

On July 10, 2012, ten on-site monitoring wells (five in Semi-Confined water-bearing zone [WBZ] including ESE-1R, ESE-2R, ESE-5R, MW-6R, SOMA-1; five in the Shallow WBZ including SOMA-5, SOMA-7, SOMA-8, OB-1, OB-2) and four off-site monitoring wells (two in the Semi-Confined WBZ including MW-7R, SOMA-4 and two in the Shallow WBZ including SOMA-2, SOMA-3) were measured for depth to groundwater. On July 10 and 11, 2012 additional field measurements and groundwater samples were collected from all monitoring wells. Figure 2 shows well locations.

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

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

Purged groundwater from each well was temporarily stored on-site in two 55-gallon drums. On January 30, 2012, two drums generated during First Semi-Annual 2012 groundwater monitoring event, were transported to an appropriate disposal facility. Appendix D includes the non-hazardous waste manifest for groundwater removal.

1.2.2 Laboratory Analysis

Curtis and Tompkins Laboratories, a California state-certified environmental laboratory, analyzed groundwater samples for the following: total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX); methyl tertiary-butyl ether (MtBE); gasoline oxygenates, and lead scavengers.

Similar to the previous events, SOMA requested that all samples be analyzed by EPA Method 8260B. However, due to laboratory sample log-in error TPH-g was analyzed by EPA Method 8015B instead of EPA Method 8260B. All other constituents were analyzed by EPA Method 8260B.

2. RESULTS

Following are results of field measurements and laboratory analysis for the July 2012 groundwater monitoring event.

2.1 Field Measurements for Shallow WBZ wells

Table 1 presents calculated groundwater elevation and depth to groundwater in each monitoring well. Depths to groundwater ranged from 7.96 feet in OB-1 to 10.45 feet in SOMA-2. Groundwater elevations ranged from 166.82 feet in SOMA-3 to 171.26 feet in SOMA-8. Table 1 also presents historical groundwater elevations in monitoring wells.

The groundwater elevation contour map is displayed in Figure 3. Groundwater flows southeasterly in the Shallow WBZ at an approximate gradient of 0.013 feet/feet. Groundwater gradient calculations are attached in Appendix B.

Since the previous monitoring event (January 2012), the groundwater flow direction has remained unchanged and the gradient has decreased. Refer to Table 1 for detailed historical groundwater elevation trends.

2.2 Laboratory Analyses for Shallow WBZ Wells

Table 1 presents laboratory analytical results of groundwater samples for TPH-g,

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

TPH-g was below the laboratory-reporting limit in groundwater samples from SOMA-2, SOMA-3, SOMA-5, and SOMA-8. TPH-g was detected in concentrations ranging from 2,100 µg/L in OB-1 to 46,000 µg/L in OB-2. Figure 4 displays the contour map of TPH-g concentrations in groundwater. The highest TPH-g concentration was observed in the vicinity of the former UST cavity at OB-2.

Since the previous monitoring event (January 2012), TPH-g increased in SOMA-7 and OB-2 and decreased in SOMA-5 and OB-1. However, as previously mentioned, due to laboratory error, TPH-g was analyzed by EPA method 8015B unlike previous events when TPH-g was analyzed by EPA method 8260B. Therefore, an accurate comparison cannot be made at this time.

The following BTEX analytes were observed during this monitoring event:

- In SOMA-2, SOMA-3, and SOMA-8, all BTEX analytes were below laboratory-reporting limits.
- In SOMA-5, all BTEX analytes were below laboratory-reporting limits, except benzene which was at a low level.
- The highest BTEX concentrations were detected in OB-2 at 580 µg/L, 11 µg/L, 1,300 µg/L, and 2,130 µg/L, respectively.

Figure 5 displays the contour map of benzene concentrations in groundwater. As illustrated, the highest benzene concentration was observed in the vicinity of the former UST cavity at OB-2. Since the previous monitoring event (January 2012), benzene increased in SOMA-7, decreased in SOMA-5 and OB-2, and remained unchanged in OB-1.

MtBE was below the laboratory-reporting limit in SOMA-2 and SOMA-8. Detectable MtBE concentrations ranged from 1.6 µg/L in SOMA-3 to 94 µg/L in OB-2. Figure 6 displays the contour map of MtBE concentrations in groundwater. Since the previous monitoring event (January 2012), MtBE increased in SOMA-7, OB-1 and OB-2 and decreased in SOMA-3 and SOMA-5.

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

- Isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary-amyl methyl ether (TAME), ethanol, 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) were below laboratory-reporting limits in all groundwater samples.
- Tertiary-butyl alcohol (TBA) was detected in OB-2 at 44 µg/L. TBA was below the laboratory-reporting limit in all other groundwater samples.

Figure 7 displays the map showing TBA concentrations in groundwater. Since the previous monitoring event (January 2012), TBA decreased in SOMA-5 and OB-2.

2.3 Field Measurements for Semi-Confined WBZ Wells

Table 1 presents calculated groundwater elevation and depth to groundwater in each monitoring well. Depths to groundwater ranged from 8.85 feet in ESE-5R to 11.25 feet in SOMA-1. Groundwater elevations ranged from 167.23 feet in SOMA-4 to 171.04 feet in MW-6R. Table 1 also presents historical groundwater elevations in monitoring wells.

The groundwater elevation contour map is displayed in Figure 8. Groundwater flows southerly across the site at an approximate gradient of 0.012 feet/foot.

Since the previous monitoring event (January 2012), the groundwater flow direction remained southerly and the gradient has slightly decreased. Refer to Table 1 for detailed historical groundwater elevation trends.

2.4 Laboratory Analyses for Semi-Confined WBZ Wells

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

TPH-g was below the laboratory-reporting limit in groundwater samples from the Semi-Confined WBZ except at wells ESE-1R, where TPH-g was detected at 1,100 µg/L. Figure 9 displays the map of TPH-g concentrations in groundwater. ESE-1R is located to the southwest of the former UST cavity.

Since the previous monitoring event (January 2012), TPH-g has decreased in ESE-1R, ESE-5R and SOMA-1, and remained below the laboratory-reporting limit in other wells. However, as previously mentioned, due to laboratory error, TPH-g was analyzed by EPA method 8015B unlike previous events when TPH-g was analyzed by EPA method 8260B. Therefore, an accurate comparison cannot be made at this time

The following BTEX analytes were observed during this monitoring event:

- BTEX analytes were detected in ESE-1R at 16 µg/L, 1.1 µg/L, 9.8 µg/L, and 1.70 µg/L, respectively.
- In all other Semi-Confined WBZ wells, BTEX analytes were below laboratory-reporting limits.

Figure 9 displays the map of benzene concentrations in groundwater. As illustrated, benzene has only minimally impacted groundwater in the Shallow WBZ. Since the previous monitoring event (January 2012), benzene has decreased in ESE-1R.

MtBE was below the laboratory-reporting limit in MW-6R and SOMA-4. Detectable MtBE concentrations ranged from 3.40 µg/L in MW-7R to 23 µg/L in ESE-1R. Figure 10 displays the contour map of MtBE concentrations in groundwater. Based on the concentrations observed in MW-7R, the MtBE plume has migrated off-site. Since the previous monitoring event (January 2012), detectable MtBE concentrations increased in ESE-1R, ESE-2R and MW-7R, and decreased in ESE-5R, SOMA-1 and SOMA-4.

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

- DIPE, ETBE, TAME, ethanol, 1,2-DCA, and EDB were below laboratory-reporting limits in all groundwater samples.
- TAME was detected in ESE-1R at 1.6 µg/L.
- TBA was detected in wells ESE-1R and SOMA-1 at 110 µg/L and 79 µg/L, respectively. It was below the laboratory-reporting limit in other wells.

Figure 9 displays the map showing TBA concentrations in groundwater. As illustrated, the highest TBA concentration was observed in the southwest of the former UST cavity around ESE-1R. Since the previous monitoring event (January 2012), TBA and TAME have increased in ESE-1R and TBA has decreased in SOMA-1.

Refer to Tables 1 and 2 for detailed historical concentration trends. Appendix C includes the laboratory report and chain of custody form for the Second Semi-Annual 2012 monitoring event.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

Conclusions based on the Second Semi-Annual 2012 groundwater monitoring event are summarized as follows:

- The groundwater flow direction was southeasterly in the Shallow WBZ and southerly in the Semi-Confined WBZ.
- In the Shallow WBZ, TPH-g, benzene, MtBE, and TBA plumes appear to be centrally located in the southern section of the site in the vicinity of the former UST cavity, at OB-2. Since the previous monitoring event

(January 2012), TPH-g has decreased in SOMA-5 and OB-1 and increased in SOMA-7 and significantly in OB-2. However, due to a different method of analysis adopted by the laboratory as compared to previous events, accurate comparison of TPH-g concentrations cannot be made during this event. High TPH-g and BTEX concentrations suggest that this WBZ is significantly impacted by petroleum hydrocarbons. Due to its high mobility and the south-to-southeasterly groundwater flow direction across the site from the former UST cavity, MtBE has migrated off-site.

- Within the Semi-Confined WBZ, TPH-g, benzene, and MtBE contamination is centered around the former UST cavity in the southern section of the site, around ESE-1R. However, since the previous monitoring event (January 2012) TPH-g and benzene has decreased while MtBE and TBA have increased in this well.
- In the northern section of the site, at MW-6R, all tested constituents were at non-detectable levels.

3.2 Recommendations

SOMA recommends the following:

- Conducting the next several monitoring events on a quarterly basis: Since Semi-Confined WBZ wells were recently reconstructed and are no longer cross-screening the impacted shallow and deeper zones, at this time it is recommended to continue groundwater monitoring for several consecutive quarters to determine the concentration trends. In addition to standard monitoring, SOMA recommends evaluating pertinent natural attenuation indicators for this WBZ (e.g., DO, ORP, Fe^{+2} , NO_3^- , and SO_4^{-2}).
- Based on the recent feasibility study report dated September 22, 2011, SOMA recommends conducting soil gas study adjacent to the southern property boundary to the west and east of the station building. This study will be conducted to establish whether vapor intrusion is a complete exposure pathway. If this approach is approved, SOMA will prepare a workplan detailing the proposed soil vapor study.
- SOMA had proposed to excavate the fuel impacted soils in order to address site contamination in the feasibility study report dated September 22, 2011. SOMA will initiate the remedial excavation upon receipt of written authorization from ACEHS.

Tables

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
Semi-Confined WBZ Wells											
ESE-1	10/5/1992	177.69	11.22	166.47	2,100	NA	370	150	17	110	NA
	10/5/1992	177.69	NM	NM	2,300	NA	370	160	16	110	NA
	4/1/1993	177.69	8.79	168.90	5,900	NA	1500	410	110	390	NA
	6/29/1993	177.69	10.34	167.35	7,600	NA	2900	390	130	460	NA
	9/23/1993	177.69	10.91	166.78	2,000	NA	490	40	20	56	600
	9/23/1993	177.69	NM	NM	1,500	NA	420	39	19	56	550
	12/10/1993	177.69	9.93	167.76	1,800	NA	480	42	19	66	921
	12/10/1993	177.69	NM	NM	1,500	NA	380	38	17	55	770
	2/17/1994	177.69	9.64	168.05	1,900	NA	380	48	24	80	585
	2/17/1994	177.69	NM	NM	2,200	NA	430	42	19	65	491
	8/8/1994	177.69	11.72	165.97	2,100	NA	450	46	16	50	760
	10/12/1994	177.69	10.48	167.21	760	NA	240	16	51	39	230
	1/19/1995	177.69	7.77	169.92	840	NA	600	120	22	58	NA
	5/2/1995	177.69	8.69	169.00	2,000	NA	640	67	24	98	NA
	7/28/1995	177.69	10.12	167.57	190	NA	<0.50	<0.50	<0.50	<1.0	NA
	11/17/1995	177.69	10.57	167.12	200	NA	3.4	<1.0	1	<2.0	600
	2/7/1996	177.69	7.41	170.28	750	NA	370	23	21	64	680
	4/23/1996	177.69	9.12	168.57	310	NA	100	<1.0	<1.0	<1.0	1500
	7/9/1996	177.69	10.12	167.57	730	NA	230	74	13	63	750
	10/10/1996	177.69	10.80	166.89	420	NA	26	1.6	7.3	12	430
1/20/1997	177.69	10.52	167.17	660	NA	290	4.2	13	36	450	
4/25/1997	177.69	9.77	167.92	410	NA	<0.5	<1.0	<1.0	<1.0	580	
7/18/1997	177.69	10.55	167.14	420	NA	<0.5	<1.0	<1.0	<1.0	370	
10/27/1997	177.69	10.36	167.33	300	NA	56	<1.0	6.5	<1.0	220	

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-1 cont.	1/22/1998	177.69	7.52	170.17	4,200	NA	440	9	15	17.7	1300
	4/23/1998	177.69	8.80	168.89	15,000	NA	3400	190	910	900	4900
	4/23/1998	177.69	NM	NM	15,000	NA	2800	140	730	730	4400
	7/29/1998	177.69	9.73	167.96	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	177.69	NM	NM	15,000	NA	<2.5	<5.0	<5.0	<5.0	15000
	12/17/1998	177.69	9.51	168.18	2,400	NA	73	1	2.8	4.6	2000
	3/19/1999	177.69	8.65	169.04	4,700	NA	58	<1.0	<1.0	<1.0	4700
	6/23/1999	177.69	10.51	167.18	600	NA	170	<1.0	7.2	5	3900
	9/27/1999	177.69	10.32	167.37	920	NA	200	<25	<25	<25	4900
	12/9/1999	177.69	10.24	167.45	460	NA	130	1.2	5.2	1.5	5100
	3/9/2000	177.69	7.72	169.97	3,000	NA	1300	120	80	140	7300
	6/8/2000	177.69	9.40	168.29	2,900	NA	540	9.7	20	17	5200
	9/18/2000	177.69	10.05	167.64	890	NA	3.4	<0.5	1.4	<0.5	2800
	12/14/2000	177.69	8.20	169.49	1,600	NA	11.1	<0.5	<0.5	<0.5	2730
	3/21/2001	177.69	9.75	167.94	5,700	NA	2.28	<0.5	0.51	<1.5	6810
	6/18/2001	177.69	10.21	167.48	2,000	NA	152	0.669	3.62	2.34	1980
	9/18/2001	177.69	10.30	167.39	2,500	NA	57.1	<5.0	6.25	<15	2090
	12/13/2001	177.69	9.82	167.87	2,800	NA	208	6.05	8.54	9.66	2030
	3/14/2002	177.69	9.10	168.59	1,800	NA	140	6.31	4.5	9.41	1970
	6/19/2002	177.69	9.92	167.77	1,100	NA	220	2.02	4.23	3.8	1280
	9/10/2002	177.69	10.21	167.48	490	NA	39	2.9	<2.0	4.9	670
	12/16/2002	177.69	8.56	169.13	730	NA	140	6	3.2	9.1	670
	3/11/2003	177.69	9.40	168.29	1,700	NA	490	21	22	41	530
	6/17/2003	177.69	9.86	167.83	1,300	NA	140	<10	<10	<10	480
	12/9/2003	177.69	9.32	168.37	1,400	NA	390	12	14	26.1	260
	2/26/2004	177.69	7.71	169.98	3,200	NA	880	50	44	89	200
	5/21/2004	177.69	10.19	167.50	1,500	NA	370	10	14	25.2	140
	8/10/2004	180.24	10.41	169.83	460	NA	390	7	8.1	15.4	110
	10/19/2004	180.24	10.40	169.84	1,600	NA	490	13	12	25.3	110

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-1 cont.	1/14/2005	180.24	8.26	171.98	790 Z	NA	420	26	19	52	91
	4/14/2005	180.24	8.77	171.47	3,020	NA	766	25.6	21.3	25.26	88.2
	7/7/2005	180.24	9.94	170.30	1,940	NA	440	15.5	15.7	21	80.6
	11/15/2005	180.24	10.21	170.03	1,260	NA	259	6.2	8.2	10.81	45.8
	2/8/2006	180.24	9.01	171.23	1,430	NA	332	13.6	18.1	25.03	43
	4/27/2006	180.24	9.14	171.10	1,600	NA	519	23.2	32.4	40.20	63.4
	8/1/2006	180.24	9.92	170.32	1,530	NA	395	11.8	25.4	28.01	40
	10/19/2006	180.24	10.34	169.90	1,230	NA	327	10.2	21.6	21.19	29.6
	1/12/2007	180.24	9.84	170.40	561	NA	153	7.18	14.4	14.95	30.9
	4/17/2007	180.24	9.78	170.46	467	NA	192	7.59	13.8	16.42	30.4
	7/17/2007	180.24	9.82	170.42	755	NA	271	8.6	17.8	22.06	26.7
	10/16/2007	180.24	8.99	171.25	164	NA	80.2	<2.0	5.24	2.47	16.6
	1/17/2008	180.24	9.35	170.89	70	NA	10.8	<2.0	<0.5	<2.0	19.3
	4/17/2008	180.24	9.80	170.44	687	NA	89.7	<2.0	4.01	5.30	8.79
	7/16/2008	180.24	10.17	170.07	1,400	NA	223	3.88	12.6	17.88	18.1
	10/14/2008	180.24	10.86	169.38	540	NA	95	2.7	7.7	18	15
	1/6/2009	180.24	10.10	170.14	500 ^Y	NA	130	3	8.8	17.1	13
	4/6/2009	180.24	10.05	170.19	910 ^Y	NA	230	2.4	11	12.1	17
	7/7/2009	180.24	10.42	169.82	850 ^Y	NA	89	1.9	7.8	15.1	15
	1/27/2010	180.24	7.94	172.30	1,600	NA	250	8.8	30	69	23
7/26/2010	180.24	9.95	170.29	1,000	NA	96	1.2	4.2	6	17	
ESE-1R	8/30/2010	180.20	10.17	170.03	2,100	NA	110	5.2	19	151	15
	11/16/2010	180.20	9.94	170.26	100	NA	5.8	<0.5	1	<0.5	16
	2/15/2011	180.20	10.12	170.08	1,400	NA	96	1.7	14	7.9	22
	7/19/2011	180.20	10.37	169.83	620	NA	30	0.76	4.4	0.96	21
	1/18/2012	180.20	10.78	169.42	1,800 ^Y	NA	18	<0.19	11	3.53	14
	7/10/2012	180.20	10.87	169.33	NA	1,100 ^Y	16	1.1	9.8	1.70	23

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-2	10/5/1992	178.23	11.68	166.55	300	NA	5.4	16	3.9	45	NA
	4/1/1993	178.23	9.17	169.06	240	NA	27	<0.5	17	2.6	123
	6/29/1993	178.23	10.88	167.35	1,700	NA	260	24	110	23	NA
	6/29/1993	178.23	NM	NM	1,300	NA	240	17	110	25	NA
	9/23/1993	178.23	11.56	166.67	240	NA	3.1	0.5	0.6	2.5	643
	12/10/1993	178.23	10.48	167.75	250	NA	2.4	2.4	1.5	11	940
	2/17/1994	178.23	10.06	168.17	900	NA	<0.5	<0.5	<0.5	<0.5	930
	8/8/1994	178.23	11.11	167.12	750	NA	<0.5	<0.5	<0.5	<0.5	1400
	10/12/1994	178.23	11.31	166.92	1,700	NA	<0.5	<0.5	<0.5	<0.5	3000
	1/19/1995	178.23	8.25	169.98	300	NA	2	0.9	0.7	1	NA
	5/2/1995	178.23	9.21	169.02	1,200	NA	4	<2.5	<2.5	<5	NA
	7/28/1995	178.23	10.64	167.59	2,000	NA	<2.5	<2.5	<2.5	<5	NA
	11/17/1995	178.23	11.13	167.10	3,600	NA	<25	<25	<25	<50	12000
	11/17/1995	178.23	NM	NM	3,400	NA	<25	<25	<25	<50	12000
	2/7/1996	178.23	7.94	170.29	450	NA	<0.5	<1	<1	<1	2300
	4/23/1996	178.23	9.73	168.50	260	NA	0.9	<1	<1	<1	8600
	7/9/1996	178.23	10.70	167.53	780	NA	<2.5	<5	<5	<5	13393
	10/10/1996	178.23	11.39	166.84	2,900	NA	<0.5	<1	<1	<1	12000
	1/20/1997	178.23	9.04	169.19	<250	NA	<2.5	<5	<5	<5	13000
	4/25/1997	178.23	10.31	167.92	2,700	NA	<0.5	<1	<1	<1	15000
	7/18/1997	178.23	11.02	167.21	11,000	NA	<5	<10	<10	<10	11000
	10/27/1997	178.23	10.93	167.30	6,100	NA	<2.5	<5.0	<5.0	<5.0	7100
	10/27/1997	178.23	NM	NM	6,600	NA	<2.5	<5.0	<5.0	<5.0	7400
	1/22/1998	178.23	7.93	170.30	13,000	NA	<0.5	<1	<1	<1	10000
	1/22/1998	178.23	NM	NM	13,000	NA	<0.5	<1	<1	<1	10000
	4/23/1998	178.23	9.34	168.89	19,000	NA	<5	<10	<10	<10	36000

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-2 cont	7/29/1998	178.23	10.29	167.94	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	178.23	NM	NM	19,000	NA	<5	<10	<10	<10	36000
	12/17/1998	178.23	10.20	168.03	12,000	NA	<5	<5	<5	<5	13000
	3/19/1999	178.23	9.02	169.21	18,000	NA	160	<1	<1	<1	18000
	6/23/1999	178.23	9.99	168.24	280	NA	<1	<1	<1	<1	16000
	9/27/1999	178.23	10.69	167.54	<500	NA	<25	<25	<25	<25	12000
	12/9/1999	178.23	11.26	166.97	<50	NA	<0.3	<0.3	<0.3	<0.6	12000
	3/9/2000	178.23	7.95	170.28	<50	NA	1.6	<0.5	<0.5	<0.5	7900
	6/8/2000	178.23	9.66	168.57	1,600	NA	<0.5	0.73	<0.5	2.2	9400
	12/14/2000	178.23	11.15	167.08	6,000	NA	0.75	<0.5	<0.5	<0.5	11200
	3/21/2001	178.23	10.35	167.88	6,900	NA	786	45.7	37.7	71.5	3790
	6/18/2001	178.23	11.24	166.99	6,400	NA	<2.5	<2.5	<2.5	<7.5	9320
	9/18/2001	178.23	11.35	166.88	4,800	NA	<12.5	<12.5	<12.5	<37.5	6960
	12/13/2001	178.23	10.97	167.26	59,000	NA	0.592	<0.5	<0.5	<1	5940
	3/14/2002	178.23	10.13	168.10	4,500	NA	76	<0.5	<0.5	<1	6660
	6/19/2002	178.23	10.91	167.32	250	NA	<12.5	<12.5	<12.5	<25	4900
	9/10/2002	178.23	10.82	167.41	1,500	NA	<5	<5	<5	6.3	3100
	12/16/2002	178.23	7.87	170.36	1,400	NA	<5	<5	<5	<5	2400
	3/11/2003	178.23	10.24	167.99	2,800	NA	<10	<10	<10	<10	4800
	6/17/2003	178.23	10.19	168.04	10,000	NA	<100	<100	<100	<100	4400
	12/9/2003	178.23	9.97	168.26	<50	NA	<0.5	<0.5	<0.5	<0.5	3400
	2/26/2004	178.23	7.89	170.34	<50	NA	<0.5	<0.5	<0.5	<0.5	3000
	5/21/2004	178.23	10.70	167.53	<50	NA	<0.5	<0.5	<0.5	<0.5	1100
	8/10/2004	180.79	10.99	169.80	<50	NA	<0.5	<0.5	<0.5	<0.5	550
	10/19/2004	180.79	10.46	170.33	<50	NA	<0.5	<0.5	<0.5	<0.5	410
1/14/2005	180.79	8.66	172.13	<50	NA	<8.3	<8.3	<8.3	<8.3	1200	
4/14/2005	180.79	9.38	171.41	<860	NA	<2.15	<2.15	<2.15	<4.30	1020	
7/7/2005	180.79	10.46	170.33	<860	NA	<2.15	<8.60	<2.15	<4.30	378	
11/15/2005	180.79	10.55	170.24	<50	NA	<0.5	<2.0	<0.5	<1.0	210	

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-2 cont	2/8/2006	180.79	9.46	171.33	<215	NA	<2.15	<8.6	<2.15	<4.3	419
	4/27/2006	180.79	10.67	170.12	<100	NA	1.71	<4.0	<1.0	<2.0	432
	8/1/2006	180.79	10.29	170.50	<100	NA	2.83	<4.0	<1.0	<2.0	222
	10/19/2006	180.79	10.65	170.14	<50	NA	0.8	<2.0	<0.5	<1.0	221
	1/12/2007	180.79	NM	NM	NA	NA	NA	NA	NA	NA	NA
	4/17/2007	180.79	10.20	170.59	<50	NA	3.17	<2.0	4.49	<2.0	158
	7/17/2007	180.79	10.31	170.48	<50	NA	1.65	<2.0	<0.5	<2.0	105
	10/16/2007	180.79	9.22	171.57	<50	NA	5.67	<2.0	<0.5	<2.0	73.9
	1/17/2008	180.79	9.88	170.91	<50.0	NA	<0.50	<2.0	<0.50	<2.0	80.2
	4/17/2008	180.79	10.29	170.50	<50	NA	<0.5	<2.0	<0.5	<2.0	45
	7/16/2008	180.79	10.64	170.15	<50	NA	<0.5	<2.0	<0.5	<2.0	54
	10/14/2008	180.79	11.41	169.38	<50	NA	<0.5	<0.5	<0.5	<0.5	41
	1/6/2009	180.79	10.60	170.19	<50	NA	<0.5	<0.5	<0.5	<0.5	36
	4/6/2009	180.79	10.62	170.17	<50	NA	<0.5	<0.5	<0.5	<0.5	30
	7/7/2009	180.79	10.92	169.87	<50	NA	2.4	<0.5	<0.5	<0.5	32
1/27/2010	180.79	8.36	172.43	<50	NA	<0.5	<0.5	<0.5	<0.5	26	
7/26/2010	180.79	10.44	170.35	<50	NA	<0.5	<0.5	<0.5	<0.5	13	
ESE-2R	8/30/2010	180.7	10.61	170.09	200	NA	0.93	<0.5	1.3	13.5	16
	11/16/2010	180.7	10.33	170.37	<50	NA	<0.5	<0.5	<0.5	<0.5	18
	2/14/2011	180.70	10.50	170.20	<50	NA	<0.5	<0.5	<0.5	<0.5	12
	7/19/2011	180.70	10.62	170.08	<50	NA	<0.5	<0.5	<0.5	<0.5	8.3
	1/18/2012	180.70	10.92	169.78	<22	NA	<0.33	<0.19	<0.15	<0.20	1.1
	7/10/2012	180.70	11.17	169.53	NA	<50	<0.5	<0.5	<0.5	<0.5	5.1
ESE-3	10/5/1992	178.20	10.58	167.62	430	NA	57	31	3.6	34	NA
	4/1/1993	178.20	8.14	170.06	2,400	NA	460	220	74	210	NA
	6/29/1993	178.20	9.72	168.48	280	NA	56	14	15	13	NA
	9/23/1993	178.20	10.46	167.74	72	NA	13	3.5	1.7	4.1	NA
	12/10/1993	178.20	9.30	168.90	270	NA	71	32	6.1	33	NA

Table 1
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TPH-g, BTEX, MtBE
3519 Castro Valley Blvd, Castro Valley, CA

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-3 cont.	2/17/1994	178.20	8.97	169.23	520	NA	140	10	20	33	5.74
	8/8/1994	178.20	10.02	168.18	<50	NA	8.8	1.6	1.6	2.3	<5.0
	10/12/1994	178.20	10.32	167.88	470	NA	190	6.4	15	18	<5.0
	1/19/1995	178.20	7.40	170.80	330	NA	260	27	21	20	NA
	5/2/1995	178.20	8.26	169.94	530	NA	180	30	23	44	NA
	7/28/1995	178.20	9.54	168.66	<50	NA	<0.50	<0.50	<0.50	<1	NA
	11/17/1995	178.20	10.04	168.16	<50	NA	1.7	<0.50	<0.50	<1	<5.0
	2/7/1996	178.20	7.08	171.12	<50	NA	8.6	<1	<1	<1	<10
	4/1/2396	178.20	8.79	169.41	<50	NA	7.6	<1	<1	<1	65
	7/9/1996	178.20	10.09	168.11	<50	NA	12	2.6	2	3.9	26
	10/10/1996	178.20	10.48	167.72	NA	NA	NA	NA	NA	NA	NA
	10/11/1996	178.20	NM	NM	260	NA	140	<1	<1	2.6	<10
	1/20/1997	178.20	8.65	169.55	<50	NA	1.5	1.7	<1	<1	14
	4/25/1997	178.20	10.02	168.18	<50	NA	<0.5	<1	<1	<1	14
	7/18/1997	178.20	10.66	167.54	10,000	NA	1400	1400	300	1280	<250
	10/27/1997	178.20	9.83	168.37	<250	NA	<2.5	<5.0	<5.0	36	<50
	1/22/1998	178.20	7.06	171.14	130	NA	<0.5	<1.0	<1.0	<1.0	120
	4/23/1998	178.20	8.44	169.76	4,800	NA	560	<10	15	<10	4000
	7/29/1998	178.20	9.27	168.93	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	178.20	NM	NM	1,800	NA	6.2	<5.0	<5.0	<5.0	1700
	12/17/1998	178.20	9.15	169.05	600	NA	54	<1.0	2.1	4.9	340/480
	3/19/1999	178.20	8.14	170.06	2,000	NA	260	4.4	13	28	870
	6/23/1999	178.20	9.44	168.76	290	NA	91	<1.0	8.3	16	240
	9/27/1999	178.20	9.69	168.51	130	NA	35	<1.0	2.7	3.8	100
	12/9/1999	178.20	10.99	167.21	380	NA	84	1.7	8.7	6.3	160
	3/9/2000	178.20	7.12	171.08	950	NA	190	4.6	39	62	350
	6/8/2000	178.20	10.92	167.28	300	NA	37	<0.5	2.3	1.3	400
9/18/2000	178.20	11.12	167.08	920	NA	140	1.3	15	4.8	170	
12/14/2000	178.20	9.70	168.50	320	NA	64	<0.5	6.24	1.76	201	

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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-3 cont.	3/21/2001	178.20	10.07	168.13	680	NA	80.5	0.546	21.1	18.2	398
	6/18/2001	178.20	11.42	166.78	380	NA	47	<0.5	3.11	<1.5	242
	9/18/2001	178.20	11.55	166.65	340	NA	54.8	<0.5	4.36	<1.5	79.7
	12/13/2001	178.20	10.12	168.08	270	NA	31.4	<0.5	1.31	2.24	129
	3/14/2002	178.20	9.84	168.36	670	NA	89.8	0.769	23.4	30.4	413
	6/19/2002	178.20	10.57	167.63	130	NA	18.6	<0.5	<0.5	<1	166
	9/10/2002	178.20	9.90	168.30	88	NA	12	<0.5	<0.5	<0.5	93
	12/16/2002	178.20	9.23	168.97	290	NA	55	17	3.7	14	78
	3/11/2003	178.20	9.05	169.15	100	NA	3.4	<0.5	0.54	<0.50	140
	6/17/2003	178.20	9.30	168.90	520	NA	17	<5	5.3	<5	130
ESE-4	10/5/1992	177.73	10.33	167.40	98	NA	7.2	1.3	1.1	6.1	NA
	4/1/1993	177.73	7.88	169.85	550	NA	93	20	23	33	NA
	6/29/1993	177.66	8.33	169.33	150	NA	23	0.6	5.4	0.5	54
	9/23/1993	177.66	10.05	167.61	110	NA	14	1.7	3.2	4.6	NA
	12/10/1993	177.66	8.95	168.71	110	NA	21	7.2	4.2	10	28.75
	2/17/1994	177.66	8.65	169.01	210	NA	26	1.2	4.7	11	113
	8/8/1994	177.66	9.76	167.90	76	NA	9.6	<0.5	2	<0.5	62
	10/12/1994	177.66	9.62	168.04	<50	NA	<0.5	<0.5	<0.5	<0.5	44
	1/19/1995	177.66	6.97	170.69	140	NA	56	14	24	23	NA
	5/2/1995	177.66	7.85	169.81	130	NA	21	2.8	8.6	8.2	NA
	7/28/1995	177.66	9.20	168.46	<50	NA	<0.5	<0.5	<0.5	<1	NA
	11/17/1995	177.66	9.68	167.98	<50	NA	<0.5	0.6	<0.5	<1	18
	2/7/1996	177.66	6.59	171.07	100	NA	2.6	<1	1.6	4.1	42
	4/23/1996	177.66	8.30	169.36	160	NA	37	15	16	31	43
	7/9/1996	177.66	9.21	168.45	60	NA	17	1.5	6.8	11.6	27
10/10/1996	177.66	9.97	167.69	NA	NA	NA	NA	NA	NA	NA	
10/11/1996	177.66	NM	NM	<50	NA	<0.5	<1.0	<1.0	<1.0	18	

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TPH-g, BTEX, MtBE
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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-4 cont.	1/20/1997	177.66	7.68	169.98	<50	NA	<0.5	<1.0	<1.0	<1.0	130
	4/25/1997	177.66	9.15	168.51	<250	NA	<2.5	<5.0	<5.0	<5.0	<50
	7/18/1997	177.66	9.71	167.95	<50	NA	15	<10	<10	<10	<100
	10/27/1997	177.66	9.38	168.28	<250	NA	<2.5	<5.0	<5.0	<5.0	<50
	1/22/1998	177.66	6.59	171.07	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1998	177.66	7.90	169.76	<250	NA	<2.5	<5.0	<5.0	<5.0	<50
	7/29/1998	177.66	8.96	168.70	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	177.66	NM	NM	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	12/17/1998	177.66	8.32	169.34	NA	NA	NA	NA	NA	NA	NA
	3/19/1999	177.66	7.71	169.95	NA	NA	NA	NA	NA	NA	NA
	6/23/1999	177.66	8.78	168.88	NA	NA	NA	NA	NA	NA	NA
	9/27/1999	177.66	9.27	168.39	NA	NA	NA	NA	NA	NA	NA
	12/9/1999	177.66	9.21	168.45	NA	NA	NA	NA	NA	NA	NA
	3/9/2000	177.66	6.82	170.84	NA	NA	NA	NA	NA	NA	NA
	6/8/2000	177.66	8.72	168.94	NA	NA	NA	NA	NA	NA	NA
	9/18/2000	177.66	8.72	168.94	NA	NA	NA	NA	NA	NA	NA
	12/14/2000	177.66	8.61	169.05	NA	NA	NA	NA	NA	NA	NA
	3/21/2001	177.66	8.61	169.05	NA	NA	NA	NA	NA	NA	NA
	6/18/2001	177.66	9.24	168.42	NA	NA	NA	NA	NA	NA	NA
	9/18/2001	177.66	9.35	168.31	NA	NA	NA	NA	NA	NA	NA
	12/13/2001	177.66	8.53	169.13	NA	NA	NA	NA	NA	NA	NA
	3/14/2002	177.66	8.44	169.22	NA	NA	NA	NA	NA	NA	NA
	6/19/2002	177.66	10.97	166.69	NA	NA	NA	NA	NA	NA	NA
	9/10/2002	177.66	9.27	168.39	NA	NA	NA	NA	NA	NA	NA
12/16/2002	177.66	6.90	170.76	NA	NA	NA	NA	NA	NA	NA	
3/11/2003	177.66	8.83	168.83	NA	NA	NA	NA	NA	NA	NA	
6/17/2003	177.66	8.84	168.82	NA	NA	NA	NA	NA	NA	NA	

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TPH-g, BTEX, MtBE
3519 Castro Valley Blvd, Castro Valley, CA

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-5	10/5/1992	176.08	9.22	166.86	1,300	NA	200	3.8	1.2	18	NA
	4/1/1993	176.08	7.02	169.06	13,000	NA	2200	26	730	1000	NA
	4/1/1993	176.08	NM	NM	13,000	NA	2500	25	740	1100	NA
	6/29/1993	176.08	10.21	165.87	7,600	NA	1500	9.3	170	100	NA
	9/23/1993	176.08	10.64	165.44	560	NA	19	1.2	0.9	1.8	NA
	12/10/1993	176.08	9.42	166.66	1,700	NA	300	3	76	110	14.07
	2/7/1994	176.08	9.35	166.73	3,500	NA	640	7.8	90	130	45.13
	8/8/1994	176.08	8.76	167.32	2,600	NA	210	4.6	9.4	4.4	33
	8/8/1994	176.08	NM	NM	2,500	NA	230	4.6	13	4.8	32
	10/12/1994	176.08	8.95	167.13	5,600	NA	560	9.5	75	21	79.2
	10/12/1994	176.08	NM	NM	6,000	NA	550	10	78	22	77
	1/19/1995	176.08	5.40	170.68	1,900	NA	620	<5	95	15	NA
	1/19/1995	176.08	NM	NM	1,600	NA	620	<5	93	17	NA
	5/2/1995	176.08	6.48	169.60	5,700	NA	1100	<10	180	58	NA
	5/2/1995	176.08	NM	NM	5,300	NA	1100	<10	180	58	NA
	7/28/1995	176.08	7.97	168.11	520	NA	15	<0.50	1.7	1.3	NA
	7/28/1995	176.08	NM	NM	460	NA	7.2	<0.50	1.9	1.5	NA
	11/17/1995	176.08	8.39	167.69	850	NA	39	1.8	7.6	2.7	24
	2/7/1996	176.08	4.71	171.37	4,100	NA	670	6	190	140	<50
	4/23/1996	176.08	7.35	168.73	3,000	NA	570	<5	79	100	84
	7/9/1996	176.08	9.40	166.68	620	NA	150	1.7	9.3	6.4	25
	10/10/1996	176.08	9.04	167.04	1,100	NA	29	<5	<5	<5	<50
	10/10/1996	176.08	NM	NM	1,100	NA	31	<5	<5	<5	<50
	1/20/1997	176.08	5.82	170.26	2,100	NA	980	<25	280	80	<250
	1/20/1997	176.08	NM	NM	2,700	NA	910	8.8	280	84	180
	4/25/1997	176.08	7.24	168.84	NA	NA	NA	NA	NA	NA	NA

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-5 cont.	4/28/1997	176.08	NM	NM	<250	NA	7.9	<5.0	<5.0	<5.0	<50
	7/18/1997	176.08	7.86	168.22	1200	NA	<5	<10	<10	<10	<100
	7/18/1997	176.08	NM	NM	630	NA	31	<5.0	<5.0	<5.0	130
	10/27/1997	176.08	7.91	168.17	<250	NA	5.4	<5.0	<5.0	<5.0	<50
	1/22/1998	176.08	4.64	171.44	170	NA	7.7	<1.0	<1.0	<1.0	130
	4/23/1998	176.08	6.31	169.77	720	NA	79	<5.0	9	<5.0	180
	7/29/1998	176.08	7.43	168.65	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	176.08	NM	NM	840	NA	9.8	<1.0	4	<1.0	710
	12/17/1998	176.08	7.05	169.03	NA	NA	NA	NA	NA	NA	NA
	3/19/1999	176.08	5.00	171.08	<250	NA	<5.0	<5.0	<5.0	<5.0	<5.0
	6/23/1999	176.08	7.77	168.31	NA	NA	NA	NA	NA	NA	NA
	9/27/1999	176.08	8.11	167.97	450	NA	10	<5.0	6.3	<5.0	220
	12/9/1999	176.08	7.66	168.42	NA	NA	NA	NA	NA	NA	NA
	3/9/2000	176.08	5.08	171.00	1,700	NA	170	2.5	45	6.4	140
	6/8/2000	176.08	7.36	168.72	NA	NA	NA	NA	NA	NA	NA
	9/18/2000	176.08	7.71	168.37	130	NA	0.65	<0.50	0.71	<0.50	51
	12/14/2000	176.08	2.36	173.72	NA	NA	NA	NA	NA	NA	NA
	3/21/2001	176.08	7.42	168.66	1,000	NA	10.3	<2.5	11	<7.5	70.8
	6/18/2001	176.08	7.92	168.16	NA	NA	NA	NA	NA	NA	NA
	9/18/2001	176.26	8.23	168.03	200	NA	0.868	<0.50	0.55	<1.5	57.5
	12/13/2001	176.26	7.80	168.46	NA	NA	NA	NA	NA	NA	NA
	3/14/2002	176.26	6.55	169.71	1,300	NA	17.1	1.35	15.4	1.42	37.4
	6/19/2002	176.26	7.83	168.43	NA	NA	NA	NA	NA	NA	NA
	9/10/2002	176.26	8.22	168.04	680	NA	9.9	<5.0	<5.0	<5.0	44
	12/16/2002	176.26	6.58	169.68	NA	NA	NA	NA	NA	NA	NA
	3/11/2003	176.26	6.77	169.49	2,100	NA	14	<2.5	15	3	80
	6/17/2003	176.26	6.75	169.51	NA	NA	NA	NA	NA	NA	NA
	9/17/2003	176.26	8.48	167.78	970	NA	10 C	<0.5	<0.5	5.3	34
	12/9/2003	176.26	7.32	168.94	700	NA	6.5	<0.5	3.1	2.7 C	34

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-5 cont.	2/26/2004	176.26	5.21	171.05	2,400 H	NA	41	2.8 C	18	2.4 C	29
	5/21/2004	176.26	7.50	168.76	1,500	NA	2.6 C	<0.5	2.1 C	2.1 C	25
	8/10/2004	178.80	8.28	170.52	680	NA	<0.5	<0.5	<0.5	<0.5	33
	10/19/2004	178.80	8.26	170.54	380	NA	<0.5	<0.5	<0.5	1.4	39
	1/14/2005	178.80	5.16	173.64	2,400	NA	18	1.4	22	2.1	26
	4/14/2005	178.80	6.13	172.67	4,800	NA	7.75	1.26	14.3	<1.0	23.1
	7/7/2005	178.80	7.52	171.28	3,240	NA	0.78	<2.0	1.18	<1.0	36.6
	11/15/2005	178.80	7.85	170.95	1,190	NA	0.51	<2.0	<0.5	<1.0	30
	2/8/2006	178.80	5.83	172.97	2,510	NA	1.91	<2.0	2.82	<1.0	20.7
	4/27/2006	178.80	5.71	173.09	4,700	NA	2.76	<2.0	4.77	<1.0	28.3
	8/1/2006	178.80	7.71	171.09	1,890	NA	0.7	<2.0	0.75	<1.0	24.7
	10/19/2006	178.80	8.00	170.80	474	NA	<0.5	<2.0	3.39	<1.0	29
	1/12/2007	178.80	7.41	171.39	868	NA	2.18	<2.0	2.66	<2.0	16.3
	4/17/2007	178.80	7.51	171.29	1,240	NA	10.2	<2.0	10.4	2.37	17.2
	7/17/2007	178.80	7.47	171.33	836	NA	3.1	<2.0	4.91	2.35	25.8
	10/16/2007	178.80	6.26	172.54	2,120	NA	2.5	<2.0	6.19	2.61	17.5
	1/17/2008	178.80	6.59	172.21	2,730	NA	5.74	<2.0	14.3	<2.0	13.1
	4/17/2008	178.80	6.81	171.99	2,770	NA	4.7	<2.0	15.9	<2.0	<0.5
	7/16/2008	178.80	7.76	171.04	2,160	NA	0.9	<2.0	1.1	<2.0	6.28
	10/14/2008	178.80	8.40	170.40	1,300	NA	<0.5	<0.5	0.6	<0.5	9.9
1/6/2009	178.80	7.66	171.14	1,100 ^Y	NA	0.61	<0.5	1.6	<0.5	8	
4/6/2009	178.80	7.79	171.01	1,900 ^Y	NA	4.6	<0.5	9.3	0.59	5.3	
7/7/2009	178.80	7.84	170.96	2,700 ^Y	NA	3.0	<0.5	2.3	<0.5	6.6	
1/27/2010	178.80	4.82	173.98	1,300 ^Y	NA	0.76	<0.5	1.0	<0.5	3.5	
7/26/2010	178.80	7.01	171.79	1,800	NA	0.75	<0.5	1.8	<0.5	2	
ESE-5R	8/30/2010	178.64	8.97	169.67	75	NA	<0.5	<0.5	<0.5	<0.5	7.3
	11/16/2010	178.64	10.46	168.18	74	NA	<0.5	<0.5	<0.5	<0.5	12
	2/15/2011	178.64	11.19	167.45	140	NA	<0.5	<0.5	<0.5	<0.5	9.6
	7/19/2011	178.64	7.92	170.72	140	NA	<0.5	<0.5	<0.5	<0.5	6.7

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
ESE-5R cont	1/18/2012	178.64	8.84	169.80	68 ^Y	NA	<0.33	<0.19	<0.15	<0.2	7.3
	7/11/2012	178.64	8.85	169.79	NA	<50	<0.5	<0.5	<0.5	<0.5	6.1
MW-6	7/28/1995	179.24	10.00	169.24	<50	NA	<0.50	<0.50	<0.50	<1.0	NA
	11/17/1995	179.24	10.44	168.80	<50	NA	<0.50	<0.50	<0.50	<1.0	<5.0
	2/7/1996	179.24	7.68	171.56	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1996	179.24	9.33	169.91	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	7/9/1996	179.24	10.10	169.14	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	10/10/1996	179.24	11.00	168.24	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	1/20/1997	179.24	8.70	170.54	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	4/25/1997	179.24	10.16	169.08	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	7/18/1997	179.24	10.66	168.58	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	10/27/1997	179.24	10.25	168.99	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	1/22/1998	179.24	7.76	171.48	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1998	179.24	9.10	170.14	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	7/29/1998	179.24	10.40	168.84	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	179.24	NM	NM	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	12/17/1998	179.24	9.40	169.84	NA	NA	NA	NA	NA	NA	NA
	3/19/1999	179.24	9.10	170.14	NA	NA	NA	NA	NA	NA	NA
	6/23/1999	179.24	9.79	169.45	NA	NA	NA	NA	NA	NA	NA
	9/27/1999	179.24	10.10	169.14	NA	NA	NA	NA	NA	NA	NA
	12/9/1999	179.24	9.97	169.27	NA	NA	NA	NA	NA	NA	NA
	3/9/2000	179.24	8.56	170.68	NA	NA	NA	NA	NA	NA	NA
6/8/2000	179.24	9.11	170.13	NA	NA	NA	NA	NA	NA	NA	
9/18/2000	179.24	9.77	169.47	NA	NA	NA	NA	NA	NA	NA	
12/14/2000	179.24	9.17	170.07	NA	NA	NA	NA	NA	NA	NA	

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TPH-g, BTEX, MtBE
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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
MW-6 cont	3/21/2001	179.24	9.82	169.42	NA	NA	NA	NA	NA	NA	NA
	6/18/2001	179.24	10.19	169.05	NA	NA	NA	NA	NA	NA	NA
	9/18/2001	179.24	10.25	168.99	NA	NA	NA	NA	NA	NA	NA
	12/13/2001	179.24	9.75	169.49	NA	NA	NA	NA	NA	NA	NA
	3/14/2002	179.24	9.53	169.71	NA	NA	NA	NA	NA	NA	NA
	6/19/2002	179.24	9.87	169.37	NA	NA	NA	NA	NA	NA	NA
	9/10/2002	179.24	9.49	169.75	NA	NA	NA	NA	NA	NA	NA
	12/16/2002	179.24	8.39	170.85	NA	NA	NA	NA	NA	NA	NA
	3/11/2003	179.24	9.40	169.84	NA	NA	NA	NA	NA	NA	NA
	6/17/2003	179.24	9.71	169.53	NA	NA	NA	NA	NA	NA	NA
	9/17/2003	179.24	10.21	169.03	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.0
	12/9/2003	179.24	9.66	169.58	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	2/26/2004	179.24	7.83	171.41	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	5/21/2004	179.24	9.75	169.49	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	8/10/2004	181.80	10.28	171.52	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	10/19/2004	181.80	9.91	171.89	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/14/2005	181.80	8.40	173.40	<50	NA	0.6	<0.5	<0.5	<0.5	<0.5
	4/14/2005	181.80	9.04	172.76	<200	NA	<0.5	<0.5	<0.5	<1.0	<0.5
	7/7/2005	181.80	9.94	171.86	<200	NA	<0.5	<2.00	<0.5	<1.00	<0.5
	11/15/2005	181.80	9.98	171.82	<50	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	2/8/2006	181.80	9.91	171.89	<50	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	4/27/2006	181.80	9.54	172.26	<50	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	8/1/2006	181.80	9.61	172.19	<50	NA	<0.5	<2.0	<0.5	<1.0	0.51
	10/19/2006	181.80	10.23	171.57	<50	NA	<0.5	<2.0	<0.5	<1.0	0.63
1/12/2007	181.80	10.13	171.67	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5	
4/17/2007	181.80	10.22	171.58	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5	
7/17/2007	181.80	9.76	172.04	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5	
10/16/2007	181.80	9.82	171.98	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5	

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TPH-g, BTEX, MtBE
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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
MW-6 cont.	1/17/2008	181.80	9.43	172.37	<50	NA	<0.50	<2.0	<0.50	<2.0	<0.5
	4/17/2008	181.80	9.54	172.26	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	7/16/2008	181.80	9.80	172.00	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	10/14/2008	181.80	10.48	171.32	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/6/2009	181.80	10.01	171.79	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	4/6/2009	181.80	10.15	171.65	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	7/7/2009	181.80	10.28	171.52	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/27/2010	181.80	8.28	173.52	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
7/26/2010	181.80	9.64	172.16	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-6R	8/30/2010	181.34	9.55	171.79	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	11/15/2010	181.34	9.32	172.02	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	2/14/2011	181.34	9.79	171.55	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	7/19/2011	181.34	9.60	171.74	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/18/2012	181.34	10.08	171.26	<22	NA	<0.33	<0.19	<0.15	<0.2	<0.38
	7/10/2012	181.34	10.30	171.04	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-7	7/28/1995	176.55	9.25	167.30	<50	NA	0.54	0.54	<0.50	<1.0	NA
	11/17/1995	176.55	9.73	166.82	1100	NA	<10	<10	<10	<20	4000
	2/7/1996	176.55	6.48	170.07	610	NA	<0.50	<1.0	<1.0	<1.0	2500
	2/7/1996	176.55	NM	NM	280	NA	<0.50	<1.0	<1.0	<1.0	2600
	4/23/1996	176.55	8.37	168.18	110	NA	<0.50	<1.0	<1.0	<1.0	3500
	4/23/1996	176.55	NM	NM	230	NA	<0.50	<1.0	<1.0	<1.0	3500
	7/9/1996	176.55	9.24	167.31	230	NA	<0.50	<1.0	<1.0	<1.0	4296
	7/9/1996	176.55	NM	NM	220	NA	<0.50	<1.0	<1.0	<1.0	4400
	10/10/1996	176.55	10.05	166.50	NA	NA	NA	NA	NA	NA	NA
	10/11/1996	176.55	NM	NM	1600	NA	<0.50	<1.0	<1.0	<1.0	3000
	1/20/1997	176.55	7.51	169.04	<50	NA	0.63	<1.0	<1.0	<1.0	2600
	4/25/1997	176.55	8.79	167.76	NA	NA	NA	NA	NA	NA	NA

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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
MW-7 cont.	4/28/1997	176.55	NM	NM	1500	NA	<0.50	<1.0	<1.0	<1.0	3600
	4/28/1997	176.55	NM	NM	7700	NA	3500	<25	74	37	<250
	7/18/1997	176.55	9.50	167.05	1400	NA	<0.50	<1.0	<1.0	<1.0	2600
	10/27/1997	176.55	9.19	167.36	420	NA	<0.50	<1.0	<1.0	<1.0	560
	1/22/1998	176.55	6.45	170.10	3100	NA	<0.50	<1.0	<1.0	1.4	2300
	4/23/1998	176.55	8.02	168.53	3800	NA	<0.50	<1.0	<1.0	<1.0	3800
	7/29/1998	176.55	8.88	167.67	NA	NA	NA	NA	NA	NA	NA
	7/30/1998	176.55	NM	NM	500	NA	<2.5	<5.0	<5.0	<5.0	<50
	7/30/1998	176.55	NM	NM	4700	NA	<12	<25	<25	<25	4700
	12/17/1998	176.55	8.62	167.93	NA	NA	NA	NA	NA	NA	NA
	3/19/1999	176.55	7.52	169.03	3800	NA	<1.0	<1.0	<1.0	<1.0	3800
	6/23/1999	176.55	9.63	166.92	NA	NA	NA	NA	NA	NA	NA
	9/27/1999	176.55	9.39	167.16	140	NA	<10	<10	<10	<10	3800
	12/9/1999	176.55	9.94	166.61	NA	NA	NA	NA	NA	NA	NA
	3/9/2000	176.55	6.72	169.83	<50	NA	<0.50	<0.50	<0.50	<0.50	1400
	6/8/2000	176.55	7.38	169.17	NA	NA	NA	NA	NA	NA	NA
	9/18/2000	176.55	9.18	167.37	190	NA	<0.50	<0.50	<0.50	<0.50	580
	12/14/2000	176.55	8.13	168.42	NA	NA	NA	NA	NA	NA	NA
	3/21/2001	176.55	8.98	167.57	1300	NA	<0.50	<0.50	<0.50	<1.5	1460
	6/18/2001	176.55	9.68	166.87	NA	NA	NA	NA	NA	NA	NA
	9/18/2001	176.55	9.80	166.75	<0.50	NA	<0.50	<0.50	<0.50	<1.5	94.9
	12/13/2001	176.55	9.26	167.29	NA	NA	NA	NA	NA	NA	NA
	3/14/2002	176.55	8.69	167.86	800	NA	<0.50	<0.50	<0.50	<1.0	952
6/19/2002	176.55	9.06	167.49	NA	NA	NA	NA	NA	NA	NA	
9/10/2002	176.55	9.23	167.32	260	NA	<2.0	<2.0	<2.0	<2.0	580	
12/16/2002	176.55	7.77	168.78	NA	NA	NA	NA	NA	NA	NA	

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3519 Castro Valley Blvd, Castro Valley, CA

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
MW-7 cont.	3/11/2003	176.55	8.30	168.25	620	NA	<2.5	<2.5	<2.5	<2.5	1100
	6/17/2003	176.55	9.51	167.04	NA	NA	NA	NA	NA	NA	NA
	9/17/2003	176.55	9.52	167.03	<50	NA	<0.5	<0.5	<0.5	<0.5	460
	12/9/2003	176.55	8.99	167.56	<50	NA	<0.5	<0.5	<0.5	<0.5	420
	2/26/2004	176.55	6.55	170.00	<50	NA	<0.5	<0.5	<0.5	<0.5	330
	5/21/2004	176.55	8.90	167.65	<50	NA	<0.5	<0.5	<0.5	<0.5	630
	8/10/2004	179.11	9.58	169.53	<50	NA	<0.5	<0.5	<0.5	<0.5	750
	10/19/2004	179.11	9.20	169.91	<50	NA	<0.5	<0.5	<0.5	<0.5	550
	1/14/2005	179.11	7.25	171.86	<50	NA	<2.0	<2.0	<2.0	<2.0	250
	4/14/2005	179.11	7.94	171.17	<200	NA	<0.5	<0.5	<0.5	<1.0	285
	7/7/2005	179.11	9.08	170.03	<400	NA	<1.0	<4.0	<1.0	<2.0	452
	11/15/2005	179.11	9.14	169.97	<50	NA	<0.5	<2.0	<0.5	<1.0	110
	2/8/2006	179.11	7.93	171.18	<50	NA	<0.5	<2.0	<0.5	<1.0	101
	4/27/2006	179.11	8.40	170.71	<50	NA	<0.5	<2.0	<0.5	<1.0	131
	8/1/2006	179.11	8.89	170.22	<50	NA	<0.5	<2.0	<0.5	<1.0	68.6
	10/19/2006	179.11	9.44	169.67	<50	NA	<0.5	<2.0	<0.5	<1.0	65.5
	1/12/2007	179.11	8.91	170.20	<50	NA	<0.5	<2.0	<0.5	<2.0	38
	4/17/2007	179.11	8.58	170.53	<50	NA	<0.5	<2.0	<0.5	<2.0	24.7
	7/17/2007	179.11	9.04	170.07	<50	NA	2.07	<2.0	<0.5	<2.0	29.3
	10/6/2007	179.11	7.88	171.23	<50	NA	0.88	<2.0	<0.5	<2.0	5.26
	1/17/2008	179.11	NM	NM	NA	NA	NA	NA	NA	NA	NA
	4/17/2008	179.11	8.85	170.26	<50	NA	1.87	<2.0	<0.5	<2.0	21.6
	7/16/2008	179.11	9.34	169.77	<50	NA	<0.5	<2.0	<0.5	<2.0	11.4
10/14/2008	179.11	10.06	169.05	<50	NA	0.78	<0.5	<0.5	<0.5	12	
1/6/2009	179.11	9.12	169.99	<50	NA	<0.5	<0.5	<0.5	<0.5	14	
4/6/2009	179.11	9.28	169.83	<50	NA	<0.5	<0.5	<0.5	<0.5	13	
7/7/2009	179.11	9.59	169.52	<50	NA	<0.5	<0.5	<0.5	<0.5	15	
1/27/2010	179.11	6.98	172.13	<50	NA	<0.5	<0.5	<0.5	<0.5	6.3	
7/26/2010	179.11	9.11	170.00	<50	NA	<0.5	<0.5	<0.5	<0.5	6	

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3519 Castro Valley Blvd, Castro Valley, CA

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
MW-7R	8/30/2010	179.14	9.39	169.75	<50	NA	<0.5	<0.5	<0.5	<0.5	24
	11/16/2010	179.14	9.10	170.04	<50	NA	<0.5	<0.5	<0.5	<0.5	4.9
	2/14/2011	179.14	9.26	169.88	<50	NA	<0.5	<0.5	<0.5	<0.5	5.3
	7/19/2011	179.14	9.38	169.76	<50	NA	<0.5	<0.5	<0.5	<0.5	2.8
	1/18/2012 7/10/2012	179.14 179.14	9.70 9.92	169.44 169.22	<22 NA	NA <50	<0.33 <0.5	<0.19 <0.5	<0.15 <0.5	<0.2 <0.5	0.93 3.4
MW-8	7/28/1995	176.34	7.80	168.54	1,100	NA	<2.5	<2.5	<2.5	<5.0	NA
	11/17/1995	176.34	8.29	168.05	8,300	NA	75	5.3	670	240	140
	2/7/1996	176.34	4.99	171.35	2,300	NA	33	<10	190	216	<100
	4/23/1996	176.34	6.09	170.25	2,000	NA	390	<10	150	26	<250
QC-2	4/1/1993	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
	6/29/1993	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
	9/23/1993	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
	12/10/1993	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0
	2/17/1994	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
	8/8/1994	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
	10/12/1994	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
	1/19/1995	NM	NM	NM	<50	NA	<0.5	<0.5	<0.5	<1.0	NA
	5/2/1995	NM	NM	NM	<50	NA	<0.50	<0.50	<0.50	<1.0	NA
	7/28/1995	NM	NM	NM	<50	NA	<0.50	<0.50	<0.50	<1.0	NA
	11/17/1995	NM	NM	NM	<50	NA	<0.50	<0.50	<0.50	<1.0	<5.0
	2/7/1996	NM	NM	NM	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
	4/23/1996	NM	NM	NM	<50	NA	<0.5	<1.0	<1.0	<1.0	<10
7/9/1996	NM	NM	NM	<50	NA	<0.5	<1.0	<1.0	<1.0	<10	
SOMA-1	8/10/2004	180.95	11.53	169.42	84	NA	<0.5	<0.5	1.5 C	2.2	2100
	10/19/2004	180.95	10.41	170.54	56	NA	<0.5	<0.5	1.3 C	1.4 C	1600

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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-1 cont.	1/14/2005	180.95	9.68	171.27	58	NA	<3.1	<3.1	<3.1	<3.1	330
	4/14/2005	180.95	9.37	171.58	<2200	NA	<5.5	<5.5	<5.5	<11	668
	7/7/2005	180.95	10.21	170.74	<860	NA	<2.15	<8.6	<2.15	<4.3	591
	11/15/2005	180.95	10.70	170.25	<50	NA	<0.5	<2.0	1.1	<1.0	256
	2/8/2006	180.95	9.30	171.65	127	NA	1.56	<2.0	3.23	3.12	176
	4/27/2006	180.95	9.64	171.31	81.6	NA	1.14	<2.0	2.8	<1.0	189
	8/1/2006	180.95	10.25	170.70	<50	NA	1.07	<2.0	1.46	<1.0	122
	10/19/2006	180.95	10.73	170.22	<50	NA	0.68	<2.0	4.17	<1.0	116
	1/12/2007	180.95	10.38	170.57	<50	NA	<0.5	<2.0	<0.5	<2.0	68.7
	4/17/2007	180.95	10.09	170.86	<50	NA	5.76	<2.0	4.33	2.59	33.4
	7/17/2007	180.95	10.35	170.60	<50	NA	14.8	<2.0	4.63	3.32	39.4
	10/16/2007	180.95	9.71	171.24	<50	NA	5.7	<2.0	<0.5	<2.0	14.2
	1/17/2008	180.95	10.01	170.94	<50	NA	1.02	<2.0	<0.5	<2.0	12.8
	4/17/2008	180.95	10.17	170.78	<50	NA	3.13	<2.0	<0.5	<2.0	12.8
	7/16/2008	180.95	10.63	170.32	<50	NA	10.6	<2.0	<0.5	<2.0	15.8
	10/14/2008	180.95	11.36	169.59	<50	NA	1.1	<0.5	<0.5	<0.5	15
	1/6/2009	180.95	10.81	170.14	<50	NA	0.6	<0.5	<0.5	<0.5	14
	4/6/2009	180.95	10.69	170.26	<50	NA	<0.5	<0.5	<0.5	<0.5	12
	7/7/2009	180.95	11.01	169.94	<50	NA	0.57	<0.5	1.2	0.91	12
	1/27/2010	180.95	8.81	172.14	<50	NA	<0.5	<0.5	<0.5	<0.5	9.9
7/26/2010	180.95	10.49	170.46	<50	NA	<0.5	<0.5	<0.5	<0.5	5.9	
11/16/2010	180.95	10.49	170.46	<50	NA	<0.5	<0.5	<0.5	<0.5	7.0	
2/15/2011	180.95	10.64	170.31	<50	NA	<0.5	<0.5	<0.5	<0.5	5.3	
7/19/2011	180.95	10.70	170.25	<50	NA	2.3	<0.5	<0.5	<0.5	5.2	
1/18/2012	180.95	10.90	170.05	77 ^y	NA	<0.33	<0.19	<0.15	<0.2	4.0	
7/10/2012	180.95	11.25	169.70	NA	<50	<0.5	<0.5	<0.5	<0.5	3.7	
SOMA-4											
SOMA-4	8/10/2004	176.94	9.44	167.50	140	NA	0.98	<0.5	7.8	<0.5	11
	10/19/2004	176.94	9.91	167.03	150	NA	<0.5	<0.5	10	<0.5	8.8

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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-4 cont	1/14/2005	176.94	8.36	168.58	500	NA	3.7	<0.5	53	<0.5	7.6
	4/14/2005	176.94	7.89	169.05	<200	NA	0.74	<0.5	3.21	<1.0	5.65
	7/7/2005	176.94	11.62	165.32	<200	NA	<0.5	<2.0	0.56	<1.0	7.09
	11/15/2005	176.94	9.33	167.61	<50	NA	<0.5	<2.0	<0.5	<1.0	8.6
	2/8/2006	176.94	9.18	167.76	55.8	NA	<0.5	<2.0	0.85	<1.0	10.4
	4/27/2006	176.94	8.75	168.19	172	NA	1.35	<2.0	8.83	<1.0	11.7
	8/1/2006	176.94	9.52	167.42	<50	NA	0.52	<2.0	1.53	<1.0	14.1
	10/19/2006	176.94	9.51	167.43	<50	NA	<0.5	<2.0	<0.5	<1.0	19.2
	1/12/2007	176.94	8.98	167.96	<50	NA	<0.5	<2.0	<0.5	<2.0	20.4
	4/17/2007	176.94	8.96	167.98	<50	NA	<0.5	<2.0	4.33	<2.0	15.8
	7/17/2007	176.94	9.31	167.63	<50	NA	<0.5	<2.0	4.47	<2.0	13.3
	10/16/2007	176.94	8.96	167.98	<50	NA	<0.5	<2.0	4.5	<2.0	8.57
	1/17/2008	176.94	8.84	168.10	<50	NA	<0.5	<2.0	<0.5	<2.0	8.87
	4/17/2008	176.94	9.44	167.50	<50	NA	<0.5	<2.0	<0.5	<2.0	1.22
	7/16/2008	176.94	9.52	167.42	<50	NA	<0.5	<2.0	<0.5	<2.0	8.58
	10/14/2008	176.94	9.98	166.96	<50	NA	<0.5	<0.5	<0.5	<0.5	9.7
	1/6/2009	176.94	9.29	167.65	<50	NA	<0.5	<0.5	<0.5	<0.5	10
	4/6/2009	176.94	9.31	167.63	<50	NA	<0.5	<0.5	<0.5	<0.5	5.3
	7/7/2009	176.94	9.54	167.40	<50	NA	<0.5	<0.5	<0.5	<0.5	7
	1/27/2010	176.94	7.35	169.59	<50	NA	<0.5	<0.5	<0.5	<0.5	5.1
7/26/2010	176.94	9.13	167.81	220	NA	<0.5	<0.5	<0.5	<0.5	2.3	
11/15/2010	176.94	8.85	168.09	75	NA	<0.5	<0.5	<0.5	<0.5	2.5	
2/14/2011	176.94	8.92	168.02	<50	NA	<0.5	<0.5	<0.5	<0.5	1.5	
7/19/2011	176.94	9.19	167.75	57	NA	<0.5	<0.5	<0.5	<0.5	0.97	
1/18/2012	176.94	9.61	167.33	<22	NA	<0.33	<0.19	<0.15	<0.2	1.2	
7/10/2012	176.94	9.71	167.23	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
Shallow WBZ Wells											
SOMA-2	8/10/2004	178.99	10.69	168.30	<50	NA	<0.5	<0.5	<0.5	<0.5	0.8
	10/19/2004	178.99	10.75	168.24	<50	NA	<0.5	<0.5	<0.5	<0.5	2.4

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Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-2 cont.	1/14/2005	178.99	9.45	169.54	<50	NA	<0.5	<0.5	<0.5	<0.5	1.1
	4/14/2005	178.99	10.46	168.53	<200	NA	<0.5	<0.5	<0.5	<1.0	<0.5
	7/7/2005	178.99	11.81	167.18	<200	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	11/15/2005	178.99	12.02	166.97	<50	NA	<0.5	<2.0	<0.5	<1.0	1.61
	2/8/2006	178.99	11.88	167.11	<50	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	4/27/2006	178.99	10.95	168.04	<50	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	8/1/2006	178.99	11.85	167.14	<50	NA	<0.5	<2.0	<0.5	<1.0	1.11
	10/19/2006	178.99	10.62	168.37	<50	NA	<0.5	<2.0	<0.5	<1.0	1.36
	1/12/2007	178.99	10.26	168.73	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	4/17/2007	178.99	11.88	167.11	<50	NA	<0.5	<2.0	<0.5	<2.0	0.87
	7/17/2007	178.99	10.84	168.15	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2007	178.99	9.69	169.30	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	1/17/2008	178.99	9.62	169.37	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	4/17/2008	178.99	10.06	168.93	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	7/16/2008	178.99	10.63	168.36	<50	NA	<0.5	<2.0	<0.5	<2.0	<0.5
	10/14/2008	178.99	11.26	167.73	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/6/2009	178.99	10.22	168.77	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	4/6/2009	178.99	10.38	168.61	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	7/7/2009	178.99	10.40	168.59	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/27/2010	178.99	8.19	170.80	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
7/26/2010	178.99	10.24	168.75	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	
11/15/2010	178.99	10.04	168.95	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	
2/14/2011	178.99	9.95	169.04	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	
7/19/2011	178.99	10.20	168.79	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	
1/18/2012	178.99	10.56	168.43	<22	NA	<0.33	<0.19	<0.15	<0.2	<0.38	
7/10/2012	178.99	10.45	168.54	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
SOMA-3	8/10/2004	176.81	9.97	166.84	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	10/19/2004	176.81	9.59	167.22	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-3 cont.	1/14/2005	176.81	8.23	168.58	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2005	176.81	8.64	168.17	<200	NA	<0.5	<0.5	<0.5	<1.0	<0.5
	7/7/2005	176.81	9.60	167.21	<200	NA	<0.5	<2.0	<0.5	<1.0	<0.5
	11/15/2005	176.81	10.01	166.80	<50	NA	<0.5	<2.0	<0.5	<1.0	5.1
	2/8/2006	176.81	8.80	168.01	<50	NA	<0.5	<2.0	<0.5	<1.0	7.16
	4/27/2006	176.81	9.00	167.81	<50	NA	<0.5	<2.0	<0.5	<1.0	14.2
	8/1/2006	176.81	9.91	166.90	<50	NA	<0.5	<2.0	<0.5	<1.0	7.29
	10/19/2006	176.81	10.21	166.60	<50	NA	<0.5	<2.0	<0.5	<1.0	41.4
	1/12/2007	176.81	9.73	167.08	<50	NA	<0.5	<2.0	<0.5	<2.0	20.9
	4/17/2007	176.81	9.81	167.00	<50	NA	<0.5	<2.0	<0.5	<2.0	32.1
	7/17/2007	176.81	10.06	166.75	<50	NA	<0.5	<2.0	<0.5	<2.0	23.6
	10/16/2007	176.81	9.54	167.27	<50	NA	<0.5	<2.0	<0.5	<2.0	22.3
	1/17/2008	176.81	9.06	167.75	<50	NA	<0.5	<2.0	<0.5	<2.0	11.1
	4/17/2008	176.81	9.57	167.24	<50	NA	<0.5	<2.0	<0.5	<2.0	23.7
	7/16/2008	176.81	10.25	166.56	<50	NA	<0.5	<2.0	<0.5	<2.0	10.6
	10/14/2008	176.81	10.76	166.05	<50	NA	<0.5	<0.5	<0.5	<0.5	19
	1/6/2009	176.81	9.53	167.28	<50	NA	<0.5	<0.5	<0.5	<0.5	1.1
	4/6/2009	176.81	9.65	167.16	<50	NA	<0.5	<0.5	<0.5	<0.5	5.7
	7/7/2009	176.81	10.19	166.62	<50	NA	<0.5	<0.5	<0.5	<0.5	6
	1/27/2010	176.81	7.80	169.01	<50	NA	<0.5	<0.5	<0.5	<0.5	56
	7/26/2010	176.81	9.67	167.14	<50	NA	<0.5	<0.5	<0.5	<0.5	9.8
	11/15/2010	176.81	9.35	167.46	<50	NA	<0.5	<0.5	<0.5	<0.5	30
	2/14/2011	176.81	10.57	166.24	<50	NA	<0.5	<0.5	<0.5	<0.5	32
7/19/2011	176.81	9.74	167.07	<50	NA	<0.5	<0.5	<0.5	<0.5	17	
1/18/2012	176.81	10.14	166.67	<22	NA	<0.33	<0.19	<0.15	<0.2	24	
7/10/2012	176.81	9.99	166.82	NA	<50	<0.5	<0.5	<0.5	<0.5	1.6	

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
SOMA-5 pre-MPE	1/27/2010	180.31	7.94	172.37	14,000	NA	2,600	1.5	800	914	190
	7/26/2010	180.31	9.99	170.32	14,000	NA	3,300	<20	1,100	1,340	150
	11/15/2010	180.31	10.01	170.30	11,000	NA	2,400	3.3	920	733	130
	2/15/2011	180.31	10.22	170.09	4,900	NA	1,600	<13	430	84	94
	6/16/2011	180.31	NM	NC	6,400	NA	2,500	<20	670	160	150
	7/19/2011	180.31	9.95	170.36	1,300	NA	470	<3.6	<3.6	212	8.8
	1/18/2012 7/10/2012	180.31 180.31	10.16 10.16	170.15 170.15	600 ^Y NA	NA <50	160 3.6	<0.19 <0.5	27 <0.5	<0.2 <0.5	6.5 4.6
SOMA-7 pre-MPE	8/30/2010	178.54	7.63	170.91	2,900	NA	190	3.7	74	19.80	8.4
	11/16/2010	178.54	7.89	170.65	1,500	NA	190	2.1	41	8.30	5.7
	2/15/2011	178.54	7.33	171.21	1,900	NA	380	4	27	5.50	5.2
	6/16/2011	178.54	NM	NC	1,900	NA	330	4.3	24	5.20	4.7
	7/19/2011	178.54	7.89	170.65	7,600	NA	1,100	15	200	61	12
	1/18/2012 7/11/2012	178.54 178.54	8.74 8.66	169.80 169.88	1,300 ^Y NA	NA 5,600	190 390	2.2 5.5	29 45	5.2 9.1	<1.7 5.2
SOMA-8	8/30/2010	181.57	9.89	171.68	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	11/15/2010	181.57	9.37	172.20	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	2/14/2011	181.57	9.89	171.68	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	7/19/2011	181.57	9.67	171.90	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
	1/18/2012 7/10/2012	181.57 181.57	10.29 10.31	171.28 171.26	<22 NA	NA <50	<0.33 <0.5	<0.19 <0.5	<0.15 <0.5	<0.2 <0.5	<0.38 <0.5

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
OB-1 pre-MPE	6/16/2011	178.7	NM	NC	1,900	NA	9.3	<0.5	3.7	5.80	23
	7/19/2011	178.7	7.89	170.81	250	NA	1.9	<0.5	0.63	0.78	4.1
	1/18/2012	178.7	8.72	169.98	2,400 ^Y	NA	12	<0.19	3.0	6.35	16
	7/11/2012	178.7	7.96	170.74	NA	2,100^Y	12	0.5	0.7	2.50	18
OB-2 pre-MPE	6/16/2011	180.23	NM	NC	12,000	NA	870	18	590	1,140	310
	7/19/2011	180.23	9.76	170.47	30,000	NA	1,000	31	1,300	3,020	310
	1/18/2012	180.23	9.92	170.31	22,000 ^Y	NA	930	13	1,300	2,100	<3.3
	7/11/2012	180.23	10.34	169.89	NA	46,000	580	11	1,300	2,130	94
Equipment Blanks											
EB-PMP	1/17/2008	NA	NA	NA	<50		<0.5	<2.0	<0.5	<2.0	<0.5
EB-PRB	1/17/2008	NA	NA	NA	<50		<0.5	<2.0	<0.5	<2.0	<0.5
EB-PMP2	1/17/2008	NA	NA	NA	<50		<0.5	<2.0	<0.5	<2.0	<0.5
EB-PRB2	1/17/2008	NA	NA	NA	<50		<0.5	<2.0	<0.5	<2.0	<0.5

Notes:

< : Not detected above laboratory reporting limit.

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

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

H: Heavier hydrocarbons contributed to the quantitation.

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

NM: Not Measured

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

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

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

Z: Sample exhibits unknown single peak or peaks.

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

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

Monitoring Well	Date	Top of casing elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L) 8260B	TPH-g (µg/L) 8015B	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) 8260B
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- The Third Quarter 2004 was the first time that SOMA analyzed groundwater samples at wells SOMA-1 to SOMA-4.
- August 2010, reconstruct ESE-1R, ESE-2R, ESE-5R, MW-6R, MW-7R; install SOMA-7, SOMA-8. 8/30/10 investigation sampling
- pre-MPE sampling conducted on 6/16/2011 prior to start of MPE pilot testing from June 20 to July 1, 2011
- In July 2012, TPH-g was analyzed by method EPA 8015B due to laboratory error instead of EPA 8260B

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)
Semi-Confined WBZ Wells								
ESE-1	6/17/2003	<400	<10	<10	18	NA	NA	NA
	9/17/2003	NA	NA	NA	NA	NA	NA	NA
	12/9/2003	290	<1.0	<1.0	9.5	<2,000	<1.0	<1.0
	2/26/2004	410	<0.5	<0.5	9.7	<1000	<0.5	<0.5
	5/21/2004	190	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	8/10/2004	180	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	270	<0.7	<0.7	4.4	<1400	9.9	<0.7
	1/14/2005	280	<1.3	<1.3	<1.3	<2,500	<1.3	<1.3
	4/14/2005	144	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	7/7/2005	119	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	11/15/2005	107	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	2/8/2006	181	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	4/27/2006	261	<2.15	<2.15	<8.6	<4300	<2.15	<2.15
	8/1/2006	165	<1.0	<1.0	<4.0	<2000	<1.0	<1.0
	10/19/2006	154	<1.0	<1.0	<4.0	<2000	<1.0	<1.0
	1/12/2007	103	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	4/17/2007	80.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	7/17/2007	128	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/16/2007	98.7	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	1/17/2008	61.5	<0.5	<0.5	2.52	<1000	<0.5	<0.5
	4/17/2008	76.4	<0.5	<0.5	<2.0	<1000	59.2	<0.5
	7/16/2008	179	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	10/14/2008	87	<0.5	<0.5	2.6	<1000	<0.5	<0.5
1/6/2009	93	<1.0	<1.0	<1.0	<2000	<1.0	<1.0	
4/6/2009	130	<1.0	<1.0	<1.0	<2000	<1.0	<1.0	
7/7/2009	100	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
1/27/2010	200	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/26/2010	110	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
ESE-1R	8/30/2010	83	<0.71	<0.71	3.4	<1,400	<0.71	<0.71
	11/16/2010	64	<0.5	<0.5	0.94	<1,000	<0.5	<0.5
	2/15/2011	130	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	82	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	79	<0.36	<0.4	<0.32	<100	<0.28	<0.19
7/10/2012	110	<0.5	<0.5	1.6	<1,000	<0.5	<0.5	
Semi-Confined WBZ Wells								
ESE-2	6/17/2003	<4000	<100	<100	<100	NA	NA	NA
	9/17/2003	NA	NA	NA	NA	NA	NA	NA
	12/9/2003	500	<13	<13	77	<25,000	<13	<13
	2/26/2004	1200	<0.5	<0.5	92	<1,000	<0.5	<0.5
	5/21/2004	2400	<10	<10	25	<20,000	<10	<10
	8/10/2004	2300	<2.5	<2.5	12	<5,000	<2.5	<2.5
10/19/2004	1800	<3.6	<3.6	8.6	<7100	<3.6	<3.6	

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-2R cont.	1/14/2005	470	<8.3	<8.3	28	<17,000	<8.3	<8.3
	4/14/2005	<10.8	<2.15	<2.15	17.9	<4,300	<2.15	<2.15
	7/7/2005	109	<2.15	<2.15	9.7	<4,300	<2.15	<2.15
	11/15/2005	64.7	<0.5	<0.5	3.43	<1,000	<0.5	<0.5
	2/8/2006	46.4	<2.15	<2.15	11	<4,300	<2.15	<2.15
	4/27/2006	47.7	<1.0	<1.0	8.29	<2,000	<1.0	<1.0
	8/1/2006	20.6	<1.0	<1.0	4.67	<2,000	<1.0	<1.0
	10/19/2006	28.9	<0.5	<0.5	4.55	<1,000	<0.5	<0.5
	1/12/2007	NA	NA	NA	NA	NA	NA	NA
	4/17/2007	60.8	<0.5	<0.5	3.85	<1,000	<0.5	<0.5
	7/17/2007	62.3	<0.5	<0.5	2.95	<1,000	<0.5	<0.5
	10/16/2007	46	<0.5	<0.5	2.21	<1,000	<0.5	<0.5
	1/17/2008	18.8	<0.5	<0.5	3.38	<1,000	<0.5	<0.5
	4/17/2008	18.8	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	9.95	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	0.85	<1,000	<0.5	<0.5
	1/6/2009	27	<0.5	<0.5	0.83	<1,000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/7/2009	18	<0.5	<0.5	0.56	<1,000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
ESE-2R	8/30/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	11/16/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
ESE-3	6/17/2003	<200	<5.0	<5.0	<5.0	NA	NA	NA
ESE-5	9/17/2003	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	12/9/2003	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/26/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	5/21/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	8/10/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	17	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
11/15/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5	

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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	ETHANOL (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
ESE-5 cont.	2/8/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	8.7	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/17/2007	15.4	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/16/2007	11.5	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/17/2008	17.2	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	5.44	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
ESE-5R	8/30/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	11/16/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/15/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
	7/11/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
MW-6	9/17/2003	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	12/9/2003	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/26/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	5/21/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	8/10/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
7/17/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5	
10/16/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5	

Table 2
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3519 Castro Valley Blvd, Castro Valley, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	ETHANOL (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-6 contd.	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
MW-6R	8/30/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	11/15/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
	7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
MW-7	9/17/2003	<10	<0.5	<0.5	9.8	<1,000	<0.5	<0.5
	12/9/2003	<25	<1.3	<1.3	8.1	<2,500	<1.3	<1.3
	2/26/2004	<10	<0.5	<0.5	9.9	<1,000	<0.5	<0.5
	5/21/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	8/10/2004	<25	<1.3	<1.3	19	<2,500	<1.3	<1.3
	10/19/2004	<100	<5.0	<5.0	11	<10,000	<5.0	<5.0
	1/14/2005	<40	<2.0	<2.0	5.1	<4,000	<2.0	<2.0
	4/14/2005	2.62	<0.5	<0.5	4.57	<1,000	<0.5	<0.5
	7/7/2005	55.6	<1.0	<1.0	10.2	<2,000	<1.0	<1.0
	11/15/2005	10.6	<0.5	<0.5	2.07	<1,000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	2.19	<1,000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	2.63	<1,000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	11.6	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/17/2007	13.3	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/17/2008	NA	NA	NA	NA	NA	NA	NA
	4/17/2008	8.63	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/7/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
MW-7R	8/30/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	11/16/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
	7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5

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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)
SOMA-1	8/10/2004	2300	<6.3	<6.3	53	<13,000	<6.3	<6.3
	10/19/2004	2400	<13	<13	36	<25,000	<13	<13
	1/14/2005	530	<3.1	<3.1	7.1	<6,300	<3.1	<3.1
	4/14/2005	<27.5	<5.5	<5.5	<22	<11,000	<5.5	<5.5
	7/7/2005	2180	<2.15	<2.15	12.9	<4,300	<2.15	<2.15
	11/15/2005	792	<0.5	<0.5	5.01	<1,000	<0.5	<0.5
	2/8/2006	618	<0.5	<0.5	3.67	<1,000	<0.5	<0.5
	4/27/2006	983	<0.5	<0.5	3.48	<1,000	<0.5	<0.5
	8/1/2006	639	<0.5	<0.5	2.27	<1,000	<0.5	<0.5
	10/19/2006	603	<0.5	<0.5	2.25	<1,000	<0.5	<0.5
	1/12/2007	396	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	148	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/17/2007	555	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/16/2007	65	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/17/2008	29.6	<0.5	<0.5	2.06	<1,000	<0.5	<0.5
	4/17/2008	339	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	264	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	250	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	180	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/6/2009	120	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
7/7/2009	250	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
1/27/2010	310	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/26/2010	68	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
11/16/2010	84	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
2/15/2011	120	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/19/2011	130	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
1/18/2012	150	<0.36	<0.4	<0.32	<100	<0.28	<0.19	
7/10/2012	79	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
SOMA-4	8/10/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	3.98	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/17/2007	6.31	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5

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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)
SOMA-4 contd	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	11/15/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
	7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
Shallow WBZ Wells								
SOMA-2	8/10/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	14.6	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/17/2007	2.58	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/16/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
1/27/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
11/15/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19	
7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
SOMA-3								
SOMA-3	8/10/2004	<10	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	10/19/2004	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5

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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)
SOMA-3 cont.	1/14/2005	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/14/2005	<2.5	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/7/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	11/15/2005	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	2/8/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/27/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	8/1/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/19/2006	<10	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/12/2007	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2007	6.72	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/17/2007	7.6	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/16/2007	9.96	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	4/17/2008	6.05	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	7/16/2008	<2.0	<0.5	<0.5	<2.0	<1,000	<0.5	<0.5
	10/14/2008	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	4/6/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/7/2009	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/27/2010	<10	<0.5	<0.5	0.8	<1,000	<0.5	<0.5
7/26/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
11/15/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19	
7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
SOMA-5	1/27/2010	500	<13	<13	<13	<25,000	<13	<13
	7/26/2010	<400	<20	<20	<20	<40,000	<20	<20
	11/15/2010	480	<2.0	<2.0	<2.0	<4,000	<2.0	<2.0
	2/15/2011	390	<13	<13	<13	<25,000	<13	<13
	6/16/2011	450	<20	<20	<20	NA	<20	<20
	7/19/2011	<71	<3.6	<3.6	<3.6	<7,100	<3.6	<3.6
	1/18/2012	11	<0.36	<0.4	<0.32	<100	<0.28	<0.19
7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5	
SOMA-7	8/30/2010	<33	<1.7	<1.7	<1.7	<3,300	<1.7	<1.7
	11/16/2010	<25	<1.3	<1.3	<1.3	<2,500	<1.3	<1.3
	2/15/2011	<25	<1.3	<1.3	<1.3	<2,500	<1.3	<1.3
	6/16/2011	<33	<1.7	<1.7	<1.7	NA	<1.7	<1.7
	7/19/2011	<25	<1.3	<1.3	<1.3	<2,500	<1.3	<1.3
	1/18/2012	<6.6	<1.6	<1.7	<1.4	<440	<1.2	<0.86
	7/11/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
SOMA-8	8/30/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	11/15/2010	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	2/14/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
	7/10/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5

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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	ETHANOL (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
OB-1 pre-MPE	6/16/2011	20	<0.5	<0.5	<0.5	NA	<0.5	<0.5
	7/19/2011	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
	1/18/2012	<1.5	<0.36	<0.4	<0.32	<100	<0.28	<0.19
	7/11/2012	<10	<0.5	<0.5	<0.5	<1,000	<0.5	<0.5
OB-2 pre-MPE	6/16/2011	220	<5.0	<5.0	<5.0	NA	<5.0	<5.0
	7/19/2011	260	<10	<10	<10	<20,000	<10	<10
	1/18/2012	94	<3.2	<3.5	<2.8	<880	<2.4	<1.7
	7/11/2012	44	<0.5	<0.5	20	<1,000	0.6	<0.5
Equipment Blanks								
EB-PMP	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
EB-PRB	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
EB-PMP2	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
EB-PRB2	1/17/2008	<2.0	<0.5	<0.5	<2.0	<1000	<0.5	<0.5

Notes:

< : Not detected above laboratory reporting limit.

NA: Not Analyzed.

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

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

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

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

Gasoline Oxygenates:

TBA: tertiary butyl alcohol

DIPE: isopropyl ether

ETBE: ethyl tertiary butyl ether

TAME: methyl tertiary amyl ether

Ethanol

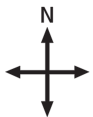
Lead Scavengers:

1,2-DCA: 1,2-Dichloroethane

EDB: 1,2-Dibromoethane

August 2010, reconstruct ESE-1R, ESE-2R, ESE-5R, MW-6R, MW-7R; install SOMA-7, SOMA-8. 8/30/10 investigation sampling

Figures



approximate scale in feet

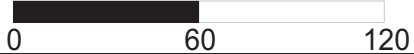
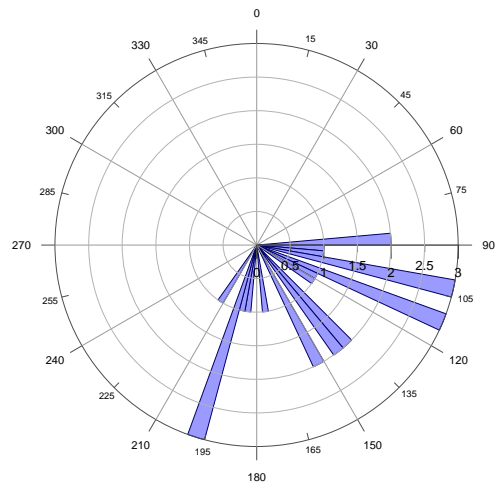
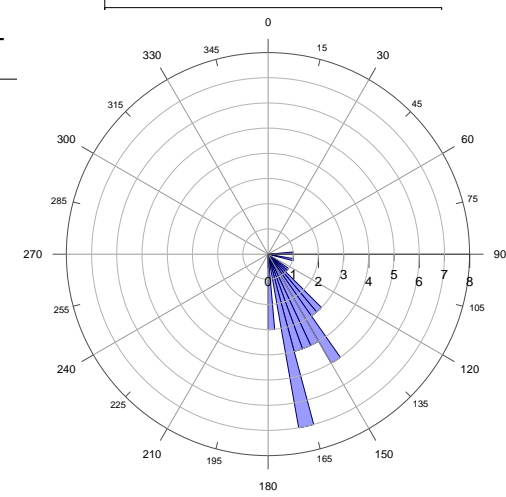
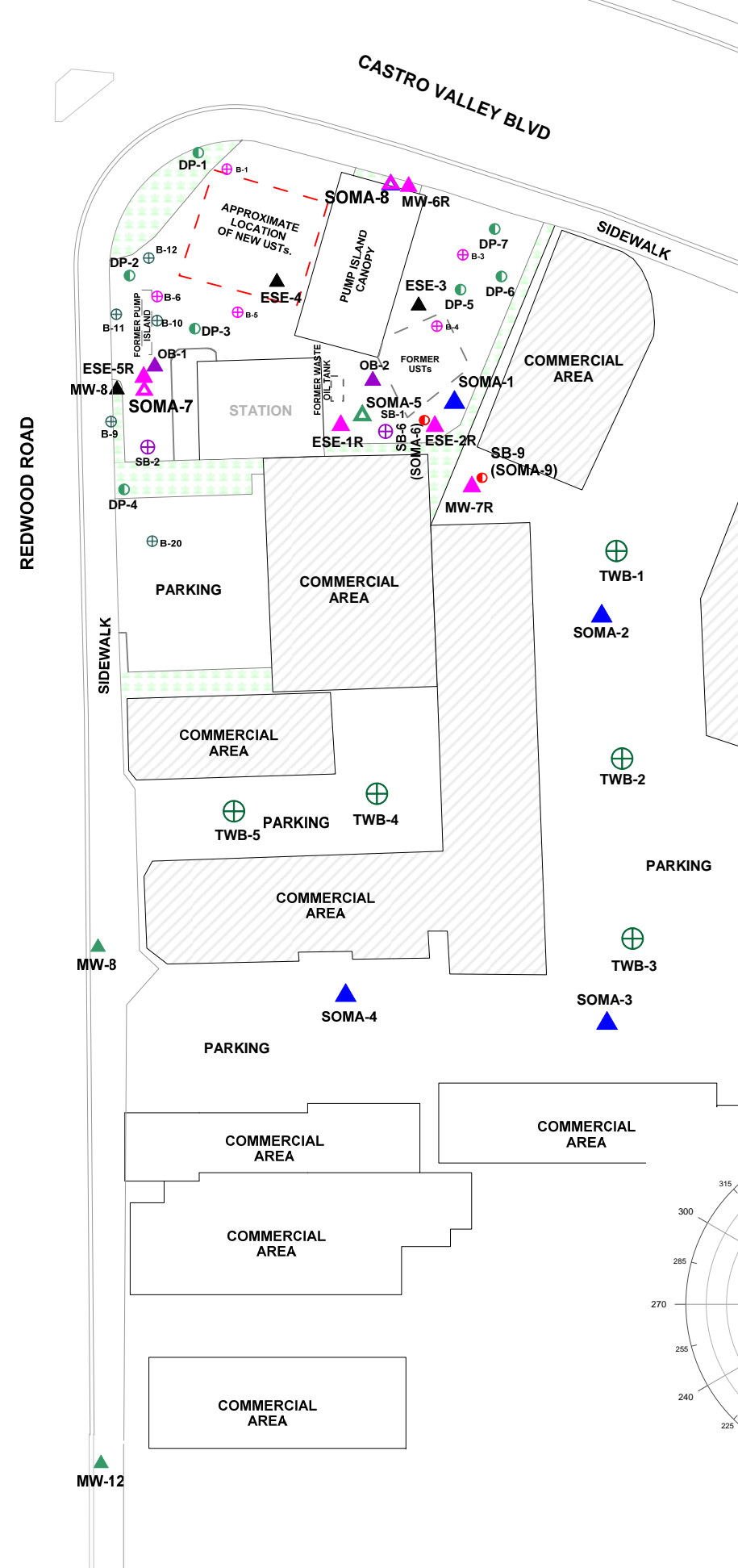
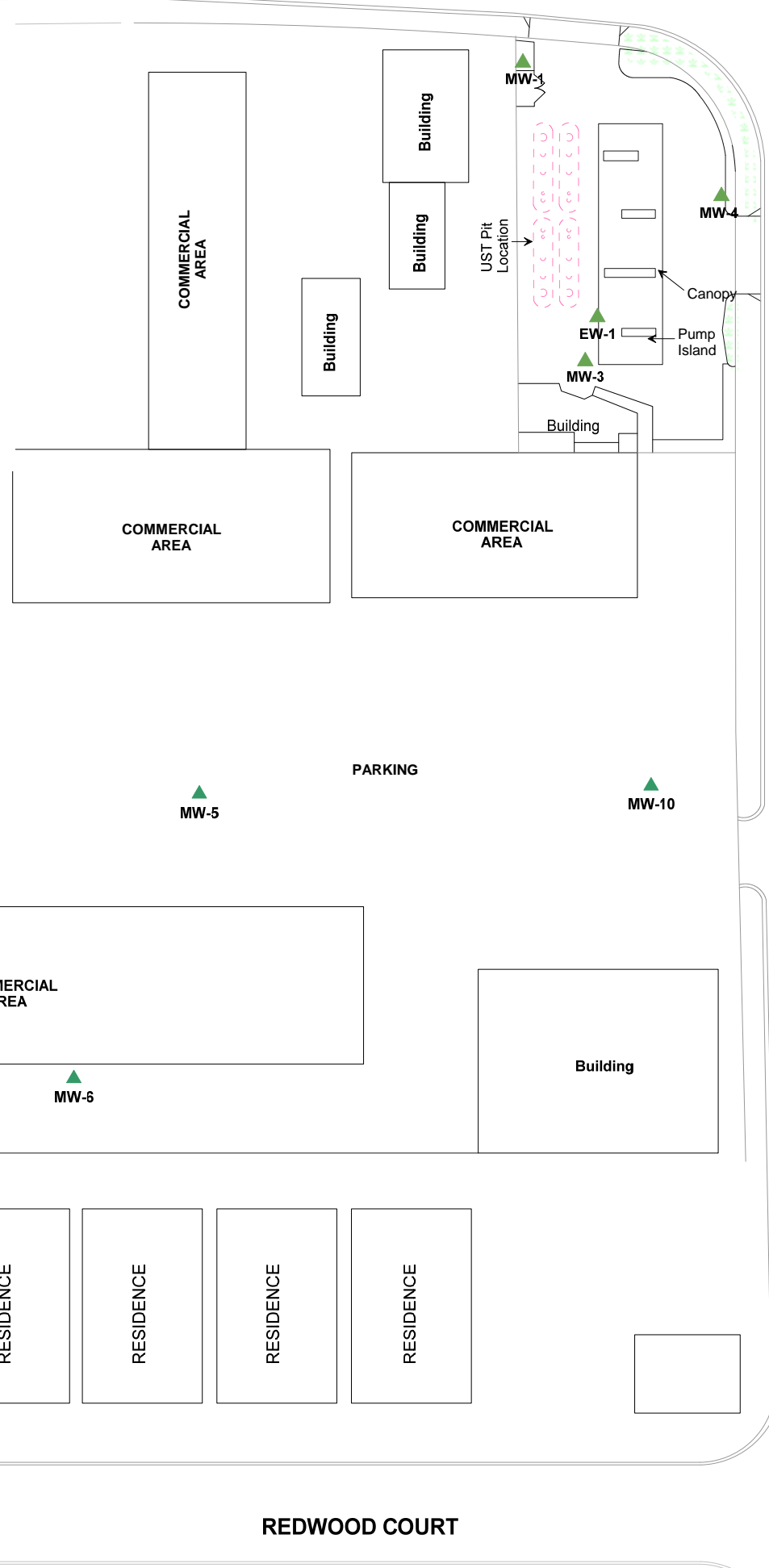


Figure 1: Site vicinity map.



Rose Diagram of Approximate Groundwater Flow Direction (3495 Castro Valley)



Rose Diagram of Approximate Groundwater Flow Direction (3519 Castro Valley)

- ▲ Observation Wells June 2011
 - ▲ Reconstructed Wells August 2010
 - ▲ Shallow WBZ Wells, August 2010
 - Shallow Soil Borings, August 2010
 - ▲ MONITORING WELL, INSTALLED AUG. 2009
 - SOIL BORINGS - SOMA ENV., AUG. 2009
 - ⊕ SOIL BORINGS- DELTA CONS. SEPT. 2008
 - ⊕ SOIL BORINGS REDWOOD ROAD EXPANSION FEB 1995
 - ▲ MONITORING WELL
 - ▲ DECOMMISSIONED WELL
 - ⊕ COMPLETED OFFSITE TEMPORARY WELL BOREHOLE DRILLED DEC. 2003
 - ⊕ SOIL BORINGS DRILLED PRIOR TO UST REMOVAL AUG. 2003
 - ▲ MONITORING WELL (Located at 3495 Castro Valley Blvd.)
- NOTES:
 ESE-3 and ESE-4 were decommissioned during UST tank excavation activities.
 MW-8 was decommissioned by the previous consultant.
 Proposed wells SOMA-6 and SOMA-9 were not installed and they subsequently became soil borings SB-6 and SB-9

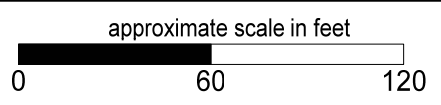


Figure 2: Site map showing locations of existing monitoring wells, decommissioned wells, offsite temporary well boreholes, monitoring wells installed by SOMA, and monitoring wells located at neighboring service station.



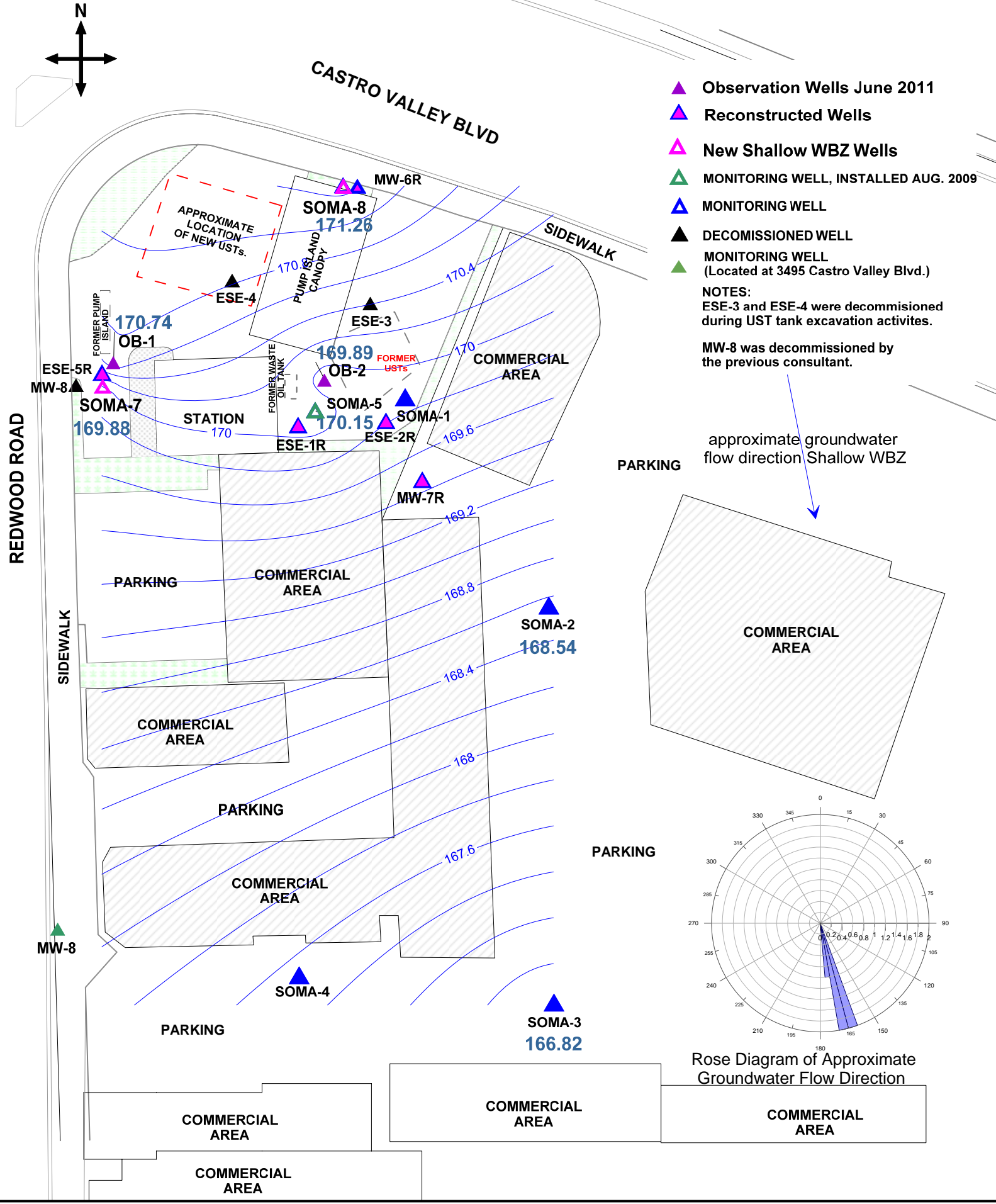


Figure 3: Groundwater Elevation Contour Map for Shallow WBZ Wells in Feet. July 10, 2012

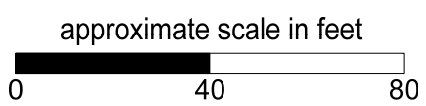
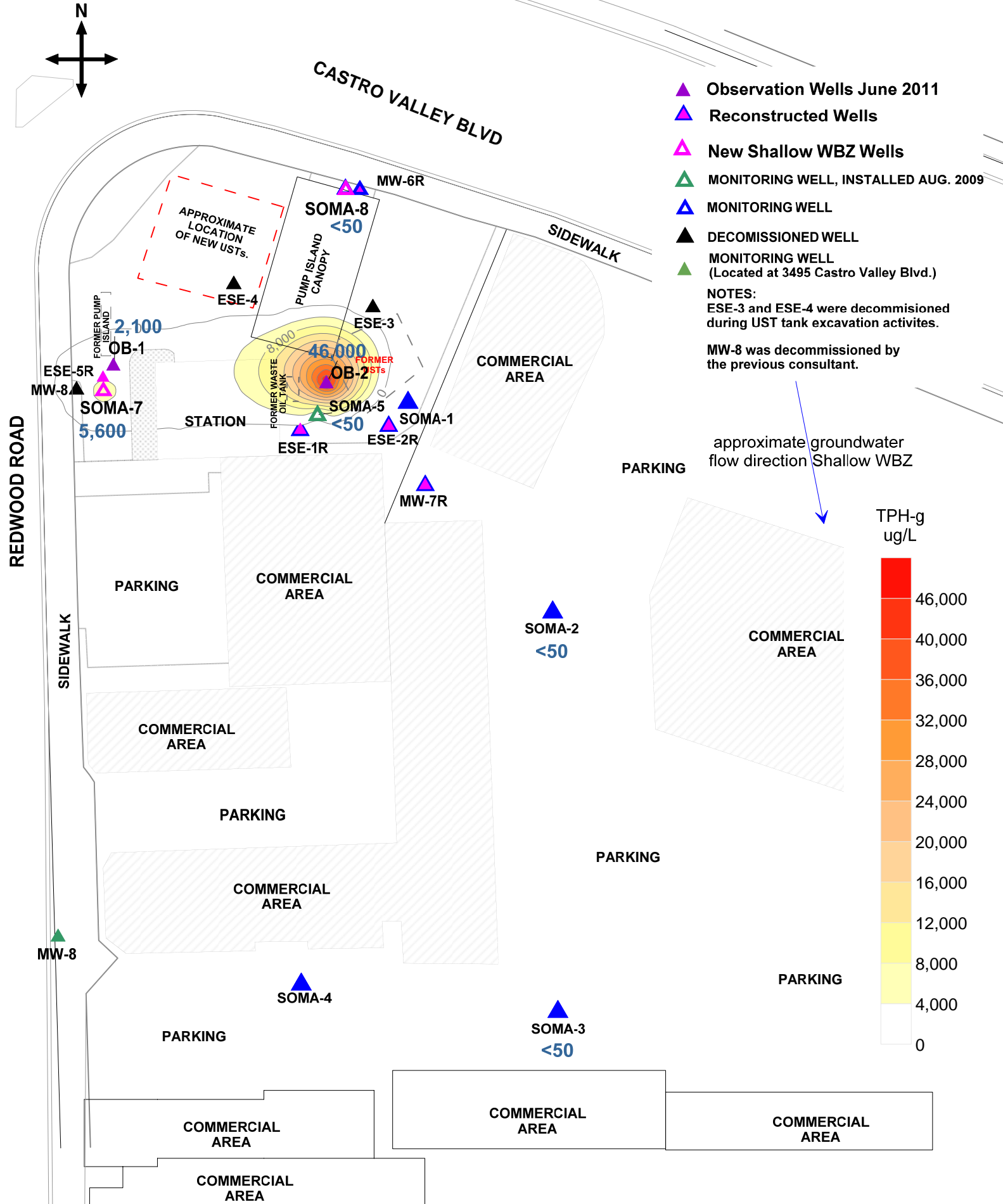


Figure 4: Contour Map of TPH-g Concentrations in Shallow WBZ Wells in Feet. July 10 and 11, 2012



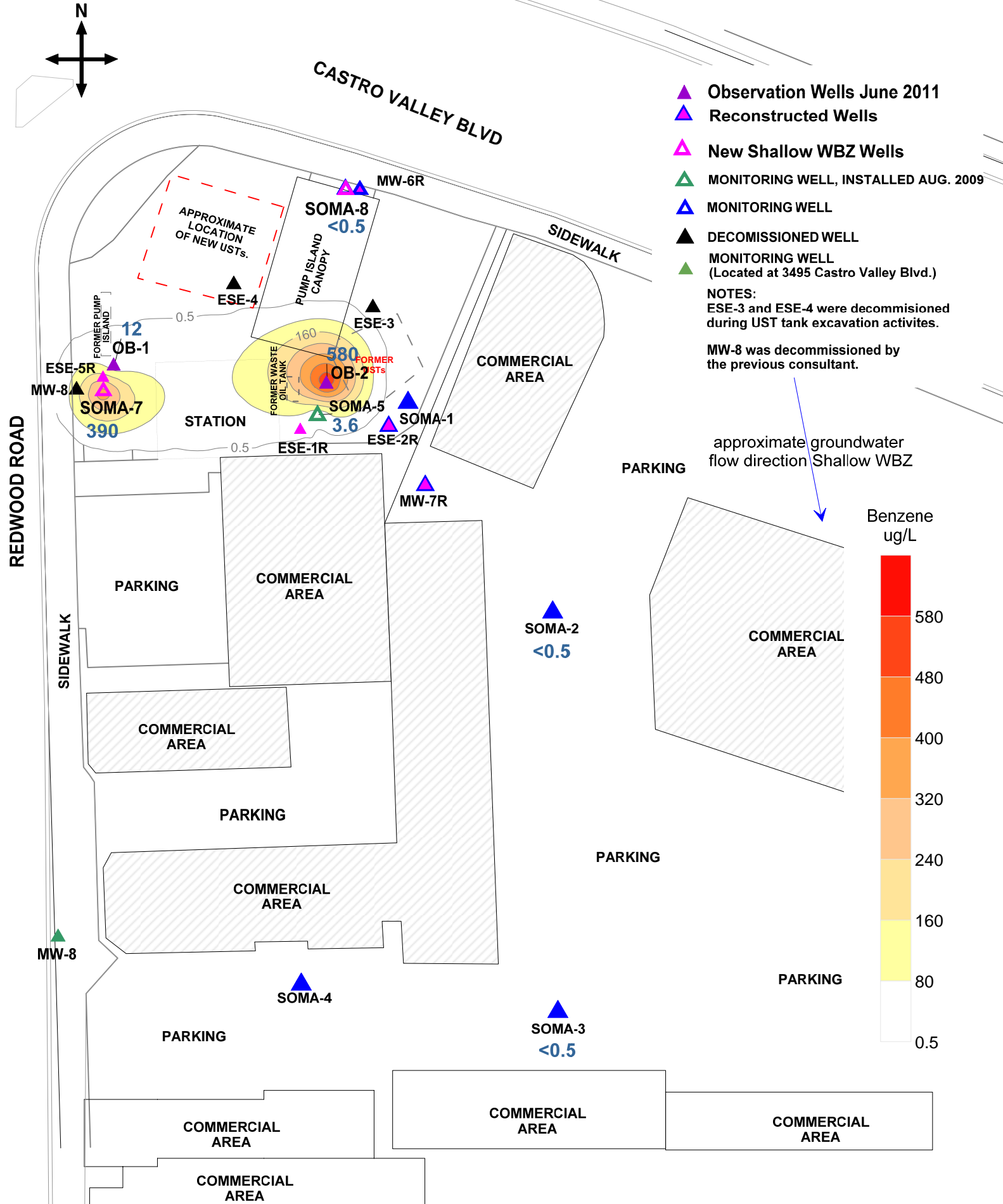
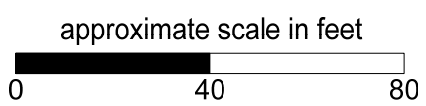


Figure 5: Contour Map of Benzene Concentrations in Shallow WBZ Wells in Feet. July 10 and 11, 2012



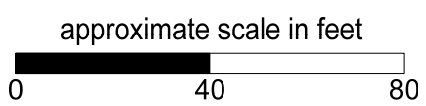
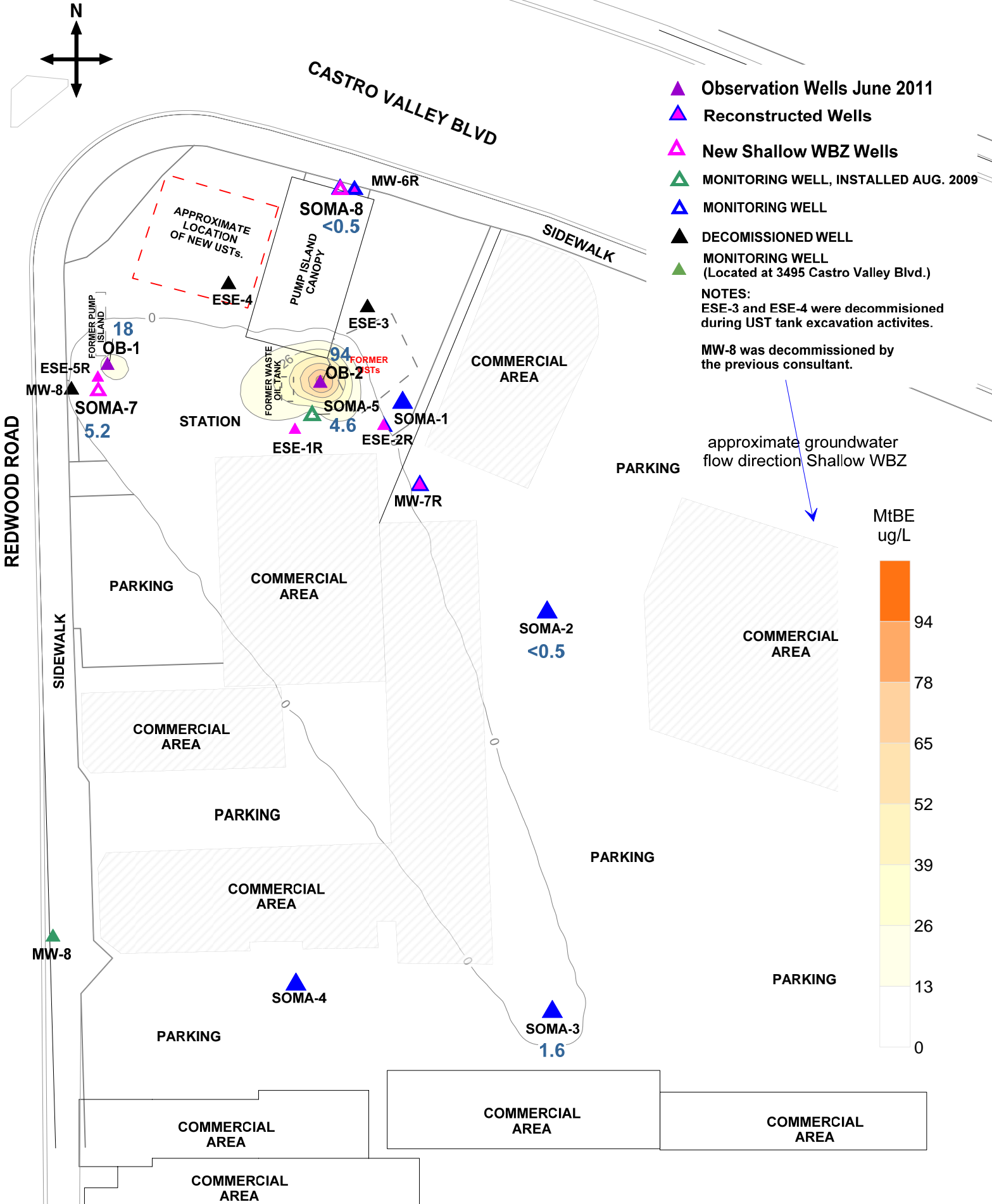


Figure 6: Contour Map of MtBE Concentrations in Shallow WBZ Wells in Feet. July 10 and 11, 2012



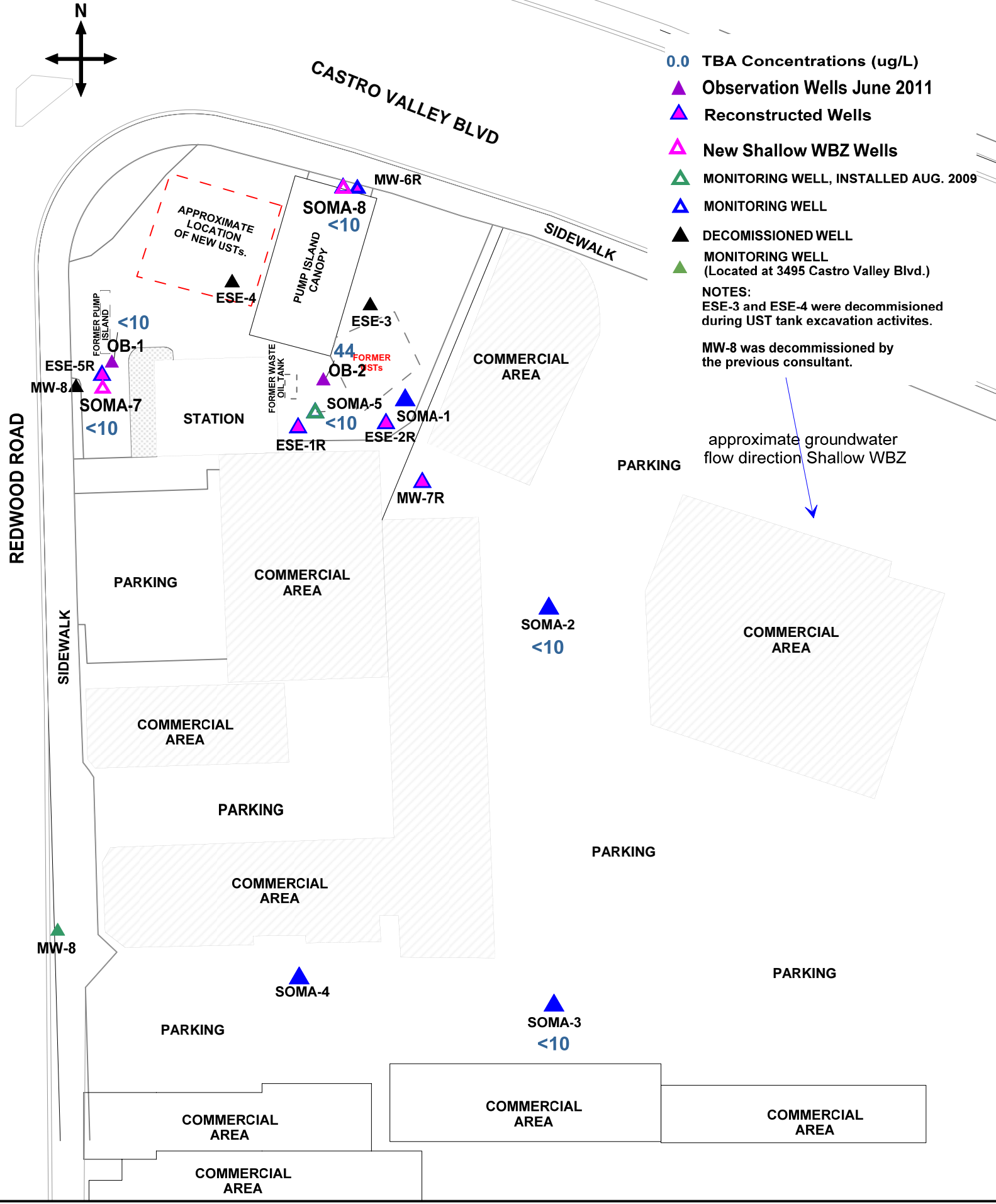


Figure 7: Map of TBA Concentrations in Shallow WBZ Wells in Feet. July 10 and 11, 2012



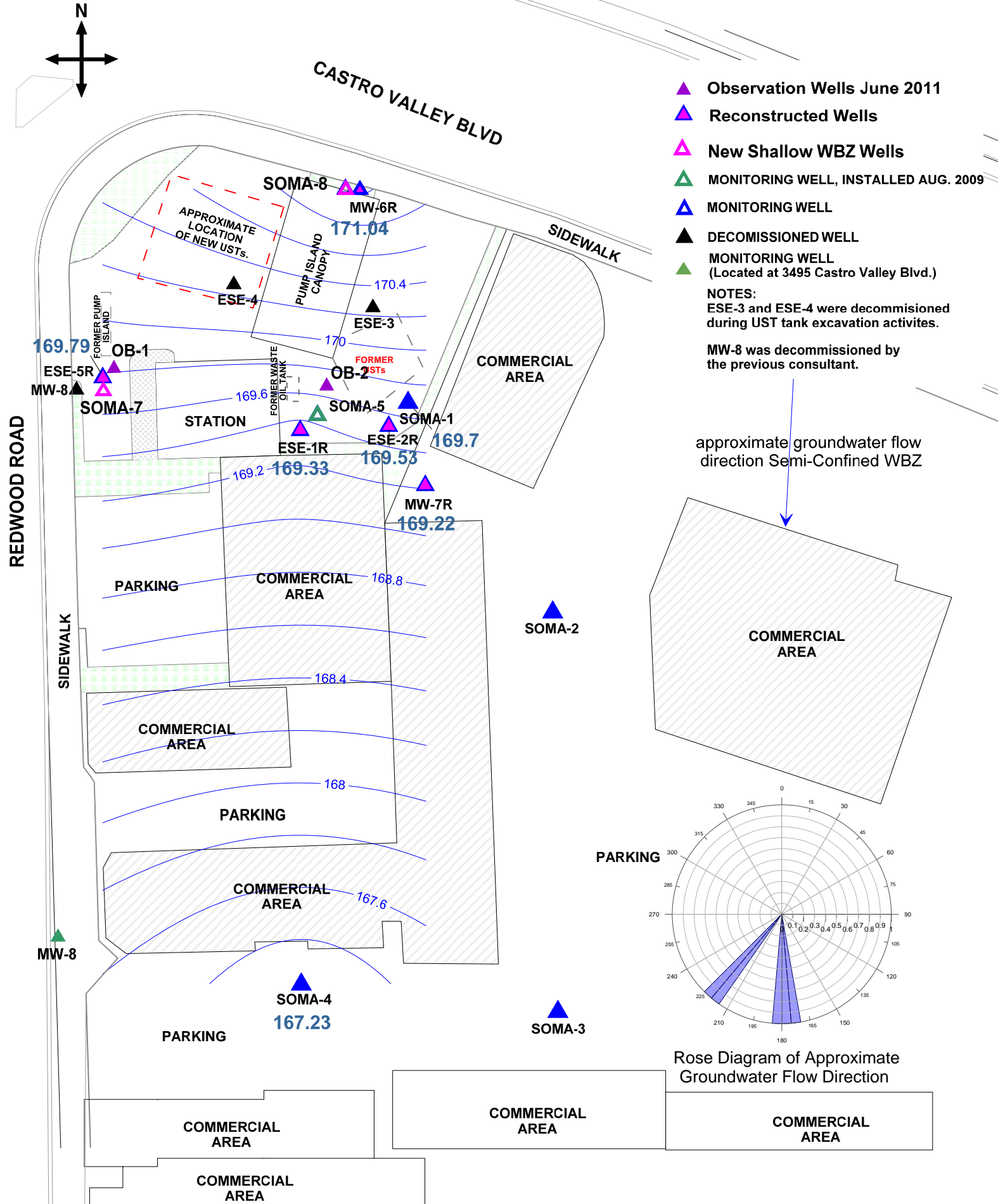


Figure 8: Groundwater Elevation Contour Map for Semi-Confined WBZ Wells in Feet. July 10, 2012



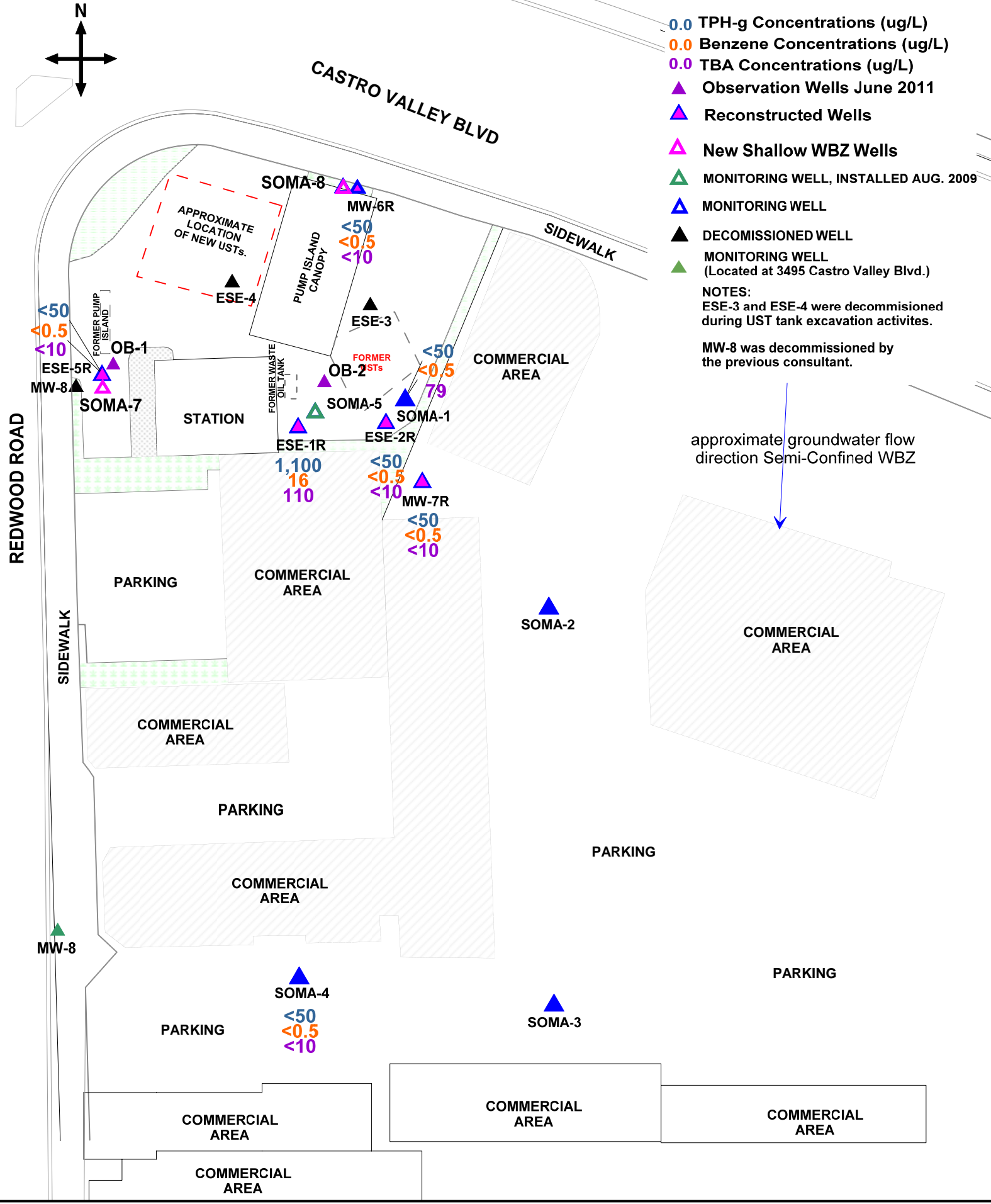
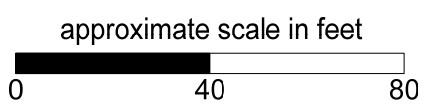


Figure 9: Map of TPH-g, Benzene and TBA Concentrations in Semi-Confined WBZ Wells. July 10 and 11, 2012



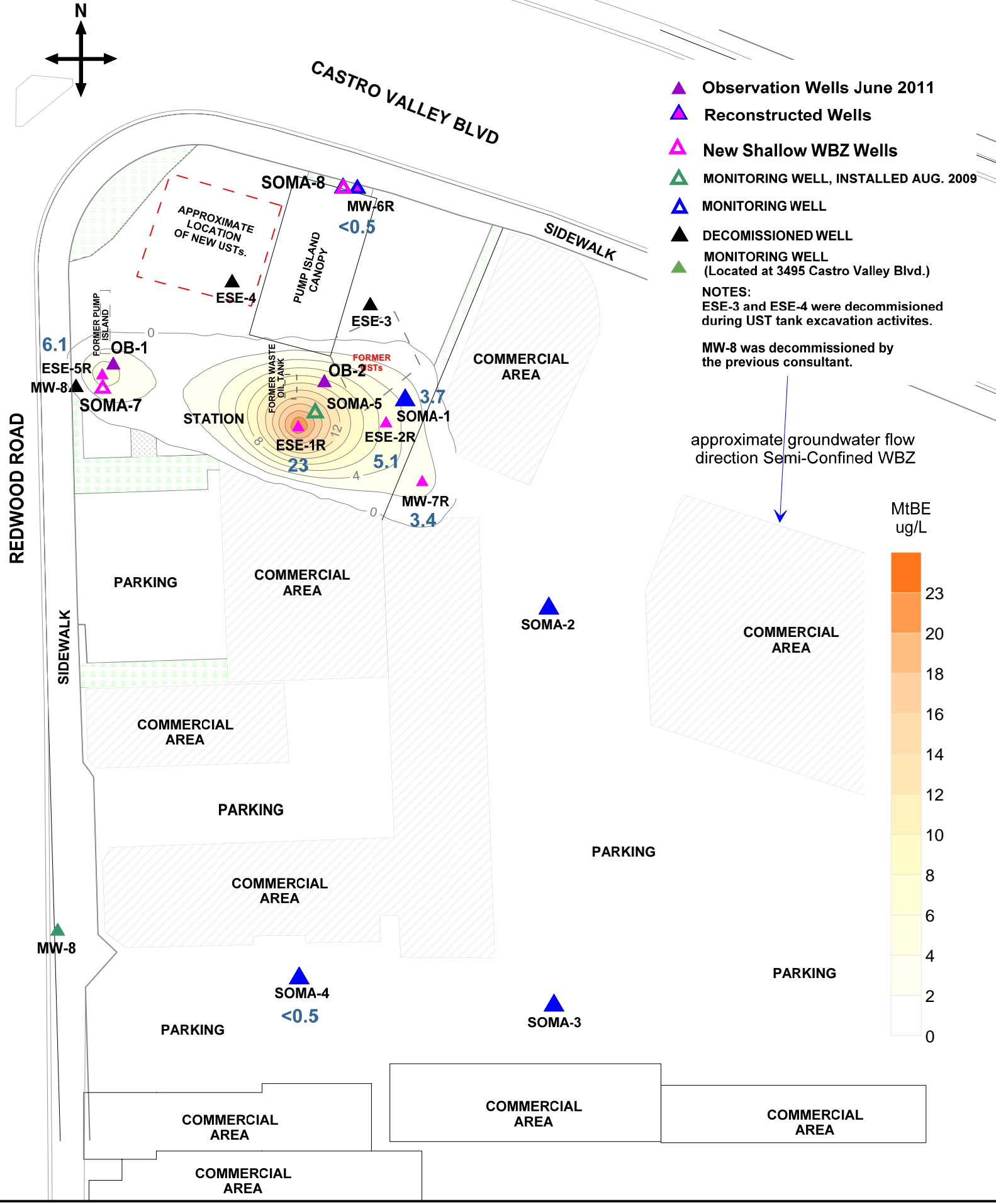
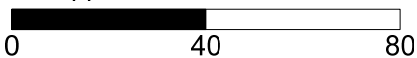


Figure 10: Contour Map of MtBE Concentrations in Semi-Confined WBZ Wells. July 10 and 11, 2012

approximate scale in feet



Appendix A

Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Water Level Measurements

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

Purging and Field Measurements

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

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

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

Sampling

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

Appendix B

Table of Elevations and Coordinates for
Monitoring Wells,
Field Measurements of Groundwater Sample
Properties,
and Groundwater Gradient Calculations

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

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

Kier & Wright Engineers Surveyors, Inc.

6/21/2005
10:19 AM
3519 Castro Valley

1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
Fax (925) 249-6563

**TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS**

SOMA ENVIRONMENTAL
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

ADDITIONAL POINTS

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

BENCH MARK: NGS Bench mark No.PID# HT0223

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

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

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

Elevation =56.33 FEET NAVD88 Datum
ADJUSTED

HORIZONTAL CONTROL:

PID - HT0223

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

PID - HT 2583

Kier & Wright Engineers Surveyors, Inc.

6/21/2005
10:19 AM
3519 Castro Valley

1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
Fax (925) 249-6563

**TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS**

SOMA ENVIRONMENTAL
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

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

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

Ben Harrington PLS

Land Surveying & Mapping

2278 Larkey Lane, Walnut Creek, Ca. 94596 Phone (925)935-7228 Fax (925)935-5118
Cel (925)788-7359 E-Mail (ben5132@pacbell.net)

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

Sept 04, 2009

Attn: Elena
Job # 2903

Ref: 3519 Castro Valley Blvd. Castro Valley Ca.

HORIZONTAL CONTROL, NAD 88:

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

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

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

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

EPOCH DATE 2007.00

OBSERVATION: EPOCH=180.

FIELD SURVEY: 9-04-09.

Ben Harrington
PLS 5132

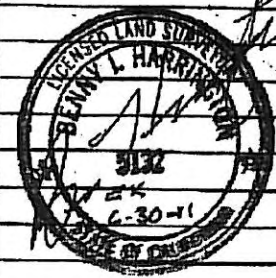


**NEW MONITORING WELL
3519 CASTRO VALLEY BLVD.
CASTRO VALLEY CA.**

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

**JOB # 2913
DATE: 09/04/09**

PT#	NORTH	EAST	ELEV	DESC.	LATITUDE N.DMS	LONGITUDE W.DMS	LAT.N. DEC. DEG.	LONG.W.DEC.DEG.
21	2079379.07	6106486.97	180.65	SET X IN CONC.	N37°41'42.25136"	W122°04'23.62071"	N37°.695069822"	W122°07'3227975"
2	2079361.30	6106501.97	180.79	ESE-2 2" PVC	N37°41'42.25902"	W122°04'28.81106"	N37°.695071950"	W122°.074669739"
1	2079361.15	6106465.13	180.24	ESE-1 2" PVC	N37°41'42.17112"	W122°04'24.07899"	N37°.695047533"	W122°.073355275"
22	2079365.14	6106472.19	180.31	SOMA-5 2" PVC	N37°41'42.11178"	W122°04'23.99204"	N37°.695031050"	W122°.073331122"
23	2079365.35	6106472.21	180.65	SPMA-5 PUNCH	N37°41'42.11384"	W122°04'23.99185"	N37°.695031622"	W122°.073331069"
24	2079364.24	6106472.19	180.66	SOMA-5 CONC.	N37°41'42.39919"	W122°04'23.99187"	N37°.695110886"	W122°.073331075"



P. 2
3259355118
Sep 28 2009 11:44AM Harrington Surveys Inc.

DATE: 08/30/2010

JOB# 10022

**TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS**

SOMA ENVIRONMENTAL ENGINEERING
3519 CASTRO VALLEY
CASTRO VALLEY, CA

WELL ID #	NORTHING (FT.) / LATITUDE (D.DEG.)	EASTING (FT.) / LONGITUDE (D.DEG.)	ELEVATION (FT.)	DESCRIPTION
ESE-1R	2079361.109	6106465.242	180.20	2" PVC NOTCH NORTH SIDE
	37.695019649N	122.073354886W	180.72	SET PUNCH NORTH SIDE RIM
			180.69	CONCRETE NORTH SIDE
ESE-2R	2079361.241	6106502.129	180.70	2" PVC NOTCH NORTH SIDE
	37.695021715N	122.073227422W	181.20	SET PUNCH NORTH SIDE RIM
			181.16	CONCRETE NORTH SIDE
ESE-5R	2079381.529	6106387.748	178.64	2" PVC NOTCH NORTH SIDE
	37.695072144N	122.073623872W	179.14	SET PUNCH NORTH SIDE RIM
			179.12	PAVEMENT NORTH SIDE
MW-6R	2079451.45	6106492.729	181.34	2" PVC NOTCH NORTH SIDE
	37.695268993N	122.073265147W	182.10	SET PUNCH NORTH SIDE RIM
			182.01	GROUND NORTH SIDE
SOMA-7	2079374.578	6106387.784	178.54	2" PVC NOTCH NORTH SIDE
	37.695053058N	122.073623344W	179.09	SET PUNCH NORTH SIDE RIM
			179.06	PAVEMENT NORTH SIDE
MW-7R	2079337.204	6106516.216	179.14	2" PVC NOTCH NORTH SIDE
	37.694956360N	122.073177344W	179.71	SET PUNCH NORTH SIDE RIM
			179.70	PAVEMENT NORTH SIDE
SOMA-8	2079453.231	6106488.22	181.57	2" PVC NOTCH NORTH SIDE
	37.695273676N	122.073280832W	182.03	SET PUNCH NORTH SIDE RIM
			181.92	GROUND NORTH SIDE

HORIZONTAL AND VERTICAL CONTROL

SURVEY BASED ON PREVIOUS SURVEY BY KIER & WRIGHT ENGINEERS SURVEYORS, INC. DATED: 6/21/2005

COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.

ELEVATIONS ARE NAVD 88 DATUM.

SOMA-1, NOTCH

NORTHING 2,079,370.39, EASTING 6,106,506.79

ELEVATION 180.95

SOMA-2, NOTCH

NORTHING 2,079,297.44, EASTING 6,106,567.02

ELEVATION 178.99



Eduardo A. Espinoza

Land Surveying and Mapping

1374 Garland Avenue, Clovis, CA 93612

Phone (559) 906-3554 Fax (559) 292-0560

email: edgis@aol.com

**TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS**

SOMA ENVIRONMENTAL ENGINEERING

3519 CASTRO VALLEY BOULEVARD

CASTRO VALLEY, CA

WELL ID #	NORTHING (FT.) / LATITUDE (D.DEG.)	EASTING (FT.) / LONGITUDE (D.DEG.)	ELEVATION (FT.)	DESCRIPTION
OB-1	2079384.618	6106391.986	178.698	2" PVC NOTCH NORTH SIDE
	37.695080822 N	122.073609406 W	179.254	PUNCH NORTH SIDE RIM
			179.247	PAVEMENT NORTH SIDE
OB-2	2079378.94	6106477.954	180.227	2" PVC NOTCH NORTH SIDE
	37.695069200 N	122.073311993 W	180.616	PUNCH NORTH SIDE RIM
			180.595	PAVEMENT NORTH SIDE

HORIZONTAL AND VERTICAL CONTROL
 SURVEY BASED ON PREVIOUS SURVEY BY EDGIS LAND SURVEYING DATED: 8/30/2010
 COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.
 ELEVATIONS ARE NAVD 88 DATUM.

SOMA-1, NOTCH
 NORTHING 2,079,370.39, EASTING 6,106,506.79, ELEVATION 180.95

SOMA-8, PUNCH
 NORTHING 2,079,453.45, EASTING 6,106,488.28, ELEVATION 181.65

EQUIPMENT USED: TRIMBLE S6, TOPCON GT-3S



ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-1R
 Casing Diameter: 2 inches
 Depth of Well: 24.53 feet
 Top of Casing Elevation: 180.20 feet
 Depth to Groundwater: 10.87 feet
 Groundwater Elevation: 169.33 feet
 Water Column Height: 13.66 feet
 Purged Volume: 6 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Montavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Gray
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: Petro Odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
14:33	Started purging well			
14:34	2	6.63	23.4 C	1080
14:35	4	6.63	22.0	1050
14:36	6	6.65	21.0	1010
14:41	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-2R
 Casing Diameter: 2 inches
 Depth of Well: 27.54 feet
 Top of Casing Elevation: 180.70 feet
 Depth to Groundwater: 11.17 feet
 Groundwater Elevation: 169.53 feet
 Water Column Height: 16.37 feet
 Purged Volume: 8 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Motavalli

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)
13:47	Started purging well			
13:48	2	6.84	22.7	830
13:49	4	6.80	21.5	830
13:50	6	6.81	20.6	820
13:51	8	6.80	20.1	840
13:56	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: ESE-5R
 Casing Diameter: 2 inches
 Depth of Well: 23.54 feet
 Top of Casing Elevation: 178.64 feet
 Depth to Groundwater: 8.85 feet
 Groundwater Elevation: 169.79 feet
 Water Column Height: 14.69 feet
 Purged Volume: 8 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 11th, 2012
 Sampler: Lizzie Hightower

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)
09:30	Started purging well			
09:31	2	7.25	19.6	900
09:32	4	7.11	20.0	860
09:33	6	7.08	19.9	880
09:34	8	7.06	19.8	890
09:39	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-6R
 Casing Diameter: 2 inches
 Depth of Well: 27.57 feet
 Top of Casing Elevation: 181.34 feet
 Depth to Groundwater: 10.30 feet
 Groundwater Elevation: 171.04 feet
 Water Column Height: 17.27 feet
 Purged Volume: 8 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parisa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Very Slightly Cloudy
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
13:04	Started purging well			
13:05	2	6.83	21.4	670
13:06	4	6.87	20.3	670
13:07	6	6.76	19.9	660
13:08	8	6.75	19.6	660
13:13	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-7R
 Casing Diameter: 2 inches
 Depth of Well: 29.59 feet
 Top of Casing Elevation: 179.14 feet
 Depth to Groundwater: 9.92 feet
 Groundwater Elevation: 169.22 feet
 Water Column Height: 19.67 feet
 Purged Volume: 8 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump
 Color: No Yes Describe: Cloudy / Brown
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:53	Started purging well			
11:54	2	6.78	20.7	720
11:55	4	6.76	19.7	710
11:56	6	6.74	19.5	710
11:57	8	6.72	19.2	730
12:02	sampled			



ENVIRONMENTAL ENGINEERING, INC

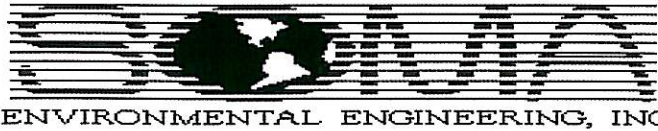
Well No.: SOMA-1
 Casing Diameter: 2 inches
 Depth of Well: 29.74 feet
 Top of Casing Elevation: 180.95 feet
 Depth to Groundwater: 11.25 feet
 Groundwater Elevation: 169.70 feet
 Water Column Height: 18.49 feet
 Purged Volume: 8 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parga Motavalli

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)
14:09	Started purging well			
14:10	2	6.71	26.0	810
14:11	4	6.70	25.4	790
14:12	6	6.68	22.0	820
14:13	8	6.68	21.4	820
14:18	Sampled			



Well No.: SOMA-4
 Casing Diameter: 2 inches
 Depth of Well: 22.65 feet
 Top of Casing Elevation: 176.94 feet
 Depth to Groundwater: 9.71 feet
 Groundwater Elevation: 167.23 feet
 Water Column Height: 12.94 feet
 Purged Volume: 6 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

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

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
10:42	started purging well			
10:43	2	6.61	22.9	610
10:44	4	6.63	22.6	570
10:45	6	6.63	22.0	560
10:50	sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-2
 Casing Diameter: 2 inches
 Depth of Well: 14.70 feet
 Top of Casing Elevation: 178.99 feet
 Depth to Groundwater: 10.45 feet
 Groundwater Elevation: 168.54 feet
 Water Column Height: 4.25 feet
 Purged Volume: 2 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy/Brown
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:33	started purging well			
11:36	1	7.10	21.6	600
11:38	1.5	7.01	20.8	570
11:40	2	7.03	20.5	570
11:45	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-3
 Casing Diameter: 2 inches
 Depth of Well: 14.70 feet
 Top of Casing Elevation: 176.81 feet
 Depth to Groundwater: 9.99 feet
 Groundwater Elevation: 166.82 feet
 Water Column Height: 4.71 feet
 Purged Volume: 2.25 gallons

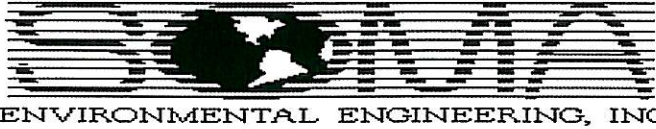
Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy / Brown
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
11:18	Started purging well			
11:20	1	6.71	22.9	930
11:22	1.75	6.69	22.1	880
11:23	2.25	6.68	21.8	890
11:28	Sampled			



Well No.: SOMA-5
 Casing Diameter: 2 inches
 Depth of Well: 14.87 feet
 Top of Casing Elevation: 180.31 feet
 Depth to Groundwater: 10.16 feet
 Groundwater Elevation: 170.15 feet
 Water Column Height: 4.71 feet
 Purged Volume: 2.25 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parsa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy / Brown
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: Very Slight Petro

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
14:55	Started purging well			
14:58	1	6.79	23.0	1340
14:59	1.75	6.77	21.7	1340
15:00	2.25	6.76	21.6	1370
15:05	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-7
 Casing Diameter: 2 inches
 Depth of Well: 14.89 feet
 Top of Casing Elevation: 178.54 feet
 Depth to Groundwater: 8.66 feet
 Groundwater Elevation: 169.88 feet
 Water Column Height: 6.23 feet
 Purged Volume: 3 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 11, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy/Gray
 Sheen: No Yes Describe: Rainbow Sheen
 Odor: No Yes Describe: Petro Odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
09:50	Started purging well			
09:52	1	6.91	20.7	1070
09:56	2	6.91	20.0	1000
10:00	3	6.93	19.9	980
10:05	Sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: SOMA-8
 Casing Diameter: 2 inches
 Depth of Well: 14.89 feet
 Top of Casing Elevation: 181.57 feet
 Depth to Groundwater: 10.31 feet
 Groundwater Elevation: 171.26 feet
 Water Column Height: 4.58 feet
 Purged Volume: 2.25 gallons

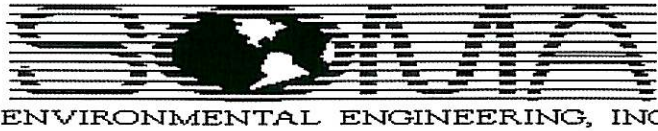
Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 10, 2012
 Sampler: Lizzie Hightower
Parisa Motavalli

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy/Brown
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
13:27	Started purging well			
13:29	1	6.87	20.4	900
13:30	1.75	6.88	19.5	880
13:31	2.25	6.85	19.1	890
13:36	Sampled			



Well No.: 0B-1
 Casing Diameter: 2 inches
 Depth of Well: 15.59 feet
 Top of Casing Elevation: 178.70 feet
 Depth to Groundwater: 7.96 feet
 Groundwater Elevation: 170.74 feet
 Water Column Height: 7.63 feet
 Purged Volume: 3.5 gallons

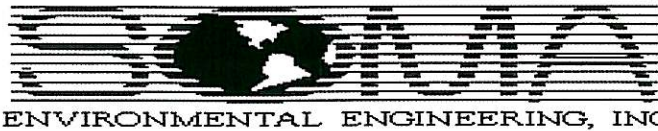
Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 11, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy/Brown
 Sheen: No Yes Describe: _____
 Odor: No Yes Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
09:04	Started purging well			
09:08	1	6.90	19.8	1080
09:11	2	6.81	20.0	1090
09:14	3	6.78	20.0	1060
09:16	3.5	6.79	20.2	1050
09:21	Sampled			



Well No.: OB-2
 Casing Diameter: 2 inches
 Depth of Well: 16.49 feet
 Top of Casing Elevation: 180.23 feet
 Depth to Groundwater: 10.34 feet
 Groundwater Elevation: 169.89 feet
 Water Column Height: 6.15 feet
 Purged Volume: 3 gallons

Project No.: 2761
 Address: 3519 Castro Valley Blvd
 Castro Valley, CA
 Date: July 11, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

Color: No Yes Describe: Cloudy
 Sheen: No Yes Describe: Rainbow Sheen
 Odor: No Yes Describe: Petro odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
08:32	Started purging well			
08:34	1	6.41	20.6	960
08:37	2	6.51	20.0	990
08:40	3	6.53	19.6	980
08:45	Sampled			



EPA On-line Tools for Site Assessment Calculation

Hydraulic Gradient – Magnitude and Direction

Gradient Calculation from fitting a plane to as many as thirty points

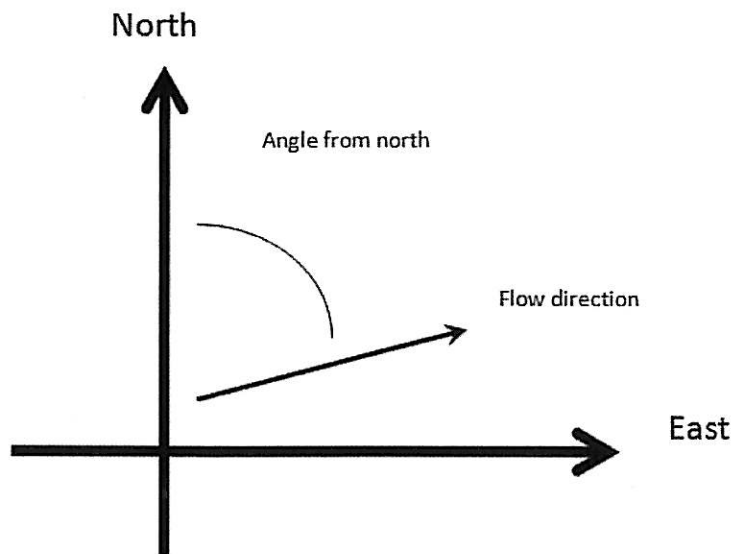
$$\begin{aligned}
 a x_1 + b y_1 + c &= h_1 \\
 a x_2 + b y_2 + c &= h_2 \\
 a x_3 + b y_3 + c &= h_3 \\
 &\dots \\
 a x_{30} + b y_{30} + c &= h_{30}
 \end{aligned}$$

where (x_i, y_i) are the coordinates of the well and h_i is the head

$i = 1, 2, 3, \dots, 30$

The coefficients a, b, and c are calculated by a least-squares fitting of the the data to a plane

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arclangent of a/b or b/a depending on the quadrant



Inputs

[Example Data Set 1](#) [Example Data Set 2](#) [Calculate](#) [Clear](#)

[Save Data](#) [Recall Data](#) [Go Back](#)

Site Name

Date [Current Date](#)

Calculation basis

Coordinates

I.D. x-coordinate y-coordinate head

I.D.	x-coordinate	y-coordinate	head
1) SOMA-2	337.5997649	211.223775	168.54
2) SOMA-3	339.7877931	53.66065088	166.82
3) SOMA-5	245.7025814	289.2758782	170.15
4) SOMA-7	160.3694824	298.0293851	169.88
5) SOMA-8	256.6427223	378.9993239	171.26
6) OB-1	165.0323759	308.9034515	170.74
7) OB-2	248.9533418	301.9534748	169.89
8)			
9)			
10)			
11)			
12)			
13)			

14)

15)	<input type="text"/>	<input type="text"/>	<input type="text"/>
16)	<input type="text"/>	<input type="text"/>	<input type="text"/>
17)	<input type="text"/>	<input type="text"/>	<input type="text"/>
18)	<input type="text"/>	<input type="text"/>	<input type="text"/>
19)	<input type="text"/>	<input type="text"/>	<input type="text"/>
20)	<input type="text"/>	<input type="text"/>	<input type="text"/>
21)	<input type="text"/>	<input type="text"/>	<input type="text"/>
22)	<input type="text"/>	<input type="text"/>	<input type="text"/>
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25)	<input type="text"/>	<input type="text"/>	<input type="text"/>
26)	<input type="text"/>	<input type="text"/>	<input type="text"/>
27)	<input type="text"/>	<input type="text"/>	<input type="text"/>
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29)	<input type="text"/>	<input type="text"/>	<input type="text"/>
30)	<input type="text"/>	<input type="text"/>	<input type="text"/>

Results

Number of Points Used in Calculation	7
Max. Difference Between Head Values	1.353
Gradient Magnitude (i)	0.01318
Flow direction as degrees from North (positive y axis)	170.2
Coefficient of Determination (R^2)	0.967

WCMS

Last updated on Thursday, January 05, 2012



EPA On-line Tools for Site Assessment Calculation

Hydraulic Gradient – Magnitude and Direction

Gradient Calculation from fitting a plane to as many as thirty points

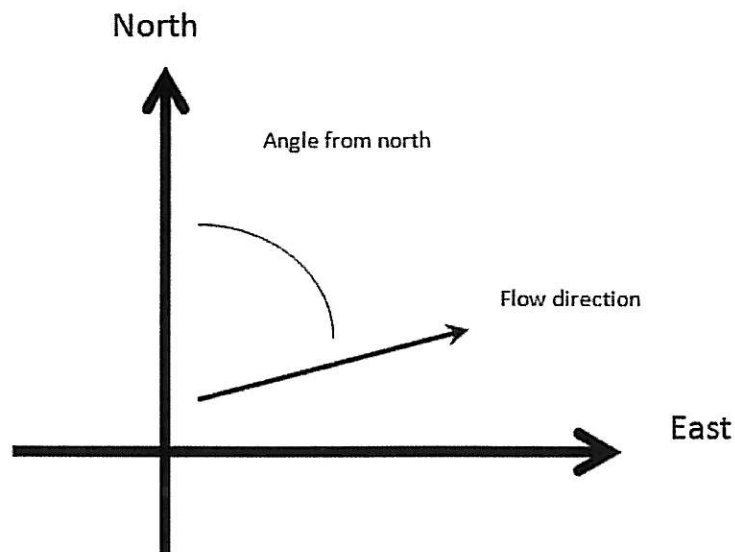
$$\begin{aligned}
 a x_1 + b y_1 + c &= h_1 \\
 a x_2 + b y_2 + c &= h_2 \\
 a x_3 + b y_3 + c &= h_3 \\
 &\dots \\
 a x_{30} + b y_{30} + c &= h_{30}
 \end{aligned}$$

where (x_i, y_i) are the coordinates of the well and h_i is the head

$i = 1, 2, 3, \dots, 30$

The coefficients a, b, and c are calculated by a least-squares fitting of the the data to a plane

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arctangent of a/b or b/a depending on the quadrant



Inputs

Site Name

Date

Calculation basis

Coordinates

I.D.	x-coordinate	y-coordinate	head	ft
1) ESE-1R	238.4091541	283.4402069	169.33	
2) ESE-2R	273.417605	284.8991247	169.53	
3) ESE-5R	160.3694824	304.5945152	169.79	
4) MW-6R	261.7481214	378.269865	171.04	
5) MW-7R	288.0044595	261.5564397	169.22	
6) SOMA-1	280.7110322	294.3820905	169.7	
7) SOMA-4	239.1384968	64.6025345	167.23	
8)				
9)				
10)				
11)				
12)				
13)				

14)

15)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
16)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
17)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
21)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
22)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
23)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
24)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
25)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
26)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
27)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
28)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
29)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
30)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Results

Number of Points Used in Calculation	7
Max. Difference Between Head Values	1.161
Gradient Magnitude (i)	0.01152
Flow direction as degrees from North (positive y axis)	181.1
Coefficient of Determination (R ²)	0.968

WCMS

Last updated on Thursday, January 05, 2012

Appendix C

Chain of Custody Form and Laboratory Report
for the
Second Semi-Annual 2012 Monitoring Event



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

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

Laboratory Job Number 237860
ANALYTICAL REPORT

SOMA Environmental Engineering Inc. Project : 2761
6620 Owens Dr. Location : 3519 Castro Valley Blvd., Castro Vall
Pleasanton, CA 94588 Level : II

Table with 2 columns: Sample ID and Lab ID. Rows include ESE-1R through ESE-7R, MW-6R through MW-7R, SOMA-1 through SOMA-8, and OB-1 through OB-2.

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

Signature: [Handwritten Signature]
Project Manager

Date: 07/23/2012

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 237860
Client: SOMA Environmental Engineering Inc.
Project: 2761
Location: 3519 Castro Valley Blvd., Castro Vall
Request Date: 07/12/12
Samples Received: 07/12/12

This data package contains sample and QC results for fourteen water samples, requested for the above referenced project on 07/12/12. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

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

High surrogate recoveries were observed for dibromofluoromethane in SOMA-2 (lab # 237860-007), SOMA-4 (lab # 237860-009), and SOMA-8 (lab # 237860-012); no target analytes were detected in these samples. High surrogate recovery was observed for bromofluorobenzene in OB-2 (lab # 237860-014). No other analytical problems were encountered.

CHAIN OF CUSTODY

Analyses

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

C&T LOGIN # 237860

Sampler: Lizzie Hightower / Parag Motavalli

Project No: 2761

Report To: Joyce Bobek

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

Turnaround Time: Standard Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date	Time	Matrix			# of Containers	Preservative				TPHg, BTEX, MIBE 8260B	Gasoline Oxygenates & Lead Scavengers	Ethanol												
				Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE															
1	ESE-1R	7/10/12	14:41	*			4-VOAs	*			*															
2	ESE-2R	7/10/12	13:56	*			4-VOAs	*			*															
3	ESE-5R	7/11/12	09:39	*			4-VOAs	*			*															
4	MW-6R	7/10/12	13:13	*			4-VOAs	*			*															
5	MW-7R	7/10/12	12:02	*			4-VOAs	*			*															
6	SOMA-1	7/10/12	14:18	*			4-VOAs	*			*															
7	SOMA-2	7/10/12	11:45	*			4-VOAs	*			*															
8	SOMA-3	7/10/12	11:28	*			4-VOAs	*			*															
9	SOMA-4	7/10/12	10:50	*			4-VOAs	*			*															
10	SOMA-5	7/10/12	15:05	*			4-VOAs	*			*															
11	SOMA-7	7/11/12	10:05	*			4-VOAs	*			*															
12	SOMA-8	7/10/12	13:36	*			4-VOAs	*			*															
13	OB-1	7/11/12	09:21	*			4-VOAs	*			*															
14	OB-2	7/11/12	08:45	*			4-VOAs	*			*															

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:
E. Hightower 7/12/12 09:30 DATE/TIME
[Signature] 7/12/12 1130 DATE/TIME
 DATE/TIME

RECEIVED BY:
[Signature] 7/12/12 0930 DATE/TIME
[Signature] 7/12/12 1130 DATE/TIME
 DATE/TIME

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 237860 Date Received 7/12/12 Number of coolers 1
Client SOMA Project 2761

Date Opened 7/12/12 By (print) Eileen Leung (sign) Eileen Leung
Date Logged in [down arrow] By (print) [down arrow] (sign) [down arrow]

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

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

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

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

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

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

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

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

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 55

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

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

10. Are there any missing / extra samples? YES NO

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

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

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

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

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

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

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

21. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.

Total Volatile Hydrocarbons

Lab #: 237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2761	Analysis: EPA 8015B
Matrix: Water	Received: 07/12/12
Units: ug/L	

Field ID: ESE-1R	Batch#: 188535
Type: SAMPLE	Sampled: 07/10/12
Lab ID: 237860-001	Analyzed: 07/16/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	1,100 Y	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	75-124

Field ID: ESE-2R	Batch#: 188535
Type: SAMPLE	Sampled: 07/10/12
Lab ID: 237860-002	Analyzed: 07/16/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	75-124

Field ID: ESE-5R	Batch#: 188535
Type: SAMPLE	Sampled: 07/11/12
Lab ID: 237860-003	Analyzed: 07/16/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	75-124

Field ID: MW-6R	Batch#: 188535
Type: SAMPLE	Sampled: 07/10/12
Lab ID: 237860-004	Analyzed: 07/16/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	75-124

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Volatile Hydrocarbons		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8015B
Matrix:	Water	Received: 07/12/12
Units:	ug/L	

Field ID:	MW-7R	Batch#:	188535
Type:	SAMPLE	Sampled:	07/10/12
Lab ID:	237860-005	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	75-124

Field ID:	SOMA-1	Batch#:	188535
Type:	SAMPLE	Sampled:	07/10/12
Lab ID:	237860-006	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	75-124

Field ID:	SOMA-2	Batch#:	188535
Type:	SAMPLE	Sampled:	07/10/12
Lab ID:	237860-007	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	75-124

Field ID:	SOMA-3	Batch#:	188535
Type:	SAMPLE	Sampled:	07/10/12
Lab ID:	237860-008	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	75-124

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Volatile Hydrocarbons		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8015B
Matrix:	Water	Received: 07/12/12
Units:	ug/L	

Field ID: SOMA-4 Batch#: 188535
 Type: SAMPLE Sampled: 07/10/12
 Lab ID: 237860-009 Analyzed: 07/17/12
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	75-124

Field ID: SOMA-5 Batch#: 188535
 Type: SAMPLE Sampled: 07/10/12
 Lab ID: 237860-010 Analyzed: 07/17/12
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	75-124

Field ID: SOMA-7 Batch#: 188535
 Type: SAMPLE Sampled: 07/11/12
 Lab ID: 237860-011 Analyzed: 07/17/12
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	5,600	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	124	75-124

Field ID: SOMA-8 Batch#: 188535
 Type: SAMPLE Sampled: 07/10/12
 Lab ID: 237860-012 Analyzed: 07/17/12
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	75-124

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Volatile Hydrocarbons		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8015B
Matrix:	Water	Received: 07/12/12
Units:	ug/L	

Field ID:	OB-1	Batch#:	188535
Type:	SAMPLE	Sampled:	07/11/12
Lab ID:	237860-013	Analyzed:	07/17/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	2,100 Y	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	75-124

Field ID:	OB-2	Batch#:	188536
Type:	SAMPLE	Sampled:	07/11/12
Lab ID:	237860-014	Analyzed:	07/16/12
Diln Fac:	16.67		

Analyte	Result	RL
Gasoline C7-C12	46,000	830

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	75-124

Type:	BLANK	Batch#:	188535
Lab ID:	QC648001	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	75-124

Type:	BLANK	Batch#:	188536
Lab ID:	QC648007	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	75-124

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Volatile Hydrocarbons				
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	2761	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC648000	Batch#:	188535	
Matrix:	Water	Analyzed:	07/16/12	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,033	103	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	75-124

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8015B
Field ID:	ESE-1R	Batch#:	188535
MSS Lab ID:	237860-001	Sampled:	07/10/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/16/12
Diln Fac:	1.000		

Type: MS Lab ID: QC648002

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,089	2,000	3,070	99	71-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	75-124

Type: MSD Lab ID: QC648003

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	3,089	100	71-120	1	22

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	75-124

RPD= Relative Percent Difference

Batch QC Report

Total Volatile Hydrocarbons				
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	2761	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC648006	Batch#:	188536	
Matrix:	Water	Analyzed:	07/16/12	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,097	110	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	75-124

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	188536
MSS Lab ID:	237915-001	Sampled:	07/13/12
Matrix:	Water	Received:	07/13/12
Units:	ug/L	Analyzed:	07/16/12
Diln Fac:	1.000		

Type: MS Lab ID: QC648008

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	20.26	2,000	2,078	103	71-120

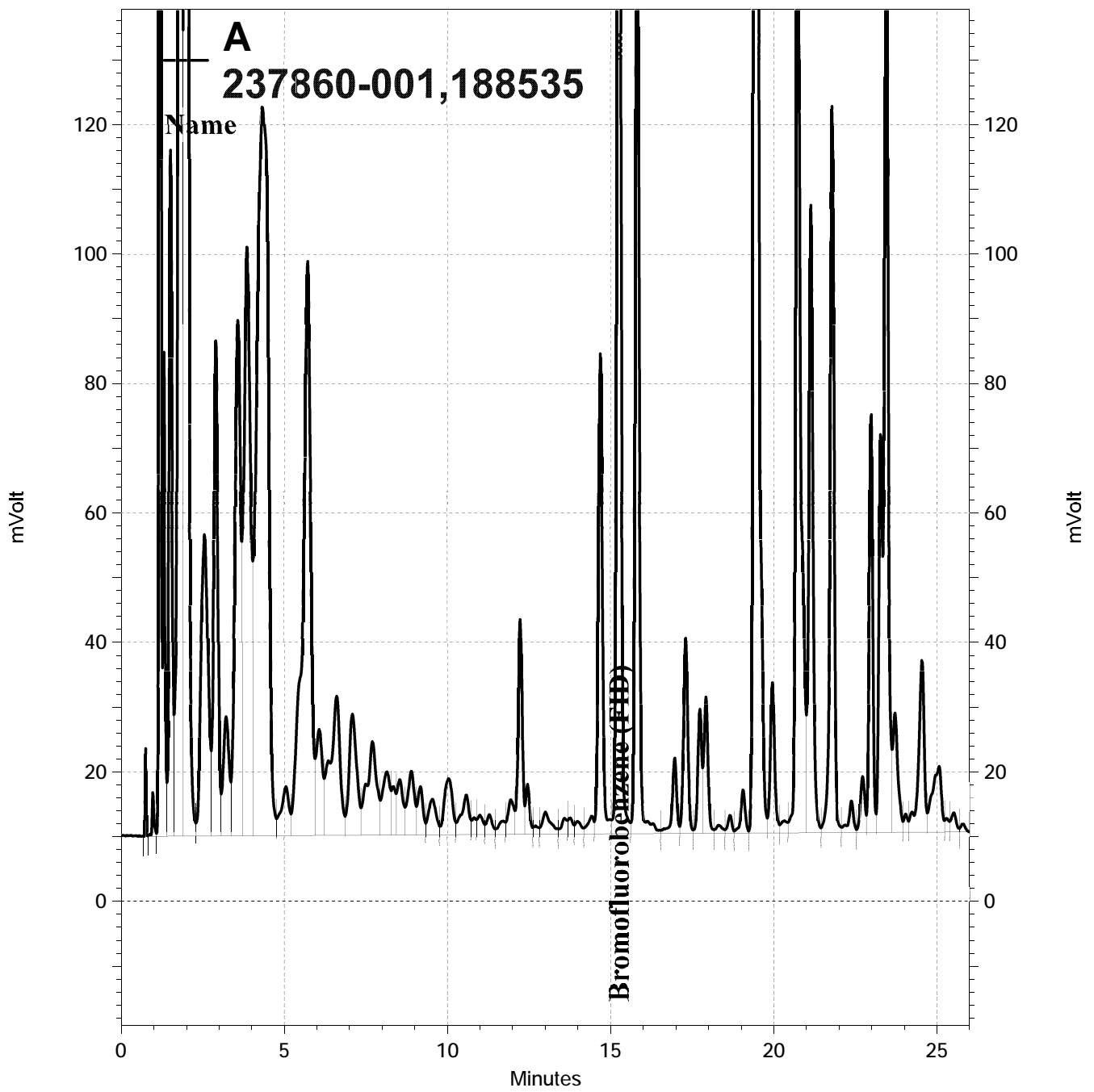
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	75-124

Type: MSD Lab ID: QC648009

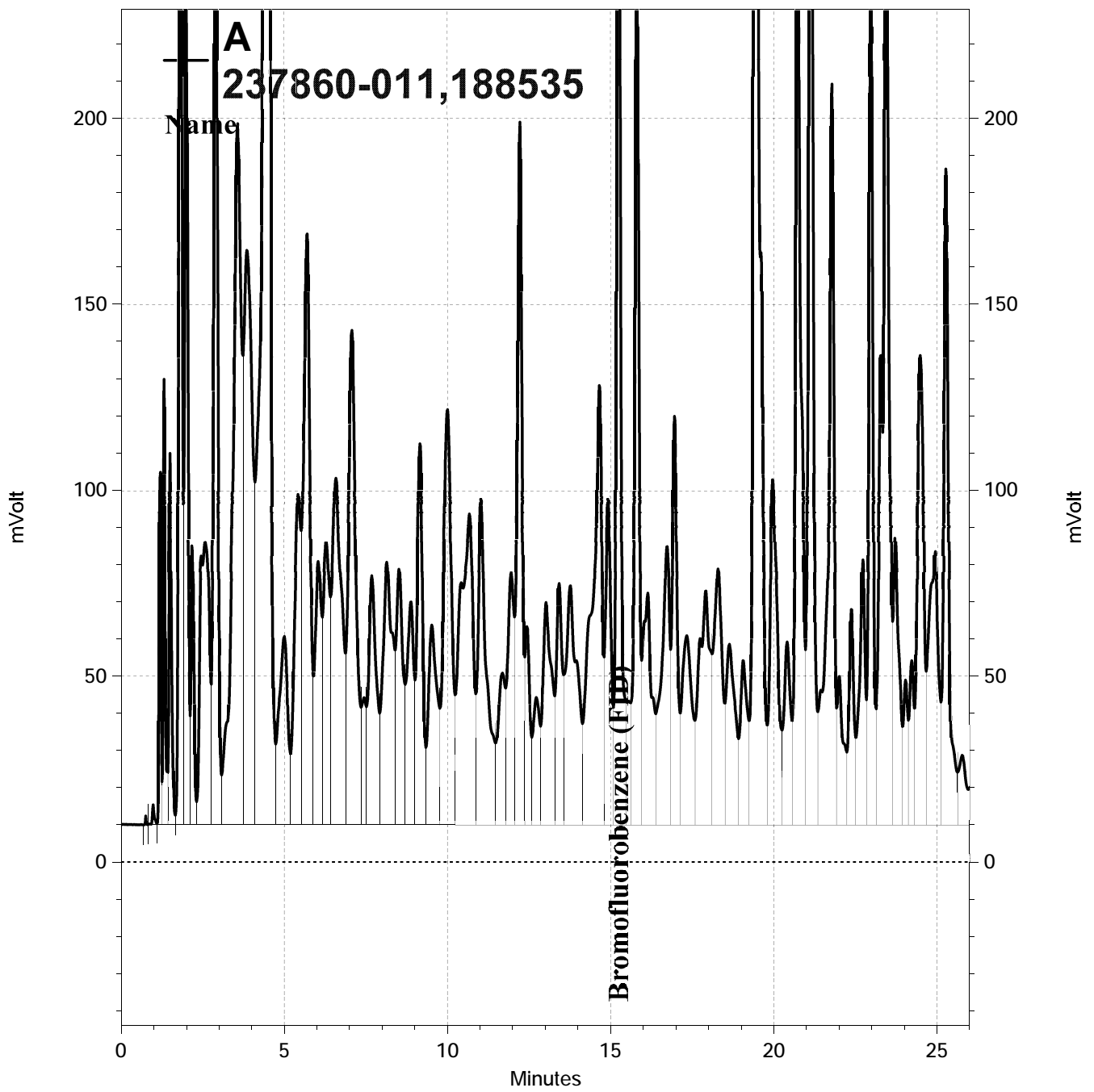
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,669	82	71-120	22	22

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	75-124

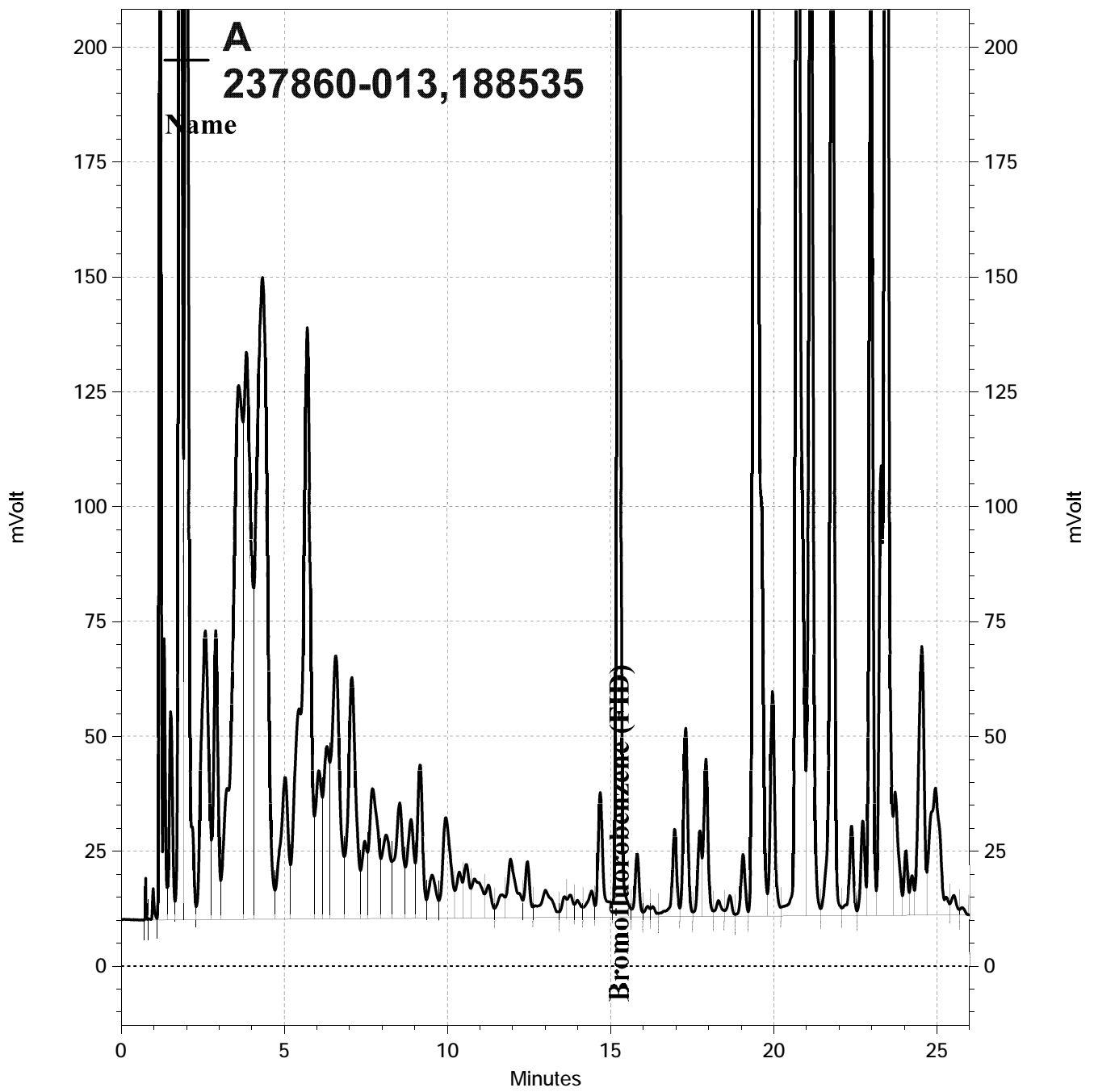
RPD= Relative Percent Difference



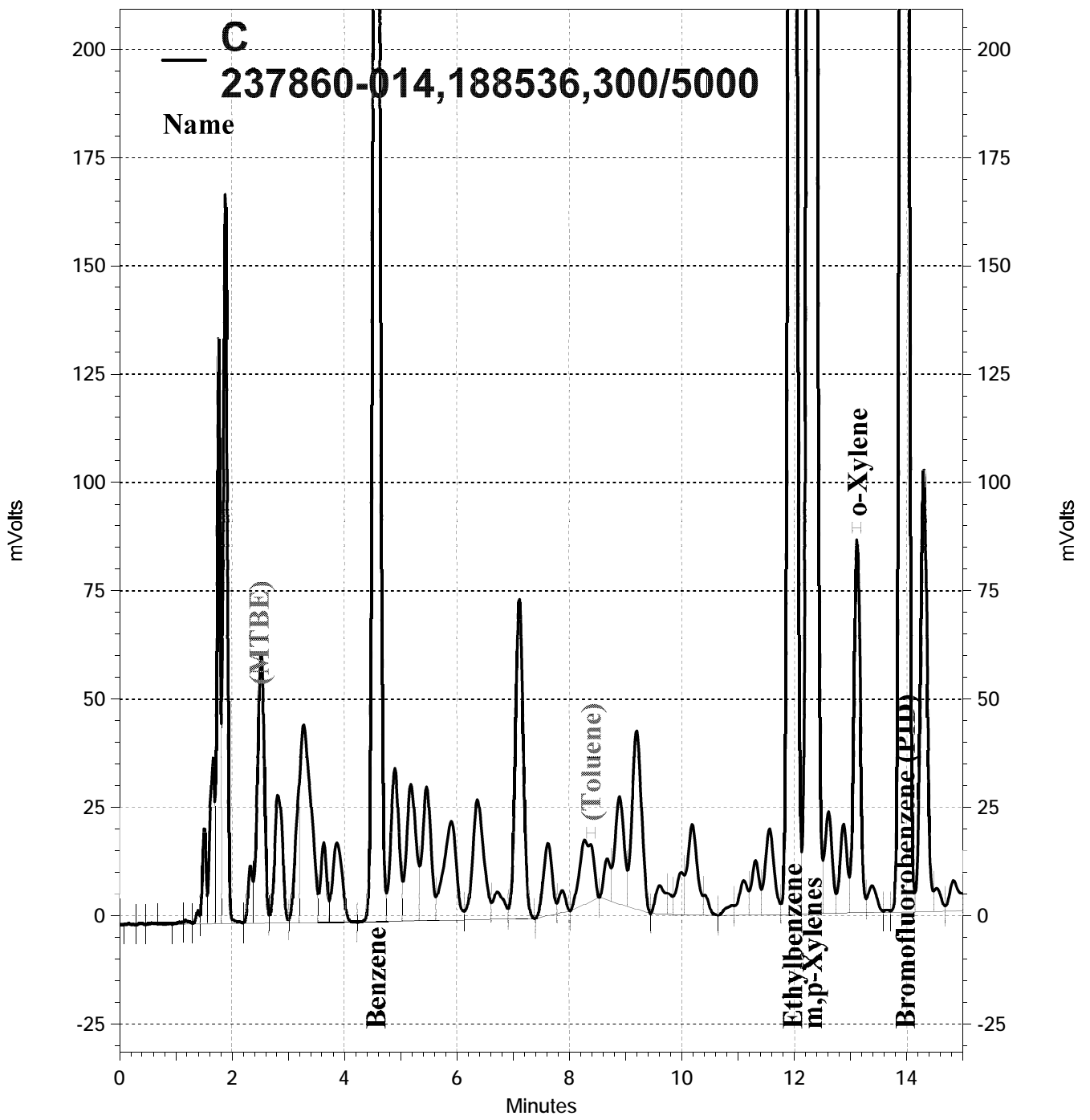
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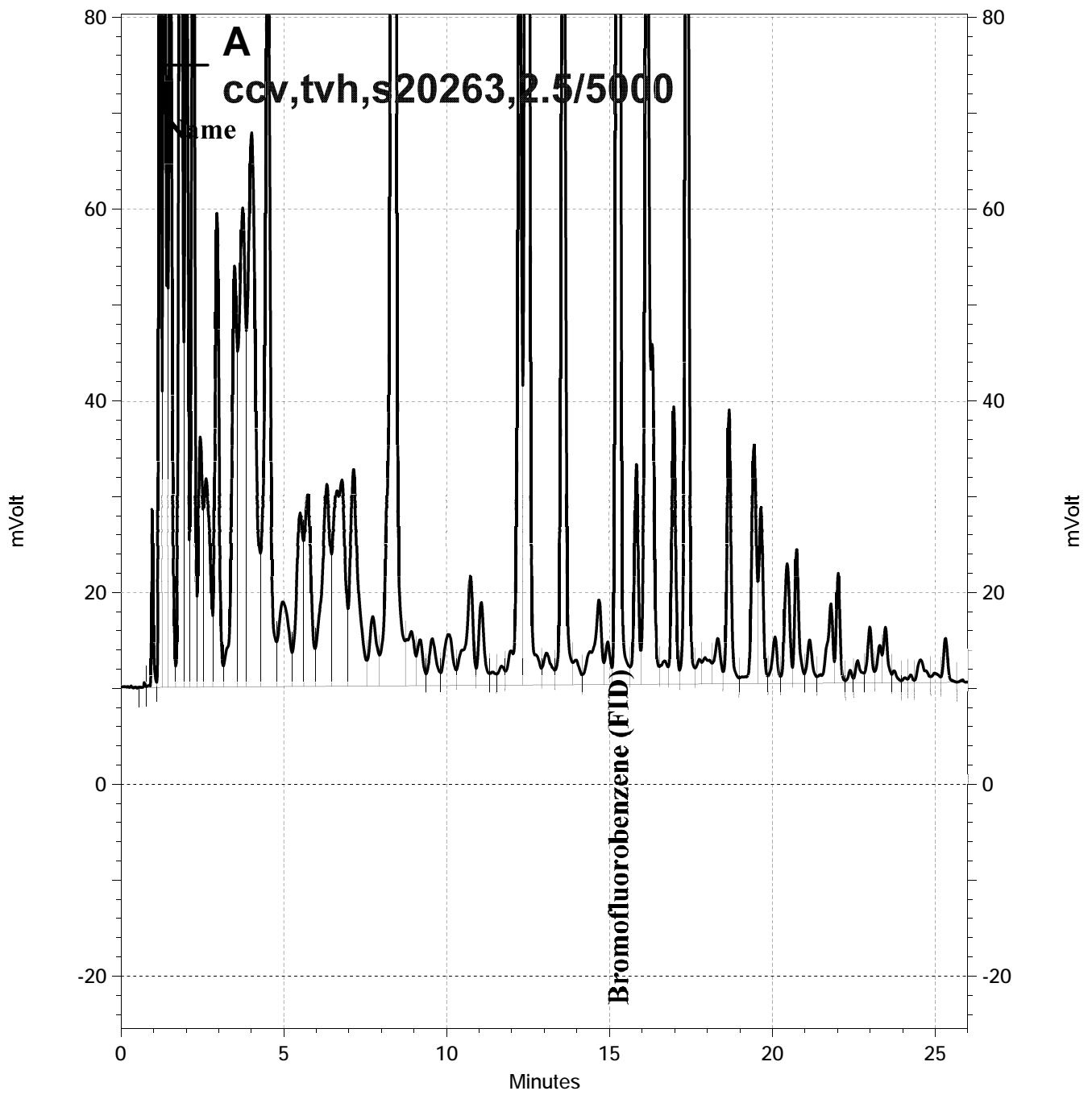
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— \\Lims\gdrive\ezchrom\Projects\GC19\Data\198-015, C



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BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	ESE-1R	Batch#: 188506
Lab ID:	237860-001	Sampled: 07/10/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/15/12
Diln Fac:	1.000	

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	110	10
MTBE	23	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	16	0.5
Methyl tert-Amyl Ether (TAME)	1.6	0.5
Ethanol	ND	1,000
Toluene	1.1	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	9.8	0.5
m,p-Xylenes	1.7	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	112	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ESE-2R	Batch#:	188474
Lab ID:	237860-002	Sampled:	07/10/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/13/12
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	5.1	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	112	69-145
Toluene-d8	94	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ESE-5R	Batch#:	188474
Lab ID:	237860-003	Sampled:	07/11/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/13/12
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	6.1	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	114	69-145
Toluene-d8	94	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	MW-6R	Batch#: 188474
Lab ID:	237860-004	Sampled: 07/10/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/13/12
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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	115	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	MW-7R	Batch#:	188524
Lab ID:	237860-005	Sampled:	07/10/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/16/12
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	3.4	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	114	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	SOMA-1	Batch#: 188524
Lab ID:	237860-006	Sampled: 07/10/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/16/12
Diln Fac:	1.000	

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	79	10
MTBE	3.7	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	111	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	SOMA-2	Batch#: 188475
Lab ID:	237860-007	Sampled: 07/10/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/13/12
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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	136 *	80-125
1,2-Dichloroethane-d4	122	69-145
Toluene-d8	106	80-120
Bromofluorobenzene	106	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-3	Batch#:	188506
Lab ID:	237860-008	Sampled:	07/10/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/15/12
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	1.6	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	123	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	SOMA-4	Batch#: 188475
Lab ID:	237860-009	Sampled: 07/10/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/13/12
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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	132 *	80-125
1,2-Dichloroethane-d4	124	69-145
Toluene-d8	105	80-120
Bromofluorobenzene	104	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-5	Batch#:	188506
Lab ID:	237860-010	Sampled:	07/10/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/15/12
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	4.6	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	3.6	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	122	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	SOMA-7	Units:	ug/L
Lab ID:	237860-011	Sampled:	07/11/12
Matrix:	Water	Received:	07/12/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
tert-Butyl Alcohol (TBA)	ND	10	1.000	188506	07/15/12
MTBE	5.2	0.5	1.000	188506	07/15/12
Isopropyl Ether (DIPE)	ND	0.5	1.000	188506	07/15/12
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	188506	07/15/12
1,2-Dichloroethane	ND	0.5	1.000	188506	07/15/12
Benzene	390	7.1	14.29	188475	07/13/12
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000	188506	07/15/12
Ethanol	ND	1,000	1.000	188506	07/15/12
Toluene	5.5	0.5	1.000	188506	07/15/12
1,2-Dibromoethane	ND	0.5	1.000	188506	07/15/12
Ethylbenzene	45	0.5	1.000	188506	07/15/12
m,p-Xylenes	8.0	0.5	1.000	188506	07/15/12
o-Xylene	1.1	0.5	1.000	188506	07/15/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	100	80-125	1.000	188506	07/15/12
1,2-Dichloroethane-d4	113	69-145	1.000	188506	07/15/12
Toluene-d8	96	80-120	1.000	188506	07/15/12
Bromofluorobenzene	102	80-120	1.000	188506	07/15/12

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	SOMA-8	Batch#: 188475
Lab ID:	237860-012	Sampled: 07/10/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/13/12
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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	135 *	80-125
1,2-Dichloroethane-d4	122	69-145
Toluene-d8	105	80-120
Bromofluorobenzene	106	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Field ID:	OB-1	Batch#: 188475
Lab ID:	237860-013	Sampled: 07/11/12
Matrix:	Water	Received: 07/12/12
Units:	ug/L	Analyzed: 07/13/12
Diln Fac:	1.000	

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	18	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	12	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	0.5	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	0.7	0.5
m,p-Xylenes	1.9	0.5
o-Xylene	0.6	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	118	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	OB-2	Units:	ug/L
Lab ID:	237860-014	Sampled:	07/11/12
Matrix:	Water	Received:	07/12/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
tert-Butyl Alcohol (TBA)	44	10	1.000	188506	07/15/12
MTBE	94	13	25.00	188475	07/13/12
Isopropyl Ether (DIPE)	ND	0.5	1.000	188506	07/15/12
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	188506	07/15/12
1,2-Dichloroethane	0.6	0.5	1.000	188506	07/15/12
Benzene	580	13	25.00	188475	07/13/12
Methyl tert-Amyl Ether (TAME)	20	0.5	1.000	188506	07/15/12
Ethanol	ND	1,000	1.000	188506	07/15/12
Toluene	11	0.5	1.000	188506	07/15/12
1,2-Dibromoethane	ND	0.5	1.000	188506	07/15/12
Ethylbenzene	1,300	13	25.00	188475	07/13/12
m,p-Xylenes	2,000	13	25.00	188475	07/13/12
o-Xylene	130	13	25.00	188475	07/13/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	96	80-125	1.000	188506	07/15/12
1,2-Dichloroethane-d4	94	69-145	1.000	188506	07/15/12
Toluene-d8	99	80-120	1.000	188506	07/15/12
Bromofluorobenzene	132 *	80-120	1.000	188506	07/15/12

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	188474
Units:	ug/L	Analyzed:	07/13/12
Diln Fac:	1.000		

Type: BS Lab ID: QC647744

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	101.6	81	47-136
MTBE	25.00	22.94	92	61-121
Isopropyl Ether (DIPE)	25.00	18.57	74	54-136
Ethyl tert-Butyl Ether (ETBE)	25.00	21.35	85	57-133
1,2-Dichloroethane	25.00	29.73	119	70-136
Benzene	25.00	25.90	104	80-121
Methyl tert-Amyl Ether (TAME)	25.00	22.19	89	65-120
Toluene	25.00	25.82	103	80-120
1,2-Dibromoethane	25.00	24.68	99	80-120
Ethylbenzene	25.00	26.60	106	80-120
m,p-Xylenes	50.00	52.69	105	80-121
o-Xylene	25.00	25.81	103	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	113	69-145
Toluene-d8	94	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC647745

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	102.4	82	47-136	1	28
MTBE	25.00	22.48	90	61-121	2	20
Isopropyl Ether (DIPE)	25.00	17.88	72	54-136	4	20
Ethyl tert-Butyl Ether (ETBE)	25.00	20.58	82	57-133	4	20
1,2-Dichloroethane	25.00	29.55	118	70-136	1	20
Benzene	25.00	24.91	100	80-121	4	20
Methyl tert-Amyl Ether (TAME)	25.00	22.30	89	65-120	1	20
Toluene	25.00	25.19	101	80-120	2	20
1,2-Dibromoethane	25.00	23.99	96	80-120	3	20
Ethylbenzene	25.00	25.52	102	80-120	4	20
m,p-Xylenes	50.00	49.80	100	80-121	6	20
o-Xylene	25.00	24.95	100	80-121	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	115	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC647748	Batch#: 188474
Matrix:	Water	Analyzed: 07/13/12
Units:	ug/L	

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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	110	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	188475
Units:	ug/L	Analyzed:	07/13/12
Diln Fac:	1.000		

Type: BS Lab ID: QC647751

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	45.38	73	47-136
MTBE	12.50	11.26	90	61-121
Isopropyl Ether (DIPE)	12.50	12.64	101	54-136
Ethyl tert-Butyl Ether (ETBE)	12.50	12.30	98	57-133
1,2-Dichloroethane	12.50	14.69	117	70-136
Benzene	12.50	14.41	115	80-121
Methyl tert-Amyl Ether (TAME)	12.50	11.14	89	65-120
Toluene	12.50	13.44	108	80-120
1,2-Dibromoethane	12.50	11.72	94	80-120
Ethylbenzene	12.50	14.02	112	80-120
m,p-Xylenes	25.00	25.97	104	80-121
o-Xylene	12.50	11.64	93	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-125
1,2-Dichloroethane-d4	117	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

Type: BSD Lab ID: QC647752

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	49.27	79	47-136	8	28
MTBE	12.50	11.46	92	61-121	2	20
Isopropyl Ether (DIPE)	12.50	12.48	100	54-136	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.17	97	57-133	1	20
1,2-Dichloroethane	12.50	14.85	119	70-136	1	20
Benzene	12.50	14.40	115	80-121	0	20
Methyl tert-Amyl Ether (TAME)	12.50	11.29	90	65-120	1	20
Toluene	12.50	13.48	108	80-120	0	20
1,2-Dibromoethane	12.50	12.10	97	80-120	3	20
Ethylbenzene	12.50	13.90	111	80-120	1	20
m,p-Xylenes	25.00	25.51	102	80-121	2	20
o-Xylene	12.50	11.47	92	80-121	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-125
1,2-Dichloroethane-d4	118	69-145
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC647753	Batch#: 188475
Matrix:	Water	Analyzed: 07/13/12
Units:	ug/L	

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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	124	80-125
1,2-Dichloroethane-d4	119	69-145
Toluene-d8	104	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC647890	Batch#: 188506
Matrix:	Water	Analyzed: 07/15/12
Units:	ug/L	

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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	117	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	188506
Units:	ug/L	Analyzed:	07/15/12
Diln Fac:	1.000		

Type: BS Lab ID: QC647891

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	86.85	87	47-136
MTBE	20.00	18.52	93	61-121
Isopropyl Ether (DIPE)	20.00	14.42	72	54-136
Ethyl tert-Butyl Ether (ETBE)	20.00	17.25	86	57-133
1,2-Dichloroethane	20.00	23.26	116	70-136
Benzene	20.00	18.87	94	80-121
Methyl tert-Amyl Ether (TAME)	20.00	17.32	87	65-120
Toluene	20.00	20.45	102	80-120
1,2-Dibromoethane	20.00	19.24	96	80-120
Ethylbenzene	20.00	21.08	105	80-120
m,p-Xylenes	40.00	41.89	105	80-121
o-Xylene	20.00	19.95	100	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	111	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC647892

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	86.37	86	47-136	1	28
MTBE	20.00	18.28	91	61-121	1	20
Isopropyl Ether (DIPE)	20.00	14.22	71	54-136	1	20
Ethyl tert-Butyl Ether (ETBE)	20.00	16.77	84	57-133	3	20
1,2-Dichloroethane	20.00	24.23	121	70-136	4	20
Benzene	20.00	20.07	100	80-121	6	20
Methyl tert-Amyl Ether (TAME)	20.00	18.40	92	65-120	6	20
Toluene	20.00	19.57	98	80-120	4	20
1,2-Dibromoethane	20.00	19.81	99	80-120	3	20
Ethylbenzene	20.00	20.32	102	80-120	4	20
m,p-Xylenes	40.00	40.26	101	80-121	4	20
o-Xylene	20.00	19.74	99	80-121	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	117	69-145
Toluene-d8	94	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	188506
MSS Lab ID:	237855-003	Sampled:	07/10/12
Matrix:	Water	Received:	07/12/12
Units:	ug/L	Analyzed:	07/16/12
Diln Fac:	1.000		

Type: MS Lab ID: QC647893

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.458	125.0	112.3	90	65-147
MTBE	<0.1000	25.00	23.12	92	74-120
Isopropyl Ether (DIPE)	<0.1000	25.00	18.41	74	71-121
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	20.76	83	75-122
1,2-Dichloroethane	<0.1000	25.00	28.40	114	80-125
Benzene	<0.1000	25.00	25.47	102	80-120
Methyl tert-Amyl Ether (TAME)	<0.1000	25.00	21.99	88	78-120
Toluene	<0.1000	25.00	26.66	107	80-120
1,2-Dibromoethane	<0.1000	25.00	24.59	98	80-120
Ethylbenzene	<0.1561	25.00	27.86	111	80-120
m,p-Xylenes	<0.1000	50.00	55.14	110	80-120
o-Xylene	<0.09974	25.00	25.86	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	107	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-120

Type: MSD Lab ID: QC647894

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	100.4	80	65-147	11	29
MTBE	25.00	22.88	92	74-120	1	20
Isopropyl Ether (DIPE)	25.00	19.48	78	71-121	6	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.64	87	75-122	4	20
1,2-Dichloroethane	25.00	27.23	109	80-125	4	20
Benzene	25.00	25.66	103	80-120	1	20
Methyl tert-Amyl Ether (TAME)	25.00	22.00	88	78-120	0	20
Toluene	25.00	25.08	100	80-120	6	20
1,2-Dibromoethane	25.00	24.19	97	80-120	2	20
Ethylbenzene	25.00	25.25	101	80-120	10	20
m,p-Xylenes	50.00	51.23	102	80-120	7	20
o-Xylene	25.00	23.92	96	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	106	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates			
Lab #:	237860	Location:	3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2761	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	188524
Units:	ug/L	Analyzed:	07/16/12
Diln Fac:	1.000		

Type: BS Lab ID: QC647955

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	113.9	91	47-136
MTBE	25.00	23.98	96	61-121
Isopropyl Ether (DIPE)	25.00	19.39	78	54-136
Ethyl tert-Butyl Ether (ETBE)	25.00	22.16	89	57-133
1,2-Dichloroethane	25.00	28.05	112	70-136
Benzene	25.00	26.43	106	80-121
Methyl tert-Amyl Ether (TAME)	25.00	22.44	90	65-120
Toluene	25.00	25.87	103	80-120
1,2-Dibromoethane	25.00	24.51	98	80-120
Ethylbenzene	25.00	26.19	105	80-120
m,p-Xylenes	50.00	52.76	106	80-121
o-Xylene	25.00	25.74	103	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	107	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC647956

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	103.8	83	47-136	9	28
MTBE	25.00	22.45	90	61-121	7	20
Isopropyl Ether (DIPE)	25.00	18.07	72	54-136	7	20
Ethyl tert-Butyl Ether (ETBE)	25.00	20.65	83	57-133	7	20
1,2-Dichloroethane	25.00	25.81	103	70-136	8	20
Benzene	25.00	24.59	98	80-121	7	20
Methyl tert-Amyl Ether (TAME)	25.00	22.21	89	65-120	1	20
Toluene	25.00	24.48	98	80-120	6	20
1,2-Dibromoethane	25.00	23.47	94	80-120	4	20
Ethylbenzene	25.00	24.70	99	80-120	6	20
m,p-Xylenes	50.00	49.90	100	80-121	6	20
o-Xylene	25.00	23.41	94	80-121	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	106	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates		
Lab #:	237860	Location: 3519 Castro Valley Blvd., Castro Vall
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2761	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC647957	Batch#: 188524
Matrix:	Water	Analyzed: 07/16/12
Units:	ug/L	

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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Ethanol	ND	1,000
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	110	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
 RL= Reporting Limit

Appendix D

Non-Hazardous Waste Manifest for Groundwater Removal

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CA1000182251
 2. Page 1 of 1
 3. Emergency Response Phone: 510-749-1390
 4. Waste Tracking Number: 65642 - 1

5. Generator's Name and Mailing Address: **At MIRAZIM SHAKOORI**
 AZIM SHAKOORI
 4313 MANSFIELD DR
 DANVILLE CA 94508
 Generator's Phone: 510-432-5588
 Generator's Site Address (if different than mailing address):
 AZIM SHAKOORI
 3518 CASTRO VALLEY BLVD.
 CASTRO VALLEY CA 94508

6. Transporter 1 Company Name: **NRC ENVIRONMENTAL SERVICES INC.**
 U.S. EPA ID Number: CA0000030114

7. Transporter 2 Company Name: **INTANSIO**
 U.S. EPA ID Number: CA000005274

8. Designated Facility Name and Site Address:
 Crosby & Overton, Inc.
 1830 W. 17th Street
 Long Beach CA 90813
 Facility's Phone: 562-432-6445
 U.S. EPA ID Number: CA00028400010

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. UH/W/Vol.
	No.	Type		
1. NON-HAZARDOUS WASTE LIQUID (PURGE WATER)	002	Dm	100	G
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information:
 WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT JOB#/PO#: 65642
 CONSULTANT: SOMA ENVIRONMENTAL 5620 OWENS DRIVE, SUITE A, PLEASANTON, CA.
 NRCS 1605 FERRY POINT ALAMEDA, CA. 94501 PROFILE 1151545
 D60118

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Officer's Printed/Typed Name: **E. Hightower for SOMA**
 Signature: *[Signature]*
 Month: 1, Day: 30, Year: 12

15. International Shipments: Import to U.S. Export from U.S.
 Port of entry/exit: _____
 Date leaving U.S.: _____

16. Transporter Acknowledgment of Receipt of Materials
 Transporter 1 Printed/Typed Name: **Thom Janula**
 Signature: *[Signature]*
 Month: 01, Day: 30, Year: 12

Transporter 2 Printed/Typed Name: **Alex Bell**
 Signature: *[Signature]*
 Month: 02, Day: 02, Year: 12

17. Discrepancy: Quantity Type Residue Partial Rejection Full Rejection

17b. Alternate Facility (or Generator): _____
 U.S. EPA ID Number: _____

Facility's Phone: _____
 17c. Signature of Alternate Facility (or Generator): _____
 Month: _____, Day: _____, Year: _____

18. Designated Facility Owner or Operator, Certification of receipt of materials covered by the manifest except as noted in item 17a:
 Printed/Typed Name: **J. Balleza**
 Signature: *[Signature]*
 Month: 02, Day: 03, Year: 12

GENERATOR

TRANSPORTER INTL

DESIGNATED FACILITY