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February 17, 2004

Mr. Amir Gholami
Alameda County
Department of Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: **StID#3337**
Site Address: 3609 International Blvd., Oakland, California

Dear Mr. Gholami:

Enclosed for your review is a copy of SOMA's "First Quarter 2004 Groundwater Monitoring and Remediation System Operation 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

REGISTERED PROFESSIONAL ENGINEER
MANSOUR SEPEHR
No. C042928
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

Enclosure

cc: Mr. Abolghassem Razi w/enclosure
Tony's Express Auto Service

Mr. Vince Tong w/enclosure
Traction International

Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Abolghassem Razi, the property owner of 3609 International Boulevard, Oakland, California, to comply with the Alameda County Department of Environmental Health Service's requirements for the First 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. Abolghassem Razi, the owner of Tony's Express Auto Service, which is located at 3609 International Boulevard at the intersection of 36th Avenue in Oakland, California (the "Site"), as shown in Figure 1.

The Site is located in an area where the surrounding properties are primarily commercial businesses and residential housing. The Site currently houses a gasoline service station and convenience store. During Third Quarter 2002, the station was remodeled and several hydraulic hoists were removed. The station no longer has an auto repair facility. Figure 2 illustrates the locations of the main service station, dispenser islands, underground storage tanks (USTs), the on-site and off-site groundwater monitoring wells, and neighboring properties.

This report summarizes the results of the First Quarter 2004 groundwater monitoring event, which was conducted at the Site on January 22, 2004. Included in this report are the bioattenuation parameters measured in the field for each groundwater sample. Also included in this report are the results of the laboratory analysis on the groundwater samples, which were analyzed for:

- Total petroleum hydrocarbons as gasoline (TPH-g)
- Benzene, toluene, ethylbenzene, total xylenes (collectively referred to as BTEX)
- Methyl tertiary Butyl Ether (MtBE)

These activities were performed in accordance with the general guidelines of the Regional Water Quality Control Board (RWQCB) and the Alameda County Environmental Health Services (ACEHS).

This report also describes the operation of the groundwater extraction system installed by SOMA in December 1999, as well as the operation of the vapor

extraction system, which was installed by SOMA in July 2000. The locations of the groundwater extraction system and the vapor extraction system are displayed in Figure 2.

1.1 Background

In 1992, Soil Tech Engineering, Inc. (STE) conducted an initial environmental investigation to determine whether or not the soil near the product lines and USTs had been impacted by petroleum hydrocarbons. In July 1993, STE removed one single-walled 10,000-gallon gasoline tank and one single-walled 6,000-gallon gasoline tank along with a 550-gallon waste oil tank from the Site. Three double-walled USTs replaced these tanks. Currently, there is one 10,000-gallon double-walled gasoline tank and two 6,000-gallon double-walled gasoline tanks beneath the Site. The locations of the USTs are shown in Figure 2.

In December 1997, Mr. Razi retained Western Geo-Engineers (WEGE) to conduct additional investigations and perform groundwater monitoring on a quarterly basis. The results of the WEGE groundwater monitoring events indicated elevated levels of petroleum hydrocarbons and MtBE in the groundwater.

In April 1999, Mr. Razi retained SOMA to conduct groundwater monitoring, risk-based corrective action (RBCA), a corrective action plan (CAP), as well as soil and groundwater remediation at the Site. The results of the RBCA study indicated that the Site is a high-risk groundwater site; therefore, the soil and groundwater in on and off-site areas warranted remedial actions. The source of the petroleum hydrocarbons in the groundwater was believed to have been the former USTs, which were used to store gasoline at the Site. The results of the CAP study indicated that the installation of a French drain combined with a vapor extraction system would be the most cost effective alternative for the Site's remediation.

In late August 1999, SOMA installed a French drain and groundwater treatment system to prevent further migration of the chemically impacted groundwater. This treatment system has been in operation since early December 1999. In July 2000, following approval from the ACEHS, SOMA installed a vapor extraction system as recommended in our CAP document, dated July 1, 1999.

In January 2002, Environmental Fabric removed old product dispensers and installed new ones in the fuel islands.

On July 25, 2003, SOMA installed an additional on-site extraction pump in the western French drain riser. The extraction pump was installed to create a capture zone in the region around the USTs and to contain off-site migration in the southwestern corner of the Site.

2.0 Field Activities

On January 22, 2004, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the RWQCB, San Francisco Bay Region. During this groundwater monitoring event, a total of eight on-site monitoring wells (MW-1 to MW-8), two off-site monitoring wells (MW-10 and MW-12), and three on-site French drain risers were measured for depth to groundwater.

The depth to groundwater at each monitoring well and riser was measured from the top of the casing to the nearest 0.01 foot using an electric sounder. The top of the casing elevation data and the depth to groundwater at each monitoring well and riser were used to calculate the groundwater elevation.

Kier and Wright Civil Engineers Surveyors, Inc. surveyed the wells and risers on August 9, 2002. At the time of the survey, monitoring well MW-11 could not be accessed due to obstacles preventing the proper use of surveying equipment, therefore, this well was not surveyed. The top of casing elevations were based

on the survey data measured at this time. The elevation data was based on an assumed datum of 14.20 NAVD88. The new survey was conducted to comply with an Electronically Deliverable Format (EDF) request made by the State Water Resources Control Board (SWRCB) Database. The survey data measured by Kier and Wright is presented in Appendix A.

Prior to the collection of samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC). During the purging activities, in order to obtain accurate measurements of groundwater parameters and especially to avoid the intrusion of oxygen from ambient air into the groundwater samples, field measurements were conducted in-situ (i.e., down-hole inside each monitoring well). The pH, temperature, electric conductivity (EC), dissolved oxygen (DO), turbidity, and Oxygen Reduction Potential (ORP) were measured in-situ using a Horiba, Model U-22 multi-parameter instrument. The Horiba, Model U-22 was calibrated at the Site using standard solutions and procedures provided by the manufacturer. Detailed field measurements are shown in Appendix A.

The purging continued until the parameters for pH, temperature, EC, DO, turbidity, and redox stabilized, or three casing volumes were purged. The groundwater samples were also tested on-site for ferrous iron (Fe^{+2}), and nitrate (NO_3^-), and sulfate (SO_4^{-2}) concentrations once stabilization occurred. Ferrous iron, nitrate, and sulfate were measured colorimetrically using the Hach Colorimeter Model 890.

For sampling purposes, after purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses. The groundwater sample was transferred into three 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent development of air bubbles within the headspace. After the groundwater samples were collected, they were placed on ice and maintained at 4°C in a cooler. A chain of custody (COC) form was written and placed along with the samples in

the cooler. On January 22, 2004, SOMA's field crew delivered the groundwater samples to Curtis & Tompkins, Ltd. Laboratory in Berkeley, California.

3.0 Laboratory Analysis

Curtis & Tompkins, Ltd., a state certified laboratory, analyzed the groundwater samples for TPH-g, BTEX and MtBE. TPH-g was prepared using EPA Method 5030B and measured using EPA Method 8015B. EPA Method 8021B was used to measure BTEX and MtBE concentrations. Detections of MtBE were confirmed using EPA Method 8260B.

4.0 Results

The following sections provide the results of the field measurements and laboratory analyses for the January 22, 2004 groundwater monitoring event.

4.1 Field Measurements

Table 1 presents the calculated groundwater elevations at each monitoring well and riser. The calculated groundwater elevation data was used to evaluate the impact of the French drain and determine the extent of the groundwater extraction capture zone.

As shown in Table 1, the groundwater elevations, for the monitoring wells, ranged from 27.28 feet in monitoring well MW-12 to 31.56 feet in monitoring well MW-5. The groundwater elevations for the center, east and west risers were 25.61 feet, 26.79 feet and 25.58 feet, respectively. In general, the groundwater elevations in all of the monitoring wells and French drain risers increased, with the exception of the western French drain riser. Local recharge rates at each well, as well as, seasonal fluctuations determine the variations in the groundwater elevations. Due to the rain encountered this quarter, the watertable ascended closer to the ground surface, which caused the groundwater elevations to increase.

Figure 3 displays the groundwater elevation contour map, as measured on January 22, 2004. Throughout the Site, the groundwater flows towards the French drain, at an approximate gradient of 0.071 feet/feet. The lowest site-wide groundwater elevation was measured in the western French drain riser. The calculated groundwater elevation data was also used to evaluate the impact of the French drain operation. Based on the groundwater elevation data, it appears that the French drain is providing excellent hydraulic control in preventing the contaminants from migrating further off-site.

The field notes for the physical, chemical and biodegradation parameters measured during this monitoring event are included in Appendix A.

4.2 Laboratory Analysis

Table 1 presents the results of the laboratory analyses on the groundwater samples collected during the First Quarter 2004 monitoring event. In general, the most impacted monitoring wells this quarter were MW-1 and MW-3, which are in the vicinity of the USTs, and MW-6, which is near the soil vapor extraction (SVE) system.

As shown in Table 1, TPH-g was detected in all of the groundwater samples collected this quarter. Detectable TPH-g levels ranged from 160 µg/L in monitoring well MW-5 to 45,000 µg/L in monitoring well MW-3.

Figure 4 displays the contour map of the TPH-g concentrations in the groundwater collected during the First Quarter 2004 monitoring event. As shown in Figure 4, the highest TPH-g concentrations were detected in the vicinity of the USTs in wells MW-1 and MW-3, and MW-6, which is near the SVE system.

As shown in Table 1, all BTEX analytes were below the laboratory reporting limit in well MW-5, with the exception of a trace concentration of ethylbenzene. The

ethylbenzene concentration in well MW-5 may have been misrepresentative due to matrix interferences during analytical testing. The laboratory designated this interference by a "C" flag; see the laboratory report in Appendix B for further clarification. In well MW-7, all BTEX analytes were below the laboratory reporting limit, with the exception of toluene, which was also "C" flagged.

As shown in Table 1, detectable benzene concentrations ranged from 7.2 µg/L in well MW-2 to 3,100 µg/L in well MW-1. Toluene concentrations ranged from 1.4 µg/L in well MW-7 to 1,600 µg/L in well MW-1. Ethylbenzene concentrations ranged from 0.55 µg/L in well MW-5 to 1,500 µg/L in wells MW-3 and MW-6. Total xylene concentrations ranged from 5 µg/L in well MW-12 to 5,700 µg/L in well MW-3. The toluene concentration in well MW-7, and the ethylbenzene concentration in well MW-5, were "C" flagged, see the laboratory report in Appendix B for further clarification.

Figure 5 displays the contour map of benzene concentrations in the groundwater collected during the First Quarter 2004 monitoring event. As shown in Figure 5, the highest benzene concentrations were found in MW-1 and MW-3, which are in the vicinity of the USTs, and well MW-6, which is in the vicinity of vapor extraction system.

MtBE was below the laboratory reporting limit in monitoring wells MW-2, MW-4 to MW-7. Detectable MtBE concentrations, when using EPA Method 8260B, ranged from 72 µg/L in well MW-12 to 8,500 µg/L in well MW-1.

Figure 6 displays the contour map of MtBE concentrations in the groundwater during the First Quarter 2004 monitoring event, as analyzed using EPA Method 8260B. The elevated MtBE concentration found in MW-1 may be attributed to the proximity and down-gradient location of MW-1 to the USTs. In general, with the exception of wells MW-1 and MW-3, MtBE was either at low concentrations or below the laboratory reporting limit throughout the Site.

The laboratory report and COC form for the First Quarter 2004 monitoring event are included in Appendix B.

4.3 Historical Analytical Results

Table 1 shows the historical groundwater analytical data. The following concentration trends have been observed since the previous monitoring event.

- TPH-g decreased significantly in well MW-1. TPH-g increased in wells MW-2, MW-3, MW-4, MW-8, and MW-10. TPH-g decreased in wells MW-5, MW-6, MW-7, and MW-12.
- In well MW-1, all BTEX analytes decreased, total xylenes decreased significantly. In wells MW-2, MW-4, and MW-10, all BTEX analytes slightly increased. In well MW-3, all BTEX analytes decreased, with the exception of total xylenes. In well MW-5, all BTEX analytes remained below the laboratory reporting limit, with the exception of ethylbenzene, however this analytical result was "C" flagged (see the laboratory report in Appendix B).
- In well MW-6, benzene remained constant, however, all other BTEX analytes decreased. In well MW-7, all BTEX analytes remained below the laboratory reporting limit, with the exception of toluene, which slightly increased, however, the result was "C" flagged. In well MW-8, all BTEX analytes decreased. In well MW-12, all BTEX analytes increased, with the exception of benzene, which decreased.
- MtBE decreased in wells MW-1, MW-3, MW-5, and MW-7. MtBE increased slightly in MW-8 and MW-12. MtBE remained constant in well MW-10. MtBE has remained below the laboratory reporting limit in MW-2, MW-4, and MW-6.

5.0 Groundwater Treatment System Operation

The treatment system began operating on December 9, 1999. Since that time, 2,165,220 gallons of groundwater has been treated and discharged, under the existing discharge permit (as of January 27, 2004), into the East Bay Municipal Utility District's (EBMUD's) sewer system.

As required by the discharge permit, and the ACEHS, sampling of the groundwater treatment system has been performed on a routine basis. Table 2 presents the total volume of treated groundwater and the groundwater analytical results. Table 2 shows that all of the effluent samples have been below the discharge limits set forth by EBMUD.

The analytical data for the October 2002 sampling period was erroneous. The high non-detectable concentration levels are due to a high dilution factor caused by the presence of 2-Butanone. During the laboratory testing 2-Butanone was detected at a high concentration of 200,000 µg/L in only the effluent sample. The influent sample concentration for 2-Butanone was only 20 µg/L. Based on the fact that 2-Butanone has not been detected in any of the effluent samples since December 1999, and because there was a very low influent concentration, the sample results shown are erroneous and are only used to depict that sampling was conducted in October 2002. The high TPH-g concentration for this sample may not be representative due to the sample exhibiting unknown peaks, and the sample also exhibiting a fuel pattern, which did not resemble the standard. The laboratory designated these items by "Y" and "Z" flags. However, the system was turned off upon detection of these concentrations and a carbon change-out was performed.

The laboratory reports for the treatment system are included in Appendix C of this report.

The cumulative weight of TPH-g and MtBE extracted from the groundwater since the installation of the treatment system is displayed in Figure 7. As Figure 7 shows, an approximate total of 145 pounds of TPH-g and 76 pounds of MtBE have been removed since the system's initial start-up to January 27, 2004.

6.0 Soil Vapor Extraction System Operation

The soil vapor extraction (SVE) system consists of 6 vapor extraction wells, a de-moisturizing unit, a blower, and four drums of GAC filters. The vapor extraction system began operating on July 24, 2000. Since then, during its working days, the system has extracted and treated more than 3,000,000 liters per day of soil gas. When the system first began to operate, the influent had a concentration of 394 parts per million on volumetric basis (ppmv) of petroleum hydrocarbons. However, it gradually decreased to 68 ppmv after 31 days of operation.

In November 2002, SOMA met a representative of the Bay Area Air Quality Management District (BAAQMD) on-site. At the request of BAAQMD, an air sample was collected from the influent and effluent of the system. The SVE system was determined to be in compliance with the BAAQMD operating permit. In August 2003, another air sample was collected from the SVE system, based on the analytical results, the system has remained in compliance.

The total mass of petroleum hydrocarbons removed by the SVE system is shown in Table 3. As of November 24, 2003, the SVE system removed approximately 414 pounds of petroleum hydrocarbons from the vadose zone beneath the Site. The SVE system was turned off in November 2003. During the rainy season, the watertable ascends closer to the ground surface, and thereby, reduces the unsaturated zone beneath the Site. The SVE system, during the rainy season, is inoperable, and becomes operational during the drier season. This allows a greater petroleum mass to be removed in the larger unsaturated region.

7.0 Conclusions and Recommendations

The findings of the First Quarter 2004 groundwater monitoring event can be summarized as follows:

1. The groundwater remediation system is providing excellent hydraulic control in preventing further migration of the contaminants. The lowest groundwater elevation was measured in the center French drain riser at 25.58 feet. The groundwater gradient is approximately 0.071 feet/feet towards the western riser.

2. In general, DO measurements throughout the Site were at very low concentrations. The maximum allowable equipment (Hach Colorimeter Model 890) tolerance level for ferrous iron is 3.30 mg/L. The ferrous iron concentration for wells MW-1, MW-3, and MW-6 was 3.30 mg/L. The presence of high ferrous iron concentrations in combination with low concentrations of other electron receptors, such as DO and nitrate, is indicative of anaerobic biodegradation beneath the Site.

3. During this monitoring event, nitrate was detected at low levels throughout the Site; the highest nitrate concentration was detected in well MW-2 at 4.4 mg/L. Sulfate concentrations were below the allowable equipment tolerance level in wells MW-3, MW-6, MW-8, MW-10, and MW-12. The presence of ferrous iron in combination with low or depleted levels of sulfate in the subsurface strongly suggests that biodegradation is occurring beneath the Site.

4. The highest TPH-g and benzene concentrations were detected in the vicinity of the USTs, and near the SVE system, in wells MW-1, MW-3, and MW-6. The highest MtBE concentration was detected in well MW-1. However, TPH-g decreased significantly in well MW-1 and also decreased in well MW-6. In well MW-1, all BTEX analytes decreased, total xylenes

decreased significantly. In well MW-3, all BTEX analytes decreased, with the exception of total xylenes. In well MW-6, benzene remained constant, all other BTEX analytes decreased. MtBE decreased in wells MW-1 and MW-3, and remained below the laboratory reporting limit in well MW-6.

5. The treatment system began operating on December 9, 1999. Since that time, approximately 2,165,220 gallons of groundwater has been treated and discharged into EBMUD's sewer system, under the existing discharge permit (as of January 27, 2004). All effluent samples from the groundwater treatment system have remained below the allowable discharge requirements. From initial start-up to January 27, 2004, approximately 145 pounds of TPH-g and 76 pounds of MtBE have been removed during the operation of the treatment system.

6. As of November 24, 2003, the SVE system has removed approximately 414 pounds of petroleum hydrocarbons from the vadose zone beneath the Site. The operation of the SVE system is based on seasonal fluctuations occurring at the Site. The system is turned off during wetter periods of the year and operational during drier periods.

8.0 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 as well as the summaries of data produced by previous environmental consultants. 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.

TABLES

Table 1
Historical Groundwater Elevation Data & Analytical Results
3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Groundwater Elevations (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE ' EPA 8260B (µg/L)
MW-1	Oct-94	97.99	82.60	320,000	24,000	21,000	2,600	15,000	NA
	Dec-94	97.99	88.67	80,000	3,800	6,600	2,300	11,000	NA
	Mar-95	97.99	89.92	32,000	190	160	150	490	NA
	Jun-95	97.99	88.46	21,000	950	650	570	150	NA
	Oct-95	97.99	84.70	59,000	140	130	140	390	NA
	Jan-96	97.99	87.92	30,000	71	73	50	120	NA
	Apr-96	97.99	89.70	31,000	98	120	63	170	NA
	Dec-96	97.99	86.32	NA	NA	NA	NA	NA	NA
	Apr-97	97.99	86.85	NA	NA	NA	NA	NA	NA
	Dec-97	97.99	88.69	27,000	2,300	2,100	1,400	5,100	NA
	Sep-98	97.99	84.41	NA	NA	NA	NA	NA	NA
	Dec-98	97.99	86.89	65,000	2,500	2,400	2,300	9,500	160
	Mar-99	97.99	88.08	17,000	480	860	850	3,000	190
	Jun-99	97.99	86.89	25,000	1,110	1,460	1,330	5,265	77
	Aug-99	97.99	84.64	19,750	678	463	893	2,938	38
	Nov-99	97.99	83.54	10,000	693	15	<5	3,471	50
	Feb-00	97.99	86.79	40,000	2,280	1,380	8	6,130	47
	May-00	97.99	86.50	15,610	610	350	310	1,400	<5
	Aug-00	97.99	84.63	11,000	638	<5	<5	<5	17.1
	Nov-00	97.99	84.79	7,050	435	52	ND	689	10
	Mar-01	97.99	89.03	14,570	1,005	440	108	2,030	16
	May-01	97.99	86.49	4,900	310	81	82	388	150
	Aug-01	97.99	84.48	14,820	852	342	568	1,606	2,000
	Nov-01	97.99	83.98	41,000	2,700	5,100	1,000	4,570	74,000
	Feb-02	97.99	87.88	260,000	3,700	12,000	3,700	19,200	23,000
	May-02	97.99	87.13	53,000	4,400	5,100	1300	7,000	32,000
	Jul-02	40.11	27.31	29,000	2,400	2,500	920	4,400	13,000
	Oct-02	40.11	24.61	27,000	2,200	2,400	950	4,500	34,000
	Jan-03	40.11	30.38	62,000	3,500	6,000	1600	9,700	48,000
	May-03	40.11	30.40	59,000	3,100	2,700	1500	7,000	14,000
	Jul-03	40.11	27.67	36,000	4,800	1,800	1300	5,600	25,000
	Oct-03	40.11	26.22	630,000 H	3,300	1900 C	3600	27,700	15,000
	Jan-04	**40.11**	**29.66**	**39,000**	**3,100**	**1,600**	**950**	**4,300**	**8,500**
MW-2	Oct-94	98.58	83.22	NA	NA	NA	NA	NA	NA
	Dec-94	98.58	89.98	NA	NA	NA	NA	NA	NA
	Mar-95	98.58	90.90	490	3	3	3	1	NA
	Jun-95	98.58	88.99	8,000	220	330	350	660	NA
	Oct-95	98.58	85.16	46,000	160	130	93	240	NA
	Jan-96	98.58	88.65	46,000	160	130	93	240	NA
	Apr-96	98.58	90.45	27,000	0.1	92	44	13	NA
	Dec-96	98.58	86.91	6,200	11	7	2	14	ND
	Apr-97	98.58	87.18	53,000	150	110	37	0.12	ND
	Dec-97	98.58	89.54	35,000	4,900	4,900	1,600	7,000	NA
	Jun-98	98.58	NM	25,000	2,000	2,000	1,300	4,300	NA
	Sep-98	98.58	85.00	29,000	290	180	160	360	<0.5
	Dec-98	98.58	87.64	26,000	1,400	1,600	880	9,500	<5
	Mar-99	98.58	90.98	7,600	730	830	610	1,900	55
	Jun-99	98.58	87.34	3,500	290	428	211	744	ND
	Aug-99	98.58	85.08	60	6	9	4	11	ND
	Nov-99	98.58	84.48	<50	<5	<5	<5	<5	<5
	Feb-00	98.58	88.73	6,400	372	639	46	134	8
	May-00	98.58	87.70	2,930	130	330	130	570	<5
	Aug-00	98.58	85.55	<50	<5	<5	<5	<5	<5

Table 1
Historical Groundwater Elevation Data & Analytical Results
3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Groundwater Elevations (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE [1] EPA 8260B (µg/L)
MW-2 cont.	Nov-00	98.58	85.98	ND	ND	ND	ND	ND	ND
	Mar-01	98.58	90.03	932	18	34	1.3	225	ND
	May-01	98.58	87.58	870	37	75	55	179	2.7
	Aug-01	98.58	85.05	125	4	4	3	11	ND
	Nov-01	98.58	85.15	470	13	64	22	83	14
	Feb-02	98.58	89.59	1,700	26	180	95	360	<2
	May-02	98.58	87.99	1,800	31	140	110	348	<2
	Jul-02	40.71	28.01	180	11	6.3	9.4	27	<2.0
	Oct-02	40.71	26.48	<50	<0.5	<0.5	<0.5	0.64	<2.0
	Jan-03	40.71	32.05	510	5	30.0	24.0	92	<2.0
	May-03	40.71	31.54	1,300	14	88.0	78.0	271	<2.0
	Jul-03	40.71	28.48	220	3.9	4.3	7	14.5	<2.0
	Oct-03	40.71	27.06	170 H	1.9	<0.5	2.2	2.2	<2.0
	Jan-04	**40.71**	**31.17**	**860**	**7.2**	**37**	**50**	**151**	**<2.0**
MW-3	Oct-94	97.78	81.99	3,000,000	190,000	740,000	310,000	130,000	NA
	Dec-94	97.78	87.99	250,000	19,000	22,000	4,400	28,000	NA
	Mar-95	97.78	89.09	350,000	20,000	42,000	5,800	36,000	NA
	Jun-95	97.78	87.53	350,000	20,000	42,000	5,800	36,000	NA
	Oct-95	97.78	84.87	150,000	510	410	210	65	NA
	Jan-96	97.78	87.23	150,000	510	410	210	650	NA
	Apr-96	97.78	89.02	NA	NA	NA	NA	NA	NA
	Dec-96	97.78	85.76	NA	NA	NA	NA	NA	NA
	Apr-97	97.78	86.05	NA	NA	NA	NA	NA	NA
	Dec-97	97.78	NM	NA	NA	NA	NA	NA	NA
	Sep-98	97.78	83.10	NA	NA	NA	NA	NA	NA
	Dec-98	97.78	86.23	51,000	5,700	3,900	1,200	6,300	410
	Mar-99	97.78	89.34	45,000	4,100	6,400	1,000	6,100	470
	Jun-99	97.78	85.98	46,000	8,245	6,425	1,015	7,173	274
	Aug-99	97.78	83.93	64,000	7,484	8,052	1,744	9,749	141
	Nov-99	97.78	83.08	26,000	3,218	1,319	<5	6,697	126
	Feb-00	97.78	86.83	44,000	6,090	3,360	<5	5,780	276
	May-00	97.78	86.10	68,000	15,000	8,900	1,500	7,400	<5
	Aug-00	97.78	84.05	76,000	8,900	5,636	883	7,356	176
	Nov-00	97.78	84.38	48,000	6,789	4,816	676	7,258	83
	Mar-01	97.78	88.35	14,754	2,250	140	ND	1,284	110
	May-01	97.78	85.97	44,000	5,400	3,100	1,400	6,400	200
	Aug-01	97.78	83.68	41,750	3,485	2,670	1,255	5,420	52
	Nov-01	97.78	83.46	NA	NA	NA	NA	NA	NA
	Feb-02	97.78	87.77	62,000	6,000	7,600	1,900	9,200	12,000
	May-02	97.78	86.50	54,000	6,700	3,200	1,800	7,100	9,100
	Jul-02	40.91	27.66	45,000	8,900	1,700	1,600	5,600	2,600
	Oct-02	40.91	25.93	70,000	4,900	5,100	2,100	11,900	21,000
	Jan-03	40.91	31.12	35,000	2,900	1,300	860	5,200	13,000
	May-03	40.91	30.90	48,000	5,800	1,400	1,600	7,400	5,900
	Jul-03	40.91	27.97	31,000	4,700	990	1,400	5,200	16,000
	Oct-03	40.91	26.62	30,000	4,400	930	1,600	5,400	7,400
	Jan-04	**40.91**	**30.34**	**45,000**	**2,100**	**850**	**1,500**	**5,700**	**2,900**

Table 1
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3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Groundwater Elevations (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE [1] EPA 8260B (µg/L)
MW-4	Jan-96	97.85	87.74	9,300	230	110	10	29	NA
	Apr-96	97.85	89.50	1,900	12	8	5	14	NA
	Dec-96	97.85	86.27	4,000	14	6	4	12	ND
	Apr-97	97.85	86.62	ND	ND	ND	ND	ND	ND
	Dec-97	97.85	88.42	2,300	410	270	100	1,500	NA
	Jun-98	97.85	NM	1,700	780	160	54	200	NA
	Sep-98	97.85	84.21	6,200	910	77	68	200	18
	Dec-98	97.85	86.72	1,400	590	33	28	94	24
	Mar-99	97.85	89.39	600	200	35	19	56	11
	Jun-99	97.85	86.55	1,000	298	44	19	64	13
	Aug-99	97.85	84.65	660	497	41	54	145	6
	Nov-99	97.85	83.75	<50	<5	<5	<5	<5	<5
	Feb-00	97.85	86.60	7,800	1,200	61	<5	781	<5
	May-00	97.85	86.39	552	42	19	16	67	<5
	Aug-00	97.85	84.50	370	5.08	<5	<5	<5	<5
	Nov-00	97.85	84.80	ND	5.30	ND	ND	8	ND
	Mar-01	97.85	88.61	62	ND	ND	3.2	8.7	ND
	May-01	97.85	88.35	80	12	1.9	4.1	9.8	ND
	Aug-01	97.85	84.05	133	12	2.2	3.9	9	ND
	Nov-01	97.85	84.17	670	180	5	17	53	ND
	Feb-02	97.85	87.88	450	83	4.1	22	28.7	<2
	May-02	97.85	87.04	570	72	29	27	74	<2
	Jul-02	40.01	27.39	450	20	24	19	74	<2.0
	Oct-02	40.01	25.67	320	69	0.99	9	5.49	<2.0
	Jan-03	40.01	30.22	310	49	2.5	13	26.7	<2.0
	May-03	40.01	30.23	120	27	1.8	9	14.6	<2.0
	Jul-03	40.01	27.57	<50	1	<0.5	<0.5	<0.5	<0.5
	Oct-03	40.01	26.29	70	12	<0.5	4.7	3.0	<2.0
	Jan-04	**40.01**	**29.46**	**230**	**18**	**2.1**	**8.1**	**17.1**	**<2.0**
MW-5	Oct-95	99.04	85.47	1,500	1	1	4	5	NA
	Jan-96	99.04	89.01	1,500	1	1	4	5	NA
	Apr-96	99.04	90.80	780	1	1	5	4	NA
	Dec-96	99.04	87.56	NA	NA	NA	NA	NA	NA
	Apr-97	99.04	87.69	NA	NA	NA	NA	NA	NA
	Dec-97	99.04	89.89	790	82	66	59	160	NA
	Jun-98	99.04	NM	400	<5	<5	15	<10	NA
	Sep-98	99.04	85.22	270	2	1	3	3	<.5
	Dec-98	99.04	87.84	1,400	1	1	ND	2	ND
	Mar-99	99.04	91.31	650	3	1	16	2	10
	Jun-99	99.04	87.54	270	4	3	6	4	ND
	Aug-99	99.04	85.49	120	ND	4	ND	4	ND
	Nov-99	99.04	84.74	<50	<5	<5	<5	<5	<5
	Feb-00	99.04	89.19	70	<5	<5	<5	7	<5
	May-00	99.04	88.01	627.4	7.4	24	12	32.4	<5
	Aug-00	99.04	85.82	<50	<5	<5	<5	<5	<5
	Nov-00	99.04	85.49	ND	ND	ND	ND	ND	ND
	Mar-01	99.04	90.37	382	6.1	1.9	6.6	5.9	ND
	May-01	99.04	87.92	180	ND	ND	2.1	0.57	4.4
	Aug-01	99.04	85.25	258	1	1.1	3.4	7.3	1.4
	Nov-01	99.04	85.32	920	17	160	26	135	40
	Feb-02	99.04	90.00	290	3.5	2	6.2	6.2	<0.5
	May-02	99.04	88.35	160	<0.5	0.78 C	2	2.15	2.3
	Jul-02	41.16	28.22	110	<0.5	<0.5	0.77	<0.5	<0.5
	Oct-02	41.16	26.65	77	<0.5	<0.5	<0.5	<0.5	<2.0
	Jan-03	41.16	32.43	450 Y	<0.5	<0.5	4	0.54	2.1
	May-03	41.16	31.92	190	<0.5	<0.5	1	<0.5	3.1
	Jul-03	41.16	28.71	300	<0.5	1.9 C	0.76	<0.5	<2.0
	Oct-03	41.16	27.27	460 H	<0.5	<0.5	<0.5	<0.5	1.9
	Jan-04	**41.16**	**31.56**	**160**	**<0.5**	**<0.5**	**0.55 C**	**<0.5**	**<5.0**

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Monitoring Well	Date	Top Of Casing Elevation (feet)	Groundwater Elevations (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE [1] EPA 8260B (µg/L)
MW-6	Oct-95	98.77	84.83	NA	NA	NA	NA	NA	NA
	Jan-96	98.77	88.22	120,000	350	310	200	610	NA
	Apr-96	98.77	90.01	NA	NA	NA	NA	NA	NA
	Dec-96	98.77	86.73	NA	NA	NA	NA	NA	NA
	Apr-97	98.77	87.01	NA	NA	NA	NA	NA	NA
	Dec-97	98.77	89.47	NA	NA	NA	NA	NA	NA
	Sep-98	98.77	84.87	NA	NA	NA	NA	NA	NA
	Dec-98	98.77	87.17	NA	NA	NA	NA	NA	NA
	Mar-99	98.77	90.37	37,000	3,900	4,300	1,600	7,000	180
	Jun-99	98.77	86.87	18,500	2,060	1,650	735	3,170	ND
	Aug-99	98.77	84.87	42,000	3,806	3,649	1,554	7,996	10
	Nov-99	98.77	84.02	40,000	1,084	130	<5	10,940	<5
	Feb-00	98.77	87.82	17,000	1,360	521	<5	4,150	6
	May-00	98.77	87.07	21,700	1,700	1,200	17	3,600	<5
	Aug-00	98.77	84.99	24,000	1,306	870	<5	5,162	<5
	Nov-00	98.77	85.37	19,000	1,387	618	ND	5,250	ND
	Mar-01	98.77	89.28	15,637	713	459	238	2,363	ND
	May-01	98.77	86.95	27,000	760	450	1,600	4,270	ND
	Aug-01	98.77	NM	NA	NA	NA	NA	NA	NA
	Nov-01	98.77	NM	NA	NA	NA	NA	NA	NA
	Feb-02	98.77	88.85	14,000	440	180	750	1,020	<10
	May-02	98.77	87.44	10,000	400	160	470	970	<2
	Jul-02	40.92	27.64	24,000	1,000	410	1,400	3,770	<20
	Oct-02	40.92	25.99	22,000	1,200	620	1,300	2,800	<20
	Jan-03	40.92	31.14	12,000	730	230	740	1,690	<20
	May-03	40.92	31.00	150,000 H	1,400	780	2,500	8,700	<40
	Jul-03	40.92	27.94	29,000	1,600	520	1,500	4,400	<200
	Oct-03	40.92	26.57	36,000	1,300	430	1,600	4,570	<40
	Jan-04	**40.92**	**30.32**	**30,000**	**1,300**	**320**	**1,500**	**3,040**	**<50**
MW-7	Oct-95	97.83	84.88	NA	10	12	17	NA	3,300
	Jan-96	97.83	88.26	3,300	9	12	17	45	NA
	Apr-96	97.83	90.08	1,900	2	3	5	7	NA
	Dec-96	97.83	86.86	NA	NA	NA	NA	NA	NA
	Apr-97	97.83	84.88	NA	NA	NA	NA	NA	NA
	Dec-97	97.83	89.18	1,400	130	98	75	200	NA
	Jun-98	97.83	NM	620	4	<5	9	<10	NA
	Sep-98	97.83	84.74	1,800	1	1	1	2	68
	Dec-98	97.83	87.31	990	5	10	5	20	160
	Mar-99	97.83	90.83	300	3	1	1	1	62
	Jun-99	97.83	87.13	320	3	7	4	3	26
	Aug-99	97.83	85.03	570	5	10	ND	ND	ND
	Nov-99	97.83	84.58	290	<5	9	<5	<5	12
	Feb-00	97.83	88.33	80	<5	<5	<5	<5	23
	May-00	97.83	87.31	494.9	4.9	22	4.2	21.9	29
	Aug-00	97.83	85.20	80	<5	<5	<5	<5	11.7
	Nov-00	97.83	85.88	50	ND	ND	ND	ND	9.1
	Mar-01	97.83	89.79	82	0.97	ND	0.76	ND	78
	May-01	97.83	87.23	370	ND	9.1	1.3	2.3	28
	Aug-01	97.83	84.81	610	3.7	3	6.2	18.9	10
	Nov-01	97.83	85.00	1,700	24	220	41	205	69
	Feb-02	97.83	88.92	380	<0.5	2.5	2	3.8	78
	May-02	97.83	87.70	560	15	28.0	9.2	44.0	37
	Jul-02	39.94	27.79	270	5.3	1.3 C	2.3	8.1	46
	Oct-02	39.94	26.20	350	<0.5	2.1 C	<0.5	3.1 C	43
	Jan-03	39.94	31.49	220 Y	<0.5	<0.5	0.78	0.55	19
	May-03	39.94	32.25	280	<0.5	<0.5	<0.5	<0.5	11
	Jul-03	39.94	28.22	230	<0.5	1.3 C	<0.5	0.63	5.9
	Oct-03	39.94	26.84	460	<0.5	<0.5	<0.5	<0.5	5.0
	Jan-04	**39.94**	**30.71**	**380**	**<0.5**	**1.4 C**	**<0.5**	**<0.5**	**<5.0**

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MW-8	Oct-95	97.25	84.39	NA	NA	NA	NA	NA	NA
	Jan-96	97.25	87.46	94,000	310	250	180	480	NA
	Apr-96	97.25	89.27	58,000	250	170	140	330	NA
	Dec-96	97.25	86.12	27,000	88	43	44	80	ND
	Apr-97	97.25	84.30	24,000	86	55	50	100	ND
	Dec-97	97.25	88.80	26,000	6,000	1,600	2,100	4,700	NA
	Jun-98	97.25	NM	54,000	4,600	2,800	3,500	7,300	NA
	Sep-98	97.25	84.23	NA	NA	NA	NA	NA	NA
	Dec-98	97.25	86.50	61,000	6,300	1,700	2,200	4,400	1,300
	Mar-99	97.25	89.67	22,000	1,800	470	2,000	2,000	820
	Jun-99	97.25	86.45	39,500	3,610	1,635	2,175	5,913	988
	Aug-99	97.25	84.50	58,000	5,379	2,438	3,001	6,960	639
	Nov-99	97.25	83.60	10,500	92	<5	<5	3,414	769
	Feb-00	97.25	86.40	44,200	1,080	617	<5	4,160	240
	May-00	97.25	86.10	25,940	940	130	1,600	3,960	75
	Aug-00	97.25	84.38	22,000	632	5.38	<5	2,686	37.3
	Nov-00	97.25	84.70	3,000	278	350	209	980	21
	Mar-01	97.25	88.50	2,360	81	16	71	270	221
	May-01	97.25	86.10	3,100	110	28	140	194	410
	Aug-01	97.25	84.28	5,620	153	46	373	345	174
	Nov-01	97.25	84.06	13,000	600	270	750	1,200	400
	Feb-02	97.25	87.37	240,000	1,400	<25	4,200	6,560	<100
	May-02	97.25	86.93	9,000	360	56	560	622	2,100
	Jul-02	39.38	27.59	8,400	340	78	530	517	1,200
	Oct-02	39.38	25.58	18,000	950	75	1,400	1,269	700
	Jan-03	39.38	29.90	8,100	300	29	370	302	1,100
	May-03	39.38	29.90	18,000	380	33 C	1,000	516	540
	Jul-03	39.38	27.46	12,000	460	54 C	910	435	890
	Oct-03	39.38	26.29	16,000	830	87	2,000	675	280
	Jan-04	**39.38**	**29.06**	**18,000**	**330**	**37 C**	**860**	**239**	**500**
MW-10	Dec-96	94.54	84.10	NA	NA	NA	NA	NA	NA
	Apr-97	94.54	84.47	1,000	21	9	3	3	ND
	Dec-97	94.54	85.76	10,000	5,300	76	1,100	780	NA
	Sep-98	94.54	82.61	9,900	5,400	66	970	620	2,600
	Dec-98	94.54	84.35	8,700	3,800	51	790	420	1,800
	Mar-99	94.54	87.24	4,100	15	28	420	250	2,800
	Jun-99	94.54	84.59	4,200	1,168	34	264	154	1,195
	Aug-99	94.54	82.94	3,250	2,135	97	600	248	1,800
	Nov-99	94.54	82.04	2,950	1,134	20	<5	70	652
	Feb-00	94.54	85.29	<50	<5	<5	<5	<5	448
	May-00	94.54	85.09	4,400	1,500	25	390	107.1	580
	Aug-00	94.54	83.02	6,800	1,055	26	54	53.8	1,283
	Nov-00	94.54	83.19	ND	ND	ND	ND	ND	145
	Mar-01	94.54	86.47	4,935	969	18	41	72	630
	May-01	94.54	84.74	2,900	630	11	200	31	270
	Aug-01	94.54	82.90	242	35	1	11	2	64
	Nov-01	94.54	82.48	3,500	900	260	310	258	410
	Feb-02	94.54	86.26	4,700	1,100	20	370	63.7	500
	May-02	94.54	85.05	3,400	660	13	260	48.0	270
	Jul-02	36.71	25.78	160	26	0.55	8.1	1.0	72
	Oct-02	36.71	24.17	550	130	3.00	31.0	2.7	70
	Jan-03	36.71	28.48	17,000	870	11	290	27	270
	May-03	36.71	28.41	2,500	650	10	190	15.81 C	180
	Jul-03	36.71	25.95	750	160	4	58	6.66 C	79
	Oct-03	36.71	24.80	2,000	410	11	170	9.14 C	110
	Jan-04	**36.71**	**27.80**	**4,000**	**600**	**15**	**280**	**15.3 C**	**110**

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MW-11	Dec-96	95.94	83.95	NA	NA	NA	NA	NA	NA
	Apr-97	95.94	84.47	NA	NA	NA	NA	NA	NA
	Dec-97	95.94	85.54	710	66	97	59	190	NA
	Jun-98	95.94	NM	1,100	45	24	71	100	NA
	Sep-98	95.94	82.70	170	7	1	4	9	22
	Dec-98	95.94	84.36	650	27	4	25	33	>0.5
	Mar-99	95.94	87.13	710	30	6	53	84	8
	Jun-99	95.94	84.44	4,600	1,240	35	290	159	1,291
	Aug-99	95.94	83.19	170	4	4	ND	6	ND
	Nov-99	95.94	82.09	<50	<5	<5	<5	<5	<5
	Feb-00	95.94	82.34	700	20	15	<5	35	<5
	May-00	95.94	82.14	477	27	13	9.5	29.0	<5
	Aug-00	95.94	81.07	590	10.5	5.94	<5	7.75	<5
	Nov-00	95.94	83.39	60	ND	ND	ND	ND	ND
	Mar-01	95.94	86.33	273	8.6	2.1	10	14	ND
	May-01	95.94	84.79	280	12	8.3	3.3	9.8	12
	Aug-01	95.94	82.90	NA	NA	NA	NA	NA	NA
	Nov-01	95.94	82.46	300	7.9	26	5.1	28.9	ND
	Feb-02	95.94	86.25	560	34	20	32	37.3	< 0.5
	May-02	95.94	84.95	280	16	3	7.6	7.6	<2
	Jul-02	NS	NM	120	5.6	<0.5	0.61	0.53	<2.0
	Oct-02	NS	NM	NA	NA	NA	NA	NA	NA
	Jan-03	NS	NC	700	32	5.7	25	14.10	<2.0
	May-03	NS	NC	280	17	1.5 C	8	4.10	<2.0
	Jul-03	NS	NC	340	19 C	3.2	0.58	0.89	<2.0
	Oct-03	NS	NC	210	5.0 C	<0.5	<0.5	<0.5	<0.5
	Jan-04	**NS**	**NC**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
MW-12	Nov-99	94.84	81.64	80	<5	<5	<5	<5	229
	Feb-00	94.84	84.64	4,000	351	37	<5	24	513
	May-00	94.84	84.36	3,930	230	10	34	12	200
	Aug-00	94.84	82.77	1,730	15.4	12.4	<5	<5	185
	Nov-00	94.84	82.79	1,010	9.3	19.0	ND	7.40	215
	Mar-01	94.84	85.80	1,517	13	5.6	5.5	11	214
	May-01	94.84	84.32	31,000	1,200	ND	95	165	1,900
	Aug-01	94.84	82.60	2,090	71	1.8	3	4	142
	Nov-01	94.84	82.08	3,000	81	69	13	73	120
	Feb-02	94.84	86.06	2,500	77	<0.5	5.7	7.4	95
	May-02	94.84	84.58	2,700	74	<0.5	20	5.1	94
	Jul-02	36.84	25.91	2,200	57	<0.5	11	2.6	100
	Oct-02	36.84	23.71	2,600	71	<0.5	<0.5	10.3	84
	Jan-03	36.84	27.61	2,300	65	<0.5	1	4.00	86
	May-03	36.84	27.60	2,200	58	<0.5	4.2 C	4.1 C	96
	Jul-03	36.84	25.40	2,200	32 C	16 C	<0.5	9.20	66
	Oct-03	36.84	24.34	2200 H	31 C	<0.5	<0.5	3.5 C	49
	Jan-04	**36.84**	**27.28**	**1,700**	**24 C**	**14 C**	**3**	**5.00**	**72**
FDC	Feb-00	97.10	81.70	NA	NA	NA	NA	NA	NA
	May-00	97.10	84.69	NA	NA	NA	NA	NA	NA
	Aug-00	97.10	81.40	NA	NA	NA	NA	NA	NA
	Nov-00	97.10	80.25	NA	NA	NA	NA	NA	NA
	Mar-01	97.10	87.71	NA	NA	NA	NA	NA	NA
	May-01	97.10	81.25	NA	NA	NA	NA	NA	NA
	Aug-01	97.10	83.80	NA	NA	NA	NA	NA	NA
	Nov-01	97.10	79.28	NA	NA	NA	NA	NA	NA
	Feb-02	97.10	80.36	NA	NA	NA	NA	NA	NA
	May-02	97.10	86.74	NA	NA	NA	NA	NA	NA
	Jul-02	39.35	27.42	NA	NA	NA	NA	NA	NA
	Oct-02	39.35	25.61	NA	NA	NA	NA	NA	NA
	Jan-03	39.35	24.17	NA	NA	NA	NA	NA	NA
	May-03	39.35	23.15	NA	NA	NA	NA	NA	NA
	Jul-03	39.35	22.90	NA	NA	NA	NA	NA	NA
	Oct-03	39.35	22.82	NA	NA	NA	NA	NA	NA
	Jan-04	**39.35**	**25.61**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 1
Historical Groundwater Elevation Data & Analytical Results
3609 International Boulevard, Oakland, California

Monitoring Well	Date	Top Of Casing Elevation (feet)	Groundwater Elevations (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE [1] EPA 8260B (µg/L)
FDE	May-00	97.90	84.68	NA	NA	NA	NA	NA	NA
	Aug-00	97.90	NM	NA	NA	NA	NA	NA	NA
	Nov-00	97.90	85.15	NA	NA	NA	NA	NA	NA
	Mar-01	97.90	88.76	NA	NA	NA	NA	NA	NA
	May-01	97.90	84.85	NA	NA	NA	NA	NA	NA
	Aug-01	97.90	84.21	NA	NA	NA	NA	NA	NA
	Nov-01	97.90	83.98	NA	NA	NA	NA	NA	NA
	Feb-02	97.90	84.72	NA	NA	NA	NA	NA	NA
	May-02	97.90	86.72	NA	NA	NA	NA	NA	NA
	Jul-02	40.06	27.25	NA	NA	NA	NA	NA	NA
	Oct-02	40.06	25.53	NA	NA	NA	NA	NA	NA
	Jan-03	40.06	26.93	NA	NA	NA	NA	NA	NA
	May-03	40.06	28.27	NA	NA	NA	NA	NA	NA
	Jul-03	40.06	26.96	NA	NA	NA	NA	NA	NA
	Oct-03	40.06	26.21	NA	NA	NA	NA	NA	NA
	Jan-04	**40.06**	**26.79**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
FDW	May-00	96.90	84.70	NA	NA	NA	NA	NA	NA
	Aug-00	96.90	NM	NA	NA	NA	NA	NA	NA
	Nov-00	96.90	81.40	NA	NA	NA	NA	NA	NA
	Mar-01	96.90	86.78	NA	NA	NA	NA	NA	NA
	May-01	96.90	83.40	NA	NA	NA	NA	NA	NA
	Aug-01	96.90	83.82	NA	NA	NA	NA	NA	NA
	Nov-01	96.90	82.59	NA	NA	NA	NA	NA	NA
	Feb-02	96.90	84.12	NA	NA	NA	NA	NA	NA
	May-02	96.90	86.76	NA	NA	NA	NA	NA	NA
	Jul-02	39.16	27.37	NA	NA	NA	NA	NA	NA
	Oct-02	39.16	25.66	NA	NA	NA	NA	NA	NA
	Jan-03	39.16	27.03	NA	NA	NA	NA	NA	NA
	May-03	39.16	28.32	NA	NA	NA	NA	NA	NA
	Jul-03	39.16	27.04	NA	NA	NA	NA	NA	NA
	Oct-03	39.16	25.68	NA	NA	NA	NA	NA	NA
	Jan-04	**39.16**	**25.58**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Notes:

[1] MtBE was analyzed using the EPA Method 8021B and confirmed using 8260B.

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

H: Heavier hydrocarbons may have contributed to the quantitation.

NA: Not Analyzed

ND, < : Not Detected above laboratory reporting limits.

NS: Not Surveyed.

Y: Sample exhibits fuel pattern which does not resemble standard.

[1]Top of casing elevations were re-surveyed to comply with the EDF requirements for electronic reporting of data to the State Water Resources Control Board Database on August 9, 2002.

NA: Not Applicable, Well/Drain did not exist at time of sampling

NC: Not calculated. No top of casing elevation was available for MW-11.

NM: Not Measured

FDC: French drain center riser.

FDE: French drain east riser.

FDW: French drain west riser.

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

		Meter	Lab Results For Effluent [1] and GAC-1					
		Reading	(concentrations in ug/L)					
Month	Date	(gallons)	MtBE [2]	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
January	1/27/2004	2,165,220	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	1/13/2004	2,116,720	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
December	12/8/2003	2,092,330	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
November	11/17/2003	2,087,670	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	11/3/2003	2,079,460	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
October	10/13/2003	2,073,060	5.3	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	10/1/2003	2,072,610	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
September	9/15/2003	2,056,910	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			6	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	9/2/2003	2,040,040	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
August	8/19/2003	2,021,040	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
July	7/21/2003	1,995,240	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			40	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	7/9/2003	1,990,260	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			36	< 50	< 5.0	< 5.0	< 5.0	< 5.0
June	6/18/2003	1,978,560	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
	6/10/2003	1,972,780	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
May	5/21/2003	1,951,830	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	5/1/2003	1,918,270	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
April	4/11/2003	1,882,440	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
March	3/19/2003	1,846,490	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
February	2/25/2003	1,804,960	replaced 55-gallon polishing vessel with new 55 gallon carbon drum					
	2/19/2003	1,791,720	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
January	1/27/2003	1,733,500	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

		Meter	Lab Results For Effluent [1] and GAC-1					
		Reading	(concentrations in ug/L)					
Month	Date	(gallons)	MtBE [2]	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	1/2/2003	1,675,600	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
December	12/10/2002	1,672,870	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
November	11/22/2002	1,668,650	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	11/13/2002	1,664,780	replaced gasket on top of 2000 lb GAC vessel, slight leak was detected					
	11/7/2002	1,663,880	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel					
October	10/16/02 [3]	1,661,590	< 310	2,000 Y Z	< 310	< 310	< 310	< 310
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
September	9/19/2002	1,653,600	< 5	< 50	< 5	< 5	< 5	< 5
			< 5	< 50	< 5	< 5	< 5	< 5
August	8/23/2002	1,641,650	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
July	7/23/2002	1,632,834	<5.0	< 50	<5.0	<5.0	<5.0	<5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

		Meter	Lab Results For Effluent [1] and GAC-1					
		Reading	(concentrations in ug/L)					
Month	Date	(gallons)	MtBE [2]	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
June	6/24/2002	1,610,050	1.7	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
May	5/30/2002	1,571,630	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	5/20/2002	1,548,000	removed newly installed compressor, installed another compressor					
	5/8/2002	1,538,850	installed new compressor					
	5/1/2002	1,529,650	installed new 55 gallon GAC Vessel					
April	4/24/2002	1,528,740	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
	4/1/2002	1,478,500	repaired valve plate assembly on compressor					
March	3/25/2002	1,478,420	performed carbon change-out on treatment system					
	3/18/2002	NR	replaced piston on compressor					
	3/14/2002	1,478,330	compressor not building up pressure					
February	2/27/2002	1,449,830	< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			1.1	< 50	< 0.5	< 0.5	< 0.5	< 0.5
January	1/22/2002	1,381,370	< 2.0	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 2.0	< 50	< 0.5	< 0.5	< 0.5	< 0.5
December	12/12/2001	1,311,340	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
November	11/2/2001	1,272,660	ND	ND	ND	ND	ND	ND
			0.6	ND	ND	ND	ND	ND
September	9/28/2001	NA	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
August	8/22/2001	1,243,100	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
July	7/26/2001	1,227,270	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	7/11/2001	1,226,730	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA

Table 2

Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

		Meter	Lab Results For Effluent [1] and GAC-1					
		Reading	(concentrations in ug/L)					
Month	Date	(gallons)	MtBE [2]	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
June	6/29/2001	1,224,600	NA	NA	NA	NA	NA	NA
			ND	ND	ND	ND	ND	ND
	6/26/2001	NR	installed new compressor					
	6/16/2001	1,216,580	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			compressor not working, repaired compressor					
	6/7/2001	1,216,580	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
May	5/30/2001	1,205,198	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	5/23/2001	1,194,390	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	5/17/2001	1,182,360	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	5/10/2001	1,166,850	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	5/5/2001	1,151,600	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
April	4/28/2001	1,135,690	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	4/21/2001	1,113,570	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	4/11/2001	1,082,700	NA	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	4/6/2001	1,065,540	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
March	3/29/2001	1,036,330	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			system was re-started					
	3/21/2001	1,036,070	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			belt replaced on compressor					
	3/17/2001	1,035,100	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/13/2001	1,032,500	ND	ND	ND	ND	ND	ND
			NA	NA	NA	NA	NA	NA
	3/2/2001	996,520	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/1/2002	NR	system re-started after carbon change-out					
February	2/28/2002	NR	Carbon Change-out was performed on GAC-1, washed algae from holding tank					
			cleaned 2000 lb GAC, re-started system					
	2/10/2001	975,490	System shut down for maintenance and cleaning.					
January	1/29/2001	957,880	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND

Table 2
Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results
3609 International Boulevard, Oakland, California

		Meter	Lab Results For Effluent [1] and GAC-1					
		Reading	(concentrations in ug/L)					
Month	Date	(gallons)	MtBE [2]	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
December	12/5/2000	883,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
November	11/24/2000	NR	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	11/1/2000	842,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
October	10/1/2000	809,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
August	8/27/2000	781,000	ND	ND	ND	ND	ND	ND
	8/24/2000	778,000	Totalizer meter replaced at 775,000 gallons					
July	7/26/2000	726,000	ND	ND	ND	ND	ND	ND
	7/19/2000	718,000	ND	ND	ND	ND	ND	ND
	7/13/2000	712,000	ND	ND	ND	ND	ND	ND
	7/7/2000	706,000	ND	ND	ND	ND	ND	ND
June	6/29/2000	700,000	ND	ND	ND	ND	ND	ND
	6/21/2000	682,220	ND	ND	ND	ND	ND	ND
	6/16/2000	669,720	ND	ND	ND	ND	ND	ND
	6/10/2000	651,200	ND	ND	ND	ND	ND	ND
May	5/31/2000	629,000	ND	ND	ND	ND	ND	ND
	5/23/2000	603,700	ND	ND	ND	ND	ND	ND
	5/18/2000	570,000	ND	ND	ND	ND	ND	ND
	5/10/2000	530,400	ND	ND	ND	ND	ND	ND
April	4/30/2000	488,300	ND	ND	ND	ND	ND	ND
	4/18/2000	485,300	ND	ND	ND	ND	ND	0.51
			compressor stopped, system shut down until April 29, 2000					
	4/10/2000	440,200	ND	ND	ND	ND	ND	ND
	4/4/2000	390,100	ND	ND	ND	ND	ND	ND
	4/2/2000	NR	performed a carbon change-out on GAC-1					

Table 2

Total Volume of Water Treated, Historical Operational Data, and Effluent and GAC-1 Analytical Results

3609 International Boulevard, Oakland, California

		Meter	Lab Results For Effluent [1] and GAC-1					
		Reading	(concentrations in ug/L)					
Month	Date	(gallons)	MtBE [2]	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes
March	3/31/2000	NR	replaced GAC-2 with a special GAC designed for removal of MtBE					
	3/24/2000	388,000	ND	ND	ND	ND	ND	ND
	3/17/2000	357,100	ND	ND	ND	ND	ND	ND
	3/10/2000	329,000	ND	ND	ND	ND	ND	ND
	3/3/2000	300,000	transfer overheated, repaired pump, restarted system 3/6/00					
February	2/25/2000	274,000	ND	ND	ND	ND	ND	ND
	2/18/2000	233,000	ND	ND	ND	ND	ND	ND
	2/11/2000	190,000	ND	ND	ND	ND	ND	ND
	2/4/2000	160,800	ND	ND	ND	ND	ND	ND
January	1/28/2000	130,600	ND	ND	ND	ND	ND	ND
	1/21/2000	103,435	ND	ND	ND	ND	ND	ND
	1/17/2000	NR	GAC-1 was replaced with 2,000 lb GAC unit					
			second polishing GAC was replaced with 55 gallon GAC unit					
	1/14/2000	83,500	185	ND	ND	ND	ND	ND
December	12/23/1999	51,680	1486	NA	ND	ND	ND	ND
			ND	NA	ND	ND	ND	ND
	12/16/1999	30,450	963	NA	ND	ND	ND	ND
			ND	NA	ND	ND	ND	ND
	12/9/1999	9,000	230	ND	ND	ND	ND	ND
Pumping began on December 6, 1999								

Notes:

1 Effluent is equivalent to PSP#1

2 MTBE was analyzed using EPA Method 8260B, prior to the September 2003. After September 2003, MtBE was only analyzed by EPA Method 8021B.

3 Lab data as shown for Oct. 2002 is erroneous data. During lab analysis a high detection of 2-Butanone was detected in only the effluent sample. The influent sample for 2-Butanone was at only 20 ppb. This caused a high dilution factor causing a high non-detectable value. The high TPH-g value was misrepresentative due to the Y and Z flags.

ND, < : Not Detected above laboratory reporting limits

NA: Not Analyzed

NR: Not recorded. Totalizer reading not recorded.

Y: Sample exhibits fuel pattern which does not resemble standard

Z: Sample exhibits unknown single peak or peaks

Table 3
Total Mass of Petroleum Hydrocarbons Removed by Vapor Extraction System
3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate	Time Elapsed	Air Flow	Mass Removed [1]
		Influent	Effluent	(ft^3/min)	(Hours)	(Liters)	(Pounds)
7/24/2000	5:00	394	0	85	0	0	0.00
7/25/2000	5:15	38	2	95	24	3,914,096	1.01
7/26/2000	5:05	207	1	80	48	3,228,121	4.52
7/27/2000	9:00	160	5	92	64	2,500,944	2.71
7/28/2000	4:30	141	7	87	96	4,656,139	4.44
7/29/2000	1:30	225	8	85	117	3,032,734	4.62
7/30/2000	9:00	226	12	85	136	2,816,110	4.31
7/31/2000	3:00	141	5	85	166	4,332,478	4.13
8/1/2000	5:00	135	4	80	192	3,533,942	3.23
8/2/2000	4:00	80	4	80	215	3,126,180	1.69
8/3/2000	5:00	60	5	85	240	3,610,398	1.47
8/4/2000	3:00	57	4	85	262	3,177,150	1.23
8/5/2000	2:00	97	8	87	285	3,399,721	2.23
8/6/2000	12:00	114	8	80	307	2,990,259	2.31
8/7/2000	12:00	93	9	85	331	3,465,982	2.18
8/8/2000	4:30	152	10	85	360	4,115,854	4.23
8/10/2000	10:00	173	1	85	377	2,527,279	2.96
8/11/2000	7:00	78	4	70	410	3,924,715	2.07
8/12/2000	9:00	100	6	70	424	1,665,031	1.13
8/13/2000	5:00	107	9	70	456	3,805,784	2.75
8/14/2000	12:30	122	5	70	476	2,319,150	1.91
8/15/2000	6:00	103	12	70	505	3,508,457	2.44
8/16/2000	12:30	112	0	70	524	2,200,219	1.67
8/18/2000	9:00	90	0	75	568	5,670,449	3.45
8/21/2000	12:00	74	5	80	643	10,194,065	5.10
8/24/2000	12:00	68	13	80	712	9,378,540	4.31
8/27/2000	12:30	68.5	2	80	785	9,854,263	4.57
8/31/2000	1:30	52	6	80	882	13,184,324	4.64
9/4/2000	12:30	54	5	80	977	12,912,482	4.72
9/7/2000	12:00	55	3	80	1,048	9,718,342	3.62
9/11/2000	4:30[2]	141	0	80	1,149	13,660,047	13.03
9/14/2000	9:30	56	5	80	1,214	8,834,856	3.35
9/18/2000	2:00	46	9.5	80	1,314	13,660,047	4.25
9/18/2000	4:30[3]	34	0	80	1,317	339,802	0.08
9/21/2000	4:30	43	1	80	1,389	9,786,302	2.85
9/25/2000	5:30	55	6	80	1,486	13,184,324	4.91
9/28/2000	9:00	47.5	7.5	80	1,550	8,766,896	2.82

Table 3
Total Mass of Petroleum Hydrocarbons Removed by Vapor Extraction System
3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate	Time Elapsed	Air Flow	Mass Removed [1]
		Influent	Effluent	(ft^3/min)	(Hours)	(Liters)	(Pounds)
10/1/2000	1:00	38.5	6	80	1,626	10,329,986	2.69
10/5/2000	3:00[4]	28.5	3	80	1,724	13,320,245	2.57
10/5/2000	5:00	36	0	80	1,726	271,842	0.07
10/8/2000	3:00	28.5	3	80	1,796	9,514,460	1.83
10/14/2000	3:00	24.5	2.5	80	1,940	19,572,604	3.24
10/17/2000	2:00	36.5	3.5	80	2,011	9,650,381	2.38
10/20/2000	8:30	18.5	3.5	80	2,078	9,038,737	1.13
10/25/2000	2:00	38	3.7	80	2,203	17,058,068	4.39
10/29/2000	10:00	35	4	80	2,295	12,504,719	2.96
11/2/2000	4:00	30.5	4	80	2,397	13,863,928	2.86
11/7/2000	4:00	30	6	80	2,517	16,310,504	3.31
11/19/2000	12:00	92.7	5.5	80	2,801	38,601,525	24.20
11/24/2000	13:30	25	6.5	80	2,923	16,514,385	2.79
11/29/2000	15:00	14.5	3.5	80	3,044	16,514,385	1.62
12/4/2000	16:30	10.7	1	80	3,190	19,776,486	1.43
12/13/2000	15:30	24	3	80	3,405	29,222,986	4.74
12/28/2000	14:30	10	6	85	3,764	51,845,314	3.51
1/4/2001[5]	14:00	8.7	3.7	85	3,907	20,723,684	1.22
8/8/2001	15:00	217	0	85	3,907	0	0
9/6/2001	12:00	85	0	85	4,048	20,362,644	11.71
9/13/2001	16:00	186	8	85	4,220	24,839,538	31.26
9/18/2001	15:00	184	9	85	4,344	17,907,574	22.29
9/21/2001 [6]		--	--	--	4,344	0	0
10/12/01 [7]		--	--	--	4,344	0	0
10/23/2001	17:00	114	58	87	4,344	0	0
10/25/01 [4]	15:00	133	0	85	4,390	6,643,132	5.98
10/29/2001 [8]	13:20	569	0	85	4,485	13,647,304	52.53
11/7/2001	15:30	177	0	87	4,679	28,675,904	34.34
11/16/2001	15:00	117	0	87	4,894	31,853,904	25.21
11/21/01 [9]	12:00	85	72	87	5,011	17,294,231	9.94
2/15/02 [10]	16:30	49	0	80	5,011.5	67,960	0.02
2/16/2002	15:45	50	0	80	5,035	3,160,160	1.07
2/21/2002	16:00	37	4	80	5,155	16,344,484	4.09
2/27/2002	10:30	11	0	83	5,294	19,530,979	1.45
3/7/02 [11]	12:20	10		80	5,488	26,429,812	1.79
6/12/2002 [12]	16:15	53	2	75	NA	NA	NA
6/17/2002	11:00	28	2	80	114.75	15,593,148	0.96
6/24/2002	11:20	24	3.1	80	168.33	22,866,400	1.21
7/5/2002	13:25	20	5	80	264.09	35,873,552	1.58
7/11/2002	15:30	26	8.0	80	144.09	19,572,752	1.12
7/23/2002	10:10	28	7.5	83	287.78	40,557,673	2.50
8/9/2002	12:20	7.5	0	80	408.09	55,434,983	0.91

Table 3
Total Mass of Petroleum Hydrocarbons Removed by Vapor Extraction System
3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate	Time Elapsed	Air Flow	Mass Removed [1]
		Influent	Effluent	(ft^3/min)	(Hours)	(Liters)	(Pounds)
8/15/2002 [11]	15:00	7.0	1	80	144.11	19,575,902	0.30
8/23/2002 [13]	15:20	NA	NA	NA	NA	NA	NA
8/26/2002	11:15	14.0	2.0	80	71.83	9,757,387	0.30
9/11/2002	10:10	34.4	0	80	383.95	52,156,428	3.95
9/19/2002	10:55	8.8	1.1	80	192.75	26,183,160	0.51
9/25/2002	10:30	18.8	1.8	80	144.75	19,662,840	0.81
10/2/2002	8:10	17.1	2.5	80	168.75	22,923,000	0.86
10/9/2002		PID malfunction		80	168.75	22,923,000	NA
10/16/2002	13:45	17.0	4.0	80	168.75	22,923,000	0.86
10/24/2002		16.5	6.4	80	192.75	26,183,160	0.95
11/1/2002		21.1	0.0	85	192.75	27,819,608	1.29
11/6/2002	10:12	PID malfunction		87	120.75	17,837,915	NA
11/7/2002		17.5	0.0	85	24.75	3,572,168	0.14
11/13/2002	11:30	15.0	0.0	85	144.75	20,891,768	0.69
11/22/2002	14:30	6.6	0.0	80	219.00	29,748,960	0.43
11/22/2002	system shut-down due to rainy season and low influent readings						
5/9/2003	10:30	0.1	0.0	82	0	0	0
5/12/2003	10:30	0.4	0.3	85	72.00	10,391,760	0.01
5/21/2003	11:00	2.2	2.2	83	216.50	30,512,211	0.15
6/4/2003	10:30	2.5	0.1	82	335.50	46,713,678	0.26
6/10/2003	10:30	2.2	0.08	82	144.00	20,049,984	0.10
6/16/2003	12:15	2.1	0.07	82	146.25	20,363,265	0.09
6/24/2003	16:55	2.6	0.08	82	196.75	27,394,683	0.16
6/30/2003	11:30	2.2	0.1	82	138.50	19,284,186	0.09
7/16/2003	12:00	2.2	0.22	82	384.50	53,536,242	0.26
7/21/2003	10:50	2.1	0.21	82	119.00	16,569,084	0.08
7/28/2003	11:15	2.2	0.22	82	168.25	23,426,457	0.11
8/11/2003	12:15	2.1	0.21	82	337.00	46,922,532	0.22
8/19/2003	10:05	2.1	0.22	82	190.00	26,454,840	0.12
8/25/2003	11:30	2.2	0.23	81	145.30	19,984,271	0.10
9/2/2003	10:50	2.1	0.21	80	190.30	25,850,352	0.12
9/8/2003	2:10	9.1	3.19	83	147.30	20,759,578	0.42
9/11/2003	10:00	All 4 SVE carbon drums changed-out					
9/22/2003	1:30	7	0.2	88	335.25	50,094,396	0.77
10/1/2003	10:30	6.5	0.2	85	213.00	30,742,290	0.44
10/6/2003	11:00	7	0.3	85	120.50	17,391,765	0.27
10/13/2003	11:15	5	0.2	85	168.25	24,283,523	0.27
10/29/2003	10:00	2.4	0	85	382.75	55,242,308	0.29
11/3/2003	11:30	3	0	85	121.50	17,536,095	0.12
11/10/2003	11:10	3.5	0	85	167.67	24,199,330	0.19
11/17/2003	13:50	4.1	0	85	170.70	24,637,131	0.22
11/24/2003	11:00	3.8	0	85	165.20	23,843,316	0.20
11/24/2003	system shut-down due to rainy season and low influent readings						
					Total Mass of Petroleum Hydrocarbons Removed =		**413.96**
					Average Daily Removal Rate (pounds / day)=		**0.34**

Table 3
Total Mass of Petroleum Hydrocarbons Removed by Vapor Extraction System
3609 International Boulevard, Oakland, California

Date	Time	PID (ppmv)		Flow Rate	Time Elapsed	Air Flow	Mass Removed [1]
		Influent	Effluent	(ft^3/min)	(Hours)	(Liters)	(Pounds)

Notes:

[1] The representative molecular weight of hydrocarbons was assumed to be 78 gram/mole and used the measured temperature of Vapor (36 °C) in converting ppm-v to ppm on mass basis.

[2] System accidentally shut down from main box, readings taken 30 minutes after startup.

[3] GAC Replaced

[4] GAC-1 removed, new GAC installed at effluent end

[5] SVE System turned off for rainy season due to low influent concentrations

[6] system down, hoses disconnected and GAC moved for replacement

[7] system down for electrical repair

[8] Carbon change-out of three drums, moved new effluent drum on 10/25/01 to GAC-1

[9] system shut-down due to high effluent value

[10] System re-started (since November 21, 2001), installed new 4-55 gallon vapor phase carbon vessels, repaired blower

[11] System was shut-down due to low influent reading

[12] System was restarted on 6/12/02

[13] System was re-started but no readings were taken

FIGURES

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

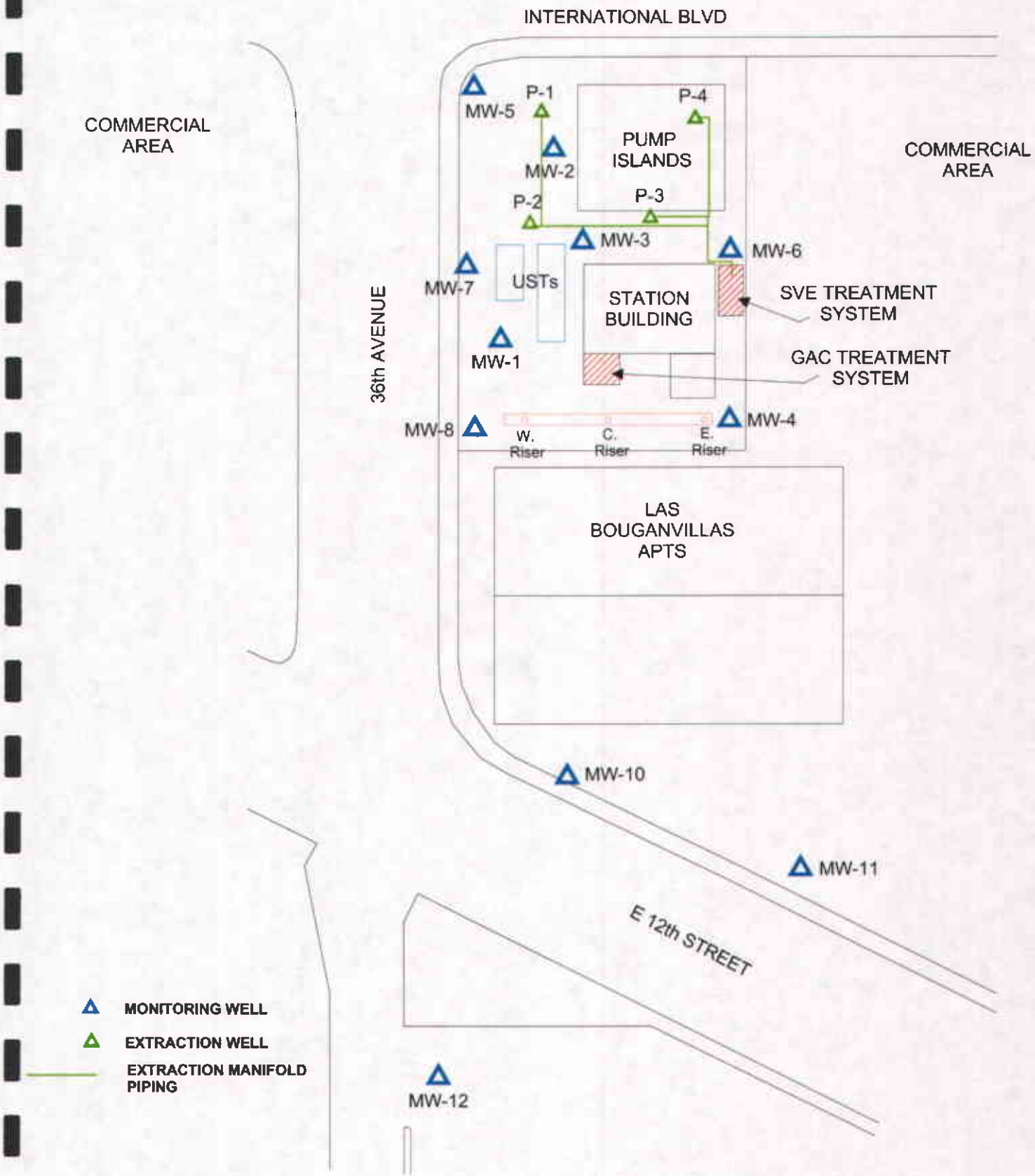


Figure 2: Site map showing location of groundwater monitoring wells, French drain, SVE system, and GAC system

SOMA ENVIRONMENTAL ENGINEERING, INC.

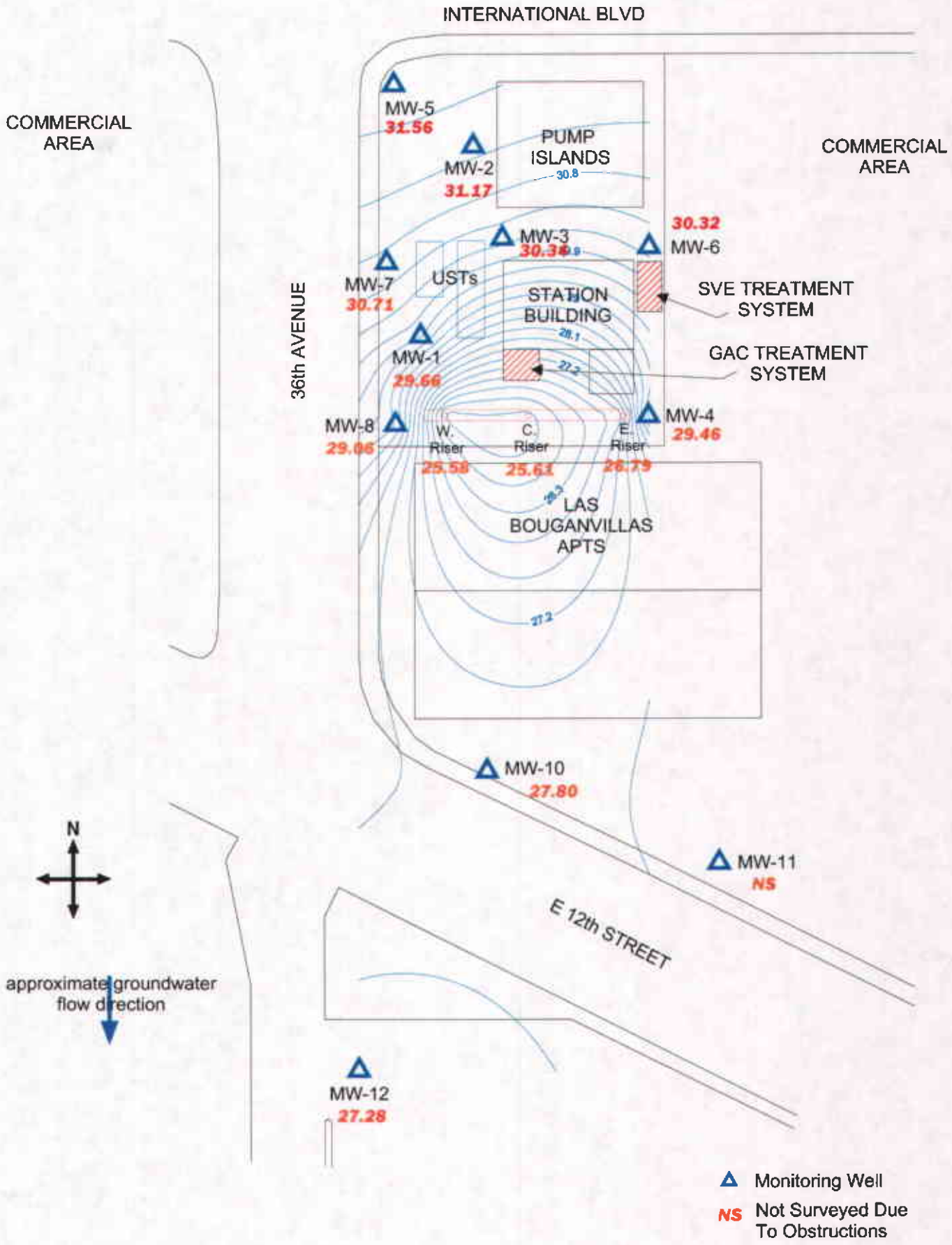


Figure 3: Groundwater elevation contour map in feet. January, 2004.

ENVIRONMENTAL ENGINEERING, INC.

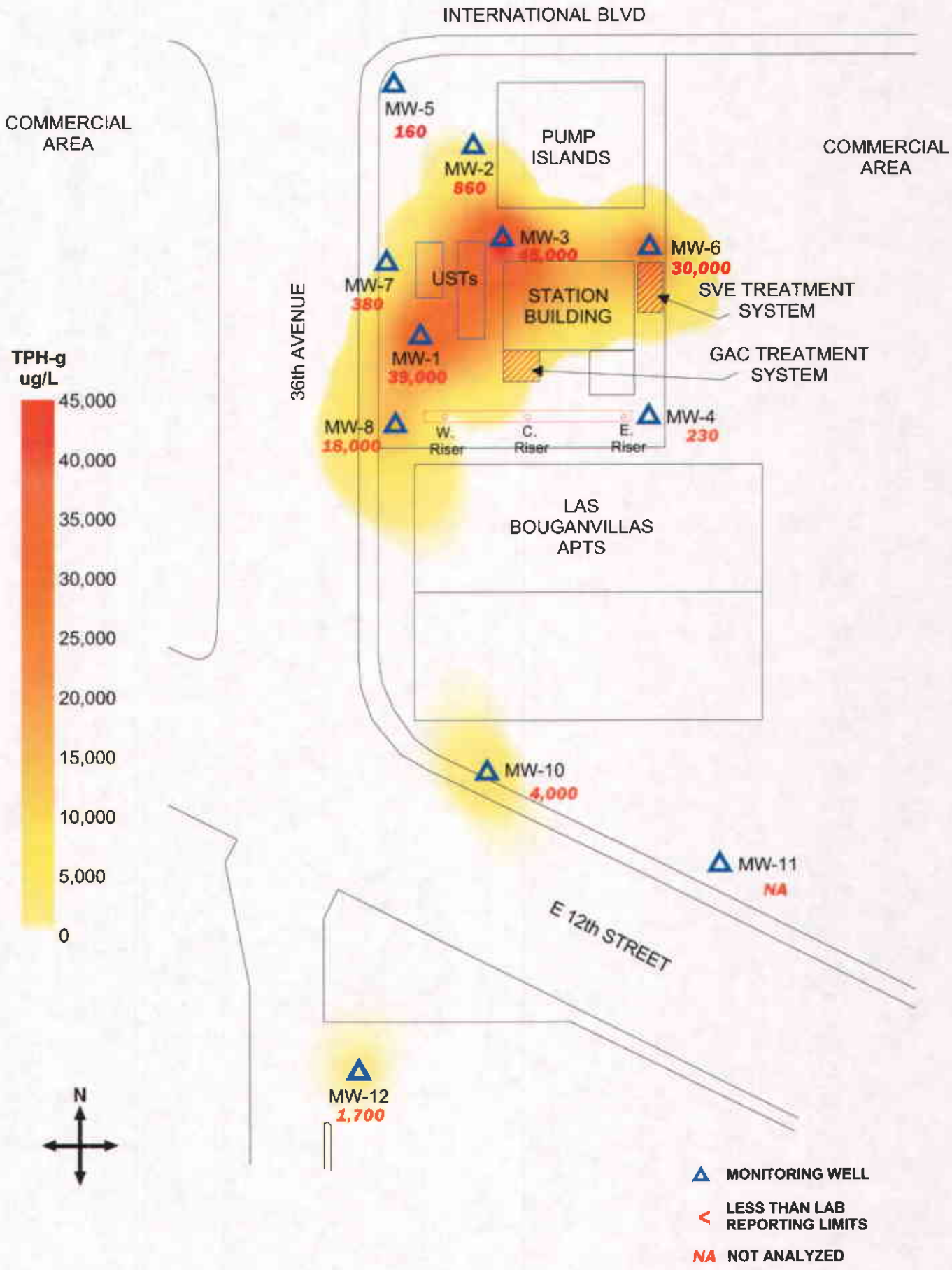
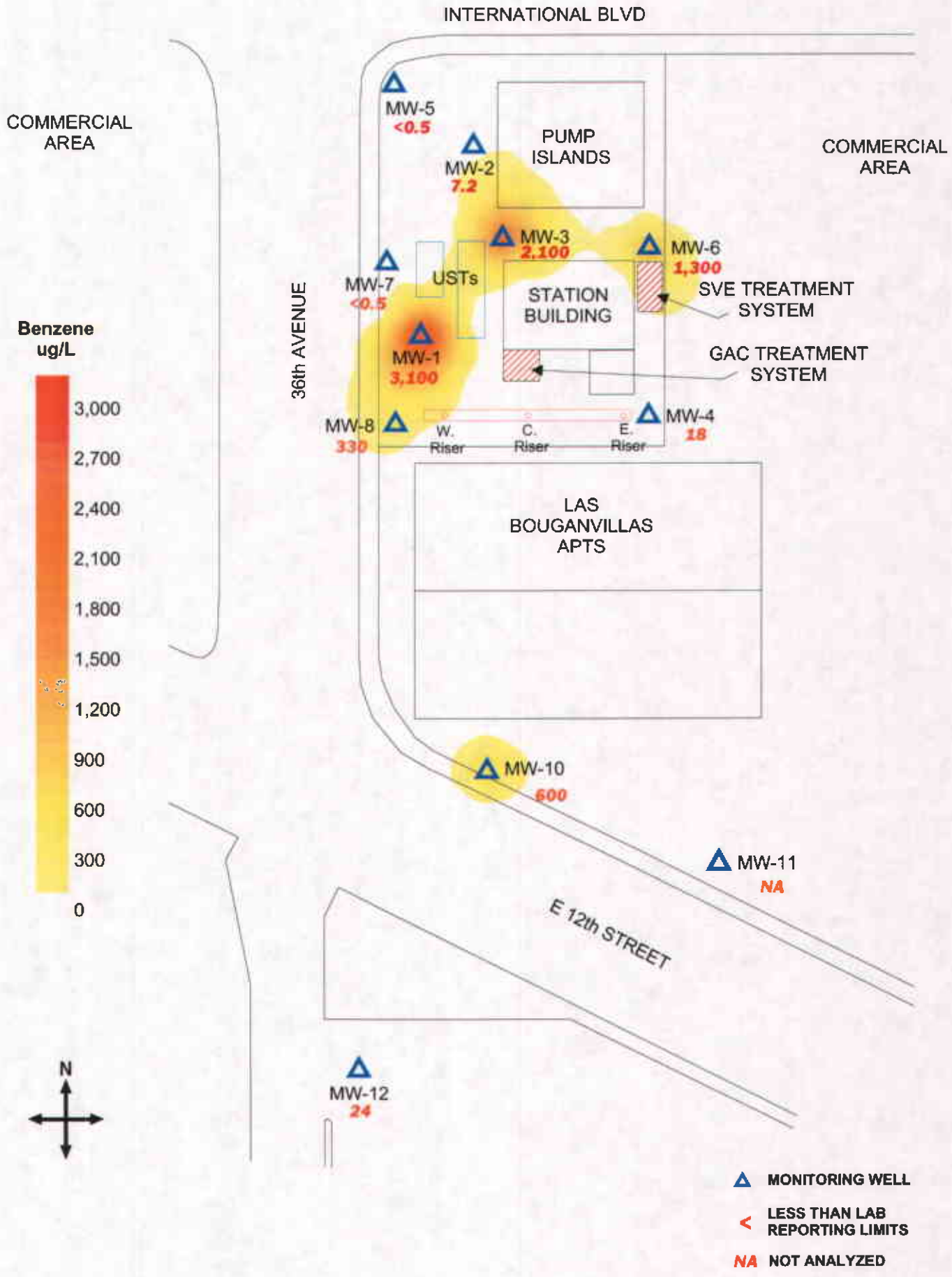


Figure 4: Contour map of TPH-g concentrations in the groundwater. January, 2004.

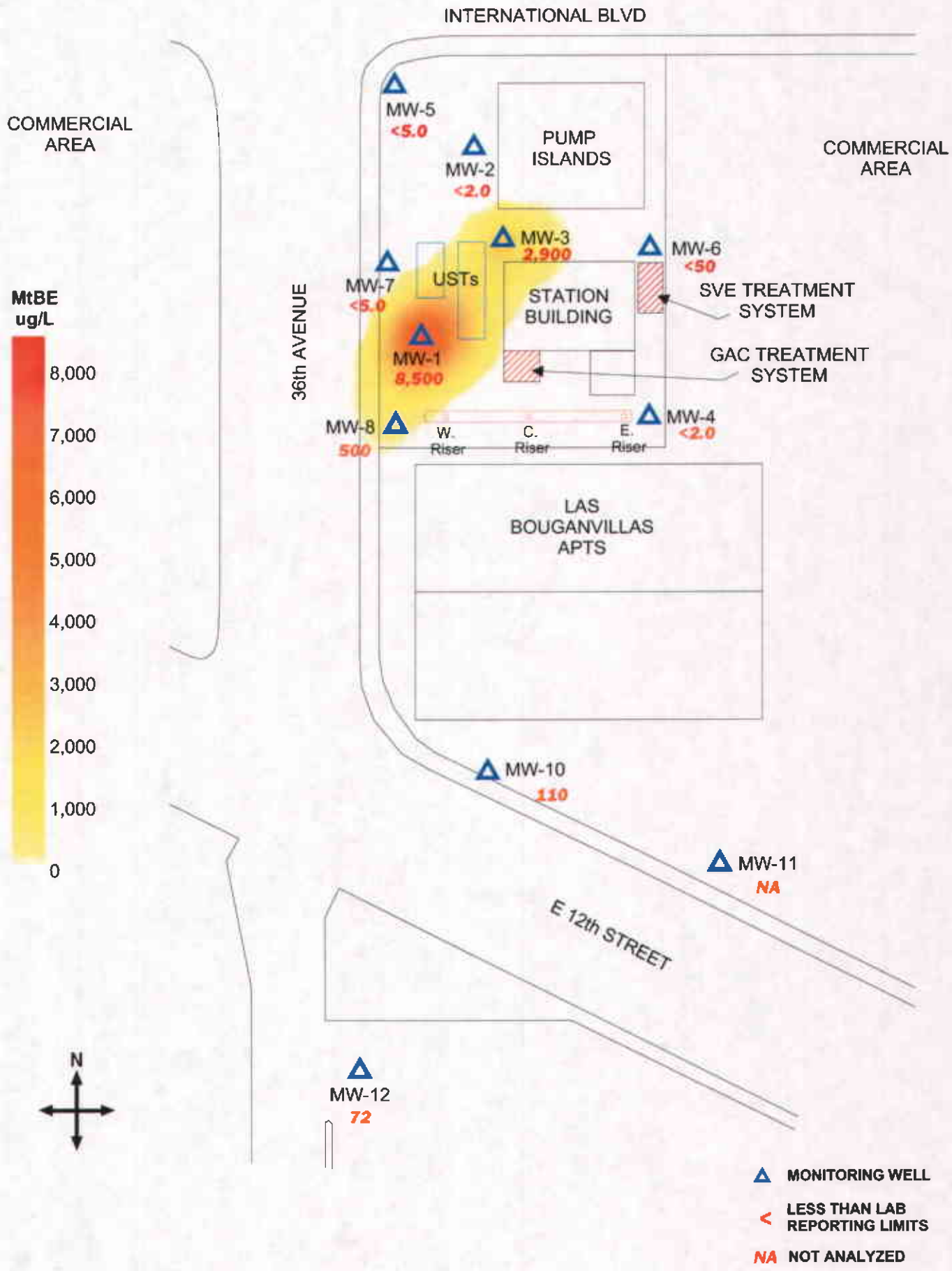
SOMA ENVIRONMENTAL ENGINEERING, INC.



approximate scale in feet
0 25 50

Figure 5: Contour map of Benzene concentrations in the groundwater. January, 2004.

SOMA ENVIRONMENTAL ENGINEERING, INC.

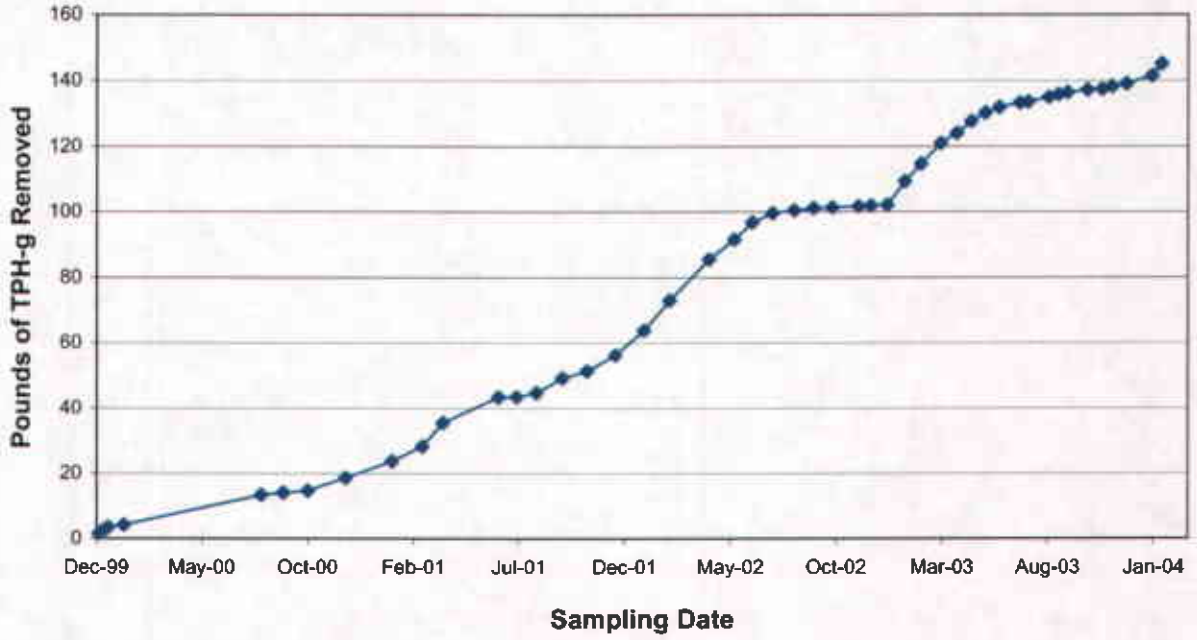


approximate scale in feet

0 25 50

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

SOMA ENVIRONMENTAL ENGINEERING, INC.



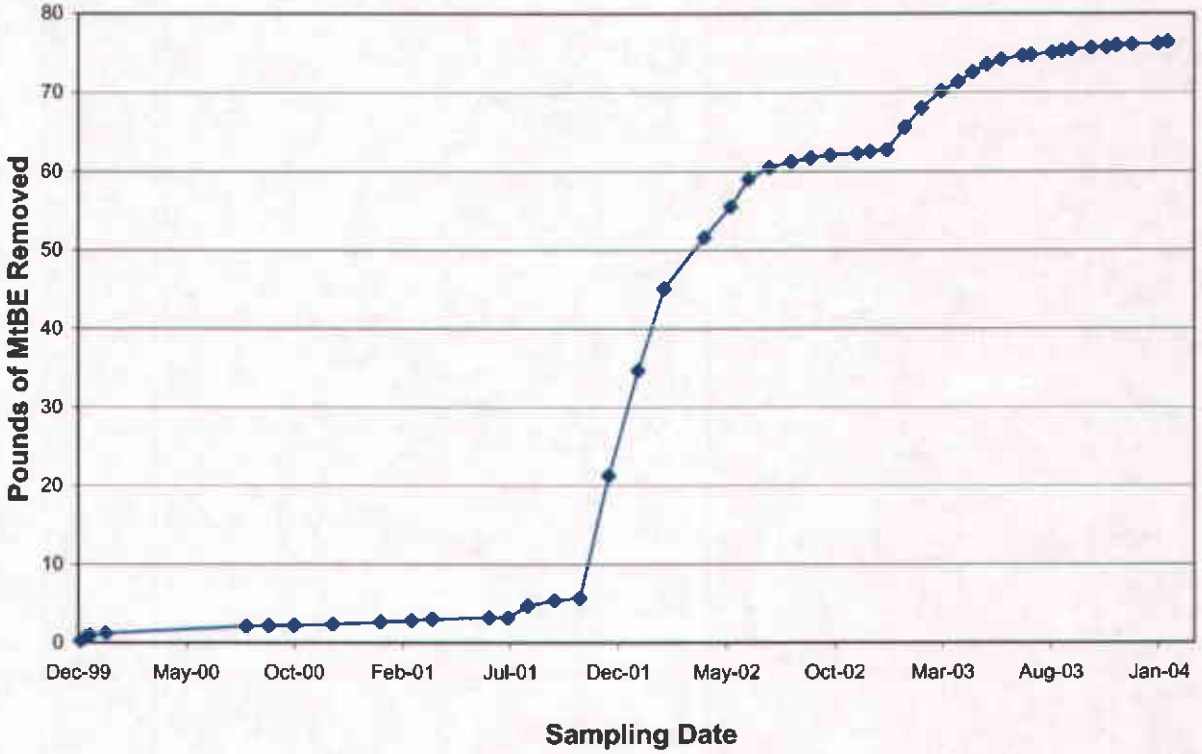


Figure 7. Cumulative mass of TPH-g and MtBE removed from groundwater since the installation of the treatment system.

APPENDIX A

Table of Elevations & Coordinates on Monitoring Wells
Surveyed by Kier Wright Civil Engineers Surveyors, Inc.,
and
Field Measurements of Physical, Chemical, and
Biodegradation Parameters of Groundwater

DATE: 08/27/02
JOB# A02576

TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL

Oakland-E. 14 the St. "International Blvd"

WELL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
FD-C	2109299.85	6064039.85	39.35	Notch on north side of PVC
			40.25	Punch north rim of box
FD-E	2109281.13	6064067.87	40.06	Notch on north side of PVC
			40.55	Punch north rim of box
FD-W	2109314.99	6064017.59	39.16	Notch on north side of PVC
			39.95	Punch north rim of box
MW-1	2109338.74	6064025.97	40.11	Notch on north side of PVC
			40.76	Punch north rim of box
MW-2	2109383.20	6064073.06	40.71	Notch on north side of PVC
			41.61	Punch north rim of box
MW-3	2109351.11	6064064.63	40.91	Notch on north side of PVC
			41.68	Punch north rim of box
MW-4	2109278.18	6064076.40	40.01	Notch on north side of PVC
			40.67	Punch north rim of box
MW-5	2109410.84	6064058.46	41.16	Notch on south side of PVC
			41.60	Punch south rim of box
MW-6	2109320.46	6064105.06	40.92	Notch on north side of PVC
			41.52	Punch north rim of box
MW-7	2109368.19	6064025.54	39.94	Notch on north side of PVC
			40.54	Punch north rim of box
MW-8	2109321.68	6064000.46	39.38	Notch on north side of PVC
			39.72	Punch north rim of box

Kier Wright Civil Engineers Surveyors, Inc.
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
(925) 249-6555 (925) 249-6563

DATE: 08/27/02
JOB# A02576

TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL
Oakland-E. 14 the St. "International Blvd"

WELL NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
MW-10	2109193.97	6063957.39	36.71	Notch on north side of PVC
			37.70	Punch north rim of box
MW-11	2109125.26	6064007.52	XXXX	NO ELEVATION , BOAT ON TOP
MW-12	2109121.85	6063865.00	36.84	Notch on north side of PVC
			36.87	

Bench mark: NGS Bench mark No.M 554. To reach the station from the intersection of Interstate Highway 880 and Hegenberger Rd in South Oakland go northeast on Hegenberger Rd for 0.5 MI to a side road right Baldwin St. Turn right and go south on Baldwin St for 0.35 MI to a T-intersection, 85th Ave. for 0.1 MI to a side road right, Railroad Ave. Turn right and go south on Railroad Ave. for 0.1 MI to the station on the left, east, side of the road in a large concrete headwall for a culvert.

Elevation = 14.20 NAVD88 Datum

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

Kier Wright Civil Engineers Surveyors, Inc.
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
(925) 249-6555 (925) 249-6563

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	30 feet		Oakland, CA
Top of Casing Elevation:	40.11 feet		
Depth to Groundwater:	10.45 feet	**Date:**	January 22, 2004
Groundwater Elevation:	29.66 feet	**Sampler:**	Tony Perini
Water Column Height:	19.55 feet		Roy Zarrin
Purged Volume:	11 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☑ Yes ☐ **Describe:**

Odor: No ☑ Yes ☐ **Describe:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
3:18 PM	1.5	7.08	20.30	565	4.87	96.1	-40			
3:20 PM	7.0	7.05	20.20	566	1.76	85.5	-42			
3:22 PM	11	7.00	20.20	566	1.40	164	-60			
3:25 PM	samples							3.3	3.8	29

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-2	**Project No.:**	2331
Casing Diameter:	4 inches	**Address:**	3609 International Blvd.
Depth of Well:	31 feet		Oakland, CA
Top of Casing Elevation:	40.71 feet		
Depth to Groundwater:	9.54 feet	**Date:**	January 22, 2004
Groundwater Elevation:	31.17 feet	**Sampler:**	Tony Perini
Water Column Height:	21.46 feet		Roy Zarrin
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☑ Yes ☐ **Describe:**

Odor: No ☑ Yes ☐ **Describe:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
1:27 PM	1.5	7.08	20.50	565	4.28	113	156			
1:30 PM	8.0	6.97	20.70	564	2.29	89.3	146			
1:33 PM	14	6.98	20.60	564	2.12	83	132			
1:35 PM		Sampled						0.3	4.4	50

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3	**Project No.:**	2331
Casing Diameter:	4 inches	**Address:**	3609 International Blvd.
Depth of Well:	31.50 feet		Oakland, CA
Top of Casing Elevation:	40.91 feet		
Depth to Groundwater:	10.57 feet	**Date:**	January 22, 2004
Groundwater Elevation:	30.34 feet	**Sampler:**	Tony Perini
Water Column Height:	~~20.93~~ feet 20.93		Roy Zarrin
Purged Volume:	19 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☐ Yes ☑ **Describe:** slight sheen

Odor: No ☐ Yes ☑ **Describe:** petro odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
2:15 PM	1.5	6.86	20.50	844	3.79	29.9	-105			
2:18 PM	8.0	6.95	20.20	713	1.08	~~30.4~~	-111			
2:21 PM	14	6.85	20.60	715	1.31	30.4	-118			
2:24 PM	19	6.83	20.60	717	1.18	48.5	-119			
2:30 PM	Sampled							3.30	2.3	0

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-4	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	26 feet		Oakland, CA
Top of Casing Elevation:	40.01 feet		
Depth to Groundwater:	10.55 feet	**Date:**	January 22, 2004
Groundwater Elevation:	29.46 feet	**Sampler:**	Tony Perini
Water Column Height:	15.45 feet		Roy Zarrin
Purged Volume:	10 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☑ Yes ☐ **Describe:**

Odor: No ☑ Yes ☐ **Describe:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
4:05 PM	1.0	7.02	19.20	525	5.61	65.8	-35			
4:08 PM	6.0	6.82	19.30	522	1.76	67.9	-6			
4:09 PM	10	6.81	19.30	525	1.55	43.4	1			
4:15 PM			Sampled					0.0	3.5	29

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-5	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	26.50 feet		Oakland, CA
Top of Casing Elevation:	41.16 feet		
Depth to Groundwater:	9.60 feet	**Date:**	January 22, 2004
Groundwater Elevation:	31.56 feet	**Sampler:**	Tony Perini
Water Column Height:	~~[illegible]~~ feet 16.90		Roy Zarrin
Purged Volume:	13 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

Color: No ☑ Yes ☐ **Describe:** _____

Sheen: No ☑ Yes ☐ **Describe:** _____

Odor: No ☑ Yes ☐ **Describe:** _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
11:48 AM	1.0	7.05	21.40	647	7.02	84.5	30			
11:50 AM	5.0	6.99	21.40	655	3.52	24.6	20			
11:52 AM	9.0	6.98	21.40	629	2.78	21.4	-12			
11:53 AM	12	6.98	21.40	629	2.14	17.6	-21			
11:55 AM	samples							0.47	1.8	80

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-6	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	25 feet		Oakland, CA
Top of Casing Elevation:	40.92 feet		
Depth to Groundwater:	10.60 feet	**Date:**	January 22, 2004
Groundwater Elevation:	30.32 feet	**Sampler:**	Tony Perini
Water Column Height:	14.40 feet		Roy Zarrin
Purged Volume:	8.5 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☐ Yes ☑ **Describe:** slight sheen

Odor: No ☐ Yes ☑ **Describe:** slight odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
3:42 PM	1.0	6.95	19.80	742	7.17	402	-18			
3:45 PM	6.0	6.92	19.80	700	2.60	134	-51			
3:47 PM	8.5	6.91	20.00	700	2.00	194	-60			
3:50 PM	samples							3.30	3.2	0

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-7	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	26 feet		Oakland, CA
Top of Casing Elevation:	39.94 feet		
Depth to Groundwater:	9.23 feet	**Date:**	January 22, 2004
Groundwater Elevation:	30.71 feet	**Sampler:**	Tony Perini
Water Column Height:	16.77 feet		Roy Zarrin
Purged Volume:	9.5 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☑ Yes ☐ **Describe:**

Odor: No ☑ Yes ☐ **Describe:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
1:51 PM	1.5	7.08	21.10	462	4.61	9.9	-60			
1:53 PM	6.0	7.00	21.20	463	2.65	46.6	-60			
1:56 PM	9.5	7.01	21.20	463	1.65	60.5	-71			
2 PM	Samples							0.93	3.5	2.5

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-8	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	27 feet		Oakland, CA
Top of Casing Elevation:	39.38 feet		
Depth to Groundwater:	10.32 feet	**Date:**	January 22, 2004
Groundwater Elevation:	29.06 feet	**Sampler:**	Tony Perini
Water Column Height:	16.68 feet		Roy Zarrin
Purged Volume:	10 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☐ Yes ☑ **Describe:** slight sheen

Odor: No ☐ Yes ☑ **Describe:** petro odor

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
2:58 PM	2.0	7.08	20.00	545	3.35	350	-80			
3PM	6.0	6.96	20.10	565	2.17	332	-82			
3:02 PM	10	6.95	20.10	565	1.76	393	-93			
3:05 PM	samples							2.43	3.1	0

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-10	**Project No.:**	2331
Casing Diameter:	2 inches	**Address:**	3609 International Blvd.
Depth of Well:	23.40 feet		Oakland, CA
Top of Casing Elevation:	36.71 feet		
Depth to Groundwater:	8.91 feet	**Date:**	January 22, 2004
Groundwater Elevation:	27.80 feet	**Sampler:**	Tony Perini
Water Column Height:	14.49 feet		Roy Zarrin
Purged Volume:	8.0 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☑ Yes ☐ **Describe:**

Odor: No ☑ Yes ☐ **Describe:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
11:25 AM	1.0	7.05	19.90	584	4.18	110	-47			
11:27 AM	3.5	7.05	19.90	585	2.31	61.6	-34			
11:28 AM	8.0	6.99	20.00	585	1.54	55.3	-25			
11:30 AM	sample							0.25	2.5	0

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-12	**Project No.:**	2331
Casing Diameter:	4 inches	**Address:**	3609 International Blvd.
Depth of Well:	30 feet		Oakland, CA
Top of Casing Elevation:	36.84 feet		
Depth to Groundwater:	9.56 feet	**Date:**	January 22, 2004
Groundwater Elevation:	27.28 feet	**Sampler:**	Tony Perini
Water Column Height:	20.44 feet		Roy Zarrin
Purged Volume:	19 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

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

Sheen: No ☑ Yes ☐ **Describe:**

Odor: No ☑ Yes ☐ **Describe:**

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (µS/cm)	D.O. (mg/L)	Turbidity (NTU)	ORP (mV)	Fe^{+2} (mg/L)	$NO3^{-1}$ (mg/L)	SO_4^{-2} (mg/L)
11:01 AM	1.5	8.24	19.80	612	5.21	47.1	-72			
11:04 AM	8.0	7.31	19.90	612	1.44	15.2	-84			
11:07 AM	13	7.02	19.90	609	1.11	14.7	-87			
11:09 AM	19	6.99	19.90	609	1.01	23.1	-88			
11:10 AM	5 samples							1.75	0.7	0

Appendix B

Chain of Custody Form and Laboratory Report

for the

First 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: 04-FEB-04
Lab Job Number: 170159
Project ID: 2331
Location: 3609 Int'l Blvd., Oakland

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

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

C&T LOGIN # 170159

Sampler: TONY PERINI / ROY ZARRIN

Project No: 2331

Report To: Tony Perini

Project Name: 3609 International Blvd, Oakland

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 + MtBE 8021 GC	Analyses: MTBE Confirmation 8260 GCMS
-1	MW-1	1/22/04 3:25 PM		✓		3-VOAs	✓			✓	✓	✓	✓
-2	MW-2	1:35 PM		↓		↓	↓			↓	↓	↓	↓
-3	MW-3	2:30 PM		↓		↓	↓			↓	↓	↓	↓
-4	MW-4	4:15 PM		↓		↓	↓			↓	↓	↓	↓
-5	MW-5	11:55 AM		↓		↓	↓			↓	↓	↓	↓
-6	MW-6	3:50 PM		↓		↓	↓			↓	↓	↓	↓
-7	MW-7	2:10 PM		↓		↓	↓			↓	↓	↓	↓
-8	MW-8	3:05 PM		↓		↓	↓			↓	↓	↓	↓
N/A	~~MW-9~~												
-9	MW-10	1/22/04 11:30 AM		↓		↓	↓			↓	↓	↓	↓
N/A	~~MW-11~~												
-10	MW-12	1/22/04 11:10 AM		↓		↓	↓			↓	↓	↓	↓

Preservation Correct? ☐ Yes ☐ No ☐ N/A

Received At ☐ Cold ☐ Ambient ☐ On ice ☒ Intact

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:		RECEIVED BY:	
Tony Perini / TONY PERINI	1/22/04 5 PM DATE/TIME	Kat Flynn	1/22/04 5pm DATE/TIME
	DATE/TIME		DATE/TIME
	DATE/TIME		DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331		
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04
Batch#:	87884	Analyzed:	01/23/04

Field ID: MW-1 Lab ID: 170159-001
Type: SAMPLE Diln Fac: 100.0

Analyte	Result	RL	Analysis
Gasoline C7-C12	39,000	5,000	8015B
MTBE	8,900	200	EPA 8021B
Benzene	3,100	50	EPA 8021B
Toluene	1,600	50	EPA 8021B
Ethylbenzene	950	50	EPA 8021B
m,p-Xylenes	3,100	50	EPA 8021B
o-Xylene	1,200	50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	110	57-150	8015B
Bromofluorobenzene (FID)	113	65-144	8015B
Trifluorotoluene (PID)	98	54-149	EPA 8021B
Bromofluorobenzene (PID)	106	58-143	EPA 8021B

Field ID: MW-2 Lab ID: 170159-002
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	860	50	8015B
MTBE	ND	2.0	EPA 8021B
Benzene	7.2	0.50	EPA 8021B
Toluene	37	0.50	EPA 8021B
Ethylbenzene	50	0.50	EPA 8021B
m,p-Xylenes	110	0.50	EPA 8021B
o-Xylene	41	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	112	57-150	8015B
Bromofluorobenzene (FID)	128	65-144	8015B
Trifluorotoluene (PID)	102	54-149	EPA 8021B
Bromofluorobenzene (PID)	118	58-143	EPA 8021B

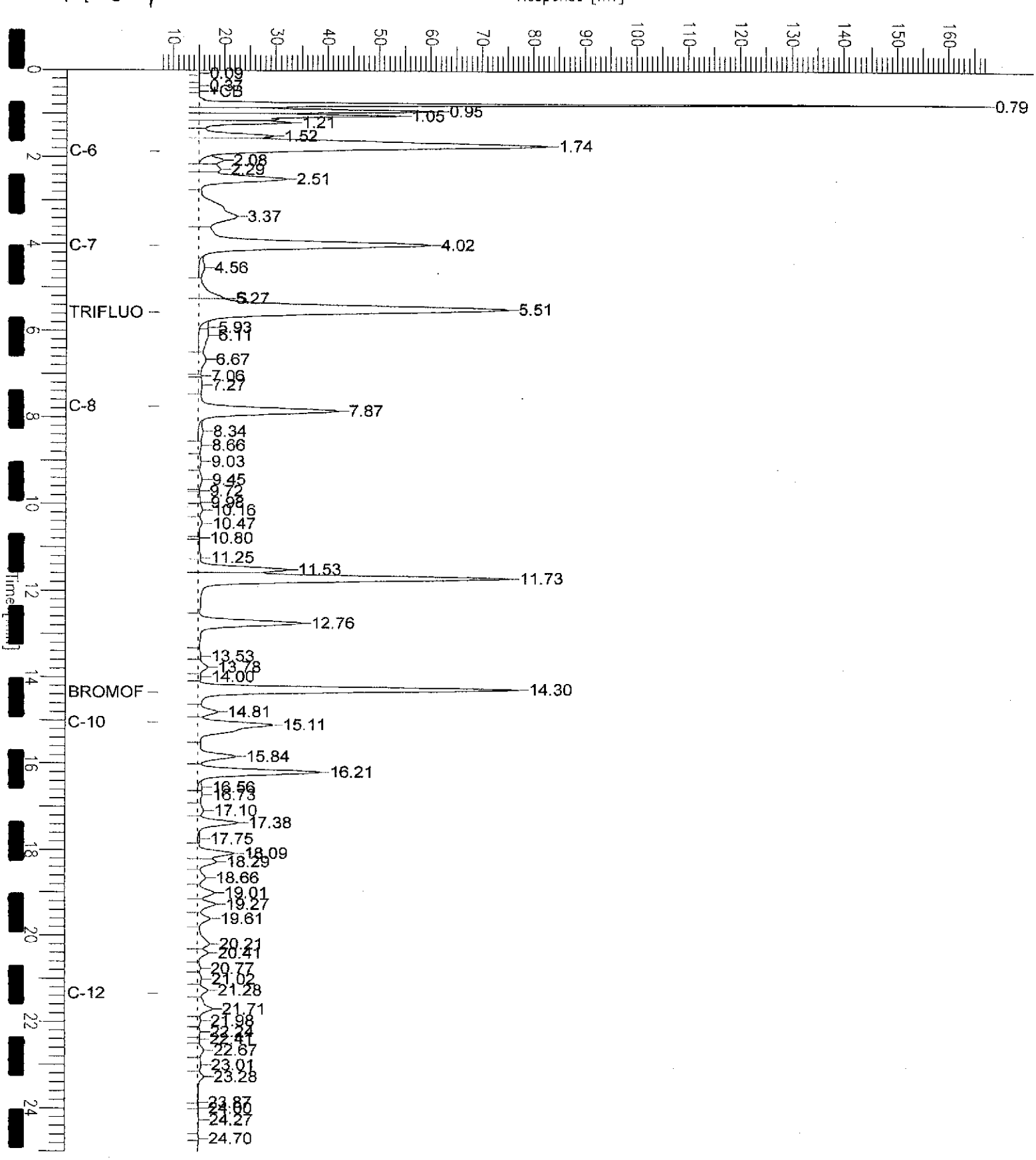
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 170159-001,87884
FileName : G:\GC05\DATA\023G005.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 7 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 12:14 PM
Low Point : 7.38 mV High Point : 167.00 mV
Plot Scale: 159.6 mV

MW-1

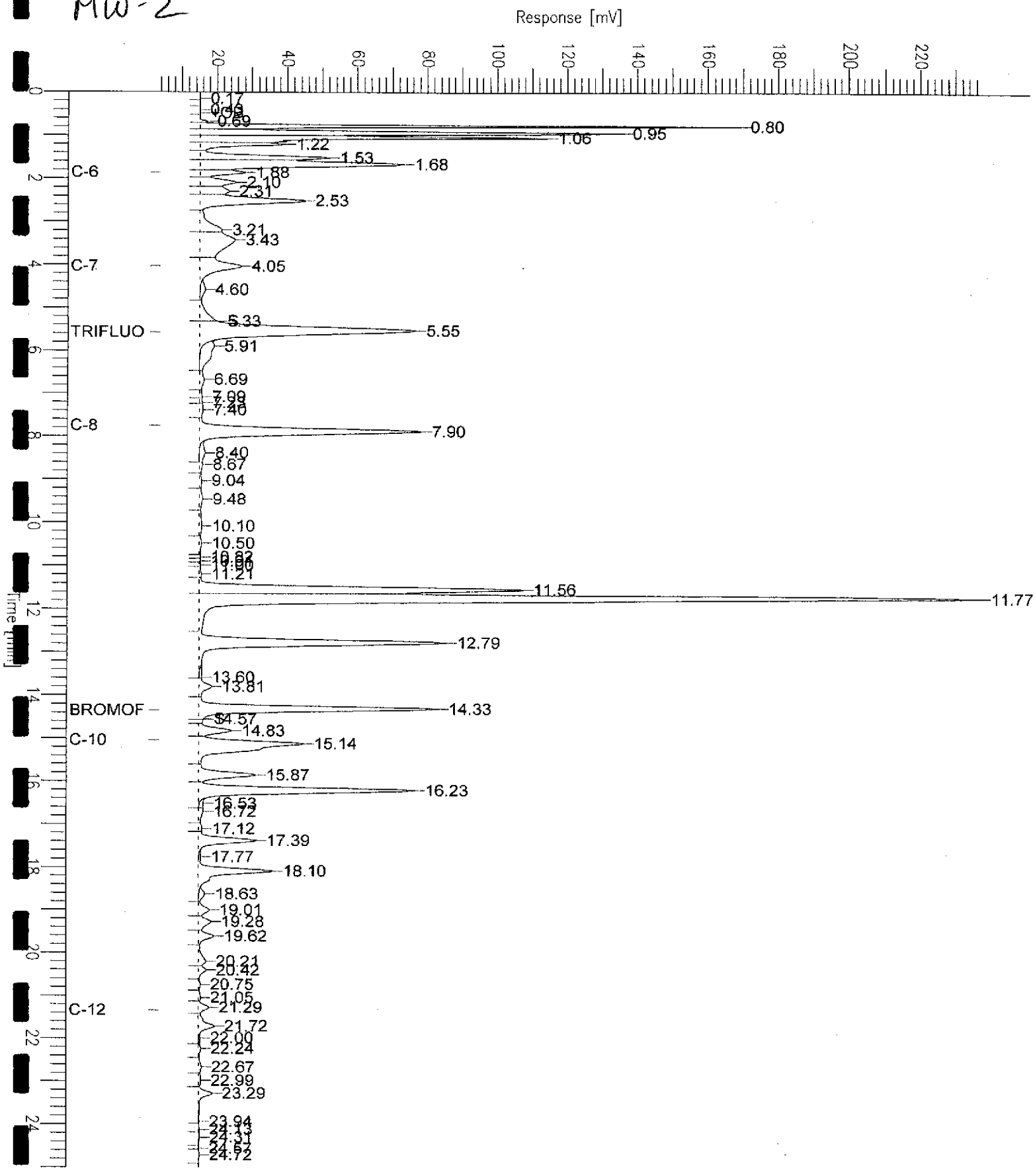


Chromatogram

Sample Name : 170159-002,87884
FileName : G:\GC05\DATA\023G010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 4 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 03:00 PM
Low Point : 3.83 mV High Point : 237.21 mV
Plot Scale: 233.4 mV

MW-2



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331		
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04
Batch#:	87884	Analyzed:	01/23/04

Field ID: MW-3 Lab ID: 170159-003
Type: SAMPLE Diln Fac: 50.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	45,000	2,500	8015B
MTBE	3,100	100	EPA 8021B
Benzene	2,100	25	EPA 8021B
Toluene	850	25	EPA 8021B
Ethylbenzene	1,500	25	EPA 8021B
m,p-Xylenes	4,300	25	EPA 8021B
o-Xylene	1,400	25	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	115	57-150	8015B
Bromofluorobenzene (FID)	119	65-144	8015B
Trifluorotoluene (PID)	106	54-149	EPA 8021B
Bromofluorobenzene (PID)	111	58-143	EPA 8021B

Field ID: MW-4 Lab ID: 170159-004
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	230	50	8015B
MTBE	ND	2.0	EPA 8021B
Benzene	18	0.50	EPA 8021B
Toluene	2.1	0.50	EPA 8021B
Ethylbenzene	8.1	0.50	EPA 8021B
m,p-Xylenes	13	0.50	EPA 8021B
o-Xylene	4.1	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	57-150	8015B
Bromofluorobenzene (FID)	108	65-144	8015B
Trifluorotoluene (PID)	94	54-149	EPA 8021B
Bromofluorobenzene (PID)	103	58-143	EPA 8021B

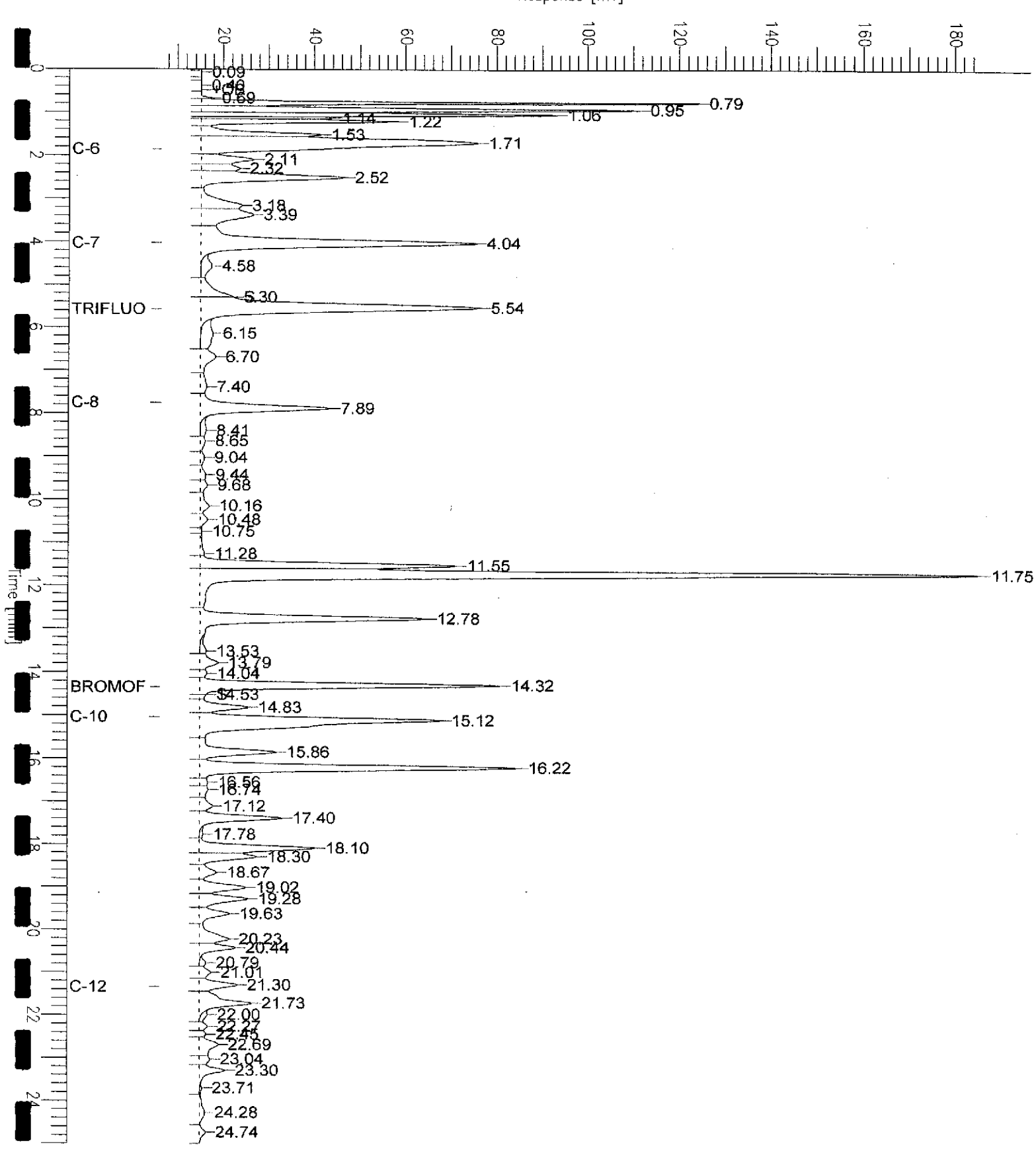
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 170159-003,87884
FileName : G:\GC05\DATA\023G006.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 7 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 12:47 PM
Low Point : 6.55 mV High Point : 185.80 mV
Plot Scale: 179.2 mV

MW-3

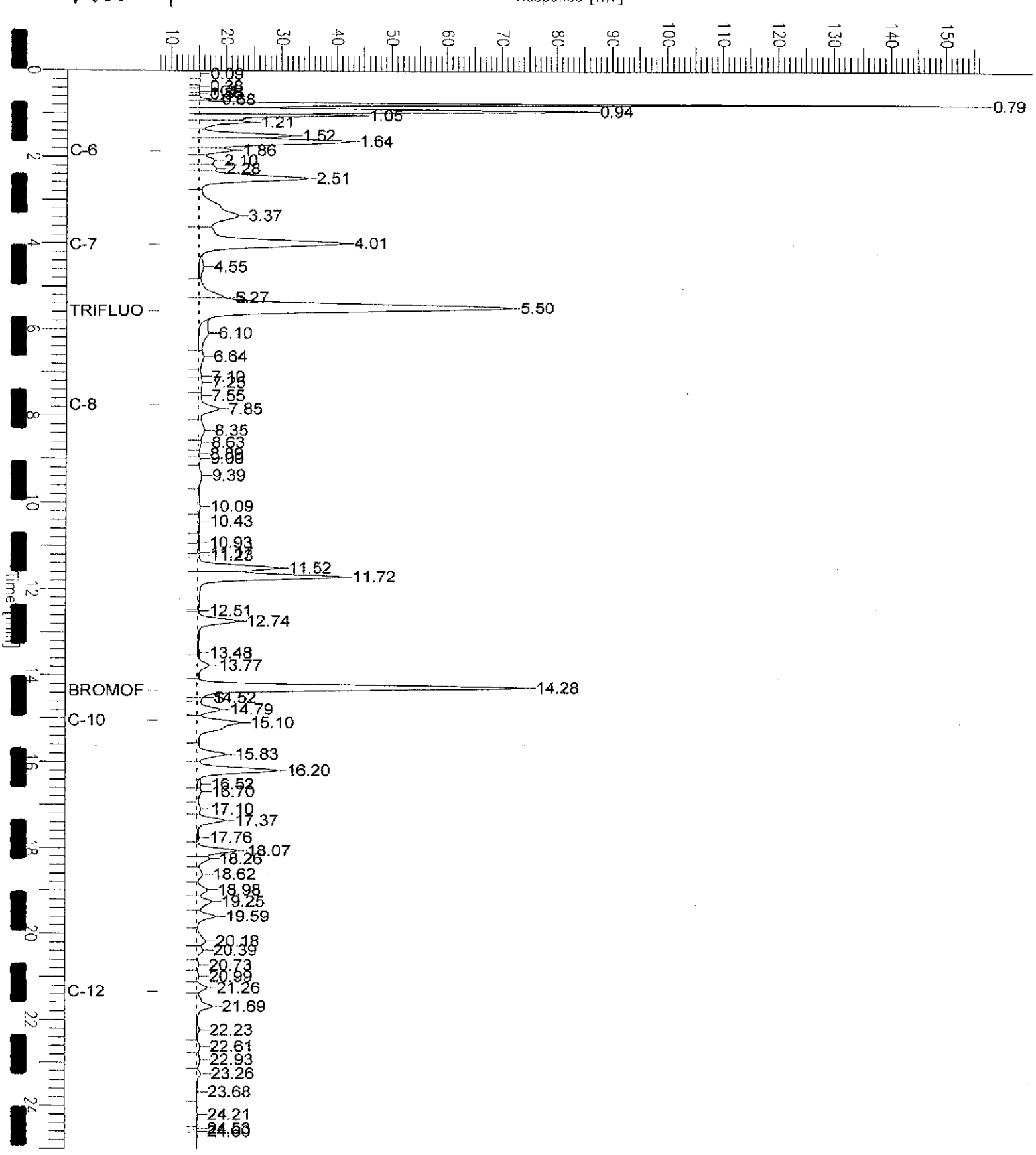


Chromatogram

Sample Name : mss,170159-004,87884
FileName : G:\GC05\DATA\023G004.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 8 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 11:41 AM
Low Point : 7.88 mV High Point : 156.67 mV
Plot Scale: 148.8 mV

MW-4



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331		
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04
Batch#:	87884	Analyzed:	01/23/04

Field ID: MW-5 Lab ID: 170159-005
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	160	50	8015B
MTBE	7.0 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	0.55 C	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)	105	57-150	8015B
Bromofluorobenzene (FID)	114	65-144	8015B
Trifluorotoluene (PID)	96	54-149	EPA 8021B
Bromofluorobenzene (PID)	109	58-143	EPA 8021B

Field ID: MW-6 Lab ID: 170159-006
Type: SAMPLE Diln Fac: 25.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	30,000	1,300	8015B
MTBE	ND	50	EPA 8021B
Benzene	1,300	13	EPA 8021B
Toluene	320	13	EPA 8021B
Ethylbenzene	1,500	13	EPA 8021B
m,p-Xylenes	2,400	13	EPA 8021B
o-Xylene	640	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	114	57-150	8015B
Bromofluorobenzene (FID)	123	65-144	8015B
Trifluorotoluene (PID)	111	54-149	EPA 8021B
Bromofluorobenzene (PID)	115	58-143	EPA 8021B

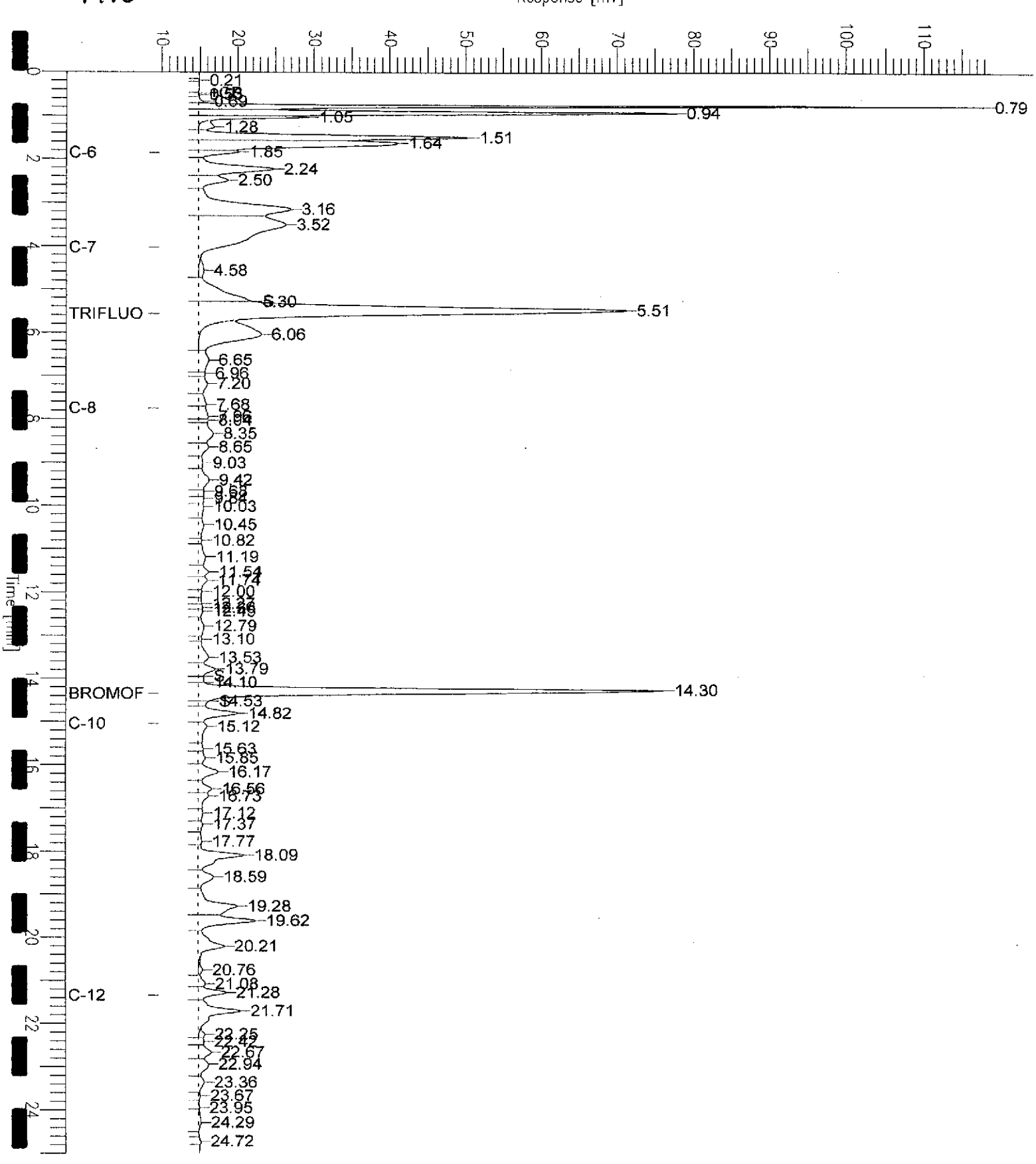
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 170159-005,87884
FileName : G:\GC05\DATA\023G013.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 10 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:30 PM
Time of Injection: 1/23/04 04:56 PM
Low Point : 9.63 mV High Point : 118.01 mV
Plot Scale: 108.4 mV

MW-5

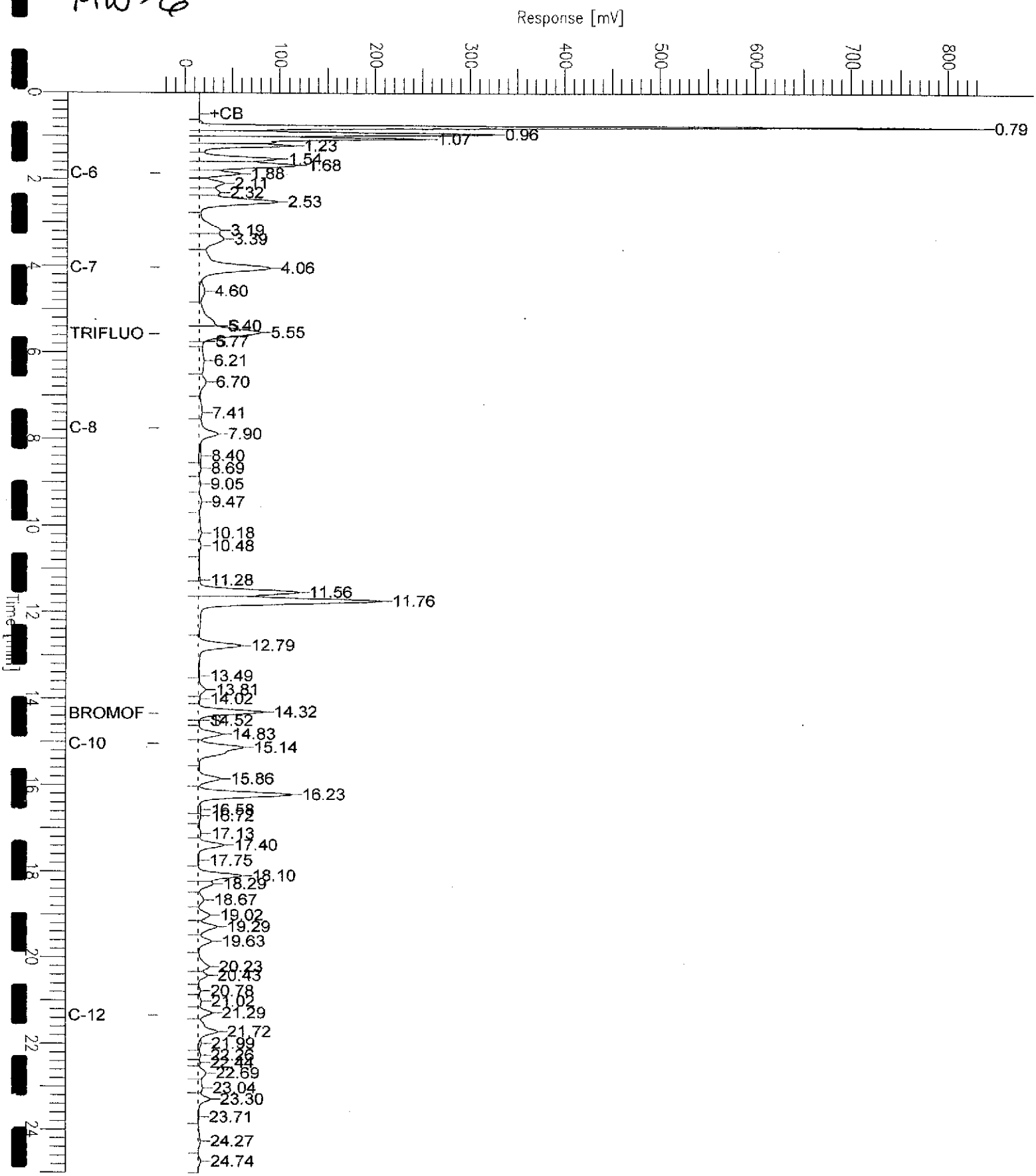


Chromatogram

Sample Name : 170159-006,87884
FileName : G:\GC05\DATA\023G007.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -26 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 01:20 PM
Low Point : -26.05 mV High Point : 838.11 mV
Plot Scale: 864.2 mV

MW-6



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331		
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04
Batch#:	87884	Analyzed:	01/23/04

Field ID: MW-7 Lab ID: 170159-007
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	380	50	8015B
MTBE	4.7	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	1.4 C	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)	121	57-150	8015B
Bromofluorobenzene (FID)	128	65-144	8015B
Trifluorotoluene (PID)	108	54-149	EPA 8021B
Bromofluorobenzene (PID)	116	58-143	EPA 8021B

Field ID: MW-8 Lab ID: 170159-008
Type: SAMPLE Diln Fac: 10.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	18,000	500	8015B
MTBE	480	20	EPA 8021B
Benzene	330	5.0	EPA 8021B
Toluene	37 C	5.0	EPA 8021B
Ethylbenzene	860	5.0	EPA 8021B
m,p-Xylenes	220	5.0	EPA 8021B
o-Xylene	19	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	123	57-150	8015B
Bromofluorobenzene (FID)	124	65-144	8015B
Trifluorotoluene (PID)	122	54-149	EPA 8021B
Bromofluorobenzene (PID)	112	58-143	EPA 8021B

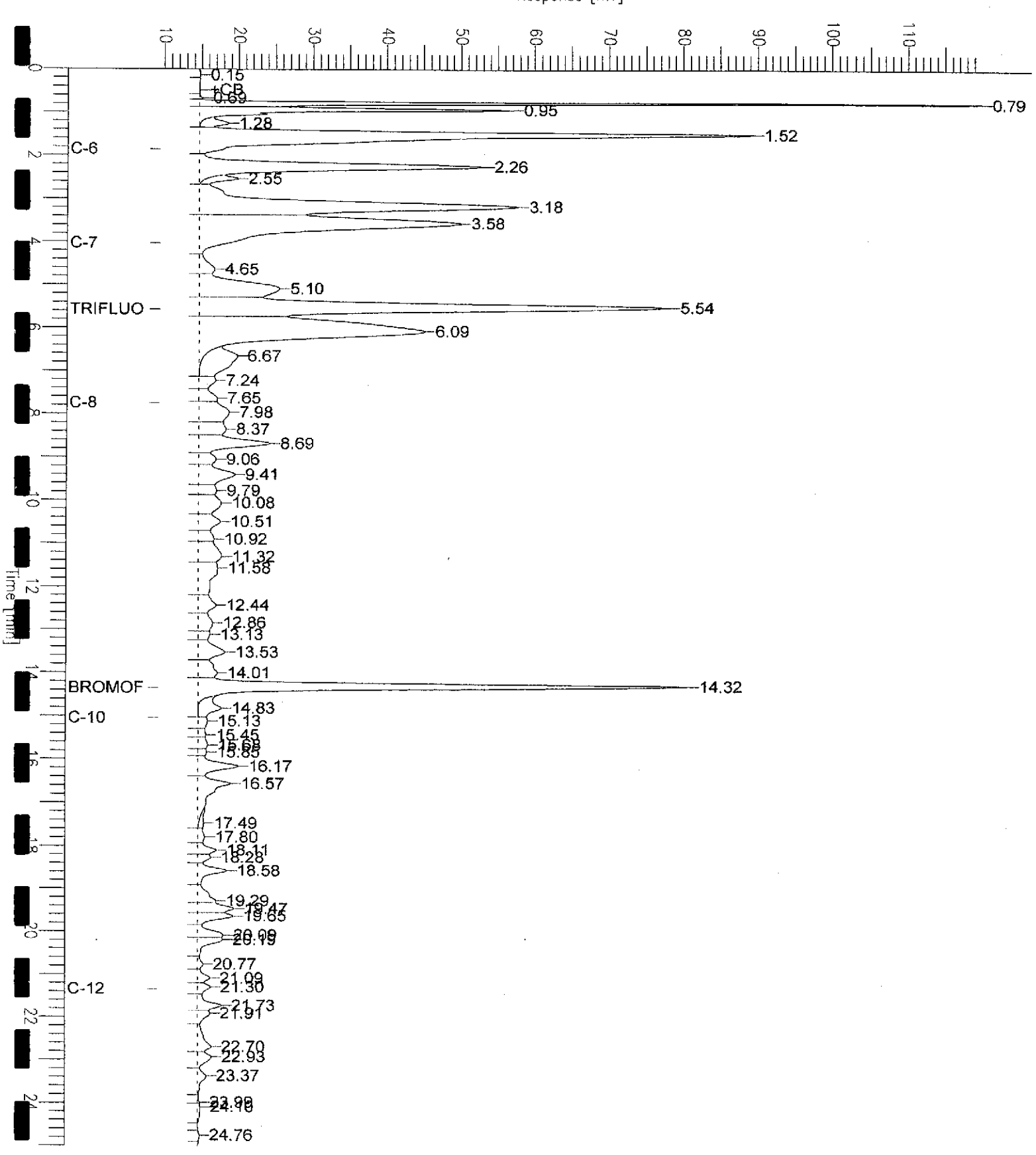
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 170159-007,87884
FileName : G:\GC05\DATA\023G014.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:55 PM
Time of Injection: 1/23/04 05:29 PM
Low Point : 9.35 mV High Point : 119.97 mV
Plot Scale: 110.6 mV

MW-7

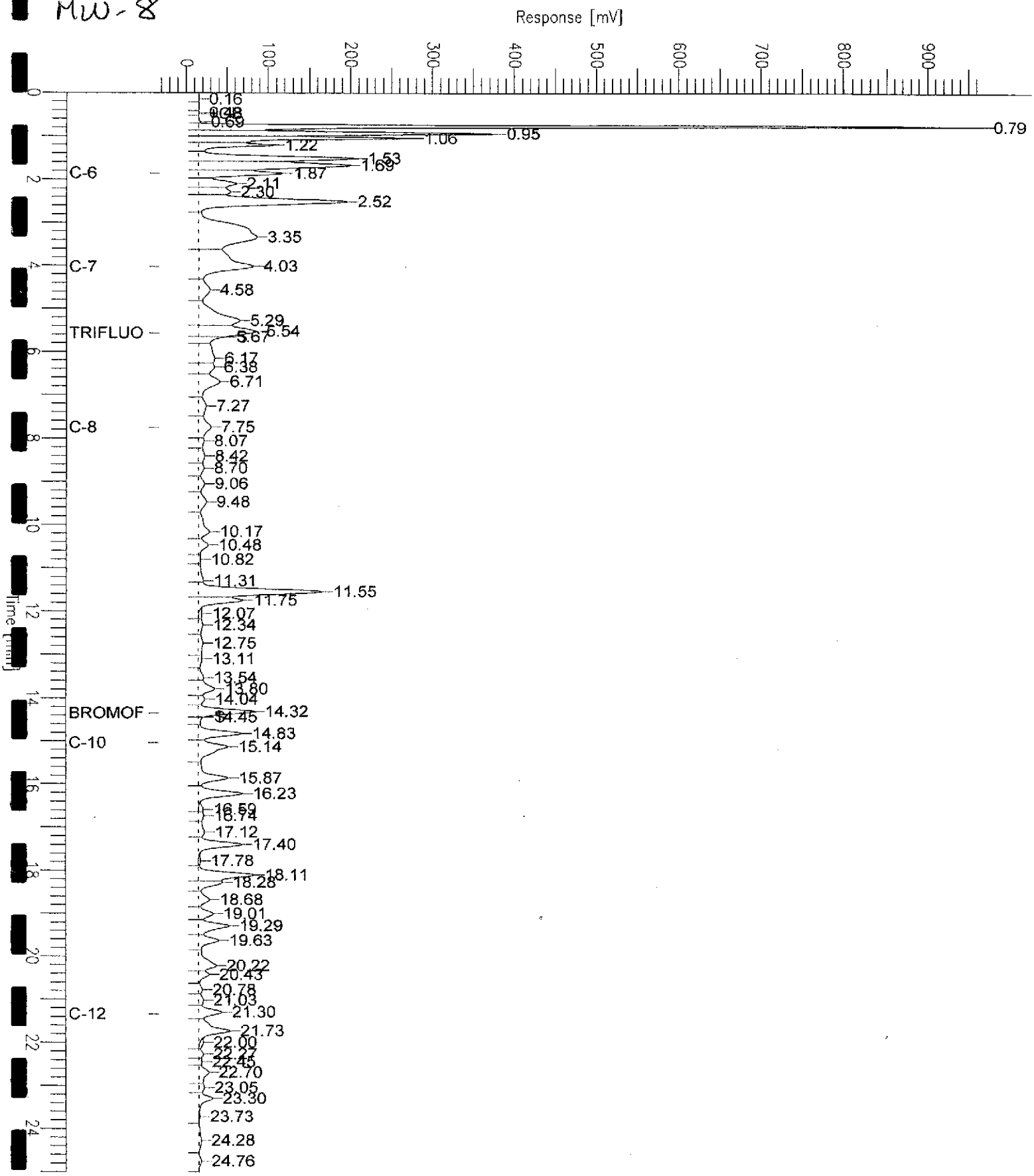


Chromatogram

Sample Name : 170159-008,87884
FileName : G:\GC05\DATA\023G008.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -32 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 01:54 PM
Low Point : -32.48 mV High Point : 967.97 mV
Plot Scale: 1000.5 mV

MW-8



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331		
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04
Batch#:	87884	Analyzed:	01/23/04

Field ID: MW-10 Lab ID: 170159-009
Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	4,000	100	8015B
MTBE	160	4.0	EPA 8021B
Benzene	600	1.0	EPA 8021B
Toluene	15	1.0	EPA 8021B
Ethylbenzene	280	1.0	EPA 8021B
m,p-Xylenes	14 C	1.0	EPA 8021B
o-Xylene	1.3	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	128	57-150	8015B
Bromofluorobenzene (FID)	129	65-144	8015B
Trifluorotoluene (PID)	113	54-149	EPA 8021B
Bromofluorobenzene (PID)	119	58-143	EPA 8021B

Field ID: MW-12 Lab ID: 170159-010
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,700	50	8015B
MTBE	94	2.0	EPA 8021B
Benzene	24 C	0.50	EPA 8021B
Toluene	14 C	0.50	EPA 8021B
Ethylbenzene	3.2	0.50	EPA 8021B
m,p-Xylenes	2.8	0.50	EPA 8021B
o-Xylene	2.2	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	135	57-150	8015B
Bromofluorobenzene (FID)	135	65-144	8015B
Trifluorotoluene (PID)	136	54-149	EPA 8021B
Bromofluorobenzene (PID)	128	58-143	EPA 8021B

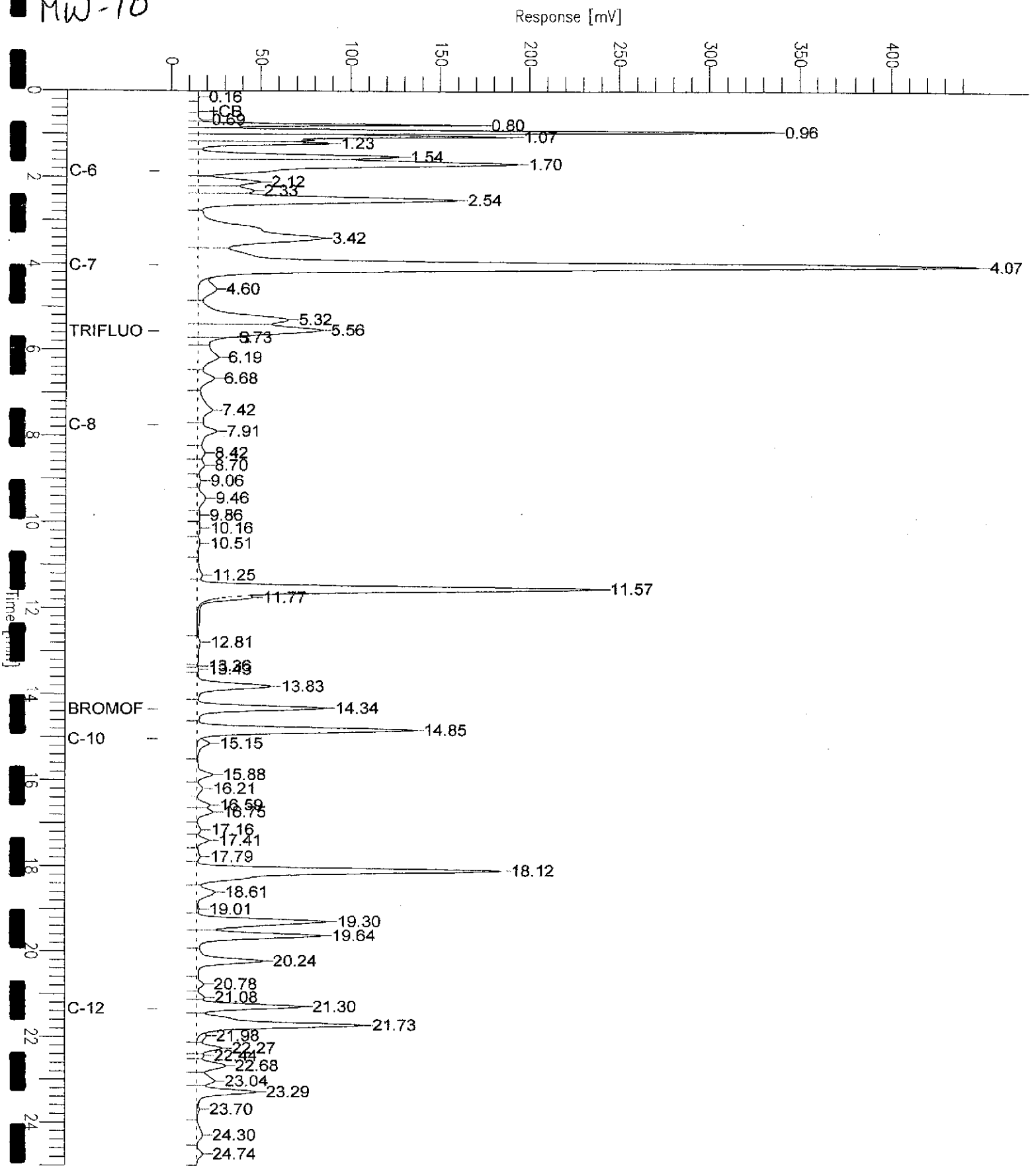
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 170159-009,87884
FileName : G:\GC05\DATA\023G009.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -7 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 05:14 PM
Time of Injection: 1/23/04 02:27 PM
Low Point : -6.64 mV High Point : 449.52 mV
Plot Scale: 456.2 mV

MW-10

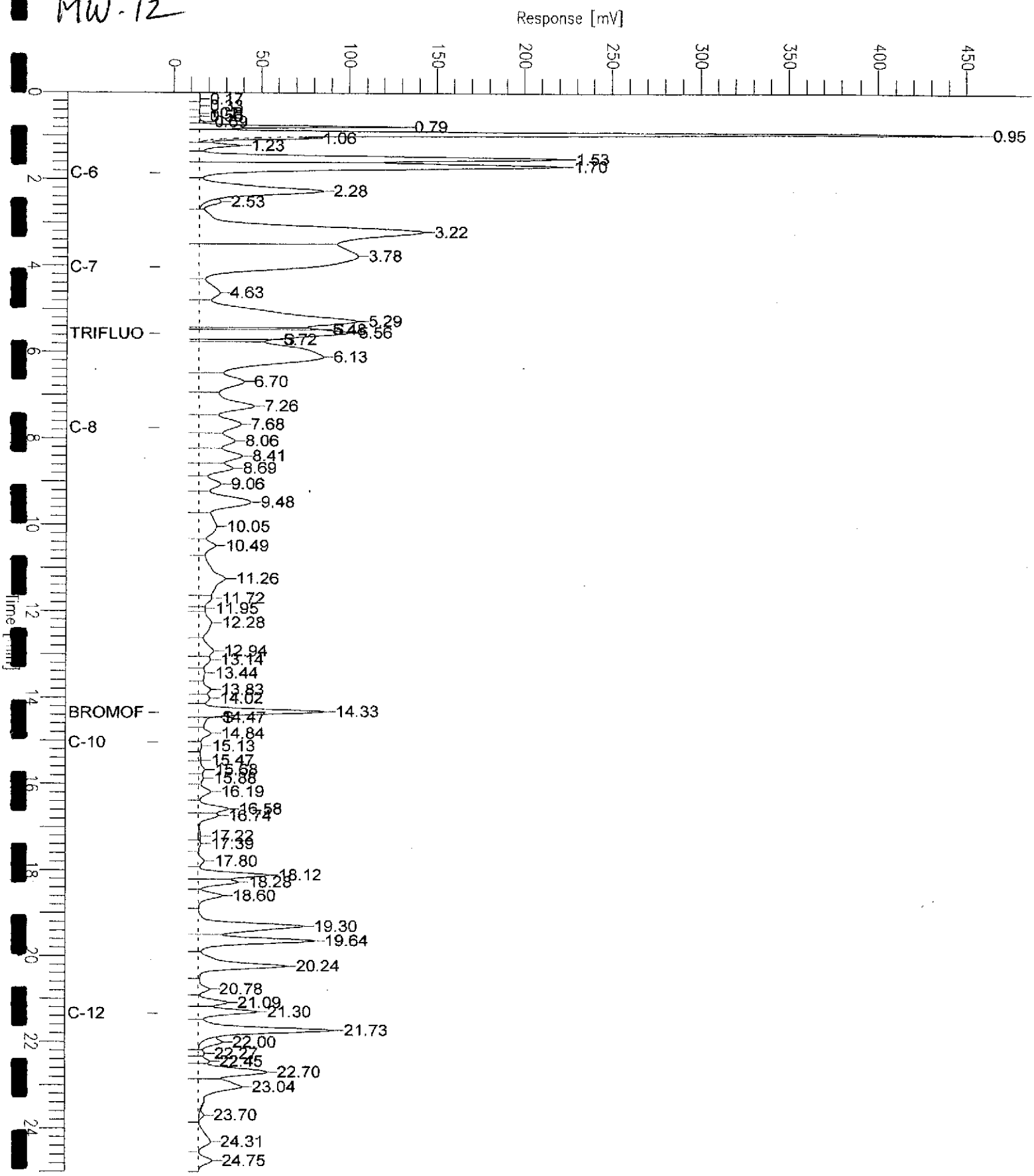


Chromatogram

Sample Name : 170159-010,87884
FileName : G:\GC05\DATA\023G015.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -8 mV

Sample #: a1.0 Page 1 of 1
Date : 1/23/04 06:34 PM
Time of Injection: 1/23/04 06:03 PM
Low Point : -7.64 mV High Point : 459.17 mV
Plot Scale: 466.8 mV

MW-12



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331		
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04
Batch#:	87884	Analyzed:	01/23/04

Type: BLANK
Lab ID: QC238733

Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	2.0	EPA 8021B
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)	100	57-150	8015B
Bromofluorobenzene (FID)	103	65-144	8015B
Trifluorotoluene (PID)	93	54-149	EPA 8021B
Bromofluorobenzene (PID)	97	58-143	EPA 8021B

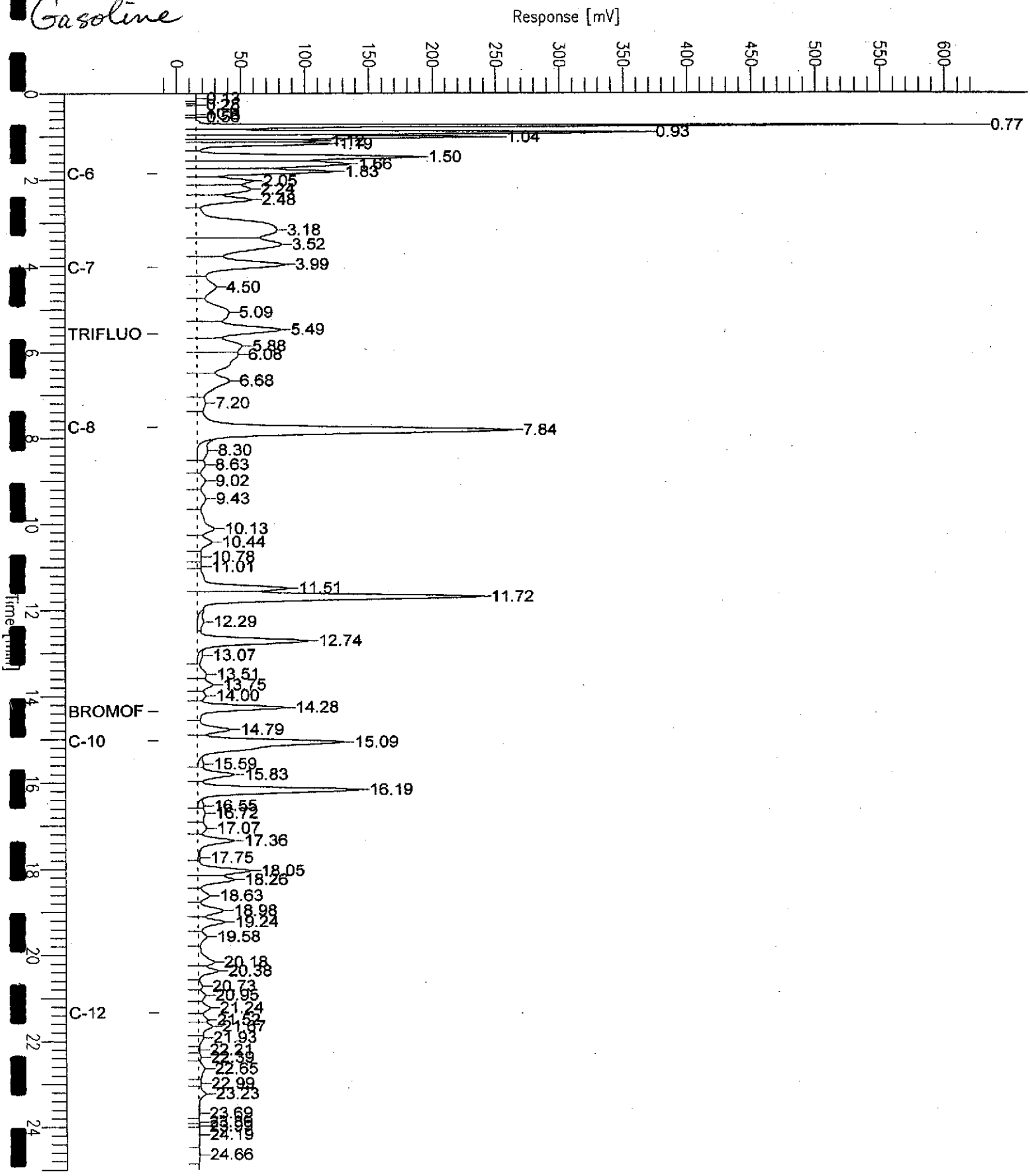
C= Presence confirmed, but RPD between columns exceeds 40%
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : ccv/lcs,qc238735,87884,04ws0146,5/5000
FileName : G:\GC05\DATA\023G002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -15 mV

Sample #: Page 1 of 1
Date : 1/23/04 11:00 AM
Time of Injection: 1/23/04 10:35 AM
Low Point : -15.30 mV High Point : 628.08 mV
Plot Scale: 643.4 mV

Gasoline



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC238734	Batch#:	87884
Matrix:	Water	Analyzed:	01/23/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	20.00	18.16	91	63-133
Benzene	20.00	20.38	102	78-123
Toluene	20.00	18.94	95	79-120
Ethylbenzene	20.00	18.67	93	80-120
m,p-Xylenes	40.00	36.34	91	76-120
o-Xylene	20.00	19.62	98	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		98	54-149
Bromofluorobenzene (PID)		107	58-143

NA= Not Analyzed

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC238735	Batch#:	87884
Matrix:	Water	Analyzed:	01/23/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,230	112	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		129	57-150
Bromofluorobenzene (FID)		130	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

3.0

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	8015B
Field ID:	MW-4	Batch#:	87884
MSS Lab ID:	170159-004	Sampled:	01/22/04
Matrix:	Water	Received:	01/22/04
Units:	ug/L	Analyzed:	01/23/04
Diln Fac:	1.000		

Type: MS Lab ID: QC238784

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	226.9	2,000	2,259	102	76-120
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		130	57-150
Bromofluorobenzene (FID)		141	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC238785

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,241	101	76-120	1	20
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		130	57-150
Bromofluorobenzene (FID)		144	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed
RPD= Relative Percent Difference

4.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04

Field ID:	MW-1	Diln Fac:	62.50
Type:	SAMPLE	Batch#:	87933
Lab ID:	170159-001	Analyzed:	01/26/04

Analyte	Result	RL
MTBE	8,500	310

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-121

Field ID:	MW-3	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	87933
Lab ID:	170159-003	Analyzed:	01/26/04

Analyte	Result	RL
MTBE	2,900	100

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-121

Field ID:	MW-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	87933
Lab ID:	170159-005	Analyzed:	01/26/04

Analyte	Result	RL
MTBE	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-121

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	87976
Lab ID:	170159-007	Analyzed:	01/27/04

Analyte	Result	RL
MTBE	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-121

Field ID:	MW-8	Diln Fac:	2.500
Type:	SAMPLE	Batch#:	87933
Lab ID:	170159-008	Analyzed:	01/26/04

Analyte	Result	RL
MTBE	500	13

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	01/22/04
Units:	ug/L	Received:	01/22/04

Field ID:	MW-10	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	87933
Lab ID:	170159-009	Analyzed:	01/26/04

Analyte	Result	RL
MTBE	110	10

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121

Field ID:	MW-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	87933
Lab ID:	170159-010	Analyzed:	01/26/04

Analyte	Result	RL
MTBE	72	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-121

Type:	BLANK	Batch#:	87933
Lab ID:	QC238935	Analyzed:	01/26/04
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-121

Type:	BLANK	Batch#:	87976
Lab ID:	QC239096	Analyzed:	01/27/04
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	87933
Units:	ug/L	Analyzed:	01/26/04
Diln Fac:	1.000		

Type: BS Lab ID: QC238933

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	48.59	97	69-124

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-121

Type: BSD Lab ID: QC238934

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	49.07	98	69-124	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170159	Location:	3609 Int'l Blvd., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2331	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	87976
Units:	ug/L	Analyzed:	01/27/04
Diln Fac:	1.000		

Type: BS Lab ID: QC239094

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	56.86	114	69-124

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-121

Type: BSD Lab ID: QC239095

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	50.00	54.66	109	69-124	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-121

RPD= Relative Percent Difference

Appendix C

Chain of Custody Form and Laboratory Report

for the

Groundwater Extraction Treatment System

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: 10-FEB-04
Lab Job Number: 170222
Project ID: 2333
Location: 3609 International Blvd

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

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

C&T LOGIN # 170222

Sampler: Mehran Nowroozi

Project No: 2333

Report To: Tony Perini

Project Name: 3609 International Blvd., Oakland

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-244-6600

Fax: 925-244-6601

Analyses

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	TPH-g 8015	BTEX & MtBE 8021B
-1	Influent	1/27/04 2:30 PM		X		3-VOAs	X			X	X	X
-2	GAC-1	1/27/04 2:35 PM		X		3-VOAs	X			X	X	X
-3	PSP#1	1/27/04 2:40 PM		X		3-VOAs	X			X	X	X

Received ☐ On ice ☐ Cold ☐ Ambient ☒ Intact

Notes: EDF OUTPUT REQUIRED
Grab Sample
Totalizer Reading: 1,392,320

RELINQUISHED BY:	RECEIVED BY:
3:20 PM 1/27/04 Mehran Nowroozi DATE/TIME	1-27-04 2:20 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170222	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	01/27/04
Units:	ug/L	Received:	01/27/04
Batch#:	87995	Analyzed:	01/28/04

Field ID: INFLUENT — Lab ID: 170222-001
Type: SAMPLE — Diln Fac: 5.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	9,000	250	EPA 8015B
MTBE	680	25	EPA 8021B
Benzene	1,400	25	EPA 8021B
Toluene	190	25	EPA 8021B
Ethylbenzene	58	25	EPA 8021B
m,p-Xylenes	700	25	EPA 8021B
o-Xylene	460	25	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	118	57-150	EPA 8015B
Bromofluorobenzene (FID)	120	65-144	EPA 8015B
Trifluorotoluene (PID)	108	54-149	EPA 8021B
Bromofluorobenzene (PID)	113	58-143	EPA 8021B

Field ID: GAC-1 — Lab ID: 170222-002
Type: SAMPLE — Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	57-150	EPA 8015B
Bromofluorobenzene (FID)	114	65-144	EPA 8015B
Trifluorotoluene (PID)	100	54-149	EPA 8021B
Bromofluorobenzene (PID)	111	58-143	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170222	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	01/27/04
Units:	ug/L	Received:	01/27/04
Batch#:	87995	Analyzed:	01/28/04

Field ID: PSP#1 Lab ID: 170222-003
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	57-150	EPA 8015B
Bromofluorobenzene (FID)	117	65-144	EPA 8015B
Trifluorotoluene (PID)	103	54-149	EPA 8021B
Bromofluorobenzene (PID)	117	58-143	EPA 8021B

Type: BLANK Diln Fac: 1.000
Lab ID: QC239175

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	57-150	EPA 8015B
Bromofluorobenzene (FID)	98	65-144	EPA 8015B
Trifluorotoluene (PID)	86	54-149	EPA 8021B
Bromofluorobenzene (PID)	92	58-143	EPA 8021B

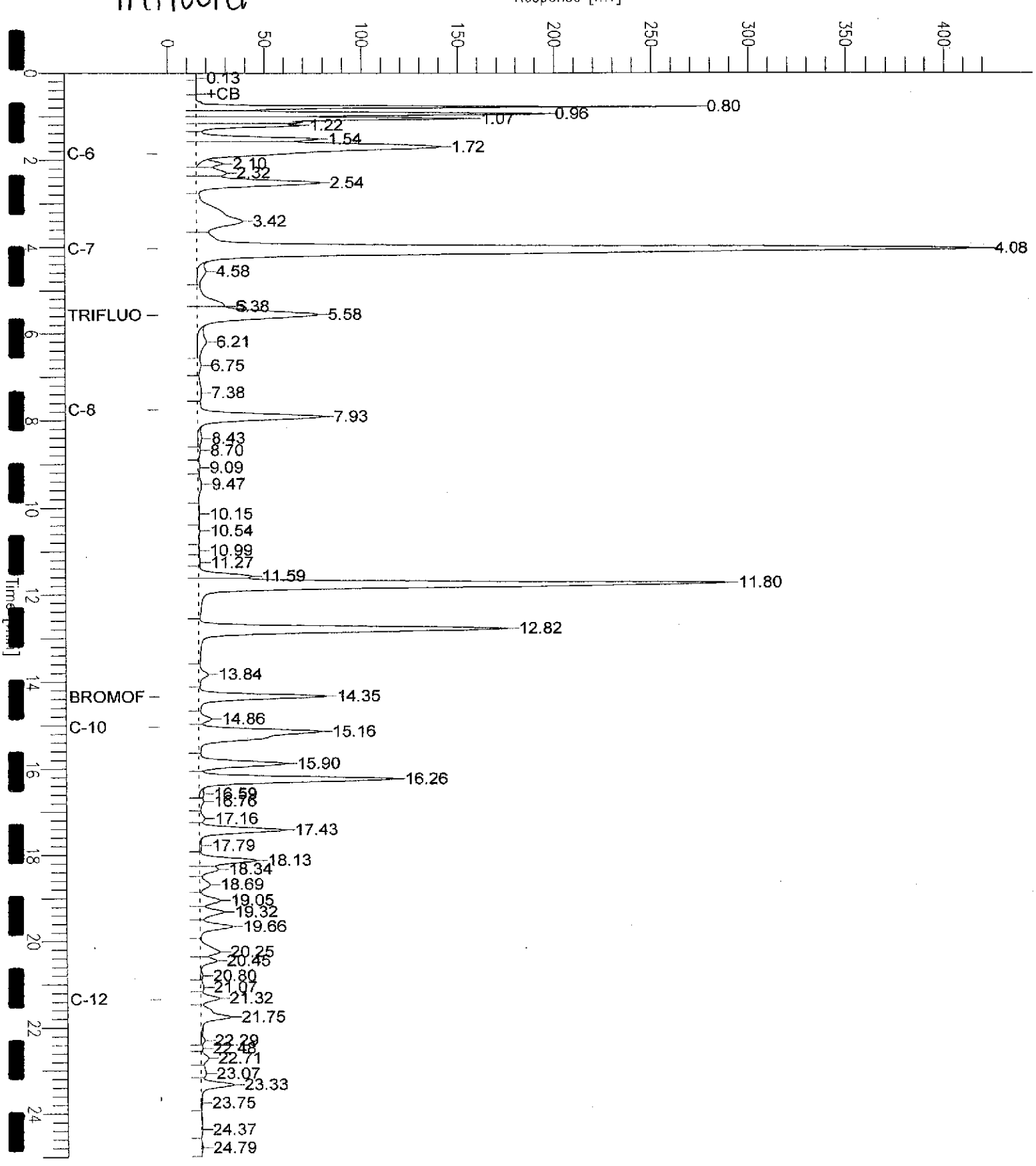
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 170222-001,87995
FileName : G:\GC05\DATA\028G004.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -5 mV

Sample #: a1.0 Page 1 of 1
Date : 1/29/04 08:46 AM
Time of Injection: 1/28/04 12:29 PM
Low Point : -5.32 mV High Point : 420.83 mV
Plot Scale: 426.2 mV

Influent

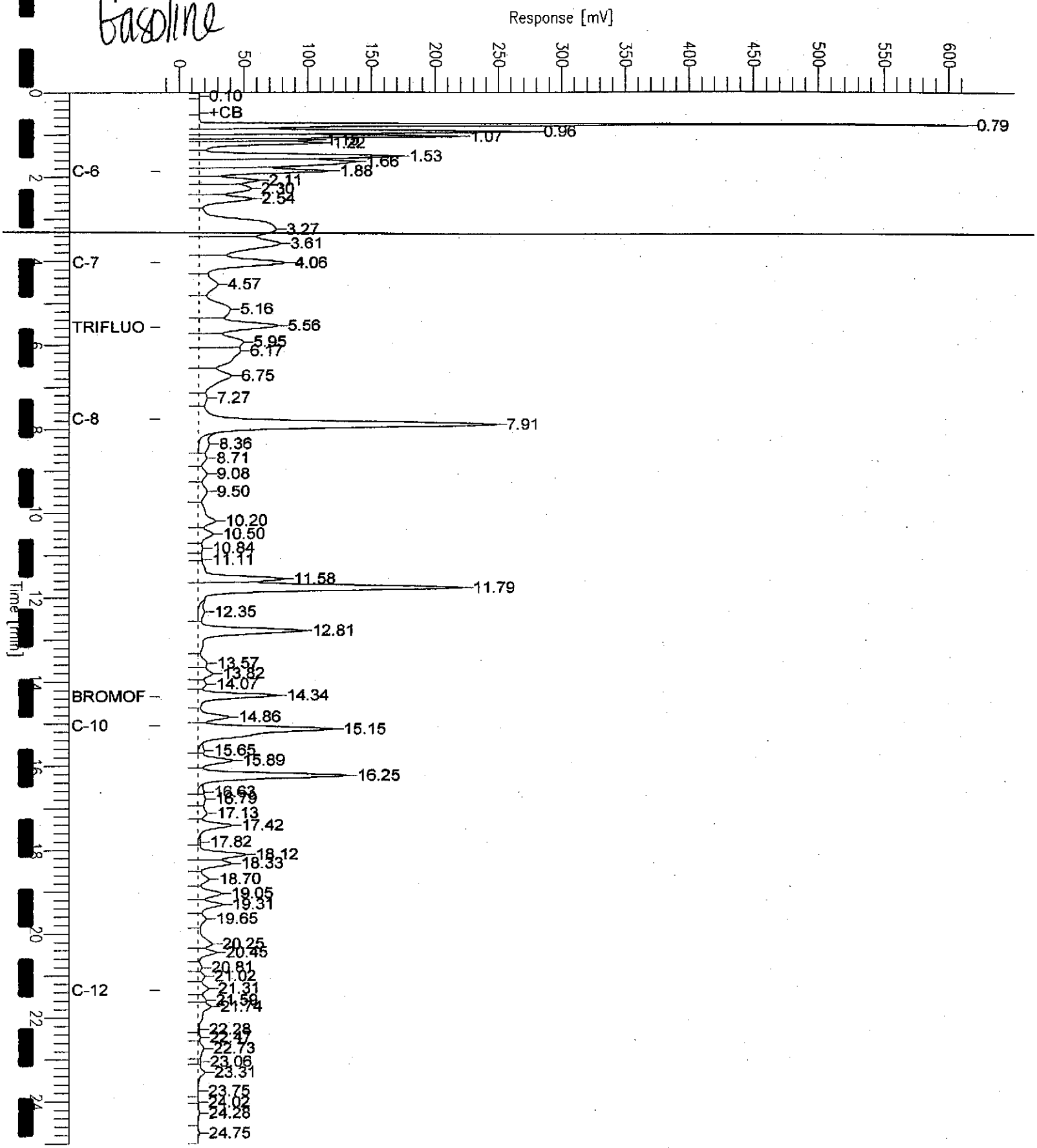


Chromatogram

Sample Name : ccv/lcs,qc239176,87995,04ws0146,5/5000
File Name : G:\GC05\DATA\028G002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -15 mV

Sample #: Page 1 of 1
Date : 1/28/04 11:47 AM
Time of Injection: 1/28/04 11:22 AM
Low Point : -14.59 mV High Point : 614.29 mV
Plot Scale: 628.9 mV

Gasoline



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170222	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC239176	Batch#:	87995
Matrix:	Water	Analyzed:	01/28/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,125	106	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		122	57-150
Bromofluorobenzene (FID)		119	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

2.0

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	170222	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC239177	Batch#:	87995
Matrix:	Water	Analyzed:	01/28/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	20.00	17.93	90	63-133
Benzene	20.00	20.12	101	78-123
Toluene	20.00	17.97	90	79-120
Ethylbenzene	20.00	18.62	93	80-120
m,p-Xylenes	40.00	34.38	86	76-120
o-Xylene	20.00	18.63	93	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		88	54-149
Bromofluorobenzene (PID)		92	58-143

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	170222	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8015B
Field ID:	PSP#1	Batch#:	87995
MSS Lab ID:	170222-003	Sampled:	01/27/04
Matrix:	Water	Received:	01/27/04
Units:	ug/L	Analyzed:	01/28/04
Dil'n Fac:	1.000		

Type: MS Lab ID: QC239193

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	14.81	2,000	2,201	109	76-120
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		136	57-150
Bromofluorobenzene (FID)		140	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC239194

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,233	111	76-120	1	20
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		133	57-150
Bromofluorobenzene (FID)		139	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed
RPD= Relative Percent Difference

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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: 26-JAN-04
Lab Job Number: 169944
Project ID: 2333
Location: 3609 International Blvd

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

Curtis & Tompkins, Ltd.

Laboratory Number: **169944**
Client: **SOMA Environmental Engineering Inc**
Project: **2333**
Request Date: **1/13/04**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for three water samples requested from the above referenced project on January 13, 2004. The samples were received cold and intact.

TVH/BTXE:
The recovery for the surrogate bromofluorobenzene in the sample PSP#1 is outside control limits due to coelution of the surrogate peak with other hydrocarbon peaks. The associated surrogate recoveries are acceptable.

No other analytical problems were encountered.

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Analytical Laboratory Since 1878
2323 Fifth Street
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C&T LOGIN # 16944

Sampler: Mehran Nowroozi

Project No: 2333

Report To: Tony Perini

Project Name:3609 International Blvd., Oakland

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: TPH-g 8015	Analyses: BTEX & MtBE 8021B
-1	Influent	1/13/04 10:30Am		X		3-VOAs	X			X	X	X
-2	GAC-1	1/13/04 10:35Am		X		3-VOAs	X			X	X	X
-3	PSP#1	1/13/04 10:40Am		X		3-VOAs	X			X	X	X

Notes: EDF OUTPUT REQUIRED
Grab Sample
Totalizer Reading:

Received ☐ On ice ☐ Cold ☐ Ambient ☐ Intact

RELINQUISHED BY:		RECEIVED BY:	
2:50 PM Mehran Nowroozi	1/13/04 DATE/TIME	1-13-04	2:50PM DATE/TIME
	DATE/TIME		DATE/TIME
	DATE/TIME		DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	169944	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	01/13/04
Units:	ug/L	Received:	01/13/04
Batch#:	87607		

Field ID:	INFLUENT	Diln Fac:	5.000
Type:	SAMPLE	Analyzed:	01/13/04
Lab ID:	169944-001		

Analyte	Result	RL	Analysis
Gasoline C7-C12	12,000	250	8015B
MTBE	180	25	EPA 8021B
Benzene	1,600	25	EPA 8021B
Toluene	260	25	EPA 8021B
Ethylbenzene	53	25	EPA 8021B
m,p-Xylenes	1,200	25	EPA 8021B
o-Xylene	670	25	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	129	57-150	8015B
Bromofluorobenzene (FID)	116	65-144	8015B
Trifluorotoluene (PID)	114	54-149	EPA 8021B
Bromofluorobenzene (PID)	107	58-143	EPA 8021B

Field ID:	GAC-1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	01/13/04
Lab ID:	169944-002		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	107	57-150	8015B
Bromofluorobenzene (FID)	108	65-144	8015B
Trifluorotoluene (PID)	105	54-149	EPA 8021B
Bromofluorobenzene (PID)	107	58-143	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	169944	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	01/13/04
Units:	ug/L	Received:	01/13/04
Batch#:	87607		

Field ID:	PSP#1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	01/14/04
Lab ID:	169944-003		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	81	57-150	8015B
Bromofluorobenzene (FID)	45 *	65-144	8015B
Trifluorotoluene (PID)	79	54-149	EPA 8021B
Bromofluorobenzene (PID)	43 *	58-143	EPA 8021B

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC237679	Analyzed:	01/13/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	84	57-150	8015B
Bromofluorobenzene (FID)	125	65-144	8015B
Trifluorotoluene (PID)	80	54-149	EPA 8021B
Bromofluorobenzene (PID)	126	58-143	EPA 8021B

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

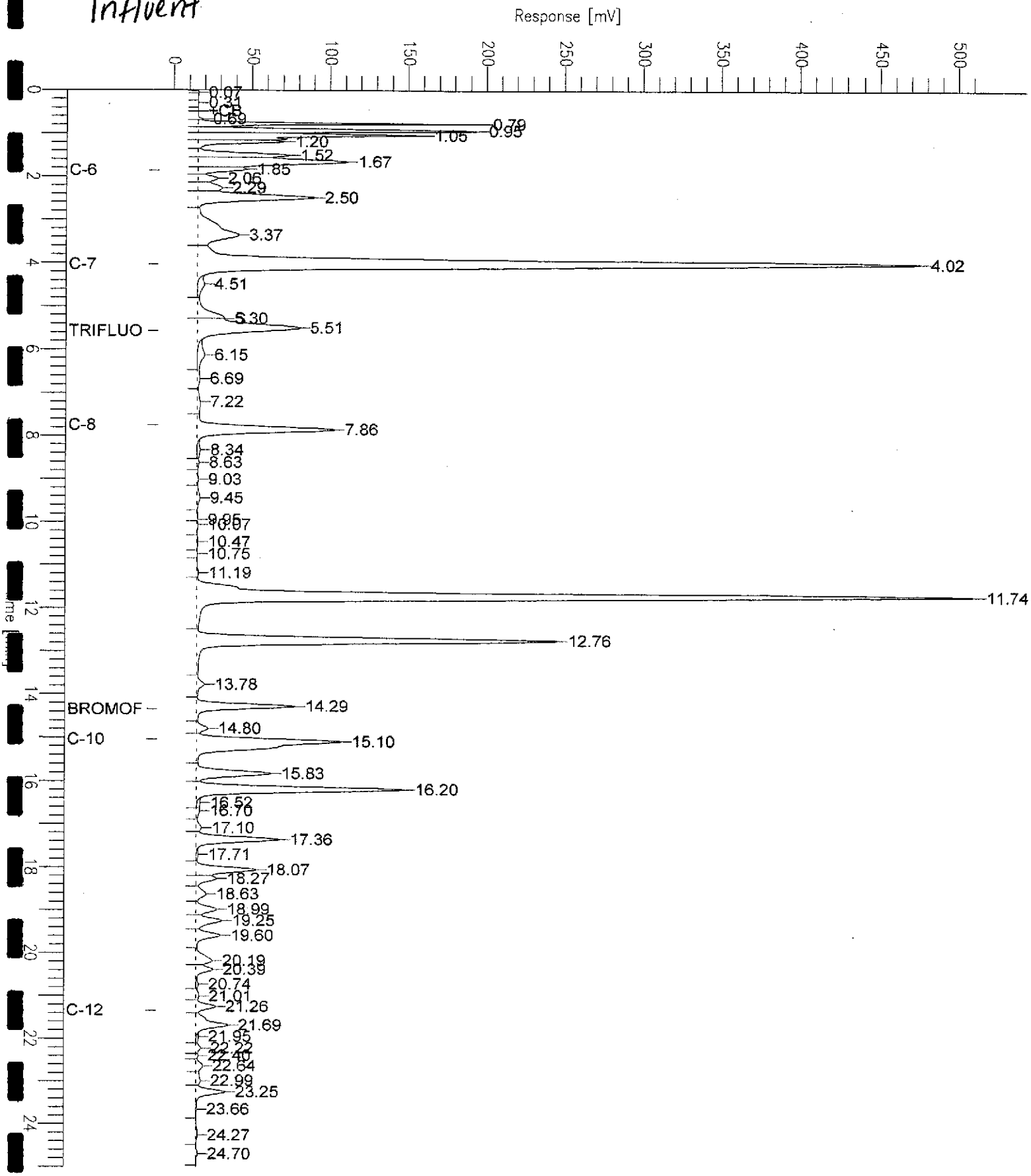
1.0

Chromatogram

Sample Name : 169944-001,87607
leName : G:\GC05\DATA\013G022.raw
thod : TVHBTXE
art Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -9 mV

Sample #: a1.0 Page 1 of 1
Date : 1/14/04 08:08 AM
Time of Injection: 1/13/04 11:09 PM
Low Point : -9.35 mV High Point : 512.17 mV
Plot Scale: 521.5 mV

Influent

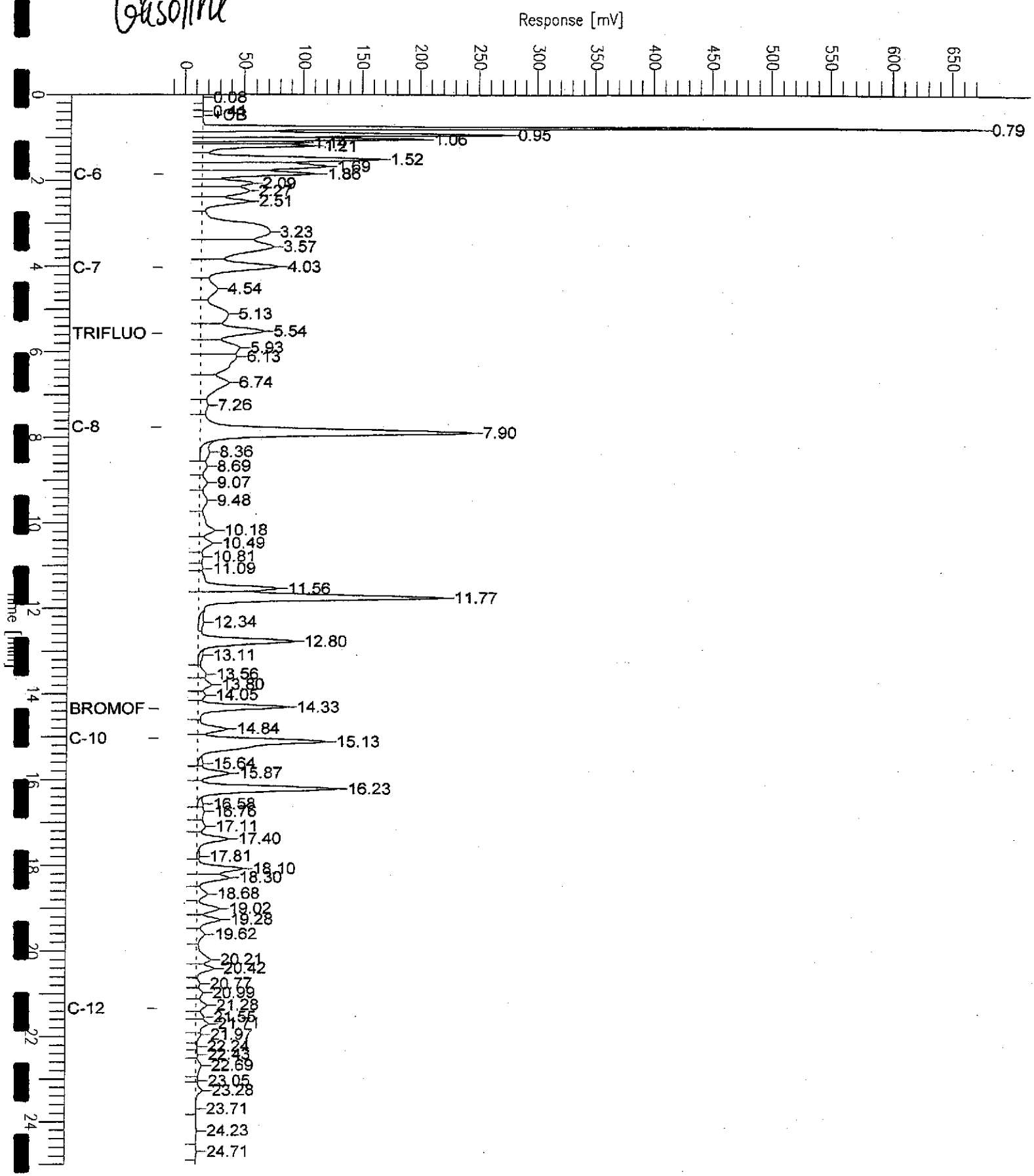


Chromatogram

Sample Name : ccv/lcs,qc237681,87607,03ws2034,5/5000
FileName : g:\gc05\data\013g003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -18 mV

Sample #: Page 1 of 1
Date : 1/13/04 10:49 AM
Time of Injection: 1/13/04 10:18 AM
Low Point : -18.07 mV High Point : 674.72 mV
Plot Scale: 692.8 mV

Gasoline



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Curtis & Tompkins Laboratories Analytical Report

Lab #:	169944	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC237680	Batch#:	87607
Matrix:	Water	Analyzed:	01/13/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	20.00	20.34	102	63-133
Benzene	20.00	21.78	109	78-123
Toluene	20.00	19.33	97	79-120
Ethylbenzene	20.00	20.99	105	80-120
m,p-Xylenes	40.00	36.75	92	76-120
o-Xylene	20.00	20.24	101	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		82	54-149
Bromofluorobenzene (PID)		126	58-143

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	169944	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC237681	Batch#:	87607
Matrix:	Water	Analyzed:	01/13/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,098	105	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		107	57-150
Bromofluorobenzene (FID)		142	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

3.0

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	169944	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	87607
MSS Lab ID:	169921-001	Sampled:	01/12/04
Matrix:	Water	Received:	01/12/04
Units:	ug/L	Analyzed:	01/13/04
Diln Fac:	1.000		

Type: MS Lab ID: QC237725

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12			NA		
MTBE	1.585	20.00	22.73	106	38-149
Benzene	<0.1200	20.00	22.65	113	75-128
Toluene	0.09893	20.00	20.17	100	79-127
Ethylbenzene	<0.03800	20.00	20.70	103	78-124
m,p-Xylenes	<0.05100	40.00	37.52	94	67-121
o-Xylene	<0.03400	20.00	20.74	104	77-131

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		107	54-149
Bromofluorobenzene (PID)		109	58-143

Type: MSD Lab ID: QC237726

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
MTBE	20.00	20.37	94	38-149	11	38
Benzene	20.00	22.07	110	75-128	3	20
Toluene	20.00	19.69	98	79-127	2	20
Ethylbenzene	20.00	19.64	98	78-124	5	20
m,p-Xylenes	40.00	37.11	93	67-121	1	20
o-Xylene	20.00	20.06	100	77-131	3	20

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		104	54-149
Bromofluorobenzene (PID)		107	58-143

NA= Not Analyzed
RPD= Relative Percent Difference

4.0

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: 22-DEC-03
Lab Job Number: 169296
Project ID: 2333
Location: 3609 International Blvd

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: _____ for LJB
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: 169296 **Receipt Date:** 12/08/03
Client: SOMA Environmental Engineering Inc.
Location: 3609 International Blvd.
Project: 2333

CASE NARRATIVE

This hardcopy data package contains sample and QC results for three water samples that were received on November 08, 2003. The samples were received cold and intact.

TVH / BTXE by EPA 8015B/8021B: High surrogate recovery was observed for Trifluorotoluene in sample ID Influent (C&T#169296-001) due to coleution with a hydrocarbon peak. No other analytical problems were encountered.

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

C&T LOGIN # 169296

Sampler: Mehran Nowroozi

Project No: 2333

Report To: Tony Perini

Project Name:3609 International Blvd., Oakland

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: TPH-g 8015	Analyses: BTEX & MtBE 8021B
-1	Influent	12/8/03 3:15 PM		X		3-VOAs	X			X	X	X
-2	GAC-1	12/8/03 3:20 PM		X		3-VOAs	X			X	X	X
-3	PSP#1	12/8/03 3:25 PM		X		3-VOAs	X			X	X	X

Received ☒ On ice ☒ Cold ☐ Ambient ☒ Intact

Notes: **EDF OUTPUT REQUIRED**
Grab Sample
Totalizer Reading:

RELINQUISHED BY:

3:35 PM 12/8/03
Mehran Nowroozi DATE/TIME

M. Nowroozi DATE/TIME

DATE/TIME

RECEIVED BY:

12-8-03 3:35pm
DATE/TIME

DATE/TIME

DATE/TIME

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	169296	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	12/08/03
Units:	ug/L	Received:	12/08/03
Batch#:	86743		

Field ID: INFLUENT
Type: SAMPLE
Lab ID: 169296-001

Analyte	Result	RL	Diln Fac	Analyzed	Analysis
Gasoline C7-C12	21,000	250	5.000	12/08/03	8015B
MTBE	3,200	25	5.000	12/08/03	EPA 8021B
Benzene	1,700	25	5.000	12/08/03	EPA 8021B
Toluene	2,100	50	10.00	12/09/03	EPA 8021B
Ethylbenzene	700	25	5.000	12/08/03	EPA 8021B
m,p-Xylenes	2,000	50	10.00	12/09/03	EPA 8021B
o-Xylene	1,000	25	5.000	12/08/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Analyzed	Analysis
Trifluorotoluene (FID)	158 *	57-150	5.000	12/08/03	8015B
Bromofluorobenzene (FID)	109	65-144	5.000	12/08/03	8015B
Trifluorotoluene (PID)	86	54-149	5.000	12/08/03	EPA 8021B
Bromofluorobenzene (PID)	77	58-143	5.000	12/08/03	EPA 8021B

Field ID: GAC-1
Type: SAMPLE
Lab ID: 169296-002
Diln Fac: 1.000
Analyzed: 12/09/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	57-150	8015B
Bromofluorobenzene (FID)	105	65-144	8015B
Trifluorotoluene (PID)	67	54-149	EPA 8021B
Bromofluorobenzene (PID)	74	58-143	EPA 8021B

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

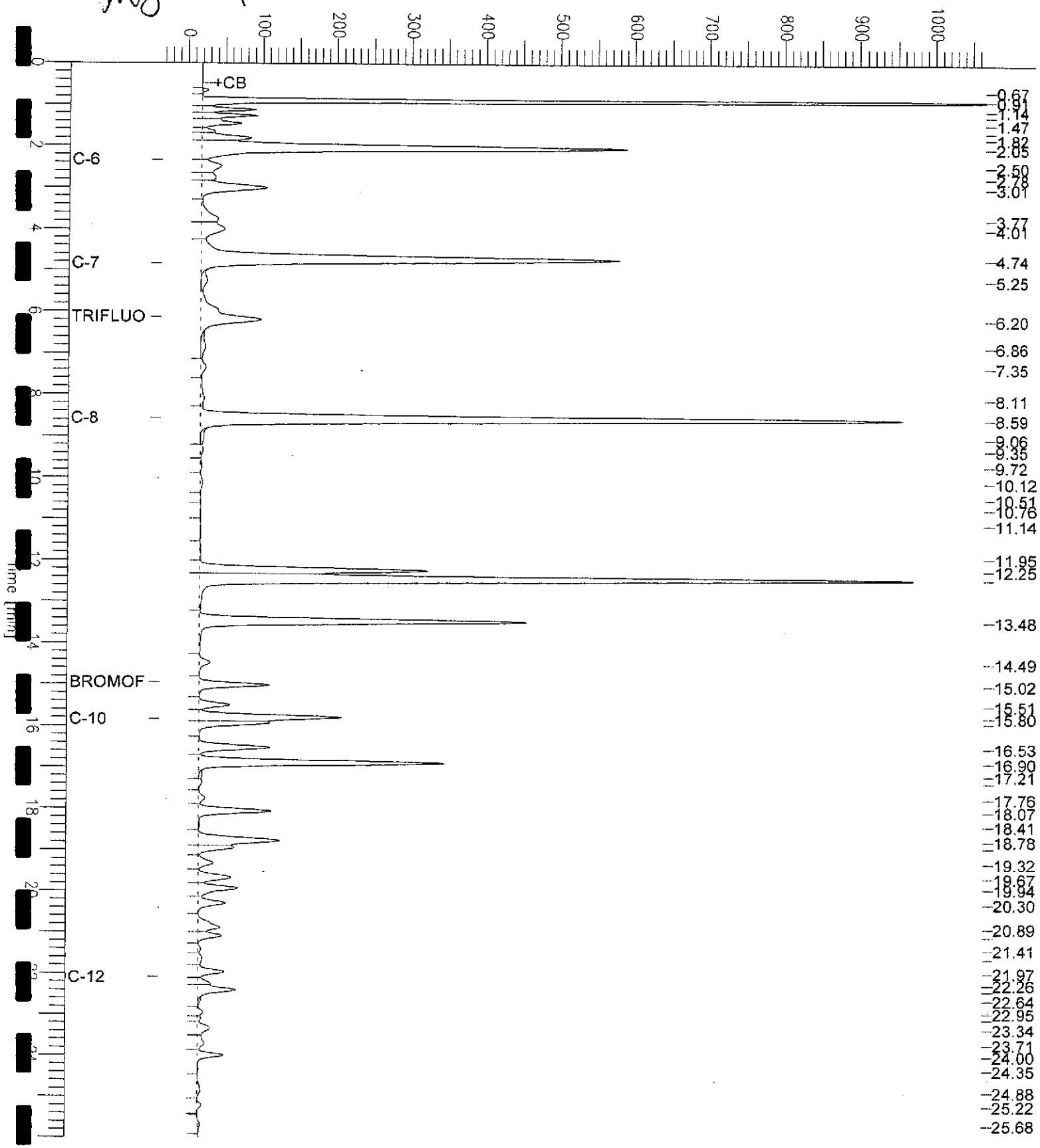
1.1

GC07 TVH 'A' Data File RTX 502

Sample Name : 169296-001,86743
FileName : G:\GC07\DATA\342A010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -34 mV

Sample #: a1.0 Page 1 of 1
Date : 12/8/03 08:32 PM
Time of Injection: 12/8/03 08:06 PM
Low Point : -34.33 mV High Point : 1067.06 mV
Plot Scale: 1101.4 mV

Influent

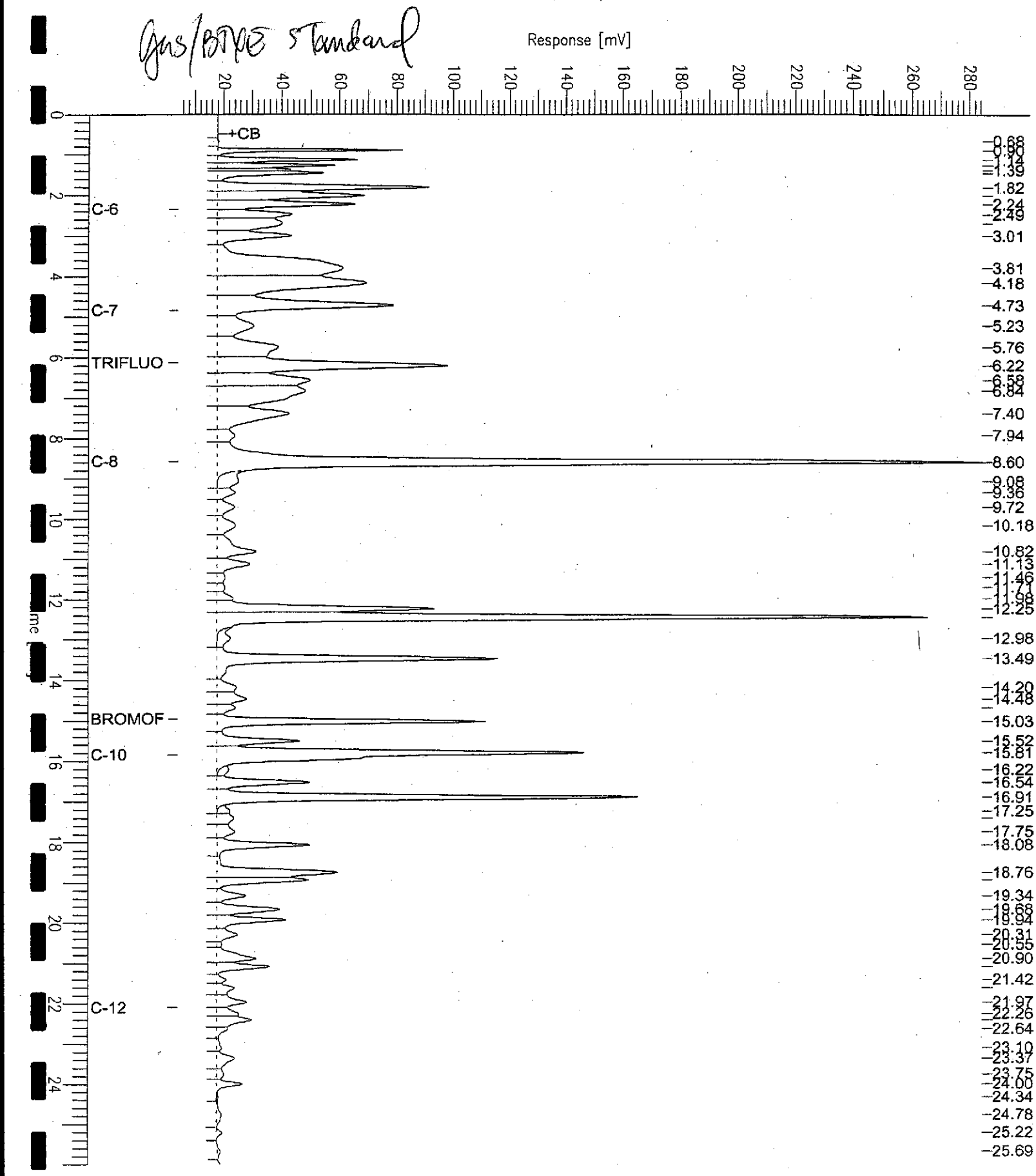


GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc234422,76743,03ws1887,5/5000
FileName : G:\GC07\DATA\342A002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 4 mV

Sample #: Page 1 of 1
Date : 12/8/03 12:30 PM
Time of Injection: 12/8/03 12:04 PM
Low Point : 4.46 mV High Point : 284.57 mV
Plot Scale: 280.1 mV

Gas/BTXE Standard



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	169296	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	12/08/03
Units:	ug/L	Received:	12/08/03
Batch#:	86743		

Field ID:	PSP#1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	12/08/03
Lab ID:	169296-003		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	57-150	8015B
Bromofluorobenzene (FID)	110	65-144	8015B
Trifluorotoluene (PID)	69	54-149	EPA 8021B
Bromofluorobenzene (PID)	76	58-143	EPA 8021B

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC234421	Analyzed:	12/08/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	57-150	8015B
Bromofluorobenzene (FID)	102	65-144	8015B
Trifluorotoluene (PID)	71	54-149	EPA 8021B
Bromofluorobenzene (PID)	74	58-143	EPA 8021B

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

1.1

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	169296	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC234422	Batch#:	86743
Matrix:	Water	Analyzed:	12/08/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,983	99	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		118	57-150
Bromofluorobenzene (FID)		110	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	169296	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC234423	Batch#:	86743
Matrix:	Water	Analyzed:	12/08/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	20.00	16.99	85	63-133
Benzene	20.00	19.82	99	78-123
Toluene	20.00	18.94	95	79-120
Ethylbenzene	20.00	18.50	93	80-120
m,p-Xylenes	40.00	40.76	102	76-120
o-Xylene	20.00	19.36	97	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		70	54-149
Bromofluorobenzene (PID)		75	58-143

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	169296	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	86743
MSS Lab ID:	169297-001	Sampled:	12/08/03
Matrix:	Water	Received:	12/08/03
Units:	ug/L	Analyzed:	12/09/03
Diln Fac:	1.000		

Type: MS Lab ID: QC234489

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.88	2,000	1,878	93	76-120
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		119	57-150
Bromofluorobenzene (FID)		115	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC234490

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,895	94	76-120	1	20
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		119	57-150
Bromofluorobenzene (FID)		115	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed
RPD= Relative Percent Difference

4.0

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: 05-DEC-03
Lab Job Number: 168910
Project ID: 2333
Location: 3609 International Blvd

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

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

C&T LOGIN # 168910

Sampler: Mehran Nowroozi

Project No: 2333

Report To: Tony Perini

Project Name:3609 International Blvd., Oakland

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: TPH-g 8015	Analyses: BTEX & MtBE 8021B
-1	Influent	11/17/03 12:25 PM		X		3-VOAs	X			X	X	X
-2	GAC-1	11/17/03 2:30 PM		X		3-VOAs	X			X	X	X
-3	PSP#1	11/17/03 2:35 PM		X		3-VOAs	X			X	X	X

Received: On ice ☐ Cold ☐ Ambient ☐ Intact

Notes: EDF OUTPUT REQUIRED
Grab Sample
Totalizer Reading:

RELINQUISHED BY:	RECEIVED BY:
3:20 PM 11/17/03	11-17-03 3:20 PM
Mehran Nowroozi DATE/TIME	DATE/TIME
M. Nowroozi DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	168910	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	11/17/03
Units:	ug/L	Received:	11/17/03
Batch#:	86223	Analyzed:	11/17/03

Field ID: INFLUENT
Type: SAMPLE
Lab ID: 168910-001
Diln Fac: 10.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	12,000	500	8015B
MTBE	3,400	50	EPA 8021B
Benzene	820	50	EPA 8021B
Toluene	770	50	EPA 8021B
Ethylbenzene	370	50	EPA 8021B
m,p-Xylenes	1,100	50	EPA 8021B
o-Xylene	860	50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	108	57-150	8015B
Bromofluorobenzene (FID)	116	65-144	8015B
Trifluorotoluene (PID)	80	54-149	EPA 8021B
Bromofluorobenzene (PID)	93	58-143	EPA 8021B

Field ID: GAC-1
Type: SAMPLE
Lab ID: 168910-002
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	57-150	8015B
Bromofluorobenzene (FID)	120	65-144	8015B
Trifluorotoluene (PID)	76	54-149	EPA 8021B
Bromofluorobenzene (PID)	93	58-143	EPA 8021B

ND= Not Detected
RL= Reporting Limit

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	168910	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333		
Matrix:	Water	Sampled:	11/17/03
Units:	ug/L	Received:	11/17/03
Batch#:	86223	Analyzed:	11/17/03

Field ID: PSP#1 Lab ID: 168910-003
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	57-150	8015B
Bromofluorobenzene (FID)	117	65-144	8015B
Trifluorotoluene (PID)	76	54-149	EPA 8021B
Bromofluorobenzene (PID)	92	58-143	EPA 8021B

Type: BLANK Diln Fac: 1.000
Lab ID: QC232381

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
MTBE	ND	5.0	EPA 8021B
Benzene	ND	5.0	EPA 8021B
Toluene	ND	5.0	EPA 8021B
Ethylbenzene	ND	5.0	EPA 8021B
m,p-Xylenes	ND	5.0	EPA 8021B
o-Xylene	ND	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	57-150	8015B
Bromofluorobenzene (FID)	113	65-144	8015B
Trifluorotoluene (PID)	75	54-149	EPA 8021B
Bromofluorobenzene (PID)	90	58-143	EPA 8021B

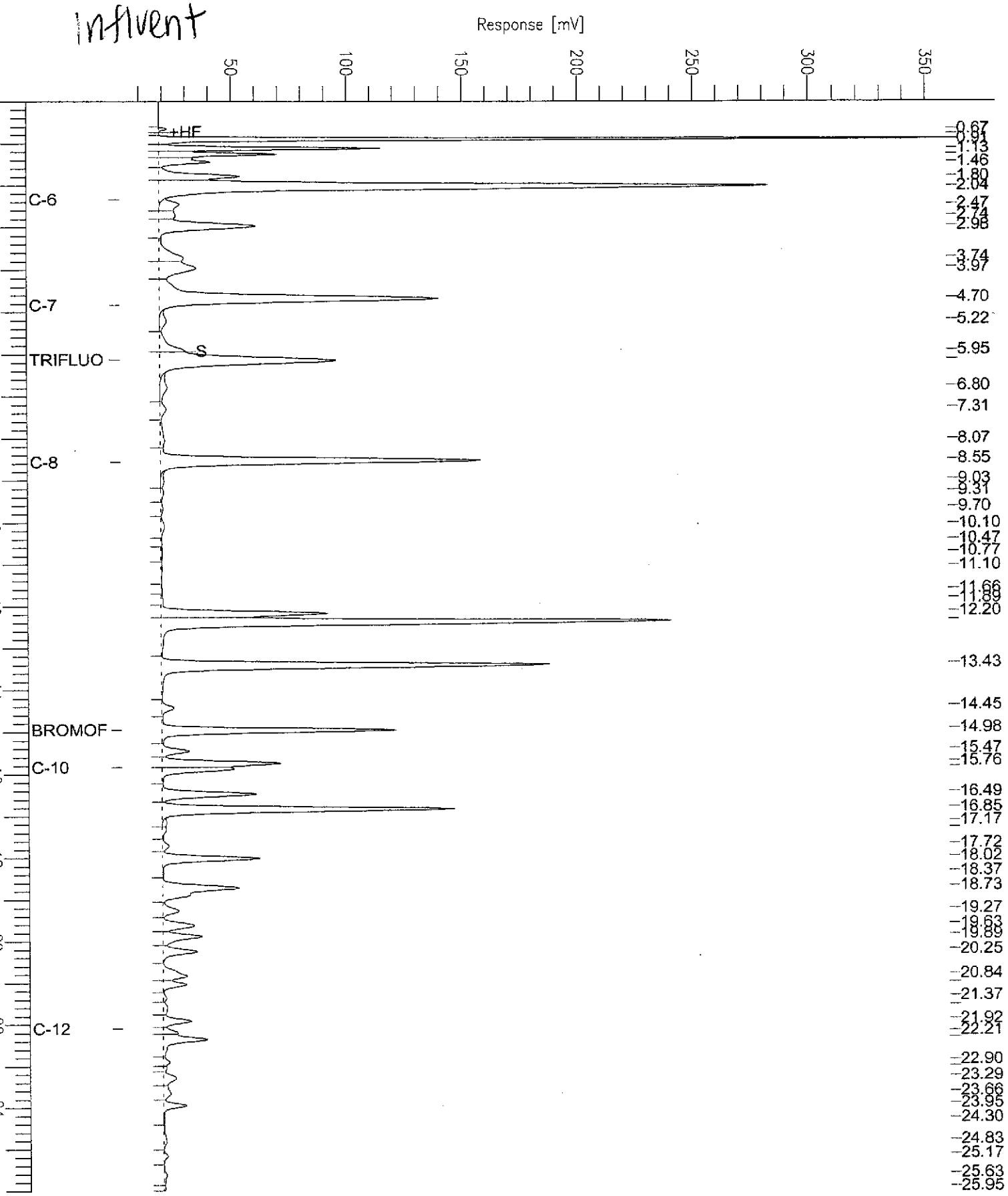
ND = Not Detected
RL = Reporting Limit

GC07 TVH 'A' Data File RTX 502

Sample Name : 168910-001,86223
FileName : G:\GC07\DATA\321A024.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 2 mV

Sample #: a1.3 Page 1 of 1
Date : 11/18/03 08:04 AM
Time of Injection: 11/17/03 11:41 PM
Low Point : 1.80 mV High Point : 359.23 mV
Plot Scale: 357.4 mV

Influent

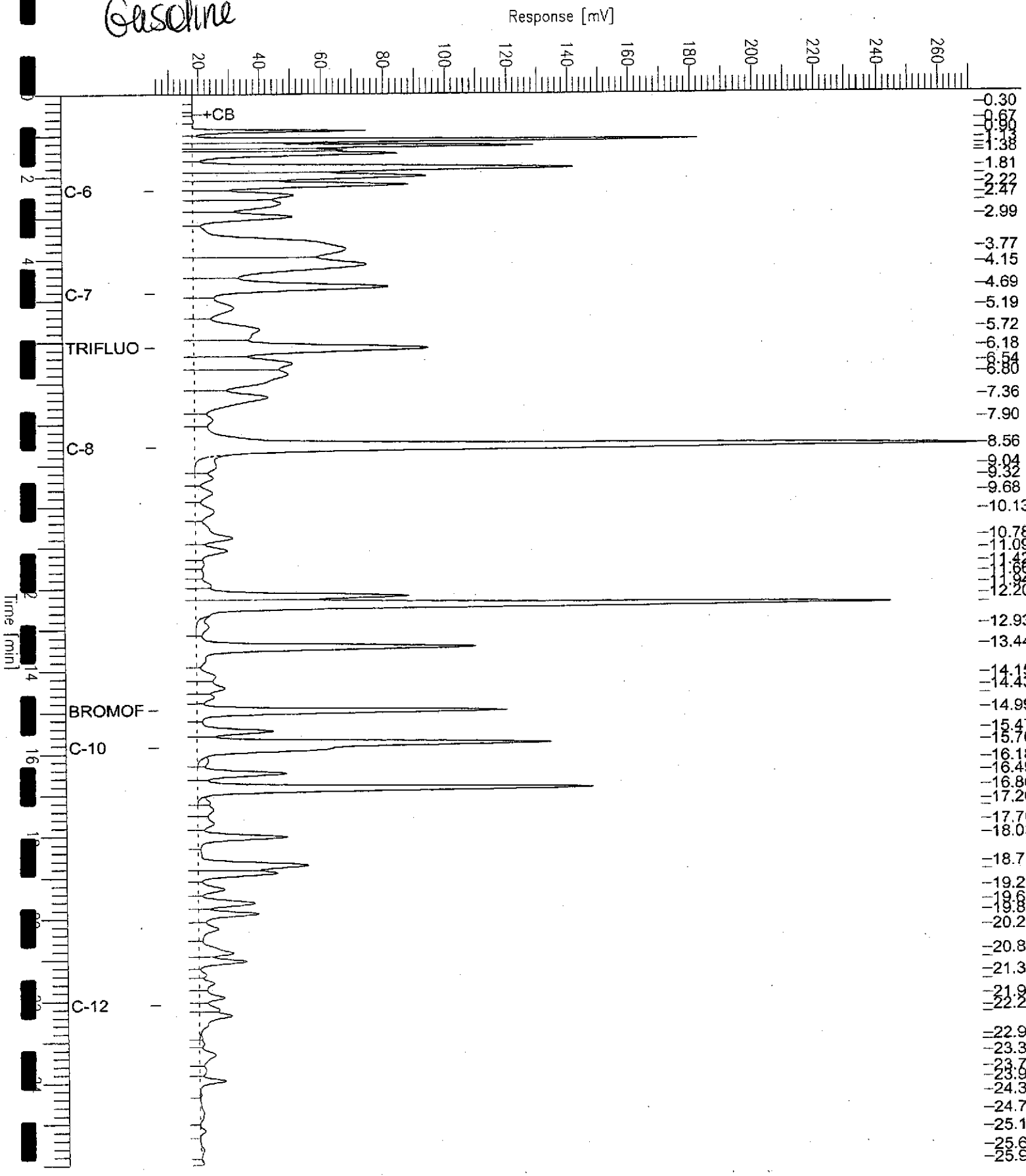


GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc232383,86223,03ws1767,5/5000
File Name : G:\GC07\DATA\321A002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #:
Date : 11/17/03 10:54 AM
Time of Injection: 11/17/03 10:28 AM
Low Point : 5.26 mV High Point : 271.93 mV
Plot Scale: 266.7 mV

Gasoline



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Curtis & Tompkins Laboratories Analytical Report

Lab #:	168910	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Type:	BS	Diln Fac:	1.000
Lab ID:	QC232382	Batch#:	86223
Matrix:	Water	Analyzed:	11/17/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
MTBE	20.00	19.55	98	63-133
Benzene	20.00	22.36	112	78-123
Toluene	20.00	21.07	105	79-120
Ethylbenzene	20.00	21.20	106	80-120
m,p-Xylenes	40.00	43.63	109	76-120
o-Xylene	20.00	21.13	106	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		76	54-149
Bromofluorobenzene (PID)		93	58-143

NA= Not Analyzed

2.0

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	168910	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8021B
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC232466	Batch#:	86223
Matrix:	Water	Analyzed:	11/18/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
MTBE	20.00	18.99	95	63-133	3	27
Benzene	20.00	20.97	105	78-123	6	20
Toluene	20.00	19.70	99	79-120	7	20
Ethylbenzene	20.00	18.96	95	80-120	11	20
m,p-Xylenes	40.00	41.01	103	76-120	6	20
o-Xylene	20.00	19.70	99	80-121	7	20

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		74	54-149
Bromofluorobenzene (PID)		87	58-143

NA= Not Analyzed
RPD= Relative Percent Difference

5.0

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	168910	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC232383	Batch#:	86223
Matrix:	Water	Analyzed:	11/17/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,819	91	80-120
MTBE		NA		
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		114	57-150
Bromofluorobenzene (FID)		117	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	168910	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	86223
MSS Lab ID:	168901-002	Sampled:	11/14/03
Matrix:	Water	Received:	11/17/03
Units:	ug/L	Analyzed:	11/18/03
Diln Fac:	1.000		

Type: MS Lab ID: QC232437

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<18.00	2,000	1,828	91	76-120
MTBE			NA		
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		104	57-150
Bromofluorobenzene (FID)		111	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC232438

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,933	97	76-120	6	20
MTBE		NA				
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		116	57-150
Bromofluorobenzene (FID)		123	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed
RPD= Relative Percent Difference

4.0