

**APPENDIX A
TANK REMOVAL REPORT**

SOIL SAMPLING
AND LABORATORY ANALYSIS
LIQUID SUGARS, INC.
1274 65TH STREET
EMERYVILLE, CALIFORNIA
FOR
VERL'S CONSTRUCTION, INC.

NO. EV-500/E172-01
NOVEMBER 14, 1990

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No. EV-500/E172-01
November 14, 1990

Verl's Construction, Inc.
753 Peralta Avenue
San Leandro, California 94577

Attention: Mr. Merlin Bowen

SUBJECT: Soil Sampling and Laboratory Analysis, Liquid Sugars, Incorporated, 1274 65th Street, Emeryville, California

Gentlemen:

This report describes the results of field activities by Environmental Geotechnical Consultants (EGC) at the above referenced site (Figure 1). EGC was contracted by Verl's Construction, Inc. (VCI) to collect soil samples from the excavation of three underground storage tanks (UST's). Field work and laboratory analytical methods were performed in compliance with current State of California Water Resources Control Board (SWRCB) procedures for conducting environmental investigations relating to potentially leaking UST's.

UNDERGROUND STORAGE TANK REMOVAL

On November 2, 1990, three UST's were excavated and removed from the yard of Liquid Sugars, Incorporated (LSI). UST removal was conducted by VCI and witnessed by George Warren of the Emeryville Fire Department. Soil sampling was done by a representative of EGC and witnessed by Susan Hugo of the Alameda County Department of Environmental Health.

*Prior to removal, the UST's were triple-rinsed and dry ice was introduced into them to displace potentially explosive vapors. A combustible gas indicator was used by VCI to verify safe lower explosive limit levels within the tanks.

The UST's were removed from the excavation and visually inspected. The tanks were designated A through C by EGC for reporting purposes (Figure 2). Tank A, a 1000-gallon tank known to have contained gasoline, had no visible holes; however, it appeared to have been dented by the backhoe during excavation. Tank B, also a 1000-gallon gasoline tank, was dented and contained a puncture that appeared to have been made by the backhoe during excavation. Tank C was a 10,000-gallon diesel fuel tank. The seam seals on the ends of the tank were corroded in places and a small amount of fluid leaked out during removal. The fluid contained no product sheen.

The tanks were then loaded onto an Erickson Enterprises, Inc., flatbed truck and taken to their facility in Richmond. The Uniform Hazardous Waste manifests for the UST's are included as Appendix A.

SOIL SAMPLING AND FIELD OBSERVATIONS

Sampling point locations are shown in Figure 2. The contaminant level of the stockpile from the initial excavation of the UST's was characterized by compositing soil taken at locations A through E in Figure 2. The sample (P1) was collected in moist soil at various heights in the pile and approximately one foot into the stockpile.

Soil with petroleum product odors and a medium greenish-gray color was encountered in the excavation. Samples S-01 through S-06 were obtained by a backhoe at depths of approximately seven to sixteen feet below grade. Each sample was collected by inserting a clean, brass, two-inch diameter sample sleeve into the native soil in the backhoe bucket. The sleeve was packed with soil and the ends sealed with aluminum foil and plastic end caps. The samples were taped, labelled, logged on a Chain-of-Custody form and transported on blue ice to NET Pacific, Inc., a California Department of Health Services-certified analytical laboratory. The Chain-of-Custody report and laboratory analytical results are included as Appendix B.

SOIL ANALYTICAL RESULTS

Sample P1 was composited at the laboratory and analyzed for: Total Petroleum Hydrocarbons as Gasoline (TPH-G); TPH as Diesel (TPH-D); Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX); Total Lead; and Reactivity, Corrosivity and Ignitability (Flash Point).

Samples S-01 through S-03, which were collected beneath the former location of the gasoline tanks, were analyzed for TPH-G, BTEX and Total Lead. Sample S-04, which was collected beneath the former location of gasoline and/or diesel piping, was analyzed for TPH-G, TPH-D, BTEX and Total Lead. Samples S-05 and S-06, which were collected beneath the former location of the diesel tank, were analyzed for TPH-D and BTEX.

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Laboratory analytical results are summarized below:

	<u>TPH-G¹</u>	<u>TPH-D¹</u>	<u>Benzene²</u>	<u>Toluene²</u>	<u>Ethylbenzene²</u>	<u>Xylenes²</u>	<u>Total Lead¹</u>
1102-P1	960	1,890	1,400	4,800	4,600	23,000	15
1102-S-01	1,700	-	11,000	45,000	22,000	110,000	6.3
1102-S-02	3,400	-	33,000	95,000	43,000	210,000	7.1
1102-S-03	1,400	-	7,300	18,000	12,000	64,000	7.0
1102-S-04	710	102	810	2,100	5,400	11,000	3.6
1102-S-05	-	10,300	1,200	1,100	560	3,900	-
1102-S-06	-	17	8	7.7	11	42	-

- ¹ - Reported in parts per million (ppm)
² - Reported in parts per billion (ppb)
- = Not analyzed for this parameter

LIMITATIONS

The scope of work of this project was strictly limited to the sampling and analysis of soil collected beneath three UST's. No warranty, express or implied, is given with regard to the general environmental condition of the subject property.

This report has been prepared in order to aid in the evaluation of the current status of the subject site. It is your responsibility to ensure that this report is made available to the agencies noted below.

Responsible Agencies

Mr. George Warren
Emeryville Fire Department
6303 Hollis Street
Emeryville, CA 94608
(415)596-3750

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Ms. Susan Hugo
Alameda County Department
of Environmental Health
Division of Hazardous Materials
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)271-4320

If you have any questions or require additional information, please contact us at your convenience.

Very truly yours,

ENVIRONMENTAL GEOTECHNICAL
CONSULTANTS, INC.

Don R. Poindexter
Principal

jmc

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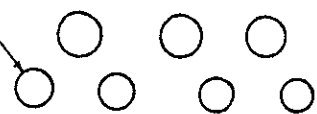
NOTES

1. MAP BASED ON APPROXIMATE FIELD MEASUREMENT 11/02/90.



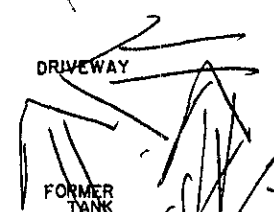
BUILDING

ABOVE GROUND LIQUID SUGAR TANKS (TYP)



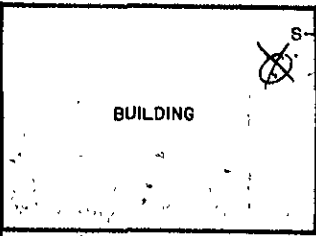
BUILDING

DRIVEWAY



FORMER TANK LOCATION

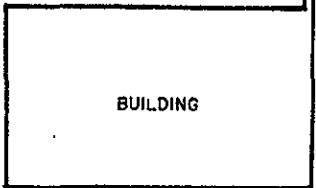
SOIL STOCKPILE (SAMPLE NO. P-1)



BUILDING

EXCAVATION

FORMER TANK LOCATION



BUILDING

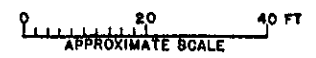
GATE FENCE

65TH STREET

EXPLANATION

⊕ APPROXIMATE SOIL SAMPLE LOCATION

HECK PRIN



NO.	DATE	BY	DESCRIPTION	DRAWN	APPROVED
REVISIONS					

NOTES

PROFESSIONAL SEAL

DATE 11/12/90
 JOB NO. E172-01
 DWG NO. E172-01/2
 DRAWN N TOOR
 CHECK G MILLIKAN
 APP'D D POINDEXTER

EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
 CONSULTANTS IN APPLIED EARTH SCIENCE
SITE PLAN AND SAMPLING LOCATION MAP
 LIQUID SUGARS, INC
 1274 66TH STREET EMERYVILLE, CALIFORNIA
 VERL'S CONSTRUCTION INC.

SHEET NO. 2

03030472

GENERATOR

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SPILL

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ORT

REC

TA

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAL0005335681732175

Manifest Document No. 1 of 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address LIQUID SUGAR 1275-66TH Street EMERYVILLE CALIFORNIA 94608

A. State Manifest Document Number 89890472

4. Generator's Phone (415) 420-7163

B. State Generator's ID

5. Transporter Company Name JACK PARKER TRUCKING

6. US EPA ID Number CAL0000027709

C. State Transporter's ID 102491

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone 415 237 2212

E. State Transporter's ID

9. Designated Facility Name and Site Address

10. US EPA ID Number

Erickson, Inc. 255 Parr Blvd. Richmond, Ca. 94801

CAD009466892

G. State Facility's ID

H. Facility's Phone (415) 235-1393

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type

13. Total Quantity

14. Unit Wt/Vol

15. Waste No.

a. Waste Empty Storage Tank NON-RCRA Hazardous Waste Solid.

003 TP 1200.7 P

State 512 EPA/Other NONE

b.

State EPA/Other

c. DRAFT

State EPA/Other

d.

State EPA/Other

J. Additional Descriptions for Materials Listed Above Qty. 3 Empty Storage Tank (s) #4891, 4892, 4902. Tank (s) have been inerted with 15 lbs. Dry Ice per 1000 Gal. Capacity.

K. Handling Codes to Wastes Listed Above

15. Special Handling Instructions and Additional Information Keep away from sources of ignition. Always wear hardhats when working around U.S.T.'s

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

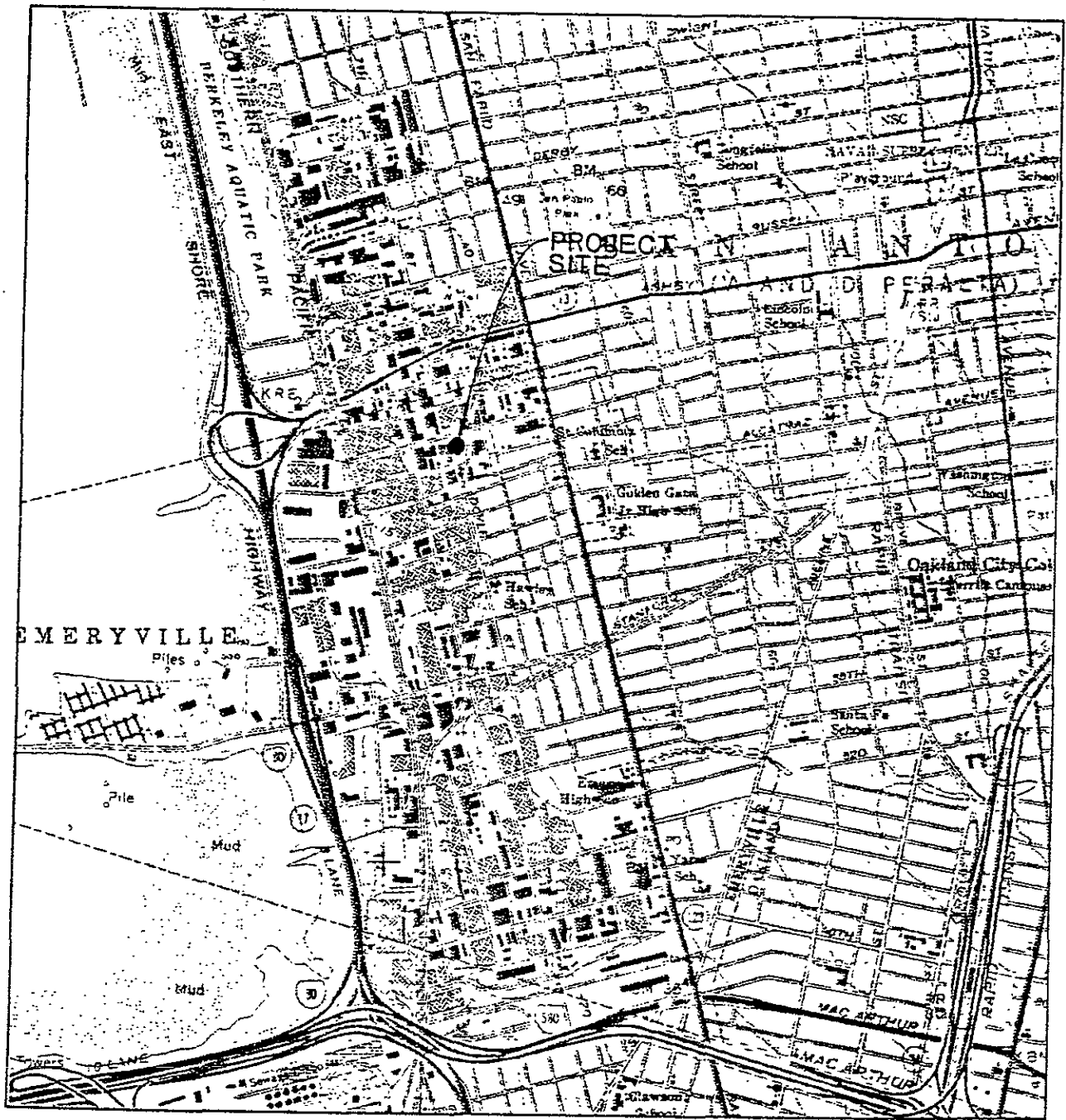
Printed/Typed Name MERLIN BOWEN Signature Merlin Bowen Month Day Year 11 02 90

17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name BILL MORAN Signature Bill Moran Month Day Year 11 02 90

18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name BILL MORAN Signature Bill Moran Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name Signature Month Day Year



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CHECK PRINT



NOTES

1. BASE MAP TAKEN FROM USGS OAKLAND WEST (1980), CALIFORNIA 7.5 MINUTE QUADRANGLE.

DATE 11/12/90
 JOB NO. E172-01
 DWG NO. E172-01/1
 DRAWN N TOOR
 CHECKED G MILLIKAN
 APPROVED D POINDEXTER



ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
 CONSULTANTS IN APPLIED EARTH SCIENCE

PROJECT SITE LOCATION MAP

LIQUID SUGARS, INC
 1274 65TH STREET EMERYVILLE, CALIFORNIA
 VERL'S CONSTRUCTION INC.

FIGURE NO.

1

REV NO.

TO: Martha @ EGE
FROM: Judy Ridley / st
11/12/90 (1540) 5 pages

M. Schaackman
Environmental Geotechnical
2495 Industrial Parkway W.
Hayward, CA 94543

Date: 11-12-90
NET Client Acct No: 362
NET Pacific Log No: 4764
Received: 11-03-90 0900

Client Reference Information

VCI - Liquid Sugars; Job: 5172-01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamardak
Laboratory Manager

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JS:rcf
Enclosure(s)

Preliminary Report

Ref: VCI- Liquid Sugars; Job: E172-01

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	Lab No.		Units
			67333	67334	
Lead (EPA 7421)	7421	0.2	15	3.6	mg/Kg
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)					
DILUTION FACTOR *			200	100	
DATE ANALYZED			11-10-90	11-10-90	
METHOD GC FID/5030					
as Gasoline	DOHCLUST	1	960	710	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			200	100	
DATE ANALYZED			11-10-90	11-10-90	
Benzene		2.5	1,400	810	ug/Kg
Ethylbenzene		2.5	4,600	5,400	ug/Kg
Toluene		2.5	4,800	2,100	ug/Kg
Xylenes, total		2.5	23,000	11,000	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)					
DILUTION FACTOR *			1	1	
DATE EXTRACTED			11-06-90	11-06-90	
DATE ANALYZED			11-09-90	11-09-90	
METHOD GC FID/3550					
as Diesel		1	1,890	102	mg/Kg
as Motor Oil		10	ND	ND	mg/Kg

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Ref: VCI-Liquid Sugars, Job: E172-01

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	1102-S-01 11-02-90	1102-S-02 11-02-90	Units
Lead (EPA 7421)	7421	5.2	6.3	7.1	mg/Kg
PETROLEUM HYDROCARBONS VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			200	500	
DATE ANALYZED			11-10-90	11-10-90	
METHOD GC FID/5030			--	--	
Gas Gasoline	BOHSLUFT	1	1,700	3,400	mg/Kg
METHOD 8020			--	--	
DILUTION FACTOR *			200	500	
DATE ANALYZED			11-10-90	11-10-90	
Benzene		2.5	11,000	33,000	ug/Kg
Ethylbenzene		2.5	22,000	43,000	ug/Kg
Toluene		2.5	45,000	95,000	ug/Kg
Xylenes, total		2.5	110,000	210,000	ug/Kg

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Client No: 362
Client Name: Environmental Geotechnical
NET Log No: 4764

Date: 11-12-90

Page: xxx

Ref: VCI-Liquid Sugars; Job: E172-01

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	67337	Units
Lead (EPA 7421)	7421	0.2	7.0	mg/Kg
PETROLEUM HYDROCARBONS			--	
VOLATILE (SOIL)			--	
DILUTION FACTOR *			200	
DATE ANALYZED			11-10-90	
METHOD GC FID/5030			--	
as Gasoline	DCHSLUFT	1	1,400	mg/Kg
METHOD 8020			--	
DILUTION FACTOR *			200	
DATE ANALYZED			11-10-90	
Benzene		2.5	7,300	ug/Kg
Ethylbenzene		2.5	12,800	ug/Kg
Toluene		2.5	18,000	ug/Kg
Xylenes, total		2.5	64,000	ug/Kg

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Preliminary Report

Client No: 362

Date: 11-12-90

Client Name: Environmental Geotechnical

N&T Log No: 4764

Page: xxx

Ref: VCI-Liquid Sugars; Job: E172-01

Descriptor, Lab No. and Results

Parameter	Method	Reporting Limit	67338	67339	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (SOIL)			--	--	
DILUTION FACTOR *			50	1	
DATE ANALYZED			11-09-90	11-09-90	
METHOD 8020			--	--	
Benzene	mg/g		1200	8.0	ug/Kg
Ethylbenzene	mg/g		550	11	ug/Kg
Toluene	mg/g		2100	7.7	ug/Kg
Xylenes, total	mg/g		3500	42	ug/Kg
PETROLEUM HYDROCARBONS			--	--	
EXTRACTABLE (SOIL)			--	--	
DILUTION FACTOR *			1	1	
DATE EXTRACTED			11-06-90	11-06-90	
DATE ANALYZED			11-09-90	11-09-90	
METHOD GC FID/3550			--	--	
as Dissol	mg/g		10,500	17	ng/Kg
as Resol Oil	mg/g		ND	ND	mg/Kg

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Preliminary report

Nick Guintoli
Environmental Geotechnical
2495 Industrial Parkway W.
Hayward, CA 94545

Date: 12-07-90
NET Client Acct. No: 362
NET Pacific Log No: 5233
Received: 12-06-90 0800

Client Reference Information

Liquid Sugars, Inc., Project:E-172-01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

From: Megan

5 pages

1725

Approved by:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Preliminary Report

Client Acct: 362
 Client Name: Environmental Geotechnical
 NET Log No: 5233

Date: 12-07-90
 Page: xxx

Ref: Liquid Sugars, Inc., Project:E-172-01

SAMPLE DESCRIPTION: W-1 12-05-90
 LAB Job No: (-70190)

Parameter	Method	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS	LUFTD		--	
EXTRACTABLE (WATER)	LUFTD		--	
DILUTION FACTOR *	LUFTD		20	
DATE EXTRACTED	LUFTD		12-06-90	
DATE ANALYZED	LUFTD		12-07-90	
METHOD GC FID/3510	LUFTD		--	
as Diesel		0.05	27	mg/L
as Motor Oil		0.5	ND	mg/L

Client Acct: 362
 Client Name: Environmental Geotechnical
 NET Log No: 5233

Date: 12-07-90
 Page: xxx

Ref: Liquid Sugars, Inc., Project: E-172-01

SAMPLE DESCRIPTION: W-1 12-05-90
 LAB Job No: (-70190)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8240				
DATE ANALYZED	CLPVOC		12-07-90	
DILUTION FACTOR *	CLPVOC		1	
Acetone	CLPVOC	10	ND	ug/L
Benzene	CLPVOC	5.0	ND	ug/L
Bromodichloromethane	CLPVOC	5.0	ND	ug/L
Bromoform	CLPVOC	5.0	ND	ug/L
Bromomethane	CLPVOC	5.0	ND	ug/L
2-Butanone	CLPVOC	10	ND	ug/L
Carbon Disulfide	CLPVOC	5.0	ND	ug/L
Carbon Tetrachloride	CLPVOC	5.0	ND	ug/L
Chlorobenzene	CLPVOC	5.0	ND	ug/L
Chloroethane	CLPVOC	5.0	ND	ug/L
2-Chloroethyl Vinyl Ether		10	ND	ug/L
Chloroform	CLPVOC	5.0	ND	ug/L
Chloromethane	CLPVOC	5.0	ND	ug/L
Dibromochloromethane	CLPVOC	5.0	ND	ug/L
1,2-Dichlorobenzene		6.0	ND	ug/L
1,3-Dichlorobenzene		6.0	ND	ug/L
1,4-Dichlorobenzene		6.0	ND	ug/L
1,1-Dichloroethane	CLPVOC	5.0	ND	ug/L
1,2-Dichloroethane	CLPVOC	5.0	ND	ug/L
1,1-Dichloroethene	CLPVOC	5.0	ND	ug/L
trans-1,2-Dichloroethene		5.0	ND	ug/L
1,2-Dichloropropane	CLPVOC	5.0	ND	ug/L
cis-1,3-Dichloropropene	CLPVOC	5.0	ND	ug/L
trans-1,3-Dichloropropene	CLPVOC	5.0	ND	ug/L
Ethyl Benzene	CLPVOC	5.0	ND	ug/L
2-Hexanone	CLPVOC	10	ND	ug/L
Methylene Chloride	CLPVOC	5.0	ND	ug/L
4-Methyl-2-pentanone	CLPVOC	10	ND	ug/L
Styrene	CLPVOC	5.0	ND	ug/L
1,1,2,2-Tetrachloroethane	CLPVOC	5.0	ND	ug/L
Tetrachloroethene	CLPVOC	5.0	ND	ug/L
Toluene	CLPVOC	5.0	ND	ug/L
1,1,1-Trichloroethane	CLPVOC	5.0	ND	ug/L
1,1,2-Trichloroethane	CLPVOC	5.0	ND	ug/L
Trichloroethene	CLPVOC	5.0	ND	ug/L
Trichlorofluoromethane		5.0	ND	ug/L
Vinyl Acetate	CLPVOC	10	ND	ug/L
Vinyl chloride	CLPVOC	5.0	ND	ug/L
Xylenes, Total	CLPVOC	5.0	ND	ug/L
SURROGATE RESULTS	CLPVOC			
Toluene-d8	CLPVOC			

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% Rec.

Client Acct: 362
Client Name: Environmental Geotechnical
NET Log No: 5233

Date: 12-07-90
Page: xxx

Ref: Liquid Sugars, Inc., Project:E-172-01

SAMPLE DESCRIPTION: W-1 12-05-90
LAB Job No: (-70190)

Parameter	Method	Reporting Limit	Results	Units
1,2-Dichloroethane-d4	CLPVOC		94	% Rec.