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Alameda County Environmental Health



January 5, 2009

Ms. Molly Ong
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. Ong:

Enclosed is SOMA's "Semi-Annual Technical Report: Treatment System Discharge to EBMUD Sewer for Permit No. 504-27421 from July 2008 to December 2008" for the subject site. This report has been uploaded to the State's GeoTracker database.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 734-6400.

Sincerely,

Mansour Sepehr, PhD., PE Principal Hydrogeologist

Enclosure

cc: Mr. Abolghassem Razi w/enclosure Mr. Jerry Wickham w/o enclosure Alameda County Dept. of Env. Health



Semi-Annual Technical Report: Treatment System Discharge to EBMUD Sewer For Permit No. 5042742 1 July 2008 through December 2008

Tony's Express Auto Service 3609 International Boulevard Oakland, California

January 5, 2009

Project 2333

Prepared for Tony's Express Auto Service 3609 International Boulevard Oakland, California

Certification Statement

Chief Executive Officer		
Abolghassem Razi Name	Owner Title	
3609 International Boulevard Street Address	Oakland City	<u>94601</u> Zip
I certify under penalty of law that the prepared under my direction or superdesigned to assure that the qualified perinformation submitted. Based on my manage the system, or those person information, the information submitted is true, accurate, and complete. I am awas submitting false information, including the knowing violations. Signature	ervision in accord rsonnel properly go inquiry of the peons directly respons to the best of my re that there are s	dance with a system ather and evaluate the rson or persons who onsible for gathering knowledge and belief, significant penalties for
Date		

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Abolghassem Razi, property owner of 3609 International Boulevard, Oakland, California, to comply with East Bay Municipal Utility District requirements for discharge of extracted and treated groundwater resulting from cleanup of groundwater polluted by fuel leaks and other related wastes.

Mansour Sepehr, PhD, PE Principal Hydrogeologist



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1. INTRODUCTION

This report presents a record of wastewater discharged from the remediation system located at 3609 International Boulevard, Oakland, California into the East Bay Municipal Utility District (EBMUD) sewer system from July 2008 through December 2008. The treatment system is operated by SOMA Environmental Engineering, Inc. (SOMA). SOMA prepared this report on behalf of Mr. Abolghassem Razi, the property owner.

2. TREATMENT SYSTEM OPERATION

The treatment system began operating on December 6, 1999. Approximately 4,017,361 gallons of groundwater have been treated and discharged into the EBMUD sewer system (as of December 22, 2008).

SOMA has conducted regular maintenance and sampling of the treatment system since system startup. Influent samples have been collected from the 200-gallon holding tank. Samples have been collected from effluent of the 2,000-pound granular activated carbon unit (GAC-1) and the treatment system effluent (PSP#1).

Table 1 shows the total volume of effluent discharged into the EBMUD sewer system, laboratory analysis results of samples collected from effluent of the GAC-1 unit and the treatment system, and pertinent maintenance history.

Appendix A includes laboratory reports for treatment system samples collected from July 2008 through December 2008.

3. CONCLUSIONS AND RECOMMENDATIONS

From the last reporting date, June 13, 2008, to December 22, 2008, approximately 82,011 gallons of groundwater have been treated and discharged into the on-site sewer main:

- 1. The permit specifies an allowable discharge rate of approximately 1,900 gallons per day. During this reporting period, approximately 430 gallons/day were discharged to the site sewer main.
- 2. Therefore, based on the discharge flow rate and non-detectable system effluent concentration levels, the remedial system has remained in compliance with the EBMUD permit conditions.

TABLE 1

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

Table 1

Total Volume of Water Treated, Historical Operational Data,
and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent		Lab Results For PSP #1 1 and GAC-1 Samples TPH-g (ug/L) Benzene Toluene benzene Total Xylene										
Month	Date	Totalizer Reading (gallons)	MtBE ² (ug/L)	_	Benzene (ug/L)	Toluene (ug/L)	•	Total Xylenes (ug/L)						
			, , ,	2008	, (.	(· J ·)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(**3- /						
December	12/11/2008	4,013,030	<0.5	<50	<0.5	<0.5	<0.5	<0.5						
			<0.5	<50	<0.5	<0.5	<0.5	<0.5						
September	9/8/2008	3,973,338	<0.5	<50	<0.5	<0.5	<0.5	<0.5						
			<0.5	<50	<0.5	<0.5	<0.5	<0.5						
June	6/9/2008	3,927,778	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
			<0.5	<50	<0.5	<2.0	<0.5	<2.0						
Мау	5/21/2008			Poli	shing drum	changed		<u> </u>						
March	3/4/2008	3,839,508	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
			<0.5	<50	<0.5	<2.0	<0.5	<2.0						
2007														
October	10/31/2007	3,673,410	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
			<0.5	<50	<0.5	<2.0	<0.5	<2.0						
July	7/27/2007	3,643,880	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
			<0.5	<50	<0.5	<2.0	<0.5	<2.0						
Мау	5/17/2007	3,590,070	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
			<0.5	<50	<0.5	<2.0	<0.5	<2.0						
April	4/27/2007	3,561,230	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
			<0.5	<50	<0.5	<2.0	<0.5	<2.0						
	4/20/2007	3,546,800						ion well EX-1. wells at the site						
	1720/2001	0,010,000	7.0 0	_	X-1, West R	-		The sale at the sale						
March	3/16/2007	3,528,090	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0						
February	2/22/2007	3,510,560	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0						
	2/19/2007	3,508,300												
January	1/16/2007	3,488,140	<0.5	<50	<0.5	<2.0	<0.5	<2.0						
		, ,,	1.37	<50	1.68	<2.0	1.25	<2.0						

Table 1

Total Volume of Water Treated, Historical Operational Data,
and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent		Lab Res	ults For PS	SP #1 ¹ and	GAC-1 Sar	nples
Month	Date	Totalizer Reading (gallons)	MtBE ² (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
				2006				
December	12/22/2006	3,469,890	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
November	11/20/2006	3,455,980	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<2.0 <2.0
October	10/18/2006	3,447,850	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
September	9/27/2006	3,441,500	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5
August	8/14/2006	3,425,340	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
July	7/24/2006	3,414,800	<0.5 <0.5	<50 <50	<0.5 0.94	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
June	6/15/2006	3,387,940	Carbon Ch	ange-out of	2000 lb vess	sel and 55 g	allon polishin	g vessel
	6/7/2006	3,379,880	<0.5 2.89	<50 <50	<0.5 5.3	<2.0 <2.0	<0.5 1.24	<1.0 4.91
Мау	5/18/2006	3,350,260					newer 200 gal	
May	5/11/2006	3,337,750	<0.5 0.61	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
April	4/19/2006	3,268,110	<0.5 1.66	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0
	4/10/2006	3,236,770	Carbon Cha	ange-out of	 2000 lb vess	l sel and 55 g	allon polishin	g vessel

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Total Volume of Water Treated, Historical Operational Data,
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3609 International Boulevard, Oakland, California

		Effluent		Lab Res	ults For PS	SP #1 ¹ and	GAC-1 Sar	nples				
Month	Date	Totalizer Reading (gallons)	MtBE ² (ug/L)	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)				
				2006			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
March	3/10/2006	3,220,570	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
February	2/10/2006 3,186,590		<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
January	1/4/2006	3,122,610	<0.5 <0.5	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5				
				2005								
December	12/9/2005	3,081,750	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
November	11/14/2005	3,072,540	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
October	10/17/2005	3,065,260	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
September	9/29/2005	3,060,640	Repl				with newer 20 ishing vessel	000 lb vessel,				
	9/12/2005	3,055,676	<0.5 <0.5	<50 <50	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
August	8/8/2005	3,042,586	<0.5 0.51	<200 <200	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
July	7/7/2005	3,026,010	<0.5 <0.5	<200 <200	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
June	6/9/2005	3,000,386	<0.5 0.61	<200 <200	<0.5 <0.5	<2.0 <2.0	<0.5 <0.5	<1.0 <1.0				
Мау	5/9/2005	2,971,430	<0.5 <0.5	<200 <200	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0				
	5/4/2005	2,964,270	Carbon Change-out of 2000 lb vessel and 55 gallon polishing vessel totalizer changed at meter reading of 2,189,270									
April	4/4/2005	2,904,500	<0.5 <0.5	<200 <200	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0				

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Total Volume of Water Treated, Historical Operational Data,
and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent		Lab Res	ults For PS	P #1 1 and	GAC-1 Sar	mples
Month	Date	Totalizer Reading (gallons)	MtBE ²	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
				2005			<u> </u>	, , ,
March	3/21/2005	2,874,170	<0.5	<200	<0.5	<0.5	<0.5	<1.0
			<0.5	<200	<0.5	<0.5	<0.5	<1.0
February	2/14/2005	2,828,000			55 Gallon	Drum Chan	<u> </u>	
	2/7/2005	2,819,000	<5.0	<50	<5.0	<5.0	<5.0	<5.0
			<5.0	<50	<5.0	<5.0	<5.0	<5.0
January	1/19/2005	2,775,000	Carbo	on Change-	out of 2000 I	b vessel and	d 55 gallon po	l Dishing vessel I
	1/3/2005	2,730,480	3.6	<50	<0.5	<0.5	<0.5	<0.5
			3.8	<50	<0.5	<0.5	<0.5	<0.5
				2004				
December	12/6/2004	2,667,620	<0.5	<50	<0.5	<0.5	<0.5	<1.0
			<0.5	<50	<0.5	<0.5	<0.5	<1.0
November	11/8/2004	2,631,600	<0.5	<50	<0.5	<0.5	<0.5	<0.5
			<0.5	<50	<0.5	<0.5	<0.5	<0.5
October	10/13/2004	2,606,420	< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
			<2.0	<50	<0.5	<0.5	<0.5	<0.5
September	9/13/2004	2,594,390	< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
			< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
August	8/25/2004	2,586,010			55 Gallon	Drum Chan	ged Out	I
	8/9/2004	2,581,250	< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
			< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
July	7/13/2004	2,568,830	< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
			< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
	7/21/2004	2,564,710			l 55 Gallon	l Drum Chan	ged Out	
June	6/14/2004	2,549,470	< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
			< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
May	5/26/2004	2,530,000	Carbo	on Change-	out of 2000 I	b vessel and	d 55 gallon po	l olishing vessel
-	5/10/2004	2,488,760				•	leeting With E	
	5/17/2004	2,518,910					and restarted	the system
	5/5/2004	2,500,650	Carbon Cha	anged Out a	and 55 Gallo	n Drum Cha	nged Out	
	5/3/2004	2,497,350	< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
			< 2.0	< 50	<0.5	<0.5	<0.5	<0.5
April	4/15/2004	2,436,190	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0

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and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent		Lab Res	ults For PS	SP #1 ¹ and	GAC-1 Sar	nples
		Totalizer Reading	MtBE ²	TPH-g (ug/L)	Benzene	Toluene	Ethyl- benzene	Total Xylenes
Month	Date	(gallons)	(ug/L)		(ug/L)	(ug/L)	(ug/L)	(ug/L)
				2004				
March	3/17/2004	2,376,200	Carb	on Change-	out of 2000 I	b vessel an	d 55 gallon po	olishing vessel
February	2/24/2004	2,276,770	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
January	1/27/2004	2,165,220	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	1/13/2004	2,116,720	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			T	2003		T		
December	12/8/2003	2,092,330	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
Nevenber	44/47/2002	0.007.070	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
November	11/17/2003	2,087,670	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	11/3/2003	2,079,460	<5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0
	11/3/2003	2,079,400	< 5.0 < 5.0	< 50 < 50	< 5.0	< 5.0	< 5.0	< 5.0
October	10/13/2003	2,073,060	5.3	< 50	< 5.0	< 5.0	< 5.0	< 5.0
October	10/13/2003	2,073,000	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	10/1/2003	2,072,610						olishing vessel
September	9/15/2003	2,056,910	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
September	9/13/2003	2,050,910	6	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			U	< 50	< 5.0	< 5.0	< 5.0	₹ 3.0
	9/2/2003	2,040,040	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	0/2/2000	_,0 .0,0 .0	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
August	8/19/2003	2,021,040	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
August	0/19/2003	2,021,040	<5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			\\ 0.0	\ 00	< 0.0	₹ 0.0	V 3.0	V 3.0
July	7/21/2003	1,995,240	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
ou.,	.,,	.,000,2.0	40	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	7/9/2003	1,990,260	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			36	< 50	< 5.0	< 5.0	< 5.0	< 5.0
June	6/18/2003	1,978,560	Carb	on Change-	out of 2000 I	b vessel and	d 55 gallon po	olishing vessel
0 3.1.10	5 5. = 5.5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					g p	
	6/10/2003	1,972,780	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
		, ,	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
May	5/21/2003	1,951,830	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
	5/1/2003	1,918,270	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
April	4/11/2003	1,882,440	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0

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and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent	Lab Results For PSP #1 1 and GAC-1 Samples										
Month	Date	Totalizer Reading (gallons)	MtBE ² (ug/L)	TPH-g (ug/L)	Benzene	Toluene	Ethyl- benzene	Total Xylenes					
WIOTILIT	Date	(gallolis)	(ug/L)	2003	(ug/L)	(ug/L)	(ug/L)	(ug/L)					
March	3/19/2003	1,846,490	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
IVIAICII	3/19/2003	1,040,490	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
February	2/25/2003	1,804,960						carbon drum					
ĺ	2/19/2003	1,791,720	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
January	1/27/2003	1,733,500	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
	1/2/2003	1 675 600	. F.O	. 50	. F.O	< 5.0	. F. O	< 5.0					
	1/2/2003	1,675,600	< 5.0 < 5.0	< 50 < 50	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0	< 5.0 < 5.0					
			1 0.0	2002	7 0.0	7 0.0	7 0.0	V 0.0					
December	12/10/2002	1,672,870	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
2000	,,	.,0:=,0:0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
November	11/22/2002	1,668,650	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
			< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0					
	11/13/2002	1,664,780	replaced ga	asket on top	of 2000 lb (AC vessel	, slight leak w	as detected					
	11/7/2002	1,663,880	Carb	on Change-c	out of 2000 l	h vessel and	d 55 gallon no	olishing vessel					
	11/1/2002	1,000,000	Carb	on onango c	Jul 01 2000 II	D 700001 am	a oo gallon pe	onorming vector					
October	10/16/02 ³	1,661,590	< 310	2,000 Y Z	< 310	< 310							
			< 0.5			< 510	< 310	< 310					
September	9/19/2002			< 50	< 0.5	< 0.5	< 310 < 0.5	< 310 < 0.5					
	3/13/2002	1,653,600	< 5	< 50 < 50									
1	3/13/2002	1,653,600	< 5 < 5		< 0.5	< 0.5	< 0.5	< 0.5					
			< 5	< 50 < 50	< 0.5 < 5 < 5	< 0.5 < 5 < 5	< 0.5 < 5 < 5	< 0.5 < 5 < 5					
August	8/23/2002	1,653,600 1,641,650	< 5	< 50 < 50 < 50	< 0.5 < 5 < 5	< 0.5 < 5 < 5	< 0.5 < 5 < 5 < 0.5	< 0.5 < 5 < 5 < 0.5					
August			< 5	< 50 < 50	< 0.5 < 5 < 5	< 0.5 < 5 < 5	< 0.5 < 5 < 5	< 0.5 < 5 < 5					
_	8/23/2002	1,641,650	< 5 1 < 0.5	< 50 < 50 < 50 < 50	< 0.5 < 5 < 5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5	< 0.5 < 5 < 5 < 0.5 < 0.5					
August July			< 5	< 50 < 50 < 50	< 0.5 < 5 < 5	< 0.5 < 5 < 5	< 0.5 < 5 < 5 < 0.5	< 0.5 < 5 < 5 < 0.5					
July	8/23/2002	1,641,650 1,632,834	< 5 1 < 0.5 <5.0 < 5.0	< 50 < 50 < 50 < 50 < 50 < 50	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0					
_	8/23/2002	1,641,650	< 5 1 < 0.5	< 50 < 50 < 50 < 50 < 50	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0					
July	8/23/2002	1,641,650 1,632,834	< 5 1 < 0.5 <5.0 < 5.0 1.7	< 50 < 50 < 50 < 50 < 50 < 50 < 50	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0					
July	8/23/2002	1,641,650 1,632,834	< 5 1 < 0.5 <5.0 < 5.0 < 5.0 < 5.5 < 0.5	< 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5					
July	8/23/2002 7/23/2002 6/24/2002 5/30/2002	1,641,650 1,632,834 1,610,050 1,571,630	<5 1 <0.5 <5.0 <5.0 < 5.0 < 0.5 < 0.5	< 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0 < 5.0 < 0.5 < 0.5 < 0.5	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5					
July	8/23/2002 7/23/2002 6/24/2002 5/30/2002 5/20/2002	1,641,650 1,632,834 1,610,050 1,571,630 1,548,000	<5 1 <0.5 <5.0 <5.0 < 5.0 < 0.5 < 0.5	< 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < nstalled com	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 c 0.5 c 0.5 c onessor, inserting the control of the c	< 0.5 < 5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0 < 0.5 < 0.5 < 0.5 < 0.5 stalled another	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5					
July	8/23/2002 7/23/2002 6/24/2002 5/30/2002 5/20/2002 5/8/2002	1,641,650 1,632,834 1,610,050 1,571,630 1,548,000 1,538,850	<5 1 <0.5 <5.0 <5.0 < 5.0 < 0.5 < 0.5	< 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 oved newly in	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < nstalled cominstalled	< 0.5 < 5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0 < 5.0 < 0.5 < 0.5 npressor, instance compares	< 0.5 < 5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0 < 0.5 < 0.5 < 0.5 < 0.5 stalled anotheressor	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5					
July June May	8/23/2002 7/23/2002 6/24/2002 5/30/2002 5/20/2002 5/8/2002 5/1/2002	1,641,650 1,632,834 1,610,050 1,571,630 1,548,000 1,538,850 1,529,650	< 5 1 < 0.5 <5.0 < 5.0 < 5.0 1.7 < 0.5 < 0.5 < needed	< 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 oved newly in	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < nstalled cominstalled constalled new	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 npressor, instance compressor, instance c	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 stalled another ressor AC Vessel	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 r compressor					
July	8/23/2002 7/23/2002 6/24/2002 5/30/2002 5/20/2002 5/8/2002	1,641,650 1,632,834 1,610,050 1,571,630 1,548,000 1,538,850	<5 1 <0.5 <5.0 <5.0 < 5.0 < 0.5 < 0.5	< 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 < 50 oved newly in	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < nstalled cominstalled	< 0.5 < 5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0 < 5.0 < 0.5 < 0.5 npressor, instance company.	< 0.5 < 5 < 0.5 < 0.5 < 5.0 < 5.0 < 5.0 < 0.5 < 0.5 < 0.5 < 0.5 stalled anotheressor	< 0.5 < 5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5					

Table 1

Total Volume of Water Treated, Historical Operational Data,
and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent									
Month	Date	Totalizer Reading (gallons)	1				benzene	Total Xylenes (ug/L)			
III O I I I I	24.0	(3)	(4.9/2)	2002	(ug/L)	(ug/L)	(ug/L)	(ug/L)			
March	3/25/2002 3/18/2002 3/14/2002	1,478,420 NR 1,478,330	replaced pi	carbon chan	ge-out on tr pressor g up pressur	·	stem				
February	2/27/2002	1,449,830	< 0.5	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5			
January	1/22/2002	1,381,370	< 2.0 < 2.0	< 50 < 50	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5			
				2001							
December	12/12/2001	1,311,340	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND			
November	11/2/2001	1,272,660	ND 0.6	ND ND	ND ND	ND ND	ND ND	ND ND			
September	9/28/2001	NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND			
August	8/22/2001	1,243,100	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND			
July	7/26/2001	1,227,270	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND			
	7/11/2001	1,226,730	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
June	6/29/2001	1,224,600	NA ND	NA ND	NA ND	NA ND	NA ND	NA ND			
	6/26/2001	NR	IND	ND	1	I new compi		ND			
	6/16/2001	1,216,580	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
	6/7/2001	1,216,580	NA NA				ired compress NA NA				
Мау	5/30/2001	1,205,198	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
	5/23/2001	1,194,390	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
	5/17/2001	1,182,360	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND			
	5/10/2001	1,166,850	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
	5/5/2001	1,151,600	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
April	4/28/2001	1,135,690	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
	4/21/2001	1,113,570	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			
	4/11/2001	1,082,700	NA ND	ND ND	ND ND	ND ND	ND ND	ND ND			
	4/6/2001	1,065,540	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			

Table 1

Total Volume of Water Treated, Historical Operational Data,
and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples
3609 International Boulevard, Oakland, California

		Effluent		Lab Res	ults For PS	SP #1 ¹ and	GAC-1 San	nples
	5.4	Totalizer Reading	MtBE ²	TPH-g (ug/L)	Benzene	Toluene	Ethyl- benzene	Total Xylenes
Month	Date	(gallons)	(ug/L)	2004	(ug/L)	(ug/L)	(ug/L)	(ug/L)
				2001				
March	3/29/2001	1,036,330	NA	NA	NA	NA	NA	NA
			NA	NA	NA	NA	NA	NA
	3/21/2001	1 026 070	NA	NA	System NA	n was re-sta NA	ntea NA	NA
	3/21/2001	1,036,070	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
			INA	INA	1	ced on com		INA
	3/17/2001	1,035,100	NA	NA	NA NA	NA	NA	NA
	3/11/2001	1,000,100	NA	NA	NA	NA	NA	NA
			14/4	14/4	14/4	INA	IVA	14/4
	3/13/2001	1,032,500	ND	ND	ND	ND	ND	ND
	5, 15, 255	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NA	NA	NA	NA	NA	NA
	3/2/2001	996,520	NA	NA	NA	NA	NA	NA
		,-	NA	NA	NA	NA	NA	NA
	3/1/2001	NR			1		on change-ou	
February	2/28/2001	NR					washed algae	e from
					000 lb GAC			
	2/10/2001	975,490			maintenance			
January	1/29/2001	957,880	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
				2000	T	T		
December	12/5/2000	883,000	ND	ND	ND	ND	ND	ND
			ND	ND	ND	ND	ND	ND
November	11/24/2000	NR	ND	ND	ND	ND	ND	ND
November	11/24/2000	INIX	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	11/1/2000	842,000	ND	ND ND	ND ND	ND	ND ND	ND
	1 1/ 1/2000	042,000	ND	ND	ND	ND	ND ND	ND
October	10/1/2000	809,000	ND	ND	ND	ND	ND	ND
October	10/1/2000	009,000	ND	ND	ND	ND	ND	ND
August	8/27/2000	781,000	ND	ND	ND	ND	ND	ND
	8/24/2000	778,000			1		ding of 775,0	
July	7/26/2000	726,000	ND	ND	ND	ND	ND	ND
	7/19/2000	718,000	ND	ND	ND	ND	ND	ND
	7/13/2000	712,000	ND	ND	ND	ND	ND	ND
	7/7/2000	706,000	ND	ND	ND	ND	ND	ND

Table 1

Total Volume of Water Treated, Historical Operational Data, and Laboratory Analytical Results for PSP #1 (Effluent) and GAC-1 Samples 3609 International Boulevard, Oakland, California

		Effluent	No											
		Totalizer Reading		_			benzene							
Month	Date	(gallons)	(ug/L)	2222	(ug/L)	(ug/L)	(ug/L)	(ug/L)						
					1									
June	6/29/2000	700,000												
	6/21/2000	682,220												
	6/16/2000	669,720												
	6/10/2000	651,200												
May	5/31/2000	629,000												
	5/23/2000	603,700	ND			ND								
	5/18/2000	570,000		ND										
	5/10/2000	530,400												
April	4/30/2000	488,300												
	4/18/2000	•		1		ND	ND	0.51						
			ystem shut c	lown until Ap		1	•	1						
	4/10/2000	440,200	ND					ND						
	4/4/2000	390,100	ND		I .									
	4/2/2000	NR		perfo	ormed a carb	oon change	out on GAC-							
March	3/31/2000	NR	repla	aced GAC-2	with a speci	ial GAC des	igned for rem	oval of MtBE						
	3/24/2000	388,000	ND	ND	ND	ND	ND	ND						
	3/17/2000	357,100	ND			ND								
	3/10/2000	329,000	ND	ND	ND	ND	ND	ND						
	3/3/2000	300,000		ansfer overh	eated, repai	ired pump, r	estarted syste	em 3/6/00						
February	2/25/2000	274,000	ND	ND	ND	ND	ND	ND						
	2/18/2000	233,000	ND	ND	ND	ND	ND	ND						
	2/11/2000	190,000	ND	ND	ND	ND	ND	ND						
	2/4/2000	160,800	ND	ND	ND	ND	ND	ND						
January	1/28/2000	130,600	ND	ND	ND	ND	ND	ND						
	1/21/2000	103,435	ND	ND	ND	ND	ND	ND						
	1/17/2000	NR			ith 2,000 lb (
			second pol	ishing GAC	was replace	d with 55 ga	Illon GAC unit							
	1/14/2000	83,500	185	ND	ND	ND	ND	ND						
				1999										
December	12/23/1999	51,680	1486	NA	ND	ND	ND	ND						
			ND	NA	ND	ND	ND	ND						
	12/16/1999	30,450	963	NA	ND	ND ND		ND						
			ND	NA	ND	ND	ND	ND						
	12/9/1999	9,000	230	ND	ND	ND	ND	ND						
	•	Pu	mping bega	n on Decem	ber 6, 1999	•	· 	· 						
Notes:				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·								

Notes:

- 1 The designator "Effluent" used on sampling and laboratory documents refers to samples collected from PSP #1.
- MTBE was analyzed using EPA Method 8260B, prior to the September 2003. After September 2003, MtBE was only analyzed by EPA Method 8021B.
- Lab data as shown for Oct. 2002 is erroneous data. During lab analysis a high detection of 2-Butanone was detected in only the effluent sample. The influent sample for 2-Butanone was at only 20 ppb. This caused a high dilution factor causing a high non-detectable value. The high TPH-g value was misrepresentative due to the Y and Z flags.
- ND, <: Not Detected above laboratory reporting limits
- NA: Not Analyzed
- NR: Not recorded. Totalizer reading not recorded.
- Y: Sample exhibits fuel pattern which does not resemble standard
- Z: Sample exhibits unknown single peak or peaks

APPENDIX A

Laboratory Results and Chain of Custody Forms for the Treatment System

Analysis

Curtis & Tompkins, Ltd.

Analytical Laboratory Since 1878 2323 Fifth Street

Ana	2323 Fifth Street Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax					58 78 6AS 8		K-1	Wal	<u> </u>	6€											
Project	No: 2333			Report To: Joyce Bobek											:							
Project	Name: 3609 International Blvd	I. Oakland C	A	Comp	any	': <u> </u>	SOM	A Environ	mer	ıtal				8260B		:						
Turnar	ound Time: Standard			Telep	hon	e:	925-	734-6400														
				Fax:		-	925-	734-6401						, BTEX, MtBE								
	y - 10 - 12 - 12 - 12 - 12 - 12 - 12 - 12			M	atrix	<u> </u>		Pr	ese	rvati	ve		Ä									
Lab No.	Sample ID.	Sampli	ng Date T	ime	Soil	Waste	Co	# of ntainers	된	H2SO₄	HN03	빙		TPHg, B								
1	PSP-1	9/8/08	14	30		*	4	VOAs	*			*		*								
2	GAC-1	1	142	5	Ш	*	4	VOAs	*			*		*				<u> </u>				
3	INFLUENT	Ι Ψ	142	0	\perp	*	4	VOAs	*	┞		*		*		ļ		<u> </u>				
		<u> </u>			+	+	+		╂		-						_	₩		-	$\vdash\vdash\vdash$	
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Notes:	EDF OUTPUT REQUIRED				RE	ELIN	QUISI	IED BY:	<u> </u>					REC	₽øy€	D BY	<u>'</u> :	<u> </u>		<u> </u>		
					_	/-	5	2/	2/	8/6	o y ∕	54 E/TI	9 ME	\neq	T	10		91	9/8	7	(OV) DATE	ک TIME/
				(<u>></u> 0	uka	Bob	ele	9	1916 DAT	28 E/TI	10: ME	50	<i>y</i>						DATE	/TIME
				'	U	•			[DAT	E/TI	ME								DATE	E/TIME	

COOLER RECEIPT CHECKLIST

Login # $\frac{205878}{}$ Date Received $9-9-08$ Number of cool	ers
Client SOMA Project 3409 Internationa	
Date Opened 9-9-08 By (print) F Nichols (sign) Date Logged in V By (print) (sign)	
Did cooler come with a shipping slip (airbill, etc)? Shipping info	YES NO
2A. Were custody seals present? YES (circle) on cooler on samples How many Name Date 2B. Were custody seals intact upon arrival? YES 3. Were custody papers dry and intact when received? 4. Were custody papers filled out properly (ink, signed, etc)? 5. Is the project identifiable from custody papers? (If so fill out top of form). 6. Indicate the packing in cooler: (if other, describe)	YES NO
Bubble Wrap Foam blocks Bags None Cloth material Cardboard Styrofoam Paper to 7. Temperature documentation:	owels
Type of ice used: Wet Blue/Gel None Temp(°C)_	
Samples Received on ice & cold without a temperature blank	
Samples received on ice directly from the field. Cooling process had begu	n
8. Were Method 5035 sampling containers present?	YES NO
10. Are samples in the appropriate containers for indicated tests?	VEG NO
11. Are sample labels present, in good condition and complete? 12. Do the sample labels agree with custody papers?	>=>
13. Was sufficient amount of sample sent for tests requested?	YES NO
14. Are the samples appropriately preserved?) NO MA
13. Are bubbles > omm absent in V()A samples?	3.50 3.5/
10. Was the cheft contacted concerning this sample delivery?	VEC NO
If YES, Who was called?ByDate:	
COMMENTS	



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

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

Laboratory Job Number 205878 ANALYTICAL REPORT

SOMA Environmental Engineering Inc. Project : 2333

6620 Owens Dr. Location: 3609 International Blvd

Pleasanton, CA 94588 Level : II

 Sample ID
 Lab ID

 PSP-1
 205878-001

 GAC-1
 205878-002

 INFLUENT
 205878-003

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. This report may be reproduced only in its entirety.

Signature:

Project Manager

Date: <u>09/22/2008</u>

Date: <u>09/22/2008</u>

Signature:

Senior Program Manager

NELAP # 01107CA

Page 1 of



CASE NARRATIVE

Laboratory number: 205878

Client: SOMA Environmental Engineering Inc.

Project: 2333

Location: 3609 International Blvd

Request Date: 09/09/08 Samples Received: 09/09/08

This hardcopy data package contains sample and QC results for three water samples, requested for the above referenced project on 09/09/08. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.



Gasoline by GC/MS 3609 International Blvd EPA 5030B Lab #: 205878 Location: Client: Prep: SOMA Environmental Engineering Inc. Project#: 2333 Analysis: EPA 8260B 09/08/08 09/09/08 Matrix: Water Sampled: ug/L 1.000 Units: Received: Diln Fac:

Field ID: PSP-1 Batch#: 142316 Type: SAMPLE Analyzed: 09/10/08

Lab ID: 205878-001

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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	
Dibromofluoromethane	102	80-125	
1,2-Dichloroethane-d4	111	80-137	
Toluene-d8	99	80-120	
Bromofluorobenzene	114	80-122	

Field ID: GAC-1 Batch#: 142316 09/10/08 SAMPLE Analyzed: Type:

Lab ID: 205878-002

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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	
Dibromofluoromethane	100	80-125	
1,2-Dichloroethane-d4	109	80-137	
Toluene-d8	101	80-120	
Bromofluorobenzene	116	80-122	

ND= Not Detected RL= Reporting Limit

Page 1 of 3



Gasoline by GC/MS 3609 International Blvd EPA 5030B Lab #: 205878 Location: Client: SOMA Environmental Engineering Inc. Prep: Project#: 2333 Analysis: Sampled: EPA 8260B 09/08/08 Water Matrix: Received: 09/09/08 Units: ug/L Diln Fac: 1.000

Field ID: INFLUENT Batch#: 142369 Type: SAMPLE Analyzed: 09/11/08

Lab ID: 205878-003

Analyte	Result	RL	
Gasoline C7-C12	300	50	
MTBE	17	0.50	
Benzene	13	0.50	
Toluene	7.3	0.50	
Ethylbenzene	4.9	0.50	
m,p-Xylenes	25	0.50	
o-Xylene	9.9	0.50	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	103	80-122

Type: BLANK Batch#: 142316 Lab ID: QC459547 Analyzed: 09/10/08

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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	
Dibromofluoromethane	98	80-125	
1,2-Dichloroethane-d4	101	80-137	
Toluene-d8	97	80-120	
Bromofluorobenzene	112	80-122	

ND= Not Detected RL= Reporting Limit

Page 2 of 3



	Gasoline	by GC/MS	
Lab #: Client: Project#:	205878 SOMA Environmental Engineering Inc. 2333	Location: Prep: Analysis:	3609 International Blvd EPA 5030B EPA 8260B
Matrix: Units: Diln Fac:	Water ug/L 1.000	Sampled: Received:	09/08/08 09/09/08

Batch#: 142369 Analyzed: 09/11/08 Type: BLANK Lab ID: QC459753

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
Benzene	ND	0.50	
Toluene	ND	0.50	
Ethylbenzene	ND	0.50	
	ND	0.50	
m,p-Xylenes o-Xylene	ND	0.50	

Surrogate	%REC	Limits	
Dibromofluoromethane	96	80-125	
1,2-Dichloroethane-d4	104	80-137	
Toluene-d8	100	80-120	
Bromofluorobenzene	112	80-122	



	Gasoline	by GC/MS	
Lab #:	205878	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142316
Units:	ug/L	Analyzed:	09/10/08
Diln Fac:	1.000		

Type: BS Lab ID: QC459548

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	25.49	102	70-125
Benzene	25.00	24.18	97	80-120
Toluene	25.00	24.60	98	80-120
Ethylbenzene	25.00	25.76	103	80-122
m,p-Xylenes	50.00	51.96	104	80-126
o-Xylene	25.00	25.41	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-122

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	25.24	101	70-125	1	20
Benzene	25.00	23.18	93	80-120	4	20
Toluene	25.00	24.27	97	80-120	1	20
Ethylbenzene	25.00	24.96	100	80-122	3	20
m,p-Xylenes	50.00	51.08	102	80-126	2	20
o-Xylene	25.00	24.76	99	80-120	3	20

Surrogate	%REC	Limits	
Dibromofluoromethane	100	80-125	
1,2-Dichloroethane-d4	102	80-137	
Toluene-d8	100	80-120	
Bromofluorobenzene	104	80-122	



	Gasoline	by GC/MS	
Lab #:	205878	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142316
Units:	ug/L	Analyzed:	09/10/08
Diln Fac:	1.000		

Type: BS Lab ID: QC459566

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,007	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-122

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	986.7	99	80-120	2	20

Surrogate	%REC	Limits	
Dibromofluoromethane	96	80-125	
1,2-Dichloroethane-d4	101	80-137	
Toluene-d8	98	80-120	
Bromofluorobenzene	101	80-122	



5.0

Batch QC Report

	Gasoline	by GC/MS	
Lab #:	205878	Location:	3609 International Blvd
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2333	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142369
Units:	ug/L	Analyzed:	09/11/08
Diln Fac:	1.000		

Type: BS Lab ID: QC459754

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	25.69	103	70-125
Benzene	25.00	25.62	102	80-120
Toluene	25.00	25.84	103	80-120
Ethylbenzene	25.00	26.38	106	80-122
m,p-Xylenes	50.00	52.74	105	80-126
o-Xylene	25.00	26.06	104	80-120

Surrogate	%REC	Limits	
Dibromofluoromethane	100	80-125	
1,2-Dichloroethane-d4	103	80-137	
Toluene-d8	101	80-120	
Bromofluorobenzene	104	80-122	

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	25.66	103	70-125	0	20
Benzene	25.00	26.81	107	80-120	5	20
Toluene	25.00	26.12	104	80-120	1	20
Ethylbenzene	25.00	25.72	103	80-122	3	20
m,p-Xylenes	50.00	52.13	104	80-126	1	20
o-Xylene	25.00	25.43	102	80-120	2	20

Surrogate	%REC	Limits	
Dibromofluoromethane	101	80-125	
1,2-Dichloroethane-d4	108	80-137	
Toluene-d8	102	80-120	
Bromofluorobenzene	104	80-122	



Gasoline by GC/MS								
Lab #:	205878	Location:	3609 International Blvd					
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B					
Project#:	2333	Analysis:	EPA 8260B					
Matrix:	Water	Batch#:	142369					
Units:	ug/L	Analyzed:	09/11/08					
Diln Fac:	1.000							

Type: BS Lab ID: QC459761

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,200	1,090	91	80-120

Surrogate %	%REC	Limits
Dibromofluoromethane 98	8	80-125
1,2-Dichloroethane-d4 10	01	80-137
Toluene-d8 99	9	80-120
Bromofluorobenzene 10	04	80-122

Type: BSD Lab ID: QC459762

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,200	1,079	90	80-120	1	20

Surrogate	%REC	Limits	
Dibromofluoromethane	98	80-125	
1,2-Dichloroethane-d4	100	80-137	
Toluene-d8	98	80-120	
Bromofluorobenzene	104	80-122	

e 1 of 1

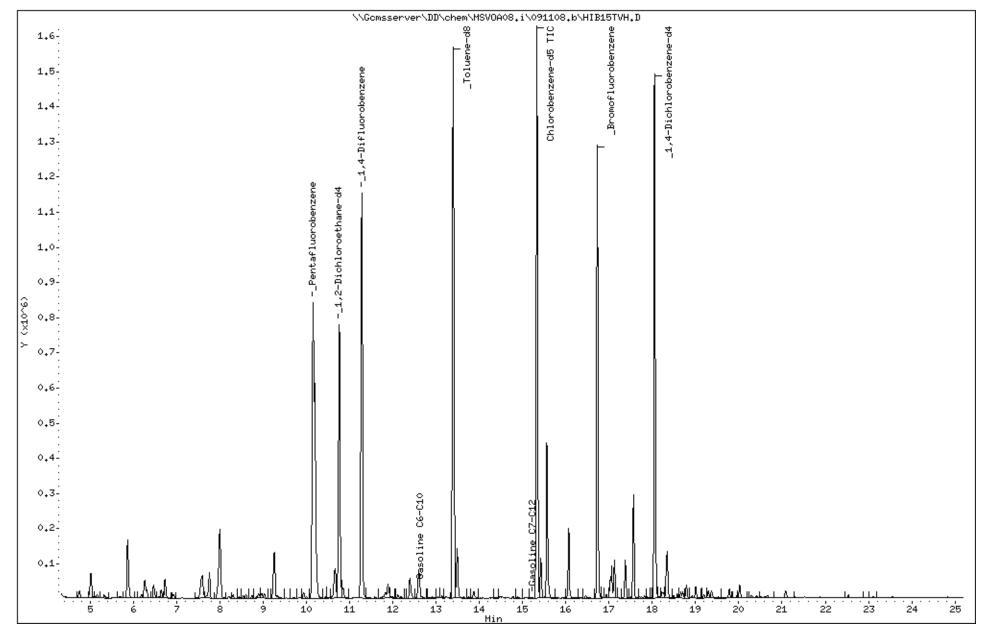
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Date : 11-SEP-2008 17:30 Client ID: DYNA P&T Sample Info: S,205878-003

Instrument: MSVOA08.i

Operator: voc

Column phase: Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\091008.b\HIA06TVH.D

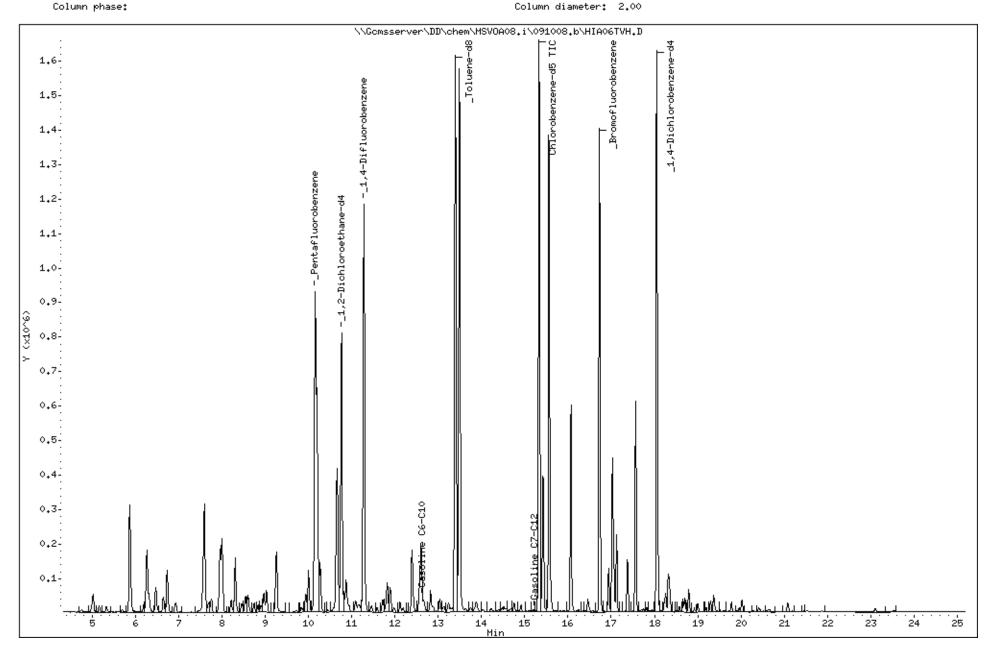
Date : 10-SEP-2008 12:59 Client ID: DYNA P&T

Sample Info: CCV/BS,QC459566,142316,S9460,10000X

Operator: voc

Column diameter: 2.00

Instrument: MSVOA08.i



Analysis

Curtis & Tompkins, Ltd.

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

Project No: 2333

Project Name: 3609 International Blvd. Oakland CA

C&T LOGIN # 208524

Sampler: LUIS ELAZEGUI

Report To:

Joyce Bobek

Company:

SOMA Environmental

Turnar	ound Time: Standard		Telep	hone	е:	925-734-6400) H								
			Fax:			925-734-6401					BTEX, MtBE								
				Ma	atrix	<u>-</u>	Pr	ese	rvat	ive	🍎								
Lab No.	Sample ID.	Sampling Date	e Time	Soil	Water Waste	# of Containers	HCL	H2SO ₄	HN03	ICE	TPHg, B								
1	PSP-1	121108	1/20		*	4 VOAs	*			*	*								
2	GAC-1		1135	Ш	*	4 VOAs	*			*	*								
3	INFLUENT	12/11/08	1155	\perp	*	4 VOAs	*	<u> </u>		*	*								
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COOLER RECEIPT CHECKLIST



Login # 208524 Date Received 12/11/06 Num Client SOMIS ENV. Project 3609 INTERNAT	ber of coolers
	TOPAL BLVD. OBKLEND, CA
Date Opened 12/11/08 By (print) M. VILLER (sign) Date Logged in By (print) (sign)	may July
Did cooler come with a shipping slip (airbill, etc) Shipping info	YES YO
How many Name Da	
2B. Were custody seals intact upon arrival? 3. Were custody papers dry and intact when received? 4. Were custody papers filled out properly (ink, signed, etc)? 5. Is the project identifiable from custody papers? (If so fill out top of for 6. Indicate the packing in cooler: (if other, describe)	YES NO NOTA YES NO TIMES NO TIMES NO
☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ Cloth material ☐ Cardboard ☐ Styrofoam 7. Temperature documentation:	☐ None ☐ Paper towels
Type of ice used: Wet Blue/Gel None Tem	p(°C)
Samples Received on ice & cold without a temperature blank	
☐ Samples received on ice directly from the field. Cooling process	ss had begun
8. Were Method 5035 sampling containers present? If YES, what time were they transferred to freezer?	VES XIO
9. Did all bottles arrive unbroken/unopened?	XEX NO
10. Are samples in the appropriate containers for indicated tests?	ABS NO
11. Are sample labels present, in good condition and complete?	XES NO
12. Do the sample labels agree with custody papers?	
13. Was sufficient amount of sample sent for tests requested?	YES NO
15. Are bubbles > 6mm absent in VOA samples?	YES NO N/A
16. Was the client contacted concerning this sample delivery?	YES NO N/A
If YES, Who was called?By	YES NO
COMMENTS	

SOP Volume:

Client Services

Section:

1.1.2 1 of 1

Page:

Rev. 6 Number 1 of 3 Effective: 23 July 2008

Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc



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

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

Laboratory Job Number 208524 ANALYTICAL REPORT

SOMA Environmental Engineering Inc.

Project : 2333

6620 Owens Dr.

Location: 3609 International Blvd. Oakland CA

Pleasanton, CA 94588

Level : II

Sample ID	<u>Lab ID</u>
PSP-1	208524-001
GAC-1	208524-002
INFLUENT	208524-003

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. This report may be reproduced only in its entirety.

Signature:

Project Manager

Date: <u>12/23/2008</u>

Date: <u>12/23/2008</u>

Signature:

Senior Program Manager

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: 208524

Client: SOMA Environmental Engineering Inc.

Project: 2333

Location: 3609 International Blvd. Oakland CA

Request Date: 12/11/08 Samples Received: 12/11/08

This data package contains sample and QC results for three water samples, requested for the above referenced project on 12/11/08. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

High surrogate recoveries were observed for bromofluorobenzene in GAC-1 (lab # 208524-002), INFLUENT (lab # 208524-003), and the method blank for batch 146136. No other analytical problems were encountered.



Gasoline by GC/MS

Lab #: 208524 Location: 3609 International Blvd. Oakland CA

Client: Prep: EPA 5030B SOMA Environmental Engineering Inc. Project#: 2333 Analysis: EPA 8260B

Sampled: 12/11/08 12/11/08 Matrix: Water Units: ug/L Received: 1.000 Diln Fac:

Field ID: PSP-1 Batch#: 146064 Type: SAMPLE Analyzed: 12/16/08

Lab ID: 208524-001

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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	
Dibromofluoromethane	93	80-125	
1,2-Dichloroethane-d4	94	80-137	
Toluene-d8	99	80-120	
Bromofluorobenzene	120	80-122	

Field ID: GAC-1 146064 Batch#: SAMPLE Analyzed: Type: 12/16/08

Lab ID: 208524-002

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	123 *	80-122

RL= Reporting Limit

Page 1 of 3



Gasoline by GC/MS Lab #: 208524 Location: 3609 International Blvd. Oakland CA Client: SOMA Environmental Engineering Inc. Prep: EPA 5030B Analysis: EPA 8260B Sampled: 12 Project#: 2333 Water Matrix: 12/11/08 Received: Units: ug/L 12/11/08 Diln Fac: 1.000

INFLUENT Field ID: Batch#: 146136 SAMPLE 12/17/08 Type: Analyzed: Lab ID: 208524-003

Result RLAnalyte Gasoline C7-C12 59 50 0.50 MTBE 20 1.5 Benzene Toluene ND 0.50 Ethylbenzene ND 0.50 m,p-Xylenes o-Xylene ND 0.50 0.50

Surrogate	%REC	Limits	
Dibromofluoromethane	93	80-125	
1,2-Dichloroethane-d4	93	80-137	
Toluene-d8	101	80-120	
Bromofluorobenzene	126 *	80-122	

BLANK Batch#: 146064 Type: Lab ID: QC475696 12/16/08 Analyzed:

ND

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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	
Dibromofluoromethane	90	80-125	
1,2-Dichloroethane-d4	90	80-137	
Toluene-d8	102	80-120	
Bromofluorobenzene	121	80-122	

ND= Not Detected

RL= Reporting Limit

Page 2 of 3

^{*=} Value outside of QC limits; see narrative



Gasoline by GC/MS Location: 3609 International Blvd. Oakland CA Prep: EPA 5030B Lab #: 208524 Client: SOMA Environmental Engineering Inc. Analysis: EPA 8260B Sampled: 12 Project#: 2333 Water 12/11/08 Units: Received: 12/11/08 ug/L Diln Fac: 1.000

Type: BLANK Batch#: 146136 Lab ID: QC476024 Analyzed: 12/17/08

Analyte	Result	RL	
Gasoline C7-C12	ND	50	
MTBE	ND	0.50	
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	
Dibromofluoromethane	93	80-125	
1,2-Dichloroethane-d4	92	80-137	
Toluene-d8	102	80-120	
Bromofluorobenzene	130 *	80-122	



Gasoline by GC/MS							
Lab #:	208524	Location: 3609 International Blvd. Oakland CA					
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B					
Project#:	2333	Analysis: EPA 8260B					
Matrix:	Water	Batch#: 146064					
Units:	ug/L	Analyzed: 12/16/08					
Diln Fac:	1.000						

Type: BS Lab ID: QC475697

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.04	90	70-125
Benzene	20.00	22.21	111	80-120
Toluene	20.00	20.72	104	80-120
Ethylbenzene	20.00	19.95	100	80-122
m,p-Xylenes	40.00	38.06	95	80-126
o-Xylene	20.00	19.55	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.57	98	70-125	8	20
Benzene	20.00	23.65	118	80-120	6	20
Toluene	20.00	21.98	110	80-120	6	20
Ethylbenzene	20.00	20.69	103	80-122	4	20
m,p-Xylenes	40.00	40.19	100	80-126	5	20
o-Xylene	20.00	20.04	100	80-120	2	20

Surrogate	%REC	Limits	
Dibromofluoromethane	93	30-125	
1,2-Dichloroethane-d4	88	30-137	
Toluene-d8	101	30-120	
Bromofluorobenzene	111	30-122	



	Gasoline	by GC/MS
Lab #:	208524	Location: 3609 International Blvd. Oakland CA
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2333	Analysis: EPA 8260B
Matrix:	Water	Batch#: 146064
Units:	ug/L	Analyzed: 12/16/08
Diln Fac:	1.000	

Type: BS Lab ID: QC475699

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	650.0	596.2	92	80-120

Surrogate %I	REC	Limits
Dibromofluoromethane 92		80-125
1,2-Dichloroethane-d4 89)	80-137
Toluene-d8 103	1	80-120
Bromofluorobenzene 115	.5	80-122

Type: BSD Lab ID: QC475700

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	650.0	588.9	91	80-120	1	20

Surrogate	%REC	Limits	
Dibromofluoromethane	91	80-125	
1,2-Dichloroethane-d4	89	80-137	
Toluene-d8	99	80-120	
Bromofluorobenzene	115	80-122	

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	Gasoline	by GC/MS
Lab #:	208524	Location: 3609 International Blvd. Oakland CA
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2333	Analysis: EPA 8260B
Matrix:	Water	Batch#: 146136
Units:	ug/L	Analyzed: 12/17/08
Diln Fac:	1.000	

Type: BS Lab ID: QC476025

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.11	91	70-125
Benzene	20.00	21.35	107	80-120
Toluene	20.00	19.13	96	80-120
Ethylbenzene	20.00	19.01	95	80-122
m,p-Xylenes	40.00	36.17	90	80-126
o-Xylene	20.00	17.87	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	115	80-122

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	18.24	91	70-125	1	20
Benzene	20.00	21.75	109	80-120	2	20
Toluene	20.00	19.93	100	80-120	4	20
Ethylbenzene	20.00	18.71	94	80-122	2	20
m,p-Xylenes	40.00	36.62	92	80-126	1	20
o-Xylene	20.00	18.16	91	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	110	80-122



	Gasoline	by GC/MS
Lab #:	208524	Location: 3609 International Blvd. Oakland CA
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2333	Analysis: EPA 8260B
Matrix:	Water	Batch#: 146136
Units:	ug/L	Analyzed: 12/17/08
Diln Fac:	1.000	

Type: BS Lab ID: QC476027

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	700.0	681.6	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	117	80-122

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	700.0	659.4	94	80-120	3	20

	^	
Surrogate	%REC	Limits
Dibromofluoromethane 93	3	80-125
1,2-Dichloroethane-d4 85	5	80-137
Toluene-d8	01	80-120
Bromofluorobenzene 12	20	80-122

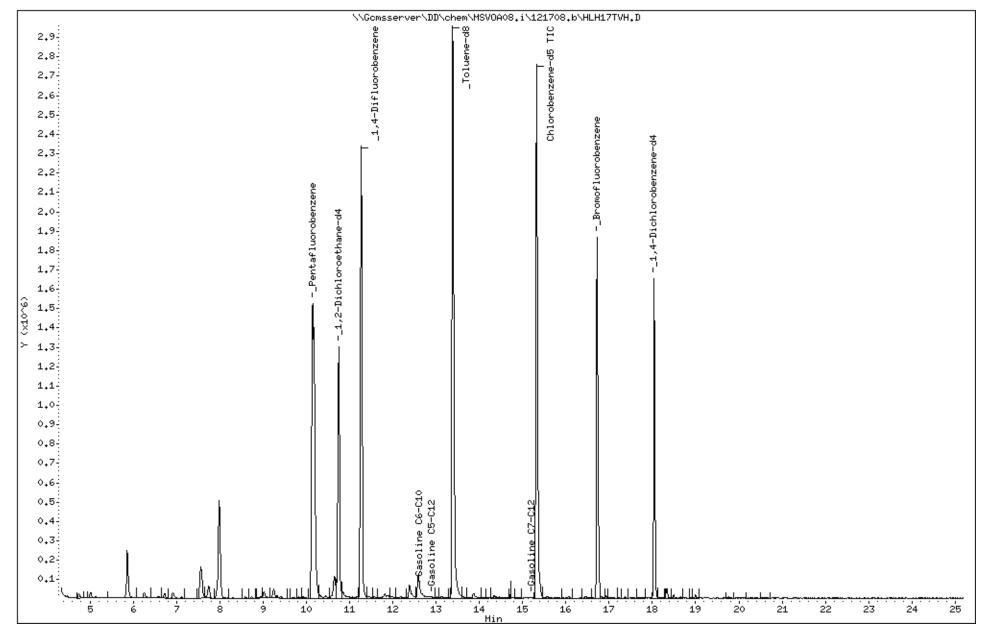
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Date : 17-DEC-2008 20:44 Client ID: DYNA P&T Sample Info: S,208524-003

Instrument: MSVOA08.i

Operator: voc

Column phase: Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\121608.b\HLG06TVH.D

Date : 16-DEC-2008 13:45 Client ID: DYNA P&T

Sample Info: CCV/BS,QC475699,146064

Instrument: MSVOA08.i

Operator: voc

Column phase: Column diameter: 2.00

