



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

FAX TRANSMISSION: This cover page plus 13 pages.

Date	<b>August 25, 1999</b>
Time	<b>11:32PM</b>
From	<b>Taylor Bennett</b>

Deliver To	<b>Scott Seery, CHMM</b>		
Name of Firm	<b>Alameda County Health Care Services Agency</b>		
FAX Number	<b>(510) 337-9335</b>	Project No.	<b>6895.00-020</b>

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**Comments:** As you requested today, following are the laboratory results for samples collected at the former Glovatorium so far. Each laboratory report is being sent as a separate fax. There is a total of five reports. LFR has not yet completed a QA/QC review of these data.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

LFR-Levine-Fricke  
1900 Powell Street  
12th Floor  
Emeryville, CA 94608

Date: 27-JUL-99  
Lab Job Number: 140543  
Project ID: 6895.00.014  
Location: Former Glovatorium

Reviewed by:

Tracy Borgia

Reviewed by:

[Signature]

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Laboratory Numbers: **140537**  
Client: **LFR-Levine-Fricke**  
Project #: **6895.00.014**  
Location: **Former Glovatorium**  
COC#: **3502**

Sampled Date: **07/21/99**  
Received Date: **07/21/99**

### **CASE NARRATIVE**

This hardcopy data package contains sample and QC results for one water sample, which was received from the site referenced above on July 21, 1999. The trip blank was placed on hold upon receipt. The samples were received cold and intact. All data were faxed to Taylor Bennett on July 27, 1999.

#### **TVH (EPA 8015M):**

Bromofluorobenzene failed high for sample GW4-0721 (CT# 140543-002) due to co-elution with hydrocarbons. No other analytical problems were encountered.

#### **VOCs (EPA 8260):**

No analytical problems were encountered.



## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140543-002	GW4-0721	49463	07/21/99	07/21/99	07/21/99	

Matrix: Water

Analyte	Units	140543-002	
Diln Fac:		5	
Gasoline C7-C12	ug/L	10000	YH
Standard Solvent	ug/L	6600	
Surrogate			
Trifluorotoluene	%REC	115	
Bromofluorobenzene	%REC	257	*

\* Values outside of QC limits

Y: Sample exhibits fuel pattern which does not resemble standard

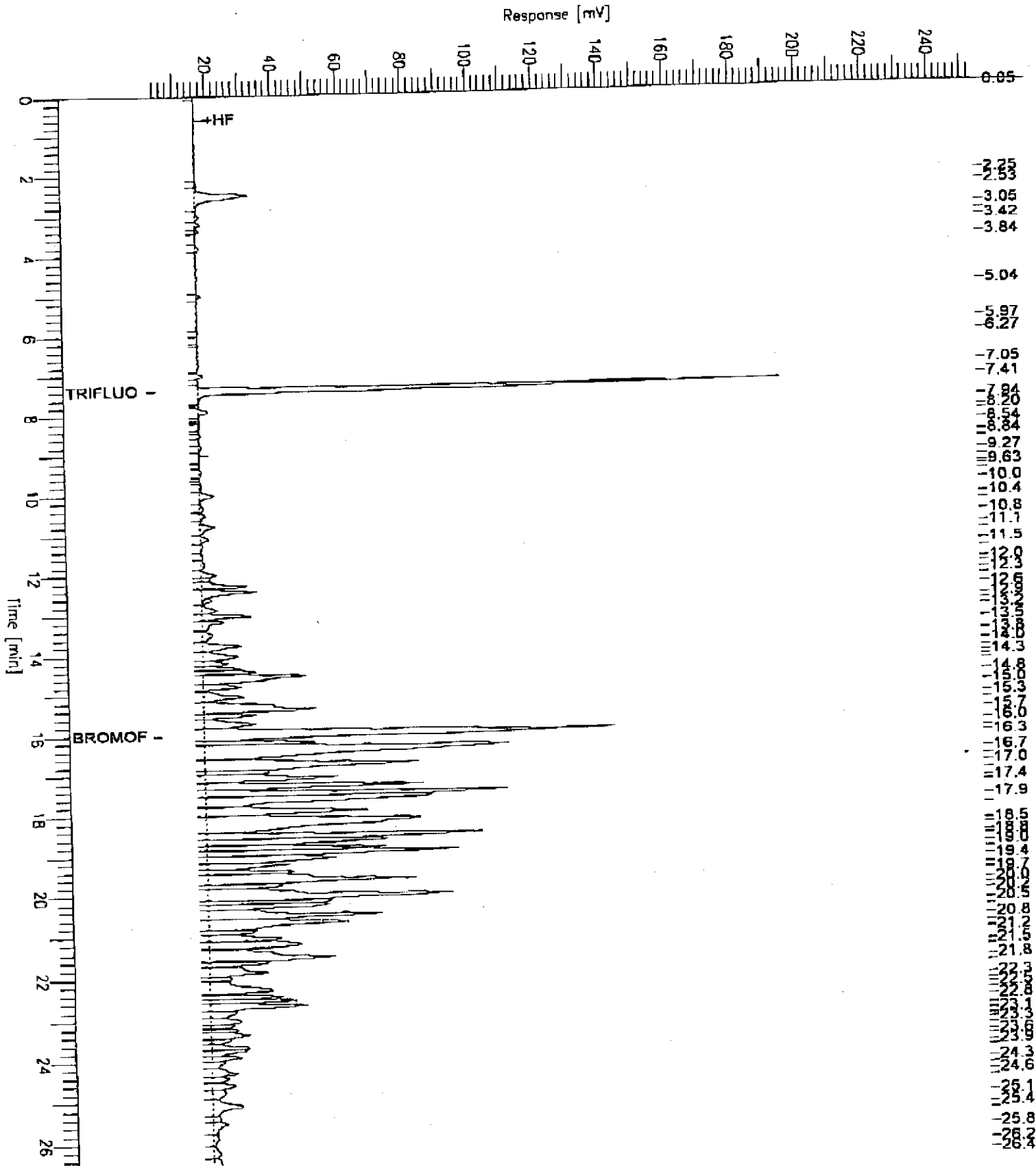
H: Heavier hydrocarbons than indicated standard

# GC19 TVH 'X' Data File (FID)

Sample Name : d\_140543-002a\_49463\_tvh+stodd.only  
 FileName : G:\GC19\DATA\202X013.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset : 4 mV

Sample #: ph<2, 5x  
 Date : 7/22/99 03:44 PM  
 Time of Injection: 7/21/99 11:49 PM  
 Low Point : 3.77 mV  
 High Point : 253.77 mV  
 Plot Scale: 250.0 mV

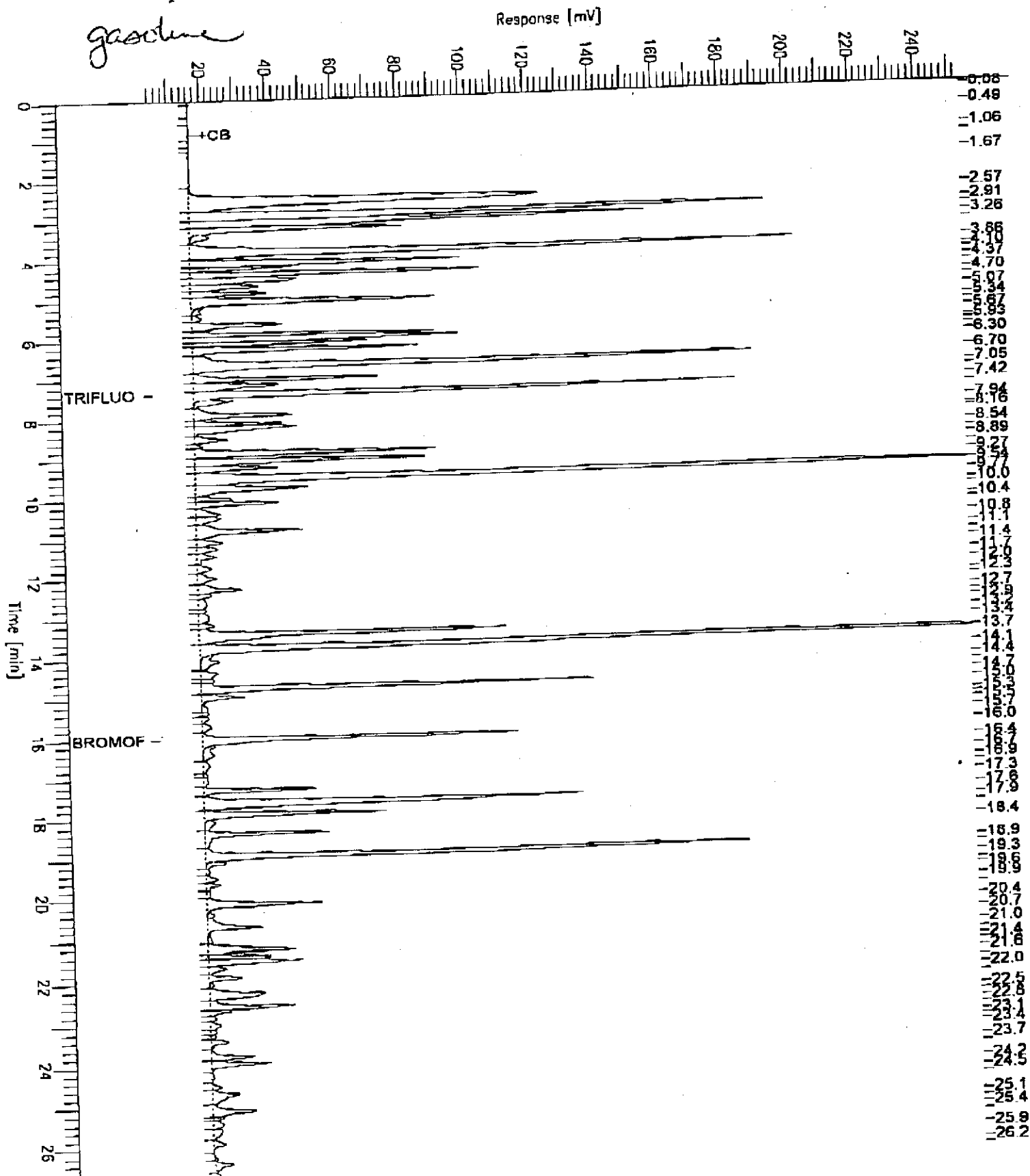


# GC19 TVH 'X' Data File (FID)

Sample Name : CCV/LCS, QC0323B, 99MS7780, 49463  
 FileName : G:\GC19\DATA\202X001.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset : 4 mV

Sample #: GAS  
 Date : 7/21/99 02:05 PM  
 Time of Injection: 7/21/99 01:38 PM  
 Low Point : 3.95 mV  
 Plot Scale: 250.0 mV  
 High Point : 253.95 mV



# GC19 TVH 'X' Data File (FID)

Sample Name : CCV,99MS7145,49463  
 FileName : G:\GC19\DATA\202X003.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

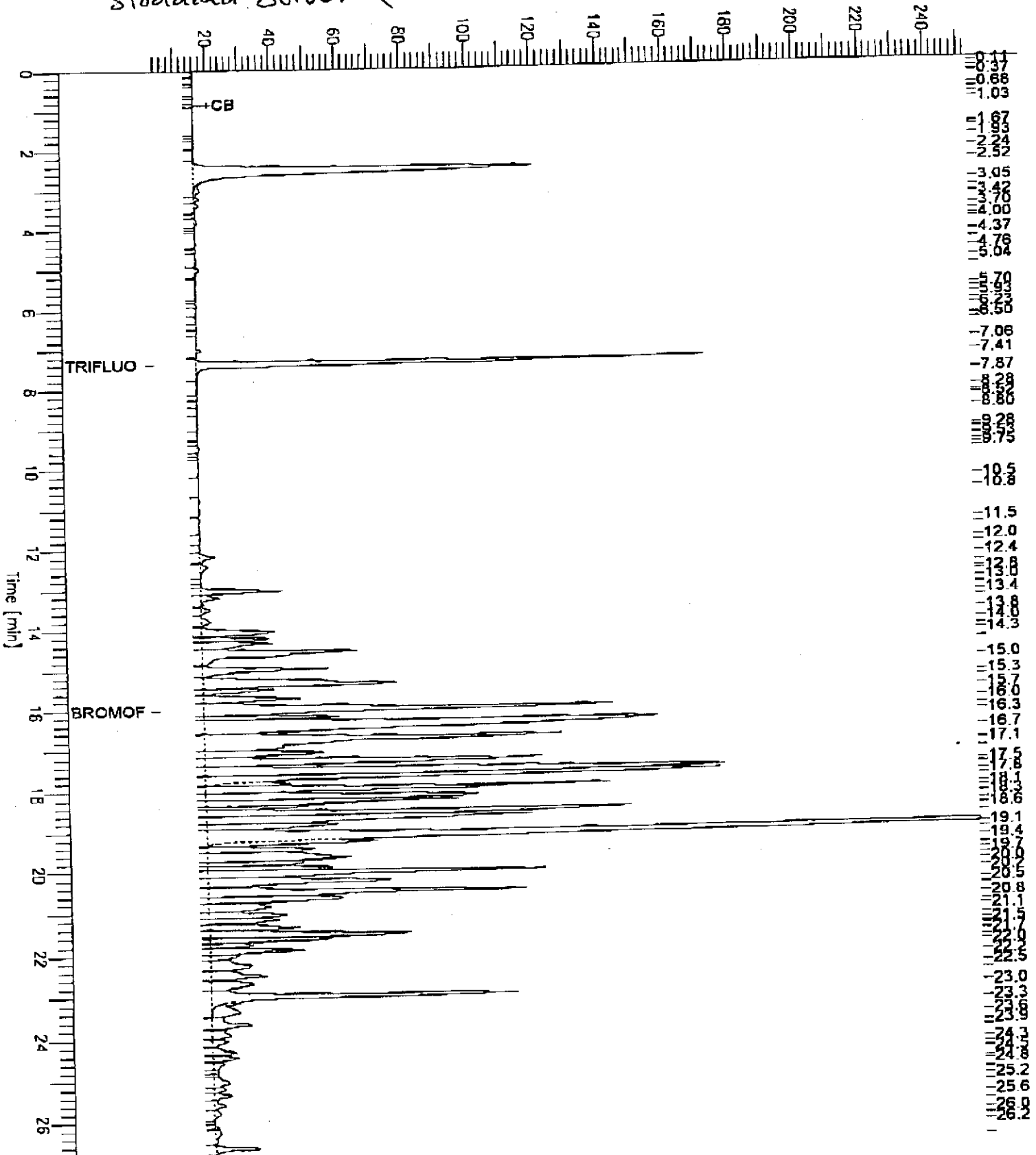
End Time : 26.00 min  
 Plot Offset : 3 mV

Sample #: STODD.  
 Date : 7/21/99 05:05 PM  
 Time of Injection: 7/21/99 04:39 PM  
 Low Point : 3.41 mV  
 Plot Scale : 250.0 mV

Page 1 of 1

*Stoddard solvent*

Response [mV]





Lab #: 140543

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## METHOD BLANK

Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/21/99  
 Analysis Date: 07/21/99

MB Lab ID: QC03237

Analyte	Result	
Gasoline C7-C12	<50	
Stoddard Solvent	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	101	53-150
Bromofluorobenzene	101	53-149





Lab #: 140543

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/21/99  
 Analysis Date: 07/21/99

LCS Lab ID: QC03238

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1709	2000	85	77-117
Surrogate	%Rec	Limits		
Trifluorotoluene	113	53-150		
Bromofluorobenzene	124	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 #: 140543

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140470-003  
 Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Sample Date: 07/11/99  
 Received Date: 07/15/99  
 Prep Date: 07/22/99  
 Analysis Date: 07/22/99

MS Lab ID: QC03291

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	1881	94	69-131
Surrogate	%Rec	Limits			
Trifluorotoluene	118	53-150			
Bromofluorobenzene	136	53-149			

MSD Lab ID: QC03292

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	1921	96	69-131	2	13
Surrogate	%Rec	Limits				
Trifluorotoluene	121	53-150				
Bromofluorobenzene	148	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

Aromatic Volatile Organics  
EPA 8020 Analyte List

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: GWA-0721  
Lab ID: 140543-002  
Matrix: Water  
Batch#: 49539  
Units: ug/L  
Diln Fac: 1

Sampled: 07/21/99  
Received: 07/21/99  
Extracted: 07/26/99  
Analyzed: 07/26/99

Analyte	Result	Reporting Limit
<b>MTBE</b>	<b>N.D.</b>	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
<b>m,p-Xylenes</b>	<b>1.4</b>	0.5
<b>o-Xylene</b>	<b>1.5</b>	0.5
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	99	82-118



Lab #: 140543

## BATCH QC REPORT

Page

 Purgeable Aromatics by GC/MS  
 EPA 8020 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## METHOD BLANK

 Matrix: Water  
 Batch#: 49539  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 07/26/99  
 Analysis Date: 07/26/99

MB Lab ID: QC03519

Analyte	Result	Reporting Limit
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	100	75-127
Toluene-d8	99	90-109
Bromofluorobenzene	104	82-118



Lab #: 140543

## BATCH QC REPORT

Page

 Purgeable Aromatics by GC/MS  
 EPA 8020 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## BLANK SPIKE/BLANK SPIKE DUPLICATE

 Matrix: Water  
 Batch#: 49539  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 07/26/99  
 Analysis Date: 07/26/99

BS Lab ID: QC03516

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	50	49.65	99	71-127
Toluene	50	52.56	105	73-129
Chlorobenzene	50	48.35	97	77-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	95	76-127		
Toluene-d8	99	90-109		
Bromofluorobenzene	102	82-118		

BSD Lab ID: QC03517

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	50	51.58	103	71-127	4	10
Toluene	50	53.87	108	73-129	2	10
Chlorobenzene	50	49.83	100	77-126	3	10
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	95	76-127				
Toluene-d8	101	90-109				
Bromofluorobenzene	99	82-118				

# Column to be used to flag recovery and RPD values with an asterisk  
 \* Values outside of QC limits  
 RPD: 0 out of 3 outside limits  
 Spike Recovery: 0 out of 6 outside limits

140543

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 6895.00.014      Project Location: Oakland, CA      Date: 7/21/99      Serial No.: No 3502

Project Name: Former gloveatorium      Field Logbook No.: \_\_\_\_\_

Sampler (Signature): James R. Burke      ANALYSES      Samplers: JRB

SAMPLES				ANALYSES								REMARKS	
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	2010	TPHs 2015 *	2020			HOLD		RUSH
1 TB-032199	7/21/99	9:00		3	water	X					X		* TPH fingerprint include standard solvent as a standard
2 GML-0321	7/21/99	10:00		3	water		X	X					
RELINQUISHED BY: James R. Burke				DATE: 7/21/99	TIME: 10150	RECEIVED BY: (Signature) M. Traven				DATE: 7/21/99	TIME: 1050		
RELINQUISHED BY: _____				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 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500						Analytical Laboratory: _____							

\*\* TOTAL PAGE. 14 \*\*

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



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Emeryville, California 94608-1827  
(510) 652-4500, FAX (510) 652-4906

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Date	<b>August 25, 1999</b>
Time	<b>11:29PM</b>
From	<b>Taylor Bennett</b>

Deliver To	<b>Scott Seery, CHMM</b>		
Name of Firm	<b>Alameda County Health Care Services Agency</b>		
FAX Number	<b>(510) 337-9335</b>	Project No.	<b>6895.00-020</b>

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**Comments:** As you requested today, following are the laboratory results for samples collected at the former Glovatorium so far. Each laboratory report is being sent as a separate fax. There is a total of five reports. LFR has not yet completed a QA/QC review of these data.

WATER



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

A N A L Y T I C A L   R E P O R T

Prepared for:

LFR-Levine-Fricke  
1900 Powell Street  
12th Floor  
Emeryville, CA 94608

Date: 27-JUL-99  
Lab Job Number: 140518  
Project ID: 6895.00.014  
Location: Former Glovatorium

Reviewed by: Tras Bely

Reviewed by: [Signature]

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Curtis &amp; Tompkins, Ltd.

Laboratory Numbers: **140518**  
Client: **LFR-Levine-Fricke**  
Project #: **6895.00.014**  
Location: **Former Glovatorium**  
COC#: **5670**

Sampled Date: **07/19/99**  
Received Date: **07/19/99**

### CASE NARRATIVE

This hardcopy data package contains sample and QC results for ~~five water samples~~, which were received from the site referenced above on July 19, 1999. The samples were received cold and intact. One water sample was placed on hold by Taylor Bennett on July 20, 1999. All data were faxed to Taylor Bennett on July 27, 1999.

#### TVH/BTXE:

The relative percent difference (RPD) for MTBE was outside QC limits. This outlier should not affect the quality of the data as the spike recoveries are within QC limits and the samples were non-detect for this compound. No other analytical problems were encountered.

#### VOCs (EPA 8260):

No analytical problems were encountered.

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140518-001	TB 071999	49463	07/19/99	07/21/99	07/21/99	
140518-002	GW3-071999	49463	07/19/99	07/21/99	07/21/99	
140518-003	GW4-071999	49463	07/19/99	07/21/99	07/21/99	
140518-004	GW6-071999	49463	07/19/99	07/21/99	07/21/99	

Matrix: Water

GW3

Analyte	Units	140518-001	140518-002	140518-003	140518-004
Diln Fac:		1	1	1	1
Gasoline C7-C12	ug/L	<50	100 Z	<50	<50
Stoddard Solvent	ug/L	<50	70 Z	<50	<50
Surrogate					
Trifluorotoluene	%REC	111	111	112	113
Bromofluorobenzene	%REC	117	114	116	116

Z: Sample exhibits unknown single peak or peaks



## BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140518-001	TB 071999	49463	07/19/99	07/21/99	07/21/99	
140518-002	GW3-071999	49514	07/19/99	07/23/99	07/23/99	
140518-003	GW2-071999	49514	07/19/99	07/23/99	07/23/99	
140518-004	GW8-071999	49514	07/19/99	07/23/99	07/23/99	

Matrix: Water

GW3

GW2

GW8

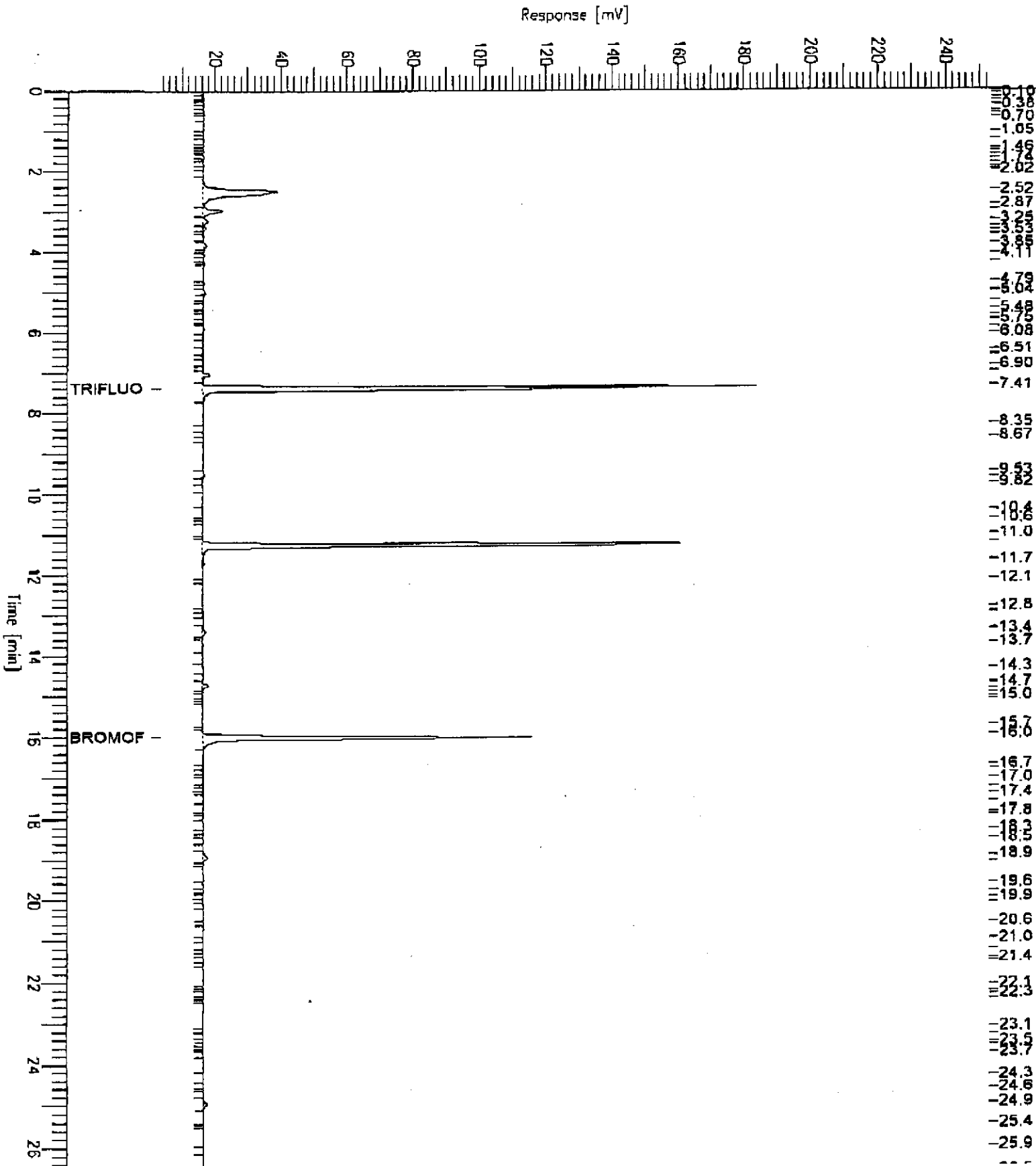
Analyte	Units	140518-001	140518-002	140518-003	140518-004
Diln Fac:		1	1	1	1
MTBE	ug/L	<2	<2	2.5	7.8
Benzene	ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	ug/L	<0.5	<0.5	0.71	0.64
Ethylbenzene	ug/L	<0.5	<0.5	<0.5	<0.5
m,p-Xylenes	ug/L	<0.5	<0.5	0.74	0.84
o-Xylene	ug/L	<0.5	0.64	<0.5	0.67
Surrogate					
Trifluorotoluene	%REC	127	65	94	92
Bromofluorobenzene	%REC	131	68	97	97

# GC19 TVH 'X' Data File (FID)

Sample Name : 140518-002a,49463  
 FileName : G:\GC19\DATA\202X008.raw  
 Method : TVHBTXC  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 26.80 min  
 Plot Offset: 4 mV

Sample #: ph<2  
 Date : 7/22/99 03:44 PM  
 Time of Injection: 7/21/99 08:31 PM  
 Low Point : 3.61 mV  
 Plot Scale: 250.0 mV  
 High Point : 253.61 mV



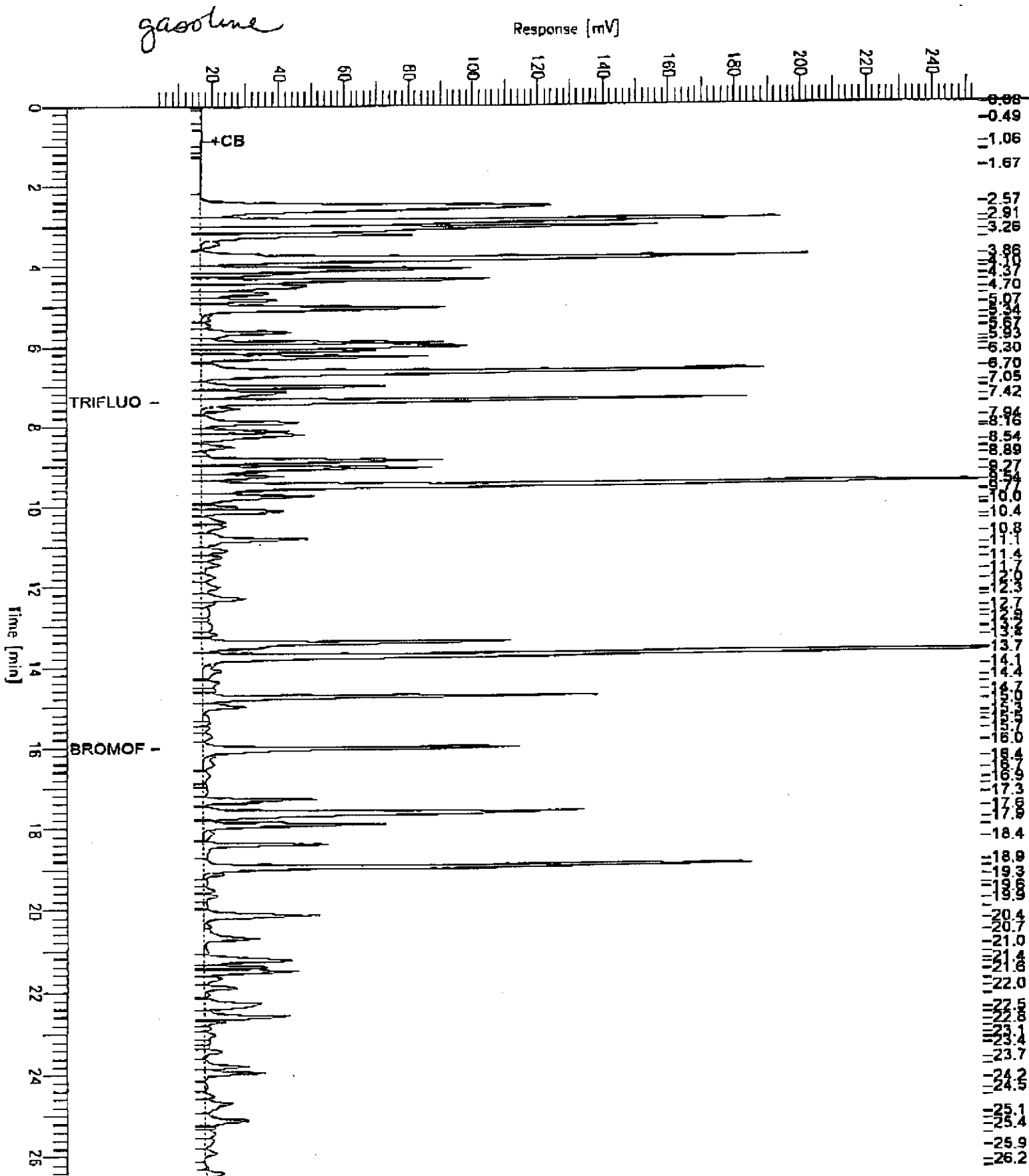
# GC19 TVH 'X' Data File (FID)

Sample Name : CCV/LCS,QC03238,99W57780,49463  
 FileName : G:\GC19\DATA\202X001.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset : 4 mV

Sample #: GAS  
 Date : 7/21/99 02:05 PM  
 Time of Injection: 7/21/99 01:38 PM  
 Low Point : 3.95 mV  
 Plot Scale: 250.0 mV

Page 1 of 1



# GC19 TVH 'X' Data File (FID)

Sample Name : CCV,99WS7145,49463  
 FileName : G:\GC19\DATA\202X003.raw  
 Method : TVHBIKE  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 26.80 min  
 Plot Offset: 3 mV

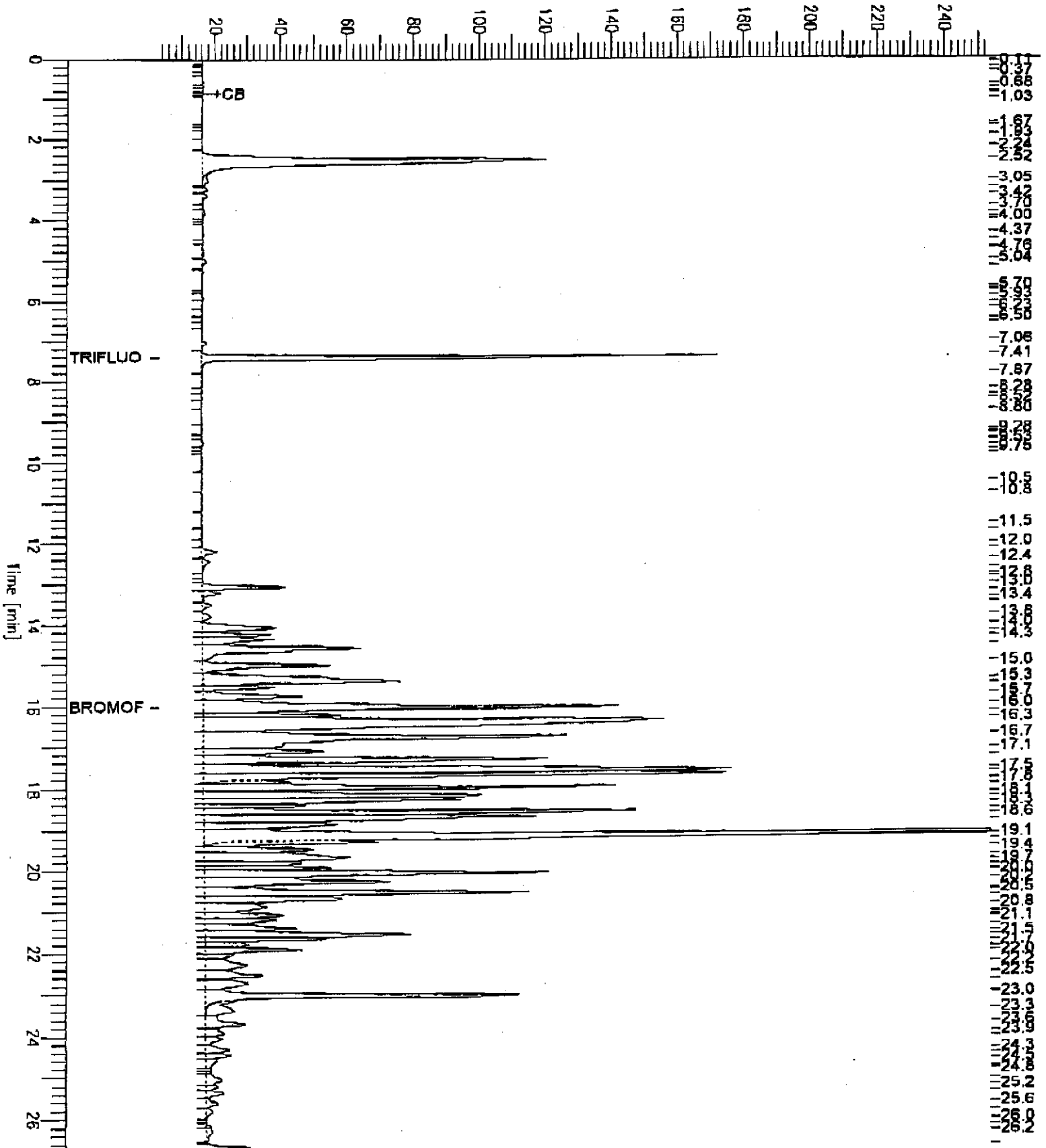
Sample #: STODD.  
 Date : 7/21/99 05:05 PM  
 Time of Injection: 7/21/99 04:38 PM  
 Low Point : 3.41 mV  
 Plot Scale: 250.0 mV

Page 1 of 1

High Point : 253.41 mV

*Stoddard solvent*

Response [mV]



Lab #: 140518

## BATCH QC REPORT

TVH-Total Volatile Hydrocarbons	
Client: LFR-Levine-Fricke	Analysis Method: EPA 8015M
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	
METHOD BLANK	
Matrix: Water	Prep Date: 07/21/99
Batch#: 49463	Analysis Date: 07/21/99
Units: ug/L	
Diln Fac: 1	

MB Lab ID: QC03237

Analyte	Result	
Gasoline C7-C12	<50	
Stoddard Solvent	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	101	53-150
BromoFluorobenzene	101	53-149

Lab #: 140518

## BATCH QC REPORT

Page



## BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## METHOD BLANK

Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/21/99  
 Analysis Date: 07/21/99

MB Lab ID: QC03237

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	119	51-143
Bromofluorobenzene	119	37-146



Lab #: 140518

## BATCH QC REPORT

BTXE	
Client: LFR-Levine-Fricke	Analysis Method: EPA 8021B
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	
METHOD BLANK	
Matrix: Water	Prep Date: 07/23/99
Batch#: 49514	Analysis Date: 07/23/99
Units: ug/L	
Diln Fac: 1	

MB Lab ID: QC03438

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	99	51-143
Bromofluorobenzene	98	37-146

Lab #: 140518

BATCH QC REPORT

Page



## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/21/99  
 Analysis Date: 07/21/99

LCS Lab ID: QC03238

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1709	2000	85	77-117
Surrogate	%Rec	Limits		
Trifluorotoluene	113	53-150		
Bromofluorobenzene	124	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 #: 140518

BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/21/99  
 Analysis Date: 07/21/99

BS Lab ID: QC03289

Analyte	Spike Added	BS	%Rec #	Limits
MTBE	20	14.41	72	66-126
Benzene	20	18.85	94	65-111
Toluene	20	19.49	97	76-117
Ethylbenzene	20	20.61	103	71-121
m,p-Xylenes	40	41.1	103	80-123
o-Xylene	20	20.59	103	75-127
Surrogate	%Rec	Limits		
Trifluorotoluene	125	51-143		
Bromofluorobenzene	126	37-146		

BSD Lab ID: QC03290

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
MTBE	20	16.38	82	66-126	13 *	12
Benzene	20	19.59	98	65-111	4	10
Toluene	20	20.21	101	76-117	4	10
Ethylbenzene	20	20.69	103	71-121	0	11
m,p-Xylenes	40	41.97	105	80-123	2	10
o-Xylene	20	21.45	107	75-127	4	11
Surrogate	%Rec	Limits				
Trifluorotoluene	120	51-143				
Bromofluorobenzene	121	37-146				

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

\* Values outside of QC limits

RPD: 1 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits

Lab #: 140518

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140470-003  
 Matrix: Water  
 Batch#: 49463  
 Units: ug/L  
 Diln Fac: 1

Sample Date: 07/11/99  
 Received Date: 07/15/99  
 Prep Date: 07/22/99  
 Analysis Date: 07/22/99

MS Lab ID: QC03291

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	1881	94	69-131
Surrogate	%Rec	Limits			
Trifluorotoluene	118	53-150			
Bromofluorobenzene	136	53-149			

MSD Lab ID: QC03292

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	1921	96	69-131	2	13
Surrogate	%Rec	Limits				
Trifluorotoluene	121	53-150				
Bromofluorobenzene	148	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



Lab #: 140518

BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Water  
 Batch#: 49514  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/23/99  
 Analysis Date: 07/23/99

LCS Lab ID: QC03462

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	16.34	20	82	66-126
Benzene	16.61	20	83	65-111
Toluene	17.08	20	85	76-117
Ethylbenzene	17.43	20	87	71-121
m,p-Xylenes	36.41	40	91	80-123
o-Xylene	17.76	20	89	75-127
Surrogate	%Rec	Limits		
Trifluorotoluene	101	51-143		
Bromofluorobenzene	103	37-146		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits



Lab #: 140518

BATCH QC REPORT

Page

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140601-003  
 Matrix: Water  
 Batch#: 49514  
 Units: ug/L  
 Diln Fac: 1

Sample Date: 07/22/99  
 Received Date: 07/22/99  
 Prep Date: 07/23/99  
 Analysis Date: 07/23/99

MS Lab ID: QC03463

Analyte	Spike Added	Sample	MS	%Rec #	Limits
MTBE	20	<2	18.3	92	49-136
Benzene	20	<0.5	17.49	87	55-122
Toluene	20	<0.5	17.99	90	63-139
Ethylbenzene	20	<0.5	18.23	91	61-137
m,p-Xylenes	40	<0.5	38.1	95	57-148
o-Xylene	20	<0.5	18.93	95	70-141
Surrogate	%Rec	Limits			
Trifluorotoluene	96	51-143			
Bromofluorobenzene	101	37-146			

MSD Lab ID: QC03464

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
MTBE	20	18.97	95	49-136	4	11
Benzene	20	19.12	96	55-122	9	10
Toluene	20	19.38	97	63-139	7	10
Ethylbenzene	20	19.86	99	61-137	9	10
m,p-Xylenes	40	41.53	104	57-148	9	10
o-Xylene	20	20.54	103	70-141	8	10
Surrogate	%Rec	Limits				
Trifluorotoluene	95	51-143				
Bromofluorobenzene	102	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

Halogenated Volatile Organics  
 EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: TB 071999	Sampled: 07/19/99
Lab ID: 140518-001	Received: 07/19/99
Matrix: Water	Extracted: 07/22/99
Batch#: 49488	Analyzed: 07/22/99
Units: ug/L	
Diln Fac: 1	

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	98	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	116	82-118



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: GW3-071999  
Lab ID: 140518-002  
Matrix: Water  
Batch#: 49507  
Units: ug/L  
Diln Fac: 2

Sampled: 07/19/99  
Received: 07/19/99  
Extracted: 07/24/99  
Analyzed: 07/24/99

Analyte	Result	Reporting Limit
Freon 12	ND	4.0
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	10
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
2-Chloroethylvinylether	ND	20
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	220	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	95	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	89	82-118



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	
Field ID: GW2-071999	Sampled: 07/19/99
Lab ID: 140518-003	Received: 07/19/99
Matrix: Water	Extracted: 07/23/99
Batch#: 49507	Analyzed: 07/23/99
Units: ug/L	
Diln Fac: 1	

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	1.4	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	14	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	91	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	90	82-118

Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: GWS-071999  
Lab ID: 140518-004  
Matrix: Water  
Batch#: 49488  
Units: ug/L  
Diln Fac: 1

Sampled: 07/19/99  
Received: 07/19/99  
Extracted: 07/23/99  
Analyzed: 07/23/99

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	1.2	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	1.7	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	3.8	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	15	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	10
2-Chloroethylvinylether	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	24	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	75-127
Toluene-d8	101	90-109
Bromofluorobenzene	115	82-118

Halogenated Volatile Organics  
 EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: GW4-071999	Sampled: 07/19/99
Lab ID: 140518-005	Received: 07/19/99
Matrix: Water	Extracted: 07/22/99
Batch#: 49488	Analyzed: 07/22/99
Units: ug/L	
Diln Fac: 1	

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	3.5	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	1.7	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	99	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	95	82-118



Lab #: 140518

BATCH QC REPORT

Page 1 of 1

 Halogenated Volatile Organics  
 EPA 8010 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## METHOD BLANK

 Matrix: Water  
 Batch#: 49488  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 07/22/99  
 Analysis Date: 07/22/99

MB Lab ID: QC03337

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	99	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	116	82-118



Lab #: 140518

BATCH QC REPORT

Page 1 of 1

 Halogenated Volatile Organics  
 EPA 8010 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## METHOD BLANK

 Matrix: Water  
 Batch#: 49488  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 07/22/99  
 Analysis Date: 07/22/99

MB Lab ID: QC03338

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	97	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	117	82-118



Lab #: 140518

## BATCH QC REPORT

Page 1 of 1

Halogenated Volatile Organics EPA 8010 Analyte List		
Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A	
Project#: 6895.00.014	Prep Method: EPA 5030	
Location: Former Glovatorium		
METHOD BLANK		
Matrix: Water	Prep Date: 07/23/99	
Batch#: 49507	Analysis Date: 07/23/99	
Units: ug/L		
Diln Fac: 1		

MB Lab ID: QC03410

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	90	75-127
Toluene-d8	101	90-109
Bromofluorobenzene	90	82-118



Lab #: 140518

BATCH QC REPORT

Page 1 of 1

 Halogenated Volatile Organics  
 EPA 8010 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## METHOD BLANK

 Matrix: Water  
 Batch#: 49507  
 Units: ug/L  
 Diln Fac: 1

 Prep Date: 07/23/99  
 Analysis Date: 07/23/99

MB Lab ID: QC03453

Analyte	Result	Reporting Limit
Freon 12	ND	2.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
2-Chloroethylvinylether	ND	10
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	Rec	Recovery Limits
1,2-Dichloroethane-d4	93	76-127
Toluene-d8	102	90-109
Bromofluorobenzene	90	82-118

Lab #: 140518

## BATCH QC REPORT

Halogenated Volatile Organics			
Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A		
Project#: 6895.00.014	Prep Method: EPA 5030		
Location: Former Glovatorium			
LABORATORY CONTROL SAMPLE			
Matrix: Water	Prep Date: 07/23/99		
Batch#: 49507	Analysis Date: 07/23/99		
Units: ug/L			
Diln Fac: 1			

LCS Lab ID: QC03411

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.33	50	99	64-139
Trichloroethene	52.93	50	106	72-129
Chlorobenzene	53.77	50	108	77-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	89	76-127		
Toluene-d8	101	90-109		
Bromofluorobenzene	90	82-118		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



Lab #: 140518

BATCH QC REPORT

Page

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water  
 Batch#: 49488  
 Units: ug/L  
 Diln Fac: 1

Prep Date: 07/22/99  
 Analysis Date: 07/22/99

BS Lab ID: QC03335

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	48.09	96	64-139
Trichloroethene	50	52.37	105	72-129
Chlorobenzene	50	52.8	106	77-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	93	76-127		
Toluene-d8	99	90-109		
Bromofluorobenzene	96	82-118		

BSD Lab ID: QC03336

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	47.45	95	64-139	1	13
Trichloroethene	50	50.75	101	72-129	3	10
Chlorobenzene	50	51.12	102	77-126	3	10
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	99	76-127				
Toluene-d8	100	90-109				
Bromofluorobenzene	95	82-118				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

Lab #: 140518

BATCH QC REPORT

Page



## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140495-001  
 Matrix: Water  
 Batch#: 49507  
 Units: ug/L  
 Diln Fac: 1

Sample Date: 07/14/99  
 Received Date: 07/15/99  
 Prep Date: 07/23/99  
 Analysis Date: 07/23/99

MS Lab ID: QC03454

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<0.5	50.06	100	59-144
Trichloroethene	50	<0.5	55.13	110	61-136
Chlorobenzene	50	<0.5	55.29	111	78-122
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	92	76-127			
Toluene-d8	101	90-109			
Bromofluorobenzene	88	82-118			

MSD Lab ID: QC03455

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.66	101	59-144	1	13
Trichloroethene	50	54.68	109	61-136	1	10
Chlorobenzene	50	54.84	110	78-122	1	10
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	91	76-127				
Toluene-d8	100	90-109				
Bromofluorobenzene	89	82-118				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

140518

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <u>6895.00.014</u>		Project Location: <u>Oakland, CA</u>			Date: <u>7/19/99</u>		Serial No: <u>5670</u>				
Project Name: <u>Farmer Gloriatorium</u>		Field Logbook No.: _____			Sample Event Name: <u>Soil &amp; groundwater investigation</u>		Samplers: <u>JRB</u>				
Sampler (Signature): <u>James R. Burke</u>		ANALYSES									
SAMPLE INFORMATION (Print Clearly)											
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	SOLO	TVA	BTEX	HOLD	RUSH	REMARKS
<u>TB-07199</u>	<u>7/19/99</u>	<u>13:00</u>		<u>3</u>	<u>Water</u>	<u>X</u>		<u>X</u>	<u>X</u>		<u>Include Standard</u>
<u>GW2-0719</u>		<u>15:25</u>		<u>3</u>	<u>↓</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>solvent standard</u>
<u>GW2-0719</u>		<u>15:45</u>		<u>3</u>	<u>↓</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>as TPH fingerprint</u>
<u>GW3-0719</u>		<u>16:10</u>		<u>3</u>	<u>↓</u>	<u>X</u>	<u>X</u>	<u>X</u>			
<u>GW4-0719</u>		<u>16:30</u>		<u>1</u>	<u>↓</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>Normal turn</u>
<u>GW4-0719 - FB</u> <u>On 7/19/99</u>	<u>7/19/99</u>	<u>14:50</u>		<u>3</u>	<u>Water</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>around time</u>
RELINQUISHED BY: (Signature) <u>James R. Burke</u>		DATE	TIME	RECEIVED BY: (Signature) <u>JRB - 9</u>		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: <u>LEVINE-FRICKE-RECON</u> <u>1900 Powell Street, 12th Floor</u> <u>Emeryville, California 94608-1827</u> <u>(510) 652-4500</u>				Analytical Laboratory: _____							

AUG 25 '99 23:53 FR LFR LEVINE FRICKE 510 652 4906 TO 3379335 P.29/32



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

FAX TRANSMISSION: This cover page plus 2 pages.

Date	July 20, 1999
Time	4:45PM
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: I'm sending you the login request and revised C.O.C. #3670 to confirm our telephone conversation today for project 6895.00-017. This is just a confirmation, not a new request.

140512

### CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <b>6895.00.014</b>		Project Location: <b>Oakland, CA</b>		Date: <b>7/19/99</b>		Serial No: <b>5670</b>						
Project Name: <b>Farmer Cotovarium</b>		Field Logbook No.: _____		Sample Event Name: <b>Soil &amp; groundwater investigation</b>								
Sampler (Signature): <i>James R. Burke</i>		ANALYSES				Samplers: <b>JRB</b>						
SAMPLE INFORMATION (Print Clearly)												
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	100% TOLUENE	100% THF	100% MEK	100% DCE	HOLD	RUSH	REMARKS
1 2 3 4 5 6 TB-071999	7/19/99	13:00		3	water	X		X			X	Include standard solvent standard as TPH fingerprint
GW2-0719		15:25		3		X	X	X				
GW2-0719		15:45		3		X	X	X				
GW3-0719		16:10		3		X	X	X				
GW4-0719		16:30		1		X	X	X	Na	THF/Bi-YE		Normal turn around time.
GW4-0719 - FB on 7/19/99	7/19/99	14:50		3	water	X	X	X			X	7/20/99 (JRB) Analyze TB-071999; Place GW4-0719 on hold.
RELINQUISHED BY: (Signature) <i>James R. Burke</i>		DATE: 7/19/99	TIME: 17:05	RECEIVED BY: (Signature) <i>JRB</i>		DATE: 7/19/99	TIME: 17:05					
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: <b>LEVINE-FRICKE-RECON</b> 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500				Analytical Laboratory:								

PAGE 03  
 JUL 25 1999 23:54 FR LFR LEVINE FRICKE  
 2509888185  
 510 652 4506 TO 3379335  
 21:31 66.02 JTB  
 P.31/32

11:09:09

Curtis & Tompkins, Berkeley  
Logis Number: 146538

07/20/99

Project: 8815.00.014  
Site: former Wavatorium  
Account #: LFR  
Logged By: JCI  
PO#:   
Proj. Ngr: TLR

Report To: LFR-Levine-Fricke  
1900 Powell Street  
12th floor  
Emeryville, CA 94608  
ATTN: Susan Shaw  
(510) 652-4500

Bill To: LFR-Levine-Fricke LFR  
Accounting  
1900 Powell Street  
Emeryville, CA 94608  
ATTN: Renee Henderson  
(510) 652-4500

Sample #	Alias	Client ID Supp. Id.	Sampl Date	Ord Date	Recd Date	Hold Date	Dis Date	Matrix	Loc	Analytes	Comments
40518-001		TS-071999	07/19	07/20	07/19						Comments: Analyze for EPA 8010, EPA8015 (Stoddard), and EPA 8020 BTEX and MTBE
40518-002		CW-071999	07/19	07/20	07/19						
			08/02	07/26				Water	BK	HOLD	
				07/26				Water	BK	HOLD	
			08/02	07/26				Water	BK	TVB/BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	TVH	Comments: stoddard,MTBE
40518-003		GI-071999	07/19	07/20	07/19						
			08/02	07/26				Water	BK	8010MS	Comments: stoddard,MTBE
				07/26				Water	BK	TVB/BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	TVH	Comments: stoddard,MTBE
40518-004		010-071999	07/19	07/20	07/19						
			08/02	07/26				Water	BK	8010MS	Comments: stoddard,MTBE
				07/26				Water	BK	TVB/BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	TVH	Comments: stoddard,MTBE
40518-005		091-071999	07/19	07/20	07/19						
			08/02	07/26				Water	BK	8010MS	Comments: One VOA!!!!
40518-006		091-071999-1B	07/19	07/20	07/19						
			08/02	07/26				Water	BK	8010MS	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	TVB/BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	BTK	Comments: stoddard,MTBE
			08/02	07/26				Water	BK	TVH	Comments: stoddard,MTBE

HOLD  
↓

\*\* TOTAL PAGE: 32 \*\*

AUG 25 '99 23:54 FR LFR LEVINE FRICKE 510 652 4906 TO 33793335  
JUL 20 '99 16:55 FR LFR LEVINE FRICKE 510 652 4906 TO 4860532  
25:30RD 25098415  
P.02/03  
11:11 AM '99



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

FAX TRANSMISSION: This cover page plus 34 pages.

Date	<b>August 25, 1999</b>
Time	<b>11:10PM</b>
From	<b>Taylor Bennett</b>

Deliver To	<b>Scott Seery, CHMM</b>		
Name of Firm	<b>Alameda County Health Care Services Agency</b>		
FAX Number	<b>(510) 337-9335</b>	Project No.	<b>6895.00-020</b>

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**Comments:** As you requested today, following are the laboratory results for samples collected at the former Glovatorium so far. Each laboratory report is being sent as a separate fax. There is a total of five reports. LFR has not yet completed a QA/QC review of these data.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

LFR-Levine-Fricke  
1900 Powell Street  
12th Floor  
Emeryville, CA 94608

Date: 28-JUL-99  
Lab Job Number: 140466  
Project ID: 6895.00.014  
Location: Former Glovatorium

Reviewed by: Tracy Bobjan

Reviewed by: [Signature]

This package may be reproduced only in its entirety.





Curtis &amp; Tompkins, Ltd.

Laboratory Numbers: 140466  
Client: LFR-Levine-Fricke  
Project #: 6895.00.014  
Location: Former Glovatorium  
COC#: 5669

Sampled Date: 07/15/99  
Received Date: 07/15/99

### CASE NARRATIVE

This hardcopy data package contains sample and QC results for four soil samples, which were received from the site referenced above on July 15, 1999. Four samples were placed on hold upon receipt. The samples were received cold and intact. Three soil samples were taken off hold by Taylor Bennett on July 19, 1999. All data were faxed to Taylor Bennett on July 28, 1999.

**TVH/BTXE:**

No analytical problems were encountered.

**VOCs (EPA 8260):**

No analytical problems were encountered.



## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140466-001	GW7-9	49395	07/15/99	07/18/99	07/18/99	
140466-002	GW7-11	49442	07/15/99	07/21/99	07/21/99	
140466-003	GW7-14	49442	07/15/99	07/21/99	07/21/99	
140466-004	GW7-16	49442	07/15/99	07/21/99	07/21/99	

Matrix: Soil

Analyte	Units	140466-001	140466-002	140466-003	140466-004
Diln Fac:		1	1	1	1
Gasoline C7-C12	mg/Kg	1.4YH	<1	<1	<1
Stoddard Solvent	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	107	105	105	106
Bromofluorobenzene	%REC	138	119	117	114

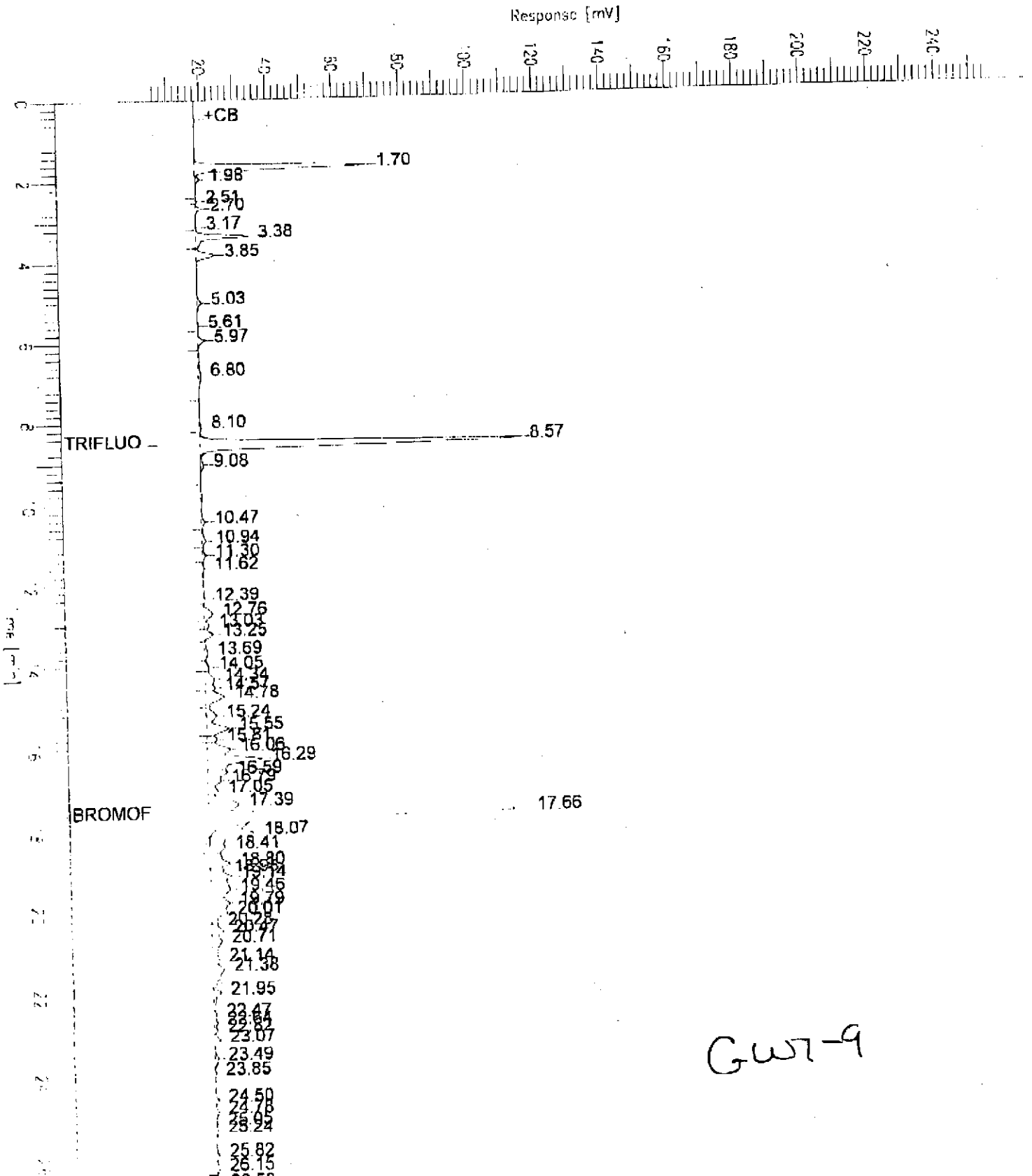
Y: Sample exhibits fuel pattern which does not resemble standard  
 H: Heavier hydrocarbons than indicated standard

# Chromatogram

Sample Name : 140466-001.49395.+stoddard  
 FileName : G:\GC05\DATA\1999007.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset : 6 mV

Sample # :  
 Date : 7/18/99 11:02 PM  
 Time of Injection: 7/18/99 10:35 PM  
 Low Point : 5.89 mV  
 High Point : 255.88 mV  
 Plot Scale: 250.0 mV



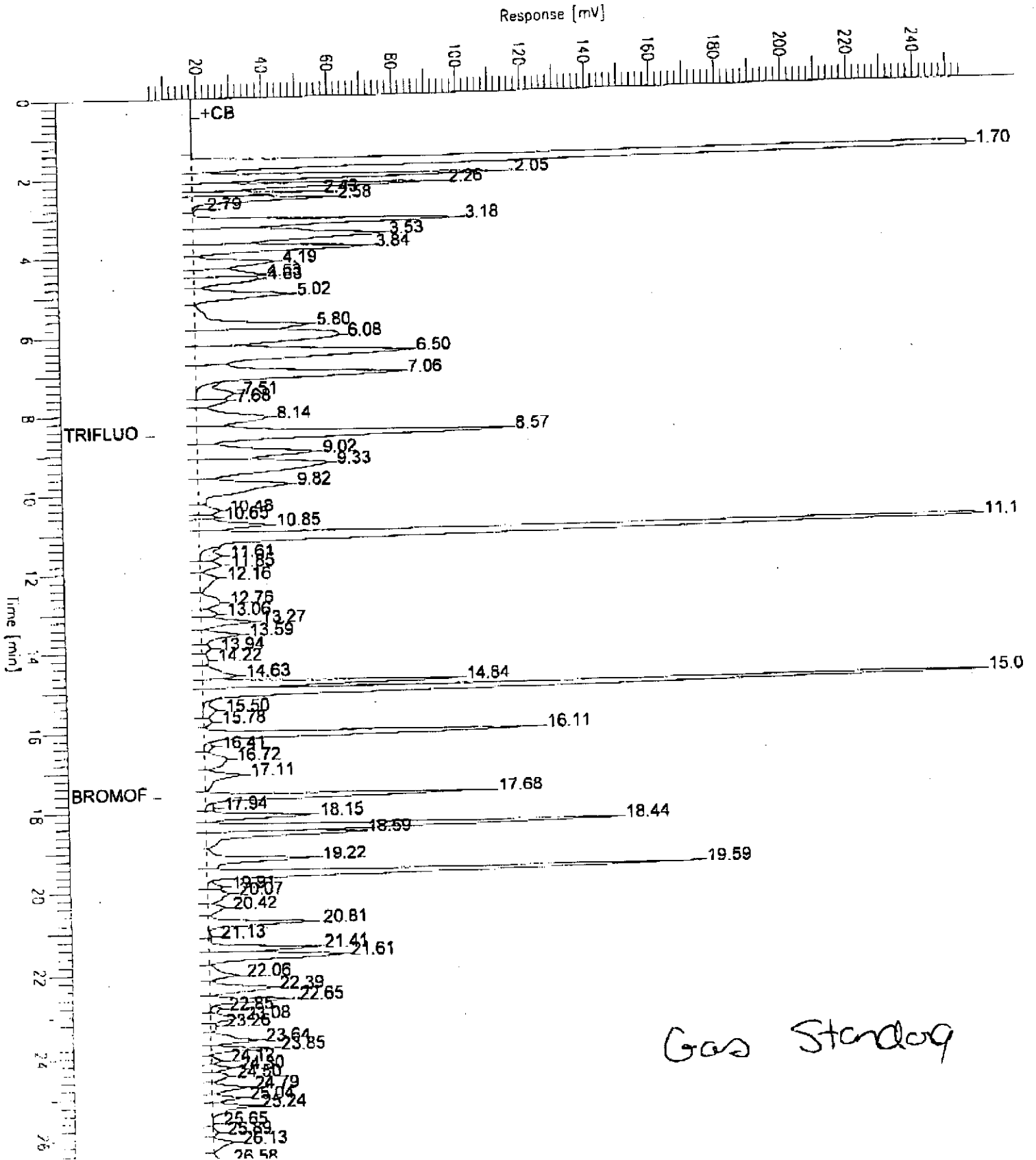
# Chromatogram

Sample Name : ccv/lcb,qc02979,99wa7780,49395  
 FileName : G:\GC05\DATA\199G001.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset: 6 mV

Sample #: 199gh.gas  
 Date : 7/18/99 06:40 PM  
 Time of Injection: 7/18/99 06:13 PM  
 Low Point : 5.93 mV  
 Plot Scale: 250.0 mV

High Point : 255.93 mV



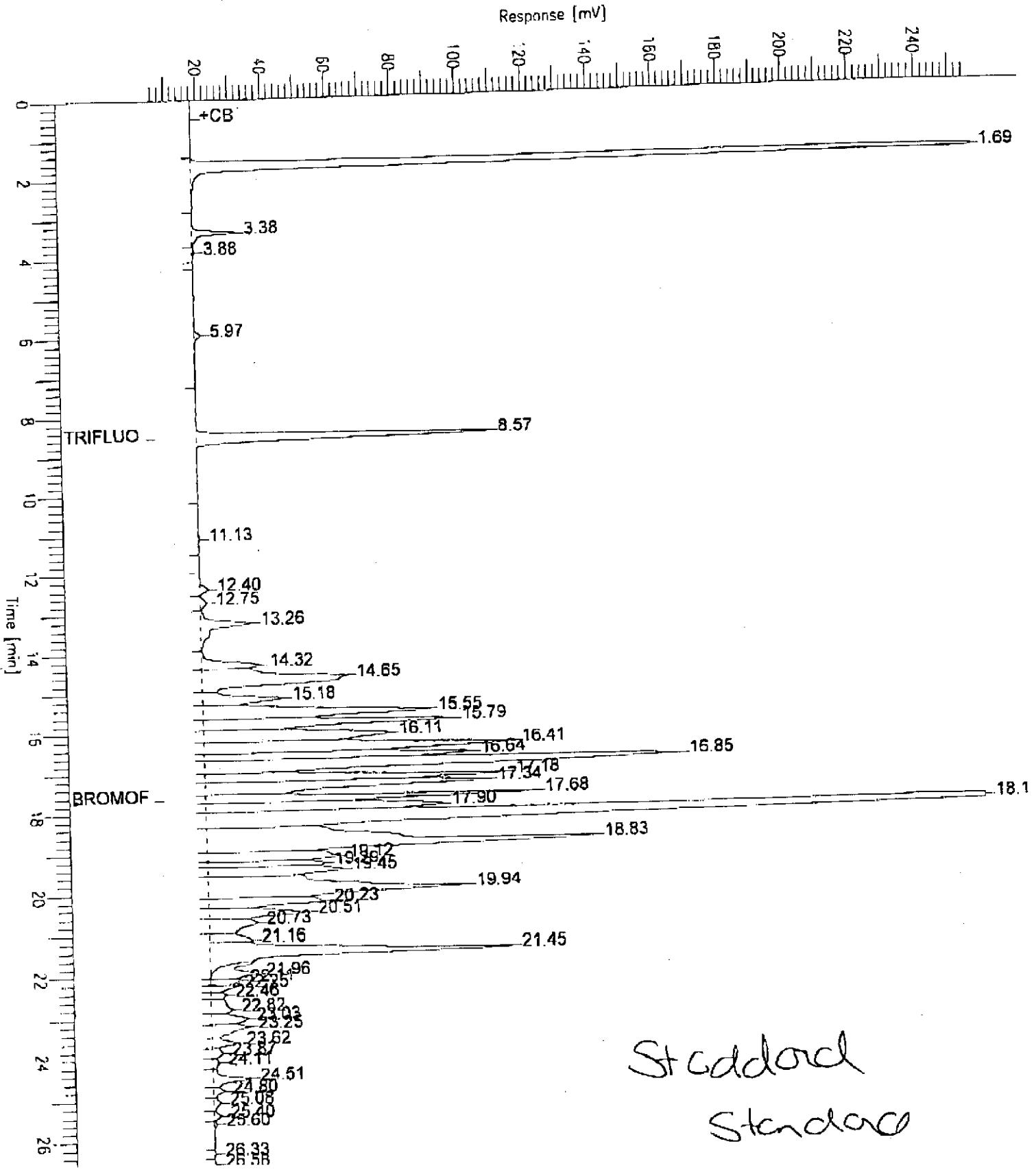
Gas Standard

# Chromatogram

Sample Name : ccv\_99wb7145\_49395  
 FileName : G:\GC05\DATA\199GG03.raw  
 Method : TVHBTX  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.00 min  
 Plot Offset : 6 mV

Sample #: stoddard  
 Date : 7/18/99 08:01 PM  
 Time of Injection: 7/18/99 07:33 PM  
 Low Point : 5.85 mV  
 Plot Scale: 250.0 mV  
 High Point : 255.85 mV





BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140466-001	GN7-9	49395	07/15/99	07/18/99	07/18/99	
140466-002	GN7-11	49442	07/15/99	07/21/99	07/21/99	
140466-003	GN7-14	49442	07/15/99	07/21/99	07/21/99	
140466-004	GN7-16	49442	07/15/99	07/21/99	07/21/99	

Matrix: Soil

Analyte	Units	140466-001	140466-002	140466-003	140466-004
Diln Fac:		1	1	1	1
MTBE	ug/Kg	<20	<20	<20	<20
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	97	93	94	94
Bromofluorobenzene	%REC	107	99	99	98



Lab #: 140466

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## METHOD BLANK

Matrix: Soil  
 Batch#: 49395  
 Units: mg/Kg  
 Diln Fac: 1

Prep Date: 07/18/99  
 Analysis Date: 07/18/99

MB Lab ID: QC02978

Analyte	Result	
Gasoline C7-C12	<1.0	
Stoddard Solvent	<1.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	100	62-143
Bromofluorobenzene	102	59-150



Lab #: 140466

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## METHOD BLANK

Matrix: Soil  
 Batch#: 49442  
 Units: mg/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

MB Lab ID: QC03153

Analyte	Result	
Gasoline C7-C12	<1.0	
Stoddard Solvent	<1.0	
Surrogate	†Rec	Recovery Limits
Trifluorotoluene	103	62-143
Bromofluorobenzene	114	59-150





Lab #: 140466

## BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## METHOD BLANK

Matrix: Soil  
 Batch#: 49395  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/18/99  
 Analysis Date: 07/18/99

MB Lab ID: QC02978

Analyte	Result	
MTBE	<20	
Benzene	<5.0	
Toluene	<5.0	
Ethylbenzene	<5.0	
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	89	59-134
Bromofluorobenzene	90	38-150

Curtis & Tompkins, Ltd.  
Page 1 of 1

Lab #: 140466

## BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil  
 Batch#: 49442  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

MB Lab ID: QC03153

Analyte	Result		
MTBE	<20		
Benzene	<5.0		
Toluene	<5.0		
Ethylbenzene	<5.0		
m,p-Xylenes	<5.0		
o-Xylene	<5.0		
Surrogate	%Rec		Recovery Limits
Trifluorotoluene	89		59-134
Bromofluorobenzene	93		38-150



Lab #: 140466

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49395  
 Units: mg/Kg  
 Diln Fac: 1

Prep Date: 07/18/99  
 Analysis Date: 07/18/99

LCS Lab ID: QC02979

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	10.08	10	101	77-122
Surrogate	%Rec	Limits		
Trifluorotoluene	126	62-143		
Bromofluorobenzene	101	59-150		

# 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 #: 140466

## BATCH QC REPORT

## TVH Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49442  
 Units: mg/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

LCS Lab ID: QC03154

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	10.38	10	104	77-122
Surrogate	%Rec	Limits		
Trifluorotoluene	130	62-143		
Bromofluorobenzene	108	59-150		

# 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 #: 140466

## BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49396  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/18/99  
 Analysis Date: 07/18/99

LCS Lab ID: QC02980

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	82.58	100	83	59-135
Benzene	95.7	100	96	67-116
Toluene	89.23	100	89	77-122
Ethylbenzene	94.63	100	95	70-124
m,p-Xylenes	189.7	200	95	75-125
o-Xylene	97.16	100	97	75-126
Surrogate			%Rec	Limits
Trifluorotoluene			94	59-134
Bromofluorobenzene			99	38-150

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



Lab #: 140466

## BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49442  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

LCS Lab ID: QC03155

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	99.25	100	99	59-135
Benzene	103.3	100	103	67-116
Toluene	101.3	100	101	77-122
Ethylbenzene	106.2	100	106	70-124
m,p-Xylenes	218.9	200	109	75-125
o-Xylene	110.5	100	110	75-126
Surrogate	%Rec	Limits		
Trifluorotoluene	95	59-134		
Bromofluorobenzene	97	38-150		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits



Lab #: 140466

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## MATRIX SPIKS/MATRIX SPIKS DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140457-006  
 Matrix: Soil  
 Batch#: 49395  
 Units: mg/Kg  
 Diln Fac: 1

Sample Date: 07/13/99  
 Received Date: 07/15/99  
 Prep Date: 07/18/99  
 Analysis Date: 07/18/99

MS Lab ID: QC02981

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	10	<1	9.9	99	55-134
Surrogate	%Rec	Limits			
Trifluorotoluene	131	62-143			
Bromofluorobenzene	109	59-150			

MSD Lab ID: QC02982

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	10	9.83	98	55-134	1	30
Surrogate	%Rec	Limits				
Trifluorotoluene	130	62-143				
Bromofluorobenzene	107	59-150				

# 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



Lab #: 140466

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140511-004  
 Matrix: Soil  
 Batch#: 49442  
 Units: mg/Kg  
 Diln Fac: 1

Sample Date: 07/15/99  
 Received Date: 07/16/99  
 Prep Date: 07/21/99  
 Analysis Date: 07/21/99

MS Lab ID: QC03156

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	10	<1	7.19	72	55-134
Surrogate	%Rec	Limits			
Trifluorotoluene	128	62-143			
Bromofluorobenzene	114	59-150			

MSD Lab ID: QC03157

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	10	7.69	77	55-134	7	30
Surrogate	%Rec	Limits				
Trifluorotoluene	129	62-143				
Bromofluorobenzene	114	59-150				

# 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



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: <del>6W7-9</del>	Sampled: 07/15/99
Lab ID: 140466-001	Received: 07/15/99
Matrix: Soil	Extracted: 07/19/99
Batch#: 49417	Analyzed: 07/19/99
Units: ug/Kg	
Diln Fac: 1.02	

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.1
Freon 113	ND	5.1
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	5.1
trans-1,2-Dichloroethene	ND	5.1
1,1-Dichloroethane	ND	5.1
cis-1,2-Dichloroethene	ND	5.1
Chloroform	ND	5.1
1,1,1-Trichloroethane	ND	5.1
Carbon Tetrachloride	ND	5.1
1,2-Dichloroethane	ND	5.1
Trichloroethene	ND	5.1
1,2-Dichloropropane	ND	5.1
Bromodichloromethane	ND	5.1
cis-1,3-Dichloropropene	ND	5.1
trans-1,3-Dichloropropene	ND	5.1
1,1,2-Trichloroethane	ND	5.1
Tetrachloroethene	ND	5.1
Dibromochloromethane	ND	5.1
Chlorobenzene	ND	10
Bromoform	ND	5.1
1,1,2,2-Tetrachloroethane	ND	5.1
1,3-Dichlorobenzene	ND	5.1
1,4-Dichlorobenzene	ND	5.1
1,2-Dichlorobenzene	ND	5.1
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	111	80-129
Toluene-d8	94	88-111
Bromofluorobenzene	108	76-128

Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: CW7-11	Sampled: 07/15/99
Lab ID: 140466-002	Received: 07/15/99
Matrix: Soil	Extracted: 07/26/99
Batch#: 49547	Analyzed: 07/26/99
Units: ug/Kg	
Diln Fac: 0.9804	

Analyte	Result	Reporting Limit
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Freon 113	ND	4.9
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
1,1-Dichloroethane	ND	4.9
cis-1,2-Dichloroethene	ND	4.9
Chloroform	ND	4.9
1,1,1-Trichloroethane	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
cis-1,3-Dichloropropene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
Chlorobenzene	ND	9.8
Bromoform	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	105	80-129
Toluene-d8	100	88-111
Bromofluorobenzene	103	76-128



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: <del>GW-14</del>	Sampled: 07/15/99
Lab ID: 140465-003	Received: 07/15/99
Matrix: Soil	Extracted: 07/23/99
Batch#: 49498	Analyzed: 07/23/99
Units: ug/Kg	
Diln Fac: 0.9259	

Analyte	Result	Reporting Limit
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.6
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.6
1,1-Dichloroethane	ND	4.6
cis-1,2-Dichloroethene	ND	4.6
Chloroform	ND	4.6
1,1,1-Trichloroethane	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
cis-1,3-Dichloropropene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
Tetrachloroethene	ND	4.6
Dibromochloromethane	ND	4.6
Chlorobenzene	ND	9.3
Bromoform	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	102	80-129
Toluene-d8	91	88-111
Bromofluorobenzene	103	76-128

### Halogenated Volatile Organics EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: <del>GW7-28</del>	Sampled: 07/15/99
Lab ID: 140466-004	Received: 07/15/99
Matrix: Soil	Extracted: 07/26/99
Batch#: 49547	Analyzed: 07/26/99
Units: ug/Kg	
Diln Fac: 0.9804	

Analyte	Result	Reporting Limit
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	4.9
Trichlorofluoromethane	ND	4.9
Freon 113	ND	4.9
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
1,1-Dichloroethane	ND	4.9
cis-1,2-Dichloroethene	ND	4.9
Chloroform	ND	4.9
1,1,1-Trichloroethane	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
cis-1,3-Dichloropropene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
Chlorobenzene	ND	9.8
Bromoform	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	109	80-129
Toluene-d8	102	88-111
Bromofluorobenzene	102	76-128



Lab #: 140466

## BATCH QC REPORT

Page 1 of 1

 Halogenated Volatile Organics  
 EPA 8010 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

\*\*METHOD BLANK

 Matrix: Soil  
 Batch#: 49417  
 Units: ug/Kg  
 Diln Fac: 1

 Prep Date: 07/19/99  
 Analysis Date: 07/19/99

MB Lab ID: QC03063

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	10
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	108	80-129
Toluene-d8	89	88-111
Bromofluorobenzene	105	76-128



Lab #: 140466

## BATCH QC REPORT

Page

 Halogenated Volatile Organics  
 EPA 8010 Analyte List

 Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

 Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## METHOD BLANK

 Matrix: Soil  
 Batch#: 49498  
 Units: ug/Kg  
 Diln Fac: 1

 Prep Date: 07/22/99  
 Analysis Date: 07/22/99

MB Lab ID: QC03376

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	10
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	104	80-129
Toluene-d8	100	88-111
Bromofluorobenzene	105	76-128



Lab #: 140466

## BATCH QC REPORT

Page

Halogenated Volatile Organics EPA 8010 Analyte List	
Client: LFR-Levine-Fricke Project#: 6895.00.014 Location: Former Glovatorium	Analysis Method: EPA 8260A Prep Method: EPA 5030
METHOD BLANK	
Matrix: Soil Batch#: 49547 Units: ug/Kg Diln Fac: 1	Prep Date: 07/26/99 Analysis Date: 07/26/99

MB Lab ID: QC03559

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	10
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	109	80-129
Toluene-d8	102	88-111
Bromofluorobenzene	101	76-128



Lab #: 140466

## BATCH QC REPORT

Page

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49417  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/19/99  
 Analysis Date: 07/19/99

LCS Lab ID: QC03062

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	46.69	50	93	63-144
Trichloroethene	45.61	50	91	70-131
Chlorobenzene	44.26	50	89	74-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	105	80-129		
Toluene-d8	94	88-111		
Bromofluorobenzene	91	76-128		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



Lab #: 140466

## BATCH QC REPORT

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49498  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/22/99  
 Analysis Date: 07/22/99

LCS Lab ID: QC03375

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	53.34	50	107	63-144
Trichloroethene	50.09	50	100	70-131
Chlorobenzene	49.42	50	99	74-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	96	80-129		
Toluene-d8	97	88-111		
Bromofluorobenzene	95	76-128		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



Lab #: 140466

## BATCH QC REPORT

Page

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49547  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/26/99  
 Analysis Date: 07/26/99

LCS Lab ID: QC03558

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	49.81	50	100	63-144
Trichloroethene	47.39	50	95	70-131
Chlorobenzene	47.09	50	94	74-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	104	80-129		
Toluene-d8	101	88-111		
Bromofluorobenzene	99	76-128		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



Lab #: 140466

## BATCH QC REPORT

Page

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ	Sample Date: 07/16/99
Lab ID: 140483-001	Received Date: 07/17/99
Matrix: Soil	Prep Date: 07/19/99
Batch#: 49417	Analysis Date: 07/19/99
Units: ug/Kg	
Diln Fac: 1	

MS Lab ID: QC03081

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	49.92	100	51-137
Trichloroethene	50	<5	46.11	92	33-153
Chlorobenzene	50	<5	43.99	88	39-132
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	99	80-129			
Toluene-d8	93	88-111			
Bromofluorobenzene	92	76-128			

MSD Lab ID: QC03082

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	48.08	49.1	102	51-137	2	35
Trichloroethene	48.08	47.82	99	33-153	4	44
Chlorobenzene	48.08	43.84	91	39-132	0	47
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	100	80-129				
Toluene-d8	97	88-111				
Bromofluorobenzene	91	76-128				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits



Lab #: 140466

## BATCH QC REPORT

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: GW7-11  
 Lab ID: 140466-002  
 Matrix: Soil  
 Batch#: 49498  
 Units: ug/Kg  
 Diln Fac: 0.9804

Sample Date: 07/15/99  
 Received Date: 07/15/99  
 Prep Date: 07/23/99  
 Analysis Date: 07/23/99

MS Lab ID: QC03377

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	49.02	<4.902	53.07	108	51-137
Trichloroethene	49.02	<4.902	45.5	93	33-153
Chlorobenzene	49.02	<4.902	42.64	87	39-132
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	111	80-129			
Toluene-d8	103	88-111			
Bromofluorobenzene	95	76-128			

MSD Lab ID: QC03378

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	59.42	119	51-137	11	35
Trichloroethene	50	50.32	101	33-153	10	44
Chlorobenzene	50	43.86	88	39-132	3	47
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	101	80-129				
Toluene-d8	98	88-111				
Bromofluorobenzene	100	76-128				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits



Lab #: 140466

## BATCH QC REPORT

Page

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ  
 Lab ID: 140511-002  
 Matrix: Soil  
 Batch#: 49547  
 Units: ug/Kg  
 Diln Fac: 0.9615

Sample Date: 07/15/99  
 Received Date: 07/16/99  
 Prep Date: 07/26/99  
 Analysis Date: 07/26/99

MS Lab ID: QC03560

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	48.08	<4.808	47.46	99	51-137
Trichloroethene	48.08	<4.808	43.28	90	33-153
Chlorobenzene	48.08	<4.808	41.56	86	39-132
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	107	80-129			
Toluene-d8	100	88-111			
Bromofluorobenzene	100	76-128			

MSD Lab ID: QC03561

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.96	102	51-137	7	35
Trichloroethene	50	45.72	91	33-153	5	44
Chlorobenzene	50	44.24	88	39-132	6	47
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	108	80-129				
Toluene-d8	102	88-111				
Bromofluorobenzene	101	76-128				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

140466

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: **6895.00.014** Project Location: **Oakland, CA.** Date: **7/15/99** Serial No: **5669**  
 Project Name: **Former Coliseum** Field Logbook No.: \_\_\_\_\_ Sample Event Name: **Soil + grab groundwater sample**

Sampler (Signature): *James R. Burke* ANALYSES Samplers: \_\_\_\_\_

SAMPLE INFORMATION (Print Clearly)						ANALYSES				REMARKS
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	VOG 8010	TPH 8015 *	TEX 8020	HOLD RUSH	
1	7/15/99	15:00		1	Soil	X	X	X	X	* Please use standard solvent
2	↓	15:10		1	↓	X	X	X	X	standard for TPH
3	↓	15:20		1	↓	X	X	X	X	fingerprinting
4	↓	15:30		1	↓	X	X	X	X	
5	↓	15:40		1	↓	X	X	X	X	normal turn around time

RELINQUISHED BY: (Signature) *James R. Burke* DATE: **7/15/99** TIME: **1745** RECEIVED BY: (Signature) *[Signature]* DATE: **7/15/99** TIME: **1745**

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

Analytical Laboratory: **Curtis & Tompkin**

AUG 25 '99 23:38 FR LFR LEVINE FRICKE 510 652 4906 TO 3379335 P.32/35

Former bioactive



Curlis & Tompkins, Ltd.

# COOLER RECEIPT CHECKLIST

Login#: 140466 Date Received: 7/15 Number of Coolers: 1  
 Client: LEP Project: 689500.014

### A. Preliminary Examination Phase

Date Opened: 7/15 By (print): William (sign) Incelle

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES  NO
- If YES, enter carrier name and airbill number: \_\_\_\_\_
2. Were custody seals on outside of cooler? ..... YES  NO
- How many and where? \_\_\_\_\_ Seal date: \_\_\_\_\_ Seal name: \_\_\_\_\_
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES  NO *MA*
4. Were custody papers dry and intact when received? ..... YES  NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES  NO
6. Did you sign the custody papers in the appropriate place? ..... YES  NO
7. Was project identifiable from custody papers? ..... YES  NO
- If YES, enter project name at the top of this form. \_\_\_\_\_
8. If required, was sufficient ice used? ..... YES  NO
- Type of ice: cool Temperature: 6.0°C

### B. Login Phase

Date Logged In: 7/15 By (print): William (sign) Incelle

1. Describe type of packing in cooler: \_\_\_\_\_ YES  NO
2. Did all bottles arrive unbroken? ..... YES  NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... YES  NO
4. Did bottle labels agree with custody papers? ..... YES  NO
5. Were appropriate containers used for the tests indicated? ..... YES  NO
6. Were correct preservatives added to samples? ..... YES  NO
7. Was sufficient amount of sample sent for tests indicated? ..... YES  NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES  NO *uff*
9. Was the client contacted concerning this sample delivery? ..... YES  NO
- If YES, give details below. \_\_\_\_\_
- Who was called? \_\_\_\_\_ By whom? \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments:

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

FAX TRANSMISSION: This cover page plus 1 page.

Date	July 19, 1999
Time	5:47PM
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 a revised C.O.C. #5669 for project 6895.00-017. Please analyze samples GW-7-11, ~~GW-7-14~~, and ~~GW-7-16~~.

25



# CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <b>CXPS.00.014</b>		Project Location: <b>CALIFORNIA</b>			Date: <b>7/15/89</b>		Serial No: <b>5669</b>			
Project Name: <b>Ferris (California)</b>		Field Logbook No.: _____			Sample Event Name: <b>Soil + Groundwater Sample</b>					
Sampler (Signature): <i>[Signature]</i>					ANALYSES				Samplers:	
SAMPLE INFORMATION (Print Clearly)										
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	EPA 8010	EPA 8015	EPA 8020	HOLD RUSH	REMARKS
GW-7-9	7/15/89	15:10		1	X-1	X	X	X	X	* Please use standard method
GW-7-11	7/15/89	15:10		1		X	X	X	X	standard for TPH
GW-7-14	7/15/89	15:10		1		X	X	X	X	finger printing
GW-7-16	7/15/89	15:10		1		X	X	X	X	
GW-7-19	7/15/89	15:10		1		X	X	X	X	
Original time 7/19/89 Please analyze GW-7-11, GW-7-14, and GW-7-16 for EPA 8010, EPA 8015, and EPA 8020 with MTBE (THB)										
RELINQUISHED BY: (Signature) <i>[Signature]</i>		DATE: <b>7/15/89</b>	TIME: <b>15:10</b>	RECEIVED BY: (Signature) <i>[Signature]</i>		DATE: <b>7/15/89</b>	TIME: <b>15:10</b>			
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: <b>LEVINE-FRICKE-RECON</b> 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 852-4500				Analytical Laboratory: <b>Curtis &amp; Tompkins</b>						

AUG 25 '99 23:38 FR LFR LEVINE FRICKE 510 652 4906 TO 33793335  
 JUL 19 '99 18:03 FR LFR LEVINE FRICKE 510 652 4506 TO 40000000  
 P. 35/35

\*\*\* TOTAL PAGE 35 \*\*\*



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

FAX TRANSMISSION: This cover page plus 30 pages.

Date	<b>August 25, 1999</b>
Time	<b>11:06PM</b>
From	<b>Taylor Bennett</b>

Deliver To	<b>Scott Seery, CHMM</b>		
Name of Firm	<b>Alameda County Health Care Services Agency</b>		
FAX Number	<b>(510) 337-9335</b>	Project No.	<b>6895.00-020</b>

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**Comments:** As you requested today, following are the laboratory results for samples collected at the former Glovatorium so far. Each laboratory report is being sent as a separate fax. There is a total of five reports. LFR has not yet completed a QA/QC review of these data.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

LFR-Levine-Fricke  
1900 Powell Street  
12th Floor  
Emeryville, CA 94608

Date: 30-JUL-99  
Lab Job Number: 140507  
Project ID: 6895.00.014  
Location: Former Glovatorium

Reviewed by: Tracy B...

Reviewed by: [Signature]

This package may be reproduced only in its entirety.



Curtis &amp; Tompkins, Ltd.

Laboratory Numbers: **140507**  
Client: **LFR-Levine-Fricke**  
Project #: **6895.00.014**  
Location: **Former Glovatorium**  
COC#: **3500**

Sampled Date: **07/16/99**  
Received Date: **07/16/99**

### **CASE NARRATIVE**

This hardcopy data package contains sample and QC results for **seven soil samples** which was received from the site referenced above on July 16, 1999. Fourteen soil samples were received cold and intact and placed on hold. On July 19, 1999 Taylor Bennett took seven soils off hold for analysis. All data were faxed to Taylor Bennett on July 27, 1999.

**TVH (EPA 8015M):**

Bromofluorobenzene failed high for sample GW-8-12 (CT# 140507-005) due to co-elution with hydrocarbons. No other analytical problems were encountered.

**VOCs (EPA 8260):**

No analytical problems were encountered.



## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140507-001	GW-1-7	49442	07/16/99	07/21/99	07/21/99	
140507-002	GW-1-8	49442	07/16/99	07/21/99	07/21/99	
140507-003	GW-8-9	49442	07/16/99	07/21/99	07/21/99	
140507-005	GW-8-12	49442	07/16/99	07/21/99	07/21/99	

Matrix: Soil

Analyte	Units	140507-001	140507-002	140507-003	140507-005
Diln Fac:		1	1	1	1
Gasoline C7-C12	mg/Kg	<1	<1	<1	8.2YH
Stoddard Solvent	mg/Kg	<1	<1	<1	4.8
Surrogate					
Trifluorotoluene	%REC	107	106	106	106
Bromofluorobenzene	%REC	113	115	112	162 *

\* Values outside of QC limits

Y: Sample exhibits fuel pattern which does not resemble standard

H: Heavier hydrocarbons than indicated standard

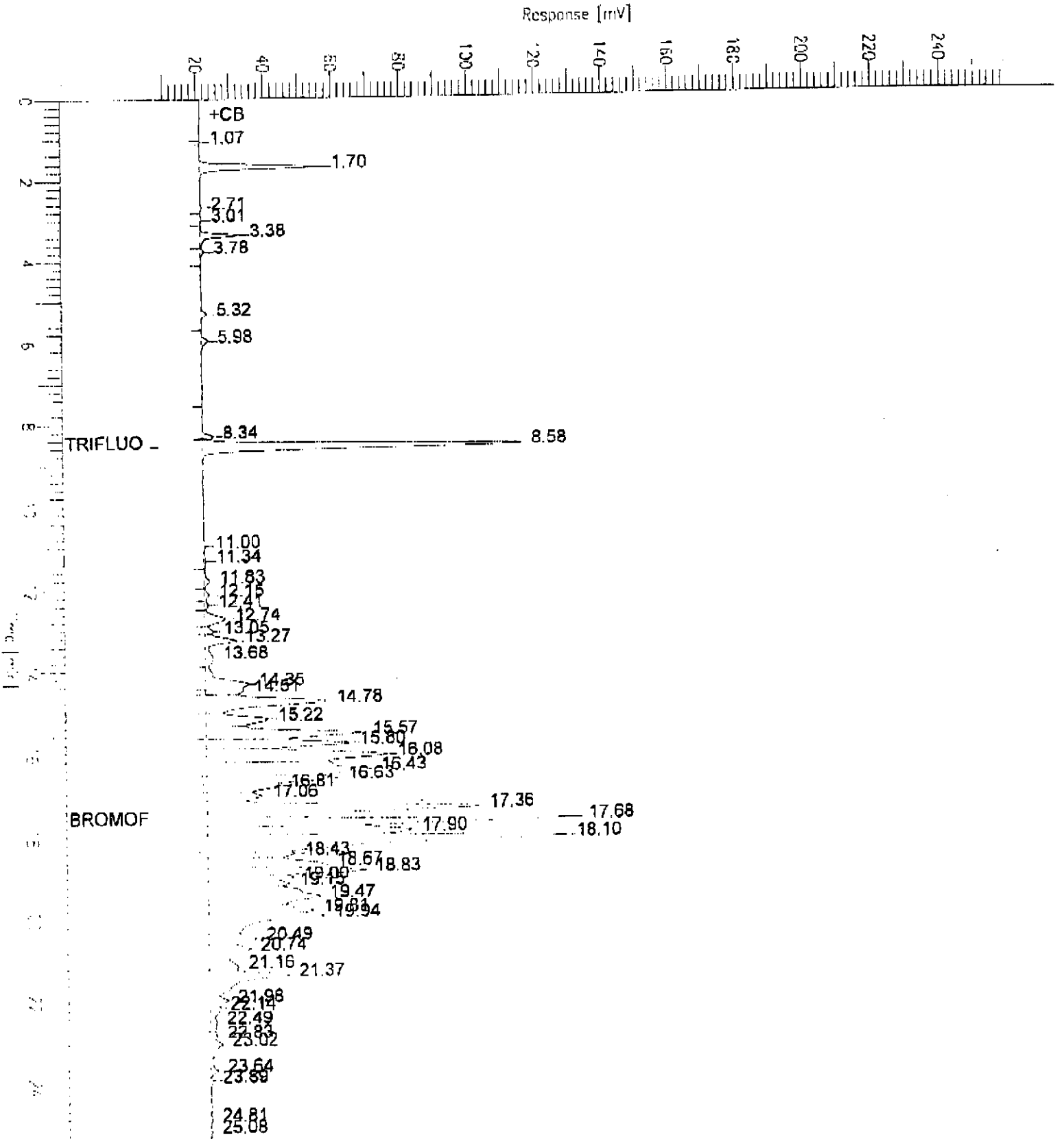
Soil

# Chromatogram

Sample Name : 140507-005,49442,+stod/mtbe  
 FileName : G:\GC05\DATA\201G027.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset : 8 mV

Sample # :  
 Date : 7/21/99 10:14 AM  
 Time of Injection: 7/21/99 09:46 AM  
 Low Point : 8.47 mV  
 Plot Scale: 250.0 mV  
 High Point : 258.47 mV



# Chromatogram

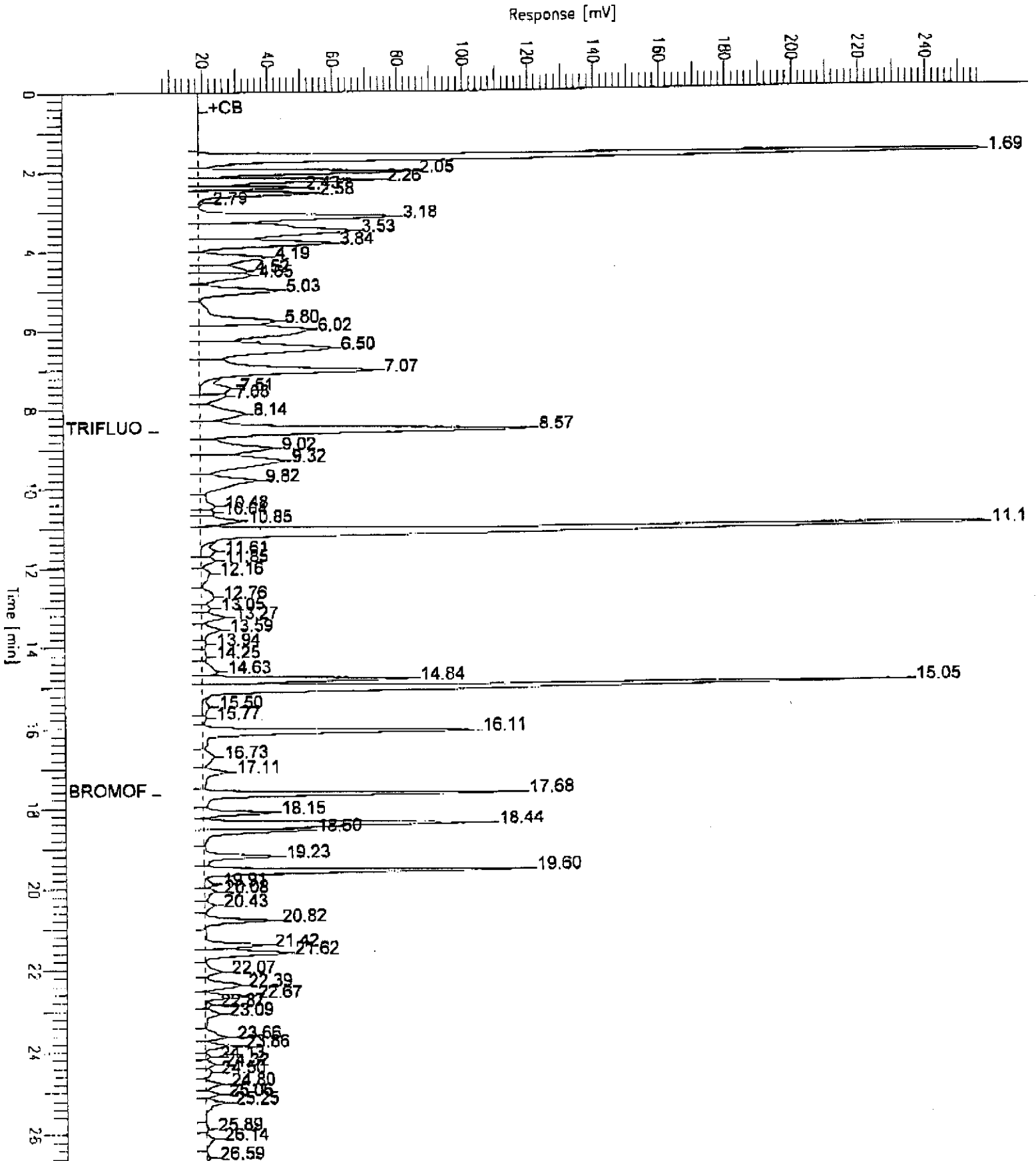
Sample Name : mb,qc03156,99wa7780,49442  
 FileName : G:\GC05\DATA\201G035.raw  
 Method : TVRBTKE  
 Start Time : 0.00 min  
 Scale Factor : -1.0

End Time : 26.80 min  
 Plot Offset: 6 mV

Sample #: gas  
 Date : 7/21/99 03:35 PM  
 Time of Injection: 7/21/99 03:08 PM  
 Low Point : 6.12 mV  
 Plot Scale: 250.0 mV

Page 1 of 1

High Point : 256.12 mV





## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140507-008	GW-4-9	49442	07/16/99	07/21/99	07/21/99	
140507-010	GW-5A-9	49442	07/16/99	07/21/99	07/21/99	
140507-013	GW-6A-10.0	49442	07/16/99	07/21/99	07/21/99	

Matrix: Soil

Analyte	Units	140507-008	140507-010	140507-013
Diln Fac:		1	1	1
Gasoline C7-C12	mg/Kg	<1	<1	<1
Stoddard Solvent	mg/Kg	<1	<1	<1
Surrogate				
Trifluorotoluene	%REC	105	106	112
Bromofluorobenzene	%REC	109	118	118

Soil





BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140507-001	GW-1-7	49442	07/16/99	07/21/99	07/21/99	
140507-002	GW-1-8	49442	07/16/99	07/21/99	07/21/99	
140507-003	GW-8-9	49442	07/16/99	07/21/99	07/21/99	
140507-005	GW-8-12	49442	07/16/99	07/21/99	07/21/99	

Matrix: Soil

Analyte	Units	140507-001	140507-002	140507-003	140507-005
Diln Fac:		1	1	1	1
MTBE	ug/Kg	<20	<20	<20	<20
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	140 C
Surrogate					
Trifluorotoluene	%REC	96	96	95	96
Bromofluorobenzene	%REC	101	98	99	119

C: Presence of this compound confirmed by second column,  
 however, the confirmation concentration differed from the reported  
 result by more than a factor of two

Soil



BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
140507-008	GW-4-9	49442	07/16/99	07/21/99	07/21/99	
140507-010	GW-5A-9	49442	07/16/99	07/21/99	07/21/99	
140507-013	GW-6A-10.0	49442	07/16/99	07/21/99	07/21/99	

Matrix: Soil

Analyte	Units	140507-008	140507-010	140507-013
Diln Fac:		1	1	1
MTBE	ug/Kg	<20	<20	<20
Benzene	ug/Kg	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5
Surrogate				
Trifluorotoluene	%REC	94	95	98
Bromofluorobenzene	%REC	96	100	102

Soil



Lab #: 140507

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former GlovatoriumAnalysis Method: EPA 8015M  
Prep Method: EPA 5030

## METHOD BLANK

Matrix: Soil  
Batch#: 49442  
Units: mg/Kg  
Diln Fac: 1Prep Date: 07/20/99  
Analysis Date: 07/20/99

MB Lab ID: QC03153

Analyte	Result
Gasoline C7-C12	<1.0
Stoddard Solvent	<1.0

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	103	62-143
Bromofluorobenzene	114	59-150

Blank



Lab #: 140507

## BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil  
 Batch#: 49442  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

MB Lab ID: QC03153

Analyte	Result	
MTBE	<20	
Benzene	<5.0	
Toluene	<5.0	
Ethylbenzene	<5.0	
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	89	59-134
Bromofluorobenzene	93	38-150

blank



Lab #: 140507

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8015M  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49442  
 Units: mg/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

LCS Lab ID: QC03154

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	10.38	10	104	77-122
Surrogate	%Rec	Limits		
Trifluorotoluene	130	62-143		
Bromofluorobenzene	108	59-150		

# 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

QC



Lab #: 140507

## BATCH QC REPORT

## TVH-Total Volatile Hydrocarbons

Client: LFR-Levine-Fricke	Analysis Method: EPA 8015M
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: Z22222	Sample Date: 07/15/99
Lab ID: 140511-004	Received Date: 07/16/99
Matrix: Soil	Prep Date: 07/21/99
Batch#: 49442	Analysis Date: 07/21/99
Units: mg/Kg	
Diln Fac: 1	

MS Lab ID: QC03156

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	10	<1	7.19	72	55-134
Surrogate	%Rec	Limits			
Trifluorotoluene	128	62-143			
Bromofluorobenzene	114	59-150			

MSD Lab ID: QC03157

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	10	7.69	77	55-134	7	30
Surrogate	%Rec	Limits				
Trifluorotoluene	129	62-143				
Bromofluorobenzene	114	59-150				

# 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

Dup | QC



Lab #: 140507

## BATCH QC REPORT

BTXE

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8021B  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49442  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/20/99  
 Analysis Date: 07/20/99

LCS Lab ID: QC03155

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	99.25	100	99	59-135
Benzene	103.3	100	103	67-116
Toluene	101.3	100	101	77-122
Ethylbenzene	106.2	100	106	70-124
m,p-Xylenes	218.9	200	109	75-125
o-Xylene	110.5	100	110	75-126
Surrogate	%Rec	Limits		
Trifluorotoluene	95	59-134		
Bromofluorobenzene	97	38-150		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: GW-1-7  
Lab ID: 140507-001  
Matrix: Soil  
Batch#: 49582  
Units: ug/Kg  
Diln Fac: 4.545

Sampled: 07/16/99  
Received: 07/16/99  
Extracted: 07/28/99  
Analyzed: 07/28/99

Analyte	Result	Reporting Limit
Chloromethane	ND	45
Vinyl Chloride	ND	45
Bromomethane	ND	45
Chloroethane	ND	45
Trichlorofluoromethane	ND	23
Freon 113	ND	23
1,1-Dichloroethene	ND	23
Methylene Chloride	ND	91
trans-1,2-Dichloroethene	ND	23
1,1-Dichloroethane	ND	23
cis-1,2-Dichloroethene	ND	23
Chloroform	ND	23
1,1,1-Trichloroethane	ND	23
Carbon Tetrachloride	ND	23
1,2-Dichloroethane	ND	23
Trichloroethene	ND	23
1,2-Dichloropropane	ND	23
Bromodichloromethane	ND	23
cis-1,3-Dichloropropene	ND	23
trans-1,3-Dichloropropene	ND	23
1,1,2-Trichloroethane	ND	23
Tetrachloroethene	ND	23
Dibromochloromethane	ND	23
Chlorobenzene	ND	23
Bromoform	ND	45
1,1,2,2-Tetrachloroethane	ND	23
1,3-Dichlorobenzene	ND	23
1,4-Dichlorobenzene	ND	23
1,2-Dichlorobenzene	ND	23
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	116	80-129
Toluene-d8	102	88-111
Bromofluorobenzene	104	76-128



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: GW-1-B	Sampled: 07/16/99
Lab ID: 140507-002	Received: 07/16/99
Matrix: Soil	Extracted: 07/28/99
Batch#: 49582	Analyzed: 07/28/99
Units: ug/Kg	
Diln Fac: 0.9615	

Analyte	Result	Reporting Limit
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.8
1,1-Dichloroethane	ND	4.8
cis-1,2-Dichloroethene	ND	4.8
Chloroform	ND	4.8
1,1,1-Trichloroethane	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
cis-1,3-Dichloropropene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
Tetrachloroethane	140	4.8
Dibromochloromethane	ND	4.8
Chlorobenzene	ND	4.8
Bromoform	ND	9.6
1,1,2,2-Tetrachloroethane	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	117	80-129
Toluene-d8	102	89-111
Bromofluorobenzene	104	76-128

Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: ~~GW-9-9~~  
Lab ID: 140507-003  
Matrix: Soil  
Batch#: 49557  
Units: ug/Kg  
Diln Fac: 0.9259

Sampled: 07/16/99  
Received: 07/16/99  
Extracted: 07/27/99  
Analyzed: 07/27/99

Analyte	Result	Reporting Limit
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	4.6
Trichlorofluoromethane	ND	4.6
Freon 113	ND	4.6
1,1-Dichloroethene	ND	19
Methylene Chloride	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
1,1-Dichloroethane	ND	4.6
cis-1,2-Dichloroethene	ND	4.6
Chloroform	ND	4.6
1,1,1-Trichloroethane	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Trichloroethene	6.1	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
cis-1,3-Dichloropropene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
Tetrachloroethene	50	4.6
Dibromochloromethane	ND	4.6
Chlorobenzene	ND	9.3
Bromoform	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	113	80-129
Toluene-d8	102	88-111
Bromofluorobenzene	101	76-128



**Halogenated Volatile Organics**  
**EPA 8010 Analyte List**

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: GW-#-12	Sampled: 07/16/99
Lab ID: 140507-005	Received: 07/16/99
Matrix: Soil	Extracted: 07/28/99
Batch#: 49557	Analyzed: 07/28/99
Units: ug/Kg	
Diln Fac: 1	

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	110	80-129
Toluene-d8	102	88-111
Bromofluorobenzene	108	76-128



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	

Field ID: GW-4-9	Sampled: 07/16/99
Lab ID: 140507-008	Received: 07/16/99
Matrix: Soil	Extracted: 07/28/99
Batch#: 49557	Analyzed: 07/28/99
Units: ug/Kg	
Diln Fac: 0.9259	

Analyte	Result	Reporting Limit
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.6
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.6
1,1-Dichloroethane	ND	4.6
cis-1,2-Dichloroethene	ND	4.6
Chloroform	ND	4.6
1,1,1-Trichloroethane	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
cis-1,3-Dichloropropene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
Tetrachloroethene	ND	4.6
Dibromochloromethane	ND	4.6
Chlorobenzene	ND	9.3
Bromoform	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	114	80-129
Toluene-d8	102	88-111
Bromofluorobenzene	105	76-128



**Halogenated Volatile Organics  
EPA 8010 Analyte List**

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: GW-5A-9  
Lab ID: 140507-010  
Matrix: Soil  
Batch#: 49557  
Units: ug/Kg  
Diln Fac: 1

Sampled: 07/16/99  
Received: 07/16/99  
Extracted: 07/28/99  
Analyzed: 07/28/99

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	10
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	114	80-129
Toluene-d8	101	88-111
Bromofluorobenzene	104	76-128



Halogenated Volatile Organics  
EPA 8010 Analyte List

Client: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former Glovatorium

Analysis Method: EPA 8260A  
Prep Method: EPA 5030

Field ID: GW-6A-10.0  
Lab ID: 140507-013  
Matrix: Soil  
Batch#: 49557  
Units: ug/Kg  
Diln Fac: 1.02

Sampled: 07/16/99  
Received: 07/16/99  
Extracted: 07/28/99  
Analyzed: 07/28/99

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.1
Freon 113	ND	5.1
1,1-Dichloroethene	ND	5.1
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.1
1,1-Dichloroethane	ND	5.1
cis-1,2-Dichloroethene	ND	5.1
Chloroform	ND	5.1
1,1,1-Trichloroethane	ND	5.1
Carbon Tetrachloride	ND	5.1
1,2-Dichloroethane	ND	5.1
Trichloroethene	ND	5.1
1,2-Dichloropropane	ND	5.1
Bromodichloromethane	ND	5.1
cis-1,3-Dichloropropene	ND	5.1
trans-1,3-Dichloropropene	ND	5.1
1,1,2-Trichloroethane	ND	5.1
Tetrachloroethene	ND	5.1
Dibromochloromethane	ND	5.1
Chlorobenzene	ND	5.1
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.1
1,3-Dichlorobenzene	ND	5.1
1,4-Dichlorobenzene	ND	5.1
1,2-Dichlorobenzene	ND	5.1
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	114	80-129
Toluene-d8	100	88-111
Bromofluorobenzene	106	76-128

Curtis & Tompkins, Ltd.  
Page 1 of 1

Lab #: 140507

## BATCH QC REPORT

Halogenated Volatile Organics  
EPA 8010 Analyte ListClient: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former GlovatoriumAnalysis Method: EPA 8260A  
Prep Method: EPA 5030

## METHOD BLANK

Matrix: Soil  
Batch#: 49557  
Units: ug/Kg  
Diln Fac: 1Prep Date: 07/27/99  
Analysis Date: 07/27/99

MB Lab ID: QC03596

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	10
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	114	80-129
Toluene-d8	101	88-111
Bromofluorobenzene	100	76-128

Curtis & Tompkins, Ltd.  
Page 1 of 1

Lab #: 140507

## BATCH QC REPORT

Halogenated Volatile Organics  
EPA 8010 Analyte ListClient: LFR-Levine-Fricke  
Project#: 6895.00.014  
Location: Former GlovatoriumAnalysis Method: EPA 8260A  
Prep Method: EPA 5030

## METHOD BLANK

Matrix: Soil  
Batch#: 49582  
Units: ug/Kg  
Diln Fac: 1Prep Date: 07/28/99  
Analysis Date: 07/28/99

MB Lab ID: QC03691

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	10
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	119	80-129
Toluene-d8	99	88-111
Bromofluorobenzene	101	76-128





Lab #: 140507

## BATCH QC REPORT

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49557  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/27/99  
 Analysis Date: 07/27/99

LCS Lab ID: QC03594

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	53.1	50	106	63-144
Trichloroethene	47.75	50	96	70-131
Chlorobenzene	48.53	50	97	74-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	108	80-129		
Toluene-d8	99	88-111		
Bromofluorobenzene	101	76-128		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



Lab #: 140507

## BATCH QC REPORT

## Halogenated volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## LABORATORY CONTROL SAMPLE

Matrix: Soil  
 Batch#: 49582  
 Units: ug/Kg  
 Diln Fac: 1

Prep Date: 07/28/99  
 Analysis Date: 07/28/99

LCS Lab ID: QC03690

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	50.62	50	101	63-144
Trichloroethene	46.87	50	94	70-131
Chlorobenzene	47.37	50	95	74-126
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	117	80-129		
Toluene-d8	101	88-111		
Bromofluorobenzene	102	76-128		

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

\* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



Lab #: 140507

## BATCH QC REPORT

## Halogenated Volatile Organics

Client: LFR-Levine-Fricke  
 Project#: 6895.00.014  
 Location: Former Glovatorium

Analysis Method: EPA 8260A  
 Prep Method: EPA 5030

## MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: GW-8-9  
 Lab ID: 140507-003  
 Matrix: Soil  
 Batch#: 49557  
 Units: ug/Kg  
 Diln Fac: 0.9615

Sample Date: 07/16/99  
 Received Date: 07/16/99  
 Prep Date: 07/27/99  
 Analysis Date: 07/27/99

MS Lab ID: QC03619

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	48.08	<4.808	46.14	96	51-137
Trichloroethene	48.08	6.057	47.58	86	33-153
Chlorobenzene	48.08	<4.808	41.74	87	39-132
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	112	80-129			
Toluene-d8	102	88-111			
Bromofluorobenzene	104	76-128			

MSD Lab ID: QC03620

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	48.08	46.56	97	51-137	1	35
Trichloroethene	48.08	48	87	33-153	1	44
Chlorobenzene	48.08	41.21	86	39-132	1	47
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	115	80-129				
Toluene-d8	102	88-111				
Bromofluorobenzene	100	76-128				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits



Lab #: 140507

## BATCH QC REPORT

Halogenated Volatile Organics	
Client: LFR-Levine-Fricke	Analysis Method: EPA 8260A
Project#: 6895.00.014	Prep Method: EPA 5030
Location: Former Glovatorium	
MATRIX SPIKE/MATRIX SPIKE DUPLICATE	
Field ID: GW-1-8	Sample Date: 07/16/99
Lab ID: 140507-002	Received Date: 07/16/99
Matrix: Soil	Prep Date: 07/28/99
Batch#: 49582	Analysis Date: 07/28/99
Units: ug/Kg	
Diln Fac: 0.9804	

MS Lab ID: QC03718

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	49.02	<4.902	58.5	119	51-137
Trichloroethene	49.02	0.9005	50.53	101	33-153
Chlorobenzene	49.02	<4.902	45.89	94	39-132
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	119	80-129			
Toluene-d8	101	88-111			
Bromofluorobenzene	101	76-128			

MSD Lab ID: QC03719

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	49.02	48.54	99	51-137	19	35
Trichloroethene	49.02	38.84	77	33-153	26	44
Chlorobenzene	49.02	33.65	69	39-132	31	47
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	116	80-129				
Toluene-d8	101	88-111				
Bromofluorobenzene	103	76-128				

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

\* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

# CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <b>6895.00.014</b>			Project Location: <b>OAKLAND, CA</b>			Date: <b>7/16/99</b>			Serial No.: <b>N# 35.0</b>					
Project Name: <b>GLOVATORIUM</b>			Field Logbook No.: <b>-</b>						Samplers: <b>CW</b>					
Sampler (Signature): <b>CRH-V</b>			ANALYSES											
SAMPLES														
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	VOC	2010	7/16/99	8015	3517-1710	5020	HOLD	RUSH	REMARKS
GW-1-7	7/16/99	0900	X	1	Soil	X	X	X				X		Include * Shaded solvent Standard B-27PH FI-journal  NORMAL TURNAROUND 7/19/99 (THB) Analyze GW-1-7, GW-1-8, GW-8-9, GW-9-12, GW-4-9, GW-5A-9, GW-6A-10
GW-1-8	7/16/99	0910	X	1	Soil	X	X	X						
GW-8-7	7/16/99	0950	X	1	Soil	X	X	X						
GW-8-9.5	7/16/99	0955	X	1	Soil	X	X	X						
GW-8-12	7/16/99	1005	X	1	Soil	X	X	X						
GW-8-19	7/16/99	1025	X	1	Soil	X	X	X						
GW-4-8.5	7/16/99	1340	X	1	Soil	X	X	X						
GW-4-9	7/16/99	1345	X	1	Soil	X	X	X						
GW-4-10	7/16/99	1350	X	1	Soil	X	X	X						
GW-5A-9	7/16/99	1450	X	1	Soil	X	X	X						
GW-5A-9.5	7/16/99	1455	X	1	Soil	X	X	X						
GW-5A-10.2	7/16/99	1500	X	1	Soil	X	X	X						
GW-6A-10.0	7/16/99	1600	X	1	Soil	X	X	X						
GW-6A-17.5	7/16/99	1610	X	1	Soil	X	X	X						
RELINQUISHED BY: <b>CRH-V</b>			DATE: <b>7/16/99</b>	TIME: <b>15:45</b>	RECEIVED BY: <b>Taylor Bennett</b>			DATE: <b>7/16/99</b>	TIME: <b>16:45</b>					
RELINQUISHED BY: <b>Taylor Bennett</b>			DATE: <b>7/16/99</b>	TIME: <b>17:15</b>	RECEIVED BY: <b>[Signature]</b>			DATE: <b>7/16/99</b>	TIME: <b>17:15</b>					
RELINQUISHED BY: (Signature)			DATE	TIME	RECEIVED BY: (Signature)			DATE	TIME					
METHOD OF SHIPMENT:			DATE	TIME	LAB COMMENTS:									
Sample Collector: <b>LEVINE-FRICKE-RECON</b> 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500					Analytical Laboratory: <b>Crutis + Tomkins</b>									

Glover for in



Curtis & Tompkins, Ltd.

# COOLER RECEIPT CHECKLIST

Login#: 740 507 Date Received: 7/16 Number of Coolers: \_\_\_\_\_  
 Client: LTE Project: 6895-00.014

### A. Preliminary Examination Phase

Date Opened: 7/16 By (print): [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc.)?.....  YES  NO
- If YES, enter carrier name and airbill number: \_\_\_\_\_
2. Were custody seals on outside of cooler?.....  YES  NO
- How many and where? \_\_\_\_\_ Seal date: \_\_\_\_\_ Seal name: \_\_\_\_\_
3. Were custody seals unbroken and intact at the date and time of arrival?.....  YES  NO
4. Were custody papers dry and intact when received?.....  YES  NO
5. Were custody papers filled out properly (ink, signed, etc.)?.....  YES  NO
6. Did you sign the custody papers in the appropriate place?.....  YES  NO
7. Was project identifiable from custody papers?.....  YES  NO
- If YES, enter project name at the top of this form.
8. If required, was sufficient ice used?.....  YES  NO
- Type of ice: used place Temperature: 5.0°C

### B. Login Phase

Date Logged In: 7/16 By (print): [Signature] (sign) [Signature]

1. Describe type of packing in cooler: \_\_\_\_\_
2. Did all bottles arrive unbroken?.....  YES  NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)?.....  YES  NO
4. Did bottle labels agree with custody papers?.....  YES  NO
5. Were appropriate containers used for the tests indicated?.....  YES  NO
6. Were correct preservatives added to samples?.....  YES  NO
7. Was sufficient amount of sample sent for tests indicated?.....  YES  NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below.....  YES  NO
9. Was the client contacted concerning this sample delivery?.....  YES  NO
- If YES, give details below.
- Who was called? \_\_\_\_\_ By whom? \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments:

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

FAX TRANSMISSION: This cover page plus 1 page.

Date	July 19, 1999
Time	6:37PM
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 a revised C.O.C. #35X0 (X represents illegible digit printed on the C.O.C.) for project 6895.00-017. Please analyze samples GW-1-7, GW-1-8, GW-8-9, GW-8-12, GW-4-9, GW-5A-9, and GW-6A-10, as indicated on the C.O.C.

## CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <b>6895.00.014</b>			Project Location: <b>OAKLAND, CA</b>			Date: <b>7/16/99</b>			Serial No.: <b>N<sup>o</sup> 35.0</b>				
Project Name: <b>GLOVATORUM</b>			Field Logbook No.: <b>-</b>										
Sampler (Signature): <b>CRJ/V</b>						ANALYSES						Samplers: <b>CW</b>	
SAMPLES													
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	TC <sup>2</sup> 2010	TPH-X	8015	25535/100	2020	HOLD	RUSH	REMARKS
GW-1-7	7/16/99	0900	X	1	Soil	X	X	X			X		* <b>SHIPPED SOLID</b> <b>Standard B-2 TPH</b> <b>Fluorinated</b>  <b>NORMAL TURBIDIM</b> <b>7/19/99 (THB) Analyze GW-1-7,</b> <b>GW-1-8, GW-8-9, GW-8-12,</b> <b>GW-4-9, GW-5A-9, GW-6A-10</b>
GW-1-8	7/16/99	0910	X	1	Soil	X	X	X					
GW-8-9	7/16/99	0950	X	1	Soil	X	X	X					
GW-8-9.5	7/16/99	0955		1	Soil	X	X	X					
GW-8-12	7/16/99	1005	X	1	Soil	X	X	X					
GW-8-19	7/16/99	1025		1	Soil	X	X	X					
GW-4-8.5	7/16/99	1340		1	Soil	X	X	X					
GW-4-9	7/16/99	1345	X	1	Soil	X	X	X					
GW-4-10	7/16/99	1350		1	Soil	X	X	X					
GW-5A-9	7/16/99	1450	X	1	Soil	X	X	X					
GW-5A-7.5	7/16/99	1455		1	Soil	X	X	X					
GW-5A-10.0	7/16/99	1500		1	Soil	X	X	X					
GW-6A-10.0	7/16/99	1600	X	1	Soil	X	X	X					
GW-6A-12.5	7/16/99	1610		1	Soil	X	X	X					
RELINQUISHED BY: <b>CRJ/V</b>			DATE: <b>7/16/99</b>	TIME: <b>15:45</b>	RECEIVED BY: <b>Taylor Bennett</b>			DATE: <b>7/16/99</b>	TIME: <b>16:45</b>				
RELINQUISHED BY: <b>Taylor Bennett</b>			DATE: <b>7/16/99</b>	TIME: <b>17:15</b>	RECEIVED BY: <b>[Signature]</b>			DATE: <b>7/16/99</b>	TIME: <b>17:15</b>				
RELINQUISHED BY: (Signature)			DATE	TIME	RECEIVED BY: (Signature)			DATE	TIME				
METHOD OF SHIPMENT:			DATE	TIME	LAB COMMENTS:								
Sample Collector: <b>LEVINE-FRICKE-RECON</b> 1900 Powell Street, 12th Floor Emeryville, California 94606-1827 (510) 652-4600					Analytical Laboratory: <b>Curtis + Tomkins</b>								





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

FAX TRANSMISSION: This cover page plus 5 pages.

Date	<b>August 25, 1999</b>		
Time	<b>11:01PM</b>		
From	<b>Taylor Bennett</b>		

Deliver To	<b>Scott Seery, CHMM</b>		
Name of Firm	<b>Alameda County Health Care Services Agency</b>		
FAX Number	<b>(510) 337-9335</b>	Project No.	<b>6895.00-020</b>

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**Comments:** As you requested today, following are the laboratory results for samples collected at the former Glovatorium so far. Each laboratory report is being sent as a separate fax. There is a total of five reports. LFR has not yet completed a QA/QC review of these data.



# Sequoia Analytical

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885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

July 21, 1999

Taylor Bennett  
LFR Levine-Fricke - Emeryville  
1900 Powell St, 12th Floor  
Emeryville, CA 94608

RE: 6895.00.014/M907605

Dear Taylor Bennett

Enclosed are the results of analyses for sample(s) received by the laboratory on July 15, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to be 'Ron Chew', written over a circular stamp or mark.

Ron Chew  
Project Manager

CA ELAP Certificate Number 1210



# Sequoia Analytical

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FAX (408) 782-6308

LFR Levine-Fricke - Emeryville  
1900 Powell St, 12th Floor  
Emeryville, CA 94608

Project: -  
Project Number: 6895.00.014  
Project Manager: Taylor Bennett

Sampled: 7/15/99  
Received: 7/15/99  
Reported: 7/21/99

## ANALYTICAL REPORT FOR M907605

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
GW-07	M907605-01	Water	7/15/99
GW-107	M907605-02	Water	7/15/99



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LFR Levine-Fricke - Emeryville 1900 Powell St, 12th Floor Emeryville, CA 94608	Project: - Project Number: 6895.00.014 Project Manager: Taylor Bennett	Sampled: 7/15/99 Received: 7/15/99 Reported: 7/21/99
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### Diesel Hydrocarbons (C9-C24) by DHS LUFT Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
				<u>M907605-01</u>			<u>Water</u>	
<b>GW-07</b> Diesel Range Hydrocarbons	9070560	7/16/99	7/18/99	50.0-150	0.0500	<b>0.566</b>	mg/l	1
Surrogate: n-Pentacosane	"	"	"			32.3	%	2
Stoddard Solvent (C9-C13)	"	"	"	50.0-150		<b>0.205</b>	mg/l	3
Surrogate: n-Pentacosane	"	"	"			32.3	%	2
Stoddard Solvent (C9-C13)	9070639	7/20/99	7/20/99	50.0-150		<b>0.697</b>	mg/l	3
Surrogate: n-Pentacosane	"	"	"	50.0-150		105	%	
Diesel Range Hydrocarbons	"	"	"		0.0500	<b>1.79</b>	mg/l	1
Surrogate: n-Pentacosane	"	"	"	50.0-150		105	%	
				<u>M907605-02</u>			<u>Water</u>	
<b>GW-107</b> Diesel Range Hydrocarbons	9070560	7/16/99	7/19/99	50.0-150	0.100	<b>3.10</b>	mg/l	1
Surrogate: n-Pentacosane	"	"	"			100	%	
Stoddard Solvent (C9-C13)	"	"	"	50.0-150		<b>1.42</b>	mg/l	3
Surrogate: n-Pentacosane	"	"	"			100	%	



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LFR Levine-Fricke - Emeryville 1900 Powell St, 12th Floor Emeryville, CA 94608	Project: - Project Number: 6895.00.014 Project Manager: Taylor Bennett	Sampled: 7/15/99 Received: 7/15/99 Reported: 7/21/99
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## MTBE by DHS LUFT Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
				<u>M907605-01</u>			<u>Water</u>	
<u>GW-07</u>					2.50	ND	ug/l	
Methyl tert-butyl ether	9070547	7/16/99	7/16/99		0.500	50.0	"	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	0.727	"	
Ethylbenzene	"	"	"		0.500	3.13	"	
Xylenes (total)	"	"	"	70.0-130		198	%	4
Surrogate: a,a,u-Trifluorotoluene	"	"	"					



# Sequoia Analytical

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LFR Levine-Fricke - Emeryville 1900 Powell St, 12th Floor Emeryville, CA 94608	Project: - Project Number: 6895.00.014 Project Manager: Taylor Bennett	Sampled: 7/15/99 Received: 7/15/99 Reported: 7/21/99
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## Volatile Organic Compounds by EPA Method 8010B Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>GW-07</b>				<b>M907605-01</b>			<b>Water</b>	
Bromodichloromethane	9070500	7/16/99	7/16/99		0.500	ND	ug/l	
Bromoform	"	"	"		0.500	ND	"	
Bromomethane	"	"	"		1.00	ND	"	
Carbon tetrachloride	"	"	"		0.500	ND	"	
Chlorobenzene	"	"	"		0.500	ND	"	
Chloroethane	"	"	"		0.500	ND	"	
Chloroform	"	"	"		0.500	ND	"	
Chloromethane	"	"	"		0.500	ND	"	
Dibromochloromethane	"	"	"		0.500	ND	"	
1,3-Dichlorobenzene	"	"	"		0.500	ND	"	
1,4-Dichlorobenzene	"	"	"		0.500	ND	"	
1,2-Dichlorobenzene	"	"	"		0.500	ND	"	
1,1-Dichloroethane	"	"	"		0.500	ND	"	
1,2-Dichloroethane	"	"	"		0.500	ND	"	
1,1-Dichloroethene	"	"	"		0.500	<b>3.58</b>	"	
<del>cis-1,2-Dichloroethene</del>	"	"	"		0.500	ND	"	
trans-1,2-Dichloroethene	"	"	"		0.500	<b>0.632</b>	"	
<b>1,2-Dichloropropane</b>	"	"	"		0.500	ND	"	
cis-1,3-Dichloropropene	"	"	"		0.500	ND	"	
trans-1,3-Dichloropropene	"	"	"		5.00	ND	"	
Methylene chloride	"	"	"		0.500	ND	"	
1,1,2,2-Tetrachloroethane	"	"	"		0.500	ND	"	
Tetrachloroethene	"	"	"		0.500	ND	"	
1,1,1-Trichloroethane	"	"	"		0.500	ND	"	
1,1,2-Trichloroethane	"	"	"		0.500	ND	"	
1,1,2-Trichlorotrifluoroethane	"	"	"		0.500	ND	"	
Trichloroethene	"	"	"		0.500	ND	"	
Trichlorofluoromethane	"	"	"		0.500	ND	"	
Vinyl chloride	"	"	"			113	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	70.0-130				



# Sequoia Analytical

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FAX (408) 782-6308

LFR Levine-Fricke - Emeryville  
1900 Powell St, 12th Floor  
Emeryville, CA 94608

Project: -  
Project Number: 6895.00.014  
Project Manager: Taylor Bennett

Sampled: 7/15/99  
Received: 7/15/99  
Reported: 7/21/99

## Diesel Hydrocarbons (C9-C23) by DHS/UEP Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9070560</b>		<b>Date Prepared: 7/16/99</b>		<b>Extraction Method: EPA 3510B</b>						
<b>Blank</b>		<b>9070560-BLK1</b>								
Diesel Range Hydrocarbons	7/18/99			ND	mg/l	0.0500				
Diesel Range Hydrocarbons	"			ND	"	0.0500				
Surrogate: n-Pentacosane	"	0.100		0.0702	"	50.0-150	70.2			
Surrogate: n-Pentacosane	"	0.100		0.0702	"	50.0-150	70.2			
<b>LCS</b>		<b>9070560-BS1</b>								
Diesel Range Hydrocarbons	7/18/99	1.00		0.778	mg/l	60.0-140	77.8			
Diesel Range Hydrocarbons	"	1.00		0.778	"	60.0-140	77.8			
Surrogate: n-Pentacosane	"	0.100		0.0851	"	50.0-150	85.1			
Surrogate: n-Pentacosane	"	0.100		0.0851	"	50.0-150	85.1			
<b>LCS Dup</b>		<b>9070560-BSD1</b>								
Diesel Range Hydrocarbons	7/18/99	1.00		0.767	mg/l	60.0-140	76.7	50.0	1.42	
Diesel Range Hydrocarbons	"	1.00		0.767	"	60.0-140	76.7	50.0	1.42	
Surrogate: n-Pentacosane	"	0.100		0.0811	"	50.0-150	81.1			
Surrogate: n-Pentacosane	"	0.100		0.0811	"	50.0-150	81.1			
<b>Matrix Spike</b>		<b>9070560-MS1 M907581-02</b>								
Diesel Range Hydrocarbons	7/18/99	1.00	ND	0.553	mg/l	50.0-150	55.3			
Diesel Range Hydrocarbons	"	1.00	ND	0.553	"	50.0-150	55.3			
Surrogate: n-Pentacosane	"	0.100		0.0721	"	50.0-150	72.1			
Surrogate: n-Pentacosane	"	0.100		0.0721	"	50.0-150	72.1			
<b>Matrix Spike Dup</b>		<b>9070560-MSD1 M907581-02</b>								
Diesel Range Hydrocarbons	7/18/99	1.00	ND	1.05	mg/l	50.0-150	105	50.0	62.0	5
Diesel Range Hydrocarbons	"	1.00	ND	1.05	"	50.0-150	105	50.0	62.0	5
Surrogate: n-Pentacosane	"	0.100		0.0877	"	50.0-150	87.7			
Surrogate: n-Pentacosane	"	0.100		0.0877	"	50.0-150	87.7			
<b>Batch: 9070639</b>		<b>Date Prepared: 7/20/99</b>		<b>Extraction Method: EPA 3510B</b>						
<b>Blank</b>		<b>9070639-BLK1</b>								
Diesel Range Hydrocarbons	7/20/99			ND	mg/l	0.0500				
Diesel Range Hydrocarbons	"			ND	"	0.0500				
Surrogate: n-Pentacosane	"	0.100		0.102	"	50.0-150	102			
Surrogate: n-Pentacosane	"	0.100		0.102	"	50.0-150	102			
<b>LCS</b>		<b>9070639-BS1</b>								
Diesel Range Hydrocarbons	7/20/99	1.00		0.919	mg/l	60.0-140	91.9			
Diesel Range Hydrocarbons	"	1.00		0.919	"	60.0-140	91.9			
Surrogate: n-Pentacosane	"	0.100		0.111	"	50.0-150	111			

Sequoia Analytical - Morgan Hill

\*Refer to end of report for text of notes and definitions.



# Sequoia Analytical

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FAX (408) 782-6308

LFR Levine-Fricke - Emeryville  
1900 Powell St. 12th Floor  
Emeryville, CA 94608

Project: -  
Project Number: 6895.00.014  
Project Manager: Taylor Bennett

Sampled: 7/15/99  
Received: 7/15/99  
Reported: 7/21/99

## Diesel Hydrocarbons (C9-C24) by DHS LHEE/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>LCS (continued)</b>	<b>9070639-BS1</b>									
Surrogate: n-Pentacosane	7/20/99	0.100		0.111	mg/l	50.0-150	111			
<b>LCS Dup</b>	<b>9070639-BSD1</b>									
Diesel Range Hydrocarbons	7/20/99	1.00		0.926	mg/l	60.0-140	92.6	50.0	0.759	
Diesel Range Hydrocarbons	"	1.00		0.926	"	60.0-140	92.6	50.0	0.759	
Surrogate: n-Pentacosane	"	0.100		0.106	"	50.0-150	106			
Surrogate: n-Pentacosane	"	0.100		0.106	"	50.0-150	106			





# Sequoia Analytical

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LFR Levine-Fricke - Emeryville  
1900 Powell St, 12th Floor  
Emeryville, CA 94608

Project: -  
Project Number: 6895.00.014  
Project Manager: Taylor Bennett

Sampled: 7/15/99  
Received: 7/15/99  
Reported: 7/21/99

MIT BE by DHS DUEP Quality Control  
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9070547</b>		<b>Date Prepared: 7/16/99</b>		<b>Extraction Method: EPA 5030B (P/T)</b>						
<b>Blank</b>		<b>9070547-BLKI</b>								
Methyl tert-butyl ether	7/16/99			ND	ug/l	2.50				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.48	"	70.0-130	94.8			
<b>LCS</b>		<b>9070547-BS1</b>								
Benzene	7/16/99	10.0		8.77	ug/l	70.0-130	87.7			
Toluene	"	10.0		8.82	"	70.0-130	88.2			
Ethylbenzene	"	10.0		8.82	"	70.0-130	88.2			
Xylenes (total)	"	30.0		26.6	"	70.0-130	88.7			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.69	"	70.0-130	86.9			
<b>Matrix Spike</b>		<b>9070547-MS1 M907294-07</b>								
Benzene	7/16/99	10.0	ND	8.96	ug/l	60.0-140	89.6			
Toluene	"	10.0	ND	9.09	"	60.0-140	90.9			
Ethylbenzene	"	10.0	ND	9.16	"	60.0-140	91.6			
Xylenes (total)	"	30.0	ND	27.6	"	60.0-140	92.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		7.95	"	70.0-130	79.5			
<b>Matrix Spike Dup</b>		<b>9070547-MSD1 M907294-07</b>								
Benzene	7/16/99	10.0	ND	7.83	ug/l	60.0-140	78.3	25.0	13.5	
Toluene	"	10.0	ND	8.21	"	60.0-140	82.1	25.0	10.2	
Ethylbenzene	"	10.0	ND	8.24	"	60.0-140	82.4	25.0	10.6	
Xylenes (total)	"	30.0	ND	24.8	"	60.0-140	82.7	25.0	10.6	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		7.68	"	70.0-130	76.8			



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LFR Levine-Fricke - Emeryville 1900 Powell St, 12th Floor Emeryville, CA 94608	Project: - Project Number: 6895.00.014 Project Manager: Taylor Bennett	Sampled: 7/15/99 Received: 7/15/99 Reported: 7/21/99
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**Volatile Organic Compounds by EPA Method 8010B/Quality Control**  
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Reporting Limit Units	Reccov. Limits	Reccov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9070500</b>		<b>Date Prepared: 7/15/99</b>		<b>Extraction Method: EPA 5030B (P/T)</b>						
<b>Blank</b>	<b>9070500-BLK1</b>									
Bromodichloromethane	7/15/99			ND	ug/l		0.500			
Bromoform	"			ND	"		0.500			
Bromomethane	"			ND	"		1.00			
Carbon tetrachloride	"			ND	"		0.500			
Chlorobenzene	"			ND	"		1.00			
Chloroethane	"			ND	"		0.500			
Chloroform	"			ND	"		1.00			
Chloromethane	"			ND	"		0.500			
Dibromochloromethane	"			ND	"		0.500			
1,3-Dichlorobenzene	"			ND	"		0.500			
1,4-Dichlorobenzene	"			ND	"		0.500			
1,2-Dichlorobenzene	"			ND	"		0.500			
1,1-Dichloroethane	"			ND	"		0.500			
1,2-Dichloroethane	"			ND	"		0.500			
1,1-Dichloroethene	"			ND	"		0.500			
cis-1,2-Dichloroethene	"			ND	"		0.500			
trans-1,2-Dichloroethene	"			ND	"		0.500			
1,2-Dichloropropane	"			ND	"		0.500			
cis-1,3-Dichloropropene	"			ND	"		0.500			
trans-1,3-Dichloropropene	"			ND	"		5.00			
Methylene chloride	"			ND	"		0.500			
1,1,2,2-Tetrachloroethane	"			ND	"		0.500			
Tetrachloroethene	"			ND	"		0.500			
1,1,1-Trichloroethane	"			ND	"		0.500			
1,1,2-Trichloroethane	"			ND	"		1.00			
1,1,2-Trichlorotrifluoroethane	"			ND	"		0.500			
Trichloroethene	"			ND	"		0.500			
Trichlorofluoromethane	"			ND	"		1.00			
Vinyl chloride	"			ND	"		70.0-130	100		
Surrogate: 4-Bromofluorobenzene	"	10.0		10.0	"					
<b>Blank</b>		<b>9070500-BLK2</b>								
Bromodichloromethane	7/16/99			ND	ug/l		0.500			
Bromoform	"			ND	"		0.500			
Bromomethane	"			ND	"		1.00			
Bromomethane	"			ND	"		0.500			
Carbon tetrachloride	"			ND	"		0.500			
Chlorobenzene	"			ND	"		1.00			
Chloroethane	"			ND	"		0.500			
Chloroform	"			ND	"		1.00			
Chloromethane	"			ND	"		0.500			

\*Refer to end of report for text of notes and definitions.

Sequoia Analytical - Morgan Hill



# Sequoia Analytical

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Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308

LFR Levine-Fricke - Emeryville  
1900 Powell St, 12th Floor  
Emeryville, CA 94608

Project: -  
Project Number: 6895.00.014  
Project Manager: Taylor Bennett

Sampled: 7/15/99  
Received: 7/15/99  
Reported: 7/21/99

## Volatile Organic Compounds by EPA Method 8010B/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Blank (continued)</b>	<b>9070500-BLK2</b>									
Dibromochloromethane	7/16/99			ND	ug/l	0.500				
1,3-Dichlorobenzene	"			ND	"	0.500				
1,4-Dichlorobenzene	"			ND	"	0.500				
1,2-Dichlorobenzene	"			ND	"	0.500				
1,1-Dichloroethane	"			ND	"	0.500				
1,2-Dichloroethane	"			ND	"	0.500				
1,1-Dichloroethene	"			ND	"	0.500				
cis-1,2-Dichloroethene	"			ND	"	0.500				
trans-1,2-Dichloroethene	"			ND	"	0.500				
1,2-Dichloropropane	"			ND	"	0.500				
cis-1,3-Dichloropropene	"			ND	"	0.500				
trans-1,3-Dichloropropene	"			ND	"	5.00				
Methylene chloride	"			ND	"	0.500				
1,1,2,2-Tetrachloroethane	"			ND	"	0.500				
Tetrachloroethene	"			ND	"	0.500				
1,1,1-Trichloroethane	"			ND	"	0.500				
1,1,2-Trichloroethane	"			ND	"	1.00				
1,1,2-Trichlorotrifluoroethane	"			ND	"	0.500				
Trichloroethene	"			ND	"	0.500				
Trichlorofluoromethane	"			ND	"	1.00				
Vinyl chloride	"			ND	"	70.0-130	89.4			
Surrogate: 4-Bromofluorobenzene	"	10.0		8.94	"	70.0-130				
<b>LCS</b>	<b>9070500-BS1</b>									
Chlorobenzene	7/15/99	25.0		19.7	ug/l	70.0-130	78.8			
1,1-Dichloroethene	"	25.0		19.1	"	65.0-135	76.4			
Trichloroethene	"	25.0		20.8	"	70.0-130	83.2			
Surrogate: 4-Bromofluorobenzene	"	10.0		9.42	"	70.0-130	94.2			
<b>LCS</b>	<b>9070500-BS2</b>									
Chlorobenzene	7/16/99	25.0		18.5	ug/l	70.0-130	74.0			
1,1-Dichloroethene	"	25.0		17.2	"	65.0-135	68.8			
Trichloroethene	"	25.0		19.1	"	70.0-130	76.4			
Surrogate: 4-Bromofluorobenzene	"	10.0		10.3	"	70.0-130	103			
<b>Matrix Spike</b>	<b>9070500-MS1</b>		<b>M907554-02</b>							
Chlorobenzene	7/16/99	25.0	ND	19.3	ug/l	60.0-140	77.2			
1,1-Dichloroethene	"	25.0	ND	17.5	"	60.0-140	70.0			
Trichloroethene	"	25.0	ND	19.3	"	60.0-140	77.2			
Surrogate: 4-Bromofluorobenzene	"	10.0		10.7	"	70.0-130	107			

Sequoia Analytical - Morgan Hill

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## Volatile Organic Compounds by EPA Method 8010B/Quality Control Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Matrix Spike Dup</b>	<b>9070500-MSD1</b>	<b>M907554-02</b>								
Chlorobenzene	7/15/99	25.0	ND	20.4	ug/l	60.0-140	81.6	25.0	5.54	
1,1-Dichloroethene	"	25.0	ND	18.3	"	60.0-140	73.2	25.0	4.47	
Trichloroethene	"	25.0	ND	20.3	"	60.0-140	81.2	25.0	5.05	
Surrogate: 4-Bromofluorobenzene	"	10.0		12.1	"	70.0-130	121			



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	Project Number: 6895.00.014	Received: 7/15/99
	Project Manager: Taylor Bennett	Reported: 7/21/99

## Notes and Definitions

#	Note
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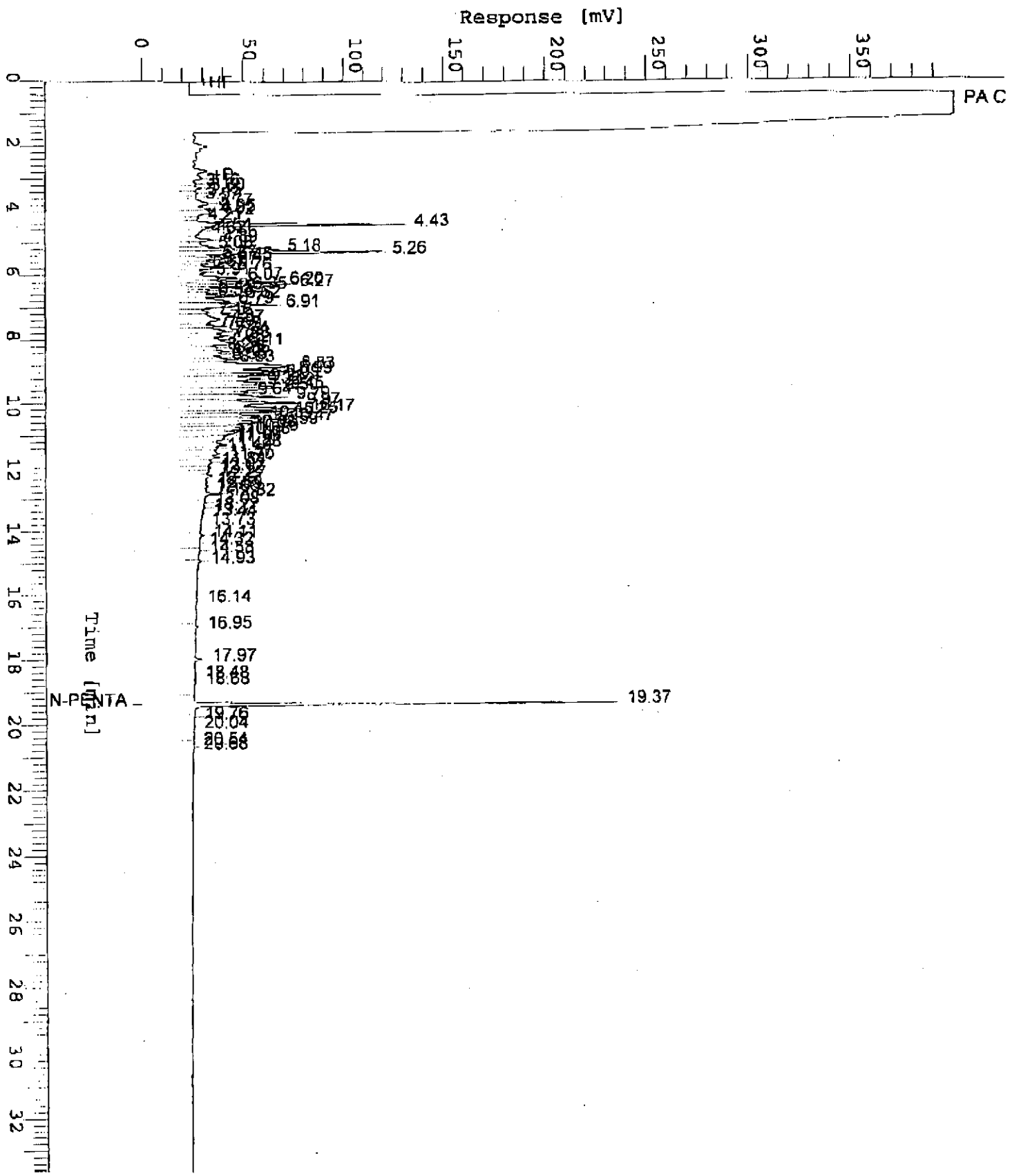
- 1 Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
  - 2 The surrogate recovery for this sample is outside of established control limits. Review of associated QC indicates the recovery for this surrogate does not represent an out-of-control condition.
  - 3 Chromatogram Pattern: [Unidentified Hydrocarbons C9-C13].
  - 4 The surrogate recovery for this sample is outside of established control limits.
  - 5 The RPD value for this QC sample is above the established control limit. Review of associated QC indicates the high RPD does not represent an out-of-control condition for the batch.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference

# Chromatogram

Sample Name : M907605-01 (500:1)  
 Filename : S:\GMP\_04\0718\716A002.raw  
 Method : TPH04A  
 Start Time : 0.00 min  
 Scale Factor: 0.0

End Time : 33.65 min  
 Plot Offset: 0 mV

Sample #: NO QC  
 Date : 7/16/99 17:31  
 Time of Injection: 7/16/99 16:57  
 Low Point : 0.00 mV  
 Plot Scale: 400.0 mV  
 High Point : 400.00 mV



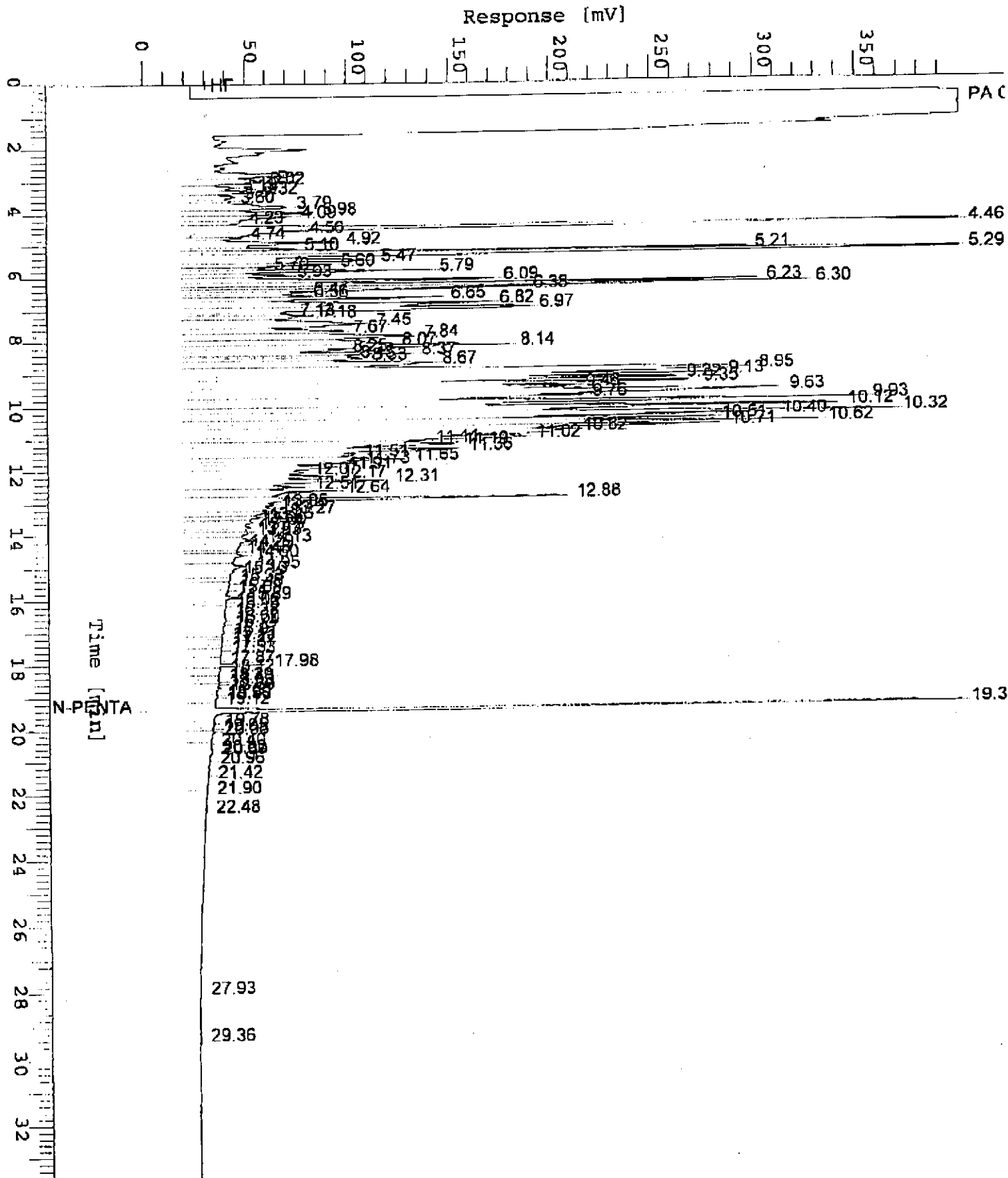
# Chromatogram

Sample Name : M907605-02 (500:1)  
 FileName : S:\GHP\_04\0718\716A001.raw  
 Method : TPH04A  
 Start Time : 0.00 min  
 Scale Factor : 0.0

End Time : 33.65 min  
 Plot Offset: 0 mV

Sample #: NO QC  
 Date : 7/16/99 16:49  
 Time of Injection: 7/16/99 16:16  
 Low Point : 0.00 mV  
 Plot Scale: 400.0 mV

Page 1 of 1  
 High Point : 400.00 mV



## CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: <b>6895.00.014</b>		Project Location: <b>Oakland, CA</b>			Date: <b>7/15/99</b>		Serial No: <b>5672</b>			
Project Name: <b>Former Gloratorium</b>			Field Logbook No.: _____		Sample Event Name: _____			Samplers: _____		
Sampler (Signature): <i>James R. Buhl</i>				ANALYSES				<b>M907605</b>		
SAMPLE INFORMATION (Print Clearly)										
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	VOL 8010 8015 TPH 8020 Standard Solvent	HOLD	RUSH	REMARKS	
TB-071599	7/15/99	7:45		3	Water	X	X		X	* TPH fingerprint must include standard solvent as a standard
GW-07	↓	2:45		5	↓	X	X	X		
GW-107	↓	2:50		5	↓	X	X	X		
RELINQUISHED BY: (Signature) <i>James R. Buhl</i>			DATE: <b>7/15/99</b>	TIME: <b>17:04</b>	RECEIVED BY: (Signature) <i>Pete Gomez</i>			DATE: <b>7-15-99</b>	TIME: <b>0704</b>	
RELINQUISHED BY: (Signature) <i>Pete Gomez</i>			DATE: _____	TIME: _____	RECEIVED BY: (Signature) <i>David Chen</i>			DATE: <b>7/15/99</b>	TIME: <b>19:52</b>	
RELINQUISHED BY: (Signature) _____			DATE: _____	TIME: _____	RECEIVED BY: (Signature) _____			DATE: <b>7/15/99</b>	TIME: _____	
METHOD OF SHIPMENT: _____			DATE: _____	TIME: _____	LAB COMMENTS: _____					
Sample Collector: <b>LEVINE-FRICKE-RECON</b> 1900 Powell Street, 12th Floor Emeryville, California 94608-1827 (510) 652-4500					Analytical Laboratory: <b>Sequoia</b>					

\*\* TOTAL PAGE. 16 \*\*

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

AUG 25 '99 23:17 FR LFR LEVINE FRICKE 510 652 4906 TO 3379335 P.16/16