aqua science engineers inc.

January 27, 2000

INTERIM REPORT
for
SOIL AND GROUNDWATER ASSESSMENT
at
Compare Prices Service Station
2844 Mountain Boulevard
Oakland, California

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

1.0 INTRODUCTION

This submittal presents Aqua Science Engineers, Inc. (ASE)'s interim results for a soil and groundwater assessment at the Compare Prices Service Station located at 2844 Mountain Boulevard in Oakland, California (Figure 1). This site was formally Desert Petroleum Station #796. The proposed site assessment activities were initiated by Mr. Shahram Shahnazi, property owner, as required by the Alameda County Health Care Services Agency (ACHCSA) in their letter dated June 9, 1999.

2.0 PROPOSED SCOPE OF WORK (SOW)

ASE's proposed scope of work is to further delineate the extent of soil and groundwater contamination off-site. To accomplish this task, ASE has prepared the following scope of work:

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

2) Contract with an underground utility contractor to accurately mark the underground utility lines in Mountain Boulevard.

3) Obtain an excavation permit from the City of Oakland to drill in the street areas and prepare a traffic plan to allow for closing traffic lanes during drilling activities.

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

5) Drill eleven (11) soil borings with a Geoprobe drill rig in the locations shown on Figure 2. Collect soil samples continuously and screen the soil samples for volatile compounds with an organic vapor meter (OVM). Groundwater samples will also be collected from each boring.

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

7) Backfill the borings with neat cement.

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

At the request of the ACHCSA, the borings on the west side of Mountain Boulevard were drilled as soon as they could be scheduled. The other borings will be drilled in the spring when groundwater is at its highest elevation. This report is prepared to provide interim results only. Complete results with conclusions and recommendations will be provided in the full report to be completed following the drilling to take place in the spring.

3.0 UNDERGROUND UTILITY LOCATING

On January 7, 2000, Subtronics Corporation of Concord, California accurately located the public utilities around the proposed drilling locations (Figure 2). They also accurately located the lines that could potentially act as a conduit for groundwater contamination. Several lines were inaccurately located in the Western Geo-Engineers report. An updated map of the utility line locations is provided as Figure 2.

4.0 DRILL SOIL BORINGS AND COLLECT SAMPLES

Prior to drilling, ASE obtained a drilling permit from the Alameda County Public Works Agency (ACPWA). ASE also obtained an excavation permit from the City of Oakland. Copies of these permits are presented in *Appendix A*.

On January 7, 2000, Vironex, Inc. of Hayward, California drilled soil borings BH-A through BH-D at the site using a Geoprobe hydraulic sampling rig (Figure 2). The drilling was directed by ASE associate geologist Ian Reed. Traffic safety for the lane closure was provided by Flash Safety of Oakland, California.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for possible 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 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. OVM readings can be found on the boring logs located in *Appendix B*.

Groundwater samples were removed from the borings with bailers. The groundwater samples were contained in 40-ml volatile organic analysis (VOA) vials (pre-preserved with hydrochloric acid) and sealed without headspace. The samples were then labeled and stored on ice for transport to Chromalab under chain of custody.

Upon completion of the soil and groundwater sampling, the borings were backfilled with neat cement to the ground surface.

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

Sediments encountered during drilling generally consisted of sandy and clayey silts beneath the surface to the total depth explored of 30-feet below ground surface (bgs). Groundwater was encountered at approximately 20-feet bgs. Boring logs are presented as *Appendix B*.

5.0 ANALYTICAL RESULTS FOR SOIL

Soil samples collected from 19.0-feet bgs in boring BH-A, 21-feet bgs in boring BH-B, 20-feet bgs in boring BH-C, and 19-feet bgs in boring BH-D were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015, and BTEX and MTBE by EPA Method 8020. **These samples represent either the capillary zone or the unsaturated soil sample that appeared the most contaminated based on odor, staining, and/or OVM readings.** The analytical results are tabulated in Table One and the certified analytical report and chain of custody forms are included in *Appendix C*.

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

Boring	Depth	TPH-Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	19.0'	**620***	< 0.62	< 0.62	**3.4**	**14**	< 0.62
BH-B	21.0'	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
BH-C	20.0'	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005	**0.2**
BH-D	19.0'	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
PRG		NE	0.62	520	230	210	NE

Notes:
Detectable concentrations are in **bold**.
Non-detectable concentrations are noted by the less than sign (<) followed by the detection limit.

PRG = the Preliminary Remediation Goal for Residential Soil use.

NE = PRG has not been established.

* = Hydrocarbons do not match the laboratory gasoline standard

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

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

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

Boring	TPH-Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	**15,000**	[redacted]	**780**	**790**	**4,600**	**33**
BH-B	< 1,000	< 10	**11**	< 10	**23**	**660**
BH-C	< 100	< 1.0	< 1.0	< 1.0	< 1.0	**170**
BH-D	< 50	< 0.5	< 0,5	< 0.5	< 0.5	< 5.0
DHS MCL	NE	1.0	150	680	1,750	13

Notes:
Detectable concentrations are in **bold**.
Non-detectable concentrations are noted by the less than sign (<) followed by the detection limit.

DHS MCL = the California Department of Health Services maximum contaminant level for drinking water.

NE = DHS MCL has not been established.

7.0 CONCLUSIONS AND RECOMMENDATION

Complete results with conclusions and recommendations will be provided in the full report to be completed following the drilling to take place in the spring.

8.0 REPORT LIMITATIONS

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

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

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

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Ian T. Reed
Associate Geologist

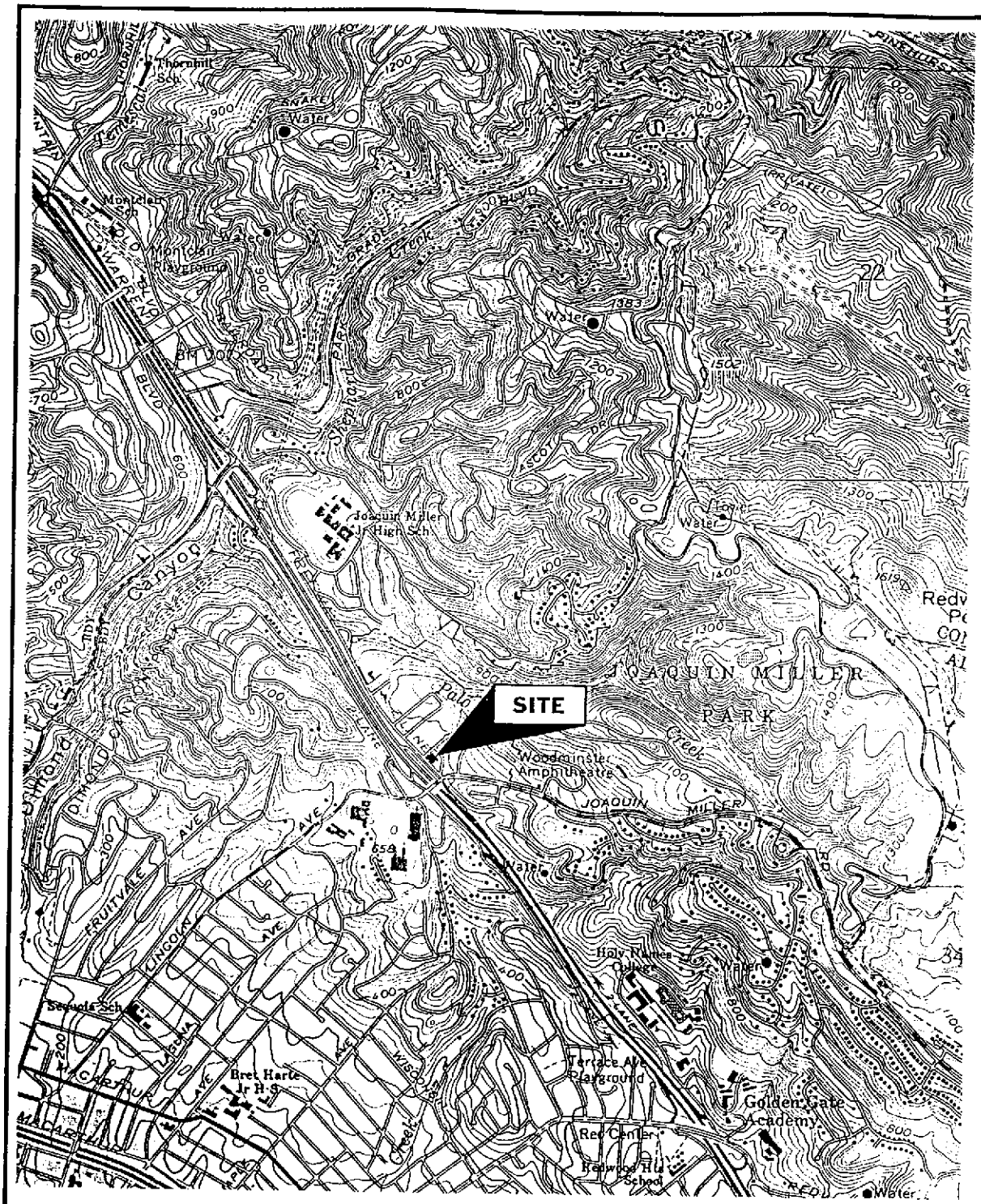
Robert E. Kitay, R.G., R.E.A.
Senior Geologist

Attachments: Figures 1 and 2
Appendices A through D

cc: Mr. Shahram Shahnazi

Mr. Scott Seery, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502

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



SITE LOCATION MAP	
2844 Mountain Boulevard Oakland, California	
Aqua Science Engineers	Figure 1

NORTH

0 20 40 80

SCALE IN FEET

LEGEND

RS-4 — MONITORING WELL

BH-A — SOIL BORING

SIDEWALK

WERNER COURT

SIDEWALK

RS-3

STORE

UST FARM

RS-2

DISPENSER ISLAND

RS-1

RS-4

PROPERTY BOUNDARIES

SIDEWALK

SIDEWALK

SEWER LINE

WATER LINE

NATURAL GAS LINE

STORM WATER LINE

MOUNTAIN BOULEVARD

PHONE LINES

BH-D BH-C CURB BH-B BH-A

INACTIVE ELECTRIC LINE

FENCE

△ WATER SAMPLE COLLECTED FROM DRAIN IN RETAINING WALL

RETAINING WALL

HIGHWAY 13

SOIL BORING LOCATION MAP
SITE PLAN

Shahnazi Property
2844 Mountain Boulevard
Oakland, California

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Permits

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PERMIT NUMBER		SITE ADDRESS/LOCATION
X0000013		2848 MOUNTAIN BL.
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: _____

2) 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____ , B&PC for this reason _____.

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee _____ ☐ Agent for ☒ Contractor ☐ Owner Date 1-5-00

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☒ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☒ NO
ISSUED BY		DATE ISSUED 1-5-00	

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) 670-6262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2844 Mountain Blvd
Oakland

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

CLIENT
Name Shahram Shahnazi
Address 140 Goddard Drive Phone (415) 902-3558
City Tiburon, CA Zip 94920

APPLICANT
Name Aqua Science Engineers, Inc.
Attn: Robert Kitay Fax (925) 837-4853
Address 208 West 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	☐		

DRILLER'S LICENSE NO. C-57 487000

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

GEOTECHNICAL PROJECTS
Number of Borings 4 Maximum
Hole Diameter 2 in. Depth 30 ft

ESTIMATED STARTING DATE 1-7-00
ESTIMATED COMPLETION DATE 1-7-00

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

APPLICANT'S SIGNATURE H. E. Kitay DATE 1-5-00

FOR OFFICE USE

PERMIT NUMBER W00-014
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~~ cement grout 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 the compacted cuttings.~~

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

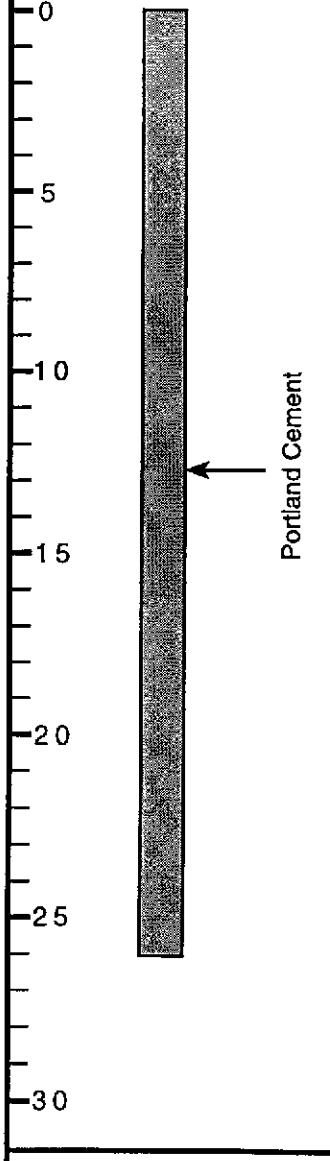
APPROVED Frank L Cook DATE 1-07-2000

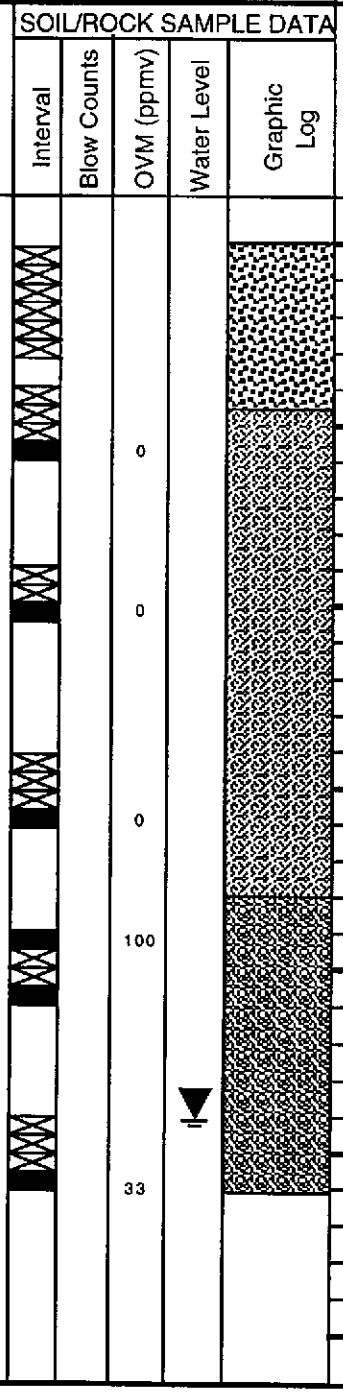
APPENDIX B

Boring Logs

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		SOIL BORNG: BH-A
Project Name: Compare Prices	Project Location: 2844 Mountain Blvd., Oakland, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Large Bore Sampler
Logged By: Ian T. Reed	Date Drilled: January 7, 2000	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 24.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 26.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Large Bore Sampler





DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

Gravely SAND (SP); orange brown; dry; medium stiff; 60% fine to coarse sand; 40% gravel to 1.0" diameter; non-plastic, medium estimated K; no odor

Sandy SILT (ML); brown; moist; medium stiff; 70% silt; 20% fine sand; 10% clay; low plasticity; low estimated K; no odor

light brown; moist; medium stiff; trace gravel; low plasticity; no odor

Clayey SILT (ML); olive brown; moist; stiff; 60% silt; 30% clay; 10% fine to coarse sand; trace gravel; low plasticity; low estimated K; slight hydrocarbon odor at 1.0'

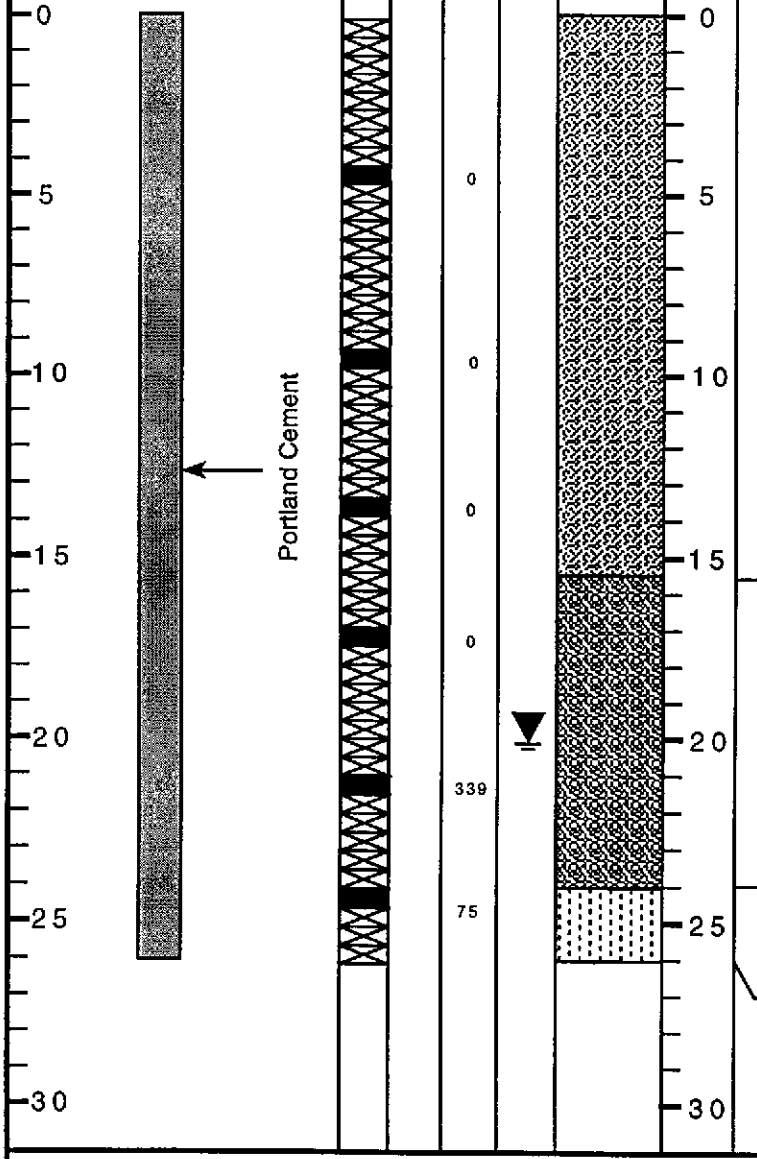
light brown; wet; no odor

End of boring at 26.0'

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		SOIL BORNG: BH-B
Project Name: Compare Prices	Project Location: 2844 Mountain Blvd., Oakland, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2" diameter Macrocore
Logged By: Ian T. Reed	Date Drilled: January 7, 2000	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 20.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 26.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 2.0" I.D. Macro sampler

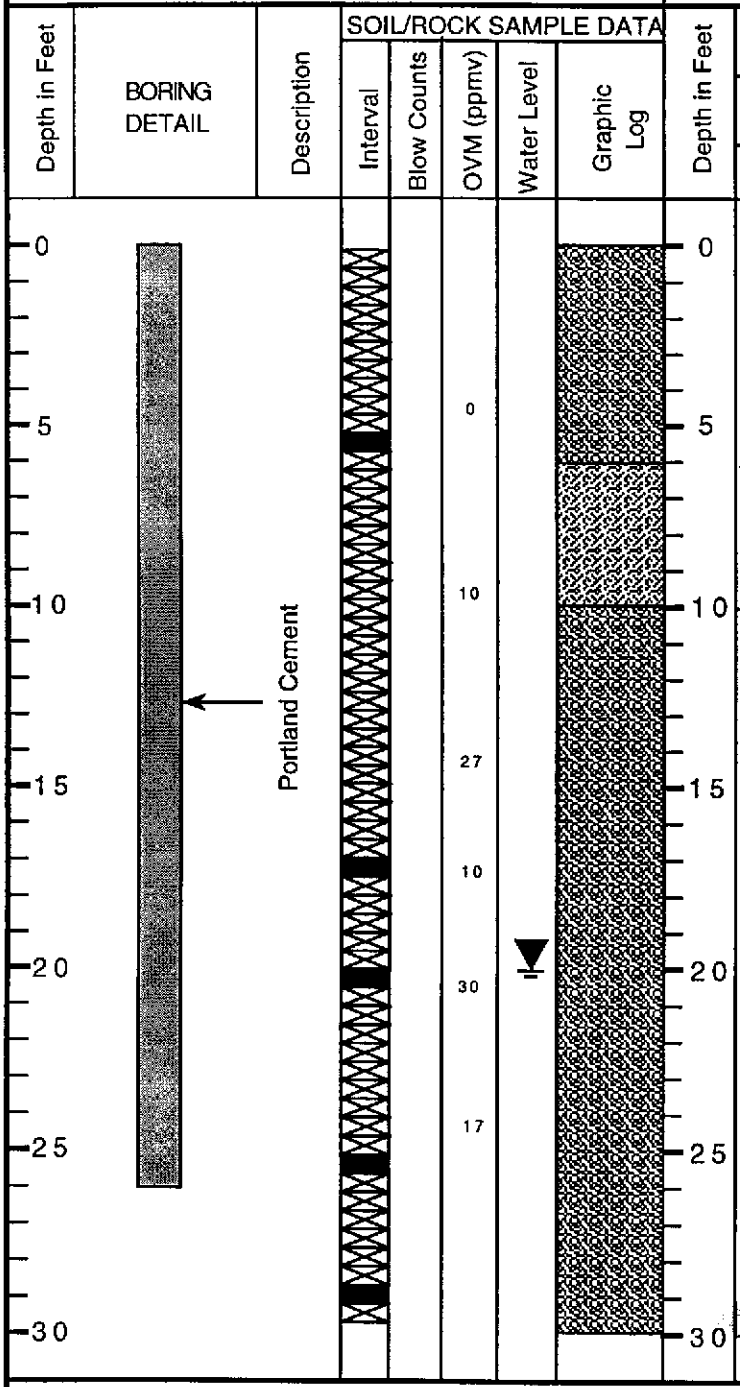


Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Sandy SILT (ML); dark brown; moist; stiff; 70% silt; 25% fine to coarse sand; 5% clay; low plasticity; low estimated K; no odor
5	light brown; moist; stiff; low plasticity; low estimated K; no odor
10	
15	Clayey SILT (ML); light brown; moist; stiff; 70% silt; 20% clay; 10% fine to coarse sand; low plasticity; low estimated K; no odor
20	olive brown; wet; slight hydrocarbon odor
25	Gravely SILT (ML); olive gray; wet; stiff; 60% silt; 30% gravel; 10% fine to coarse sand; non-plastic; low estimated K; moderate hydrocarbon odor
30	End of boring at 26.0'

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		SOIL BORNG: BH-C
Project Name: Compare Prices	Project Location: 2844 Mountain Blvd., Oakland, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2" diameter Macrocore
Logged By: Ian T. Reed	Date Drilled: January 7, 2000	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 20.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 30.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 2.0" I.D. Macro sampler

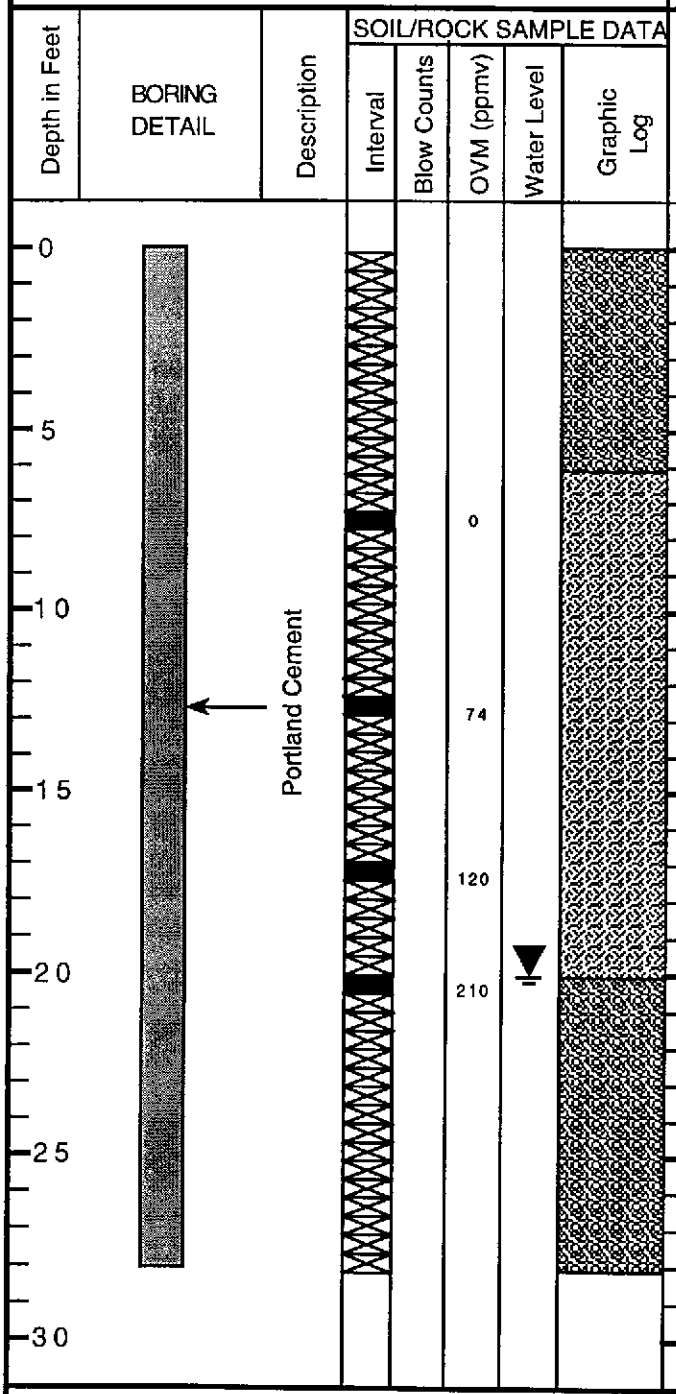


Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Clayey SILT (ML); dark brown; moist; stiff; 60% silt; 25% clay; 5% fine to coarse sand; low plasticity; low estimated K; no odor
5	Sandy SILT (ML); light brown; moist; siff; 70% silt; 20% fine to coarse sand; 10% clay; low plasticity; low estimated K; no odor
10	Clayey SILT (ML); light to dark brown; moist; stiff; 70% silt; 20% clay; 10% fine to coarse sand; low plasticity; low estimated K; no odor
15	
20	wet; moderate hydrocarbon odor
25	moderate hydrocarbon odor
30	moderate hydrocarbon odor
	End of boring at 30.0'

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		SOIL BORNG: BH-D
Project Name: Compare Prices	Project Location: 2844 Mountain Blvd., Oakland, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2" diameter Macrocore
Logged By: Ian T. Reed	Date Drilled: January 7, 2000	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 20.0'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 28.0'	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	Clayey SILT (ML); dark brown; dry; stiff; 70% silt; 20% clay; 10% fine to coarse sand; trace gravel; low plasticity; low estimated K; no odor
5	
10	Sandy SILT (ML); light to dark brown; dry; stiff; 60% silt; 40% fine to coarse sand; non-plastic; low estimated K; no odor
15	olive gray; moderate hydrocarbon odor
20	moderate hydrocarbon odor Clayey SILT (ML); olive gray; wet; stiff; 70% silt; 30% clay; trace gravel; low plasticity; medium estimated K; moderate hydrocrabon odor
25	
30	End of boring at 28.0'

AQUA SCIENCE ENGINEERS, INC.

APPENDIX C

Certified Analytical Report
and
Chain of Custody Documentation
Soil Samples

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

Attn.: Mr. Ian T. Reed

Project: 3538
Compare Prices-Shahnazi

Site: 2844 Mountain Boulevard, Oakland

Dear Mr. Reed,

Attached is our report for your samples received on Monday January 10, 2000
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 February 9, 2000 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. You can also contact me via email. My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

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 #: 3538

Project: Compare Prices-Shahnazi

Site: 2844 Mountain Boulevard, Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BH-B-21`	Soil	01/07/2000 12:00	2
BH-C-20`	Soil	01/07/2000 13:20	3
BH-D-19`	Soil	01/07/2000 14:00	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0116

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-B-21**	Lab Sample ID:	**2000-01-0116-002**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/14/2000 21:31
Sampled:	01/07/2000 12:00	QC-Batch:	2000/01/14-01.03
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	01/14/2000 21:31	
Benzene	ND	0.0050	mg/Kg	1.00	01/14/2000 21:31	
Toluene	ND	0.0050	mg/Kg	1.00	01/14/2000 21:31	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	01/14/2000 21:31	
Xylene(s)	ND	0.0050	mg/Kg	1.00	01/14/2000 21:31	
MTBE	ND	0.0050	mg/Kg	1.00	01/14/2000 21:31	
Surrogate(s)						
Trifluorotoluene	91.3	53-125	%	1.00	01/14/2000 21:31	
Trifluorotoluene-FID	101.5	53-125	%	1.00	01/14/2000 21:31	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0116

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-C-20`**	Lab Sample ID:	**2000-01-0116-003**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/17/2000 15:55
Sampled:	01/07/2000 13:20	QC-Batch:	2000/01/17-01.03
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	01/17/2000 15:55	
Benzene	ND	0.0050	mg/Kg	1.00	01/17/2000 15:55	
Toluene	ND	0.0050	mg/Kg	1.00	01/17/2000 15:55	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	01/17/2000 15:55	
Xylene(s)	ND	0.0050	mg/Kg	1.00	01/17/2000 15:55	
MTBE	0.20	0.0050	mg/Kg	1.00	01/17/2000 15:55	
Surrogate(s)						
4-Bromofluorobenzene	82.9	58-124	%	1.00	01/17/2000 15:55	
4-Bromofluorobenzene-FID	113.1	58-124	%	1.00	01/17/2000 15:55	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0116

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-D-19`**	Lab Sample ID:	**2000-01-0116-004**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/17/2000 10:57
Sampled:	01/07/2000 14:00	QC-Batch:	2000/01/17-01.03
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	01/17/2000 10:57	
Benzene	ND	0.0050	mg/Kg	1.00	01/17/2000 10:57	
Toluene	ND	0.0050	mg/Kg	1.00	01/17/2000 10:57	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	01/17/2000 10:57	
Xylene(s)	ND	0.0050	mg/Kg	1.00	01/17/2000 10:57	
MTBE	ND	0.0050	mg/Kg	1.00	01/17/2000 10:57	
Surrogate(s)						
Trifluorotoluene	56.8	53-125	%	1.00	01/17/2000 10:57	
4-Bromofluorobenzene-FID	69.6	58-124	%	1.00	01/17/2000 10:57	

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 | **Soil** | **QC Batch # 2000/01/14-01.03**

MB: 2000/01/14-01.03-001

Date Extracted: 01/14/2000 10:04

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	01/14/2000 10:04	
Benzene	ND	0.0050	mg/Kg	01/14/2000 10:04	
Toluene	ND	0.0050	mg/Kg	01/14/2000 10:04	
Ethyl benzene	ND	0.0050	mg/Kg	01/14/2000 10:04	
Xylene(s)	ND	0.0050	mg/Kg	01/14/2000 10:04	
MTBE	ND	0.0050	mg/Kg	01/14/2000 10:04	
Surrogate(s)					
Trifluorotoluene	105.4	53-125	%	01/14/2000 10:04	
Trifluorotoluene-FID	124.6	53-125	%	01/14/2000 10:04	

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 | **Soil** | **QC Batch # 2000/01/17-01.03**

MB: 2000/01/17-01.03-001

Date Extracted: 01/17/2000 06:36

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	01/17/2000 06:36	
Benzene	ND	0.0050	mg/Kg	01/17/2000 06:36	
Toluene	ND	0.0050	mg/Kg	01/17/2000 06:36	
Ethyl benzene	ND	0.0050	mg/Kg	01/17/2000 06:36	
Xylene(s)	ND	0.0050	mg/Kg	01/17/2000 06:36	
MTBE	ND	0.0050	mg/Kg	01/17/2000 06:36	
Surrogate(s)					
Trifluorotoluene	105.0	53-125	%	01/17/2000 06:36	
4-Bromofluorobenzene-FID	111.2	58-124	%	01/17/2000 06:36	

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) **Soil** **QC Batch # 2000/01/14-01.03**

LCS: 2000/01/14-01.03-002 Extracted: 01/14/2000 10:35 Analyzed: 01/14/2000 10:35

LCSD: 2000/01/14-01.03-003 Extracted: 01/14/2000 11:07 Analyzed: 01/14/2000 11:07

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.576	0.585	0.500	0.500	115.2	117.0	1.6	75-125	35		
Benzene	0.0927	0.0879	0.1000	0.1000	92.7	87.9	5.3	77-123	35		
Toluene	0.0919	0.0882	0.1000	0.1000	91.9	88.2	4.1	78-122	35		
Ethyl benzene	0.0780	0.0722	0.1000	0.1000	78.0	72.2	7.7	70-130	35		
Xylene(s)	0.300	0.265	0.300	0.300	100.0	88.3	12.4	75-125	35		
Surrogate(s)											
Trifluorotoluene	515	460	500	500	103.0	92.0		53-125			
4-Bromofluorobenzene-FI	586	587	500	500	117.2	117.4		58-124			

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) **Soil** **QC Batch # 2000/01/17-01.03**

LCS: 2000/01/17-01.03-002 Extracted: 01/17/2000 07:08 Analyzed: 01/17/2000 07:08

LCSD: 2000/01/17-01.03-003 Extracted: 01/17/2000 07:39 Analyzed: 01/17/2000 07:39

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.528	0.444	0.500	0.500	105.6	88.8	17.3	75-125	35		
Benzene	0.0932	0.0869	0.1000	0.1000	93.2	86.9	7.0	77-123	35		
Toluene	0.0904	0.0866	0.1000	0.1000	90.4	86.6	4.3	78-122	35		
Ethyl benzene	0.0918	0.0868	0.1000	0.1000	91.8	86.8	5.6	70-130	35		
Xylene(s)	0.275	0.259	0.300	0.300	91.7	86.3	6.1	75-125	35		
Surrogate(s)											
Trifluorotoluene	493	467	500	500	98.6	93.4		53-125			
4-Bromofluorobenzene-FI	591	590	500	500	118.2	118.0		58-124			

Gas/BTEX (Methanol Extraction)

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 #: 3538

Project: Compare Prices-Shahnazi

Site: 2844 Mountain Boulevard, Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BH-A-19	Soil	01/07/2000 11:40	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0116

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX (Methanol Extraction)

Sample ID:	**BH-A-19**	Lab Sample ID:	**2000-01-0116-001**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/14/2000 14:39
Sampled:	01/07/2000 11:40	QC-Batch:	2000/01/14-05.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	620	50	mg/Kg	5.00	01/17/2000 14:39	g
Benzene	ND	0.62	mg/Kg	1.00	01/17/2000 13:44	
Toluene	ND	0.62	mg/Kg	1.00	01/17/2000 13:44	
Ethyl benzene	3.4	0.62	mg/Kg	1.00	01/17/2000 13:44	
Xylene(s)	14	0.62	mg/Kg	1.00	01/17/2000 13:44	
MTBE	ND	0.62	mg/Kg	1.00	01/17/2000 13:44	
Surrogate(s)						
4-Bromofluorobenzene	102.9	58-124	%	1.00	01/17/2000 13:44	
4-Bromofluorobenzene-FID	NA	58-124	%	1.00	01/17/2000 14:39	sd

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX (Methanol Extraction)

Method Blank | **Soil** | **QC Batch # 2000/01/14-05.04**

MB: 2000/01/14-05.04-001

Date Extracted: 01/14/2000 13:19

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	10	mg/Kg	01/14/2000 13:19	
Benzene	ND	0.62	mg/Kg	01/14/2000 13:19	
Toluene	ND	0.62	mg/Kg	01/14/2000 13:19	
Ethyl benzene	ND	0.62	mg/Kg	01/14/2000 13:19	
Xylene(s)	ND	0.62	mg/Kg	01/14/2000 13:19	
MTBE	ND	0.62	mg/Kg	01/14/2000 13:19	
Surrogate(s)					
Trifluorotoluene	98.4	53-125	%	01/14/2000 13:19	
4-Bromofluorobenzene-FID	87.8	58-124	%	01/14/2000 13:19	

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX (Methanol Extraction)

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2000/01/14-05.04**

LCS: 2000/01/14-05.04-002 Extracted: 01/17/2000 10:46 Analyzed: 01/17/2000 10:46

LCSD: 2000/01/14-05.04-003 Extracted: 01/17/2000 11:14 Analyzed: 01/17/2000 11:14

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.723	0.721	0.625	0.625	115.7	115.4	0.3	75-125	35		
Benzene	0.117	0.117	0.125	0.125	93.6	93.6	0.0	77-123	35		
Toluene	0.119	0.118	0.125	0.125	95.2	94.4	0.8	78-122	35		
Ethyl benzene	0.116	0.116	0.125	0.125	92.8	92.8	0.0	70-130	35		
Xylene(s)	0.356	0.356	0.375	0.375	94.9	94.9	0.0	75-125	35		
Surrogate(s)											
Trifluorotoluene	454	462	500	500	90.8	92.4		53-125			
4-Bromofluorobenzene-FI	479	448	500	500	95.8	89.6		58-124			

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

Attn:Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX (Methanol Extraction)

Analyte Flags

g

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

sd

Surrogate diluted out due to the presence of non-target materials.

2000 - 01 - 0116

49881

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) Ian Reed (PHONE NO.) (925) 820-9391

PROJECT NAME Compare Prices - Shahaazi JOB NO. 3538

ADDRESS 2844 Mountain Boulevard, Oakland DATE 1/7/00

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
BH-A-19'	1/7/00	1140	Soil	1	X																		
BH-B-21'	1/7/00	1200	Soil	1	X																		
BH-C-20'	1/7/00	1320	Soil	1	X																		
BH-D-19'	1/7/00	1400	Soil	1	X																		

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) (time) Ian Reed	(signature) (time) 1338	(signature) (time) 1-10-00	(signature) (time) Denise Harrington	5-day TAT
(printed name) (date) Ian T Reed 1/9/00	(printed name) (date) 1-10-00	(printed name) (date) 1804	(printed name) (date) D. Harrington 1804	4.5°C
Company- ASE	Company-	Company-	Company- Chromalab 1/10/00	

APPENDIX D

Certified Analytical Report
and
Chain of Custody Documentation
Groundwater Samples

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

Attn.: Mr. Ian T. Reed

Project: 3538
Compare Prices-Shahnazi

Site: 2844 Mountain Boulevard, Oakland

Dear Mr. Reed,

Attached is our report for your samples received on Monday January 10, 2000
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 February 9, 2000 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. You can also contact me via email. My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

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 #: 3538

Project: Compare Prices-Shahnazi

Site: 2844 Mountain Boulevard, Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
BH-A	Water	01/07/2000	1
BH-B	Water	01/07/2000	2
BH-C	Water	01/07/2000	3
BH-D	Water	01/07/2000	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0120

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-A**	Lab Sample ID:	**2000-01-0120-001**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/15/2000 02:46
Sampled:	01/07/2000	QC-Batch:	2000/01/14-01.05
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	15000	2500	ug/L	50.00	01/15/2000 02:46	
Benzene	370	25	ug/L	50.00	01/15/2000 02:46	
Toluene	780	25	ug/L	50.00	01/15/2000 02:46	
Ethyl benzene	790	25	ug/L	50.00	01/15/2000 02:46	
Xylene(s)	4600	25	ug/L	50.00	01/15/2000 02:46	
MTBE	33	5.0	ug/L	1.00	01/12/2000 17:36	
Surrogate(s)						
Trifluorotoluene	84.9	58-124	%	1.00	01/15/2000 02:46	
4-Bromofluorobenzene-FID	86.7	50-150	%	1.00	01/15/2000 02:46	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0120

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-B**	Lab Sample ID:	**2000-01-0120-002**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/18/2000 12:11
Sampled:	01/07/2000	QC-Batch:	2000/01/18-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/L	20.00	01/18/2000 12:11	
Benzene	ND	10	ug/L	20.00	01/18/2000 12:11	
Toluene	11	10	ug/L	20.00	01/18/2000 12:11	
Ethyl benzene	ND	10	ug/L	20.00	01/18/2000 12:11	
Xylene(s)	23	10	ug/L	20.00	01/18/2000 12:11	
MTBE	660	100	ug/L	20.00	01/18/2000 12:11	
Surrogate(s)						
Trifluorotoluene	83.5	58-124	%	1.00	01/18/2000 12:11	
4-Bromofluorobenzene-FID	83.3	50-150	%	1.00	01/18/2000 12:11	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-C**	Lab Sample ID:	**2000-01-0120-003**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/18/2000 10:36
Sampled:	01/07/2000	QC-Batch:	2000/01/18-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	100	ug/L	2.00	01/18/2000 10:36	
Benzene	ND	1.0	ug/L	2.00	01/18/2000 10:36	
Toluene	ND	1.0	ug/L	2.00	01/18/2000 10:36	
Ethyl benzene	ND	1.0	ug/L	2.00	01/18/2000 10:36	
Xylene(s)	ND	1.0	ug/L	2.00	01/18/2000 10:36	
MTBE	170	10	ug/L	2.00	01/18/2000 10:36	
Surrogate(s)						
Trifluorotoluene	72.9	58-124	%	1.00	01/18/2000 10:36	
4-Bromofluorobenzene-FID	96.1	50-150	%	1.00	01/18/2000 10:36	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0120

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**BH-D**	Lab Sample ID:	**2000-01-0120-004**
Project:	3538 Compare Prices-Shahnazi	Received:	01/10/2000 18:04
Site:	2844 Mountain Boulevard, Oakland	Extracted:	01/17/2000 18:18
Sampled:	01/07/2000	QC-Batch:	2000/01/17-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	01/17/2000 18:18	
Benzene	ND	0.50	ug/L	1.00	01/17/2000 18:18	
Toluene	ND	0.50	ug/L	1.00	01/17/2000 18:18	
Ethyl benzene	ND	0.50	ug/L	1.00	01/17/2000 18:18	
Xylene(s)	ND	0.50	ug/L	1.00	01/17/2000 18:18	
MTBE	ND	5.0	ug/L	1.00	01/17/2000 18:18	
Surrogate(s)						
Trifluorotoluene	87.5	58-124	%	1.00	01/17/2000 18:18	
4-Bromofluorobenzene-FID	91.8	50-150	%	1.00	01/17/2000 18:18	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/01/12-01.01**

MB: 2000/01/12-01.01-003 | Date Extracted: 01/12/2000 13:33

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	01/12/2000 13:33	
Benzene	ND	0.5	ug/L	01/12/2000 13:33	
Toluene	ND	0.5	ug/L	01/12/2000 13:33	
Ethyl benzene	ND	0.5	ug/L	01/12/2000 13:33	
Xylene(s)	ND	0.5	ug/L	01/12/2000 13:33	
MTBE	ND	5.0	ug/L	01/12/2000 13:33	
Surrogate(s)					
Trifluorotoluene	115.6	58-124	%	01/12/2000 13:33	
4-Bromofluorobenzene-FID	52.4	50-150	%	01/12/2000 13:33	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank	**Water**	**QC Batch # 2000/01/14-01.05**
MB: 2000/01/14-01.05-001		Date Extracted: 01/14/2000 10:22

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	01/14/2000 10:22	
Benzene	ND	0.5	ug/L	01/14/2000 10:22	
Toluene	ND	0.5	ug/L	01/14/2000 10:22	
Ethyl benzene	ND	0.5	ug/L	01/14/2000 10:22	
Xylene(s)	ND	0.5	ug/L	01/14/2000 10:22	
Surrogate(s)					
Trifluorotoluene	64.2	58-124	%	01/14/2000 10:22	
4-Bromofluorobenzene-FID	66.6	50-150	%	01/14/2000 10:22	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/01/17-01.04**

MB: 2000/01/17-01.04-001

Date Extracted: 01/17/2000 09:42

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	01/17/2000 09:42	
Benzene	ND	0.5	ug/L	01/17/2000 09:42	
Toluene	ND	0.5	ug/L	01/17/2000 09:42	
Ethyl benzene	ND	0.5	ug/L	01/17/2000 09:42	
Xylene(s)	ND	0.5	ug/L	01/17/2000 09:42	
MTBE	ND	5.0	ug/L	01/17/2000 09:42	
Surrogate(s)					
Trifluorotoluene	100.0	58-124	%	01/17/2000 09:42	
4-Bromofluorobenzene-FID	88.8	50-150	%	01/17/2000 09:42	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/01/18-01.04**

MB: 2000/01/18-01.04-001

Date Extracted: 01/18/2000 09:27

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	01/18/2000 09:27	
Benzene	ND	0.5	ug/L	01/18/2000 09:27	
Toluene	ND	0.5	ug/L	01/18/2000 09:27	
Ethyl benzene	ND	0.5	ug/L	01/18/2000 09:27	
Xylene(s)	ND	0.5	ug/L	01/18/2000 09:27	
MTBE	ND	5.0	ug/L	01/18/2000 09:27	
Surrogate(s)					
Trifluorotoluene	97.6	58-124	%	01/18/2000 09:27	
4-Bromofluorobenzene-FID	99.6	50-150	%	01/18/2000 09:27	

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/12-01.01**

LCS: 2000/01/12-01.01-001 Extracted: 01/12/2000 10:40 Analyzed: 01/12/2000 10:40

LCSD: 2000/01/12-01.01-002 Extracted: 01/12/2000 11:08 Analyzed: 01/12/2000 11:08

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	528	544	500	500	105.6	108.8	3.0	75-125	20		
Benzene	117	97.8	100.0	100.0	117.0	97.8	17.9	77-123	20		
Toluene	120	102	100.0	100.0	120.0	102.0	16.2	78-122	20		
Ethyl benzene	124	102	100.0	100.0	124.0	102.0	19.5	70-130	20		
Xylene(s)	354	302	300	300	118.0	100.7	15.8	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-FI	354	373	500	500	70.8	74.6		50-150			

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/14-01.05**

LCS: 2000/01/14-01.05-002 Extracted: 01/14/2000 10:54 Analyzed: 01/14/2000 10:54

LCSD: 2000/01/14-01.05-003 Extracted: 01/14/2000 11:27 Analyzed: 01/14/2000 11:27

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	519	504	500	500	103.8	100.8	2.9	75-125	20		
Benzene	107	104	100.0	100.0	107.0	104.0	2.8	77-123	20		
Toluene	102	97.2	100.0	100.0	102.0	97.2	4.8	78-122	20		
Ethyl benzene	104	97.6	100.0	100.0	104.0	97.6	6.3	70-130	20		
Xylene(s)	302	287	300	300	100.7	95.7	5.1	75-125	20		
Surrogate(s)											
Trifluorotoluene	527	483	500	500	105.4	96.6		58-124			
4-Bromofluorobenzene-FI	434	429	500	500	86.8	85.8		50-150			

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/17-01.04**

LCS: 2000/01/17-01.04-002 Extracted: 01/17/2000 07:16 Analyzed: 01/17/2000 07:16

LCSD: 2000/01/17-01.04-003 Extracted: 01/17/2000 07:44 Analyzed: 01/17/2000 07:44

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	522	589	500	500	104.4	117.8	12.1	75-125	20		
Benzene	105	93.6	100.0	100.0	105.0	93.6	11.5	77-123	20		
Toluene	103	92.7	100.0	100.0	103.0	92.7	10.5	78-122	20		
Ethyl benzene	101	90.3	100.0	100.0	101.0	90.3	11.2	70-130	20		
Xylene(s)	298	270	300	300	99.3	90.0	9.8	75-125	20		
Surrogate(s)											
Trifluorotoluene	484	414	500	500	96.8	82.8		58-124			
4-Bromofluorobenzene-FI	435	427	500	500	87.0	85.4		50-150			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-01-0120

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/18-01.04**

LCS: 2000/01/18-01.04-002 Extracted: 01/18/2000 05:50 Analyzed: 01/18/2000 05:50

LCSD: 2000/01/18-01.04-003 Extracted: 01/18/2000 06:17 Analyzed: 01/18/2000 06:17

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	519	504	500	500	103.8	100.8	2.9	75-125	20		
Benzene	99.8	89.7	100.0	100.0	99.8	89.7	10.7	77-123	20		
Toluene	98.8	88.5	100.0	100.0	98.8	88.5	11.0	78-122	20		
Ethyl benzene	97.7	86.7	100.0	100.0	97.7	86.7	11.9	70-130	20		
Xylene(s)	289	260	300	300	96.3	86.7	10.5	75-125	20		
Surrogate(s)											
Trifluorotoluene	441	400	500	500	88.2	80.0		58-124			
4-Bromofluorobenzene-FI	458	458	500	500	91.6	91.6		50-150			

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 01/18/2000 15:58

2000-01-0120

49882

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) Ian T Reed (PHONE NO.) (925)820-9391

PROJECT NAME Compare Prices - Shahnaei JOB NO. 3538

ADDRESS 2844 Mountain Boulevard, Oakland DATE 1/7/00

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
BH-A	1/7/00		water	3	X																	
BH-B	1/7/00		water	3	X																	
BH-C	1/7/00		water	3	X																	
BH-D	1/7/00		water	3	X																	

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Ian T Reed (signature) (time)	(signature) (time) 1358	(signature) (time) 1804	Denise Harrington (signature) (time)	
Ian T Reed 1/7/00 (printed name) (date)	B Morris 1-10-00 (printed name) (date)	B Morris (printed name) (date) 1/10/00	D. Harrington (printed name) (date) 1804	5-day TAT
Company- ASE	Company- Arnold	Company- Arnold	Company- Chromalab 1/10/00	4.5°C