JG Gribi (ed) MSP.com

September 29, 2001

Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

OCT 03 2001

Attention: Ms. Eva Chu

Subject: Report of Groundwater Monitoring Conducted on
March 24, 1999 and September 1, 1999
3838 West Street UST Site
Oakland, California
GA Project No. 140-01-01
LOP Site ID No.: 4262

Ladies and Gentlemen:

Gribi Associates is pleased to submit this report on behalf of Mr. Johnny Houston documenting groundwater monitoring activities at the 3838 West Street underground storage tank (UST) site in Oakland, California (see Figure 1 and Figure 2). This report documents two separate groundwater monitoring events, one on March 24, 1999 and the other on September 1, 1999, conducted for the project site well, MW-1.

BACKGROUND

One 550-gallon gasoline UST, which apparently had been unused for at least 20 years, was removed from the project site on January 8, 1992. Prior to removing the UST, approximately 650 gallons of water was pumped from the tank. Following removal of the UST, the Alameda County Department of Environmental Health inspector noted holes in the tank, and hydrocarbon odors and sheens in the excavation. Two soil samples collected at about eight feet in depth in the UST excavation cavity contained no detectable gasoline constituents and low levels of Lead. One four-point composite soil sample collected from the excavated soil stockpile contained 4.3 parts per million (ppm) of TPH-G, with low levels of BTEX constituents and 32 ppm of Total Lead. A grab groundwater sample collected from the UST excavation cavity following tank removal contained 16 ppm of TPH-G, with low or no detectable levels of BTEX constituents.

On August, 13, 1998, two soil borings were drilled and sampled by Mr. Jim Gribi, and a temporary monitoring well, MW-1, was installed in the southwest boring. This well was purged and sampled on August 19, 1998. Results of this investigation indicated that although residual hydrocarbons are present in soil and groundwater beneath the site, significant natural degradation of these hydrocarbons has occurred in the two decades since the USTs were last used. Because of this natural degradation of volatile gasoline constituent, remaining less volatile residual hydrocarbons do not pose a significant risk to current and future human and environmental receptors in the project site

vicinity. Based on these conclusions, we requested that Alameda County Department of Environmental Health review this site for regulatory case closure. However, on November 23, 1998, Alameda County Department of Environmental Health issued a letter requesting that quarterly groundwater monitoring be continued at the site for at least two quarters.

DESCRIPTION OF SAMPLING ACTIVITIES

On March 24, 1999 and September 1, 1999, Mr. Jim Gribi of Gribi Associates conducted groundwater monitoring activities for the site well MW-1. Groundwater monitoring was conducted in accordance with California LUFT Field Manual guidelines as follows:

- After unlocking and opening the monitoring well, the water level was measured to the nearest 0.01 foot with an electronic probe.
- Using a clean stainless steel bailer, a single bail of groundwater was taken from the well to check for the presence or absence of floating free product.
- The well was 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. Groundwater sampling data sheets for both sampling events are contained in Appendix A.
- After purging the required volume of water, groundwater was poured directly from the bailer into three 40-ml VOC vials. Each container was then tightly sealed with a Teflon-lined septum, 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 depths in MW-1 were measured at 4.52 feet on March 24, 1999 and at 7.23 feet on September 1, 1999. Groundwater recharge in MW-1 was good during both sampling events. Purged groundwater from MW-1 exhibited moderate hydrocarbon odors with no sheens during both sampling events.

Laboratory Analytical Results

Groundwater samples collected from MW-1 during both sampling events were analyzed for the following parameters.

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)

All laboratory analyses were conducted by Acculabs, Inc., a California-certified analytical laboratory, with two-week turn around on lab results. Groundwater analytical results from the two sampling events reported herein, as well as previous soil and groundwater results, are summarized in Table 1. Laboratory data reports, which include laboratory chromatograms for all analyses, are contained in Appendix B.

Table 1
SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS
3838 West Street UST Site

Sample ID	*Sample Date*	*Sample Depth*	*Concentration (parts per million)* TPH-G	B	T	E	X	MTBE
Soil Samples								
IB-1.1	08/13/98	7.0 ft	**120**[1]	<0.10	<0.10	**0.19**	**0.22**	<1.0
MW-1.1	08/13/98	6.5 ft	**190**[1]	<0.25	<0.25	**0.77**	**0.53**	<2.5
Groundwater Samples								
IB-1W[2]	08/13/98	—	**26**	<0.025	0.085	0.180	0.058	<0.250
MW-1W	08/19/98	7.83 ft	**1.8**	**0.0028**	**0.011**	**0.0059**	**0.0027**	<0.025
MW-1	03/24/99	4.52 ft	**2.6**	**0.0058**	**0.048**	**0.026**	**0.024**	<0.050
MW-1	09/01/99	7.23 ft	**6.0**[1]	<0.0025	**0.028**	**0.061**	**0.025**	<0.025
RWQCB Groundwater RBSL				**0.046**	**0.130**	**0.290**	**0.013**	**1.8**
Oakland Groundwater RBSL				**89**	**>SOL**	**>SOL**	**>SOL**	**>SOL**

TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene,
X = Xylenes
MTBE = Methyl-t-butyl Ether
<0.10 = Not detected above the expressed value
1 = Acculabs, Inc. laboratory report states " Product is not typical gasoline."
2 = Grab groundwater sample.
Groundwater RBSL = Regional Water Quality Control Board Groundwater Risk-Based Screening Levels for protection of groundwater (groundwater is not a current or potential source of drinking water (drinking water resource not threatened)), as contained in *Application of Risk-Based Screening Levels and Decision Making at Sites With Impacted Soil and Groundwater*, August 2000, Tables B and D
Oakland Groundwater RBSL = City of Oakland Risk-Based Screening Levels (inhalation of indoor vapors, Silty Clay soils)) as contained in *Oakland Urban Land Development Program: Guidance Document*, (City of Oakland Public Works Agency, January 2000).
>SOL = RBSL exceeds solubility of chemical in water.

CONCLUSIONS AND RECOMMENDATIONS

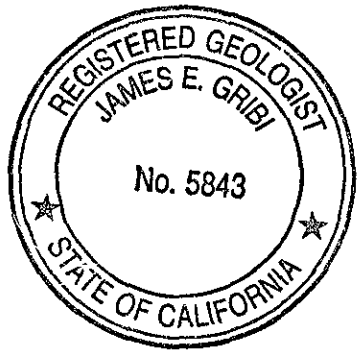
Results from both the two reported groundwater monitoring events and from the previous soil and groundwater investigation indicate that residual gasoline constituents present in soil and groundwater beneath the site do not pose a significant risk to either human or environmental receptors. While moderate levels of TPH-G were encountered in soil and groundwater beneath the site, all soil and groundwater samples have shown very low levels of BTEX constituents. In fact, concentrations of BTEX constituents are generally below Risk-Based Screening Levels established by both the San Francisco Bay Regional Water Quality Control Board and the City of Oakland.

Based on these results and conclusions, we recommend that Alameda County Department of Environmental Health grant regulatory closure for this site.

We appreciate the opportunity to provide this report for your review. Please call if you have questions or require additional information.

Very truly yours,

James E. Gribi
Registered Geologist
California No. 5843



JEG/ct
Enclosures

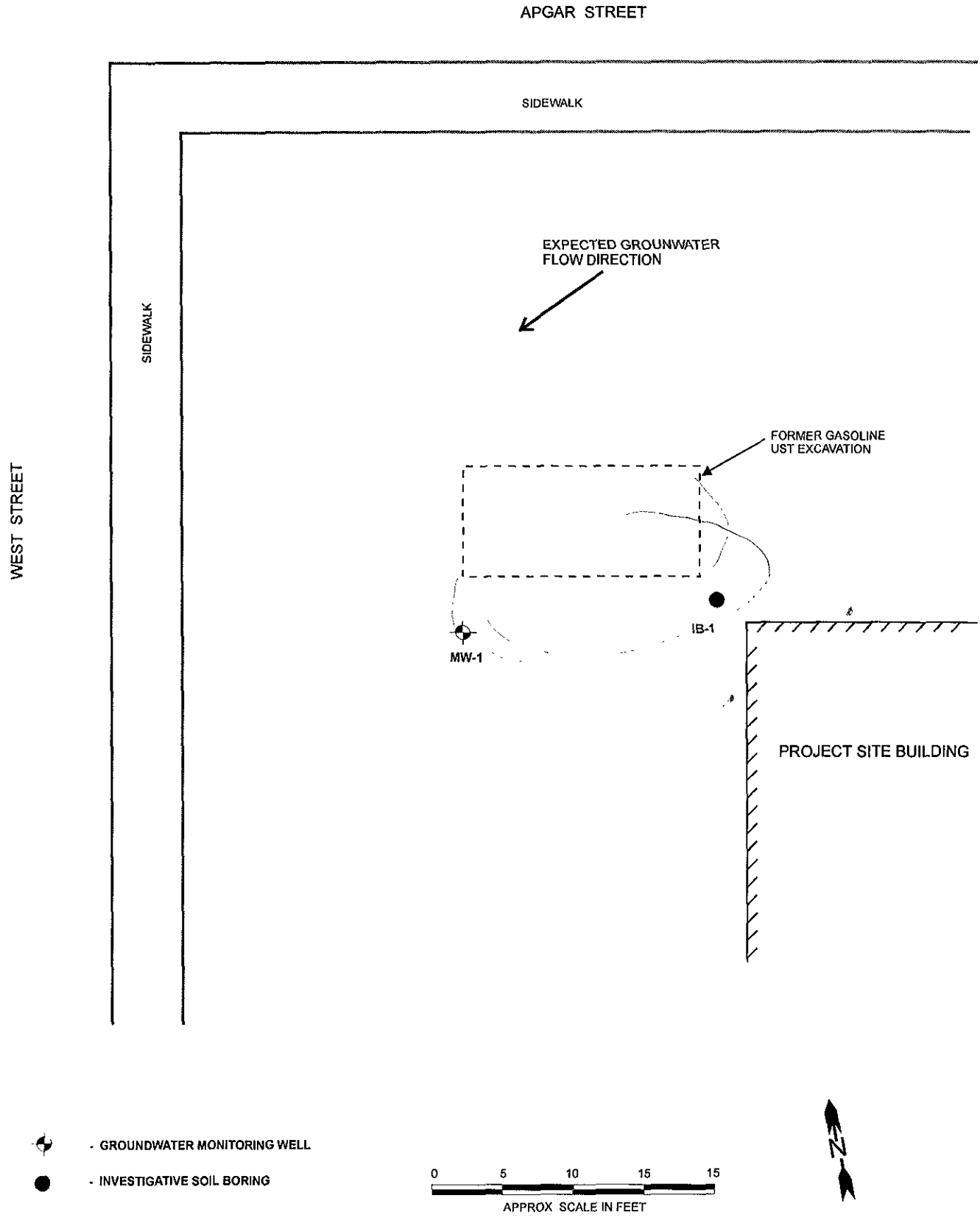
C:\My Documents\MyFiles\Reports\jh-west-qm-9-01.wpd

FIGURES

N

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

DESIGNED BY:	CHECKED BY:	**SITE VICINITY MAP**	DATE: 07/28/98	FIGURE: 1
DRAWN BY: JG	SCALE: 1:24,000			
PROJECT NO: 140-01-01		3838 WEST STREET UST SITE OAKLAND, CALIFORNIA	**GRIBI Associates**	



DESIGNED BY:	CHECKED BY:	SITE PLAN	DATE: 09/29/01	FIGURE: 2
DRAWN BY: JG	SCALE:	3838 WEST STREET OAKLAND, CALIFORNIA	GRIBI Associates	
PROJECT NO: 140-01-02				

APPENDIX A

GROUNDWATER SAMPLING DATA SHEETS

3/24/99 Johnny Huston West Street

DTW 4.52

	Temp	Cond	ph	Clarity
0	58.9	0.43	6.92	clr - sl HC O
0.5	58.2	0.45	6.75	Mky grey Mat
1.0	58.7	0.40	6.71	HC O, No sh
1.5	58.6	0.40	6.67	Trans Mk, gr
~~2.0~~ 2.5	58.5	0.39	6.75	

9-1-99 JOHNNY HUSTON - west street

DTW 7.23	Ph	COND	Ph	C
0.	66.9	3.74	7.14	clr
0.5	66.8	4.53	7.13	MOD HC 0
1.0	66.4	3.58	6.83	
1.5	66.0	1.79	6.76	
2.5	66.1	1.82	6.75	

APPENDIX B

LABORATORY DATA REPORTS

Acculabs Inc.

Davis

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

Sample Log 19829
April 05, 1999

Jim Gribi
Gribi Associates
884 Vintage
Suisun, CA 94585

Subject : 1 Water sample
Project Name : JH - West St.
Project Number :

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

Sample Log 19829

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

From : JH - West St.
Sampled : 03/24/99
Received : 03/27/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
MW-1	04/03/99	(50)	<50

Approved By:

Tom Kwoka
Lab Director

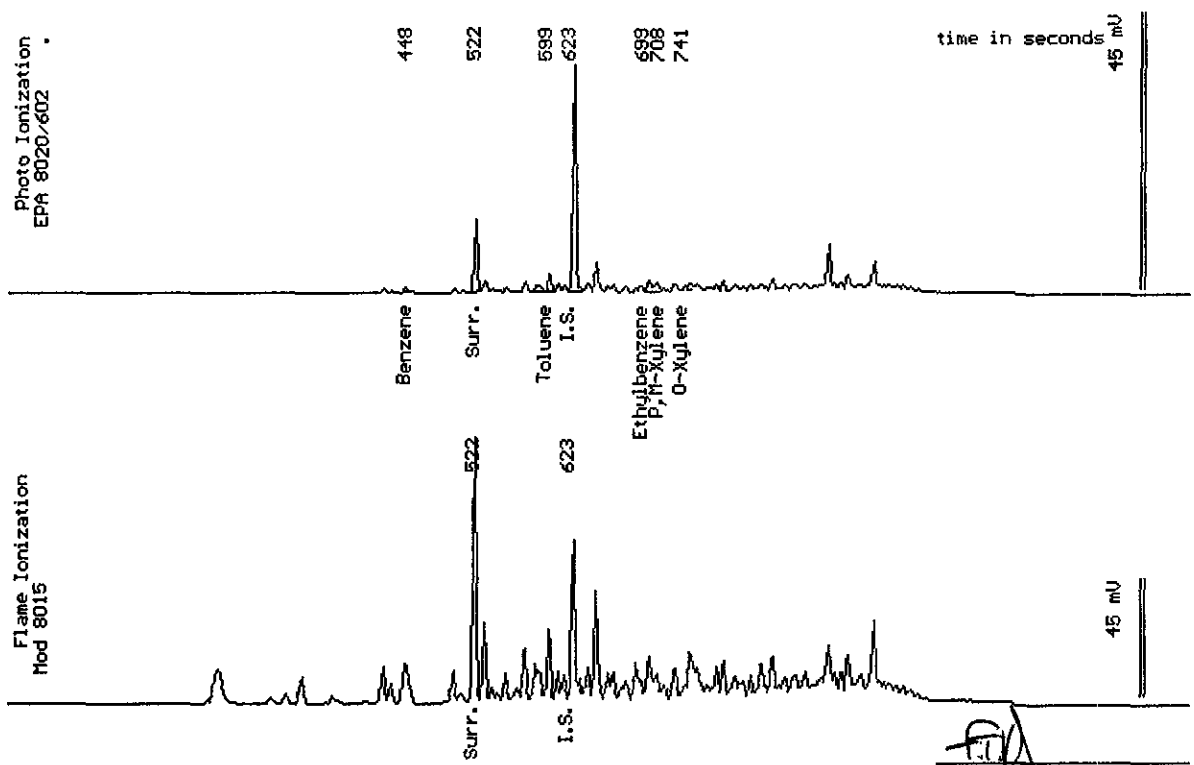
Acculabs Inc.
Davis
1046 Olive Drive, Davis CA 95616 ▪ 530-757-0920 ▪ Fax 753-6091

Sample Log 19829
19829-01

Sample: **MW-1**

From : JH - West St.
Sampled : 03/24/99
Dilution : 1:10 Run Log : 2179B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	5.8
Toluene	(5.0)	48
Ethylbenzene	(5.0)	26
Total Xylenes	(5.0)	24
TPH as Gasoline	(500)	2600
Surrogate Recovery		109 %



Date Analyzed: 04-03-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

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 19829
Report Due Date:

Client Gribi Assoc.
Address
City, State & Zip
Contact
Phone
Fax
P.O. Number

Project Name JH-West St
Project Number
Fax Results Y N
Page of

PUBLIC WATER SUPPLY INFORMATION
System Report to: State Y N
PWS No. Report to: EPA Y N
POE No. DWR No.
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 Manager Approval

CLIENT'S SAMPLE ID/LOCATION	Date	Time	Sample Type	Containers	Analyses Requested: TPH-G/BTEX/MTBE	Spl. No.
MW-1	3/24		W	3	X	01

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT			Date	Time	Samples Relinquished By	Samples Received By
Received Cold	Y	N	3/27	8:45		
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)

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

Sample Log 20512
September 04, 1999

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

Subject : 1 Water sample
Project Name : Johnny Huston
Project Number :

Location : Oakland

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

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

Sample Log 20512

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

From : Johnny Huston
Sampled : 09/01/99
Received : 09/02/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
MW-1	09/02/99	(25)	<25

Approved By:

Tom Kwoka
Lab Director

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

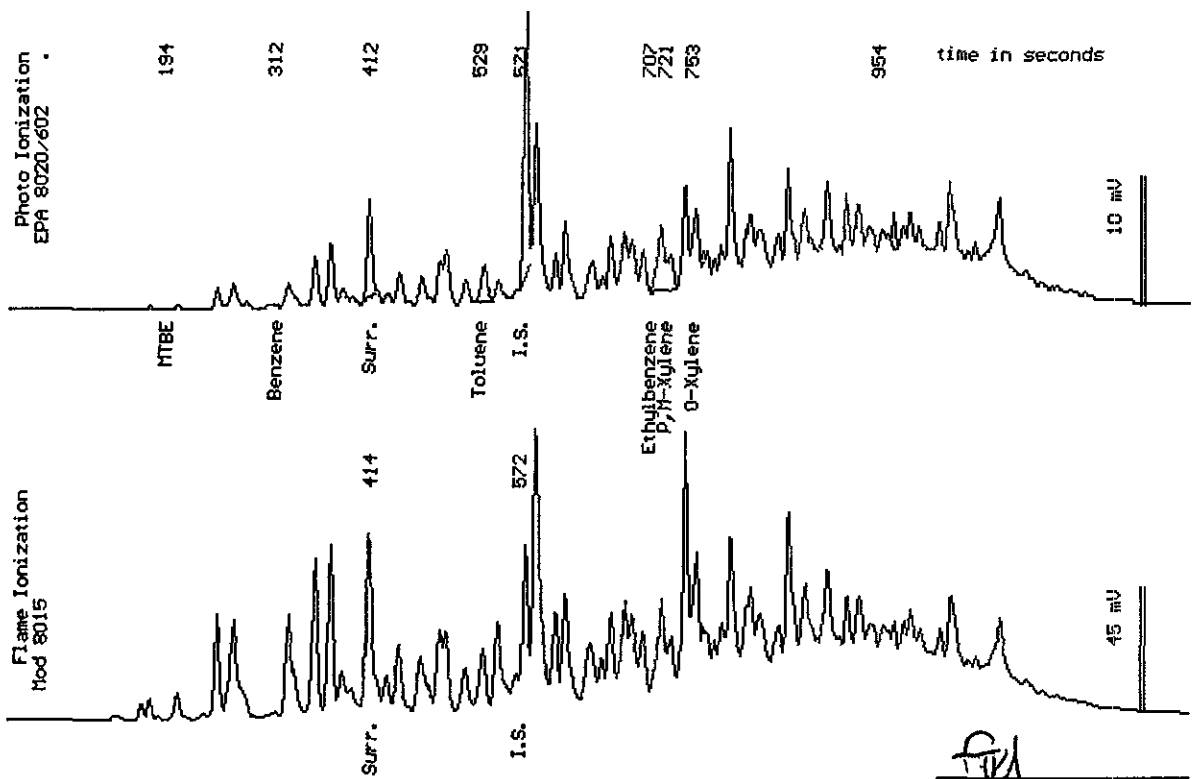
Sample Log 20512
20512-01

Sample: **MW-1**

From : Johnny Huston
Sampled : 09/01/99
Dilution : 1:5 Run Log : 4188C
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(2.5)	<2.5
Toluene	(2.5)	28
Ethylbenzene	(2.5)	61
Total Xylenes	(2.5)	25
TPH as Gasoline	(250)	6000 *
Surrogate Recovery		132 %

* Product is not typical gasoline.



Date Analyzed: 09-02-99
Column : 0.53mm ID X 60m Restek Rtx-1701

Stewart Podolsky
Senior Chemist

Acculabs Inc.

September 3, 1999
Sample Log 20512

QC Report for EPA 602 & Modified EPA 8015
Run Log : 4187Z
From : Johnny Huston
Sample(s) Received : 09/02/99

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *
Benzene	115	119	3
Ethylbenzene	109	114	4
TPH as Gasoline	109	129	17

* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene	116
Ethylbenzene	110
Gasoline	117

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

West Analytical Labs

1046 Olive Drive, Suite 2, Davis, CA 95616

Phone#: 916-757-0920
Fax#: 916-753-6091
Sample Receiving#: 916-757-4608

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Jim Gribi

Phone #:

Company/Address: Gribi Associates

FAX #:

Project Number:

P.O.#:

Project Name: Johnny Huston

Project Location: Oakland

Sampler Signature: James C. Gribi

ANALYSIS REQUEST

TAT: 12 hour / 24 hour / 48 hour / 1 week / 2 weeks

For Lab Use ONLY

Sample ID	Sampling DATE	Sampling TIME	Container (Type/Amount) VOA	SLEEVE	1L GLASS	1L PLASTIC	Method Preserved HCl	HNO_3	ICE	NONE	Matrix WATER	SOIL	BTEX (602/8020)	BTEX/TPH as Gasoline (602/8020/M8015) MTBE	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	EPA 601/8010	EPA 608/8080 - Pesticides	EPA 608/8080 - PCB's	EPA 624/8240	EPA 625/8270	CAM - 17 Metals	LEAD(6010/7421/239.2)	Cd, Cr, Pb, Zn, Ni	W.E.T. (V)	TOTAL (V)	WEST Lab Number
MW-1	9/1/99		3						X		X			X													20512 01

20512

Relinquished by:	Date	Time	Received by:
James C. Gribi	9/2/99	1040	Ted Wood
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:

Remarks:

Bill To: