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THIRD QUARTER 2004
GROUNDWATER MONITORING REPORT
TEXACO GASOLINE SERVICE STATION
15101 FREEDOM AVENUE
SAN LEANDRO, CALIFORNIA

October 19, 2004

Project 2551

Prepared for

Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, California

Prepared by

SOMA Environmental Engineering, Inc.
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October 19, 2004

Mr. Robert Schultz
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. Schultz:

Enclosed for your review is a copy of SOMA's "Third Quarter 2004 Groundwater Monitoring Report" for the subject property.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 244-6600.

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist

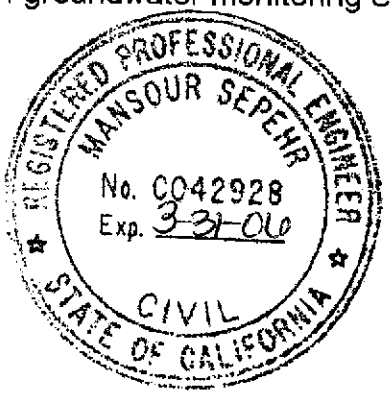
Enclosure

cc: Mr. Mohammad Pazdel w/enclosure

Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Mohammad Pazdel, the property owner of 15101 Freedom Avenue, San Leandro, California, to comply with the Alameda County Health Care Services' requirements for the Third Quarter 2004 groundwater monitoring event.

Mansour Sepehr, Ph.D., P.E.
Principal Hydrogeologist



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1.0 INTRODUCTION

This report has been prepared by SOMA Environmental Engineering, Inc., (SOMA) on behalf of Mr. Mohammad Pazdel, the property owner. The property is located at 15101 Freedom Avenue, between 151st Street and Fairmont Boulevard, which is just west of Interstate 580 in San Leandro, California (the "Site"). Formerly, the property was known as Freedom ARCO Station, however, the Site is currently operating as a service station under the brand name of Texaco. Since the 1960's, the Site has been used as a gasoline service station. Figure 1 shows the location of the Site.

This groundwater monitoring report summarizes the results of the Third Quarter 2004 groundwater monitoring event conducted at the Site on September 21, 2004. This report includes the results of the on-site measurements of the physical and chemical properties of the groundwater, which includes pH, temperature, and electrical conductivity (EC). During this monitoring event five on-site monitoring wells (MW-1 to MW-5), and four off-site wells (MW-6 to MW-9) were sampled and analyzed for the following chemicals, as requested by the Alameda County Health Care Services (ACHCS):

- Total petroleum hydrocarbons as gasoline (TPH-g);
- Benzene, toluene, ethylbenzene, and total xylenes (collectively referred to as BTEX);
- Methyl tertiary Butyl Ether (MtBE);
- Gasoline oxygenates, which included tertiary Butyl Alcohol (TBA), Isopropyl Ether (DIPE), Ethyl tertiary Butyl Ether (ETBE), Methyl tertiary Amyl Ether (TAME) and;
- Lead scavengers, which included 1,2-Dichloroethane (1,2-DCA) and 1,2-Dibromoethane (EDB).

These activities were performed in accordance with the general guidelines of the California Regional Water Quality Control Board (CRWQCB). Appendix A details the groundwater monitoring procedures used during the Third Quarter 2004 monitoring event.

1.1 Previous Activities

On May 20, 1999, in order to comply with underground storage tank (UST) upgrade regulations, three 10,000-gallon single-walled USTs were removed and replaced with new double-walled fuel tanks. On July 7, 1999, a 20,000-gallon gasoline UST, an 8,000-gallon gasoline UST, and a 6,000-gallon diesel UST were installed in the tank cavity.

In July 2001, additional soil and groundwater investigations were conducted to further examine potential petroleum hydrocarbon contamination discovered during the removal and upgrade of the USTs. During this investigation five soil

borings (SB-1 through SB-5) were drilled. The maximum concentrations of TPH-g and BTEX in the soil samples collected between 19 and 25.5 feet below ground surface (bgs) were 470, 2.6, 16, 12, and 73 mg/Kg, respectively. MtBE was below the laboratory reporting limit of 0.005 mg/Kg in all soil samples. The maximum concentrations of TPH-g and BTEX in the groundwater samples collected from the soil borings were 83, 19, 1.8, 1.5, and 73 mg/L, respectively. The maximum reported MtBE concentration was 87 mg/L in soil boring SB-2. The soil boring locations are shown in Figure 2.

On April 22 and 23, 2002, SOMA installed 5 (4-inch diameter) on-site groundwater monitoring wells (MW-1 to MW-5) to evaluate the groundwater flow gradient, the extent of petroleum hydrocarbons, and MtBE contamination beneath the Site. Figure 2 displays the locations of the monitoring wells.

Based on SOMA's approved workplan submitted on July 22, 2003, an additional off-site investigation was performed to evaluate the lateral extent of the soil and groundwater contamination. The off-site investigation included a sensitive receptor survey to locate water supply wells and/or water bodies within a 2,000 foot radius of the Site. In September 2003, six temporary well boreholes were advanced to depths of at least 40 feet bgs. Figure 2 shows the location of the temporary well boreholes.

In September 2004, SOMA installed four off-site wells (MW-6 to MW-9). This monitoring event was the first time these wells were monitored. Figure 2 shows the location of newly installed monitoring wells.

2.0 RESULTS

The following sections provide the results of the field measurements and laboratory analyses for the September 21, 2004 groundwater monitoring event.

2.1 Field Measurements

Table 1 presents the calculated groundwater elevations in each groundwater monitoring well. As Table 1 shows, depths to groundwater ranged from 12.18 feet in monitoring well MW-9 to 23.49 feet in monitoring well MW-1. The corresponding groundwater elevations ranged from 28.08 feet in well MW-9 to 30.97 feet in well MW-1.

Variations in seasonal fluctuations, as well as local recharge rates in each well determine the deviations in the groundwater elevations. The groundwater elevations decreased throughout the Site during the Third Quarter 2004. The decrease in groundwater elevations can be attributed to the drier weather encountered this quarter. This was the first time the off-site wells were monitored, further monitoring events will aid in determining more detailed trends.

Figure 3 displays the contour map of groundwater elevations, in feet, measured during the Third Quarter 2004. In general, for the on-site wells, the groundwater flows slightly south to southwesterly across the Site, at a gradient of 0.007 feet/feet. The lowest groundwater elevation was observed south of the Site at well MW-9.

The field measurements taken during the Third Quarter 2004 monitoring event are shown in Appendix B.

2.2 Laboratory Analysis

Table 1 also presents the TPH-g, BTEX, and MtBE analytical results of the groundwater samples during this quarter. In general, the analytical results indicate that the groundwater samples collected from monitoring well MW-3 were the most impacted, with the exception of MtBE, which peaks in monitoring well MW-4. High concentrations of TPH-g and BTEX in monitoring well MW-3 can be attributed to leaks from the former USTs prior to their upgrade in 1999. Also, high TPH-g and total xylene concentrations were detected in well MW-6.

TPH-g concentrations were below the laboratory reporting limit in off-site wells MW-8 and MW-9. TPH-g has impacted wells MW-3 and MW-6 to the greatest extent. Figure 4 displays the contour map of TPH-g concentrations in the groundwater on September 21, 2004. The highest reported TPH-g concentration was in the vicinity of the dispenser islands and former USTs, in well MW-3.

In general, all BTEX concentrations were below the laboratory reporting limit in off-site wells MW-8 and MW-9. In well MW-2, only low BTEX concentrations were detected, with the exception of toluene, which was below the laboratory reporting limit. Also, low BTEX concentration were detected in well MW-7, with the exception of both benzene and toluene, which were below the laboratory reporting limit. In general, the highest BTEX concentrations were detected in the vicinity of the dispenser islands and former USTs, in well MW-3. However, in well MW-6, both ethylbenzene and total xylenes were detected at high concentrations. Ethylbenzene was detected in both wells MW-3 and MW-6 at 2,200 µg/L.

Figure 5 displays the contour map of benzene concentrations in the groundwater on September 21, 2004. Similar to the results for TPH-g, the highest benzene concentration was detected in monitoring well MW-3, which is near the dispenser islands.

Table 1 presents the results of the MtBE analysis using EPA Method 8260B. MtBE was detected in all of the wells during the Third Quarter 2004, with the

exception of wells MW-8 and MW-9. The highest MtBE concentration was detected in well MW-4 at 7,300 µg/L.

Figure 6 displays the contour map of MtBE concentrations in the groundwater on September 21, 2004. As shown in Figure 6, the highest MtBE concentration was detected in the vicinity of the dispenser islands, in monitoring well MW-4. This can be attributed to the location of the product piping from the existing USTs to the dispenser islands and the solubility of MtBE in groundwater.

Table 2 shows the analytical results for gasoline oxygenates for the Third Quarter 2004. TBA was below the laboratory reporting limit in all wells, with the exception of well MW-4. DIPE and ETBE were below the laboratory reporting limit in all wells. TAME was below the laboratory reporting limit in all wells, with the exception of wells MW-3, MW-5, and a trace TAME concentration in well MW-7.

Lead scavengers, 1,2-DCA and EDB were below the laboratory reporting limit throughout the Site, with the exception of a trace 1,2-DCA concentration in well MW-9 at 3.2 µg/L.

Appendix C includes the laboratory report and COC form for the Third Quarter 2004.

3.0 CONCLUSION AND RECOMMENDATIONS

The results of the September 21, 2004 groundwater monitoring event can be summarized as follows:

1. The groundwater flows slightly south to southwesterly across the Site, at a gradient of 0.007 feet/feet.

2. Although MW-3 is located near the former USTs, where the release of petroleum hydrocarbons occurred, TPH-g, BTEX constituents, with the exception of benzene, and gasoline oxygenate (MtBE and TAME) concentrations decreased in well MW-3 during the Third Quarter 2004.

3. MtBE and TBA are the dominant constituents in well MW-4. The highest MtBE and TBA concentrations were detected in well MW-4. However, MtBE has remained well below the historical peak value of 12,000 µg/L, which was detected in May 2002.

4. The Third Quarter 2004 was the first time SOMA monitored the newly installed off-site wells. Further monitoring events, especially for the off-site wells, will aid in determining more detailed concentration patterns. However, based on the results of this monitoring event, it appears TPH-g and both ethylbenzene and total xylenes have greatly impacted well

MW-6. In off-site wells, MW-7, MW-8, and MW-9, with the exception of TPH-g in well MW-7, all TPH-g, BTEX, and gasoline oxygenates were either at trace concentrations or below the laboratory reporting limit.

4.0 REPORT LIMITATIONS

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

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

Figures

N

approximate scale in feet

0 250 500

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

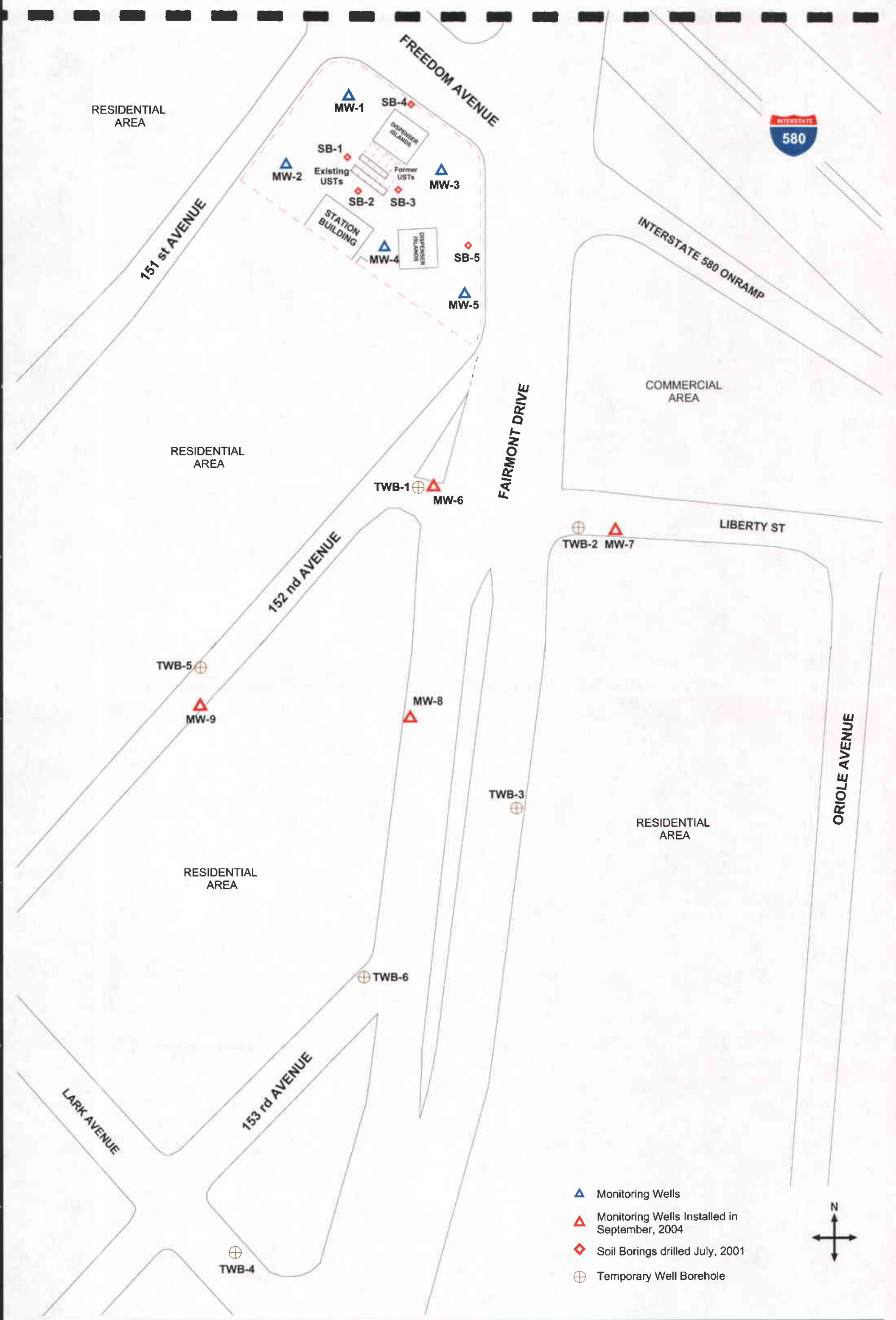


Figure 2: Site map showing locations of groundwater monitoring wells and soil borings.

SOMA ENVIRONMENTAL ENGINEERING, INC.

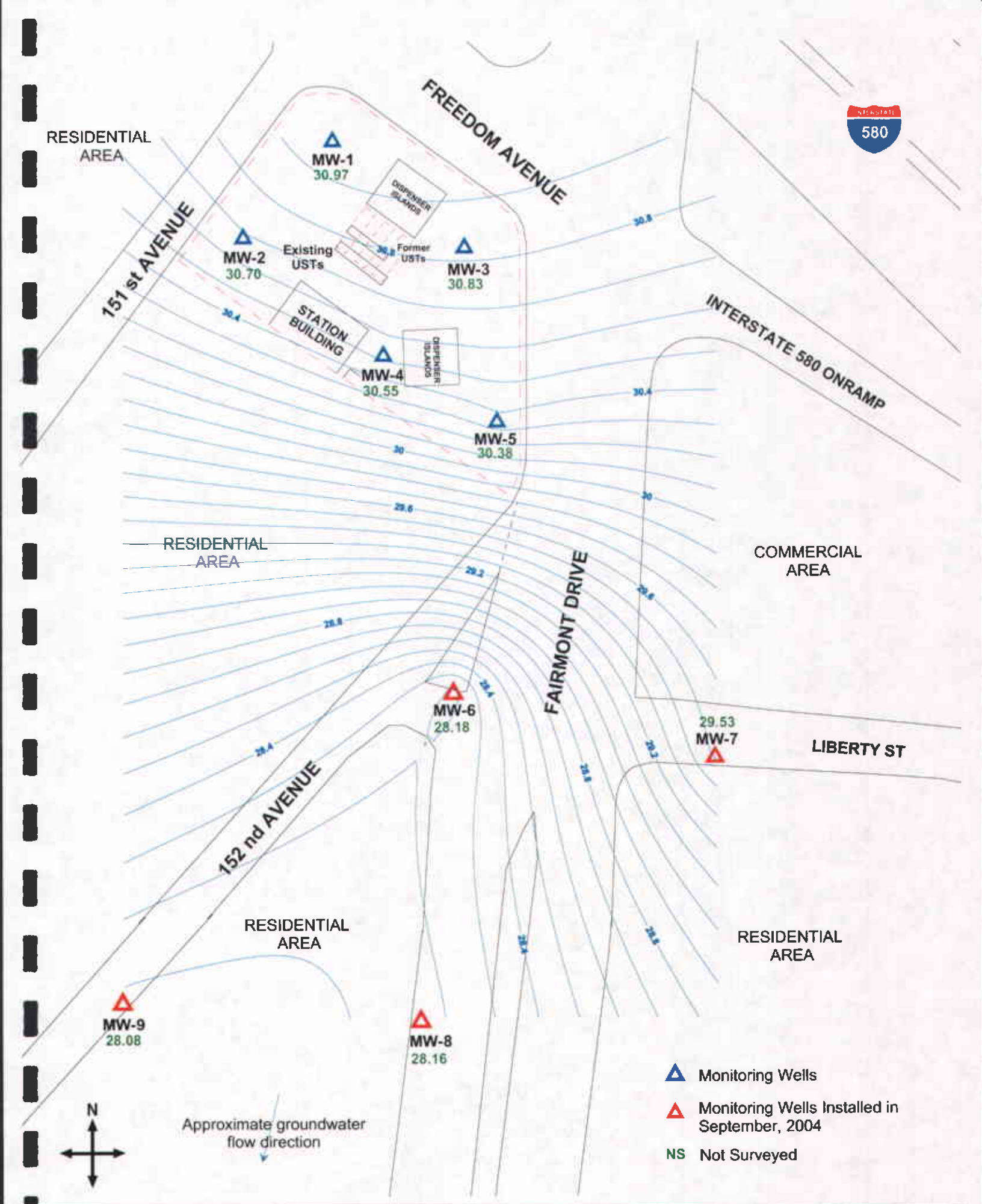


Figure 3: Groundwater elevation contour map in feet. September 2004.

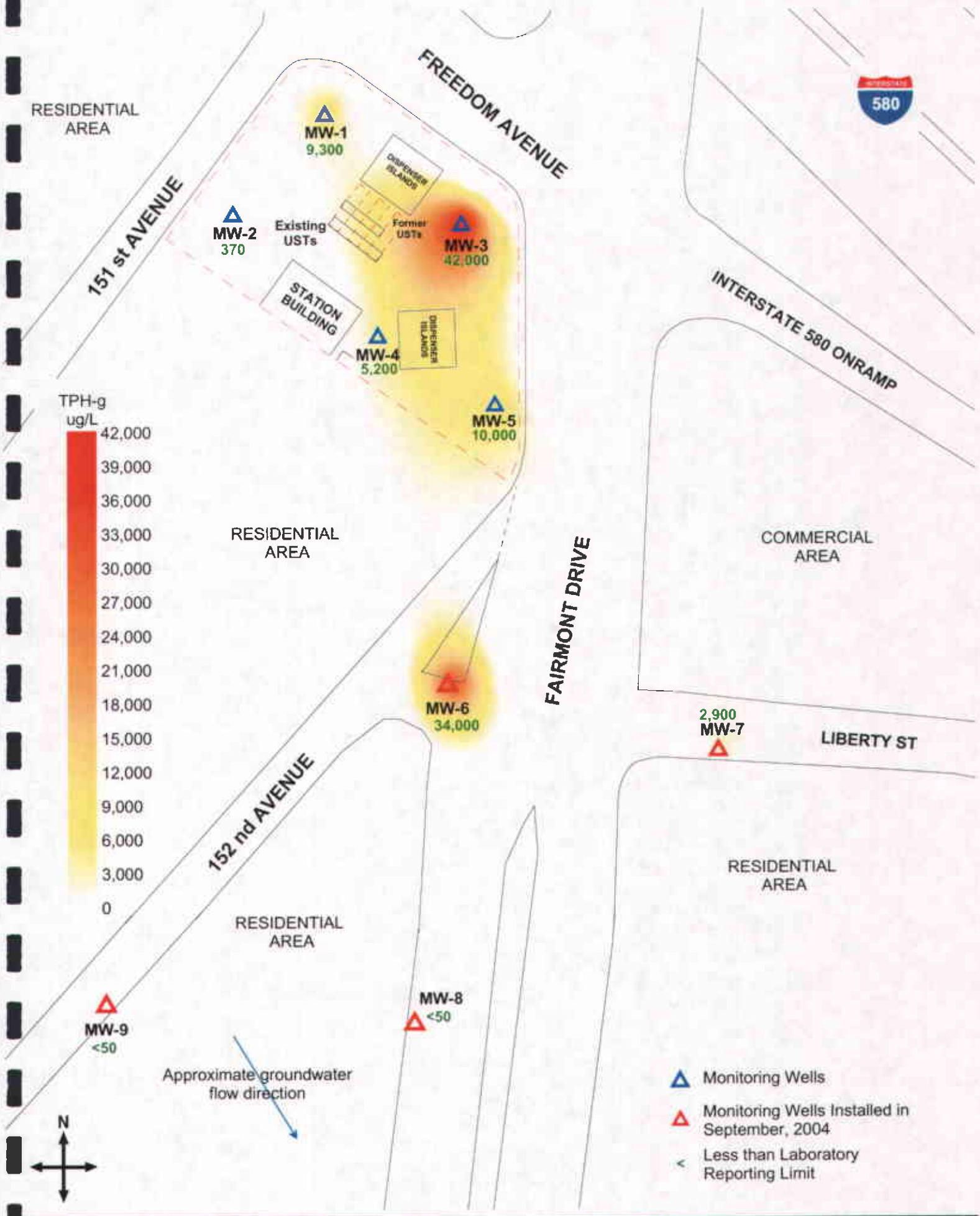


Figure 4: Contour map of TPH-g concentrations in groundwater. September 2004.

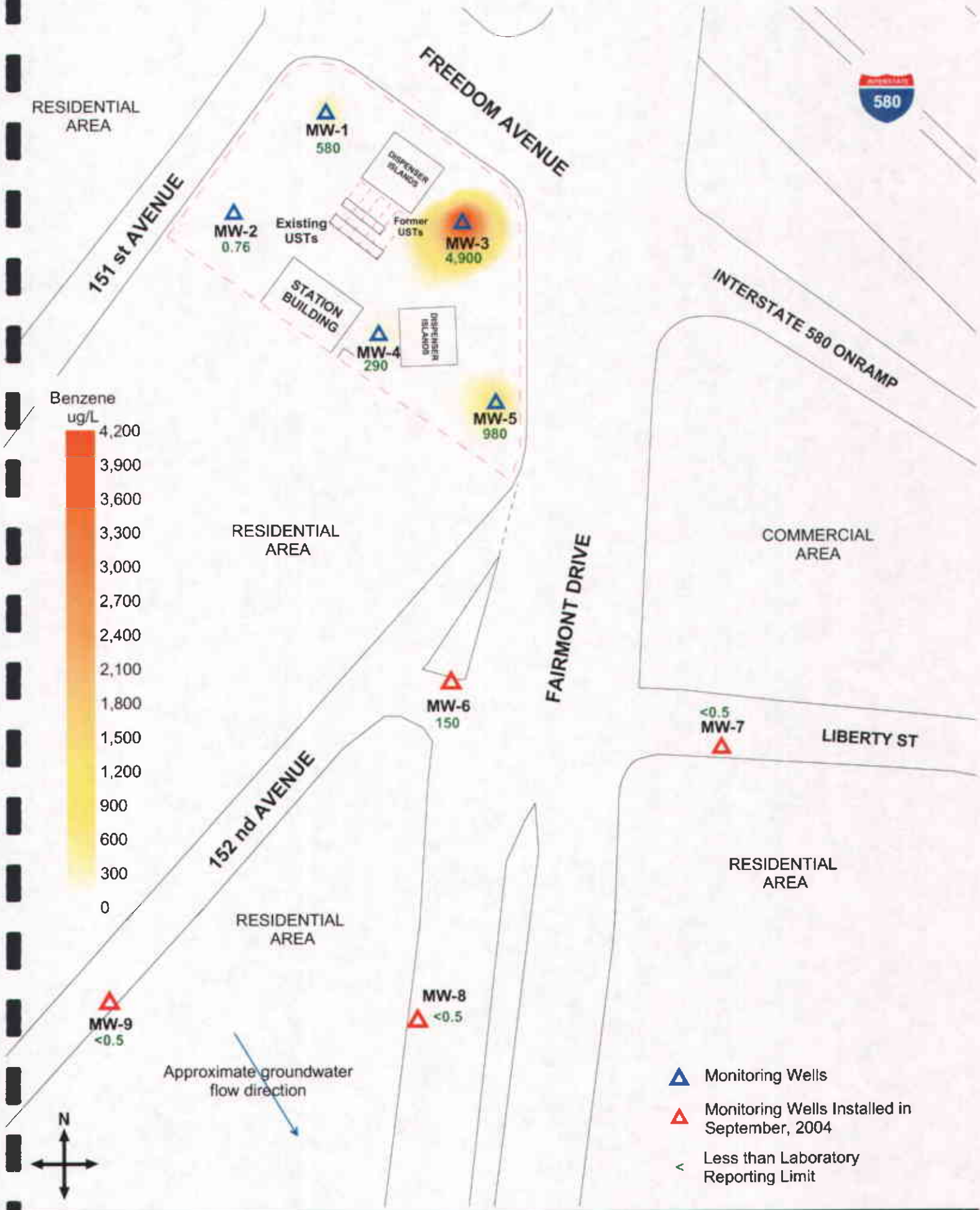


Figure 5: Contour map of Benzene concentrations in groundwater. September 2004.

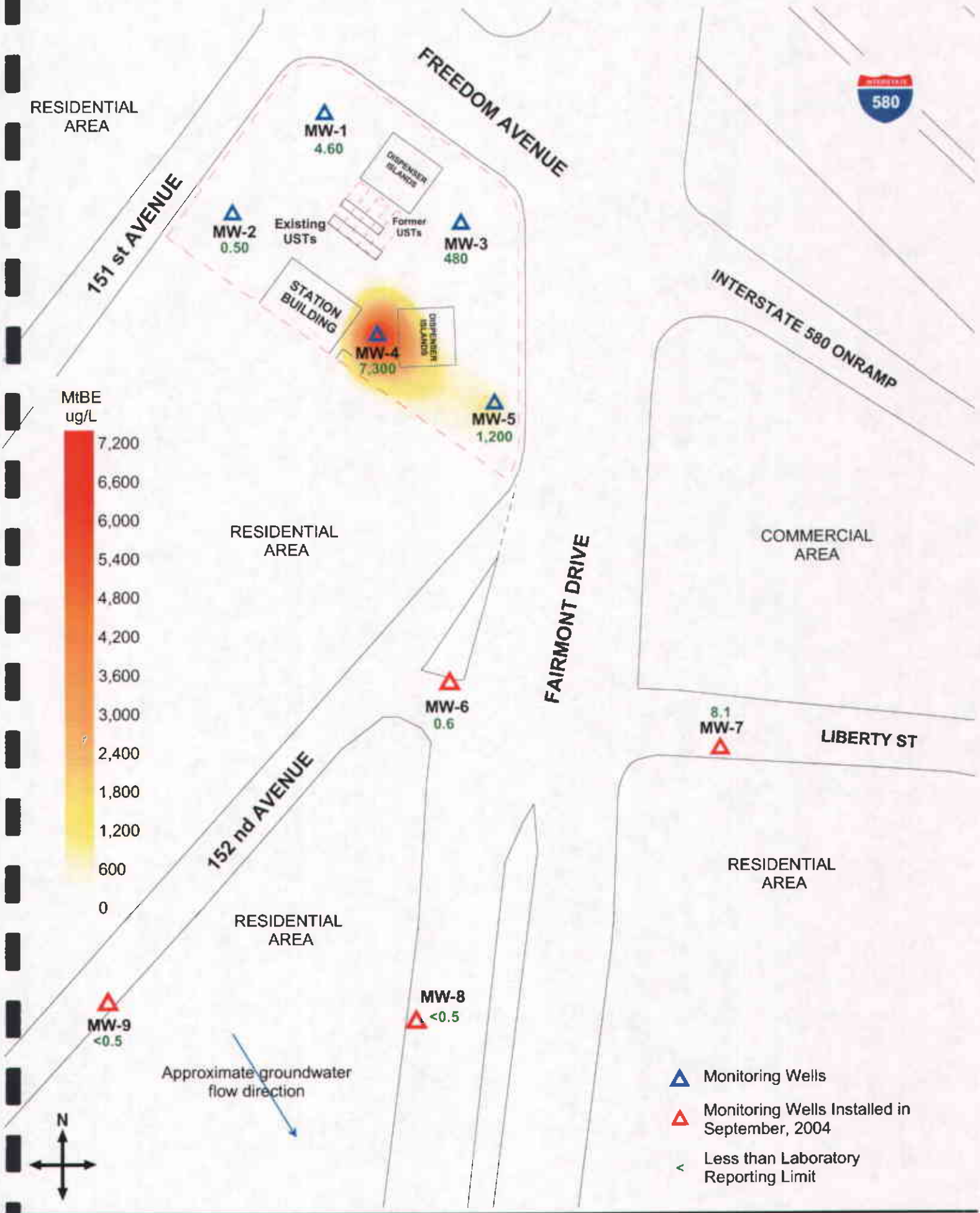


Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260 B) September 2004.

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)
MW-1	May-02	51.71	22.85	28.86	5,700	360	4.5	340	450	2
	Aug-02	51.71	23.31	28.40	9,100	590	2.6	830	362	<1.3
	Nov-02	51.71	23.58	28.13	7,900	570	3.1	680	392	< 1.0
	Feb-03	51.71	22.62	29.09	2,900	160	1.6 C	170	211	<0.5
	May-03	51.71	22.43	29.28	1,700	55	<0.5	90	115	2.00
	Aug-03	51.71	21.30	30.41	2,600	2.5	<0.5	190	130	<0.5
	Oct-03	51.71	23.49	28.22	9,200	560.0	2.7 C	670	648	<1.0
	Jan-04	51.71	22.43	29.28	5,500	190	<1.0	220	124.4	<0.5
	May-04	51.71	22.94	28.77	8,000	400	1.50	420	393	3.40
	Sep-04	**54.46**	**23.49**	**30.97**	**9,300**	**580**	**9.30**	**690**	**683**	**4.60**
MW-2	May-02	49.66	22.83	26.83 *	3,100	67	8	250	215	56
	Aug-02	49.66	21.41	28.25	2,700	4.6	<0.5	310	140	<0.5
	Nov-02	49.66	21.79	27.87	3,400	4.6	< 0.5	310	160	< 0.5
	Feb-03	49.66	20.51	29.15	890	1.7 C	0.80 C	68	38.92 C	<0.5
	May-03	49.66	20.33	29.33	2,700	5.2 C	<0.5	120	140	1.2
	Aug-03	49.66	23.18	26.48*	8,500	640	<2.5	560	659	<0.8
	Oct-03	49.66	21.71	27.95	3100 H	4.3 C	<0.5	210	160	<0.5
	Jan-04	49.66	20.31	29.35	660 H	1.5 C	<0.5	8.9	25	<0.5
	May-04	49.66	21.09	28.57	4,500	5.1 C	<0.5	190	230	0.70
	Sep-04	**52.41**	**21.71**	**30.70**	**370**	**0.76 C**	**<0.5**	**25**	**16**	**0.50**
MW-3	May-02	51.16	22.28	28.88	44,000	6,000	900	1,500	6,200	2,400
	Aug-02	51.16	22.88	28.28	40,000	5,800	1,100	1,600	6,500	1,300
	Nov-02	51.16	23.19	27.97	47,000	5,300	1,200	2,200	8,600	1,000
	Feb-03	51.16	22.02	29.14	39,000	5,500	1,500	2,000	8,600	1,300
	May-03	51.16	21.89	29.27	52,000	7,300	3,000	2,800	12,700	2,100
	Aug-03	51.16	22.66	28.50	31,000	6,100	860	1,500	6,900	1,200
	Oct-03	51.16	23.06	28.10	41,000	6,100	1,100	2,200	10,200	960
	Jan-04	51.16	21.85	29.31	51,000	4,100	1,100	2,000	8,400	590
	May-04	51.16	22.55	28.61	65,000	4,300	1,300	2,500	10,500	720
	Sep-04	**53.91**	**23.08**	**30.83**	**42,000**	**4,900**	**890**	**2,200**	**8,700**	**480**

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	May-02	50.54	21.78	28.76	880	25	1.0C	110	52	12,000
	Aug-02	50.54	22.50	28.04	3,800	70	<5.0	300	115	4,800
	Nov-02	50.54	22.81	27.73	5,100	150	10	460	258	2,400
	Feb-03	50.54	21.48	29.06	3,200	98	66	220	360	6,600
	May-03	50.54	21.24	29.30	6,200	140	46	200	790	2,300
	Aug-03	50.54	22.32	28.22	7,500	180	57	220	1450	1,900
	Oct-03	50.54	22.74	27.80	5,800	250	32	300	970	7,800
	Jan-04	50.54	21.19	29.35	5,900	270	17 C	150	640	7,300
	May-04	50.54	22.03	28.51	9,100	210	51	200	1190	1800
	Sep-04	**53.31**	**22.76**	**30.55**	**5,200**	**290**	**12**	**370**	**600**	**7300**
MW-5	May-02	47.79	19.02	28.77	25,000	1,000	1200	1,100	3,060	1,800
	Aug-02	47.79	19.80	27.99	16,000	1,000	660	950	1,720	1,500
	Nov-02	47.79	20.14	27.65	16,000	1,300	380	930	1,550	1,200
	Feb-03	47.79	18.70	29.09	12,000	390	71	770	1,100	860
	May-03	47.79	18.52	29.27	9,100	210	31	560	790	600
	Aug-03	47.79	19.54	28.25	12,000	660	75	660	1,110	1,000
	Oct-03	47.79	20.06	27.73	15,000	1,000	130	1,000	1,430	1,700
	Jan-04	47.79	18.42	29.37	9,900	450 C	16	500	431	1,100
	May-04	47.79	19.30	28.49	9,200	380	24	490	536	720
	Sep-04	**50.53**	**20.15**	**30.38**	**10,000**	**980**	**71**	**560**	**770**	**1200**
MW-6	Sep-04	45.82	17.64	28.18	34,000	150	130	2200	8100	0.6
MW-7	Sep-04	44.74	15.21	29.53	2,900	<0.5	<0.5	52	61	8.1
MW-8	Sep-04	41.14	12.98	28.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9	Sep-04	40.26	12.18	28.08	<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)

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..

[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.

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

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

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)
MW-1	Aug-02	78	<1.3	<1.3	<1.3
	Nov-02	42	< 1.0	< 1.0	< 1.0
	Feb-03	47	<0.5	<0.5	<0.5
	May-03	25	<0.5	<0.5	<0.5
	Aug-03	<10	<0.5	<0.5	<0.5
	Oct-03	70	<1.0	<1.0	<1.0
	Jan-04	55	<0.5	<0.5	<0.5
	May-04	62	<0.7	<0.7	<0.7
	Sep-04	**<10**	**<0.5**	**<0.5**	**<0.5**
MW-2	Aug-02	21	<0.5	<0.5	<0.5
	Nov-02	15	<0.5	<0.5	<0.5
	Feb-03	12	<0.5	<0.5	<0.5
	May-03	31	<0.5	<0.5	<0.5
	Aug-03	69	<0.8	<0.8	<0.8
	Oct-03	12	<0.5	<0.5	<0.5
	Jan-04	<10	<0.5	<0.5	<0.5
	May-04	14	<0.5	<0.5	<0.5
	Sep-04	**<10**	**<0.5**	**<0.5**	**<0.5**
MW-3	Aug-02	<330	<8.3	<8.3	330
	Nov-02	85	< 1.3	<1.3	220
	Feb-03	140	<5.0	<5.0	320
	May-03	520	<10	<10	530
	Aug-03	180	<4.2	<4.2	270
	Oct-03	<170	<8.3	<8.3	200
	Jan-04	<100	<5.0	<5.0	150
	May-04	<100	<5.0	<5.0	270
	Sep-04	**<140**	**<7.1**	**<7.1**	**110**

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)
MW-4	Aug-02	1500	<17	<17	18
	Nov-02	580	< 5.0	6	13
	Feb-03	1600	<20	22	<20
	May-03	690	<8.3	<8.3	17
	Aug-03	550	<7.1	7.3	18
	Oct-03	1400	<31	50	<31
	Jan-04	1,300	<20	25	21
	May-04	560	<8.3	<8.3	24
	Sep-04	**1300**	**<50**	**<50**	**<50**
MW-5	Aug-02	<250	<6.3	<6.3	510
	Nov-02	66	< 2.0	< 2.0	560
	Feb-03	<63	<3.1	<3.1	280
	May-03	<33	<1.7	<1.7	110
	Aug-03	130	<3.6	<3.6	270
	Oct-03	<100	<5.0	<5.0	740
	Jan-04	<63	<3.1	<3.1	300
	May-04	<100	<5.0	<5.0	210
	Sep-04	**<130**	**<6.3**	**<6.3**	**550**
MW-6	**Sep-04**	**<10**	**<0.5**	**<0.5**	**<0.5**
MW-7	**Sep-04**	**<10**	**<0.5**	**<0.5**	**1.5**
MW-8	**Sep-04**	**<10**	**<0.5**	**<0.5**	**<0.5**
MW-9	**Sep-04**	**<10**	**<0.5**	**<0.5**	**<0.5**

Notes:

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

<: Not detected above the laboratory reporting limit.

TBA: tert-Butyl Alcohol

DIPE: Isopropyl Ether

ETBE: Ethyl tert-Butyl Ether

TAME: Methyl tert-Amyl Ether

Appendix A

SOMA's Groundwater Monitoring Procedures

FIELD ACTIVITIES

On September 21, 2004, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the CRWQCB. During this groundwater monitoring event, five on-site wells (MW-1 to MW-5) and four off-site wells (MW-6 to MW-9) were monitored. Figure 2 shows the locations of the monitoring wells.

The depth to groundwater in each on-site monitoring well was measured from the top of the casing to the nearest 0.01 foot using an electric sounder. The Site was re-surveyed by Harrington Surveys Inc., of Walnut Creek, on October 11, 2004. The survey datum was based on California Coordinate System, Zone 3, NAVD 83. Top of the casing elevation data and the depth to groundwater in each monitoring well was used to calculate the groundwater elevation. The survey data is included in Appendix B.

Prior to collecting samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC).

In order to ensure that the final samples were in equilibrium with and representative of the surrounding groundwater, several samples were taken during the purging for field measurements of pH, temperature and EC. These parameters were measured using a Hanna pH, conductivity, and temperature meter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

The purging continued until these parameters stabilized or three casing volumes were purged. For sampling purposes, after purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses.

The groundwater samples collected from each monitoring well were transferred to four 40-mL VOA vials, which had been prepared with a hydrochloric acid preservative. The vials were sealed to prevent the development of air bubbles within the headspace area. After the groundwater samples were collected, they were placed in an ice chest and maintained at 4 °C. A chain of custody (COC) form was completed for all of the samples and was submitted along with the samples to the laboratory. Upon completion of this monitoring event, SOMA's field crew delivered the groundwater samples to Curtis & Tompkins, Ltd. laboratory in Berkeley, California.

LABORATORY ANALYSIS

Curtis & Tompkins, Ltd., a state certified laboratory, analyzed the groundwater samples for TPH-g, BTEX, MtBE, gasoline oxygenates, and lead scavengers. Samples for TPH-g measurement were prepared using EPA Method 5030B and analyzed using Method 8015B. Samples for BTEX measurements were prepared using EPA Method 5030B and analyzed using EPA Method 8021B. MtBE, gasoline oxygenates, and lead scavengers measurements were prepared using EPA Method 5030B and analyzed using EPA Method 8260B.

Appendix B

Table of Elevations & Coordinates on Monitoring Wells
Measured by Harrington Surveys, Inc., and
Field Measurements of Physical and Chemical Parameters
of Groundwater Samples

244-6601

Harrington Surveys Inc.

Land Surveying & Mapping

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

Soma Environmental Engineering
14, 2004
2680 Bishop Dr. # 203
San Ramon, Ca. 94583

Oct.

Attn: Elena Manzo
Job # 2445

Ref: 15101 Freedom Ave, San Leandro, Ca.

HORZONTAL CONTROL, NAD 88:

Survey based on California Coordinate System, Zone 3, NAD 83.

CHABOT "B', NORTH 2,087,731.02 EAST 6,094,039.23 sft. LAT. N37°43'02.71762" W122°07"00.46339", NAVD 88, ELEV. 134.957.

CHABOT "A", NORTH 2,088,584.99 EAST 6,093,351.39 sft. LAT. N37°43'11.04190" W122°07'09.20691", NAVD 88, ELEV. 492.08.

VERTICAL CONTROL, NAVD 88:

NGS 1974, STATION K 1256, NAVD 88 ELEV. 58.50.
PID # HT1871

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

EPOCH DATE 1998.5

OBSERVATION; EPOCH=180.

FIELD SURVEY: OCT. 11, 2004.

Ben Harrington
PLS 5132

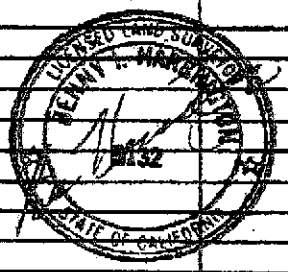
LICENSED LAND SURVEYOR
BENNY L. HARRINGTON
5132
EXP 6-30-07
STATE OF CALIFORNIA

SURVEY 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: OCT. 12, 2004

	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°42'25.61160"	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°42'27.55280	122°07'22.57930
67	2084670.41	6092307.68	69.79	FD BM FAIR580		
68	2084443.65	6092198.88	53.70	MW-4 PAV		
69	2084444.39	6092199.72	53.74	MW-4 PUNCH		
70	2084444.59	6092199.51	53.31	MW-4 NOTCH	37°42'29.91496"	122°07'22.64809"
71	2084399.10	6092145.43	54.37	MW-3 PAV		
72	2084399.78	6092145.28	54.33	MW-3 PUNCH		
73	2084400.15	6092145.27	53.91	MW-3 NOTCH	37°42'29.46636"	122°07'23.31339"
74	2084329.47	6092199.72	54.82	MW-1 PAV		
75	2084330.44	6092199.45	54.79	MW-1 PUNCH		
76	2084330.75	6092199.20	54.46	MW-1 NOTCH	37°42'28.78955"	122°07'22.62738"
77	2084367.59	6092256.38	52.88	MW-2 PAV		
78	2084368.15	6092256.14	52.92	MW-2 PUNCH		
79	2084368.53	6092256.06	52.41	MW-2 NOTCH	37°42'29.17277"	122°07'21.92804"
80	2084930.49	6091759.33	58.50	FD BM K1256	37°42'34.64279"	122°07'28.23011"



ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30 feet		San Leandro, CA
Top of Casing Elevation:	54.76 feet	**Date:**	21-Sep-04
Depth to Groundwater:	23.49 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	30.97 feet		Tony Perini
Water Column Height:	6.51 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:** _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
3:15 PM	started purging well			
3:20 PM	5.0	6.79	22.10	1150
3:23 ~~3:28~~ PM	9.0	6.60	20.80	1270
3:27 PM	12	6.60	20.40	1250
3:30 PM	Sampled			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30 feet		San Leandro, CA
Top of Casing Elevation:	52.41 feet	**Date:**	21-Sep-04
Depth to Groundwater:	21.71 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	30.70 feet		Tony Perini
Water Column Height:	8.29 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: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
2:45 PM	Started purging well			
2:48 PM	4.0	6.80	22.10	1453
2:52 PM	8.0	6.85	20.90	1423
2:56 PM	12	6.85	20.60	1413
3 PM	Sampled			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30 feet		San Leandro, CA
Top of Casing Elevation:	53.91 feet	**Date:**	21-Sep-04
Depth to Groundwater:	23.08 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	30.83 feet		Tony Perini
Water Column Height:	6.92 feet		
Purged Volume:	13 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☑ No ☐ Describe: slight petro odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
4:25 PM	started purging well			
4:29 PM	5.0	6.81	21.50	1290
4:32 PM	9	6.73	20.60	1240
4:35 PM	13	6.72	20.40	1270
4:40 PM	sampled			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-4	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30 feet		San Leandro, CA
Top of Casing Elevation:	53.31 feet	**Date:**	21-Sep-04
Depth to Groundwater:	22.76 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	30.55 feet		Tony Perini
Water Column Height:	7.24 feet		
Purged Volume:	16 gallons		

Purging Method:	**Bailer**	☐	**Pump**	■
Sampling Method:	**Bailer**	■	**Pump**	☐

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

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
3:35 PM	starts purging well			
3:40 PM	5.0	6.81	21.90	1570
3:45 PM	11	6.70	20.3	1530
3:50 PM	16	6.70	20.10	1540
SAMPLED 3:55 PM				

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-5	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30 feet		San Leandro, CA
Top of Casing Elevation:	50.53 feet	**Date:**	21-Sep-04
Depth to Groundwater:	20.15 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	30.38 feet		Tony Perini
Water Column Height:	9.85 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: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
4:02 PM	starts purging well			
4:05 PM	4	6.81	21.9	1230
4:08 PM	8	6.69	21.0	1230
4:13 PM	15	6.69	20.8	1240
4:15 PM	samples			

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-6	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	27.40 feet		San Leandro, CA
Top of Casing Elevation:	45.82 feet	**Date:**	21-Sep-04
Depth to Groundwater:	17.64 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	28.18 feet		Tony Perini
Water Column Height:	9.76 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:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
2:11 PM START	Purging			
2115 PM	4	6.98	23.2	1118
2:19 PM	8	6.83	21.4	1116
2121 PM	12	6.83	20.8	1115
SAMPLED 2125 PM				

notes:
Well survey still pending, therefore
Top of casing data could not be determined
NS: not surveyed
NC: not calculated

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-7	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	21 feet		San Leandro, CA
Top of Casing Elevation:	44.74 feet	**Date:**	21-Sep-04
Depth to Groundwater:	15.21 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	29.53 feet		Tony Perini
Water Column Height:	5.79 feet		
Purged Volume:	8 gallons		

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

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)
1:53 PM	Started purging well			
1:55 PM	2.5	6.96	22.70	1450
1:57 PM	5.0	6.78	20.30	1340
1:59 PM	8	6.73	19.80	1320
2:03 PM	Sampled			

notes:
NS: not surveyed NC: not calculated
survey DATA still pending

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-8	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	28.70 feet		San Leandro, CA
Top of Casing Elevation:	41.14 feet	**Date:**	21-Sep-04
Depth to Groundwater:	12.98 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	28.16 feet		Tony Perini
Water Column Height:	15.72 feet		
Purged Volume:	7.5 gallons		

Purging Method:	**Bailer**	☐	**Pump**	■
Sampling Method:	**Bailer**	■	**Pump**	☐

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

Field Measurements:

Time	Vol (gallons)	pH	Temp (° C)	E.C. (µs/cm)
1:35 PM	Started purging well			
1:37 PM	2.5	7.22	21.80	1500
1:39 PM	5.0	7.22	21.90	1446
1:41 PM	7.5	7.22	20.90	1437
1:45 PM	sampled			

notes:
ns: not surveyed nc: not calculated
survey data still pending

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-9	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	32.50 feet		San Leandro, CA
Top of Casing Elevation:	40.26 feet	**Date:**	21-Sep-04
Depth to Groundwater:	12.18 feet	**Sampler:**	Mehran Nowroozi
Groundwater Elevation:	28.08 feet		Tony Perini
Water Column Height:	20.32 feet		
Purged Volume:	6.0 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

Color: Yes ☐ No ☑ **Describe:** _____

Sheen: Yes ☐ No ☑ **Describe:** _____

Odor: Yes ☐ No ☑ **Describe:** _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µs/cm)	
1:18 PM	Started purging well				
1:20 PM	3.0	7.57	22.40	970	
1:22 PM	6.0	7.50	24.00	1000	DRIED
1:25 PM	Sampled				

notes:
NS: not surveyed NC: not calculated
survey data still pending

Appendix C

Laboratory Report and Chain of Custody Form

for the

Third Quarter 2004 Monitoring Event

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

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 07-OCT-04
Lab Job Number: 174813
Project ID: 2551
Location: 15101 Freedom Avenue

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

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

CHAIN OF CUSTODY

Page 1 of 1

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

C&T LOGIN # 174813

Sampler: Tony Perini / Mehran Nourooz

Project No: 2551

Report To: Tony Perini

Project Name: 15101 Freedom Ave.,San Leandro

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-244-6600

Fax: 925-244-6601

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPHg 8015	Analyses: BTEX 8021 GC	Analyses: Gasoline Oxygenates & MtBE 8260B
-1	MW-1	9/21/04 3:30 PM		✓		4-VOAs	✓			✓	✓	✓	✓
-2	MW-2	3 PM		↓		↓	↓			↓	↓	↓	↓
-3	MW-3	4:40 PM		↓		↓	↓			↓	↓	↓	↓
-4	MW-4	3:55 PM		↓		↓	↓			↓	↓	↓	↓
-5	MW-5	4:15 PM		↓		↓	↓			↓	↓	↓	↓
-6	MW-6	2:25 PM		↓		↓	↓			↓	↓	↓	↓
-7	MW-7	2:03 PM		↓		↓	↓			↓	↓	↓	↓
-8	MW-8	1:45 PM		↓		↓	↓			↓	↓	↓	↓
-9	MW-9	1:25 PM		↓		↓	↓			↓	↓	↓	↓

Notes: EDF OUTPUT REQUIRED

on ice/intact

RELINQUISHED BY:	RECEIVED BY:
Tony Perini 9/21/04 Tony Perini 5:40PM DATE/TIME	9/21/04 5:40p.m. DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551		
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-1	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-001	Analyzed:	09/22/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	9,300	100	EPA 8015B
Benzene	580	1.0	EPA 8021B
Toluene	9.3	1.0	EPA 8021B
Ethylbenzene	690	1.0	EPA 8021B
m,p-Xylenes	590	1.0	EPA 8021B
o-Xylene	93	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	70-141	EPA 8015B
Bromofluorobenzene (FID)	100	80-143	EPA 8015B
Trifluorotoluene (PID)	69	59-133	EPA 8021B
Bromofluorobenzene (PID)	94	76-128	EPA 8021B

Field ID:	MW-2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-002	Analyzed:	09/22/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	370	50	EPA 8015B
Benzene	0.76 C	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	25	0.50	EPA 8021B
m,p-Xylenes	16	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	70-141	EPA 8015B
Bromofluorobenzene (FID)	101	80-143	EPA 8015B
Trifluorotoluene (PID)	88	59-133	EPA 8021B
Bromofluorobenzene (PID)	99	76-128	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551		
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-3	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-003	Analyzed:	09/22/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	42,000	1,000	EPA 8015B
Benzene	4,900	10	EPA 8021B
Toluene	890	10	EPA 8021B
Ethylbenzene	2,200	10	EPA 8021B
m,p-Xylenes	6,100	10	EPA 8021B
o-Xylene	2,600	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	70-141	EPA 8015B
Bromofluorobenzene (FID)	93	80-143	EPA 8015B
Trifluorotoluene (PID)	101	59-133	EPA 8021B
Bromofluorobenzene (PID)	91	76-128	EPA 8021B

Field ID:	MW-4	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-004	Analyzed:	09/22/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	5,200	100	EPA 8015B
Benzene	290	1.0	EPA 8021B
Toluene	12	1.0	EPA 8021B
Ethylbenzene	370	1.0	EPA 8021B
m,p-Xylenes	490	1.0	EPA 8021B
o-Xylene	110	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	118	70-141	EPA 8015B
Bromofluorobenzene (FID)	102	80-143	EPA 8015B
Trifluorotoluene (PID)	86	59-133	EPA 8021B
Bromofluorobenzene (PID)	95	76-128	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551		
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-5	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-005	Analyzed:	09/22/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	10,000	500	EPA 8015B
Benzene	980	5.0	EPA 8021B
Toluene	71	5.0	EPA 8021B
Ethylbenzene	560	5.0	EPA 8021B
m,p-Xylenes	640	5.0	EPA 8021B
o-Xylene	130	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	124	70-141	EPA 8015B
Bromofluorobenzene (FID)	91	80-143	EPA 8015B
Trifluorotoluene (PID)	108	59-133	EPA 8021B
Bromofluorobenzene (PID)	94	76-128	EPA 8021B

Field ID:	MW-6	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	94865
Lab ID:	174813-006	Analyzed:	09/23/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	34,000	1,000	EPA 8015B
Benzene	150	10	EPA 8021B
Toluene	130	10	EPA 8021B
Ethylbenzene	2,200	10	EPA 8021B
m,p-Xylenes	6,400	10	EPA 8021B
o-Xylene	1,700	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	70-141	EPA 8015B
Bromofluorobenzene (FID)	97	80-143	EPA 8015B
Trifluorotoluene (PID)	93	59-133	EPA 8021B
Bromofluorobenzene (PID)	95	76-128	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551		
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-007	Analyzed:	09/22/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	2,900	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	52	0.50	EPA 8021B
m,p-Xylenes	61	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	85	70-141	EPA 8015B
Bromofluorobenzene (FID)	108	80-143	EPA 8015B
Trifluorotoluene (PID)	65	59-133	EPA 8021B
Bromofluorobenzene (PID)	104	76-128	EPA 8021B

Field ID:	MW-8	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-008	Analyzed:	09/22/04

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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	70-141	EPA 8015B
Bromofluorobenzene (FID)	94	80-143	EPA 8015B
Trifluorotoluene (PID)	84	59-133	EPA 8021B
Bromofluorobenzene (PID)	94	76-128	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551		
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-9	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94814
Lab ID:	174813-009	Analyzed:	09/22/04

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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	70-141	EPA 8015B
Bromofluorobenzene (FID)	106	80-143	EPA 8015B
Trifluorotoluene (PID)	86	59-133	EPA 8021B
Bromofluorobenzene (PID)	101	76-128	EPA 8021B

Type:	BLANK	Batch#:	94814
Lab ID:	QC265527	Analyzed:	09/22/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	84	70-141	EPA 8015B
Bromofluorobenzene (FID)	84	80-143	EPA 8015B
Trifluorotoluene (PID)	81	59-133	EPA 8021B
Bromofluorobenzene (PID)	84	76-128	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551		
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Type:	BLANK	Batch#:	94865
Lab ID:	QC265703	Analyzed:	09/23/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	83	70-141	EPA 8015B
Bromofluorobenzene (FID)	91	80-143	EPA 8015B
Trifluorotoluene (PID)	84	59-133	EPA 8021B
Bromofluorobenzene (PID)	91	76-128	EPA 8021B

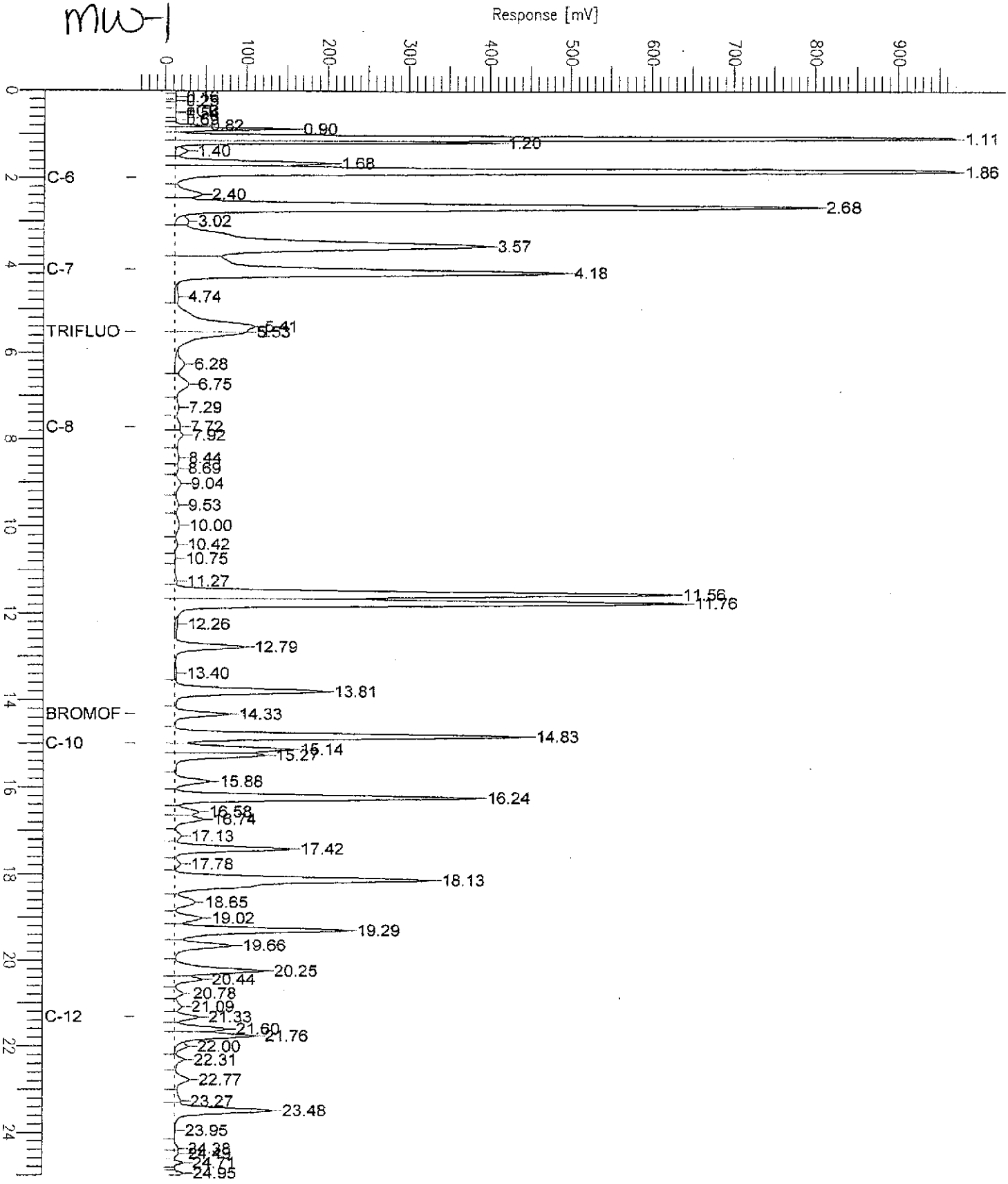
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 174813-001,94814
FileName : G:\GC05\DATA\266G009.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -35 mV

Sample #: c1.0 Page 1 of 1
Date : 9/23/04 08:08 AM
Time of Injection: 9/22/04 02:21 PM
Low Point : -35.00 mV High Point : 969.57 mV
Plot Scale: 1004.6 mV

MW-1

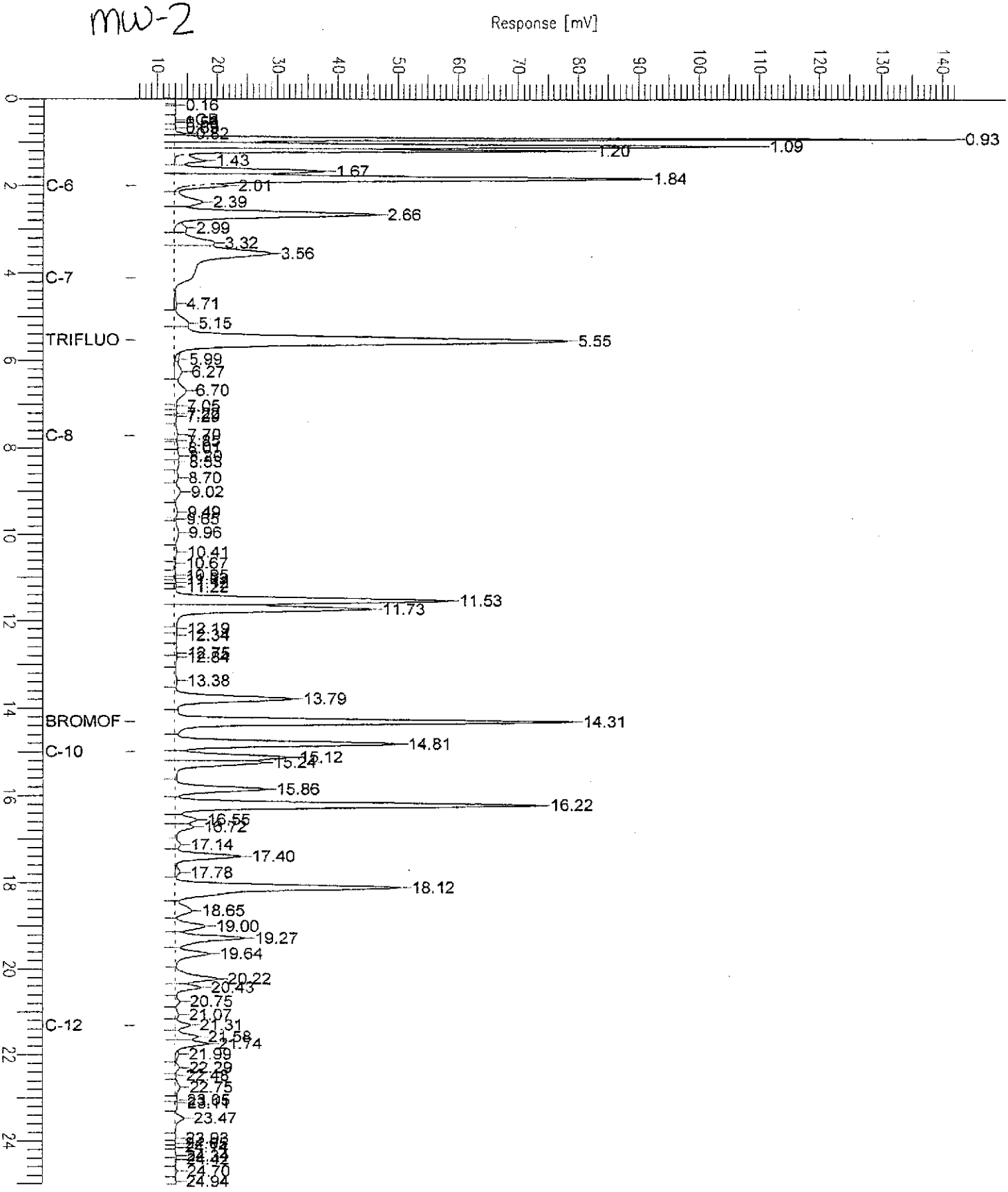


Chromatogram

Sample Name : 174813-002,94814
FileName : G:\GC05\DATA\266G017.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: c1.0 Page 1 of 1
Date : 9/22/04 08:50 PM
Time of Injection: 9/22/04 08:24 PM
Low Point : 6.45 mV High Point : 142.23 mV
Plot Scale: 135.8 mV

MW-2

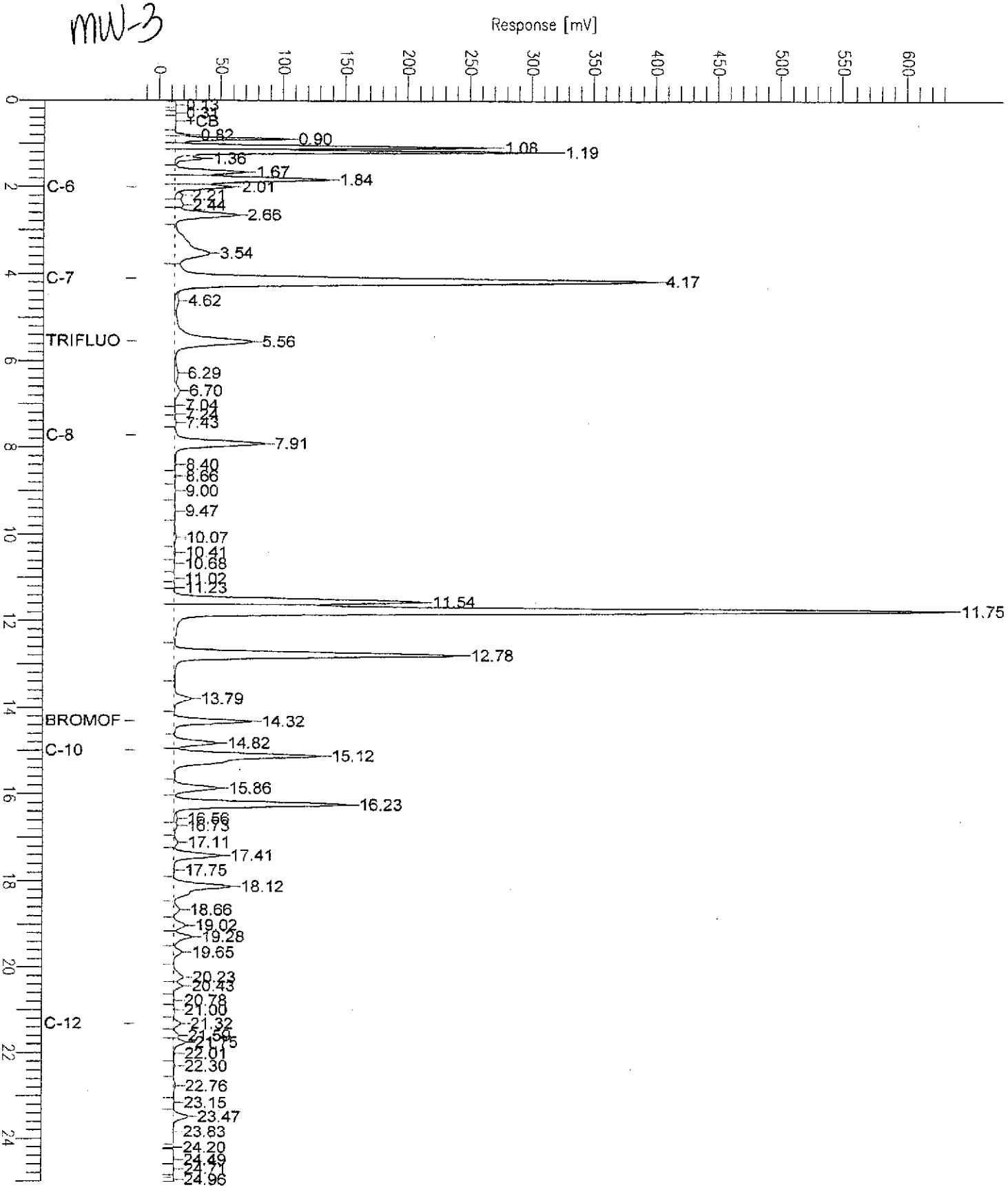


Chromatogram

Sample Name : 174813-003,94814
FileName : g:\gc05\data\266g007.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -18 mV

Sample #: c1.0 Page 1 of 1
Date : 9/22/04 01:20 PM
Time of Injection: 9/22/04 12:50 PM
Low Point : -17.90 mV High Point : 636.68 mV
Plot Scale: 654.6 mV

MW-3

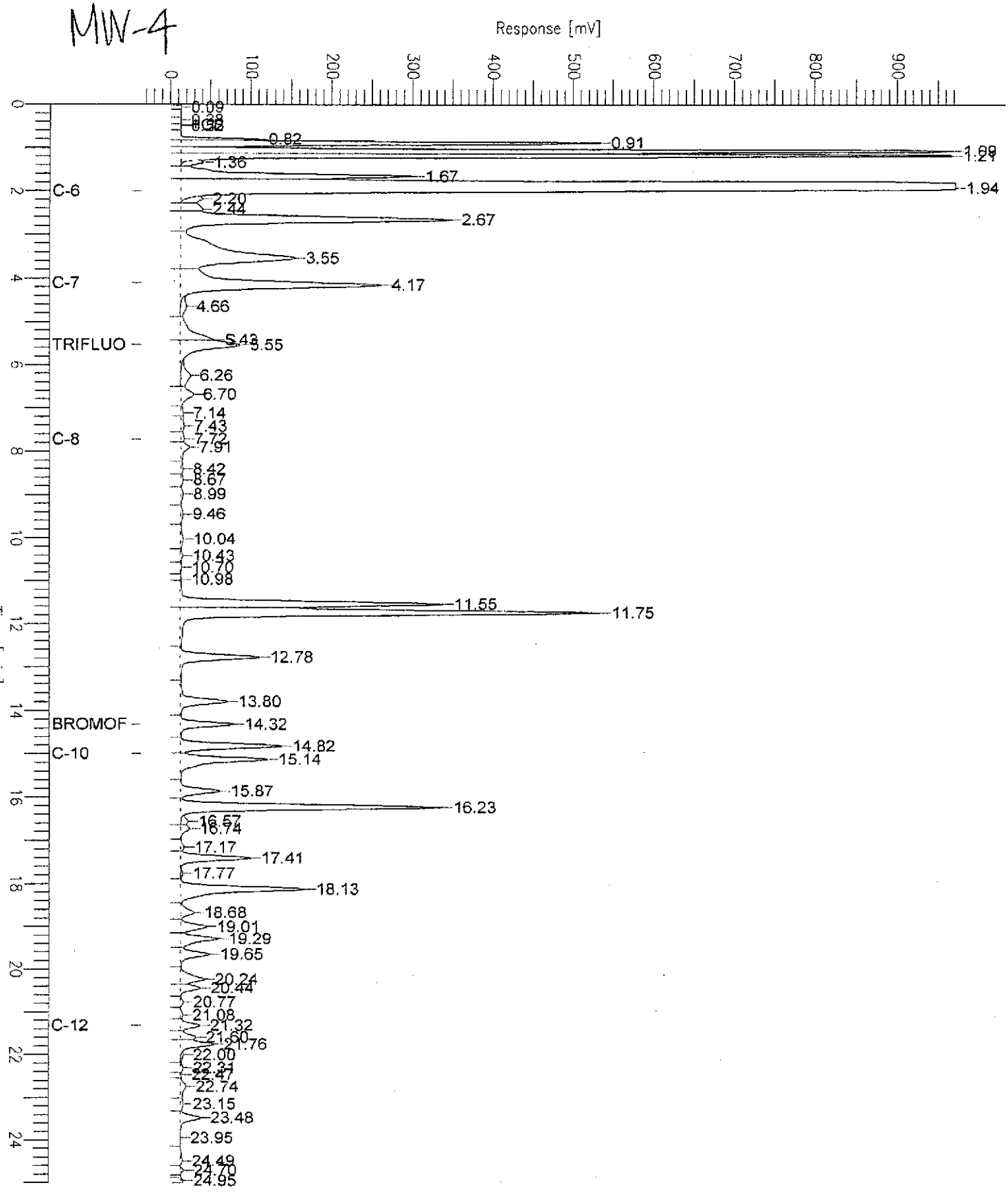


Chromatogram

Sample Name : 174813-004,94814
FileName : G:\GC05\DATA\266G010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -35 mV

Sample #: c1.0 Page 1 of 1
Date : 9/23/04 08:08 AM
Time of Injection: 9/22/04 02:53 PM
Low Point : -34.85 mV High Point : 972.79 mV
Plot Scale: 1007.6 mV

MW-4

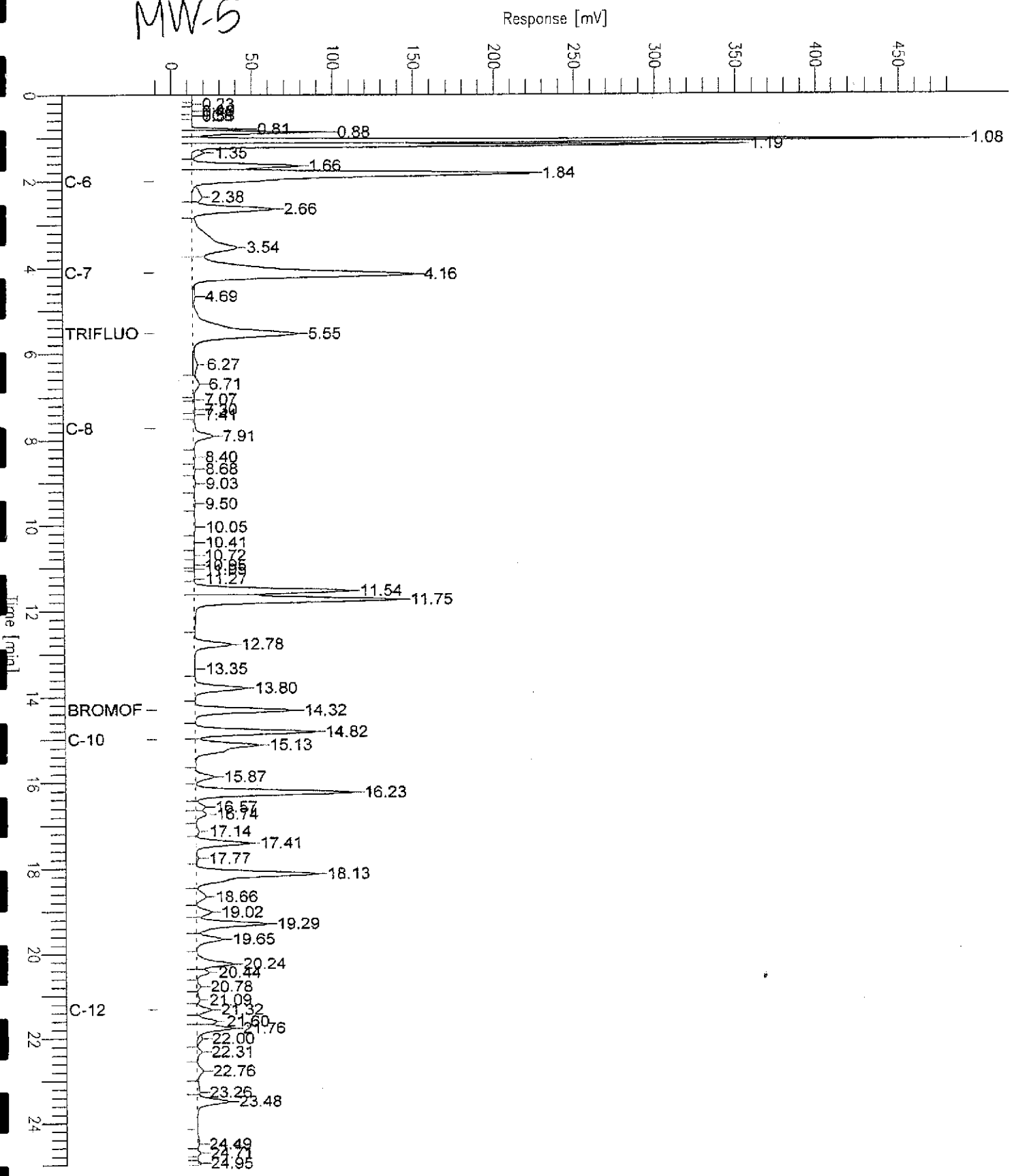


Chromatogram

Sample Name : 174813-005,94814
FileName : G:\GC05\DATA\266G008.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -11 mV

Sample #: c1.0 Page 1 of 1
Date : 9/22/04 02:00 PM
Time of Injection: 9/22/04 01:35 PM
Low Point : -10.63 mV High Point : 488.41 mV
Plot Scale: 499.0 mV

MW-5

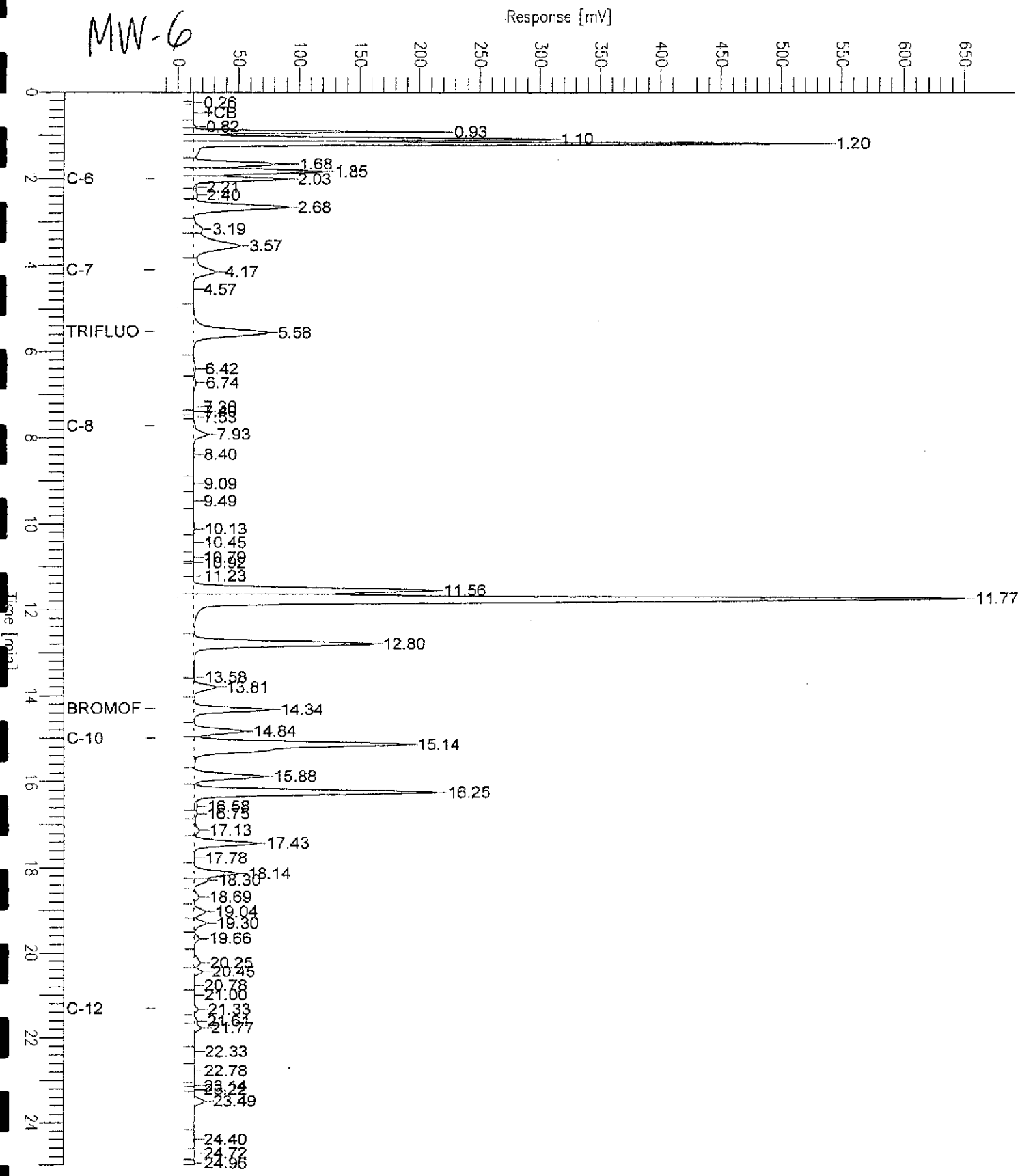


Chromatogram

Sample Name : 174813-006,94865
FileName : G:\GC05\DATA\267G005.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -19 mV

Sample #: d1.0 Page 1 of 1
Date : 9/23/04 03:12 PM
Time of Injection: 9/23/04 02:47 PM
Low Point : -19.03 mV High Point : 650.48 mV
Plot Scale: 669.5 mV

MW-6

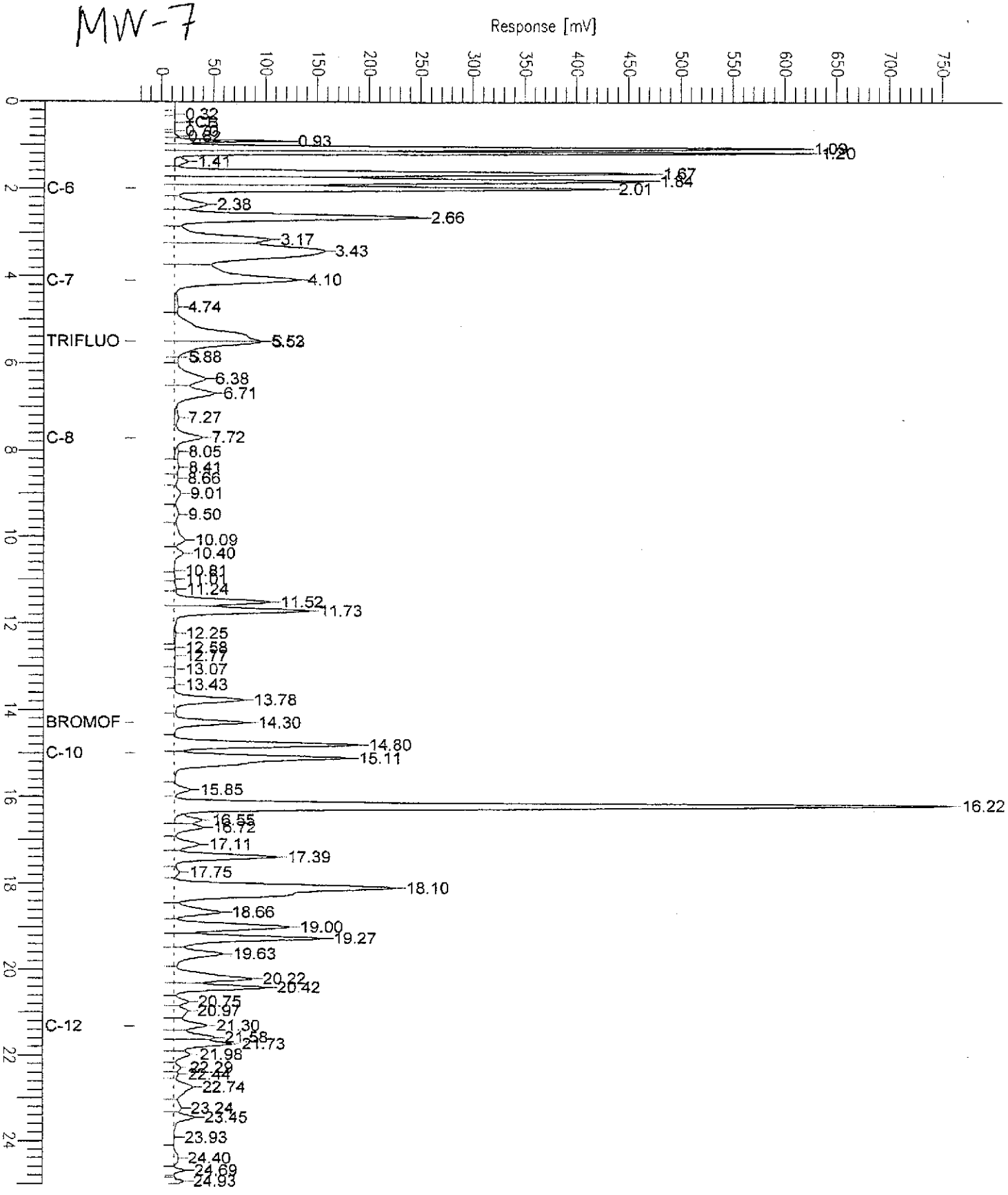


Chromatogram

Sample Name : 174813-007,94814
FileName : G:\GC05\DATA\266G018.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -24 mV

Sample #: c1.0 Page 1 of 1
Date : 9/23/04 08:08 AM
Time of Injection: 9/22/04 08:56 PM
Low Point : -24.42 mV High Point : 759.95 mV
Plot Scale: 784.4 mV

MW-7

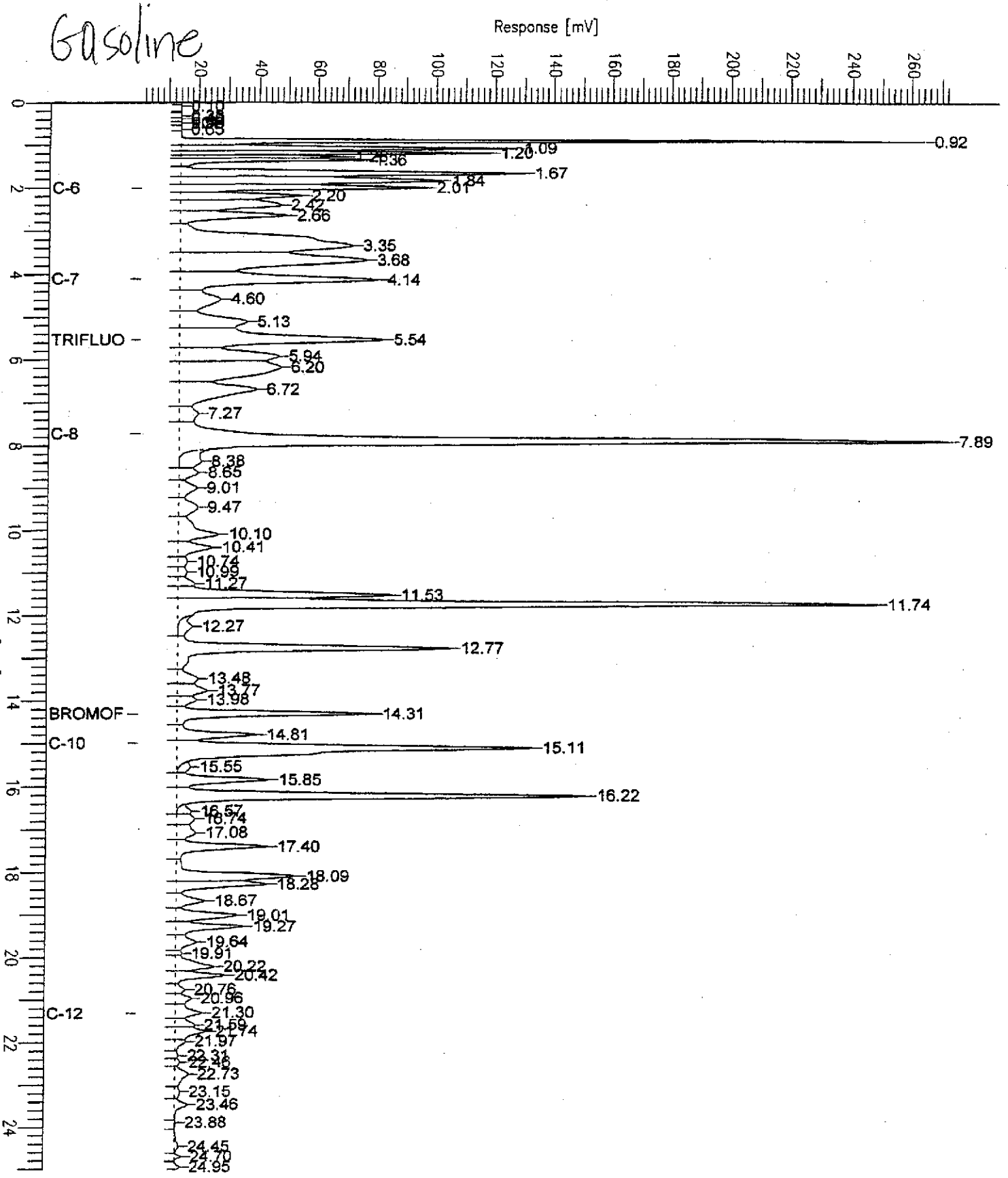


Chromatogram

Sample Name : ccv/lcs,qc265529,94814,04ws1636,5/5000
FileName : G:\GC05\DATA\266G003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 1 mV

Sample #: Page 1 of 1
Date : 9/22/04 10:03 AM
Time of Injection: 9/22/04 09:38 AM
Low Point : 0.85 mV High Point : 272.77 mV
Plot Scale: 271.9 mV

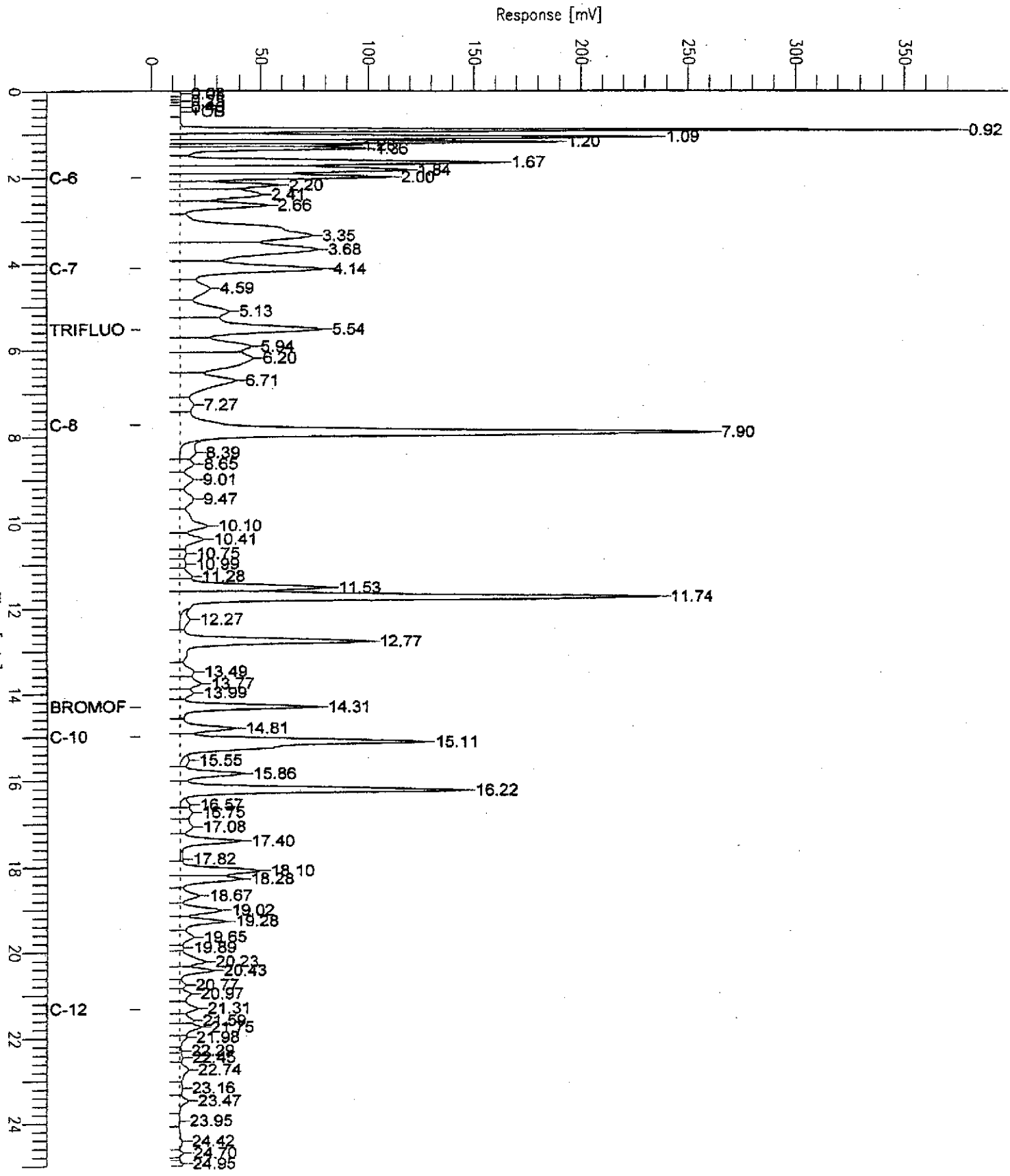
Gasoline



Chromatogram

Sample Name : ccv/lcs,qc265705,94865,04ws1636,5/5000
FileName : G:\GC05\DATA\267G003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -5 mV

Sample #: Page 1 of 1
Date : 9/23/04 11:01 AM
Time of Injection: 9/23/04 10:36 AM
Low Point : -4.65 mV High Point : 374.97 mV
Plot Scale: 379.6 mV



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC265528	Batch#:	94814
Matrix:	Water	Analyzed:	09/22/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	19.93	100	80-120
Toluene	20.00	20.68	103	80-120
Ethylbenzene	20.00	19.77	99	80-120
m,p-Xylenes	20.00	19.22	96	80-120
o-Xylene	20.00	20.87	104	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	85	59-133
Bromofluorobenzene (PID)	89	76-128

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC265529	Batch#:	94814
Matrix:	Water	Analyzed:	09/22/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,897	95	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	124	70-141
Bromofluorobenzene (FID)	105	80-143

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC265704	Batch#:	94865
Matrix:	Water	Analyzed:	09/23/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	19.97	100	80-120
Toluene	20.00	21.04	105	80-120
Ethylbenzene	20.00	21.16	106	80-120
m,p-Xylenes	20.00	19.36	97	80-120
o-Xylene	20.00	21.82	109	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	83	59-133
Bromofluorobenzene (PID)	88	76-128

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC265705	Batch#:	94865
Matrix:	Water	Analyzed:	09/23/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,797	90	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	70-141
Bromofluorobenzene (FID)	101	80-143

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8015B
Field ID:	MW-2	Batch#:	94814
MSS Lab ID:	174813-002	Sampled:	09/21/04
Matrix:	Water	Received:	09/22/04
Units:	ug/L	Analyzed:	09/23/04
Diln Fac:	1.000		

Type: MS Lab ID: QC265627

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	373.3	2,000	2,140	88	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	126	70-141
Bromofluorobenzene (FID)	104	80-143

Type: MSD Lab ID: QC265628

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,114	87	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	125	70-141
Bromofluorobenzene (FID)	104	80-143

RPD= Relative Percent Difference

S.0

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	94865
MSS Lab ID:	174860-005	Sampled:	09/22/04
Matrix:	Water	Received:	09/23/04
Units:	ug/L	Analyzed:	09/23/04
Diln Fac:	1.000		

Type: MS Lab ID: QC265740

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	36.68	2,000	1,934	95	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	70-141
Bromofluorobenzene (FID)	111	80-143

Type: MSD Lab ID: QC265741

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,901	93	80-120	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	70-141
Bromofluorobenzene (FID)	109	80-143

RPD= Relative Percent Difference

8.0

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94817
Lab ID:	174813-001	Analyzed:	09/22/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	4.6	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	109	80-120
Toluene-d8	104	80-120
Bromofluorobenzene	97	80-122

Field ID:	MW-2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94817
Lab ID:	174813-002	Analyzed:	09/22/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	0.5	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	103	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-3	Diln Fac:	14.29
Type:	SAMPLE	Batch#:	94817
Lab ID:	174813-003	Analyzed:	09/22/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	140
MTBE	480	7.1
Isopropyl Ether (DIPE)	ND	7.1
Ethyl tert-Butyl Ether (ETBE)	ND	7.1
Methyl tert-Amyl Ether (TAME)	110	7.1
1,2-Dichloroethane	ND	7.1
1,2-Dibromoethane	ND	7.1

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	92	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-122

Field ID:	MW-4	Diln Fac:	100.0
Type:	SAMPLE	Batch#:	94817
Lab ID:	174813-004	Analyzed:	09/22/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	1,300	1,000
MTBE	7,300	50
Isopropyl Ether (DIPE)	ND	50
Ethyl tert-Butyl Ether (ETBE)	ND	50
Methyl tert-Amyl Ether (TAME)	ND	50
1,2-Dichloroethane	ND	50
1,2-Dibromoethane	ND	50

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	94	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-5	Diln Fac:	12.50
Type:	SAMPLE	Batch#:	94817
Lab ID:	174813-005	Analyzed:	09/22/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	130
MTBE	1,200	6.3
Isopropyl Ether (DIPE)	ND	6.3
Ethyl tert-Butyl Ether (ETBE)	ND	6.3
Methyl tert-Amyl Ether (TAME)	550	6.3
1,2-Dichloroethane	ND	6.3
1,2-Dibromoethane	ND	6.3

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	94	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-122

Field ID:	MW-6	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94817
Lab ID:	174813-006	Analyzed:	09/22/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	0.6	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	99	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94867
Lab ID:	174813-007	Analyzed:	09/23/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	8.1	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	1.5	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	110	80-120
Toluene-d8	105	80-120
Bromofluorobenzene	96	80-122

Field ID:	MW-8	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94867
Lab ID:	174813-008	Analyzed:	09/23/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	109	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Field ID:	MW-9	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	94867
Lab ID:	174813-009	Analyzed:	09/23/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	3.2	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	111	80-120
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-122

Type:	BLANK	Batch#:	94817
Lab ID:	QC265538	Analyzed:	09/22/04
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	111	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	09/21/04
Units:	ug/L	Received:	09/22/04

Type:	BLANK	Batch#:	94867
Lab ID:	QC265710	Analyzed:	09/23/04
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	104	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	94817
Units:	ug/L	Analyzed:	09/22/04
Diln Fac:	1.000		

Type: BS Lab ID: QC265536

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	130.1	104	74-135
MTBE	50.00	53.50	107	74-128
Isopropyl Ether (DIPE)	25.00	25.57	102	80-120
Ethyl tert-Butyl Ether (ETBE)	25.00	24.62	98	80-120
Methyl tert-Amyl Ether (TAME)	25.00	23.31	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	111	80-120
Toluene-d8	104	80-120
Bromofluorobenzene	98	80-122

Type: BSD Lab ID: QC265537

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	110.8	89	74-135	16	25
MTBE	50.00	51.62	103	74-128	4	20
Isopropyl Ether (DIPE)	25.00	25.16	101	80-120	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.37	97	80-120	1	20
Methyl tert-Amyl Ether (TAME)	25.00	23.05	92	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	108	80-120
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	174813	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	94867
Units:	ug/L	Analyzed:	09/23/04
Diln Fac:	1.000		

Type: BS Lab ID: QC265708

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	134.2	107	74-135
MTBE	50.00	49.88	100	74-128
Isopropyl Ether (DIPE)	25.00	23.82	95	80-120
Ethyl tert-Butyl Ether (ETBE)	25.00	23.71	95	80-120
Methyl tert-Amyl Ether (TAME)	25.00	22.80	91	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	102	80-120
Bromofluorobenzene	98	80-122

Type: BSD Lab ID: QC265709

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	143.0	114	74-135	6	25
MTBE	50.00	50.69	101	74-128	2	20
Isopropyl Ether (DIPE)	25.00	23.39	94	80-120	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.56	94	80-120	1	20
Methyl tert-Amyl Ether (TAME)	25.00	23.04	92	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-122

RPD= Relative Percent Difference

11.0