March 9, 1999

UST Local Oversight Program
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

Attention: Ms. Susan Hugo

Subject: Report of Quarterly Ground Water Monitoring
Conducted on February 5, 1999
Liquid Sugars UST Site
1275 66th Street, Emeryville, California
GA Project No.: 149-01-03

Ladies and Gentlemen:

Gribi Associates is pleased to submit this groundwater monitoring report on behalf of Liquid Sugars, Inc. for the subject site in Emeryville, California (see Figure 1 and Figure 2). This letter report documents the recent monitoring of two groundwater monitoring wells at the site.

DESCRIPTION OF SAMPLING ACTIVITIES

On February 5, 1999, Mr. Jim Gribi conducted groundwater monitoring activities for two site wells (MW-1 and MW-2). Groundwater monitoring was conducted in accordance with California LUFT Field Manual guidelines as follows:

- After unlocking and opening both of the monitoring wells, the water levels were measured to the nearest 0.01 foot with an electronic probe.

- Using a disposable PVC bailer, a single bail of groundwater was taken from each well to check for the presence or absence of floating free product.

- The wells were purged of approximately three well volumes. During purging, temperature, pH, conductivity, and turbidity of the well water were periodically monitored and recorded until they stabilized. All purged water was stored onsite in sealed 55-gallon metal drums. Groundwater sampling data sheets for each well are contained in Appendix A.

- After purging the required volume of water, groundwater was poured directly from the bailer into two half-liter amber jars and four 40-ml VOC vials. Each container

was then tightly sealed with teflon-lined septa, making sure that no air bubbles were present in the containers. Each container was then labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody.

RESULTS OF GROUNDWATER MONITORING

Hydrologic Conditions

Groundwater was encountered in the two wells at a depth of about seven feet below surface grade. Purged groundwater from MW-1 exhibited slight hydrocarbon odors, with no hydrocarbon sheens. Purged groundwater from MW-2 exhibited slight to moderate hydrocarbon odors, with slight hydrocarbon sheens.

Laboratory Analytical Results

Groundwater samples from the two wells were analyzed for the following parameters with standard method turn around time on results.

USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)
USEPA 8020/602 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)
USEPA 8020/602 Methyl-t-butyl Ether (MTBE)
USEPA 8015M Total Petroleum Hydrocarbons as Diesel (TPH-D)

Groundwater analytical results are summarized in Table 1. The laboratory data report, which includes laboratory chromatograms for all analyses, is contained in Appendix B.

Table 1
SUMMARY OF GROUND WATER ANALYTICAL RESULTS
Liquid Sugars, Inc. 66th Street Site

Well Number	*Sample Date*	*Water Depth*	*Constituent (ppm)*						
			TPH-G	*TPH-D*	*B*	*T*	*E*	*X*	*MTBE*
MW-1	04/23/93	6.72 ft	0.64	0.99	0.0063	< 0 0005	0.0056	0.0025	--
(West)	07/13/93	8.00 ft	0.70	1.50	0.032	0.0012	0.0033	0 0110	--
	11/02/93	8.95 ft	0.87	1.70	0.019	< 0.0005	0.0066	0.0044	--
	02/15/94	7.91 ft	1.20	2.00	0.022	0.0018	0 01	0.0064	--
	05/18/94	7.65 ft	1.70	2.60[1]	0.057	0.021	0.30	0.13	--
	08/17/94	8.51 ft	1.20	2 20[1]	0.013	0.0019	0.0008	0.0082	--
	12/22/94	6.58 ft	1.10	2.40[2,3]	0.027	0.0069	0.0014	0 0059	--

Table 1
SUMMARY OF GROUND WATER ANALYTICAL RESULTS
Liquid Sugars, Inc. 66th Street Site

Well Number	*Sample Date*	*Water Depth*	*Constituent (ppm)*						
			TPH-G	*TPH-D*	*B*	*T*	*E*	*X*	*MTBE*
	05/09/95	6.73 ft	1.20	2.00[2,3]	0.014	0.0082	0.0120	0.0062	--
	11/05/98	9.08 ft	0.380	<0.050	0.0040	0.0064	0 0042	0 0019	<0.0050
	12/05/99	7.28 ft	0.490	<0.050	0.0012	0.0061	0.0046	0 0019	<0.0050
MW-2	04/23/93	6.73 ft	1.10	2.10	0 320	0.0065	0.0082	0.013	--
(East)	07/13/93	8.38 ft	0.48	0.21	0.033	0.0025	0.0052	0.0047	--
	11/02/93	9.05 ft	0.43	1.80	0.016	0.0009	0.0019	0.0021	--
	02/15/94	6.82 ft	1.40	2.80	0.056	0.0029	0.0075	0.0071	--
	05/18/94	7 56 ft	0.54	3.00	0.024	0.0013	0.0026	0.0034	--
	08/17/94	8.50 ft	0.88	2.20[1]	0.025	0.0030	0.0028	0.0086	--
	12/22/94	6.23 ft	0.61[4]	3.10[2,3]	0.0036	0.0033	0.0054	0.0016	--
	05/09/95	6.71 ft	2.30	5.20	0.0150	0.0060	0.0110	0.0130	--
	11/05/98	8.83 ft	1.20[5]	9.10	0.0065	0.0018	0.0059	0.0014	<0.010
	12/05/99	6.91 ft	0.790[5]	3.50	0.017	0.0049	0.0064	0.0016	<0.0050

TPH-G = Total Petroleum Hydrocarbons as Gasoline.
TPH-D = Total Petroleum Hydrocarbons as Diesel.
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-t-Butyl Ether
<1 0 = Not detected above the expressed value
-- = Not analyzed for this analyte

1 = Lab report states. "The positive result has an atypical pattern for Diesel analysis."
2 = Lab report states "The positive result appears to be a heavier hydrocarbon than Diesel."
3 = Lab report states "The positive result appears to be a lighter hydrocarbon than Diesel."
4 = Lab report states· "The positive result appears to be a heavier hydrocarbon than Gasoline."
5 = Lab report states "Product is not typical gasoline "

CONCLUSIONS

Laboratory analytical results from this sampling event are similar to November 1998 monitoring results. Groundwater from MW-1, located about 25 feet southwest from the former underground storage tank (UST) excavation cavity, continues to show a decreased level of TPH-G relative to historical levels, with no significant Benzene and no detectable TPH-D or MTBE. Groundwater from MW-2, located about ten feet southwest from the former UST excavation cavity, continues to show low to moderate levels of diesel-range hydrocarbons, with no significant levels of gasoline-range hydrocarbons and no detectable MTBE.

We appreciate this opportunity to provide this report for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,

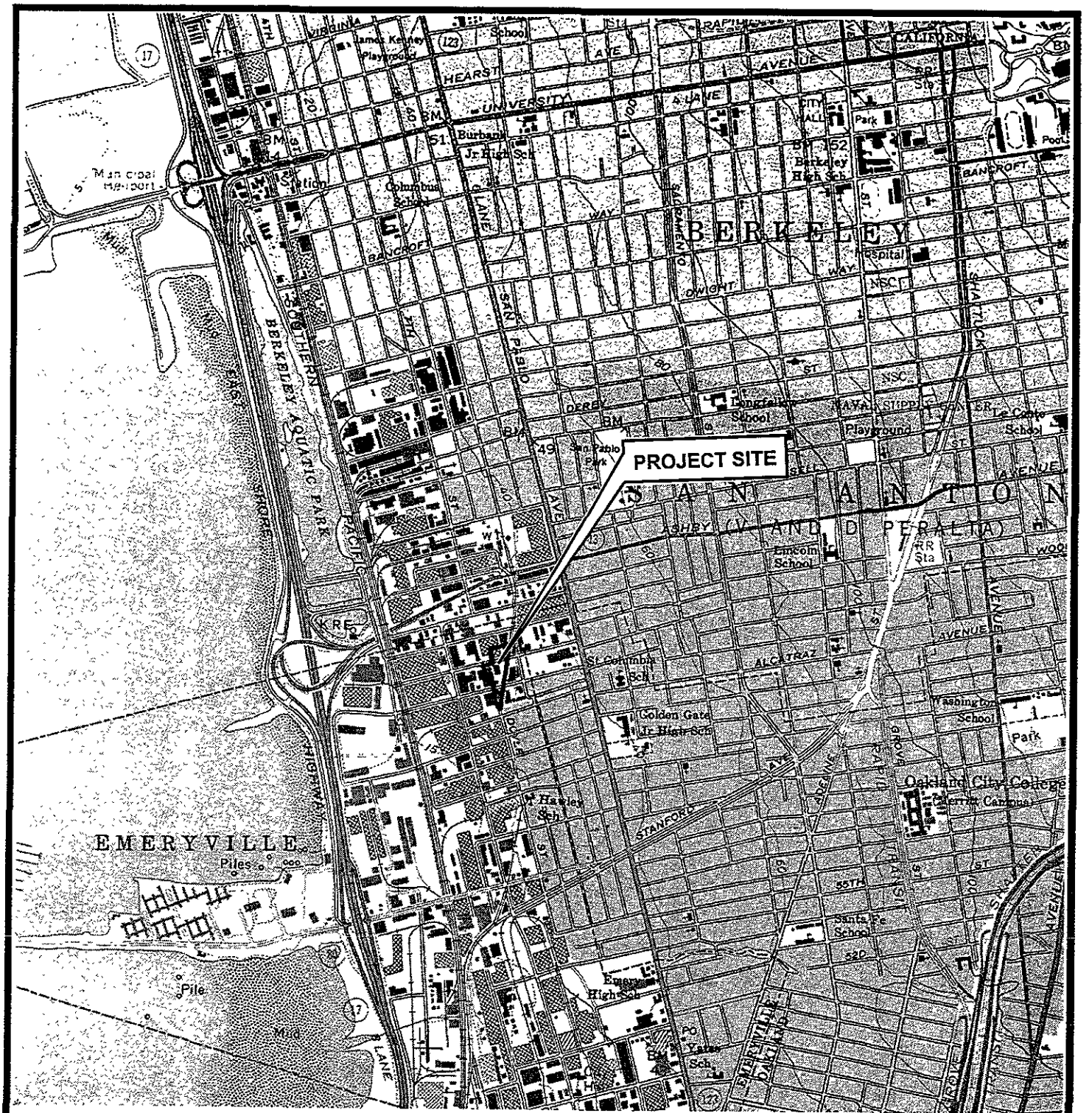
James E. Gribi
Registered Geologist
California No. 5843

JEG:ct
Enclosure

c Mr. Mike Alo, Liquid Sugars, Inc.

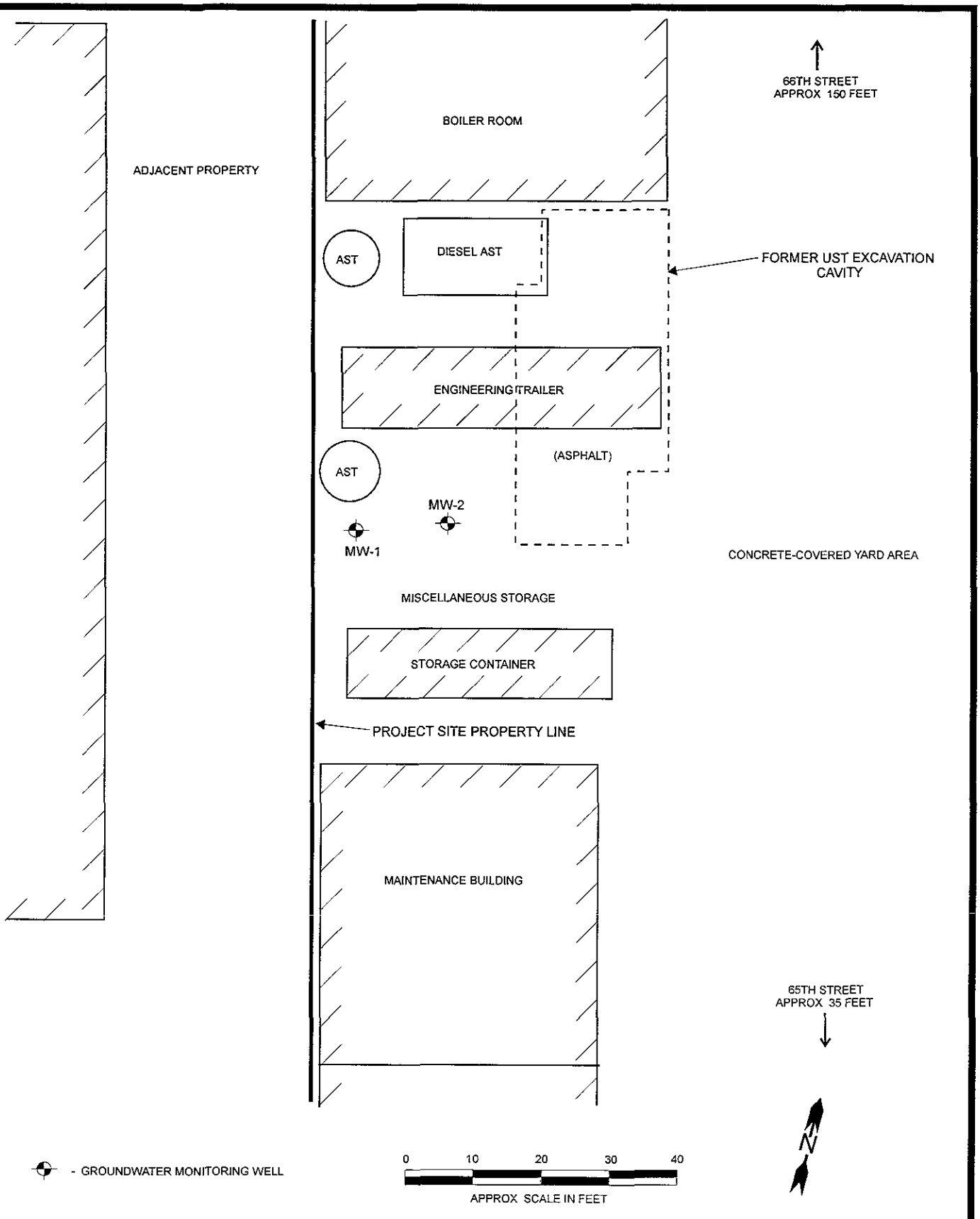
File GA-24/lsi-gmr qm1

FIGURES



TOPOGRAPHY FROM USGS OAKLAND, WEST, CALIFORNIA
7.5-MINUTE QUADRANGLE MAPS, (TOPO! 1997).

DESIGNED BY:	CHECKED BY:	**SITE VICINITY MAP**	DATE: 11/09/98	FIGURE: 1
DRAWN BY: JG	SCALE: 1:24,000	LIQUID SUGARS, INC. EMERYVILLE, CALIFORNIA	**GRIBI Associates**	
PROJECT NO: 149-01-01				



DESIGNED BY:	CHECKED BY:	SITE PLAN LIQUID SUGARS UST SITE 1275 66TH STREET EMERYVILLE,, CALIFORNIA	DATE: 11/25/98	FIGURE: 2
DRAWN BY JG	SCALE:		GRIBI Associates	
PROJECT NO: 140-01-01				

APPENDIX A

GROUNDWATER MONITORING FIELD DATA RECORDS

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-1 (WEST)	Well Loc.
Project Name LSI/Emeryville	Project No.
Date 7/5/99 Time	TOC Elevation GW Elevation
Depth to Water 7.28	Well Depth Well Diameter
Purge Water, 2": Wtr Column X 0.163 X 3 =	Purge Water, 4": Wtr Column X 0.653 X 3 =
Purge/Sample Method	*Lab Analyses*
Weather Conditions CL/PT cldy	Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	56.1	0.73	7.41	Clr – No HC Sh
	1	59.0	1.07	7.01	SL MKy gray. Si. HC O
	2	58.5	1.11	6.97	Si. SL HC O
	4	58.6	1.21	6.79	
	6	58.2	1.30	6.80	MKy Grey. No HC
	9	58.6	1.35	6.78	Sh. SL HC O

Remarks

GROUNDWATER SAMPLING RECORD		GRIBI Associates
Well No.	MW-2 (east	Well Loc.
Project Name	LSI Lemont, IL	Project No.
Date	2/5/90 Time	TOC Elevation GW Elevation
Depth to Water	6.91	Well Depth Well Diameter
Purge Water, 2": Wtr Column X 0.163 X 3 =		Purge Water, 4": Wtr Column X 0.653 X 3 =
Purge/Sample Method		Lab Analyses
Weather Conditions		Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	55.5	0.58	6.31	CLR-ND °C SH
	2	56.6	1.29	6.19	SL HC 0
	4	58.1	1.34	6.25	SL-MOD HC 0
	6	58.0	1.29	6.49	SL-MOD GRY (SL)
	10	58.9	1.29	6.48	
	15	58.5	1.70	6.41	
	20	58.6	1.71	6.32	SL MOD GRY SL HC
					SHEEN, SL-MOD HC 0

Remarks

APPENDIX B

LABORATORY DATA REPORTS AND CHAIN-OF-CUSTODY RECORDS

Acculabs Inc.
Davis
1046 Olive Drive, Davis CA 95616 ▪ 530-757-0920 ▪ Fax 753-6091

Sample Log 19596
February 11, 1999

Jim Gribi
Gribi Associates
884 Vintage
Suisun, CA 94585

Subject : 2 Water samples
Project Name : LSI/Emeryville
Project Number : 149-01-03

Dear Mr. Gribi,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Acculabs - Davis is certified by the State of Arizona (AZ0583) and the State of California (# I-2330). If you have any questions regarding procedures or results, please call me at 530-757-0920.

Sincerely,

Tom Kwoka

Tom Kwoka

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

Sample Log 19596

MTBE (Methyl-t-butyl ether) By EPA Method 8020/602

From : LSI/Emeryville (Proj. # 149-01-03)
Sampled : 02/05/99
Received : 02/05/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
MW-1 (WEST)	02/10/99	(5.0)	<5.0
MW-2 (EAST)	02/10/99	(5.0)	<5.0

Approved By:

Tom Kwoka
Lab Director

Acculabs Inc.

Davis

1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

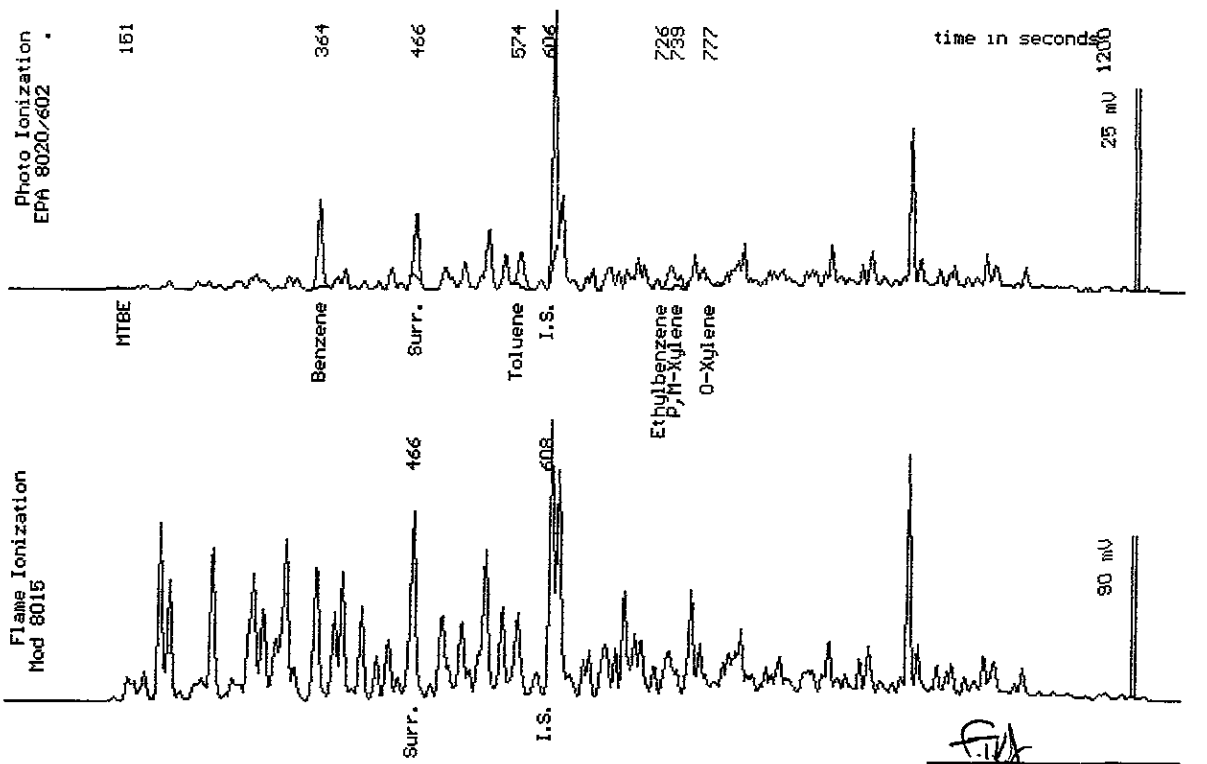
Sample Log 19596

19596-01

Sample: **MW-1 (WEST)**

From : LSI/Emeryville (Proj. # 149-01-03)
Sampled : 02/05/99
Dilution : 1:1 Run Log : 4181K
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	12
Toluene	(.50)	6.1
Ethylbenzene	(.50)	4.6
Total Xylenes	(.50)	1.9
TPH as Gasoline	(50)	490
Surrogate Recovery		115 %



Date Analyzed: 02-10-99
Column : 0.53mm ID X 60m Restek Rtx-1701

Stewart Rodolsky
Senior Chemist

Acculabs Inc.

Davis 1046 Olive Drive, Suite 2, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

Sample Log 19596

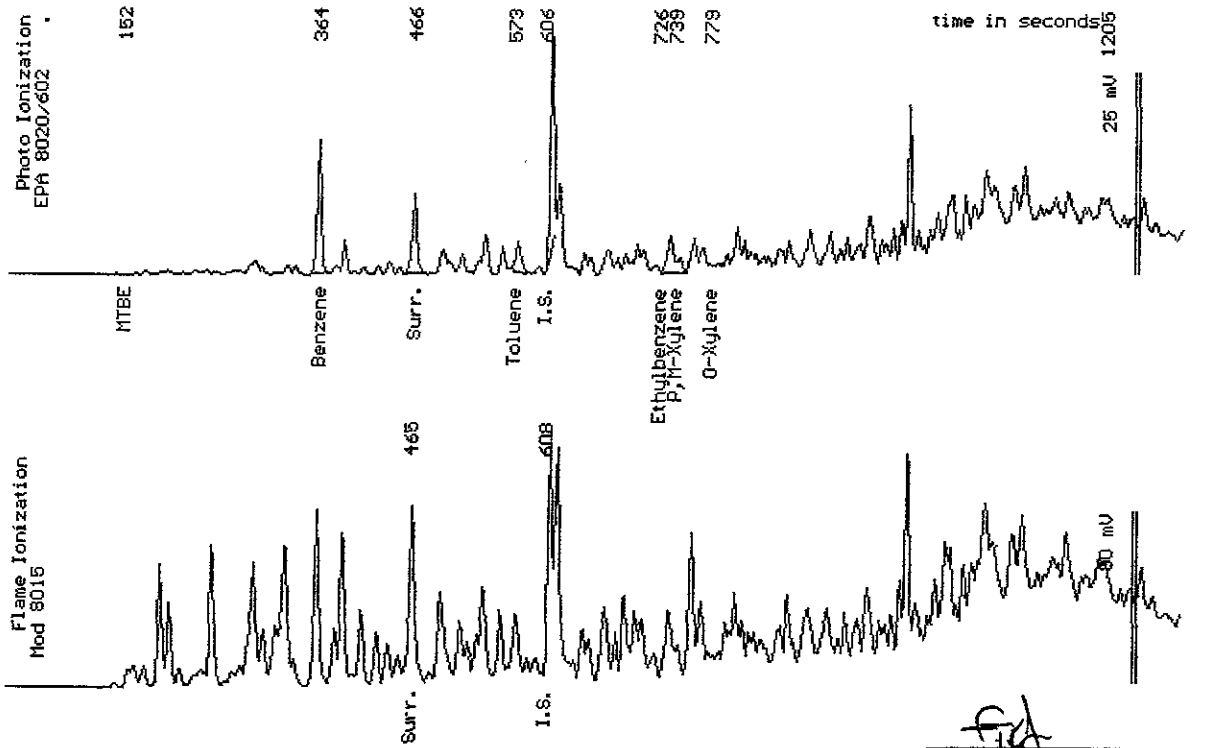
19596-02

Sample: **MW-2 (EAST)**

From : LSI/Emeryville (Proj. # 149-01-03)
Sampled : 02/05/99
Dilution : 1:1 Run Log : 4181K
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	17
Toluene	(.50)	4.9
Ethylbenzene	(.50)	6.4
Total Xylenes	(.50)	1.6
TPH as Gasoline	(50)	790 *
Surrogate Recovery		161 * %

* Product is not typical gasoline. Surrogate recovery high due to matrix interference.



Date Analyzed: 02-10-99
Column : 0.53mm ID X 60m Restek Rtx-1701

Stewart Pacolsky
Senior Chemist

Acculabs Inc.

February 11, 1999
Sample Log 19596

QC Report for EPA 602 & Modified EPA 8015
Run Log : 4181K
From : LSI/Emeryville (Proj. # 149-01-03)
Sample(s) Received : 02/05/99

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *

Spiked sample too contaminated for spike recovery. See LCS data.

* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene	108
Ethylbenzene	107
Gasoline	137

Parameter	Method Blank
Benzene	<0.50 ug/L
Toluene	<0.50 ug/L
Ethylbenzene	<0.50 ug/L
Total Xylenes	<0.50 ug/L
TPH as Gasoline	<50 ug/L

Tom Kwoka
Lab Director

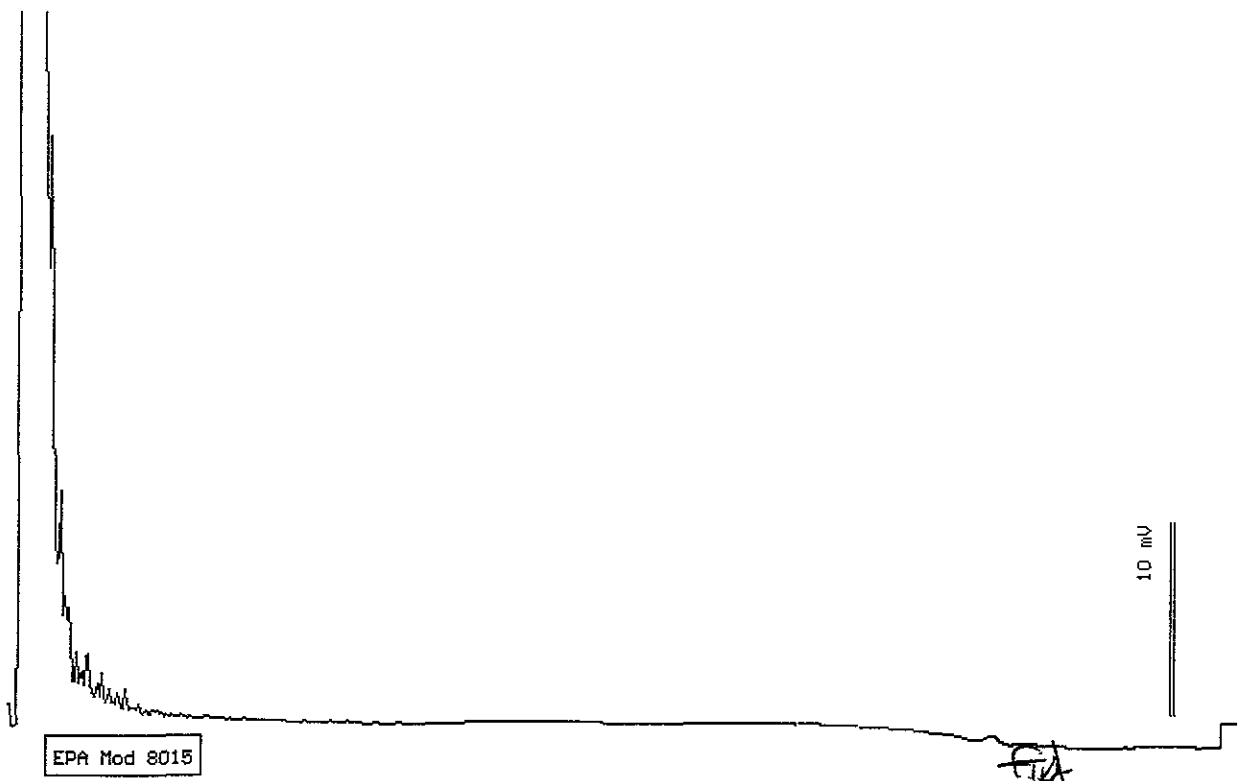
Acculabs Inc.
Davis
1046 Olive Drive, Davis CA 95616 ▪ 530-757-0920 ▪ Fax 753-6091

Sample Log 19596
19596-01

Sample: **MW-1 (WEST)**

From : LSI/Emeryville (Proj. # 149-01-03)
Sampled : 02/05/99
Extracted: 02/09/99 QC Batch : DW990201
Dilution : 1:1 Run Log : 7429B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	<50
TPH as Motor Oil	(100)	<100



Date: 02-10-99 Time: 03:33:12
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Podolsky
Senior Chemist

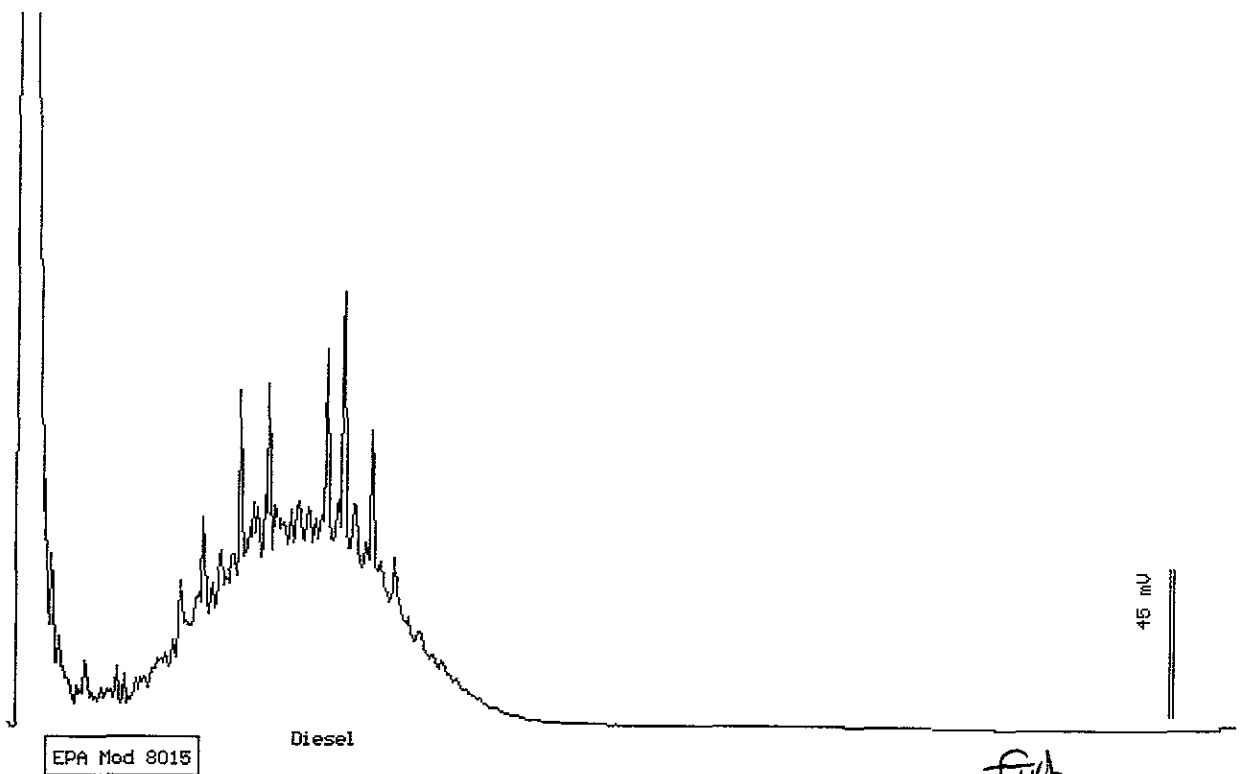
Acculabs Inc.
Davis
1046 Olive Drive, Davis CA 95616 ▪ 530-757-0920 ▪ Fax 753-6091

Sample Log 19596
19596-02

Sample: **MW-2 (EAST)**

From : LSI/Emeryville (Proj. # 149-01-03)
Sampled : 02/05/99
Extracted: 02/09/99 QC Batch : DW990201
Dilution : 1:1 Run Log : 7429B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	3500
TPH as Motor Oil	(100)	<100



Date: 02-10-99 Time: 04:06:09
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Steuart Podolsky
Senior Chemist

Acculabs Inc. February 10, 1999

QC Report
TPH Diesel/Motor Oil by 8015 Mod

QC Batch DW990201 Matrix: Water

Spike and Spike Duplicate Results

Parameter	Matrix Spike (%Rec)	Matrix Spike Dup. (%Rec)	RPD %
TPH as Diesel	Not enough sample for spiking. See duplicate LCS Data.		

Laboratory Control Spike

Parameter	Laboratory Control Spike (%Rec)	Laboratory Control Spike Dup. (%Rec)	RPD %
TPH as Diesel	96	102	6

Method Blank

Parameter	MDL(ug/L)	Measured Value(ug/L)
TPH as Diesel	(50)	<50
TPH as Motor Oil	(100)	<100

Tom Kwoka
Lab Director

Acculabs Inc.

[ ] 1725 W. 17th. St. Tempe AZ 85281 602-967-1310 Fax 967-1019
[ ] 4455 S. Park Ave. Tucson AZ 85714 520-807-3801 Fax 807-3803
[ ] 2020 W. Lone Cactus Dr. Phoenix AZ 85027 602-780-4800 Fax 780-7695
[ ] 2029 N. 4th. St. Flagstaff AZ 86004 520-774-7643 Fax 774-7648
[ ] 1046 Olive Drive Davis CA 95616 530-757-0920 Fax 753-6091
[ ] 75 Suttle St. Durango CO 81301 970-247-4220 Fax 247-4227
[ ] 4663 Table Mountain Dr. Golden CO 80403 303-277-9514 Fax 277-9512
[ ] 992 Spice Islands Dr. Sparks NV 89431 702-355-0202 Fax 355-0817

Lab Number: 19596
Report Due Date: 2-12-99

Client: GRIBI ASSOCIATES		PUBLIC WATER SUPPLY INFORMATION	
Address: 1350 HAYES St, Ste C-14		System	Report to: State Y N
City, State & Zip: BENICIA CA 94510		PWS No.	Report to: EPA Y N
Contact: JIM GRIBI		POE No.	DWR No.
Phone: 707/748-7743	Project Name: LSI/EMERYVILLE	Collection Point	
Fax: 707/748-7763	Project Number: 149-01-03	Collector's Name	
P.O. Number	Fax Results: (Y) N	Page of	Location (City)

SAMPLE TYPE CODES

DW = drinking water; WW = waste water; MW = monitoring well; HW = hazardous waste; TB = travel blank; SD = solid; SO = soil; SL = sludge

Compliance Monitoring Y N

TURNAROUND TIME REQUESTED

(Standard) / ~~RUSH~~ / Special

Lab Manager Approval

CLIENT'S SAMPLE ID/LOCATION	Date	Time	Sample Type	Containers	Analyses Requested: TPH-G/BTEX/MTBE	TPH-D/TMO	Spl. No.
MW-1 (West)	2/5		W	6	X	X	01
MW-2 (EAST)	"		W	6	X	X	02

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT			Date	Time	Samples Relinquished By	Samples Received By
Received Cold	Y	N	2/5	17:35	Jim Gribi	Amy Thompson
Custody Seals	Y	N	2			
Seals Intact	Y	N				
No. of Containers						

Acculabs' terms are: Net 40 (Payment must be received by the date shown on the invoice or any discount is void)