aqua science engineers inc.

February 9, 1999

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 West El Pintado
Danville, CA 94526
(925) 820-9391

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

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 as required in a letter from the Alameda County Health Care Services Agency (ACHCSA) dated December 7, 1998 (Appendix A).

2.0 SITE HISTORY

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

On October 9, 1998, ASE drilled five soil borings at the site (Figure 2). Up to 1,400 parts per million (ppm) total petroleum hydrocarbons as gasoline (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 (benzene, toluene, ethylbenzene and total xylenes) compound at concentrations below 1 ppm. None of the BTEX concentrations exceeded United States Environmental Protection Agency (US EPA) Region IX preliminary remediation goals (PRGs) for industrial soil. No methyl tertiary butyl ether (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 California Department of Toxic Substances Control (DTSC) maximum contaminant levels (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.

3.0 SCOPE OF WORK (SOW)

Based on the site history and requirements of the ACHCSA, ASE's SOW was as follows:

1) Prepare a workplan and a health and safety plan for approval by the ACHCSA.

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

3) Drill three (3) soil borings to approximately 19-feet below ground surface (bgs) at the site.

4) Analyze at least one soil sample from each boring at a CAL-EPA certified analytical laboratory for TPH-G by modified EPA Method 5030/8015, BTEX and MTBE by EPA Method 8020 and lead by EPA Method 6010.

5) Install 2-inch diameter groundwater monitoring wells in each boring described in task 3.

6) Develop the monitoring wells.

7) Collect groundwater samples from each monitoring well for analyses.

8) Analyze the groundwater samples at a CAL-EPA certified analytical laboratory for TPH-G, BTEX, MTBE and dissolved lead.

9) Survey the top of casing elevation of each well, and determine the groundwater flow direction and gradient beneath the site.

10) Prepare a report detailing the methods and findings of this assessment.

Details of this assessment follow.

4.0 DRILLING SOIL BORINGS AND COLLECTING SAMPLES

Prior to drilling, ASE obtained an Alameda County Public Works Agency drilling permit (Appendix B). ASE also notified Underground Service Alert (USA) to have underground public utilities in the vicinity of the site marked prior to drilling.

On January 21, 1999, Kvilhaug Well Drilling of Concord, California drilled soil borings MW-1, MW-2 and MW-3 at the site using a Mobile B-61 drill rig equipped with 8-inch diameter hollow-stem augers (Figure 3). Groundwater monitoring wells MW-1, MW-2 and MW-3 were subsequently

constructed in these borings. These locations were chosen to monitor groundwater adjacent to and downgradient of the former UST. The groundwater flow direction was assumed to be to the west based on ASE's knowledge of regional groundwater flow as well as conversations with Ms. Susan Hugo of the ACHCSA, the case worker for several sites in the site vicinity. The drilling was directed by ASE staff geologist Greg Schramm and ASE senior geologist Robert E. Kitay, R.G.

Undisturbed soil samples were collected at 5-foot intervals as drilling progressed for lithologic and hydrogeologic description and for possible chemical analyses. The samples were collected by driving a split-barrel drive sampler lined with 2-inch diameter brass tubes ahead of the auger tip with successive blows from a 140-lb. hammer dropped 30-inches. One tube from each sampling interval was immediately trimmed, sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in a plastic bag and stored on ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under chain of custody. Soil from the remaining tubes was described by the site geologist using the Unified Soil Classification System.

Drilling equipment was steam-cleaned prior to use, and sampling equipment was washed with a TSP solution between sampling intervals to prevent cross-contamination. Rinsate was contained on-site in sealed and labeled 55-gallon steel drums.

Sediments encountered during drilling generally consisted of silty or gravelly sand with abundant debris such as tar, tar paper, roofing shingle material, railroad ties and railroad spikes. Hydrocarbon odors were present in all three borings, including strong odors at times. Groundwater was encountered between 3.7 and 6.5-feet bgs. The boring logs and well construction details are included as Appendix C. Based on conversations with Ms. Hugo of the ACHCSA, this type of fill material is very common in the site vicinity. She also stated that there may have been a tar or asphalt plant in the immediate site vicinity.

Drill cuttings were contained in sealed and labeled 55-gallon steel drums and stored on-site for temporary storage until off-site storage can be arranged.

5.0 ANALYTICAL RESULTS FOR SOIL

The soil sample collected from 4.5-feet bgs in each boring was analyzed by Chromalab, Inc. for TPH-G by modified EPA Method 5030/8015, BTEX

and MTBE by EPA Method 8020 and total lead by EPA Method 7420. The analytical results are tabulated in Table One, and a copy of the certified analytical report and chain of custody form are included in Appendix D.

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	Total Lead
MW-1	4.5'	< 100*	< 6.2	< 6.2	**13**	**27**	< 6.2	**130**
MW-2	4.5'	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**49**
MW-3	4.5'	< 1.2	< 0.005	< 0.005	**0.0073**	**0.027**	< 0.005	**72**
PRG		NE	0.62	520	230	210	NE	130

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

Detectable concentrations are in **bold**.

* = Hydrocarbons uncharacteristic of gasoline detected in the gasoline range at 1,500 parts per million.

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

None of the hydrocarbon or lead concentrations detected during this assessment exceeded US EPA PRGs for residential soil.

6.0 MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Groundwater monitoring wells MW-1, MW-2 and MW-3 were installed in borings MW-1, MW-2 and MW-3, respectively. The wells were constructed with 2-inch diameter, 0.020-inch slotted, flush-threaded, Schedule 40 PVC well screen and blank casing. Each well is screened between 3-feet bgs and the total depth of the well, between 15 and 19-feet bgs, to monitor the first water bearing zone encountered. Lonestar #3 Monterey sand occupies the annular space between the borehole and the casing from the bottom of the boring to approximately 1-foot above the well screen. A 0.5-foot thick hydrated bentonite layer separates the sand from the overlying cement surface seal. The wellheads are secured with locking wellplugs beneath at-grade traffic-rated vaults.

On January 24, 1999, ASE staff geologist Greg Schramm developed each monitoring well using at least two episodes of surge-block agitation and bailer evacuation. Over ten well casing volumes of water were removed from each well during development, and evacuation continued until the water was relatively clear.

On January 28, 1999, ASE staff geologist Greg Schramm collected groundwater samples from each monitoring well for analysis. A sheen was present on the surface of groundwater in all three monitoring wells. Prior to sampling, the wells were purged of four well casing volumes of groundwater. The pH, temperature and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Samples were collected from the wells using pre-cleaned polyethylene bailers. The groundwater samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid and sealed without headspace. The samples for lead analysis were contained in 500-ml polyethylene bottles. All of the samples were labeled and stored on ice for transport to Chromalab, Inc. of Pleasanton, California under chain of custody. The laboratory was instructed to filter and preserve the samples for lead analysis immediately upon receipt. Well development and sampling purge water were contained in 55-gallon steel drums and stored on-site for temporary storage. See Appendix E for a copy of the Field Logs.

7.0 GROUNDWATER ELEVATIONS

ASE surveyed the top of casing elevation of each well relative to a site datum on January 28, 1999. An assumed site datum elevation of 10.00-feet above mean sea level (msl) was interpolated from the USGS Oakland West, California 7.5 Minute Quadrangle (1980). The top of casing elevation of monitoring well MW-1 was set at 10.00-feet and the top of casing elevations of monitoring wells MW-2 and MW-3 were surveyed relative to monitoring well MW-1. Depths to groundwater were measured in each well prior to sampling on January 28, 1999 with an electric water level sounder. Depth to groundwater measurements are presented in Table Two, and groundwater elevation (potentiometric surface) contours are plotted on Figure 4. On January 28, 1999, groundwater appeared to flow to the south beneath the site at a gradient of 0.0138-feet/foot.

TABLE TWO
Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	1-28-99	10.00	4.85	5.15
MW-2	1-28-99	9.96	4.17	5.79
MW-3	1-28-99	9.25	4.23	5.02

8.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015, BTEX and MTBE by EPA Method 8020 and dissolved lead by EPA Method 6010. The analytical results are tabulated in Table Three, and copies of the certified analytical report and chain of custody form are included in Appendix F.

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

Well	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Dissolved Lead
MW-1	**730**	**22**	**3.3**	**24**	**61**	<5.0	<5.0
MW-2	**710**	**20**	**180**	**14**	**67**	<5.0	<5.0
MW-3	<50*	<0.5	<0.5	<0.5	**0.69**	<5.0	<5.0
DTSC MCL	NE	1.0	150	700	1,750	35**	15

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

NE = DTSC MCLs are not established.

* = Hydrocarbons uncharacteristic of gasoline detected in the gasoline range at 68 parts per billion.
** = DTSC interim action level for drinking water; MCL not established.

Detectable concentrations are in **bold**.

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

Benzene concentrations detected in groundwater samples collected from monitoring wells MW-1 and MW-2 exceeded the DTSC MCL for drinking water. The toluene concentration detected in groundwater samples collected from monitoring well MW-2 also exceeded the DTSC MCL for drinking water. Only very low concentrations of hydrocarbons, below DTSC MCLs for drinking water, were detected in groundwater samples collected from monitoring well MW-3. No lead was detected in groundwater samples collected from any of the monitoring wells.

9.0 CONCLUSIONS AND RECOMMENDATIONS

None of the hydrocarbon or lead concentrations detected in soil samples collected during this assessment exceeded US EPA PRGs for residential soil.

Benzene concentrations detected in groundwater samples collected from monitoring wells MW-1 and MW-2 exceeded DTSC MCLs for drinking water. The toluene concentration detected in groundwater samples collected from monitoring well MW-2 also exceeded the DTSC MCL for drinking water. No lead was detected in groundwater samples collected from any of the monitoring wells.

Based on the potentiometric surface contours, groundwater appears to flow to the south beneath the site at a gradient of 0.0138-feet/foot. This groundwater flow direction is not consistent with the expected groundwater flow direction to the west which was based on information provided by the ACHCSA and ASE's knowledge of regional groundwater in the Emeryville area.

Strong odors were present in soil encountered beneath the site, and a sheen was detected on the groundwater surface in the site monitoring wells. The analytical results do not indicate as significant contamination as field conditions would indicate. Based on this information, it appears that there is contamination beneath the site that is possibly related to the fill material beneath the site and not the former gasoline UST.

ASE recommends that groundwater samples be collected from the site wells on a quarterly basis. In addition, ASE recommends that water level measurements be collected from the site on a monthly basis for the next quarter to confirm the groundwater flow direction beneath the site. If the groundwater flow direction remains to the south, an additional groundwater monitoring well may be necessary downgradient of the former UST. The next groundwater sampling at the site is scheduled for April 1999. Lead analyses will be discontinued in future sampling periods.

10.0 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.

It 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 to assist Lerer Brothers Transmission Service with their environmental needs. 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 through 4
Appendices A through F

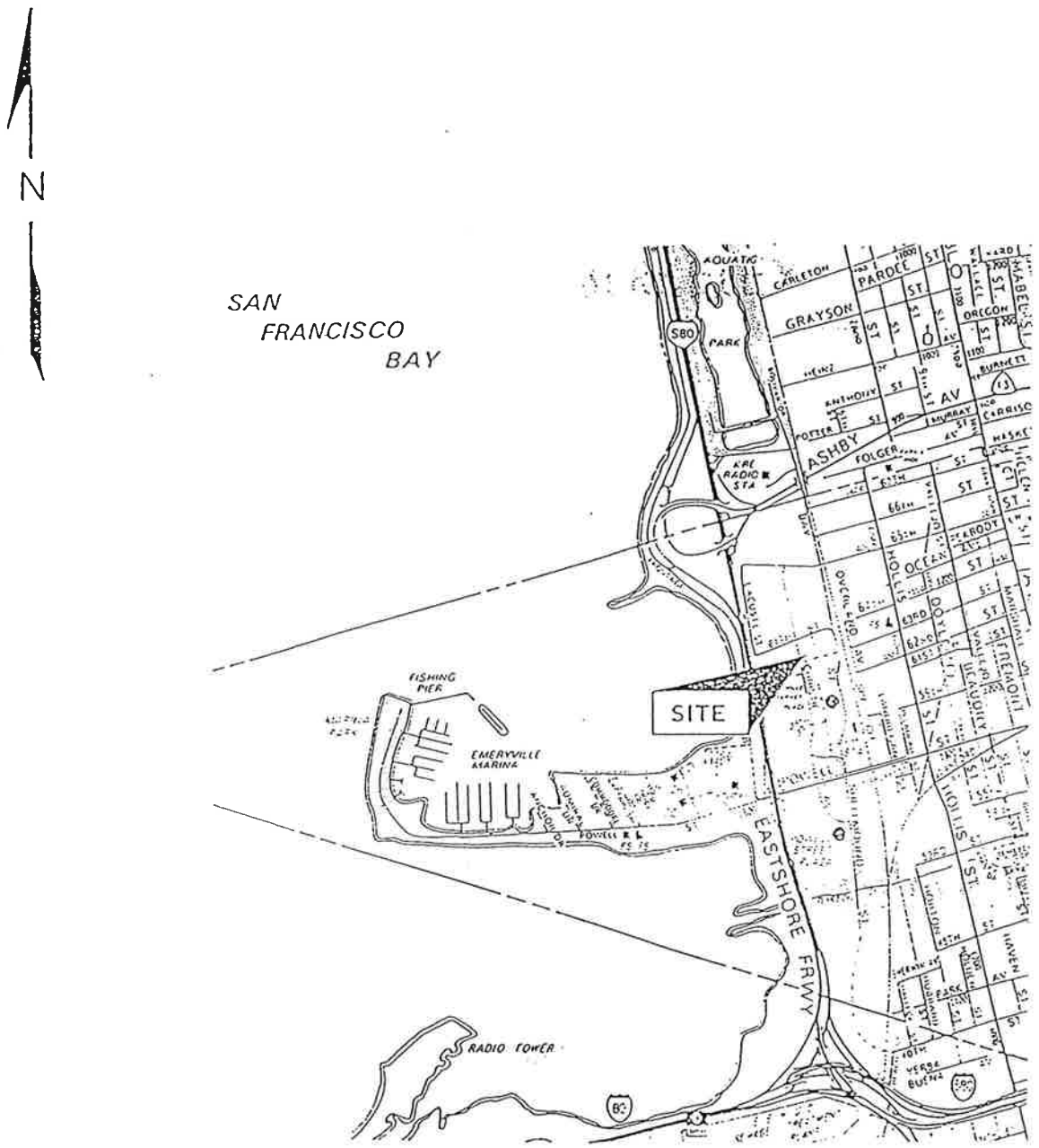
Distribution:

Mr. Richard Gold, P.O. Box 117820, Burlingame, CA 94011-7820 (original and 1 copy)

Ms. Susan Hugo, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502 (copy)

Mr. Chuck Headlee, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612 (copy)

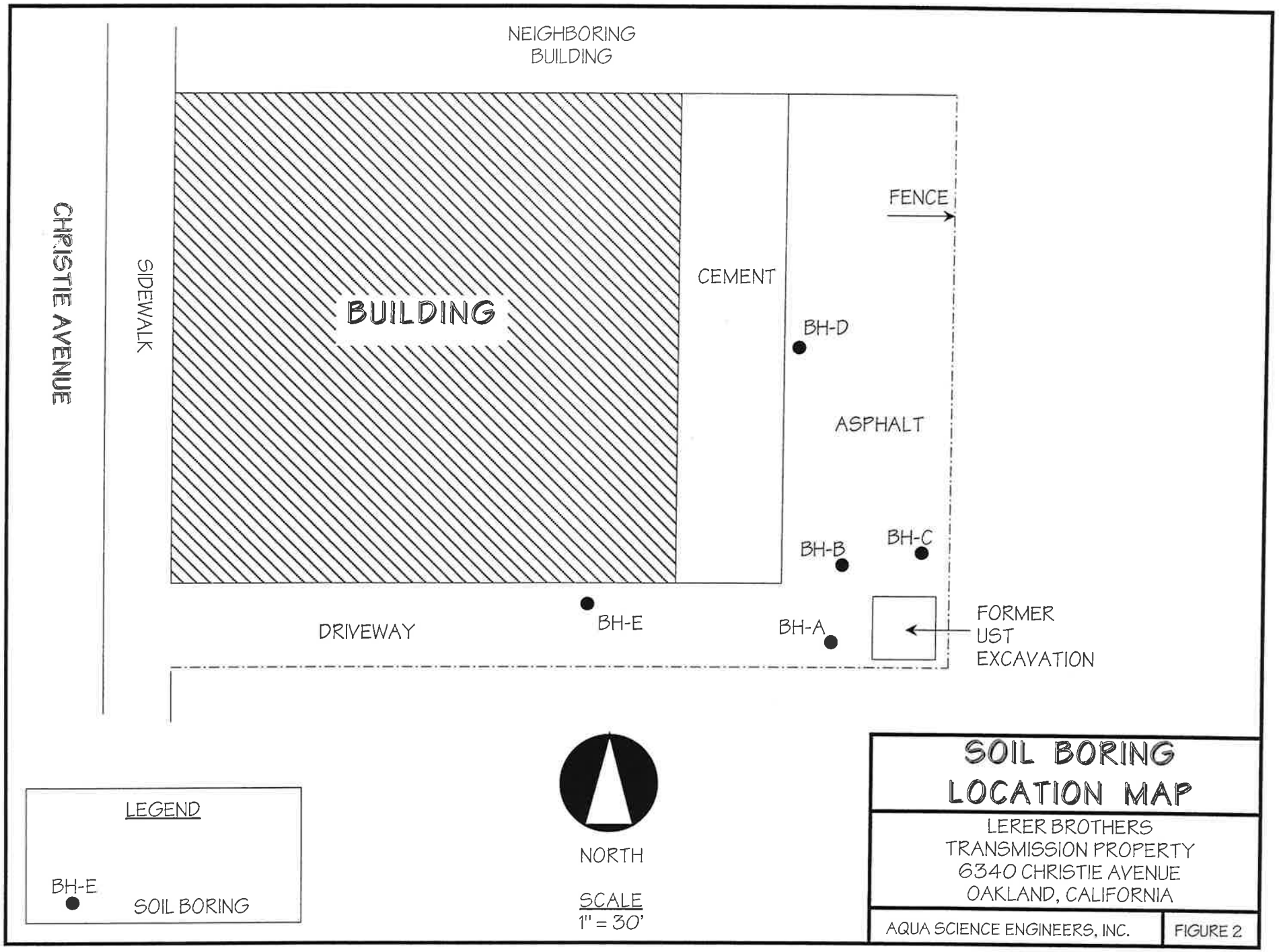
FIGURES

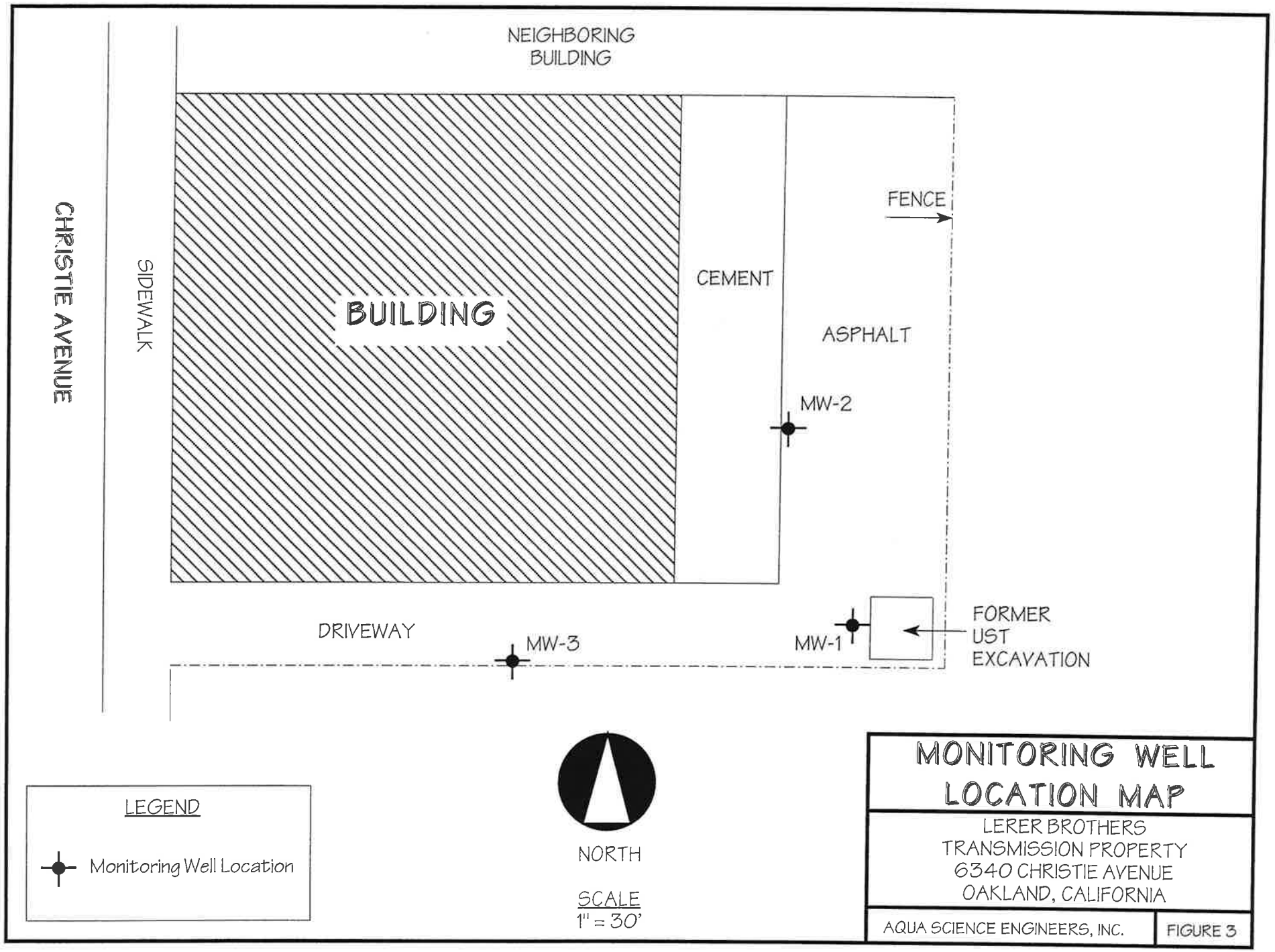


SITE LOCATION MAP

6340 Christie Avenue
Emeryville, California

Aqua Science Engineers | Figure 1

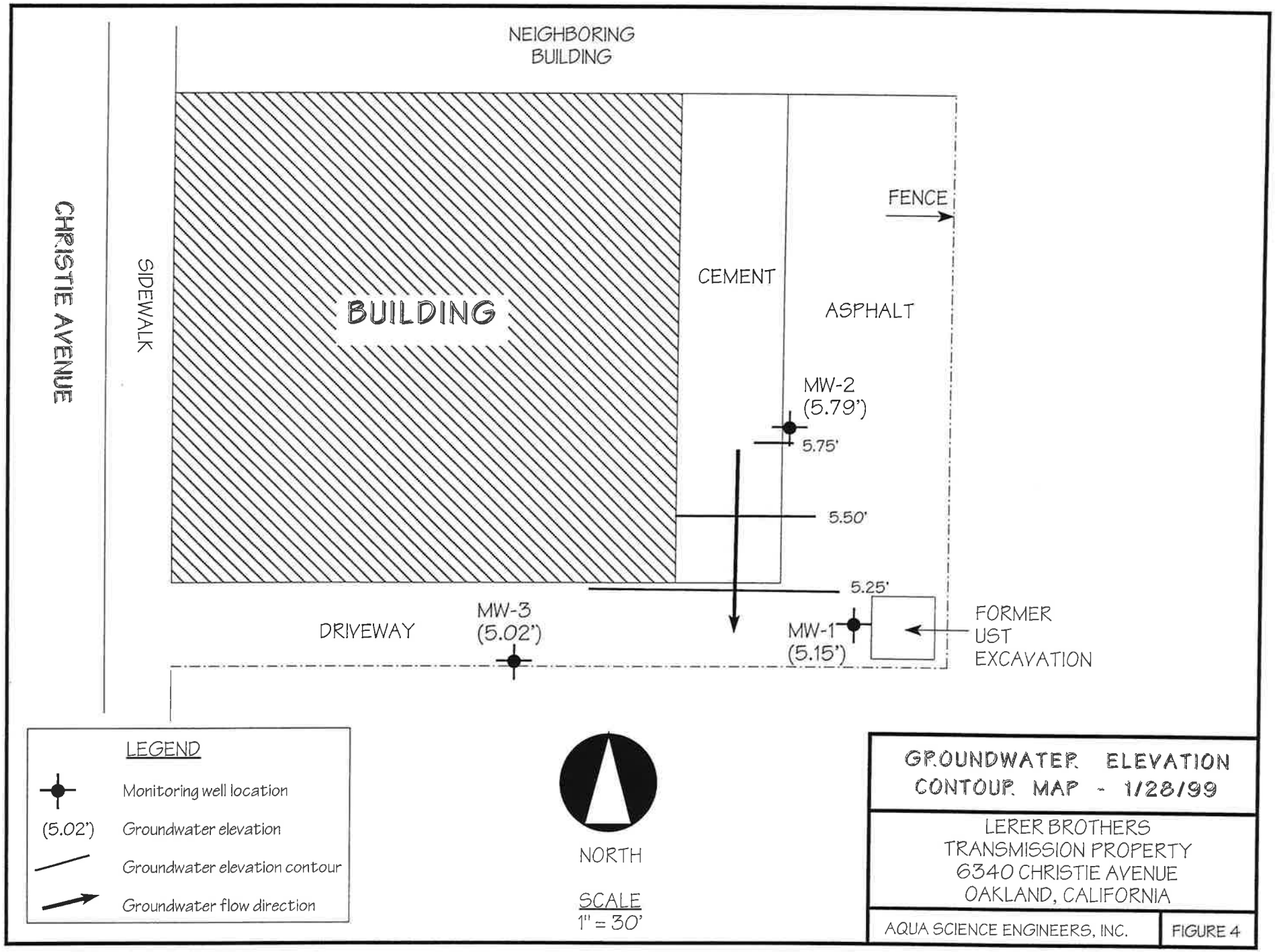

NEIGHBORING BUILDING
CHRISTIE AVENUE
SIDEWALK
BUILDING
CEMENT
FENCE
BH-D
ASPHALT
BH-B
BH-C
BH-E
BH-A
DRIVEWAY
FORMER UST EXCAVATION
LEGEND
BH-E
SOIL BORING
NORTH
SCALE
1" = 30'
SOIL BORING LOCATION MAP
LERER BROTHERS
TRANSMISSION PROPERTY
6340 CHRISTIE AVENUE
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
FIGURE 2



MONITORING WELL LOCATION MAP

LERER BROTHERS
TRANSMISSION PROPERTY
6340 CHRISTIE AVENUE
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 3


NEIGHBORING BUILDING
CHRISTIE AVENUE
SIDEWALK
BUILDING
CEMENT
ASPHALT
FENCE
MW-2 (5.79')
5.75'
5.50'
5.25'
MW-3 (5.02')
DRIVEWAY
MW-1 (5.15')
FORMER UST EXCAVATION
LEGEND
Monitoring well location
(5.02') Groundwater elevation
Groundwater elevation contour
Groundwater flow direction
NORTH
SCALE 1" = 30'
GROUNDWATER ELEVATION CONTOUR MAP - 1/28/99
LERER BROTHERS TRANSMISSION PROPERTY
6340 CHRISTIE AVENUE
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
FIGURE 4

APPENDIX A

December 7, 1998 Letter
From The ACHCSA

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

December 7, 1998

Mr. Richard Gold
Lerer Brothers Transmission
P.O. Box 117820
Burlingame, CA 94011-7820

Subject: **Lerer Brothers Transmission (STID # 1247)**
6340 Christie Avenue, Emeryville, CA 94608

Dear Mr. Gold:

This agency has reviewed the Soil and Groundwater Assessment Report, dated October 27, 1998, prepared and submitted by Aqua Science Engineers Inc., for the above referenced site. One 2,000 gallon steel underground storage tank (UST) used to store unleaded gasoline was reportedly removed from the subject property in 1988. Soil and groundwater investigation was conducted to characterize the extent of petroleum hydrocarbon contamination related to releases associated with the former UST at the site.

On October 9, 1998, five soil borings (BH-A to BH-E) were drilled at the site. One soil sample was collected from each boring at the capillary zone (between 3.5 to 6 feet depth). Hydrocarbon sheen was present in boring BH-A. Soil samples collected from the borings showed petroleum hydrocarbon contamination up to 1,400 ppm Total Petroleum Hydrocarbon (TPH) gasoline, 0.011 ppm benzene, 25 ppm toluene, 7.1 ppm ethyl benzene and 15 ppm xylenes. In addition, the grab water samples collected from the borings found dissolved petroleum hydrocarbon contamination at the following concentrations: up to 620,000 ppb TPH gasoline, 1,200 ppb benzene, 4,900 ppb toluene and 16,000 ppb ethyl benzene.

Based on the review of the data submitted for the site, the extent of the groundwater contamination has not been fully defined. Please submit a workplan to determine the extent of the groundwater contamination beneath the site. Your work plan should include at a minimum the installation of shallow groundwater monitoring wells and should be submitted no later than January 30, 1999.

If you have any questions concerning this letter or the subject site, please contact me at (510) 567-6780.

Sincerely,

Susan L. Hugo

Susan L. Hugo
Hazardous Materials Specialist

cc: Chuck Headlee, San Francisco Bay RWQCB
Dave Allen, Aqua Science Engineers, 208 W. El Pintado Road, Danville, CA 94526
SH/ files

APPENDIX B

Drilling Permit

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-6575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5268 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 6340 Christie Ave
Emeryville, CA

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

CLIENT
Name Lenar Brothers Transmission Service
Address PO Box 117820 Phone 650-579-1919
City Burlingame, CA Zip 94011-7820

APPLICANT
Name Aqua Science Engineers, Inc.
Attn: Robert Kitay Fax 925-837-4853
Address 208 W. El Pintado Rd Phone 925-820-9391
City Danville, CA Zip 94518

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	☐		

DRILLER'S LICENSE NO. C-57 487000

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 24 ft.
Surface Seal Depth 3 ft. Number 3

GEOTECHNICAL PROJECTS
Number of Borings ____ Maximum
Hole Diameter ____ in. Depth ____ ft.

ESTIMATED STARTING DATE 1-21-99
ESTIMATED COMPLETION DATE 1-22-99

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

APPLICANT'S SIGNATURE Robert C. Kitay DATE 1-15-99

FOR OFFICE USE

PERMIT NUMBER 99WR019
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 1/20/99

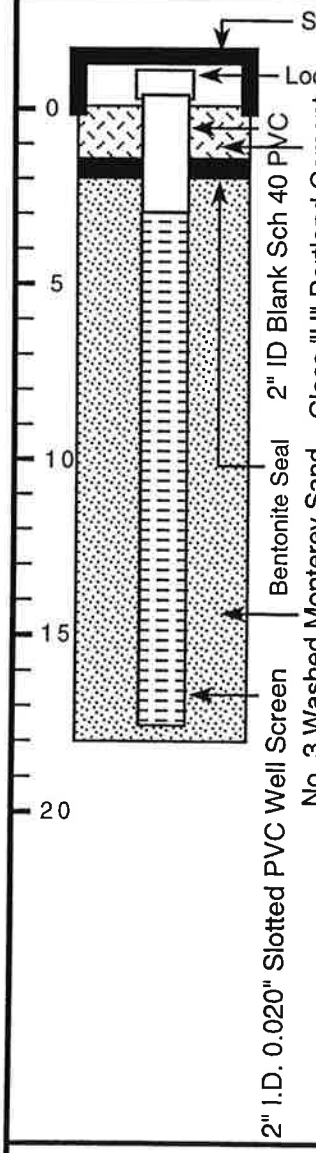
** TOTAL PAGE.02 **

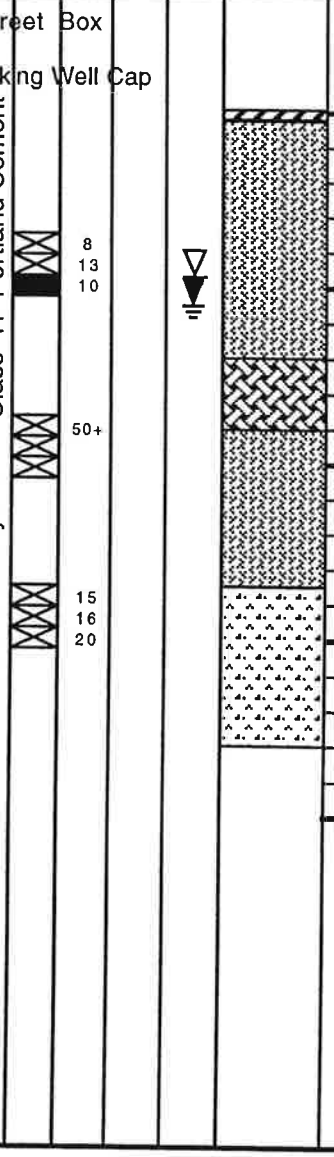
APPENDIX C

Boring Logs and Well Construction Details

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		Well MW-1
Project Name: Lerer Bros. Trans.	Project Location: 6340 Christie Ave., Emeryville, CA	Page 1 of 1
Driller: Kvilhaug Drilling, Concord, CA	Type of Rig: Hollow-Stem Auger	Size of Drill: 8.0" Diameter
Logged By: Greg Schramm	Date Drilled: January 21, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 5.7'	Total Depth of Well Completed: 17.7'
Static Depth of Water in Well: 4.76'	Well Screen Type and Diameter: 2" Diameter PVC Casing
Total Depth of Boring: 18.0'	Well Screen Slot Size: 0.020"
	Type and Size of Soil Sampler: 2.0" I.D. Split-Barrel Sampler



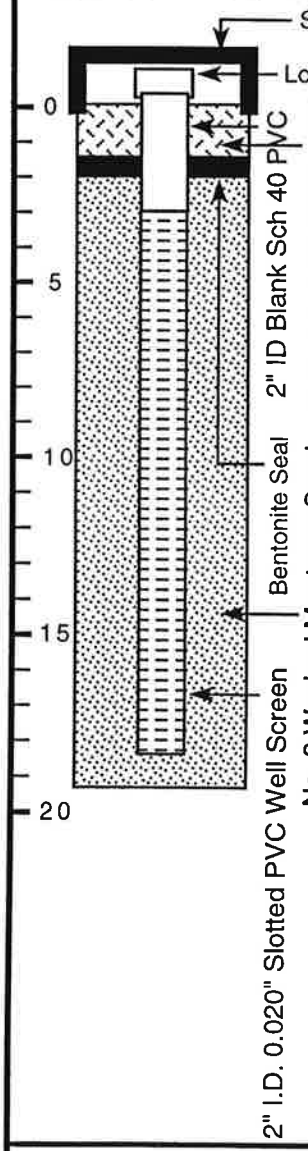


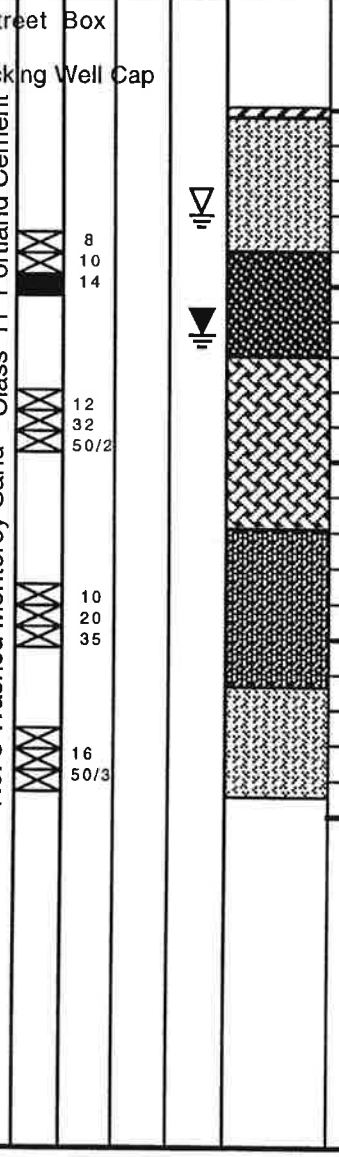
Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Asphalt
	Silty SAND (SM); black; loose; wet; 80% fine to medium sand; 20% silt; non-plastic; medium estimated K; strong odor; sheen
5	Railroad tie, 1' section of tar paper, Railroad spike
10	Silty SAND (SM); black; loose; wet; 80% fine to medium sand; 20% silt; non-plastic; medium estimated K; strong odor; sheen
15	Gravely SAND (SW); yellow brown; medium dense; wet; 70% fine to medium sand; 20% subangular pebbles to 0.03" diamater; 10% fines, non-plastic; medium estimated K; no odor
20	End of Boring

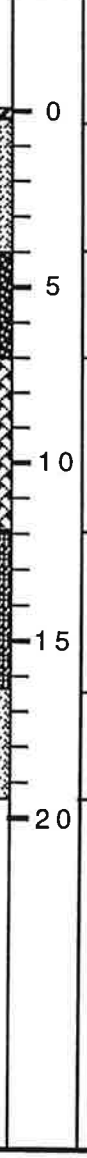
AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		Well MW-2
Project Name: Lerer Bros. Trans.	Project Location: 6340 Christie Ave., Emeryville, CA	Page 1 of 1
Driller: Kvilhaug Drilling, Concord, CA	Type of Rig: Hollow-Stem Auger	Size of Drill: 8.0" Diameter
Logged By: Greg Schramm	Date Drilled: January 21, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 6.50'	Total Depth of Well Completed: 17.7'
Static Depth of Water in Well: 4.17'	Well Screen Type and Diameter: 2" Diameter PVC Casing
Total Depth of Boring: 19.5'	Well Screen Slot Size: 0.020"
	Type and Size of Soil Sampler: 2.0" I.D. Split-Barrel Sampler







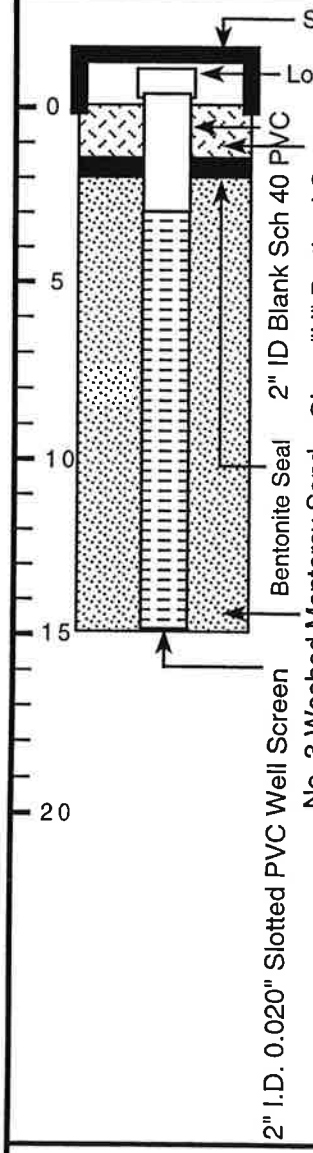
DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.	
Asphalt	0
Silty SAND (SM); olive brown; loose; damp; 80% fine sand; 20% silt; trace clay; non-plastic; medium estimated K; no odor	
Silty CLAY (CH); dark brown; stiff; damp; 95% clay; 5% silt; trace gravel; high plasticity; very low estimated K; no odor	5
Predominately fill material consisting of a soft tar substance with interlayered fiberous material; sheet rock and roof shingles in a predominately silt matrix with trace sand and clay; wood; wet	10
Clayey SILT (ML); light brown and yellow brown; medium stiff; damp; 75% silt; 20% clay; 5% fine sand; medium plasticity; low estimated K; slight odor	15
Silty SAND (SM); olive brown; dense; wet; 85% fine to medium sand; 15% silt; trace clay; non-plastic; medium estimated K; faint odor	
End of Boring	20

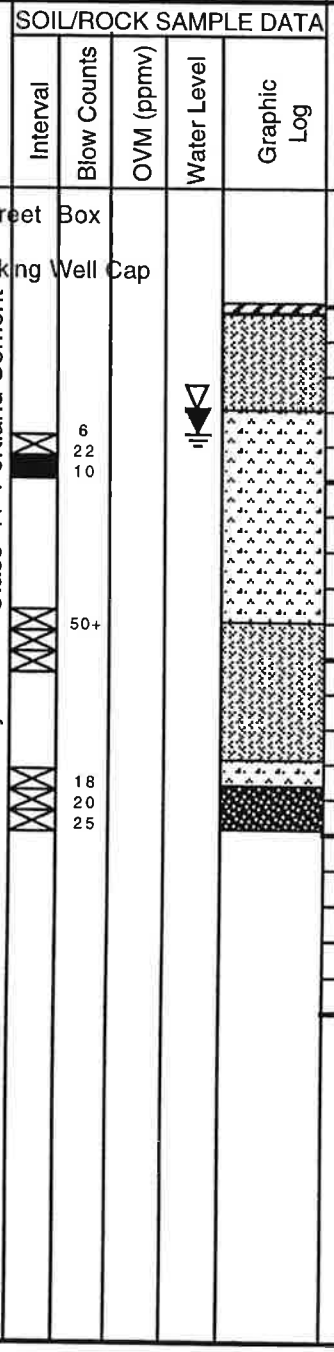
AQUA SCIENCE ENGINEERS, INC.

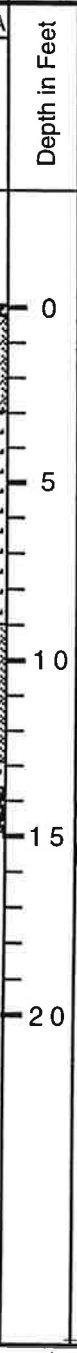
SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		Well MW-3
Project Name: Lerer Bros. Trans.	Project Location: 6340 Christie Ave., Emeryville, CA	Page 1 of 1
Driller: Kvilhaug Drilling, Concord, CA	Type of Rig: Hollow-Stem Auger	Size of Drill: 8.0" Diameter
Logged By: Greg Schramm	Date Drilled: January 21, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA

Depth of Water First Encountered: 3.75'	Total Depth of Well Completed: 15'
Static Depth of Water in Well: 4.23'	Well Screen Type and Diameter: 2" Diameter PVC Casing
Total Depth of Boring: 15.0'	Well Screen Slot Size: 0.020"
	Type and Size of Soil Sampler: 2.0" I.D. Split-Barrel Sampler







DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
Asphalt
Silty SAND (SM); black; stiff; damp; 85% fine to medium sand; 10% silt; 5% clay; low plasticity; low estimated K; no odor
Gravely SAND (SW); yellow brown; loose; damp; 60% fine to medium sand; 30% subangular pebbles to 0.2" diameter; 10% fines, non-plastic; medium estimated K; slight hydrocarbon odor; rock
Silty SAND (SM); grey; loose; wet; 70% fine to medium sand; 30% silt; trace clay; non-plastic; medium estimated K; no odor; tar paper
Gravely SAND (SW); yellow brown, red; medium dense; wet; 60% fine to medium sand; 30% subangular pebbles to 0.1" diameter; 10% fines, non-plastic; medium estimated K; no odor
Silty CLAY (CH); yellow brown; stiff; wet; 80% clay; 15% silt; 5% very fine sand; high plasticity; very low estimated K; no odor
End of Boring

AQUA SCIENCE ENGINEERS, INC.

APPENDIX D

Analytical Report and Chain of Custody Form
For Soil Samples

CHROMALAB, INC.

Environmental Services (SDB)

January 29, 1999 *Submission #:* 9901252

AQUA SCIENCE ENGINEERS, INC

Atten: GREG SCHRAMM

Project: LERER BROS. TRANSMISSION
Received: January 22, 1999

re: 3 samples for Lead analysis.
Method: *EPA 3050A/7420A*

Matrix: SOIL *Extracted:* January 25, 1999
Sampled: January 21, 1999 *Run#:* 17110 *Analyzed:* January 25, 1999

Spl#	CLIENT SPL ID	LEAD (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
226072	MW-1@4.5	130	5.0	N.D.	102	1
226073	MW-2@4.5	49	5.0	N.D.	102	1
226074	MW-3@4.5	72	5.0	N.D.	102	1

Shafi Barekzai
Analyst

Michael Verona
Operations Manager

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

CHROMALAB, INC.

Environmental Services (SDB)

January 28, 1999 *Submission #:* 9901252

AQUA SCIENCE ENGINEERS, INC

Atten: GREG SCHRAMM

Project: LERER BROS. TRANSMISSION
Received: January 22, 1999

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

Client Sample ID: **MW-1@4.5**
Spl#: 226072 *Matrix:* SOIL
Sampled: January 21, 1999 *Run#:*17098 *Analyzed:* January 27, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	100	N.D.	105	10
MTBE	N.D.	6.2	N.D.	84	10
BENZENE	N.D.	6.2	N.D.	109	10
TOLUENE	N.D.	6.2	N.D.	117	10
ETHYL BENZENE	13	6.2	N.D.	106	10
XYLENES	27	6.2	N.D.	108	10

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 1500mg/Kg.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
VINCE 12:0:

CHROMALAB, INC.

Environmental Services (SDB)

January 28, 1999 *Submission #:* 9901252

AQUA SCIENCE ENGINEERS, INC

Atten: GREG SCHRAMM

Project: LERER BROS. TRANSMISSION
Received: January 22, 1999

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

Client Sample ID: **MW-2@4.5**
Spl#: 226073 *Matrix:* SOIL
Sampled: January 21, 1999 *Run#:*17149 *Analyzed:* January 27, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	83	1
MTBE	N.D.	0.0050	N.D.	80	1
BENZENE	N.D.	0.0050	N.D.	87	1
TOLUENE	N.D.	0.0050	N.D.	87	1
ETHYL BENZENE	N.D.	0.0050	N.D.	88	1
XYLENES	N.D.	0.0050	N.D.	88	1

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
VINCE 12:

CHROMALAB, INC.

Environmental Services (SDB)

January 28, 1999 *Submission #:* 9901252

AQUA SCIENCE ENGINEERS, INC

Atten: GREG SCHRAMM

Project: LERER BROS. TRANSMISSION
Received: January 22, 1999

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

Client Sample ID: **MW-3@4.5**
Spl#: 226074 *Matrix:* SOIL
Sampled: January 21, 1999 *Run#:*17134 *Analyzed:* January 26, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.2	N.D.	104	1
MTBE	N.D.	0.0050	N.D.	88	1
BENZENE	N.D.	0.0050	N.D.	85	1
TOLUENE	N.D.	0.0050	N.D.	85	1
ETHYL BENZENE	0.0073	0.0050	N.D.	86	1
XYLENES	0.027	0.0050	N.D.	86	1

Vincent Vancil
Analyst

Michael Verona
Operations Manager

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

PM V132 O:BTEXQC022
VINCE 12:0

9901252 / 226072

Chain of Custody

44238

Aqua Science Engineers, Inc.
~~2411 Old Crow Canyon Road, #4,~~
~~San Ramon, CA 94583~~
~~(510)~~ 820-9391 - FAX (510) 837-4853
925

DATE 1/21 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.) 820-9391

PROJECT NAME Lefer Bros. Transmission NO.

ADDRESS 6450 Christie Ave., Emeryville

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GASOLINE (EPA 5030/8015)	TPH-GASOLINE/BTEX/MTBE (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	Total Pb	MTBE
mw-1@4.5'	1/21	11:30	soil	1		X												X	X
mw-2@4.5'	↓	9:25	↓	1		X												X	X
mw-3@4.5'	↓	14:30	↓	1		X												X	X

SUBM #: 9901252 REF: PM
CLIENT: ASE
DUE: 01/29/99
REF #:44238

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
14:30	1430			3 tubes
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Greg Schramm 1/22	A. Parades 1/22/99			
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE	Company-	Company-	Company-	

APPENDIX E

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Lerer Bros.
Job #: 3389 Date of sampling: 1/28/99
Well Name: MW-1 Sampled by: GS
Total depth of well (feet): 17.72 Well diameter (inches): 2
Depth to water before sampling (feet): 9.85
Thickness of floating product if any: —
Depth of well casing in water (feet): 12.87
Number of gallons per well casing volume (gallons): 2.15
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 8.6
Equipment used to purge the well: electric pump
Time Evacuation Began: 9:10 Time Evacuation Finished: 9:28
Approximate volume of groundwater purged: 9.0
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 9:30
Depth to water at time of sampling:
Percent recovery at time of sampling:
Samples collected with: dedicated bailer
Sample color: clear Odor: slight HC
Description of sediment in sample: fine brown sediments

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	60.9	6.22	2270
2	60.6	6.14	2510
3	60.8	6.15	3420
4	60.7	6.14	3560

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40 ml VOA	HCl	✓	TPH-G/BTEX/MTBE
MW-1	1	125 ml plastic	—	✓	TTLC Lead

208 W. El Pintado Road, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Lerer Bros.
Job #: 3389 Date of sampling: 1/28/99
Well Name: MW-2 Sampled by: GS
Total depth of well (feet): 18.45 Well diameter (inches): 2
Depth to water before sampling (feet): 4.17
Thickness of floating product if any: 0 —
Depth of well casing in water (feet): 14.28
Number of gallons per well casing volume (gallons): 2.38
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 9.5
Equipment used to purge the well: electric pump
Time Evacuation Began: 10:37 Time Evacuation Finished: 10:55
Approximate volume of groundwater purged: 10
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 10:58
Depth to water at time of sampling: —
Percent recovery at time of sampling: —
Samples collected with: dedicated bailer
Sample color: Yellow Odor: None
Description of sediment in sample: H. brown

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	59.2	6.00	3510
2	58.5	5.68	3460
3	58.6	5.70	3350
4	57.6	5.70	3460

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	3	40 ml VOA	HCl	✓	TPH-G/BTEX/MTBE
MW-2	1	250ml plastic	—	✓	TTLC Lead

208 W. El Pintado Road, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Lerer Bros.
Job #: 3389 Date of sampling: 1/28/99
Well Name: MW-3 Sampled by: GS
Total depth of well (feet): 14.80 Well diameter (inches): 2
Depth to water before sampling (feet): 4.23
Thickness of floating product if any: —
Depth of well casing in water (feet): 10.57
Number of gallons per well casing volume (gallons): 1.77
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7.06
Equipment used to purge the well: electric pump
Time Evacuation Began: 11:10 Time Evacuation Finished: 11:27
Approximate volume of groundwater purged: 8.0 ga
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 11:30
Depth to water at time of sampling: —
Percent recovery at time of sampling: —
Samples collected with: dedicated bailer
Sample color: sheen Odor: strong HC
Description of sediment in sample: fine black

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	59.5	5.65	1980
2	58-59.2	5.43	1805
3	59.2	5.49	1771
4	59.4	5.46	1932

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40 ml VOA	HCl	✓	TPH-G/BTEX/MTBE
MW-3	1	250ml plastic	—	✓	TTLC Lead

208 W. El Pintado Road, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

APPENDIX F

Analytical Report and Chain of Custody Form
For Groundwater Samples

CHROMALAB, INC.

Environmental Services (SDB)

February 4, 1999 *Submission #:* 9901320

AQUA SCIENCE ENGINEERS, INC

Atten: Greg Schramm

Project: LERER BROS. *Project#:* 3389
Received: January 28, 1999

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

Client Sample ID: **MW-1**
Spl#: 226693 *Matrix:* WATER
Sampled: January 28, 1999 *Run#:*17205 *Analyzed:* February 1, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	730	50	N.D.	92	1
MTBE	N.D.	5.0	N.D.	91	1
BENZENE	22	0.50	N.D.	105	1
TOLUENE	3.3	0.50	N.D.	103	1
ETHYL BENZENE	24	0.50	N.D.	102	1
XYLENES	61	0.50	N.D.	97	1

Craig Huntzinger
Analyst

Michael Verona
Laboratory 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 14:4

CHROMALAB, INC.

Environmental Services (SDB)

February 4, 1999 *Submission #:* 9901320

AQUA SCIENCE ENGINEERS, INC

Atten: Greg Schramm

Project: LERER BROS. *Project#:* 3389
Received: January 28, 1999

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

Client Sample ID: **MW-2**
Spl#: 226694 *Matrix:* WATER
Sampled: January 28, 1999 *Run#:*17205 *Analyzed:* February 1, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	710	50	N.D.	92	1
MTBE	N.D.	5.0	N.D.	91	1
BENZENE	20	0.50	N.D.	105	1
TOLUENE	180	0.50	N.D.	103	1
ETHYL BENZENE	14	0.50	N.D.	102	1
XYLENES	67	0.50	N.D.	97	1

Craig Huntzinger
Analyst

Michael Verona
Laboratory 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:BTEXQC022
CRAIG 14:4

CHROMALAB, INC.

Environmental Services (SDB)

February 4, 1999 *Submission #:* 9901320

AQUA SCIENCE ENGINEERS, INC

Atten: Greg Schramm

Project: LERER BROS. *Project#:* 3389
Received: January 28, 1999

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

Client Sample ID: **MW-3**
Spl#: 226695 *Matrix:* WATER
Sampled: January 28, 1999 *Run#:*17245 *Analyzed:* February 2, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	93	1
MTBE	N.D.	5.0	N.D.	87	1
BENZENE	N.D.	0.50	N.D.	100	1
TOLUENE	N.D.	0.50	N.D.	99	1
ETHYL BENZENE	N.D.	0.50	N.D.	99	1
XYLENES	0.69	0.50	N.D.	94	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 68ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

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

CHROMALAB, INC.

Environmental Services (SDB)

February 4, 1999 *Submission #:* 9901320

AQUA SCIENCE ENGINEERS, INC

Atten: Greg Schramm

Project: LERER BROS. *Project#:* 3389
Received: January 28, 1999

re: One sample for Soluble Miscellaneous Metals with Mercury analysis.
Method: *EPA 3005A/6010A/7470A Nov 1990*

Client Sample ID: **MW-1**
Spl#: 226693 *Matrix:* WATER *Extracted:* February 3, 1999
Sampled: January 28, 1999 *Run#:* 17246 *Analyzed:* February 3, 1999

ANALYTE	RESULT (mg/L)	REPORTING LIMIT (mg/L)	BLANK RESULT (mg/L)	BLANK SPIKE (%)	DILUTION FACTOR
LEAD	N.D.	0.0050	N.D.	98.2	1

Shafi Barekzai
Analyst

Michael Verona
Operations Manager

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

CHROMALAB, INC.

Environmental Services (SDB)

February 4, 1999 *Submission #:* 9901320

AQUA SCIENCE ENGINEERS, INC

Atten: Greg Schramm

Project: LERER BROS. *Project#:* 3389
Received: January 28, 1999

re: One sample for Soluble Miscellaneous Metals with Mercury analysis.
Method: *EPA 3005A/6010A/7470A Nov 1990*

Client Sample ID: **MW-2**
Spl#: 226694 *Matrix:* WATER *Extracted:* February 3, 1999
Sampled: January 28, 1999 *Run#:* 17246 *Analyzed:* February 3, 1999

ANALYTE	RESULT (mg/L)	REPORTING LIMIT (mg/L)	BLANK RESULT (mg/L)	BLANK SPIKE (%)	DILUTION FACTOR
LEAD	N.D.	0.0050	N.D.	98.2	1

Shafi Barekzai
Analyst

Michael Verona
Operations Manager

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

CHROMALAB, INC.

Environmental Services (SDB)

February 4, 1999 *Submission #:* 9901320

AQUA SCIENCE ENGINEERS, INC

Atten: Greg Schramm

Project: LERER BROS. *Project#:* 3389
Received: January 28, 1999

re: One sample for Soluble Miscellaneous Metals with Mercury analysis.
Method: *EPA 3005A/6010A/7470A Nov 1990*

Client Sample ID: **MW-3**
Spl#: 226695 *Matrix:* WATER *Extracted:* February 3, 1999
Sampled: January 28, 1999 *Run#:* 17246 *Analyzed:* February 3, 1999

ANALYTE	RESULT (mg/L)	REPORTING LIMIT (mg/L)	BLANK RESULT (mg/L)	BLANK SPIKE (%)	DILUTION FACTOR
LEAD	N.D.	0.0050	N.D.	98.2	1

Shanti Barekzai
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/04

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

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

SUBM #: 9901328 REP: FM
CLIENT: ASE
DUE: 02/04/99
REF #: 3389

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE) (PHONE NO.) 820-9391

PROJECT NAME Geer Bros. JOB NO. 3389

ADDRESS DATE 1/28/99

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
Filter & preserve Pb

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
mw-1	1/28	9:30	water	3	X														-			
mw-1		9:30		1															X			
mw-2		10:58		3	X														-	—		
mw-2		10:58		1															X			
* mw-3		11:30		3	X														-			
mw-3	↓	11:30	↓	1															X			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) 13:487 (time)	(signature) 1354 (time)	(signature) (time)	(signature) (time)	5day T.A.T.
Greg Sobramm 1/28	A Bowles 1/28/99			*MW-3 may be high - may need dilution
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE	Chromalab Company-	Company-	Company-	