aqua science engineers inc.

October 27, 1998

REPORT
of
SOIL AND GROUNDWATER ASSESSMENT
ASE JOB NO. 3389
at
Lerer Brothers Transmission Service
6340 Christie Avenue
Emeryville, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391

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1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil and groundwater assessment at the Lerer Brothers Transmission Service property located at 6340 Christie Avenue in Emeryville, California (Figure 1). The site assessment activities were initiated by Mr. Rick Gold of Lerer Brothers Transmission Service to delineate the area of petroleum hydrocarbon contamination in soil and groundwater in the vicinity of the former underground storage tank (UST) in order to achieve case closure.

2.0 SITE HISTORY

One 2,000 gallon steel UST used to store unleaded gasoline was removed from the site in 1988. No verifiable records have been located regarding the UST removal.

3.0 SCOPE OF WORK (SOW)

Based on the site history and requirements of the Alameda County Health Care Services Agency (ACHCSA), ASE's scope of work was to:

1) Prepare a workplan for approval by the ACHCSA.

2) Obtain a drilling permit from the Alameda County Public Works Agency (ACPWA).

3) Drill five (5) soil borings at the site with a Geoprobe drill rig. Collect soil and groundwater samples from each boring.

4) Analyze one soil and one groundwater sample from each boring at a CAL-EPA certified analytical laboratory for TPH-G by modified EPA Method 5030/8015 and benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020.

5) Backfill the borings with neat cement.

6) Prepare a report outlining the methods and findings of this assessment.

4.0 DRILL SOIL BORINGS AND COLLECT SAMPLES

Prior to drilling, ASE obtained a drilling permit from ACPWA. A copy of this permit is presented in Appendix A.

On October 9, 1998, Gregg Drilling of Martinez, California drilled soil borings BH-A through BH-E at the site using a Geoprobe hydraulic sampling rig (Figure 2). The drilling was directed by ASE staff geologist Greg Schramm and senior project manager David Allen.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for possible chemical analysis. The samples were collected by driving a sampler lined with acetate tubes using hydraulic direct push methods. Selective soil samples were immediately cut at the appropriate sampling interval, trimmed, sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in plastic bags and stored on ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under chain of custody. Soil from the remaining tubes were described by the site geologist and was periodically screened for volatile compounds using an Organic Vapor Meter (OVM). The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the volatile compounds were allowed to volatilize, the OVM measured the vapor in the bag through a small hole punched in the bag. OVM readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory.

A temporary PVC well casing was driven into place in each boring for the collection of groundwater samples. Groundwater samples were removed from the borings with disposable polyethylene bailers. The groundwater samples were contained in 40-ml volatile organic analysis (VOA) vials (pre-preserved with hydrochloric acid) and capped without headspace. The samples were then labeled, placed in protective foam sleeves, and stored on ice for transport to Chromalab under chain of custody. Upon completion of the soil and groundwater sampling, the borings were backfilled with neat cement to the ground surface.

Drilling equipment was cleaned with a TSP solution between sampling intervals and between borings to prevent potential cross-contamination.

Sediments encountered during drilling generally consisted of up to three feet of a debris-free silty clay fill overlying a sandy fill material containing wood and asphalt shingle roofing material, brick and rubber to the total

depth explored of 8-feet below ground surface (bgs). No native soil was encountered. Groundwater was encountered at between 4 and 6 feet bgs and rose to approximately 4-feet bgs in each boring where it stabilized. Petroleum hydrocarbon odors and/or olive hydrocarbon staining were present in soil samples from borings BH-A, BH-B and BH-C. A hydrocarbon sheen was present on groundwater from boring BH-A. There were no obvious indications of hydrocarbons in borings BH-D and BH-E.

5.0 ANALYTICAL RESULTS FOR SOIL

One soil sample was collected from each boring for analysis. The soil sample chosen for analysis was collected from what appeared to be the capillary zone in each boring, just above completely saturated sediments. The samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015 and BTEX and MTBE by EPA Method 8020. The analytical results are tabulated in Table One, and the certified analytical report and chain of custody form are included in Appendix B.

TABLE ONE
Summary of Chemical Analysis of **SOIL** Samples
All results are in **parts per million**

Boring	Depth Sampled	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	6.0'	**1,400**	<6.2	**25**	**7.1**	**15**	<6.2
BH-B	3.5'	<1.0	**0.0090**	**0.0083**	**0.012**	**0.039**	<0.0050
BH-C	4.0'	<1.0	**0.011**	<0.0050	**0.080**	**0.16**	<0.0050
BH-D	4.0'	<1.0	<0.0050	<0.0050	<0.0050	**0.0087**	<0.0050
BH-E	5.5'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
PRG		NE	1.4	880	230	320	NE

Notes:
Detectable concentrations are in **bold**.

Non-detectable concentrations are noted by the less than sign (<) followed by the detection limit.

PRG is the United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goal (PRG) for industrial soil.

NE = US EPA PRG is not established.

The soil sample collected from 6.0-feet bgs in boring BH-A contained 1,400 parts per million (ppm) TPH-G, 25 ppm toluene, 7.1 ppm ethylbenzene and 15 ppm total xylenes. No TPH-G was detected in soil samples collected from the remaining borings above detection limits. Soil samples collected from borings BH-B through BH-D contained one or more BTEX compound at concentrations below 1 ppm. None of the BTEX concentrations detected at the site exceeded United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goals (PRGs) for industrial soil.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015 and BTEX and MTBE by EPA Method 8020. The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody forms are included in Appendix B.

TABLE TWO
Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in **parts per billion**

Boring	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	**620,000**	**1,200**	**4,900**	**16,000**	**64,000**	< 1,000
BH-B	**40,000**	**280**	**110**	**3,200**	**6,400**	< 250
BH-C	**18,000**	**56**	**280**	**150**	**120**	< 50
BH-D	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
BH-E	< 50*	< 0.5	< 0.5	< 0.5	**1.2**	< 5.0
DTSC MCL	NE	1.0	150	700	1,750	35**

Notes:
DTSC MCL is the California Department of Toxic Substances Control maximum contaminant level for drinking water.

NE = DTSC MCLs is not established.

* = Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 98 parts per billion.
** = DTSC interim action level for drinking water. MCL not established.

Detectable concentrations are in **bold**.

Elevated hydrocarbon concentrations, including benzene, toluene, ethylbenzene and/or total xylene concentrations exceeding California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water, were detected in groundwater samples collected from the borings BH-A, BH-B and BH-C in the vicinity of the former UST at the site. Very low to non-detectable hydrocarbon concentrations were detected in groundwater samples collected from borings BH-D and BH-E further away from the former UST location.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Up to 1,400 ppm TPH-G, 25 ppm toluene, 7.1 ppm ethylbenzene and 15 ppm total xylenes were detected in the soil sample collected from boring BH-A. No TPH-G was detected in soil samples collected from the remaining borings above detection limits. Soil samples collected from borings BH-B through BH-D contained one or more BTEX compounds at concentrations below 1 ppm. None of the BTEX concentrations exceeded US EPA PRGs for industrial soil. No MTBE was detected in any of the soil samples analyzed.

Groundwater samples collected from borings BH-A, BH-B and BH-C contained BTEX concentrations exceeding DTSC MCLs for drinking water. Very low to non-detectable hydrocarbon concentrations were detected in groundwater samples collected from borings BH-D and BH-E further away from the former UST location. No MTBE was detected in any of the groundwater samples analyzed.

Based on these results, ASE anticipates that the ACHCSA will require further assessment activities, including the installation of three groundwater monitoring wells and at least one year of groundwater monitoring, prior to considering case closure at this site.

8.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the soil and groundwater sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory.

This report does not fully characterize the site for contamination resulting from unknown sources or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-EPA certified laboratory. The

independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

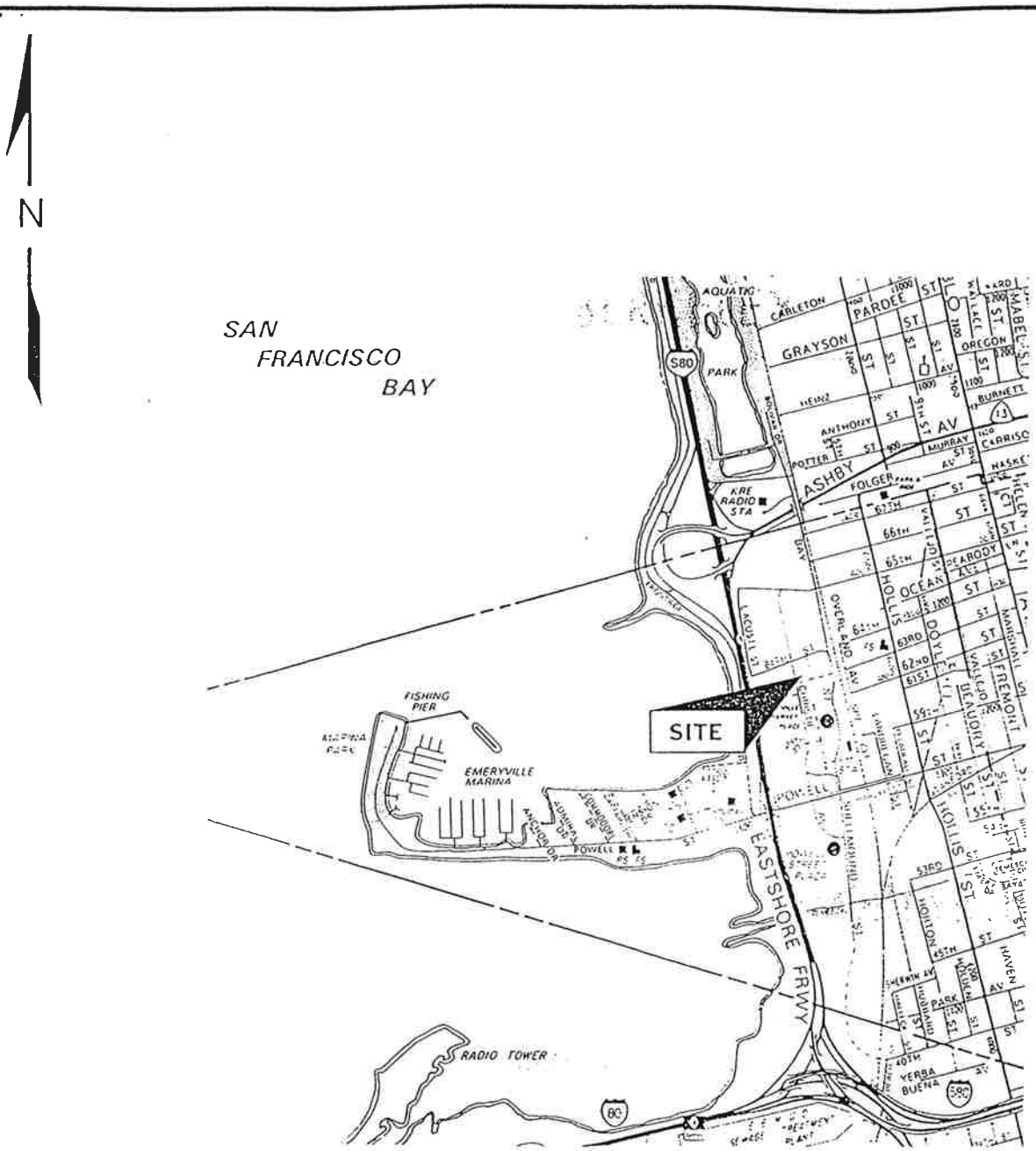
Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

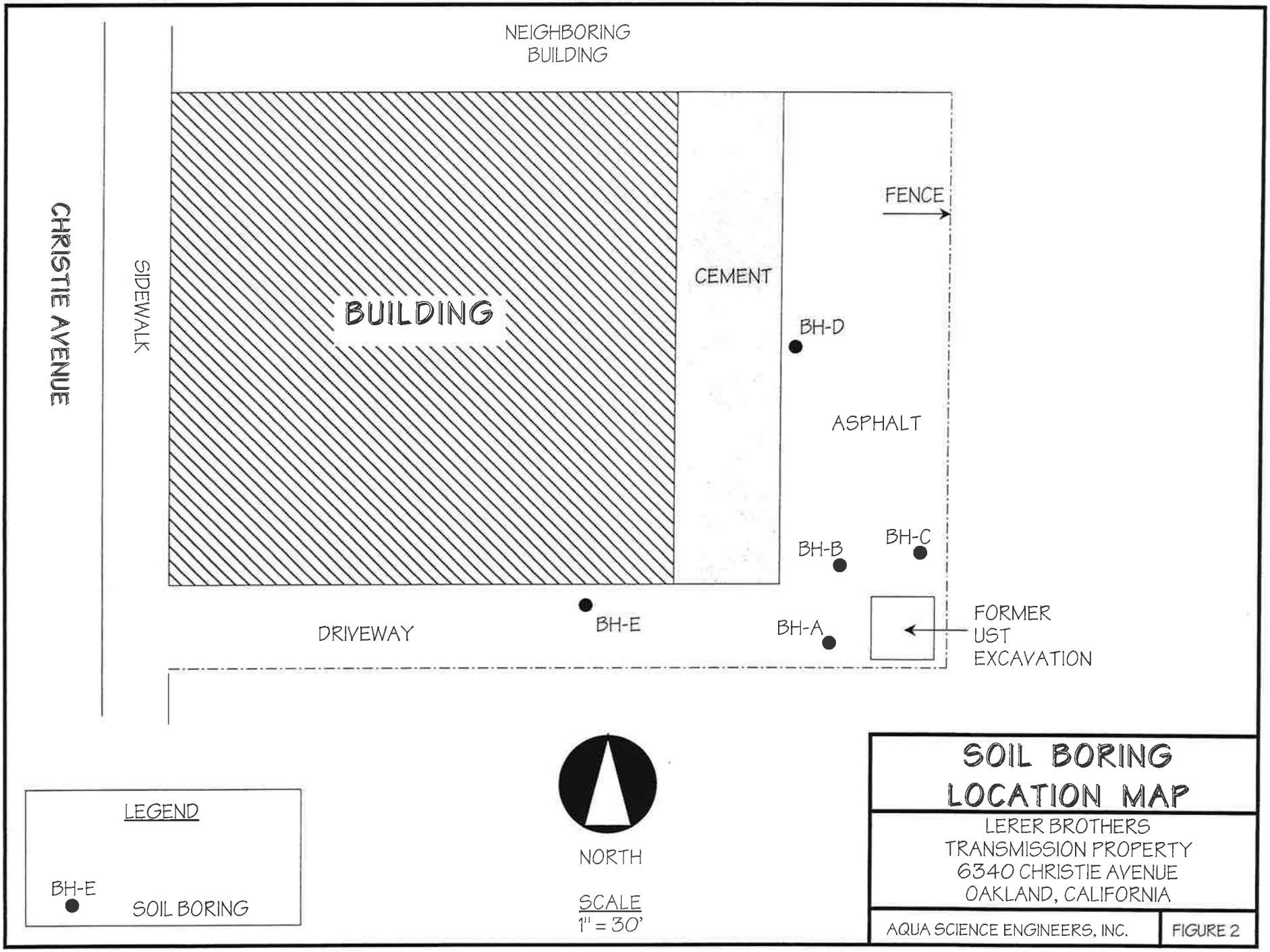
Robert E. Kitay, R.G., R.E.A.
Senior Geologist

Attachments: Figures 1 and 2
Appendices A and B

FIGURES



SITE LOCATION MAP	
6340 Christie Avenue Emeryville, California	
Aqua Science Engineers	Figure 1



SOIL BORING LOCATION MAP

LERER BROTHERS
TRANSMISSION PROPERTY
6340 CHRISTIE AVENUE
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 2

APPENDIX A

Drilling Permit

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 6340 Christie Ave
Emeryville, CA

California Coordinates Source ____ Accuracy ____
CCX ____ ft CCE ____ ft.
APN ____

CLIENT
Name Rick Gold
Address 6340 Christie Ave Phone ____
City Emeryville Zip 94608

APPLICANT
Name Aqua Science Engineers
Address 208 W. El Pintado Fax (925) 837-4853
City DANVILLE Phone (925) 820-9391
Zip 94526

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 N/A	☒

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☒ Direct push		

DRILLER'S LICENSE NO. 985165

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

GEOTECHNICAL PROJECTS
Number of Borings 3
Hole Diameter 2 in Maximum Depth 20 ft.

ESTIMATED STARTING DATE 10/9/98
ESTIMATED COMPLETION DATE 10/9/98

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

APPLICANT'S SIGNATURE ____ DATE 10/7/98

FOR OFFICE USE

PERMIT NUMBER 98W12428
WELL NUMBER ____
APN ____

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
(1.) A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
(2.) Submit to ACPWA 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 [signature] DATE 10/9/98

** TOTAL PAGE.02 **

APPENDIX B

Analytical Report and Chain of Custody Form
For Soil and Groundwater Samples

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-A,6'**
Spl#: 209866 *Matrix:* SOIL
Sampled: October 9, 1998 *Run#:*15375 *Analyzed:* October 13, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	1400	100	N.D.	98	10
MTBE	N.D.	6.2	N.D.	77	10
BENZENE	N.D.	6.2	N.D.	88	10
TOLUENE	25	6.2	N.D.	89	10
ETHYL BENZENE	7.1	6.2	N.D.	90	10
XYLENES	15	6.2	N.D.	90	10

Note: Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

PM V135 O:BTEXQC022
CRAIG 17:0

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-B,3.5'**
Spl#: 209867 *Matrix:* SOIL
Sampled: October 9, 1998 *Run#:*15363 *Analyzed:* October 13, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	110	1
MTBE	N.D.	0.0050	N.D.	103	1
BENZENE	0.0090	0.0050	N.D.	99	1
TOLUENE	0.0083	0.0050	N.D.	98	1
ETHYL BENZENE	0.012	0.0050	N.D.	98	1
XYLENES	0.039	0.0050	N.D.	98	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

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Federal ID #68-0140157

PM V132 O:BTEXQC022
CRAIG 17:0

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-C,4'**
Spl#: 209868 *Matrix:* SOIL
Sampled: October 9, 1998 *Run#:*15363 *Analyzed:* October 13, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	110	1
MTBE	N.D.	0.0050	N.D.	103	1
BENZENE	0.011	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	0.080	0.0050	N.D.	98	1
XYLENES	0.16	0.0050	N.D.	98	1

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CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-D,4'**
Spl#: 209869 *Matrix:* SOIL
Sampled: October 9, 1998 *Run#:*15363 *Analyzed:* October 13, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	110	1
MTBE	N.D.	0.0050	N.D.	103	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	98	1
XYLENES	0.0087	0.0050	N.D.	98	1

Note: Surrogate Recoveries demonstrate Matrix interference.

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-E,5.5'**
Spl#: 209870 *Matrix:* SOIL
Sampled: October 9, 1998 *Run#:*15363 *Analyzed:* October 13, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	110	1
MTBE	N.D.	0.0050	N.D.	103	1
BENZENE	N.D.	0.0050	N.D.	99	1
TOLUENE	N.D.	0.0050	N.D.	98	1
ETHYL BENZENE	N.D.	0.0050	N.D.	98	1
XYLENES	N.D.	0.0050	N.D.	98	1

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PM V132 O:BTEXQC02
CRAIG 17:

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-A WATER**
Spl#: 209871 *Matrix:* WATER
Sampled: October 9, 1998 *Run#:*15432 *Analyzed:* October 13, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	620000	10000	N.D.	97	200
MTBE	N.D.	1000	N.D.	93	200
BENZENE	1200	100	N.D.	107	200
TOLUENE	4900	100	N.D.	117	200
ETHYL BENZENE	16000	100	N.D.	109	200
XYLENES	64000	100	N.D.	106	200

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PM V132 O:BTEXQC022
CRAIG 17:0

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998

Submission #: 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS
Project#: 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-B WATER**
Spl#: 209872
Matrix: WATER
Sampled: October 9, 1998
*Run#:*15432
Analyzed: October 13, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	40000	2500	N.D.	97	50
MTBE	N.D.	250	N.D.	93	50
BENZENE	280	25	N.D.	107	50
TOLUENE	110	25	N.D.	117	50
ETHYL BENZENE	3200	25	N.D.	109	50
XYLENES	6400	25	N.D.	106	50

Vincent Vancil
Analyst

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-C WATER**
Spl#: 209873 *Matrix:* WATER
Sampled: October 9, 1998 *Run#:*15432 *Analyzed:* October 15, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	18000	500	N.D.	97	10
MTBE	N.D.	50	N.D.	93	10
BENZENE	56	5.0	N.D.	107	10
TOLUENE	280	5.0	N.D.	117	10
ETHYL BENZENE	150	5.0	N.D.	109	10
XYLENES	120	5.0	N.D.	106	10

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Michael Verona
Operations Manager

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Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-D WATER**
Spl#: 209874 *Matrix:* WATER
Sampled: October 9, 1998 *Run#:*15432 *Analyzed:* October 13, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	97	1
MTBE	N.D.	5.0	N.D.	93	1
BENZENE	N.D.	0.50	N.D.	107	1
TOLUENE	N.D.	0.50	N.D.	117	1
ETHYL BENZENE	N.D.	0.50	N.D.	109	1
XYLENES	N.D.	0.50	N.D.	106	1

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Federal ID #68-0140157

PM V132 O:BTEXQC02
CRAIG 17:

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: **BH-E WATER**
Spl#: 209875 *Matrix:* WATER
Sampled: October 9, 1998 *Run#:*15432 *Analyzed:* October 13, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	97	1
MTBE	N.D.	5.0	N.D.	93	1
BENZENE	N.D.	0.50	N.D.	107	1
TOLUENE	N.D.	0.50	N.D.	117	1
ETHYL BENZENE	N.D.	0.50	N.D.	109	1
XYLENES	1.2	0.50	N.D.	106	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 98ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Facsimile (925) 484-1096
Federal ID #68-0140157

PM V132 O:BTEXQC02
CRAIG 17:

CHROMALAB, INC.

Environmental Services (SDB)

October 16, 1998 *Submission #:* 9810161

AQUA SCIENCE ENGINEERS INC

Atten: Dave Allen

Project: LERER BROTHERS *Project#:* 3389
Received: October 9, 1998

re: 5 samples for Lead analysis.
Method: *EPA 3050A/7420A*

Matrix: SOIL *Extracted:* October 13, 1998
Sampled: October 9, 1998 *Run#:* 15372 *Analyzed:* October 13, 1998

Spl#	CLIENT SPL ID	LEAD (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
209866	BH-A,6'	23	5.0	N.D.	103	1
209867	BH-B,3.5'	130	5.0	N.D.	103	1
209868	BH-C,4'	130	5.0	N.D.	103	1
209869	BH-D,4'	310	5.0	N.D.	103	1
209870	BH-E,5.5'	11	5.0	N.D.	103	1

Shafi Barekzai
Analyst

Michael Verona
Operations Manager

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42458

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(925) 820-9391
FAX (925) 837-4853

SUBM #: 9810161 REP: PM
CLIENT: ASE
DUE: 10/16/98
REF #:42458

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE) D. Allen (PHONE NO.) 820.9391

PROJECT NAME LERER BROTHERS JOB NO. 3389

ADDRESS EMERYVILLE, CA DATE

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-GASOLINE (EPA 5030/8015)	TPH-DIESEL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520) ____	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)	Total Pb			COMPOSITE
BH-A, 6'	10/9	8:10	soil	1	X														X			
BH-B, 3.5'		8:30		1	X														X			
BH-C, 4'		8:50		1	X														X			
BH-D, 4		9:10		1	X														X			
BH-E, 5.5'		9:25		1	X														X			
BH-A WATER		9:30	water	2	X																	
BH-B WATER		9:35		2	X																	
BH-C WATER		9:40		2	X																	
BH-D WATER		10:10		2	X																	
BH-E WATER		10:30		2	X																	

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
D. Allen	B Morro 1645	B Morro 1725	Alex Pavels 1727	STANDARD
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
D. Allen	B Morro 10 9 98	B Morro 10 9 98	Alex Pavels 10/9/98	T.A.T. 30 days
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	10 VOAS
Company- ASE	Company- Kramer	Company- Kramer	Company- Kramer	5 poly's