SOMA
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September 15, 2009

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

Subject: Texaco Gasoline Service Station (Formerly Freedom ARCO Station)
Site Address: 15101 Freedom Avenue, San Leandro, California
STID 4473/RO0000473

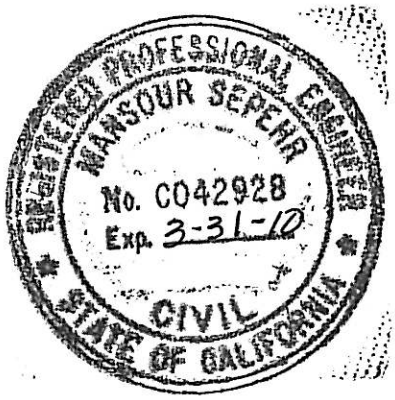
Dear Mr. Khatri:

SOMA's "Third Quarter 2009 Groundwater Monitoring 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,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist



cc: Mr. Mohammad Pazdel w/report enclosure

Third Quarter 2009
Groundwater Monitoring Report

Texaco Gasoline Service Station
15101 Freedom Avenue
San Leandro, California

September 15, 2009

Project 2551

Prepared for

Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, California

SOMA ENVIRONMENTAL ENGINEERING, INC.
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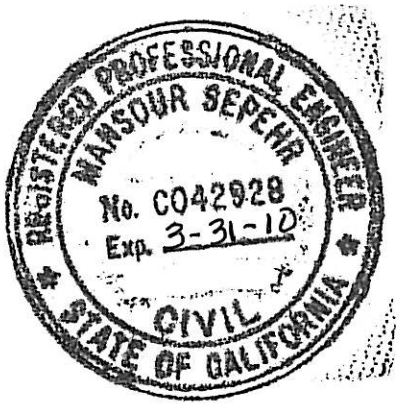
CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Mohammad Pazdel, property owner of 15101 Freedom Avenue, San Leandro, California, to comply with Alameda County Health Care Services requirements for the Third Quarter 2009 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 Mr. Mohammad Pazdel, property owner of 15101 Freedom Avenue, San Leandro, California. The site is located in an area of primarily residential properties and adjacent commercial areas (Figure 1).

This report summarizes results of the Third Quarter 2009 groundwater monitoring event conducted on August 26 and 27, 2009. It includes physical and chemical properties measured in the field and laboratory analysis results for each groundwater sample.

1.1 Field Activities

On August 26 and 27, 2009, SOMA's field crew conducted a groundwater monitoring event in accordance with procedures and guidelines of Alameda County Health Care Services (ACHCS) and the California Regional Water Quality Control Board (CRWQCB). Figure 2 shows well locations.

On August 26, 2009, five on-site monitoring wells (MW-1 to MW-5), and four off-site wells (MW-6 to MW-9) in the First water bearing zone (WBZ), and three on-site monitoring wells (MW-1D, MW-3D, and MW-4D) in the Second WBZ were measured for depth to groundwater. On August 26 and 27, 2009, additional field measurements and grab groundwater samples were collected from all monitoring 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 wells.

Purged groundwater from each well was temporarily stored on-site in three filled 55-gallon drums. Six drums, generated during current and Second Quarter 2009 groundwater monitoring events, are stored on-site pending transport to an appropriate disposal facility. Appendix D contains the non-hazardous waste manifest for removal of two drums, generated during the First Quarter 2009 groundwater monitoring event. These drums were transported for disposal on January 23, 2009.

1.2 Laboratory Analysis

Curtis & Tompkins, Ltd., a California state-certified laboratory, analyzed groundwater samples for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX), methyl tertiary-butyl ether (MtBE), 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 August 26 and 27, 2009 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 12.50 feet in MW-9 to 23.60 feet in MW-1. Corresponding groundwater elevations ranged from 27.76 feet in MW-9 to 30.86 feet in MW-1.

Figure 3 displays the contour map of groundwater elevations. Groundwater flows southwesterly across the site at a gradient of 0.005 feet/feet. The groundwater flow direction and gradient have remained consistent with the previous monitoring event (Second Quarter 2009).

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO concentrations in the First WBZ ranged from 0.38 mg/L in MW-1 to 2.90 mg/L in MW-4. ORP showed negative redox potentials in all First WBZ monitoring wells, except for MW-9 which showed positive redox potential. 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 removal of organic mass from contaminated groundwater by indigenous bacteria in the subsurface during release of the transfer of electrons.

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

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 concentrations were below the laboratory-reporting limit in MW-8 and MW-9. Detectable TPH-g concentrations ranged from 130 µg/L in MW-2 to

43,000 µg/L in MW-3. The TPH-g concentration in MW-3 was significantly higher than in the other wells. However, TPH-g has decreased in MW-3 since the previous monitoring event (Second Quarter 2009).

Figure 4 displays the contour map of TPH-g concentrations in groundwater. As illustrated, the highest TPH-g impact is in the vicinity of the dispenser islands and former underground storage tanks (USTs). Since the previous monitoring event (Second Quarter 2009), detectable TPH-g concentrations have decreased in MW-2, MW-3, MW-4, and MW-5, and increased in MW-1, MW-6, and MW-7.

The following BTEX concentrations were observed:

- In MW-8 and MW-9, all BTEX analytes were below laboratory-reporting limits.
- In MW-2 and MW-7, benzene and toluene were below laboratory-reporting limits and ethylbenzene and total xylenes were at low levels.
- In MW-1 and MW-6, toluene was below the laboratory-reporting limit.
- The highest BTEX concentrations were detected in MW-3, at 2,500 µg/L, 160 µg/L, 1,900 µg/L, and 7,000 µg/L, respectively.

Figure 5 displays the contour map of benzene concentrations in groundwater. The highest benzene impact is in the vicinity of the dispenser islands and former USTs. Since the previous monitoring event (Second Quarter 2009), benzene concentrations have increased in MW-1, MW-4, MW-5 and decreased in MW-3, where benzene concentration was significantly higher than in the other wells. Benzene appears to have only minimally impacted off-site well MW-6 and was non-detectable in remaining off-site wells.

Levels of MtBE below the laboratory-reporting limit were observed at MW-2, MW-8 and MW-9. Detectable MtBE concentrations ranged from 2.2 µg/L at MW-6 to 290 µg/L at MW-4. Figure 6 displays the contour map of MtBE concentrations in the groundwater. The highest MtBE impact was in the vicinity of the dispenser islands and former USTs, around MW-3 and MW-4. Since the previous monitoring event (Second Quarter 2009) MtBE concentrations have increased at MW-1, MW-5, and MW-7 and decreased at MW-3, MW-4, and MW-6.

As shown in Table 1, since the previous monitoring event (Second Quarter 2009), TPH-g, BTEX, and MtBE concentrations have decreased in the more impacted well MW-3.

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, and MW-8, concentrations of all gasoline oxygenates and lead scavengers were below laboratory-reporting limits.
- Tertiary-butyl alcohol (TBA) was detected in MW-4 and MW-5 at 4,900 µg/L and 1,300 µg/L, respectively, and was below the laboratory-reporting limit in all other First WBZ wells.

  Figure 7 shows the map of TBA concentrations in groundwater. The most TBA-impacted regions were in the vicinity of the dispenser islands and in the southern section of the site, around MW-4 and MW-5. Due to the high mobility rate of TBA in groundwater, the TBA plume appears to have migrated with the flow of groundwater from the UST cavity and pump islands toward MW-4.
- Ethyl tertiary-butyl ether (ETBE) was detected in MW-4 at 24 µg/L and was below the laboratory-reporting limit in remaining wells.
- Methyl tertiary-amyl ether (TAME) was detected in MW-7 at 33 µg/L, and was below the laboratory-reporting limit in remaining wells.
- 1,2-dichloroethane (1,2-DCA) was detected in MW-9 at low levels and was below the laboratory-reporting limit in remaining wells. Figure 7 displays the map showing concentrations of ETBE, TAME and 1,2-DCA in First WBZ wells.
- Isopropyl ether (DIPE), 1,2-dibromoethane (EDB), and ethanol concentrations 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 monitoring well. Depths to groundwater ranged from 22.79 feet in MW-4D to 23.73 feet in MW-1D. Corresponding groundwater elevations ranged from 30.33 feet in MW-4D to 30.69 feet in MW-1D and MW-3D.

Figure 8 displays the contour map of groundwater elevations in the Second WBZ. Groundwater flows southwesterly at a gradient of 0.0031 feet/feet. During the previous monitoring event (Second Quarter 2009), groundwater flow direction was northwesterly.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO concentrations in the Second WBZ ranged from 0.45 mg/L in MW-1D to 0.98 mg/L in MW-4D. ORP showed negative potential in all wells. Negative redox potentials indicate that contaminants in the groundwater are conducive to anaerobic biodegradation.

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.

Similar to the previous monitoring event (Second Quarter 2009), TPH-g and BTEX analytes were below laboratory-reporting limits in all Second WBZ wells.

MtBE was below the laboratory-reporting limit in MW-1D, and was detected in MW-3D and MW-4D at 20 µg/L and 2.2 µg/L, respectively.

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:

- TBA, DIPE, ETBE, 1,2-DCA, EDB, and ethanol constituents were below laboratory-reporting limits in all groundwater samples from the Second WBZ. (Analysis results for ethanol are included in Appendix C.)
- TAME was detected at low level in MW-3D and was below the laboratory-reporting limit in MW-1D and MW-4D.

Figure 9 displays concentrations of MtBE and TAME in Second WBZ wells.

3. CONCLUSIONS AND RECOMMENDATIONS

Third Quarter 2009 groundwater monitoring results are summarized below.

- Groundwater flow direction has remained southwesterly in the First WBZ and was also southwesterly in the Second WBZ.
- The hydrocarbon source area remains in the vicinity of the former UST cavity, near MW-3, where a previous release of petroleum hydrocarbons occurred.
- The southerly migration of impacted groundwater from the source area of the former UST cavity is evidenced by high MtBE and TBA concentrations at MW-4 and MW-5. However, in general, the contaminant region appears

to be centrally located in the vicinity of the former UST cavity and pump islands, especially at MW-3.

- Based on quarterly groundwater monitoring results, in general, BTEX, MtBE and gasoline oxygenates have remained at low or non-detectable levels in off-site wells.
- TPH-g concentrations in off-site wells MW-6 at 10,000 µg/L and MW-7 at 2,700 µg/L increased since the previous quarter monitoring event (Second Quarter 2009); TPH-g was below the laboratory-reporting limit in remaining off-site wells MW-8 and MW-9.
- In the Second WBZ, MtBE was detected in MW-3D and MW-4D and TAME in MW-3D, at low levels. All other contaminants were below laboratory-reporting limits in Second WBZ wells.

Based on results of this monitoring event, SOMA recommends the following action items:

- Continue quarterly groundwater monitoring to increase understanding of seasonal variations in groundwater quality conditions.

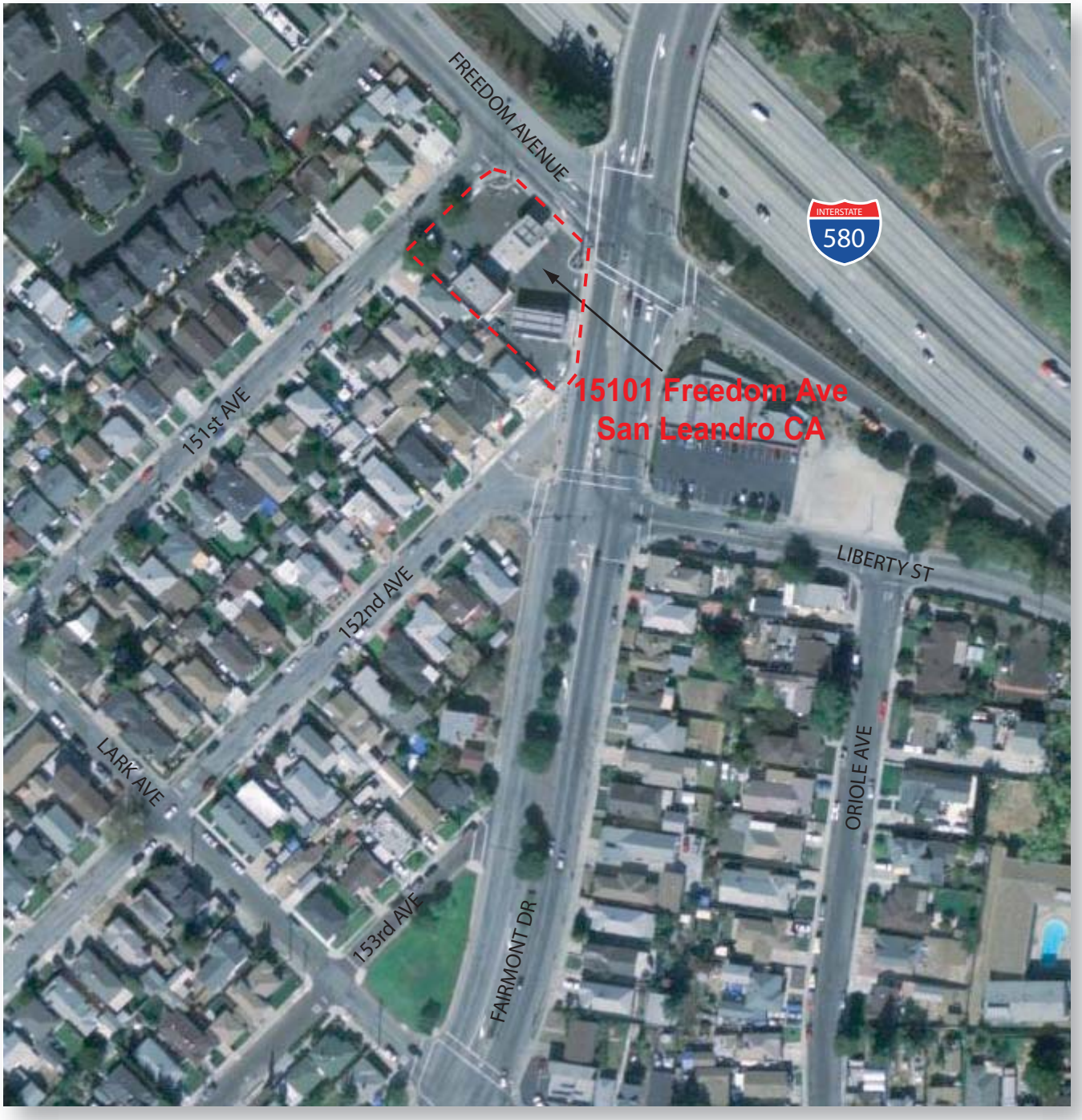
Other ongoing activities: SOMA is in the process of implementing the "Revised Workplan" dated February 10, 2009 based on ACEHS directive dated May 22, 2009. Field activities and results will be documented in the "CAP Implementation and Well Decommissioning Report." Currently, a treatment system and extraction wells are being installed at the site. The status and results of treatment system operation will be included with the next quarterly groundwater monitoring report.

4. 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, Ltd. 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



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approximate scale in feet

0 150 300

Figure 1: Site vicinity map.

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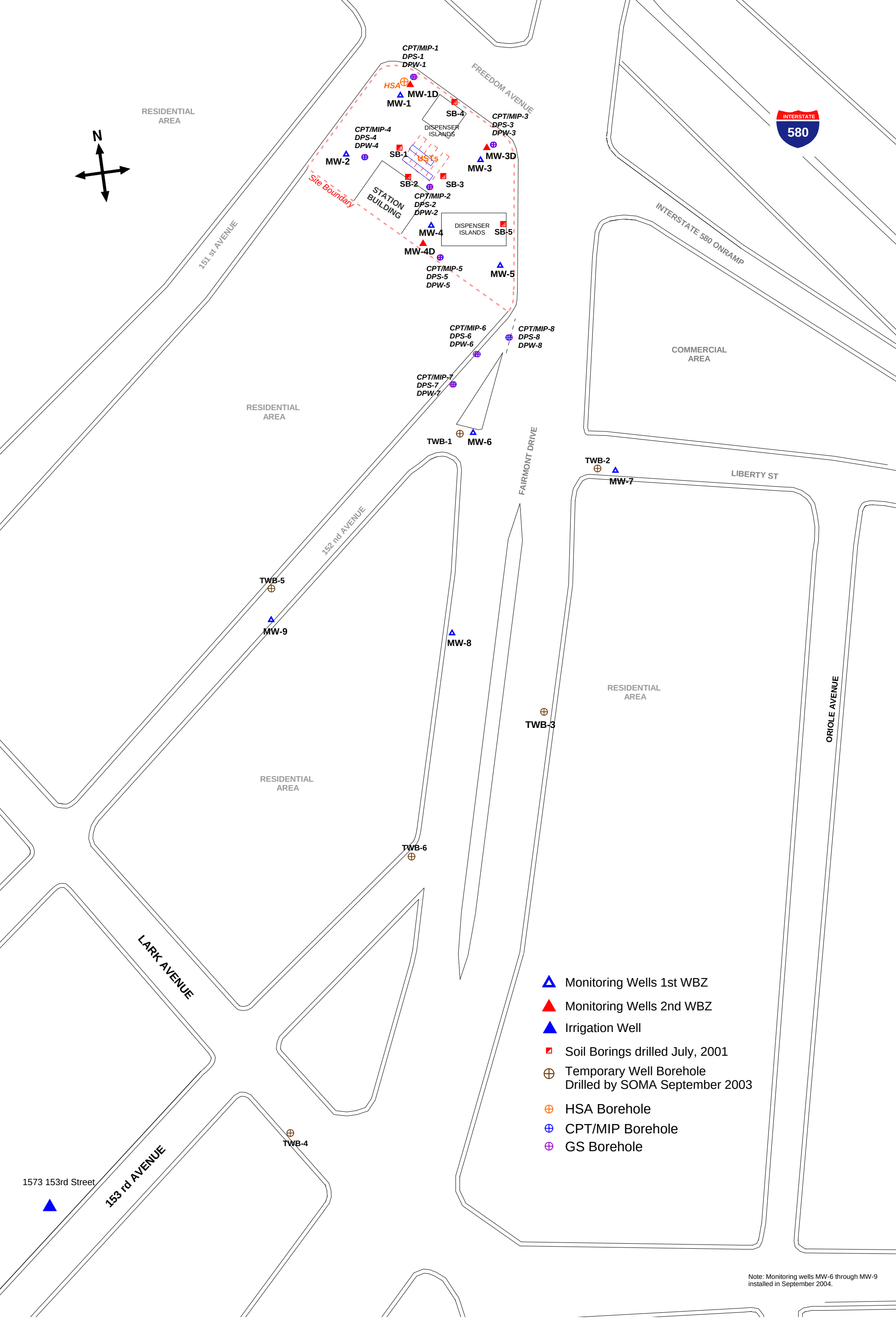

Figure 2: Site map showing locations of groundwater monitoring wells and soil borings

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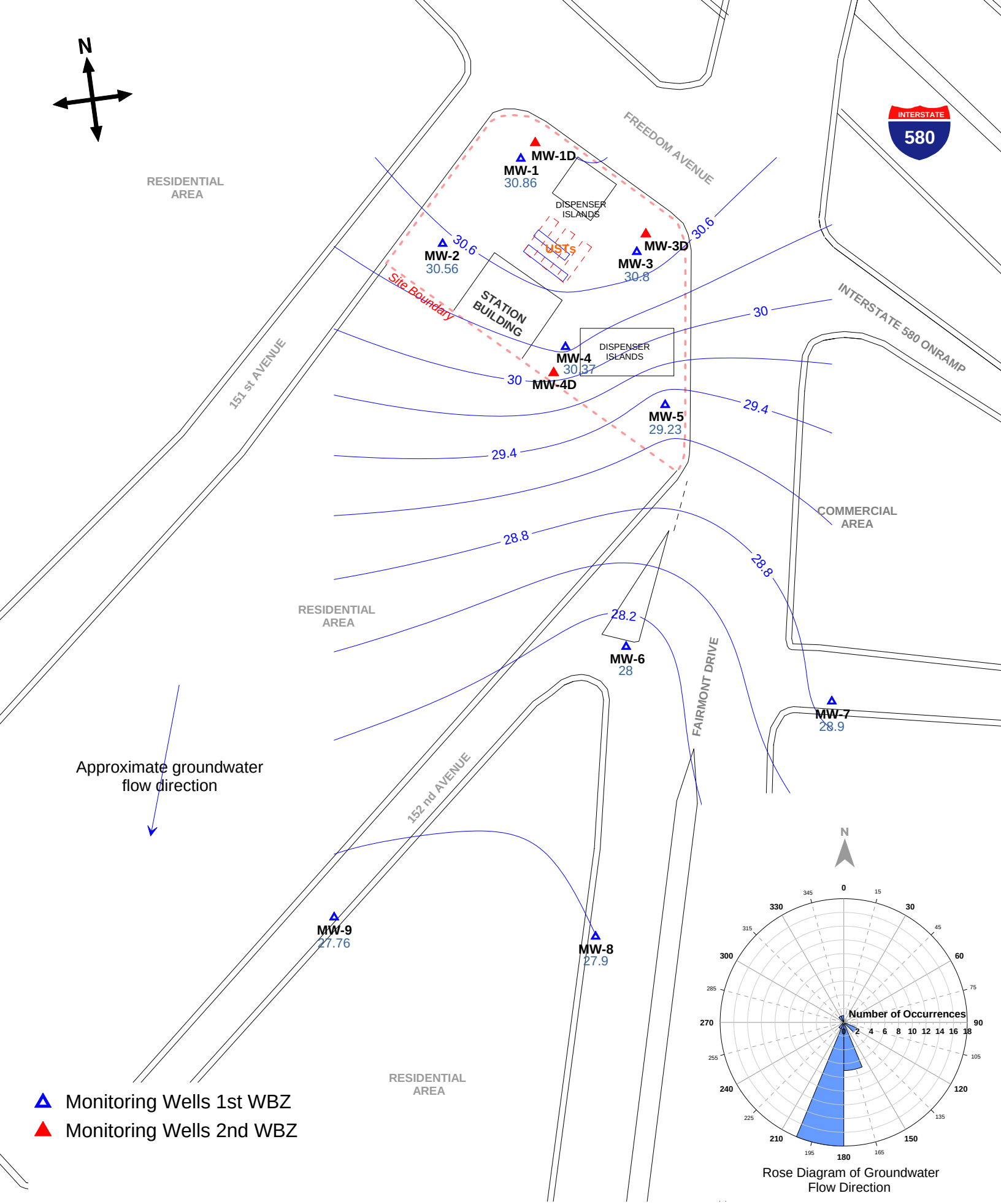

Figure 3: Groundwater elevation contour map in feet, First WBZ. August 26, 2009

ENVIRONMENTAL ENGINEERING, INC.

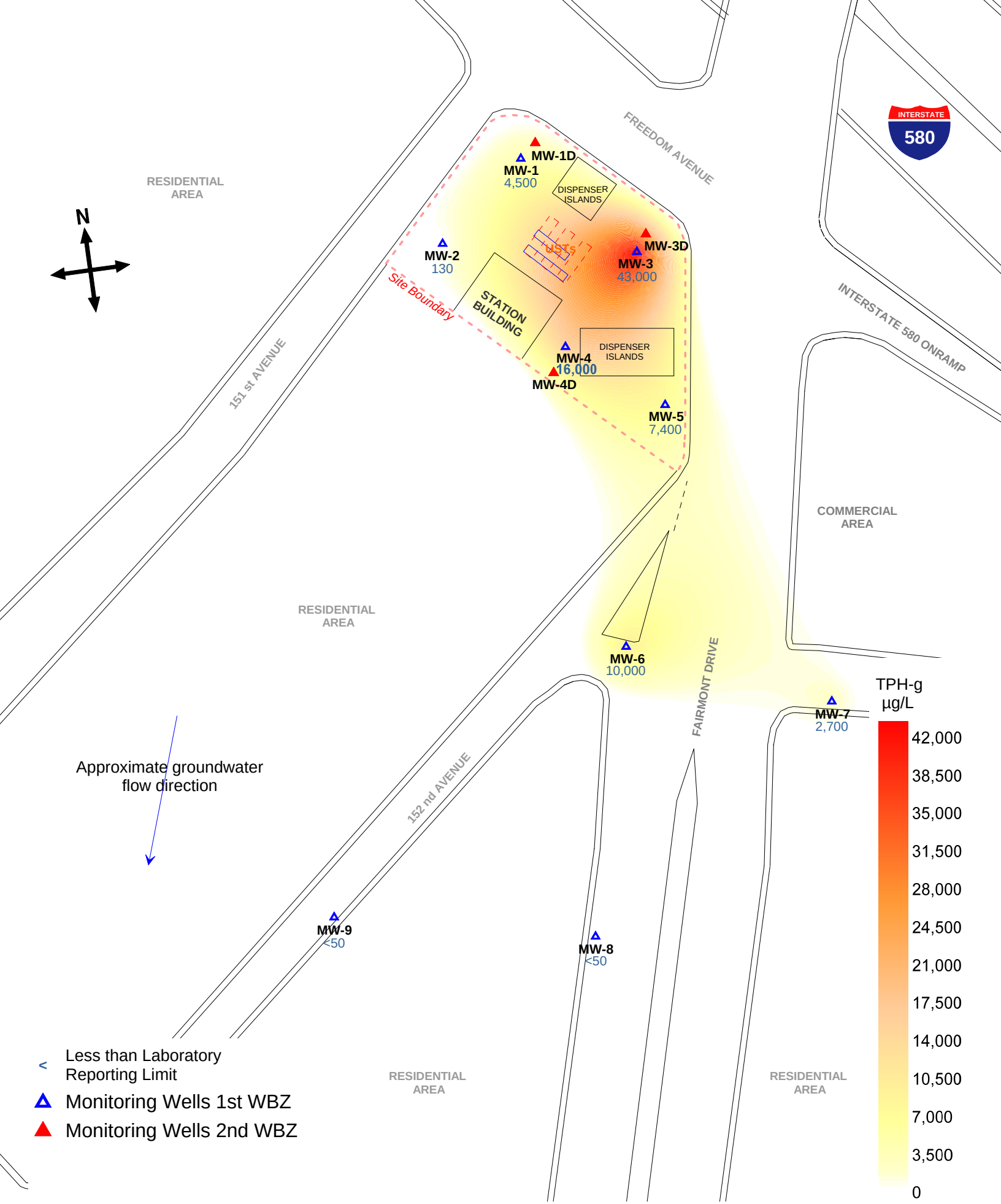

Figure 4: Contour map of TPH-g concentrations in groundwater, First WBZ. August 26 and 27, 2009

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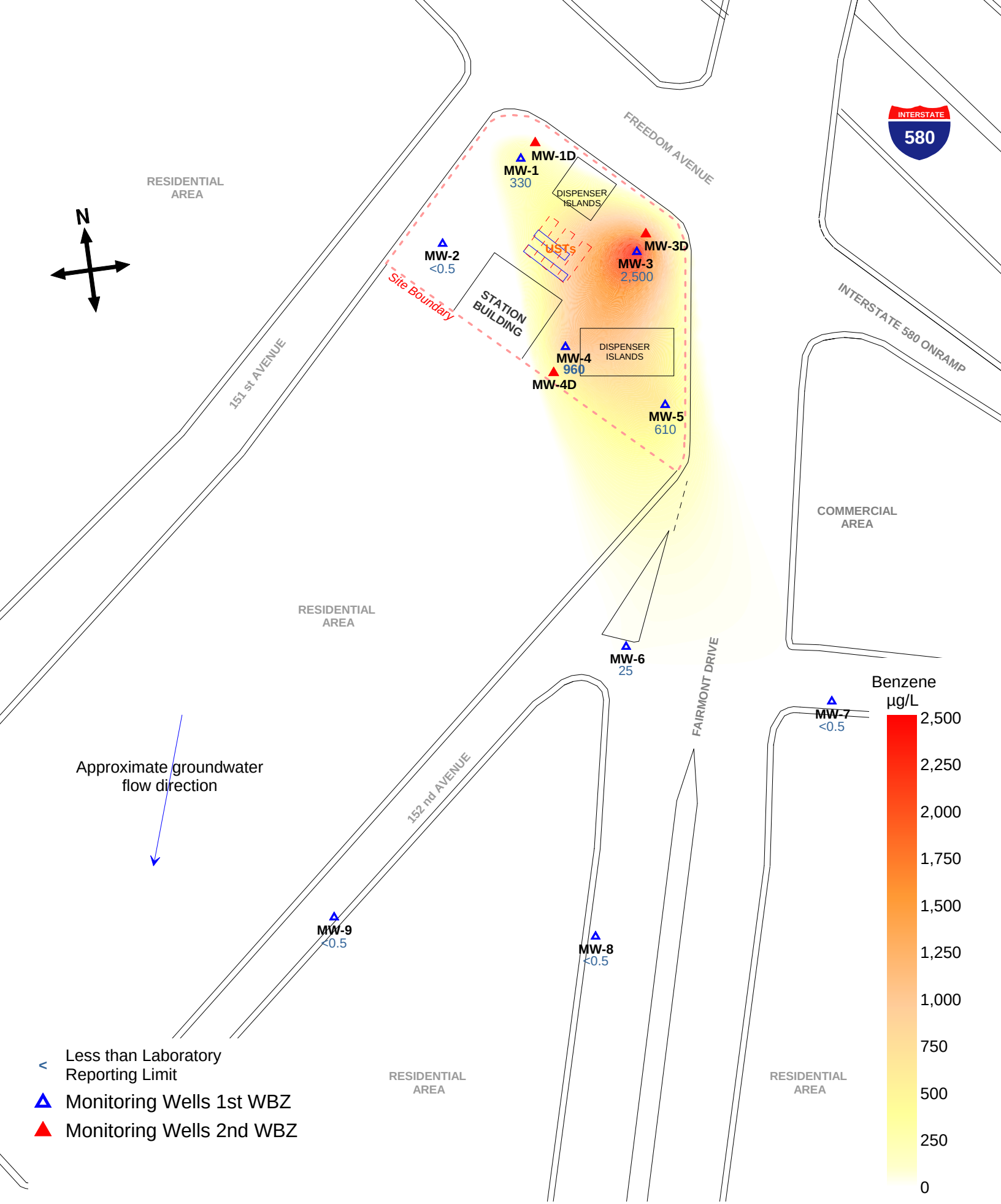

Figure 5: Contour map of benzene concentrations in groundwater, First WBZ. August 26 and 27, 2009

ENVIRONMENTAL ENGINEERING, INC.

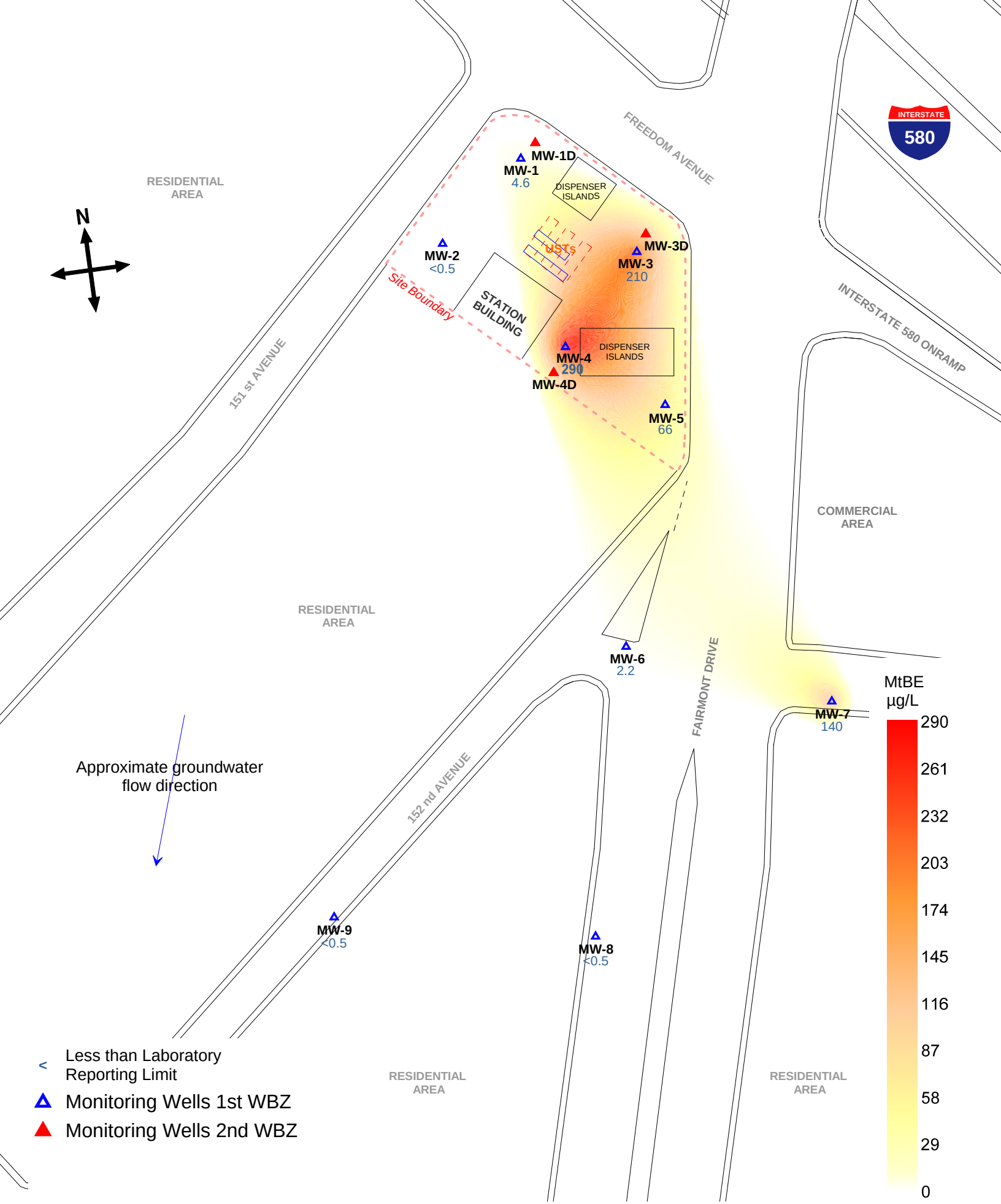

Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B), First WBZ. August 26 and 27, 2009

ENVIRONMENTAL ENGINEERING, INC.

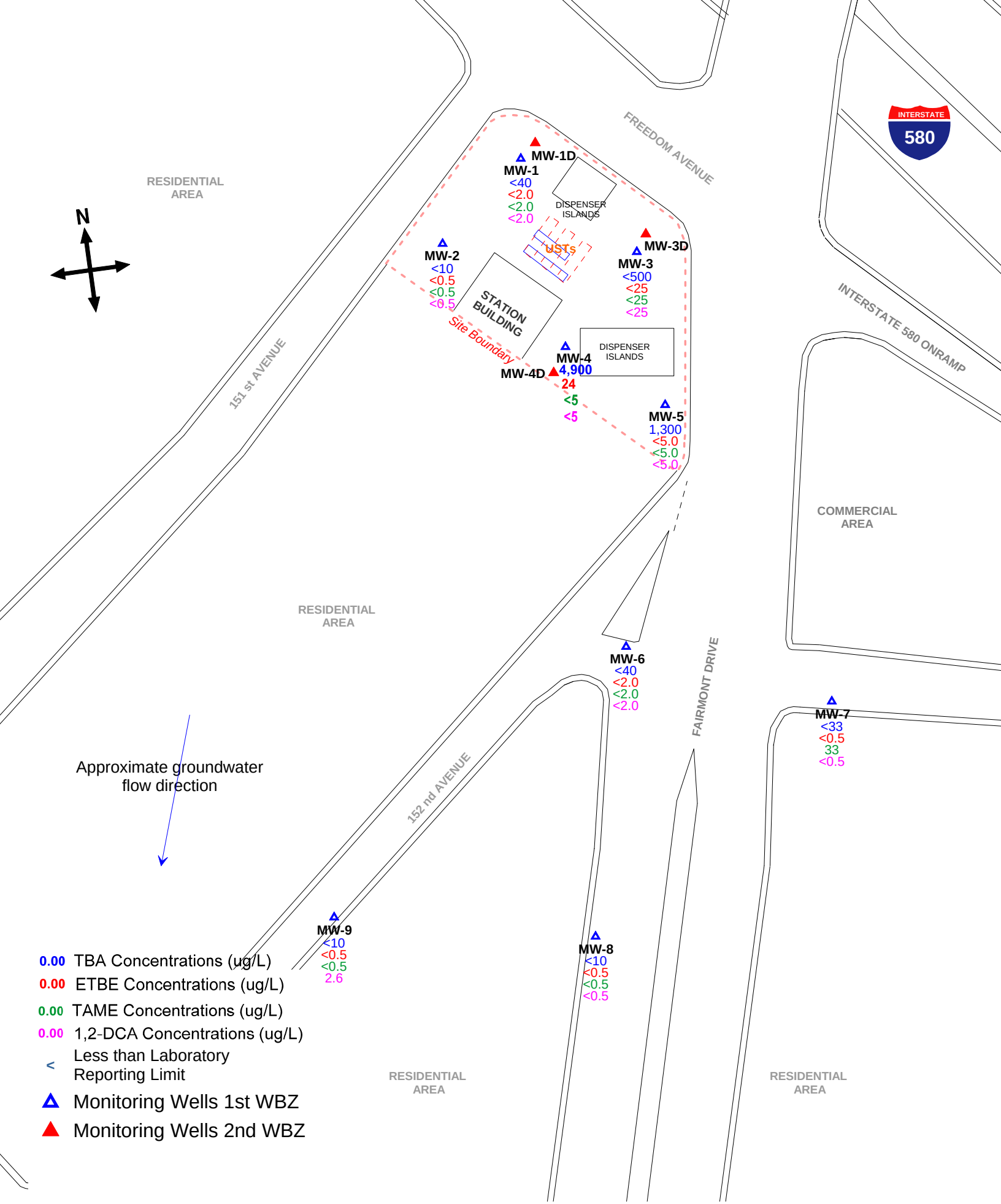

Figure 7: Map showing concentrations of TBA, ETBE, TAME, and 1,2-DCA in First WBZ. August 26 and 27, 2009

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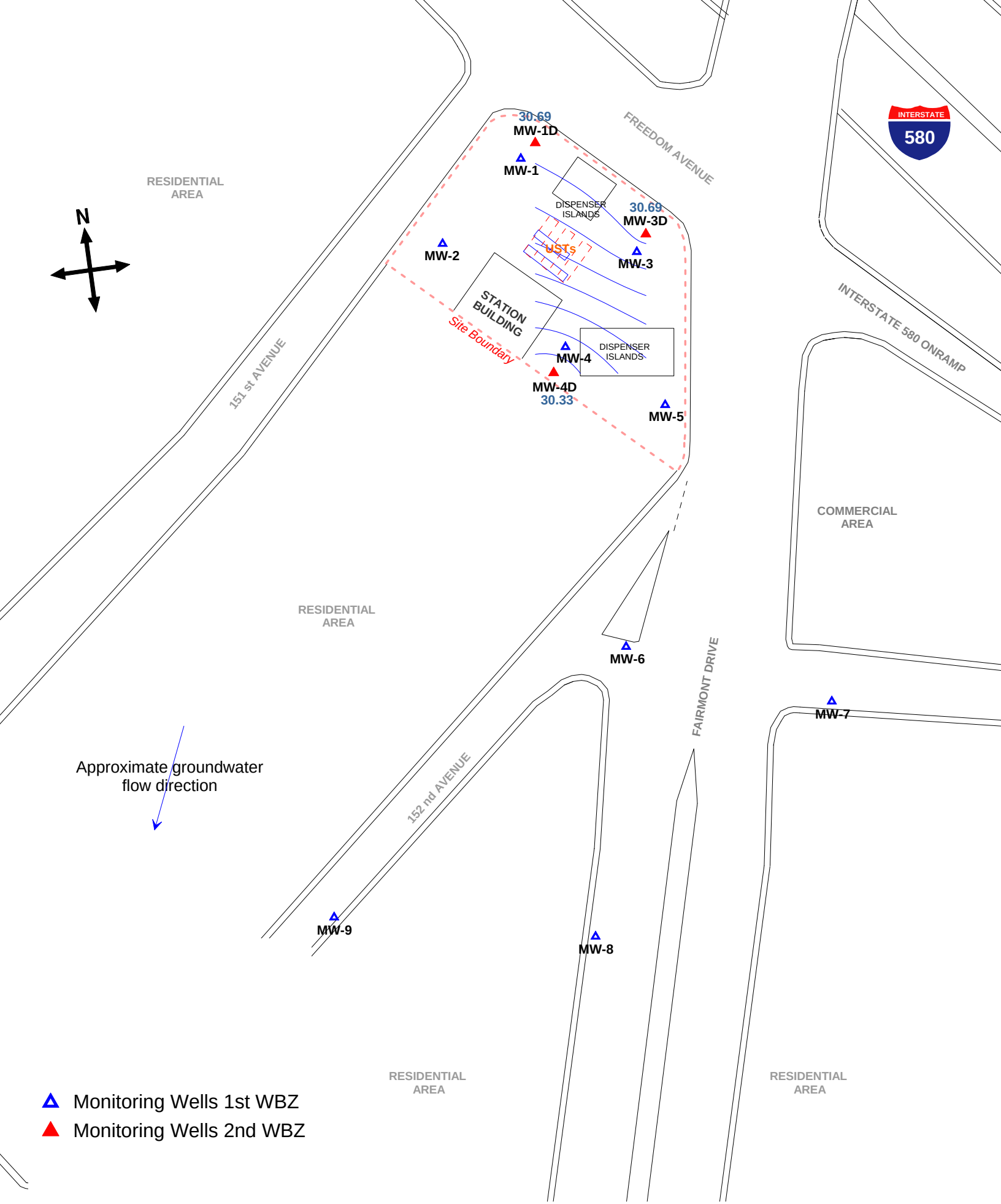

approximate scale in feet

0 70 140

Figure 8: Groundwater elevation contour map in feet, Second WBZ
August 26, 2009

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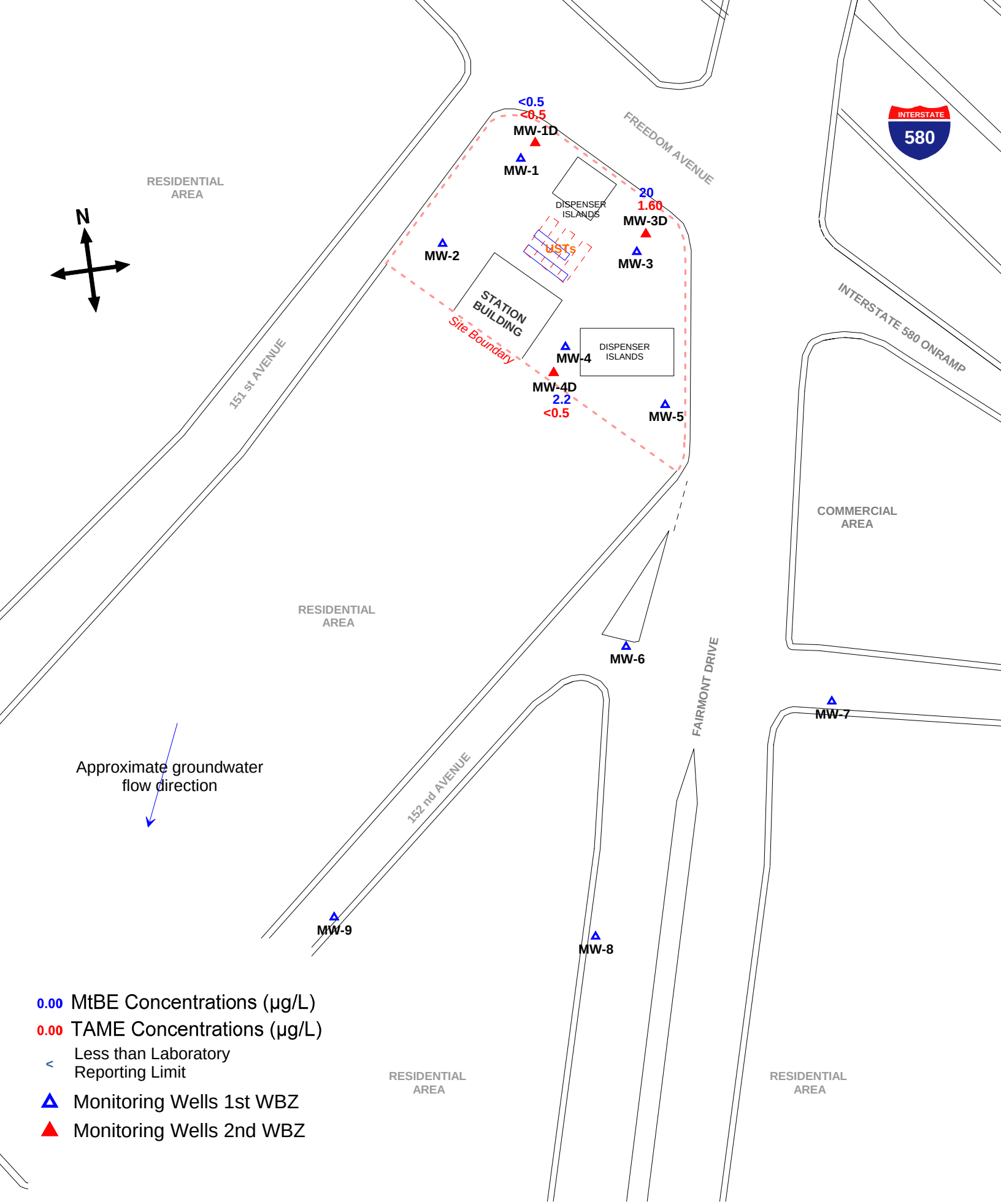

Figure 9: Map showing concentrations of MtBE and TAME, Second WBZ. August 26 and 27, 2009

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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**
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
	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

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-2 cont.	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**
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

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-3 cont.	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
	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**
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

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-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**

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-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
	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

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-5 cont.	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**
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

Table 1

Historical Groundwater Elevation Data and Analytical Results

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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-6 contd.	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**
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**
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

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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-8 cont.	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
	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**
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

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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-9 cont.	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**
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	120.0	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**
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**

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-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**
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
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

[C] 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.

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

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)

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)

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**
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

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-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**
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**
MW-4	8/8/2002	1500	<17	<17	18	NA	NA
	11/1/2002	580	< 5.0	6	13	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-4 cont.	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**
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
	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

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.	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**
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**
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

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 contd.	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**
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**
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
	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	1.4	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	0.97	<0.5
	8/26/2009	**<10**	**<0.5**	**<0.5**	**<0.5**	**2.6**	**<0.5**
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

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-1D contd.	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**
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**
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**
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**

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)

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.

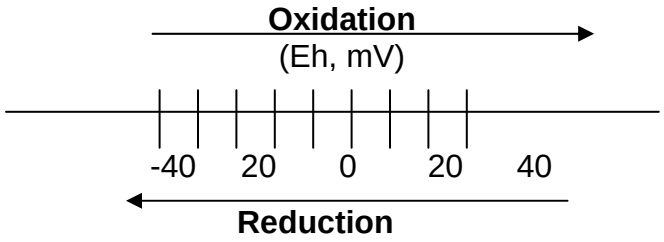
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

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 O_2 in water is low (9 mg/L at 25 ^{o}C and 11 mg/L at 5 ^{o}C), and because the rate of O_2 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 O_2 in the groundwater is consumed; however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO^{-}_3, MnO_2, $Fe(OH)_3$, SO_4^{2-}

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, nonpreserved glass containers. Samples are placed in an ice-filled cooler and maintained at 4°C. A chain of custody form for all samples is prepared to accompany the samples, which are promptly delivered to a California state-certified analytical laboratory.

Appendix B

Table of Elevations and Coordinates on Monitoring Wells and Field Measurements of Physical and Chemical Parameters of Groundwater Samples

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
	37º 42' 29.1" N	122º 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
	37º 42' 28.5" N	122º 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
	37º 42' 27.7" N	122º 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 37º43'11.04190" LONG W 122º07'09.20691", 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 37º43'02.71762" LONG W 122º07'00.46339", ELEVATION 442.77 NAVD 88.

AMMENDED REPORT
15101 FREEDOM AVE
SAN LEANDRO, CA.

HARRINGTON SURVEYS INC.
2278 LARKEY LANE
WALNUT CREEK, CA. 94597
925-935-7228 FAX. 935-5118

JOB NO. 2445
DATE: FEB. 21,2008

	NAD 83	NAD 83	NAVD 88		NORTH	WEST
PT	NORTH (sft)	EAST(sft)	ELEV.	DESCRIPTION	LATITUDE (DMS)	LONGITUDE (DMS)
1	2087731.02	6094039.23	442.77	FD CHABOT B	37°43'02.71762"	122°07'00.46339"
2	2088584.99	6093351.39	492.08	FD CHABOT A	37°43'11.04190"	122°07'09.20691"
51	2084348.54	6092159.32	55.44	FD. X-8		
52	2084073.17	6092141.24	46.15	MW-6 PAV		
53	2084072.72	6092140.95	46.15	MW-6 PUNCH		
54	2084072.47	6092140.95	45.82	MW-6 NOTCH	37°42'26.22635"	122°07'23.29643
55	2083909.71	6091947.10	40.61	MW-9 PAV		
56	2083909.10	6091946.97	40.61	MW-9 PUNCH		
57	2083908.71	6091947.00	40.26	MW-9 NOTCH	37°42'24.57425"	122°07'25.67431"
58	2083861.20	6092118.11	41.38	MW-8 PAV		
59	2083860.43	6092118.36	41.44	MW-8 PUNCH		
60	2083860.03	6092118.52	41.14	MW-8 NOTCH	37°42'24.12245"	122°07'23.52966"
61	2084008.21	6092290.11	44.94	MW-7 PAV		
62	2084007.88	6092290.27	44.95	MW-7 PVNCH		
63	2084007.68	6092290.40	44.74	MW-7 NOTCH	37°42'25.61150"	122°07'21.42290"
64	2084206.49	6092175.95	51.03	MW-5 PAV		
65	2084206.17	6092176.55	50.96	MW-5 PUNCH		
66	2084206.01	6092176.79	50.53	MW-5 NOTCH	37°42'27.55260	122°07'22.87930
67	2084670.41	6092307.68	69.79	FD BM FAIR580		
68	2084251.32	6092125.25	53.70	MW-4 PAV	Ammended 2\21\08	From here down
69	2084250.55	6092124.46	53.74	MW-4 PUNCH		
70	2084250.36	6092124.67	53.31	MW-4 NOTCH	37°42'27.98205"	122°07'23.53734"
71	2084298.86	6092176.07	54.37	MW-3 PAV		
72	2084298.19	6092176.26	54.33	MW-3 PUNCH		
73	2084297.82	6092176.29	53.91	MW-3 NOTCH	37°42'28.46009"	122°07'22.90536"
74	2084365.28	6092117.89	54.82	MW-1 PAV		
75	2084364.32	6092118.22	54.79	MW-1 PUNCH		
76	2084364.03	6092118.49	54.46	MW-1 NOTCH	37°42'29.10470"	122°07'23.63882"
77	2084323.98	6092063.51	52.88	MW-2 PAV		
78	2084323.44	6092063.77	52.92	MW-2 PUNCH		
79	2084323.06	6092063.88	52.41	MW-2 NOTCH	37°42'28.69039"	122°07'24.30947"
80	2084930.49	6091759.33	58.50	FD BM K1256	37°42'34.64279"	122°07'28.23011"

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.50 feet		San Leandro, CA
Top of Casing Elevation:	54.46 feet	**Date:**	Aug. 27, 2009
Depth to Groundwater:	23.60 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.86 feet		Erica Fisher
Water Column Height:	6.90 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
11:44	Start	Purging					
11:45	2	0.75	6.36	20.83	1295	2.63	-59.9
11:47	6	0.69	6.29	20.84	1283	3.98	-81.8
11:49	10	0.46	6.30	20.82	1318	6.23	-88.7
11:50	12	0.42	6.31	20.81	1350	4.78	-93.7
11:51	14	0.38	6.32	20.80	1357	4.69	-95.7
11:56	SAMPLE						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.15 feet		San Leandro, CA
Top of Casing Elevation:	52.41 feet	**Date:**	Aug. 27, 2009
Depth to Groundwater:	21.85 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.56 feet		Erica Fisker
Water Column Height:	8.30 feet		
Purged Volume:	16 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
9:07	start sampling						
9:08	2	0.60	6.62	20.66	1484	12.9	-138.3
9:10	6	0.52	6.48	20.77	1226	5.59	-166.4
9:12	10	0.47	6.45	20.78	1303	4.32	-160.2
9:14	14	0.45	6.52	20.74	1526	2.59	-173.7
9:15	16	0.43	6.57	20.72	1530		-168.1
9:20	SAMPLED						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	29.90 feet		San Leandro, CA
Top of Casing Elevation:	53.91 feet	**Date:**	Aug. 27, 2009
Depth to Groundwater:	23.11 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.80 feet		Erica Fisker
Water Column Height:	6.79 feet		
Purged Volume:	12 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☒ Describe: _____

Sheen: Yes ☒ No ☐ Describe: Rainbow Sheen

Odor: Yes ☐ No ☒ Describe: petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
12:59	Started purging well						
13:00	2	3.5	6.41	20.84	1317	6.57	-71.3
13:02	6	2.9	6.36	20.87	1309	5.21	-101.6
13:04	10	2.3	6.36	20.83	1317	4.90	-118.8
13:05	12	1.9	6.36	20.82	1318	5.57	-119.3
13:10	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-4	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.20 feet		San Leandro, CA
Top of Casing Elevation:	53.31 feet	**Date:**	Aug. 27, 2009
Depth to Groundwater:	22.94 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.37 feet		Erica Fisker
Water Column Height:	7.26 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
11:23	Started purging well						
11:24	2	4.0	6.32	20.08	1556	4.89	-111.1
11:26	6	3.7	6.27	20.10	1621	3.11	-120.9
11:28	10	3.2	6.27	20.11	1639	2.40	-121.9
11:29	12	3.0	6.27	20.10	1635	2.84	-118.1
11:30	14	2.9	6.26	20.11	1649	2.78	-115.5
11:35	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-5	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	29.80 feet		San Leandro, CA
Top of Casing Elevation:	50.53 feet	**Date:**	Aug, 27, 2009
Depth to Groundwater:	21.30 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.23 feet		Erica Fiskar
Water Column Height:	8.50 feet		
Purged Volume:	16 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

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
09:35	Started purging well						
09:36	2	2.3	6.46	20.76	1246	5.16	-54.4
09:38	6	1.8	6.41	20.80	1271	3.66	-77.9
09:40	10	1.5	6.40	20.81	1292	5.15	-86.5
09:42	14	1.2	6.39	20.80	1304	5.98	-90.7
09:43	16	1.0	6.38	20.80	1321	6.63	-91.9
09:48	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-6	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	27.30 feet		San Leandro, CA
Top of Casing Elevation:	45.82 feet	**Date:**	Aug. 26, 2009
Depth to Groundwater:	17.82 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	28.00 feet		Erica Fisker
Water Column Height:	9.48 feet		
Purged Volume:	16 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☒ Describe: _____

Sheen: Yes ☒ No ☐ Describe: oily

Odor: Yes ☒ No ☐ Describe: Petro - mod

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
11:20	Started purging well						
11:21	2	0.05	6.57	20.88	1193	3.91	-126.1
11:23	6	0.98	6.53	20.93	1194	3.29	-146.0
11:25	10	0.76	6.48	20.93	1196	4.46	-161.5
11:27	14	0.51	6.50	20.92	1208	7.07	-170.2
11:28	16	0.42	6.47	20.93	1201	6.53	-172.3
11:33	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW - 7	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	21.00 feet		San Leandro, CA
Top of Casing Elevation:	44.74 feet	**Date:**	Aug. 26, 2009
Depth to Groundwater:	15.84 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	28.90 feet		Erica Fischer
Water Column Height:	5.16 feet		
Purged Volume:	4 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** Cloudy

Sheen: Yes ☐ No ☑ **Describe:**

Odor: Yes ☑ No ☐ **Describe:** Slight Petro odor

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
10:53	Started purging well						
10:54	2	1.03	6.37	19.27	1373	6.18	-120.1
10:55	4	0.98	6.36	19.24	1375	145	-128.3
11:00	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-8	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	28.75 feet		San Leandro, CA
Top of Casing Elevation:	41.14 feet	**Date:**	Aug. 27, 2009
Depth to Groundwater:	13.24 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	27.90 feet		Erica Fisker
Water Column Height:	15.51 feet		
Purged Volume:	8 gallons		

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
08:41	Started purging well						
08:42	2	0.93	6.650	19.48	1375	125	+13.8
08:43	4	0.75	6.66	19.49	1386	81.0	+5.9
08:44	6	0.61	6.67	19.51	1390	35.1	-0.5
08:45	8	0.52	6.67	19.51	1391	35.1	-4.3
08:50	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-9	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	32.55 feet		San Leandro, CA
Top of Casing Elevation:	40.26 feet	**Date:**	Aug. 26, 2009
Depth to Groundwater:	12.50 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	27.76 feet		Erica Fisker
Water Column Height:	20.05 feet		
Purged Volume:	10 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
10:26	Start	purging				~~5.70~~	
10:27	2	0.62	6.94	19.53	1322	5.70	14.5
10:28	4	0.59	6.91	19.59	1307	6.95	13.6
10:29	6	0.53	6.92	19.53	1309	7.72	12.9
10:30	8	0.47	6.91	19.41	1327	6.98	10.3
10:31	10	0.42	6.90	19.31	1305	10.7	6.6
10:36	sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1D	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	59.81 feet		San Leandro, CA
Top of Casing Elevation:	54.42 feet	**Date:**	Aug. 26 2009
Depth to Groundwater:	23.73 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.69 feet		Erica Fisker
Water Column Height:	36.08 feet		
Purged Volume:	16 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
13:08	Started purging well						
13:09	2	0.68	7.08	20.14	1377	12.2	-6.8
13:11	6	0.59	7.05	19.98	1386	11.0	-8.4
13:13	10	0.53	7.05	19.94	1388	12.0	-9.8
13:15	14	0.47	7.04	19.93	1389	7.96	-10.7
13:16	16	0.45	7.04	19.93	1388	7.75	-11.0
13:21	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3D	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	58.59 feet		San Leandro, CA
Top of Casing Elevation:	54.10 feet	**Date:**	Aug. 26, 2009
Depth to Groundwater:	23.41 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.69 feet		Erica Fisker
Water Column Height:	35.18 feet		
Purged Volume:	16 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
13:33	Start	Purging					
13:34	2	2.3	6.99	20.19	1265	2.76	-17.0
13:36	6	1.7	6.95	20.17	1269	2.12	-17.4
13:38	10	0.98	6.94	20.17	1272	1.61	-18.0
13:40	14	0.76	6.94	20.17	1273	1.93	-18.3
13:42	16	0.73	6.93	20.17	1276	1.73	-18.8
13:45		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:**	Aug. 27, 2009
Depth to Groundwater:	22.79 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.33 feet		Erica Fisker
Water Column Height:	36.00 feet		
Purged Volume:	16 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
10:05	Started purging well						
10:06	2	3.5	7.01	19.46	1290	3.34	-33.2
10:08	6	2.7	6.96	19.44	1290	9.45	-31.4
10:10	10	2.3	6.94	19.45	1284	9.73	-29.4
10:12	14	1.5	6.93	19.45	1281	4.04	-27.4
10:13	16	0.98	6.93	19.46	1280	4.31	-26.4
10:18	Sampling						

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:	NM feet	**Date:**	Aug. 26, 2009
Depth to Groundwater:	23.06 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	NC feet		Erica Fisker
Water Column Height:	6.94 feet		
Purged Volume:	— gallons		
	Not purged		

Purging Method: Bailer ☐ Pump ☐

Sampling Method: Bailer ☐ Pump ☐ Not sampled

Color:	Yes ☐	No ☐	**Describe:**	Unknown
Sheen:	Yes ☐	No ☐	**Describe:**	Unknown
Odor:	Yes ☐	No ☐	**Describe:**	Unknown

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP

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:	NM feet	**Date:**	Aug. 26, 2009
Depth to Groundwater:	21.80 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	NC feet		Erica Fisker
Water Column Height:	8.20 feet		
Purged Volume:	— gallons		

Not purged

Purging Method: Bailer ☐ Pump ☐

Sampling Method: Bailer ☐ Pump ☐ Not sampled

Color:	Yes ☐	No ☐	**Describe:**	Unknown
Sheen:	Yes ☐	No ☐	**Describe:**	Unknown
Odor:	Yes ☐	No ☐	**Describe:**	Unknown

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP

Appendix C

Laboratory Report and Chain of Custody Form
for the Third Quarter 2009 Monitoring Event

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

Laboratory Job Number 214495
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2551
6620 Owens Dr.	Location : 15101 Freedom Avenue
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
MW-1	214495-001
MW-2	214495-002
MW-3	214495-003
MW-4	214495-004
MW-5	214495-005
MW-6	214495-006
MW-7	214495-007
MW-8	214495-008
MW-9	214495-009
MW-1D	214495-010
MW-3D	214495-011
MW-4D	214495-012

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: _____ Date: 09/04/2009
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**214495**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2551**
Location:	**15101 Freedom Avenue**
Request Date:	**08/27/09**
Samples Received:	**08/27/09**

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 08/27/09. The samples were received cold and intact.

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

High response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 09/01/09 13:31; 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

C&T LOGIN # 214495

Sampler: Lizzie Hightower/ Erica Fisker

Project No: 2551

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: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analyses: TPHg, BTEX, MtBE 8260B	Gasoline Oxygenates & Lead Scavengers
1	MW-1	8/27/09 11:56		*		4-VOAs	*			*	*	*
2	MW-2	8/27/09 09:20		*		4-VOAs	*			*	*	*
3	MW-3	8/27/09 13:10		*		4-VOAs	*			*	*	*
4	MW-4	8/27/09 11:35		*		4-VOAs	*			*	*	*
5	MW-5	8/27/09 09:48		*		4-VOAs	*			*	*	*
6	MW-6	8/26/09 11:33		*		4-VOAs	*			*	*	*
7	MW-7	8/26/09 11:00		*		4-VOAs	*			*	*	*
8	MW-8	8/27/09 08:50		*		4-VOAs	*			*	*	*
9	MW-9	8/26/09 10:36		*		4-VOAs	*			*	*	*
10	MW-1D	8/26/09 13:21		*		4-VOAs	*			*	*	*
11	MW-3D	8/26/09 13:45		*		4-VOAs	*			*	*	*
12	MW-4D	8/27/09 10:18		*		4-VOAs	*			*	*	*

Notes: **EDF OUTPUT REQUIRED**
Ethanol

RELINQUISHED BY:	RECEIVED BY:
E. Hightower 8/27/09 14:22 DATE/TIME	8/27/09 1422 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 214495 Date Received 8/27/09 Number of coolers 1
Client SOMA Project 1510 FREEDOM BLVD, SAN LEANDRO

Date Opened 8/27/09 By (print) M. VILLANUEVA (sign)
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:

Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☑ Samples Received on ice & cold without a temperature blank

☐ 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 samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	154457
Lab ID:	214495-001	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
Diln Fac:	4.000		

Analyte	Result	RL
Gasoline C7-C12	4,500	200
tert-Butyl Alcohol (TBA)	ND	40
Isopropyl Ether (DIPE)	ND	2.0
Ethyl tert-Butyl Ether (ETBE)	ND	2.0
Methyl tert-Amyl Ether (TAME)	ND	2.0
Ethanol	ND	4,000
MTBE	4.6	2.0
1,2-Dichloroethane	ND	2.0
Benzene	330	2.0
Toluene	ND	2.0
1,2-Dibromoethane	ND	2.0
Ethylbenzene	97	2.0
m,p-Xylenes	42	2.0
o-Xylene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-122
1,2-Dichloroethane-d4	98	77-137
Toluene-d8	92	80-120
Bromofluorobenzene	102	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	154457
Lab ID:	214495-002	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	130	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	2.5	0.50
m,p-Xylenes	0.61	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-122
1,2-Dichloroethane-d4	114	77-137
Toluene-d8	93	80-120
Bromofluorobenzene	103	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	154457
Lab ID:	214495-003	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/02/09
Diln Fac:	50.00		

Analyte	Result	RL
Gasoline C7-C12	43,000	2,500
tert-Butyl Alcohol (TBA)	ND	500
Isopropyl Ether (DIPE)	ND	25
Ethyl tert-Butyl Ether (ETBE)	ND	25
Methyl tert-Amyl Ether (TAME)	ND	25
Ethanol	ND	50,000
MTBE	210	25
1,2-Dichloroethane	ND	25
Benzene	2,500	25
Toluene	160	25
1,2-Dibromoethane	ND	25
Ethylbenzene	1,900	25
m,p-Xylenes	5,300	25
o-Xylene	1,700	25

Surrogate	%REC	Limits
Dibromofluoromethane	115	80-122
1,2-Dichloroethane-d4	104	77-137
Toluene-d8	93	80-120
Bromofluorobenzene	103	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4	Units:	ug/L
Lab ID:	214495-004	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	16,000	1,000	20.00	154457	09/02/09
tert-Butyl Alcohol (TBA)	4,900	100	10.00	154546	09/04/09
Isopropyl Ether (DIPE)	ND	5.0	10.00	154546	09/04/09
Ethyl tert-Butyl Ether (ETBE)	24	5.0	10.00	154546	09/04/09
Methyl tert-Amyl Ether (TAME)	ND	5.0	10.00	154546	09/04/09
Ethanol	ND	10,000	10.00	154546	09/04/09
MTBE	290	5.0	10.00	154546	09/04/09
1,2-Dichloroethane	ND	5.0	10.00	154546	09/04/09
Benzene	960	5.0	10.00	154546	09/04/09
Toluene	64	5.0	10.00	154546	09/04/09
1,2-Dibromoethane	ND	5.0	10.00	154546	09/04/09
Ethylbenzene	560	5.0	10.00	154546	09/04/09
m,p-Xylenes	1,900	5.0	10.00	154546	09/04/09
o-Xylene	220	5.0	10.00	154546	09/04/09

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	102	80-122	10.00	154546	09/04/09
1,2-Dichloroethane-d4	105	77-137	10.00	154546	09/04/09
Toluene-d8	108	80-120	10.00	154546	09/04/09
Bromofluorobenzene	101	80-125	10.00	154546	09/04/09

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-5	Diln Fac:	10.00
Lab ID:	214495-005	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	7,400	500	154457	09/02/09
tert-Butyl Alcohol (TBA)	1,300	100	154546	09/04/09
Isopropyl Ether (DIPE)	ND	5.0	154546	09/04/09
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	154546	09/04/09
Methyl tert-Amyl Ether (TAME)	ND	5.0	154546	09/04/09
Ethanol	ND	10,000	154546	09/04/09
MTBE	66	5.0	154546	09/04/09
1,2-Dichloroethane	ND	5.0	154546	09/04/09
Benzene	610	5.0	154546	09/04/09
Toluene	15	5.0	154546	09/04/09
1,2-Dibromoethane	ND	5.0	154546	09/04/09
Ethylbenzene	320	5.0	154546	09/04/09
m,p-Xylenes	170	5.0	154546	09/04/09
o-Xylene	15	5.0	154546	09/04/09

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	100	80-122	154546	09/04/09
1,2-Dichloroethane-d4	104	77-137	154546	09/04/09
Toluene-d8	109	80-120	154546	09/04/09
Bromofluorobenzene	103	80-125	154546	09/04/09

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	154457
Lab ID:	214495-006	Sampled:	08/26/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/02/09
Diln Fac:	4.000		

Analyte	Result	RL
Gasoline C7-C12	10,000 Y	200
tert-Butyl Alcohol (TBA)	ND	40
Isopropyl Ether (DIPE)	ND	2.0
Ethyl tert-Butyl Ether (ETBE)	ND	2.0
Methyl tert-Amyl Ether (TAME)	ND	2.0
Ethanol	ND	4,000
MTBE	2.2	2.0
1,2-Dichloroethane	ND	2.0
Benzene	25	2.0
Toluene	ND	2.0
1,2-Dibromoethane	ND	2.0
Ethylbenzene	130	2.0
m,p-Xylenes	270	2.0
o-Xylene	24	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-122
1,2-Dichloroethane-d4	110	77-137
Toluene-d8	94	80-120
Bromofluorobenzene	100	80-125

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-7	Units:	ug/L
Lab ID:	214495-007	Sampled:	08/26/09
Matrix:	Water	Received:	08/27/09

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	2,700 Y	50	1.000	154457	09/01/09
tert-Butyl Alcohol (TBA)	ND	33	3.333	154546	09/04/09
Isopropyl Ether (DIPE)	ND	0.50	1.000	154457	09/01/09
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	154457	09/01/09
Methyl tert-Amyl Ether (TAME)	33	0.50	1.000	154457	09/01/09
Ethanol	ND	1,000	1.000	154457	09/01/09
MTBE	140	1.7	3.333	154546	09/04/09
1,2-Dichloroethane	ND	0.50	1.000	154457	09/01/09
Benzene	ND	0.50	1.000	154457	09/01/09
Toluene	ND	0.50	1.000	154457	09/01/09
1,2-Dibromoethane	ND	0.50	1.000	154457	09/01/09
Ethylbenzene	48	0.50	1.000	154457	09/01/09
m,p-Xylenes	53	0.50	1.000	154457	09/01/09
o-Xylene	ND	0.50	1.000	154457	09/01/09

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	110	80-122	1.000	154457	09/01/09
1,2-Dichloroethane-d4	103	77-137	1.000	154457	09/01/09
Toluene-d8	92	80-120	1.000	154457	09/01/09
Bromofluorobenzene	103	80-125	1.000	154457	09/01/09

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	154457
Lab ID:	214495-008	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
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	111	80-122
1,2-Dichloroethane-d4	116	77-137
Toluene-d8	93	80-120
Bromofluorobenzene	105	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-9	Batch#:	154457
Lab ID:	214495-009	Sampled:	08/26/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
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	2.6	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	111	80-122
1,2-Dichloroethane-d4	114	77-137
Toluene-d8	92	80-120
Bromofluorobenzene	106	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1D	Batch#:	154457
Lab ID:	214495-010	Sampled:	08/26/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
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	114	80-122
1,2-Dichloroethane-d4	113	77-137
Toluene-d8	92	80-120
Bromofluorobenzene	103	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3D	Batch#:	154457
Lab ID:	214495-011	Sampled:	08/26/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
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)	1.6	0.50
Ethanol	ND	1,000
MTBE	20	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	114	80-122
1,2-Dichloroethane-d4	115	77-137
Toluene-d8	92	80-120
Bromofluorobenzene	105	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4D	Batch#:	154457
Lab ID:	214495-012	Sampled:	08/27/09
Matrix:	Water	Received:	08/27/09
Units:	ug/L	Analyzed:	09/01/09
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	2.2	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	115	80-122
1,2-Dichloroethane-d4	116	77-137
Toluene-d8	92	80-120
Bromofluorobenzene	105	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC510159	Batch#:	154457
Matrix:	Water	Analyzed:	09/01/09
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	113	80-122
1,2-Dichloroethane-d4	116	77-137
Toluene-d8	90	80-120
Bromofluorobenzene	102	80-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	154457
Units:	ug/L	Analyzed:	09/01/09
Diln Fac:	1.000		

Type: BS Lab ID: QC510160

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	106.3	150.0 b	141	55-151
Isopropyl Ether (DIPE)	21.25	26.81	126	65-131
Ethyl tert-Butyl Ether (ETBE)	21.25	24.92	117	75-128
Methyl tert-Amyl Ether (TAME)	21.25	20.89	98	80-121
MTBE	21.25	23.36	110	73-122
1,2-Dichloroethane	21.25	25.54	120	73-141
Benzene	21.25	20.41	96	80-120
Toluene	21.25	20.73	98	80-120
1,2-Dibromoethane	21.25	23.73	112	80-120
Ethylbenzene	21.25	21.02	99	80-121
m,p-Xylenes	42.50	46.10	108	80-122
o-Xylene	21.25	22.32	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-122
1,2-Dichloroethane-d4	106	77-137
Toluene-d8	92	80-120
Bromofluorobenzene	100	80-125

Type: BSD Lab ID: QC510161

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	106.3	143.9 b	135	55-151	4	21
Isopropyl Ether (DIPE)	21.25	25.84	122	65-131	4	20
Ethyl tert-Butyl Ether (ETBE)	21.25	24.17	114	75-128	3	20
Methyl tert-Amyl Ether (TAME)	21.25	19.90	94	80-121	5	20
MTBE	21.25	22.67	107	73-122	3	20
1,2-Dichloroethane	21.25	25.27	119	73-141	1	20
Benzene	21.25	19.77	93	80-120	3	20
Toluene	21.25	20.04	94	80-120	3	20
1,2-Dibromoethane	21.25	22.57	106	80-120	5	20
Ethylbenzene	21.25	20.26	95	80-121	4	20
m,p-Xylenes	42.50	44.26	104	80-122	4	20
o-Xylene	21.25	21.11	99	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-122
1,2-Dichloroethane-d4	105	77-137
Toluene-d8	91	80-120
Bromofluorobenzene	102	80-125

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	154457
Units:	ug/L	Analyzed:	09/01/09
Diln Fac:	1.000		

Type: BS Lab ID: QC510162

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	950.0	950.7	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-122
1,2-Dichloroethane-d4	112	77-137
Toluene-d8	90	80-120
Bromofluorobenzene	104	80-125

Type: BSD Lab ID: QC510163

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	950.0	970.6	102	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-122
1,2-Dichloroethane-d4	111	77-137
Toluene-d8	93	80-120
Bromofluorobenzene	101	80-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC510573	Batch#:	154546
Matrix:	Water	Analyzed:	09/03/09
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
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	103	80-122
1,2-Dichloroethane-d4	99	77-137
Toluene-d8	109	80-120
Bromofluorobenzene	106	80-125

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	214495	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	154546
Units:	ug/L	Analyzed:	09/03/09
Diln Fac:	1.000		

Type: BS Lab ID: QC510574

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	151.3	121	55-151
Isopropyl Ether (DIPE)	25.00	22.99	92	65-131
Ethyl tert-Butyl Ether (ETBE)	25.00	23.63	95	75-128
Methyl tert-Amyl Ether (TAME)	25.00	24.75	99	80-121
MTBE	25.00	23.65	95	73-122
1,2-Dichloroethane	25.00	22.57	90	73-141
Benzene	25.00	24.51	98	80-120
Toluene	25.00	25.33	101	80-120
1,2-Dibromoethane	25.00	24.57	98	80-120
Ethylbenzene	25.00	25.36	101	80-121
m,p-Xylenes	50.00	52.21	104	80-122
o-Xylene	25.00	23.73	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	98	77-137
Toluene-d8	108	80-120
Bromofluorobenzene	103	80-125

Type: BSD Lab ID: QC510575

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	135.1	108	55-151	11	21
Isopropyl Ether (DIPE)	25.00	23.43	94	65-131	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.02	96	75-128	2	20
Methyl tert-Amyl Ether (TAME)	25.00	24.55	98	80-121	1	20
MTBE	25.00	24.03	96	73-122	2	20
1,2-Dichloroethane	25.00	21.50	86	73-141	5	20
Benzene	25.00	23.64	95	80-120	4	20
Toluene	25.00	24.75	99	80-120	2	20
1,2-Dibromoethane	25.00	25.45	102	80-120	4	20
Ethylbenzene	25.00	24.96	100	80-121	2	20
m,p-Xylenes	50.00	49.54	99	80-122	5	20
o-Xylene	25.00	23.81	95	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	97	77-137
Toluene-d8	106	80-120
Bromofluorobenzene	106	80-125

RPD= Relative Percent Difference

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\090109.b\HI123TVH.D

Date : 01-SEP-2009 23:32

Client ID: DYNA P&T

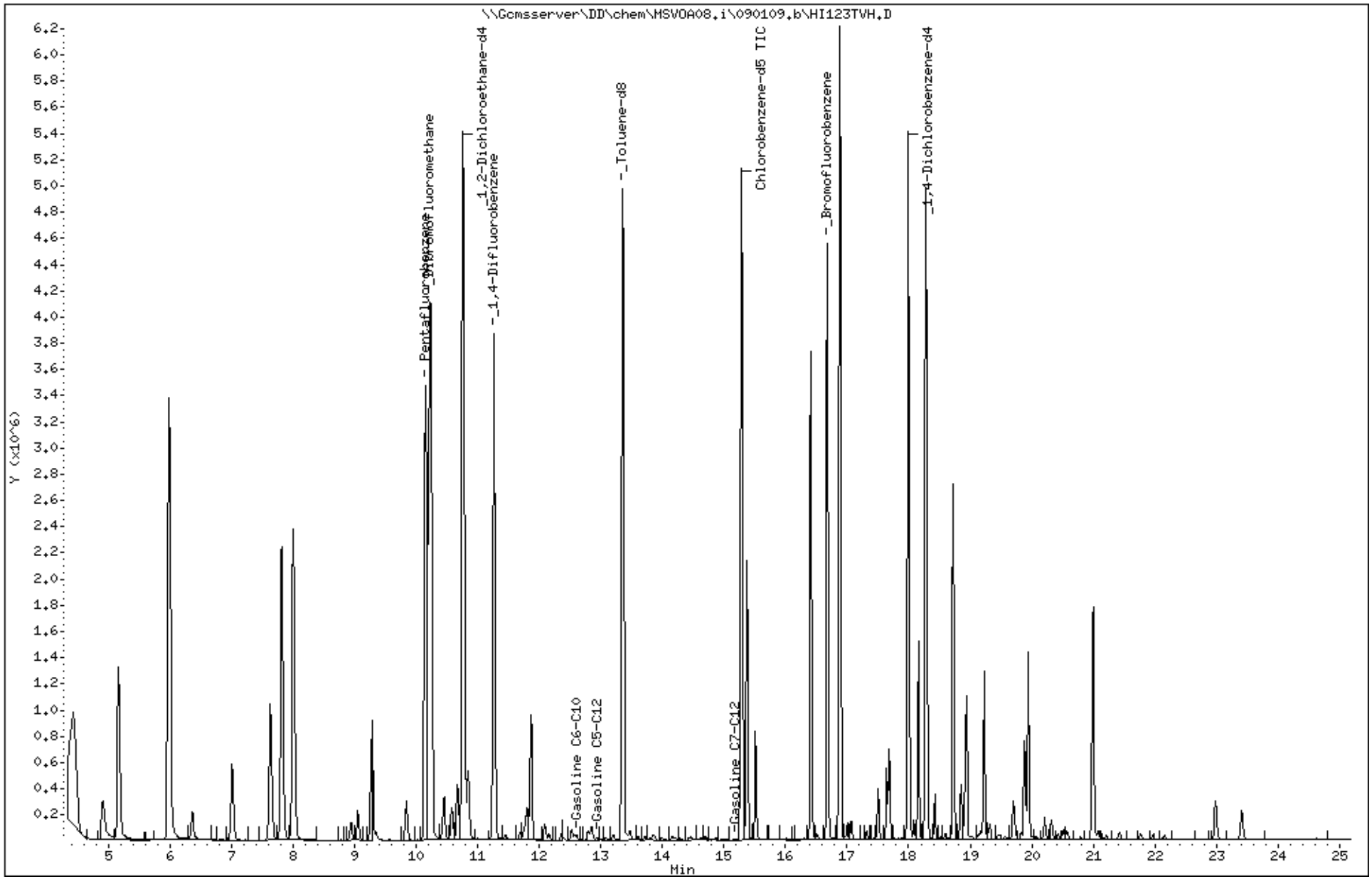
Instrument: MSVOA08.i

Sample Info: S,214495-001

Operator: voc

Column phase:

Column diameter: 2.00



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Date : 01-SEP-2009 18:43

Client ID: DYNA P&T

Instrument: MSVOA08.i

Sample Info: S,214495-002

Operator: voc

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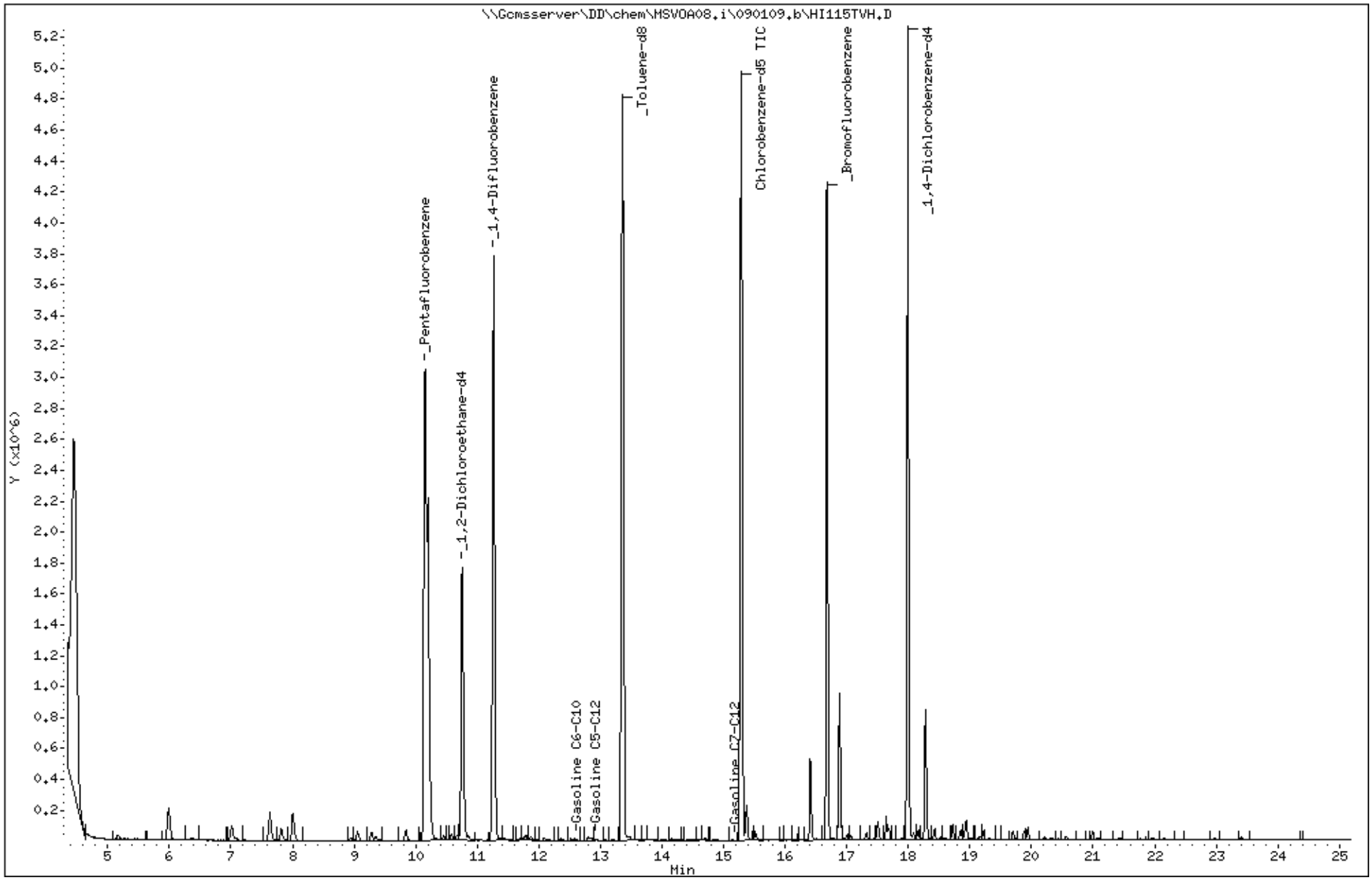

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Sample Info: S,214495-003

Operator: voc

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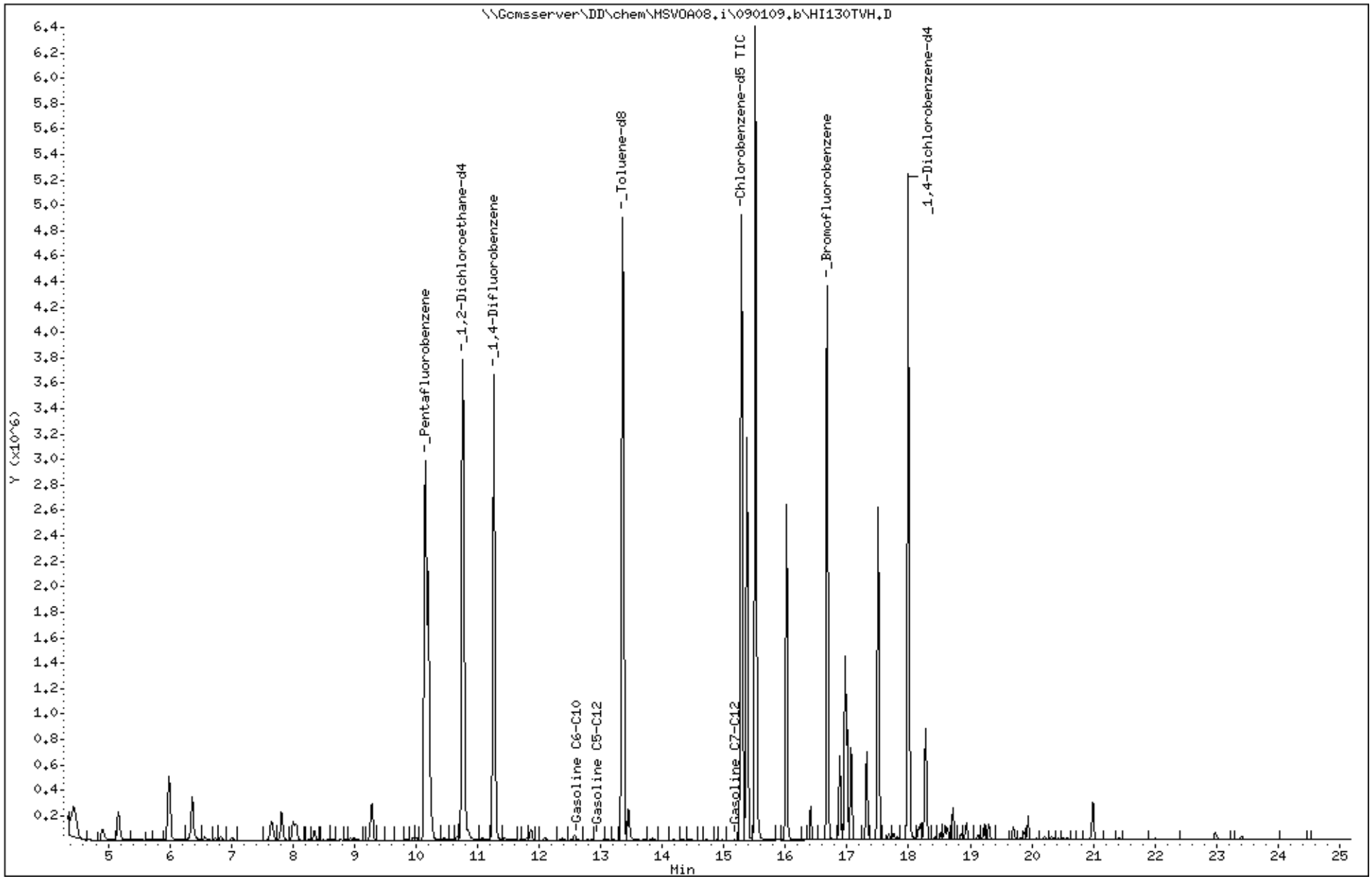
Column diameter: 2.00



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Sample Info: S,214495-004

Operator: voc

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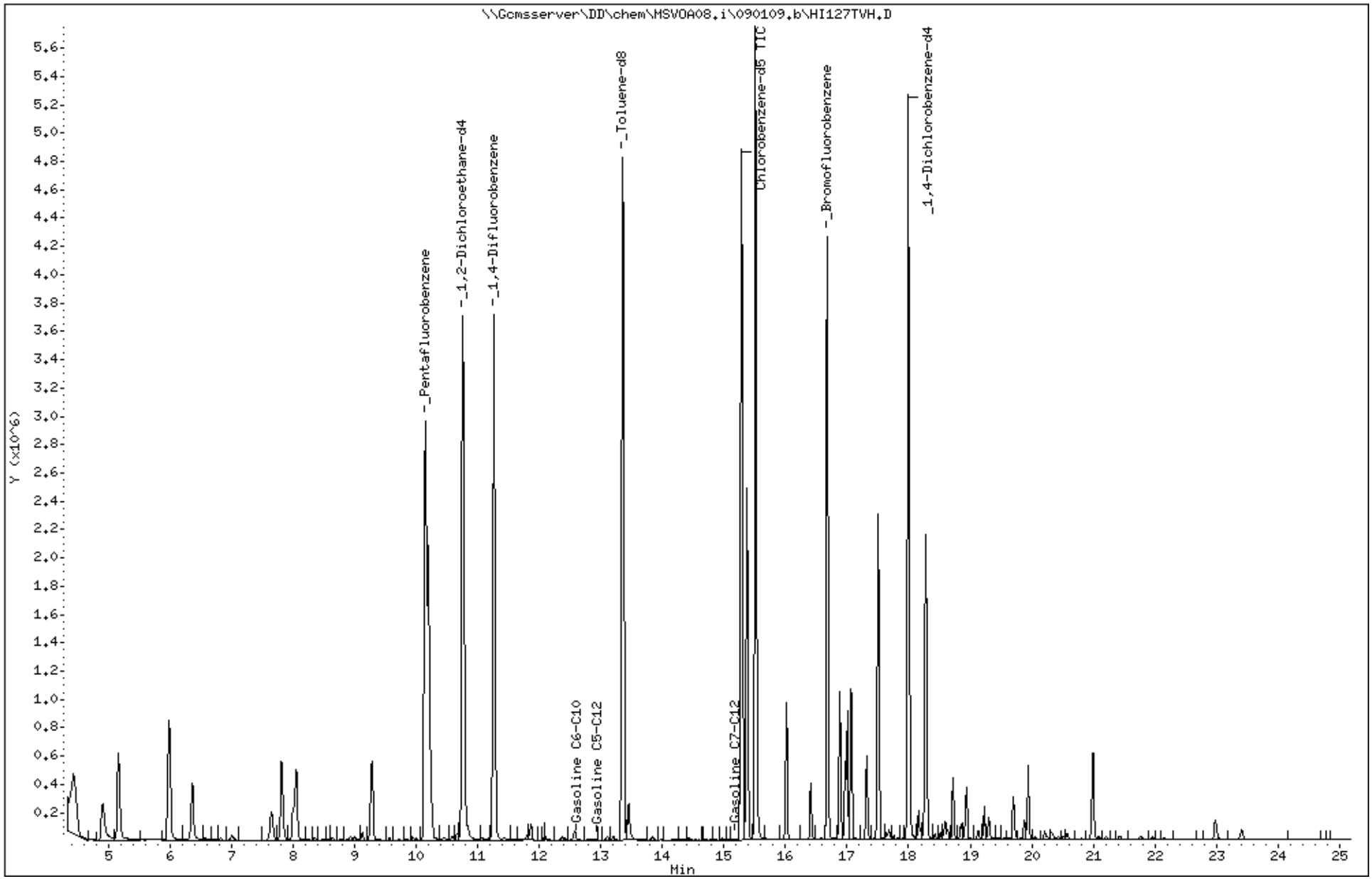
Column diameter: 2.00



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Date : 02-SEP-2009 01:20

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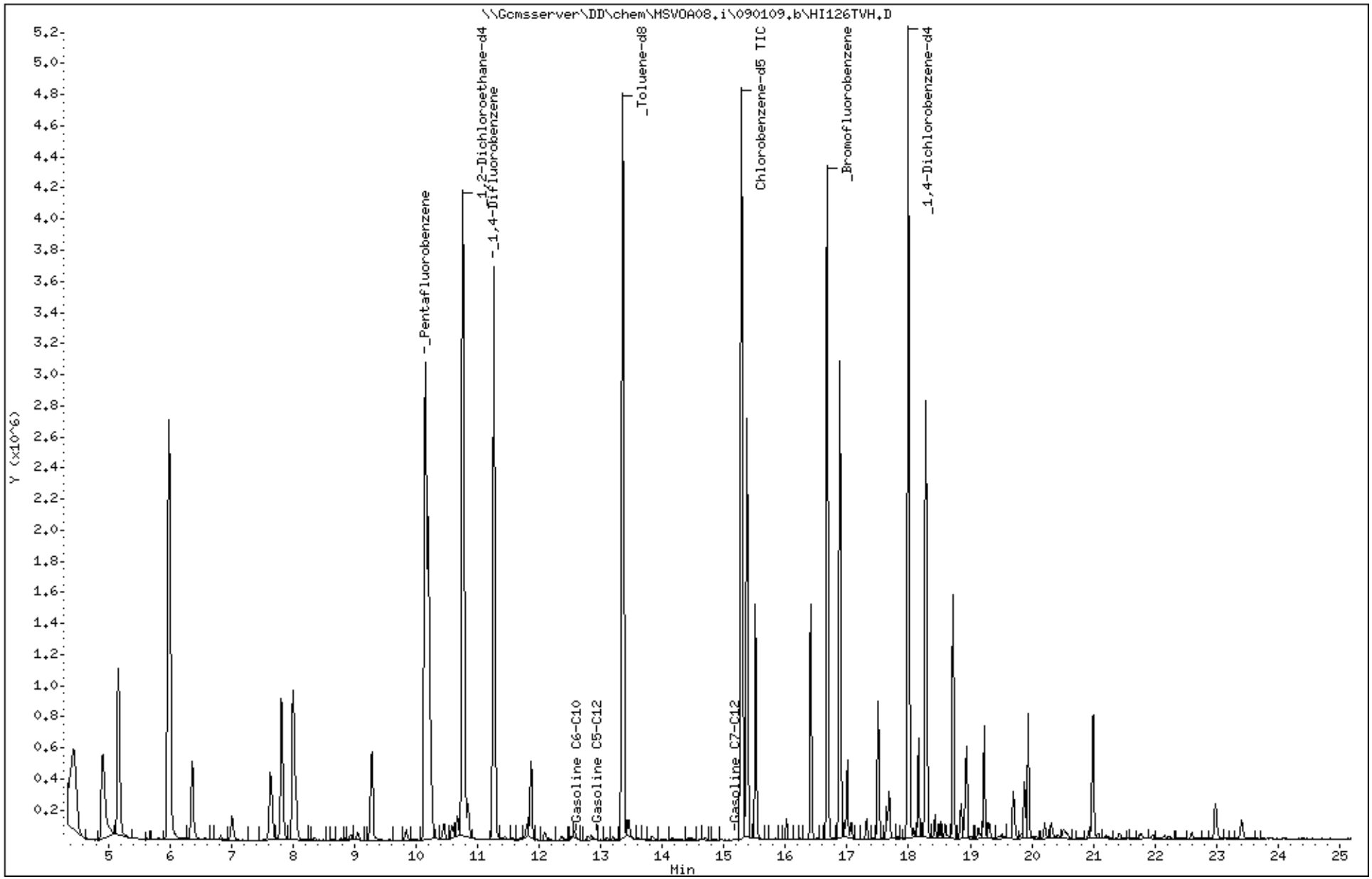
Instrument: MSVOA08.i

Sample Info: S,214495-005

Operator: voc

Column phase:

Column diameter: 2.00



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Date : 02-SEP-2009 00:08

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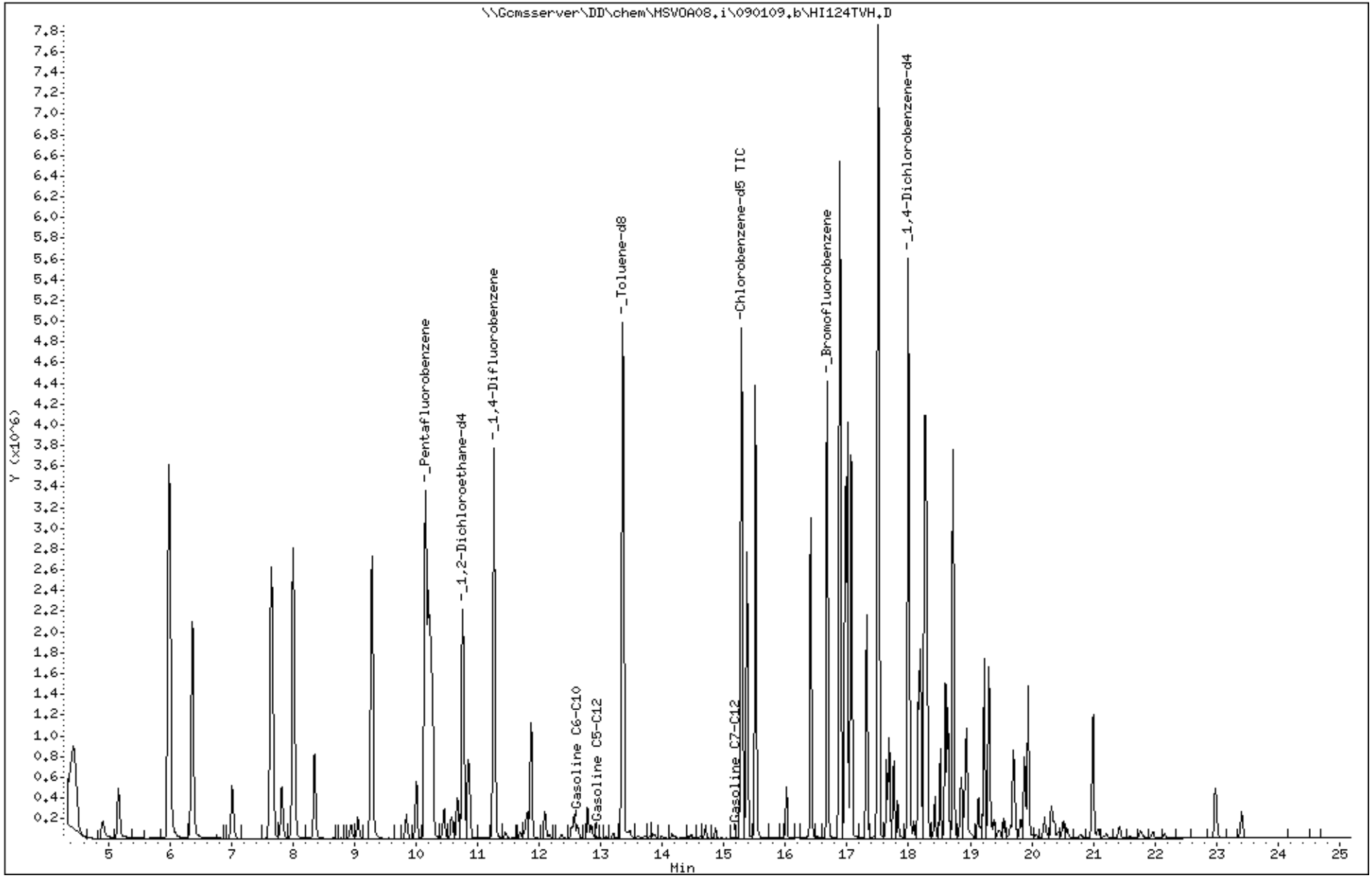
Instrument: MSVOA08.i

Sample Info: S,214495-006

Operator: voc

Column phase:

Column diameter: 2.00



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Date : 01-SEP-2009 19:19

Client ID: DYNA P&T

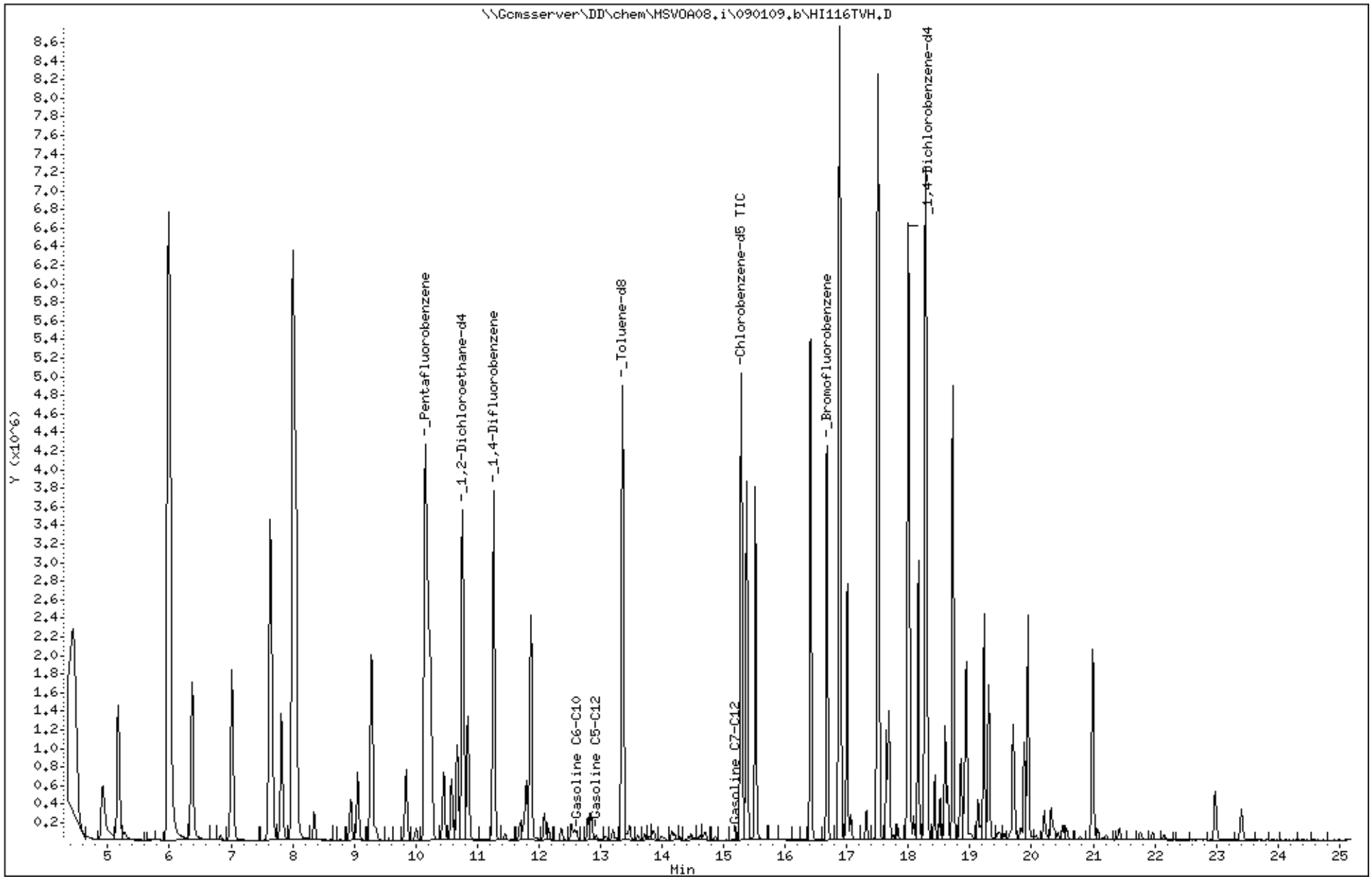
Instrument: MSVOA08.i

Sample Info: S,214495-007

Operator: voc

Column phase:

Column diameter: 2.00



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Date : 01-SEP-2009 12:55

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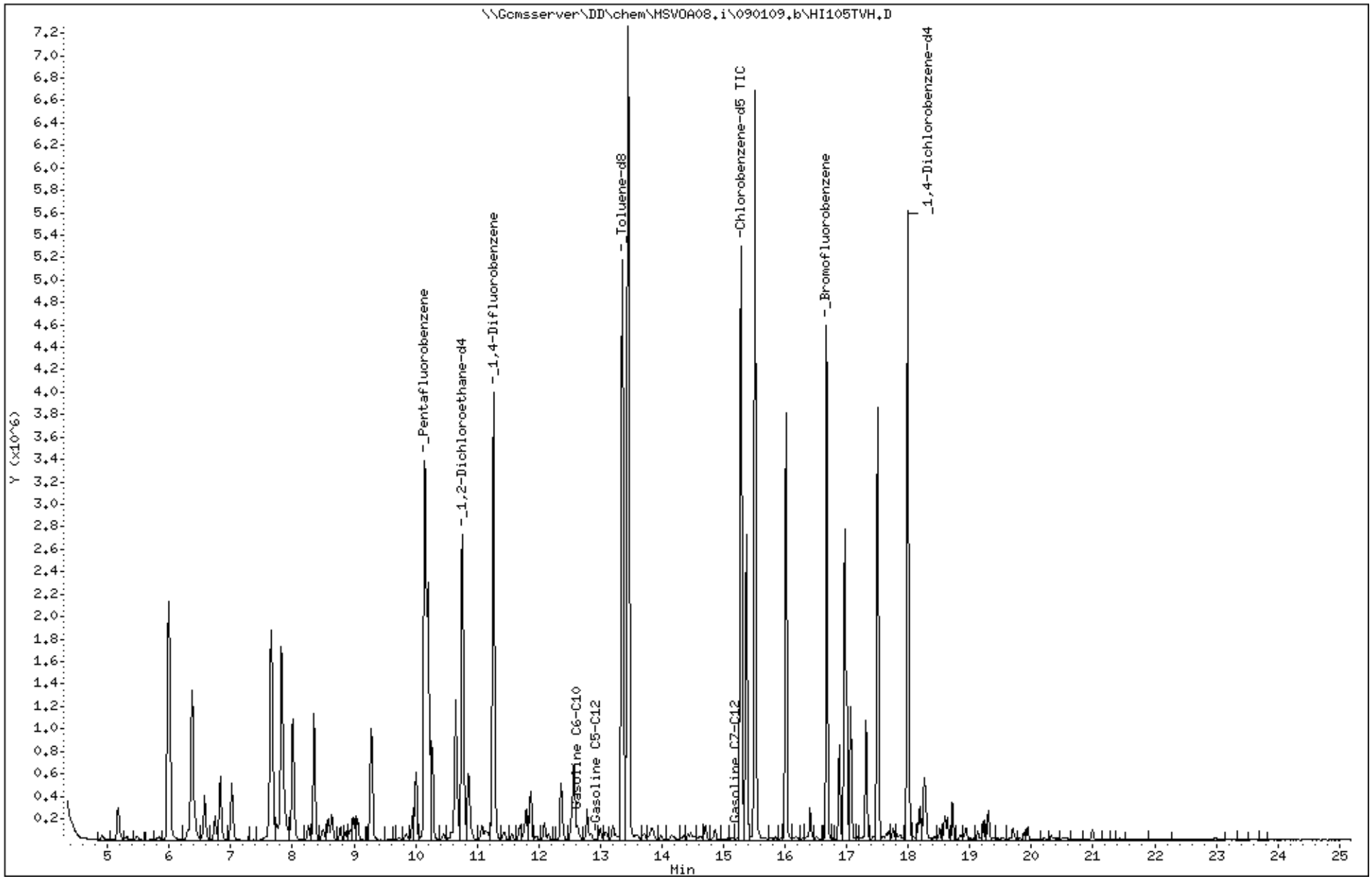
Instrument: MSVOA08.i

Sample Info: CCV,S12207,.017/100

Operator: voc

Column phase:

Column diameter: 2.00



Appendix D

Non-Hazardous Waste Manifest
for Groundwater Removal

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
EXEMPT	1	NRCES 610-749-1390	40434-04

GENERATOR

5. Generator's Name and Mailing Address
GAS & FOOD
1770 PISTACIA CT.
FAIRFIELD CA 94533
Generator's Phone: 510 481 2839

Generator's Site Address (if different than mailing address)
GAS & FOOD
15101 FREEDOM AVE
SAN LEANDRO CA 94578

6. Transporter 1 Company Name: NRC ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number: CAR000003114

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Crosby & Overton Inc.
1630 W. 17th Street
Long Beach CA 90813
Facility's Phone: 562 432-5445
U.S. EPA ID Number: CAD028409019

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-HAZARDOUS WASTE, LIQUID (PURGE WATER)	2	DM	100	G	NONE
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT JOB/PO#: 40434
PROFILE#: 51545
CONSULTANT: SOMA ENVIRONMENTAL 6620 OWENS DRIVE, PLEASANTON, CA 94588
NRC ENVIRONMENTAL SERVICES 1605 FERRY POINT, ALAMEDA, CA 94501

D6343.

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: ERIC GASSNER-WALLACE
Signature:
Month: 01 Day: 23 Year: 09

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Gary Scott
Signature: Gary Scott
Month: 01 Day: 23 Year: 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

H135

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month Day Year