aqua science engineers inc.

- Need Phase I rpt.
- Need wp to delineate extent of S/GW contam
- locate pipe from drain - sample soil beneath pipe.

- Any boring logs? - No - boreholes were too sloppy to collect soil samples to log.

July 28, 1999

REPORT
of
SOIL AND GROUNDWATER ASSESSMENT
ASE JOB NO. 3515
at
Industrial Property
2221 Union Street
Oakland, California

California Brake + Clutch
John Kendall; trustee
2411 Santa Clara Ave
Alameda 94501
510/523-9821

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

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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 property located at 2221 Union Street in Oakland, California (Figure 1). The site assessment activities were designed to delineate the area of volatile organic compound (VOC) contamination identified by ASE in a soil sample collected from a hand auger drilled within an outdoor surface water drain located at the site (Figure 2).

2.0 BACKGROUND INFORMATION

The site is currently vacant and up for sale by a Trustee of the property. The site houses two buildings, a concrete surfaced yard, and a dirt lot. Most recently, the site was the home of a brake pad manufacturer. A recent Phase I Environmental Site Assessment prepared for the site identified a surface water drain located in the exterior yard area (see Figure 2). The Phase I suggested drilling a soil boring for the collection of soil samples. On June 22, 1999, ASE removed the dirt and debris from the bottom of the drain, cored through the concrete bottom of the drain, and using a hand auger, drilled soil boring BH-A to a depth of 3 feet below the bottom of the drain. Soil samples BH-A @ 1' and BH-A @ 3' were collected from the boring. Soil sample BH-A @ 1' was analyzed by Chromalab, Inc. of Pleasanton, California (ELAP #1094) for total petroleum hydrocarbons as gasoline (TPH-G) and diesel (TPH-D) by EPA Method 8015M, benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX) by EPA Method 8020, methyl tertiary butyl ether (MTBE) by EPA Method 8020, oil and grease by Standard Method 5520E, volatile organic compounds (VOCs) by EPA Method 8010, and the LUFT five metals by EPA Method 6010. The only compound identified in the soil above action levels was tetrachloroethene (PCE) at 390 parts per million (ppm). Soil sample BH-A @ 3' was placed on hold at the laboratory. It was not subsequently analyzed because it was saturated, and had the same appearance and odor as the 1-foot sample.

3.0 SCOPE OF WORK (SOW)

ASE performed the following scope of work (SOW) to assess the subsurface soil and groundwater near the drain and inside the building where parts-cleaning bins were used. The purpose of this assessment was to quantify the area of soil and groundwater affected by the PCE, and in doing so, determine if costly remedial activities would be necessary. ASE's SOW was as follows:

1) Prepare a workplan and site specific health and safety plan for approval by Ms. Eva Chu of the Alameda County Health Care Services Agency (ACHCSA). Not received prior to start of field work, i.e. WP was never approved

2) Obtain a subsurface drilling permit from the Alameda County Public Works Agency (ACPWA). Call Underground Service Alert (USA) to have all public utilities in the area marked prior to drilling.

3) Using a Geoprobe hydraulic sampling rig, drill six (6) soil borings to a depth of 10-feet below ground surface (bgs) at the locations shown of Figure 2, attached.

4) Collect soil samples continuously from each boring as drilling progresses for chemical analysis and hydrogeologic description. Screen the soil samples with a hand-held organic vapor meter (OVM) to determine the depth of highest concentrations of VOCs in soil. Collect a grab groundwater sample from each boring.

5) Analyze one (1) soil and one (1) water sample from each soil boring at a CAL-EPA certified environmental laboratory for VOCs by EPA Method 8010.

6) Backfill the borings with neat cement.

7) Prepare a report detailing the methods and findings of the investigation. The report will be submitted under the seal of a registered geologist or professional engineer.

Details of the assessment are presented below.

4.0 DRILL SOIL BORINGS AND COLLECT SAMPLES

Prior to drilling, ASE obtained a drilling permit from the ACPWA. A copy of this permit is presented in Appendix A. ASE also notified Underground Service Alert (USA) to have underground utility lines marked in the site vicinity. The workplan, dated July 9, 1999, was verbally approved by Ms. Eva Chu of the ACHCSA prior to mobilization to the site. → in conversation described work intended, but not in great detail

On July 12, 1999, Vironex Drilling of Hayward, California drilled six soil borings at the site (boreholes BH-B through BH-G) using a Geoprobe drill rig (Figure 2). The borehole locations were located (a) to assess the soil and groundwater in the directions north, south, east and west of the former drain in the outdoor yard, and (b) adjacent to a crack in the

concrete floor inside the main building where the parts-cleaning bins were used. The drilling was directed by ASE senior geologist Robert E. Kitay, R.G.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for chemical analysis. The samples were collected by driving a sampler lined with acetate tubes using hydraulic direct push methods. Selective soil samples were immediately 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 was described by the site geologist using the Unified Soil Classification System and was 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. Soil samples were collected at 2.5-feet below ground surface (bgs) in each of the boreholes; this depth best represented the capillary fringe due to the presence of shallow groundwater in the vicinity. Groundwater samples were collected from the boreholes using PVC well casing and bailers.

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

Sediments encountered during drilling generally consisted of yellow-brown, damp, silty sand from beneath the concrete surface to approximately 2.5-feet bgs, and an olive-gray, wet, clayey silt from 2.5-feet bgs to the total depth explored of 8-feet bgs. Groundwater was encountered at approximately 4-feet bgs. No discernable odors were present in any of the samples, cuttings or groundwater encountered.

5.0 ANALYTICAL RESULTS FOR SOIL

The soil samples collected from 2.5-feet bgs in borings BH-B through BH-G were analyzed by Chromalab, Inc. of Pleasanton, California (ELAP #1094) for VOCs by EPA Method 8010. The analytical results are tabulated in Table One. The certified analytical report and chain of custody form are included in Appendix B.

The only VOCs detected in soil were trichloroethene (TCE) up to 230 parts per billion (ppb), tetrachloroethene (PCE) up to 53 ppb, and cis-1,2-dichloroethene (cis-1,2-DCE) up to 17 ppb; these compounds were only identified in boreholes BH-B and BH-C. Soil samples collected from the remaining boreholes contained no detectable concentrations of any VOCs analyzed.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples collected from each borehole were analyzed by Chromalab, Inc. of Pleasanton, California (ELAP #1094) for VOCs by EPA Method 8010. The analytical results are tabulated in Table Two. The certified analytical report and chain of custody form are included in Appendix B. The groundwater samples collected from borehole BH-C and BH-G contained an excessive amount of silt, and thus were analyzed using a method similar to a soil sample. Also, a groundwater sample was collected from borehole BH-A which was drilled several weeks earlier within the drain in the outdoor yard.

No VOCs were detected above reporting limits in the groundwater samples collected from borehole BH-G. Of the remaining boreholes, each of the groundwater samples contained elevated concentrations of VOCs as follows: up to 1,500 ppb TCE, up to 1,300 ppb PCE, up to 190 ppb cis-1,2-DCE, and up to 21 ppb trans-1,2-DCE. The groundwater sample collected from borehole BH-A contained the highest concentrations of VOCs.

7.0 CONCLUSIONS

The only VOCs detected in soil during this assessment were TCE up to 230 ppb, PCE up to 53 ppb, and cis-1,2-DCE up to 17 ppb; these compounds were only identified in boreholes BH-B and BH-C. Soil samples collected from the remaining boreholes contained no detectable concentrations of any VOC analyzed. The detected VOC concentrations during this assessment were below United States Environmental Protection Agency (USEPA) preliminary remediation goals (PRGs) for industrial soil. The concentration of 390,000 ppb PCE detected in the soil sample collected earlier from borehole BH-A is over 20 times higher than its PRG for industrial soil.

No VOCs were identified in groundwater samples collected from borehole BH-G. Of the remaining boreholes, each of the groundwater samples contained elevated concentrations of VOCs as follows: up to 1,500 ppb TCE, up to 1,300 ppb PCE, up to 190 ppb cis-1,2-DCE, up to 21 ppb trans-

1,2-DCE, and up to 11 ppb 1,1-DCA. The groundwater sample collected from borehole BH-A contained the highest concentrations of VOCs.

All of the VOCs detected in groundwater samples at the site had concentrations that exceeded California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water. These DTSC MCLs are the standard "ruler" for which compounds in groundwater are measured.

8.0 RECOMMENDATIONS

ASE recommends that the site be placed on a quarterly groundwater monitoring program to track the concentration of VOCs in the groundwater for a period of one year. This would require the installation of, at least three (3) groundwater monitoring wells. These wells would be sampled on a quarterly basis, and the samples would be analyzed for VOCs by EPA Method 8010.

It appears that limited soil remediation may be required in the immediate area surrounding the outdoor drain. The results of the initial groundwater sampling event, following the monitoring well installation, would likely be an accurate indicator of whether or not any groundwater remediation would be required.

Likely remedial options could include overexcavation and aeration of the contaminated soil, excavation dewatering and offsite disposal, or in-situ bioremediation activities that would assist (speed-up) the natural attenuation of the VOCs in both the saturated soil and groundwater.

9.0 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.

REGISTERED GEOLOGIST
ROBERT E. KITAY
No. 6586
STATE OF CALIFORNIA

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

David Allen, R.E.A.
Senior Project Manager

Attachments: Figures 1 and 2
Appendices A and B

cc: Mr. John Kendall, Property Trustee
Ms. Anne Bruff, Wells & Bennett Realtors
Ms. Eva Chu, ACHCSA
Mr. Chuck Headlee, RWQCB

TABLE ONE

Summary of Chemical Analysis of **Soil Samples**

Volatile Organic Compounds

All results are in **parts per billion**

SAMPLE NAME	PCE	TCE	CIS-1,2-DCE	REMAINING VOCs
BH-B, 2.5'	**53**	< 5	< 5	< 5 - < 10
BH-C, 2.5'	**41**	**230**	**17**	< 5 - < 25
BH-D, 2.5'	< 5	< 5	< 5	< 5 - < 10
BH-E, 2.5'	< 5	< 5	< 5	< 5 - < 10
BH-F, 2.5'	< 5	< 5	< 5	< 5 - < 10
BH-G, 2.5'	< 5	< 5	< 5	< 5 - < 10
INDUSTRIAL PRG	16,000	6,100	150,000	VARIES
EPA METHOD	8010	8010	8010	8010

NOTES:

Detectable concentrations are in **bold.**

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

Industrial PRG is the USEPA Region IX Preliminary Remediation Goal (PRG) for soil in industrial areas.

TABLE TWO

Summary of Chemical Analysis of **Water Samples**

Volatile Organic Compounds

All results are in **parts per billion**

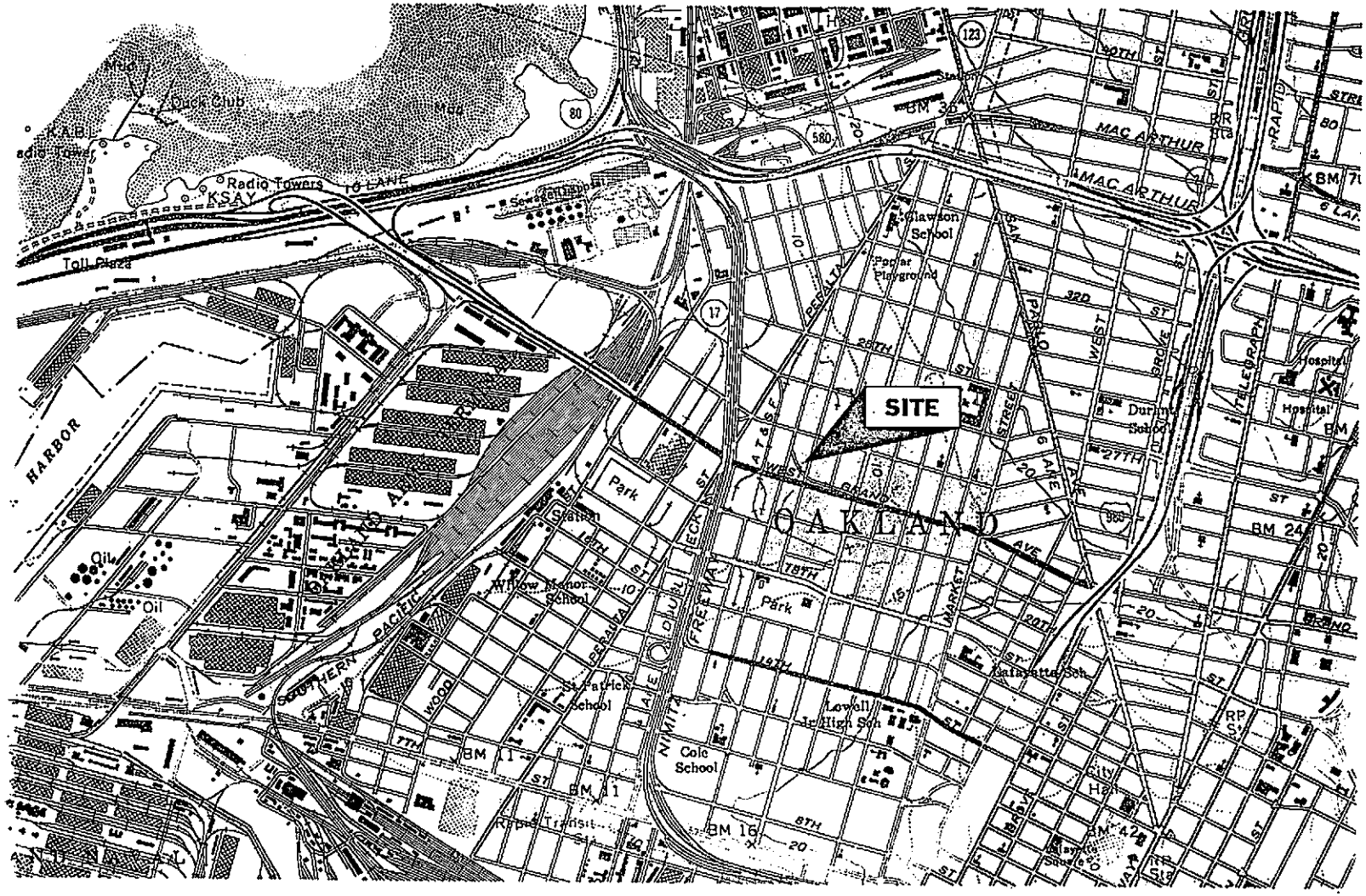
SAMPLE NAME	PCE	TCE	CIS 1,2-DCE	TRANS 1,2-DCE	1,1-DCA	REMAINING VOCs
BH-A, WATER	**1300**	**1500**	**190**	< 25	< 25	< 25 - < 250
BH-B, WATER	**33**	**170**	**130**	**21**	< 5	< 5 - < 30
BH-C, WATER	**35**	**21**	< 12	< 12	< 12	< 12
BH-D, WATER	< 0.5	< 0.5	**11**	< 0.5	< 0.5	< 0.5 - < 5
BH-E, WATER	**42**	**33**	**46**	< 25	< 25	< 25 - < 250
BH-F, WATER	**9.2**	**6.4**	**8.8**	< 0.5	**11**	< 0.5 - < 5
BH-G, WATER	< 5	< 5	< 5	< 5	< 5	< 5
DTSC MCL	5	5	6	10	5	VARIES
EPA METHOD	8010	8010	8010	8010	8010	8010

NOTES:

Detectable concentrations are in **bold.**

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

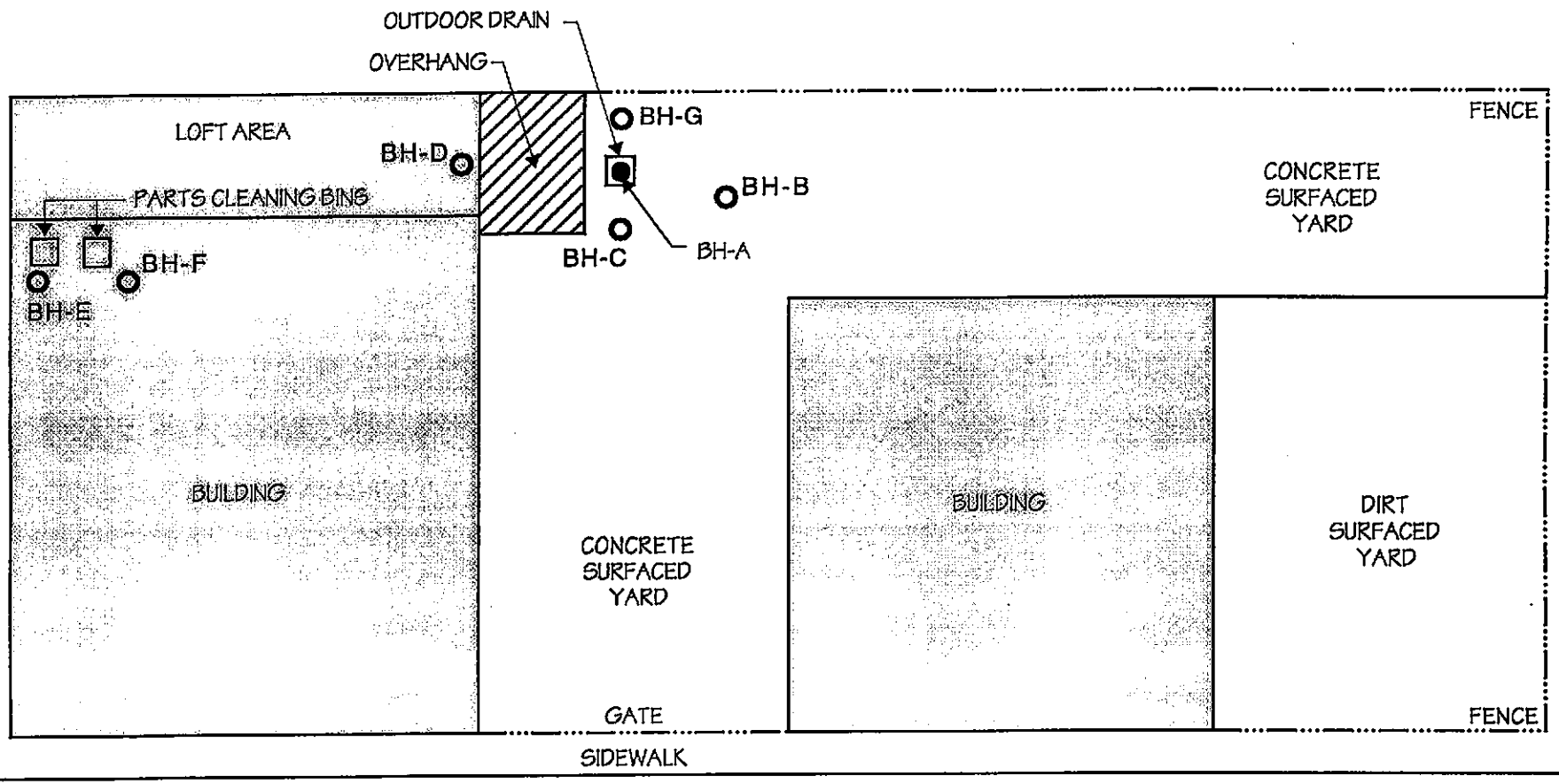
DTSC MCL is the Department of Toxic Substances Control (DTSC) maximum contaminant level (MCL) for drinking water.



LOCATION MAP

Vacant Property
2221 Union Street
Oakland, California

AQUA SCIENCE ENGINEERS, INC. | Figure 1



LEGEND

BH-A ● HAND-AUGERED SOIL BORING, DRILLED BY ASE, JUNE 22, 1999

BH-G ○ GEOPROBE SOIL BORING, DRILLED BY ASE, JULY 12, 1999

NORTH

NOT TO SCALE

SOIL BORING LOCATION MAP

Vacant Property
2221 Union Street
Oakland, California

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Permits

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 2221 UNION STREET
OAKLAND CA 94608

California Coordinate Source ____ / ____ ft. Accuracy ± ____ ft.
CCN ____ ft. CCE ____ ft.
APN ____

CLIENT
Name JOHN KENNALL
Address 2411 SANTA CLARA AVE Phone 510.523.9821
City ALAMEDA Zip 94501

APPLICANT
Name AQUA SCIENCE ENGINEERS Fax 925.837.4853
Address 208 W. EL PINTADO Phone 925.820.9391
City DANVILLE CA 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 480440

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

GEOTECHNICAL PROJECTS
Number of Borings 6 Maximum
Hole Diameter 2 in. Depth 10 ft.

ESTIMATED STARTING DATE 7-12-99
ESTIMATED COMPLETION DATE 7-12-99

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

APPLICANT'S SIGNATURE [signature] DATE 7-6-99

FOR OFFICE USE

PERMIT NUMBER 99WR350
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 [signature] DATE 7-8-99

APPENDIX B

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

Halogenated Volatile Organics Compounds

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Dave Allen

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

Project #: 3515

Project: Kendall

Site: 2221 Union St., Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BH-B,2.5`	Soil	07/12/1999	1
BH-C,2.5`	Soil	07/12/1999	2
BH-D,2.5`	Soil	07/12/1999	3
BH-E,2.5`	Soil	07/12/1999	4
BH-F,2.5`	Soil	07/12/1999	5
BH-G,2.5`	Soil	07/12/1999	6

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	BH-B,2.5`	Lab Sample ID:	1999-07-0190-001
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/19/1999 19:48
Sampled:	07/12/1999	QC-Batch:	1999/07/19-01.09
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/19/1999 19:48	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Chloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Chloroform	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/19/1999 19:48	
Trichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Tetrachloroethene	53	5.0	ug/Kg	1.00	07/19/1999 19:48	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Bromoform	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Chloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Bromomethane	ND	5.0	ug/Kg	1.00	07/19/1999 19:48	
Surrogate(s)						
4-Bromofluorobenzene	95.5	74-121	%	1.00	07/19/1999 19:48	
1,2-Dichloroethane-d4	103.7	70-121	%	1.00	07/19/1999 19:48	
Toluene-d8	96.6	81-117	%	1.00	07/19/1999 19:48	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-07-0190

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-C,2.5'**	Lab Sample ID:	**1999-07-0190-002**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/19/1999 20:27
Sampled:	07/12/1999	QC-Batch:	1999/07/19-01.09
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/19/1999 20:27	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Chloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
cis-1,2-Dichloroethene	17	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Chloroform	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/19/1999 20:27	
Trichloroethene	230	25	ug/Kg	5.00	07/19/1999 20:27	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Tetrachloroethene	41	5.0	ug/Kg	1.00	07/19/1999 20:27	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Bromoform	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Chloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Bromomethane	ND	5.0	ug/Kg	1.00	07/19/1999 20:27	
Surrogate(s)						
4-Bromofluorobenzene	95.2	74-121	%	1.00	07/19/1999 20:27	
1,2-Dichloroethane-d4	108.4	70-121	%	1.00	07/19/1999 20:27	
Toluene-d8	96.9	81-117	%	1.00	07/19/1999 20:27	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-D,2.5'**	Lab Sample ID:	**1999-07-0190-003**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/19/1999 21:05
Sampled:	07/12/1999	QC-Batch:	1999/07/19-01.09
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/19/1999 21:05	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Chloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Chloroform	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/19/1999 21:05	
Trichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Bromoform	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Chloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Bromomethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:05	
Surrogate(s)						
4-Bromofluorobenzene	93.8	74-121	%	1.00	07/19/1999 21:05	
1,2-Dichloroethane-d4	82.4	70-121	%	1.00	07/19/1999 21:05	
Toluene-d8	95.6	81-117	%	1.00	07/19/1999 21:05	

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

Attn.: Dave Allen

Test Method: 8260A

Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-E,2.5'**	Lab Sample ID:	**1999-07-0190-004**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/19/1999 21:43
Sampled:	07/12/1999	QC-Batch:	1999/07/19-01.09
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/19/1999 21:43	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Chloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Chloroform	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/19/1999 21:43	
Trichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Bromoform	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Chloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Bromomethane	ND	5.0	ug/Kg	1.00	07/19/1999 21:43	
Surrogate(s)						
4-Bromofluorobenzene	98.9	74-121	%	1.00	07/19/1999 21:43	
1,2-Dichloroethane-d4	96.2	70-121	%	1.00	07/19/1999 21:43	
Toluene-d8	98.7	81-117	%	1.00	07/19/1999 21:43	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-F,2.5`**	Lab Sample ID:	**1999-07-0190-005**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/19/1999 22:22
Sampled:	07/12/1999	QC-Batch:	1999/07/19-01.09
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/19/1999 22:22	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Chloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Chloroform	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/19/1999 22:22	
Trichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Bromoform	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Chloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Bromomethane	ND	5.0	ug/Kg	1.00	07/19/1999 22:22	
Surrogate(s)						
4-Bromofluorobenzene	94.4	74-121	%	1.00	07/19/1999 22:22	
1,2-Dichloroethane-d4	107.4	70-121	%	1.00	07/19/1999 22:22	
Toluene-d8	95.2	81-117	%	1.00	07/19/1999 22:22	

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

Attn.: Dave Allen

Test Method: 8260A

Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-G,2.5'**	Lab Sample ID:	**1999-07-0190-006**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/19/1999 23:01
Sampled:	07/12/1999	QC-Batch:	1999/07/19-01.09
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/19/1999 23:01	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Chloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Chloroform	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/19/1999 23:01	
Trichloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Bromoform	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Chloromethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Bromomethane	ND	5.0	ug/Kg	1.00	07/19/1999 23:01	
Surrogate(s)						
4-Bromofluorobenzene	89.9	74-121	%	1.00	07/19/1999 23:01	
1,2-Dichloroethane-d4	119.6	70-121	%	1.00	07/19/1999 23:01	
Toluene-d8	97.9	81-117	%	1.00	07/19/1999 23:01	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organics Compounds

Method Blank | **Soil** | **QC Batch # 1999/07/19-01.09**

MB: 1999/07/19-01.09-001

Date Extracted: 07/19/1999 14:17

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Bromodichloromethane	ND	5.0	ug/Kg	07/19/1999 14:17	
Bromoform	ND	5.0	ug/Kg	07/19/1999 14:17	
Bromomethane	ND	10.0	ug/Kg	07/19/1999 14:17	
Carbon tetrachloride	ND	5.0	ug/Kg	07/19/1999 14:17	
Chlorobenzene	ND	5.0	ug/Kg	07/19/1999 14:17	
Chloroethane	ND	10	ug/Kg	07/19/1999 14:17	
2-Chloroethylvinyl ether	ND	50	ug/Kg	07/19/1999 14:17	
Chloroform	ND	5.0	ug/Kg	07/19/1999 14:17	
Chloromethane	ND	10	ug/Kg	07/19/1999 14:17	
Dibromochloromethane	ND	5.0	ug/Kg	07/19/1999 14:17	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	07/19/1999 14:17	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	07/19/1999 14:17	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	07/19/1999 14:17	
Dichlorodifluoromethane	ND	10	ug/Kg	07/19/1999 14:17	
1,1-Dichloroethane	ND	5.0	ug/Kg	07/19/1999 14:17	
1,2-Dichloroethane	ND	5.0	ug/Kg	07/19/1999 14:17	
1,1-Dichloroethene	ND	5.0	ug/Kg	07/19/1999 14:17	
1,2-Dichloroethene (cis)	ND	5.0	ug/Kg	07/19/1999 14:17	
1,2-Dichloroethene (trans)	ND	5.0	ug/Kg	07/19/1999 14:17	
1,2-Dichloropropane	ND	5.0	ug/Kg	07/19/1999 14:17	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	07/19/1999 14:17	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	07/19/1999 14:17	
Methylene chloride	ND	5.0	ug/Kg	07/19/1999 14:17	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	07/19/1999 14:17	
Tetrachloroethene	ND	5.0	ug/Kg	07/19/1999 14:17	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	07/19/1999 14:17	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	07/19/1999 14:17	
Trichloroethene	ND	5.0	ug/Kg	07/19/1999 14:17	
Vinyl chloride	ND	5.0	ug/Kg	07/19/1999 14:17	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	07/19/1999 14:17	
Trichlorofluoromethane	ND	5.0	ug/Kg	07/19/1999 14:17	
Surrogate(s)					
4-Bromofluorobenzene	100.8	74-121	%	07/19/1999 14:17	
1,2-Dichloroethane-d4	104.6	70-121	%	07/19/1999 14:17	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organics Compounds

Method Blank | **Soil** | **QC Batch # 1999/07/19-01.09**

MB: 1999/07/19-01.09-001 | Date Extracted: 07/19/1999 14:17

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Surrogate(s)					
Toluene-d8	98.8	81-117	%	07/19/1999 14:17	

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

Attn: Dave Allen

Test Method: 8260A

Prep Method: 5030

Batch QC Report

Halogenated Volatile Organics Compounds

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/19-01.09**

LCS: 1999/07/19-01.09-002 Extracted: 07/19/1999 12:51 Analyzed: 07/19/1999 12:51

LCSD: 1999/07/19-01.09-003 Extracted: 07/19/1999 13:38 Analyzed: 07/19/1999 13:38

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Chlorobenzene	112	113	100.0	100.0	112.0	113.0	0.9	61-121	20		
1,1-Dichloroethene	96.2	95.4	100.0	100.0	96.2	95.4	0.8	65-125	20		
Trichloroethene	91.4	96.4	100.0	100.0	91.4	96.4	5.3	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	488	467	500	500	97.6	93.4		74-121			
1,2-Dichloroethane-d4	546	548	500	500	109.2	109.6		70-121			
Toluene-d8	487	480	500	500	97.4	96.0		81-117			

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 1999-07-0190

Halogenated Volatile Organic Compounds

Aqua Science Engineers, Inc.
208 West El Pintado Road
Danville, CA 94526
Attn: Dave Allen
Phone: (925) 820-9391 Fax: (925) 837-4853

Project #: 3515
Project: Kendall
Site: 2221 Union St., Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BH-A,WATER	Water	07/12/1999	7
BH-B,WATER	Water	07/12/1999	8
BH-D,WATER	Water	07/12/1999	10
BH-E,WATER	Water	07/12/1999	11
BH-F,WATER	Water	07/12/1999	12

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	**BH-A,WATER**	Lab Sample ID:	**1999-07-0190-007**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/14/1999 22:11
Sampled:	07/12/1999	QC-Batch:	1999/07/14-01.25
Matrix:	Water		

Sample/Analysis Flag: o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	50	ug/L	50.00	07/14/1999 22:11	
Vinyl chloride	ND	25	ug/L	50.00	07/14/1999 22:11	
Chloroethane	ND	25	ug/L	50.00	07/14/1999 22:11	
Trichlorofluoromethane	ND	25	ug/L	50.00	07/14/1999 22:11	
1,1-Dichloroethene	ND	25	ug/L	50.00	07/14/1999 22:11	
Methylene chloride	ND	250	ug/L	50.00	07/14/1999 22:11	
trans-1,2-Dichloroethene	ND	25	ug/L	50.00	07/14/1999 22:11	
cis-1,2-Dichloroethene	190	25	ug/L	50.00	07/14/1999 22:11	
1,1-Dichloroethane	ND	25	ug/L	50.00	07/14/1999 22:11	
Chloroform	ND	150	ug/L	50.00	07/14/1999 22:11	
1,1,1-Trichloroethane	ND	25	ug/L	50.00	07/14/1999 22:11	
Carbon tetrachloride	ND	25	ug/L	50.00	07/14/1999 22:11	
1,2-Dichloroethane	ND	25	ug/L	50.00	07/14/1999 22:11	
Trichloroethene	1500	25	ug/L	50.00	07/14/1999 22:11	
1,2-Dichloropropane	ND	25	ug/L	50.00	07/14/1999 22:11	
Bromodichloromethane	ND	25	ug/L	50.00	07/14/1999 22:11	
2-Chloroethylvinyl ether	ND	25	ug/L	50.00	07/14/1999 22:11	
trans-1,3-Dichloropropene	ND	25	ug/L	50.00	07/14/1999 22:11	
cis-1,3-Dichloropropene	ND	25	ug/L	50.00	07/14/1999 22:11	
1,1,2-Trichloroethane	ND	25	ug/L	50.00	07/14/1999 22:11	
Tetrachloroethene	1300	25	ug/L	50.00	07/14/1999 22:11	
Dibromochloromethane	ND	25	ug/L	50.00	07/14/1999 22:11	
Chlorobenzene	ND	25	ug/L	50.00	07/14/1999 22:11	
Bromoform	ND	100	ug/L	50.00	07/14/1999 22:11	
1,1,2,2-Tetrachloroethane	ND	25	ug/L	50.00	07/14/1999 22:11	
1,3-Dichlorobenzene	ND	25	ug/L	50.00	07/14/1999 22:11	
1,4-Dichlorobenzene	ND	25	ug/L	50.00	07/14/1999 22:11	
1,2-Dichlorobenzene	ND	25	ug/L	50.00	07/14/1999 22:11	
Trichlorotrifluoroethane	ND	100	ug/L	50.00	07/14/1999 22:11	
Chloromethane	ND	50	ug/L	50.00	07/14/1999 22:11	
Bromomethane	ND	50	ug/L	50.00	07/14/1999 22:11	
Surrogate(s)						
1-Chloro-2-fluorobenzene	77.3	50-150	%	1.00	07/14/1999 22:11	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	**BH-B,WATER**	Lab Sample ID:	**1999-07-0190-008**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/15/1999 11:59
Sampled:	07/12/1999	QC-Batch:	1999/07/15-01.25
Matrix:	Water		

Sample/Analysis Flag: o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/L	10.00	07/15/1999 11:59	
Vinyl chloride	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Chloroethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Trichlorofluoromethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
1,1-Dichloroethene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Methylene chloride	ND	50	ug/L	10.00	07/15/1999 11:59	
trans-1,2-Dichloroethene	21	5.0	ug/L	10.00	07/15/1999 11:59	
cis-1,2-Dichloroethene	130	5.0	ug/L	10.00	07/15/1999 11:59	
1,1-Dichloroethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Chloroform	ND	30	ug/L	10.00	07/15/1999 11:59	
1,1,1-Trichloroethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Carbon tetrachloride	ND	5.0	ug/L	10.00	07/15/1999 11:59	
1,2-Dichloroethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Trichloroethene	170	5.0	ug/L	10.00	07/15/1999 11:59	
1,2-Dichloropropane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Bromodichloromethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
2-Chloroethylvinyl ether	ND	5.0	ug/L	10.00	07/15/1999 11:59	
trans-1,3-Dichloropropene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
cis-1,3-Dichloropropene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
1,1,2-Trichloroethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Tetrachloroethene	33	5.0	ug/L	10.00	07/15/1999 11:59	
Dibromochloromethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Chlorobenzene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Bromoform	ND	20	ug/L	10.00	07/15/1999 11:59	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	10.00	07/15/1999 11:59	
1,3-Dichlorobenzene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
1,4-Dichlorobenzene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
1,2-Dichlorobenzene	ND	5.0	ug/L	10.00	07/15/1999 11:59	
Trichlorotrifluoroethane	ND	20	ug/L	10.00	07/15/1999 11:59	
Chloromethane	ND	10	ug/L	10.00	07/15/1999 11:59	
Bromomethane	ND	10	ug/L	10.00	07/15/1999 11:59	
Surrogate(s)						
1-Chloro-2-fluorobenzene	70.3	50-150	%	1.00	07/15/1999 11:59	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	**BH-D,WATER**	Lab Sample ID:	**1999-07-0190-010**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/15/1999 12:48
Sampled:	07/12/1999	QC-Batch:	1999/07/15-01.25
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	07/15/1999 12:48	
Vinyl chloride	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Chloroethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Methylene chloride	ND	5.0	ug/L	1.00	07/15/1999 12:48	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
cis-1,2-Dichloroethene	11	0.50	ug/L	1.00	07/15/1999 12:48	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Chloroform	ND	3.0	ug/L	1.00	07/15/1999 12:48	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Carbon tetrachloride	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Trichloroethene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Bromodichloromethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	07/15/1999 12:48	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Tetrachloroethene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Dibromochloromethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Chlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Bromoform	ND	2.0	ug/L	1.00	07/15/1999 12:48	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 12:48	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	07/15/1999 12:48	
Chloromethane	ND	1.0	ug/L	1.00	07/15/1999 12:48	
Bromomethane	ND	1.0	ug/L	1.00	07/15/1999 12:48	
Surrogate(s)						
1-Chloro-2-fluorobenzene	72.8	50-150	%	1.00	07/15/1999 12:48	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	**BH-E,WATER**	Lab Sample ID:	**1999-07-0190-011**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/15/1999 00:57
Sampled:	07/12/1999	QC-Batch:	1999/07/14-01.25
Matrix:	Water		

Sample/Analysis Flag: rl (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	50	ug/L	50.00	07/15/1999 00:57	
Vinyl chloride	ND	25	ug/L	50.00	07/15/1999 00:57	
Chloroethane	ND	25	ug/L	50.00	07/15/1999 00:57	
Trichlorofluoromethane	ND	25	ug/L	50.00	07/15/1999 00:57	
1,1-Dichloroethene	ND	25	ug/L	50.00	07/15/1999 00:57	
Methylene chloride	ND	250	ug/L	50.00	07/15/1999 00:57	
trans-1,2-Dichloroethene	ND	25	ug/L	50.00	07/15/1999 00:57	
cis-1,2-Dichloroethene	46	25	ug/L	50.00	07/15/1999 00:57	
1,1-Dichloroethane	ND	25	ug/L	50.00	07/15/1999 00:57	
Chloroform	ND	150	ug/L	50.00	07/15/1999 00:57	
1,1,1-Trichloroethane	ND	25	ug/L	50.00	07/15/1999 00:57	
Carbon tetrachloride	ND	25	ug/L	50.00	07/15/1999 00:57	
1,2-Dichloroethane	ND	25	ug/L	50.00	07/15/1999 00:57	
Trichloroethene	33	25	ug/L	50.00	07/15/1999 00:57	
1,2-Dichloropropane	ND	25	ug/L	50.00	07/15/1999 00:57	
Bromodichloromethane	ND	25	ug/L	50.00	07/15/1999 00:57	
2-Chloroethylvinyl ether	ND	25	ug/L	50.00	07/15/1999 00:57	
trans-1,3-Dichloropropene	ND	25	ug/L	50.00	07/15/1999 00:57	
cis-1,3-Dichloropropene	ND	25	ug/L	50.00	07/15/1999 00:57	
1,1,2-Trichloroethane	ND	25	ug/L	50.00	07/15/1999 00:57	
Tetrachloroethene	42	25	ug/L	50.00	07/15/1999 00:57	
Dibromochloromethane	ND	25	ug/L	50.00	07/15/1999 00:57	
Chlorobenzene	ND	25	ug/L	50.00	07/15/1999 00:57	
Bromoform	ND	100	ug/L	50.00	07/15/1999 00:57	
1,1,2,2-Tetrachloroethane	ND	25	ug/L	50.00	07/15/1999 00:57	
1,3-Dichlorobenzene	ND	25	ug/L	50.00	07/15/1999 00:57	
1,4-Dichlorobenzene	ND	25	ug/L	50.00	07/15/1999 00:57	
1,2-Dichlorobenzene	ND	25	ug/L	50.00	07/15/1999 00:57	
Trichlorotrifluoroethane	ND	100	ug/L	50.00	07/15/1999 00:57	
Chloromethane	ND	50	ug/L	50.00	07/15/1999 00:57	
Bromomethane	ND	50	ug/L	50.00	07/15/1999 00:57	
Surrogate(s)						
1-Chloro-2-fluorobenzene	73.3	50-150	%	1.00	07/15/1999 00:57	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	**BH-F,WATER**	Lab Sample ID:	**1999-07-0190-012**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/15/1999 14:27
Sampled:	07/12/1999	QC-Batch:	1999/07/15-01.25
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	07/15/1999 14:27	
Vinyl chloride	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Chloroethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Methylene chloride	ND	5.0	ug/L	1.00	07/15/1999 14:27	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
cis-1,2-Dichloroethene	8.8	0.50	ug/L	1.00	07/15/1999 14:27	
1,1-Dichloroethane	11	0.50	ug/L	1.00	07/15/1999 14:27	
Chloroform	ND	3.0	ug/L	1.00	07/15/1999 14:27	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Carbon tetrachloride	ND	0.50	ug/L	1.00	07/15/1999 14:27	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Trichloroethene	6.4	0.50	ug/L	1.00	07/15/1999 14:27	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Bromodichloromethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	07/15/1999 14:27	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Tetrachloroethene	9.2	0.50	ug/L	1.00	07/15/1999 14:27	
Dibromochloromethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Chlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Bromoform	ND	2.0	ug/L	1.00	07/15/1999 14:27	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	07/15/1999 14:27	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	07/15/1999 14:27	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	07/15/1999 14:27	
Chloromethane	ND	1.0	ug/L	1.00	07/15/1999 14:27	
Bromomethane	ND	1.0	ug/L	1.00	07/15/1999 14:27	
Surrogate(s)						
1-Chloro-2-fluorobenzene	76.9	50-150	%	1.00	07/15/1999 14:27	

To: Aqua Science Engineers, Inc.
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organic Compounds

Method Blank | **Water** | **QC Batch # 1999/07/14-01.25**

MB: 1999/07/14-01.25-001 | Date Extracted: 07/14/1999 10:23

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	07/14/1999 10:23	
Vinyl chloride	ND	0.5	ug/L	07/14/1999 10:23	
Chloroethane	ND	0.5	ug/L	07/14/1999 10:23	
Trichlorofluoromethane	ND	0.5	ug/L	07/14/1999 10:23	
1,1-Dichloroethene	ND	0.5	ug/L	07/14/1999 10:23	
Methylene chloride	ND	5.0	ug/L	07/14/1999 10:23	
trans-1,2-Dichloroethene	ND	0.5	ug/L	07/14/1999 10:23	
cis-1,2-Dichloroethene	ND	0.5	ug/L	07/14/1999 10:23	
1,1-Dichloroethane	ND	0.5	ug/L	07/14/1999 10:23	
Chloroform	ND	3.0	ug/L	07/14/1999 10:23	
1,1,1-Trichloroethane	ND	0.5	ug/L	07/14/1999 10:23	
Carbon tetrachloride	ND	0.5	ug/L	07/14/1999 10:23	
1,2-Dichloroethane	ND	0.5	ug/L	07/14/1999 10:23	
Trichloroethene	ND	0.5	ug/L	07/14/1999 10:23	
1,2-Dichloropropane	ND	0.5	ug/L	07/14/1999 10:23	
Bromodichloromethane	ND	0.5	ug/L	07/14/1999 10:23	
2-Chloroethylvinyl ether	ND	0.5	ug/L	07/14/1999 10:23	
trans-1,3-Dichloropropene	ND	0.5	ug/L	07/14/1999 10:23	
cis-1,3-Dichloropropene	ND	0.5	ug/L	07/14/1999 10:23	
1,1,2-Trichloroethane	ND	0.5	ug/L	07/14/1999 10:23	
Tetrachloroethene	ND	0.5	ug/L	07/14/1999 10:23	
Dibromochloromethane	ND	0.5	ug/L	07/14/1999 10:23	
Chlorobenzene	ND	0.5	ug/L	07/14/1999 10:23	
Bromoform	ND	2.0	ug/L	07/14/1999 10:23	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	07/14/1999 10:23	
1,3-Dichlorobenzene	ND	0.5	ug/L	07/14/1999 10:23	
1,4-Dichlorobenzene	ND	0.5	ug/L	07/14/1999 10:23	
1,2-Dichlorobenzene	ND	0.5	ug/L	07/14/1999 10:23	
Trichlorotrifluoroethane	ND	2.0	ug/L	07/14/1999 10:23	
Chloromethane	ND	1.0	ug/L	07/14/1999 10:23	
Bromomethane	ND	1.0	ug/L	07/14/1999 10:23	
Surrogate(s)					
1-Chloro-2-fluorobenzene	62.0	50-150	%	07/14/1999 10:23	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organic Compounds

Method Blank | **Water** | **QC Batch # 1999/07/15-01.25**

MB: 1999/07/15-01.25-001 | Date Extracted: 07/15/1999 09:34

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	07/15/1999 09:34	
Vinyl chloride	ND	0.5	ug/L	07/15/1999 09:34	
Chloroethane	ND	0.5	ug/L	07/15/1999 09:34	
Trichlorofluoromethane	ND	0.5	ug/L	07/15/1999 09:34	
1,1-Dichloroethene	ND	0.5	ug/L	07/15/1999 09:34	
Methylene chloride	ND	5.0	ug/L	07/15/1999 09:34	
trans-1,2-Dichloroethene	ND	0.5	ug/L	07/15/1999 09:34	
cis-1,2-Dichloroethene	ND	0.5	ug/L	07/15/1999 09:34	
1,1-Dichloroethane	ND	0.5	ug/L	07/15/1999 09:34	
Chloroform	ND	3.0	ug/L	07/15/1999 09:34	
1,1,1-Trichloroethane	ND	0.5	ug/L	07/15/1999 09:34	
Carbon tetrachloride	ND	0.5	ug/L	07/15/1999 09:34	
1,2-Dichloroethane	ND	0.5	ug/L	07/15/1999 09:34	
Trichloroethene	ND	0.5	ug/L	07/15/1999 09:34	
1,2-Dichloropropane	ND	0.5	ug/L	07/15/1999 09:34	
Bromodichloromethane	ND	0.5	ug/L	07/15/1999 09:34	
2-Chloroethylvinyl ether	ND	0.5	ug/L	07/15/1999 09:34	
trans-1,3-Dichloropropene	ND	0.5	ug/L	07/15/1999 09:34	
cis-1,3-Dichloropropene	ND	0.5	ug/L	07/15/1999 09:34	
1,1,2-Trichloroethane	ND	0.5	ug/L	07/15/1999 09:34	
Tetrachloroethene	ND	0.5	ug/L	07/15/1999 09:34	
Dibromochloromethane	ND	0.5	ug/L	07/15/1999 09:34	
Chlorobenzene	ND	0.5	ug/L	07/15/1999 09:34	
Bromoform	ND	2.0	ug/L	07/15/1999 09:34	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	07/15/1999 09:34	
1,3-Dichlorobenzene	ND	0.5	ug/L	07/15/1999 09:34	
1,4-Dichlorobenzene	ND	0.5	ug/L	07/15/1999 09:34	
1,2-Dichlorobenzene	ND	0.5	ug/L	07/15/1999 09:34	
Trichlorotrifluoroethane	ND	2.0	ug/L	07/15/1999 09:34	
Chloromethane	ND	1.0	ug/L	07/15/1999 09:34	
Bromomethane	ND	1.0	ug/L	07/15/1999 09:34	
Surrogate(s)					
1-Chloro-2-fluorobenzene	72.0	50-150	%	07/15/1999 09:34	

To: **Aqua Science Engineers, Inc.**
Attn: Dave Allen

Test Method: 8010
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 1999/07/14-01.25**

LCS: 1999/07/14-01.25-002 Extracted: 07/14/1999 11:12 Analyzed: 07/14/1999 11:12
LCSD: 1999/07/14-01.25-003 Extracted: 07/14/1999 12:02 Analyzed: 07/14/1999 12:02

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
1,1-Dichloroethene	21.7	21.1	20.0	20.0	108.5	105.5	2.8	50-140	20		
Trichloroethene	22.2	23.0	20.0	20.0	111.0	115.0	3.5	50-150	20		
Chlorobenzene	21.6	22.5	20.0	20.0	108.0	112.5	4.1	50-150	20		
Surrogate(s)											
1-Chloro-2-fluorobenzene	17.3	17.8	20	20	86.5	89.0		50-150			

To: **Aqua Science Engineers, Inc.**
Attn: Dave Allen

Test Method: 8010
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 1999/07/15-01.25**

LCS: 1999/07/15-01.25-002 Extracted: 07/15/1999 10:22 Analyzed: 07/15/1999 10:22
LCSD: 1999/07/15-01.25-003 Extracted: 07/15/1999 11:10 Analyzed: 07/15/1999 11:10

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
1,1-Dichloroethene	20.8	20.4	20.0	20.0	104.0	102.0	1.9	50-140	20		
Trichloroethene	21.2	20.7	20.0	20.0	106.0	103.5	2.4	50-150	20		
Chlorobenzene	20.6	19.8	20.0	20.0	103.0	99.0	4.0	50-150	20		
Surrogate(s)											
1-Chloro-2-fluorobenzene	16.1	15.5	20	20	80.5	77.5		50-150			

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8010
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Matrix Spike (MS / MSD) **Water** **QC Batch # 1999/07/15-01.25**

Sample ID: **BH-F,WATER** Lab Sample ID: 1999-07-0190-012

MS: 1999/07/15-01.25-004 Extracted: 07/15/1999 15:17 Analyzed: 07/15/1999 15:17 Dilution: 1.0

MSD: 1999/07/15-01.25-005 Extracted: 07/15/1999 16:08 Analyzed: 07/15/1999 16:08 Dilution: 1.0

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
1,1-Dichloroethene	21.1	19.8	ND	20.0	20.0	105.5	99.0	6.4	50-140	20		
Trichloroethene	30.9	31.5	6.38	20.0	20.0	122.6	125.6	2.4	50-150	20		
Chlorobenzene	22.8	22.5	ND	20.0	20.0	114.0	112.5	1.3	50-150	20		
Surrogate(s)												
1-Chloro-2-fluorobenzen	18.0	18.1		20	20	90.0	90.5		50-150			

To: **Aqua Science Engineers, Inc.**
Attn:Dave Allen

Test Method: 8010
Prep Method: 5030

Legend & Notes

Halogenated Volatile Organic Compounds

Analysis Flags

o

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

rl

Reporting limits raised due to insufficient sample volume.

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 1999-07-019

Halogenated Volatile Organics Compounds

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Dave Allen

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

Project #: 3515

Project: Kendall

Site: 2221 Union St., Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BH-C,WATER	Sludge	07/12/1999	9
BH-G,WATER	Sludge	07/12/1999	13

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-C,WATER**	Lab Sample ID:	**1999-07-0190-009**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/22/1999 14:19
Sampled:	07/12/1999	QC-Batch:	1999/07/22-01.06
Matrix:	Sludge		

Sample/Analysis Flag: o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	25	ug/Kg	2.46	07/22/1999 14:19	
Vinyl chloride	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Chloroethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Trichlorofluoromethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,1-Dichloroethene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Methylene chloride	ND	12	ug/Kg	2.46	07/22/1999 14:19	
trans-1,2-Dichloroethene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
cis-1,2-Dichloroethene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,1-Dichloroethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Chloroform	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,1,1-Trichloroethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Carbon tetrachloride	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,2-Dichloroethane	ND	12	mg/Kg	2.46	07/22/1999 14:19	
Trichloroethene	21	12	ug/Kg	2.46	07/22/1999 14:19	
1,2-Dichloropropane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Bromodichloromethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
2-Chloroethylvinyl ether	ND	12	ug/Kg	2.46	07/22/1999 14:19	
trans-1,3-Dichloropropene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
cis-1,3-Dichloropropene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,1,2-Trichloroethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Tetrachloroethene	35	12	ug/Kg	2.46	07/22/1999 14:19	
Dibromochloromethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Chlorobenzene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Bromoform	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,1,2,2-Tetrachloroethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,3-Dichlorobenzene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,4-Dichlorobenzene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
1,2-Dichlorobenzene	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Trichlorotrifluoroethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Chloromethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Bromomethane	ND	12	ug/Kg	2.46	07/22/1999 14:19	
Surrogate(s)						
4-Bromofluorobenzene	104.4	74-121	%	1.00	07/22/1999 14:19	
1,2-Dichloroethane-d4	87.4	70-121	%	1.00	07/22/1999 14:19	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-C,WATER**	Lab Sample ID:	**1999-07-0190-009**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/22/1999 14:19
Sampled:	07/12/1999	QC-Batch:	1999/07/22-01.06
Matrix:	Sludge		

Sample/Analysis Flag: o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Surrogate(s)						
Toluene-d8	99.6	81-117	%	1.00	07/22/1999 14:19	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Halogenated Volatile Organics Compounds

Sample ID:	**BH-G,WATER**	Lab Sample ID:	**1999-07-0190-013**
Project:	3515 Kendall	Received:	07/13/1999 16:44
Site:	2221 Union St., Oakland	Extracted:	07/23/1999 11:47
Sampled:	07/12/1999	QC-Batch:	1999/07/23-01.07
Matrix:	Sludge		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	07/23/1999 11:47	
Vinyl chloride	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Chloroethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Methylene chloride	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Chloroform	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,2-Dichloroethane	ND	5.0	mg/Kg	1.00	07/23/1999 11:47	
Trichloroethene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
2-Chloroethylvinyl ether	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Chlorobenzene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Bromoform	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Chloromethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Bromomethane	ND	5.0	ug/Kg	1.00	07/23/1999 11:47	
Surrogate(s)						
4-Bromofluorobenzene	95.7	74-121	%	1.00	07/23/1999 11:47	
1,2-Dichloroethane-d4	93.5	70-121	%	1.00	07/23/1999 11:47	
Toluene-d8	103.4	81-117	%	1.00	07/23/1999 11:47	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organics Compounds

Method Blank | **Soil** | **QC Batch # 1999/07/22-01.06**

MB: 1999/07/22-01.06-001 | Date Extracted: 07/22/1999 11:25

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Bromodichloromethane	ND	5.0	ug/Kg	07/22/1999 11:25	
Bromoform	ND	5.0	ug/Kg	07/22/1999 11:25	
Bromomethane	ND	10.0	ug/Kg	07/22/1999 11:25	
Carbon tetrachloride	ND	5.0	ug/Kg	07/22/1999 11:25	
Chlorobenzene	ND	5.0	ug/Kg	07/22/1999 11:25	
Chloroethane	ND	10	ug/Kg	07/22/1999 11:25	
2-Chloroethylvinyl ether	ND	50	ug/Kg	07/22/1999 11:25	
Chloroform	ND	5.0	ug/Kg	07/22/1999 11:25	
Chloromethane	ND	10	ug/Kg	07/22/1999 11:25	
Dibromochloromethane	ND	5.0	ug/Kg	07/22/1999 11:25	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	07/22/1999 11:25	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	07/22/1999 11:25	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	07/22/1999 11:25	
Dichlorodifluoromethane	ND	10	ug/Kg	07/22/1999 11:25	
1,1-Dichloroethane	ND	5.0	ug/Kg	07/22/1999 11:25	
1,2-Dichloroethane	ND	5.0	ug/Kg	07/22/1999 11:25	
1,1-Dichloroethene	ND	5.0	ug/Kg	07/22/1999 11:25	
1,2-Dichloroethene (cis)	ND	5.0	ug/Kg	07/22/1999 11:25	
1,2-Dichloroethene (trans)	ND	5.0	ug/Kg	07/22/1999 11:25	
1,2-Dichloropropane	ND	5.0	ug/Kg	07/22/1999 11:25	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	07/22/1999 11:25	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	07/22/1999 11:25	
Methylene chloride	ND	5.0	ug/Kg	07/22/1999 11:25	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	07/22/1999 11:25	
Tetrachloroethene	ND	5.0	ug/Kg	07/22/1999 11:25	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	07/22/1999 11:25	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	07/22/1999 11:25	
Trichloroethene	ND	5.0	ug/Kg	07/22/1999 11:25	
Vinyl chloride	ND	5.0	ug/Kg	07/22/1999 11:25	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	07/22/1999 11:25	
Trichlorofluoromethane	ND	5.0	ug/Kg	07/22/1999 11:25	
Surrogate(s)					
4-Bromofluorobenzene	114.8	74-121	%	07/22/1999 11:25	
1,2-Dichloroethane-d4	111.0	70-121	%	07/22/1999 11:25	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organics Compounds

Method Blank | **Soil** | **QC Batch # 1999/07/22-01.06**

MB: 1999/07/22-01.06-001 | Date Extracted: 07/22/1999 11:25

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Surrogate(s)					
Toluene-d8	115.2	81-117	%	07/22/1999 11:25	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organics Compounds

Method Blank | **Soil** | **QC Batch # 1999/07/23-01.07**

MB: 1999/07/23-01.07-001 | Date Extracted: 07/23/1999 11:08

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Bromodichloromethane	ND	5.0	ug/Kg	07/23/1999 11:08	
Bromoform	ND	5.0	ug/Kg	07/23/1999 11:08	
Bromomethane	ND	10.0	ug/Kg	07/23/1999 11:08	
Carbon tetrachloride	ND	5.0	ug/Kg	07/23/1999 11:08	
Chlorobenzene	ND	5.0	ug/Kg	07/23/1999 11:08	
Chloroethane	ND	10	ug/Kg	07/23/1999 11:08	
2-Chloroethylvinyl ether	ND	50	ug/Kg	07/23/1999 11:08	
Chloroform	ND	5.0	ug/Kg	07/23/1999 11:08	
Chloromethane	ND	10	ug/Kg	07/23/1999 11:08	
Dibromochloromethane	ND	5.0	ug/Kg	07/23/1999 11:08	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	07/23/1999 11:08	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	07/23/1999 11:08	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	07/23/1999 11:08	
Dichlorodifluoromethane	ND	10	ug/Kg	07/23/1999 11:08	
1,1-Dichloroethane	ND	5.0	ug/Kg	07/23/1999 11:08	
1,2-Dichloroethane	ND	5.0	ug/Kg	07/23/1999 11:08	
1,1-Dichloroethene	ND	5.0	ug/Kg	07/23/1999 11:08	
1,2-Dichloroethene (cis)	ND	5.0	ug/Kg	07/23/1999 11:08	
1,2-Dichloroethene (trans)	ND	5.0	ug/Kg	07/23/1999 11:08	
1,2-Dichloropropane	ND	5.0	ug/Kg	07/23/1999 11:08	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	07/23/1999 11:08	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	07/23/1999 11:08	
Methylene chloride	ND	5.0	ug/Kg	07/23/1999 11:08	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	07/23/1999 11:08	
Tetrachloroethene	ND	5.0	ug/Kg	07/23/1999 11:08	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	07/23/1999 11:08	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	07/23/1999 11:08	
Trichloroethene	ND	5.0	ug/Kg	07/23/1999 11:08	
Vinyl chloride	ND	5.0	ug/Kg	07/23/1999 11:08	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	07/23/1999 11:08	
Trichlorofluoromethane	ND	5.0	ug/Kg	07/23/1999 11:08	
Surrogate(s)					
4-Bromofluorobenzene	97.4	74-121	%	07/23/1999 11:08	
1,2-Dichloroethane-d4	101.0	70-121	%	07/23/1999 11:08	

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Halogenated Volatile Organics Compounds

Method Blank | **Soil** | **QC Batch # 1999/07/23-01.07**

MB: 1999/07/23-01.07-001 | Date Extracted: 07/23/1999 11:08

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Surrogate(s)					
Toluene-d8	105.4	81-117	%	07/23/1999 11:08	

To: **Aqua Science Engineers, Inc.**
Attn: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organics Compounds

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 1999/07/22-01.06**

LCS: 1999/07/22-01.06-002 Extracted: 07/22/1999 10:06 Analyzed: 07/22/1999 10:06
LCSD: 1999/07/22-01.06-003 Extracted: 07/22/1999 10:46 Analyzed: 07/22/1999 10:46

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Chlorobenzene	100	103	100.0	100.0	100.0	103.0	3.0	61-121	20		
1,1-Dichloroethene	88.8	91.6	100.0	100.0	88.8	91.6	3.1	65-125	20		
Trichloroethene	96.4	99.6	100.0	100.0	96.4	99.6	3.3	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	533	535	500	500	106.6	107.0		74-121			
1,2-Dichloroethane-d4	475	498	500	500	95.0	99.6		70-121			
Toluene-d8	510	523	500	500	102.0	104.6		81-117			

To: **Aqua Science Engineers, Inc.**
Attn: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organics Compounds

Laboratory Control Spike (LCS/LCSD) — **Soil** — **QC Batch # 1999/07/23-01.07**

LCS: 1999/07/23-01.07-002 Extracted: 07/23/1999 09:51 Analyzed: 07/23/1999 09:51
LCSD: 1999/07/23-01.07-003 Extracted: 07/23/1999 10:30 Analyzed: 07/23/1999 10:30

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Chlorobenzene	108	108	100.0	100.0	108.0	108.0	0.0	61-121	20		
1,1-Dichloroethene	85.6	88.2	100.0	100.0	85.6	88.2	3.0	65-125	20		
Trichloroethene	101	102	100.0	100.0	101.0	102.0	1.0	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	470	476	500	500	94.0	95.2		74-121			
1,2-Dichloroethane-d4	443	466	500	500	88.6	93.2		70-121			
Toluene-d8	487	500	500	500	97.4	100.0		81-117			

To: **Aqua Science Engineers, Inc.**
Attn.: Dave Allen

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organics Compounds

Matrix Spike (MS / MSD) **Soil** **QC Batch # 1999/07/22-01.06**

Sample ID: **STOCKPILE3** Lab Sample ID: 1999-07-0303-003

MS: 1999/07/22-01.06-004 Extracted: 07/22/1999 17:37 Analyzed: 07/22/1999 17:37 Dilution: 1.0

MSD: 1999/07/22-01.06-005 Extracted: 07/22/1999 18:17 Analyzed: 07/22/1999 18:17 Dilution: 1.0

Compound	Conc [ug/Kg]			Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Chlorobenzene	98.5	99.3	ND	91.6	95.1	107.5	104.4	2.9	61-121	20		
1,1-Dichloroethene	92.2	95.5	ND	91.6	95.1	100.7	100.4	0.3	65-125	20		
Trichloroethene	96.0	96.7	ND	91.6	95.1	104.8	101.7	3.0	74-134	20		
Surrogate(s)												
4-Bromofluorobenzene	572	574		500	500	114.4	114.8		74-121			
1,2-Dichloroethane-d4	521	500		500	500	104.2	100.0		70-121			
Toluene-d8	532	534		500	500	106.4	106.8		81-117			

To: **Aqua Science Engineers, Inc.**
Attn:Dave Allen

Test Method: 8260A
Prep Method: 5030

Legend & Notes

Halogenated Volatile Organics Compounds

Analysis Flags

o

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

99-07-0190

469116

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 2

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

PROJECT NAME KENDALL JOB NO. 3515

ADDRESS 2221 UNION ST. OAKLAND DATE 7-12-99

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) (EPA 608/8080)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)				COMPOSITE
BH-B 2.5'	7/12		Soil	1				X														
BH-C, 2.5'	"		"	"				X														
BH-D. 2.5'								X														
BH-E, 2.5'								X														
BH-F, 2.5'								X														
BH-G, 2.5'	"		"	"				X														

RELINQUISHED BY: (signature) (time)	RECEIVED BY: (signature) 1010 (time)	RELINQUISHED BY: (signature) 7-13-99 (time)	RECEIVED BY LABORATORY: (signature) 1644 (time)	COMMENTS:
D. Allen 7-12-99 (printed name) (date)	B Morris 7-13-99 (printed name) (date)	B Morris 7-14 (printed name) (date)	Ken Wright 7/13/99 (printed name) (date)	STANDARD T.A.T.
Company- ASE Inc.	Company- Kendall	Company- Kendall	Company- Chronalab	

99-07-0190

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

Chain of Custody

PAGE 2 OF 2

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BH-A, WATER	7/12		Water	1				X														
BH-B, WATER	"		"	2				X														
BH-C, WATER	"		"	1				X														
BH-D, WATER	"		"	3				X														
BH-E, WATER	"		"	3				X														
BH-F, WATER	"		"	3				X														
BH-G, WATER	"		"	3				X														

RELINQUISHED BY: (signature)	(time)	RECEIVED BY: (signature)	(time)	RELINQUISHED BY: (signature)	(time)	RECEIVED BY LABORATORY: (signature)	(time)	COMMENTS:
	1010		1644		1644			STANDARD T.A.T.
D. Allen (printed name)	7-13-99 (date)	B. Morris (printed name)	7-13-99 (date)	B. Morris (printed name)	7-13-99 (date)	Ken Wright (printed name)	7/13/99 (date)	
Company- ASE Inc.		Company-		Company-		Company-		