GRIBI Associates

Geological and Environmental Consulting Services

ENVIRONMENTAL PROTECTION

00 JAN 19 PM 3:41

- check Zone 7 maps for GW flow direction generally to SSE
- the MTBE conc. are very high, maybe best to do HPs (3) to better place third (possible 4th) MW, if
- check if IB 3 & IB 4 has grab GW samples collected No. + no HC odor in soil

January 17, 2000

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

Attention: Eva Chu

Subject: Report of Quarterly Groundwater Monitoring Conducted On October 14, 1999,
Dublin Toyota UST Site, 6450 Dublin Court, Dublin, California
Alameda County LOP Site ID No. 699
GA Project No. 147-01-01

Ladies and Gentlemen:

Gribi Associates is pleased to submit this groundwater monitoring report on behalf of Dublin Toyota for the underground storage tank (UST) site located at 6450 Dublin Court in Dublin, California (see Figure 1 and Figure 2). This letter report documents the monitoring of two groundwater monitoring wells at the site.

DESCRIPTION OF SAMPLING ACTIVITIES

On October 14, 1999, Mr. Stanton Stubbs of Gribi Associates 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 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 was encountered in the two wells at a depth of about six feet below surface grade. Purged groundwater from MW-1 exhibited a slight sweet odor and no sheen. Purged groundwater from MW-2 exhibited no hydrocarbon odors or 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/Motor Oil (TPH-D/MO)

In addition, the MTBE result for MW-1 was confirmed using USEPA Method 8260B. 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 GROUNDWATER ANALYTICAL RESULTS
Dublin Toyota UST Site

Sample ID	Sample Date	Sample Depth[1]	Concentration (ppm)[1] TPH-D	TPH-MO	TPH-G	B	T	E	X	MTBE
MW-1	12/15/99	5.74	<0.050	**0.110**	**46**	<0.10	<0.10	<0.10	<0.10	**62**
	4/6/99	5.09	<0.050	<0.100	**45**	<0.050	<0.050	<0.050	<0.050	**86[2]**
	7/14/99	6.18	<0.050	<0.100	**2.8**	<0.10	<0.10	<0.10	<0.10	**65[2]**
	10/14/99	6.86	<0.050	<0.100	**11**	<0.017	<0.017	<0.017	<0.017	**98[2]**
MW-2	12/15/99	4.30	<0.050	**0.570**	<0.050	<0.00050	**0.00090**	<0.00050	**0.00150**	<0.0050
	4/6/99	3.42	<0.050	<0.100	<0.050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0050
	7/14/99	4.76	<0.050	**0.110**	<0.050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0050
	10/14/99	5.48	<0.050	<0.100	<0.050	<0.00050	<0.00050	<0.00050	<0.00050	<0.0050

TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-t-Butyl Ether
<0.050 = Not detected above the expressed value.
1 = Groundwater depths measured from top of casing.
2 = MTBE result was confirmed using USEPA Method 8260B.

CONCLUSIONS

Laboratory analytical results from this sampling event are similar to previous monitoring results, with elevated levels of only MTBE still present in groundwater from MW-1, and no significant levels of other hydrocarbon constituents present in groundwater from MW-1 or MW-2.

In accordance with the approved workplan (*Workplan to Conduct Additional Investigation Activities,* Gribi Associates, October 11, 1999), Gribi Associates has been authorized to install one additional groundwater monitoring well to provide additional MTBE characterization. We expect to begin these additional activities within the next two to three weeks, and will notify your office prior to conducting field activities.

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,

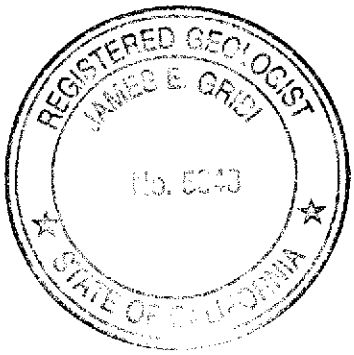
Stanton Stubbs
Environmental Scientist

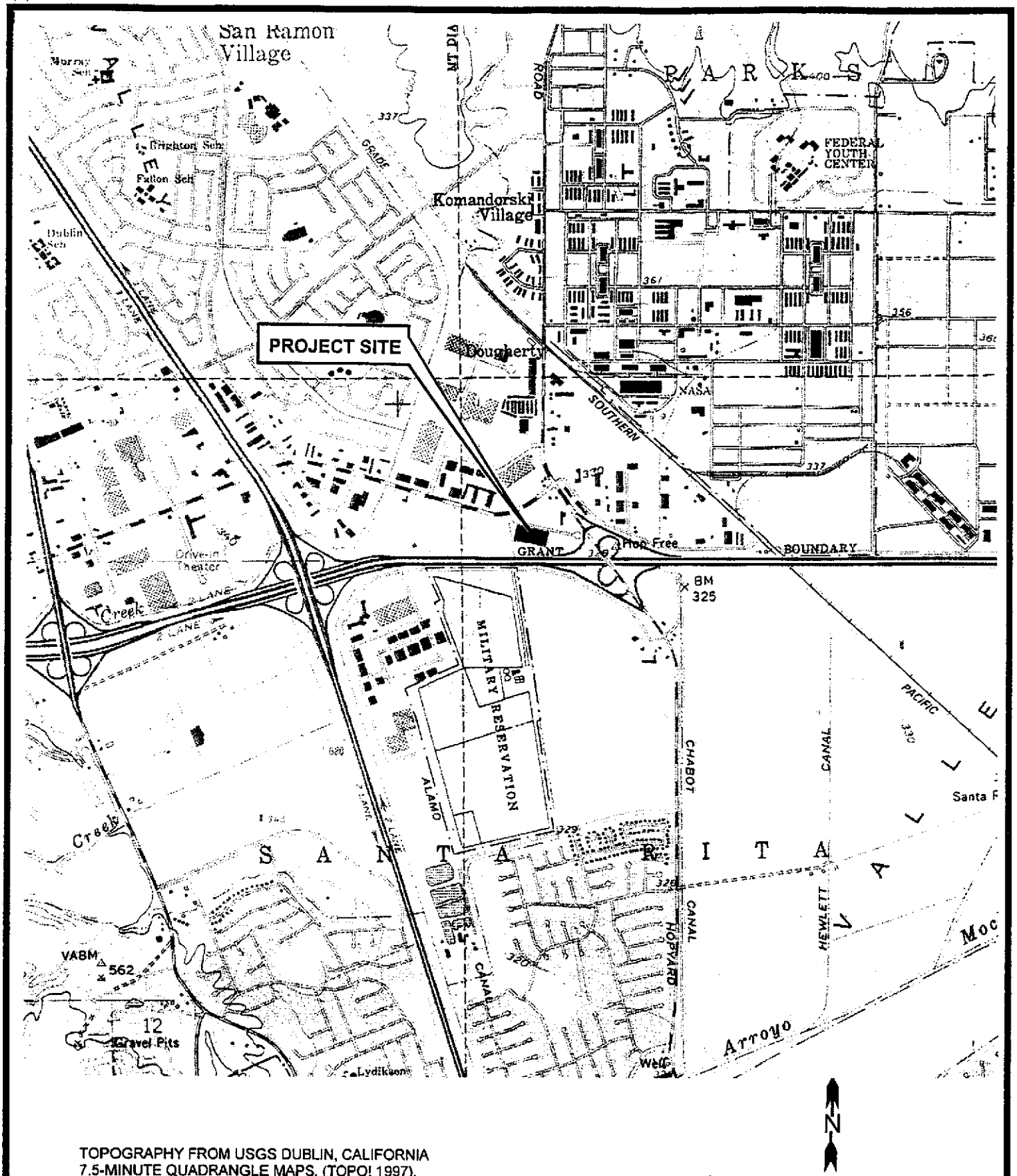
James E. Gribi
Registered Geologist
California No. 5843

SS/JEG:ct
Enclosure

c Mr. Scott Anderson, Dublin Toyota

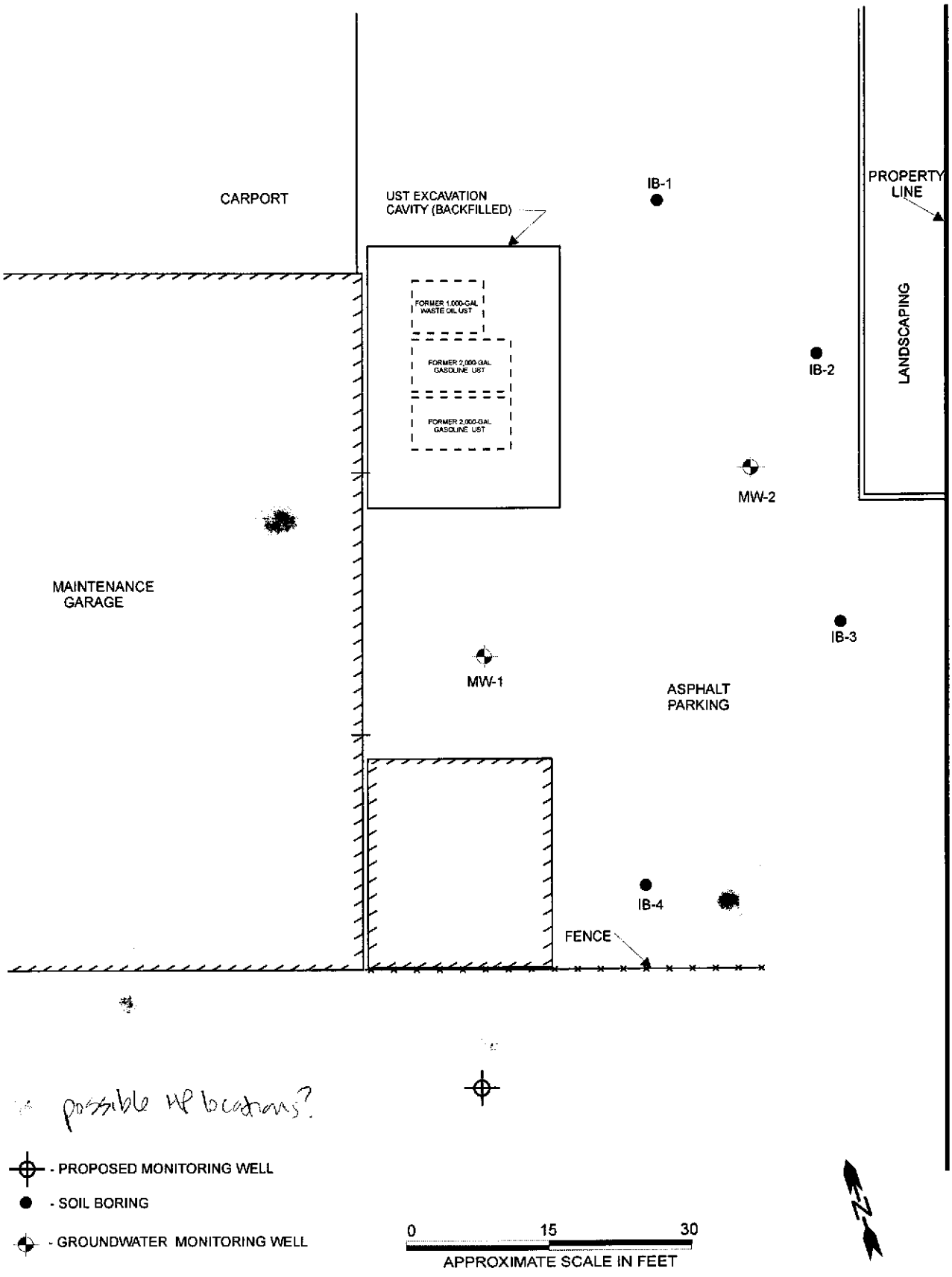
File: F:\MyFiles\Reports\dutoy-qm-4.wpd





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

DESIGNED BY:	CHECKED BY:	**SITE VICINITY MAP**	DATE: 10/01/98	FIGURE: 1
DRAWN BY: JG	SCALE: 1:24,000	DUBLIN TOYOTA UST SITE 6450 DUBLIN COURT DUBLIN, CALIFORNIA	**GRIBI Associates**	
PROJECT NO: 147-01-01				



DESIGNED BY:	CHECKED BY:	**SITE PLAN**	DATE: 10/11/99	FIGURE: 2
DRAWN BY: JG	SCALE:	DUBLIN TOYOTA UST SITE 6450 DUBLIN COURT DUBLIN, CALIFORNIA	GRIBI Associates	
PROJECT NO: 147-01-01				

APPENDIX A

GROUNDWATER MONITORING FIELD DATA RECORDS

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-1	Well Loc.
Project Name Dublin Toyota	Project No.
Date 10/14 Time	TOC Elevation GW Elevation
Depth to Water 6.86	Well Depth Well Diameter
Purge Water, 2": Wtr Column X 0.163 X 3 = 6.42	Purge Water, 4": Wtr Column X 0.653 X 3 =
Purge/Sample Method Bailer	Lab Analyses
Weather Conditions Sunny ~75°	Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	78.4	2.47	7.48	Clear, Sweet Odor
	1	73.3	2.28	7.25	Murky Gray, SL Sweet Odor
	3	71.9	2.57	6.93	" "
	5	70.8	2.66	6.87	" "
	7	70.3	2.64	7.77	" "

Remarks

GROUNDWATER SAMPLING RECORD	GRIBI Associates
Well No. MW-2	Well Loc.
Project Name Dublin Toyota	Project No.
Date 10/14 Time	TOC Elevation GW Elevation
Depth to Water 5.48	Well Depth Well Diameter
Purge Water, 2": Wtr Column X 0.163 X 3 = 7.10	Purge Water, 4": Wtr Column X 0.653 X 3 =
Purge/Sample Method Bailer	Lab Analyses
Weather Conditions Sunny ~75°	Laboratory

Time	Volume Purged	Temp.	Cond.	pH	Visual
	0	71.9	14.01	6.46	Clear, No HC's/Sh
	2	70.1	13.68	6.57	Mrky Brn Gray, No HC's/Sh
	4	69.9	5.77	5.78	" "
	8	69.8	2.85	7.17	" "

Remarks

APPENDIX B

LABORATORY DATA REPORT AND CHAIN-OF-CUSTODY RECORD

Acculabs Inc.

Davis

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

Sample Log 20693
October 21, 1999

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

Subject : 2 Water samples
Project Name : DUBLIN TOYOTA
Project Number : 147-01-01

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 21, 1999
Sample Log 20693

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

From : DUBLIN TOYOTA (Proj. # 147-01-01)
Sampled : 10/14/99
Received : 10/14/99
Matrix : Water

SAMPLE	Date Analyzed	(MRL) ug/L	Measured Value ug/L
MW-1	10/21/99	(1700)	79000
MW-2	10/20/99	(5.0)	<5.0

Approved By:

Tom Kwoka
Lab Director

Acculabs Inc.

Davis

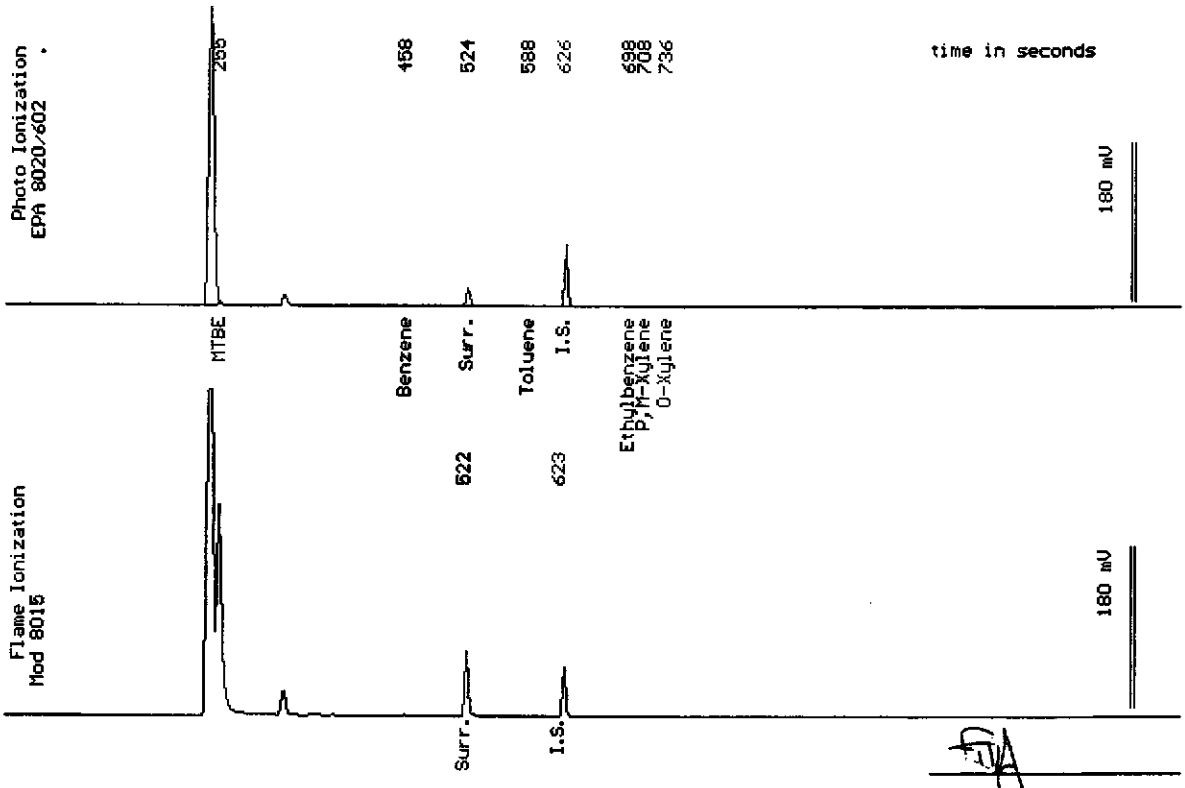
Sample Log 20693

20693-01

Sample: **MW-1**

From : DUBLIN TOYOTA (Proj. # 147-01-01)
Sampled : 10/14/99
Dilution : 1:33 Run Log : 2184T
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(17)	<17
Toluene	(17)	<17
Ethylbenzene	(17)	<17
Total Xylenes	(17)	<17
TPH as Gasoline	(1700)	11000
Surrogate Recovery		101 %



Date Analyzed: 10-20-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

Acculabs Inc.

Davis

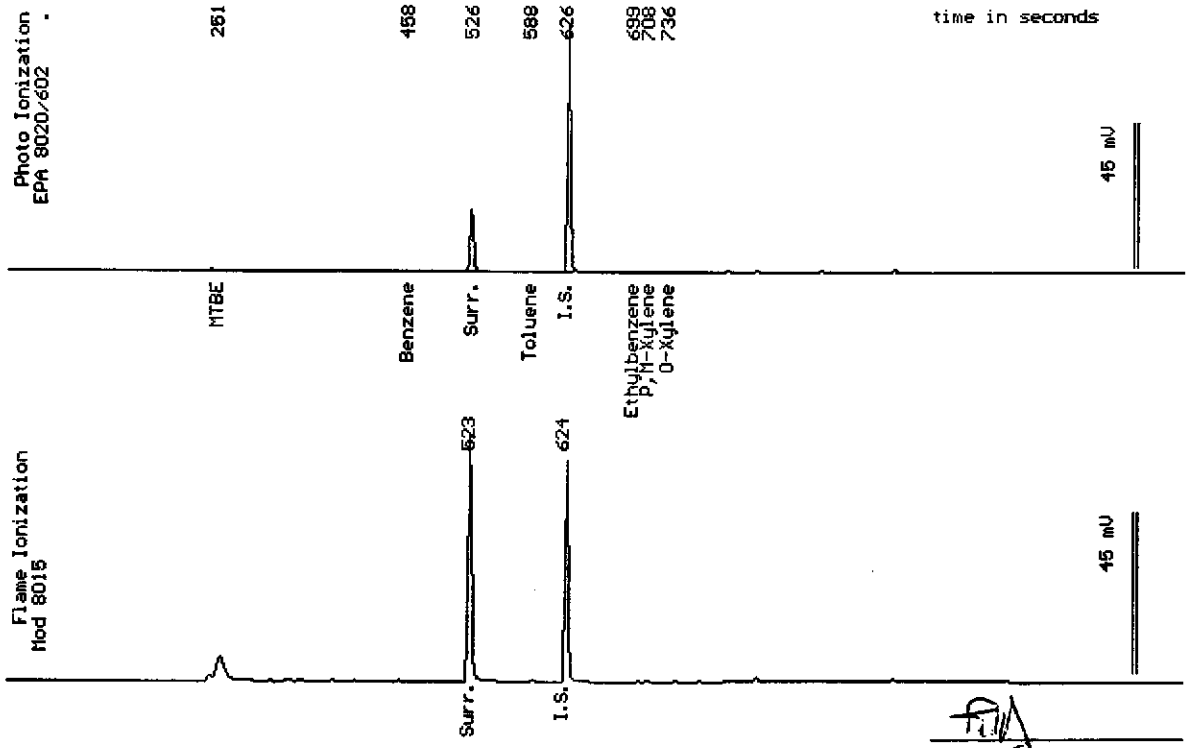
Sample Log 20693

20693-02

Sample: **MW-2**

From : DUBLIN TOYOTA (Proj. # 147-01-01)
Sampled : 10/14/99
Dilution : 1:1 Run Log : 2184T
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		103 %



Date Analyzed: 10-20-99
Column : 0.53mm X 60m Restek Rtx-1301

Stewart Podolsky
Senior Chemist

Acculabs Inc.

October 21, 1999
Sample Log 20693

QC Report for EPA 602 & Modified EPA 8015
Run Log : 2184S
From : DUBLIN TOYOTA (Proj. # 147-01-01)
Sample(s) Received : 10/14/99

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *
Benzene	114	110	4
Ethylbenzene	99	97	2
TPH as Gasoline	130	135	4

* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene	101
Ethylbenzene	100
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 Kwok
Lab Director

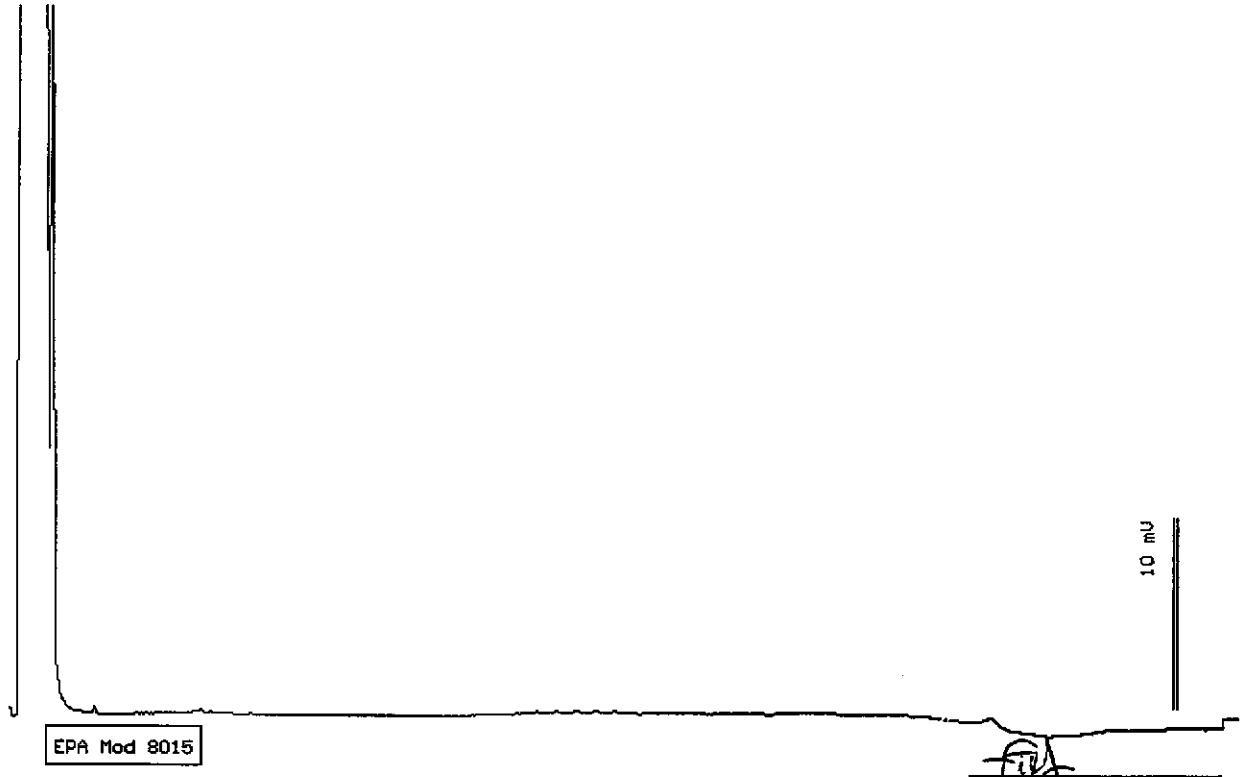
Acculabs Inc.
Davis

Sample Log 20693
20693-01

Sample: **MW-1**

From : DUBLIN TOYOTA (Proj. # 147-01-01)
Sampled : 10/14/99
Extracted: 10/19/99 QC Batch : DW991002
Dilution : 1:1 Run Log : 7453L
Matrix : Water

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



EPA Mod 8015

Date: 10-19-99 Time: 18:44:57
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Rodolsky
Senior Chemist

Acculabs Inc.

Davis

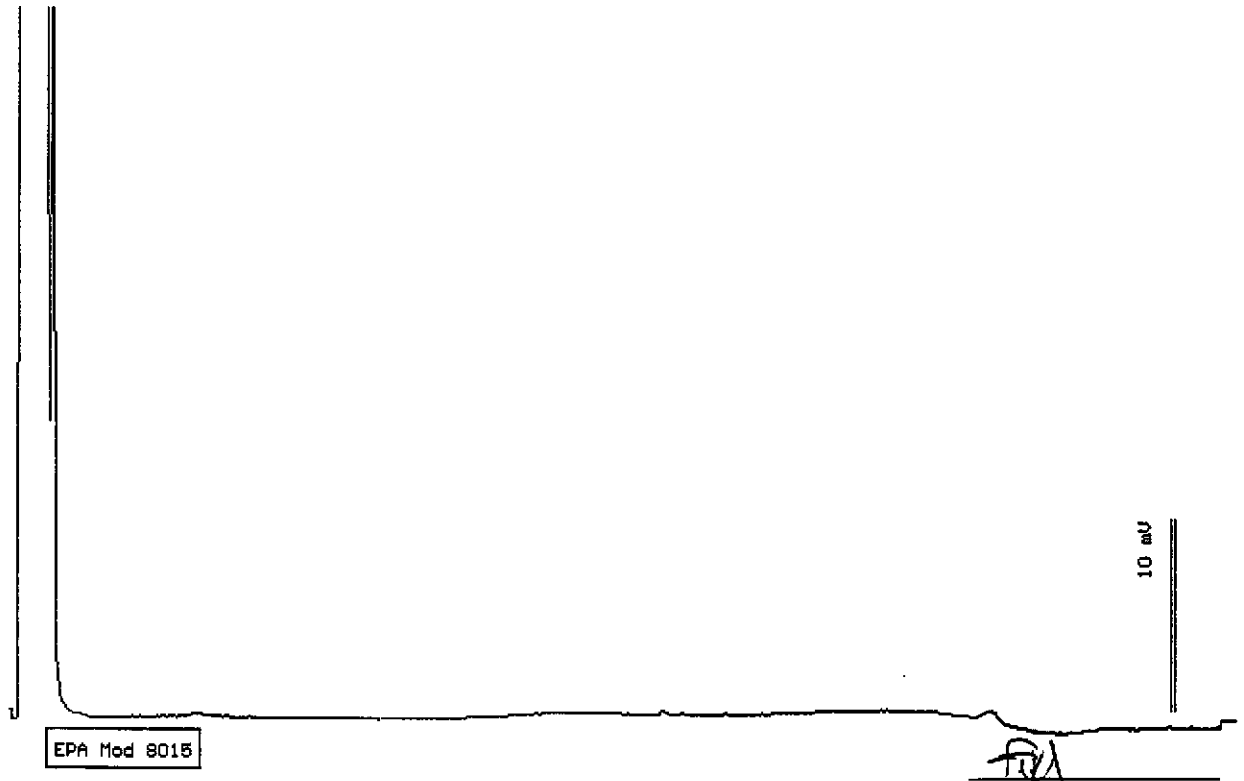
Sample Log 20693

20693-02

Sample: **MW-2**

From : DUBLIN TOYOTA (Proj. # 147-01-01)
Sampled : 10/14/99
Extracted: 10/19/99 QC Batch : DW991002
Dilution : 1:1 Run Log : 7453L
Matrix : Water

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



Date: 10-19-99 Time: 19:18:19
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

Stewart Podolsky
Senior Chemist

Acculabs Inc. October 20, 1999

QC Report
TPH Diesel by 8015 Mod

QC Batch DW991002 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	91	97	6

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 20693
October 21, 1999

Sample Name : **MW-1**

Project Name : DUBLIN TOYOTA
Project Number : 147-01-01
Sample Date : 10/14/99
Date Analyzed : 10/20/99

Date Received : 10/14/99
Dilution : 1:1000
Sample Matrix : Water
Lab Number : 20693-01

Parameter	MRL	Measured Conc.	Units
Methyl-tert-butyl ether	**5000**	**98000**	ug/L
Dibromofluoromethane (surr)		129	% Recovery

MRL = Method Reporting Limit Conc. = Concentration

B = Analyte was detected in Method Blank.

E = Concentration exceeded calibration range.

Approved By : Tom Kiyoka

Acculabs Inc. - Davis

EPA 8260B QC Report

Matrix: Water	Date Analyzed: 10/20/99
QC Batch: VW991020	QC Limits Set: 8/18/99

Parameter	Spike Conc ug/L	LCS % Rec	LCSD % Rec	RPD	Control Chart Limits Lower	Control Chart Limits Upper
1,1-Dichloroethene	50	94	93	1.1	26	139
Benzene	50	97	95	1.8	83	127
Trichloroethene	50	96	96	0.5	64	120
Toluene	50	78	74	5.5	64	129
Chlorobenzene	50	98	98	0.3	88	112

Surrogate Compound	Control Chart Limits Lower	Control Chart Limits Upper
Dibromofluoromethane	80	122
Toluene-d8	67	127
4-Bromofluorobenzene	51	121

Tom Kwoka
Laboratory Director

C:\EXCEL\QC\VW991020.XLS

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: 20693
Report Due Date: 10-21-99

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	DUBLIN TOYOTA	Collection Point	
Fax	707/748-7763	Project Number	147-01-01	Collector's Name	
P.O. Number		Fax Results	(Y) N	Page 1 of 2	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	MTBE CONFIRM	Spl. No.
MW - 1	10/14/99		W	5	X	X	X	01
MW - 2	10/14/99		W	5	X	X		02

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT			Date	Time	Samples Relinquished By	Samples Received By
Received Cold	Y	N	10-13	1455		
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)