

March 29, 1995

QUARTERLY GROUNDWATER MONITORING REPORT MARCH 13, 1995 GROUNDWATER SAMPLING ASE JOB NO. 2750

at 2110 Santa Clara Avenue Alameda, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391



1.0 INTRODUCTION

This report outlines the methods and findings of Aqua Science Engineers, Inc. (ASE)'s quarterly groundwater sampling at the property located at 2110 Santa Clara Avenue in Alameda, California (Figures 1 and 2).

2.0 GROUNDWATER SAMPLING

On March 13, 1995, ASE measured the depth to groundwater in the site well using an electric water level sounder. The well was then purged dry using a pre-cleaned PVC pump. Groundwater samples were collected after the well recovered to 95% of its static water level. Groundwater samples were decanted from the bailer into three (3) 40-ml volatile organic analysis (VOA) vials and two (2) 1-liter amber glass bottles. All of the samples were preserved with hydrochloric acid, labeled, placed in protective foam sleeves, and stored on wet ice for transport to American Environmental Network (AEN) of Pleasant Hill, California (CSDHS #1172) under chain of custody. No odors were present in the groundwater at the time of the sampling.

Well sampling purge water was contained in DOT 17H drums and stored on-site for handling by the client at a later date. See Appendix B for a copy of the well sampling field log.

3.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by AEN for total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 8015, and benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8020. The analytical results are tabulated below in Table One, and the certified analytical report and chain of custody form are included in Appendix A. No significant hydrocarbons were detected in the groundwater samples.

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TABLE ONE
Summary of Chemical Analysis of GROUNDWATER Samples
All Results are in parts per billion

Well I.D.	Date of Sampling	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes
MW-1	05-23-94	<50	<0.5	<0.5	<0.5	2
	09-07-94	<50	<0.5	<0.5	<0.5	2
	12-14-94	<50	<0.5	< 0.5	<0.5	<2
	03-13-95	<50	<0.5	1	<0.5	<2
EPA METHOD		3510/ 8015	8020	8020	8020	8020

4.0 CONCLUSIONS AND RECOMMENDATIONS

Only 1 part per billion (ppb) toluene was detected in the groundwater sample collected from monitoring well MW-1 this quarter. This concentration is just above the detection limit of 0.5 ppb and well below the California Department of Toxic Substances Control (DTSC) recommended action level for drinking water. This trace detection was the only hydrocarbon concentration ever detected in groundwater samples collected from this site. ASE feels that this site is suitable for site closure. On behalf of Mr. Ghidella, please consider this report a formal request for site closure.

5.0 REPORT LIMITATIONS

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

It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed for by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CSDHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to assist you with your environmental needs. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

Respectfully submitted,

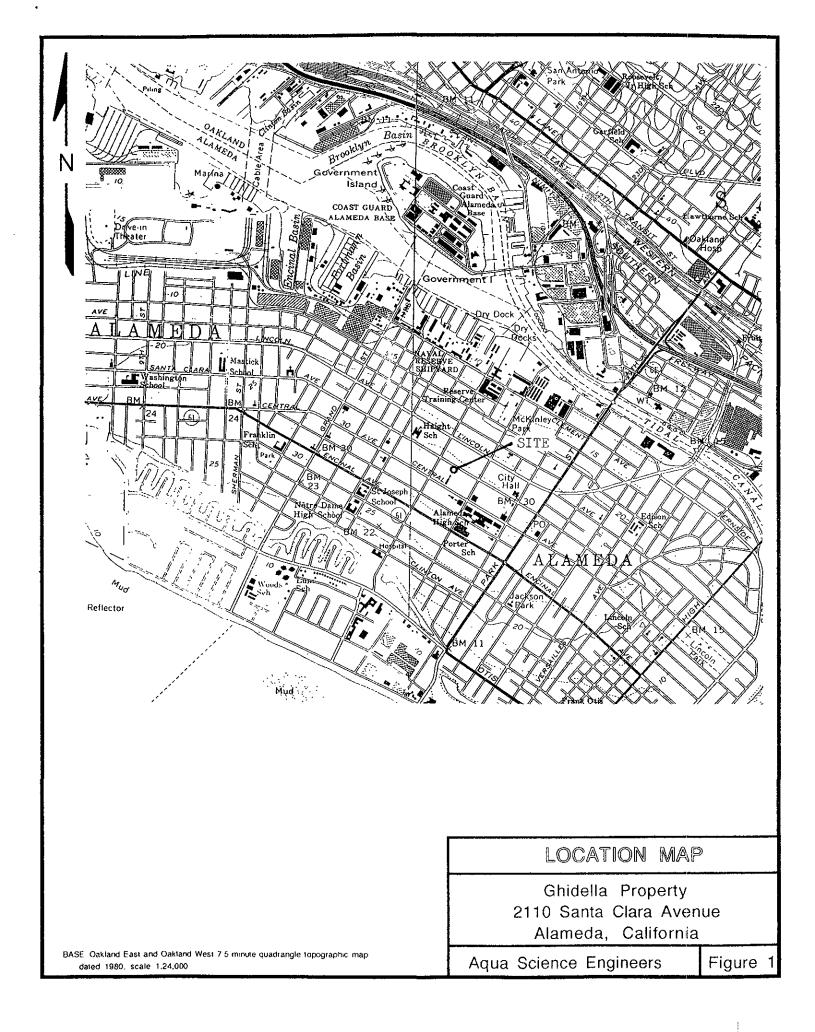
AQUA SCIENCE ENGINEERS, INC.

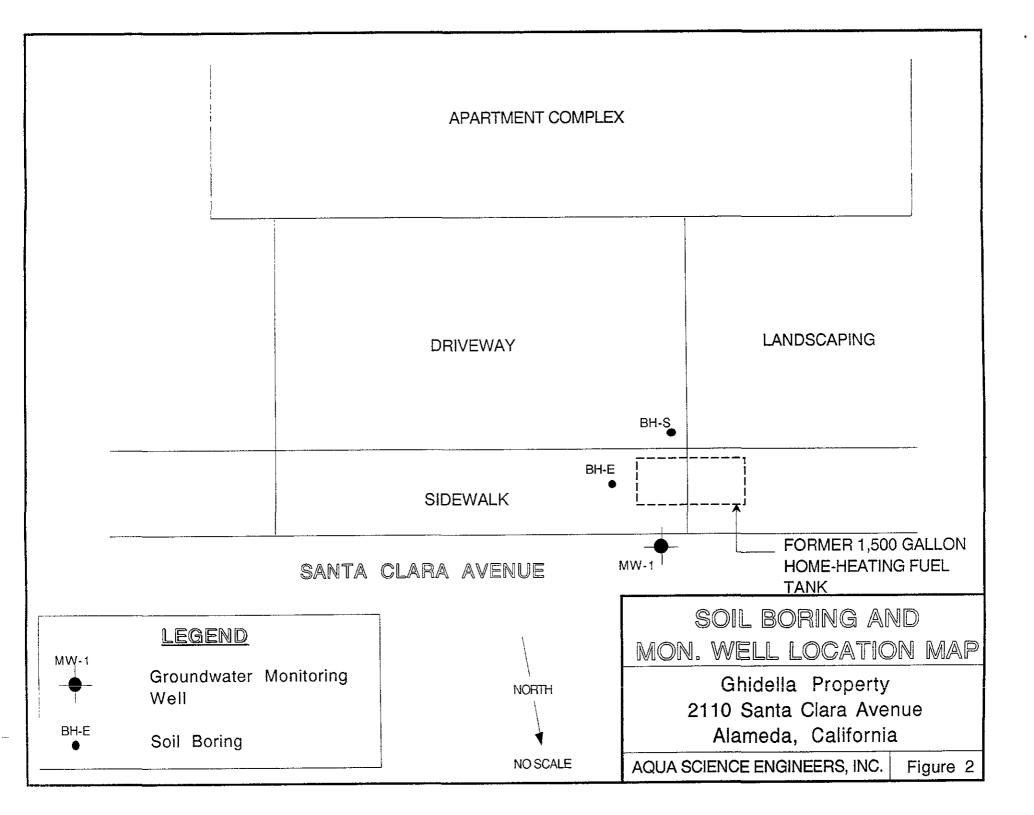
Robert E. Kitay, R.E.A. Project Geologist

Attachments: Figures 1 and 2
Appendices A and B

cc: Mr. Micheal Ghidella
Ms. Juliet Shin, ACHCSA

Mr. Kevin Graves, RWQCB, San Francisco Bay Region





APPENDIX A

Analytical Report and Chain of Custody Form

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

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AQUA SCIENCE ENGINEERS, INC 2411 OLD CROW CANYON RD. #4 SAN RAMON, CA 94583

ATTN: ROBERT KITAY
CLIENT PROJ. ID: 2750

CLIENT PROJ. NAME: GHIDELLA

REPORT DATE: 03/27/95

DATE(S) SAMPLED: 03/13/95

DATE RECEIVED: 03/14/95

AEN WORK ORDER: 9503235

PROJECT SUMMARY:

On March 14, 1995, this laboratory received 1 water sample(s).

Client requested sample(s) be analyzed for organic parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein

Laboratory Director

AQUA SCIENCE ENGINEERS, INC.

AEN JOB NO: 9503235 DATE SAMPLED: 03/13/95 DATE RECEIVED: 03/14/95 CLIENT PROJ. ID: 2750

Client Sample Id.	AEN Lab Id.	Extractable Hydrocarbons as Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
MW-1	01	ND	ND	1	ND	ND
Reporting Limit:		50	0.5	0.5	0.5	2
EPA Method:		3510 GCFID	8020	8020	8020	8020
Instrument:		С	Н	Н	Н	Н
Date Extracted:		03/21/95	NA	NA	NA	NA
Date Analyzed:		03/22/95	03/22/95	03/22/95	03/22/95	03/22/95

NA = Not Applicable ND = Not Detected

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AEN (CALIFORNIA) QUALITY CONTROL REPORT

AEN JOB NUMBER: 9503235

CLIENT PROJECT ID: 2750

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

<u>Definitions</u>

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

- D: Surrogates diluted out.
- #: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9503235

DATE EXTRACTED: 03/21/95

INSTRUMENT: C MATRIX: WATER

Surrogate Standard Recovery Summary

			Percent Recovery
Analyzed	Client Id.	Lab Id.	n-Pentacosane
03/22/95	MW-1	01	112
QC Limits:			73-129

DATE EXTRACTED: 03/18/95 DATE ANALYZED: 03/20/95 SAMPLE SPIKED: DI WATER

INSTRUMENT: C

Method Spike Recovery Summary

Analyte	6 11			QC Limits		
	Spike Added (mg/L)	Average Percent Recovery	RPD	Percent Recovery	RPD	
Diesel	2.02	86	2	65-103	12	

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

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QUALITY CONTROL DATA

METHOD: EPA 8020

AEN JOB NO: 9503235

INSTRUMENT: H MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
03/22/95	MW-1	01	101
QC Limits:			92-109

DATE ANALYZED: 03/22/95 SAMPLE SPIKED: 9503235-01

INSTRUMENT: H

Matrix Spike Recovery Summary

	0 11			QC Limits		
Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	Percent Recovery	RPD	
Benzene Toluene	18.2 52.8	92 91	11 10	85-109 87-111	17 16	

9503235

San Ramon, CA 94583 (510) 820-9391 - FAX (510) 837-4853

Aqua Science Engineers, Inc. 2411 Old Crow Canyon Road, #4, San Ramon, CA 94583 Chain of Custody

DATE 3-13-95 PAGE _ / OF _/ NO. 2750 PROJECT NAME Ghidalla (PHONE NO.) SAMPLERS (SIGNATURE) ADDRESS 2110 Santa Clara Avenue, Alameda, At (510) 820-9391 BG.F.) PURCABLE HALOCARBONS (EPA 601/8010) PURGABLE ARCHATICS (EPA 602/8020) ONLY TPH-CASOLINE/BTEX (EPA 5030/8015-8020) VOLATILE ORGANICS (EPA 624/8240) SPECIAL INSTRUCTIONS: OIL & GREASE (EPA 5520 E&F or LUFT METALS (5) (EPA 6010+7000) STLC- CAM WET (EPA 1311/1310) TPH GASOLINE (EPA 5030/8015) BASE/NUETRALS, (EPA 625/8270) (EPA 1311/1310) NO. OF SAMPLE ID DATE TIME MATRIX SAMPLES \times 11:30 3/13 Water RELEMOUISMED BY: COMMENTS: RECEIVED BY LABORATORY: RELINQUISHED BY. (signature) /signature) (signature) / Gra Gillespie 3/4/ (printed name) (printed name) Company- AEN Company-AEN Company-Company- ASE

APPENDIX B

Well Sampling Field Log



WELL SAMPLING FIELD LOG

Project Name and Address: Chidella, 2110 Souta Clara Avenue, Alameda,	CA
Tob #- 7360 Date of sampling	
Well Name: Mw-1 Sampled by: RK	
Total depth of well (feet):	
Denth to water before sampling (feet):	
Thickness of floating product if any: None	
Depth of well casing in water (feet):	
Number of gallons per well casing volume (gailons):	
Number of well casing volumes to be removed: 7	
Doo'd volume of groundwater to be nurged before sampling (gallons): 10	
Equipment used to purge the well: 12 volt PVC casing	
Equipment used to purge the well: 12 volt PVC casing Time Evacuation Began: 10:55 Time Evacuation Finished: 11:05	
Approximate volume of groundwater purged: 7 octors	
Did the well go dry?: Yes After how many gallons:	
Time samples were collected: 11:30	
Depth to water at time of sampling: 4.43	
Percent recovery at time of sampling: 75%	
Samples collected with: Pedicated polyethylene bailer Sample color: None Odor: None	
Sample color: None. Odor: None.	,
Description of sediment in sample: Norw	
2000	
CHEMICAL DATA	
Volume Purged Temp pH Conductivity	
Initial 64.6 7.45 219	
2-5 gals 61.5 7-13 272	
5 gals 612 7.08 276	
SAMPLES COLLECTED	
SAME LES COLLECTED	
Sample # of containers Volume & type container Pres Iced? Apalysis	
and the second s	
MW-1 3 70-m/ VOH VIA/3 HEL 943 BIEX V 2 1-liter amber 9/035 V V TPH-D	•
V 111-U	-
	-
	-
	-