

June 14, 2001

JUN I 9 2007

Ms. Trish Maguire
Wastewater Control Representative
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:

Enclosed is SOMA's "Semi-Annual Technical Report: Treatment System Discharge to EBMUD Sewer from February 15, 2001 to May 14, 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

Patrick Sullivan

Project Hydrogeologist

cc: Mr. Abolghassem Razi w/enclosure

Mr. Barney Chan w/enclosure

Alameda County Dept. of Env. Health

### **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 Sepeh Ph.D., P.E.

Principal Hydrogeologist



JUN 1 9 2001

## **Certification Statement**

CL:LC	T	4 *	$\sim \sim$
Ciner	Exec	uuve	Officer

Abolghassem Razi	Owner	
Name	Title	
3609 International Boulevard	Oakland	94601
Street Address	City	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

6-14-01

Date

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June 12, 2000

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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; 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 1,200,000 gallons (recording date is June 7, 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 since August, and weekly before that.

Table-1 shows 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 16,000 gallons of chemically impacted groundwater per week has been processed by the treatment system during the period from February 15, 2001 through May 14, 2001. This is more than 11,000 gallons treated weekly during the prior three-month period, primarily due to the increased recharge during this time period.

#### 3.0 CHANGES TO REMEDIATION SYSTEM

The system has run continuously this quarter, except for one week at the end of March when the treatment system was turned off for maintenance of the compressor. The drive belt had become worn and was slipping. At this time, a noise suppression housing was also added to the compressor to reduce the noise level in the alley behind the service station. No other changes were made to the system.

#### 4.0 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 Delta Environmental Laboratories, 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

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".

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

## **TABLES**

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

	Date	Total		L	ab Results Fo				
	Sampling	Volume**				ations in ug/L			
	& Read	(Gallons)	MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylene	
June	6/7/01	1,216,580							
May	5/30/01	1,205,190		<u></u>					
	5/23/01	1,194,390							
	5/17/01	1,182,360			Results no	t yet availab	le.		
	5/10/01	1,166,850						<u> </u>	
	5/5/01	1,151,600						*	
<u>April</u>	4/28/01	1,135,690							
	4/21/01	1,113,570	-					<u></u>	
	4/11/01	1,082,700	<u>ND</u>	ND	ND	ND	<u>ND</u>	<u>ND</u>	
			ND	ND	<u>ND</u>	ND	ND	<u>ND</u>	
	4/6/01	1,065,540							
March	3/29/01	1,036,300			System	restarted.	<u> </u>	<u> </u>	
	3/21/01	1,036,000	System off - belt replaced on compressor.						
	3/17/01	1,035,100		T	T				
	3/13/01	1,032,500	ND	ND	ND	ND	ND	ND	
	3/2/01	996,520	<del></del>						
	3/1/01			1	System	restarted.		1	
<u>February</u>	2/10/01			System s	hut down for	<u> </u> maintenance	e and cleaning.		
	2/8/01	975,490							
January	1/29/01	957,880	ND	ND	ND	ND	ND	ND	
			ND	ND	ND	ND	ND	ND	
· · · · · · · · · · · · · · · · · · ·	1/12/01	927,200						<u> </u>	
	1/4/01	921,790							
December	12/5/00	883,000	ND	ND	ND	ND	ND	ND	

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

	Date Sampling	Date Total Sampling Volume**			L	Lab Results For GAC-1 and PSP* (concentrations in ug/L)				
	& Read	(Gallons)	MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylene		
			<u>ND</u>	ND	ND	ND	ND	ND		
<u>November</u>	11/24/01		ND	ND	ND	ND	ND	ND		
			ND	ND	ND	ND	ND	ND		
	11/14/00	854,000								
	11/1/00	842,000	ND	ND	ND	ND	ND	D		
			<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	ND	<u>ND</u>		
October	10/25/00	825,000								
October	10/25/00	821,000								
	10/20/00	820,000		<del> </del>						
	10/19/00	818,000								
<del></del>	10/14/00	814,000		<u> </u>	<u> </u>					
	10/5/00	812,000		<del> </del>						
	10/3/00	809,000	* 15°	A IPS	NO		1100	1.15		
	10/1/00	609,000	ND ND	ND ND	ND ND	ND NE	ND	ND		
<del> </del>		<u> </u>	<u>ND</u>	ND	<u>ND</u>	ND	<u>ND</u>	<u>ND</u>		
September	9/28/00	807,000								
	9/18/00		ND	ND	ND	ND	ND	ND		
	9/14/00	797,000						<del></del>		
	9/4/00	788,000								
August	8/31/00	785,000				<del></del>				
<u>August</u>	8/27/00	781,000	ND	A IFS	NID	h 33mm				
	8/24/00	781,000	ND	ND ND	ND	ND	<u>ND</u>	ND		
	1 0,2 0	. , , , , , , ,		<del></del>				<u></u>		
July	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	ND		
	07/07/200	706,000	<u>ND</u>	ND	ND	ND	ND	ND		
							<del></del> -			

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

	Date Sampling & Read	Total Volume**		I <u>PSP*</u> )	:P*			
		(Galions)	MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylene
June	06/29/00	700,000	ND	ND	ND	ND	<u>ND</u>	ND
	06/21/00	682,220	ND	ND	פא	ND	ND	ND
	06/16/00	669,720	ND	ND	ND	ND	ND	<u>ND</u>
	06/10/00	651,200	ND	ND	<u>ND</u>	ND	ND	ND
	06/02/00		<u>ND</u>	ND	ND	ND	ND	<u> </u>
May	05/31/00	629,000						<u></u>
	05/23/00	603,700	ND	<u>ND</u>	NC	NO	<u>NC</u>	ND
	05/18/00	570,000	ND	ND	ND	ND	ND	ND
	05/10/00	530,400	ND	ND	ND	ND	ND	ND
<u>April</u>	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
				<u> </u>				
<u>March</u>	03/24/00	388,000	ND	ND	ND	ND	ND -	ND
	03/24/00	357,100	ND	ND	ND	ND	ND	ND
	03/17/00	329,000	ND	ND	ND	ND	ND	ND
	03/03/00	300,000	NO	144	110	1100	Tana manadan	1 3 400
February						<u> </u>		
1 00, 44.	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	<u>ND</u>
January								
	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
December								

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

· · · · · · · · · · · · · · · · · · ·	Date Sampling	Total Volume**		L	ab Results Fo concentra)	r GAC-1 and ations in ug/L		
	& Read	(Gallons)	MTBE	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylene
	12/23/99	51,680	1486	NA	ND	ND	ND	ND
	12/23/99		ND	NA	ND	ND	ND	<u>ND</u>
	12/16/99	30,450	963	NA	ND	ND	ND	ND
	12/16/99		ND	NA	ND	<u>ND</u>	ND	ND
	12/09/99	9,000	230	ND	ND	ND	ND	ND
	12/09/99	9,000		ND egan on Decei		<u>ND</u>	I NU	_

<sup>\*</sup> PSP#1 formerly labeled Effluent or GAC-2

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

## **FIGURES**

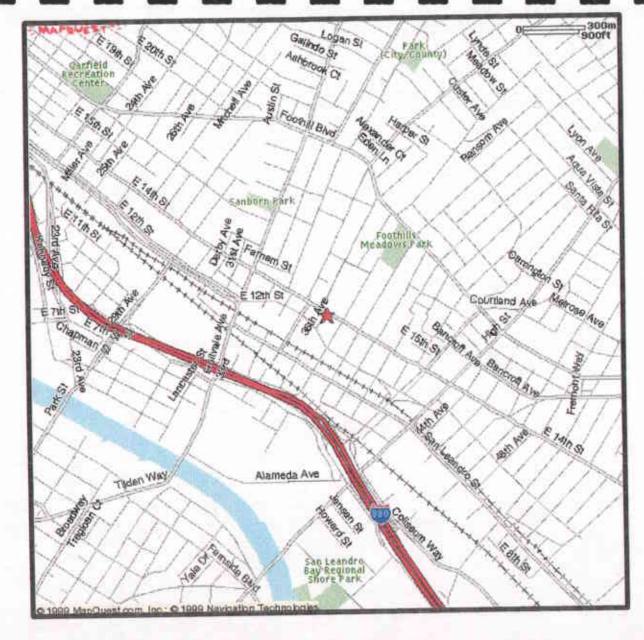


Figure 1: Site Location Map



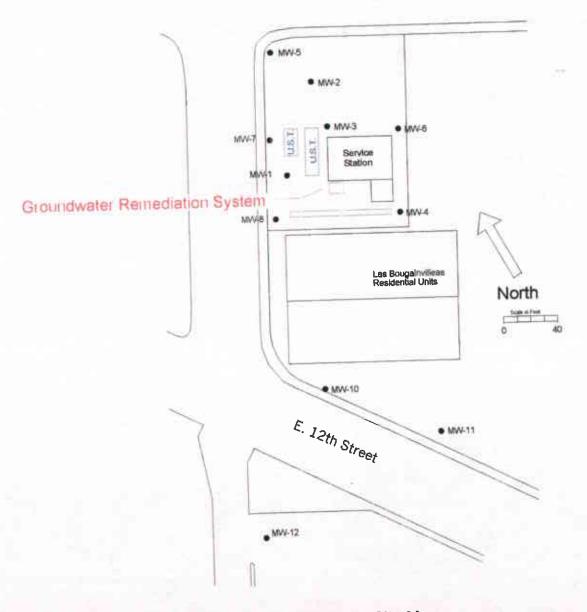


Figure 2: Site Map



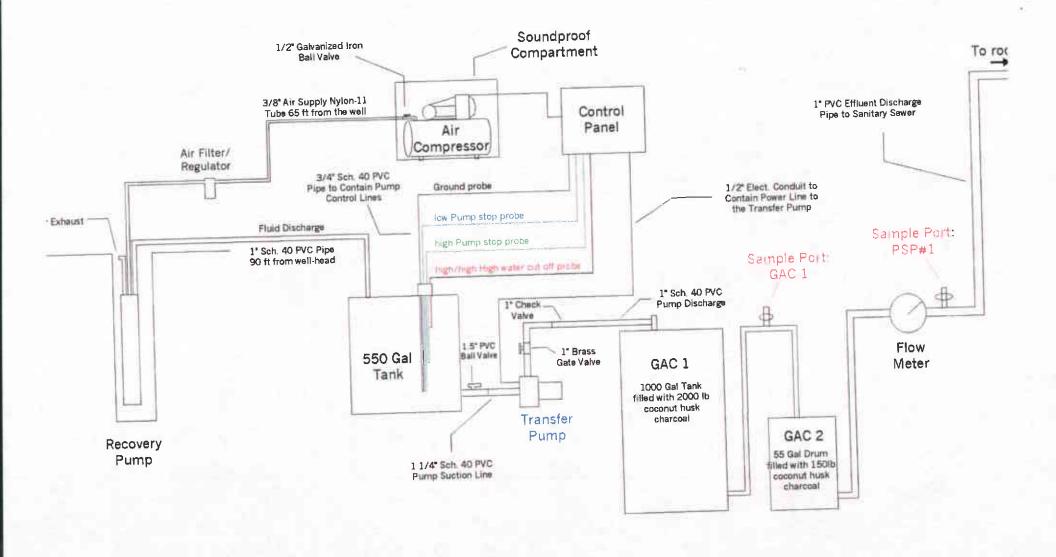


Figure 3: Schematic of the Groundwater Remediation System, June 12, 2001



## **APPENDIX A**

EBMUD DISCHARGE PERMIT
AND CERTIFICATION STATEMENT



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.



REVISION EFFECTIVE JULY 1, 2000 Terms and Conditions

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

### REPORTING REQUIREMENTS

- Violations shall be reported in accordance with Section B, Paragraph II of I. 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>	Reporting Period

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:

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

REGULATED PARAMETER	DAILY MAXIMUM
Benzene	0.005 mg/L
Toluene	$0.005\mathrm{mg/L}$
Ethylbenzene	$0.005\mathrm{mg/L}$
Xvlenes, total	$0.005\mathrm{mg/L}$



**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 <u>STANDARD TERMS</u> <u>AND CONDITIONS</u>, 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

SD-30.7 2/9



**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:

@ \$540.00 each =

\$1,080.00 / year

Analyses Per Year:

Parameter

Tests per year

Charge per test

Total Charge per year

EPA 624

\$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 =

Monthly Capacity Fee over 36 months =

\$27,744.06

\$770.67



**REVISION EFFECTIVE JULY 1, 2000** 

**Terms and Conditions** 

Tony's Express Auto Service Permit No. 504-27421 Page No. 5

## 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

## **APPENDIX B**

**Laboratory Results and Chain of Custody Forms** 



SOMA

2680 Bishop Drive, Suite 203 San Ramon, CA 94583 Client project ID:

Proj.# 2333 3609 International Blvd Tony's Auto Express Ref.: R5924400

Method 5030 GCFID/

8020 Sampled: 4/11/01

Received: 4/11/01 Matrix: Water Analyzed: 4/12/01 Reported: 4/19/01

Units: ug/L Analyst: DS

Attention: Naser Pakrou

#### Laboratory Results for TPH + BTEX Analysis

		Detection		Results	
Analyte	EPA	Limit			
	Method	ug/L	Influent	Gac-1	PSP #1
BTÉX					
Benzene	8020	0.5	1,627	ND	ND
Toluene	B020	0.5	532	ND	ND
Ethylbenzene	8020	0.5	103	ND	ND
Total-Xylene	8020	1.0	2,083	ND	ND
TPH-g	5030/GCFiD	50	17,170	ND	ND

ND:Not Detected(<MDL)

Delta Environmental Laboratories

Hossein Khosh Khoo, Ph.D.



#### **Quality Control Report**

SOMA

2680 Bishop Drive, Suite 203 San Ramon, CA 94583

Client Project ID:

proj 2333

3609 International Blvd Tony's Auto Express

Ref.:

5924400

Method

5030 GCFID/

8020

4/11/01 Sampled:

Received:

4/11/01

Matrix: Analyzed: Water 4/12/01

Analyst

DS

Reported: Units:

4/19/01 ug/L

Attention: Naser Pakrou

Quality Control Report for TPH & BTEX

Analyte	Detection Limit ug/L	Sample Result ug/L	Spike Added ug/L	% MS Recovery	% MSD Recovery	Relative % Difference RPD	Method
Benzene	0.5	ND	20	99	100	1.0	8020
Toulene	0.5	ND	20	9.2	95	3.2	8020
Ethylbenzene	0.5	ND	20	98	100	2	8020
T-Xylene	1.0	ND	40	98	100	2.0	8020
TPH-Gas,GC/FID	50	ND	400	112	111	0.9	5030

Delta Environmental Laboratories

H.Khosli Khoo, PhD.

Client:

SOMA

2680 Bishop Drive, Suite 203

San Ramon, CA 94583

Attention: Naser Pakrou



## ENVIRONMENTAL LABORATORIES, Ltd

Client Project ID:

Proj. # 2333 3609 International Blvd

Tony's Auto Express

Ref.

R5924100

Method: Sampled: 8260 4/11/01

Received: Matrix 4/11/01 Water

Analyzed:

4/13-17/2001

Reported:

4/19/01

Analyst:

DS

Unit

ug/L

### Purgeable Hydrocarbons EPA 8260

VOC

	Detection		Results Sample ID			
Analyte	Limit					
	ug/L	influent*	GAC-1	PSP #1		
Benzene	0.5	1,716	ND	ND		
Bromobenzene	0.5	ND	ND	ND		
Bromochloromethane	0.5	ND	ND	ND		
Bromodichloromethane	0.5	ND	ND	ND		
Bromoform	0.5	ND	ND	ND_		
Bromomethane	0.5	ND	ND	ND		
n-Butylbenzene	0.5	10	ND	ND		
sec-Butylbenzene	0.5	5.1	ND	ND		
tert-Butylbenzene	0,5	ND	ND	ND		
Carbon Tetrachloride	0.5	. ND	ND	ND		
Chlorobenzene	0.5	ND	ND	ND		
Chloroethane	0.5	ND	ND	ND		
Chloroform	0.5	ND	ND	0.54		
Chloromethane	0.5	ND	ND	ND		
2-Chlorotoluene	0.5	ND	ND	ND		
4-Chlorotoluene	0.5	ND	ND	ND		
Dibromochloromethane	0.5	. ND	ND	ND		
1,2-Dibromo-3-chloropropane	0.5	ND	ND	ND		
1,2 Dibromoethane	0.5	ND	ND	ND		
Dibromomethane	0.5	ND	ND	ND		
1,2-Dichlorobenzene	0.5	ND	ND	ND		
1,3 Dichlorobenzene	0.5	ND	ND	ND		
1,4 Dichlorobenzene	0.5	ND	ND	ND		
dichlorodifluoromethane	0.5	ND	ND	ND		
1,1.Dichloroethane	0.5	ND	ND	ND		
1,2,-Dichloroethane	0.5	ND	ND	ND		
1,1-Dichloroethene	0.5	ND	ND	ND		
cis-1,2-Dichloloethene	0.5	ND	ND	ND		
trans-1,2-Dichloroethene	0.5	ND	ND	ND		
1,2-Dichloropropane	0.5	ND	ND	ND		
1,3-Dichloropropane	0.5	ND	ND	. ND		



Ref.

R5924100

Client: SOMA

2680 Bishop Drive, Suite 203

San Ramon, CA 94583

Client Project ID:

Proj. # 2333 3609 International Blvd

Tony's Auto Express

Received: Matrix

8260

Method: Sampled: 4/11/01

> 4/11/01 Water

Analyzed:

4/13-17/2001 4/19/01

Reported: Analyst: DS

Unit ug/L

Attention: Naser Pakrou

#### Purgeable Hydrocarbons EPA 8260

VOC

	Detection		Results	
Analyte	Limit		Sample ID	
·	ug/L	Influent*	GAC-1	PSP #1
2,2-Dichioropropane	0.5	ND	ND	ND
1,1-Dichloropropene	0.5	ND	ND	ND
Ethylbenzene	0.5	108	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND
Isopropylbenzene	0.5	11	ND	ND
p-Isopropyltoluene	0,5	ND	ND	ND
Methylene Chloride	0.5	ND	ND	ND
Naphthalene	0.5	157	ND	ND
n-Propylbenzene	0.5	10	ND	ND
Styrene	0.5	ND	ND	ND
1,1,1,2.Tetrachloroethane	0.5	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND	ND
Tetrachloroethene	0.5	ND	ND	ND
Toluene	0.5	474	ND	ND
1,2,3-Trichlorobenzene	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	0.5	ND	ND	ND
1,1,1-Trichloroethane	0.5	ND	ND	ND
1,1,2.Trichloroethane	0.5	ND	ND	ND
Trichloroethene	0.5	ND	ND	ND
Trichlorofluoromethane	0.5	ND	ND	ND
1,2,3-Trichloropropane	0.5	ND	ND	ND
1,2,4-Trimethylbenzene	0.5	616	ND	ND
1,3,5-Trimethylbenzene	0.5	124	ND	ND
Vinyl Chloride	0.5	ND	ND	ND
Xylenes, Total	1.0	1673	ND	ND
cis-1,3-Dichloropropene	0.5	ND	ND	ND
trans-1,3-Dichlopropene	0.5	ND	ND	ND

ND: Not Detected

H.Khosh Khoo, PhD.,

<sup>\*</sup> Sample was diluted 10 times; therefore, detection limits must be multiplied by the same factor. DELTA Environmental Laboratories



## **Quality Control Report**

Client:

SOMA

2680 Bishop Drive, Suite 203

San Ramon, CA 94583

Client Project ID:

Proj. # 2333

3609 International Blvd

Tony's Auto Express

Ref.

Q5924100

Matrix:

Water

Unit:

ug/L

Attention: Naser Pakrou

QC Batch: 5923

Reported

4/19/01

**Surrogate Standard Recovery Summary** 

Method: EPA8260

		Percent Recovery							
Date		Pentafluoro-	Toluene	p-Bromofluoro-					
Analyzed Lab Id.		benzene	<b>d</b> 8	Benzene					
4/13/01	Blank	88	103	108					
4/13/01	Blank	94	101	105					
QC limit:		70-121	81-117	74-121					

Date Analyzed: 4/13/01 Sample Spiked:Blank

Matrix Spike Recovery

million opinion recording								
	Spike Added	Matrix Spike	Matrix Spike Dup	Relative % Difference				
Analyte	ug/L	%Recovery	% Recovery	RPD				
1,1-Dichloroethene	20	94	98	4.2				
Trichloroethene	20	105	101	200.0				
Benzene	20	104	101	200.0				
Toluene	20	106	102	200.0				
Chlorobenzene	20	100	98	2.0				

H.Khosh Khoo, PhD.,

Delta Environmental Laboratories 685 Stone Road #11 & 12

Chain of Custody (CCC) Form Benicia, Ca. 94510 Results to: Nasel Parise V (707) 747-6081, 800-7476082 FAX (707) 747-8082 Eny. Eng. Client Name 30MB Project Name 3609 International Address Analysis Requested Blud Cakland CA City Telephone 925 2446600 Fax: 925 244 6601 LABID TONY : > PUTO TOXATO SAMPLER (signature) Standard . Turnaround Time **Femperatura** Special Instructions:: Comments Time | Matrix |Sample ID Date Hel Preservite Cont Influent 10:52 HZO 6 AC-1 PSP#1 11 :01 Have all samples received been stored on ice?

Did any VOA samples received have any head space? IDate // 11 Relinquished by: N Med 2)3:108 Received By: Were samples in appropriate containers and packaged properly? 3) Reinquished by: **IDate** 



SOMA

2680 Bishop Drive, Suite 203 San Ramon, CA 94583

Client project ID:

Proj 2333 3609 INT Blv. Oakland, CA

Ref.:

R5859400

Method:

5030 GCFID/ 8020/8260B

Sampled:

3/13/01

Received:

3/14/01

Matrix:

Water

Analyzed: Reported: 3/17-20/01 3/20/01

Units:

ug/L

DS

Attention: Naser Pakrou

Analyst:

#### Laboratory Results for TPH-G & MTBE Analysis

		Detection	Resu	
Analyte	EPA	Limit	Sampl	e ID
	Method	ug/L	PSP#1	Influent
MTBE	8260B	5.0	ND	267
ТРН-д	5030/GCFiD	50	ND	7250

ND:Not Detected(<MDL)

s khor W Delta Environmental Laboratories,

Hossein Khosh Khoo, Ph.D.



### SOMA

2680 Bishop Drive San Ramon, CA 94583

Client Project ID:

Quality Control Report

proj 2333 3609 INT Blv.

Oakland,CA

Ref.:

Q5859400

Method:

5030 GCFID/

8020/8260B

Sampled:

3/13/01

Received:

3/14/01

Matrix: Analyzed: Water 3/17-20/01

Analyst:

DS

Reported:

Units:

3/20/00 ug/L

Quality Control Report for TPH-G & MTBE

Sample Spiked:Blank

Analyte	Detection Limit ug/L	Sample Result ug/L	Spike Added ug/L	% MS Recovery	% MSD Recovery	Relative % Difference RPD	Method
МТВЕ	5	ND	20	100	103	3.0	8260B
TPH-Gas,GC/FID	50	ND	400	93	91	2.2	5030

Delta Environmental Laboratories

H.Khosh Khoo, PhD.,



**SOMA** 

2680 Bishop Drive, Suite 203 San Ramon, CA 94583 Ref.:

R5859100

Client Project ID:

Project # 2333 3609 INT. Blvd Oakland, CA Method: Sampled: 8260B

Received:

3/13/01 3/14/01

Matrix:

Water

Analyzed: Reported:

3/16/01 3/20/01

Attention: Naser Pakrou

#### Purgeable Hydrocarbons EPA 8260B

	Detection		Results	
Analyte	Limit	<del> </del>	ample ID	
	(ug/L)	PSP#1	Influent*	
Benzene	0.5	ND	701	
Bromobenzene	0.5	ND	ND	-
Bromochloromethane	0.5	ND	ND	
Bromodichloromethane	0.5	ND	ND	
Bramoform	0.5	ND	ND	
Bromomethane	0,5	ND	ND	
n-Butylbenzene	0.5	ND	ND	
Isec-Butylbenzene	0.5	ND	ND	
tert-Butylbenzene	0.5	ND	ND	
Carbon Tetrachloride	0.5	ND	ND	
Chlorobenzene	0.5	ND	ND	
Chloroethane	0.5	ND	ND	
Chloroform	0.5	ND	ND	
Chloromethane	0.5	ND	ND	
2-Chlorotoluene	0.5	ND	ND	
4-Chlorotoluene	0.5	ND	ND	
Dibromochloromethane	0.5	ND	ND	
1,2.Dibromo-3-chloropropane	0.5	ND	ND ND	
1,2-Dibromoethane	0.5	ND	ND	
Dibromomethane	0.5	ND	ND .	
1,2-Dichlorobenzene	0.5	ND	ND	
1.3-Dichlorobenzene	0.5	ND	ND	
1,4-Dichlorobenzene	0.5	ND	ND	
dichlorodifluoromethane	0.5	ND	ND	
1,1-Dichloroethane	0.5	ND	ND	
1,2, Dichloroethane	0.5	ND	ND	
1,1-Dichloroethene	0.5	ND	ND	
cis-1,2-Dichloloethene	0.5	ND	ND	
trans-1,2-Dichloroethene	0.5	ND	ND	·
1,2-Dichloropropane	0.5	ND	ND .	
1,3-Dichloropropane	0.5	ND	ND	



#### SOMA

2680 Bishop Drive, Suite 203 San Ramon, CA 94583

## ENVIRONMENTAL LABORATORIES, Ltd

Ref.:

R5859100

Client Project ID:

Project # 2333 3609 INT. Blvd Method:

8260B

Sampled: Received: 3/13/01 3/14/01

Oakland, CA

Matrix: Analyzed: Water

Reported:

3/16/01 3/20/01

Attention: Naser Pakrou

#### Purgeable Hydrocarbons

**EPA 8260B** 

	Detection	Results Sample ID					
Analyte	Limit						
	(ug/L)	PSP#1	influent*				
2,2-Dichloropropane	0.5	ND ND	ND	_			
1,1 Dichloropropene	0.5	ND	ND				
Ethylbenzene	0.5	ND	ND				
Hexachlorobutadiene	0.5	ND	ND				
Isopropylbenzene	0.5	ND	ND				
p-Isopropyltoluene	0.5	ND	ND				
Methylene Chloride	0.5	ND	ND	· · ·			
Naphthalene	0.5	ND	. ND				
n-Propylbenzene	0.5	ND	ND				
Styrene	0.5	ND	ND				
1,1,1,2 Tetrachloroethane	0.5	ND	ND				
1,1,2,2-Tetrachloroethane	0.5	ND	ND				
Tetrachloroethene	0.5	ND	33				
Toluene	0.5	ND	81				
1,2,3-Trichlorobenzene	0.5	ND	ND				
1,2,4 Trichlorobenzene	0.5	ND	ND				
1,1,1-Trichloroethane	0.5	ND	ND				
1,1,2 Trichloroethane	0.5	ND	ND	_			
Trichloroethene	0,5	ND	ND	<del></del>			
Trichlorofluoromethane	0.5	ND	ND	-			
1,2,3-Trichloropropane	0.5	ND	ND				
1,2,4-Trimethylbenzene	0.5	ND	23				
1,3,5·Trimethylbenzene	0.5	ND	85				
Vinyl Chloride	0.5	ND	ND				
Xylenes, Total	1.0	ND	795				
cis-1,3-Dichloropropene	0.5	ND	ND				
trans-1,3-Dichlopropene	0.5	ND	ND				

ND: Not Detected

California Certification #1857

H.Khosh Khoo, PhD.,

<sup>\*</sup> Sample has been diluted 20 times, therefore detection limits must be multiplied by the same factor. DELTA Environmental Laboratories



#### **Quality Control Report**

Client project ID:

Project # 2333 3609 INT Blvd

Oakland, CA

Ref.

Q5859100

Matrix:

Reported:

Water ug/L

Unit:

3/20/01

Attention: Naser Pakrou

San Ramon, CA 94583

2680 Bishop Drive, Suite 203

**SOMA** 

**Surrogate Standard Recovery Summary** 

Method: EPA8260B

		MICHION . LEMOZOOD		
Date		Pentafluoro-	Toluene	p-Bromofluoro-
Analyzed Lab ld.		benzene	d8	Benzene
3/16/01	Blank	108	98	99
3/16/01	Blank	109	98	99
QC limit:		70-121	81-117	74-121

Date Analyzed:3/16/01 Sample Spiked:Blank

Matrix Spike Recovery

		mati ix Spike Necove	· · · · · · · · · · · · · · · · · · ·			
	Spike	Matrix	Matrix	Relative % Difference		
	Added	Spike	Spike Dup			
Analyte	ug/L	%Recovery	% Recovery	RPD		
1,1-Dichloroethene	. 20	119	117	1.7		
Trichloroethene	20	102	100	2.0		
Benzene	20	102	100	2.0		
Toluene	20	96	97	1.0		
Chlorobenzene	20	99	99	0.0		

H.Khosh Khoo, PhD.,

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	Chain of Custody (C					685 St	one Road		12		
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lient Name SOMA ENV. Eng						(707(				AX (707) 74	17-8082
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furnaryund Time Standard	·		<b>—</b>	-				Ref #	Crou	ndwar	er
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