aqua science engineers inc.

March 5, 1999

REPORT
of
SOIL AND GROUNDWATER ASSESSMENT
ASE JOB NO. 3451
at
Liquid Sugar, Inc.
1275 66th Street
Emeryville, California

Prepared for:
Richards and Sterling
6598 Hollis Street
Emeryville, CA 94608

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

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1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil and groundwater assessment at the Liquid Sugar, Inc. (LSI) property located at 1275 66th Street in Emeryville, California (Figures 1 and 2). The proposed site assessment activities were initiated by Mr. Jon Boshard of Richards and Sterling, a potential buyer of the site, to determine the extent of soil and groundwater contamination beneath the site prior to the potential purchase.

2.0 BACKGROUND

2.1 Site History

The subject site is currently used for the storage of bulk liquid sugar products. Prior to LSI's ownership of the property, a company called Mohawk Petroleum occupied the site and stored bulk fuel on the western portion of the site. Please see the November 9, 1998 Phase I Environmental Site Assessment prepared by GRIBI Associates for details on the history of the site.

2.2 Geology and Groundwater Occurrence

The site lies in the East Bay Plain groundwater basin. The East Bay Plain groundwater basin is generally characterized by a very thick alluvial sequence overlying Franciscan bedrock. The basin extends from the Oakland/Berkeley Hills in the east to the San Francisco Bay to the west. Sediments in the basin are predominantly silt and clay with localized areas of sand. Groundwater in the basin generally flows from the hills in the east to the bay in the west. The groundwater flow direction at the neighboring Oliver Rubber Company property is to the southwest.

2.3 Previous Environmental Assessment

In November 1990, one 1,000-gallon gasoline underground storage tank (UST) and one 10,000-gallon diesel UST were removed from the site. Up to 10,000 parts per million (ppm) total petroleum hydrocarbons as diesel (TPH-D), 3,400 ppm total petroleum hydrocarbons as gasoline (TPH-G) and 33 ppm benzene were detected in soil samples collected from the UST excavation.

In September 1991, soil previously removed from the UST excavation was disposed of at the Vasco Road Sanitary Landfill in Livermore, California.

In November 1991, Century West Engineering drilled eight soil borings around the former UST excavation. Up to 610 ppm TPH-G, 1,500 ppm TPH-D, 1.2 ppm benzene, 0.31 ppm toluene, 2.5 ppm ethylbenzene and 4.7 ppm total xylenes were detected in soil samples collected from the borings. The highest TPH-G and TPH-D concentrations were detected in borings TB-2 and TB-8, southwest of the former USTs; however, the highest benzene concentrations were detected in borings TB-4 and TB-5 located east of the former USTs.

In April 1993, Century West Engineering installed groundwater monitoring wells MW-1 and MW-2 southwest of the former USTs. Soil samples collected at the time of the well installation contained up to 670 ppm TPH-G, 940 ppm TPH-D, 0.74 ppm benzene, 0.94 ppm toluene, 1.6 ppm ethylbenzene and 3.4 ppm total xylenes. Up to 1,100 parts per billion (ppb) TPH-G, 2,100 ppb TPH-D, 32 ppb benzene, 6.5 ppb toluene, 8.2 ppb ethylbenzene and 13 ppm total xylenes were detected in groundwater samples collected from the monitoring wells.

Groundwater samples have been collected periodically from the groundwater monitoring wells starting in July 1993 and most recently in November 1998. The highest concentrations detected in groundwater samples collected from these wells to date were 2,300 ppb TPH-G, 9,100 ppb TPH-D, 320 ppb benzene, 21 ppb toluene, 300 ppb ethylbenzene and 130 ppb total xylenes. During the most recent groundwater sampling in November 1998, up to 1,200 ppb TPH-G, 9,100 ppb TPH-D, 6.5 ppb benzene, 6.4 ppb toluene, 5.9 ppb ethylbenzene and 1.9 ppb total xylenes were detected in groundwater samples collected from the monitoring wells.

3.0 SCOPE OF WORK (SOW)

Based on the site background and history, ASE's SOW was as follows:

1) Prepare a health and safety plan for the site.

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

3) Using a Geoprobe and/or hand auger, drill two soil borings to a depth not to exceed 4-feet below ground surface (bgs) in the warehouse area which used to contain a truck repair shop. One of these borings will be located west of the spot which may have been a pit. The other boring will be at the location of the largest floor crack.

4) Analyze one soil sample collected from each of the borings described in task 3 at a CAL-EPA certified analytical laboratory for TPH-G by EPA Method 5030/8015M, TPH-D and motor oil (TPH-MO) by EPA Method 3510/8015M, benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) by EPA Method 8020, methyl tertiary butyl ether (MTBE) by EPA Method 8020, and halogenated volatile organic compounds (HVOCs) by EPA Method 8010.

5) Drill three soil borings in the boiler room, which is also the location of the former Mohawk Petroleum aboveground storage tanks (ASTs). One boring will be drilled near the air compressors, one will be drilled in the northern portion of the room and the third will be drilled as far west as possible. The boring to the west will be drilled to the water table and both soil and groundwater samples will be collected from this boring. The other two borings will be drilled to 4-feet bgs for the collection of soil samples only.

6) Analyze one soil sample collected from each of the three borings described in task 5 at a CAL-EPA certified analytical laboratory for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3550/8015M, and BTEX and MTBE by EPA Method 8020.

7) Analyze the groundwater sample collected from the boring to the west in the boiler room (described in task 5) at a CAL-EPA certified analytical laboratory for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3510/8015M, and BTEX and MTBE by EPA Method 8020.

8) Drill two soil borings east of the former USTs where high benzene concentrations were previously detected in soil and collect soil and groundwater samples from the borings for analysis.

9) Analyze one soil and one groundwater sample collected from each of the borings described in task 8 at a CAL-EPA certified analytical laboratory for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3550/8015M, and BTEX and MTBE by EPA Method 8020.

10) Drill three soil borings in and around the location of the maintenance shop. One boring will be drilled at the location of the inside floor drain to a depth of 4-feet bgs for the collection of a soil sample, one boring will be drilled to a depth of 4-feet bgs in a location behind the western corner of the shop (outside) where staining was observed for

the collection of a soil sample. Another boring will be drilled to the water table for the collection of soil and groundwater samples near the drain just outside the northern corner of the shop.

11) Analyze one soil sample from each of the three borings described in task 10 at a CAL-EPA certified analytical laboratory for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3510/8015M, BTEX and MTBE by EPA Method 8020, and HVOCs by EPA Method 8010

12) Analyze one groundwater sample collected from the boring near the outside floor drain near the northern corner of the shop (described in task 10) at a CAL-EPA certified analytical laboratory for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3510/8015M, BTEX and MTBE by EPA Method 8020, and HVOCs by EPA Method 8010.

13) Prepare a report presenting the results of the soil and groundwater assessment.

4.0 DRILLING SOIL BORINGS AND COLLECTING SAMPLES

4.1 Soil Boring Drilling and Soil Sample Collection

Prior to drilling, ASE obtained Alameda County Public Works Agency (ACPWA) drilling permit # 99WR049 (Appendix A).

On February 10 and 11, 1999, Vironex of Hayward, California drilled soil borings B-1, B-2 and B-4 through B-10 at the site using a Geoprobe hydraulic sampling rig (Figure 2). Boring B-3 was drilled with a hand auger. The drilling was directed by ASE senior geologist Robert E. Kitay, R.G. Drilling equipment was cleaned with a TSP solution between sampling intervals and between borings to prevent potential cross-contamination.

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 and cooled in an ice chest for delivery 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 (USCS).

4.2 Groundwater Sample Collection

Four of the borings (B-1, B-6, B-7 and B-10) were advanced into groundwater for collection of groundwater samples. Groundwater samples were removed from the borings with a pre-cleaned bailer. The groundwater samples to be analyzed for volatile compounds were contained in 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid, and sealed without headspace. The samples to be analyzed for TPH-D and TPH-MO were contained in 1-liter amber glass containers. Each sample was labeled and cooled in an ice chest with wet ice for delivery to Chromalab under chain of custody.

4.3 Site Specific Geology and Hydrogeology

Sediments encountered in the soil borings consisted of various discontinuous layers of silty clay from beneath the concrete surface to 6.5-feet bgs, sandy silt from 6.5-feet bgs to 12-feet bgs and clayey silt from 12-feet bgs to the total depth explored of 24-feet bgs. Sediments appeared to be completely saturated as shallow as 4-feet bgs; however, due to low permeability sediments, it generally took a long period of time for enough groundwater to accumulate in the borings to allow for groundwater collection. Boring logs are presented as Appendix B.

5.0 ANALYTICAL RESULTS FOR SOIL

One soil sample from each boring was analyzed by Chromalab, Inc. of Pleasanton, California, a state certified environmental laboratory (ELAP #1094), for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3510/8015, and BTEX and MTBE by EPA Method 8020. The soil samples analyzed from borings B-1, B-2 and B-3 near the maintenance shop and borings B-4 and B-5 near the former truck maintenance area (currently a warehouse) were also analyzed for HVOCs by EPA Method 8010. The analytical results for soil are tabulated in Tables One and Two, 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/ Sample Depth	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
B-1 - 3.0'	< 1.0[1]	**5.2**[2]	< 50	**0.019**	**0.0083**	< 0.005	**0.0096**	< 0.005
B-2 – 3.5'	< 1.0	**430**[2]	**2,000**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
B-3 – 3.5'	< 1.0	**1.9**[2]	< 50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
B-4 – 3.5'	< 1.0	< 1.0	< 50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
B-5 – 3.5'	< 1.0	< 1.0	< 50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
B-6 – 7.5'	< 1.0[3]	< 1.0	< 50	**0.13**	**0.062**	**0.026**	**0.14**	< 0.005
B-7 – 7.5'	< 10[4]	**98**[2]	< 50	< 0.62	< 0.62	**0.76**	< 0.62	< 0.62
B-8 – 3.5'	< 1.0[5]	**11**[2]	< 50	**0.086**	**0.014**	< 0.011	**0.010**	< 0.005
B-9 – 3.0'	< 1.0[6]	**670**[7]	< 250	**0.009**	< 0.005	**0.0080**	**0.047**	< 0.005
B-10 – 3.5'	< 1.2[8]	**45**[2]	< 50	**0.0066**	**0.0076**	**0.019**	**0.15**	< 0.005
USEPA PRG	NE	NE	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.

1 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 1.5 ppm.
2 Hydrocarbons do not match a diesel standard.
3 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 34 ppm.
4 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 79 ppm.
5 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 2.8 ppm.
6 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 18 ppm.
7 Hydrocarbons have characteristics of weathered/aged diesel.
8 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 2.5 ppm.

USEPA PRG is the United States Environmental Protection Agency Region IX preliminary remediation goal for residential soil.

USEPA PRG has not been established.

TABLE TWO
Summary of Chemical Analysis of **SOIL** Samples
Halogenated Volatile Organic Compounds
All results are in **parts per million**

Boring	Depth	All HVOCs
B-1	3.0'	< 0.005 - < 0.05
B-2	3.5'	< 0.005 - < 0.05
B-3	3.5'	< 0.005 - < 0.05
B-4	3.5'	< 0.005 - < 0.05
B-5	3.5'	< 0.005 - < 0.05
USEPA PRG		Varies

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

USEPA PRG is the United States Environmental Protection Agency Region IX preliminary remediation goal for residential soil.

The soil sample analyzed from boring B-2, in the maintenance shop, contained moderate concentrations of TPH-D and TPH-MO at 430 ppm and 2,000 ppm, respectively. The soil sample analyzed from boring B-9, in the boiler room, which is the location of the former Mohawk Petroleum bulk storage tanks, contained a moderate TPH-D concentration of 670 ppm. None of the other soil samples analyzed contained TPH-D at concentrations over 100 ppm, and no TPH-MO was detected in soil samples analyzed other than boring B-2.

Relatively low BTEX concentrations were detected in soil samples collected from boring B-1 and borings B-6 through B-10. None of the BTEX concentrations detected exceeded United States Environmental Protection Agency (USEPA) Region IX preliminary remediation goals (PRGs) for residential soil. No BTEX was detected in soil samples analyzed from borings B-2 through B-5. No HVOCs were detected in any of the samples in which they were analyzed.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by Chromalab for TPH-G by EPA Method 5030/8015M, TPH-D and TPH-MO by EPA Method 3510/8015M, and BTEX and MTBE by EPA Method 8020. The groundwater samples collected from boring B-1 was also analyzed for HVOCs by EPA Method 8010. The analytical results are tabulated in Tables Three and Four, and the certified analytical report and chain of custody forms are included in Appendix C.

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

Boring	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE
B-1	< 1,000[1]	**120,000**	< 5,000	**2,400**	< 10	**280**	**85**	< 100
B-6	< 50[4]	**2,700**[2]	**680**	**27**	**11**	**3.5**	**5.3**	< 5.0
B-7	< 1,000[5]	**2,000**[3]	< 500	**400**	**35**	**240**	**270**	< 100
B-10	< 5,000[6]	**350,000**[2]	< 10,000	< 50	< 50	< 50	< 50	< 500
DTSC MCL	NE	NE	NE	1.0	150	680	1,750	35*

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

1 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 16,000 ppb.
2 Hydrocarbons have characteristics of weathered/aged diesel.
3 Hydrocarbons do not match a diesel standard.
4 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 2,100 ppb.
5 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 4,600 ppb.
6 Hydrocarbons uncharacteristic of gasoline detected in gasoline range at 200,000 ppb.

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

NE = DTSC MCL has not been established.

* = DTSC interim action level for drinking water; MCL not established.

TABLE FOUR

Summary of Chemical Analysis of **GROUNDWATER** Samples
Halogenated Volatile Organic Compounds
All results are in **parts per billion**

Boring	All HVOCs
B-1	< 0.5 - < 5.0
DTSC MCL	Varies

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

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

High TPH-D concentrations were detected in groundwater samples collected from boring B-1, near a drain outside the maintenance shop, at 120,000 ppb and boring B-10, in the boiler room, at 350,000 ppb. Moderate TPH-D concentrations were detected in groundwater samples collected from borings B-6 and B-7 at 2,700 ppb and 2,000 ppb, respectively. Although no TPH-G was detected, hydrocarbons were found in the gasoline range in groundwater samples collected from all four borings. Although some of these hydrocarbons are probably related to overlap of diesel in the gasoline range, the presence of BTEX without MTBE suggest the presence of old, degraded and weathered gasoline.

The groundwater sample collected from boring B-1 contained a high benzene concentration of 2,400 ppb. Benzene was also detected in groundwater samples collected from borings B-6 and B-7 at 27 ppb and 400 ppb, respectively. These benzene concentrations exceed the California Department of Toxic Substances Control (DTSC) maximum contaminant level (MCL) for drinking water of 1 ppb. It is also possible that these concentrations, particularly the benzene concentration of 2,400 ppb in the groundwater sample collected from boring B-1, may also exceed risk based cleanup goals for both residential and commercial property.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Soil samples analyzed from borings in the maintenance shop and boiler room, which is the location of the former Mohawk Petroleum bulk storage tanks, contained moderate concentrations of TPH-D and TPH-MO at concentrations up to 2,000 ppm. No BTEX were detected in any of the soil samples at concentrations exceeding USEPA PRGs, and no HVOCs or MTBE were detected in any of the soil samples where they were analyzed.

High TPH-D concentrations were also detected in groundwater samples collected from boring B-1, near a drain outside the maintenance shop, at 120,000 ppb and boring B-10, in the boiler room, at 350,000 ppb. Moderate TPH-D concentrations were detected in groundwater samples collected from borings B-6 and B-7 at 2,700 ppb and 2,000 ppb, respectively.

In general, heavy hydrocarbon concentrations such as TPH-D and TPH-MO do not require remediation since they do not present a significant threat to human health. Regulatory agencies look at cases with diesel and oil contamination on a case by case basis, and although ASE feels it unlikely that remediation will be required at these concentrations, it is possible that additional investigation may be required prior to closing this case. ASE can not rule out the possibility that remediation may be required in order to obtain case closure. It is also important to be aware that if excavating or grading takes place at the site which will disturb subsurface soils, this soil may require off-site disposal at a facility licensed to accept contaminated soil.

The groundwater sample collected from boring B-1 contained a high benzene concentration of 2,400 ppb. Benzene was also detected in groundwater samples collected from borings B-6 and B-7 at 27 ppb and 400 ppb, respectively. These benzene concentrations are the highest historical benzene concentrations to be detected at the site to date. These benzene concentrations exceed the DTSC MCL for drinking water of 1 ppb, and may also exceed risk based cleanup goals for both residential and commercial property. The elevated benzene concentration detected in boring B-1 is probably related to the former gasoline UST at the site, but it is also possible that it may be related to a spill near the drain or some other source at the site.

It is ASE's opinion that some additional soil and groundwater assessment activities will be required at the site in order to obtain case closure including the installation of additional groundwater monitoring wells, at

least one additional year of groundwater monitoring, and a human health risk assessment. It is unknown at this time whether groundwater remediation will be required at the site.

ASE has contacted Ms. Susan Hugo of the Alameda County Health Care Services Agency (ACHCSA), the lead regulatory agency for this site, regarding the status of this case. She did confirm that this is an open case with her agency, but she was not aware of any recent environmental activities. She also stated that no discussions regarding case closure have taken place to date. ASE recommends that a copy of this report be forwarded to her agency as well as the California Regional Water Quality Control Board, San Francisco Bay Region in order to receive regulatory guidance regarding the need for future environmental activities required to receive case closure.

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.

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

Attachments: Figures 1 and 2
Appendices A through C

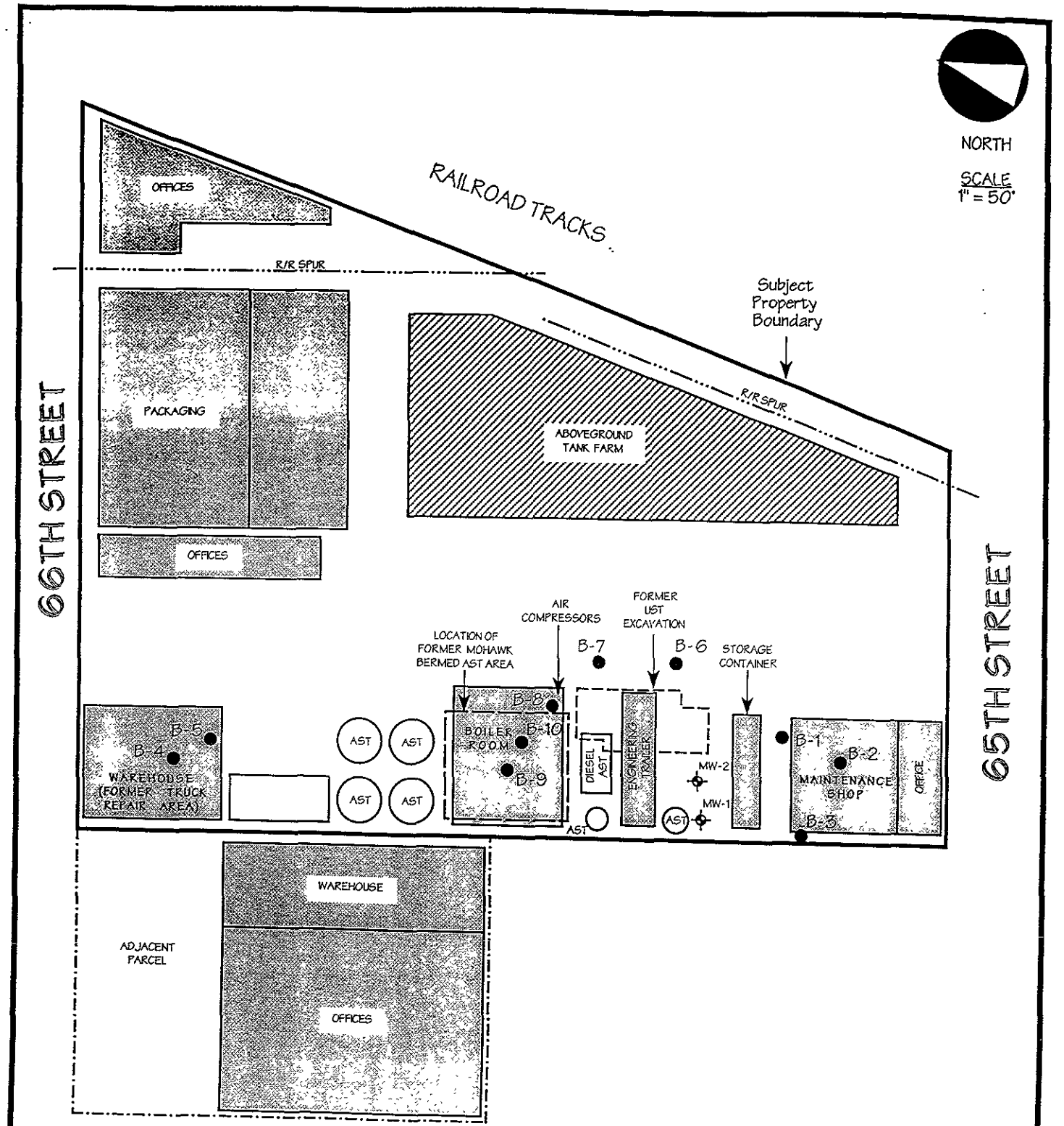
FIGURES

SITE LOCATION MAP

LIQUID SUGARS, INC. FACILITY
EMERYVILLE, CALIFORNIA

BASE: USGS, OAKLAND WEST, 7.5 MINUTE SERIES QUADRANGLE (1980)

AQUA SCIENCE ENGINEERS, INC. | Figure 1



LEGEND

MW-2 — EXISTING MONITORING WELL

B-1 — SOIL BORING DRILLED FOR THIS ASSESSMENT

SOIL BORING LOCATION MAP

LIQUID SUGARS, INC. FACILITY
EMERYVILLE, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Drilling Permit

ALAMEDA COUNTY PUBLIC WORKS AGENCY
WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-6262
(510) 670-5268 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Liquid Energy Inc.
1335 - 66th Street
Emeryville, CA

California Coordinate Source ____ Accuracy = ____ ft.
COC ____ ft. CCE ____ ft.
ASN ____

CLIENT
Name Richards & Sterling
Address 6599 Willis Street Phone 510-596-2345
City Emeryville, CA Zip 94608

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	Geoprobe & Hand Auger		

DRILLER'S LICENSE NO. C-57 498200

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

GEOTECHNICAL PROJECTS
Number of Borings 10
Hole Diameter 2 in. Maximum
Depth 25 ft.

ESTIMATED STARTING DATE 2-10-99
ESTIMATED COMPLETION DATE 2-11-99

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

APPLICANT'S SIGNATURE Robt C. Kitay DATE 2-5-99

FOR OFFICE USE

PERMIT NUMBER 99WR 049
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 cases of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

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

F. WELL DESTRUCTION
See attached

G. SPECIAL CONDITIONS

APPROVED Andrea Godfrey DATE 2/8/99

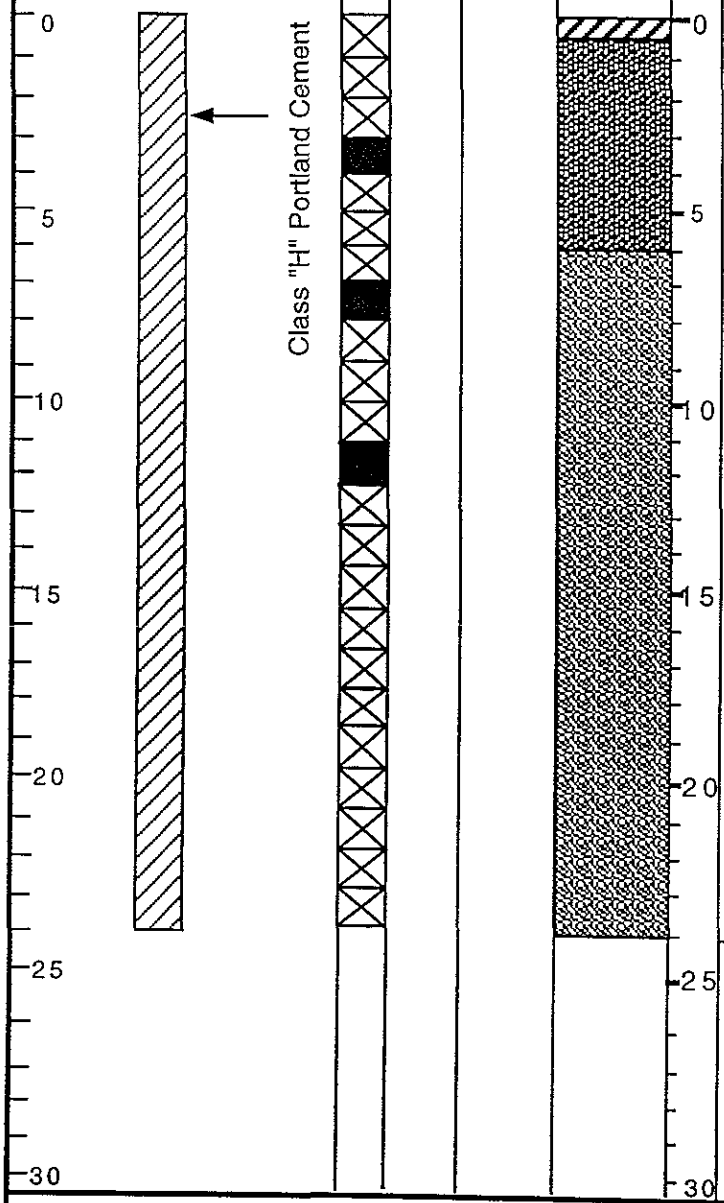
** TOTAL PAGE.02 **

APPENDIX B

Boring Logs

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-1
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

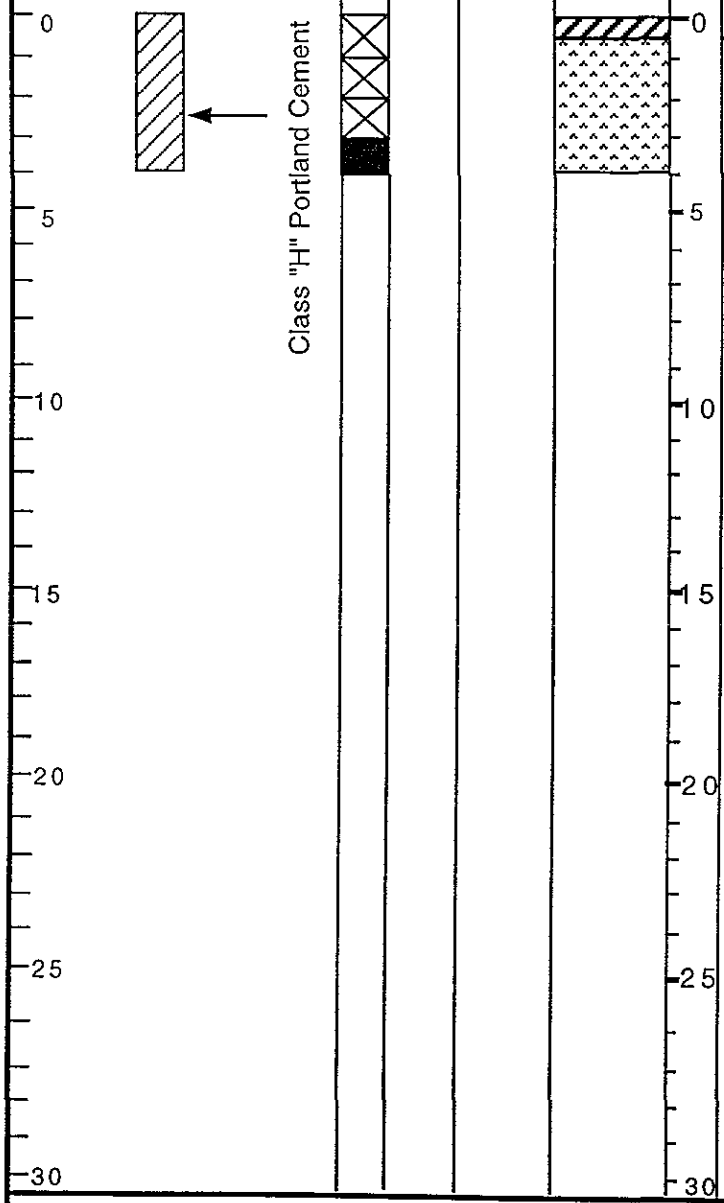
WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 24.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler



Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Concrete
	Clayey SILT (MH); black; soft; damp; 70% silt; 20% clay; 10% fine sand; high plasticity; low estimated K; moderate hydrocarbon odor
5	
	Sandy SILT (ML); grey brown; dense; damp; 60% silt; 30% fine to coarse sand; 10% clay; non-plastic; low estimated K; moderate hydrocarbon odor
10	
15	
20	
25	End of boring at 24'
30	

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-2
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

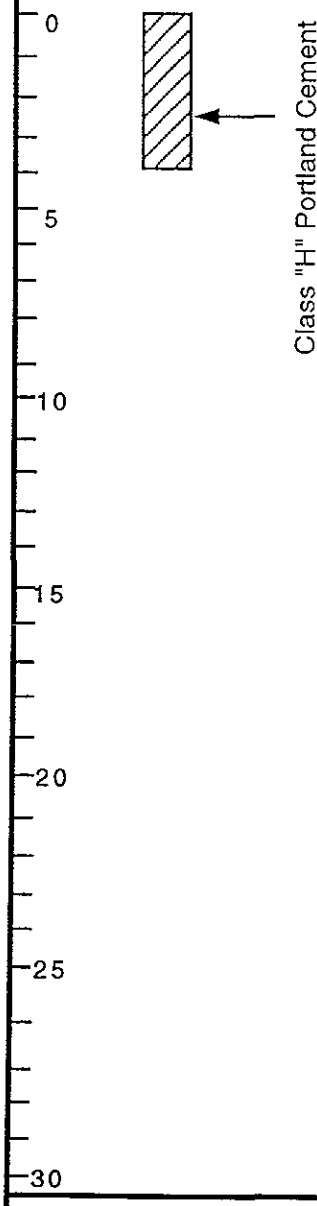
WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 4.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler

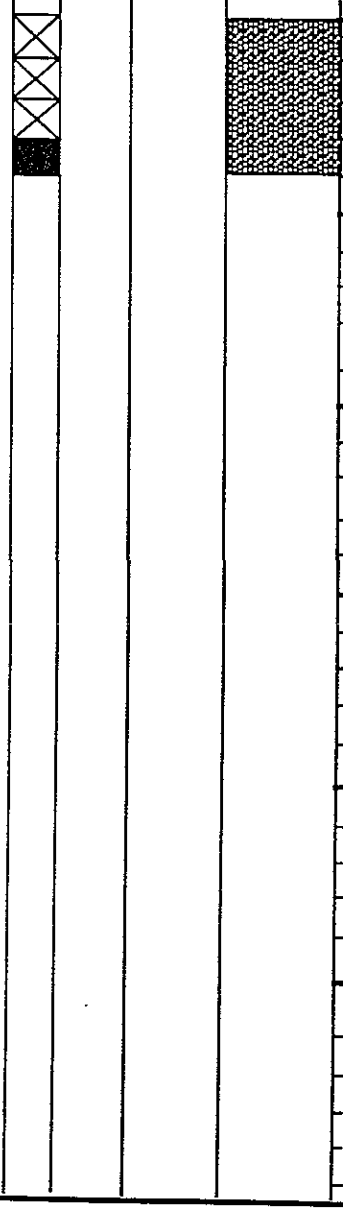


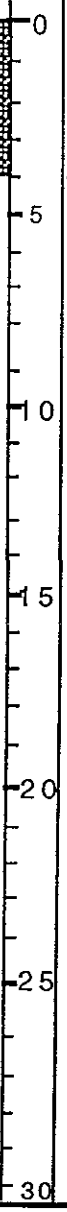
Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Concrete
	Gravely SAND (SW); black; medium dense; damp; 50% medium to course sand; 40% subangular to subrounded pebbles to 0.8" diameter; non-plastic; medium estimated K; slight hydrocarbon odor
5	End of boring at 4'
10	
15	
20	
25	
30	

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-3
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Aqua Science Engineers, Inc.	Type of Rig: Hand Auger	
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 4'	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 4'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: NA







DESCRIPTION OF LITHOLOGY

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

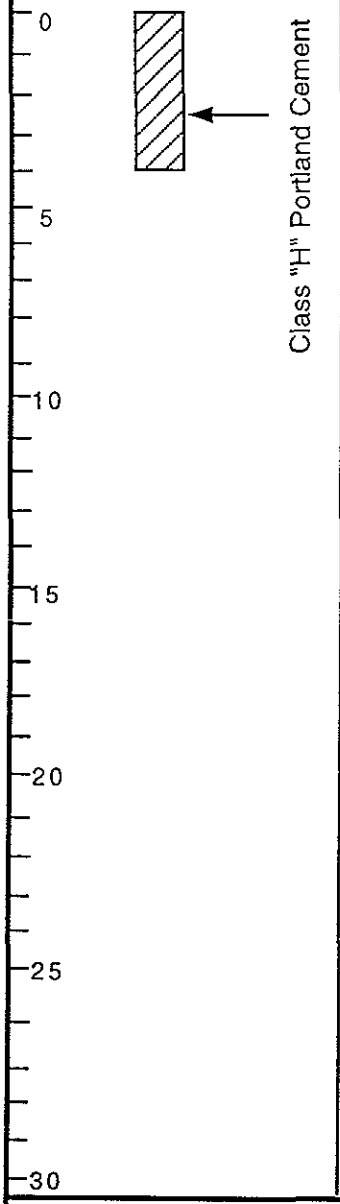
Clayey SILT (MH); black; soft; moist; 70% silt; 20% clay; 10% fine sand; high plasticity; low estimated K; faint hydrocarbon odor

End of boring at 4'

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-4
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA

Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 4.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler



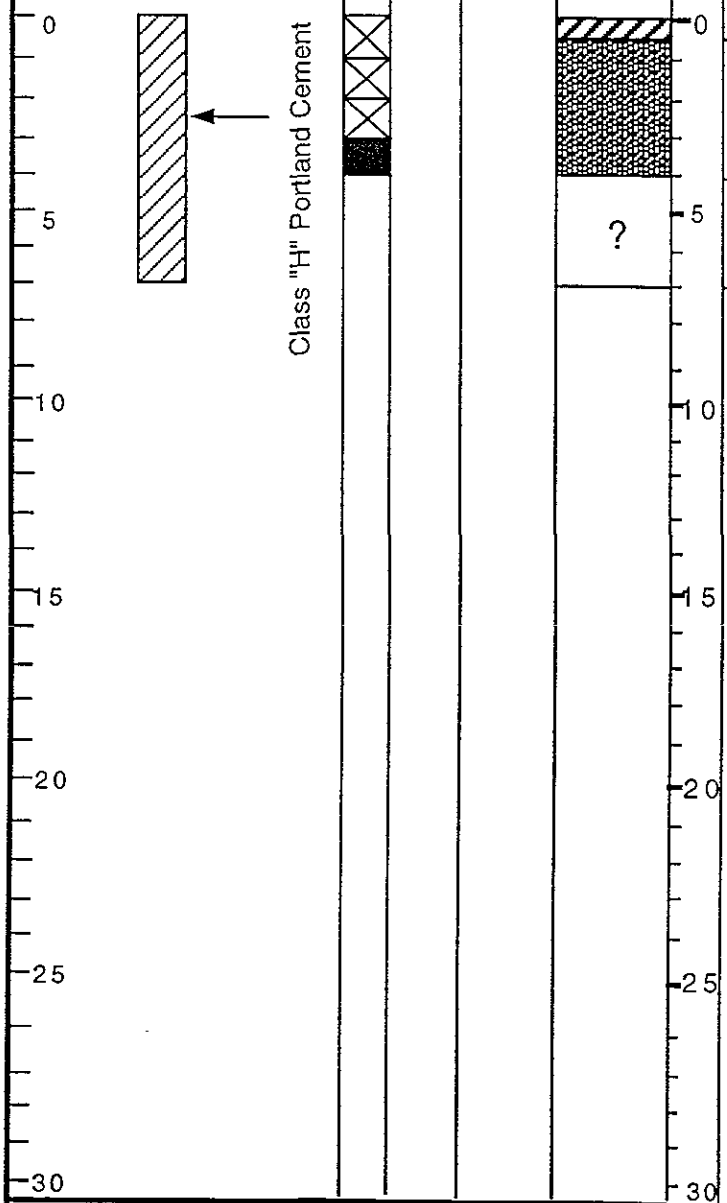
SOIL/ROCK SAMPLE DATA

Interval	Water Level	OVM (ppmv)	Graphic Log

Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Concrete
	Clayey SILT (MH); black; soft; wet; 80% silt; 20% clay; high plasticity; low estimated K; no odor
5	End of boring at 4'
10	
15	
20	
25	
30	

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-5
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 7.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler



DESCRIPTION OF LITHOLOGY

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

0 — Concrete

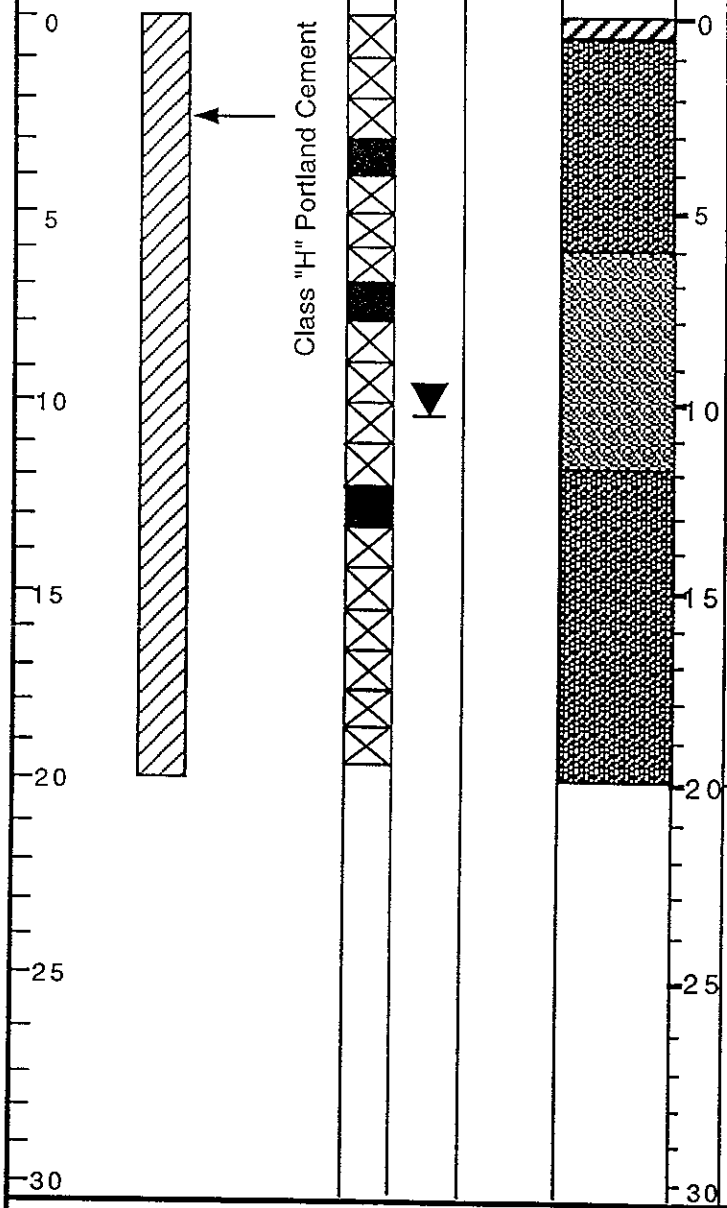
Sandy SILT (ML); black; soft; damp; 65% silt; 20% fine sand; 15% clay;high plasticity; low estimated K; no odor

5 — No recovery

Refusal at 7'

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-6
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 20.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler



DESCRIPTION OF LITHOLOGY

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

Concrete

Clayey SILT (MH); black; soft; damp; 80% silt; 20% clay; high plasticity; low estimated K; slight hydrocarbon odor

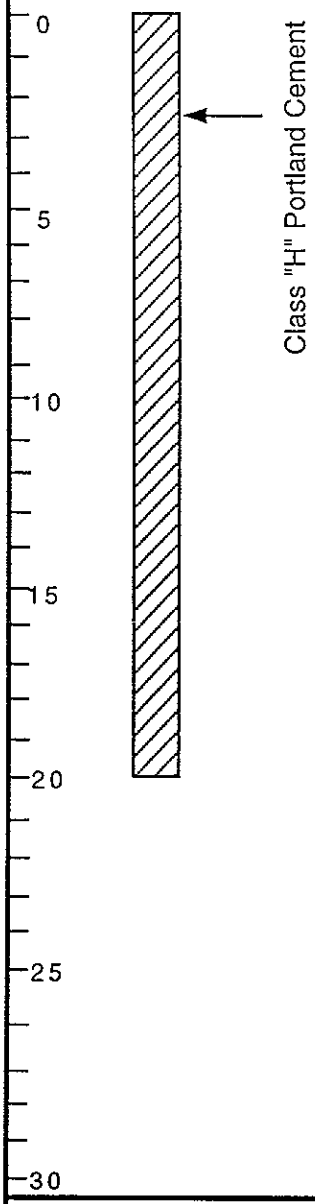
Sandy SILT (ML); olive grey; dense; damp; 50% silt; 30% fine to coarse sand; 20% subangular gravel to 0.5" diameter; non-plastic; medium estimated K; slight hydrocarbon odor

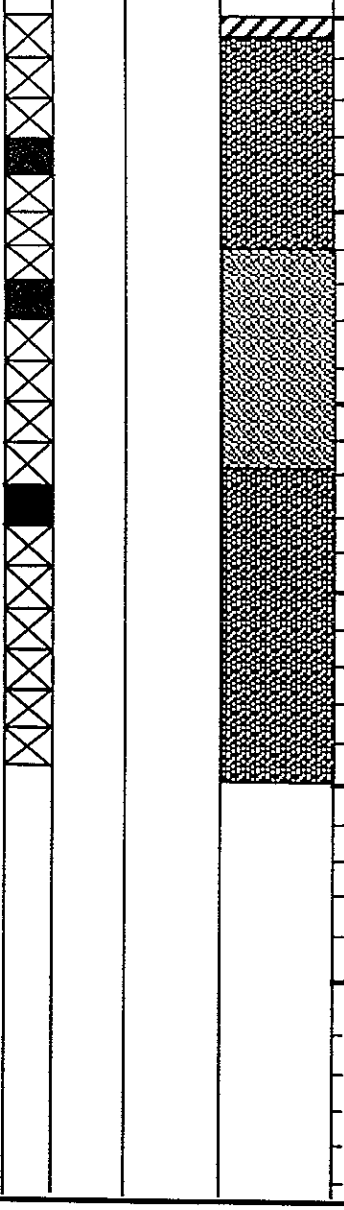
Clayey SILT (ML); red brown; medium stiff; moist; 70% silt; 20% clay; 5% fine sand; 5% subangular gravel to 0.25" diameter; moderate plasticity; low estimated K; moderate hydrocarbon odor
sand and gravel stringers

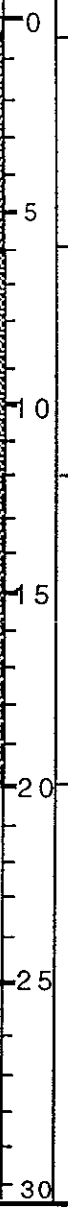
End of boring at 20'

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-7
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 20.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler







DESCRIPTION OF LITHOLOGY

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

Concrete

Clayey SILT (MH); black; soft; damp; 80% silt; 20% clay; high plasticity; low estimated K; slight hydrocarbon odor

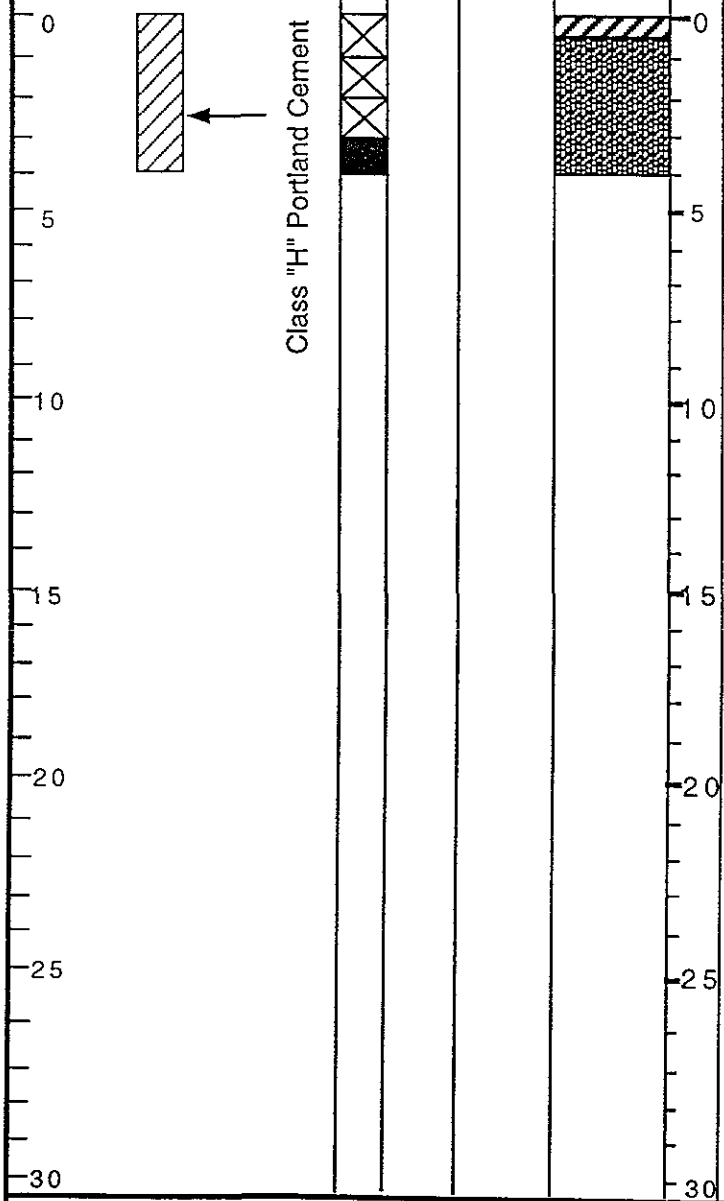
Sandy SILT (ML); olive grey; dense; damp; 50% silt; 30% fine to coarse sand; 20% subangular gravel to 0.5" diameter; non-plastic; medium estimated K; slight hydrocarbon odor

Clayey SILT (ML); red brown; medium stiff; moist; 70% silt; 20% clay; 5% fine sand; 5% subangular gravel to 0.25" diameter; moderate plasticity; low estimated K; moderate hydrocarbon odor
sand and gravel stringers

End of boring at 20'

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-8
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

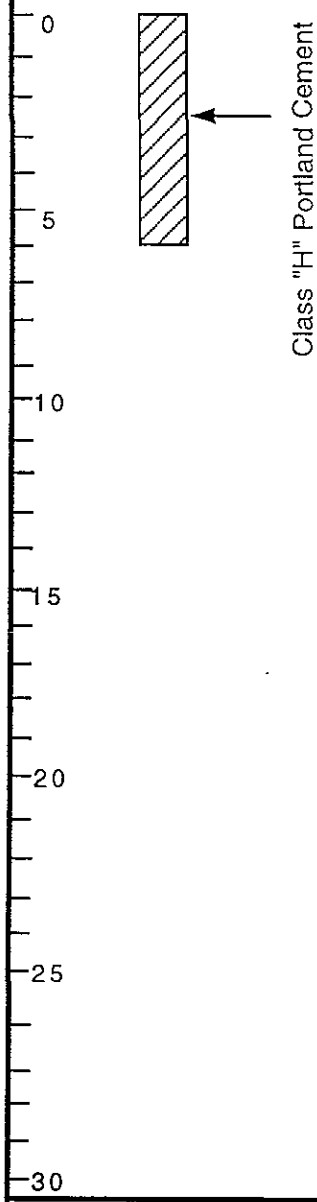
WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 4.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler

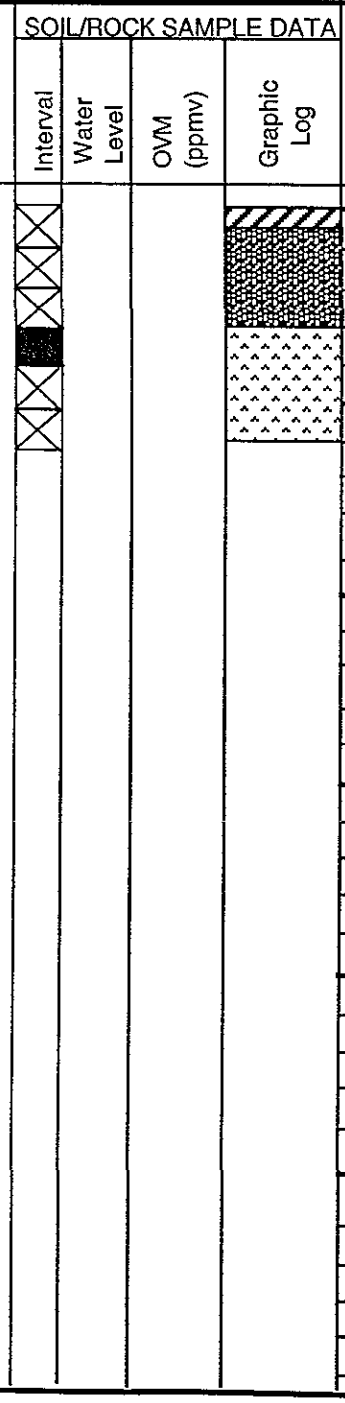


Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Concrete
	Clayey SILT (MH); yellow brown; medium stiff; moist; 70% silt; 20% clay; 10% medium to coarse sand; high plasticity; low estimated K; slight hydrocarbon odor
5	End of boring at 4'
10	
15	
20	
25	
30	

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-9
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 10, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: Unknown	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 6.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler





DESCRIPTION OF LITHOLOGY

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

Concrete

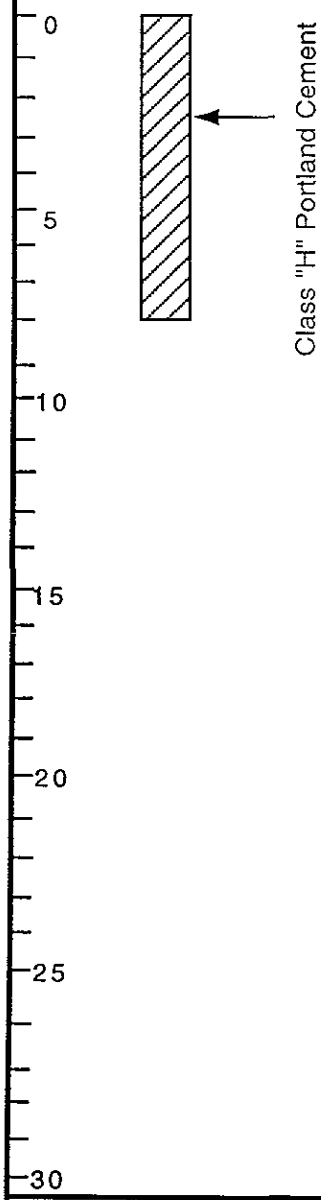
Clayey SILT (MH); black; soft; damp; 70% silt; 20% clay; 10% fine sand; high plasticity; low estimated K; strong hydrocarbon odor

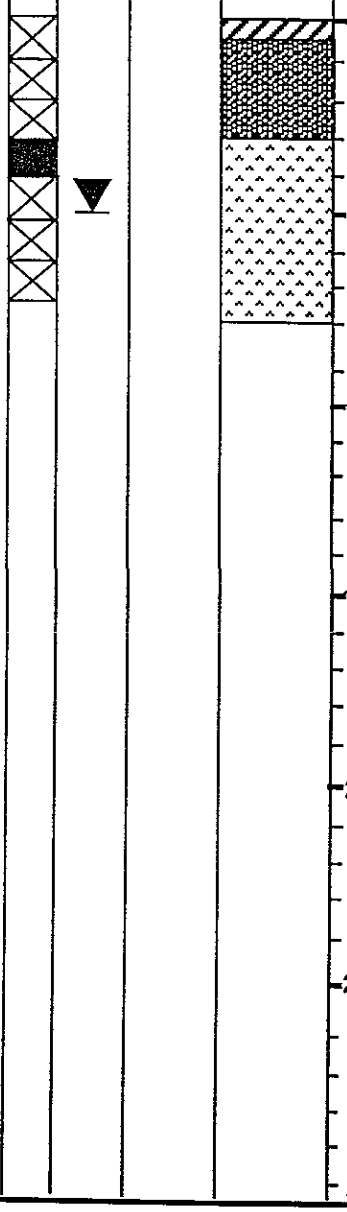
Gravely SAND (SW); black; medium dense; damp; 50% medium to course sand; 40% subangular to subrounded pebbles to 0.8" diameter; non-plastic; medium estimated K; strong hydrocarbon odor

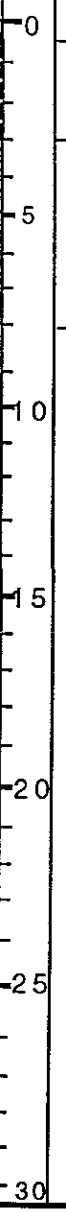
Refusal at 6'

SOIL BORING LOG AND WELL COMPLETION DETAILS		Soil Boring: B-10
Project Name: Liquid Sugar, Inc.	Project Location: 1275 66th Street, Emeryville, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: Macro Core Sampler
Logged By: Robert E. Kitay, R.G.	Date Drilled: February 11, 1999	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA	
Depth of Water First Encountered: 5'	Total Depth of Well Completed: NA
Static Depth of Water in Well: Unknown	Well Screen Type and Diameter: NA
Total Depth of Boring: 8.0'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: Macro Core Sampler







DESCRIPTION OF LITHOLOGY

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

Concrete

Clayey SILT (MH); black; soft; damp; 70% silt; 20% clay; 10% fine sand; high plasticity; low estimated K; strong hydrocarbon odor

Gravely SAND (SW); black; medium dense; damp; 50% medium to course sand; 40% subangular to subrounded pebbles to 0.8" diameter; non-plastic; medium estimated K; very strong hydrocarbon odor; sheen on cuttings

End of boring at 8'

APPENDIX C

Analytical Report and Chain of Custody Forms
For Soil and Groundwater Samples

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-1 3.0'
Spl#: 228556 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:*17450 *Analyzed:* February 11, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	86	1
MTBE	N.D.	0.0050	N.D.	82	1
BENZENE	0.019	0.0050	N.D.	93	1
TOLUENE	0.0083	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	0.0096	0.0050	N.D.	94	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 1.5mg/Kg.

Craig Huntzinger
Analyst

Michael Verona
Laboratory Operations Manager

925-837-4853

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

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-2 3.5'
Spl#: 228557 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:*17450 *Analyzed:* February 11, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	86	1
MTBE	N.D.	0.0050	N.D.	82	1
BENZENE	N.D.	0.0050	N.D.	93	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	94	1

Craig Huntzinger
Analyst

Michael Verona
Laboratory Operations Manager

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

PM V132 O:BTEXQC0
VINCE 1

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-3 3.5'
Spl#: 228558 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17358 *Analyzed:* February 11, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	91	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	N.D.	0.0050	N.D.	90	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	90	1
XYLENES	N.D.	0.0050	N.D.	89	1

Craig Huntzinger
Analyst

for
Michael Verona
Laboratory Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-4 3.5'
Spl#: 228559 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:*17358 *Analyzed:* February 11, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	91	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	N.D.	0.0050	N.D.	90	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	90	1
XYLENES	N.D.	0.0050	N.D.	89	1

Craig Huntzinger
Analyst

for
Michael Verona
Laboratory Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-5 3.5'
Spl#: 228560 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17358 *Analyzed:* February 11, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	91	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	N.D.	0.0050	N.D.	90	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	90	1
XYLENES	N.D.	0.0050	N.D.	89	1

Craig Huntzinger
Analyst

for
Michael Verona
Laboratory Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-6 7.5'
Spl#: 228565 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17358 *Analyzed:* February 11, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	91	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	0.13	0.0050	N.D.	90	1
TOLUENE	0.062	0.0050	N.D.	91	1
ETHYL BENZENE	0.026	0.0050	N.D.	90	1
XYLENES	0.14	0.0050	N.D.	89	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, estimated concentration would equal 34mg/Kg.

Craig Huntzinger
Analyst

Michael Verona
Laboratory Operations Manager

925-837-4853

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

PM V132 O: BTEXQC0
VINCE 1

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-7 7.5'
Spl#: 228567 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17455 *Analyzed:* February 18, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	10	N.D.	100	1
MTBE	N.D.	0.62	N.D.	92	1
BENZENE	N.D.	0.62	N.D.	97	1
TOLUENE	N.D.	0.62	N.D.	99	1
ETHYL BENZENE	0.76	0.62	N.D.	102	1
XYLENES	N.D.	0.62	N.D.	101	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 79mg/Kg.

Vincent Vancil
Analyst

for
Michael Verona
Operations Manager

925-837-4853

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

PM V135 O:BTEXQC02
VINCE 10

CHROMALAB, INC.

Environmental Services (SDB)

March 4, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-8 3.5'
Spl#: 228568 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:*17418 *Analyzed:* February 17, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	0.086	0.011	N.D.	94	1
TOLUENE	0.014	0.011	N.D.	95	1
ETHYL BENZENE	N.D.	0.011	N.D.	95	1
XYLENES	0.010	0.0050	N.D.	94	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 2.8mg/Kg.

Vincent Vancil
Analyst

for
Michael Verona
Operations Manager

925-837-4853

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

PM V132 O:BTEXQC0
VINCE 1

CHROMALAB, INC.

Environmental Services (SDB)

February 26, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-9 3.0'
Spl#: 228569 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:*17418 *Analyzed:* February 17, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	0.0090	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	95	1
ETHYL BENZENE	0.0080	0.0050	N.D.	95	1
XYLENES	0.047	0.0050	N.D.	94	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 18mg/Kg.

Vincent Vancil
Analyst

for
Michael Verona
Operations Manager

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

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: **B-10 3.5'**
Spl#: 228570 *Matrix:* SOIL
Sampled: February 11, 1999 *Run#:*17418 *Analyzed:* February 17, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.2	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	94	1
BENZENE	0.0066	0.0050	N.D.	94	1
TOLUENE	0.0076	0.0050	N.D.	95	1
ETHYL BENZENE	0.019	0.0050	N.D.	95	1
XYLENES	0.15	0.0050	N.D.	94	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 2.5mg/Kg.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

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

PM V132 O:BTEXQC02
VINCE 10

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 12, 1999
Sampled: February 10, 1999 *Run#:* 17385 *Analyzed:* February 16, 1999

Spl# CLIENT SPL ID	Diesel (mg/Kg)	Motor Oil (mg/Kg)
228556 B-1 3.0'	5.2	N.D.
Note: Hydrocarbon reported is in the early Diesel Range and does not match our Diesel Standard.		
Reporting Limits	1.0	50
Blank Result	N.D.	N.D.
Blank Spike Result (%)	108	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 12, 1999
Sampled: February 10, 1999 *Run#:* 17385 *Analyzed:* February 16, 1999

Spl#	CLIENT SPL ID	Diesel (mg/Kg)	Motor Oil (mg/Kg)
228557	B-2 3.5'	430	2000

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard. Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Reporting Limits	10	500
Blank Result	N.D.	N.D.
Blank Spike Result (%)	108	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 6 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 12, 1999
Sampled: February 10, 1999 *Run#:* 17385 *Analyzed:* February 16, 1999

Spl#	CLIENT SPL ID	Diesel (mg/Kg)	Motor Oil (mg/Kg)
228558	B-3 3.5'	1.9	N.D.
	Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.		
228559	B-4 3.5'	N.D.	N.D.
228560	B-5 3.5'	N.D.	N.D.
228565	B-6 7.5'	N.D.	N.D.
228567	B-7 7.5'	98	N.D.
	Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.		
228568	B-8 3.5'	11	N.D.
	Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.		
Reporting Limits		1.0	50
Blank Result		N.D.	N.D.
Blank Spike Result (%)		108	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 12, 1999
Sampled: February 10, 1999 *Run#:* 17385 *Analyzed:* February 16, 1999

Spl#	CLIENT SPL ID	Diesel (mg/Kg)	Motor Oil (mg/Kg)
228569	B-9 3.0'	670	N.D.

Note: Hydrocarbon reported has characteristics of weathered/aged Diesel. Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Reporting Limits	5.0	250
Blank Result	N.D.	N.D.
Blank Spike Result (%)	108	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: SOIL *Extracted:* February 12, 1999
Sampled: February 11, 1999 *Run#:* 17385 *Analyzed:* February 16, 1999

Spl#	CLIENT SPL ID	Diesel (mg/Kg)	Motor Oil (mg/Kg)
228570	B-10 3.5'	45	N.D.

Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.

Reporting Limits	1.0	50
Blank Result	N.D.	N.D.
Blank Spike Result (%)	108	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 19, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC
Atten: Robert Kitay
Project: LIQUID SUGARS, INC
Received: February 11, 1999
re: One sample for Volatile Halogenated Organics by GC/MS analysis.
Method: *8010 Compounds by Method 8260A Sept 1994*

Client Sample ID: B-1 3.0'
Spl#: 228556 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17469 *Analyzed:* February 17, 1999

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,2-DIBROMOETHANE	N.D.	10	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	123	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	109	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1

Alex Tam
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 19, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC
Atten: Robert Kitay
Project: LIQUID SUGARS, INC
Received: February 11, 1999
re: One sample for Volatile Halogenated Organics by GC/MS analysis.
Method: *8010 Compounds by Method 8260A Sept 1994*

Client Sample ID: B-2 3.5'
Spl#: 228557 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17470 *Analyzed:* February 18, 1999

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	
BROMOFORM	N.D.	5.0	N.D.	--	
BROMOMETHANE	N.D.	10	N.D.	--	
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	
CHLOROBENZENE	N.D.	5.0	N.D.	98.8	
CHLOROETHANE	N.D.	10	N.D.	--	
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	
CHLOROFORM	N.D.	5.0	N.D.	--	
CHLOROMETHANE	N.D.	10	N.D.	--	
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,2-DIBROMOETHANE	N.D.	10	N.D.	--	
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	92.4	
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROETHENE	N.D.	5.0	N.D.	88.5	
VINYL CHLORIDE	N.D.	5.0	N.D.	--	
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	

Alex Tam
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 19, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC
Atten: Robert Kitay
Project: LIQUID SUGARS, INC
Received: February 11, 1999
re: One sample for Volatile Halogenated Organics by GC/MS analysis.
Method: *8010 Compounds by Method 8260A Sept 1994*

Client Sample ID: B-3 3.5'
Spl#: 228558 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17469 *Analyzed:* February 17, 1999

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTIO FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	
BROMOFORM	N.D.	5.0	N.D.	--	
BROMOMETHANE	N.D.	10	N.D.	--	
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	
CHLOROBENZENE	N.D.	5.0	N.D.	106	
CHLOROETHANE	N.D.	10	N.D.	--	
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	
CHLOROFORM	N.D.	5.0	N.D.	--	
CHLOROMETHANE	N.D.	10	N.D.	--	
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,2-DIBROMOETHANE	N.D.	10	N.D.	--	
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	123	
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROETHENE	N.D.	5.0	N.D.	109	
VINYL CHLORIDE	N.D.	5.0	N.D.	--	
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	

Alex Tam
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 19, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC
Atten: Robert Kitay
Project: LIQUID SUGARS, INC
Received: February 11, 1999
re: One sample for Volatile Halogenated Organics by GC/MS analysis.
Method: *8010 Compounds by Method 8260A Sept 1994*

Client Sample ID: B-4 3.5'
Spl#: 228559 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17469 *Analyzed:* February 17, 1999

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	
BROMOFORM	N.D.	5.0	N.D.	--	
BROMOMETHANE	N.D.	10	N.D.	--	
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	
CHLOROBENZENE	N.D.	5.0	N.D.	106	
CHLOROETHANE	N.D.	10	N.D.	--	
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	
CHLOROFORM	N.D.	5.0	N.D.	--	
CHLOROMETHANE	N.D.	10	N.D.	--	
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,2-DIBROMOETHANE	N.D.	10	N.D.	--	
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	123	
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROETHENE	N.D.	5.0	N.D.	109	
VINYL CHLORIDE	N.D.	5.0	N.D.	--	
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	

Alex Tam
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 19, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC
Atten: Robert Kitay
Project: LIQUID SUGARS, INC
Received: February 11, 1999
re: One sample for Volatile Halogenated Organics by GC/MS analysis.
Method: *8010 Compounds by Method 8260A Sept 1994*

Client Sample ID: B-5 3.5'
Spl#: 228560 *Matrix:* SOIL
Sampled: February 10, 1999 *Run#:* 17469 *Analyzed:* February 17, 1999

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	
BROMOFORM	N.D.	5.0	N.D.	--	
BROMOMETHANE	N.D.	10	N.D.	--	
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	
CHLOROBENZENE	N.D.	5.0	N.D.	106	
CHLOROETHANE	N.D.	10	N.D.	--	
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	
CHLOROFORM	N.D.	5.0	N.D.	--	
CHLOROMETHANE	N.D.	10	N.D.	--	
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	
1,2-DIBROMOETHANE	N.D.	10	N.D.	--	
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	123	
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROETHENE	N.D.	5.0	N.D.	109	
VINYL CHLORIDE	N.D.	5.0	N.D.	--	
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.	--	
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	

Alex Tam
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 26, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: **B-1 WATER**
Spl#: 228571 *Matrix:* WATER
Sampled: February 11, 1999 *Run#:*17397 *Analyzed:* February 16, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1000	N.D.	89	20
MTBE	N.D.	100	N.D.	89	20
BENZENE	2400	10	N.D.	98	20
TOLUENE	N.D.	10	N.D.	101	20
ETHYL BENZENE	280	10	N.D.	98	20
XYLENES	85	10	N.D.	99	20

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 16000ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

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

PM V132 O:BTEXQC02
VINCE 13

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-6 WATER
Spl#: 228572 *Matrix:* WATER
Sampled: February 10, 1999 *Run#:* 17463 *Analyzed:* February 19, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	90	1
MTBE	N.D.	5.0	N.D.	97	1
BENZENE	27	0.50	N.D.	95	1
TOLUENE	11	0.50	N.D.	97	1
ETHYL BENZENE	3.5	0.50	N.D.	95	1
XYLENES	5.3	0.50	N.D.	95	1

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 2100ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

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

CHROMALAB, INC.

Environmental Services (SDB)

February 22, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: B-7 WATER
Spl#: 228573 *Matrix:* WATER
Sampled: February 11, 1999 *Run#:*17463 *Analyzed:* February 19, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1000	N.D.	90	20
MTBE	N.D.	100	N.D.	97	20
BENZENE	400	10	N.D.	95	20
TOLUENE	35	10	N.D.	97	20
ETHYL BENZENE	240	10	N.D.	95	20
XYLENES	270	10	N.D.	95	20

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 4600ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

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

CHROMALAB, INC.

Environmental Services (SDB)

February 26, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

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

Client Sample ID: **B-10 WATER**
Spl#: 228574 *Matrix:* WATER
Sampled: February 11, 1999 *Run#:*17397 *Analyzed:* February 16, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	5000	N.D.	89	100
MTBE	N.D.	500	N.D.	89	100
BENZENE	N.D.	50	N.D.	98	100
TOLUENE	N.D.	50	N.D.	101	100
ETHYL BENZENE	N.D.	50	N.D.	98	100
XYLENES	N.D.	50	N.D.	99	100

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile.If quantified using Gasoline's response factor, concentration would equal 200000ug/L.

Vincent Vancil
Analyst

Michael Verona
Operations Manager

925-837-4853

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

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* February 12, 1999
Sampled: February 11, 1999 *Run#:* 17384 *Analyzed:* February 16, 1999

Spl#	CLIENT SPL ID	Diesel (ug/L)	Motor Oil (ug/L)
228571	B-1 WATER	120000	N.D.

Note: Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Reporting Limits	500	5000
Blank Result	N.D.	
Blank Spike Result (%)	89.2	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

S010 0:0C0405 CMH 16

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 2 samples for TEPH analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* February 12, 1999
Sampled: February 10, 1999 *Run#:* 17384 *Analyzed:* February 13, 1999

Spl#	CLIENT SPL ID	Diesel (ug/L)	Motor Oil (ug/L)
228572	B-6 WATER	2700	680

Note: Hydrocarbon reported has characteristics of weathered/aged Diesel.

Matrix: WATER *Extracted:* February 12, 1999
Sampled: February 11, 1999 *Run#:* 17384 *Analyzed:* February 13, 1999

Spl#	CLIENT SPL ID	Diesel (ug/L)	Motor Oil (ug/L)
228573	B-7 WATER	2000	N.D.

Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.

Reporting Limits	50	500
Blank Result	N.D.	
Blank Spike Result (%)	89.2	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 17, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: 1 sample for TEPH analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* February 12, 1999
Sampled: February 11, 1999 *Run#:* 17384 *Analyzed:* February 16, 1999

Spl#	CLIENT SPL ID	Diesel (ug/L)	Motor Oil (ug/L)
228574	B-10 WATER	350000	N.D.

Note: Hydrocarbon reported has characteristics of weathered/aged Diesel. Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Reporting Limits	1000	10000
Blank Result	N.D.	
Blank Spike Result (%)	89.2	--

Carolyn House
Analyst

Bruce Havlik
Analyst

925-837-4853 PM 02/18

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

CHROMALAB, INC.

Environmental Services (SDB)

February 18, 1999 *Submission #:* 9902146

AQUA SCIENCE ENGINEERS, INC

Atten: Robert Kitay

Project: LIQUID SUGARS, INC
Received: February 11, 1999

re: One sample for Volatile Halogenated Organics analysis.
Method: *SW846 Method 8010A July 1992*

Client Sample ID: B-1 WATER
Spl#: 228571 *Matrix:* WATER
Sampled: February 11, 1999 *Run#:* 17452 *Analyzed:* February 17, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTIO FACTOR
VINYL CHLORIDE	N.D.	0.50	N.D.	--	
CHLOROETHANE	N.D.	0.50	N.D.	--	
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	96.0	
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	
TRANS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	
CIS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	
CHLOROFORM	N.D.	3.0	N.D.	--	
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	
TRICHLOROETHENE	N.D.	0.50	N.D.	93.0	
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	
2-CHLOROETHYL VINYL ETHER	N.D.	0.50	N.D.	--	
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	
TETRACHLOROETHENE	N.D.	0.50	N.D.	--	
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	
CHLOROBENZENE	N.D.	0.50	N.D.	118	
BROMOFORM	N.D.	2.0	N.D.	--	
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	--	
TRICHLOROTRIFLUOROETHANE	N.D.	2.0	N.D.	--	
CHLOROMETHANE	N.D.	1.0	N.D.	--	
BROMOMETHANE	N.D.	1.0	N.D.	--	
DICHLORODIFLUOROMETHANE	N.D.	1.0	N.D.	--	

Oleg Nemtsov
Analyst

Michael Verona
Operations Manager

925-837-4853 PM 02/18

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

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

Chain of Custody

44553

PAGE 1 OF 2

SAMPLER (SIGNATURE) Robert E. Kitay (PHONE NO.) (925) 820-9391

PROJECT NAME Liquid Sugars, Inc JOB NO.

ADDRESS 1275 66th Street, Emeryville, CA DATE 2-11-99

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 + Motor Oil (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)	HOLD			COMPOSITE
B-1 3.0'	2/10	8:35	Soil	1	X		X	X														
B-1 7.5'		8:43																	X			
B-1 11.5'		8:52																	X			
B-2 3.5'		13:37			X		X	X														
B-3 3.5'		13:10			X		X	X														
B-4 3.5'		14:15			X		X	X														
B-5 3.5'		14:34			X		X	X														
B-6 3.5'		14:42																	X			
B-6 7.5'		14:47			X		X															
B-6 11.5'	↓	14:51	↓	↓															X			

SUBM #: 9961146 REF: #:
CLIENT: ASE
DUE: 02/15/99
RET #: 44553

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Robert E. Kitay 15:17	Hsanah. Salimpour	Hsanah. Salimpour	A. Parada 1600	5-DAY T.A.T. 5.9°C AP
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	7 Amber vials 1 soil jar 16 soils
Robert E. Kitay 2-11-99	Hsanah. Salimpour	Hsanah. Salimpour	A. Parada 2/11/99	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE	Company- Chromalab 2/11/99 15:30	Company- Chromalab 2/11/99 15:55	Company- Chromalab	

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

Chain of Custody

44553

SAMPLER (SIGNATURE): Robert E. Kitay (PHONE NO.) (925) 820-9391

PROJECT NAME: Liquid Sugars, Inc. JOB NO.:

ADDRESS: 1275 66th Street, Emeryville, CA DATE: 2-11-99

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 + Motor Oil (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)	HOLD			COMPOSITE
B-7 3.5'	2/10	16:15	Soil	1															X			
B-7 7.5		16:20			X		X															
B-7 11.5'		16:26																	X			
B-7 15.5'		16:32																	X			
B-8 3.5'		14:52			X		X															
B-9 3.0'	↓	15:15			X		X															
B-10 3.5'	2/11	9:11	↓	↓	X		X															
B-1 Water	2/11	8:35	Water	7	X		X	X														
B-6 Water	2/10	15:36		7	X		X															
B-7 Water	2/11	8:10		4	X		X															
B-10 Water	2/11	9:30	↓	5	X		X															

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Robert E. Kitay 15:17	Hsanah. Salimpour	Hsanah Salimpour	A Paredes (600)	5-DAY
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	T.A.T.
Robert E. Kitay 2-11-99	Hsanah. Salimpour	Hsanah Salimpour	A Paredes 2/11/99	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE	Company- Chromalab 2/11/99 15:32	Company- Chromalab 2/11/99 15:55	Company- Chromalab	