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ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive, Suite A • Pleasanton, CA 94588
TEL (925)734-6400 • FAX (925)734-6401
www.somaenv.com

June 27, 2012

Ms. Dilan Roe
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Freedom Food and Gas (Formerly Freedom ARCO Mini-Mart)
Site Address: 15101 Freedom Avenue, San Leandro, California
STID 4473/RO0000473

Dear Ms. Roe:

SOMA's "Second Quarter 2012 Groundwater Monitoring and Remediation Progress Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

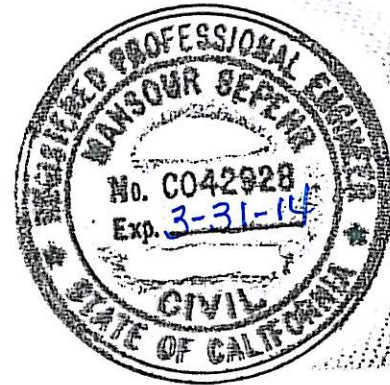
Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have questions or comments.

Sincerely,

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

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel w/report enclosure



**Second Quarter 2012
Groundwater Monitoring and
Remediation Progress Report**

**Freedom Food and Gas
15101 Freedom Avenue
San Leandro, California**

June 27, 2012

Project 2551/2553

Prepared for

**Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, California**



ENVIRONMENTAL ENGINEERING, INC.

6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 www.somaenv.com

PERJURY STATEMENT

Site Location: 15101 Freedom Avenue, San Leandro, California

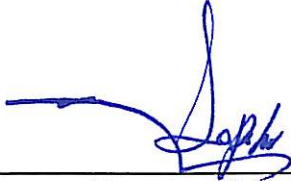
"I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge".

A handwritten signature in black ink, reading "M. Pazdel", written over a horizontal line.

Mohammad Pazdel
1770 Pistacia Court
Fairfield, California 94533
Responsible Party

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of the responsible party, Mr. Mohammad Pazdel, for property located at 15101 Freedom Avenue, San Leandro, California, to comply with Alameda County Health Care Services requirements for the Second Quarter 2012 groundwater monitoring event.



Mansour Sepehr, PhD, PE
Principal Hydrogeologist



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1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report on behalf of the responsible party, Mr. Mohammad Pazdel, for property located at 15101 Freedom Avenue, San Leandro, California. The site is located in an area of primarily residential properties and adjacent commercial areas (Figure 1). The property was formerly owned by Mr. Mohammad Pazdel. In late 2009, the property was sold to DDH, LLC, Assignee and in early 2010 it was sold to Mr. Mohammad Mashhoon. Under the new management, the site is currently operational with the business name "Freedom Food and Gas" (formerly "Freedom Arco Mini-Mart").

This report summarizes results of the Second Quarter 2012 groundwater monitoring event conducted on June 6 and 7, 2012. It includes physical and chemical properties measured in the field and laboratory analysis results for each groundwater sample. It also presents the remediation progress report for Second Quarter 2012, which includes operation of a groundwater extraction and treatment system. During this reporting period, no multi-phase extraction (MPE) events were conducted.

1.1 Field Activities

In June 2012, SOMA's field crew conducted a groundwater monitoring event in accordance with procedures and guidelines of Alameda County Health Care Services Environmental Health Department (ACEH) and the California Regional Water Quality Control Board (CRWQCB). Figure 2 shows well locations.

On June 6, 2012, the following wells were measured for depth to groundwater: five on-site monitoring wells (MW-1 to MW-5) and two off-site wells (MW-6 and MW-7) in the First water-bearing zone (WBZ); two extraction wells (EX-1 and EX-2), two MPE wells (MPE-1 and MPE-2), and three on-site monitoring wells (MW-1D, MW-3D, and MW-4D) in the Second WBZ. On June 6 and 7, 2012, additional field measurements and groundwater samples were collected from all monitoring and MPE wells. Grab groundwater samples were also collected from the two extraction wells. Properties measured include pH, temperature, and electrical conductivity (EC). A natural attenuation study was conducted during this event to determine whether petroleum hydrocarbons in groundwater are biodegrading. Dissolved oxygen (DO) and oxidation reduction potential (ORP) measurements were taken for all monitoring and MPE wells.

1.2 Laboratory Analysis

Curtis & Tompkins Laboratories, a California state-certified 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); and gasoline oxygenates, ethanol and lead scavengers. Samples were prepared using EPA Method 5030B and analyzed using EPA Method 8260B.

2. RESULTS

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

2.1 Field Measurements, First WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each monitoring well. Depths to groundwater ranged from 14.00 feet in MW-7 to 22.92 feet in MW-1. No free product (FP) was measurable in any wells during this event.

Corresponding groundwater elevations ranged from 29.51 feet in MW-6 to 31.54 feet in MW-1. Groundwater elevations at extraction wells EX-1 and EX-2 were 22.60 feet and 27.06 feet, respectively.

Figure 3 displays the contour map of groundwater elevations. As illustrated, groundwater flows towards extraction well EX-1, at a gradient of 0.024 feet/feet. Since the previous monitoring event (First Quarter 2012) the gradient has increased. Groundwater gradient calculations are attached in Appendix B.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO in the First WBZ ranged from 0.48 mg/L in MPE-2 to 2.78 mg/L in MW-7. ORP showed negative redox potentials in all First WBZ wells except MW-7, where potential redox potential was observed. Negative redox potentials indicate that contaminants in groundwater are conducive to anaerobic biodegradation. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes the removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons.

Field measurements taken during this monitoring event are included in Appendix B (Table A).

2.2 Laboratory Analysis, First WBZ Wells

Appendix C includes the laboratory report and chain-of-custody form for this monitoring event.

Table 1 presents TPH-g, BTEX, and MtBE analysis results for the current and historical groundwater monitoring events.

TPH-g ranged from 250 µg/L in EX-1 to 78,000 µg/L in MPE-1. Since the previous monitoring event (First Quarter 2012), TPH-g decreased in all First WBZ monitoring wells and increased in extraction (EX-1 and EX-2) wells.

Figure 4 displays the contour map of TPH-g concentrations in groundwater. As illustrated, the highest TPH-g impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE-1.

The following BTEX concentrations were observed:

- In MW-2 and MW-7, benzene and toluene were below laboratory-reporting limits and ethylbenzene and total xylenes were at low levels.
- Toluene was also below laboratory-reporting limit in MW-1, MW-4, MW-5, MW-6, and EX-1.
- The highest BTEX was detected in MPE-1 at 4,500 µg/L, 4,900 µg/L, 2,300 µg/L, and 10,700 µg/L, respectively.

Figure 5 displays the contour map of benzene in groundwater. The highest benzene impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE-1. Since the previous monitoring event (First Quarter 2012), benzene has increased in EX-1, EX-2, and MPE-2 and decreased in MW-1, MW-3, MW-4, MW-5, MW-6, and MPE-1.

MtBE was below the laboratory-reporting limit in MW-2, MW-3, and MW-6. Detectable MtBE ranged from 2.6 µg/L in MW-7 to 750 µg/L in MPE-1. Figure 6 displays the contour map of MtBE concentrations in groundwater. The highest MtBE impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE-1 where MtBE concentration is significantly higher than in other wells. Since the previous monitoring event (First Quarter 2012), MtBE has increased in MW-1, EX-1 and MPE-2 and decreased in MW-4, MW-5, MW-7, EX-2, and most significantly in MPE-1.

As shown in Table 1, TPH-g and BTEX decreased in more impacted wells MW-3 and MPE-1 since the previous monitoring event (First Quarter 2012).

Table 2 shows analysis results for gasoline oxygenate and lead scavenger concentrations for the current as well as historical events.

The following gasoline oxygenate and lead scavenger concentrations were observed:

- In MW-1, MW-2, MW-3, MW-6, MW-7, EX-2, and MPE-2, all gasoline oxygenates and lead scavengers were below laboratory-reporting limits.

- Detectable tertiary-butyl alcohol (TBA) ranged from 22 µg/L in MW-5 to 1,000 µg/L in MW-4.

Figure 7 shows the contour map of TBA concentrations in groundwater. The highest TBA impact was in the vicinity of southern dispenser islands around MW-4.

- Methyl tertiary-amyl ether (TAME) was detected in MW-5, EX-1, and MPE-1 at 2.8 µg/L, 4.8 µg/L, and 430 µg/L, respectively and was below the laboratory-reporting limit in remaining wells. Figure 8 displays the contour map of TAME concentrations in First WBZ wells.
- Ethyl tertiary-butyl ether (ETBE) was detected in MW-4 and EX-1 at 13 µg/L and 2.9 µg/L, respectively and was below laboratory-reporting limits in remaining wells. Figure 9 displays the map of ETBE concentrations in First WBZ wells.
- 1,2-dichloroethane (1,2-DCA) was detected in EX-1 at 0.57 µg/L and was below laboratory-reporting limits in remaining wells. Figure 9 displays the map of 1,2-DCA concentrations in First WBZ wells.
- Isopropyl ether (DIPE), 1,2-dibromoethane (EDB), and ethanol were below laboratory-reporting limits in all groundwater samples. Analysis results for ethanol are shown in Appendix C.

2.3 Field Measurements, Second WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each Second WBZ monitoring well. Depths to groundwater ranged from 22.00 feet in MW-4D to 23.18 feet in MW-1D. Corresponding groundwater elevations ranged from 31.12 feet in MW-4D to 31.33 feet in MW-3D.

Figure 10 displays the contour map of groundwater elevations in the Second WBZ. Groundwater flows southwesterly similar to the previous monitoring event (First Quarter 2012), at a gradient of 0.0024 feet/feet. The groundwater gradient increased since the previous monitoring event. Groundwater gradient calculations are attached in Appendix B.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO in the Second WBZ ranged from 0.32 mg/L in MW-4D to 1.10 mg/L in MW-1D. ORP showed positive potentials in all second WBZ wells. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes the removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons.

Field measurements taken during this monitoring event are included in Appendix B.

2.4 Laboratory Analysis for Second WBZ Wells

Appendix C includes the laboratory report and chain-of-custody form for this monitoring event.

Table 1 presents TPH-g, BTEX, and MtBE analysis results for the current and historical groundwater monitoring events.

TPH-g and BTEX were below laboratory-reporting limits in all second WBZ wells. Since the previous monitoring event (First Quarter 2012), ethylbenzene and total xylenes have decreased in MW-4D.

MtBE was below the laboratory-reporting limit in MW-1D and was detected in MW-3D and MW-4D at 4.8 µg/L and 1.3 µg/L, respectively. Since the previous monitoring event (First Quarter 2012), MtBE has slightly increased in MW-3D and slightly decreased in MW-4D. Figure 11 shows the map of MtBE concentrations in Second WBZ.

Table 2 shows analysis results for gasoline oxygenate and lead scavenger concentrations for the current as well as historical events.

All gasoline oxygenate, lead scavenger, and ethanol concentrations were below laboratory-reporting limits in Second WBZ wells.

3. OPERATION OF TREATMENT SYSTEM

SOMA installed a groundwater treatment system at the site in December 2009. The system includes two extraction wells (EX-1 and EX-2), trenching containing influent and effluent lines and electrical conduits, and the treatment system compound. During system operation, extracted groundwater is pumped from extraction wells through underground piping to a fenced treatment compound, adjacent to the existing service station building.

In the treatment compound, groundwater is treated using granular activated carbon (GAC) and subsequently discharged to the sanitary sewer. Two GAC vessels are connected in series. The first unit (1,000 gallons) serves as the primary treatment unit, and the second (55 gallons) provides an additional safety buffer prior to discharge. Effectiveness of the GAC units is monitored by collection and analysis of samples from the system discharge, including a sample collected from water that has passed only through the first GAC unit. When analytical results indicate that the first GAC unit is no longer effectively treating groundwater, the vessel will be removed from the treatment line and refurbished with new carbon.

The treatment system operates under discharge permit issued by Oro Loma Sanitary District (OLSD) in May 2009. This discharge permit was most recently renewed in May 2012. Treated groundwater has been discharging to the OLSD sewer since December 9, 2009. Figure 12 shows the schematic diagram of the groundwater treatment system. Treatment system effluent is sampled monthly to comply with OLSD discharge permit requirements. Table 3 includes analytical results and operational history of the treatment system. As shown in Table 4, as of April 17, 2012, cumulative masses of TPH-g and BTEX extracted from groundwater were approximately 19.54 pounds, 0.87 pounds, 0.22 pounds, 0.40 pounds, and 2.93 pounds, respectively. Appendix D includes laboratory analytical results. Since the system began discharging, approximately 1,933,786 gallons of groundwater have been treated and discharged at the site (as of June 22, 2012).

4. MULTI-PHASE EXTRACTION EVENTS

No MPE events were performed during Second Quarter 2012. The overall estimated total mass of VOCs extracted by previous MPE events is 806 pounds. This includes the following: 106 pounds, November 2007 pilot test; 243 pounds, October 2009 event; 72 pounds, November 2009 event; 97 pounds, December 2009 event; 17 pounds, February 2010 event; 11 pounds, March 2010 event; 30 pounds, June 2010 event; 30 pounds, August 2010 event; 79 pounds, October 2010 event; 27 pounds, April 2011 event; and 94 pounds, August 2011 event. Figure 13 shows the cumulative mass of VOCs removed in pounds.

5. CONCLUSIONS AND RECOMMENDATIONS

Second Quarter 2012 groundwater monitoring and previous MPE events results are summarized below.

- Groundwater flows towards EX-1 in the First WBZ and southwesterly in the Second WBZ.
- The highest hydrocarbon concentrations were observed in the southern portion of the site and in the vicinity of the dispenser islands around MPE extraction well MPE-1.
- Since the previous quarterly monitoring event (First Quarter 2012), TPH-g decreased in all First WBZ monitoring wells and increased in extraction (EX-1 and EX-2) wells.
- In the Second WBZ, TPH-g and BTEX were below laboratory-reporting limits, and MtBE was below laboratory-reporting limit in MW-1D. Since the previous monitoring event (First Quarter 2012), MtBE increased slightly in MW-3D and decreased slightly in MW-4D.

- MPE events conducted since November 2007 have removed an estimated 806 pounds of VOCs.

Based on results of this monitoring event and previous MPE events, SOMA recommends the following action items:

- Continue quarterly groundwater monitoring to increase understanding of seasonal variations in groundwater quality conditions.
- Conduct additional MPE events at the site, based on the high contaminant concentrations in MPE-1.

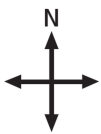
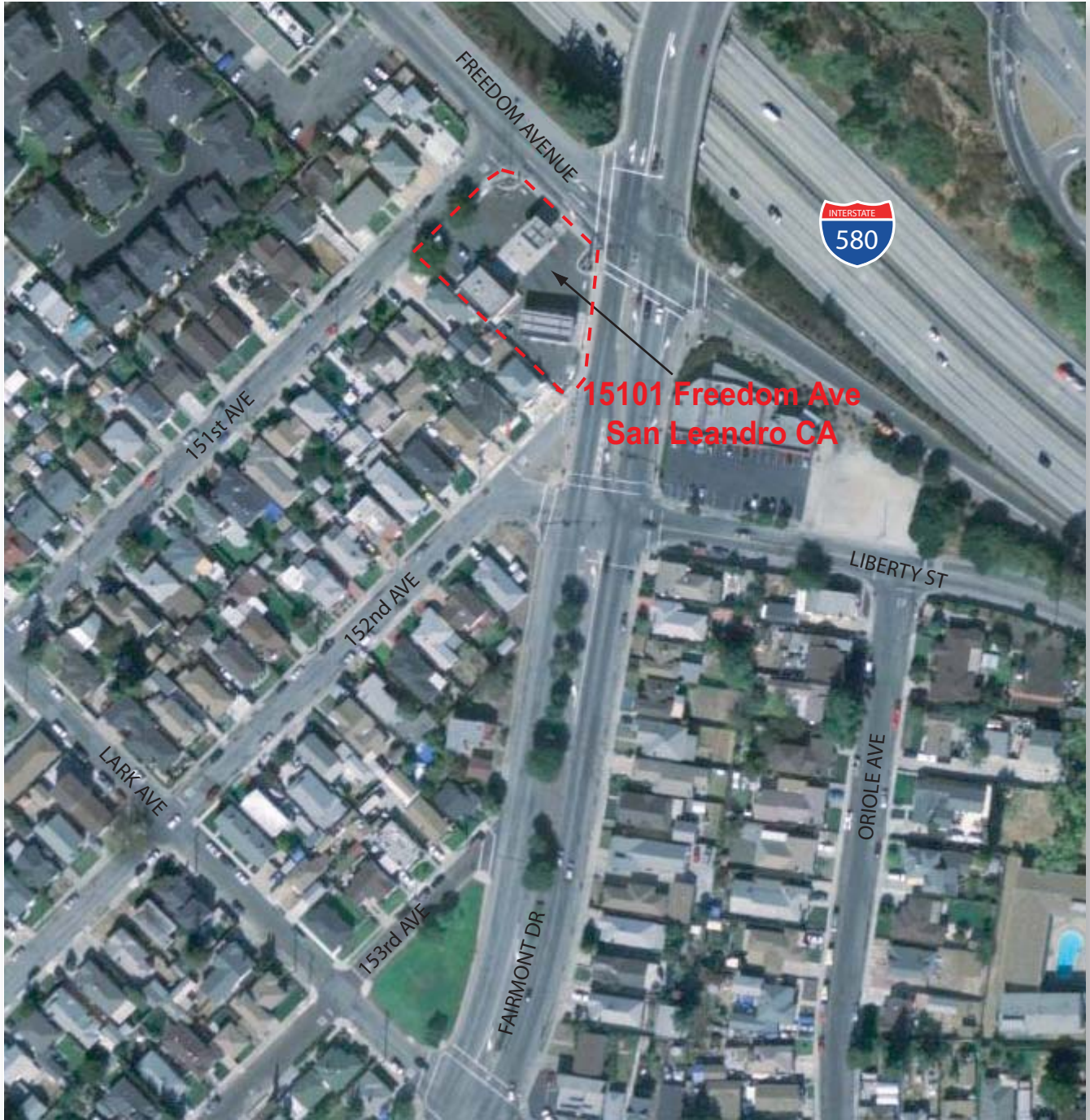
Other ongoing activities: Based on ACEH directive dated September 21, 2011, SOMA submitted a site evaluation workplan that discusses construction of extraction well MW-6 and its probable radius of influence (under pumping conditions). The workplan will be implemented upon receipt of written authorization from ACEH.

6. REPORT LIMITATIONS

This report is the summary of work done by SOMA, including observations and descriptions of site conditions. It includes analysis results produced by Curtis & Tompkins Laboratories for the current groundwater monitoring event. Quantities and locations of wells were selected to provide the required information, but may not be representative of entire site conditions. All conclusions and recommendations are based on laboratory analysis results. Conclusions beyond those specifically stated in this document should not be inferred from this report.

SOMA warrants that services were provided in accordance with generally accepted practices in the environmental engineering and consulting field at the time of this sampling.

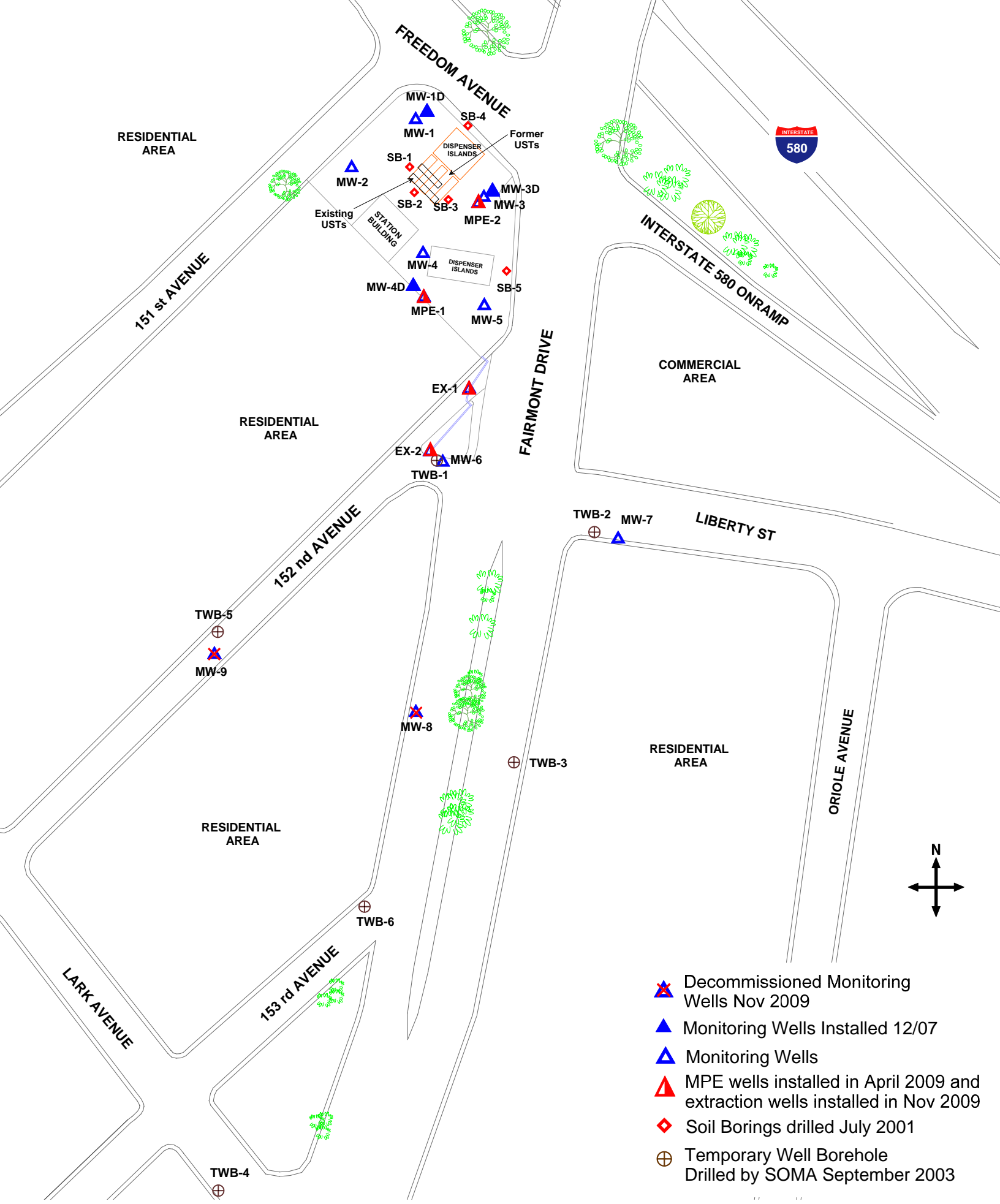
Figures









approximate scale in feet



Figure 1: Site vicinity map.

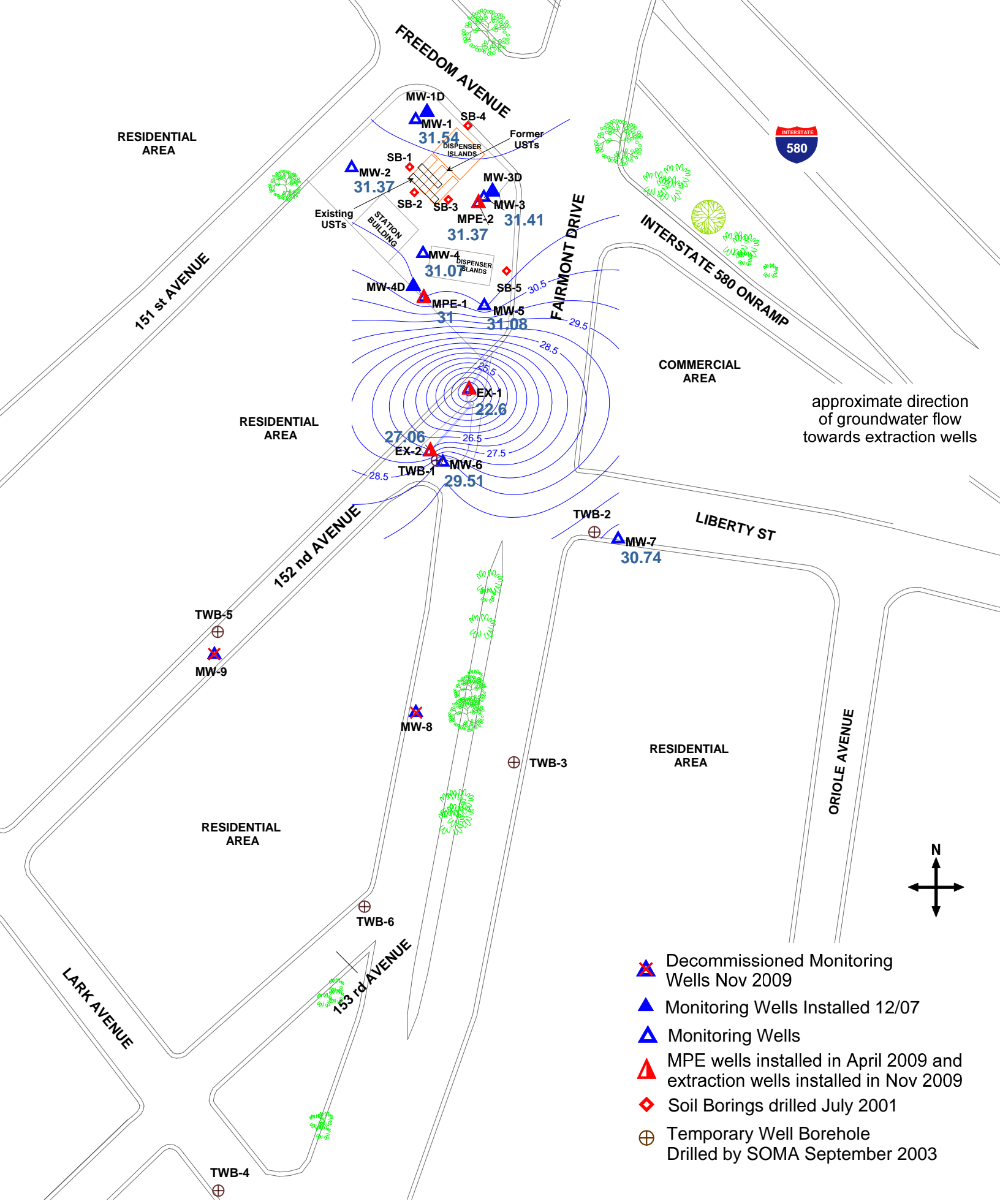


-  Decommissioned Monitoring Wells Nov 2009
-  Monitoring Wells Installed 12/07
-  Monitoring Wells
-  MPE wells installed in April 2009 and extraction wells installed in Nov 2009
-  Soil Borings drilled July 2001
-  Temporary Well Borehole Drilled by SOMA September 2003







approximate scale in feet
 0 50 100

Figure 2: Site map showing locations of groundwater monitoring wells, soil borings, and extraction wells.





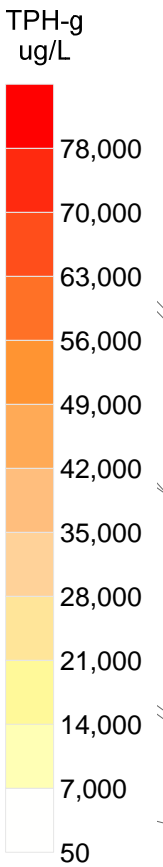
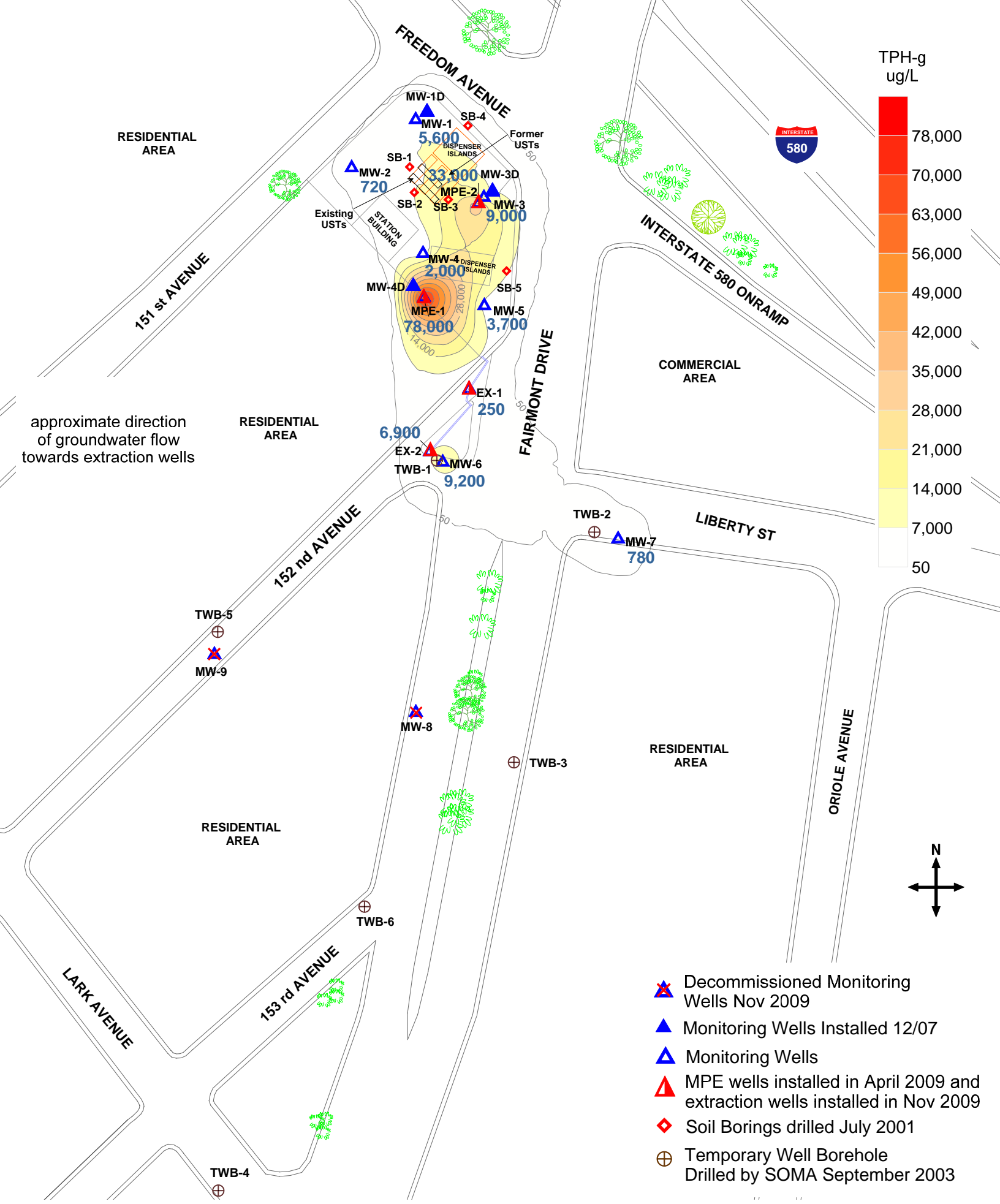
approximate direction of groundwater flow towards extraction wells

-  Decommissioned Monitoring Wells Nov 2009
-  Monitoring Wells Installed 12/07
-  Monitoring Wells
-  MPE wells installed in April 2009 and extraction wells installed in Nov 2009
-  Soil Borings drilled July 2001
-  Temporary Well Borehole Drilled by SOMA September 2003

approximate scale in feet
 0 50 100

Figure 3: Groundwater Elevation Contour Map in Feet, First WBZ
 June 6, 2012





approximate direction of groundwater flow towards extraction wells

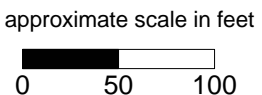
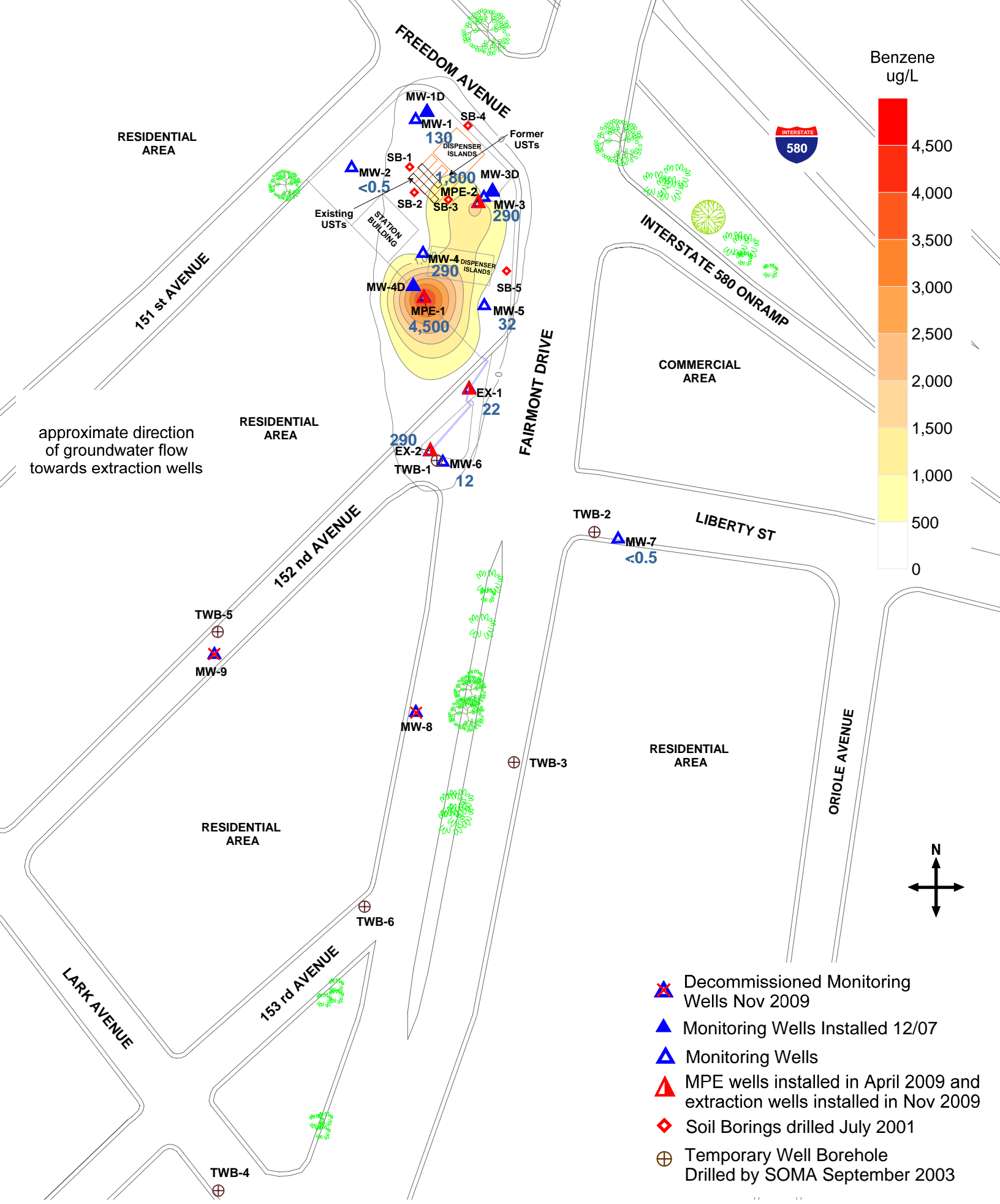


Figure 4: Contour Map of TPH-g Concentrations in Groundwater, First WBZ, June 6 and 7, 2012

- Decommissioned Monitoring Wells Nov 2009
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

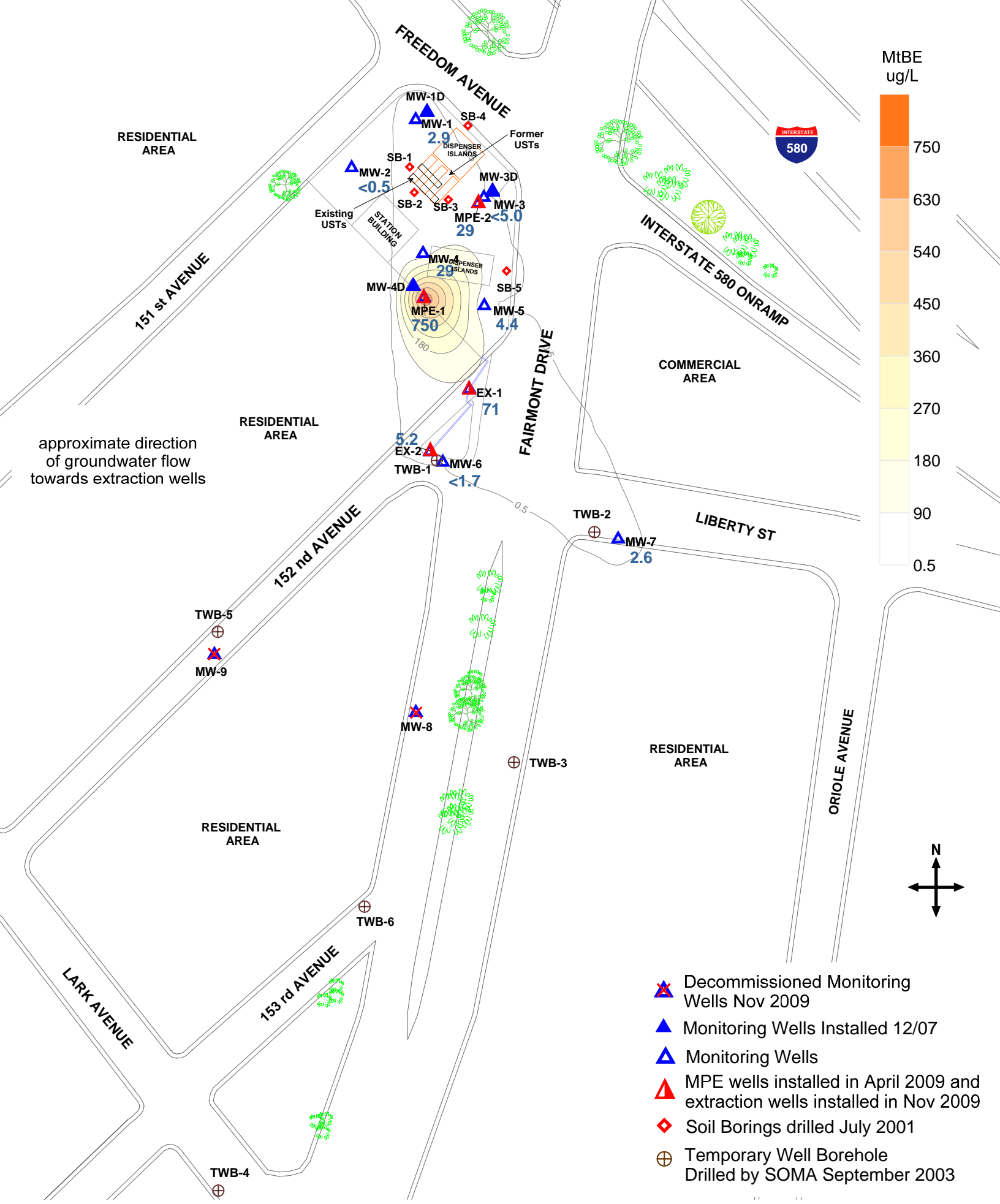




approximate scale in feet
0 50 100

Figure 5: Contour Map of Benzene Concentrations in Groundwater, First WBZ, June 6 and 7, 2012



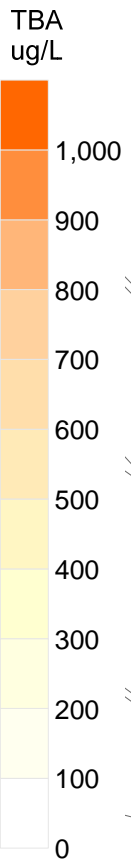
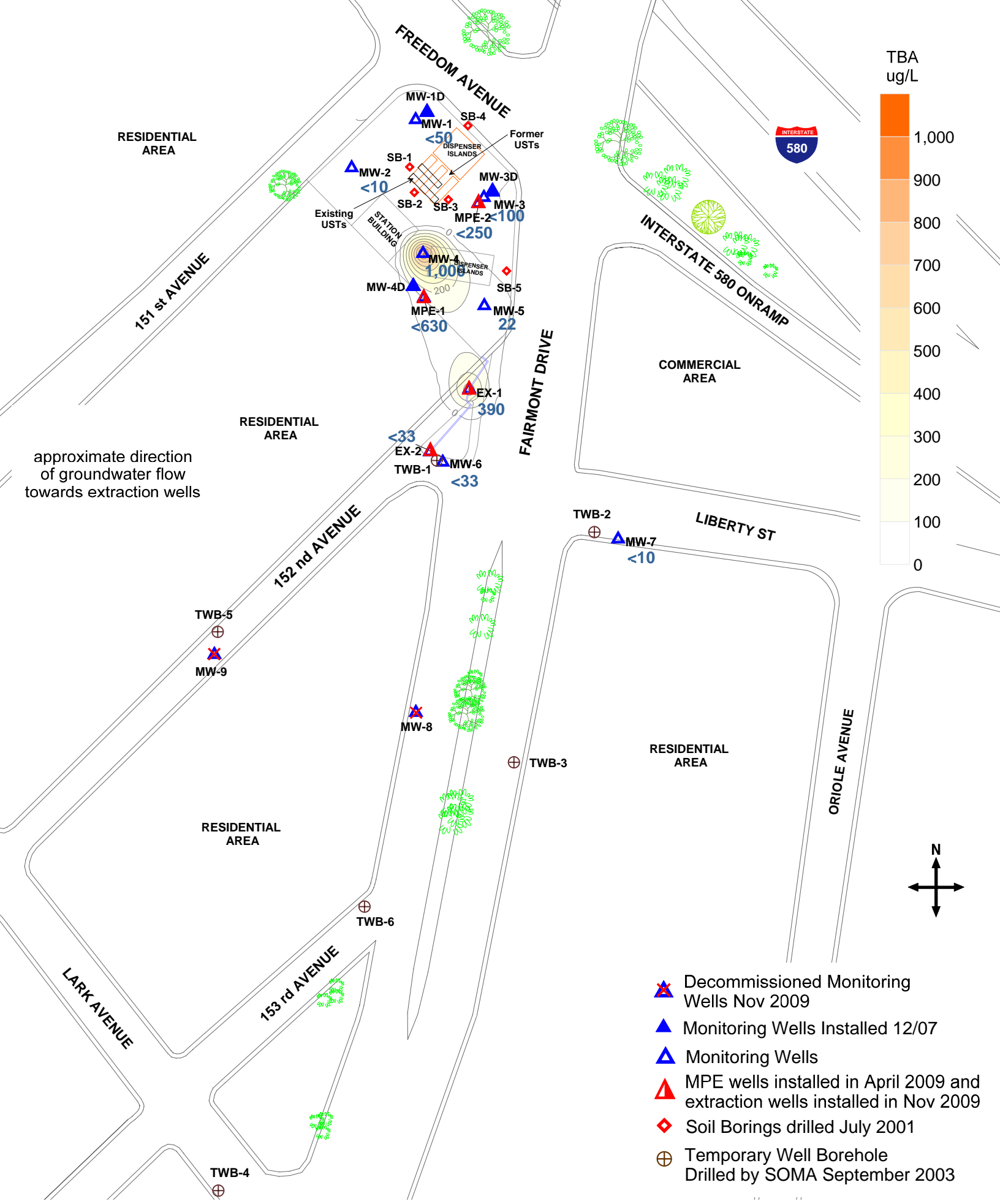


approximate scale in feet







0 50 100

Figure 6: Contour Map of MtBE Concentrations in Groundwater, First WBZ, June 6 and 7, 2012





approximate direction
of groundwater flow
towards extraction wells

-  Decommissioned Monitoring Wells Nov 2009
-  Monitoring Wells Installed 12/07
-  Monitoring Wells
-  MPE wells installed in April 2009 and extraction wells installed in Nov 2009
-  Soil Borings drilled July 2001
-  Temporary Well Borehole Drilled by SOMA September 2003

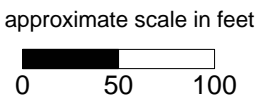
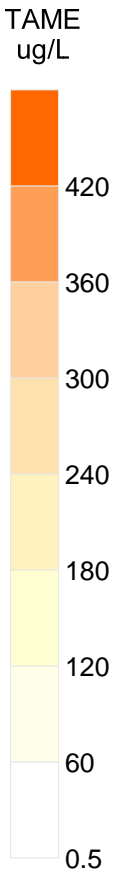
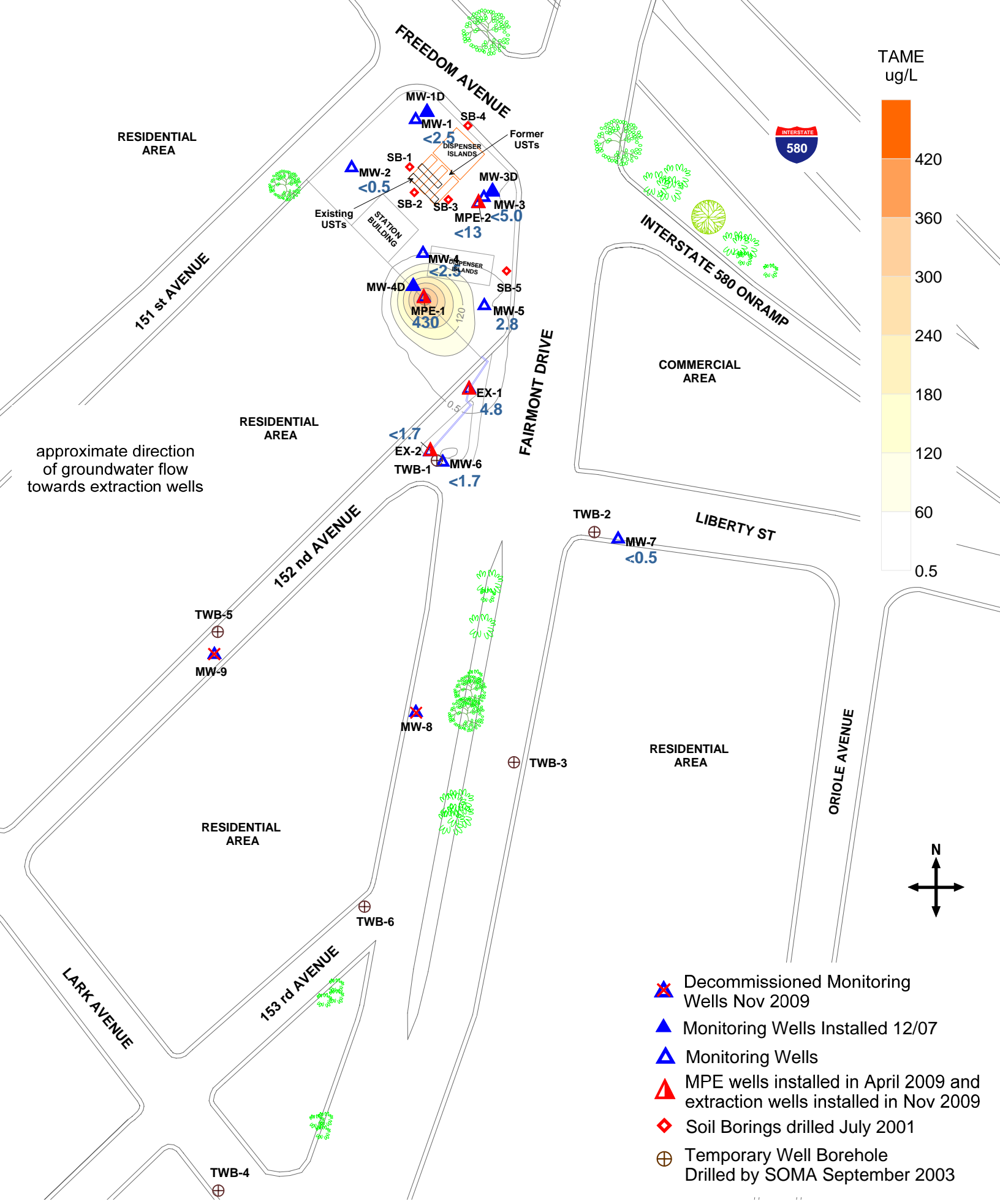


Figure 7: Contour Map of TBA Concentrations in Groundwater, First WBZ, June 6 and 7, 2012





approximate direction of groundwater flow towards extraction wells

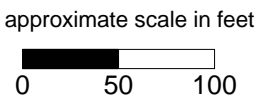


Figure 8: Contour Map of TAME Concentrations in Groundwater, First WBZ, June 6 and 7, 2012

- Decommissioned Monitoring Wells Nov 2009
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

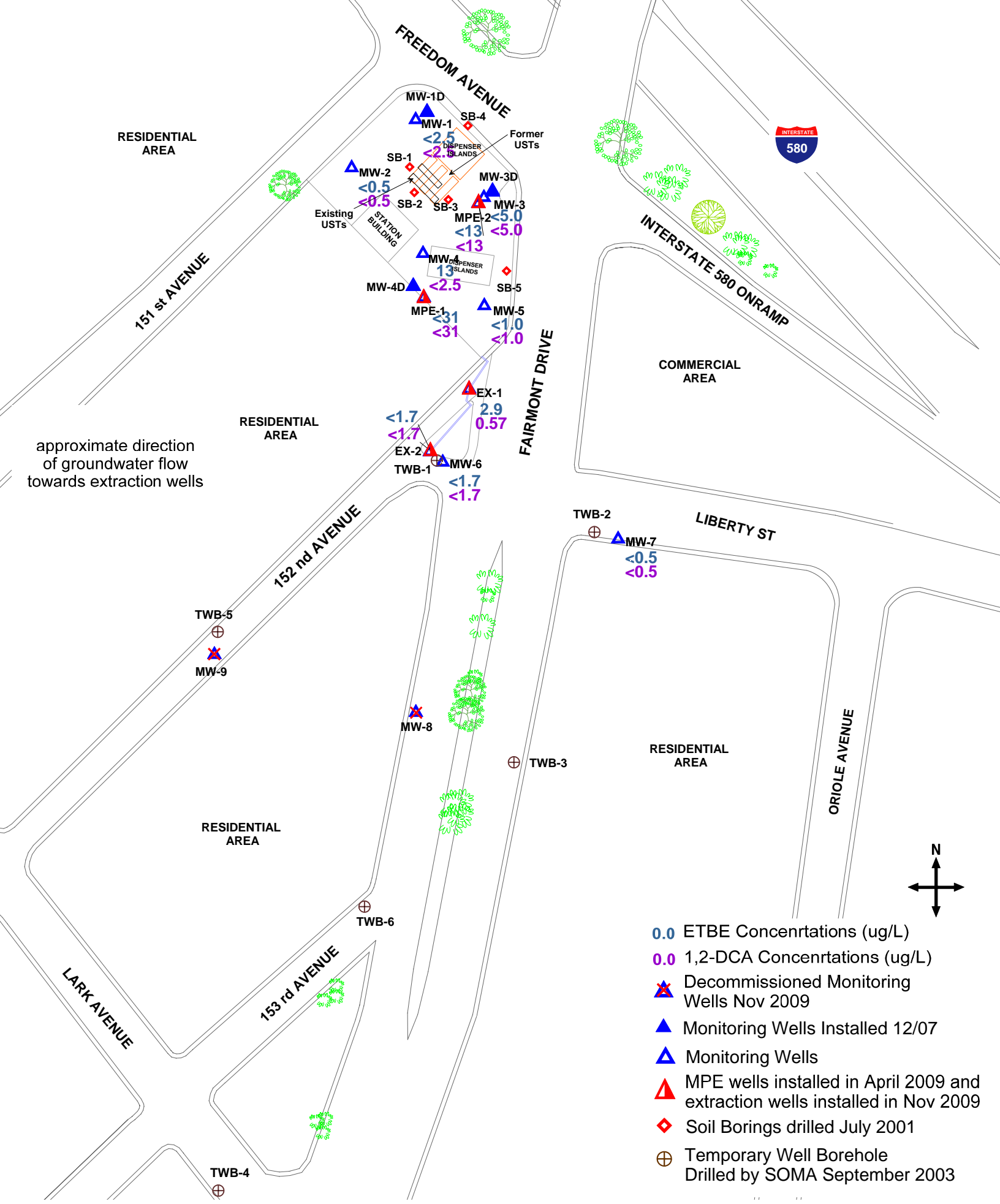


Figure 9: Map of ETBE and 1,2-DCA Concentrations in Groundwater, First WBZ, June 6 and 7, 2012

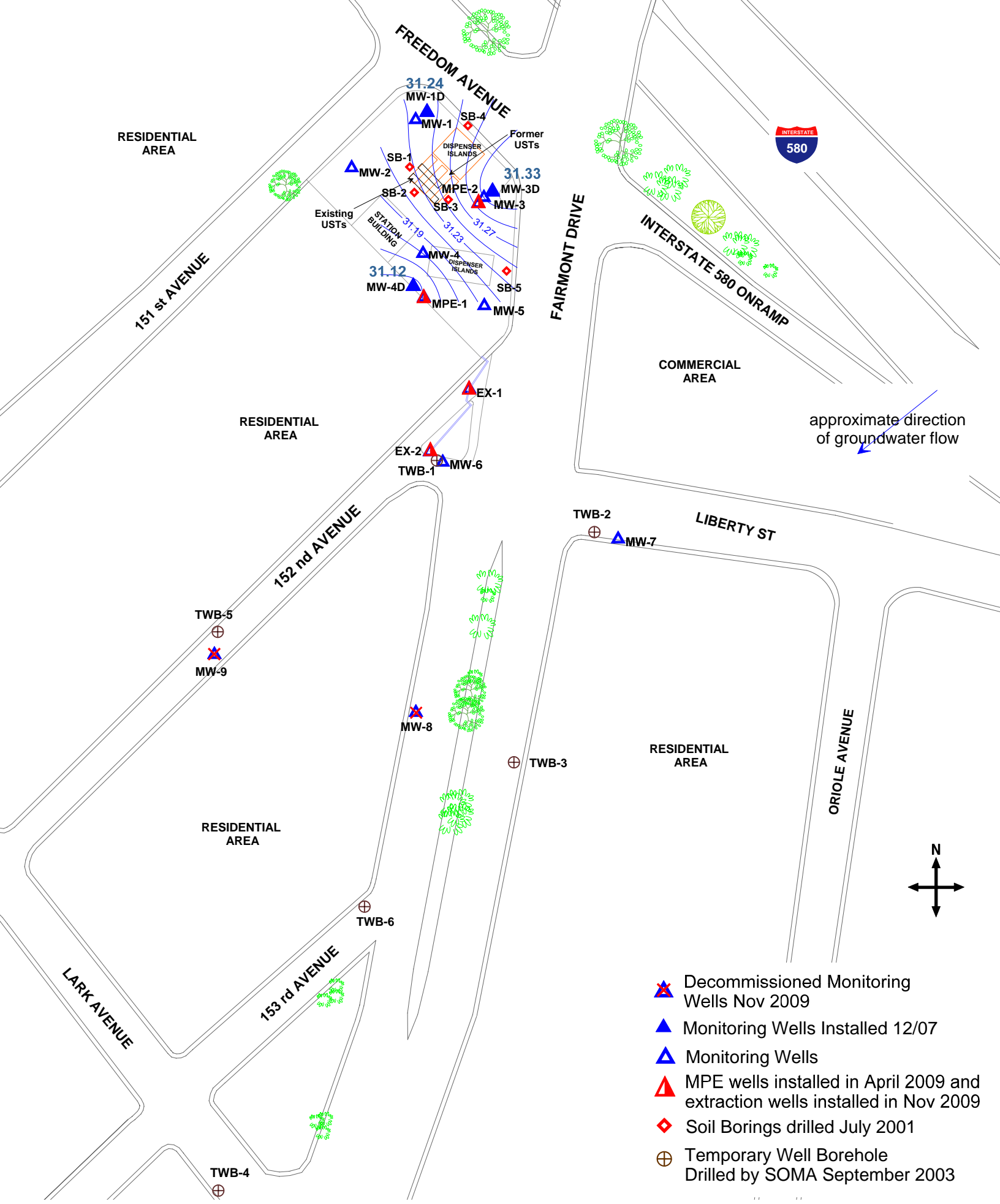


Figure 10: Groundwater Elevation Contour Map in Feet, Second WBZ, June 6, 2012

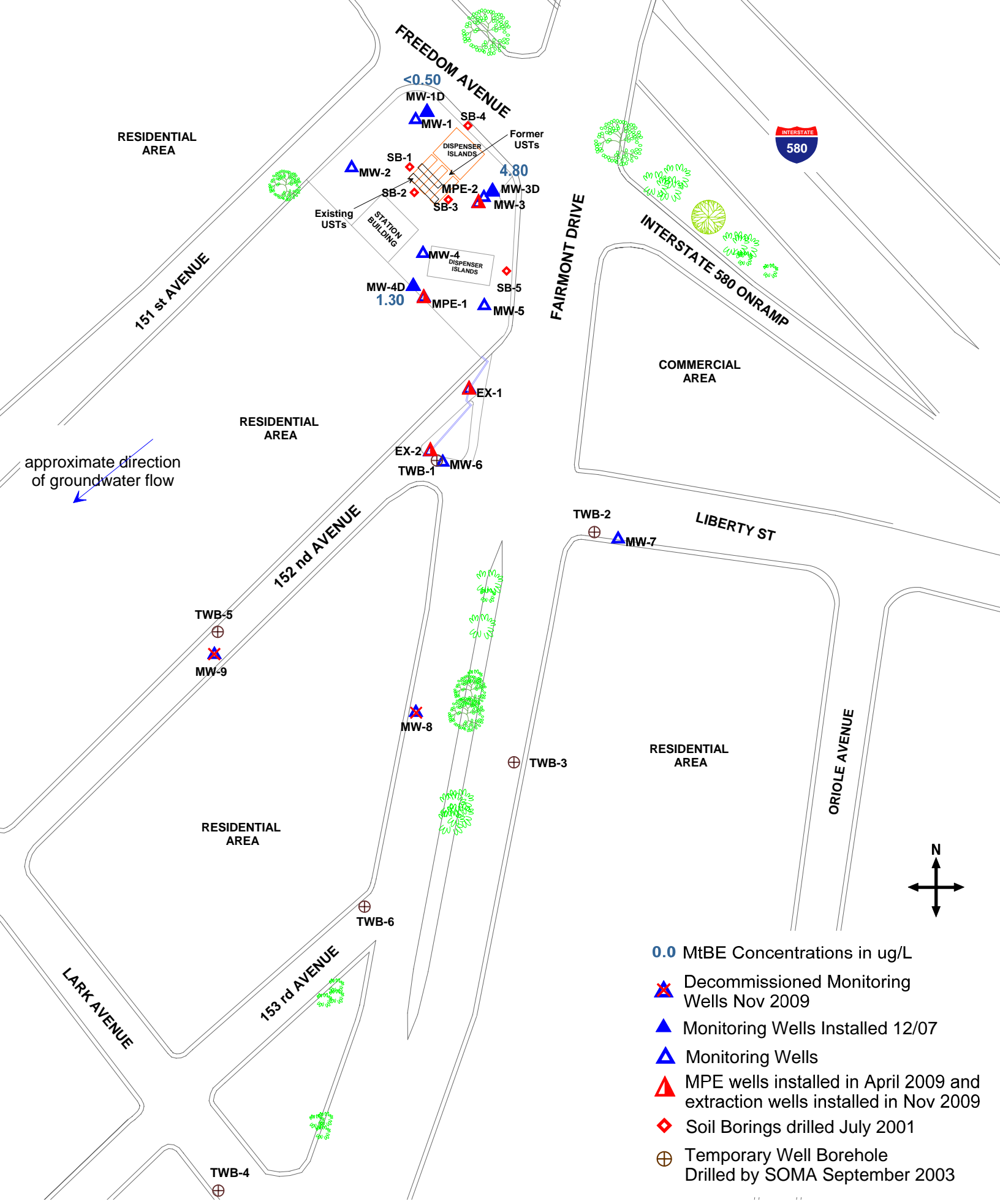


Figure 11: Map Showing Concentrations of MtBE in Groundwater, Second WBZ, June 6 and 7, 2012

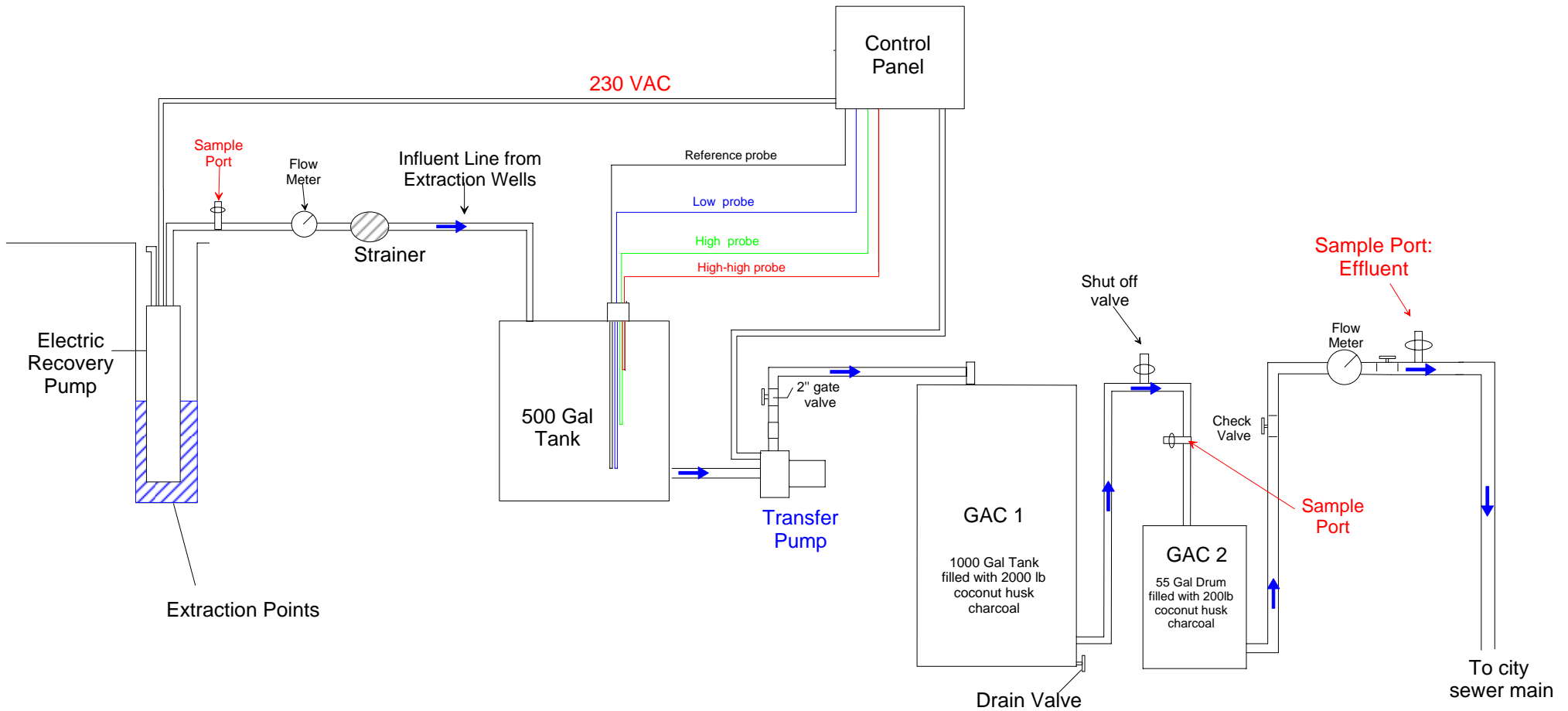


Figure 12: Schematic diagram of Groundwater Remediation System

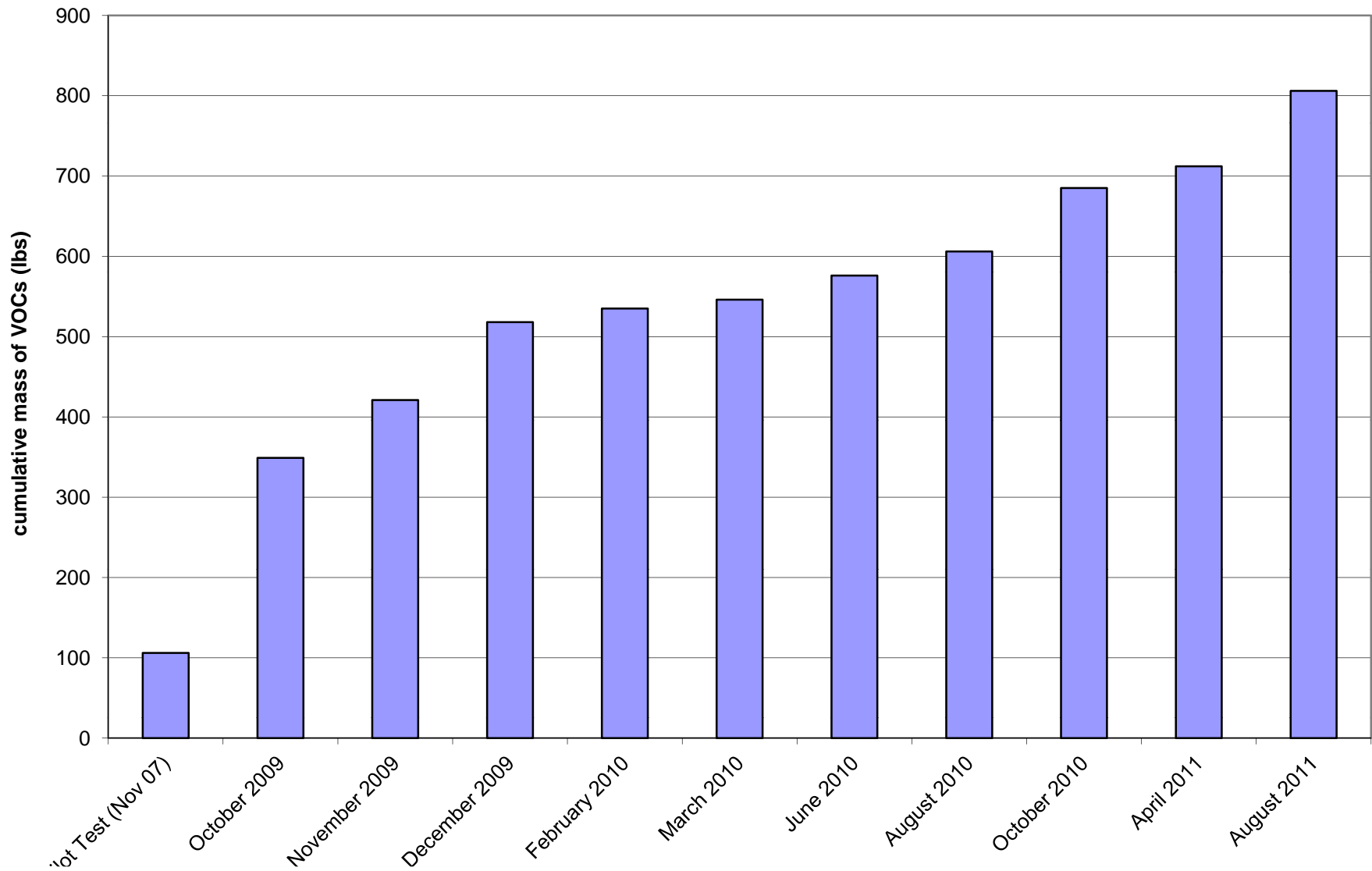


Figure 13: Cumulative mass of VOCs removed

Tables

Table 1
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
1st WBZ										
MW-1	5/10/2002	51.71	22.85	28.86	5,700	360	4.5	340	450	2
	8/8/2002	51.71	23.31	28.40	9,100	590	2.6	830	362	<1.3
	11/8/2002	51.71	23.58	28.13	7,900	570	3.1	680	392	< 1.0
	2/21/2003	51.71	22.62	29.09	2,900	160	1.6 C	170	211	<0.5
	5/28/2003	51.71	22.43	29.28	1,700	55	<0.5	90	115	2.00
	8/12/2003	51.71	21.30	30.41	2,600	2.5	<0.5	190	130	<0.5
	10/9/2003	51.71	23.49	28.22	9,200	560.0	2.7 C	670	648	<1.0
	1/15/2004	51.71	22.43	29.28	5,500	190	<1.0	220	124.4	<0.5
	5/25/2004	51.71	22.94	28.77	8,000	400	1.50	420	393	3.40
	9/21/2004	54.46	23.49	30.97	9,300	580	9.30	690	683	4.60
	12/14/2004	54.46	23.01	31.45	7,360	337	<4.3	731	633	<4.3
	3/11/2005	54.46	21.48	32.98	2,510	45.2	<0.5	23.2	39.63	2.80
	6/15/2005	54.46	22.42	32.04	1,690	36.3	<2.0	59.5	28.73	2.01
	8/26/2005	54.46	23.00	31.46	7,310	318	<8.60	475	316	5.15
	11/11/2005	54.46	21.40	33.06	9,640	341	<8.6	467	329.7	6.04
	2/9/2006	54.46	21.81	32.65	775	14	<2.0	12.6	10.32	4.01
	5/9/2006	54.46	21.68	32.78	444	7.80	<2.0	12.1	6.31	1.75
	8/10/2006	54.46	22.79	31.67	5,090	324	<8.60	108	59.9	8.24
	10/26/2006	54.46	23.19	31.27	6,950	556	<4.0	190	136.09	8.61
	1/25/2007	54.46	22.82	31.64	2,640	196	<2.0	105	25.5	7.92
4/26/2007	54.46	22.67	31.79	861	95.5	<2.0	17	6.36	4.00	
7/25/2007	54.46	23.25	31.21	4,520	412	<4.0	182	77.9	7.48	
10/23/2007	54.46	23.42	31.04	3,900	117	<2.0	87.1	23.87	4.54	

Table 1
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-1 cont	1/22/2008	54.46	22.59	31.87	2,260	81.3	<2.0	17.5	<2.0	4.23
	4/16/2008	54.46	22.89	31.57	2,320	248	<2.0	54.1	37.3	<0.5
	7/3/2008	54.46	23.33	31.13	5,240	414	<2.0	168	94	6.56
	10/15/2008	54.46	23.76	30.70	4,500 ^Y	260	<1.0	150	130	3.40
	1/7/2009	54.46	23.25	31.21	4,800	140	<1.3	48	32	1.70
	4/14/2009	54.46	22.52	31.94	1,800 ^Y	78	<0.5	35	18	2.50
	8/27/2009	54.46	23.6	30.86	4,500	330	<2.0	97	42	4.60
	12/2/2009	54.46	23.43	31.03	3,800 ^Y	250	<2.0	110	25	2.50
	3/17/2010	54.46	22.32	32.14	1,100	33	<0.50	46	18	1.70
	6/3/2010	54.46	22.88	31.58	10,000	330	4.3	680	841.5	5.20
	9/2/2010	54.46	23.28	31.18	8,900	440	<5.0	510	310	<5.0
	12/2/2010	54.46	23.21	31.25	7,400	250	<3.1	390	180	<3.1
	3/4/2011	54.46	21.95	32.51	2,400	67	<0.5	45	8.4	2.20
	5/20/2011	54.46	22.8	31.66	9,500	260	6.2	970	480	<3.6
	9/9/2011	54.46	22.81	31.65	6,400	220	<1.3	380	160	2.30
	12/2/2011	54.46	21.97	32.49	4,700 ^X	96	<1.7	310	200	<3.3
3/2/2012	54.46	22.82	31.64	6,800	320	<2.5	430	120	<2.5	
	6/7/2012	54.46	22.92	31.54	5,600	130	<2.5	360	160	2.9
MW-2	5/10/2002	49.66	22.83	26.83 *	3,100	67	8	250	215	56
	8/8/2002	49.66	21.41	28.25	2,700	4.6	<0.5	310	140	<0.5
	11/8/2002	49.66	21.79	27.87	3,400	4.6	< 0.5	310	160	< 0.5
	2/21/2003	49.66	20.51	29.15	890	1.7 C	0.80 C	68	38.92 C	<0.5
	5/28/2003	49.66	20.33	29.33	2,700	5.2 C	<0.5	120	140	1.2
	8/12/2003	49.66	23.18	26.48*	8,500	640	<2.5	560	659	<0.8
	10/9/2003	49.66	21.71	27.95	3100 H	4.3 C	<0.5	210	160	<0.5

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-2 cont.	1/15/2004	49.66	20.31	29.35	660 H	1.5 C	<0.5	8.9	25	<0.5
	5/25/2004	49.66	21.09	28.57	4,500	5.1 C	<0.5	190	230	0.70
	9/21/2004	52.41	21.71	30.70	370	0.76 C	<0.5	25	16	0.50
	12/14/2004	52.41	21.20	31.21	880	1.0	<0.5	66	52	<0.5
	3/11/2005	52.41	19.15	33.26	564	<0.5	<0.5	21	11.9	<0.5
	6/15/2005	52.41	20.30	32.11	2,040	1.2	<2.0	78.2	22	<0.5
	8/26/2005	52.41	20.97	31.44	1,500	0.930	<2.00	87.6	21	0.86
	11/11/2005	52.41	25.30	27.11	2,140	1.08	<2.0	104	29	0.79
	2/9/2006	52.41	19.41	33.00	1,410	<0.5	<2.0	99.6	21.4	0.72
	5/9/2006	52.41	19.41	33.00	1,100	<0.5	<2.0	86.5	17	<0.5
	8/10/2006	52.41	20.8	31.61	3,180	2.87	<2.0	88.9	24.8	<0.50
	10/26/2006	52.41	21.22	31.19	1,200	<0.5	<2.0	23.5	4.79	0.6
	1/25/2007	52.41	20.89	31.52	623	0.64	<2.0	42.4	4.37	0.66
	4/26/2007	52.41	20.65	31.76	169	<0.5	<2.0	15.2	2.3	<0.5
	7/25/2007	52.41	21.43	30.98	276	0.78	<2.0	22.1	4.04	<0.5
	10/23/2007	52.41	21.59	30.82	535	<0.5	<2.0	18	5.11	<0.5
	1/22/2008	52.31	20.45	31.86	132	<0.5	<2.0	12.2	<2.0	<0.5
	4/15/2008	52.41	20.89	31.52	852	<0.5	<2.0	27.2	4.78	<0.5
	7/2/2008	52.41	21.5	30.91	98.3	<0.5	<2.0	2.76	<2.0	<0.5
	10/15/2008	52.41	22.06	30.35	1,400 ^Y	<0.5	<0.5	60	17	<0.5
	1/7/2009	52.41	21.35	31.06	93	<0.5	<0.5	2.1	0.74	<0.5
	4/13/2009	52.41	20.52	31.89	480 ^Y	<0.5	<0.5	20	5.5	<0.5
	8/27/2009	52.41	21.85	30.56	130	<0.5	<0.5	2.5	0.61	<0.5
	12/1/2009	52.41	21.59	30.82	760 ^Y	<0.5	<0.5	14	1.5	<0.5
	3/17/2010	52.41	20.11	32.30	480	<0.5	<0.5	30	6.9	<0.5
	6/3/2010	52.41	21	31.41	690	<0.5	<0.5	14	2.6	<0.5
	9/2/2010	52.41	21.42	30.99	470	<0.5	<0.5	7.6	1	<0.5
	12/2/2010	52.41	21.44	30.97	470	<0.5	<0.5	7.6	3.3	<0.5

Table 1
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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-2 cont.	3/4/2011	52.41	19.65	32.76	240	<0.5	<0.5	6.6	0.8	<0.5
	5/20/2011	52.41	20.75	31.66	310	<0.5	<0.5	4.8	<0.5	<0.5
	9/9/2011	52.41	21.05	31.36	1,000	<0.5	<0.5	12	0.76	<0.5
	12/2/2011	52.41	20.14	32.27	900 ^x	<2.9	<1.7	14	1.9	<3.3
	3/2/2012	52.41	19.98	32.43	880	<0.5	<0.5	5.3	0.58	<0.5
	6/7/2012	52.41	21.04	31.37	720	<0.5	<0.5	7.9	0.79	<0.5
MW-3	5/10/2002	51.16	22.28	28.88	44,000	6,000	900	1,500	6,200	2,400
	8/8/2002	51.16	22.88	28.28	40,000	5,800	1,100	1,600	6,500	1,300
	11/8/2002	51.16	23.19	27.97	47,000	5,300	1,200	2,200	8,600	1,000
	2/21/2003	51.16	22.02	29.14	39,000	5,500	1,500	2,000	8,600	1,300
	5/28/2003	51.16	21.89	29.27	52,000	7,300	3,000	2,800	12,700	2,100
	8/12/2003	51.16	22.66	28.50	31,000	6,100	860	1,500	6,900	1,200
	10/9/2003	51.16	23.06	28.10	41,000	6,100	1,100	2,200	10,200	960
	1/15/2004	51.16	21.85	29.31	51,000	4,100	1,100	2,000	8,400	590
	5/25/2004	51.16	22.55	28.61	65,000	4,300	1,300	2,500	10,500	720
	9/21/2004	53.91	23.08	30.83	42,000	4,900	890	2,200	8,700	480
	12/14/2004	53.91	22.52	31.39	35,151	4,066	972	2,942	13,032	491
	3/11/2005	53.91	20.90	33.01	42,600	3,040	1,100	1,530	6,670	968
	6/15/2005	53.91	21.85	32.06	84,100	5,110	2,160	3,030	8,800	2,670
	8/26/2005	53.91	22.49	31.42	43,500	3,630	1,080	2,500	6,830	1,440
	11/11/2005	53.91	22.81	31.10	47,700	4,240	520	2,170	6,320	1,390
	2/9/2006	53.91	21.12	32.79	44,500	5,070	1360	1,920	4,840	3,280
5/9/2006	53.91	21.09	32.82	48,100	2,510	1,140	1,950	5,030	2,210	
8/10/2006	53.91	22.26	31.65	42,100	3,450	869	1,760	5,650	3,570	
10/26/2006	53.91	22.73	31.18	33,400	4,800	331	1,170	3,510	4,790	

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MW-3 cont.	1/25/2007	53.91	22.34	31.57	19,300	4,820	167	1,540	3,740	3,430
	4/26/2007	53.91	22.24	31.67	30,700	2,350	158	1,470	4,320	1,330
	7/25/2007	53.91	22.83	31.08	34,900	5,400	364	2,080	6,360	1,980
	10/23/2007	53.91	23.01	30.9	22,600	4,070	<86	1,120	3,095	970
	1/22/2008	53.96	22.04	31.92	22,100	1,280	453	1,330	3,520	490
	4/16/2008	53.91	22.4	31.51	20,700	2,790	182	860	3,389	263
	7/3/2008	53.91	22.9	31.01	48,500	3,760	346	3,130	12,980	573
	10/16/2008	53.91	23.36	30.55	50,000	3,900	300	3,100	11,000	460
	1/8/2009	53.91	22.82	31.09	54,000	2,600	180	2,500	8,800	220
	4/13/2009	53.91	22.06	31.85	49,000	2,900	170	2,100	8,100	490
	8/27/2009	53.91	23.11	30.80	43,000	2,500	160	1,900	7,000	210
	12/2/2009	53.91	23.00	30.91	30,000	2,100	180	1,600	5,600	91
	3/17/2010	53.91	21.90	32.01	24,000	970	81	1,100	3,700	38
	6/3/2010	53.91	22.49	31.42	31,000	1,200	110	1,300	4,400	34
	9/2/2010	53.91	22.76	31.15	26,000	1,100	81	1,200	3,810	26
	12/2/2010	53.91	22.86	31.05	18,000	830	47	780	2,360	14
	3/4/2011	53.91	21.44	32.47	18,000	410	32	850	2,480	16
	5/20/2011	53.91	22.36	31.55	12,000	710	24	620	1,460	11
	9/9/2011	53.91	22.44	31.47	11,000	1,100	26	580	1,430	7.8
	12/2/2011	53.91	21.60	32.31	5,100 ^x	280	12	370	740	<1.7
3/2/2012	53.91	22.39	31.52	13,000	440	23	690	1,570	<5.0	
	6/7/2012	53.91	22.50	31.41	9,000	290	9.3	520	900	<5.0
MW-4	5/10/2002	50.54	21.78	28.76	880	25	1.0C	110	52	12,000
	8/8/2002	50.54	22.50	28.04	3,800	70	<5.0	300	115	4,800
	11/8/2002	50.54	22.81	27.73	5,100	150	10	460	258	2,400

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Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-4 cont.	2/21/2003	50.54	21.48	29.06	3,200	98	66	220	360	6,600
	5/28/2003	50.54	21.24	29.30	6,200	140	46	200	790	2,300
	8/12/2003	50.54	22.32	28.22	7,500	180	57	220	1450	1,900
	10/9/2003	50.54	22.74	27.80	5,800	250	32	300	970	7,800
	1/15/2004	50.54	21.19	29.35	5,900	270	17 C	150	640	7,300
	5/25/2004	50.54	22.03	28.51	9,100	210	51	200	1190	1800
	9/21/2004	53.31	22.76	30.55	5,200	290	12	370	600	7300
	12/14/2004	53.31	21.99	31.32	8,937	538	114	416	2379	5021
	3/11/2005	53.31	20.01	33.30	12,300	225	39.6	80.1	1465	3870
	6/15/2005	53.31	21.25	32.06	7,690	114	32.6	77.1	555	1150
	8/26/2005	53.31	22.03	31.28	8,850	175	24.6	150	851	1380
	11/11/2005	53.31	22.43	30.88	9,990	356	<43	196	700	3,640
	2/9/2006	53.31	20.31	33.00	6,850	205	<43	67.2	255.2	5,120
	5/9/2006	53.31	20.33	32.98	1,290	18.1	<8.6	12.9	25.87	799
	8/10/2006	53.31	21.74	31.57	7,830	118	<8.60	25.3	174.6	919
	10/26/2006	53.31	22.29	31.02	1,540	81.9	<43	96	46.4	3,610
	1/25/2007	53.31	21.86	31.45	4,370	163	<8.6	85.1	269.1	1,050
	4/26/2007	53.31	21.63	31.68	4,380	140	<8.6	67	276.8	576
	7/25/2007	53.31	22.49	30.82	4,970	220	<8.60	198	241.5	1,040
	10/23/2007	53.31	22.69	30.62	4,200	267	<8.6	147	155.5	1,220
	1/22/2008	53.36	21.39	31.97	2,180	133	<22.0	43.1	32.2	1,800
	4/15/2008	53.31	21.9	31.41	4,240	90.4	<22.0	107	380	674
	7/2/2008	53.31	22.55	30.76	2,300	193	<22.0	212	183	4,050
	10/16/2008	53.31	23.13	30.18	8,900	320	3.7	430	1,160	450
	1/8/2009	53.31	22.42	30.89	19,000	430	44	590	3,380	440
	4/13/2009	53.31	21.51	31.80	21,000	400	38	450	2,880	330
	8/27/2009	53.31	22.94	30.37	16,000	960	64	560	2,120	290
	12/2/2009	53.31	22.36	30.95	4,400	480	6	170	640	110

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MW-4 cont.	3/17/2010	53.31	21.39	31.92	14,000	260	6	230	1,220	93	
	6/3/2010	53.31	22.23	31.08	18,000	240	4	310	770	41	
	9/2/2010	53.31	22.51	30.80	1,800	800	<3.6	150	25	33	
	12/2/2010	53.31	22.71	30.60	3,800	1,500	<10	200	115	29	
	3/3/2011	53.31	20.64	32.67	2,400	28	<0.71	28	17	3	
	5/19/2011	53.31	21.84	31.47	1,800	27	<0.5	29	11.2	4.8	
	9/8/2011	53.31	22.11	31.20	3,600	300	2.6	270	68.5	59	
	12/1/2011	53.31	21.38	31.93	1,400 ^x	370	<0.84	110	30.6	110	
	3/2/2012	53.31	22.02	31.29	3,100	780	<2.0	150	59.6	50	
	6/7/2012	53.31	22.24	31.07	2,000	290	<2.5	66	23.0	29	
	MW-5	5/10/2002	47.79	19.02	28.77	25,000	1,000	1200	1,100	3,060	1,800
		8/8/2002	47.79	19.80	27.99	18,000	1,000	660	950	1,720	1,500
11/8/2002		47.79	20.14	27.65	16,000	1,300	380	930	1,550	1,200	
2/21/2003		47.79	18.70	29.09	12,000	390	71	770	1,100	860	
5/28/2003		47.79	18.52	29.27	9,100	210	31	560	790	600	
8/12/2003		47.79	19.54	28.25	12,000	660	75	660	1,110	1,000	
10/9/2003		47.79	20.06	27.73	15,000	1,000	130	1,000	1,430	1,700	
1/15/2004		47.79	18.42	29.37	9,900	450 C	16	500	431	1,100	
5/25/2004		47.79	19.30	28.49	9,200	380	24	490	536	720	
9/21/2004		50.53	20.15	30.38	10,000	980	71	560	770	1200	
12/14/2004		50.53	19.30	31.23	10,502	587	64	1040	1133	1015	
3/11/2005		50.53	17.20	33.33	8,390	407	<5.5	83	42.5	1530	
6/15/2005		50.53	18.54	31.99	9,350	147	18.3	435	146.2	573	
8/26/2005		50.53	19.31	31.22	9,500	261	<22	726	321.3	749	
11/11/2005		50.53	19.75	30.78	10,000	443	41.5	527	278.5	1,430	

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Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-5 cont.	2/9/2006	50.53	17.58	32.95	7,640	237	<22	187	50.2	2,050
	5/9/2006	50.53	17.54	32.99	8,360	111	<8.6	300	75.84	566
	8/10/2006	50.53	19.02	31.51	16,100	250	<22	455	187.4	1,590
	10/26/2006	50.53	19.61	30.92	10,100	430	<22	375	192.6	3,060
	1/25/2007	50.53	19.19	31.34	3,960	340	<22	323	150.1	1,740
	4/26/2007	50.53	18.89	31.64	4,590	187	<8.6	307	116.5	861
	7/25/2007	50.53	19.81	30.72	6,490	419	21.8	413	223.2	913
	10/23/2007	50.53	19.98	30.55	6,120	550	11	284	141.4	433
	1/22/2008	50.18	18.69	31.49	9,810	572	22	574	184.1	126
	4/15/2008	50.18	19.16	31.02	8,890	335	15.1	477	397.5	136
	7/3/2008	50.53	19.88	30.65	13,100	949	34.4	875	825.5	176
	10/16/2008	50.53	20.45	30.08	11,000	870	25	820	668	160
	1/8/2009	50.53	19.72	30.81	12,000	490	21	690	456	76
	4/13/2009	50.53	18.81	31.72	9,000 ^Y	200	11	390	198	44
	8/27/2009	50.53	21.30	29.23	7,400	610	15	320	185	66
	12/2/2009	50.53	20.00	30.53	8,400 ^Y	400	12	540	296	45
Pre-MPE	3/17/2010	50.53	18.73	31.80	4,800	120	8.7	120	107	14
	6/4/2010	50.53	19.60	30.93	7,200	160	5.7	190	149.2	24
	9/2/2010	50.53	19.82	30.71	9,200	110	12	270	318	35
	12/2/2010	50.53	20.10	30.43	9,100	170	6.7	350	442	23
	3/4/2011	50.53	18.00	32.53	2,600	18	0.62	54	18.1	3
	5/20/2011	50.53	19.18	31.35	4,000	91	8.5	110	106	33
	8/4/2011	50.53	NM	NC	3,000	23	0.95	92	43.7	5.4
	9/9/2011	50.53	19.41	31.12	4,200	120	2.8	140	61.1	22
	12/2/2011	50.53	18.59	31.94	6,900 ^X	96	12	220	104	32
	3/2/2012	50.53	19.30	31.23	5,400	43	1.8	110	85	7
	6/7/2012	50.53	19.45	31.08	3,700	32	<1.0	100	59	4.4

Table 1
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-6	9/21/2004	45.82	17.64	28.18	34,000	150	130	2200	8100	0.6
	12/14/2004	45.82	15.75	30.07	5,161	137	7	436	1136	<5.5
	3/11/2005	45.82	13.80	32.02	6,040	125	3.22	260	722.1	4.94
	6/15/2005	45.82	14.78	31.04	5,590	44.3	6.60	272	382	5.85
	8/26/2005	45.82	15.91	29.91	6,130	99	<8.6	378	492.9	5.66
	11/11/2005	45.82	16.55	29.27	11,400	101	<8.6	645	834.7	4.33
	2/9/2006	45.82	13.92	31.90	2,790	32.3	<8.6	131	131.22	7.30
	5/9/2006	45.82	13.95	31.87	3,730	25	<2.0	213	207.82	5.87
	8/10/2006	45.82	15.28	30.54	4,800	41.9	<2.0	201	189	10.4
	10/26/2006	45.82	16.11	29.71	6,080	37.4	<2.0	116	183	9.78
	1/25/2007	45.82	15.76	30.06	3,220	25.2	<2.0	219	174	14.7
	4/26/2007	45.82	15.18	30.64	3,110	28	<2.0	165	138.47	14.6
	7/25/2007	45.82	16.82	29.00	4,960	54.1	<2.0	199	255.87	8.05
	10/23/2007	45.82	16.91	28.91	9,610	64.3	<2.0	188	302.6	5.81
	1/21/2008	45.82	15.36	30.46	3,290	33	<2.0	149	131.31	3.86
	4/15/2008	45.82	15.73	30.09	2,070	10.8	<2.0	51.1	67	<0.5
	7/2/2008	45.82	16.9	28.92	7,900	42.4	<2.0	194	296	3.58
	10/15/2008	45.82	17.21	28.61	18,000 ^Y	42	1.4	320	673	1.7
	1/7/2009	45.82	17.08	28.74	13,000	47	<3.1	210	425	<3.1
	4/13/2009	45.82	15.52	30.30	7,200 ^Y	26	<1.3	170	312.6	2.6
8/26/2009	45.82	17.82	28.00	10,000 ^Y	25	<2.0	130	294	2.2	
12/1/2009	45.82	17.34	28.48	11,000 ^Y	31	6.1	220	539	<2.0	
3/16/2010	45.82	14.81	31.01	31,000	63	140	970	4,200	64	
6/3/2010	45.82	15.72	30.10	27,000	22	67	840	3,100	32	
9/1/2010	45.82	16.86	28.96	33,000	24	34	1,100	3,780	12	
12/2/2010	45.82	16.98	28.84	70,000	32	55	1,700	5,670	18	

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-6 cont.	3/3/2011	45.82	14.35	31.47	7,000	18	<2.5	97	237	11
	5/20/2011	45.82	14.95	30.87	14,000	14	<2.5	300	823	7.2
	9/8/2011	45.82	16.14	29.68	23,000	28	<2.5	360	812	3.4
	12/1/2011	45.82	16.17	29.65	NA	NA	NA	NA	NA	NA
	3/2/2012	45.82	16.11	29.71	14,000	23	<4.2	400	694.4	<4.2
	6/6/2012	45.82	16.31	29.51	9,200	12	<1.7	210	320	<1.7
MW-7	9/21/2004	44.74	15.21	29.53	2,900	<0.5	<0.5	52	61	8.1
	12/14/2004	44.74	13.90	30.84	<50	1.6	<0.5	29	58	6.0
	3/11/2005	44.74	11.46	33.28	2,230	<2.5	<2.5	39.4	51.4	12.4
	6/15/2005	44.74	12.97	31.77	2,940	0.85	<2.0	50.6	31.9	13.7
	8/26/2005	44.74	14.10	30.64	2,310	<0.50	<2.0	55.7	29.6	4.01
	11/11/2005	44.74	14.59	30.15	3,030	<0.5	<2.0	66.5	42.3	9.76
	2/9/2006	44.74	NM	NM	NA	NA	NA	NA	NA	NA
	5/9/2006	44.74	12.02	32.72	1,400	<0.5	<2.0	19.8	12.4	2.30
	8/10/2006	44.74	13.72	31.02	604	<0.50	<2.0	6.2	4.63	1.42
	10/26/2006	44.74	14.38	30.36	1350	<0.50	<2.0	16.6	10.8	1.87
	1/25/2007	44.74	13.93	30.81	340	<0.5	<2.0	6.84	2.44	1.63
	4/26/2007	44.74	14.44	30.30	552	<0.5	<2.0	11.4	6.11	4.12
	7/25/2007	44.74	14.79	29.95	1,230	<0.5	<2.0	27	19.24	3.2
	10/23/2007	44.74	14.88	29.86	1,730	0.67	<2.0	20.7	17.31	8.44
	1/21/2008	44.74	13.34	31.40	610	1.15	<2.0	8.4	4.34	17.2
	4/15/2008	44.74	13.91	30.83	1,460	<0.5	<2.0	15.9	19.7	17.3
	7/2/2008	44.74	14.87	29.87	1,450	<0.5	<2.0	11	6.8	22.1
	10/15/2008	44.74	15.68	29.06	1,900 ^Y	0.56	1.2	27	39.5	55
	1/7/2009	44.74	14.72	30.02	2,700	1.2	2.9	11	25	39
	4/13/2009	44.74	13.54	31.20	2,300 ^Y	<0.5	<0.5	15	6.3	63
8/26/2009	44.74	15.84	28.90	2,700 ^Y	<0.5	<0.5	48	53	140	
12/1/2009	44.74	15.03	29.71	1,800 ^Y	<0.5	<0.5	22	15	120	

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)	
MW-7 cont.	3/16/2010	44.74	12.56	32.18	1,100	<0.5	<0.5	3.2	1.4	65	
	6/3/2010	44.74	13.80	30.94	740	<0.5	<0.5	1.8	0.62	28	
	9/1/2010	44.74	14.84	29.90	1,200	<0.5	<0.5	10	3.2	29	
	12/2/2010	44.74	14.74	30.00	1,400	<0.5	<0.5	8	0.74	21	
	3/3/2011	44.74	13.31	31.43	1,000	<0.5	<0.5	1.8	<0.5	16	
	5/19/2011	44.74	13.43	31.31	810	<0.5	<0.5	2.2	0.79	7.8	
	9/8/2011	44.74	14.38	30.36	1,000	<0.5	<0.5	8.3	2.9	5.4	
	12/1/2011	44.74	13.57	31.17	1,500 ^x	<0.33	<0.19	12	5.7	13	
	3/2/2012	44.74	14.16	30.58	1,000	<0.5	<0.5	4	1.1	5.1	
	6/6/2012	44.74	14.00	30.74	780	<0.5	<0.5	2.9	1.0	2.6	
	MW-8	9/21/2004	41.14	12.98	28.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5
		12/14/2004	41.14	11.22	29.92	<50	<0.5	<0.5	<0.5	<1.0	<0.5
3/11/2005		41.14	NM	NM	NA	NA	NA	NA	NA	NA	
6/15/2005		41.14	10.46	30.68	<200	0.53	<2.0	<0.5	<1.0	<0.5	
8/26/2005		41.14	11.53	29.61	<50	<0.50	<2.0	<0.50	<1.0	<0.50	
11/11/2005		41.14	11.92	29.22	<50	<0.5	<2.0	1.36	1.8	<0.5	
2/9/2006		41.14	9.74	31.40	<50	<0.50	<2.0	<0.50	<1.0	<0.50	
5/9/2006		41.14	9.90	31.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50	
8/10/2006		41.14	10.9	30.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50	
10/26/2006		41.14	11.68	29.46	<50	<0.50	<2.0	3.37	<1.0	<0.50	
1/25/2007		41.14	11.44	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5	
4/26/2007		41.14	10.81	30.33	<50	<0.5	<2.0	4.29	<2.0	<0.5	
7/25/2007		41.14	12.31	28.83	<50	<0.5	<2.0	4.39	<2.0	<0.5	
10/23/2007		41.14	12.37	28.77	<50	<0.5	<2.0	4.31	<2.0	<0.5	
1/21/2008		41.14	11.02	30.12	<50	<0.5	<2.0	<0.5	<2.0	<0.5	
4/15/2008		41.14	11.44	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5	
7/2/2008	41.14	12.39	28.75	94.8	<0.5	<2.0	1	<2.0	<0.5		
10/15/2008	41.14	13.42	27.72	<50	<0.5	<0.5	<0.5	<0.5	<0.5		

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15101 Freedom Avenue, San Leandro, CA

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MW-8 cont.	1/7/2009	41.14	12.50	28.64	<50	<0.5	<0.5	<0.5	0.6	<0.5
	4/13/2009	41.14	11.23	29.91	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	41.14	13.24	27.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Well Decommissioned 11/13/2009										
MW-9	9/21/2004	40.26	12.18	28.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	40.26	10.91	29.35	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	40.26	10.52	29.74	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	6/15/2005	40.26	14.73	25.53	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	8/26/2005	40.26	10.59	29.67	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	40.26	11.25	29.01	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	2/9/2006	40.26	10.05	30.21	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	40.26	9.06	31.20	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	40.26	10.01	30.25	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	40.26	10.81	29.45	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	1/25/2007	40.26	10.67	29.59	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	40.26	10.05	30.21	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/25/2007	40.26	11.44	28.82	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/23/2007	40.26	11.59	28.67	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/21/2008	40.26	10.37	29.89	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	40.26	10.56	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	40.26	11.95	28.31	161	<0.5	<2.0	2.15	<2.0	<0.5
	10/15/2008	40.26	12.64	27.62	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	40.26	11.75	28.51	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	40.26	10.89	29.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/26/2009	40.26	12.50	27.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
Well Decommissioned 11/13/2009										

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Extraction Wells											
EX-1	12/2/2009	47.36	17.02	30.34	2,900	120	4	64	410	25	
	3/16/2010	47.36	19.08	28.28	2,200	150	18	94	326	210	
	6/3/2010	47.36	17.02	30.34	3,600	180	6.3	150	428	83	
	9/1/2010	47.36	16.88	30.48	550	6.5	0.5	6.9	31.7	38	
	12/2/2010	47.36	19.84	27.52	<200	3.1	<2.0	<2.0	<2.0	210	
	3/3/2011	47.36	14.96	32.4	530	51	0.94	15	31.3	110	
	5/19/2011	47.36	16.12	31.24	370	42	<0.71	7.6	17.2	110	
	9/8/2011	47.36	16.47	30.89	110	5	<0.5	2.2	6.4	12	
	12/1/2011	47.36	16.1	31.26	780 ^x	91	3	29	85	150	
	3/2/2012	47.36	16.35	31.01	140	6	<0.5	3.5	8	14	
	6/6/2012	47.36	24.76	22.6	250	22	<0.5	4.7	20	71	
	EX-2	12/2/2009	45.96	17.56	28.4	7,100 ^y	9.3	3.2	440	770	<3.1
		3/16/2010	45.96	19.65	26.31	13,000	600	360	770	2,250	15
6/3/2010		45.96	17.10	28.86	16,000	590	400	700	2,500	9.5	
9/1/2010		45.96	16.99	28.97	6,100	230	74	200	890	11	
12/2/2010		45.96	20.87	25.09	14,000	510	270	640	2,170	15	
3/3/2011		45.96	14.61	31.35	8,600	340	52	460	1,350	13	
5/19/2011		45.96	15.08	30.88	7,500	260	65	390	1,080	11	
9/8/2011		45.96	16.34	29.62	3,400	190	28	160	451	5.4	
12/1/2011		45.96	22.60	23.36	9,900 ^x	630	200	690	1,760	<3.3	
3/2/2012		45.96	16.48	29.48	5,000	220	25	200	600	7.1	
6/6/2012		45.96	18.90	27.06	6,900	290	97	310	790	5.2	
MPE Wells											
MPE-1		12/1/2009	51.96	21.41	30.55	NA	NA	NA	NA	NA	NA

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15101 Freedom Avenue, San Leandro, CA

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MPE-1 cont.	3/16/2010	51.96	20.22	31.74	NA	NA	NA	NA	NA	NA	
	6/3/2010	51.96	21.18	30.78	NA	NA	NA	NA	NA	NA	
	9/1/2010	51.96	21.25	30.71	NA	NA	NA	NA	NA	NA	
	12/2/2010	51.96	21.64	30.32	NA	NA	NA	NA	NA	NA	
Pre-MPE	3/3/2011	51.96	19.33	32.63	NA	NA	NA	NA	NA	NA	
	5/19/2011	51.96	20.6	31.36	NA	NA	NA	NA	NA	NA	
	8/4/2011	51.96	NM	NC	49,000	210	100	840	7,070	45	
Post-MPE	9/8/2011	51.96	20.83	31.13	NA	NA	NA	NA	NA	NA	
	9/26/2011	51.96	20.94	31.02	62,000	6,300	3,700	1,800	9,400	1,200	
	12/2/2011	51.96	20.14	31.82	56,000	9,000	7,700	2,200	10,800	2,600	
	3/2/2012	51.96	20.73	31.23	97,000	11,000	11,000	2,600	12,600	2,700	
	6/6/2012	51.96	20.96	31.00	78,000	4,500	4,900	2,300	10,700	750	
 											
MPE-2	12/1/2009	53.72	22.87	30.85	NA	NA	NA	NA	NA	NA	
	3/16/2010	53.72	21.7	32.02	NA	NA	NA	NA	NA	NA	
	6/3/2010	53.72	22.35	31.37	NA	NA	NA	NA	NA	NA	
	9/1/2010	53.72	23.7	30.02	NA	NA	NA	NA	NA	NA	
	12/2/2010	53.72	22.7	31.02	NA	NA	NA	NA	NA	NA	
	Pre-MPE	3/3/2011	53.72	21.25	32.47	NA	NA	NA	NA	NA	NA
		5/19/2011	53.72	22.19	31.53	NA	NA	NA	NA	NA	NA
		8/4/2011	53.72	NM	NC	46,000	2,100	80	1,900	5,300	75
	Post-MPE	9/8/2011	53.72	22.31	31.41	NA	NA	NA	NA	NA	NA
		9/26/2011	53.72	22.38	31.34	37,000	1,800	33	1,700	2,760	<17
		12/2/2011	53.72	21.44	32.28	26,000	1,600	43	1,800	3,370	<17
		3/2/2012	53.72	22.24	31.48	36,000	1,100	19	1,700	2,970	<17
		6/7/2012	53.72	22.35	31.37	33,000	1,800	27	1,600	2,700	29

Table 1
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
2nd WBZ										
MW-1D	1/3/2008	54.42		-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	54.42	22.85	31.57	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	4/16/2008	54.42	23.10	31.32	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/3/2008	54.42	23.44	30.98	75.9	<0.5	<2.0	0.54	<2.0	<0.5
	10/15/2008	54.42	23.82	30.60	120	1.6	<0.5	2.8	3.6	<0.5
	1/8/2009	54.42	23.44	30.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	54.42	23.06	31.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	54.42	23.73	30.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	54.42	23.59	30.83	330 ^Y	<0.5	<0.5	1.3	2.2	<0.5
	3/16/2010	54.42	22.60	31.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	54.42	23.10	31.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	54.42	23.51	30.91	<50	<0.5	<0.5	0.52	1.8	<0.5
	12/3/2010	54.42	23.41	31.01	61	<0.5	<0.5	1.0	3.73	<0.5
	3/3/2011	54.42	22.27	32.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	54.42	22.89	31.53	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	54.42	23.08	31.34	220	<0.5	<0.5	0.6	1.4	<0.5
	12/1/2011	54.42	22.26	32.16	<22	<0.33	<0.19	<0.15	<0.20	<0.38
3/2/2012	54.42	23.01	31.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
6/6/2012	54.42	23.18	31.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-3D	1/3/2008	54.10		-	<50	<0.50	<2.0	<0.50	<2.0	87.6
	1/22/2008	54.10	22.31	31.79	<50	<0.50	<2.0	<0.50	<2.0	88.3
	4/16/2008	54.10	22.64	31.46	<50	<0.5	<2.0	<0.5	<2.0	71.1
	7/3/2008	54.10	23.17	30.93	<50	<0.5	<2.0	<0.5	<2.0	67.4
	10/16/2008	54.10	23.62	30.48	<50	<0.5	<0.5	<0.5	<0.5	37
	1/8/2009	54.10	23.07	31.03	<50	<0.5	<0.5	<0.5	<0.5	29
	4/14/2009	54.10	22.36	31.74	<50	<0.5	<0.5	<0.5	<0.5	44
	8/26/2009	54.10	23.41	30.69	<50	<0.5	<0.5	<0.5	<0.5	20
	12/1/2009	54.10	23.27	30.83	110 ^Y	<0.5	<0.5	<0.5	0.52	24

Table 1
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Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-3D cont.	3/16/2010	54.10	22.10	32.00	<50	<0.5	<0.5	<0.5	<0.5	7.1
	6/4/2010	54.10	22.70	31.40	<50	<0.5	<0.5	<0.5	<0.5	17
	9/1/2010	54.10	23.09	31.01	78	<0.5	<0.5	1.1	4.71	24
	12/3/2010	54.10	22.90	31.20	<50	<0.5	<0.5	0.56	1.4	13
	3/3/2011	54.10	21.66	32.44	<50	1.3	<0.5	<0.5	0.59	14
	5/19/2011	54.10	22.61	31.49	<50	<0.5	<0.5	<0.5	<0.5	5.2
	9/8/2011	54.10	22.68	31.42	69	<0.5	<0.5	<0.5	0.62	4.8
	12/1/2011	54.10	22.86	31.24	<22	<0.33	<0.19	<0.15	<0.20	10
	3/2/2012	54.10	22.60	31.50	<50	<0.5	<0.5	<0.5	<0.5	4.2
	6/6/2012	54.10	22.77	31.33	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4D	1/4/2008	53.12		-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	53.12	21.11	32.01	91.5	18.7	<2.0	7.08	11.42	219
	4/15/2008	53.12	21.67	31.45	<50	<0.5	<2.0	<0.5	<2.0	27
	7/3/2008	53.12	22.39	30.73	<50	<0.5	<2.0	<0.5	<2.0	6.27
	10/16/2008	53.12	22.98	30.14	<50	<0.5	<0.5	<0.5	<0.5	1.9
	1/8/2009	53.12	22.25	30.87	<50	<0.5	<0.5	<0.5	<0.5	2
	4/14/2009	53.12	21.34	31.78	<50	<0.5	<0.5	<0.5	<0.5	2.2
	8/27/2009	53.12	22.79	30.33	<50	<0.5	<0.5	<0.5	<0.5	2.2
	12/1/2009	53.12	22.49	30.63	120 ^Y	<0.5	<0.5	1.4	2.3	2.3
	3/16/2010	53.12	21.02	32.10	<50	<0.5	<0.5	<0.5	<0.5	0.65
	6/4/2010	53.12	21.93	31.19	<50	<0.5	<0.5	<0.5	<0.5	1.1
	9/1/2010	53.12	23.32	29.80	<50	<0.5	<0.5	0.85	3.76	2.2
	12/3/2010	53.12	22.46	30.66	<50	<0.5	<0.5	<0.5	0.67	<0.5
	3/3/2011	53.12	20.45	32.67	<50	<0.5	<0.5	<0.5	<0.5	0.58
	5/19/2011	53.12	21.57	31.55	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	53.12	21.92	31.20	59	<0.5	<0.5	<0.5	0.51	1.7
	12/1/2011	53.12	21.19	31.93	<22	<0.33	<0.19	<0.15	<0.20	4.2
	3/2/2012	53.12	21.8	31.32	<50	<0.5	<0.5	0.85	1.2	2.7
	6/6/2012	53.12	22.00	31.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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1573 153 RD	7/2/2008	NS	NM	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2008	NS	NM	NC	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Equipment Blanks										
EB-PMP	1/21/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB	1/21/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PMP2	1/22/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB2	1/22/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
ESL (ug/L)	-	-	-	-	100	1	40	30	20	5

Notes:

The first time SOMA monitored this Site was in May 2002.

*: Due to minimal recharge rates in well MW-2, the groundwater elevation recorded on these dates did not match the overall site conditions, May 2002 & August 2003.

NC: Not Calculated

¹ : Top of casing elevations were surveyed to a datum of 67.07 M.S.L by Kier & Wright Civil Engineers & Land Surveyors on May 7, 2002.

On October 11, 2004, the site was re-surveyed by Harrington Surveys, Inc. of Walnut Creek, CA to a datum of California Coordinate System, Zone 3, NAD 83.

² MtBE analyzed by EPA Method 8021B, and confirmed by EPA Method 8260B.

<: Not detected above the laboratory reporting limit.

Y: Sample exhibits chromatographic pattern which does not resemble standard

o Presence confirmed, but confirmation concentration differed by more than a factor of two.

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

H: Heavier hydrocarbons contributed to the quantitation.

x: Does not match pattern of reference Gasoline Standard. Hydrocarbons in the range of C5-C12 quantified as gasoline (possibly aged gasoline)

NA: Not Analyzed. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.

Not Analyzed. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

NM: Not Measured. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.

Not Measured. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

The first time SOMA monitored wells MW-6 to MW-9 was in September 2004.

EB-PMP/EB-PRB: Equipment Blanks for Pump and Probe

ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008);

Table F-1a, Groundwater Screening Levels (groundwater is a current or potential drinking water resource)

MW-8 and MW-9 were decommissioned November 13, 2009

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
1st WBZ							
MW-1	8/8/2002	78	<1.3	<1.3	<1.3	NA	NA
	11/1/2002	42	< 1.0	< 1.0	< 1.0	NA	NA
	2/21/2003	47	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	25	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	<10	<0.5	<0.5	<0.5	NA	NA
	10/9/2003	70	<1.0	<1.0	<1.0	NA	NA
	1/15/2004	55	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	62	<0.7	<0.7	<0.7	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<21.5	<4.3	<4.3	<17.2	NA	NA
	3/11/2005	81	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	68.9	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	46	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	11.3	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	0.51	<0.5
	8/10/2006	<43	<2.15	<2.15	<8.60	3.37	<2.15
	10/26/2006	39.4	<1.0	<1.0	<4.0	2.92	<1.0
	1/25/2007	41.4	<0.5	<0.5	<2.0	1.36	<0.5
	4/26/2007	39.6	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	46.5	<1.0	<1.0	<4.0	<1.0	<1.0
	10/23/2007	53.7	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	23.8	<0.5	<0.5	2.16	<0.5	<0.5
	4/16/2008	8.36	<0.5	<0.5	<2.0	164	<0.5
	7/3/2008	30.5	<0.5	<0.5	<2.0	1.08	<0.5
	10/15/2008	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	1/7/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	4/14/2009	15	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/2/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	26	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
12/2/2010	<63	<3.1	<3.1	<3.1	<3.1	<3.1	
3/4/2011	40	<0.5	<0.5	<0.5	<0.5	<0.5	
5/20/2011	<71	<3.6	<3.6	<3.6	<3.6	<3.6	
9/9/2011	33	<1.3	<1.3	<1.3	<1.3	<1.3	
12/2/2011	49	<3.2	<3.5	<2.8	<2.4	<1.7	
3/2/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
6/7/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
MW-2							
MW-2	8/8/2002	21	<0.5	<0.5	<0.5	NA	NA
	11/1/2002	15	<0.5	<0.5	<0.5	NA	NA
	2/21/2003	12	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	31	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	69	<0.8	<0.8	<0.8	NA	NA
	10/9/2003	12	<0.5	<0.5	<0.5	NA	NA
	1/15/2004	<10	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	14	<0.5	<0.5	<0.5	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA

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MW-2 cont.	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	2.44	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/4/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
9/9/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
12/2/2011	<13	<3.2	<3.5	<2.8	<2.4	<1.7	
3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
6/7/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-3	8/8/2002	<330	<8.3	<8.3	330	NA	NA
	11/1/2002	85	< 1.3	<1.3	220	NA	NA
	2/21/2003	140	<5.0	<5.0	320	NA	NA
	5/28/2003	520	<10	<10	530	NA	NA
	8/12/2003	180	<4.2	<4.2	270	NA	NA
	10/9/2003	<170	<8.3	<8.3	200	NA	NA
	1/15/2004	<100	<5.0	<5.0	150	NA	NA
	5/25/2004	<100	<5.0	<5.0	270	NA	NA
	9/21/2004	<140	<7.1	<7.1	110	NA	NA
	12/14/2004	<100	<20	<20	154	NA	NA
	3/11/2005	<215	<43	<43	256	NA	NA
	6/15/2005	<215	<10.8	<10.8	374	NA	NA
	8/26/2005	699	<21.5	<21.5	277	NA	NA
	11/11/2005	<430	<21.5	<21.5	171	NA	NA
	2/9/2006	<430	<21.5	<21.5	620	NA	NA
	5/9/2006	367	<10.8	<10.8	594	<10.8	<10.8
	8/10/2006	365	<10.8	<10.8	727	<10.8	<10.8
	10/26/2006	591	<10.8	<10.8	899	<10.8	<10.8
	1/25/2007	711	<10.8	<10.8	768	<10.8	<10.8
	4/26/2007	690	<10.8	<10.8	369	<10.8	<10.8
	7/25/2007	1,340	<10.8	<10.8	565	<10.8	<10.8
	10/23/2007	1,050	<21.5	<21.5	301	<21.5	<21.5
	1/22/2008	373	<10.8	<10.8	170	<0.5	<0.5
	4/16/2008	881	<5.50	<5.50	<22.0	1,850	12.1
	7/3/2008	426	<10.8	<10.8	124	<10.8	<10.8
	10/16/2008	<400	<20	<20	<20	<20	<20
1/8/2009	<500	<25	<25	<25	<25	<25	
4/13/2009	<500	<25	<25	<25	<25	<25	
8/27/2009	<500	<25	<25	<25	<25	<25	
12/2/2009	270	<13	<13	<13	<13	<13	

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MW-3 cont.	3/17/2010	<250	<13	<13	<13	<13	<13
	6/3/2010	<250	<13	<13	<13	<13	<13
	9/2/2010	<250	<13	<13	<13	<13	<13
	12/2/2010	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	3/4/2011	<170	<8.3	<8.3	<8.3	<8.3	<8.3
	5/20/2011	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	9/9/2011	<140	<7.1	<7.1	<7.1	<7.1	<7.1
	12/2/2011	<6.6	<1.6	<1.7	<1.4	<1.2	<0.86
	3/2/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/7/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
MW-4	8/8/2002	1500	<17	<17	18	NA	NA
	11/1/2002	580	< 5.0	6	13	NA	NA
	2/21/2003	1600	<20	22	<20	NA	NA
	5/28/2003	690	<8.3	<8.3	17	NA	NA
	8/12/2003	550	<7.1	7.3	18	NA	NA
	10/9/2003	1400	<31	50	<31	NA	NA
	1/15/2004	1,300	<20	25	21	NA	NA
	5/25/2004	560	<8.3	<8.3	24	NA	NA
	9/21/2004	1,300	<50	<50	<50	NA	NA
	12/14/2004	826	<10.75	21	49	NA	NA
	3/11/2005	1,110	<10.8	12.1	<43	NA	NA
	6/15/2005	<110	<5.5	<5.5	22.9	NA	NA
	8/26/2005	902	<5.50	<5.50	37.4	NA	NA
	11/11/2005	884	<10.8	<10.8	<43	NA	NA
	2/9/2006	769	<10.8	16.4	45.6	NA	NA
	5/9/2006	405	<2.15	2.95	31.3	<2.15	<2.15
	8/10/2006	306	<2.15	<2.15	35.3	<2.15	<2.15
	10/26/2006	3430	<10.8	13.8	<43	<10.8	<10.8
	1/25/2007	822	<2.15	2.4	28	2.25	<2.15
	4/26/2007	556	<2.15	2.28	29.2	<2.15	<2.15
	7/25/2007	1,860	<2.15	9.94	24	<2.15	<2.15
	10/23/2007	3,400	<2.15	18.4	25.9	<2.15	<2.15
	1/22/2008	2,580	<5.50	64.7	<22	<0.5	<0.5
	4/15/2008	1,100	<5.50	11.7	<22	39.9	<5.50
	7/2/2008	8,720	<5.50	75.2	<22	<5.50	<5.50
	10/16/2008	700	<3.6	4.2	37	5.4	<3.6
	1/8/2009	1,500	<3.6	9.9	41	3.6	<3.6
	4/13/2009	1,100	<8.3	<8.3	28	<8.3	<8.3
	8/27/2009	4,900	<5.0	24	<5.0	<5.0	<5.0
	12/2/2009	6,800	<5.0	69	<5.0	<5.0	<5.0
	3/17/2010	1,900	<3.6	18	<3.6	<3.6	<3.6
	6/3/2010	930	<3.6	7.7	<3.6	<3.6	<3.6
9/2/2010	7,200	<3.6	57	<3.6	<3.6	<3.6	
12/2/2010	3,800	<10	30	<10	<10	<10	
3/3/2011	410	<0.71	3.2	<0.71	<0.71	<0.71	
5/19/2011	130	<0.5	1.4	<0.5	<0.5	<0.5	
9/8/2011	380	<0.5	3.5	<0.5	1.1	<0.5	
12/1/2011	790	<1.6	5.4	8.2	<1.2	<0.86	
3/2/2012	920	<2.0	5.9	24	<2.0	<2.0	
6/7/2012	1,000	<2.5	13	<2.5	<2.5	<2.5	
MW-5	8/8/2002	<250	<6.3	<6.3	510	NA	NA
	11/1/2002	66	< 2.0	< 2.0	560	NA	NA
	2/21/2003	<63	<3.1	<3.1	280	NA	NA
	5/28/2003	<33	<1.7	<1.7	110	NA	NA
	8/12/2003	130	<3.6	<3.6	270	NA	NA
	10/9/2003	<100	<5.0	<5.0	740	NA	NA
	1/15/2004	<63	<3.1	<3.1	300	NA	NA
	5/25/2004	<100	<5.0	<5.0	210	NA	NA
	9/21/2004	<130	<6.3	<6.3	550	NA	NA
	12/14/2004	40	<5.5	<5.5	444	NA	NA

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	
MW-5 cont.	3/11/2005	88.8	<5.5	<5.5	448	NA	NA	
	6/15/2005	<43	<2.15	<2.15	88.1	NA	NA	
	8/26/2005	274	<5.50	<5.50	195	NA	NA	
	11/11/2005	192	<5.50	<5.50	360	NA	NA	
	2/9/2006	218	<5.50	<5.50	523	NA	NA	
	5/9/2006	91.8	<2.15	<2.15	163	<2.15	<2.15	
	8/10/2006	138	<5.50	<5.50	342	<5.50	<5.50	
	10/26/2006	322	<5.50	<5.50	712	<5.50	<5.50	
	1/25/2007	878	<5.50	<5.50	552	<5.50	<5.50	
	4/26/2007	708	<2.15	<2.15	310	<2.15	<2.15	
	7/25/2007	1,020	<2.15	<2.15	356	<2.15	<2.15	
	10/23/2007	1,510	<2.15	<2.15	181	<2.15	<2.15	
	1/22/2008	470	<0.5	4.56	62.1	<0.5	<0.5	
	4/15/2008	566	<1.0	<1.0	29.6	231	5.66	
	7/3/2008	2,320	<2.15	<2.15	53.3	<2.15	<2.15	
	10/16/2008	990	<5.0	<5.0	82	<5.0	<5.0	
	1/8/2009	360	<6.3	<6.3	51	<6.3	<6.3	
	4/13/2009	280	<3.1	<3.1	<3.1	<3.1	<3.1	
	8/27/2009	1,300	<5.0	<5.0	<5.0	<5.0	<5.0	
	12/2/2009	320	<5.0	<5.0	25	<5.0	<5.0	
Pre- MPE	3/17/2010	570	<1.0	<1.0	<1.0	<1.0	<1.0	
	6/4/2010	340	<1.0	<1.0	<1.0	<1.0	<1.0	
	9/2/2010	320	<2.5	<2.5	13	<2.5	<2.5	
	12/2/2010	200	<3.1	<3.1	<3.1	<3.1	<3.1	
	3/4/2011	180	<0.5	<0.5	<0.5	<0.5	<0.5	
	5/20/2011	480	<1.0	<1.0	<1.0	<1.0	<1.0	
	8/4/2011	110	<0.71	<0.71	2.6	<0.71	<0.71	
	9/9/2011	260	<1.0	<1.0	11	<1.0	<1.0	
	12/2/2011	95	<3.2	<3.5	14	<2.4	<1.7	
	3/2/2012	59	<1.0	<1.0	4.1	<1.0	<1.0	
	6/7/2012	22	<1.0	<1.0	2.8	<1.0	<1.0	
	MW-6	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
		12/14/2004	<5.5	<5.5	<5.5	<22	NA	NA
		3/11/2005	2.54	<0.5	<0.5	<2.0	NA	NA
		6/15/2005	<20	<1.0	<1.0	<4.0	NA	NA
8/26/2005		<43	<2.15	<2.15	<8.6	NA	NA	
11/11/2005		<43	<2.15	<2.15	<8.6	NA	NA	
2/9/2006		<43	<2.15	<2.15	<8.6	NA	NA	
5/9/2006		<10	<0.5	<0.5	<2.0	<0.5	<0.5	
8/10/2006		<10	<0.5	<0.5	<2.0	<0.5	<0.5	
10/26/2006		<10	<0.5	<0.5	<2.0	<0.5	<0.5	
1/25/2007		<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
4/26/2007		7.21	<0.5	<0.5	<2.0	<0.5	<0.5	
7/25/2007		5.66	<0.5	<0.5	<2.0	<0.5	<0.5	
10/23/2007		6.68	<0.5	<0.5	<2.0	<0.5	<0.5	
1/21/2008		13.9	<0.5	<0.5	<2.0	<0.5	<0.5	
4/15/2008		<2.0	<0.5	<0.5	<2.0	6.78	1.49	
7/2/2008		4.54	<0.5	<0.5	<2.0	<0.5	<0.5	
10/15/2008		<10	<0.5	<0.5	<0.5	<0.5	<0.5	
1/7/2009		<63	<3.1	<3.1	<3.1	<3.1	<3.1	
4/13/2009		<25	<1.3	<1.3	<1.3	<1.3	<1.3	
8/26/2009		<40	<2.0	<2.0	<2.0	<2.0	<2.0	
12/1/2009		<40	<2.0	<2.0	<2.0	<2.0	<2.0	
3/16/2010		<40	<2.0	<2.0	<2.0	<2.0	<2.0	
6/3/2010		<40	<2.0	<2.0	<2.0	<2.0	<2.0	
9/1/2010		<200	<10	<10	<10	<10	<10	
12/2/2010		<330	<17	<17	<17	<17	<17	
3/3/2011		<50	<2.5	<2.5	<2.5	<2.5	<2.5	
5/20/2011		<50	<2.5	<2.5	<2.5	<2.5	<2.5	
9/8/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5		
12/1/2011	NA	NA	NA	NA	NA	NA		
3/2/2012	<83	<4.2	<4.2	<4.2	<4.2	<4.2		
6/6/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7		

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-7	9/21/2004	<10	<0.5	<0.5	1.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<12.5	<2.5	<2.5	<10	NA	NA
	6/15/2005	<10	<0.5	<0.5	2.23	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	NA	NA	NA	NA	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.49	<0.5	<0.5	2.58	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	6.01	<0.5	<0.5
	4/15/2008	8.8	<0.5	<0.5	<2.0	<0.5	1.26
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	14	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	11	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	16	<0.5	<0.5
	8/26/2009	<33	<0.5	<0.5	33	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	30	<0.5	<0.5
	3/16/2010	11	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	20	<0.5	<0.5	7.1	<0.5	<0.5
	9/1/2010	47	<0.5	<0.5	7.2	<0.5	<0.5
	12/2/2010	22	<0.5	<0.5	4.9	<0.5	<0.5
3/4/2011	14	<0.5	<0.5	4.0	<0.5	<0.5	
5/19/2011	<10	<0.5	<0.5	2.1	<0.5	<0.5	
9/8/2011	<10	<0.5	<0.5	1.6	<0.5	<0.5	
12/1/2011	15	<0.36	<0.40	2.4	<0.28	<0.19	
3/2/2012	<10	<0.5	<0.5	0.82	<0.5	<0.5	
6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-8	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	NA	NA	NA	NA	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
Well Decommissioned 11/13/2009							
MW-9	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA

Table 2
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MW-9 contd.	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	2.8	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	1.83	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	3.07	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	2.92	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	<2.0	1.18	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	2.07	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	1.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	1.4
4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	0.97	<0.5
8/26/2009	<10	<0.5	<0.5	<0.5	<0.5	2.6	<0.5
Well Decommissioned 11/13/2009							
EX-1	12/2/2009	150	<1.3	<1.3	<1.3	<1.3	<1.3
	3/16/2010	980	<1.3	2.4	27	<1.3	<1.3
	6/3/2010	570	<1.3	1.9	<1.3	<1.3	<1.3
	9/1/2010	470	<0.5	1.4	2	<0.5	<0.5
	12/2/2010	1,300	<2.0	3.6	15	<2.0	<2.0
	3/3/2011	690	<0.71	2.5	12	<0.71	<0.71
	5/19/2011	370	<0.71	1.9	13	<0.71	<0.71
	9/8/2011	32	<0.5	<0.5	0.53	<0.5	<0.5
	12/1/2011	1,200	<1.6	8.3	6.8	<1.2	<0.86
	3/2/2012	31	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	390	<0.5	2.9	4.8	0.57	<0.5
	EX-2	12/2/2009	<63	<3.1	<3.1	<3.1	<3.1
3/16/2010		<100	<5.0	<5.0	<5.0	<5.0	<5.0
6/3/2010		<100	<5.0	<5.0	<5.0	<5.0	<5.0
9/1/2010		<50	<2.5	<2.5	<2.5	<2.5	<2.5
12/2/2010		<100	<5.0	<5.0	<5.0	<5.0	<5.0
3/3/2011		<100	<5.0	<5.0	<5.0	<5.0	<5.0
5/19/2011		<100	<5.0	<5.0	<5.0	<5.0	<5.0
9/8/2011		<25	<1.3	<1.3	<1.3	<1.3	<1.3
12/1/2011		74	<3.2	<3.5	<2.8	<2.4	<1.7
3/2/2012		<25	<1.3	<1.3	<1.3	<1.3	<1.3
6/6/2012		<33	<1.7	<1.7	<1.7	<1.7	<1.7
MPE Wells							
MPE-1	8/4/2011	<500	<25	<25	<25	<25	<25
	9/26/2011	<500	<25	<25	600	<25	<25
	12/2/2011	830	<32	<35	750	<24	<17
	3/2/2012	<710	<36	<36	1,200	<36	<36
	6/6/2012	<630	<31	<31	430	<31	<31
MPE-2	8/4/2011	<330	<17	<17	<17	<17	<17
	9/26/2011	<330	<17	<17	<17	<17	<17
	12/2/2011	<66	<16	<17	<14	<12	<8.6
	3/2/2012	<330	<17	<17	<17	<17	<17
	6/7/2012	<250	<13	<13	<13	<13	<13
2nd WBZ							
MW-1D	1/3/2008	111	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	12.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/16/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5

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MW-1D cont.	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	<0.32	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3D	1/3/2008	37.3	<0.5	3.12	15.3	NA	NA
	1/22/2008	15.6	<0.5	3.1	15.3	<0.5	<0.5
	4/16/2008	17.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	7.45	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	4.7	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	3.4	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	2.2	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	0.65	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	1.8	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	0.93	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	1.0	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	0.52	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-4D	1/4/2008	25	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	124	<0.5	4.9	3.32	<0.5	<0.5
	4/15/2008	25.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	3.38	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
12/1/2011	<1.5	<0.36	<0.40	<0.32	<0.28	<0.19	
3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
1573 153 RD	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
EB-PMP	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PMP2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
ESL		12	NE	NE	NE	0.5	0.05

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
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Notes:

August 8, 2002 was the first time that samples were analyzed for Gasoline Oxygenates

<: Not detected above the laboratory reporting limit.

NA: Not Analyzed. Well MW-8 was inaccessible during the 1Q05 & well MW-7 (1Q06) car was parked over each well.

NE: Not Established

TBA: tert-Butyl Alcohol

DIPE: Isopropyl Ether

ETBE: Ethyl tert-Butyl Ether

TAME: Methyl tert-Amyl Ether

ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008);

Table F-1a, Groundwater Screening Levels (groundwater is a current or potential drinking water resource)

MW-8 and MW-9 were decommissioned November 13, 2009

Table 3
Effluent Chemical Analytical Results
and Operational History of Remediation System
15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
2009											
8-Oct-2009	15,351	<50	120 ^Y	NA	NA	NA	NA	NA	NA	NA	NA
19-Nov-2009	8,287	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.7
9-Dec-2009	0	Installation of GWETS									
16-Dec-2009	20,000	<50	<50	<300	<0.5	0.65 C	<0.5	0.84 C	<10	<5	7.4
2010											
18-Jan-2010	215,453	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.4
15-Feb-2010	297,560	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	11	<5	6.7
15-Mar-2010	475,245	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5.0	6.5
19-Apr-2010	621,180	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.6
17-May-2010	705,770	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.7
16-Jun-2010	825,200	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	17	9	6.8
19-Jul-2010	910,652	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.6
16-Aug-2010	939,935	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6
28-Sep-2010	970,450	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	10	6.8
26-Oct-2010	1,013,700	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.2
15-Nov-2010	1,052,591	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.5
7-Dec-2010	1,100,492	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6
2011											
11-Jan-2011	1,179,075	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	12	6	6.6
10-Feb-2011	1,249,569	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.6
14-Mar-2011	1,336,784	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.5
11-Apr-2011	1,364,272	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.5
10-May-2011	1,466,472	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	12	7	6.6
7-Jun-2011	1,532,263	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6

Table 3
Effluent Chemical Analytical Results
and Operational History of Remediation System
15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
28-Jul-2011	1,573,295	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	5	6.3
25-Aug-2011	1,613,935	77	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.1
23-Sep-2011	1,631,273	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.7
27-Oct-2011	1,642,277	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	7	7.1
18-Nov-2011	1,676,170	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.8
1-Dec-2011	1,694,889	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.97
2012											
19-Jan-2012	1,715,163	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.02
23-Feb-2012	1,794,185	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.98
20-Mar-2012	1,803,832	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	7	7.02
17-Apr-2012	1,876,439	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.95
29-May-2012	1,900,111	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.89
11-Jun-2012	1,914,130	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.1

Note:

NA: Not Available/Not Applicable

< : Less than Laboratory-reporting limit

In October and November 2009 discharge occurred only during MPE events
GWETS and totalizer installed in December 2009.

Week # 1 sampling conducted on Oct 8, 2009

C: Presence confirmed, but RPD between column exceeds 40%

Volume discharged during the October 2009 MPE event was 18,669 gallons

Volume discharged during the November 2009 MPE event was 10,507 gallons

Volume discharged during the December 2009 MPE event was 20,298 gallons

Volume discharged during the February 2010 MPE event was 6,339 gallons

Volume discharged during the March 2010 MPE event was 3,810 gallons

Volume discharged during the June 2010 MPE event was 15,600 gallons

Volume discharged during the August 2010 MPE event was 1,421 gallons

Volume discharged during the October 2010 MPE event was 13,282 gallons

SOMA ceased COD and TSS testing based on a request from OLSA dated April 5, 2012

Table 4
Cumulative Masses of Petroleum Hydrocarbons Removed from
the Groundwater Since Installation of the Treatment System
 15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	Influent Concentration (µg/L)					Mass removed (pounds)				
		TPH-g	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-g	Benzene	Toluene	Ethyl- benzene	Total Xylenes
2009											
9-Dec-2009	0	Installation of GWETS, began discharging treated groundwater to site sewer main									
2010											
18-Jan-2010	215,453	1,900	79	32.00	2.4	260	3.41	0.14	0.06	0.00	0.47
19-Apr-2010	621,180	2,100	75	28	56	332	10.50	0.40	0.15	0.19	1.59
19-Jul-2010	910,652	56 ^Y	<0.5	<0.5	<0.5	<0.5	10.64	0.40	0.15	0.19	1.59
26-Oct-2010	1,013,700	2,600	200	25	68	405	12.87	0.57	0.17	0.25	1.94
2011											
11-Jan-2011	1,179,075	1,700	80	19	50	295	15.21	0.68	0.20	0.32	2.34
11-Apr-2011	1,364,272	1,200	41	3.3	23	185	17.06	0.75	0.20	0.36	2.63
28-Jul-2011	1,573,295	540	21	2.8	5.4	49	18.00	0.78	0.21	0.37	2.71
27-Oct-2011	1,642,277	<50	1.50	<0.5	<0.5	2.9	18.00	0.78	0.21	0.37	2.71
2012											
19-Jan-2012	1,715,163	110 ^Y	<0.5	<0.5	<0.5	<0.5	18.07	0.78	0.21	0.37	2.71
17-Apr-2012	1,876,439	1,100	60	6.8	24	161	19.54	0.87	0.22	0.40	2.93

Notes:

< : Below laboratory-reporting limit

Y : sample exhibits chromatographic pattern which does not resemble standard

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 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 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 well is purged using a battery-operated, 2-inch-diameter pump (Model ES-60 DC). During purging, groundwater is measured for parameters such as dissolved oxygen (DO), pH, temperature, electrical conductivity (EC), and oxygen-reduction potential (ORP) using a Hanna HI-9828 multi-parameter instrument. Turbidity is measured using a Hanna HI-98703 portable turbidimeter. The equipment is calibrated at the site using standard solutions and procedures provided by the manufacturer.

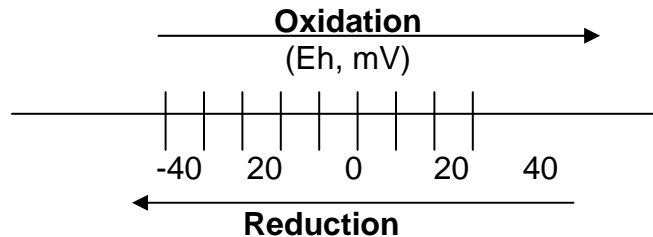
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

There is a strong correlation between the turbidity level and the biological oxygen demand of natural water bodies. The main purpose for checking the turbidity level is to provide a general overview of the extent of the suspended solids in the groundwater.

ORP is the measure of the potential for an oxidation or reduction process to occur. In the oxidation process, a molecule or ion loses one or several electrons. In the reduction process, a molecule or ion gains one or several electrons. The unit of the redox potential is the volt or millivolt. The most important redox reaction in petroleum-contaminated groundwater is the oxidation of petroleum hydrocarbons in the presence of bacteria and free molecular oxygen. Because the solubility of O₂ in water is low (9 mg/L at 25 °C and 11 mg/L at 5 °C), and because the rate of O₂ replenishment in subsurface environments is limited, DO can be entirely consumed when the oxidation of only a small amount of petroleum hydrocarbons occurs.

Oxidation of petroleum hydrocarbons can still occur when all the dissolved O₂ in the groundwater is consumed; however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO₃⁻, MnO₂, Fe (OH)₃, SO₄²⁻

and others (Freeze and Cherry, 1979). As these oxidizing agents are consumed, the groundwater environment becomes more and more reduced. If the process advances far enough, the environment may become so strongly reduced that the petroleum hydrocarbons undergo anaerobic degradation, resulting in the production of methane and carbon dioxide. The concept of oxidation and reduction in terms of changes in oxidation states is illustrated below.



Purging of wells continues until the parameters for DO, pH, temperature, EC, turbidity, and redox stabilize, or three casing volumes are purged.

Once stabilization occurs, the groundwater samples are also tested on-site for ferrous iron (Fe^{+2}), nitrate (NO_3^-), and sulfate (SO_4^{-2}) concentrations.

Fe^{+2} , NO_3^- , and SO_4^{-2} are measured colorimetrically using the Hach Colorimeter Model 890, a microprocessor-controlled photometer suitable for colorimetric testing in the laboratory or the field. The required reagents for each specific test are provided in AccuVac ampuls.

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 into 40-mL VOA vials and preserved with hydrochloric acid. The vials are sealed to prevent air bubbles from developing within the headspace. For TPH-d analysis, groundwater samples are collected using 1-L, amber, non-preserved 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 on Monitoring Wells,
Field Measurements of Physical, Chemical, and Natural
Attenuation Parameters of Groundwater Samples, and
Groundwater Gradient Calculations

DATE: 1/08/2008
 JOB NUMBER 0208101
 DATE OF SURVEY 1/03/08
 INSTRUMENT LIECA SR520

TABLE OF ELEVATIONS & COORDINATES
 ON MONITORING WELLS
 SOMA ENVIRONMENTAL, PROJECT 15101 FREEDOM DRIVE - SAN LEANDRO

WELL ID#	NORTHING (ft.) LATITUDE	EASTING (ft.) LONGITUDE	ELEVATION (ft.)	DESCRIPTION
MW-1D	2084371.23	6092127.90	54.42	MW-1D NOTCH
	37.708104856	122.123200912	54.94	MW-1D RIM
	37° 42' 29.1" N	122° 07' 23" W	54.74	PAVEMENT
MW-3D	2084303.98	6092183.53	54.10	MW-3D NOTCH
	37.707922851	122.123004590	54.56	MW-3D RIM
	37° 42' 28.5" N	122° 07' 22" W	54.47	PAVEMENT
MW-4D	2084222.77	6092116.37	53.12	MW-4D NOTCH
	37.707696648	122.123231858	53.37	MW-4D RIM
	37° 42' 27.7" N	122° 07' 23" W	53.39	PAVEMENT

BENCH MARK: NGS BENCH MARK NO. HT1871

3.0 KM (1.85 MI) NORTH FROM SAM LORENZO. 1.85 MILES NORTH ALONG INTERSTATE HIGHWAY 580 FROM THE JUNCTION OF STATE HIGHWAY 238 IN SAN LORENZO, IN THE WEST CORNER OF THE CROSSING OF 150TH AVENUE, IN TOP OF THE CONCRETE BRIDGE DECK, 15.5 FEET NORTHWEST OF THE SOUTHWEST BOUND LANES OF THE AVENUE, 10.9 FEET NORTHEAST OF THE SOUTH CORNER OF THE SOUTHWEST END OF THE NORTHWEST CONCRETE GUARDRAIL, 0.7 FOOT NORTHEAST OF THE SOUTHWEST EDGE OF THE DECK, 0.9 FOOT SOUTHEAST OF THE NORTHWEST CONCRETE GUARDRAIL, AND ABOUT LEVEL WITH THE HIGHWAY.

ELEVATION = 58.50 NAVD 88 DATUM

HORIZONTAL AND VERTICAL CONTROL BASED ON HARRINGTON SURVEY DATED 10-12-2004

FD CHABOT A, CALIFORNIA STATE PLAIN COORDINATE SYSTEM, NAD 83, ZONE 3. NORTH 2,088,584.99 EAST 6,093,351.39. LAT N 37°43'11.04190" LONG W 122°07'09.20691", ELEVATION 492.08 NAVD 88.

FD CHABOT B, CALIFORNIA STATE PLAIN COORDINATE SYSTEM, NAD 83, ZONE 3. NORTH 2,087,731.02 EAST 6,094,039.23. . LAT N 37°43'02.71762" LONG W 122°07'00.46339", ELEVATION 442.77 NAVD 88.

DATE: 12/11/2009

JOB# 09039

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

SOMA ENVIRONMENTAL ENGINEERING
15101 FREEDOM AVENUE
SAN LEANDRO, CA 94579

WELL ID #	NORTHING (FT.) / LATITUDE (D.DEG.)	EASTING (FT.) / LONGITUDE (D.DEG.)	ELEVATION (FT.)	DESCRIPTION
EX-1	2084135.454	6092163.720	47.36	4" PVC NOTCH NORTH SIDE
	37.707459134	122.123062972	47.61	SET PUNCH NORTH SIDE RIM
			47.60	PAVEMENT NORTH SIDE
EX-2	2084082.018	6092130.224	45.96	4" PVC NOTCH NORTH SIDE
	37.707310806	122.123175540	47.04	SET PUNCH NORTH SIDE RIM
			47.00	CONCRETE NORTH SIDE
MPE-1	2084213.168	6092125.258	51.96	4" PVC NOTCH NORTH SIDE
	37.707670702	122.123200567	52.49	SET PUNCH NORTH SIDE RIM
			52.51	CONCRETE NORTH SIDE
MPE-2	2084293.133	6092171.374	53.72	4" PVC NOTCH NORTH SIDE
	37.707892479	122.123045970	54.29	SET PUNCH NORTH SIDE RIM
			54.27	PAVEMENT NORTH SIDE

HORIZONTAL AND VERTICAL CONTROL

SURVEY BASED ON PREVIOUS SURVEY BY HARRINGTON SURVEY INC. DATED: 2/21/2008
COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.
ELEVATIONS ARE NAVD 88 DATUM.

MW-2, PUNCH

NORTHING 2,084323.44, EASTING 6,092063.77, ELEVATION 52.92

MW-4 PUNCH

NORTHING 2,084250.55, EASTING 6,092124.46, ELEVATION 53.74

EQUIPMENT USED: TRIMBLE S6

Edgis Land Surveying
Land Surveying and mapping
1374 Garland Avenue, Clovis, CA 93612
Phone (559) 906-3554 Fax (559) 292-0560
email: edgis@aol.com



Eduardo A. Espinoza
1 of 1



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-1
 Casing Diameter: 4 inches
 Depth of Well: 30.50 feet
 Top of Casing Elevation: 54.46 feet
 Depth to Groundwater: 22.92 feet
 Groundwater Elevation: 31.54 feet
 Water Column Height: 7.58 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 7, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

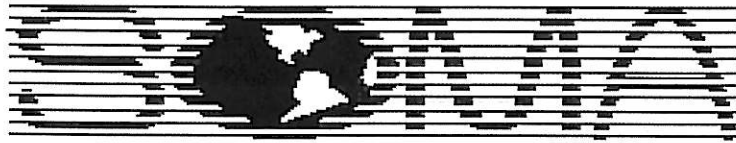
Color: Yes No Describe: _____

Sheen: Yes No Describe: _____

Odor: Yes No Describe: Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
09:21	Started purging well						
09:22	2	1.84	6.55	19.96	1224	3.14	-4.3
09:24	6	1.20	6.52	19.98	1201	4.08	-12.2
09:26	10	1.05	6.51	19.99	1211	4.37	-17.4
09:28	14	0.89	6.51	20.00	1234	3.92	-20.0
09:33	sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-2
 Casing Diameter: 4 inches
 Depth of Well: 30.15 feet
 Top of Casing Elevation: 52.41 feet
 Depth to Groundwater: 21.04 feet
 Groundwater Elevation: 31.37 feet
 Water Column Height: 9.11 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 7, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

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

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. (NTU)	ORP
08:49	Started purging well						
08:50	2	5.59	6.46	19.82	1004	6.20	+6.0
08:52	6	1.69	6.52	19.85	888	6.86	-21.9
08:54	10	1.10	6.51	19.85	833	6.02	-22.0
08:56	14	0.93	6.53	19.87	877	4.64	-22.9
09:01	Sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-3
 Casing Diameter: 4 inches
 Depth of Well: 29.90 feet
 Top of Casing Elevation: 53.91 feet
 Depth to Groundwater: 22.50 feet
 Groundwater Elevation: 31.41 feet
 Water Column Height: 7.40 feet
 Purged Volume: 14 gallons

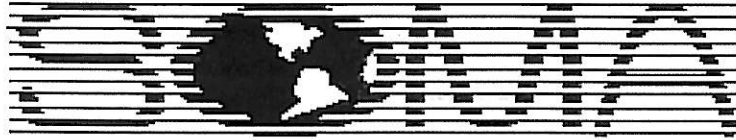
Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 7, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

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

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. (NTU)	ORP
09:45	Started purging well						
09:46	2	1.09	6.93	20.08	1110	14.0	-6.3
09:48	6	0.72	6.67	20.11	1067	8.00	-16.8
09:50	10	0.57	6.66	20.12	1045	4.24	-20.1
09:52	14	0.54	6.66	20.13	1057	3.11	-20.9
09:57	Sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-4
 Casing Diameter: 4 inches
 Depth of Well: 30.20 feet
 Top of Casing Elevation: 53.31 feet
 Depth to Groundwater: 22.24 feet
 Groundwater Elevation: 31.07 feet
 Water Column Height: 7.96 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 7, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

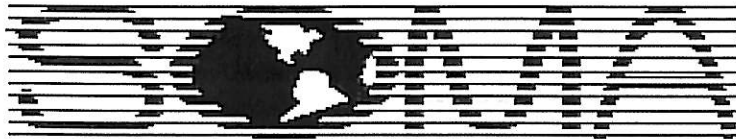
Color: Yes No Describe: _____

Sheen: Yes No Describe: _____

Odor: Yes No Describe: Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. (NTU)	ORP
10:47	Started purging well						
10:48	2	0.97	6.77	19.47	1093	7.24	-10.9
10:50	6	1.19	6.63	19.50	1237	3.88	-6.1
10:52	10	0.77	6.59	19.52	1291	3.01	-2.5
10:54	14	0.58	6.58	19.53	1315	2.62	-0.3
10:59	sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-5
 Casing Diameter: 4 inches
 Depth of Well: 29.80 feet
 Top of Casing Elevation: 50.53 feet
 Depth to Groundwater: 19.45 feet
 Groundwater Elevation: 31.08 feet
 Water Column Height: 9.35 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 7, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

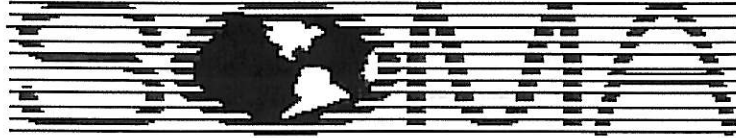
Color: Yes No Describe: _____

Sheen: Yes No Describe: _____

Odor: Yes No Describe: Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. (NTU)	ORP
10:24	Started purging well						
10:25	2	0.81	6.72	20.27	1200	2.80	-27.6
10:27	6	0.54	6.69	20.28	1197	3.10	-34.7
10:29	10	0.44	6.68	20.29	1196	2.83	-47.0
10:31	14	0.40	6.68	20.29	1200	5.35	-50.7
10:36	Sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-6
 Casing Diameter: 4 inches
 Depth of Well: 27.30 feet
 Top of Casing Elevation: 45.82 feet
 Depth to Groundwater: 16.31 feet
 Groundwater Elevation: 29.51 feet
 Water Column Height: 10.99 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 6, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: Yes No Describe: _____

Sheen: Yes No Describe: Rainbow Sheen

Odor: Yes No Describe: Petro odor

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
11:59	Started purging well						
12:00	2	1.54	6.87	19.79	1092	8.65	-30.3
12:02	6	1.97	6.80	19.79	1094	5.24	-30.8
12:04	10	1.95	6.78	19.81	1092	3.76	-31.9
12:06	14	1.8	6.78	19.82	1091	3.46	-32.8
12:11	sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-7
 Casing Diameter: 2 inches
 Depth of Well: 21.00 feet
 Top of Casing Elevation: 44.74 feet
 Depth to Groundwater: 14.00 feet
 Groundwater Elevation: 30.74 feet
 Water Column Height: 7.00 feet
 Purged Volume: 3.5 gallons

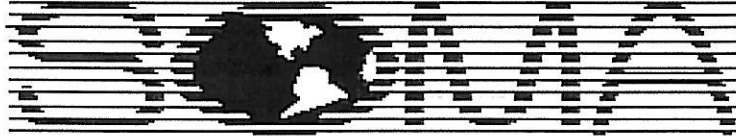
Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 6, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

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

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
11:23	Started purging well						
11:26	1	8.58	6.42	17.67	1193	117	+64.3
11:29	2	2.91	6.53	17.34	1047	294	+13.4
11:33	3	2.69	6.54	17.29	1050	408	+4.1
11:35	3.5	2.78	6.57	17.41	1106	362	+1.3
11:40	Sampled						



ENVIRONMENTAL ENGINEERING, INC

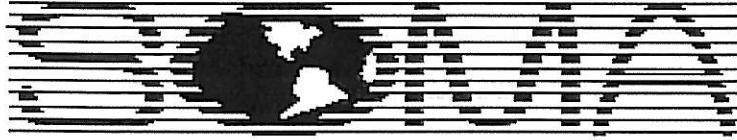
Well No.: MPE-1 Project No.: 2551
 Casing Diameter: 4 inches Address: 15101 Freedom Avenue
 Depth of Well: 30.00 feet San Leandro, CA
 Top of Casing Elevation: 51.96 feet Date: June 6, 2012
 Depth to Groundwater: 20.96 feet Sampler: Lizzie Hightower
 Groundwater Elevation: 31.00 feet
 Water Column Height: 9.04 feet
 Purged Volume: 14 gallons

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump

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

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. (NTU)	ORP
15:00	Started						
15:01	2	0.12	6.81	19.53	1266	38.4	-10.4
15:03	6	1.11	6.79	19.37	1262	32.4	-25.4
15:05	10	1.44	6.82	19.34	1259	26.2	-34.9
15:07	14	1.73	6.83	19.34	1269	16.8	-41.9
15:12	Sampled						



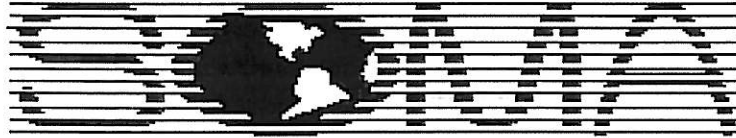
ENVIRONMENTAL ENGINEERING, INC

Well No.: MPE-2 Project No.: 2551
 Casing Diameter: 4 inches Address: 15101 Freedom Avenue
 Depth of Well: 30.00 feet San Leandro, CA
 Top of Casing Elevation: 53.72 feet Date: June 7, 2012
 Depth to Groundwater: 22.35 feet Sampler: Lizzie Hightower
 Groundwater Elevation: 31.37 feet
 Water Column Height: 7.65 feet
 Purged Volume: 14 gallons

Purging Method: Bailer Pump
 Sampling Method: Bailer Pump
 Color: Yes No Describe: _____
 Sheen: Yes No Describe: _____
 Odor: Yes No Describe: Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. NTU	ORP
10:04	Started purging well						
10:05	2	0.93	6.66	20.26	1309	4.28	-5.6
10:07	6	0.63	6.63	20.29	1309	3.61	-14.8
10:09	10	0.56	6.62	20.30	1309	4.05	-18.7
10:11	14	0.48	6.62	20.32	1309	3.63	-20.4
10:16	Sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-1D
 Casing Diameter: 2 inches
 Depth of Well: 59.81 feet
 Top of Casing Elevation: 54.42 feet
 Depth to Groundwater: 23.18 feet
 Groundwater Elevation: 31.24 feet
 Water Column Height: 36.63 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 6, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

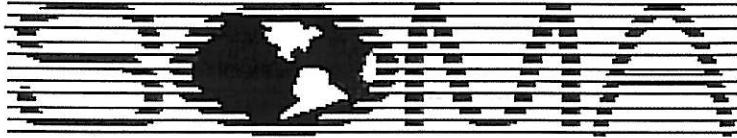
Color: Yes No Describe: _____

Sheen: Yes No Describe: _____

Odor: Yes No Describe: _____

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
<u>13:37</u>	<u>started</u>	<u>purging well</u>					
<u>13:38</u>	<u>2</u>	<u>0.89</u>	<u>7.27</u>	<u>19.71</u>	<u>1227</u>	<u>93.9</u>	<u>+62.0</u>
<u>13:40</u>	<u>6</u>	<u>0.85</u>	<u>7.27</u>	<u>19.59</u>	<u>1229</u>	<u>21.8</u>	<u>+61.6</u>
<u>13:42</u>	<u>10</u>	<u>1.11</u>	<u>7.28</u>	<u>19.54</u>	<u>1229</u>	<u>14.3</u>	<u>+60.0</u>
<u>13:44</u>	<u>14</u>	<u>1.10</u>	<u>7.29</u>	<u>19.54</u>	<u>1228</u>	<u>10.8</u>	<u>+58.7</u>
<u>13:49</u>	<u>sampled</u>						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-3D
 Casing Diameter: 2 inches
 Depth of Well: 58.59 feet
 Top of Casing Elevation: 54.10 feet
 Depth to Groundwater: 22.77 feet
 Groundwater Elevation: 31.33 feet
 Water Column Height: 35.82 feet
 Purged Volume: 14 gallons

Project No.: 2551
 Address: 15101 Freedom Avenue
 San Leandro, CA
 Date: June 6, 2012
 Sampler: Lizzie Hightower

Purging Method: Bailer Pump

Sampling Method: Bailer Pump

Color: Yes No Describe: _____

Sheen: Yes No Describe: _____

Odor: Yes No Describe: _____

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. NTU	ORP
14:08	Started purging well						
14:09	2	0.51	7.19	19.81	1211	43.9	+67.0
14:11	6	0.40	7.16	19.79	1221	9.46	+67.8
14:13	10	0.35	7.16	19.78	1223	6.57	+67.8
14:15	14	0.33	7.16	19.76	1225	4.78	+67.5
14:20	Sampled						



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-4D Project No.: 2551
 Casing Diameter: 2 inches Address: 15101 Freedom Avenue
 Depth of Well: 58.79 feet San Leandro, CA
 Top of Casing Elevation: 53.12 feet Date: June 6, 2012
 Depth to Groundwater: 22.00 feet Sampler: Lizzie Hightower
 Groundwater Elevation: 31.12 feet
 Water Column Height: 36.79 feet
 Purged Volume: 14 gallons

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

Field Measurements:

Time	Volume (gallons)	D.O. (mg/L)	pH	Temp (°C)	E.C. (µS/cm)	Turb. NTU	ORP
14:36	Started purging well						
14:37	2	0.43	7.30	19.53	1179	201	-16.4
14:39	6	0.37	7.27	19.28	1189	15.1	+4.5
14:41	10	0.33	7.27	19.25	1191	9.11	+17.2
14:43	14	0.32	7.27	19.25	1189	6.32	+22.9
14:48	Sampled						

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
1st WBZ							
MW-1	8/27/2009	0.38	6.32	20.8	1357	4.69	-95.7
	12/2/2009	0.15	6.4	20.82	1261	6.19	-136.4
	3/17/2010	0.58	5.68	20.97	1186	7.00	-155.9
	6/3/2010	0.91	6.11	20.81	1285	2.49	-131.6
	9/2/2010	0.92	6.04	20.66	1361	2.46	-86.4
	12/2/2010	0.97	5.96	20.74	1309	4.32	-119.7
	3/4/2011	1.4	6.69	20.96	1169	1.98	-101.2
	5/20/2011	1.51	6.22	20.68	1305	1.85	-164.5
	9/9/2011	1.73	6.02	20.53	1320	4.63	-179.2
	3/2/2012	1.39	6.53	20.84	1309	12.00	-204.4
	6/7/2012	0.89	6.51	20.00	1234	3.92	-20.0
MW-2	8/27/2009	0.43	6.57	20.72	1530	2.59	-168.1
	12/1/2009	0.48	6.75	21.12	1297	5.01	-191.3
	3/17/2010	0.51	5.78	21.08	1025	5.65	-108
	6/3/2010	0.62	6.28	20.84	930	2.66	-150.2
	9/2/2010	0.66	6.29	20.73	1269	2.67	-174.2
	12/2/2010	0.63	6.06	20.94	1439	2062	-162.4
	3/4/2011	1.55	6.84	20.91	815	3.34	-87.8
	5/20/2011	1.22	6.39	20.59	981	2.58	-185.9
	9/9/2011	1.67	5.89	20.48	1303	6.19	-157.7
	3/2/2012	1.98	6.37	20.83	1014	11.8	-204.5
	6/7/2012	0.93	6.53	19.87	877	4.64	-22.9
MW-3	8/27/2009	1.90	6.36	20.82	1318	5.57	-119.3
	12/2/2009	1.80	6.52	20.94	1239	5.88	-206.6
	3/17/2010	1.60	5.78	21.28	1080	5.37	-166.4
	6/3/2010	1.05	6.24	21.16	1130	2.03	-134.8
	9/2/2010	1.17	6.18	21.04	1256	2.86	-131.2
	12/2/2010	1.27	6.06	21.03	1152	1.83	-171.9
	3/4/2011	1.26	6.77	21.18	1074	3.57	-109.8
	5/20/2011	1.04	6.4	20.9	1180	2.72	-220.1
	9/9/2011	1.05	6.13	20.74	1272	3.23	-179.4
	3/2/2012	1.72	6.58	20.87	1120	12.00	-162.7
	6/7/2012	0.54	6.66	20.13	1057	3.11	-20.9
MW-4	8/27/2009	2.90	6.26	20.11	1649	2.78	-115.5
	12/2/2009	0.87	6.4	20.12	1578	5.06	-173.2
	3/17/2010	2.30	5.63	20.39	1506	4.01	-119.4
	6/3/2010	1.90	6.14	20.45	1418	1.56	-131.8
	9/2/2010	1.80	6.06	20.21	1305	1.45	-101.5
	12/2/2010	1.63	5.89	20.28	1465	102	-180
	3/3/2011	1.89	6.66	20.47	1278	0.97	-90.5
	5/19/2011	1.78	6.42	20.51	1251	1.5	-168.3
	9/8/2011	1.77	6.27	20.32	1430	3.82	-157.4
	3/2/2012	1.55	6.39	20.21	1486	8.00	-165.9
	6/7/2012	0.58	6.58	19.53	1315	2.62	-0.3
MW-5	8/27/2009	1.00	6.38	20.8	1321	6.63	-91.9
	12/2/2009	1.50	6.47	21.03	1227	5.66	-109.1
	3/17/2010	1.10	5.82	21.28	1150	75.3	-60.7
	6/4/2010	1.10	5.99	20.87	1128	3.84	-33.8
	9/2/2010	1.03	6.16	21.22	1178	13.0	-168.4
	12/2/2010	1.05	6.02	21.46	1112	12.3	-167.7
	3/4/2011	1.11	6.89	21.46	1078	4.59	-106.9
	5/20/2011	1.18	6.47	21.02	1106	26.5	-222.5
	9/9/2011	1.14	6.2	21.07	1194	5.83	-215.4
	3/2/2012	1.70	6.72	21.34	1187	11.7	-228.6
	6/7/2012	0.40	6.68	20.29	1200	5.35	-50.7

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity μS/cm	Turbidity NTU	ORP
MW-6	8/26/2009	0.42	6.47	20.93	1201	6.53	-172.3
	12/1/2009	0.26	6.89	21.64	1171	6.83	-207.9
	3/16/2010	0.63	5.91	21.26	1544	6.72	-168.2
	6/3/2010	0.58	6.38	20.74	1346	2.61	-116.4
	9/1/2010	0.41	6.44	20.86	1419	2.77	-120.3
	12/2/2010	0.37	6.24	21.17	1362	4.5	-148
	3/3/2011	1.54	6.81	21	1262	1.87	-98.3
	5/20/2011	1.23	6.62	20.51	1312	2.53	-221.1
	9/8/2011	1.07	6.2	20.84	1292	5.17	-167.9
	3/2/2012	1.10	6.55	21.03	1197	13.2	-166.4
	6/6/2012	1.18	6.78	19.82	1091	3.46	-32.8
MW-7	8/26/2009	0.98	6.36	19.24	1375	145	-128.3
	12/1/2009	1.05	6.83	19.51	1340	997	-4.3
	3/16/2010	0.83	5.88	18.37	1266	382	-37.9
	6/3/2010	0.77	6.46	18.67	1199	873	-30.4
	9/1/2010	0.98	6.4	19.83	1271	999	-60
	12/2/2010	1.01	6.23	19.17	1253	999	-85.6
	3/4/2011	3.66	6.68	18.33	1098	609	-49.5
	5/19/2011	1.35	6.42	17.71	1192	879	-53.7
	9/8/2011	2.01	6.07	18.91	1198	748	-17.8
	3/2/2012	1.82	6.39	18.12	1308	363	-69.3
	6/6/2012	2.78	6.57	17.41	1106	362	1.3
MPE-1	6/6/2012	1.73	6.83	19.34	1269	16.8	-41.9
MPE-2	3/2/2012	1.30	6.40	21.18	1303	8.70	-164.9
	6/7/2012	0.48	6.62	20.32	1309	3.63	-20.4
2nd WBZ							
MW-1D	8/26/2009	0.45	7.04	19.93	1388	7.75	-11
	12/1/2009	0.51	7.4	19.79	1342	19.1	-21.7
	3/16/2010	0.57	6.45	19.99	1353	98.9	-28.2
	6/4/2010	0.58	6.66	19.98	1336	3.85	97.7
	9/1/2010	0.52	6.94	20.12	1404	4.41	-6.6
	12/3/2010	0.49	6.64	19.73	1328	7.12	-75.3
	3/3/2011	2.77	7.35	19.79	1294	9.97	18.8
	5/19/2011	2.81	7.07	19.95	1330	5.26	6.6
	9/8/2011	3.21	6.66	20.03	1309	9.98	-35.5
	3/2/2012	2.04	6.75	19.76	1306	22.0	-71.3
	6/6/2012	1.1	7.29	19.54	1228	10.8	58.7
MW-3D	8/26/2009	0.73	6.93	20.17	1276	1.73	-18.8
	12/1/2009	0.98	7.3	20.04	1236	2.48	-23.5
	3/16/2010	0.69	6.38	20.29	1272	8.05	-27.8
	6/4/2010	0.77	6.54	20.2	1254	0.42	78.1
	9/1/2010	0.79	6.85	20.33	1304	0.25	-29.4
	12/3/2010	0.81	6.49	20.04	1252	1.49	-79.2
	3/3/2011	2	7.24	20.02	1254	0.85	54
	5/19/2011	1.99	6.91	20.21	1260	2.03	-14.8
	9/8/2011	1.73	6.52	20.19	1247	3.53	-32.6
	3/2/2012	2.17	6.99	20.02	1269	9.02	-84.2
	6/6/2012	0.33	7.16	19.76	1225	4.78	67.5
MW-4D	8/27/2009	0.98	6.93	19.46	1280	4.31	-26.4
	12/1/2009	1.9	7.36	19.42	1249	4.66	-24.2
	3/16/2010	1.4	6.36	19.58	1283	24.8	-16.7
	6/4/2010	1.3	6.53	19.49	1259	5.1	115.8
	9/1/2010	1.44	6.92	19.67	1333	2.2	-26.9
	12/3/2010	1.3	6.5	19.4	1266	1.57	-116.6

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity μS/cm	Turbidity NTU	ORP
MW-4D cont.	3/3/2011	2.11	7.36	19.42	1219	1.8	-96.4
	5/19/2011	2.12	6.95	19.56	1262	2.09	-15.5
	9/8/2011	2.03	6.57	19.62	1261	3.13	-54
	3/2/2012	2.15	6.92	19.39	1272	13.1	-86.5
	6/6/2012	0.32	7.27	19.25	1189	6.32	22.9



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

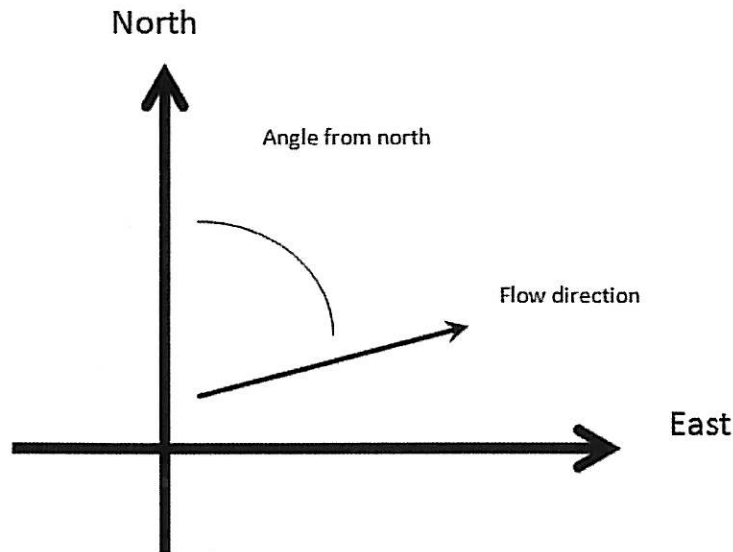
$$\begin{aligned}
 a x_1 + b y_1 + c &= h_1 \\
 a x_2 + b y_2 + c &= h_2 \\
 a x_3 + b y_3 + c &= h_3 \\
 &\dots \\
 a x_{30} + b y_{30} + c &= h_{30}
 \end{aligned}$$

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) MW-1	6092119.016	2084364.691	31.54	
2) MW-2	6092063.978	2084323.224	31.37	
3) MW-3	6092176.317	2084298.343	31.41	
4) MW-4	6092124.294	2084251.598	31.07	
5) MW-5	6092177.071	2084206.361	31.08	
6) MW-6	6092140.881	2084072.911	29.51	
7) MW-7	6092290.918	2084008.071	30.74	
8) EX-1	6092163.5	2084133.982	22.60	
9) EX-2	6092131.08	2084082.713	27.06	
10) MPE-1	6092125.048	2084212.393	31.00	
11) MPE-2	6092171.793	2084292.312	31.37	
12)				
13)				
14)				

15)			
16)			
17)			
18)			
19)			
20)			
21)			
22)			
23)			
24)			
25)			
26)			
27)			
28)			
29)			
30)			

Results

Number of Points Used in Calculation	11
Max. Difference Between Head Values	2.725
Gradient Magnitude (i)	0.02346
Flow direction as degrees from North (positive y axis)	226.8
Coefficient of Determination (R ²)	0.312

WCMMS

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

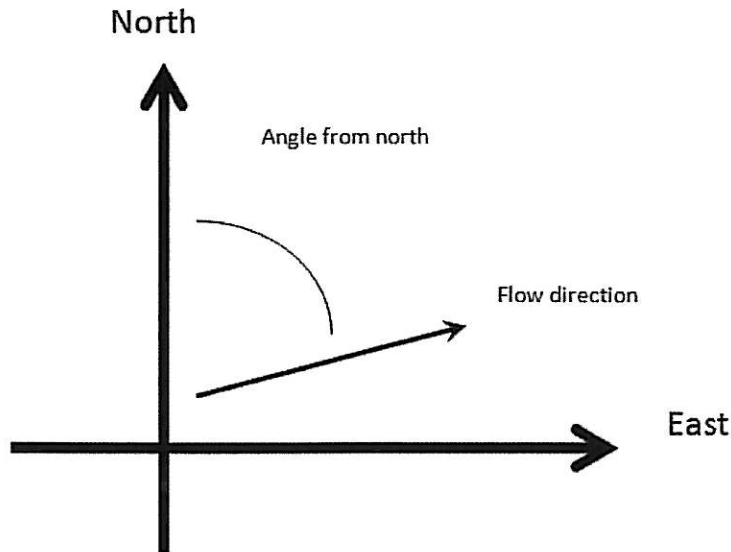
$$\begin{aligned}
 a x_1 + b y_1 + c &= h_1 \\
 a x_2 + b y_2 + c &= h_2 \\
 a x_3 + b y_3 + c &= h_3 \\
 &\dots \\
 a x_{30} + b y_{30} + c &= h_{30}
 \end{aligned}$$

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
1) MW-1D	6092128.064	2084372.231	31.24
2) MW-3D	6092183.856	2084303.621	31.33
3) MW-4D	6092116.755	2084222.948	31.12
4)			
5)			
6)			
7)			
8)			
9)			
10)			
11)			
12)			
13)			
14)			

15)			
16)			
17)			
18)			
19)			
20)			
21)			
22)			
23)			
24)			
25)			
26)			
27)			
28)			
29)			
30)			

Results

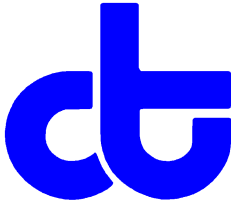
Number of Points Used in Calculation	3
Max. Difference Between Head Values	0.06401
Gradient Magnitude (i)	0.002460
Flow direction as degrees from North (positive y axis)	255.3
Coefficient of Determination (R^2)	1.00

WCMS

Last updated on Thursday, January 05, 2012

Appendix C

Laboratory Report and Chain of Custody Form
for the Second Quarter 2012 Monitoring Event



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

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

**Laboratory Job Number 236939
ANALYTICAL REPORT**

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2551
Location : 15101 Freedom Avenue San Leandro
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-1	236939-001
MW-2	236939-002
MW-3	236939-003
MW-4	236939-004
MW-5	236939-005
MW-6	236939-006
MW-7	236939-007
MW-1D	236939-008
MW-3D	236939-009
MW-4D	236939-010
EX-1	236939-011
EX-2	236939-012
MPE-1	236939-013
MPE-2	236939-014

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: _____

Project Manager

Date: 06/15/2012

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 236939
Client: SOMA Environmental Engineering Inc.
Project: 2551
Location: 15101 Freedom Avenue San Leandro
Request Date: 06/08/12
Samples Received: 06/08/12

This data package contains sample and QC results for fourteen water samples, requested for the above referenced project on 06/08/12. The samples were received cold and intact.

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

Low response was observed for isopropyl ether (DIPE) in the CCV analyzed 06/14/12 10:57; this analyte met minimum response criteria, and affected data was qualified with "b". No other analytical problems were encountered.

CHAIN OF CUSTODY

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

Analyses

C&T LOGIN # 236939

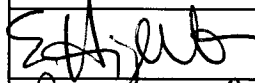
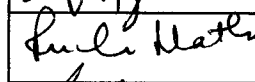
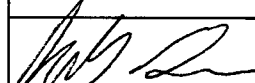
Project No: 2551
Project Name: 15101 Freedom Ave., San Leandro
Turnaround Time: Standard

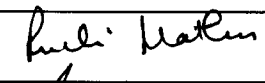
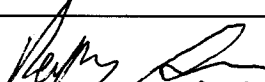
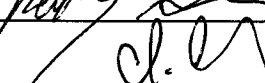
Sampler: Lizzie Hightower/
Report To: Joyce Bobek
Company: SOMA Environmental
Telephone: 925-734-6400
Fax: 925-734-6401

TPHg, BTEX, MtBE 8260B Gasoline Oxygenates & Lead Scavengers																			

Lab No.	Sample ID.	Sampling Date Time		Matrix			# of Containers	Preservative				
				Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE	
1	MW-1	6/7/12	09:33	*			3-VOAs	*			*	
2	MW-2	6/7/12	09:01	*			3-VOAs	*			*	
3	MW-3	6/7/12	09:57	*			3-VOAs	*			*	
4	MW-4	6/7/12	10:59	*			3-VOAs	*			*	
5	MW-5	6/7/12	10:36	*			3-VOAs	*			*	
6	MW-6	6/6/12	12:11	*			3-VOAs	*			*	
7	MW-7	6/6/12	11:40	*			3-VOAs	*			*	
8	MW-1D	6/6/12	13:49	*			3-VOAs	*			*	
9	MW-3D	6/6/12	14:20	*			3-VOAs	*			*	
10	MW-4D	6/6/12	14:48	*			3-VOAs	*			*	
11	EX-1	6/6/12	12:45	*			3-VOAs	*			*	
12	EX-2	6/6/12	12:26	*			3-VOAs	*			*	
13	MPE-1	6/6/12	15:12	*			3-VOAs	*			*	
14	MPE-2	6/7/12	10:16	*			3-VOAs	*			*	

Notes: EDF OUTPUT REQUIRED
 Ethanol

RELINQUISHED BY:
 6/8/12 09:50 DATE/TIME
 6/8/12 9:40 DATE/TIME
 6/8/12 10:45 DATE/TIME

RECEIVED BY:
 6/8/12 8:50 DATE/TIME
 6/8/12 9:40 DATE/TIME
 6/8/12 10:45 DATE/TIME

intact cold RC

COOLER RECEIPT CHECKLIST



Login # 236939 Date Received 6/18/12 Number of coolers 1
 Client SOMA ENVIRONMENTAL Project 2501

Date Opened 6/18/12 By (print) ICHOY (sign) [Signature]
 Date Logged in ↓ By (print) ↓ (sign) ↓

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 Foam blocks Bags None
- Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C
 Type of ice used: Wet Blue/Gel None Temp(°C) 2-2°C

- 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 etc

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

COMMENTS

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-1	Batch#: 187549
Lab ID: 236939-001	Sampled: 06/07/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 5.000	

Analyte	Result	RL
Gasoline C7-C12	5,600	250
tert-Butyl Alcohol (TBA)	ND	50
Isopropyl Ether (DIPE)	ND	2.5
Ethyl tert-Butyl Ether (ETBE)	ND	2.5
Methyl tert-Amyl Ether (TAME)	ND	2.5
Ethanol	ND	5,000
MTBE	2.9	2.5
1,2-Dichloroethane	ND	2.5
Benzene	130	2.5
Toluene	ND	2.5
1,2-Dibromoethane	ND	2.5
Ethylbenzene	360	2.5
m,p-Xylenes	160	2.5
o-Xylene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	93	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-2	Batch#: 187549
Lab ID: 236939-002	Sampled: 06/07/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	720	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	7.9	0.50
m,p-Xylenes	0.79	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	104	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-3	Batch#: 187549
Lab ID: 236939-003	Sampled: 06/07/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/14/12
Diln Fac: 10.00	

Analyte	Result	RL
Gasoline C7-C12	9,000	500
tert-Butyl Alcohol (TBA)	ND	100
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	10,000
MTBE	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	290	5.0
Toluene	9.3	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	520	5.0
m,p-Xylenes	790	5.0
o-Xylene	110	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	92	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-4	Batch#: 187603
Lab ID: 236939-004	Sampled: 06/07/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/14/12
Diln Fac: 5.000	

Analyte	Result	RL
Gasoline C7-C12	2,000	250
tert-Butyl Alcohol (TBA)	1,000	50
Isopropyl Ether (DIPE)	ND	2.5
Ethyl tert-Butyl Ether (ETBE)	13	2.5
Methyl tert-Amyl Ether (TAME)	ND	2.5
Ethanol	ND	5,000
MTBE	29	2.5
1,2-Dichloroethane	ND	2.5
Benzene	290	2.5
Toluene	ND	2.5
1,2-Dibromoethane	ND	2.5
Ethylbenzene	66	2.5
m,p-Xylenes	23	2.5
o-Xylene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	94	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-5	Batch#: 187549
Lab ID: 236939-005	Sampled: 06/07/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 2.000	

Analyte	Result	RL
Gasoline C7-C12	3,700	100
tert-Butyl Alcohol (TBA)	22	20
Isopropyl Ether (DIPE)	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	1.0
Methyl tert-Amyl Ether (TAME)	2.8	1.0
Ethanol	ND	2,000
MTBE	4.4	1.0
1,2-Dichloroethane	ND	1.0
Benzene	32	1.0
Toluene	ND	1.0
1,2-Dibromoethane	ND	1.0
Ethylbenzene	100	1.0
m,p-Xylenes	52	1.0
o-Xylene	7.0	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-6	Batch#: 187603
Lab ID: 236939-006	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/14/12
Diln Fac: 3.333	

Analyte	Result	RL
Gasoline C7-C12	9,200	170
tert-Butyl Alcohol (TBA)	ND	33
Isopropyl Ether (DIPE)	ND	1.7
Ethyl tert-Butyl Ether (ETBE)	ND	1.7
Methyl tert-Amyl Ether (TAME)	ND	1.7
Ethanol	ND	3,300
MTBE	ND	1.7
1,2-Dichloroethane	ND	1.7
Benzene	12	1.7
Toluene	ND	1.7
1,2-Dibromoethane	ND	1.7
Ethylbenzene	210	1.7
m,p-Xylenes	320	1.7
o-Xylene	ND	1.7

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	100	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-7	Batch#: 187549
Lab ID: 236939-007	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	780	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	2.6	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	2.9	0.50
m,p-Xylenes	1.0	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	100	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-1D	Batch#: 187549
Lab ID: 236939-008	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	95	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-3D	Batch#: 187549
Lab ID: 236939-009	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	4.8	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	95	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MW-4D	Batch#: 187549
Lab ID: 236939-010	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	1.3	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	96	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: EX-1	Batch#: 187549
Lab ID: 236939-011	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	250	50
tert-Butyl Alcohol (TBA)	390	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	2.9	0.50
Methyl tert-Amyl Ether (TAME)	4.8	0.50
Ethanol	ND	1,000
MTBE	71	0.50
1,2-Dichloroethane	0.57	0.50
Benzene	22	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	4.7	0.50
m,p-Xylenes	16	0.50
o-Xylene	4.0	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	98	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: EX-2	Batch#: 187549
Lab ID: 236939-012	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/13/12
Diln Fac: 3.333	

Analyte	Result	RL
Gasoline C7-C12	6,900	170
tert-Butyl Alcohol (TBA)	ND	33
Isopropyl Ether (DIPE)	ND	1.7
Ethyl tert-Butyl Ether (ETBE)	ND	1.7
Methyl tert-Amyl Ether (TAME)	ND	1.7
Ethanol	ND	3,300
MTBE	5.2	1.7
1,2-Dichloroethane	ND	1.7
Benzene	290	1.7
Toluene	97	1.7
1,2-Dibromoethane	ND	1.7
Ethylbenzene	310	1.7
m,p-Xylenes	600	1.7
o-Xylene	190	1.7

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	95	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MPE-1	Batch#: 187549
Lab ID: 236939-013	Sampled: 06/06/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/14/12
Diln Fac: 62.50	

Analyte	Result	RL
Gasoline C7-C12	78,000	3,100
tert-Butyl Alcohol (TBA)	ND	630
Isopropyl Ether (DIPE)	ND	31
Ethyl tert-Butyl Ether (ETBE)	ND	31
Methyl tert-Amyl Ether (TAME)	430	31
Ethanol	ND	63,000
MTBE	750	31
1,2-Dichloroethane	ND	31
Benzene	4,500	31
Toluene	4,900	31
1,2-Dibromoethane	ND	31
Ethylbenzene	2,300	31
m,p-Xylenes	7,600	31
o-Xylene	3,100	31

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	89	69-145
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 236939	Location: 15101 Freedom Avenue San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2551	Analysis: EPA 8260B
Field ID: MPE-2	Batch#: 187549
Lab ID: 236939-014	Sampled: 06/07/12
Matrix: Water	Received: 06/08/12
Units: ug/L	Analyzed: 06/14/12
Diln Fac: 25.00	

Analyte	Result	RL
Gasoline C7-C12	33,000	1,300
tert-Butyl Alcohol (TBA)	ND	250
Isopropyl Ether (DIPE)	ND	13
Ethyl tert-Butyl Ether (ETBE)	ND	13
Methyl tert-Amyl Ether (TAME)	ND	13
Ethanol	ND	25,000
MTBE	29	13
1,2-Dichloroethane	ND	13
Benzene	1,800	13
Toluene	27	13
1,2-Dibromoethane	ND	13
Ethylbenzene	1,600	13
m,p-Xylenes	2,500	13
o-Xylene	200	13

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	92	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	236939	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187549
Units:	ug/L	Analyzed:	06/13/12
Diln Fac:	1.000		

Type: BS Lab ID: QC643923

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	101.4	81	47-136
Isopropyl Ether (DIPE)	25.00	17.46	70	54-136
Ethyl tert-Butyl Ether (ETBE)	25.00	19.77	79	57-133
Methyl tert-Amyl Ether (TAME)	25.00	20.32	81	65-120
MTBE	25.00	20.18	81	61-121
1,2-Dichloroethane	25.00	26.44	106	70-136
Benzene	25.00	24.83	99	80-121
Toluene	25.00	25.69	103	80-120
1,2-Dibromoethane	25.00	24.90	100	80-120
Ethylbenzene	25.00	25.64	103	80-120
m,p-Xylenes	50.00	50.96	102	80-121
o-Xylene	25.00	25.63	103	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	100	69-145
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC643924

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	100.8	81	47-136	1	28
Isopropyl Ether (DIPE)	25.00	16.64	67	54-136	5	20
Ethyl tert-Butyl Ether (ETBE)	25.00	18.88	76	57-133	5	20
Methyl tert-Amyl Ether (TAME)	25.00	20.47	82	65-120	1	20
MTBE	25.00	19.35	77	61-121	4	20
1,2-Dichloroethane	25.00	25.50	102	70-136	4	20
Benzene	25.00	24.53	98	80-121	1	20
Toluene	25.00	24.54	98	80-120	5	20
1,2-Dibromoethane	25.00	24.13	97	80-120	3	20
Ethylbenzene	25.00	24.53	98	80-120	4	20
m,p-Xylenes	50.00	48.98	98	80-121	4	20
o-Xylene	25.00	23.78	95	80-121	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	101	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	236939	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187549
Units:	ug/L	Analyzed:	06/13/12
Diln Fac:	1.000		

Type: BS Lab ID: QC643925

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	978.7	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	103	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC643926

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,006	101	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS		
Lab #:	236939	Location: 15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2551	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC643927	Batch#: 187549
Matrix:	Water	Analyzed: 06/13/12
Units:	ug/L	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	98	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	236939	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187603
Units:	ug/L	Analyzed:	06/14/12
Diln Fac:	1.000		

Type: BS Lab ID: QC644153

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	99.35	79	47-136
Isopropyl Ether (DIPE)	25.00	17.17 b	69	54-136
Ethyl tert-Butyl Ether (ETBE)	25.00	18.67	75	57-133
Methyl tert-Amyl Ether (TAME)	25.00	19.33	77	65-120
MTBE	25.00	19.92	80	61-121
1,2-Dichloroethane	25.00	25.68	103	70-136
Benzene	25.00	24.83	99	80-121
Toluene	25.00	24.91	100	80-120
1,2-Dibromoethane	25.00	23.47	94	80-120
Ethylbenzene	25.00	24.59	98	80-120
m,p-Xylenes	50.00	50.38	101	80-121
o-Xylene	25.00	24.65	99	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	98	69-145
Toluene-d8	97	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC644154

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	96.50	77	47-136	3	28
Isopropyl Ether (DIPE)	25.00	15.89 b	64	54-136	8	20
Ethyl tert-Butyl Ether (ETBE)	25.00	17.91	72	57-133	4	20
Methyl tert-Amyl Ether (TAME)	25.00	19.41	78	65-120	0	20
MTBE	25.00	19.62	78	61-121	2	20
1,2-Dichloroethane	25.00	25.22	101	70-136	2	20
Benzene	25.00	23.74	95	80-121	4	20
Toluene	25.00	24.88	100	80-120	0	20
1,2-Dibromoethane	25.00	22.61	90	80-120	4	20
Ethylbenzene	25.00	23.75	95	80-120	3	20
m,p-Xylenes	50.00	47.95	96	80-121	5	20
o-Xylene	25.00	22.93	92	80-121	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	99	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

b= See narrative
 RPD= Relative Percent Difference
 Page 1 of 1

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	236939	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	187603
Units:	ug/L	Analyzed:	06/14/12
Diln Fac:	1.000		

Type: BS Lab ID: QC644155

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,008	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	102	69-145
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC644156

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	941.8	94	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	96	69-145
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS		
Lab #:	236939	Location: 15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2551	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC644157	Batch#: 187603
Matrix:	Water	Analyzed: 06/14/12
Units:	ug/L	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-125
1,2-Dichloroethane-d4	98	69-145
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Date : 13-JUN-2012 23:41

Client ID: DYNA P&T

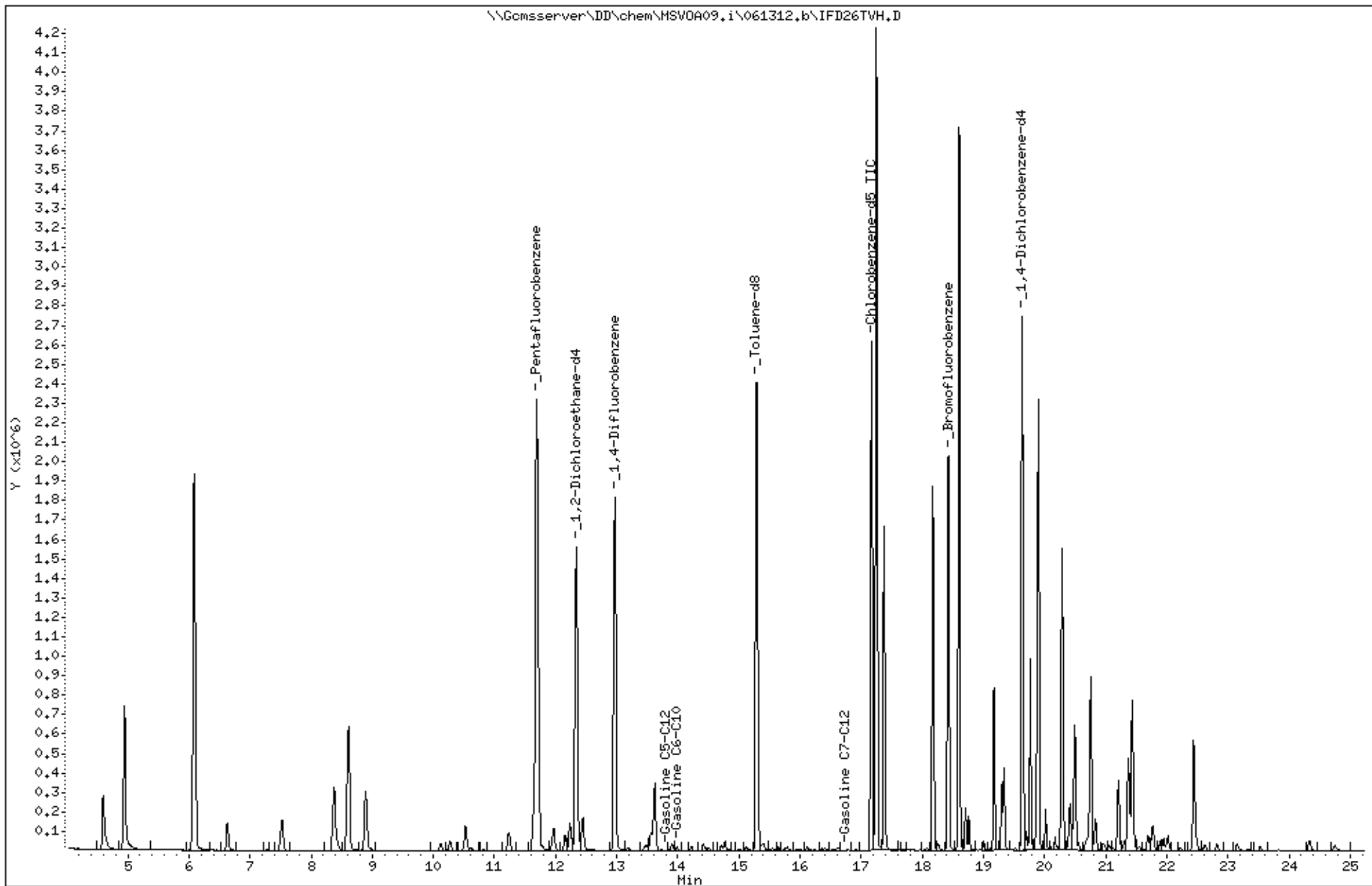
Sample Info: S,236939-001

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 13-JUN-2012 19:14

Client ID: DYNA P&T

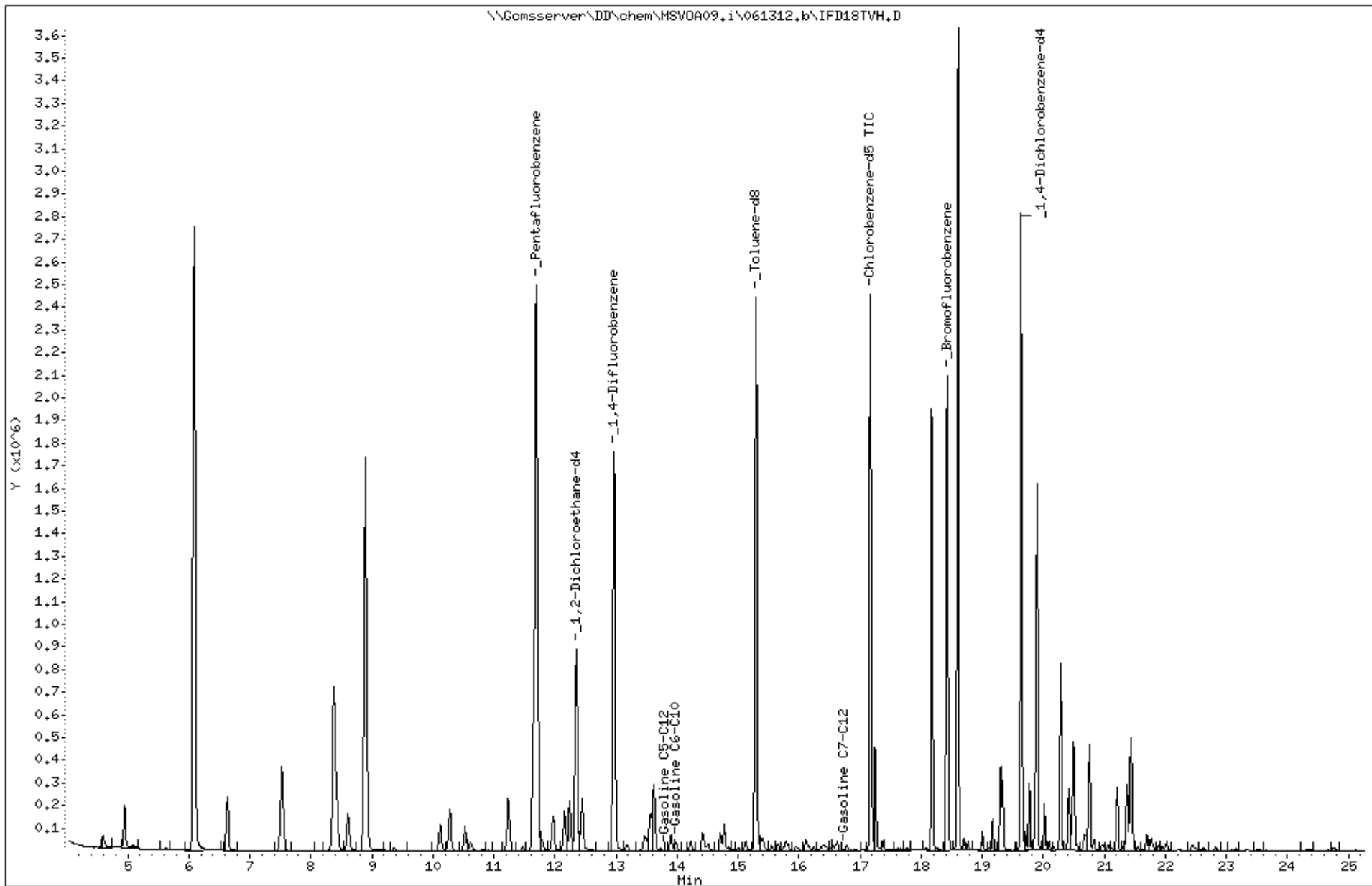
Sample Info: S,236939-002

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:

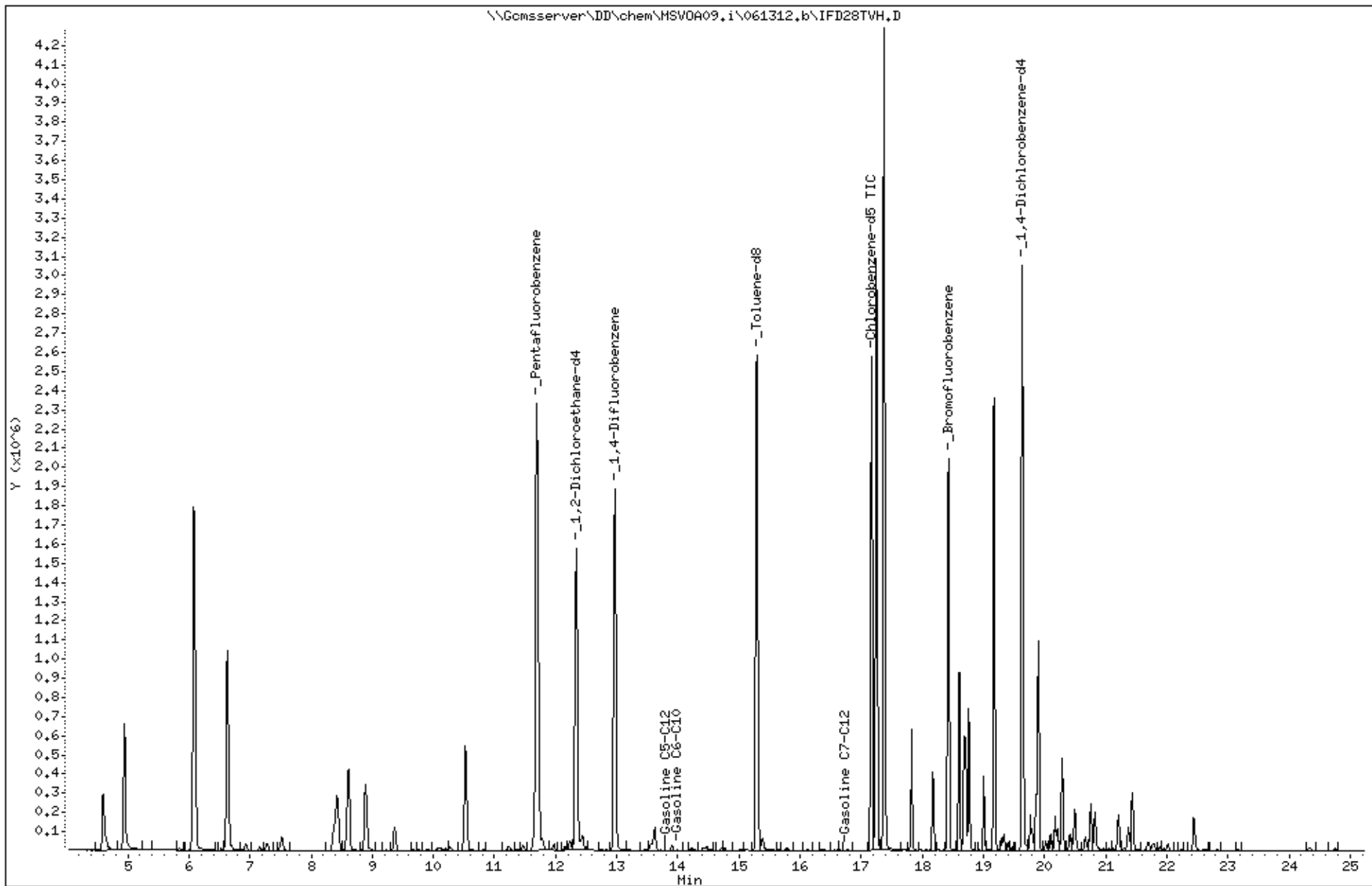


Date : 14-JUN-2012 00:48
Client ID: DYNA P&T
Sample Info: S,236939-003

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:

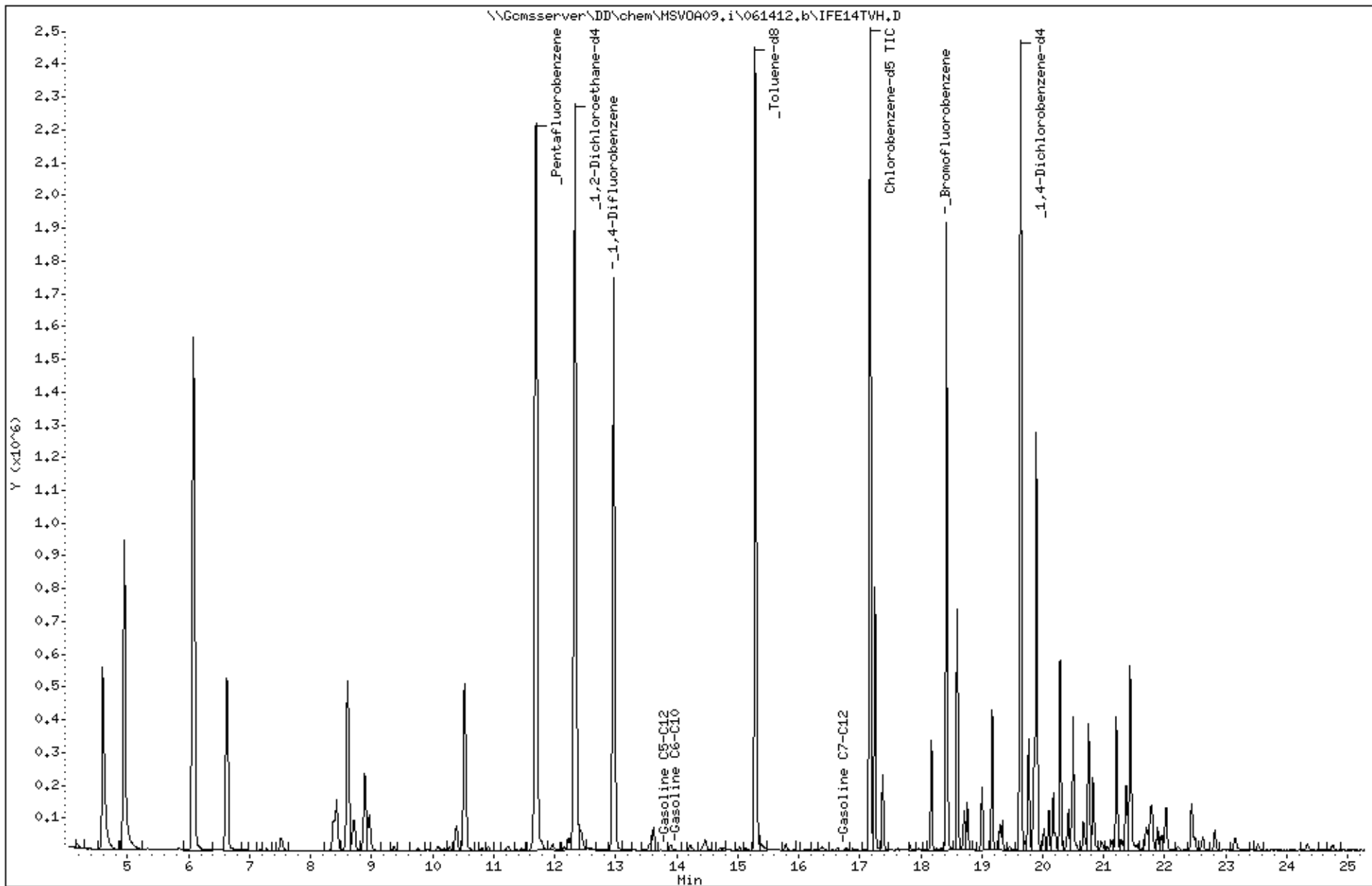


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Client ID: DYNA P&T
Sample Info: S,236939-004

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:



Date : 13-JUN-2012 22:34

Client ID: DYNA P&T

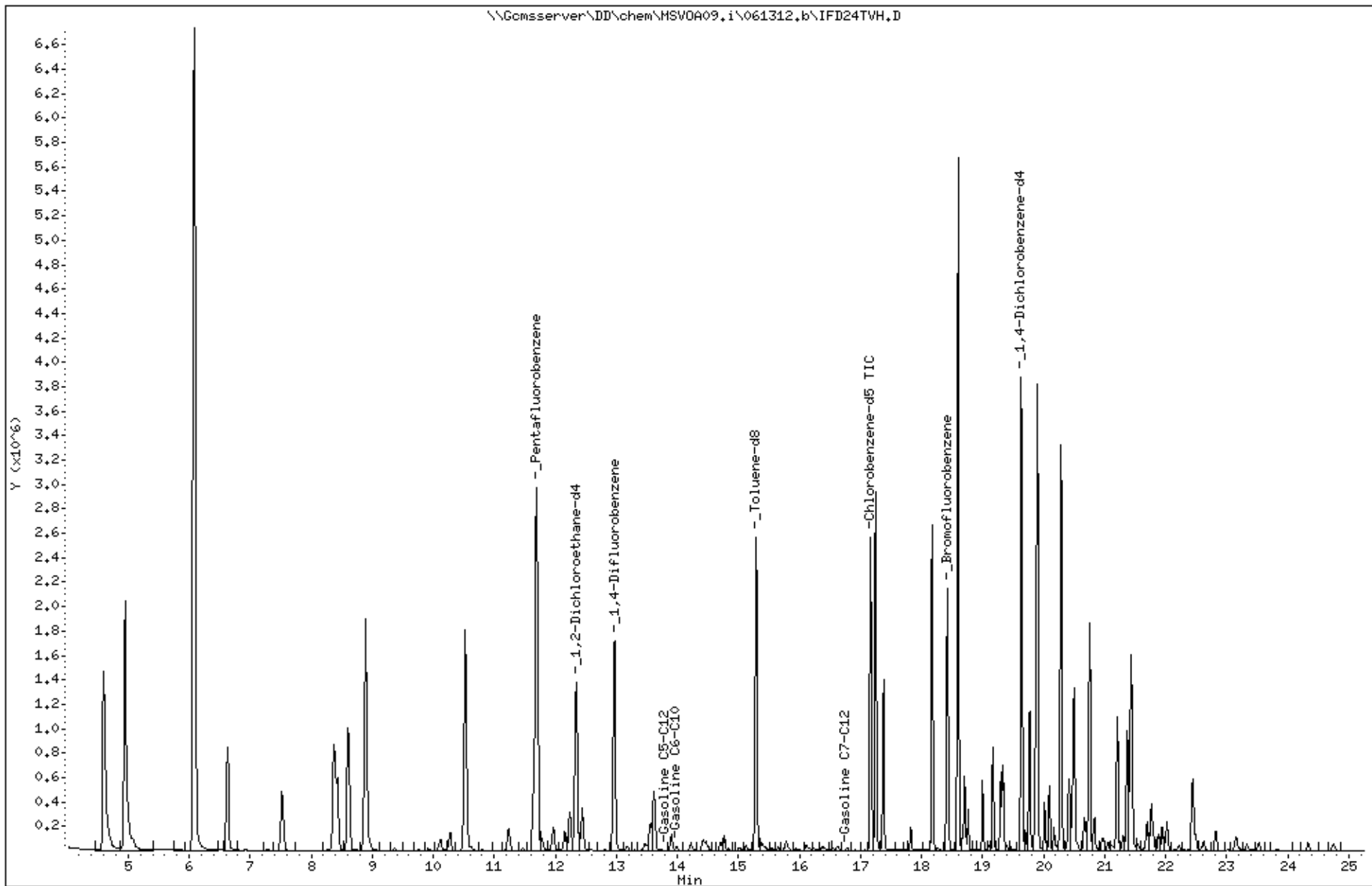
Sample Info: S,236939-005

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:

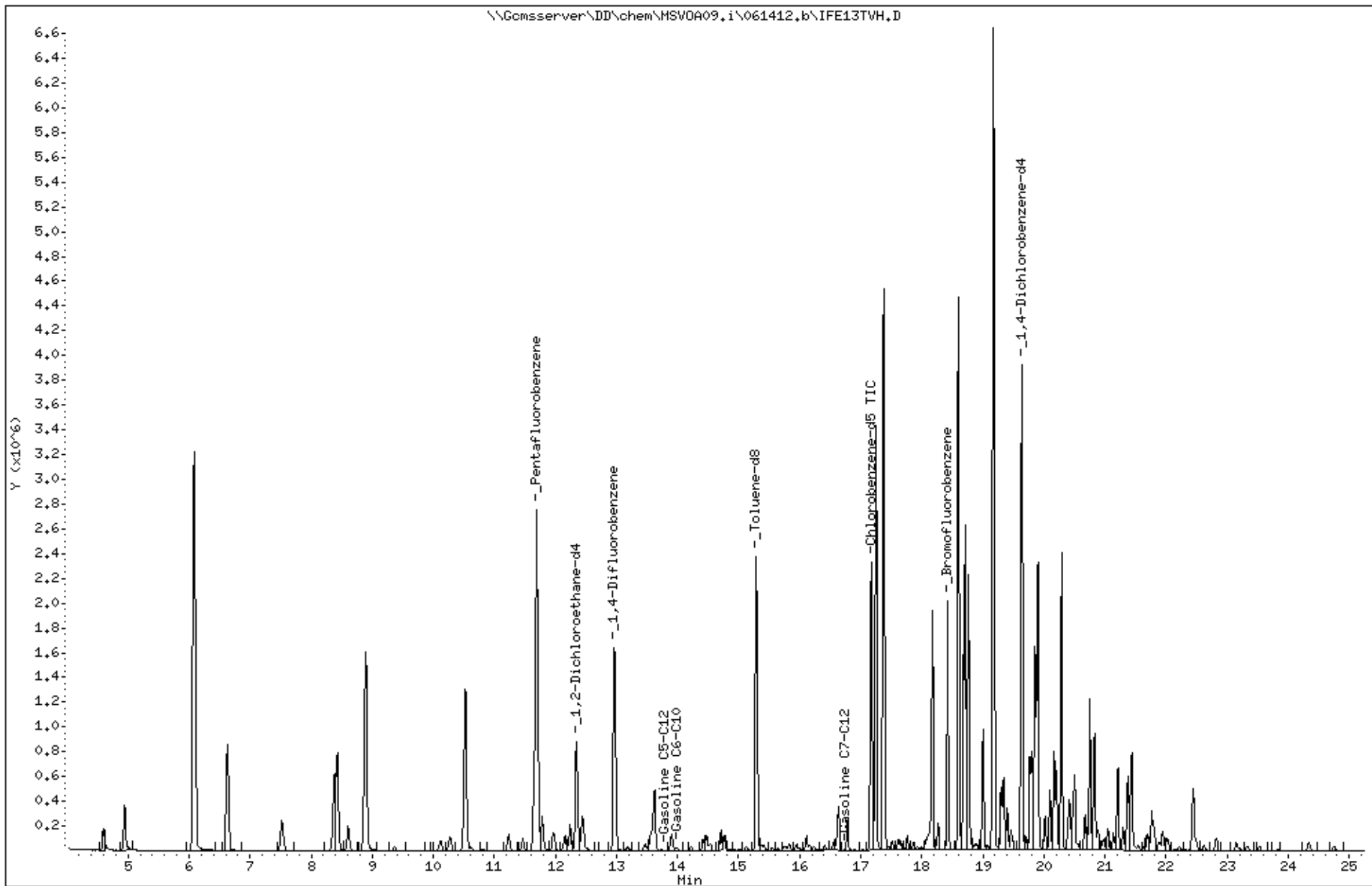


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Sample Info: S,236939-006

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:



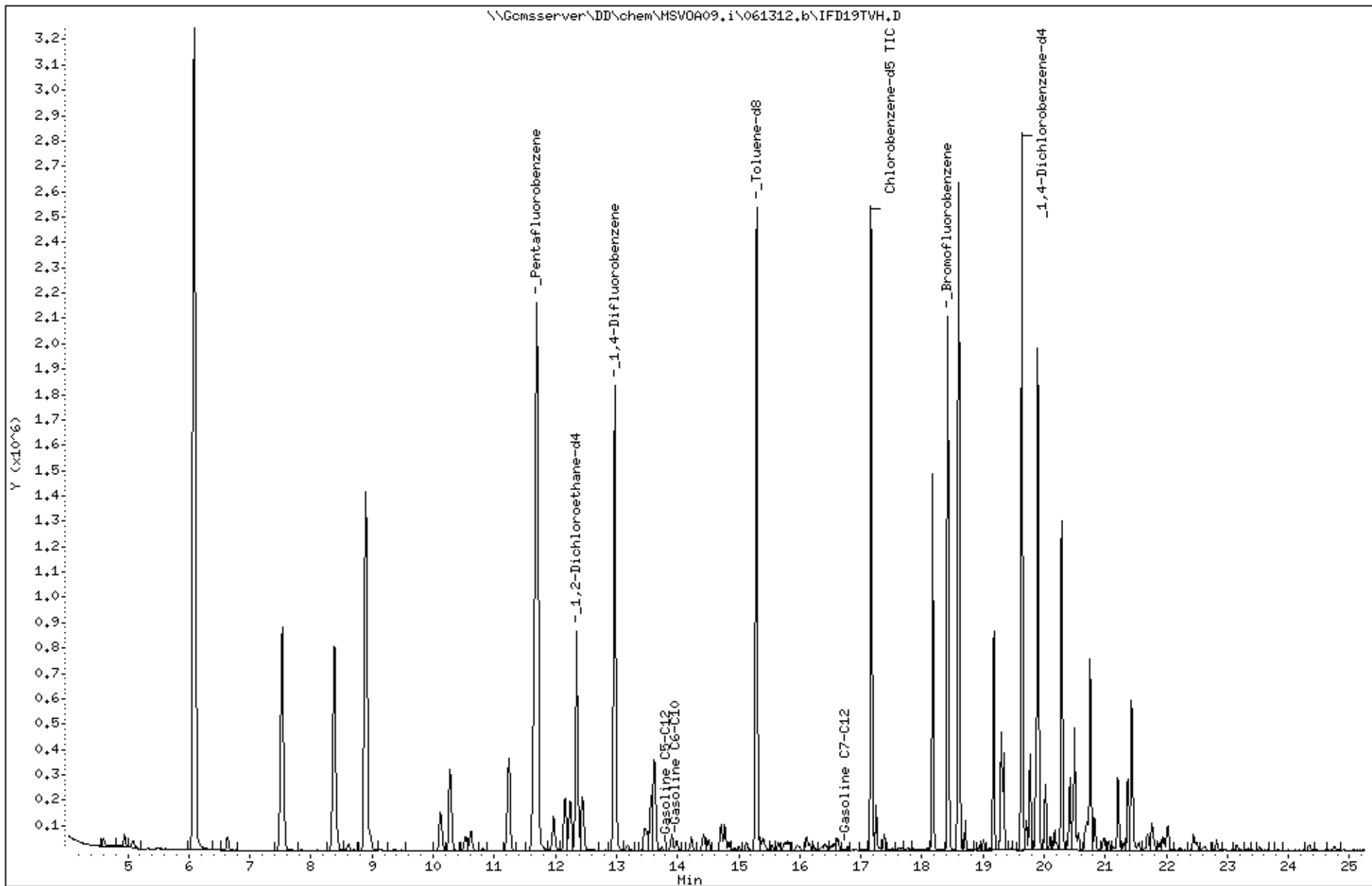
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Client ID: DYNA P&T
Sample Info: S,236939-007

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 13-JUN-2012 22:01

Client ID: DYNA P&T

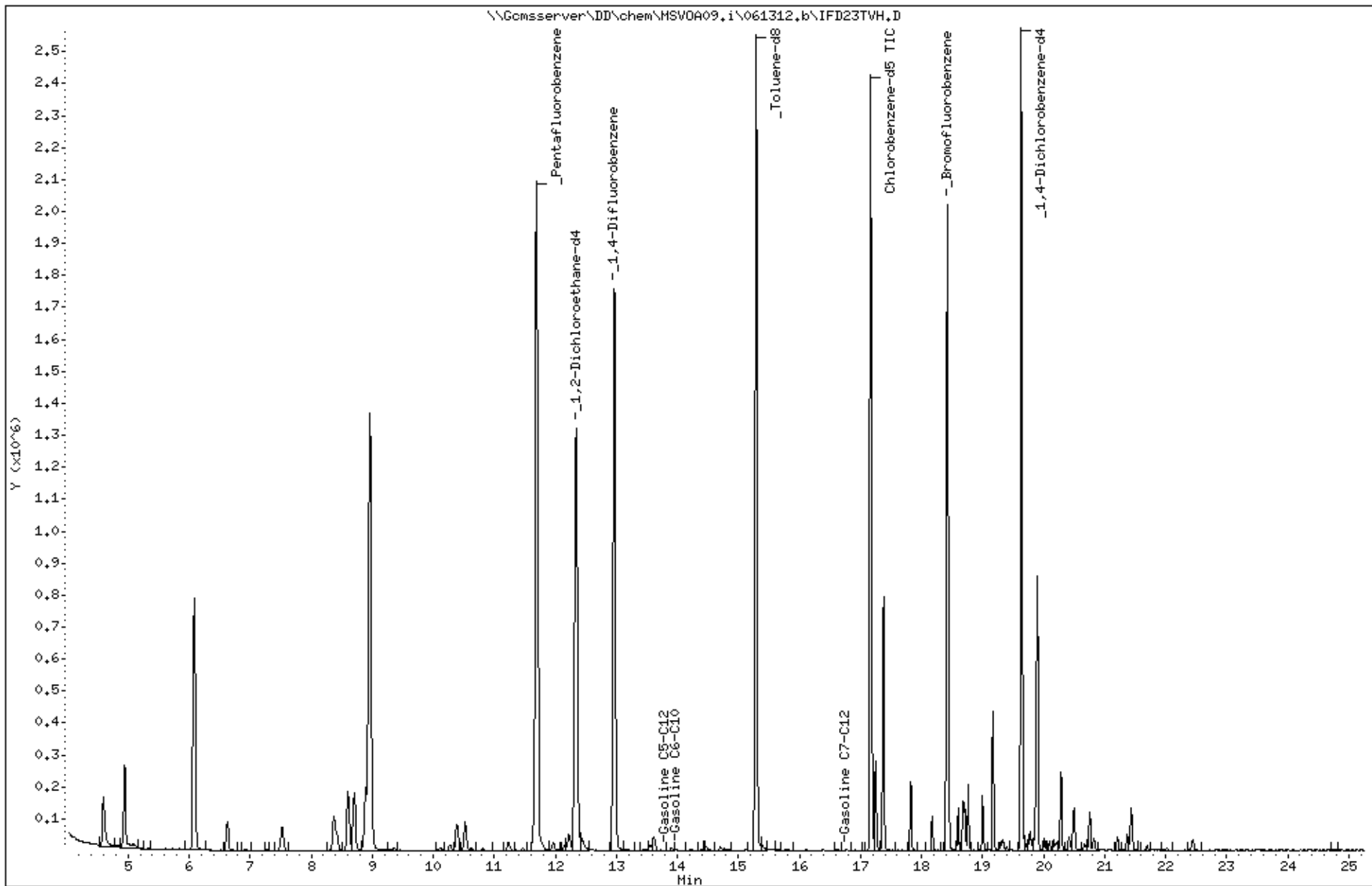
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Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



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Client ID: DYNA P&T

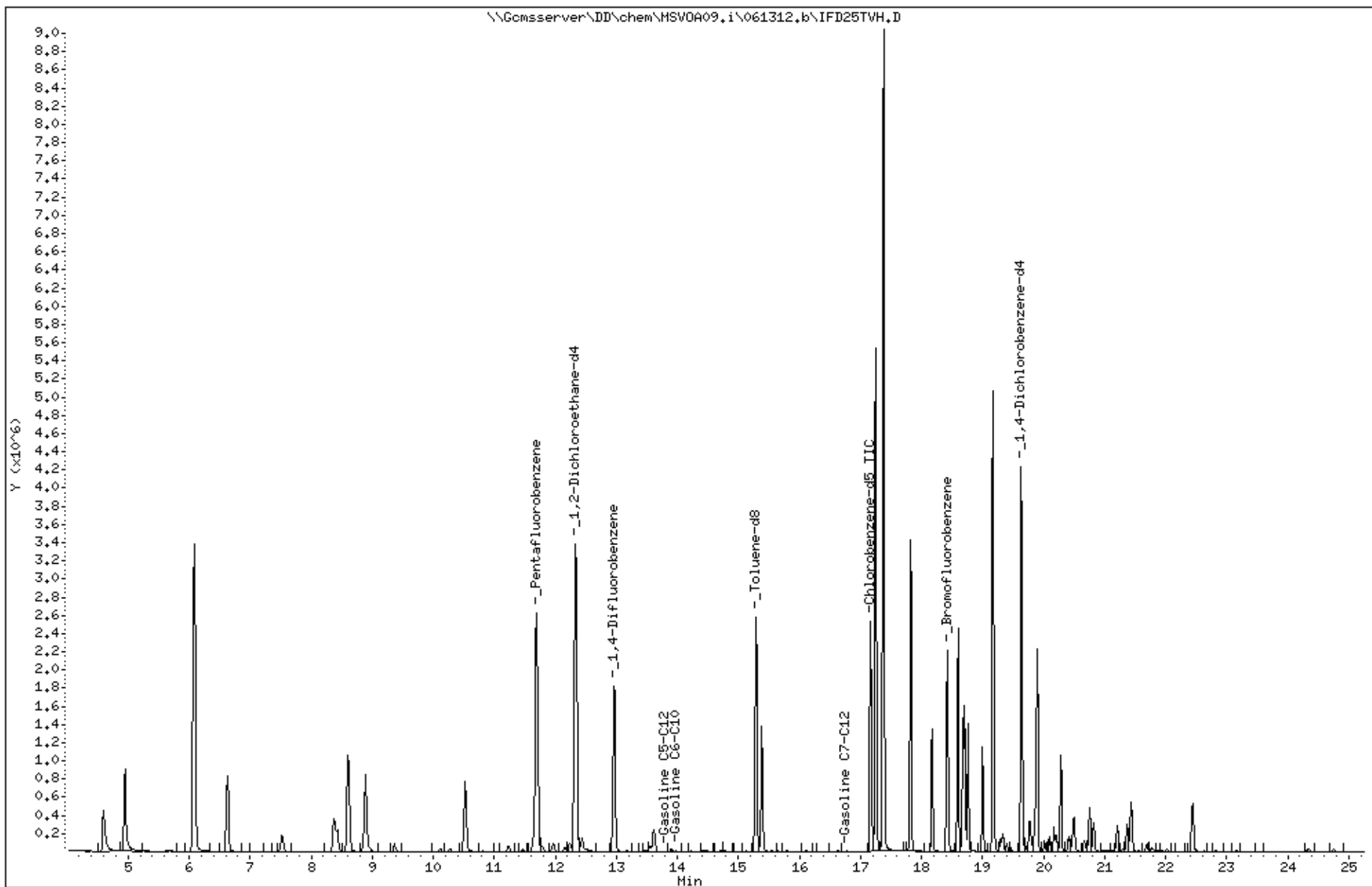
Sample Info: S,236939-012

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 14-JUN-2012 02:27

Client ID: DYNA P&T

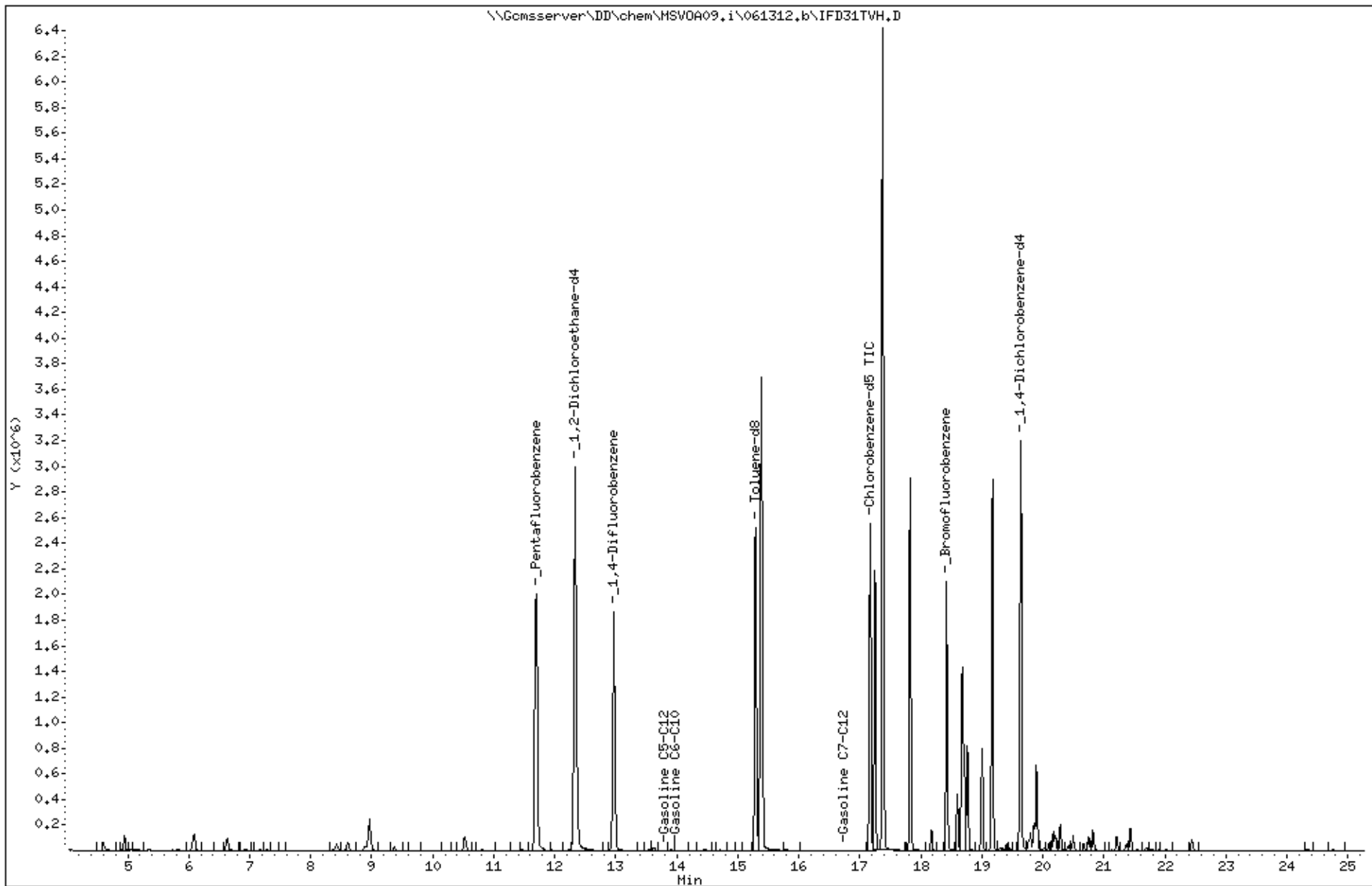
Sample Info: S.236939-013

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:

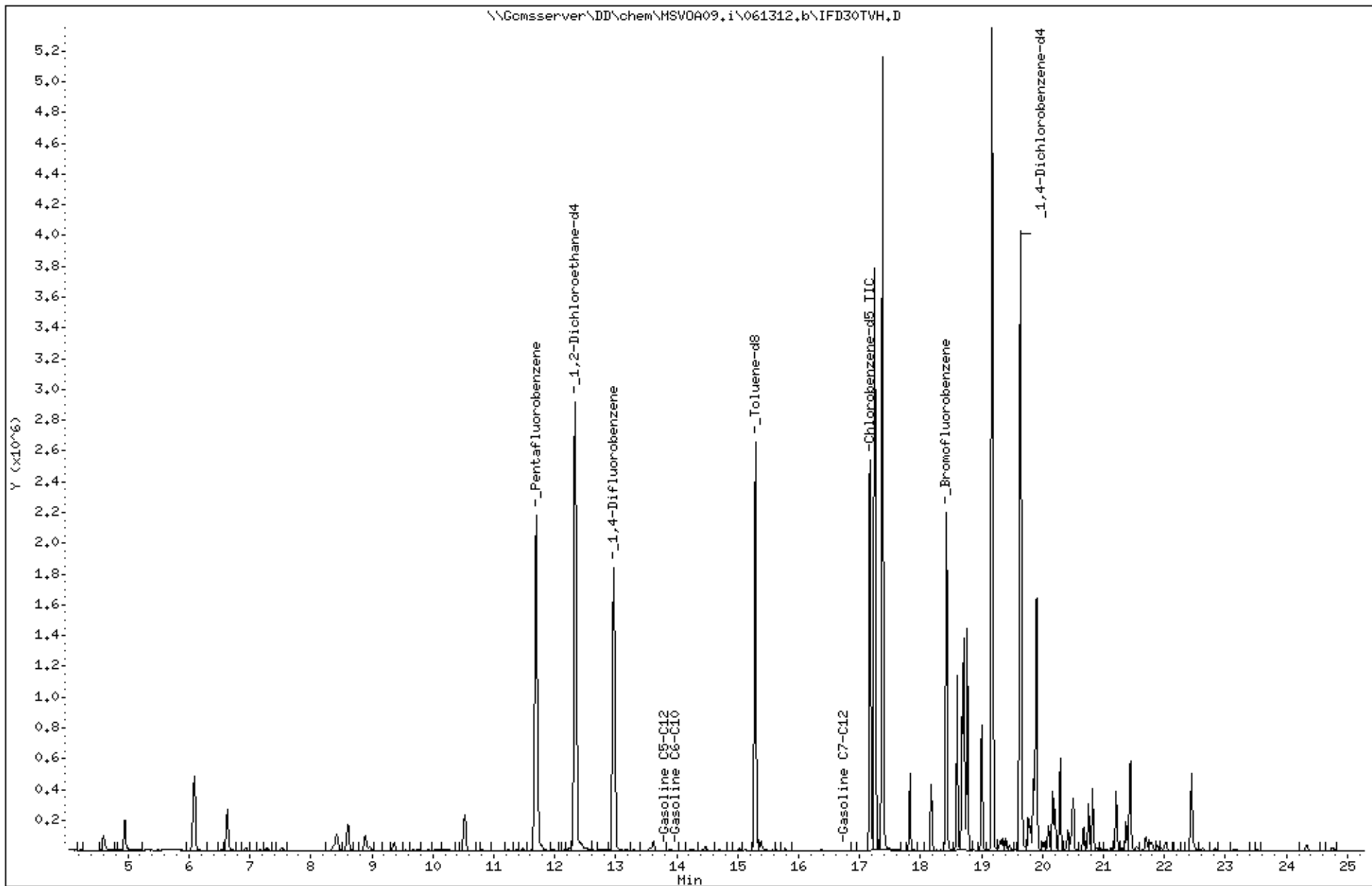


Date : 14-JUN-2012 01:54
Client ID: DYNA P&T
Sample Info: S,236939-014

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:



Date : 13-JUN-2012 17:01

Client ID: DYNA P&T

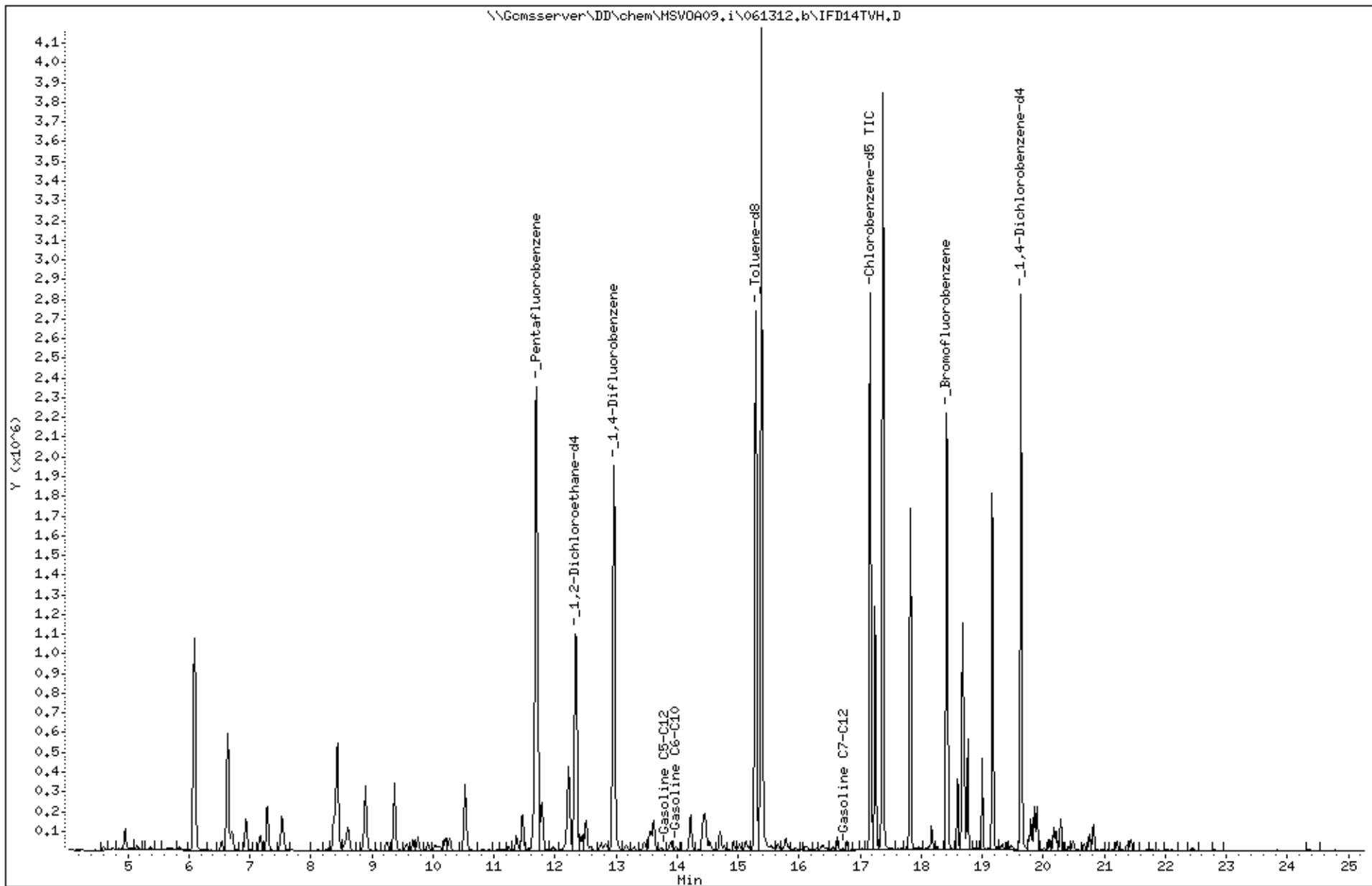
Sample Info: CCV/BS,QC643925,187549,S19732,,01/100

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Appendix D

Laboratory Report and Chain of Custody Form for the Treatment System



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

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

**Laboratory Job Number 235613
ANALYTICAL REPORT**

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2553
Location : 15101 Freedom Ave, San Leandro
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
EFFLUENT	235613-001
GAC-1	235613-002
INFLUENT	235613-003

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: _____

Project Manager

Date: 04/25/2012

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 235613
Client: SOMA Environmental Engineering Inc.
Project: 2553
Location: 15101 Freedom Ave, San Leandro
Request Date: 04/17/12
Samples Received: 04/17/12

This data package contains sample and QC results for three water samples, requested for the above referenced project on 04/17/12. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

High surrogate recovery was observed for bromofluorobenzene (PID) in INFLUENT (lab # 235613-003). No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No 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

LOGIN # 235013

Sampler: MASOUD

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandro 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				TPH-g 8015	TPH-d, TPH-mo 8015	BTEX 8020
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE			
1	EFFLUENT	4/17/12-10		*		6 VOAs	*			*			
				*		1L Amber				*			
2	GAC-1			*		6 VOAs	*			*			
3	INFLUENT			*		6 VOAs	*			*			

Notes: EDF OUTPUT REQUIRED <i>instead charged a day & used Blue Ice.</i>	RELINQUISHED BY:		RECEIVED BY:	
	<i>see</i>	4/17/12-12:20	<i>Tony Bobek</i>	4-17-12 12:20
		DATE/TIME		DATE/TIME
		DATE/TIME		DATE/TIME
		DATE/TIME		DATE/TIME

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 235613 Date Received 4/17/12 Number of coolers 1
Client SOMA Project 2563

Date Opened 4/17/12 By (print) I CHOI (sign) [Signature]
Date Logged in [initials] By (print) [initials] (sign) [initials]

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, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

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

Type of ice used: Wet, Blue/Gel, None Temp(°C) 19.0°C

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.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	235613	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Batch#:	185744
Units:	ug/L	Sampled:	04/17/12
Diln Fac:	1.000	Received:	04/17/12

Field ID: EFFLUENT Lab ID: 235613-001
 Type: SAMPLE Analyzed: 04/19/12

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

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	95	76-121	EPA 8015B
Bromofluorobenzene (PID)	121	70-125	EPA 8021B

Field ID: GAC-1 Lab ID: 235613-002
 Type: SAMPLE Analyzed: 04/19/12

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

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	96	76-121	EPA 8015B
Bromofluorobenzene (PID)	121	70-125	EPA 8021B

*= Value outside of QC limits; see narrative
 ND= Not Detected
 RL= Reporting Limit

Curtis & Tompkins Laboratories Analytical Report

Lab #: 235613	Location: 15101 Freedom Ave, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2553	
Matrix: Water	Batch#: 185744
Units: ug/L	Sampled: 04/17/12
Diln Fac: 1.000	Received: 04/17/12

Field ID: INFLUENT Lab ID: 235613-003
 Type: SAMPLE Analyzed: 04/20/12

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,100	50	EPA 8015B
Benzene	60	0.50	EPA 8021B
Toluene	6.8	0.50	EPA 8021B
Ethylbenzene	24	0.50	EPA 8021B
m,p-Xylenes	120	0.50	EPA 8021B
o-Xylene	41	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	104	76-121	EPA 8015B
Bromofluorobenzene (PID)	132 *	70-125	EPA 8021B

Type: BLANK Analyzed: 04/19/12
 Lab ID: QC636431

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

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	88	76-121	EPA 8015B
Bromofluorobenzene (PID)	112	70-125	EPA 8021B

*= Value outside of QC limits; see narrative
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	235613	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	185744
Units:	ug/L	Analyzed:	04/19/12
Diln Fac:	1.000		

Type: BS Lab ID: QC636428

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	10.93	109	78-120
Toluene	10.00	10.20	102	80-120
Ethylbenzene	10.00	10.74	107	80-120
m,p-Xylenes	10.00	10.05	100	80-120
o-Xylene	10.00	11.00	110	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	111	70-125

Type: BSD Lab ID: QC636429

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.27	103	78-120	6	31
Toluene	10.00	9.963	100	80-120	2	20
Ethylbenzene	10.00	10.06	101	80-120	7	20
m,p-Xylenes	10.00	10.33	103	80-120	3	20
o-Xylene	10.00	10.91	109	80-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	111	70-125

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	235613	Location:	15101 Freedom Ave, San Leandro	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	2553	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC636430	Batch#:	185744	
Matrix:	Water	Analyzed:	04/19/12	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,736	87	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	76-121

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	235613	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	185744
MSS Lab ID:	235633-002	Sampled:	04/17/12
Matrix:	Water	Received:	04/17/12
Units:	ug/L	Analyzed:	04/20/12
Diln Fac:	1.000		

Type: MS Lab ID: QC636432

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	20.71	2,000	2,076	103	68-120

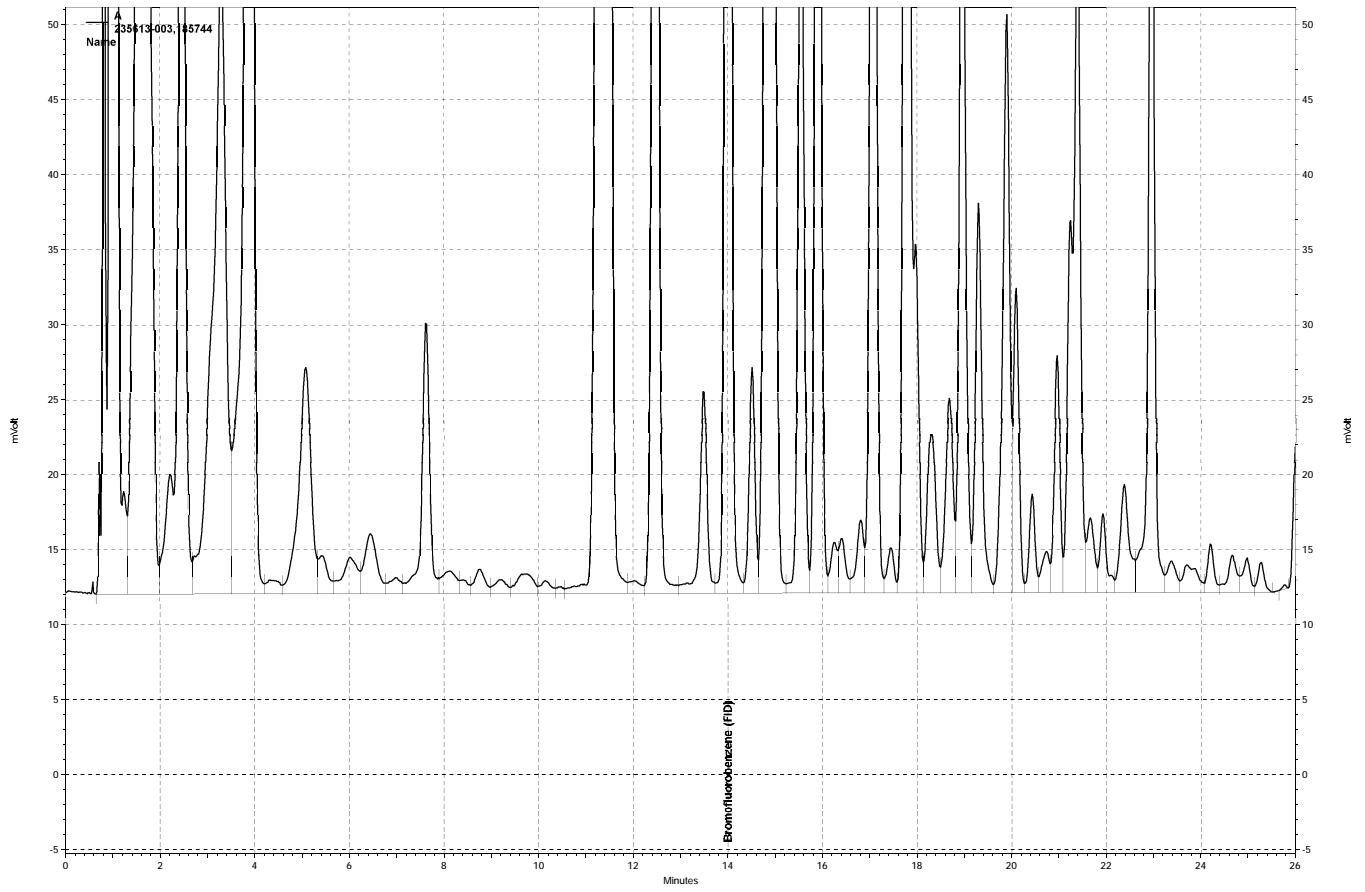
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	76-121

Type: MSD Lab ID: QC636433

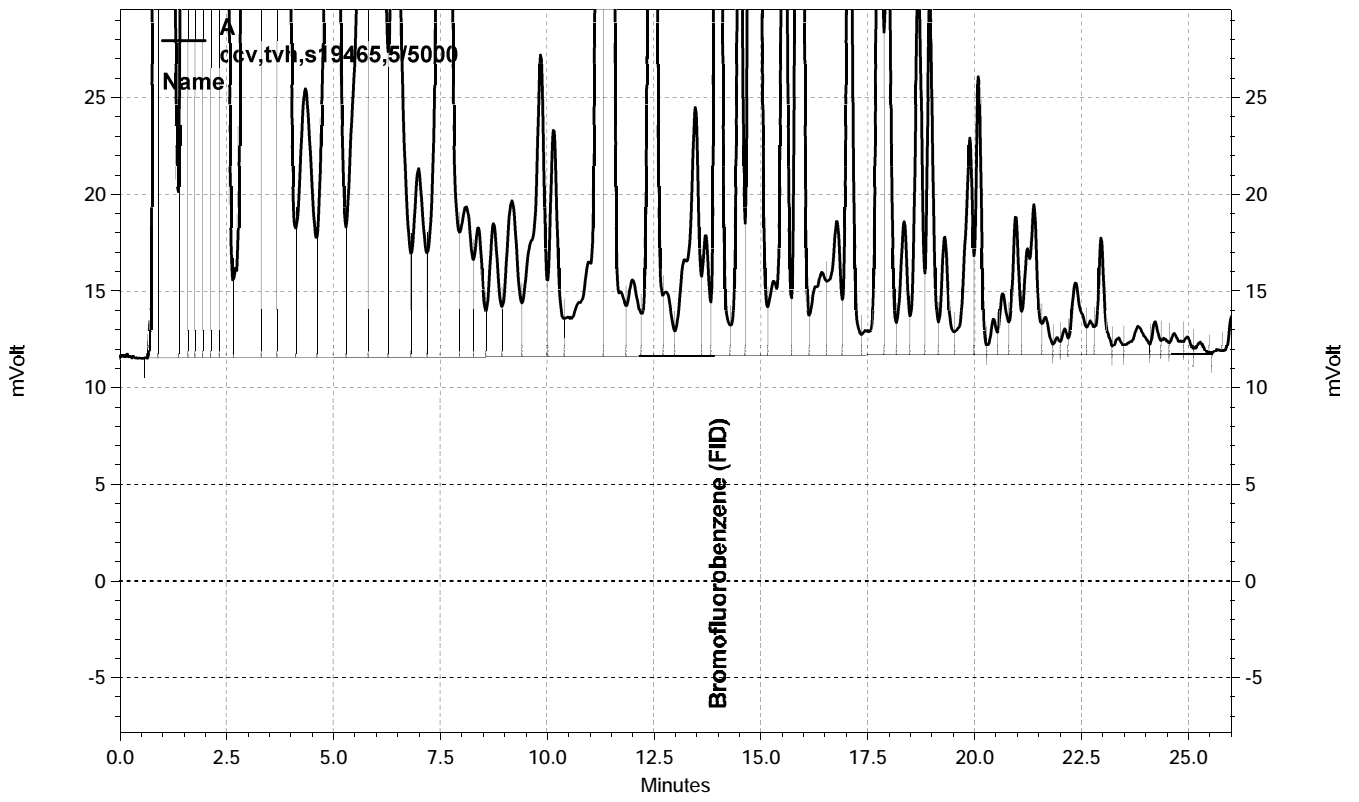
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,948	96	68-120	6	21

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	76-121

RPD= Relative Percent Difference



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Total Extractable Hydrocarbons			
Lab #:	235613	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	185747
Matrix:	Water	Sampled:	04/17/12
Units:	ug/L	Received:	04/17/12
Diln Fac:	1.000	Prepared:	04/19/12

Type: SAMPLE Analyzed: 04/24/12
 Lab ID: 235613-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	108	61-129

Type: BLANK Analyzed: 04/23/12
 Lab ID: QC636443 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	113	61-129

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	235613	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	185747
Units:	ug/L	Prepared:	04/19/12
Diln Fac:	1.000	Analyzed:	04/24/12

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC636444

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,360	94	59-120

Surrogate	%REC	Limits
o-Terphenyl	123	61-129

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC636445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,200	88	59-120	7	52

Surrogate	%REC	Limits
o-Terphenyl	116	61-129

RPD= Relative Percent Difference



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

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

**Laboratory Job Number 236593
ANALYTICAL REPORT**

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2553
Location : 15101 Freedom Ave. San Leandro
Level : II

Sample ID
EFFLUENT

Lab ID
236593-001

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:

Project Manager

Date: 06/05/2012

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 236593
Client: SOMA Environmental Engineering Inc.
Project: 2553
Location: 15101 Freedom Ave. San Leandro
Request Date: 05/29/12
Samples Received: 05/29/12

This data package contains sample and QC results for one water sample, requested for the above referenced project on 05/29/12. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

High responses were observed for benzene and ethylbenzene in the CCV analyzed 05/31/12 22:33; affected data was qualified with "b". No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No 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

LOGIN # 236593

Sampler: MASOUD-SEPEHR

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandr Company : SOMA Environmental

Turnaround Time: Standard Telephone: 925-734-6400

Fax: 925-734-6401

TPH-g, TPH-d, TPH-mo 8015	BTEX 8020																			
---------------------------	-----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative													
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE										
1	Effluent	5,29,12-9.30		*		6 VOAs	*				*									
		↓		*		1-1 L Amber					*									

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:	RECEIVED BY:
5,29,12 10:30 DATE/TIME	5/29/12 10:30 a.m. DATE/TIME

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 236593 Date Received 5/29/12 Number of coolers 1
Client SOMA Environmental Project 2553

Date Opened 5/29/12 By (print) CPM (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

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, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

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

Type of ice used: Wet, Blue/Gel, None Temp(°C) 12.1

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
10) CEC says 6 VOAs, rec'd only 4.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236593	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	187113
Matrix:	Water	Sampled:	05/29/12
Units:	ug/L	Received:	05/29/12
Diln Fac:	1.000	Analyzed:	05/31/12

Type: SAMPLE Lab ID: 236593-001

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

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	97	76-121	EPA 8015B
Bromofluorobenzene (PID)	124	70-125	EPA 8021B

Type: BLANK Lab ID: QC642067

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

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	86	76-121	EPA 8015B
Bromofluorobenzene (PID)	109	70-125	EPA 8021B

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236593	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	187113
Units:	ug/L	Analyzed:	05/31/12
Diln Fac:	1.000		

Type: BS Lab ID: QC642064

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	20.96	105	78-120
Toluene	20.00	19.90	100	80-120
Ethylbenzene	20.00	20.52	103	80-120
m,p-Xylenes	20.00	19.97	100	80-120
o-Xylene	20.00	19.99	100	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	98	70-125

Type: BSD Lab ID: QC642065

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	22.92 b	115	78-120	9	31
Toluene	20.00	21.74	109	80-120	9	20
Ethylbenzene	20.00	22.28 b	111	80-120	8	20
m,p-Xylenes	20.00	21.56	108	80-120	8	20
o-Xylene	20.00	21.85	109	80-120	9	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	107	70-125

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236593	Location:	15101 Freedom Ave. San Leandro	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	2553	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC642066	Batch#:	187113	
Matrix:	Water	Analyzed:	05/31/12	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	896.3	90	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	76-121

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236593	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	187113
MSS Lab ID:	236593-001	Sampled:	05/29/12
Matrix:	Water	Received:	05/29/12
Units:	ug/L	Analyzed:	05/31/12
Diln Fac:	1.000		

Type: MS Lab ID: QC642068

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	13.35	2,000	1,860	92	68-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	76-121

Type: MSD Lab ID: QC642069

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,900	94	68-120	2	21

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	76-121

RPD= Relative Percent Difference

Total Extractable Hydrocarbons

Lab #: 236593	Location: 15101 Freedom Ave. San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 3520C
Project#: 2553	Analysis: EPA 8015B
Field ID: EFFLUENT	Sampled: 05/29/12
Matrix: Water	Received: 05/29/12
Units: ug/L	Prepared: 05/29/12
Diln Fac: 1.000	Analyzed: 05/31/12
Batch#: 187033	

Type: SAMPLE Lab ID: 236593-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	111	61-129

Type: BLANK Lab ID: QC641740

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	107	61-129

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	236593	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	187033
Units:	ug/L	Prepared:	05/29/12
Diln Fac:	1.000	Analyzed:	05/31/12

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC641741

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,134	85	59-120

Surrogate	%REC	Limits
o-Terphenyl	107	61-129

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC641742

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,086	83	59-120	2	52

Surrogate	%REC	Limits
o-Terphenyl	105	61-129

RPD= Relative Percent Difference



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

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

Laboratory Job Number 236988
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2553
Location : 15101 Freedom Ave. San Leandro
Level : II

Sample ID
EFFLUENT

Lab ID
236988-001

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: _____

Project Manager

Date: 06/18/2012

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 236988
Client: SOMA Environmental Engineering Inc.
Project: 2553
Location: 15101 Freedom Ave. San Leandro
Request Date: 06/11/12
Samples Received: 06/11/12

This data package contains sample and QC results for one water sample, requested for the above referenced project on 06/11/12. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No 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

LOGIN # 236988

Sampler: MASOUD - SEPEHR

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandr Company: SOMA Environmental

Turnaround Time: Standard Telephone: 925-734-6400


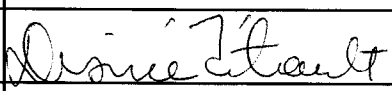
Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				TPH-g, TPH-d, TPH-mo 8015	BTEX 8020
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE		
1	Effluent	6/11/12 - 10	*			6 VOAs	*				*	
		↓	*			1-1 L Amber					*	

Notes: **EDF OUTPUT REQUIRED**

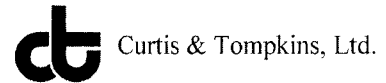
RELINQUISHED BY:

RECEIVED BY:

 41	DATE/TIME	 6/11/12 10:55	DATE/TIME
	DATE/TIME		DATE/TIME
	DATE/TIME		DATE/TIME

blue ice from field

COOLER RECEIPT CHECKLIST



Login # 236988 Date Received 6/11/12 Number of coolers 1
Client SOMA Project 2553

Date Opened 6/11/12 By (print) I. CHOI (sign) [Signature]
Date Logged in [initials] By (print) [initials] (sign) [initials]

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)

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.

Curtis & Tompkins Laboratories Analytical Report

Lab #: 236988	Location: 15101 Freedom Ave. San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2553	
Field ID: EFFLUENT	Diln Fac: 1.000
Matrix: Water	Sampled: 06/11/12
Units: ug/L	Received: 06/11/12

Type: SAMPLE Lab ID: 236988-001

Analyte	Result	RL	Batch#	Analyzed	Analysis
Gasoline C7-C12	ND	50	187516	06/12/12	EPA 8015B
Benzene	ND	0.50	187544	06/13/12	EPA 8021B
Toluene	ND	0.50	187544	06/13/12	EPA 8021B
Ethylbenzene	ND	0.50	187544	06/13/12	EPA 8021B
m,p-Xylenes	ND	0.50	187544	06/13/12	EPA 8021B
o-Xylene	ND	0.50	187544	06/13/12	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Bromofluorobenzene (FID)	97	76-121	187516	06/12/12	EPA 8015B
Bromofluorobenzene (PID)	95	70-125	187544	06/13/12	EPA 8021B

Type: BLANK Lab ID: QC643803 Batch#: 187516 Analyzed: 06/12/12

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	86	76-121	EPA 8015B
Bromofluorobenzene (PID)	91 b q	70-125	EPA 8021B

Type: BLANK Lab ID: QC643908 Batch#: 187544 Analyzed: 06/13/12

Analyte	Result	RL	Analysis
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	89 q	76-121	EPA 8015B
Bromofluorobenzene (PID)	93	70-125	EPA 8021B

b= See narrative
q= Draft result - ending instrument QC not yet analyzed
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236988	Location:	15101 Freedom Ave. San Leandro	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	2553	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC643802	Batch#:	187516	
Matrix:	Water	Analyzed:	06/12/12	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,079	108	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	76-121

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236988	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	187516
MSS Lab ID:	236999-002	Sampled:	06/07/12
Matrix:	Water	Received:	06/11/12
Units:	ug/L	Analyzed:	06/12/12
Diln Fac:	1.000		

Type: MS Lab ID: QC643811

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	32.95	2,000	1,998	98	68-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	76-121

Type: MSD Lab ID: QC643812

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,915	94	68-120	4	21

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	76-121

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	236988	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	187544
Units:	ug/L	Analyzed:	06/13/12
Diln Fac:	1.000		

Type: BS Lab ID: QC643934

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	19.83	99	78-120
Toluene	20.00	18.78	94	80-120
Ethylbenzene	20.00	19.36	97	80-120
m,p-Xylenes	20.00	19.02	95	80-120
o-Xylene	20.00	19.22	96	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	96	70-125

Type: BSD Lab ID: QC643935

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	23.83	119	78-120	18	31
Toluene	20.00	22.69	113	80-120	19	20
Ethylbenzene	20.00	23.43	117	80-120	19	20
m,p-Xylenes	20.00	23.09	115	80-120	19	20
o-Xylene	20.00	23.55	118	80-120	20	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	115	70-125

RPD= Relative Percent Difference

Total Extractable Hydrocarbons			
Lab #:	236988	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	187477
Matrix:	Water	Sampled:	06/11/12
Units:	ug/L	Received:	06/11/12
Diln Fac:	1.000	Prepared:	06/11/12

Type: SAMPLE Analyzed: 06/15/12
 Lab ID: 236988-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	89	61-129

Type: BLANK Analyzed: 06/13/12
 Lab ID: QC643617

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	107	61-129

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	236988	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	187477
Units:	ug/L	Prepared:	06/11/12
Diln Fac:	1.000	Analyzed:	06/13/12

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC643618

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,101	84	59-120

Surrogate	%REC	Limits
o-Terphenyl	107	61-129

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC643619

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,831	73	59-120	14	52

Surrogate	%REC	Limits
o-Terphenyl	92	61-129

RPD= Relative Percent Difference