

C A M B R I A

20223

NEW  
RO

June 28, 2004

Mr. Keith L. Matthews  
Hazardous Materials Inspector  
Office of Emergency Services  
City of Oakland, Fire Services Agency  
1605 Martin Luther King, Jr. Way  
Oakland, California 94612

Re: **Dispenser and Piping Upgrade Sampling Report**  
Shell-branded Service Station  
540 Hegenberger Road  
Oakland, California  
Incident # 98995752  
Cambria Project #206-0414-001

Alameda County  
JUL 02 2004  
Environmental Health



Dear Mr. Matthews:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, Cambria Environmental Technology, Inc. (Cambria) is submitting this *Dispenser and Piping Upgrade Sampling Report* which presents the results of sampling conducted during station upgrade activities at the referenced site. Presented below are a summary of site conditions, sampling activities and analytical results.

### SITE CONDITIONS

**Location:** This active Shell-branded service station is located on the southeast corner of the Hegenberger Road and Edes Avenue intersection in Oakland, California (Figures 1 & 2). Commercial property surrounds the site. The service station layout includes a station building, two dispenser islands, and a gasoline underground storage tank (UST) complex. (Figure 2).

**Upgrade Activities:** This Shell-branded service station was recently upgraded by Paradiso Mechanical, Inc. (Paradiso) of San Leandro, California. Paradiso upgraded under dispenser containment to the dispenser locations adjacent to product, vapor and vent lines. Additionally, Paradiso installed enhanced vapor recovery equipment on the UST fuel fill port sumps on the top of the UST's in the tank pit area.

Cambria  
Environmental  
Technology, Inc.

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

**SAMPLING ACTIVITIES AND SAMPLE ANALYSIS**

**Personnel Present:** Stewart Dalie, Staff Scientist, Cambria.  
Keith L. Matthews, Hazardous Materials Inspector, City of Oakland, Fire Services Agency.

**Sample Date:** April 22, 2004.

**Sampling Requirements:** Based on a conversation between Stewart Dalie and Keith Matthews during field activities on April 22, 2004, one soil sample was collected beneath each dispenser within 1 to 2 feet of native soil and at 90-degree elbows of product piping (Figure 2). Only the dispenser locations and the adjacent 90-degree elbows of product piping were exposed and available for sampling as part of the project scope.

**Dispenser and Pipeline Sampling:** Under Mr. Matthews' direction, 12 soil samples were collected at depths ranging from 4 to 5 feet below grade (fbg) (Figure 2). Cambria's standard procedures for dispenser and piping sampling are presented as Attachment A.

**Sample Analyses:** State-certified laboratory Severn Trent Laboratories Inc. of Pleasanton, California analyzed all 12 samples for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tert-butyl ether (MTBE) by EPA Method 8260B. Additionally, two samples were analyzed for total petroleum hydrocarbons as diesel by EPA Method 8015 modified. Table 1 summarizes laboratory analytical results. Attachment B presents laboratory analytical reports and chain of custody records.

**Waste Handling:** To characterize stockpiled soil for disposal, four brass tubes of soil were collected from the approximately 50 cubic yards of stockpiled soil and composited by the analytical laboratory. The soil was analyzed for TPHg and BTEX by EPA Method 8260B, and for total threshold limit concentration lead. On April 30, 2004, the stockpile was transported to Forward Landfill in Manteca, California for disposal.

**ANALYTICAL RESULTS**

Analytes were detected in each of the 12 soil samples submitted for analysis. Maximum TPHg, benzene, and MTBE concentrations identified in soil were 1,400 parts per million (ppm) TPHg in sample P-5-5', 4.3 ppm benzene in sample D-2-5', and 43 ppm MTBE in sample D-5-5'. Soil analytical results are summarized in Table 1.

**CONCLUSIONS**

The current soil sampling identifies petroleum hydrocarbon and MTBE impacts to soil in the vicinity of the dispenser and piping areas. The results observed are consistent with previous sampling performed during upgrade and site investigation activities. As a result of previous investigation, this site has an active groundwater extraction system and several monitoring wells, which are monitored on a quarterly basis.

Cambria will continue remediation activities under the direction of the Alameda County Health Care Services Agency.



**CLOSING**

Please call Diane Lundquist at (510) 420-3334 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc.**

Stewart A. Dalie IV  
Staff Scientist

Diane M. Lundquist, P.E.  
Principal Engineer

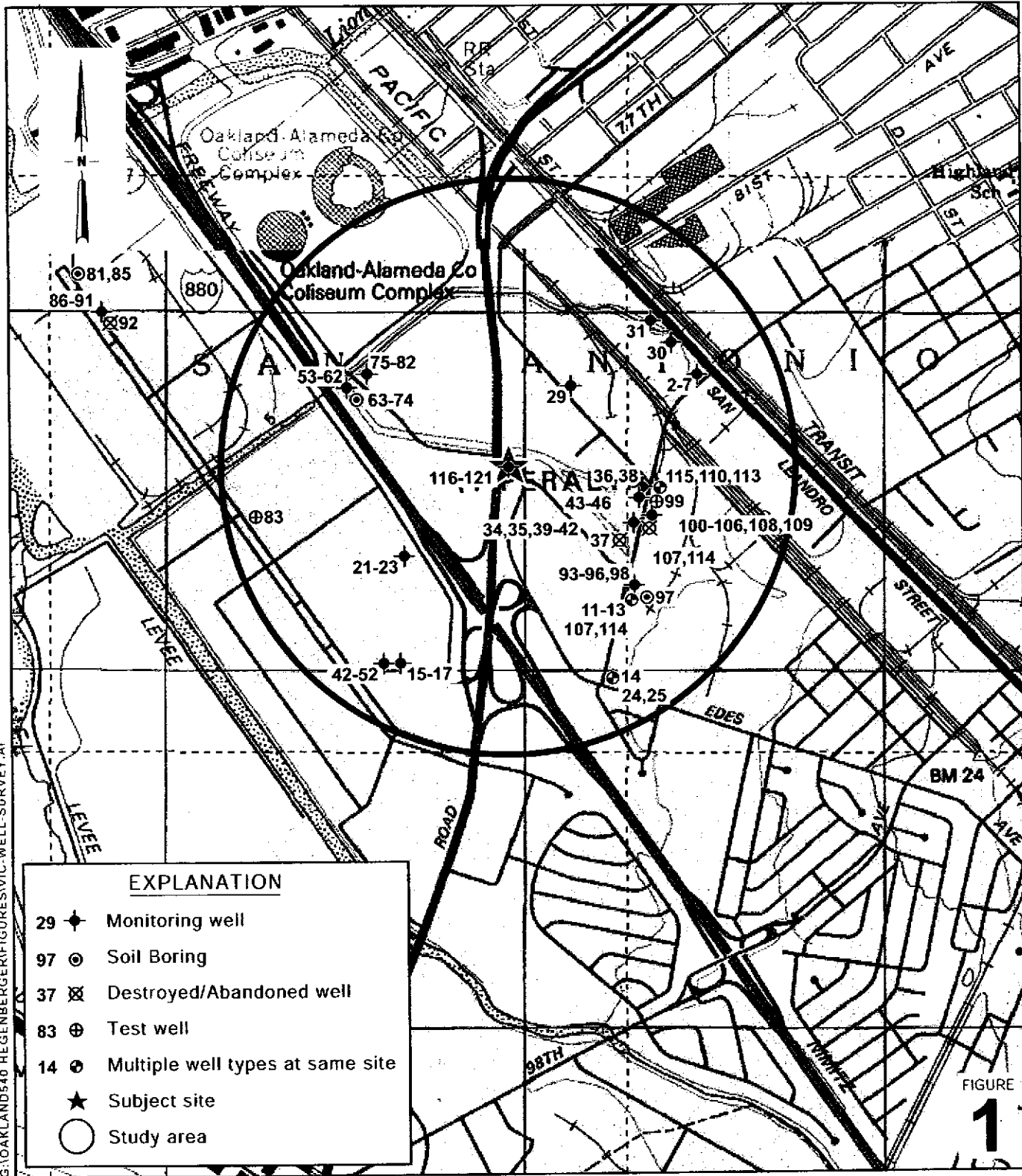


Figures:           1 - Vicinity/Area Well Survey Map  
                      2 - Soil Sample Location Map

Table:             1 - Soil Analytical Data

Attachments:    A - Standard Piping and Dispenser Removal Sampling Procedures  
                      B - Laboratory Analytical Data

cc:                Karen Petryna, Shell Oil Products US, 20945 S. Wilmington, Carson CA 90810  
                      Mr. Bill Merchant, Shell Oil Products US, 9141 E. Stockton Boulevard, Suite  
                                  250-321, Elk Grove, CA 95624  
                      Amir K. Gholami, Alameda County Health Care Services Agency, 1131 Harbor  
                                  Bay Parkway, Suite 250, Alameda, California 94502-6577



G:\OAKLAND540 HEGENBERGER\FIGURES\VIC-WELL-SURVEY.A1

FIGURE 1

0 1/8 1/4 1/2 1  
SCALE 1:1/4 MILES

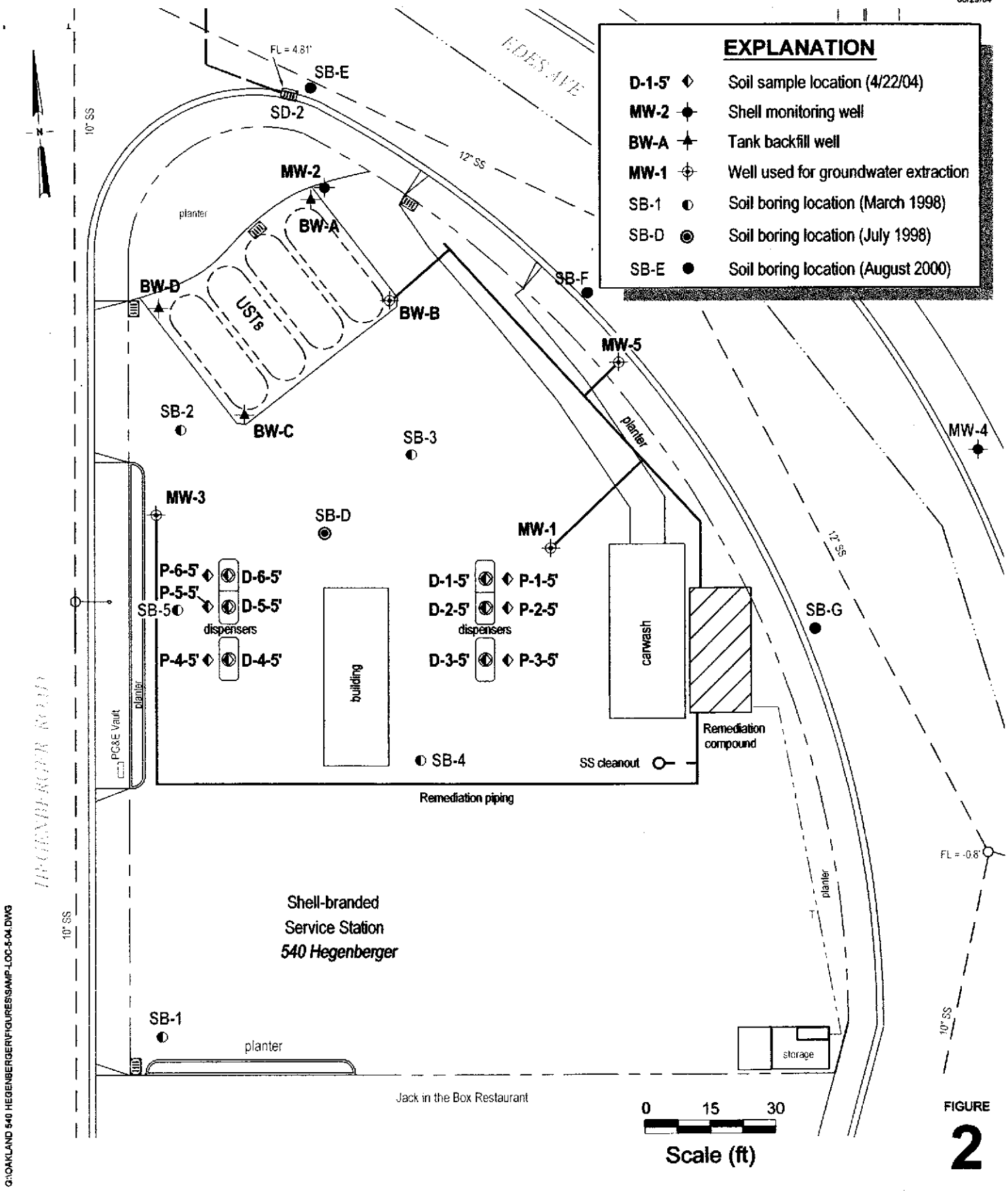
**Shell-branded Service Station**  
540 Hegenberger Road  
Oakland, California  
Incident #98995752



**Vicinity / Area Well Survey Map**  
(1/2-Mile Radius)

### EXPLANATION

- D-1-5' ◆ Soil sample location (4/22/04)
- MW-2 ◆ Shell monitoring well
- BW-A ◆ Tank backfill well
- MW-1 ◆ Well used for groundwater extraction
- SB-1 ● Soil boring location (March 1998)
- SB-D ● Soil boring location (July 1998)
- SB-E ● Soil boring location (August 2000)



G:\OAKLAND 540 HEGENBERGER\FIGURES\SAMP.LOC-5-04.DWG

FIGURE  
**2**

**Shell-branded Service Station**  
 540 Hegenberger Road  
 Oakland, California  
 Incident #98995752



C A M B R I A

**Soil Sample  
 Location Map**

# CAMBRIA

**Table 1. Soil Analytical Data - Shell-branded Service Station - 540 Hegenberger Road, Oakland, California, Incident # 98995752**

Sample ID	Date	Depth (feet below grade)	TPHg	TPHd	Benzene	Toluene (ppm)	Ethylbenzene	Xylenes	MTBE
D-1-5'	4/22/2004	5	1,000	---	3.7	<2.5	12	<2.5	18
D-2-5'	4/22/2004	5	1,300	1200 <sup>a</sup>	4.3	<0.50	14	2.6	23
D-3-5'	4/22/2004	5	6.6	---	0.15	0.031	0.063	0.047	0.66
D-4-5'	4/22/2004	5	<50	---	1.0	<0.50	2.0	<0.50	33
D-5-5'	4/22/2004	5	<50	---	0.59	3.4	0.67	3.3	43
D-6-5'	4/22/2004	5	59	---	<0.50	<0.50	<0.50	0.6	9.8
P-1-5'	4/22/2004	5	<50	---	<0.50	<0.50	1.3	0.65	7.4
P-2-5'	4/22/2004	5	240	1200 <sup>a</sup>	2.8	<0.50	1.3	1.2	13
P-3-5'	4/22/2004	5	240	---	<1.3	<1.3	2.2	<1.3	<1.3
P-4-5'	4/22/2004	5	<50	---	<0.50	<0.50	<0.50	<0.50	7.3
P-5-5'	4/22/2004	5	1,400	---	<2.5	<2.5	3.1	2.5	3.4
P-6-5'	4/22/2004	5	180	---	<0.50	<0.50	1.3	<0.50	6.0

**Notes and Abbreviations:**

TPHg = Total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8260B

TPHd = Total petroleum hydrocarbons as diesel, analyzed by EPA Method 8015M

Benzene, ethylbenzene, toluene, xylenes, analyzed by EPA Method 8260B

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260B

ppm = parts per million

<X = Below laboratory detection limit of X

--- = Not analyzed

a = Reported hydrocarbon does not match lab's diesel standard.

**ATTACHMENT A**

Standard Piping and Dispenser Removal Sampling Procedures

# CAMBRIA

## STANDARD PIPING AND DISPENSER REMOVAL SAMPLING PROCEDURES

Cambria Environmental Technology, Inc. (Cambria) has developed standard operating procedures for collecting soil samples during petroleum dispenser and piping removal. These procedures ensure that the samples are collected, handled, and documented in compliance with California Administration Code Title 23: Waters; Chapter 3: Water Resources Control Board; Subchapter 16: Underground Storage Tank Regulations (Title 23). Cambria's sampling procedures are based on guidelines contained in the California State Regional Water Quality Control Board Tri-Regional Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites dated August 10, 1990.

### **Piping and Dispenser Removal Sampling**

The objective of sample collection during routine dispenser and piping removals is to determine whether hydrocarbons or other stored chemicals have leaked to the subsurface. We collect one soil sample from the native soil beneath each dispenser unit, at each piping elbow, and at every 20 ft of product piping, as applicable.

The soil samples are collected in steam cleaned brass or steel tubes from either a driven split-spoon type sampler or the bucket of a backhoe. When a backhoe is used, approximately three inches of soil are scraped from the surface and the tube is driven into the exposed soil.

Upon removal from the split-spoon sampler or the backhoe, the samples are trimmed flush, capped with Teflon sheets and plastic end caps, labeled, logged and refrigerated for delivery under chain of custody to a State certified analytic laboratory.

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**ATTACHMENT B**

Laboratory Analytical Data

**Cambria Environmental Emeryville**

April 27, 2004

5900 Hollis Street, Ste. A  
Emeryville, CA 94608

Attn.: Diane Lundquist

Project#: 206-0414

Project: 98995752

Site: 540 Hegenburger Avenue, Oakland, CA

Dear Ms. Lundquist,

Attached is our report for your samples received on 04/22/2004 17:00

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 06/06/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [vvancil@stl-inc.com](mailto:vvancil@stl-inc.com)

Sincerely,



Vincent Vancil  
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* [www.stl-inc.com](http://www.stl-inc.com) \* CA DHS ELAP# 2496

**Diesel (C9-C24)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
D-2-5'	04/22/2004 12:45	Soil	2
P-2-5'	04/22/2004 13:30	Soil	5

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/23/2004 15:52

**Diesel (C9-C24)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	D-2-5	Lab ID:	2004-04-0686-2
Sampled:	04/22/2004 12:45	Extracted:	4/22/2004 05:34
Matrix:	Soil	QC Batch#:	2004/04/22-1A.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	1200	5.0	mg/Kg	5.00	04/23/2004 11:47	ndp
<i>Surrogate(s)</i> o-Terphenyl	NA	60-130	%	5.00	04/23/2004 11:47	sd

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04/23/2004 15:52

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Emeryville, CA 94608

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Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	P-2-5	Lab ID:	2004-04-0686-5
Sampled:	04/22/2004 13:30	Extracted:	4/22/2004 05:34
Matrix:	Soil	QC Batch#:	2004/04/22-1A-10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	1200	5.0	mg/Kg	5.00	04/23/2004 11:20	ndp
<b>Surrogate(s)</b>						
o-Terphenyl	NA	60-130	%	5.00	04/23/2004 11:20	sd

**Diesel (C9-C24)**

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Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report					
Prep(s): 3550/8015M				Test(s): 8015M	
Method Blank	Soil			QC Batch # 2004/04/22-1A-10	
MB: 2004/04/22-1A.10-001				Date Extracted: 04/22/2004 05:34	

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	04/22/2004 12:32	
<b>Surrogates(s)</b> o-Terphenyl	101.3	60-130	%	04/22/2004 12:32	

**Diesel (C9-C24)**

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Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report			
Prep(s): 3550/8015M		Test(s): 8015M	
Laboratory Control Spike		Soil	QC Batch # 2004/04/22-1A-10
LCS	2004/04/22-1A-10-002	Extracted: 04/22/2004	Analyzed: 04/22/2004 11:38
LCSD	2004/04/22-1A-10-003	Extracted: 04/22/2004	Analyzed: 04/22/2004 12:05

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	38.5	40.4	41.6	92.5	97.1	4.9	60-130	25		
<b>Surrogates(s)</b> o-Terphenyl	20.2	20.9	20.0	101.0	104.7		60-130			

**Diesel (C9-C24)**

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Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Legend and Notes**

**Result Flag**

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

sd

Surrogate recovery not reportable due to required dilution.

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/23/2004 15:52



**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
D-1-5'	04/22/2004 12:30	Soil	1
D-2-5'	04/22/2004 12:45	Soil	2
P-1-5'	04/22/2004 13:15	Soil	4
P-2-5'	04/22/2004 13:30	Soil	5
P-3-5'	04/22/2004 13:45	Soil	6
D-4-5'	04/22/2004 14:00	Soil	7
D-5-5'	04/22/2004 14:15	Soil	8
D-6-5'	04/22/2004 14:30	Soil	9
P-4-5'	04/22/2004 14:45	Soil	10
P-5-5'	04/22/2004 15:00	Soil	11
P-6-5'	04/22/2004 15:15	Soil	12

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	D-1-5	Lab ID:	2004-04-0686-1
Sampled:	04/22/2004 12:30	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69
Analysis Flag: o ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1000	250	mg/Kg	5.00	04/26/2004 20:21	
Benzene	3.7	2.5	mg/Kg	5.00	04/26/2004 20:21	
Toluene	ND	2.5	mg/Kg	5.00	04/26/2004 20:21	
Ethyl benzene	12	2.5	mg/Kg	5.00	04/26/2004 20:21	
Total xylenes	ND	2.5	mg/Kg	5.00	04/26/2004 20:21	
Methyl tert-butyl ether (MTBE)	18	2.5	mg/Kg	5.00	04/26/2004 20:21	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	NA	70-121	%	5.00	04/26/2004 20:21	sd
Toluene-d8	NA	81-117	%	5.00	04/26/2004 20:21	sd

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

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Emeryville, CA 94608

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Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	D-2-5	Lab ID:	2004-04-0686-2
Sampled:	04/22/2004 12:45	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1300	50	mg/Kg	1.00	04/27/2004 14:07	
Benzene	4.3	0.50	mg/Kg	1.00	04/27/2004 14:07	
Toluene	ND	0.50	mg/Kg	1.00	04/27/2004 14:07	
Ethyl benzene	14	0.50	mg/Kg	1.00	04/27/2004 14:07	
Total xylenes	2.6	0.50	mg/Kg	1.00	04/27/2004 14:07	
Methyl tert-butyl ether (MTBE)	23	0.50	mg/Kg	1.00	04/27/2004 14:07	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	106.0	70-121	%	1.00	04/27/2004 14:07	
Toluene-d8	95.7	81-117	%	1.00	04/27/2004 14:07	

Sewern Trent Laboratories, Inc.

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04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

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Emeryville, CA 94608  
Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	P-1-5	Lab ID:	2004-04-0686-4
Sampled:	04/22/2004 13:15	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	mg/Kg	1.00	04/26/2004 23:22	
Benzene	ND	0.50	mg/Kg	1.00	04/26/2004 23:22	
Toluene	ND	0.50	mg/Kg	1.00	04/26/2004 23:22	
Ethyl benzene	1.3	0.50	mg/Kg	1.00	04/26/2004 23:22	
Total xylenes	0.65	0.50	mg/Kg	1.00	04/26/2004 23:22	
Methyl tert-butyl ether (MTBE)	7.4	0.50	mg/Kg	1.00	04/26/2004 23:22	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	114.5	70-121	%	1.00	04/26/2004 23:22	
Toluene-d8	111.8	81-117	%	1.00	04/26/2004 23:22	

Severn Trent Laboratories, Inc.

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04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

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98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	P-2-5	Lab ID:	2004-04-0686-5
Sampled:	04/22/2004 13:30	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	240	50	mg/Kg	1.00	04/26/2004 20:57	
Benzene	2.8	0.50	mg/Kg	1.00	04/26/2004 20:57	
Toluene	ND	0.50	mg/Kg	1.00	04/26/2004 20:57	
Ethyl benzene	1.3	0.50	mg/Kg	1.00	04/26/2004 20:57	
Total xylenes	1.2	0.50	mg/Kg	1.00	04/26/2004 20:57	
Methyl tert-butyl ether (MTBE)	13	0.50	mg/Kg	1.00	04/26/2004 20:57	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.7	70-121	%	1.00	04/26/2004 20:57	
Toluene-d8	92.9	81-117	%	1.00	04/26/2004 20:57	

Sewern Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

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Attn.: Diane Lundquist

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
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Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	P-3-5	Lab ID:	2004-04-0686 - 6
Sampled:	04/22/2004 13:45	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69
Analysis Flag: o ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	240	130	mg/Kg	2.50	04/27/2004 14:25	
Benzene	ND	1.3	mg/Kg	2.50	04/27/2004 14:25	
Toluene	ND	1.3	mg/Kg	2.50	04/27/2004 14:25	
Ethyl benzene	2.2	1.3	mg/Kg	2.50	04/27/2004 14:25	
Total xylenes	ND	1.3	mg/Kg	2.50	04/27/2004 14:25	
Methyl tert-butyl ether (MTBE)	ND	1.3	mg/Kg	2.50	04/27/2004 14:25	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	NA	70-121	%	2.50	04/27/2004 14:25	sd
Toluene-d8	NA	81-117	%	2.50	04/27/2004 14:25	sd

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s)	5030B	Test(s)	8260B
Sample ID	D-4-5	Lab ID	2004-04-0686-7
Sampled	04/22/2004 14:00	Extracted	4/26/2004 11:00
Matrix	Soil	QC Batch#	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	mg/Kg	1.00	04/26/2004 21:33	
Benzene	1.0	0.50	mg/Kg	1.00	04/26/2004 21:33	
Toluene	ND	0.50	mg/Kg	1.00	04/26/2004 21:33	
Ethyl benzene	2.0	0.50	mg/Kg	1.00	04/26/2004 21:33	
Total xylenes	ND	0.50	mg/Kg	1.00	04/26/2004 21:33	
Methyl tert-butyl ether (MTBE)	33	0.50	mg/Kg	1.00	04/26/2004 21:33	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.3	70-121	%	1.00	04/26/2004 21:33	
Toluene-d8	93.2	81-117	%	1.00	04/26/2004 21:33	

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TeI 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	D-5-5	Lab ID:	2004-04-0686 - 8
Sampled:	04/22/2004 14:15	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	mg/Kg	1.00	04/26/2004 21:51	
Benzene	0.59	0.50	mg/Kg	1.00	04/26/2004 21:51	
Toluene	3.4	0.50	mg/Kg	1.00	04/26/2004 21:51	
Ethyl benzene	0.67	0.50	mg/Kg	1.00	04/26/2004 21:51	
Total xylenes	3.3	0.50	mg/Kg	1.00	04/26/2004 21:51	
Methyl tert-butyl ether (MTBE)	43	0.50	mg/Kg	1.00	04/26/2004 21:51	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	101.8	70-121	%	1.00	04/26/2004 21:51	
Toluene-d8	95.3	81-117	%	1.00	04/26/2004 21:51	

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04/27/2004 16:15



**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	0-6-5	Lab ID:	2004-04-0686-9
Sampled:	04/22/2004 14:30	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A 69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	59	50	mg/Kg	1.00	04/26/2004 22:10	
Benzene	ND	0.50	mg/Kg	1.00	04/26/2004 22:10	
Toluene	ND	0.50	mg/Kg	1.00	04/26/2004 22:10	
Ethyl benzene	ND	0.50	mg/Kg	1.00	04/26/2004 22:10	
Total xylenes	0.58	0.50	mg/Kg	1.00	04/26/2004 22:10	
Methyl tert-butyl ether (MTBE)	9.8	0.50	mg/Kg	1.00	04/26/2004 22:10	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.5	70-121	%	1.00	04/26/2004 22:10	
Toluene-d8	92.2	81-117	%	1.00	04/26/2004 22:10	

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04/27/2004 16:15

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	P-4-5	Lab ID:	2004-04-0686 - 10
Sampled:	04/22/2004 14:45	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	mg/Kg	1.00	04/26/2004 22:28	
Benzene	ND	0.50	mg/Kg	1.00	04/26/2004 22:28	
Toluene	ND	0.50	mg/Kg	1.00	04/26/2004 22:28	
Ethyl benzene	ND	0.50	mg/Kg	1.00	04/26/2004 22:28	
Total xylenes	ND	0.50	mg/Kg	1.00	04/26/2004 22:28	
Methyl tert-butyl ether (MTBE)	7.3	0.50	mg/Kg	1.00	04/26/2004 22:28	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	100.3	70-121	%	1.00	04/26/2004 22:28	
Toluene-d8	98.2	81-117	%	1.00	04/26/2004 22:28	

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04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prepts:	5030B	Test(s):	8260B
Sample ID:	P-5-5	Lab ID:	2004-04-0686-11
Sampled:	04/22/2004 15:00	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69
Analysis Flag: o (See Legend and Note Section)			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1400	250	mg/Kg	5.00	04/26/2004 22:46	
Benzene	ND	2.5	mg/Kg	5.00	04/26/2004 22:46	
Toluene	ND	2.5	mg/Kg	5.00	04/26/2004 22:46	
Ethyl benzene	3.1	2.5	mg/Kg	5.00	04/26/2004 22:46	
Total xylenes	2.5	2.5	mg/Kg	5.00	04/26/2004 22:46	
Methyl tert-butyl ether (MTBE)	3.4	2.5	mg/Kg	5.00	04/26/2004 22:46	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	NA	70-121	%	5.00	04/26/2004 22:46	sd
Toluene-d8	NA	81-117	%	5.00	04/26/2004 22:46	sd

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Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	P-6-5	Lab ID:	2004-04-0686-12
Sampled:	04/22/2004 15:15	Extracted:	4/26/2004 11:00
Matrix:	Soil	QC Batch#:	2004/04/26-3A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	180	50	mg/Kg	1.00	04/26/2004 23:04	
Benzene	ND	0.50	mg/Kg	1.00	04/26/2004 23:04	
Toluene	ND	0.50	mg/Kg	1.00	04/26/2004 23:04	
Ethyl benzene	1.3	0.50	mg/Kg	1.00	04/26/2004 23:04	
Total xylenes	ND	0.50	mg/Kg	1.00	04/26/2004 23:04	
Methyl tert-butyl ether (MTBE)	6.0	0.50	mg/Kg	1.00	04/26/2004 23:04	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	98.0	70-121	%	1.00	04/26/2004 23:04	
Toluene-d8	97.3	81-117	%	1.00	04/26/2004 23:04	

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04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report					
Prep(s): 5030B				Test(s): 8260B	
Method Blank		Soil		QC Batch # 2004/04/26-3A-69	
MB: 2004/04/26-3A-69-053				Date Extracted: 04/26/2004 18:53	

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	mg/Kg	04/26/2004 18:53	
Benzene	ND	0.50	mg/Kg	04/26/2004 18:53	
Toluene	ND	0.50	mg/Kg	04/26/2004 18:53	
Ethyl benzene	ND	0.50	mg/Kg	04/26/2004 18:53	
Total xylenes	ND	0.50	mg/Kg	04/26/2004 18:53	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	04/26/2004 18:53	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	106.6	70-121	%	04/26/2004 18:53	
Toluene-d8	101.2	81-117	%	04/26/2004 18:53	

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Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report									
Prep(s): 5030B					Test(s): 8260B				
Laboratory Control Spike			Soil			QC Batch # 2004/04/26-3A-69			
LCS	2004/04/26-3A-69-017		Extracted: 04/26/2004		Analyzed: 04/26/2004 18:17				
LCSD	2004/04/26-3A-69-035		Extracted: 04/26/2004		Analyzed: 04/26/2004 18:35				

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	11.7	12.2	10.00	117.0	122.0	4.2	69-129	20		
Toluene	10.7	11.6	10.00	107.0	116.0	8.1	70-130	20		
Methyl tert-butyl ether (MTBE)	11.5	11.2	10.00	115.0	112.0	2.6	65-165	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	236	250	250	94.4	100.0		70-121			
Toluene-d8	227	255	250	90.8	102.0		81-117			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEX Fuel Oxygenates by 8260B (High Level)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Legend and Notes**

**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

sd

Surrogate recovery not reportable due to required dilution.

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 16:15

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
D-3-5	04/22/2004 13:00	Soil	3

Severn Trent Laboratories, Inc.

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04/27/2004 16:15

Page 1 of 5



**Gas/BTEX/MTBE by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s): 5030B	Test(s): 8260B
Sample ID: D-3-5	Lab ID: 2004-04-0686-3
Sampled: 04/22/2004 13:00	Extracted: 4/23/2004 00:12
Matrix: Soil	QC Batch#: 2004/04/22-3A.69
Analysis Flag: 0 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	6.6	6.2	mg/Kg	6.17	04/23/2004 00:12	
Benzene	0.15	0.031	mg/Kg	6.17	04/23/2004 00:12	
Toluene	ND	0.031	mg/Kg	6.17	04/23/2004 00:12	
Ethyl benzene	0.063	0.031	mg/Kg	6.17	04/23/2004 00:12	
Total xylenes	0.047	0.031	mg/Kg	6.17	04/23/2004 00:12	
Methyl tert-butyl ether (MTBE)	0.66	0.031	mg/Kg	6.17	04/23/2004 00:12	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	107.0	70-121	%	6.17	04/23/2004 00:12	
Toluene-d8	102.7	81-117	%	6.17	04/23/2004 00:12	

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04/27/2004 16:15

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report					
Prep(s): 5030B			Test(s): 8260B		
Method Blank			Soil		
MB: 2004/04/22-3A 69-047			QC Batch # 2004/04/22-3A 69		
			Date Extracted: 04/22/2004 21:47		
Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.000	mg/Kg	04/22/2004 21:47	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	04/22/2004 21:47	
Benzene	ND	0.0050	mg/Kg	04/22/2004 21:47	
Toluene	ND	0.0050	mg/Kg	04/22/2004 21:47	
Ethyl benzene	ND	0.0050	mg/Kg	04/22/2004 21:47	
Total xylenes	ND	0.0050	mg/Kg	04/22/2004 21:47	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	111.2	70-121	%	04/22/2004 21:47	
Toluene-d8	113.0	81-117	%	04/22/2004 21:47	

Severn Trent Laboratories, Inc.

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04/27/2004 16:15

Page 3 of 5

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Diane Lundquist

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Emeryville, CA 94608

Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report			
Prep(s): 5030B		Test(s): 8260B	
Laboratory Control Spike		Soil	QC Batch # 2004/04/22-3A-69
LCS	2004/04/22-3A-69-012	Extracted: 04/22/2004	Analyzed: 04/22/2004 21:12
LCSD	2004/04/22-3A-69-030	Extracted: 04/22/2004	Analyzed: 04/22/2004 21:30

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	0.0490	0.0536	0.05	98.0	107.2	9.0	65-165	20		
Benzene	0.0526	0.0558	0.05	105.2	111.6	5.9	69-129	20		
Toluene	0.0527	0.0517	0.05	105.4	103.4	1.9	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	507	546	500	101.4	109.2		70-121			
Toluene-d8	579	551	500	115.8	110.2		81-117			

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04/27/2004 16:15

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Cambria Environmental Emeryville

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Phone: (510) 420-0700 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Legend and Notes**

**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

Lab Identification (if necessary)

Address: 1220 Quarry Lane

City, State, Zip: Pleasanton, CA 94566

Shell Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CIVIL ENGINEERING

Party/Plineda/Tom Merchant

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 7 5 2

DATE: 4/22/04

SAMPLE CRMT NUMBER (ITS/CRMT)

1 3 5 6 9 4

Page 1 of 2

SAMPLING COMPANY: <b>Cambria Environmental</b>		LAB CODE: <b>CETO</b>	SITE ADDRESS (Street and City): <b>540 Hegenburger Avenue, Oakland, GA</b>		GLOBAL ID#: <b>T0600102123</b>
ADDRESS: <b>5900 Hollis St. Ste A, Emeryville, CA</b>		EPA DELIVERABLE TO (EPA/State/Party/Origin):		PHONE NO.:	CONSULTANT PROJECT ID:
PROJECT CONTACT (Name/Title or PDF Report #): <b>Diane Lundquist</b>		EMAIL: <b>sheela.lundquist@cambria-env.com</b>		<b>510-420-3339</b>	<b>206-0414</b>
TELEPHONE: <b>510-420-3334</b>	FAX: <b>510-420-9170</b>	EMAIL: <b>sdalia@cambria-env.com</b>		LAB USE ONLY	

TURNAROUND TIME (BUSINESS DAYS):  
 5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

LA - WVOCE REPORT FORM  UST AGENCY

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST PER ECHOING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF ECHO IS NOT NEEDED

Please see results to sdalia@cambria-env.com

REQUESTED ANALYSIS

LA USE	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	TBA	MTBE (B260B - 0.5ppb RL)	PAHs: DIB, EDB, EDB, 1,2-DCA	Ethanol (B260B)	Methanol	EDB & 1,2-DCA (B260B)	EPA 5035 Extractor for Volatiles	VOCs: Halogenated/Aromatic (B021B)	TRPH (418.1)	Vapor VOCs: BTEX/MTBE (T015)	Vapor VOCs: Fuel List (T015)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1945)	Test for Disposal (4B)	Test for Disposal, see attached	TPH - Diesel, Extractable (B015m)	MTBE (B260B) Concentrations, see above	
		DATE	TIME																						
	D-1-5'	4/17/04	12:30	Soil	1	X	X		X																
	D-2-5'																						X		
	D-3-5'																								
	P-1-5'																								
	P-2-5'																						X		
	P-3-5'																								

FIELD NOTES:  
 Container/Preservative or PID Readings or Laboratory Notes

On ICE 2.0°C  
 Field point ID

TEMPERATURE ON RECEIPT:

RUSH RUSH

Requested by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: 4/22/04	Time: 5:00 PM
Requested by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: 4/22/04	Time: 17:00
Requested by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: 4/22/04	Time: 18:50

# SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address: 1220 Quaker Lane

City, State, Zip: Pleasanton CA 94569

Shell Project Manager to be invoiced:

- AGENCY ENGINEERING
- TECHNICAL SERVICES
- CONTRACT ROUSTING

Perry/Pinedar/Tom Merchant

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 7 5 2

SAP or CRMT NUMBER (TS/CRMT)

1 3 5 6 9 4

DATE: 4/22/04

Page 2 of 2

<b>SAMPLING COMPANY:</b> Cambria Environmental <b>ADDRESS:</b> 5900 Hollis St. Ste A, Emeryville, CA <b>PROJECT CONTACT (Name/Title or POC Name/Title):</b> Diane Lundquist <b>TELEPHONE:</b> 510-420-3334 <b>FAX:</b> 510-420-3170 <b>EMAIL:</b> dlundquist@cambrlab.com	<b>SITE ADDRESS (Street and City):</b> 540 Hegenburger Avenue, Oakland, CA <b>GLOBAL ID NO.:</b> T0600102123 <b>PHONE NO.:</b> 510-420-3333 <b>EMAIL:</b> dslundquist@cambrlab.com <b>CONSULTANT PROJECT NO.:</b> 205-0414 <b>SAMPLER NAME(S) (Print):</b> Site Data	<b>EDS DELIVERABLE TO (Organization Party or Designation):</b>  <b>PHONE NO.:</b>  <b>EMAIL:</b>  <b>CONSULTANT PROJECT NO.:</b> 205-0414 <b>LAB USE ONLY:</b>
---	--	---

**FURNISHING TIME (BUSINESS DAYS):**  
 5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

LA - RWQCB REPORT FORM  UST AGENCY

**GCMS-MTR CONFIRMATION: HIGHEST** \_\_\_\_\_ **HIGHEST per BORING** \_\_\_\_\_ **ALL** \_\_\_\_\_

**SPECIAL INSTRUCTIONS OR NOTES:** CHECK BOX IF EOD IS NOT NEEDED:

Please see results to sdallo@cambrlab.com

24 hr TAT

**REQUESTED ANALYSIS**

CA #	US	Field Sample Identification				MATRIX	NO. OF CONT.	TPH - Gas Purgeable	BTEX	TBA	MTBE (8260B - 0.5ppb PL)	TAME, DPE, ETBE, EDB, 1,2 DCA	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated Aromatic (8021B)	TPH (418.1)	Vapor VOCs - BTEX / MTBE (70-15)	Vapor VOC - Full List (70-15)	Vapor TPH (ASTM 3476m)	Vapor Fixed Gases - (ASTM D1944)	Test for Disposal (4B-)	Test for Disposal, see attached	TPH - Diesel Extractable (8015m)	MTBE (8260B) Confirmation, See Note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes  On ICE Field point ID	TEMPERATURE ON RECEIPT C:
		DATE	TIME	DATE	TIME																							
-		D-4-5'	4/22/04	2:00	Soil	1	X	X	X																			
-		D-5-5'		2:15																								
-		D-6-5'		2:30																								
-		P-4-5'		2:45																								
-		P-5-5'		3:00																								
-		P-6-5'		3:15																								

Requested by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date: 4-22-04	Time: 5:00
Requested by: <i>[Signature]</i>	Site Location: Emeryville office refrigerator, Stewart Dalio	Date: 4-22-04	Time: 17:00
Requested by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date: 4-22-04	Time: 18:30

**Cambria Environmental Emeryville**

April 27, 2004

5900 Hollis Street, Ste. A  
Emeryville, CA 94608

Attn.: Cynthia Vasko

Project#: 206-0414

Project: 98995752

Site: 540 Hegenburger Avenue, Oakland, CA

Dear Ms. Vasko:

Attached is our report for your samples received on 04/22/2004 17:00

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 06/06/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [vvancil@stl-inc.com](mailto:vvancil@stl-inc.com)

Sincerely,



Vincent Vancil  
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* [www.stl-inc.com](http://www.stl-inc.com) \* CA DHS ELAP# 2496

**Total Lead**

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SP-1A-SP1D	04/22/2004 16:00	Soil	1

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/26/2004 06:17



**Total Lead**

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	3050B	Test(s):	6010B
Sample ID:	SP-1A-SP1D	Lab ID:	2004-04-0687 - 1
Sampled:	04/22/2004 16:00	Extracted:	4/23/2004 13:33
Matrix:	Soil	QC Batch#:	2004/04/23-02.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	4.3	1.0	mg/Kg	1.00	04/23/2004 19:23	

**Total Lead**

Cambria Environmental Emeryville  
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report					
Prep(s): 3050B			Test(s): 6010B		
Method Blank			Soil		
MB: 2004/04/23-02-15-005			QC Batch # 2004/04/23-02-15		
			Date Extracted: 04/23/2004 13:33		
Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	1.0	mg/Kg	04/23/2004 19:11	

**Total Lead**

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report										
Prep(s): 3050B						Test(s): 6010B				
Laboratory Control Spike				Soil			QC Batch # 2004/04/23-02.15			
LCS	2004/04/23-02.15-006			Extracted: 04/23/2004			Analyzed: 04/23/2004 19:16			
LCSD	2004/04/23-02.15-007			Extracted: 04/23/2004			Analyzed: 04/23/2004 19:19			
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Lead	92.3	91.5	100.0	92.3	91.5	0.9	80-120	20		

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/26/2004 06:17

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SP-1A-SP1D	04/22/2004 16:00	Soil	1

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 14:16

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Cambria Environmental Emeryville  
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SP-1A-SP1D	Lab ID:	2004-04-0687-1
Sampled:	04/22/2004 16:00	Extracted:	4/26/2004 10:16
Matrix:	Soil	QC Batch#:	2004/04/26-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	04/26/2004 10:16	
Benzene	ND	0.0050	mg/Kg	1.00	04/26/2004 10:16	
Toluene	ND	0.0050	mg/Kg	1.00	04/26/2004 10:16	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	04/26/2004 10:16	
Total xylenes	ND	0.0050	mg/Kg	1.00	04/26/2004 10:16	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	100.9	70-121	%	1.00	04/26/2004 10:16	
Toluene-d8	94.9	81-117	%	1.00	04/26/2004 10:16	

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A  
Emeryville, CA 94608  
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414  
98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report					
Prep(s): 5030B			Test(s): 8260B		
Method Blank			Soil		
MB: 2004/04/26-1A.62-023			QC Batch # 2004/04/26-1A.62		
			Date Extracted: 04/26/2004 08:23		
Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	04/26/2004 08:23	
Benzene	ND	0.0050	mg/Kg	04/26/2004 08:23	
Toluene	ND	0.0050	mg/Kg	04/26/2004 08:23	
Ethyl benzene	ND	0.0050	mg/Kg	04/26/2004 08:23	
Total xylenes	ND	0.0050	mg/Kg	04/26/2004 08:23	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	100.3	70-121	%	04/26/2004 08:23	
Toluene-d8	104.0	81-117	%	04/26/2004 08:23	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566  
Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 14:16

**Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)**

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A

Emeryville, CA 94608

Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 206-0414

98995752

Received: 04/22/2004 17:00

Site: 540 Hegenburger Avenue, Oakland, CA

Batch QC Report										
Prep(s): 5030B						Test(s): 8260B				
Laboratory Control Spike			Soil			QC Batch # 2004/04/26-1A.62				
LCS	2004/04/26-1A.62-038		Extracted: 04/26/2004			Analyzed: 04/26/2004 07:38				
LCSD	2004/04/26-1A.62-001		Extracted: 04/26/2004			Analyzed: 04/26/2004 08:01				
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	0.0451	0.0419	0.05	90.2	83.8	7.4	69-129	20		
Toluene	0.0505	0.0459	0.05	101.0	91.8	9.5	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	491	500	500	98.2	100.0		70-121			
Toluene-d8	498	459	500	99.6	91.8		81-117			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/27/2004 14:16

LAB: STL San Francisco

# 2004.04.06 877 Chain Of Custody Record

85093

Lab Identification (if necessary):

Address: 1230 Quarry Lane

City, State, Zip: Pleasanton, CA 94568

Shell Project Manager to be Invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CORE HOUSTON

Parry/Pineda/Toni/Merchant

INCIDENT NUMBER (SEE ONLY)

9 8 9 9 5 7 5 2

DATE: 4/22/04

SAP or CRMT NUMBER (S/CRMT)

1 3 5 6 9 4

Page 1 of 2

CAMPINA COMPANY: <b>Cambria Environmental</b>		LOG CODE: <b>CETO</b>	SITE ADDRESS (Street and City): <b>540 Hegenburger Avenue, Oakland, CA</b>		GLOBAL ID#: <b>T0600102123</b>
ADDRESS: <b>5900 Hollis St. Ste A, Emeryville, CA</b>		OFFICE TELEPHONE TO (Invoicing Party or Designated):		FAX/PHONE NO.:	EMAIL: <b>edlatie@cambria-env.com</b>
PROJECT CONTACT (Agency or PEP Report to): <b>Diane Lundquist</b>		Shell Contact: <b>dlatie@cambria-env.com</b>		PHONE NO.:	CC PROJECT NO.:
TELEPHONE: <b>519-420-3334</b>	FAX: <b>510-420-9170</b>	EMAIL: <b>edlatie@cambria-env.com</b>		LAB USE ONLY:	

TURNDOWN TIME (BUSINESS DAYS):  
 5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

LA - RWQCB REPORT FORM  JUST AGENCY

OCMS MTRC CONFIRMATION: HIGHEST: \_\_\_\_\_ HIGHEST PER BORING: \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES:  CHECK BOX IF EDD IS NOT NEEDED

Please cc results to [edlatie@cambria-env.com](mailto:edlatie@cambria-env.com)

### REQUESTED ANALYSIS

TPH - Gas, Purgeable	BTX	TBA	MTBE (B260B - 0.5ppb RL)	TAME, DPE, ETBE, EDB, 1/2 DCA	Ethanol (B260B)	Me-manol	EDB & 1/2 DCA (B260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (B261B)	TRPH (M18.1)	Vapor VOCs - BTX/MTBE (D-15)	Vapor VOCs - Full List (D-15)	Vapor TPH (ASTM 3445cm)	Vapor Fixed Gases (ASTM D1948)	Test for Disposal (-4B-)	Test for Disposal, see attached	TPH - Diesel, Extractable (B215m)	MTBE (B261B) Confirmation, See Note
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FIELD NOTES:  
 Container/Preservative or PID Readings or Laboratory Notes

2.0  
 On ICE, Field point ID

TEMPERATURE ON RECEIPT: \_\_\_\_\_

LAB #	Field Sample Identification		SAMPLING		MATRIX	NO. OF CONT.	TPH	BTX	TBA	MTBE	TAME, DPE, ETBE, EDB, 1/2 DCA	Ethanol	Me-manol	EDB & 1/2 DCA	EPA 5035	VOCs	TRPH	Vapor VOCs	Vapor VOCs	Vapor TPH	Vapor Fixed Gases	Test for Disposal	Test for Disposal	TPH - Diesel	MTBE	
	DATE	TIME	DATE	TIME																						
	SP-1A		4/22/04	10:00	Soil	1	X	X																		
	SP-1B					1																				
	SP-1C					1																				
	SP-1D					1																				

# RUSH

Requisitioned by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i>	Date: 4/22/04	Time: 5:00 PM
Requisitioned by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i>	Date: 4/22/04	Time: 17:00
Requisitioned by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i>	Date: 4.22.04	Time: 18:30

Safe location: Emeryville office refrigerator; Stewart Calle

4/22/04 1830