From: Sent:

Stephen\_Vanni@bpna.com Tuesday, May 20, 2003 8:38 AM

Al Pelton

To: Subject:

Fleischmann's Yeast Oakland Subsurface Investigation Report









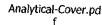


BTEX2.pdf

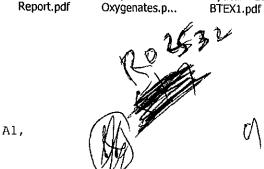




Analytical - Gas BTEX3.pdf



2018 103



UN WHOM

Alameda County MAY 2 2 2003 Environmental Health

Subsurface Investigation Report is attached.

Stephen

Trevor Bausman <tbausman@accenv.com> 01/08/2003 07:14 PM PST

To: "'mark henson@bpna.com'" <mark henson@bpna.com> cc: "'stephen\_vanni@bpna.com'" <stephen\_vanni@bpna.com>

bcc:

Subject: Fleischmann's Yeast Oakland Subsurface Investigation Report

Dear Mr. Henson:

Attached to this email is the ACC Subsurface Investigation Report for Fleischmann's Yeast Facility,

Oakland, California, including Appendices in PDF and JPG format (to reduce file size). Upon your

and/or Mr. Vanni's approval, ACC will send you a signed copy and forward one copy to the local

oversight regulator, Mr. Hernan Gomez, of the Oakland Fire Services Agency.

If you have any questions with this report, you may contact me directly at (510) 638~8400 ext. 113

or David DeMent, Environmental Division Manager, at ext. 109.

Trevor Bausman Environmental Project Administrator

ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, CA 94621

Voice: (510) 638-8400 x 113 Fax: (510) 638-8404

www.accenv.com

January 8, 2003

Mr. Stephen Vanni, Plant Manager Fleischmann's Yeast 921 98<sup>th</sup> Avenue Oakland, California 94603

RE: Subsurface Investigation Report 921 98th Avenue Oakland, California ACC Project Number: 6725-001.01

Dear Mr. Vanni:

Enclosed please find two copies he Subsurface Investigation Report for the Fleischmann's Yeast Facility located at 921 98<sup>th</sup> Avenue, Oakland, California. The purpose of this initial investigation was to: 1) characterize soil and groundwater conditions beneath the underground storage tanks (USTs) formerly located onsite; 2) obtain data regarding suspect residual concentrations of gasoline constituents in soil and groundwater; 3) evaluate residual gasoline constituent concentrations in regards to potential human health and ecological risk; and 4) prepare and submit a report of findings to the Oakland Fire Services Agency for review.

ACC observed field indications of residual gasoline impact in exploratory soil borings B1 through B6. Soil and groundwater sample analytical results reported varying concentrations of gasoline constituents and relatively low benzene, toluene, ethylbenzene, and total xylenes concentrations indicate that the residual hydrocarbons are weathered and degraded.

On your behalf, ACC will forward a copy of this report to Mr. Hernan Gomez of the Oakland Fire Services Agency for review and approval. Based on findings of this investigation and continued commercial use of the property, ACC is recommending regulatory case closure in regards to the former gasoline USTs. If you have any questions regarding the report, please contact me at (510) 638-8400, extension 109.

Sincerely,

David R. DeMent, RG, REA II Environmental Division Manager

/trb:drd

**Enclosures** 

# SUBSURFACE INVESTIGATION REPORT

# 921 98<sup>th</sup> Avenue Oakland, California

ACC Project Number: 6725-001.01

Prepared for:

Mr. Stephen Vanni Plant Manager Fleischmann's Yeast 921 98<sup>th</sup> Avenue Oakland, California 94603

January 8, 2003

Prepared by:		
	Edward Giacometti Staff Geologist	
Reviewed by:		
	David R. DeMent, RG, REA II Environmental Division Manager	

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# SUBSURFACE INVESTIGATION REPORT 921 98th Avenue Oakland, California

## 1.0 INTRODUCTION

This Subsurface Investigation Report has been prepared by ACC Environmental Consultants, Inc. (ACC) at the request of Fleischmann's Yeast (Client). This report describes subsurface investigation work performed at the Fleischmann's Yeast Facility located at 921 98th Avenue, Oakland, California (Site). The specific goals of this investigation were to: 1) characterize soil and groundwater and collect representative samples in the vicinity of the two former gasoline underground storage tanks (UST's) and one formaldehyde UST; 2) analyze select representative soil and grab groundwater samples from the soil borings for gasoline constituents; and 3) prepare a report of findings for submission to the Oakland Fire Services Agency (OFSA), the oversight regulatory agency.

The work performed consisted of advancing eight exploratory soil borings to total depths of 16 feet below ground surface (bgs), collecting representative soil and grab groundwater samples, and characterizing the soil and groundwater for gasoline constituents in the vicinity of the two former gasoline underground storage tanks (USTs) and one existing formaldehyde UST.

## 2.0 BACKGROUND

During preparation of a Phase I Environmental Site Assessment, ACC identified two former gasoline USTs and product dispensers and one formaldehyde UST at the Site. UST locations are illustrated on Figure 2. The gasoline USTs were apparently last used in the early 1980's and the formaldehyde UST was last used in the late 1980's. No records of gasoline UST removal were found but the formaldehyde UST was investigated and found to contain approximately 500 gallons of a water/formaldehyde mixture.

ACC contracted with DCM Construction, Inc. (DCM) of Dublin, California, to excavate in the vicinity of the two former, gasoline USTs and break the concrete around the formaldehyde UST. These activities were inteded to verify that the gasoline USTs had been removed and to facilitate closing the formaldehyde UST in-place under permit with the OFSA. Exploratory excavation at gasoline UST T1 revealed broken and cut product and vent lines and engineered fill where soils should have been native silts and clays. Exploratory excavation at gasoline UST T2 was inconclusive. ACC then contracted with a GeoTech Utility Locating (GeoTech), of E1 Cerrito, California, a subsurface utility locating firm, to scan the area of the suspect USTs, especially UST 2. The results of a subsurface magnetometer survey were more conclusive and indicated that no metallic anomalies were located in the area of the former gasoline UST's.

The formaldehyde UST fill port was uncovered to confirm the tank type and orientation. ACC sampled the contents of the formaldehyde UST and confirmed that no solvents or elevated metals were present in the liquid. The Client tested the UST contents in-house and further confirmed that the liquid in the UST contained a weak water / formaldehyde mixture.

## 3.0 FIELD PROCEDURES

On September 16, 2002, ACC advanced eight exploratory soil borings (designated B1 through B8) at select locations adjacent to the UST's. The locations of the borings were marked with white paint and Underground Service Alert was notified at least 48 hours prior to commencing work. A soil boring permit was obtained form Alameda County Public Works Agency.

The eight exploratory soil borings were advanced by continuously coring with a four-feet long, hydraulically-driven, hollow-stem Geoprobe® sampling tool equipped with 2-inch inside-diameter clear acetate liners. Soil borings B1 and B2 were advanced adjacent to and on each side of former gasoline UST T1. Soil borings B3 (also designated T1-Disp) was advanced at the former dispenser for UST T1. Soil borings B4 and B5 were advanced adjacent to and on two sides of former gasoline UST T2. Soil borings B6 was advanced at the midpoint between former UST T2 and its former product dispenser located inside the existing building. Finally, soil borings B7 and B8 were advanced directly adjacent to the formaldehyde UST as close as physical parameters allowed.

The sampling probe and rods were cleaned prior to use and between sample drives by washing them with a trisodium phosphate and potable water solution, a potable water rinse, and distilled water rinse. Upon removal from the sampler, each recovered soil core was visually inspected and logged. The sample intervals were primarily logged to determine relative permeability and evaluate migration potential through the medium.

Grab groundwater samples were collected in soil borings B1, B4, and B7 by advancing a Geoprobe® sampling tool equipped with a clean, four-foot-long stainless steel screen. When the probe was advanced to approximately 20 feet bgs, the external sampling probe was pulled upwards four feet to expose the internal screen to the water-bearing formation. A grab groundwater sample was then retrieved through the rods with either a pre-cleaned stainless steel bailer or clean polyethylene tubing equipped with a checkvalve. Grab groundwater samples were collected in 40-milliliter VOA vials without headspace. Following collection, the vials were labeled, placed in a pre-chilled insulated container, and then transported to STL San Francisco (STL-SF), a state-certified laboratory, for analysis.

Drilling was performed under the direction of a Registered Geologist, and the surface materials in the borings were identified using visual and manual methods. Soils in each soil boring were logged and classified during drilling operations according to the Unified Soil Classification System (USCS). Lithologic logs of the soil borings are included as Appendix 1. Following drilling and sample collection, each boring location was abandoned with neat cement to just below the surface (2 to 3 inches). The surface of each boring location was completed with concrete to grade and colored to match the surrounding material.

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## 4.0 FINDINGS

# 4.1 Subsurface Conditions

The concrete and/or asphalt pavement was underlain by approximately 3 to 6 inches of sand and/or gravel baserock. Subsurface soil conditions were generally consistent across the Site. In general, soils consisted of uniform silty clay and clay to a depth of approximately 16 feet bgs. The fine-grained clays were generally dark olive green to olive gray, medium stiff, moderately to highly plastic, damp, and displayed low estimated permeability. At approximately 15 to 16 feet bgs, sand content began to increase with depth and a saturated SC clayey sand was observed in soil boring B1. This zone appears to be first-encountered groundwater.

All soil borings were continuously cored to better characterize the soils present. Soils were continuously logged and screened with a ppbRAE photoionization detector (PID). Some elevated PID readings, characteristic odors, and/or soil discoloration were noted during sampling activities. Additional details are included in the lithologic logs included in Appendix 1.

Fill materials presumedly used during the backfill of the UST T1 excavation were observed in soil boring B1 and in the exploratory soil excavation nearby. Gravel drainrock was also observed in the exploratory soil excavation performed to trace product/vent lines identified between the former T1 dispenser location and former UST T1. The product/vent lines appeared to have been cut at the excavation boundary and were presumedly bent back with a backhoe.

# 4.2 Analytical Results

Eleven soil samples and three grab groundwater samples were collected and analyzed for TPHg, BTEX, and MTBE. Soil sample analytical results are summarized in Table 1 and the grab groundwater sample results are summarized in Table 2. Copies of laboratory reports and chain of custody records are included in Appendix 2.

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TABLE 1 -SOIL ANALYTICAL RESULTS

Boring- Depth	ТРНд	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
B1-11.0	300	2.3	< 0.62	6.3	< 0.62	< 0.62
B1-15.0	410	5.5	9.3	9.6	43	< 3.1
B2-8.0	26	< 0.62	< 0.62	1.0	1.7	< 0.62
B2-12.0	1,400	23	70	48	230	< 6.2
B4-12.0	130	< 0.62	< 0.62	3.3	2.4	< 0.62
B4-16.0	<1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
B6-5.0	110	1.6	< 0.62	2.3	9.0	< 0.62
B5-8.0	870	< 6.2	< 6.2	< 6.2	< 6.2	< 6.2
B5-12.0	180	< 0.62	< 0.62	1.4	< 0.62	< 0.62
T1 DISP- 2.5	370	< 6.2	< 6.2	13	47	< 6.2
T1 DISP- 5.0	80	< 0.62	< 0.62	1.2	< 0.62	< 0.62

Notes: All results reported in milligrams per kilogram (mg/kg), approximately equal to parts per million (ppm) < Sample tested below the laboratory minimum detection limit indicated

TABLE 2 - WATER ANALYTICAL RESULTS

Sample ID	ТРНд	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
B1 -W	8,600	1,100	340	730	390	< 10
B4 -W	17,000	120	10	850	330	< 10
B7 -W	< 50	< 0.50	< 0.50	< 0.50	<1.0	1.8

Notes: All results reported in micrograms per liter (µg/L), approximately equal to parts per billion (ppb) < Sample tested below the laboratory minimum detection limit indicated

## 5.0 DISCUSSION

After confirming that the gasoline USTs had been removed and that no constituents of concern were stored in the formaldehyde UST, ACC advanced two exploratory soil borings at each former gasoline UST location to collect representative soil samples and one grab groundwater sample from first-encountered groundwater. Soil borings were also advanced beneath the former outside product dispenser, at the midpoint of the product lines between former gasoline UST T2 and its product dispenser, and adjacent to the formaldehyde UST. The general intent was to collect data about current subsurface conditions to facilitate closure of the facility.

Specific goals of this subsurface investigation were to: 1) characterize soil and groundwater conditions beneath the USTs formerly located at the subject site; 2) obtain data regarding suspect residual concentrations of gasoline constituents in soil and groundwater; 3) evaluate residual gasoline constituent concentrations in regards to potential human health and ecological risk; and 4) prepare and submit a report of findings to the OFSA for review and approval.

Based on ACC's experience with other subsurface investigations in this geographic region, we believe that subsurface soil and groundwater conditions have been characterized with a high degree of confidence. UST releases in subsurface conditions like those reported at the subject site tend to be highly localized, decrease readily through passive natural attenuation processes, and typically do not demonstrate an unacceptable risk to human health or the environment.

#### 5.1 Soil

Exploratory soil borings revealed that soils at the Site consist of fine-grained silts and clays from the surface to approximately 15 to 16 feet bgs. These soils typically limit the migration potential of released total petroleum hydrocarbons (TPH) due to their adsorption to the soil matrix and the low soil permeability. Based on the findings of exploratory soil excavation and accurately mapping the former UST locations from a scaled site plan, ACC believes that the exploratory soil borings advanced were correctly placed directly adjacent to the former USTs, product pipelines, and product dispenser. Therefore, ACC estimates that the sample analyses of soil and grab groundwater samples collected in the soil borings are indicative of worst-case conditions, with any residual TPH concentrations decreasing dramatically over horizontal distance. Residual TPH was identified primarily in soil from 8 to 15 feet bgs. Some TPH-impacted soil was identified in soil borings B3 (T1-Disp) and B6, but these impacts were relatively minor and decreased significantly with vertical distance.

Due to the fact that formaldehyde naturally breaks down into benign by-products and that the formaldehyde UST was observed to have a water / formaldehyde mixture present, this UST is considered to pose a low potential human health risk even if an unauthorized release did occur.

## 5.2 Water

First-encountered groundwater was logged in poor quality clayey sands at approximately 16 feet bgs. Grab groundwater sample analytical results indicate that water is being impacted by residual TPH in soil at each former UST location. However, based on the relatively low BTEX to TPHg ratios and the approximate age of the former USTs, weathering is occurring and BTEX is likely being preferentially degraded by natural attenuation processes.

ACC reviewed topographic contours on the San Leandro Quadrangle and estimates the regional groundwater flow direction to be northwest. A grab groundwater sample collected in soil boring B7, located north of USTs T1 and T2 reported only 1.8 ppb MTBE. While the location of soil boring B7 is somewhat crossgradient of the USTs, migration in groundwater in this area is typically defined more by diffusion than groundwater flow direction. As such, the analytical results reported in the grab groundwater sample collected from soil boring B7 likely approximate the horizontal extent of residual TPH impact in groundwater.

## 6.0 CONCLUSIONS

Based on findings of this investigation, analytical results, and field observations, ACC has made the following conclusions regarding soil and groundwater conditions at the site:

- Residual TPH impacts are present in fine-grained soils primarily below 8 feet bgs but these TPH impacts appear to be degraded and BTEX concentrations are relatively low;
- Residual TPH impacts are present in first encountered groundwater at 16 feet bgs but these TPH
  impacts are likely localized to the vicinity of the two former gasoline USTs;
- Identified residual TPH impacts in soil present no significant potential human health risk due to
  the their depth in fine grained soils, the estimated small volume of impacted soil, and the
  relatively low to non-detectable concentrations of benzene;
- Identified residual TPH impacts in groundwater present no significant potential human health
  risk due to its location in relatively shallow groundwater on a commercial facility, the lack of
  any potential downgradient or onsite receptors, the estimated small volume of impacted
  groundwater, and the relatively low to non-detectable concentrations of benzene;
- Identified residual TPH impacts in soil and groundwater present no significant potential
  ecological risk due to its location on a commercial facility, the low TPH migration potential in
  the subsurface, the lack of any nearby surface water bodies, and the relatively low to nondetectable concentrations of constituents of concern away from the two former USTs as
  potential sources;
- ACC believes that the location, degree, and extent of TPH impacts in the subsurface does not justify remedial soil and/or groundwater removal;
- No indication of subsurface impact was noted in soil borings B7 and B8 and formaldehyde is not
  a constituent of concern in the environment;
- Residual TPH concentrations will likely continue to decrease through natural attenuation processes.

ACC Project Number: 6725-001.01

## 7.0 RECOMMENDATIONS

Since property use will remain commercial to light industrial, and the likelihood is very low that residual TPH impacts would be encountered during site development, ACC recommends that the Client request no further action in regards to the former USTs and regulatory case closure from the OFSA.

If regulatory closure cannot be approved at this time, we recommend meeting with the OFSA to discuss the technical merits of this case.

# 8.0 REQUEST FOR REGULATORY CLOSURE

On behalf of the property owner, Fleischmann's Yeast, ACC requests that the site be evaluated for regulatory site closure as a low-risk groundwater case based on the following:

- 1) No significant residual source exists in soil and groundwater and the plume of impacted groundwater appears to be localized to the immediate vicinity of the two former USTs;
- 2) Natural attenuation processes will likely continue to decrease residual TPH concentrations in soil and groundwater;
- 3) Any additional risk evaluation would likely demonstrate that no unacceptable human health risk exists and would exist under most potential receptor scenarios;
- 4) The first encountered water bearing zone is not a current, or likely future source of potable water;
- 5) No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted by this release, nor likely to be impacted in the future;
- 6) The site presents no significant risk to the environment due to the low to nondetectable concentrations of constituents of concern; and
- 7) The site is a commercial/industrial operation and will likely remain so in the foreseeable future.

ACC Project Number: 6725-001.01 Page 8

# 9.0 LIMITATIONS

The service performed by ACC has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.

Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6725-001.01

Fleischman's 921 98TH

SEVERN
TRENT
LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## **Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
B1-W	09/16/2002 08:10	Water	17
B4-W	09/16/2002 09:30	Water	18
B7-W	09/16/2002 11:10	Water	19

Received: 09/17/2002 13:51

# Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

Attn.: Dave DeMent

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Fleischman's 921 98TH

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CA DHS ELAP# 2496

Prep(s):

5030B

Sample ID: B1-W

09/16/2002 08:10

Sampled: Matrix:

Water

Analysis Flag: o (See Legend and Note Section)

Test(s): 8260B

Lab ID:

Received: 09/17/2002 13:51

2002-09-0375 - 17

Extracted: 9/30/2002 15:55

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	8600	1000	ug/L	20.00	09/30/2002 15:55	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L		09/30/2002 15:55	
Benzene	1100	10	ug/L		09/30/2002 15:55	
Toluene	340	10	ug/L		09/30/2002 15:55	
Ethylbenzene	730	10	ug/L		09/30/2002 15:55	
Total xylenes	390	20	ug/L		09/30/2002 15:55	
Surrogates(s)						
1,2-Dichloroethane-d4	104.2	76-114	%	20.00	09/30/2002 15:55	
Toluene-d8	99.4	88-110	%		09/30/2002 15:55	

# Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

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Fleischman's 921 98TH

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CA DHS ELAP# 2496

Prep(s): 5030B

Sample ID: B4-W

09/16/2002 09:30

Sampled: Matrix:

Water

Test(s):

8260B

Lab ID:

Received: 09/17/2002 13:51

2002-09-0375 - 18 9/30/2002 14:06

Extracted:

QC Batch#: 2002/09/30-01.62

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	17000	1000	ug/L	20.00	09/30/2002 14:06	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	20.00	; i	
Benzene	120	10	ug/L	20.00	09/30/2002 14:06	
Toluene	10	10	ug/L	20.00		
Ethylbenzene	850	10	ug/L	20.00		
Total xylenes	330	20	ug/L	20.00	09/30/2002 14:06	
Surrogates(s)						
1,2-Dichloroethane-d4	79.2	76-114	%	20.00	09/30/2002 14:06	
Toluene-d8	99.9	88-110	%	20.00	09/30/2002 14:06	

# Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

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CA DHS ELAP# 2496

Prep(s):

5030B

Sample ID: B7-W

Sampled: Matrix:

Water

09/16/2002 11:10

Test(s):

Received: 09/17/2002 13:51

8260B

Lab ID:

2002-09-0375 - 19

Extracted:

9/30/2002 13:44

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	09/30/2002 13:44	, rag
Methyl tert-butyl ether (MTBE)	1.8	0.50	ug/L		09/30/2002 13:44	
Benzene	ND	0.50	ug/L		09/30/2002 13:44	
Toluene	ND	0.50	ug/L		09/30/2002 13:44	
Ethylbenzene	ND	0.50	ug/L		09/30/2002 13:44	
Total xylenes	ND	1.0	ug/L		09/30/2002 13:44	
Surrogates(s)	1	1	] "- ]		00.00.2002 10.44	
1,2-Dichloroethane-d4	84.7	76-114	%	1.00	09/30/2002 13:44	
Toluene-d8	99.3	88-110	%			

Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

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Project: 6725-001.01

Fleischman's 921 98TH

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CA DHS ELAP# 2496

# Batch QC Report

Received: 09/17/2002 13:51

Prep(s): 5030B Method Blank

MB: 2002/09/30-01.62-050

Water

Test(s): 8260B QC Batch # 2002/09/30-01.62

Date Extracted: 09/30/2002 11:11

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	09/30/2002 11:11	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/30/2002 11:11	
Benzene	ND	0.5	ug/L	09/30/2002 11:11	
Toluene	ND	0.5	ug/L	09/30/2002 11:11	
Ethylbenzene	ND	0.5	ug/L	09/30/2002 11:11	
Total xylenes	ND	1.0	ug/L	09/30/2002 11:11	
Surrogates(s)					
1,2-Dichloroethane-d4	82.4	76-114	%	09/30/2002 11:11	
Toluene-d8	97.6	88-110	%	09/30/2002 11:11	

Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

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Fleischman's 921 98TH

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 5030B

LCS

LCSD

Test(s): 8260FAB

#### **Laboratory Control Spike**

2002/09/30-01.62-028 2002/09/30-01.62-049 Water

QC Batch # 2002/09/30-01.62

Extracted: 09/30/2002

Received: 09/17/2002 13:51

Analyzed: 09/30/2002 10:28

Extracted: 09/30/2002

Analyzed: 09/30/2002 10:49

Compound	Conc.	ug/L	Exp.Conc.	Red	covery	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	L.CS	LCSD
Benzene Toluene Methyl tert-butyl ether (MTBE)	20.2 23.2 22 4	20.0 24.0 21.0	25.0 25.0 25.0	80.8 92.8 89.6	80.0 96.0 84.0	1.0 3.4 6.5	69-129 70-130 65-165	20 20 20		
Surrogates(s) 1,2-Dichloroethane-d4 Toluene-d8	468 484	454 502	500 500	93.6 96.8	90.8 100.4		76-114 88-110			

Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

Attn.: Dave DeMent

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Oakland, CA 94621

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Project: 6725-001.01

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CA DHS ELAP# 2496

## Legend and Notes

## **Analysis Flag**

0

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

Received: 09/17/2002 13:51

# Gas/BTEX Compounds by 8015M/8021

**ACC Environmental Consultants** 

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CA DHS ELAP# 2496

# **Samples Reported**

Sample Name	Date Sampled	Matrix	Lab#
B4-16.0	09/16/2002 09:25	Soil	9

Received: 09/17/2002 13:51

# Gas/BTEX Compounds by 8015M/8021

**ACC Environmental Consultants** 

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CA DHS ELAP# 2496

Prep(s):

5035

5035

Test(s):

Received: 09/17/2002 13:51

8015M

8021B

Sample iD: **B4-16.0** 

Lab ID:

2002-09-0375 - 9

Sampled:

09/16/2002 09:25

Extracted:

9/27/2002 15:12

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	09/27/2002 15:12	
Benzene	ND	0.0050	mg/Kg	1.00	09/27/2002 15:12	
Toluene	ND	0.0050	mg/Kg	1.00	09/27/2002 15:12	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/27/2002 15:12	
Xylene(s)	ND	0.0050	mg/Kg	1.00	09/27/2002 15:12	
MTBE	ND	0.0050	mg/Kg	1.00	09/27/2002 15:12	
Surrogates(s)						
Trifluorotoluene	112.8	53-125	%	1.00	09/27/2002 15:12	
4-Bromofluorobenzene-FID	92.1	58-124	%	1.00	09/27/2002 15:12	

# Gas/BTEX Compounds by 8015M/8021

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CA DHS ELAP# 2496

# **Batch QC Report**

Received: 09/17/2002 13:51

Prep(s): 5035 Method Blank

MB: 2002/09/27-01.03-004

Soil

Test(s): 8015M QC Batch # 2002/09/27-01.03

Date Extracted: 09/27/2002 09:37

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	09/27/2002 09:37	
Benzene	ND	0.0050	mg/Kg	09/27/2002 09:37	
Toluene	NĐ	0.0050	mg/Kg	09/27/2002 09:37	
Ethyl benzene	ND	0.0050	mg/Kg	09/27/2002 09:37	
Xylene(s)	ND	0.0050	mg/Kg	09/27/2002 09:37	
MTBE	ND	0.0050	mg/Kg	09/27/2002 09:37	
Surrogates(s)		ĺ			
Trifluorotoluene	112.0	53-125	%	09/27/2002 09:37	
4-Bromofluorobenzene-FID	96.8	58-124	%	09/27/2002 09:37	

# Gas/BTEX Compounds by 8015M/8021

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CA DHS ELAP# 2496

# **Batch QC Report**

Prep(s): 5035

LCS

LCSD

Test(s): 8021B

**Laboratory Control Spike** 

2002/09/27-01.03-005

2002/09/27-01.03-006

Soil

Extracted: 09/27/2002 Extracted: 09/27/2002

Received: 09/17/2002 13:51

Analyzed: 09/27/2002 10:08

QC Batch # 2002/09/27-01.03

Analyzed: 09/27/2002 10:40

Compound	Conc.	mg/Kg	Exp.Conc.	Rec	overy	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0994	0.0944	0.1000	99.4	94.4	5.2	77-123	35		
Toluene	0.100	0.0958	0.1000	100.0	95.8	4.3	78-122	35		
Ethyl benzene	0.104	0.100	0.1000	104.0	100.0	3.9	70-130	35		
Xylene(s)	0.299	0.292	0.300	99.7	97.3	2.4	75-125	35		
Surrogates(s)					1					
Trifluorotoluene	543	521	500	108.6	104.2		53-125	, l		1

# Gas/BTEX Compounds by 8015M/8021

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CA DHS ELAP# 2496

# **Batch QC Report**

Prep(s): 5035

Test(s): 8015M

**Laboratory Control Spike** 

2002/09/27-01.03-007

Soil

QC Batch # 2002/09/27-01.03

LCS LCSD 2002/09/27-01.03-008

Extracted: 09/27/2002 Extracted: 09/27/2002

Received: 09/17/2002 13:51

Analyzed: 09/27/2002 11:11 Analyzed: 09/27/2002 11:42

Compound	Conc.	mg/Kg	Exp.Conc.	Rec	overy	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	0.549	0.532	0.500	109 8	106.4	3.1	75-125	35		
Surrogates(s) 4-Bromofluorobenzene-FID	451	434	500	90.2	86.8		58-124			

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

## Samples Reported

Received: 09/17/2002 13:51

Sample Name	Date Sampled	Matrix	Lab#
B1-11.0	09/16/2002 07:50	Soil	1
B1~15.0	09/16/2002 08:00	Soil	2
B2-8.0	09/16/2002 08:25	Soil	3
B2-12.0	09/16/2002 08:30	Soil	4
T1-DISP2.5	09/16/2002 07:50	Soil	5
B4-12.0	09/16/2002 09:20	Soil	8
B6-5.0	09/16/2002 10:10	Soil	10
B5-8.0	09/16/2002 09:50	Soil	11
B5-12.0	09/16/2002 09:55	Soil	12

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s):

5030

5030

3030

Sample ID: **B1-11.0** Sampled: 09/16/2002 07:50

Matrix:

Soil

Test(s): 8015M

Received: 09/17/2002 13:51

8021B

Lab ID: 2002-09-0375 - 1

Extracted: 9/23/2002 04:00

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	300	10	mg/Kg	1.00	09/24/2002 04:00	g
Benzene	2.3	0.62	mg/Kg	1.00	09/24/2002 04:00	J
Toluene	ND	0.62	mg/Kg	1.00	09/24/2002 04:00	
Ethyl benzene	6.3	0.62	mg/Kg	1.00	09/24/2002 04:00	
Xylene(s)	ND	0.62	mg/Kg	1.00	09/24/2002 04:00	
MTBE	ND	0.62	mg/Kg	1.00	09/24/2002 04:00	
Surrogates(s)						
4-Bromofluorobenzene	101.0	58-124	%	1.00	09/24/2002 04:00	
4-Bromofluorobenzene-FID	131.0	58-124	%	1.00	09/24/2002 04:00	sh

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s): 5030

5030

8015M

8021B

Sample ID: **B1-15.0** 

Lab ID:

Test(s):

Received: 09/17/2002 13:51

2002-09-0375 - 2

Sampled: 09/16/2002 08:00 Extracted:

9/23/2002 10:03

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	410	50	mg/Kg	5.00	09/25/2002 10:03	
Benzene	5.5	3.1	mg/Kg	5.00	09/25/2002 10:03	
Toluene	9.3	3.1	mg/Kg	5.00	09/25/2002 10:03	
Ethyl benzene	9.6	3.1	mg/Kg	5.00	09/25/2002 10:03	
Xylene(s)	43	3.1	mg/Kg	5.00	09/25/2002 10:03	
MTBE	ND	3.1	mg/Kg	5.00	09/25/2002 10:03	
Surrogates(s)						
4-Bromofluorobenzene	105.0	58-124	%	1.00	09/25/2002 10:03	
4-Bromofluorobenzene-FID	110.0	58-124	%	1.00	09/25/2002 10:03	

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s):

5030 5030

Test(s):

Received: 09/17/2002 13:51

8015M

8021B

Sample ID: B2-8.0

Lab ID:

2002-09-0375 - 3

Sampled: 09/16/2002 08:25 Extracted:

9/23/2002 05:01

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	26	10	mg/Kg	1.00	09/24/2002 05:01	g
Benzene	ND	0.62	mg/Kg		09/24/2002 05:01	9
Toluene	ND	0.62	mg/Kg		09/24/2002 05:01	
Ethyl benzene	1.0	0.62	mg/Kg	1.00	1	
Xylene(s)	1.7	0.62	mg/Kg	1.00	09/24/2002 05:01	
MTBE	ND	0.62	mg/Kg	1.00		
Surrogates(s)		ļ		į	00,01	
Trifluorotoluene	76.0	53-125	%	1.00	09/24/2002 05:01	
4-Bromofluorobenzene-FID	96.0	58-124	%	1.00	l t	

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s):

5030

5030

Test(s):

8015M

8021B

Sample ID: **B2-12.0** 

Lab ID:

2002-09-0375 - 4

Sampled:

09/16/2002 08:30

Extracted:

9/23/2002 10:34

Matrix:

Soil

Received: 09/17/2002 13:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1400	100	mg/Kg	10.00	09/25/2002 10:34	
Benzene	23	6.2	mg/Kg	10.00	09/25/2002 10:34	
Toluene	70	6.2	mg/Kg	10.00	09/25/2002 10:34	
Ethyl benzene	48	6.2	mg/Kg	10.00	09/25/2002 10:34	
Xylene(s)	230	6.2	mg/Kg	10.00	09/25/2002 10:34	
MTBE	ND	6.2	mg/Kg	10.00	09/25/2002 10:34	
Surrogates(s)	ĺ		İ			
Trifluorotoluene	NA	53-125	%	1.00	09/25/2002 10:34	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	09/25/2002 10:34	sd

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s): 5

5030

5030

Soil

Sample ID: T1-DISP.-2.5

Sampled:

09/16/2002 07:50

Matrix:

Test(s):

8015M

8021B

Lab ID:

2002-09-0375 - 5

Extracted: 9/23/2002 11:05

Received: 09/17/2002 13:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	370	100	mg/Kg	10.00	09/25/2002 11:05	
Benzene	ND	6.2	mg/Kg	10.00	09/25/2002 11:05	
Toluene	ND	6.2	mg/Kg	10.00	09/25/2002 11:05	
Ethyl benzene	13	6.2	mg/Kg	10.00	09/25/2002 11:05	
Xylene(s)	47	6.2	mg/Kg	10.00	09/25/2002 11:05	
MTBE	ND	6.2	mg/Kg	10.00	09/25/2002 11:05	
Surrogates(s)	<b>\</b>	<b>\</b>	1			
Trifluorotoluene	NA NA	53-125	%	1.00	09/25/2002 11:05	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	09/25/2002 11:05	sd

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s):

5030

5030

Sample ID: **B4-12.0** 

09/16/2002 09:20

Sampled:

Matrix:

Soil

Test(s):

Received: 09/17/2002 13:51

8015M

8021B

Lab ID: 2002-09-0375 - 8

Extracted: 9/23/2002 06:32

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	130	10	mg/Kg	1.00	09/24/2002 06:32	g
Benzene	ND	0.62	mg/Kg	1.00	09/24/2002 06:32	_
Toluene	ND	0.62	mg/Kg	1.00	09/24/2002 06:32	
Ethyl benzene	3.3	0.62	mg/Kg	1.00	09/24/2002 06:32	
Xylene(s)	2.4	0.62	mg/Kg	1.00	09/24/2002 06:32	
MTBE	ND	0.62	mg/Kg	1.00	09/24/2002 06:32	
Surrogates(s)						
4-Bromofluorobenzene	100.0	58-124	%	1.00	09/24/2002 06:32	
Trifluorotoluene-FID	122.0	53-125	%	1.00	09/24/2002 06:32	

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s):

5030

5030

09/16/2002 10:10

Sample ID: B6-5.0

Sampled: Matrix:

Soil 1

Test(s):

Received: 09/17/2002 13:51

8015M

8021B

Lab ID:

2002-09-0375 - 10

Extracted:

9/23/2002 07:33

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	110	10	mg/Kg	1.00	09/24/2002 07:33	
Benzene	1.6	0.62	mg/Kg	1.00		
Toluene	ND	0.62	mg/Kg		09/24/2002 07:33	
Ethyl benzene	2.3	0.62	mg/Kg		09/24/2002 07:33	
Xylene(s)	9.0	0.62	mg/Kg		09/24/2002 07:33	
MTBE	ND	0.62	mg/Kg		09/24/2002 07:33	
Surrogates(s)	ĺ				l	
4-Bromofluorobenzene	97.0	58-124	%	1.00	09/24/2002 07:33	
4-Bromofluorobenzene-FID	90.0	58-124	%		09/24/2002 07:33	

Gas/BTEX Compounds (High Level)

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Received: 09/17/2002 13:51

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CA DHS ELAP# 2496

Prep(s):

5030

5030

3030

Sample ID: B5-8.0

Sampled: Matrix:

Soil

09/16/2002 09:50

Test(s):

8015M

8021B

Lab ID: Extracted: 2002-09-0375 - 11

Extracted: 9/23/2002 11:36

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	870	100	mg/Kg	10.00	09/25/2002 11:36	g
Benzene	ND	6.2	mg/Kg	10.00	09/25/2002 11:36	_
Toluene	ND	6.2	mg/Kg	10.00	09/25/2002 11:36	
Ethyl benzene	ND	6.2	mg/Kg	10.00	09/25/2002 11:36	
Xylene(s)	ND	6.2	mg/Kg	10.00	09/25/2002 11:36	
MTBE	ND	6.2	mg/Kg	10.00	09/25/2002 11:36	
Surrogates(s)						
Trifluorotoluene	NA	53-125	%	1.00	09/25/2002 11:36	sd
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	09/25/2002 11:36	sd

# Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

5030

5030

Sample ID: **B5-12.0** Sampled:

Matrix:

Prep(s):

09/16/2002 09:55

Soil

Test(s):

Received: 09/17/2002 13:51

8015M

8021B

Lab ID:

2002-09-0375 - 12

Extracted:

9/23/2002 09:34

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	180	10	mg/Kg	1.00	09/24/2002 08:34	g
Benzene	ND	0.62	mg/Kg	1.00	09/24/2002 08:34	9
Toluene	ND	0.62	mg/Kg		09/24/2002 08:34	
Ethyl benzene	1.4	0.62	mg/Kg		09/24/2002 08:34	
Xylene(s)	ND	0.62	mg/Kg		09/24/2002 08:34	
MTBE	ND	0.62	mg/Kg		09/24/2002 08:34	
Surrogates(s)		<b> </b>			!	
4-Bromofluorobenzene	113.0	58-124	%	1.00	09/24/2002 08:34	
4-Bromofluorobenzene-FID	130.0	58-124	%		09/24/2002 08:34	sh

# Gas/BTEX Compounds (High Level)

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7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6725-001.01

Fleischman's 921 98TH

SEVERN
TRENT
LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## **Batch QC Report**

Received: 09/17/2002 13:51

Prep(s): 5030 Method Blank

MB: 2002/09/23-05.03-001

Soil

Test(s): 8015M QC Batch # 2002/09/23-05.03

Date Extracted: 09/23/2002 07:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	10	mg/Kg	09/25/2002 07:29	
Benzene	ND	0.62	mg/Kg	09/25/2002 07:29	
Toluene	ND	0.62	mg/Kg	09/25/2002 07:29	
Ethyl benzene	ND	0.62	mg/Kg	09/25/2002 07:29	
Xylene(s)	ND	0.62	mg/Kg	09/25/2002 07:29	
MTBE	ND	0.62	mg/Kg	09/25/2002 07:29	
Surrogates(s)	]				
Trifluorotoluene	111.0	53-125	%	09/25/2002 07:29	
4-Bromofluorobenzene-FID	97.1	58-124	%	09/25/2002 07:29	

Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

Attn.: Dave DeMent

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CA DHS ELAP# 2496

# **Batch QC Report**

Soil

Prep(s): 5030

LCS

Test(s): 8021B

**Laboratory Control Spike** 

2002/09/23-05.03-002

Extracted: 09/23/2002

Received: 09/17/2002 13:51

QC Batch # 2002/09/23-05.03

LCSD 2002/09/23-05.03-003

Extracted: 09/23/2002

Analyzed: 09/23/2002 16:41 Analyzed: 09/25/2002 17:12

Compound	Conc.	Conc. mg/Kg		Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene Toluene	0.143 0.150	0.148 0.141	0.125 0.125	114.4 120.0	118.4 112.8	3.4 6.2	77-123 78-122	35 35		
Ethyl benzene Xylene(s)	0.153 0.455	0.157 0.468	0.125 0.375	122.4 121.3	125.6 124.8	2.6 2.8	70-130 75-125	35 35		i i
Surrogates(s) Trifluorotoluene	109	114	100	109.0	114.0		53-125	0		

Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

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CA DHS ELAP# 2496

# **Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike** 

Soil

QC Batch # 2002/09/23-05.03

LCS

2002/09/23-05.03-004

Extracted: 09/23/2002

Received: 09/17/2002 13:51

Analyzed: 09/23/2002 17:43

LCSD

2002/09/23-05.03-005

Extracted: 09/23/2002

Analyzed: 09/23/2002 18:15

Compound	Conc	mg/Kg	Exp.Conc.	Rec	overy	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS LCSD			LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	0.667	0.698	0.625	106.7	111.7	4.6	75-125	35		
Surrogates(s) 4-Bromofluorobenzene-FID	90.8	74.1	100	90.8	74.1		58-124	0		

# Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

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Project: 6725-001.01

Fleischman's 921 98TH

SEVERN TRENT LABORATORY

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CA DHS ELAP# 2496

## Legend and Notes

Received: 09/17/2002 13:51

## **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.

Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

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Project: 6725-001.01

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CA DHS ELAP# 2496

## Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
T1-DISP5.0	09/16/2002 08:45	Soil	6

Received: 09/17/2002 13:51

# Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

Attn.: Dave DeMent

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Project: 6725-001.01

Fleischman's 921 98TH

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

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CA DHS ELAP# 2496

Prep(s):

5030

5030

Test(s):

8021B

8015M

Sample ID: T1-DISP.-5.0

Lab ID:

2002-09-0375 - 6

Sampled:

09/16/2002 08:45

Extracted:

9/30/2002 15:00

Matrix:

Soil

Received: 09/17/2002 13:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	80	10	mg/Kg	1.00	10/01/2002 10:50	<del> </del>
Benzene	ND	0.62	mg/Kg	1.00	10/01/2002 10:50	
Toluene	ND	0.62	mg/Kg	1.00	10/01/2002 10:50	
Ethyl benzene	1.2	0.62	mg/Kg	1.00	10/01/2002 10:50	
Xylene(s)	ND	0.62	mg/Kg	1.00	10/01/2002 10:50	
MTBE	ND	0.62	mg/Kg	1.00	10/01/2002 10:50	
Surrogates(s)	· · · · · · ·	ļ				
4-Bromofluorobenzene	95.5	58-124	%	1.00	10/01/2002 10:50	
4-Bromofluorobenzene-FID	71.3	58-124	%	1.00	10/01/2002 10:50	

Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

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Project: 6725-001.01

Fleischman's 921 98TH

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 09/17/2002 13:51

Prep(s): 5030 Method Blank

MB: 2002/09/30-05.03-001

Soil

Test(s): 8015M QC Batch # 2002/09/30-05.03

Date Extracted: 09/30/2002 15:00

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	10	mg/Kg	10/01/2002 10:19	
Benzene	ND	0.62	mg/Kg	10/01/2002 10:19	
Toluene	ND	0.62	mg/Kg	10/01/2002 10:19	
Ethyl benzene	ND	0.62	mg/Kg	10/01/2002 10:19	
Xylene(s)	ND	0.62	mg/Kg	10/01/2002 10:19	
MTBE	ND	0.62	mg/Kg	10/01/2002 10:19	
Surrogates(s)					
Trifluorotoluene	107.8	53-125	1 %	10/01/2002 10:19	
4-Bromofluorobenzene-FID	116.8	58-124	%	10/01/2002 10:19	

# Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6725-001.01

Fleischman's 921 98TH

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 5030

LCS

LCSD

Test(s): 8021B

**Laboratory Control Spike** 

2002/09/30-05.03-002 2002/09/30-05.03-003

Soil

QC Batch # 2002/09/30-05.03

Extracted: 09/30/2002 Extracted: 09/30/2002

Received: 09/17/2002 13:51

Analyzed: 10/01/2002 03:44 Analyzed: 10/01/2002 04:15

Compound	Conc.	mg/Kg	Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene Toluene Ethyl benzene Xylene(s)	0.121 0.128 0.135 0.397	0.115 0.123 0.126 0.372	0.125 0.125 0.125 0.375	96.8 102.4 108.0 105.9	92.0 98.4 100.8 99.2	5.1 4.0 6.9 6.5	77-123 78-122	35 35 35 35		1000
Surrogates(s) Trifluorotoluene	467	441	500	93.4	88.2		53-125	0		

# Gas/BTEX Compounds (High Level)

**ACC Environmental Consultants** 

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike** 

Soil

QC Batch # 2002/09/30-05.03

LCS

2002/09/30-05.03-004

Extracted: 09/30/2002

Analyzed: 10/01/2002 14:35

LCSD

2002/09/30-05.03-005

Extracted: 09/30/2002

Received: 09/17/2002 13:51

Analyzed: 10/01/2002 15:06

Compound	Conc.	mg/Kg	Exp.Conc.	Red	overy	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	0.531	0.624	0.625	85.0	99.8	16.0	75-125	35		
Surrogates(s) 4-Bromofluorobenzene-FID	413	409	500	82.6	81.8		58-124	0		



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CA DHS ELAP#:2496

# **ACC Environmental Consultants**

7977 Capwell Drive, Suite 100 Oakland, CA 94621

Submission#: 2002-09-0375

Attn.:

Dave DeMent

Project#: 6725-001.01

Project:

Fleischman's 921 98TH

Dear Mr. DeMent,

Attached is our report for your samples received on 09/17/2002 13:51 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 11/01/2002 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@chromalab.com

Sincerely,

Vincent Vancil

Project Manager