aqua science engineers inc.

ENVIRONMENTAL PROTECTION

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November 9, 1999

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REPORT OF ADDITIONAL SOIL BORINGS AND QUARTERLY GROUNDWATER MONITORING ASE JOB NO. 3389

at

Former Lerer Brothers Transmission
6340 Christie Ave.
Emeryville, CA 94608

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

1.0 INTRODUCTION

Site Location (Site), See Figure 1
Former Lerer Brothers Transmission
6340 Christie Ave.
Emeryville, CA 94608

Responsible Party
Richard Gold
P.O. Box 117820
Burlingame, CA 94011-7820

Environmental Consulting Firm
Aqua Science Engineers, Inc. (ASE)
208 W. El Pintado
Danville, CA 94583
Contact: Robert Kitay, Senior Geologist
(925) 820-9391

Agency Review
Alameda County Health Care Services
1131 Harbor Bay Pkwy., Suite 250
Alameda, CA 94502
Contact: Ms. Susan Hugo
(510) 567-6700

California Regional Water Quality Control Board (RWQCB)
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
Contact: Mr. Chuck Headlee
(510) 622-2433

This report presents the results of the October 22, 1999 quarterly groundwater sampling and additional boring groundwater sampling for the above-referenced site. This sampling was conducted as required by the ACHCSA. ASE has prepared this report on behalf of Mr. Richard Gold, owner of the property.

2.0 DRILL TWO ADDITIONAL SOIL BORINGS AND COLLECT GROUNDWATER SAMPLES

Two soil borings were drilled on the neighboring property to the south to determine the extent of groundwater contamination downgradient of the site. Prior to drilling, ASE obtained an access agreement from the neighboring property owner, The Martin Group, to allow this drilling on their property. ASE also obtained a drilling permit from the Alameda County Public Works Agency (ACPWA). A copy of this permit is presented in Appendix A.

On October 22, 1999, Gregg Drilling of Martinez, California drilled soil borings BH-F and BH-G on The Martin Group property south of the site using a Geoprobe hydraulic sampling rig (Figure 2). These borings were drilled south of the former Underground Storage Tank (UST) to determine the extent of groundwater contamination downgradient of the UST. The drilling was directed by ASE associate geologist Ian Reed and senior geologist Robert E. Kitay, R.G.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description. No soil samples were retained for analysis. The samples were collected by driving a sampler lined with acetate tubes using hydraulic direct push methods. Soil was described by the site geologist using the Unified Soil Classification System. Boring logs are presented in Appendix B.

Groundwater samples were removed from the borings with a bailer. The groundwater samples were contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, and sealed without headspace. The samples were then labeled and stored on ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP 1094) under chain of custody. Upon completion of the 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.

3.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On October 22, 1999, ASE environmental scientist Ian Reed measured the depth to water in each site groundwater monitoring well using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. There was no free-

floating product or sheen present in any well. Current and historical groundwater elevation data is presented as Table One.

TABLE ONE
Groundwater Elevation 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
	3-29-99		4.85	5.15
	7-20-99		5.08	4.92
	10-22-99		**5.08**	**4.92**
MW-2	1-28-99	9.96	4.17	5.79
	3-29-99		3.89	6.07
	7-20-99		4.30	5.66
	10-22-99		**4.36**	**5.60**
MW-3	1-28-99	9.25	4.23	5.02
	3-29-99		4.41	4.84
	7-20-99		3.86	5.39
	10-22-99		**3.94**	**5.31**

A groundwater potentiometric surface map is presented as Figure 2. The groundwater flow direction is to the southeast with a gradient of approximately 0.014-feet/foot. This groundwater flow direction and gradient are consistent with historical groundwater flow direction and gradient data which consistently shows the groundwater flow beneath the site to the south or southeast.

4.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, each monitoring well was purged of four well casing volumes of groundwater using a dedicated bailer. Slight petroleum hydrocarbon odors were present during the purging and sampling of the groundwater monitoring wells. The parameters pH, temperature and conductivity were monitored during the well purging. Samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using dedicated polyethylene bailers. The samples were decanted from the bailers into 40-ml VOA vials, preserved with hydrochloric acid, sealed without headspace, labeled and placed in coolers with wet ice for transport to Chromalab under appropriate chain-

of-custody documentation. Well sampling field logs are presented in Appendix C.

5.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples collected from all three groundwater monitoring wells, as well as from borings BH-F and BH-G, were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) by EPA Method 8020 and methyl tertiary butyl ether (MTBE) by EPA Method 8020. The analytical results are presented in Table Two. The certified analytical report and chain-of-custody documentation are included as Appendix D.

Benzene concentrations in groundwater samples collected from monitoring well MW-1, monitoring well MW-2 and boring BH-F all exceeded the California Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. Concentrations of the other compounds detected did not exceed DHS MCLs for drinking water. Although the benzene concentrations exceeded the DHS MCL for drinking water, these concentrations are relatively low and would not be considered a threat to human health in non-drinking water scenarios. The hydrocarbon trends are relatively stable although there does appear to be a slight increasing trend in hydrocarbon concentrations in groundwater samples collected from monitoring well MW-1.

TABLE TWO

Certified Analytical Results of **GROUNDWATER** Samples
All results are in **parts per billion**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Lead
MW-1							
1-28-99	730	22	3.3	24	61	<5.0	<5.0
3-29-99	950	37	5.7	27	60	<5.0	--
7-20-99	970	40	5.4	67	120	<5.0	--
10-22-99	**1,300**	**71**	**7.2**	**100**	**210**	**< 10**	**--**
MW-2							
1-28-99	710	20	180	14	67	<5.0	<5.0
3-29-99	500	8.6	44	4.3	25	<5.0	--
7-20-99	510	8.4	44	6.0	31	<5.0	--
10-22-99	**280**	**13**	**10**	**6.2**	**36**	**< 5.0**	**--**
MW-3							
1-28-99	<50*	<0.5	<0.5	<0.5	0.69	<5.0	<5.0
3-29-99	130	1.9	8.2	1.4	7.1	<5.0	--
7-20-99	170	<0.5	1.9	<0.5	0.89	<5.0	--
10-22-99	**70****	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 5.0**	**--**
BH-F	**65**	**1.2**	**< 0.5**	**1.4**	**2.4**	**< 5.0**	**--**
BH-G	**180****	**< 1.0**	**< 1.0**	**1.5**	**9.1**	**< 10**	**--**
DHS MCL	NE	1	150	700	1,750	13	15
EPA METHOD	5030/ 8015M	8020	8020	8020	8020	8020	6010

Notes:

* = Hydrocarbons uncharacteristic of gasoline detected in the gasoline range at 68 ppb.
** = Hydrocarbons detected do not match a gasoline standard.
-- = Not analyzed
NE = DHS MCL not established
DHS MCL = Department of Health Services maximum contaminant level for drinking water.
Non-detectable concentrations noted by the less than sign (<) followed by the laboratory detection limit.

4.0 CONCLUSIONS

The groundwater flow direction beneath this site is to the southeast at a gradient of 0.014 feet/foot, which is consistent with the historical groundwater flow direction and gradient beneath the site.

Benzene concentrations in groundwater samples collected from monitoring well MW-1, monitoring well MW-2 and boring BH-F all exceeded the DHS MCL for drinking water. Concentrations of the other compounds detected did not exceed DHS MCLs for drinking water. Although the benzene concentrations exceeded the DHS MCL for drinking water, groundwater in the site vicinity is no used for drinking water. In non-drinking water scenarios, these concentrations would be considered relatively low and not a threat to human health or the environment. The hydrocarbon trends are relatively stable although there does appear to be a slight increasing trend in hydrocarbon concentrations in groundwater samples collected from monitoring well MW-1.

5.0 RECOMMENDATIONS

Based on the relatively low hydrocarbon concentrations detected in groundwater samples collected during the one year of quarterly groundwater monitoring, the limited horizontal extent of hydrocarbons in groundwater, and the current commercial/industrial usage of the site, ASE recommends that the ACHCSA and RWQCB review this case for closure.

6.0 REPORT LIMITATIONS

The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former underground storage tanks and associated plumbing at the site, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of 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 provide environmental consulting services to Lerer Brother Transmission Service, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

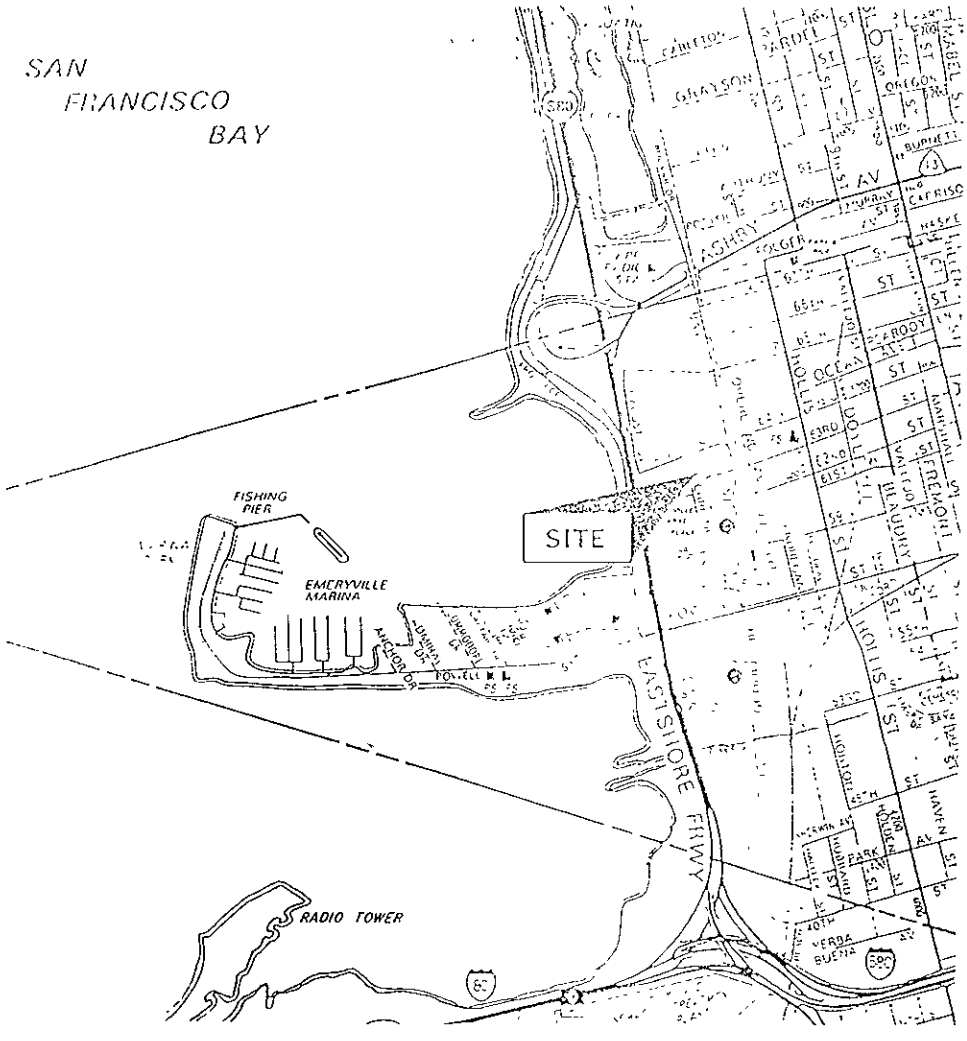
Ian Reed
Environmental Scientist

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

Attachments: Figures 1 and 2
Appendices A through D

cc: Mr. Richard Gold
Ms. Susan Hugo, Alameda County Health Care Services Agency
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region
Mr. Tom Gram, The Martin Group

FIGURES

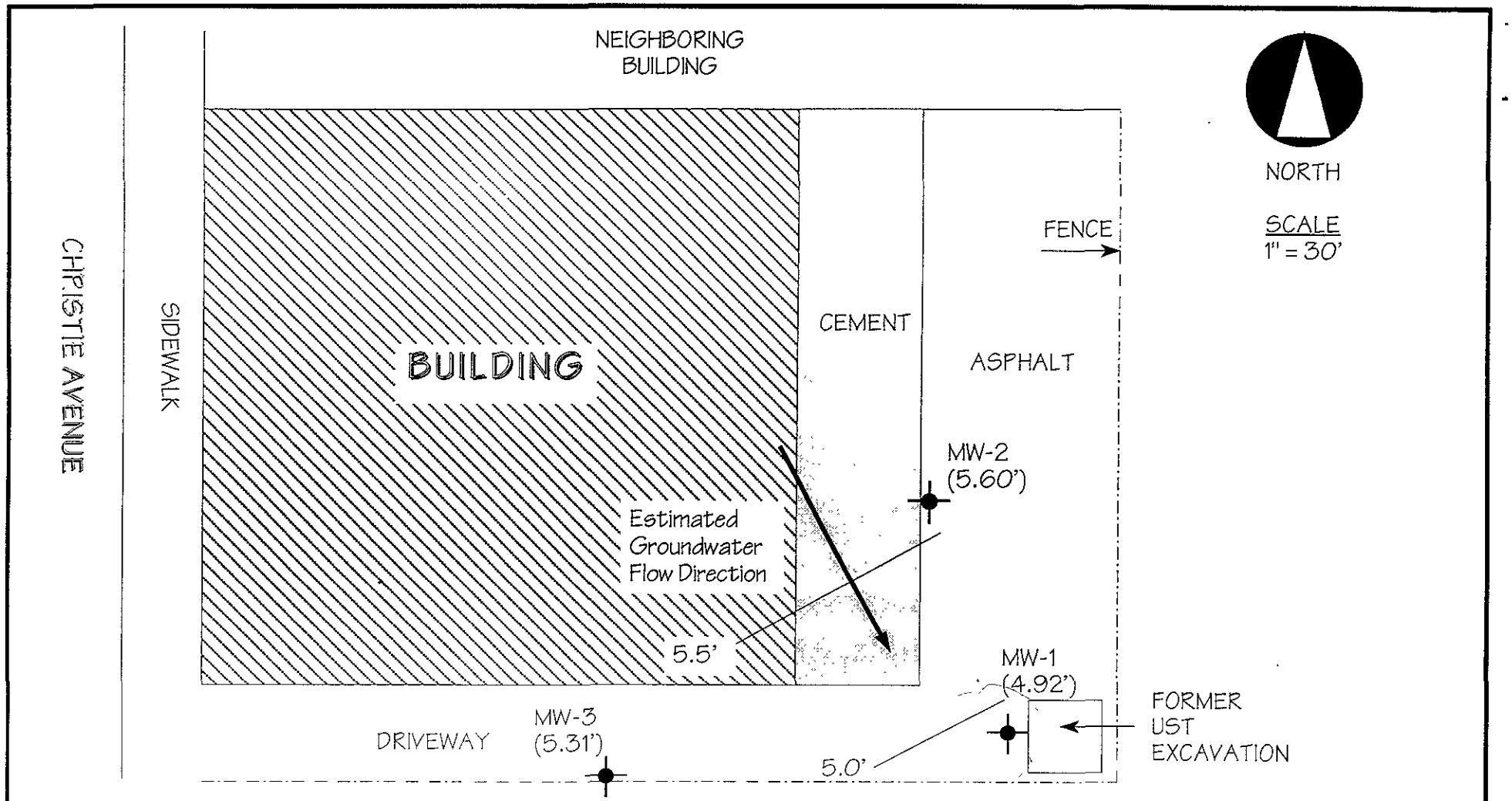


SITE LOCATION MAP

6340 Christie Avenue
Emeryville, California

Aqua Science Engineers

Figure 1



SOIL BORING LOCATION AND GROUNDWATER ELEVATION CONTOUR MAP - 10/22/99

LERER BROTHERS
TRANSMISSION PROPERTY
6340 CHRISTIE AVENUE
EMERYVILLE, 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) 670-6548 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2290 Christie Ave
Emeryville, CA

California Coordinate Source _____ Est Accuracy ± _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

CLIENT
Name Richard Gold
Address 800 Hearst Ave Phone 650-529-1919
City Berkeley Zip 94710-9820

APPLICANT
Name Aqua Science Engineers, Inc.
Attn: Edward Ripley Fax 925-837-4853
Address 208 Utah Landing Phone 925-820-9391
City Danville 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 _____	☐

DRILLING METHOD:

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

DRILLER'S LICENSE NO. C-57 485165

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 2 in. Depth 15 ft.

ESTIMATED STARTING DATE 10-22-99
ESTIMATED COMPLETION DATE 10-22-99

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

APPLICANT'S SIGNATURE Richard G. Kiely DATE 10-18-99

FOR OFFICE USE
PERMIT NUMBER 99WR612
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 SEE ATTACHED INFORMATION.

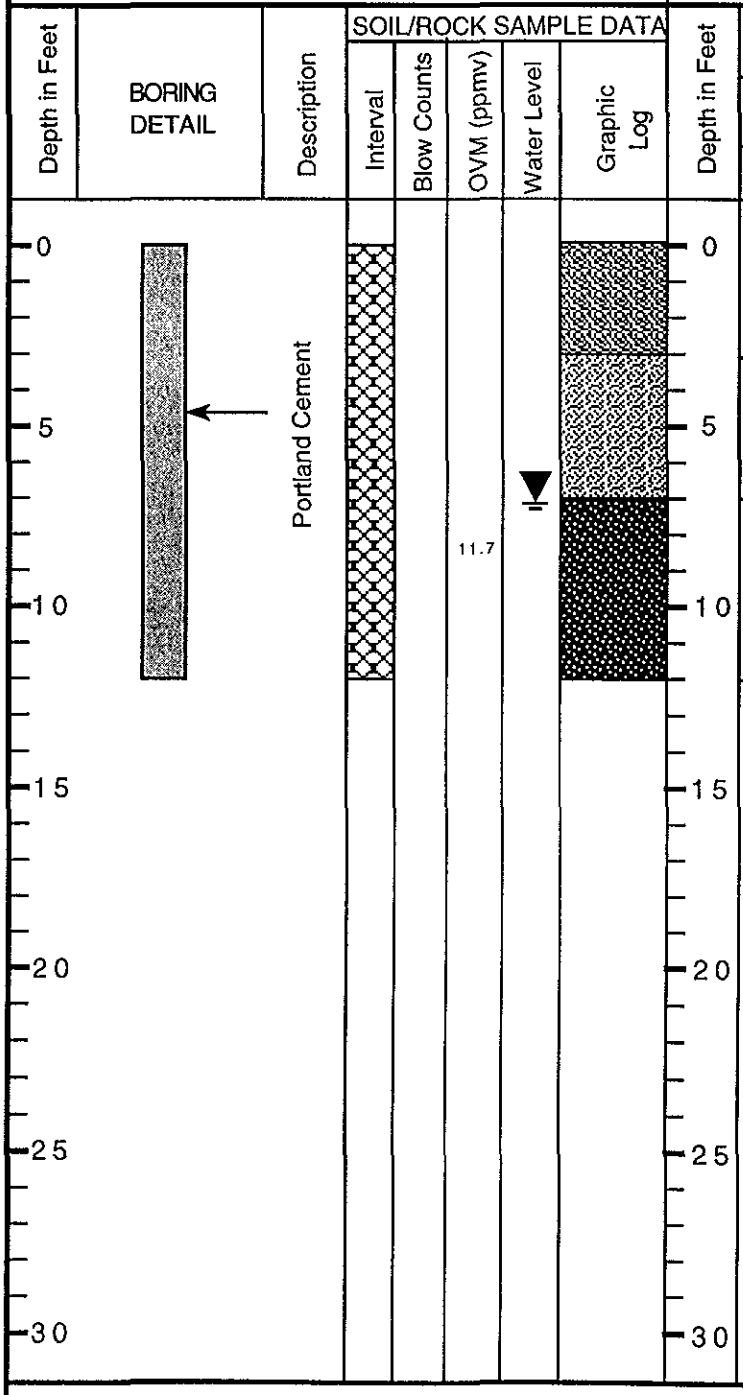
APPROVED Frank L. Cudd DATE 10-20-99

APPENDIX B

Boring Logs

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		SOIL BORNG: BH-F
Project Name: Lerer Brothers	Project Location: 6340 Christie Avenue, Emeryville, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Power Push	Size of Drill: 2" diameter macrocore
Logged By: Ian T. Reed	Date Drilled: October 22, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 7.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 12.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 2.0" I.D. Macro sampler



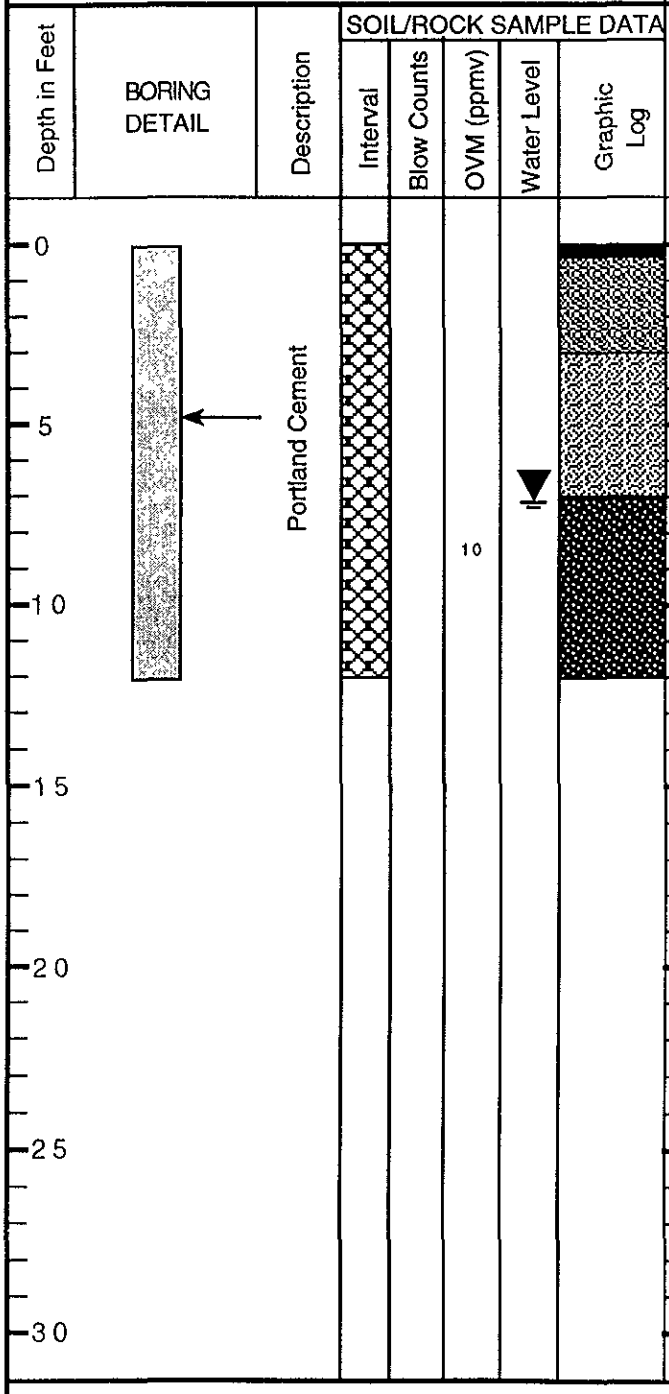
Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Gravelly SILT (ML); olive; damp; medium stiff; 65% silt; 20% gravel; 10% fine to medium sand; 5% clay; low plasticity; low estimated K; no odor
5	Sandy SILT (ML); olive; damp; medium stiff; 65% silt; 20% fine to medium sand; 10% gravel; 5% clay; low plasticity; low estimated K; no odor building debris (rubber, hardened glue; plastic)
10	Clayey SILT (MH); black; wet; medium stiff; 80% silt; 20% clay; high plasticity; low estimated K; no odor [Bay Mud]
	End of boring at 12.0'

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		SOIL BORNG: BH-G
Project Name: Lerer Brothers	Project Location: 6340 Christie Avenue, Emeryville, CA	Page 1 of 1
Driller: Gregg Drilling	Type of Rig: Power Push	Size of Drill: 2" Diameter Macrocore
Logged By: Ian T. Reed	Date Drilled: October 22, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA

Depth of Water First Encountered: 7.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 12.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 2.0" I.D. Macro sampler



Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Asphalt
	Gravelly SILT (ML); olive; damp; medium stiff; 65% silt; 20% gravel; 10% fine to medium sand; 5% clay; low plasticity; low estimated K; no odor
5	Sandy SILT (ML); black; damp; medium stiff; 65% silt; 20% fine to medium sand; 10% gravel; 5% clay; low plasticity; low estimated K; no odor building debris (rubber, hardened glue; plastic)
10	Clayey SILT (MH); black; wet; medium stiff; 80% silt; 20% clay; high plasticity; low estimated K; no odor [Bay Mud]
	End of boring at 12.0'

APPENDIX C

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Ivers Brothers
Job #: 3[illegible] Date of sampling: [illegible]
Well Name: MW-2 Sampled by: [illegible]
Total depth of well (feet): 18.45 Well diameter (inches): 2"
Depth to water before sampling (feet): 4.36
Thickness of floating product if any: -
Depth of well casing in water (feet): 14.09
Number of gallons per well casing volume (gallons): 2.4
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 9.6
Equipment used to purge the well: dedicated [illegible]
Time Evacuation Began: 0920 Time Evacuation Finished: 0930
Approximate volume of groundwater purged: 9.6
Did the well go dry?: NO After how many gallons: -
Time samples were collected: 0935
Depth to water at time of sampling: 4.36'
Percent recovery at time of sampling: [illegible]
Samples collected with: dedicated bailer
Sample color: clear/gray Odor: [illegible]
Description of sediment in sample: -

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	69.9	6.47	56.7
2	70.1	6.78	56.9
3	70.2	6.79	57.4
4	71.7	6.33	56.3

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-	3	40 ml VOAs	✓	✓	TPH-G / MTBE 8021

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Lam Parkes
Job #: 3287 Date of sampling: 10/21/99
Well Name: MW-3 Sampled by: KB
Total depth of well (feet): 14.60 Well diameter (inches): 2"
Depth to water before sampling (feet): 3.94'
Thickness of floating product if any: —
Depth of well casing in water (feet): 10.86
Number of gallons per well casing volume (gallons): 1.8
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7.2
Equipment used to purge the well: disposable bailer
Time Evacuation Began: 1005 Time Evacuation Finished: 1018
Approximate volume of groundwater purged: 7.2
Did the well go dry?: No After how many gallons: —
Time samples were collected: 1015
Depth to water at time of sampling: 3.99'
Percent recovery at time of sampling: 97%
Samples collected with: disposable bailer
Sample color: clear/grey Odor: HC odor
Description of sediment in sample: —

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	72.7	6.71	601
2	71.9	6.81	542
3	72.3	6.92	591
4	72.7	6.74	609

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40ml VOAs	✓	✓	TPH-G/MTBE/BTEX

2411 Old Crow Canyon Road #4, San Ramon, CA 94583 • 510-820-9391 • Fax 510-837-4853

APPENDIX D

Certified Analytical Report
and
Chain of Custody Documentation

Aqua Science Engineers, Inc.
208 West El Pintado Road
Danville, CA 94526

Attn.: Mr. Ian T. Reed

Project: 3389
Lerer Brothers

Site: Christie Ave.
Emeryville, CA

Dear Mr. Reed,

Attached is our report for your samples received on Friday October 22, 1999.
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after November 21, 1999 unless you have requested otherwise. We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

Sincerely,

Pierre Monette

Gas/BTEX and MTBE

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Ian T. Reed

Phone: (925) 820-9391 Fax: (925) 837-4853

Project #: 3389

Project: Lerer Brothers

Site: Christie Ave.
Emeryville, CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	10/22/1999 09:55	1
MW-2	Water	10/22/1999 09:35	2
MW-3	Water	10/22/1999 10:15	3
BH-F	Water	10/22/1999 07:30	4
BH-G	Water	10/22/1999 08:15	5

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-1**	Lab Sample ID:	**1999-10-0403-001**
Project:	3389 Lerer Brothers	Received:	10/22/1999 15:50
Site:	Christie Ave. Emeryville, CA	Extracted:	11/01/1999 14:26
Sampled:	10/22/1999 09:55	QC-Batch.	1999/11/01-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1300	100	ug/L	2.00	11/01/1999 14:26	
Benzene	71	1.0	ug/L	2.00	11/01/1999 14:26	
Toluene	7.2	1.0	ug/L	2.00	11/01/1999 14:26	
Ethyl benzene	100	1.0	ug/L	2.00	11/01/1999 14:26	
Xylene(s)	210	1.0	ug/L	2.00	11/01/1999 14:26	
MTBE	ND	10	ug/L	2.00	11/01/1999 14:26	
Surrogate(s)						
Trifluorotoluene	108.7	58-124	%	1.00	11/01/1999 14:26	
4-Bromofluorobenzene-FID	91.5	50-150	%	1.00	11/01/1999 14:26	

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-2**	Lab Sample ID:	**1999-10-0403-002**
Project:	3389 Lerer Brothers	Received:	10/22/1999 15:50
Site:	Christie Ave. Emeryville, CA	Extracted:	11/01/1999 10:39
Sampled:	10/22/1999 09:35	QC-Batch:	1999/11/01-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	280	50	ug/L	1.00	11/01/1999 10:39	
Benzene	13	0.50	ug/L	1.00	11/01/1999 10:39	
Toluene	10	0.50	ug/L	1.00	11/01/1999 10:39	
Ethyl benzene	6.2	0.50	ug/L	1.00	11/01/1999 10:39	
Xylene(s)	36	0.50	ug/L	1.00	11/01/1999 10:39	
MTBE	ND	5.0	ug/L	1.00	11/01/1999 10:39	
Surrogate(s)						
Trifluorotoluene	116.9	58-124	%	1.00	11/01/1999 10:39	
4-Bromofluorobenzene-FID	88.4	50-150	%	1.00	11/01/1999 10:39	

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-3**	Lab Sample ID:	**1999-10-0403-003**
Project:	3389 Lerer Brothers	Received:	10/22/1999 15:50
Site:	Christie Ave. Emeryville, CA	Extracted:	11/01/1999 11:06
Sampled:	10/22/1999 10:15	QC-Batch:	1999/11/01-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	70	50	ug/L	1.00	11/01/1999 11:06	g
Benzene	ND	0.50	ug/L	1.00	11/01/1999 11:06	
Toluene	ND	0.50	ug/L	1.00	11/01/1999 11:06	
Ethyl benzene	ND	0.50	ug/L	1.00	11/01/1999 11:06	
Xylene(s)	ND	0.50	ug/L	1.00	11/01/1999 11:06	
MTBE	ND	5.0	ug/L	1.00	11/01/1999 11:06	
Surrogate(s)						
Trifluorotoluene	113.0	58-124	%	1.00	11/01/1999 11:06	
4-Bromofluorobenzene-FID	87.3	50-150	%	1.00	11/01/1999 11:06	

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-F**	Lab Sample ID:	**1999-10-0403-004**
Project:	3389 Lerer Brothers	Received:	10/22/1999 15:50
Site:	Christie Ave. Emeryville, CA	Extracted:	11/01/1999 13:58
Sampled:	10/22/1999 07:30	QC-Batch:	1999/11/01-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	65	50	ug/L	1.00	11/01/1999 13:58	
Benzene	1.2	0.50	ug/L	1.00	11/01/1999 13:58	
Toluene	ND	0.50	ug/L	1.00	11/01/1999 13:58	
Ethyl benzene	1.4	0.50	ug/L	1.00	11/01/1999 13:58	
Xylene(s)	2.4	0.50	ug/L	1.00	11/01/1999 13:58	
MTBE	ND	5.0	ug/L	1.00	11/01/1999 13:58	
Surrogate(s)						
Trifluorotoluene	60.6	58-124	%	1.00	11/01/1999 13:58	
4-Bromofluorobenzene-FID	52.8	50-150	%	1.00	11/01/1999 13:58	

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-G**	Lab Sample ID:	**1999-10-0403-005**
Project:	3389 Lerer Brothers	Received:	10/22/1999 15:50
Site:	Christie Ave. Emeryville, CA	Extracted:	11/01/1999 14:54
Sampled:	10/22/1999 08:15	QC-Batch:	1999/11/01-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	180	100	ug/L	2.00	11/01/1999 14:54	g
Benzene	ND	1.0	ug/L	2.00	11/01/1999 14:54	
Toluene	ND	1.0	ug/L	2.00	11/01/1999 14:54	
Ethyl benzene	1.5	1.0	ug/L	2.00	11/01/1999 14:54	
Xylene(s)	9.1	1.0	ug/L	2.00	11/01/1999 14:54	
MTBE	ND	10	ug/L	2.00	11/01/1999 14:54	
Surrogate(s)						
Trifluorotoluene	72.4	58-124	%	1.00	11/01/1999 14:54	
4-Bromofluorobenzene-FID	67.5	50-150	%	1.00	11/01/1999 14:54	

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 1999/11/01-01.02**

MB: 1999/11/01-01.02-001

Date Extracted: 11/01/1999 09.26

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	11/01/1999 09:26	
Benzene	ND	0.5	ug/L	11/01/1999 09:26	
Toluene	ND	0.5	ug/L	11/01/1999 09:26	
Ethyl benzene	ND	0.5	ug/L	11/01/1999 09:26	
Xylene(s)	ND	0.5	ug/L	11/01/1999 09:26	
MTBE	ND	5.0	ug/L	11/01/1999 09:26	
Surrogate(s)					
Trifluorotoluene	124.0	58-124	%	11/01/1999 09:26	
4-Bromofluorobenzene-FID	97.0	50-150	%	11/01/1999 09:26	

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/11/01-01.02**

LCS: 1999/11/01-01.02-002 Extracted: 11/01/1999 16:47 Analyzed: 11/01/1999 16:47

LCSD: 1999/11/01-01.02-003 Extracted: 11/01/1999 06:52 Analyzed: 11/01/1999 06:52

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	464	453	500	500	92.8	90.6	2.4	75-125	20		
Benzene	113	99.9	100.0	100.0	113.0	99.9	12.3	77-123	20		
Toluene	111	99.1	100.0	100.0	111.0	99.1	11.3	78-122	20		
Ethyl benzene	107	95.7	100.0	100.0	107.0	95.7	11.1	70-130	20		
Xylene(s)	316	283	300	300	105.3	94.3	11.0	75-125	20		
Surrogate(s)											
Trifluorotoluene	504	456	500	500	100.8	91.2		58-124			
4-Bromofluorobenzene-FI	475	429	500	500	95 0	85.8		50-150			

To: **Aqua Science Engineers, Inc.**

Attn:Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

99-10-0403 48678

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

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE) Lee T Reed (PHONE NO.) (925) 820-9391

PROJECT NAME Lerer Brothers. JOB NO. 3389

ADDRESS Christie Ave, Emeryville CA DATE 10-22-99

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5 day TAT

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) (EPA 608/8080)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)				COMPOSITE
MW-1	10-22-99	0945	W	3																		
MW-2		0935																				
MW-3		1005																				
BH-1		0950																				
BH-6	V	0815	V	V																		

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) Lee T Reed (time)	(signature) (time) 1550	(signature) (time) 1550	(signature) Denise Harrington (time)	
(printed name) Lee Reed (date) 10-22-99	(printed name) (date) 10/22/99	(printed name) B Morrow (date) 10/22/99	(printed name) D. Harrington (date) 1550	5 day TAT
Company- ASE	Company-	Company-	Company- Chromalab 10/22/99	