



1900 Powell Street, 12th Floor  
Emeryville, California 94608-1827  
(510) 652-4500, FAX (510) 652-4906

FAX TRANSMISSION: This cover page plus 26 pages.

Date	<b>September 24, 1999</b>
Time	<b>4:20PM</b>
From	<b>Taylor Bennett</b>

Deliver To	<b>Mr. Scott Seery, CHMM</b>		
Name of Firm	<b>Alameda County Health Care Services Agency</b>		
FAX Number	<b>337-9335</b>	Project No.	<b>6895.00-015</b>

THE INFORMATION CONTAINED IN THIS FACSIMILE IS CONFIDENTIAL AND IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR THE PERSON RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, DO NOT USE OR DISCLOSE THIS FACSIMILE. IF YOU HAVE RECEIVED THIS FACSIMILE IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO LFR LEVINE-FRICKE VIA THE U.S. POSTAL SERVICE. THANK YOU.

**Comments:** Following are the results for grab groundwater samples collected at locations GW-5 and GW-6A on August 25, 1999. The highlights of the results are the following:

- Stoddard solvent was not detected.
- A trace amount of unidentified gasoline-range hydrocarbons was detected at location GW-6A.
- BTEX was not detected.
- Very low concentrations of MTBE were detected at location GW-6A, but not at location GW-5.
- Chlorinated solvents (e.g., tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene) were not detected at locations GW-5 and GW-6A.
- Acetone was detected at concentrations up to 190 ug/l at location GW-6A and at 240 ug/l at location GW-5. Since acetone has not been detected previously in samples from the Deppers' property, and acetone was detected in samples collected previously from tanks on Mr. Earl Thompson's property, these results suggest that Mr. Thompson's tanks may be the source of acetone, and possibly other chemicals, in groundwater at these locations.





1900 Powell Street, 12th Floor  
Emeryville, California 94608-1827  
(510) 652-4500, FAX (510) 652-4906

FAX TRANSMISSION: This cover page plus 7 pages.

Date	September 2, 1999		
Time	5:08PM		
From	Taylor Bennett		
Deliver To	Tracy Babjar		
Name of Firm	Curtis & Tompkins		
FAX Number	486-0532	Project No.	6895.00-017

THE INFORMATION CONTAINED IN THIS FACSIMILE IS CONFIDENTIAL AND IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR THE PERSON RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, DO NOT USE OR DISCLOSE THIS FACSIMILE. IF YOU HAVE RECEIVED THIS FACSIMILE IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO LFR LEVINE-FRICKE VIA THE U.S. POSTAL SERVICE. THANK YOU.

Comments: Following is the revised C.O.C. #2281 to confirm our conversation today for project 6895.00-018. This is a confirmation, not a new request.

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 6815.00 - 044 018 THB		Project Location: 38th St. + 14th Ave, Oakland, CA		Date: 9/27/99		Serial No.: No 2281					
Project Name: Gloratorium				Field Logbook No:							
Sampler (Signature): Taylor Bennett				ANALYSES		Samplers: THB					
SAMPLES				ANALYSES							
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 8080M Stoddard & Gas	EPA 8015 TEX and MIBK	EPA 8260 Acetone, MEK, MIBK	HOLD	RUSH	REMARKS
Trip Blank	9/27/99	9:45		2	water				X		Normal trip blank
GW-6A-A	9/27	12:00		1	water		X	X	X	THB	Results to Taylor Bennett
GW-6A-B	9/27	12:00		1	water	X	X	X		THB	9/30/99 THB:
GW-106A-C	9/27	13:00		1	water	X	X	X		THB	Analyze GW-6A-A, GW-106A-C, and GW-5-A for EPA 9010.
GW-106A-D	9/27	13:00		1	water	X	X		X	THB	Analyze GW-6A-B, GW-106A-D, and GW-5-B for 8015 M (TPH as Standard and Gasoline) and for EPA 8260 (TEX and MIBK)
GW-5-A	9/27	13:30		1	water	X	X	X		THB	
GW-5-B	9/27	13:30		1	water	X	X		X	THB	9/2/99: Analyze GW-6A-A, GW-106A-C, and GW-5-A for EPA 8260, to include acetone, MEK, and MIBK.
RELINQUISHED BY: (Signature) Taylor Bennett			DATE	TIME	RECEIVED BY: (Signature)			DATE	TIME		
RELINQUISHED BY: (Signature)			DATE	TIME	RECEIVED BY: (Signature)			DATE	TIME		
RELINQUISHED BY: (Signature)			DATE	TIME	RECEIVED BY: (Signature)			DATE	TIME		
METHOD OF SHIPMENT:			DATE	TIME	LAB COMMENTS:						
Sample Collector: LEVINE-FRICKE-RECON 1908 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 852-4500					Analytical Laboratory: Curtis & Tompkins						

Shipping Copy (White)    Lab Copy (Yellow)    File Copy (Pink)    Field Copy (Goldenrod)

CCS CON 10130774

SEP 24 1999 16:33 FR LFR LEVINE FRICKE 510 652 4906 TD 33793335  
 P. 04/27  
 T-546 P. 03/26 F-187  
 Sep-08-99 05:29pm From-CURTIS & TOMPKINS 5104860592



TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke	Analysis Method: EPA 8015M
Project#: 6895.00-018	Prep Method: EPA 5030
Location: Glovatorium	

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
141186-003	GW-6A-B	50292	08/27/99	09/01/99	09/01/99	
141186-005	GW-105A-D	50292	08/27/99	09/01/99	09/01/99	
141186-007	GW-5-B	50292	08/27/99	09/01/99	09/01/99	

Matrix: Water

Analyte	Units	141186-003	141186-005	141186-007
Diln Fac:		1	1	1
Gasoline C7-C12	ug/L	54 Y	57 Y	<50
Stoddard Solvent	ug/L	<50	<50	<50
Surrogate				
Trifluorotoluene	%REC	90	88	91
Bromofluorobenzene	%REC	92	90	90

Y: Sample exhibits fuel pattern which does not resemble standard

# Chromatogram

Sample Name : 141156-003.50292

Sample w:

Page 1 of 1

FileName : C:\GC05\DATA\2438027.raw

Date : 9/1/99 06:30 AM

Method : TVHETKE

Time of Injection 9/1/99 06:03 AM

Start Time : 0.00 min

End Time : 26.80 min

Low Point : 14.25 mV

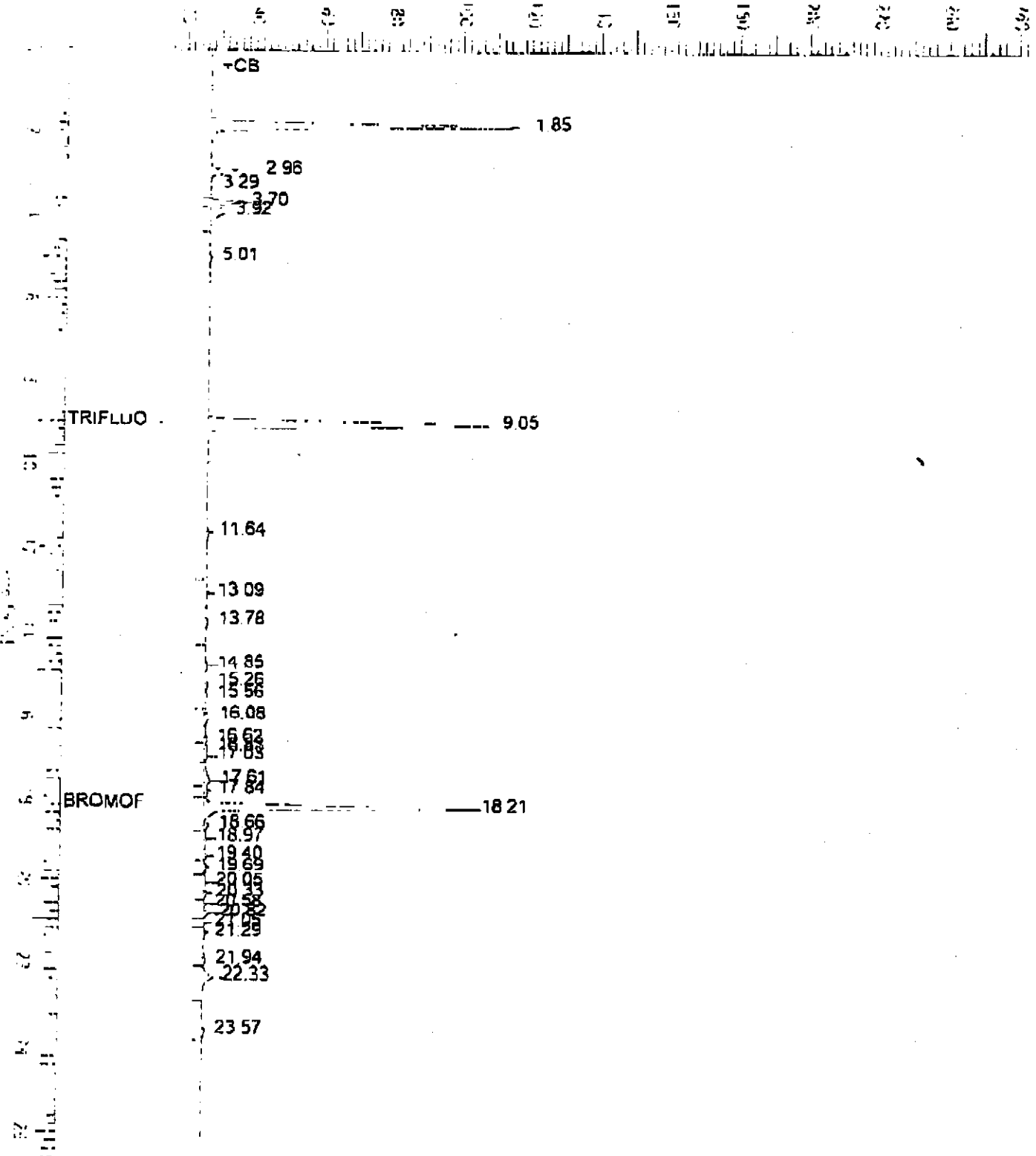
High Point : 264.25 mV

Scale Factor : -1.0

Plot Offset : 14 mV

Plot Scale : 250.0 mV

Response [mV]



### Chromatogram

Sample Name : 141186-005.S0292

FileName : G:\GCDS\DATA\249G028.RAW

Method : TVHSTXE

Start Time : 0 00 min

End Time : 26.80 min

Scale Factor : -1.0

Plot Offset : 14 mV

Sample #:

Page 1 of 1

Date : 9/1/99 07:13 AM

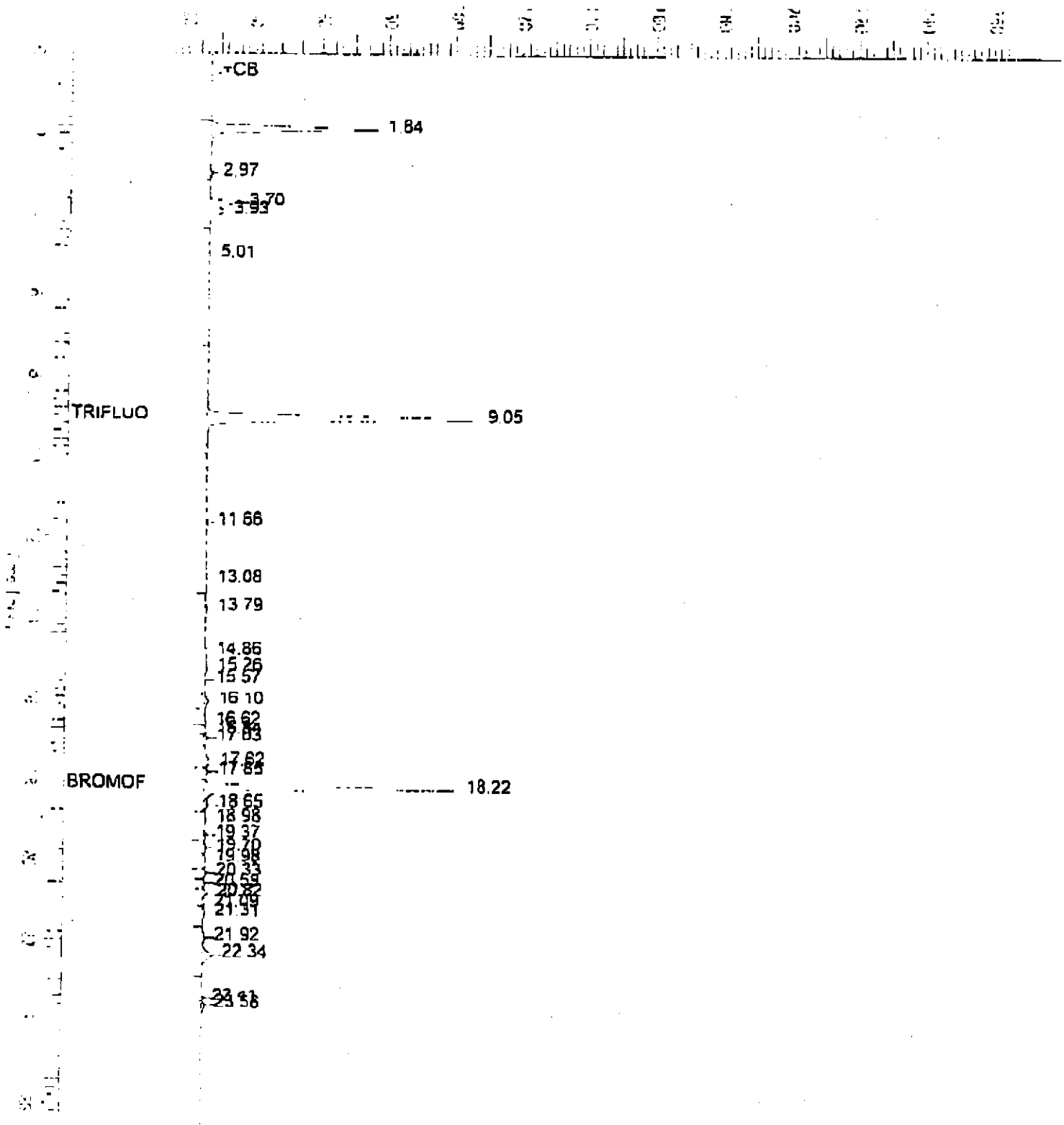
Time of Injection: 9/1/99 06:46 AM

Low Point : 14.25 mV

High Point : 264.25 mV

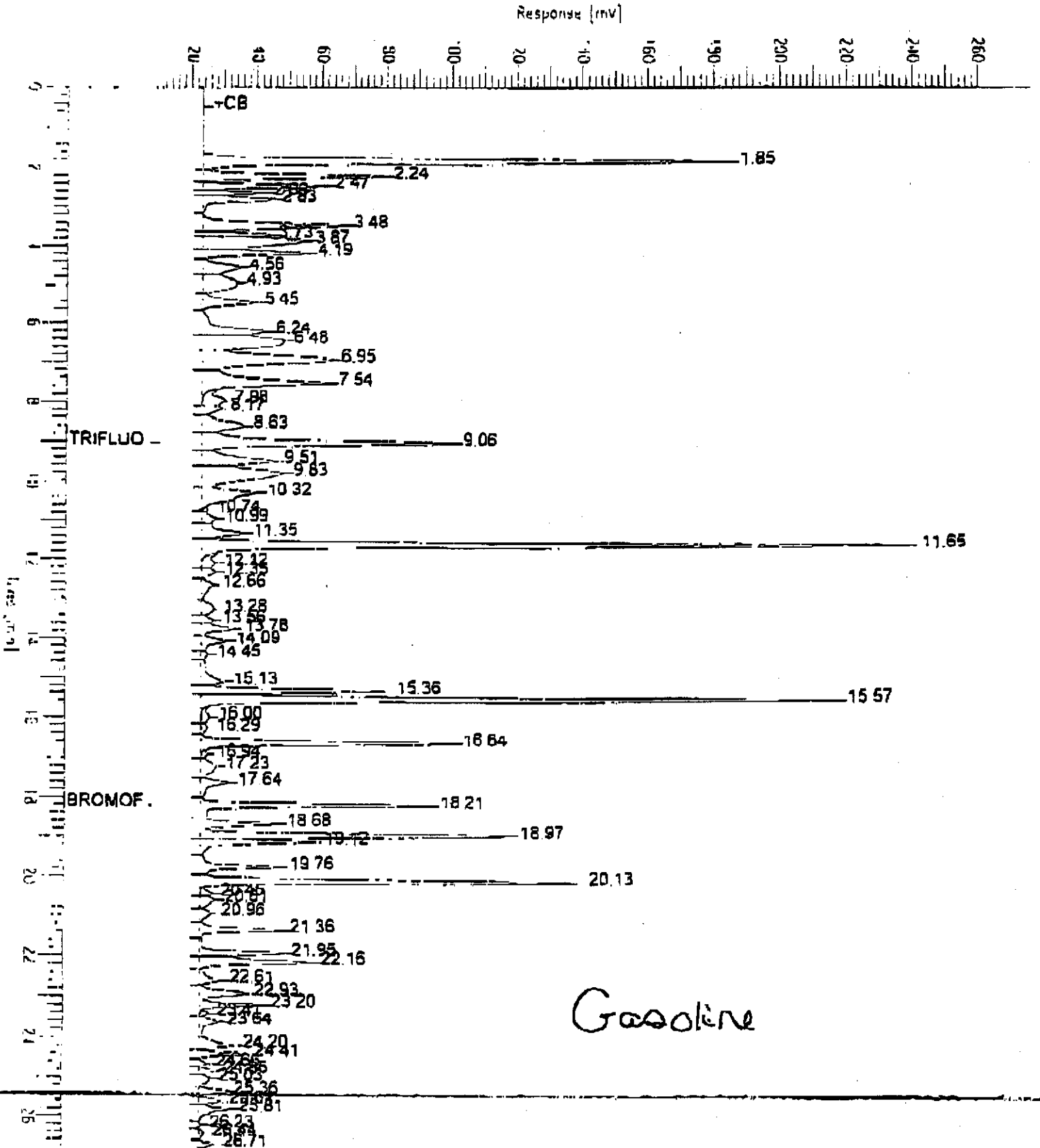
Plot Scale: 250.0 mV

Response [mV]



Sample Name : CCV/LCS, QCD6427, 99WS7998, 50292  
Filename : G:\GC05\DATA\243G011.raw  
Method : TVHBTXE  
Start Time : 0.00 min End Time : 26.80 min  
Scale Factor : -1.0 Plot Offset : 11 mV

Sample #: GAS  
Date : 8/31/99 07:03 PM  
Time of Injection: 8/31/99 06:26 PM  
Low Point : 10.76 mV High Point : 260.76 mV  
Plot Scale : 250.0 mV



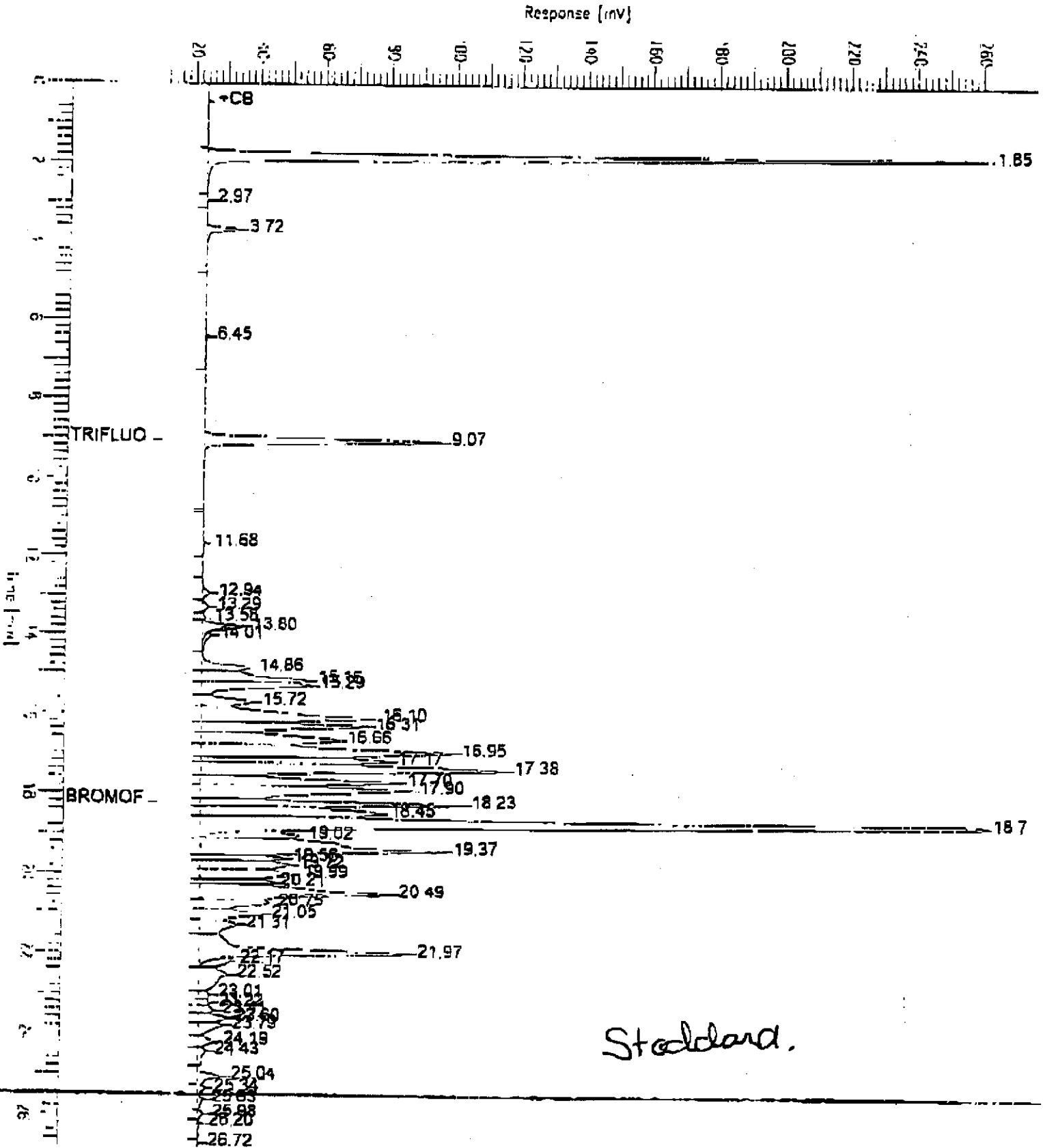


Sample Name : CCV.99MS7897.50292  
FileName : G:\GC05\DATA\2436012.raw  
Method : TVHBTX1  
Start Time : 0.00 min  
Scale Factor : -1.0

End Time : 26.86 min  
Plot Offset : 11 mV

Sample #: STODDARD  
Date : 8/31/99 09:50 PM  
Time of Injection : 8/31/99 07:18 PM  
Low Point : 10.98 mV  
Plot Scale : 250.0 mV  
High Point : 250.98 mV

Page 1 of 1





BTXE	
Client: LFR-Levina-Fricke	Analysis Method: EPA 8021B
Project#: 6895.00-018	Prep Method: EPA 5030
Location: Giovatorium	

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
141186-003	GW-6A-B	50292	08/27/99	09/01/99	09/01/99	
141186-005	GW-106A-D	50292	08/27/99	09/01/99	09/01/99	
141186-007	GW-5-B	50292	08/27/99	09/01/99	09/01/99	

MATRIX: Water

Analyte	Units	141186-003	141186-005	141186-007
Diln Fac:		1	1	1
MTBE	ug/L	8.9	8.7	<2
Benzene	ug/L	<0.5	<0.5	<0.5
Toluene	ug/L	<0.5	<0.5	<0.5
Ethylbenzene	ug/L	<0.5	<0.5	<0.5
m,p-Xylenes	ug/L	<0.5	<0.5	<0.5
o-Xylene	ug/L	<0.5	<0.5	<0.5
Surrogate				
Trifluorotoluene	%REC	92	90	91
Bromofluorobenzene	%REC	96	93	93

Lab #: 141185

BATCH QC REPORT



Curtis & Tompkins, Ltd  
Page 1 of 1

TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke Analysis Method: EPA 8015M  
Project#: 6895.00-018 Prep Method: EPA 5030  
Location: Glovacorium

METHOD BLANK

Matrix: Water Prep Date: 08/31/99  
Batch#: S0292 Analysis Date: 08/31/99  
Units: ug/L  
Diln Fac: 1

MB Lab ID: QC06430

Analyte	Result	
Gasoline C7-112	<50	
Stoddard Solvent	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	84	53-150
Bromofluorobenzene	91	53-149

Lab #: 141186

BATCH QC REPORT



Curtis & Tompkins, Inc.  
Page 1 of 1

BTXE

Client: LFR-Levine-Fricke  
Project#: 6895.00-018  
Location: Glovatorium

Analysis Method: EPA 8021B  
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water  
Batch#: 50292  
Units: ug/L  
Diln Fac: 1

Prep Date: 08/31/99  
Analysis Date: 08/31/99

MB Lab ID: QC06430

Analyte	Result	
MTBE	<2.0	
Benzene	<0.5	
Toluene	<0.5	
Ethylbenzene	<0.5	
m, p-Xylenes	<0.5	
o-Xylene	<0.5	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	67	51-143
Bromofluorobenzene	86	37-146



Lab #: 141186

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
Project#: 6895.00-018  
Location: Glovatorium

Analysis Method: EPA 8015M  
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water  
Batch#: 50292  
Units: ug/L  
Diln Fac: 1

Prep Date: 08/31/99  
Analysis Date: 08/31/99

LCS Lab ID: Q206427

Analyte	Result	Spike Added	†Rec #	Limits
Gasoline C7-112	1918	2000	96	77-117
Surrogate	†Rec	Limits		
Trifluorotoluene	96	53-150		
Bromofluorobenzene	84	53-149		

\* Column to be used to flag recovery and RPD values with an asterisk  
- Values outside of QC limits  
Spike Recovery: 0 out of 1 outside limits



Lab #: 141186

BATCH QC REPORT

BTXE	
Client: LFR-Levine-Fricke	Analysis Method: EPA 8021B
Project#: 6895.00-018	Prep Method: EPA 5030
Location: Glovarorium	
BLANK SPIKE/BLANK SPIKE DUPLICATE	
Matrix: Water	Prep Date: 08/31/99
Batch#: 50292	Analysis Date: 08/31/99
Units: ug/L	
Diln Fac: 1	

BS Lab ID: QC06428

Analyte	Spike Added	BS	%Rec #	Limits
MTBE	20	16.92	85	66-126
Benzene	20	18.38	92	65-111
Toluene	20	18.38	92	76-117
Ethylbenzene	20	19.26	96	71-121
m,p-Xylenes	40	38.99	97	80-123
o-Xylene	20	19.94	100	75-127
Surrogate	%Rec	Limits		
Trifluorotoluene	88	51-143		
Bromofluorobenzene	88	37-146		

BSD Lab ID: QC06429

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
MTBE	20	17.72	89	66-126	5	12
Benzene	20	18.19	91	65-111	1	10
Toluene	20	18.24	91	76-117	1	10
Ethylbenzene	20	19.29	96	71-121	0	11
m,p-Xylenes	40	38.59	96	80-123	1	10
o-Xylene	20	20	100	75-127	0	11
Surrogate	%Rec	Limits				
Trifluorotoluene	90	51-143				
Bromofluorobenzene	91	37-146				

# Column to be used to flag recovery and RPD values with an asterisk  
 \* Values outside of QC limits  
 RPD: 0 out of 6 outside limits  
 Spike Recovery: 0 out of 12 outside limits



Lab #: 141186

BATCH QC REPORT

TVR-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke	Analysis Method: EPA 9015M
Project#: 6895.00-012	Prep Method: EPA 5030
Location: Glovarorium	

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ	Sample Date: 08/26/99
Lab ID: 141160-007	Received Date: 08/26/99
Matrix: Water	Prep Date: 09/01/99
Batch#: 50292	Analysis Date: 09/01/99
Units: ug/L	
Diln Fac: 1	

MS Lab ID: QC06431

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	1710	85	69-131
Surrogate	%Rec	Limits			
Trifluorotoluene	103	53-150			
Bromofluorobenzene	96	53-149			

MSD Lab ID: QC06432

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	1733	87	69-131	1	13
Surrogate	%Rec	Limits				
Trifluorotoluene	104	53-150				
Bromofluorobenzene	97	53-149				

\* Column to be used to flag recovery and RPD values with an asterisk  
 \* Values outside of QC limits  
 RPD: 0 out of 1 outside limits  
 Spike Recovery: 0 out of 2 outside limits



Volatile Organics by GC/MS

Client: LFR-Levine-Fricke  
 Project#: 6895.00-018  
 Location: Glovatorium

Analysis Method: EPA 8260  
 Prep Method: EPA 5030

Field ID: Gw-6A-A  
 Lab ID: 141186-002  
 Matrix: Water  
 Batch#: 50373  
 Units ug/L  
 Dils Fac: 1

Sampled: 08/27/99  
 Received: 08/27/99  
 Extracted: 09/03/99  
 Analyzed: 09/03/99

Analyte	Result	Reporting Limit
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	190	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	5.7	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromo-chloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethane	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromochloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans 1,3-Dichloropropene	ND	0.5
1,1,2 Trichloroethane	ND	0.5
2-Hexanon-	ND	0.5
1,3-Dichloropropane	ND	10
Tetrachloroethene	ND	0.5





Curtis & Tompkins, Ltd.

Volatile Organics by GC/MS

Field ID: GW-6A-A	Sampled: 08/27/99
Lab ID: 141186-002	Received: 08/27/99
Matrix: Water	Extracted: 09/03/99
Batch#: 50373	Analyzed: 09/03/99
Units: ug/L	
Diln Fac: 1	

Analyte	Result	Reporting Limit
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%Recovery	Recovery Limits
Dibromofluoromethane	98	81-121
1,2-Dichloroethane-d4	101	76-127
Toluene-d8	102	90-109
Bromofluorobenzene	96	82-118



Volatile Organics by GC/MS

Client: LFR-Levine-Fricke Analysis Method: EPA 8260  
 Project#: 6895.00-018 Prep Method: EPA 5030  
 Location: Glovatorium

Field ID: GW-106A-C Sampled: 08/27/99  
 Lab ID: 141186-004 Received: 08/27/99  
 Matrix: Water Extracted: 09/03/99  
 Batch#: 50373 Analyzed: 09/03/99  
 Units: ug/L  
 Diln Fac: 1

Analyte	Result	Reporting Limit
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	110	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	5.4	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethane	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethane	ND	0.5



Curtis & Tompkins, LTD

Volatile Organics by GC/MS

Field ID: GW-106A-C	Sampled: 03/27/99
Lab ID: 141186-004	Received: 08/27/99
Matrix: Water	Extracted: 09/03/99
Batch#: 50373	Analyzed: 09/03/99
Units: ug/L	
Diln Fac: 1	

Analyte	Result	Reporting Limit
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m, p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%Recovery	Recovery Limits
Dibromofluoromethane	94	81-121
1,2 Dichloroethane-d4	98	76-127
Toluene-d8	104	90-109
Bromofluorobenzene	96	82-118



## Volatile Organics by GC/MS

Client: LFR-Levine-Fricke  
 Project#: 6895.00-018  
 Location: Glovatorium

Analysis Method: EPA 8260  
 Prep Method: EPA 5030

Field ID: GW-5-A  
 Lab ID: 141186-006  
 Matrix: Water  
 Batch#: 50454  
 Units: ug/L  
 Diln Fac: 2

Sampled: 08/27/99  
 Received: 08/27/99  
 Extracted: 09/08/99  
 Analyzed: 09/08/99

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Acetone	240	20
Freon 113	ND	10
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	10
Carbon Disulfide	ND	1.0
MTBE	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Vinyl Acetate	ND	20
1,1-Dichloroethane	ND	1.0
2-Butanone	ND	20
cis-1,2-Dichloroethene	ND	1.0
2,2-Dichloropropane	ND	1.0
Chloroform	ND	1.0
Bromochloromethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
1,1-Dichloropropene	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Benzene	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
Dibromomethane	ND	1.0
2-Chloroethylvinylether	ND	20
4-Methyl-2-Pentanone	ND	20
cis-1,3-Dichloropropene	ND	1.0
Toluene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
2-Hexanone	ND	20
1,3-Dichloropropane	ND	1.0
Tetrachloroethane	ND	1.0



Volatile Organics by GC/MS

Field ID: Gw-5-A	Sampled: 08/27/99
Lab ID: 141186-006	Received: 08/27/99
Matrix: Water	Extracted: 09/08/99
Batch#: 50454	Analyzed: 09/08/99
Units: ug/L	
Diln Fac: 2	

Analyte	Result	Reporting Limit
Dibromochloromethane	ND	1.0
1,2-Dibromoethane	ND	1.0
Chlorobenzene	ND	1.0
1,1,1,2-Tetrachloroethane	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0
Styrene	ND	1.0
Bromoform	ND	2.0
Isopropylbenzene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,2,3-Trichloropropane	ND	1.0
Propylbenzene	ND	1.0
Bromobenzene	ND	1.0
1,3,5-Trimethylbenzene	ND	1.0
2-Chlorotoluene	ND	1.0
4-Chlorotoluene	ND	1.0
tert-Butylbenzene	ND	1.0
1,2,4-Trimethylbenzene	ND	1.0
sec-Butylbenzene	ND	1.0
para-Isopropyl Toluene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
n-Butylbenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,2-Dibromo-3-Chloropropane	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Naphthalene	ND	1.0
1,2,3-Trichlorobenzene	ND	1.0

Surrogate	% Recovery	Recovery Limits
Dibromofluoromethane	93	81-121
1,2-Dichloroethane-d4	101	76-127
Toluene-d8	106	90-109
Bromofluorobenzene	99	82-118



Curtis & Tompkins Ltd  
 Page 1 of 2

Lab #: 141186

BATCH QC REPORT

EPA 8260 Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6835.00-018  
 Location: Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

METHOD BLANK

Matrix: Water  
 Batch#: 50373  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 09/03/99  
 Analysis Date: 09/03/99

MB Lab ID: QC06791

Analyte	Result	Reporting Limit
Freon 12	ND	
Chloromethane	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	0.5
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	0.5
Freon 113	ND	10
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	0.5
Carbon Disulfide	ND	5.0
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	0.5
1,1-Dichloroethane	ND	10
2-Butanone	ND	0.5
cis-1,2-Dichloroethene	ND	10
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	10
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	0.5
1,3-Dichloropropane	ND	10
Tetrachloroethene	ND	0.5
		0.5



Lab #: 141185

BATCH QC REPORT

EPA 8260 Volatile Organics		
Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A	
Project#: 6895.00-018	Prep Method: EPA 5030	
Location: Glovatorium		
METHOD BLANK		
Matrix: Water	Prep Date: 09/03/99	
Batch#: 50373	Analysis Date: 09/03/99	
Units: ug/L		
Diln Fac: 1		

MS Lab ID: QC06791

Analyte	Result	Reporting Limit
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorocyclohexadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
Dibromofluoromethane	104	81-121
1,2-Dichloroethane-d4	103	76-127
Toluene-d8	99	90-109
Bromofluorobenzene	97	82-118



Lab #: 141186

BATCH QC REPORT

EPA 8260 Volatile Organics	
Client: LFR-Levina-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00-018	Prep Method: EPA 5030
Location: Glovarorium	
METHOD BLANK	
Matrix: Water	Prep Date: 09/08/99
Batch#: 50454	Analysis Date: 09/08/99
Units: ug/L	
Diln Fac: 1	

MB Lab ID: QC07057

Analyte	Result	Reporting Limit
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethane	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
2-Chloroethylvinylether	ND	10
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5



Curtis & Tompkins Ltd.  
Page 2 of 2

Lab #: 141186

## BATCH QC REPORT

## EPA 8260 Volatile Organics

Client: LFR-Levine-Fricke  
Project#: 6895.00-018  
Location: GlevatoriumAnalysis Method: EPA 8260A  
Prep Method: EPA 5030

## METHOD BLANK

Matrix: Water  
Batch#: 50659  
Units: ug/L  
Diln Fac: 1Prep Date: 09/08/99  
Analysis Date: 09/08/99

MB Lab ID: QC07097

Analyte	Result	Reporting Limit
Dibromochloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	0.5
Isopropylbenzene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	0.5
1,2,3-Trichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
Dibromofluoromethane	96	81-121
1,2-Dichloroethane-d4	101	76-127
Toluene-d8	103	90-109
Bromofluorobenzene	99	82-118



Lab #: 141150

BATCH QC REPORT

EPA 8260 Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6095.00-018  
 Location: Glovatorium

Analysis Method: EPA 8260  
 Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water  
 Batch#: 50373  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 09/03/99  
 Analysis Date: 09/03/99

BS Lab ID: QC06788

Analyte	Spike Added	BS	%Rec	#	Limits
1,1-Dichloroethene	50	57.18	114		64-139
Benzene	50	48.78	98		71-127
Trichloroethene	50	47.4	95		72-129
Toluene	50	50.39	101		73-129
Chlorobenzene	50	48.92	98		77-126
Surrogate	%Rec	Limits			
Dibromofluoromethane	100	81-121			
1,2-Dichloroethane-d4	100	76-127			
Toluene-d8	100	90-109			
Bromofluorobenzene	97	82-118			

BSD Lab ID: QC06789

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
1,1-Dichloroethene	50	57.38	115		64-139	0		13
Benzene	50	50.34	101		71-127	3		10
Trichloroethene	50	47.88	96		72-129	1		10
Toluene	50	51.75	103		73-129	3		10
Chlorobenzene	50	50.12	100		77-126	2		10
Surrogate	%Rec	Limits						
Dibromofluoromethane	98	81-121						
1,2-Dichloroethane-d4	99	76-127						
Toluene-d8	102	90-109						
Bromofluorobenzene	97	82-118						

# Column to be used to flag recovery and RPD values with an asterisk  
 \* Values outside of QC limits  
 RPD: 0 out of 5 outside limits  
 Spike Recovery: 0 out of 10 outside limits



Cums & Tompkins, Ltd  
 Page 1 of 1

Lab #: 141186

BATCH QC REPORT

EPA 8260 Volatile Organics	
Client: LFR-Levine-Fricke	Analysis Method: EPA 8260
Project#: 6895.00-018	Prep Method: EPA 5030
Location: Glovatorium	
BLANK SPIKE/BLANK SPIKE DUPLICATE	
Matrix: Water	Prep Date: 09/08/99
Batch#: 50454	Analysis Date: 09/08/99
Units: ug/L	
Diln Fac: 1	

BS Lab ID: QC07094

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	53.4	107	64-139
Benzene	50	48.64	97	71-127
Trichloroethene	50	47.36	95	72-129
Toluene	50	50.48	101	73-129
Chlorobenzene	50	50.05	100	77-126
Surrogate	%Rec	Limits		
Dibromofluoromethane	99	81-121		
1,2-Dichloroethane-d4	98	76-127		
Toluene-d8	99	90-109		
Bromofluorobenzene	101	82-118		

BSD Lab ID: QC07095

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	48.5	97	64-139	10	13
Benzene	50	45.37	91	71-127	7	10
Trichloroethene	50	44.12	88	72-129	7	10
Toluene	50	47.18	94	73-129	7	10
Chlorobenzene	50	46.89	94	77-126	7	10
Surrogate	%Rec	Limits				
Dibromofluoromethane	97	81-121				
1,2-Dichloroethane-d4	98	76-127				
Toluene-d8	100	90-109				
Bromofluorobenzene	102	82-118				

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits