

Alameda County  
JAN 22 2004  
Environmental Health

Mountain View  
Fairfield  
Oakland  
San Ramon  
Fullerton

January 12, 2004  
1731-2G

Ms. Betty Graham  
**CALIFORNIA REGIONAL WATER QUALITY  
CONTROL BOARD**  
1515 Clay Street, Suite 1400  
Oakland, California 94612

**RE: SHORELINE SAMPLING  
303 AND 315 DERBY AVENUE  
2901 AND 2909 GLASCOCK STREET  
OAKLAND, CALIFORNIA**

Dear Ms. Graham:

We are pleased to present the results of the shoreline sampling at 303 and 315 Derby Avenue and 2901 and 2909 Glascock Street in Oakland, California (Site) (Figure 1). This work was performed at the request of California Regional Water Quality Control Board (CRWQCB) staff and Alameda County Environmental Health Department (ACEHD) staff to evaluate soil quality along the estuary shoreline.

### **Background**

The October 20, 2003 ecological buffer zone work plan included an area of the estuary shoreline that will be capped by a low-permeability liner. The purpose of the liner is to reduce nuisance odors emanating from soil exposed along the shoreline. CRWQCB staff requested additional shoreline sampling to evaluate whether the planned extent of the liner was adequate and whether other shoreline areas required a liner. During our November 5, 2003 meeting, a concentration of 100 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHg) was established by the CRWQCB as the threshold above which a liner would be required. In addition, during the November 5, 2003 meeting at the Site, ACDEH staff requested the collection and analysis of soil samples from the shoreline of 2901 Glascock Street. Results of the sampling are summarized below.

### **Shoreline Observations**

The January 6, 2004 Soil Removal Completion Report, Ground Water Quality Evaluation, and Ground Water Quality Monitoring Work Plan present the results of the removal activities at the Site. The report documented the removal and grouting of a ground water extraction trench and removal of pipelines that appear to have acted as preferential pathways for migration of petroleum hydrocarbons to the shoreline. Since completion of the removal activities, significant petroleum odors and sheen have not been noted on the estuary shoreline sediments.

### **Shoreline Soil Sampling**

To evaluate the quality of soil along the estuary shoreline, 13 soil samples were collected from locations shown on Figure 2. Samples SS-8, SS-9, SS-10, and SS-11 were collected near the edges of the liner that is planned on 303 and 315 Derby Avenue. The purpose of these samples was to evaluate whether the extent of the planned liner was appropriate. The remaining soil samples were collected from randomly selected locations to evaluate sediment

quality. The soil samples were collected from the inter-tidal zone using hand sampling equipment. The soil samples were analyzed for TPHg, benzene, toluene, ethylbenzene, and xylene (BTEX), and MTBE (EPA Test Method 8020 and 8260). Soil sampling protocol and the complete analytical results and chain of custody documentation are presented in Attachment A.

**Table 1. Analytical Results of Selected Ground Water Samples  
(concentrations in parts per million)**

Sample Number	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
SS-8	11/3/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
SS-9	11/3/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
SS-10	11/3/2003	550	<3.1	<3.1	<3.1	<3.1	<3.1
SS-11	11/3/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
SS-20	12/15/2003	2,400	<13	<13	<13	<13	<13
SS-21	12/15/2003	540	<2.5	<2.5	<2.5	<2.5	<2.5
SS-22	12/15/2003	2.0	<0.005	0.064	<0.005	<0.005	<0.005
SS-23	12/15/2003	6.0	<0.023	<0.023	<0.023	<0.023	<0.023
GSED-1	11/5/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
GSED-2	11/5/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
GSED-3	11/5/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
GSED-4	11/5/2003	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
GSED-5	11/5/2004	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

### Conclusions

Laboratory analyses of soil samples collected from the shoreline of 2901 Glascock Street did not detect TPHg, BTEX, or MTBE. Laboratory analyses of sediment samples SS-10, SS-20, and SS-21 detected TPHg above 100 ppm. Soil sample SS-10 was located approximately 10 feet south of the southern edge of the liner. The liner, therefore, will be extended toward the south as shown on Figure 2. Soil samples SS-20 and SS-21 were collected from the shoreline of the new University of California Men's Crew parcel. A liner will be placed below the riprap slope dressing in the area of these samples, as shown on Figure 2.

As noted above, no significant petroleum odors have been noted on shoreline soil since completion of the soil removal actions. Therefore, the liner is a conservative measure that will be implemented to further reduce the potential for nuisance odors along the shoreline.

### Limitations

This report was prepared for the sole use of Signature Properties and the Friends of Cal Crew. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and

Environmental Health  
JAN 29 2004

location. The chemical and other data presented in this report can change over time and are applicable only to the time this study was performed. We are not responsible for the data presented by others.

If you have any questions, please call and we will be glad to discuss them with you.

Very truly yours,

**LOWNEY ASSOCIATES**

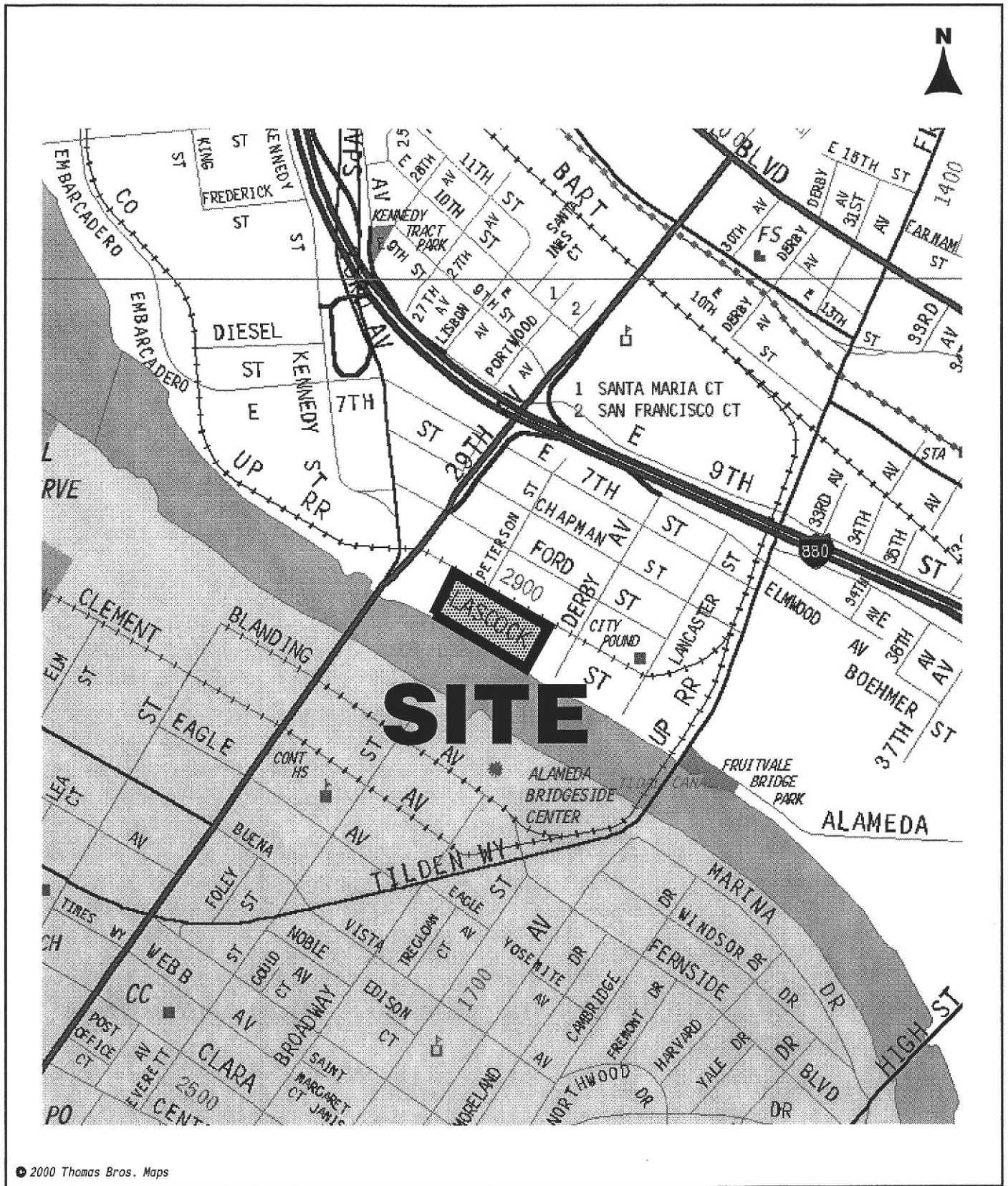
Peter M. Langtry, R.G., C.E.G.  
Principal Environmental Geologist

RLH:PML

Copies: Addressee (2)  
Signature Properties  
Attn: Ms. Mary Grace Houlihan (1)  
Mr. Marc Stice (1)  
Mr. Patrick Van Ness (1)  
Alameda County Health Care Services Agency (1)  
Attn: Mr. Amir Gholami

Attachments: Figure 1. Vicinity Map  
Figure 2. Shoreline Soil Sample Locations  
Attachment A. Soil Sampling Protocol and Analytical Results

OK P: 1731-2G Derby shoreline sampling ltr 010904



© 2000 Thomas Bros. Maps

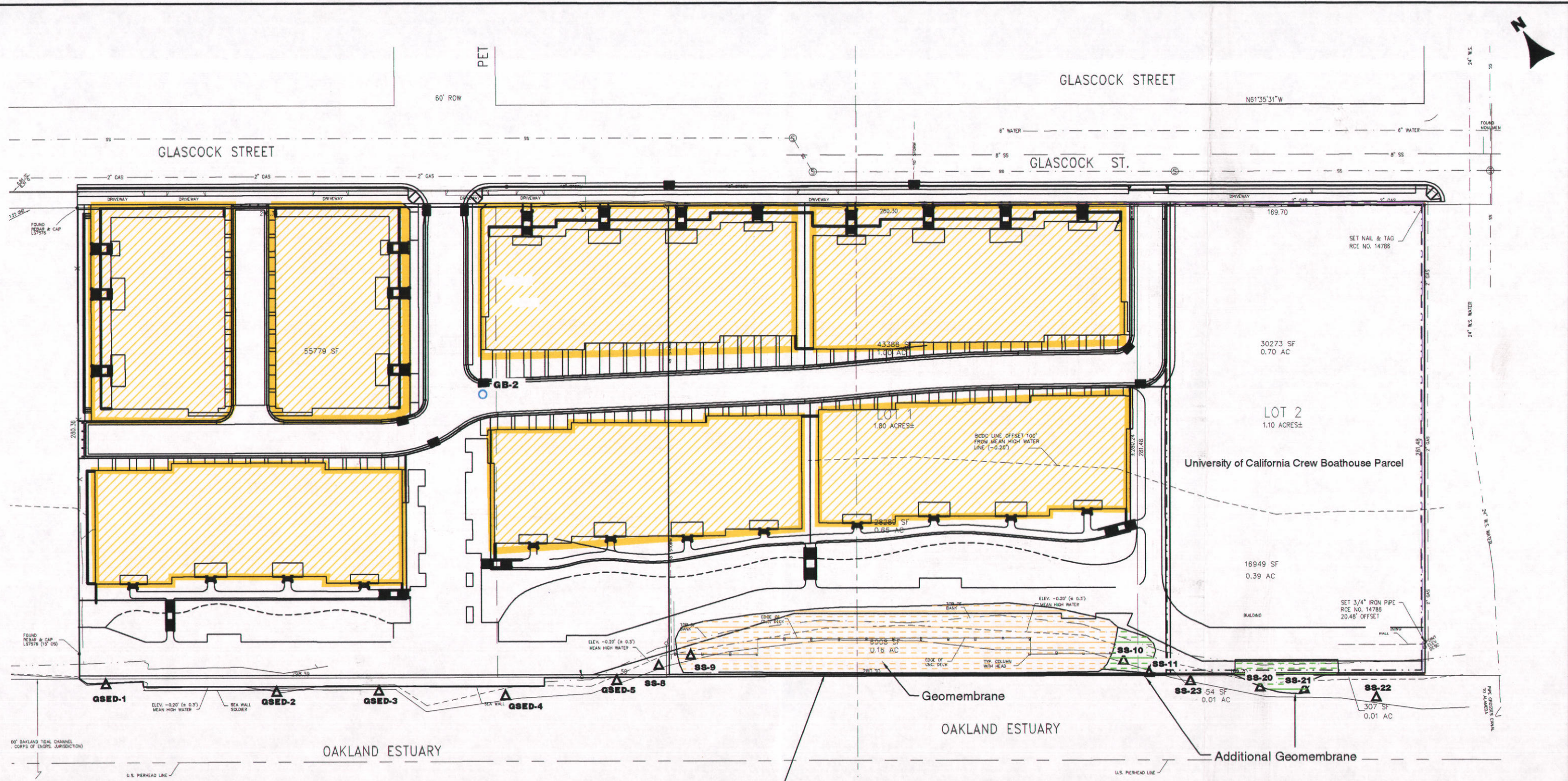
1/03\*EB

**VICINITY MAP**

303/315 DERBY AVENUE, 2901 AND 2909 GLASCOCK STREET  
Oakland, California

**LOVNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

**FIGURE 1**  
1731-2B



**LEGEND**

▲ - Approximate Location of Shoreline Sediment Sample



**SHORELINE SAMPLE LOCATIONS**  
 303/315 DERBY, 2901 AND 2909 GLASCOCK STREET  
 Oakland, California

**LOWNEY ASSOCIATES**  
 Environmental/Geotechnical/Engineering Services

**FIGURE 2**  
1731-2G

Base by KCA Engineers.

**ATTACHMENT A**  
**SOIL SAMPLING PROTOCOL AND ANALYTICAL RESULTS**

**Soil Sampling:** Soil samples for laboratory analysis were collected in brass liners. The ends of the liners were covered in aluminum foil or Teflon film, fitted with plastic end caps, taped, and labeled with a unique identification number. The samples were then placed in an ice-chilled cooler, and transported to a state-certified analytical laboratory with chain of custody documentation.

**Equipment Decontamination:** All sampling equipment was cleaned in a solution of laboratory grade detergent and distilled water before use at each sampling point.

Gas/BTEX Compounds (High Level)

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SS-10	11/03/2003	Soil	3
TP4-1	11/03/2003	Soil	5
TP4-3	11/03/2003	Soil	7
DSV-90	11/04/2003	Soil	8
DSV-91	11/04/2003	Soil	9
DSV-92	11/04/2003	Soil	10
DSV-93	11/04/2003	Soil	11

## Gas/BTEX Compounds (High Level)

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167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 11/05/2003 14:10

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	<b>SS-10</b>	Lab ID:	2003-11-0138 - 3
Sampled:	11/03/2003	Extracted:	11/6/2003 11:23
Matrix:	Soil	QC Batch#:	2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	550	50	mg/Kg	5.00	11/07/2003 11:23	g
Benzene	ND	3.1	mg/Kg	5.00	11/07/2003 11:23	
Toluene	ND	3.1	mg/Kg	5.00	11/07/2003 11:23	
Ethyl benzene	ND	3.1	mg/Kg	5.00	11/07/2003 11:23	
Xylene(s)	ND	3.1	mg/Kg	5.00	11/07/2003 11:23	
MTBE	ND	3.1	mg/Kg	5.00	11/07/2003 11:23	
<b>Surrogate(s)</b>						
Trifluorotoluene	NA	53-125	%	1.00	11/07/2003 11:23	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	11/07/2003 11:23	sd



Gas/BTEX Compounds (High Level)

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Project: 1731-2G

Derby

Received: 11/05/2003 14:10

Prep(s): 5030  
5030  
Sample ID: TP4-1  
Sampled: 11/03/2003  
Matrix: Soil  
Test(s): 8015M  
8021B  
Lab ID: 2003-11-0138 - 5  
Extracted: 11/6/2003 11:55  
QC Batch#: 2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	37	10	mg/Kg	1.00	11/07/2003 11:55	g
Benzene	ND	0.62	mg/Kg	1.00	11/07/2003 11:55	
Toluene	ND	0.62	mg/Kg	1.00	11/07/2003 11:55	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/07/2003 11:55	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/07/2003 11:55	
MTBE	ND	0.62	mg/Kg	1.00	11/07/2003 11:55	
<b>Surrogate(s)</b>						
Trifluorotoluene	87.0	53-125	%	1.00	11/07/2003 11:55	
4-Bromofluorobenzene-FID	270.0	58-124	%	1.00	11/07/2003 11:55	sh

## Gas/BTEX Compounds (High Level)

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Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

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Received: 11/05/2003 14:10

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	TP4-3	Lab ID:	2003-11-0138 - 7
Sampled:	11/03/2003	Extracted:	11/6/2003 12:27
Matrix:	Soil	QC Batch#:	2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	240	10	mg/Kg	1.00	11/07/2003 12:27	g
Benzene	ND	0.62	mg/Kg	1.00	11/07/2003 12:27	
Toluene	ND	0.62	mg/Kg	1.00	11/07/2003 12:27	
Ethyl benzene	ND	0.62	mg/Kg	1.00	11/07/2003 12:27	
Xylene(s)	ND	0.62	mg/Kg	1.00	11/07/2003 12:27	
MTBE	ND	0.62	mg/Kg	1.00	11/07/2003 12:27	
<b>Surrogate(s)</b>						
Trifluorotoluene	95.0	53-125	%	1.00	11/07/2003 12:27	
4-Bromofluorobenzene-FID	1098.0	58-124	%	1.00	11/07/2003 12:27	sh

Gas/BTEX Compounds (High Level)

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Project: 1731-2G

Derby

Received: 11/05/2003 14:10

Prep(s): 5030  
5030  
Sample ID: **DSV-90**  
Sampled: 11/04/2003  
Matrix: Soil

Test(s): 8015M  
8021B  
Lab ID: 2003-11-0138 - 8  
Extracted: 11/6/2003 12:59  
QC Batch#: 2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1200	50	mg/Kg	5.00	11/07/2003 12:59	g
Benzene	9.3	3.1	mg/Kg	5.00	11/07/2003 12:59	
Toluene	ND	3.1	mg/Kg	5.00	11/07/2003 12:59	
Ethyl benzene	8.2	3.1	mg/Kg	5.00	11/07/2003 12:59	
Xylene(s)	11	3.1	mg/Kg	5.00	11/07/2003 12:59	
MTBE	ND	3.1	mg/Kg	5.00	11/07/2003 12:59	
<b>Surrogate(s)</b>						
Trifluorotoluene	NA	53-125	%	1.00	11/07/2003 12:59	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	11/07/2003 12:59	sd

Gas/BTEX Compounds (High Level)

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Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	DSV-91	Lab ID:	2003-11-0138 - 9
Sampled:	11/04/2003	Extracted:	11/6/2003 13:31
Matrix:	Soil	QC Batch#:	2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	960	50	mg/Kg	5.00	11/07/2003 13:31	g
Benzene	ND	3.1	mg/Kg	5.00	11/07/2003 13:31	
Toluene	ND	3.1	mg/Kg	5.00	11/07/2003 13:31	
Ethyl benzene	ND	3.1	mg/Kg	5.00	11/07/2003 13:31	
Xylene(s)	ND	3.1	mg/Kg	5.00	11/07/2003 13:31	
MTBE	ND	3.1	mg/Kg	5.00	11/07/2003 13:31	
<b>Surrogate(s)</b>						
Trifluorotoluene	NA	53-125	%	1.00	11/07/2003 13:31	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	11/07/2003 13:31	sd

Gas/BTEX Compounds (High Level)

Lowney & Associates Oakland

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Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Prep(s): 5030 Test(s): 8015M  
5030 8021B  
Sample ID: DSV-92 Lab ID: 2003-11-0138 - 10  
Sampled: 11/04/2003 Extracted: 11/6/2003 14:03  
Matrix: Soil QC Batch#: 2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	940	50	mg/Kg	5.00	11/07/2003 14:03	g
Benzene	6.2	3.1	mg/Kg	5.00	11/07/2003 14:03	
Toluene	ND	3.1	mg/Kg	5.00	11/07/2003 14:03	
Ethyl benzene	ND	3.1	mg/Kg	5.00	11/07/2003 14:03	
Xylene(s)	ND	3.1	mg/Kg	5.00	11/07/2003 14:03	
MTBE	ND	3.1	mg/Kg	5.00	11/07/2003 14:03	
<b>Surrogate(s)</b>						
Trifluorotoluene	NA	53-125	%	1.00	11/07/2003 14:03	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	11/07/2003 14:03	sd

## Gas/BTEX Compounds (High Level)

Lowney &amp; Associates Oakland

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Received: 11/05/2003 14:10

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	<b>DSV-93</b>	Lab ID:	2003-11-0138 - 11
Sampled:	11/04/2003	Extracted:	11/6/2003 14:35
Matrix:	Soil	QC Batch#:	2003/11/06-05.04

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	720	50	mg/Kg	5.00	11/07/2003 14:35	g
Benzene	ND	3.1	mg/Kg	5.00	11/07/2003 14:35	
Toluene	ND	3.1	mg/Kg	5.00	11/07/2003 14:35	
Ethyl benzene	ND	3.1	mg/Kg	5.00	11/07/2003 14:35	
Xylene(s)	ND	3.1	mg/Kg	5.00	11/07/2003 14:35	
MTBE	ND	3.1	mg/Kg	5.00	11/07/2003 14:35	
<b>Surrogate(s)</b>						
Trifluorotoluene	NA	53-125	%	1.00	11/07/2003 14:35	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	11/07/2003 14:35	sd

## Gas/BTEX Compounds (High Level)

Lowney &amp; Associates Oakland

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Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

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Derby

## Batch QC Report

Prep(s): 5030

Test(s): 8015M

Method Blank

Soil

QC Batch # 2003/11/06-05.04

MB: 2003/11/06-05.04-005

Date Extracted: 11/06/2003 10:14

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	10	mg/Kg	11/07/2003 10:14	
Benzene	ND	0.62	mg/Kg	11/07/2003 10:14	
Toluene	ND	0.62	mg/Kg	11/07/2003 10:14	
Ethyl benzene	ND	0.62	mg/Kg	11/07/2003 10:14	
Xylene(s)	ND	0.62	mg/Kg	11/07/2003 10:14	
MTBE	ND	0.62	mg/Kg	11/07/2003 10:14	
<b>Surrogates(s)</b>					
Trifluorotoluene	97.2	53-125	%	11/07/2003 10:14	
4-Bromofluorobenzene-FID	97.2	58-124	%	11/07/2003 10:14	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94586

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

11/10/2003 16:08

**Gas/BTEX Compounds (High Level)**

Lowney & Associates Oakland

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Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 11/05/2003 14:10

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/11/06-05.04**

LCS 2003/11/06-05.04-001

Extracted: 11/06/2003

Analyzed: 11/06/2003 18:40

LCSD 2003/11/06-05.04-002

Extracted: 11/06/2003

Analyzed: 11/06/2003 19:11

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	0.608	0.623	0.625	97.3	99.7	2.4	75-125	35		
<i>Surrogates(s)</i> 4-Bromofluorobenzene-FID	84.9	85.7	100	84.9	85.7		58-124	0		



**Gas/BTEX Compounds (High Level)**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/11/06-05.04**

LCS 2003/11/06-05.04-003

Extracted: 11/06/2003

Analyzed: 11/07/2003 09:40

LCSD 2003/11/06-05.04-004

Extracted: 11/06/2003

Analyzed: 11/07/2003 10:11

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	0.116	0.122	0.125	92.8	97.6	5.0	77-123	35		
Toluene	0.116	0.124	0.125	92.8	99.2	6.7	78-122	35		
Ethyl benzene	0.121	0.129	0.125	96.8	103.2	6.4	70-130	35		
Xylene(s)	0.368	0.395	0.375	98.1	105.3	7.1	75-125	35		
<b>Surrogates(s)</b>										
Trifluorotoluene	479	525	500	95.8	105.0		53-125	0		

**Gas/BTEX Compounds (High Level)**

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Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

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**Legend and Notes**

---

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

sd

Surrogate recovery not reportable due to required dilution.

sh

Surrogate recovery was higher than QC limit due to matrix interference.

# LOWNEY ASSOCIATES

Mountain View Office  
105 Clyde Ave.  
Mountain View, CA 94043  
Tel: 650.967.2365  
Fax: 650.967.2747

Oakland Office  
167 Tibert St.  
Oakland, CA 94607  
Tel: 510.967.1970  
Fax: 510.967.1970

Fullerton Office  
251 E. Imperial Hwy.  
Fullerton, CA 92833  
Tel: 714.441.3090  
Fax: 714.441.3091

San Ramon Office  
2000 Camino Real  
San Ramon, CA 94583  
Tel: 925.734.2000  
Fax: 925.734.2001

## CHAIN OF CUSTODY RECORD

2003-11-0138

**Client Name:** *W. King*  
**Project:** *1731-247*  
**Report To:** *John King*  
**Sample Location:** *California State Highway*  
**Site ID (per client):** *CL-11-0138*

**Electronic Deliverable Format Required:** YES  NO   
**EDF LOGCODE:** LAMV  LAD  LAF

**Global ID #:**

**Turnaround Requirements:**  
5 Working Days  
48 Hours  
 24 Hours  
2-3 Hours RUSH

**QC Requirement:**  
Level A (standard)

**ANALYSIS REQUESTED:**  
TPH as gas/TLX/MTBE  
MOTOR:  8015/802:  8260  
TPH as trace: 8015/802  
Add slice gel column (Krook Oil Rat)   
TPH (418 11 with slice gel column)  
Halogenated VOCs (former 8010 list)  
Method: LIS02  8260  Add BTEX  
Organic Compounds (BUB)   
Metals: Cu, Pb, Fe  17 CAR   
Petroleum Hydrocarbons (C10-C28)  
Fuel Oxygenates (MTBE, ETBE, AMI, DPE)  
TBA, T, DCA, BPO, EDB) by RUSH  
PAHs (2310)  
PCEs (8050)

Sample I.D. (Field Point Name)	Date	Time	Lab ID	Sample Matrix	No. of Cans	Remarks
<i>1731-247</i>	<i>11/5/03</i>	<i>13:30</i>	<i>11/5/03</i>	<i>11/5/03</i>	<i>11/5/03</i>	<i>11/5/03</i>
<i>1731-247</i>	<i>11/5/03</i>	<i>14:30</i>	<i>11/5/03</i>	<i>11/5/03</i>	<i>11/5/03</i>	<i>11/5/03</i>

**Received By:** *[Signature]* Date: *11/4/03* Time: *13:30*  
**Received By:** *[Signature]* Date: *11/5/03* Time: *13:30*  
**Lab of Record:** *[Signature]*  
**Received by Lab:** *[Signature]* Date: *11/5/03* Time: *14:30*

Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 11/05/2003 14:10

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SS-8	11/03/2003	Soil	1
SS-9	11/03/2003	Soil	2
SS-11	11/03/2003	Soil	4
TP4-2	11/03/2003	Soil	6

Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

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167 Filbert Street  
Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Prep(s): 5035 Test(s): 8015M  
5035 8021B  
Sample ID: **SS-8** Lab ID: 2003-11-0138 - 1  
Sampled: 11/03/2003 Extracted: 11/7/2003 10:46  
Matrix: Soil QC Batch#: 2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 10:46	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 10:46	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 10:46	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 10:46	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 10:46	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 10:46	
<b>Surrogate(s)</b>						
Trifluorotoluene	69.3	53	%	1.00	11/07/2003 10:46	
4-Bromofluorobenzene-FID	60.0	58	%	1.00	11/07/2003 10:46	

## Gas/BTEX Compounds by 8015M/8021

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Received: 11/05/2003 14:10

Prep(s):	5035	Test(s):	8015M
	5035		8021B
Sample ID:	SS-9	Lab ID:	2003-11-0138 - 2
Sampled:	11/03/2003	Extracted:	11/7/2003 11:18
Matrix:	Soil	QC Batch#:	2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 11:18	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 11:18	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 11:18	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 11:18	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 11:18	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 11:18	
<b>Surrogate(s)</b>						
Trifluorotoluene	71.4	53	%	1.00	11/07/2003 11:18	
4-Bromofluorobenzene-FID	70.0	58	%	1.00	11/07/2003 11:18	

Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

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Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Prep(s): 5035  
5035  
Test(s): 8015M  
8021B  
Sample ID: **SS-11**  
Lab ID: 2003-11-0138 - 4  
Sampled: 11/03/2003  
Extracted: 11/7/2003 14:40  
Matrix: Soil  
QC Batch#: 2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 14:40	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 14:40	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 14:40	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 14:40	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 14:40	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 14:40	
<b>Surrogate(s)</b>						
Trifluorotoluene	66.7	53-125	%	1.00	11/07/2003 14:40	
4-Bromofluorobenzene-FID	63.1	58-124	%	1.00	11/07/2003 14:40	

**Gas/BTEX Compounds by 8015M/8021**

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Project: 1731-2G

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Received: 11/05/2003 14:10

Prep(s):	5035	Test(s):	8015M
	5035		8021B
Sample ID:	TP4-2	Lab ID:	2003-11-0138 - 6
Sampled:	11/03/2003	Extracted:	11/7/2003 12:22
Matrix:	Soil	QC Batch#:	2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1.0	1.0	mg/Kg	1.00	11/07/2003 12:22	g
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 12:22	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 12:22	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 12:22	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 12:22	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 12:22	
<b>Surrogate(s)</b>						
Trifluorotoluene	89.5	53-125	%	1.00	11/07/2003 12:22	
4-Bromofluorobenzene-FID	90.6	58-124	%	1.00	11/07/2003 12:22	



Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Batch QC Report

Prep(s): 5035

Test(s): 8015M

Method Blank

Soil

QC Batch # 2003/11/07-01.01

MB: 2003/11/07-01.01-003

Date Extracted: 11/07/2003 07:02

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/07/2003 07:02	
Benzene	ND	0.0050	mg/Kg	11/07/2003 07:02	
Toluene	ND	0.0050	mg/Kg	11/07/2003 07:02	
Ethyl benzene	ND	0.0050	mg/Kg	11/07/2003 07:02	
Xylene(s)	ND	0.0050	mg/Kg	11/07/2003 07:02	
MTBE	ND	0.0050	mg/Kg	11/07/2003 07:02	
<b>Surrogates(s)</b>					
Trifluorotoluene	97.8	53-125	%	11/07/2003 07:02	
4-Bromofluorobenzene-FID	101.2	58-124	%	11/07/2003 07:02	

## Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G

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Received: 11/05/2003 14:10

## Batch QC Report

Prep(s): 5035

Test(s): 8021B

## Laboratory Control Spike

## Soil

## QC Batch # 2003/11/07-01.01

LCS 2003/11/07-01.01-004

Extracted: 11/07/2003

Analyzed: 11/07/2003 07:34

LCSD 2003/11/07-01.01-005

Extracted: 11/07/2003

Analyzed: 11/07/2003 08:06

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	0.0967	0.0984	0.1000	96.7	98.4	1.7	77-123	35		
Toluene	0.0945	0.0964	0.1000	94.5	96.4	2.0	78-122	35		
Ethyl benzene	0.0935	0.0946	0.1000	93.5	94.6	1.2	70-130	35		
Xylene(s)	0.280	0.288	0.300	93.3	96.0	2.9	75-125	35		
<i>Surrogates(s)</i>										
Trifluorotoluene	472	488	500	94.4	97.6		53-125			

Severn Trent Laboratories, Inc.

11/10/2003 16:08

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

Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

Attn.: Peter Langtry

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Project: 1731-2G  
Derby

Received: 11/05/2003 14:10

Batch QC Report

Prep(s): 5035

Test(s): 8015M

Laboratory Control Spike

Soil

QC Batch # 2003/11/07-01.01

LCS 2003/11/07-01.01-006

Extracted: 11/07/2003

Analyzed: 11/07/2003 09:10

LCSD 2003/11/07-01.01-007

Extracted: 11/07/2003

Analyzed: 11/07/2003 09:42

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	0.504	0.487	0.500	100.8	97.4	3.4	75-125	35		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	488	507	500	97.6	101.4		58-124			

## Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G

Derby

Received: 11/05/2003 14:10

---

**Legend and Notes**

---

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

Attn.: Peter Langtry

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Project: 1731-2G

Derby

Received: 11/07/2003 09:10

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
GSED-1	11/06/2003	Soil	7
GSED-2	11/06/2003	Soil	8
GSED-3	11/06/2003	Soil	9
GSED-4	11/06/2003	Soil	10
GSED-5	11/06/2003	Soil	11

## Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G

Derby

Received: 11/07/2003 09:10

---

Prep(s):	5035	Test(s):	8015M
	5035		8021B
Sample ID:	GSED-1	Lab ID:	2003-11-0195 - 7
Sampled:	11/06/2003	Extracted:	11/7/2003 18:54
Matrix:	Soil	QC Batch#:	2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 18:54	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 18:54	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 18:54	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 18:54	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 18:54	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 18:54	
<b>Surrogate(s)</b>						
Trifluorotoluene	78.7	53	%	1.00	11/07/2003 18:54	
4-Bromofluorobenzene-FID	74.4	58	%	1.00	11/07/2003 18:54	

Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

Prep(s):	5035	Test(s):	8015M
	5035		8021B
Sample ID:	GSED-2	Lab ID:	2003-11-0195 - 8
Sampled:	11/06/2003	Extracted:	11/10/2003 20:18 11/11/2003 11:58
Matrix:	Soil	QC Batch#:	2003/11/10-01.01 2003/11/11-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/11/2003 11:58	
Benzene	ND	0.0050	mg/Kg	1.00	11/10/2003 20:18	
Toluene	ND	0.0050	mg/Kg	1.00	11/10/2003 20:18	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/10/2003 20:18	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/10/2003 20:18	
MTBE	ND	0.0050	mg/Kg	1.00	11/10/2003 20:18	
<b>Surrogate(s)</b>						
Trifluorotoluene	58.2	53	%	1.00	11/10/2003 20:18	
4-Bromofluorobenzene-FID	64.3	58	%	1.00	11/11/2003 11:58	

## Gas/BTEX Compounds by 8015M/8021

Lowney &amp; Associates Oakland

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Project: 1731-2G

Derby

Received: 11/07/2003 09:10

Prep(s):	5035	Test(s):	8015M
	5035		8021B
Sample ID:	GSED-3	Lab ID:	2003-11-0195 - 9
Sampled:	11/06/2003	Extracted:	11/7/2003 17:50
Matrix:	Soil	QC Batch#:	2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 17:50	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 17:50	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 17:50	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 17:50	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 17:50	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 17:50	
<b>Surrogate(s)</b>						
Trifluorotoluene	81.9	53	%	1.00	11/07/2003 17:50	
4-Bromofluorobenzene-FID	80.2	58	%	1.00	11/07/2003 17:50	



Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

Prep(s): 5035 Test(s): 8015M  
5035 8021B  
Sample ID: GSED-4 Lab ID: 2003-11-0195 - 10  
Sampled: 11/06/2003 Extracted: 11/7/2003 18:22  
Matrix: Soil QC Batch#: 2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 18:22	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 18:22	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 18:22	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 18:22	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 18:22	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 18:22	
<b>Surrogate(s)</b>						
Trifluorotoluene	75.3	53	%	1.00	11/07/2003 18:22	
4-Bromofluorobenzene-FID	76.4	58	%	1.00	11/07/2003 18:22	

## Gas/BTEX Compounds by 8015M/8021

Lowney &amp; Associates Oakland

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Project: 1731-2G

Derby

Received: 11/07/2003 09:10

Prep(s):	5035	Test(s):	8015M
	5035		8021B
Sample ID:	GSED-5	Lab ID:	2003-11-0195 - 11
Sampled:	11/06/2003	Extracted:	11/7/2003 17:18
Matrix:	Soil	QC Batch#:	2003/11/07-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/07/2003 17:18	
Benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 17:18	
Toluene	ND	0.0050	mg/Kg	1.00	11/07/2003 17:18	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/07/2003 17:18	
Xylene(s)	ND	0.0050	mg/Kg	1.00	11/07/2003 17:18	
MTBE	ND	0.0050	mg/Kg	1.00	11/07/2003 17:18	
<b>Surrogate(s)</b>						
Trifluorotoluene	87.0	53	%	1.00	11/07/2003 17:18	
4-Bromofluorobenzene-FID	85.0	58	%	1.00	11/07/2003 17:18	

Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

Batch QC Report

Prep(s): 5035

Test(s): 8015M

Method Blank

Soil

QC Batch # 2003/11/07-01.01

MB: 2003/11/07-01.01-003

Date Extracted: 11/07/2003 07:02

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/07/2003 07:02	
Benzene	ND	0.0050	mg/Kg	11/07/2003 07:02	
Toluene	ND	0.0050	mg/Kg	11/07/2003 07:02	
Ethyl benzene	ND	0.0050	mg/Kg	11/07/2003 07:02	
Xylene(s)	ND	0.0050	mg/Kg	11/07/2003 07:02	
MTBE	ND	0.0050	mg/Kg	11/07/2003 07:02	
<b>Surrogates(s)</b>					
Trifluorotoluene	97.8	53-125	%	11/07/2003 07:02	
4-Bromofluorobenzene-FID	101.2	58-124	%	11/07/2003 07:02	

## Gas/BTEX Compounds by 8015M/8021

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## Batch QC Report

Prep(s): 5035

Method Blank

MB: 2003/11/10-01.01-003

Soil

Test(s): 8015M

QC Batch # 2003/11/10-01.01

Date Extracted: 11/10/2003 06:43

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/10/2003 06:43	
Benzene	ND	0.0050	mg/Kg	11/10/2003 06:43	
Toluene	ND	0.0050	mg/Kg	11/10/2003 06:43	
Ethyl benzene	ND	0.0050	mg/Kg	11/10/2003 06:43	
Xylene(s)	ND	0.0050	mg/Kg	11/10/2003 06:43	
MTBE	ND	0.0050	mg/Kg	11/10/2003 06:43	
<b>Surrogates(s)</b>					
Trifluorotoluene	90.2	53-125	%	11/10/2003 06:43	
4-Bromofluorobenzene-FID	97.6	58-124	%	11/10/2003 06:43	

Gas/BTEX Compounds by 8015M/8021

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Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

Batch QC Report

Prep(s): 5035

Method Blank

MB: 2003/11/11-01.01-003

Soil

Test(s): 8015M

QC Batch # 2003/11/11-01.01

Date Extracted: 11/11/2003 06:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	11/11/2003 06:51	
Benzene	ND	0.0050	mg/Kg	11/11/2003 06:51	
Toluene	ND	0.0050	mg/Kg	11/11/2003 06:51	
Ethyl benzene	ND	0.0050	mg/Kg	11/11/2003 06:51	
Xylene(s)	ND	0.0050	mg/Kg	11/11/2003 06:51	
MTBE	ND	0.0050	mg/Kg	11/11/2003 06:51	
<b>Surrogates(s)</b>					
Trifluorotoluene	97.7	53-125	%	11/11/2003 06:51	
4-Bromofluorobenzene-FID	92.5	58-124	%	11/11/2003 06:51	

## Gas/BTEX Compounds by 8015M/8021

Lowney &amp; Associates Oakland

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Project: 1731-2G

Derby

Received: 11/07/2003 09:10

## Batch QC Report

Prep(s): 5035

Test(s): 8021B

Laboratory Control Spike

Soil

QC Batch # 2003/11/07-01.01

LCS 2003/11/07-01.01-004

Extracted: 11/07/2003

Analyzed: 11/07/2003 07:34

LCSD 2003/11/07-01.01-005

Extracted: 11/07/2003

Analyzed: 11/07/2003 08:06

Compound	Conc. mg/Kg		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	0.0967	0.0984	0.1000	96.7	98.4	1.7	77-123	35		
Toluene	0.0945	0.0964	0.1000	94.5	96.4	2.0	78-122	35		
Ethyl benzene	0.0935	0.0946	0.1000	93.5	94.6	1.2	70-130	35		
Xylene(s)	0.280	0.288	0.300	93.3	96.0	2.9	75-125	35		
<b>Surrogates(s)</b>										
Trifluorotoluene	472	488	500	94.4	97.6		53-125			

Severn Trent Laboratories, Inc.

11/12/2003 15:40

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

Page 10 of 15

Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

Attn.: Peter Langtry

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Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

Batch QC Report

Prep(s): 5035

Test(s): 8015M

Laboratory Control Spike

Soil

QC Batch # 2003/11/07-01.01

LCS 2003/11/07-01.01-006

Extracted: 11/07/2003

Analyzed: 11/07/2003 09:10

LCSD 2003/11/07-01.01-007

Extracted: 11/07/2003

Analyzed: 11/07/2003 09:42

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	0.504	0.487	0.500	100.8	97.4	3.4	75-125	35		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	488	507	500	97.6	101.4		58-124			

**Gas/BTEX Compounds by 8015M/8021**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 11/07/2003 09:10

**Batch QC Report**

Prep(s): 5035

Test(s): 8015M

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/11/10-01.01**

LCS 2003/11/10-01.01-004

Extracted: 11/10/2003

Analyzed: 11/10/2003 07:14

LCSD 2003/11/10-01.01-005

Extracted: 11/10/2003

Analyzed: 11/10/2003 07:46

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	0.505	0.465	0.500	101.0	93.0	8.2	75-125	35		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	474	449	500	94.8	89.8		58-124			



Gas/BTEX Compounds by 8015M/8021

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

Batch QC Report

Prep(s): 5035

Test(s): 8021B

Laboratory Control Spike

Soil

QC Batch # 2003/11/10-01.01

LCS 2003/11/10-01.01-006

Extracted: 11/10/2003

Analyzed: 11/10/2003 08:18

LCSD 2003/11/10-01.01-007

Extracted: 11/10/2003

Analyzed: 11/10/2003 08:50

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD %	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Benzene	0.0889	0.0982	0.1000	88.9	98.2	9.9	77-123	35		
Toluene	0.0885	0.0956	0.1000	88.5	95.6	7.7	78-122	35		
Ethyl benzene	0.0865	0.0919	0.1000	86.5	91.9	6.1	70-130	35		
Xylene(s)	0.264	0.275	0.300	88.0	91.7	4.1	75-125	35		
<b>Surrogates(s)</b>										
Trifluorotoluene	464	479	500	92.8	95.8		53-125			

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

11/12/2003 15:40

**Gas/BTEX Compounds by 8015M/8021**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 11/07/2003 09:10

**Batch QC Report**

Prep(s): 5035

Test(s): 8021B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/11/11-01.01**

LCS 2003/11/11-01.01-004

Extracted: 11/11/2003

Analyzed: 11/11/2003 07:23

LCSD 2003/11/11-01.01-005

Extracted: 11/11/2003

Analyzed: 11/11/2003 07:54

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	0.0912	0.0933	0.1000	91.2	93.3	2.3	77-123	35		
Toluene	0.0902	0.0933	0.1000	90.2	93.3	3.4	78-122	35		
Ethyl benzene	0.0883	0.0908	0.1000	88.3	90.8	2.8	70-130	35		
Xylene(s)	0.269	0.277	0.300	89.7	92.3	2.9	75-125	35		
<b>Surrogates(s)</b> Trifluorotoluene	460	433	500	92.0	86.6		53-125			

**Gas/BTEX Compounds by 8015M/8021**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 11/07/2003 09:10

**Batch QC Report**

Prep(s): 5035

Test(s): 8015M

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/11/11-01.01**

LCS 2003/11/11-01.01-009

Extracted: 11/11/2003

Analyzed: 11/11/2003 10:54

LCSD 2003/11/11-01.01-010

Extracted: 11/11/2003

Analyzed: 11/11/2003 11:26

Compound	Conc. mg/Kg		Exp. Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	0.453	0.467	0.500	90.6	93.4	3.0	75-125	35		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	373	445	500	74.6	89.0		58-124			

Severn Trent Laboratories, Inc.

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

11/12/2003 15:40

**CHAIN OF CUSTODY RECORD**

Project Name: Deerby  
Job No.: 1731-2A  
Report To: Peter Langley  
Sampler (print): Charles Methner  
Sampler (signature): Charles Methner

Turnaround Requirements

- 5 Working Days
- 48 Hours
- 24 Hours
- 2-3 Hours RUSH
- see remarks

ANALYSES REQUESTED

QC Requirement:  
 Level A (standard)

Electronic Deliverable Format Required:  YES  NO

EDF LOGCODE:  LAMV  LAO  LAF

Global ID #:

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPH as per BTEX/MTBE Method: 8015/8021	TPH as diesel (8015M) Add silica gel column	TRPH (418.1) with silica gel column	Halogenated VOCs (former 8010 list) Method: 8021 8260 8260 BTEX	Organochlorine Pesticides (8081)	Metals: 8015, Pb, Hg 817 CAM Please filter water samples before preserve	Fuel Oxygenates (MTBE, ETBE, TAME, DIPE, TBA, 1,2-DCA, and EDB) by 8260	PAHs (8310)	PCBs (8082)	Remarks
DSV-94	11-5-03			SOIL	1	✓	✓								24h
DSV-95	↓			↓	↓	✓	✓								24h
DSV-96	↓			↓	↓	✓	✓								24h
DSV-97	11-6-03			↓	↓	✓	✓								24h
DSV-98	↓			↓	↓	✓	✓								24h
DSV-99	↓			↓	↓	✓	✓								24h
GSED-1	↓			↓	↓	✓	✓								24h
GSED-2	↓			↓	↓	✓	✓								3 days
GSED-3	↓			↓	↓	✓	✓								↓
GSED-4	↓			↓	↓	✓	✓								↓
GSED-5	↓			↓	↓	✓	✓								↓

Relinquished By: Charles Methner Date: 11-7-03 Time: 7:45

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Lab of Record: \_\_\_\_\_

Received by Lab: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

PM Initial:

Temp:

Submission # 2003-11-0195

**Lowney & Associates Oakland**

December 19, 2003

167 Filbert Street  
Oakland, Ca 94607

Attn.: Peter Langtry

Project#: 1731-2G

Project: Derby

Dear Peter,

Attached is our report for your samples received on 12/16/2003 14:30

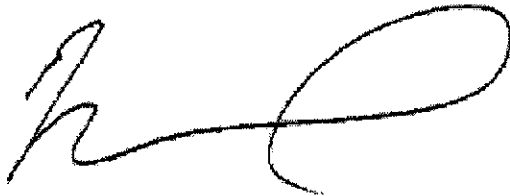
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 01/30/2004 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

**Fuel Oxygenates by 8260B**

Lowney &amp; Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SS-23	12/15/2003 11:45	Soil	1
SS-22	12/15/2003	Soil	4

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94586

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

12/19/2003 16:49

**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

Prep(s): 5030B Test(s): 8260B  
 Sample ID: SS-23 Lab ID: 2003-12-0543 - 1  
 Sampled: 12/15/2003 11:45 Extracted: 12/18/2003 14:52  
 Matrix: Soil QC Batch#: 2003/12/18-01.69  
 Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	6000	4600	ug/Kg	4.59	12/18/2003 14:52	g
Methyl tert-butyl ether (MTBE)	ND	23	ug/Kg	4.59	12/18/2003 14:52	
Benzene	ND	23	ug/Kg	4.59	12/18/2003 14:52	
Toluene	ND	23	ug/Kg	4.59	12/18/2003 14:52	
Ethyl benzene	ND	23	ug/Kg	4.59	12/18/2003 14:52	
Total xylenes	ND	23	ug/Kg	4.59	12/18/2003 14:52	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	89.9	70-121	%	4.59	12/18/2003 14:52	
Toluene-d8	94.7	81-117	%	4.59	12/18/2003 14:52	

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

12/19/2003 16:49

**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

Prep(s): 5030B	Test(s): 8260B
Sample ID: SS-22	Lab ID: 2003-12-0543 - 4
Sampled: 12/15/2003	Extracted: 12/19/2003 13:17
Matrix: Soil	QC Batch#: 2003/12/19-01.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2000	1000	ug/Kg	1.00	12/19/2003 13:17	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	12/19/2003 13:17	
Benzene	ND	5.0	ug/Kg	1.00	12/19/2003 13:17	
Toluene	64	5.0	ug/Kg	1.00	12/19/2003 13:17	
Ethyl benzene	ND	5.0	ug/Kg	1.00	12/19/2003 13:17	
Total xylenes	ND	5.0	ug/Kg	1.00	12/19/2003 13:17	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	86.3	70-121	%	1.00	12/19/2003 13:17	
Toluene-d8	109.6	81-117	%	1.00	12/19/2003 13:17	



**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 12/16/2003 14:30

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

Method Blank

Soil

QC Batch # 2003/12/18-01.69

MB: 2003/12/18-01.69-038

Date Extracted: 12/18/2003 11:38

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	12/18/2003 11:38	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	12/18/2003 11:38	
Benzene	ND	5.0	ug/Kg	12/18/2003 11:38	
Toluene	ND	5.0	ug/Kg	12/18/2003 11:38	
Ethyl benzene	ND	5.0	ug/Kg	12/18/2003 11:38	
Total xylenes	ND	5.0	ug/Kg	12/18/2003 11:38	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	92.9	70-121	%	12/18/2003 11:38	
Toluene-d8	96.1	81-117	%	12/18/2003 11:38	

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

12/19/2003 16:49

**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 12/16/2003 14:30

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2003/12/19-01.69-018

Soil

Test(s): 8260B

QC Batch # 2003/12/19-01.69

Date Extracted: 12/19/2003 10:18

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	12/19/2003 10:18	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	12/19/2003 10:18	
Benzene	ND	5.0	ug/Kg	12/19/2003 10:18	
Toluene	ND	5.0	ug/Kg	12/19/2003 10:18	
Ethyl benzene	ND	5.0	ug/Kg	12/19/2003 10:18	
Total xylenes	ND	5.0	ug/Kg	12/19/2003 10:18	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	87.3	70-121	%	12/19/2003 10:18	
Toluene-d8	89.5	81-117	%	12/19/2003 10:18	

**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 12/16/2003 14:30

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/12/18-01.69**

LCS 2003/12/18-01.69-000

Extracted: 12/18/2003

Analyzed: 12/18/2003 11:00

LCSD 2003/12/18-01.69-019

Extracted: 12/18/2003

Analyzed: 12/18/2003 11:19

Compound	Conc. ug/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	47.1	45.2	50.0	94.2	90.4	4.1	65-165	20		
Benzene	45.8	47.2	50.0	91.6	94.4	3.0	69-129	20		
Toluene	44.8	53.0	50.0	89.6	106.0	16.8	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	468	449	500	93.6	89.8		70-121			
Toluene-d8	451	512	500	90.2	102.4		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

12/19/2003 16:49

**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/12/19-01.69**

LCS 2003/12/19-01.69-041

Extracted: 12/19/2003

Analyzed: 12/19/2003 09:41

LCSD 2003/12/19-01.69-059

Extracted: 12/19/2003

Analyzed: 12/19/2003 09:59

Compound	Conc. ug/Kg		Exp. Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	47.2	39.6	50.0	94.4	79.2	17.5	65-165	20		
Benzene	41.1	44.0	50.0	82.2	88.0	6.8	69-129	20		
Toluene	47.2	48.9	50.0	94.4	97.8	3.5	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	448	428	500	89.6	85.6		70-121			
Toluene-d8	453	476	500	90.6	95.2		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

12/19/2003 16:49

**Fuel Oxygenates by 8260B**

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

---

**Legend and Notes**

---

**Analysis Flag**

o

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

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

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

Lowney &amp; Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SS-20	12/15/2003	Soil	2
SS-21	12/15/2003 12:00	Soil	3

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

12/19/2003 16:49

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607  
Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 12/16/2003 14:30

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SS-20	Lab ID:	2003-12-0543 - 2
Sampled:	12/15/2003	Extracted:	12/18/2003 16:00
Matrix:	Soil	QC Batch#:	2003/12/18-03.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2400000	1300000	ug/Kg	25.00	12/19/2003 03:09	g
Benzene	ND	13000	ug/Kg	25.00	12/19/2003 03:09	
Toluene	ND	13000	ug/Kg	25.00	12/19/2003 03:09	
Ethyl benzene	ND	13000	ug/Kg	25.00	12/19/2003 03:09	
Total xylenes	ND	13000	ug/Kg	25.00	12/19/2003 03:09	
Methyl tert-butyl ether (MTBE)	ND	13000	ug/Kg	25.00	12/19/2003 03:09	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	NA	70-121	%	25.00	12/19/2003 03:09	sd
Toluene-d8	NA	81-117	%	25.00	12/19/2003 03:09	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

12/19/2003 16:49

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

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street

Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G

Derby

Received: 12/16/2003 14:30

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2003/12/18-03.69**

LCS 2003/12/18-03.69-038

Extracted: 12/19/2003

Analyzed: 12/19/2003 00:38

LCSD 2003/12/18-03.69-059

Extracted: 12/19/2003

Analyzed: 12/19/2003 00:59

Compound	Conc. ug/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	9230	9260	10000	92.3	92.6	0.3	69-129	20		
Toluene	10300	10000	10000	103.0	100.0	3.0	70-130	20		
Methyl tert-butyl ether (MTBE)	8280	7360	10000	82.8	73.6	11.8	65-165	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	235	231	250	94.0	92.4		70-121			
Toluene-d8	269	250	250	107.6	100.0		81-117			

12/19/2003 16:49

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



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

Lowney & Associates Oakland

Attn.: Peter Langtry

167 Filbert Street  
Oakland, Ca 94607

Phone: (510) 267-1970 Fax: (510) 267-1972

Project: 1731-2G  
Derby

Received: 12/16/2003 14:30

---

Legend and Notes

---

Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

sd

Surrogate recovery not reportable due to required dilution.

**LOWNEY ASSOCIATES**  
Environmental/Geotechnical/Engineering Services

Mountain View Office  
405 Clyde Ave.  
Mountain View 94043  
Tel: 650.967.2365  
Fax: 650.967.2785



Oakland Office  
167 Filbert St.  
Oakland 94607  
Tel: 510.267.1970  
Fax: 510.267.1970

Fullerton Office  
251 E. Imperial Hwy. #470  
Fullerton 92835  
Tel: 714.441.3090  
Fax: 714.441.3091

San Ramon Office  
2258 Camino Ramon  
San Ramon 94583  
Tel: 925.275.2555  
Fax: 925.275.2555

**CHAIN OF CUSTODY RECORD**

2003-12-0543

Project Name: Derby

Job No.: 1731-26

Report To: Peter Langley

Sampler (print): Charles Mettlo

Sampler (signature): [Signature]

Electronic Deliverable Format Required:  YES  NO

EDF LOGCODE:  LAMV  LAO  LAF

Global ID #:

Turnaround Requirements:  
 5 Working Days  
 48 Hours  
 24 Hours  
 2-3 Hours RUSH  
 3-Day

QC Requirement:  
 Level A (standard)

ANALYSES REQUESTED: 81222

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPH as gas (BTEX/MTBE) Method: 8015/8021	TPH as diesel (8015M) Dadd silica gel column Dadd Oil Range	TRPH (418.1) with silica gel column	Halogenated VOCs (former 8010 list) Method: 8021 80260 Dadd BTEX	Organochlorine Pesticides (8081)	Metals: <input type="checkbox"/> As, <input type="checkbox"/> Pb, <input type="checkbox"/> Hg <input type="checkbox"/> 17 CAN <i>Please filter water samples before preserve</i>	Fuel Oxygenates (MTBE, ETBE, TAME, DIPE, TBA, 1,2-DCA, and EDB) by 8260	PAHs (8310)	PCBs (8082)	Remarks
SS-23	12-15-03			soil	1	✓	✓								
SS-20	↓			↓	↓	✓	✓								
SS-21	↓			↓	↓	✓	✓								
SS-22	↓			↓	↓	✓	✓								
<b>RUSH</b>															

Relinquished By: [Signature] Date: 12-16-03 Time: 19:10

Relinquished By: [Signature] Date: 12-16-03 Time: 14:30

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature] Date: 12/16/03 Time: 10:10 PM Initial: 4.1

Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Lab of Record: \_\_\_\_\_

Received by Lab: [Signature] Date: 12-16-03 Time: 14:30

Temp: \_\_\_\_\_

**STL San Francisco**

**Sample Receipt Checklist**

Submission #: 2003- 12 - 0543

Checklist completed by: (Initials) NK Date: 12 / 16 /03

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

Yes \_\_\_ No \_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_

Chain of custody agrees with sample labels?

Yes \_\_\_ No

Samples in proper container/bottle?

Yes  No \_\_\_

Sample containers intact?

Yes  No \_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_

All samples received within holding time?

Yes  No \_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}C \pm 2$ )?

Temp: 4.1°C Yes  No \_\_\_

Water - VOA vials have zero headspace?

Ice Present Yes  No \_\_\_

No VOA vials submitted  Yes \_\_\_ No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small ~O), M (medium ~ O) or L (large ~ O))

Water - pH acceptable upon receipt?  Yes  No Boils

pH adjusted- Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc -Lot #(s) \_\_\_\_\_

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments: Rec'd two containers for SS-23 @ 12/15/03 @ 12:00  
& SS-23 @ 12/15/03 @ 11:45. Did not rec'd sample  
SS-21.

**Project Management [Routing for instruction of indicated discrepancy(ies)]**

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_ / \_\_\_ /03

Client contacted:  Yes  No

Summary of discussion: SS21 at 12:00 SS23 11:45

Corrective Action (per PM/Client):



2003-12-0543

**CHAIN OF CUSTODY RECORD**

Project Name: Derby

Job No.: 1731-26

Report To: Peter Langley

Sampler (print): Charles Mettlo

Sampler (signature): CL Mettlo

Electronic Deliverable Format Required:  YES  NO

EDF LOGCODE:  LAMV  LAO  LAF

Global ID # :

Turnaround Requirements

5 Working Days

48 Hours

24 Hours

2-3 Hours RUSH

3-Day

QC Requirement:

Level A (standard)

ANALYSES REQUESTED 81222

TPH as gas/BTEX/MTBE  
Method:  8015/8021  8260

TPH as diesel (8015M)  
 add silica gel column  add Oil Range

TRPH (418.1) with silica gel column

Halogenated VOCs (former 8010 list)  
Method:  8021  8260  add BTEX

Organochlorine Pesticides (8081)

Metals:  As, Pb, Hg  17 CAM  
*Please filter water samples before preserve*

Fuel Oxygenates (MTBE, ETBE, TAME, DIPE, TBA, 1,2-DCA, and EDB) by 8260

PAHs (8310)

PCBs (8082)

Sample I.D. (Field Point Name)	Date	Time	Lab I.D.	Sample Matrix	No. of Cont.	TPH as gas/BTEX/MTBE Method: <input checked="" type="checkbox"/> 8015/8021 <input type="checkbox"/> 8260	TPH as diesel (8015M) <input type="checkbox"/> add silica gel column <input type="checkbox"/> add Oil Range	TRPH (418.1) with silica gel column	Halogenated VOCs (former 8010 list) Method: <input type="checkbox"/> 8021 <input type="checkbox"/> 8260 <input type="checkbox"/> add BTEX	Organochlorine Pesticides (8081)	Metals: <input type="checkbox"/> As, Pb, Hg <input type="checkbox"/> 17 CAM <i>Please filter water samples before preserve</i>	Fuel Oxygenates (MTBE, ETBE, TAME, DIPE, TBA, 1,2-DCA, and EDB) by 8260	PAHs (8310)	PCBs (8082)	Remarks
<u>SS-29</u>	<u>12-15-03</u>			<u>SOIL</u>	<u>1</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
<u>SS-20</u>	↓			↓	↓	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
<u>SS-21</u>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
<u>SS-22</u>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
<b>RUSH</b>															

Relinquished By: CL Mettlo Date: 12-16-03 Time: 19:10

Relinquished By: Proby Date: 12-16-03 Time: 14:30

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: Proby Date: 12/16/03 Time: 10:10

Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Lab of Record: \_\_\_\_\_

Received by Lab: Proby Date: 12-16-03 Time: 1430

PM Initial: 41

Temp: \_\_\_\_\_