GRIBI Associates *Geological and Environmental Consulting Services*

99 OCT 25 PM 4:42

October 22, 1999 LOP 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 September 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 September 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 strong hydrocarbon odors, with moderate hydrocarbon sheens. Purged groundwater from MW-5 exhibited moderate hydrocarbon odors, with no hydrocarbon sheens. Purged groundwater from MW-1 and MW-4 exhibited slight hydrocarbon odors, with no hydrocarbon sheens. Purged groundwater from MW-3 exhibited no hydrocarbon odors and no hydrocarbon sheens.

During the September 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 0.009 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)

In order to confirm MTBE results, the groundwater samples from MW-5 were also analyzed for MTBE using USEPA Method 8260B. 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	--	--
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		
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		
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**		
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]		

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.

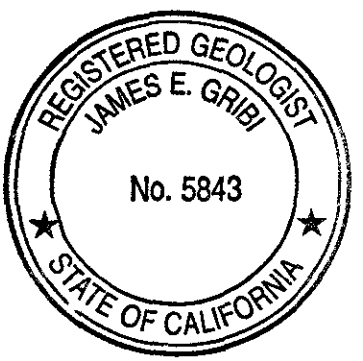
CONCLUSIONS

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 both gasoline- and diesel-impacted; however, hydrocarbon impacts appear to decrease markedly in median downgradient wells MW-5 and MW-4. Low levels of diesel-range hydrocarbons in MW-3 and MW-4, located along the north sidewalk on 65th Street, appear to be from an unknown source.

Groundwater monitoring will continue for two additional quarters, 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

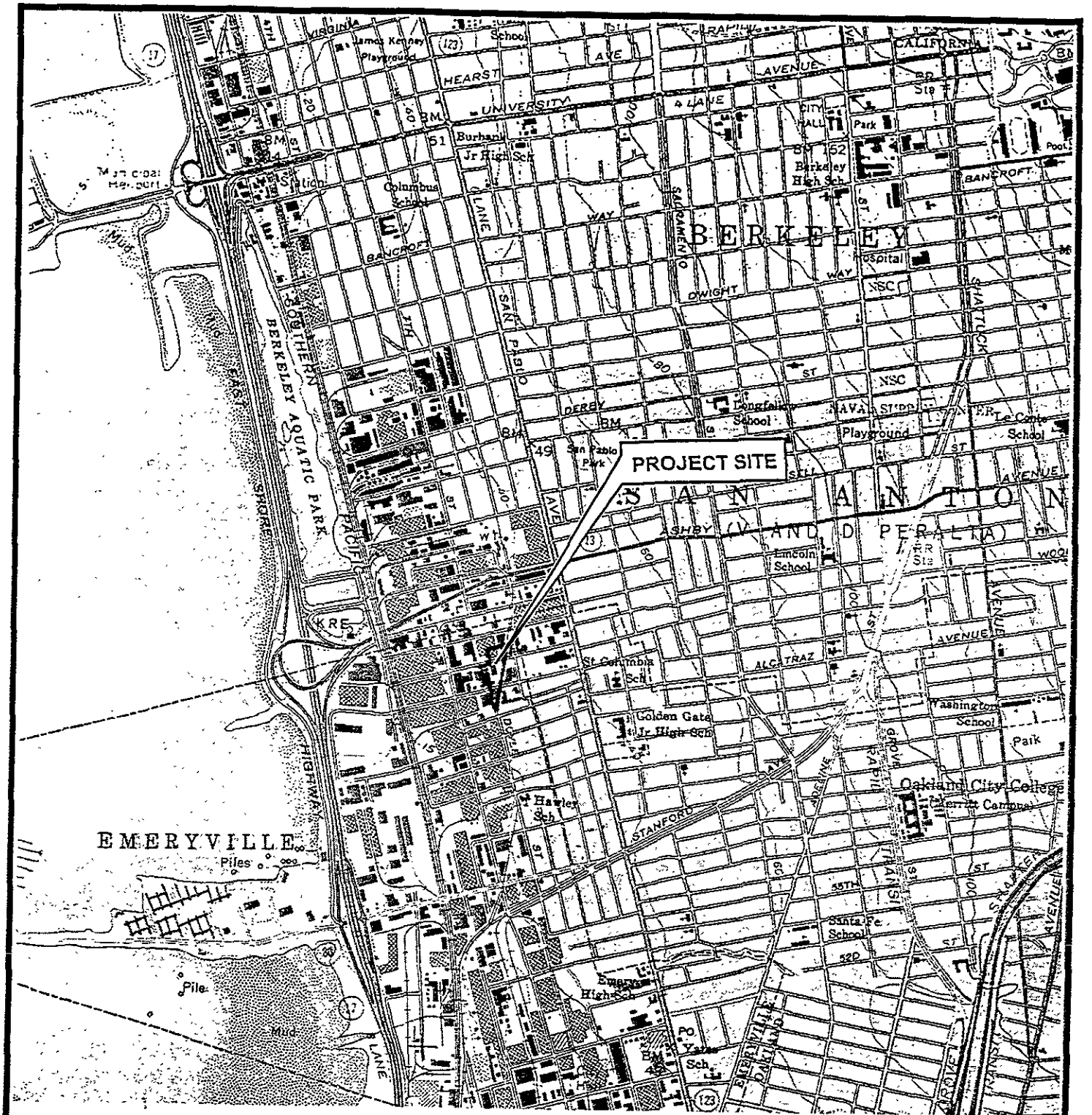
Stanton Stubbs
Environmental Scientist

JEG:ct
Enclosure

c Mr. Mike Alo, Liquid Sugars, Inc.

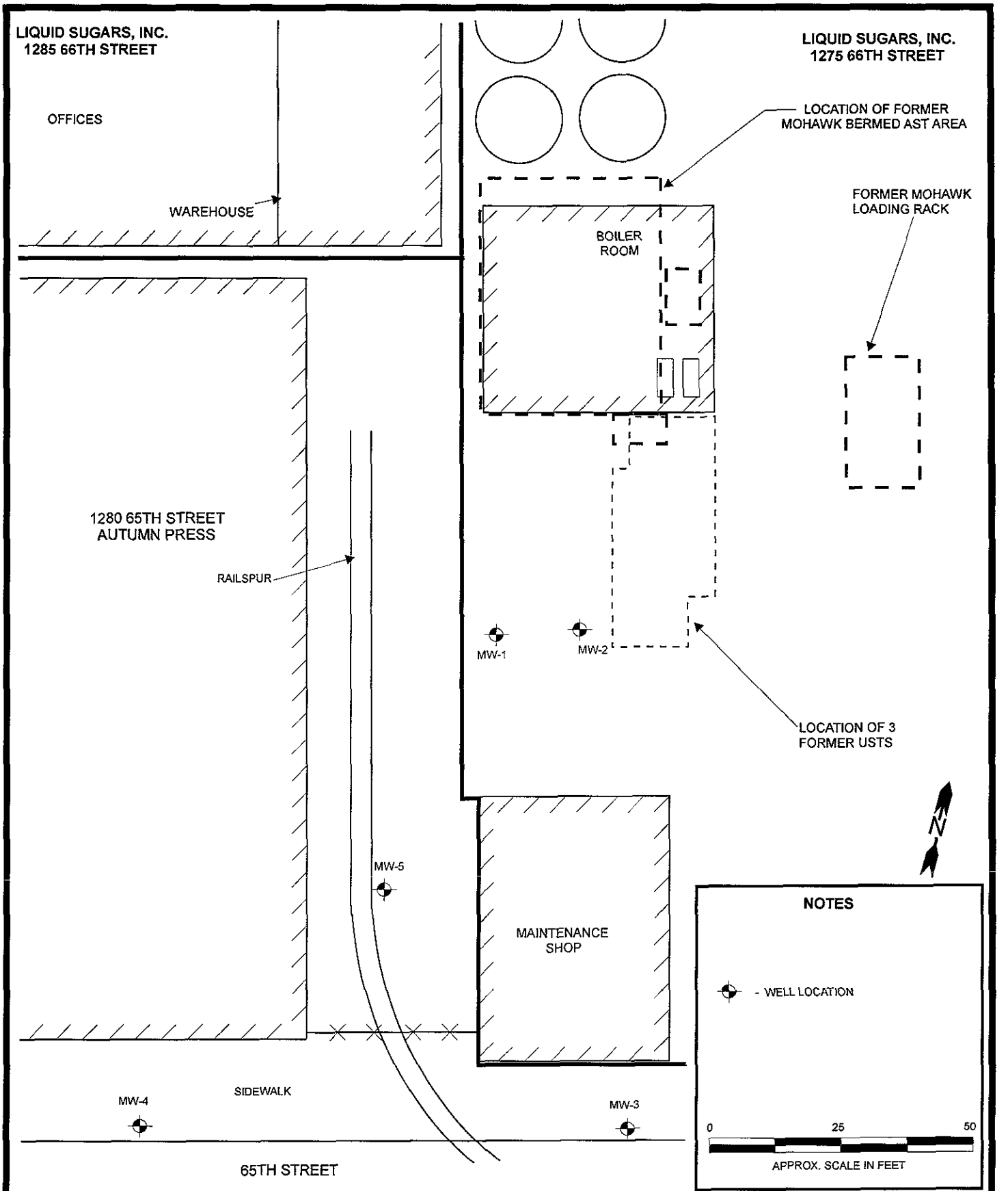
Filename C:\MyFiles\Quartly Monitoring\Draft\LSI-Middle\lsi-qmr2_10-99.wpd

FIGURES

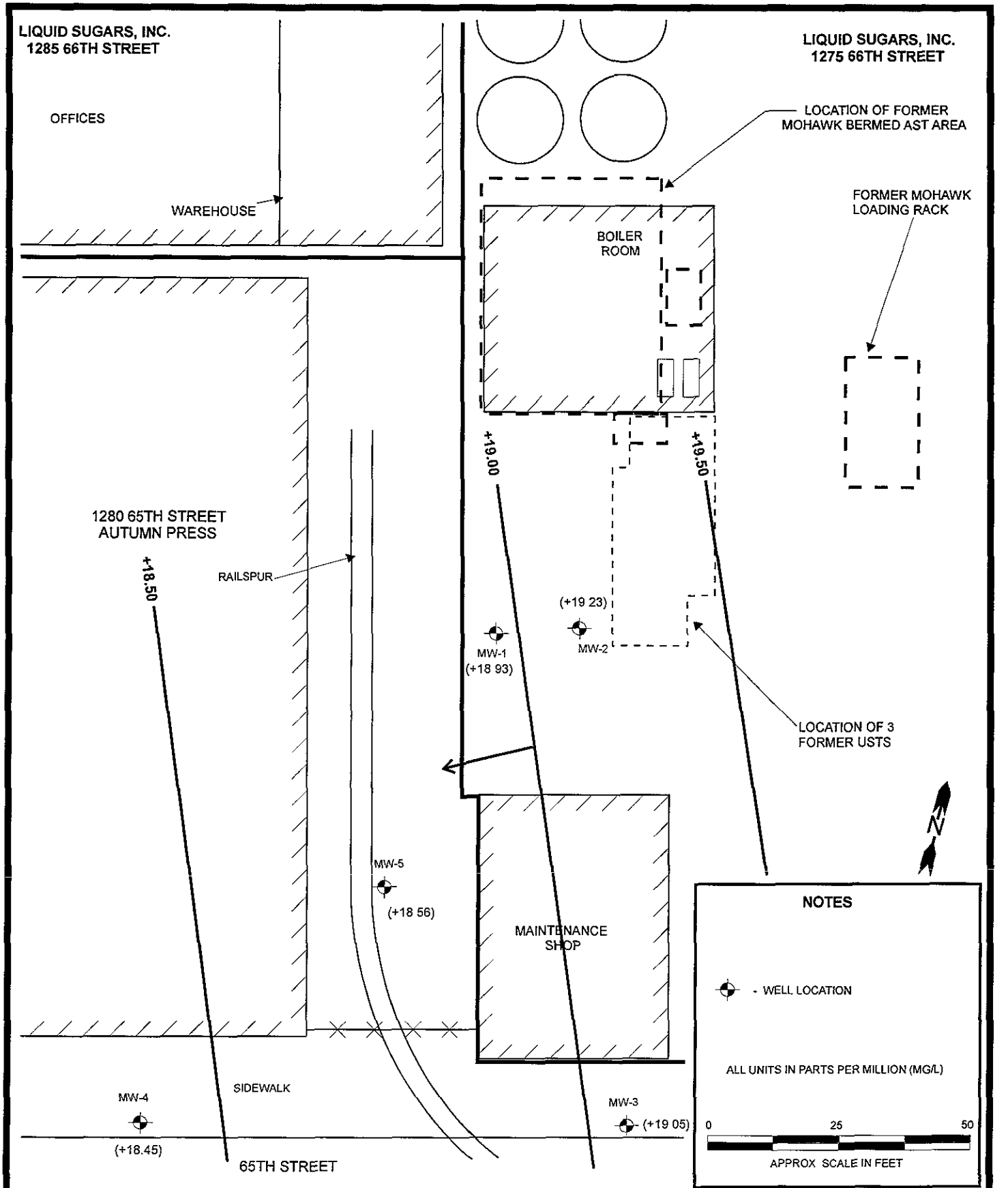


TOPOGRAPHY FROM USGS OAKLAND, WEST, CALIFORNIA
7.5-MINUTE QUADRANGLE MAPS, (TOPO! 1997).

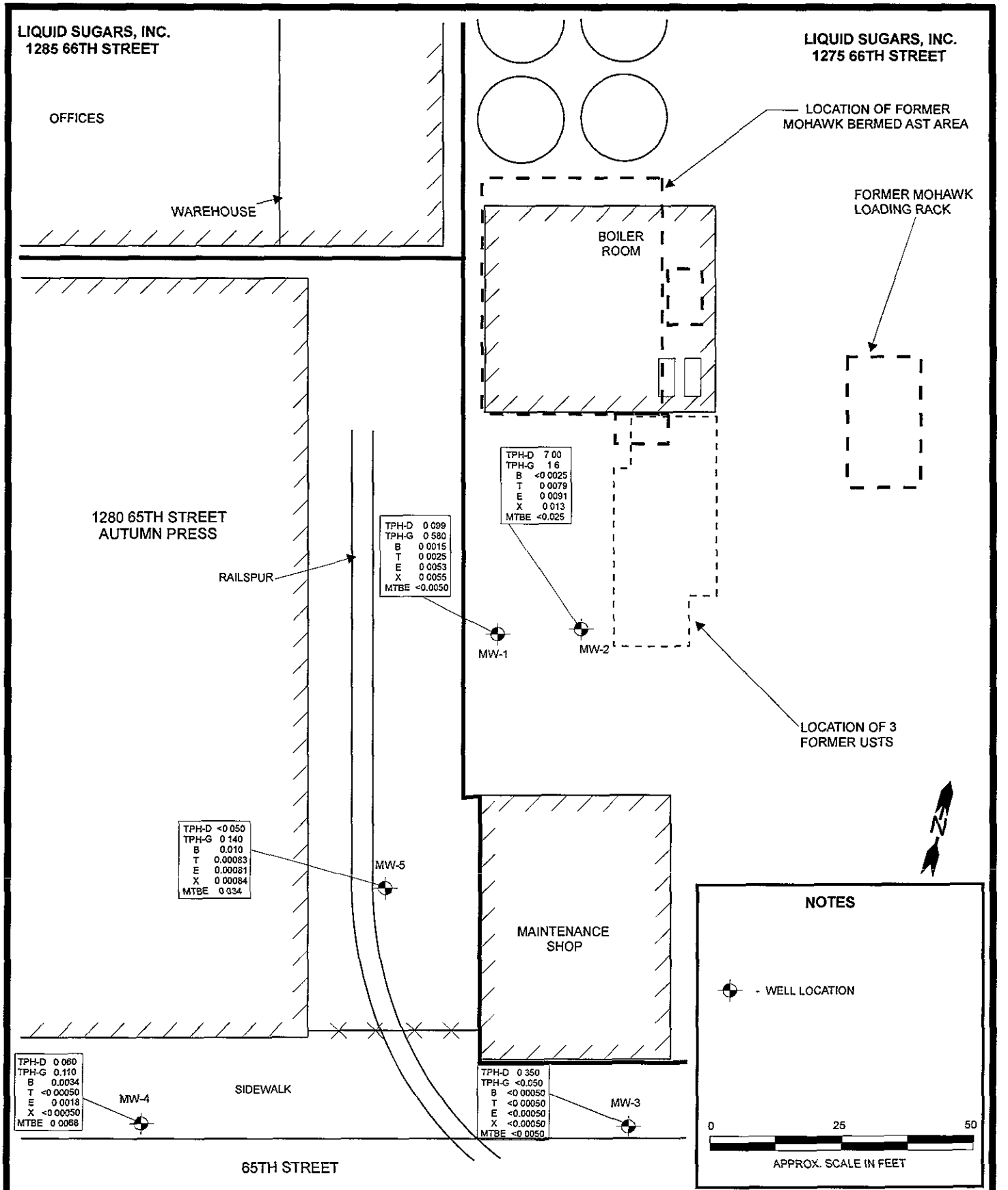
DESIGNED BY:	CHECKED BY:	SITE VICINITY MAP	DATE: 11/09/98	FIGURE: 1
DRAWN BY: JG	SCALE: 1:24,000	LIQUID SUGARS, INC. EMERYVILLE, CALIFORNIA	GRIBI Associates	
PROJECT NO: 149-01-01				



DESIGNED BY:	CHECKED BY: SS	**SITE PLAN**	DATE: 10/20/99	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 09/28/99**	DATE: 10/20/99	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: 10/20/99	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

GROUNDWATER SAMPLING RECORD		GRIBI Associates
Well No. MW-2 MW-1		Well Loc.
Project Name LSI-Middle		Project No.
Date 9/12/3 Time		TOC Elevation GW Elevation
Depth to Water 8.64/MW-2 9.01/MW-1		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 Bailer/MW-2 Pump/MW-1		Lab Analyses
Weather Conditions Sunny, Clear 33°		Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
1100	0	75.8	12.70	4.21	Clear, MOD HC O
	2	68.5	12.49	4.57	Clear, STRONG HC O
MW-2	4	67.4	12.29	4.66	Gray/Murky/SL/STRONG HC O
	6	67.2	11.60	4.62	SL Gray/Murky, STRG HC O, SL Sheen
1205	10	66.5	8.60	4.89	Murky Gray/STRG HC O/Sheen/STRG
1220	0	69.8	6.26	4.50	SL GRAY, SL HC O
	1	69.1	5.17	4.89	" "
	3	68.5	5.61	4.81	" "
MW-1	5	67.5	5.88	4.85	" "
	7	67.3	5.26	4.95	" "

Remarks

MW-2 Sheen @ 10 gal in bucket

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-3	Well Loc.
Project Name LSI - Middle	Project No.
Date 9/28 Time	TOC Elevation GW Elevation
Depth to Water 7.14'	Well Depth Well Diameter
Purge Water, 2": Wtr Column X 0.163 X 3 = 6.357	Purge Water, 4": Wtr Column X 0.653 X 3 =
Purge/Sample Method Pump	Lab Analyses
Weather Conditions Clear, no wind ~70°	Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
0800	0	67.2	13.78	6.55	Clear, no HC o/s
	1	69.3	13.00	6.51	Murky Brn, No HC o/s
	3	68.9	12.82	6.43	" "
	5	68.2	9.80	7.43	" "
0900	7	68.2	5.10	5.32	" "

Remarks

Purged Dry @ 4 gallons

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-4	Well Loc.
Project Name LSI-Middle	Project No.
Date 9/28 Time	TOC Elevation GW Elevation
Depth to Water 6.45	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 Sunny, Clear ~75°	Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
910	0	74.3	6.20	4.69	Clear, No HC O/SH
	1	73.3	6.53	4.71	Murky Gray, SL HC O
	3	730	7.04	4.81	" " "
	5	71.4	7.34	4.95	" " "
935	7	71.8	7.58	5.01	" " "

Remarks

Recharge Good!

GROUNDWATER SAMPLING RECORD		GRIBI Associates
Well No. MW-5	Well Loc.	
Project Name LSI - middle	Project No.	
Date 9/28 Time	TOC Elevation	GW Elevation
Depth to Water 7.34	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 Sunny Clear, ~75°	Laboratory	

Time	Volume Purged	Temp.	Cond.	pH	Visual
1000	0	69.1	3.90	4.90	clear, No HC O/SH
	1	70.4	7.78	5.04	SL Brown, MOD HC O
	3	69.7	7.70	5.12	" "
	5	69.6	8.35	5.14	" "
1020	7	69.0	8.60	5.23	" "

Remarks

Good Recharge!

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 20615
October 04, 1999

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 Arizona (AZ0583) and the State of California (# 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

October 1, 1999
Sample Log 20615

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

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Received : 09/28/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
MW-1	10/01/99	(5.0)	<5.0
MW-2	10/01/99	(25)	<25
MW-3	10/01/99	(5.0)	<5.0
MW-4	10/01/99	(5.0)	6.8
MW-5	10/01/99	(5.0)	45

Approved By:

Tom Kwoka
Lab Director

Acculabs Inc.

Davis

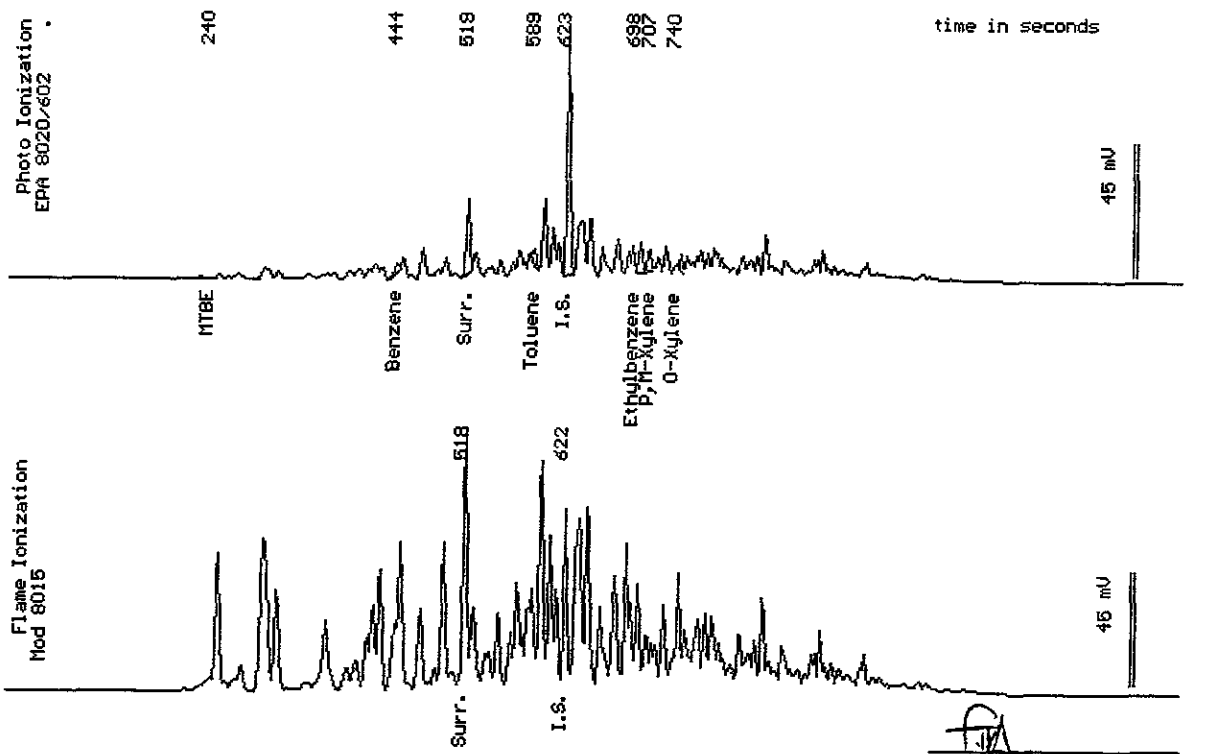
Sample Log 20615

20615-01

Sample: **MW-1**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Dilution : 1:1 Run Log : 2184J
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	1.5
Toluene	(.50)	2.5
Ethylbenzene	(.50)	5.3
Total Xylenes	(.50)	5.5
TPH as Gasoline	(50)	580
Surrogate Recovery		110 %



Date Analyzed: 10-01-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Rodolsky
Senior Chemist

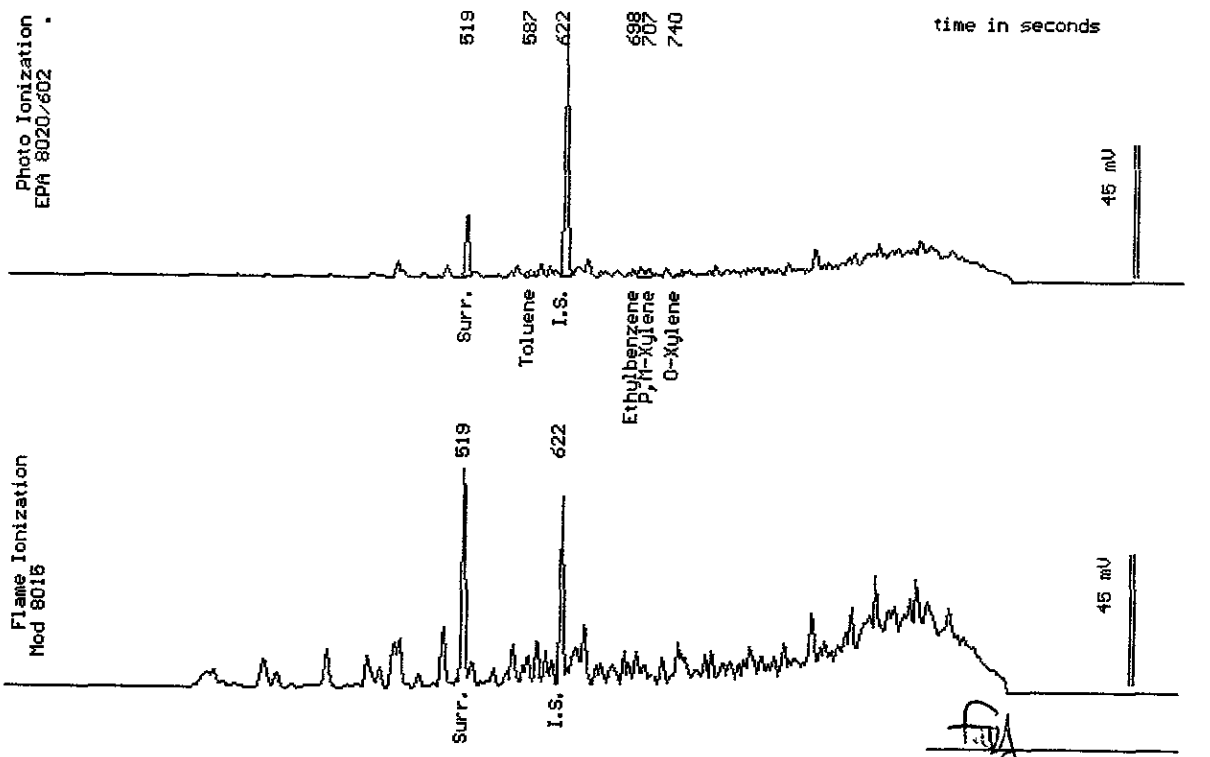
Acculabs Inc.
Davis

Sample Log 20615
20615-02

Sample: **MW-2**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Dilution : 1:5 Run Log : 2184K
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(2.5)	<2.5
Toluene	(2.5)	7.9
Ethylbenzene	(2.5)	9.1
Total Xylenes	(2.5)	13
TPH as Gasoline	(250)	1600
Surrogate Recovery		104 %



Date Analyzed: 10-01-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

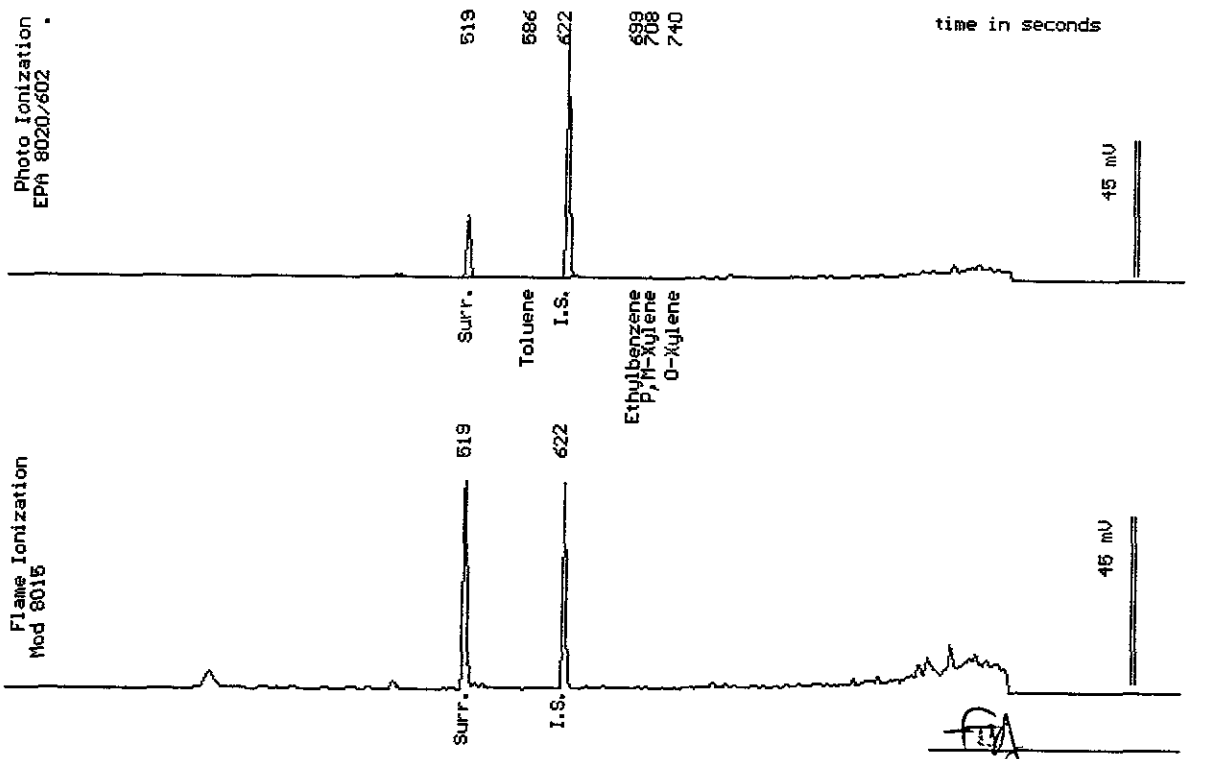
Acculabs Inc.
Davis

Sample Log 20615
20615-03

Sample: **MW-3**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Dilution : 1:1 Run Log : 2184K
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		107 %



Date Analyzed: 10-01-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

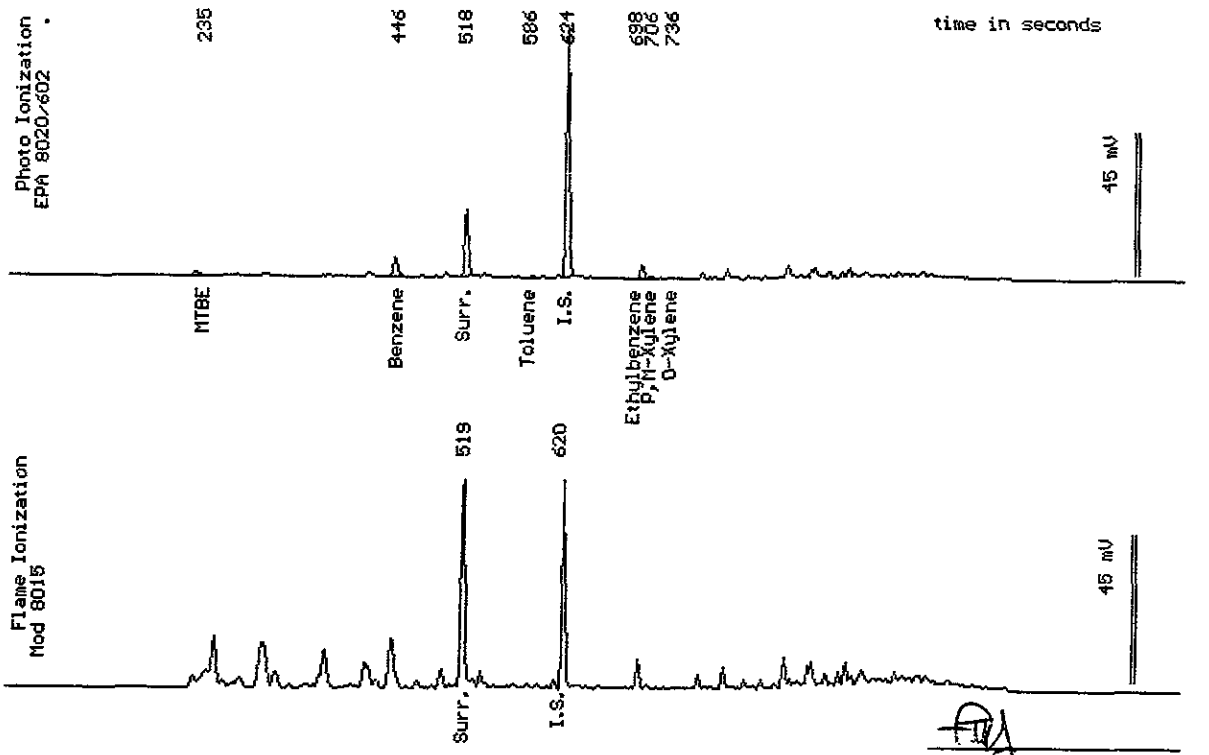
Acculabs Inc.
Davis

Sample Log 20615
20615-04

Sample: **MW-4**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Dilution : 1:1 Run Log : 2184J
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	3.4
Toluene	(.50)	<.50
Ethylbenzene	(.50)	1.8
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	110
Surrogate Recovery		102 %



Date Analyzed: 10-01-99
Column : 0.53mm X 60m Restek Rtx-1301

Steuart Podolsky
Senior Chemist

Acculabs Inc.

Davis

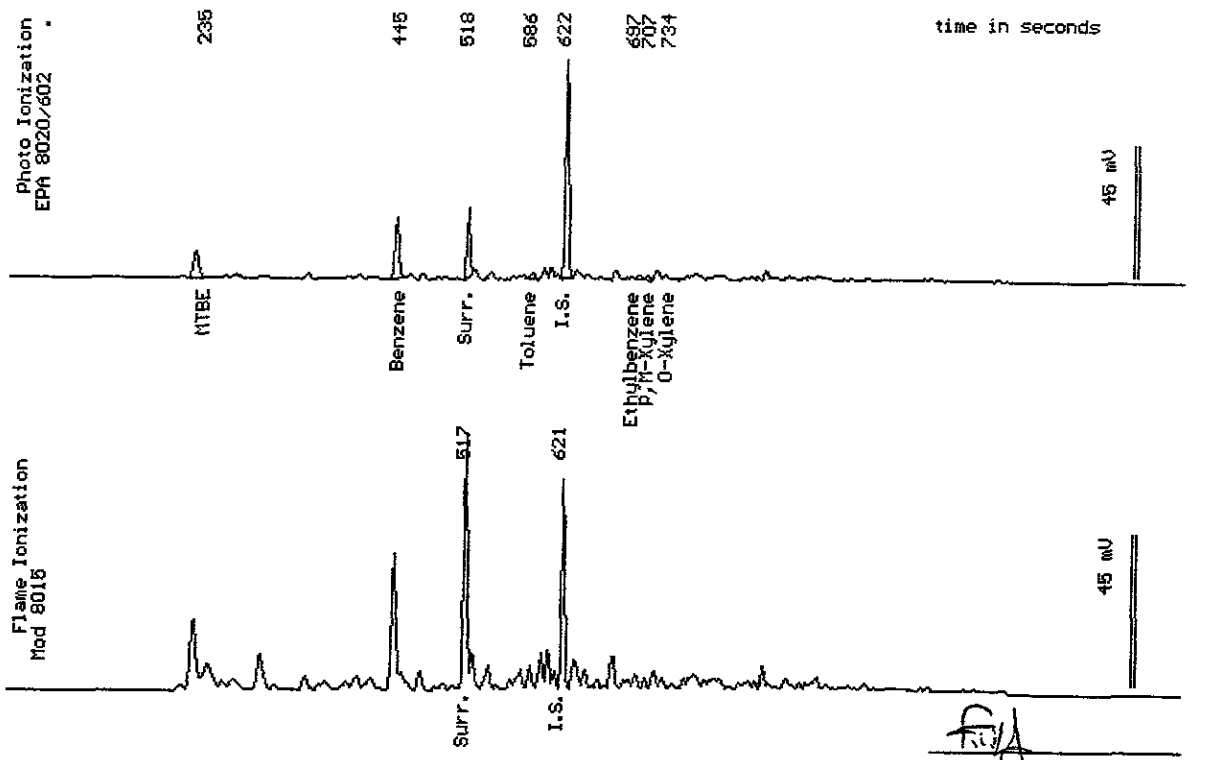
Sample Log 20615

20615-05

Sample: **MW-5**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Dilution : 1:1 Run Log : 2184J
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	10
Toluene	(.50)	.83
Ethylbenzene	(.50)	.81
Total Xylenes	(.50)	.84
TPH as Gasoline	(50)	140
Surrogate Recovery		100 %



Date Analyzed: 10-01-99
Column : 0.53mm X 60m Restek Rtx-1301

Steuart Podolsky
Senior Chemist

Acculabs Inc.

October 1, 1999
Sample Log 20615

QC Report for EPA 602 & Modified EPA 8015
Run Log : 2184J
From : LSI-MIDDLE (Proj. # 149-01-03)
Sample(s) Received : 09/28/99

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	103
Ethylbenzene	109
Gasoline	97

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

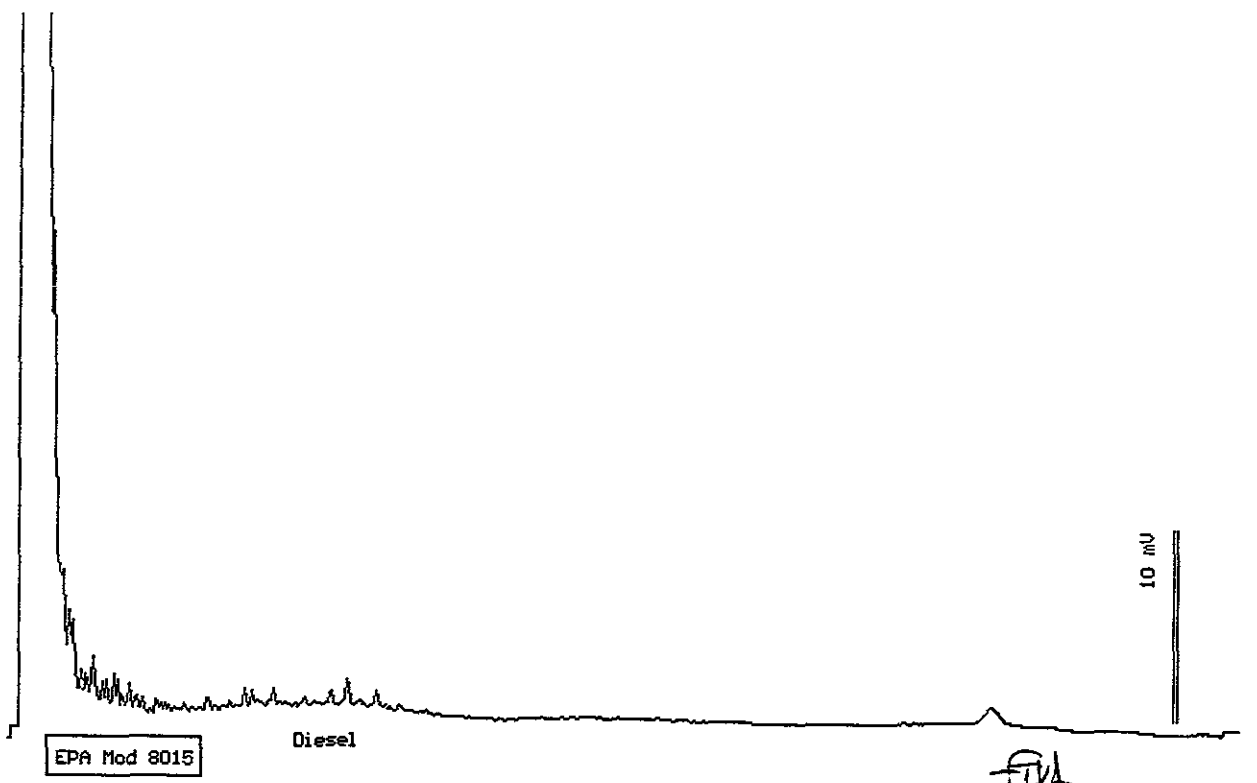
Sample Log 20615

20615-01

Sample: **MW-1**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Extracted: 10/01/99 QC Batch : DW990908
Dilution : 1:1 Run Log : 7451L
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	99
TPH as Motor Oil	(100)	<100



Date: 10-01-99 Time: 18:51:16
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Podolsky
Senior Chemist

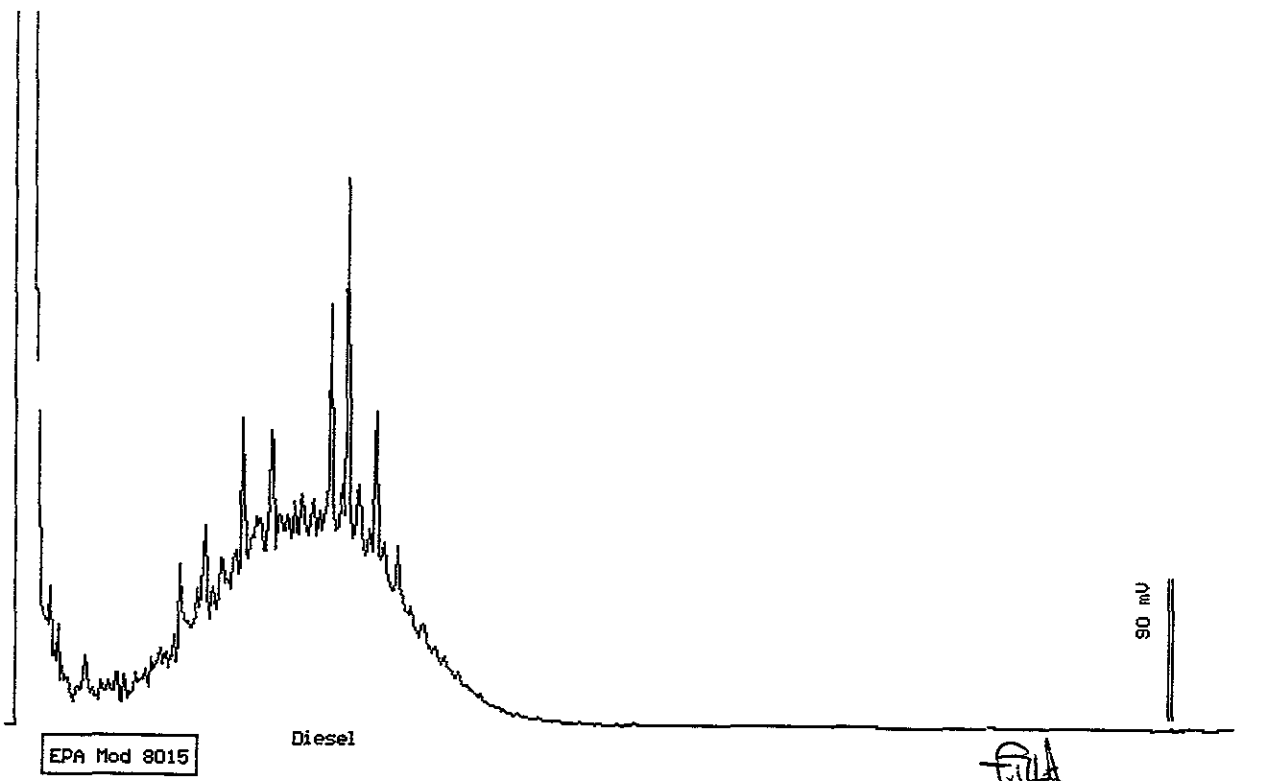
Acculabs Inc.
Davis

Sample Log 20615
20615-02

Sample: **MW-2**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Extracted: 10/01/99 QC Batch : DW990908
Dilution : 1:1 Run Log : 7451L
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	7000
TPH as Motor Oil	(100)	<100



Date: 10-01-99 Time: 19:25:48
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Bodolsky
Senior Chemist

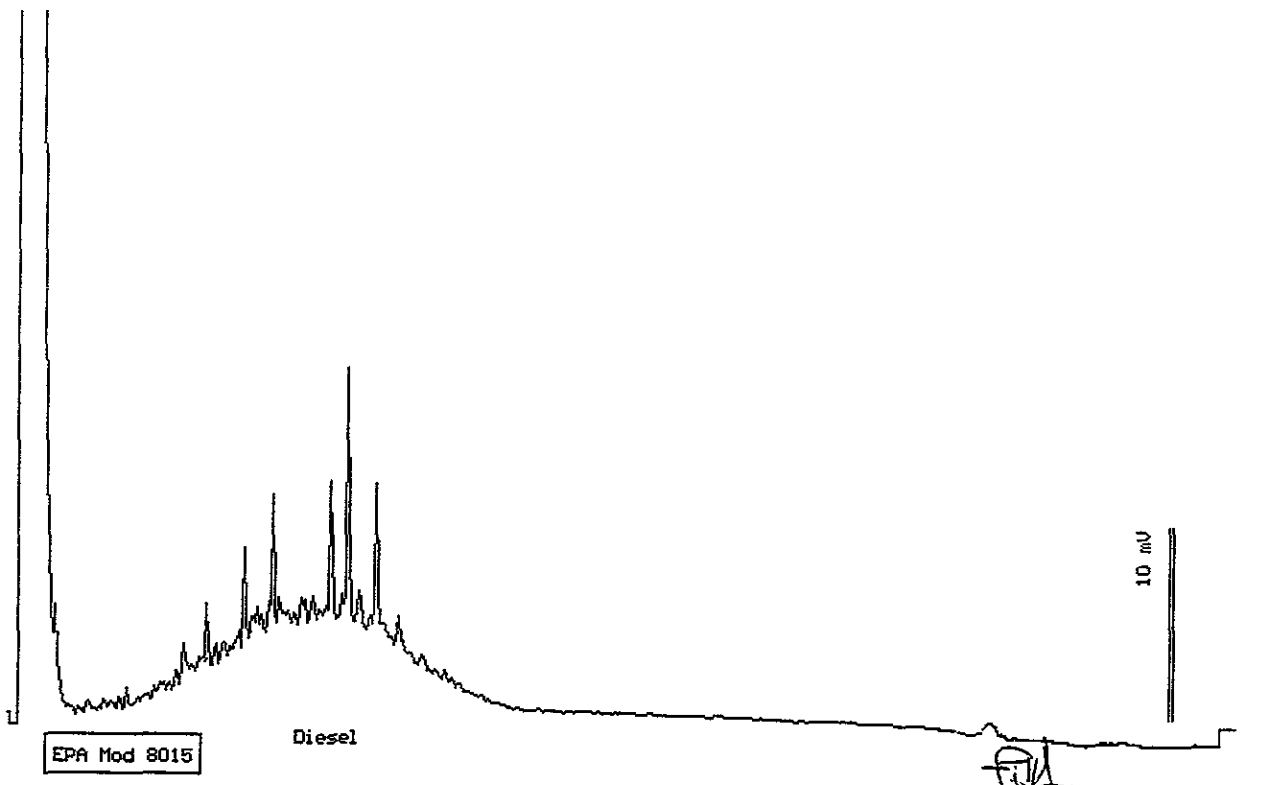
Acculabs Inc.
Davis

Sample Log 20615
20615-03

Sample: **MW-3**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Extracted: 10/01/99 QC Batch : DW990908
Dilution : 1:1 Run Log : 7451L
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	350
TPH as Motor Oil	(100)	<100



Date: 10-01-99 Time: 20:00:48
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Rodolsky
Senior Chemist

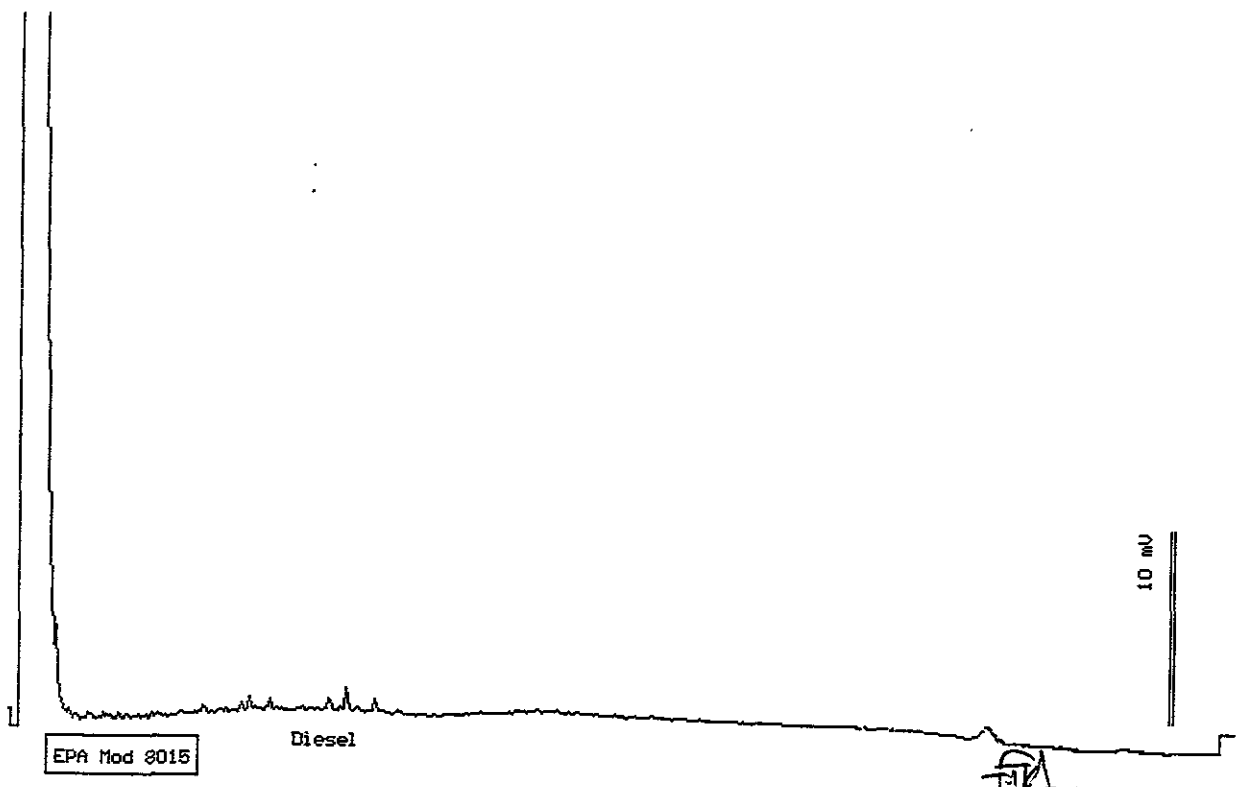
Acculabs Inc.
Davis

Sample Log 20615
20615-04

Sample: **MW-4**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Extracted: 10/01/99 QC Batch : DW990908
Dilution : 1:1 Run Log : 7451L
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	60
TPH as Motor Oil	(100)	<100



Date: 10-01-99 Time: 20:34:28
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Podolsky
Senior Chemist

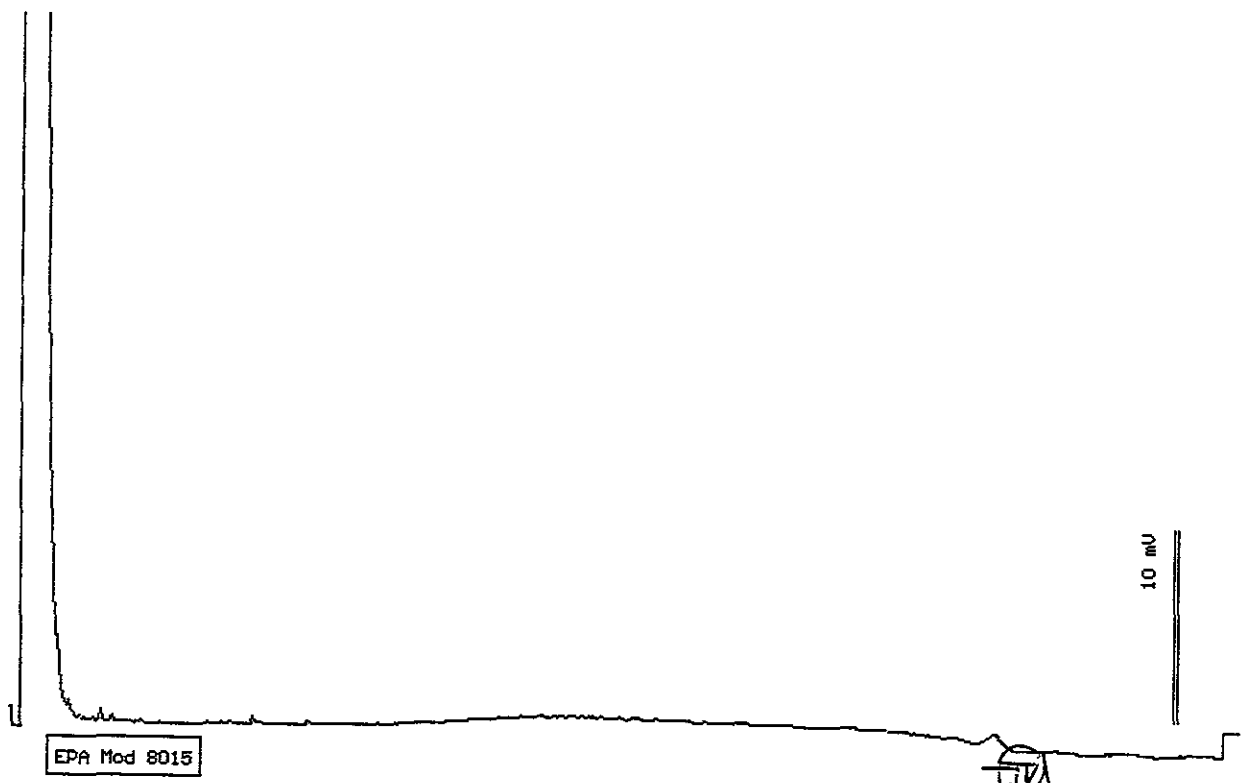
Acculabs Inc.
Davis

Sample Log 20615
20615-05

Sample: **MW-5**

From : LSI-MIDDLE (Proj. # 149-01-03)
Sampled : 09/28/99
Extracted: 10/01/99 QC Batch : DW990908
Dilution : 1:1 Run Log : 7451L
Matrix : Water

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



Date: 10-01-99 Time: 21:08:53
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Podolsky
Senior Chemist

Acculabs Inc. September 30, 1999

QC Report
TPH Diesel by 8015 Mod

QC Batch DW990908 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	89	8

Method Blank

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

Tom Kwoka
Lab Director

Acculabs Inc.

Davis

MTBE By EPA 8260B

Sample Log 20615
October 06, 1999

Sample Name : **MW-5**

Project Name : LSI-MIDDLE
Project Number : 149-01-03
Sample Date : 09/28/99
Date Analyzed : 10/05/99

Date Received : 09/28/99
Dilution : 1:1
Sample Matrix : Water
Lab Number : 20615-05

Parameter	MRL	Measured Conc.	Units
Methyl-tert-butyl ether	**5.0**	**34**	ug/L
Dibromofluoromethane (surr)		95	% Recovery

MRL = Method Reporting Limit Conc. = Concentration

B = Analyte was detected in Method Blank.

E = Concentration exceeded calibration range.

Approved By : Tom Kwoka

WEST LABORATORY

CHANGE ORDER FORM

DATE: 10-4-99 TIME: 4:00 pm

COMPANY: Grib

PROJECT #: 149-01-03 SAMPLE LOG #: 20615

PROJECT NAME: LSI - Middle

ORDER TAKEN BY: TomK ORDERED BY: Stan

SAMPLE #	CHANGE REQUESTED	TURN-AROUND-TIME (If Applicable)
-05	add MTBE conf on 1wlk	
	MW-5	

REMARKS:

****

UPDATE SECTION: (Initial / Date / Time)

FRONT COMPUTER	VOLATILES	DIESEL	SLOG BOOK
JDT / 10-5-99 / 1045	__/__/__	__/__/__	__/__/__

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 20615

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
Fax	707/748-7763	Project Number	149-01-03
P.O. Number		Fax Results (Y) N	Page 1 of 1
		Collection Point	
		Collector's Name	
		Location (City)	

SAMPLE TYPE CODES

DW = drinking water TB = travel blank
WW = waste water SD = solid
MW = monitoring well SO = soil
HW = hazardous waste 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	9/28/99		MW	5	X	X											01
MW-2	9/28/99		MW	5	X	X											02
MW-3	9/28/99		MW	5	X	X											03
MW-4	9/28/99		MW	5	X	X											04
MW-5	9/28/99		MW	5	X	X											05

SAMPLE RECEIPT			Date	Time	Samples Relinquished By	Samples Received By
Received Cold	Y	N	9/28/99	1525		
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)