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**SUBSURFACE
INVESTIGATION
REPORT**

January 17, 2003

921 98th Avenue
Oakland, California

Prepared For:
Mr. Stephen Vanni, Plant Manager
Fleischmann's Yeast
921 98th Avenue
Oakland, California 94603

OAKLAND ■ SACRAMENTO
SEATTLE ■ LOS ANGELES

ACC Project Number: 6725-001.01

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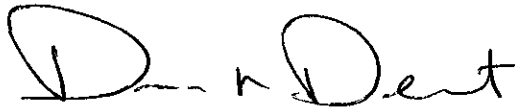
January 17, 2003

Prepared by:



Edward Giacometti
Staff Geologist

Reviewed by:



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

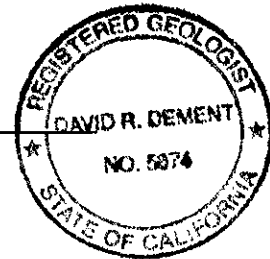


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SUBSURFACE INVESTIGATION REPORT
921 98th Avenue
Oakland, California

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 intended 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 El 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 from Alameda County Public Works Agency.

The eight exploratory soil borings were advanced by continuously coring with a four-foot 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 boring 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 boring 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.

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 presumably 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 presumably 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.

TABLE 1 -SOIL ANALYTICAL RESULTS

Boring Depth	TPH(g)	Benzene	Toluene	Ethylbenzene	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	TPH(g)	Benzene	Toluene	Ethylbenzene	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 adequately characterized. While the horizontal extent of impact in soil and groundwater has not been fully defined, the extent of impact can be estimated 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. Volatilization in air, the most common form of potential exposure, is minimal due to the location of the former USTs in the parking lot, fine grained soils at the Site, and the age of the former release. Contact with residual hydrocarbons in soil, the second most likely potential exposure, is also minimal due to the depth and relatively small volume of impacted soil.

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.

5.3 Formaldehyde UST

Based on first-hand historical accounts and analytical testing of residual contents of the formaldehyde UST, ACC confirmed that the UST only stored formaldehyde. The tank was emptied and rinsed in October 2002, and is currently empty pending OFSA approval to abandon in-place under permit. ACC continuously cored two exploratory soil borings approximately two to four feet from the UST to depths of 12 to 16 feet bgs. The formaldehyde UST is set in uniform, plastic clay and situated approximately five to six feet above groundwater. During logging and sampling activities, ACC did not note any indications of soil impact such as characteristic formaldehyde odor, elevated PID readings, or soil discoloration. ACC collected a grab groundwater sample in soil boring B7 and analyzed it for gasoline constituents due to its estimated downgradient location from the former gasoline USTs. Grab groundwater sample B7-W reported only 1.8 ppb MTBE.

Research indicates that formaldehyde degrades into formic acid and carbon monoxide. These breakdown products are relatively benign and short-lived and do not pose an undue risk to the environment. According to the attached fact sheet on formaldehyde, prepared by the Center for Disease Control, Agency for Toxic Substances and Disease Registry, formaldehyde breaks down readily when introduced to the environment and is not a potential constituent of concern.

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 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 non-detectable 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.

7.0 RECOMMENDATIONS

Since property use will remain commercial to light industrial for the foreseeable future, 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. In addition, we recommend determining if OFSA will require any deed notifications prior to approving regulatory closure

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 benzene; and
- 7) The site is a commercial/industrial operation and will likely remain so in the foreseeable future.

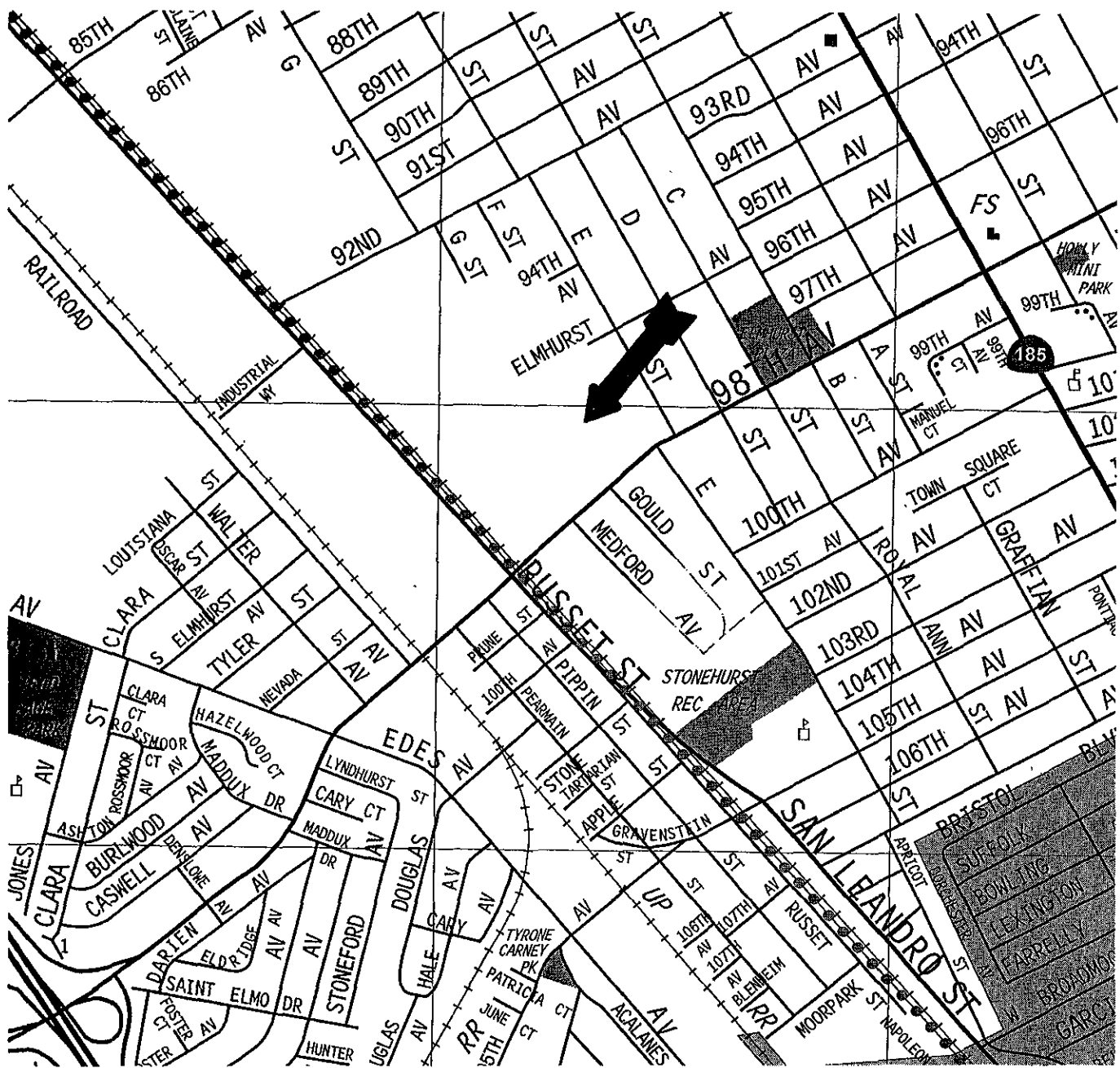
9.0 LIMITATIONS

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.

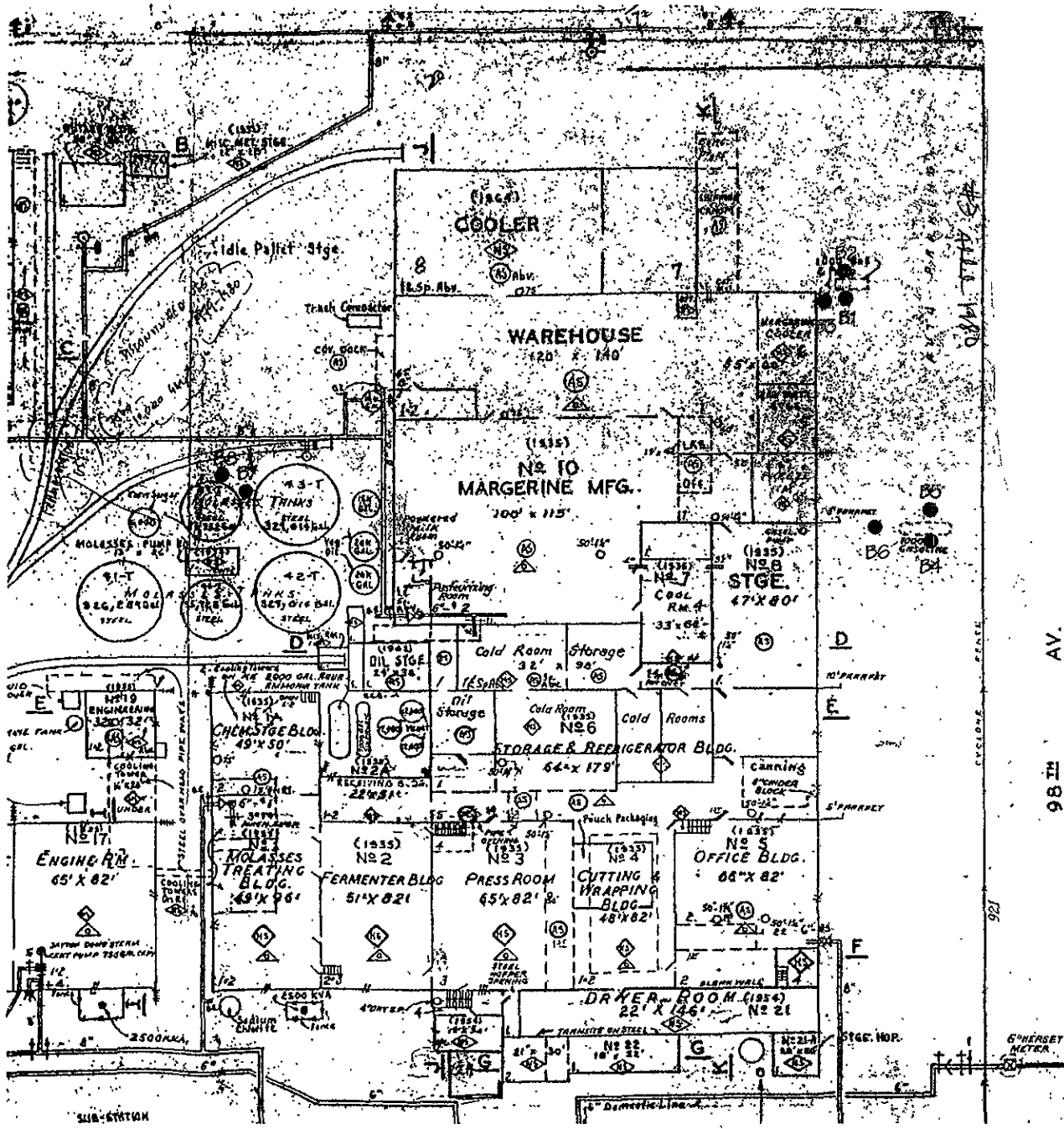
ACC has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ACC is not responsible for laboratory errors in procedure or result reporting.

FIGURES



Source: The Thomas Guide, Bay Area 2002

Title: Location Map 921 98th Avenue Oakland, California	
Figure Number: 1	Scale: None
Project No.: 6725-001.01	Drawn By: E.J.G.
A · C · C ENVIRONMENTAL CONSULTANTS 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404	Date: 1/8/03



LEGEND

- BB Approximate Boring Location
- Underground Storage Tank (Approximate Location)

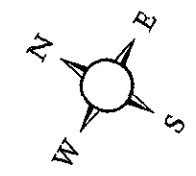
Title: Site Plan
 921 98th Avenue
 Oakland, California

Figure Number: 2 Scale: None

Project No.: 6725-001.01 Drawn By: EJG

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 ENVIRONMENTAL
 CONSULTANTS

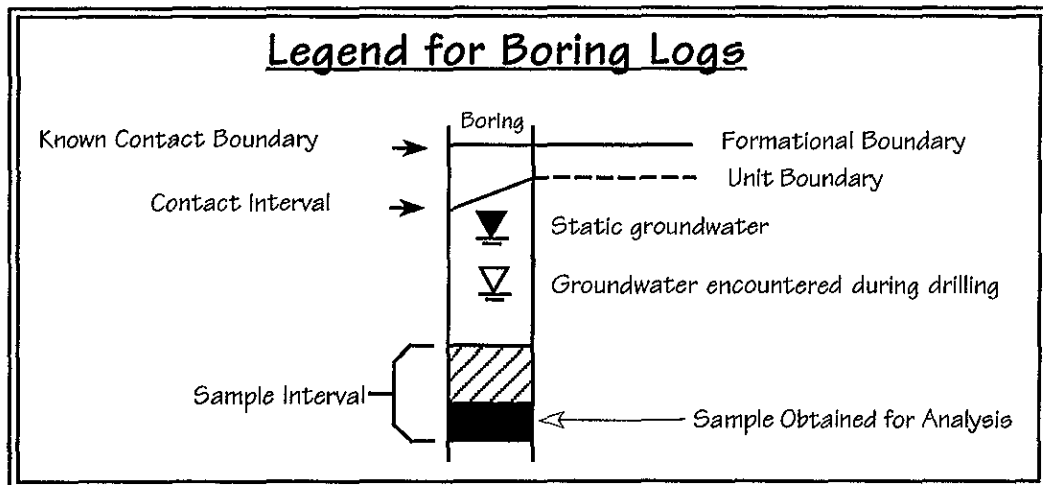
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 Oakland, California 94621
 (510) 638-8400 Fax: (510) 638-8404



APPENDICES

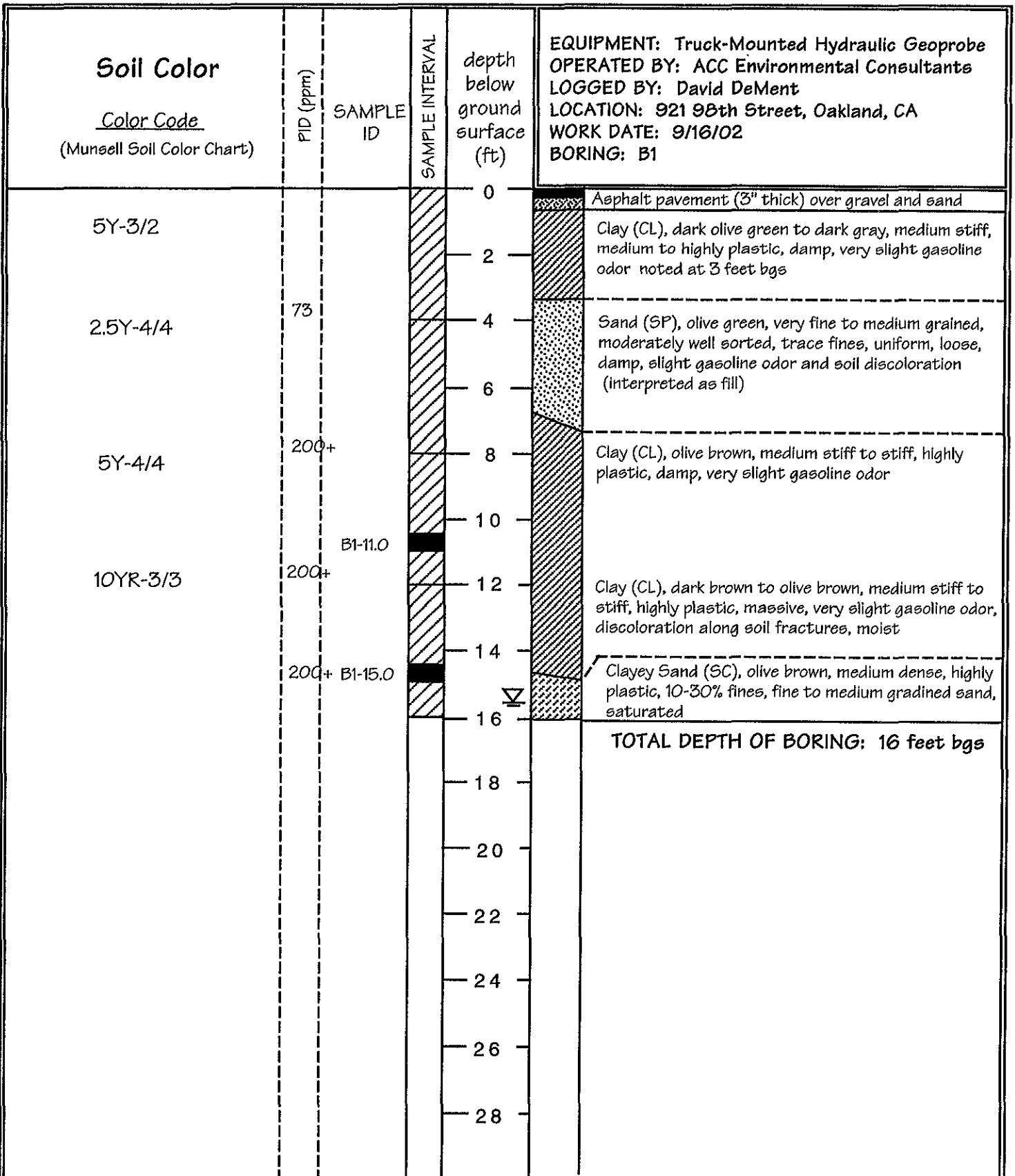
UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		TYPICAL NAMES							
COARSE GRAINED SOILS more than half > #200 sieve	GRAVELS more than half coarse fraction is larger than No. 4 sieve	CLEAN GRAVELS WITH LITTLE OR NO FINES	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 10%;">GW</td> <td style="width: 20%;"></td> <td style="width: 70%;">well graded gravels, gravel-sand mixtures</td> </tr> <tr> <td style="text-align: center;">GP</td> <td></td> <td>poorly graded gravels, gravel-sand mixtures</td> </tr> </table>	GW		well graded gravels, gravel-sand mixtures	GP		poorly graded gravels, gravel-sand mixtures
		GW		well graded gravels, gravel-sand mixtures					
		GP		poorly graded gravels, gravel-sand mixtures					
		GRAVELS WITH OVER 12% FINES	GM		silty gravels, poorly graded gravel-sand silt mixtures				
	GC			clayey gravels, poorly graded gravel-sand clay mixtures					
	SANDS more than half coarse fraction is smaller than No. 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES	SW		well graded sands, gravelly sands				
			SP		poorly graded sands, gravelly sands				
		SANDS WITH OVER 12% FINES	SM		silty sands, poorly graded sand-silt mixtures				
SC				clayey sands, poorly graded sand-clay mixtures					
FINE GRAINED SOILS more than half < #200 sieve	SILTS AND CLAYS liquid limit less than 50	ML		inorg. silts and v. fine sands, rock flour silty or clayey sands, or clayey silts w/sl. plasticity					
		CL		inorg. clays of low-med plasticity, gravelly clays, sandy clays, silty clays, lean clays					
		OL		organic clays and organic silty clays of low plasticity					
	SILTS AND CLAYS liquid limit greater than 50	MH		inorganic silty, micaceous or diatomaceous fine sandy or silty soils, elastic silts					
		CH		inorganic clays of high plasticity, fat clays					
		OH		organic clays of medium to high plasticity organic silts					
HIGHLY ORGANIC SOILS		PT		peat and other highly organic soils					



ACC Environmental Consultants, Inc.
 7977 Capwell Drive, Suite 100
 Oakland, California 94621
 (510) 638-8400 Fax: (510) 638-8404

Site: **SUBJECT SITE**
921 98th Street
Oakland, California
 Project No. 02-6725-001.01






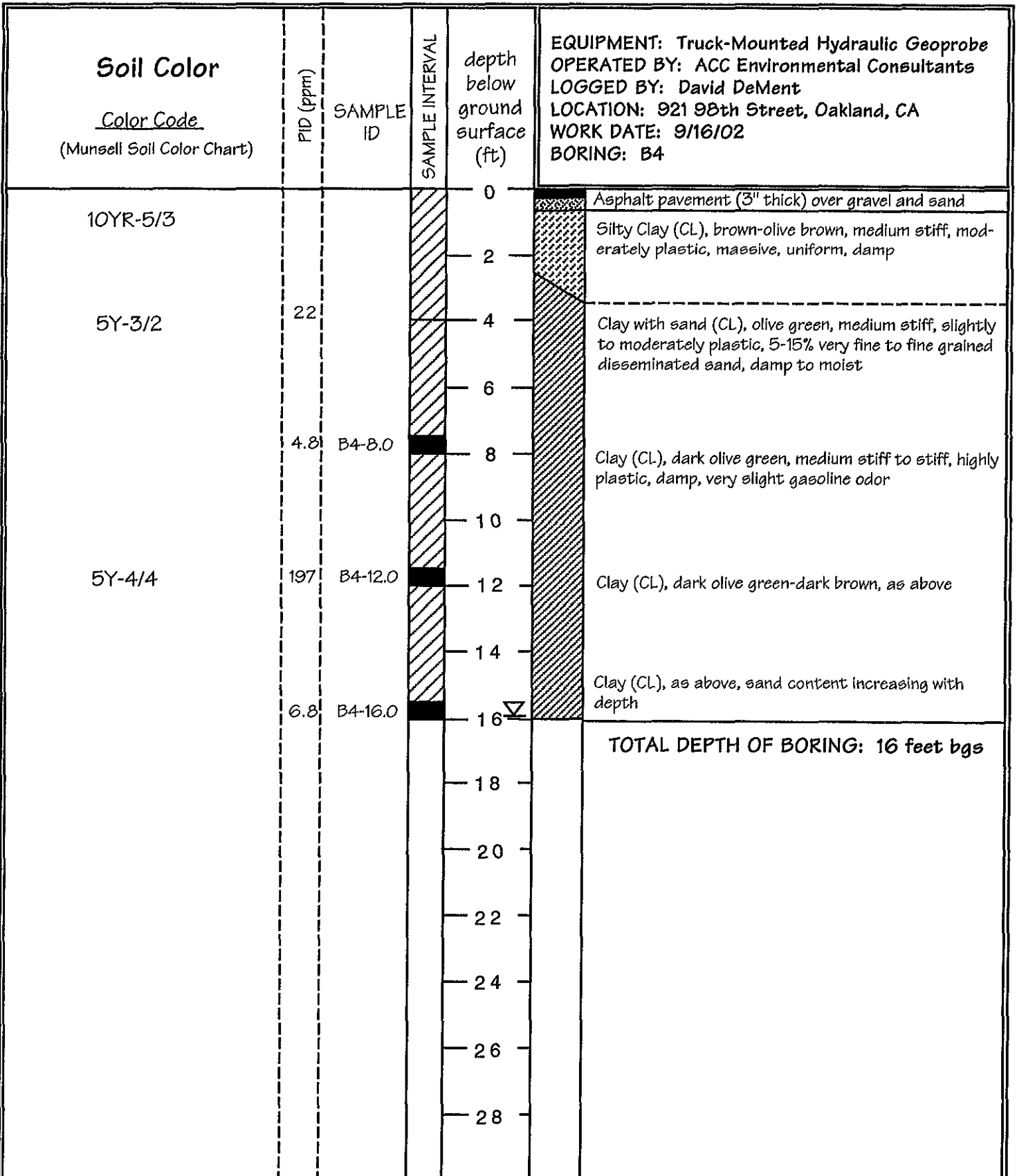
ACC Environmental Consultants, Inc.
 7977 Capwell Drive, Suite 100
 Oakland, California 94621
 (510)638-8400 FAX: (510)638-8404

Project No:
6725-001.01
 Date: **10/28/02**

Title: **LOG OF BORING B1**
 Subject Property
 921 98th Street
 Oakland, California

Soil Color <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Truck-Mounted Hydraulic Geoprobe OPERATED BY: ACC Environmental Consultants LOGGED BY: David DeMent LOCATION: 921 98th Street, Oakland, CA WORK DATE: 9/16/02 BORING: B2
5Y-3/2				0	Asphalt pavement (3" thick) over gravel and sand
2.5Y-4/4	32			2	Clayey Silt (ML), dark gray brown, medium stiff, uniform slightly to moderately plastic, damp
5Y-4/4	41	B2-8.0		4	Clay (CL), dark olive brown, medium stiff, moderately plastic, massive, very slight gasoline odor, trace root holes and soil fractures, damp-moist
				6	
				8	Clay (CL), olive brown, medium stiff to stiff, highly plastic, damp, very slight gasoline odor
10YR-3/3	200+	B2-12.0		10	
				12	TOTAL DEPTH OF BORING: 12 feet bgs
				14	
				16	
				18	
				20	
				22	
				24	
				26	
				28	
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404	Project No: 6725-001.01	Title: LOG OF BORING B2 Subject Property 921 98th Street Oakland, California			
Date: 10/28/02					



Soil Color <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Truck-Mounted Hydraulic Geoprobe OPERATED BY: ACC Environmental Consultants LOGGED BY: David DeMent LOCATION: 921 98th Street, Oakland, CA WORK DATE: 9/16/02 BORING: B3 (At Tank T1 dispenser)
10YR-5/3 5Y-4/4	200+	B3-5.0		0	 Asphalt pavement (3" thick) over gravel and sand
				2 4	 Silty Clay (CL), brown-olive brown, medium stiff, moderately plastic, massive, very slight gasoline odor, olive discoloration along soil fractures, damp
	42			6 8 10 12 14 16 18 20 22 24 26 28	TOTAL DEPTH OF BORING: 5 feet bgs
ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404	Project No: 6725-001.01	Date: 10/28/02	Title: LOG OF BORING B3 Subject Property 921 98th Street Oakland, California		



ACC Environmental Consultants, Inc.
 7977 Capwell Drive, Suite 100
 Oakland, California 94621
 (510)638-8400 FAX: (510)638-8404

Project No:
6725-001.01
 Date: **10/28/02**

Title: **LOG OF BORING B4**
 Subject Property
 921 98th Street
 Oakland, California

Soil Color <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	EQUIPMENT: Truck-Mounted Hydraulic Geoprobe OPERATED BY: ACC Environmental Consultants LOGGED BY: David DeMent LOCATION: 921 98th Street, Oakland, CA WORK DATE: 9/16/02 BORING: B6 (At midpoint to dispenser)
10YR-5/3 5Y-4/4	182	B6-5.0		0	Asphalt pavement (3" thick) over gravel and sand
				2	Silty Clay (CL), brown-olive brown, medium stiff, moderately plastic, massive, very slight gasoline odor, olive discoloration along soil fractures, damp
				4	TOTAL DEPTH OF BORING: 5 feet bgs
				6	
				8	
				10	
				12	
				14	
				16	
				18	
				20	
				22	
				24	
				26	
				28	

ACC Environmental Consultants, Inc. 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510)638-8400 FAX: (510)638-8404	Project No: 6725-001.01 Date: 10/28/02	Title: LOG OF BORING B6 Subject Property 921 98th Street Oakland, California
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Submission#: 2002-09-0375

October 04, 2002

SEVERN

TRENT

LABORATORY

ACC Environmental Consultants

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Attn.: Dave DeMent

Project#: 6725-001.01

Project: Fleischman`s 921 98TH

STL San Francisco
1220 Quarry Ln
Pleasanton CA 94566

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

CA DHS ELAP#:2496

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

Submission #: 2002-09-0375

Gas/BTEX Compounds by 8015M/8021

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

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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

Submission #: 2002-09-0375

Gas/BTEX Compounds by 8015M/8021

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

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Pleasanton, CA 94566

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CA DHS ELAP# 2496

Prep(s):	5035	Test(s):	8015M
	5035		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	QC Batch#:	2002/09/27-01.03

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	

Submission #: 2002-09-0375

Gas/BTEX Compounds by 8015M/8021

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

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Pleasanton, CA 94566

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5035

Method Blank

MB: 2002/09/27-01.03-004

Test(s): 8015M

Soil

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	ND	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)					
Trifluorotoluene	112.0	53-125	%	09/27/2002 09:37	
4-Bromofluorobenzene-FID	96.8	58-124	%	09/27/2002 09:37	

Submission #: 2002-09-0375

Gas/BTEX Compounds by 8015M/8021

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5035

Test(s): 8021B

Laboratory Control Spike

Soil

QC Batch # 2002/09/27-01.03

LCS 2002/09/27-01.03-005

Extracted: 09/27/2002

Analyzed: 09/27/2002 10:08

LCSD 2002/09/27-01.03-006

Extracted: 09/27/2002

Analyzed: 09/27/2002 10:40

Compound	Conc. mg/Kg		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
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)										
Trifluorotoluene	543	521	500	108.6	104.2		53-125			

Submission #: 2002-09-0375

Gas/BTEX Compounds by 8015M/8021

ACC Environmental Consultants

Attn.: Dave DeMent
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5035

Test(s): 8015M

Laboratory Control Spike

Soil

QC Batch # 2002/09/27-01.03

LCS 2002/09/27-01.03-007

Extracted: 09/27/2002

Analyzed: 09/27/2002 11:11

LCSD 2002/09/27-01.03-008

Extracted: 09/27/2002

Analyzed: 09/27/2002 11:42

Compound	Conc. mg/Kg		Exp.Conc.	Recovery		RPD %	Ctrl.Limits %		Flags	
	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			

Submission #: 2002-09-0375

Fuel Oxygenates by 8260B

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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Pleasanton, CA 94566

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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

Submission #: 2002-09-0375

Fuel Oxygenates by 8260B

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Attn.: Dave DeMent
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

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CA DHS ELAP# 2496

Prep(s): 5030B Test(s): 8260B
Sample ID: B1-W Lab ID: 2002-09-0375-17
Sampled: 09/16/2002 08:10 Extracted: 9/30/2002 15:55
Matrix: Water QC Batch#: 2002/09/30-01-62
Analysis Flag: o (See Legend and Note Section)

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	20.00	09/30/2002 15:55	
Benzene	1100	10	ug/L	20.00	09/30/2002 15:55	
Toluene	340	10	ug/L	20.00	09/30/2002 15:55	
Ethylbenzene	730	10	ug/L	20.00	09/30/2002 15:55	
Total xylenes	390	20	ug/L	20.00	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	%	20.00	09/30/2002 15:55	

Submission #: 2002-09-0375

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

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1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Prep(s): 5030B	Test(s): 8260B
Sample ID: B4-W	Lab ID: 2002-09-0375 - 18
Sampled: 09/16/2002 09:30	Extracted: 9/30/2002 14:06
Matrix: Water	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	09/30/2002 14:06	
Benzene	120	10	ug/L	20.00	09/30/2002 14:06	
Toluene	10	10	ug/L	20.00	09/30/2002 14:06	
Ethylbenzene	850	10	ug/L	20.00	09/30/2002 14:06	
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	

Submission #: 2002-09-0375

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

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Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Prep(s): 5030B Test(s): 8260B
Sample ID: B7-W Lab ID: 2002-09-0375 - 19
Sampled: 09/16/2002 11:10 Extracted: 9/30/2002 13:44
Matrix: Water GC Batch#: 2002/09/30-01 62

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

Submission #: 2002-09-0375

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

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Pleasanton, CA 94566

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CA DHS ELAP# 2496

Batch QC Report

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	

Submission #: 2002-09-0375

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

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike

Water

QC Batch # 2002/09/30-01.62

LCS 2002/09/30-01.62-028

Extracted: 09/30/2002

Analyzed: 09/30/2002 10:28

LCSD 2002/09/30-01.62-049

Extracted: 09/30/2002

Analyzed: 09/30/2002 10:49

Compound	Conc. ug/L		Exp. Conc.	Recovery		RPD %	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Benzene	20.2	20.0	25.0	80.8	80.0	1.0	69-129	20		
Toluene	23.2	24.0	25.0	92.8	96.0	3.4	70-130	20		
Methyl tert-butyl ether (MTBE)	22.4	21.0	25.0	89.6	84.0	6.5	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	468	454	500	93.6	90.8		76-114			
Toluene-d8	484	502	500	96.8	100.4		88-110			

Submission #: 2002-09-0375

Fuel Oxygenates by 8260B

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7977 Capwell Drive, Suite 100

Oakland, CA 94621

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CA DHS ELAP# 2496

Legend and Notes

Analysis Flag

o

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

Submission #: 2002-09-0375

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

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Pleasanton, CA 94566

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CA DHS ELAP# 2496

Samples Reported

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-DISP.-2.5	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

Submission #: 2002-09-0375

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

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CA DHS ELAP# 2496

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	B1-11.0	Lab ID:	2002-09-0375-1
Sampled:	09/16/2002 07:50	Extracted:	9/23/2002 04:00
Matrix:	Soil	QC Batch#:	2002/09/23-05.03

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	
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

Submission #: 2002-09-0375

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

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CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: B1-15.0
Sampled: 09/16/2002 08:00
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375 - 2
Extracted: 9/23/2002 10:03
QC Batch#: 2002/09/23-05 03

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	

Submission #: 2002-09-0375

Gas/BTEX Compounds (High Level)

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CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: B2-8.0
Sampled: 09/16/2002 08:25
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375 - 3
Extracted: 9/23/2002 05:01
QC Batch#: 2002/09/23-05-03

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	1.00	09/24/2002 05:01	
Toluene	ND	0.62	mg/Kg	1.00	09/24/2002 05:01	
Ethyl benzene	1.0	0.62	mg/Kg	1.00	09/24/2002 05:01	
Xylene(s)	1.7	0.62	mg/Kg	1.00	09/24/2002 05:01	
MTBE	ND	0.62	mg/Kg	1.00	09/24/2002 05:01	
Surrogates(s)						
Trifluorotoluene	76.0	53-125	%	1.00	09/24/2002 05:01	
4-Bromofluorobenzene-FID	96.0	58-124	%	1.00	09/24/2002 05:01	

Submission #: 2002-09-0375

Gas/BTEX Compounds (High Level)

ACC Environmental Consultants

Attn.: Dave DeMent
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Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 6725-001.01
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CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: B2-12.0
Sampled: 09/16/2002 08:30
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375-4
Extracted: 9/23/2002 10:34
QC Batch#: 2002/09/23-05:03

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)						
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

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51

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

Prep(s): 5030
5030
Sample ID: B4-12.0
Sampled: 09/16/2002 09:20
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375-8
Extracted: 9/23/2002 06:32
QC Batch#: 2002/09/23-05-03

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	

Submission #: 2002-09-0375

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
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STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Prep(s): 5030 Test(s): 8015M
5030 8021B
Sample ID: B6-5.0 Lab ID: 2002-09-0375 - 10
Sampled: 09/16/2002 10:10 Extracted: 9/23/2002 07:33
Matrix: Soil QC Batch#: 2002/09/23-05-03

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	09/24/2002 07:33	
Toluene	ND	0.62	mg/Kg	1.00	09/24/2002 07:33	
Ethyl benzene	2.3	0.62	mg/Kg	1.00	09/24/2002 07:33	
Xylene(s)	9.0	0.62	mg/Kg	1.00	09/24/2002 07:33	
MTBE	ND	0.62	mg/Kg	1.00	09/24/2002 07:33	
Surrogates(s)						
4-Bromofluorobenzene	97.0	58-124	%	1.00	09/24/2002 07:33	
4-Bromofluorobenzene-FID	90.0	58-124	%	1.00	09/24/2002 07:33	

Submission #: 2002-09-0375

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
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STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: B5-8.0
Sampled: 09/16/2002 09:50
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375-11
Extracted: 9/23/2002 11:36
QC Batch#: 2002/09/23-05 03

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

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51

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LABORATORY

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: B5-12.0
Sampled: 09/16/2002 09:55
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375 - 12
Extracted: 9/23/2002 09:34
QC Batch#: 2002/09/23-05-03

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	
Toluene	ND	0.62	mg/Kg	1.00	09/24/2002 08:34	
Ethyl benzene	1.4	0.62	mg/Kg	1.00	09/24/2002 08:34	
Xylene(s)	ND	0.62	mg/Kg	1.00	09/24/2002 08:34	
MTBE	ND	0.62	mg/Kg	1.00	09/24/2002 08:34	
Surrogates(s)						
4-Bromofluorobenzene	113.0	58-124	%	1.00	09/24/2002 08:34	
4-Bromofluorobenzene-FID	130.0	58-124	%	1.00	09/24/2002 08:34	sh

Submission #: 2002-09-0375

Gas/BTEX Compounds (High Level)

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Oakland, CA 94621

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

Project: 6725-001.01

Fleischman's 921 98TH

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STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: T1-DISP.-2.5
Sampled: 09/16/2002 07:50
Matrix: Soil
Test(s): 8015M
8021B
Lab ID: 2002-09-0375 - 5
Extracted: 9/23/2002 11:05
QC Batch#: 2002/09/23-05-03

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)						
Trifluorotoluene	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

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51

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LABORATORY

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030

Method Blank

MB: 2002/09/23-05.03-001

Test(s): 8015M

Soil

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	

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51



STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike

Soil

QC Batch # 2002/09/23-05-03

LCS 2002/09/23-05-03-002

Extracted: 09/23/2002

Analyzed: 09/23/2002 16:41

LCSD 2002/09/23-05-03-003

Extracted: 09/23/2002

Analyzed: 09/25/2002 17:12

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

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51

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LABORATORY

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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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

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.	Recovery		RPD %	Ctrl. Limits %			Flags	
	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			

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51

SEVERN

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STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919

Fax: (925) 484-1096

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CA DHS ELAP# 2496

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.

Submission #: 2002-09-0375

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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1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
T1-DISP.-5.0	09/16/2002 08:45	Soil	6

Submission #: 2002-09-0375

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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Pleasanton, CA 94566

Tel: (925) 484-1919

Fax: (925) 484-1096

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www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 5030
5030
Sample ID: T1-DISP.-5.0
Sampled: 09/16/2002 08:45
Matrix: Soil
Test(s): 8021B
8015M
Lab ID: 2002-09-0375 - 6
Extracted: 9/30/2002 15:00
QC Batch#: 2002/09/30-05.03

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	80	10	mg/Kg	1.00	10/01/2002 10:50	
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)						
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	

Submission #: 2002-09-0375

Gas/BTEX Compounds (High Level)

ACC Environmental Consultants

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

Project: 6725-001.01

Fleischman's 921 98TH

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Pleasanton, CA 94566

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

CA DHS ELAP# 2496

Batch QC Report

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	%	10/01/2002 10:19	
4-Bromofluorobenzene-FID	116.8	58-124	%	10/01/2002 10:19	

Submission #: 2002-09-0375

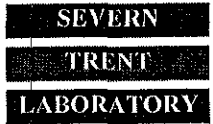
Gas/BTEX Compounds (High Level)

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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1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike

Soil

QC Batch # 2002/09/30-05.03

LCS 2002/09/30-05.03-002

Extracted: 09/30/2002

Analyzed: 10/01/2002 09:44

LCSD 2002/09/30-05.03-003

Extracted: 09/30/2002

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	0.121	0.115	0.125	96.8	92.0	5.1	77-123	35		
Toluene	0.128	0.123	0.125	102.4	98.4	4.0	78-122	35		
Ethyl benzene	0.135	0.126	0.125	108.0	100.8	6.9	70-130	35		
Xylene(s)	0.397	0.372	0.375	105.9	99.2	6.5	75-125	35		
Surrogates(s)										
Trifluorotoluene	467	441	500	93.4	88.2		53-125	0		

Submission #: 2002-09-0375

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

Received: 09/17/2002 13:51

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1220 Quarry Lane
Pleasanton, CA 94566

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

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

Analyzed: 10/01/2002 15:06

Compound	Conc. mg/Kg		Exp.Conc.	Recovery		RPD %	Ctrl.Limits %		Flags	
	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		

2002-09-0375

Report To Analysis Request


Attn: DAVID DEMENT					TPH EPA - <input type="checkbox"/> 8015/8021 <input type="checkbox"/> 8260B <input checked="" type="checkbox"/> Gas w/ <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE Purgeable Aromatics BTEX EPA - <input type="checkbox"/> 8021 <input type="checkbox"/> 8260B TEPH EPA 8015M <input type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other _____ Fuel Tests EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> Five Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol Purgeable Halocarbons (HVOCs) EPA 8021 Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B <input type="checkbox"/> 624 Semivolatiles GC/MS <input type="checkbox"/> EPA 8270 <input type="checkbox"/> 625 Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664) <input type="checkbox"/> Total Pesticides <input type="checkbox"/> EPA 8081 <input type="checkbox"/> 608 <input type="checkbox"/> PCBs <input type="checkbox"/> EPA 8082 <input type="checkbox"/> 608 PNAs by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310 CAM17 Metals (EPA 6010/7470/7471) Metals: <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____ W.E.T (STLC) TCLP Hexavalent Chromium pH (24h hold time for H ₂ O) Spec Cond. <input type="checkbox"/> Alkalinity TSS <input type="checkbox"/> TDS Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> NO ₃ <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO ₂ <input type="checkbox"/> PO ₄
Company: ACC ENVIRONMENTAL CONSULTANTS					
Address: 7977 CAPWELL DRIVE, OAKLAND, CA					
P: (510) 638-8400 x 109		E: ddement@accenv.com			
Bill To: ACC ENVIRONMENTAL		Sampled By:			
Attn: TREVOR		Phone ext: 113			
Sample ID	Date	Time	Mat rix	Pres erv.	
B7-11.0	9/16/02	7:50	S	LED	
B1-15.0		8:00			
B2-8.0		8:25			
B2-12.0		8:30			
T1-Disp.-2.5		8:45			
T1-Disp-5.0		8:45			
B4-8.0		9:15			
B4-12.0		9:20			
B4-16.0		9:25			
B6-5.0		10:10			

HOLD


Number of Containers

Project Info. Sample Receipt

Project Name: 921 Fleischman's 98th
 Project#: 6725-001.01
 PO#: _____
 Credit Card#: _____
 # of Containers: _____
 Head Space: _____
 Temp: 5.3°C
 Conforms to record: _____


1) Relinquished by:

 Signature _____ Time _____
 DAVID DEMENT 9/17/02
 Printed Name _____ Date _____
 ACC ENVIRONMENTAL CONSULTANTS
 Company

2) Relinquished by:
 Signature _____ Time _____
 Printed Name _____ Date _____
 Company _____


3) Relinquished by:

 Signature _____ Time _____
 Nouna K. 9/17/02
 Printed Name _____ Date _____
 STL-SF
 Company

Report: Routine Level 3 Level 4 EDD State Tank Fund EDF
 Special Instructions / Comments: Global ID _____

MOST soil samples have discoloration,
 gasoline odor, and elevated PID levels

1) Received by:

 Signature _____ Time _____
 Nouna K. 9/17/02
 Printed Name _____ Date _____
 STL-SF
 Company

2) Received by:
 Signature _____ Time _____
 Printed Name _____ Date _____
 Company _____

3) Received by:

 Signature _____ Time _____
 Nouna K. 9/17/02
 Printed Name _____ Date _____
 STL-SF
 Company

Submission#: 2002-07-0204

July 16, 2002

SEVERN

TRENT

LABORATORY

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

Attn.: Dave DeMent
Project#: 02-6725-001.00
Project: 921 98th Ave.

STL San Francisco
1220 Quarry Ln
Pleasanton CA 94566

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

CA DHS ELAP#:2496

Dear Mr. DeMent,

Attached is our report for your samples received on 07/10/2002 17:50

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 08/24/2002 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

Submission #: 2002-07-0204

Halogenated Volatile Organic Compounds by 8021

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

Project: 02-6725-001.00

921 98th Ave.

Received: 07/10/2002 17:50



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 #
F-TANK	07/09/2002 10:00	Water	1

Submission #: 2002-07-0204

Halogenated Volatile Organic Compounds by 8021

ACC Environmental Consultants

Attn.: Dave DeMent
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 02-6725-001.00
921 98th Ave.

Received: 07/10/2002 17:50

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

Prep(s):	5030B	Test(s):	8021B
Sample ID:	F-TANK	Lab ID:	2002-07-0204 - 1
Sampled:	07/09/2002 10:00	Extracted:	7/12/2002 15:01
Matrix:	Water	QC Batch#:	2002/07/12-01-26

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	07/12/2002 15:01	
Vinyl chloride	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Chloroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Methylene chloride	ND	5.0	ug/L	1.00	07/12/2002 15:01	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Chloroform	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Carbon tetrachloride	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Trichloroethene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Bromodichloromethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	07/12/2002 15:01	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Tetrachloroethene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Dibromochloromethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Chlorobenzene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Bromoform	ND	2.0	ug/L	1.00	07/12/2002 15:01	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	07/12/2002 15:01	
Chloromethane	ND	1.0	ug/L	1.00	07/12/2002 15:01	
Bromomethane	ND	1.0	ug/L	1.00	07/12/2002 15:01	
Surrogates(s)						
1-Chloro-2-fluorobenzene	105.2	70-130	%	1.00	07/12/2002 15:01	

Submission #: 2002-07-0204

Halogenated Volatile Organic Compounds by 8021

ACC Environmental Consultants

Attn.: Dave DeMent
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 02-6725-001.00
921 98th Ave.

Received: 07/10/2002 17:50

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

Prep(s): 5030B

Method Blank

MB: 2002/07/12-01.26-005

Water

Test(s): 8021B

QC Batch # 2002/07/12-01.26

Date Extracted: 07/12/2002 11:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	07/12/2002 11:51	
Vinyl chloride	ND	0.5	ug/L	07/12/2002 11:51	
Chloroethane	ND	0.5	ug/L	07/12/2002 11:51	
Trichlorofluoromethane	ND	0.5	ug/L	07/12/2002 11:51	
1,1-Dichloroethene	ND	0.5	ug/L	07/12/2002 11:51	
Methylene chloride	ND	5.0	ug/L	07/12/2002 11:51	
trans-1,2-Dichloroethene	ND	0.5	ug/L	07/12/2002 11:51	
cis-1,2-Dichloroethene	ND	0.5	ug/L	07/12/2002 11:51	
1,1-Dichloroethane	ND	0.5	ug/L	07/12/2002 11:51	
Chloroform	ND	0.5	ug/L	07/12/2002 11:51	
1,1,1-Trichloroethane	ND	0.5	ug/L	07/12/2002 11:51	
Carbon tetrachloride	ND	0.5	ug/L	07/12/2002 11:51	
1,2-Dichloroethane	ND	0.5	ug/L	07/12/2002 11:51	
Trichloroethene	ND	0.5	ug/L	07/12/2002 11:51	
1,2-Dichloropropane	ND	0.5	ug/L	07/12/2002 11:51	
Bromodichloromethane	ND	0.5	ug/L	07/12/2002 11:51	
2-Chloroethylvinyl ether	ND	0.5	ug/L	07/12/2002 11:51	
trans-1,3-Dichloropropene	ND	0.5	ug/L	07/12/2002 11:51	
cis-1,3-Dichloropropene	ND	0.5	ug/L	07/12/2002 11:51	
1,1,2-Trichloroethane	ND	0.5	ug/L	07/12/2002 11:51	
Tetrachloroethene	ND	0.5	ug/L	07/12/2002 11:51	
Dibromochloromethane	ND	0.5	ug/L	07/12/2002 11:51	
Chlorobenzene	ND	0.5	ug/L	07/12/2002 11:51	
Bromoform	ND	2.0	ug/L	07/12/2002 11:51	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	07/12/2002 11:51	
1,3-Dichlorobenzene	ND	0.5	ug/L	07/12/2002 11:51	
1,4-Dichlorobenzene	ND	0.5	ug/L	07/12/2002 11:51	
1,2-Dichlorobenzene	ND	0.5	ug/L	07/12/2002 11:51	
Trichlorotrifluoroethane	ND	0.5	ug/L	07/12/2002 11:51	
Chloromethane	ND	1.0	ug/L	07/12/2002 11:51	
Bromomethane	ND	1.0	ug/L	07/12/2002 11:51	
Surrogates(s)					
1-Chloro-2-fluorobenzene	97.6	70-130	%	07/12/2002 11:51	

Submission #: 2002-07-0204

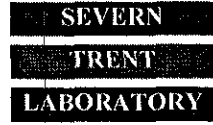
Halogenated Volatile Organic Compounds by 8021

ACC Environmental Consultants

Attn.: Dave DeMent
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 02-6725-001.00
921 98th Ave.

Received: 07/10/2002 17:50



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

Prep(s): 5030B

Test(s): 8021B

Laboratory Control Spike

Water

QC Batch # 2002/07/12-01.26

LCS 2002/07/12-01.26-003

Extracted: 07/12/2002

Analyzed: 07/12/2002 10:21

LCSD 2002/07/12-01.26-004

Extracted: 07/12/2002

Analyzed: 07/12/2002 11:06

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
1,1-Dichloroethene	20.8	17.2	20.0	104.0	86.0	18.9	70-130	20		
Trichloroethene	23.3	20.8	20.0	116.5	104.0	11.3	70-130	20		
Chlorobenzene	22.7	20.2	20.0	113.5	101.0	11.7	70-130	20		
Surrogates(s)										
1-Chloro-2-fluorobenzene	25.6	24.8	20	128.0	124.0		70-130			

Submission #: 2002-07-0204

Metals

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

Project: 02-6725-001.00
921 98th Ave.

Received: 07/10/2002 17:50

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 #
F-TANK	07/09/2002 10:00	Water	1

Submission #: 2002-07-0204

SEVERN

TRENT

LABORATORY

Metals

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

Project: 02-6725-001.00

921 98th Ave.

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STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919

Fax: (925) 484-1096

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www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3010A Test(s): 6010B
Sample ID: F-TANK Lab ID: 2002-07-0204 - 1
Sampled: 07/09/2002 10:00 Extracted: 7/12/2002 05:11
Matrix: Water QC Batch#: 2002/07/12-01.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Cadmium	0.055	0.0020	mg/L	1.00	07/12/2002 11:50	
Chromium	0.034	0.0050	mg/L	1.00	07/12/2002 11:50	
Lead	ND	0.0050	mg/L	1.00	07/12/2002 11:50	
Nickel	0.041	0.0050	mg/L	1.00	07/12/2002 11:50	
Zinc	0.040	0.010	mg/L	1.00	07/12/2002 11:50	

Submission #: 2002-07-0204

Metals

ACC Environmental Consultants

Attn.: Dave DeMent
7977 Capwell Drive, Suite 100
Oakland, CA 94621
Phone: (510) 638-8400 Fax: (510) 638-8404

Project: 02-6725-001.00
921 98th Ave.

Received: 07/10/2002 17:50

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

Prep(s): 3010A
Method Blank
MB: 2002/07/12-01.15-038

Water

Test(s) 6010B
QC Batch # 2002/07/12-01:15
Date Extracted: 07/12/2002 05:11

Compound	Conc.	RL	Unit	Analyzed	Flag
Cadmium	ND	0.0020	mg/L	07/12/2002 09:56	
Chromium	ND	0.0050	mg/L	07/12/2002 09:56	
Lead	ND	0.0050	mg/L	07/12/2002 09:56	
Nickel	ND	0.0050	mg/L	07/12/2002 09:56	
Zinc	ND	0.010	mg/L	07/12/2002 09:56	

Submission #: 2002-07-0204

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LABORATORY

Metals

ACC Environmental Consultants

Attn.: Dave DeMent

7977 Capwell Drive, Suite 100

Oakland, CA 94621

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

Project: 02-6725-001.00

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

CA DHS ELAP# 2496

Batch QC Report

Prep(s): 3010A

Test(s): 6010B

Laboratory Control Spike

Water

QC Batch # 2002/07/12-01.15

LCS 2002/07/12-01.15-039

Extracted: 07/12/2002

Analyzed: 07/12/2002 10:01

LCSD 2002/07/12-01.15-040

Extracted: 07/12/2002

Analyzed: 07/12/2002 10:05

Compound	Conc. mg/L		Exp.Conc.	Recovery		RPD %	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Cadmium	0.516	0.525	0.500	103.2	105.0	1.7	80-120	20		
Chromium	0.515	0.528	0.500	103.0	105.6	2.5	80-120	20		
Lead	0.513	0.524	0.500	102.6	104.8	2.1	80-120	20		
Nickel	0.513	0.524	0.500	102.6	104.8	2.1	80-120	20		
Zinc	0.519	0.530	0.500	103.8	106.0	2.1	80-120	20		



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ToxFAQs™ for

Formaldehyde

CAS# 50-00-0

July 1999

This fact sheet answers the most frequently asked health questions about formaldehyde. For more information, you may call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. This information is important because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Everyone is exposed to small amounts of formaldehyde in air and some foods and products. Formaldehyde can cause irritation of the skin, eyes, nose, and throat. High levels of exposure may cause some types of cancers. This substance has been found in at least 26 of the 1,467 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is formaldehyde?
(Pronounced for-mal' de hide')

At room temperature, formaldehyde is a colorless, flammable gas that has a distinct, pungent smell. It is also known as methanol, methylene oxide, oxymethylene, methylaldehyde, and oxomethane. Formaldehyde is naturally produced in small amounts in our bodies.

It is used in the production of fertilizer, paper, plywood, and urea-formaldehyde resins. It is also used as a preservative in some foods and in many products used around the house, such as antiseptics, medicines, and cosmetics.

What happens to formaldehyde when it enters the environment?

- Formaldehyde dissolves easily but does not last a long time in water.
- Most formaldehyde in the air breaks down during the day.
- The breakdown products of formaldehyde are formic acid and carbon monoxide.
- Formaldehyde does not build up in plants and animals.

How might I be exposed to formaldehyde?

- Smog is a major source of formaldehyde exposure.
- Cigarettes and other tobacco products, gas cookers, and open fireplaces are sources of formaldehyde exposure.
- It is used in many industries and in hospitals and laboratories.
- Formaldehyde is given off as a gas from the manufactured wood products used in new mobile homes.
- The amount of formaldehyde in foods is very small.
- Household sources, such as fiberglass, carpets, permanent press fabrics, paper products, and some household cleaners.

How can formaldehyde affect my health?

Low levels of formaldehyde can cause irritation of the eyes, nose, throat, and skin. It is possible that people with asthma may be more sensitive to the effects of inhaled formaldehyde.

Drinking large amounts of formaldehyde can cause severe pain, vomiting, coma, and possible death.

How likely is formaldehyde to cause cancer?

Some studies of people exposed to formaldehyde in workplace air found more cases of cancer of the nose and throat than expected, but other studies did not confirm this finding.

In animal studies, rats exposed to high levels of formaldehyde in air developed nose cancer. The Department of Health and Human Services (DHHS) has determined that formaldehyde may reasonably be anticipated to be a carcinogen.

How does formaldehyde affect children?

The most common route of exposure is by breathing it, which is likely to cause nose and eye irritation (burning, itchy, tearing, and sore throat) in children as well as in adults.

Animal studies suggest that formaldehyde will not cause birth defects in humans. It is not likely to be transferred to a child in breast milk.

How can families reduce the risk of exposure to formaldehyde?

Formaldehyde is usually found in the air, and levels are usually higher indoors than outdoors. Opening windows and using fans to bring fresh air indoors are the easiest ways to lower levels in the house. Not smoking and not using unvented heaters indoors can lower the formaldehyde levels.

Removing formaldehyde sources in the home can reduce exposure. Formaldehyde is given off from a number of products used in the home. Providing fresh air, sealing unfinished manufactured wood surfaces, and washing new permanent press clothing before wearing can help lower exposure.

Is there a medical test to show whether I've been exposed to formaldehyde?

Laboratory tests can measure formaldehyde in blood, urine, and breath. These tests do not tell you how much formaldehyde you have been exposed to or if harmful effects will occur. The tests are not routinely available at your doctor's office.

Has the federal government made recommendations to protect human health?

The EPA recommends that an adult should not drink water containing more than 1 milligram of formaldehyde per liter of water (1 mg/L) for a lifetime exposure, and a child should not drink water containing more than 10 mg/L for 1 day or 5 mg/L for 10 days.

The Occupational Safety and Health Administration (OSHA) has set a permissible exposure limit for formaldehyde of 0.75 parts per million (ppm) for an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends an exposure limit of 0.016 ppm.

Source of Information

Agency for Toxic Substances and Disease Registry (ATSDR). 1999. Toxicological profile for formaldehyde. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Animal testing is sometimes necessary to find out how toxic substances might harm people and how to treat people who have been exposed. Laws today protect the welfare of research animals and scientists must follow strict guidelines.

Where can I get more information?

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat

illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

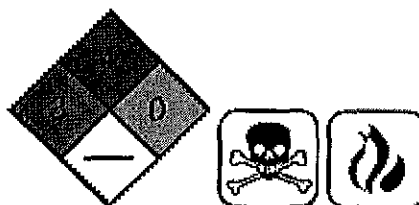
For more information, contact:

Agency for Toxic Substances and Disease Registry
Division of Toxicology
1600 Clifton Road NE, Mailstop E-29
Atlanta, GA 30333
Phone: 1-888-422-8737
FAX: (404)498-0057

External safety and chemistry information (please see our disclaimer):

Formaldehyde
CH₂O

Stereo Image
MDL Molfile



NFPA Label Key

Vermont SIRI MSDS Archive

ATSDR Information Center / ATSDRIC@cdc.gov / 1-888-422-8737

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