GRIBI Associates
Geological and Environmental Consulting Services

February 8, 2000

SOP 537

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 December 28, 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 five groundwater monitoring wells at the site.

DESCRIPTION OF SAMPLING ACTIVITIES

On December 28, 1999, Mr. Stanton Stubbs conducted groundwater monitoring activities for five site wells (MW-1, MW-2, MW-3, MW-4, and MW-5). Groundwater monitoring was conducted in accordance with California LUFT Field Manual guidelines as follows:

- After unlocking and opening the monitoring wells, 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 using a 12-volt purge pump (except MW-2, which was purged using a PVC bailer). 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 pump outlet or bailer into laboratory supplied containers. 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

Purged groundwater from MW-2 exhibited moderate hydrocarbon odors, with slight hydrocarbon sheens. Purged groundwater from MW-1 and MW-5 exhibited moderate hydrocarbon odors, with no hydrocarbon sheens. Purged groundwater from MW-3 and MW-4 exhibited no hydrocarbon odors and no hydrocarbon sheens.

During the December 28, 1999 monitoring activities, groundwater was measured in the five site wells at a depth of about eight feet below surface grade, with a flow gradient of about 0.03 feet/feet to the southwest (see Figure 3).

Laboratory Analytical Results

Groundwater samples from the five 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/MO)

Groundwater analytical results are summarized in Table 1 and on Figure 4. The laboratory data report, which includes laboratory chromatograms for all analyses, is contained in Appendix B.

Table 2
SUMMARY OF ANALYTICAL RESULTS FROM GROUNDWATER MONITORING
Liquid Sugars UST Site, 1275 66th Street Site

Well Number	Sample Date	Groundwater Elevation	Constituent (ppm)									
			TPH-D	TPH-MO	TPH-G	B	T	E	X	MTBE	SVOCs	PB
MW-1	04/23/93	21 22 ft	**0.99**	--	**0.64**	**0.0063**	<0.0005	**0.0056**	**0.0025**	--	--	--
<27.94>	07/13/93	19.94 ft	**1.50**	--	**0.70**	**0.032**	**0.0012**	**0.0033**	**0.0110**	--	--	--
	11/02/93	18.99 ft	**1.70**	--	**0.87**	**0.019**	<0.0005	**0.0066**	**0.0044**	--	--	--
	02/15/94	20.03 ft	**2.00**	--	**1.20**	**0.022**	**0.0018**	**0.01**	**0.0064**	--	--	--
	05/18/94	20.29 ft	**2.60**[1]	--	**1.70**	**0.057**	**0.021**	**0.30**	**0.13**	--	--	--
	08/17/94	19.43 ft	**2.20**[1]	--	**1.20**	**0.013**	**0.0019**	**0.0008**	**0.0082**	--	--	--
	12/22/94	21.36 ft	**2.40**[2,3]	--	**1.10**	**0.027**	**0.0069**	**0.0014**	**0.0059**	--	--	--
	05/09/95	21.21 ft	**2.00**[2,3]	--	**1.20**	**0.014**	**0.0082**	**0.0120**	**0.0062**	--	--	--
	11/05/98	18.86 ft	<0.050	<0.100	**0.380**	**0.0040**	**0.0064**	**0.0042**	**0.0019**	<0.0050	--	--
	2/05/99	20.66 ft	<0.050	<0.100	**0.490**	**0.0012**	**0.0061**	**0.0046**	**0.0019**	<0.0050	--	--
	06/02/99	19.61 ft	**0.770**	<0.100	**0.340**	**0.029**	**0.0040**	**0.0058**	**0.0015**	<0.0050	--	--
	06/28/99	19 08 ft	<0.050	<0.100	**0.460**	**0.0073**	**0.0049**	**0.0026**	**0.0022**	<0.0050	--	--
	09/28/99	18.93 ft	**0.099**	<0.100	**0.580**	**0.0015**	**0.0025**	**0.0053**	**0.0055**	<0 0050	--	--
	12/28/99	--	<0.050	<0 100	**0.490**	**0.0012**	**0.012**	**0.0023**	**0.0023**	<0.0050	--	--
MW-2	04/23/93	21.14 ft	**2.10**	--	**1.10**	**0.320**	**0.0065**	**0.0082**	**0.013**	--	--	--
<27.87>	07/13/93	19.49 ft	**0.21**	--	**0.48**	**0.033**	**0.0025**	**0.0052**	**0.0047**	--	--	--
	11/02/93	18.82 ft	**1.80**	--	**0.43**	**0.016**	**0.0009**	**0.0019**	**0.0021**	--	--	--
	02/15/94	21.05 ft	**2.80**	--	**1.40**	**0.056**	**0.0029**	**0.0075**	**0.0071**	--	--	--
	05/18/94	20.31 ft	**3.00**	--	**0.54**	**0.024**	**0.0013**	**0.0026**	**0.0034**	--	--	--
	08/17/94	19.37 ft	**2.20**[1]	--	**0.88**	**0.025**	**0.0030**	**0.0028**	**0.0086**	--	--	--
	12/22/94	21.64 ft	**3.10**[2,3]	--	**0.61**[4]	**0.0036**	**0.0033**	**0.0054**	**0.0016**	--	--	--

Table 2
SUMMARY OF ANALYTICAL RESULTS FROM GROUNDWATER MONITORING
Liquid Sugars UST Site, 1275 66th Street Site

Well Number	Sample Date	Groundwater Elevation	Constituent (ppm)									
			TPH-D	TPH-MO	TPH-G	B	T	E	X	MTBE	SVOCs	PB
	05/09/95	21 16 ft	**5.20**	--	**2.30**	**0.0150**	**0.0060**	**0.0110**	**0.0130**	--	--	--
	11/05/98	19 04 ft	**9.10**	**0.200**	**1.20**[5]	**0.0065**	**0.0018**	**0.0059**	**0.0014**	<0 010	--	--
	2/05/99	20 96 ft	**3.50**	<0.100	**0.790**[5]	**0.017**	**0.0049**	**0.0064**	**0.0016**	<0.0050	--	--
	06/02/99	19.84 ft	**21.0**	<0 500	**0.480**	**0.032**	**0.0040**	**0.0059**	**0.0016**	<0 0050	<0 010[6]	**0.008**
	06/28/99	19 29 ft	**0.650**	<0 100	**0.380**	**0.010**	**0.0020**	**0.0033**	**0.00077**	<0.0050	--	--
	09/28/99	19.23 ft	**7.00**	<0.100	**1.6**	<0.0025	**0.0079**	**0.0091**	**0.013**	<0.025	--	--
	12/28/99	20.36 ft.	**0.640**	<0 100	**1.1**[5]	**0.0075**	**0.012**	**0.0056**	**0.0053**	**0.0086**[7]	--	--
MW-3	06/28/99	18.77 ft	**0.300**	<0 100	**0.066**	<0 00050	<0.00050	<0.00050	<0.00050	<0.0050	--	--
<26 19>	09/28/99	19.05 ft	**0.350**	<0 100	<0.050	<0.00050	<0.00050	<0 00050	<0.00050	<0.0050	--	--
	12/28/99	20.07 ft	**0.220**	<0.100	<0.050	<0 00050	**0.013**	<0.00050	<0.00050	<0.0050	--	--
MW-4	06/28/99	18 49 ft	**0.320**	<0.100	**0.110**	**0.00052**	**0.0011**	**0.0022**	<0.00050	<0.0050	--	--
<24.90>	09/28/99	18.45 ft	**0.060**	<0.100	**0.110**	**0.0034**	<0.00050	**0.0018**	<0.00050	**0.0068**	--	--
	12/28/99	19 24 ft.	<0.050	<0.100	**0.086**	**0.0033**	**0.0069**	**0.00064**	<0.00050	<0.0050	--	--
MW-5	06/28/99	18.64 ft	<0 050	<0.100	**0.140**	**0.0030**	**0.0017**	<0.00050	<0.00050	**0.024**[7]	--	--
<25.90>	09/28/99	18.56 ft	<0.050	<0.100	**0.140**	**0.010**	**0.00083**	**0.00081**	**0.00084**	**0.034**[7]	--	–
	12/28/99	18.98 ft.	<0.050	<0.100	**0.190**	**0.048**	**0.00062**	**0.0018**	**0.0015**	**0.040**	--	--

Groundwater Elevation = Groundwater mean sea level elevation
TPH-G = Total Petroleum Hydrocarbons as Gasoline
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-t-Butyl Ether
SVOCS = Semi-Volatile Organic Compounds
Pb = Total Lead

<27 94> = Top of casing mean sea level elevation
<0 0005 = Not detected above the expressed detection level
-- = 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 "
6 = No detectable levels of 69 SVOC analytes
7 = MTBE result confirmed using USEPA Method 8260B

CONCLUSIONS

Laboratory analytical results from this sampling event are similar to previous monitoring results. Shallow groundwater southwest from the former Liquid Sugars USTs appears to be gasoline-impacted; however, impacts appear to decrease markedly in median downgradient wells MW-5 and MW-4. Low level of diesel-range hydrocarbons in MW-3, located along the north sidewalk on 65th Street, appear to be from an unknown source.

Groundwater monitoring will continue for one additional quarter, in accordance with the approved workplan requiring one year of quarterly monitoring.

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

REGISTERED GEOLOGIST
JAMES E. GRIBI
No. 5843
STATE OF CALIFORNIA

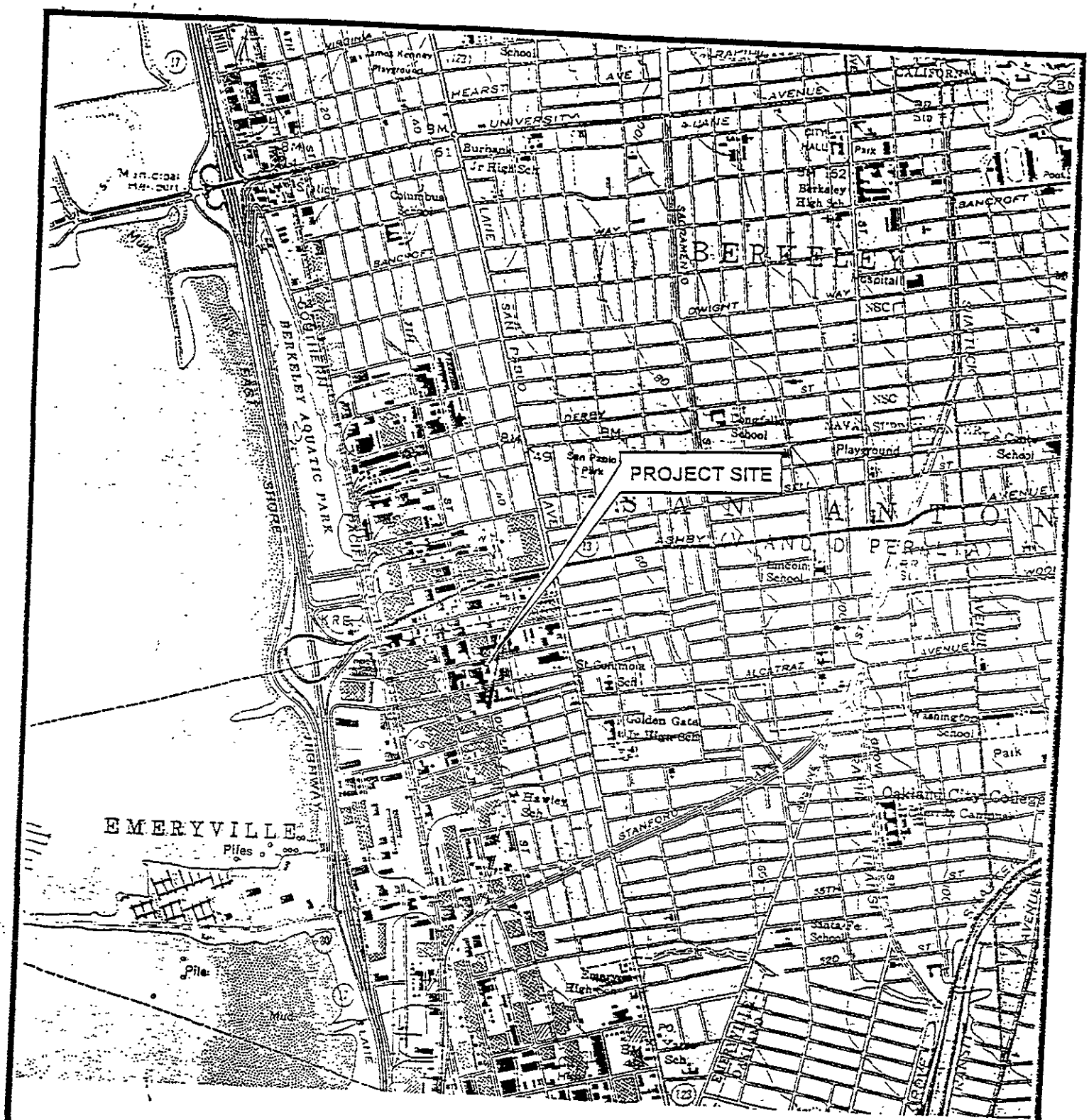
Stanton Stubbs
Environmental Scientist

JEG:ct
Enclosure

c Mr. Mike Alo, Liquid Sugars, Inc.

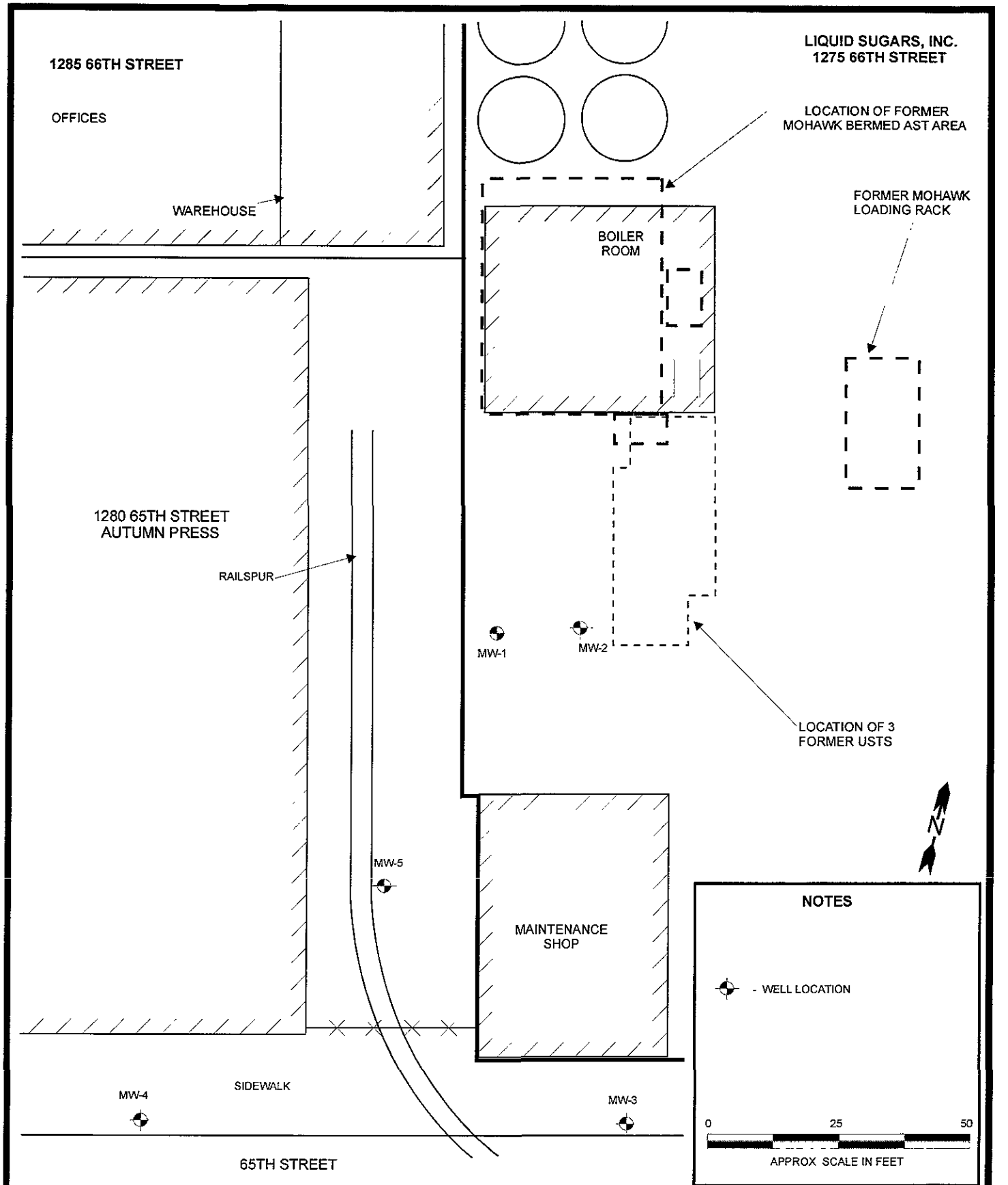
Filename C:\My Documents\My Files\Quartly Monitoring\Draft\LSI-Middle\lsi-qmr3_1-00.wpd

FIGURES

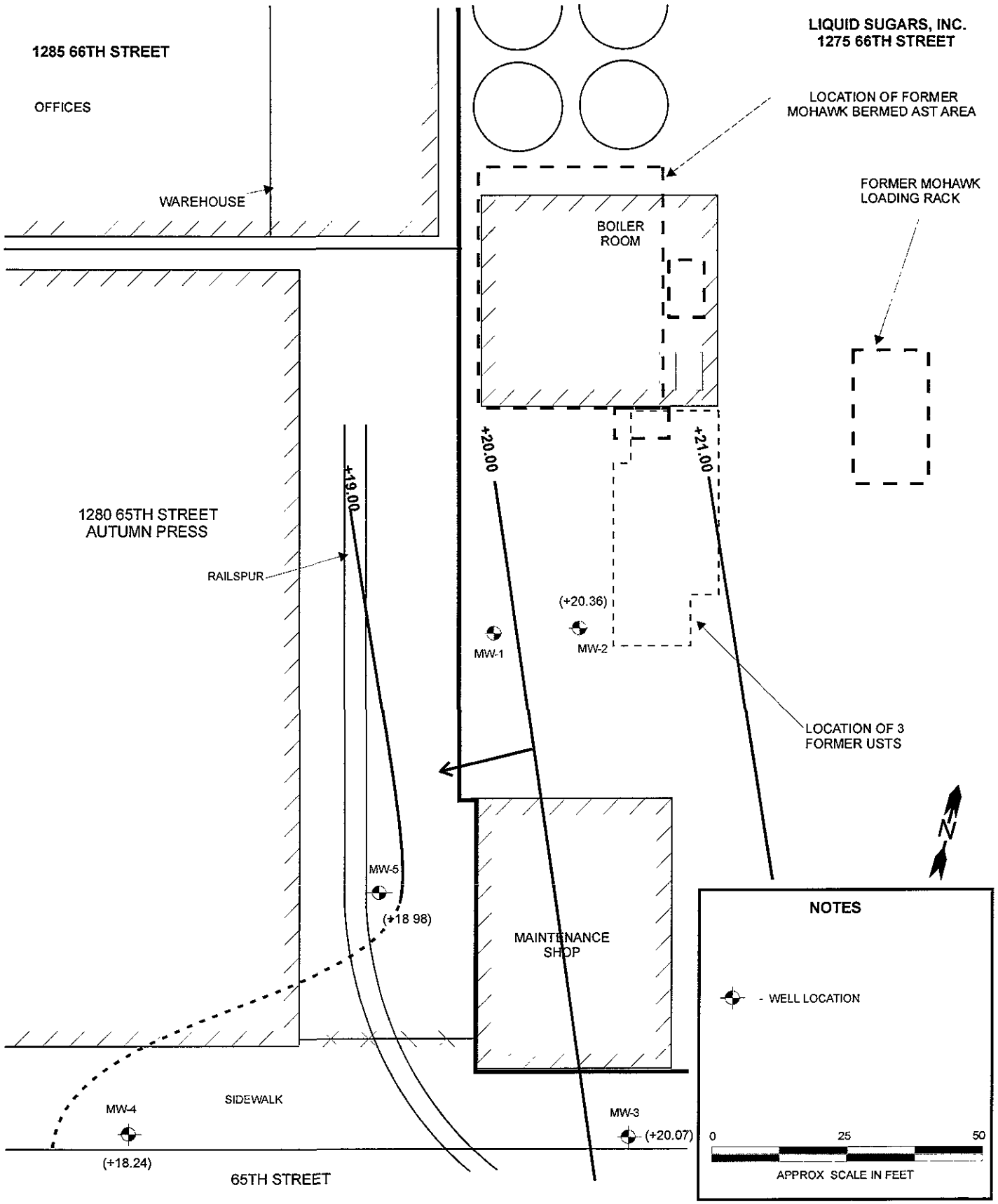


TOPOGRAPHY FROM USGS OAKLAND, WEST, CALIFORNIA
7.5-MINUTE QUADRANGLE MAPS, (TOPO! 1997).

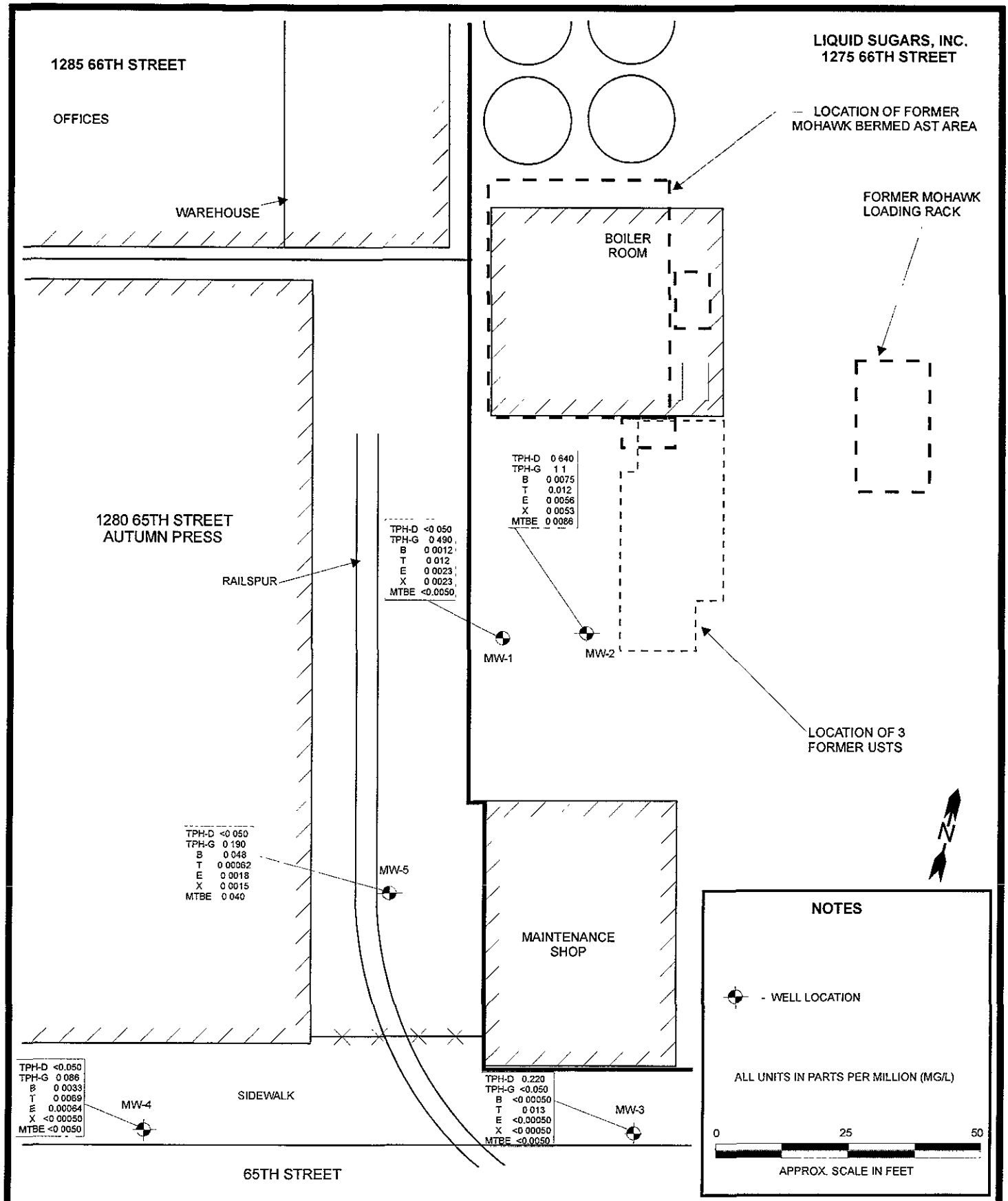
DESIGNED BY:	CHECKED BY:	SITE VICINITY MAP	DATE: 11/09/98	FIGURE: 1
DRAWN BY: JG	SCALE: 1:24,000			
PROJECT NO: 149-01-01		LIQUID SUGARS, INC. EMERYVILLE, CALIFORNIA	GRIBI Associates	



DESIGNED BY.	CHECKED BY: SS	**SITE PLAN**	DATE: 02/08/00	FIGURE: 2
DRAWN BY: JG	SCALE:	LIQUID SUGARS, INC. SITE 1275 & 1285 66TH STREET EMERYVILLE, CALIFORNIA	**GRIBI Associates**	
PROJECT NO: 149-01-03				



DESIGNED BY:	CHECKED BY: SS	**GROUNDWATER GRADIENT MAP 12/28/99**	DATE: 02/08/00	FIGURE: 3
DRAWN BY: JG	SCALE:	LIQUID SUGARS, INC. SITE 1275 & 1285 66TH STREET EMERYVILLE, CALIFORNIA	GRIBI Associates	
PROJECT NO: 149-01-03				



DESIGNED BY:	CHECKED BY: SS	**GROUNDWATER HYDROCARBON RESULTS**	DATE 02/08/00	FIGURE: **4**
DRAWN BY: JG	SCALE:	LIQUID SUGARS, INC. SITE 1275 & 1285 66TH STREET EMERYVILLE, CALIFORNIA	**GRIBI Associates**	
PROJECT NO: 149-01-03				

APPENDIX A

GROUNDWATER MONITORING FIELD DATA RECORDS

17.73

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. WW-1	Well Loc.
Project Name LSI-Middle	Project No.
Date 12/28 Time	TOC Elevation GW Elevation
Depth to Water 9, 10.71 (? - Purged)	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	69.7	2.77	9.55	Clear, No Tr Oil/Silt
	3	67.8	2.48	9.75	" , SL HCO
	6	68.8	2.56	9.89	Milky Gray mod HCO
	9	68.7	2.57	9.99	Milky Gray mod HCO

Remarks

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-2	Well Loc.
Project Name LSI-Middle	Project No.
Date 12/28 : Time	TOC Elevation GW Elevation
Depth to Water 7.51	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

20.36

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	66.0	2.49	11.07	
	4	66.6	2.43	11.26	
	8	67.6	2.39	11.31	
	16	68.3	2.3	11.36	

Remarks

20.07

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-3	Well Loc.
Project Name LSI-M[illegible]	Project No.
Date 12/28 Time	TOC Elevation GW Elevation
Depth to Water [illegible].12	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 B[illegible]	Lab Analyses
Weather Conditions [illegible]	Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	66.9	1.93	6.9[illegible]	[illegible], No [illegible]
	[illegible]	68.0	[illegible]	6.15	[illegible]
	4	68.8	2.47	[illegible].99	[illegible]
	8	68.[illegible]	2.[illegible]9	[illegible].28	[illegible]

Remarks

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-4	Well Loc.
Project Name [illegible]	Project No.
Date 12/2/04 Time	TOC Elevation GW Elevation
Depth to Water 6.56	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 Pump	Lab Analyses
Weather Conditions	Laboratory

18.24

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	73.7	2.25	9.49	Clear, No HC Odor
	2	69.4	2.08	8.96	[illegible] Brn, No HC Odor
	4	68.6	2.12	8.72	"
	9	69.0	2.12	7.89	"

Remarks

Recharge Slow

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-5	Well Loc.
Project Name LSI-Middl	Project No.
Date 12/28 Time	TOC Elevation GW Elevation
Depth to Water 6.92	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 Pump	Lab Analyses
Weather Conditions	Laboratory

19.98

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	67.6	7.99	6.77	[illegible]
	2	67.0	2.04	6.99	" "
	4	67.6	2.10	7.57	" "
	8	68.2	2.10	8.43	" "

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 20940
January 12, 2000

Jim Gribi
Gribi Associates
1350 Hayes Street, #C-14
Benicia, CA 94510

Subject : 5 Water samples
Project Name : LSI-MIDDLE
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 California (# 2330), the State of Arizona (AZ0583) and the State of Nevada. If you have any questions regarding procedures or results, please call me at 530-757-0920.

Sincerely,

Tom Kwoka

Tom Kwoka

Acculabs Inc.
Davis

January 10, 2000
Sample Log 20940

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

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Received : 12/30/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
MW-1	01/10/00	(5.0)	<5.0
MW-2	01/10/00	(5.0)	8.6
MW-3	01/10/00	(5.0)	<5.0
MW-4	01/10/00	(5.0)	<5.0
MW-5	01/10/00	(5.0)	40

Approved By:

Tom Kwoka
Lab Director

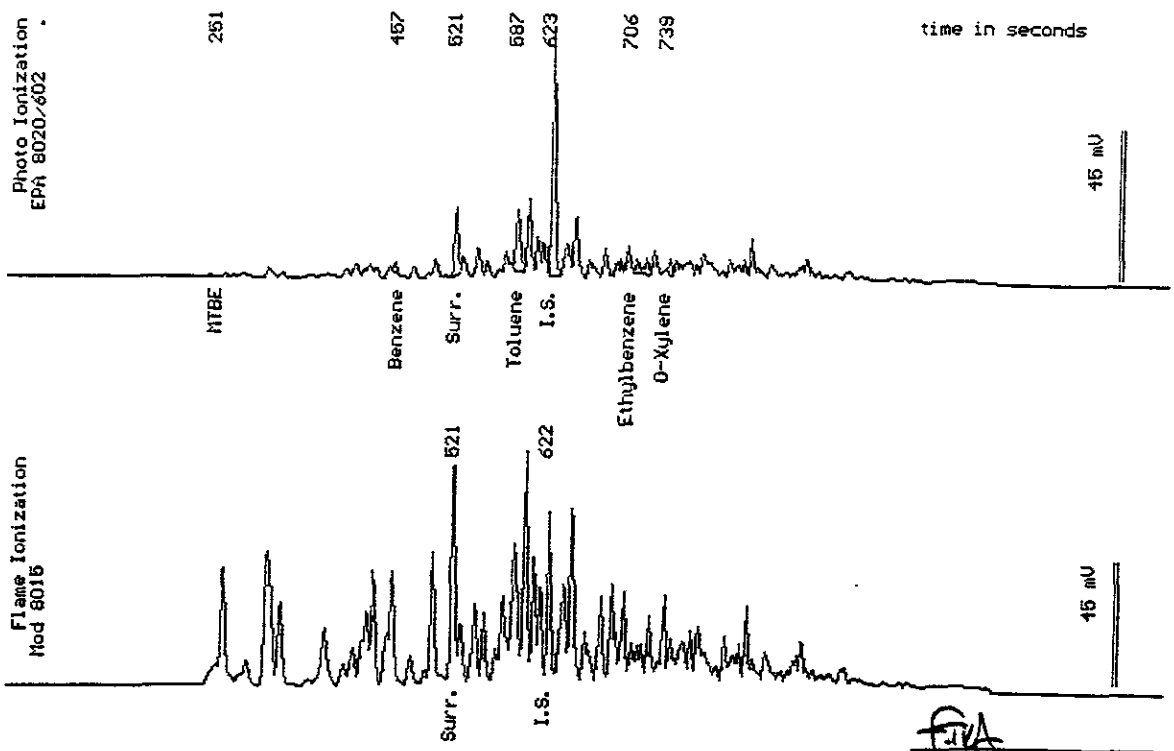
Acculabs Inc.
Davis

Sample Log 20940
20940-01

Sample: **MW-1**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Dilution : 1:1 Run Log : 2186W
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	1.2
Toluene	(.50)	12
Ethylbenzene	(.50)	2.3
Total Xylenes	(.50)	2.3
TPH as Gasoline	(50)	490
Surrogate Recovery		103 %



Date Analyzed: 01-10-00
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Bodolsky
Senior Chemist

Acculabs Inc.
Davis

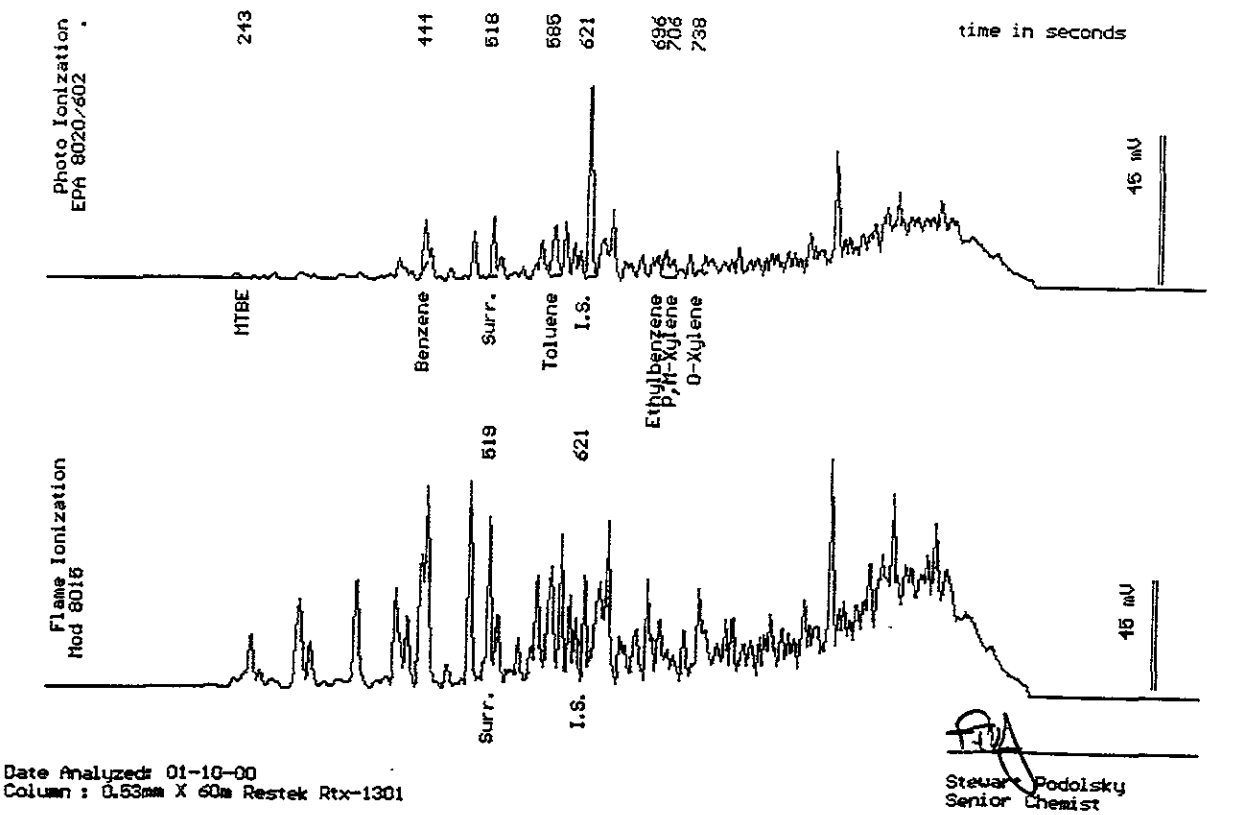
Sample Log 20940
20940-02

Sample: **MW-2**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Dilution : 1:1 Run Log : 2186V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	7.5
Toluene	(.50)	12
Ethylbenzene	(.50)	5.6
Total Xylenes	(.50)	5.3
TPH as Gasoline	(50)	1100 *
Surrogate Recovery		101 %

* Product is not typical gasoline.



Date Analyzed: 01-10-00
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

Acculabs Inc.

Davis

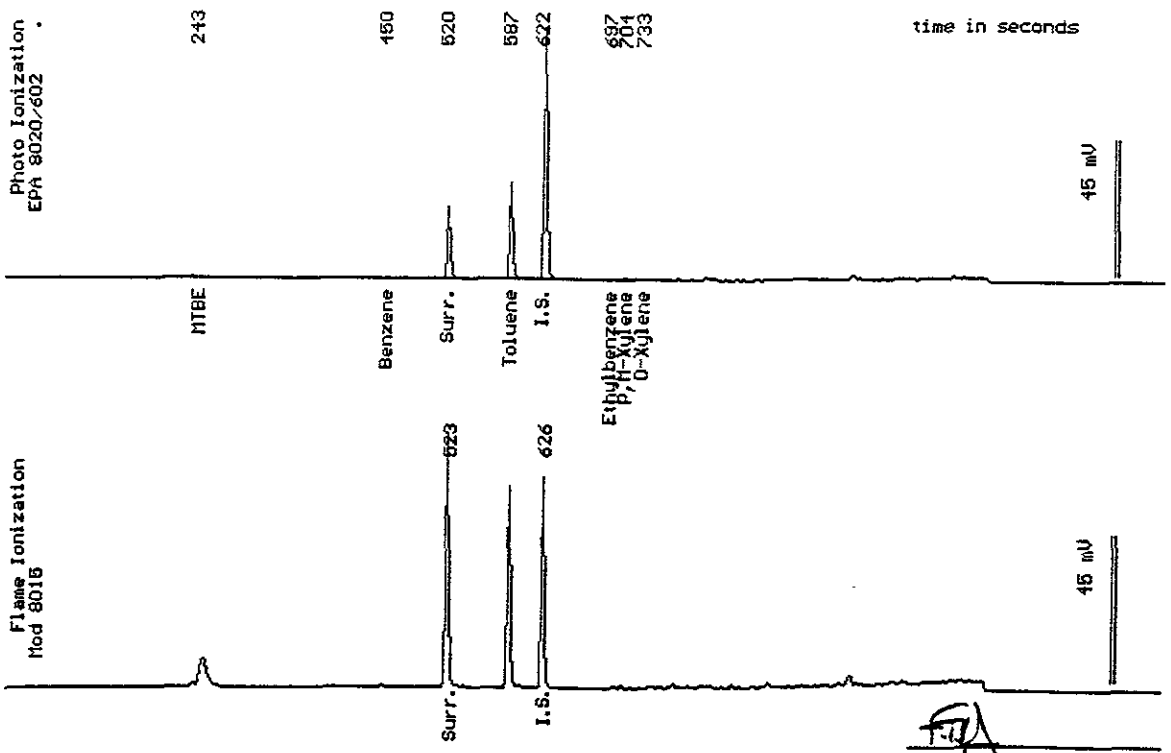
Sample Log 20940

20940-03

Sample: **MW-3**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Dilution : 1:1 Run Log : 2186V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	13
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		101 %



Date Analyzed: 01-10-00
Column : 0.53mm X 60m Restek Rtx-1301

Steuart Podolsky
Senior Chemist

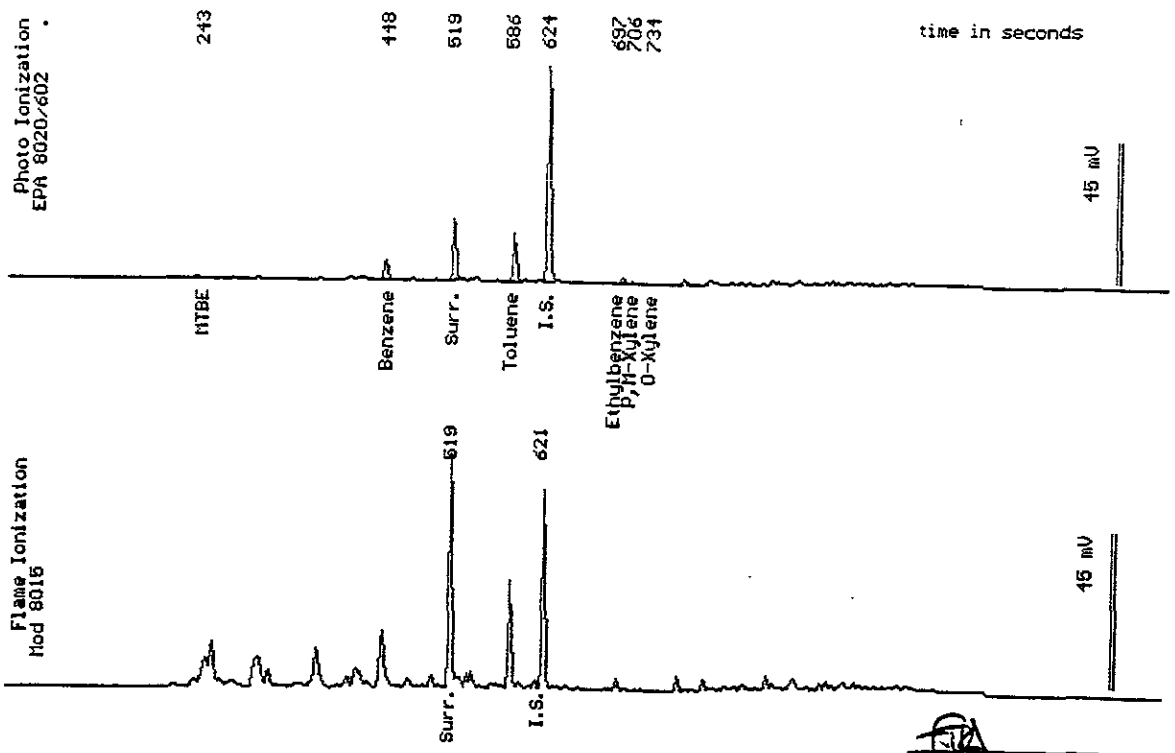
Acculabs Inc.
Davis

Sample Log 20940
20940-04

Sample: **MW-4**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Dilution : 1:1 Run Log : 2186V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	3.3
Toluene	(.50)	6.9
Ethylbenzene	(.50)	.64
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	86
Surrogate Recovery		99 %



Date Analyzed: 01-10-00
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

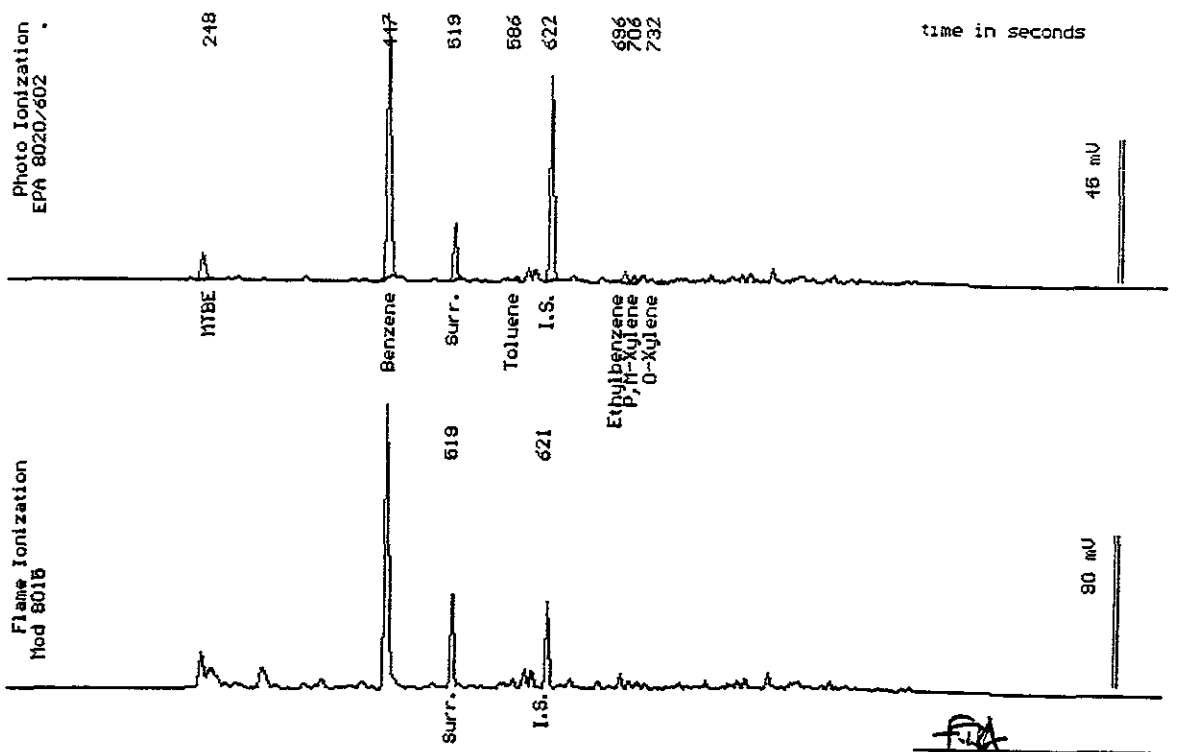
Acculabs Inc.
Davis

Sample Log 20940
20940-05

Sample: **MW-5**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Dilution : 1:1 Run Log : 2186V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	48
Toluene	(.50)	.62
Ethylbenzene	(.50)	1.8
Total Xylenes	(.50)	1.5
TPH as Gasoline	(50)	190
Surrogate Recovery		98 %



Date Analyzed: 01-10-00
Column : 0.53mm X 60m Restek Rtx-1301

Steuart Bodolsky
Senior Chemist

Acculabs Inc.

January 10, 2000
Sample Log 20940

QC Report for EPA 602 & Modified EPA 8015
Run Log : 2186V
From : LSI-MIDDLE (Proj. # 149-01-03)
Sample(s) Received : 12/30/99

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *
Benzene	132	126	5
Ethylbenzene	124	125	1

No gasoline spike recovery due to high gas in spiked sample.

* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene	104
Ethylbenzene	106
Gasoline	100

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

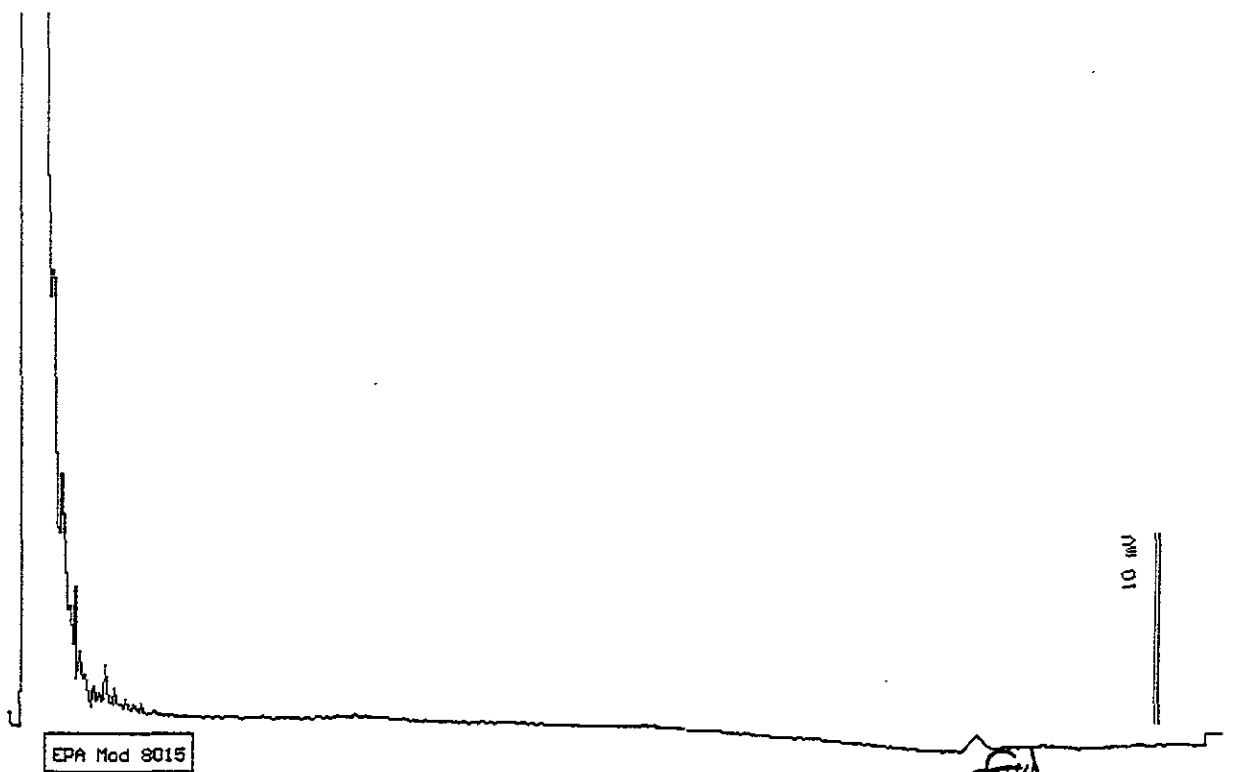
Acculabs Inc.
Davis

Sample Log 20940
20940-01

Sample: **MW-1**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Extracted: 01/04/00 QC Batch : DW991203
Dilution : 1:1 Run Log : 7458C
Matrix : Water

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



Date: 01-04-80 Time: 15:38:00
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Steuart Podolsky
Senior Chemist

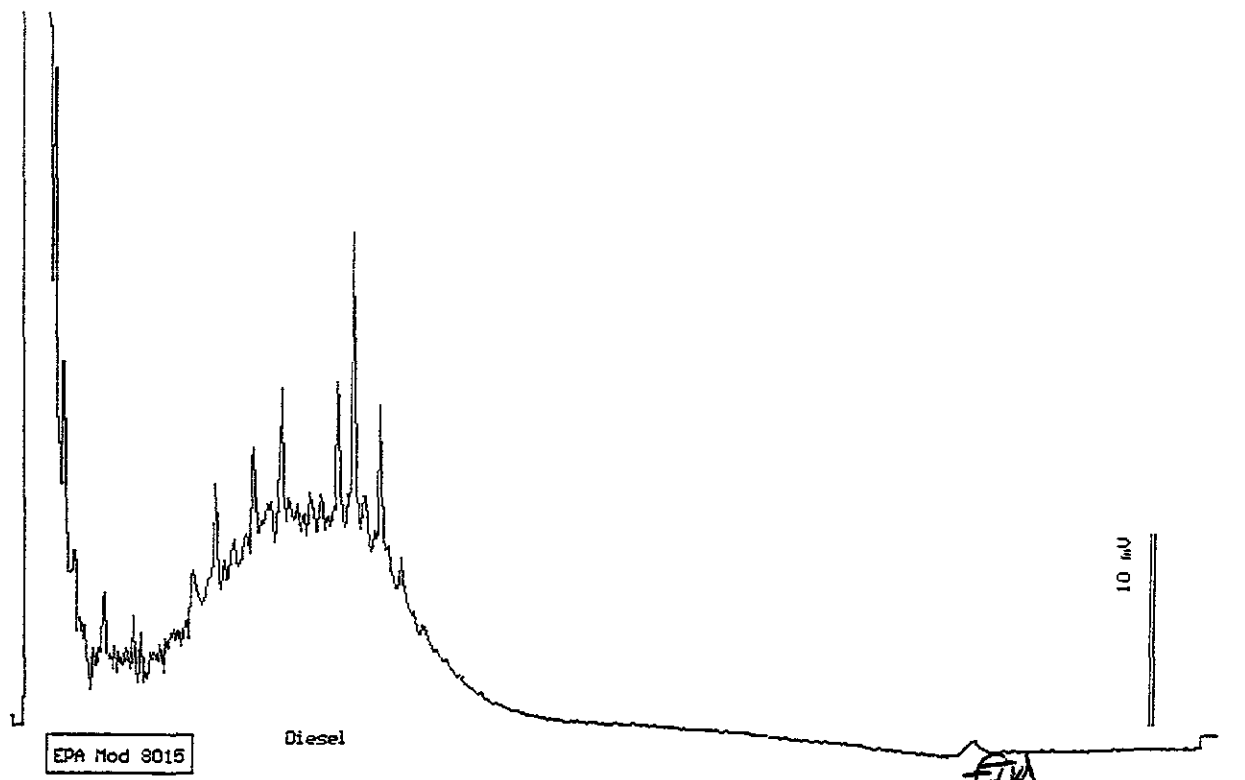
Acculabs Inc.
Davis

Sample Log 20940
20940-02

Sample: MW-2

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Extracted: 01/04/00 QC Batch : DW991203
Dilution : 1:1 Run Log : 7458C
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	640
TPH as Motor Oil	(100)	<100



Date: 01-04-80 Time: 16:10:51
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Steuart Podolsky
Senior Chemist

Acculabs Inc.
Davis

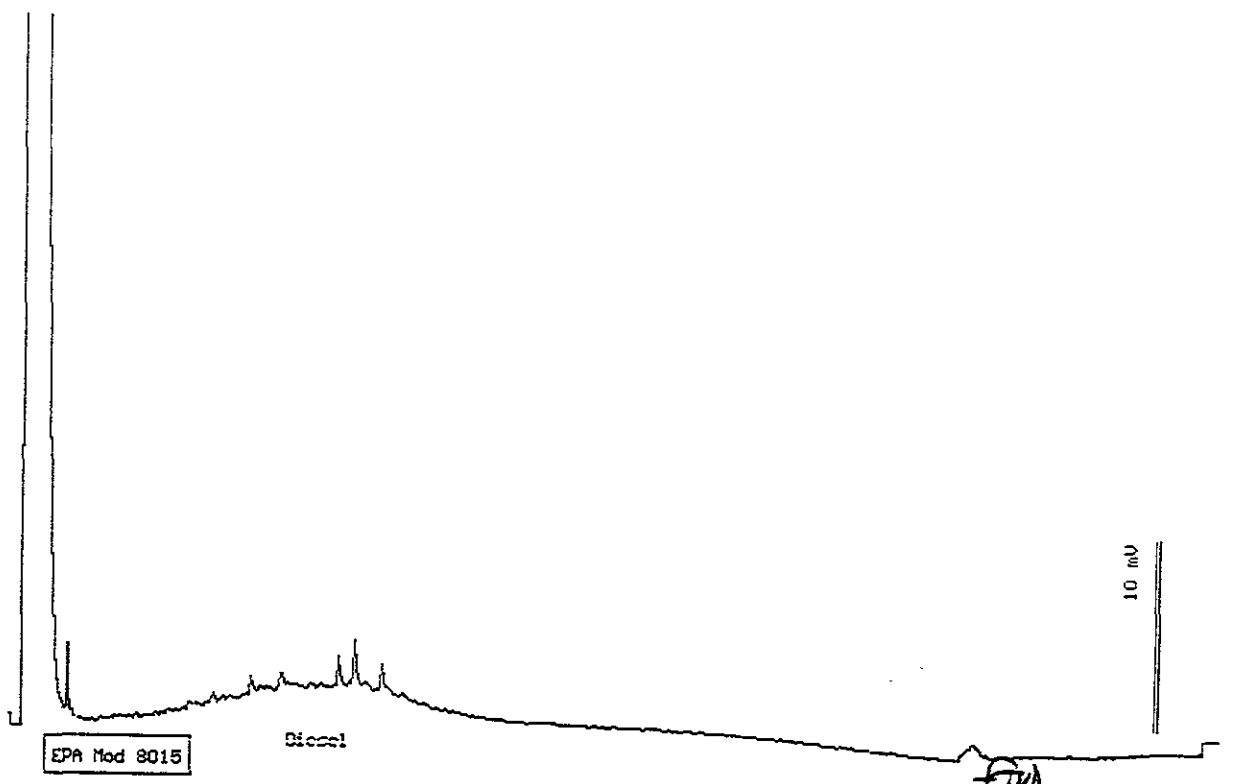
Sample Log 20940
20940-03

Sample: MW-3

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Extracted: 01/04/00
Dilution : 1:1
Matrix : Water

QC Batch : DW991203
Run Log : 7458C

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	220
TPH as Motor Oil	(100)	<100



Date: 01-04-80 Time: 16:43:42
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Steuart Podolsky
Senior Chemist

Acculabs Inc.
Davis

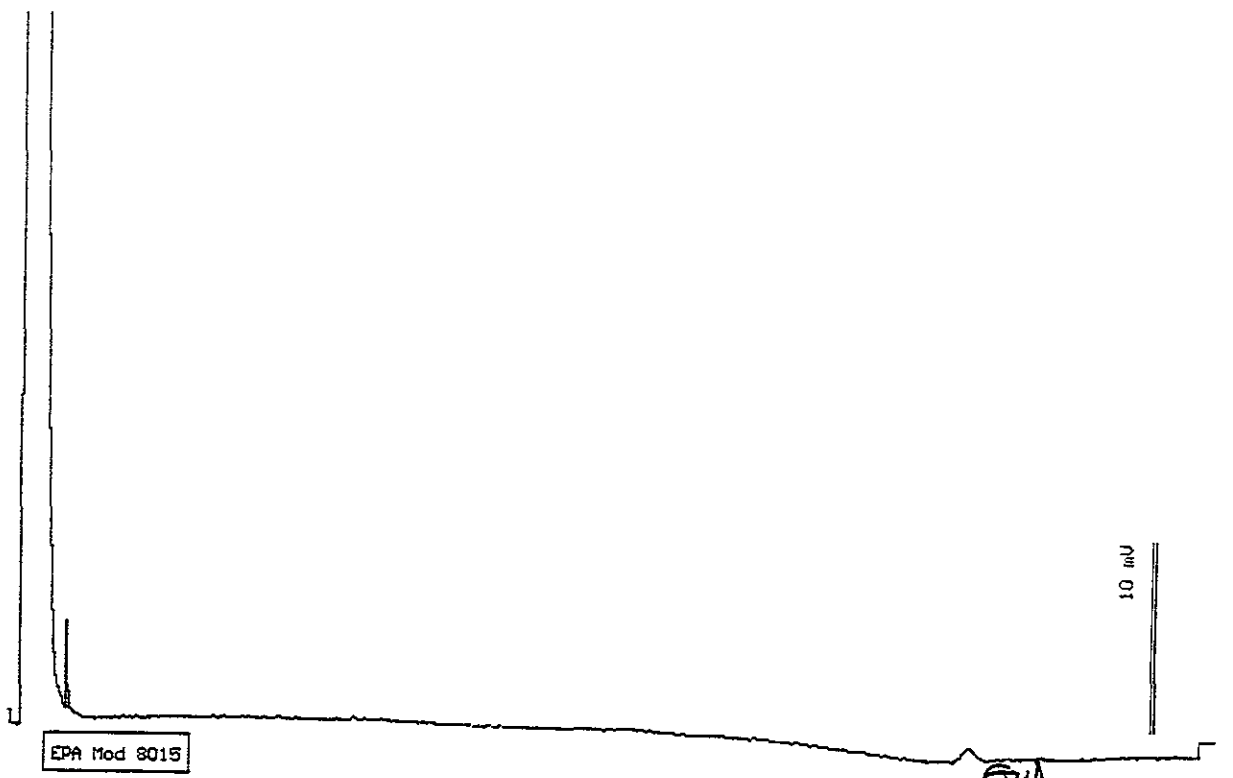
Sample Log 20940
20940-04

Sample: MW-4

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Extracted: 01/04/00
Dilution : 1:1
Matrix : Water

QC Batch : DW991203
Run Log : 7458C

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



Date: 01-04-80 Time: 17:16:16
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Rohlsky
Senior Chemist

Acculabs Inc.
Davis

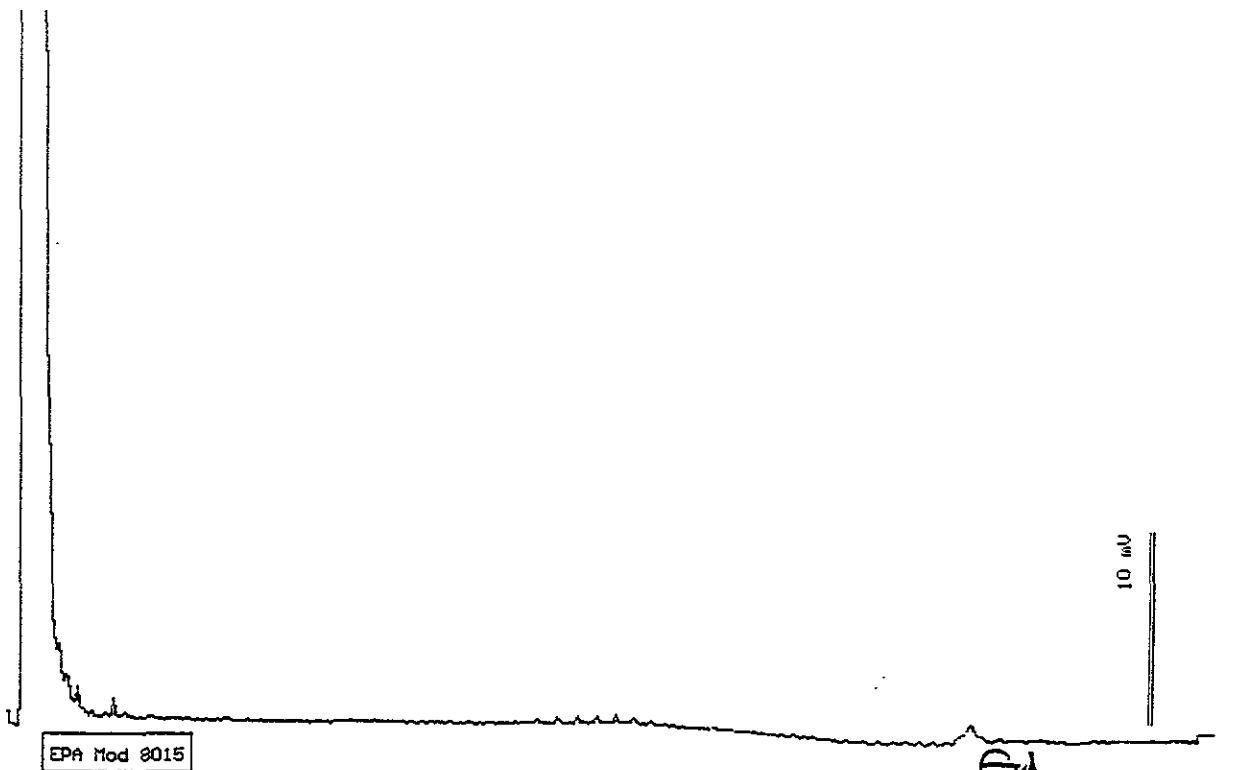
Sample Log 20940
20940-05

Sample: **MW-5**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 12/28/99
Extracted: 01/04/00
Dilution : 1:1
Matrix : Water

QC Batch : DW991203
Run Log : 7458C

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



Date: 01-04-80 Time: 18:54:53
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Podolsky
Senior Chemist

Acculabs Inc.

January 06, 2000

QC Report
TPH Diesel by 8015 Mod

QC Batch DW991203

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	95	92	3

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.

[ ] 3902 E. University Dr. Phoenix AZ 85034 — 602-437-0979 Fax 437-0826
[ ] 710 E. Evans Blvd. Tucson AZ 85713 — 520-884-5811 Fax 884-5812
[ ] 2020 W. Lone Cactus Dr. Phoenix AZ 85027 — 602-780-4800 Fax 780-7695
[ ] 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
[ ] 1046 Olive Drive #2 Davis CA 95616 — 530-757-0920 Fax 753-6091

Lab Number: 20940
Report Due Date:

Client	Gribi Associates		PUBLIC WATER SUPPLY INFORMATION
Address	1350 Hayes Street, Ste C-14		System Name
City, State & Zip	Benicia, CA 94510		PWS No. / Report to State/EPA Y N
Contact	Jim Gribi		POE No. / DWR No.
Phone	707/748-7743	Project Name: LSI-MIDDLE	Collection Point
Fax	707/748-7763	Project Number: 149-01-03	Collector's Name
P.O. Number		Fax Results (Y) N	Page 1 of 1 — 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 Director Approval

CLIENT'S SAMPLE ID/LOCATION	Date	Time	Sample Type	Containers	TPH-G/BTEX/MTBE	TPH-D/MO	HOLD	Spl. No.
MW-1	12/28/99		W	5	X	X		01
MW-2	12/28/99		W	5	X	X		02
MW-3	12/28/99		W	5	X	X		03
MW-4	12/28/99		W	5	X	X		04
MW-5	12/28/99		W	5	X	X		05

SAMPLE RECEIPT			Date	Time	Samples Relinquished By	Samples Received By
Received Cold	Y	N	12/30/99	1520		
Custody Seals	Y	N				
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).

c:\excel\forms\chain.xls