

September 14, 2001

SEP 18 2001

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

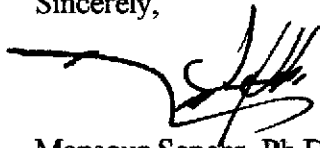
Re: 3609 International Boulevard, Oakland, California 94601  
Wastewater Discharge Permit No. 504-27421

Dear Ms. Maguire:

As you requested in your letter dated August 1, 2001, enclosed is SOMA's "Quarterly Report: Treatment System Discharge to EBMUD Sewer from May 15, 2001 to August 15, 2001" 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



## Certification Statement

Chief Executive Officer

Abolghassem Razi  
Name

Owner  
Title

3609 International Boulevard  
Street Address

Oakland  
City

94601  
Zip

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 the 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.



Signature

9-13-01  
Date

**CERTIFICATION**

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Abolghassem Razi, the property owner at 3609 International Boulevard, Oakland, California to comply with East Bay Municipal Utility District's requirements.



Mansour Sepéhr, Ph.D., P.E.

Principal Hydrogeologist



**TABLE OF CONTENTS**

**TABLE OF CONTENTS ..... 1**

**LIST OF TABLES..... 2**

**LIST OF FIGURES ..... 2**

**LIST OF APPENDICES..... 2**

**1.0 INTRODUCTION ..... 3**

1.1 Background..... 3

**2.0 TREATMENT SYSTEM OPERATION..... 4**

**3.0 REPORT LIMITATIONS..... 6**

**5.0 REFERENCES ..... 7**

## **List of Tables**

Table-1: Total Volume of Water Treated and Effluent Chemistry

## **List of Figures**

Figure-1: Site Location Map

Figure-2: Site Map

Figure-3: Revised Schematic of the Groundwater Remediation System,  
August 23, 2001

## **List of Appendices**

Appendix A: EBMUD Discharge Permit

Appendix B: Laboratory Results and Chain of Custody Forms

## 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; located at 3609 International Boulevard, Oakland, California (the "Site"), see Figure-1.

The Site is located at the intersection of 36<sup>th</sup> Avenue and International Boulevard (formerly known as East 14<sup>th</sup> Street), 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 shows the location of the main building, fuel tank areas, and on-site and off-site groundwater monitoring wells. Currently, the groundwater monitoring wells are being monitored on a quarterly basis. The results of the groundwater monitoring programs have indicated elevated levels of petroleum hydrocarbons in the groundwater beneath the Site. The source of petroleum hydrocarbons in the groundwater is believed to be the former underground storage tanks (USTs), which were used to store gasoline at the Site.

### 1.1 Background

Currently, the Site is used as a gasoline service station. The environmental investigation at the subject property started since 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 underground storage tanks (USTs) have 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. Currently, there are 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 additional investigation and perform groundwater monitoring on a quarterly basis. The results of WEGE groundwater monitoring events indicated elevated levels of petroleum hydrocarbons and methyl tertiary butyl ether (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 CAP study indicated that installation of a French Drain along with air sparging technique is a cost effective alternative for site 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 EBMUD sewer system during the period from November 15, 2000 to February 14, 2001.

## **2.0 TREATMENT SYSTEM OPERATION**

The operation of the treatment system was started on December 6, 1999. Since then, more than 1,237,000 gallons (recording date is August 15, 2001) of

groundwater has been treated and discharged to the East Bay Municipal Utility District (EBMUD) under the existing discharge permit (see Appendix A). As required by the discharge permit and the ACEHS, inspection of the treatment system has been performed on a weekly basis since the system began operation. Also, effluent from the treatment system has been sampled and analyzed for chemical content on a monthly basis.

Table-1 shows the total volume of effluent discharged to EBMUD, as well as the results of laboratory analysis of the effluent treated at the Site. Table-1 shows that all effluent samples during discharge have maintained compliance with the permit, having values below the level of detection limit. Approximately 5000 gallons of chemically impacted groundwater per week has been processed by the treatment system during the period from May 15, 2001 through August 15, 2001.



### 3.0 REPORT LIMITATIONS

This report is the summary of work done by SOMA including observations and descriptions of the Site 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 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, until July 1997

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

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

SOMA Environmental Engineering, Inc., September 14, 1999, "Third Quarter 1999 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

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

SOMA Environmental Engineering, Inc., March 10, 2000, "First Quarter 2000 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., July 26, 2000, "Second Quarter 2000 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., August 24, 2000, "Installation of Soil Vapor Extraction and Air Sparging System and Initial Results Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., August 29, 2000, "Third Quarter 2000 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., December 4, 2000, "Fourth Quarter 2000 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

SOMA Environmental Engineering, Inc., April 23, 2001, "First Quarter 2001 Groundwater Monitoring Report Tony's Express Auto Service Oakland, California".

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

# TABLES

**Table 1: Total Volume of Water Treated and Effluent Chemistry**  
**Tony's Auto Express, Oakland, California**

	Date Sampling & Read	Total Volume** (Gallons)	Lab Results For GAC-1 and PSP* (concentrations in ug/L)					Total Xylene
			MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	
<b>August</b>	8/15/2001	1,237,000						
	8/3/2001	1,232,480						
<b>July</b>	7/25/2001	1,227,270	ND	ND	ND	ND	ND	ND
			NA	NA	NA	NA	NA	NA
	7/11/2001	1,226,730						
<b>June</b>	6/29/2001	1,224,600	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	6/16/2001	1,216,580						
	6/7/2001	1,216,580						
<b>May</b>	5/30/2001	1,205,190						
	5/23/2001	1,194,390						
	5/17/2001	1,182,360	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	5/10/2001	1,166,850						
	5/5/2001	1,151,600						
<b>April</b>	4/28/2001	1,135,690						
	4/21/2001	1,113,570						
	4/11/2001	1,082,700	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
	4/6/2001	1,065,540						
<b>March</b>	3/29/2001	1,036,300	System restarted.					
	3/21/2001	1,036,000	System off - belt replaced on compressor.					
	3/17/2001	1,035,100						

**Table 1: Total Volume of Water Treated and Effluent Chemistry**  
**Tony's Auto Express, Oakland, California**

	Date Sampling & Read	Total Volume** (Gallons)	Lab Results For GAC-1 and PSP* (concentrations in ug/L)						
			MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylene	
	3/13/2001	1,032,500	ND	ND	ND	ND	ND	ND	
	3/2/2001	996,520							
	3/1/2001		System restarted.						
<b>February</b>	2/10/2001		System shut down for maintenance and cleaning.						
	2/8/2001	975,490							
<b>January</b>	1/29/2001	957,880	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND	
	1/12/2001	927,200							
	1/4/2001	921,790							
<b>December</b>	12/5/2000	883,000	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND	
<b>November</b>	11/24/2001		ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND	
	11/14/2000	854,000							
	11/1/2000	842,000	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND	
<b>October</b>	10/25/2000	825,000							
	10/20/2000	821,000							
	10/19/2000	820,000							
	10/14/2000	818,000							
	10/8/2000	814,000							
	10/5/2000	812,000							
	10/1/2000	809,000	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND	
<b>September</b>	9/28/2000	807,000							

**Table 1: Total Volume of Water Treated and Effluent Chemistry**  
**Tony's Auto Express, Oakland, California**

	Date Sampling & Read	Total Volume** (Gallons)	Lab Results For GAC-1 and PSP* (concentrations in ug/L)					Total Xylene
			MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	
	9/18/2000		ND	ND	ND	ND	ND	ND
	9/14/2000	797,000						
	9/4/2000	788,000						
<b>August</b>	8/31/2000	785,000						
	8/27/2000	781,000	ND	ND	ND	ND	ND	ND
	8/24/2000	778,000						
<b>July</b>	07/26/200	726,000	ND	ND	ND	ND	ND	ND
	07/19/200	718,000	ND	ND	ND	ND	ND	ND
	07/13/200	712,000	ND	ND	ND	ND	ND	ND
	07/07/200	706,000	ND	ND	ND	ND	ND	ND
<b>June</b>	06/29/00	700,000	ND	ND	ND	ND	ND	ND
	06/21/00	682,220	ND	ND	ND	ND	ND	ND
	06/16/00	669,720	ND	ND	ND	ND	ND	ND
	06/10/00	651,200	ND	ND	ND	ND	ND	ND
	06/02/00		ND	ND	ND	ND	ND	ND
<b>May</b>	05/31/00	629,000						
	05/23/00	603,700	ND	ND	ND	ND	ND	ND
	05/18/00	570,000	ND	ND	ND	ND	ND	ND
	05/10/00	530,400	ND	ND	ND	ND	ND	ND
<b>April</b>	04/30/00	488,300	ND	ND	ND	ND	ND	ND
	04/18/00	485,300	ND	ND	ND	ND	ND	0.51
	04/10/00	440,200	ND	ND	ND	ND	ND	ND
	04/04/00	390,100	ND	ND	ND	ND	ND	ND
<b>March</b>								
	03/24/00	388,000	ND	ND	ND	ND	ND	ND
	03/17/00	357,100	ND	ND	ND	ND	ND	ND

**Table 1: Total Volume of Water Treated and Effluent Chemistry**  
**Tony's Auto Express, Oakland, California**

	Date Sampling & Read	Total Volume** (Gallons)	Lab Results For GAC-1 and PSP*					
			(concentrations in ug/L)					
			MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylene
	03/10/00	329,000	ND	ND	ND	ND	ND	ND
	03/03/00	300,000						
<b>February</b>								
	02/25/00	274,000	ND	ND	ND	ND	ND	ND
	02/18/00	233,000	ND	ND	ND	ND	ND	ND
	02/11/00	190,000	ND	ND	ND	ND	ND	ND
	02/04/00	160,800	ND	ND	ND	ND	ND	ND
<b>January</b>								
	01/28/00	130,600	ND	ND	ND	ND	ND	ND
	01/21/00	103,435	ND	ND	ND	ND	ND	ND
	01/14/00	83,500	185	ND	ND	ND	ND	ND
<b>December</b>								
	12/23/99	51,680	1486	NA	ND	ND	ND	ND
	12/23/99		ND	NA	ND	ND	ND	ND
	12/16/99	30,450	963	NA	ND	ND	ND	ND
	12/16/99		ND	NA	ND	ND	ND	ND
	12/09/99	9,000	230	ND	ND	ND	ND	ND
Pumping began on December 6, 1999								

\* PSP#1 formerly labeled Effluent or GAC-2

\*\* Meter replaced at 775,000 gallons. Actual current reading of new meter is 775,000 gallons less than the total volume reported.



# FIGURES

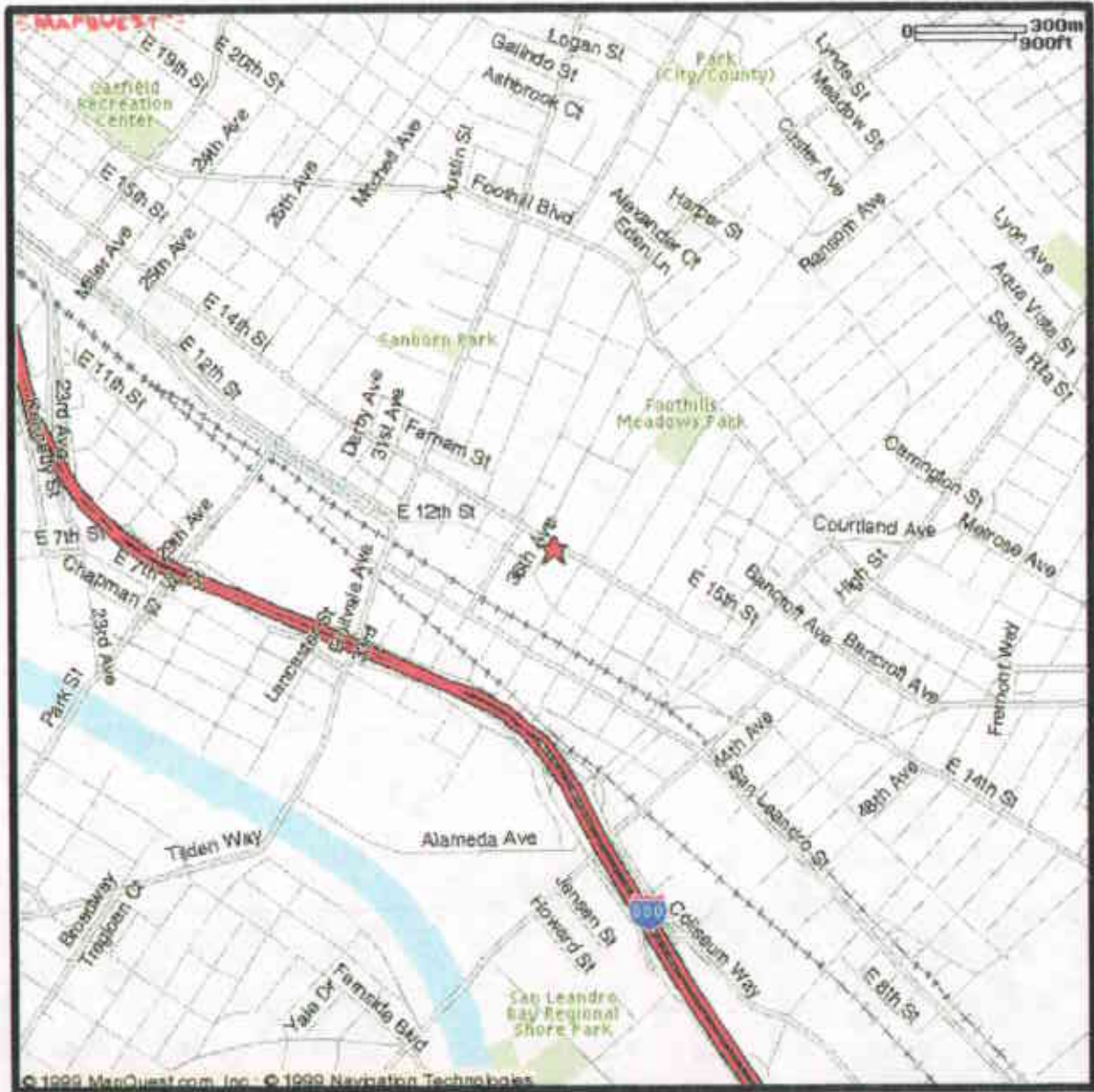


Figure 1: Site Location Map

International Blvd. ( old E. 14th Street)

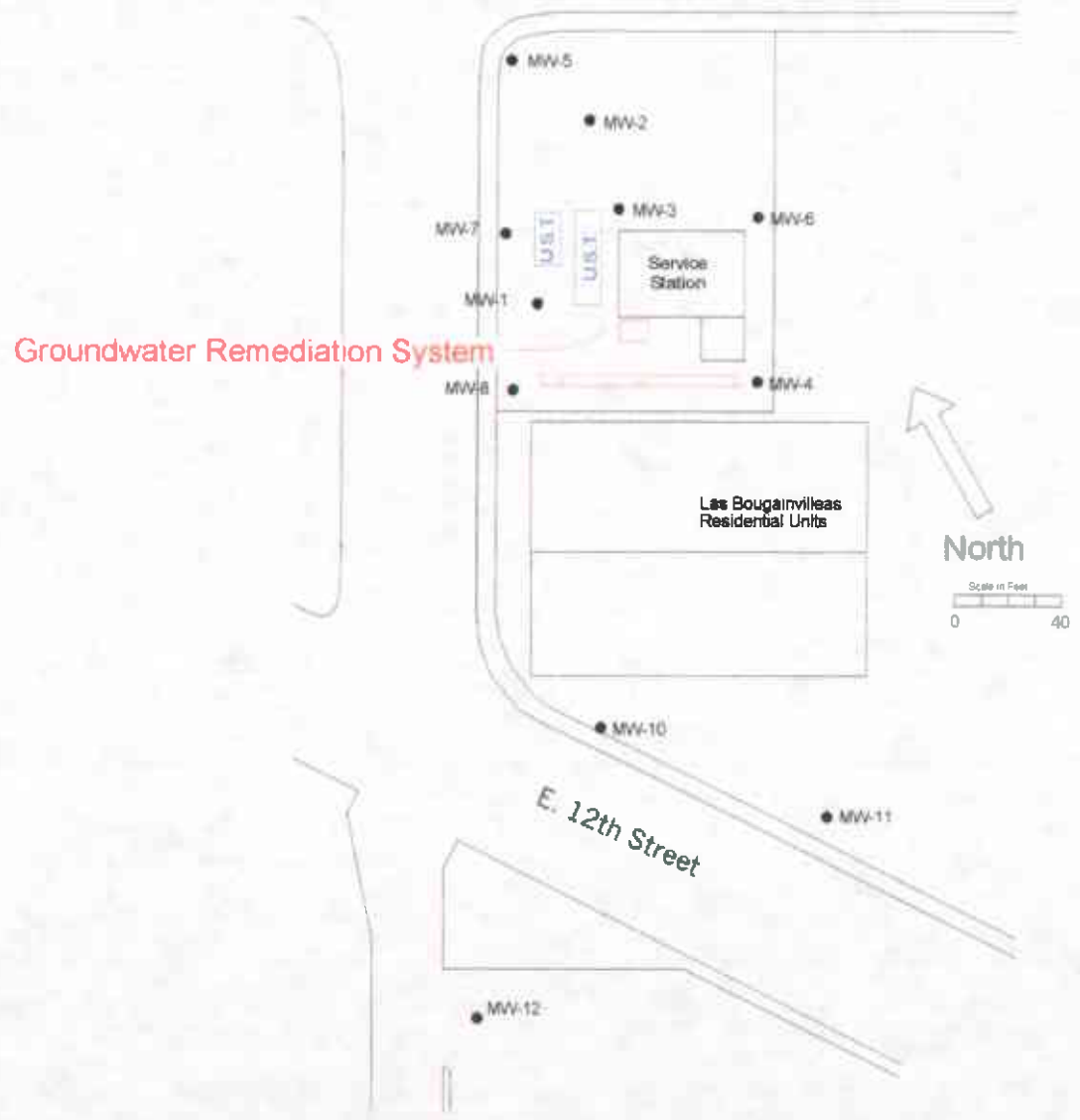


Figure 2: Site Map

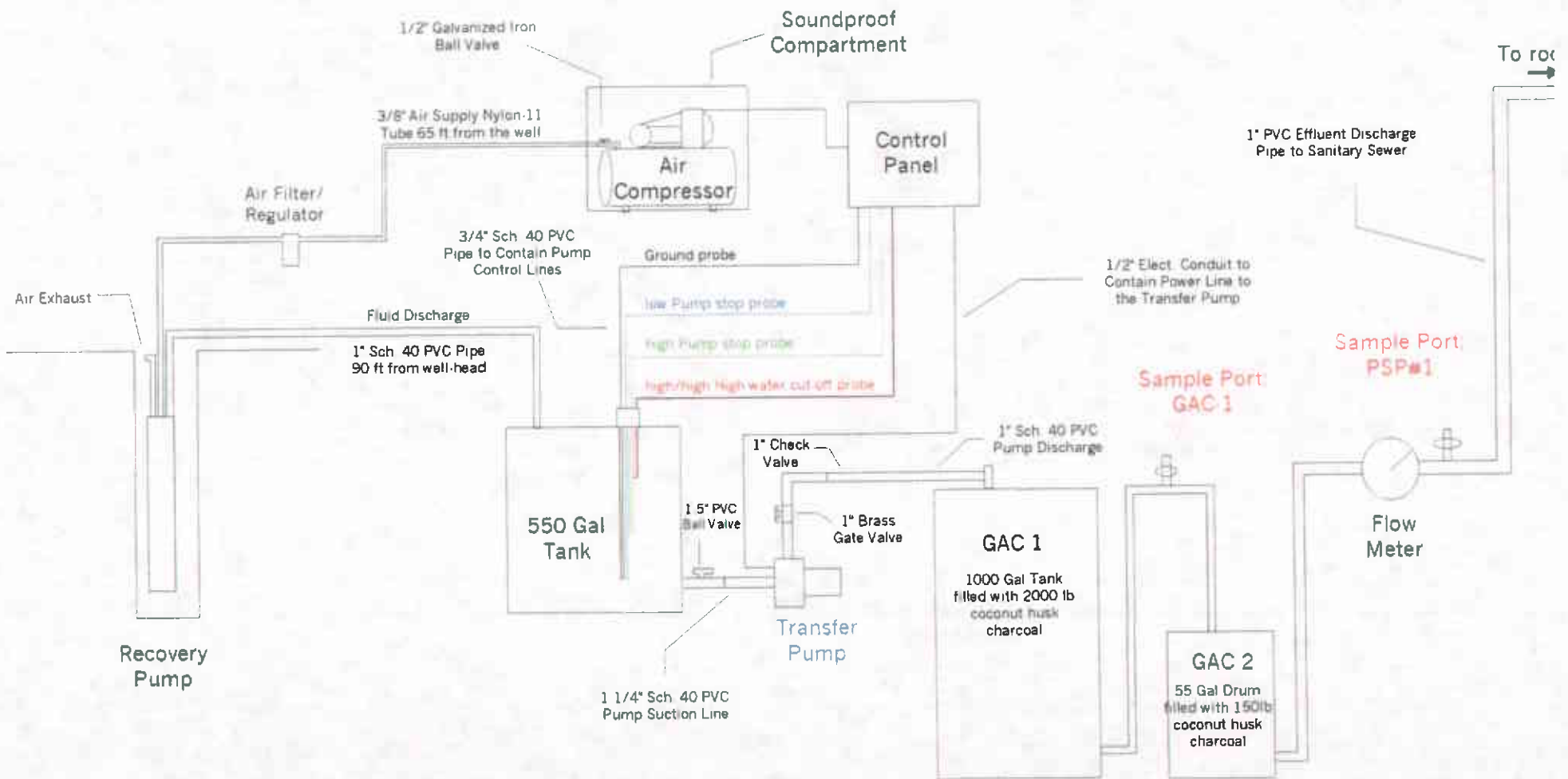


Figure 3: Schematic of the Groundwater Remediation System, August 23, 2001

# **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



# WASTEWATER DISCHARGE PERMIT

REVISION EFFECTIVE JULY 1, 2000 Terms and Conditions

Tony's Express Auto Service  
Permit No. 504-27421  
Page No. 3

## 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

REVISION EFFECTIVE JULY 1, 2000 Terms and Conditions

Tony's Express Auto Service  
Permit No. 504-27421  
Page No. 4

## 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

# **APPENDIX B**

## **Laboratory Results and Chain of Custody Forms**

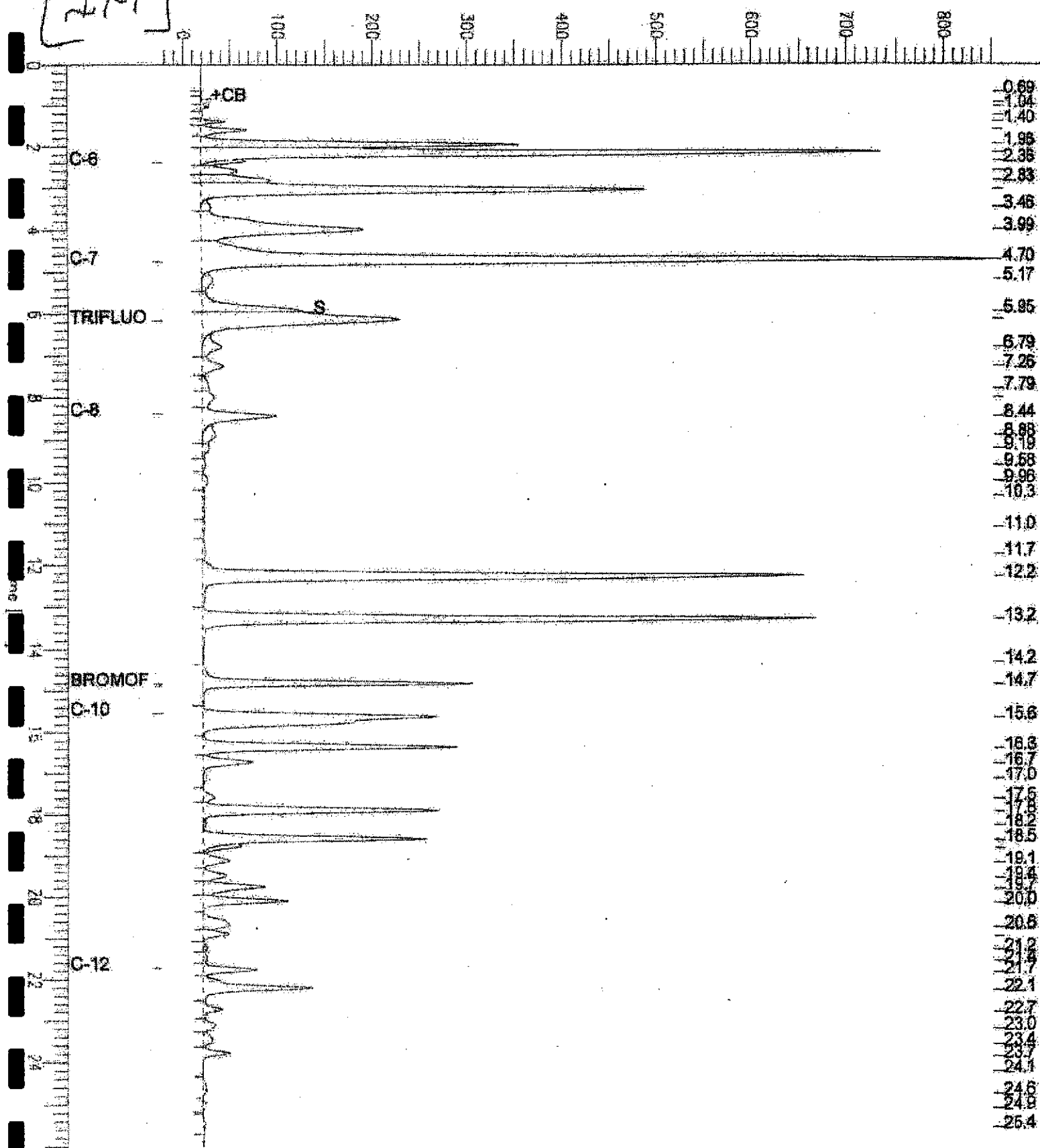


Sample Name : 153250-002, 65336, TVH, ONLY  
FileName : G:\GC07\DATA\212A034.raw  
Method : TVHRTX  
Start Time : 0:06 min  
Scale Factor: 1.0

Sample #: B1  
Date : 8/1/01 04:58 PM  
Time of Injection: 8/1/01 08:44 AM  
Low Point : -21.99 mV  
Plot Scale: 874.5 mV  
High Point : 852.45 mV

[INF]

Response [mV]





## Gasoline by GC/FID EA LUFT

Lab #:	153250	Location:	Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	65356
Units:	ug/L	Sampled:	07/25/01
Aln Fac:	1.000	Received:	07/26/01

Field ID:	BFF/PSPI	Lab ID:	153250-001
Type:	SAMPLE	Analyzed:	08/01/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	WISC	Limit
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	114	60-140

Field ID:	INF	Lab ID:	153250-002
Type:	SAMPLE	Analyzed:	08/01/01

Analyte	Result	RL
Gasoline C7-C12	2,400	50

Surrogate	WISC	Limit
Trifluorotoluene (FID)	130	59-135
Bromofluorobenzene (FID)	124	60-140

Type:	BLANK	Analyzed:	07/31/01
Lab ID:	QC151920		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	WISC	Limit
Trifluorotoluene (FID)	104	59-135
Bromofluorobenzene (FID)	102	60-140



## Purgeable Aromatics by GC/MS

Lab #:	153250	Location:	Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	EPF/PSPF	Batch#:	65350
Lab ID:	153250-001	Sampled:	07/25/01
Matrix:	Water	Received:	07/26/01
Units:	ug/L	Analysed:	07/31/01
Diln Fac:	1.000		

Analyte	Result	RL
MIBK	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	RT	Limit
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	107	80-115

ND= Not Detected

RL= Reporting Limit

Page 1 of 1



Purgeable Aromatics by GC/MS

Lab #:	153250	Location:	Tony's
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INF	Batch#:	65382
Lab ID:	153250-002	Sampled:	07/25/01
Matrix:	Water	Received:	07/26/01
Units:	ug/L	Analyzed:	08/01/01
Diln Fac:	2.500		

Analyte	Result	RL
MTBE	330	1.3
Benzene	260	1.3
Toluene	30	1.3
Chlorobenzene	ND	1.3
Ethylbenzene	ND	1.3
m,p-Xylenes	230	1.3
o-Xylene	220	1.3
1,3-Dichlorobenzene	ND	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3

Surrogate	SPC	Limit
1,2-Dichloroethane-d4	96	78-123
Toluene-d8	102	80-110
Bromofluorobenzene	93	80-115



A N A L Y T I C A L   R E P O R T

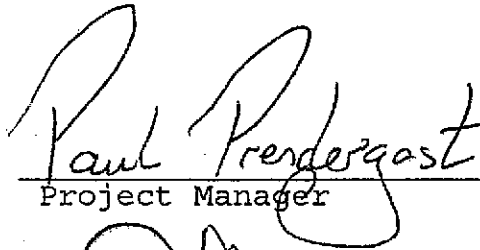
Prepared for:

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

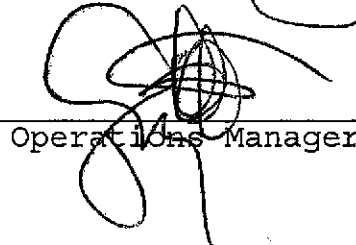
Date: 15-JUN-01  
Lab Job Number: 152088  
Project ID: 2333  
Location: Tony's Auto Express

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.



# CHAIN OF CUSTODY FORM

**Analyses**

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

C&T  
 LOGIN # 152088

Project No: 2333  
 Project Name: Tony's Auto Express  
 Project P.O.: \_\_\_\_\_  
 Turnaround Time: Standard

Sampler: Naser Pakrou  
 Report To: Naser Pakrou  
 Company: SOMA Env. Eng.  
 Telephone: 925 244 6600  
 Fax: 925 244 6601

TONY'S AUTO EXPRESS MTBE 8260B

Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes
			Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE	
	<u>GAC-1</u>	<u>5/17 1:30</u>		<input checked="" type="checkbox"/>		<u>3</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<u>40ml VOA w/HCL x 3</u>
	<u>PSP #1</u>	<u>"</u>		<input checked="" type="checkbox"/>		<u>"</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<u>SAME</u>
<b>L</b>											
<b>O</b>											
<b>R</b>											
<b>A</b>											
<b>T</b>											
<b>O</b>											
<b>R</b>											
<b>I</b>											
<b>O</b>											

Received  On Ice  
 Cold  Ambient  Intact

Notes: \_\_\_\_\_

RELINQUISHED BY:	RECEIVED BY:
<u>Naser Pakrou</u> <u>5/17 5:00</u>	<u>_____</u> <u>5/18/01 9:00 am</u>
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

Signature

## Gasoline by GC/FID CA LUFT

Lab #:	152088	Location:	Tony's Auto Express
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	63827
Units:	ug/L	Sampled:	05/17/01
Injection Fac:	1.000	Received:	05/18/01

Field ID:	GAC-1	Lab ID:	152088-001
Type:	SAMPLE	Analyzed:	05/23/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	59-135
Bromofluorobenzene (FID)	104	60-140

Field ID:	PSP#1	Lab ID:	152088-002
Type:	SAMPLE	Analyzed:	05/24/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	103	60-140

Type:	BLANK	Analyzed:	05/23/01
Lab ID:	QC146132		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	59-135
Bromofluorobenzene (FID)	97	60-140

## Gasoline by GC/FID CA LUFT

Lab #:	152088	Location:	Tony's Auto Express
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC146133	Batch#:	63827
Matrix:	Water	Analyzed:	05/23/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,070	104	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	59-135
Bromofluorobenzene (FID)	101	60-140

## Gasoline by GC/FID CA LUFT

Lab #:	152088	Location:	Tony's Auto Express
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	63827
MSS Lab ID:	152107-001	Sampled:	05/18/01
Matrix:	Water	Received:	05/18/01
Units:	ug/L	Analyzed:	05/24/01
Diln Fac:	1.000		

Type: MS Lab ID: QC146134

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<21.00	2,000	1,991	100	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	59-135
Bromofluorobenzene (FID)	106	60-140

Type: MSD Lab ID: QC146135

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,036	102	65-131	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	59-135
Bromofluorobenzene (FID)	109	60-140



## Benzene, Toluene, Ethylbenzene, Xylenes

Lab #: 152088	Location: Tony's Auto Express
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030
Project#: 2333	Analysis: EPA 8021B
Matrix: Water	Batch#: 63785
Units: ug/L	Sampled: 05/17/01
Fill Fac: 1.000	Received: 05/18/01

Field ID: GAC-1	Lab ID: 152088-001
Type: SAMPLE	Analyzed: 05/23/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	106	56-142
Bromofluorobenzene (PID)	108	55-149

Field ID: PSP#1	Lab ID: 152088-002
Type: SAMPLE	Analyzed: 05/23/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	105	56-142
Bromofluorobenzene (PID)	107	55-149

Type: BLANK	Analyzed: 05/22/01
Lab ID: QC145986	

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	103	56-142
Bromofluorobenzene (PID)	101	55-149

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	152088	Location:	Tony's Auto Express
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC145990	Batch#:	63785
Matrix:	Water	Analyzed:	05/22/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
TBE	20.00	21.98	110	51-125
Benzene	20.00	21.64	108	67-117
Toluene	20.00	23.15	116	69-117
Ethylbenzene	20.00	22.93	115	68-124
m,p-Xylenes	40.00	48.28	121	70-125
o-Xylene	20.00	23.72	119	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	108	56-142
Bromofluorobenzene (PID)	106	55-149



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

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

A N A L Y T I C A L   R E P O R T

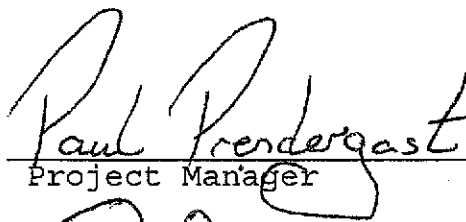
Prepared for:

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

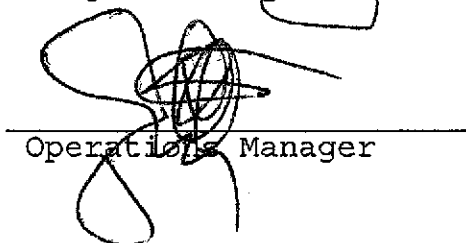
Date: 10-JUL-01  
Lab Job Number: 152813  
Project ID: 2333  
Location: Tonys

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.

# 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 # 152813

**Analyses**


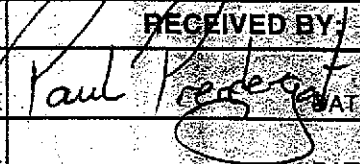
Project No: 2333  
 Project Name: TONY'S  
 Project P.O.: Oakland  
 Turnaround Time: Standard

Sampler: fc  
 Report To: Frank Cioffi  
 Company: SOMA  
 Telephone: (925) 244-6600  
 Fax: (925) 244-6601

Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative					Field Notes
			Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE	566 Sample	
Factory Laboratory Use	EFF/PSP	6/29/01 10:10		<input checked="" type="checkbox"/>		3	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	40ml vials preserved with HCl
	GAC-	10:25		<input checked="" type="checkbox"/>		3	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	INF	10:30		<input checked="" type="checkbox"/>		3	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<div style="border: 2px solid black; padding: 5px; transform: rotate(-15deg); display: inline-block;">                     Preservation Contact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A                 </div> <div style="border: 2px solid black; padding: 5px; transform: rotate(-15deg); display: inline-block; margin-top: 10px;">                     Received <input checked="" type="checkbox"/> On Ice <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Contact                 </div>												

TPNG, STEY, MAGE, VFA, S260												
-----------------------------	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

	RELINQUISHED BY:	RECEIVED BY:
	 Frank Cioffi DATE/TIME: <u>6/29/01 15:40</u>	 Paul Pedersen DATE/TIME: <u>6/29/01 15:40</u>
	DATE/TIME	DATE/TIME
	DATE/TIME	DATE/TIME

Signature \_\_\_\_\_



## Gasoline by GC/FID CA LUFT

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	06/29/01
Units:	ug/L	Received:	06/29/01

Field ID:	EFF/PSPI	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	64657
Lab ID:	152813-001	Analyzed:	07/01/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	106	60-140

Field ID:	GAC-1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	64657
Lab ID:	152813-002	Analyzed:	07/01/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	59-135
Bromofluorobenzene (FID)	105	60-140

Field ID:	INF	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	64765
Lab ID:	152813-003	Analyzed:	07/06/01

Analyte	Result	RL
Gasoline C7-C12	6,600	250

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	105	60-140

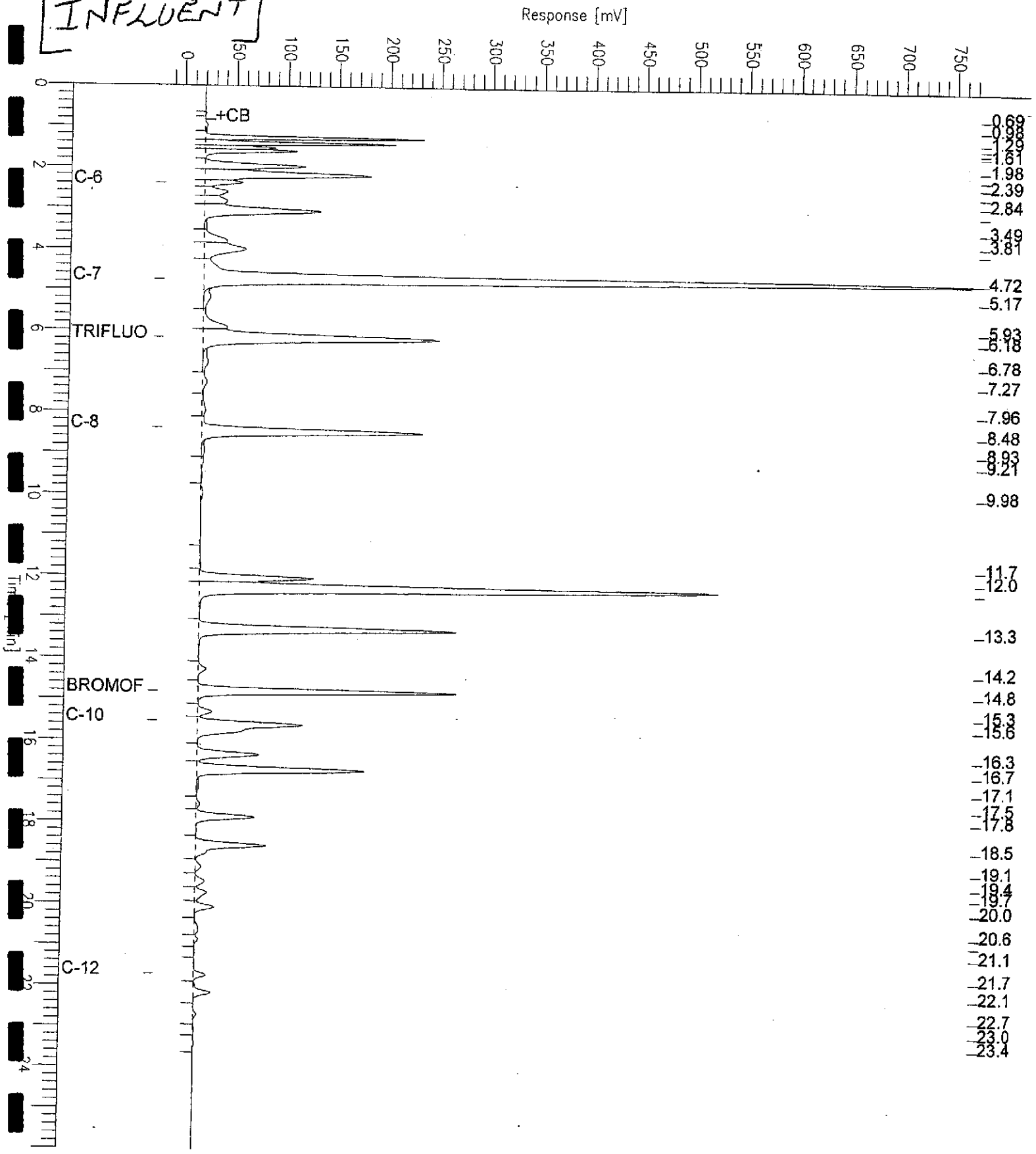
# GC07 TVH 'A' Data File RTX 502

Sample Name : 152813-003,64765,TVH ONLY  
 FileName : G:\GC07\DATA\186A010.raw  
 Method : TVHBTXE

Sample #: A1 HS  
 Date : 7/6/01 12:43 PM  
 Time of Injection: 7/6/01 12:17 PM  
 Low Point : -18.78 mV  
 High Point : 772.11 mV  
 Plot Scale: 790.9 mV

Start Time : 0.00 min  
 End Time : 26.00 min  
 Scale Factor: 1.0  
 Plot Offset: -19 mV

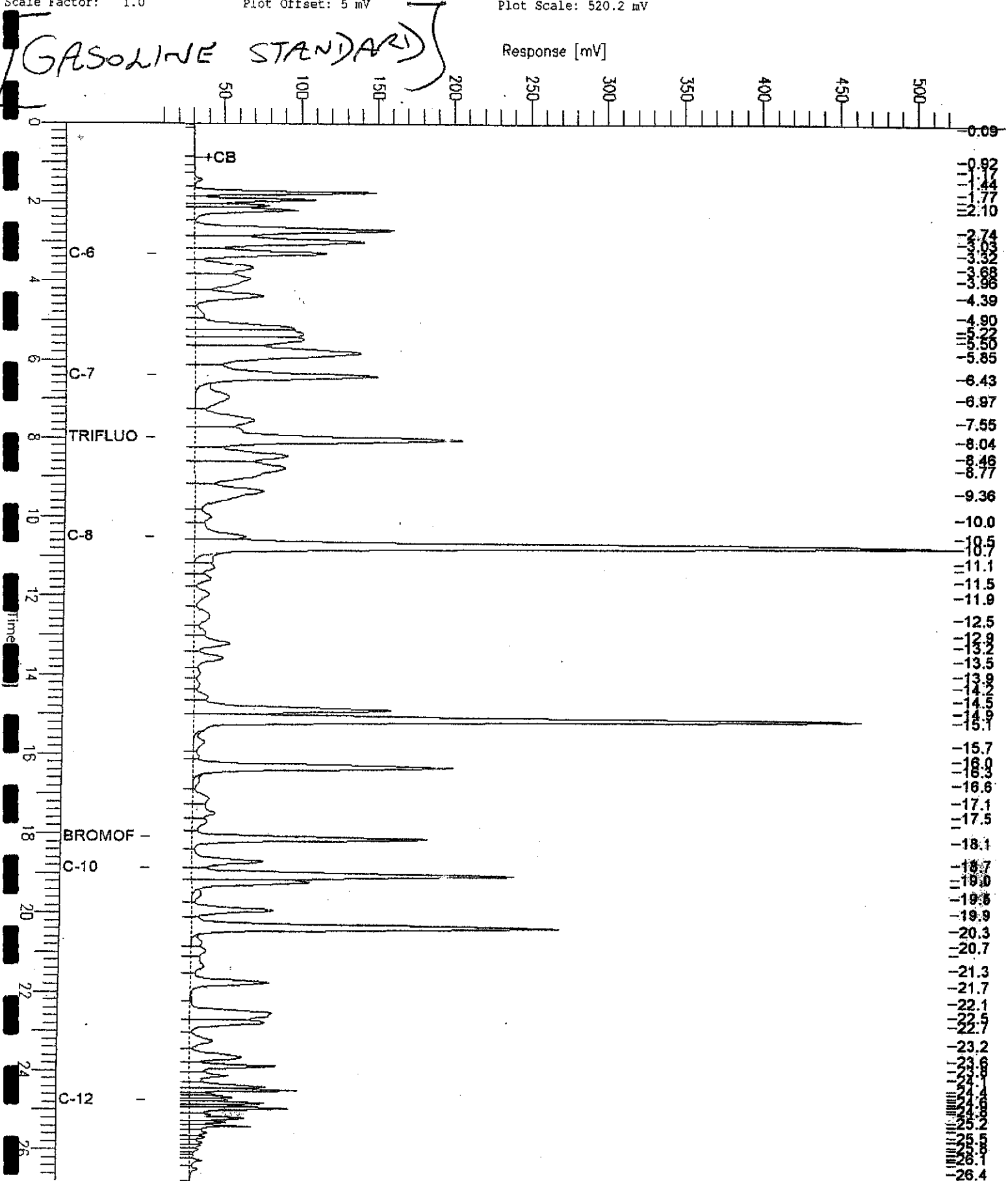
INFLUENT



# GC19 TVH 'X' Data File (FID)

Sample Name : CCV/LCS, QC149221, 64657, 01WS1268, 5/5000  
 File Name : G:\GC19\DATA\181X003.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : 1.0

Sample # :  
 Date : 6/30/01 08:05 PM  
 Time of Injection: 6/30/01 07:38 PM  
 Low Point : 4.86 mV  
 High Point : 525.09 mV  
 Plot Scale: 520.2 mV



## Gasoline by GC/FID CA LUFT

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	06/29/01
Units:	ug/L	Received:	06/29/01

Type:	BLANK	Batch#:	64657
Lab ID:	QC149220	Analyzed:	06/30/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	59-135
Bromofluorobenzene (FID)	99	60-140

Type:	BLANK	Batch#:	64765
Lab ID:	QC149641	Analyzed:	07/06/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	59-135
Bromofluorobenzene (FID)	102	60-140

## Gasoline by GC/FID CA LUFT

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC149221	Batch#:	64657
Matrix:	Water	Analyzed:	06/30/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,791	90	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	124	59-135
Bromofluorobenzene (FID)	104	60-140



Gasoline by GC/FID CA LUFT

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	64765
Units:	ug/L	Analyzed:	07/06/01
Diln Fac:	1.000		

Type: BS Lab ID: QC149642

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,290	115	73-121
Surrogate	%REC	Limits		
Trifluorotoluene (FID)	110	59-135		
Bromofluorobenzene (FID)	113	60-140		

Type: BSD Lab ID: QC149643

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,212	111	73-121	3	20
Surrogate	%REC	Limits				
Trifluorotoluene (FID)	110	59-135				
Bromofluorobenzene (FID)	110	60-140				

Gasoline by GC/FID CA LUFT

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	64657
MSS Lab ID:	152792-002	Sampled:	06/28/01
Matrix:	Water	Received:	06/28/01
Units:	ug/L	Analyzed:	07/01/01
Diln Fac:	1.000		

Type: MS Lab ID: QC149222

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<33.00	2,000	1,835	92	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	131	59-135
Bromofluorobenzene (FID)	112	60-140

Type: MSD Lab ID: QC149223

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,821	91	65-131	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	59-135
Bromofluorobenzene (FID)	111	60-140

## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Field ID:	EFF/PSPI	Batch#:	64700
Lab ID:	152813-001	Sampled:	06/29/01
Matrix:	Water	Received:	06/29/01
Units:	ug/L	Analyzed:	07/03/01
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



## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Field ID:	EFF/PSPI	Batch#:	64700
Lab ID:	152813-001	Sampled:	06/29/01
Matrix:	Water	Received:	06/29/01
Units:	ug/L	Analyzed:	07/03/01
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	80-122
1,2-Dichloroethane-d4	109	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	99	80-115

## Purgeable Organics by GC/MS

Lab #: 152813	Location: Tonys
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030
Project#: 2333	Analysis: EPA 8260B
Field ID: GAC-1	Batch#: 64700
Lab ID: 152813-002	Sampled: 06/29/01
Matrix: Water	Received: 06/29/01
Units: ug/L	Analyzed: 07/03/01
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
1,2-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
Styrene	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



## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Field ID:	GAC-1	Batch#:	64700
Lab ID:	152813-002	Sampled:	06/29/01
Matrix:	Water	Received:	06/29/01
Units:	ug/L	Analyzed:	07/03/01
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	105	80-122
1,2-Dichloroethane-d4	111	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	99	80-115

ND= Not Detected  
RL= Reporting Limit

## Purgeable Organics by GC/MS

Lab #: 152813	Location: Tonys
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030
Project#: 2333	Analysis: EPA 8260B
Field ID: INF	Batch#: 64730
Lab ID: 152813-003	Sampled: 06/29/01
Matrix: Water	Received: 06/29/01
Units: ug/L	Analyzed: 07/04/01
Diln Fac: 7.143	

Analyte	Result	RL
Freon 12	ND	71
Chloromethane	ND	71
Vinyl Chloride	ND	71
Bromomethane	ND	71
Chloroethane	ND	71
Trichlorofluoromethane	ND	36
Acetone	ND	140
Freon 113	ND	36
1,1-Dichloroethene	ND	36
Methylene Chloride	ND	140
Carbon Disulfide	ND	36
MTBE	300	36
trans-1,2-Dichloroethene	ND	36
Vinyl Acetate	ND	360
1,1-Dichloroethane	ND	36
2-Butanone	ND	71
cis-1,2-Dichloroethene	ND	36
2,2-Dichloropropane	ND	36
Chloroform	ND	36
Bromochloromethane	ND	71
1,1,1-Trichloroethane	ND	36
1,1-Dichloropropene	ND	36
Carbon Tetrachloride	ND	36
1,2-Dichloroethane	ND	36
Benzene	1,100	36
Trichloroethene	ND	36
1,2-Dichloropropane	ND	36
Bromodichloromethane	ND	36
Dibromomethane	ND	36
4-Methyl-2-Pentanone	ND	71
cis-1,3-Dichloropropene	ND	36
Toluene	350	36
trans-1,3-Dichloropropene	ND	36
1,1,2-Trichloroethane	ND	36
2-Hexanone	ND	71
1,3-Dichloropropane	ND	36
Tetrachloroethene	ND	36

## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Field ID:	INF	Batch#:	64730
Lab ID:	152813-003	Sampled:	06/29/01
Matrix:	Water	Received:	06/29/01
Units:	ug/L	Analyzed:	07/04/01
Diln Fac:	7.143		

Analyte	Result	RL
Dibromochloromethane	ND	36
1,2-Dibromoethane	ND	36
Chlorobenzene	ND	36
1,1,1,2-Tetrachloroethane	ND	36
Ethylbenzene	210	36
m,p-Xylenes	1,000	36
o-Xylene	470	36
Styrene	ND	36
Bromoform	ND	36
Isopropylbenzene	ND	36
1,1,2,2-Tetrachloroethane	ND	36
1,2,3-Trichloropropane	ND	36
Propylbenzene	ND	36
Bromobenzene	ND	36
1,3,5-Trimethylbenzene	88	36
2-Chlorotoluene	ND	36
4-Chlorotoluene	ND	36
tert-Butylbenzene	ND	36
1,2,4-Trimethylbenzene	390	36
sec-Butylbenzene	ND	36
para-Isopropyl Toluene	ND	36
1,3-Dichlorobenzene	ND	36
1,4-Dichlorobenzene	ND	36
n-Butylbenzene	ND	36
1,2-Dichlorobenzene	ND	36
1,2-Dibromo-3-Chloropropane	ND	36
1,2,4-Trichlorobenzene	ND	36
Hexachlorobutadiene	ND	36
Naphthalene	140	36
1,2,3-Trichlorobenzene	ND	36

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	112	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	96	80-115



## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC149392	Batch#:	64700
Matrix:	Water	Analyzed:	07/03/01
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
2-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

ND = Not Detected

RL = Reporting Limit

## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC149392	Batch#:	64700
Matrix:	Water	Analyzed:	07/03/01
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	99	80-122
1,2-Dichloroethane-d4	108	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	99	80-115

## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC149480	Batch#:	64700
Matrix:	Water	Analyzed:	07/03/01
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

ND = Not Detected

RL = Reporting Limit



## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC149480	Batch#:	64700
Matrix:	Water	Analyzed:	07/03/01
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	RREC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	99	80-115

ND= Not Detected

RL= Reporting Limit



## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC149500	Batch#:	64730
Matrix:	Water	Analyzed:	07/04/01
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
2-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

ND = Not Detected

RL = Reporting Limit

Page 1 of 2

## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC149500	Batch#:	64730
Matrix:	Water	Analyzed:	07/04/01
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
1-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	101	80-122
1,2-Dichloroethane-d4	108	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	99	80-115

ND = Not Detected  
 RL = Reporting Limit

## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	64700
Units:	ug/L	Analyzed:	07/03/01
Diln Fac:	1.000		

Type: BS Lab ID: QC149390

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	43.91	88	74-132
Benzene	50.00	42.34	85	80-116
Trichloroethene	50.00	45.24	90	80-119
Toluene	50.00	45.47	91	80-120
Chlorobenzene	50.00	44.42	89	80-117

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-122
1,2-Dichloroethane-d4	101	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	95	80-115

Type: BSD Lab ID: QC149391

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	44.66	89	74-132	2	20
Benzene	50.00	43.31	87	80-116	2	20
Trichloroethene	50.00	46.71	93	80-119	3	20
Toluene	50.00	45.77	92	80-120	1	20
Chlorobenzene	50.00	46.36	93	80-117	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	110	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	94	80-115



## Purgeable Organics by GC/MS

Lab #:	152813	Location:	Tonys
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	64730
Units:	ug/L	Analyzed:	07/04/01
Diln Fac:	1.000		

Type: BS Lab ID: QC149498

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	42.67	85	74-132
Benzene	50.00	40.61	81	80-116
Trichloroethene	50.00	44.08	88	80-119
Toluene	50.00	43.83	88	80-120
Chlorobenzene	50.00	44.86	90	80-117

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	93	80-115

Type: BSD Lab ID: QC149499

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	41.49	83	74-132	3	20
Benzene	50.00	41.05	82	80-116	1	20
Trichloroethene	50.00	44.66	89	80-119	1	20
Toluene	50.00	42.36	85	80-120	3	20
Chlorobenzene	50.00	46.12	92	80-117	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	96	80-115