SOMA
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November 19, 2008

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 "Fourth Quarter 2008 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

Fourth Quarter 2008
Groundwater Monitoring Report

Texaco Gasoline Service Station
15101 Freedom Avenue
San Leandro, California

November 19, 2008

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 Fourth Quarter 2008 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 Fourth Quarter 2008 groundwater monitoring event conducted on October 15 and 16, 2008. It includes physical and chemical properties measured in the field and laboratory analysis results for each groundwater sample.

1.1 Field Activities

On October 15 and 16, 2008, 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 October 15, 2008, 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 October 15 and 16, 2008, 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. A grab groundwater sample was also collected from the irrigation well located at 1573 153rd Avenue.

Purged groundwater from each well was temporarily stored on-site in two filled 55-gallon drums generated during this event. Stored groundwater was hauled off-site to an appropriate disposal facility on the following dates: August 8, 2008, five drums generated during Second and Third Quarter 2008 monitoring events; August 24, 2008, two drums generated during the current monitoring. Approximately 350 gallons of purged groundwater were hauled off-site. Non-hazardous waste manifests are included in Appendix D.

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 October 15 and 16, 2008 groundwater monitoring event.

2.1 Field Measurements for First WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each monitoring well. Depths to groundwater ranged from 12.64 feet in well MW-9 to 23.76 feet in MW-1. Corresponding groundwater elevations ranged from 27.62 feet in MW-9 to 30.70 feet in MW-1.

Figure 3 displays the contour map of groundwater elevations. Groundwater flows south to southwesterly across the site at a gradient of 0.006 feet/feet. The groundwater flow direction has remained consistent with the previous monitoring event (Third Quarter 2008) and the gradient has increased.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO concentrations in the First WBZ ranged from 0.25 mg/L in MW-6 to 3.0 mg/L in MW-3 and MW-4. ORP showed negative redox potentials in all First WBZ monitoring wells except for MW-8. Negative redox potentials indicate that contaminants in groundwater are conducive to anaerobic biodegradation.

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

2.2 Laboratory Analysis for 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 laboratory-reporting limit in MW-8 and MW-9. Detectable TPH-g concentrations ranged from 1,400 µg/L in MW-2 to 50,000 µg/L in MW-3. The TPH-g concentration in MW-3 was significantly higher than in the other site wells and has increased since the previous monitoring event (Third Quarter 2008).

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).

The following BTEX concentrations were observed:

- In MW-8 and MW-9, all BTEX analytes were below laboratory-reporting limits.
- In MW-2, benzene and toluene were below laboratory-reporting limits.
- In MW-1, toluene was below the laboratory-reporting limit.
- The highest BTEX concentrations were detected in MW-3, at 3,900 µg/L, 300 µg/L, 3,100 µg/L, and 11,000 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. The benzene concentration detected in well MW-3 was significantly higher than in the other site wells. Benzene appears to have only minimally impacted off-site wells MW-6 and MW-7 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 1.7 µg/L at MW-6 to 460 µg/L at MW-3. 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.

As shown in Table 1, since the previous monitoring event (Third Quarter 2008), TPH-g and benzene concentrations have increased and other BTEX analytes 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.
- Ethyl tertiary-butyl ether (ETBE) was detected at trace concentrations in well MW-4 and was below the laboratory-reporting limit in remaining tested wells.
- 1,2-dichloroethane (1,2-DCA) was detected in groundwater samples collected from wells MW-4 and MW-9 at low levels. 1,2-DCA was below the laboratory-reporting limit in the remaining tested wells.

- Tertiary-butyl alcohol (TBA) was detected in wells MW-4 and MW-5 at 700 µg/L and 990 µg/L, respectively, and was below the laboratory-reporting limit in all other First WBZ wells.

  Figure 7 displays the map showing concentrations of TBA, ETBE, and 1,2-DCA in First WBZ wells. 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.

- Tertiary-amyl methyl ether (TAME) was below the laboratory-reporting limit in samples from all wells except MW-4, MW-5 and MW-7, where TAME was detected at 37 µg/L, 82 µg/L and 14 µg/L, respectively. Figure 8 displays the contour map of TAME concentrations in groundwater.
- Ethanol concentrations were below the laboratory-reporting limit in all groundwater samples. Analysis results for ethanol are shown in Appendix C.

2.3 Field Measurements for Second WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each monitoring well. Depths to groundwater ranged from 22.98 feet in MW-4D to 23.82 feet in MW-1D. Corresponding groundwater elevations ranged from 30.14 feet in MW-4D to 30.60 feet in MW-1D.

Figure 9 displays the contour map of groundwater elevations in the Second WBZ. Groundwater flows southwesterly at a gradient of 0.0034 feet/feet. The groundwater flow direction has remained consistent with the previous monitoring event (Third Quarter 2008).

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO concentrations in the Second WBZ ranged from 0.27 mg/L in MW-1D to 3.10 mg/L in MW-4D. ORP showed negative potential in MW-1D and positive potentials in MW-3D and MW-4D. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons. 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.

TPH-g concentrations were below the laboratory-reporting limit in all Second WBZ wells except for MW-1D, where TPH-g was detected at 120 µg/L.

All BTEX analytes were below laboratory-reporting limits in groundwater samples from MW-3D and MW-4D. In MW-1D, toluene was below laboratory-reporting limit and all other BTEX analytes were detected in trace concentrations.

Figure 10 displays concentrations of TPH-g and benzene in Second WBZ wells. In general, the most impacted region is in the northern section of the site at MW-1D.

MtBE was below the laboratory-reporting limit in MW-1D, and was detected in MW-3D and MW-4D at 37 µg/L and 1.9 µg/L, respectively. MtBE concentrations in these wells have decreased since the previous monitoring event (Third Quarter 2008).

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 4.7 µg/L in MW-3D and was below the laboratory-reporting limit in MW-1D and MW-4D.

Figure 11 displays concentrations of MtBE and TAME in Second WBZ wells. In general, the most impacted region is in the vicinity of the dispenser islands at MW-3D and MW-4D.

2.5 Laboratory Analysis for Irrigation Well at 1573 153rd Avenue

TPH-g, BTEX, MtBE, gasoline oxygenates, lead scavengers, and ethanol were below laboratory-reporting limits in groundwater samples from the irrigation well at 1573 153rd Avenue.

3. CONCLUSIONS AND RECOMMENDATIONS

Fourth Quarter 2008 groundwater monitoring results are summarized below.

- The groundwater flow direction has remained south to southwesterly in the both the First and Second WBZs.
- 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.
- The TPH-g concentration in MW-6, at 18,000 µg/L, increased since the previous quarter monitoring event (Third Quarter 2008); however, it remained significantly lower than the historical peak value of 34,000 µg/L observed in September 2004. TPH-g was below the laboratory-reporting limit in MW-8 and MW-9.
- In the Second WBZ, the contaminant region appears to be in the vicinity of MW-1D. However, MtBE and TAME were detected in MW-3D and MW-4D at low levels.
- All tested constituents were below laboratory-reporting limits in groundwater samples from the irrigation well at 1573 153rd Avenue.

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.
- Based on continued low to non-detectable levels of all tested constituents in off-site wells MW-7 to MW-9, modify the existing quarterly sampling schedule to annual sampling for these off-site wells.

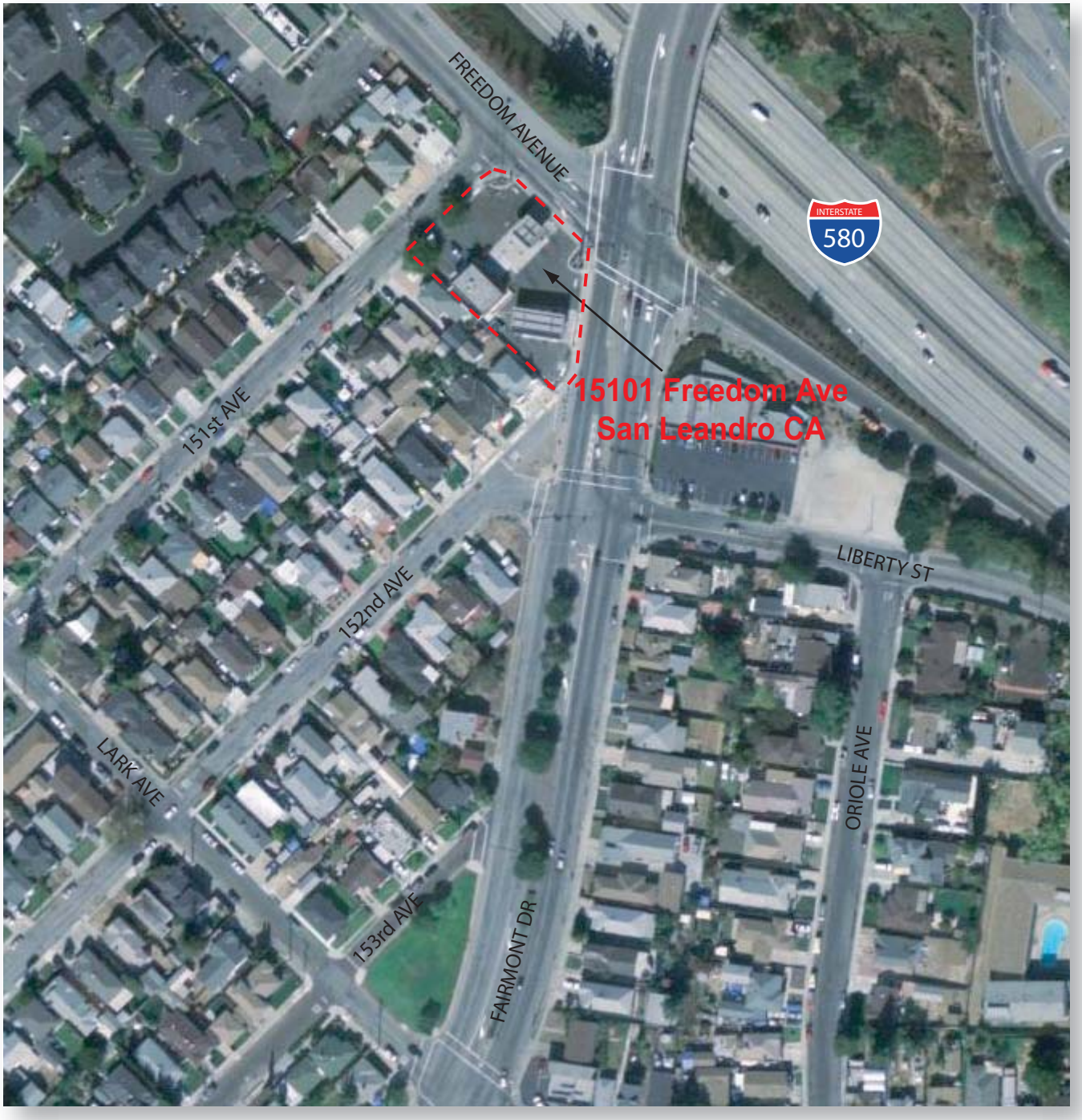
SOMA is currently preparing a workplan in order to implement a corrective action plan (CAP) for the site. Upon approval, SOMA will implement the CAP.

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.

SOMA ENVIRONMENTAL ENGINEERING, INC.

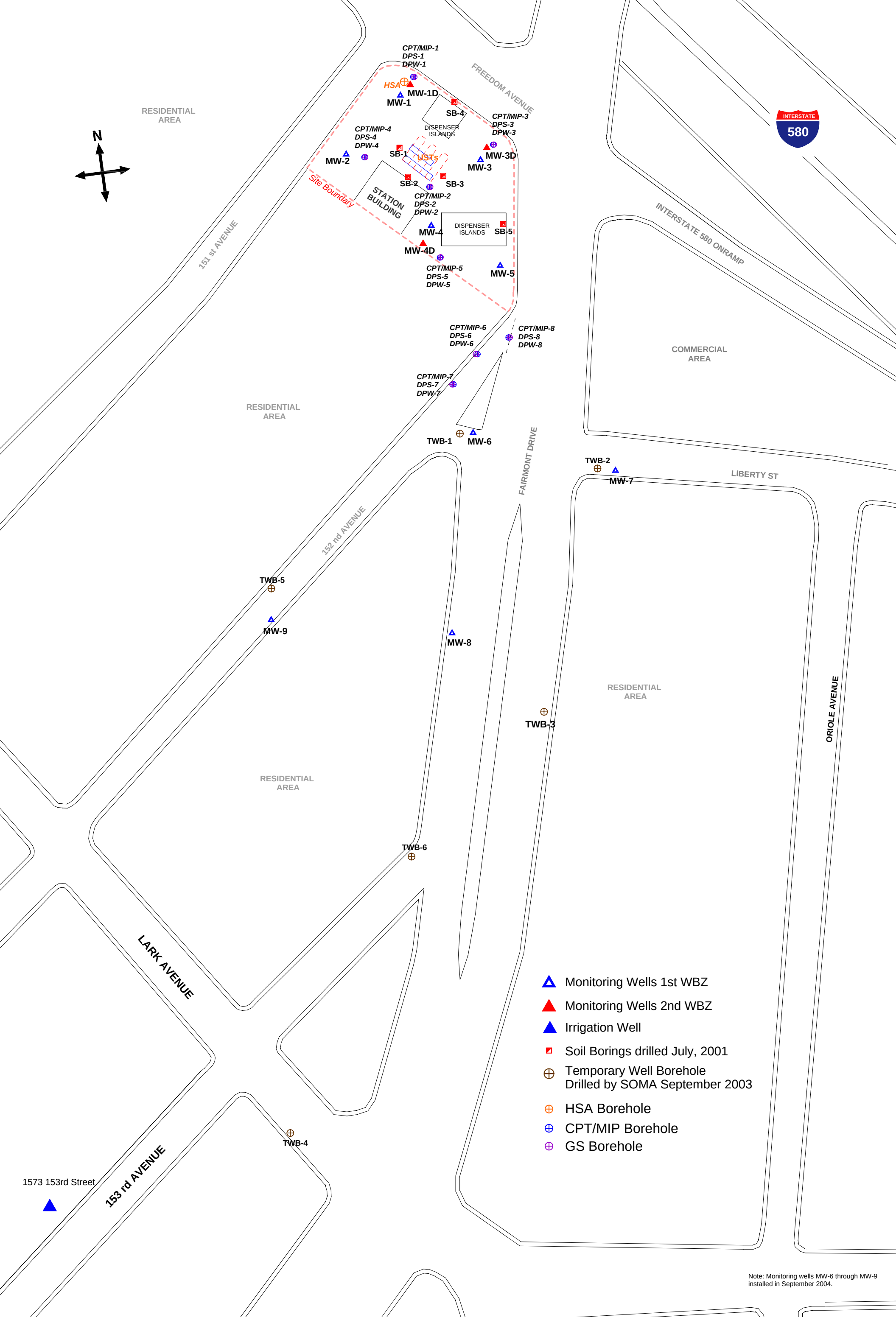
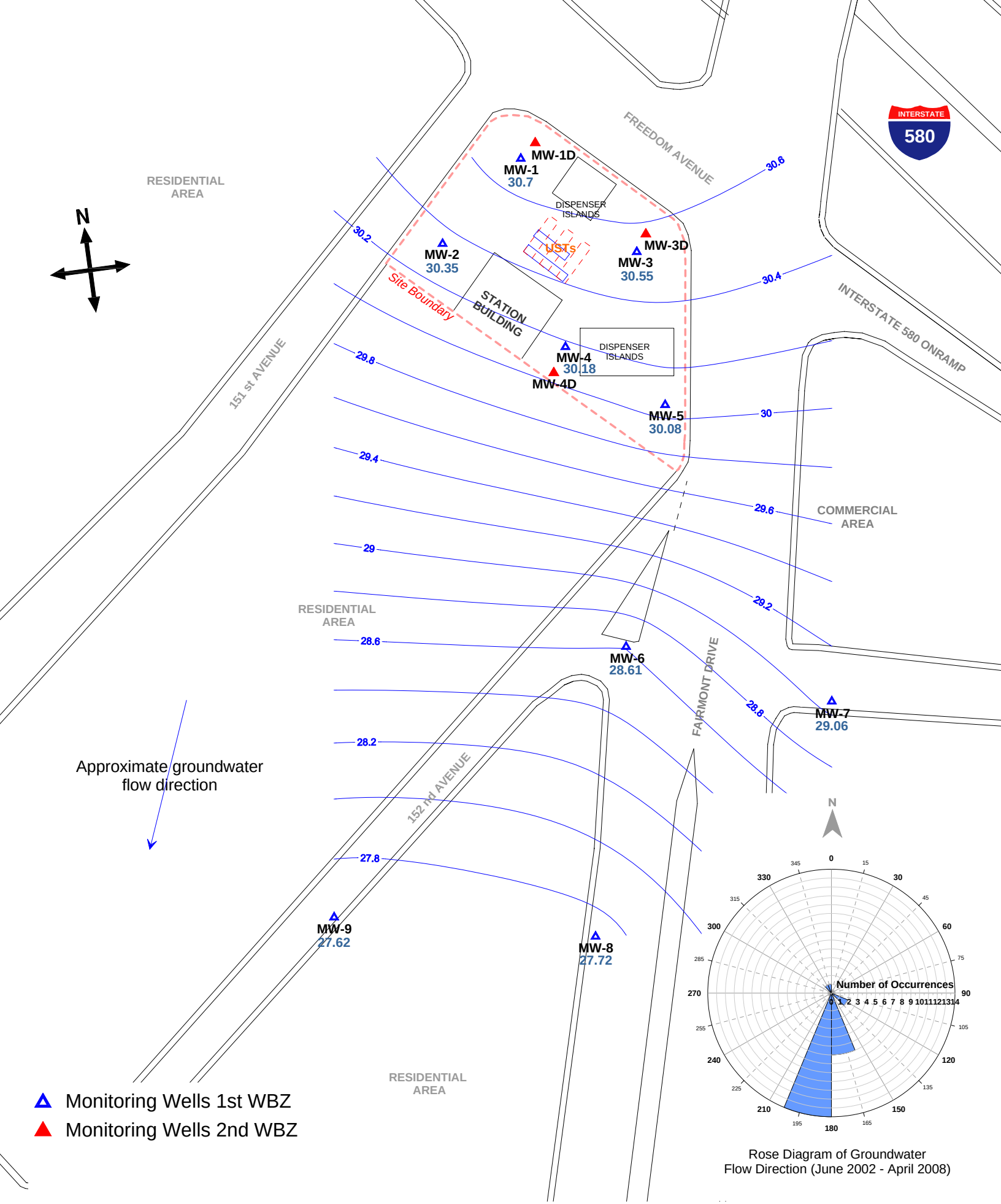


Figure 2: Site map showing locations of groundwater monitoring wells and soil borings

SOMA ENVIRONMENTAL ENGINEERING, INC.



Rose Diagram of Groundwater Flow Direction (June 2002 - April 2008)

approximate scale in feet

0 50 100

Figure 3: Groundwater elevation contour map in feet, First WBZ. October 15, 2008.

ENVIRONMENTAL ENGINEERING, INC.

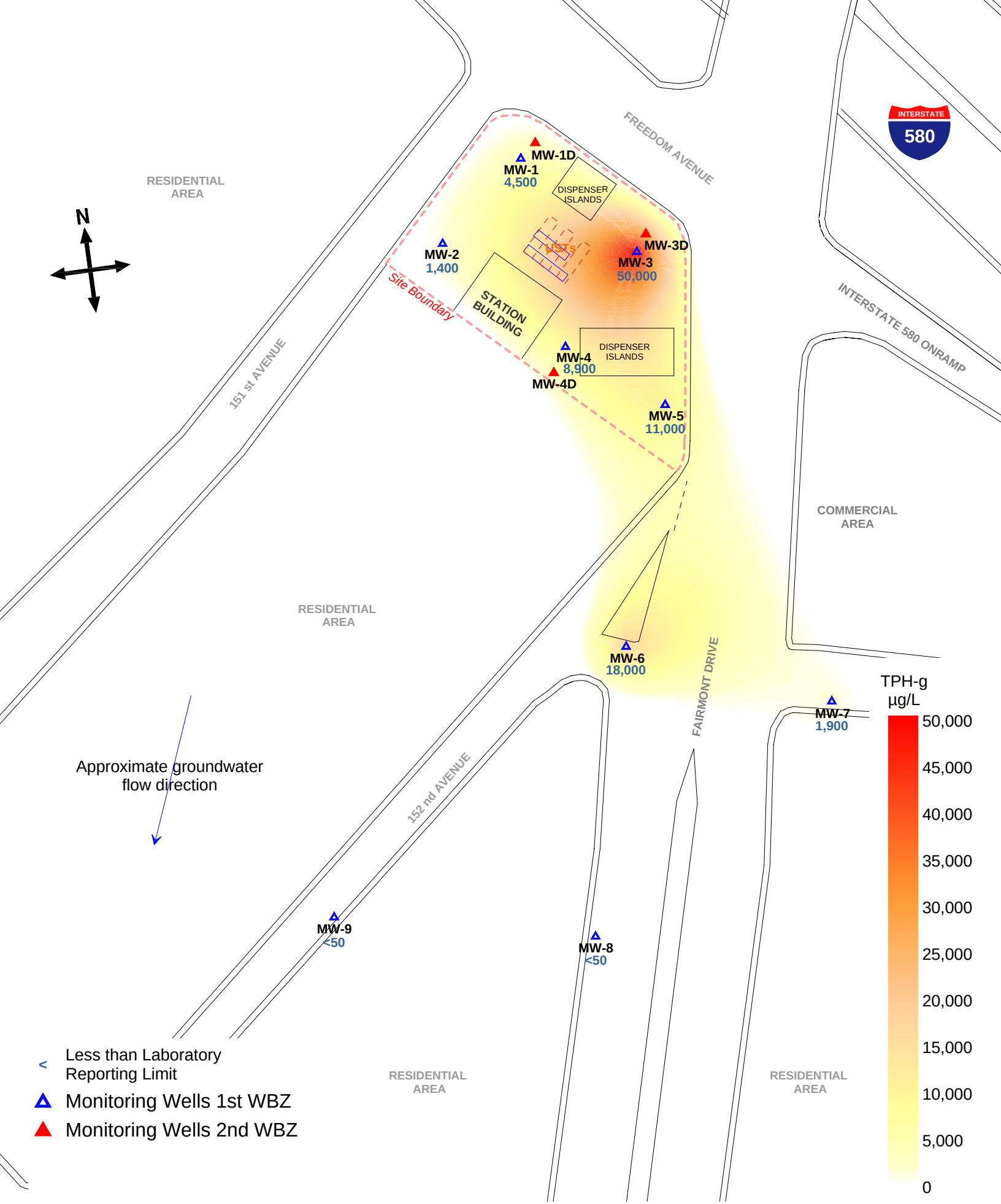


Figure 4: Contour map of TPH-g concentrations in groundwater, First WBZ. October 15 and 16, 2008.

ENVIRONMENTAL ENGINEERING, INC.

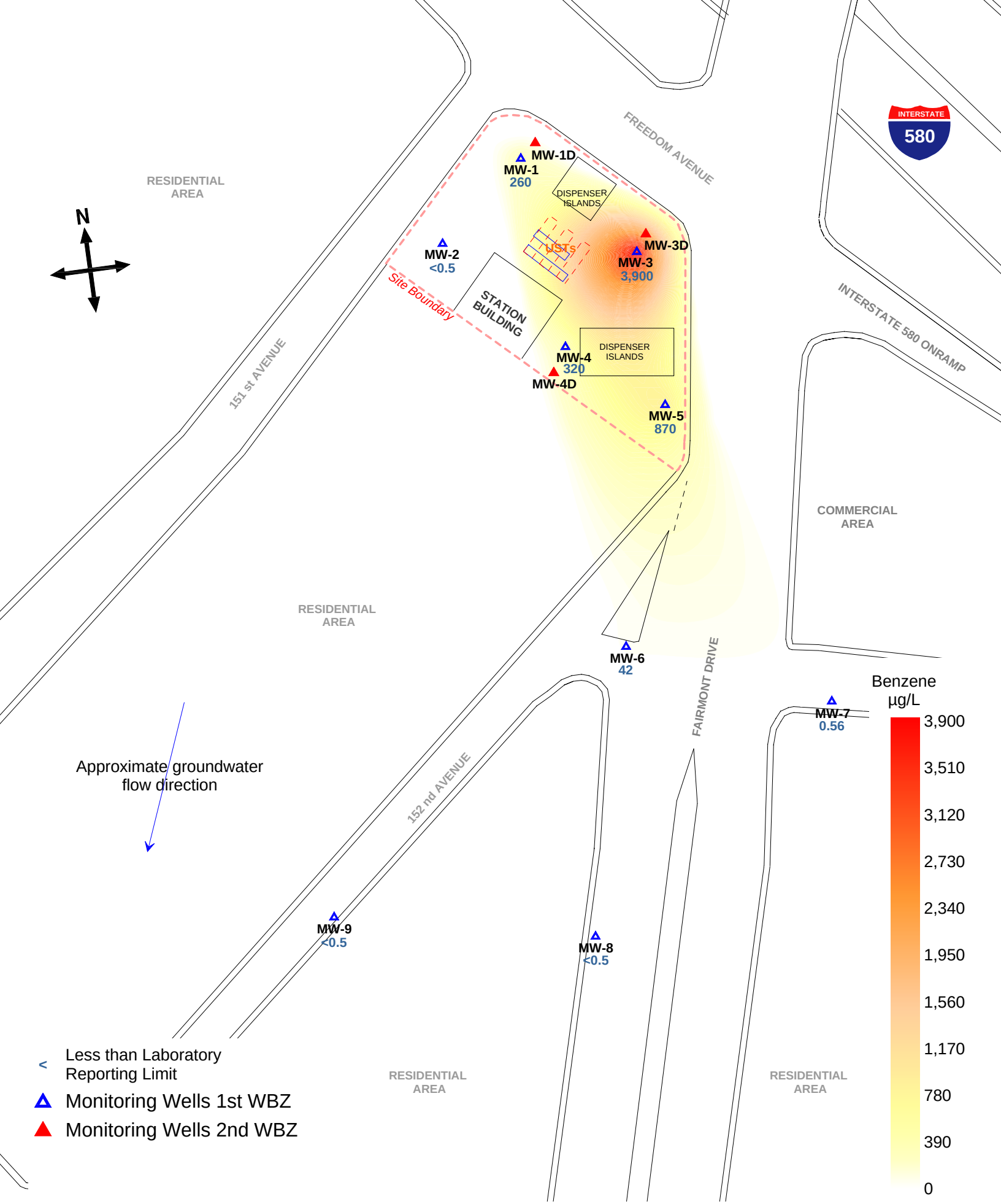


Figure 5: Contour map of benzene concentrations in groundwater, First WBZ. October 15 and 16, 2008.

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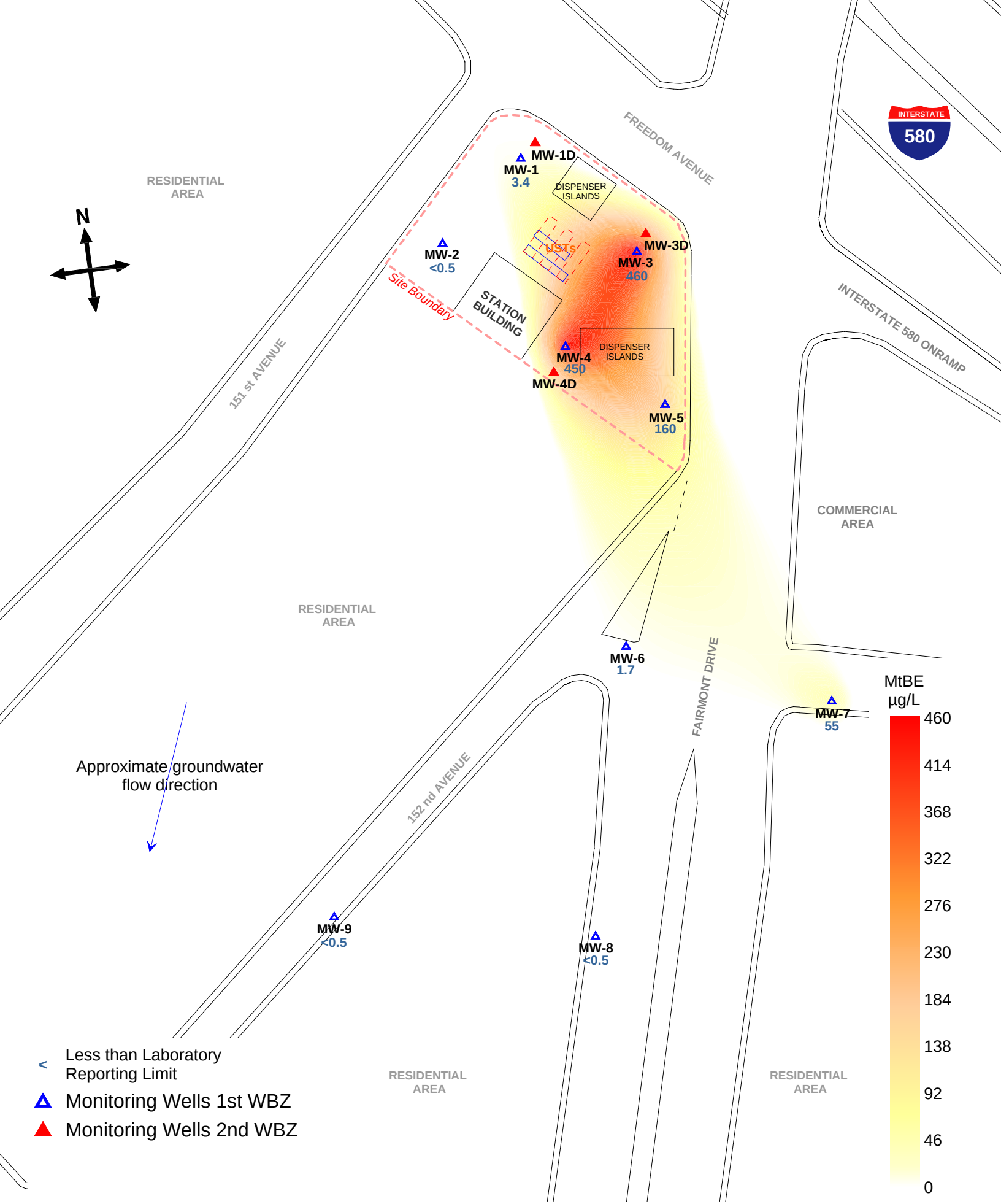

Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B), First WBZ. October 15 and 16, 2008.

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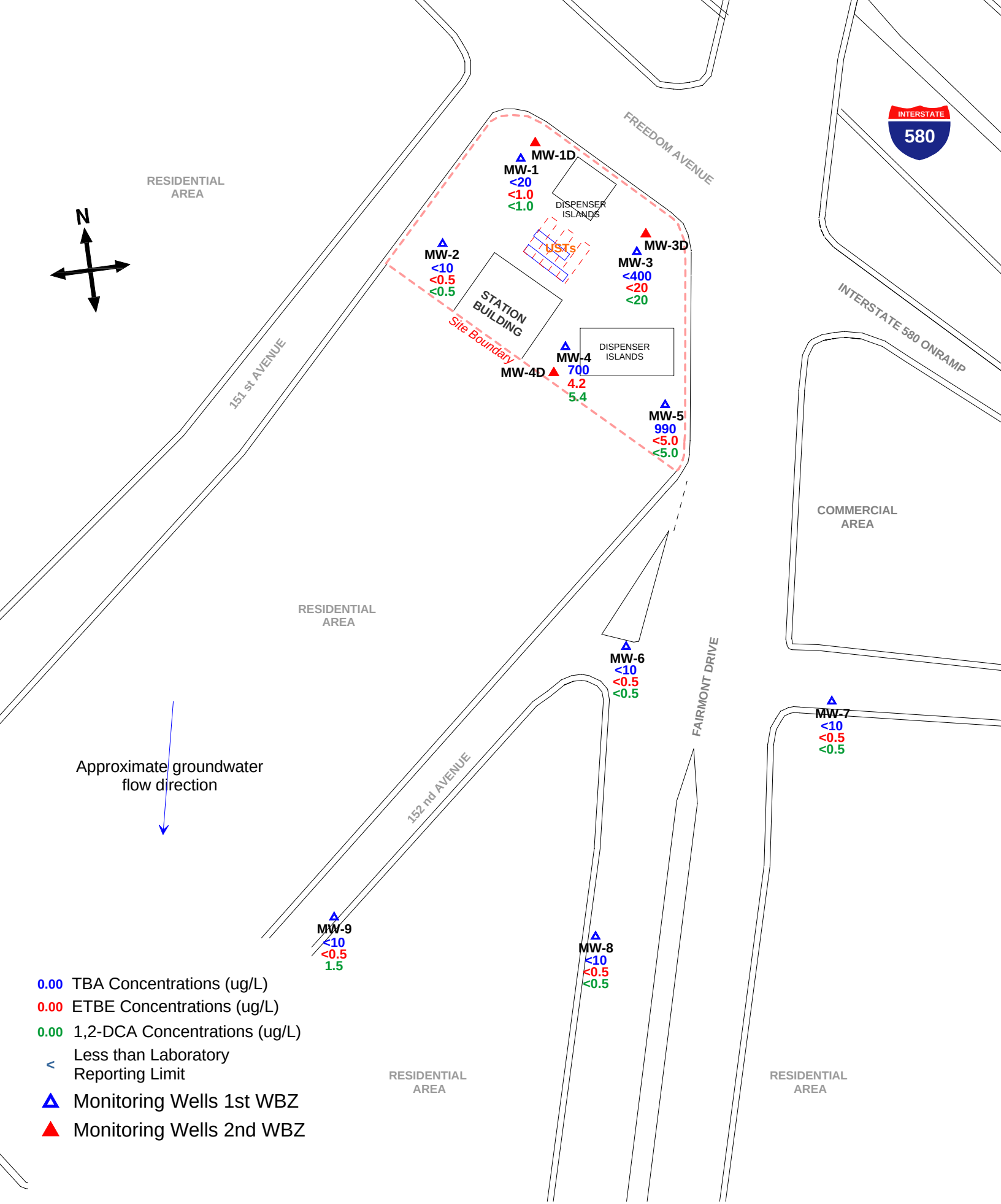

Figure 7: Map showing concentrations of TBA, ETBE, and 1,2-DCA in First WBZ. October 15 and 16, 2008.

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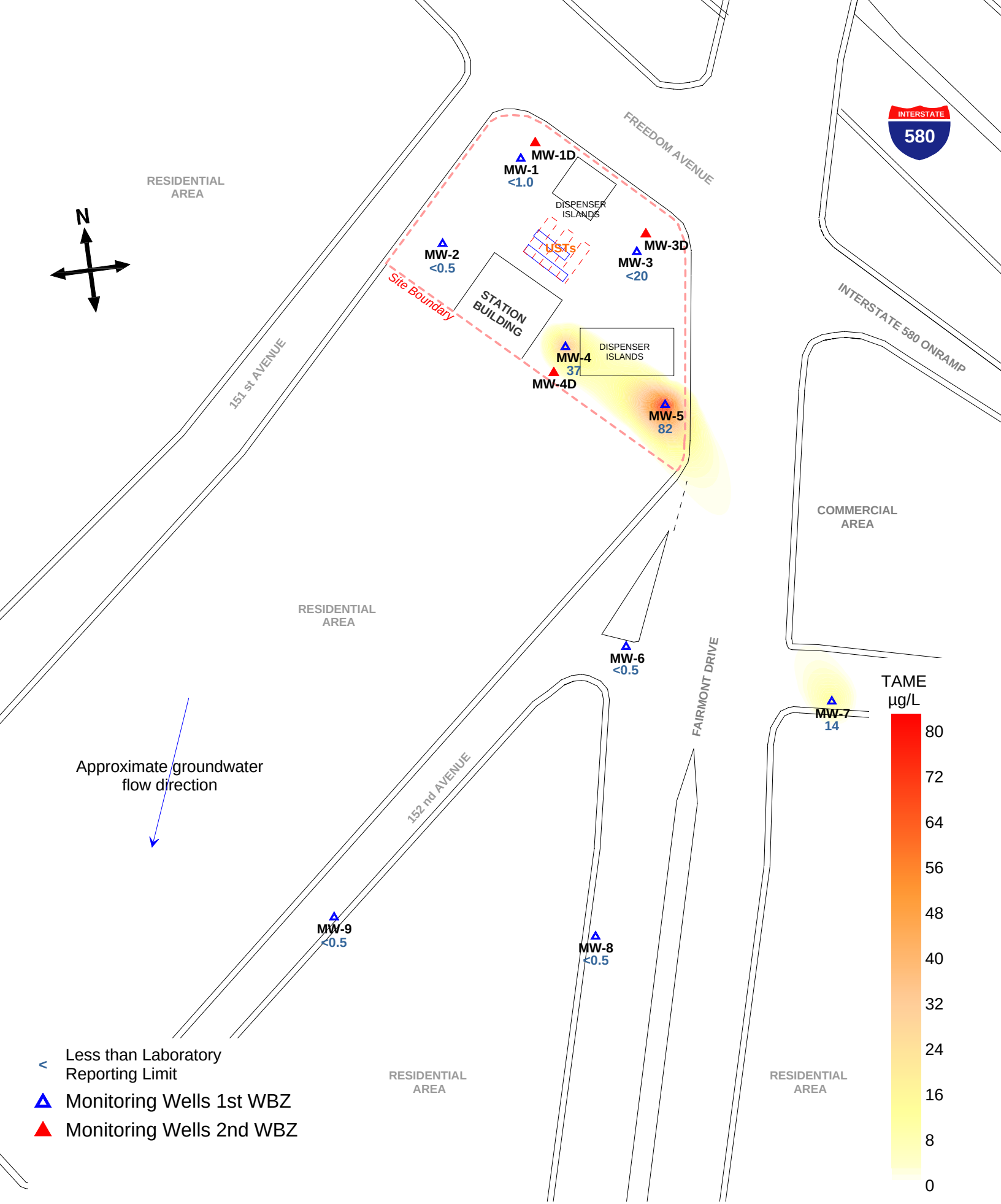

Figure 8: Contour map of TAME concentrations in groundwater, First WBZ. October 15 and 16, 2008.

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N

RESIDENTIAL AREA

FREEDOM AVENUE

30.6
MW-1D

MW-1

30.56

DISPENSER ISLANDS

30.5

30.48
MW-3D

MW-2

30.44

USTs

MW-3

30.38

Site Boundary

STATION BUILDING

30.32

30.26

DISPENSER ISLANDS

MW-4

MW-4D
30.14

MW-5

INTERSTATE
580

INTERSTATE 580 ONRAMP

151 st AVENUE

RESIDENTIAL AREA

COMMERCIAL AREA

MW-6

FAIRMONT DRIVE

MW-7

LIBERTY ST

152 nd AVENUE

Approximate groundwater flow direction

MW-9

MW-8

RESIDENTIAL AREA

RESIDENTIAL AREA

ORIOLE AVENUE

LARK AVENUE

153 rd AVENUE

NC
1573 153rd Street

NC Not Calculated

Monitoring Wells 1st WBZ

Monitoring Wells 2nd WBZ

Note: Monitoring wells MW-6 through MW-9 installed in September 2004.

approximate scale in feet

0 50 100

Figure 9: Groundwater elevation contour map in feet, Second WBZ.
October 15, 2008.

ENVIRONMENTAL ENGINEERING, INC.

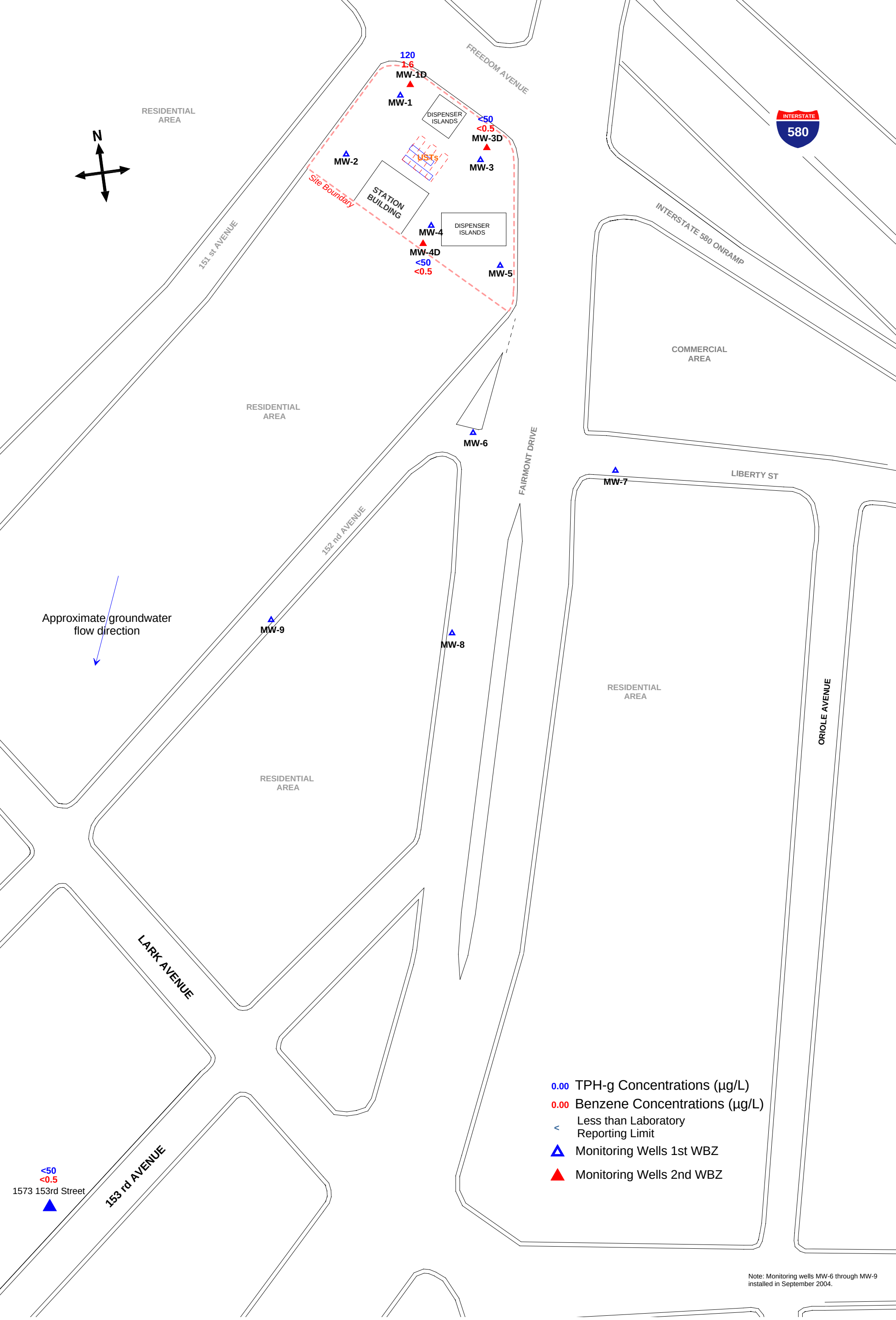

Figure 10: Map showing concentrations of TPH-g and benzene, Second WBZ. October 15 and 16, 2008.

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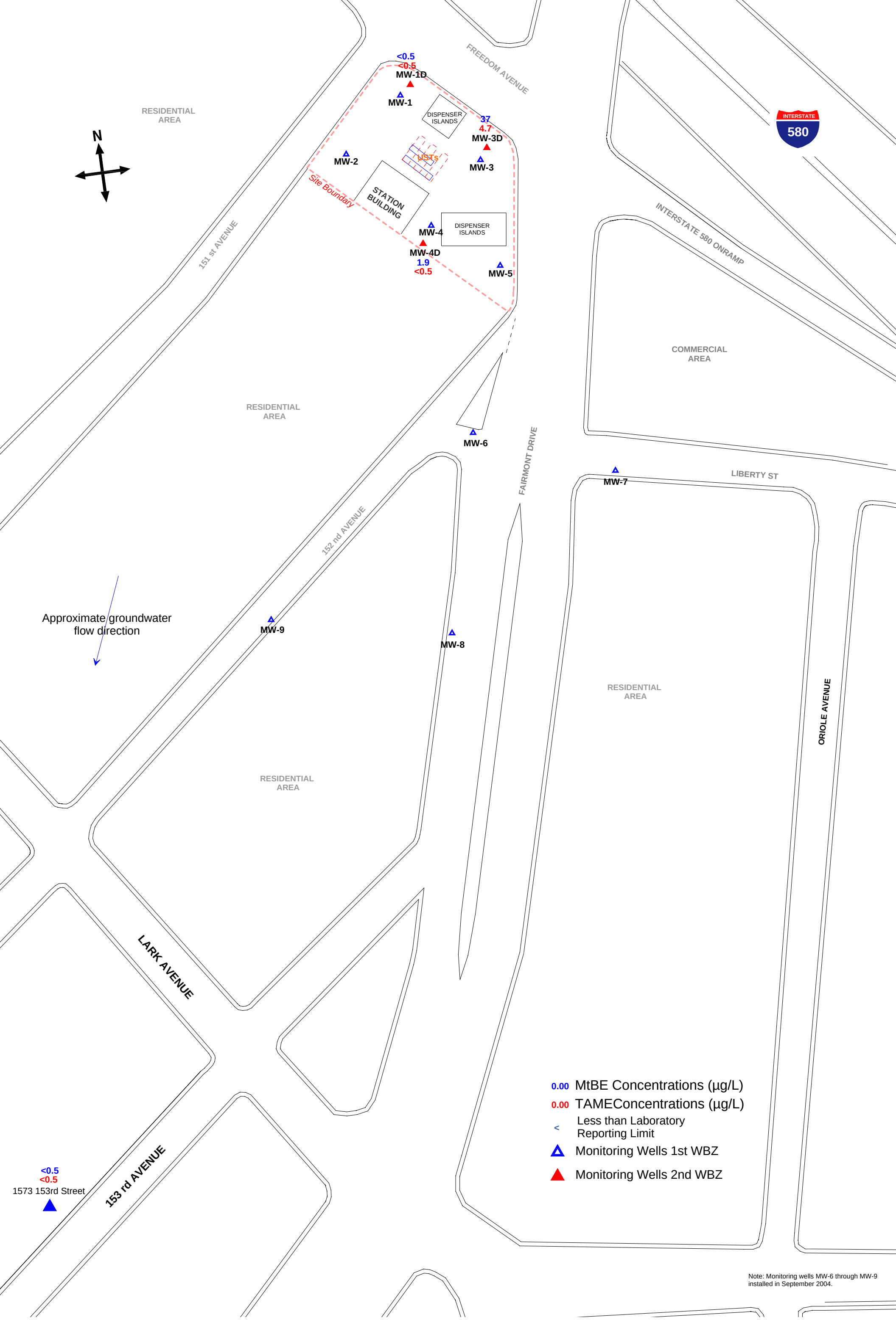

approximate scale in feet

0 50 100

Figure 11: Map showing concentrations of MtBE and TAME, Second WBZ. October 15 and 16, 2008.

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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

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	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
	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**
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

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.	3/11/2005	52.41	19.15	33.26	564	<0.5	<0.5	21	11.9	<0.5
	6/15/2005	52.41	20.30	32.11	2,040	1.2	<2.0	78.2	22	<0.5
	8/26/2005	52.41	20.97	31.44	1,500	0.930	<2.00	87.6	21	0.86
	11/11/2005	52.41	25.30	27.11	2,140	1.08	<2.0	104	29	0.79
	2/9/2006	52.41	19.41	33.00	1,410	<0.5	<2.0	99.6	21.4	0.72
	5/9/2006	52.41	19.41	33.00	1,100	<0.5	<2.0	86.5	17	<0.5
	8/10/2006	52.41	20.8	31.61	3,180	2.87	<2.0	88.9	24.8	<0.50
	10/26/2006	52.41	21.22	31.19	1,200	<0.5	<2.0	23.5	4.79	0.6
	1/25/2007	52.41	20.89	31.52	623	0.64	<2.0	42.4	4.37	0.66
	4/26/2007	52.41	20.65	31.76	169	<0.5	<2.0	15.2	2.3	<0.5
	7/25/2007	52.41	21.43	30.98	276	0.78	<2.0	22.1	4.04	<0.5
	10/23/2007	52.41	21.59	30.82	535	<0.5	<2.0	18	5.11	<0.5
	1/22/2008	52.31	20.45	31.86	132	<0.5	<2.0	12.2	<2.0	<0.5
	4/15/2008	52.41	20.89	31.52	852	<0.5	<2.0	27.2	4.78	<0.5
	7/2/2008	52.41	21.5	30.91	98.3	<0.5	<2.0	2.76	<2.0	<0.5
	10/15/2008	**52.41**	**22.06**	**30.35**	**1,400 [Y]**	**<0.5**	**<0.5**	**60**	**17**	**<0.5**
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**
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**

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**
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**
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

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-7 cont	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**
MW-8	9/21/2004	41.14	12.98	28.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	41.14	11.22	29.92	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	41.14	NM	NM	NA	NA	NA	NA	NA	NA
	6/15/2005	41.14	10.46	30.68	<200	0.53	<2.0	<0.5	<1.0	<0.5
	8/26/2005	41.14	11.53	29.61	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	41.14	11.92	29.22	<50	<0.5	<2.0	1.36	1.8	<0.5

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-8 cont.	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**
MW-9	9/21/2004	40.26	12.18	28.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	40.26	10.91	29.35	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	40.26	10.52	29.74	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	6/15/2005	40.26	14.73	25.53	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	8/26/2005	40.26	10.59	29.67	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	40.26	11.25	29.01	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	2/9/2006	40.26	10.05	30.21	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	40.26	9.06	31.20	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	40.26	10.01	30.25	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	40.26	10.81	29.45	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	1/25/2007	40.26	10.67	29.59	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	40.26	10.05	30.21	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/25/2007	40.26	11.44	28.82	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/23/2007	40.26	11.59	28.67	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/21/2008	40.26	10.37	29.89	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	40.26	10.56	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	40.26	11.95	28.31	161	<0.5	<2.0	2.15	<2.0	<0.5
	10/15/2008	**40.26**	**12.64**	**27.62**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
2nd WBZ										
MW-1D	1/3/2008	54.42		-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	54.42	22.85	31.57	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	4/16/2008	54.42	23.10	31.32	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/3/2008	54.42	23.44	30.98	75.9	<0.5	<2.0	0.54	<2.0	<0.5
	10/15/2008	**54.42**	**23.82**	**30.60**	**120.0**	**1.6**	**<0.5**	**2.8**	**3.6**	**<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**
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**
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**

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)

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

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**
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**
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**
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**
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**
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**
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**
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

Table 2
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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-8 cont	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**
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**
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**
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**
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**

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)
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.

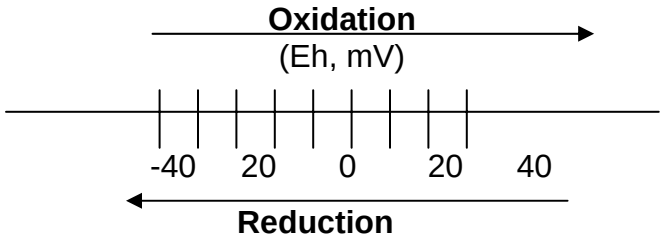
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

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

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"

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.

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:**	October 15-16, 2008
Depth to Groundwater:	23.76 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.70 feet		~~Eric Gassner-Wollwage~~
Water Column Height:	6.74 feet		Ruchi Mathur
Purged Volume:	12 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☑ No ☐ Describe: petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
1236	Started Purging						
1237	2	0.46	6.94	22.97	773	3.75	-164.7
1238	4	0.34	6.83	22.97	793	3.17	-168.6
1240	8	0.30	6.78	22.93	809	2.92	-170.4
1241	10	0.28	6.76	22.86	821	3.56	-173.2
1242	12	0.27	6.75	22.85	837	3.83	-176.3
1246	Sampled						

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:**	October 15-~~16~~, 2008
Depth to Groundwater:	22.06 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.35 feet		~~Eric Gassner~~ Rudhi Mathur
Water Column Height:	8.09 feet		
Purged Volume:	15 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☑ No ☐ Describe: petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
12:17	Started purging well						
1218	3	0.41	6.73	22.86	963	3.41	-265.9
1219	6	0.32	6.52	23.26	804	2.70	-287.3
1221	12	0.28	6.36	23.49	744	3.21	-286.2
1222	15	0.27	6.36	23.23	806	2.83	-282.8
1226	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:**	October ~~15~~ 16, 2008
Depth to Groundwater:	23.36 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.55 feet		~~Arc Gassner-Wallace~~ Ruchi Mathur
Water Column Height:	6.54 feet		
Purged Volume:	12 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
11:20	Started purging well						
11:21	2	3.8	6.0	21.2	0.13	84	-71
11:23	6	3.3	5.9	21.2	0.13	88	-75
11:25	10	3.0	5.9	21.2	0.13	74	-78
11:26	12	3.0	5.9	21.2	0.13	69	-79
11:30	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:**	October ~~16~~-16, 2008
Depth to Groundwater:	23.13 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.18 feet		~~Eric Gassner-Wellwage~~
Water Column Height:	7.07 feet		Ruchi Mathur
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☐ No ☑ Describe: _____

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
1034	Started Purging						
1035	2	4.3	5.9	20.40	0.16	11	-65
1037	6	3.6	5.8	20.40	0.16	4	-67
1039	10	3.2	5.8	20.40	0.16	1	-64
1040	12	3.1	5.8	20.40	0.16	0	-61
1041	14	3.0	5.8	20.40	0.16	0	-57
1045	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:**	October ~~15~~-16, 2008
Depth to Groundwater:	20.45 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.08 feet		~~Eric Gasher/Wollwage~~
Water Column Height:	9.35 feet		Ruchi Mathur
Purged Volume:	18 gallons		

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

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
1056	Started Purging						
1057	2	3.9	6.0	21.2	0.13	18	-61
1059	6	3.2	5.8	21.4	0.13	3	-64
1102	10	3.6	5.8	21.3	0.13	2	-65
1104	14	2.9	5.8	21.4	0.13	2	-68
1106	18	2.9	5.8	21.3	0.13		-69
1110	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:**	October 15-~~16~~, 2008
Depth to Groundwater:	17.21 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	28.61 feet		~~Eric Gasser-Wellwage~~
Water Column Height:	9.09 feet		Ruchi Mathur
Purged Volume:	18 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
1048	Started Purging						
1049	3	0.42	6.99	23.12	733	3.76	-236.7
1050	6	0.33	6.86	23.13	742	2.62	-251.9
1052	12	0.28	6.90	23.13	739	2.82	-258.4
1053	15	0.26	6.91	23.08	750	4.03	-263.7
1054	18	0.25	6.87	23.06	755	4.09	-266.2
1059	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:**	October 15-~~16~~, 2008
Depth to Groundwater:	15.68 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.06 feet		~~Eric Gassner-Wollwage~~
Water Column Height:	5.32 feet		Rudhi Mathur
Purged Volume:	2.5 gallons		

Purging Method: Bailer ☑ Pump ☐

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** Cloudy/Lt. Gray

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
11:15	Started purging well						
11:18	1	1.06	6.80	21.10	744	999	-158.3
11:23	2	1.14	6.85	23.32	822	999	-141.7
11:24	2.5	0.82	6.84	22.99	832	999	-140.3
11:29	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3	**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:**	October 15-16, 2008
Depth to Groundwater:	13.42 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	27.72 feet		~~Eric Gasper-Wolfrage~~
Water Column Height:	15.33 feet		Ruchi Mathur
Purged Volume:	9 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
11:53	Started Purging						
1154	3	0.48	7.14	21.60	917	337	+25.8
1155	6	0.37	7.09	21.66	927	19.2	+24.1
1156	9	0.34	7.08	21.61	924	8.68	+22.1
1200	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:**	October 15-~~16~~, 2008
Depth to Groundwater:	12.64 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	27.62 feet		~~Eric Gassner-Wollwage~~ Ruchi Mathur
Water Column Height:	19.91 feet		
Purged Volume:	9 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	Started purging well						
10:27	3	0.77	7.16	21.60	829	7.16	-44.7
10:28	6	0.55	7.18	21.68	825	7.10	-53.3
10:29	9	0.45	7.22	21.71	806	6.37	-58.1
10:34	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:**	October 15-~~16~~ 2008
Depth to Groundwater:	23.82 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.60 feet		~~Eric Gassner-Wellwage~~
Water Column Height:	35.99 feet		Ruchi Mathur
Purged Volume:	18 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
12:59	Started purging well						
1300	2	0.47	7.83	22.06	895	36.6	-65.8
1302	6	0.35	7.60	22.04	899	16.1	-66.3
1304	10	0.32	7.52	22.03	894	15.0	-66.4
1306	14	0.28	7.53	22.06	909	7.46	-65.8
1308	18	0.27	7.49	22.06	913	5.19	-64.9
1312	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:**	October ~~16~~-16, 2008
Depth to Groundwater:	23.62 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.48 feet		~~Eric Glassner-Wollwage~~
Water Column Height:	34.97 feet		Ruchi Mathur
Purged Volume:	18 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
947	Started purging						
948	2	3.9	6.1	20.5	0.12	1	+199
950	6	3.4	6.2	20.5	0.12	0	+193
952	10	3.2	6.2	20.5	0.12	0	+186
954	14	3.0	6.3	20.5	0.12	0	+180
956	18	2.9	6.3	20.5	0.12	0	+176
1000	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:**	October ~~15~~ 16, 2008
Depth to Groundwater:	22.98 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.14 feet		~~Eric Gaesner-Wollwage~~ Rudi Mathur
Water Column Height:	36.81 feet		
Purged Volume:	18 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
1011	Started Purging						
1012	2	4.0	6.5	19.8	0.13	31	+103
1014	6	3.5	6.4	19.8	0.13	22	+112
1016	10	3.3	6.4	19.8	0.13	30	+114
1018	14	3.2	6.4	19.8	0.13	14	+115
1020	18	3.1	6.4	19.8	0.13	7	+116
1025	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	1573 153RD	**Project No.:**	2551
Casing Diameter:	— inches	**Address:**	15101 Freedom Avenue
Depth of Well:	NM feet		San Leandro, CA
Top of Casing Elevation:	NS feet	**Date:**	October ~~15~~ 16, 2008
Depth to Groundwater:	NM feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	NM feet		~~Eric Gassner Wallwage~~
Water Column Height:	NM feet		Ruchi Mathur
Purged Volume:	— gallons		

Not purged

Purging Method: Bailer ☐ Pump ☐

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** slightly 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
12:45	Grab sample only						

Appendix C

Laboratory Report and Chain of Custody Form
for the Fourth Quarter 2008 Monitoring Event

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 # 706934

Sampler:Lizzie Hightower/ Ruchi Mathur

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	10/15/08 12:46		*		4-VOAs	*			*	*	*
2	MW-2	10/15/08 12:26		*		4-VOAs	*			*	*	*
3	MW-3	10/16/08 11:30		*		4-VOAs	*			*	*	*
4	MW-4	10/16/08 10:45		*		4-VOAs	*			*	*	*
5	MW-5	10/16/08 11:10		*		4-VOAs	*			*	*	*
6	MW-6	10/15/08 10:59		*		4-VOAs	*			*	*	*
7	MW-7	10/15/08 11:29		*		4-VOAs	*			*	*	*
8	MW-8	10/15/08 12:00		*		4-VOAs	*			*	*	*
9	MW-9	10/15/08 10:34		*		4-VOAs	*			*	*	*
10	MW-1D	10/15/08 13:12		*		4-VOAs	*			*	*	*
11	MW-3D	10/16/08 10:00		*		4-VOAs	*			*	*	*
12	MW-4D	10/16/08 10:25		*		4-VOAs	*			*	*	*
13	1573 153RD	10/16/08 12:45		X		4-VOAs	X			X	X	X

Notes: **EDF OUTPUT REQUIRED**
Ethanol
on ice, intact

RELINQUISHED BY:

E. Hightower 10/16/08 14:23 DATE/TIME

DATE/TIME

DATE/TIME

RECEIVED BY:

10/16/08 14:23 DATE/TIME

DATE/TIME

DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 206934 Date Received 10-16-9 Number of coolers 1
Client SOMA ENVIRONMENTAL Project 2551

Date Opened 10-16-9 By (print) SAM FIAMS (sign)
Date Logged in V By (print) M. VILLANUEVA (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
SAMPLE #2 HAD BUBBLE IN 1/4 VOAs

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

Laboratory Job Number 206934
ANALYTICAL REPORT

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

Sample ID	Lab ID
MW-1	206934-001
MW-2	206934-002
MW-3	206934-003
MW-4	206934-004
MW-5	206934-005
MW-6	206934-006
MW-7	206934-007
MW-8	206934-008
MW-9	206934-009
MW-1D	206934-010
MW-3D	206934-011
MW-4D	206934-012
1573 153RD	206934-013

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

Signature: _____ Date: 10/28/2008
Project Manager

Signature: _____ Date: 10/28/2008
Senior Program Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**206934**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2551**
Location:	**15101 Freedom Avenue.,San Leandro**
Request Date:	**10/16/08**
Samples Received:	**10/16/08**

This data package contains sample and QC results for thirteen water samples, requested for the above referenced project on 10/16/08. The samples were received cold and intact.

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

High surrogate recoveries were observed for bromofluorobenzene in many samples. Tert-butyl alcohol (TBA) was detected above the RL in the method blank for batch 144002; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1	Units:	ug/L
Lab ID:	206934-001	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	4,500 Y	100	2.000	144002	10/24/08
tert-Butyl Alcohol (TBA)	ND	20	2.000	144002	10/24/08
Isopropyl Ether (DIPE)	ND	1.0	2.000	144002	10/24/08
Ethyl tert-Butyl Ether (ETBE)	ND	1.0	2.000	144002	10/24/08
Methyl tert-Amyl Ether (TAME)	ND	1.0	2.000	144002	10/24/08
Ethanol	ND	2,000	2.000	144002	10/24/08
MTBE	3.4	1.0	2.000	144002	10/24/08
1,2-Dichloroethane	ND	1.0	2.000	144002	10/24/08
Benzene	260	2.0	4.000	144065	10/25/08
Toluene	ND	1.0	2.000	144002	10/24/08
1,2-Dibromoethane	ND	1.0	2.000	144002	10/24/08
Ethylbenzene	150	1.0	2.000	144002	10/24/08
m,p-Xylenes	130	1.0	2.000	144002	10/24/08
o-Xylene	ND	1.0	2.000	144002	10/24/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	97	80-125	2.000	144002	10/24/08
1,2-Dichloroethane-d4	99	80-137	2.000	144002	10/24/08
Toluene-d8	100	80-120	2.000	144002	10/24/08
Bromofluorobenzene	101	80-122	2.000	144002	10/24/08

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	144065
Lab ID:	206934-002	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,400 Y	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	60	0.50
m,p-Xylenes	17	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3	Units:	ug/L
Lab ID:	206934-003	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	50,000	2,000	40.00	144002	10/24/08
tert-Butyl Alcohol (TBA)	ND	400	40.00	144002	10/24/08
Isopropyl Ether (DIPE)	ND	20	40.00	144002	10/24/08
Ethyl tert-Butyl Ether (ETBE)	ND	20	40.00	144002	10/24/08
Methyl tert-Amyl Ether (TAME)	ND	20	40.00	144002	10/24/08
Ethanol	ND	40,000	40.00	144002	10/24/08
MTBE	460	20	40.00	144002	10/24/08
1,2-Dichloroethane	ND	20	40.00	144002	10/24/08
Benzene	3,900	20	40.00	144002	10/24/08
Toluene	300	20	40.00	144002	10/24/08
1,2-Dibromoethane	ND	20	40.00	144002	10/24/08
Ethylbenzene	3,100	20	40.00	144002	10/24/08
m,p-Xylenes	8,100	36	71.43	144065	10/25/08
o-Xylene	2,900	20	40.00	144002	10/24/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	101	80-125	40.00	144002	10/24/08
1,2-Dichloroethane-d4	98	80-137	40.00	144002	10/24/08
Toluene-d8	100	80-120	40.00	144002	10/24/08
Bromofluorobenzene	108	80-122	40.00	144002	10/24/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	144065
Lab ID:	206934-004	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	7.143		

Analyte	Result	RL
Gasoline C7-C12	8,900	360
tert-Butyl Alcohol (TBA)	700	71
Isopropyl Ether (DIPE)	ND	3.6
Ethyl tert-Butyl Ether (ETBE)	4.2	3.6
Methyl tert-Amyl Ether (TAME)	37	3.6
Ethanol	ND	7,100
MTBE	450	3.6
1,2-Dichloroethane	5.4	3.6
Benzene	320	3.6
Toluene	3.7	3.6
1,2-Dibromoethane	ND	3.6
Ethylbenzene	430	3.6
m,p-Xylenes	920	3.6
o-Xylene	240	3.6

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-5	Units:	ug/L
Lab ID:	206934-005	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	11,000	500	10.00	144002	10/24/08
tert-Butyl Alcohol (TBA)	990	130	12.50	144065	10/25/08
Isopropyl Ether (DIPE)	ND	5.0	10.00	144002	10/24/08
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	10.00	144002	10/24/08
Methyl tert-Amyl Ether (TAME)	82	5.0	10.00	144002	10/24/08
Ethanol	ND	10,000	10.00	144002	10/24/08
MTBE	160	5.0	10.00	144002	10/24/08
1,2-Dichloroethane	ND	5.0	10.00	144002	10/24/08
Benzene	870	5.0	10.00	144002	10/24/08
Toluene	25	5.0	10.00	144002	10/24/08
1,2-Dibromoethane	ND	5.0	10.00	144002	10/24/08
Ethylbenzene	820	5.0	10.00	144002	10/24/08
m,p-Xylenes	640	5.0	10.00	144002	10/24/08
o-Xylene	28	5.0	10.00	144002	10/24/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	100	80-125	10.00	144002	10/24/08
1,2-Dichloroethane-d4	98	80-137	10.00	144002	10/24/08
Toluene-d8	101	80-120	10.00	144002	10/24/08
Bromofluorobenzene	103	80-122	10.00	144002	10/24/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-6	Units:	ug/L
Lab ID:	206934-006	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	18,000 Y	310	6.250	144065	10/25/08
tert-Butyl Alcohol (TBA)	ND	10	1.000	144002	10/23/08
Isopropyl Ether (DIPE)	ND	0.50	1.000	144002	10/23/08
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	144002	10/23/08
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	144002	10/23/08
Ethanol	ND	1,000	1.000	144002	10/23/08
MTBE	1.7	0.50	1.000	144002	10/23/08
1,2-Dichloroethane	ND	0.50	1.000	144002	10/23/08
Benzene	42	0.50	1.000	144002	10/23/08
Toluene	1.4	0.50	1.000	144002	10/23/08
1,2-Dibromoethane	ND	0.50	1.000	144002	10/23/08
Ethylbenzene	320	3.1	6.250	144065	10/25/08
m,p-Xylenes	620	3.1	6.250	144065	10/25/08
o-Xylene	53	0.50	1.000	144002	10/23/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	100	80-125	1.000	144002	10/23/08
1,2-Dichloroethane-d4	103	80-137	1.000	144002	10/23/08
Toluene-d8	98	80-120	1.000	144002	10/23/08
Bromofluorobenzene	104	80-122	1.000	144002	10/23/08

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	144065
Lab ID:	206934-007	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,900 Y	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)	14	0.50
Ethanol	ND	1,000
MTBE	55	0.50
1,2-Dichloroethane	ND	0.50
Benzene	0.56	0.50
Toluene	1.2	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	27	0.50
m,p-Xylenes	38	0.50
o-Xylene	1.5	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	144065
Lab ID:	206934-008	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/25/08
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	103	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	128 *	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-9	Batch#:	144002
Lab ID:	206934-009	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/23/08
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	1.5	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	99	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	125 *	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1D	Batch#:	144002
Lab ID:	206934-010	Sampled:	10/15/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/24/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	120	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	1.6	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	2.8	0.50
m,p-Xylenes	3.6	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	120	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3D	Batch#:	144002
Lab ID:	206934-011	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/24/08
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)	4.7	0.50
Ethanol	ND	1,000
MTBE	37	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	100	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	125 *	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4D	Batch#:	144002
Lab ID:	206934-012	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/24/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	1.9	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	100	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	128 *	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	1573 153RD	Batch#:	144002
Lab ID:	206934-013	Sampled:	10/16/08
Matrix:	Water	Received:	10/16/08
Units:	ug/L	Analyzed:	10/24/08
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	100	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	127 *	80-122

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

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466724	Batch#:	144002
Matrix:	Water	Analyzed:	10/23/08
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	16 b	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	100	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	126 *	80-122

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

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	144002
Units:	ug/L	Analyzed:	10/23/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466725

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	106.5	106	59-152
Isopropyl Ether (DIPE)	20.00	20.07	100	67-126
Ethyl tert-Butyl Ether (ETBE)	20.00	20.74	104	69-127
Methyl tert-Amyl Ether (TAME)	20.00	20.72	104	80-122
MTBE	20.00	17.64	88	70-125
1,2-Dichloroethane	20.00	20.85	104	78-132
Benzene	20.00	21.69	108	80-120
Toluene	20.00	21.71	109	80-120
1,2-Dibromoethane	20.00	20.90	105	80-120
Ethylbenzene	20.00	22.39	112	80-122
m,p-Xylenes	40.00	45.37	113	80-126
o-Xylene	20.00	21.17	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC466726

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	102.6	103	59-152	4	20
Isopropyl Ether (DIPE)	20.00	20.17	101	67-126	1	20
Ethyl tert-Butyl Ether (ETBE)	20.00	21.10	105	69-127	2	20
Methyl tert-Amyl Ether (TAME)	20.00	21.38	107	80-122	3	20
MTBE	20.00	17.73	89	70-125	0	20
1,2-Dichloroethane	20.00	21.45	107	78-132	3	20
Benzene	20.00	21.61	108	80-120	0	20
Toluene	20.00	21.38	107	80-120	2	20
1,2-Dibromoethane	20.00	21.93	110	80-120	5	20
Ethylbenzene	20.00	21.72	109	80-122	3	20
m,p-Xylenes	40.00	43.67	109	80-126	4	20
o-Xylene	20.00	21.37	107	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	144002
Units:	ug/L	Analyzed:	10/23/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466727

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	900.0	819.5	91	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	112	80-122

Type: BSD Lab ID: QC466728

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	900.0	824.2	92	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	113	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC466988	Batch#:	144065
Matrix:	Water	Analyzed:	10/25/08
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	101	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	126 *	80-122

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

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	144065
Units:	ug/L	Analyzed:	10/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466989

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	88.34	88	59-152
Isopropyl Ether (DIPE)	20.00	19.72	99	67-126
Ethyl tert-Butyl Ether (ETBE)	20.00	20.07	100	69-127
Methyl tert-Amyl Ether (TAME)	20.00	20.04	100	80-122
MTBE	20.00	16.88	84	70-125
1,2-Dichloroethane	20.00	20.63	103	78-132
Benzene	20.00	21.58	108	80-120
Toluene	20.00	21.34	107	80-120
1,2-Dibromoethane	20.00	20.43	102	80-120
Ethylbenzene	20.00	21.59	108	80-122
m,p-Xylenes	40.00	44.57	111	80-126
o-Xylene	20.00	21.41	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	110	80-122

Type: BSD Lab ID: QC466990

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	98.14	98	59-152	11	20
Isopropyl Ether (DIPE)	20.00	20.84	104	67-126	6	20
Ethyl tert-Butyl Ether (ETBE)	20.00	21.24	106	69-127	6	20
Methyl tert-Amyl Ether (TAME)	20.00	21.63	108	80-122	8	20
MTBE	20.00	17.82	89	70-125	5	20
1,2-Dichloroethane	20.00	21.91	110	78-132	6	20
Benzene	20.00	22.03	110	80-120	2	20
Toluene	20.00	21.76	109	80-120	2	20
1,2-Dibromoethane	20.00	21.80	109	80-120	7	20
Ethylbenzene	20.00	22.47	112	80-122	4	20
m,p-Xylenes	40.00	44.97	112	80-126	1	20
o-Xylene	20.00	22.01	110	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	206934	Location:	15101 Freedom Avenue.,San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	144065
Units:	ug/L	Analyzed:	10/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC466991

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,100	1,007	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	112	80-122

Type: BSD Lab ID: QC466992

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,100	897.0	82	80-120	12	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	111	80-122

RPD= Relative Percent Difference

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Instrument: MSVOA08.i

Operator: voc
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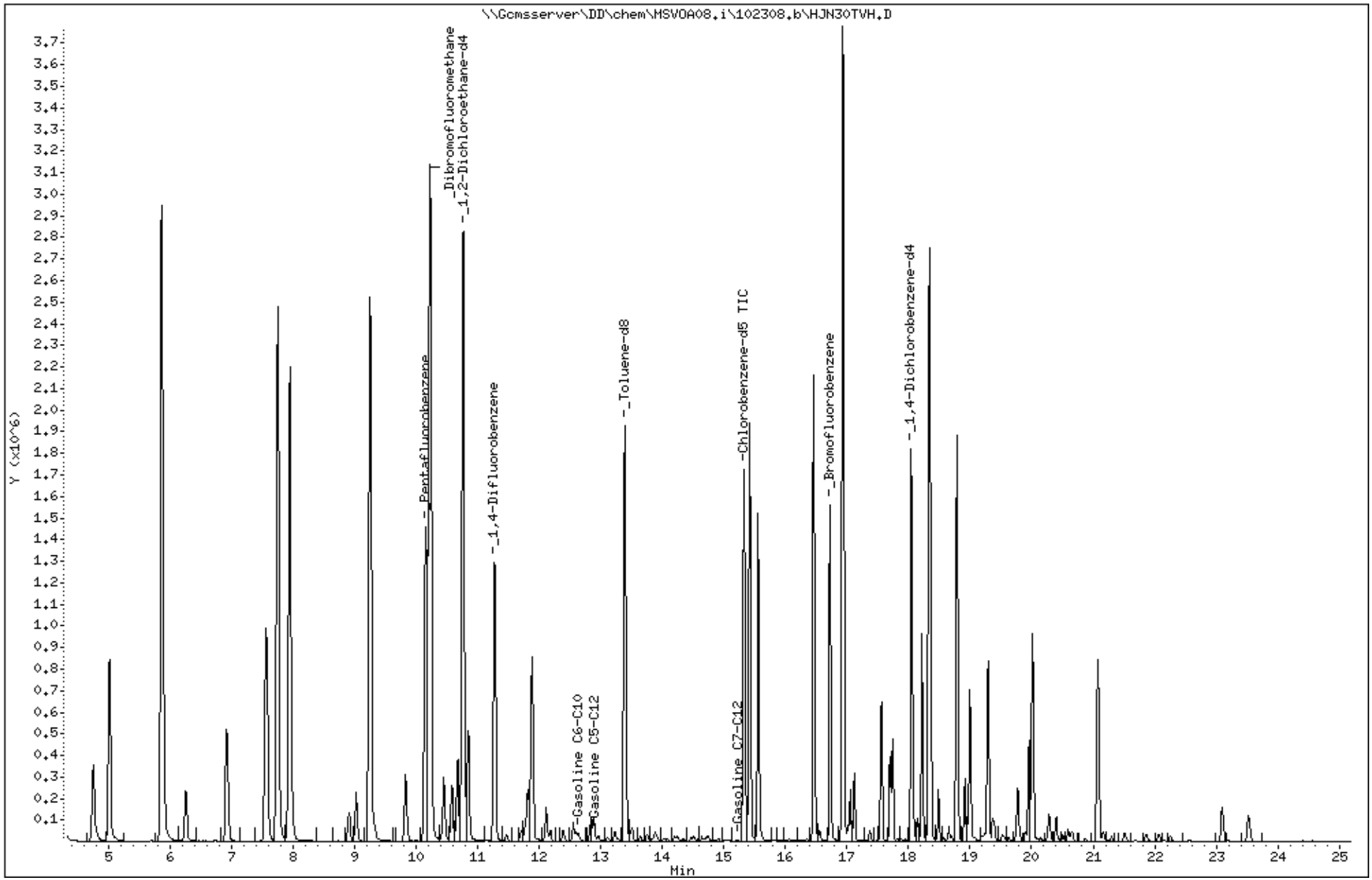

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Instrument: MSVOA08.i

Operator: voc
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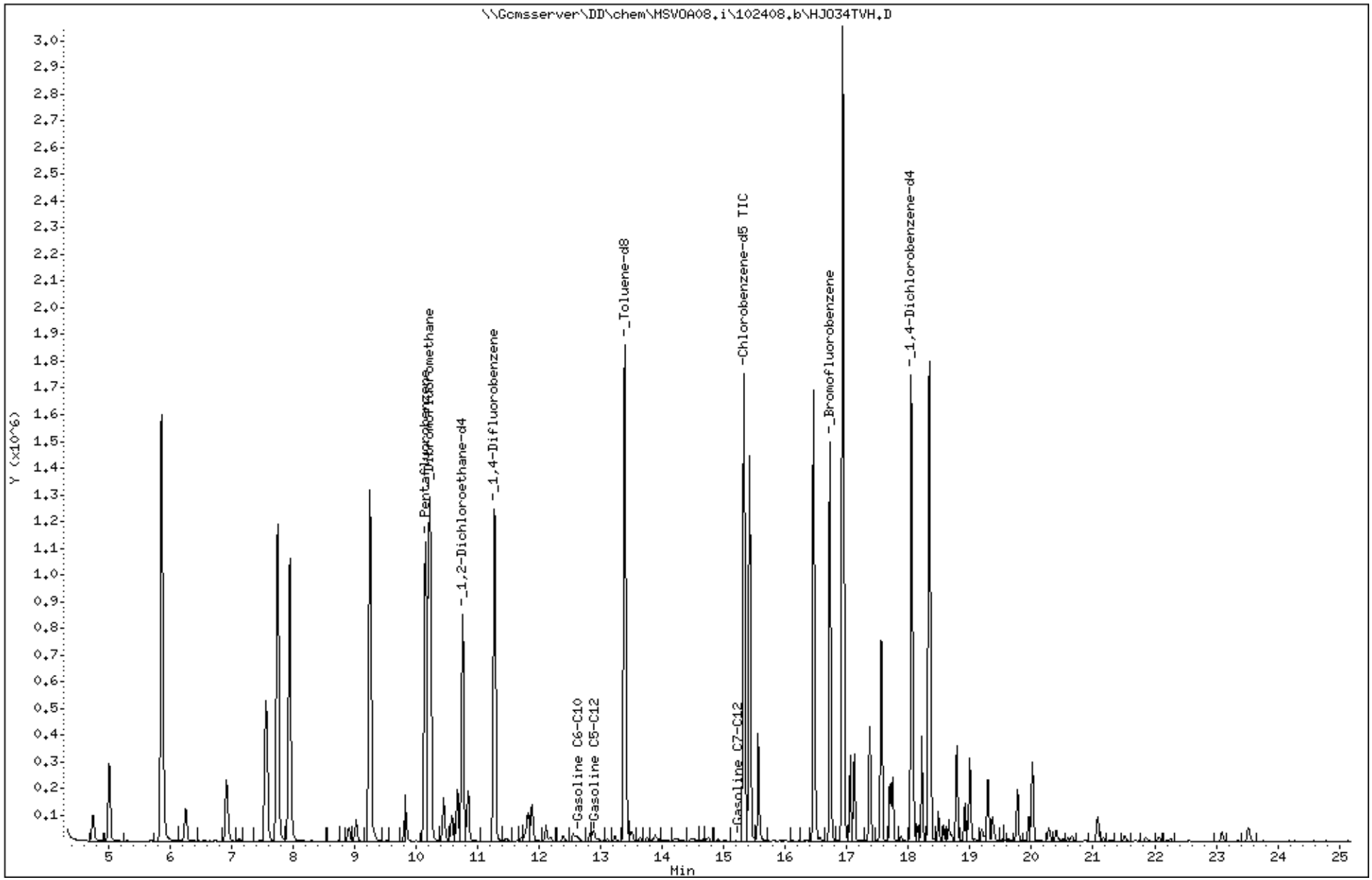

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Operator: voc
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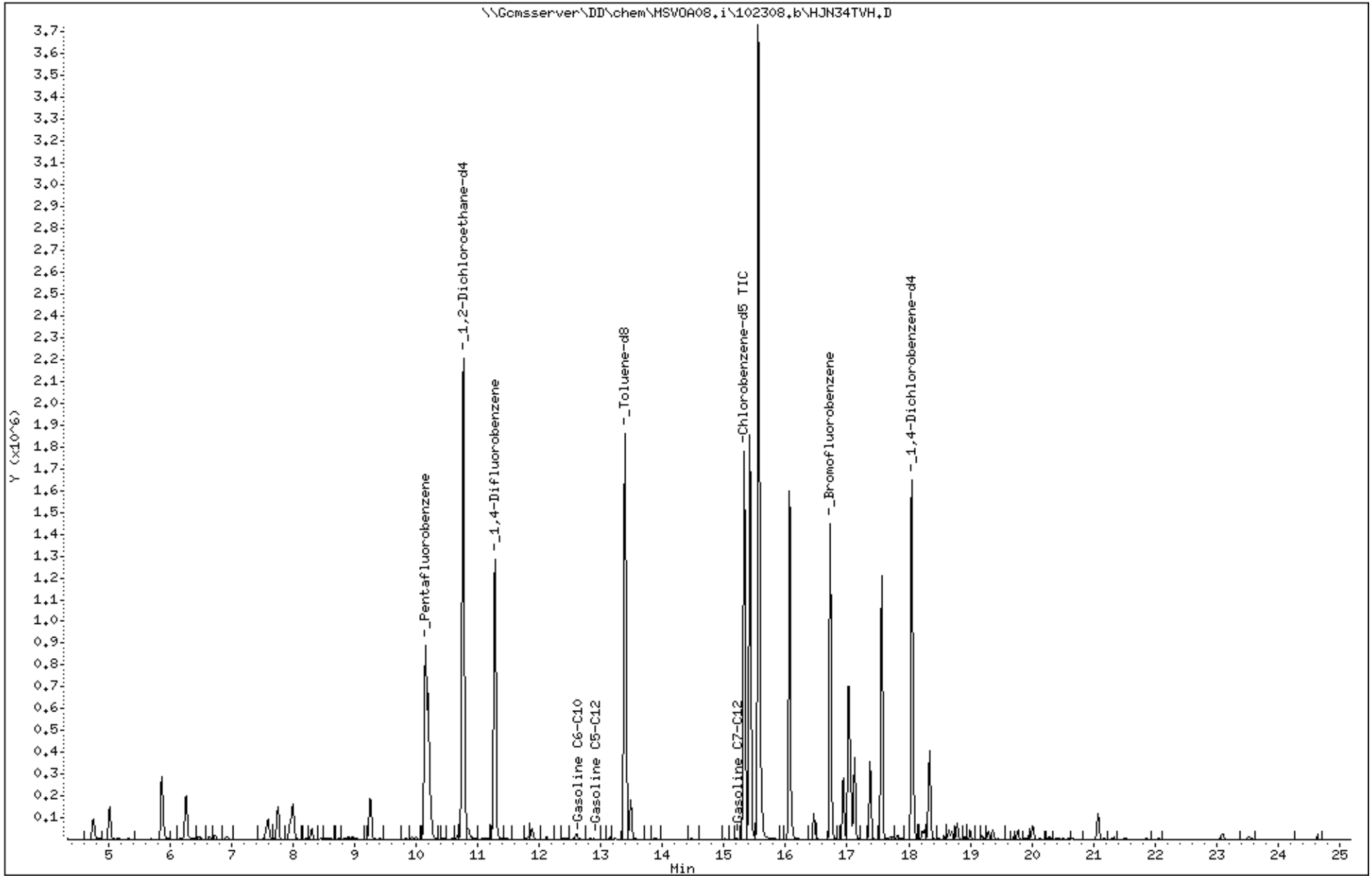

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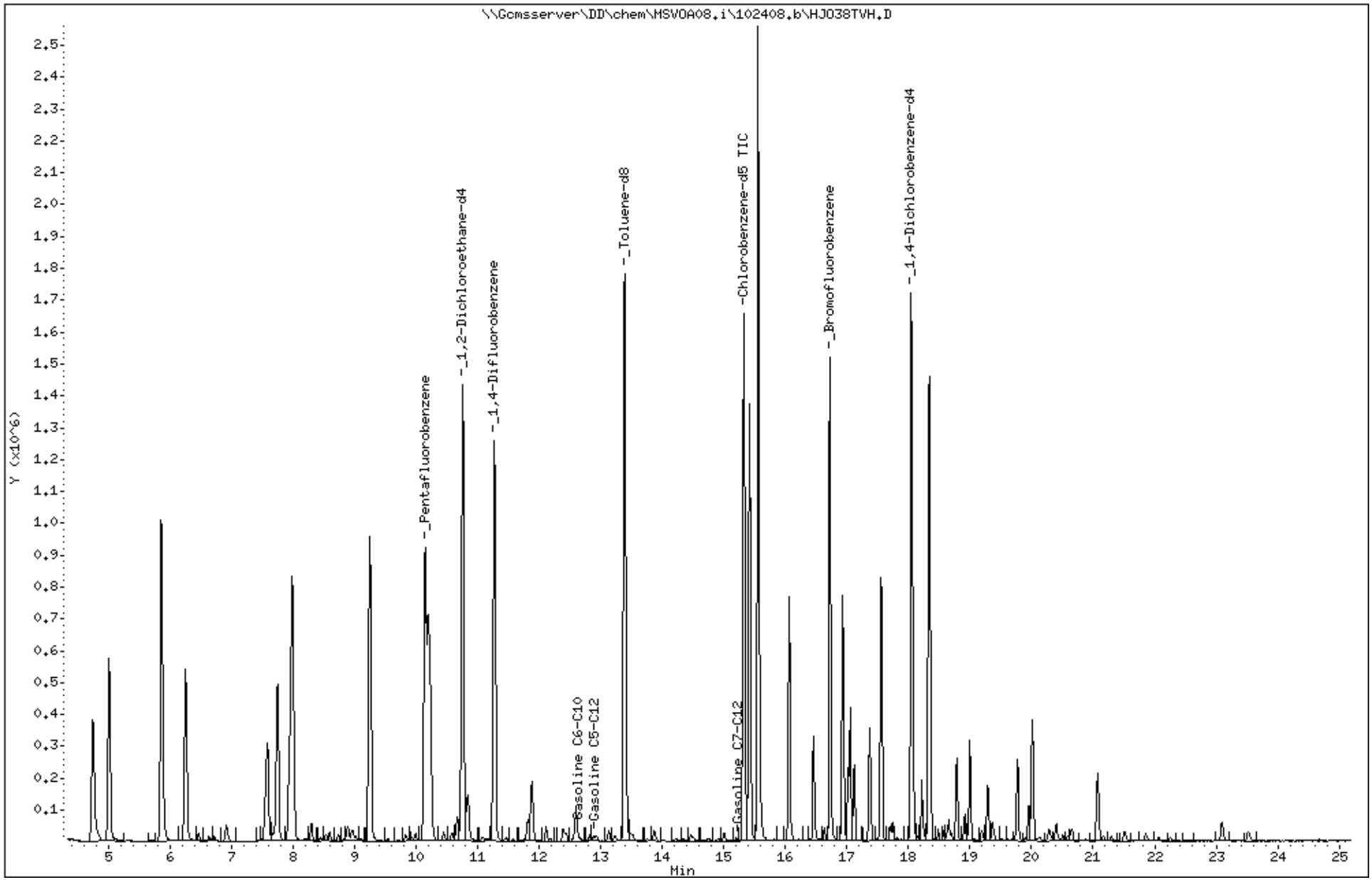
Instrument: MSVOA08.i

Operator: voc
Column diameter: 2.00

Column phase:



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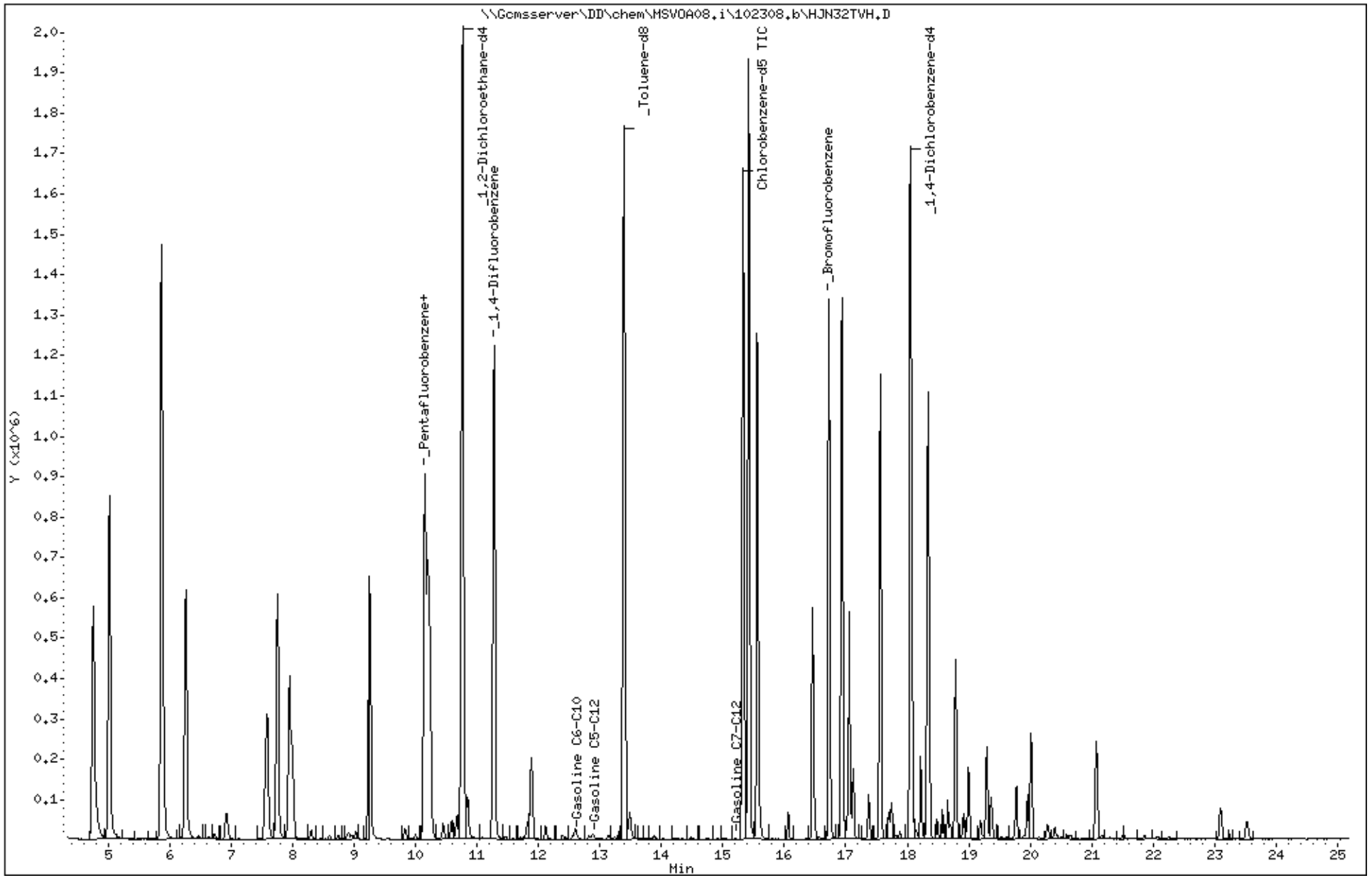
Sample Info: S,206934-005

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:



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Date : 25-OCT-2008 06:30
Client ID: DYNA P&T
Sample Info: S,206934-006

Instrument: MSVOA08.i
Operator: voc
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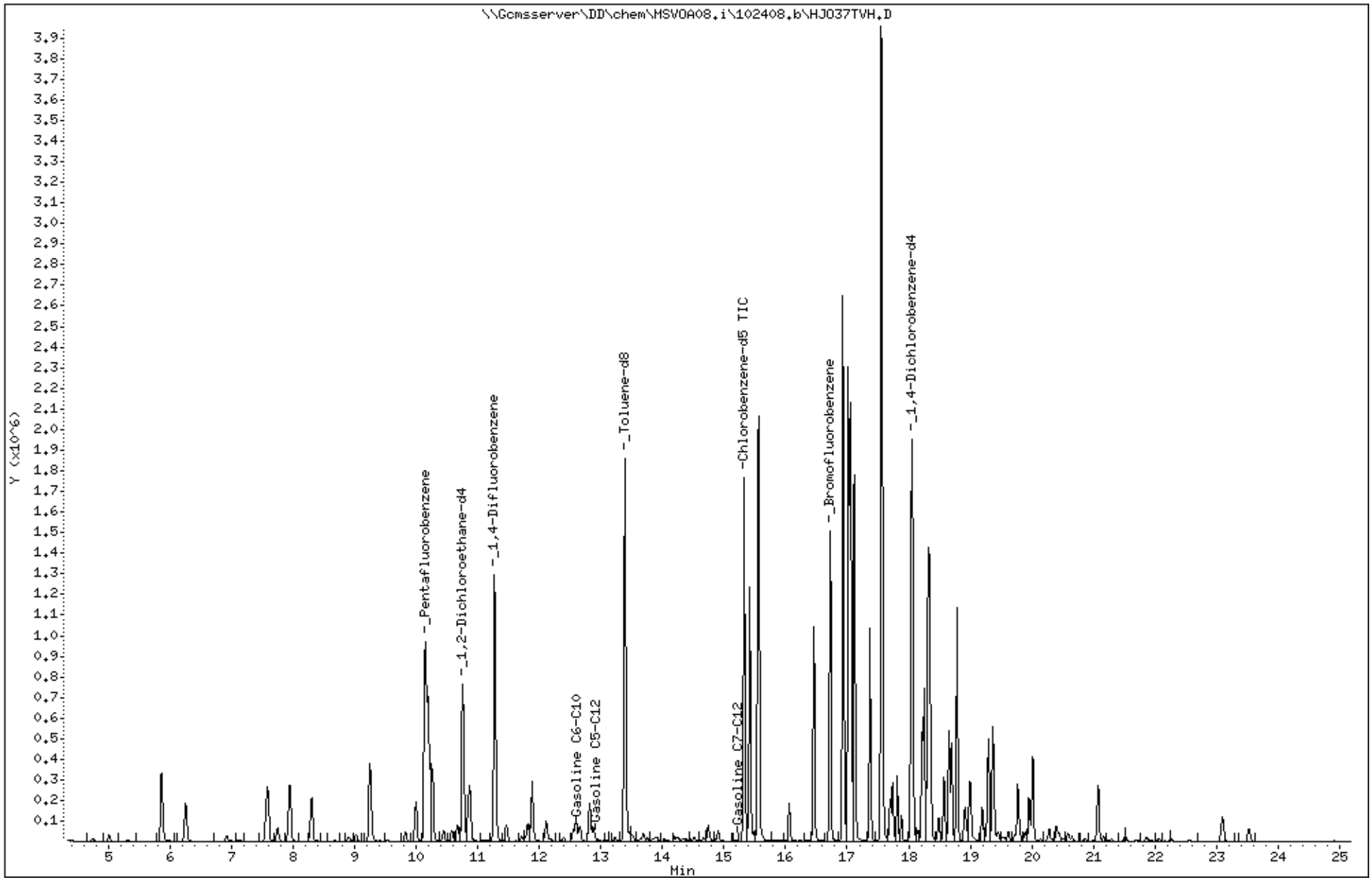

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Operator: voc
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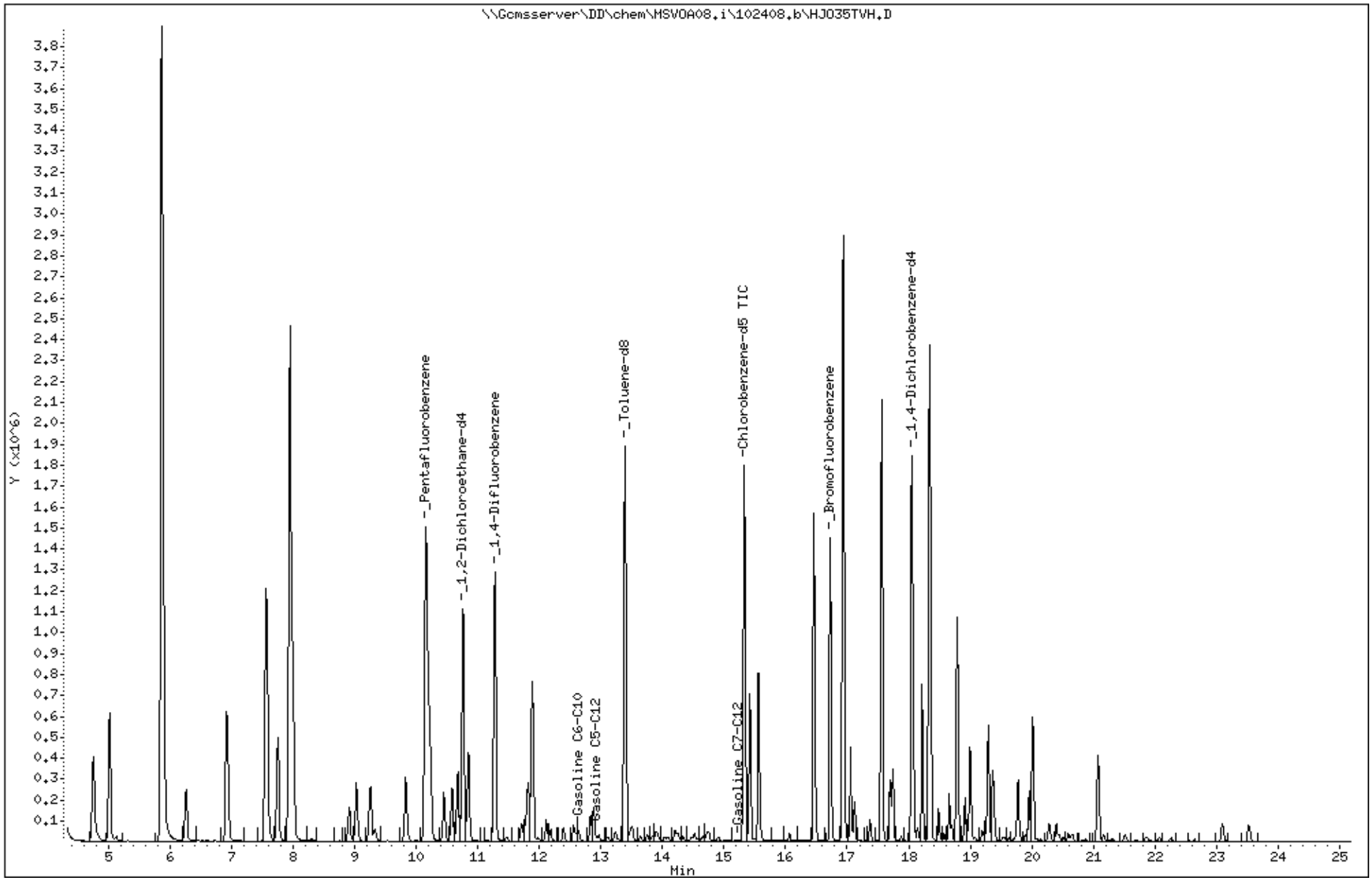

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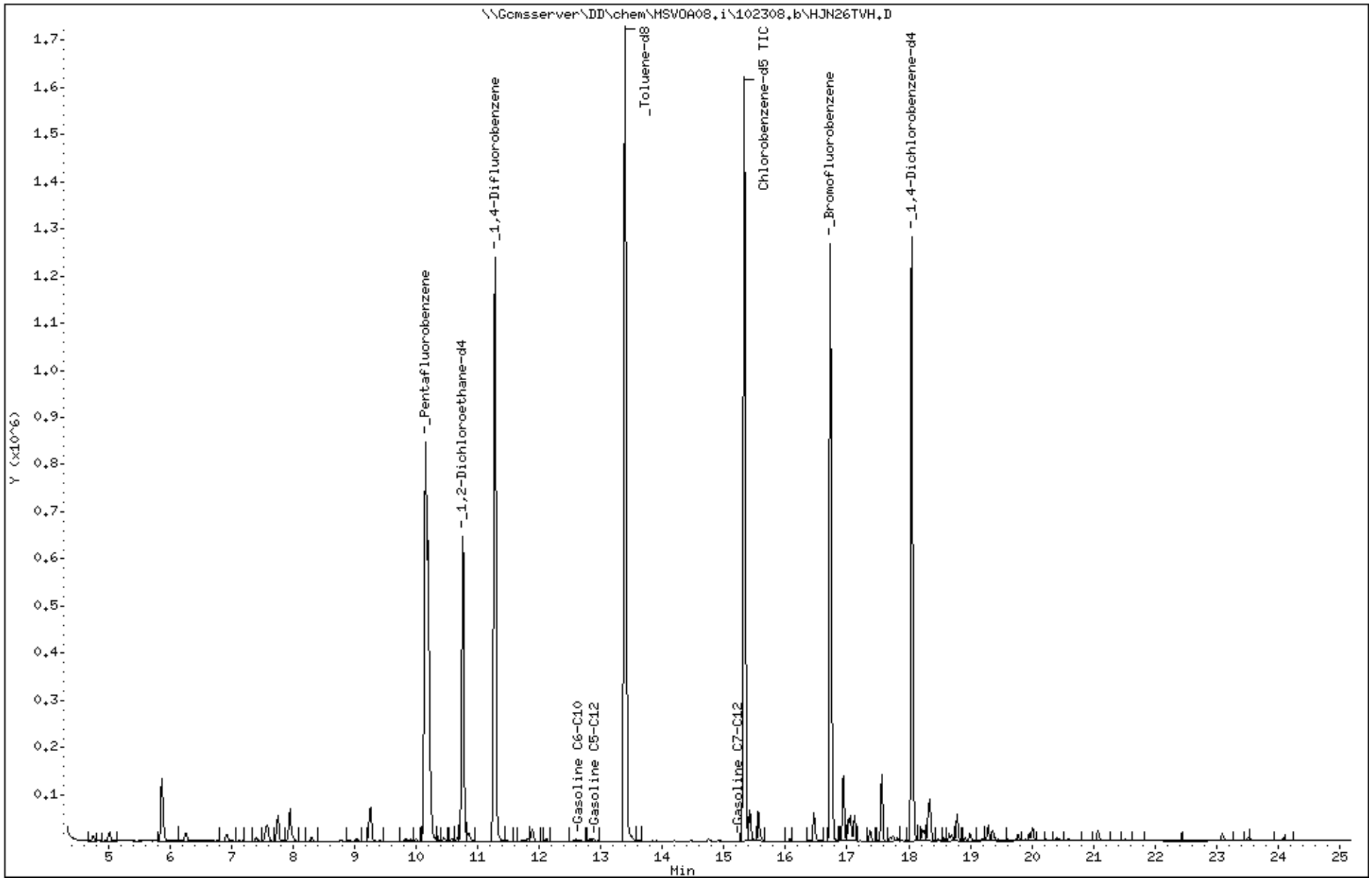
Date : 24-OCT-2008 00:35
Client ID: DYNA P&T
Sample Info: S,206934-010

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:



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Date : 23-OCT-2008 12:54
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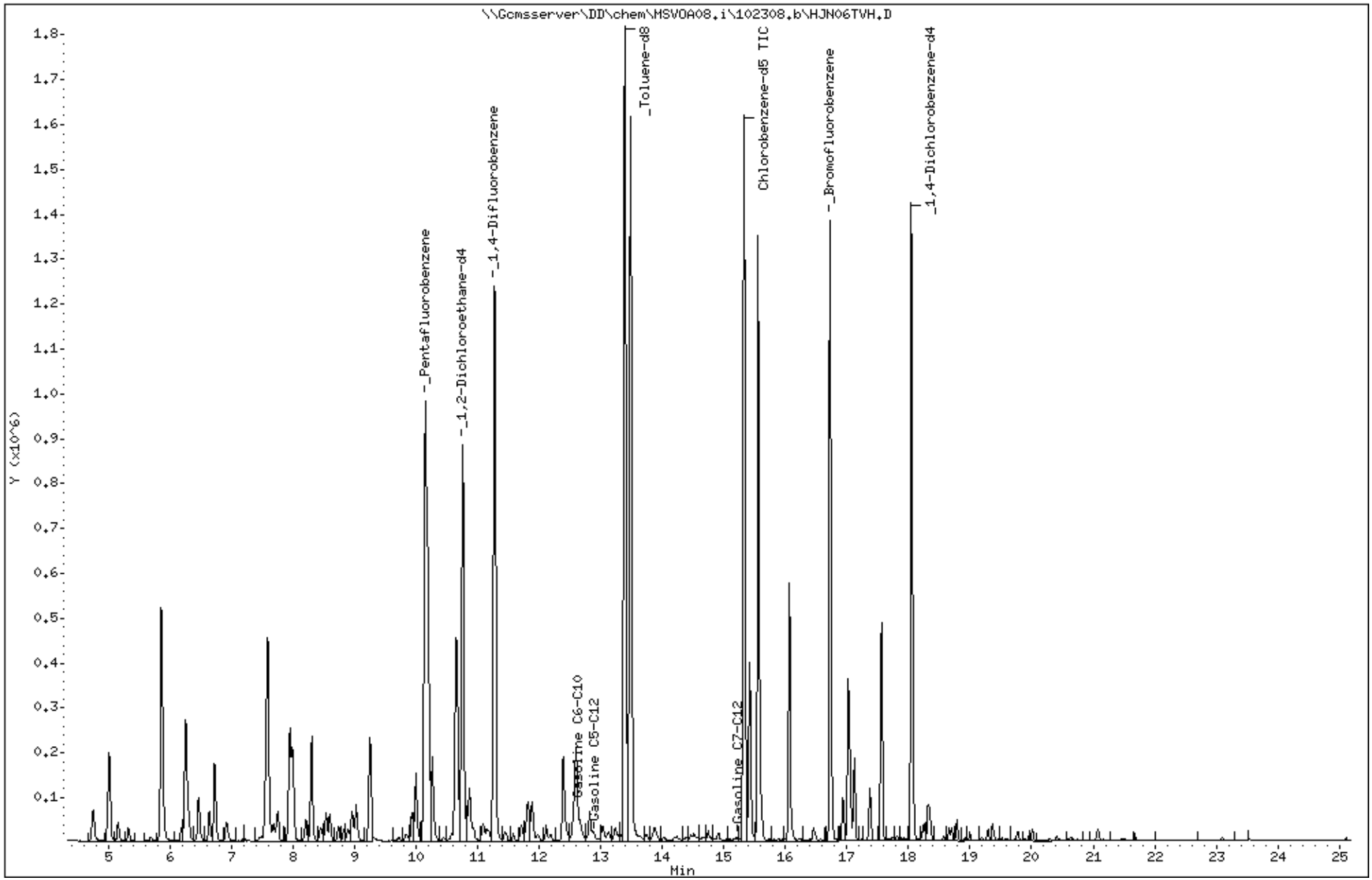
Instrument: MSVOA08.i
Sample Info: CCV/BS,QC466727,144002,S10222,0.009/100
Operator: voc
Column phase:
Column diameter: 2.00



Appendix D

Non-Hazardous Waste Manifest

for Groundwater removal

08110814

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	EXEMPT	1	NRCES 510-749-1390	36764-07

5. Generator's Name and Mailing Address

GAS & FOOD
1770 PISTACIA CT
FAIRFIELD CA 94533

Generator's Site Address (if different than mailing address)

GAS & FOOD
1510 FREEDOM AVE
SAN LEANDRO CA 94578

Generator's Phone: 510 481 2838

6. Transporter 1 Company Name

NRC ENVIRONMENTAL SERVICES INC

U.S. EPA ID Number: CAR000030114

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

U.S. EPA ID Number: CAD028409819

Facility's Phone: 562 432 5445

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
GENERATOR	1. NON-HAZARDOUS WASTE LIQUID (PROFILE# 51545) (PURGE WATER)	5	DM	250	G	NRF
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information

WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
JOB#/PO#:36764-07
CONSULTANT: SOMA ENVIRONMENTAL 6620 OWENS DRIVE SUITE A, PLEASANTON, CA (2551)

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: Elizabeth Hightower for SOMA
Signature: Elizabeth Highton
Month: 08 Day: 08 Year: 08

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: 08 Day: 08 Year: 08

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:

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

Printed/Typed Name: ALVARO MOJARRO
Signature:
Month: 8 Day: 11 Year: 08

169-BLC-O 6 10498 (Rev. 8/06) DESIGNATED FACILITY TO GENERATOR

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
EXEMPT	1	NRCES 510-749-1390	38391-06

GENERATOR

5. Generator's Name and Mailing Address
GAS & FOOD
1770 PISTACIA CT.
FAIRFIELD CA 94533
Generator's Phone: 510 481-2838

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: CAR000030114

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) (PROFILE # 51646)	2	DM	100	G	NONE
2.					P	
3.						
4.						

13. Special Handling Instructions and Additional Information
WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
JOB#38391-06 PO# 2551
CONSULTANT: SOMA ENVIRONMENTAL 6620 OWENS DRIVE, SUITE A, PLEASANTON, CA.

D2564.

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: Elizabeth Hightower for SOMA — Signature: E. Hightower — Month 10 Day 24 Year 08

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 10 Day 24 Year 08

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: FRANCE PATINO — Signature — Month 10 Day 27 Year 08