GRIBI Associates
Geological and Environmental Consulting Services

'99 MAR 17 PM 3:02

March 15, 1999

Do site conceptual model to determine if any sensitive receptor.

10/3/00 Gribi will call Albany Fire & they want to do HP.

UST Local Oversight Program
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Attention: Ms. Eva Chu

Subject: Report of Soil and Groundwater Investigation And
Workplan to Drill One Additional Soil Boring
Albany Fire Station UST Site
1001 Marin Avenue, Albany, California
GA Project No. 148-01-01

Ladies and Gentlemen:

Gribi Associates is pleased to submit this report on behalf of the City of Albany documenting a recently-completed soil and groundwater investigation at the Albany Fire Station underground storage tank (UST) site located at 1001 Marin Avenue in Albany, California (see Figure 1 and Figure 2). This soil and groundwater investigation included the drilling and sampling of two soil borings immediately adjacent to a gasoline UST formerly located at the project site. The purpose of the soil boring investigation was to assess soil and groundwater quality adjacent to the former UST in order to address regulatory site closure.

Background

One 1,000-gallon diesel UST and one 10,000-gallon unleaded gasoline UST were removed from separate locations at the project site by HK2, Inc./Semco in April 1998. Two soil samples collected beneath the removed diesel UST at a depth of about nine feet below surface grade contained 4 milligrams per kilogram (mg/kg) and 110 mg/kg of Total Petroleum Hydrocarbons as Diesel (TPH-D), with no detectable levels of BTEX constituents. The four-point composite soil sample from the diesel UST removal soil stockpile contained 3 mg/kg of TPH-D, with no detectable levels of BTEX constituents.

Two soil samples collected beneath the removed unleaded gasoline UST at a depth of about 11 feet below surface grade contained no detectable levels of Total Petroleum Hydrocarbons as Gasoline (TPH-G), with low to nondetectable levels of BTEX constituents and Methyl-t-butyl Ether (MTBE). One soil sample collected beneath the removed fuel dispenser at a depth of about two feet contained 3 mg/kg of TPH-G, with low to nondetectable levels of BTEX constituents and MTBE. One grab groundwater sample collected from the UST excavation cavity following tank removal contained 4,000 micrograms per liter (ug/l) of TPH-G, 70 ug/l of Benzene, 330 ug/l of Toluene, 90 ug/l of Ethylbenzene, 260 ug/l of Xylenes, and 380 ug/l of MTBE

LIMITATIONS

The services provided under this contract as described in this report include professional opinions and judgments based on data collected. These services have been provided according to generally accepted environmental protocol. The opinions and conclusions contained in this report are typically based on information obtained from:

1. Observations and measurements made by our field staff.
2. Contacts and discussions with regulatory agencies and others.
3. Review of available hydrogeologic data.

DESCRIPTION OF FIELD ACTIVITIES

The two soil borings were drilled and sampled by Mr. Jim Gribi on January 22, 1999.

Prefield Activities

Prior to beginning field activities, Gribi Associates marked proposed boring locations and notified Underground Services Alert (USA). In addition, Gribi Associates obtained a drilling permit from Alameda County Public Works Department. A copy of this permit is contained in Appendix A.

Location of Soil Borings

Locations of investigative soil borings IB-1 and IB-2 are shown on Figure 2. Based on the expected west-southwest groundwater flow direction in the area, IB-1 was sited southwest and IB-2 was sited west from the former gasoline UST excavation cavity.

Drilling and Sampling of Soil Borings

Both investigative borings were advanced to a depth of about ten feet below surface grade using hand auger equipment. During hand augering, retrieved soil cuttings were logged by Mr. Jim Gribi, a California-registered geologist. Boring logs for the two borings are contained in Appendix B. All hand auger and sampling equipment was thoroughly cleaned and decontaminated between each sample collection by triple rinsing first with water, then with dilute tri-sodium phosphate solution, and finally with distilled water. Following completion, the investigative boring IB-1 was grouted to match existing grade.

Soil samples were collected from each of the two soil borings at a depth of about 9.5 feet below surface grade. Each of the soil samples was collected using the following method: (1) Exposed soil was scraped away; (2) A clean 2-inch by 6-inch brass tube was completely filled with undisturbed soil, taking care to minimize excess void in the tube; (3) The tube was then quickly sealed with aluminum foil and plastic end caps, wrapped tightly with tape and labeled; and (4) The sealed tube was immediately placed in cold storage for transport to the laboratory.

A grab groundwater sample was collected from each of the borings. For IB-1, the grab groundwater was collected directly from the open borehole using a clean disposable PVC bailer. For IB-2, 1-1/4 inch diameter Schedule 40 threaded PVC well screen and blank casing was placed in the boring, and filter sand was poured around the casing to about seven feet in depth. Approximately four gallons of groundwater was then purged from this temporary well point prior to sampling using a clean 3/4-inch PVC bailer. Water samples from both borings were collected in four 40-ml VOA vials by completely filling each container from the bailer, and then tightly sealing each container with teflon-lined septum, making sure that no air bubbles were present. Each container was then labeled and immediately placed on ice for transport to the analytical laboratory.

After completion of sampling, the temporary well casing was pulled from IB-2, and both borings were grouted to match existing surface grade.

Laboratory Analysis of Soil and Groundwater Samples

One soil sample and one grab groundwater sample from each of the two borings were analyzed for the following parameters:

USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)
USEPA 8020/602 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
USEPA 8020/602 Methyl-t-butyl Ether (MTBE)

In addition, the positive MTBE result for the groundwater sample from IB-2 was confirmed using USEPA Method 8260. All laboratory analyses were conducted by Acculabs, Inc., a California-certified analytical laboratory, with two-week turn around on lab results.

RESULTS OF INVESTIGATION

General Subsurface Conditions

Subsurface soils in the two borings were generally similar, consisting of dark grey silty clay down to about three feet in depth, followed by olive grey to brown clayey silts down to about seven feet in depth. Soils below about seven feet in depth consisted of reddish brown to grey green sands and gravels down to total depth. Groundwater was encountered in both borings at about eight feet in depth.

Grey green hydrocarbon staining with slight to moderate hydrocarbon odors were noted in subsurface soils in IB-2 from about 8.5 feet to 10.5 feet in depth. No hydrocarbon odors or staining were noted in soils from IB-1.

Results of Laboratory Analyses

Soil and water analytical results are summarized in Table 1. Laboratory data reports for soil and water samples are contained in Appendix C.

Table 1
SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS
Albany Fire Station UST Site

Sample ID	Sample Type	Sample Depth	Constituent (parts per million) TPH-G	B	T	E	X	MTBE
IB-1 (Southwest) Samples								
IB-1.1	Soil	9.5 ft	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
IB-1W	Water	--	**0.057**	<0.00050	<0.00050	<0.00050	<0.00050	<0.0050
IB-2 (West) Samples								
IB-2.1	Soil	9.5 ft	**1.8**	<0.0050	<0.0050	**0.0099**	<0.0050	<0.050
IB-2W	Water	--	**0.760**	<0.00050	**0.0016**	<0.00050	<0.00050	**0.320**

TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes
MTBE = Methyl-t-butyl Ether
<0.10 = Not detected above the expressed value.

CONCLUSIONS

Field screening and laboratory analytical results from the two soil borings indicate minimal hydrocarbon impacts in subsurface soils in both investigative borings. However, the groundwater sample from IB-2, located about ten feet west from the former gasoline UST excavation cavity, contained a level of MTBE which is above both formal and informal regulatory action levels for MTBE. Thus, based on preliminary conversations with Ms. Eva Chu of Alameda County Department of Environmental Health, additional downgradient investigation will be required before regulatory site closure can be achieved. Ms. Chu indicated that an additional soil boring drilled 20 to 30 feet further west from IB-2 might be adequate to determine whether or not a widespread MTBE problem exists at the site.

WORKPLAN TO CONDUCT ADDITIONAL SITE CHARACTERIZATION

Based on the above project approach, Gribi Associates proposes to conduct the following tasks. All activities will be conducted in accordance with applicable State and Federal guidelines and statutes.

Task 1 Conduct prefield activities. Gribi Associates will: (1) Obtain a drilling permit from Alameda County Department of Public Works; (2) Mark the proposed boring locations

with white paint; and (3) Notify Underground Services Alert (USA) at least 48 hours prior to drilling.

Task 2 Conduct drilling and sampling activities. Gribi Associates will: (1) Drill one soil boring 20 to 30 feet further west from IB-2 to about 12 feet below surface grade using hand auger equipment; (2) Collect one soil sample and one grab groundwater sample from the boring; and (3) Grout the boring to match existing surface grade. The soil sample will be collected using the methods described previously in this report. The grab groundwater sample will be collected as follows: (1) 1-1/4-inch diameter well casing will be placed in the boring; (2) Two to three feet of filter sand will be placed around the well casing to help filter out silt; (3) The well casing will be purged of at least three well volume using a clean PVC bailer; (4) Groundwater will be poured directly from the bailer into laboratory-supplied containers; and (5) Each sample container will be preserved in accordance with standard sampling protocols.

If field screening results warrant, then Gribi Associates will deepen the hand auger boring to about 15 feet in depth and install a temporary monitoring well in the boring. The well will be installed using 1-1/4-inch diameter Schedule 40 PVC casing as follows: (1) 0.020 inch slotted well screen will be placed from 15 feet to 5 feet in depth; (2) Filter sand will be placed around the well casing to about 4 feet in depth; (3) Bentonite pellets will be placed around the well casing from 4 feet to 3 feet in depth; and (4) The remaining annulus will be grouted with a cement slurry. The top of the well will be enclosed in a traffic-rated well box set in concrete slightly above grade.

Task 3 Conduct laboratory analyses. Gribi Associates will analyze one soil sample and one grab groundwater sample for the following parameters

USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)
USEPA 8020/602 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
USEPA 8020/602 Methyl-t-butyl Ether (MTBE)

All analyses will be conducted by a California-certified analytical laboratory with two-week turn around on lab results. Positive MTBE results will be confirmed using USEPA Method 8260.

Task 4 Prepare report of findings. Gribi Associates will prepare a brief letter report for submittal to Alameda County Department of Environmental Health which will describe all investigative activities and provide results of the investigation. If results indicate no significant release, then this report will also request regulatory site closure.

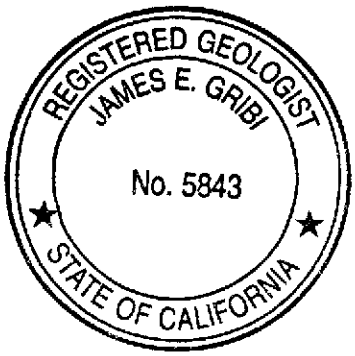
Project Schedule

Gribi Associates is prepared to begin project activities immediately. Based on our understanding of the project, we expect to complete the project scope of work within four to six weeks after receiving workplan approval.

We appreciate the opportunity to provide these services for you. Please call if you have questions or require additional information.

Very truly yours,

James E. Gribi
Registered Geologist
California No. 5843

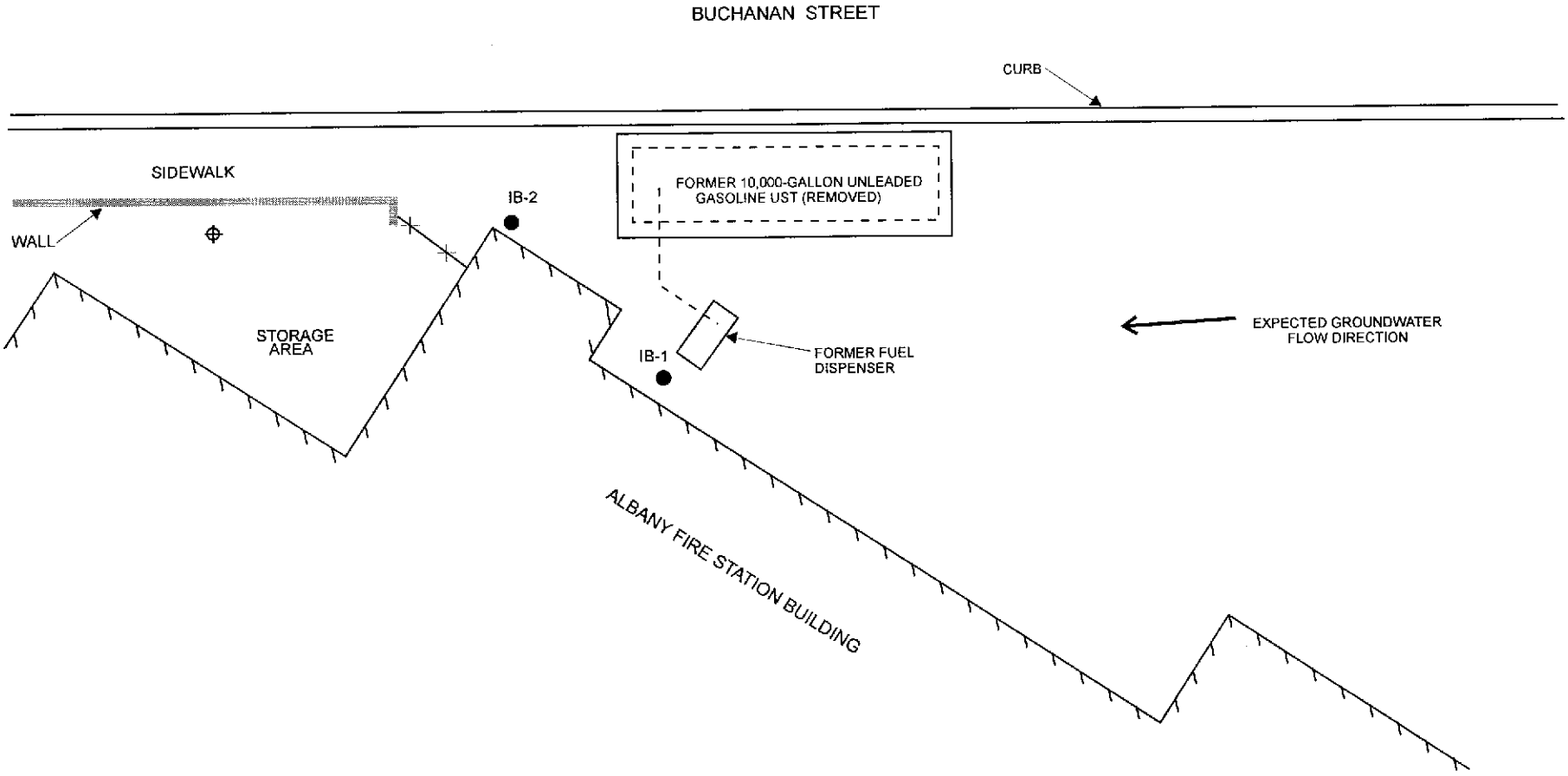


JEG/ct
Enclosures

File: GA-29/Albany.rp1

TOPOGRAPHY FROM USGS RICHMOND
7 5-MINUTE QUADRANGLE MAP. (TOPO! 1997)

DESIGNED BY:	CHECKED BY:	**SITE VICINITY MAP**	DATE: 01/05/99	FIGURE: 1
DRAWN BY: JG	SCALE: 1:24,000	ALBANY FIRE STATION UST SITE 1001 MARIN AVENUE ALBANY, CALIFORNIA	**GRIBI Associates**	
PROJECT NO: 101-02-01				



LEGEND

- ● - INVESTIGATIVE SOIL BORING
- ⊕ - PROPOSED SOIL BORING LOCATION

0 20 40

APPROXIMATE SCALE IN FEET

N

DESIGNED BY:	CHECKED BY:
DRAWN BY: JG	SCALE:
PROJECT NO: 148-01-01	

SITE PLAN

ALBANY FIRE STATION UST SITE
1001 MARIN AVENUE
ALBANY, CALIFORNIA

DATE: 02/25/99 | FIGURE: 2

GRIBI Associates

APPENDIX A

ALAMEDA COUNTY DRILLING PERMIT

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE, PLEASANTON, CALIFORNIA 94588-5127 PHONE (510) 484-2600 X236
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Albany Fire Station 6
1901 Marin Avenue
Albany CA

California Coordinates Source _____ ft. Accuracy ± _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

CLIENT
Name City of Albany (cont: Steve Yee)
Address 1000 San Pablo Ave Phone 510/524-1543
City Albany CA Zip 94706

APPLICANT
Name James E. Gribi, R.G.
Gribi Associates Fax 707/748-7763
Address 350 Hayes St. Ste C-14 Phone 707/748-7743
City Benicia CA Zip 94510

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☒
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐ Auger ☐
Cable	☐	Other	☒ Hand Auger

DRILLER'S LICENSE NO. None - Hand Auger

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Number _____

GEOTECHNICAL PROJECTS
Number of Borings 2 Maximum
Hole Diameter 3¼ in. Depth 12 ft.

ESTIMATED STARTING DATE 1/21/99
ESTIMATED COMPLETION DATE 1/21/99

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ Date 1/14/99

FOR OFFICE USE

PERMIT NUMBER 99WR020
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
(2.) Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
(3.) Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(D.) GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached.

G. SPECIAL CONDITIONS

Approved _____ Date 1/20/99

101994

APPENDIX B

SOIL BORING LOGS

LOG OF BORING

GRIBI Associates

SHEET _1_ OF _1_

BORING NUMBER : IB-1

BORING LOCATION:
SOUTH OF FORMER GASOLINE UST

BORING TYPE: INVESTIGATIVE BORING

PROJECT NAME:
ALBANY FIRE STATION UST SITE

PROJECT NUMBER: 148-01-01

START DATE: 01/22/99

COMPLETION DATE: 01/22/99

DRILLING CONTRACTOR :

DRILLING METHOD: HAND AUGER

BOREHOLE DIAMETER: 3-1/4 INCHES

BORING TOTAL DEPTH: 10.0 FEET

COMPLETION METHOD: GROUTED

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	RECOVERY	BLOWS PER 6 IN.	USCS	LOG OF MATERIAL	PIEZOMETER\ WELL INSTALLATION
							0.0 - 1.0 Ft. Concrete and base rock.	
						CL	1.0 - 3.0 Ft. Dark grey to black silty CLAY, soft, moist, swampy odor, no hydrocarbon odors or staining.	
						GP	3.0 - 3.5 Ft. Grey brown GRAVEL, clayey, angular clasts, moist to wet, no hydrocarbon odors or staining.	
5						CL	3.5 - 5.0 Ft. Olive grey to reddish brown CLAY, firm, stiff, no hydrocarbon odors or staining.	
						ML	5.0 - 8.5 Ft. Light grey to reddish brown SILT, slightly clayey, dry to moist, firm to friable, no hydrocarbon odors or staining.	
						GP	8.5 - 10.0 Ft. Reddish brown sandy GRAVEL, loose, angular to subrounded clasts, slightly clayey, wet, no hydrocarbon odors or staining.	
10	IB-1.1	9.5 FT					TOTAL DEPTH: 10 FEET GROUNDWATER DEPTH: APPROX. 8 FEET	
15							GRAB GROUNDWATER SAMPLE COLLECTED DIRECTLY FROM BORING USING DISPOSABLE PVC BAILER.	
20								

LOG OF BORING

GRIBI Associates

SHEET _1_ OF _1_

BORING NUMBER : IB-2

BORING LOCATION:
WEST OF FORMER GASOLINE UST

BORING TYPE: INVESTIGATIVE BORING

PROJECT NAME:
ALBANY FIRE STATION UST SITE

PROJECT NUMBER: 148-01-01

START DATE: 01/22/99

COMPLETION DATE: 01/22/99

DRILLING CONTRACTOR :

DRILLING METHOD: HAND AUGER

BOREHOLE DIAMETER: 3-1/4 INCHES

BORING TOTAL DEPTH: 10.0 FEET

COMPLETION METHOD: GROUTED

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	RECOVERY	BLOWS PER 6 IN.	USCS	LOG OF MATERIAL	PIEZOMETER/ WELL INSTALLATION
							0.0 - 1.0 Ft. Concrete and base rock.	
						CL	1.0 - 3.0 Ft. Dark grey to black silty CLAY, firm, moist, swampy odor, no hydrocarbon odors or staining.	
						ML	3.0 - 4.0 Ft. Olive brown SILT, sandy, slightly clayey, moist, no hydrocarbon odors or staining.	
5						CL	4.0 - 6.0 Ft. Olive grey brown CLAY, firm, stiff, gravelly from 5 to 6 feet, moist, no hydrocarbon odors or staining.	
						SM	6.0 - 8.5 Ft. Grey green to brown SAND, clayey, gravelly, loose to firm, medium to coarse grained, moist, no hydrocarbon odors or staining.	
						ML	8.5 - 10.5 Ft. Grey Green SILT, slightly gravelly, slightly clayey, moist to wet, slight hydrocarbon odor, no hydrocarbon staining.	
10	IB-1.1	9.5 FT						
							TOTAL DEPTH: 10.5 FEET GROUNDWATER DEPTH: APPROX. 8.5 FEET	
15							GRAB GROUNDWATER SAMPLE COLLECTED AS FOLLOWS: 1-1/4-INCH PVC SLOTTED CASING WAS PLACED FROM 10.5 FT TO 6.5 FT, FOLLOWED BY BLANK CASING TO SURFACE. APPROX. 4 GALLONS OF GROUNDWATER WAS PURGED WITH A CLEAN PVC BAILER PRIOR TO SAMPLING.	
20								

APPENDIX C

LABORATORY DATA REPORT AND CHAIN-OF-CUSTODY RECORD

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

Sample Log 19526
January 29, 1999

Jim Gribi
Gribi Associates
884 Vintage
Suisun, CA 94585

Subject : 2 Water and 2 Soil samples
Project Name : Albany Fire Dept.
Project Number : 148-01-01

Dear Mr. Gribi,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Acculabs - Davis is certified by the State of Arizona (AZ0583) and the State of California (# I-2330). If you have any questions regarding procedures or results, please call me at 530-757-0920.

Sincerely,

Tom Kwoka

Tom Kwoka

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

January 28, 1999
Sample Log 19526

MTBE (Methyl-t-butyl ether) By EPA Method 8020/602

From : Albany Fire Dept. (Proj. # 148-01-01)
Sampled : 01/22/99
Received : 01/22/99
Matrix : Soil

SAMPLE	Date Analyzed	(MRL) mg/kg	Measured Value mg/kg
IB-1.1 (9 1/2')	01/28/99	(.050)	<.050
IB-2.1 (9 1/2')	01/28/99	(.050)	<.050

Approved By:

Tom Kwoka
Lab Director

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

January 28, 1999
Sample Log 19526

MTBE (Methyl-t-butyl ether) By EPA Method 8020/602

From : Albany Fire Dept. (Proj. # 148-01-01)
Sampled : 01/22/99
Received : 01/22/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
IB-1W	01/29/99	(5.0)	<5.0
IB-2W	01/29/99	(5.0)	190

Approved By:

Tom Kwoka
Lab Director

Acculabs Inc.

Davis

1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

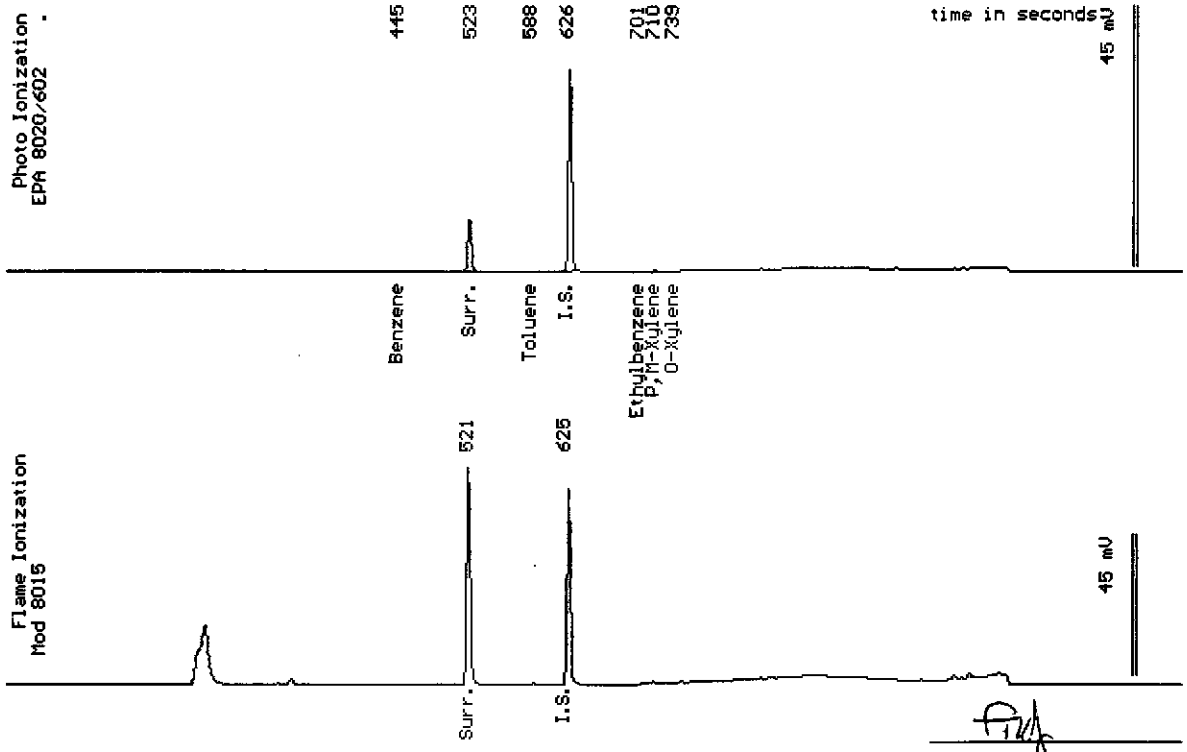
Sample Log 19526

19526-01

Sample: **IB-1.1 (9 1/2')**

From : Albany Fire Dept. (Proj. # 148-01-01)
Sampled : 01/22/99
Dilution : 1:1 Run Log : 2177L
Matrix : Soil

Parameter	(MRL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	<.0050
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	<1.0
Surrogate Recovery		98 %



Date Analyzed: 01-28-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

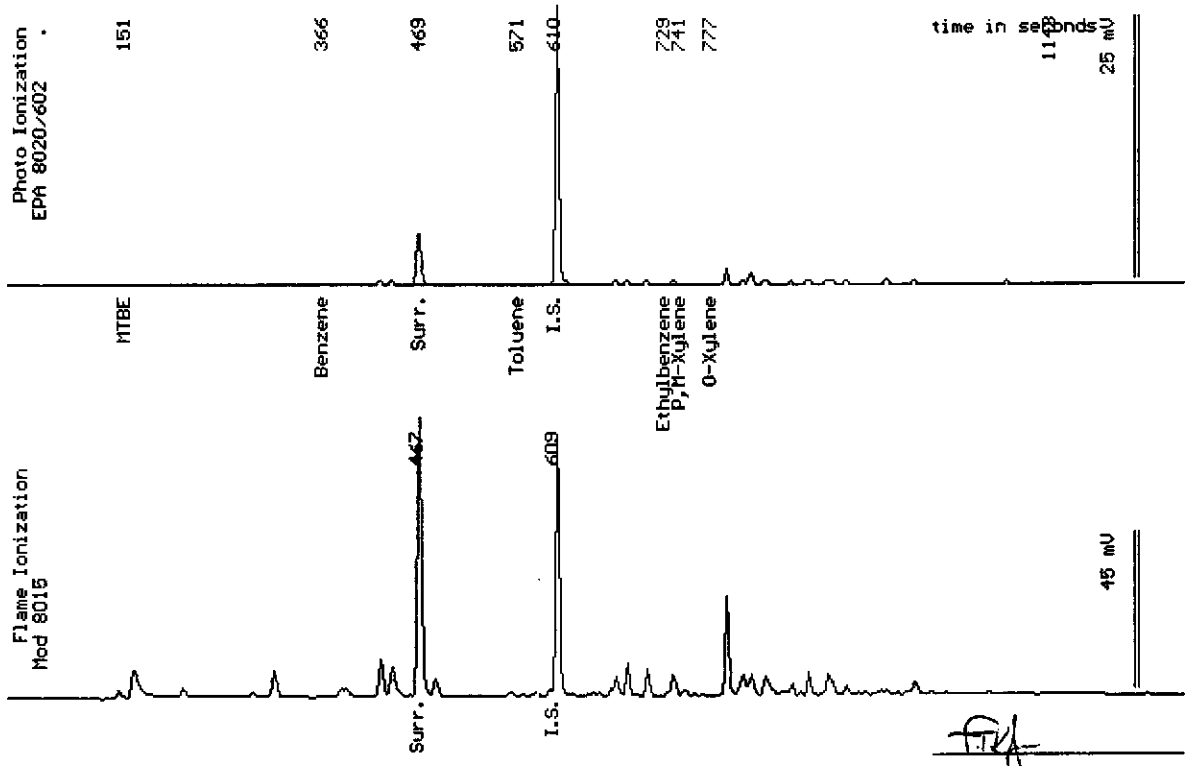
Sample Log 19526

19526-02

Sample: **IB-1W**

From : Albany Fire Dept. (Proj. # 148-01-01)
Sampled : 01/22/99
Dilution : 1:1 Run Log : 4181C
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	57
Surrogate Recovery		94 %



Date Analyzed: 01-29-99
Column : 0.53mm ID X 60m Restek Rtx-1701

Stewart Podolsky
Senior Chemist

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

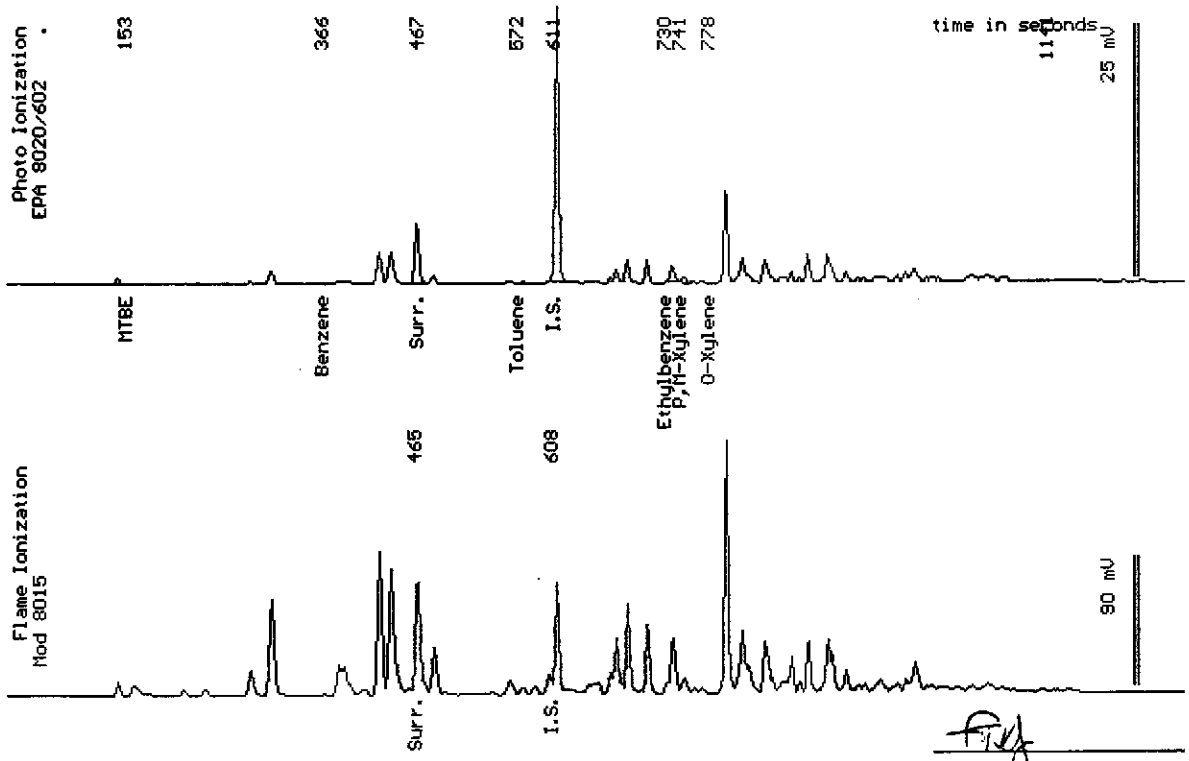
Sample Log 19526

19526-03

Sample: IB-2.1 (9 1/2')

From : Albany Fire Dept. (Proj. # 148-01-01)
Sampled : 01/22/99
Dilution : 1:1 Run Log : 4181C
Matrix : Soil

Parameter	(MRL) mg/kg	Measured Value mg/kg
Benzene	(.0050)	<.0050
Toluene	(.0050)	<.0050
Ethylbenzene	(.0050)	.0099
Total Xylenes	(.0050)	<.0050
TPH as Gasoline	(1.0)	1.8
Surrogate Recovery		102 %



Date Analyzed: 01-28-99
Column : 0.53mm ID X 60m Restek Rtx-1701

Stewart Podolsky
Senior Chemist

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

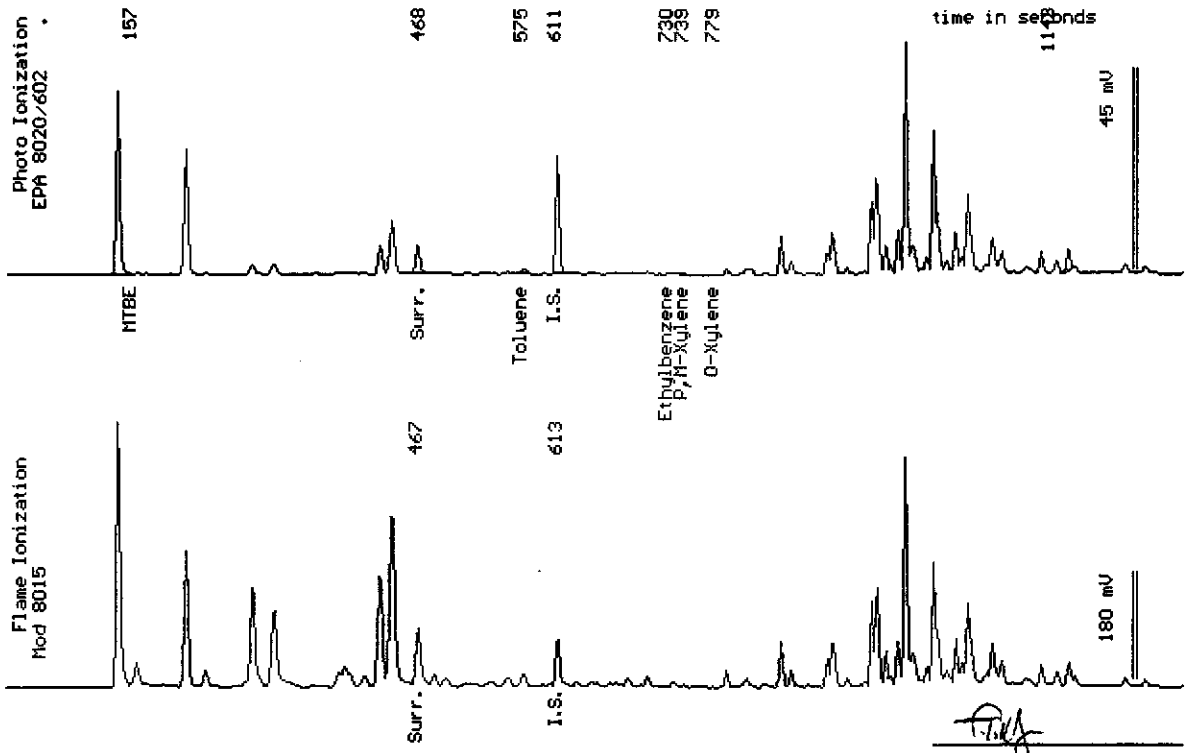
Sample Log 19526

19526-04

Sample: **IB-2W**

From : Albany Fire Dept. (Proj. # 148-01-01)
Sampled : 01/22/99
Dilution : 1:1 Run Log : 4181C
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	1.6
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	760
Surrogate Recovery		113 %



Date Analyzed: 01-29-99
Column : 0.53mm ID X 60m Restek Rtx-1701

Stewart Abdolsky
Senior Chemist

Acculabs Inc.

January 28, 1999
Sample Log 19526

QC Report for EPA 8020 & Modified EPA 8015
Run Log : 2177J
From : Albany Fire Dept. (Proj. # 148-01-01)
Sample(s) Received : 01/22/99

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *
Benzene	100	102	2
Ethylbenzene	100	104	4
TPH as Gasoline	123	135	9

* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene	101
Ethylbenzene	103
Gasoline	118

Parameter	Method Blank
Benzene	<0.005 mg/Kg
Toluene	<0.005 mg/Kg
Ethylbenzene	<0.005 mg/Kg
Total Xylenes	<0.005 mg/Kg
TPH as Gasoline	<1.0 mg/kg

Tom Kwoka
Lab Director

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

MTBE By EPA 8260B

Sample Log 19526
January 29, 1999

Sample Name : **IB-2W**

Project Name : Albany Fire Dept.
Project Number : 148-01-01
Sample Date : 01/22/99
Date Analyzed : 01/29/99

Date Received : 01/22/99
Dilution : 1:2.5
Sample Matrix : Water
Lab Number : 19526-04

Parameter	MRL	Measured Conc.	Units
Methyl-tert-butyl ether	**12**	**320**	ug/L
Dibromofluoromethane (surr)		116	% Recovery

MRL = Method Reporting Limit Conc. = Concentration

B = Analyte was detected in Method Blank.

E = Concentration exceeded calibration range.

Approved By : Tom Kwoka

West Analytical Labs

1046 Olive Drive, Suite 2, Davis, CA 95616

Phone#: 916-757-0920
Fax#: 916-753-6091
Sample Receiving#: 916-757-4608

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Jim Gribi
Phone #: 707/748-7743
Company/Address: Gribi Associates
FAX #: 707/748-7763
Project Number: 148-01-01
P.O.#:
Project Name: Albany Fire Dept.
Project Location:
Sampler Signature: James C Gribi

ANALYSIS REQUEST

Sample ID	Sampling DATE	Sampling TIME	Container (Type/Amount) VOA	SLEEVE	1L GLASS	1L PLASTIC	Method Preserved HCl	HNO_3	ICE	NONE	Matrix WATER	SOIL	BTEX (602/8020)	BTEX/TPH as Gasoline (602/8020/M8015) MTBE	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	EPA 601/8010	EPA 608/8080 - Pesticides	EPA 608/8080 - PCB's	EPA 624/8240	EPA 625/8270	CAM - 17 Metals	LEAD(6010/7421/239.2)	Cd, Cr, Pb, Zn, Ni	MTBE Confirm (8260B)	W.E.T. (Y)	TOTAL (Y)	TAT 12 hour / 24 hour / 48 hour / 1 week / 2 weeks	For Lab Use ONLY WEST Lab Number
1B-1.1 (9½')	1/22			1								X		X														X	01
1B-1W	1/22		4								X			X														X	02
1B-2.1 (9½')	1/22			1								X		X														X	03
1B-2W	1/22		4								X			X											X			X	04

Relinquished by:	Date	Time	Received by:
James C Gribi	1/22/99	15:30	Shy Woodfield
Shy Woodfield	1/22/99	1630	Jerry D. Jones
Relinquished by:	Date	Time	Received by Laboratory:

Remarks:
For 1B-2W, analyze "A" VOAs first.

Bill To: