



ENVIRONMENTAL ENGINEERING, INC
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December 13, 2002

10 265

Alameda County
DEC 18 2002
Environmental Health

Ms. Trish Maguire
East Bay Municipal Utility District
EDMUD – Mail Slot #702
P. O. Box 24055
Oakland, CA 94623-1055

Re: 3609 International Boulevard, Oakland, California 94601
Wastewater Discharge Permit No. 504-27421

Dear Ms. Maguire:

As you requested in your letter dated May 2, 2002, enclosed is SOMA's "Semi-Annual Technical Report: Treatment System Discharge to EBMUD Sewer from May 15, 2002 to November 14, 2002" for the subject site.

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., P.E.
Principal Hydrogeologist



Enclosure

cc: Mr. Abolghassem Razi w/enclosure

Mr. Barney Chan w/enclosure ✓
Alameda County Dept. of Env. Health

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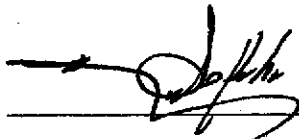
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CERTIFICATION

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 East Bay Municipal Utility District's requirements for the discharge of extracted and treated groundwater resulting from the cleanup of groundwater polluted by fuel leaks and other related wastes.



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



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1.0 INTRODUCTION

This report presents the record of wastewater discharge from the groundwater remediation system operated by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Abolghassem Razi, the property owner. The project site is Tony's Express Auto Service, which is located at 3609 International Boulevard, Oakland, California (the "Site", see Figure 1).

The Site is located at the intersection of 36th Avenue and International Boulevard (formerly known as East 14th Street) in Oakland, California (see Figure 1). It is currently used as a gasoline service station and mechanic shop. The Site is relatively flat, and the surrounding properties are primarily commercial businesses and residential housing. Figure 2 illustrates the location of the service station, dispenser islands, underground storage tanks (USTs), groundwater remediation system, on-site and off-site groundwater monitoring wells, and surrounding areas. Currently, the groundwater monitoring wells are being monitored on a quarterly basis.

The results of the recent (Fourth Quarter 2002) groundwater monitoring event which was conducted on October 30, 2002, indicated that the highest total petroleum hydrocarbons as gasoline (TPH-g) and benzene concentrations in the groundwater were detected in the vicinity of the USTs, in monitoring wells MW-1 and MW-3. TPH-g was detected at 27,000 µg/L in monitoring well MW-1 and 70,000 µg/L in monitoring well MW-3. Benzene was detected at 2,200 µg/L in monitoring well MW-1 and 4,900 µg/L in monitoring well MW-3. The highest Methyl tertiary Butyl Ether (MtBE) concentration was detected in monitoring well MW-1 at 34,000 µg/L using EPA Method 8260B.

Based on results from the previous monitoring event (Third Quarter 2002) the following concentration trends were observed. The TPH-g concentration in

monitoring well MW-1 has decreased. Benzene concentrations in both monitoring wells MW-1 and MW-3 have decreased. However, MtBE concentrations have increased significantly since the previous monitoring event. The source of petroleum hydrocarbons in the groundwater is believed to have been the former single walled USTs, which were used to store gasoline at the Site. The former single walled USTs were replaced with a 10,000 gallon double walled UST and two 6,000 gallon double walled USTs. The results of the Fourth Quarter 2002 monitoring event are presented in SOMA's December 16, 2002, "Fourth Quarter 2002 Groundwater Monitoring And Remediation System Operation Report, Tony's Express Auto Service, 3609 International Boulevard, Oakland, California".

1.1 Background

Currently, the Site is used as a gasoline service station. The environmental investigation at the subject property began in 1992, when Mr. Razi, the property owner, retained Soil Tech Engineering, Inc. (STE) of San Jose to conduct a limited subsurface investigation. The purpose of STE's investigation was to determine whether or not the soil near the product lines and USTs had been impacted with 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. As stated earlier, currently, there is one 10,000 gallon double-walled gasoline tank and two 6,000 gallon double-walled gasoline tanks beneath the Site (Figure 2).

In December 1997, Mr. Razi retained Western Geo-Engineers (WEGE) to conduct an additional investigation and perform groundwater monitoring on a quarterly basis. The results of 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), corrective action plan (CAP) and soil and groundwater remediation at the Site. The results of the RBCA study indicated that the Site is a high-risk area; therefore, the soil and groundwater in on-and off-site areas needs to be remediated. The results of the CAP study indicated that the installation of a French drain coupled with the air sparging technique is the most cost effective alternative for the Site's remediation.

In late August 1999, SOMA installed a French drain and initiated a groundwater treatment system to prevent further migration of chemically impacted groundwater. Currently, this treatment system has been in operation since early December 1999. The purpose of this report is to present a record of the wastewater discharged from this system to the East Bay Municipal Utility District's (EBMUD's) sewer system from May 15, 2002 to November 14, 2002.

2.0 TREATMENT SYSTEM OPERATION

The operation of the treatment system began on December 6, 1999. Since then, (recording date is November 13, 2002) 1,664,780 gallons of groundwater has been treated and discharged, under the existing discharge permit (see Appendix A), into EBMUD's sewer system.

As required by the discharge permit and the Alameda County Environmental Health Services (ACEHS), inspection of the treatment system has been performed on a weekly basis and sampling has occurred on a monthly basis since the initial system start-up. The samples have been collected from the 550 gallon holding tank (influent), the effluent from the 2,000 pound Granular Activated Carbon Unit (GAC-1), and the treatment system effluent (PSP#1). The sample locations can be seen in the schematic diagram of the treatment system which is shown in Figure 3.

SOMA modified the treatment system during the Fourth Quarter 2002 to prevent PVC piping connection leaks. Scale deposits had built up inside the PVC piping during the operation of the treatment system. The entire effluent line from GAC-1 to the effluent sample port was removed and a new line was installed. A 1-inch ball valve was installed up-gradient of the 55-gallon GAC vessel. This valve was installed to shut-off flow to the 55-gallon carbon vessel during carbon change-outs.

Table 1 shows the total volume of effluent discharged to EBMUD's sewer system. Also included in Table 1 are the laboratory analytical results of the treatment system samples collected from the effluent and the 2,000-pound GAC-1 unit, as well as, pertinent historical maintenance data.

As shown in Table 1, all treatment system effluent and 2,000 pound GAC-1 unit samples have maintained compliance with the discharge permit, with the exception of the October 2002 sampling event. The analytical data for the October 2002 sampling period was erroneous. During the laboratory testing 2-Butanone was detected at a high concentration of 200,000 $\mu\text{g/L}$ in only the effluent sample. The influent sample concentration for 2-Butanone was only 20 $\mu\text{g/L}$. Based on the fact that 2-Butanone has never been detected since December 1999 in any of the effluent samples and the very low influent concentration, the sample results shown are erroneous and are only used to depict that sampling was conducted in October 2002. Also, based on the laboratory data the sample analysis for TPH-g did not resemble a standard fuel pattern. However, the system was turned off upon detection of the TPH-g concentration and a carbon change-out was performed. During this carbon change-out both the carbon in the 2,000-pound carbon vessel and the carbon in the 55-gallon vessel (GAC-2) were removed and replaced. In future carbon change-out cycles, both GAC-1 and GAC-2 will be replaced with fresh carbon.

Laboratory reports for the treatment system from May 2002 to November 2002 are shown in Appendix B.

The treatment system has removed approximately 158 pounds of hydrocarbons and 63 pounds of MtBE the Site since the initial start-up in December 1999. Approximately 4,492 gallons of chemically impacted groundwater per week have been treated by the groundwater remediation system from May 15, 2002 to November 14, 2002. Figure 4 displays the cumulative mass of both TPH-g and MtBE extracted from the groundwater at the Site since December 1999.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on historical treatment system analytical data and the number of carbon change-out cycles since the initial start-up in December 1999, SOMA recommends that the 55-gallon carbon vessel be replaced every 18 weeks at a minimum. SOMA further recommends that the treatment system monitoring be performed at a minimum of every 3-4 weeks and that the maintenance continues on a weekly basis.

- As of November 13, 2002, approximately 1,664,780 gallons of chemically impacted groundwater has been treated since the initial treatment start-up in December 1999.
- The treatment system has removed approximately 158 pounds of hydrocarbons and 63 pounds of MtBE from the Site since the initial start-up in December 1999.

4.0 REPORT LIMITATIONS

This report is the summary of work done by SOMA including observations and descriptions of the Site's conditions. It includes the analytical results produced by Curtis & Tompkins, Ltd., as well as the data summaries produced by the 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 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.

5.0 REFERENCES

Soil Tech Engineering, Quarterly Groundwater Monitoring Reports, from 1995 to July 1997.

Western Geo-Engineers, Quarterly Groundwater Monitoring and Sampling Reports from Fourth Quarter 1997 to First Quarter of 1999.

SOMA Environmental Engineering, Inc., June 30, 1999. "Second Quarter 1999 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

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SOMA Environmental Engineering, Inc., July 17, 2001. "Second Quarter 2001 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., September 20, 2001. "Third Quarter 2001 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., January 8, 2002. "Fourth Quarter 2001 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., April 8, 2002. "First Quarter 2002 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., June 18, 2002. "Second Quarter 2002 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., September 11, 2002. "Third Quarter 2002 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., December 16, 2002. "Fourth Quarter 2002 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

TABLE

Table 1
 Total Volume of Water Treated and Effluent and GAC-1 Chemistry
 3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					Total Xylenes
		Reading (gallons)	(concentrations in mg/L)					
			MtBE ²	TPH-g	Benzene	Toluene	Ethylbenzene	
2002								
November	11/13/02	1,664,780	replaced gasket on top of GAC-1 when leak was detected system modification-new piping from GAC-1 to the effluent sample port was installed, carbon change-out on system					
	11/6/02	1,663,880						
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	9/19/02	1,653,600	< 5	< 50	< 5	< 5	< 5	< 5
			< 5	< 50	< 5	< 5	< 5	< 5
August	8/23/02	1,641,650	1	< 50	< 0.5	< 0.5	< 0.5	< 0.5
			< 0.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
July	7/23/02	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
June	6/24/02	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	5/30/02	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
	5/20/02	1,548,000	removed newly installed compressor, installed another compressor					
	5/8/02	1,538,850	installed new compressor					
	5/1/02	1,529,650	installed new 55 gallon GAC Vessel					
April	4/24/02	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
	4/1/02	1,478,500	repaired valve plate assembly on compressor					
March	3/25/02	1,478,420	performed carbon change-out on treatment system replaced piston on compressor compressor not building up pressure					
	3/18/02	NR						
	3/14/02	1,478,330						
February	2/27/02	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	1/22/02	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

Table 1
 Total Volume of Water Treated and GAC-1 and Effluent Chemistry
 3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					Total Xylenes
		Reading (gallons)	(concentrations in mg/L)		Benzene	Toluene	Ethylbenzene	
			MTBE ²	TPH-g				
2001								
December	12/12/01	1,311,340	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
November	11/2/01	1,272,660	ND	ND	ND	ND	ND	ND
			0.6	ND	ND	ND	ND	ND
September	9/28/01	NA	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
August	8/22/01	1,243,100	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
July	7/26/01	1,227,270	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	7/11/01	1,226,730	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
June	6/29/01	1,224,600	NA	NA	NA	NA	NA	NA
			ND	ND	ND	ND	ND	ND
	6/26/01	NR	installed new compressor					
	6/16/01	1,216,580	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			compressor not working, repaired compressor					
	6/7/01	1,216,580	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
May	5/30/01	1,205,198	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	5/23/01	1,194,390	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	5/17/01	1,182,360	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	5/10/01	1,166,850	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	5/5/01	1,151,600	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
April	4/28/01	1,135,690	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	4/21/01	1,113,570	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	4/11/01	1,082,700	NA	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	4/6/01	1,065,540	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA

Table 1
 Total Volume of Water Treated and GAC-1 and Effluent Chemistry
 3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					Total Xylenes
		Reading (gallons)	(concentrations in mg/L)		Benzene	Toluene	Ethybenzene	
			MtBE ²	TPH-g				
March	3/29/01	1,036,330	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			system was re-started					
	3/21/01	1,036,070	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
			belt replaced on compressor					
	3/17/01	1,035,100	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/13/01	1,032,500	ND	ND	ND	ND	ND	ND
			NA	NA	NA	NA	NA	NA
	3/2/01	996,520	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/1/02	NR	system re-started after carbon change-out					
February	2/28/02	NR	Carbon Change-out was performed on GAC-1, washed algae from holding tank cleaned 2000 lb GAC, re-started system					
	2/10/01	975,490	System shut down for maintenance and cleaning.					
January	1/29/01	957,880	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
2000								
December	12/5/00	883,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
November	11/24/00	NR	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	11/1/00	842,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
October	10/1/00	809,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
August	8/27/00	781,000	ND	ND	ND	ND	ND	ND
	8/24/00	778,000	Totalizer meter replaced at 775,000 gallons					
July	7/26/00	726,000	ND	ND	ND	ND	ND	ND
	7/19/00	718,000	ND	ND	ND	ND	ND	ND
	7/13/00	712,000	ND	ND	ND	ND	ND	ND
	7/7/00	706,000	ND	ND	ND	ND	ND	ND
June	6/29/00	700,000	ND	ND	ND	ND	ND	ND
	6/21/00	682,220	ND	ND	ND	ND	ND	ND
	6/16/00	669,720	ND	ND	ND	ND	ND	ND
	6/10/00	651,200	ND	ND	ND	ND	ND	ND

Table 1
Total Volume of Water Treated and Effluent and GAC-1 Chemistry
3609 International Boulevard, Oakland, California

Month	Date	Meter	Lab Results For Effluent and GAC-1					Total Xylenes	
		Reading (gallons)	(concentrations in mg/L)		Benzene	Toluene	Ethylbenzene		
			MtBE ²	TPH-g					
May	5/31/00	629,000	ND	ND	ND	ND	ND	ND	
	5/23/00	603,700	ND	ND	ND	ND	ND	ND	
	5/18/00	570,000	ND	ND	ND	ND	ND	ND	
	5/10/00	530,400	ND	ND	ND	ND	ND	ND	
April	4/30/00	488,300	ND	ND	ND	ND	ND	ND	
	4/18/00	485,300	ND	ND	ND	ND	ND	0.51	
			compressor stopped, system shut down until April 29, 2000						
	4/10/00	440,200	ND	ND	ND	ND	ND	ND	
	4/4/00	390,100	ND	ND	ND	ND	ND	ND	
	4/2/00	NR	performed a carbon change-out on GAC-1						
March	3/31/00	NR	replaced GAC-2 with a special GAC designed for removal of MtBE						
	3/24/00	388,000	ND	ND	ND	ND	ND	ND	
	3/17/00	357,100	ND	ND	ND	ND	ND	ND	
	3/10/00	329,000	ND	ND	ND	ND	ND	ND	
	3/3/00	300,000	transfer overheated, repaired pump, restarted system 3/6/00						
February	2/25/00	274,000	ND	ND	ND	ND	ND	ND	
	2/18/00	233,000	ND	ND	ND	ND	ND	ND	
	2/11/00	190,000	ND	ND	ND	ND	ND	ND	
	2/4/00	160,800	ND	ND	ND	ND	ND	ND	
January	1/28/00	130,600	ND	ND	ND	ND	ND	ND	
	1/21/00	103,435	ND	ND	ND	ND	ND	ND	
	1/17/00	NR	GAC-1 was replaced with 2,000 lb GAC unit						
	1/14/00	83,500	second polishing GAC was replaced with 55 gallon GAC unit						
1999									
December	12/23/99	51,680	1486	NA	ND	ND	ND	ND	
			ND	NA	ND	ND	ND	ND	
	12/16/99	30,450	963	NA	ND	ND	ND	ND	
			ND	NA	ND	ND	ND	ND	
	12/9/99	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 detected using EPA Method 8260B
- 3 Lab data as shown 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.
- 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

FIGURES

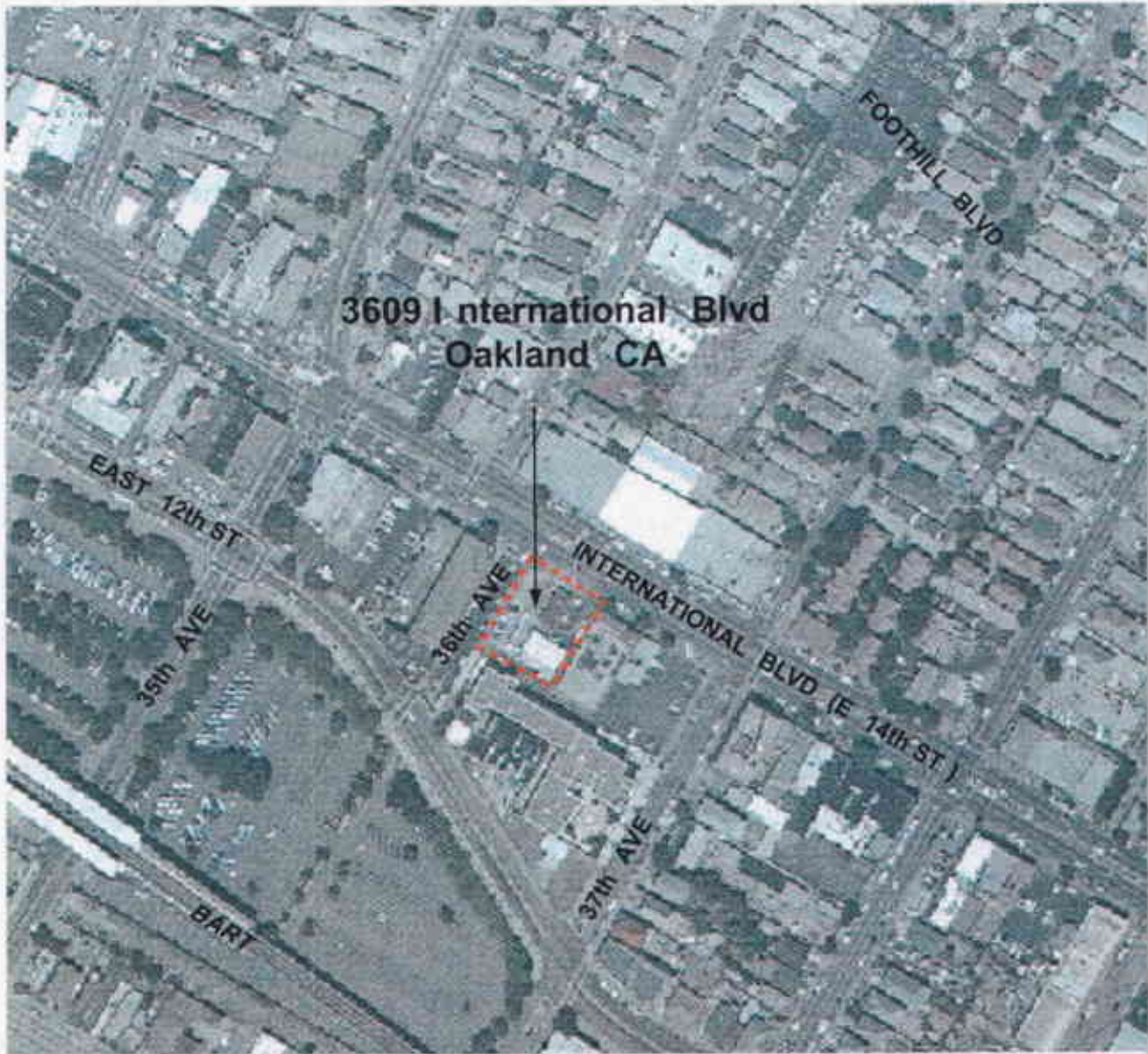


Figure 1: Site vicinity map.

INTERNATIONAL BLVD

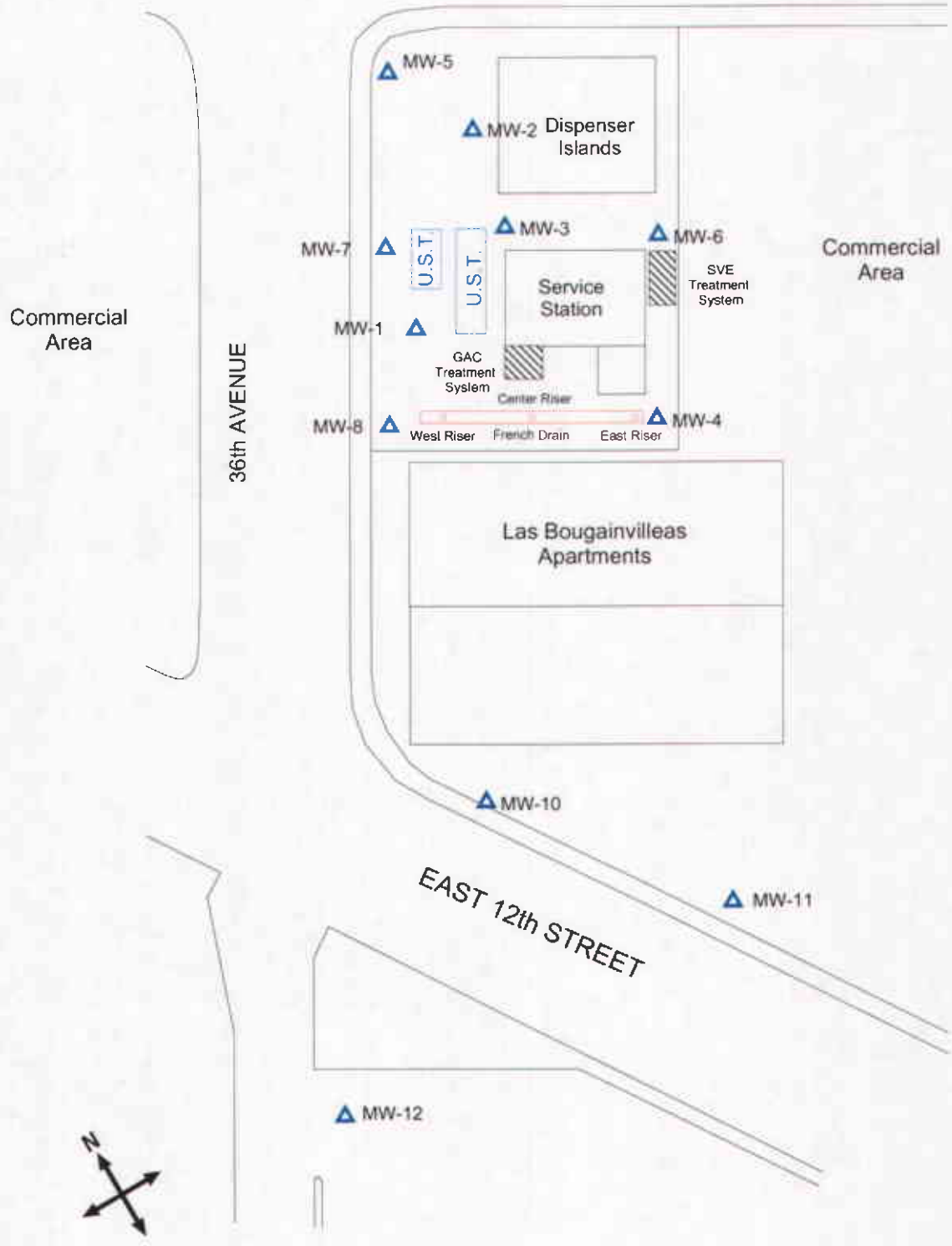


Figure 2: Site map showing location of groundwater monitoring wells and french drain.

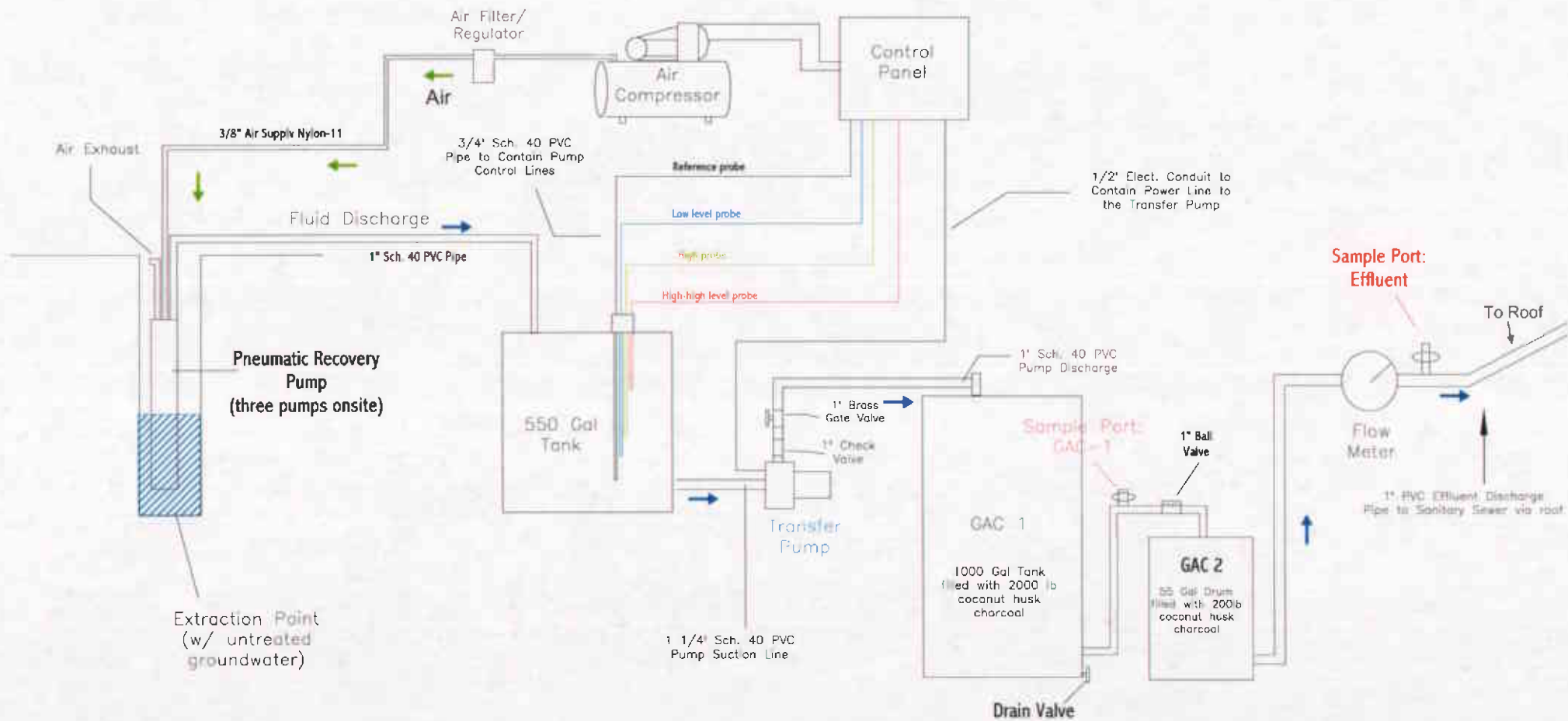
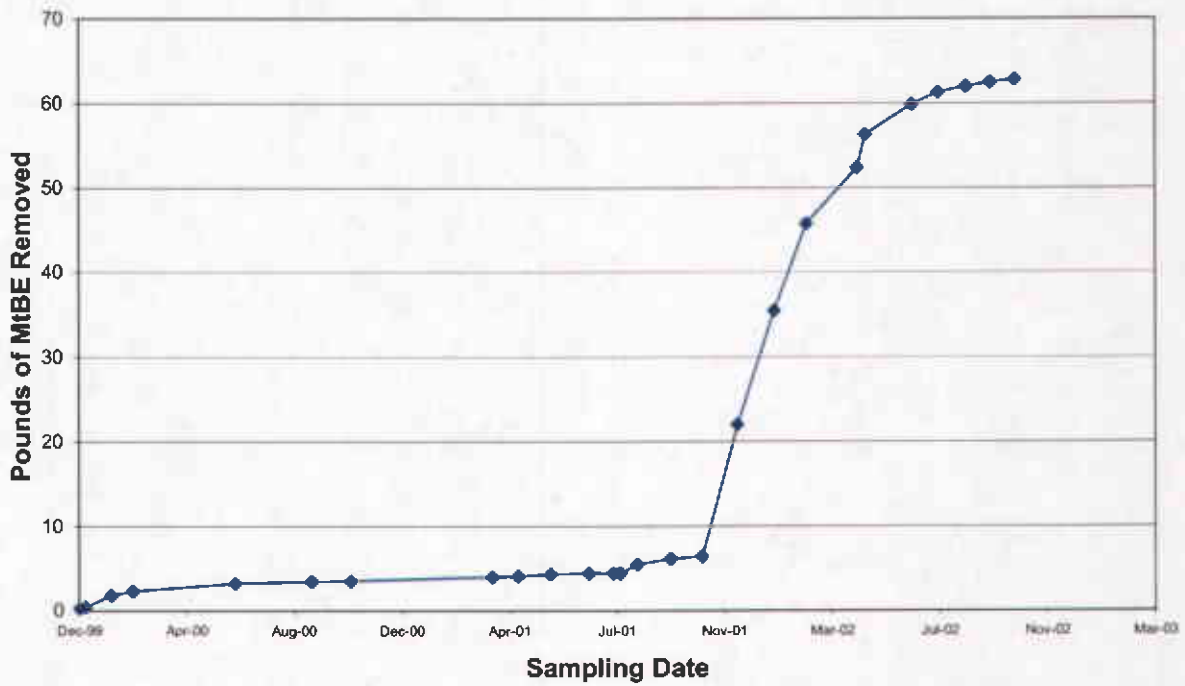
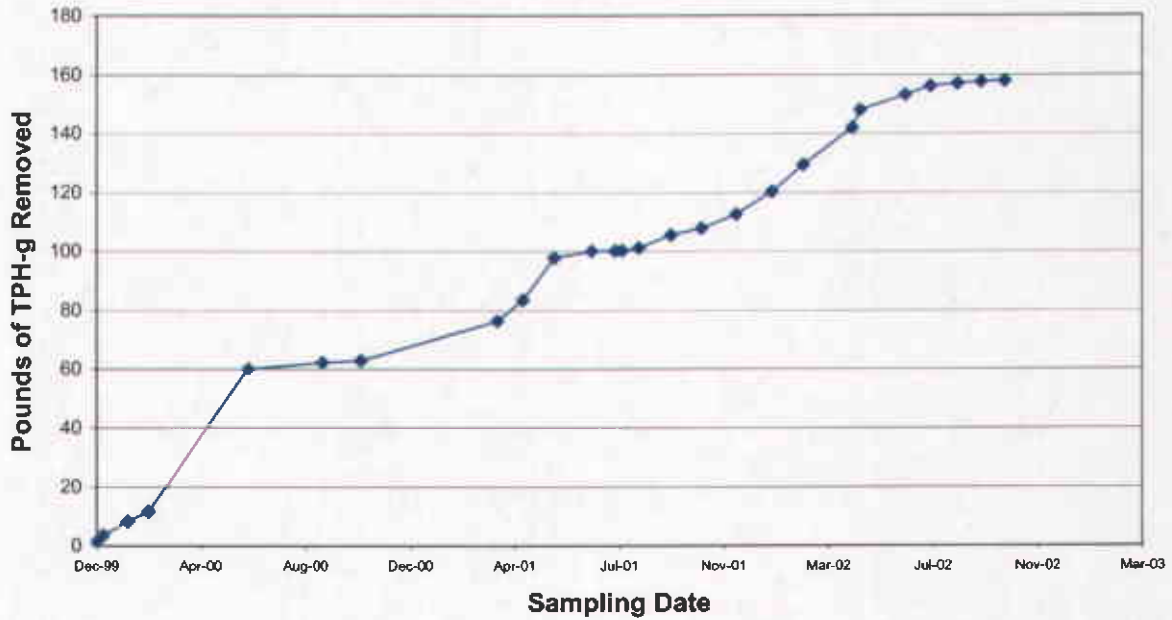


Figure 3: Schematic of the Groundwater Remediation System.

Figure 4
Cumulative Weight of TPH-g and MtBE Extracted from Groundwater
Since Installation of the Treatment System
3609 International Boulevard, Oakland, California



APPENDIX A

EBMUD DISCHARGE PERMIT



WASTEWATER DISCHARGE PERMIT

REVISION EFFECTIVE JULY 1, 2000 Terms and Conditions

Tony's Express Auto Service
Permit No. 504-27421
Page No. 1

GENERAL CONDITIONS

- I. Title I, Section 5 of EBMUD Ordinance No. 311 prohibits the discharge of groundwater to the community sewer. This Permit to discharge treated groundwater is considered a waiver of the prohibition and is issued based on Tony's Express Auto Service's application that discharge of pollutants to the community sewer will be minimized and methods to reclaim the groundwater, to the extent technically and economically feasible, have been made.
- II. This Permit is granted to Tony's Express Auto Service to discharge treated groundwater from 3609 International Boulevard in Oakland.
- III. Tony's Express Auto Service shall cease discharge of groundwater immediately if not in compliance with any of the Terms and Conditions of this Permit.
- IV. Tony's Express Auto Service shall comply with all items of the attached STANDARD TERMS AND CONDITIONS, July 2000 Edition.

COMPLIANCE REQUIREMENTS

- I. Tony's Express Auto Service shall not discharge any treated wastewater that is known to be, or suspected of, violating wastewater discharge limitations.
- II. Tony's Express Auto Service shall pretreat all groundwater before discharging to the sanitary sewer at 3609 International Boulevard in Oakland. Pretreatment shall consist of a minimum of processes displayed in the *Tony's Express Auto Service System Flow Diagram (Figure 3)*.
- III. Tony's Express Auto Service shall maintain the pretreatment system in proper operating condition.
- IV. Tony's Express Auto Service shall maintain records of operation and maintenance activities on the pretreatment systems. The records shall include, but are not be limited to, meter readings from the flow totalizer at a maximum of monthly intervals; maintenance activities performed; description of operational changes; description of visual observations of the unit for leaks or fouling; and off - haul of hazardous wastes. The records shall be available to the District staff upon request.



WASTEWATER DISCHARGE PERMIT

REVISION EFFECTIVE JULY 1, 2000 Terms and Conditions

Tony's Express Auto Service
Permit No. 504-27421
Page No. 2

REPORTING REQUIREMENTS

- I. Violations shall be reported in accordance with Section B, Paragraph II of STANDARD TERMS AND CONDITIONS, July 2000 Edition.
- II. Tony's Express Auto Service shall submit technical reports due on the following dates:

<u>Date Due</u>	<u>Reporting Period</u>
June 14, 2000	November 15, 1999, through May 14, 2000
December 14, 2000	May 15, 2000 through November 14, 2000

The technical reports shall contain the following information, at a minimum:

- 1. Self-monitoring reports prepared in accordance with the "Self-Monitoring Reporting Requirements" of this Permit.
- 2. Monthly readings from the flow totalizer measuring volume of the pretreatment system effluent.
- 3. Volume of groundwater pumped and treated during the reporting period, and a total to date.
- 4. Description of any operational changes occurred during the reporting period.
- 5. Certification and signature prepared in accordance with Section B Part V of STANDARD TERMS AND CONDITIONS, July 2000 Edition, "Signature Requirements".

WASTEWATER DISCHARGE LIMITATIONS

Tony's Express Auto Service shall not discharge wastewater from a side sewer into the community sewer if the strength of the wastewater exceeds the following local limits:

<u>REGULATED PARAMETER</u>	<u>DAILY MAXIMUM</u>
Benzene	0.005 mg/L
Toluene	0.005 mg/L
Ethylbenzene	0.005 mg/L
Xylenes, total	0.005 mg/L

SD-30.7.2/91



WASTEWATER DISCHARGE PERMIT

REVISION EFFECTIVE JULY 1, 2000 Terms and Conditions

Tony's Express Auto Service
Permit No. 504-27421
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SELF-MONITORING REPORTING REQUIREMENTS

- I. Tony's Express Auto Service shall monitor and sample the wastewater discharge into the community sewer in accordance with Section C of STANDARD TERMS AND CONDITIONS, July 2000 Edition. The sampling shall be performed at the locations and frequency for the parameters specified below.
- II. Self-monitoring reports shall contain all laboratory results and the corresponding chain of custody documentation, and signatory requirements.
- III. The Sample location shall be the sample tap located on the effluent side of the second (final) Liquid Phase GAC. This sample location shall be referred to as Process Sample Point #1 (PSP #1) in all reports. PSP #1 is shown in Tony's Express Auto Service System Flow Diagram (Figure 3) and Schematic Flow (Figure 4).
- IV. Tony's Express Auto Service shall sample wastewater from PSP #1, at a minimum, quarterly for the following parameters:

Parameter	Sample Type	EPA Method
Benzene	grab	8020 or 624
Toluene	grab	8020 or 624
Ethylbenzene	grab	8020 or 624
Xylenes	grab	8020 or 624



WASTEWATER DISCHARGE PERMIT

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MONITORING and TESTING CHARGES

EBMUD Inspections Per Year: 2 @ \$540.00 each = \$1,080.00 / year

Analyses Per Year:

Parameter	Tests per year	Charge per test	Total Charge per year
EPA 624	2	\$127.00	\$254.00

Total Monitoring and Testing Charge = \$1,334.00 / year
\$111.17 / month

WASTEWATER DISPOSAL SERVICE CHARGE

All wastewater discharged will be charged for treatment and disposal service at the Business Classification Code (BCC) unit rate for 4950, Sanitary Collection and Disposal, or 'All other BCC's'. Wastewater charges are determined by multiplying the metered consumption by the percent discharged, adding any fixed volume, and multiplied by the treatment charge.

Unit Rate = \$0.40 /Ccf
Discharge Volume = 293 Ccf/mo. (based on 7,200 gpd average)
Wastewater Disposal Charge = \$117.20 /mo.

WASTEWATER CAPACITY FEE

The capacity fee is calculated by multiplying the maximum monthly wastewater discharge volume by the applicable fee in effect at start-up. The capacity fee is based on the maximum monthly discharge of 14,000 gpd or 569 Ccf/month.

Capacity Fee Rate for Flow: \$ 47.71/Ccf/Mo. * 569Ccf/mo. = \$27,146.99
CODF: 15mg/l * 0.00624 * 569 Ccf/mo. = 53lbs.
Capacity Fee Rate for CODF: (\$8.68/lb/mo.) = 53 lbs * \$8.68/lb/mo. \$460.04
TSS: 2 mg/l * 0.00624 *569 Ccf/mo. = 7.1 lbs
Capacity Fee Rate for TSS: (\$19.30/lb/mo.) = 7.1 lbs * \$ 19.30/lb/mo/ \$137.03
Total Capacity Fee = \$27,744.06
Monthly Capacity Fee over 36 months = \$770.67



WASTEWATER DISCHARGE PERMIT

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Tony's Express Auto Service

Permit No. 504-27421

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FEES AND WASTEWATER CHARGES

The following fees and charges are due when billed by the District:

Permit Fee:	\$2,490.00
Monthly Capacity Fee	\$770.67
Monthly Monitoring Charge:	\$111.17
Monthly Wastewater Disposal Charge:	\$117.20

Total Monthly Charges = \$999.04



WASTEWATER DISCHARGE PERMIT STANDARD TERMS AND CONDITIONS

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WASTEWATER DISCHARGE PERMIT STANDARD TERMS AND CONDITIONS

VII. Closure Plan

The District may require a facility that intends to close or cease a regulated process to provide a written Closure Plan.

The plan shall include the following four items:

- a) date of proposed work or production stoppage
- b) date of proposed final closure (after cleaning and demobilizing activities are complete)
- c) description of cleaning activities, and
- d) description of disposal of inventoried process material and waste

VIII. Calibration and Maintenance of Equipment

The Permit Holder shall calibrate, inspect, and maintain all flow measuring, discharge sampling, monitoring, and pretreatment equipment to ensure the equipment accuracy and reliability.

IX. Availability of Permit

The Permit Holder shall maintain a copy of the current Permit at the permitted site and make the Permit available to both facility and District staff at all times.

X. Payment of Permit Fees and Charges

The Permit Holder shall pay all Permit fees, monitoring and testing charges, and wastewater treatment charges.

XI. Continuation of Expired Permits

An expired Permit will continue to be effective and enforceable until the Permit is reissued if:

- a) The Permit Holder has submitted a complete permit application at least 60 days prior to the expiration date of the Permit Holder's existing Permit.
- b) The delay in reissuing the expired Permit is not due to any act or failure to act on the part of the Permit Holder.

XII. Permit Termination

The District may terminate the Permit for violation of the terms and conditions of the Permit or for violation of the provisions of EBMUD Ordinance No. 311, unless waived by the Permit.

XIII. Transfer of Permit Prohibition

The Permit Holder shall not assign or transfer the Permit.



WASTEWATER DISCHARGE PERMIT STANDARD TERMS AND CONDITIONS

2. the cause of the violation
 3. a description of the violation, including what was discharged
 4. the volume of the discharge
 5. the duration of the discharge violation including start and end times and dates
 6. analytical results, if available, with chain of custody and other pertinent documentation
 7. measures taken to correct the violation
 8. measures taken to prevent recurrence
- c) If analytical results of a sample collected by the Permit Holder indicate a violation, the Permit Holder shall repeat the sampling and analysis, and submit the results to the District within 30 days of becoming aware of the violation, unless:
1. the District collects samples of the permitted discharge at a frequency of at least once per month, or
 2. the District collects samples for the same parameter between the time the Permit Holder performs its initial sampling and the time when the Permit Holder receives the results of the sampling

III. Changes in Quantity and Quality of Wastewater

The Permit Holder shall immediately report to the District any significant change to the quality or volume of the wastewater discharge or any deviation from the terms and conditions of the Permit.

IV. Hazardous Waste Notification

The Permit Holder shall submit to the District a written notification in accordance with 40 CFR 403.12(p) of any discharge, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Pollutants reported as part of the Self-Monitoring Reporting Requirements are not subject to this notification requirement.

V. Signatory Requirements

The Permit Holder shall submit all applications, reports, or information in accordance with signatory requirements of 40 CFR 403.12 (l) and include the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



II. Chain of Custody

- a) The Permit Holder shall submit a Chain of Custody record for each sample that documents the following:
 1. the location, the type of sample(s) (grab or composite), the date(s) and time, or span of time the sample was taken
 2. the number of containers, and type (glass, plastic, vial, etc.)
 3. preservation techniques (ice, refrigeration at 4°C, chemicals added, etc.)
 4. sample collector's name, legibly written
 5. sample ID number (to cross-reference with the sample ID number on the Laboratory results)
 6. all persons handling the sample and the individual receiving the sample at the laboratory, including their signature, printed name, company, date and time the sample was relinquished and accepted
- b) The Permit Holder shall ensure that samples transported or handled by a courier, delivery service (public or private) or shipper, shall include the company or individual's name, and the method of packaging the samples, on the Chain of Custody record.
- c) The Permit Holder shall show all sample analyses performed in the field on the Chain of Custody record (e.g. pH - field test).
- d) The District may require resampling of the wastewater for an incomplete or incorrect Chain of Custody record.

III. Sample Preservation and Analytical Methods

Unless the Permit requires otherwise, the Permit Holder shall use sampling methods, sample preservation, and analytical methods for each parameter in accordance with applicable sections of:

- a) *EBMUD Table of Approved Test Methods*
- b) *Standard Methods of Water and Wastewater Analysis*, Edition used in the EBMUD Table of Approved Test Methods
- c) EPA 40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, latest edition

IV. Laboratory Reports

The Permit Holder shall use a laboratory certified by the California Department of Health Services for each sample analysis required by the Permit. The laboratory report for each sample shall include:

- a) the name and address of the laboratory performing the analyses
- b) sample ID number (to cross reference with the sample ID number on the Chain of Custody)
- c) the analytical result(s)



SECTION E. DEFINITIONS

BMPs - Best Management Practices (also known as Pollution Prevention Practices) are guidelines and procedures that include maintenance procedures, management practices and prohibition of practices that focus on the reduction or elimination of pollutants or wastes at the source.

Bypass - The diversion of wastestreams from any portion of a treatment facility.

Chain of Custody - A Chain-of-Custody is a legal record of each person who had possession of a sample. It is included with an analytical report.

Combined Wastestream Formula - Formula defined in 40 CFR 403.6(e)

Director - Refers to the term "Manager", as defined in EBMUD Ordinance No. 311, the Director of the District's Wastewater Department, or his/her designated representative.

Discharge Minimization Permit - Permits issued for the purpose of regulating the discharge of wastewater to the sanitary sewer. Discharge Minimization Permits generally include monitoring and reporting requirements and District inspections.

District - Refers to East Bay Municipal Utility District (EBMUD). EBMUD is a publicly owned water district formed in 1923 under the Municipal Utility District Act of 1921.

Hazardous Waste - Listed and characterized wastes under the Section 3001 of the Resource Conservation and Recovery Act, as described in the Code of Federal Regulations (40 CFR Part 261) or as defined in California Health and Safety Code Section 25117. VII.

Permit Holder - Any individual, partnership, firm, association, corporation, or public agency issued a Wastewater Discharge Permit.

Pollution Prevention Permits - Permits issued to businesses in specific commercial categories. Pollution Prevention Permits are based on pollution prevention or waste minimization at sources, and the implementation of specific BMPs.

POTW - Publicly Owned Treatment Works, e.g., EBMUD SD-1.

Prohibition - Prohibited discharges of wastewater as defined in EPA 40 CFR Part 403.5 or EBMUD Ordinance No. 311, Title I, Section 5, and Title II, Section 2.

Pretreatment Program - A program administered by a POTW that meets the criteria established in EPA 40 CFR Part 403.8, 403.9 and 403.11.

Regional Water Quality Control Board - The California Regional Water Quality Control Board, San Francisco Bay Region, is the approval authority for the District's Pretreatment Program.

Sample - A portion of wastewater that is representative of a larger volume of wastewater being discharged. The two types of samples are:

- a) **Grab** - an individual sample collected in a short period of time not exceeding fifteen minutes.



WASTEWATER DISCHARGE PERMIT STANDARD TERMS AND CONDITIONS

Total Toxic Organics (TTO)- The sum of the concentrations of specific toxic organic compounds found in the wastewater discharge at a concentration greater than 10 ug/L. Each categorical standard (40 CFR 405 - 471) lists the specific toxic organic compounds that are to be included in the summation.

Total Identifiable Chlorinated Hydrocarbons (TICH) - The sum of the concentrations of all quantifiable values greater than the detection limit for all chlorinated hydrocarbons identified by EPA Method 624.

Wastewater Discharge Limits - A wastewater discharge limit is the maximum concentration of a pollutant allowed to be discharged during a specific period of time. Wastewater discharge limits may be of three types: Monthly Average, 4-day Average, and Maximum.

Monthly Average - The maximum arithmetic average value of all samples taken in a calendar month.

4-day Average - The maximum arithmetic average value of four consecutive samples taken on different days.

Maximum - The maximum concentration of a pollutant allowed to be discharged at any time, as determined from the analysis of a grab or composite sample.

w:\ids\permits\standard terms and conditions.doc



EBMUD TABLE OF APPROVED TEST METHODS

Required Preservation & Holding Times

Parameter	Preservative	Maximum Hold Time	EPA Method	STD Methods* 18 th Ed.
Total Suspended Solids, TSS, filtered with Whatman 934 AH Glass Microfiber filter, or equivalent	Cool to 4°C	7 days	160.2	
Zinc (Total)	HNO ₃ to pH<2 Cool to 4°C	6 months	289.2 200.7	
Organochlorine Pesticides & Poly Chlorinated Biphenyls (PCBs)	Cool to 4°C	7 days until extraction; 40 days after extraction	608	6630B & C
Purgeable Organics (BTEX)	HCl to pH <2, add ascorbic acid if Cl ₂ is present. VOA vials, No headspace. Cool to 4°C	14 days	624 ¹ 8021 B 8260 B	
Semi-Volatile Organics (BNA's)	Cool to 4°C	7 days until extraction; 40 days after extraction	625	
Total Identifiable Chlorinated Hydrocarbon (Volatile Organics)	HCl to pH<2, add ascorbic acid if Cl ₂ is present. VOA vials, No headspace. Cool to 4°C	14 days	624 8260 B	

¹EPA Method 624 table in 40 CFR Part 136 does not list xylenes, however, EBMUD may accept xylenes detected by this method.

* Standard Methods for the Examination of Water and Wastewater

APPENDIX B

Laboratory Results and Chain of Custody Forms



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

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

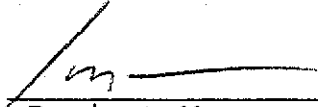
A N A L Y T I C A L R E P O R T

Prepared for:

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

Date: 23-OCT-02
Lab Job Number: 161303
Project ID: 2333
Location: Tony's Auto Express-Oak

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

This package may be reproduced only in its entirety.

Laboratory Number: 161303
Client: SOMA Environmental Engineering Inc.
Project #: 2333
Project name: Tony's Auto Express-Oak
Receipt Date: 10/16/02

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for three water samples received from the above referenced project on October 16th, 2002. The samples were received cold and intact.

Total Volatile Hydrocarbons (EPA 8015(M)):

A high recovery was observed for the surrogate trifluorotoluene for the influent sample due to coelution with the sample matrix.

No other analytical problems were encountered.

Purgeable Aromatics by GC/MS (EPA 8260B):

The sample PSP-1 was diluted due to high concentrations on non-target compounds.

No other analytical problems were encountered.



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Matrix:	Water	Sampled:	10/16/02
Units:	ug/L	Received:	10/16/02

Field ID:	PSP-1	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	76187
Lab ID:	161303-001	Analyzed:	10/19/02

Analyte	Result	RL
Gasoline C7-C12	2,000 Y Z	1,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	68-145
Bromofluorobenzene (FID)	96	66-143

Field ID:	GAC-1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	76171
Lab ID:	161303-002	Analyzed:	10/19/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	87	68-145
Bromofluorobenzene (FID)	96	66-143

Field ID:	INFLUENT	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	76136
Lab ID:	161303-003	Analyzed:	10/18/02

Analyte	Result	RL
Gasoline C7-C12	3,200	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	156 *	68-145
Bromofluorobenzene (FID)	96	66-143

*= Value outside of QC limits; see narrative

Y= Sample exhibits fuel pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

ND= Not Detected

RL= Reporting Limit

Page 1 of 2

GC19 TVH 'X' Data File (FID)

Sample Name : 161303-001,76187,TVH ONLY

FileName : G:\GC19\DATA\292X008.raw

Method : TVHBTXE

Start Time : 0.00 min

End Time : 26.80 min

Scale Factor: 1.0

Plot Offset: -37 mV

Sample #: C1

Page 1 of 1

Date : 10/21/02 07:43 AM

Time of Injection: 10/19/02 05:19 PM

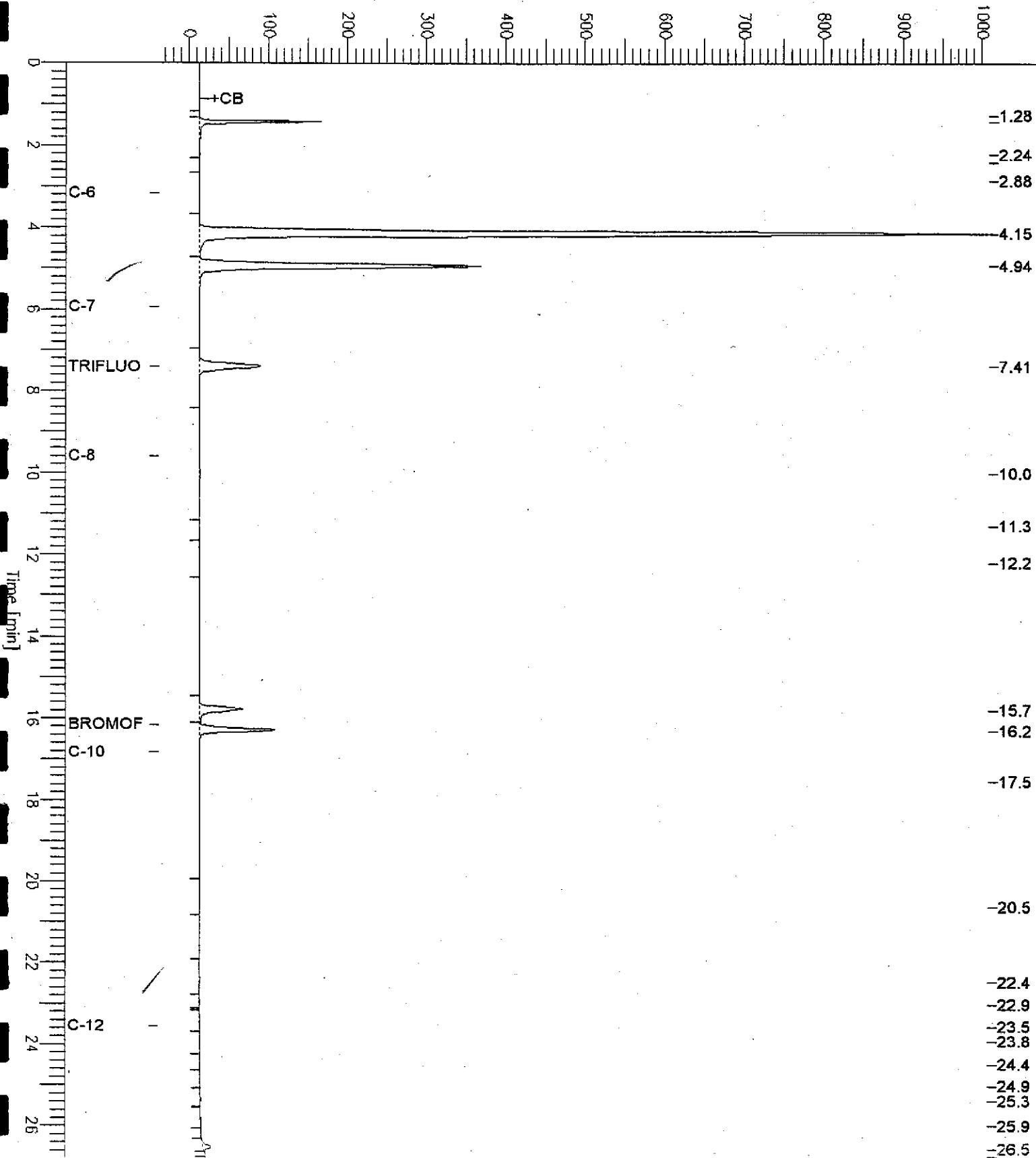
Low Point : -37.08 mV

High Point : 1008.95 mV

Plot Scale: 1046.0 mV

PSP-1

Response [mV]

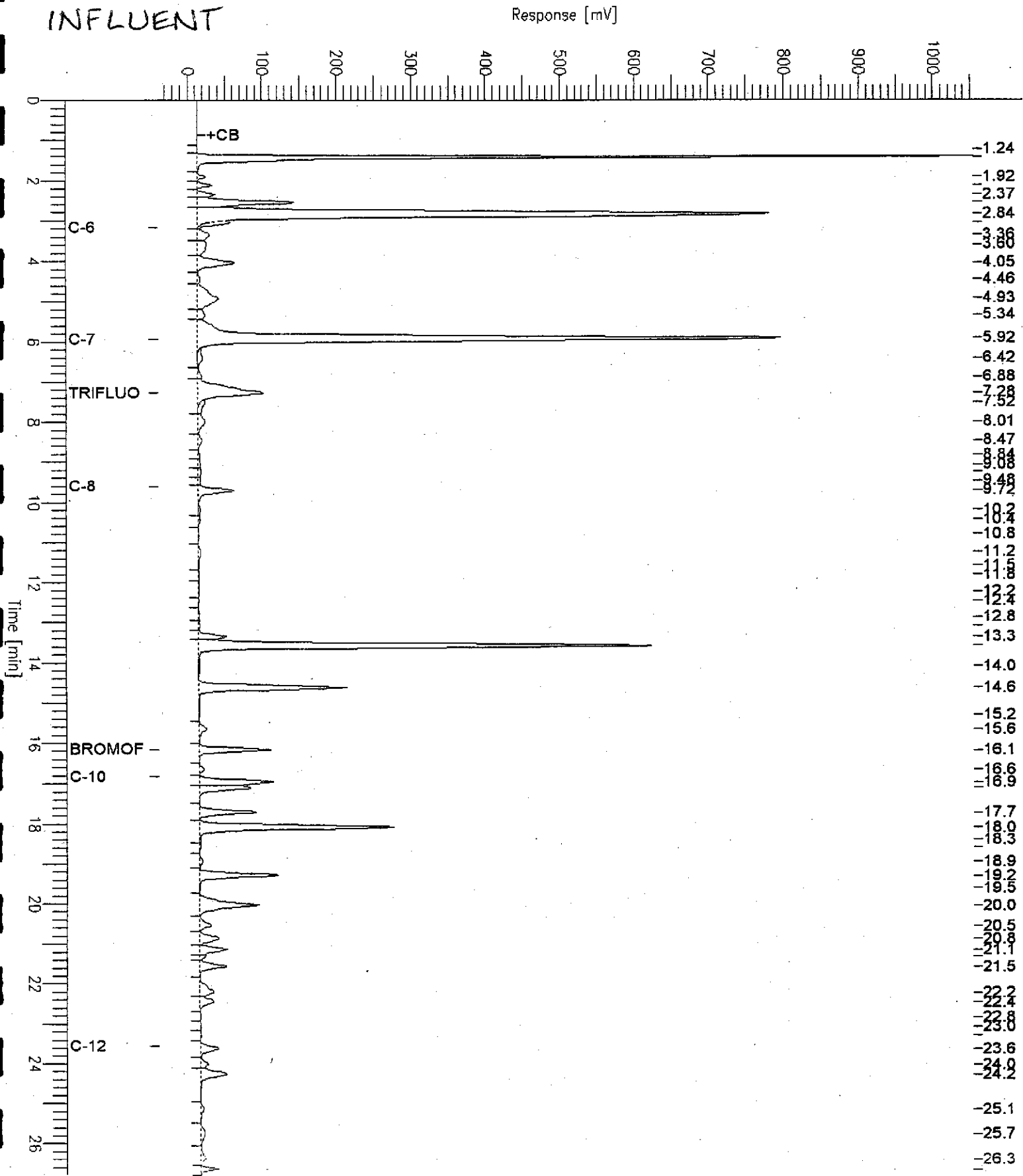


GC19 TVH 'X' Data File (FID)

Sample Name : 161303-003,76136,tvh only
 FileName : G:\GC19\DATA\290X031.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor: 1.0

End Time : 26.80 min
 Plot Offset: -39 mV

Page 1 of 1
 Sample #: c1
 Date : 10/18/02 08:41 AM
 Time of Injection: 10/18/02 08:14 AM
 Low Point : -39.37 mV
 High Point : 1053.94 mV
 Plot Scale: 1093.3 mV

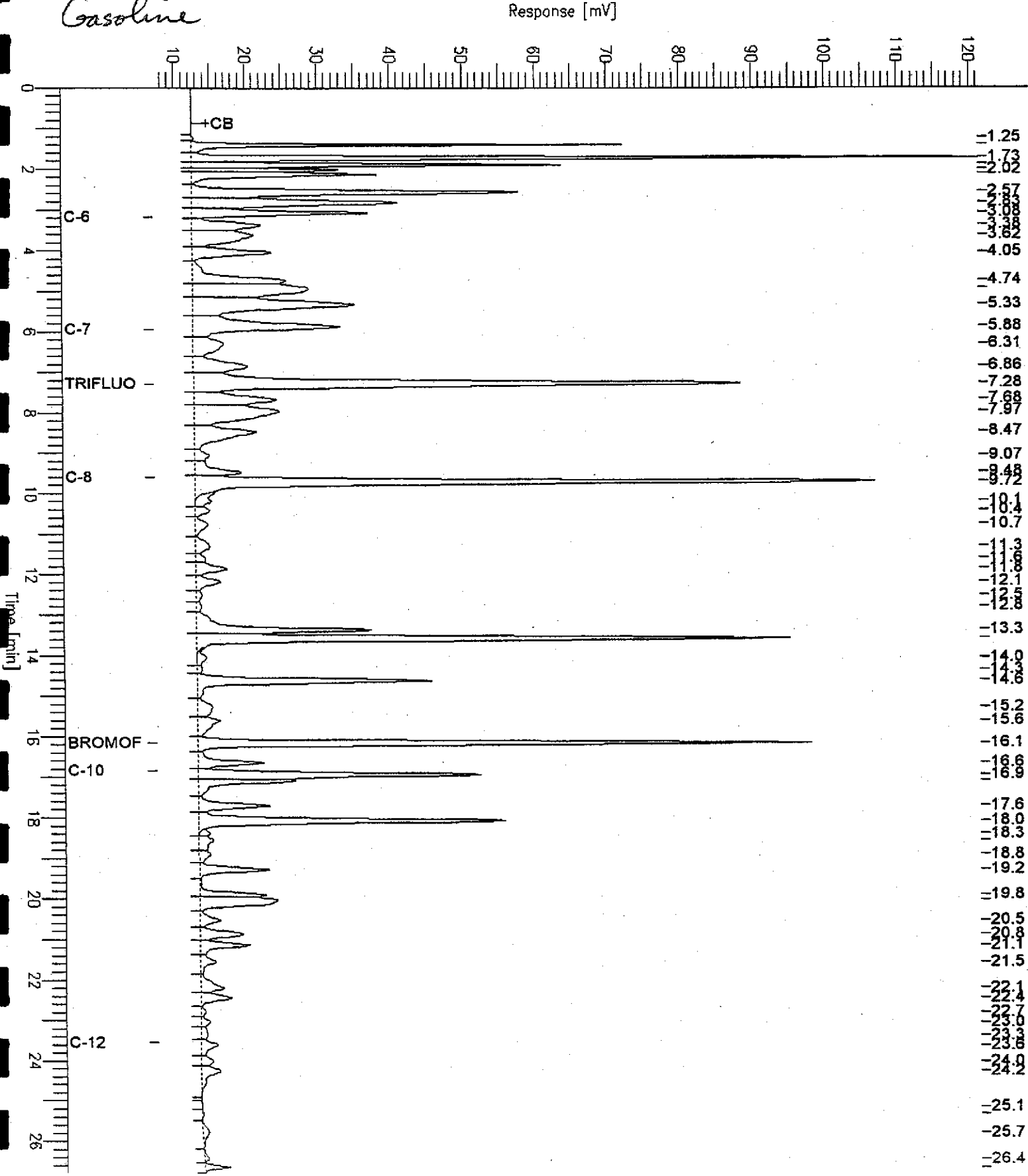


GC19 TVH 'X' Data File (FID)

Sample Name : CCV/LCS, QC193214, 76136, 02WS1664, 2.5/5000
 File Name : G:\GC19\DATA\290X002.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.80 min
 Scale Factor : 1.0 Plot Offset : 7 mV

Sample #: Page 1 of 1
 Date : 10/17/02 02:46 PM
 Time of Injection: 10/17/02 02:19 PM
 Low Point : 7.01 mV High Point : 121.32 mV
 Plot Scale: 114.3 mV

Gasoline





Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Matrix:	Water	Sampled:	10/16/02
Units:	ug/L	Received:	10/16/02

Type:	BLANK	Batch#:	76136
Lab ID:	QC193213	Analyzed:	10/17/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	68-145
Bromofluorobenzene (FID)	96	66-143

Type:	BLANK	Batch#:	76171
Lab ID:	QC193316	Analyzed:	10/18/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	91	68-145
Bromofluorobenzene (FID)	93	66-143

Type:	BLANK	Batch#:	76187
Lab ID:	QC193389	Analyzed:	10/19/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	86	68-145
Bromofluorobenzene (FID)	88	66-143

*= Value outside of QC limits; see narrative
 Y= Sample exhibits fuel pattern which does not resemble standard
 Z= Sample exhibits unknown single peak or peaks
 ND= Not Detected
 RL= Reporting Limit



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC193214	Batch#:	76136
Matrix:	Water	Analyzed:	10/17/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,009	101	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	68-145
Bromofluorobenzene (FID)	85	66-143



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	BS	Diln Fac:	1.000
Lab ID:	QC193317	Batch#:	76171
Matrix:	Water	Analyzed:	10/18/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,001	100	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	68-145
Bromofluorobenzene (FID)	93	66-143



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC193345	Batch#:	76171
Matrix:	Water	Analyzed:	10/18/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,901	95	79-120	5	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	68-145
Bromofluorobenzene (FID)	83	66-143



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	BS	Diln Fac:	1.000
Lab ID:	QC193390	Batch#:	76187
Matrix:	Water	Analyzed:	10/19/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,947	97	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	68-145
Bromofluorobenzene (FID)	90	66-143



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC193415	Batch#:	76187
Matrix:	Water	Analyzed:	10/19/02
Units:	ug/L		

Analyte	Spiked	Result	REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,076	104	79-120	6	20

Surrogate	REC	Limits
Trifluorotoluene (FID)	105	68-145
Bromofluorobenzene (FID)	91	66-143



Total Volatile Hydrocarbons

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Batch#:	76136
MSS Lab ID:	161122-001	Sampled:	10/05/02
Matrix:	Water	Received:	10/07/02
Units:	ug/L	Analyzed:	10/17/02
Diln Fac:	1.000		

Type: MS Lab ID: QC193223

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<20.00	2,000	1,864	93	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	68-145
Bromofluorobenzene (FID)	95	66-143

Type: MSD Lab ID: QC193224

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,835	92	67-120	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	68-145
Bromofluorobenzene (FID)	96	66-143

Purgeable Aromatics by GC/MS

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	PSP-1	Batch#:	76126
Lab ID:	161303-001	Sampled:	10/16/02
Matrix:	Water	Received:	10/16/02
Units:	ug/L	Analyzed:	10/17/02
Diln Fac:	62.50		

Analyte	Result	RL
MTBE	ND	310
Benzene	ND	310
Toluene	ND	310
Ethylbenzene	ND	310
m,p-Xylenes	ND	310
o-Xylene	ND	310

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	98	80-120
Bromofluorobenzene	114	80-120

Purgeable Aromatics by GC/MS

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	76126
Lab ID:	161303-002	Sampled:	10/16/02
Matrix:	Water	Received:	10/16/02
Units:	ug/L	Analyzed:	10/17/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	110	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	110	80-120

Purgeable Aromatics by GC/MS

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INFLUENT	Batch#:	76126
Lab ID:	161303-003	Sampled:	10/16/02
Matrix:	Water	Received:	10/16/02
Units:	ug/L	Analyzed:	10/17/02
Diln Fac:	33.33		

Analyte	Result	RL
MTBE	5,300	170
Benzene	720	170
Toluene	ND	170
Ethylbenzene	ND	170
m,p-Xylenes	570	170
o-Xylene	ND	170

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	108	80-120

**Purgeable Aromatics by GC/MS**

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC193176	Batch#:	76126
Matrix:	Water	Analyzed:	10/17/02
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	REC	Limits
1,2-Dichloroethane-d4	105	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-120

Purgeable Aromatics by GC/MS

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC193237	Batch#:	76126
Matrix:	Water	Analyzed:	10/17/02
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	109	80-120

Purgeable Aromatics by GC/MS

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC193177	Batch#:	76126
Matrix:	Water	Analyzed:	10/17/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	47.19	94	76-120
Toluene	50.00	48.27	97	79-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

Purgeable Aromatics by GC/MS

Lab #:	161303	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	76126
MSS Lab ID:	161277-007	Sampled:	10/14/02
Matrix:	Water	Received:	10/15/02
Units:	ug/L	Analyzed:	10/18/02
Diln Fac:	1.000		

Type: MS Lab ID: QC193178

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.1500	50.00	47.22	94	79-120
Toluene	<0.1300	50.00	48.51	97	75-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC193179

Analyte	Spiked	Result	%REC	Limits	RPD	Lim.
Benzene	50.00	49.34	99	79-120	4	20
Toluene	50.00	48.85	98	75-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-120



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

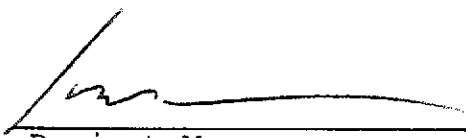
Prepared for:

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

Date: 30-SEP-02
Lab Job Number: 160842
Project ID: 2333
Location: Tony's Auto Express-Oak

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

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C&T
 LOGIN # 160842

Project No: 2333
 Project Name: ORLAND-TONY'S
 Project P.O.:
 Turnaround Time: STANDARD

Sampler: Ramin Bet-Yonan
 Report To: TONY PERINI
 Company: SOMMA
 Telephone: 925-244-6600
 Fax: 925-244-6601

7049 EPA 8015 DTEX/MADE EPA 8260B																			

-1
-2
-3

Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes
			Soil	Water	Waste		HCL	H ₂ SO	HNO ₃	ICE	
	PSP-1	9/19/02 1144		/		3	/		/		GRAB samples
	CAE-1	9/19/02 1150		/		3	/		/		↓
	INFILTR	9/19/02 1155		/		3	/		/		↓

Received On Ice
 Cold Ambient Intact

Preservation Correct?
 Yes No N/A

Notes:

RELINQUISHED BY: <u>Ramin Bet-Yonan</u> DATE/TIME: <u>9/19/02 3:45pm</u>	RECEIVED BY: <u>[Signature]</u> DATE/TIME: <u>9-19-02 3:15pm</u>
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Signature

Total Volatile Hydrocarbons

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Matrix:	Water	Sampled:	09/19/02
Units:	ug/L	Received:	09/19/02
Batch#:	75432	Analyzed:	09/25/02

Field ID:	PSP-1	Lab ID:	160842-001
Type:	SAMPLE	Diln Fac:	1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	68-145
Bromofluorobenzene (FID)	111	66-143

Field ID:	GAC-1	Lab ID:	160842-002
Type:	SAMPLE	Diln Fac:	1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	68-145
Bromofluorobenzene (FID)	115	66-143

Field ID:	INFLUENT	Lab ID:	160842-003
Type:	SAMPLE	Diln Fac:	10.00

Analyte	Result	RL
Gasoline C7-C12	6,700	500
Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	68-145
Bromofluorobenzene (FID)	111	66-143

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC190544		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	68-145
Bromofluorobenzene (FID)	102	66-143

GC07 TVH 'A' Data File RTX 502

Sample Name : 160842-003,75432

Sample #: c1

Page 1 of 1

File Name : G:\GC07\DATA\267A043.RAW

Date : 9/25/02 03:03 PM

Method :

Time of Injection: 9/25/02 09:47 AM

Start Time : 0.32 min

End Time : 26.00 min

Low Point : 15.43 mV

High Point : 373.20 mV

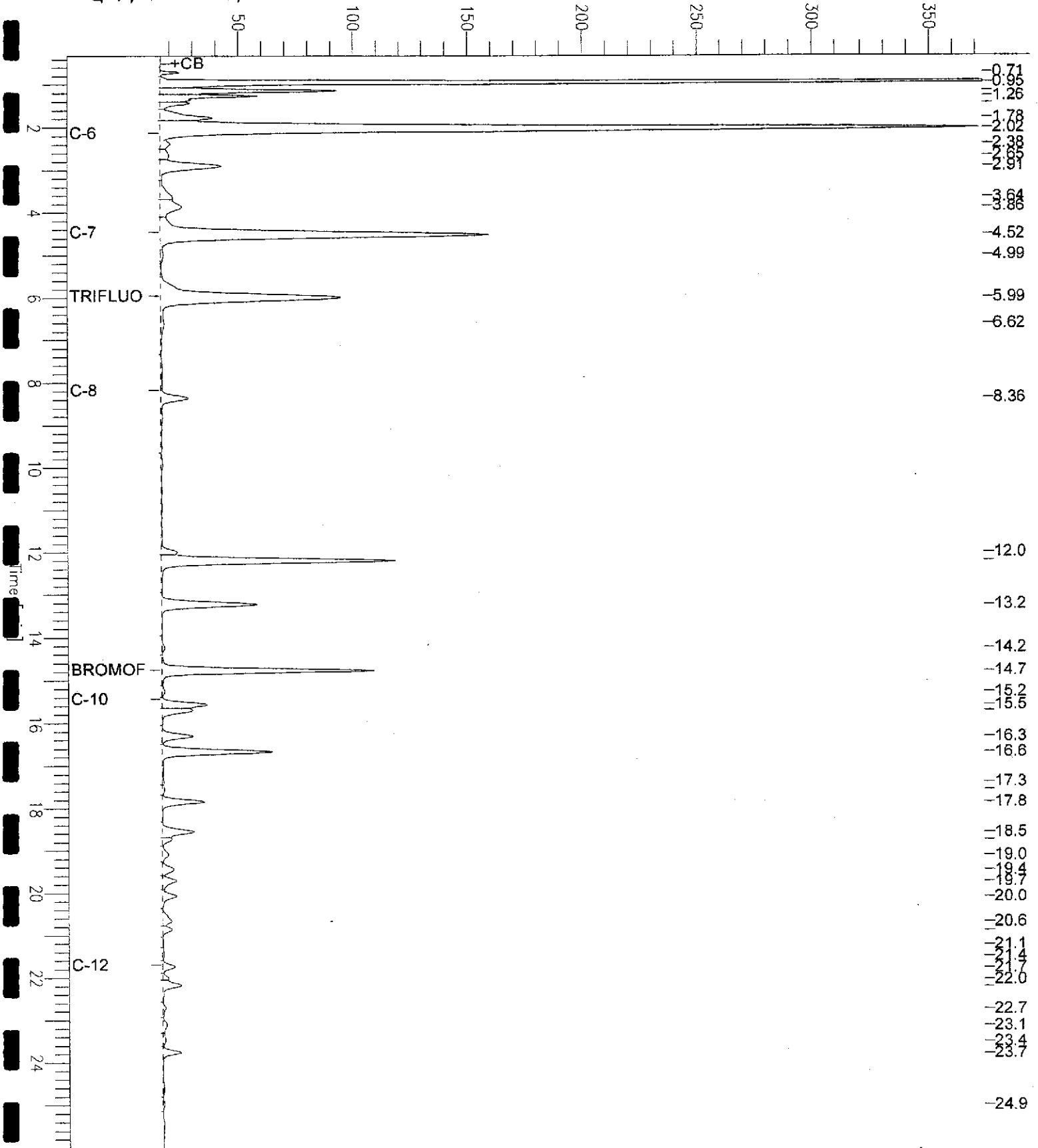
Scale Factor: 0.0

Plot Offset: 15 mV

Plot Scale: 357.8 mV

Influent

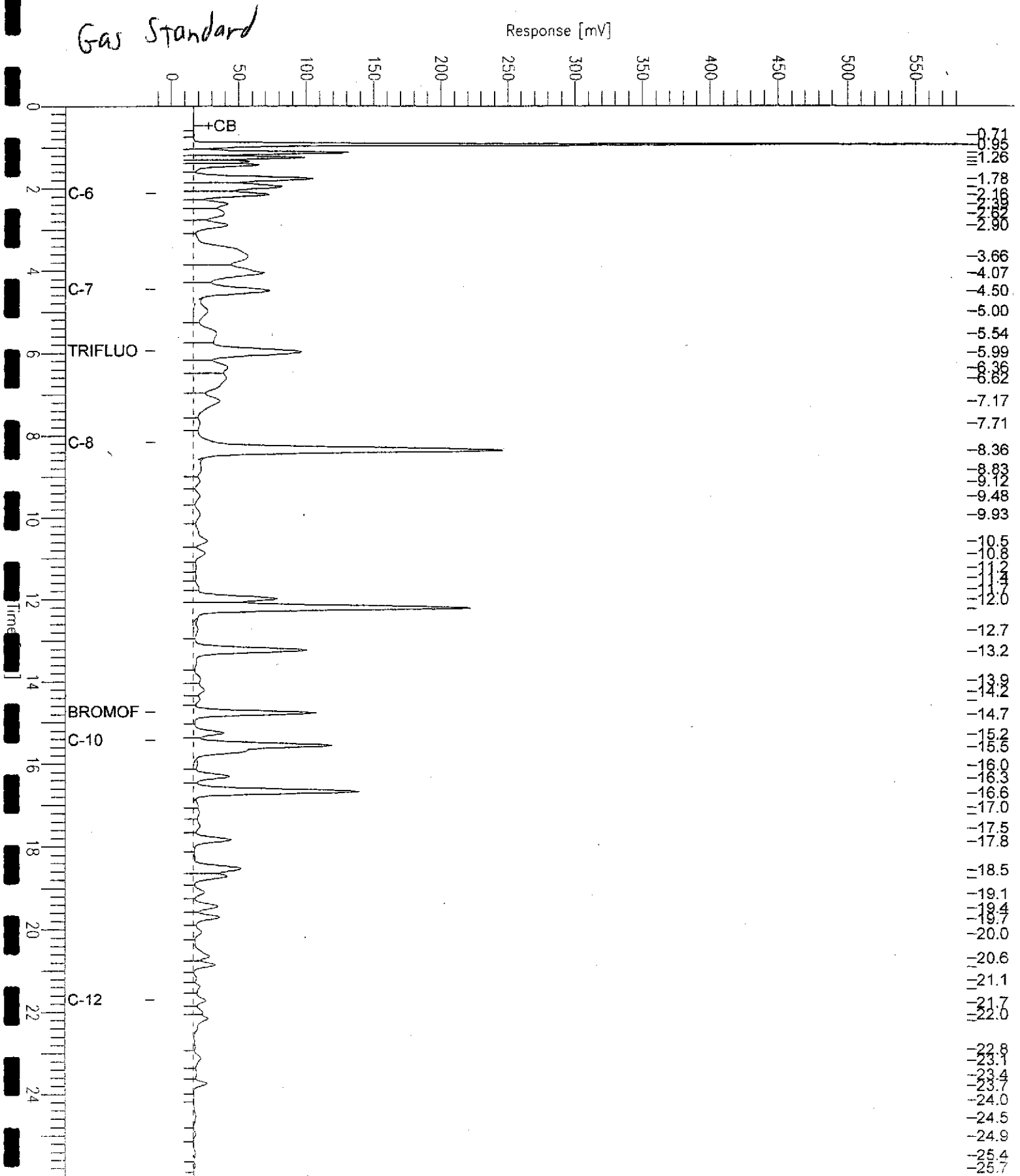
Response [mV]



GC07 TVH 'A' Data File RTX 502

Sample Name : lcs, qc190545, 75432, 02ws1468, 5/5000
 File Name : G:\GC07\DATA\267A033.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor : 1.0 Plot Offset : -12 mV

Sample # :
 Date : 9/25/02 04:32 AM
 Time of Injection : 9/25/02 04:06 AM
 Low Point : -11.95 mV High Point : 588.08 mV
 Plot Scale : 600.0 mV



**Total Volatile Hydrocarbons**

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC190545	Batch#:	75432
Matrix:	Water	Analyzed:	09/25/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,047	102	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	68-145
Bromofluorobenzene (FID)	110	66-143

Purgeable Aromatics by GC/MS

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	PSP-1	Batch#:	75559
Lab ID:	160842-001	Sampled:	09/19/02
Matrix:	Water	Received:	09/19/02
Units:	ug/L	Analyzed:	09/26/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-120

Purgeable Aromatics by GC/MS

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	75559
Lab ID:	160842-002	Sampled:	09/19/02
Matrix:	Water	Received:	09/19/02
Units:	ug/L	Analyzed:	09/26/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	95	80-120



Purgeable Aromatics by GC/MS

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INFLUENT	Batch#:	75559
Lab ID:	160842-003	Sampled:	09/19/02
Matrix:	Water	Received:	09/19/02
Units:	ug/L	Analyzed:	09/26/02
Diln Fac:	50.00		

Analyte	Result	RL
MTBE	5,000	250
Benzene	930	250
Toluene	ND	250
Ethylbenzene	ND	250
m,p-Xylenes	560	250
o-Xylene	ND	250

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	93	80-120

Purgeable Aromatics by GC/MS

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC191039	Batch#:	75559
Matrix:	Water	Analyzed:	09/26/02
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	96	80-120

Purgeable Aromatics by GC/MS

Lab #:	160842	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	75559
Units:	ug/L	Analyzed:	09/26/02
Diln Fac:	1.000		

Type: BS Lab ID: QC191021

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	52.15	104	76-120
Toluene	50.00	50.79	102	79-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	90	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC191022

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	50.00	51.02	102	76-120	2	20
Toluene	50.00	49.88	100	79-120	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	93	80-120



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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: 12-JUN-02
Lab Job Number: 158863
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

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 (510)486-0900 Phone
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C&T LOGIN # 158863

Sampler: TONY PERLMAN

Report To: Mansour Sepehr

Company: SOMA Environmental

Telephone: 925-244-6600

Fax: 925-244-6601

Project No: 2333

Project Name: 3609 International Blvd., Oakland

Turnaround Time: Standard

TPHg 8015										
BTEX & MTBE 8260 GCMS										

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
-1	Influent	5/30/02 3:40 PM		✓		4	✓			✓
-2	GAC-1	5/30/02 3:20 PM		✓		4	✓			✓
-3	PSP#1	5/30/02 3 PM		✓		4	✓			✓

Received On Ice
 Cold Ambient Intact

Preservation Correct?
 Yes No N/A

Notes:

RELINQUISHED BY:	RECEIVED BY:
5/30/02 TONY PERLMAN 4:10 PM DATE/TIME	<u>G-30-02</u> 4:10 PM DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Total Volatile Hydrocarbons

Lab #: 158863	Location: 3609 International Blvd.
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: 8015B(M)
Matrix: Water	Sampled: 05/30/02
Units: ug/L	Received: 05/30/02

Field ID: INFLUENT	Diln Fac: 20.00
Type: SAMPLE	Batch#: 72693
Lab ID: 158863-001	Analyzed: 06/04/02

Analyte	Result	RL
Gasoline C7-C12	17,000	1,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	68-145
Bromofluorobenzene (FID)	93	66-143

Field ID: GAC-1	Diln Fac: 1.000
Type: SAMPLE	Batch#: 72667
Lab ID: 158863-002	Analyzed: 06/01/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	84	68-145
Bromofluorobenzene (FID)	97	66-143

Field ID: PSP#1	Diln Fac: 1.000
Type: SAMPLE	Batch#: 72667
Lab ID: 158863-003	Analyzed: 06/01/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	84	68-145
Bromofluorobenzene (FID)	96	66-143

GC04 TVH 'J' Data File FID

Sample Name : 158863-001,72693

Sample #: D1

Page 1 of 1

File Name : G:\GC04\DATA\154J032.raw

Date : 6/4/02 08:54 AM

Method : TVHBTXE

Time of Injection: 6/4/02 08:28 AM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 13.60 mV

High Point : 1094.07 mV

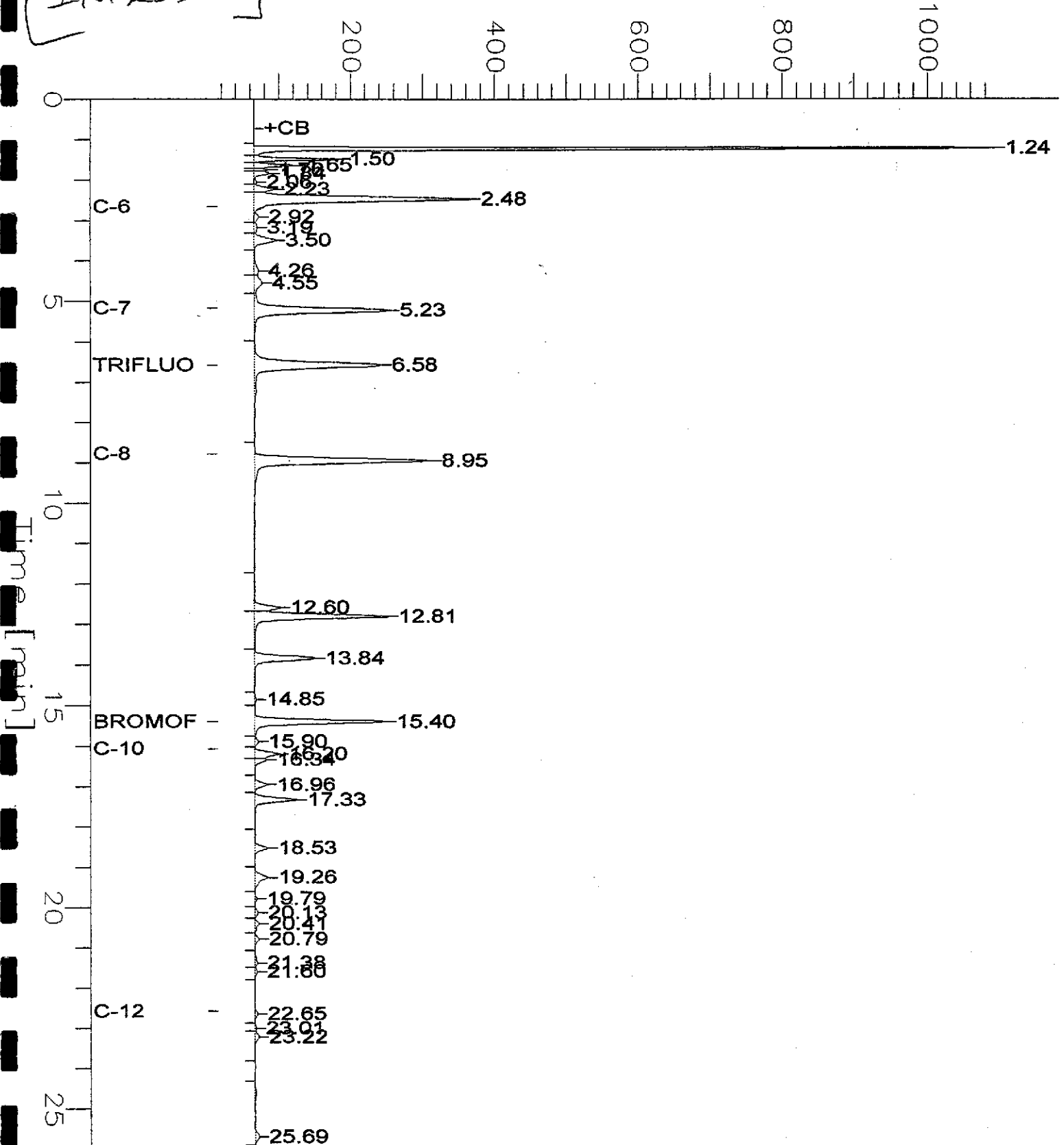
Scale Factor: 1.0

Plot Offset: 14 mV

Plot Scale: 1080.5 mV

Response [mV]

[INFLUENT]



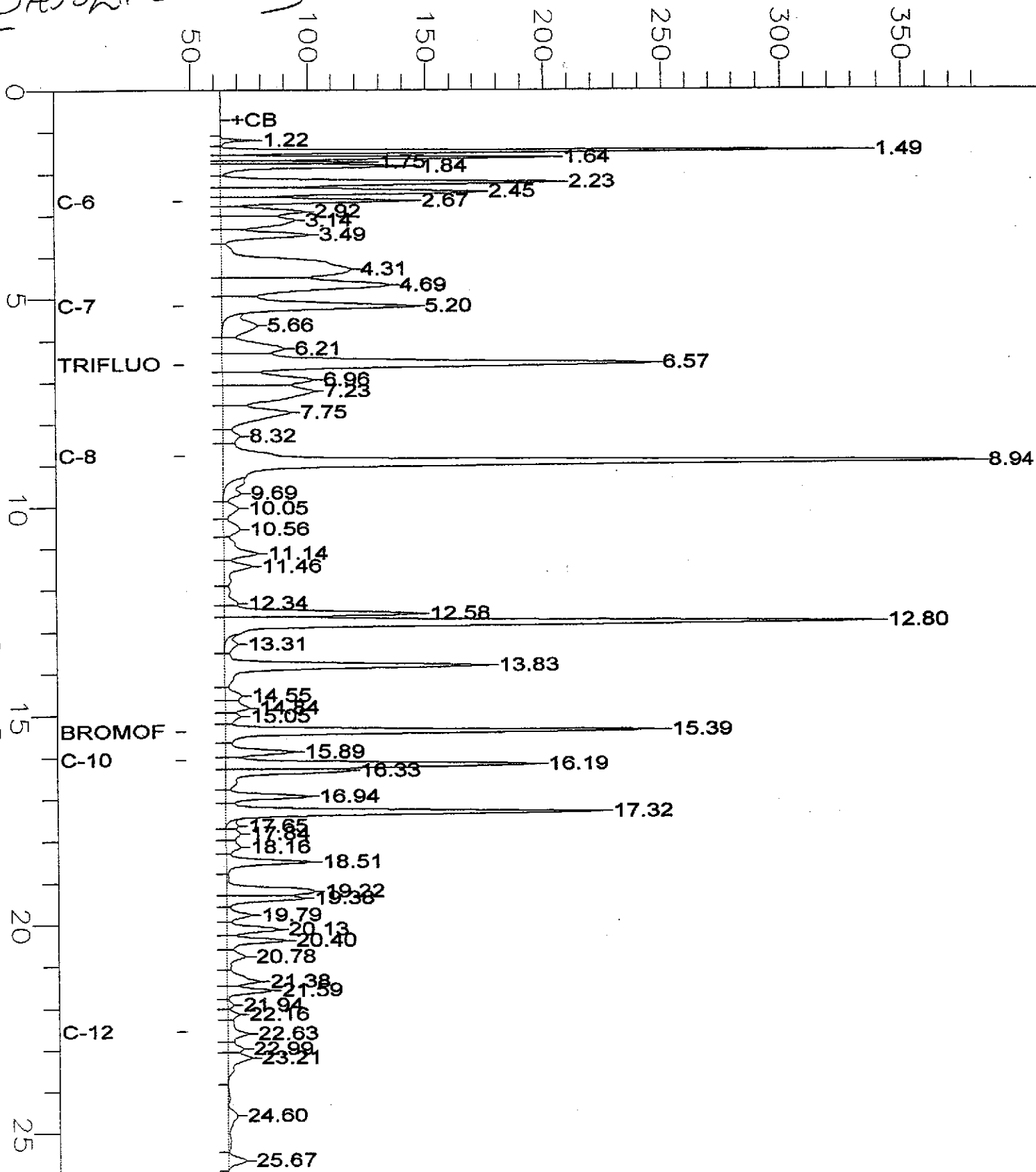
GC04 TVH 'J' Data File FID

Sample Name : CCV/LCS, QC179837, 72667, 02WS0791, 5/5000
 File Name : G:\GC04\DATA\152J001.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor : 1.0 Plot Offset: 47 mV

Sample # :
 Date : 6/1/02 11:34 AM
 Time of Injection: 6/1/02 11:08 AM
 Low Point : 46.81 mV High Point : 381.25 mV
 Plot Scale: 334.4 mV

Response [mV]

GASOLINE STD



Total Volatile Hydrocarbons

Lab #: 158863	Location: 3609 International Blvd.	
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B	
Project#: 2333	Analysis: 8015B(M)	
Matrix: Water	Sampled: 05/30/02	
Units: ug/L	Received: 05/30/02	

Type: BLANK	Batch#: 72667	
Lab ID: QC179836	Analyzed: 06/01/02	
Diln Fac: 1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	90	68-145
Bromofluorobenzene (FID)	90	66-143

Type: BLANK	Batch#: 72693	
Lab ID: QC179940	Analyzed: 06/03/02	
Diln Fac: 1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	84	68-145
Bromofluorobenzene (FID)	88	66-143

Total Volatile Hydrocarbons

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC179837	Batch#:	72667
Matrix:	Water	Analyzed:	06/01/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,850	92	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	68-145
Bromofluorobenzene (FID)	93	66-143



Total Volatile Hydrocarbons

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC179941	Batch#:	72693
Matrix:	Water	Analyzed:	06/03/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,880	94	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	68-145
Bromofluorobenzene (FID)	92	66-143

Total Volatile Hydrocarbons

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Batch#:	72667
MSS Lab ID:	158847-001	Sampled:	05/29/02
Matrix:	Water	Received:	05/29/02
Units:	ug/L	Analyzed:	06/01/02
Diln Fac:	1.000		

Type: MS Lab ID: QC179839

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	131.6	2,000	1,940	90	67-120
Surrogate	%REC	Limits			
Trifluorotoluene (FID)	96	68-145			
Bromofluorobenzene (FID)	97	66-143			

Type: MSD Lab ID: QC179840

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,956	91	67-120	1	20
Surrogate	%REC	Limits				
Trifluorotoluene (FID)	97	68-145				
Bromofluorobenzene (FID)	98	66-143				



Total Volatile Hydrocarbons

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Batch#:	72693
MSS Lab ID:	158874-002	Sampled:	05/30/02
Matrix:	Water	Received:	05/31/02
Units:	ug/L	Analyzed:	06/04/02
Diln Fac:	1.000		

Type: MS Lab ID: QC179959

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<33.00	2,000	1,850	93	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	68-145
Bromofluorobenzene (FID)	95	66-143

Type: MSD Lab ID: QC179960

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,860	93	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	68-145
Bromofluorobenzene (FID)	97	66-143

RPD= Relative Percent Difference



Purgeable Aromatics by GC/MS

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INFLUENT	Batch#:	72687
Lab ID:	158863-001	Sampled:	05/30/02
Matrix:	Water	Received:	05/30/02
Units:	ug/L	Analyzed:	06/03/02
Diln Fac:	71.43		

Analyte	Result	RL
MTBE	11,000	36
Benzene	1,600	36
Toluene	2,000	36
Chlorobenzene	ND	36
Ethylbenzene	270	36
m,p-Xylenes	1,400	36
o-Xylene	640	36
1,3-Dichlorobenzene	ND	36
1,4-Dichlorobenzene	ND	36
1,2-Dichlorobenzene	ND	36

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-120

ND= Not Detected

RL= Reporting Limit

Purgeable Aromatics by GC/MS

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	72687
Lab ID:	158863-002	Sampled:	05/30/02
Matrix:	Water	Received:	05/30/02
Units:	ug/L	Analyzed:	06/03/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	117	80-120

Purgeable Aromatics by GC/MS

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	PSP#1	Batch#:	72687
Lab ID:	158863-003	Sampled:	05/30/02
Matrix:	Water	Received:	05/30/02
Units:	ug/L	Analyzed:	06/03/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	77-130
Toluene-d8	94	80-120
Bromofluorobenzene	104	80-120



Purgeable Aromatics by GC/MS

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC179919	Batch#:	72687
Matrix:	Water	Analyzed:	06/03/02
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-130
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

Purgeable Aromatics by GC/MS

Lab #:	158863	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	72687
Units:	ug/L	Analyzed:	06/03/02
Diln Fac:	1.000		

Type: BS Lab ID: QC179916

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	47.42	95	76-120
Toluene	50.00	44.26	89	79-120
Chlorobenzene	50.00	47.17	94	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	94	77-130
Toluene-d8	96	80-120
Bromofluorobenzene	92	80-120

Type: BSD Lab ID: QC179917

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	50.00	47.36	95	76-120	0	20
Toluene	50.00	43.51	87	79-120	2	20
Chlorobenzene	50.00	46.78	94	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120



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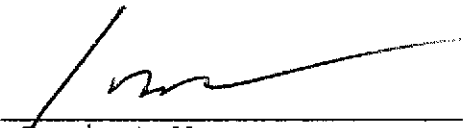
A N A L Y T I C A L R E P O R T

Prepared for:

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

Date: 30-AUG-02
Lab Job Number: 160367
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

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 Analytical Laboratory Since 1878
 2323 Fifth Street
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 (510)486-0532 Fax

Analyses

C&T LOGIN # 160367

Sampler: Andy Madden

Project No: 2333

Report To: Mansour Sepehr / 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			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
-1	Influent	8/23/02 4:15PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-2	GAC-1	8/23/02 4:10PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-3	PSP#1	8/23/02 4:05PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

TPHg 8015	BTEX & MTBE 8260 GCMS																			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			

Received On Ice
 Cold Ambient Intact

Preservation Correct?
 Yes No N/A

Notes:

RELINQUISHED BY:
Thomas W. Madden 4:45
 8/23/02
 DATE/TIME
 DATE/TIME
 DATE/TIME

RECEIVED BY:
Mansour Sepehr 4:45
 8-23-02
 DATE/TIME
 DATE/TIME
 DATE/TIME

Total Volatile Hydrocarbons

Lab #: 160367	Location: 3609 International Blvd.
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: 8015B(M)
Matrix: Water	Sampled: 08/23/02
Units: ug/L	Received: 08/23/02

Field ID: INFLUENT	Diln Fac: 10.00
Type: SAMPLE	Batch#: 74791
Lab ID: 160367-001	Analyzed: 08/27/02

Analyte	Result	RL
Gasoline C7-C12	12,000	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	90	68-145
Bromofluorobenzene (FID)	78	66-143

Field ID: GAC-1	Diln Fac: 1.000
Type: SAMPLE	Batch#: 74733
Lab ID: 160367-002	Analyzed: 08/26/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	68-145
Bromofluorobenzene (FID)	106	66-143

Field ID: PSP#1	Diln Fac: 1.000
Type: SAMPLE	Batch#: 74733
Lab ID: 160367-003	Analyzed: 08/26/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	68-145
Bromofluorobenzene (FID)	108	66-143

Chromatogram

Sample Name : 160367-001,74791,TVH ONLY

Sample #: C1

Page 1 of 1

FileName : G:\GC05\DATA\239G007.raw

Date : 8/27/02 07:06 PM

Method : TVHBTXE

Time of Injection: 8/27/02 06:41 PM

Start Time : 0.00 min

End Time : 25.00 min

Low Point : -30.67 mV

High Point : 972.56 mV

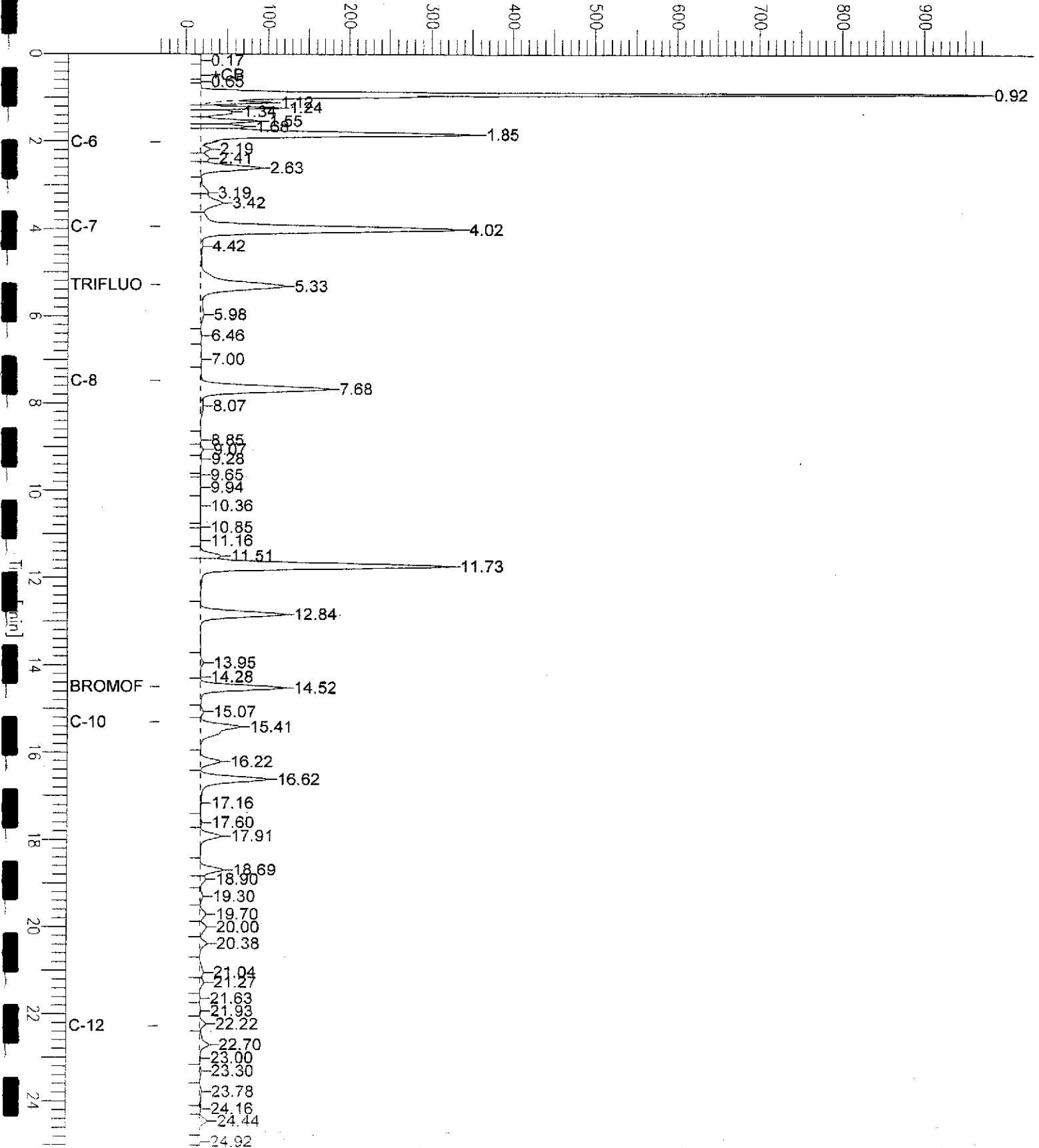
Scale Factor: 1.0

Plot Offset: -31 mV

Plot Scale: 1003.2 mV

Influent

Response [mV]



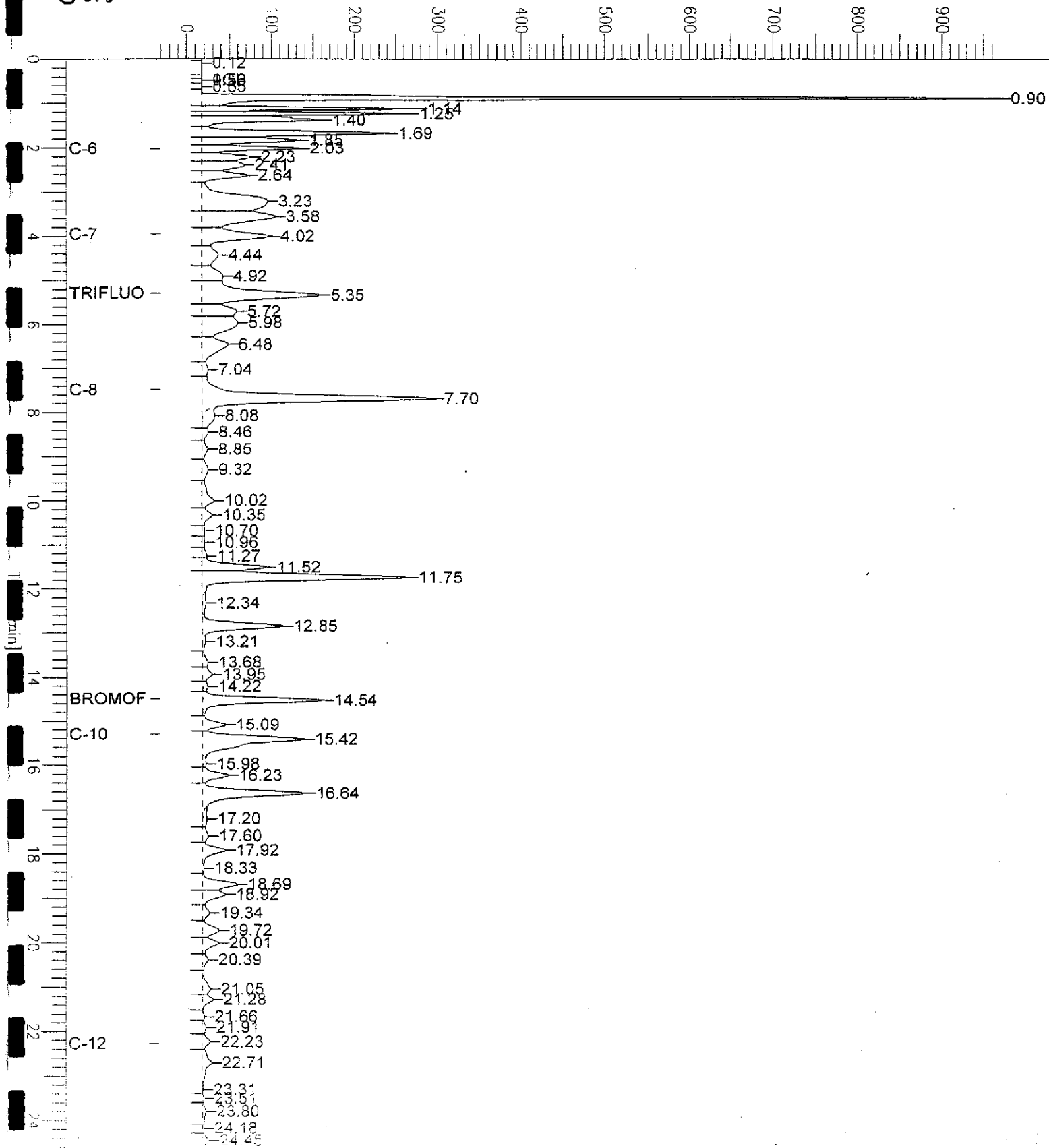
Chromatogram

Sample Name : GCV/BS, QC188011, 74791, 02WS1323, 5/5000
Sample Name : G:\GC05\DATA\239G002.raw
Method : TVHBTXE
Start Time : 0.00 min
End Time : 25.00 min
Scale Factor : 1.0
Plot Offset : -31 mV

Sample # :
Date : 8/27/02 04:03 PM
Time of Injection : 8/27/02 03:24 PM
Low Point : -30.62 mV
High Point : 969.18 mV
Plot Scale : 999.8 mV

Gas Standard

Response [mV]



Total Volatile Hydrocarbons

Lab #: 160367	Location: 3609 International Blvd.
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: 8015B (M)
Matrix: Water	Sampled: 08/23/02
Units: ug/L	Received: 08/23/02

Type: BLANK	Batch#: 74733
Lab ID: QC187805	Analyzed: 08/26/02
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	68-145
Bromofluorobenzene (FID)	101	66-143

Type: BLANK	Batch#: 74791
Lab ID: QC188010	Analyzed: 08/27/02
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	68-145
Bromofluorobenzene (FID)	109	66-143

Total Volatile Hydrocarbons

Lab #: 160367	Location: 3609 International Blvd.
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: 8015B(M)
Type: LCS	Diln Fac: 1.000
Lab ID: QC187806	Batch#: 74733
Matrix: Water	Analyzed: 08/26/02
Units: ug/L	

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,106	105	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	68-145
Bromofluorobenzene (FID)	104	66-143

Total Volatile Hydrocarbons

Lab #:	160367	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Matrix:	Water	Batch#:	74791
Units:	ug/L	Analyzed:	08/27/02
Diln Fac:	1.000		

Type: BS Lab ID: QC188011

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,919	96	79-120
Surrogate	%REC	Limits		
Trifluorotoluene (FID)	127	68-145		
Bromofluorobenzene (FID)	119	66-143		

Type: BSD Lab ID: QC188012

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,862	93	79-120	3	20
Surrogate	%REC	Limits				
Trifluorotoluene (FID)	100	68-145				
Bromofluorobenzene (FID)	85	66-143				



Total Volatile Hydrocarbons

Lab #:	160367	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Field ID:	GAC-1	Batch#:	74733
MSS Lab ID:	160367-002	Sampled:	08/23/02
Matrix:	Water	Received:	08/23/02
Units:	ug/L	Analyzed:	08/27/02
Diln Fac:	1.000		

Type: MS Lab ID: QC187875

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<33.00	2,000	1,968	98	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	68-145
Bromofluorobenzene (FID)	106	66-143

Type: MSD Lab ID: QC187876

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,995	100	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	68-145
Bromofluorobenzene (FID)	105	66-143

Purgeable Aromatics by GC/MS

Lab #: 160367	Location: 3609 International Blvd.
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: EPA 8260B
Field ID: INFLUENT	Batch#: 74746
Lab ID: 160367-001	Sampled: 08/23/02
Matrix: Water	Received: 08/23/02
Units: ug/L	Analyzed: 08/26/02
Diln Fac: 71.43	

Analyte	Result	RL
MTBE	9,200	36
Benzene	1,300	36
Toluene	690	36
Chlorobenzene	ND	36
Ethylbenzene	82	36
m,p-Xylenes	1,400	36
o-Xylene	390	36
1,3-Dichlorobenzene	ND	36
1,4-Dichlorobenzene	ND	36
1,2-Dichlorobenzene	ND	36

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	80	80-120



Purgeable Aromatics by GC/MS

Lab #:	160367	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	74746
Lab ID:	160367-002	Sampled:	08/23/02
Matrix:	Water	Received:	08/23/02
Units:	ug/L	Analyzed:	08/27/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	98	80-120
Bromofluorobenzene	80	80-120

ND= Not Detected
RL= Reporting Limit
Page 1 of 1

Purgeable Aromatics by GC/MS

Lab #:	160367	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	PSP#1	Batch#:	74746
Lab ID:	160367-003	Sampled:	08/23/02
Matrix:	Water	Received:	08/23/02
Units:	ug/L	Analyzed:	08/27/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	1.0	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	80	80-120

D= Not Detected

L= Reporting Limit



Purgeable Aromatics by GC/MS

Lab #: 160367	Location: 3609 International Blvd.
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: EPA 8260B
Type: BLANK	Diln Fac: 1.000
Lab ID: QC187850	Batch#: 74746
Matrix: Water	Analyzed: 08/26/02
Units: ug/L	

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%RVC	Limits
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	82	80-120

ND= Not Detected
RL= Reporting Limit
Page 1 of 1

Purgeable Aromatics by GC/MS

Lab #:	160367	Location:	3609 International Blvd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	74746
Units:	ug/L	Analyzed:	08/26/02
Diln Fac:	1.000		

Type: BS Lab ID: QC187848

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	47.74	95	76-120
Toluene	50.00	46.41	93	79-120
Chlorobenzene	50.00	49.15	98	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-130
Toluene-d8	94	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC187849

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	50.00	47.71	95	76-120	0	20
Toluene	50.00	45.73	91	79-120	1	20
Chlorobenzene	50.00	48.71	97	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-130
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-120



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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

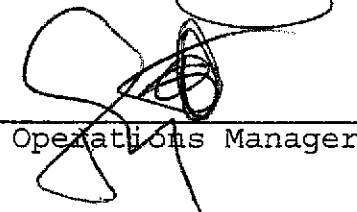
Date: 30-JUL-02
Lab Job Number: 159823
Project ID: 2333
Location: Tony's Auto Express-Oak

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

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 Berkeley, CA 94710
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C&T
 LOGIN #

159823

Analyses

Project No: 2337

Samplerz: Tom Perini / Roger Papler

Project Name: Rizi / Oak 3009 Int'l

Report To: Tom Perini / Roger Papler

Project P.O.:

Company: SOMA Env. Eng

Telephone: (925) 244-6600

Turnaround Time: Standard

Fax: (925) 244-6600

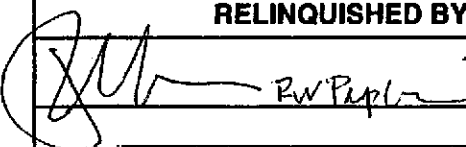
Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes
			Soil	Water	Waste		HCL	H ₂ SO	HNO ₃	ICE	
	PSP-1	12/22/02		X		3	X				Treatment system PSP-1
	KAL-1	12/20/02		X		3	X				KAL-1
	Influent	12/25/02		X		3	X		X		Influent
Laboratory Use											

TPH-g 8015
 BTEX & MIBK 8015

Preservation Correct?
 Yes No N/A

Received On Ice
 Cold Ambient Intact

Notes:

RELINQUISHED BY:

RW Papler
 DATE/TIME: 23 July 02 / 1:35

RECEIVED BY:
 DATE/TIME: _____
 DATE/TIME: _____
 DATE/TIME: 7-23-02
 DATE/TIME: 2:35

Signature



Total Volatile Hydrocarbons

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B(M)
Matrix:	Water	Sampled:	07/23/02
Units:	ug/L	Received:	07/23/02

Field ID:	PSP-1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73985
Lab ID:	159823-001	Analyzed:	07/24/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	68-145
Bromofluorobenzene (FID)	112	66-143

Field ID:	GAC-1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73985
Lab ID:	159823-002	Analyzed:	07/25/02

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	68-145
Bromofluorobenzene (FID)	111	66-143

Field ID:	INFLUENT	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	74055
Lab ID:	159823-003	Analyzed:	07/26/02

Analyte	Result	RL
Gasoline C7-C12	15,000	1,300

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	68-145
Bromofluorobenzene (FID)	110	66-143

GC07 TVH 'A' Data File RTX 502

Sample Name : 159823-003,74055

Sample #: ALHS

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File Name : G:\GC07\DATA\207A011.raw

Date : 7/26/02 09:42 PM

Method : TVHBTXE

Time of Injection: 7/26/02 09:16 PM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 2.42 mV

High Point : 270.54 mV

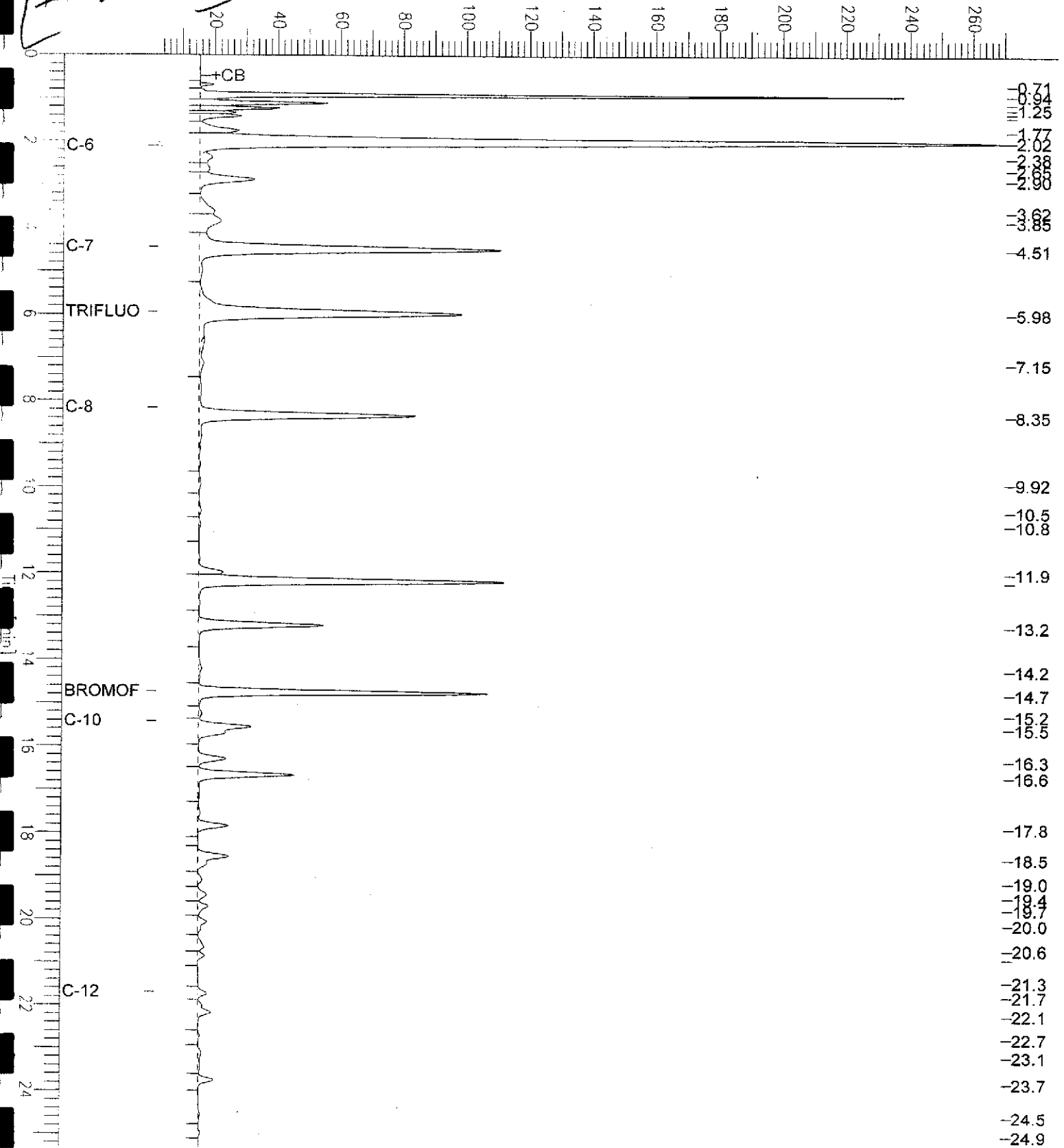
Scale Factor: 1.0

Plot Offset: 2 mV

Plot Scale: 268.1 mV

INFLUENT

Response [mV]



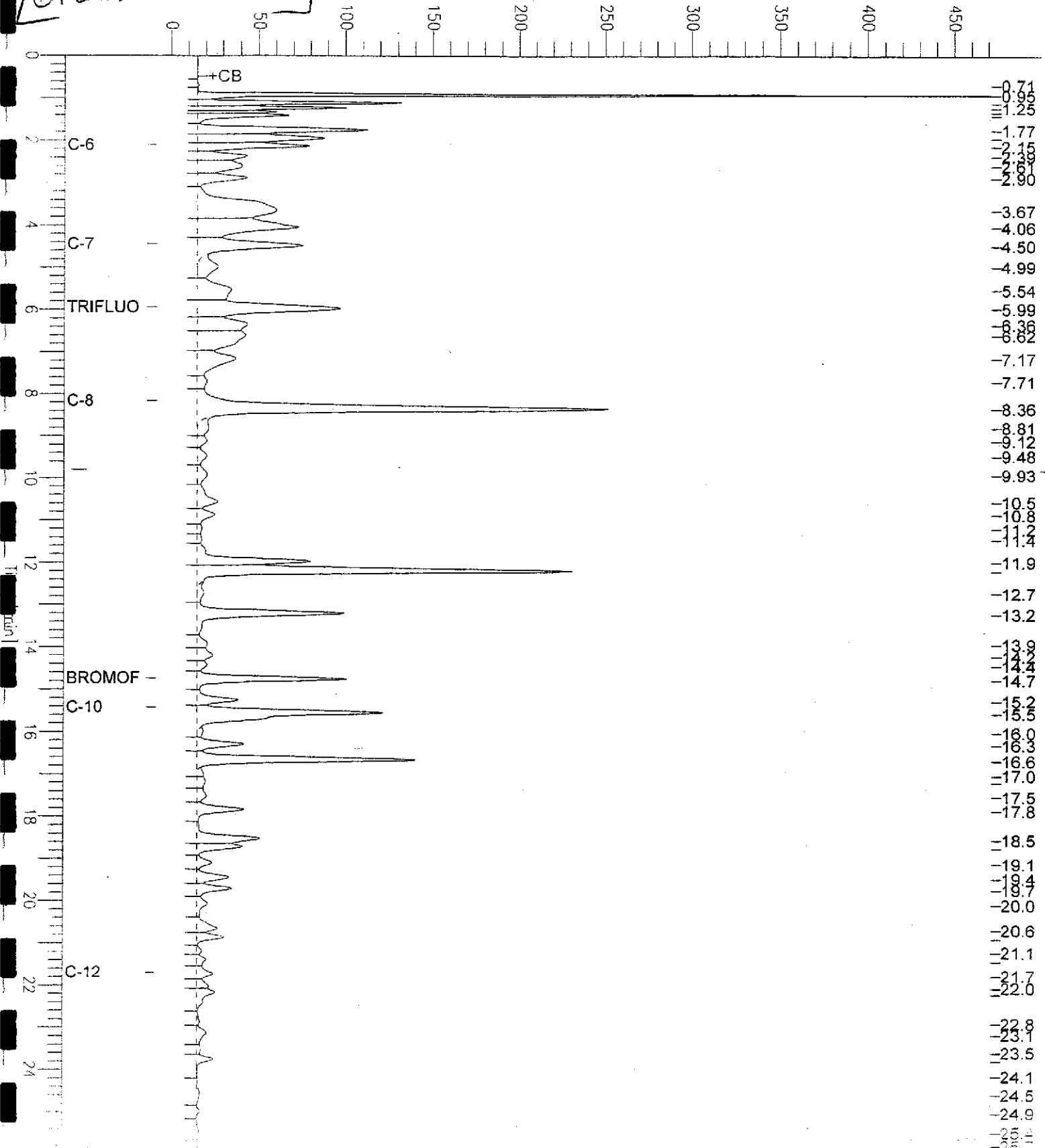
GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc185297,74055,02ws1033,5/5000
 File Name : G:\GC07\DATA\207A003.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor : 1.0

Sample # :
 Date : 7/26/02 05:10 PM
 Time of Injection: 7/26/02 04:44 PM
 Low Point : -7.95 mV
 High Point : 471.22 mV
 Plot Scale: 479.2 mV

GASOLINE STD

Response [mV]





Total Volatile Hydrocarbons

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Matrix:	Water	Sampled:	07/23/02
Units:	ug/L	Received:	07/23/02

Type:	BLANK	Batch#:	73985
Lab ID:	QC185018	Analyzed:	07/24/02
Filen Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	68-145
Bromofluorobenzene (FID)	109	66-143

Type:	BLANK	Batch#:	74055
Lab ID:	QC185296	Analyzed:	07/26/02
Filen Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	68-145
Bromofluorobenzene (FID)	101	66-143

**Total Volatile Hydrocarbons**

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC185019	Batch#:	73985
Matrix:	Water	Analyzed:	07/25/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	3,000	3,278	109	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	123	68-145
Bromofluorobenzene (FID)	114	66-143

**Total Volatile Hydrocarbons**

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC185297	Batch#:	74055
Matrix:	Water	Analyzed:	07/26/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,189	109	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	68-145
Bromofluorobenzene (FID)	106	66-143



Total Volatile Hydrocarbons

Lab #: 159823 Location: Tony's Auto Express-Oak
Client: SOMA Environmental Engineering Inc. Prep: EPA 5030B
Project#: 2333 Analysis: 8015B (M)
Field ID: ZZZZZZZZZZ Batch#: 73985
MSS Lab ID: 159827-001 Sampled: 07/22/02
Matrix: Water Received: 07/23/02
Units: ug/L Analyzed: 07/25/02
Diln Fac: 1.000

Type: MS Lab ID: QC185020

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<33.00	2,000	2,301	115	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	68-145
Bromofluorobenzene (FID)	115	66-143

Type: MSD Lab ID: QC185021

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,282	114	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	68-145
Bromofluorobenzene (FID)	117	66-143



Total Volatile Hydrocarbons

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Field ID:	ZZZZZZZZZZ	Batch#:	74055
MSS Lab ID:	159878-002	Sampled:	07/24/02
Matrix:	Water	Received:	07/25/02
Units:	ug/L	Analyzed:	07/26/02
Diln Fac:	1.000		

Type: MS Lab ID: QC185298

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	104.7	2,000	2,275	109	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	68-145
Bromofluorobenzene (FID)	117	66-143

Type: MSD Lab ID: QC185299

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,241	107	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	68-145
Bromofluorobenzene (FID)	119	66-143



Purgeable Organics by GC/MS

Lab #: 159823	Location: Tony's Auto Express-Oak
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: EPA 8260B
Field ID: PSP-1	Batch#: 74006
Lab ID: 159823-001	Sampled: 07/23/02
Matrix: Water	Received: 07/23/02
Units: ug/L	Analyzed: 07/25/02
Diln Fac: 1.000	

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND = Not Detected
 RL = Reporting Limit
 Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	PSP-1	Batch#:	74006
Lab ID:	159823-001	Sampled:	07/23/02
Matrix:	Water	Received:	07/23/02
Units:	ug/L	Analyzed:	07/25/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-121
1,2-Dichloroethane-d4	111	77-130
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-120

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	74006
Lab ID:	159823-002	Sampled:	07/23/02
Matrix:	Water	Received:	07/23/02
Units:	ug/L	Analyzed:	07/25/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

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Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	74006
Lab ID:	159823-002	Sampled:	07/23/02
Matrix:	Water	Received:	07/23/02
Units:	ug/L	Analyzed:	07/25/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-121
1,2-Dichloroethane-d4	109	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

D= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS

Lab #: 159823	Location: Tony's Auto Express-Oak
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: EPA 8260B
Field ID: INFLUENT	Batch#: 74006
Lab ID: 159823-003	Sampled: 07/23/02
Matrix: Water	Received: 07/23/02
Units: ug/L	Analyzed: 07/25/02
Diln Fac: 40.00	

Analyte	Result	RL
Freon 12	ND	400
Chloromethane	ND	400
Vinyl Chloride	ND	400
Bromomethane	ND	400
Chloroethane	ND	400
Trichlorofluoromethane	ND	200
Acetone	ND	800
Freon 113	ND	200
1,1-Dichloroethene	ND	200
Methylene Chloride	ND	800
Carbon Disulfide	ND	200
MTBE	7,500	200
trans-1,2-Dichloroethene	ND	200
Vinyl Acetate	ND	2,000
1,1-Dichloroethane	ND	200
2-Butanone	ND	400
cis-1,2-Dichloroethene	ND	200
2,2-Dichloropropane	ND	200
Chloroform	ND	200
Bromochloromethane	ND	400
1,1,1-Trichloroethane	ND	200
1,1-Dichloropropene	ND	200
Carbon Tetrachloride	ND	200
1,2-Dichloroethane	ND	200
Benzene	1,400	200
Trichloroethene	ND	200
1,2-Dichloropropane	ND	200
Bromodichloromethane	ND	200
Dibromomethane	ND	200
4-Methyl-2-Pentanone	ND	400
cis-1,3-Dichloropropene	ND	200
Toluene	970	200
trans-1,3-Dichloropropene	ND	200
1,1,2-Trichloroethane	ND	200
2-Hexanone	ND	400
1,3-Dichloropropane	ND	200
Tetrachloroethene	ND	200

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2



Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INFLUENT	Batch#:	74006
Lab ID:	159823-003	Sampled:	07/23/02
Matrix:	Water	Received:	07/23/02
Units:	ug/L	Analyzed:	07/25/02
Diln Fac:	40.00		

Analyte	Result	RL
Dibromochloromethane	ND	200
1,2-Dibromoethane	ND	200
Chlorobenzene	ND	200
1,1,1,2-Tetrachloroethane	ND	200
Ethylbenzene	ND	200
m,p-Xylenes	1,200	200
o-Xylene	400	200
Styrene	ND	200
Bromoform	ND	200
Isopropylbenzene	ND	200
1,1,2,2-Tetrachloroethane	ND	200
1,2,3-Trichloropropane	ND	200
Propylbenzene	ND	200
Bromobenzene	ND	200
1,3,5-Trimethylbenzene	ND	200
2-Chlorotoluene	ND	200
4-Chlorotoluene	ND	200
tert-Butylbenzene	ND	200
1,2,4-Trimethylbenzene	270	200
sec-Butylbenzene	ND	200
para-Isopropyl Toluene	ND	200
1,3-Dichlorobenzene	ND	200
1,4-Dichlorobenzene	ND	200
n-Butylbenzene	ND	200
1,2-Dichlorobenzene	ND	200
1,2-Dibromo-3-Chloropropane	ND	200
1,2,4-Trichlorobenzene	ND	200
Hexachlorobutadiene	ND	200
Naphthalene	ND	200
1,2,3-Trichlorobenzene	ND	200

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-121
1,2-Dichloroethane-d4	105	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

D= Not Detected

RL= Reporting Limit



Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC185098	Batch#:	74006
Matrix:	Water	Analyzed:	07/25/02
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

D= Not Detected

RL= Reporting Limit

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Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC185098	Batch#:	74006
Matrix:	Water	Analyzed:	07/25/02
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-121
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

D= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	159823	Location:	Tony's Auto Express-Oak
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	74006
Units:	ug/L	Analyzed:	07/25/02
Diln Fac:	1.000		

Type: BS Lab ID: QC185096

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	49.79	100	71-131
Benzene	50.00	51.23	102	76-120
Trichloroethene	50.00	49.65	99	78-120
Toluene	50.00	52.02	104	79-120
Chlorobenzene	50.00	52.46	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-121
1,2-Dichloroethane-d4	101	77-130
Toluene-d8	103	80-120
Bromofluorobenzene	92	80-120

Type: BSD Lab ID: QC185097

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	49.11	98	71-131	1	20
Benzene	50.00	49.46	99	76-120	4	20
Trichloroethene	50.00	48.40	97	78-120	3	20
Toluene	50.00	50.16	100	79-120	4	20
Chlorobenzene	50.00	50.83	102	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-121
1,2-Dichloroethane-d4	101	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference



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

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

Prepared for:

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Suite 203
San Ramon, CA 94583

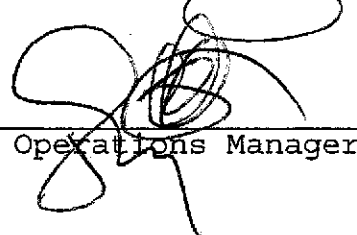
Date: 03-JUL-02
Lab Job Number: 159338
Project ID: 2333
Location: Oakland - Tony's

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

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CHAIN OF CUSTODY FORM

Curtis & Tompkins, Ltd.

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

C&T
 LOGIN # 159338

Analyses

Project No: 2333

Sampler: TONY PERINI

Report To: Mansour Sepehr

Project Name: Oakland - Tony's

Company: SOMA

Project P.O.:

Telephone: 925-244-6600

Turnaround Time: Standard

Fax: 925-244-6601

Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes	TPH	EPA Method 8015	BTEX	MTBE	EPA Method 8260
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE						
1 2 3 Factory Laboratory Use	PSP#1	6/24/02 1215		✓		4	✓			✓	Grab Samples	✓	✓			
	GAC-1	6/24/02 1220		✓		4	✓			✓	Grab Samples	✓	✓			
	DAP14001	6/24/02 1240		✓		4	✓			✓	Grab Samples	✓	✓			

Received On Ice
 Cold Ambient Intact

Preservation Correct?
 Yes No N/A

Notes:

RELINQUISHED BY:
TONY PERINI
Sony Perini 6/24/02 1:20 PM
 DATE/TIME

RECEIVED BY:
[Signature] 6/24/02 1220
 DATE/TIME

Signature

Total Volatile Hydrocarbons

Lab #: 159338	Location: Oakland - Tony's	
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B	
Project#: 2333	Analysis: 8015B(M)	
Matrix: Water	Sampled: 06/24/02	
Units: ug/L	Received: 06/24/02	

Field ID: PSP#1	Diln Fac: 1.000	
Type: SAMPLE	Batch#: 73277	
Lab ID: 159338-001	Analyzed: 06/26/02	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	88	68-145
Bromofluorobenzene (FID)	77	66-143

Field ID: GAC-1	Diln Fac: 1.000	
Type: SAMPLE	Batch#: 73277	
Lab ID: 159338-002	Analyzed: 06/25/02	

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	68-145
Bromofluorobenzene (FID)	79	66-143

Field ID: INFLUENT	Diln Fac: 5.000	
Type: SAMPLE	Batch#: 73306	
Lab ID: 159338-003	Analyzed: 06/27/02	

Analyte	Result	RL
Gasoline C7-C12	16,000	250

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	68-145
Bromofluorobenzene (FID)	79	66-143

GC19 TVH 'X' Data File (FID)

Sample Name : 159338-003,73306

Sample #: c1

Page 1 of 1

FileName : G:\GC19\DATA\177X025.raw

Date : 6/27/02 06:47 AM

Method : TVHBTXE

Time of Injection: 6/27/02 06:20 AM

Start Time : 0.00 min

End Time : 26.80 min

Low Point : -31.24 mV

High Point : 1055.41 mV

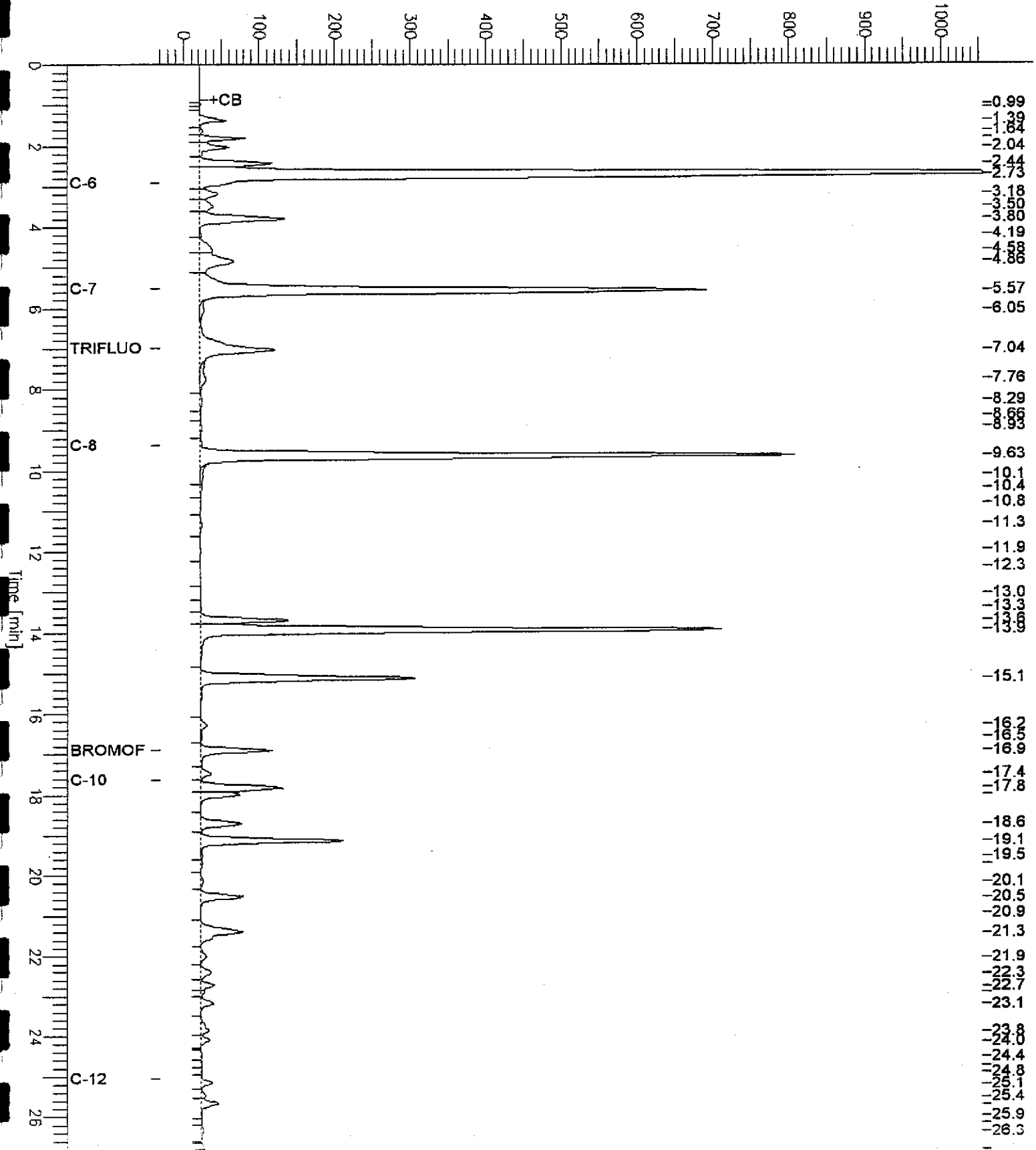
Scale Factor: 1.0

Plot Offset: -31 mV

Plot Scale: 1086.6 mV

INFLUENT

Response [mV]



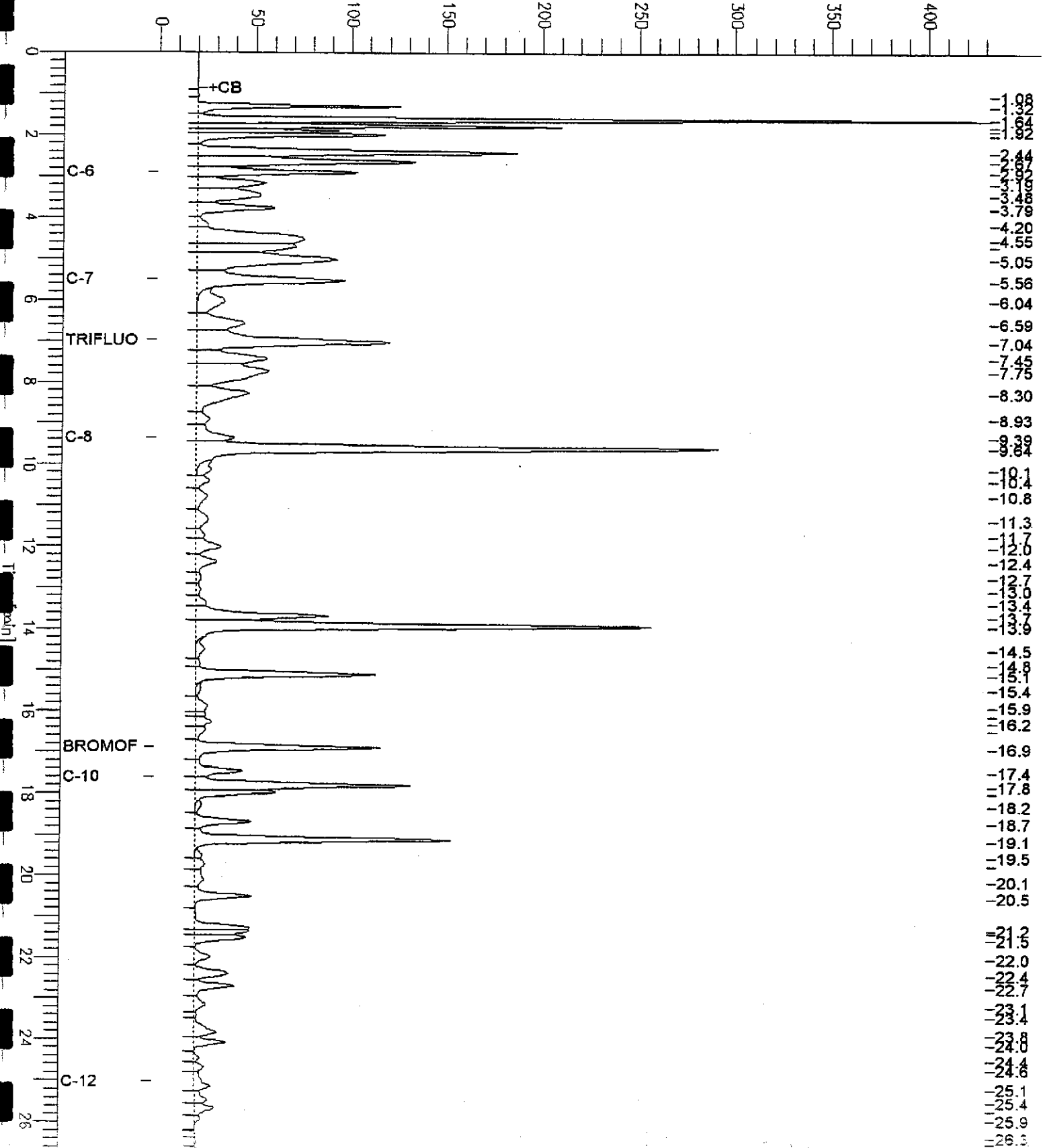
GC19 TVH 'X' Data File (FID)

Sample Name : ccv/lcs,gc182332,73306,02ws0906,5/5000
 File Name : G:\GC19\DATA\177X003.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.80 min
 Scale Factor : 1.0 Plot Offset : -1 mV

Sample # :
 Date : 6/26/02 03:45 PM Page 1 of 1
 Time of Injection: 6/26/02 03:18 PM
 Low Point : -1.16 mV High Point : 431.51 mV
 Plot Scale: 432.7 mV

Gasoline

Response [mV]





Total Volatile Hydrocarbons

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Matrix:	Water	Sampled:	06/24/02
Units:	ug/L	Received:	06/24/02

Type:	BLANK	Batch#:	73277
Lab ID:	QC182213	Analyzed:	06/25/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	88	68-145
Bromofluorobenzene (FID)	75	66-143

Type:	BLANK	Batch#:	73306
Lab ID:	QC182331	Analyzed:	06/26/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	90	68-145
Bromofluorobenzene (FID)	78	66-143

**Total Volatile Hydrocarbons**

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC182214	Batch#:	73277
Matrix:	Water	Analyzed:	06/25/02
Units:	ug/L		

Analyte	Spiked	Result	REC	Limits
Gasoline C7-C12	2,000	1,775	89	79-120

Surrogate	REC	Limits
Trifluorotoluene (FID)	107	68-145
Bromofluorobenzene (FID)	75	66-143



Total Volatile Hydrocarbons

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC182332	Batch#:	73306
Matrix:	Water	Analyzed:	06/26/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,715	86	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	68-145
Bromofluorobenzene (FID)	81	66-143



Total Volatile Hydrocarbons

Lab #: 159338	Location: Oakland - Tony's
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: 8015B(M)
Field ID: ZZZZZZZZZZ	Batch#: 73277
MSS Lab ID: 159329-006	Sampled: 06/20/02
Matrix: Water	Received: 06/21/02
Units: ug/L	Analyzed: 06/26/02
Diln Fac: 1.000	

Type: MS Lab ID: QC182216

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<20.00	2,000	1,652	83	67-120
Surrogate	%REC	Limits			
Trifluorotoluene (FID)	112	68-145			
Bromofluorobenzene (FID)	78	66-143			

Type: MSD Lab ID: QC182217

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,673	84	67-120	1	20
Surrogate	%REC	Limits				
Trifluorotoluene (FID)	111	68-145				
Bromofluorobenzene (FID)	78	66-143				



Total Volatile Hydrocarbons

Lab #: 159338	Location: Oakland - Tony's
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: 8015B(M)
Field ID: ZZZZZZZZZZ	Batch#: 73306
MSS Lab ID: 159369-001	Sampled: 06/25/02
Matrix: Water	Received: 06/25/02
Units: ug/L	Analyzed: 06/27/02
Diln Fac: 1.000	

Type: MS Lab ID: QC182333

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<20.00	2,000	1,828	91	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	68-145
Bromofluorobenzene (FID)	83	66-143

Type: MSD Lab ID: QC182334

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,812	91	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	68-145
Bromofluorobenzene (FID)	82	66-143

Purgeable Aromatics by GC/MS

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	PSP#1	Batch#:	73335
Lab ID:	159338-001	Sampled:	06/24/02
Matrix:	Water	Received:	06/24/02
Units:	ug/L	Analyzed:	06/27/02
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	1.7	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-120



Purgeable Aromatics by GC/MS

Lab #: 159338	Location: Oakland - Tony's
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2333	Analysis: EPA 8260B
Field ID: GAC-1	Batch#: 73335
Lab ID: 159338-002	Sampled: 06/24/02
Matrix: Water	Received: 06/24/02
Units: ug/L	Analyzed: 06/27/02
Diln Fac: 1.000	

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	110	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	107	80-120

D= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Purgeable Aromatics by GC/MS

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INFLUENT	Batch#:	73335
Lab ID:	159338-003	Sampled:	06/24/02
Matrix:	Water	Received:	06/24/02
Units:	ug/L	Analyzed:	06/27/02
Diln Fac:	83.33		

Analyte	Result	RL
MTBE	11,000	42
Benzene	1,600	42
Toluene	1,400	42
Chlorobenzene	ND	42
Ethylbenzene	ND	42
m,p-Xylenes	1,500	42
o-Xylene	690	42
1,3-Dichlorobenzene	ND	42
1,4-Dichlorobenzene	ND	42
1,2-Dichlorobenzene	ND	42

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	77-130
Toluene-d8	106	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1



Purgeable Aromatics by GC/MS

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC182446	Batch#:	73335
Matrix:	Water	Analyzed:	06/27/02
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-120

Purgeable Aromatics by GC/MS

Lab #:	159338	Location:	Oakland - Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73335
Units:	ug/L	Analyzed:	06/27/02
Diln Fac:	1.000		

Type: BS Lab ID: QC182443

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	52.38	105	76-120
Toluene	50.00	49.83	100	79-120
Chlorobenzene	50.00	49.63	99	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	103	80-120
Bromofluorobenzene	103	80-120

Type: BSD Lab ID: QC182444

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	50.00	51.82	104	76-120	1	20
Toluene	50.00	49.08	98	79-120	2	20
Chlorobenzene	50.00	47.80	96	80-120	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	105	80-120
Bromofluorobenzene	103	80-120