CompuChem Environmental Corporation

I. SAMPLE DATA PACKAGE

OLM03.1 STATEMENT OF WORK

The sample data package shall include data for analyses of all samples in one Sample Delivery Group (SDG), including field samples, dilutions, reanalyses, blanks, matrix spikes, and matrix spike duplicates. The sample data package consists of the following:

A. SDG Narrative

B. Traffic Reports

C. Volatiles Data

D. Semivolatiles Data

E. Pesticide / Aroclor Data

964853

This package contains :

X	R A S data only
	S A S data only
	R A S + S A S data
	A D D I T I O N A L D A T A
	Other (explain below) :

LAB CODE : COMPU

CONTRACT # : 68D50064

SAS # (if applicable) :

CASE # : 29893

SDG # : FFE82

8.14.96

A. SDG Narrative

This document shall be clearly labeled "SDG Narrative" and shall contain: laboratory name; Case number; EPA sample numbers in the SDG, differentiating between initial analyses and reanalyses; SDG number; Contract number; and detailed documentation of any quality control, sample, shipment and/or analytical problems encountered in processing the samples reported in the data package.

The Contractor shall include any technical and administrative problems encountered, corrective actions taken, resolution, and an explanation for all flagged edits on quantitation lists.

Whenever data from sample reanalyses are submitted, the Contractor shall state in the SDG Narrative for each reanalysis, whether the reanalysis is billable, and if so, why.

The Contractor shall list the pH determined for each water sample submitted for volatiles analysis.

SDG NARRATIVE

CASE: 24893
SDG: FFE82
CONTRACT: 68D50004

SAMPLE IDENTIFICATIONS: FFE82, FFE84, FFE85, FFE86, FFE87, FFE88, FFE89, FFF25, FFF26, FFF27, FFF28

The eleven (11) soil samples listed above were received intact, properly refrigerated, with proper chain-of-custody (COC) documentation, on July 24, 1996. The samples were scheduled for the analyses of the volatile, semivolatile, and pesticide/PCB fractions as requested. The samples were prepared and analyzed following Contract Laboratory Program (CLP) Statement of Work (SOW), document OLM03.2, protocol.

VOLATILES

Analysis holding time requirements were met for all of these samples.

The common laboratory solvents methylene chloride and/or acetone were identified at concentrations above the Contract Required Quantitation Limit (CRQL) in all of these samples. The Tentatively Identified Compounds (TICs) found in FFE87 and FFE88 could be characterized as substituted naphthalenes, substituted cyclohexanes, and unknowns.

All of the surrogates met recovery criteria and all of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria. The method blanks contained concentrations of the common laboratory solvents methylene chloride and acetone which were within acceptance limits. No reportable TICs were found in the method blanks.

FFE82 was used as the original to prepare the duplicate matrix spikes. The associated duplicate matrix spikes met all advisory accuracy and precision criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions listed above. Release of the data contained in the hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Stephanie W. Winfield 8/12/96
Stephanie W. Winfield
Technical Reviewer
August 12, 1996

CompuChem Environmental Corporation
4600 Silicon Drive
Durham, N.C. 27703
919/474-7000

SDG NARRATIVE

CASE # 24893
SDG # FFE82
CONTRACT # 68D50004

SAMPLE IDENTIFICATIONS: FFE82, FFE84, FFE85, FFE86, FFE87, FFE88, FFE89, FFF25, FFF26, FFF27, FFF28

The eleven (11) soil samples listed above were scheduled for the requested analyses of the semivolatile fractions These samples were analyzed following the current EPA Contract for the Laboratory Program, Document number OLM03 2 The pH values of these soil samples ranged from 7 7 to 10 8, and the percent moistures ranged from 53 to 74 This portion of the SDG narrative deals with the semivolatile fractions only For the receiving information associated with these samples, please refer to the volatile SDG narrative.

Holding time requirements were met for the initial extraction of all of these samples Surrogate recovery criteria were not met in the analysis of the initial extract of FFE89 The sample was re-extracted outside of holding times The analysis of the second extract met all quality control criteria We have reported only the analysis of the second extract of FFE89 The data from the analysis of the initial extract may be found in the Complete SDG File (CSF)

The Target Compound List (TCL) analyte 4-methylphenol was identified above the Contract Required Quantitation Limit (CRQL) in FFE86 The Target Compound List (TCL) analytes fluoranthene and pyrene were identified above the Contract Required Quantitation Limit (CRQL) in FFE88 Tentatively Identified Compounds (TICs) were found in all of these samples The TICs found in these samples could be characterized as aldols, alkanes, amides, bicyclohexyl, carboxylic acids, substituted cyclohexenes, and unknowns

Manual quantitations were performed on one or more of the process files associated with this SDG The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG

In the continuing calibration standards associated with these samples, benzo(b)fluoranthene and benzo(k)fluoranthene were chromatographically resolved and were identified as separate peaks with different retention times However, in the samples containing these analytes, the isomers could not be chromatographically resolved This is indicated with an "X" flag on the Form Is

All of the surrogates met recovery criteria in the analyses of these samples All of the internal standards met response and retention time criteria in the analyses of these samples

The associated method blanks met all quality control criteria. Neither of the method blanks contained TCL analyte contamination TICs were found in both of these method blanks

FFE82 was used as the original to prepare the duplicate matrix spikes as requested With eight exceptions, the associated duplicate matrix spikes met all advisory accuracy and precision criteria. The recoveries of the spike compounds 1,4-dichlorobenzene, n-nitroso-di-n-propylamine, and 1,2,4-trichlorobenzene were flagged as outliers in both of the duplicate matrix spikes The recovery of the spike compounds acenaphthene and pyrene were also flagged as outliers in the matrix spike duplicate

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Michael Steven Schapira 8/12/96

Michael Steven Schapira
Technical Reviewer
August 12, 1996

Note· This report is paginated for reference and accountability in numerical sequence

SDG NARRATIVE

CASE: 24893
SDG: FFE82
CONTRACT: 68D50004

SAMPLE IDENTIFICATIONS: FFE82, FFE84, FFE85, FFE86, FFE87, FFE88, FFE89, FFF25, FFF26, FFF27, FFF28

This portion of the SDG narrative covers only the petsicide/PCB fractions of these samples. For receiving information pertaining to these samples, please refer to the section of the SDG narrative that covers the volatile fractions.

PESTICIDE/PCB

Extraction and analysis holding time requirements were met for both of these samples.

The pesticide Target Compound List (TCL) analyte endosulfan sulfate was confirmed by dual column analysis at a concentration above the Contract Required Quantitation Limit (CRQL) in FFE88. FFF28 contained a concentration of the PCB TCL analyte Aroclor 1254 above the CRQL.

Due to a scheduling error, no Aroclor 1254 standard was analyzed within 72 hours of the analysis of FFF28.

All of the surrogates met recovery criteria in the analyses of these samples with three exceptions. The recovery of tetrachloro-m-xylene (TCX) fell below the quality control criteria limit on the DB-608 column in the analysis of FFE84. The recovery of TCX fell below the quality control criteria limit on both columns in the analysis of FFF26.

The associated method blank met all quality control criteria. The method blank contained concentrations of the pesticide TCL analytes beta-BHC and heptachlor which were within acceptance limits. No PCB TCL analytes were detected in the method blank.

FFE82 was used as the original to prepare the duplicate matrix spikes. The associated duplicate matrix spikes met all advisory accuracy and precision criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions listed above. Release of the data contained in the hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Stephanie W. Winfield 8/12/96
Stephanie W. Winfield

Technical Reviewer
August 12, 1996

1FA
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFE82

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 814998

Sample wt/vol: 30.3 (g/mL) g Lab File ID: GH014998A60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 74 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/04/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 12

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	13.83	680	J
2.	UNKNOWN ALKANE	14.06	350	J
3.	UNKNOWN ALKANE	14.44	540	J
4.	UNKNOWN ALKANE	14.62	660	J
5.	UNKNOWN ALKANE	15.05	340	J
6.	UNKNOWN ALKANE	15.20	1000	J
7.	UNKNOWN ALKANE	15.57	760	J
8.	UNKNOWN ALKANE	18.93	560	J
9.	UNKNOWN ALKANE	19.97	300	J
10.	UNKNOWN ALKANE	21.07	370	J
11.	UNKNOWN ALKANE	22.55	360	J
12.	UNKNOWN ALKANE	24.68	430	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFE84

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815007

Sample wt/vol: 30.2 (g/mL) g Lab File ID: GH015007B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 60 decanted: (Y/N) N Date Extracted:07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/04/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	22.56	170	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFE86

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815009

Sample wt/vol: 30.3 (g/mL) g Lab File ID: GH015009B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 70 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	13.82	360	J
2.		UNKNOWN ALKANE	21.06	330	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFE87

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815010

Sample wt/vol: 30.2 (g/mL) g Lab File ID: GH015010B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 66 decanted: (Y/N) N Date Extracted:07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	8.28	5100	J
2.		UNKNOWN ALKANE	9.28	1200	J
3.		UNKNOWN ALKANE	9.39	1500	J
4.		UNKNOWN ALKANE	9.54	1300	J
5.		UNKNOWN ALKANE	9.56	920	J
6.		UNKNOWN ALKANE	9.72	780	J
7.		UNKNOWN ALKANE	9.79	1400	J
8.		UNKNOWN ALKANE	9.84	710	J
9.		UNKNOWN ALKANE	9.93	1800	J
10.		UNKNOWN ALKANE	10.16	3400	J
11.		UNKNOWN ALKANE	10.43	1000	J
12.		UNKNOWN ALKANE	10.50	720	J
13.		UNKNOWN ALKANE	11.14	3700	J
14.		UNKNOWN ALKANE	13.45	3800	J
15.		UNKNOWN ALKANE	13.90	14000	J
16.		UNKNOWN ALKANE	14.03	2800	J
17.		UNKNOWN ALKANE	14.25	4200	J
18.		UNKNOWN ALKANE	14.55	2800	J
19.		UNKNOWN ALKANE	14.67	8900	J
20.		UNKNOWN ALKANE	15.23	3400	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFE88

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815011

Sample wt/vol: 30.2 (g/mL) g Lab File ID: GH015011B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 73 decanted: (Y/N) N Date Extracted:07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	8.27	5300	J
2.	UNKNOWN ALKANE	9.07	1200	J
3.	UNKNOWN ALKANE	9.27	890	J
4.	UNKNOWN ALKANE	9.72	1100	J
5.	UNKNOWN ALKANE	9.78	1800	J
6.	UNKNOWN ALKANE	9.92	2400	J
7.	UNKNOWN ALKANE	10.15	4100	J
8.	UNKNOWN ALKANE	10.42	1400	J
9.	UNKNOWN ALKANE	10.76	1500	J
10.	UNKNOWN ALKANE	10.93	3200	J
11.	UNKNOWN ALKANE	11.13	5400	J
12.	UNKNOWN ALKANE	13.43	2800	J
13.	UNKNOWN ALKANE	13.88	4000	J
14.	UNKNOWN ALKANE	14.07	1200	J
15.	UNKNOWN ALKANE	14.22	1900	J
16.	UNKNOWN ALKANE	14.53	1700	J
17.	UNKNOWN ALKANE	14.64	4200	J
18.	UNKNOWN ALKANE	14.83	2000	J
19.	UNKNOWN ALKANE	15.21	1800	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFE89

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815012

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GR015012A60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 70 decanted: (Y/N) N Date Extracted: 08/06/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/08/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	10.08	700	J
2.	UNKNOWN ALKANE	10.68	230	J
3.	UNKNOWN ALKANE	11.06	430	J
4.	UNKNOWN ALKANE	13.17	380	J
5.	UNKNOWN ALKANE	13.35	420	J
6.	UNKNOWN ALKANE	13.78	1300	J
7.	UNKNOWN ALKANE	14.55	1000	J
8.	UNKNOWN ALKANE	15.13	1000	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFF25

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815013

Sample wt/vol: 30.2 (g/mL) g Lab File ID: GH015013B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 53 decanted: (Y/N) N Date Extracted:07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 10.8

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	13.41	230	J
2.		UNKNOWN ALKANE	13.84	520	J
3.		UNKNOWN ALKANE	14.62	250	J
4.		UNKNOWN ALKANE	15.21	190	J
5.		UNKNOWN ALKANE	17.81	190	J
6.		UNKNOWN ALKANE	19.95	400	J
7.		UNKNOWN ALKANE	20.46	350	J
8.		UNKNOWN ALKANE	21.07	900	J
9.		UNKNOWN ALKANE	22.55	370	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFF26

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815014

Sample wt/vol: 30.2 (g/mL) g Lab File ID: GH015014B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 70 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	13.85	420	J
2.	UNKNOWN ALKANE	18.93	410	J
3.	UNKNOWN ALKANE	21.06	340	J
4.	UNKNOWN ALKANE	22.55	230	J
5.	UNKNOWN ALKANE	24.65	440	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFF27

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815015

Sample wt/vol: 30.2 (g/mL) g Lab File ID: GH015015B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 71 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	13.83	270	J
2.		UNKNOWN ALKANE	20.46	250	J
3.		UNKNOWN ALKANE	21.06	270	J
4.		UNKNOWN ALKANE	22.55	380	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
ALKANE SERIES REPORT

EPA SAMPLE NO.

FFF28

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815016

Sample wt/vol: 30.3 (g/mL) g Lab File ID: GH015016B60

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 63 decanted: (Y/N) N Date Extracted:07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	13.83	270	J
2.	UNKNOWN ALKANE	18.93	240	J
3.	UNKNOWN ALKANE	19.95	180	J
4.	UNKNOWN ALKANE	21.06	240	J
5.	UNKNOWN ALKANE	22.29	220	J
6.	UNKNOWN ALKANE	22.55	270	J
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GC and GC/MS Column and Trap Specifications Table

COLUMNS

Brand Name	Coating Material	ID (mm)	Film Thickness (µm)	Length (m)
GC Laboratory				
Restek	RTX-1701	0.53	0.5	30
J & W	DB-608	0.53	0.83	30
GC/MS Volatiles Laboratory				
J & W	DB-624	0.53	3.0	30/75
GC/MS Semivolatiles Laboratory				
J & W	DB-5	0.32	1.0	30

TRAP

GC/MS Volatiles Laboratory	
	• 15 cm of 2,6-diphenylene oxide polymer (Tenax) • 1 cm of methyl silicone packing (OV-1 coating) • 8 cm of silica gel • 0.5 cm of glass wool at each end

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These adjustments are performed by the data reviewer, GC/MS operator, or GC chemist. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration of each compound to demonstrate the accuracy that process. Adjustments are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count as possible for the peak.

H - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count as possible for the peak.

L - Denotes that the data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternative peak. The software still performs the integration

ML - Denotes that an alternate library search has been selected and a manual integration has also been performed This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

With the introduction of the current EPA CLP SOW (Document Number OLM03.0, plus revisions) additional explanations for manual editing/integration are required. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

M1 - The compound was not found by the automatic integration routine.

M2 - The compound was incorrectly integrated by the automatic integration routine.

M3 - The co-eluting compounds were incorrectly integrated by the automatic integration routine

These codes will appear in GC/MS and GC data packages.

Robert E. Meierer

Robert E Meierer
Vice President & General Manager

Revision 2 (12/29/95)

CompuChem Environmental Corporation

DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. This flag is used

1. When estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide/Aroclor or other GC or HPLC identification criteria, and the result is less than the CRQL but greater than zero For example, if the sample quantitation limit is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC such as chlorinated hydrocarbon, the N flag is not used.

P : This flag is used for a pesticide/Aroclor target analyte, and other GC or HPLC analytes, when there is greater than 25% difference for detected concentrations between the two GC or HPLC columns. The lower of the two values is reported on Form I and flagged with a P.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X qualifier.)

cont. DATA REPORTING QUALIFIERS

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i e. compounds reported with the CRQL and the U flag NOTE 2 Separate Form Is are used for reporting the orginal analysis (Client Sample No XXXXX) and the more diluted sample analysis (Client Sample No XXXXXDL) i e. the results from both analyses <u>are not combined</u> on a single Form I.

A : This flag indicates that a TIC is a suspected aldol-condensation product.

X : Other specific flags may be required to properly define the results. If used, the flags will be fully described. An "X" qualifier is used first. If more than one flag is required, Y and Z are used as needed. If more than five qualifiers are required for a sample result, the X flag is used to represent a combination of several flags. For example, the X flag might combine the A, B and D flags for some samples. The laboratory-defined flags are limited to X, Y and Z

COMPUCHEM
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CORPORATION

Notification Regarding Tentatively Identified Compound Policy

The EPA CLP Organic SOW (Document Number OLM03.0, with revisions) requires, for tentatively identified compound (TIC) assessment, that certain items should not be reported. These include, for volatile organics, carbon dioxide and semivolatile Target Compound List (TCL) compounds and, for semivolatile TCL compounds.

In order to assist the data review/validation process by our clients, if we detect carbon dioxide or semivolatile TCL compounds at or above 10% of the closest internal standard we will report them on Form I VOA-TIC but not count them as part of the thirty (30) TICs required. Similarly, if we detect volatile TCL compounds at or above 10% of the closest internal standard during the TIC assessment of the semivolatile analysis, we will report them on the Form I SV-TIC but not count them as part of the thirty (30) TICs required.

We feel this approach will aid the data review/validation process by our clients, since we will be accounting for all peaks greater than 10% of the closest internal standards that will be present on the reconstructed ion chromatogram (RIC). If we did not account for all peaks on the RIC, the data reviewer/validator could justifiably question why a peak, greater than 10% of the closest internal standard, had not been assessed Approval for this practice has been given by the EPA

Robert E. Meierer

Robert E Meierer
Vice President & General Manager

Revision 1 (12/29/95)

B. Traffic Reports

The Contractor shall include a copy of the Traffic Reports (TRs) for all of the samples in the SDG. The TRs shall be arranged in increasing EPA sample number order, considering both letters and numbers.

In any instance where samples from more that one multi-sample TR are in the same data package, the Contractor shall submit a copy of the SDG cover sheet with copies of the TRs.

COMPUCHEM
ENVIRONMENTAL
CORPORATION

3306 Chapel Hill/Nelson Highway P O Box 14998
Research Triangle Park, NC 27709-4998
(919) 406-1600

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name : CompuChem Environmental Corporation **Contract No. :** 68 - D - 50004

Lab Code : COMPU **Case No. :** 24893 **SAS No. :** N/A -

Full Sample Analysis Price in Contract : $ 547.00

SDG No./First Sample in SDG : FFE82 **Sample Receipt Date :** 7/24/96
(Lowest EPA Sample Number in first shipment of samples received under SDG) (MM/DD/YY)

Last Sample in SDG : FFF28 **Sample Receipt Date :** 7/24/96
(Highest EPA Sample Number in last shipment of samples received under SDG) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumberic order) :

1	FFE82	11	FFF28 Last Sample in SDG M.S 7/24/96
2	84	12	
3	85	13	
4	86	14	
5	87	15	
6	88	16	
7	89	17	
8	FFF25	18	
9	26	19	
10	27	20	

NOTE : There is a maximum of 20 field samples in one SDG.

Attach Traffic Report(s) to this form in alphanumeric order.
(i.e., the order listed on this form)

Melissa Sh
Sample Control Specialist

7/24/96
Date

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 24893

24

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

2 Region No: 6
Sampling Co.: WESTON
4. Date Shipped: 7/23/96
Carrier: FED EX
6. Date Received -- Received by: FFE82 7/24/96 M. Sloan
Sampler (Name): TROY HILE
Airbill Number: 1325933722
Laboratory Contract Number: 68D50004
Unit Price: 547.00
Sampler Signature: Troy Hile
5. Ship To: COMPUCHEM, 4600 SILICON DRIVE, RESEARCH TRIANGLE PARK, NC 27709
ATTN. RICHARD BLOOM (919) 406-24
7. Transfer to:
Date Received
Received by
Contract Number
Price

3. Purpose*
Lead: [X] SF, [ ] PRP, [ ] ST, [ ] FED
Early Action: [ ] CLEM, [ ] PA, [ ] REM, [ ] RI, [ ] SI, [X] ESI
Long-Term Action: [ ] FS, [ ] RD, [ ] RA, [ ] O&M, [ ] NPLD

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other	B Conc.: Low Med High	C Sample Type: Comp / Grab	D Preservative (from Box 2) Other	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq	Water-Immis Liq
~~FFE~~	~~5~~	~~L~~	~~G~~	~~5~~	~~X~~	~~X~~	~~X~~				~~7/23/96~~		~~TH~~			
FFE79	5	L	G	5	X	X	X		6-012825-27	D05-51-1	7/23/96 1030	MFGY39	TH			
FFE80	5	L	G	5	X	X	X		6-012827-31	D05-52-1	7/23/96 1030	MFGY40	TH	Final	Sample	
FFE82	5	L	G	5	X	X	X		6-012841-43	D06-51-1	7/23/96 1115	MFGY42	TH			
FFE84	5	L	G	5	X	X	X		6-012849-51	D08-51-1	7/23/96 1240	MFGY44	TH			
FFE85	5	L	G	5	X	X	X		6-012853-55	D09-51-1	7/23/96 1300	MFGY45	TH			
~~FFE86~~	~~5~~	~~L~~	~~G~~	~~5~~	~~X~~	~~X~~	~~X~~		~~6-012857-59~~	~~D10-51-1~~	~~7/23/96 1015~~	~~MFGY46~~	~~TH~~			
FFE87	5	L	G	5	X	X	X		6-012861-63	D11-51-1	7/23/96 1340	MFGY47	TH			
~~FFE88~~	~~5~~	~~L~~	~~G~~	~~5~~	~~X~~	~~X~~	~~X~~		~~6-012866-68~~	~~D12-51-1~~	~~7/23/96 1430~~	~~MFGY48~~	~~TH~~			
FFE89	5	L	G	5	X	X	X		6-012869-71	D13-51-1	7/23/96 1450	MFGY49	TH			

(TH) (TH) (TH)

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: FFE82
Additional Sampler Signatures(s): [illegible]
Chain of Custody Seal Number(s): 814996, 997, 998, 815007, 008, 010, 011, 012

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Troy Hile	7/23/96 1900	FED EX			
Relinquished by: (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
		Melissa Sloan	7/24/96 10:30	4°C	

A21-012 (Rev. 1/3) 9/04/96

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

SDG FFE91, FFE82.

365776

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 27893

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

2. Region No.: 6
Sampling Co.: Weston
Sampler (Name): TROY HILE
Sampler Signature: Troy Hile

3. Purpose*
Lead: [X] SF [ ] PRP [ ] ST [ ] FED
Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [ ] SI [X] ESI
Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

4. Date Shipped: 7/23/96
Carrier: FedEx
Airbill Number: 1325933722

5. Ship To
Compuchem
4600 Silicon Drive
Research Triangle Park, NC 27709
(919) 406-2401
ATTN. Richard Bloom

6. Date Received -- Received by: 7/24/96 M. Stev FFE82
Laboratory Contract Number: 68D50004
Unit Price: 547.00
7. Transfer to:
Date Received
Received by
Contract Number
Price

CLP Sample Numbers (from labels)	A Matrix (from Box 1) / Other	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) / Other	E RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq	Water-Immis. Liq
FFE86	5	L	G	5	X	X	X		6-012857-59	D10-51-1	7/23/96 1315	MFGY46	TH			
FFF25	5	L	G	5	X	X	X		6-013055-57	D32-51-1	7/23/96 0830	MFGW05	TH			
FFF26	5	L	G	5	X	X	X		6-013059-61	D33-51-1	7/23/96 0900	MFGT95	TH			
FFF27	5	L	G	5	X	X	X		6-013063-65	D07-51	7/23/96 1130	MFGW09	TH			
FFF28	5	L	G	5	X	X	X		6-013067-69	D34-51-1	7/23/96 1540	MFGW09	TH			
FFE88	5	L	G	5	X	X	X		6-012865-67	D12-51-1	7/23/96 1430	MFGY48	TH			

Shipment for Case Complete? (Y/N): Y
Page 2 of 2
Sample(s) to be Used for Laboratory QC: —
Additional Sampler Signatures: [illegible]
Chain of Custody Seal Number(s):

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by (Signature)	Date / Time	Received by: (Signature)
Troy Hile	7/23/96 1900	FEDEX			815009
Relinquished by: (Signature)	Date / Time	Received by (Signature)	Relinquished by (Signature)	Date / Time	Received by: (Signature)
					013
Relinquished by: (Signature)	Date / Time	Received for Laboratory by (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		Melissa Stevens	7/24/96 10:30	4°C	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

SDG FFE82.

365772

25

CompuChem Environmental Corporation

C. VOLATILE DATA

1. Q C Summary

2. Sample Data

3. Standards Data

4. Raw Q C Data

LAB CODE : COMPU

CONTRACT # : 68D50004

SAS# (if applicable) :

CASE # : 24893

SDG # : FFE82

I. Q C Summary

a. Form II VOA
System Monitoring Compound Summary

b. Form III VOA
Matrix Spike / Matrix Spike Duplicate Summary

c. Form IV VOA
Method Blank Summary

d. Form V VOA
GC/MS Instrument Performance Check

e. Form VIII VOA
Internal Standard Area and Retention Time Summary

a. Form II VOA

System Monitoring Compound Summary

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKT1	107	90	88		0
02	FFE82	107	88	88		0
03	FFE82MS	102	86	84		0
04	FFE84	95	86	86		0
05	FFE85	90	86	89		0
06	FFE86	92	85	82		0
07	FFE87	91	86	81		0
08	FFE88	85	84	88		0
09	VBLKT2	95	91	85		0
10	FFF25	106	94	89		0
11	FFF26	107	91	85		0
12	FFF27	102	88	82		0
13	FFF28	102	87	80		0
14	VBLKK1	99	101	113		0
15	FFE82MSD	98	102	112		0
16	VBLKS1	97	97	108		0
17	FFE89	95	90	101		0
18	VBLKS2	108	110	114		0
19	VHBLKV1	91	86	93		0
20						
21						
22						
23						
24						
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26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

b. Form III VOA

Matrix Spike / Matrix Spike Duplicate Summary

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix Spike - EPA Sample No.: FFE82 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	192.3	0.000	195.4	102	61-145
Trichloroethene	192.3	0.000	202.8	105	71-120
Benzene	192.3	0.000	202.6	105	76-127
Toluene	192.3	0.000	186.3	97	76-125
Chlorobenzene	192.3	0.000	196.6	102	75-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	178.6	161.5	90	12	22	59-172
Trichloroethene	178.6	181.3	102	3	24	62-137
Benzene	178.6	218.5	122	15	21	66-142
Toluene	178.6	186.6	104	7	21	59-139
Chlorobenzene	178.6	185.6	104	2	21	60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

c. Form IV VOA

Method Blank Summary

If more than a single form is necessary, forms must be arranged in chronological order by date of analysis of the blank.

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKT1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: GH015393A52 Lab Sample ID: 815393

Date Analyzed: 07/27/96 Time Analyzed: 1022

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50052

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFE82	814998	GH014998A52	1105
02	FFE82MS	814999	GH014999A52	1140
03	FFE84	815007	GH015007A52	1245
04	FFE85	815008	GH015008A52	1315
05	FFE86	815009	GH015009A52	1347
06	FFE87	815010	GH015010A52	1417
07	FFE88	815011	GH015011A52	1453
08				
09				
10				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: GH015394B52 Lab Sample ID: 815394

Date Analyzed: 07/28/96 Time Analyzed: 2149

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50052

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFF25	815013	GH015013B52	2321
02	FFF26	815014	GH015014B52	2359
03	FFF27	815015	GH015015B52	0033
04	FFF28	815016	GH015016B52	0119
05				
06				
07				
08				
09				
10				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKK1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: GH017050B56 Lab Sample ID: 817050

Date Analyzed: 07/31/96 Time Analyzed: 1915

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50056

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFE82MSD	815000	G2R15000B56	2105
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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30				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: GH017754C56 Lab Sample ID: 817754

Date Analyzed: 08/03/96 Time Analyzed: 0127

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50056

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFE89	815012	G4R15012C56	0725
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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30				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: GH017755A56 Lab Sample ID: 817755

Date Analyzed: 08/03/96 Time Analyzed: 1158

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50056

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VHBLKV1	815001	GH015001B56	1727
02				
03				
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COMMENTS:

d. Form V VOA

GC/MS Instrument Performance Check

BFB in chronological order by instrument.

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BG960726A52 BFB Injection Date: 07/26/96

Instrument ID: F50052 BFB Injection Time: 0817

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.7
75	30.0 - 66.0% of mass 95	49.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 120.0% of mass 95	87.2
175	4.0 - 9.0% of mass 174	6.7 (7.7)1
176	93.0 - 101.0% of mass 174	84.0 (96.3)1
177	5.0 - 9.0% of mass 176	6.4 (7.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050KK	VSTD050KK	GT960726A52	07/26/96	0954
02	VSTD010KL	VSTD010KL	GU960726A52	07/26/96	1047
03	VSTD200KM	VSTD200KM	GV960726A52	07/26/96	1129
04	VSTD100KN	VSTD100KN	GW960726A52	07/26/96	1221
05	VSTD020KO	VSTD020KO	GX960726A52	07/26/96	1305
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BG960727C52 BFB Injection Date: 07/27/96

Instrument ID: F50052 BFB Injection Time: 0347

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.7
75	30.0 - 66.0% of mass 95	51.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5 (0.4)1
174	50.0 - 120.0% of mass 95	102.3
175	4.0 - 9.0% of mass 174	7.4 (7.2)1
176	93.0 - 101.0% of mass 174	98.6 (96.4)1
177	5.0 - 9.0% of mass 176	6.4 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050KS	VSTD050KS	GU960727C52	07/27/96	0409
02	VBLKT1	815393	GH015393A52	07/27/96	1022
03	FFE82	814998	GH014998A52	07/27/96	1105
04	FFE82MS	814999	GH014999A52	07/27/96	1140
05	FFE84	815007	GH015007A52	07/27/96	1245
06	FFE85	815008	GH015008A52	07/27/96	1315
07	FFE86	815009	GH015009A52	07/27/96	1347
08	FFE87	815010	GH015010A52	07/27/96	1417
09	FFE88	815011	GH015011A52	07/27/96	1453
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BG960728B52 BFB Injection Date: 07/28/96

Instrument ID: F50052 BFB Injection Time: 2024

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.3	
75	30.0 - 66.0% of mass 95	49.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	7.3	
173	Less than 2.0% of mass 174	0.2	(0.2)1
174	50.0 - 120.0% of mass 95	104.7	
175	4.0 - 9.0% of mass 174	7.8	(7.4)1
176	93.0 - 101.0% of mass 174	104.7	(100.0)1
177	5.0 - 9.0% of mass 176	7.5	(7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050LG	VSTD050LG	GU960728B52	07/28/96	2037
02	VBLKT2	815394	GH015394B52	07/28/96	2149
03	FFF25	815013	GH015013B52	07/28/96	2321
04	FFF26	815014	GH015014B52	07/28/96	2359
05	FFF27	815015	GH015015B52	07/29/96	0033
06	FFF28	815016	GH015016B52	07/29/96	0119
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BF960723A56 BFB Injection Date: 07/23/96

Instrument ID: F50056 BFB Injection Time: 0748

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.1
75	30.0 - 66.0% of mass 95	38.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	61.1
175	4.0 - 9.0% of mass 174	4.3 (7.0)1
176	93.0 - 101.0% of mass 174	58.8 (96.2)1
177	5.0 - 9.0% of mass 176	3.9 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050JL	VSTD050JL	GT960723A56	07/23/96	0847
02	VSTD200JO	VSTD200JO	GV960723A56	07/23/96	1036
03	VSTD100JP	VSTD100JP	GW960723A56	07/23/96	1123
04	VSTD020JQ	VSTD020JQ	GX960723A56	07/23/96	1200
05	VSTD010JM	VSTD010JM	GY960723A56	07/23/96	1237
06					
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BF960731B56 BFB Injection Date: 07/31/96

Instrument ID: F50056 BFB Injection Time: 1812

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	15.7
75	30.0 - 66.0% of mass 95	38.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	67.6
175	4.0 - 9.0% of mass 174	4.9 (7.2)1
176	93.0 - 101.0% of mass 174	64.8 (95.8)1
177	5.0 - 9.0% of mass 176	4.2 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050ML	VSTD050ML	GS960731B56	07/31/96	1827
02	VBLKK1	817050	GH017050B56	07/31/96	1915
03	FFE82MSD	815000	G2R15000B56	07/31/96	2105
04					
05					
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BF960803C56 BFB Injection Date: 08/03/96

Instrument ID: F50056 BFB Injection Time: 0020

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	14.5
75	30.0 - 66.0% of mass 95	36.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	68.0
175	4.0 - 9.0% of mass 174	4.9 (7.3)1
176	93.0 - 101.0% of mass 174	65.2 (95.9)1
177	5.0 - 9.0% of mass 176	4.5 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050MW	VSTD050MW	GS960803C56	08/03/96	0036
02	VBLKS1	817754	GH017754C56	08/03/96	0127
03	FFE89	815012	G4R15012C56	08/03/96	0725
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID: BG960803A56 BFB Injection Date: 08/03/96

Instrument ID: F50056 BFB Injection Time: 1054

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	14.3
75	30.0 - 66.0% of mass 95	35.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	64.7
175	4.0 - 9.0% of mass 174	4.6 (7.0)1
176	93.0 - 101.0% of mass 174	60.5 (93.5)1
177	5.0 - 9.0% of mass 176	4.0 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050MX	VSTD050MX	GU960803A56	08/03/96	1108
02	VBLKS2	817755	GH017755A56	08/03/96	1158
03	VHBLKV1	815001	GH015001B56	08/03/96	1727
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e. Form VIII VOA

Internal Standard Area and Retention Time Summary

In chronological order by instrument.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID (Standard): GU960727C52 Date Analyzed: 07/27/96

Instrument ID: F50052 Time Analyzed: 0409

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	20826	7.28	69926	8.92	43885	13.51
	UPPER LIMIT	41652	7.78	139852	9.42	87770	14.01
	LOWER LIMIT	10413	6.78	34963	8.42	21942	13.01
	EPA SAMPLE NO.						
01	VBLKT1	17211	7.35	62677	9.00	40191	13.55
02	FFE82	16281	7.31	59850	8.95	38266	13.54
03	FFE82MS	15744	7.34	57362	8.98	37033	13.57
04	FFE84	18101	7.34	62398	8.97	44904	13.55
05	FFE85	17039	7.31	61580	8.94	39075	13.54
06	FFE86	16823	7.32	64693	8.95	42553	13.55
07	FFE87	16045	7.32	57597	8.94	36836	13.54
08	FFE88	19343	7.34	70903	8.98	44305	13.58
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID (Standard): GU960728B52 Date Analyzed: 07/28/96

Instrument ID: F50052 Time Analyzed: 2037

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	26102	7.31	91051	8.94	54104	13.51
	UPPER LIMIT	52204	7.81	182102	9.44	108208	14.01
	LOWER LIMIT	13051	6.81	45526	8.44	27052	13.01
	EPA SAMPLE NO.						
01	VBLKT2	27364	7.28	88241	8.92	58422	13.45
02	FFF25	22153	7.32	74437	8.97	48133	13.52
03	FFF26	22769	7.37	73975	9.00	48221	13.54
04	FFF27	20286	7.32	69575	8.97	44863	13.51
05	FFF28	19337	7.32	66137	8.97	41947	13.55
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22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID (Standard): GS960731B56 Date Analyzed: 07/31/96

Instrument ID: F50056 Time Analyzed: 1827

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	46515	14.51	215041	16.31	171360	20.63
	UPPER LIMIT	93030	15.01	430082	16.81	342720	21.13
	LOWER LIMIT	23258	14.01	107520	15.81	85680	20.13
	EPA SAMPLE NO.						
01	VBLKK1	61523	14.45	262814	16.27	227251	20.60
02	FFE82MSD	52900	14.28	224547	16.09	187071	20.49
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID (Standard): GS960803C56 Date Analyzed: 08/03/96

Instrument ID: F50056 Time Analyzed: 0036

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	49126	14.56	217856	16.37	174908	20.68
	UPPER LIMIT	98252	15.06	435712	16.87	349816	21.18
	LOWER LIMIT	24563	14.06	108928	15.87	87454	20.18
	EPA SAMPLE NO.						
01	VBLKS1	68040	14.37	277204	16.19	241904	20.55
02	FFE89	61465	14.39	263379	16.20	220350	20.56
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Lab File ID (Standard): GU960803A56 Date Analyzed: 08/03/96

Instrument ID: F50056 Time Analyzed: 1108

GC Column:DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	50959	14.51	216595	16.32	176153	20.64
	UPPER LIMIT	101918	15.01	433190	16.82	352306	21.14
	LOWER LIMIT	25480	14.01	108298	15.82	88076	20.14
	EPA SAMPLE NO.						
01	VBLKS2	59406	14.45	238265	16.27	211263	20.60
02	VHBLKV1	66084	14.39	285297	16.20	234771	20.56
03							
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19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I VOA, including Form I VOA-TIC), followed by the raw data for volatile samples. These sample packets should then be placed in increasing EPA number order, considering both letters and numbers in ordering samples.

. TCL Results - Organic Analysis Data Sheet (Form I VOA).
Tabulated results (identification and quantitation) of the specified target compounds.

. Tentatively Identified Compounds (Form I VOA-TIC).
This form must be included even if no compounds are found.

. Reconstructed total ion chromatogram (RIC) for each sample, sample extract, standard, blank and spike sample.

. For each sample, by each compound identified :

Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (TCL) that are identified in the sample and corresponding background-subtracted TCL standard mass spectra. Compound names must be clearly marked on all spectra.

Copies of mass spectra of nonsurrogate organic compounds (tentatively identified compounds) with associated best-match spectra (three best matches).

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE82

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 814998

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH014998A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 74 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	38	U
74-83-9	Bromomethane	38	U
75-01-4	Vinyl Chloride	38	U
75-00-3	Chloroethane	38	U
75-09-2	Methylene Chloride	85	B
67-64-1	Acetone	200	
75-15-0	Carbon Disulfide	38	U
75-35-4	1,1-Dichloroethene	38	U
75-34-3	1,1-Dichloroethane	38	U
540-59-0	1,2-Dichloroethene (total)	38	U
67-66-3	Chloroform	38	U
107-06-2	1,2-Dichloroethane	38	U
78-93-3	2-Butanone	38	U
71-55-6	1,1,1-Trichloroethane	38	U
56-23-5	Carbon Tetrachloride	38	U
75-27-4	Bromodichloromethane	38	U
78-87-5	1,2-Dichloropropane	38	U
10061-01-5	cis-1,3-Dichloropropene	38	U
79-01-6	Trichloroethene	38	U
124-48-1	Dibromochloromethane	38	U
79-00-5	1,1,2-Trichloroethane	38	U
71-43-2	Benzene	38	U
10061-02-6	trans-1,3-Dichloropropene	38	U
75-25-2	Bromoform	38	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	38	U
79-34-5	1,1,2,2-Tetrachloroethane	38	U
108-88-3	Toluene	38	U
108-90-7	Chlorobenzene	38	U
100-41-4	Ethylbenzene	38	U
100-42-5	Styrene	38	U
1330-20-7	Xylene (Total)	38	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE82

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 814998

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH014998A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 74 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.95	208	JB
2.				
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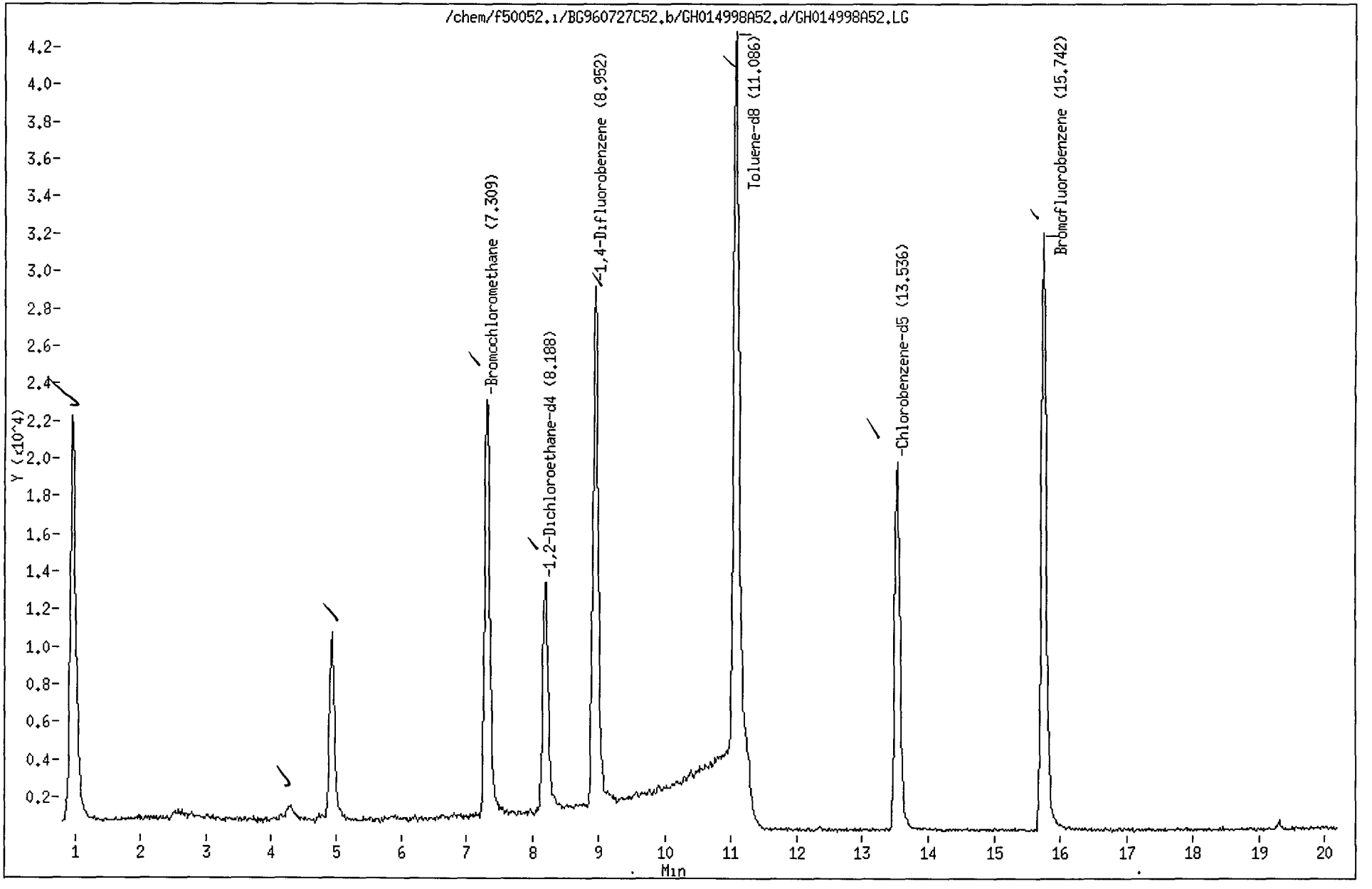
Data File: /chem/f50052.1/BG960727C52.b/GH014998A52.d
Date : 27-JUL-1996 11:05
Client ID: FFE82
Sample Info:

Instrument: f50052.1

Operator: 2141
Column phase: DB624
Column diameter: 0.53



Data File: /chem/f50052.i/BG960727C52.b/GH014998A52.d
Report Date: 30-Jul-1996 13:11

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH014998A52.d
Lab Smp Id: 814998 Client Smp ID: FFE82
Inj Date : 27-JUL-1996 11:05
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	74.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 309	7 280	(1 000)	16281	250 0	
* 2 1,4-Difluorobenzene	114 00	8 952	8 923	(1 000)	59850	250 0	
* 3 Chlorobenzene-d5	117 00	13 536	13 508	(1 000)	38266	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 188	8 174	(1 120)	25170	220 5	169 6
$ 5 Toluene-d8	98 00	11 071	11 057	(0 818)	73335	268 4	206 4
$ 6 Bromofluorobenzene	95 00	15 757	15 728	(1 164)	31719	220 2	169 4
7 Chloromethane	50 00		1 312		Compound Not Detected		
8 Vinyl Chloride	62 00		1 571		Compound Not Detected		
9 Bromomethane	94 00		2 278		Compound Not Detected		
10 Chloroethane	64 00		2 451		Compound Not Detected.		
11 1,1-Dichloroethene	96 00		3.979		Compound Not Detected		
12 Carbon Disulfide	76 00		4 109		Compound Not Detected		
13 Acetone	43 00	4 282	4 267	(0 586)	3040	260 5	200 4
14 Methylene Chloride	84 00	4 930	4 873	(0 675)	12081	110 2	84 74
15 trans-1,2-Dichloroethene	96 00		5 305		Compound Not Detected		
16 1,1-Dichloroethane	63 00		6 011		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		6 934		Compound Not Detected		
18 2-Butanone	43 00		7 121		Compound Not Detected		
19 Chloroform	83 00		7 511		Compound Not Detected		
20 1,1,1-Trichloroethane	97 00		7 612		Compound Not Detected.		
21 Carbon Tetrachloride	117 00		7 842		Compound Not Detected		
22 Benzene	78 00		8 174		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH014998A52.d
Report Date: 30-Jul-1996 13:11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
	24 Trichloroethene	130 00		9 212		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 527		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 825		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 762		Compound Not Detected		
	39 Styrene	104 00		14 819		Compound Not Detected		
	40 Bromoform	173 00		15 065		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH014998A52.d
Report Date: 30-Jul-1996 13:28

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH014998A52.d
Lab Smp Id: 814998 Client Smp ID: FFE82
Inj Date : 27-JUL-1996 11:05
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.309	123214	250.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)					CAS #		
0 951	133186	270 2	207 9	0		0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/f50052.1/BG960727C52.b/GH014998A52.d

Date : 27-JUL-1996 11:05

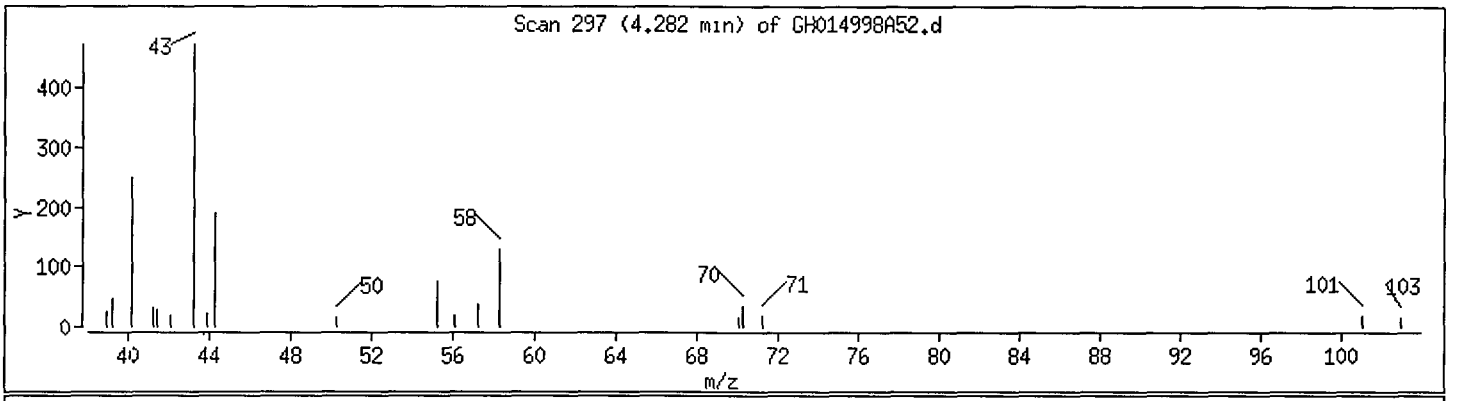
Client ID: FFE82 Instrument: f50052.1

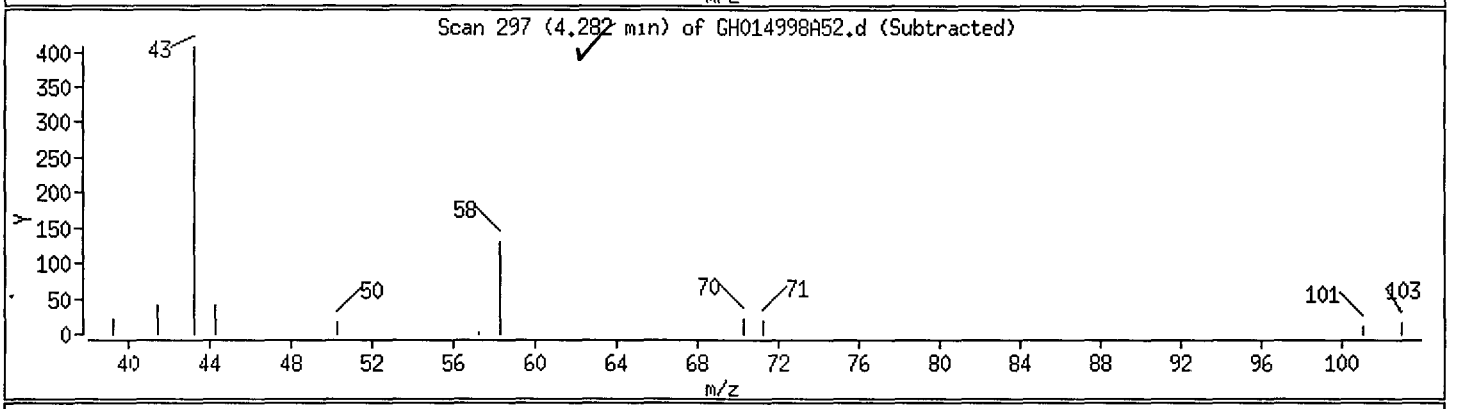
Sample Info:

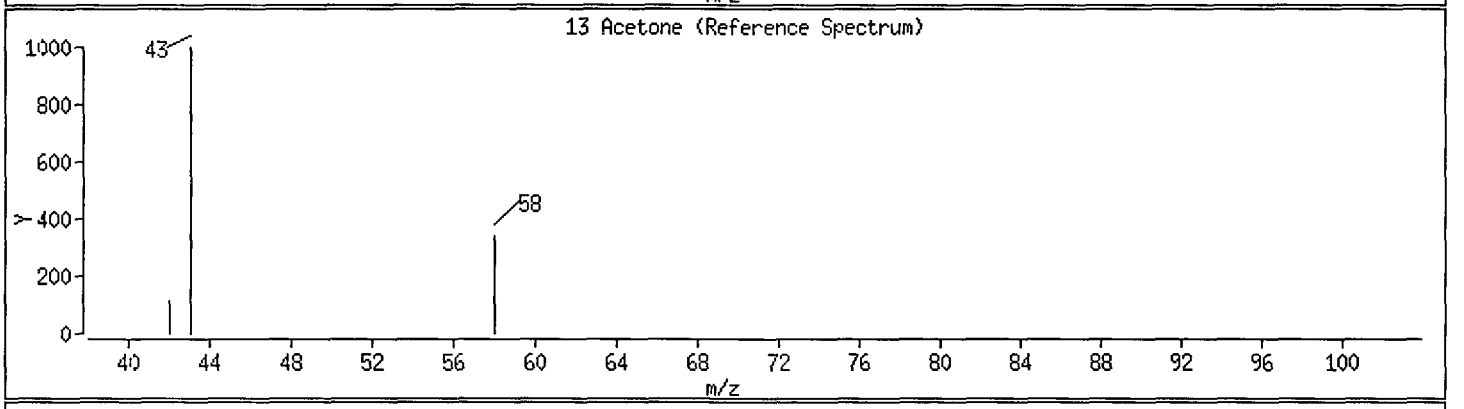
Operator: 2141

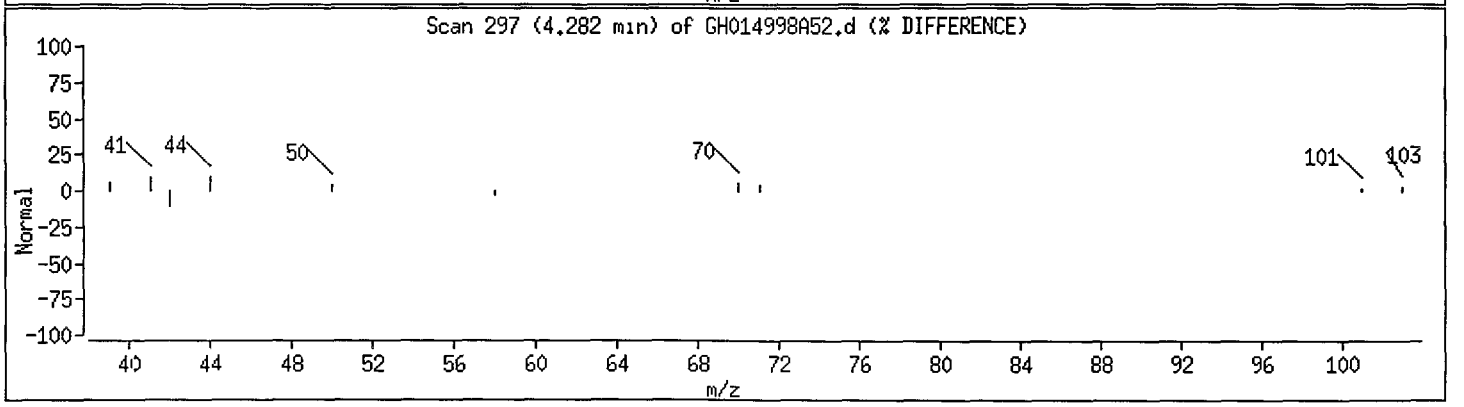
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960727C52.b/GH014998A52.d

Date : 27-JUL-1996 11:05

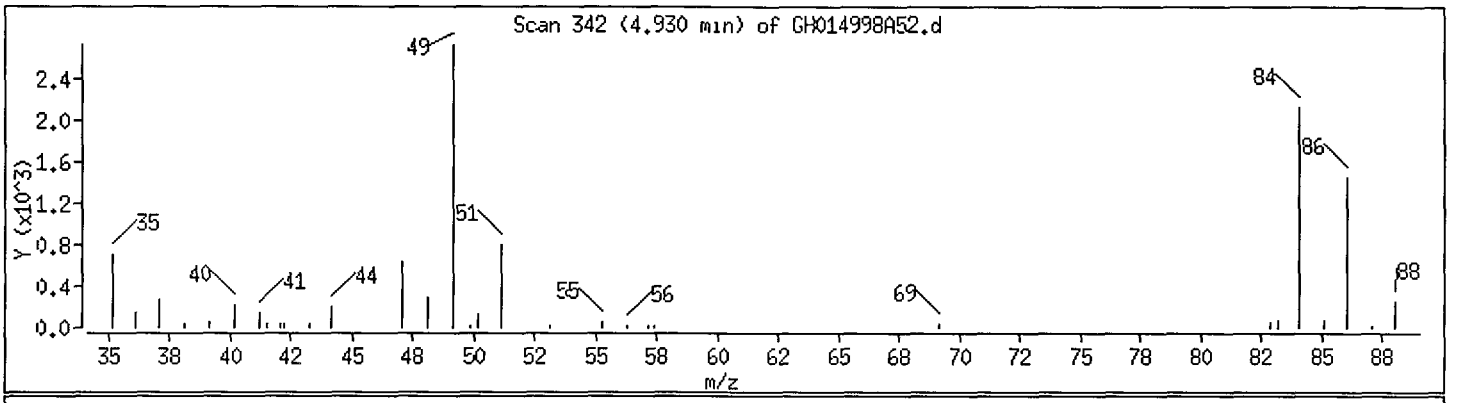
Client ID: FFE82 Instrument: f50052.1

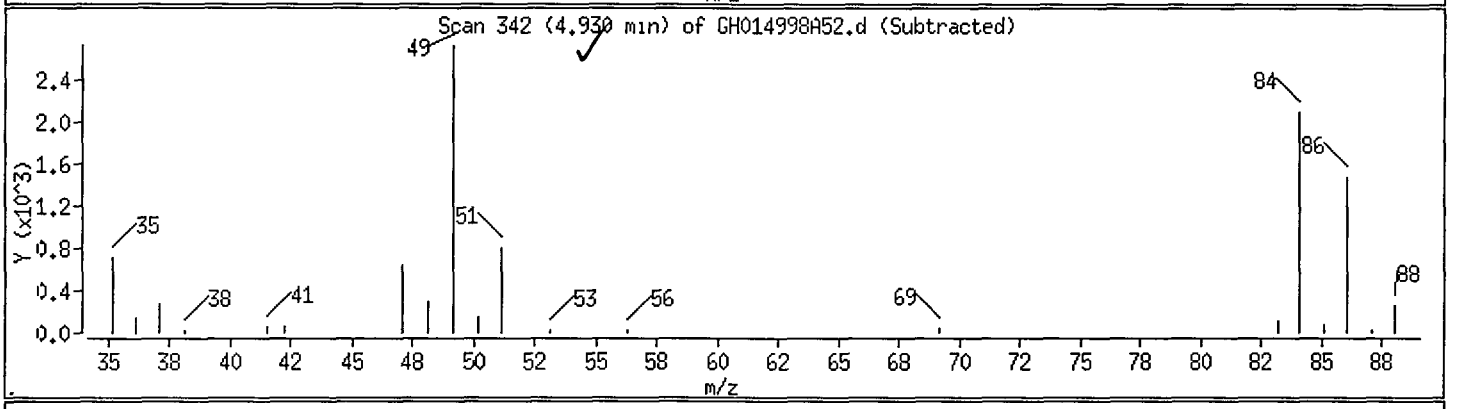
Sample Info:

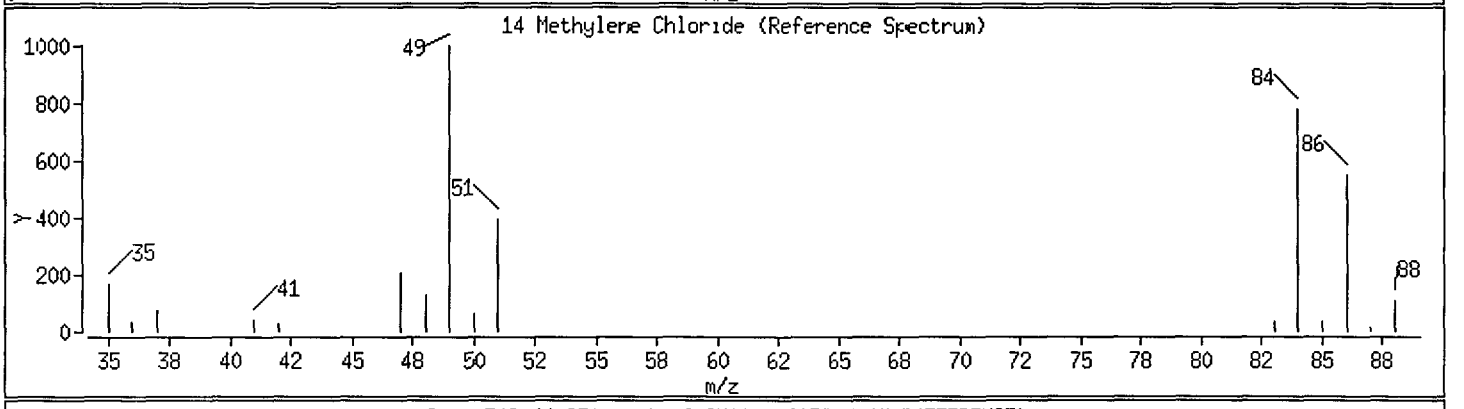
Operator: 2141

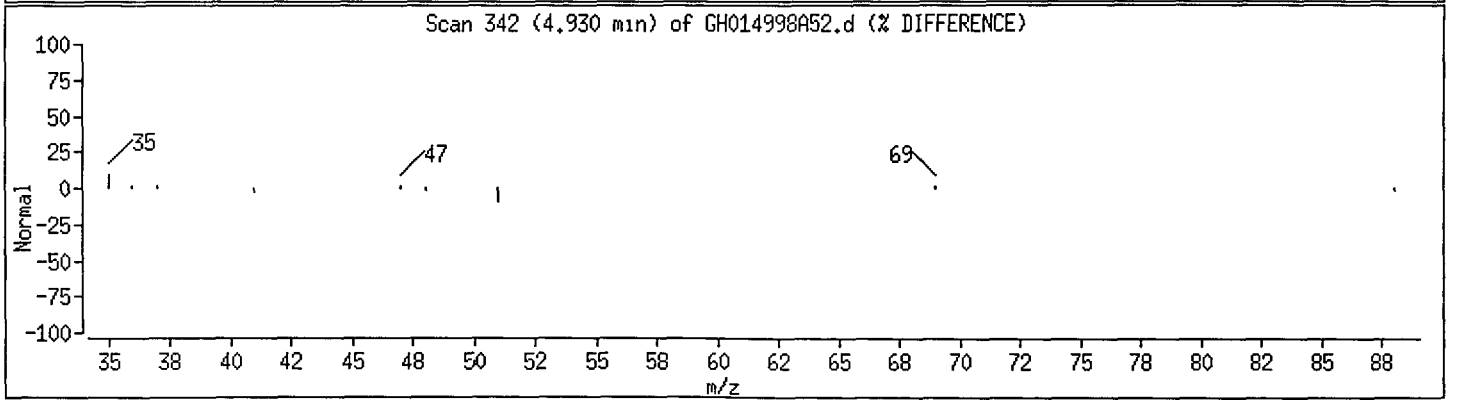
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960727C52.b/GH014998A52.d

Date : 27-JUL-1996 11:05

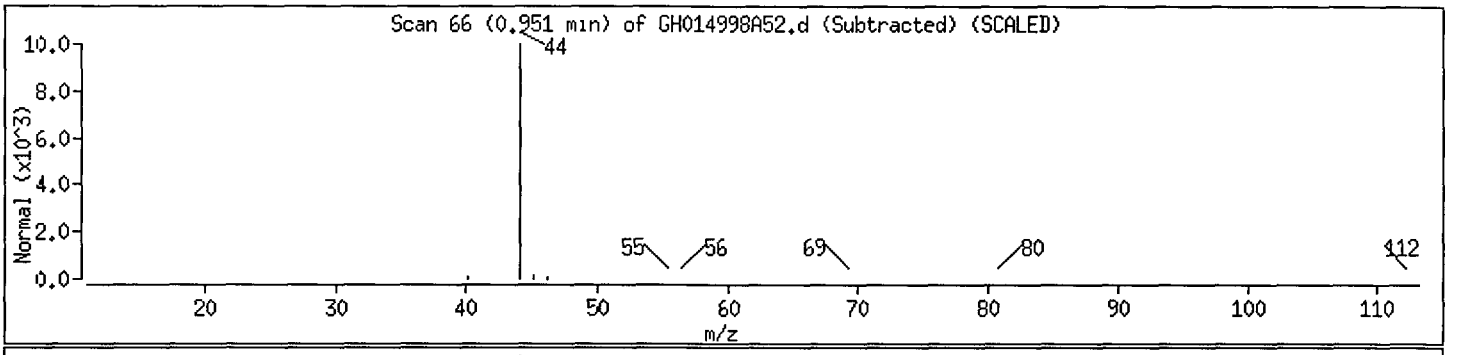
Client ID: FFE82 Instrument: f50052.1

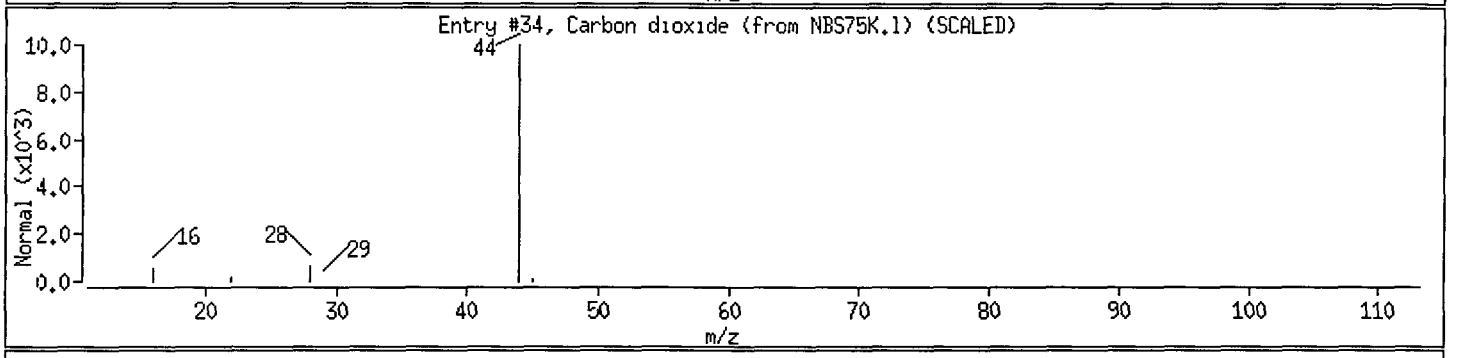
Sample Info:

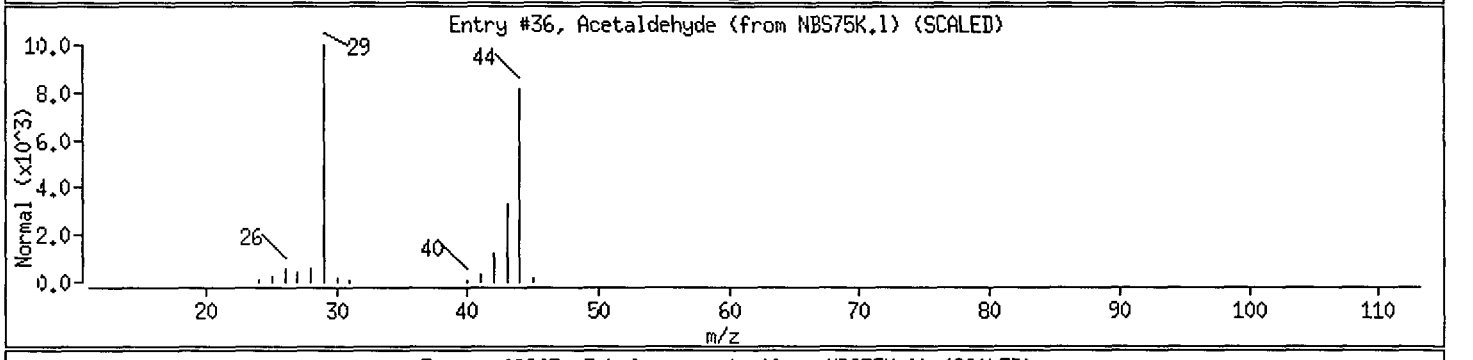
Operator: 2141

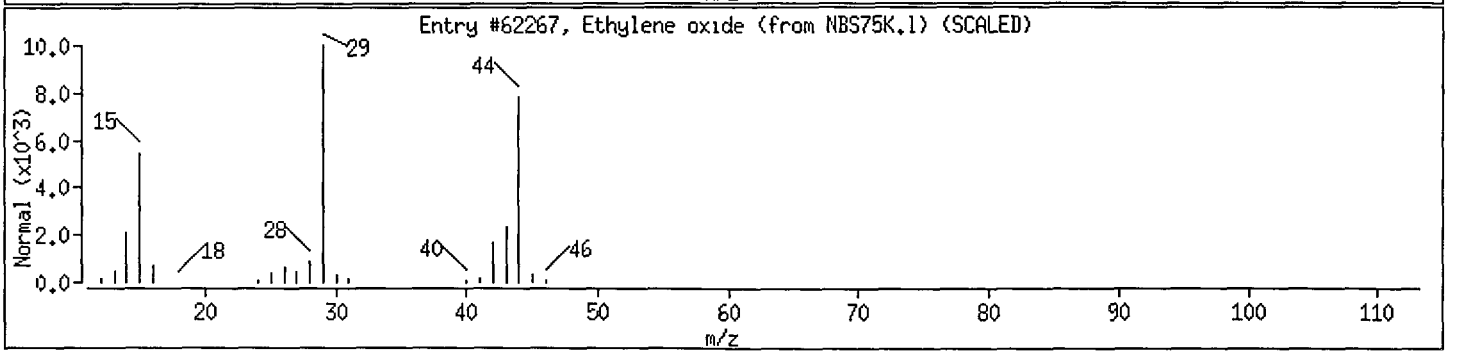
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	34	5	CO2	44
Acetaldehyde	75-07-0	NBS75K.1	36	4	C2H4O	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44









LAB INSTRUCTIONS: PPS#: _____
USE FOR QC

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 814998
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE82 Dry Weight Factor 74

GC/MS ANALYSIS
Amount Purged: [ ] ~~10mls~~ 5 ul 7.27.96/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG960727CS2 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2141 Work-up 2141 RR

GC/MS REVIEW

CONDITION CODE OK

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review JRM Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE 155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE84

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815007

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015007A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 60 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	25	U
75-01-4	Vinyl Chloride	25	U
75-00-3	Chloroethane	25	U
75-09-2	Methylene Chloride	35	B
67-64-1	Acetone	94	
75-15-0	Carbon Disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
540-59-0	1,2-Dichloroethene (total)	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon Tetrachloride	25	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	25	U
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	25	U
591-78-6	2-Hexanone	25	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U
1330-20-7	Xylene (Total)	25	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE84

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815007

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015007A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 60 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.97	83	JB
2.				
3.				
4.				
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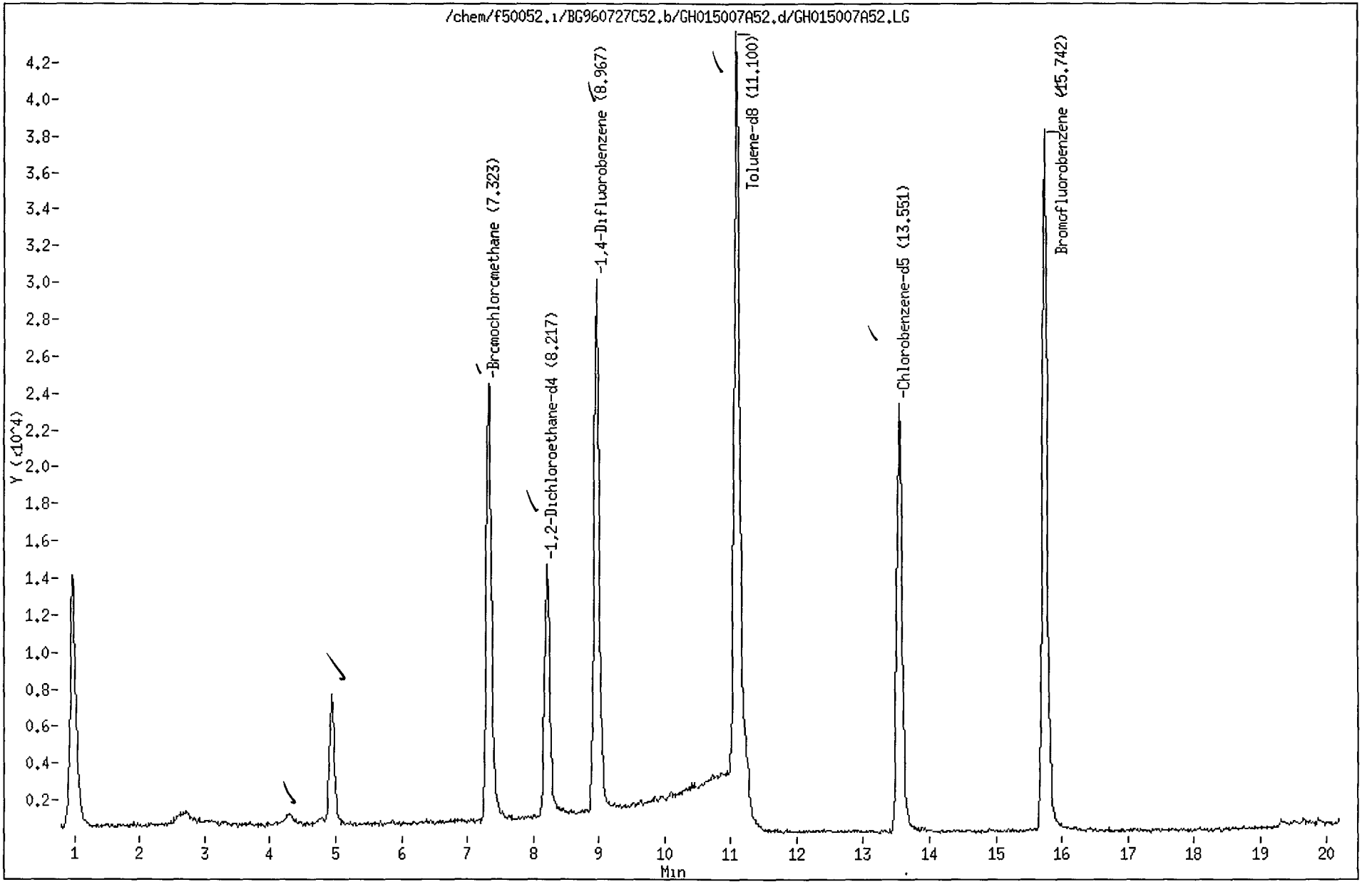
30.				

Data File: /chem/f50052.1/BG960727C52.b/GH015007A52.d
Date : 27-JUL-1996 12:45
Client ID: FFE84
Sample Info:

Column phase: DB624

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53



Data File: /chem/f50052.i/BG960727C52.b/GH015007A52.d
Report Date: 30-Jul-1996 13:11

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH015007A52.d
Lab Smp Id: 815007 Client Smp ID: FFE84
Inj Date : 27-JUL-1996 12:45
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	60.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 338	7 280	(1 000)	18101	250 0	
* 2 1,4-Difluorobenzene	114 00	8 967	8 923	(1 000)	62398	250 0	
* 3 Chlorobenzene-d5	117 00	13 551	13 508	(1 000)	44904	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 217	8 174	(1 120)	27191	214 3	107 1
$ 5 Toluene-d8	98 00	11 100	11 057	(0 819)	76177	237 6	118 8
$ 6 Bromofluorobenzene	95 00	15.742	15 728	(1 162)	36590	216 5	108 2
7 Chloromethane	50 00		1 312		Compound Not Detected		
8 Vinyl Chloride	62 00		1 571		Compound Not Detected		
9 Bromomethane	94 00		2 278		Compound Not Detected		
10 Chloroethane	64 00		2 451		Compound Not Detected		
11 1,1-Dichloroethene	96 00		3 979		Compound Not Detected		
12 Carbon Disulfide	76 00		4 109		Compound Not Detected		
13 Acetone	43 00	4 310	4 267	(0 587)	2435	187 7	93 84
14 Methylene Chloride	84 00	4 945	4 873	(0 674)	8507	69 77	34 89
15 trans-1,2-Dichloroethene	96 00		5 305		Compound Not Detected		
16 1,1-Dichloroethane	63 00		6 011		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		6 934		Compound Not Detected		
18 2-Butanone	43 00		7 121		Compound Not Detected		
19 Chloroform	83 00		7 511		Compound Not Detected		
20 1,1,1-Trichloroethane	97 00		7 612		Compound Not Detected		
21 Carbon Tetrachloride	117 00		7 842		Compound Not Detected		
22 Benzene	78 00		8 174		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015007A52.d
Report Date: 30-Jul-1996 13:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
24 Trichloroethene	130 00		9 212		Compound Not Detected		
25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
29 Toluene	91 00		11 158		Compound Not Detected		
30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
34 2-Hexanone	43 00		12 527		Compound Not Detected		
35 Chlorobenzene	112 00		13 565		Compound Not Detected		
36 Ethylbenzene	106 00		13 825		Compound Not Detected		
37 m,p-Xylene	106 00		14 070		Compound Not Detected		
38 o-Xylene	106 00		14 762		Compound Not Detected		
39 Styrene	104 00		14 819		Compound Not Detected		
40 Bromoform	173 00		15 065		Compound Not Detected		
41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M 42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M 43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015007A52.d
Report Date: 30-Jul-1996 13:28

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH015007A52.d
Lab Smp Id: 815007 Client Smp ID: FFE84
Inj Date : 27-JUL-1996 12:45
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.338	131574	250.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)					CAS #		
0 966	87791	166 8	83 40	0		0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/f50052.1/BG960727C52.b/GH015007A52.d

Date : 27-JUL-1996 12:45

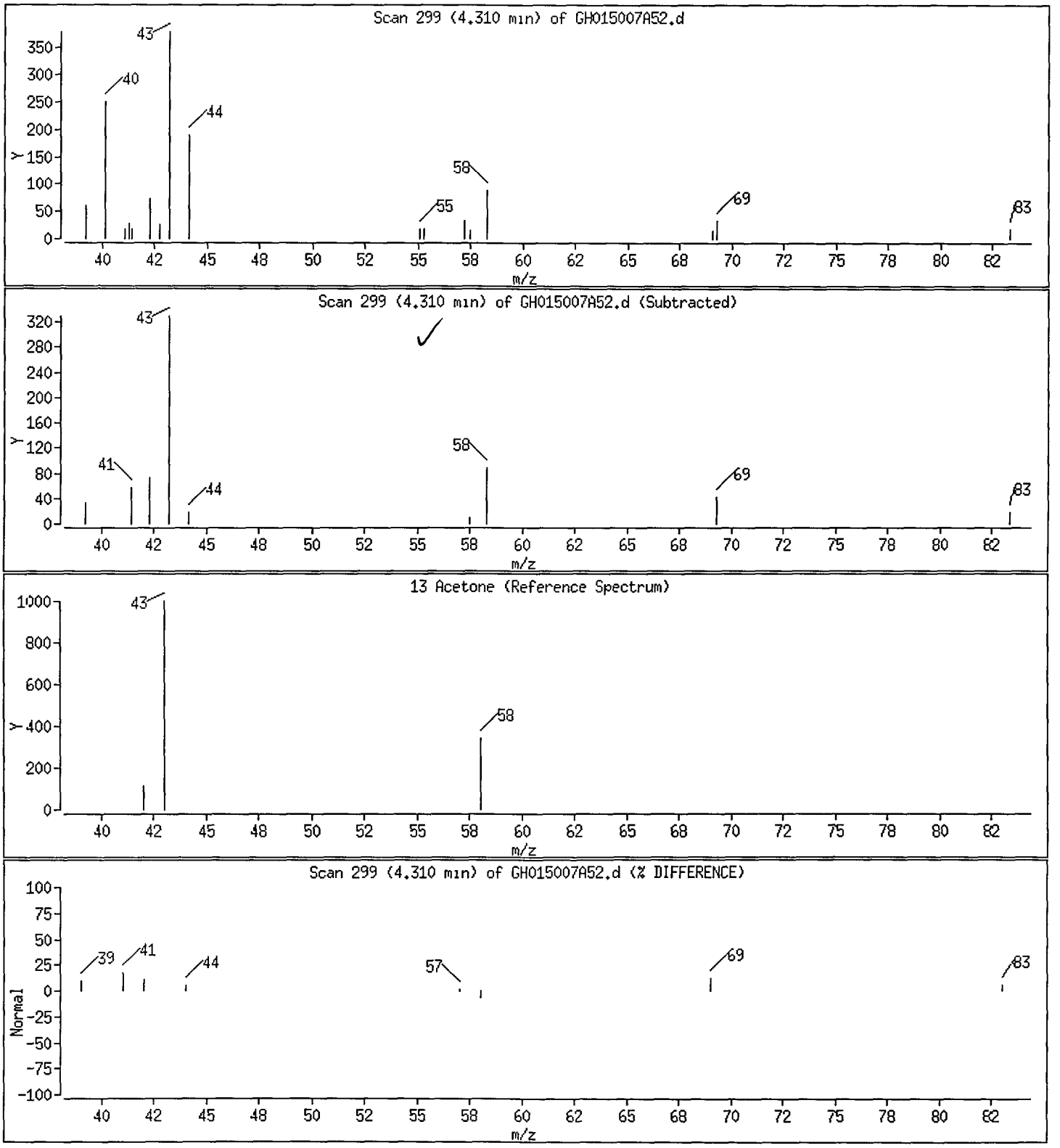
Client ID: FFE84 Instrument: f50052.1

Sample Info:

Operator: 2141

Column phase: DB624 Column diameter: 0.53

13 Acetone



Data File: /chem/f50052.i/BG960727C52.b/GH015007A52.d

Date : 27-JUL-1996 12:45

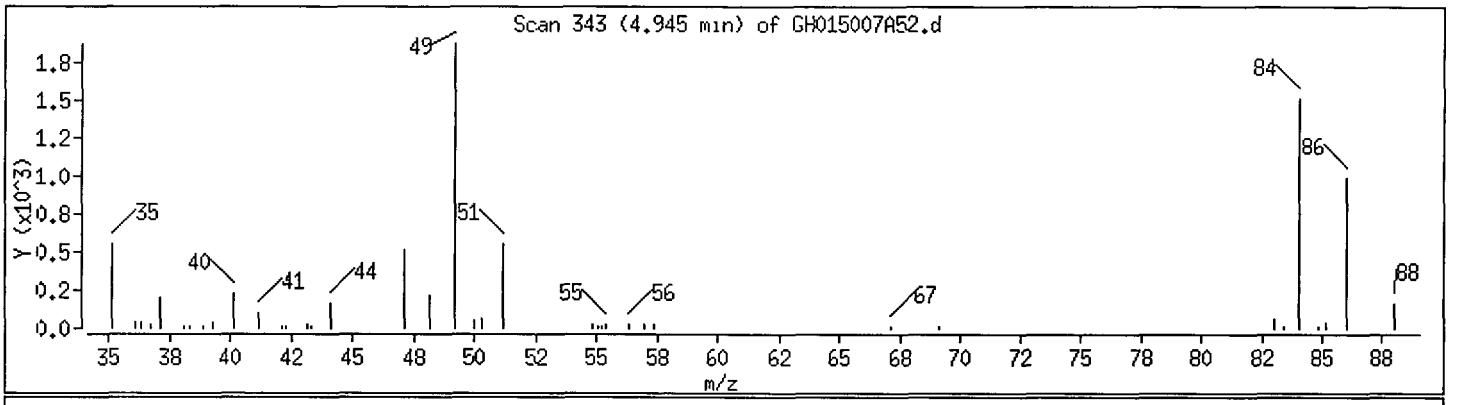
Client ID: FFE84 Instrument: f50052.i

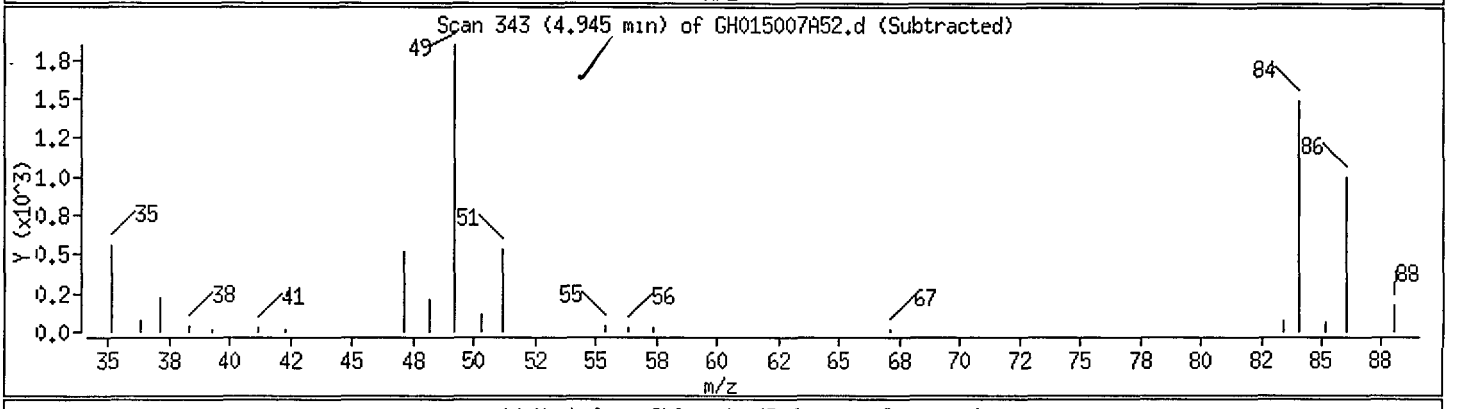
Sample Info:

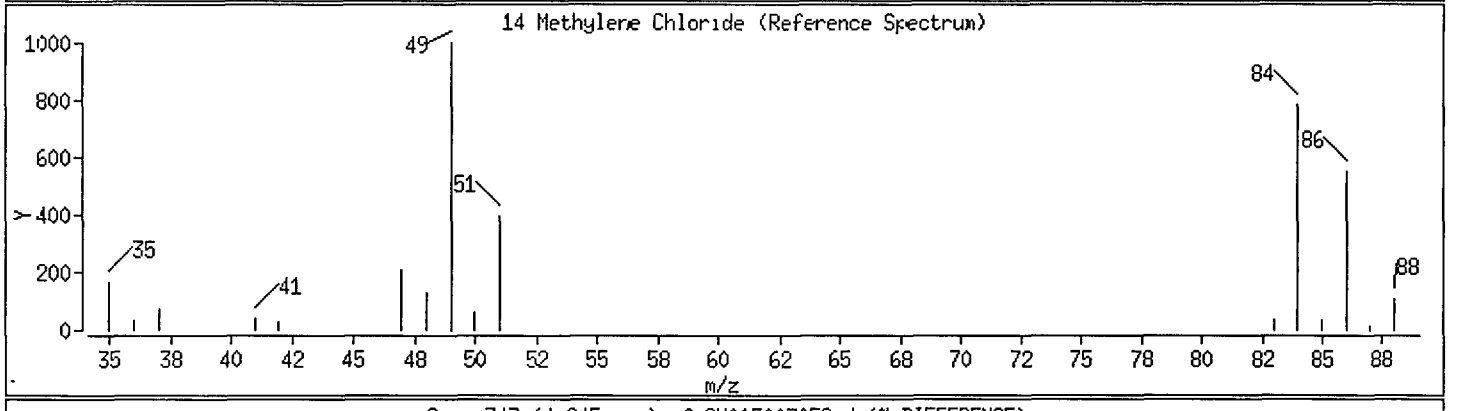
Operator: 2141

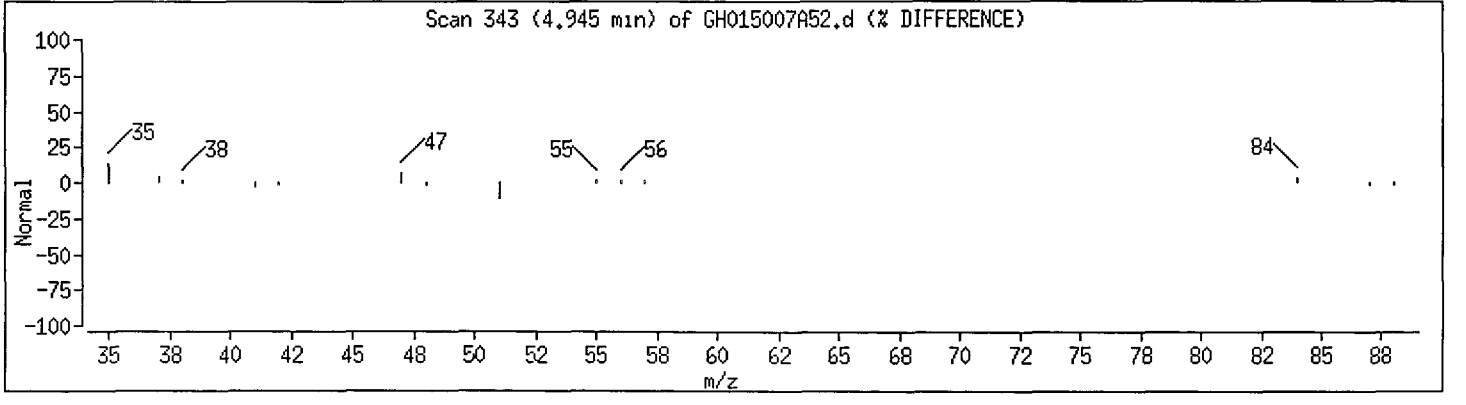
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960727C52.b/GH015007A52.d

Date : 27-JUL-1996 12:45

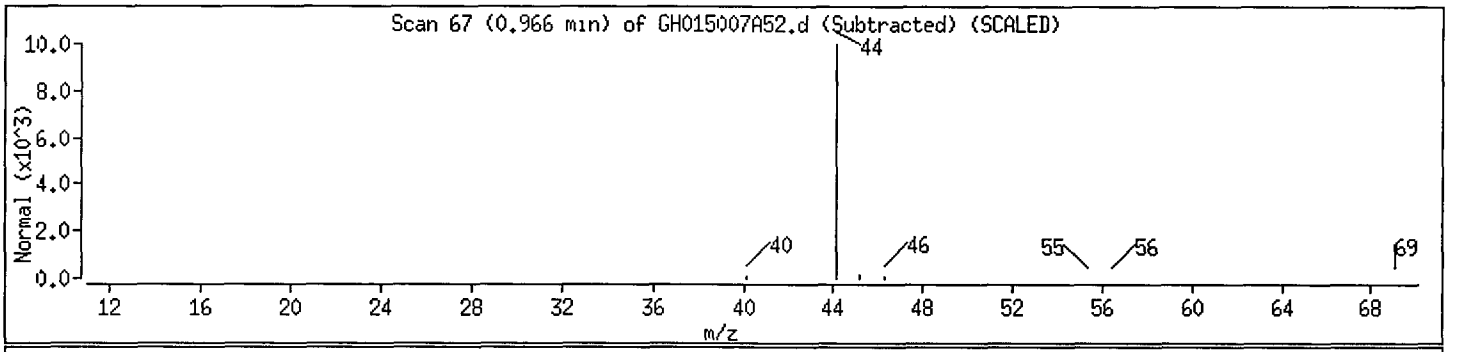
Client ID: FFE84 | Instrument: f50052.1

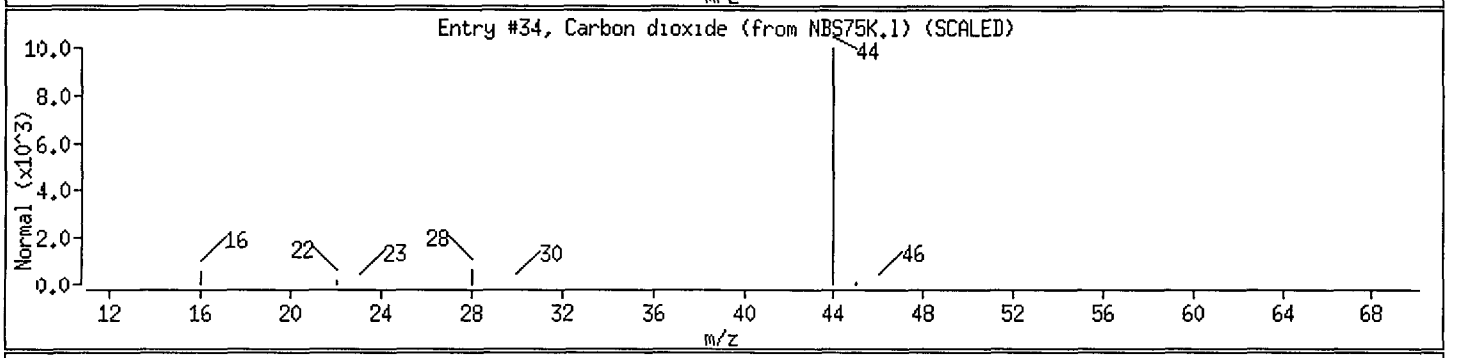
Sample Info:

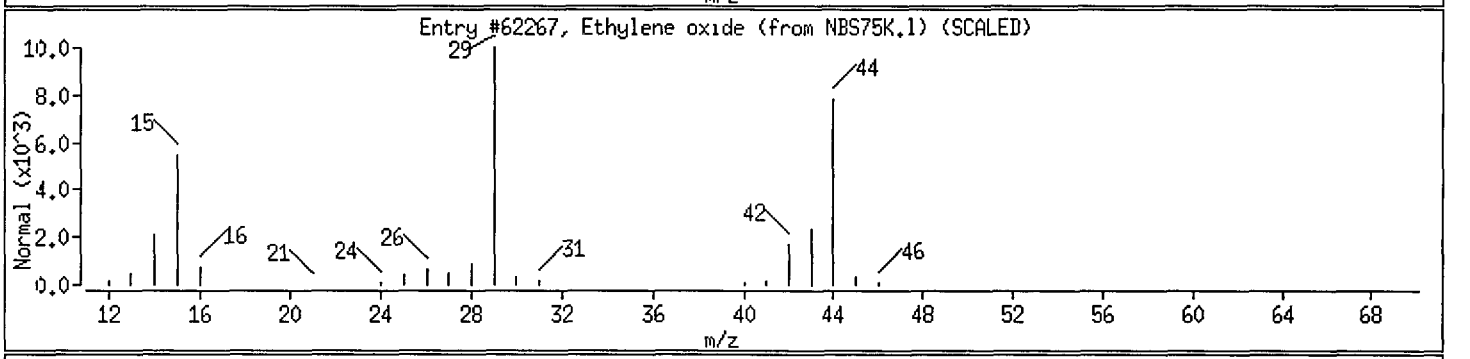
Operator: 2141

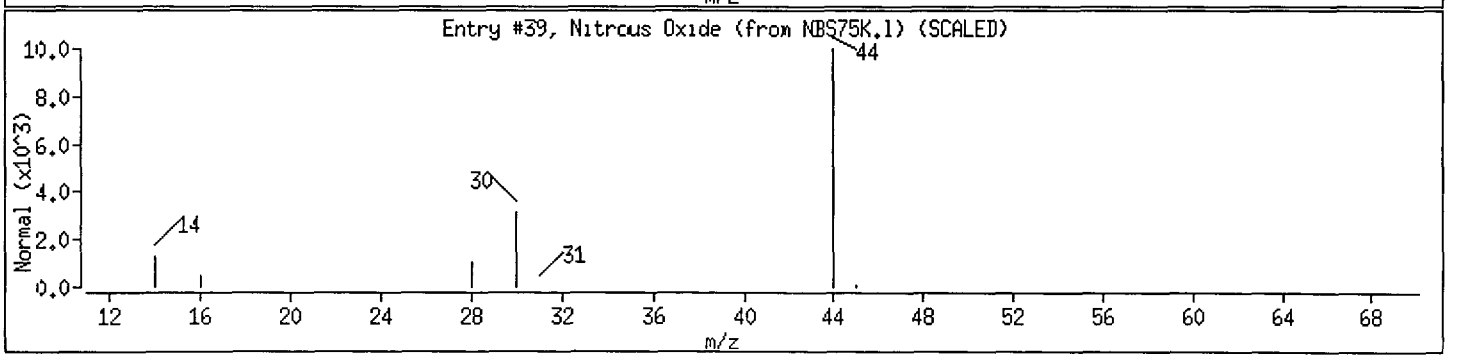
Column phase: DB624 | Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	34	5	CO2	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44
Nitrous Oxide	10024-97-2	NBS75K.1	39	3	N2O	44









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815007
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

Sample date: 072396 Report type: A

SAMPLE ID#: FFE84 Dry Weight Factor 60

GC/MS ANALYSIS 6gMB7.29.96
Amount Purged: [ ] ~~10mls~~/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF960727A52 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 244 Work-up 244NR

GC/MS REVIEW

CONDITION CODE [OK]

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review [illegible] Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE85

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815008

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015008A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 74 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	38	U
74-83-9	Bromomethane	38	U
75-01-4	Vinyl Chloride	38	U
75-00-3	Chloroethane	38	U
75-09-2	Methylene Chloride	86	B
67-64-1	Acetone	220	
75-15-0	Carbon Disulfide	38	U
75-35-4	1,1-Dichloroethene	38	U
75-34-3	1,1-Dichloroethane	38	U
540-59-0	1,2-Dichloroethene (total)	38	U
67-66-3	Chloroform	38	U
107-06-2	1,2-Dichloroethane	38	U
78-93-3	2-Butanone	38	U
71-55-6	1,1,1-Trichloroethane	38	U
56-23-5	Carbon Tetrachloride	38	U
75-27-4	Bromodichloromethane	38	U
78-87-5	1,2-Dichloropropane	38	U
10061-01-5	cis-1,3-Dichloropropene	38	U
79-01-6	Trichloroethene	38	U
124-48-1	Dibromochloromethane	38	U
79-00-5	1,1,2-Trichloroethane	38	U
71-43-2	Benzene	38	U
10061-02-6	trans-1,3-Dichloropropene	38	U
75-25-2	Bromoform	38	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	38	U
79-34-5	1,1,2,2-Tetrachloroethane	38	U
108-88-3	Toluene	38	U
108-90-7	Chlorobenzene	38	U
100-41-4	Ethylbenzene	38	U
100-42-5	Styrene	38	U
1330-20-7	Xylene (Total)	38	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE85

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815008

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015008A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 74 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.97	434	JB
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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19.				
20.				
21.				
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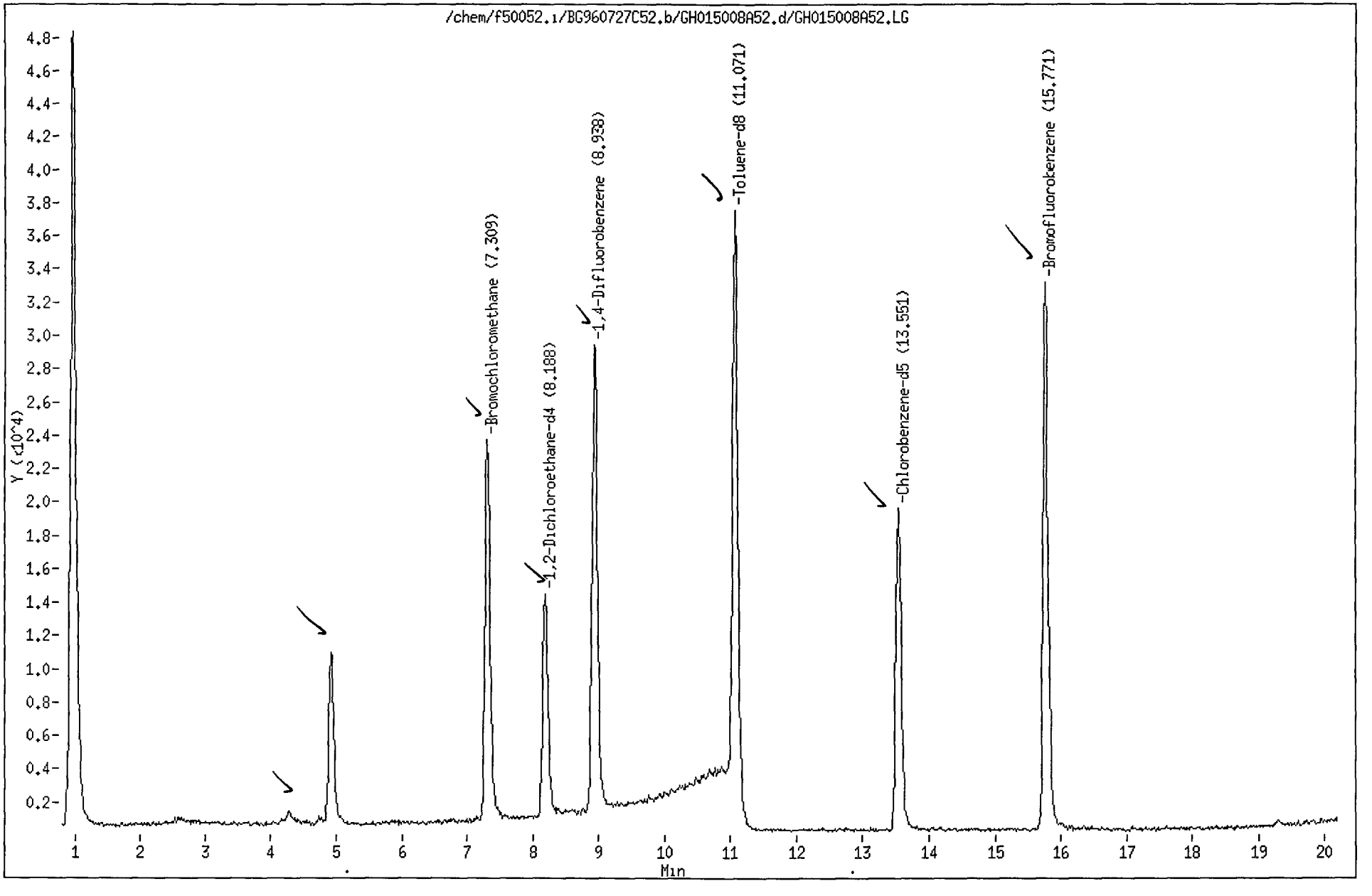
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960727C52.b/GH015008A52.d
Date : 27-JUL-1996 13:15
Client ID: FFE85
Sample Info:

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960727C52.b/GH015008A52.d
Report Date: 30-Jul-1996 13:11

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH015008A52.d
Lab Smp Id: 815008 Client Smp ID: FFE85
Inj Date : 27-JUL-1996 13:15
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	74.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 309	7 280	(1 000)	17039	250 0	
* 2 1,4-Difluorobenzene	114 00	8.938	8 923	(1 000)	61580	250 0	
* 3 Chlorobenzene-d5	117 00	13 536	13 508	(1 000)	39075	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8.188	8 174	(1 120)	26526	222 0	170 8
$ 5 Toluene-d8	98 00	11 071	11 057	(0 818)	62736	224 8	173 0
$ 6 Bromofluorobenzene	95 00	15 771	15 728	(1 165)	31451	213 8	164 5
7 Chloromethane	50 00		1 312	Compound Not Detected			
8 Vinyl Chloride	62 00		1 571	Compound Not Detected			
9 Bromomethane	94 00		2 278	Compound Not Detected			
10 Chloroethane	64 00		2 451	Compound Not Detected			
11 1,1-Dichloroethene	96 00		3 979	Compound Not Detected			
12 Carbon Disulfide	76 00		4 109	Compound Not Detected			
13 Acetone	43 00	4 296	4 267	(0 588)	3542	290 0	223 1
14 Methylene Chloride	84 00	4 916	4 873	(0 673)	12869	112 1	86 25
15 trans-1,2-Dichloroethene	96 00		5 305	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		6 934	Compound Not Detected			
18 2-Butanone	43 00		7 121	Compound Not Detected			
19 Chloroform	83 00		7 511	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7 612	Compound Not Detected			
21 Carbon Tetrachloride	117 00		7 842	Compound Not Detected			
22 Benzene	78 00		8 174	Compound Not Detected			

Data File: /chem/f50052.i/BG960727C52.b/GH015008A52.d
Report Date: 30-Jul-1996 13:11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
24 Trichloroethene	130 00		9 212		Compound Not Detected		
25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
29 Toluene	91 00		11 158		Compound Not Detected		
30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
34 2-Hexanone	43 00		12 527		Compound Not Detected		
35 Chlorobenzene	112 00		13 565		Compound Not Detected		
36 Ethylbenzene	106 00		13 825		Compound Not Detected		
37 m,p-Xylene	106 00		14 070		Compound Not Detected		
38 o-Xylene	106 00		14 762		Compound Not Detected		
39 Styrene	104 00		14 819		Compound Not Detected		
40 Bromoform	173 00		15 065		Compound Not Detected		
41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M 42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M 43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015008A52.d
Report Date: 30-Jul-1996 13:28

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH015008A52.d
Lab Smp Id: 815008 Client Smp ID: FFE85
Inj Date : 27-JUL-1996 13:15
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.309	124155	250.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)					CAS #		
0 966	280579	565 0	434 6	0		0	1

Data File: /chem/f50052.1/BG960727C52.b/GH015008A52.d

Date : 27-JUL-1996 13:15

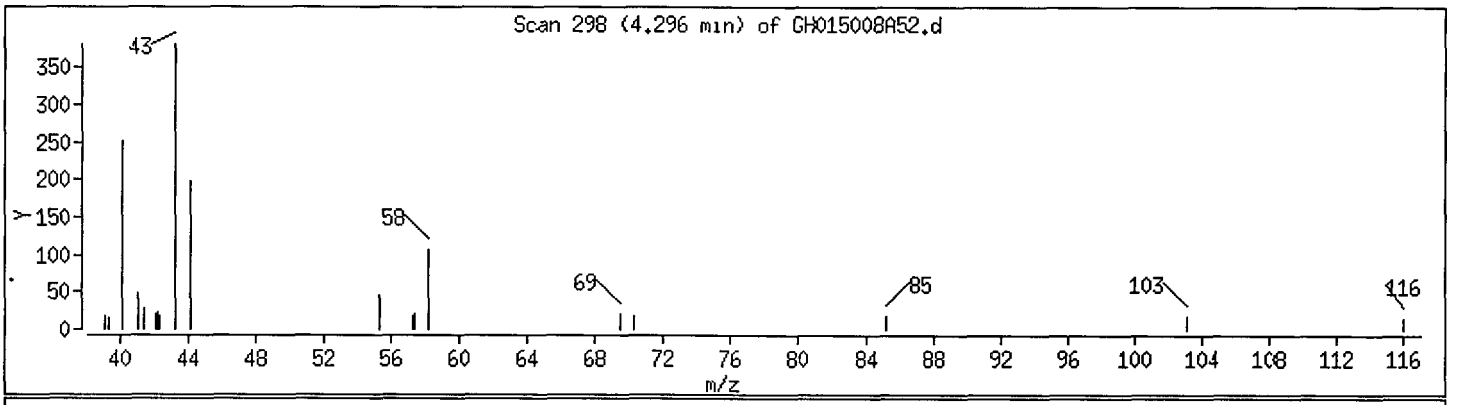
Client ID: FFE85 Instrument: f50052.1

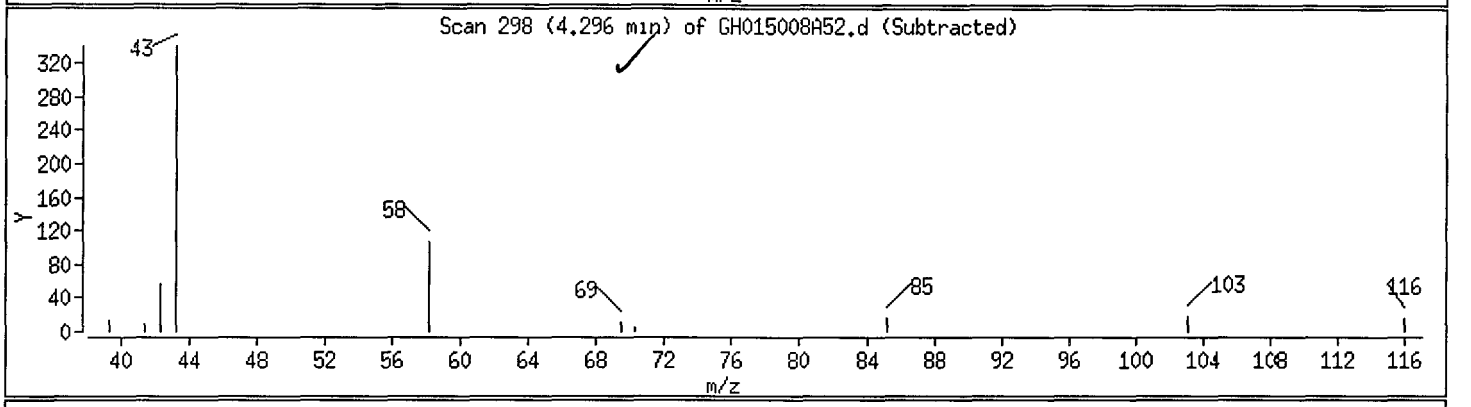
Sample Info:

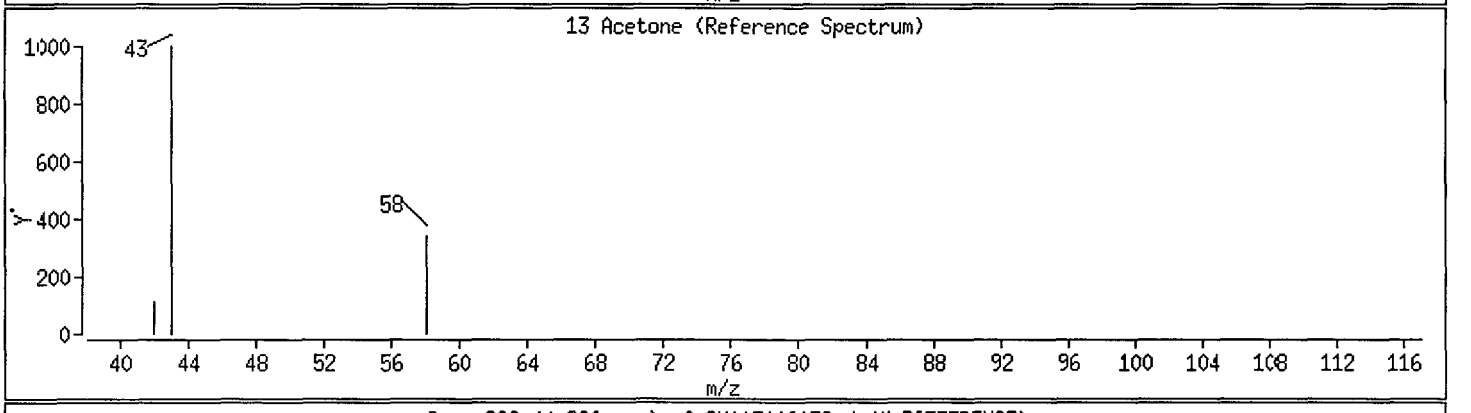
Operator: 2141

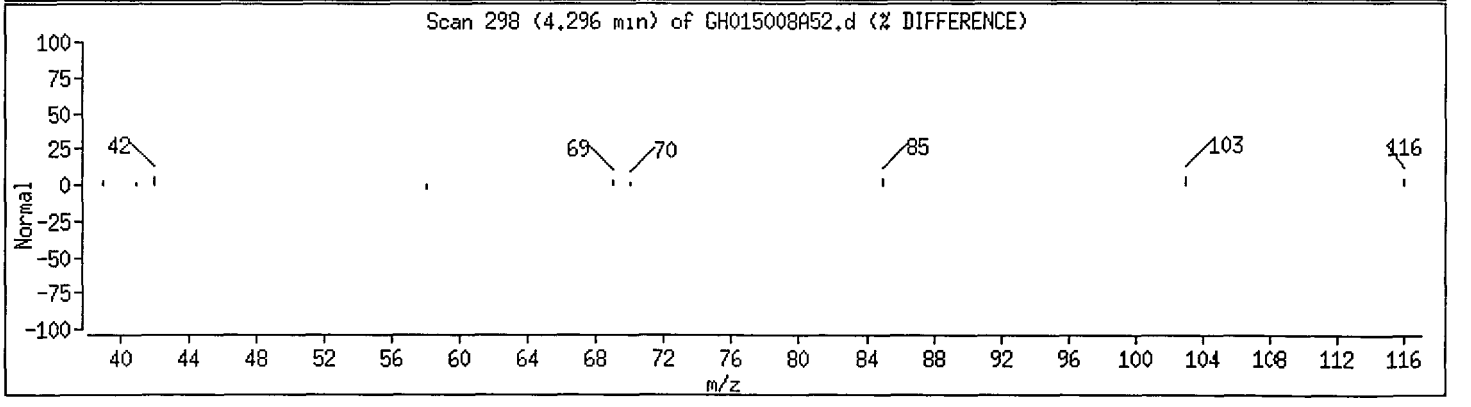
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960727C52.b/GH015008A52.d

Date : 27-JUL-1996 13:15

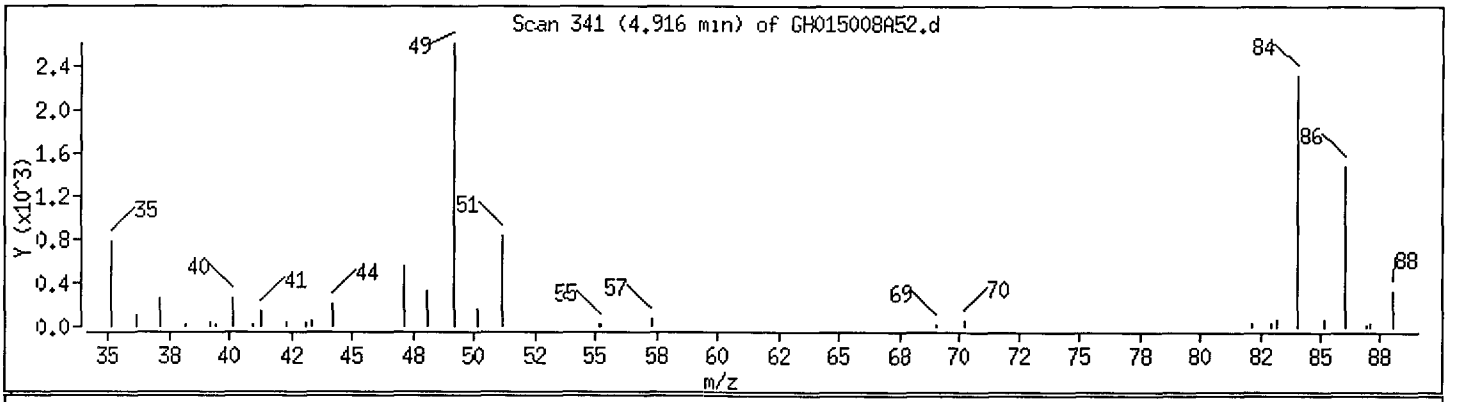
Client ID: FFE85 Instrument: f50052.1

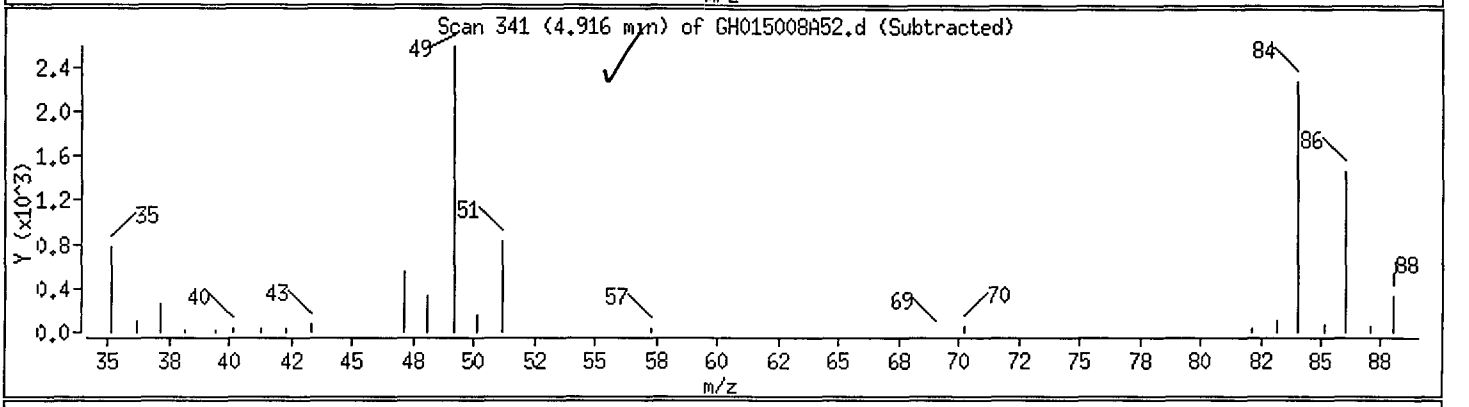
Sample Info:

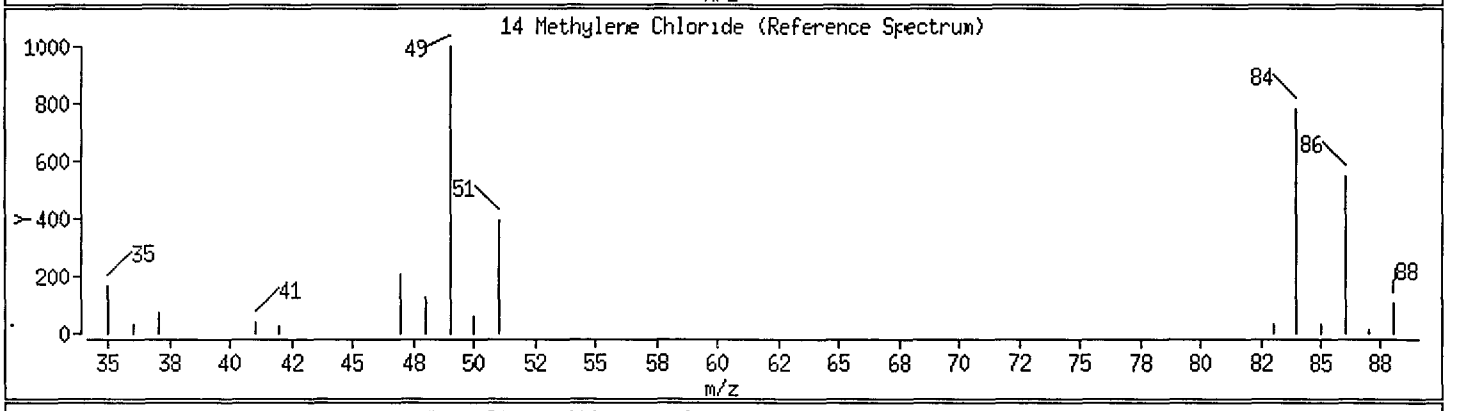
Operator: 2141

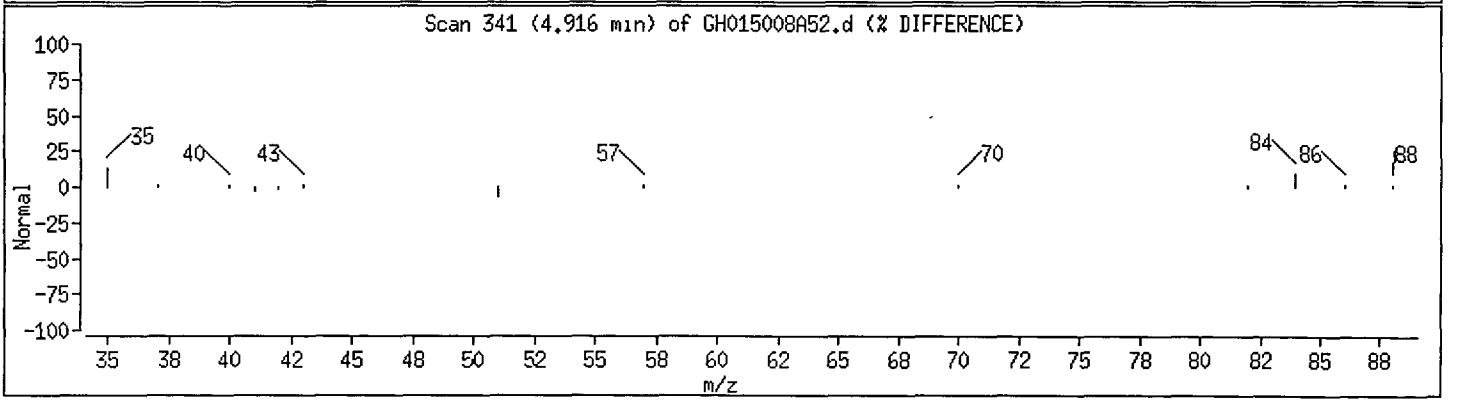
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960727C52.b/GH015008A52.d

Date : 27-JUL-1996 13:15

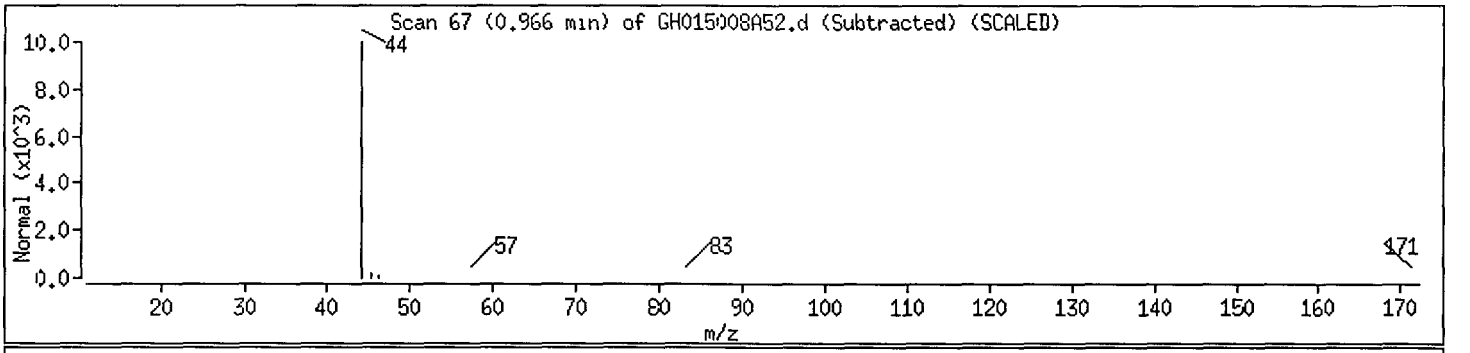
Client ID: FFE85 Instrument: f50052.1

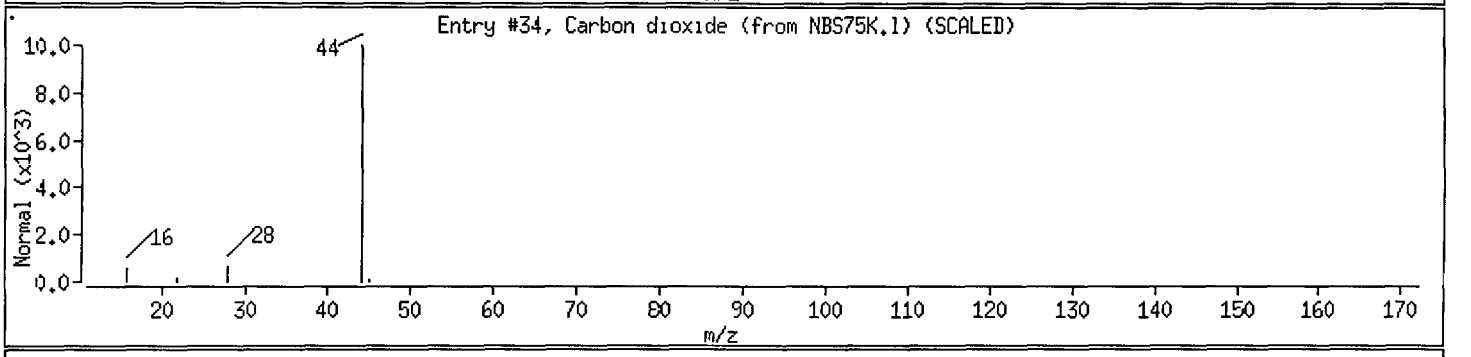
Sample Info:

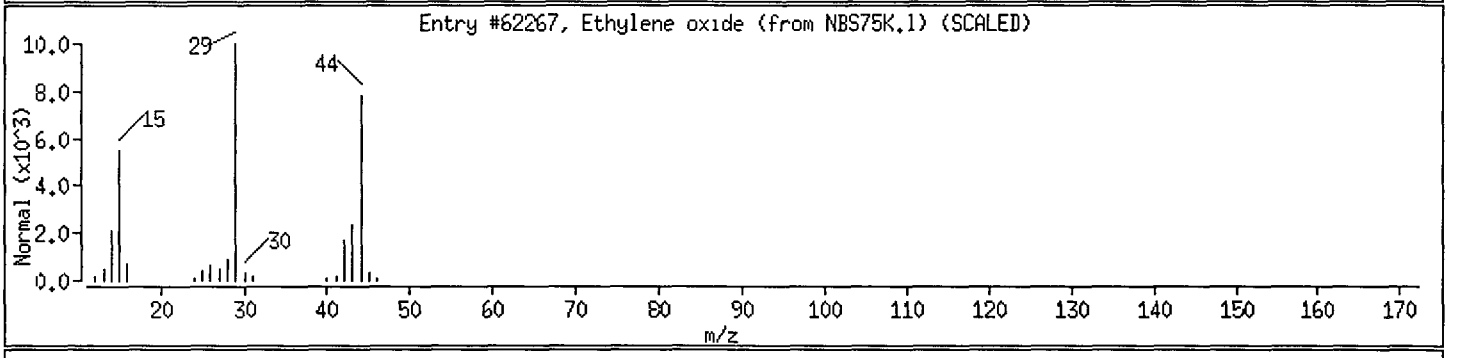
Operator: 2141

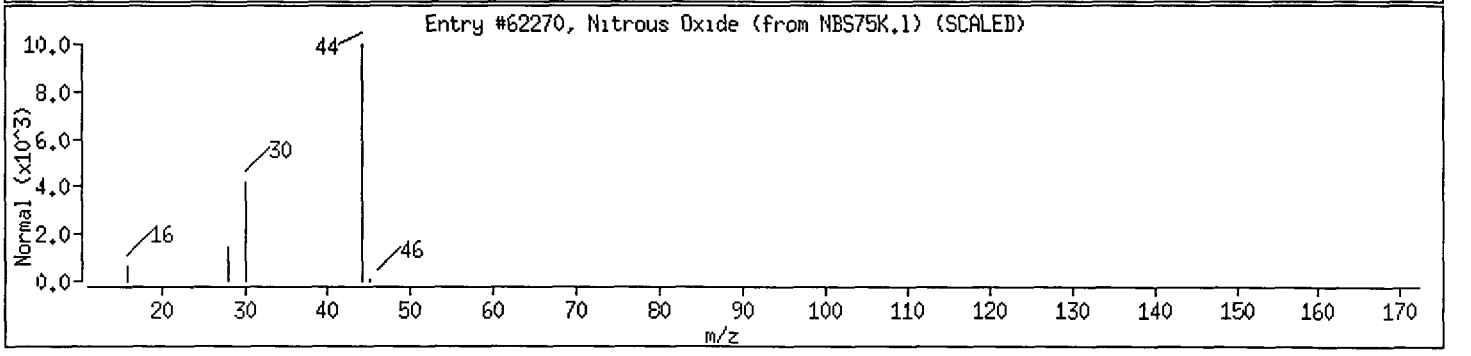
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	34	5	CO2	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44
Nitrous Oxide	10024-97-2	NBS75K.1	62270	3	N2O	44









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815008

J[ ] J3[ ] D[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE85 Dry Weight Factor 74

GC/MS ANALYSIS
Amount Purged: [ ] ~~1~~ mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG9607271CS2 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection ZMI Work-up ZMI LR

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review ZMI Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____ _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE86

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815009

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015009A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 70 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	33	U
74-83-9	Bromomethane	33	U
75-01-4	Vinyl Chloride	33	U
75-00-3	Chloroethane	33	U
75-09-2	Methylene Chloride	77	B
67-64-1	Acetone	130	
75-15-0	Carbon Disulfide	33	U
75-35-4	1,1-Dichloroethene	33	U
75-34-3	1,1-Dichloroethane	33	U
540-59-0	1,2-Dichloroethene (total)	33	U
67-66-3	Chloroform	33	U
107-06-2	1,2-Dichloroethane	33	U
78-93-3	2-Butanone	33	U
71-55-6	1,1,1-Trichloroethane	33	U
56-23-5	Carbon Tetrachloride	33	U
75-27-4	Bromodichloromethane	33	U
78-87-5	1,2-Dichloropropane	33	U
10061-01-5	cis-1,3-Dichloropropene	33	U
79-01-6	Trichloroethene	33	U
124-48-1	Dibromochloromethane	33	U
79-00-5	1,1,2-Trichloroethane	33	U
71-43-2	Benzene	33	U
10061-02-6	trans-1,3-Dichloropropene	33	U
75-25-2	Bromoform	33	U
108-10-1	4-Methyl-2-Pentanone	33	U
591-78-6	2-Hexanone	33	U
127-18-4	Tetrachloroethene	33	U
79-34-5	1,1,2,2-Tetrachloroethane	33	U
108-88-3	Toluene	33	U
108-90-7	Chlorobenzene	33	U
100-41-4	Ethylbenzene	33	U
100-42-5	Styrene	33	U
1330-20-7	Xylene (Total)	33	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE86

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815009

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015009A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 70 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.97	274	JB
2.				
3.				
4.				
5.				
6.				
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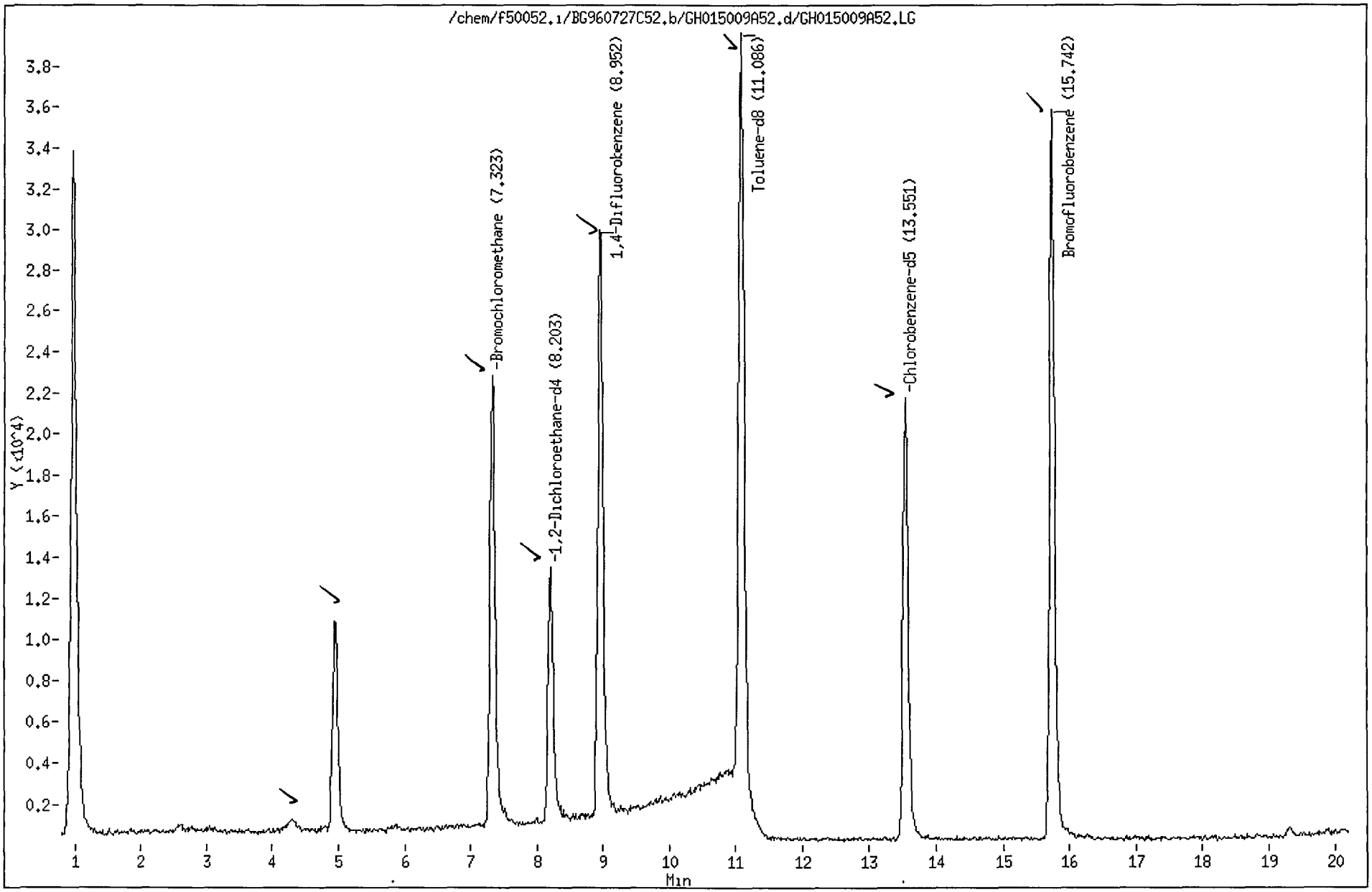
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960727C52.b/GH015009A52.d
Date : 27-JUL-1996 13:47
Client ID: FFE86
Sample Info:

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960727C52.b/GH015009A52.d
Report Date: 30-Jul-1996 13:11

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH015009A52.d
Lab Smp Id: 815009 Client Smp ID: FFE86
Inj Date : 27-JUL-1996 13:47
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	70.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 323	7 280	(1 000)	16823	250 0	
* 2 1,4-Difluorobenzene	114.00	8 952	8 923	(1 000)	64693	250 0	
* 3 Chlorobenzene-d5	117 00	13 551	13 508	(1 000)	42553	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 203	8 174	(1 120)	24257	205 7	137 1
$ 5 Toluene-d8	98 00	11 086	11 057	(0 818)	70294	231 3	154 2
$ 6 Bromofluorobenzene	95 00	15 742	15 728	(1 162)	34206	213 6	142 4
7 Chloromethane	50 00		1 312		Compound Not Detected		
8 Vinyl Chloride	62 00		1 571		Compound Not Detected		
9 Bromomethane	94 00		2 278		Compound Not Detected		
10 Chloroethane	64 00		2 451		Compound Not Detected		
11 1,1-Dichloroethene	96 00		3 979		Compound Not Detected		
12 Carbon Disulfide	76 00		4 109		Compound Not Detected		
13 Acetone	43 00	4 310	4 267	(0 589)	2402	199 2	132 8
14 Methylene Chloride	84 00	4 945	4 873	(0 675)	13047	115 1	76 76
15 trans-1,2-Dichloroethene	96 00		5 305		Compound Not Detected		
16 1,1-Dichloroethane	63 00		6 011		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		6.934		Compound Not Detected		
18 2-Butanone	43 00		7 121		Compound Not Detected		
19 Chloroform	83 00		7 511		Compound Not Detected		
20 1,1,1-Trichloroethane	97 00		7 612		Compound Not Detected		
21 Carbon Tetrachloride	117 00		7 842		Compound Not Detected		
22 Benzene	78 00		8 174		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015009A52.d
Report Date: 30-Jul-1996 13:11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
	24 Trichloroethene	130 00		9 212		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 527		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 825		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 762		Compound Not Detected		
	39 Styrene	104 00		14 819		Compound Not Detected		
	40 Bromoform	173 00		15 065		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015009A52.d
Report Date: 30-Jul-1996 13:28

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH015009A52.d
Lab Smp Id: 815009 Client Smp ID: FFE86
Inj Date : 27-JUL-1996 13:47
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.323	121202	250.000

	RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)	0 966	199198	410 9	273 9	0	CAS #	0	1

.

Data File: /chem/f50052.i/BG960727C52.b/GH015009A52.d

Date : 27-JUL-1996 13:47

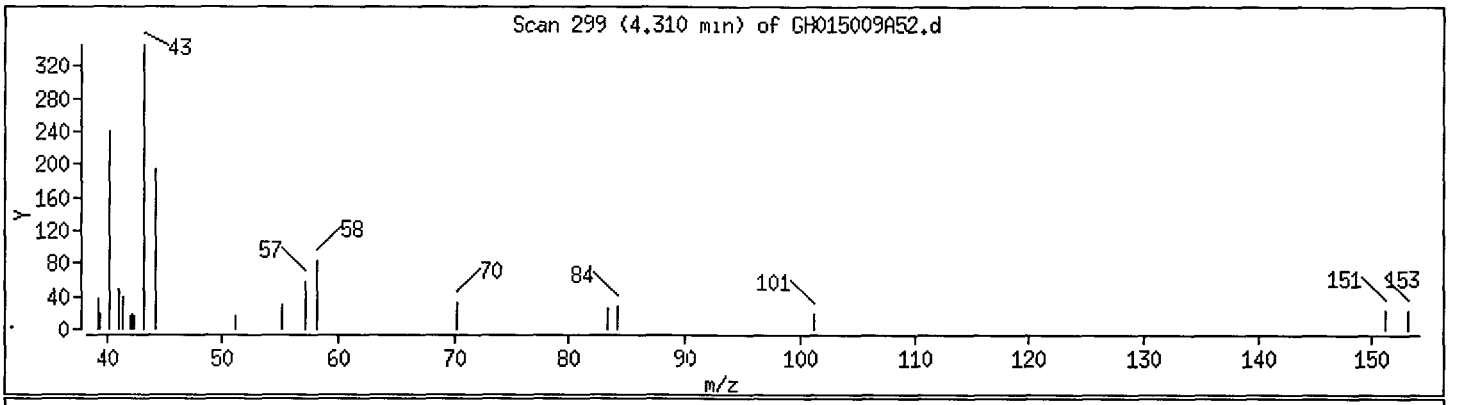
Client ID: FFE86 Instrument: f50052.i

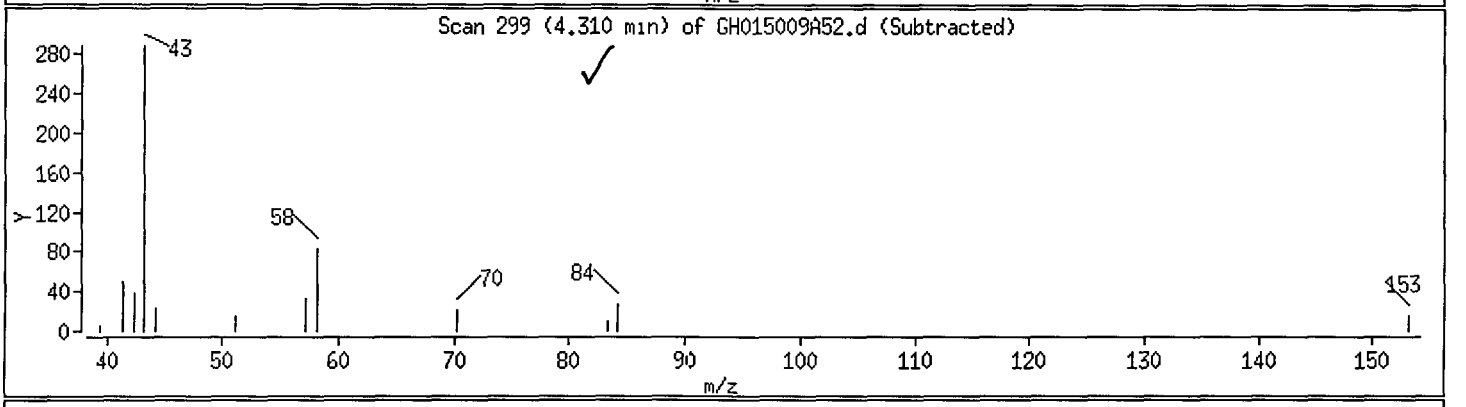
Sample Info:

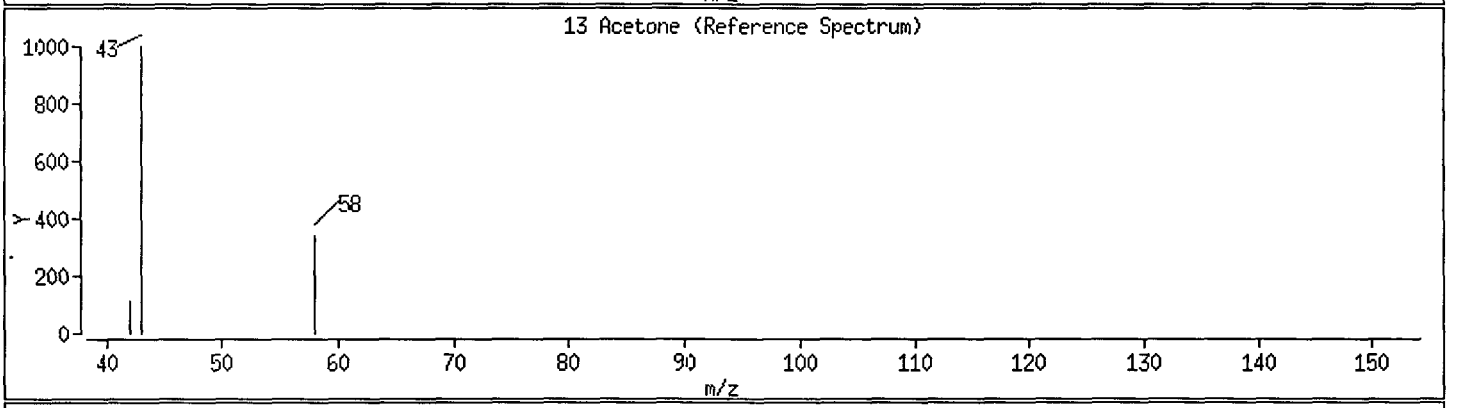
Operator: 2141

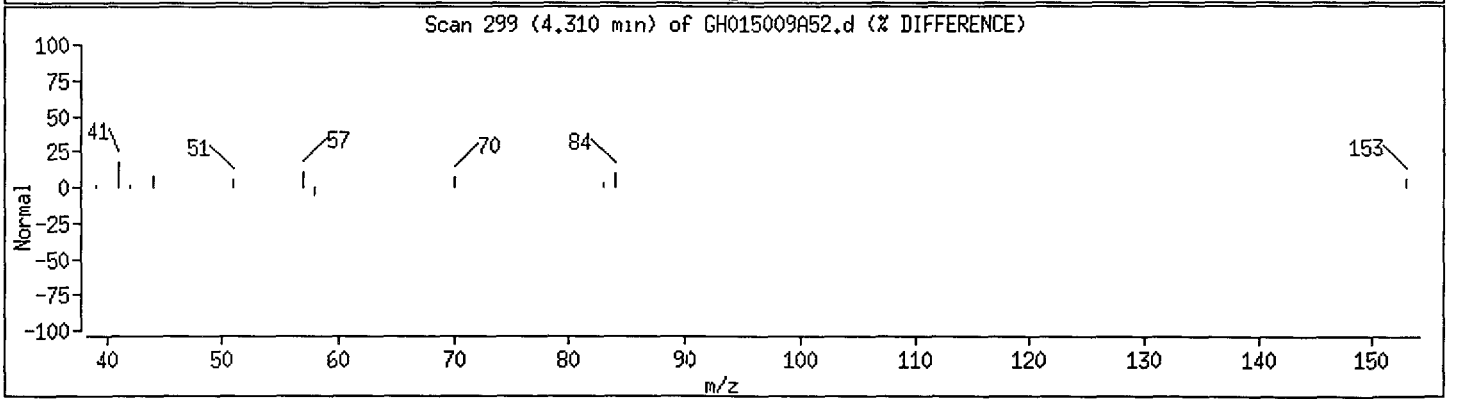
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960727C52.b/GH015009A52.d

Date : 27-JUL-1996 13:47

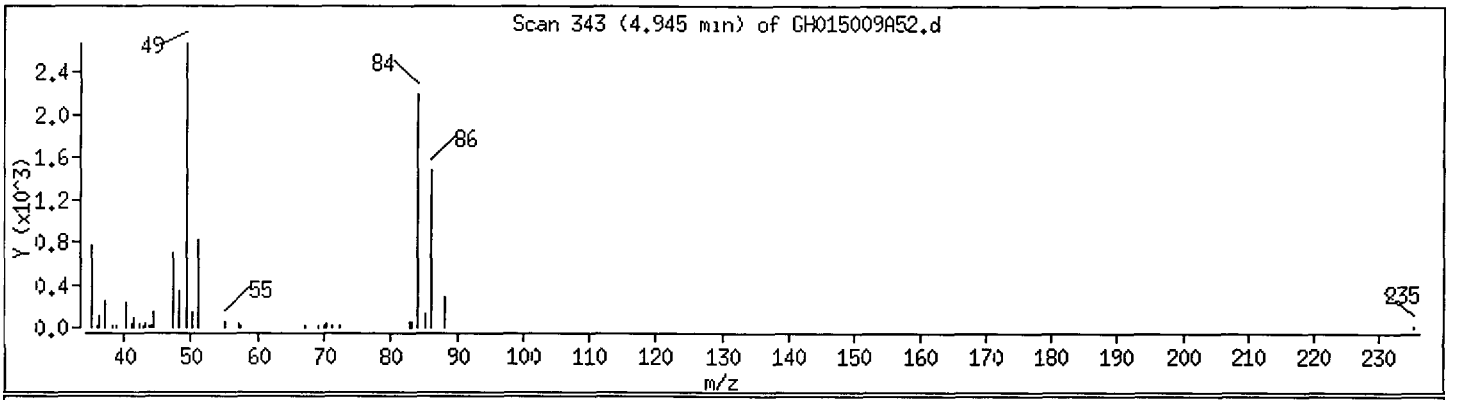
Client ID: FFE86 Instrument: f50052.1

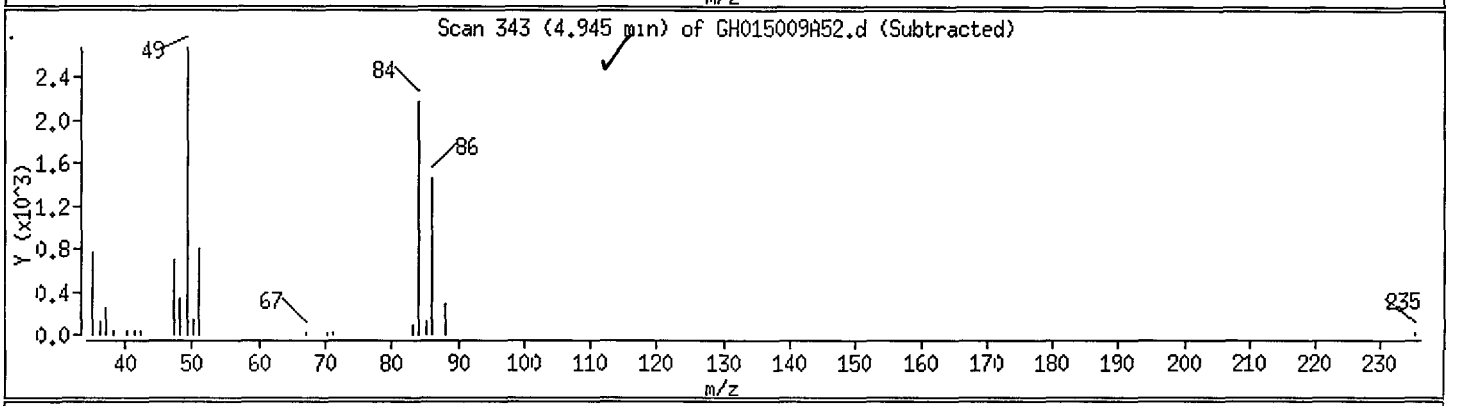
Sample Info:

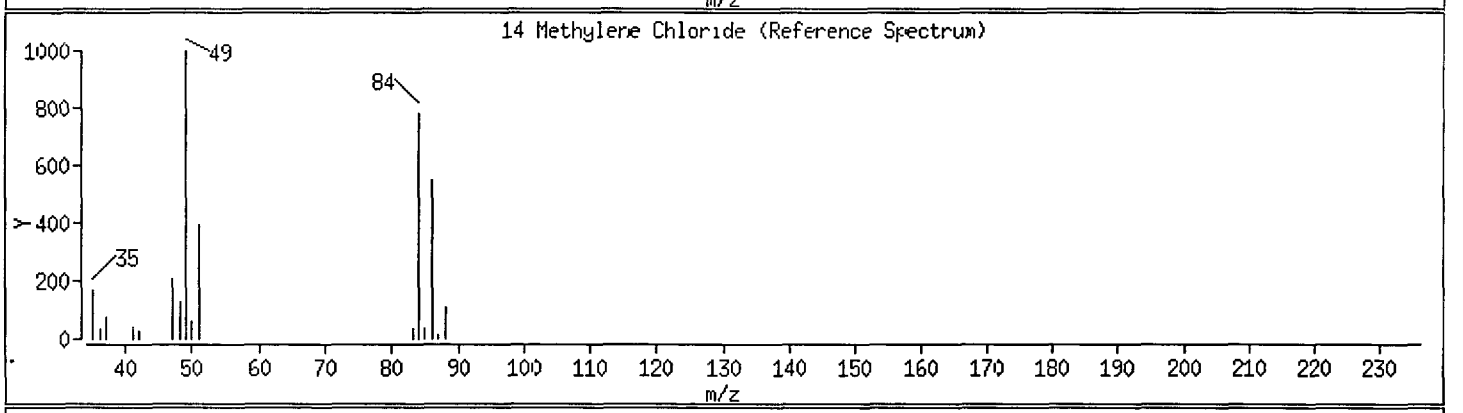
Operator: 2141

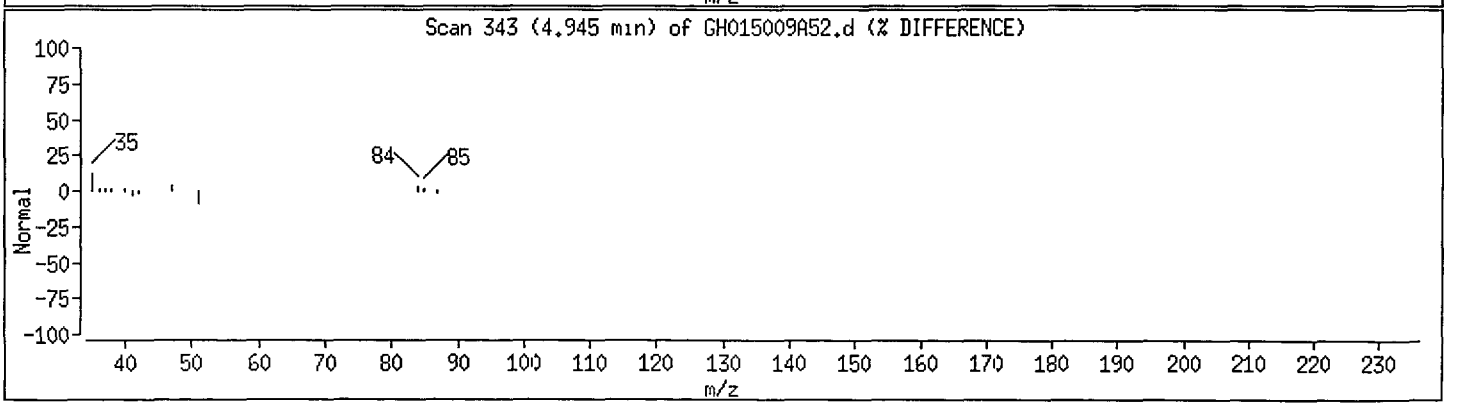
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960727C52.b/GH015009A52.d

Date : 27-JUL-1996 13:47

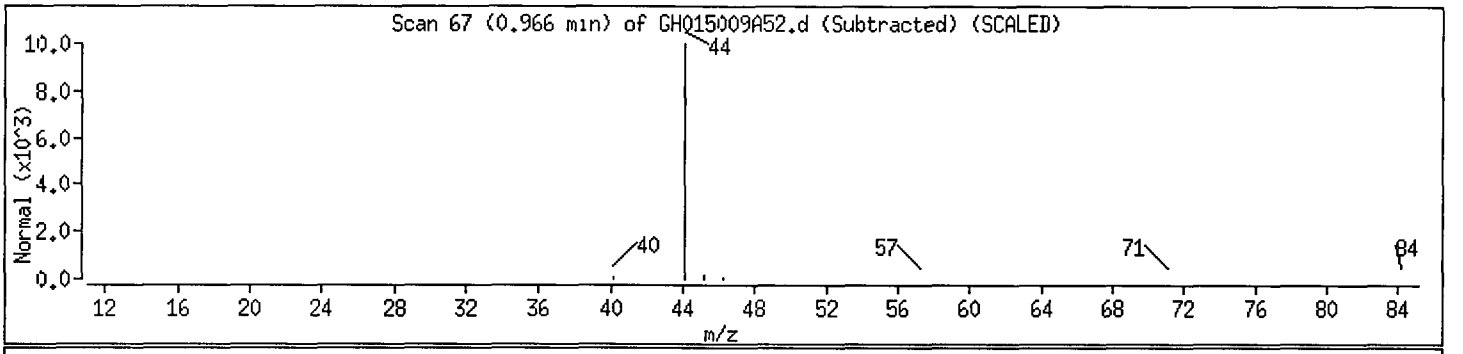
Client ID: FFE86 Instrument: f50052.1

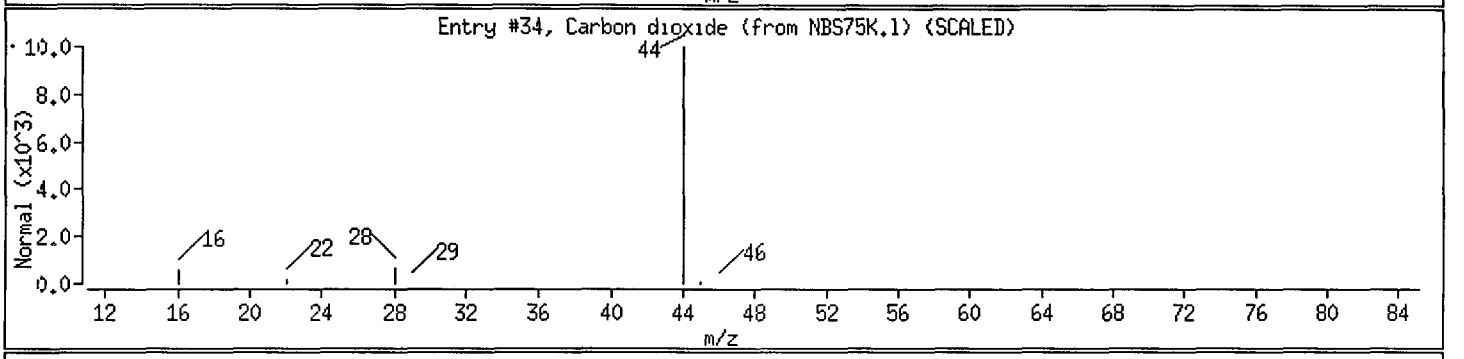
Sample Info:

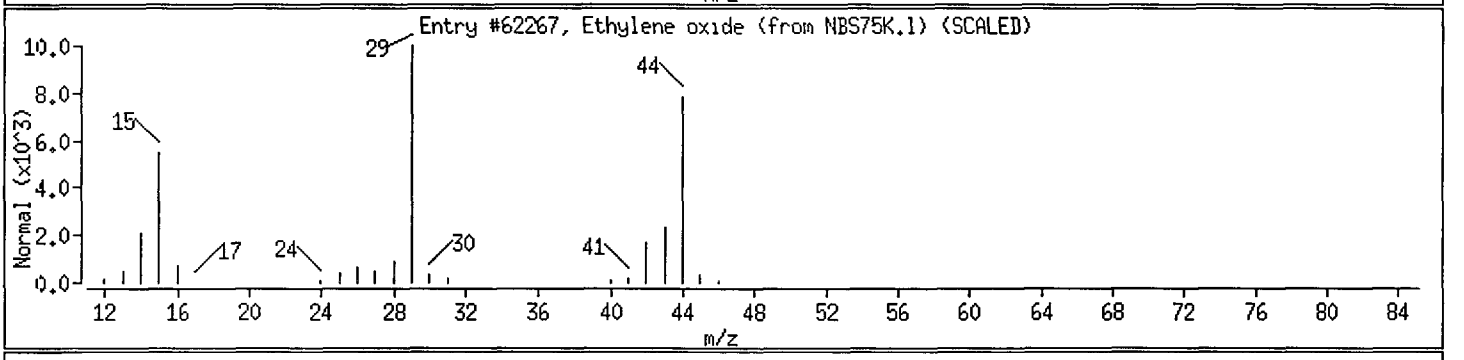
Operator: 2141

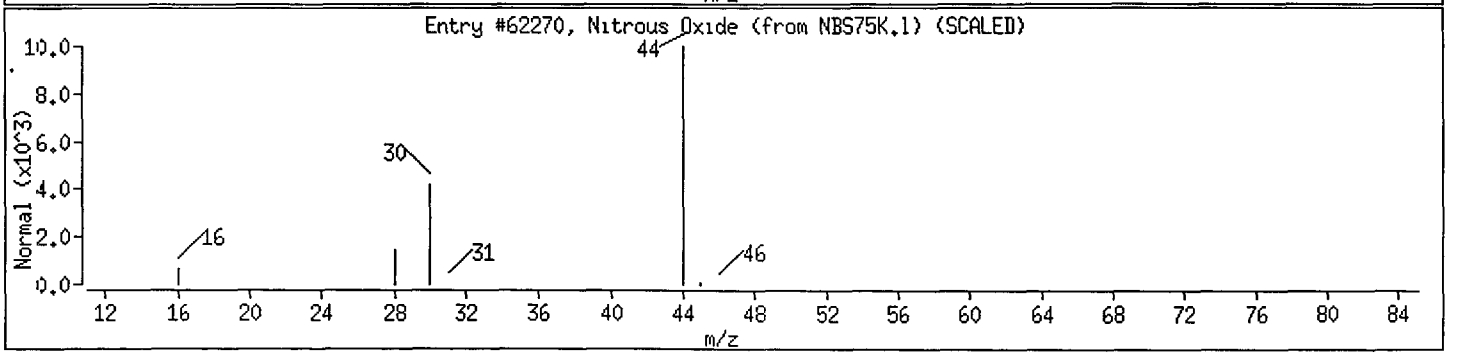
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	34	5	CO2	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44
Nitrous Oxide	10024-97-2	NBS75K.1	62270	3	N2O	44









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815009

J[ ] J3[ ] D[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE86 Dry Weight Factor 70

GC/MS ANALYSIS SGMB7.27.96
Amount Purged: [ ] ~~10ml~~s/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF960727C52 Disk ( )
Blank Filename G MB7.27.96 Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 241 Work-up 241 DR

GC/MS REVIEW

CONDITION CODE [OK]

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review [illegible] Date 7/30/96 Auditor_____ Date____/____/____

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials_____ Date____/____/____

FINAL REVIEW: Initials_____ Date____/____/____

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE 155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE87

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815010

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015010A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 66 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	29	U
74-83-9	Bromomethane	29	U
75-01-4	Vinyl Chloride	29	U
75-00-3	Chloroethane	29	U
75-09-2	Methylene Chloride	78	B
67-64-1	Acetone	130	
75-15-0	Carbon Disulfide	29	U
75-35-4	1,1-Dichloroethene	29	U
75-34-3	1,1-Dichloroethane	29	U
540-59-0	1,2-Dichloroethene (total)	29	U
67-66-3	Chloroform	29	U
107-06-2	1,2-Dichloroethane	29	U
78-93-3	2-Butanone	29	U
71-55-6	1,1,1-Trichloroethane	29	U
56-23-5	Carbon Tetrachloride	29	U
75-27-4	Bromodichloromethane	29	U
78-87-5	1,2-Dichloropropane	29	U
10061-01-5	cis-1,3-Dichloropropene	29	U
79-01-6	Trichloroethene	29	U
124-48-1	Dibromochloromethane	29	U
79-00-5	1,1,2-Trichloroethane	29	U
71-43-2	Benzene	29	U
10061-02-6	trans-1,3-Dichloropropene	29	U
75-25-2	Bromoform	29	U
108-10-1	4-Methyl-2-Pentanone	29	U
591-78-6	2-Hexanone	29	U
127-18-4	Tetrachloroethene	29	U
79-34-5	1,1,2,2-Tetrachloroethane	29	U
108-88-3	Toluene	29	U
108-90-7	Chlorobenzene	29	U
100-41-4	Ethylbenzene	29	U
100-42-5	Styrene	29	U
1330-20-7	Xylene (Total)	29	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE87

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815010

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015010A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 66 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

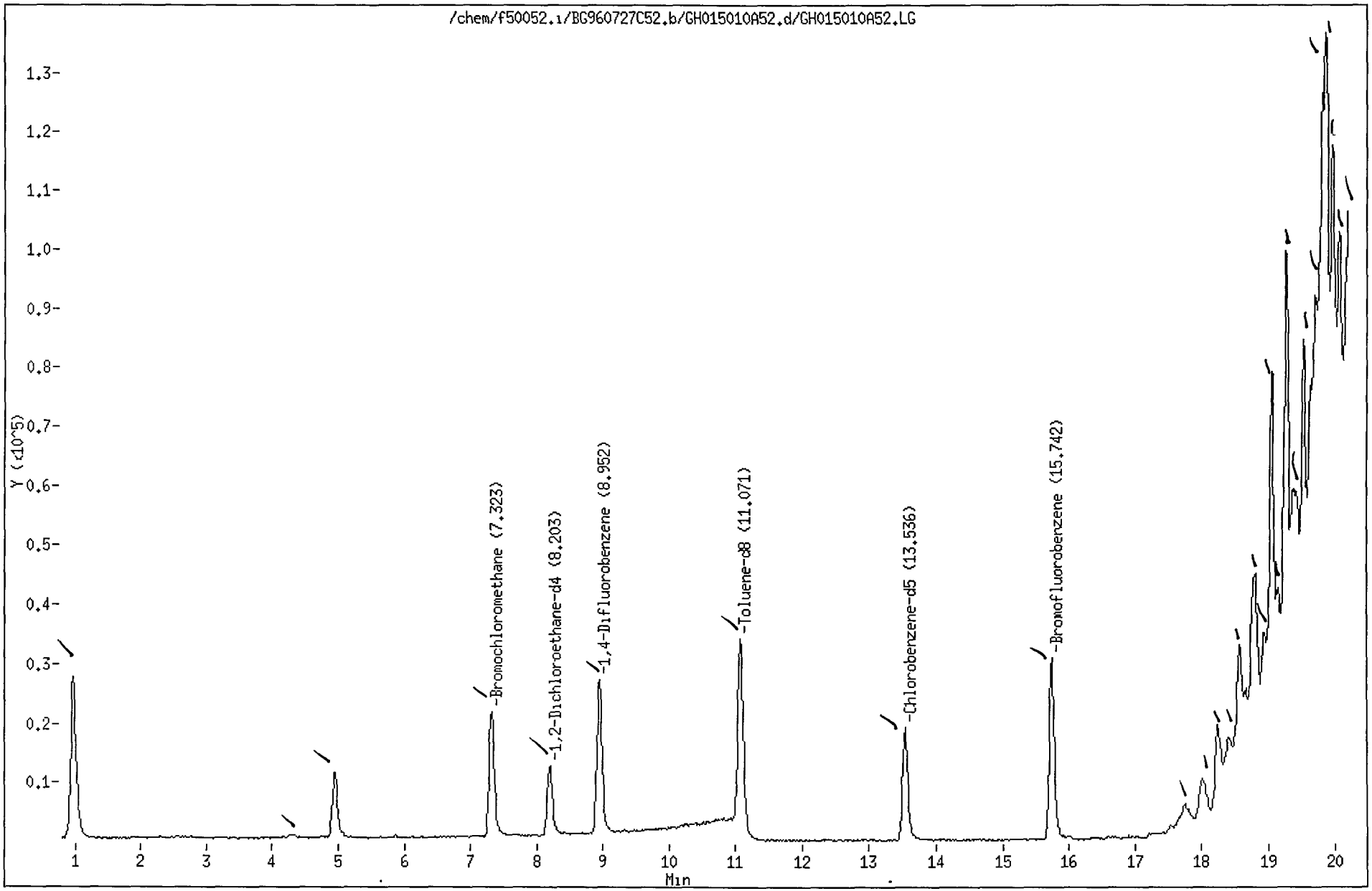
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.97	207	JB
2.	UNKNOWN	17.76	56	J
3.	UNKNOWN	18.02	74	J
4.	SUBSTITUTED NAPHTHALENE	18.25	127	J
5.	UNKNOWN	18.41	34	J
6.	UNKNOWN	18.57	124	J
7.	UNKNOWN	18.81	177	J
8.	UNKNOWN	18.94	51	J
9.	SUBSTITUTED NAPHTHALENE	19.04	246	J
10.	UNKNOWN	19.14	19	J
11.	UNKNOWN	19.26	337	J
12.	UNKNOWN	19.37	28	J
13.	UNKNOWN	19.40	40	J
14.	UNKNOWN	19.52	157	J
15.	UNKNOWN	19.62	67	J
16.	UNKNOWN	19.69	72	J
17.	UNKNOWN	19.81	167	J
18.	UNKNOWN	19.85	229	J
19.	UNKNOWN	19.95	165	J
20.	UNKNOWN	20.05	118	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d
Date : 27-JUL-1996 14:17
Client ID: FFE87
Sample Info:

Column phase: DB624

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53



Data File: /chem/f50052.i/BG960727C52.b/GH015010A52.d
Report Date: 30-Jul-1996 13:11

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH015010A52.d
Lab Smp Id: 815010 Client Smp ID: FFE87
Inj Date : 27-JUL-1996 14:17
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	66.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 323	7 280	(1 000)	16045	250 0	
* 2 1,4-Difluorobenzene	114 00	8 938	8 923	(1 000)	57597	250 0	
* 3 Chlorobenzene-d5	117 00	13 536	13 508	(1 000)	36836	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 203	8 174	(1 120)	22806	202 7	119 3
$ 5 Toluene-d8	98 00	11 071	11 057	(0 818)	59603	226 6	133 3
$ 6 Bromofluorobenzene	95 00	15 742	15 728	(1 163)	29978	216 2	127 2
7 Chloromethane	50 00		1 312		Compound Not Detected		
8 Vinyl Chloride	62 00		1 571		Compound Not Detected		
9 Bromomethane	94 00		2 278		Compound Not Detected		
10 Chloroethane	64 00		2 451		Compound Not Detected		
11 1,1-Dichloroethene	96 00		3 979		Compound Not Detected		
12 Carbon Disulfide	76 00		4 109		Compound Not Detected		
13 Acetone	43 00	4 310	4 267	(0 589)	2550	221 7	130 4
14 Methylene Chloride	84 00	4 945	4 873	(0 675)	14399	133 2	78 37
15 trans-1,2-Dichloroethene	96 00		5 305		Compound Not Detected		
16 1,1-Dichloroethane	63 00		6 011		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		6 934		Compound Not Detected		
18 2-Butanone	43 00		7 121		Compound Not Detected		
19 Chloroform	83 00		7 511		Compound Not Detected.		
20 1,1,1-Trichloroethane	97 00		7 612		Compound Not Detected		
21 Carbon Tetrachloride	117 00		7 842		Compound Not Detected		
• 22 Benzene	78 00		8 174		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015010A52.d
Report Date: 30-Jul-1996 13:11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
	24 Trichloroethene	130 00		9 212		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 527		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 825		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 762		Compound Not Detected		
	39 Styrene	104 00		14 819		Compound Not Detected		
	40 Bromoform	173 00		15 065		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015010A52.d
Report Date: 30-Jul-1996 13:28

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH015010A52.d
Lab Smp Id: 815010 Client Smp ID: FFE87
Inj Date : 27-JUL-1996 14:17
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.323	117155	250.000
* 3 Chlorobenzene-d5	13.536	106789	250.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)					CAS #		
0 966	164719	351 5	206 8	0		0	1
unknown					CAS #		
17 760	40802	95 52	56 19	0		0	3
unknown					CAS #		
18 020	54018	126 4	74 39	0		0	3
substituted naphthalene					CAS #		
18 250	91938	215 2	126 6	0		0	3
unknown					CAS #		
18 409	24729	57 89	34 05	0		0	3
unknown					CAS #		
18 568	90320	211 4	124 4	0		0	3

Data File: /chem/f50052.i/BG960727C52.b/GH015010A52.d
Report Date: 30-Jul-1996 13:28

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
unknown					CAS #		
18 813	128423	300 6	176 8	0		0	3
unknown					CAS #		
18 942	37036	86 70	51 00	0		0	3
substituted naphthalene					CAS #		
19 043	178460	417 8	245 8	0		0	3
unknown					CAS #		
19 144	14074	32 95	19 38	0		0	3
unknown					CAS #		
19 260	244992	573 5	337 4	0		0	3
unknown					CAS #		
19.375	20372	47 69	28 05	0		0	3
unknown					CAS #		
19 404	29170	68 29	40 17	0		0	3
unknown					CAS #		
19 519	113765	266 3	156 7	0		0	3
unknown					CAS #		
19.620	48924	114 5	67 37	0		0	3
unknown					CAS #		
19 692	51928	121 6	71 51	0		0	3
unknown					CAS #		
19 807	121017	283 3	166 6	0		0	3
unknown					CAS #		
19 851	166367	389 5	229 1	0		0	3
unknown					CAS #		
19 951	120121	281 2	165 4	0		0	3
unknown					CAS #		
20 052	85414	200 0	117 6	0		0	3

Data File: /chem/f50052.i/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

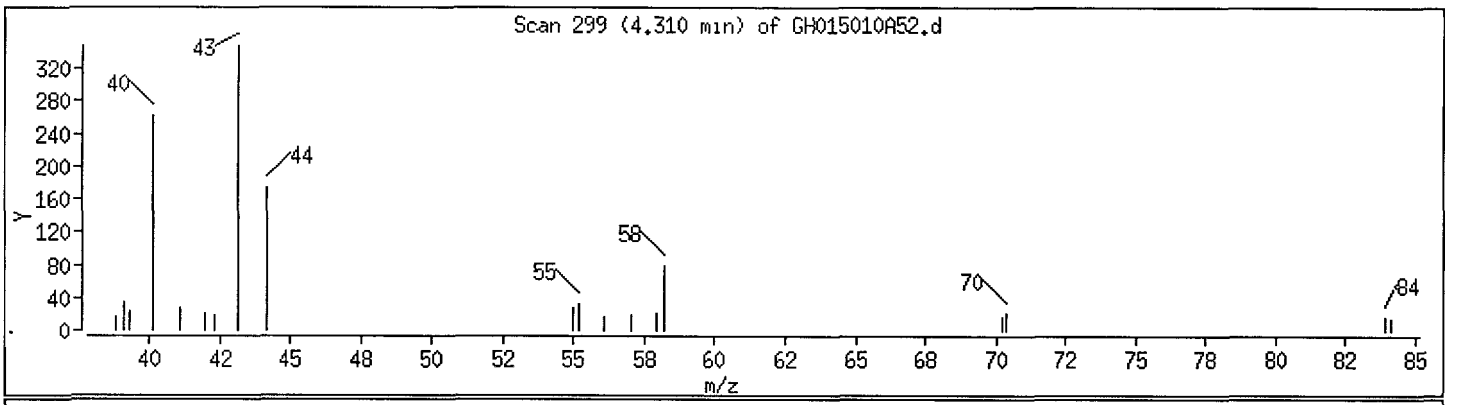
Client ID: FFE87 Instrument: f50052.i

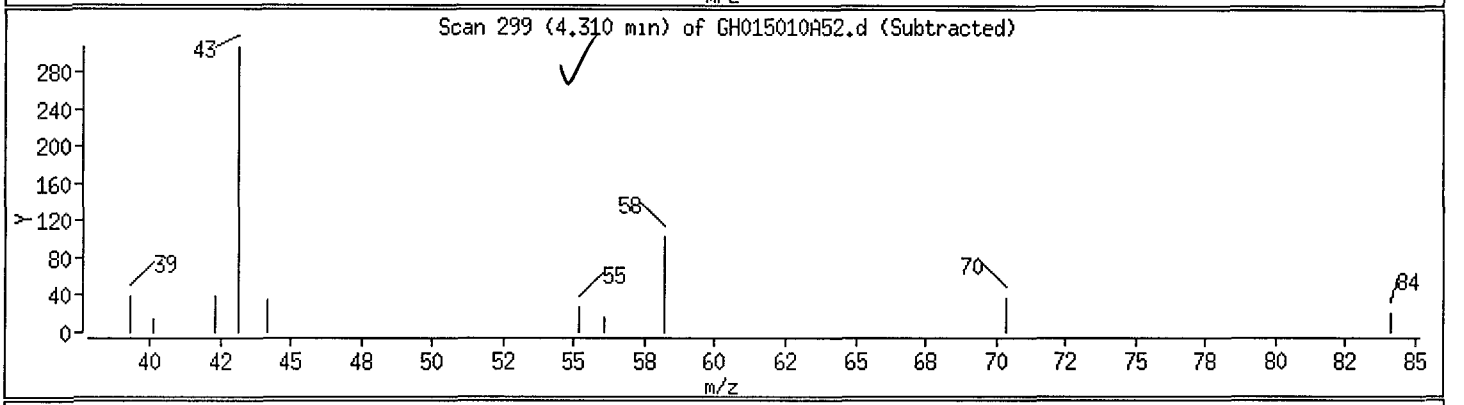
Sample Info:

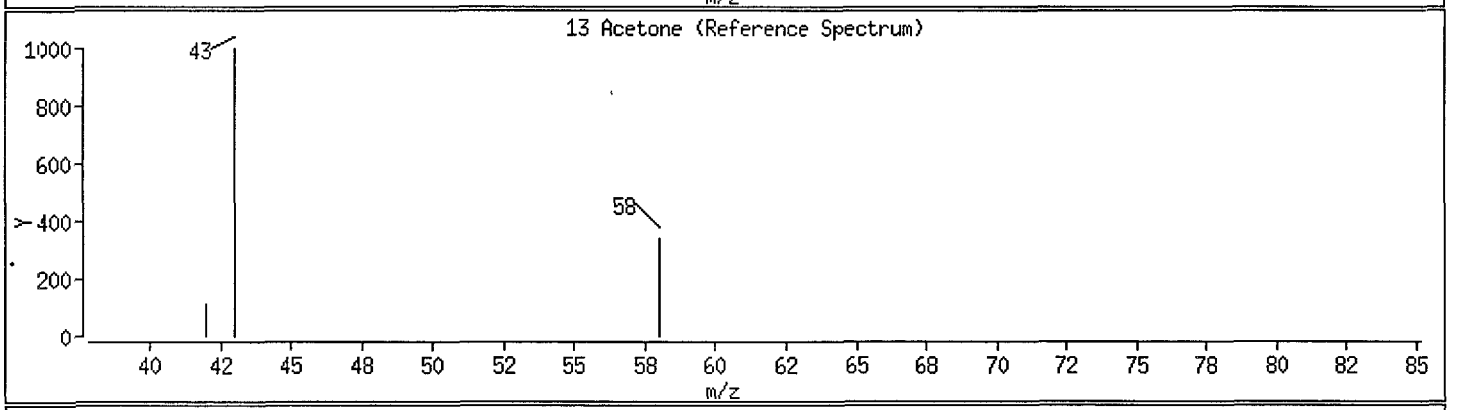
Operator: 2141

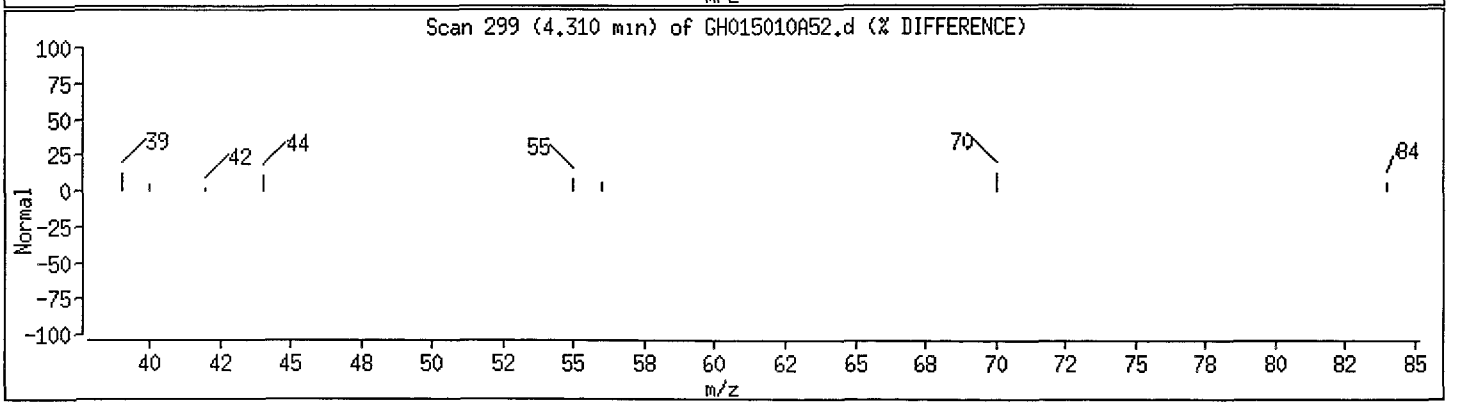
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

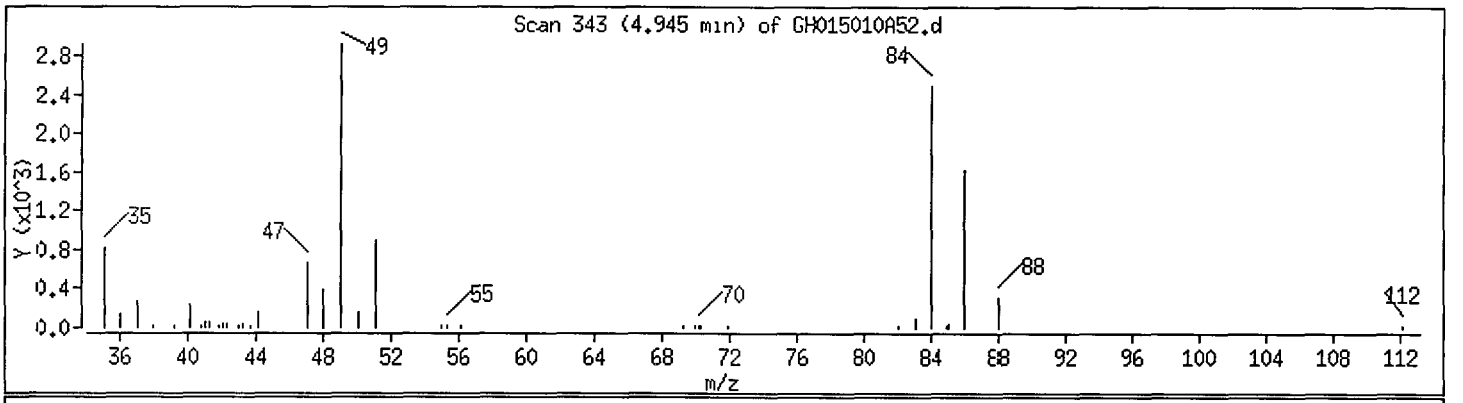
Client ID: FFE87 Instrument: f50052.1

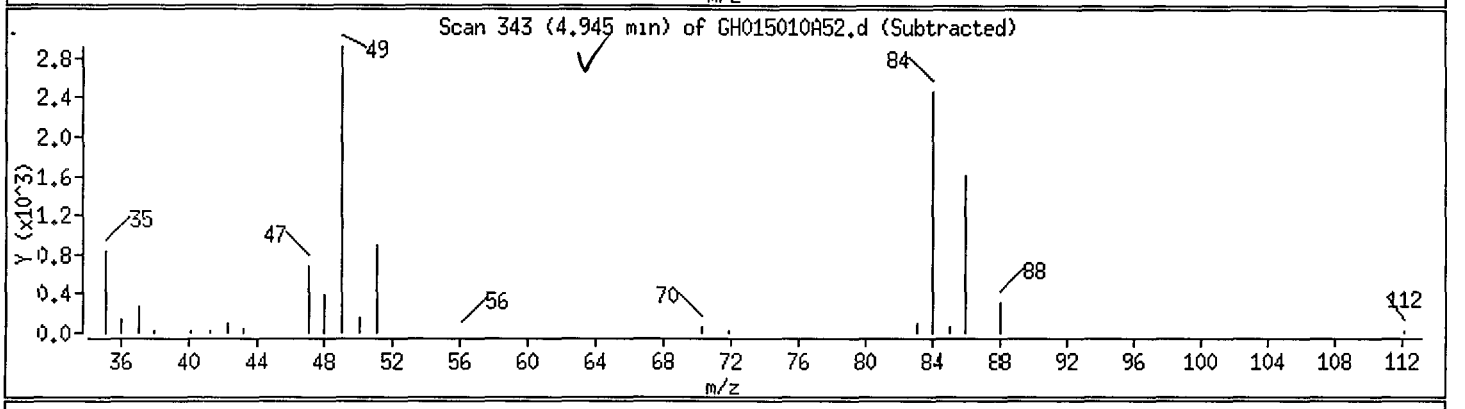
Sample Info:

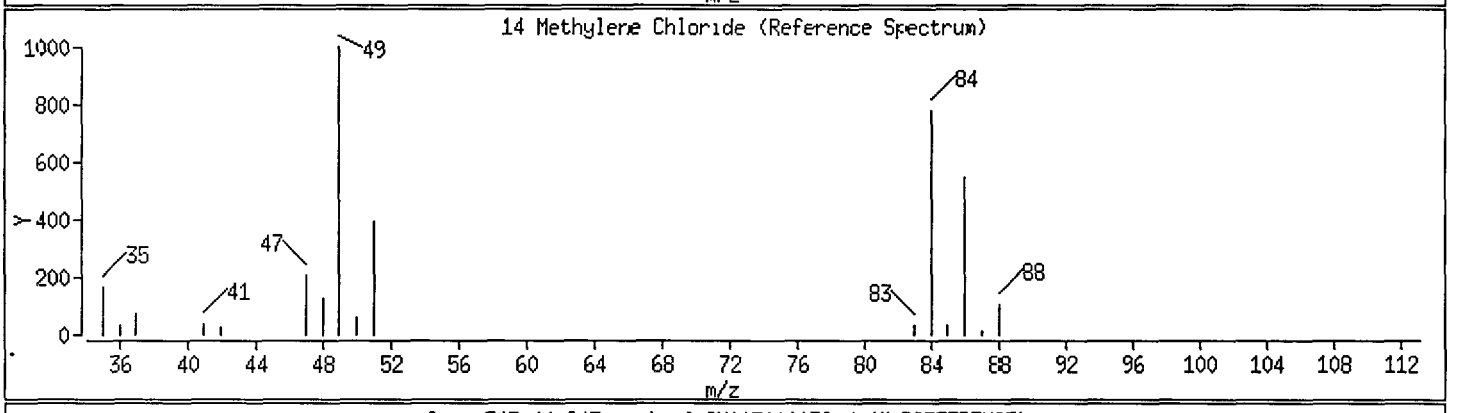
Operator: 2141

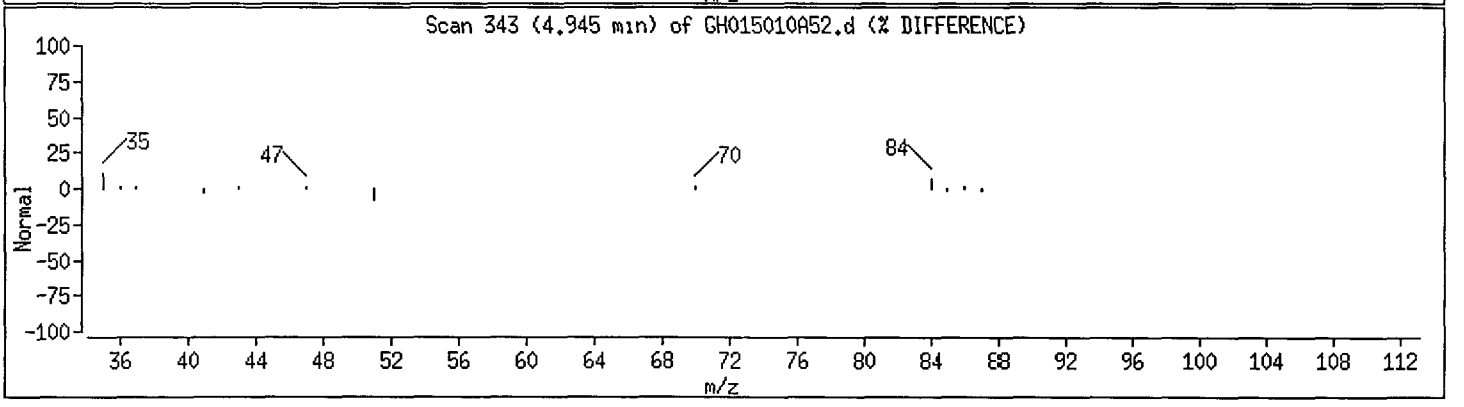
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

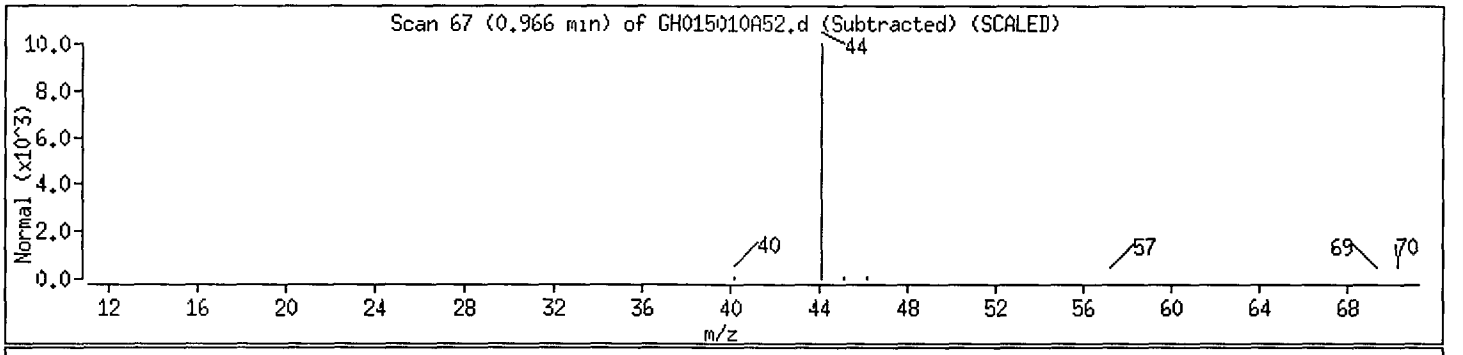
Client ID: FFE87 Instrument: f50052.1

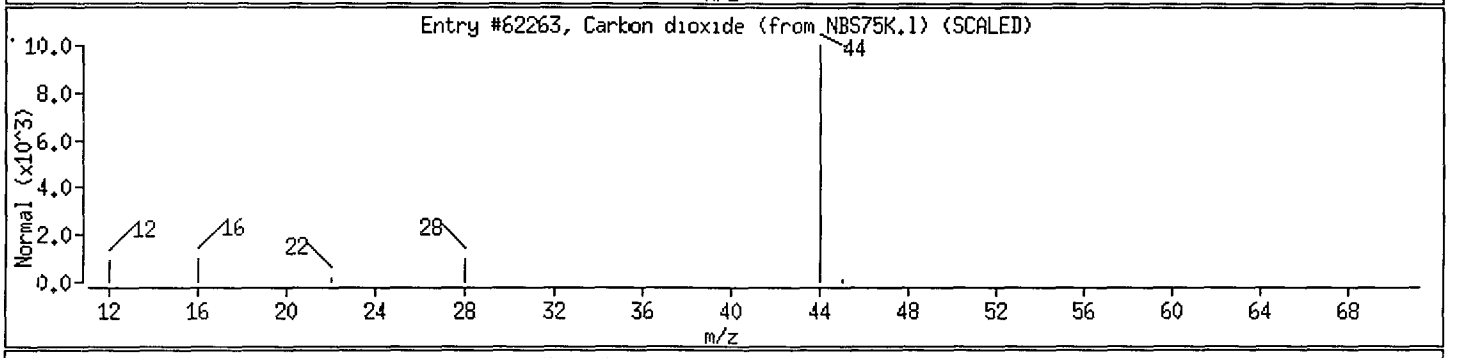
Sample Info:

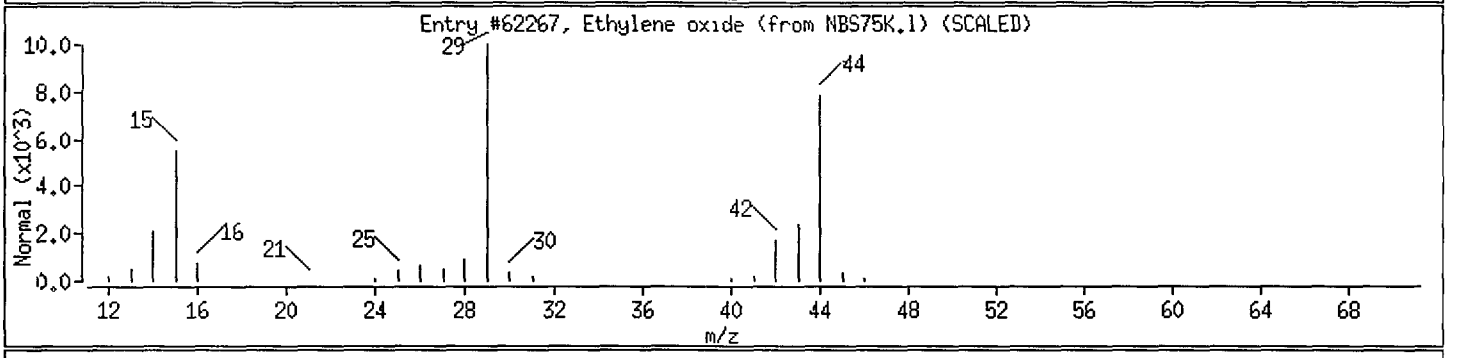
Operator: 2141

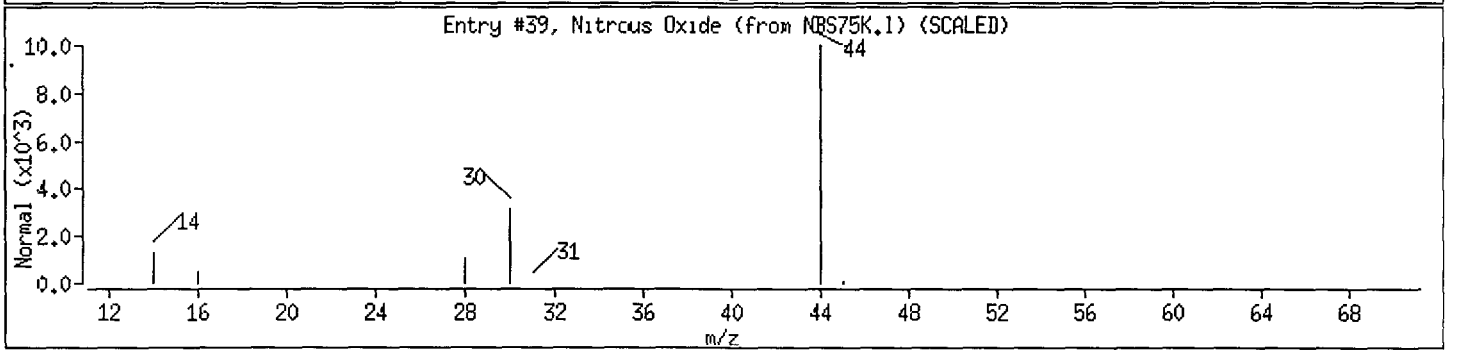
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	62263	5	CO2	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44
Nitrous Oxide	10024-97-2	NBS75K.1	39	3	N2O	44









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

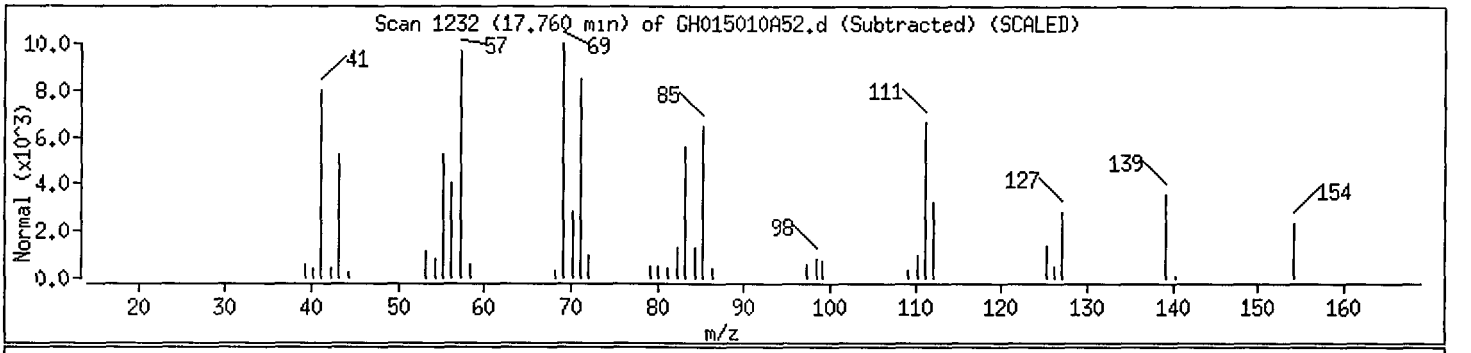
Client ID: FFE87 Instrument: f50052.1

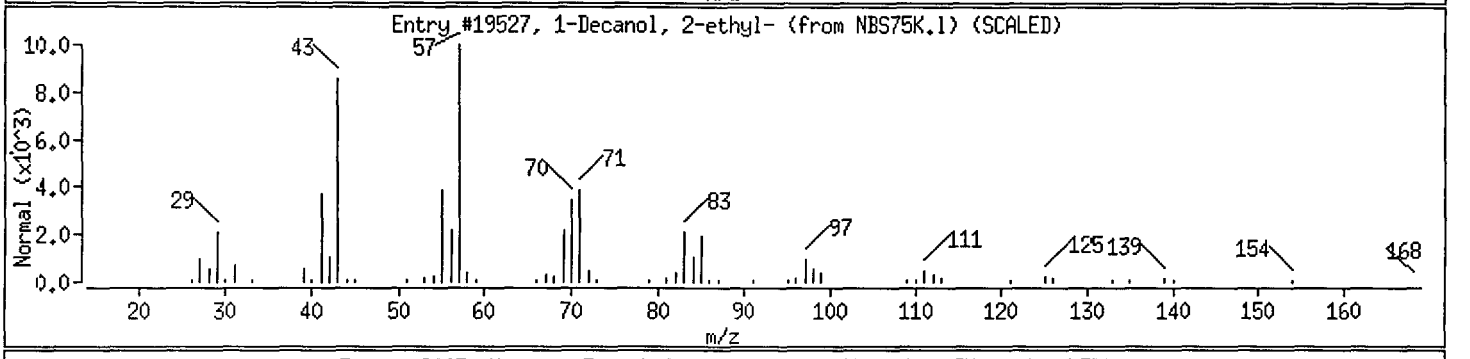
Sample Info:

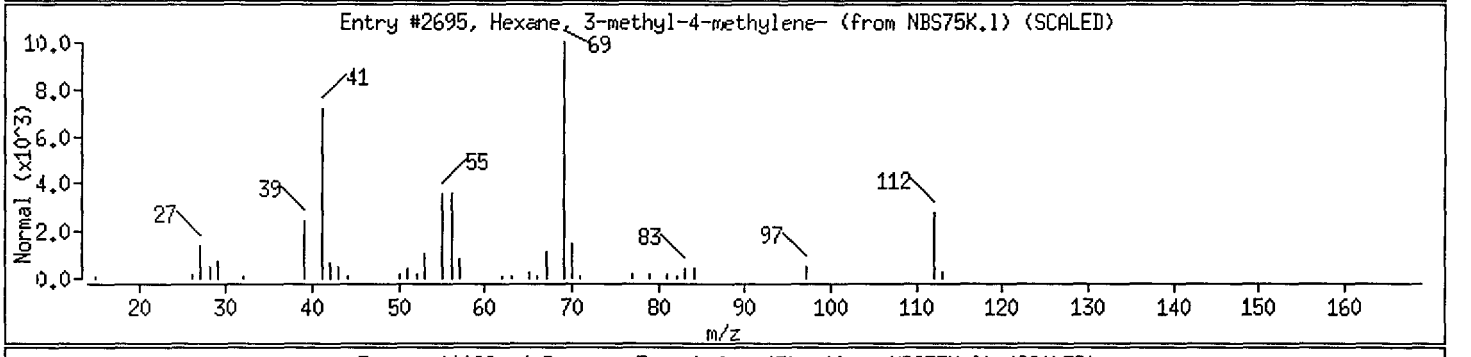
Operator: 2141

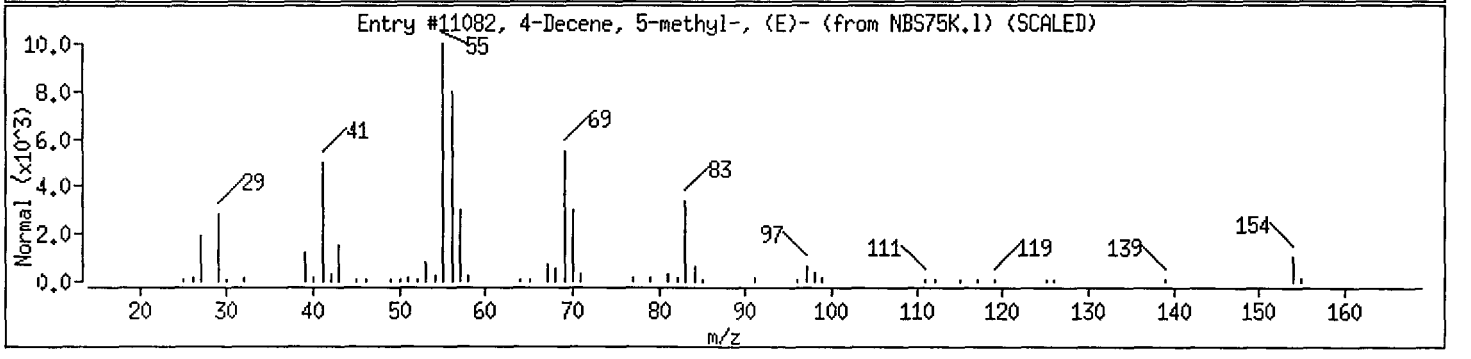
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1-Decanol, 2-ethyl-	21078-65-9	NBS75K.1	19527	38	C12H26O	186
Hexane, 3-methyl-4-methylene-	3404-67-9	NBS75K.1	2695	25	C8H16	112
4-Decene, 5-methyl-, (E)-	62338-51-6	NBS75K.1	11082	22	C11H22	154









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

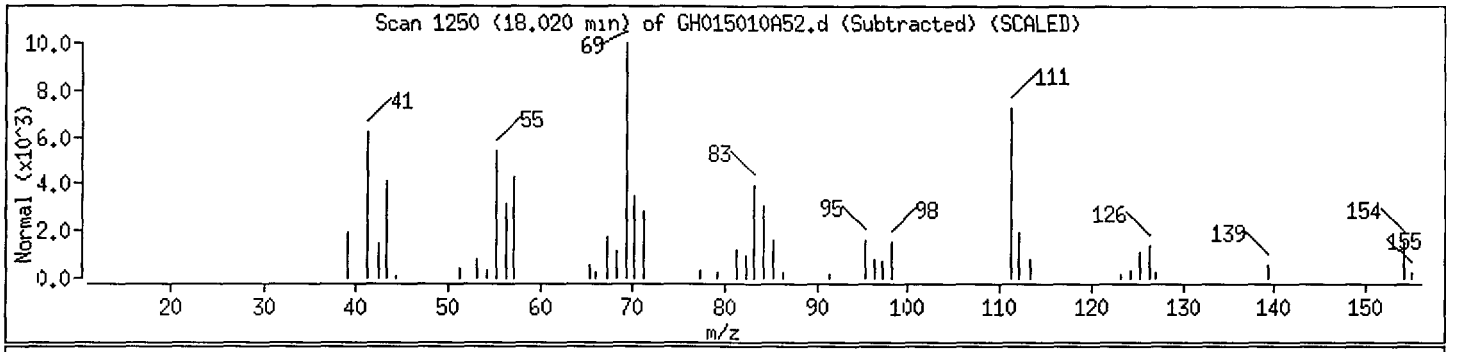
Client ID: FFE87 Instrument: f50052.1

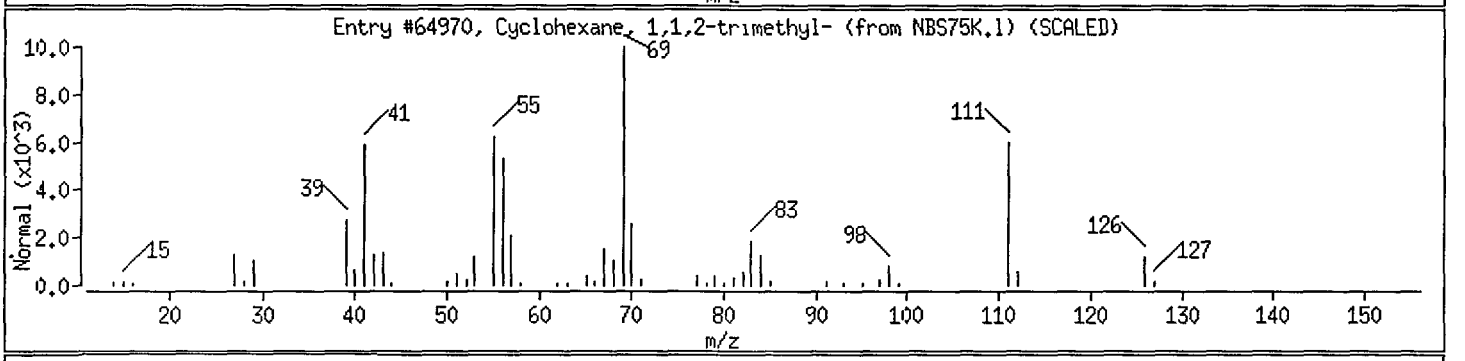
Sample Info:

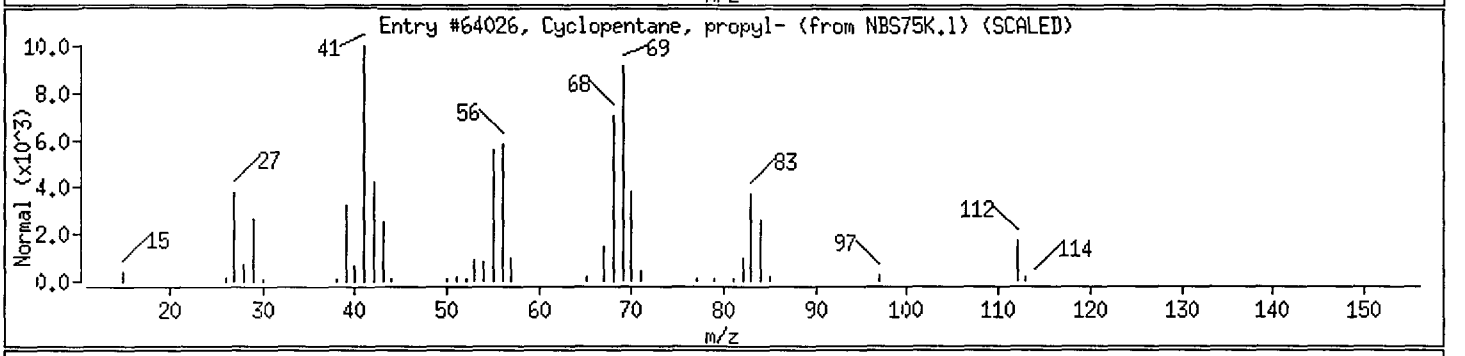
Operator: 2141

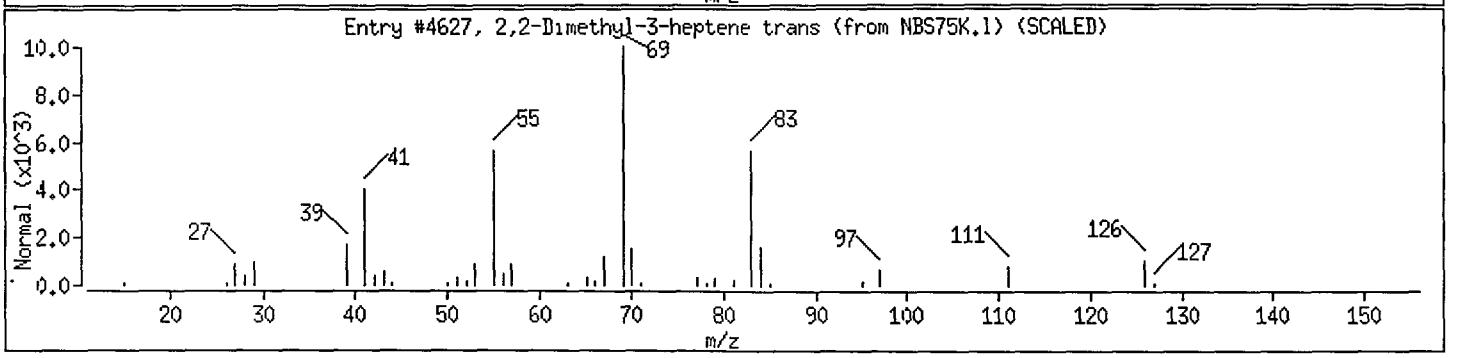
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1,1,2-trimethyl-	7094-26-0	NBS75K.1	64970	62	C9H18	126
Cyclopentane, propyl-	2040-96-2	NBS75K.1	64026	53	C8H16	112
2,2-Dimethyl-3-heptene trans	19550-75-5	NBS75K.1	4627	49	C9H18	126









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

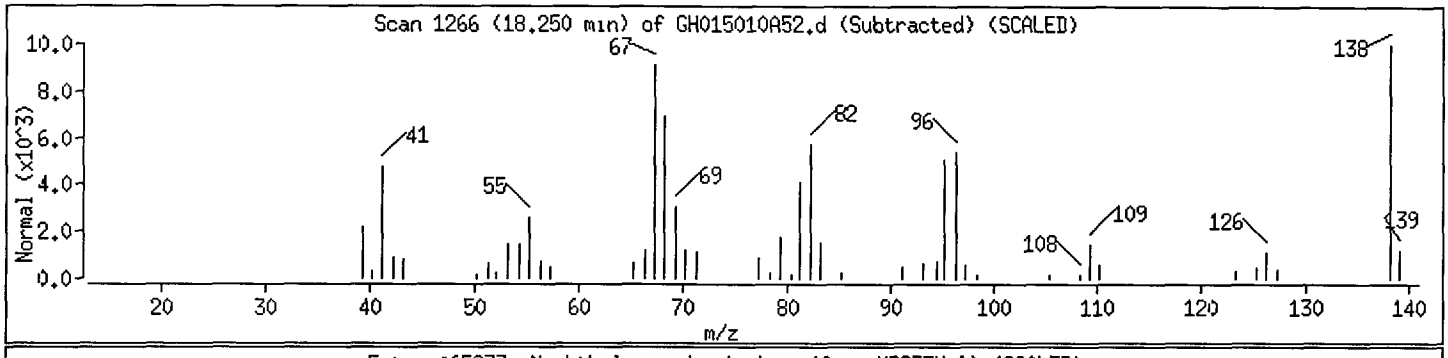
Client ID: FFE87 Instrument: f50052.1

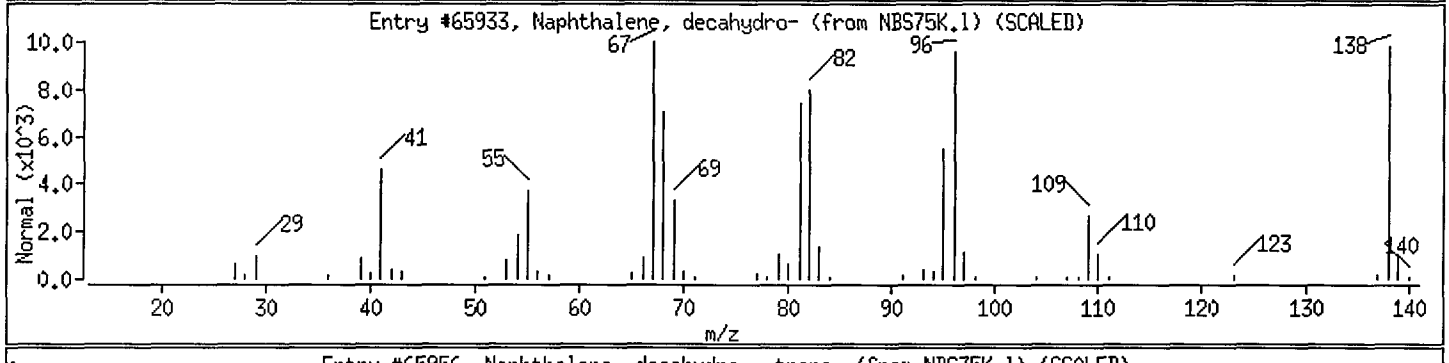
Sample Info:

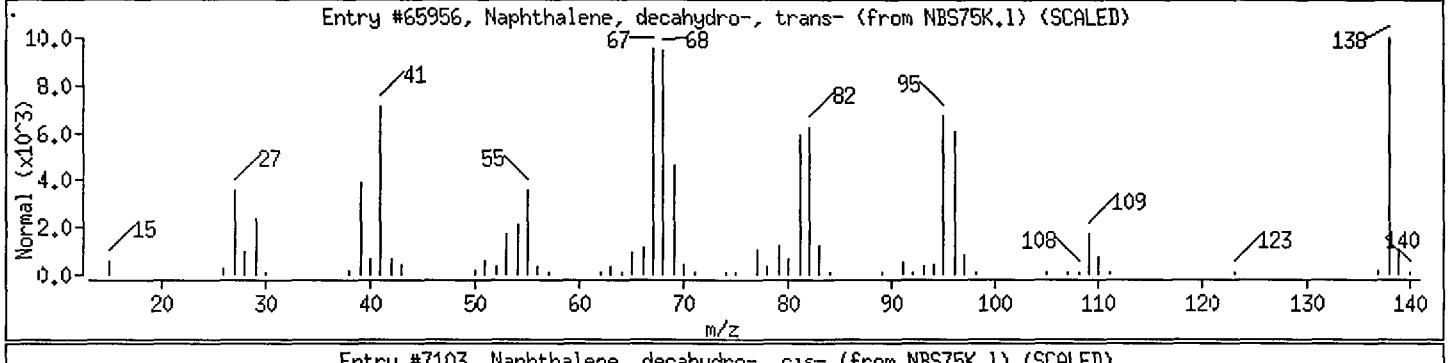
Operator: 2141

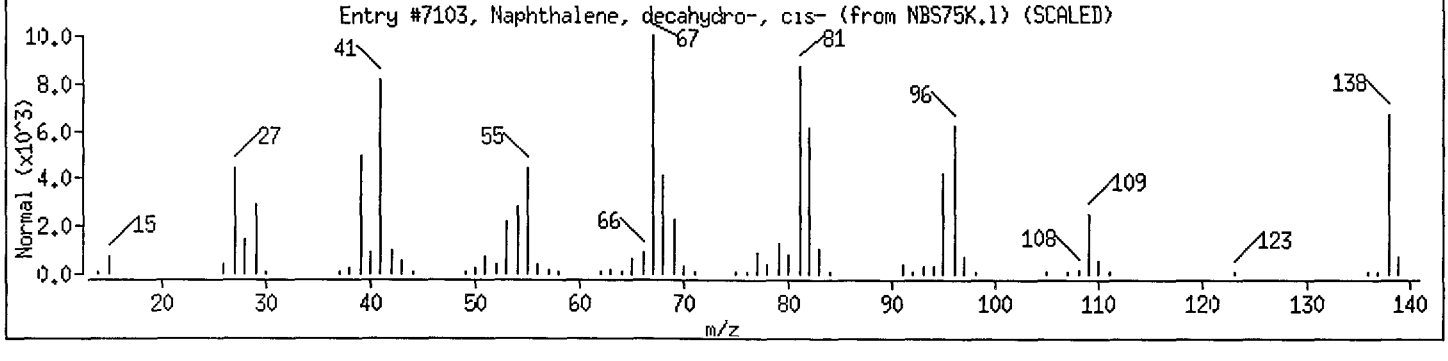
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted naphthalene						
Naphthalene, decahydro-	91-17-8	NBS75K.1	65933	93	C10H18	138
Naphthalene, decahydro-, trans-	493-02-7	NBS75K.1	65956	91	C10H18	138
Naphthalene, decahydro-, cis-	493-01-6	NBS75K.1	7103	83	C10H18	138









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

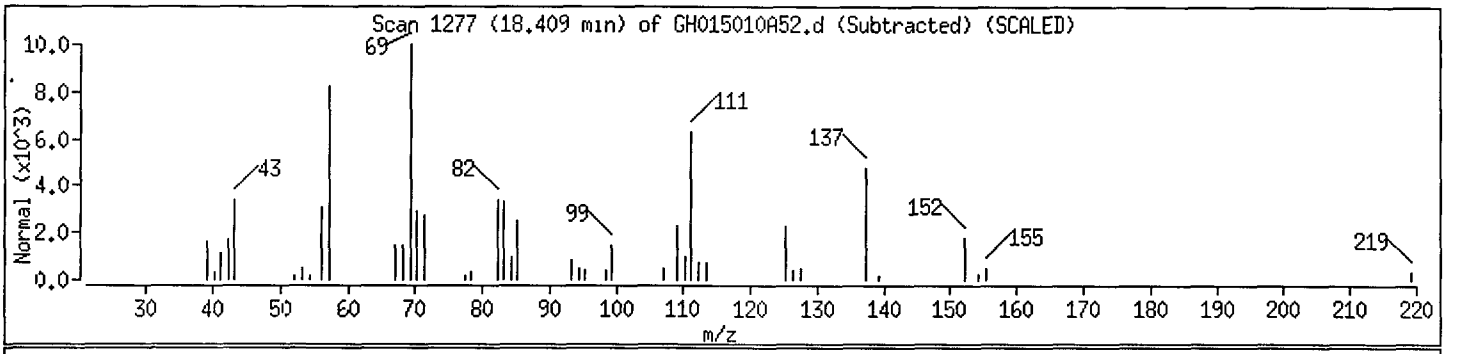
Client ID: FFE87 Instrument: f50052.1

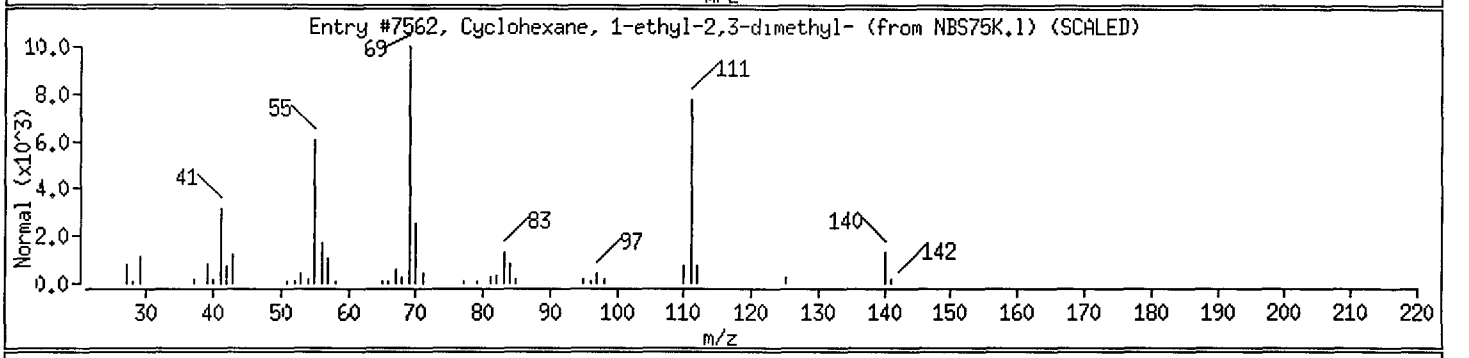
Sample Info:

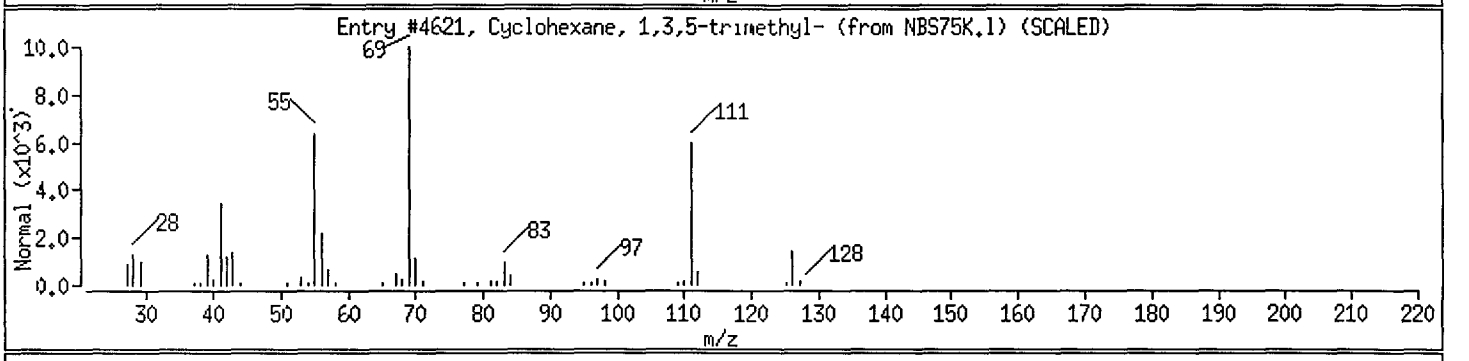
Operator: 2141

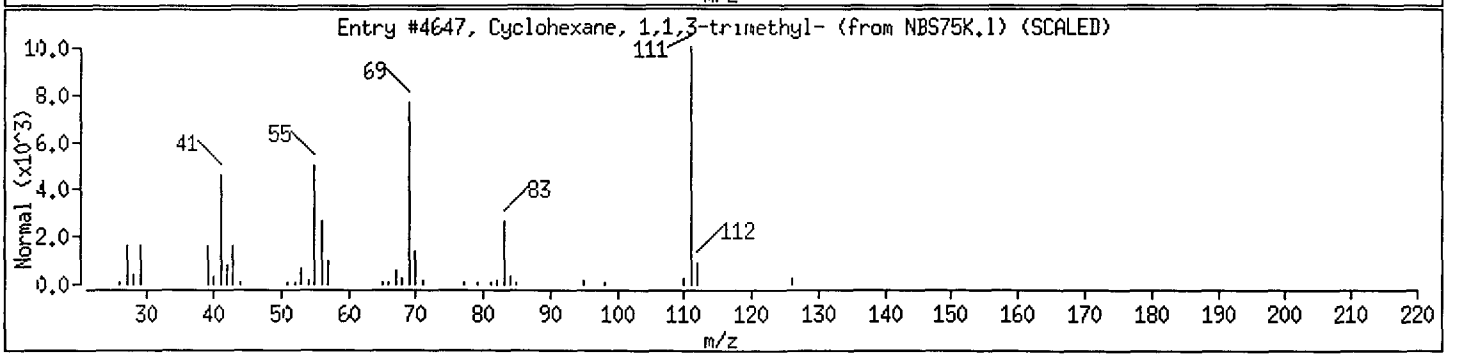
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1-ethyl-2,3-dimethyl-	7058-05-1	NBS75K.1	7562	43	C10H20	140
Cyclohexane, 1,3,5-trimethyl-	1839-63-0	NBS75K.1	4621	43	C9H18	126
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NBS75K.1	4647	38	C9H18	126









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

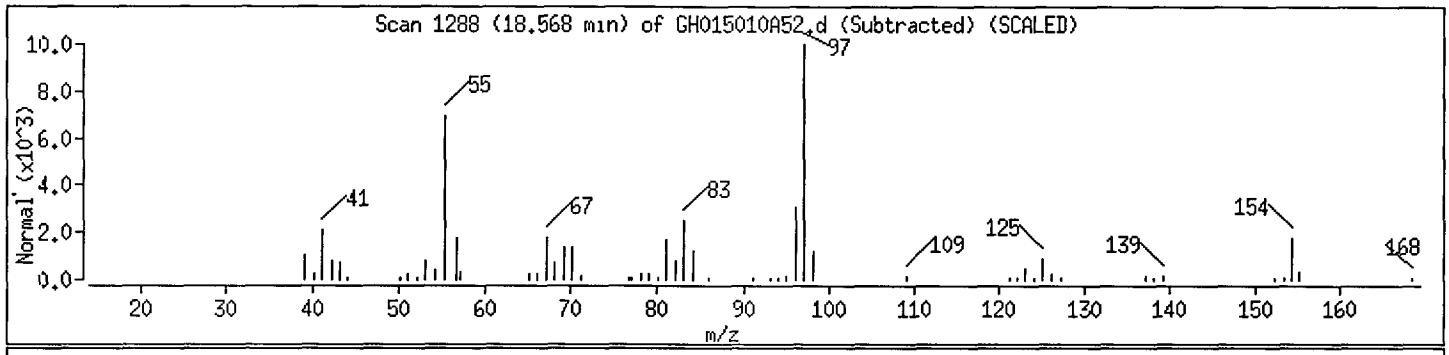
Client ID: FFE87 Instrument: f50052.1

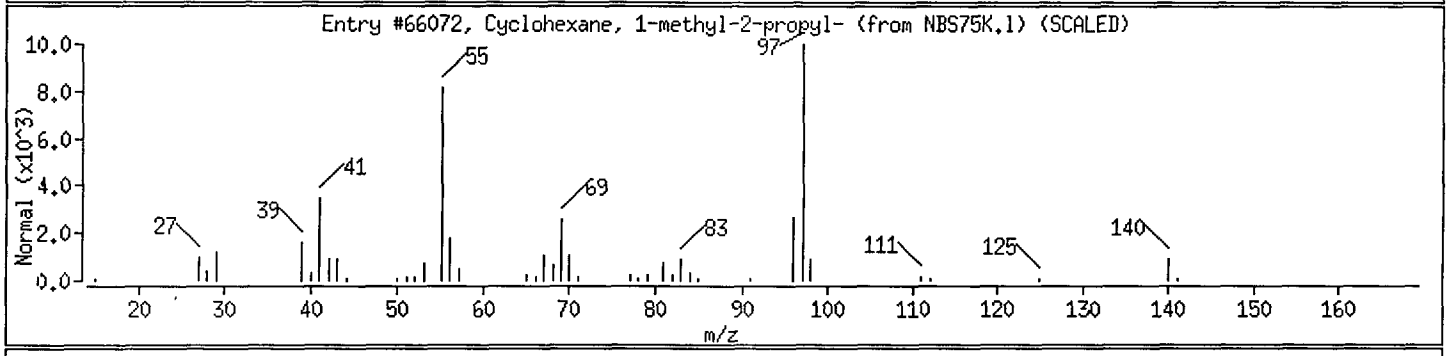
Sample Info:

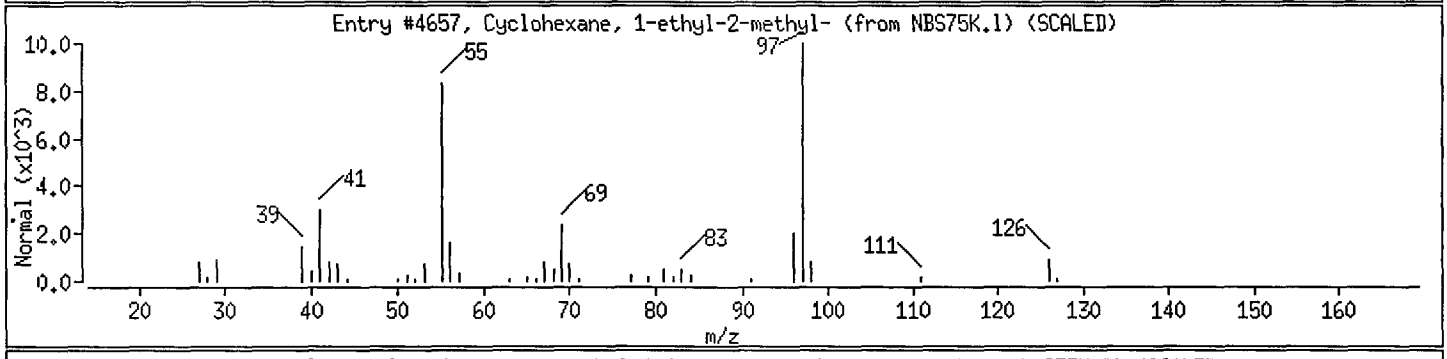
Operator: 2141

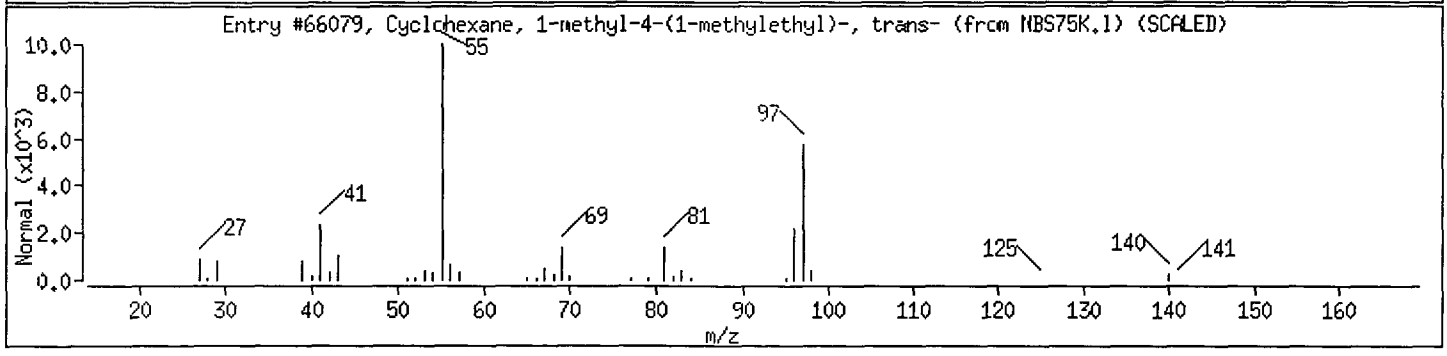
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	NBS75K.1	66072	64	C10H20	140
Cyclohexane, 1-ethyl-2-methyl-	3728-54-9	NBS75K.1	4657	53	C9H18	126
Cyclohexane, 1-methyl-4-(1-methylethyl)-	1678-82-6	NBS75K.1	66079	53	C10H20	140









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

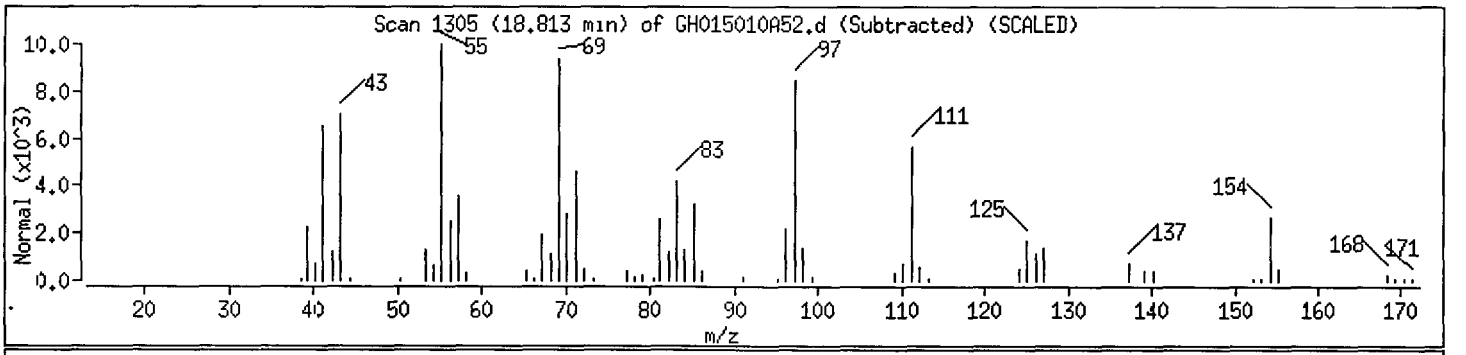
Client ID: FFE87 Instrument: f50052.1

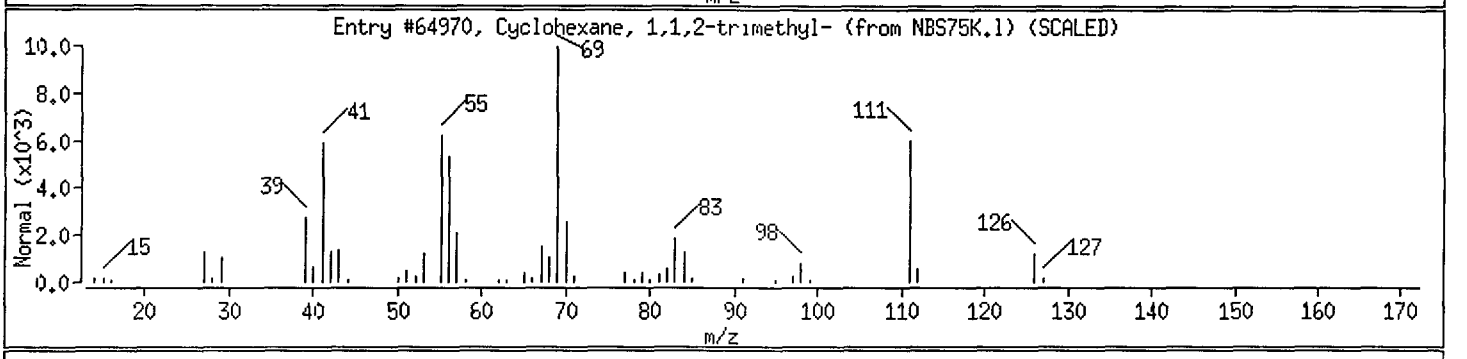
Sample Info:

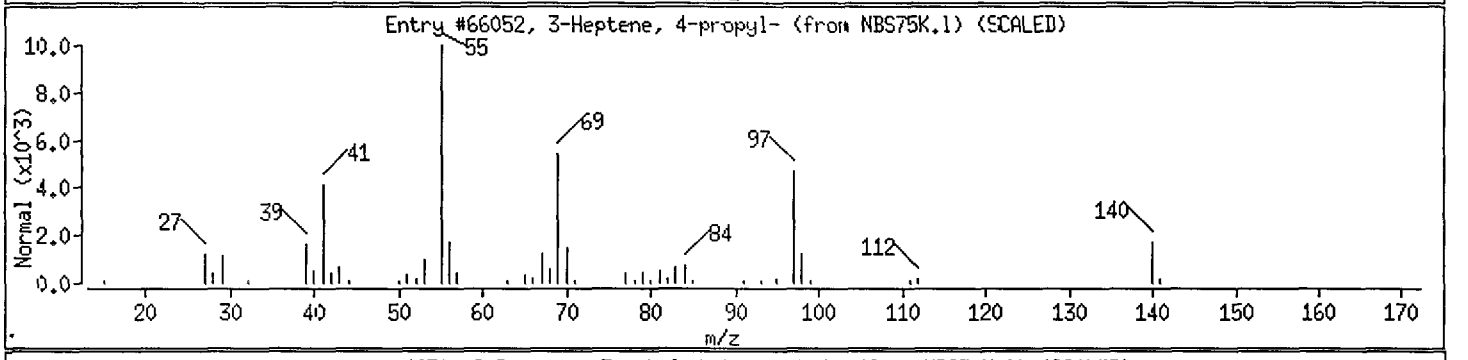
Operator: 2141

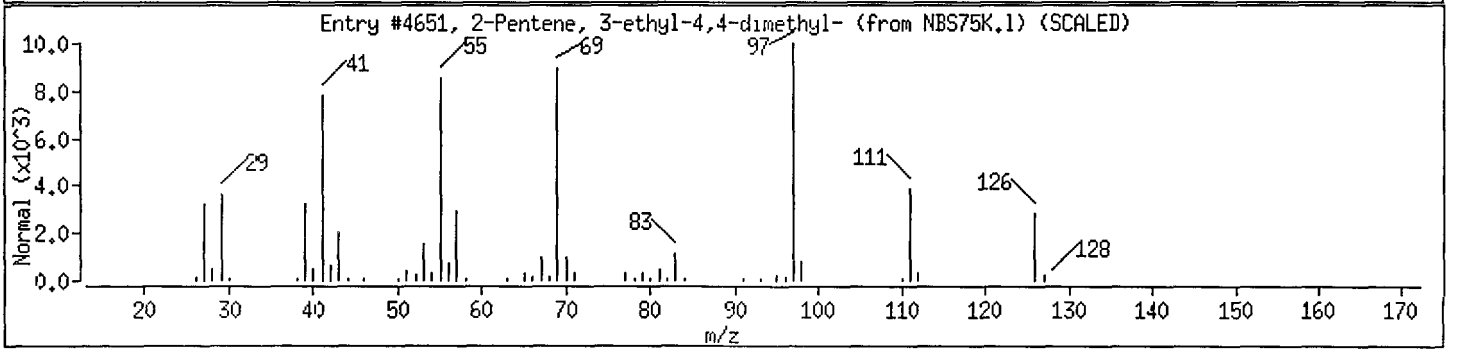
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1,1,2-trimethyl-	7094-26-0	NBS75K.1	64970	51	C9H18	126
3-Heptene, 4-propyl-	4485-13-6	NBS75K.1	66052	46	C10H20	140
2-Pentene, 3-ethyl-4,4-dimethyl-	53907-59-8	NBS75K.1	4651	46	C9H18	126









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

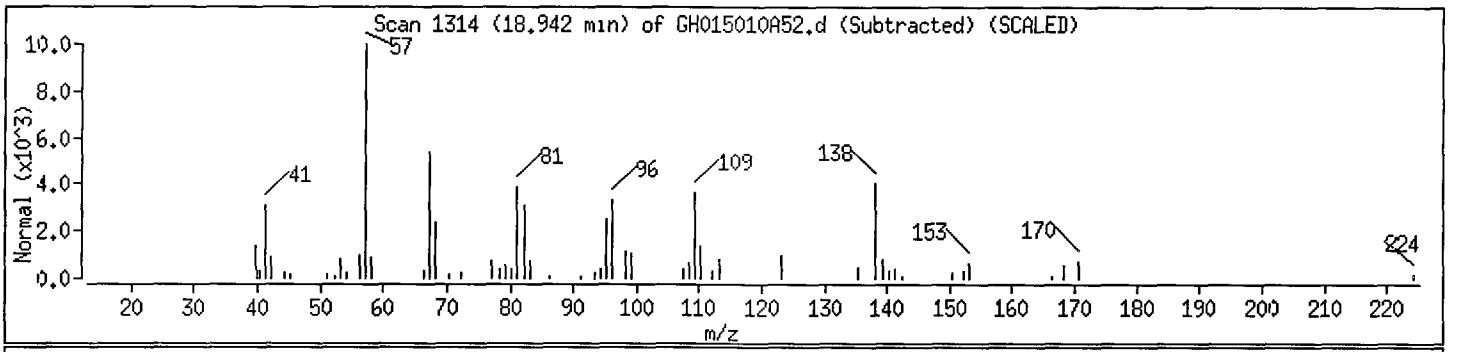
Client ID: FFE87 Instrument: f50052.1

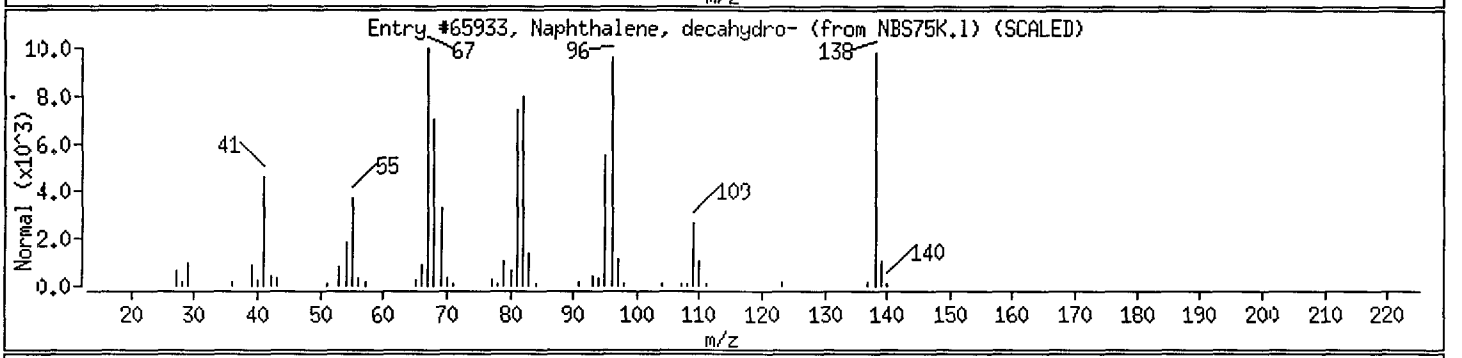
Sample Info:

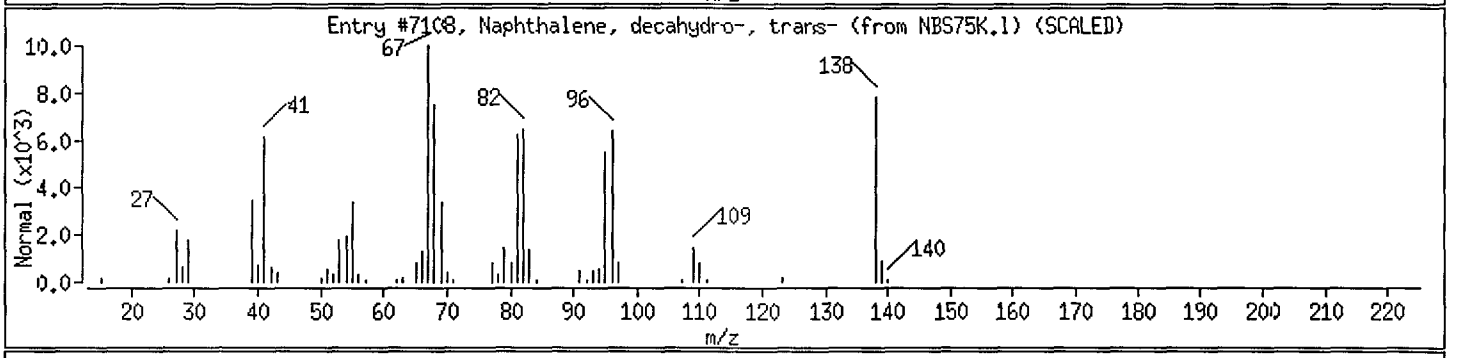
Operator: 2141

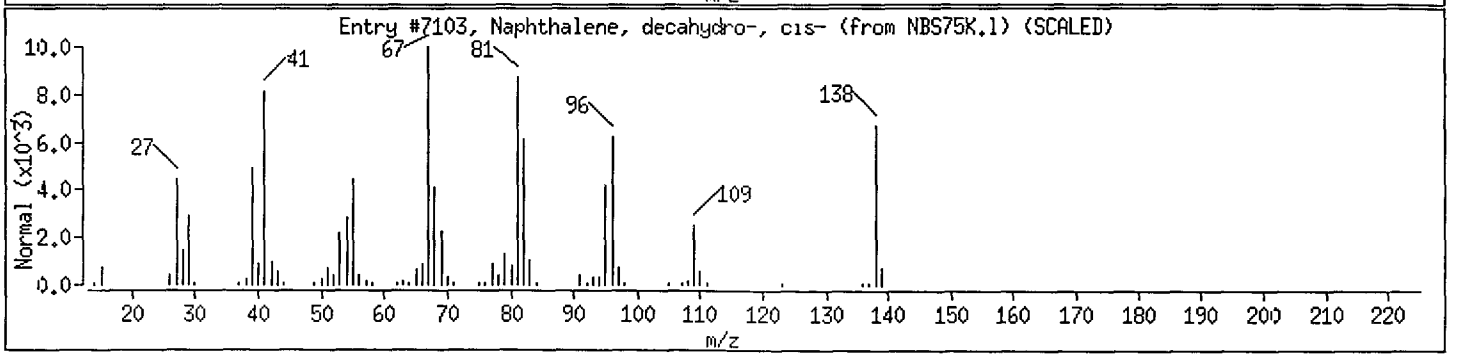
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Naphthalene, decahydro-	91-17-8	NBS75K.1	65933	60	C10H18	138
Naphthalene, decahydro-, trans-	493-02-7	NBS75K.1	7108	58	C10H18	138
Naphthalene, decahydro-, cis-	493-01-6	NBS75K.1	7103	53	C10H18	138









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

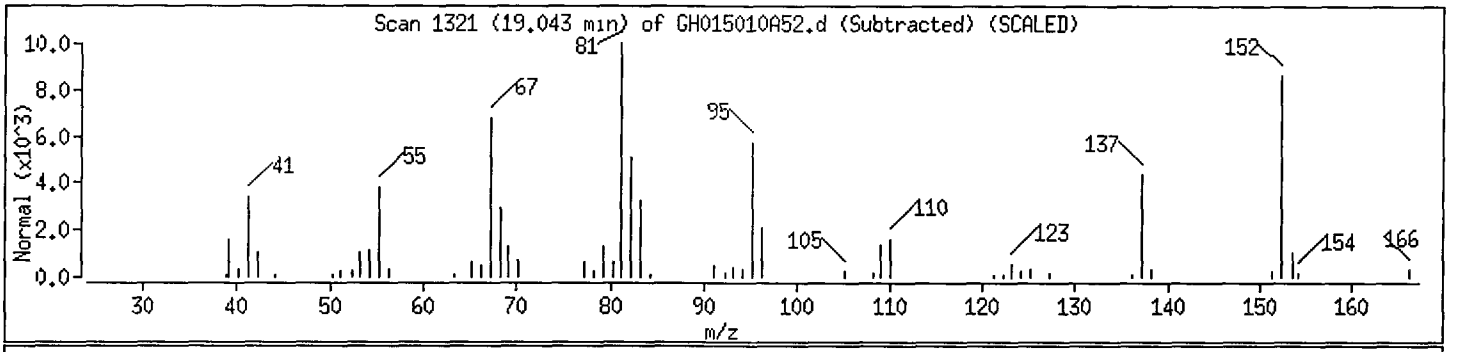
Client ID: FFE87 Instrument: f50052.1

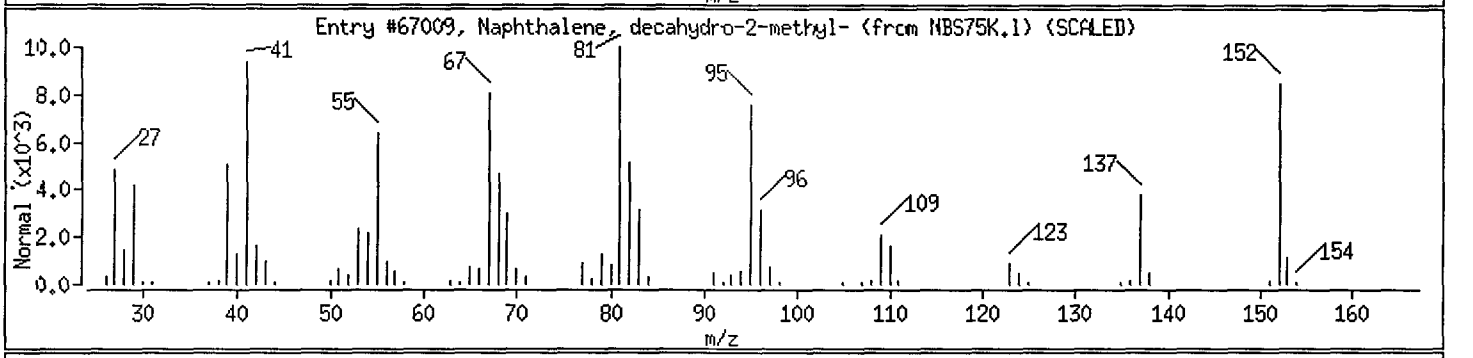
Sample Info:

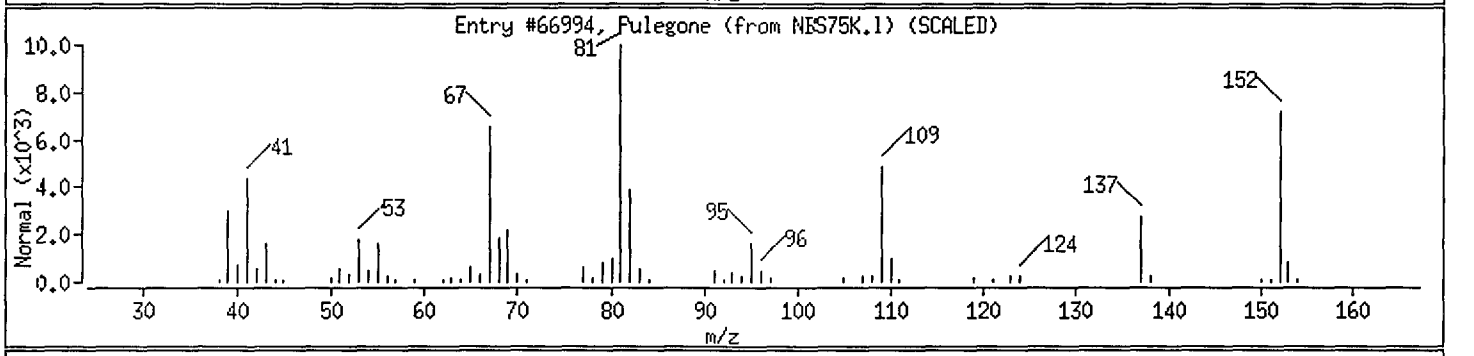
Operator: 2141

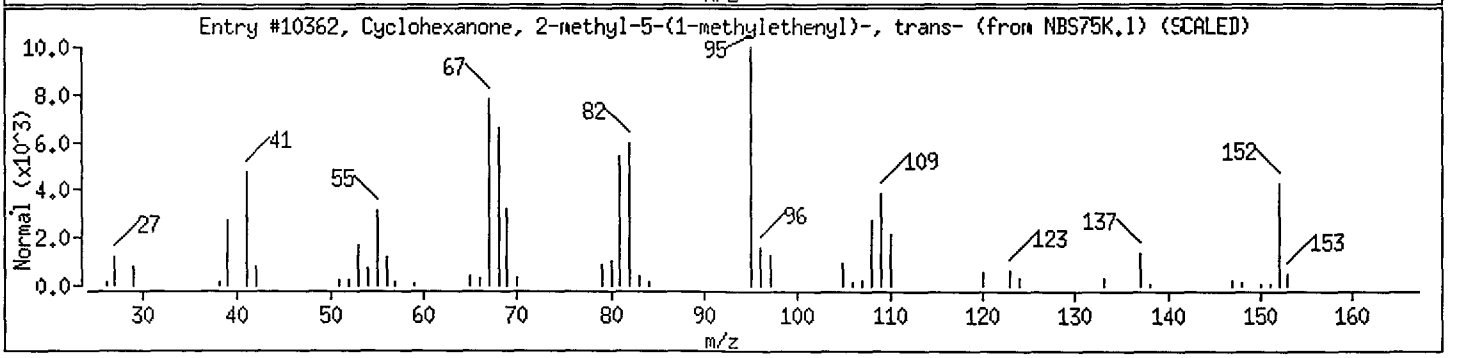
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted naphthalene						
Naphthalene, decahydro-2-methyl-	2958-76-1	NBS75K.1	67009	72	C11H20	152
Pulegone	89-82-7	NBS75K.1	66994	72	C10H16O	152
Cyclohexanone, 2-methyl-5-(1-methylethen	5948-04-9	NBS75K.1	10362	58	C10H16O	152









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

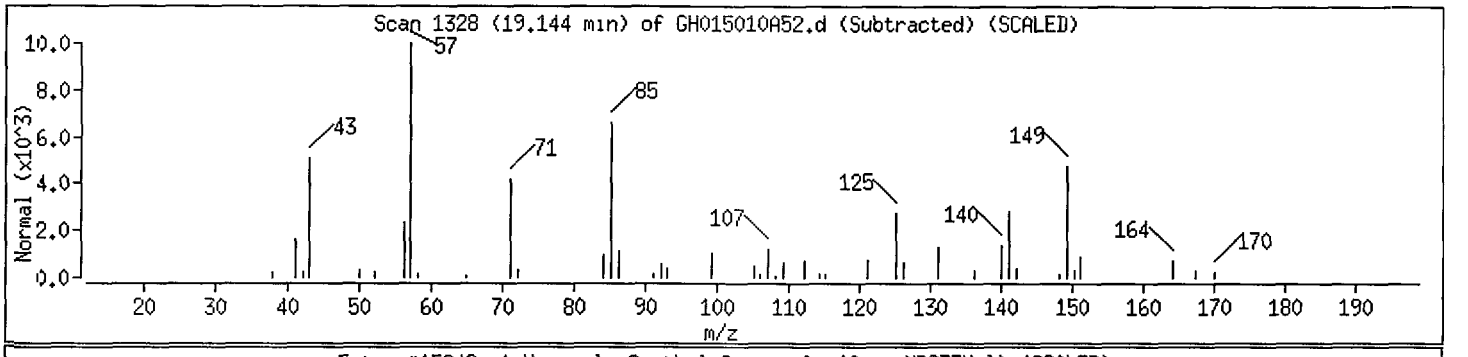
Client ID: FFE87 Instrument: f50052.1

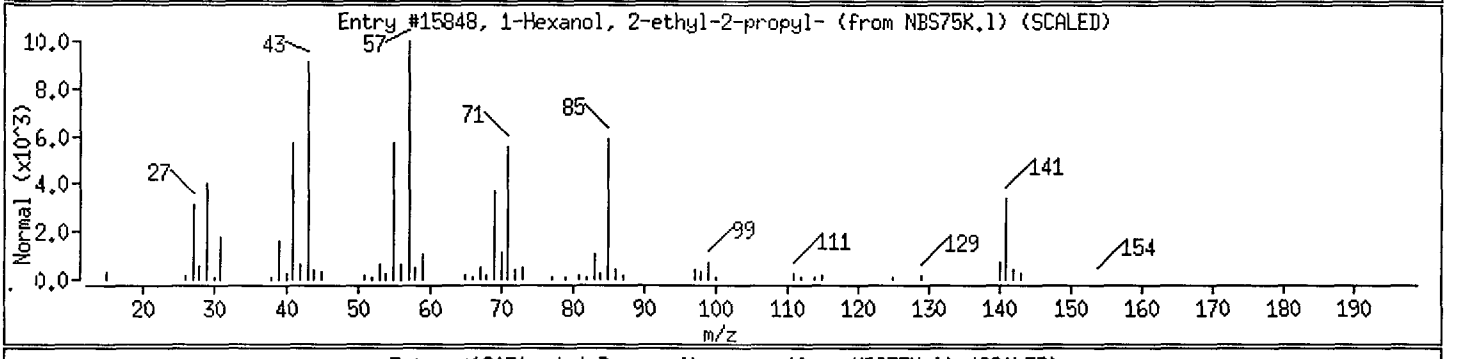
Sample Info:

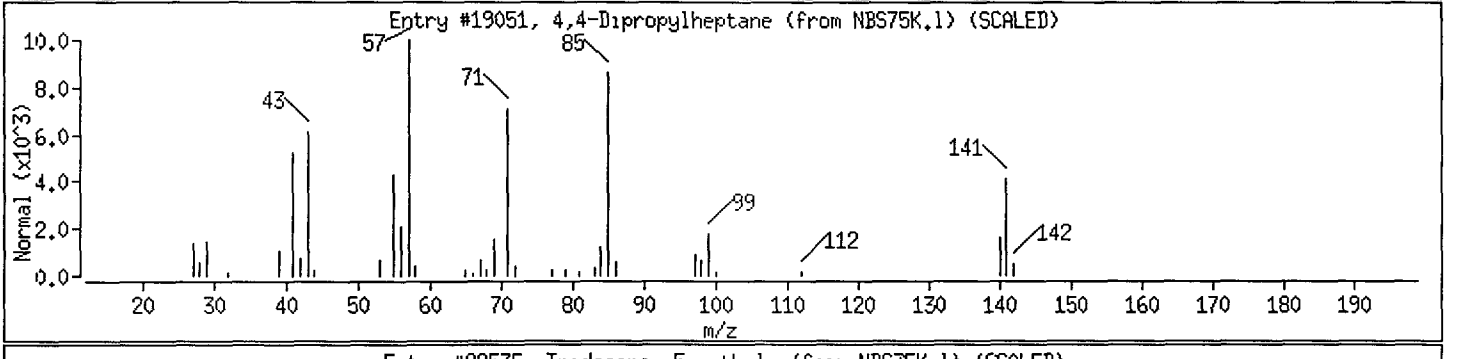
Operator: 2141

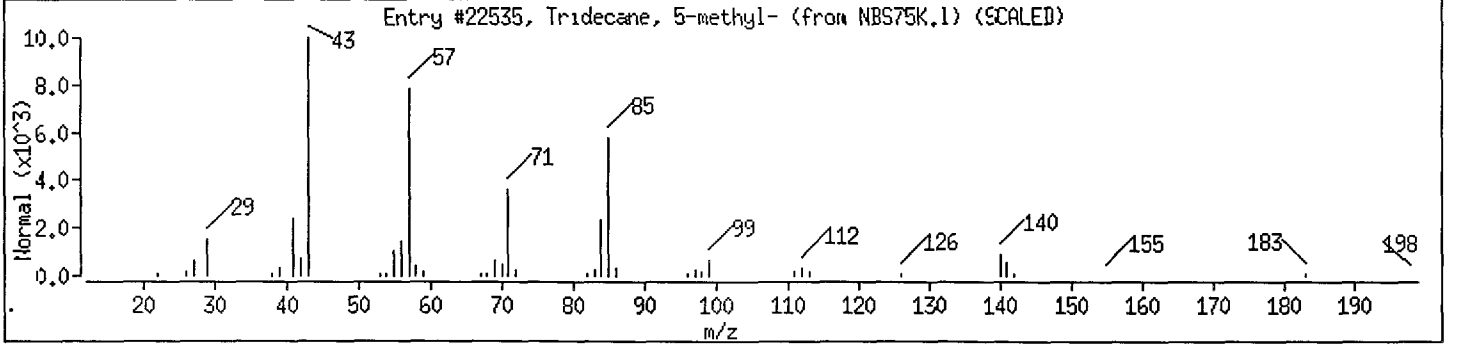
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1-Hexanol, 2-ethyl-2-propyl-	54461-00-6	NBS75K.1	15848	43	C11H24O	172
4,4-Dipropylheptane	17312-72-0	NBS75K.1	19051	43	C13H28	184
Tridecane, 5-methyl-	25117-31-1	NBS75K.1	22535	32	C14H30	198









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

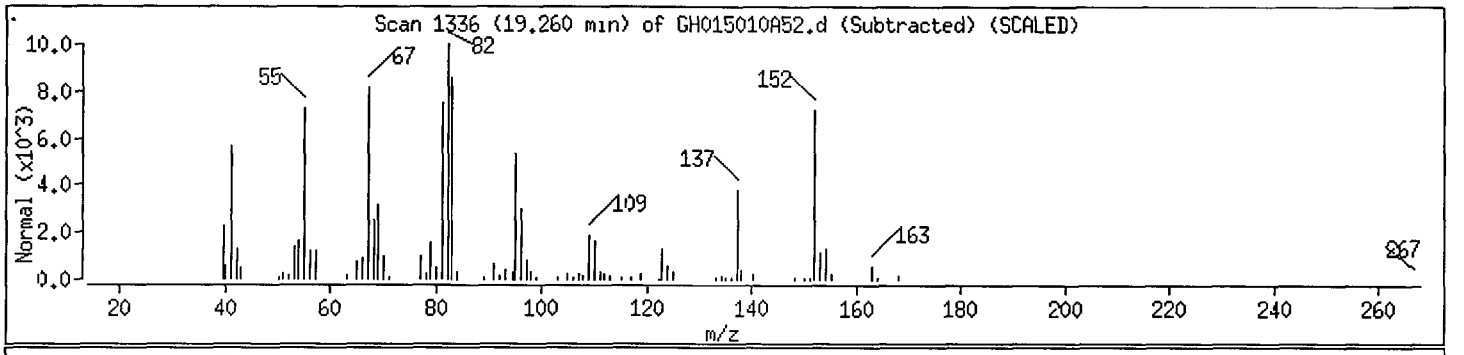
Client ID: FFE87 Instrument: f50052.1

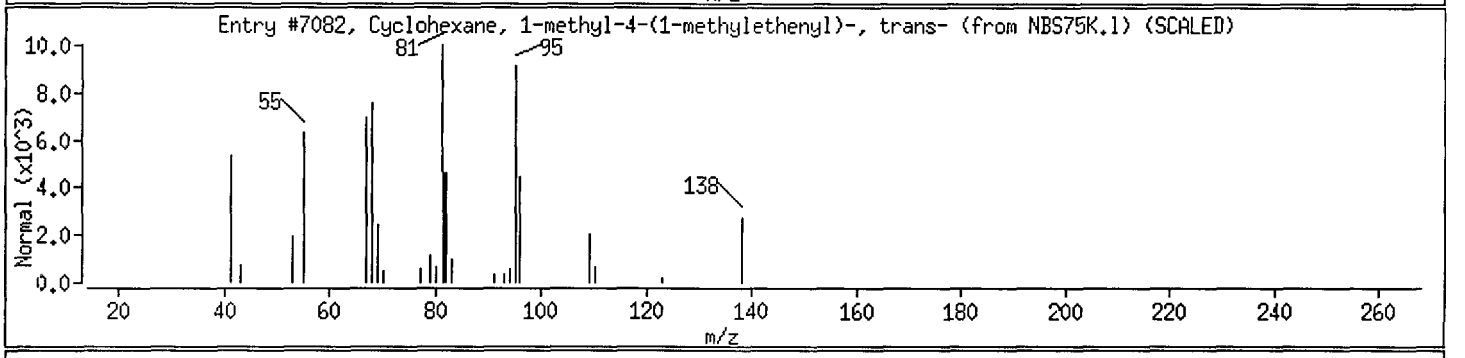
Sample Info:

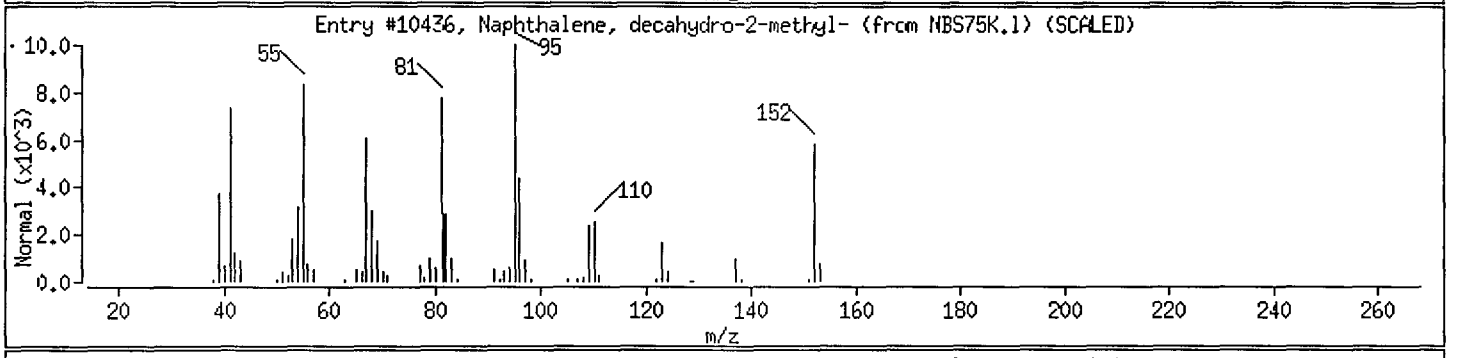
Operator: 2141

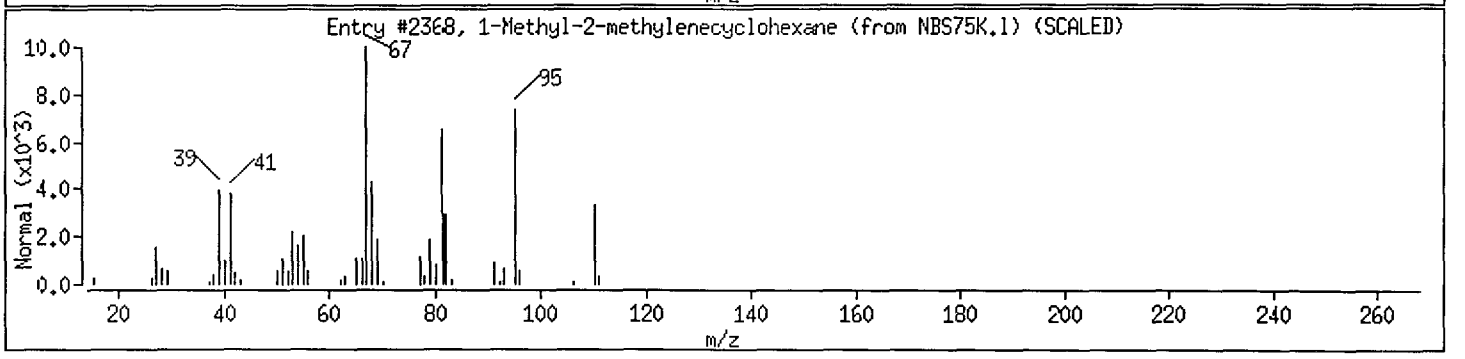
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1-methyl-4-(1-methylethenyl	1124-25-0	NBS75K.1	7082	41	C10H18	138
Naphthalene, decahydro-2-methyl-	2958-76-1	NBS75K.1	10436	41	C11H20	152
1-Methyl-2-methylenecyclohexane	2808-75-5	NBS75K.1	2368	35	C8H14	110









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

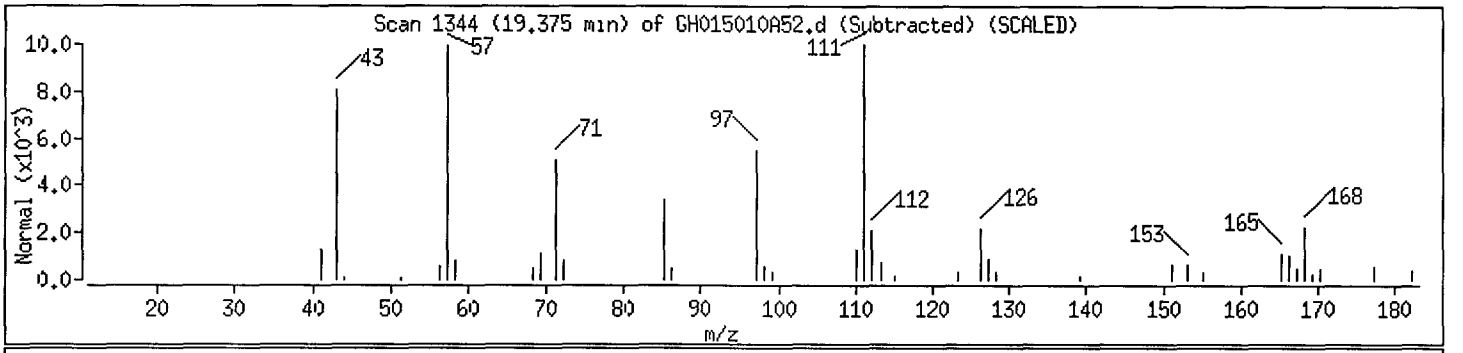
Client ID: FFE87 Instrument: f50052.1

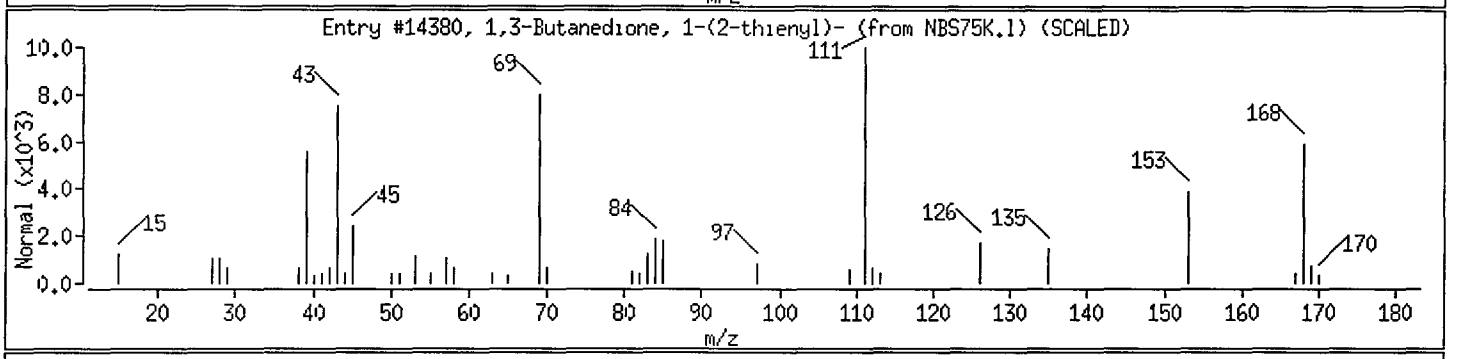
Sample Info:

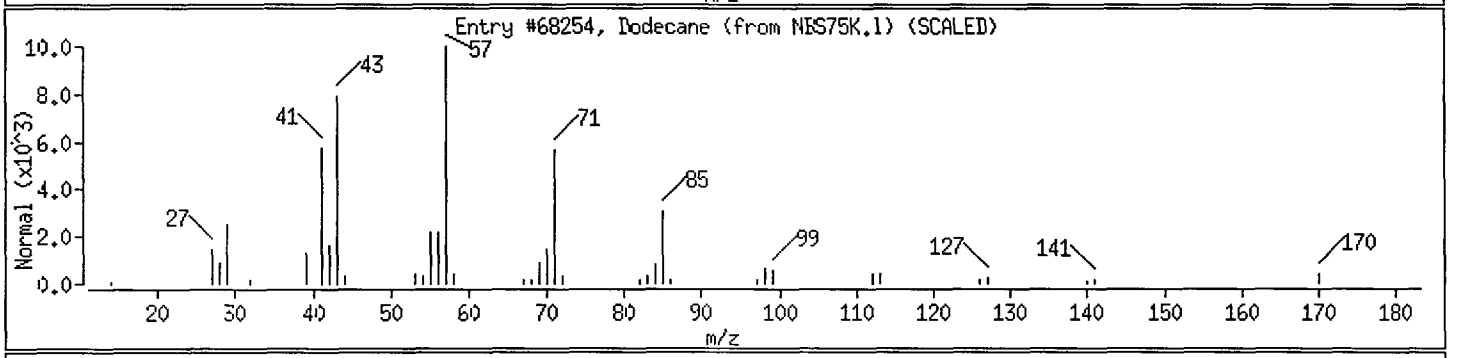
Operator: 2141

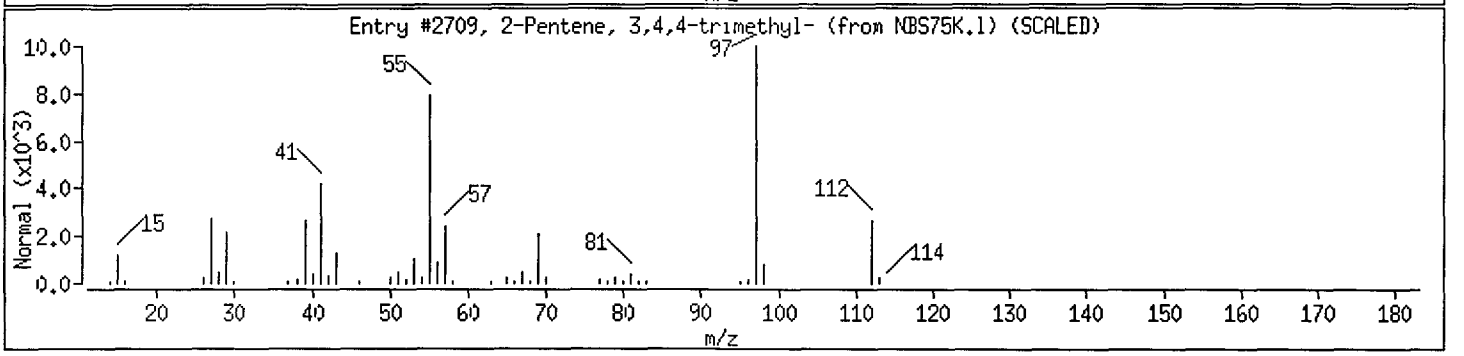
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1,3-Butanedione, 1-(2-thienyl)-	3051-27-2	NBS75K.1	14380	32	C8H8O2S	168
Dodecane	112-40-3	NBS75K.1	68254	11	C12H26	170
2-Pentene, 3,4,4-trimethyl-	598-96-9	NBS75K.1	2709	11	C8H16	112









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

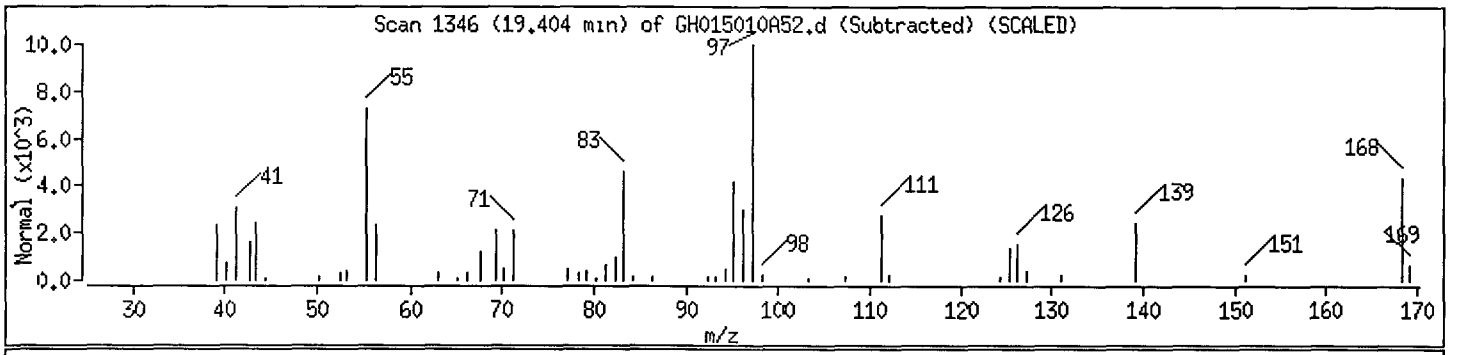
Client ID: FFE87 Instrument: f50052.1

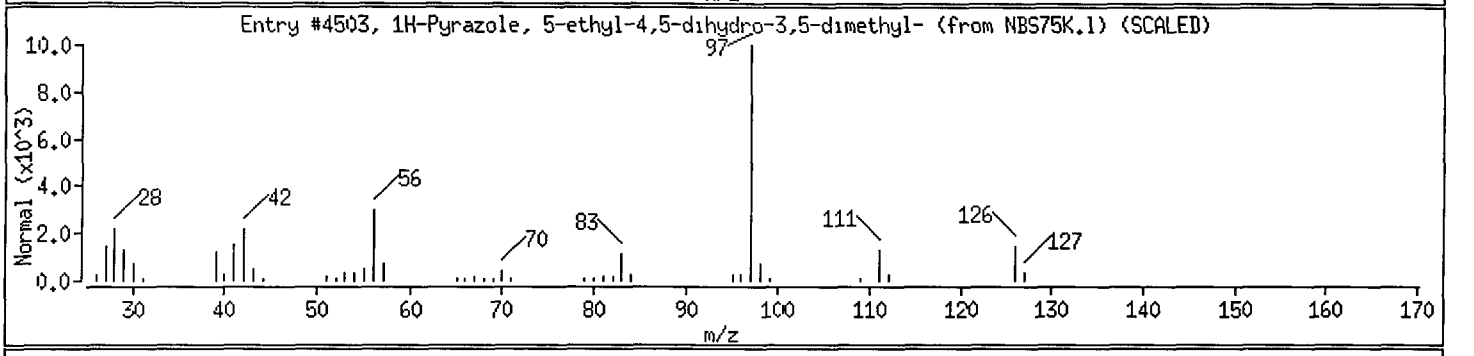
Sample Info:

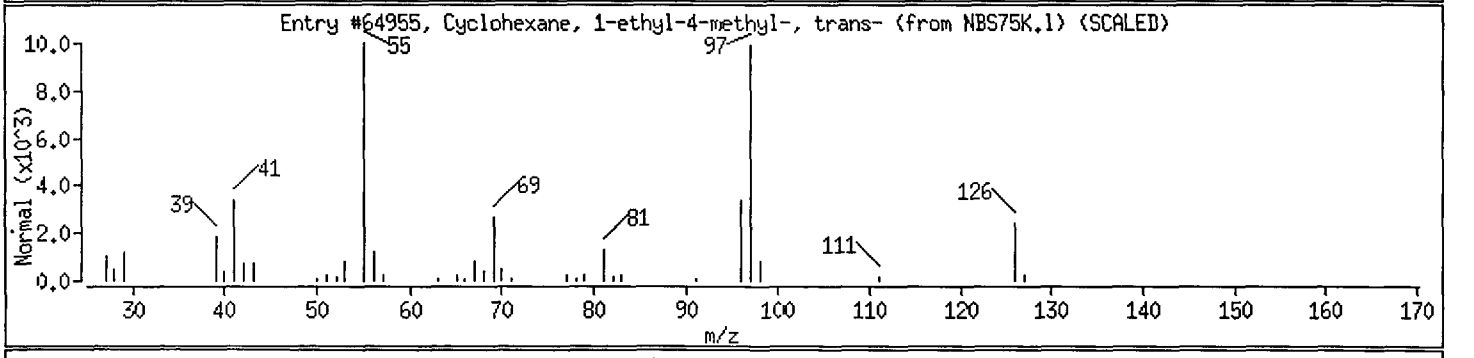
Operator: 2141

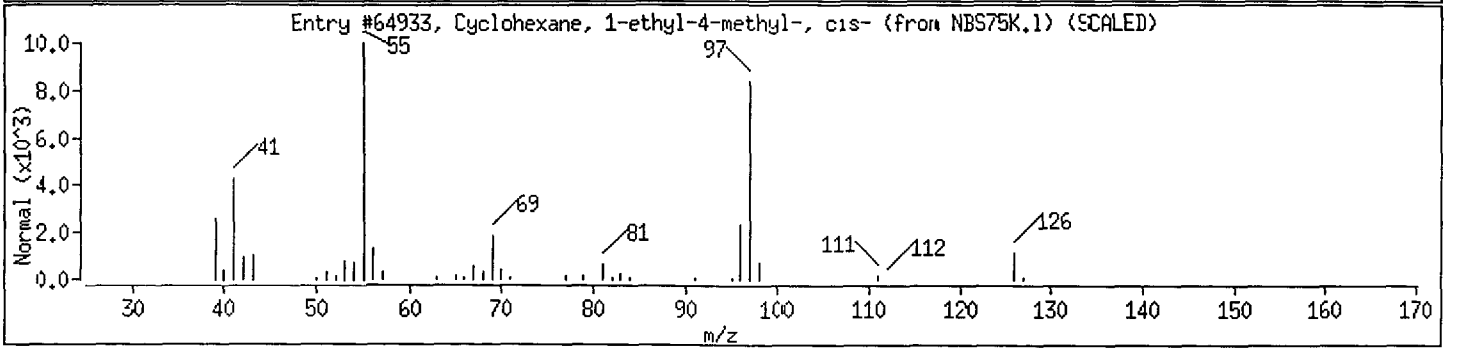
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1H-Pyrazole, 5-ethyl-4,5-dihydro-3,5-dim	21981-22-6	NBS75K.1	4503	25	C7H14N2	126
Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	NBS75K.1	64955	22	C9H18	126
Cyclohexane, 1-ethyl-4-methyl-, cis-	4926-78-7	NBS75K.1	64933	22	C9H18	126









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

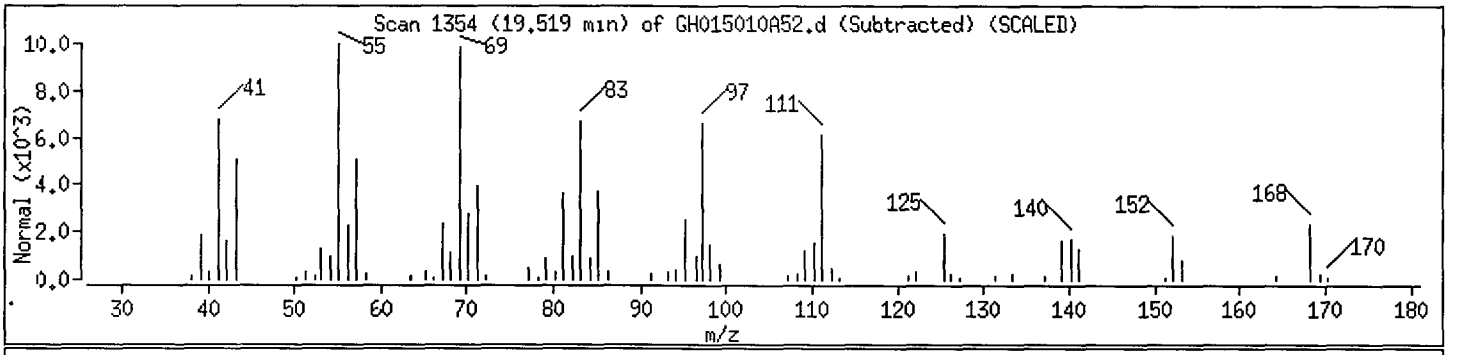
Client ID: FFE87 Instrument: f50052.1

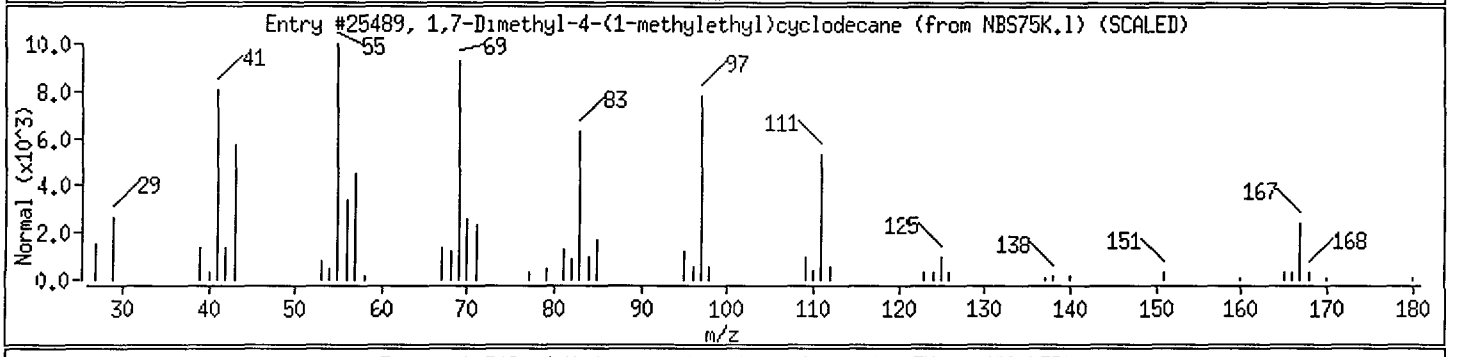
Sample Info:

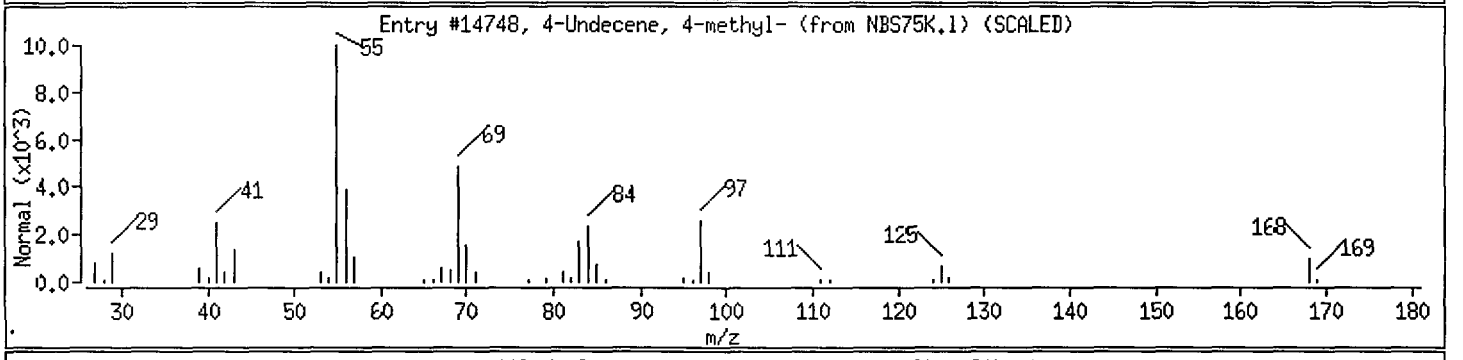
Operator: 2141

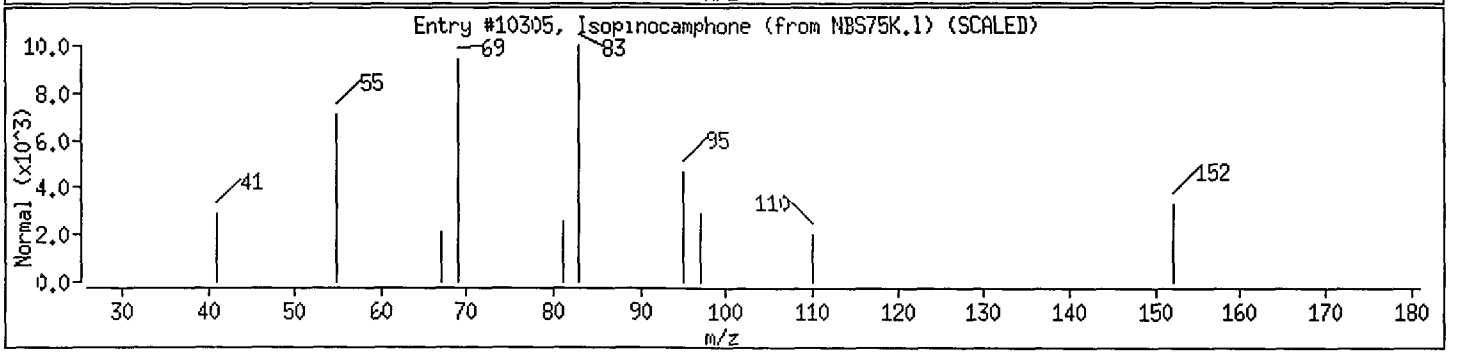
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1,7-Dimethyl-4-(1-methylethyl)cyclodecan	645-10-3	NBS75K.1	25489	59	C15H30	210
4-Undecene, 4-methyl-	61142-40-3	NBS75K.1	14748	46	C12H24	168
Isopinocamphone	473-62-1	NBS75K.1	10305	38	C10H16O	152









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

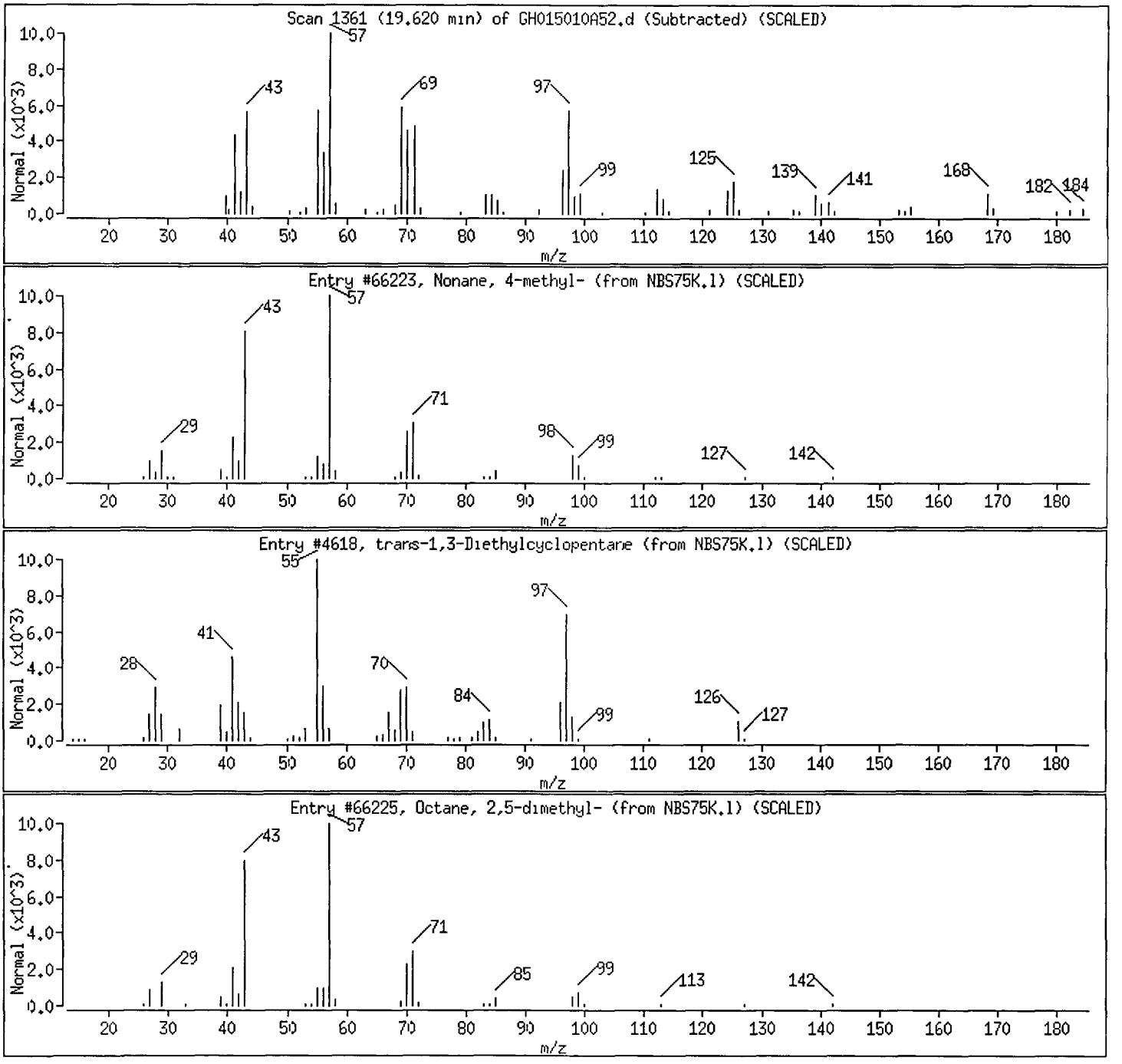
Client ID: FFE87 Instrument: f50052.1

Sample Info:

Operator: 2141

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Nonane, 4-methyl-	17301-94-9	NBS75K.1	66223	38	C10H22	142
trans-1,3-Diethylcyclopentane	0-00-0	NBS75K.1	4618	38	C9H18	126
Octane, 2,5-dimethyl-	15869-89-3	NBS75K.1	66225	38	C10H22	142



Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

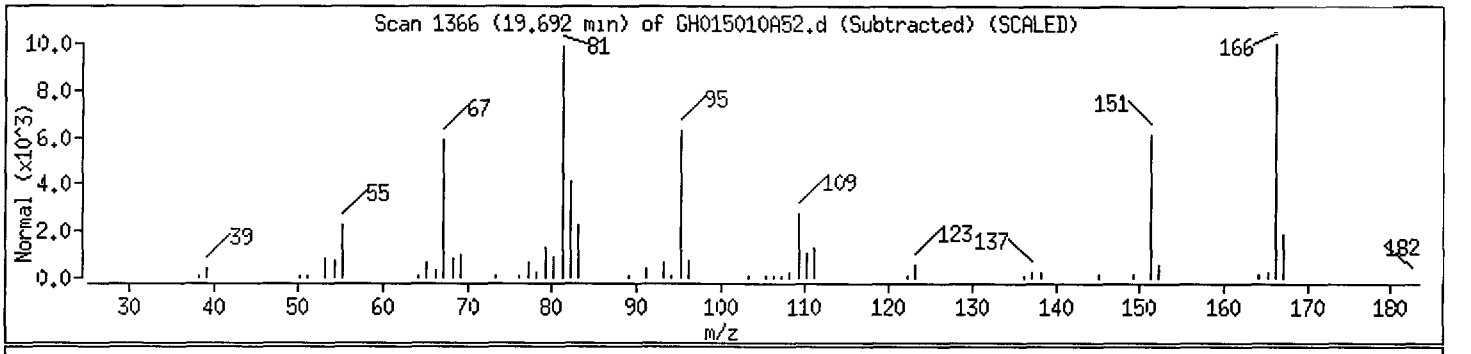
Client ID: FFE87 Instrument: f50052.1

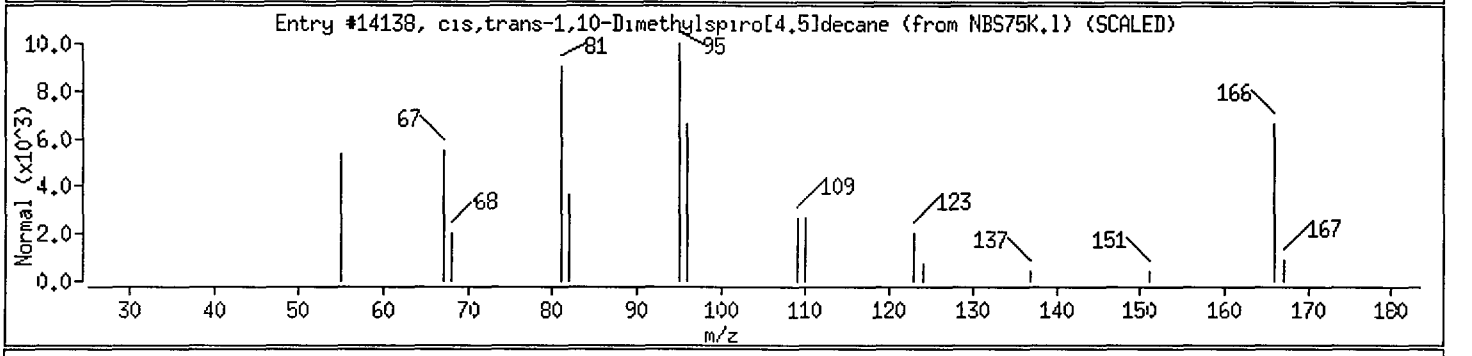
Sample Info:

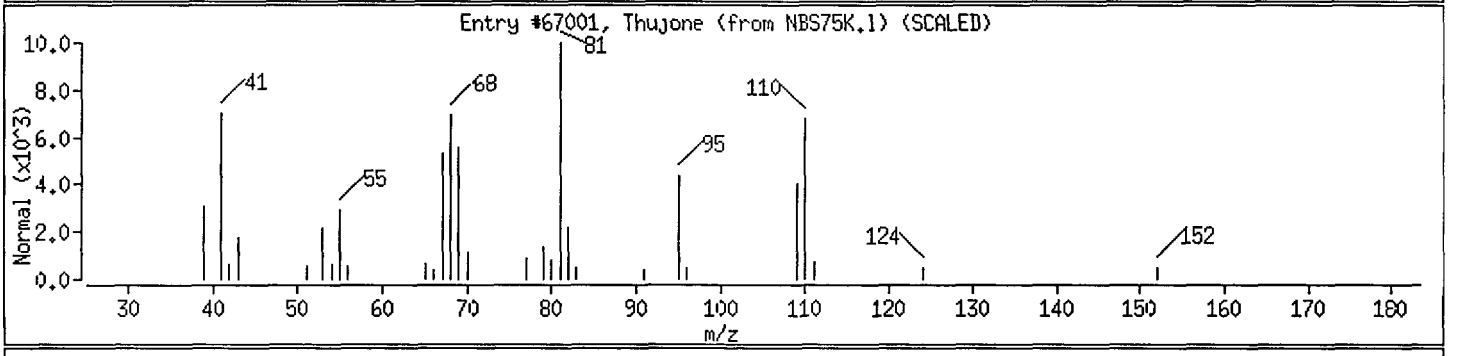
Operator: 2141

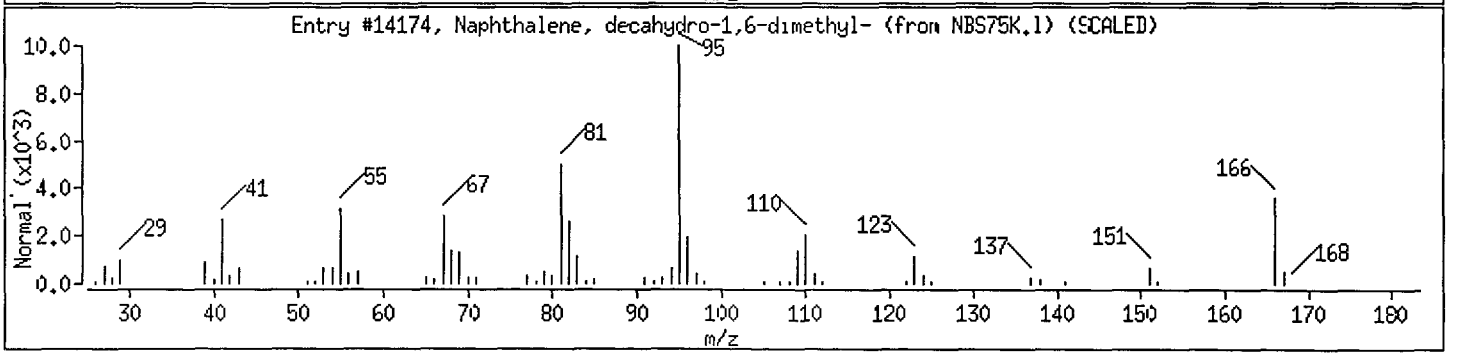
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
cis,trans-1,10-Dimethylspiro[4.5]decane	0-00-0	NBS75K.1	14138	59	C12H22	166
Thujone	546-80-5	NBS75K.1	67001	43	C10H160	152
Naphthalene, decahydro-1,6-dimethyl-	1750-51-2	NBS75K.1	14174	35	C12H22	166









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

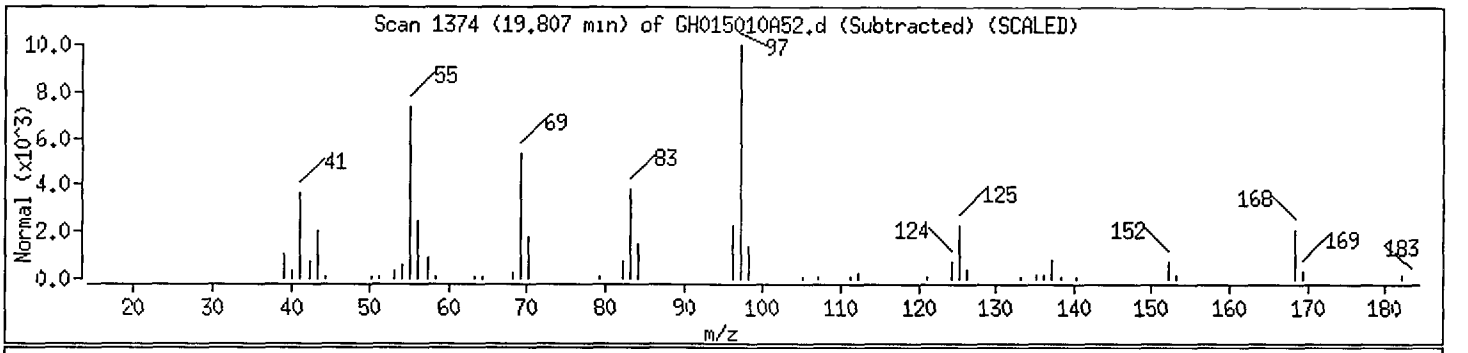
Client ID: FFE87 Instrument: f50052.1

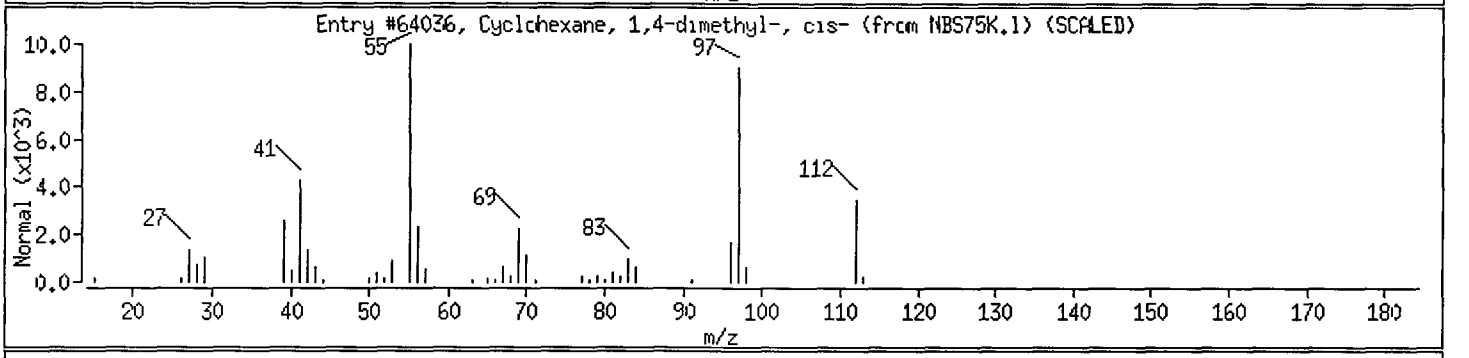
Sample Info:

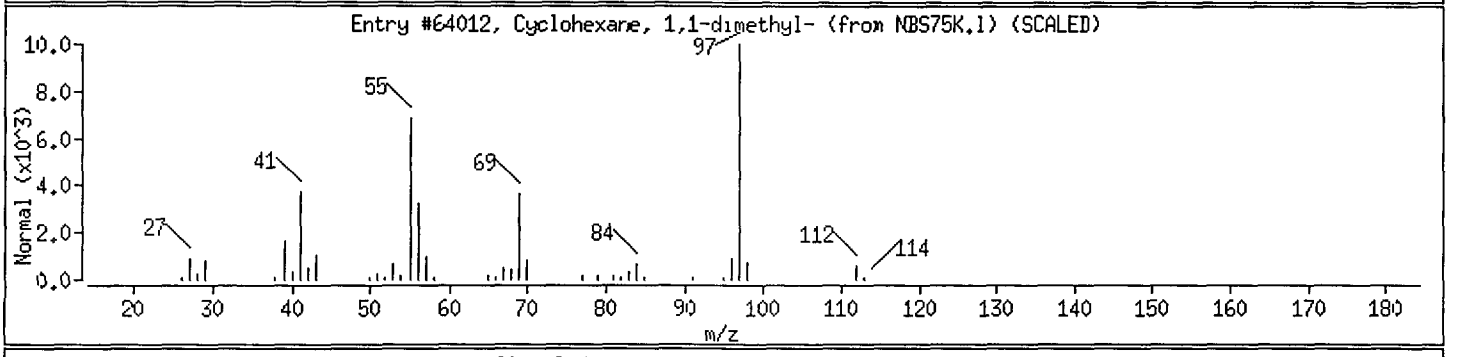
Operator: 2141

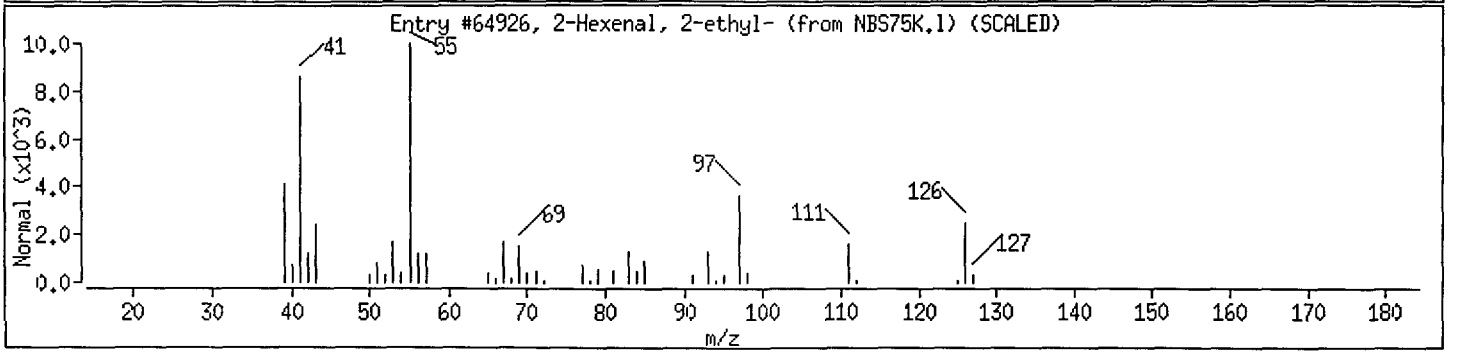
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1,4-dimethyl-, cis-	624-29-3	NBS75K.1	64036	53	C8H16	112
Cyclohexane, 1,1-dimethyl-	590-66-9	NBS75K.1	64012	50	C8H16	112
2-Hexenal, 2-ethyl-	645-62-5	NBS75K.1	64926	38	C8H14O	126









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

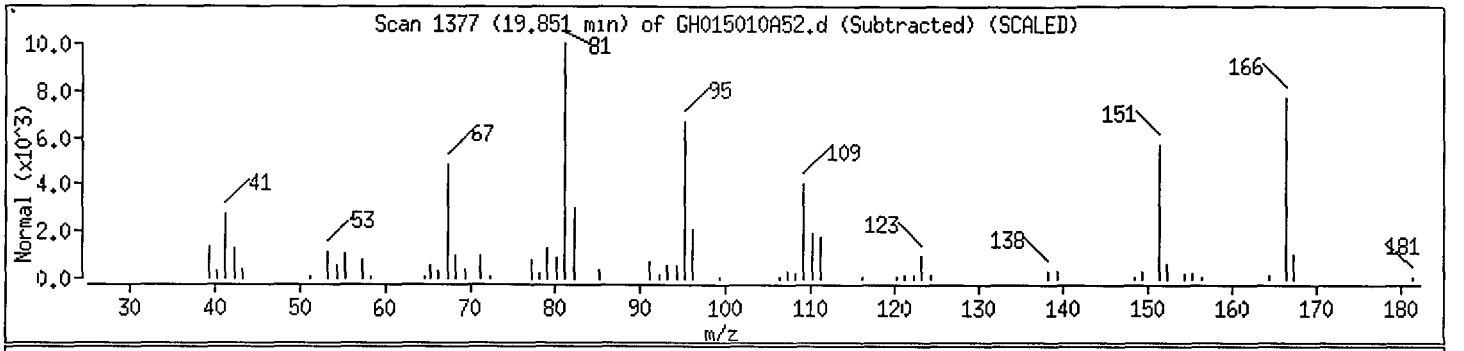
Client ID: FFE87 Instrument: f50052.1

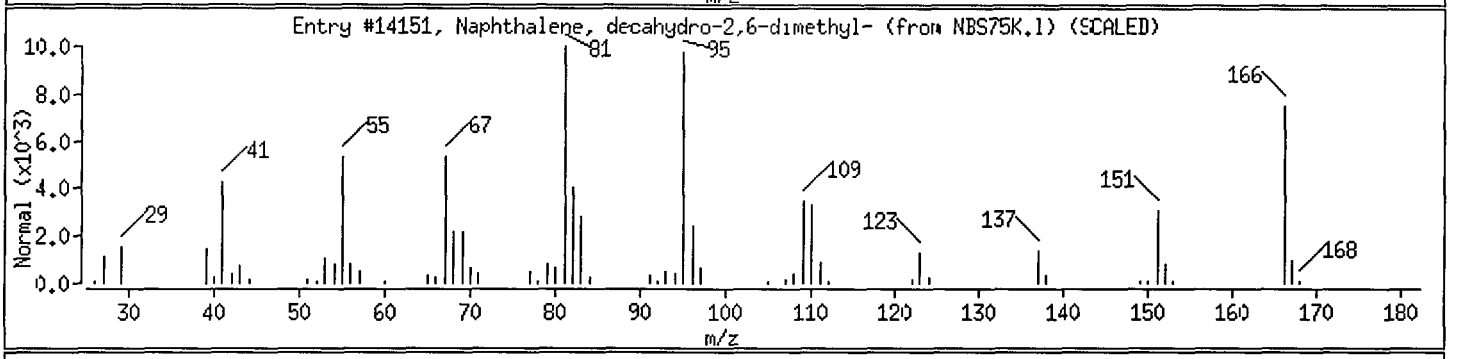
Sample Info:

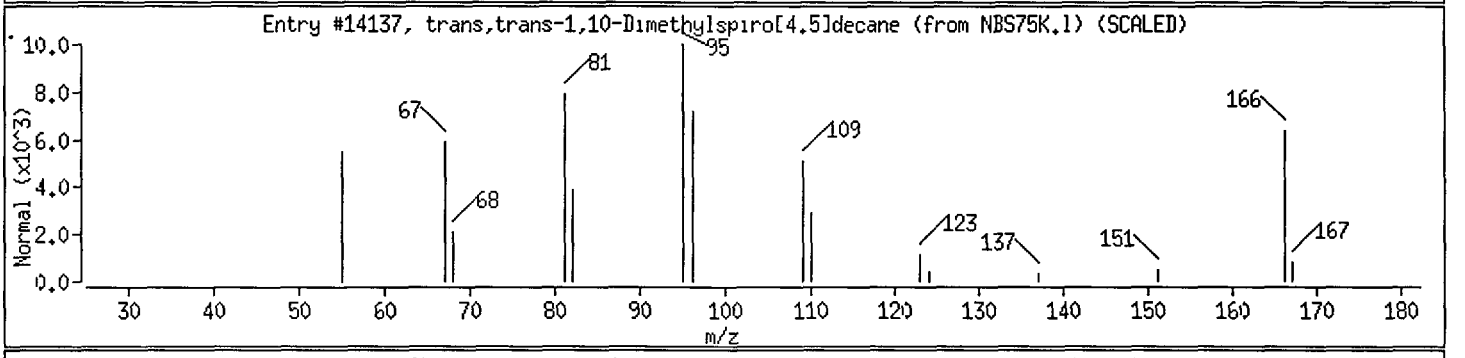
Operator: 2141

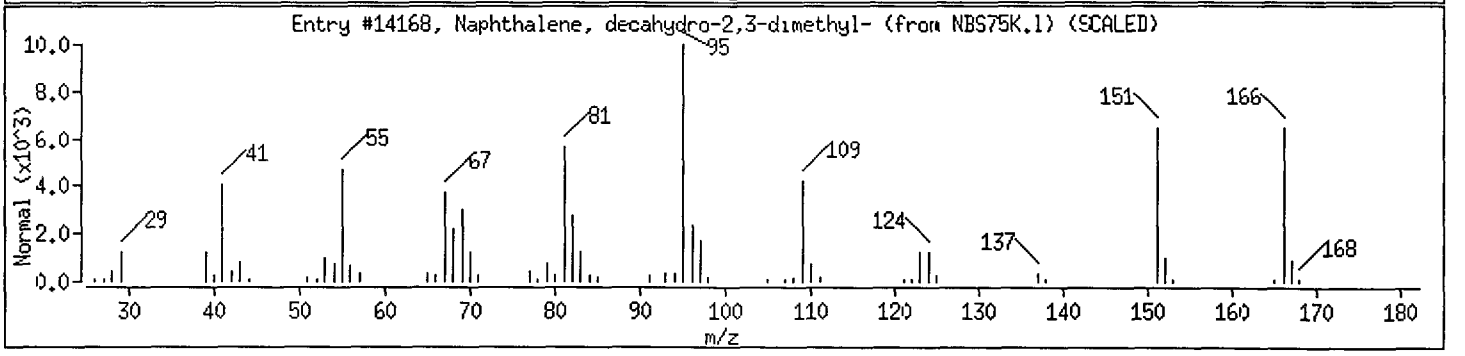
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Naphthalene, decahydro-2,6-dimethyl-	1618-22-0	NBS75K.l	14151	62	C12H22	166
trans,trans-1,10-Dimethylspiro[4.5]decan	0-00-0	NBS75K.l	14137	49	C12H22	166
Naphthalene, decahydro-2,3-dimethyl-	1008-80-6	NBS75K.l	14168	47	C12H22	166









Data File: /chem/f50052.i/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

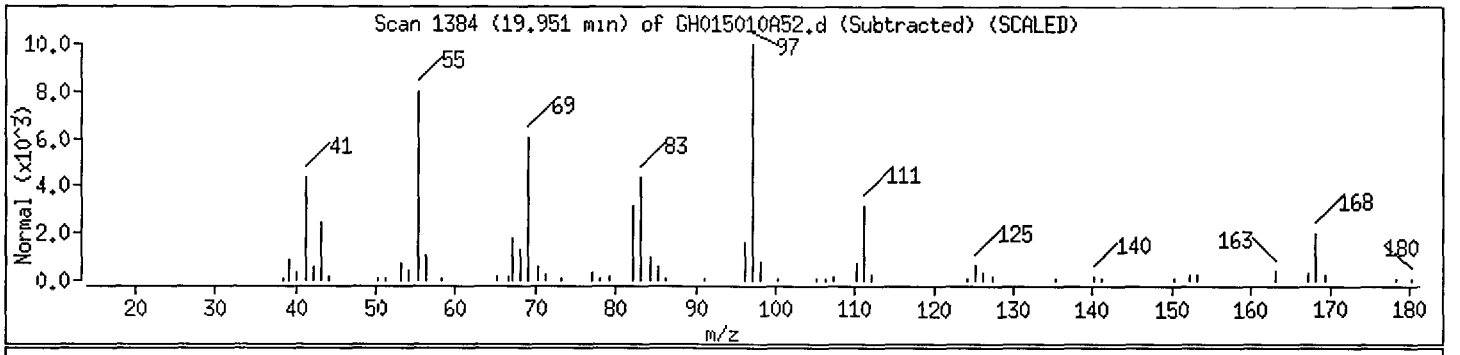
Client ID: FFE87 Instrument: f50052.i

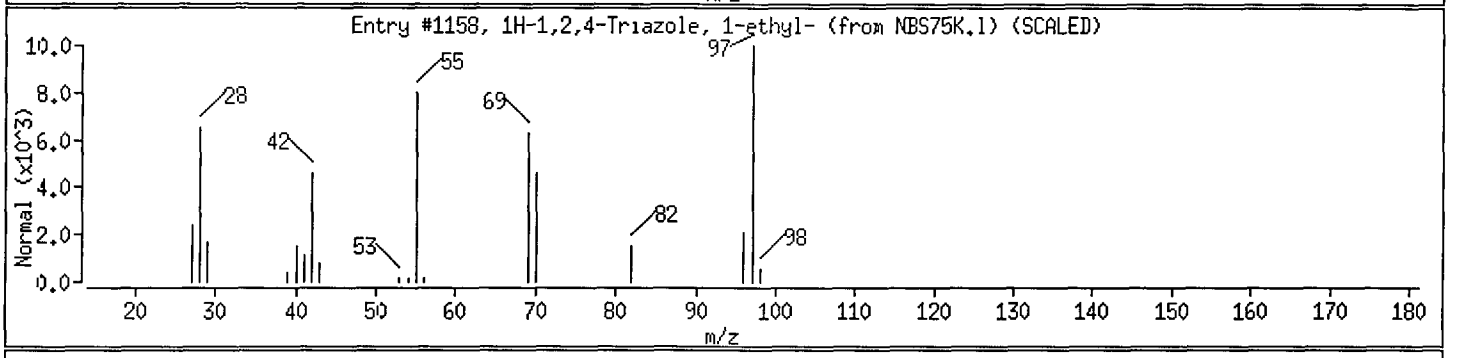
Sample Info:

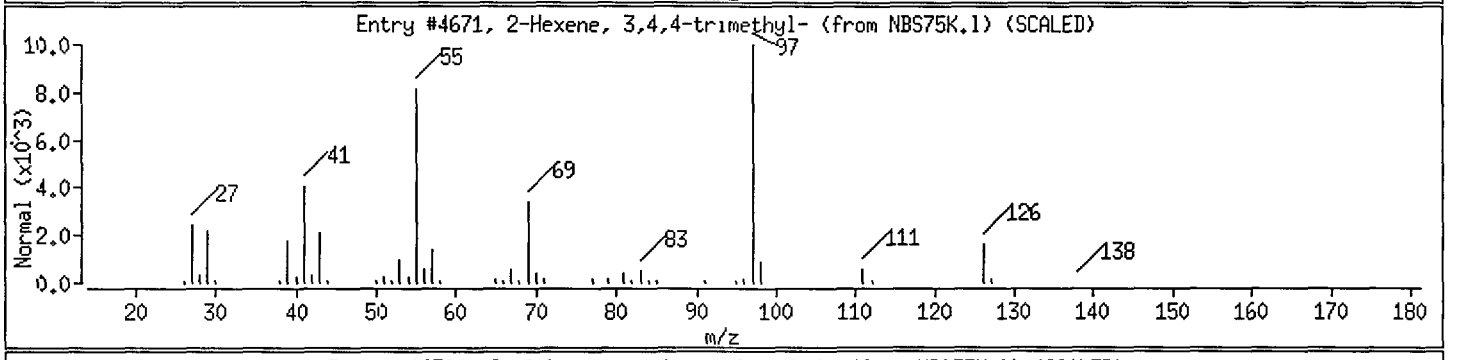
Operator: 2141

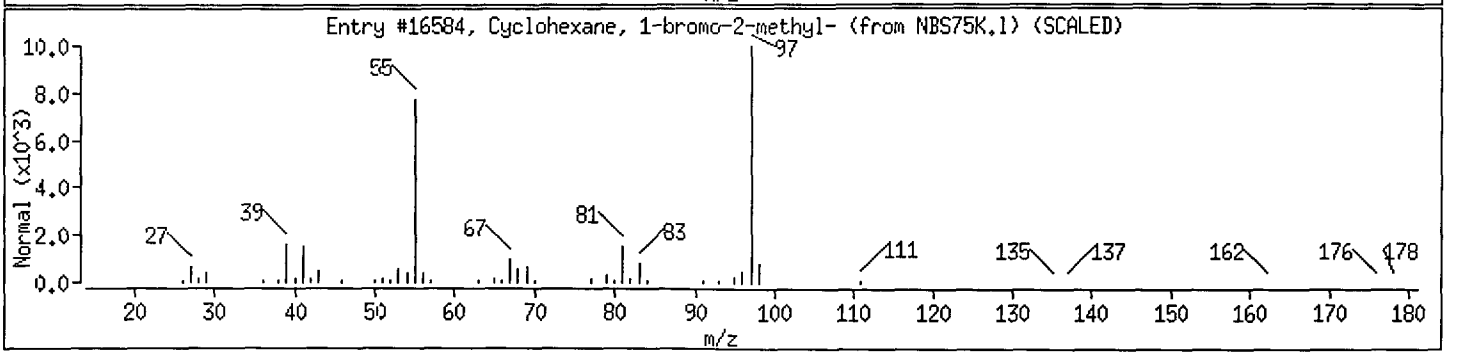
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1H-1,2,4-Triazole, 1-ethyl-	16778-70-4	NBS75K.l	1158	38	C4H7N3	97
2-Hexene, 3,4,4-trimethyl-	53941-19-8	NBS75K.l	4671	38	C9H18	126
Cyclohexane, 1-bromo-2-methyl-	6294-39-9	NBS75K.l	16584	38	C7H13Br	176









Data File: /chem/f50052.1/BG960727C52.b/GH015010A52.d

Date : 27-JUL-1996 14:17

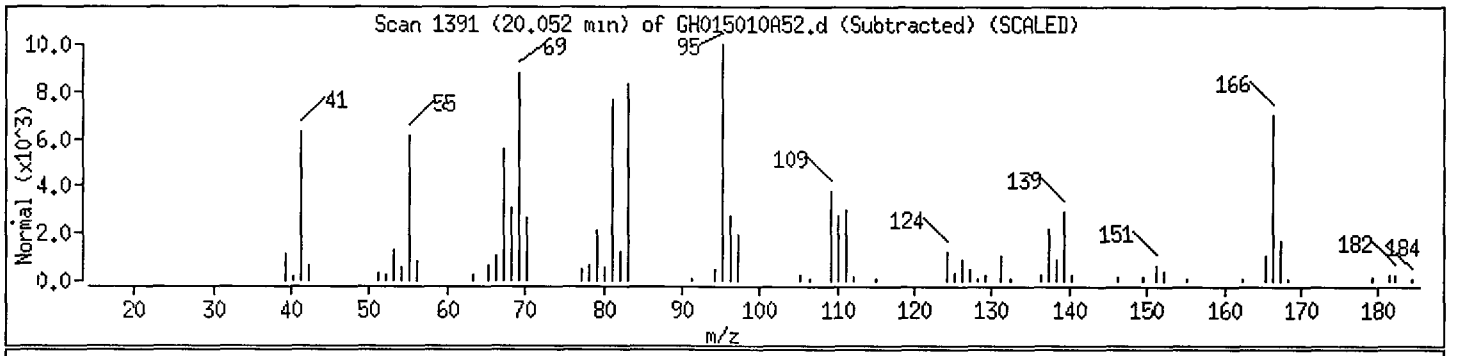
Client ID: FFE87 Instrument: f50052.1

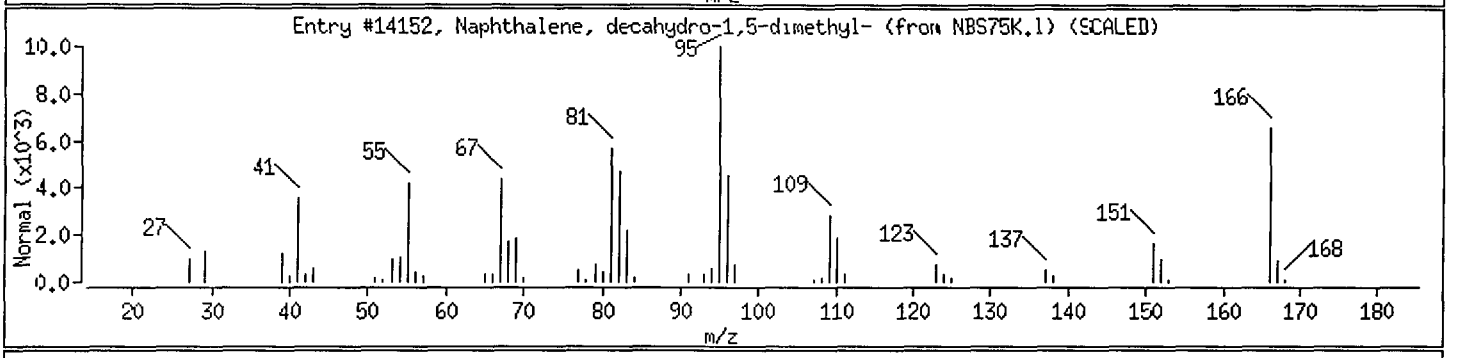
Sample Info:

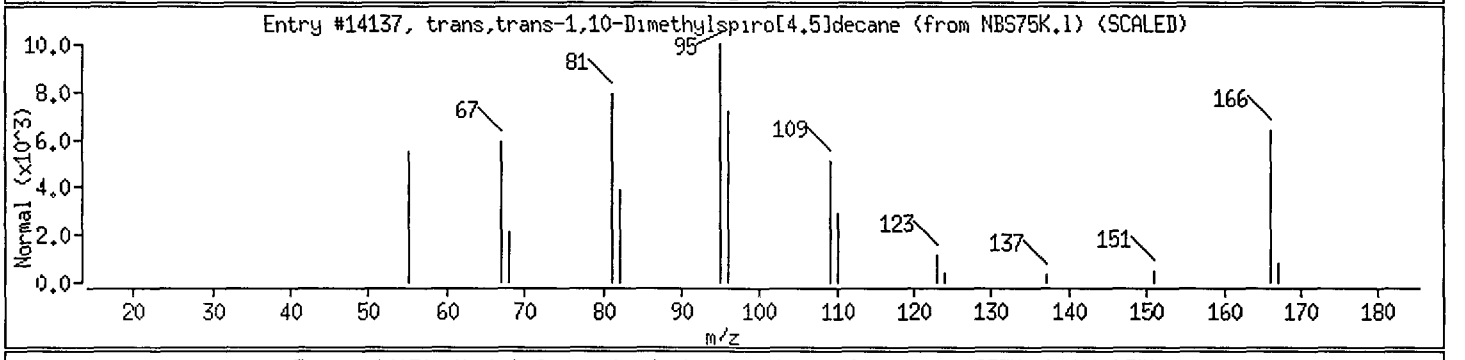
Operator: 2141

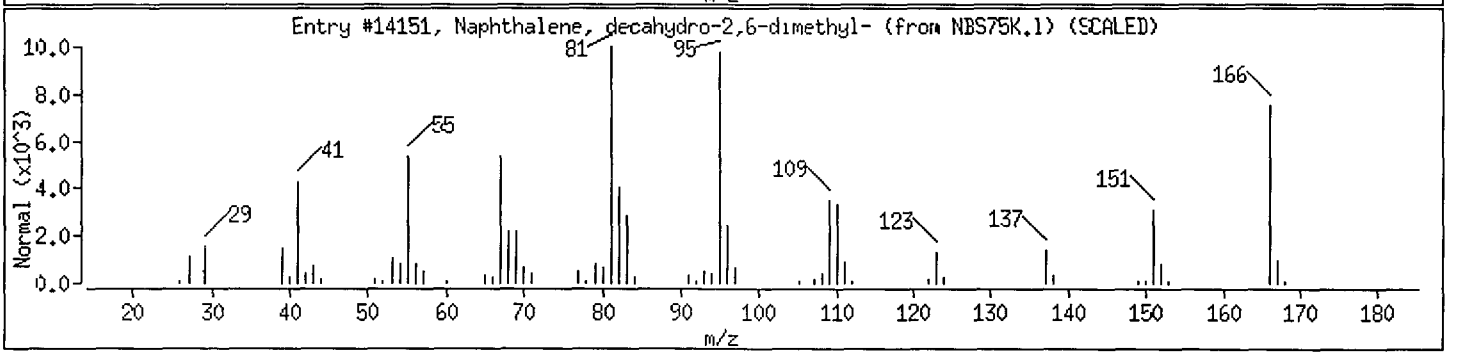
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	NBS75K.1	14152	53	C12H22	166
trans,trans-1,10-Dimethylspiro[4.5]decan	0-00-0	NBS75K.1	14137	49	C12H22	166
Naphthalene, decahydro-2,6-dimethyl-	1618-22-0	NBS75K.1	14151	47	C12H22	166









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815010

J[ ] J3[ ] D[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S, SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE87 Dry Weight Factor 66

GC/MS ANALYSIS
Amount Purged: [ ] ~~10ml~~ 5g MB 7.27.96 s/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF960727D52 Disk ( )
Blank Filename G MB 7.27.96 Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2141 Work-up 2141 [illegible]

GC/MS REVIEW

CONDITION CODE OK

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø19 [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review [illegible] Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____ _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE88

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815011

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015011A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 73 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	37	U
74-83-9	Bromomethane	37	U
75-01-4	Vinyl Chloride	37	U
75-00-3	Chloroethane	37	U
75-09-2	Methylene Chloride	47	B
67-64-1	Acetone	42	
75-15-0	Carbon Disulfide	37	U
75-35-4	1,1-Dichloroethene	37	U
75-34-3	1,1-Dichloroethane	37	U
540-59-0	1,2-Dichloroethene (total)	37	U
67-66-3	Chloroform	37	U
107-06-2	1,2-Dichloroethane	37	U
78-93-3	2-Butanone	37	U
71-55-6	1,1,1-Trichloroethane	37	U
56-23-5	Carbon Tetrachloride	37	U
75-27-4	Bromodichloromethane	37	U
78-87-5	1,2-Dichloropropane	37	U
10061-01-5	cis-1,3-Dichloropropene	37	U
79-01-6	Trichloroethene	37	U
124-48-1	Dibromochloromethane	37	U
79-00-5	1,1,2-Trichloroethane	37	U
71-43-2	Benzene	37	U
10061-02-6	trans-1,3-Dichloropropene	37	U
75-25-2	Bromoform	37	U
108-10-1	4-Methyl-2-Pentanone	37	U
591-78-6	2-Hexanone	37	U
127-18-4	Tetrachloroethene	37	U
79-34-5	1,1,2,2-Tetrachloroethane	37	U
108-88-3	Toluene	37	U
108-90-7	Chlorobenzene	37	U
100-41-4	Ethylbenzene	37	U
100-42-5	Styrene	37	U
1330-20-7	Xylene (Total)	37	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE88

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815011

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015011A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 73 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 22

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

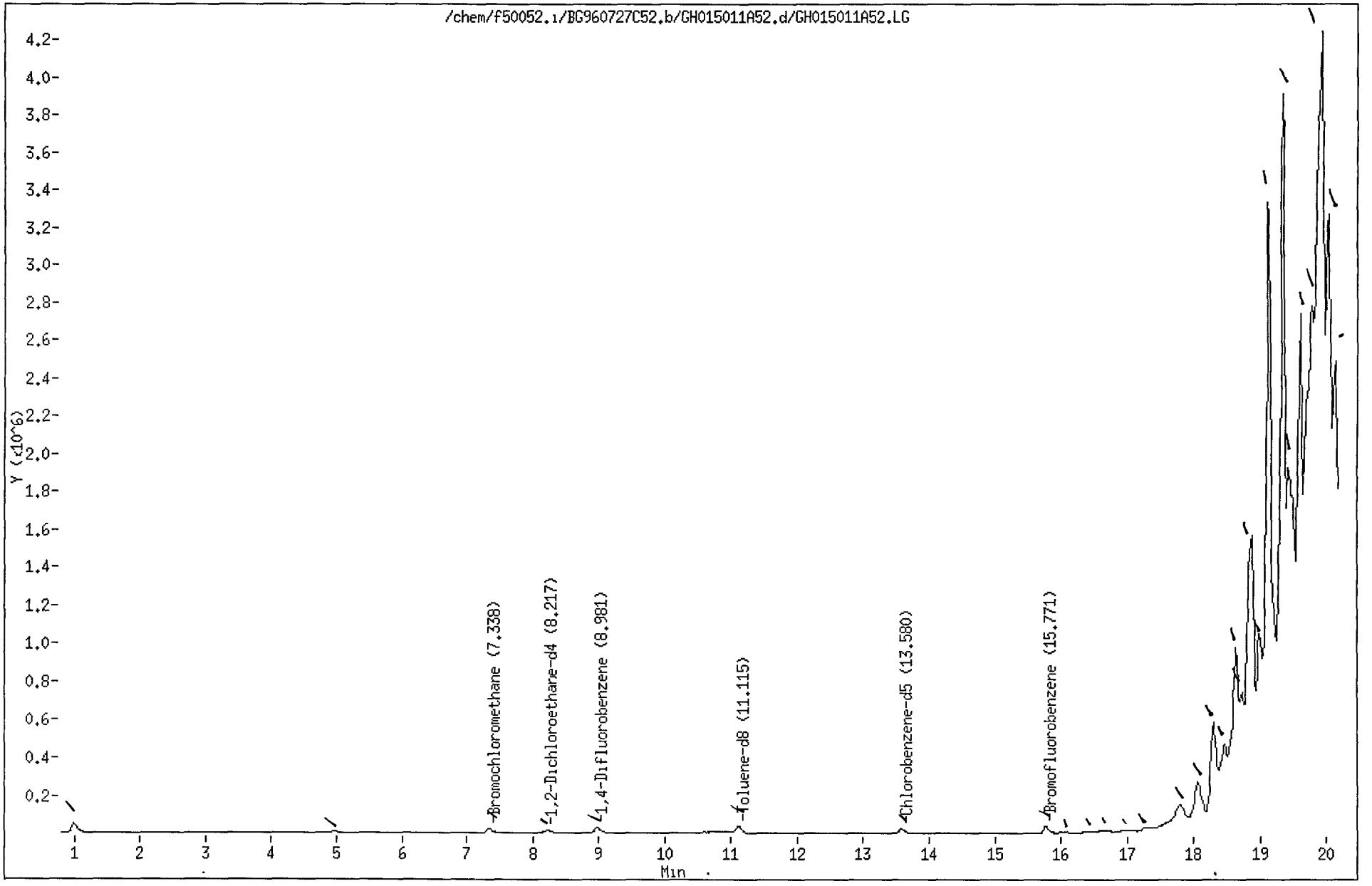
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.99	386	JB
2.	UNKNOWN	16.03	69	J
3.	SUBSTITUTED CYCLOHEXANE	16.46	132	J
4.	SUBSTITUTED CYCLOHEXANE	16.64	175	J
5.	SUBSTITUTED CYCLOHEXANE	16.97	108	J
6.	UNKNOWN	17.07	35	J
7.	UNKNOWN	17.31	277	J
8.	UNKNOWN	17.79	2429	J
9.	UNKNOWN	18.06	2155	J
10.	SUBSTITUTED NAPHTHALENE	18.29	4276	J
11.	UNKNOWN	18.47	994	J
12.	SUBSTITUTED CYCLOHEXANE	18.64	4583	J
13.	SUBSTITUTED CYCLOHEXANE	18.73	263	J
14.	UNKNOWN	18.87	7765	J
15.	SUBSTITUTED NAPHTHALENE	18.99	1570	J
16.	SUBSTITUTED NAPHTHALENE	19.12	15143	J
17.	UNKNOWN	19.33	17769	J
18.	UNKNOWN	19.42	917	J
19.	UNKNOWN	19.59	6932	J
20.	UNKNOWN	19.76	8462	J
21.	UNKNOWN	19.92	17436	J
22.	UNKNOWN	20.02	6871	J
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d
Date : 27-JUL-1996 14:53
Client ID: FFE88
Sample Info:

Column phase: DB624

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53



Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d
Report Date: 30-Jul-1996 13:12

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH015011A52.d
Lab Smp Id: 815011 Client Smp ID: FFE88
Inj Date : 27-JUL-1996 14:53
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	73.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 338	7 280	(1 000)	19343	250 0	
* 2 1,4-Difluorobenzene	114 00	8 981	8 923	(1 000)	70903	250 0	
* 3 Chlorobenzene-d5	117 00	13 580	13 508	(1 000)	44305	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8.231	8 174	(1 122)	29676	218 8	162 1
$ 5 Toluene-d8	98 00	11 115	11 057	(0 818)	67022	211 8	156 9
$ 6 Bromofluorobenzene	95 00	15 785	15 728	(1 162)	35144	210 8	156 1
7 Chloromethane	50 00		1 312		Compound Not Detected		
8 Vinyl Chloride	62 00		1 571		Compound Not Detected		
9 Bromomethane	94 00		2 278		Compound Not Detected		
10 Chloroethane	64 00		2 451		Compound Not Detected		
11 1,1-Dichloroethene	96 00		3 979		Compound Not Detected.		
12 Carbon Disulfide	76 00		4 109		Compound Not Detected		
. 13 Acetone	43 00	4 339	4 267	(0 591)	796	57 41	42 53
14 Methylene Chloride	84 00	4 959	4 873	(0 676)	8237	63 22	46 83
15 trans-1,2-Dichloroethene	96 00		5 305		Compound Not Detected		
16 1,1-Dichloroethane	63 00		6 011		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		6 934		Compound Not Detected		
18 2-Butanone	43 00		7 121		Compound Not Detected		
19 Chloroform	83 00		7 511		Compound Not Detected		
20 1.1,1-Trichloroethane	97 00		7 612		Compound Not Detected		
21 Carbon Tetrachloride	117 00		7 842		Compound Not Detected		
22 Benzene	78 00		8 174		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d
Report Date: 30-Jul-1996 13:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
	24 Trichloroethene	130 00		9 212		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 527		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 825		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 762		Compound Not Detected		
	39 Styrene	104 00		14 819		Compound Not Detected		
	40 Bromoform	173 00		15 065		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d
Report Date: 30-Jul-1996 13:28

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH015011A52.d
Lab Smp Id: 815011 Client Smp ID: FFE88
Inj Date : 27-JUL-1996 14:53
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.338	138544	250.000
* 3 Chlorobenzene-d5	13.580	126617	250.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)					CAS #		
0 995	288751	521 0	386 0	0		0	1
unknown					CAS #		
16 030	47113	93 02	68 90	0		0	3
substituted cyclohexane					CAS #		
16 463	90175	178 0	131 9	0		0	3
substituted cyclohexane					CAS #		
16.636	119784	236 5	175 2	0		0	3
substituted cyclohexane					CAS #		
16 967	73850	145 8	108 0	0		0	3
unknown					CAS #		
17 068	24266	47 91	35 49	0		0	3

Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d
Report Date: 30-Jul-1996 13:28

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
unknown					CAS #		
17 313	189664	374 5	277 4	0		0	3
unknown					CAS #		
17 789	1660837	3279	2429	0		0	3
unknown					CAS #		
18 063	1473589	2910	2155	0		0	3
substituted naphthalene					CAS #		
18 294	2923783	5773	4276	0		0	3
unknown					CAS #		
18 467	679291	1341	993 5	0		0	3
substituted cyclohexane					CAS #		
18 640	3133376	6187	4583	0		0	3
substituted cyclohexane					CAS #		
18 726	179609	354 6	262 7	0		0	3
unknown					CAS #		
18 870	5309245	10480	7765	0		0	3
substituted naphthalene					CAS #		
18 986	1073334	2119	1570	0		0	3
substituted naphthalene					CAS #		
19 115	10353649	20440	15140	0		0	3
unknown					CAS #		
19 332	12149451	23990	17770	0		0	3
unknown					CAS #		
19 418	627118	1238	917 2	0		0	3
unknown					CAS #		
19 591	4739902	9359	6932	0		0	3
unknown					CAS #		
19 764	5785784	11420	8462	0		0	3
unknown					CAS #.		
19 923	11921615	23540	17440	0		0	3
unknown					CAS #		
20 024	4698071	9276	6871	0		0	3

Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

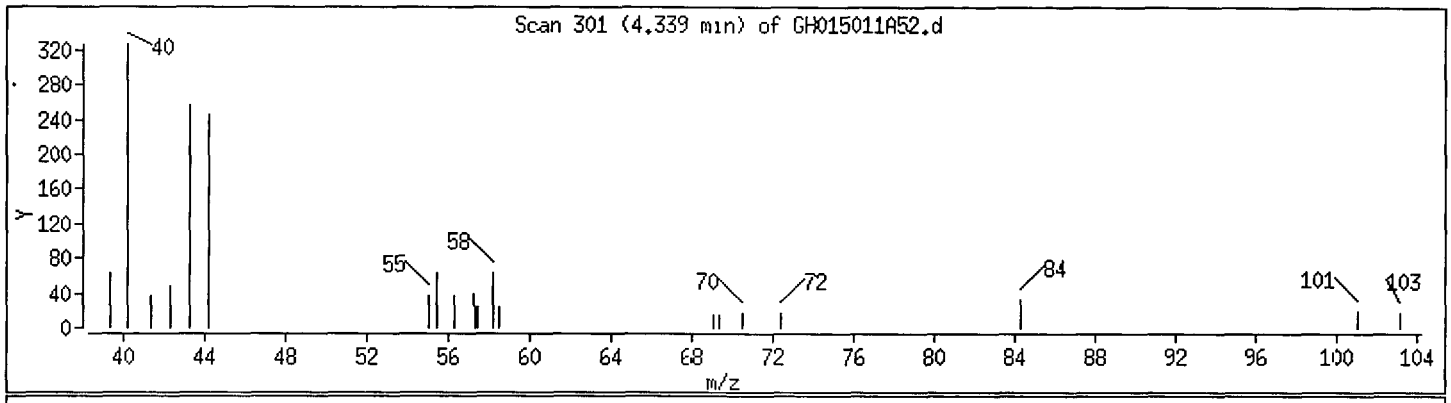
Client ID: FFE88 Instrument: f50052.1

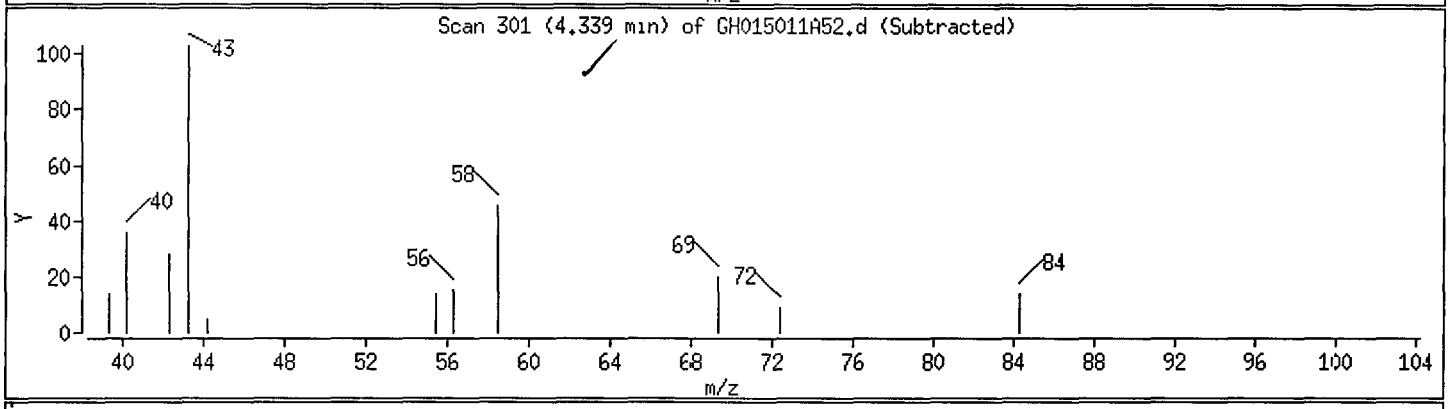
Sample Info:

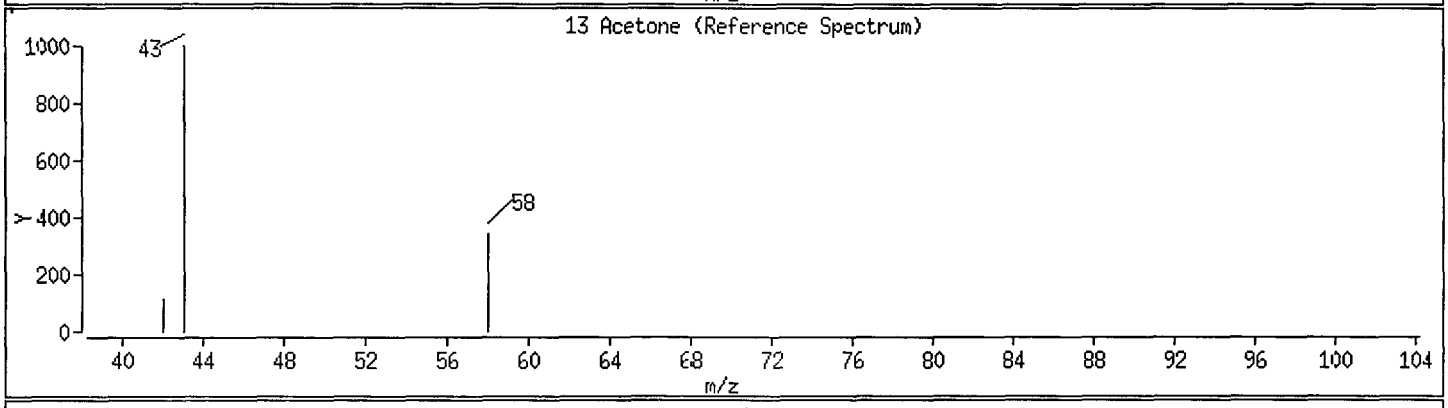
Operator: 2141

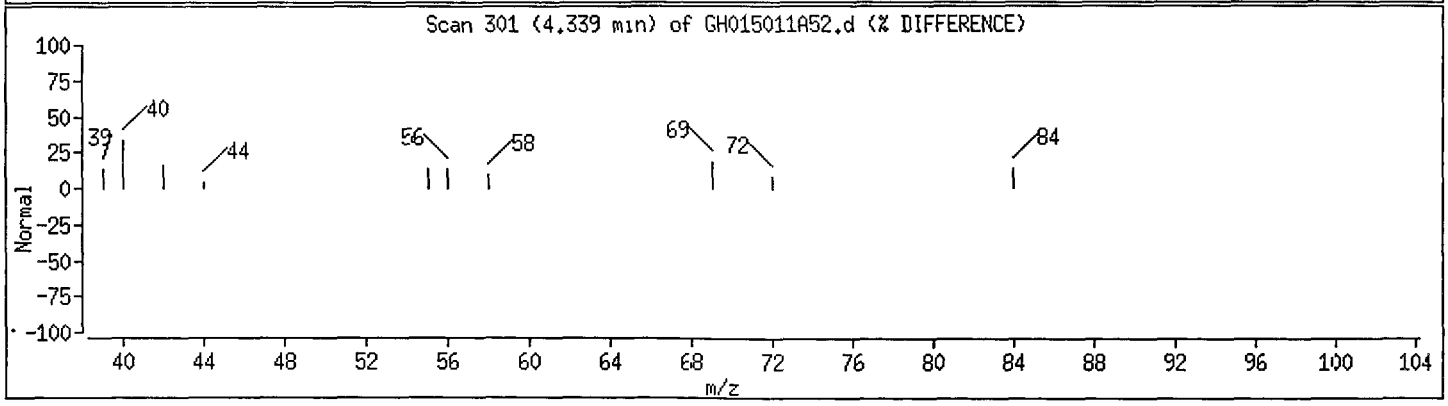
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

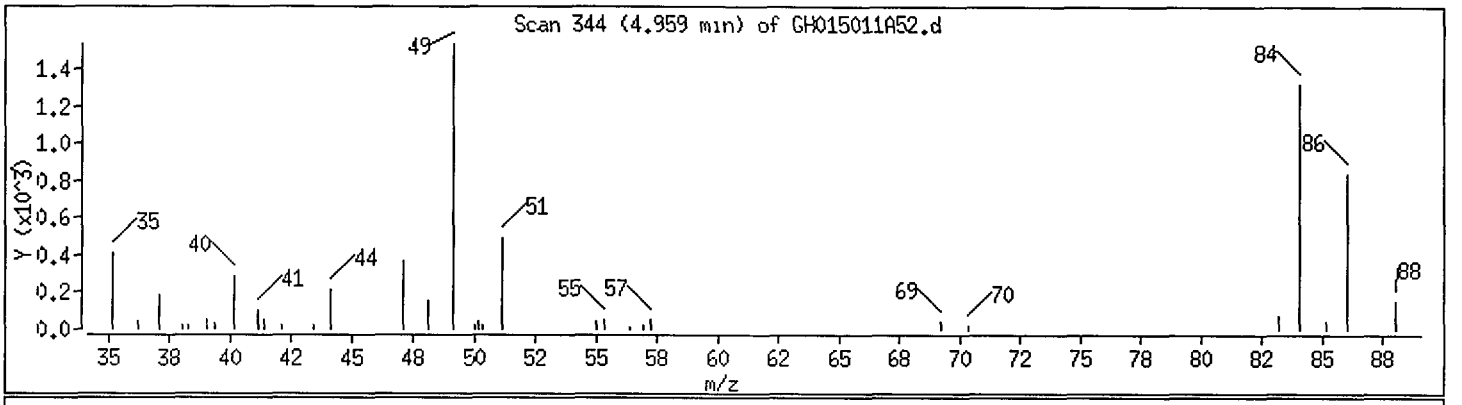
Client ID: FFE88 Instrument: f50052.1

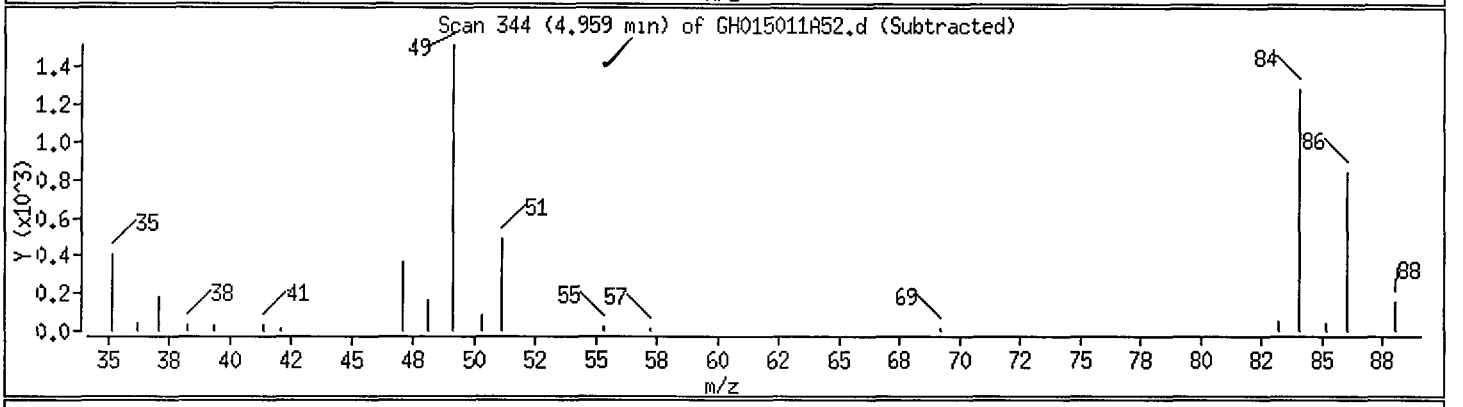
Sample Info:

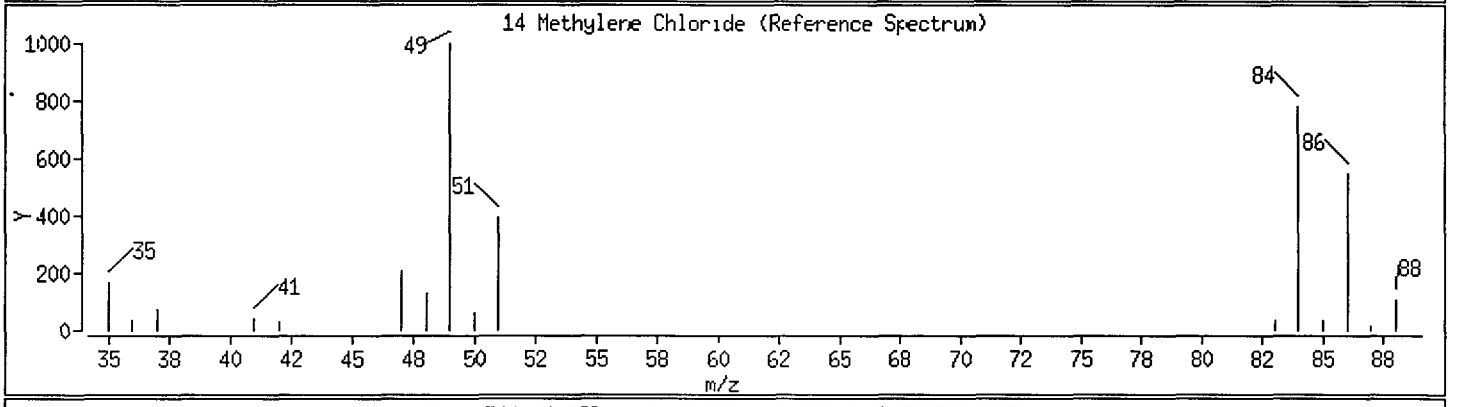
Operator: 2141

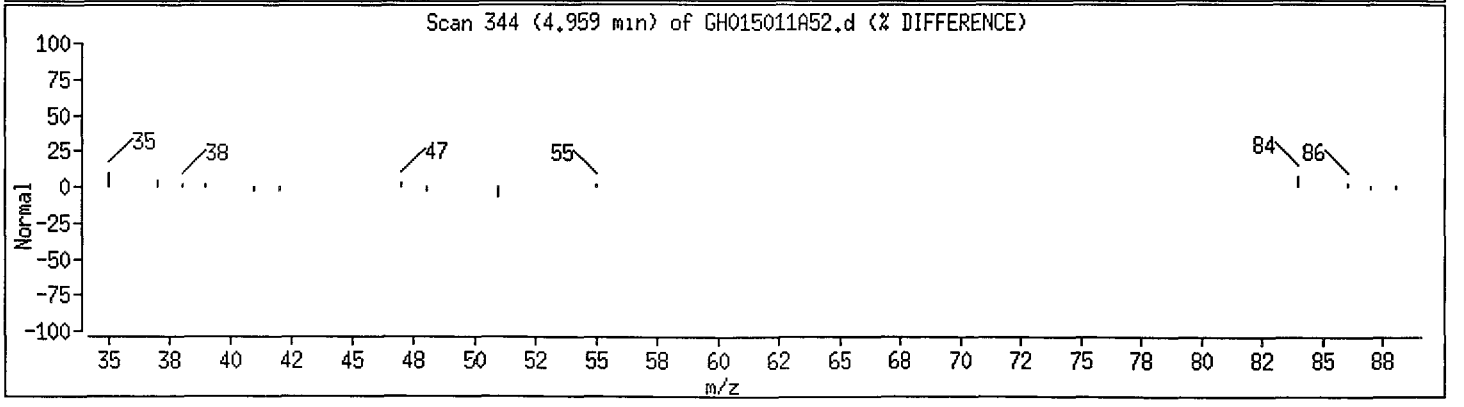
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

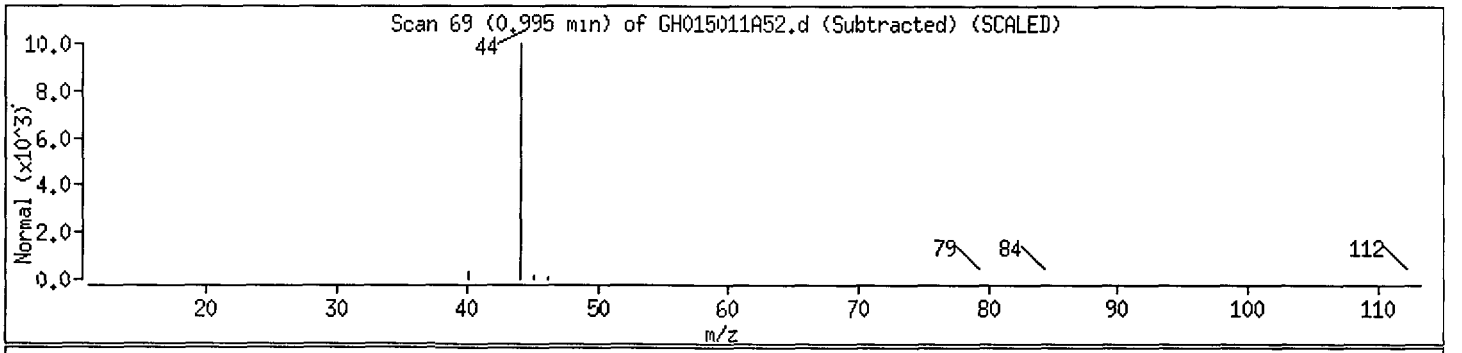
Client ID: FFE88 Instrument: f50052.1

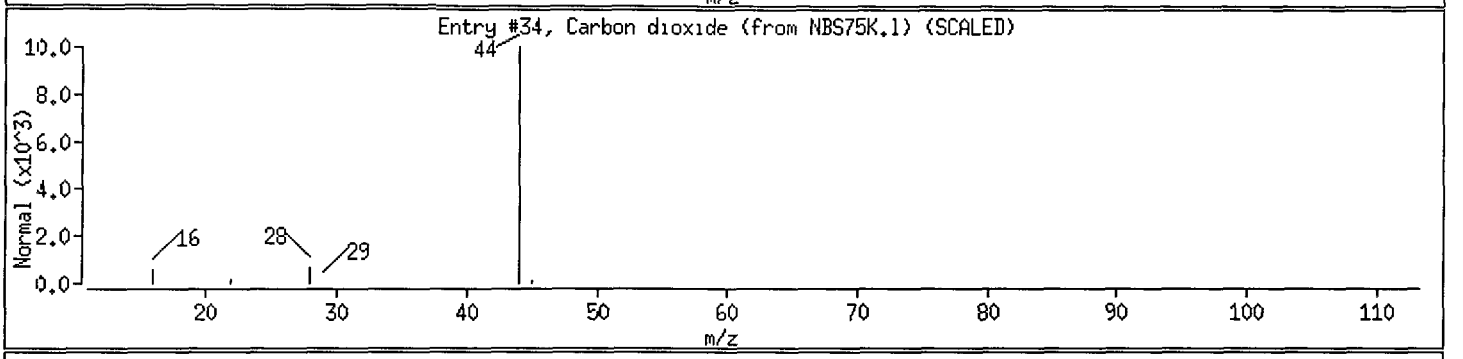
Sample Info:

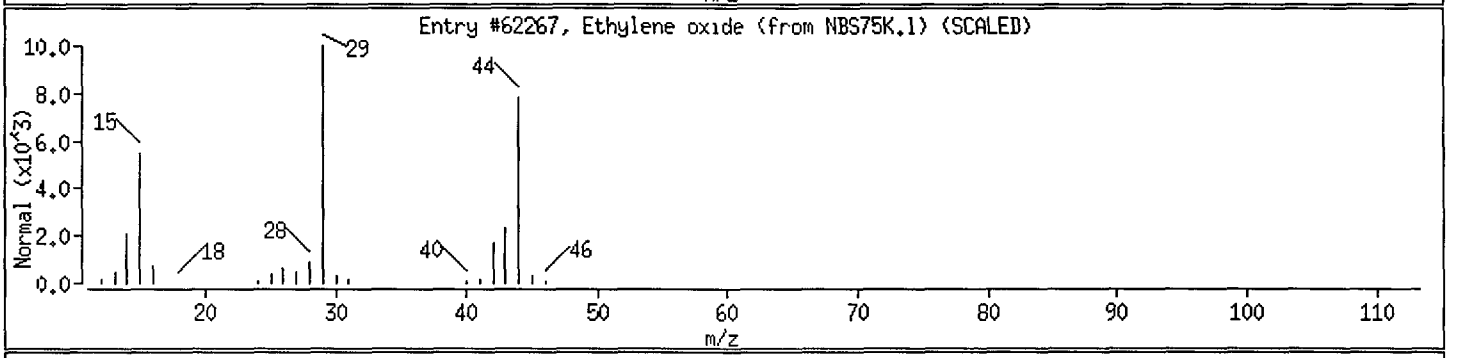
Operator: 2141

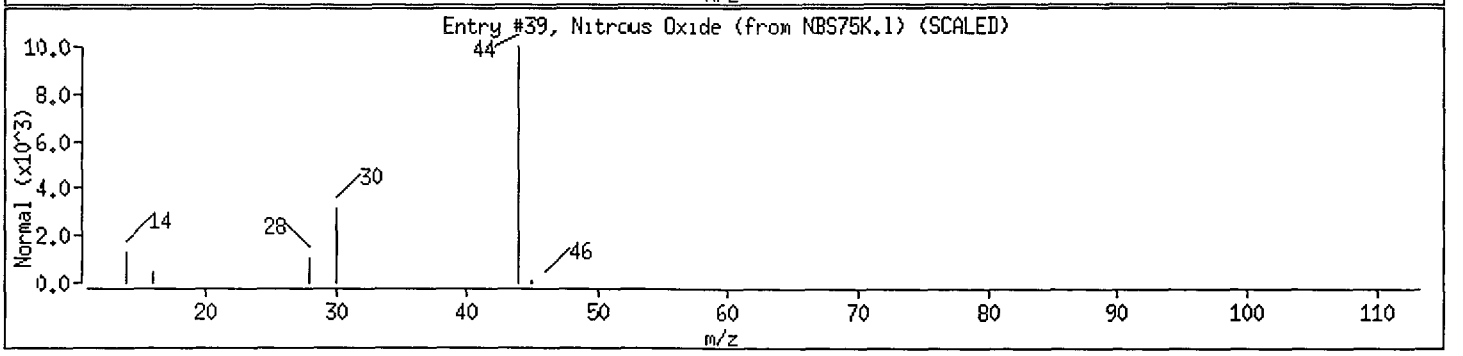
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	34	5	CO2	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44
Nitrous Oxide	10024-97-2	NBS75K.1	39	3	N2O	44









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

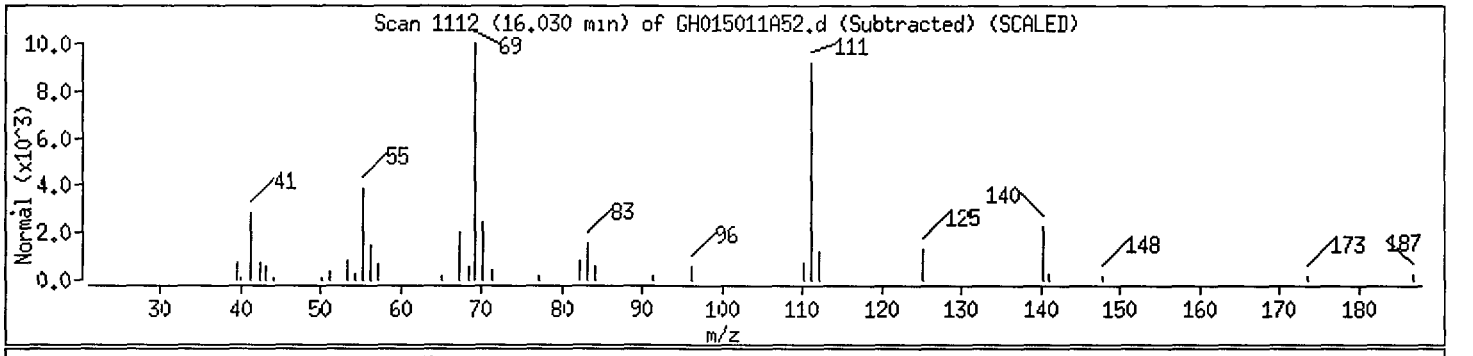
Client ID: FFE88 Instrument: f50052.1

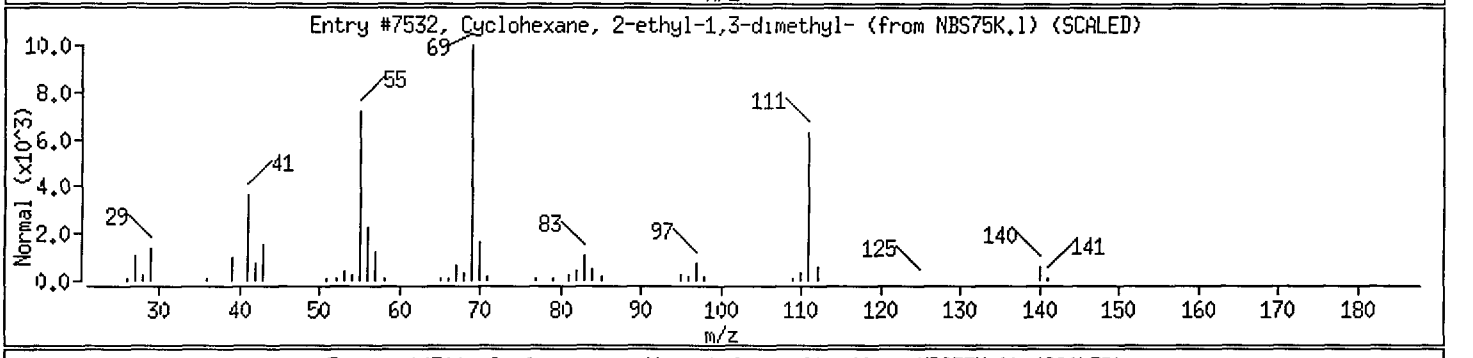
Sample Info:

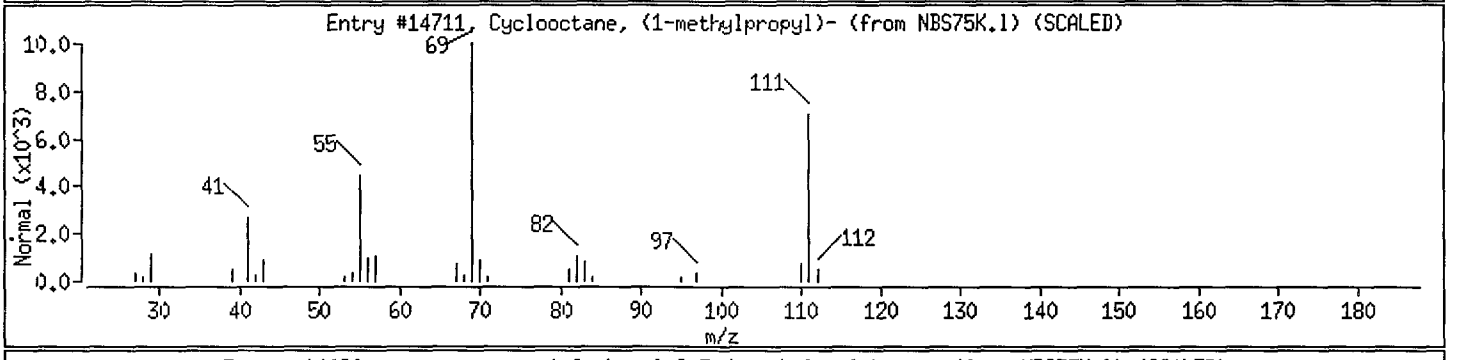
Operator: 2141

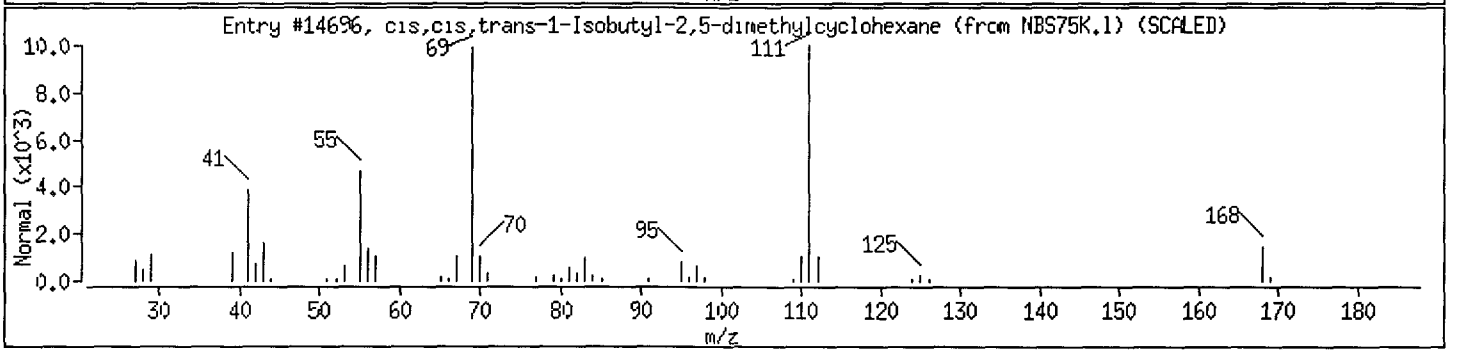
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 2-ethyl-1,3-dimethyl-	7045-67-2	NBS75K.1	7532	59	C10H20	140
Cyclooctane, (1-methylpropyl)-	16538-89-9	NBS75K.1	14711	53	C12H24	168
cis,cis,trans-1-Isobutyl-2,5-dimethylcyc	0-00-0	NBS75K.1	14696	53	C12H24	168









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

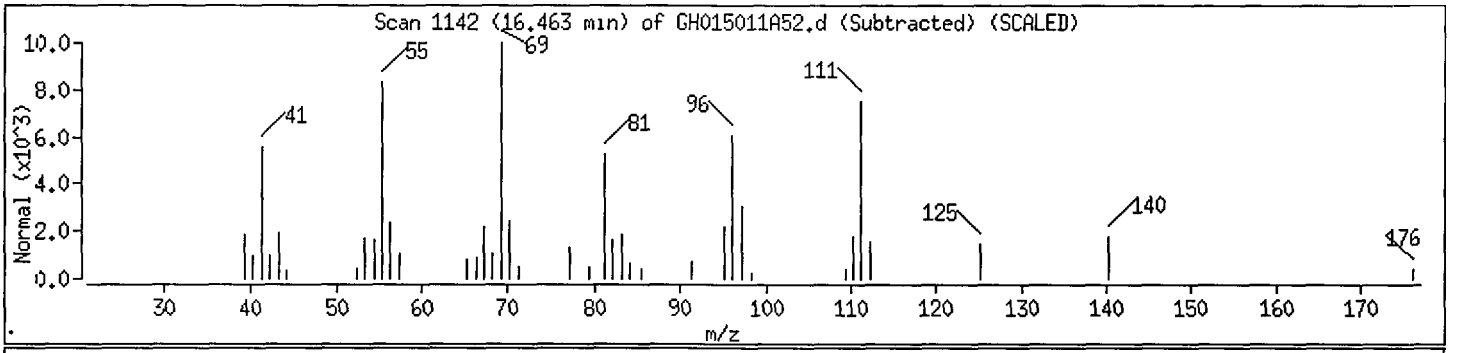
Client ID: FFE88 Instrument: f50052.1

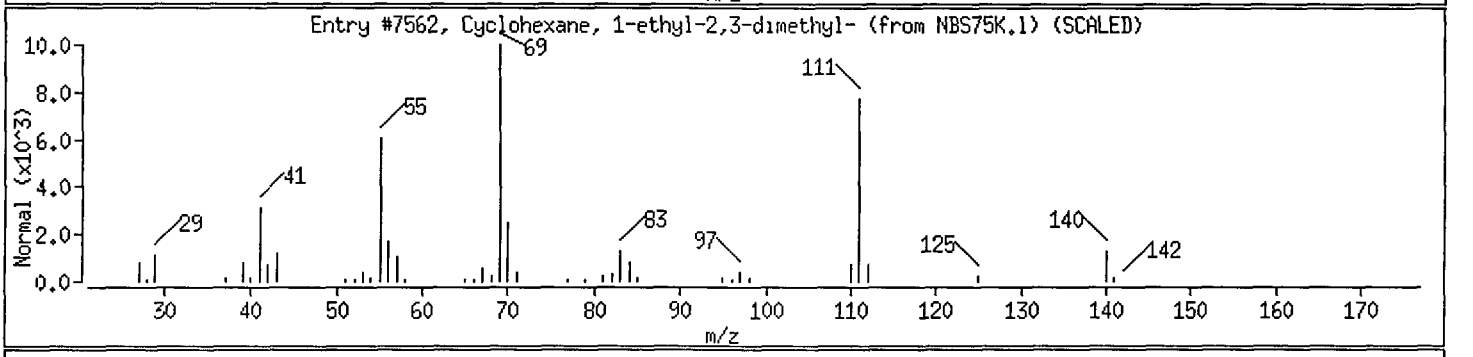
Sample Info:

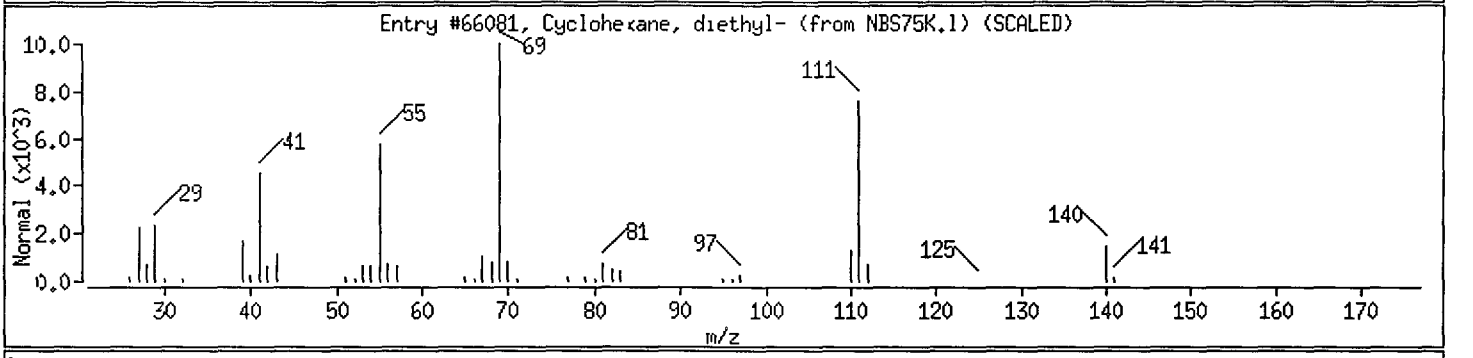
Operator: 2141

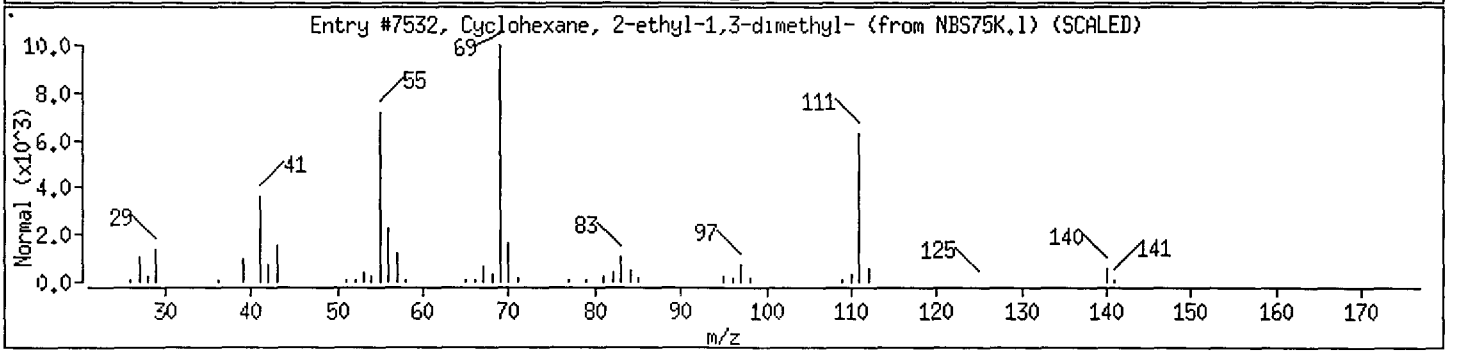
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted cyclohexane						
Cyclohexane, 1-ethyl-2,3-dimethyl-	7058-05-1	NBS75K.1	7562	70	C10H20	140
Cyclohexane, diethyl-	1331-43-7	NBS75K.1	66081	52	C10H20	140
Cyclohexane, 2-ethyl-1,3-dimethyl-	7045-67-2	NBS75K.1	7532	50	C10H20	140









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

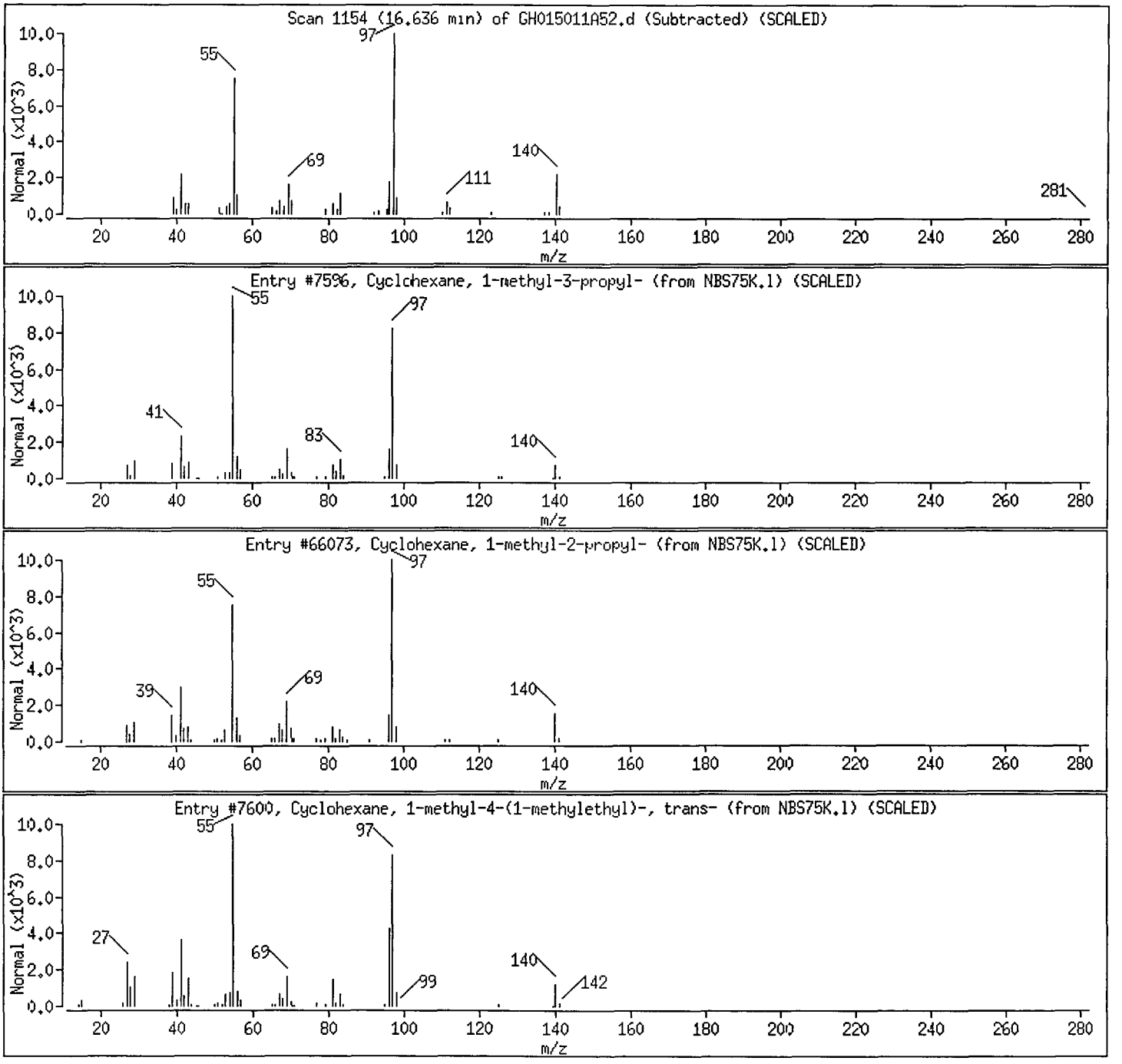
Client ID: FFE88 Instrument: f50052.1

Sample Info:

Operator: 2141

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted cyclohexane						
Cyclohexane, 1-methyl-3-propyl-	4291-80-9	NBS75K.1	7596	91	C10H20	140
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	NBS75K.1	66073	91	C10H20	140
Cyclohexane, 1-methyl-4-(1-methylethyl)-	1678-82-6	NBS75K.1	7600	86	C10H20	140



Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

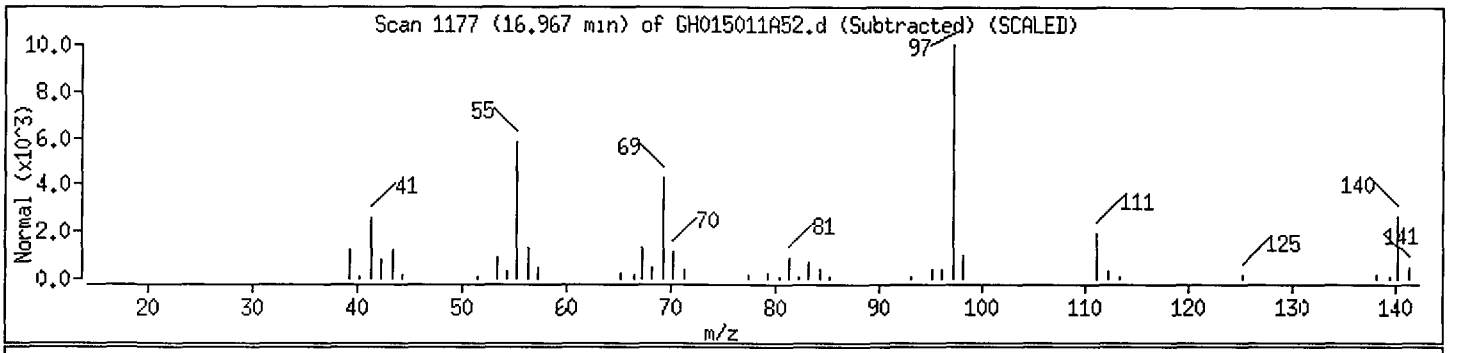
Client ID: FFE88 Instrument: f50052.i

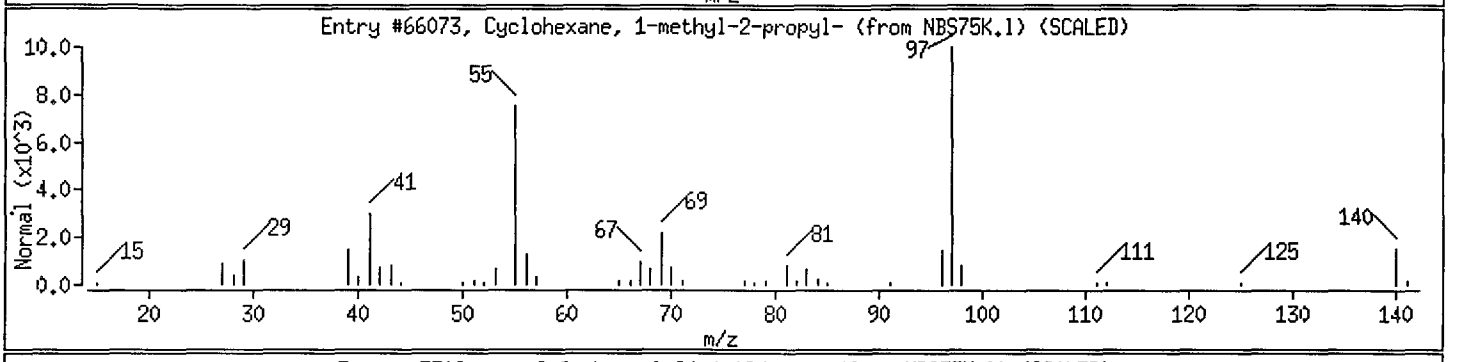
Sample Info:

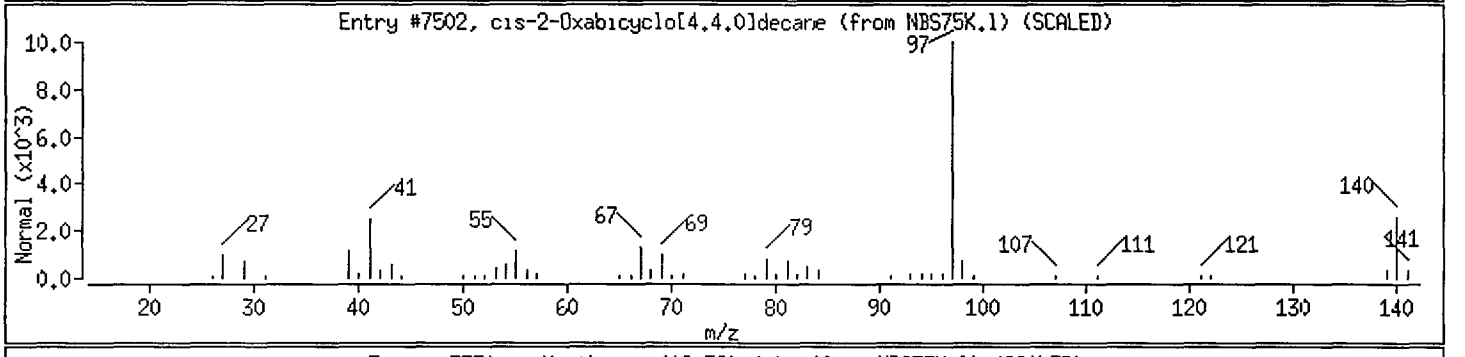
Operator: 2141

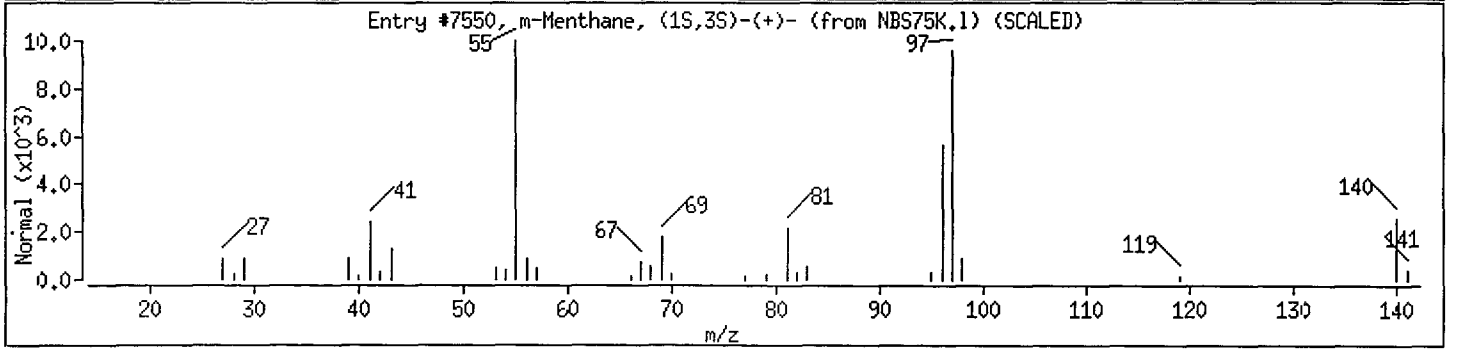
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted cyclohexane						
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	NBS75K.1	66073	81	C10H20	140
cis-2-Oxabicyclo[4.4.0]decane	60416-19-5	NBS75K.1	7502	74	C9H16O	140
m-Menthane, (1S,3S)-(+)-	13837-67-7	NBS75K.1	7550	68	C10H20	140









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

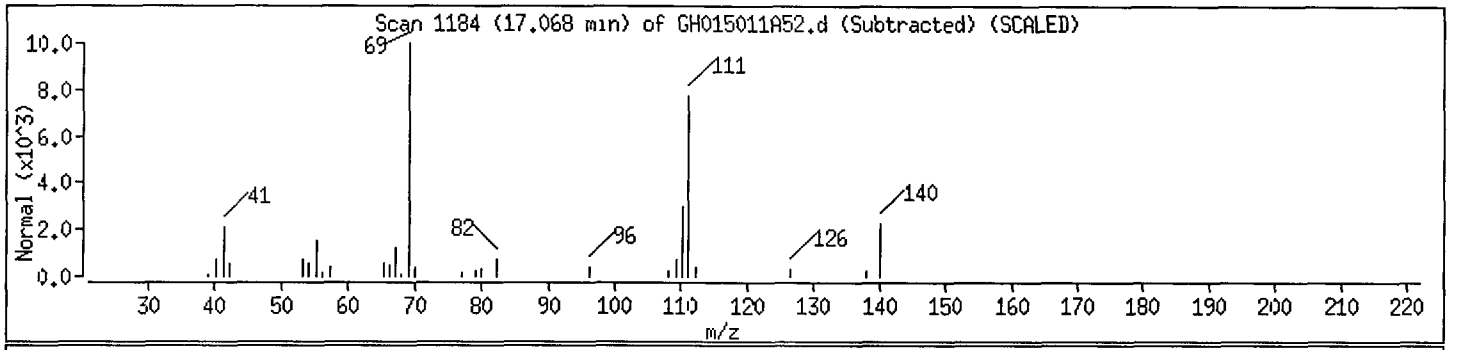
Client ID: FFE88 Instrument: f50052.1

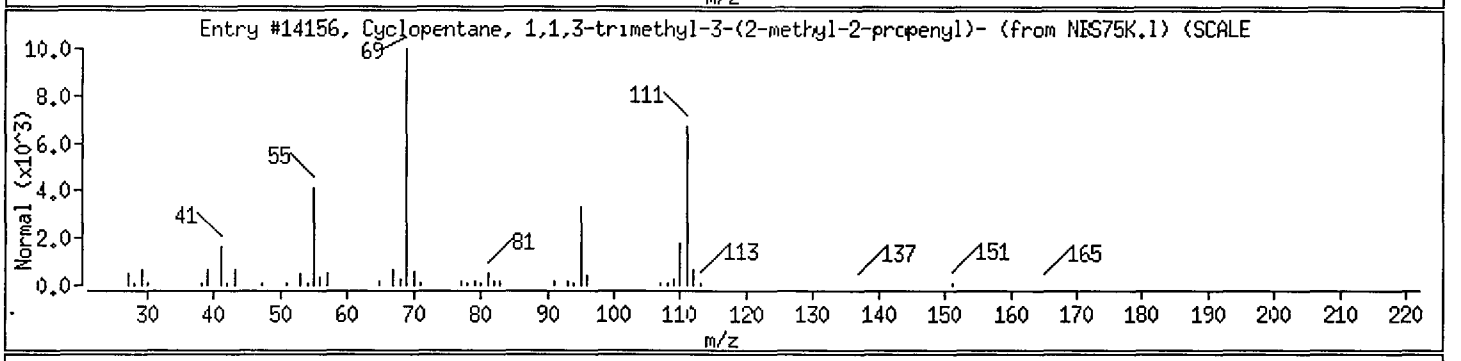
Sample Info:

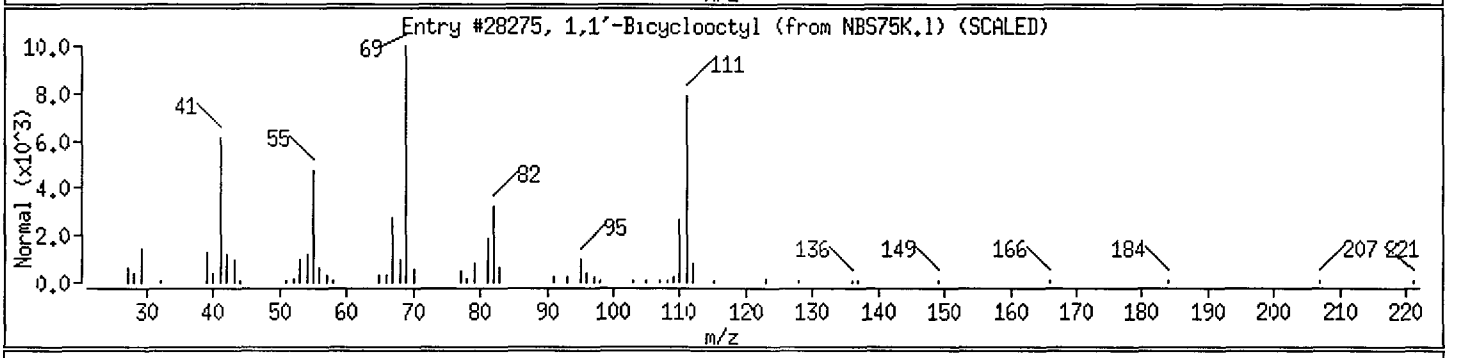
Operator: 2141

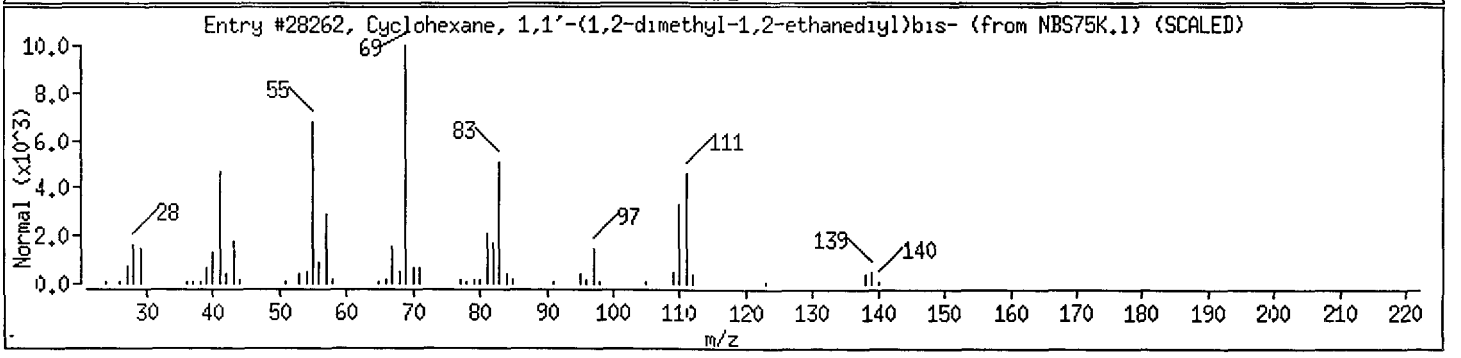
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclopentane, 1,1,3-trimethyl-3-(2-methy	74421-09-3	NBS75K.1	14156	50	C12H22	166
1,1'-Bicyclooctyl	6708-17-4	NBS75K.1	28275	39	C16H30	222
Cyclohexane, 1,1'-(1,2-dimethyl-1,2-etha	74663-71-1	NBS75K.1	28262	28	C16H30	222









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

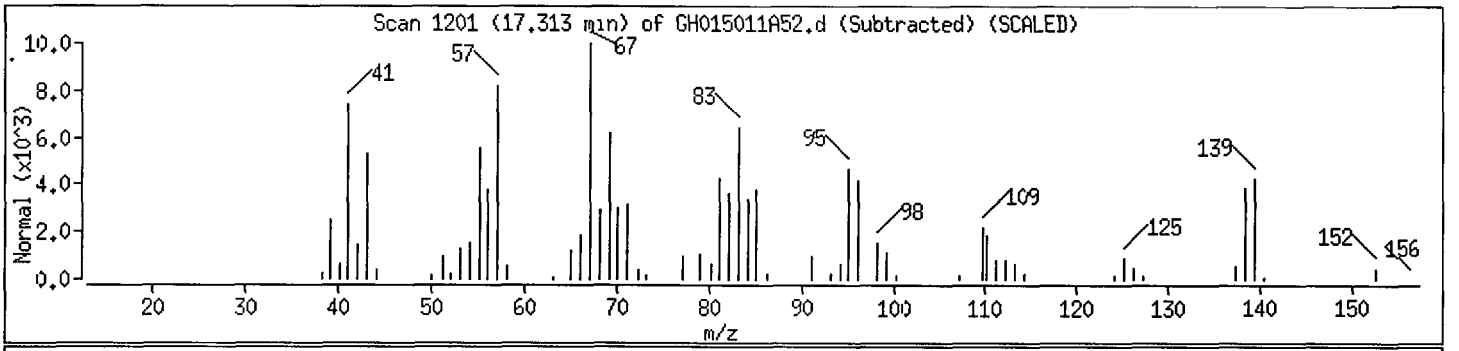
Client ID: FFE88 Instrument: f50052.1

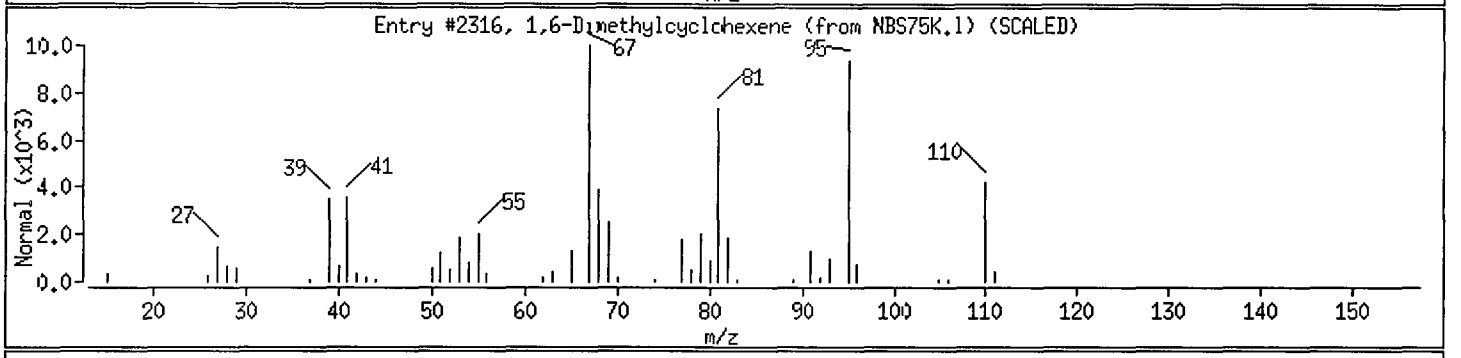
Sample Info:

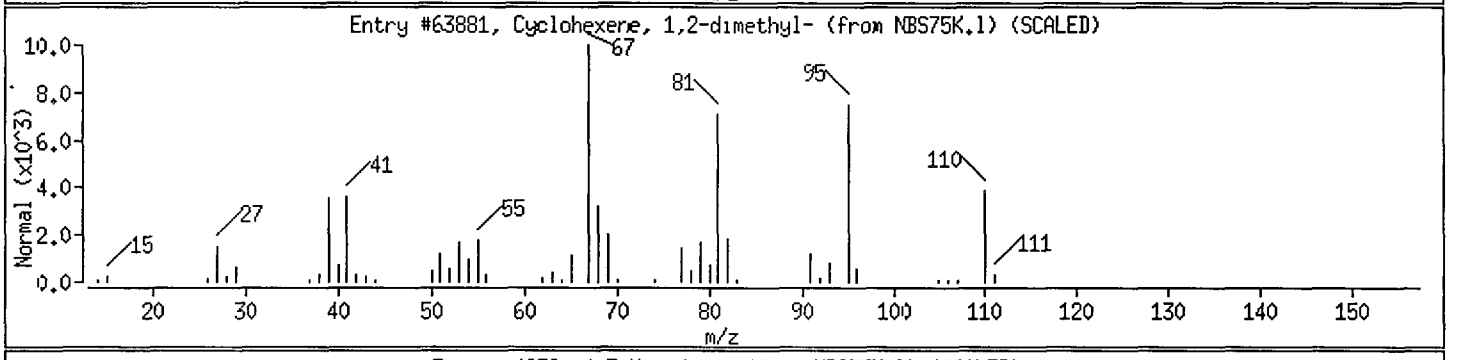
Operator: 2141

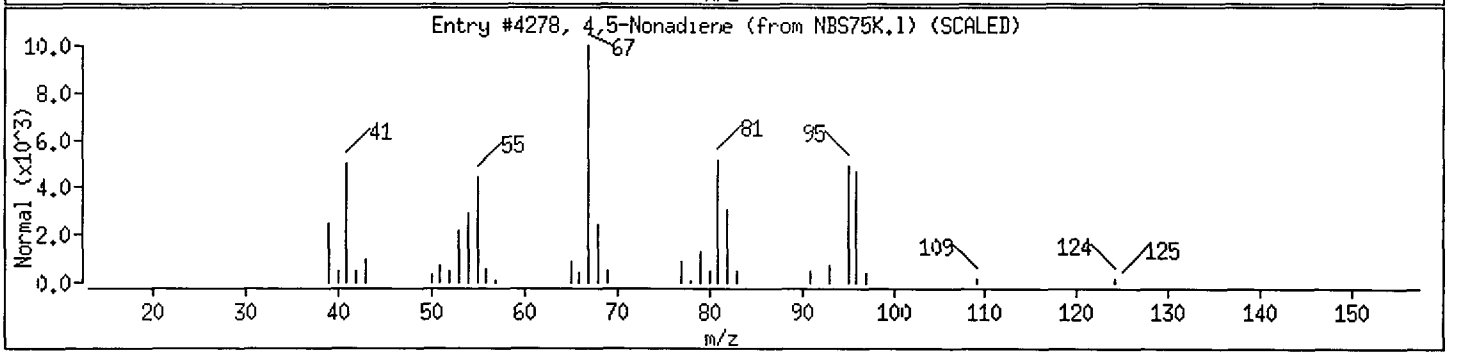
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
1,6-Dimethylcyclohexene	0-00-0	NBS75K.1	2316	42	C8H14	110
Cyclohexene, 1,2-dimethyl-	1674-10-8	NBS75K.1	63881	42	C8H14	110
4,5-Nonadiene	821-74-9	NBS75K.1	4278	42	C9H16	124









Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

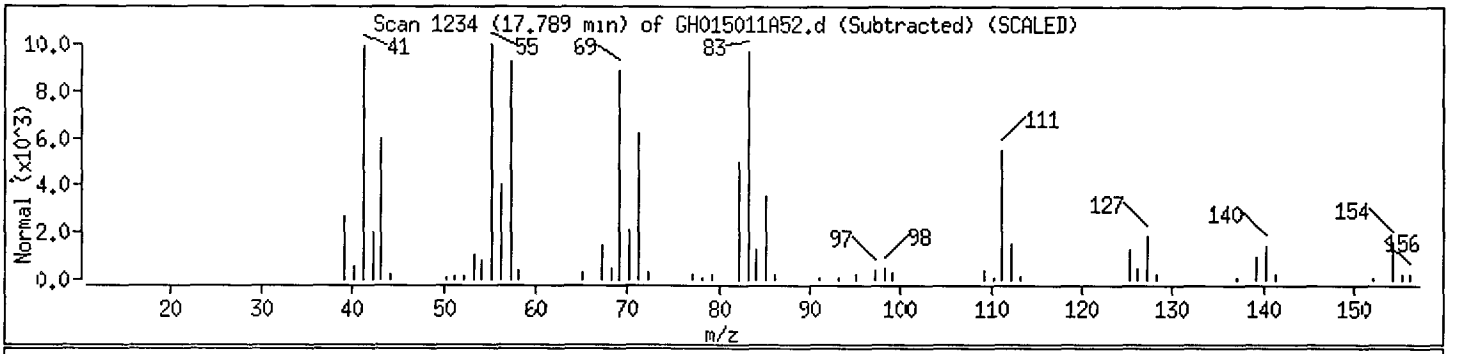
Client ID: FFE88 Instrument: f50052.i

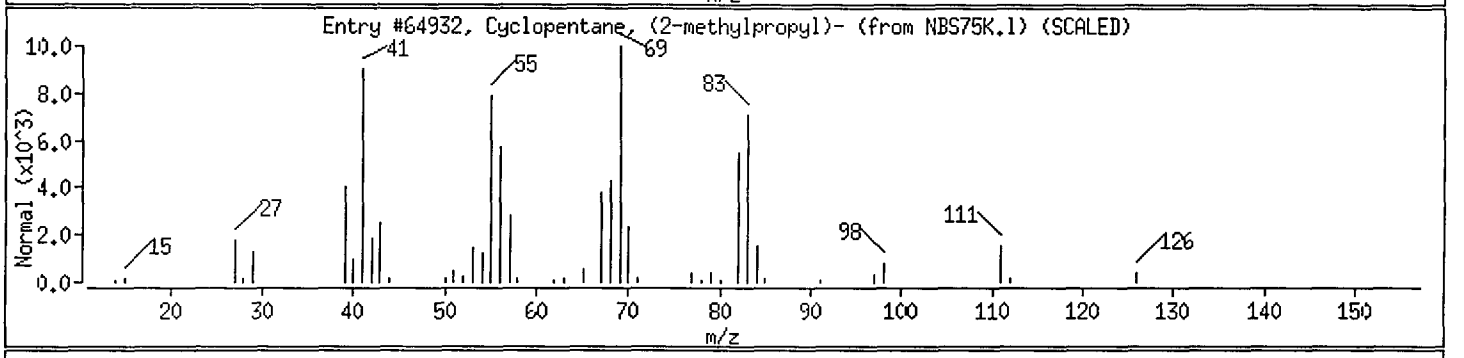
Sample Info:

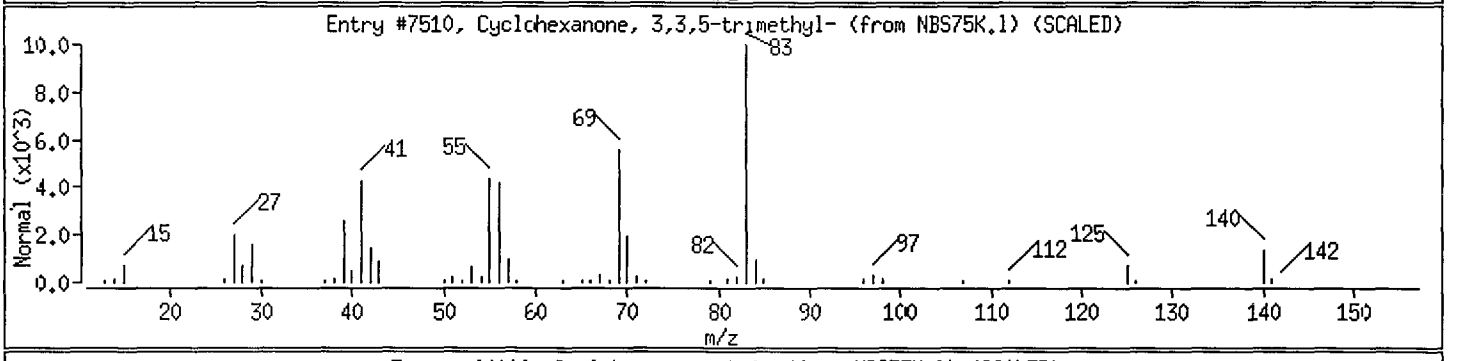
Operator: 2141

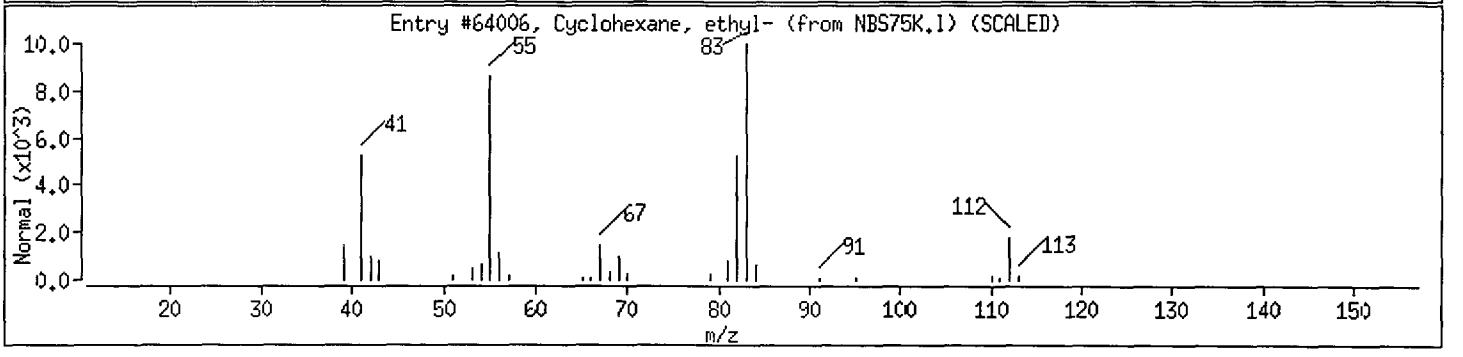
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclopentane, (2-methylpropyl)-	3788-32-7	NBS75K.l	64932	55	C9H18	126
Cyclohexanone, 3,3,5-trimethyl-	873-94-9	NBS75K.l	7510	38	C9H16O	140
Cyclohexane, ethyl-	1678-91-7	NBS75K.l	64006	30	C8H16	112









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

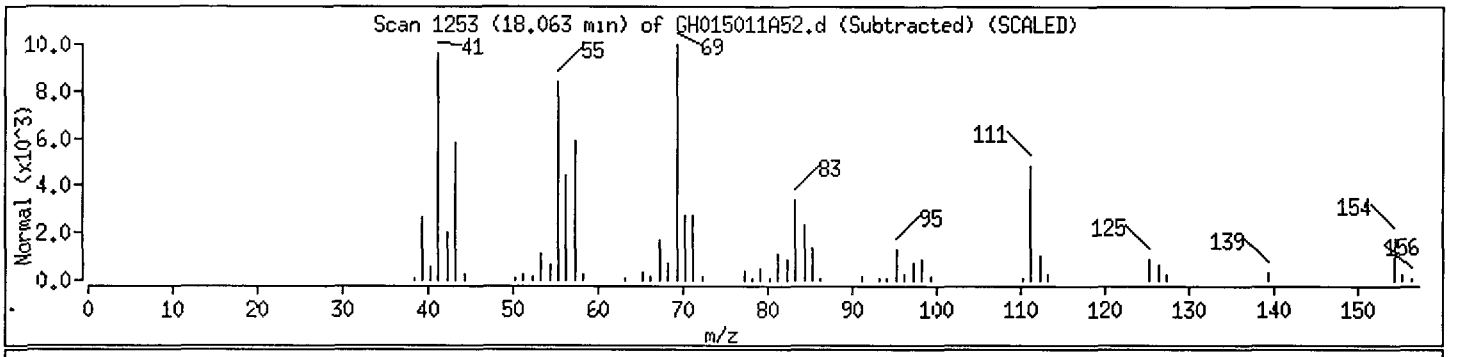
Client ID: FFE88 Instrument: f50052.1

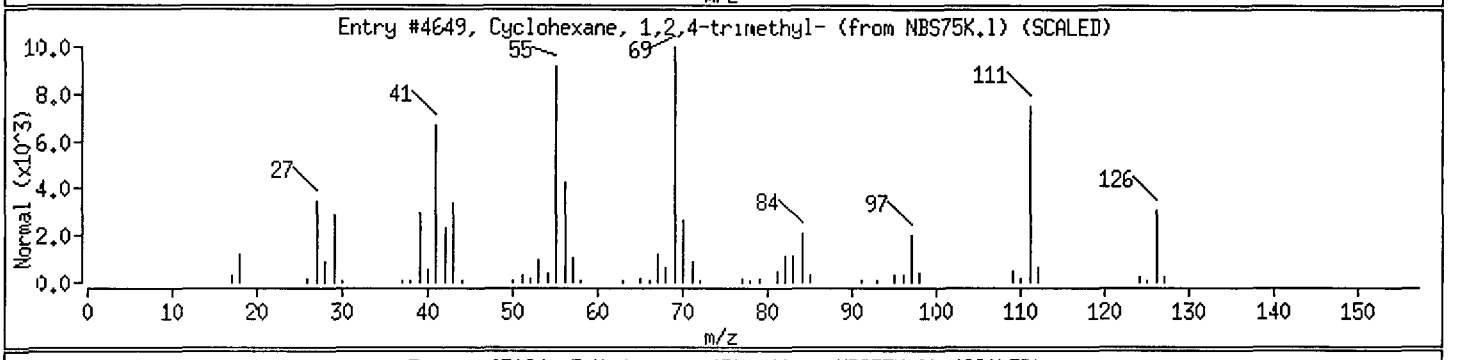
Sample Info:

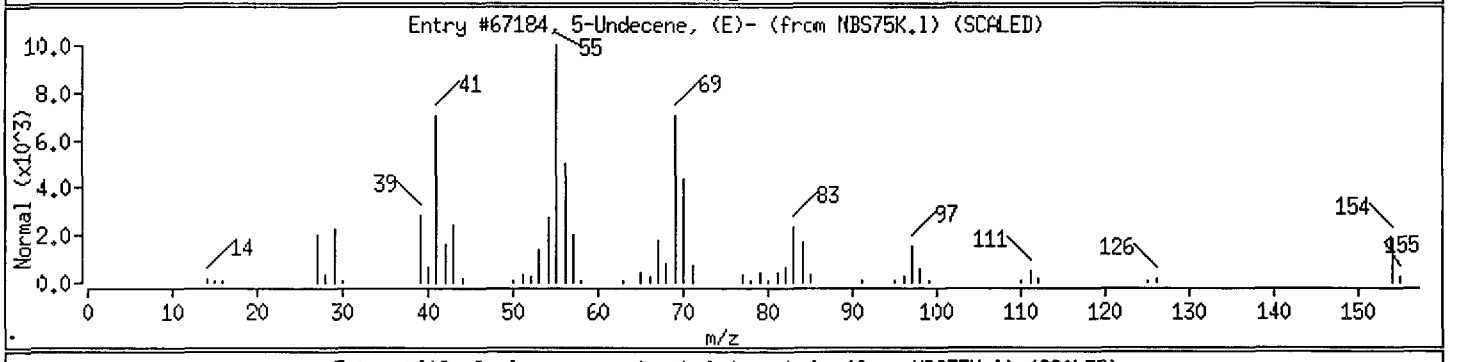
Operator: 2141

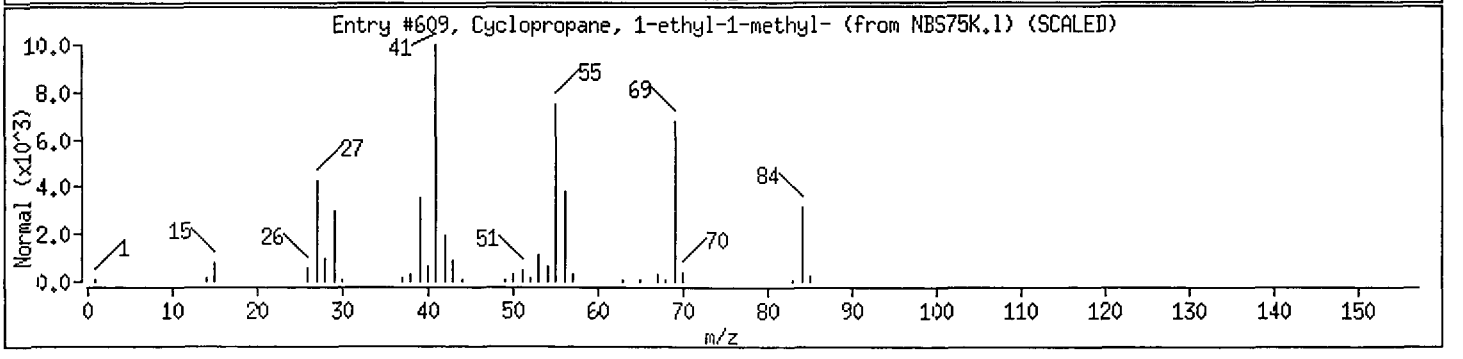
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1,2,4-trimethyl-	2234-75-5	NBS75K.l	4649	72	C9H18	126
5-Undecene, (E)-	764-97-6	NBS75K.l	67184	70	C11H22	154
Cyclopropane, 1-ethyl-1-methyl-	53778-43-1	NBS75K.l	609	53	C6H12	84









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

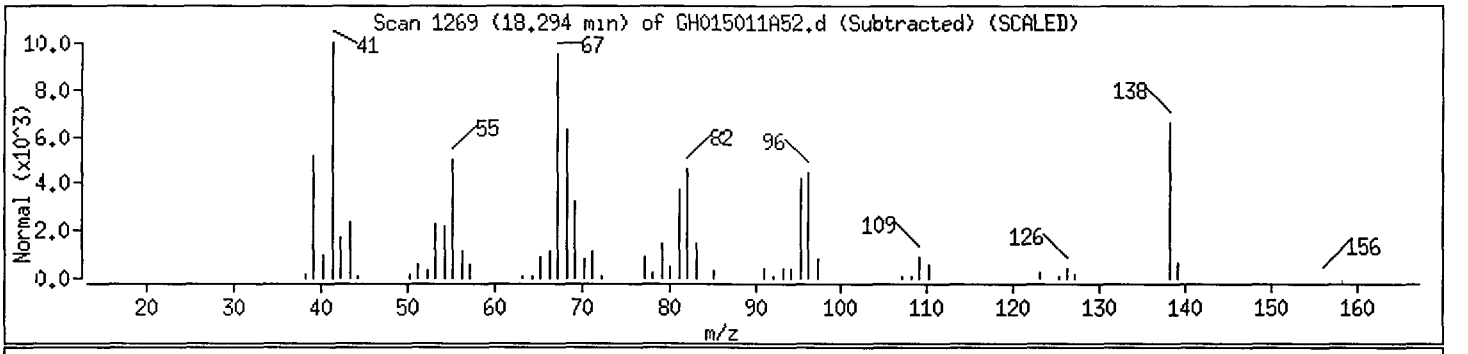
Client ID: FFE88 Instrument: f50052.1

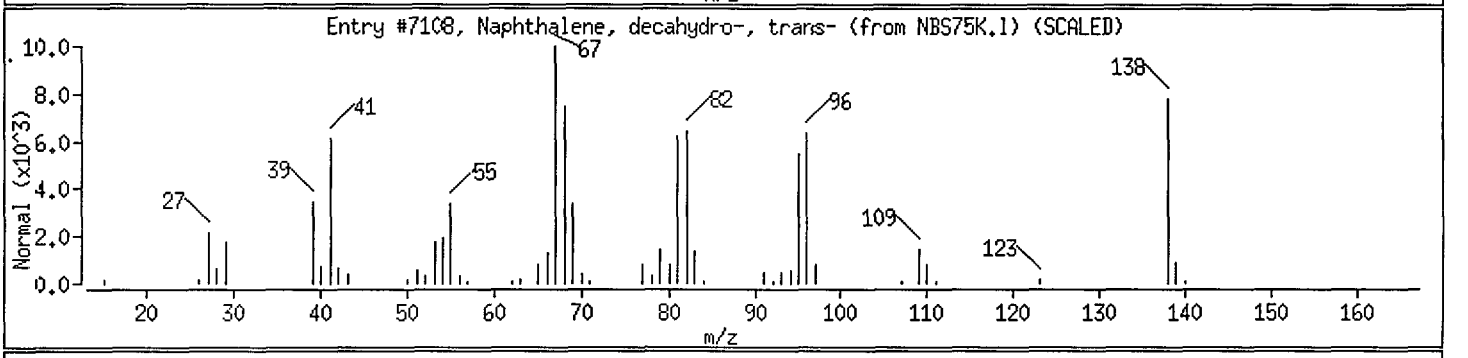
Sample Info:

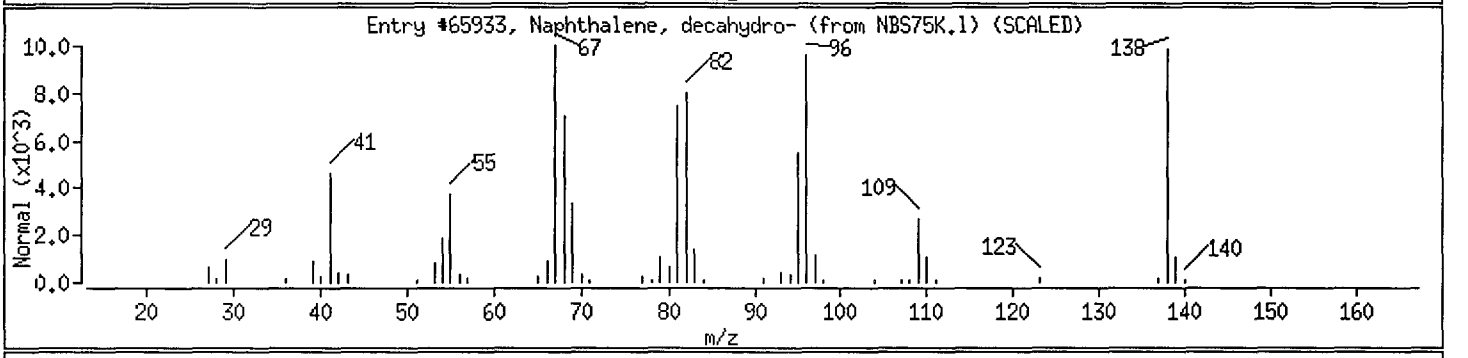
Operator: 2141

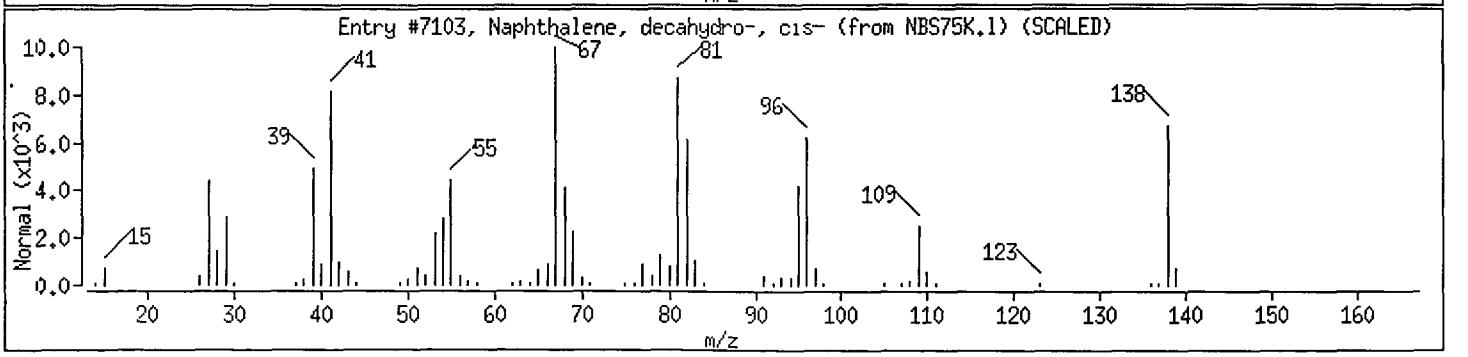
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted naphthalene						
Naphthalene, decahydro-, trans-	493-02-7	NBS75K.1	7108	96	C10H18	138
Naphthalene, decahydro-	91-17-8	NBS75K.1	65933	94	C10H18	138
Naphthalene, decahydro-, cis-	493-01-6	NBS75K.1	7103	94	C10H18	138









Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

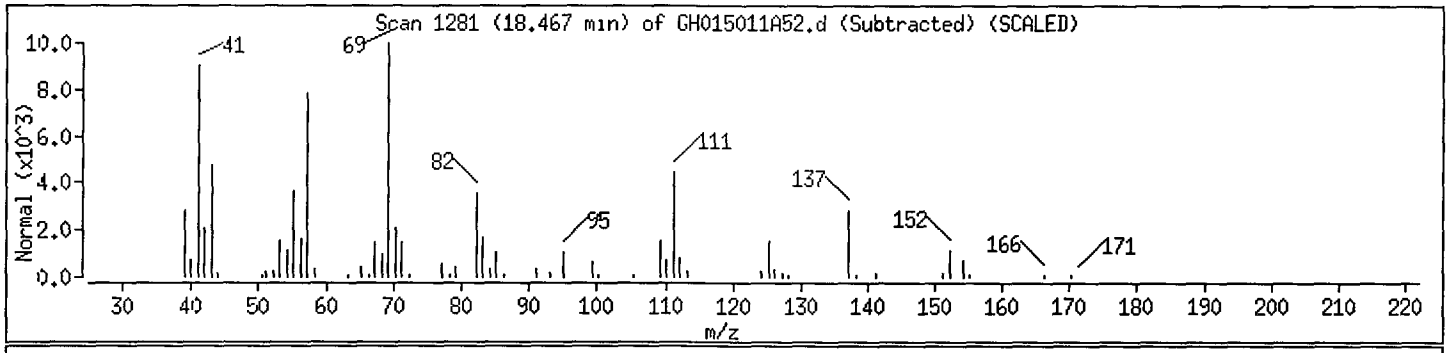
Client ID: FFE88 Instrument: f50052.i

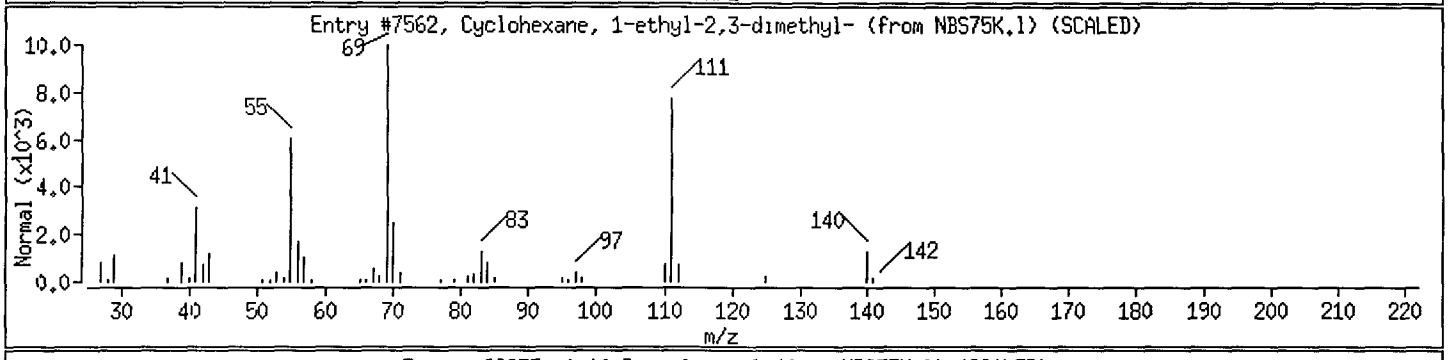
Sample Info:

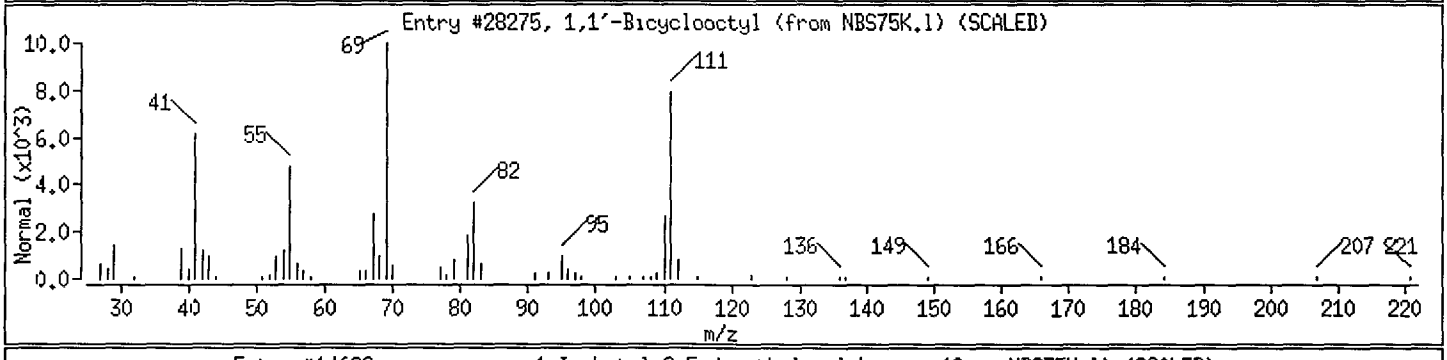
Operator: 2141

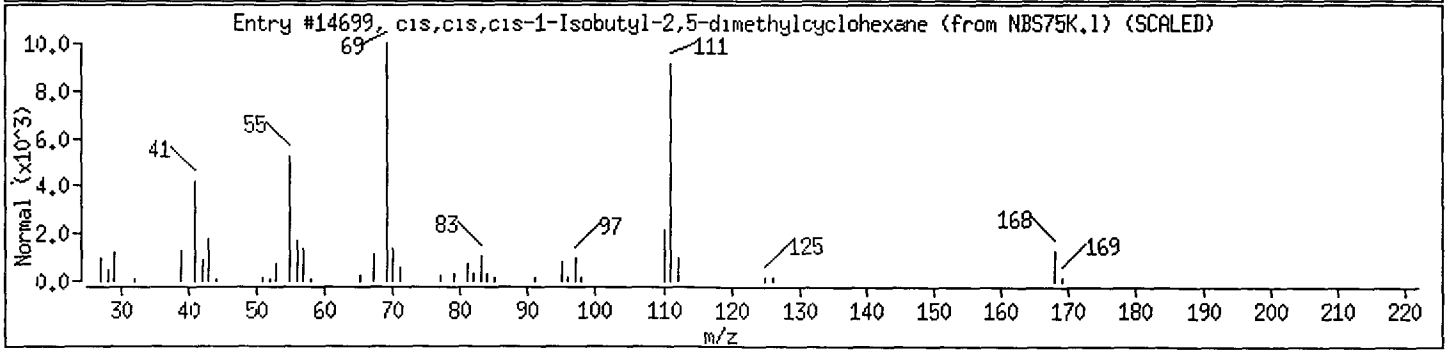
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1-ethyl-2,3-dimethyl-	7058-05-1	NBS75K.l	7562	47	C10H20	140
1,1'-Bicyclooctyl	6708-17-4	NBS75K.l	28275	40	C16H30	222
cis,cis,cis-1-Isobutyl-2,5-dimethylcyclo	0-00-0	NBS75K.l	14699	38	C12H24	168









Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

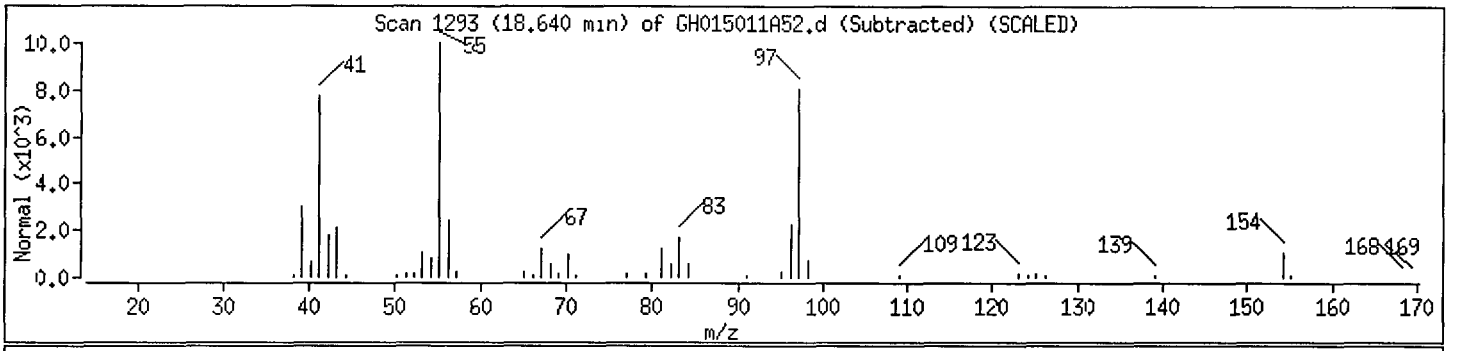
Client ID: FFE88 Instrument: f50052.i

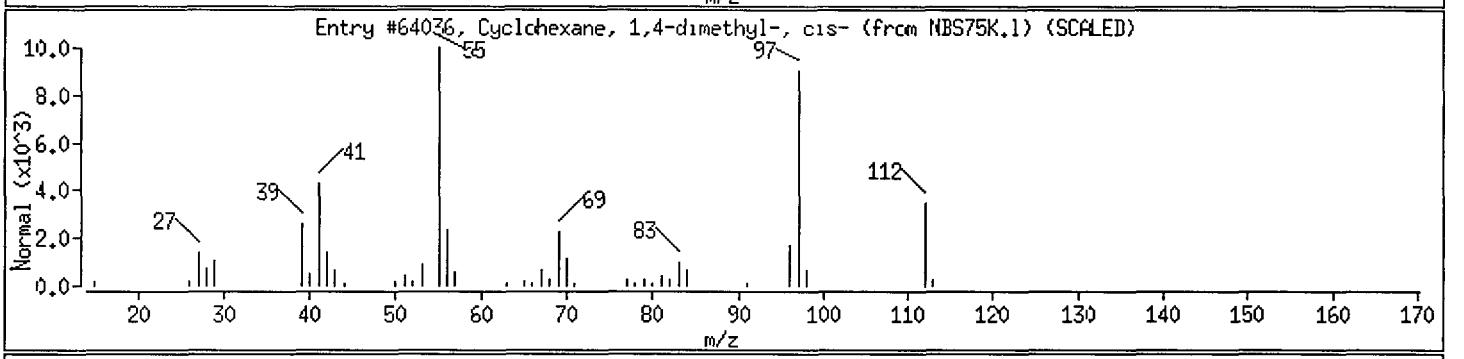
Sample Info:

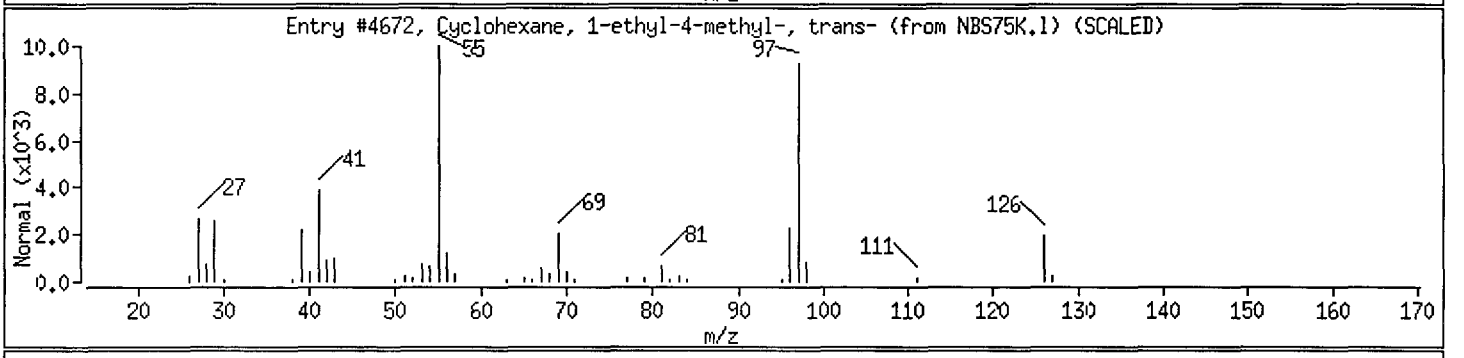
Operator: 2141

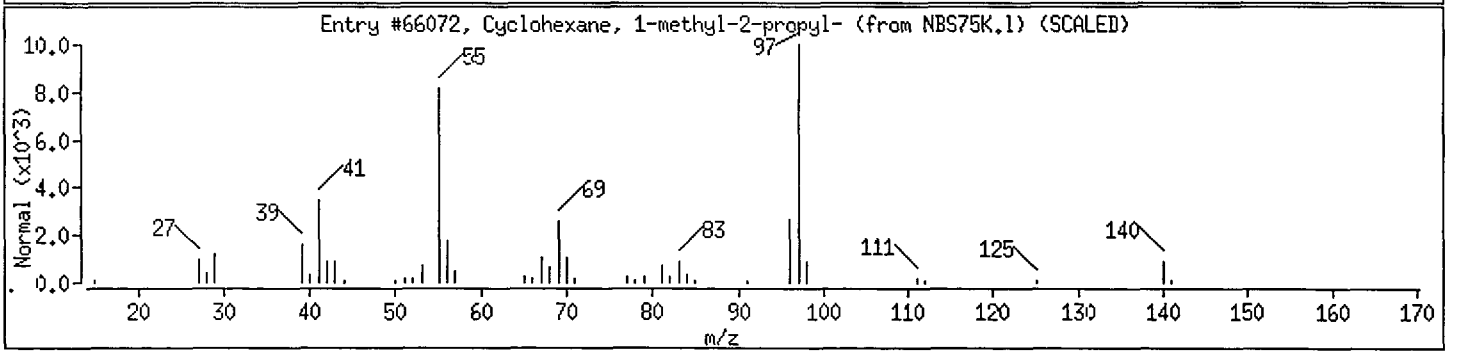
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted cyclohexane						
Cyclohexane, 1,4-dimethyl-, cis-	624-29-3	NBS75K.l	64036	72	C8H16	112
Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	NBS75K.l	4672	64	C9H18	126
Cyclohexane, 1-methyl-2-propyl-	4291-79-6	NBS75K.l	66072	64	C10H20	140









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

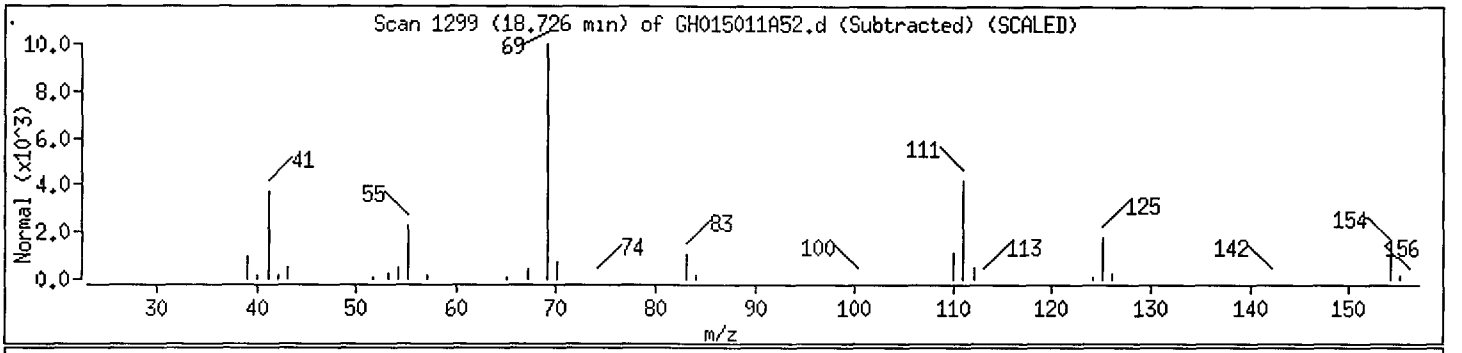
Client ID: FFE88 Instrument: f50052.1

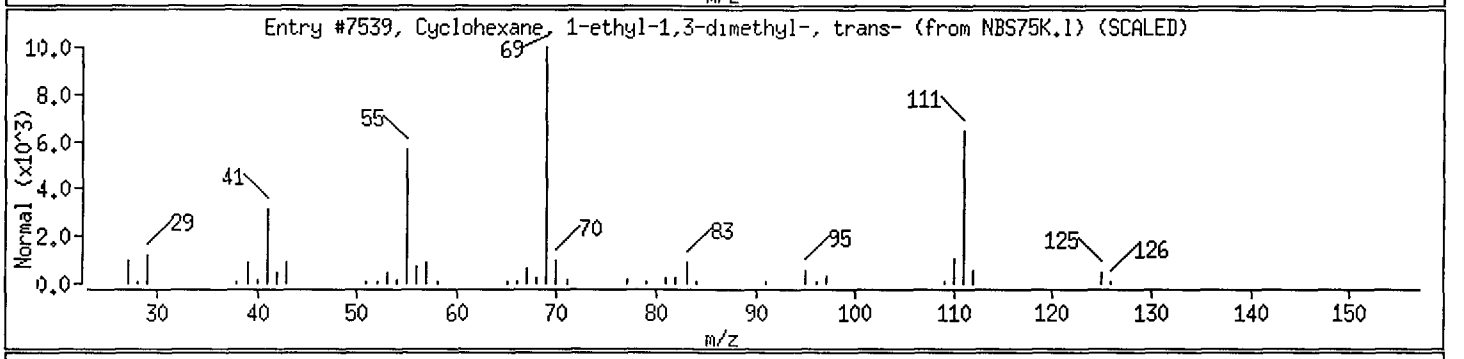
Sample Info:

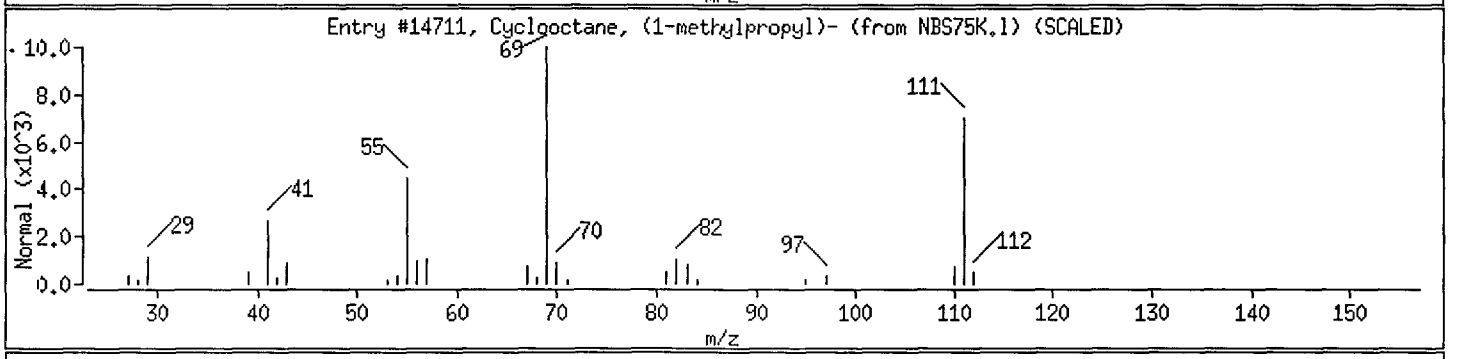
Operator: 2141

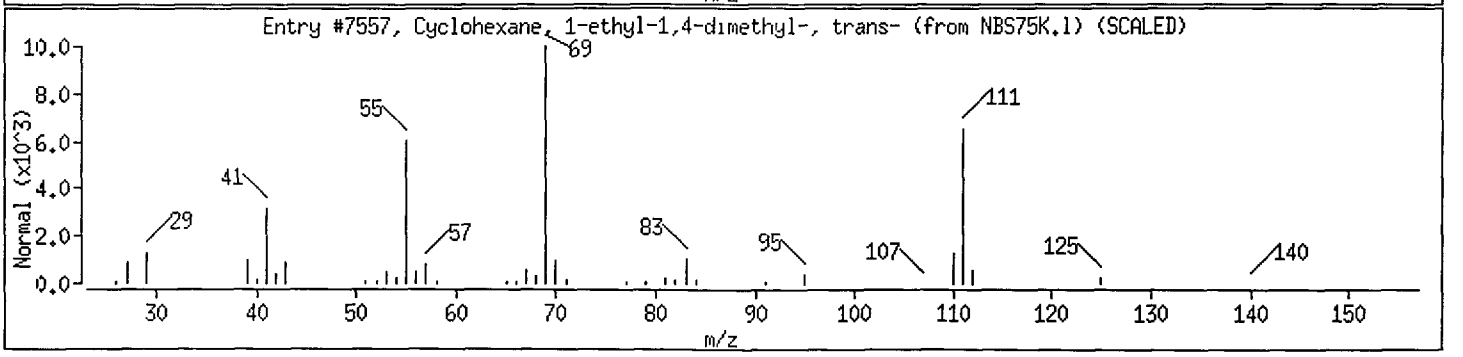
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted cyclohexane						
Cyclohexane, 1-ethyl-1,3-dimethyl-, tran	62238-29-3	NBS75K.l	7539	72	C10H20	140
Cyclooctane, (1-methylpropyl)-	16538-89-9	NBS75K.l	14711	64	C12H24	168
Cyclohexane, 1-ethyl-1,4-dimethyl-, tran	62238-32-8	NBS75K.l	7557	56	C10H20	140









Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

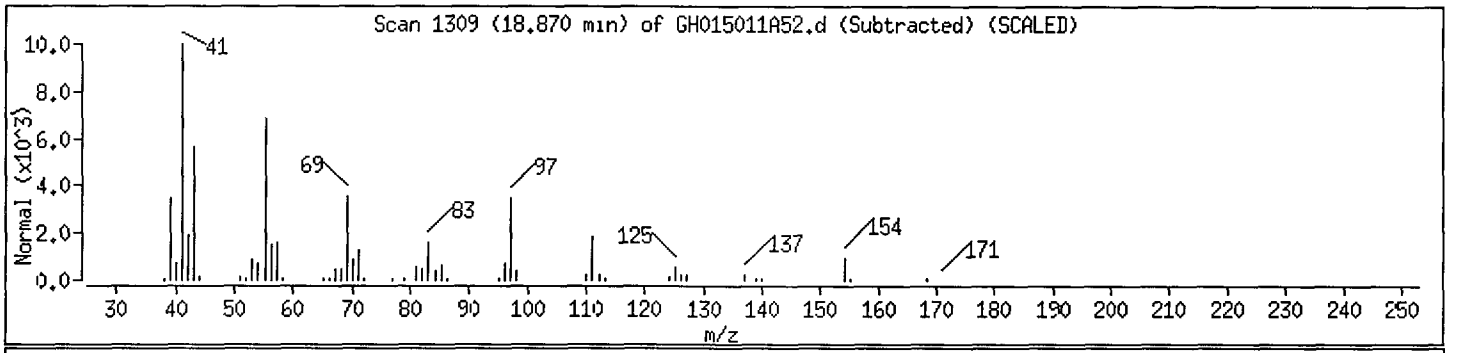
Client ID: FFE88 Instrument: f50052.i

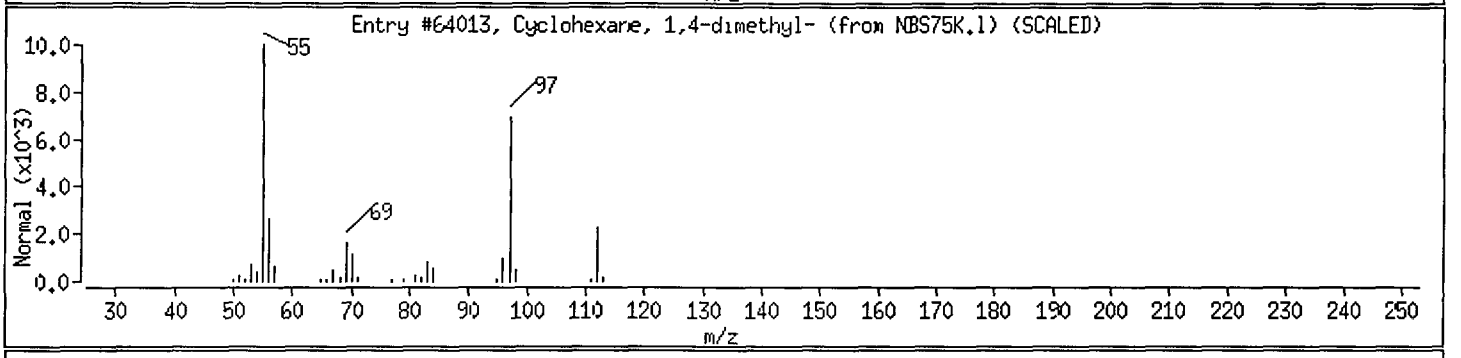
Sample Info:

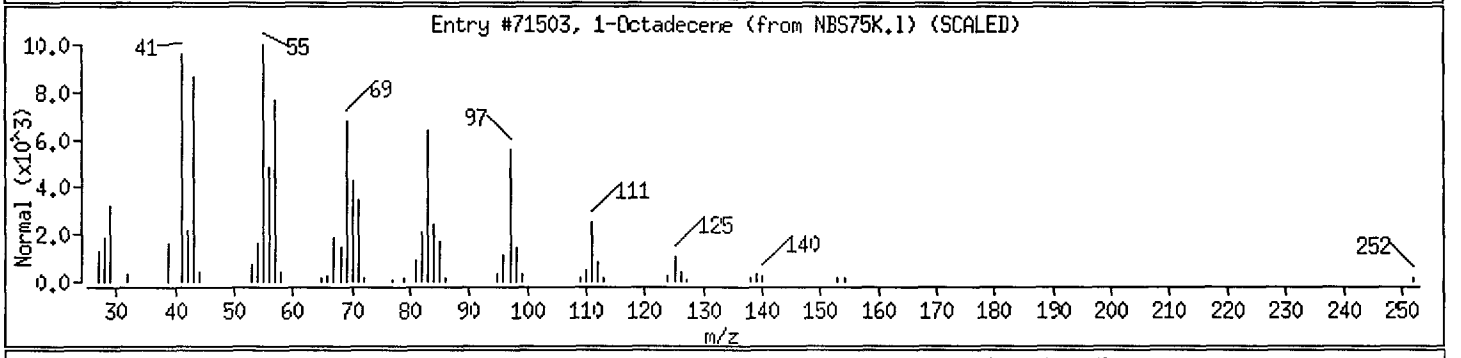
Operator: 2141

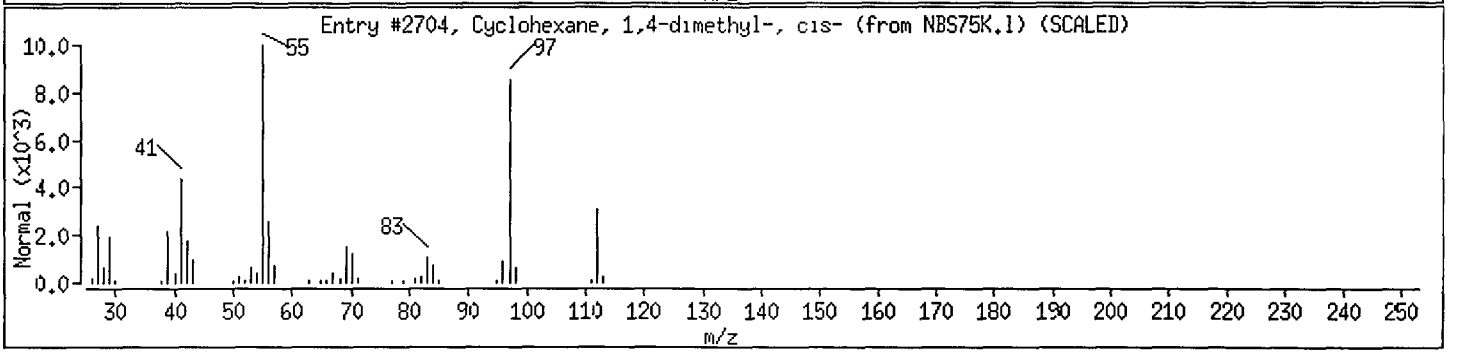
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Cyclohexane, 1,4-dimethyl-	589-90-2	NBS75K.1	64013	38	C8H16	112
1-Octadecene	112-88-9	NBS75K.1	71503	38	C18H36	252
Cyclohexane, 1,4-dimethyl-, cis-	624-29-3	NBS75K.1	2704	35	C8H16	112









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

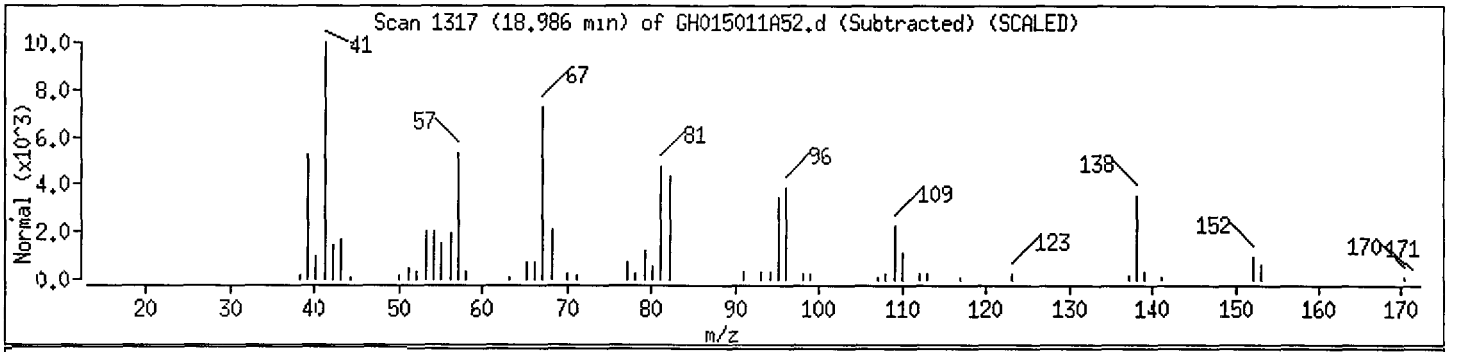
Client ID: FFE88 | Instrument: f50052.1

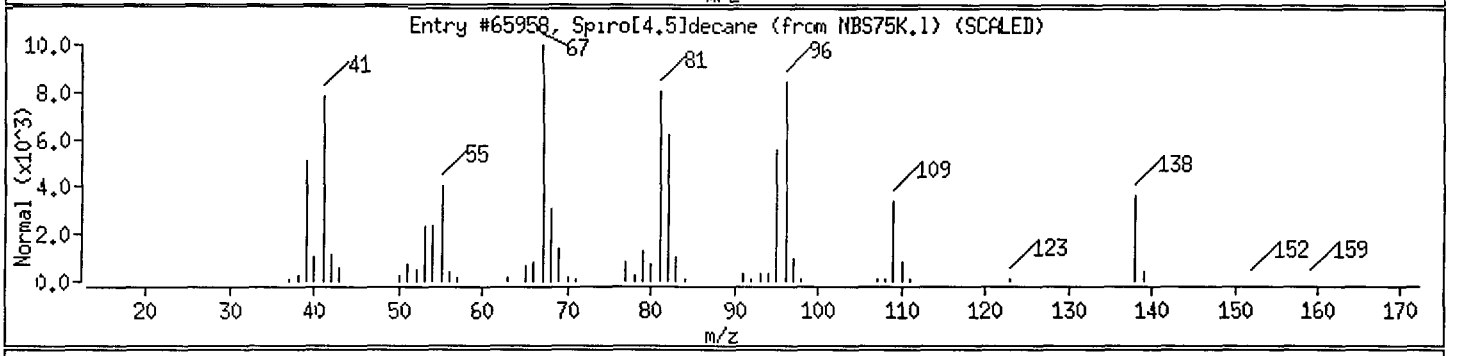
Sample Info:

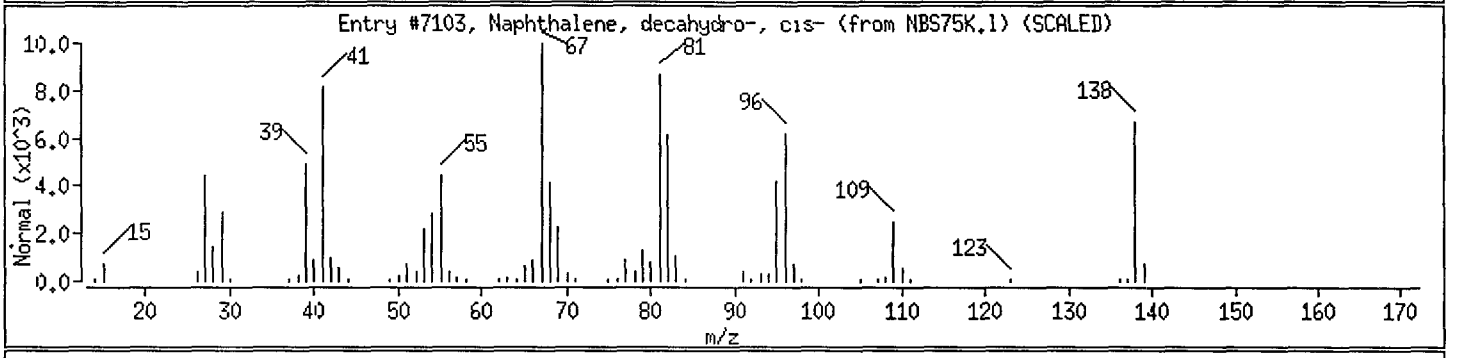
Operator: 2141

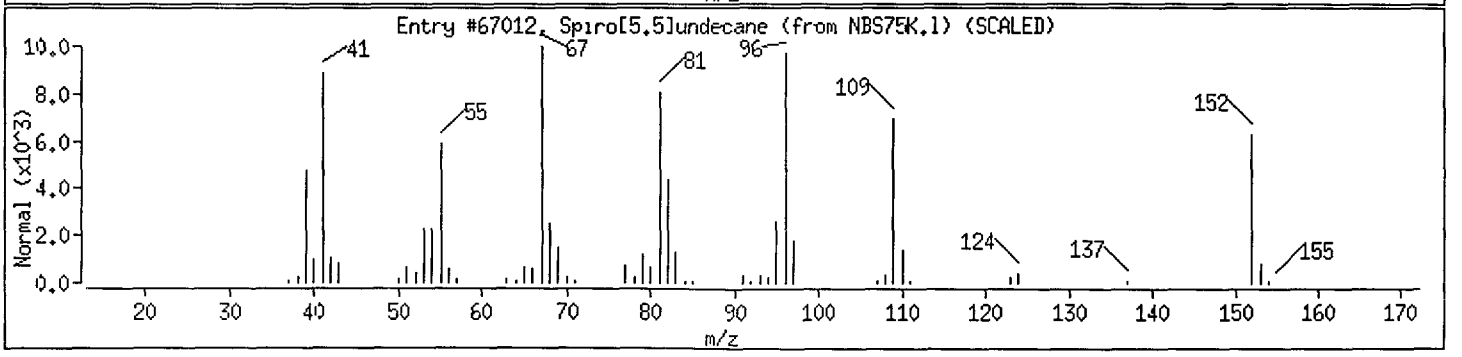
Column phase: DB624 | Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted naphthalene						
Spiro[4.5]decane	176-63-6	NBS75K.1	65958	94	C10H18	138
Naphthalene, decahydro-, cis-	493-01-6	NBS75K.1	7103	81	C10H18	138
Spiro[5.5]undecane	180-43-8	NBS75K.1	67012	64	C11H20	152









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

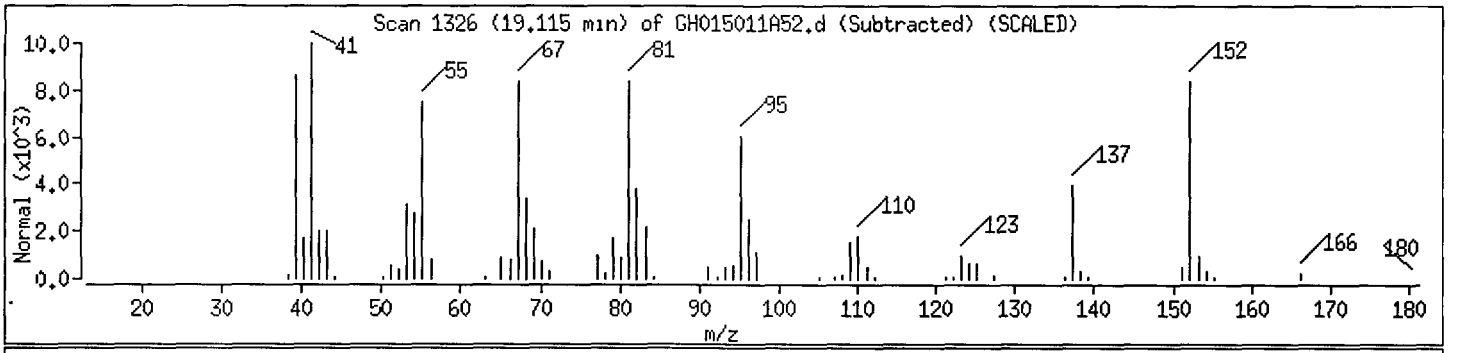
Client ID: FFE88 Instrument: f50052.1

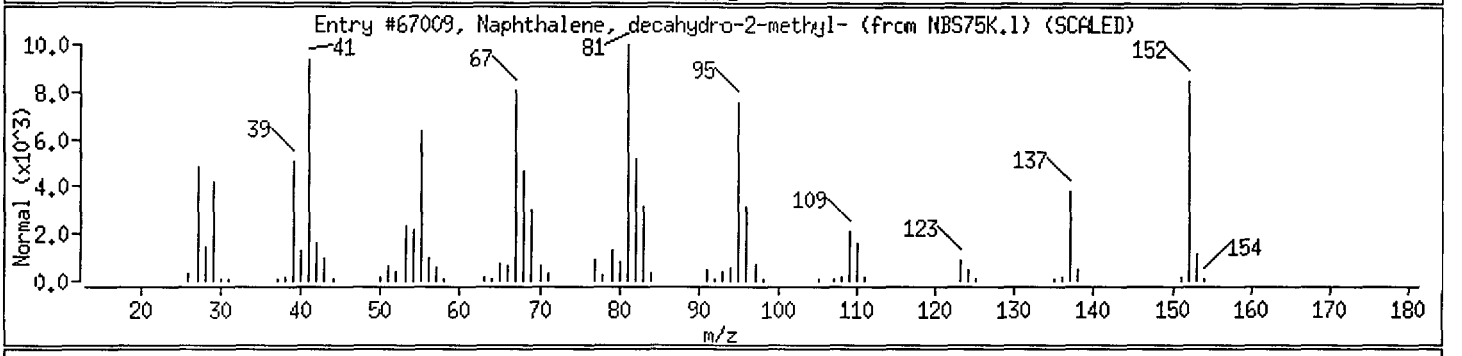
Sample Info:

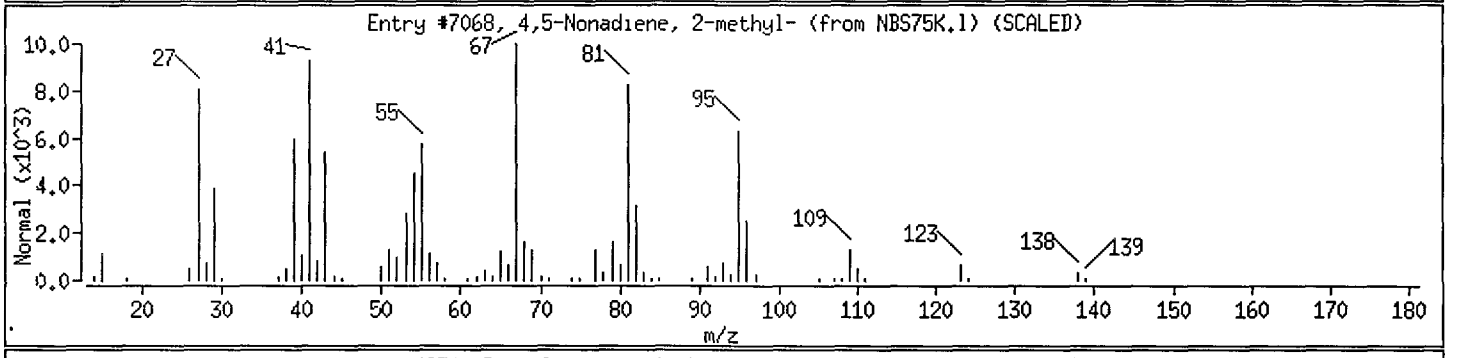
Operator: 2141

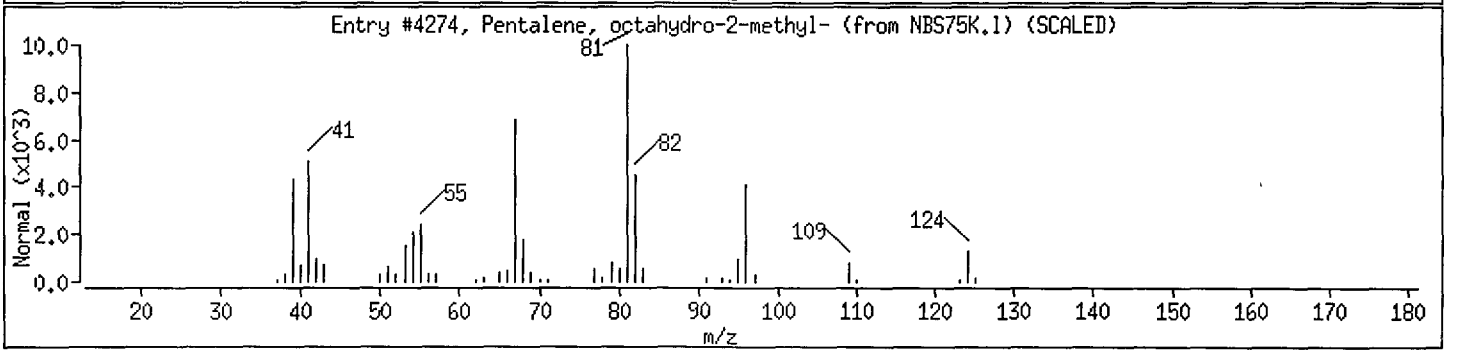
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
substituted naphthalene						
Naphthalene, decahydro-2-methyl-	2958-76-1	NBS75K.1	67009	90	C11H20	152
4,5-Nonadiene, 2-methyl-	55956-32-6	NBS75K.1	7068	83	C10H18	138
Pentalene, octahydro-2-methyl-	3868-64-2	NBS75K.1	4274	70	C9H16	124









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

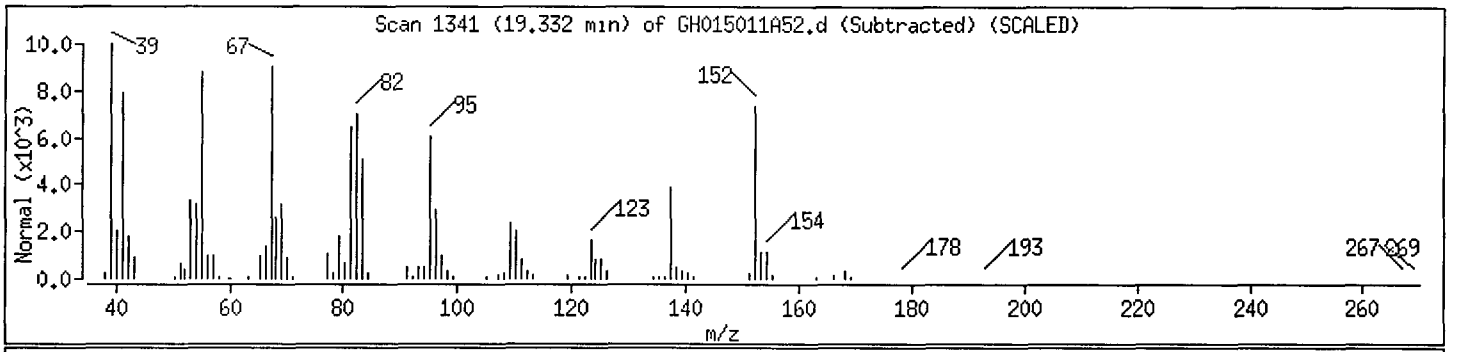
Client ID: FFE88 Instrument: f50052.1

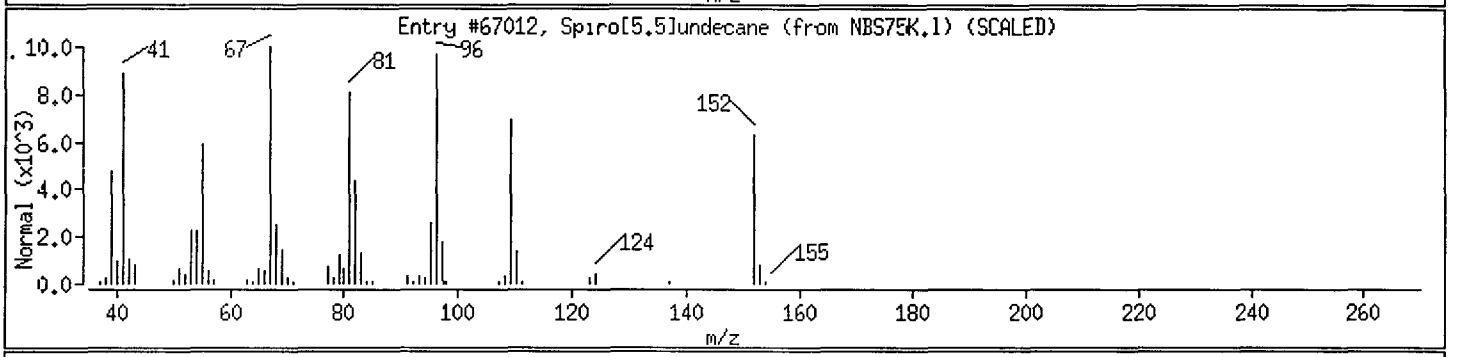
Sample Info:

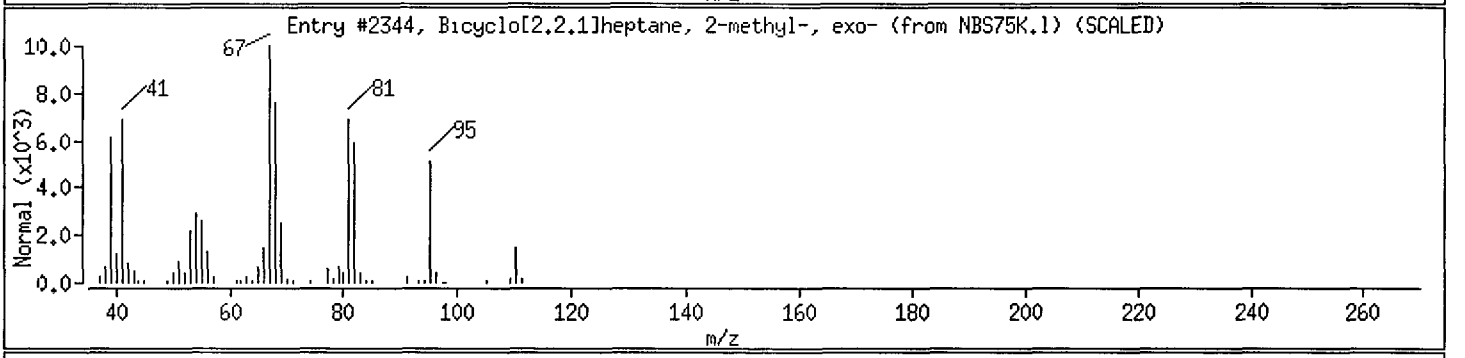
Operator: 2141

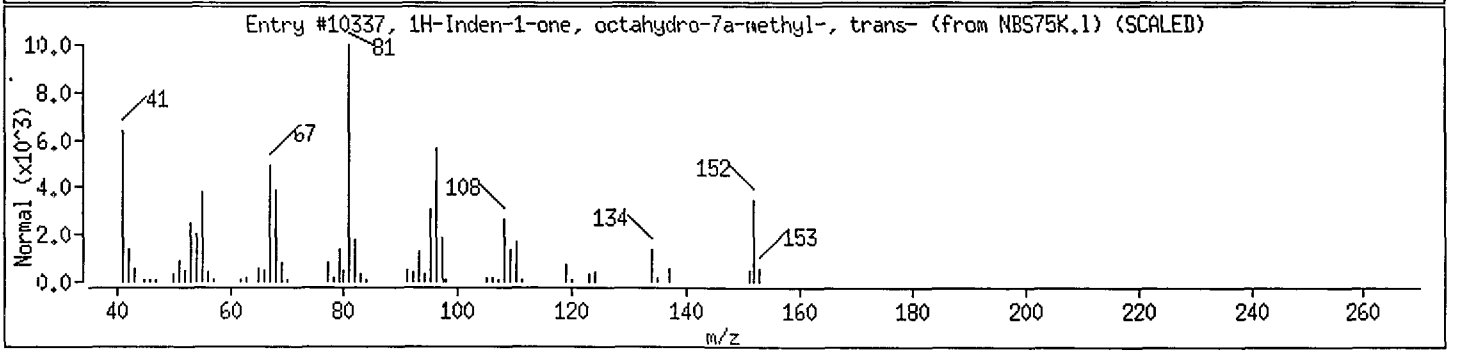
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Spiro[5.5]undecane	180-43-8	NBS75K.1	67012	58	C11H20	152
Bicyclo[2.2.1]heptane, 2-methyl-, exo-	872-78-6	NBS75K.1	2344	49	C8H14	110
1H-Inden-1-one, octahydro-7a-methyl-, tr	17428-83-0	NBS75K.1	10337	46	C10H16O	152









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

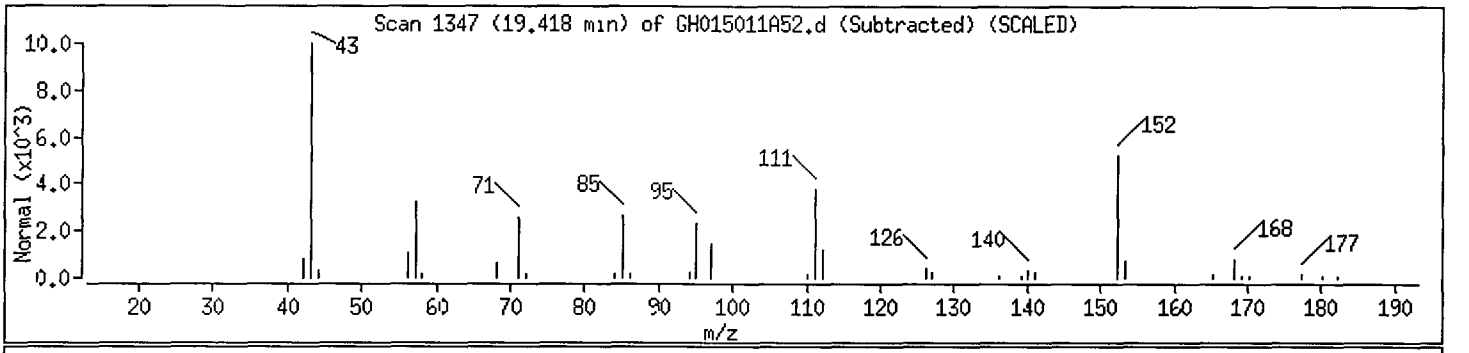
Client ID: FFE88 Instrument: f50052.1

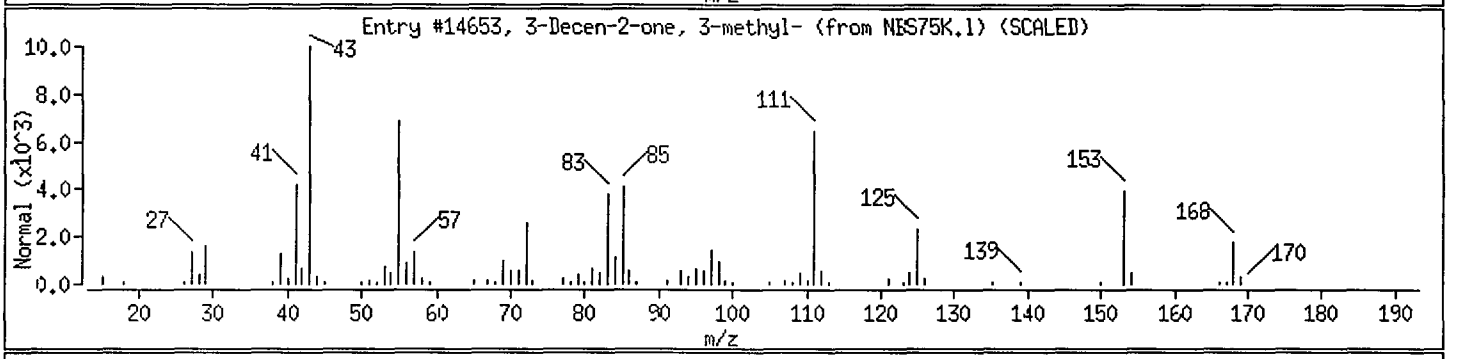
Sample Info:

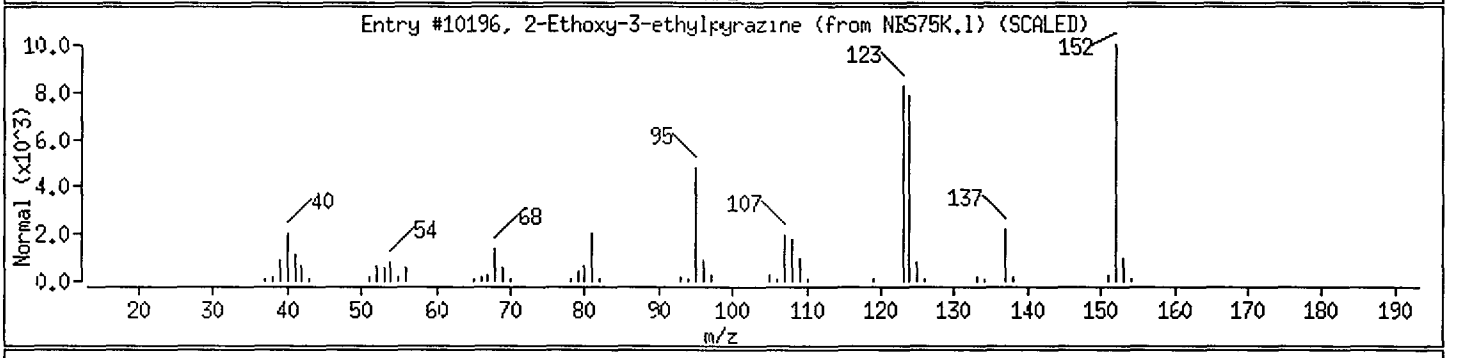
Operator: 2141

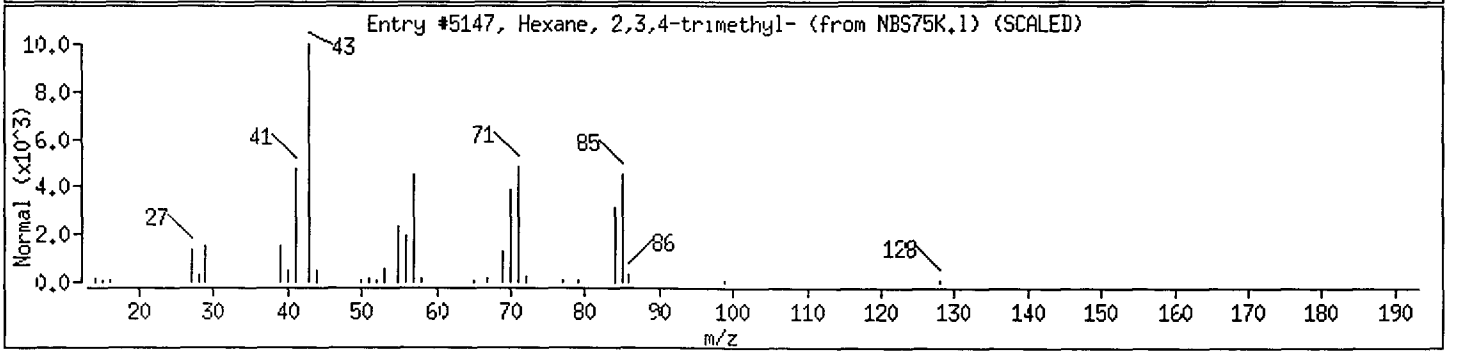
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
3-Decen-2-one, 3-methyl-	54411-03-9	NBS75K.1	14653	17	C11H20O	168
2-Ethoxy-3-ethylpyrazine	35243-43-7	NBS75K.1	10196	12	C8H12N2O	152
Hexane, 2,3,4-trimethyl-	921-47-1	NBS75K.1	5147	11	C9H20	128









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

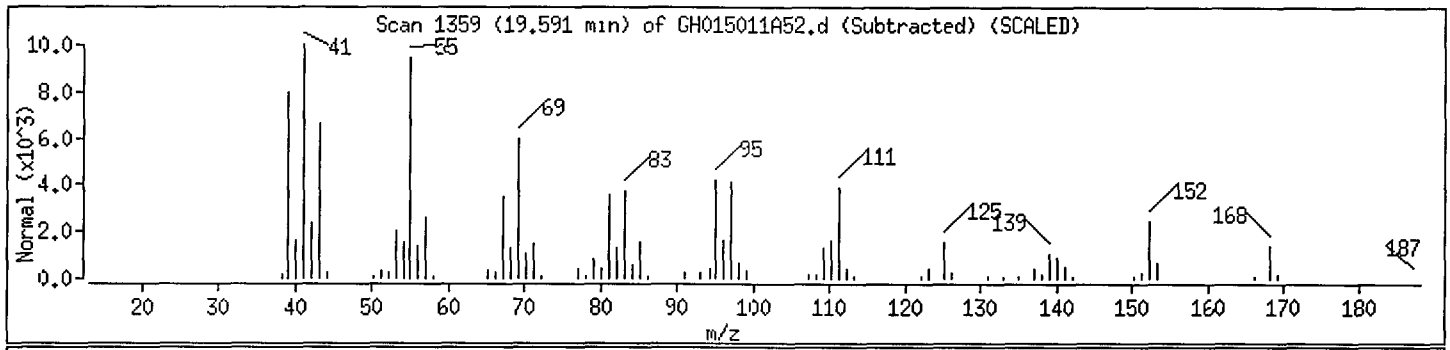
Client ID: FFE88 Instrument: f50052.1

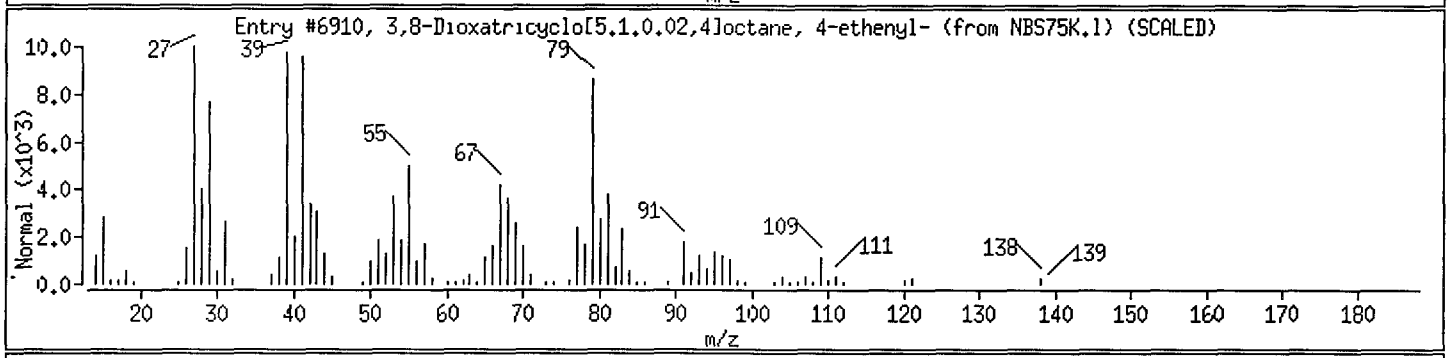
Sample Info:

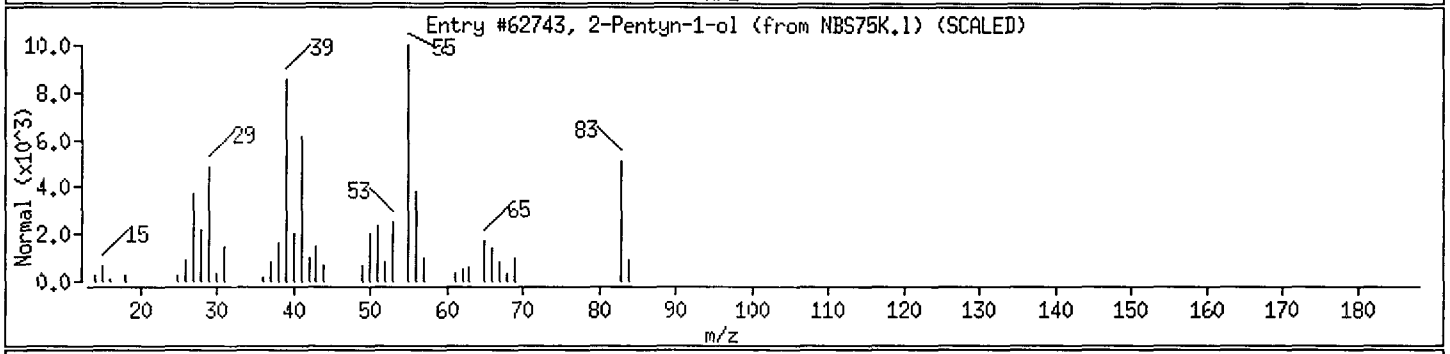
Operator: 2141

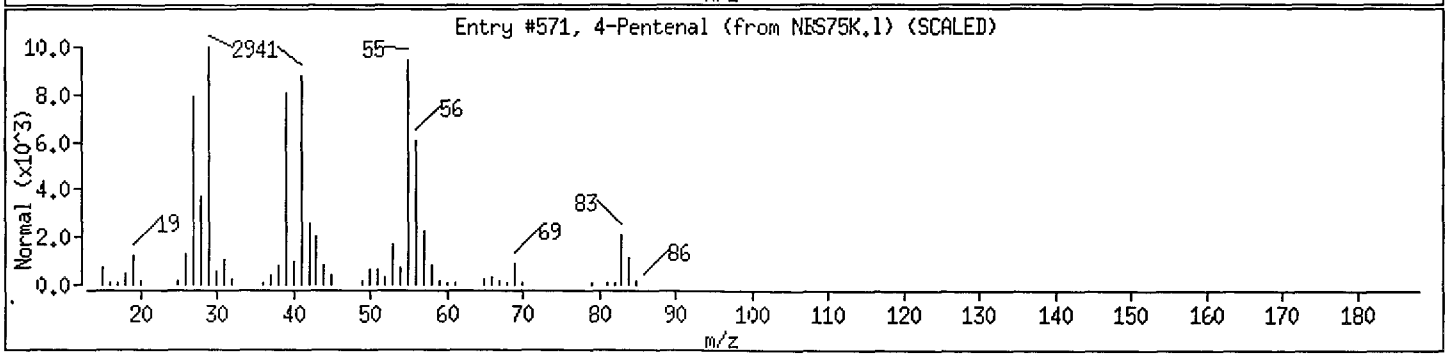
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
3,8-Dioxatricyclo[5.1.0.02,4]octane, 4-e	53966-43-1	NBS75K.1	6910	50	C8H10O2	138
2-Pentyn-1-ol	6261-22-9	NBS75K.1	62743	49	C5H8O	84
4-Pentenal	2100-17-6	NBS75K.1	571	47	C5H8O	84









Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

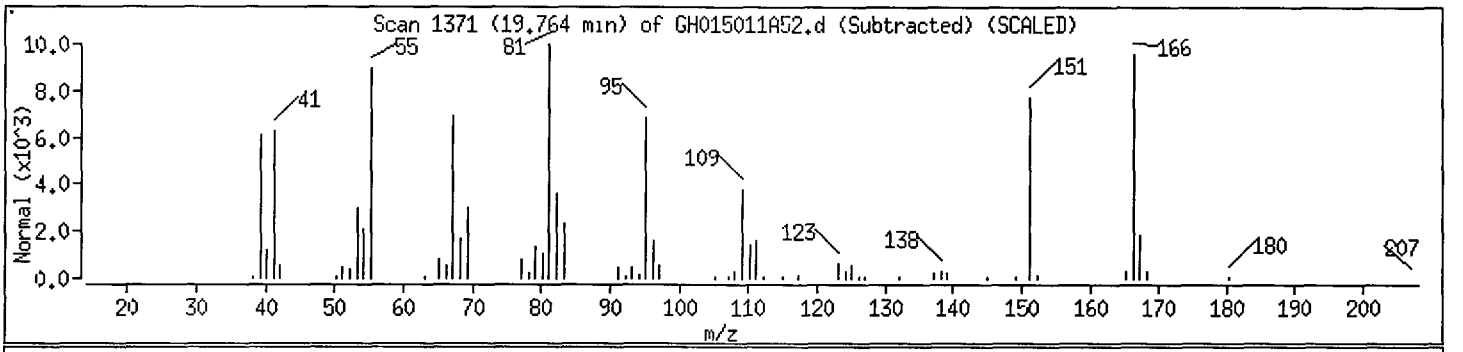
Client ID: FFE88 | Instrument: f50052.i

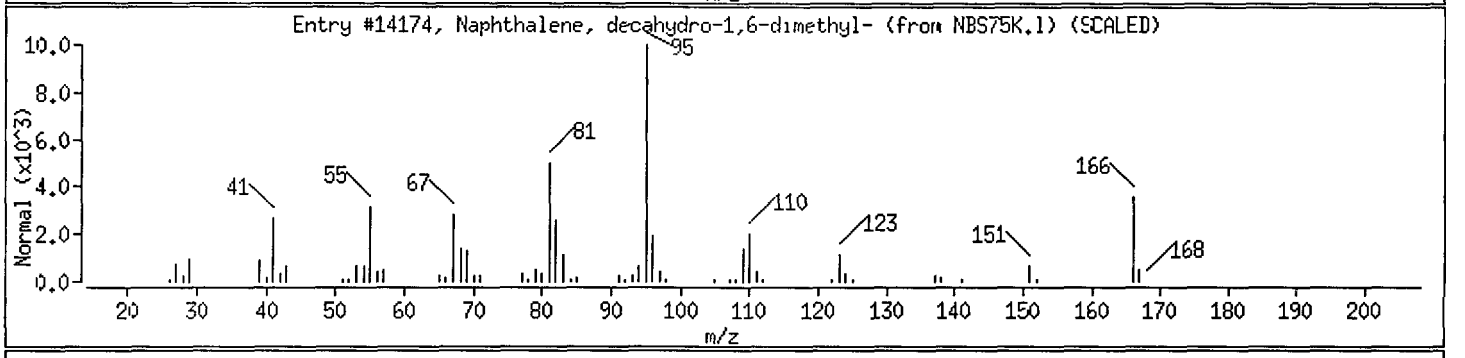
Sample Info:

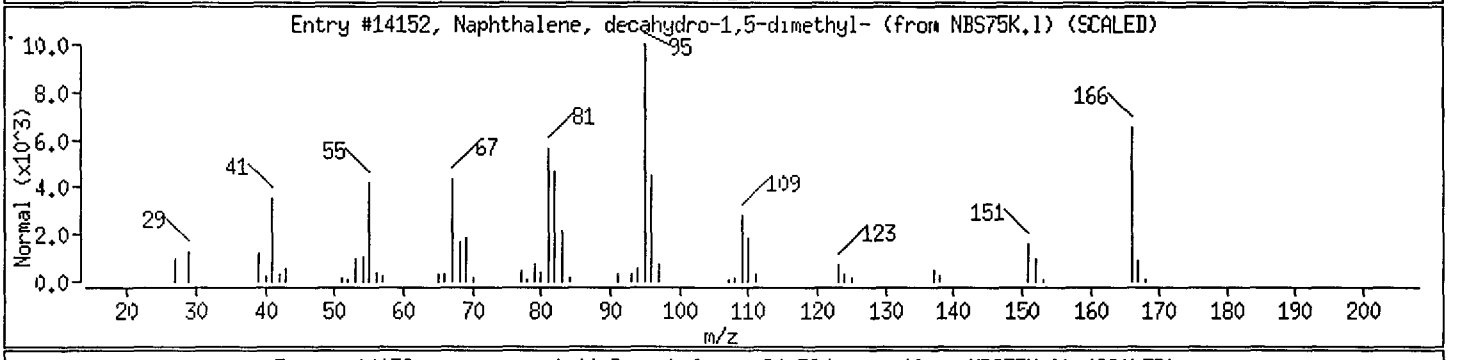
Operator: 2141

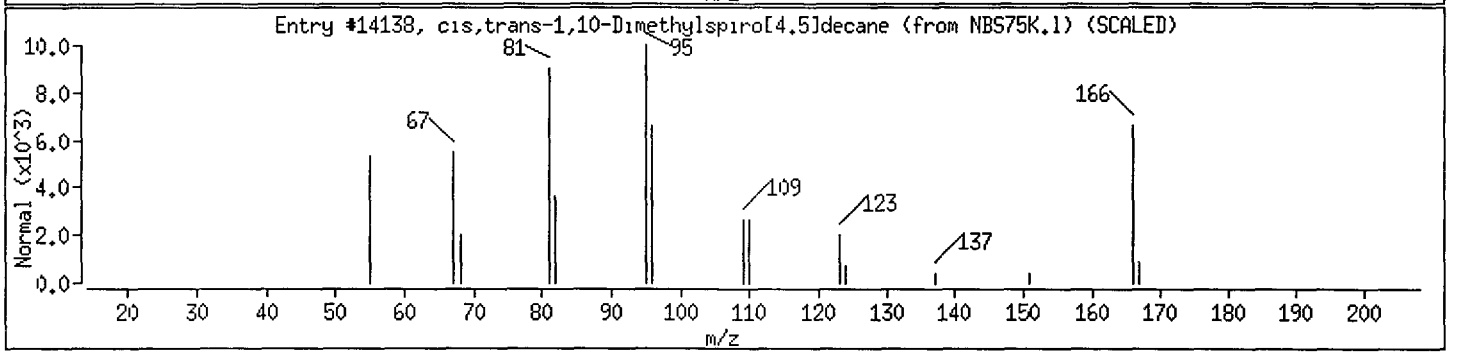
Column phase: DB624 | Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
Naphthalene, decahydro-1,6-dimethyl-	1750-51-2	NBS75K.l	14174	50	C12H22	166
Naphthalene, decahydro-1,5-dimethyl-	66552-62-3	NBS75K.l	14152	50	C12H22	166
cis,trans-1,10-Dimethylspiro[4.5]decane	0-00-0	NBS75K.l	14138	49	C12H22	166









Data File: /chem/f50052.i/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

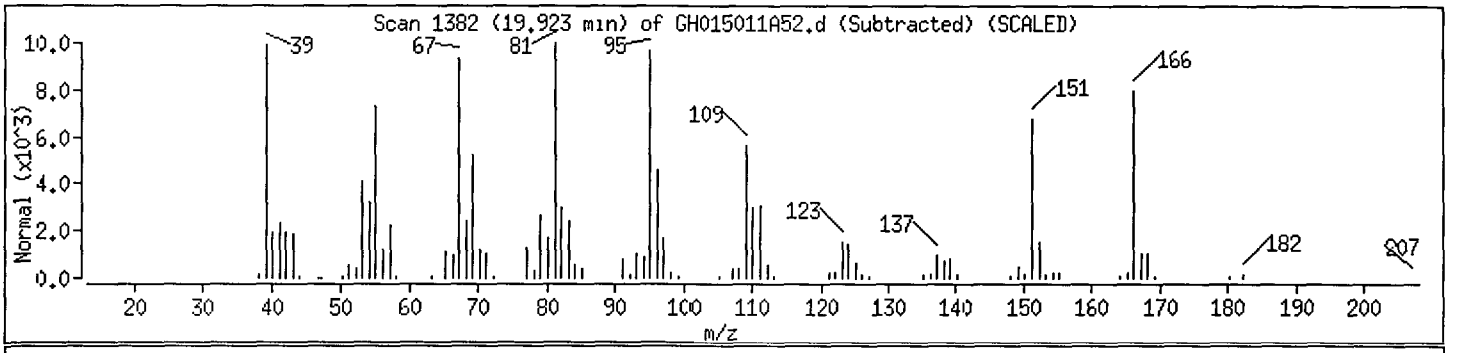
Client ID: FFE88 Instrument: f50052.i

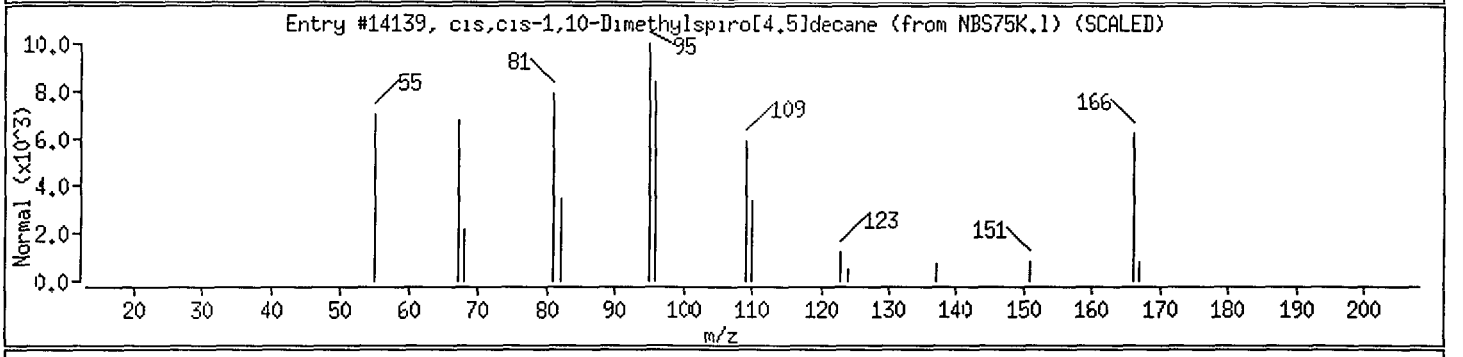
Sample Info:

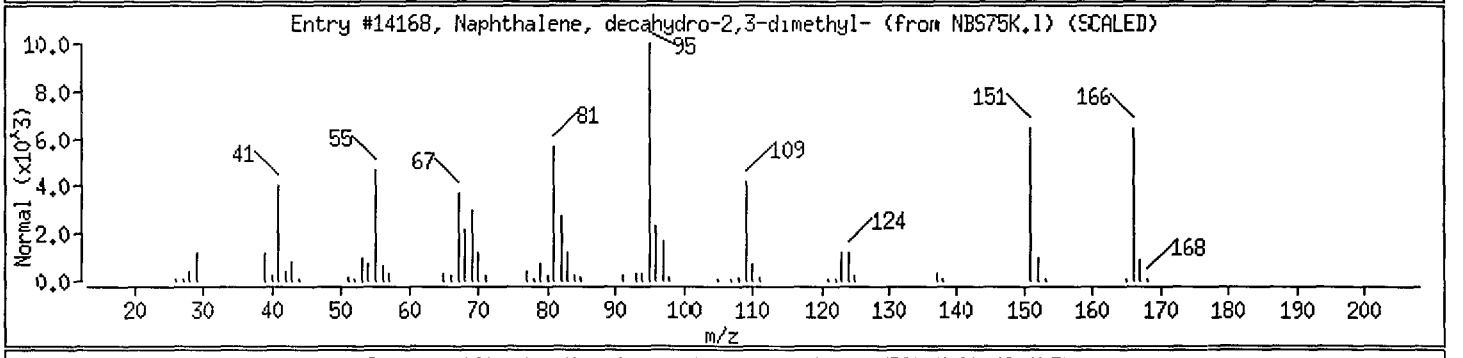
Operator: 2141

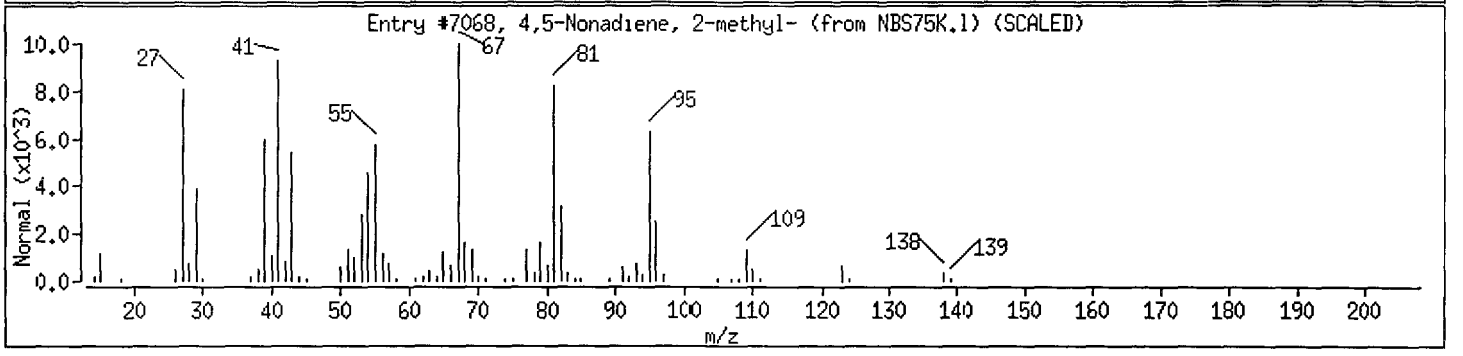
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
cis,cis-1,10-Dimethylspiro[4.5]decane	0-00-0	NBS75K.l	14139	86	C12H22	166
Naphthalene, decahydro-2,3-dimethyl-	1008-80-6	NBS75K.l	14168	64	C12H22	166
4,5-Nonadiene, 2-methyl-	55956-32-6	NBS75K.l	7068	62	C10H18	138









Data File: /chem/f50052.1/BG960727C52.b/GH015011A52.d

Date : 27-JUL-1996 14:53

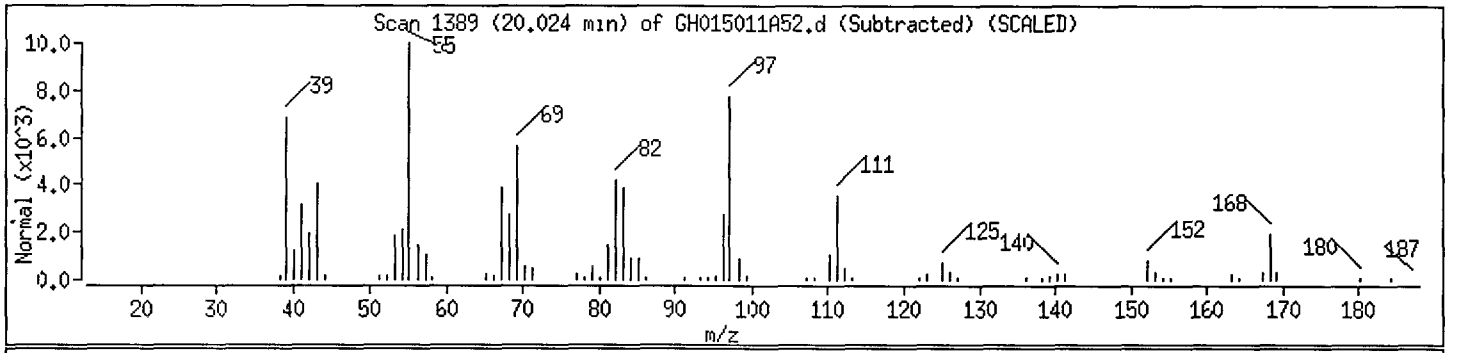
Client ID: FFE88 Instrument: f50052.1

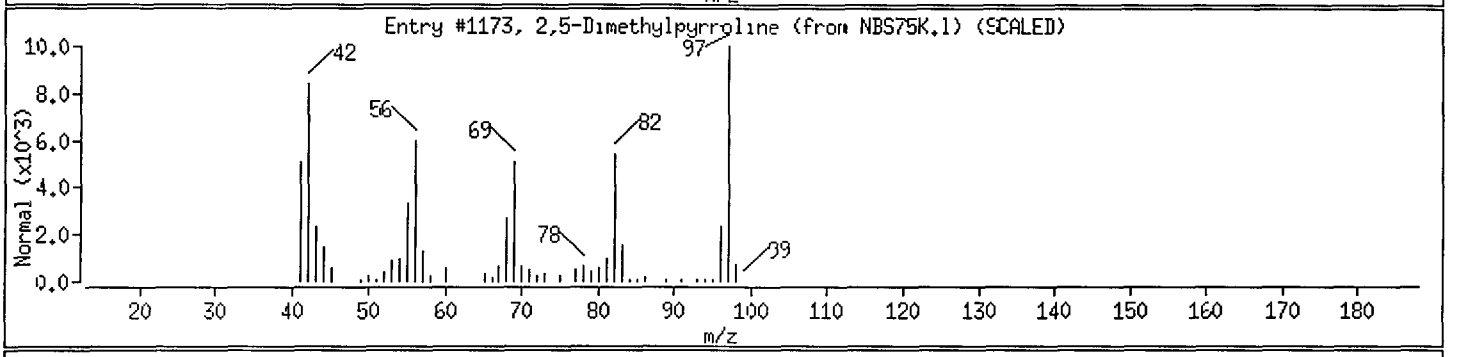
Sample Info:

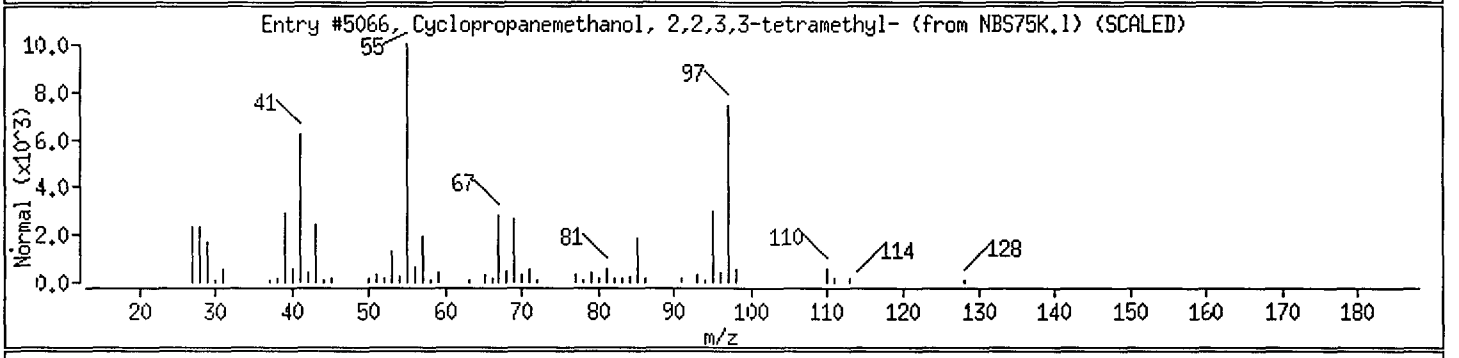
Operator: 2141

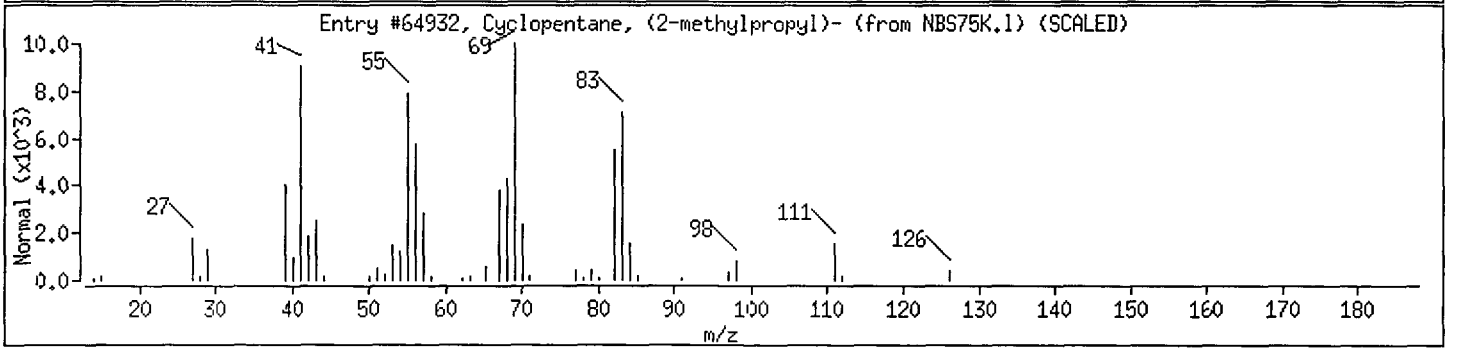
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
unknown						
2,5-Dimethylpyrroline	0-00-0	NBS75K.1	1173	46	C6H11N	97
Cyclopropanemethanol, 2,2,3,3-tetramethy	2415-96-5	NBS75K.1	5066	30	C8H16O	128
Cyclopentane, (2-methylpropyl)-	3788-32-7	NBS75K.1	64932	27	C9H18	126









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815011
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE88 Dry Weight Factor 73

GC/MS ANALYSIS 5 g 7.27.96
Amount Purged: [ ] ~~10mls~~/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG960727C52 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 241 Work-up 241 RR

GC/MS REVIEW

CONDITION CODE OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø21 [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review [signature] Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Tom Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE89

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815012

Sample wt/vol: 5.0 (g/mL) g Lab File ID: G4R15012C56

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 70 Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	33	U
74-83-9	Bromomethane	33	U
75-01-4	Vinyl Chloride	33	U
75-00-3	Chloroethane	33	U
75-09-2	Methylene Chloride	49	B
67-64-1	Acetone	37	B
75-15-0	Carbon Disulfide	33	U
75-35-4	1,1-Dichloroethene	33	U
75-34-3	1,1-Dichloroethane	33	U
540-59-0	1,2-Dichloroethene (total)	33	U
67-66-3	Chloroform	33	U
107-06-2	1,2-Dichloroethane	33	U
78-93-3	2-Butanone	33	U
71-55-6	1,1,1-Trichloroethane	33	U
56-23-5	Carbon Tetrachloride	33	U
75-27-4	Bromodichloromethane	33	U
78-87-5	1,2-Dichloropropane	33	U
10061-01-5	cis-1,3-Dichloropropene	33	U
79-01-6	Trichloroethene	33	U
124-48-1	Dibromochloromethane	33	U
79-00-5	1,1,2-Trichloroethane	33	U
71-43-2	Benzene	33	U
10061-02-6	trans-1,3-Dichloropropene	33	U
75-25-2	Bromoform	33	U
108-10-1	4-Methyl-2-Pentanone	33	U
591-78-6	2-Hexanone	33	U
127-18-4	Tetrachloroethene	33	U
79-34-5	1,1,2,2-Tetrachloroethane	33	U
108-88-3	Toluene	33	U
108-90-7	Chlorobenzene	33	U
100-41-4	Ethylbenzene	33	U
100-42-5	Styrene	33	U
1330-20-7	Xylene (Total)	33	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFE89

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815012

Sample wt/vol: 5.0 (g/mL) g Lab File ID: G4R15012C56

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 70 Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
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15.				
16.				
17.				
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20.				
21.				
22.				
23.				
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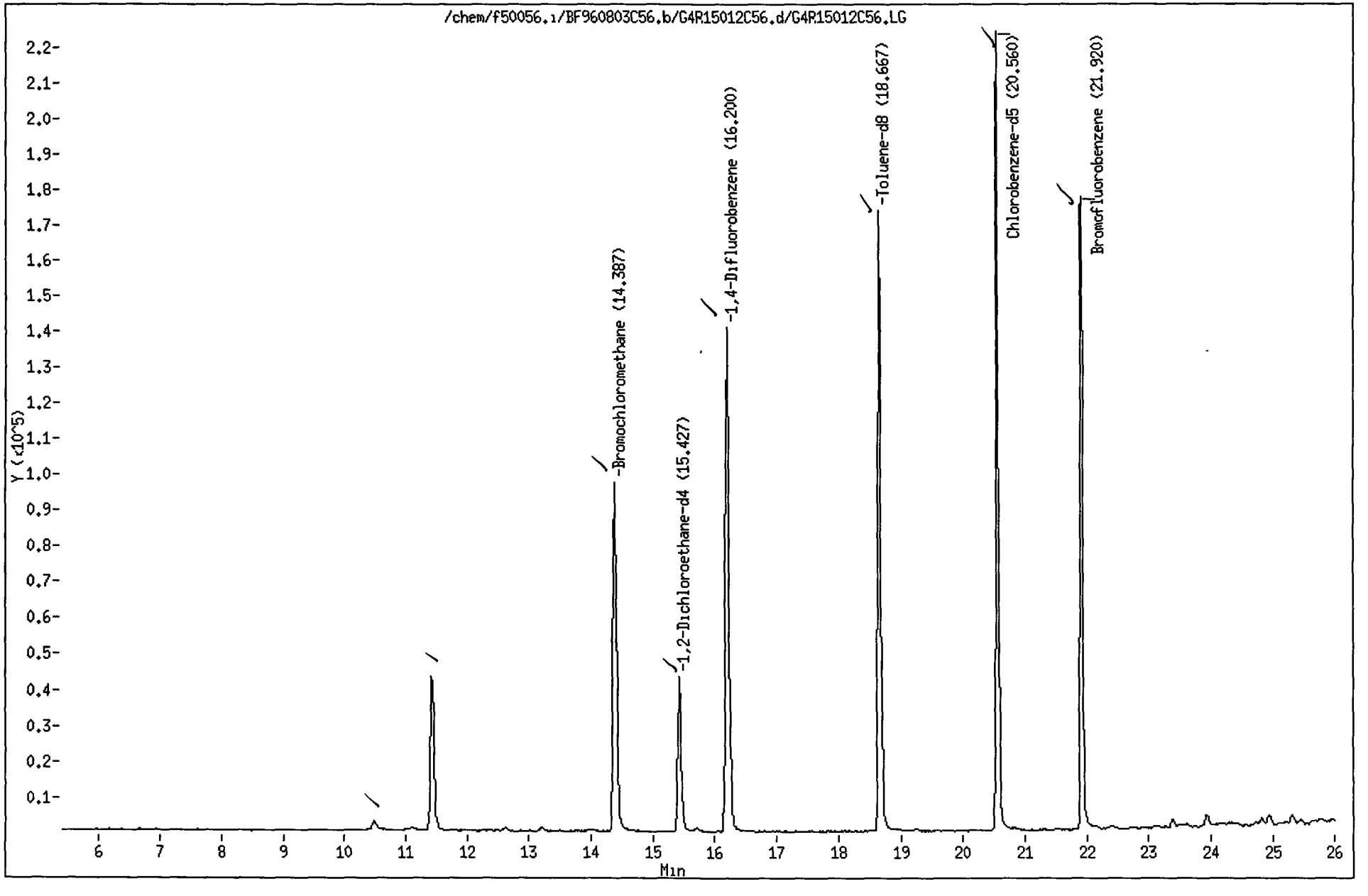
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50056.1/BF960803C56.b/G4R15012C56.d
Date : 03-AUG-1996 07:25
Client ID: FFE89
Sample Info:

Instrument: f50056.1

Operator: 2227
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50056.i/BF960803C56.b/G4R15012C56.d
Report Date: 06-Aug-1996 15:34

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960803C56.b/G4R15012C56.d
Lab Smp Id: 815012 Client Smp ID: FFE89
Inj Date : 03-AUG-1996 07:25
Operator : 2227 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960803C56.b/SOLM03.1.m
Meth Date : 06-Aug-1996 15:12 riedl Quant Type: ISTD
Cal Date : 03-AUG-1996 00:36 Cal File: GS960803C56.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	70.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	14 387	14 560	(1 000)	61465	250 0	
* 2 1,4-Difluorobenzene	114 00	16 200	16 373	(1 000)	263379	250 0	
* 3 Chlorobenzene-d5	117 00	20 560	20 680	(1 000)	220350	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 427	15 600	(1 072)	49345	253 5	169 0
$ 5 Toluene-d8	98.00	18 667	18 800	(0 908)	218204	237 1	158 1
$ 6 Bromofluorobenzene	95 00	21 920	22 027	(1 066)	128696	225 1	150 0
7 Chloromethane	50 00		5 987		Compound Not Detected		
8 Vinyl Chloride	62 00		6 547		Compound Not Detected		
9 Bromomethane	94.00		7 840		Compound Not Detected		
10 Chloroethane	64 00		8 160		Compound Not Detected		
11 1,1-Dichloroethene	96.00		10 440		Compound Not Detected		
12 Carbon Disulfide	76 00		10 853		Compound Not Detected		
13 Acetone	43 00	10.480	10 653	(0 728)	8918	55 80	37 20
14 Methylene Chloride	84 00	11 427	11 600	(0 794)	44596	73 26	48 84
15 trans-1,2-Dichloroethene	96 00		12 200		Compound Not Detected		
16 1,1-Dichloroethane	63 00		13 040		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		14 133		Compound Not Detected		
18 2-Butanone	43.00		14 173		Compound Not Detected		
19 Chloroform	83 00		14 720		Compound Not Detected		
20 1,1,1-Trichloroethane	97 00		15 053		Compound Not Detected		
21 Carbon Tetrachloride	117 00		15 360		Compound Not Detected		
22 Benzene	78 00		15 720		Compound Not Detected		

Data File: /chem/f50056.i/BF960803C56.b/G4R15012C56.d
Report Date: 06-Aug-1996 15:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
23 1,2-Dichloroethane	62 00		15 733		Compound Not Detected		
24 Trichloroethene	130 00		16 853		Compound Not Detected		
25 1,2-Dichloropropane	63 00		17 240		Compound Not Detected		
26 Bromodichloromethane	83 00		17 693		Compound Not Detected		
27 cis-1,3-Dichloropropene	75 00		18 387		Compound Not Detected		
28 4-Methyl-2-Pentanone	43 00		18 600		Compound Not Detected		
29 Toluene	91 00		18 907		Compound Not Detected		
30 trans-1,3-Dichloropropene	75.00		19 173		Compound Not Detected		
31 1,1,2-Trichloroethane	97 00		19 427		Compound Not Detected		
32 Tetrachloroethene	164 00		19 653		Compound Not Detected		
33 Dibromochloromethane	129 00		19 960		Compound Not Detected		
34 2-Hexanone	43 00		19 733		Compound Not Detected		
35 Chlorobenzene	112 00		20 707		Compound Not Detected		
36 Ethylbenzene	106 00		20 827		Compound Not Detected		
37 m,p-Xylene	106 00		20 947		Compound Not Detected		
38 o-Xylene	106 00		21 413		Compound Not Detected		
39 Styrene	104 00		21 427		Compound Not Detected		
40 Bromoform	173 00		21 667		Compound Not Detected		
41 1,1,2,2-Tetrachloroethane	83 00		22 160		Compound Not Detected		
M 42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M 43 Xylene (Total)	106 00		21 413		Compound Not Detected		

Data File: /chem/f50056.1/BF960803C56.b/G4R15012C56.d

Date : 03-AUG-1996 07:25

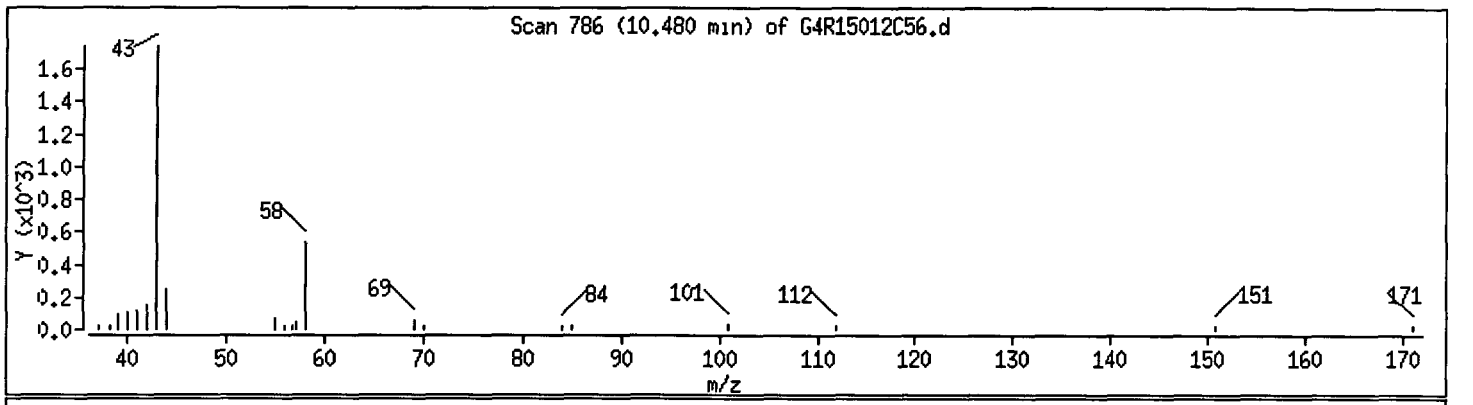
Client ID: FFE89 Instrument: f50056.1

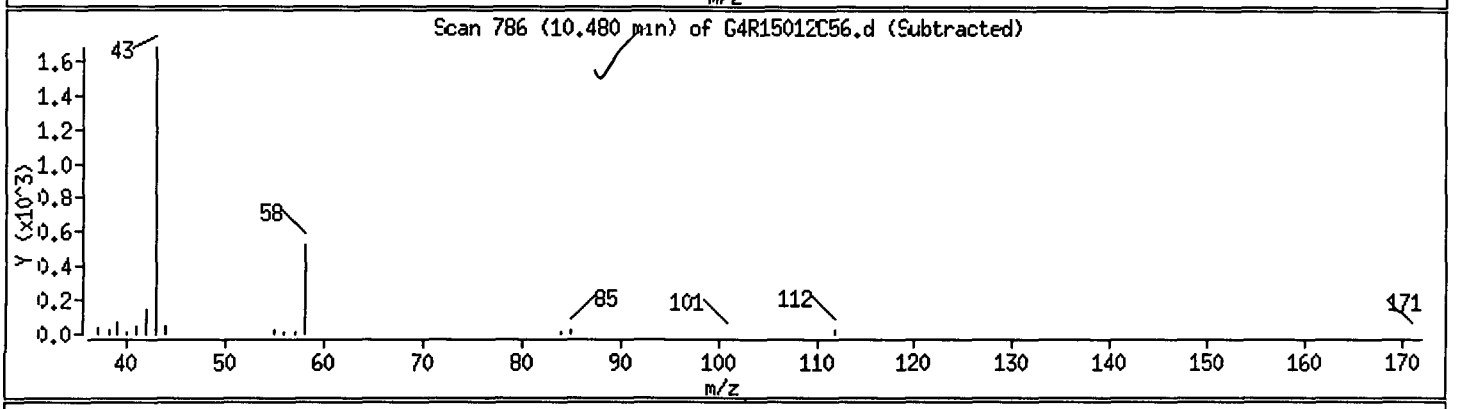
Sample Info:

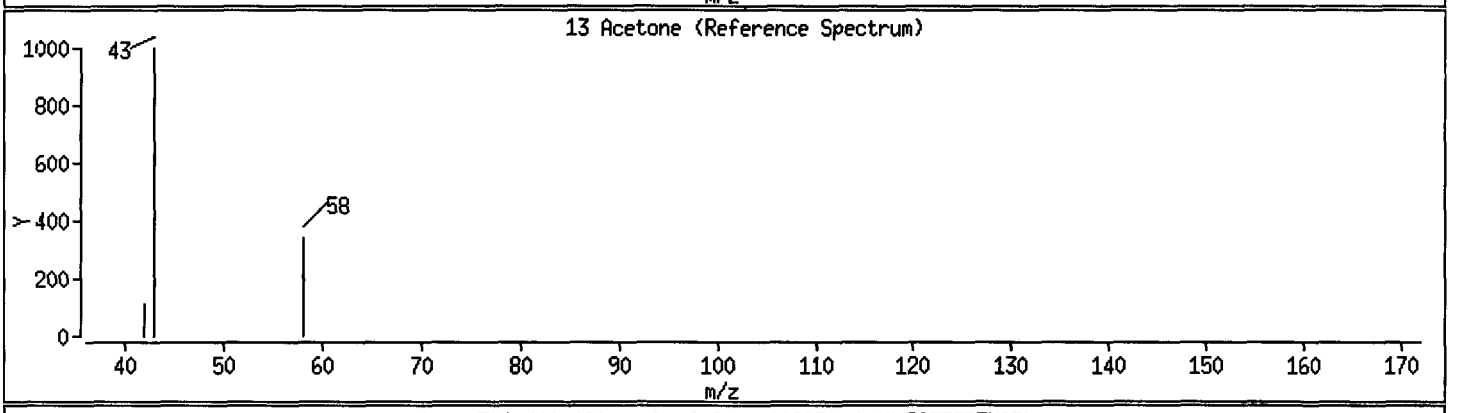
Operator: 2227

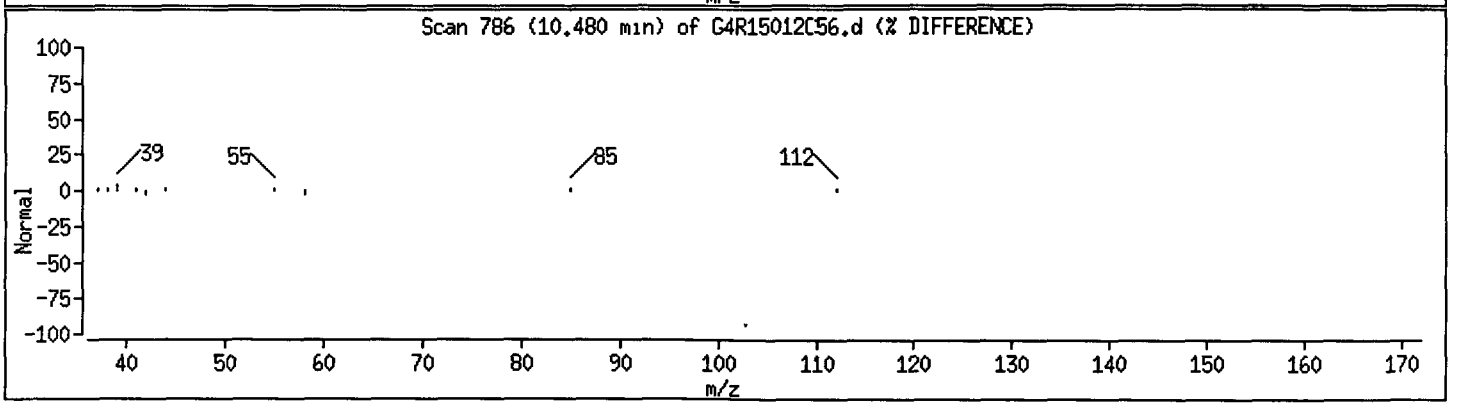
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50056.1/BF960803C56.b/G4R15012C56.d

Date : 03-AUG-1996 07:25

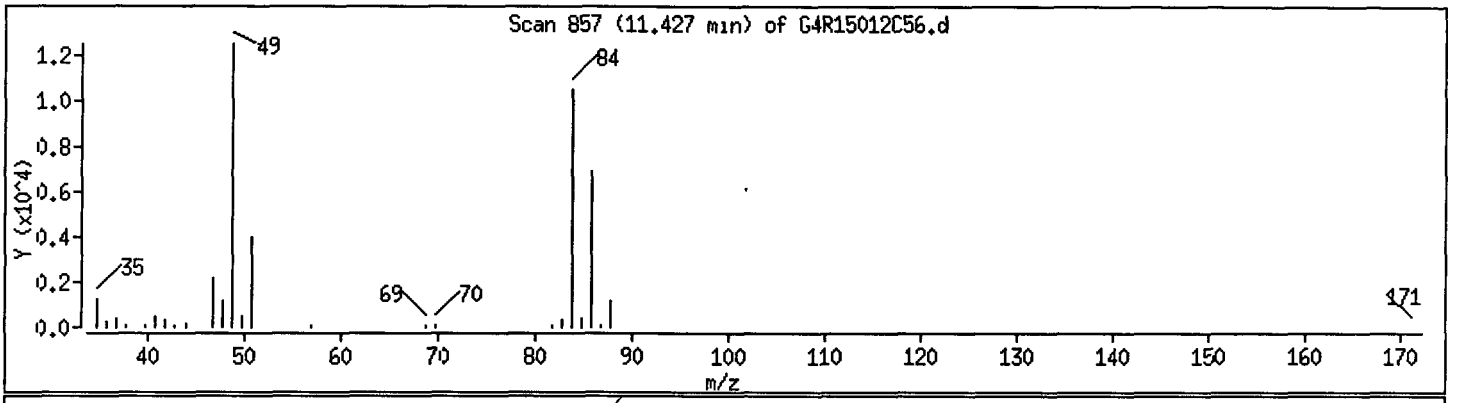
Client ID: FFE89 Instrument: f50056.1

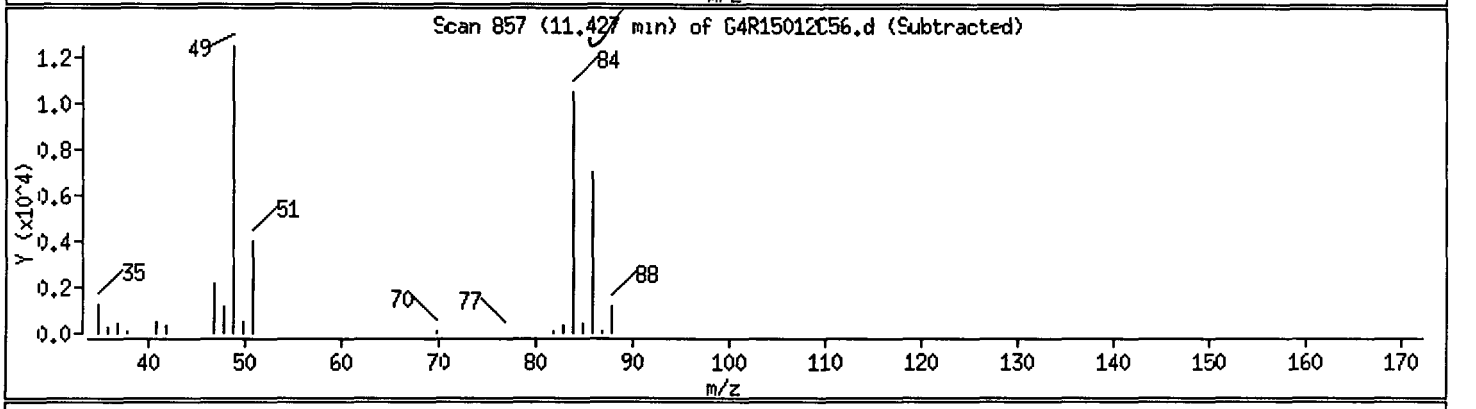
Sample Info:

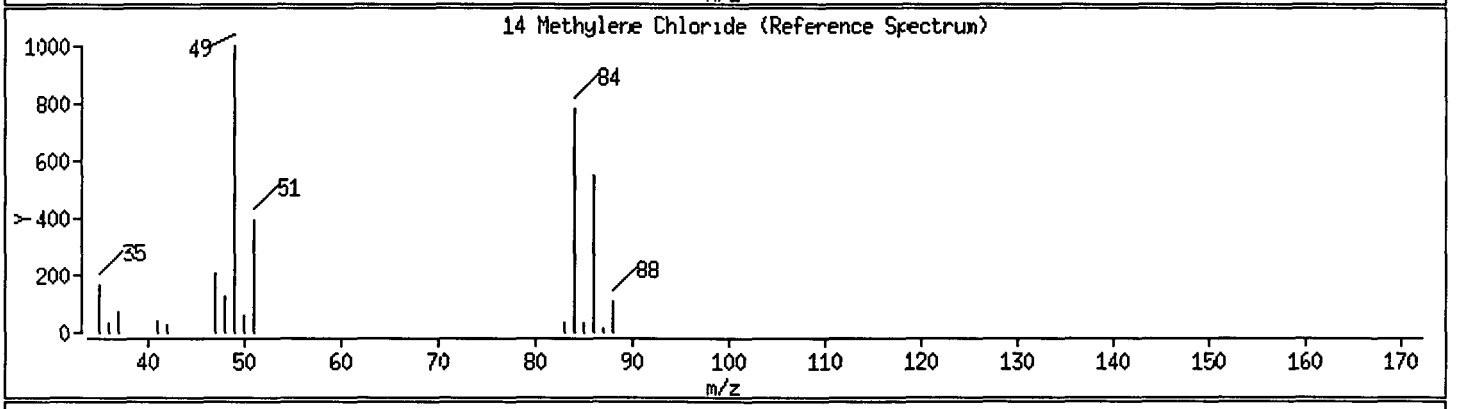
Operator: 2227

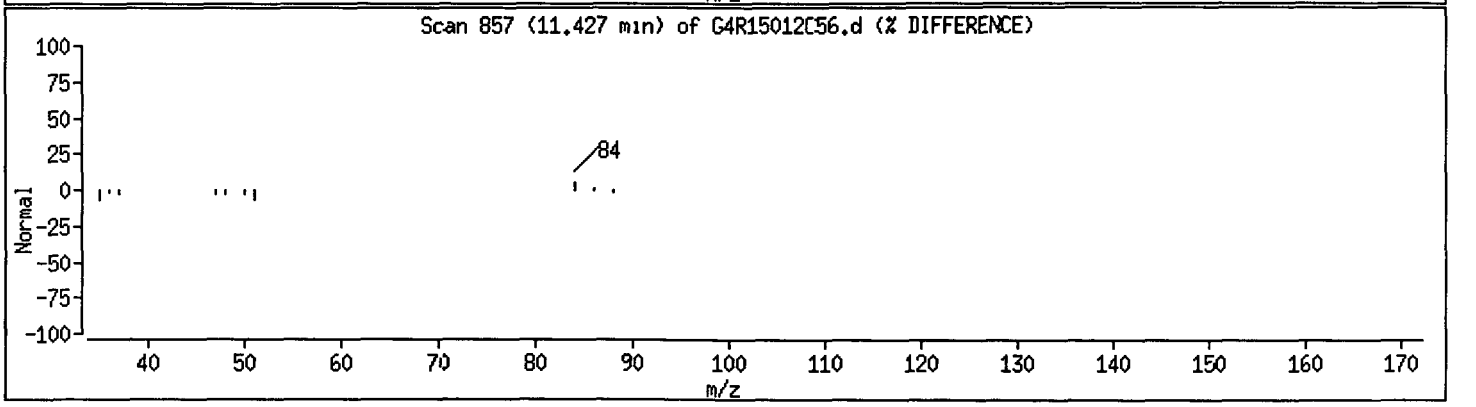
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815012R4

J1[ ] J3[ ] D1[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S, SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE89 Dry Weight Factor 70

GC/MS ANALYSIS
Amount Purged: [✓] 10mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF960803056 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2227 Work-up S Simpson

GC/MS REVIEW

CONDITION CODE JA

Disposition: [/] Complete

Extraneous Peak Search Results
# of Peaks Found: 0

[ ] Reinject Neat
[ ] Dilute (:1)

Quality Assurance Notice(s):
Notices Required _____

COMMENTS: BOTTLE 1 of 3

#GC/MS Review JM Date 8/6/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s) _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1345

1336 / 1588

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 8/2/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
815012	24093	FFE82			5.0g	FFE89	Bottle 1 of 3
815012	24893	FFE82			5.0g	FFE89	2 of 3
816486	24869	BRL05			5.0g	BRL20	5.0g BU
816868	24[illegible]74	250			5.0g	CTP003B12	5.0g BU
816858					5.0g	BTP001EB5 Rcp 8/2/96	
816884					5.0g	CTP005B10	
816016			SS	816858	5.0g	BTP001B5MS	
816017			SS	816858	5.0g	BTP0001B5MSD	
817754			B1		5.0g	VBlK S1	
817755			B2		5.0g	VBlK S2	
817756			B3		5.0g	VBlK S3	
817757			B4		5.0g	VBlK S4	
817758			B5		5.0g	VBlK S5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337 / 75[illegible]

RELINQUISHED BY [signature] DATE 8/2/96 RECEIVED BY Temp Storage DATE 8/2/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFF25

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815013

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015013B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 0 Date Analyzed: 07/28/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	B
67-64-1	Acetone	25	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFF25

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815013

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015013B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 0 Date Analyzed: 07/28/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

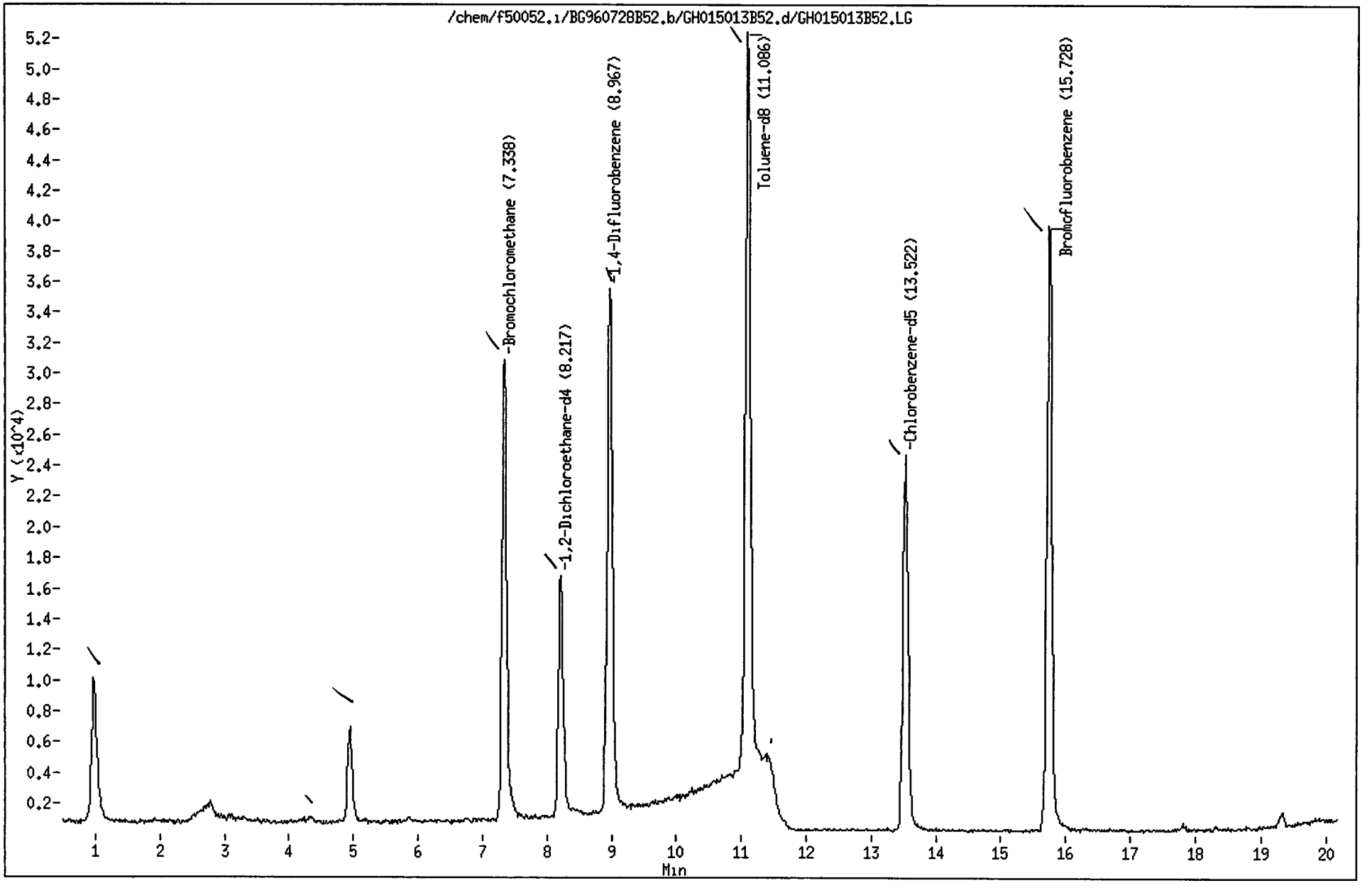
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.97	17	JB
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960728B52.b/GH015013B52.d
Date : 28-JUL-1996 23:21
Client ID: FFF25
Sample Info:

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960728B52.b/GH015013B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960728B52.b/GH015013B52.d
Lab Smp Id: 815013 Client Smp ID: FFF25
Inj Date : 28-JUL-1996 23:21
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass Quant Type: ISTD
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 323	7.309	(1 000)	22153	250 0	
* 2 1,4-Difluorobenzene	114 00	8 967	8 938	(1 000)	74437	250 0	
* 3 Chlorobenzene-d5	117 00	13.522	13 508	(1 000)	48133	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8.217	8 188	(1 122)	30562	223 7	44 75
$ 5 Toluene-d8	98 00	11 086	11 071	(0 820)	86405	265 0	53 01
$ 6 Bromofluorobenzene	95 00	15 728	15 728	(1 163)	38184	235 6	47 12
7 Chloromethane	50 00		1 542	Compound Not Detected			
8 Vinyl Chloride	62 00		1 744	Compound Not Detected			
9 Bromomethane	94 00		2.335	Compound Not Detected			
10 Chloroethane	64 00		2 537	Compound Not Detected			
11 1,1-Dichloroethene	96 00		4 036	Compound Not Detected			
12 Carbon Disulfide	76 00		4 152	Compound Not Detected			
13 Acetone	43 00	4 325	4 296	(0 591)	1437	126 6	25 32
14 Methylene Chloride	84 00	4.945	4 930	(0 675)	7550	56 33	11 27
15 trans-1,2-Dichloroethene	96 00		5 348	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		6 963	Compound Not Detected			
18 2-Butanone	43 00		7 136	Compound Not Detected			
19 Chloroform	83 00		7 539	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7.640	Compound Not Detected			
21 Carbon Tetrachloride	117 00		7 871	Compound Not Detected			
22 Benzene	78 00		8 188	Compound Not Detected.			

Data File: /chem/f50052.i/BG960728B52.b/GH015013B52.d
Report Date: 29-Jul-1996 16:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 289		Compound Not Detected		
	24 Trichloroethene	130 00		9 226		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 543		Compound Not Detected.		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 691		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 965		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 037		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 542		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 839		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 776		Compound Not Detected		
	39 Styrene	104 00		14 834		Compound Not Detected		
	40 Bromoform	173 00		15 079		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 776		Compound Not Detected		

Data File: /chem/f50052.i/BG960728B52.b/GH015013B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960728B52.b/GH015013B52.d
Lab Smp Id: 815013 Client Smp ID: FFF25
Inj Date : 28-JUL-1996 23:21
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.323	164034	250.000

	RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)	0 966	56878	86 68	17 34	0	CAS #	0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/f50052.1/BG960728B52.b/GH015013B52.d

Date : 28-JUL-1996 23:21

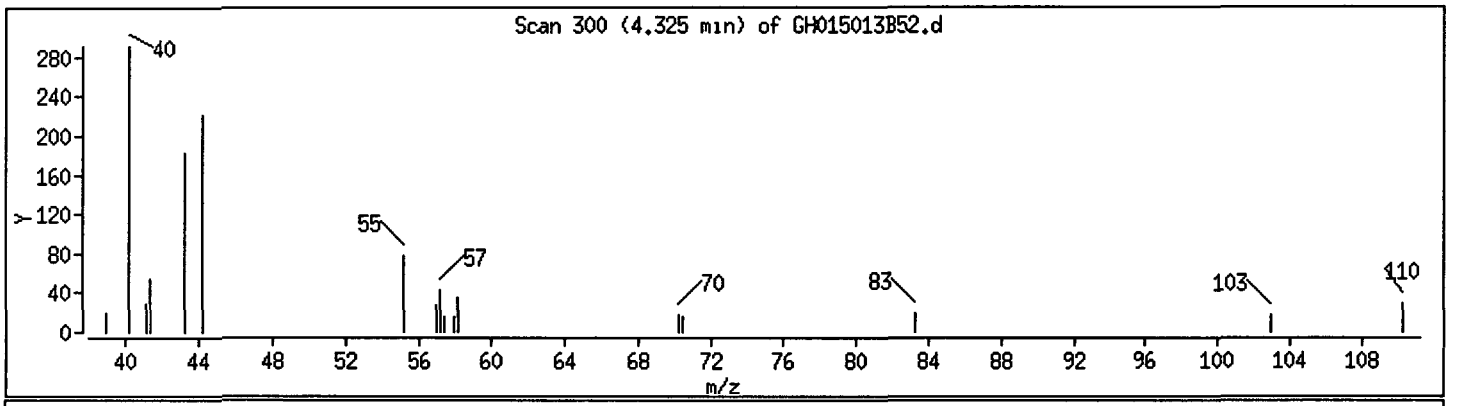
Client ID: FFF25 Instrument: f50052.1

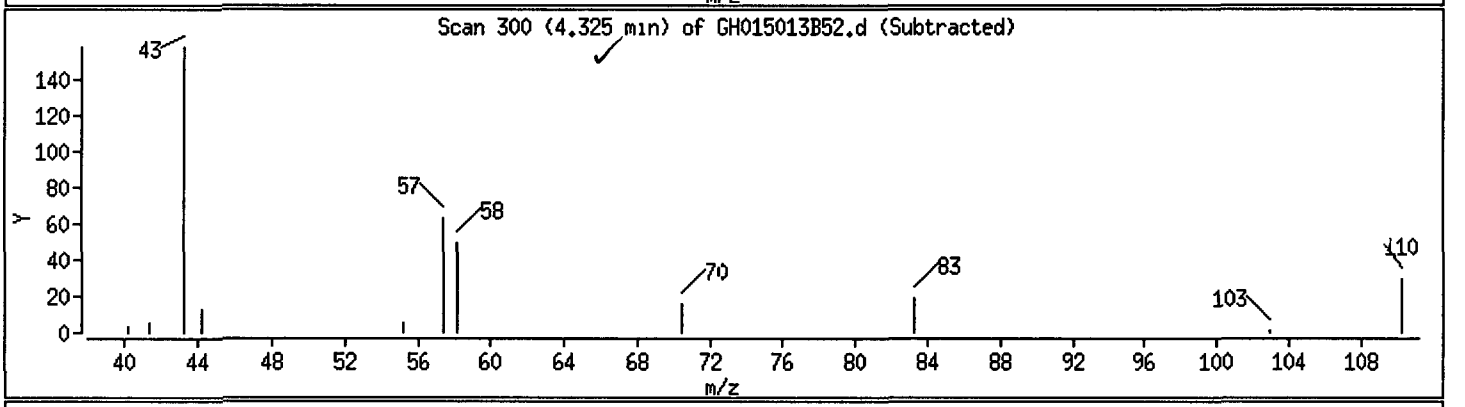
Sample Info:

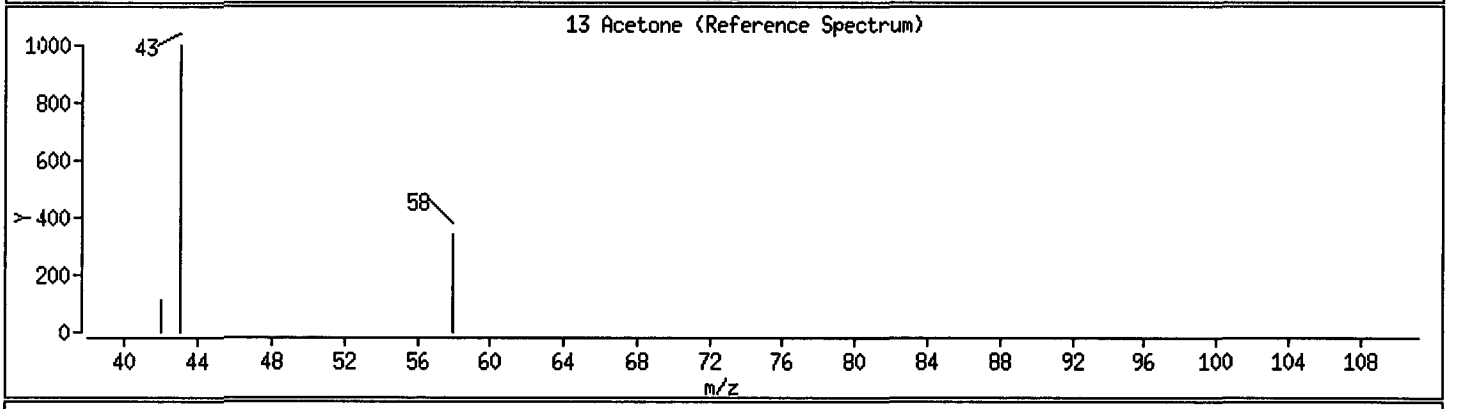
Operator: 2141

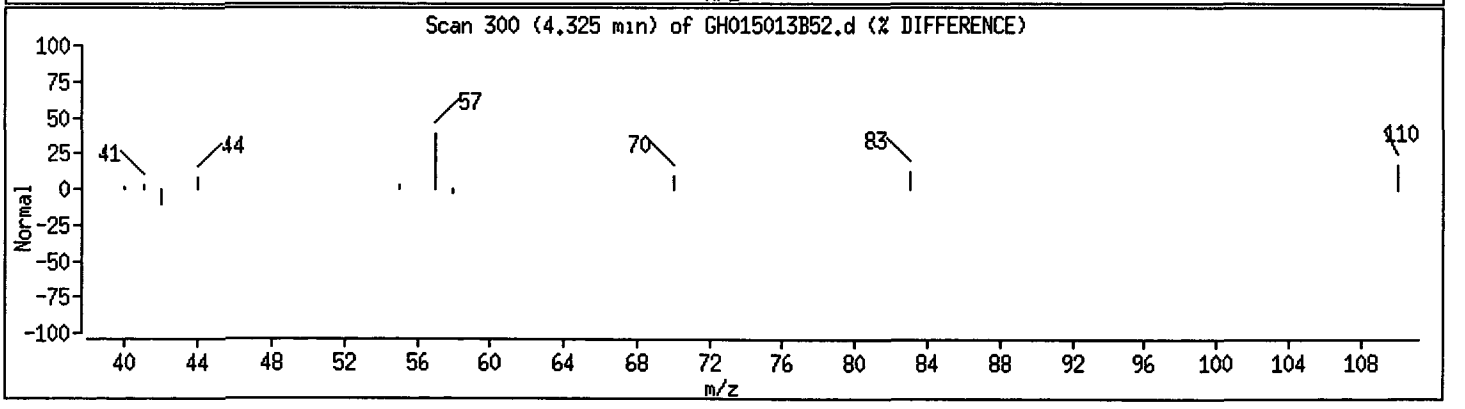
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960728B52.b/GH015013B52.d

Date : 28-JUL-1996 23:21

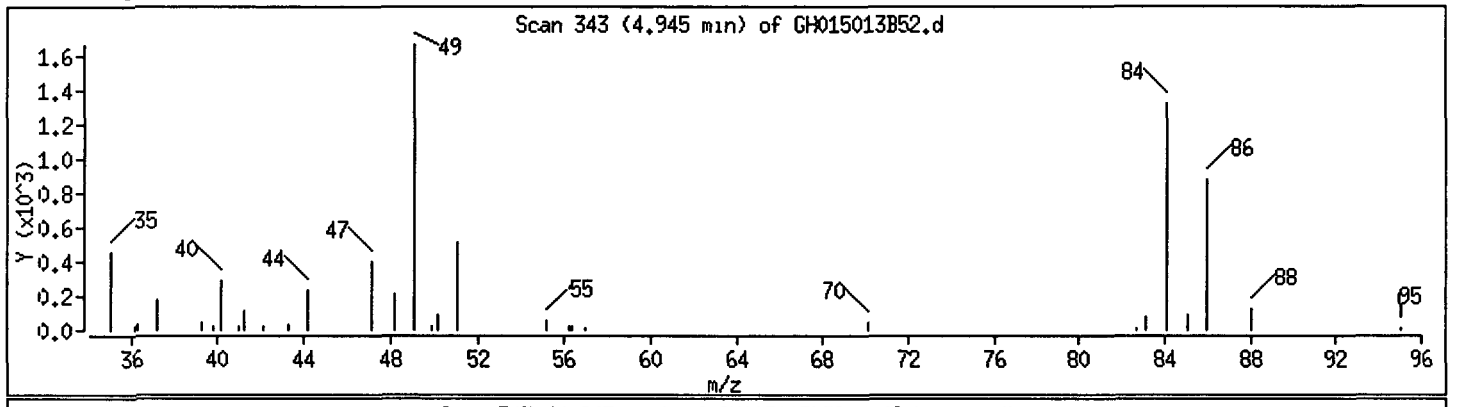
Client ID: FFF25 Instrument: f50052.1

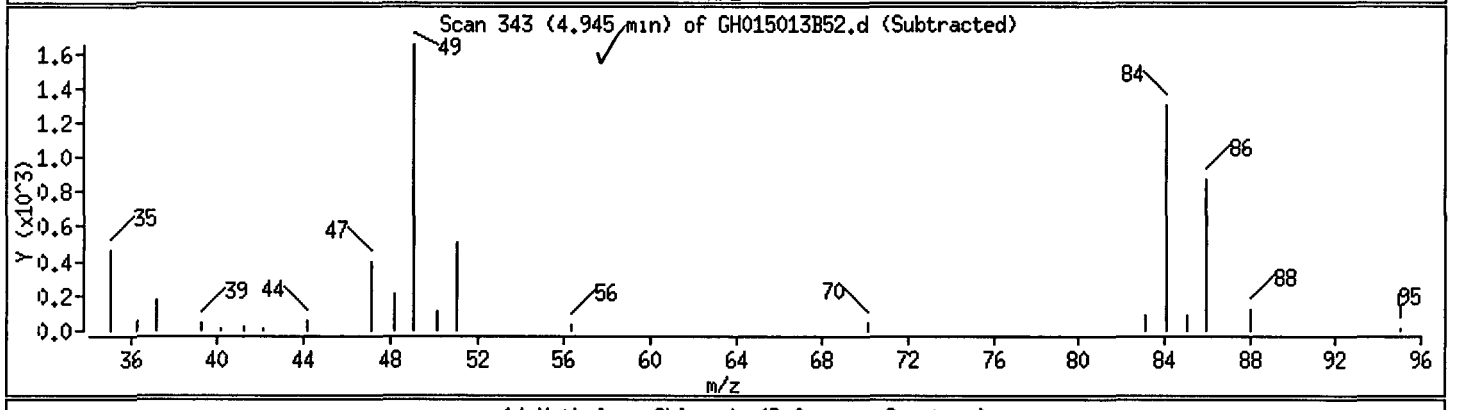
Sample Info:

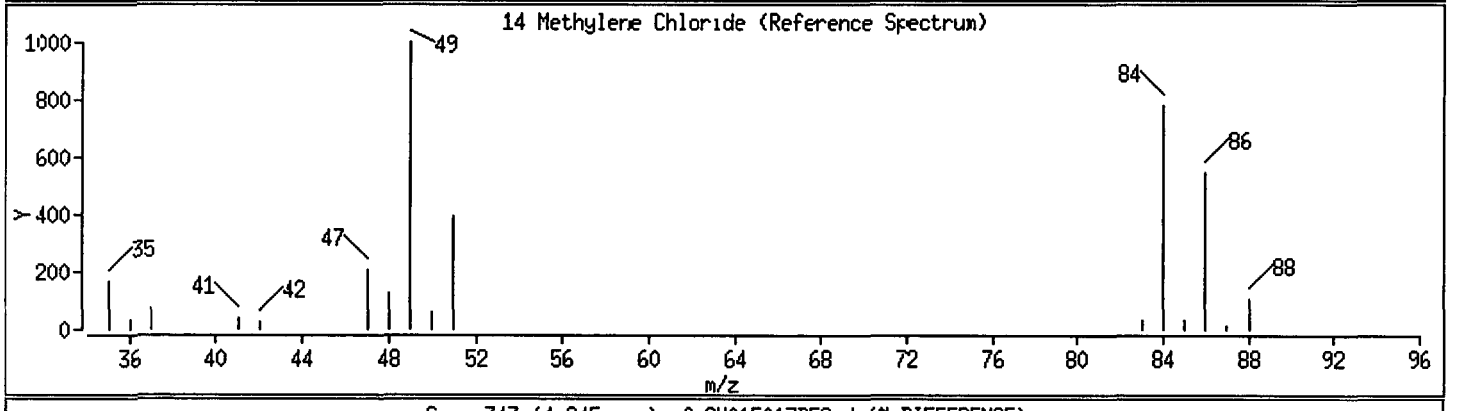
Operator: 2141

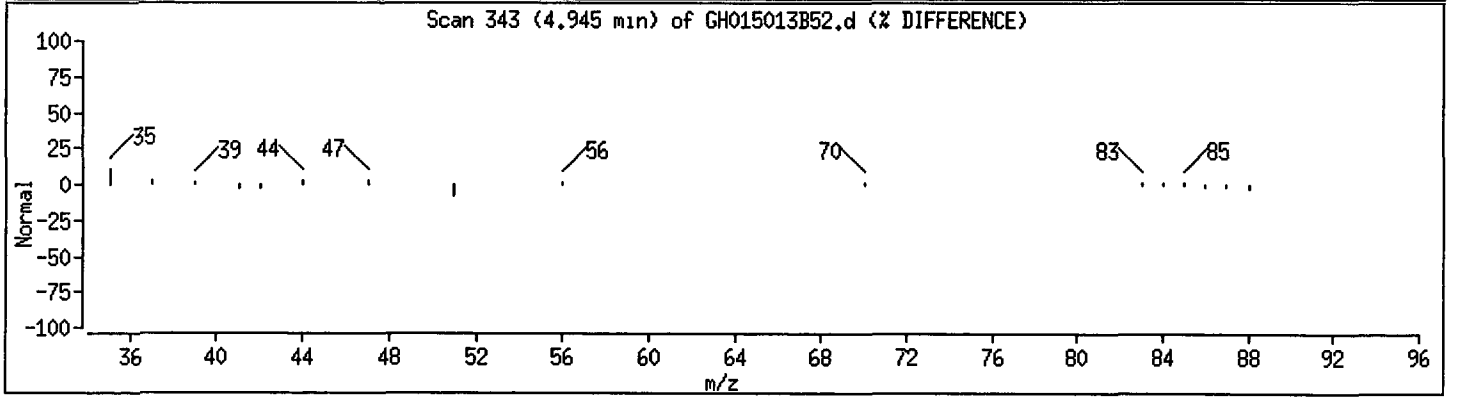
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960728B52.b/GH015013B52.d

Date : 28-JUL-1996 23:21

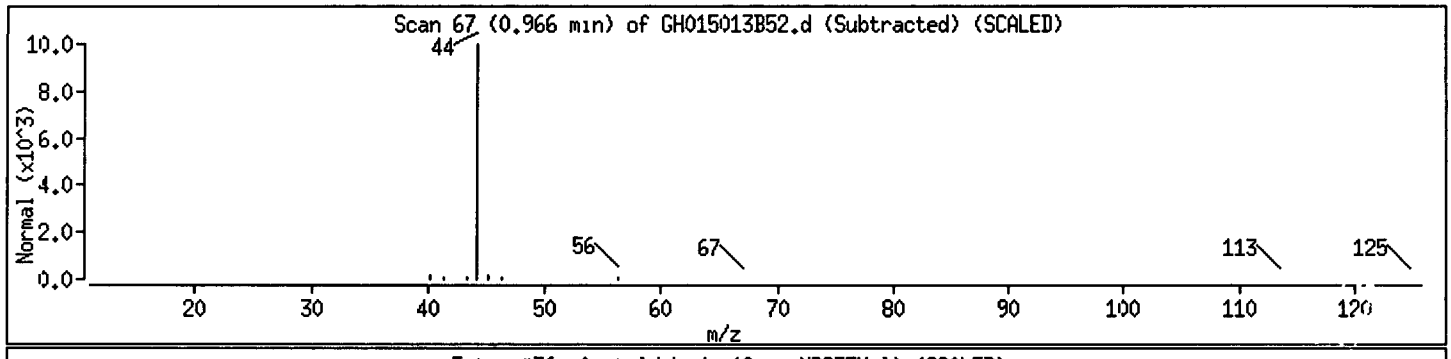
Client ID: FFF25 Instrument: f50052.1

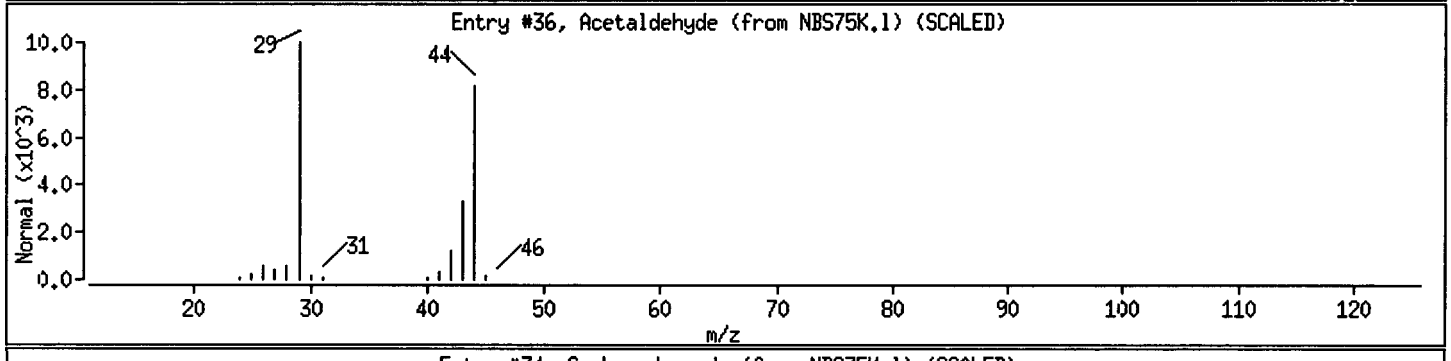
Sample Info:

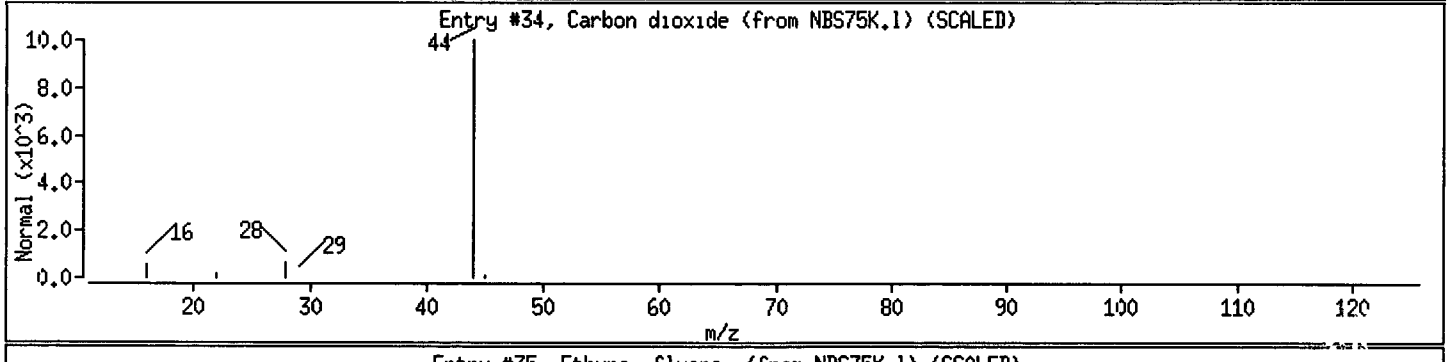
Operator: 2141

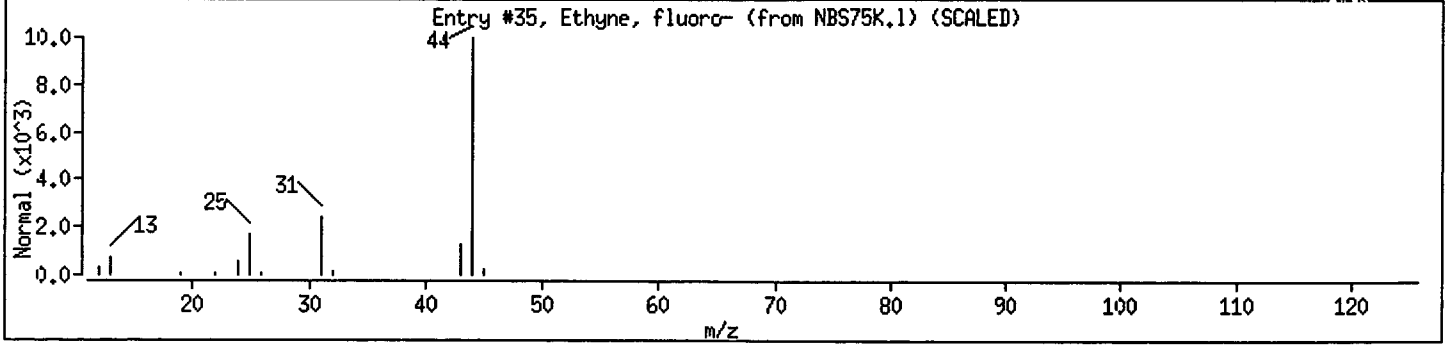
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Acetaldehyde	75-07-0	NBS75K.1	36	3	C2H4O	44
Carbon dioxide	124-38-9	NBS75K.1	34	3	CO2	44
Ethyne, fluoro-	2713-09-9	NBS75K.1	35	3	C2HF	44









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815013
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFF25 Dry Weight Factor 53

GC/MS ANALYSIS
Amount Purged: [✓] 10mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename B6960724B5B Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2227 Work-up S Simpson

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review SWBan Date 7/29/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFF26

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815014

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015014B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 70 Date Analyzed: 07/28/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	33	U
74-83-9	Bromomethane	33	U
75-01-4	Vinyl Chloride	33	U
75-00-3	Chloroethane	33	U
75-09-2	Methylene Chloride	39	B
67-64-1	Acetone	90	B
75-15-0	Carbon Disulfide	33	U
75-35-4	1,1-Dichloroethene	33	U
75-34-3	1,1-Dichloroethane	33	U
540-59-0	1,2-Dichloroethene (total)	33	U
67-66-3	Chloroform	33	U
107-06-2	1,2-Dichloroethane	33	U
78-93-3	2-Butanone	33	U
71-55-6	1,1,1-Trichloroethane	33	U
56-23-5	Carbon Tetrachloride	33	U
75-27-4	Bromodichloromethane	33	U
78-87-5	1,2-Dichloropropane	33	U
10061-01-5	cis-1,3-Dichloropropene	33	U
79-01-6	Trichloroethene	33	U
124-48-1	Dibromochloromethane	33	U
79-00-5	1,1,2-Trichloroethane	33	U
71-43-2	Benzene	33	U
10061-02-6	trans-1,3-Dichloropropene	33	U
75-25-2	Bromoform	33	U
108-10-1	4-Methyl-2-Pentanone	33	U
591-78-6	2-Hexanone	33	U
127-18-4	Tetrachloroethene	33	U
79-34-5	1,1,2,2-Tetrachloroethane	33	U
108-88-3	Toluene	33	U
108-90-7	Chlorobenzene	33	U
100-41-4	Ethylbenzene	33	U
100-42-5	Styrene	33	U
1330-20-7	Xylene (Total)	33	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFF26

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815014

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015014B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 70 Date Analyzed: 07/28/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	1.01	118	JB
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
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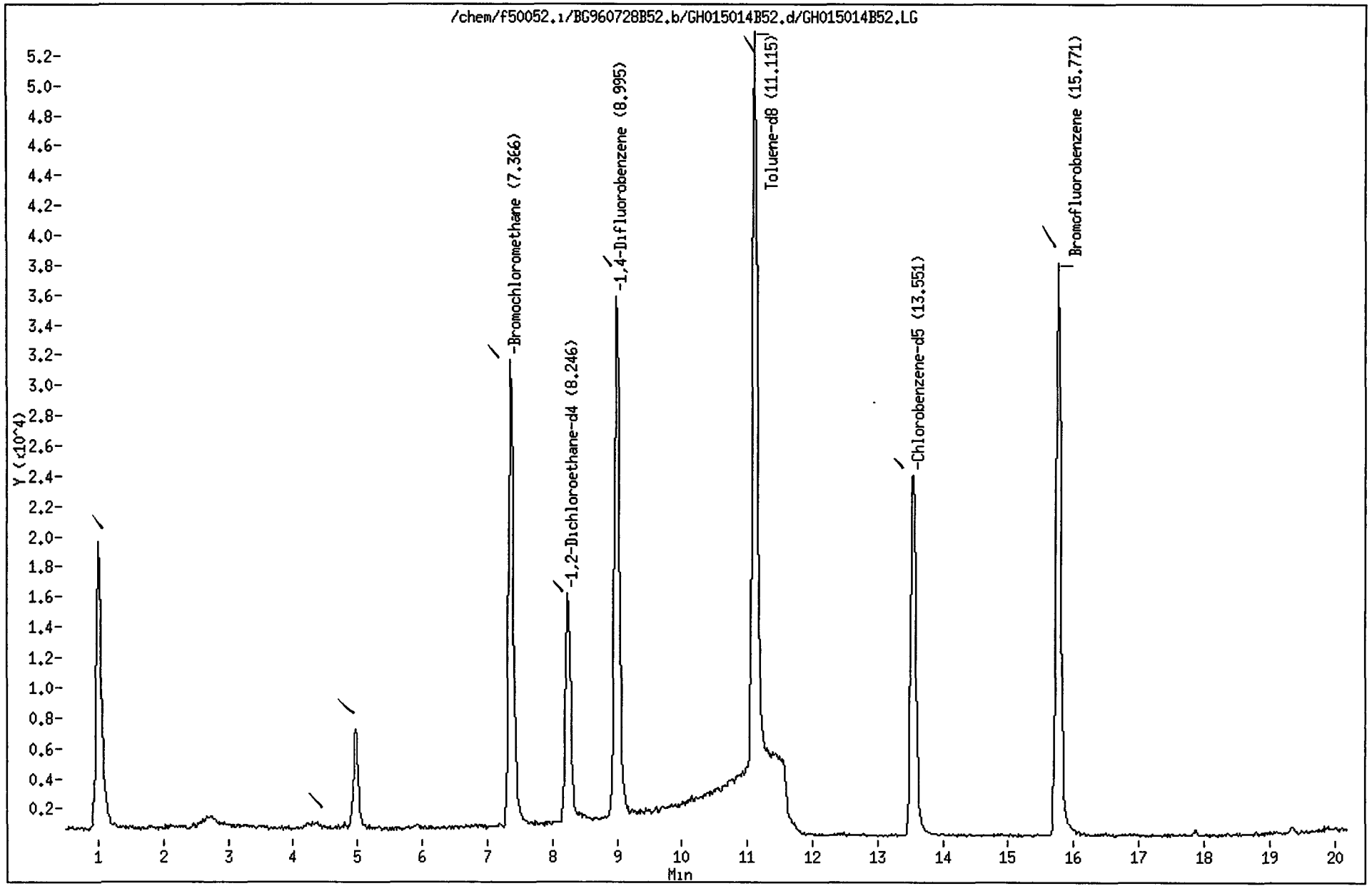
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960728B52.b/GH015014B52.d
Date : 28-JUL-1996 23:59
Client ID: FFF26
Sample Info:

Instrument: f50052.1

Operator: 2227
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960728B52.b/GH015014B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960728B52.b/GH015014B52.d
Lab Smp Id: 815014 Client Smp ID: FFF26
Inj Date : 28-JUL-1996 23:59
Operator : 2227 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass Quant Type: ISTD
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	70.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 366	7 309	(1 000)	22769	250 0	
* 2 1,4-Difluorobenzene	114 00	8 995	8 938	(1 000)	73975	250 0	
* 3 Chlorobenzene-d5	117 00	13.536	13 508	(1 000)	48221	250 0	
$ 4 1,2-Dichloroethane-d4	65.00	8 246	8 188	(1 119)	29831	212 5	141 6
$ 5 Toluene-d8	98 00	11 115	11 071	(0 821)	87112	266 7	177 8
$ 6 Bromofluorobenzene	95.00	15.771	15 728	(1 165)	37107	228 5	152.4
7 Chloromethane	50 00		1.542	Compound Not Detected.			
8 Vinyl Chloride	62 00		1 744	Compound Not Detected			
9 Bromomethane	94 00		2 335	Compound Not Detected			
10 Chloroethane	64 00		2 537	Compound Not Detected			
11 1,1-Dichloroethene	96 00		4 036	Compound Not Detected			
12 Carbon Disulfide	76 00		4 152	Compound Not Detected			
13 Acetone	43 00	4.354	4 296	(0 591)	1576	135 1	90 07
14 Methylene Chloride	84 00	4 973	4 930	(0 675)	8114	58 90	39 27
15 trans-1,2-Dichloroethene	96 00		5 348	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		6 963	Compound Not Detected			
18 2-Butanone	43 00		7 136	Compound Not Detected			
19 Chloroform	83 00		7 539	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7 640	Compound Not Detected			
21 Carbon Tetrachloride	117 00		7 871	Compound Not Detected			
22 Benzene	78 00		8 188	Compound Not Detected			

Data File: /chem/f50052.i/BG960728B52.b/GH015014B52.d
Report Date: 29-Jul-1996 16:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 289		Compound Not Detected		
	24 Trichloroethene	130 00		9 226		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 543		Compound Not Detected.		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 691		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 965		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 037		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 542		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13.839		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 776		Compound Not Detected		
	39 Styrene	104 00		14 834		Compound Not Detected		
	40 Bromoform	173 00		15 079		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1.000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 776		Compound Not Detected		

Data File: /chem/f50052.i/BG960728B52.b/GH015014B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960728B52.b/GH015014B52.d
Lab Smp Id: 815014 Client Smp ID: FFF26
Inj Date : 28-JUL-1996 23:59
Operator : 2227 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.366	166252	250.000

	RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)						CAS #.		
1 009		117626	176 9	117 9	0		0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/f50052.1/BG960728B52.b/GH015014B52.d

Date : 28-JUL-1996 23:59

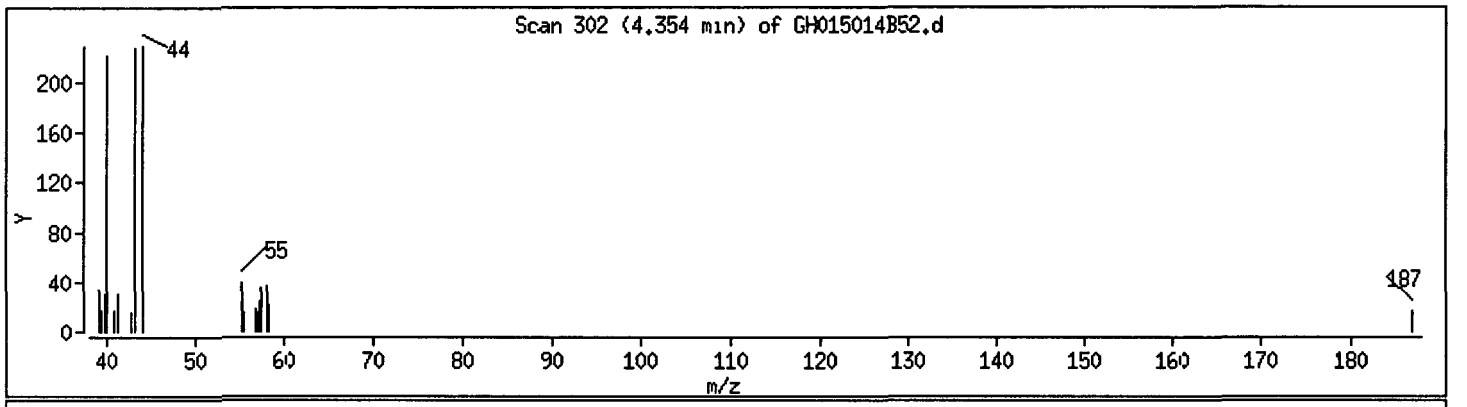
Client ID: FFF26 Instrument: f50052.1

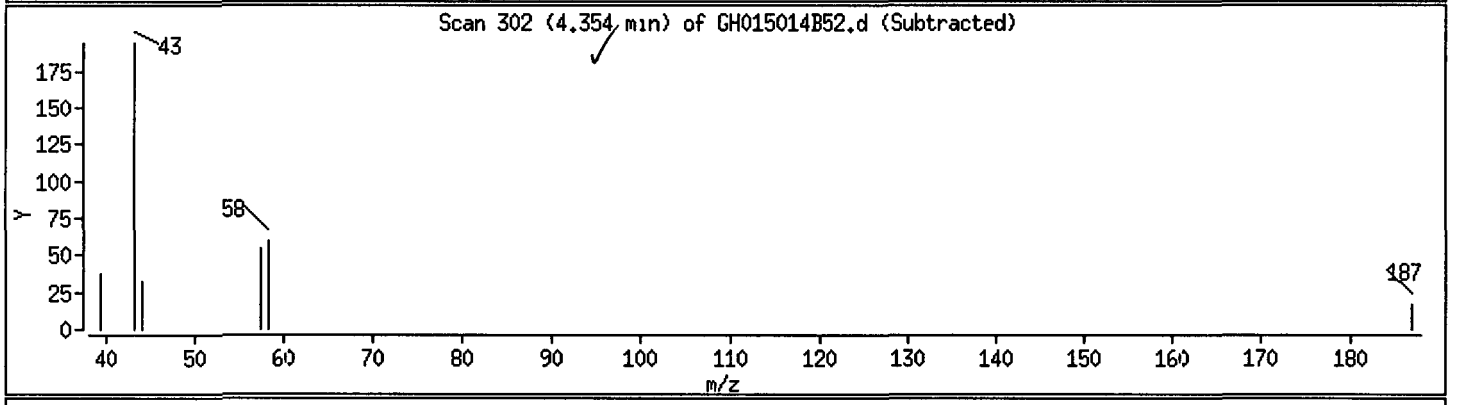
Sample Info:

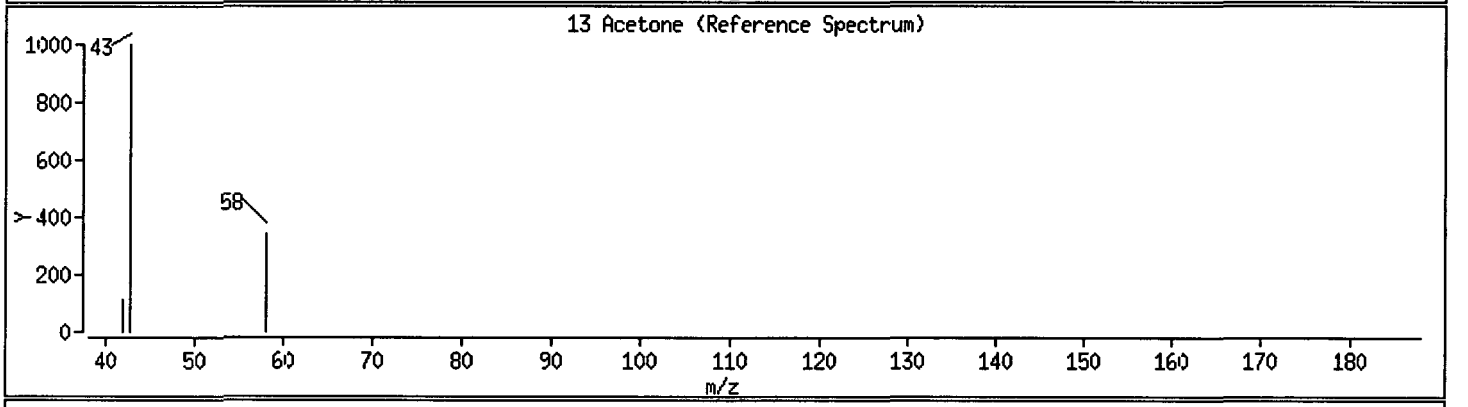
Operator: 2227

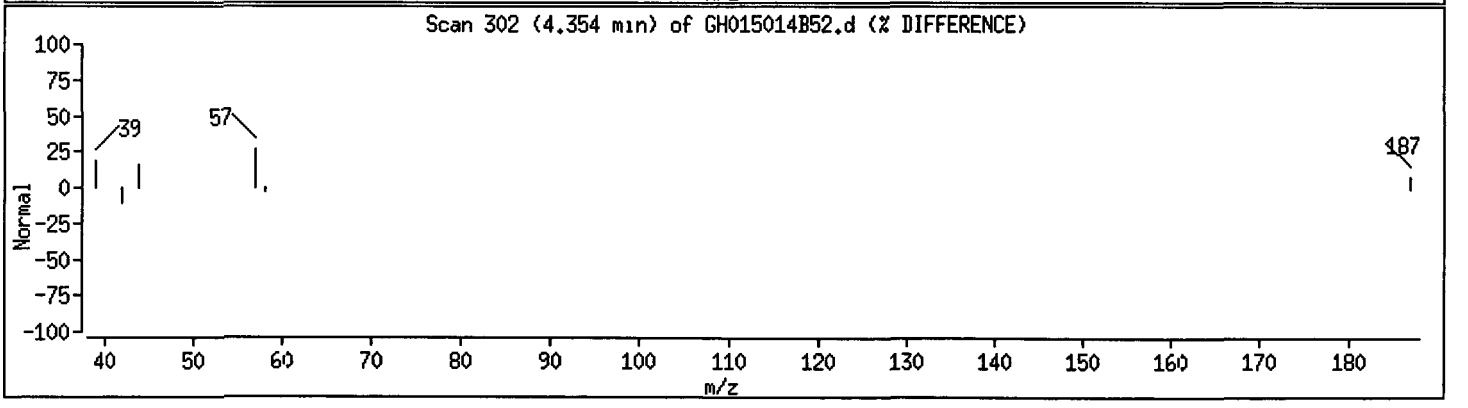
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960728B52.b/GH015014B52.d

Date : 28-JUL-1996 23:59

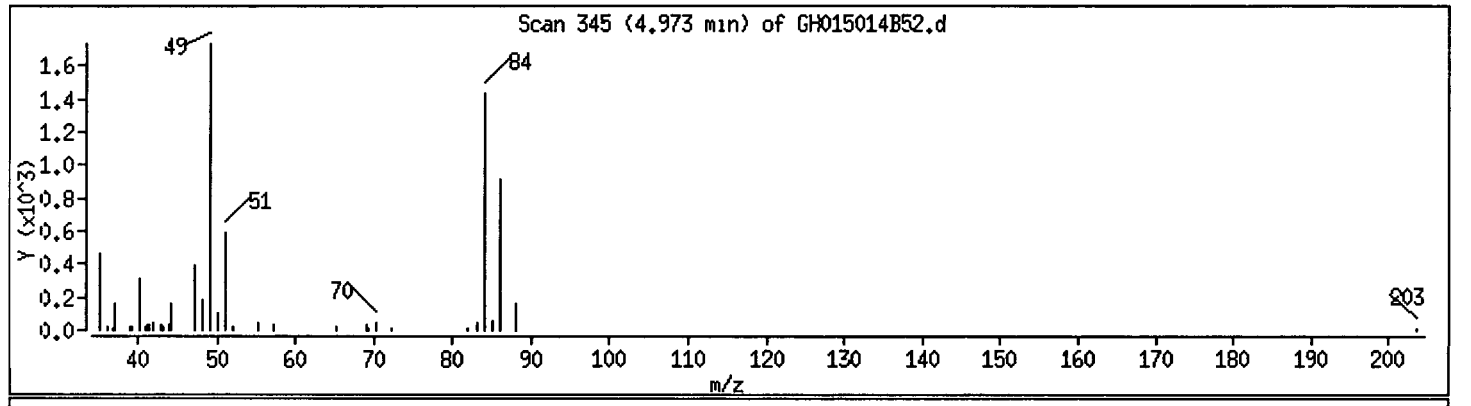
Client ID: FFF26 Instrument: f50052.1

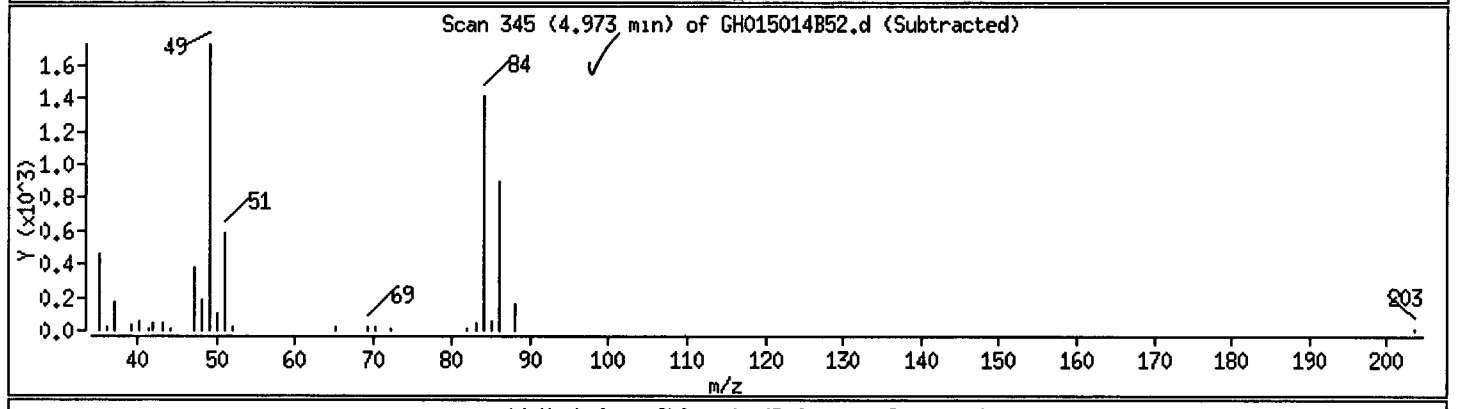
Sample Info:

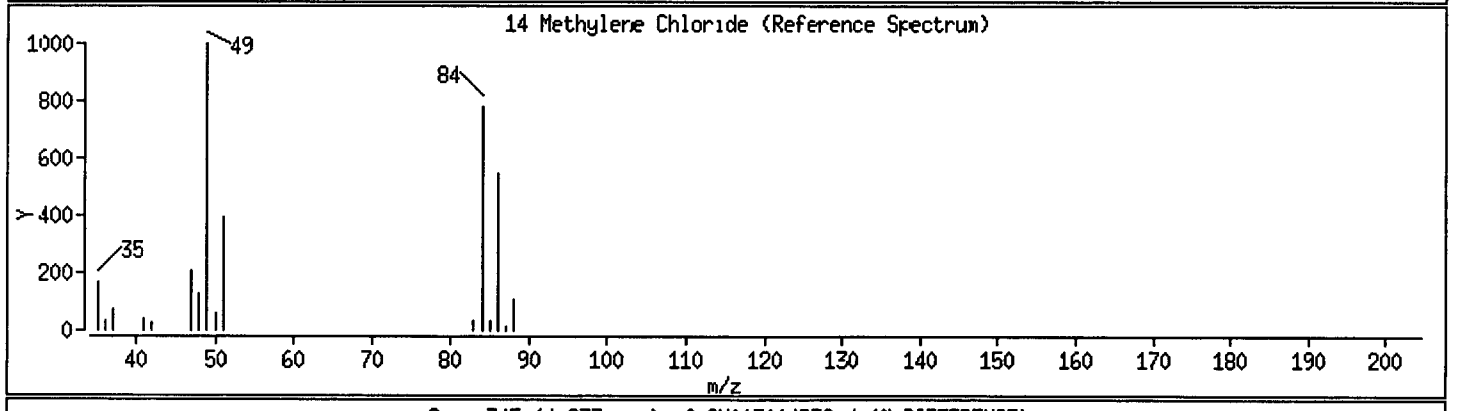
Operator: 2227

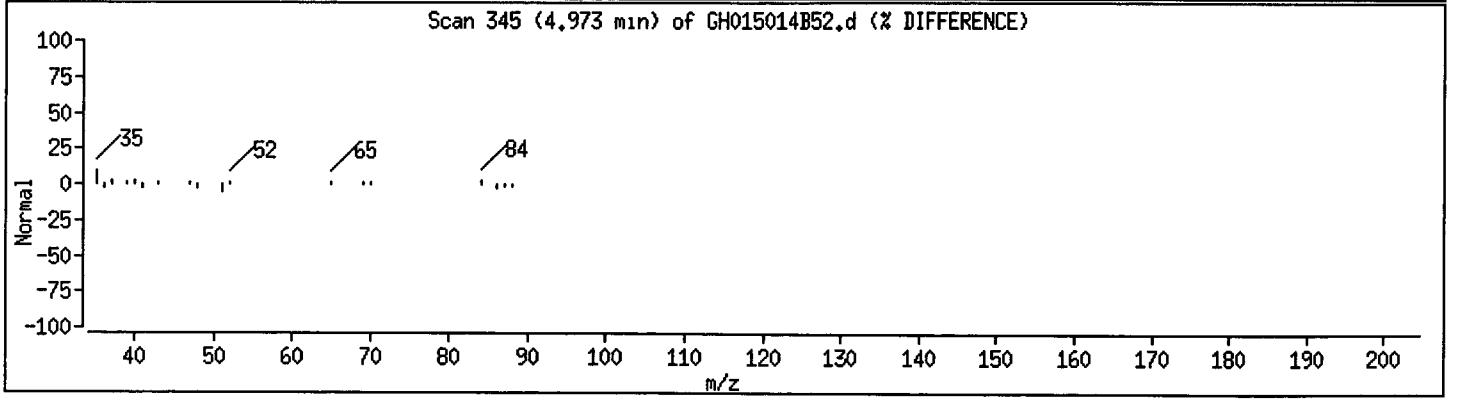
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960728B52.b/GH015014B52.d

Date : 28-JUL-1996 23:59

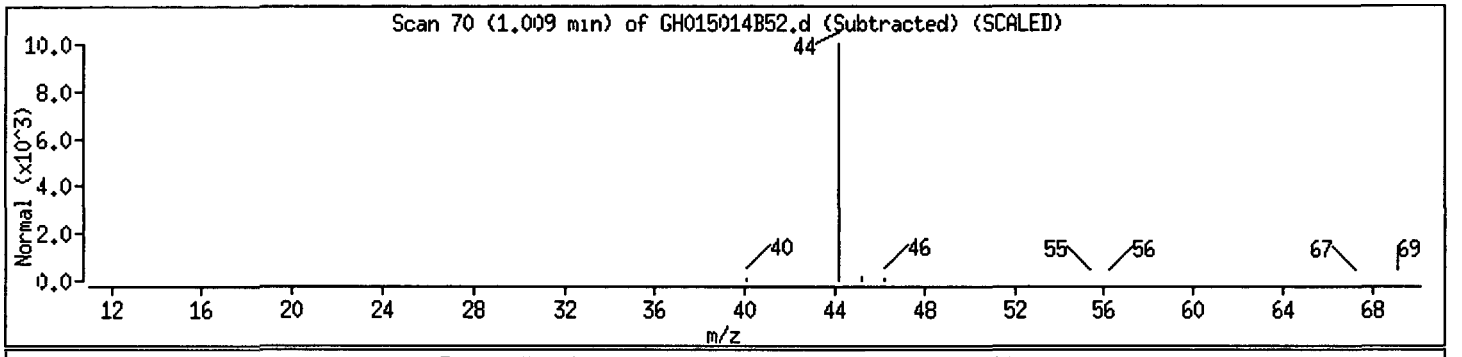
Client ID: FFF26 Instrument: f50052.1

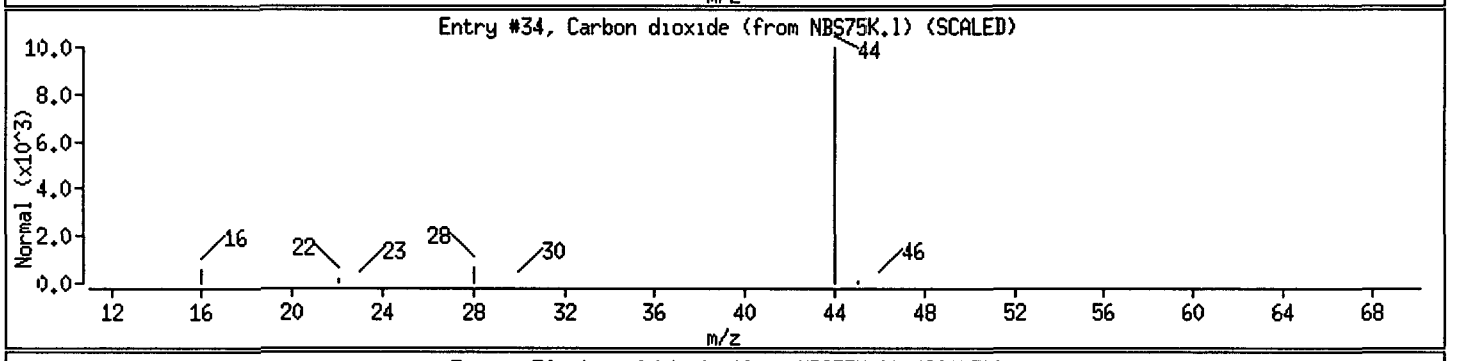
Sample Info:

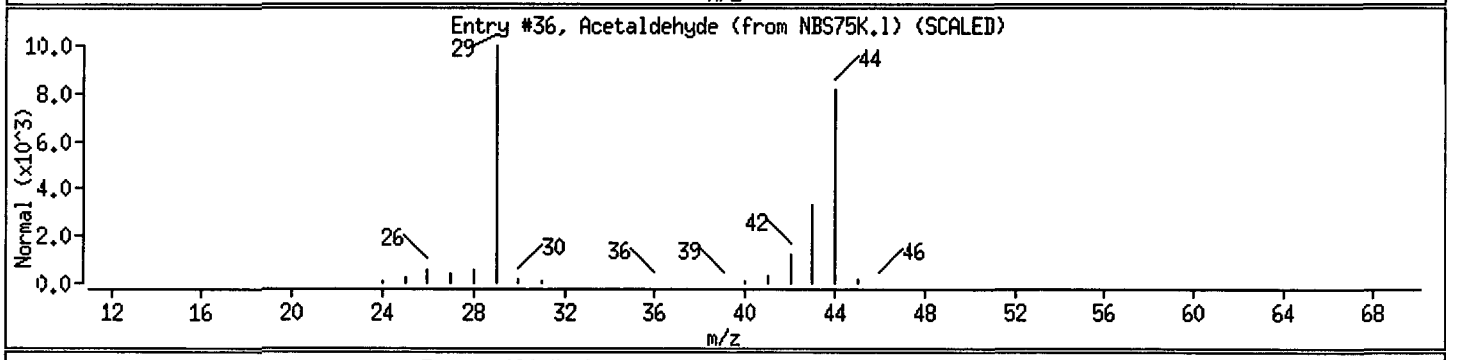
Operator: 2227

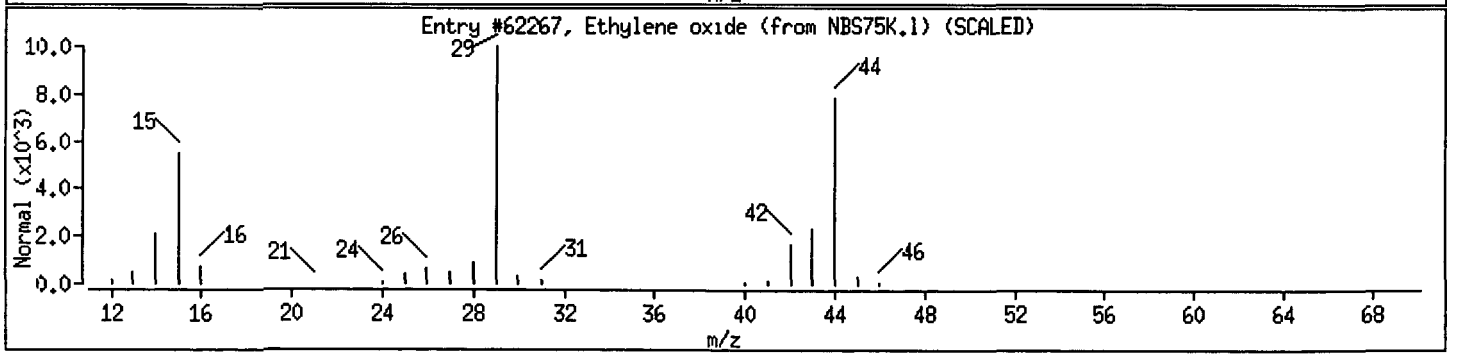
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	34	5	CO2	44
Acetaldehyde	75-07-0	NBS75K.1	36	4	C2H4O	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815014
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S, SOW OLM03.1

Sample date: 072396 Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFF26 Dry Weight Factor 70

GC/MS ANALYSIS
Amount Purged: [✓ 10mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG960728052 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2227 Work-up 1948VASmith

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review [signature] Date 7/29/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation
VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFF27

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815015

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015015B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 71 Date Analyzed: 07/29/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	34	U
74-83-9	Bromomethane	34	U
75-01-4	Vinyl Chloride	34	U
75-00-3	Chloroethane	34	U
75-09-2	Methylene Chloride	39	B
67-64-1	Acetone	130	B
75-15-0	Carbon Disulfide	34	U
75-35-4	1,1-Dichloroethene	34	U
75-34-3	1,1-Dichloroethane	34	U
540-59-0	1,2-Dichloroethene (total)	34	U
67-66-3	Chloroform	34	U
107-06-2	1,2-Dichloroethane	34	U
78-93-3	2-Butanone	34	U
71-55-6	1,1,1-Trichloroethane	34	U
56-23-5	Carbon Tetrachloride	34	U
75-27-4	Bromodichloromethane	34	U
78-87-5	1,2-Dichloropropane	34	U
10061-01-5	cis-1,3-Dichloropropene	34	U
79-01-6	Trichloroethene	34	U
124-48-1	Dibromochloromethane	34	U
79-00-5	1,1,2-Trichloroethane	34	U
71-43-2	Benzene	34	U
10061-02-6	trans-1,3-Dichloropropene	34	U
75-25-2	Bromoform	34	U
108-10-1	4-Methyl-2-Pentanone	34	U
591-78-6	2-Hexanone	34	U
127-18-4	Tetrachloroethene	34	U
79-34-5	1,1,2,2-Tetrachloroethane	34	U
108-88-3	Toluene	34	U
108-90-7	Chlorobenzene	34	U
100-41-4	Ethylbenzene	34	U
100-42-5	Styrene	34	U
1330-20-7	Xylene (Total)	34	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFF27

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815015

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015015B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 71 Date Analyzed: 07/29/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.98	78	JB
2.				
3.				
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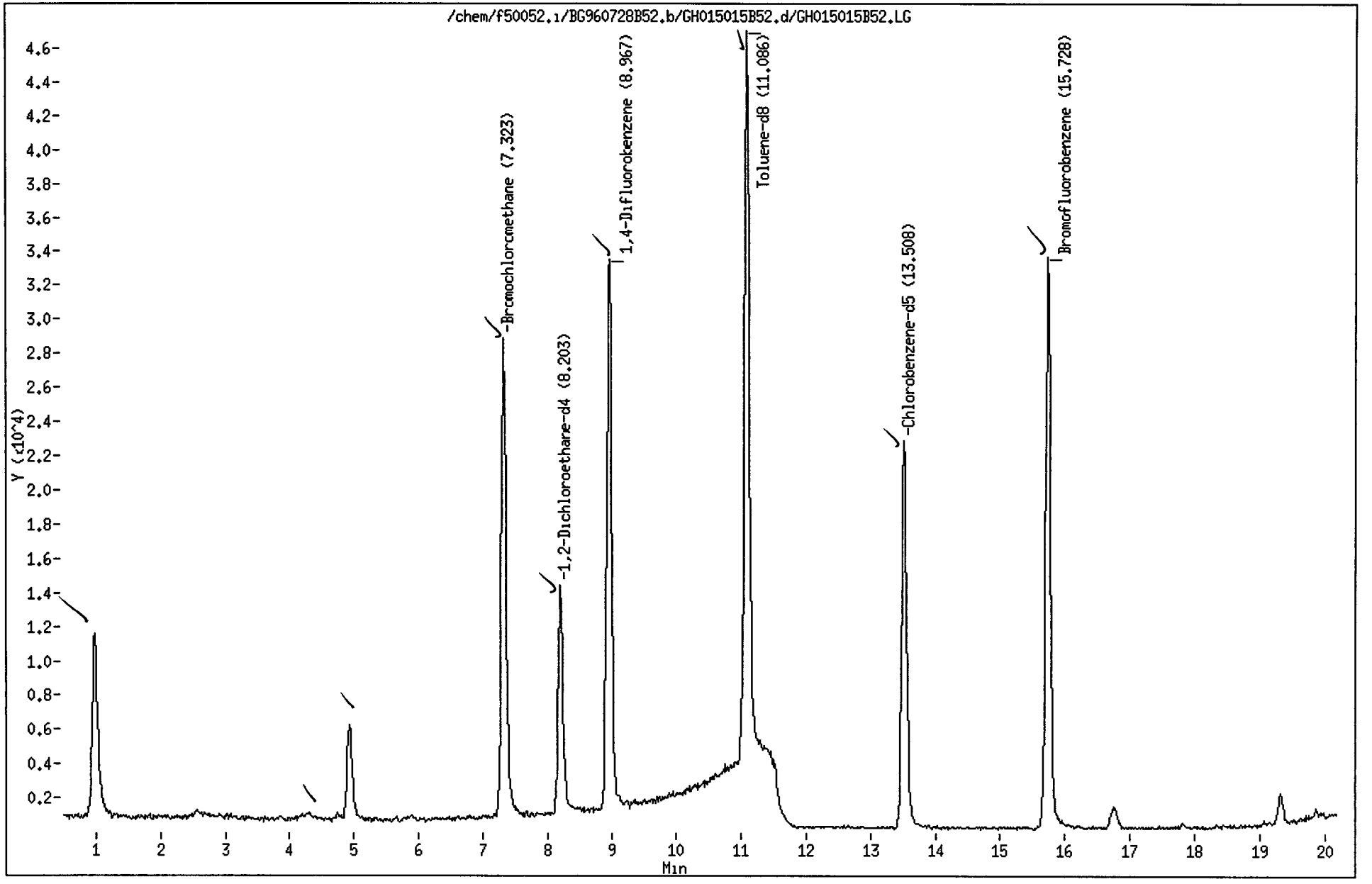
29.				
30.				

Data File: /chem/f50052.1/BG960728B52.b/GH015015B52.d
Date : 29-JUL-1996 00:33
Client ID: FFF27
Sample Info:

Instrument: f50052.1

Operator: 1948
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960728B52.b/GH015015B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960728B52.b/GH015015B52.d
Lab Smp Id: 815015 Client Smp ID: FFF27
Inj Date : 29-JUL-1996 00:33
Operator : 1948 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass Quant Type: ISTD
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	71.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 323	7 309	(1 000)	20286	250 0	(H)
* 2 1,4-Difluorobenzene	114 00	8 967	8 938	(1.000)	69575	250 0	
* 3 Chlorobenzene-d5	117 00	13 508	13 508	(1 000)	44863	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 203	8 188	(1 120)	25593	204 6	141 1
$ 5 Toluene-d8	98 00	11.071	11.071	(0.820)	77243	254 2	175 3
$ 6 Bromofluorobenzene	95 00	15 728	15 728	(1 164)	33079	219 0	151 0
7 Chloromethane	50.00		1 542	Compound Not Detected			
8 Vinyl Chloride	62 00		1 744	Compound Not Detected			
9 Bromomethane	94 00		2 335	Compound Not Detected			
10 Chloroethane	64.00		2 537	Compound Not Detected			
11 1,1-Dichloroethene	96 00		4 036	Compound Not Detected			
12 Carbon Disulfide	76 00		4 152	Compound Not Detected			
13 Acetone	43 00	4.310	4 296	(0 589)	2029	195 2	134 6
14 Methylene Chloride	84 00	4 930	4 930	(0 673)	6901	56.23	38 78
15 trans-1,2-Dichloroethene	96 00		5 348	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		6.963	Compound Not Detected			
18 2-Butanone	43 00		7 136	Compound Not Detected			
19 Chloroform	83 00		7 539	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7 640	Compound Not Detected			
21 Carbon Tetrachloride	117 00		7 871	Compound Not Detected.			
22 Benzene	78 00		8 188	Compound Not Detected.			

SWB 7/29/96

Data File: /chem/f50052.i/BG960728B52.b/GH015015B52.d
Report Date: 29-Jul-1996 16:14

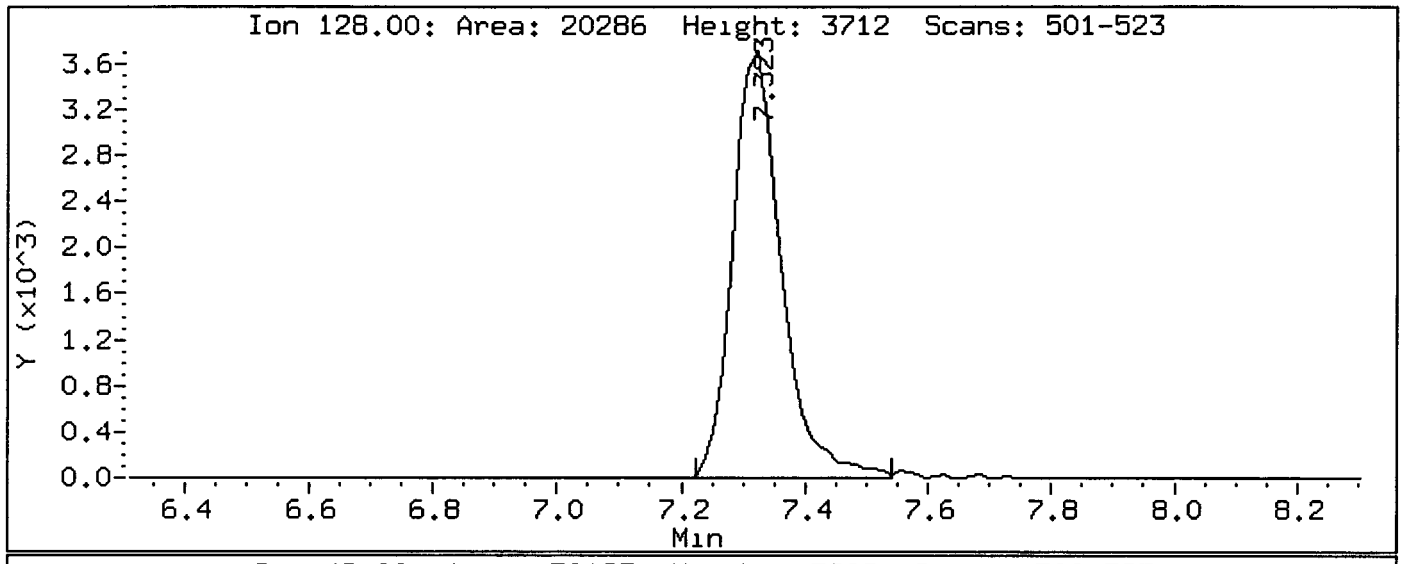
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 289		Compound Not Detected		
	24 Trichloroethene	130.00		9 226		Compound Not Detected		
	25 1,2-Dichloropropane	63.00		9 543		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11.691		Compound Not Detected		
	31 1,1,2-Trichloroethane	97.00		11.965		Compound Not Detected		
	32 Tetrachloroethene	164.00		12 037		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43.00		12 542		Compound Not Detected		
	35 Chlorobenzene	112.00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 839		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 776		Compound Not Detected		
	39 Styrene	104 00		14 834		Compound Not Detected		
	40 Bromoform	173.00		15 079		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 776		Compound Not Detected		

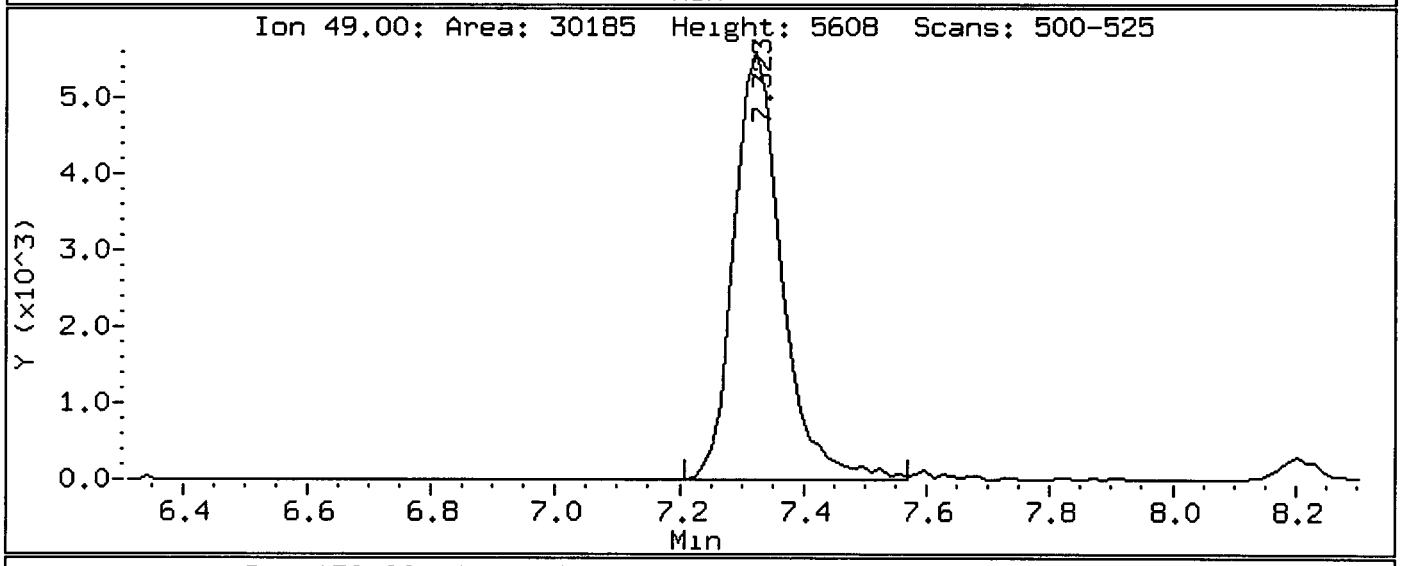
QC Flag Legend

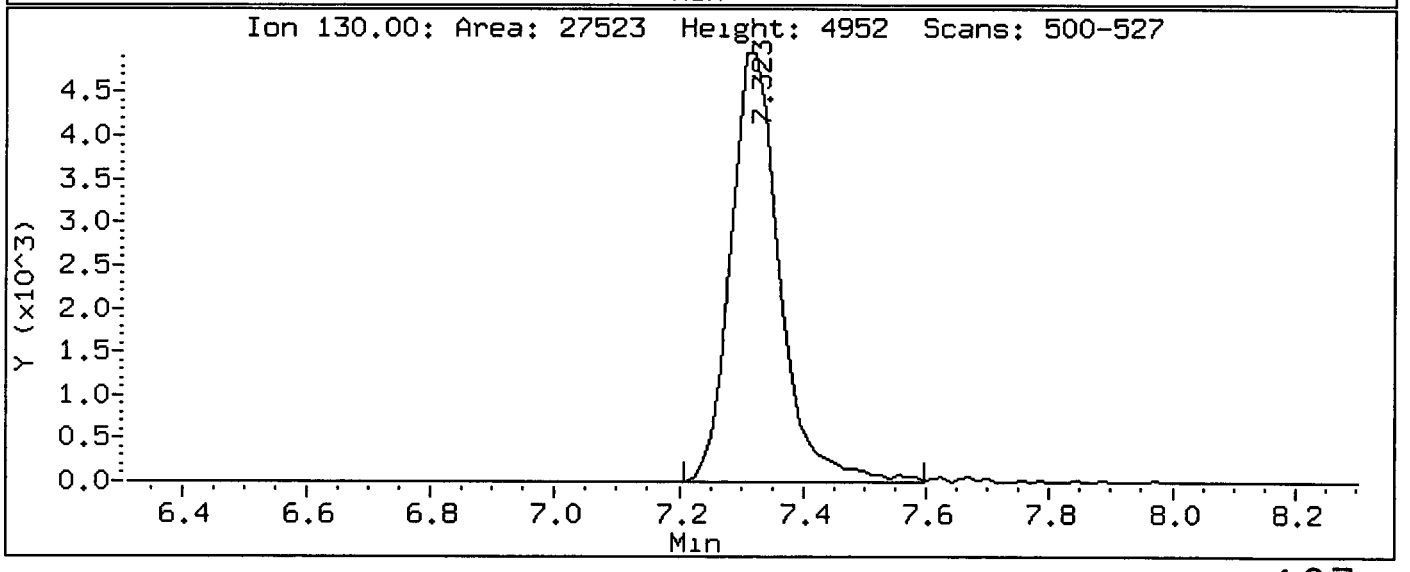
H - Operator selected an alternate compound hit.

Data File: /chem/f50052.1/BG960728B52.b/GH015015B52.d/GH015015B52.LG
Injection Date: 09-JUL-96 00:33
Instrument: f50052.1
Client Sample ID: FFF27

Compound: Bromochloromethane
CAS Number: 74-97-5







Data File: /chem/f50052.i/BG960728B52.b/GH015015B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960728B52.b/GH015015B52.d
Lab Smp Id: 815015 Client Smp ID: FFF27
Inj Date : 29-JUL-1996 00:33
Operator : 1948 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.323	148655	250.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)					CAS #.		
0 980	67726	113 9	78 55	0		0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/f50052.1/BG960728B52.b/GH015015B52.d

Date : 29-JUL-1996 00:33

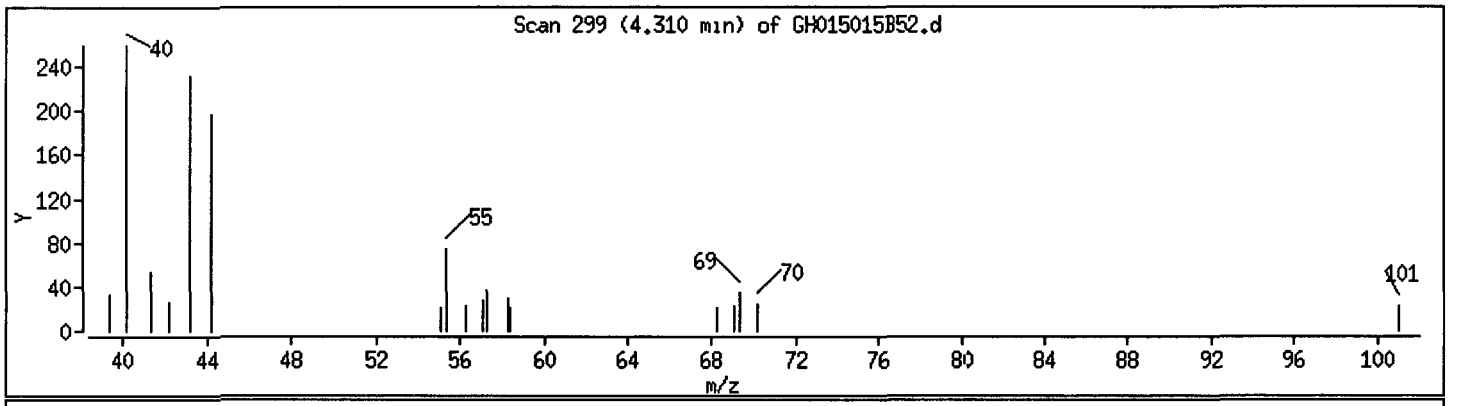
Client ID: FFF27 Instrument: f50052.1

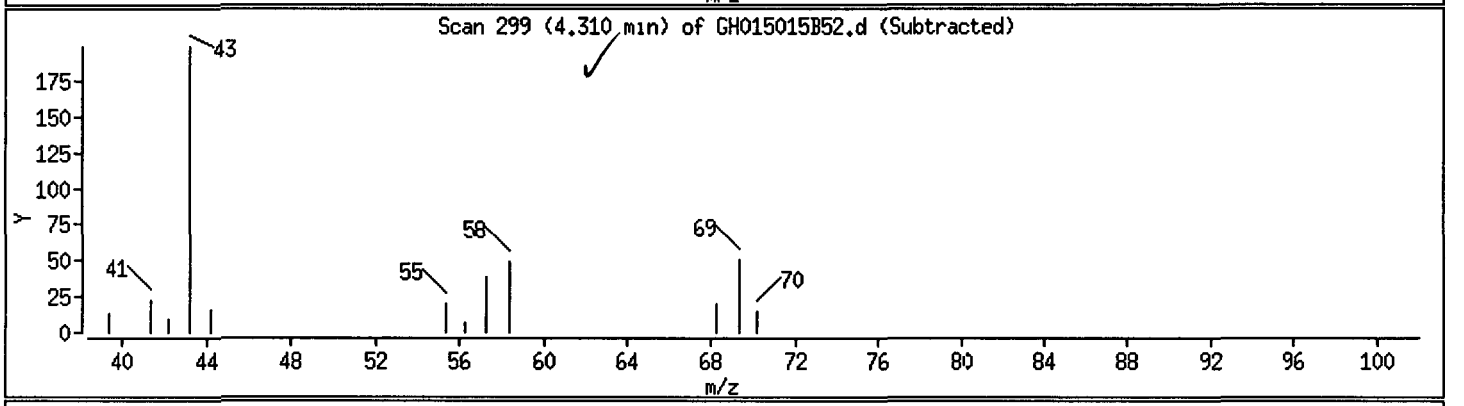
Sample Info:

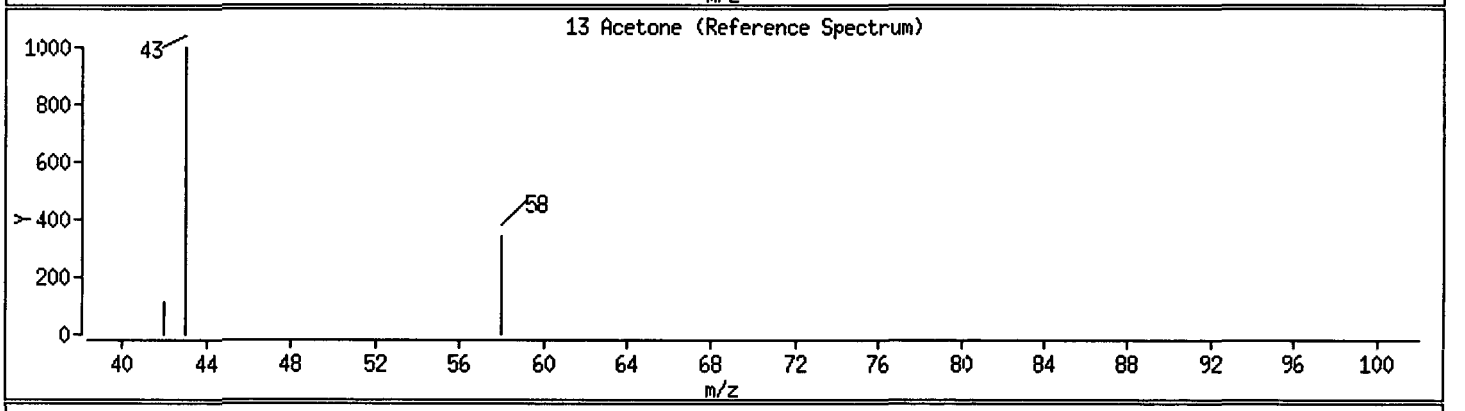
Operator: 1948

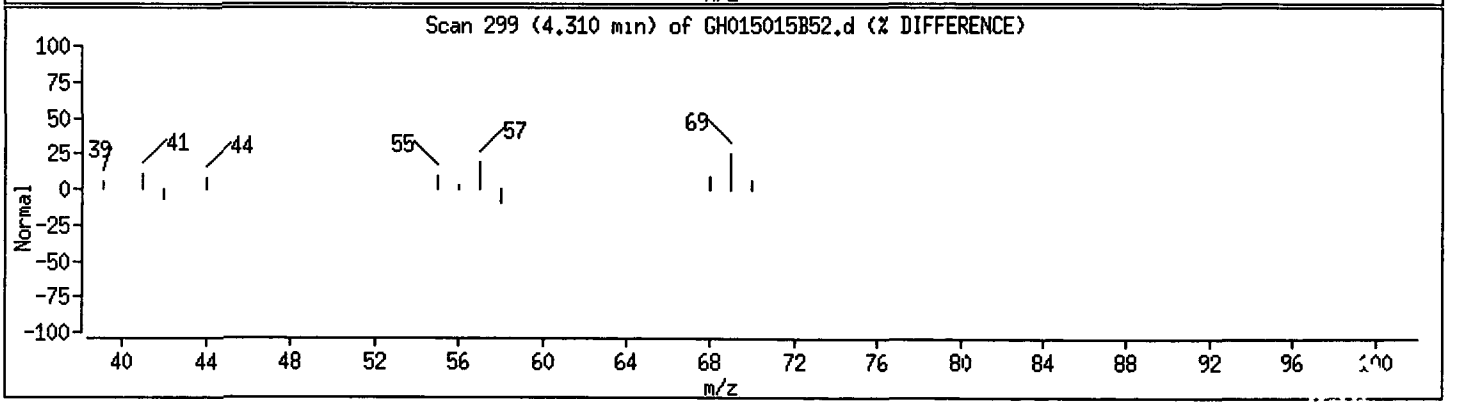
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960728B52.b/GH015015B52.d

Date : 29-JUL-1996 00:33

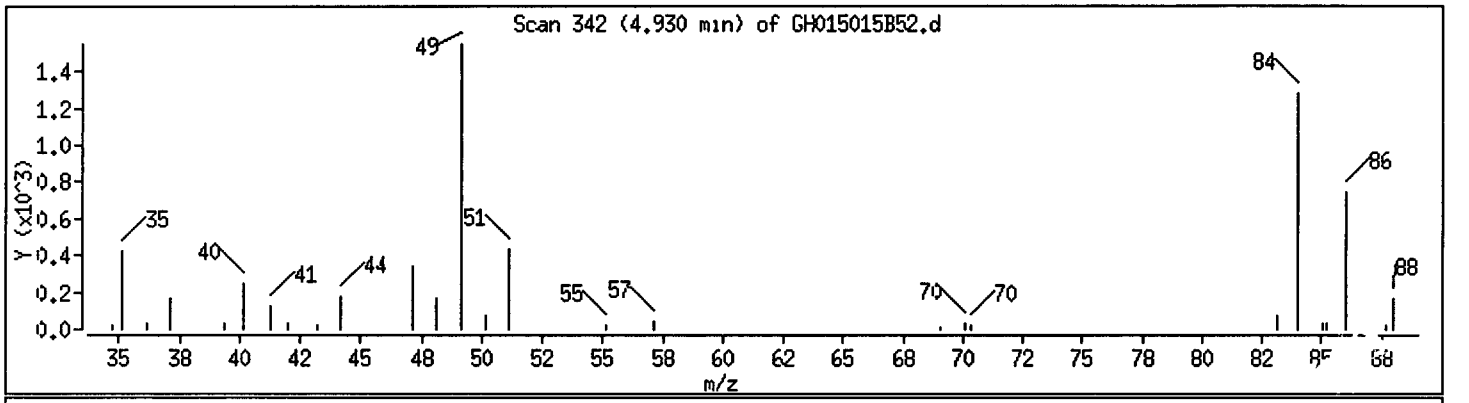
Client ID: FFF27 Instrument: f50052.1

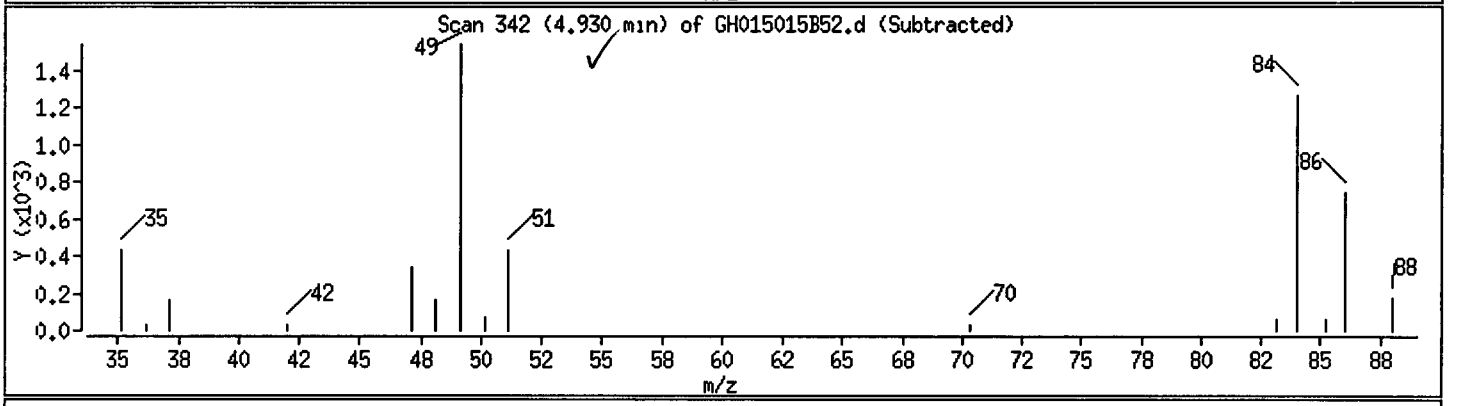
Sample Info:

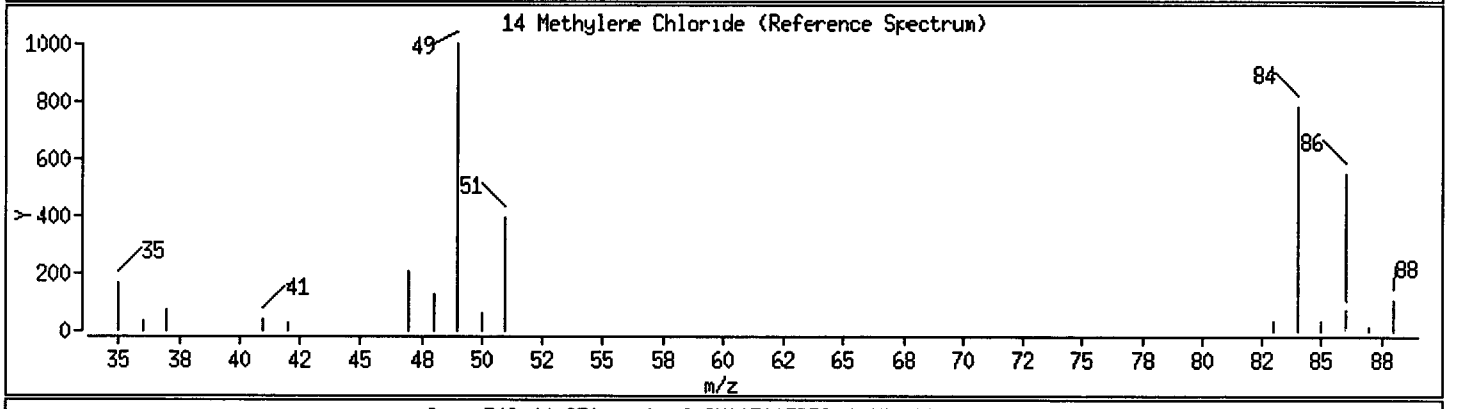
Operator: 1948

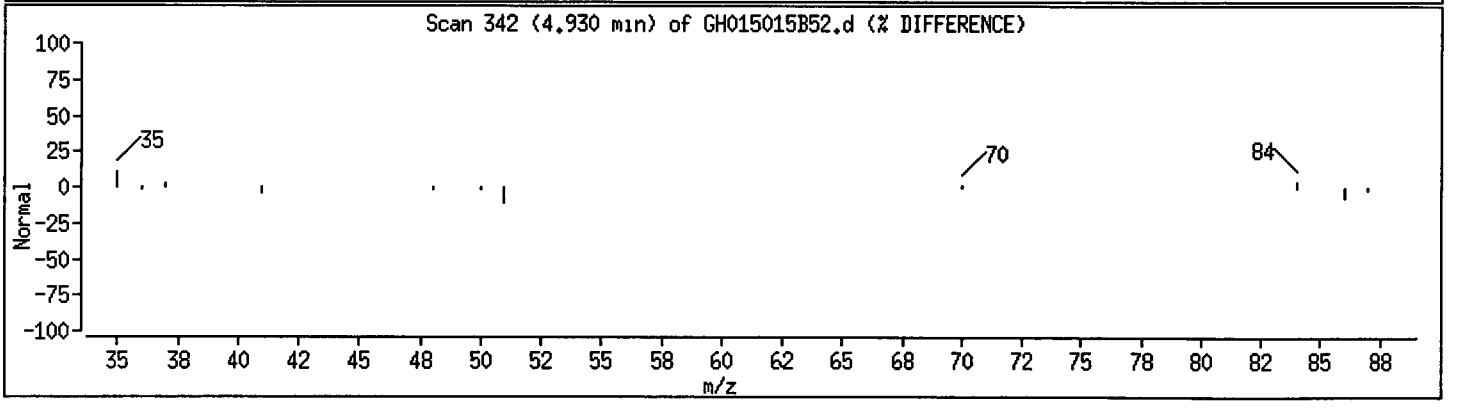
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960728B52.b/GH015015B52.d

Date : 29-JUL-1996 00:33

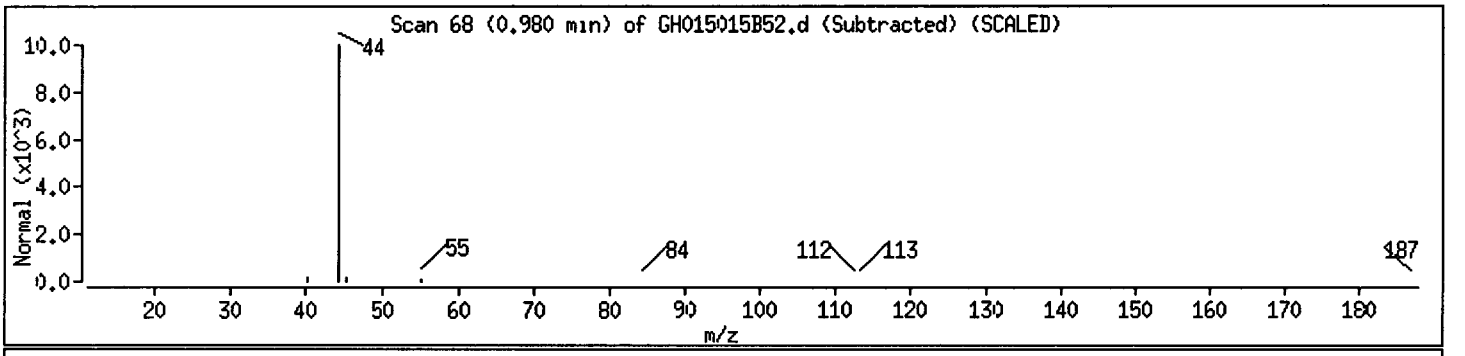
Client ID: FFF27 Instrument: f50052.1

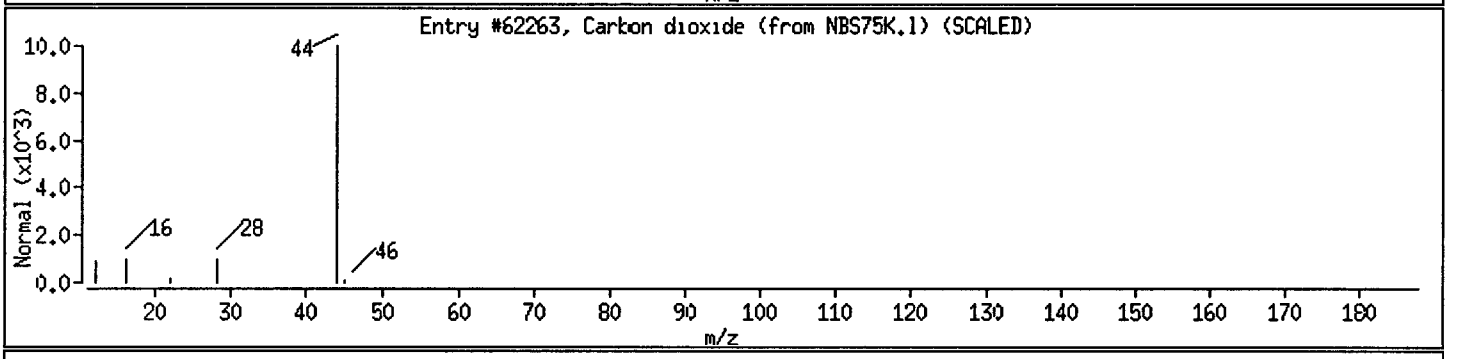
Sample Info:

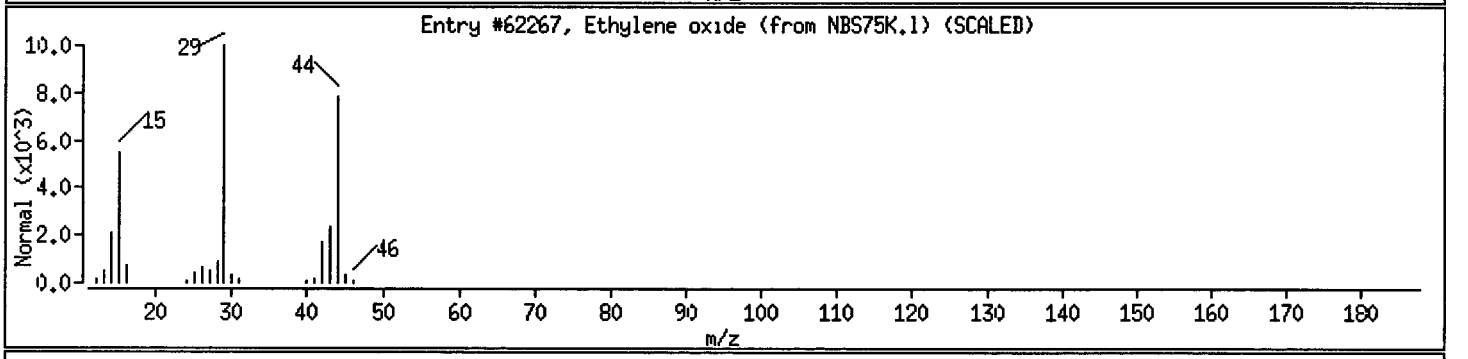
Operator: 1948

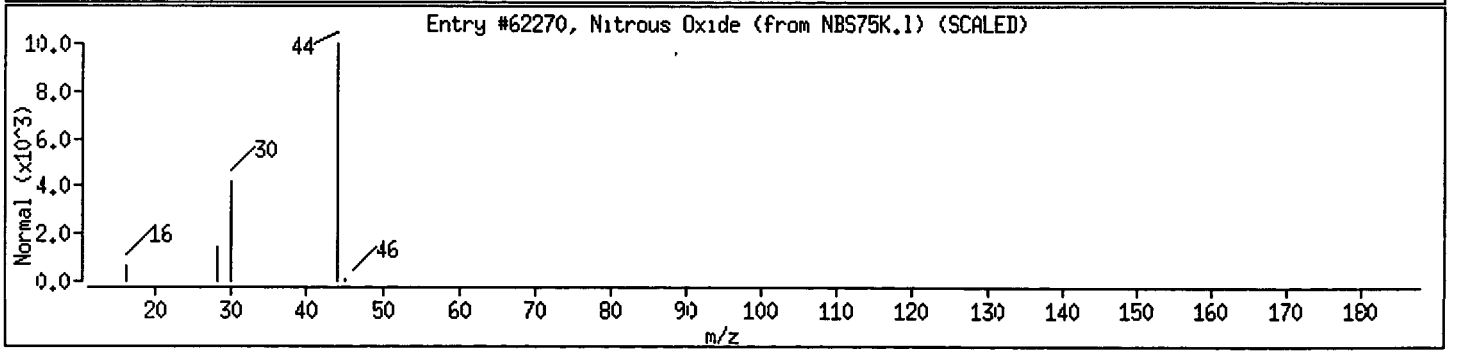
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	62263	5	CO2	44
Ethylene oxide	75-21-8	NBS75K.1	62267	3	C2H4O	44
Nitrous Oxide	10024-97-2	NBS75K.1	62270	3	N2O	44









LAB INSTRUCTIONS: PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815015
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

Sample date: 072396 Report type: A

SAMPLE ID#: FFF27 Dry Weight Factor 71

GC/MS ANALYSIS

Amount Purged: [ ] ~~10mls/Xg or~~ 5gm VS 7.29.96 [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG9607 28B52 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 1948VASmith Work-up 1948VASmith

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: _____ [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review SWBurs Date 7/29/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Temp Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFF28

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815016

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015016B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 63 Date Analyzed: 07/29/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	✓27	U
74-83-9	Bromomethane	27	U
75-01-4	Vinyl Chloride	27	U
75-00-3	Chloroethane	27	U
75-09-2	Methylene Chloride	35	B
67-64-1	Acetone	63	B
75-15-0	Carbon Disulfide	27	U
75-35-4	1,1-Dichloroethene	27	U
75-34-3	1,1-Dichloroethane	27	U
540-59-0	1,2-Dichloroethene (total)	27	U
67-66-3	Chloroform	27	U
107-06-2	1,2-Dichloroethane	27	U
78-93-3	2-Butanone	27	U
71-55-6	1,1,1-Trichloroethane	27	U
56-23-5	Carbon Tetrachloride	27	U
75-27-4	Bromodichloromethane	27	U
78-87-5	1,2-Dichloropropane	27	U
10061-01-5	cis-1,3-Dichloropropene	27	U
79-01-6	Trichloroethene	27	U
124-48-1	Dibromochloromethane	27	U
79-00-5	1,1,2-Trichloroethane	27	U
71-43-2	Benzene	27	U
10061-02-6	trans-1,3-Dichloropropene	27	U
75-25-2	Bromoform	27	U
108-10-1	4-Methyl-2-Pentanone	27	U
591-78-6	2-Hexanone	27	U
127-18-4	Tetrachloroethene	27	U
79-34-5	1,1,2,2-Tetrachloroethane	27	U
108-88-3	Toluene	27	U
108-90-7	Chlorobenzene	27	U
100-41-4	Ethylbenzene	27	U
100-42-5	Styrene	27	U
1330-20-7	Xylene (Total)	27	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFF28

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815016

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015016B52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 63 Date Analyzed: 07/29/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.98	60	JB
2.				
3.				
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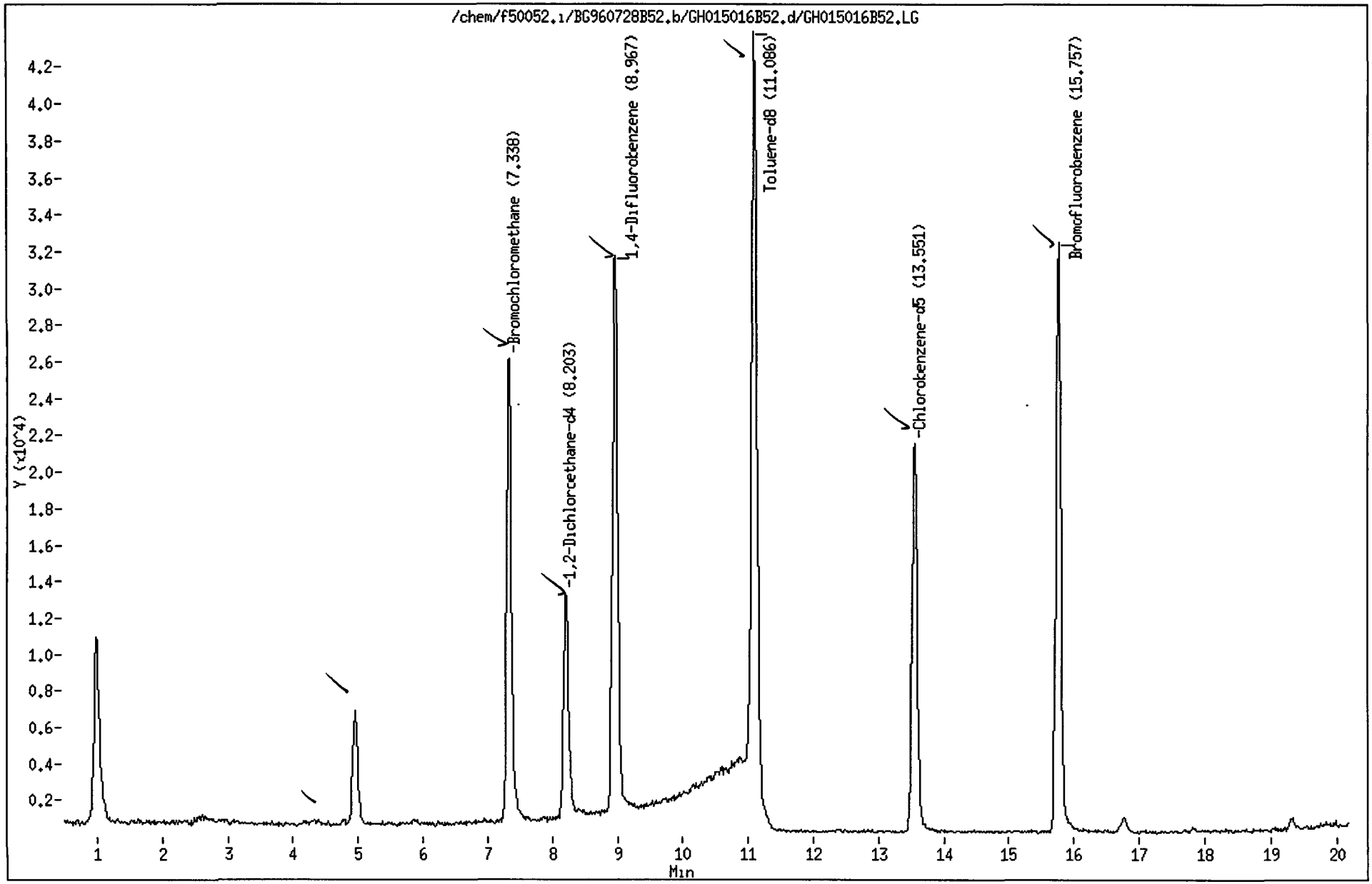
Data File: /chem/f50052.1/BG960728B52.b/GH015016B52.d
Date : 29-JUL-1996 01:19
Client ID: FFF28
Sample Info:

Column phase: DB624

Instrument: f50052.1

Operator: 1948
Column diameter: 0.53



Data File: /chem/f50052.i/BG960728B52.b/GH015016B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960728B52.b/GH015016B52.d
Lab Smp Id: 815016 Client Smp ID: FFF28
Inj Date : 29-JUL-1996 01:19
Operator : 1948 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass Quant Type: ISTD
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	63.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 323	7.309	(1 000)	19337	250 0	
* 2 1,4-Difluorobenzene	114 00	8 967	8 938	(1 000)	66137	250 0	
* 3 Chlorobenzene-d5	117 00	13 551	13 508	(1 000)	41947	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 217	8 188	(1 122)	23866	200 2	108 2
$ 5 Toluene-d8	98.00	11 086	11 071	(0 818)	72174	254 0	137 3
$ 6 Bromofluorobenzene	95.00	15 757	15 728	(1 163)	30696	217.3	117 5
7 Chloromethane	50.00		1 542	Compound Not Detected			
8 Vinyl Chloride	62.00		1 744	Compound Not Detected			
9 Bromomethane	94 00		2.335	Compound Not Detected			
10 Chloroethane	64 00		2 537	Compound Not Detected			
11 1,1-Dichloroethene	96 00		4.036	Compound Not Detected			
12 Carbon Disulfide	76 00		4 152	Compound Not Detected.			
13 Acetone	43.00	4 296	4 296	(0 587)	1160	117 1	63 30(M)
14 Methylene Chloride	84 00	4 959	4 930	(0 677)	7665	65 52	35.42
15 trans-1,2-Dichloroethene	96 00		5 348	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96.00		6 963	Compound Not Detected			
18 2-Butanone	43.00		7 136	Compound Not Detected			
19 Chloroform	83 00		7 539	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7 640	Compound Not Detected			
21 Carbon Tetrachloride	117.00		7 871	Compound Not Detected			
22 Benzene	78.00		8 188	Compound Not Detected			

SLB 7/29/96

Data File: /chem/f50052.i/BG960728B52.b/GH015016B52.d
Report Date: 29-Jul-1996 16:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62.00		8.289		Compound Not Detected.		
	24 Trichloroethene	130.00		9.226		Compound Not Detected.		
	25 1,2-Dichloropropane	63.00		9.543		Compound Not Detected.		
	26 Bromodichloromethane	83.00		10.048		Compound Not Detected.		
	27 cis-1,3-Dichloropropene	75.00		10.725		Compound Not Detected.		
	28 4-Methyl-2-Pentanone	43.00		11.100		Compound Not Detected.		
	29 Toluene	91.00		11.158		Compound Not Detected.		
	30 trans-1,3-Dichloropropene	75.00		11.691		Compound Not Detected.		
	31 1,1,2-Trichloroethane	97.00		11.965		Compound Not Detected.		
	32 Tetrachloroethene	164.00		12.037		Compound Not Detected.		
	33 Dibromochloromethane	129.00		12.556		Compound Not Detected.		
	34 2-Hexanone	43.00		12.542		Compound Not Detected.		
	35 Chlorobenzene	112.00		13.565		Compound Not Detected.		
	36 Ethylbenzene	106.00		13.839		Compound Not Detected.		
	37 m,p-Xylene	106.00		14.070		Compound Not Detected.		
	38 o-Xylene	106.00		14.776		Compound Not Detected.		
	39 Styrene	104.00		14.834		Compound Not Detected.		
	40 Bromoform	173.00		15.079		Compound Not Detected.		
	41 1,1,2,2-Tetrachloroethane	83.00		16.175		Compound Not Detected.		
M	42 1,2-Dichloroethene (total)	96.00		1.000		Compound Not Detected.		
M	43 Xylene (Total)	106.00		14.776		Compound Not Detected.		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960728B52.b/GH015016B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960728B52.b/GH015016B52.d
Lab Smp Id: 815016 Client Smp ID: FFF28
Inj Date : 29-JUL-1996 01:19
Operator : 1948 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.323	139780	250.000

	RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)						CAS #		
0 980	62053	111 0	59 99	0			0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: /chem/f50052.1/BG960728B52.b/GH015016B52.d

Date : 29-JUL-1996 01:19

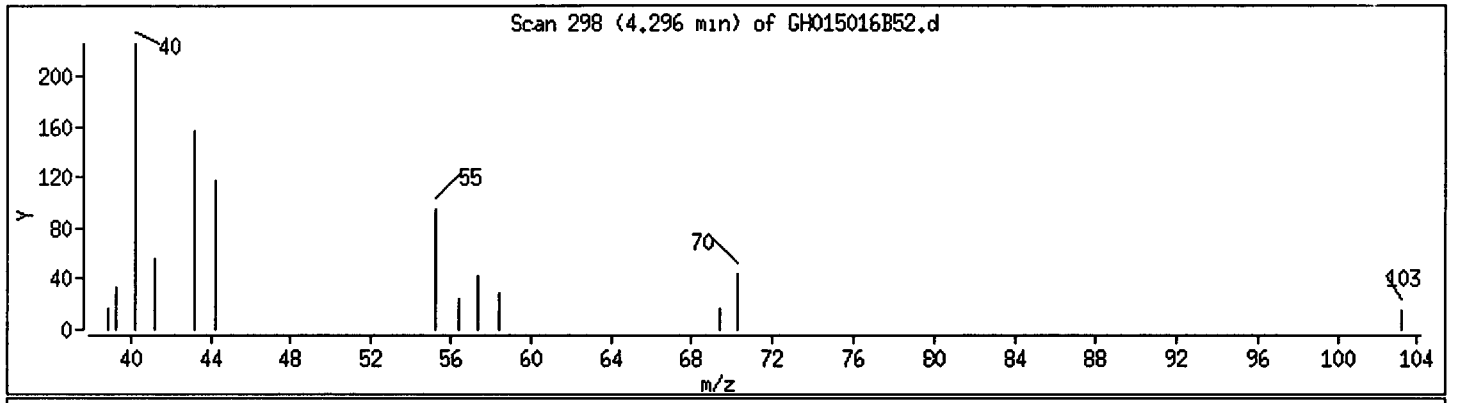
Client ID: FFF28 Instrument: f50052.1

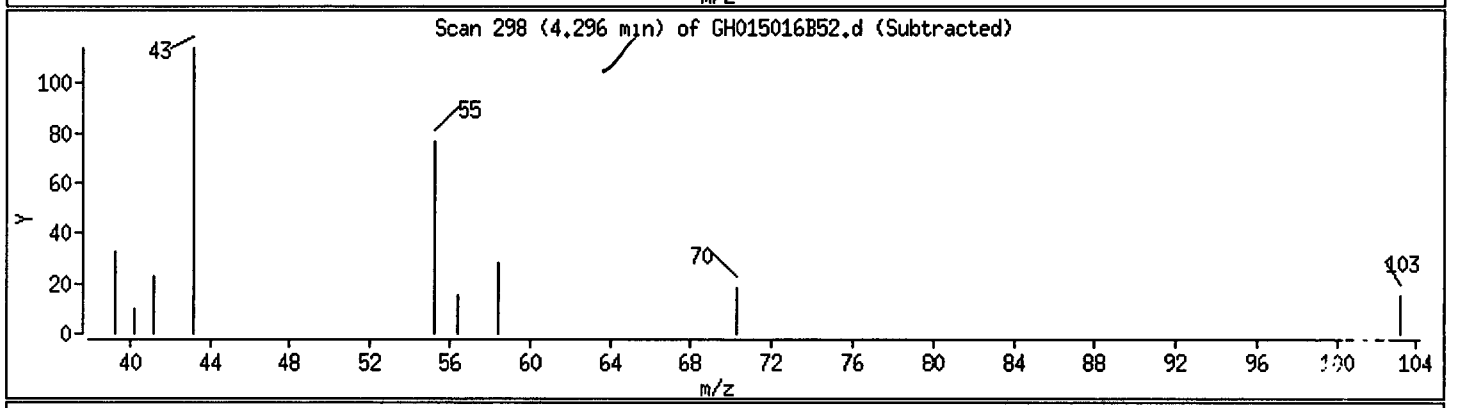
Sample Info:

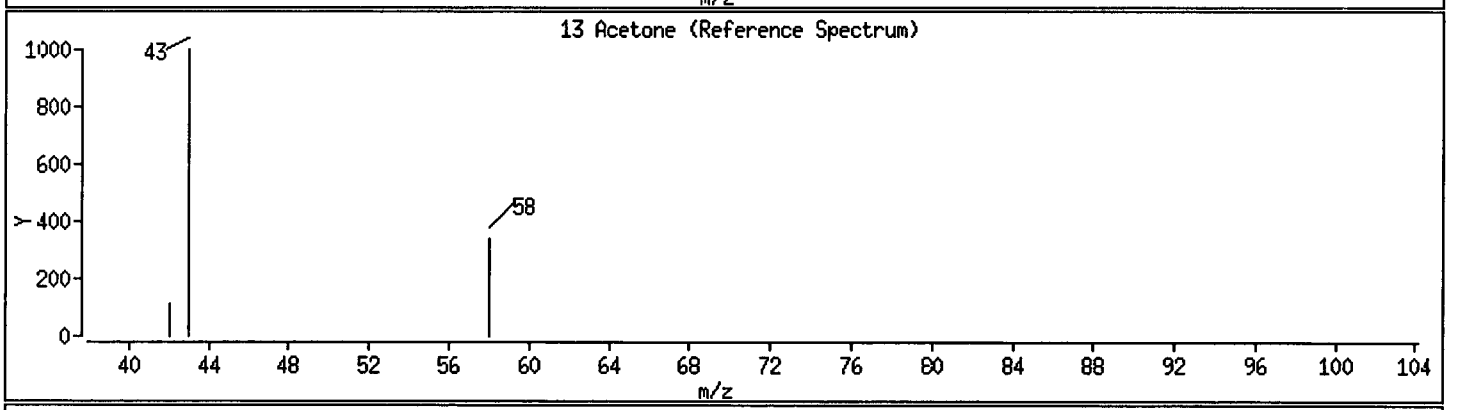
Operator: 1948

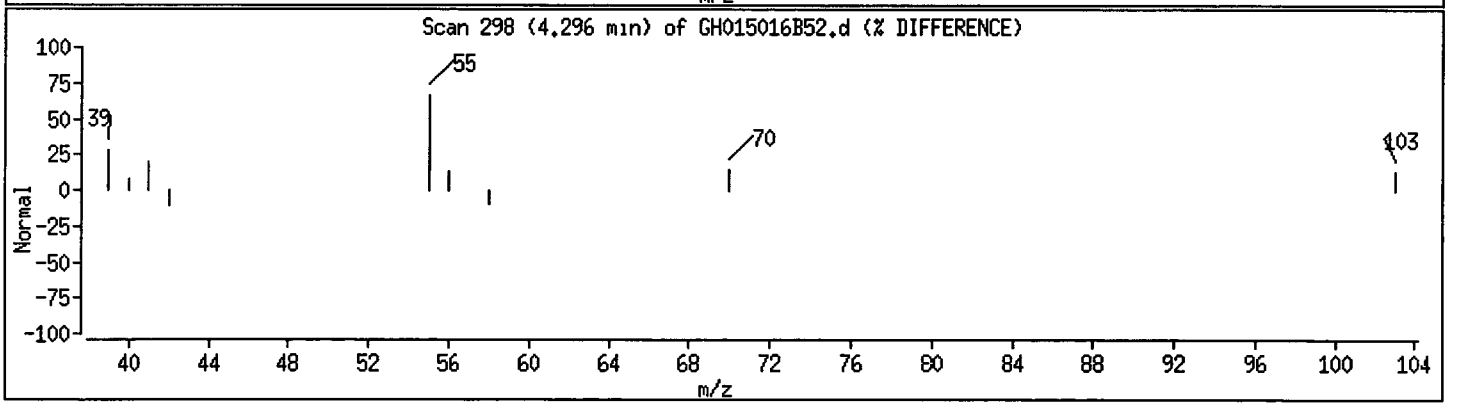
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.i/BG960728B52.b/GH015016B52.d

Date : 29-JUL-1996 01:19

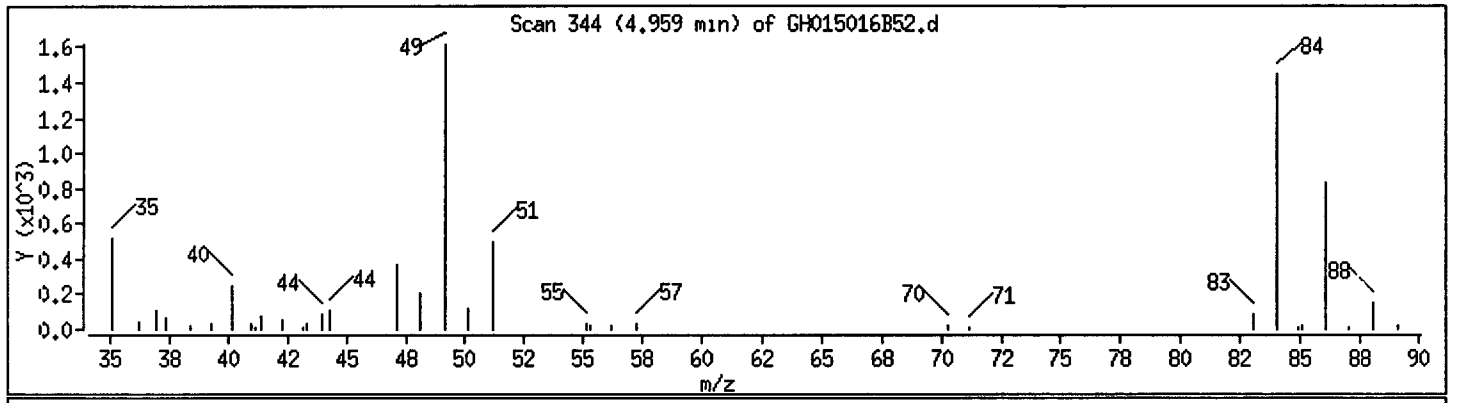
Client ID: FFF28 Instrument: f50052.i

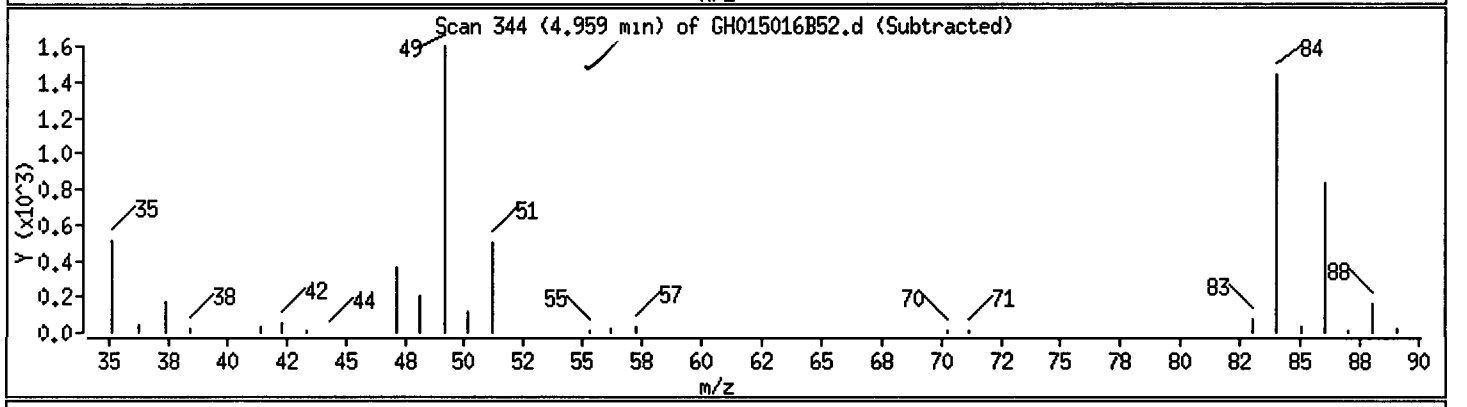
Sample Info:

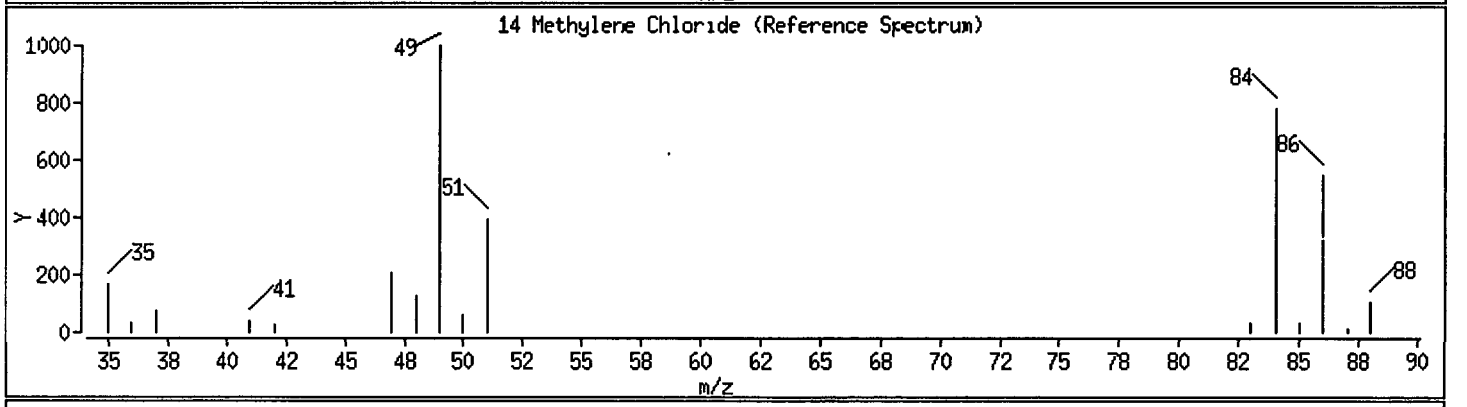
Operator: 1948

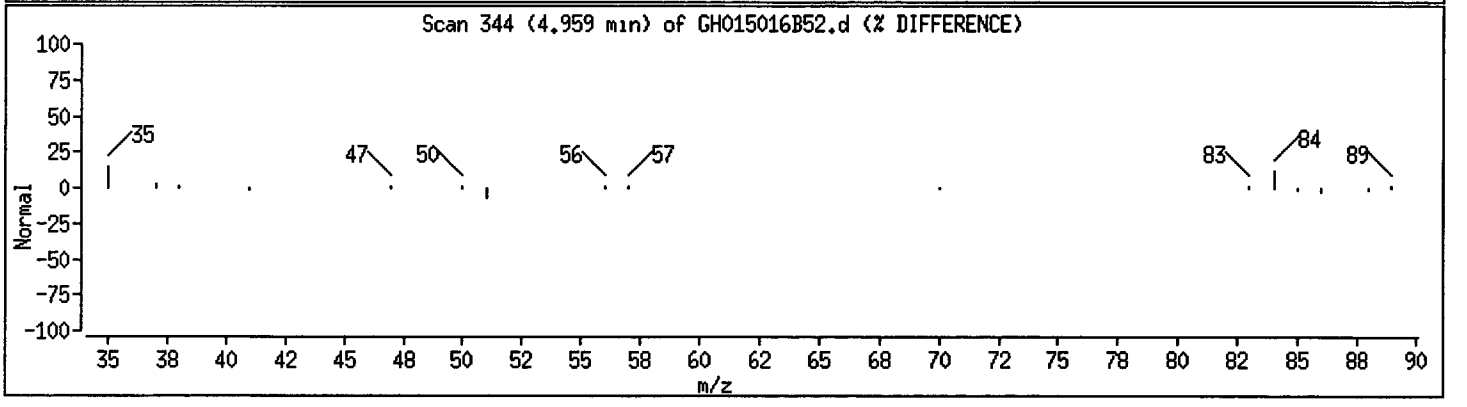
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960728B52.b/GH015016B52.d

Date : 29-JUL-1996 01:19

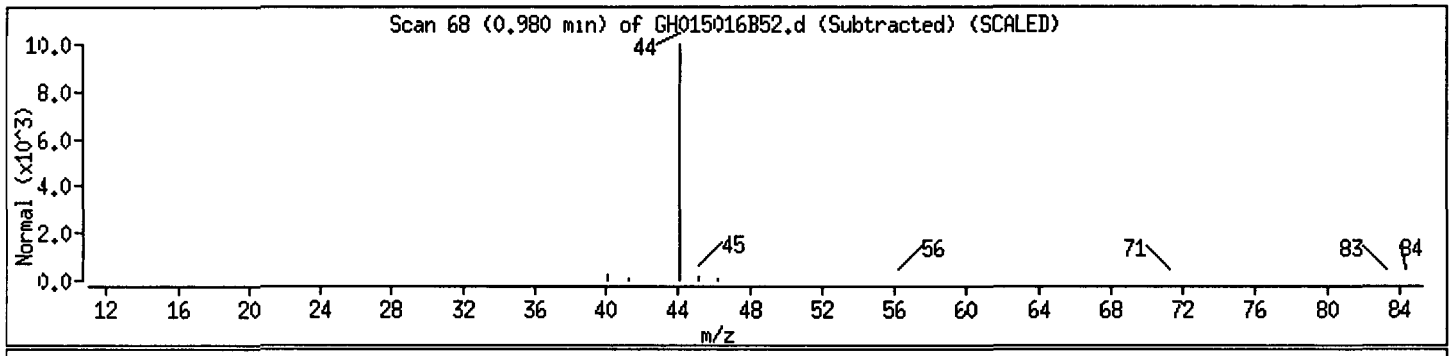
Client ID: FFF28 Instrument: f50052.1

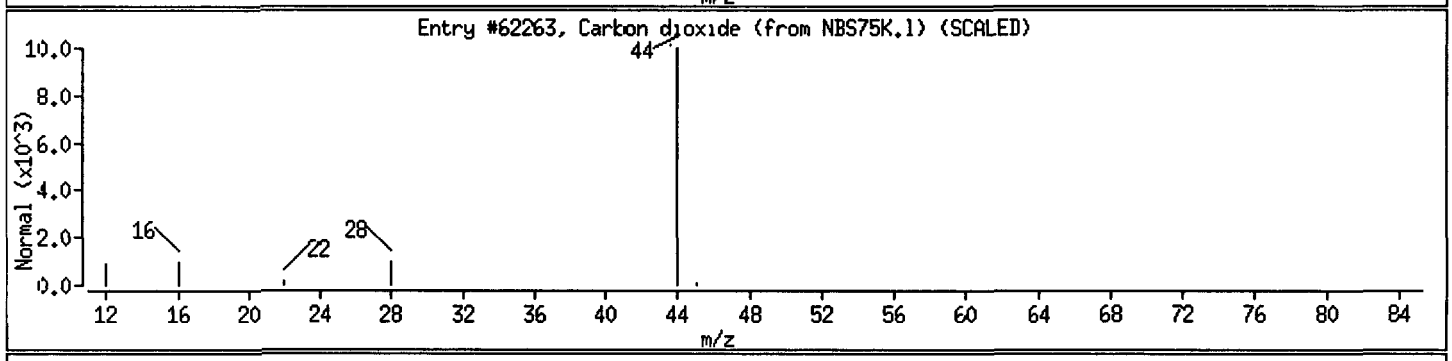
Sample Info:

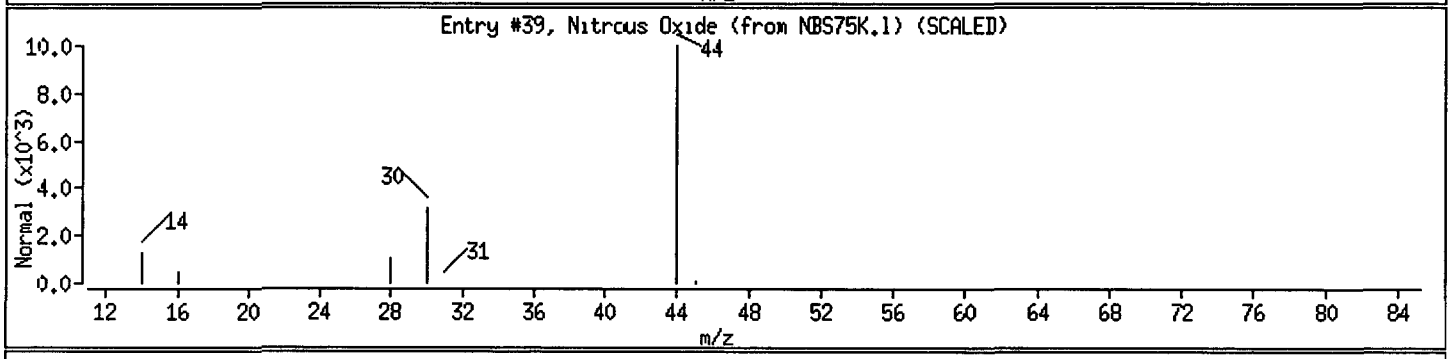
Operator: 1948

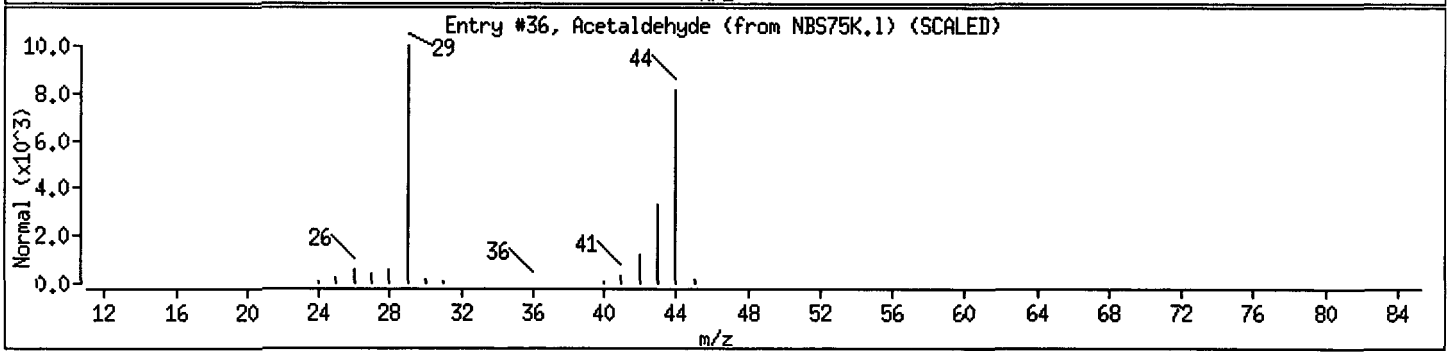
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.1	62263	5	CO2	44
Nitrous Oxide	10024-97-2	NBS75K.1	39	3	N2O	44
Acetaldehyde	75-07-0	NBS75K.1	36	2	C2H4O	44



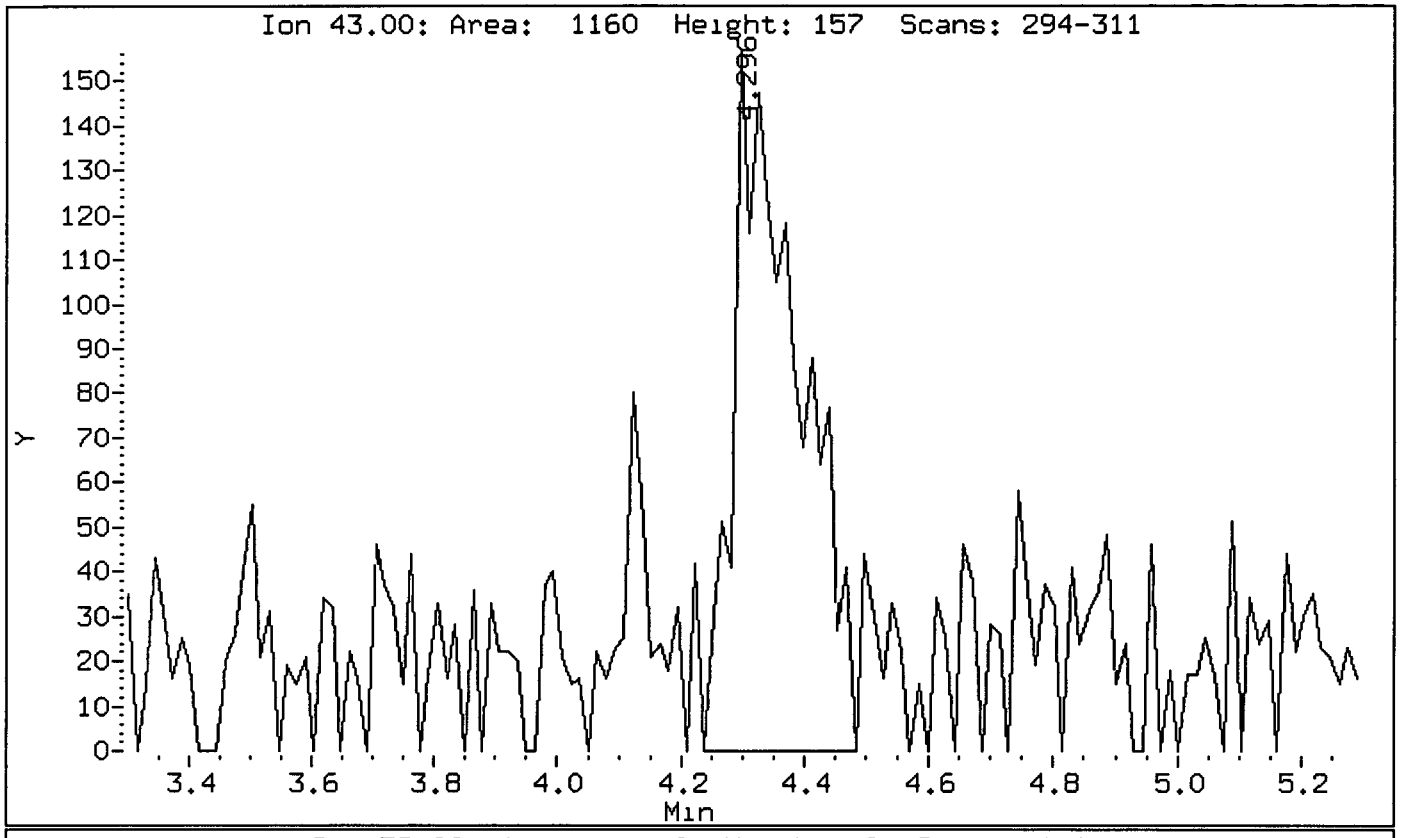


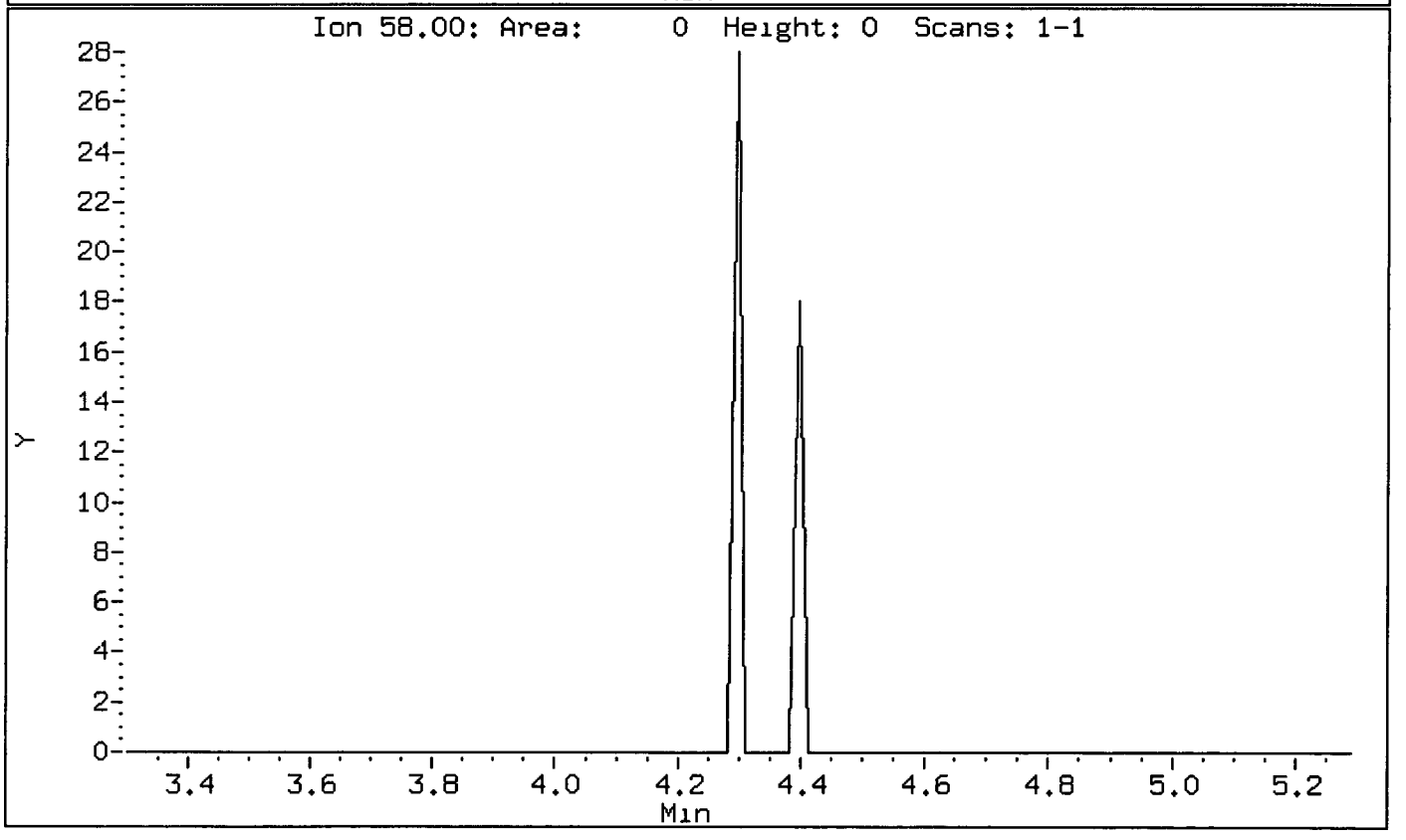




Data File: /chem/f50052.i/BG960728B52.b/GH015016B52.d/GH015016B52.LG
Injection Date: 09-JUL-96 01:19
Instrument: f50052.i
Client Sample ID: FFF28

Compound: Acetone
CAS Number: 67-64-1





LAB INSTRUCTIONS PPS#: _____

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 08/03/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815016
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

Sample date: 072396 Report type: A

SAMPLE ID#: FFF28 Dry Weight Factor 63

GC/MS ANALYSIS 5gm VST 29.96
Amount Purged: [ ] ~~10mls/Xg~~ or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG960728B52 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 1948 VASmith Work-up 1948 VASmith

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review SWBaz Date 7/29/96 Auditor_____ Date____/____/____

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials_____ Date____/____/____

FINAL REVIEW: Initials_____ Date____/____/____

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999	↓	↓	SS	814998	5.0g	FFE82MS	
815000	↓	↓	SS	814998	5.0g	FFE82MSD	
815007	↓	↓			5.0g	FFE84	
815008	↓	↓			5.0g	FFE85	
815009	↓	↓			5.0g	FFE86	
815010	↓	↓			5.0g	FFE87	
815011	↓	↓			5.0g	FFE88	
815012	↓	↓			5.0g	FFE89	
815013	↓	↓			5.0g	FFF25	
815014	↓	↓			5.0g	FFF26	
815015	↓	↓			5.0g	FFF27	
815016	↓	↓			5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997	↓	↓			5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Tom Storage DATE 7/26/96

3. Standards Data

a. Form VI VOA
Initial Calibration Data

b. Form VII VOA
Continuing Calibration Data

a. Form VI VOA

Initial Calibration Data

In order by instrument.

(1) VOA standards reconstructed ion chromatograms and quantitation reports for the initial (five point) calibration. Spectra not required.

(2) All initial calibration data must be included, regardless of when it was performed and for which case. When more than one initial calibration is performed, the data must be put in chronological order, by instrument.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50052 Calibration Date(s): 07/26/96 07/26/96

Heated Purge: (Y/N) Y Calibration Time(s): 0954 1305

GC Column:DB624 ID: 0.53 (mm)

LAB FILE ID: RRF10 =GU960726A52 RRF20 =GX960726A52
RRF50 =GT960726A52 RRF100=GW960726A52 RRF200=GV960726A52

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane		0.898	0.820	1.014	0.794	0.837	0.873	10.1
Bromomethane	*	1.595	1.542	1.734	1.392	1.496	1.552	8.2*
Vinyl Chloride	*	1.086	1.079	1.277	1.022	1.116	1.116	8.6*
Chloroethane		0.553	0.601	0.697	0.569	0.616	0.607	9.2
Methylene Chloride		4.933	3.916	2.487	1.913	1.714	2.993	46.3
Acetone		0.247	0.444	0.178	0.172	0.127	0.234	53.6
Carbon Disulfide		2.997	2.899	3.359	2.770	3.212	3.047	7.8
1,1-Dichloroethene	*	1.037	1.056	1.181	1.009	1.189	1.094	7.7*
1,1-Dichloroethane	*	1.970	1.887	2.058	1.722	1.906	1.909	6.5*
1,2-Dichloroethene (total)		1.106	1.083	1.205	1.027	1.188	1.122	6.6
Chloroform	*	3.108	2.996	3.184	2.804	3.115	3.041	4.9*
1,2-Dichloroethane	*	1.571	1.452	1.607	1.369	1.449	1.490	6.6*
2-Butanone		0.201	0.181	0.180	0.164	0.156	0.176	9.8
1,1,1-Trichloroethane	*	0.891	0.794	0.834	0.744	0.774	0.807	7.1*
Carbon Tetrachloride	*	1.005	0.918	0.952	0.869	0.929	0.935	5.3*
Bromodichloromethane	*	1.076	0.926	0.986	0.880	0.912	0.956	8.1*
1,2-Dichloropropane		0.327	0.292	0.321	0.273	0.286	0.300	7.7
cis-1,3-Dichloropropene	*	0.543	0.472	0.542	0.458	0.492	0.501	7.8*
Trichloroethene	*	0.490	0.438	0.474	0.421	0.448	0.454	6.1*
Dibromochloromethane	*	0.723	0.611	0.687	0.606	0.656	0.657	7.6*
1,1,2-Trichloroethane	*	0.228	0.183	0.218	0.204	0.206	0.208	8.2*
Benzene	*	0.727	0.627	0.665	0.580	0.606	0.641	8.9*
trans-1,3-Dichloropropene	*	0.325	0.178	0.233	0.400	0.348	0.297	30.3*
Bromoform	*	0.627	0.555	0.551	0.509	0.504	0.549	9.0*
4-Methyl-2-Pentanone		0.761	0.810	0.693	0.564	0.499	0.665	19.7
2-Hexanone		0.167	0.126	0.120	0.102	0.110	0.125	20.1
Tetrachloroethene	*	0.815	0.733	0.754	0.712	0.681	0.739	6.8*
1,1,2,2-Tetrachloroethane	*	0.763	0.614	0.608	0.589	0.555	0.626	12.8*
Toluene	*	1.833	1.551	1.557	1.427	1.374	1.548	11.5*
Chlorobenzene	*	1.039	0.891	0.920	0.852	0.880	0.916	7.9*
Ethylbenzene	*	0.421	0.382	0.406	0.356	0.370	0.387	6.8*
Styrene	*	0.779	0.684	0.745	0.644	0.672	0.705	7.9*
Xylene (Total)	*	0.522	0.456	0.495	0.455	0.462	0.478	6.2*
Toluene-d8		2.169	1.918	1.623	1.570	1.466	1.749	16.5
Bromofluorobenzene	*	1.135	1.004	0.897	0.850	0.870	0.951	12.5*
1,2-Dichloroethane-d4		1.905	1.725	1.552	1.427	1.500	1.622	11.9

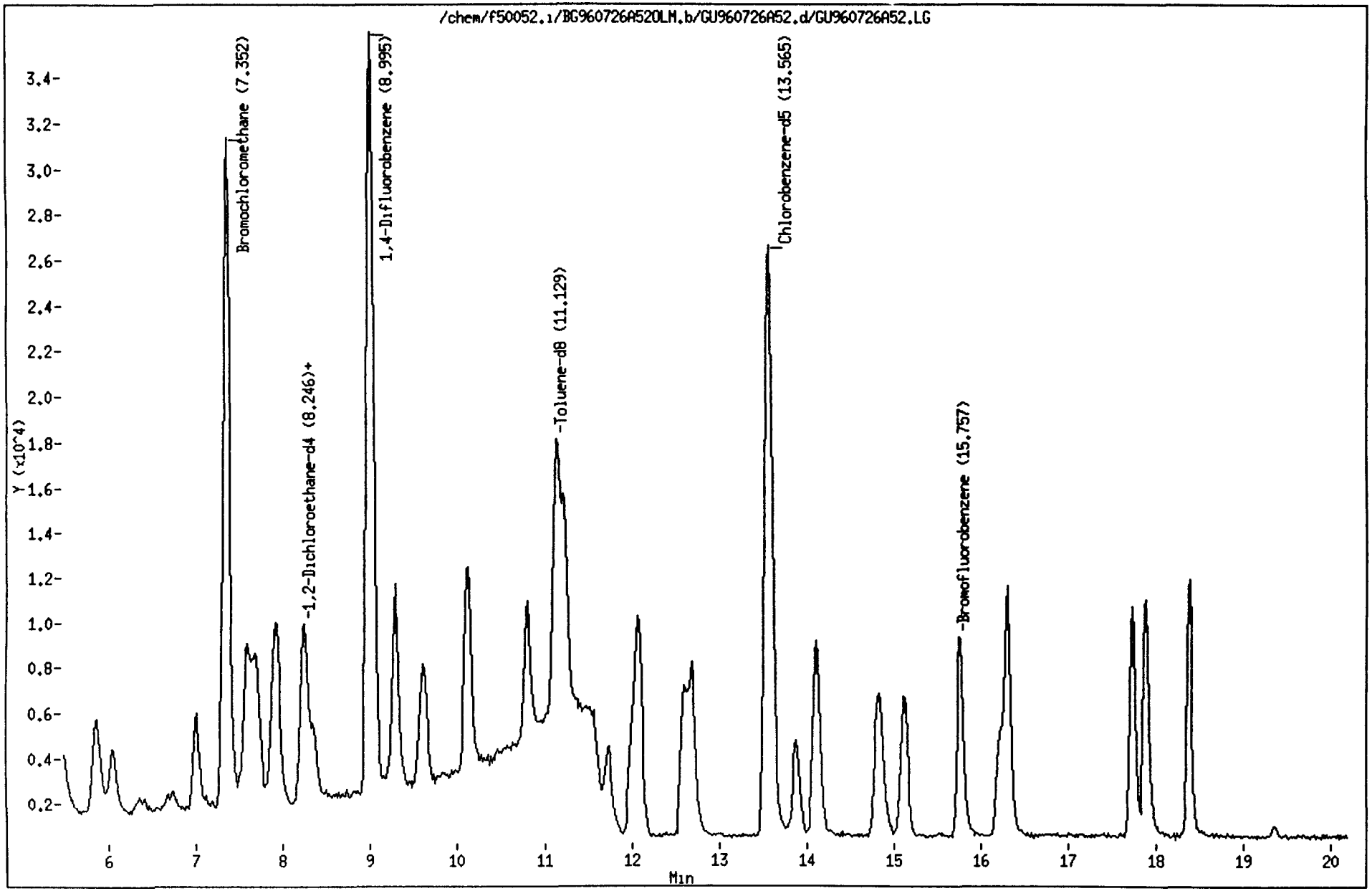
* Compounds with required minimum and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/f50052.i/BG960726A52OLM.b/GU960726A52.d
Date : 26-JUL-1996 10:47
Client ID: VSTD010KL
Sample Info: VSTD010KL:2141:1:

Column phase: DB624

Instrument: f50052.i

Operator: 2141
Column diameter: 0.53



copy original in 24893-FFE91 SWB 7/30/96 219

Data File: /chem/f50052.i/BG960726A52OLM.b/GU960726A52.d
Report Date: 29-Jul-1996 12:56

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960726A52OLM.b/GU960726A52.d
Lab Smp Id: VSTD010KL Client Smp ID: VSTD010KL
Inj Date : 26-JUL-1996 10:47
Operator : 2141 Inst ID: f50052.i
Smp Info : VSTD010KL:2141:1:
Misc Info :
Comment :
Method : /chem/f50052.i/BG960726A52OLM.b/SOLM03.1.m
Meth Date : 29-Jul-1996 12:56 bevan Quant Type: ISTD
Cal Date : 26-JUL-1996 09:54 Cal File: GT960726A52.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	7 352	7 352	(1.000)	20568	250 0	
* 2 1,4-Difluorobenzene	114 00	8 995	8 995	(1 000)	73214	250 0	
* 3 Chlorobenzene-d5	117 00	13.551	13 551	(1.000)	41507	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 231	8 231	(1.120)	7836	50 00	55 10
$ 5 Toluene-d8	98 00	11.129	11 129	(0 821)	18003	50.00	57 20
$ 6 Bromofluorobenzene	95 00	15 757	15 757	(1 163)	9422	50 00	55 84
7 Chloromethane	50 00	1 312	1 312	(0 178)	3695	50 00	46 96(aM) 2
8 Vinyl Chloride	62 00	1 557	1 557	(0.212)	4469	50 00	45 96(aM) 2
9 Bromomethane	94.00	2.307	2 307	(0.314)	6562	50 00	47 91(aM) 2
10 Chloroethane	64 00	2.480	2 480	(0.337)	2274	50.00	44.22(aM) 2
11 1,1-Dichloroethene	96 00	4.036	4 036	(0 549)	4267	50 00	46 76(aM) 2
12 Carbon Disulfide	76 00	4 166	4 166	(0 567)	12327	50.00	47 15(a)
13 Acetone	43.00	4.339	4.339	(0 590)	1017	50 00	58 06(M) 2
14 Methylene Chloride	84.00	4 930	4.930	(0.671)	20294	50.00	66 48
15 trans-1,2-Dichloroethene	96.00	5.363	5 363	(0 729)	4281	50.00	48 12(a)
16 1,1-Dichloroethane	63.00	6.055	6.055	(0.824)	8106	50.00	48.92(a)
17 cis-1,2-Dichloroethene	96.00	7.006	7.006	(0 953)	4816	50.00	47 61(a)
18 2-Butanone	43 00	7 194	7 194	(0 978)	827	50.00	52 79(M) 2
19 Chloroform	83.00	7 583	7.583	(1.031)	12786	50 00	49 40(a)
20 1,1,1-Trichloroethane	97.00	7.684	7 684	(0.854)	13041	50.00	51 62
21 Carbon Tetrachloride	117 00	7 914	7.914	(0 880)	14711	50 00	51 34
22 Benzene	78 00	8 260	8 260	(0 918)	10642	50 00	52.21

Data File: /chem/f50052.i/BG960726A52OLM.b/GU960726A52.d
Report Date: 29-Jul-1996 12:56

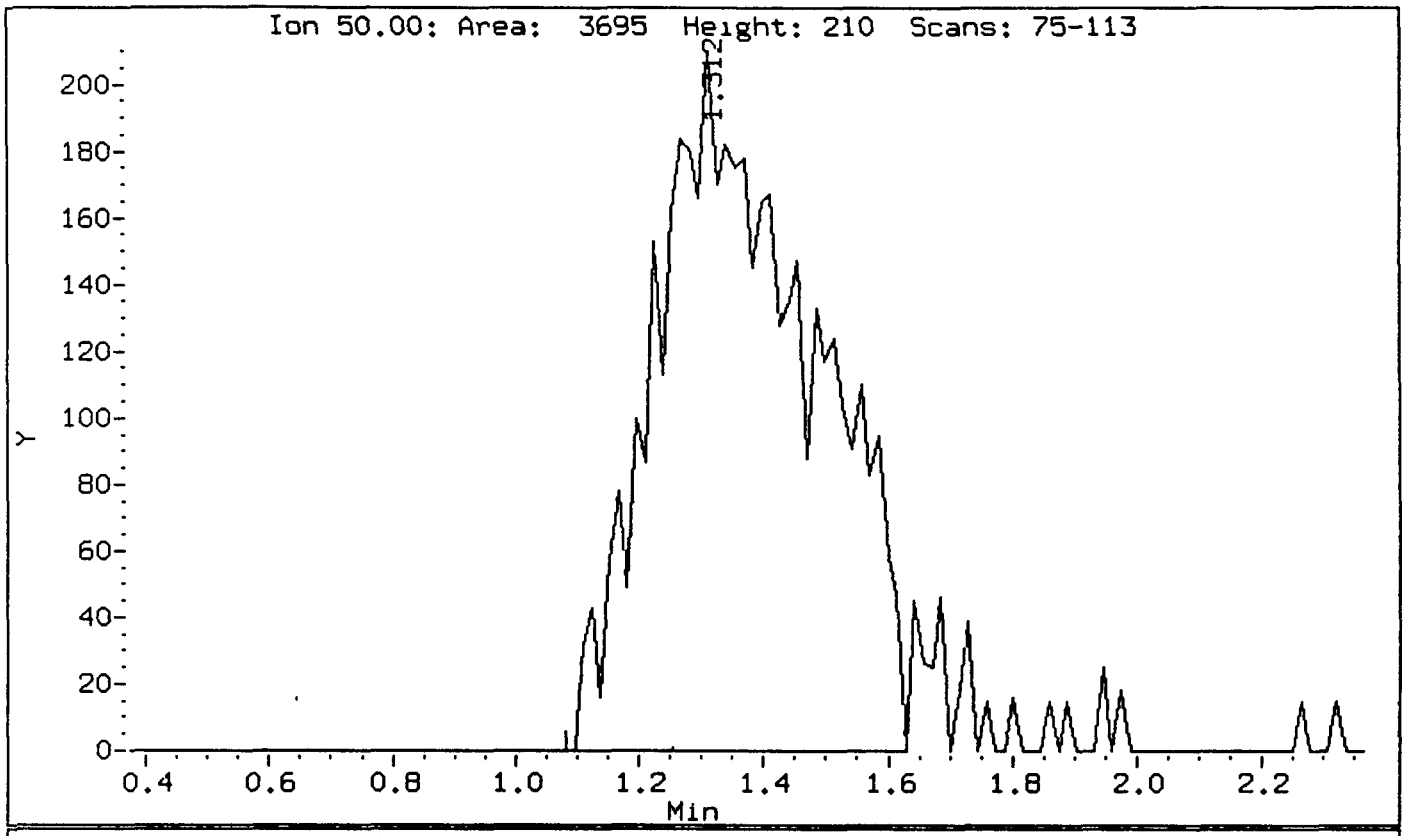
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	8 347	8 347	(1 135)	6464	50 00	49 44(a)
24 Trichloroethene	130 00	9 284	9 284	(1 032)	7182	50 00	50 85
25 1,2-Dichloropropane	63 00	9 615	9 615	(1 069)	4788	50.00	50 49
26 Bromodichloromethane	83 00	10 120	10 120	(1 125)	15764	50.00	52 21
27 cis-1,3-Dichloropropene	75.00	10 797	10 797	(1 200)	7946	50 00	50 02
28 4-Methyl-2-Pentanone	43 00	11 172	11 172	(0 824)	6319	50 00	52 33(M) 2
29 Toluene	91 00	11.230	11 230	(0 829)	15218	50.00	54 07
30 trans-1,3-Dichloropropene	75 00	11 734	11.734	(1 304)	4759	50 00	58 27
31 1,1,2-Trichloroethane	97.00	11 994	11 994	(1.333)	3340	50.00	51 07
32 Tetrachloroethene	164.00	12 080	12 080	(0 891)	6765	50 00	51 94
33 Dibromochloromethane	129 00	12 599	12.599	(1 401)	10589	50 00	51 27
34 2-Hexanone	43 00	12 571	12 571	(0 928)	1385	50 00	58 26
35 Chlorobenzene	112 00	13 594	13 594	(1 003)	8624	50 00	53 04
36 Ethylbenzene	106 00	13 868	13 868	(1 023)	3494	50 00	50 90
37 m,p-Xylene	106 00	14 113	14 113	(1 041)	8567	100 0	101 5
38 o-Xylene	106 00	14 791	14.791	(1 091)	4331	50 00	51 30
39 Styrene	104 00	14 863	14.863	(1 097)	6465	50 00	51 10
40 Bromoform	173 00	15 108	15.108	(1 679)	9187	50 00	53 23
41 1,1,2,2-Tetrachloroethane	83 00	16 203	16.203	(1 196)	6336	50 00	55.67
M 42 1,2-Dichloroethene (total)	96 00				9097	100 0	95 70
M 43 Xylene (Total)	106 00				12898	50 00	152 8

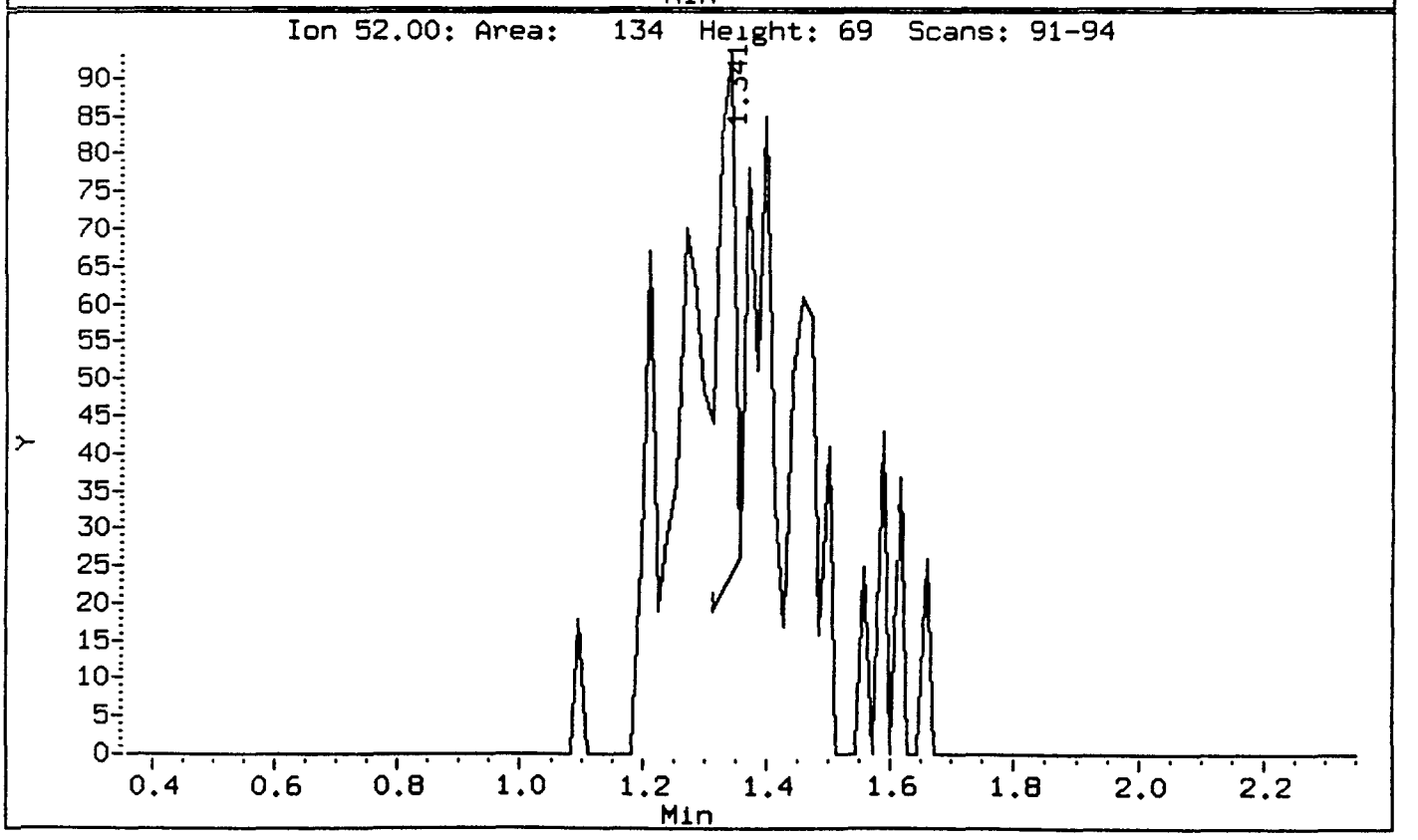
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960726A52OLM.b/GU960726A52.d/GU960726A52.LG
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: Chloromethane
CAS Number: 74-87-3





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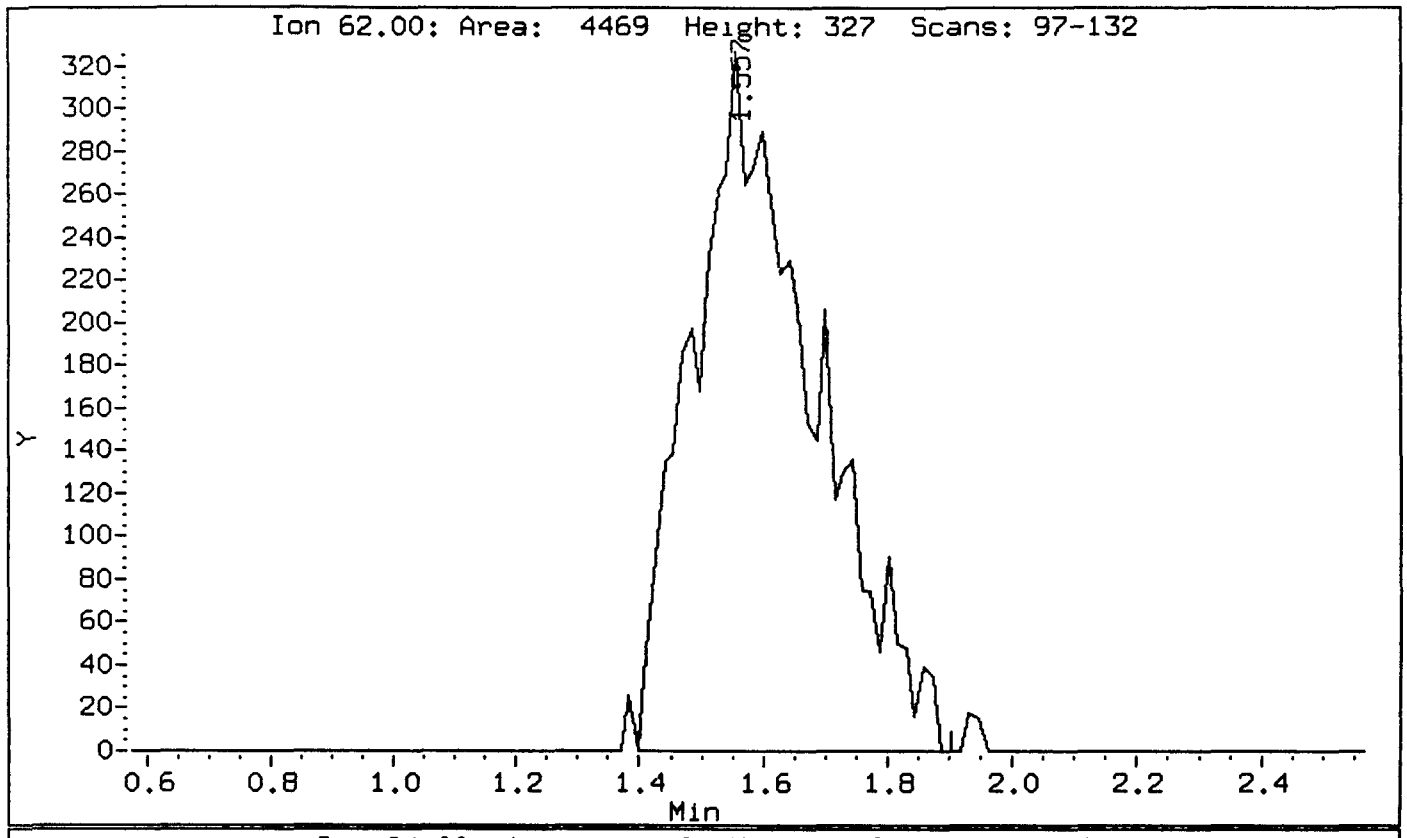
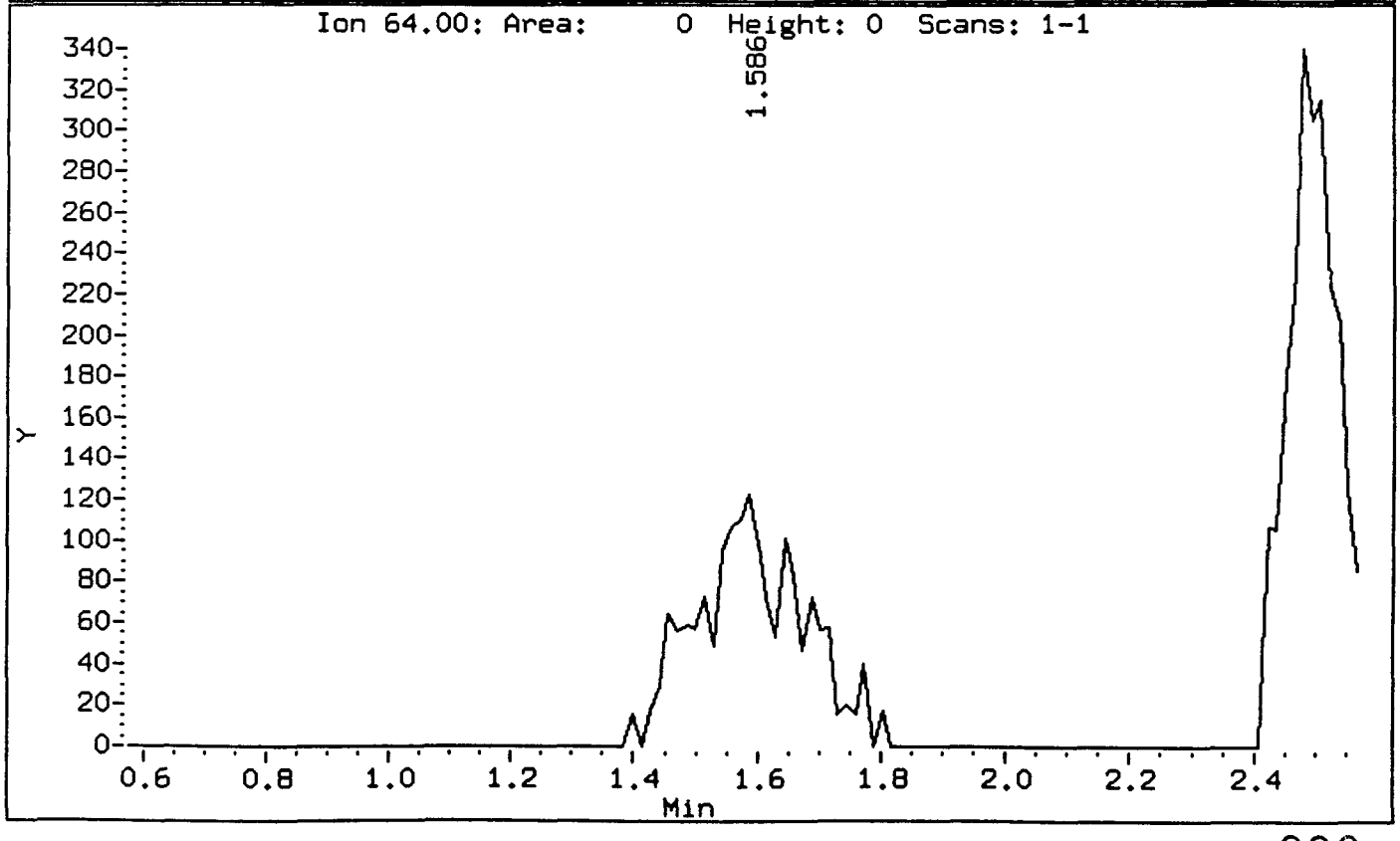
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: Vinyl Chloride
CAS Number: 75-01-4





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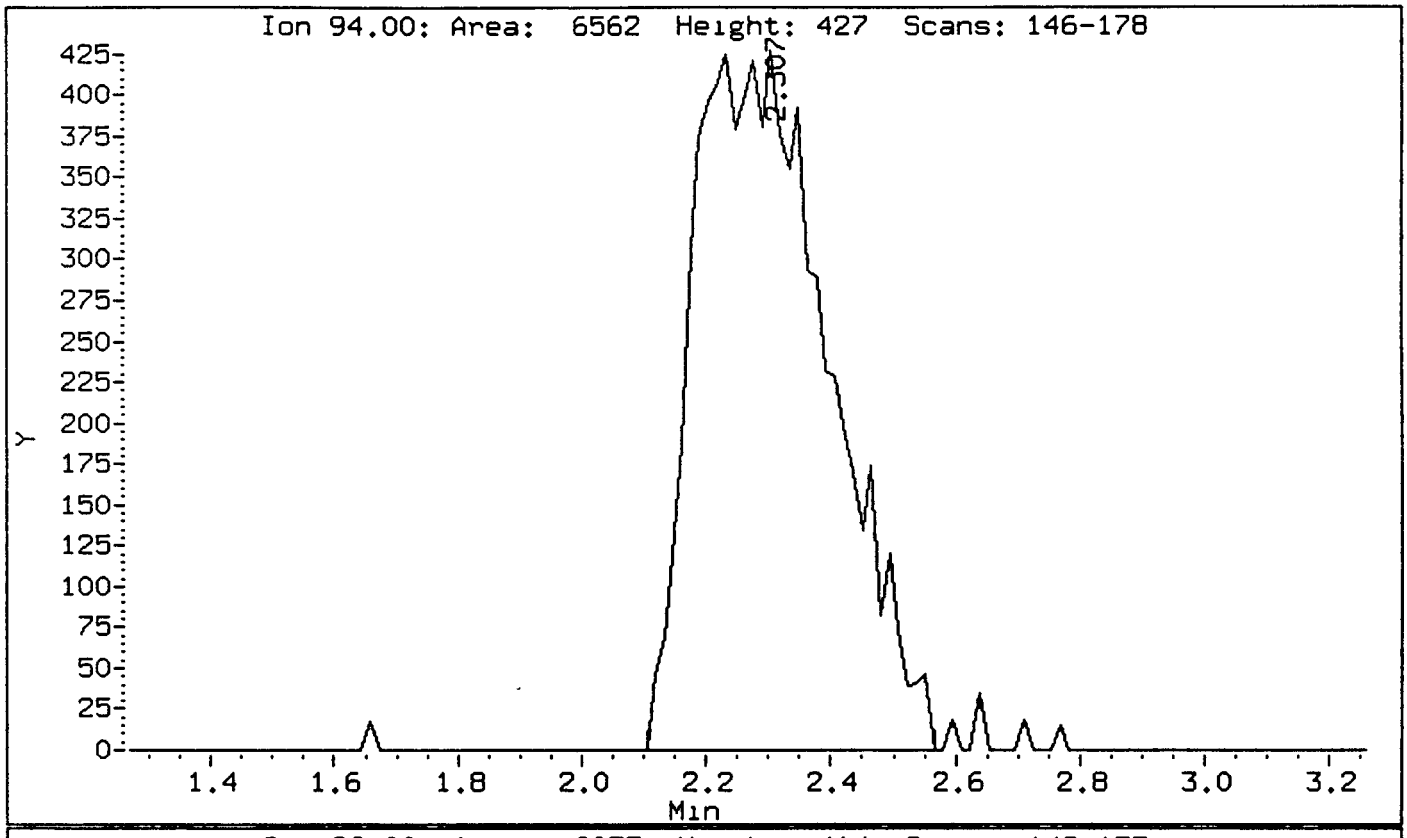
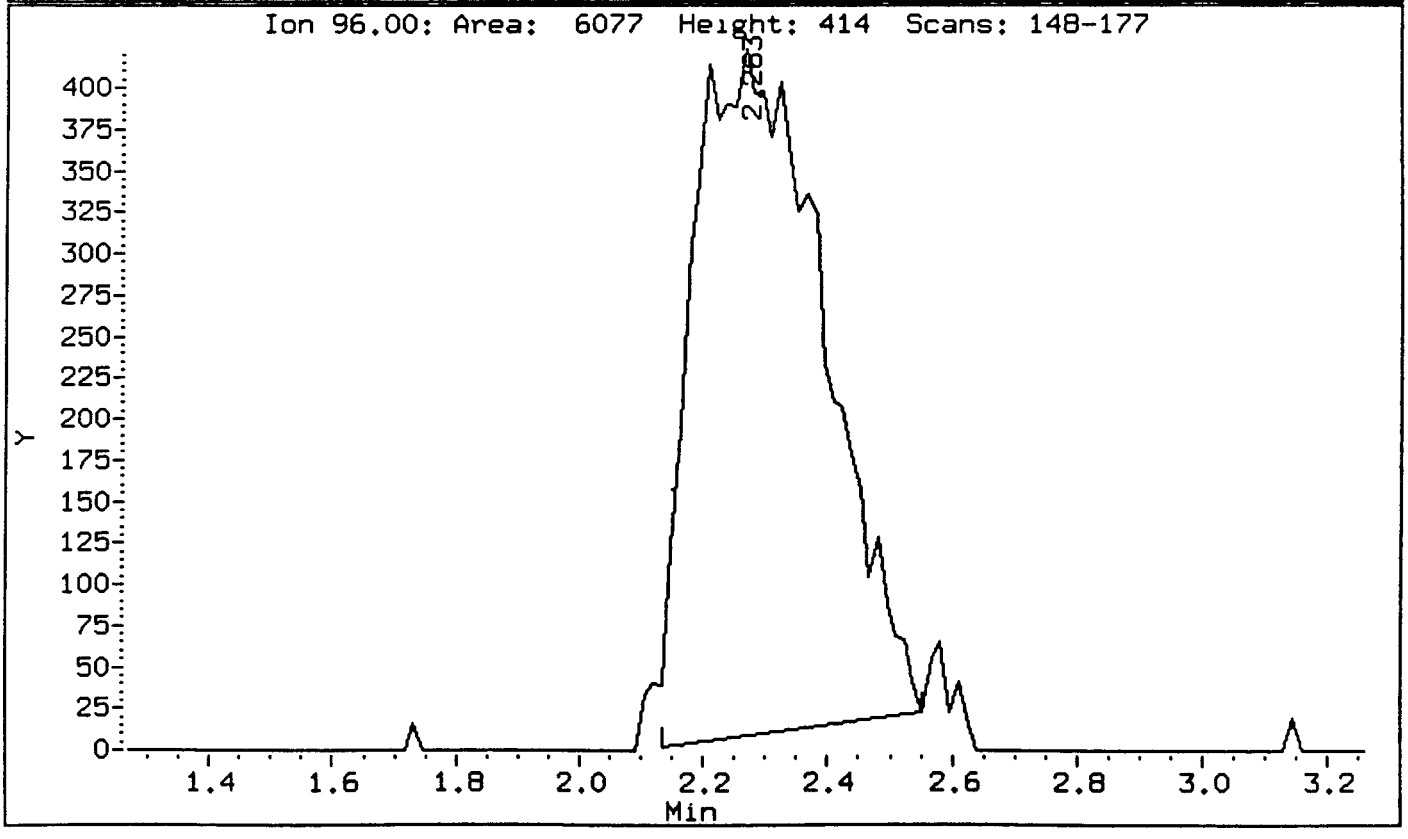
Injection Date: 26-JUL-96 10:47
Instrument: f50052.1
Client Sample ID: VSTD010KL

Compound: Bromomethane
CAS Number: 74-83-9





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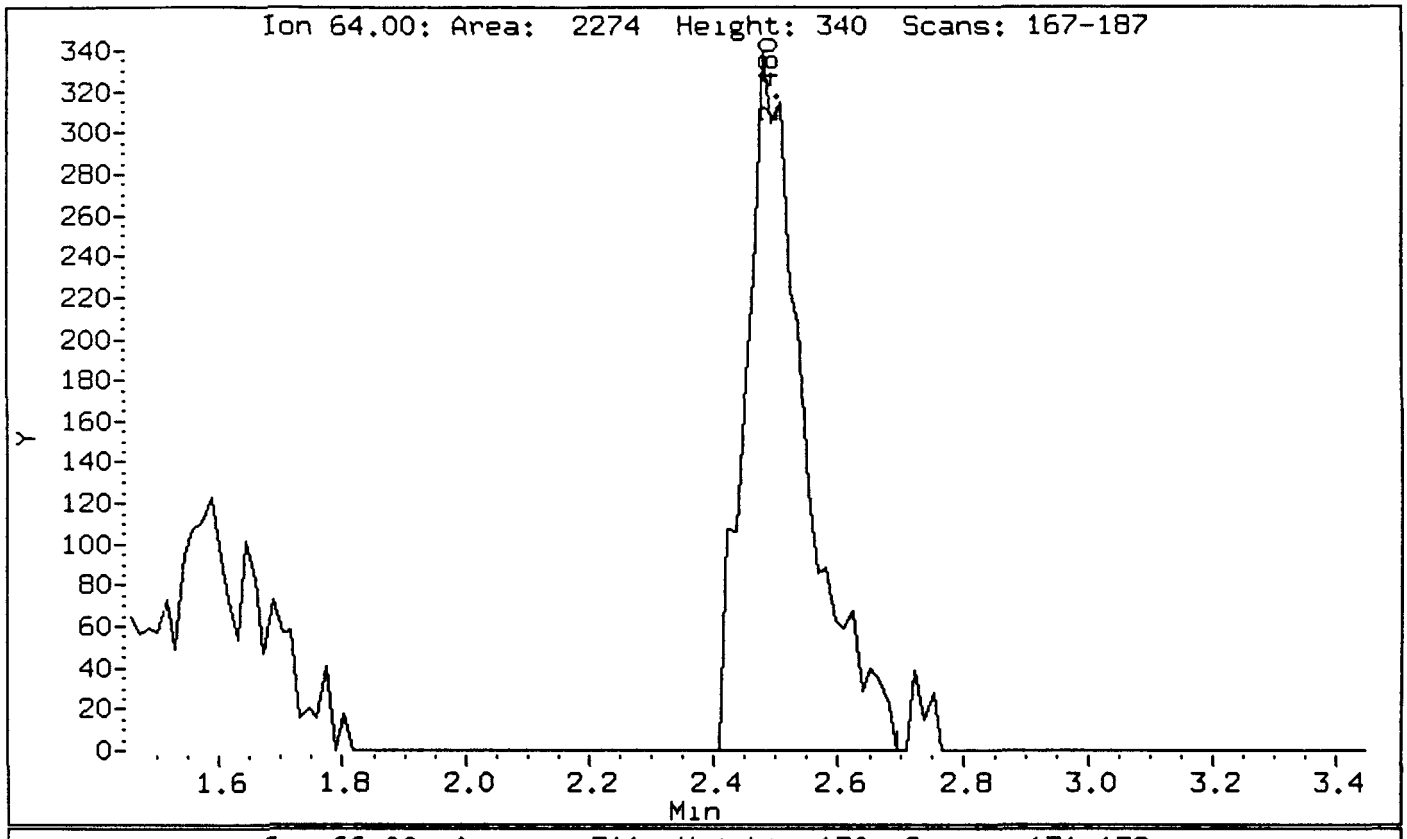
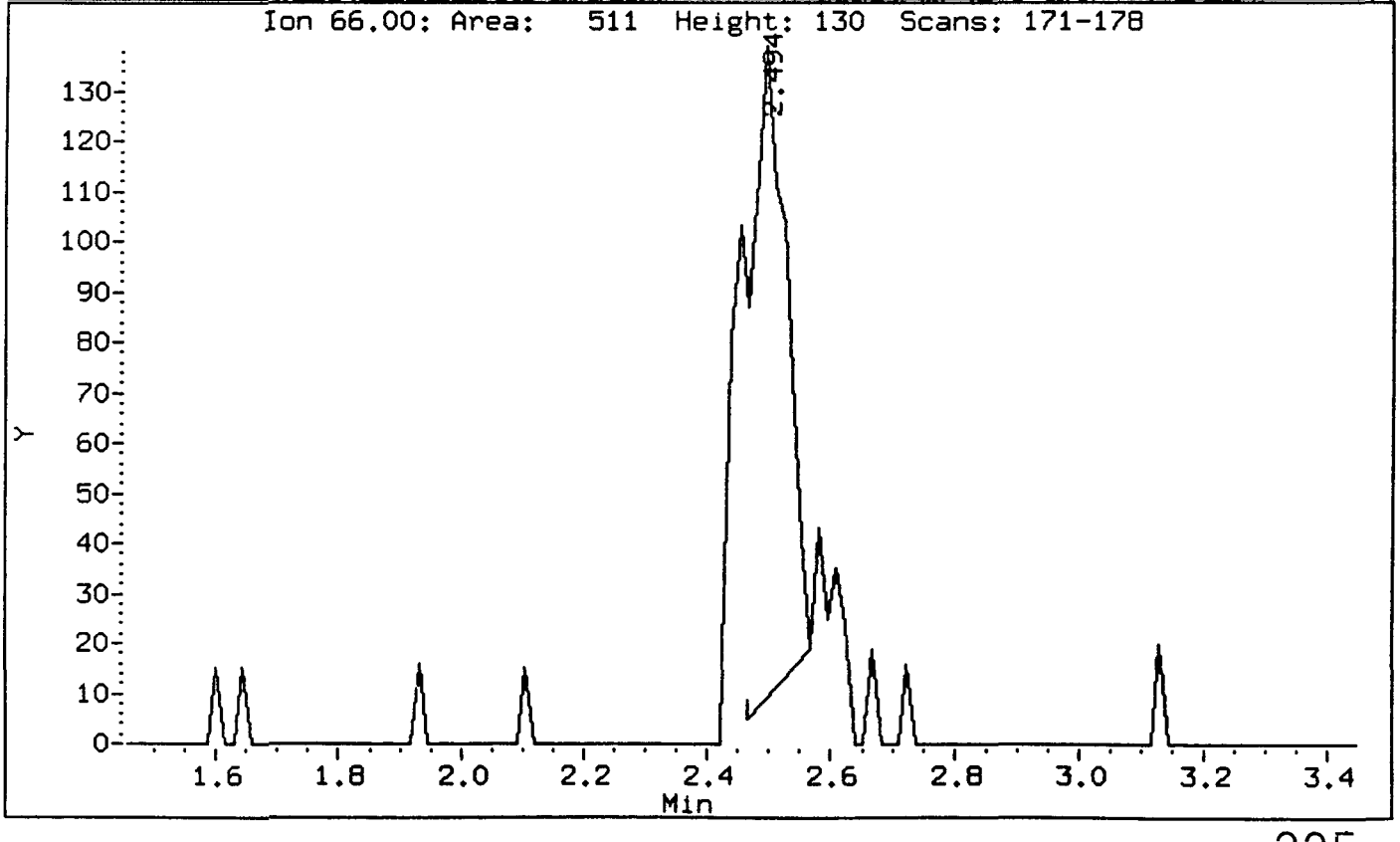
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: Chloroethane
CAS Number: 75-00-3





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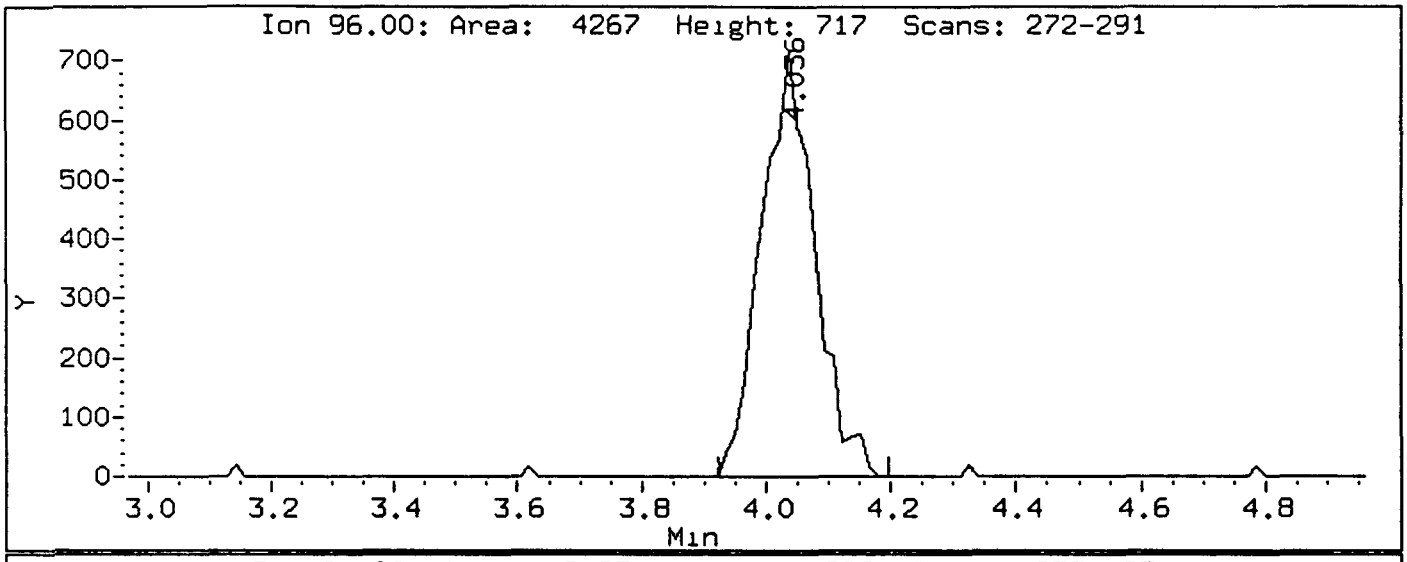
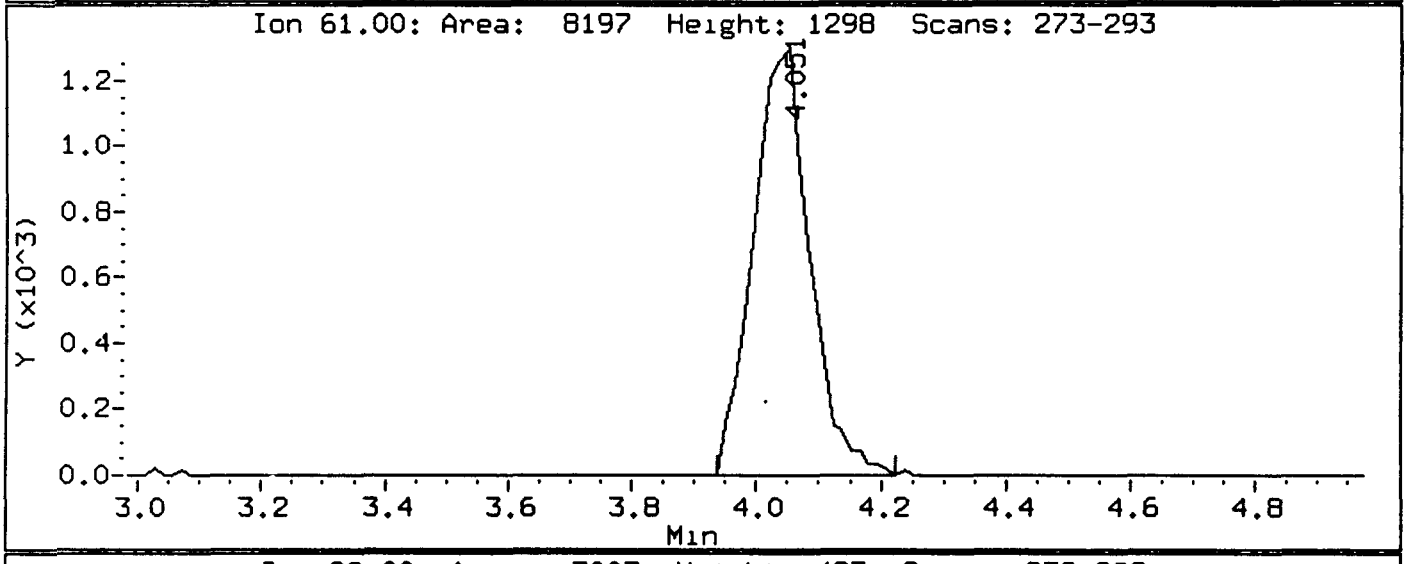
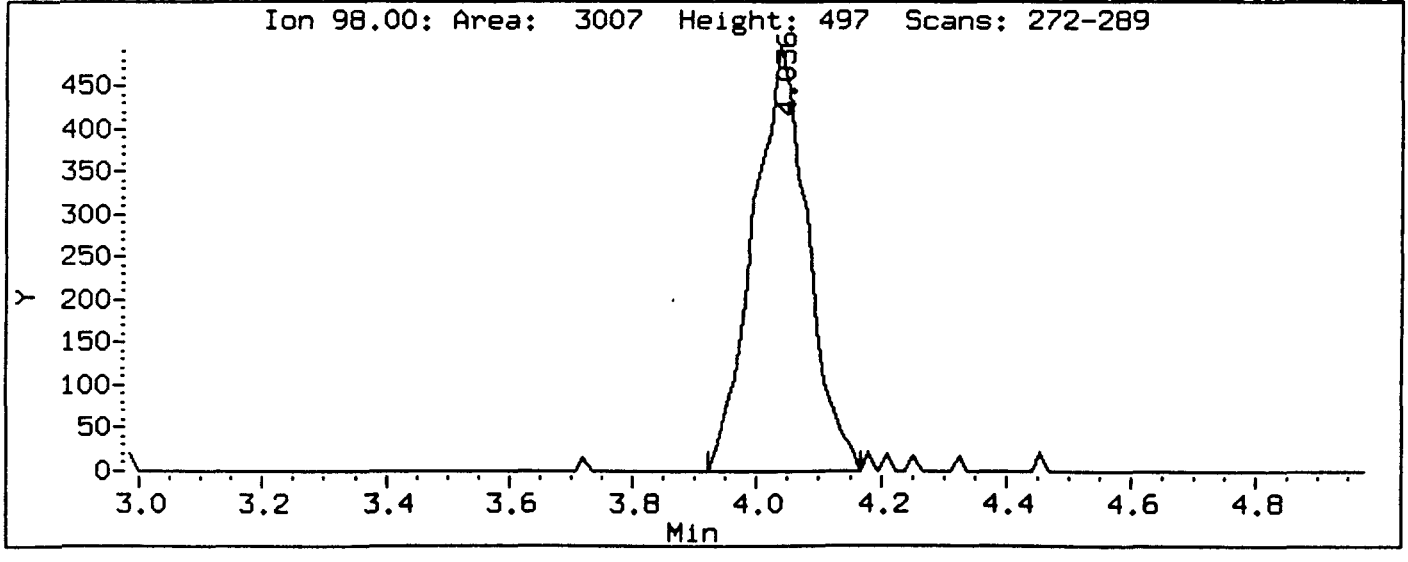
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: 1,1-Dichloroethene
CAS Number: 75-35-4







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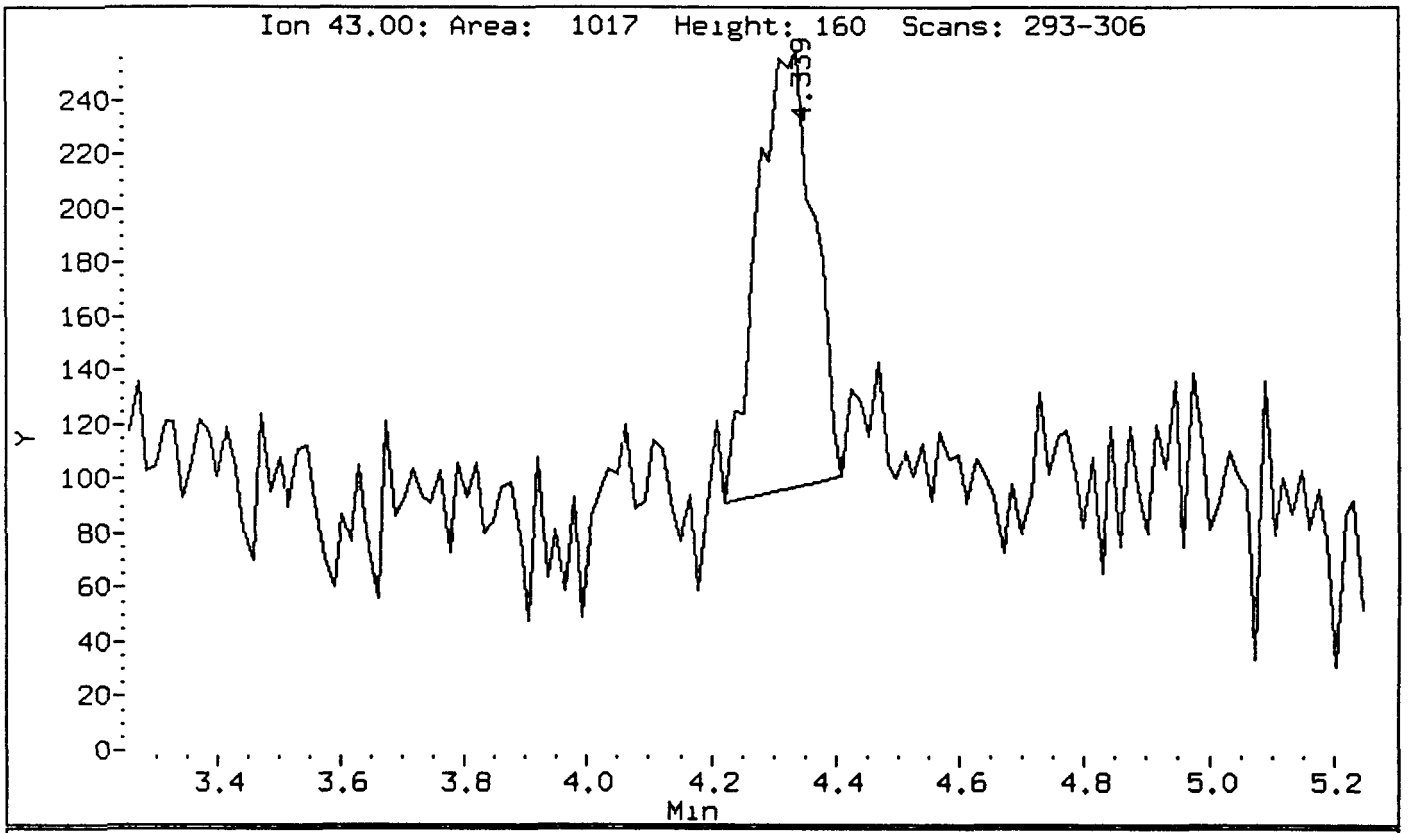
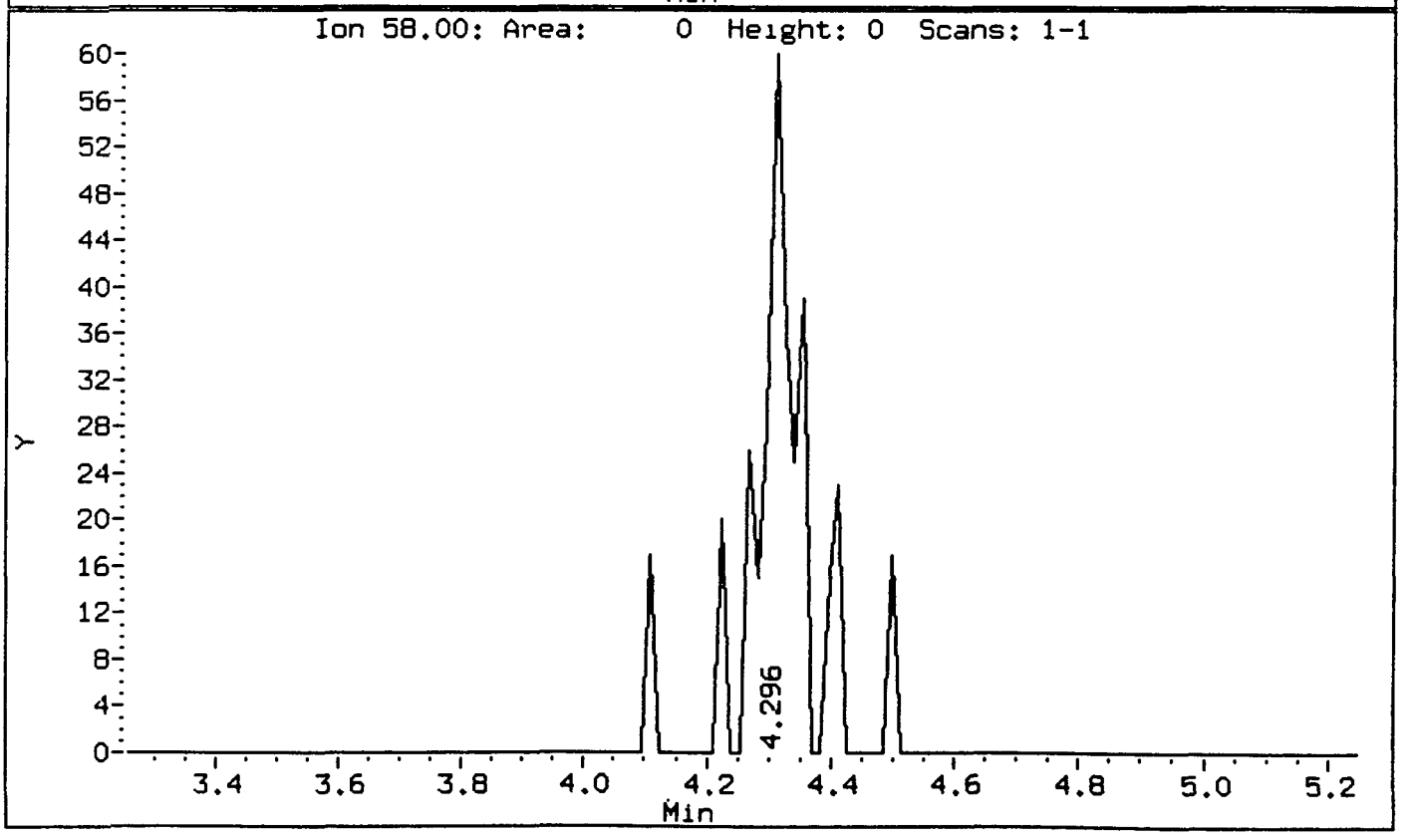
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: Acetone
CAS Number: 67-64-1





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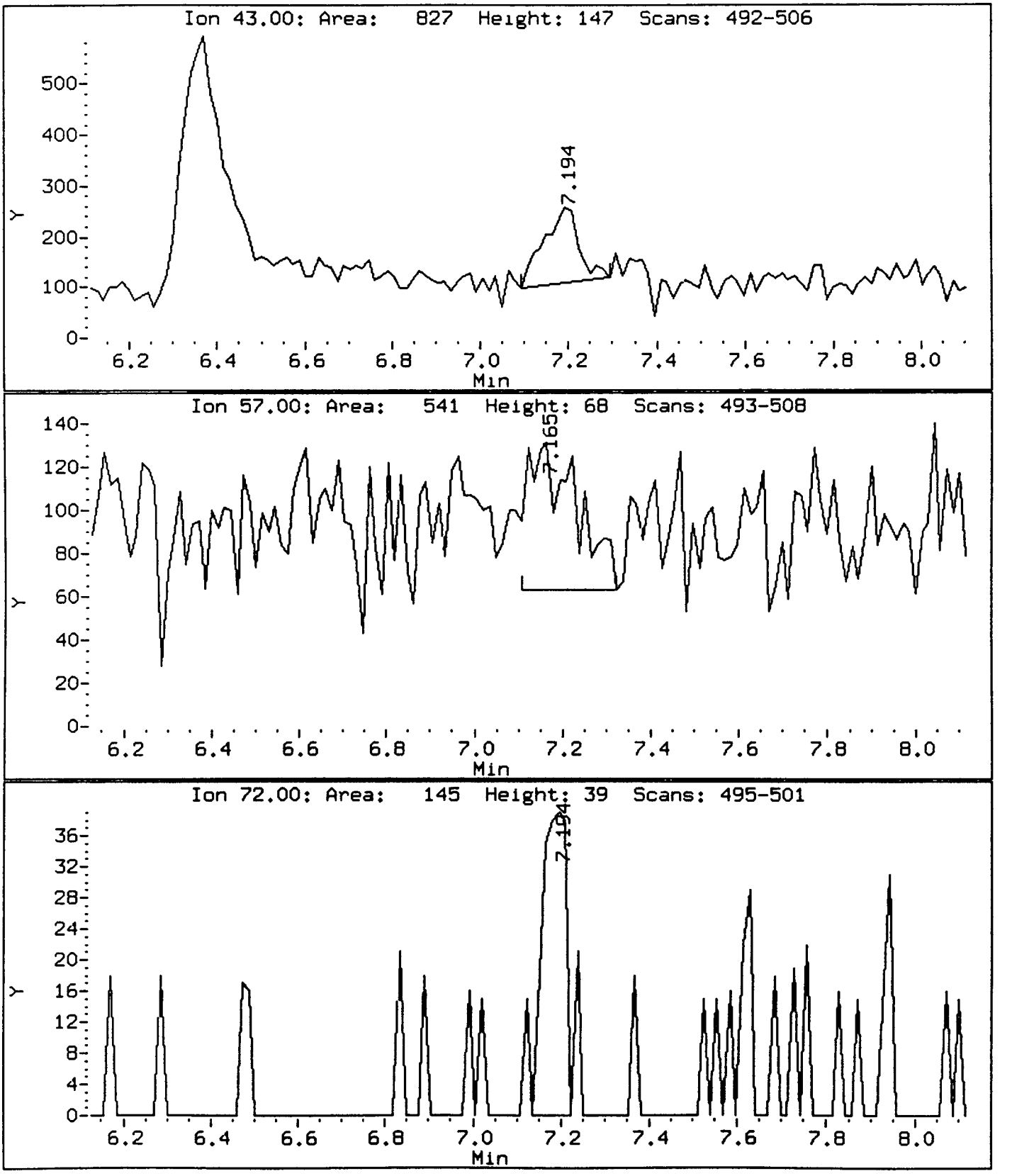
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: 2-Butanone
CAS Number: 78-93-3



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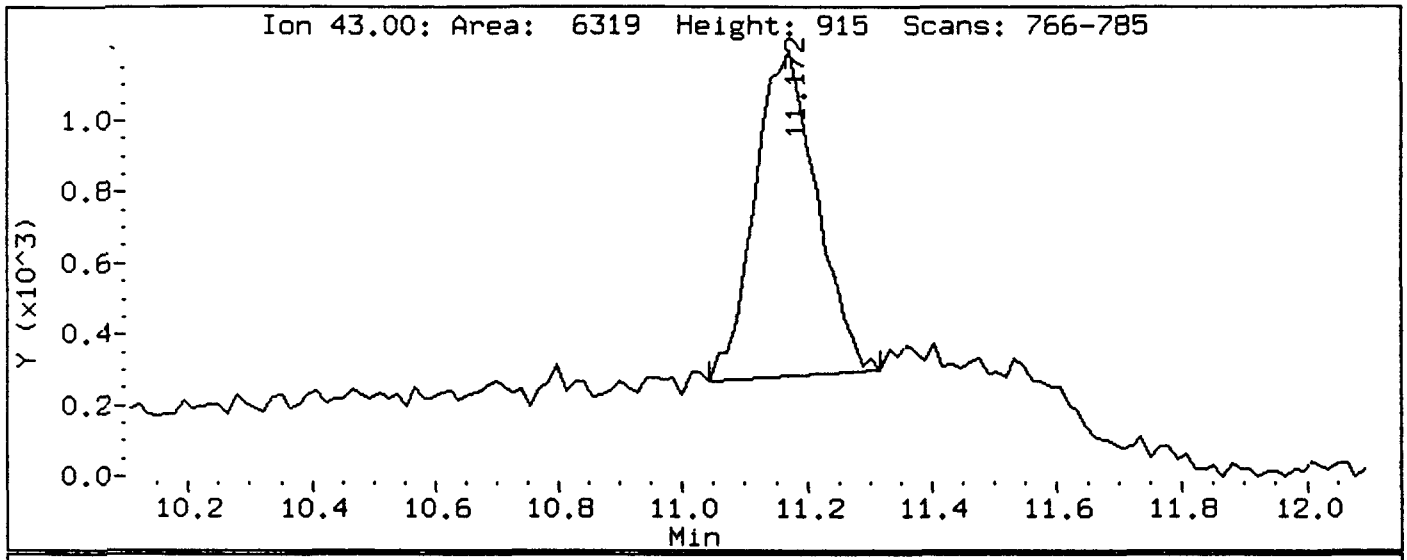
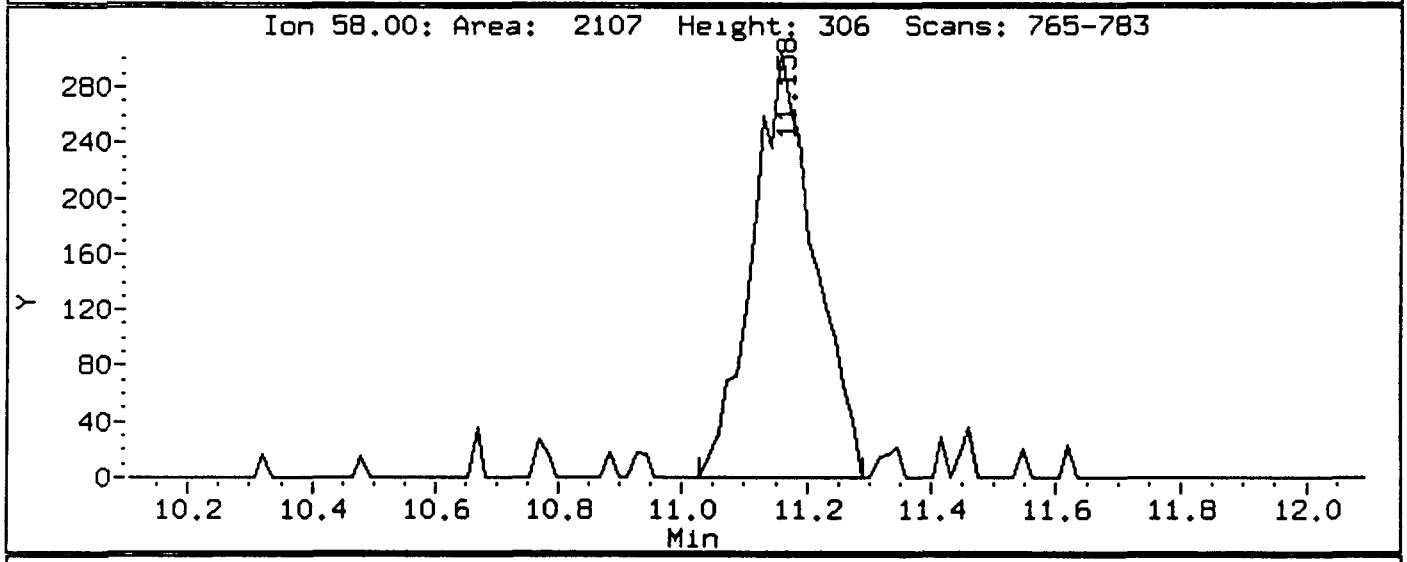
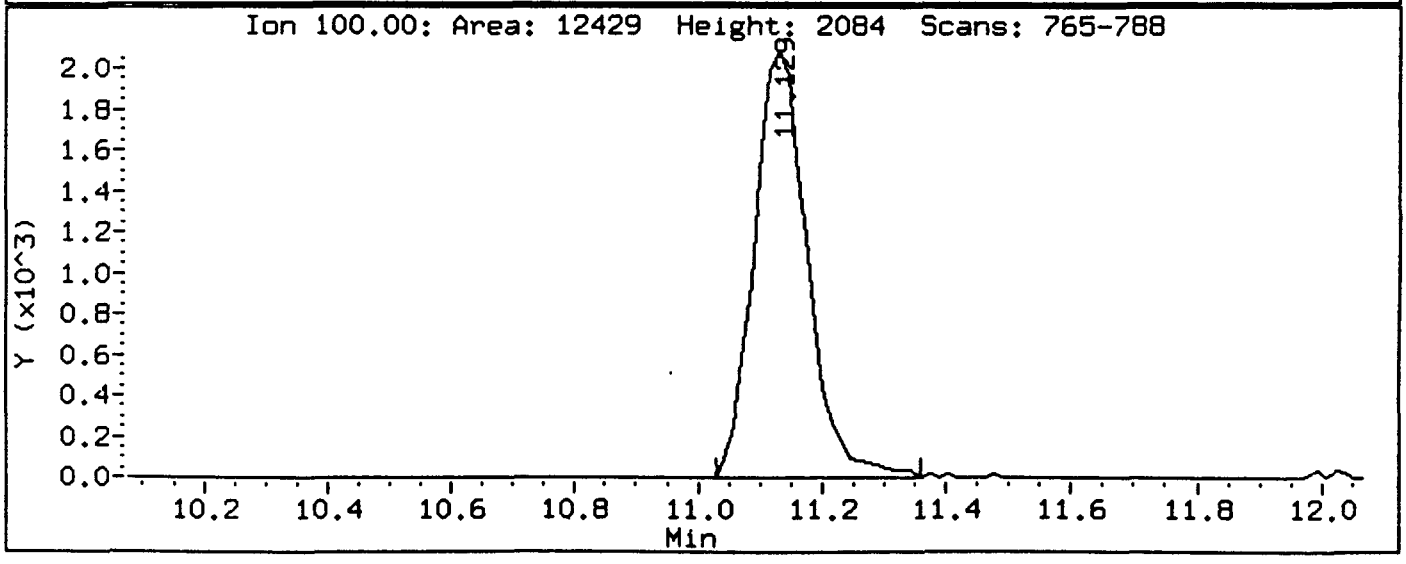
Injection Date: 26-JUL-96 10:47
Instrument: f50052.i
Client Sample ID: VSTD010KL

Compound: 4-Methyl-2-Pentanone
CAS Number: 108-10-1







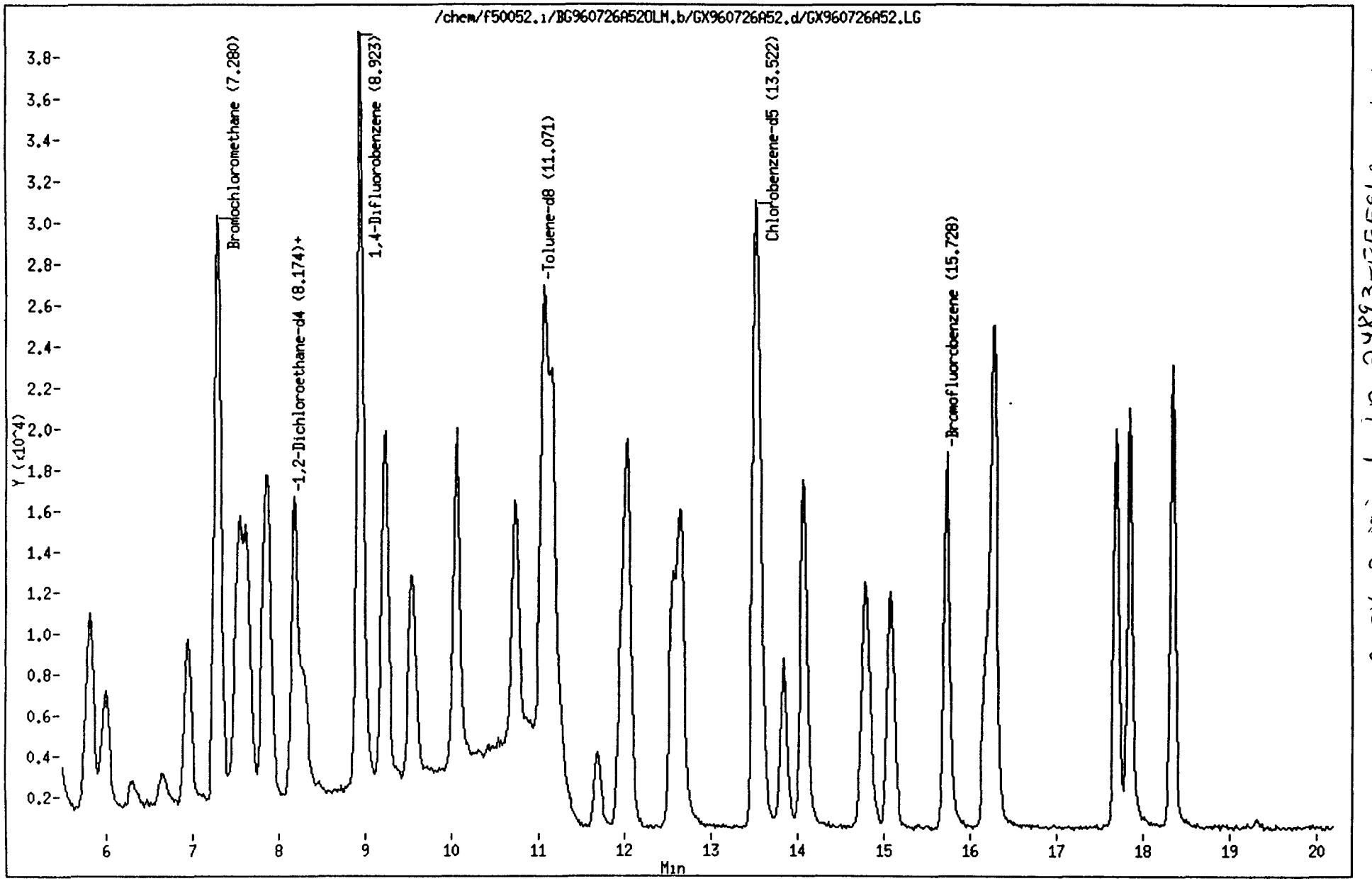
Data File: /chem/f50052.i/BG960726A52OLM.b/GX960726A52.d
Date : 26-JUL-1996 13:05
Client ID: VSTD020KO
Sample Info: VSTD020KO:2141:1:

Column phase: DB624

Instrument: f50052.i

Operator: 2141
Column diameter: 0.53

230



copy original in 24893-FFE91 BWB 7/30/96

Data File: /chem/f50052.i/BG960726A52OLM.b/GX960726A52.d
Report Date: 29-Jul-1996 12:56

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960726A52OLM.b/GX960726A52.d
Lab Smp Id: VSTD020KO Client Smp ID: VSTD020KO
Inj Date : 26-JUL-1996 13:05
Operator : 2141 Inst ID: f50052.i
Smp Info : VSTD020KO:2141:1:
Misc Info :
Comment :
Method : /chem/f50052.i/BG960726A52OLM.b/SOLM03.1.m
Meth Date : 29-Jul-1996 12:56 bevan Quant Type: ISTD
Cal Date : 26-JUL-1996 09:54 Cal File: GT960726A52.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

NB 7296

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	7 280	7 280	(1 000)	20428	250 0	
* 2 1,4-Difluorobenzene	114 00	8 923	8 923	(1 000)	79443	250 0	
* 3 Chlorobenzene-d5	117.00	13.522	13 522	(1 000)	45853	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 174	8 174	(1 123)	14098	100 0	106 4
$ 5 Toluene-d8	98.00	11.071	11.071	(0 819)	35174	100 0	109 6
$ 6 Bromofluorobenzene	95 00	15 728	15 728	(1 163)	18412	100.0	105 5
7 Chloromethane	50 00	1.369	1.369	(0 188)	6704	100 0	93 98(M) 2
8 Vinyl Chloride	62.00	1 571	1 571	(0 216)	8817	100 0	96 69(M) 2
9 Bromomethane	94 00	2.263	2.263	(0 311)	12600	100 0	99 36(M) 2
10 Chloroethane	64 00	2.451	2 451	(0 337)	4914	100.0	99 02(M) 2
11 1,1-Dichloroethene	96 00	3 964	3.964	(0 545)	8627	100 0	96.46(M) 2
12 Carbon Disulfide	76 00	4 094	4.094	(0 562)	23688	100.0	95 13
13 Acetone	43 00	4 253	4.253	(0 584)	3630	100 0	190 0
14 Methylene Chloride	84 00	4 873	4 873	(0 669)	32002	100.0	130 8
15 trans-1,2-Dichloroethene	96 00	5.305	5 305	(0 729)	8371	100 0	97.10
16 1,1-Dichloroethane	63.00	5.997	5.997	(0 824)	15422	100 0	98 88
17 cis-1,2-Dichloroethene	96 00	6.948	6 948	(0.954)	9330	100 0	96 09
18 2-Butanone	43 00	7.107	7.107	(0.976)	1481	100.0	102 7(M) 2
19 Chloroform	83.00	7.525	7 525	(1.034)	24482	100 0	98 50
20 1,1,1-Trichloroethane	97 00	7.612	7 612	(0 853)	25228	100 0	98 33
21 Carbon Tetrachloride	117 00	7 842	7 842	(0.879)	29170	100 0	98 22
22 Benzene	78 00	8 174	8 174	(0.916)	19928	100 0	97 84

Data File: /chem/f50052.i/BG960726A52OLM.b/GX960726A52.d
Report Date: 29-Jul-1996 12:56

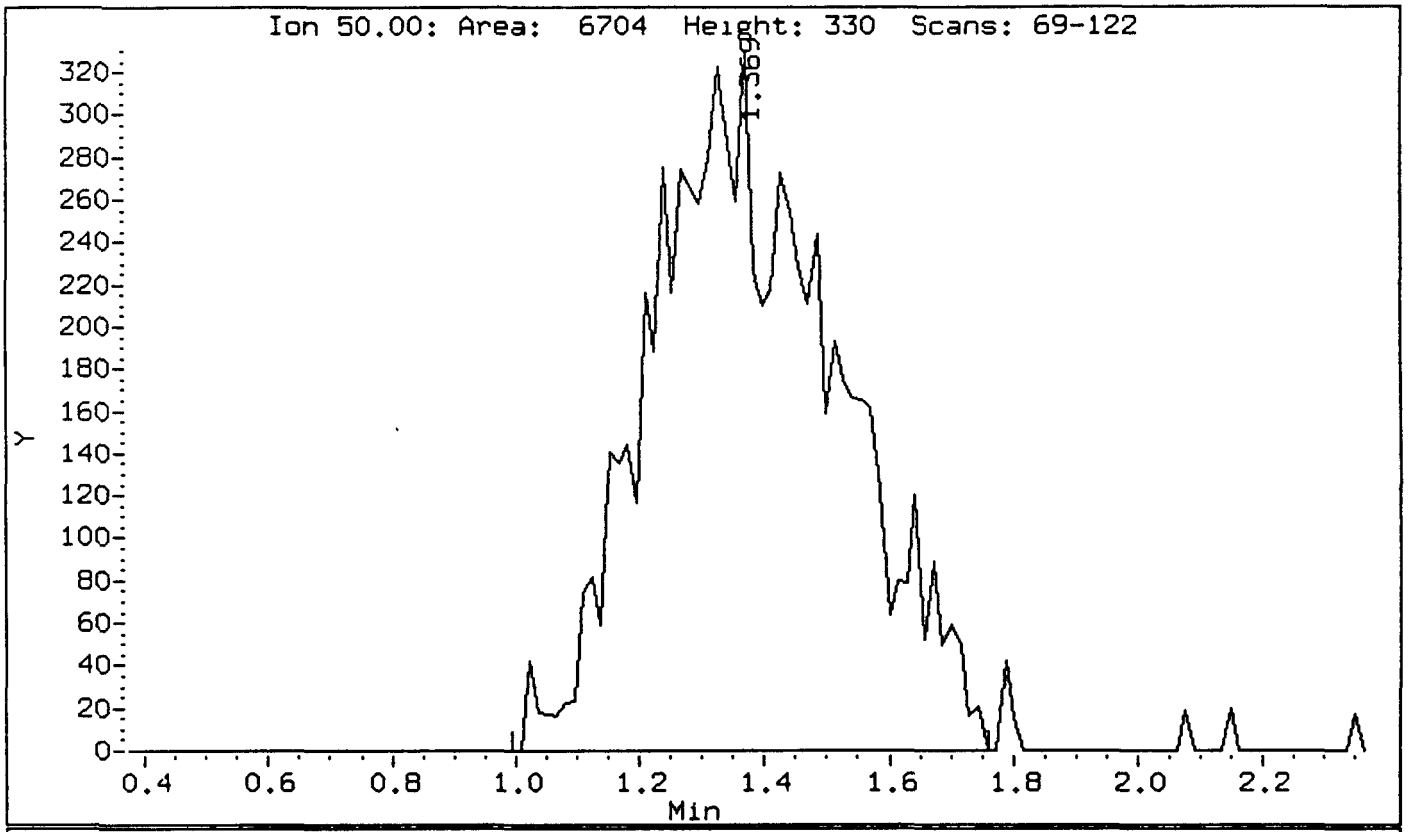
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	8 289	8 289	(1 139)	11866	100 0	97 48
24 Trichloroethene	130 00	9 212	9 212	(1 032)	13921	100 0	96 42
25 1,2-Dichloropropane	63 00	9.529	9 529	(1.068)	9296	100 0	97 57
26 Bromodichloromethane	83 00	10.048	10 048	(1 126)	29433	100 0	96 88
27 cis-1,3-Dichloropropene	75 00	10 725	10 725	(1 202)	14988	100 0	94 06
28 4-Methyl-2-Pentanone	43 00	11 100	11 100	(0 821)	14857	100 0	121 7
29 Toluene	91 00	11 158	11 158	(0 825)	28454	100 0	100 2
30 trans-1,3-Dichloropropene	75 00	11 691	11 691	(1 310)	5669	100 0	60 07
31 1,1,2-Trichloroethane	97 00	11 965	11 965	(1 341)	5805	100 0	87 85
32 Tetrachloroethene	164 00	12 037	12 037	(0 890)	13453	100 0	99 25
33 Dibromochloromethane	129 00	12 571	12 571	(1 409)	19405	100 0	92 98
34 2-Hexanone	43 00	12.556	12 556	(0 929)	2317	100 0	101 1
35 Chlorobenzene	112 00	13 565	13 565	(1 003)	16344	100 0	97 24
36 Ethylbenzene	106 00	13 839	13 839	(1.023)	7017	100 0	98 80
37 m,p-Xylene	106 00	14 070	14 070	(1 040)	17413	200 0	200 4
38 o-Xylene	106 00	14 762	14 762	(1 092)	8365	100 0	95 42
39 Styrene	104 00	14 819	14 819	(1 096)	12540	100 0	97 04
40 Bromoform	173 00	15 079	15 079	(1 690)	17652	100 0	101 1
41 1,1,2,2-Tetrachloroethane	83 00	16 175	16 175	(1 196)	11269	100 0	98 15
M 42 1,2-Dichloroethene (total)	96 00				17701	200 0	193 1
M 43 Xylene (Total)	106 00				25778	100 0	294 1

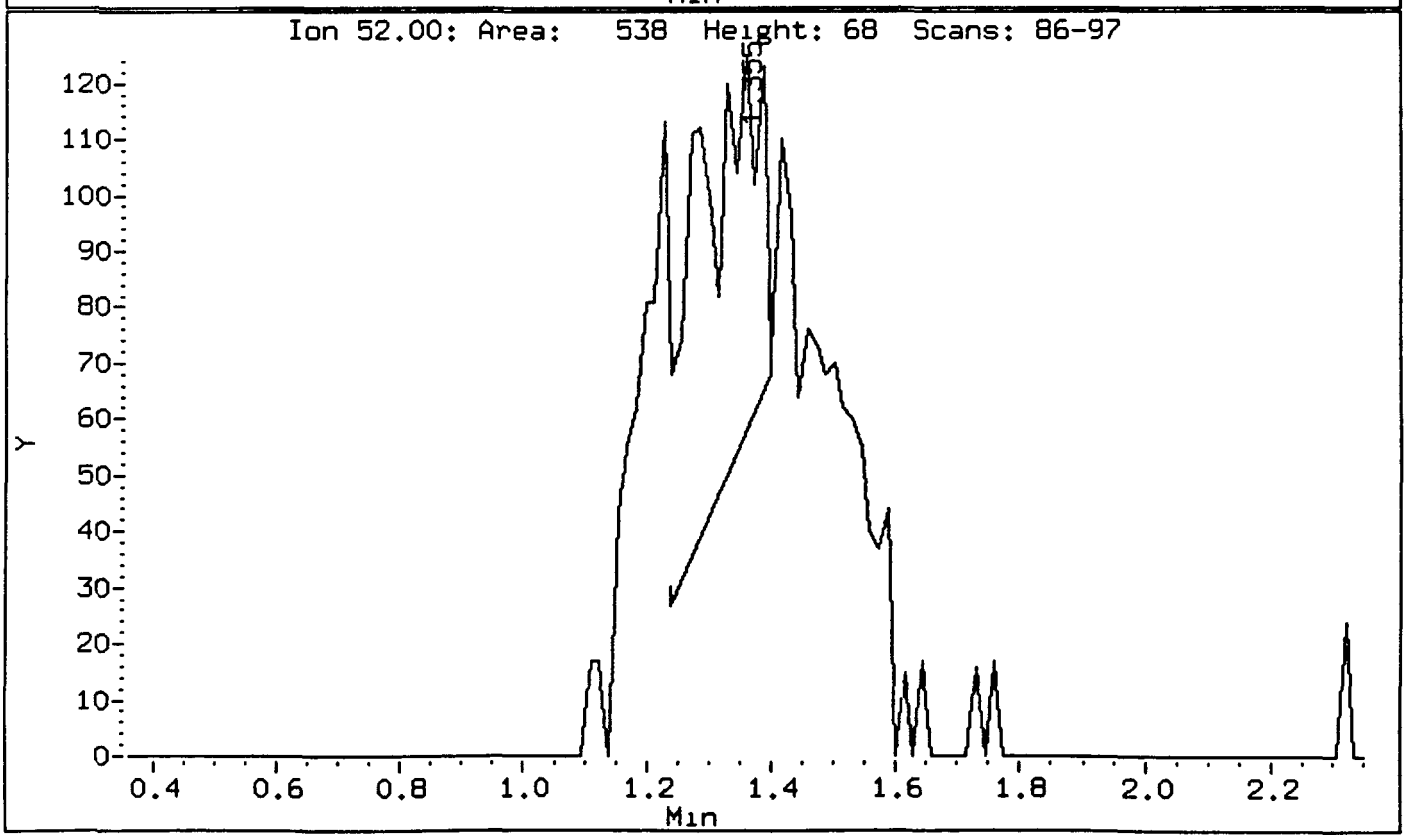
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960726A52OLM.b/GX960726A52.d/GX960726A52.LG
Injection Date: 26-JUL-96 13:05
Instrument: f50052.i
Client Sample ID: VSTD020KO

Compound: Chloromethane
CAS Number: 74-87-3





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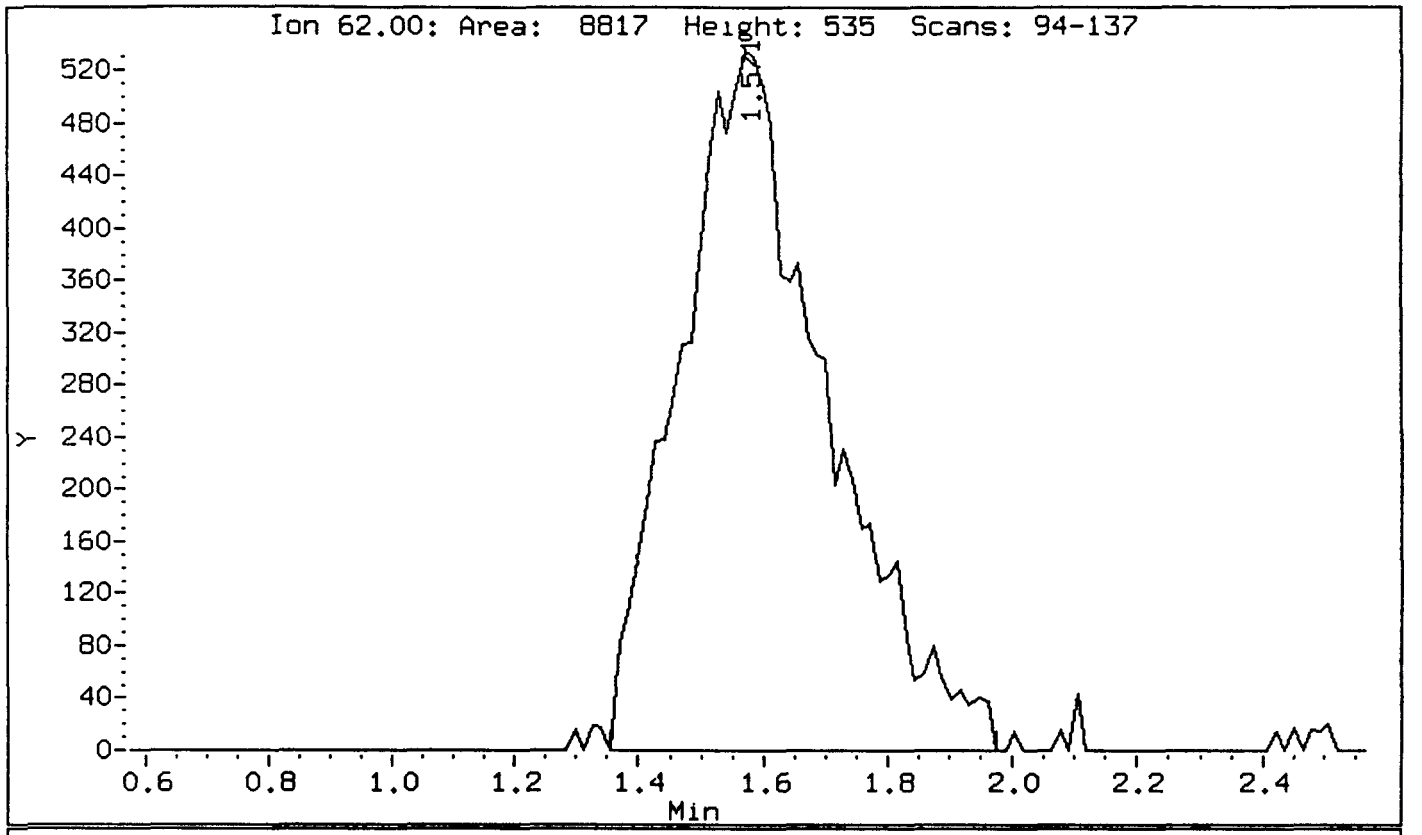
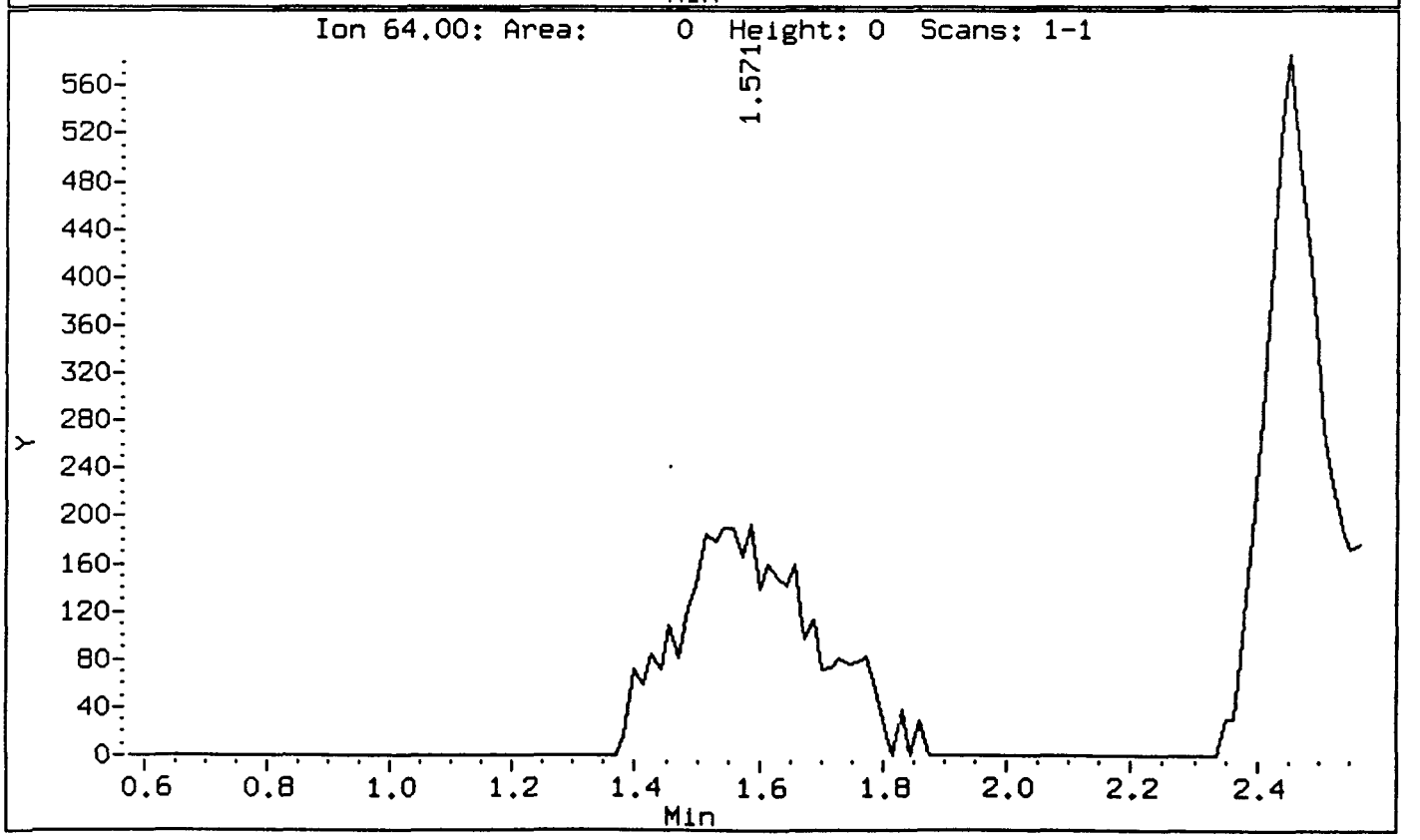
Injection Date: 26-JUL-96 13:05
Instrument: f50052.i
Client Sample ID: VSTD020KO

Compound: Vinyl Chloride
CAS Number: 75-01-4





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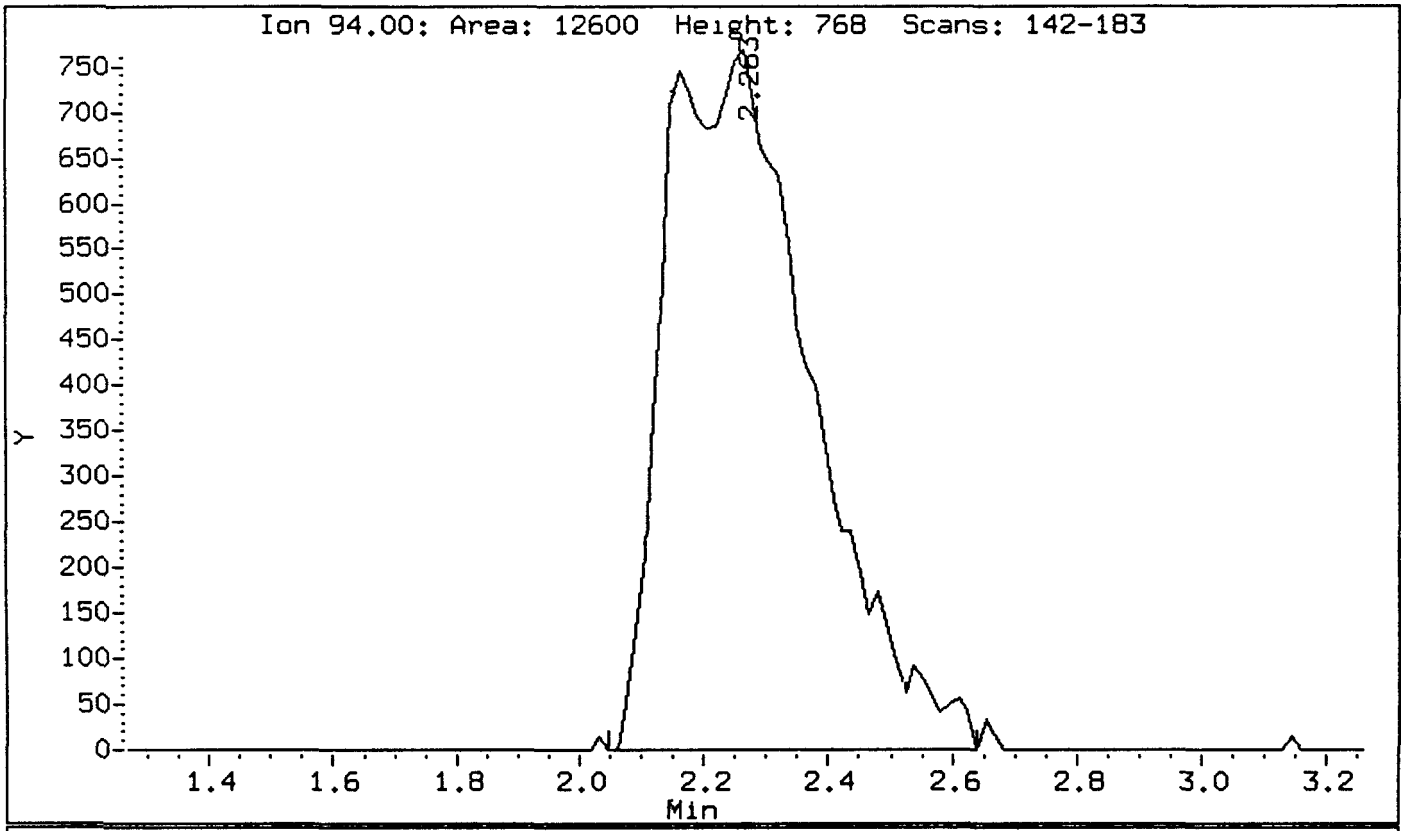
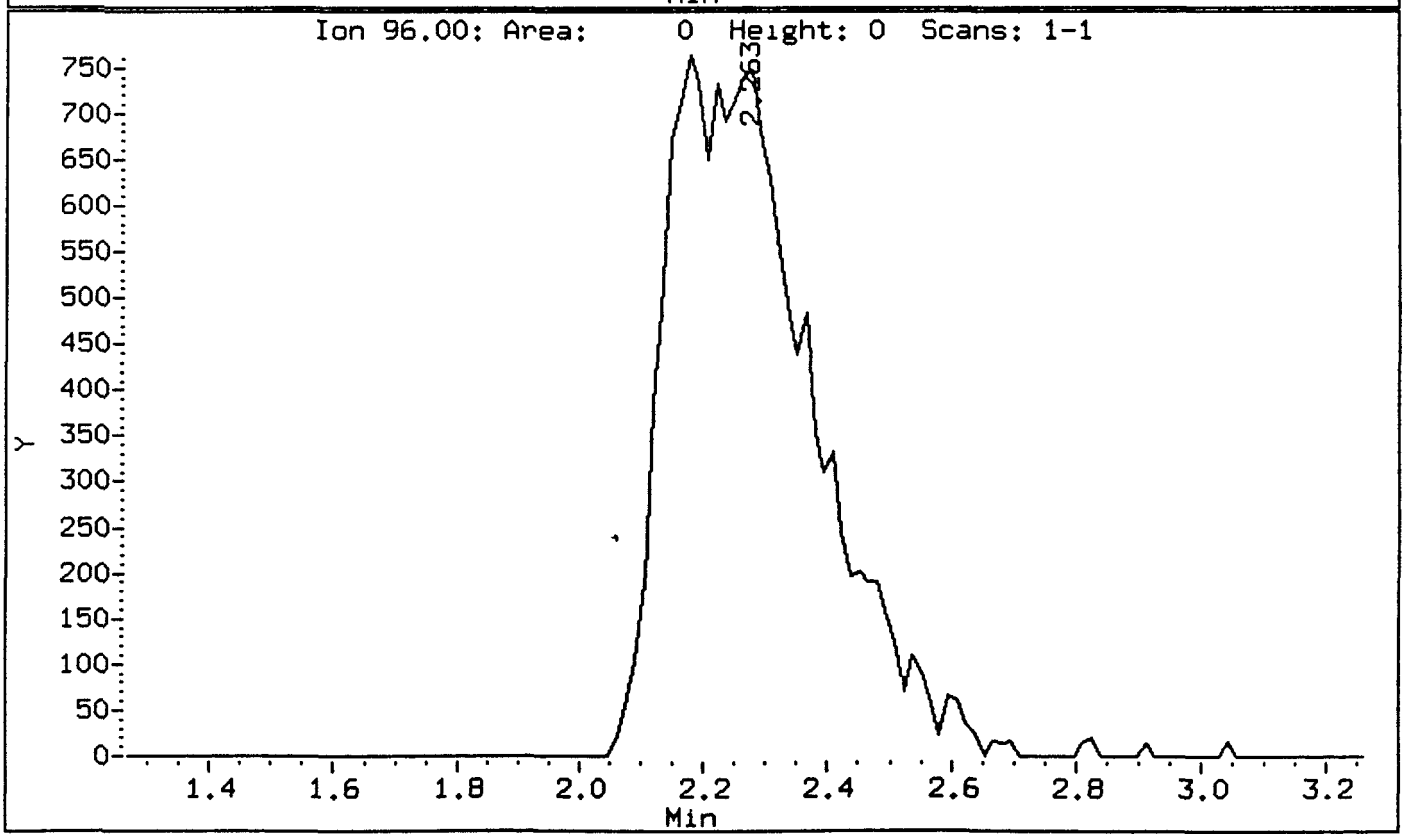
Injection Date: 26-JUL-96 13:05
Instrument: f50052.i
Client Sample ID: VSTD020KO

Compound: Bromomethane
CAS Number: 74-83-9





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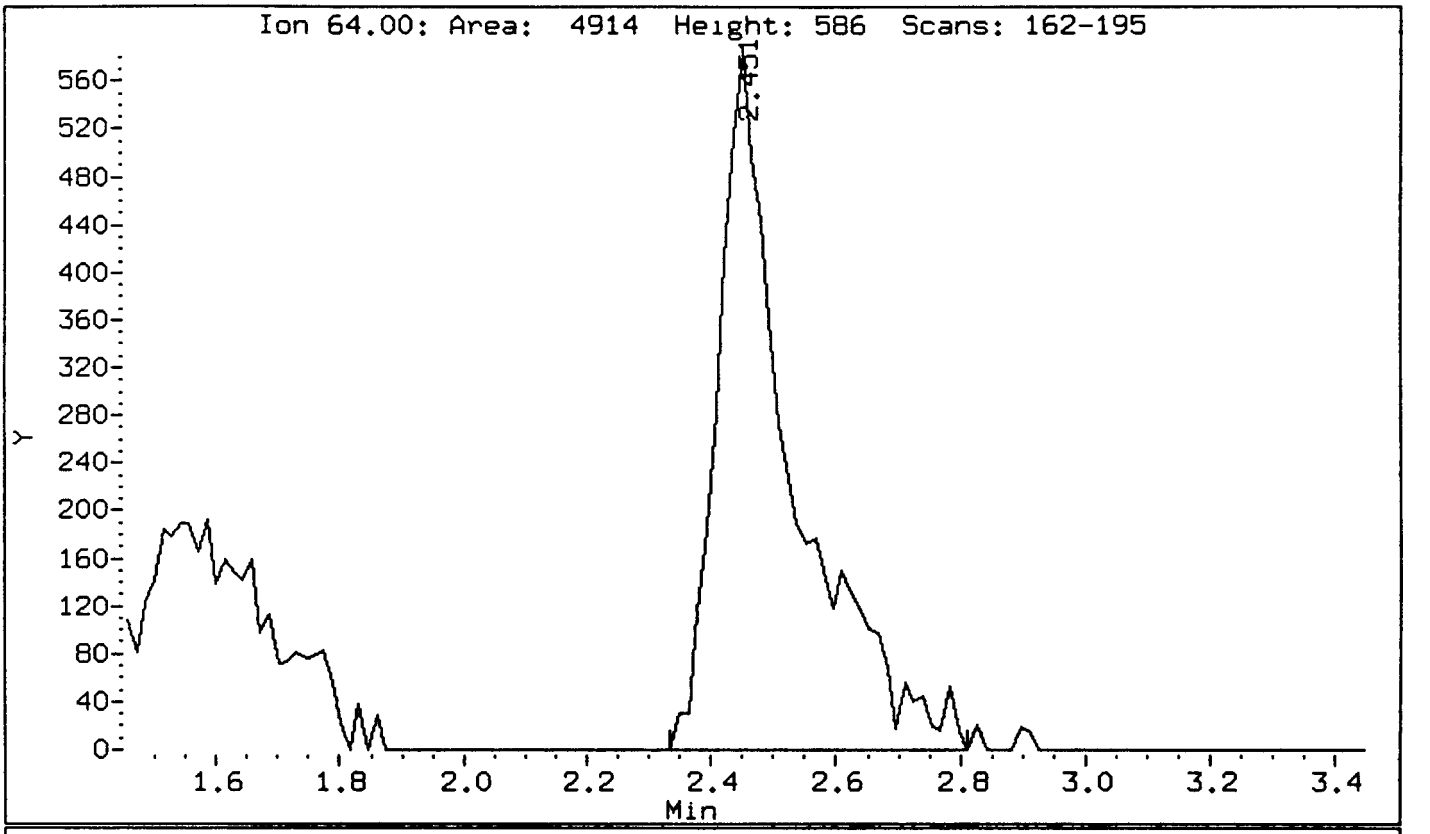
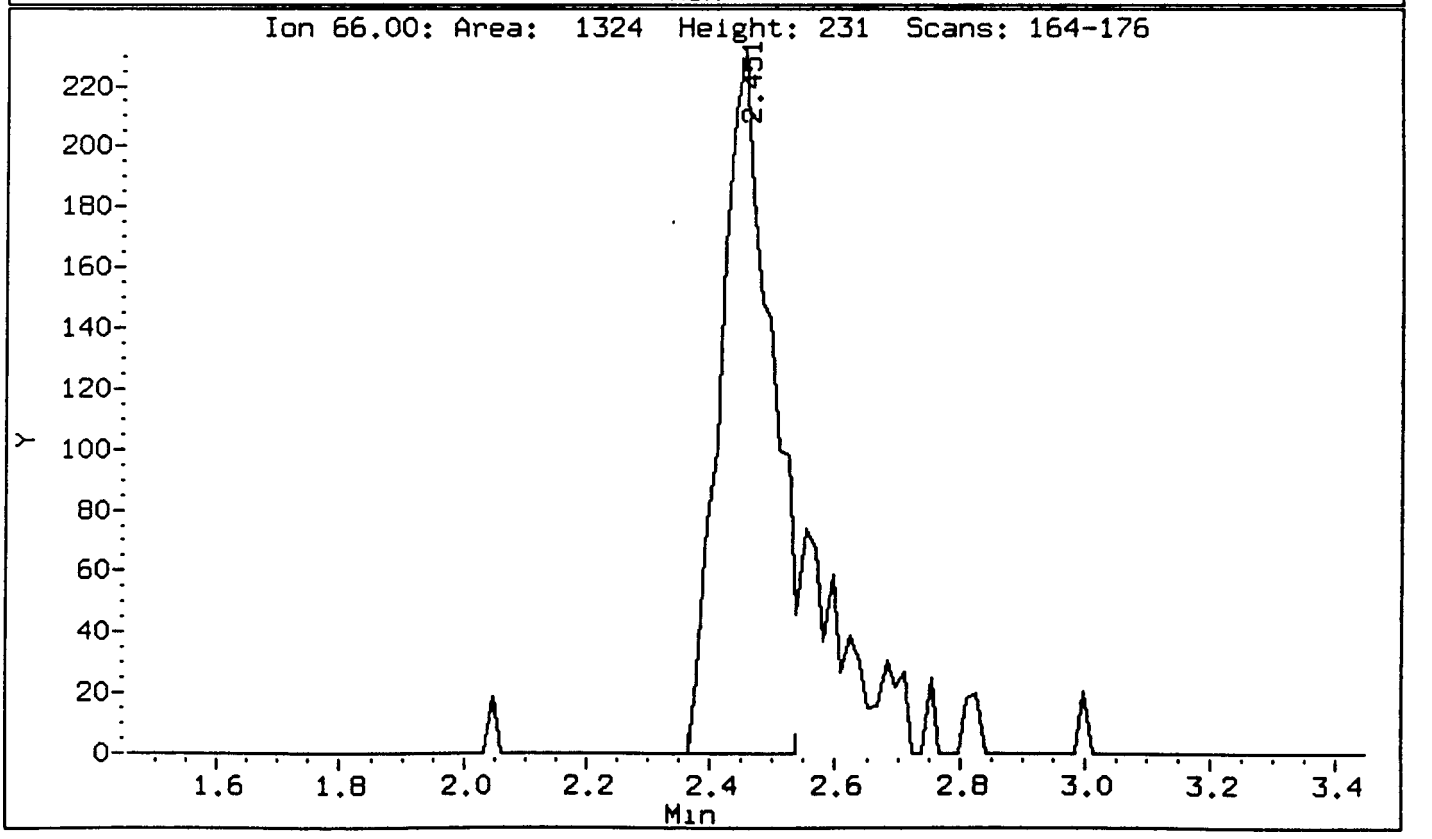
Injection Date: 26-JUL-96 13:05
Instrument: f50052.i
Client Sample ID: VSTD020KO

Compound: Chloroethane
CAS Number: 75-00-3





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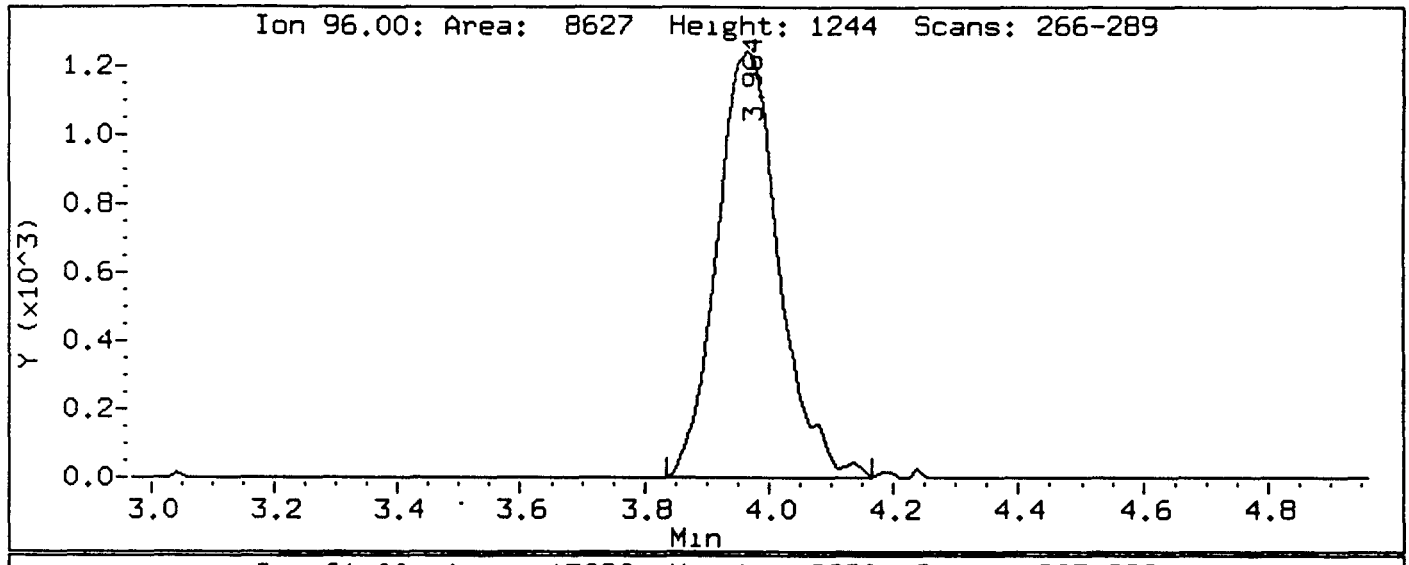
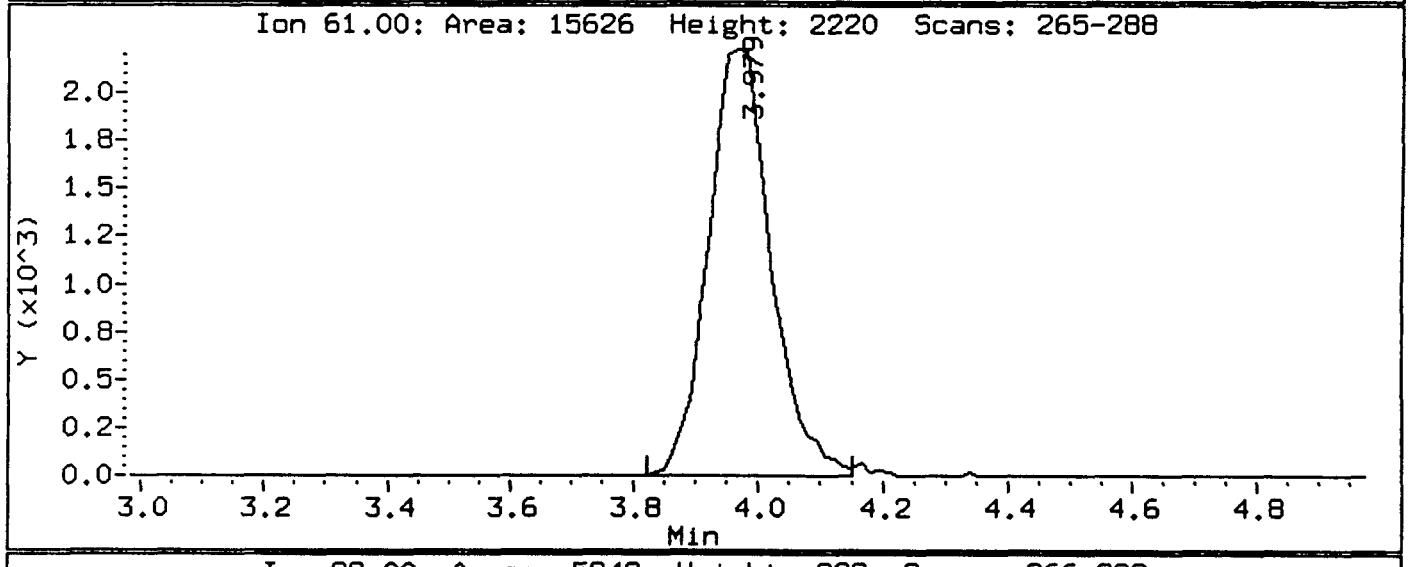
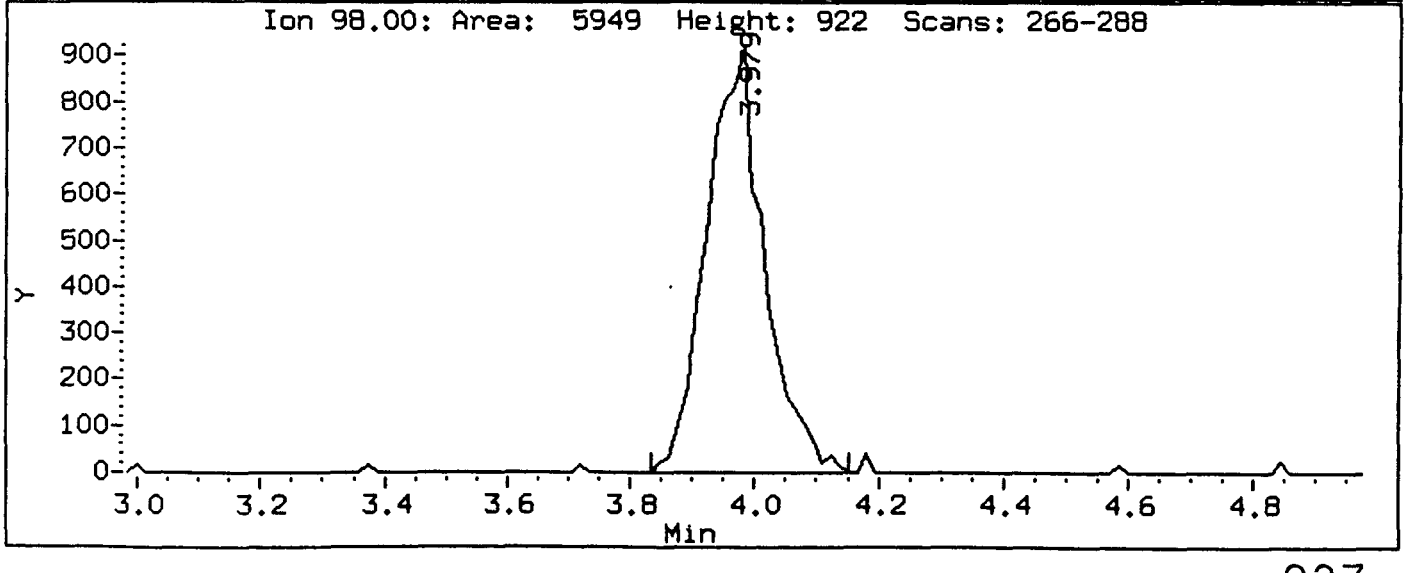
Injection Date: 26-JUL-96 13:05
Instrument: f50052.i
Client Sample ID: VSTD020KO

Compound: 1,1-Dichloroethene
CAS Number: 75-35-4







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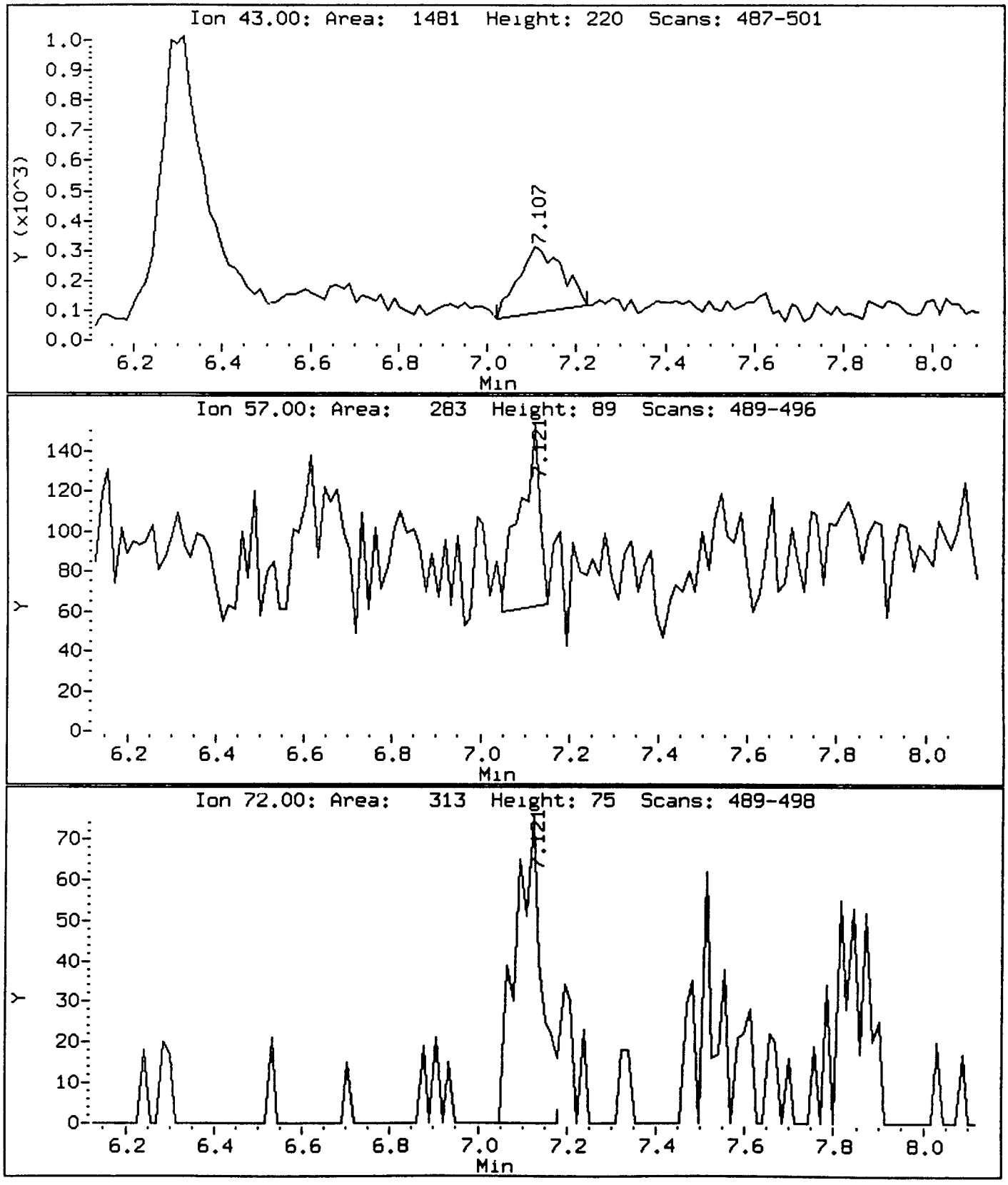
Injection Date: 26-JUL-96 13:05
Instrument: f50052.i
Client Sample ID: VSTD020KO

Compound: 2-Butanone
CAS Number: 78-93-3

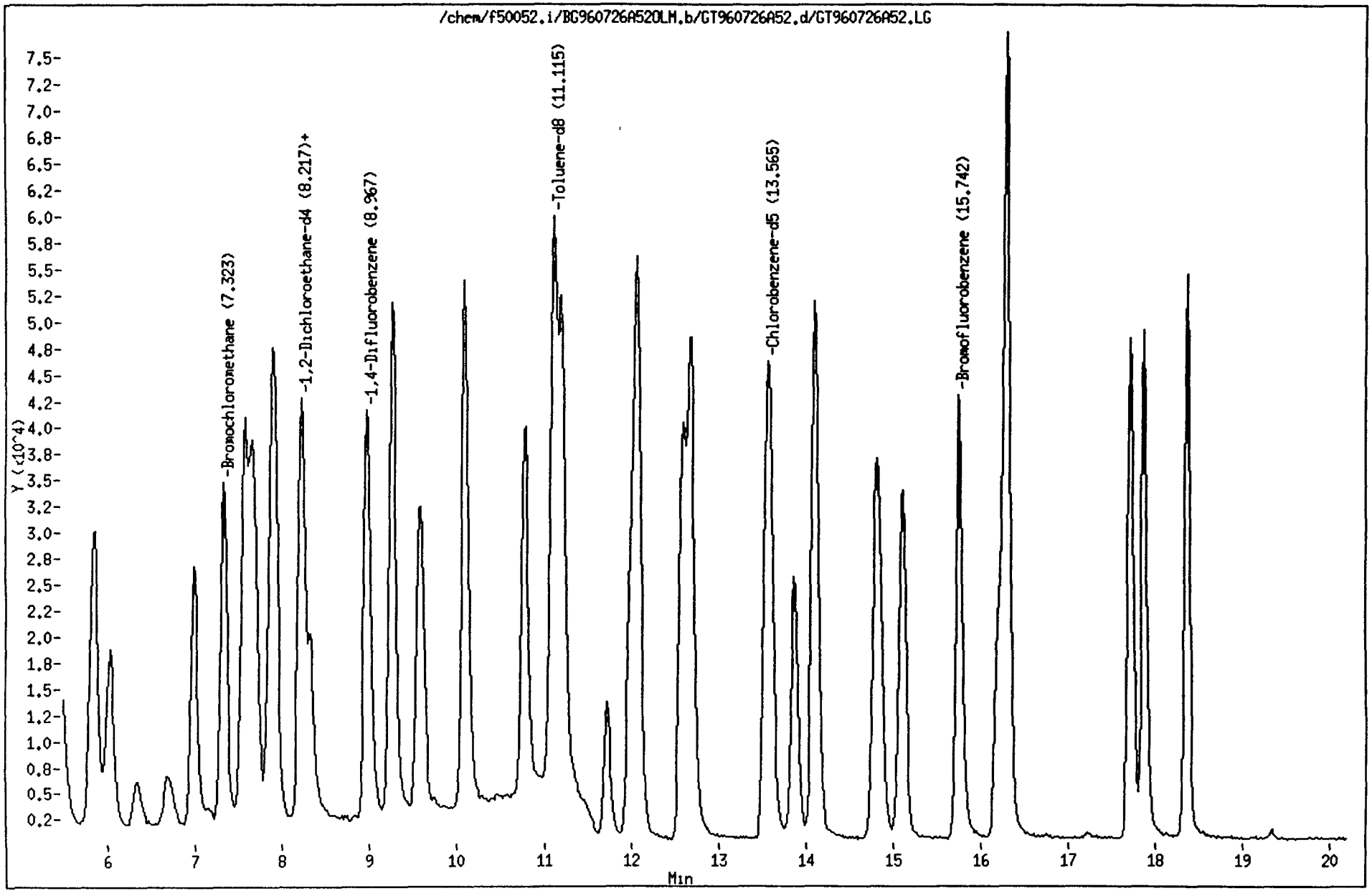


Data File: /chem/f50052.i/BG960726A52OLM.b/GT960726A52.d
Date : 26-JUL-1996 09:54
Client ID: VSTD050KK
Sample Info: VSTD050KK:2153:1:

Column phase: DB624

Instrument: f50052.i

Operator: 2153
Column diameter: 0.53



239

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Data File: /chem/f50052.i/BG960726A52OLM.b/GT960726A52.d
Report Date: 29-Jul-1996 12:56

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960726A52OLM.b/GT960726A52.d
Lab Smp Id: VSTD050KK Client Smp ID: VSTD050KK
Inj Date : 26-JUL-1996 09:54
Operator : 2153 Inst ID: f50052.i
Smp Info : VSTD050KK:2153:1:
Misc Info :
Comment :
Method : /chem/f50052.i/BG960726A52OLM.b/SOLM03.1.m
Meth Date : 29-Jul-1996 12:56 bevan Quant Type: ISTD
Cal Date : 26-JUL-1996 09:54 Cal File: GT960726A52.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	7 323	7 323	(1 000)	22358	250 0	
* 2 1,4-Difluorobenzene	114 00	8 967	8 967	(1 000)	86315	250 0	
* 3 Chlorobenzene-d5	117 00	13 551	13 551	(1 000)	49803	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8.203	8 203	(1 120)	34707	250 0	250 0
$ 5 Toluene-d8	98 00	11 115	11 115	(0 820)	80817	250 0	250 0
$ 6 Bromofluorobenzene	95 00	15 757	15 757	(1 163)	44693	250 0	250 0
7 Chloromethane	50 00	1 283	1 283	(0.175)	22681	250 0	250 0(M)
8 Vinyl Chloride	62 00	1 571	1 571	(0.215)	28557	250 0	250 0(M)
9 Bromomethane	94.00	2.292	2 292	(0.313)	38779	250 0	250 0(M)
10 Chloroethane	64.00	2.480	2 480	(0 339)	15588	250 0	250 0(M)
11 1,1-Dichloroethene	96 00	3 993	3 993	(0.545)	26409	250 0	250 0
12 Carbon Disulfide	76 00	4 137	4 137	(0 565)	75098	250.0	250.0
13 Acetone	43.00	4 282	4 282	(0.585)	3992	250.0	250 0(M)
14 Methylene Chloride	84.00	4 916	4 916	(0 671)	55612	250.0	250 0
15 trans-1,2-Dichloroethene	96 00	5.334	5 334	(0 728)	25082	250.0	250 0
16 1,1-Dichloroethane	63 00	6.026	6 026	(0 823)	46003	250.0	250.0
17 cis-1,2-Dichloroethene	96.00	6.977	6.977	(0 953)	28802	250 0	250 0
18 2-Butanone	43 00	7.150	7 150	(0.976)	4019	250.0	250.0(M)
19 Chloroform	83 00	7 554	7 554	(1.031)	71182	250 0	250.0
20 1,1,1-Trichloroethane	97 00	7.655	7 655	(0.854)	72032	250 0	250.0
21 Carbon Tetrachloride	117 00	7 900	7 900	(0 881)	82187	250 0	250 0
22 Benzene	78 00	8 217	8.217	(0.916)	57428	250 0	250 0

MB 7.29.96

Data File: /chem/f50052.i/BG960726A52OLM.b/GT960726A52.d
Report Date: 29-Jul-1996 12:56

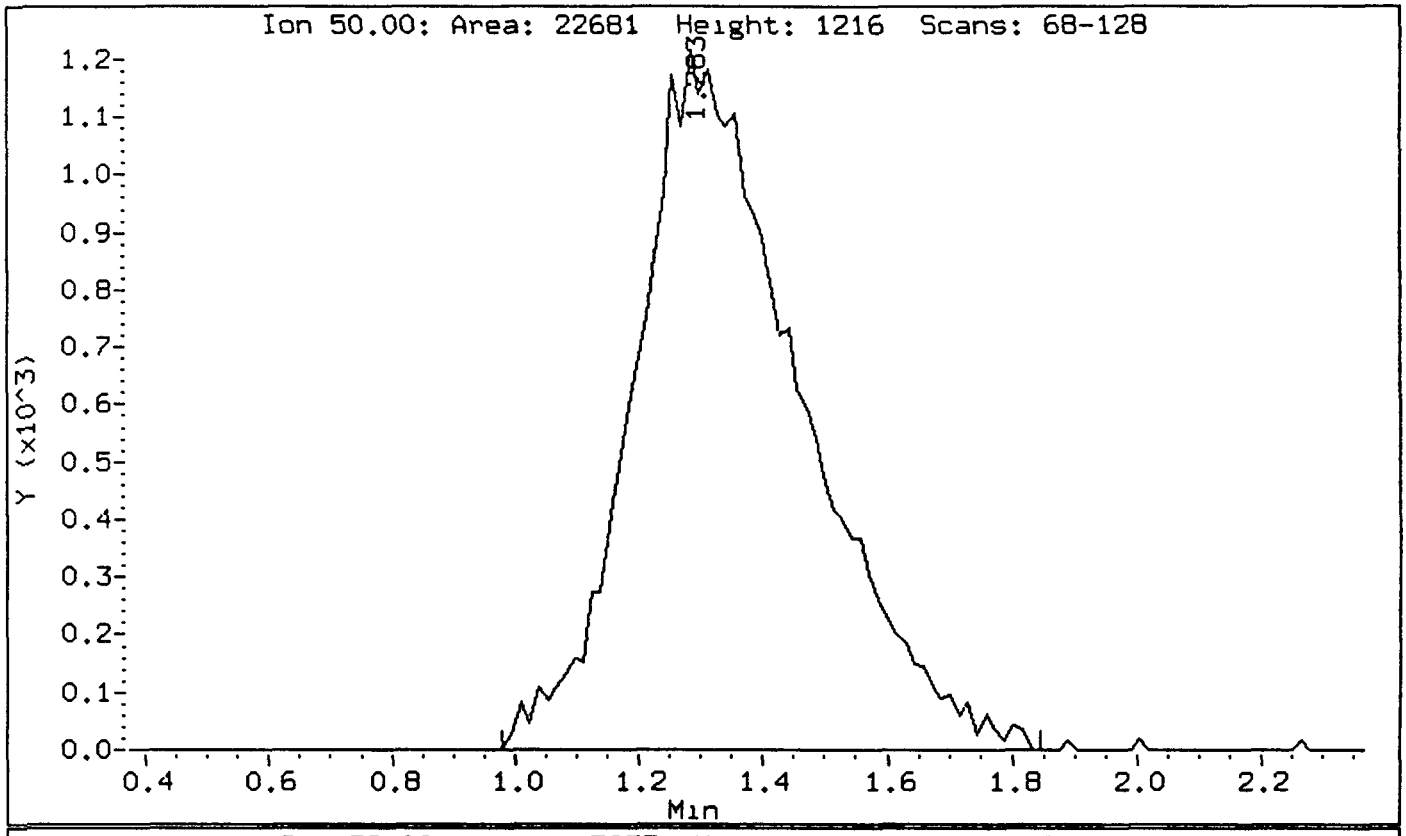
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	23 1,2-Dichloroethane	62 00 ✓	8 332	8 332	(1 138)	35930	250 0	250 0
	24 Trichloroethene	130 00 ✓	9 255	9 255	(1 032)	40914	250 0	250 0
	25 1,2-Dichloropropane	63 00 ✓	9 572	9 572	(1 068)	27678	250 0	250 0
	26 Bromodichloromethane	83 00 ✓	10.091	10 091	(1 125)	85070	250 0	250 0
	27 cis-1,3-Dichloropropene	75 00 ✓	10 783	10 783	(1 203)	46793	250 0	250 0
	28 4-Methyl-2-Pentanone	43.00 ✓	11.143	11 143	(0 822)	34534	250 0	250 0
	29 Toluene	91.00 ✓	11 201	11 201	(0 827)	77561	250 0	250.0
	30 trans-1,3-Dichloropropene	75 00 ✓	11 720	11 720	(1 307)	20086	250 0	250 0
	31 1,1,2-Trichloroethane	97.00 ✓	11 994	11 994	(1.338)	18862	250 0	250 0
	32 Tetrachloroethene	164 00 ✓	12 066	12 066	(0 890)	37557	250 0	250 0
	33 Dibromochloromethane	129 00 ✓	12 599	12 599	(1 405)	59321	250 0	250 0
	34 2-Hexanone	43 00 ✓	12 571	12 571	(0 928)	5953	250 0	250 0
	35 Chlorobenzene	112 00 ✓	13 594	13 594	(1 003)	45805	250 0	250 0
	36 Ethylbenzene	106 00 ✓	13 868	13 868	(1 023)	20223	250 0	250 0
	37 m,p-Xylene	106 00 ✓	14 099	14 099	(1 040)	49867	500 0	500 0
	38 o-Xylene	106 00 ✓	14 791	14 791	(1.091)	24671	250 0	250 0
	39 Styrene	104 00 ✓	14 834	14 834	(1 095)	37110	250 0	250 0
	40 Bromoform	173 00 ✓	15 093	15.093	(1 683)	47582	250 0	250 0
	41 1,1,2,2-Tetrachloroethane	83 00 ✓	16.189	16 189	(1.195)	30271	250 0	250 0
M	42 1,2-Dichloroethene (total)	96 00 ✓				53884	500 0	500 0
M	43 Xylene (Total)	106 00 ✓				74538	250 0	755.3

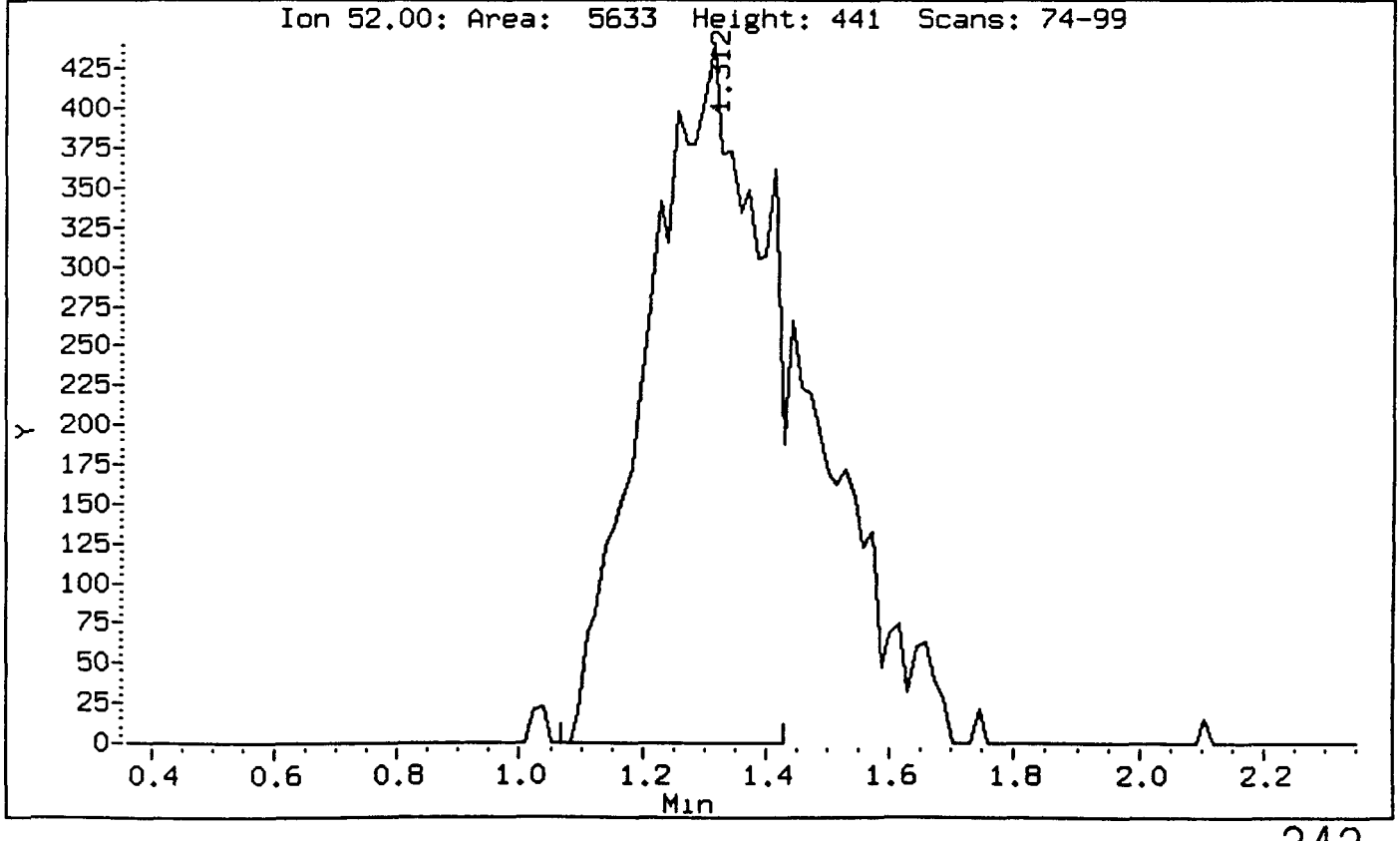
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960726A52OLM.b/GT960726A52.d/GT960726A52.LG
Injection Date: 26-JUL-96 09:54
Instrument: f50052.i
Client Sample ID: VSTD050KK

Compound: Chloromethane
CAS Number: 74-87-3





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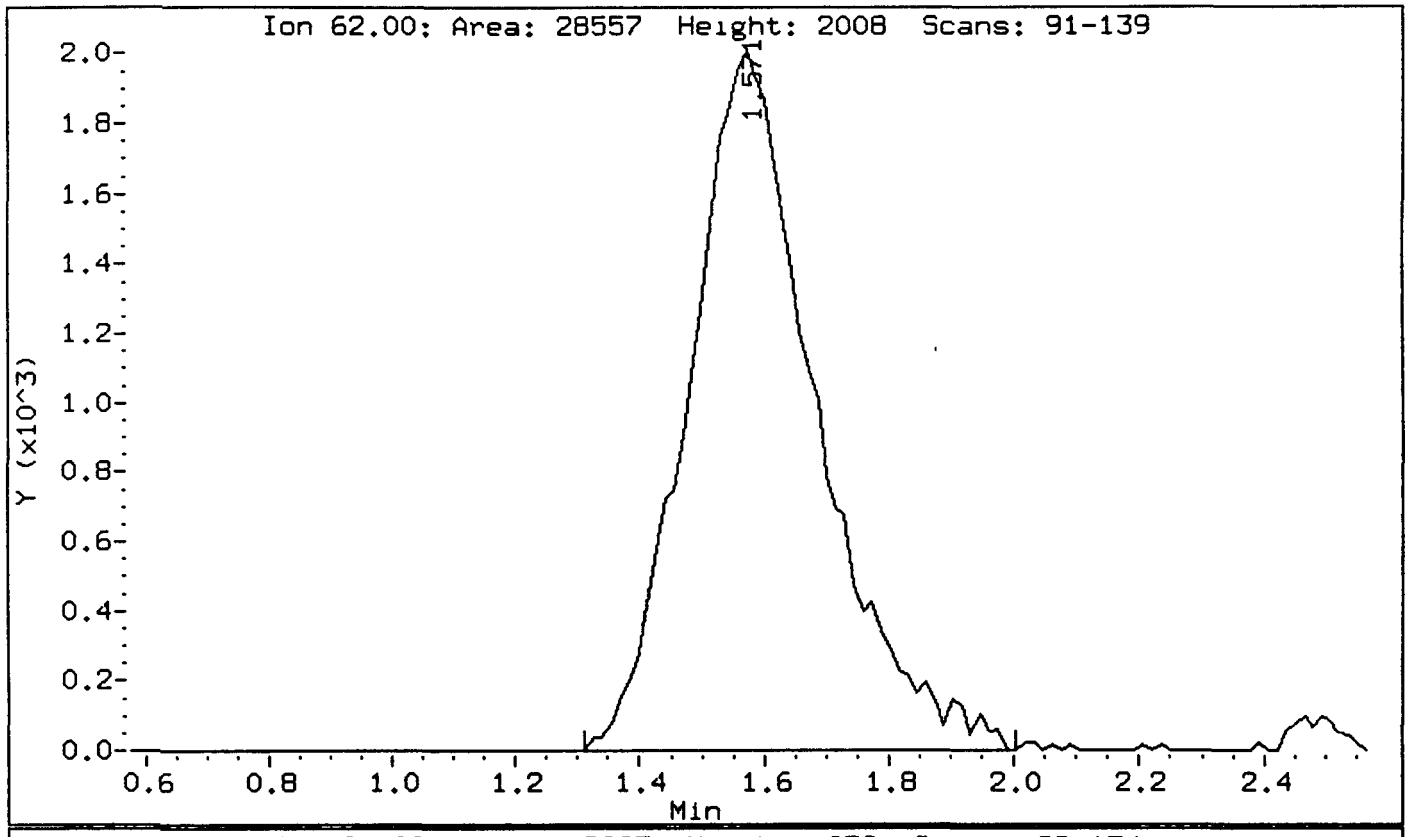
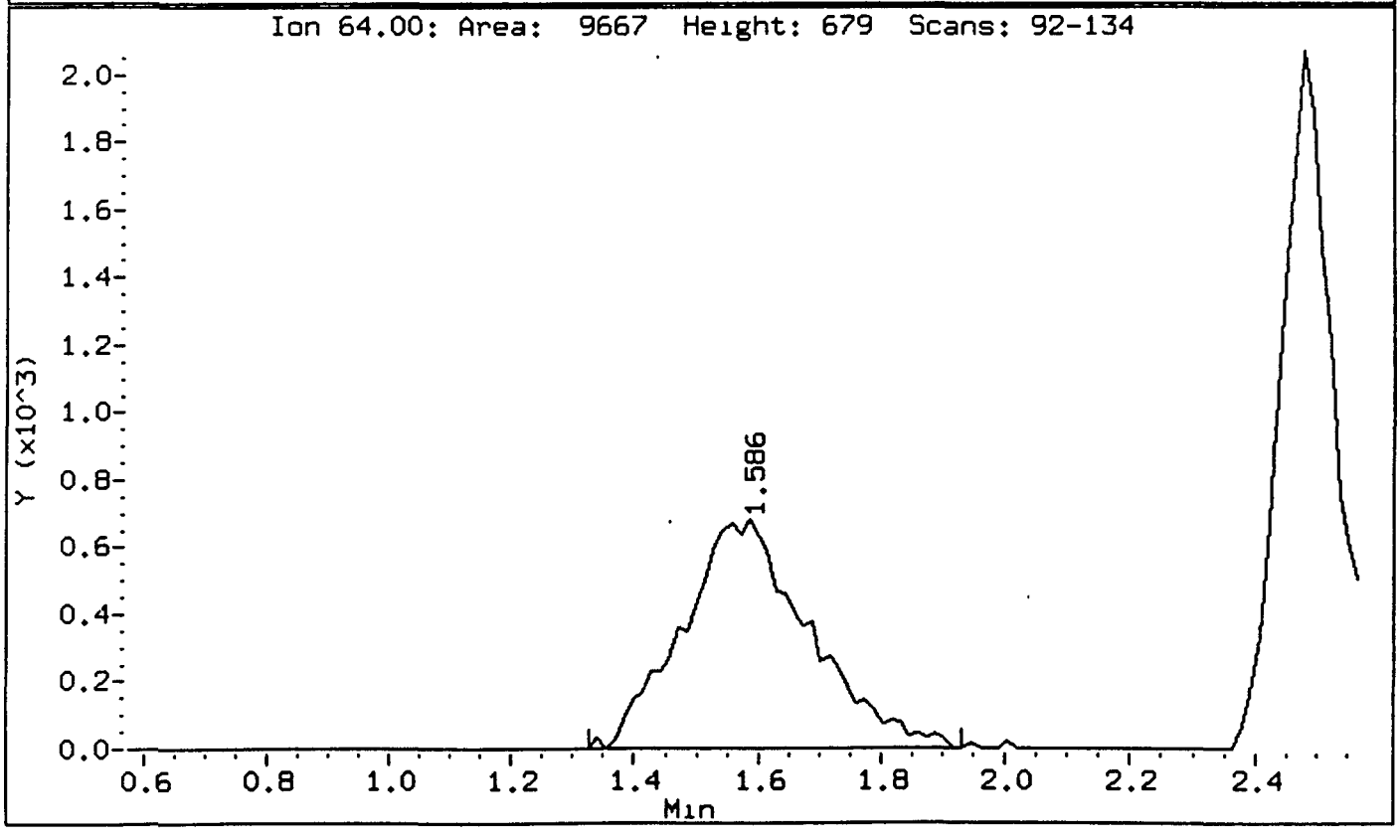
Injection Date: 26-JUL-96 09:54
Instrument: f50052.i
Client Sample ID: VSTD050KK

Compound: Vinyl Chloride
CAS Number: 75-01-4





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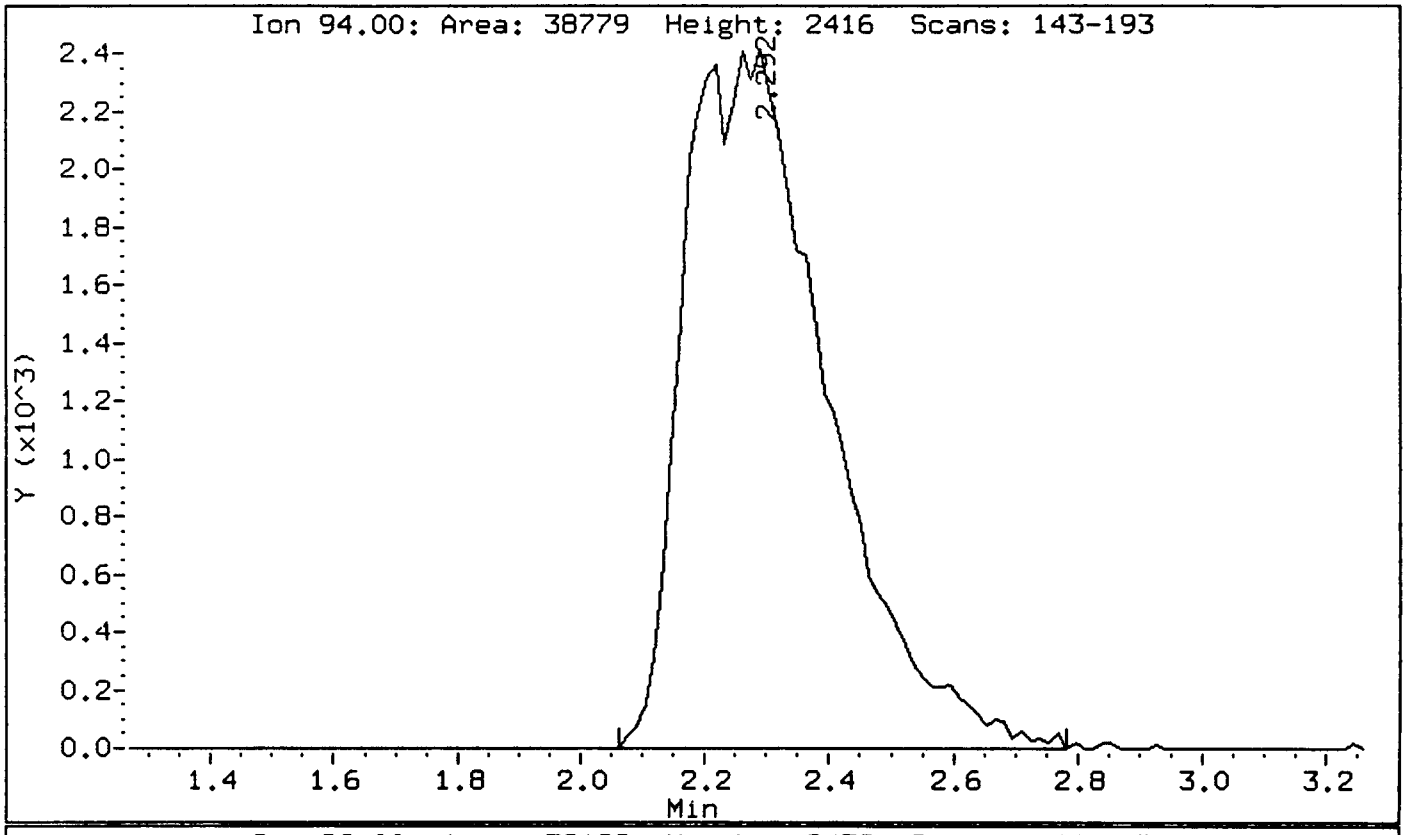
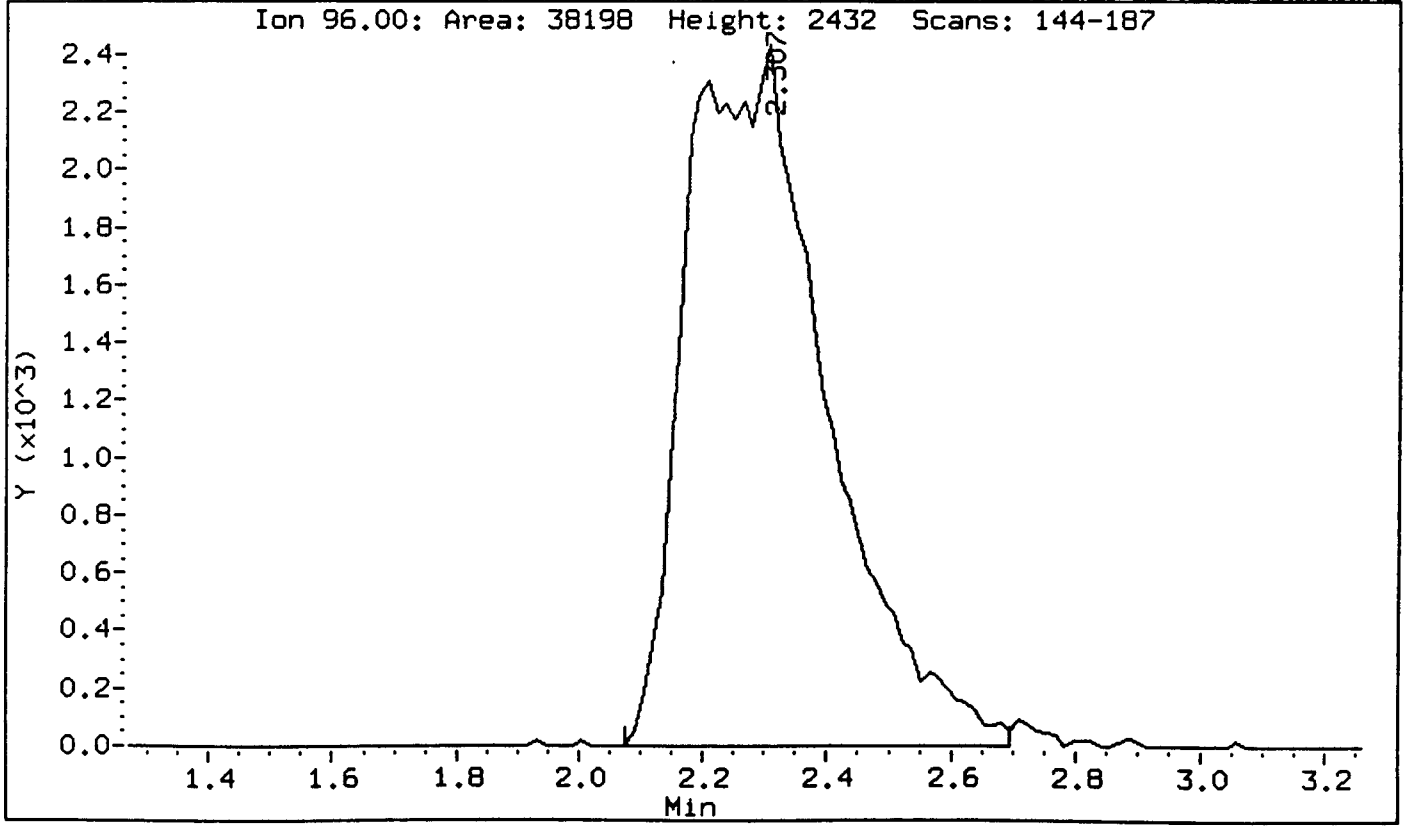
Injection Date: 26-JUL-96 09:54
Instrument: f50052.i
Client Sample ID: VSTD050KK

Compound: Bromomethane
CAS Number: 74-83-9





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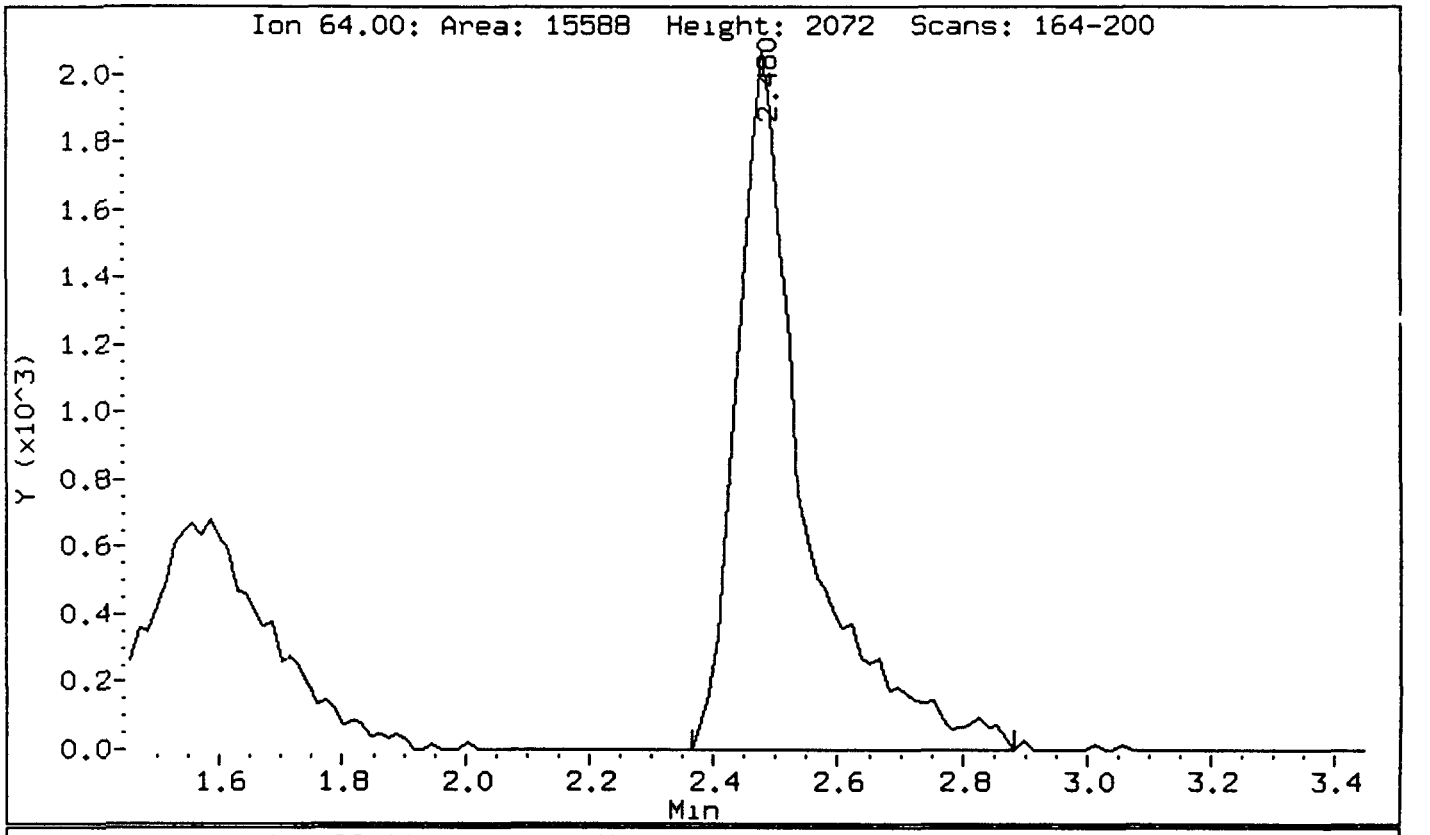
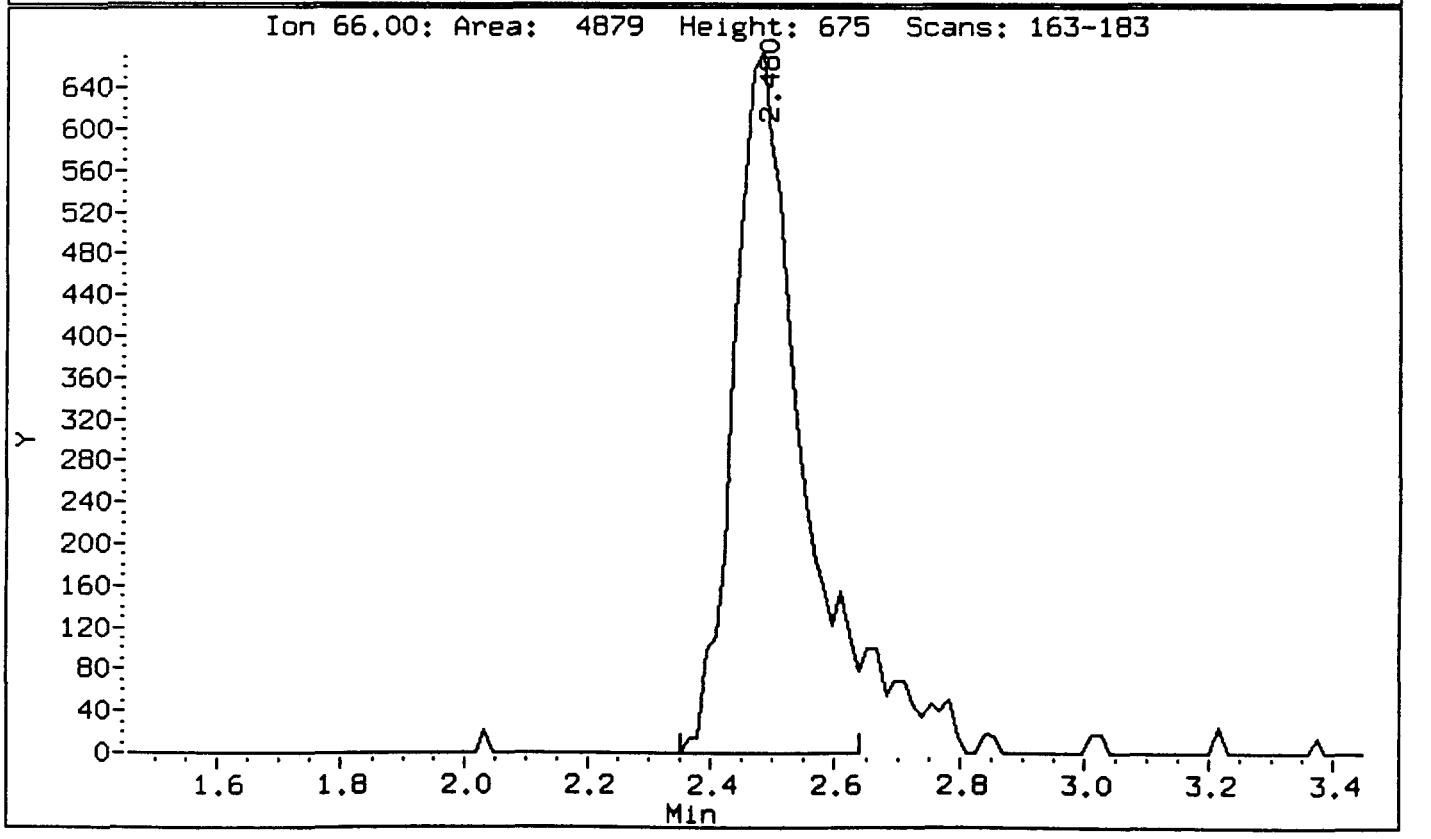
Injection Date: 26-JUL-96 09:54
Instrument: f50052.i
Client Sample ID: VSTD050KK

Compound: Chloroethane
CAS Number: 75-00-3





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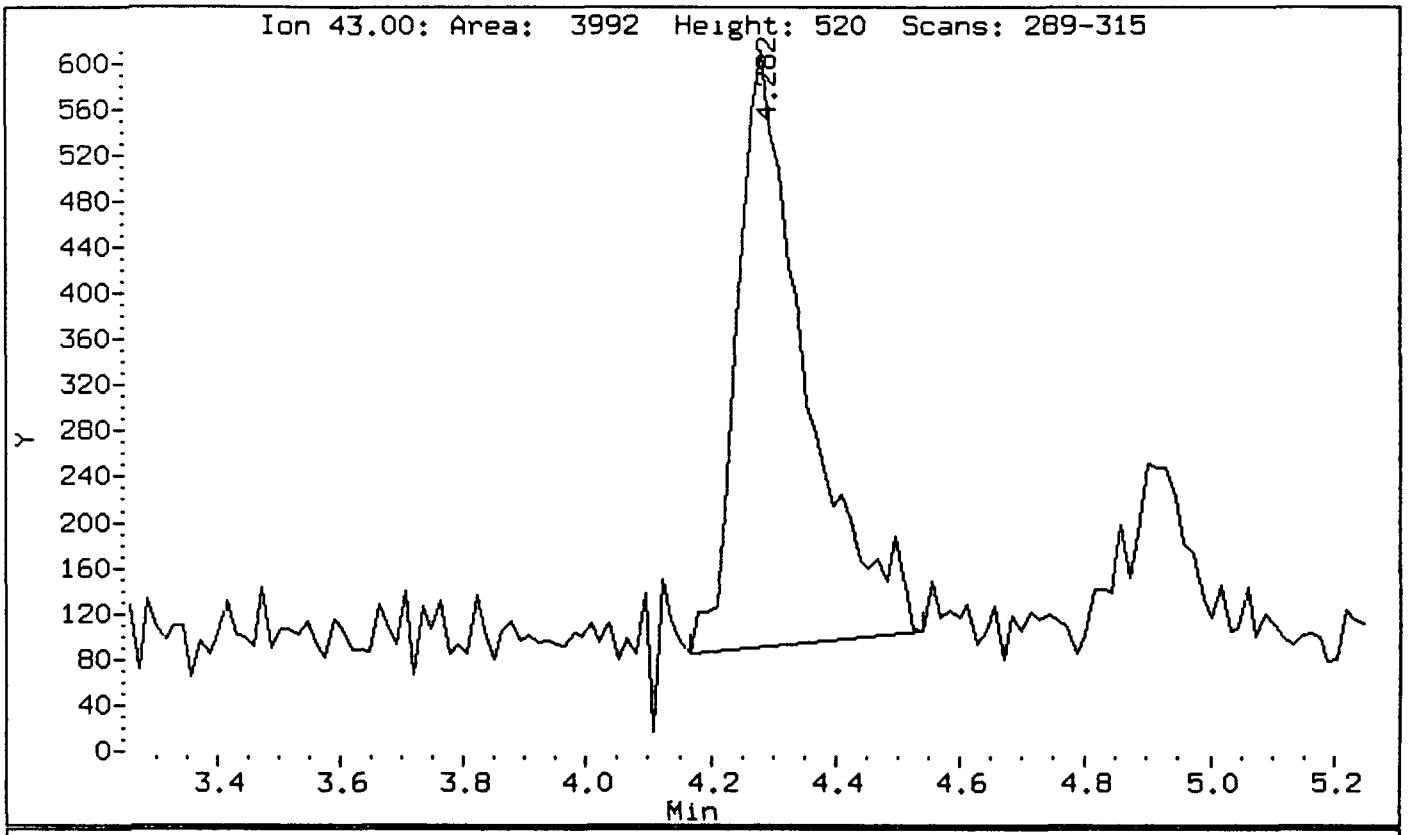
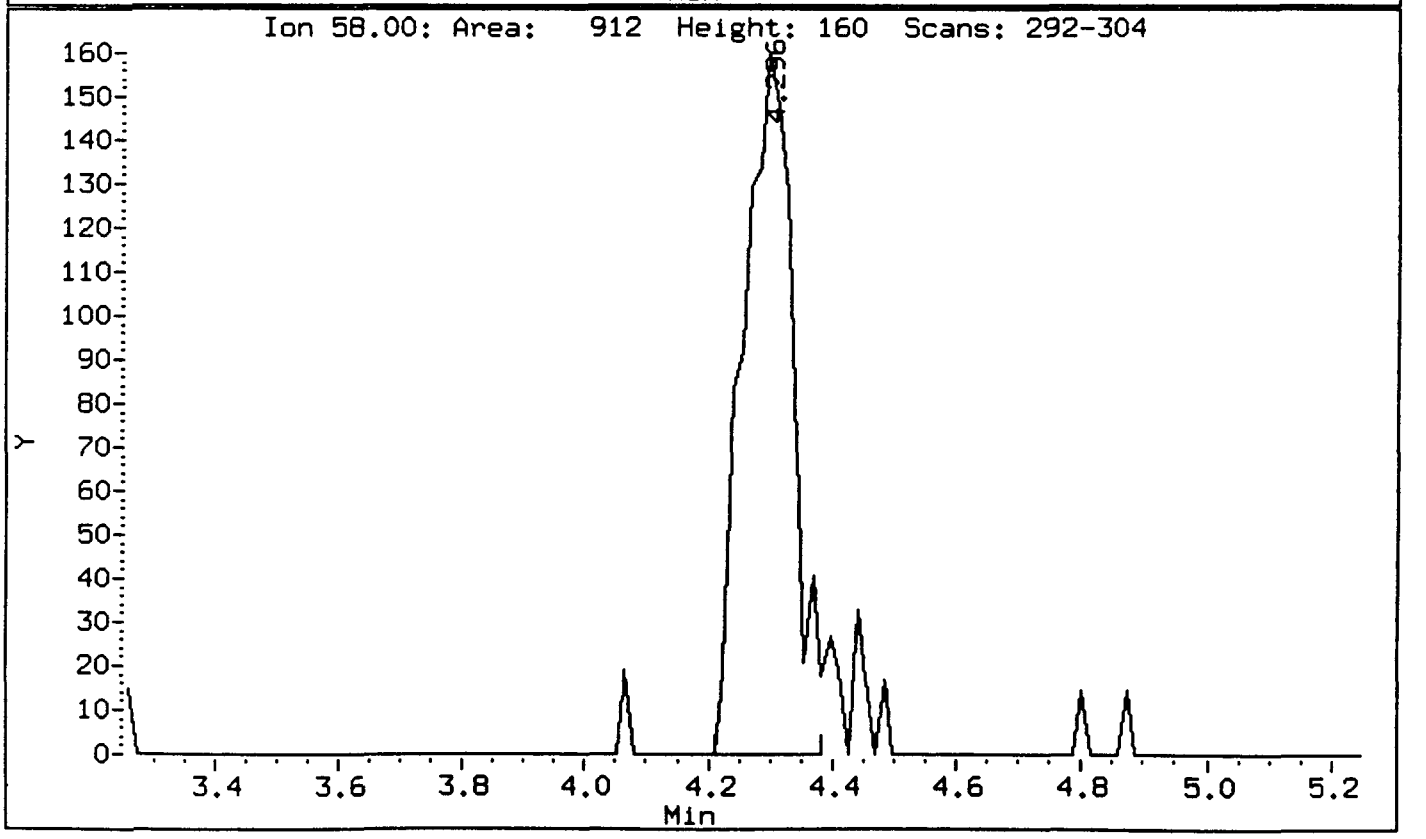
Injection Date: 26-JUL-96 09:54
Instrument: f50052.i
Client Sample ID: VSTD050KK

Compound: Acetone
CAS Number: 67-64-1





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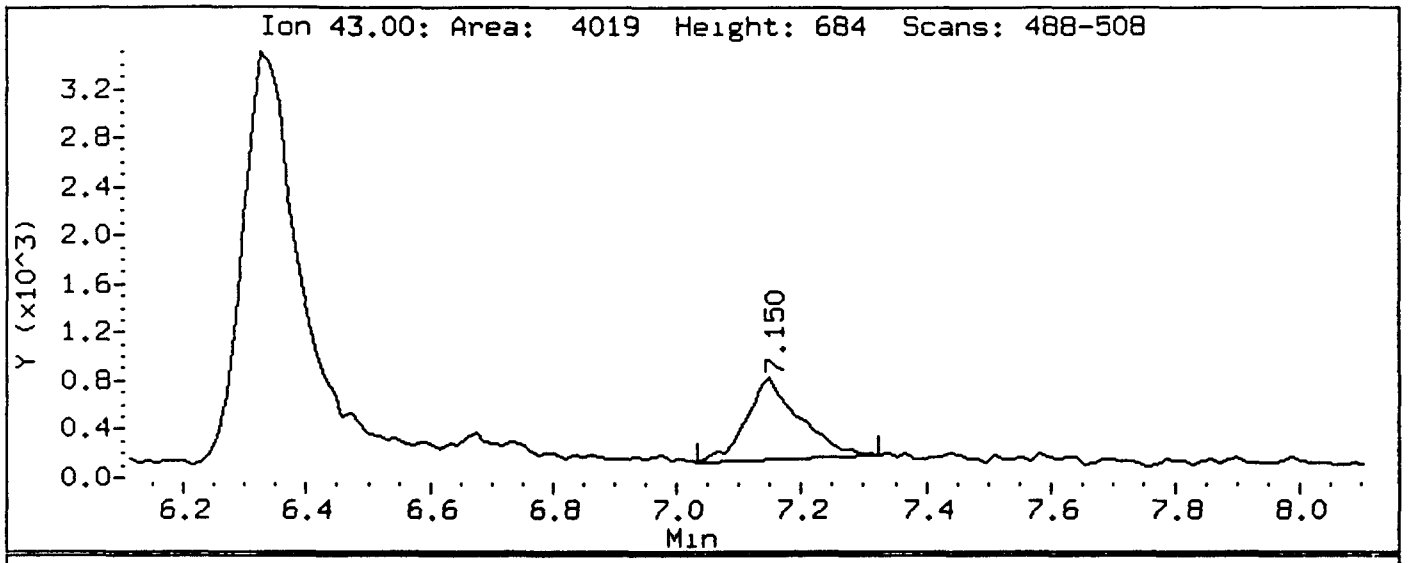
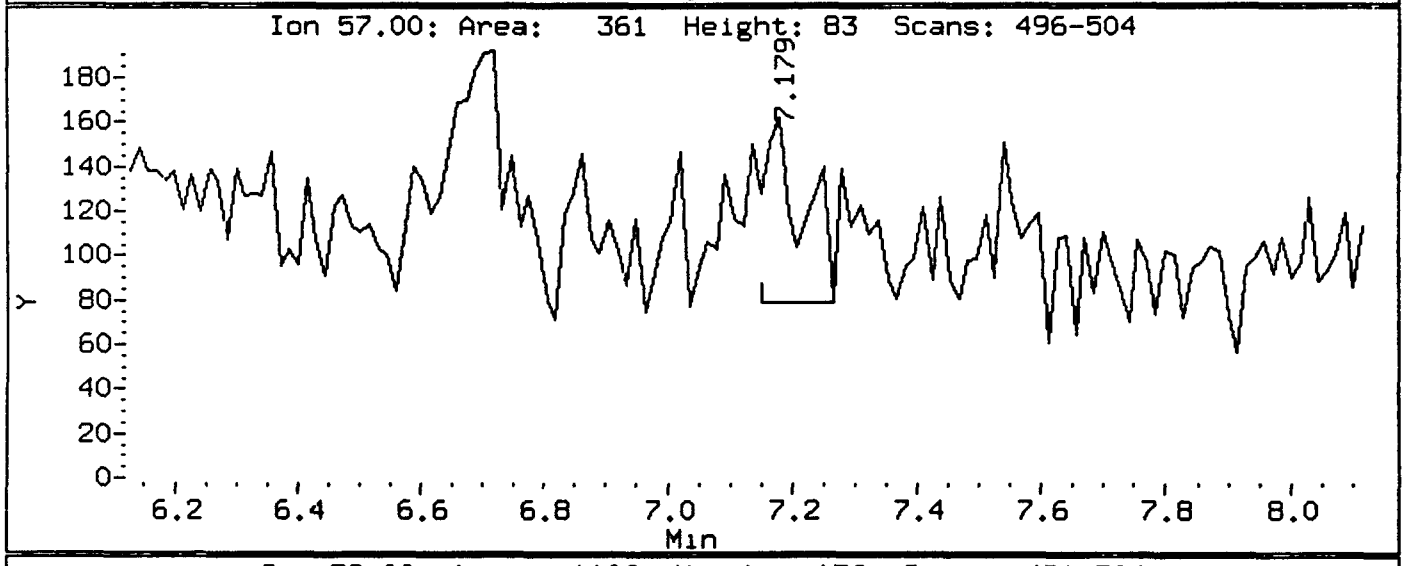
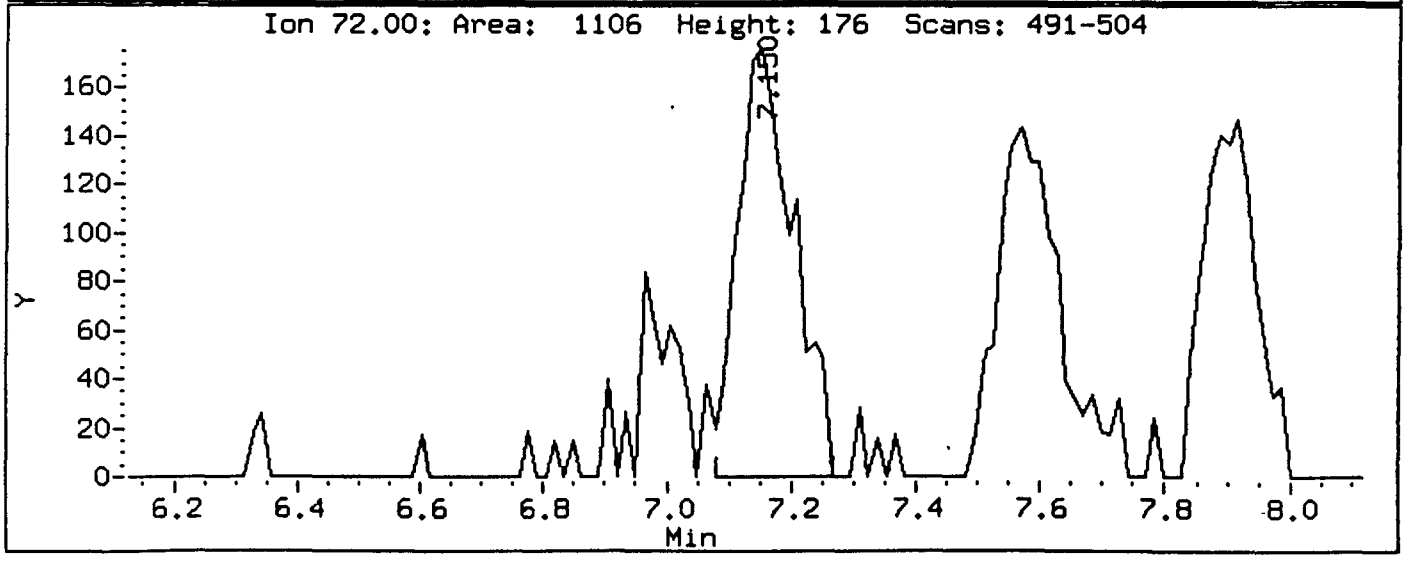
Injection Date: 26-JUL-96 09:54
Instrument: f50052.i
Client Sample ID: VSTD050KK

Compound: 2-Butanone
CAS Number: 78-93-3





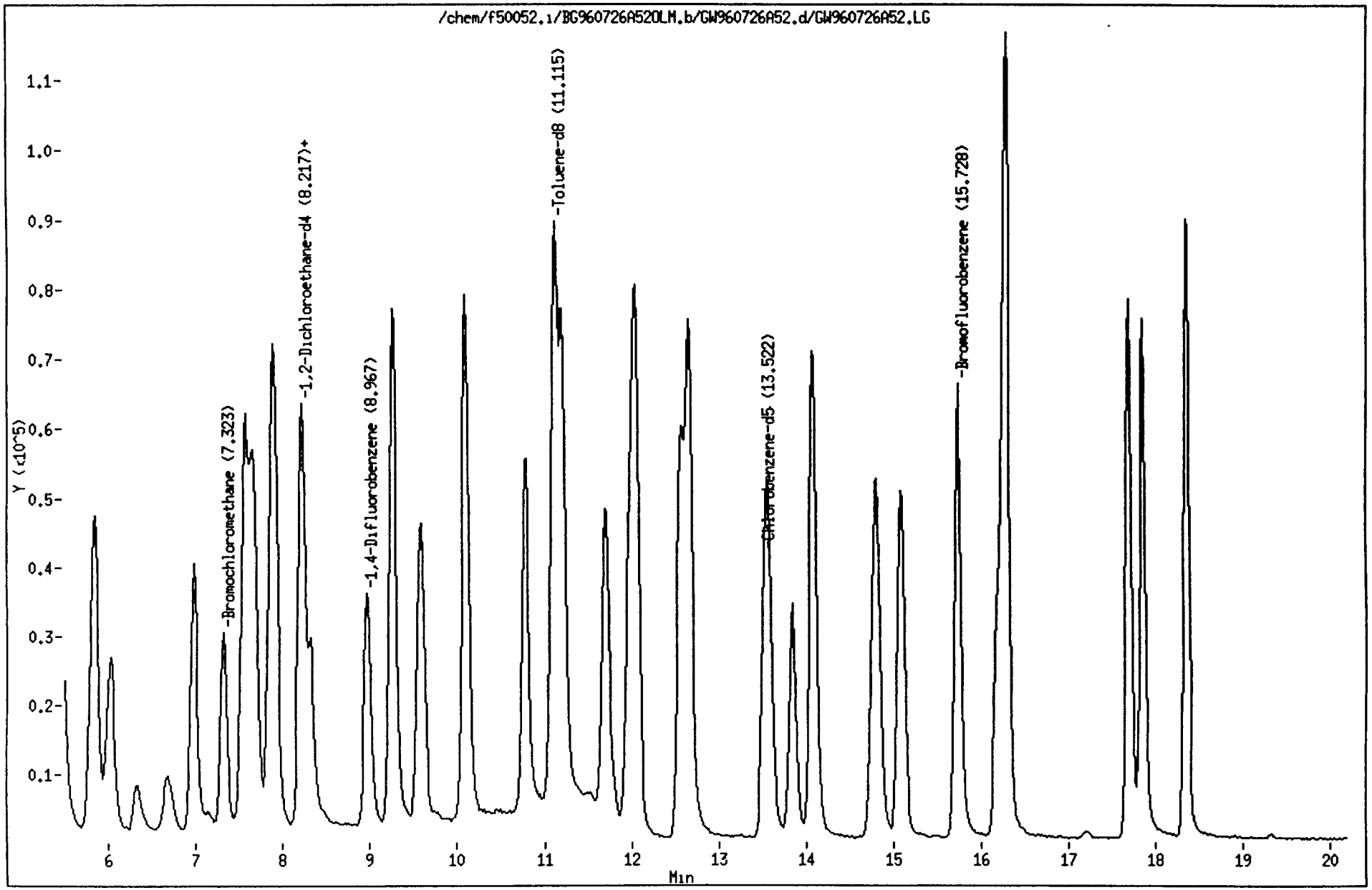


Data File: /chem/f50052.i/BG960726A52OLM.b/GW960726A52.d
Date : 26-JUL-1996 12:21
Client ID: VSTD100KN
Sample Info: VSTD100KN:2141:1:

Column phase: DB624

Instrument: f50052.i

Operator: 2141
Column diameter: 0.53



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Data File: /chem/f50052.i/BG960726A52OLM.b/GW960726A52.d
Report Date: 29-Jul-1996 12:56

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960726A52OLM.b/GW960726A52.d
Lab Smp Id: VSTD100KN Client Smp ID: VSTD100KN
Inj Date : 26-JUL-1996 12:21
Operator : 2141 Inst ID: f50052.i
Smp Info : VSTD100KN:2141:1:
Misc Info :
Comment :
Method : /chem/f50052.i/BG960726A52OLM.b/SOLM03.1.m
Meth Date : 29-Jul-1996 12:56 bevan Quant Type: ISTD
Cal Date : 26-JUL-1996 09:54 Cal File: GT960726A52.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	7.309	7 309	(1 000)	20070	250 0	
* 2 1,4-Difluorobenzene	114 00	8.967	8 967	(1 000)	73822	250 0	
* 3 Chlorobenzene-d5	117 00	13 522	13 522	(1 000)	39765	250 0	
$ 4 1,2-Dichloroethane-d4	65.00	8.203	8 203	(1 122)	57279	500 0	447 0
$ 5 Toluene-d8	98 00	11.100	11.100	(0 821)	124890	500 0	460 0
$ 6 Bromofluorobenzene	95 00	15 728	15 728	(1.163)	67609	500 0	453 1
7 Chloromethane	50 00	1 341	1 341	(0 183)	31879	500 0	448 2(M) 2
8 Vinyl Chloride	62.00	1.571	1 571	(0.215)	41004	500 0	453 9(M) 2
9 Bromomethane	94 00	2.206	2.206	(0.302)	55860	500 0	447 6(M) 2
10 Chloroethane	64 00	2.465	2.465	(0 337)	22858	500.0	467 6
11 1,1-Dichloroethene	96.00	3.993	3.993	(0.546)	40516	500.0	457.1
12 Carbon Disulfide	76.00	4 123	4 123	(0 564)	111196	500.0	449.0
13 Acetone	43.00	4 282	4.282	(0.586)	6924	500 0	475.9
14 Methylene Chloride	84.00	4 901	4.901	(0.671)	76786	500.0	346.3
15 trans-1,2-Dichloroethene	96 00	5.334	5 334	(0.730)	38407	500 0	450 2
16 1,1-Dichloroethane	63 00	6 026	6.026	(0 824)	69137	500.0	449 9
17 cis-1,2-Dichloroethene	96 00	6.977	6 977	(0 955)	44011	500.0	456.9
18 2-Butanone	43 00	7 150	7.150	(0 978)	6584	500.0	467.7
19 Chloroform	83.00	7.554	7 554	(1 034)	112567	500.0	459 3
20 1,1,1-Trichloroethane	97 00	7 655	7 655	(0.854)	109802	500 0	458 6
21 Carbon Tetrachloride	117.00	7.885	7 885	(0 879)	128246	500 0	462.6
22 Benzene	78.00	8.217	8 217	(0 916)	85581	500 0	449 7

Data File: /chem/f50052.i/BG960726A52OLM.b/GW960726A52.d
Report Date: 29-Jul-1996 12:56

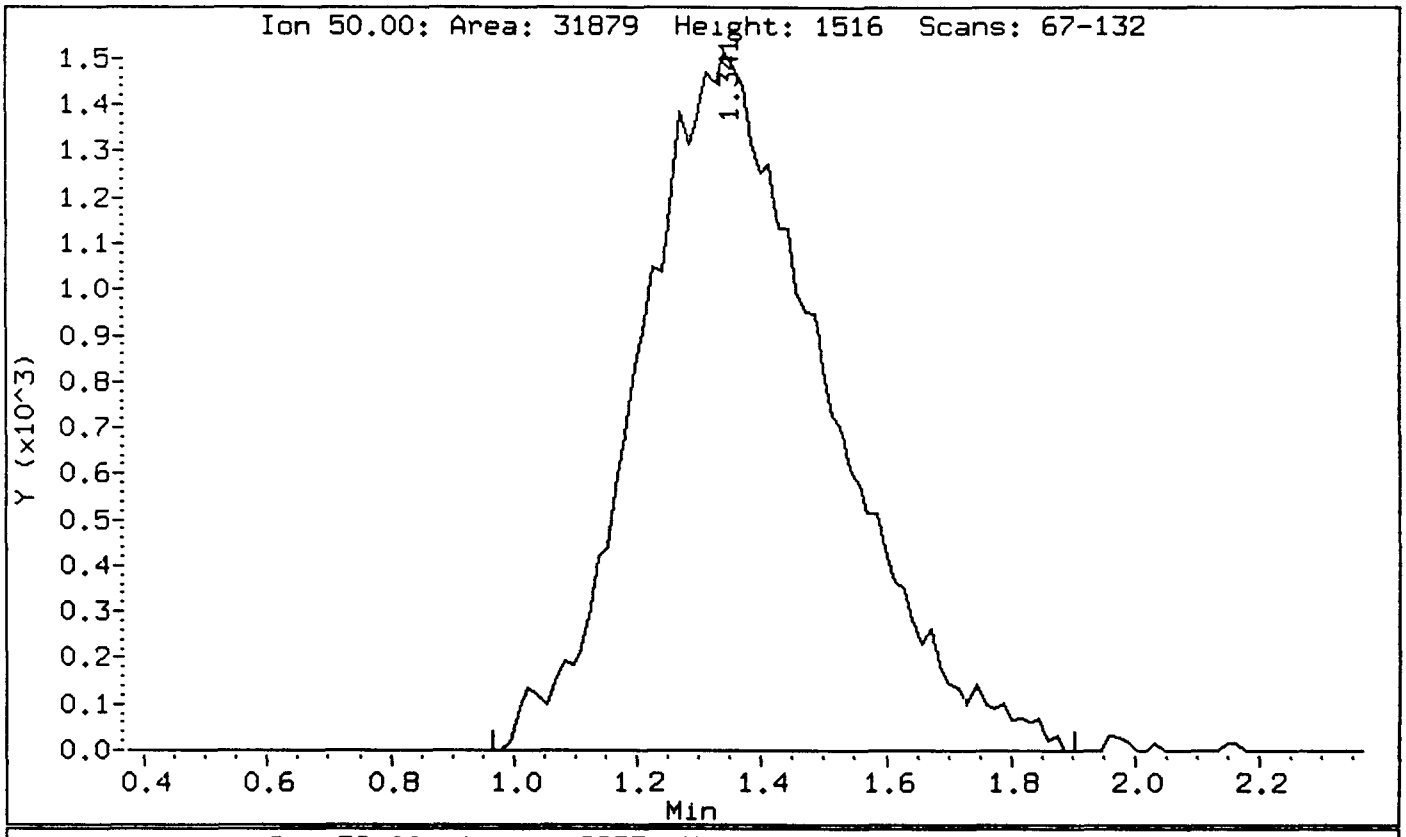
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	23 1,2-Dichloroethane	62 00	8 318	8 318	(1 138)	54940	500 0	456.5
	24 Trichloroethene	130 00	9 255	9.255	(1 032)	62134	500 0	459 0
	25 1,2-Dichloropropane	63 00	9 587	9 587	(1 069)	40260	500 0	452.0
	26 Bromodichloromethane	83 00	10 091	10 091	(1 125)	129927	500 0	456 6
	27 cis-1,3-Dichloropropene	75 00	10 769	10 769	(1 201)	67660	500.0	450 3
	28 4-Methyl-2-Pentanone	43 00	11 143	11 143	(0 824)	44817	500 0	447 7
	29 Toluene	91 00	11.201	11 201	(0 828)	113510	500 0	461 0
	30 trans-1,3-Dichloropropene	75 00	11.691	11 691	(1 304)	59101	500 0	612 8
	31 1,1,2-Trichloroethane	97 00	11.951	11 951	(1 333)	30174	500 0	476 9
	32 Tetrachloroethene	164 00	12 037	12 037	(0 890)	56613	500 0	480 7
	33 Dibromochloromethane	129 00	12 571	12 571	(1.402)	89479	500 0	453.4
	34 2-Hexanone	43 00	12 556	12 556	(0 929)	8142	500 0	410 9
	35 Chlorobenzene	112 00	13 565	13 565	(1 003)	67807	500 0	462.0
	36 Ethylbenzene	106 00	13 839	13 839	(1 023)	28356	500 0	459 0
	37 m,p-Xylene	106 00	14.070	14 070	(1 040)	69599	1000	924 4
	38 o-Xylene	106 00	14.762	14 762	(1 092)	36178	500 0	470 5
	39 Styrene	104 00	14.819	14 819	(1 096)	51198	500 0	453 5
	40 Bromoform	173 00	15.079	15 079	(1 682)	75217	500 0	464 7
	41 1,1,2,2-Tetrachloroethane	83 00	16 189	16 189	(1 197)	46856	500 0	468 4
M	42 1,2-Dichloroethene (total)	96 00				82418	1000	907 5
M	43 Xylene (Total)	106 00				105777	500 0	1376

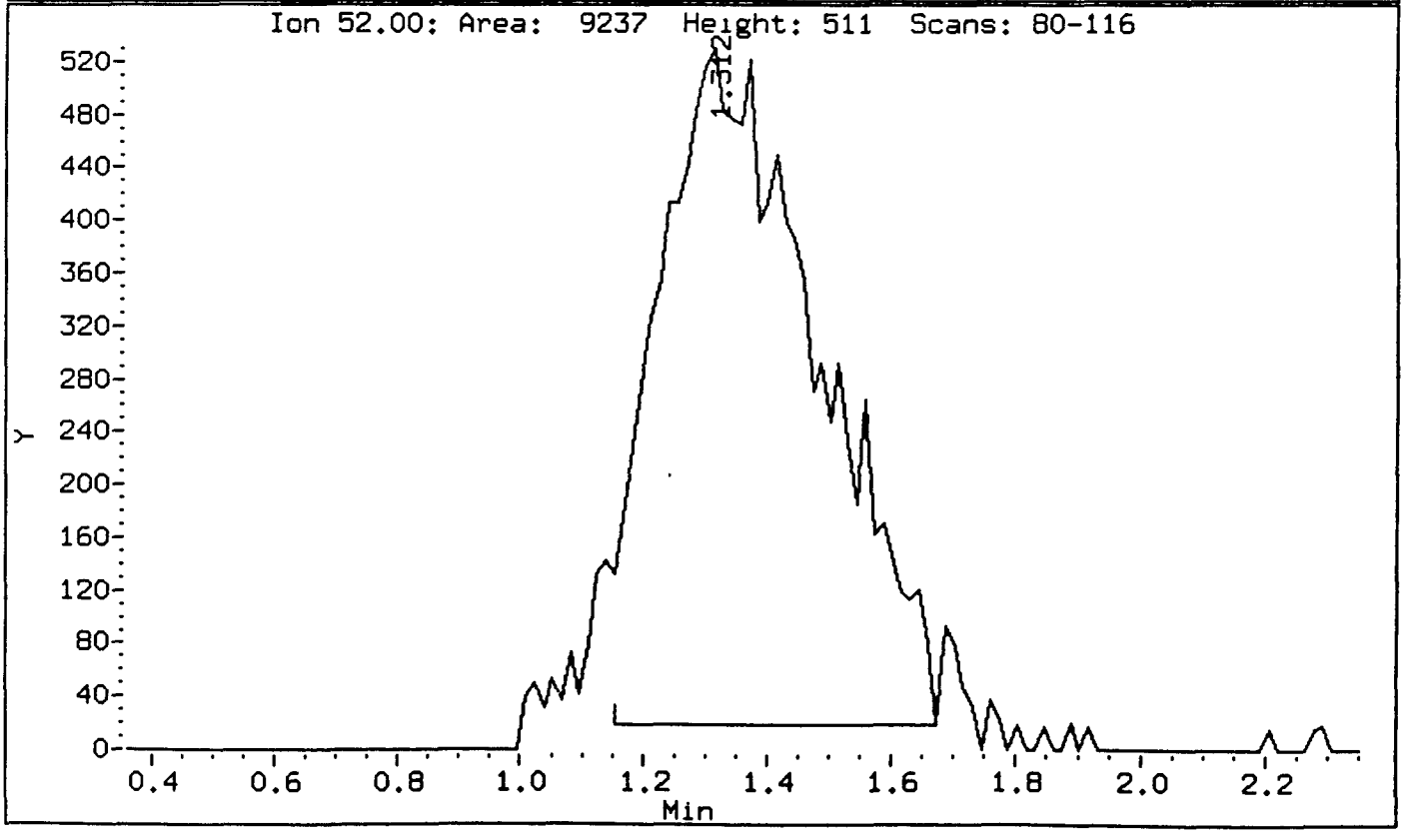
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960726A52OLM.b/GW960726A52.d/GW960726A52.LG
Injection Date: 26-JUL-96 12:21
Instrument: f50052.i
Client Sample ID: VSTD100KN

Compound: Chloromethane
CAS Number: 74-87-3





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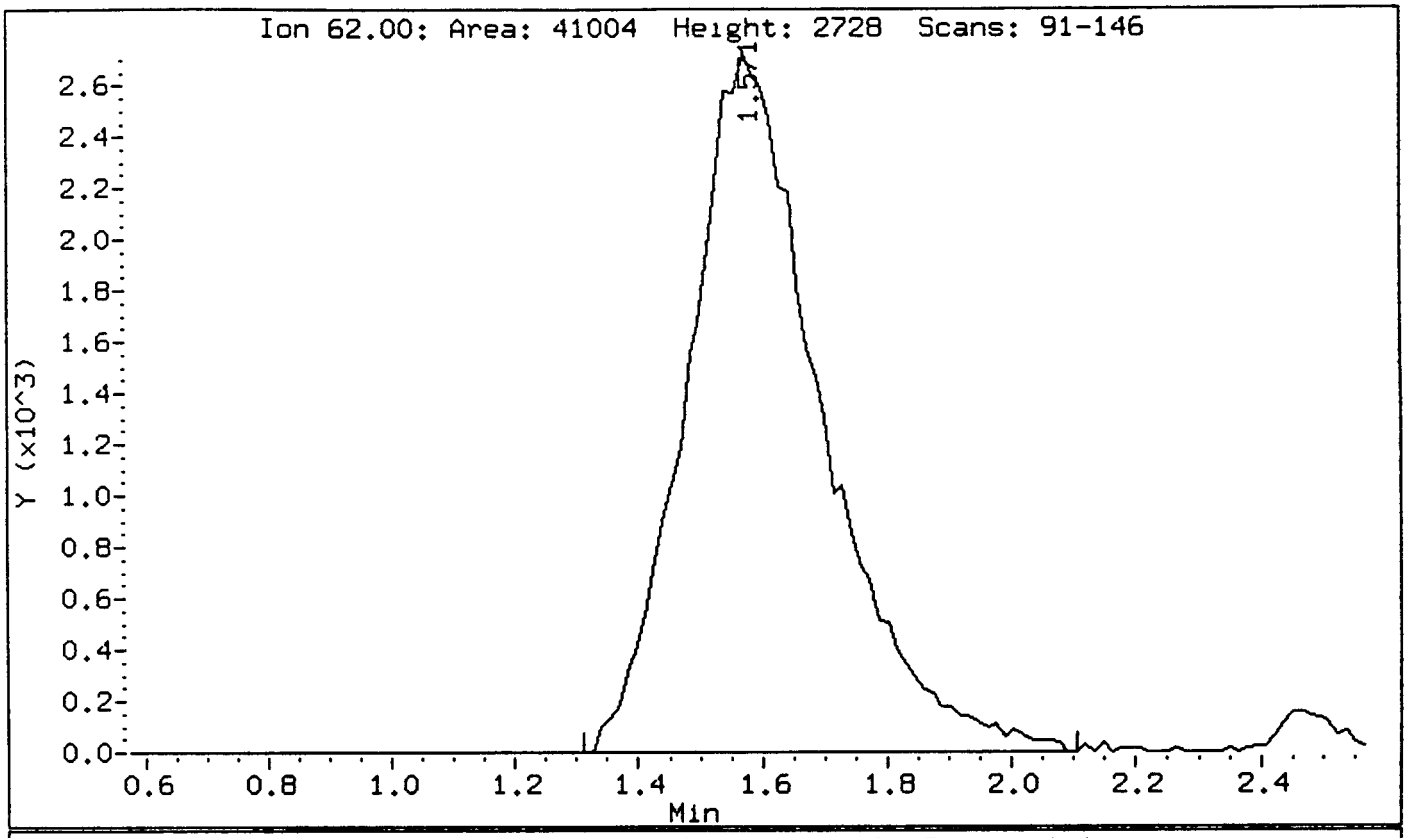
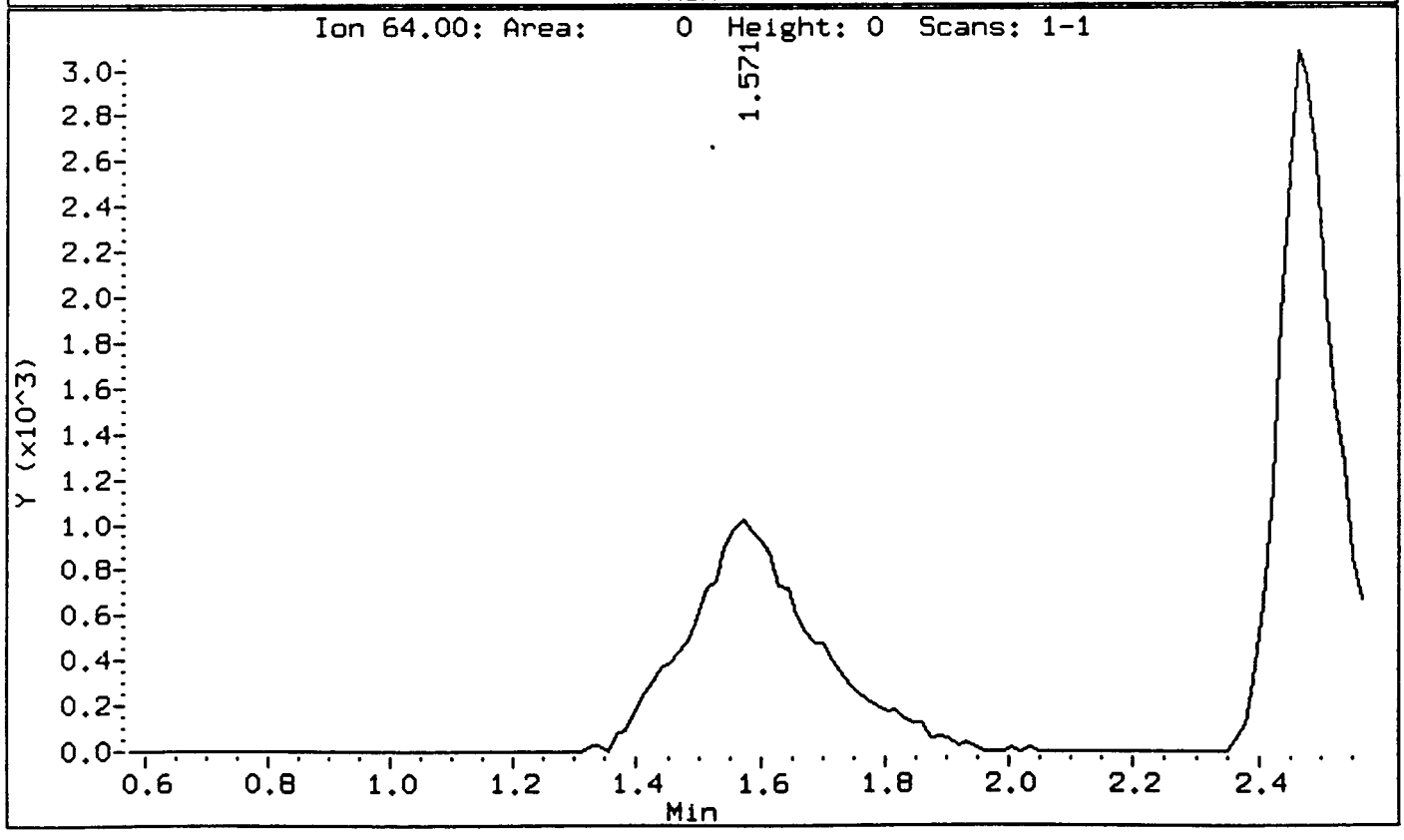
Injection Date: 26-JUL-96 12:21
Instrument: f50052.1
Client Sample ID: VSTD100KN

Compound: Vinyl Chloride
CAS Number: 75-01-4





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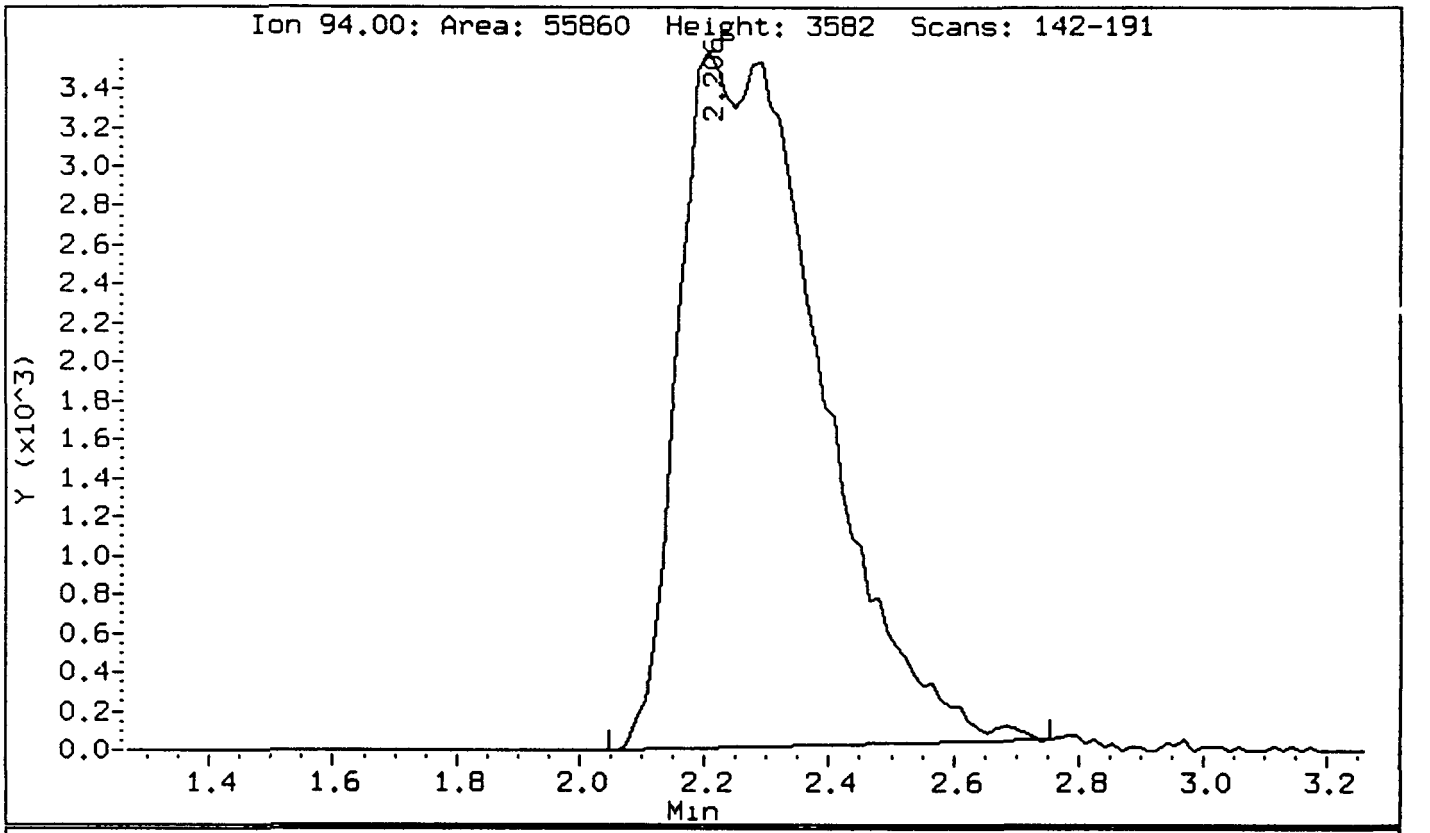
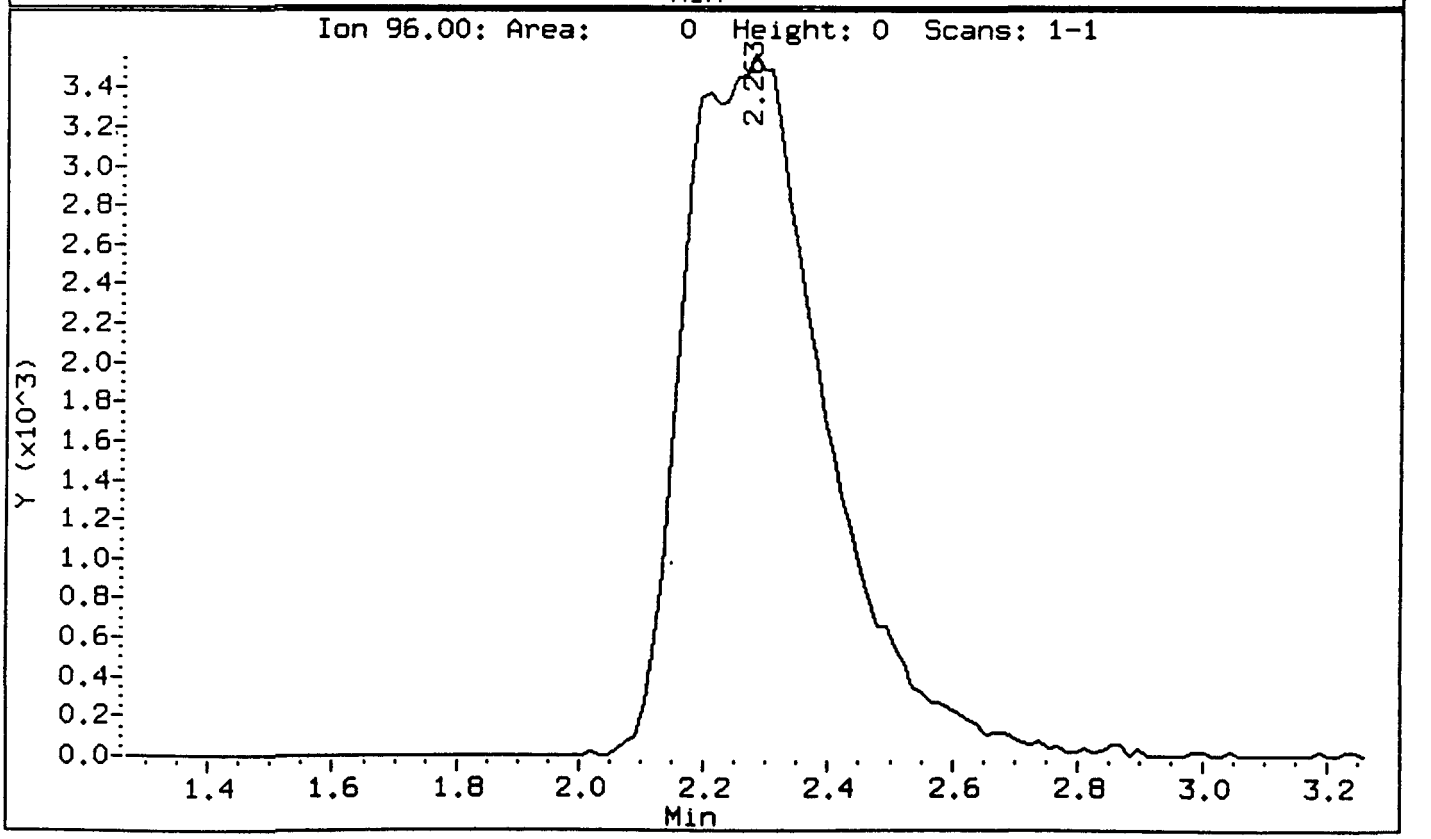
Injection Date: 26-JUL-96 12:21
Instrument: f50052.1
Client Sample ID: VSTD100KN

Compound: Bromomethane
CAS Number: 74-83-9





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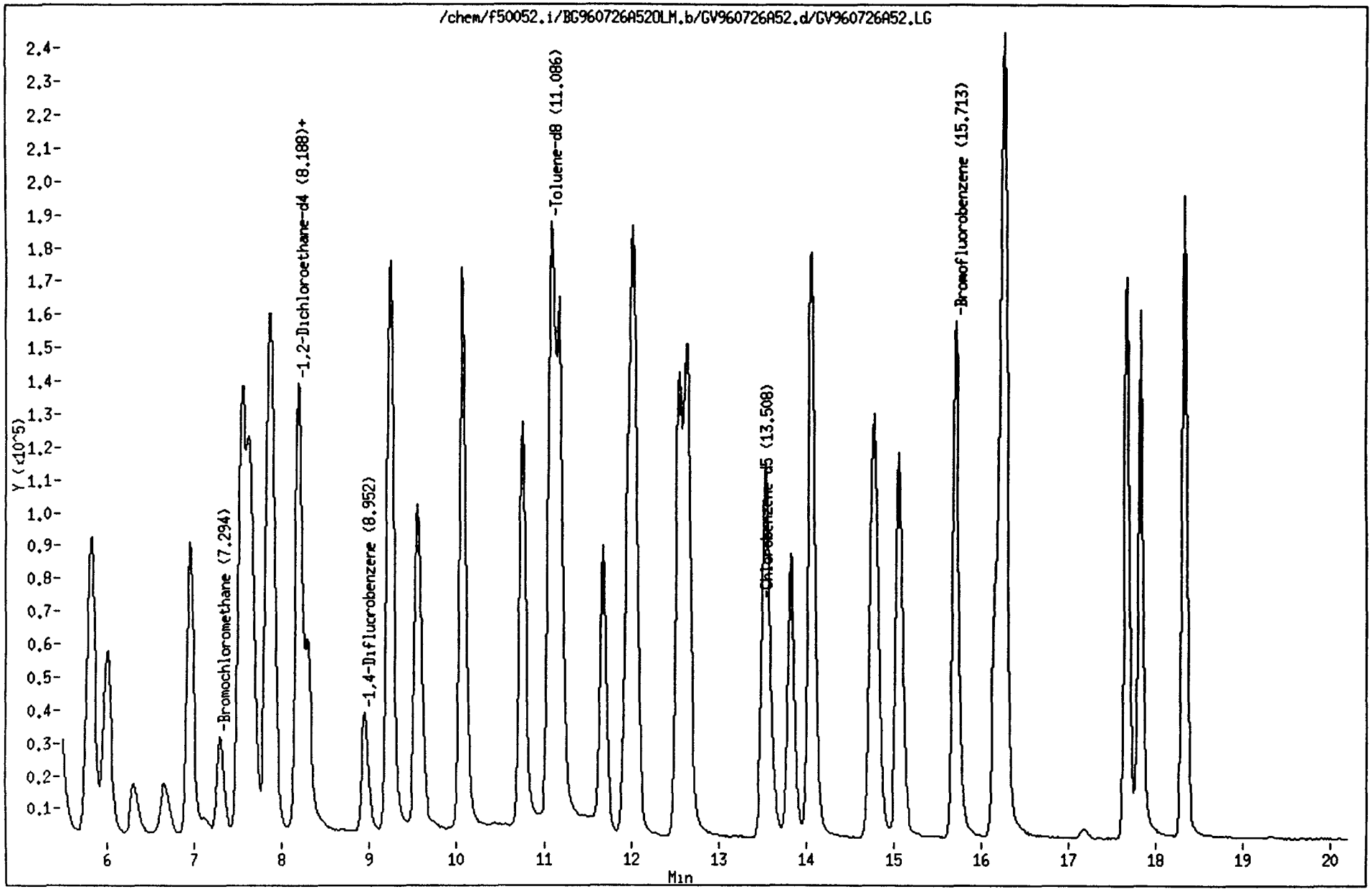
Date : 26-JUL-1996 11:29
Client ID: VSTD200KM
Sample Info: VSTD200KM:2141:1:

Column phase: DB624

Instrument: f50052.i

Operator: 2141
Column diameter: 0.53



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Data File: /chem/f50052.i/BG960726A52OLM.b/GV960726A52.d
Report Date: 29-Jul-1996 12:56

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960726A52OLM.b/GV960726A52.d
Lab Smp Id: VSTD200KM Client Smp ID: VSTD200KM
Inj Date : 26-JUL-1996 11:29
Operator : 2141 Inst ID: f50052.i
Smp Info : VSTD200KM:2141:1:
Misc Info :
Comment :
Method : /chem/f50052.i/BG960726A52OLM.b/SOLM03.1.m
Meth Date : 29-Jul-1996 12:56 bevan Quant Type: ISTD
Cal Date : 26-JUL-1996 09:54 Cal File: GT960726A52.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128.00	7.294	7 294	(1 000)	20050	250 0	
* 2 1,4-Difluorobenzene	114 00	8 938	8 938	(1 000)	78781	250 0	
* 3 Chlorobenzene-d5	117 00	13.508	13 508	(1 000)	45875	250.0	
$ 4 1,2-Dichloroethane-d4	65.00	8 188	8.188	(1 123)	120304	1000	907 8
$ 5 Toluene-d8	98.00	11 086	11.086	(0.821)	269035	1000	836 6
$ 6 Bromofluorobenzene	95 00	15.713	15 713	(1.163)	159568	1000	899 0
7 Chloromethane	50.00	1.341	1 341	(0.184)	67158	1000	913 5(M) 2
8 Vinyl Chloride	62.00	1 542	1.542	(0 211)	89489	1000	962 1
9 Bromomethane	94.00	2.191	2.191	(0 300)	119999	1000	930 1(M) 2
10 Chloroethane	64.00	2.451	2 451	(0.336)	49396	1000	990.2
11 1,1-Dichloroethene	96 00	3.964	3 964	(0 543)	95334	1000	1047(A)
12 Carbon Disulfide	76 00	4.109	4.109	(0.563)	257622	1000	1007(A)
13 Acetone	43.00	4.296	4 296	(0.589)	10155	1000	687.7
14 Methylene Chloride	84.00	4.887	4.887	(0.670)	137500	1000	563.0
15 trans-1,2-Dichloroethene	96 00	5 319	5.319	(0.729)	90719	1000	1030(A)
16 1,1-Dichloroethane	63 00	6.011	6.011	(0 824)	152859	1000	963 6
17 cis-1,2-Dichloroethene	96.00	6.948	6 948	(0.953)	99787	1000	1008(A)
18 2-Butanone	43.00	7.136	7 136	(0.978)	12557	1000	874 1(M) 2
19 Chloroform	83 00	7.539	7 539	(1 034)	249858	1000	993 5
20 1,1,1-Trichloroethane	97.00	7 640	7.640	(0.855)	243965	1000	929 3
21 Carbon Tetrachloride	117 00	7.857	7 857	(0.879)	292887	1000	966 0
22 Benzene	78 00	8.203	8 203	(0 918)	190986	1000	909.9

Data File: /chem/f50052.i/BG960726A52OLM.b/GV960726A52.d
Report Date: 29-Jul-1996 12:56

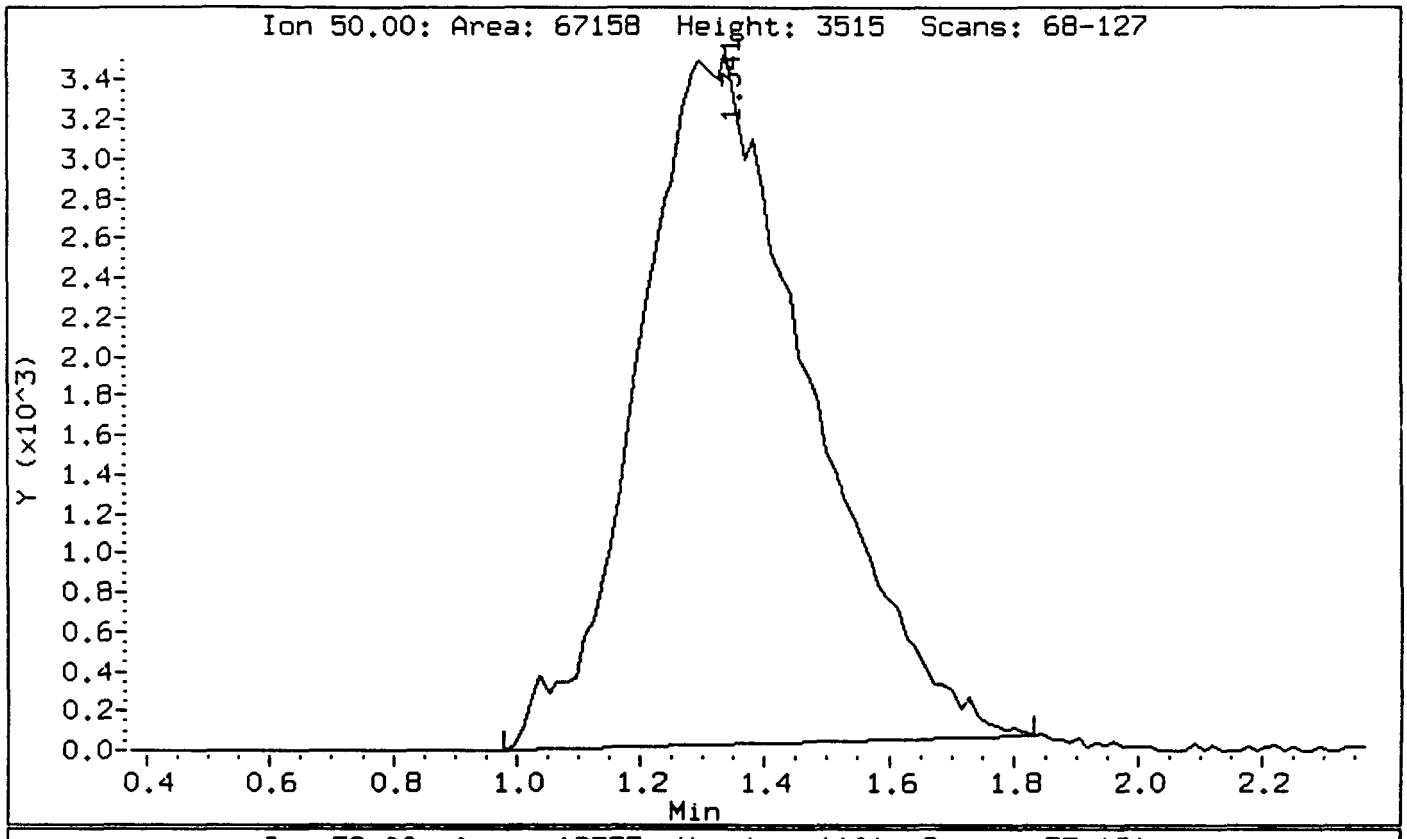
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	8 304	8 304	(1 138)	116221	1000	939 5
24 Trichloroethene	130 00	9 226	9 226	(1 032)	141299	1000	952 1
25 1,2-Dichloropropane	63 00	9 558	9 558	(1 069)	90186	1000	919 4
26 Bromodichloromethane	83 00	10 062	10 062	(1 126)	287378	1000	919 9
27 cis-1,3-Dichloropropene	75 00	10 754	10 754	(1 203)	155169	1000	936 6
28 4-Methyl-2-Pentanone	43 00	11 115	11 115	(0 823)	91610	1000	766 5
29 Toluene	91 00	11 187	11 187	(0 828)	252076	1000	865.0
30 trans-1,3-Dichloropropene	75 00	11 677	11 677	(1 306)	109827	1000	1154(A)
31 1,1,2-Trichloroethane	97 00	11 951	11 951	(1 337)	64933	1000	947 1
32 Tetrachloroethene	164 00	12 023	12 023	(0 890)	124899	1000	907 6
33 Dibromochloromethane	129 00	12 542	12 542	(1 403)	206906	1000	953 0
34 2-Hexanone	43 00	12 542	12 542	(0 928)	20097	1000	829 9
35 Chlorobenzene	112 00	13 551	13 551	(1 003)	161428	1000	929 8
36 Ethylbenzene	106 00	13 825	13 825	(1 023)	67912	1000	927.5
37 m,p-Xylene	106 00	14 055	14 055	(1 041)	161211	2000	1810
38 o-Xylene	106 00	14.747	14 747	(1 092)	84712	1000	936 6
39 Styrene	104 00	14 805	14 805	(1 096)	123226	1000	917 6
40 Bromoform	173 00	15 065	15 065	(1 685)	158934	1000	899 0
41 1,1,2,2-Tetrachloroethane	83 00	16 160	16 160	(1.196)	101886	1000	864 7
M 42 1,2-Dichloroethene (total)	96 00				190506	2000	2037(A)
M 43 Xylene (Total)	106 00				245923	1000	2719

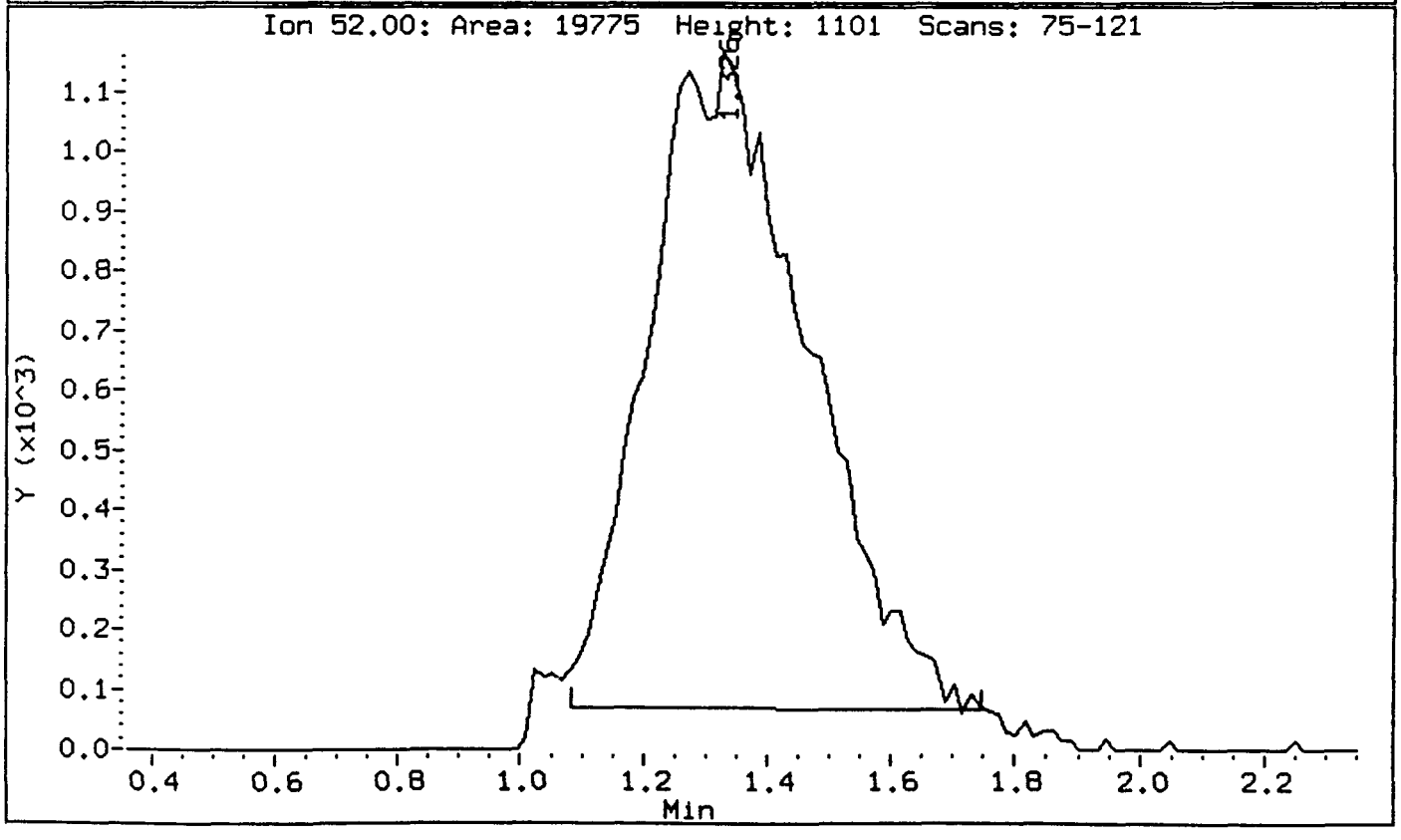
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960726A52OLM.b/GV960726A52.d/GV960726A52.LG
Injection Date: 26-JUL-96 11:29
Instrument: f50052.i
Client Sample ID: VSTD200KM

Compound: Chloromethane
CAS Number: 74-87-3





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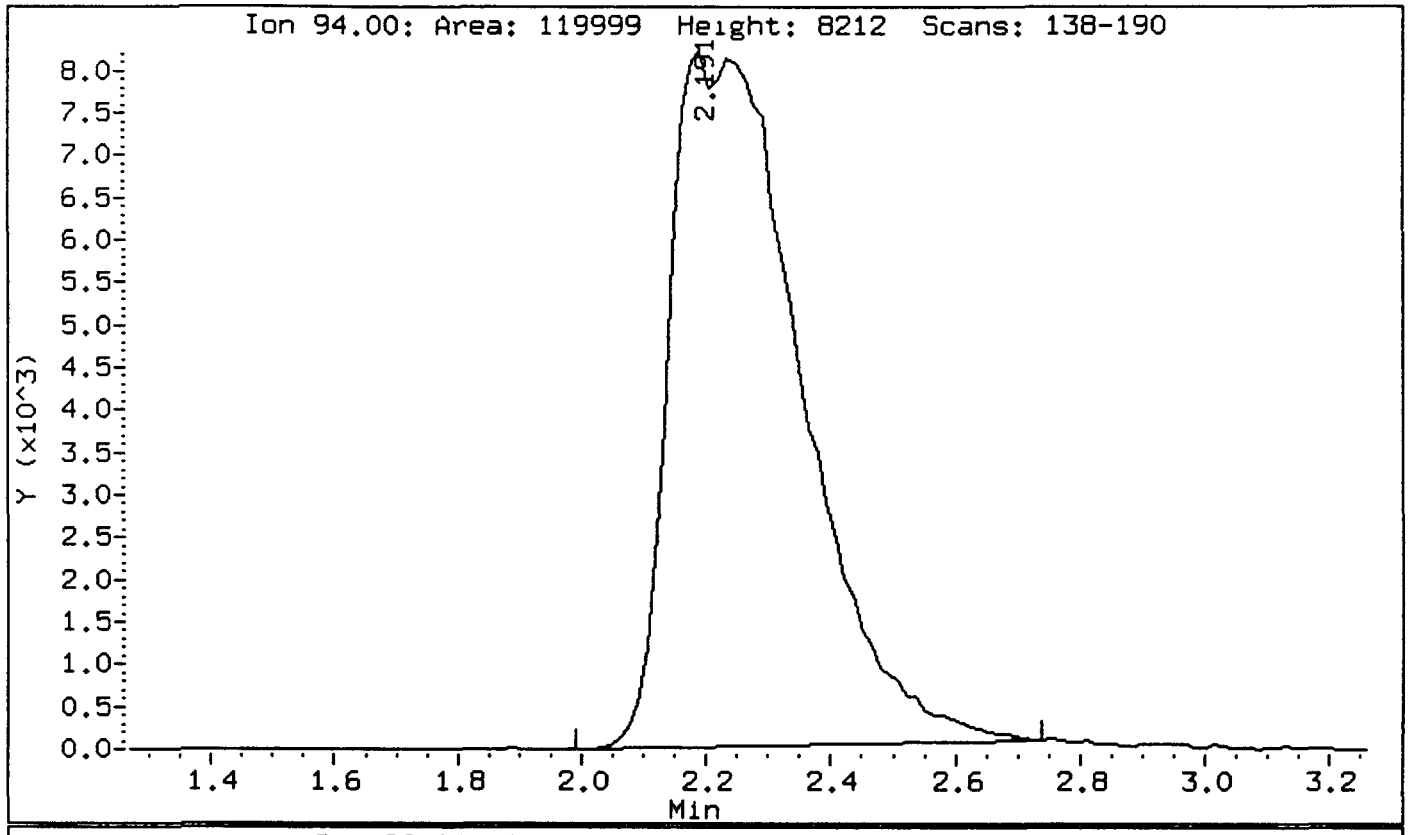
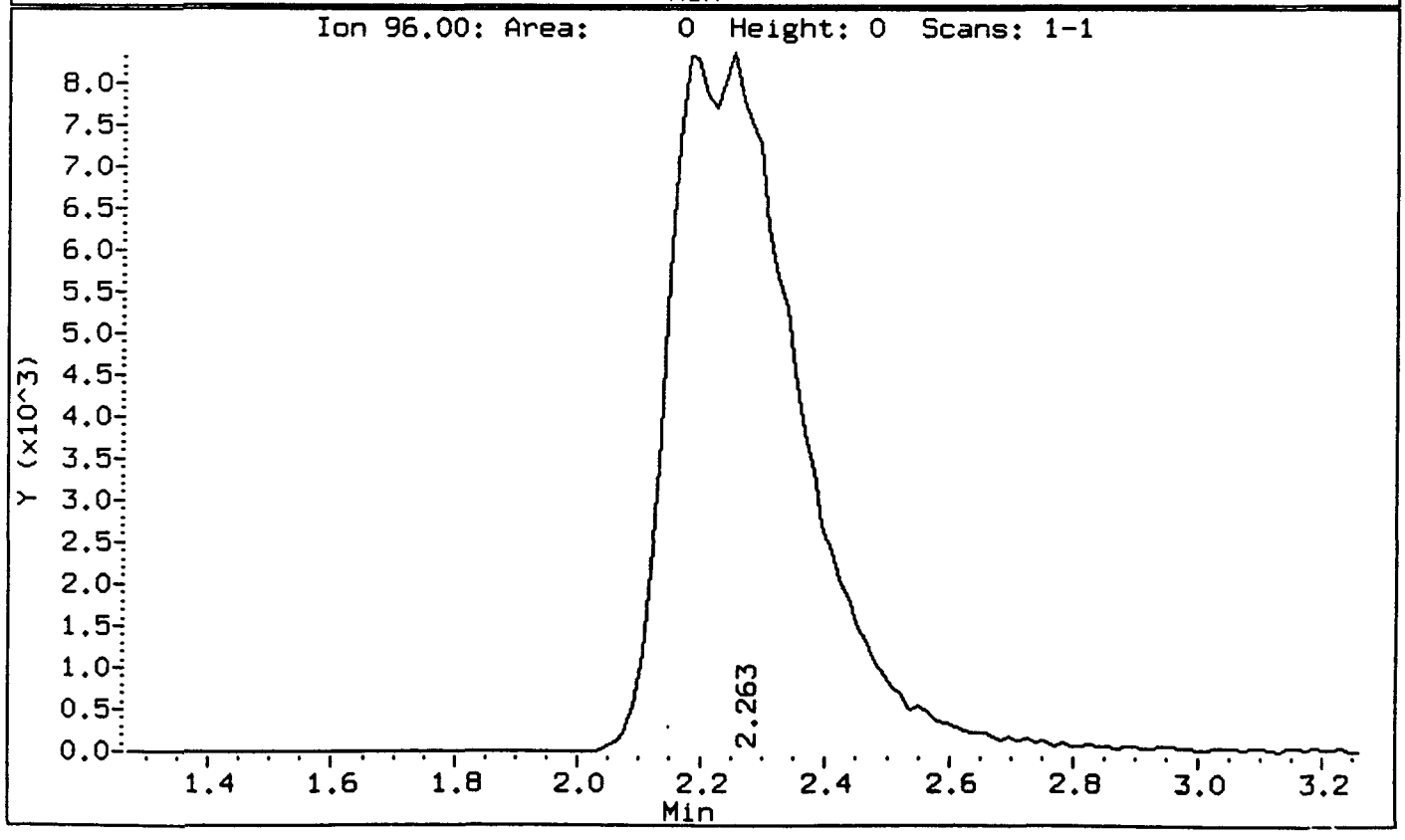
Injection Date: 26-JUL-96 11:29
Instrument: f50052.i
Client Sample ID: VSTD200KM

Compound: Bromomethane
CAS Number: 74-83-9





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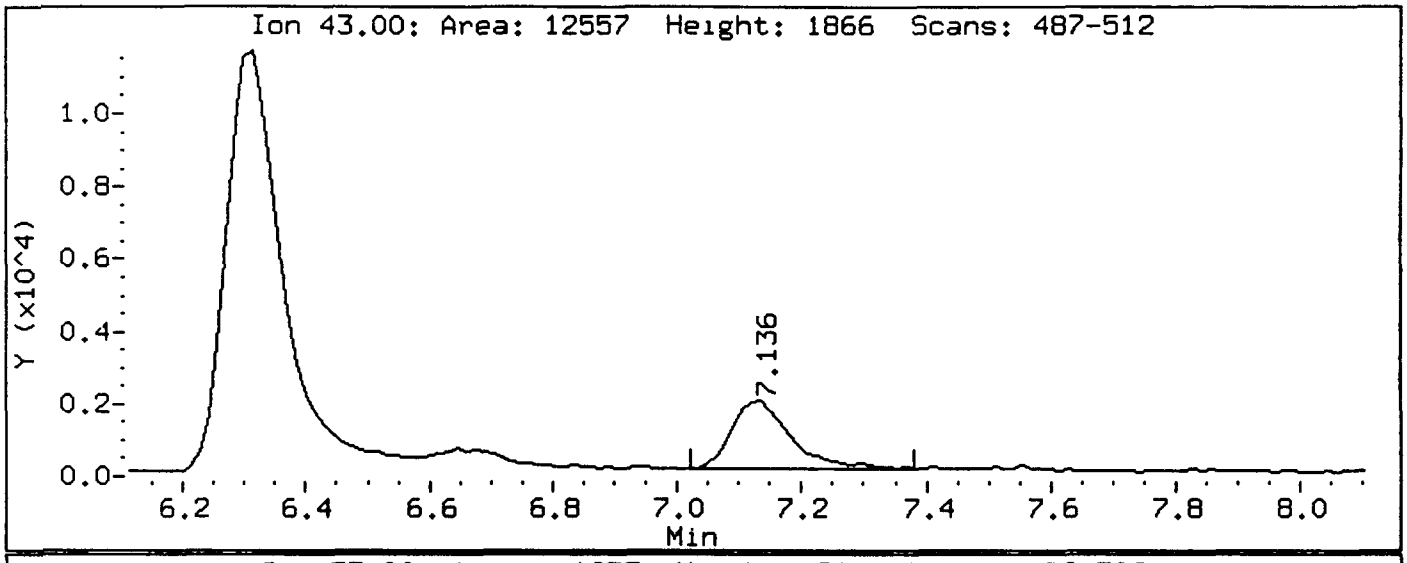
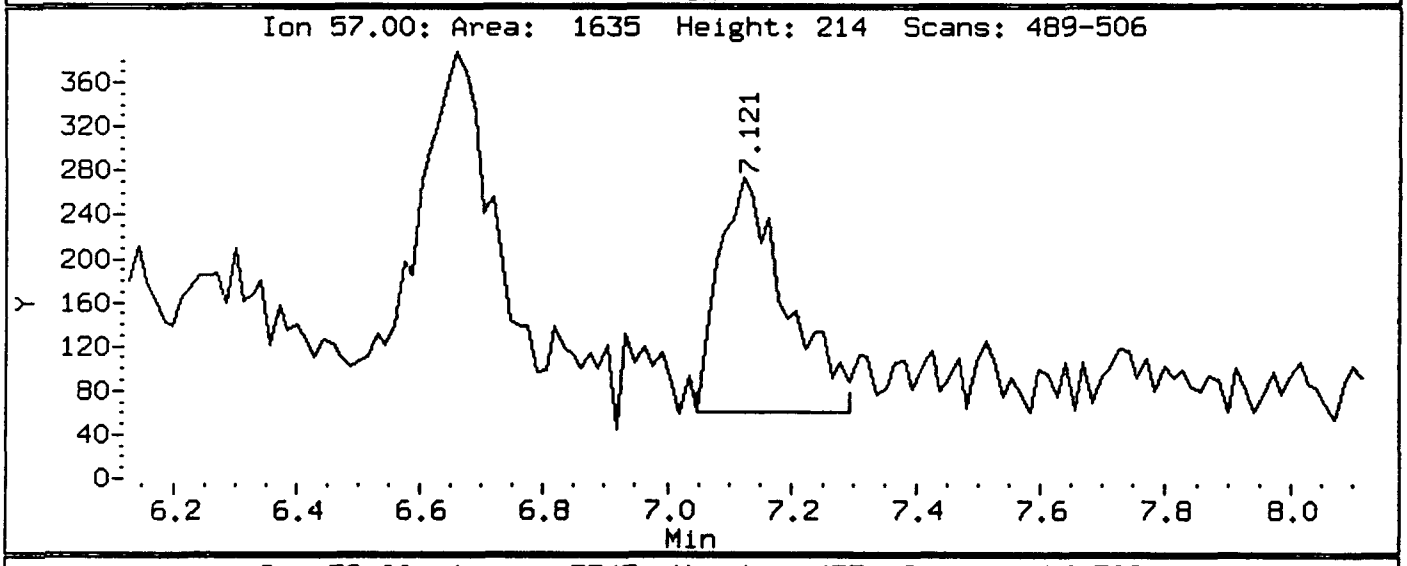
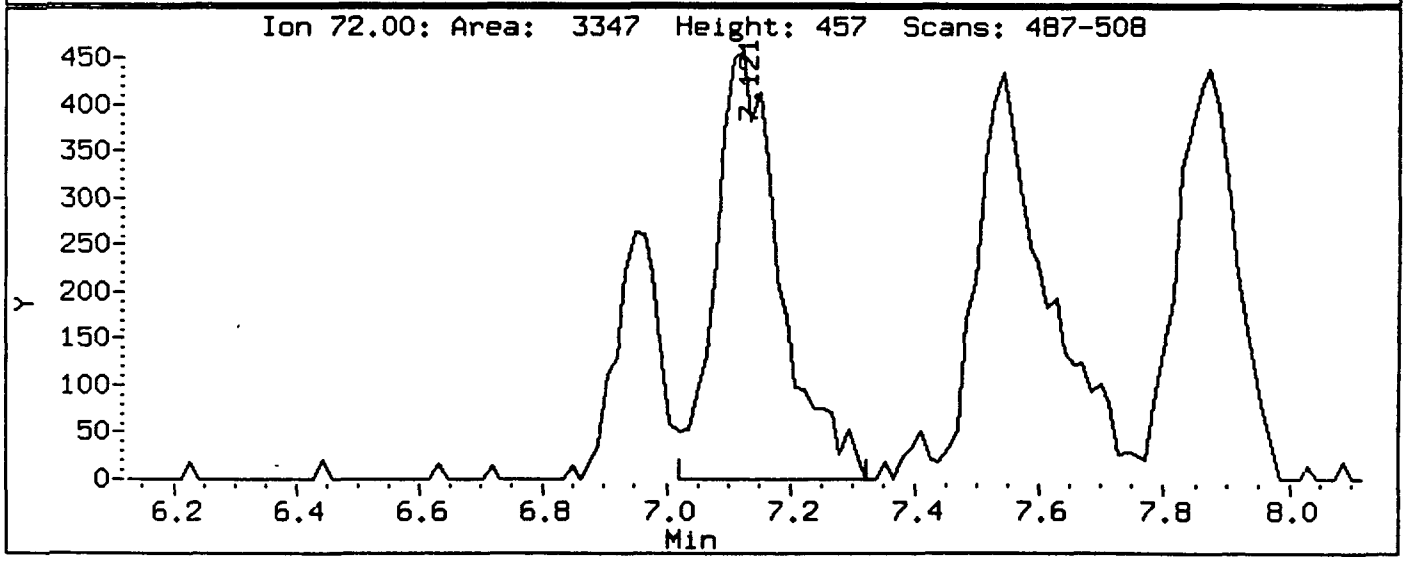
Injection Date: 26-JUL-96 11:29
Instrument: f50052.i
Client Sample ID: VSTD200KM

Compound: 2-Butanone
CAS Number: 78-93-3







COMPUCHEM ENVIROMENTAL CORPORATION
GC/MS ANALYSIS LOG

~~SEMI~~-VOLATILE
MS 7/26/96

INITIAL TIME OF TUNE 8:17
TIME TUNE EXPIRES 20:17

SHIFT(S) (A) ✓ (B) ____ (C) ____
DATE 7/26/96
LINKER/METHOD SOLM03.1+

PREVENTIVE MAINTENANCE None

RUN LOG

	REJECTED	FILE NAME (GMRD 7/26/96)	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc)
1		~~BF8~~960726A52	/	7/26/96	8 17	BFB	—	7008	2ul	2153	LCSSC 45115
2	/	GS960726A52		7/26/96	8 51	VSTD050KK	~~TN59~~ 2	~~TN59~~	10ml	2153	
3		GT960726A52	/	7/26/96	9 54	VSTD050KK	~~TN59~~	TN59	10ml	2153	
4		GU960726A52	/	/ /	10 47	VSTD050KL	—	TN59		2141	Good
5		GV960726A52	/	/ /	11 29	VSTD200KM					ICAL
6		GW960726A52	/	/ /	12 21	VSTD100KN					
7		GX960726A52	/	/ /	13 05	VSTD020KO					
8				/ /							
9				/ /							
10				/ /							
11				/ /							
12				/ /							
13				/ /							
14				/ /							
15				/ /							
16				/ /							
17				/ /							
18				/ /							
19				/ /							
20				/ /							
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22				/ /							
23				/ /							
24				/ /							
				/ /							

260

COPY original in 24893 - FFE911 8493 7/30/96

VERIFIED ____
SUPERVISOR APPROVAL [signature]
ENVELOPE NAME ____

0007

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50056 Calibration Date(s): 07/23/96 07/23/96

Heated Purge: (Y/N) Y Calibration Time(s): 0847 1237

GC Column:DB624 ID: 0.53 (mm)

LAB FILE ID: RRF10 =GY960723A56 RRF20 =GX960723A56
RRF50 =GT960723A56 RRF100=GW960723A56 RRF200=GV960723A56

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	1.638	1.736	1.693	1.624	1.797	1.698	4.2
Bromomethane *	2.216	2.384	2.158	2.020	2.025	2.161	7.0*
Vinyl Chloride *	2.136	2.330	2.105	2.001	2.111	2.137	5.6*
Chloroethane	1.165	1.119	1.194	0.994	1.036	1.102	7.7
Methylene Chloride	8.916	4.626	2.617	1.999	1.678	3.967	75.5
Acetone	1.412	0.723	0.313	0.282	0.226	0.591	84.5
Carbon Disulfide	4.131	4.717	5.300	4.922	4.449	4.704	9.5
1,1-Dichloroethene *	1.455	1.594	1.864	1.717	1.597	1.645	9.3*
1,1-Dichloroethane *	2.255	2.519	2.565	2.422	2.383	2.429	5.0*
1,2-Dichloroethene (total)	1.400	1.646	1.768	1.620	1.489	1.585	9.0
Chloroform *	2.564	2.880	3.016	2.788	2.697	2.789	6.2*
1,2-Dichloroethane *	1.120	1.291	1.263	1.150	1.139	1.193	6.6*
2-Butanone	0.451	0.513	0.354	0.354	0.360	0.406	17.8
1,1,1-Trichloroethane *	0.460	0.540	0.539	0.495	0.501	0.507	6.6*
Carbon Tetrachloride *	0.432	0.516	0.505	0.449	0.440	0.468	8.3*
Bromodichloromethane *	0.443	0.541	0.552	0.514	0.533	0.517	8.4*
1,2-Dichloropropane	0.310	0.379	0.361	0.339	0.334	0.345	7.7
cis-1,3-Dichloropropene *	0.432	0.532	0.532	0.501	0.516	0.503	8.3*
Trichloroethene *	0.410	0.488	0.472	0.412	0.390	0.434	9.9*
Dibromochloromethane *	0.414	0.492	0.453	0.398	0.406	0.433	9.2*
1,1,2-Trichloroethane *	0.269	0.312	0.293	0.261	0.273	0.282	7.3*
Benzene *	0.794	0.913	0.841	0.717	0.646	0.782	13.3*
trans-1,3-Dichloropropene *	0.327	0.373	0.364	0.347	0.391	0.360	6.7*
Bromoform *	0.215	0.278	0.245	0.235	0.273	0.249	10.6*
4-Methyl-2-Pentanone	0.320	0.420	0.325	0.363	0.399	0.365	12.1
2-Hexanone	0.233	0.281	0.179	0.192	0.209	0.219	18.3
Tetrachloroethene *	0.392	0.419	0.412	0.351	0.340	0.383	9.3*
1,1,2,2-Tetrachloroethane *	0.494	0.624	0.506	0.507	0.546	0.535	9.9*
Toluene *	1.228	1.319	1.235	1.026	1.020	1.166	11.6*
Chlorobenzene *	0.832	0.967	0.931	0.809	0.765	0.861	9.9*
Ethylbenzene *	0.417	0.476	0.445	0.365	0.326	0.406	14.9*
Styrene *	0.859	0.932	0.830	0.644	0.596	0.772	18.8*
Xylene (Total) *	0.530	0.589	0.530	0.420	0.377	0.489	17.9*
Toluene-d8	1.628	1.566	1.350	1.136	1.092	1.354	17.9
Bromofluorobenzene *	1.022	1.065	0.845	0.770	0.763	0.893	15.9*
1,2-Dichloroethane-d4	1.480	1.389	1.194	1.101	1.142	1.261	13.1

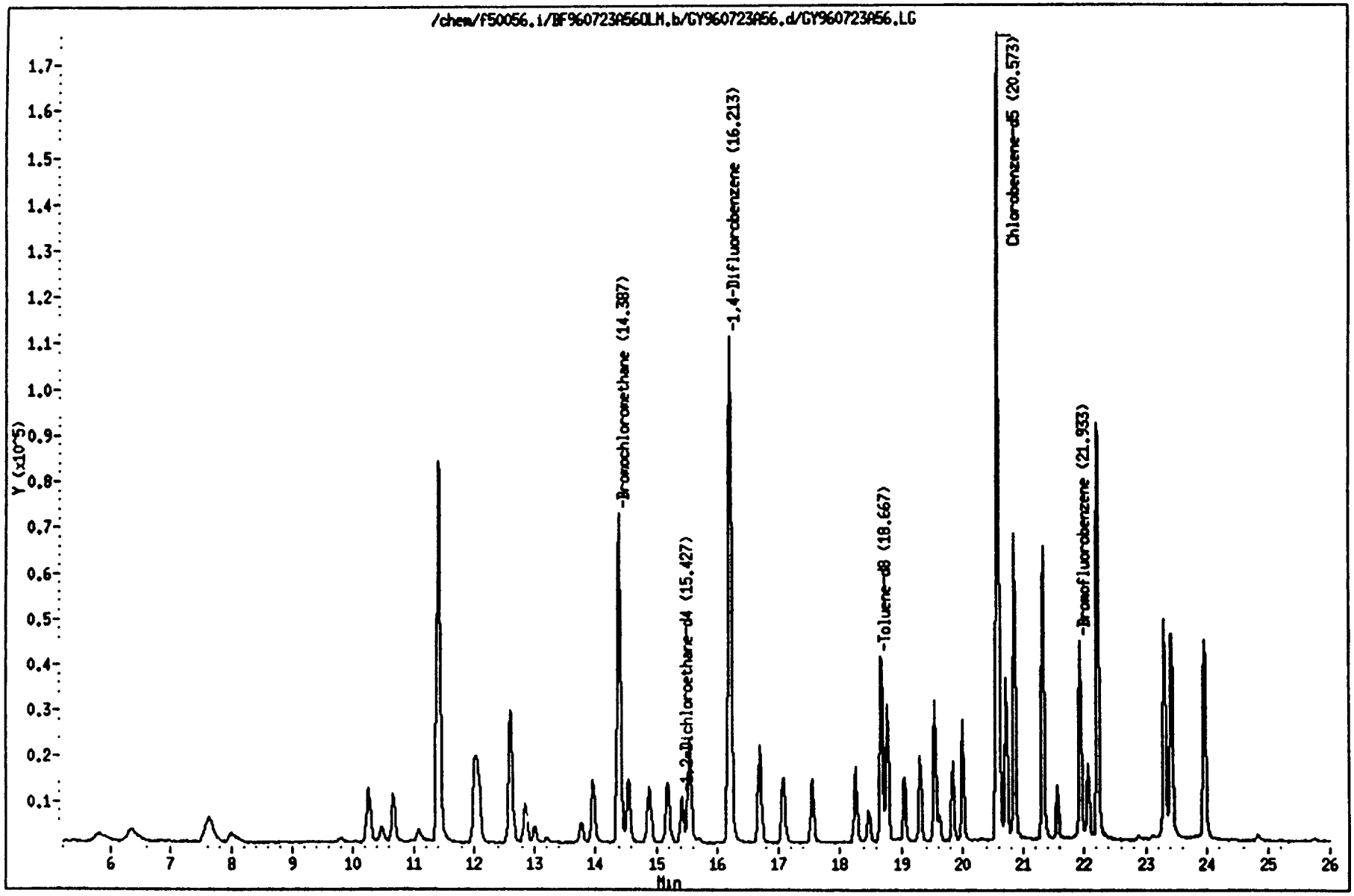
* Compounds with required minimum and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/f50056.i/BF960723A56OLM.b/GY960723A56.d
Date : 23-JUL-1996 12:37
Client ID: VSTD010JM
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53



copy original in 24864-BNN17 SWB 7/30/96

Data File: /chem/f50056.i/BF960723A56OLM.b/GY960723A56.d
Report Date: 24-Jul-1996 17:25

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960723A56OLM.b/GY960723A56.d
Lab Smp Id: VSTD010JM Client Smp ID: VSTD010JM
Inj Date : 23-JUL-1996 12:37
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960723A56OLM.b/SOLM03.1.m
Meth Date : 24-Jul-1996 17:23 riedl Quant Type: ISTD
Cal Date : 23-JUL-1996 08:47 Cal File: GT960723A56.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	4.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	14 387	14 387	(1.000)	41276	250 0	
* 2 1,4-Difluorobenzene	114.00	16.200	16.200	(1.000)	197372	250.0	
* 3 Chlorobenzene-d5	117.00	20.573	20.573	(1.000)	159104	250.0	
$ 4 1,2-Dichloroethane-d4	65.00	15.427	15.427	(1 072)	12222	50.00	58 70
$ 5 Toluene-d8	98 00	18.667	18 667	(0.907)	51795	50 00	60 08
$ 6 Bromofluorobenzene	95 00	21 933	21 933	(1 066)	32534	50 00	57.24
7 Chloromethane	50.00	5 787	5.787	(0 402)	13521	50.00	48 24(a)
8 Vinyl Chloride	62 00	6 333	6 333	(0.440)	17635	50 00	49 99(M)
9 Bromomethane	94 00	7.627	7.627	(0 530)	18291	50 00	51 27
10 Chloroethane	64 00	8 000	8 000	(0.556)	9620	50 00	52.88
11 1,1-Dichloroethene	96.00	10.253	10 253	(0.713)	12014	50.00	44 21(a)
12 Carbon Disulfide	76.00	10.667	10.667	(0.741)	34105	50.00	43.91(a)
13 Acetone	43.00	10.480	10.480	(0.728)	11654	50.00	119.4
14 Methylene Chloride	84.00	11.413	11.413	(0.793)	73603	50.00	112.4
15 trans-1,2-Dichloroethene	96 00	12.013	12.013	(0.835)	11067	50.00	44 52(a)
16 1,1-Dichloroethane	63.00	12.853	12.853	(0.893)	18619	50.00	46.43(a)
17 cis-1,2-Dichloroethene	96.00	13.960	13.960	(0.970)	12041	50 00	43.84(a)
18 2-Butanone	43.00	14 013	14.013	(0.974)	3721	50.00	55.45
19 Chloroform	83.00	14.547	14.547	(1.011)	21169	50 00	45.97(a)
20 1,1,1-Trichloroethane	97.00	14.880	14.880	(0.919)	18144	50 00	45.32(a)
21 Carbon Tetrachloride	117.00	15.187	15.187	(0.937)	17060	50 00	46 13(a)
22 Benzene	78.00	15.547	15.547	(0.960)	31331	50 00	50.75

8u13
7/30/96

Data File: /chem/f50056.i/BF960723A56OLM.b/GY960723A56.d
Report Date: 24-Jul-1996 17:25

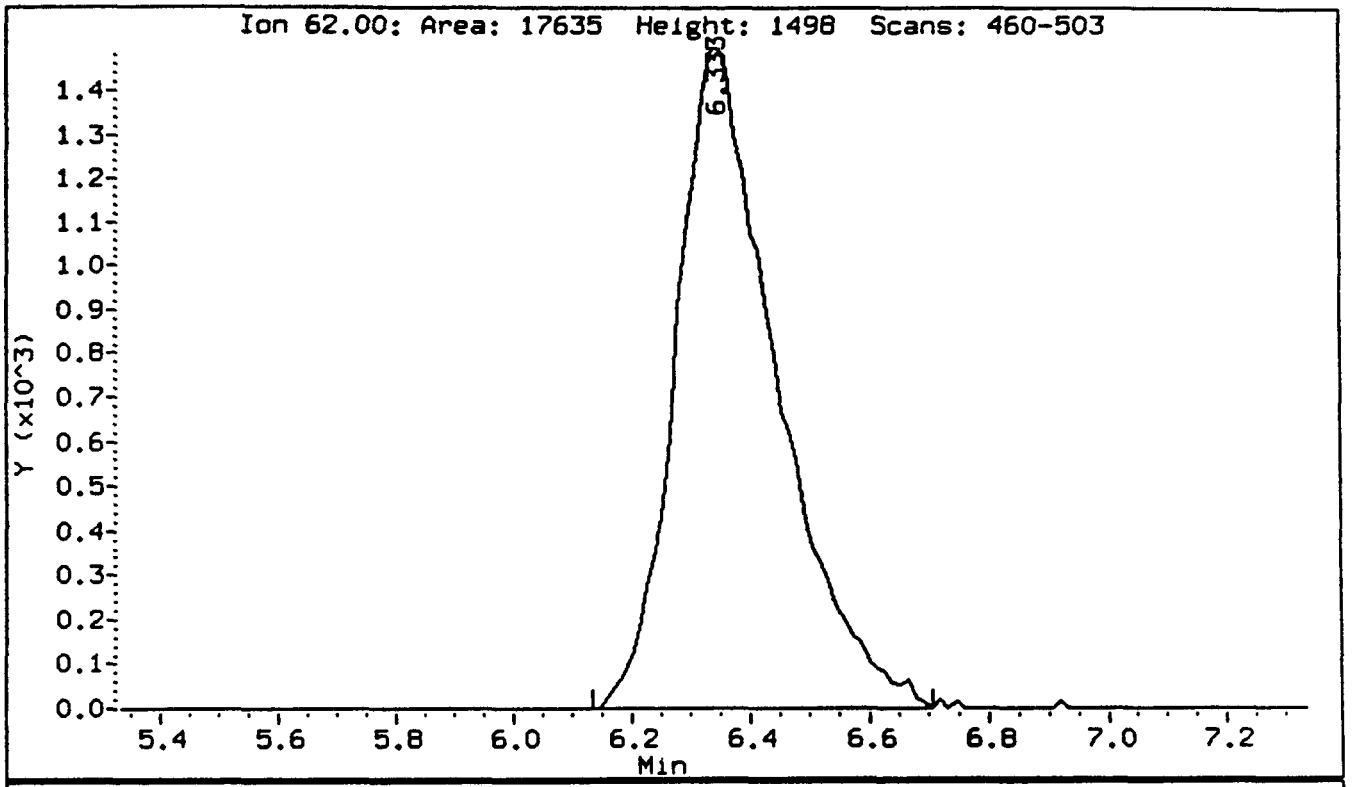
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	15.560	15 560	(1.082)	9248	50.00	46 96(a)
24 Trichloroethene	130 00	16 693	16.693	(1.030)	16179	50 00	47.20(a)
25 1,2-Dichloropropane	63.00	17.080	17.080	(1.054)	12241	50 00	44.98(a)
26 Bromodichloromethane	83.00	17.547	17 547	(1.083)	17484	50.00	42.87(a)
27 cis-1,3-Dichloropropene	75.00	18.253	18.253	(1.127)	17038	50.00	42.94(a)
28 4-Methyl-2-Pentanone	43.00	18.467	18.467	(0.898)	10188	50.00	43.80(a)
29 Toluene	91.00	18.773	18.773	(0.912)	39077	50.00	52.68
30 trans-1,3-Dichloropropene	75.00	19.053	19.053	(1.176)	12923	50.00	45.42(a)
31 1,1,2-Trichloroethane	97.00	19.307	19.307	(1 192)	10603	50.00	47 68(a)
32 Tetrachloroethene	164 00	19.533	19 533	(0 949)	12489	50.00	51 26
33 Dibromochloromethane	129.00	19.840	19.840	(1 225)	16345	50.00	47 86(a)
34 2-Hexanone	43.00	19.627	19.627	(0.954)	7414	50.00	53.23
35 Chlorobenzene	112.00	20.600	20 600	(1.001)	26471	50.00	48.32(a)
36 Ethylbenzene	106.00	20.720	20.720	(1.007)	13267	50.00	51 38
37 m,p-Xylene	106 00	20.853	20.853	(1.014)	32870	100.0	116.6
38 o-Xylene	106 00	21.320	21.320	(1 036)	16870	50.00	54 20
39 Styrene	104.00	21.320	21.320	(1.036)	27339	50 00	55.63
40 Bromoform	173.00	21.560	21.560	(1.331)	8504	50.00	43 19(a)
41 1,1,2,2-Tetrachloroethane	83 00	22.067	22 067	(1 073)	15731	50.00	46.17(a)
M 42 1,2-Dichloroethene (total)	96.00				23108	100.0	88 32
M 43 Xylene (Total)	106.00				49740	50.00	159 8

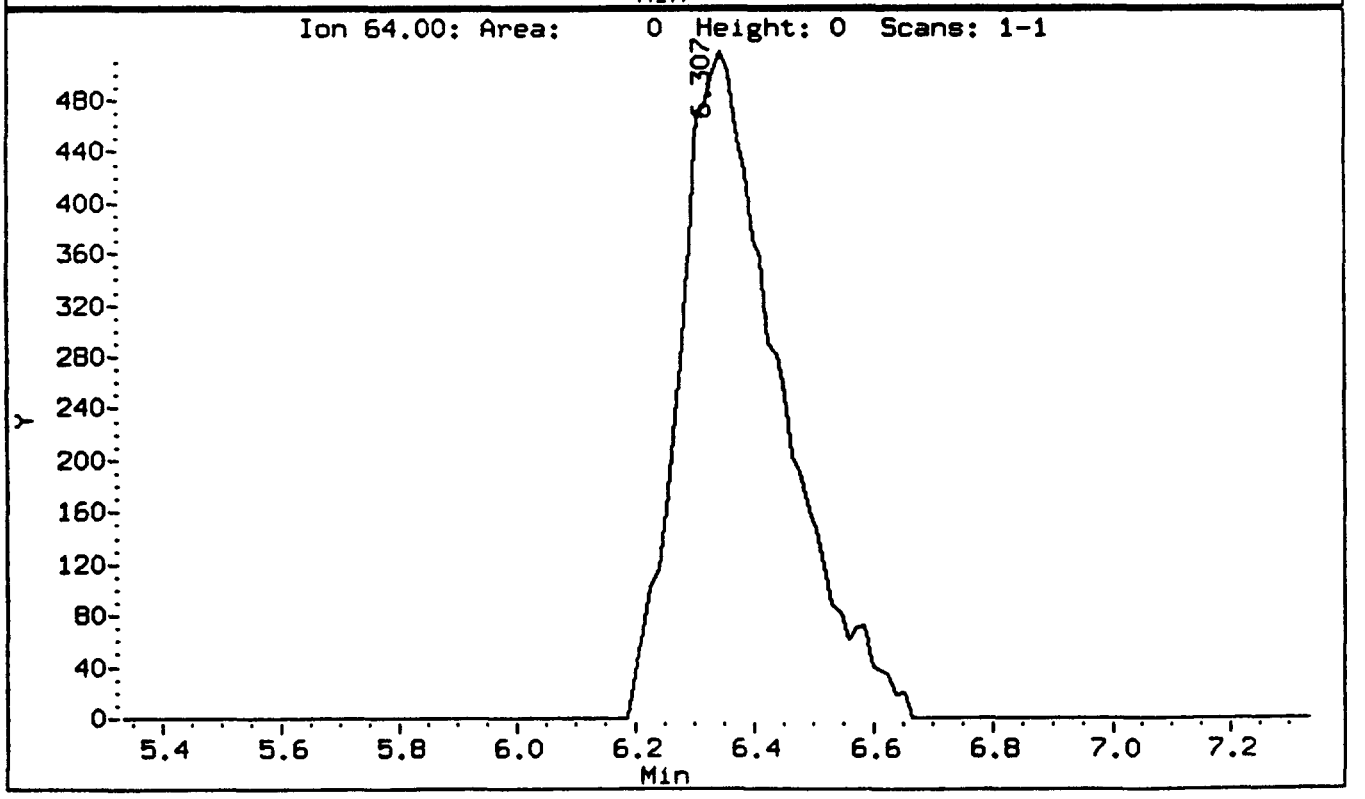
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/f50056.i/BF960723A56OLM.b/GY960723A56.d/GY960723A56.LG
Injection Date: 23-JUL-96 12:37
Instrument: f50056.i
Client Sample ID: VSTD010JM

Compound: Vinyl Chloride
CAS Number: 75-01-4



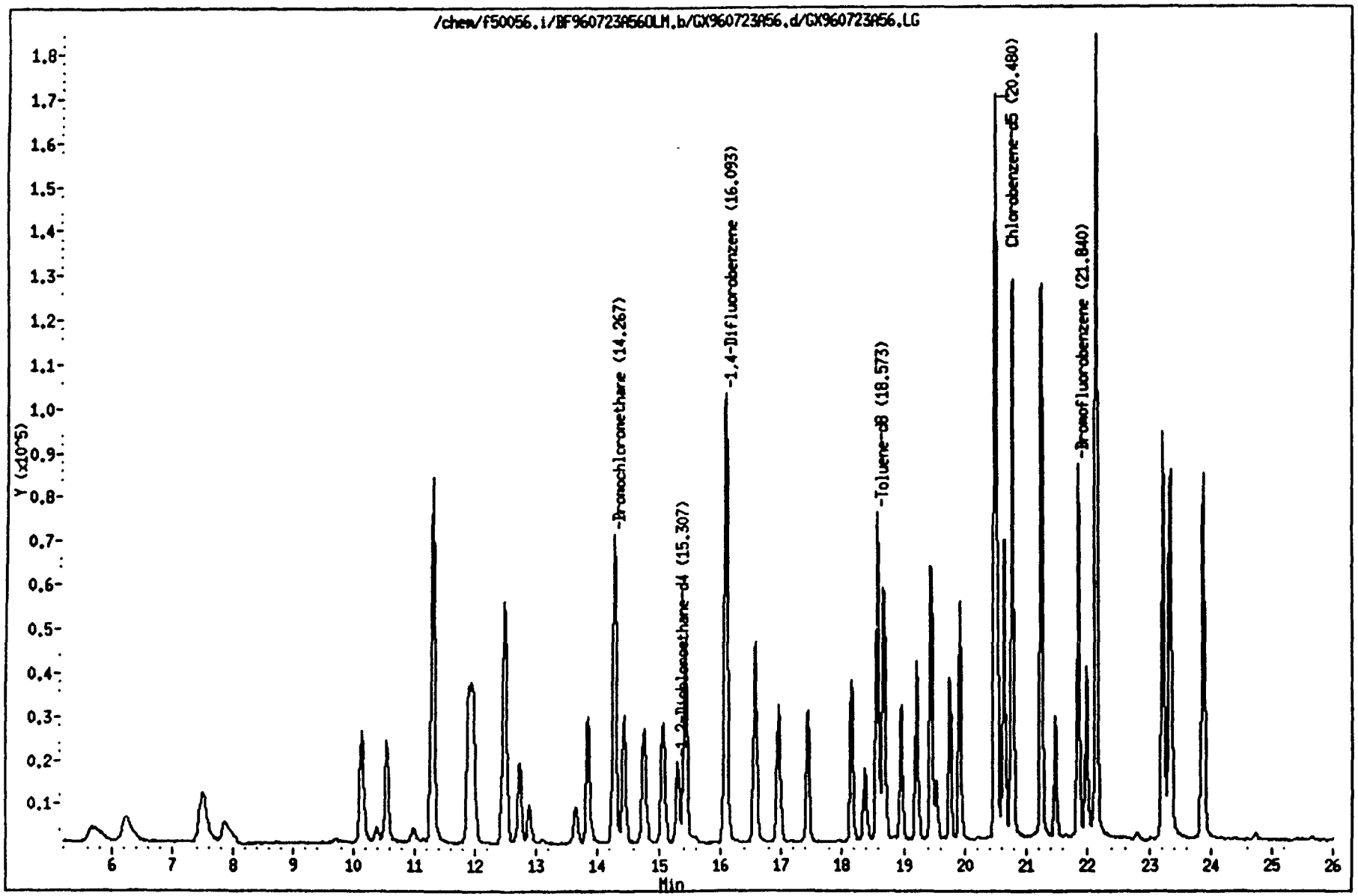


Data File: /chem/f50056.i/BF960723A56OLM.b/GX960723A56.d
Date : 23-JUL-1996 12:00
Client ID: VSTD020JQ
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53



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Data File: /chem/f50056.i/BF960723A56OLM.b/GX960723A56.d
Report Date: 24-Jul-1996 17:25

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960723A56OLM.b/GX960723A56.d
Lab Smp Id: VSTD020JQ Client Smp ID: VSTD020JQ
Inj Date : 23-JUL-1996 12:00
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960723A56OLM.b/SOLM03.1.m
Meth Date : 24-Jul-1996 17:23 riedl Quant Type: ISTD
Cal Date : 23-JUL-1996 08:47 Cal File: GT960723A56.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	4.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128.00	14 267	14.387	(1.000)	39840	250.0	
* 2 1,4-Difluorobenzene	114.00	16.093	16.200	(1.000)	180403	250.0	
* 3 Chlorobenzene-d5	117.00	20.480	20.573	(1.000)	147484	250 0	
$ 4 1,2-Dichloroethane-d4	65.00	15 307	15.427	(1.073)	22129	100.0	115.1
$ 5 Toluene-d8	98.00	18.573	18 667	(0.907)	92397	100.0	121.8
$ 6 Bromofluorobenzene	95.00	21.840	21 933	(1.066)	62839	100 0	123 8
7 Chloromethane	50.00	5 680	5.787	(0.398)	27667	100.0	101.4
8 Vinyl Chloride	62.00	6.213	6 333	(0.435)	37126	100.0	109.0(M) 2
9 Bromomethane	94.00	7 507	7 627	(0.526)	37990	100.0	111.0
10 Chloroethane	64 00	7.867	8.000	(0.551)	17840	100.0	103 1
11 1,1-Dichloroethene	96.00	10.133	10.253	(0.710)	25411	100.0	94 16
12 Carbon Disulfide	76.00	10.533	10.667	(0.738)	75166	100.0	97 31
13 Acetone	43.00	10.373	10.480	(0.727)	11528	100.0	187.4
14 Methylene Chloride	84.00	11.293	11.413	(0.792)	73726	100.0	169.4
15 trans-1,2-Dichloroethene	96.00	11.893	12.013	(0.834)	24908	100.0	101.0
16 1,1-Dichloroethane	63.00	12.733	12.853	(0.893)	40140	100.0	101.9
17 cis-1,2-Dichloroethene	96 00	13.840	13.960	(0.970)	27571	100.0	100.9
18 2-Butanone	43.00	13 893	14.013	(0.974)	8172	100.0	129.7
19 Chloroform	83.00	14.427	14.547	(1.011)	45899	100.0	101 2
20 1,1,1-Trichloroethane	97.00	14.760	14.880	(0.917)	38932	100.0	104.0
21 Carbon Tetrachloride	117.00	15.067	15 187	(0.936)	37243	100.0	108.1
22 Benzene	78.00	15.427	15.547	(0.959)	65857	100.0	117.1

SLW3 7/31/96

Data File: /chem/f50056.i/BF960723A56OLM.b/GX960723A56.d
Report Date: 24-Jul-1996 17:25

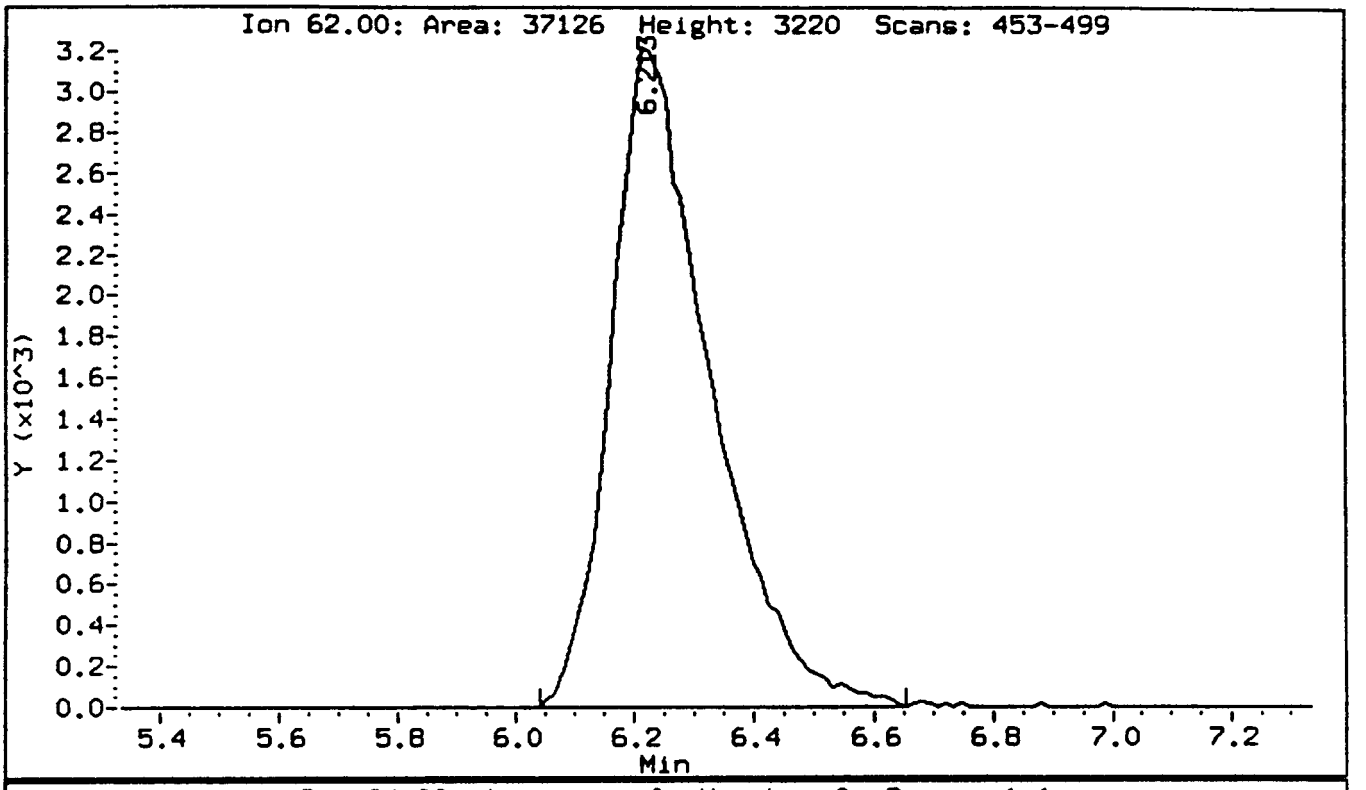
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62.00	15.440	15.560	(1.082)	20569	100.0	106.6
24 Trichloroethene	130.00	16 573	16.693	(1 030)	35225	100.0	110 9
25 1,2-Dichloropropane	63.00	16.960	17.080	(1.054)	27363	100 0	107.3
26 Bromodichloromethane	83 00	17.440	17.547	(1.084)	39011	100 0	101 0
27 cis-1,3-Dichloropropene	75.00	18.147	18.253	(1.128)	38432	100.0	102.3
28 4-Methyl-2-Pentanone	43 00	18.373	18.467	(0.897)	24796	100.0	111.5
29 Toluene	91.00	18 667	18.773	(0.911)	77808	100.0	114.7
30 trans-1,3-Dichloropropene	75 00	18.960	19.053	(1.178)	26928	100 0	101.2
31 1,1,2-Trichloroethane	97.00	19.213	19.307	(1.194)	22518	100.0	109.5
32 Tetrachloroethene	164.00	19.440	19.533	(0.949)	24697	100.0	110 0
33 Dibromochloromethane	129.00	19.747	19.840	(1.227)	35542	100.0	112.6
34 2-Hexanone	43.00	19.533	19.627	(0.954)	16561	100.0	130 4
35 Chlorobenzene	112.00	20.520	20.600	(1.002)	57043	100.0	111.4
36 Ethylbenzene	106 00	20.627	20.720	(1.007)	28083	100.0	118.1
37 m,p-Xylene	106.00	20.760	20 853	(1.014)	64317	200.0	256 8
38 o-Xylene	106 00	21 227	21 320	(1.036)	34729	100 0	123 0
39 Styrene	104.00	21 240	21.320	(1.037)	54977	100.0	124.2
40 Bromoform	173.00	21.467	21.560	(1.334)	20081	100.0	107 9
41 1,1,2,2-Tetrachloroethane	83.00	21.973	22.067	(1 073)	36807	100.0	114.3
M 42 1,2-Dichloroethene (total)	96.00				52479	200.0	201.9
M 43 Xylene (Total)	106 00				99046	100 0	350.6

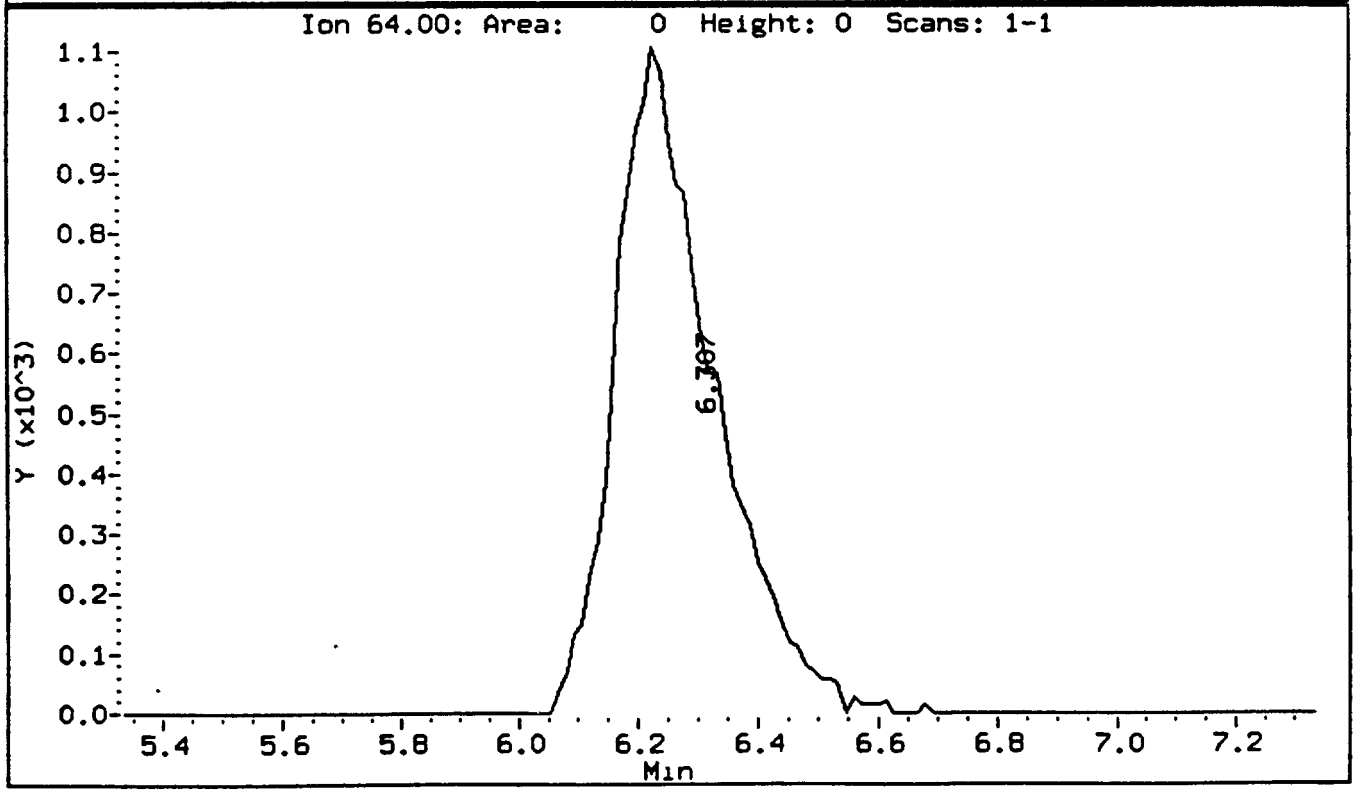
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50056.i/BF960723A56OLM.b/GX960723A56.d/GX960723A56.LG
Injection Date: 23-JUL-96 12:00
Instrument: f50056.i
Client Sample ID: VSTD020JQ

Compound: Vinyl Chloride
CAS Number: 75-01-4



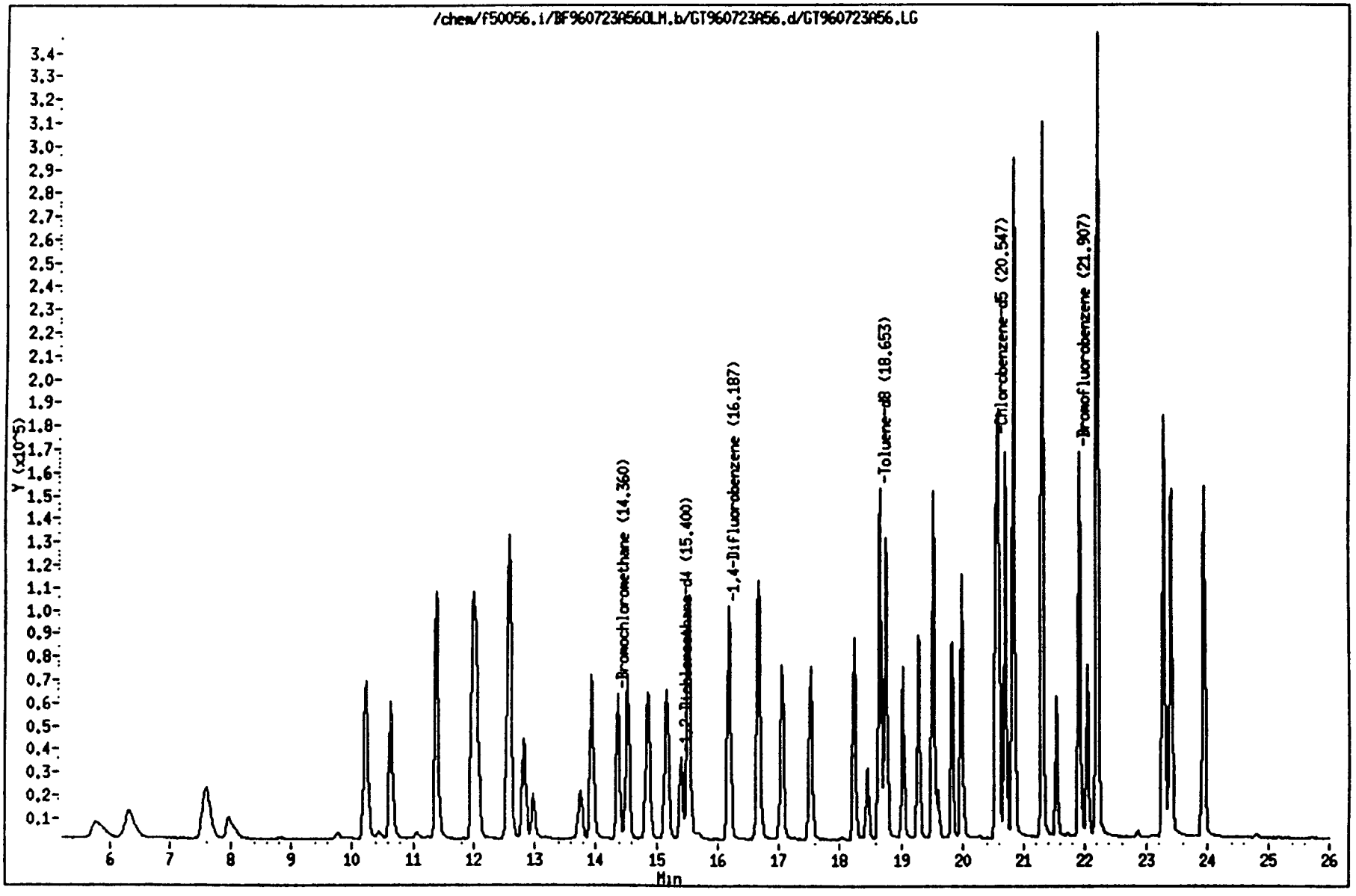


Data File: /chem/f50056.i/BF960723A56OLM.b/GT960723A56.d
Date : 23-JUL-1996 08:47
Client ID: VSTD050JL
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53



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Data File: /chem/f50056.i/BF960723A56OLM.b/GT960723A56.d
Report Date: 24-Jul-1996 17:24

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960723A56OLM.b/GT960723A56.d
Lab Smp Id: VSTD050JL Client Smp ID: VSTD050JL
Inj Date : 23-JUL-1996 08:47
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960723A56OLM.b/SOLM03.1.m
Meth Date : 24-Jul-1996 17:23 riedl Quant Type: ISTD
Cal Date : 23-JUL-1996 08:47 Cal File: GT960723A56.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00 ✓	14 360	14 387	(1.000)	36963	250 0	
* 2 1,4-Difluorobenzene	114.00 ✓	16.187	16.200	(1.000)	176585	250.0	
* 3 Chlorobenzene-d5	117.00 ✓	20.547	20 573	(1.000)	137550	250.0	
S 4 1,2-Dichloroethane-d4	65.00 ✓	15.400	15.427	(1.072)	44126	250.0	250.0
S 5 Toluene-d8	98 00 ✓	18.653	18.667	(0.908)	185668	250.0	250.0
S 6 Bromofluorobenzene	95.00 ✓	21 907	21.933	(1.066)	116225	250.0	250.0
7 Chloromethane	50.00 ✓	5 760	5.787	(0.401)	62580	250 0	250.0
8 Vinyl Chloride	62.00 ✓	6 320	6 333	(0.440)	77816	250.0	250 0 (M) 2
9 Bromomethane	94 00 ✓	7.600	7.627	(0.529)	79779	250.0	250 0
10 Chloroethane	64.00 ✓	7.973	8 000	(0.555)	44118	250.0	250.0
11 1,1-Dichloroethene	96.00 ✓	10.227	10 253	(0.712)	68918	250 0	250.0
12 Carbon Disulfide	76.00 ✓	10.640	10.667	(0.741)	195900	250.0	250.0
13 Acetone	43.00 ✓	10.440	10.480	(0.727)	11560	250.0	250.0
14 Methylene Chloride	84.00 ✓	11.387	11.413	(0.793)	96726	250.0	250.0
15 trans-1,2-Dichloroethene	96.00 ✓	11.987	12.013	(0.835)	62439	250.0	250.0
16 1,1-Dichloroethane	63.00 ✓	12.827	12.853	(0.893)	94806	250.0	250.0
17 cis-1,2-Dichloroethene	96.00 ✓	13.933	13.960	(0.970)	68256	250.0	250 0
18 2-Butanone	43.00 ✓	13.987	14.013	(0.974)	13096	250.0	250.0
19 Chloroform	83.00 ✓	14.520	14.547	(1.011)	111462	250.0	250.0
20 1,1,1-Trichloroethane	97.00 ✓	14.853	14.880	(0.918)	95247	250.0	250.0
21 Carbon Tetrachloride	117 00 ✓	15.160	15.187	(0.937)	89134	250.0	250 0
22 Benzene	78 00 ✓	15 520	15.547	(0 959)	148452	250 0	250 0

SLB 7/30/96

Data File: /chem/f50056.i/BF960723A56OLM.b/GT960723A56.d
Report Date: 24-Jul-1996 17:24

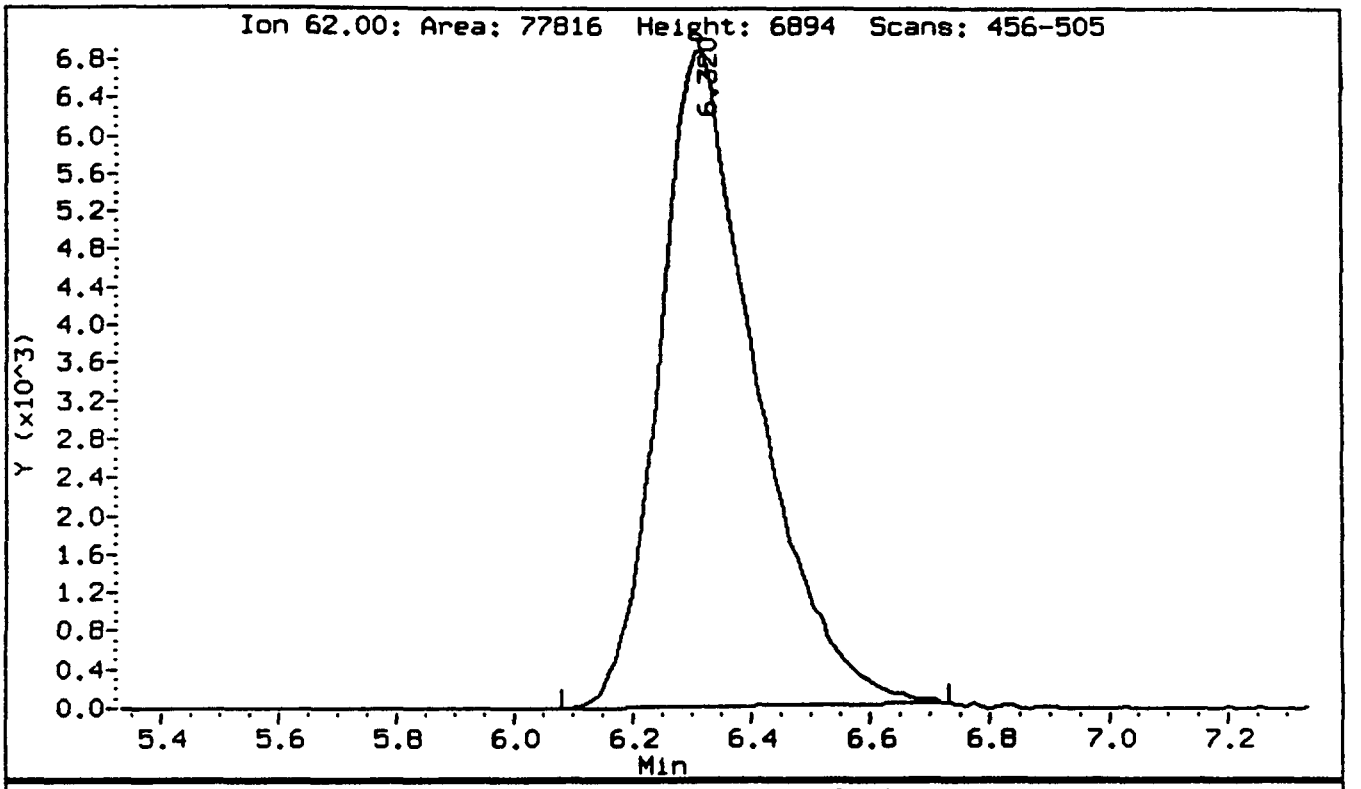
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	23 1,2-Dichloroethane	62.00 ✓	15.533	15 560	(1.082)	46687	250 0	250.0
	24 Trichloroethene	130.00 ✓	16.667	16.693	(1.030)	83280	250 0	250.0
	25 1,2-Dichloropropane	63.00 ✓	17.053	17.080	(1.054)	63835	250.0	250.0
	26 Bromodichloromethane	83.00 ✓	17.520	17.547	(1.082)	97505	250.0	250.0
	27 cis-1,3-Dichloropropene	75.00 ✓	18.227	18.253	(1.126)	93960	250.0	250 0
	28 4-Methyl-2-Pentanone	43.00 ✓	18.453	18.467	(0.898)	44670	250.0	250 0
	29 Toluene	91.00 ✓	18.747	18.773	(0.912)	169873	250.0	250.0
	30 trans-1,3-Dichloropropene	75.00 ✓	19.027	19.053	(1.175)	64244	250 0	250.0
	31 1,1,2-Trichloroethane	97 00 ✓	19.280	19.307	(1.191)	51737	250.0	250 0
	32 Tetrachloroethene	164.00 ✓	19.520	19.533	(0.950)	56617	250.0	250 0
	33 Dibromochloromethane	129.00 ✓	19 827	19.840	(1.225)	80023	250.0	250.0
	34 2-Hexanone	43.00 ✓	19.600	19.627	(0.954)	24631	250.0	250.0
	35 Chlorobenzene	112.00 ✓	20.587	20.600	(1.002)	128036	250.0	250.0
	36 Ethylbenzene	106.00 ✓	20.693	20.720	(1.007)	61158	250.0	250 0
	37 m,p-Xylene	106.00 ✓	20.827	20 853	(1.014)	131698	500.0	500 0
	38 o-Xylene	106.00 ✓	21.293	21.320	(1.036)	72849	250 0	250 0
	39 Styrene	104.00 ✓	21.293	21.320	(1 036)	114129	250.0	250 0
	40 Bromoform	173 00 ✓	21.533	21.560	(1.330)	43220	250 0	250.0
	41 1,1,2,2-Tetrachloroethane	83.00 ✓	22.040	22 067	(1.073)	69586	250 0	250.0
M	42 1,2-Dichloroethene (total)	96 00 ✓				130695	500.0	500 0
M	43 Xylene (Total)	106.00 ✓				204547	250.0	702.0

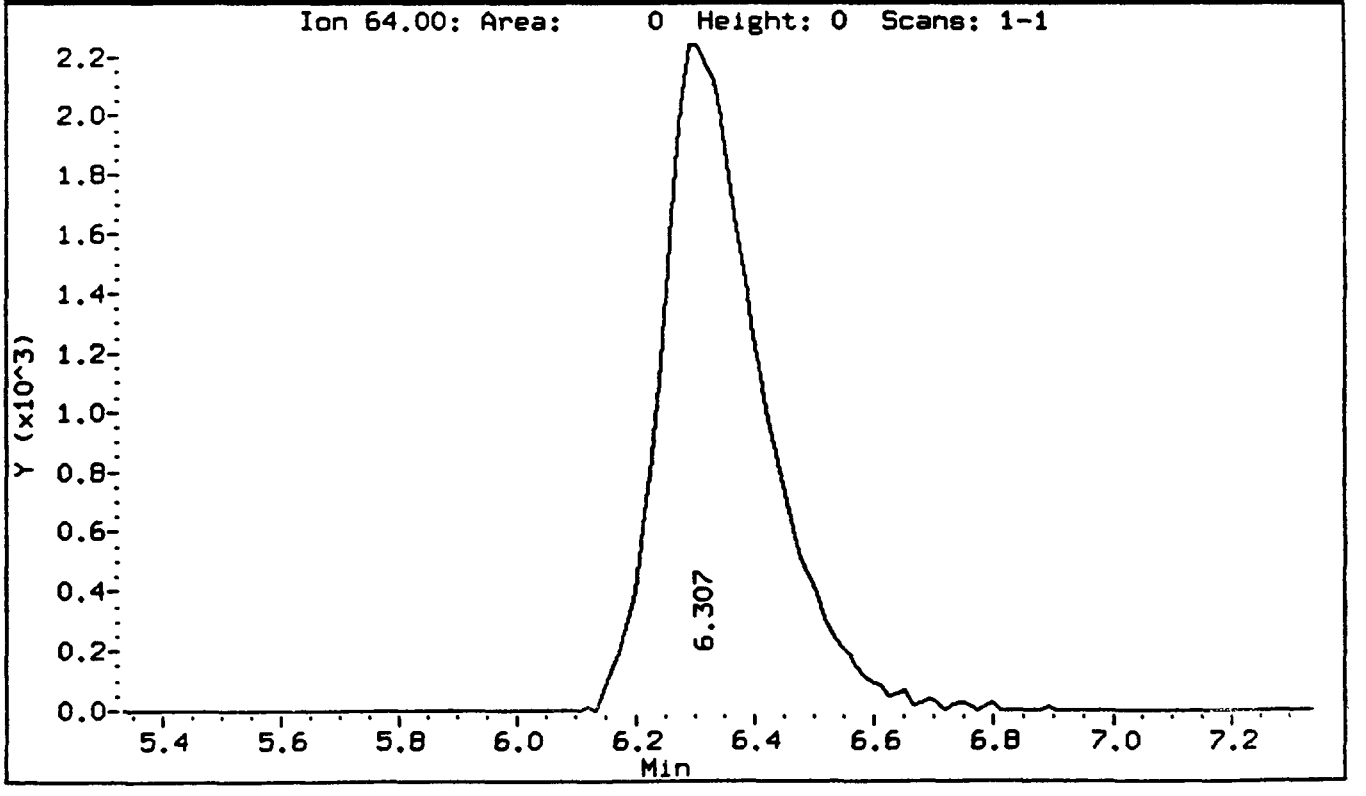
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50056.i/BF960723A56OLM.b/GT960723A56.d/GT960723A56.LG
Injection Date: 23-JUL-96 08:47
Instrument: f50056.i
Client Sample ID: VSTD050JL

Compound: Vinyl Chloride
CAS Number: 75-01-4



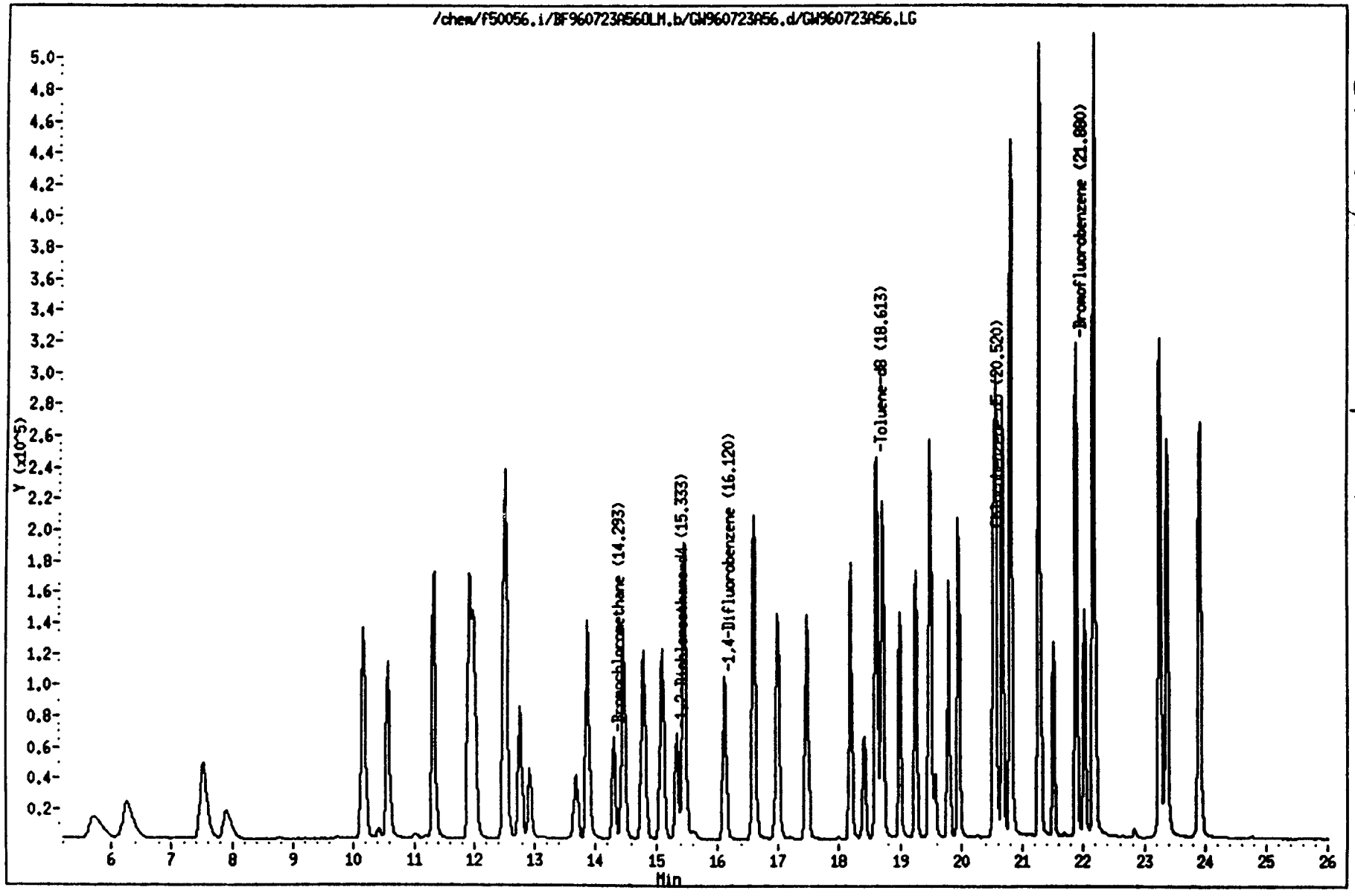


Data File: /chem/f50056.i/BF960723A56OLM.b/GW960723A56.d
Date : 23-JUL-1996 11:23
Client ID: VSTD100JP
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53



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Data File: /chem/f50056.i/BF960723A56OLM.b/GW960723A56.d
Report Date: 24-Jul-1996 17:24

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960723A56OLM.b/GW960723A56.d
Lab Smp Id: VSTD100JP Client Smp ID: VSTD100JP
Inj Date : 23-JUL-1996 11:23
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960723A56OLM.b/SOLM03.1.m
Meth Date : 24-Jul-1996 17:23 riedl Quant Type: ISTD
Cal Date : 23-JUL-1996 08:47 Cal File: GT960723A56.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	4.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	14.293	14.387	(1.000)	38190	250.0	
* 2 1,4-Difluorobenzene	114 00	16.120	16.200	(1.000)	182100	250.0	
* 3 Chlorobenzene-d5	117.00	20.520	20.573	(1.000)	133982	250.0	
$ 4 1,2-Dichloroethane-d4	65.00	15.333	15.427	(1.073)	84075	500.0	480.5
$ 5 Toluene-d8	98.00	18.600	18.667	(0.906)	304529	500.0	476.3
$ 6 Bromofluorobenzene	95.00	21.880	21.933	(1.066)	206230	500.0	485.5
7 Chloromethane	50.00	5 707	5.787	(0.399)	124046	500.0	476.4
8 Vinyl Chloride	62.00	6 253	6 333	(0.437)	152846	500.0	482.8 (M) 2
9 Bromomethane	94 00	7.520	7.627	(0.526)	154275	500.0	488 4
10 Chloroethane	64.00	7.893	8.000	(0.552)	75964	500.0	462.6
11 1,1-Dichloroethene	96.00	10.160	10.253	(0.711)	131171	500.0	497.4
12 Carbon Disulfide	76.00	10.560	10.667	(0.739)	375964	500.0	503.2
13 Acetone	43.00	10.413	10.480	(0.729)	21516	500.0	515.0
14 Methylene Chloride	84.00	11.320	11.413	(0.792)	152705	500.0	476 4
15 trans-1,2-Dichloroethene	96.00	11.920	12.013	(0.834)	117107	500.0	497.2
16 1,1-Dichloroethane	63.00	12.760	12.853	(0.893)	184983	500.0	492.9
17 cis-1,2-Dichloroethene	96.00	13.867	13.960	(0.970)	130414	500.0	499.3
18 2-Butanone	43.00	13.920	14.013	(0.974)	27022	500.0	496.6
19 Chloroform	83.00	14.453	14.547	(1.011)	212942	500.0	491.9
20 1,1,1-Trichloroethane	97 00	14.787	14.880	(0.917)	180361	500.0	483.6
21 Carbon Tetrachloride	117.00	15.093	15 187	(0.936)	163569	500.0	483.4
22 Benzene	78.00	15.453	15.547	(0.959)	261033	500.0	487.9

SWB 7/30/96

Data File: /chem/f50056.i/BF960723A56OLM.b/GW960723A56.d
Report Date: 24-Jul-1996 17:24

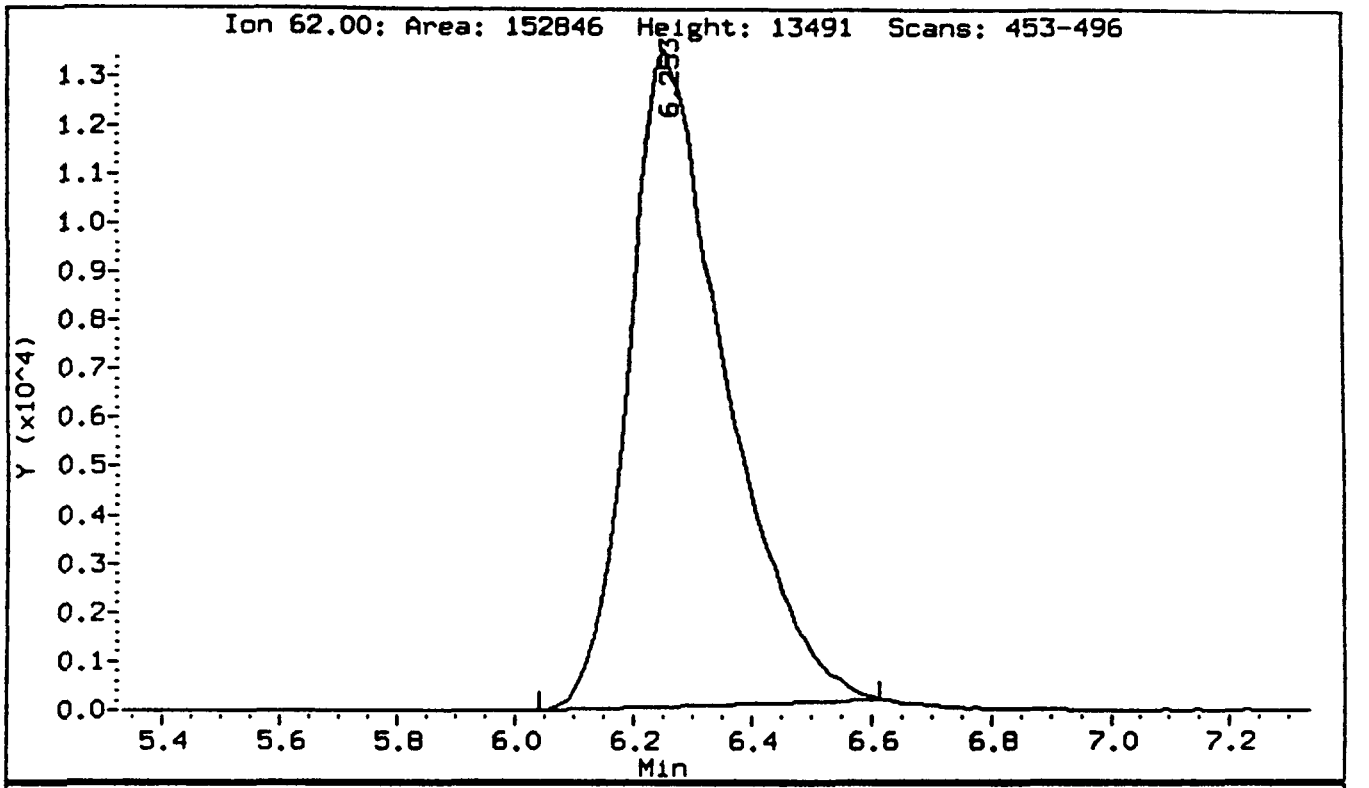
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	23 1,2-Dichloroethane	62.00	15.467	15.560	(1.082)	87844	500.0	485.6
	24 Trichloroethene	130 00	16.600	16 693	(1.030)	149915	500.0	485 0
	25 1,2-Dichloropropane	63.00	16.987	17.080	(1.054)	123569	500.0	492.0
	26 Bromodichloromethane	83.00	17.467	17.547	(1.084)	187339	500.0	482.4
	27 cis-1,3-Dichloropropene	75.00	18.187	18.253	(1.128)	182591	500 0	485.5
	28 4-Methyl-2-Pentanone	43.00	18.413	18.467	(0.897)	97252	500.0	500.8
	29 Toluene	91.00	18.707	18.773	(0.912)	274932	500.0	469.1
	30 trans-1,3-Dichloropropene	75.00	18.987	19.053	(1.178)	126372	500.0	472.5
	31 1,1,2-Trichloroethane	97.00	19.253	19.307	(1.194)	95235	500.0	473.8
	32 Tetrachloroethene	164.00	19.480	19.533	(0.949)	94151	500.0	477 8
	33 Dibromochloromethane	129.00	19.787	19.840	(1.227)	144782	500.0	474.7
	34 2-Hexanone	43.00	19.573	19.627	(0.954)	51527	500.0	496.8
	35 Chlorobenzene	112.00	20.560	20.600	(1.002)	216702	500 0	484.2
	36 Ethylbenzene	106.00	20.667	20.720	(1.007)	97905	500.0	482.5
	37 m,p-Xylene	106.00	20.800	20 853	(1.014)	187710	1000	911 4
	38 o-Xylene	106.00	21.267	21.320	(1.036)	112500	500.0	474.7
	39 Styrene	104.00	21.280	21 320	(1.037)	172582	500.0	466 8
	40 Bromoform	173.00	21.507	21.560	(1.334)	85620	500.0	468.2
	41 1,1,2,2-Tetrachloroethane	83.00	22 013	22 067	(1.073)	135880	500.0	488.0
M	42 1,2-Dichloroethene (total)	96.00				247521	1000	996.7
M	43 Xylene (Total)	106.00				300210	500.0	1267

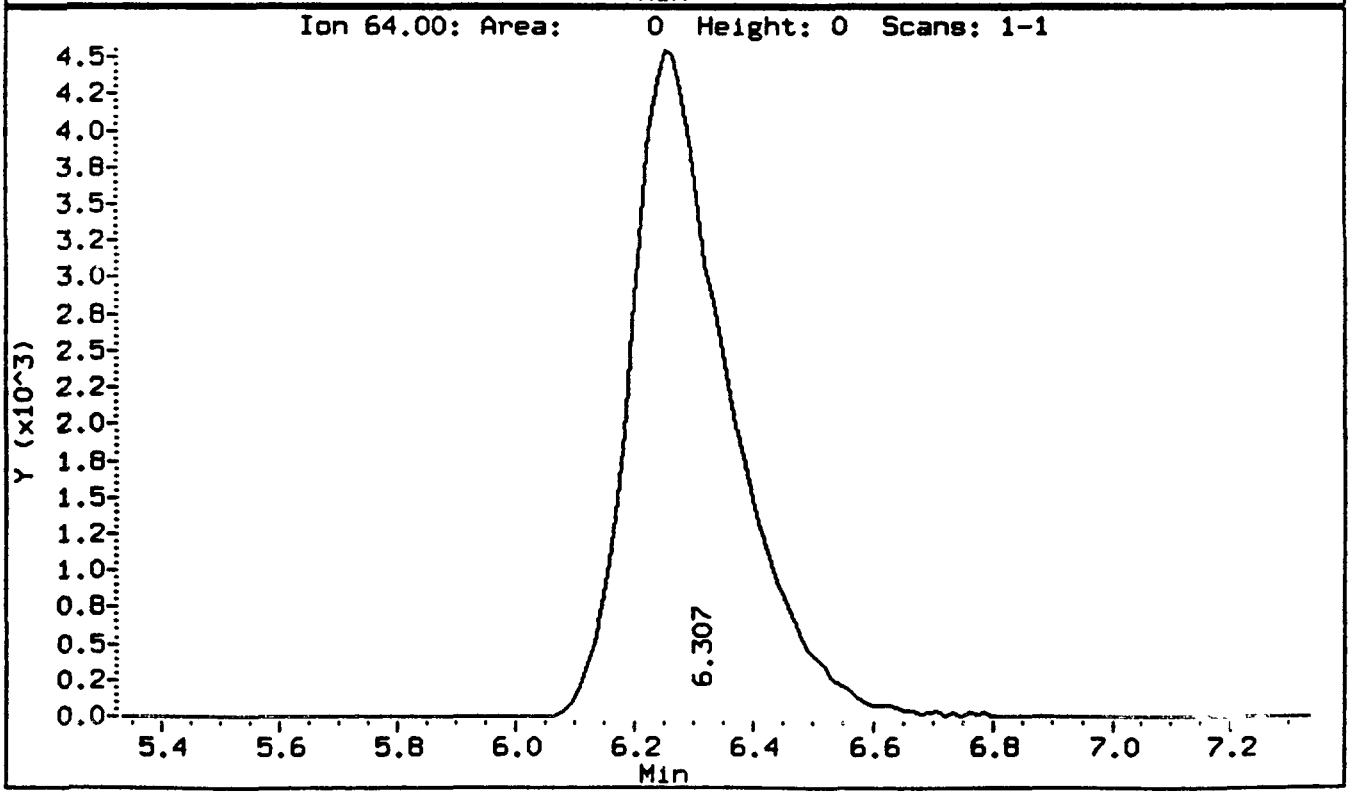
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50056.i/BF960723A56OLM.b/GW960723A56.d/GW960723A56.LG
Injection Date: 23-JUL-96 11:23
Instrument: f50056.i
Client Sample ID: VSTD100JP

Compound: Vinyl Chloride
CAS Number: 75-01-4



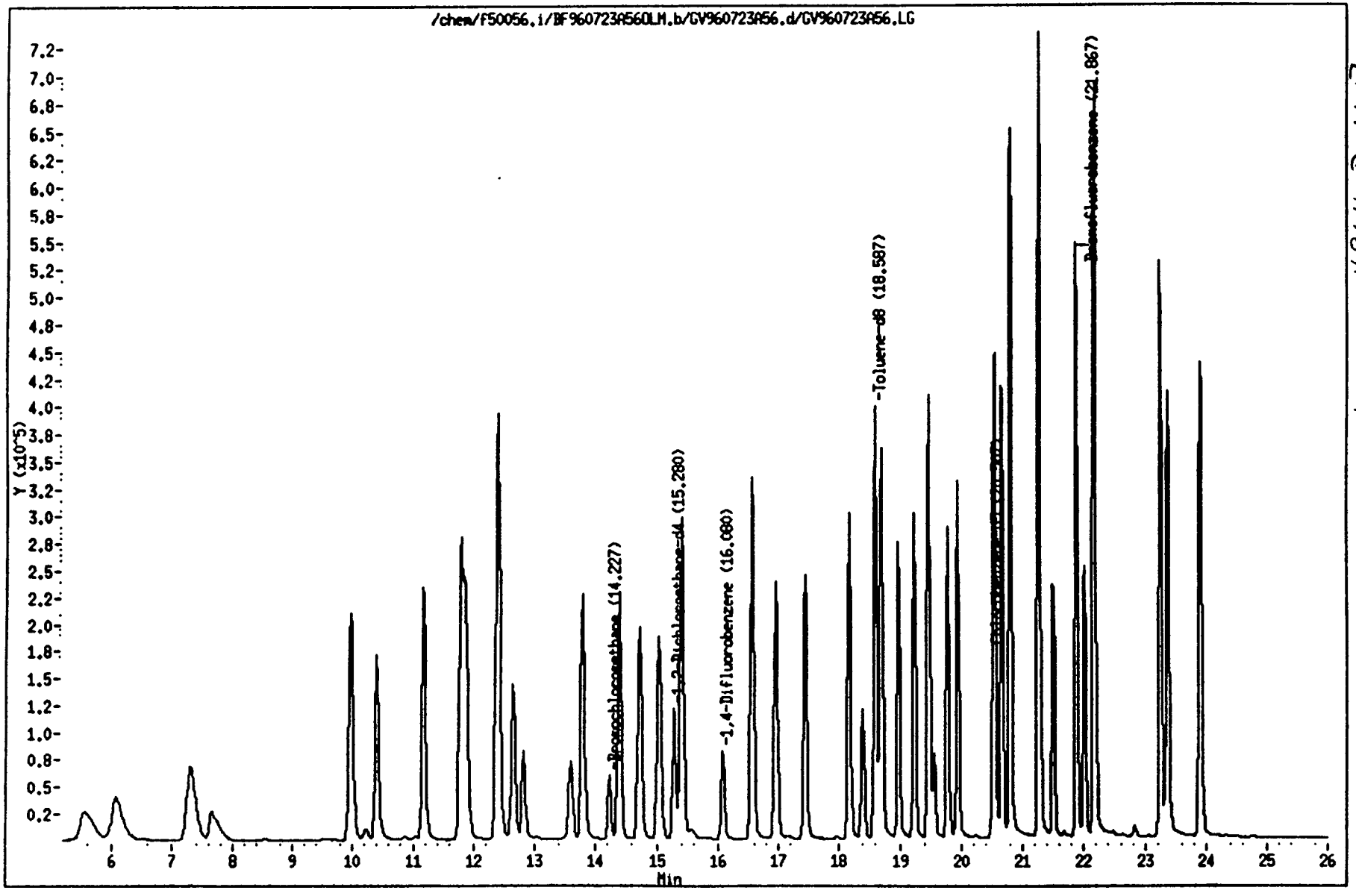


Data File: /chem/f50056.i/BF960723A56OLM.b/GV960723A56.d
Date : 23-JUL-1996 10:36
Client ID: VSTD200JO
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53



copy original in 24864-BNN17 SWB 7/30/96

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Data File: /chem/f50056.i/BF960723A56OLM.b/GV960723A56.d
Report Date: 24-Jul-1996 17:24

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960723A56OLM.b/GV960723A56.d
Lab Smp Id: VSTD200JO Client Smp ID: VSTD200JO
Inj Date : 23-JUL-1996 10:36
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960723A56OLM.b/SOLM03.1.m
Meth Date : 24-Jul-1996 17:23 riedl Quant Type: ISTD
Cal Date : 23-JUL-1996 08:47 Cal File: GT960723A56.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	4.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128.00	14.227	14.387	(1.000)	33331	250.0	
* 2 1,4-Difluorobenzene	114.00	16.080	16.200	(1.000)	148918	250.0	
* 3 Chlorobenzene-d5	117.00	20.507	20.573	(1.000)	109827	250.0	
$ 4 1,2-Dichloroethane-d4	65.00	15.280	15.427	(1.074)	152220	1000	977.7
$ 5 Toluene-d8	98.00	18 587	18.667	(0.906)	479983	1000	894.7
$ 6 Bromofluorobenzene	95.00	21 867	21.933	(1.066)	335192	1000	949 0
7 Chloromethane	50 00	5.547	5.787	(0.390)	239555	1000	1030(A)
8 Vinyl Chloride	62.00	6 067	6 333	(0.426)	281465	1000	1001(AM) 2
9 Bromomethane	94.00	7.320	7.627	(0.515)	270020	1000	968.2
10 Chloroethane	64.00	7 667	8.000	(0.539)	138177	1000	929.5
11 1,1-Dichloroethene	96.00	9.973	10.253	(0.701)	212940	1000	922 8
12 Carbon Disulfide	76.00	10.400	10.667	(0.731)	593164	1000	912.7
13 Acetone	43.00	10.227	10.480	(0.719)	30129	1000	839 0
14 Methylene Chloride	84.00	11.173	11.413	(0.785)	223773	1000	781.5
15 trans-1,2-Dichloroethene	96.00	11.787	12.013	(0.828)	187016	1000	907.3
16 1,1-Dichloroethane	63.00	12.653	12.853	(0.889)	317729	1000	963.3
17 cis-1,2-Dichloroethene	96.00	13.787	13.960	(0.969)	210011	1000	920.7
18 2-Butanone	43.00	13.840	14.013	(0.973)	48065	1000	1009(A)
19 Chloroform	83.00	14.387	14.547	(1.011)	359606	1000	944.3
20 1,1,1-Trichloroethane	97.00	14.720	14.880	(0.915)	298692	1000	963.5
21 Carbon Tetrachloride	117.00	15.040	15.187	(0.935)	261956	1000	931.2
22 Benzene	78.00	15.400	15.547	(0.958)	384915	1000	869.2

SWS 7/30/96

Data File: /chem/f50056.i/BF960723A56OLM.b/GV960723A56.d
Report Date: 24-Jul-1996 17:24

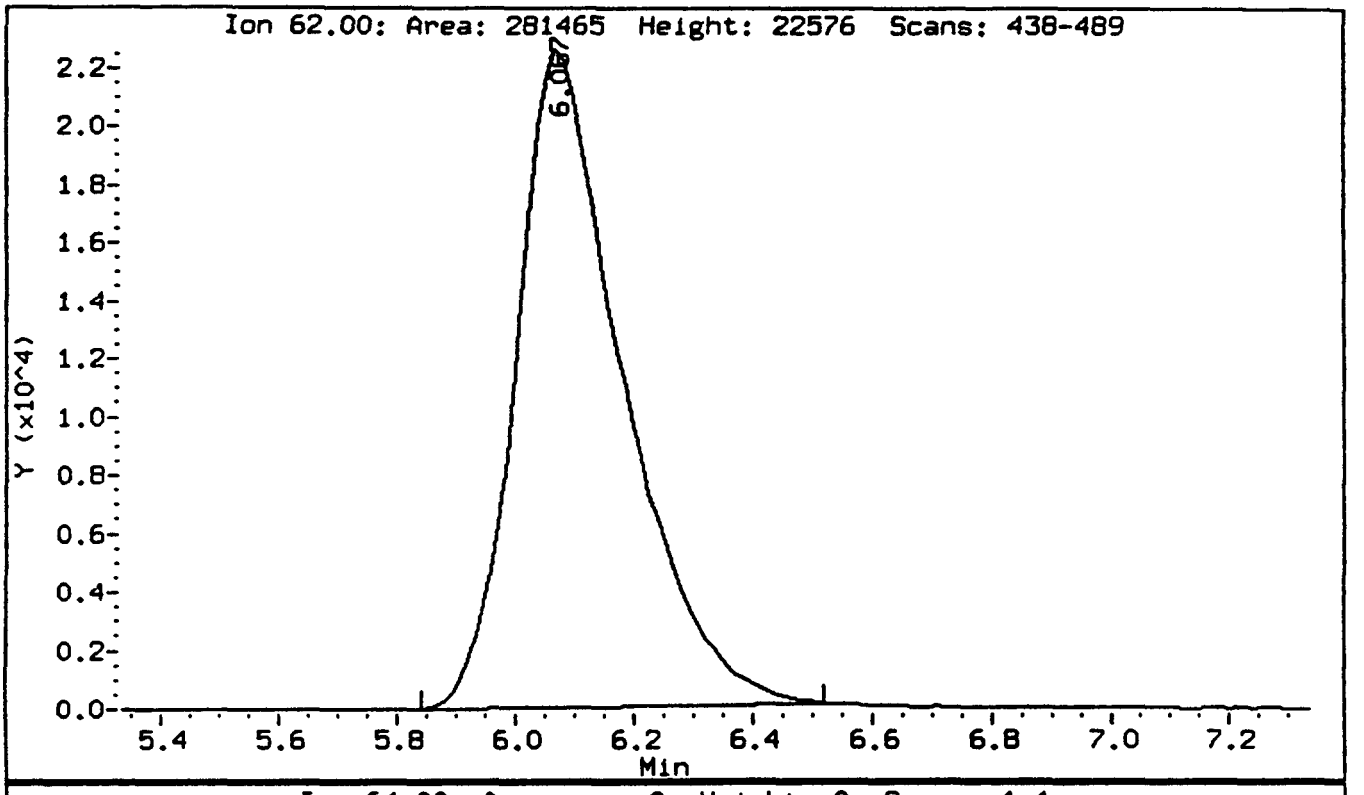
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	23 1,2-Dichloroethane	62.00	15.413	15.560	(1.083)	151891	1000	948 5
	24 Trichloroethene	130.00	16.560	16.693	(1.030)	232167	1000	905 0
	25 1,2-Dichloropropane	63.00	16.960	17.080	(1.055)	198719	1000	959.9
	26 Bromodichloromethane	83.00	17.440	17.547	(1.085)	317531	1000	982.4
	27 cis-1,3-Dichloropropene	75.00	18.160	18.253	(1.129)	307113	1000	984.2
	28 4-Methyl-2-Pentanone	43.00	18.400	18.467	(0.897)	175417	1000	1103 (A)
	29 Toluene	91.00	18.693	18.773	(0.912)	447960	1000	904.5
	30 trans-1,3-Dichloropropene	75.00	18.973	19.053	(1.180)	232745	1000	1036 (A)
	31 1,1,2-Trichloroethane	97.00	19.240	19.307	(1.197)	162820	1000	965.3
	32 Tetrachloroethene	164.00	19.467	19.533	(0.949)	149371	1000	904.7
	33 Dibromochloromethane	129.00	19.773	19.840	(1.230)	241580	1000	944.6
	34 2-Hexanone	43.00	19.560	19.627	(0.954)	91896	1000	1078 (A)
	35 Chlorobenzene	112.00	20.547	20.600	(1.002)	336256	1000	902.5
	36 Ethylbenzene	106.00	20.653	20.720	(1.007)	143163	1000	845.9
	37 m,p-Xylene	106.00	20 787	20.853	(1.014)	284614	2000	1614
	38 o-Xylene	106.00	21.253	21.320	(1.036)	165635	1000	831.7
	39 Styrene	104.00	21.267	21.320	(1.037)	261812	1000	836 0
	40 Bromoform	173.00	21.493	21.560	(1.337)	162814	1000	1055 (A)
	41 1,1,2,2-Tetrachloroethane	83.00	22.013	22.067	(1.073)	239761	1000	1038 (A)
M	42 1,2-Dichloroethene (total)	96.00				397027	2000	1829 (A)
M	43 Xylene (Total)	106.00				450249	1000	2261

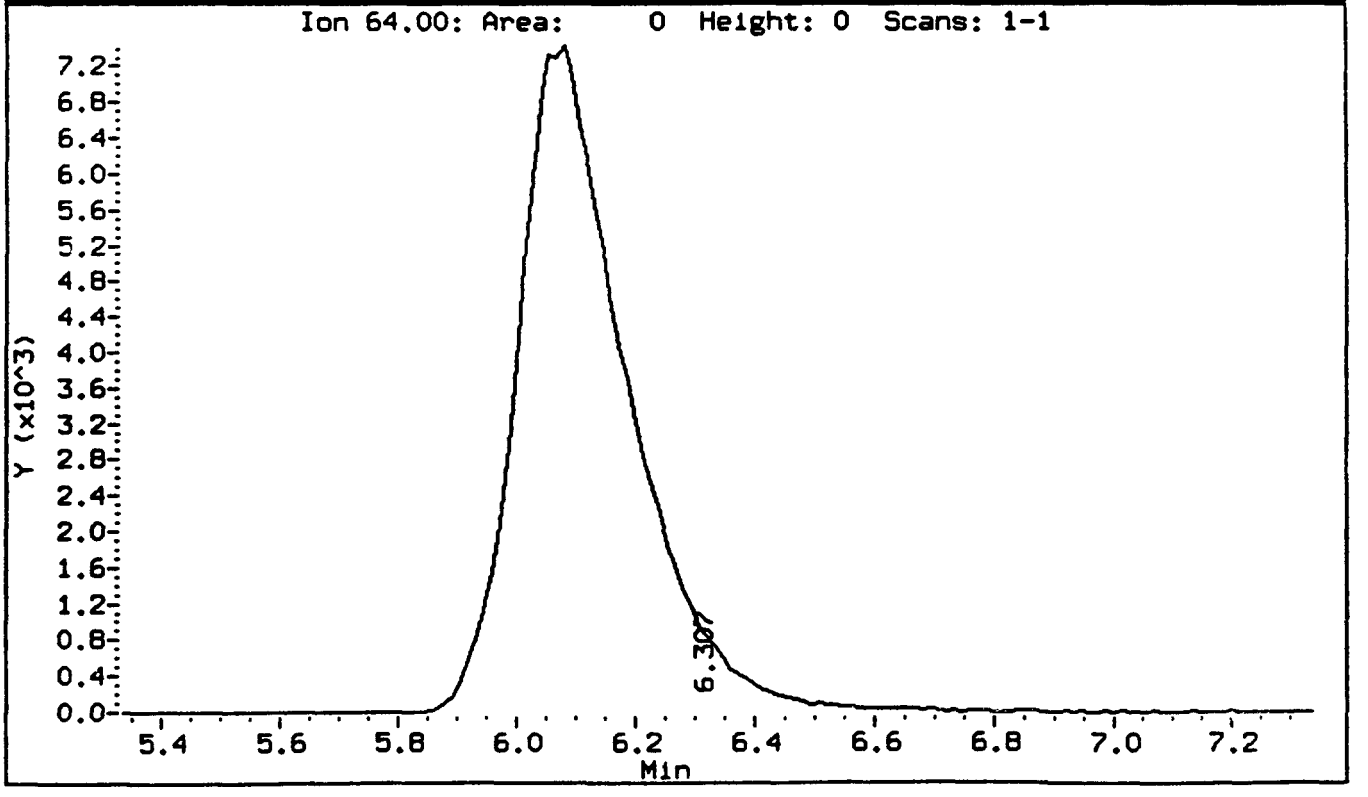
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: /chem/f50056.i/BF960723A560LM.b/GV960723A56.d/GV960723A56.LG
Injection Date: 23-JUL-96 10:36
Instrument: f50056.i
Client Sample ID: VSTD200JO

Compound: Vinyl Chloride
CAS Number: 75-01-4





COMPUCHEM ENVIROMENTAL CORPORATION ~~SEMI-VOLATILE~~
GC/MS ANALYSIS LOG

MB 7.23.96

INITIAL TIME OF TUNE 7.48
TIME TUNE EXPIRES 19.48
PREVENTIVE MAINTENANCE ΔES → 1242

SHIFT(S) (A) 1 (B) ____ (C) ____
DATE 7.23.96
LINKER/METHOD SOLM03.1 ONLY

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF960723A56	/	7/23/96	7 48	BFB	—	7008	2ul	2141	LCS SC 45115
2	/	GS960723A56		/ /	802	VSTD050JL	—	TN59	10mL		TN59
3		GT960723A56	/	/ /	847	↓		↓			
4	/	GU960723A56		/ /	944	VSTD010JM		TN59			
5		GV960723A56	/	/ /	1036	VSTD200JO					GOOD ICAL
6		GW960723A56	/	/ /	1123	VSTD100JP					
7		GX960723A56	/	/ /	1200	VSTD020JQ					
8		GY960723A56	/	/ /	1237	VSTD010JM					
9				/ /							
10				/ /							
11				/ /							
12				/ /							
13				/ /							
14				/ /							
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22				/ /							
23				/ /							
24				/ /							
				/ /							

COPY original in 24864-BNN17 Sub 7/30/96 282

MB 7.23.96

VERIFIED ____
SUPERVISOR APPROVAL [signature]
ENVELOPE NAME ____

0006

b. Form VII VOA

Continuing Calibration Data

In order by instrument.

(1) VOA standard reconstructed ion chromatograms and quantitation reports for the continuing calibration. Spectra not required.

(2) When more than one continuing calibration is performed, forms must be in chronological order, within fraction and instrument.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50052 Calibration Date: 07/27/96 Time: 0409

Lab File ID: GU960727C52 Init. Calib. Date(s): 07/26/96 07/26/96

Heated Purge: (Y/N) Y Init. Calib. Times: 0954 1305

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF250	MIN RRF	%D	MAX %D
Chloromethane	0.873	0.844		-3.3	
Bromomethane	1.552	1.520	0.100	-2.1	25.0
Vinyl Chloride	1.116	1.078	0.100	-3.4	25.0
Chloroethane	0.607	0.648		6.8	
Methylene Chloride	2.993	1.684		-43.7	
Acetone	0.234	0.179		-23.5	
Carbon Disulfide	3.047	2.899		-4.9	
1,1-Dichloroethene	1.094	1.023	0.100	-6.5	25.0
1,1-Dichloroethane	1.909	1.939	0.200	1.6	25.0
1,2-Dichloroethene (total)	1.122	1.104		-1.6	
Chloroform	3.041	3.157	0.200	3.8	25.0
1,2-Dichloroethane	1.490	1.774	0.100	19.1	25.0
2-Butanone	0.176	0.267		51.7	
1,1,1-Trichloroethane	0.807	0.924	0.100	14.5	25.0
Carbon Tetrachloride	0.935	1.091	0.100	16.7	25.0
Bromodichloromethane	0.956	1.135	0.200	18.7	25.0
1,2-Dichloropropane	0.300	0.344		14.7	
cis-1,3-Dichloropropene	0.501	0.640	0.200	27.7	25.0
Trichloroethene	0.454	0.502	0.300	10.6	25.0
Dibromochloromethane	0.657	0.770	0.100	17.2	25.0
1,1,2-Trichloroethane	0.208	0.235	0.100	13.0	25.0
Benzene	0.641	0.735	0.500	14.7	25.0
trans-1,3-Dichloropropene	0.297	0.238	0.100	-19.9	25.0
Bromoform	0.549	0.747	0.100	36.1	25.0
4-Methyl-2-Pentanone	0.665	0.860		29.3	
2-Hexanone	0.125	0.134		7.2	
Tetrachloroethene	0.739	0.779	0.200	5.4	25.0
1,1,2,2-Tetrachloroethane	0.626	0.662	0.300	5.8	25.0
Toluene	1.548	1.648	0.400	6.5	25.0
Chlorobenzene	0.916	0.994	0.500	8.5	25.0
Ethylbenzene	0.387	0.395	0.100	2.1	25.0
Styrene	0.705	0.715	0.300	1.4	25.0
Xylene (Total)	0.478	0.483	0.300	1.0	25.0
Toluene-d8	1.749	1.785		2.1	
Bromofluorobenzene	0.951	0.941	0.200	-1.1	25.0
1,2-Dichloroethane-d4	1.622	1.753		8.1	

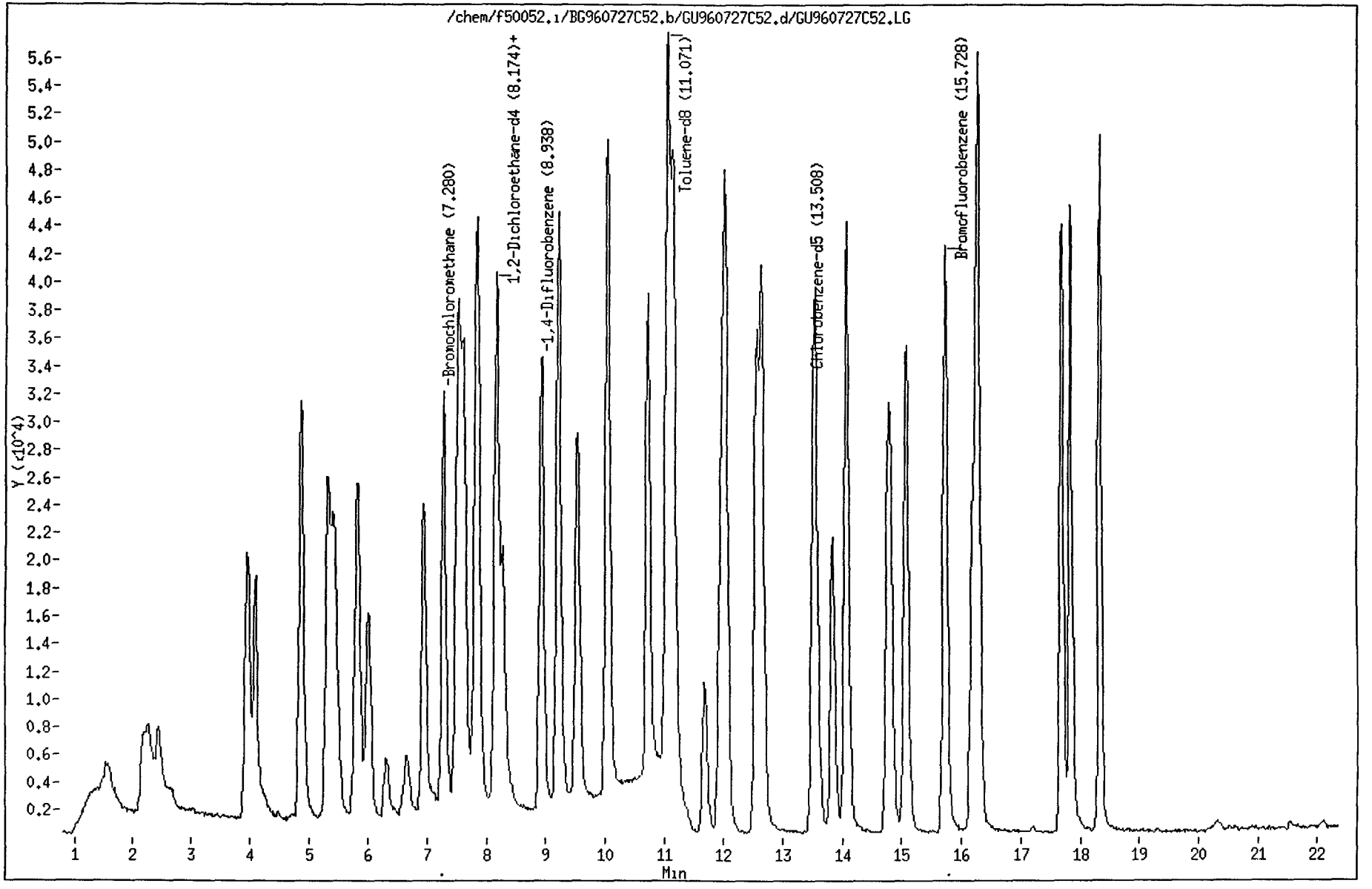
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/f50052.i/BG960727C52.b/GU960727C52.d
Date : 27-JUL-1996 04:09
Client ID: VSTD050KS
Sample Info:

Column phase: DB624

Instrument: f50052.i

Operator: 2227
Column diameter: 0.53



Page Original in 24877-YW736 OMcConnach 7/30/96

Data File: /chem/f50052.i/BG960727C52.b/GU960727C52.d
Report Date: 30-Jul-1996 13:12

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GU960727C52.d
Lab Smp Id: VSTD050KS Client Smp ID: VSTD050KS
Inj Date : 27-JUL-1996 04:09
Operator : 2227 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	7 280	7 280	(1 000)	20826	250 0	
* 2 1,4-Difluorobenzene	114 00	8 923	8 923	(1 000)	69926	250 0	
* 3 Chlorobenzene-d5	117 00	13 508	13 508	(1 000)	43885	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 174	8 174	(1 123)	36501	250 0	270 2
$ 5 Toluene-d8	98 00	11 057	11 057	(0 819)	78344	250 0	255 2
$ 6 Bromofluorobenzene	95 00	15 728	15 728	(1 164)	41293	250 0	247 3
7 Chloromethane	50 00	1 312	1 312	(0 180)	17587	250 0	241 8(M)
8 Vinyl Chloride	62 00	1 571	1 571	(0 216)	22445	250 0	241 4(M)
9 Bromomethane	94 00	2 278	2 278	(0 313)	31664	250 0	244 9
10 Chloroethane	64 00	2 451	2 451	(0 337)	13497	250 0	266 8
11 1,1-Dichloroethene	96 00	3 979	3 979	(0 547)	21304	250 0	233 7
12 Carbon Disulfide	76 00	4 109	4 109	(0 564)	60374	250 0	237 8
13 Acetone	43 00	4 267	4 267	(0 586)	3732	250 0	191 6
14 Methylene Chloride	84 00	4 873	4 873	(0 669)	35069	250 0	140 6
15 trans-1 2-Dichloroethene	96 00	5 305	5 305	(0 729)	20953	250 0	238 4
16 1,1-Dichloroethane	63 00	6 011	6 011	(0 826)	40386	250 0	254 0
17 cis-1,2-Dichloroethene	96 00	6 934	6 934	(0 952)	25024	250 0	252 8
18 2-Butanone	43 00	7 121	7 121	(0 978)	5567	250 0	378 6
19 Chloroform	83 00	7 511	7 511	(1 032)	65755	250 0	259 5
20 1,1,1-Trichloroethane	97 00	7 612	7 612	(0 853)	64650	250 0	286 3
21 Carbon Tetrachloride	117 00	7 842	7 842	(0 879)	76287	250 0	291 8
22 Benzene	78 00	8 174	8 174	(0 916)	51429	250 0	286 8

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Data File: /chem/f50052.i/BG960727C52.b/GU960727C52.d
Report Date: 30-Jul-1996 13:12

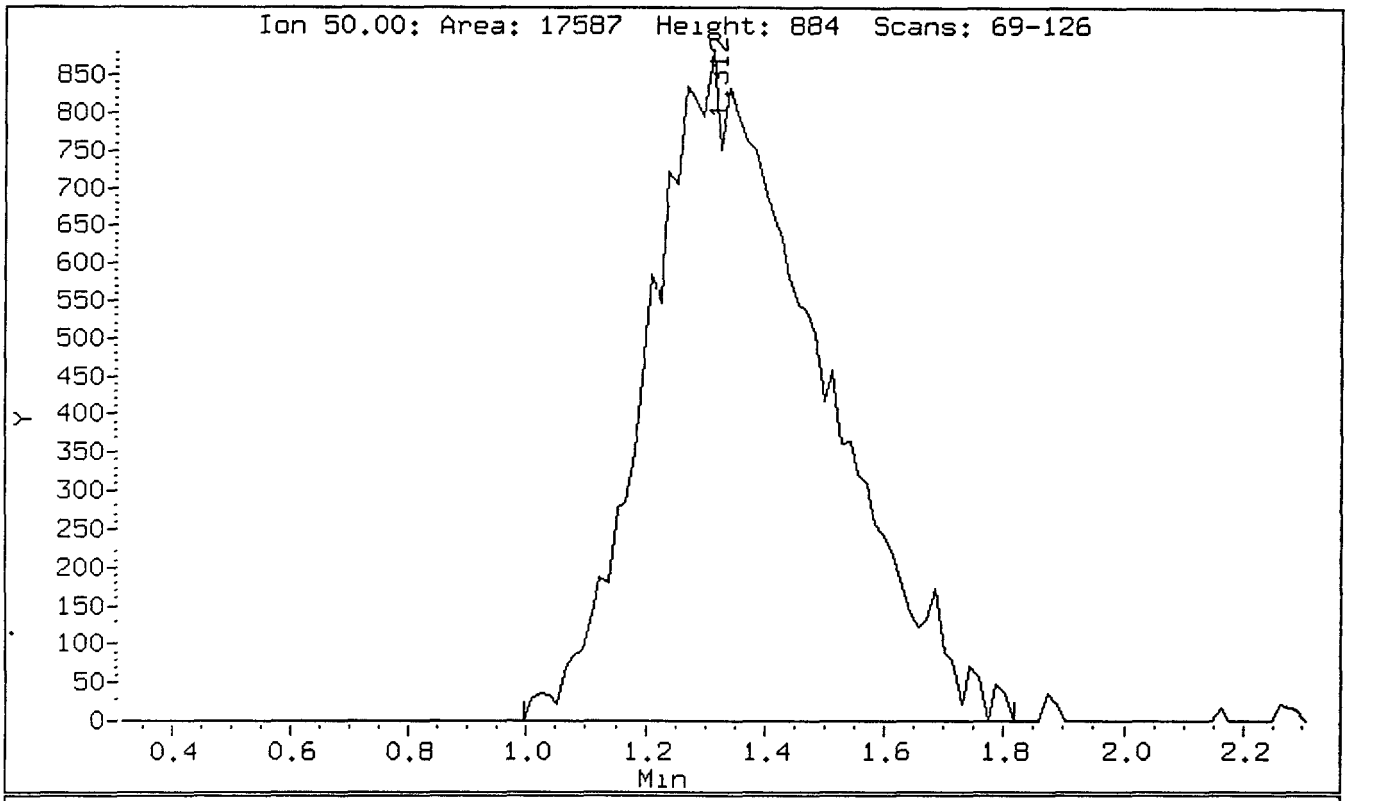
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	8 275	8 275	(1 137)	36939	250 0	297 7
24 Trichloroethene	130 00	9 212	9 212	(1 032)	35073	250 0	276 0
25 1,2-Dichloropropane	63 00	9 529	9 529	(1 068)	24094	250 0	287 3
26 Bromodichloromethane	83 00	10 048	10 048	(1 126)	79394	250 0	296 9
27 cis-1,3-Dichloropropene	75 00	10 725	10 725	(1 202)	44744	250 0	319 0
28 4-Methyl-2-Pentanone	43 00	11 100	11 100	(0 822)	37744	250 0	323 1
29 Toluene	91 00	11 158	11 158	(0 826)	72337	250 0	266 1
30 trans-1,3-Dichloropropene	75 00	11 677	11 677	(1 309)	16646	250 0	200 4
31 1,1,2-Trichloroethane	97 00	11 951	11 951	(1 339)	16444	250 0	282 7
32 Tetrachloroethene	164 00	12 023	12 023	(0 890)	34205	250.0	263 7
33 Dibromochloromethane	129 00	12 556	12 556	(1 407)	53869	250 0	293 2
34 2-Hexanone	43 00	12 527	12 527	(0 927)	5876	250 0	268 0
35 Chlorobenzene	112 00	13 565	13 565	(1 004)	43626	250 0	271 2
36 Ethylbenzene	106 00	13 825	13 825	(1 023)	17319	250 0	254 8
37 m,p-Xylene	106 00	14 070	14 070	(1 042)	42627	500 0	512 7
38 o-Xylene	106 00	14 762	14 762	(1 093)	21209	250 0	252 8
39 Styrene	104 00	14 819	14 819	(1 097)	31388	250 0	253 8
40 Bromoform	173 00	15 065	15 065	(1 688)	52215	250 0	339 7
41 1,1,2,2-Tetrachloroethane	83 00	16 175	16 175	(1 197)	29040	250 0	264 3
M 42 1,2-Dichloroethene (total)	96 00				45977	500 0	492 1
M 43 Xylene (Total)	106 00				63836	250 0	760 9

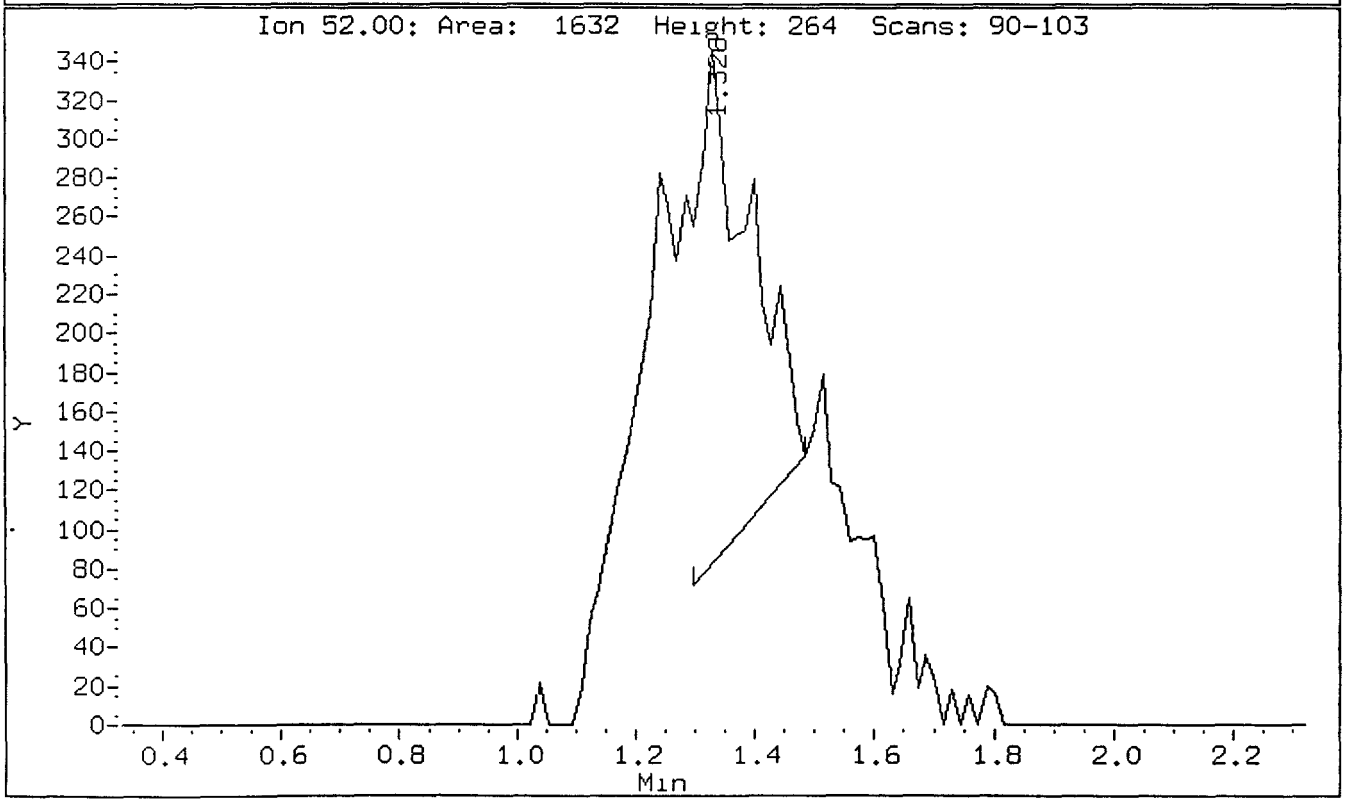
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960727C52.b/GU960727C52.d/GU960727C52.LG
Injection Date: 27-JUL-96 04:09
Instrument: f50052.i
Client Sample ID: VSTD050KS

Compound: Chloromethane
CAS Number: 74-87-3

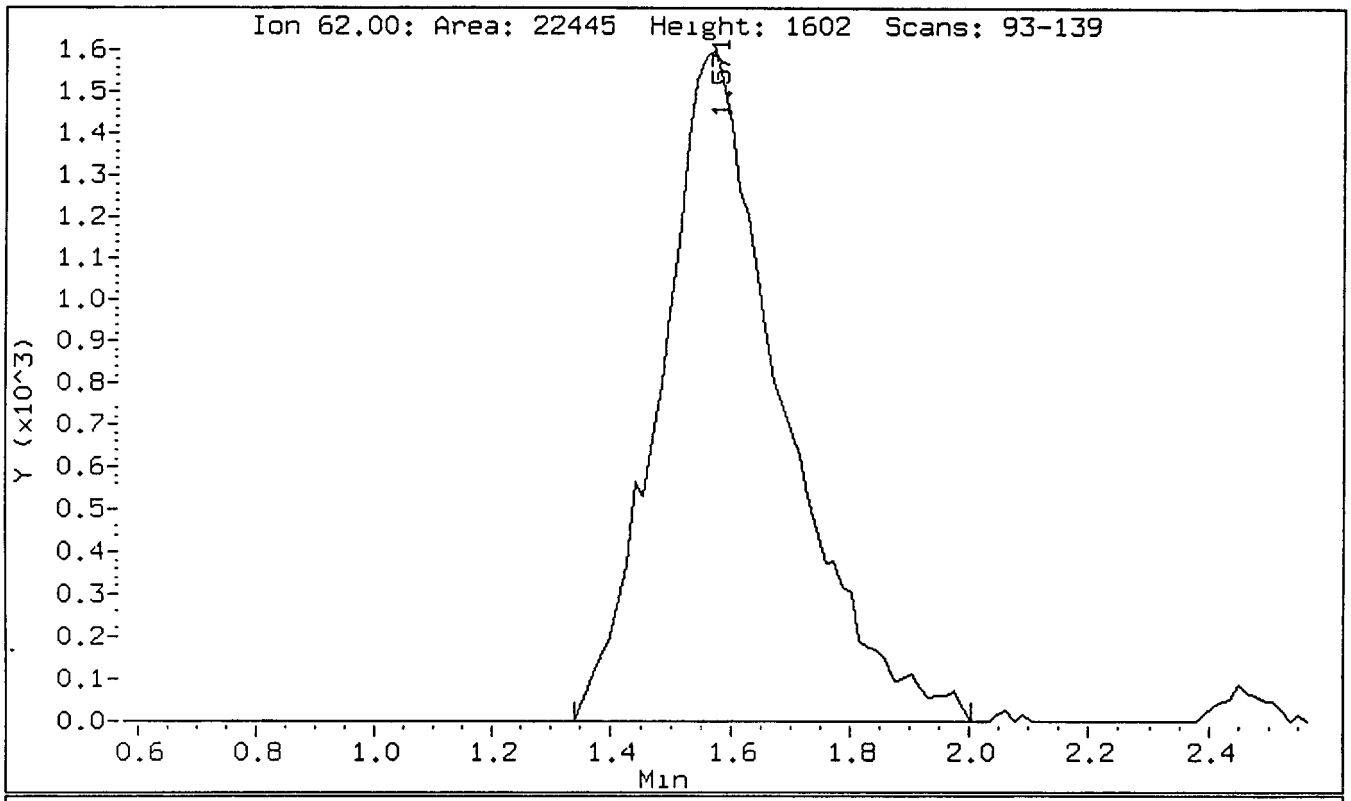


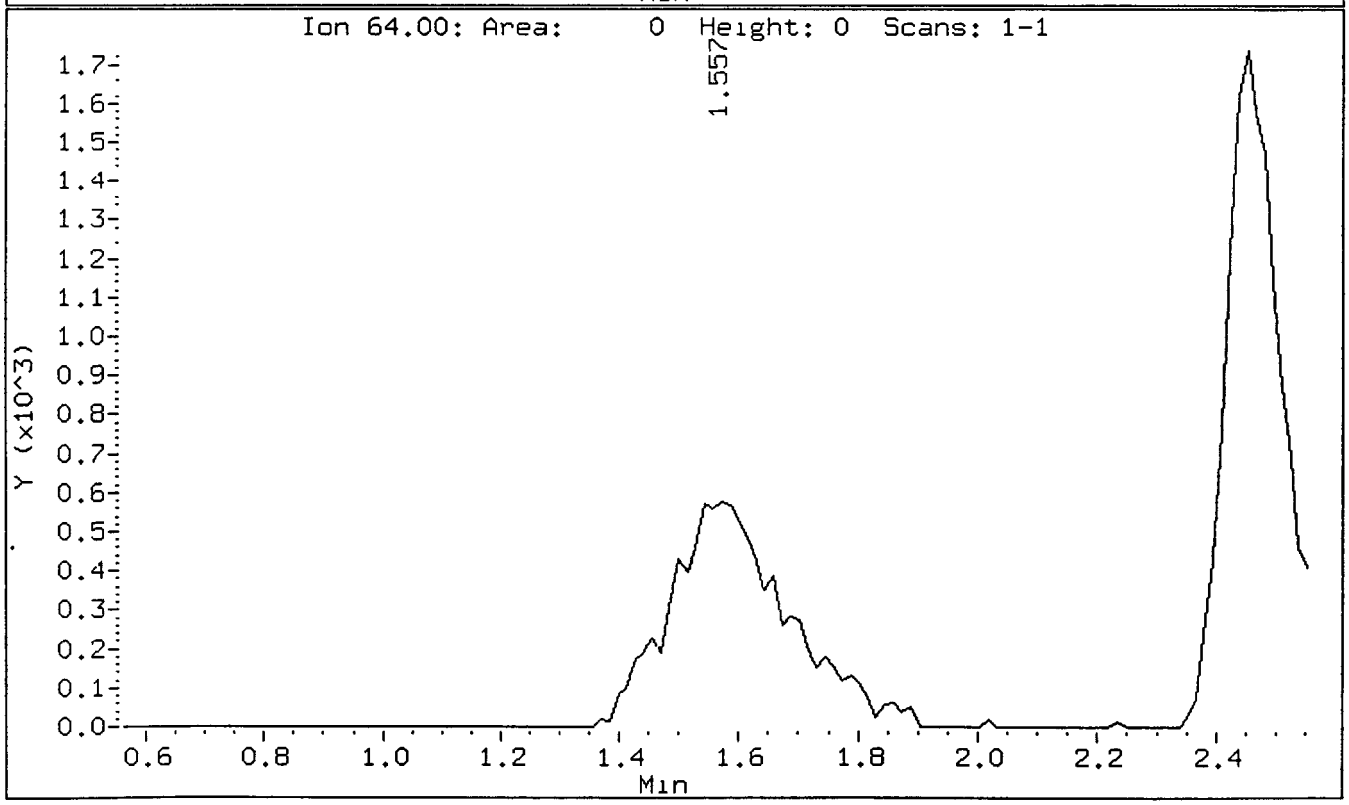


Copy Original in 24877-YW736 QMcConnack 7/30/96

Data File: /chem/f50052.i/BG960727C52.b/GU960727C52.d/GU960727C52.LG
Injection Date: 27-JUL-96 04:09
Instrument: f50052.i
Client Sample ID: VSTD050KS

Compound: Vinyl Chloride
CAS Number: 75-01-4





705028

COMPUCHEM ENVIROMENTAL CORPORATION
GC/MS ANALYSIS LOG

SEMI-VOLATILE

MB 7/27/96

INITIAL TIME OF TUNE 3:47

TIME TUNE EXPIRES 15:47

SHIFT(S) (A) / (B) ____ (C) ✓

DATE 7/27/96

LINKER/METHOD Solmo3 It

PREVENTIVE MAINTENANCE None

290

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc)
1		BF960727C52	/	7/27/96	1 42	BFB	—	7008	2uL	2227	CC=SC 45115
2	/	GS960727C52		/ /	1 58	VSTD050KS	—	TN59	10mL		
3	/	GT960727C52		/ /	2 53	VSTD050KS	—	TN59	10mL		(45004/45120)
4		BG960727C52	/	/ /	3 47	BFB	—	7008	2uL		45115
5		GU960727C52	/	/ /	4 09	VSTD050KS	—	TN59	10mL		45004/45120
6		GH015375C52	/	/ /	5 06	VBLKW3	various	—	5g		
7		GH015083C52	/	/ /	6 14	YW739	24877-YW736	—	5g		
8		GH015084C52	/	/ /	6 49	YW740		—	5g		
9	/	GH015085C52	SL	/ /	7 31	YW741		—	5g		
10	/	GH015076C52	SL	/ /	8 08	YW736		—	5g	2227	
11		GH015071C52	/	/ /	8 39	YW736MS				2141	45092
12		GH015078C52	/	/ /	9 19	YW736MSD					
13		GH015393A52	/	/ /	10 22	VBLK17	[illegible]				
14		GH014998A52	/	/ /	11 05	FFE82	24893-FFE82				
15		GH014999A52	/	/ /	11 40	FFE82MS					45092
16	/	GH015000A52	SL	/ /	12 14	FFE82MSD					
17		GH015007A52	/	/ /	12 45	FFE84					
18		GH015008A52	/	/ /	13 15	FFE85					
19		GH015009A52	/	/ /	13 47	FFE86					
20		GH015010A52	/	/ /	14 17	FFE87					
21		GH015011A52	/	/ /	14 53	FFE88					
22		GB960727A52	MT	/ /	15 56	VIBLKMA	—		10mL		(methylene Vchloride)
23				/ /							
24				/ /							
				/ /							

MB 7/27/96

VERIFIED ____

SUPERVISOR APPROVAL Mark D [illegible]

ENVELOPE NAME ____

Copy Original in 24877-YW736 @McComack 7/30/96

0009

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50052 Calibration Date: 07/28/96 Time: 2037

Lab File ID: GU960728B52 Init. Calib. Date(s): 07/26/96 07/26/96

Heated Purge: (Y/N) Y Init. Calib. Times: 0954 1305

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF250	MIN RRF	%D	MAX %D
Chloromethane	0.873	0.688		-21.2	
Bromomethane	1.552	1.277	0.100	-17.7	25.0
Vinyl Chloride	1.116	0.971	0.100	-13.0	25.0
Chloroethane	0.607	0.611		0.7	
Methylene Chloride	2.993	1.512		-49.5	
Acetone	0.234	0.128		-45.3	
Carbon Disulfide	3.047	2.776		-8.9	
1,1-Dichloroethene	1.094	1.036	0.100	-5.3	25.0
1,1-Dichloroethane	1.909	1.880	0.200	-1.5	25.0
1,2-Dichloroethene (total)	1.122	1.100		-2.0	
Chloroform	3.041	3.016	0.200	-0.8	25.0
1,2-Dichloroethane	1.490	1.512	0.100	1.5	25.0
2-Butanone	0.176	0.219		24.4	
1,1,1-Trichloroethane	0.807	0.873	0.100	8.2	25.0
Carbon Tetrachloride	0.935	1.024	0.100	9.5	25.0
Bromodichloromethane	0.956	1.006	0.200	5.2	25.0
1,2-Dichloropropane	0.300	0.316		5.3	
cis-1,3-Dichloropropene	0.501	0.582	0.200	16.2	25.0
Trichloroethene	0.454	0.478	0.300	5.3	25.0
Dibromochloromethane	0.657	0.625	0.100	-4.9	25.0
1,1,2-Trichloroethane	0.208	0.202	0.100	-2.9	25.0
Benzene	0.641	0.697	0.500	8.7	25.0
trans-1,3-Dichloropropene	0.297	0.198	0.100	-33.3	25.0
Bromoform	0.549	0.702	0.100	27.9	25.0
4-Methyl-2-Pentanone	0.665	0.693		4.2	
2-Hexanone	0.125	0.112		-10.4	
Tetrachloroethene	0.739	0.733	0.200	-0.8	25.0
1,1,2,2-Tetrachloroethane	0.626	0.559	0.300	-10.7	25.0
Toluene	1.548	1.469	0.400	-5.1	25.0
Chlorobenzene	0.916	0.913	0.500	-0.3	25.0
Ethylbenzene	0.387	0.332	0.100	-14.2	25.0
Styrene	0.705	0.624	0.300	-11.5	25.0
Xylene (Total)	0.478	0.426	0.300	-10.9	25.0
Toluene-d8	1.749	1.693		-3.2	
Bromofluorobenzene	0.951	0.842	0.200	-11.5	25.0
1,2-Dichloroethane-d4	1.622	1.541		-5.0	

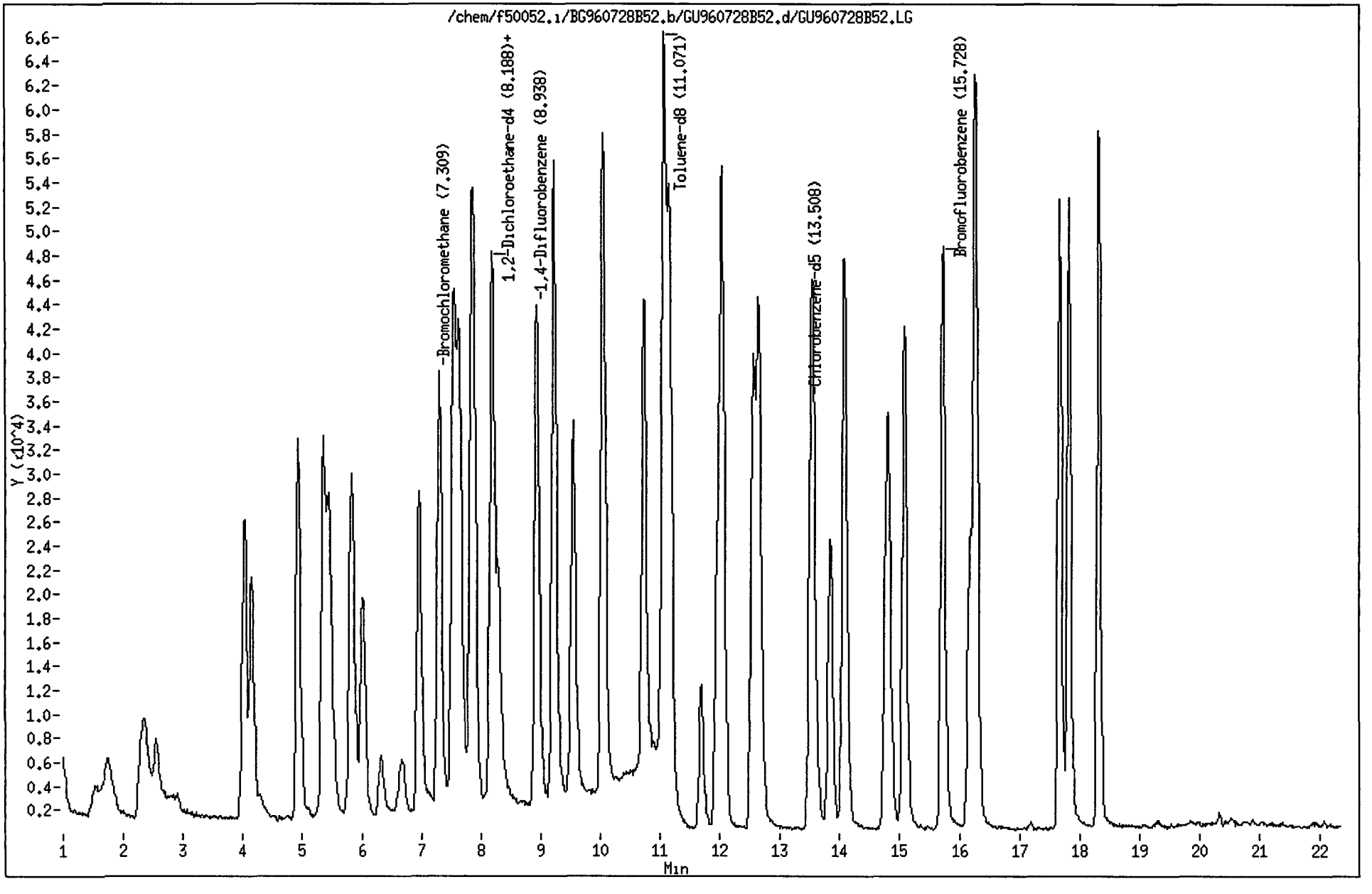
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/f50052.1/BG960728B52.b/GU960728B52.d
Date : 28-JUL-1996 20:37
Client ID: VSTD050LG
Sample Info:

Instrument: f50052.1

Operator: 2227
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960728B52.b/GU960728B52.d
Report Date: 29-Jul-1996 15:33

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960728B52.b/GU960728B52.d
Lab Smp Id: VSTD050LG Client Smp ID: VSTD050LG
Inj Date : 28-JUL-1996 20:37
Operator : 2227 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 15:32 bass Quant Type: ISTD
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	7 309	7 309	(1 000)	26102	250.0	
* 2 1,4-Difluorobenzene	114 00	8.938	8 938	(1 000)	91051	250 0	
* 3 Chlorobenzene-d5	117 00	13.508	13 508	(1 000)	54104	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 188	8 188	(1 120)	40235	250 0	237 6
$ 5 Toluene-d8	98 00	11 071	11 071	(0 820)	91608	250 0	242 0
$ 6 Bromofluorobenzene	95 00	15 728	15 728	(1 164)	45543	250 0	221 2
7 Chloromethane	50 00	1 542	1 542	(0 211)	17963	250 0	197 1
8 Vinyl Chloride	62 00	1.744	1 744	(0 239)	25348	250 0	217.5 (M) 2
9 Bromomethane	94 00	2 335	2 335	(0.320)	33324	250 0	205 7
10 Chloroethane	64 00	2 537	2 537	(0 347)	15957	250 0	251 6
11 1,1-Dichloroethene	96 00	4 036	4 036	(0 552)	27043	250 0	236 6
12 Carbon Disulfide	76 00	4 152	4 152	(0 568)	72451	250.0	227 7
13 Acetone	43 00	4.296	4 296	(0 588)	3343	250 0	136 9
14 Methylene Chloride	84 00	4.930	4 930	(0 675)	39480	250 0	126 3
15 trans-1,2-Dichloroethene	96 00	5 348	5 348	(0 732)	27250	250 0	247 4
16 1,1-Dichloroethane	63 00	6 011	6 011	(0 822)	49069	250 0	246 2
17 cis-1,2-Dichloroethene	96 00	6 963	6 963	(0 953)	30172	250 0	243 2
18 2-Butanone	43 00	7.136	7 136	(0 976)	5723	250 0	310.5 (M) 2
19 Chloroform	83 00	7 539	7 539	(1 032)	78738	250 0	247 9
20 1,1,1-Trichloroethane	97 00	7 640	7 640	(0 855)	79471	250 0	270 3
21 Carbon Tetrachloride	117 00	7 871	7 871	(0 881)	93288	250 0	274 1
22 Benzene	78 00	8 188	8 188	(0 916)	63502	250 0	272 0

SWB 7/29/96

Data File: /chem/f50052.i/BG960728B52.b/GU960728B52.d
Report Date: 29-Jul-1996 15:33

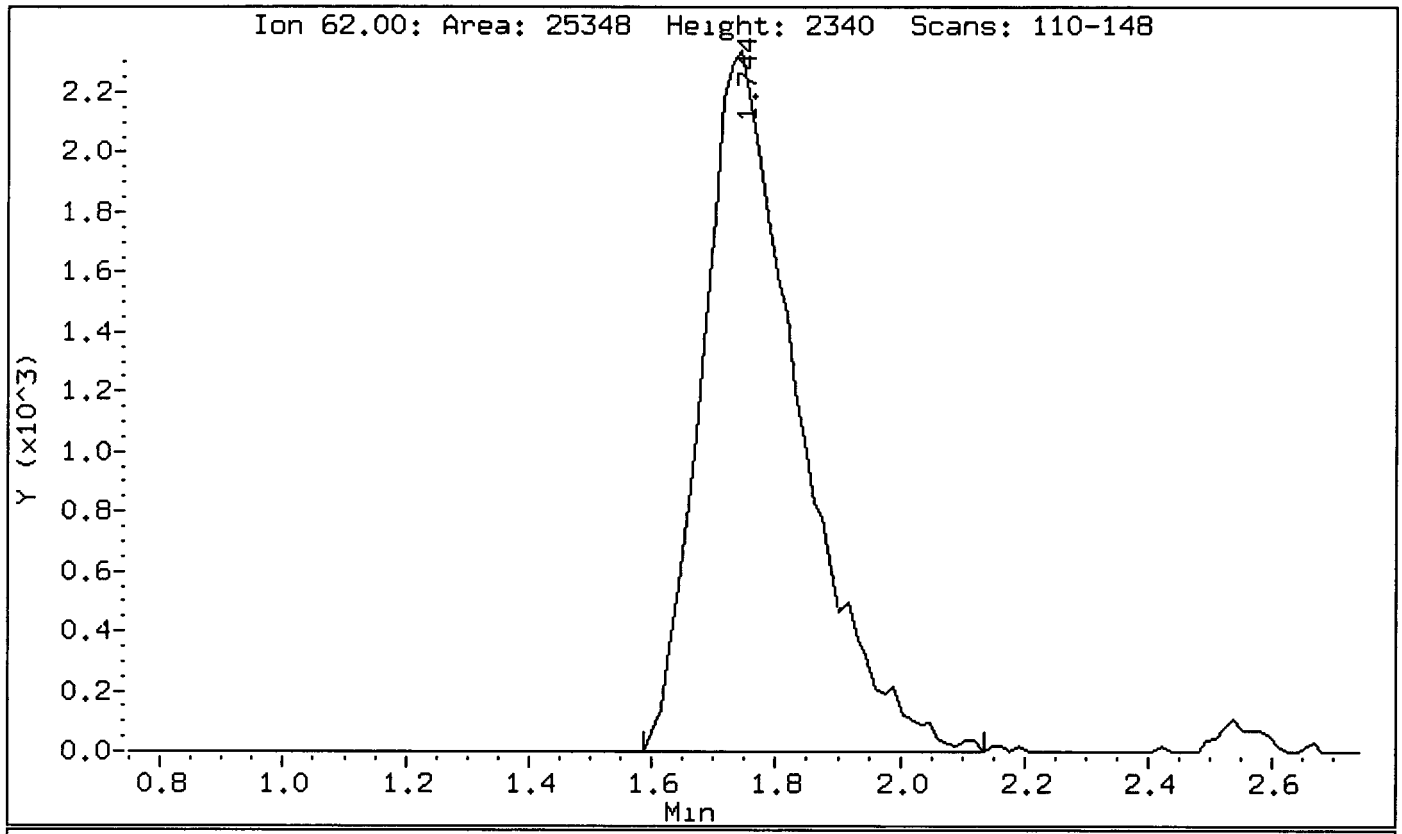
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	8 289	8 289	(1 134)	39466	250 0	253 7
24 Trichloroethene	130 00	9 226	9.226	(1 032)	43501	250 0	262 9
25 1,2-Dichloropropane	63 00	9 543	9 543	(1 068)	28751	250 0	263 3
26 Bromodichloromethane	83 00	10 048	10 048	(1 124)	91572	250 0	263 0
27 cis-1,3-Dichloropropene	75 00	10 725	10 725	(1 200)	53031	250 0	290 4
28 4-Methyl-2-Pentanone	43 00	11 100	11 100	(0 822)	37493	250 0	260 3
29 Toluene	91 00	11 158	11 158	(0 826)	79473	250 0	237 1
30 trans-1,3-Dichloropropene	75 00	11 691	11 691	(1 308)	18047	250 0	166 8
31 1,1,2-Trichloroethane	97 00	11 965	11 965	(1 339)	18423	250 0	243 2
32 Tetrachloroethene	164 00	12 037	12 037	(0 891)	39638	250 0	247 8
33 Dibromochloromethane	129 00	12 556	12 556	(1 405)	56900	250 0	237 9
34 2-Hexanone	43 00	12 542	12 542	(0 928)	6056	250 0	224 0
35 Chlorobenzene	112 00	13 565	13 565	(1 004)	49415	250 0	249 2
36 Ethylbenzene	106 00	13 839	13 839	(1 025)	17982	250 0	214 6
37 m,p-Xylene	106 00	14 070	14 070	(1 042)	46437	500 0	453 0
38 o-Xylene	106 00	14 776	14 776	(1 094)	23036	250 0	222 7
39 Styrene	104 00	14 834	14 834	(1.098)	33764	250 0	221 4
40 Bromoform	173 00	15 079	15 079	(1 687)	63893	250 0	319 2
41 1,1,2,2-Tetrachloroethane	83 00	16 175	16 175	(1 197)	30236	250 0	223 2
M 42 1,2-Dichloroethene (total)	96 00				57422	500 0	490 3
M 43 Xylene (Total)	106 00				69473	250 0	671 7

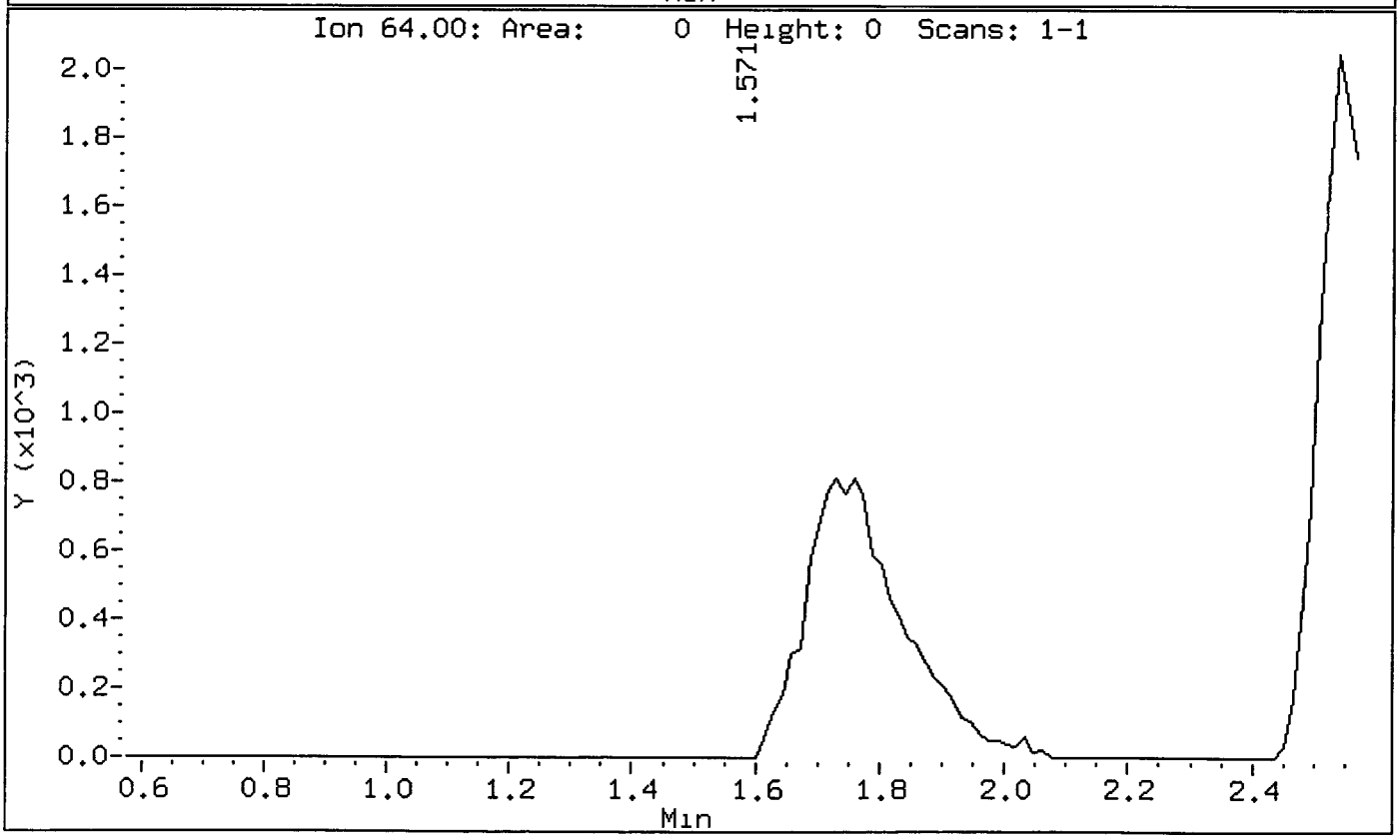
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960728B52.b/GU960728B52.d/GU960728B52.LG
Injection Date: 28-JUL-96 20:37
Instrument: f50052.i
Client Sample ID: VSTD050LG

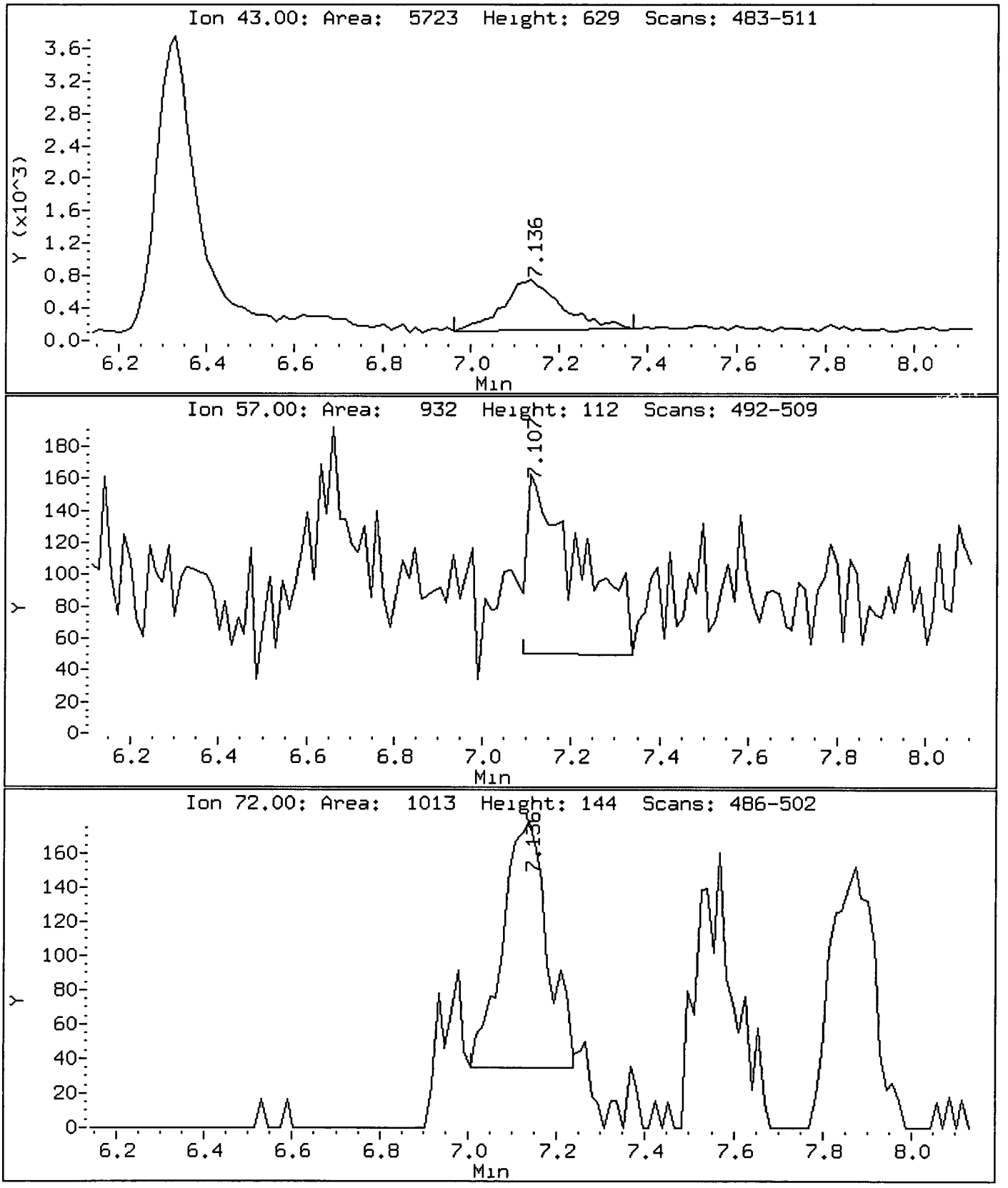
Compound: Vinyl Chloride
CAS Number: 75-01-4





Data File: /chem/f50052.i/BG960728B52.b/GU960728B52.d/GU960728B52.LG
Injection Date: 28-JUL-96 20:37
Instrument: f50052.i
Client Sample ID: VSTD050LG

Compound: 2-Butanone
CAS Number: 78-93-3



COMPUCHEM ENVIROMENTAL CORPORATION
GC/MS ANALYSIS LOG

SEMI-VOLATILE

INITIAL TIME OF TUNE 20:24
TIME TUNE EXPIRES 8:24

SHIFT(S) (A) ____ (B) ✓ (C) ✓
DATE 7/28/96
LINKER/METHOD SOLM030/+

PREVENTIVE MAINTENANCE none

297

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc)
1		BF960728B52	/	7 28 96	17 13	BFB	—	7008	2uL	2227	LC=SC 45115
2	/	GS960728B52		/ /	18 31	VSTD050LG	—	TN59	10mL		
3	/	GT960728B52		/ /	19 21	VSTD050LG	—	TN59	10mL		
4		BG960728B52	/	/ /	20 24	BFB	—	7008	2uL		LC=SC 45115
5		GU960728B52	/	/ /	20 37	VSTD050LG	—	TN59	10mL		
6		GH015394B52	/	/ /	21 49	VBLKT2	various	—	5g		45004/45120
7	/	GH015012B52	RT	/ /	22 25	FFE89	24893-FFE82	—	5g		
8		GH015013B52	/	/ /	23 21	FFF25		—	5g		
9		GH015014B52	/	/ /	23 59	FFF26		—	5g		
10		GH015015B52	/	7/29/96	0 33	FFF27		—	5gm	1948	
11		GH015016B52	/	7/29/96	1 19	FFF28		—	5gm	1948	
12		GH014996B52	/	7/29/96	2 01	FFE79	FFE91-24893	—	5gm	1948	
13		GH014997B52	/	7/29/96	2 37	FFE80		—	5gm	1948	
14		GH014851B52	/	7/29/96	3 25	VHBLKZ8		—	5 10mL VS 7-29-96	1948	
15		GH015975C52	/	7/29/96	3 58	VBLKP1	various	—	5gm	1948	
16	/	GH015462C52	RT	7/29/96	4 40	YW759	24877-YW757	—	5gm	1948	
17	/	GH015463C52	SL	7/29/96	5 25	YW760		—	5gm	1948	
18		GH015464C52	/	7/29/96	5 48	YW761		—	5gm	1948	
19		GH015465C52	/	7/29/96	6 23	YW762		—	5gm	1948	
20		GH015466C52	/	7/29/96	6 58	YW764		—	5gm	1948	
21		GH015467C52	/	7/29/96	7 28	YW765		—	5gm	1948	
22		GH015468C52	/	7/29/96	8 00	YW766		—	5gm	1948	
23				/ /							
24				/ /		M. D	7/29/96				
				/ /							

VERIFIED ____
SUPERVISOR APPROVAL Mark D R
ENVELOPE NAME ____

0010

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50056 Calibration Date: 07/31/96 Time: 1827

Lab File ID: GS960731B56 Init. Calib. Date(s): 07/23/96 07/23/96

Heated Purge: (Y/N) Y Init. Calib. Times: 0847 1237

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF250	MIN RRF	%D	MAX %D
Chloromethane	1.698	1.598		-5.9	
Bromomethane	2.161	1.915	0.100	-11.4	25.0
Vinyl Chloride	2.137	2.030	0.100	-5.0	25.0
Chloroethane	1.102	0.923		-16.2	
Methylene Chloride	3.967	2.341		-41.0	
Acetone	0.591	0.617		4.4	
Carbon Disulfide	4.704	4.403		-6.4	
1,1-Dichloroethene	1.645	1.638	0.100	-0.4	25.0
1,1-Dichloroethane	2.429	2.134	0.200	-12.1	25.0
1,2-Dichloroethene (total)	1.585	1.531		-3.4	
Chloroform	2.789	2.531	0.200	-9.3	25.0
1,2-Dichloroethane	1.193	0.991	0.100	-16.9	25.0
2-Butanone	0.406	0.566		39.4	
1,1,1-Trichloroethane	0.507	0.467	0.100	-7.9	25.0
Carbon Tetrachloride	0.468	0.448	0.100	-4.3	25.0
Bromodichloromethane	0.517	0.535	0.200	3.5	25.0
1,2-Dichloropropane	0.345	0.314		-9.0	
cis-1,3-Dichloropropene	0.503	0.458	0.200	-8.9	25.0
Trichloroethene	0.434	0.450	0.300	3.7	25.0
Dibromochloromethane	0.433	0.445	0.100	2.8	25.0
1,1,2-Trichloroethane	0.282	0.253	0.100	-10.3	25.0
Benzene	0.782	0.742	0.500	-5.1	25.0
trans-1,3-Dichloropropene	0.360	0.307	0.100	-14.7	25.0
Bromoform	0.249	0.263	0.100	5.6	25.0
4-Methyl-2-Pentanone	0.365	0.269		-26.3	
2-Hexanone	0.219	0.144		-34.2	
Tetrachloroethene	0.383	0.407	0.200	6.3	25.0
1,1,2,2-Tetrachloroethane	0.535	0.464	0.300	-13.3	25.0
Toluene	1.166	1.058	0.400	-9.3	25.0
Chlorobenzene	0.861	0.815	0.500	-5.3	25.0
Ethylbenzene	0.406	0.383	0.100	-5.7	25.0
Styrene	0.772	0.736	0.300	-4.7	25.0
Xylene (Total)	0.489	0.463	0.300	-5.3	25.0
Toluene-d8	1.354	1.118		-17.4	
Bromofluorobenzene	0.893	0.686	0.200	-23.2	25.0
1,2-Dichloroethane-d4	1.261	0.918		-27.2	

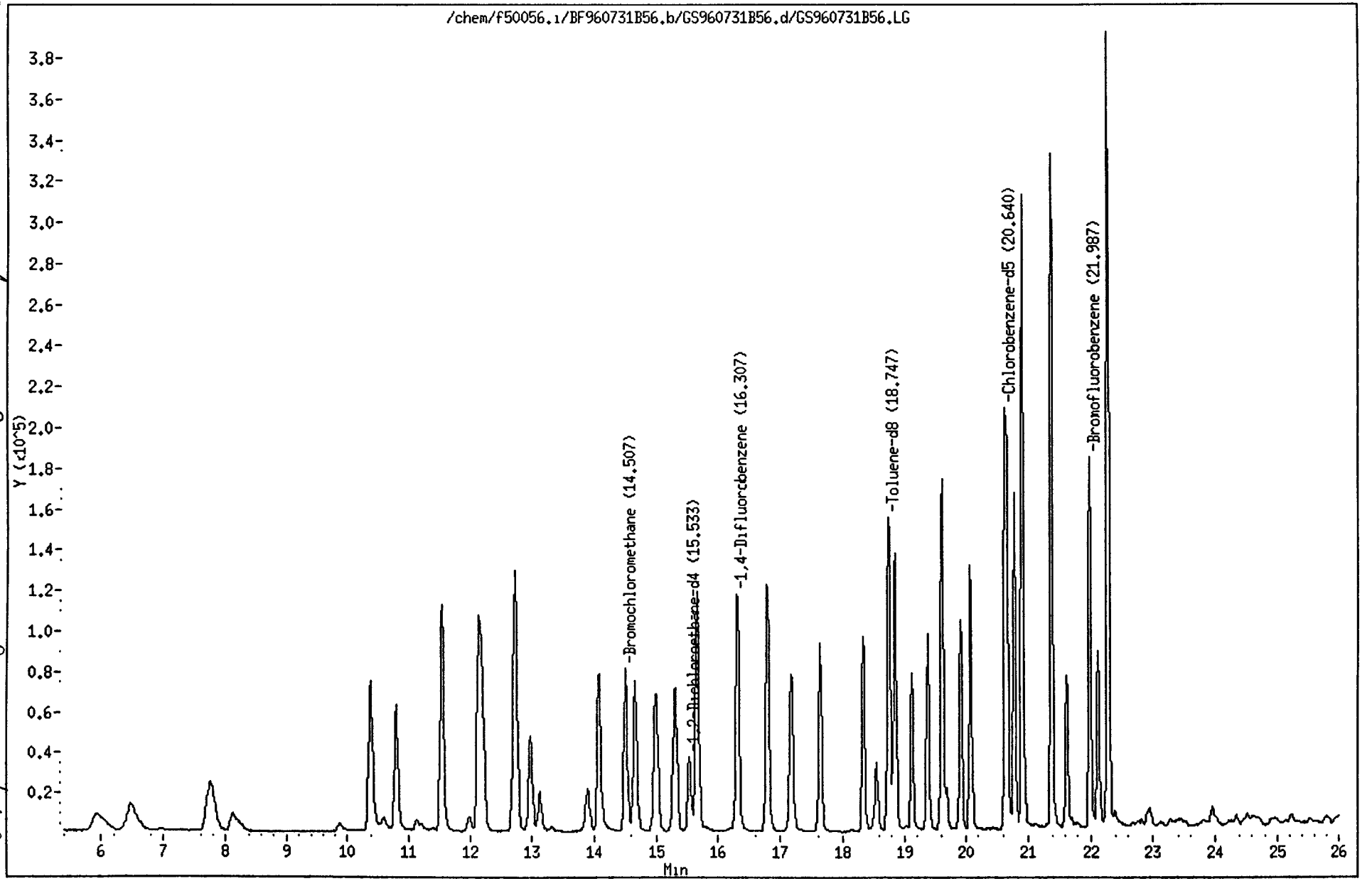
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/f50056.i/BF960731B56.b/GS960731B56.d
Date : 31-JUL-1996 18:27
Client ID: VSTD050ML
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2230
Column diameter: 0.53



Copy Original in 24877-YW736 JMcCormack 8/1/96

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Data File: /chem/f50056.i/BF960731B56.b/GS960731B56.d
Report Date: 01-Aug-1996 12:51

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960731B56.b/GS960731B56.d
Lab Smp Id: VSTD050ML Client Smp ID: VSTD050ML
Inj Date : 31-JUL-1996 18:27
Operator : 2230 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960731B56.b/SOLM03.1.m
Meth Date : 01-Aug-1996 11:35 riedl Quant Type: ISTD
Cal Date : 31-JUL-1996 18:27 Cal File: GS960731B56.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	14 507	14 507	(1 000)	46515	250 0	
* 2 1,4-Difluorobenzene	114 00	16 307	16 307	(1 000)	215041	250 0	
* 3 Chlorobenzene-d5	117.00	20 627	20 627	(1 000)	171360	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 533	15 533	(1 071)	42700	250 0	182 0
$ 5 Toluene-d8	98 00	18 747	18 747	(0 909)	191569	250 0	206 3
$ 6 Bromofluorobenzene	95 00	21 987	21 987	(1 066)	117520	250 0	192 0
7 Chloromethane	50 00	5 920	5 920	(0 408)	74315	250 0	235 3
8 Vinyl Chloride	62 00	6 480	6 480	(0 447)	94444	250 0	237 6(M)
9 Bromomethane	94 00	7.760	7 760	(0.535)	89079	250 0	221 6
10 Chloroethane	64 00	8 133	8 133	(0 561)	42942	250 0	209 4
11 1,1-Dichloroethene	96 00	10 387	10 387	(0 716)	76195	250.0	248 8
12 Carbon Disulfide	76 00	10 800	10 800	(0 744)	204795	250 0	234 0
13 Acetone	43 00	10 600	10 600	(0 731)	28694	250 0	260 9
14 Methylene Chloride	84 00	11 547	11 547	(0 796)	108876	250.0	147 5
15 trans-1,2-Dichloroethene	96 00	12.133	12 133	(0.836)	66688	250 0	238 0
16 1,1-Dichloroethane	63 00	12 973	12 973	(0 894)	99256	250.0	219 6
17 cis-1,2-Dichloroethene	96 00	14.067	14 067	(0.970)	75750	250 0	244 7
18 2-Butanone	43.00	14 120	14 120	(0 973)	26323	250 0	348 1
19 Chloroform	83 00	14 653	14 653	(1 010)	117716	250 0	226 8
20 1,1,1-Trichloroethane	97 00	15.000	15 000	(0 920)	100340	250.0	230 1
21 Carbon Tetrachloride	117 00	15 293	15 293	(0.938)	96390	250 0	239 2
22 Benzene	78 00	15 653	15 653	(0 960)	159676	250 0	237 4

Data File: /chem/f50056.i/BF960731B56.b/GS960731B56.d
Report Date: 01-Aug-1996 12:51

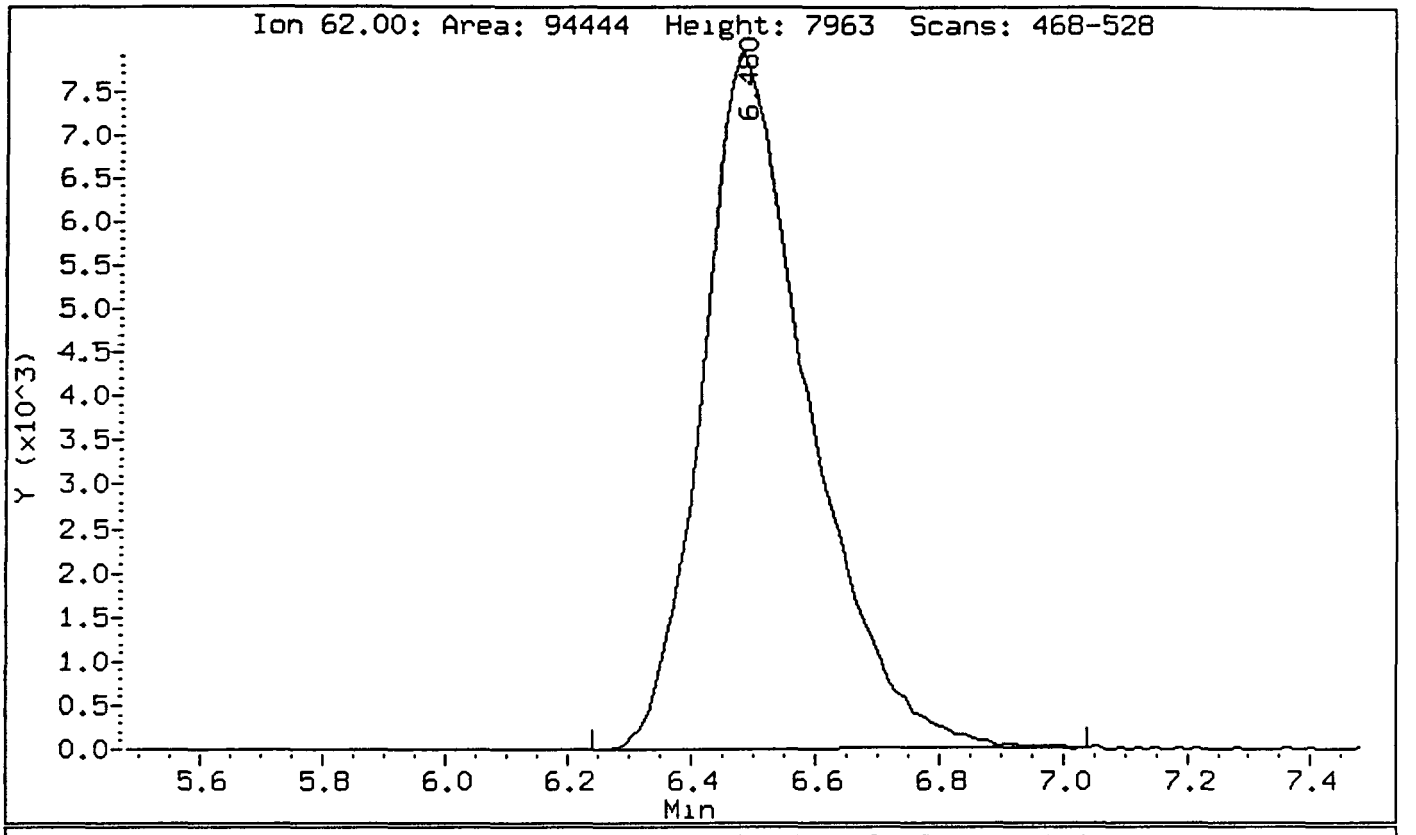
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	23 1,2-Dichloroethane	62.00	15 667	15 667	(1 080)	46092	250 0	207 7
	24 Trichloroethene	130 00	16.787	16 787	(1.029)	96716	250 0	259 0
	25 1,2-Dichloropropane	63 00	17.173	17.173	(1 053)	67488	250 0	227 6
	26 Bromodichloromethane	83 00	17 640	17 640	(1 082)	114970	250 0	258 7
	27 cis-1,3-Dichloropropene	75.00	18 333	18.333	(1.124)	98574	250 0	228 0
	28 4-Methyl-2-Pentanone	43.00	18 547	18 547	(0 899)	46118	250 0	184 1
	29 Toluene	91 00	18 853	18.853	(0 914)	181257	250 0	226 9
	30 trans-1,3-Dichloropropene	75 00	19 120	19.120	(1 173)	65950	250 0	212 7
	31 1,1,2-Trichloroethane	97 00	19 373	19.373	(1.188)	54483	250 0	224 8
	32 Tetrachloroethene	164 00	19 613	19.613	(0.951)	69700	250 0	265 6
	33 Dibromochloromethane	129.00	19 907	19 907	(1.221)	95692	250 0	257 2
	34 2-Hexanone	43 00	19 693	19 693	(0 955)	24672	250 0	164 5
	35 Chlorobenzene	112 00	20 667	20 667	(1 002)	139696	250 0	236 8
	36 Ethylbenzene	106 00	20 773	20 773	(1 007)	65712	250 0	236 3
	37 m,p-Xylene	106 00	20 907	20 907	(1 014)	141332	500 0	465 5
	38 o-Xylene	106 00	21 373	21 373	(1 036)	79316	250 0	236 6
	39 Styrene	104 00	21 373	21 373	(1 036)	126102	250 0	238 2
	40 Bromoform	173.00	21 613	21 613	(1.325)	56528	250 0	263 5 (M)
	41 1,1,2,2-Tetrachloroethane	83 00	22 120	22 120	(1 072)	79457	250 0	216 5
M	42 1,2-Dichloroethene (total)	96 00				142438	500 0	483 1
M	43 Xylene (Total)	106 00				220648	250 0	658 2

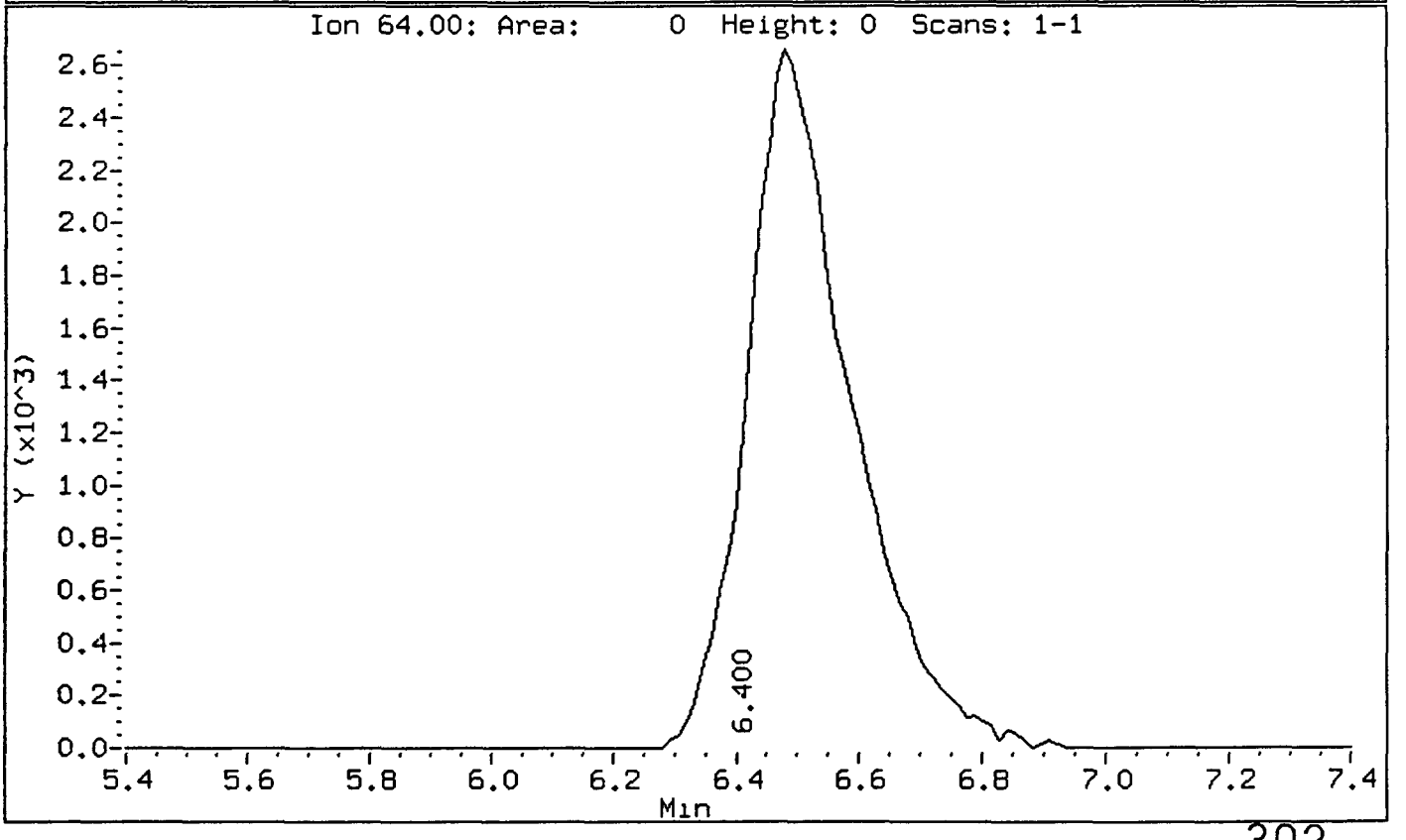
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50056.i/BF960731B56.b/GS960731B56.d/GS960731B56.LG
Injection Date: 31-JUL-96 18:27
Instrument: f50056.i
Client Sample ID: VSTD050ML

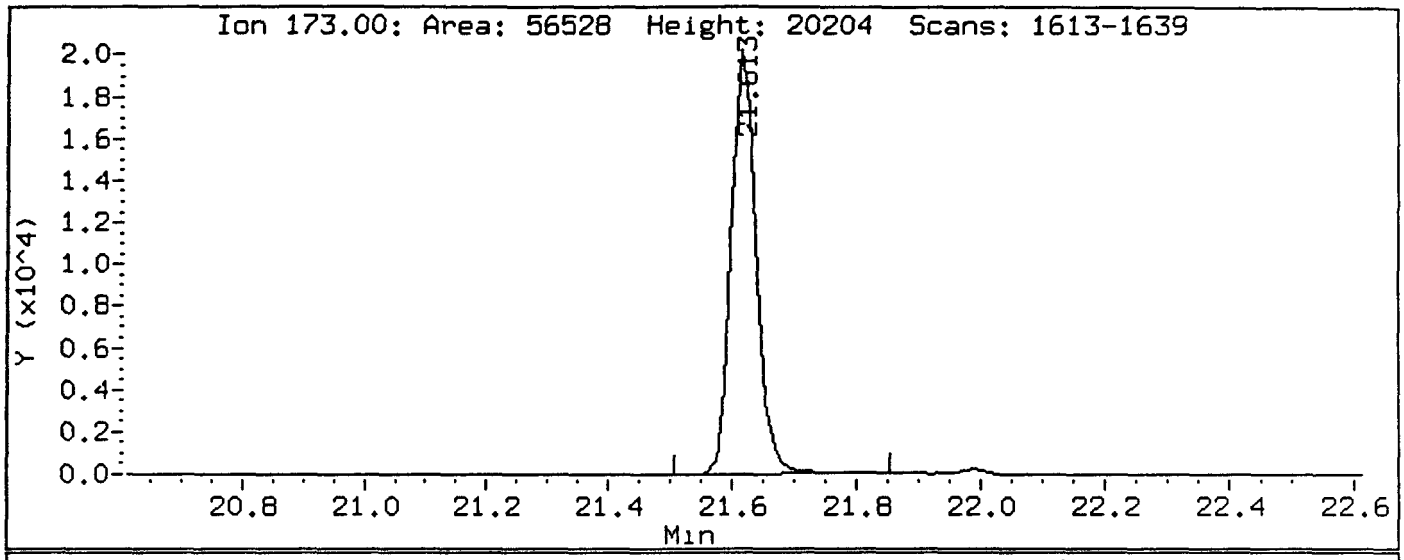
Compound: Vinyl Chloride
CAS Number: 75-01-4

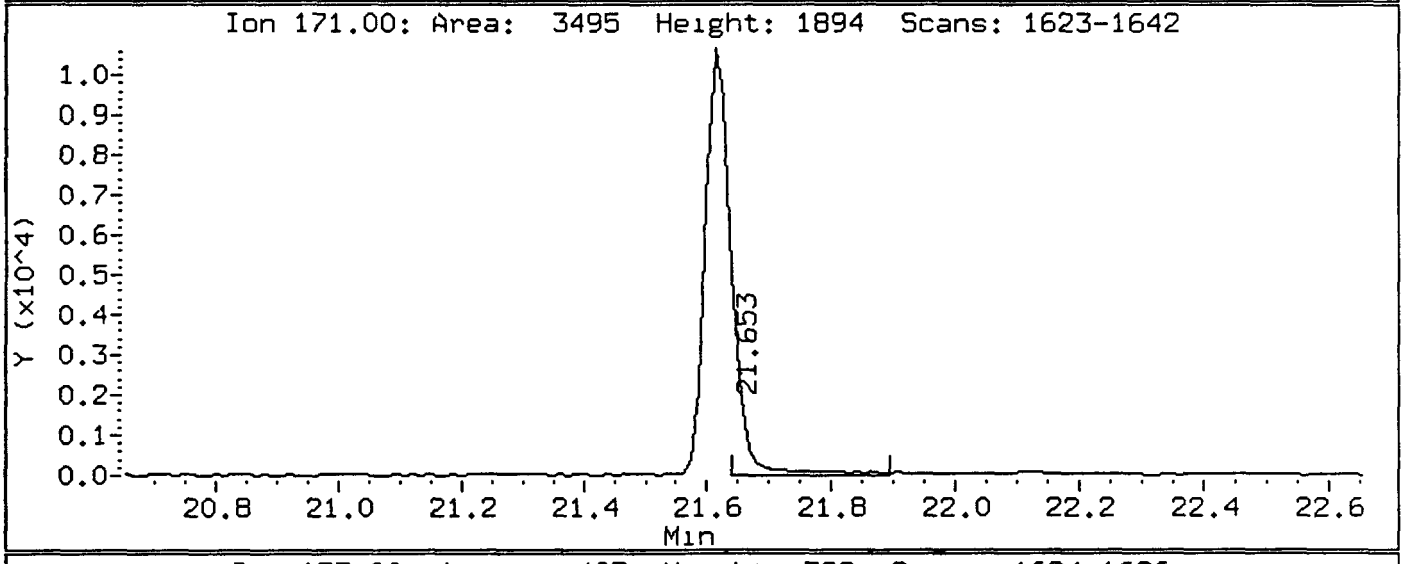


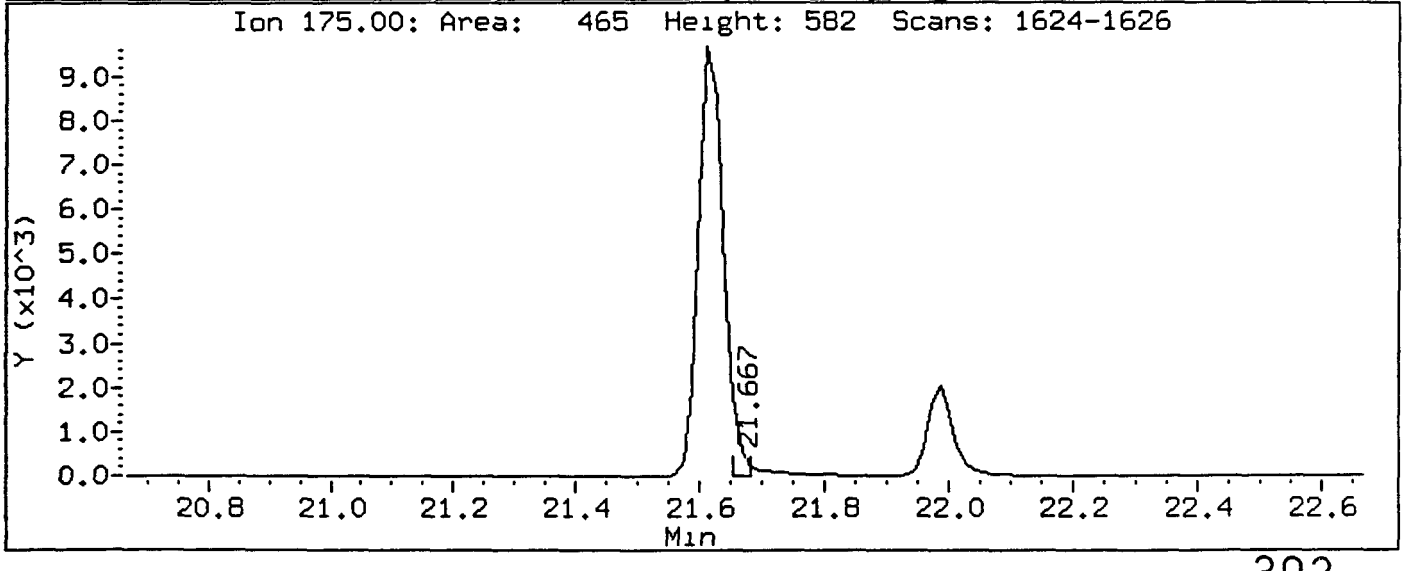


Data File: /chem/f50056.i/BF960731B56.b/GS960731B56.d/GS960731B56.LG
Injection Date: 31-JUL-96 18:27
Instrument: f50056.i
Client Sample ID: VSTD050ML

Compound: Bromoform
CAS Number: 75-25-2







Copy Original in 24877-YW736 JMcCormack 8/1/96

COMPUCHEM ENVIROMENTAL CORPORATION
GC/MS ANALYSIS LOG

SEMI-VOLATILE
SS 7/31

INITIAL TIME OF TUNE 18:12
TIME TUNE EXPIRES 6:12
PREVENTIVE MAINTENANCE None

SHIFT(S) (A) ____ (B) ✓ (C) ✓
DATE 7/31/96
LINKER/METHOD SOLM03.1 +

304

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc)
1		BF960731B56	/	7/31/96	18 12	BFB	—	7008	2ml	2230	45115 2C=SC
2		GS960731B56	/	/ /	18.27	VST0050mL	—	TN60	10ml		45004 / 45120
3		GN017050B56	/	/ /	19 15	VBLKK1	Various	—	5g		
4		G2R15096B56	/	/ /	20.24	YW753	24877-YW736	—	5g		
5		G2R15000B56	/	/ /	21 05	FFE82 MS	24893-FFE82	—	5g		45092
6		GR015079B56	/	/ /	21 50	VHBLK57	24877-YW736	—	5ml		
7	/	G2R15012B56	CS	/ /	22 32	FFE89	24893-FFE82	—	5g		
8	/	GB960731B56	CS	/ /	23.08	VIBLKLB	—	—	5ml		
9		GC960731B56	OK	/ /	23.49	VIBLKLB		—	5ml		
10		G3R15462B56	/	8/1/96	0 39	YW759	24877-YW759	—	5g	2227	
11		G2R15105B56	/	/ /	1 25	YW758		—	5g		
12		GR016482B56	/	/ /	2 12	BRL22	24869-BRL05	—	5g		
13		GR016483B56	/	/ /	2 57	BRL25		—	5g		
14		GR015206B56	/	/ /	3 37	DSB12480	32474-00104	—	5g		
15	/	GR015166B56	IL	/ /	4 17	DTP010B7MS		—	5g		45092
16		GR015167B56	/	/ /	5 02	DTP010B7MSD		—	5g		
17		G2R15166B56	/	/ /	5 41	DTP010B7MS		—	5g		
18		GD960731B56	CS	/ /	6 32	VBLKSB	—	—	10mL	2227	
19				/ /							
20				/ /							
21				/ /							
22				/ /							
23				/ /							
24				/ /							
				/ /							

SS 8/1/96

VERIFIED ____
SUPERVISOR APPROVAL SWBas 8/1/96
ENVELOPE NAME ____

0022

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50056 Calibration Date: 08/03/96 Time: 0036

Lab File ID: GS960803C56 Init. Calib. Date(s): 07/23/96 07/23/96

Heated Purge: (Y/N) Y Init. Calib. Times: 0847 1237

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF250	MIN RRF	%D	MAX %D
Chloromethane	1.698	1.287		-24.2	
Bromomethane	2.161	1.680	0.100	-22.3	25.0
Vinyl Chloride	2.137	1.703	0.100	-20.3	25.0
Chloroethane	1.102	0.765		-30.6	
Methylene Chloride	3.967	2.476		-37.6	
Acetone	0.591	0.650		10.0	
Carbon Disulfide	4.704	3.860		-17.9	
1,1-Dichloroethene	1.645	1.434	0.100	-12.8	25.0
1,1-Dichloroethane	2.429	1.852	0.200	-23.8	25.0
1,2-Dichloroethene (total)	1.585	1.390		-12.3	
Chloroform	2.789	2.163	0.200	-22.4	25.0
1,2-Dichloroethane	1.193	0.895	0.100	-25.0	25.0
2-Butanone	0.406	0.322		-20.7	
1,1,1-Trichloroethane	0.507	0.406	0.100	-19.9	25.0
Carbon Tetrachloride	0.468	0.398	0.100	-15.0	25.0
Bromodichloromethane	0.517	0.487	0.200	-5.8	25.0
1,2-Dichloropropane	0.345	0.287		-16.8	
cis-1,3-Dichloropropene	0.503	0.423	0.200	-15.9	25.0
Trichloroethene	0.434	0.431	0.300	-0.7	25.0
Dibromochloromethane	0.433	0.426	0.100	-1.6	25.0
1,1,2-Trichloroethane	0.282	0.259	0.100	-8.2	25.0
Benzene	0.782	0.714	0.500	-8.7	25.0
trans-1,3-Dichloropropene	0.360	0.292	0.100	-18.9	25.0
Bromoform	0.249	0.270	0.100	8.4	25.0
4-Methyl-2-Pentanone	0.365	0.282		-22.7	
2-Hexanone	0.219	0.158		-27.9	
Tetrachloroethene	0.383	0.390	0.200	1.8	25.0
1,1,2,2-Tetrachloroethane	0.535	0.486	0.300	-9.2	25.0
Toluene	1.166	1.013	0.400	-13.1	25.0
Chlorobenzene	0.861	0.778	0.500	-9.6	25.0
Ethylbenzene	0.406	0.361	0.100	-11.1	25.0
Styrene	0.772	0.716	0.300	-7.3	25.0
Xylene (Total)	0.489	0.442	0.300	-9.6	25.0
Toluene-d8	1.354	1.044		-22.9	
Bromofluorobenzene	0.893	0.649	0.200	-27.3	25.0
1,2-Dichloroethane-d4	1.261	0.792		-37.2	

All other compounds must meet a minimum RRF of 0.010.

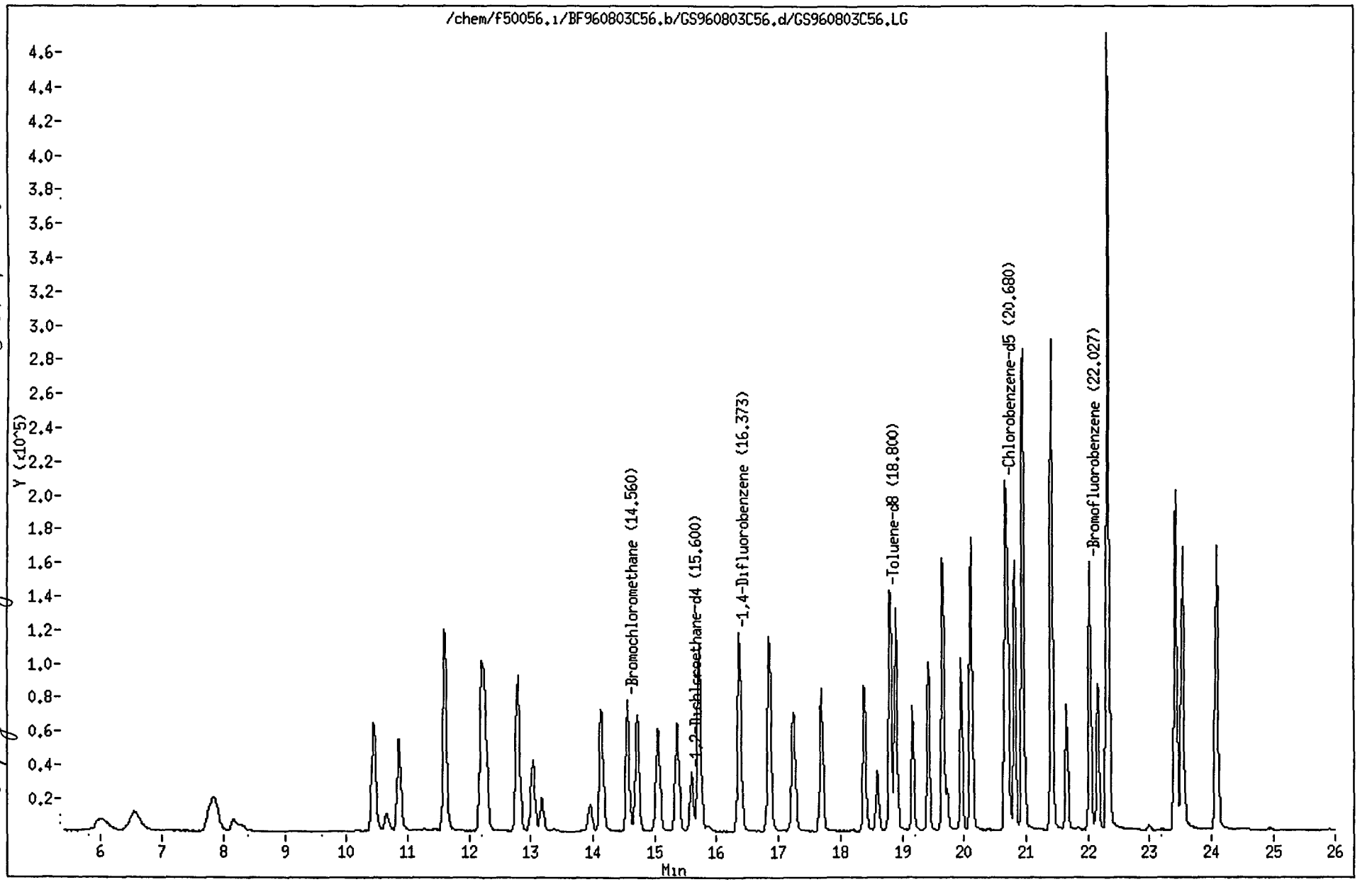
Copy Original in 24877-YW779 JMcDonald 8/6/96

Data File: /chem/f50056.i/BF960803C56.b/GS960803C56.d
Date : 03-AUG-1996 00:36
Client ID: VSTD050MW
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2227
Column diameter: 0.53



Data File: /chem/f50056.i/BF960803C56.b/GS960803C56.d
Report Date: 06-Aug-1996 15:35

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960803C56.b/GS960803C56.d
Lab Smp Id: VSTD050MW Client Smp ID: VSTD050MW
Inj Date : 03-AUG-1996 00:36
Operator : 2227 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960803C56.b/SOLM03.1.m
Meth Date : 06-Aug-1996 15:12 riedl Quant Type: ISTD
Cal Date : 03-AUG-1996 00:36 Cal File: GS960803C56.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128.00	14 560	14 560	(1 000)	49126	250 0	
* 2 1,4-Difluorobenzene	114 00	16 373	16 373	(1 000)	217856	250 0	
* 3 Chlorobenzene-d5	117.00	20 680	20 680	(1 000)	174908	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 600	15 600	(1 071)	38896	250 0	150 1
$ 5 Toluene-d8	98 00	18 800	18 800	(0 909)	182606	250 0	220 0
$ 6 Bromofluorobenzene	95.00	22 027	22.027	(1 065)	113470	250 0	196 4
7 Chloromethane	50 00	5 987	5.987	(0.411)	63224	250 0	268 9
8 Vinyl Chloride	62.00	6 547	6 547	(0 450)	83667	250 0	266 6
9 Bromomethane	94.00	7.840	7 840	(0 538)	82556	250 0	237 1
10 Chloroethane	64 00	8 160	8 160	(0.560)	37564	250 0	197 7
11 1,1-Dichloroethene	96 00	10 440	10 440	(0 717)	70476	250.0	236 4
12 Carbon Disulfide	76.00	10.853	10 853	(0 745)	189609	250 0	219 6
13 Acetone	43 00	10 653	10 653	(0 732)	31931	250 0	423 2
14 Methylene Chloride	84 00	11 600	11 600	(0 797)	121636	250 0	238 9
15 trans-1,2-Dichloroethene	96.00	12 200	12 200	(0 838)	63366	250 0	236 1
16 1,1-Dichloroethane	63 00	13.040	13.040	(0 896)	90964	250 0	193 9
17 cis-1,2-Dichloroethene	96 00	14 133	14 133	(0 971)	73241	250 0	254.5
18 2-Butanone	43.00	14 173	14 173	(0 973)	15827	250 0	241 9
19 Chloroform	83 00	14 720	14.720	(1 011)	106248	250 0	206 4
20 1,1,1-Trichloroethane	97 00	15.053	15 053	(0 919)	88475	250 0	207 8
21 Carbon Tetrachloride	117 00	15 360	15 360	(0 938)	86598	250 0	217.2
22 Benzene	78.00	15 720	15.720	(0 960)	155603	250 0	268 4

Data File: /chem/f50056.i/BF960803C56.b/GS960803C56.d
Report Date: 06-Aug-1996 15:35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62.00	15.733	15 733	(1.081)	43950	250.0	180 4
24 Trichloroethene	130 00	16 853	16 853	(1.029)	93817	250 0	287 3
25 1,2-Dichloropropane	63 00	17.240	17.240	(1 053)	62603	250 0	232 3
26 Bromodichloromethane	83.00	17 693	17 693	(1 081)	106043	250.0	251 6
27 cis-1,3-Dichloropropene	75 00	18 387	18 387	(1 123)	92115	250 0	236 2
28 4-Methyl-2-Pentanone	43.00	18.600	18.600	(0 899)	49251	250 0	224 0
29 Toluene	91.00	18 907	18 907	(0 914)	177148	250.0	252 8
30 trans-1,3-Dichloropropene	75 00	19 173	19.173	(1 171)	63596	250 0	220 9
31 1,1,2-Trichloroethane	97.00	19.427	19 427	(1 186)	56438	250 0	273 9
32 Tetrachloroethene	164 00	19 653	19 653	(0 950)	68304	250 0	278 8
33 Dibromochloromethane	129.00	19.960	19 960	(1 219)	92899	250 0	271 1
34 2-Hexanone	43.00	19 733	19 733	(0 954)	27553	250 0	219 0
35 Chlorobenzene	112.00	20.707	20 707	(1 001)	136182	250 0	268 1
36 Ethylbenzene	106.00	20 827	20 827	(1 007)	63155	250 0	254 6
37 m,p-Xylene	106 00	20 947	20 947	(1 013)	140310	500.0	518 8
38 o-Xylene	106.00	21 413	21 413	(1 035)	77332	250 0	260 5
39 Styrene	104.00	21.427	21 427	(1 036)	125191	250 0	270 1
40 Bromoform	173.00	21 667	21 667	(1 323)	58937	250 0	293 1
41 1,1,2,2-Tetrachloroethane	83 00	22 160	22 160	(1 072)	85036	250.0	274 4
M 42 1,2-Dichloroethene (total)	96.00				136607	500 0	491 2
M 43 Xylene (Total)	106.00				217642	250 0	733 3

8/6/96

COMPUCHEM ENVIROMENTAL CORPORATION
GC/MS ANALYSIS LOG

~~SEMI~~-VOLATILE
SS813

INITIAL TIME OF TUNE 0:20
TIME TUNE EXPIRES 12:20

SHIFT(S) (A) / (B) ____ (C) ✓
DATE 8/3/96
LINKER/METHOD SOLM03.1+

309

PREVENTIVE MAINTENANCE none

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc)
1		BF960803C56	/	8/3/96	0 20	BFB	—	7008	2uL	2227	LC=SC 45115
2		GS960803C56	/	/ /	0 36	VSTD050MW	—	7N60	10mL		
3		GH017754C56	/	/ /	1 27	VBLKS1	various	—	5g		45004/45120
4		GH016782C56	/	/ /	2 16	VBLKR3	various	—	5g		
5		GH016798C56	/	/ /	3 02	VBLKI2	various	—	5g		
6		GH016364C56	/	/ /	3 50	YW779MS	24877-YW779	—	5g		45092
7		GH016365C56	/	/ /	4 30	YW779MSD		—	5g		45092
8		GH016369C56	/	/ /	5 14	YW781		—	5g		
9		GH016370C56	/	/ /	5 56	YW782		—	5g 8/3/96		
10		GH016366C56	/	/ /	6 33	VHBLKF	8/3/96	—	5 ~~10~~mL		
11		G4R15012C56	/	/ /	7 25	FFE89	24893-FFE82	—	5g		
12	/	G2R15714A56	US	/ /	8 08	CSB04B12	32474-00104		125g	2141	
13				/ /							
14				/ /							
15				/ /							
16				/ /							
17				/ /							
18				/ /							
19				/ /							
20				/ /							
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22				/ /							
23				/ /							
24				/ /							
				/ /							

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VERIFIED ____
SUPERVISOR APPROVAL Mark B
ENVELOPE NAME ____

0001

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Instrument ID: F50056 Calibration Date: 08/03/96 Time: 1108

Lab File ID: GU960803A56 Init. Calib. Date(s): 07/23/96 07/23/96

Heated Purge: (Y/N) Y Init. Calib. Times: 0847 1237

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF250	MIN RRF	%D	MAX %D
Chloromethane	1.698	1.434		-15.5	
Bromomethane	2.161	2.077	0.100	-3.9	25.0
Vinyl Chloride	2.137	1.933	0.100	-9.5	25.0
Chloroethane	1.102	1.025		-7.0	
Methylene Chloride	3.967	2.102		-47.0	
Acetone	0.591	0.396		-33.0	
Carbon Disulfide	4.704	4.243		-9.8	
1,1-Dichloroethene	1.645	1.565	0.100	-4.9	25.0
1,1-Dichloroethane	2.429	2.022	0.200	-16.8	25.0
1,2-Dichloroethene (total)	1.585	1.536		-3.1	
Chloroform	2.789	2.407	0.200	-13.7	25.0
1,2-Dichloroethane	1.193	1.010	0.100	-15.3	25.0
2-Butanone	0.406	0.416		2.5	
1,1,1-Trichloroethane	0.507	0.458	0.100	-9.7	25.0
Carbon Tetrachloride	0.468	0.440	0.100	-6.0	25.0
Bromodichloromethane	0.517	0.571	0.200	10.4	25.0
1,2-Dichloropropane	0.345	0.342		-0.9	
cis-1,3-Dichloropropene	0.503	0.507	0.200	0.8	25.0
Trichloroethene	0.434	0.489	0.300	12.7	25.0
Dibromochloromethane	0.433	0.516	0.100	19.2	25.0
1,1,2-Trichloroethane	0.282	0.314	0.100	11.3	25.0
Benzene	0.782	0.816	0.500	4.3	25.0
trans-1,3-Dichloropropene	0.360	0.353	0.100	-1.9	25.0
Bromoform	0.249	0.328	0.100	31.7	25.0
4-Methyl-2-Pentanone	0.365	0.378		3.6	
2-Hexanone	0.219	0.213		-2.7	
Tetrachloroethene	0.383	0.425	0.200	11.0	25.0
1,1,2,2-Tetrachloroethane	0.535	0.601	0.300	12.3	25.0
Toluene	1.166	1.109	0.400	-4.9	25.0
Chlorobenzene	0.861	0.892	0.500	3.6	25.0
Ethylbenzene	0.406	0.410	0.100	1.0	25.0
Styrene	0.772	0.803	0.300	4.0	25.0
Xylene (Total)	0.489	0.502	0.300	2.7	25.0
Toluene-d8	1.354	1.168		-13.7	
Bromofluorobenzene	0.893	0.736	0.200	-17.6	25.0
1,2-Dichloroethane-d4	1.261	0.895		-29.0	

All other compounds must meet a minimum RRF of 0.010.

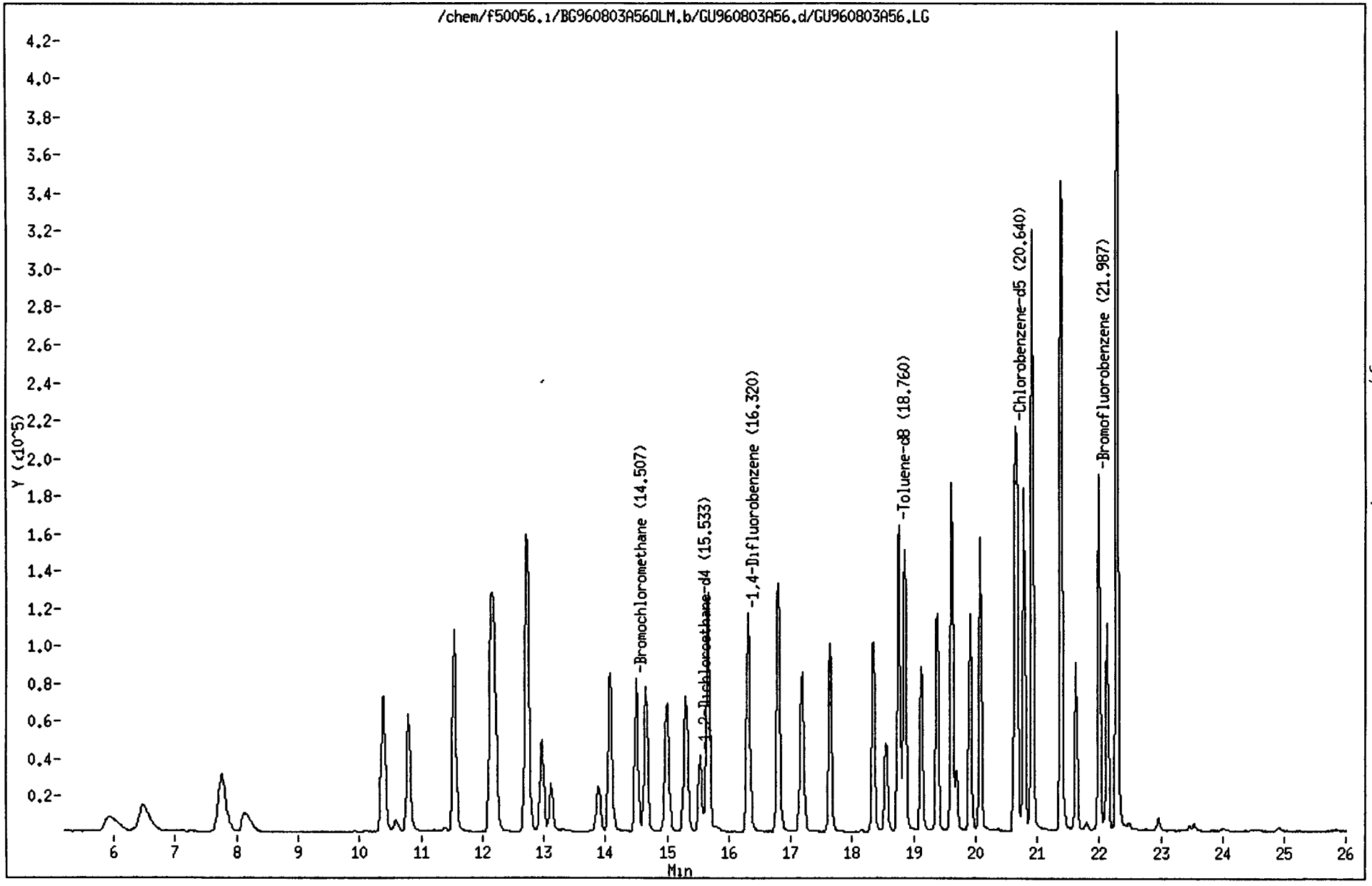
Data File: /chem/f50056.1/BG960803A56OLM.b/GU960803A56.d
Date : 03-AUG-1996 11:08
Client ID: VSTD050MX
Sample Info:

Column phase: DB624

Instrument: f50056.1

Operator: 2141
Column diameter: 0.53

311



Copy original in 24869-BRLOS BWS 8/6/96

Data File: /chem/f50056.i/BG960803A56OLM.b/GU960803A56.d
Report Date: 06-Aug-1996 10:14

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BG960803A56OLM.b/GU960803A56.d
Lab Smp Id: VSTD050MX Client Smp ID: VSTD050MX
Inj Date : 03-AUG-1996 11:08
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BG960803A56OLM.b/SOLM03.1.m
Meth Date : 06-Aug-1996 10:14 bass Quant Type: ISTD
Cal Date : 03-AUG-1996 11:08 Cal File: GU960803A56.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Bromochloromethane	128 00	14 507	14 507	(1 000)	50959	250.0	
* 2 1,4-Difluorobenzene	114 00	16 320	16 320	(1 000)	216595	250 0	
* 3 Chlorobenzene-d5	117 00	20 640	20 640	(1 000)	176153	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 533	15 533	(1 071)	45620	250 0	177 5
$ 5 Toluene-d8	98 00	18 760	18 760	(0 909)	205758	250 0	215 6
$ 6 Bromofluorobenzene	95 00	21 987	21 987	(1 065)	129620	250 0	206 0
7 Chloromethane	50 00	5 933	5 933	(0 409)	73092	250 0	211 2
8 Vinyl Chloride	62 00	6 480	6 480	(0 447)	98502	250 0	226 2(M)
9 Bromomethane	94 00	7 747	7 747	(0 534)	105857	250.0	240 4
10 Chloroethane	64.00	8 120	8 120	(0 560)	52222	250 0	232 5
11 1,1-Dichloroethene	96 00	10 373	10 373	(0 715)	79766	250.0	237 8
12 Carbon Disulfide	76 00	10 800	10 800	(0 744)	216224	250 0	225 5
13 Acetone	43 00	10 587	10 587	(0 730)	20204	250 0	167 7
14 Methylene Chloride	84 00	11 547	11.547	(0 796)	107091	250 0	132.4
15 trans-1,2-Dichloroethene	96 00	12 133	12 133	(0 836)	72508	250.0	236 2
16 1,1-Dichloroethane	63 00	12 973	12.973	(0.894)	103040	250.0	208 1
17 cis-1,2-Dichloroethene	96 00	14 080	14 080	(0 971)	84028	250 0	247 8
18 2-Butanone	43 00	14 120	14 120	(0.973)	21201	250 0	255 9
19 Chloroform	83 00	14 667	14.667	(1 011)	122643	250 0	215 7
20 1,1,1-Trichloroethane	97 00	15 000	15 000	(0 919)	99235	250.0	225 9
21 Carbon Tetrachloride	117 00	15 307	15 307	(0 938)	95368	250 0	235 0
22 Benzene	78 00	15 653	15 653	(0 959)	176769	250 0	260 9

Data File: /chem/f50056.i/BG960803A56OLM.b/GU960803A56.d
Report Date: 06-Aug-1996 10:14

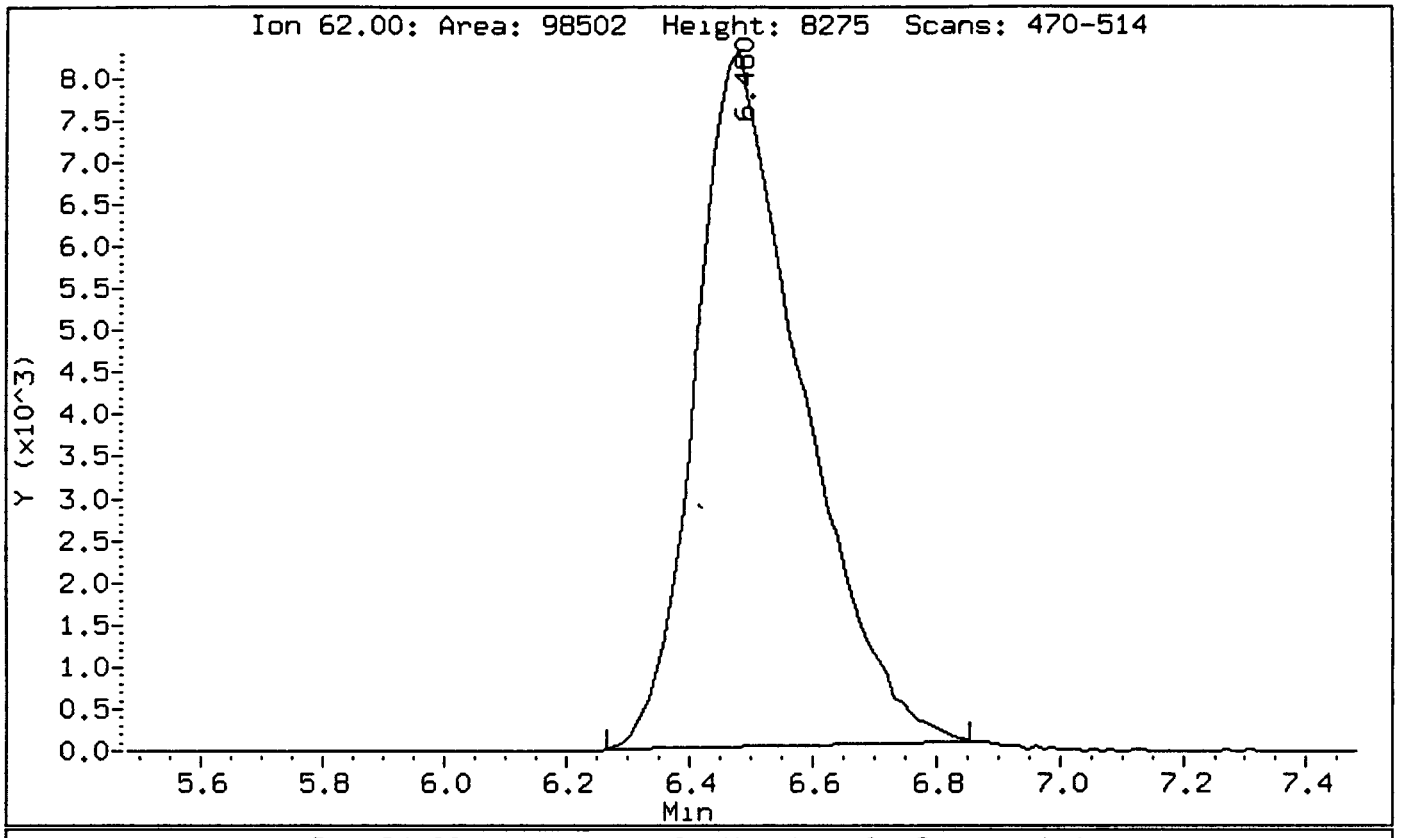
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
23 1,2-Dichloroethane	62 00	15 667	15 667	(1 080)	51476	250 0	211 7
24 Trichloroethene	130 00	16 800	16 800	(1 029)	105983	250 0	281 7
25 1,2-Dichloropropane	63 00	17 187	17 187	(1 053)	74019	250 0	247 8
26 Bromodichloromethane	83 00	17 640	17 640	(1 081)	123604	250 0	276 1
27 cis-1,3-Dichloropropene	75 00	18 347	18 347	(1 124)	109769	250 0	252 1
28 4-Methyl-2-Pentanone	43 00	18 547	18 547	(0 899)	66667	250.0	258 9
29 Toluene	91 00	18 853	18 853	(0 913)	195403	250 0	237 9
30 trans-1,3-Dichloropropene	75 00	19 120	19 120	(1 172)	76411	250.0	244 7
31 1,1,2-Trichloroethane	97 00	19 387	19 387	(1.188)	67982	250 0	278 6
32 Tetrachloroethene	164 00	19 613	19 613	(0 950)	74889	250.0	277 6
33 Dibromochloromethane	129 00	19 907	19 907	(1.220)	111722	250 0	298 1
34 2-Hexanone	43 00	19.693	19 693	(0.954)	37454	250 0	242.9
35 Chlorobenzene	112 00	20 667	20 667	(1 001)	157225	250 0	259 2
36 Ethylbenzene	106 00	20 787	20 787	(1 007)	72294	250 0	252 8
37 m,p-Xylene	106 00	20 907	20 907	(1 013)	156495	500 0	501 5
38 o-Xylene	106 00	21 373	21 373	(1 036)	88350	250 0	256 4
39 Styrene	104 00	21 387	21 387	(1.036)	141499	250 0	260 1
40 Bromoform	173 00	21 627	21 627	(1 325)	70988	250 0	328 6
41 1,1,2,2-Tetrachloroethane	83 00	22 120	22 120	(1 072)	105956	250 0	280 9
M 42 1,2-Dichloroethene (total)	96 00				156536	500 0	484 6
M 43 Xylene (Total)	106 00				244845	250 0	710 5

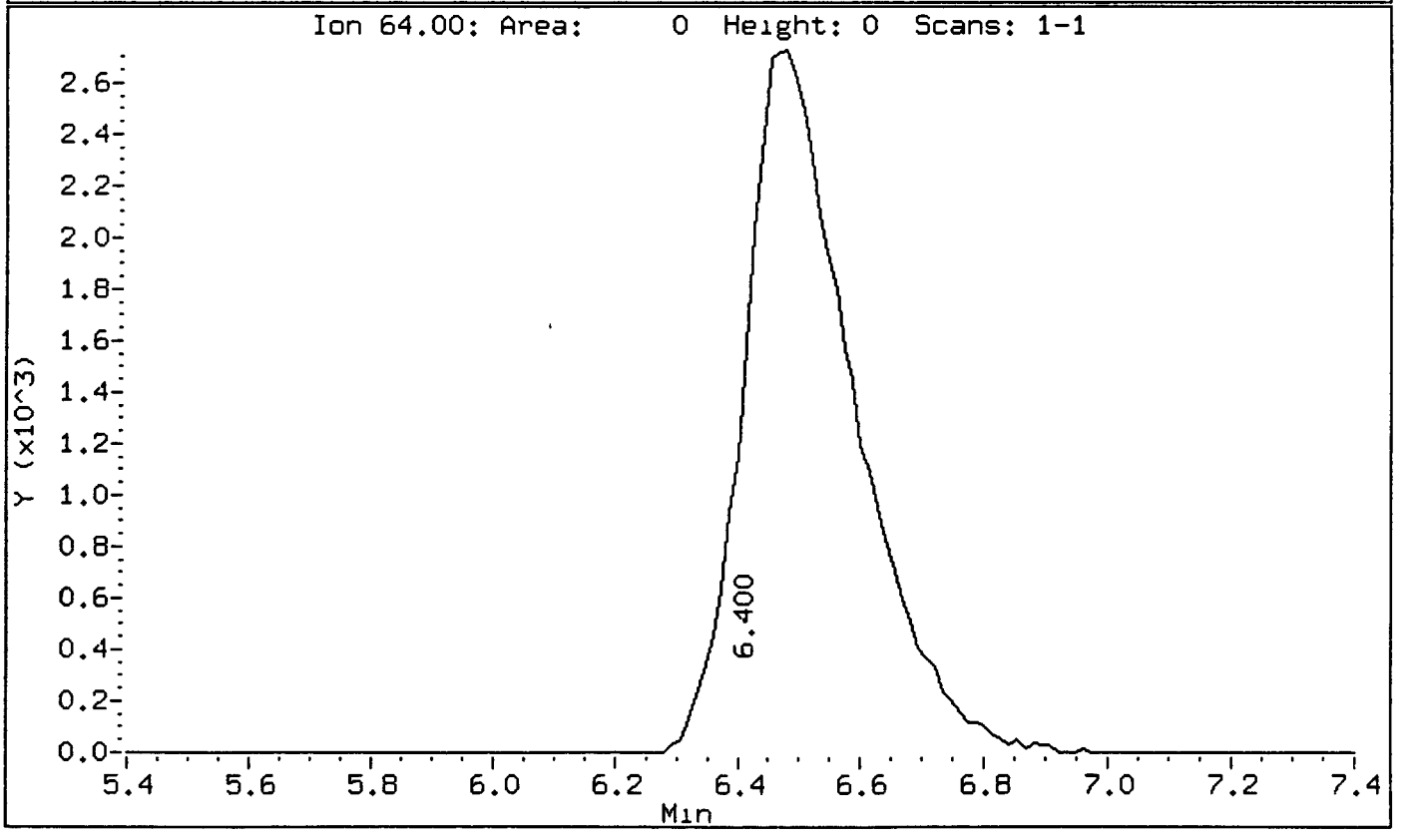
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50056.i/BG960803A56OLM.b/GU960803A56.d/GU960803A56.LG
Injection Date: 03-AUG-96 11:08
Instrument: f50056.i
Client Sample ID: VSTD050MX

Compound: Vinyl Chloride
CAS Number: 75-01-4





COMPUCHEM ENVIROMENTAL CORPORATION
GC/MS ANALYSIS LOG

~~SEMI-VOLATILE~~ HB 8 3 96

INITIAL TIME OF TUNE 10:54
TIME TUNE EXPIRES 22:54

SHIFT(S) (A) 1 (B) 1 (C) _____
DATE 8 3 96
LINKER/METHOD SOLM03.17

PREVENTIVE MAINTENANCE None

315

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc)
1		BF9608 03A56	/	8/3/96	9 02	BFB	—	7008	2ul	2141	WC=SC 45115
2	/	GS9608 03A56		/ /	9 14	VSTD050MX	—	TN60	10mL		
3	/	GT9608 03A056		/ /	10 05	↓	—	↓	↓		
4		BG9608 03A56	/	/ /	10 54	BFB	—	7008	2ul		
5		GU9608 03A56	/	/ /	11 08	VSTD050MX	—	TN60	10mL		
6		GH017735A56	/	/ /	11 58	VBLK 52	Various	—	5g		(45204/45120)
7		GZR164606A56	/	/ /	13 05	BRL29	24869-BRL05				
8		GH016865A56	/	/ /	13 43	CTP003B12	32474-00220				
9		GH016858A56	/	/ /	14 77	BTP001B5					
10		GH016884A56	/	/ /	15 05	CTP005B10					
11		GH016016A56	/	/ /	15 45	BTP001B5MS					45092
12		GH016017A56	/	/ /	16 29	BTP001B5MSD				2230	
13		GH015001B56	/	/ /	17 27	VHBLKV1	24893-FFE02	—	5mL		
14		GH016465B56	/	/ /	18 11	VHBLKF1	24667-BRL05	—	5mL		
15		GH017767B56	/	/ /	18 41	VBLKM1	Various	—	5g		
16		GH016029B56	/	/ /	19 35	CSB026B08	32474-00250	—	5g		
17		GH016192B56	/	/ /	20 17	LDSB-208B	32481-00007	—	5g		
18		GH016530B56	/	/ /	21 02	BSB012B6	32474-00280	—	5g		
19		GH016542B56	/	/ /	21 39	CSB025B4	↓	—	5g		
20		GH016522B56	/	/ /	22 26	BSB012B0	↓	—	5g	↓	
21				/ /							
22				/ /							
23				/ /							
24				/ /							

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VERIFIED Steve Simpson
SUPERVISOR APPROVAL _____
ENVELOPE NAME _____

0002

4. Raw Q C Data

a. B F B Data

b. Blank Data

c. Matrix Spike Data

d. Matrix Spike Duplicate Data

a. B F B Data

For each 12 hour period, for each GC/MS system utilized.

(1) Bar graph spectrum

(2) Mass listing

(3) Reconstructed total ion chromatogram (RIC)

Data File: /chem/f50052.1/BG960726A52OLM.b/BG960726A52.d

Date : 26-JUL-1996 08:17

Client ID: BFB

Instrument: f50052.1

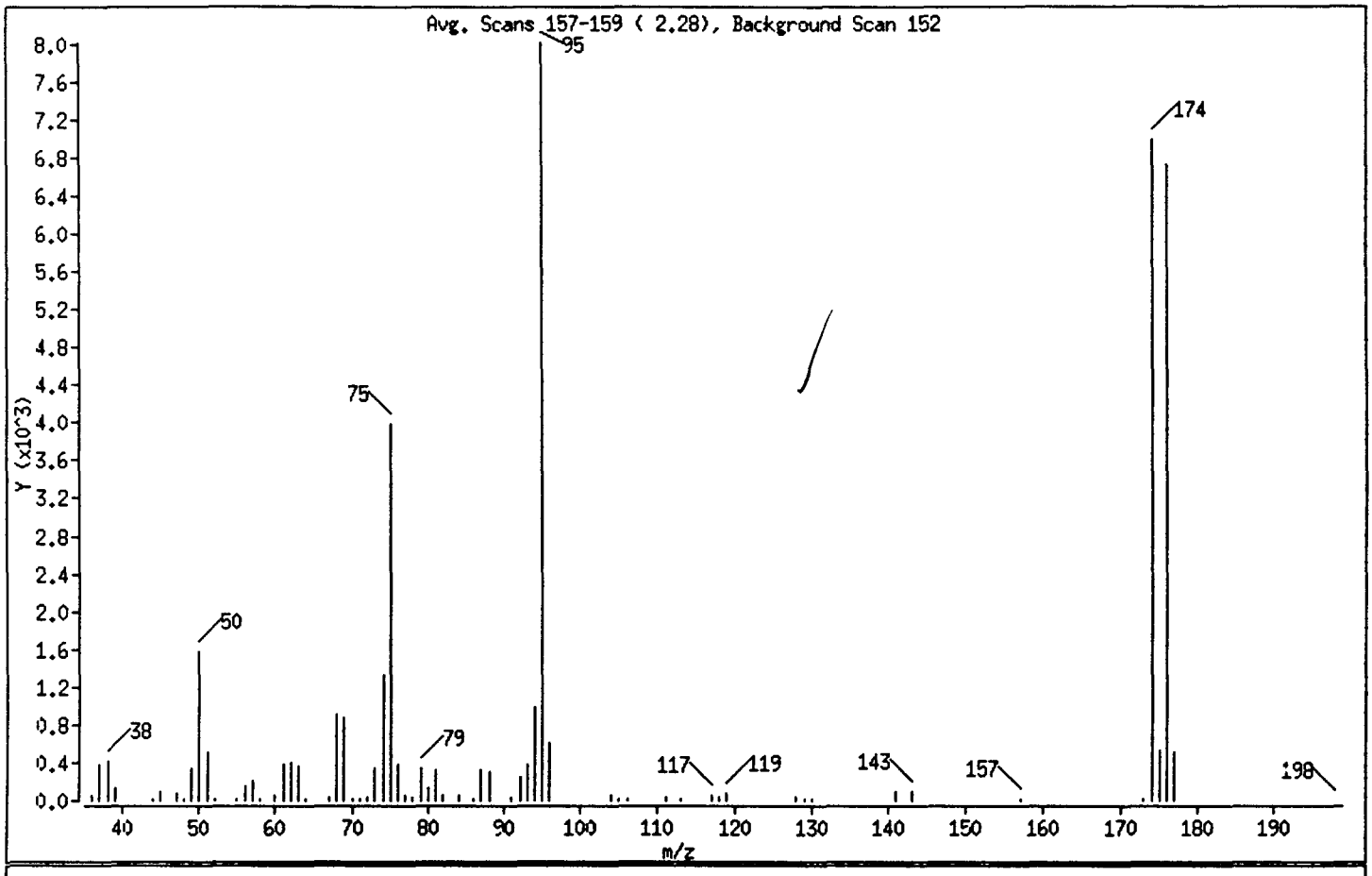
Sample Info: BFB TUNE

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.69
75	30.00 - 66.00% of mass 95	49.79
96	5.00 - 9.00% of mass 95	7.51
173	Less than 2.00% of mass 174	0.32 (0.37)
174	50.00 - 120.00% of mass 95	87.21
175	4.00 - 9.00% of mass 174	6.68 (7.66)
176	93.00 - 101.00% of mass 174	83.98 (96.31)
177	5.00 - 9.00% of mass 176	6.38 (7.60)

Data File: /chem/f50052.i/BG960726A52OLM.b/BG960726A52.d

Date : 26-JUL-1996 08:17

Client ID: BFB

Instrument: f50052.i

Sample Info: BFB TUNE

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BG960726A52.d

Spectrum : Avg. Scans 157-159 (2.28), Background Scan 152

Largest m/z: 95.00

Number of peaks: 83

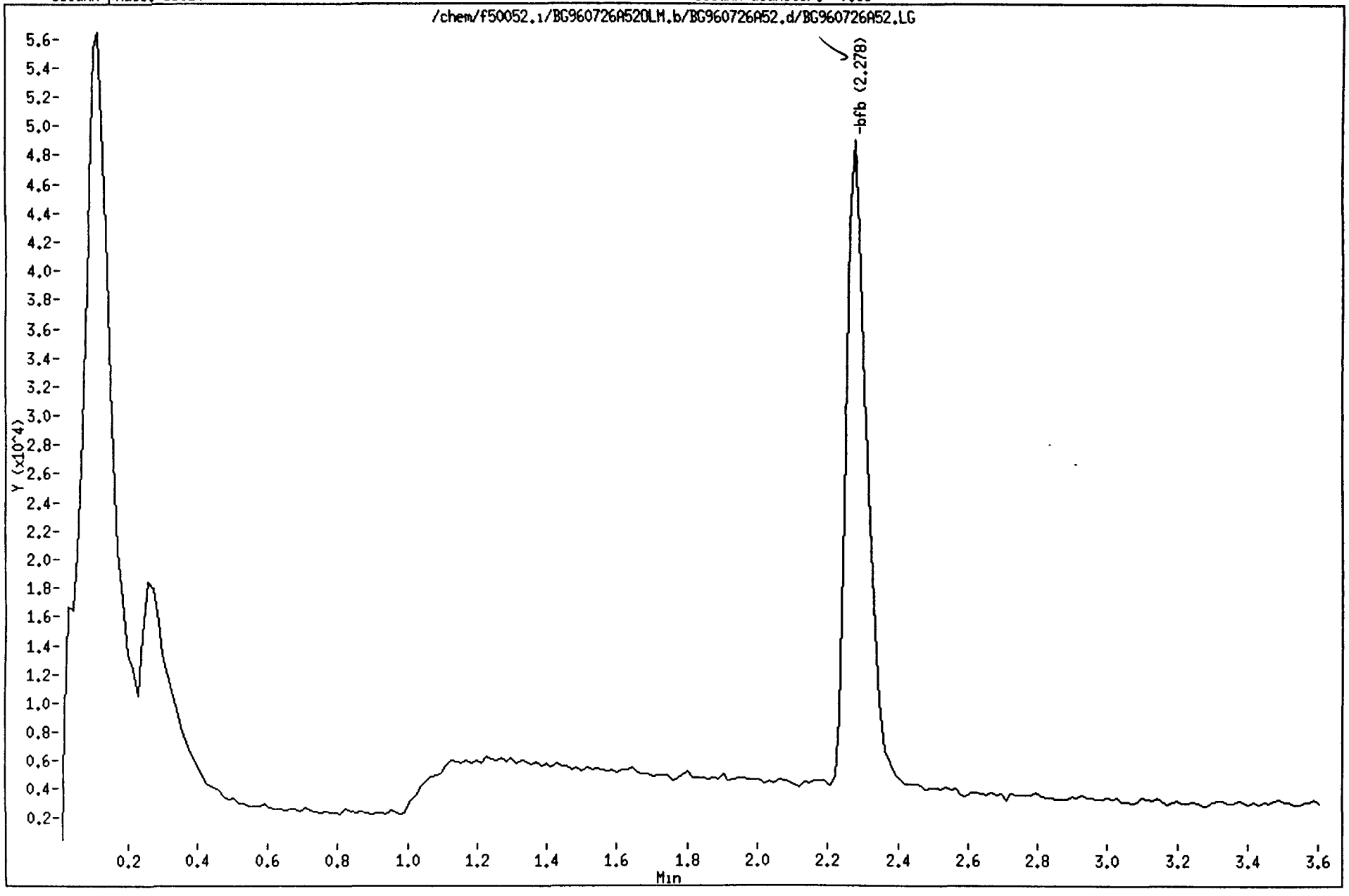
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	63	63.00	352	87.00	316	128.00	33
37.00	379	64.00	14	88.00	296	129.00	17
38.00	411	65.00	5	91.00	43	130.00	22
39.00	133	67.00	29	92.00	253	136.00	5
42.00	7	68.00	919	93.00	376	140.00	7
44.00	16	69.00	866	94.00	995	141.00	99
45.00	100	70.00	12	95.00	8011	142.00	5
47.00	74	71.00	22	96.00	602	143.00	103
48.00	21	72.00	44	101.00	5	145.00	5
49.00	347	73.00	346	103.00	5	146.00	5
50.00	1577	74.00	1334	104.00	51	148.00	6
51.00	519	75.00	3989	105.00	14	149.00	5
52.00	27	76.00	373	106.00	14	151.00	5
55.00	25	77.00	65	110.00	6	157.00	14
56.00	149	78.00	45	111.00	33	173.00	26
57.00	213	79.00	335	113.00	16	174.00	6986
58.00	16	80.00	126	117.00	56	175.00	535
59.00	5	81.00	323	118.00	30	176.00	6728
60.00	51	82.00	63	119.00	67	177.00	511
61.00	373	84.00	53	124.00	6	198.00	5
62.00	401	86.00	18	125.00	5		

Data File: /chem/f50052.i/BG960726A52OLM.b/BG960726A52.d
Date : 26-JUL-1996 08:17
Client ID: BFB
Sample Info: BFB TUNE

Column phase: DB624

Instrument: f50052.i

Operator: 2141
Column diameter: 0.53



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Data File: /chem/f50052.i/BG960727C52.b/BG960727C52.d

Date : 27-JUL-96 03:47

Client ID: BFB

Instrument: f50052.i

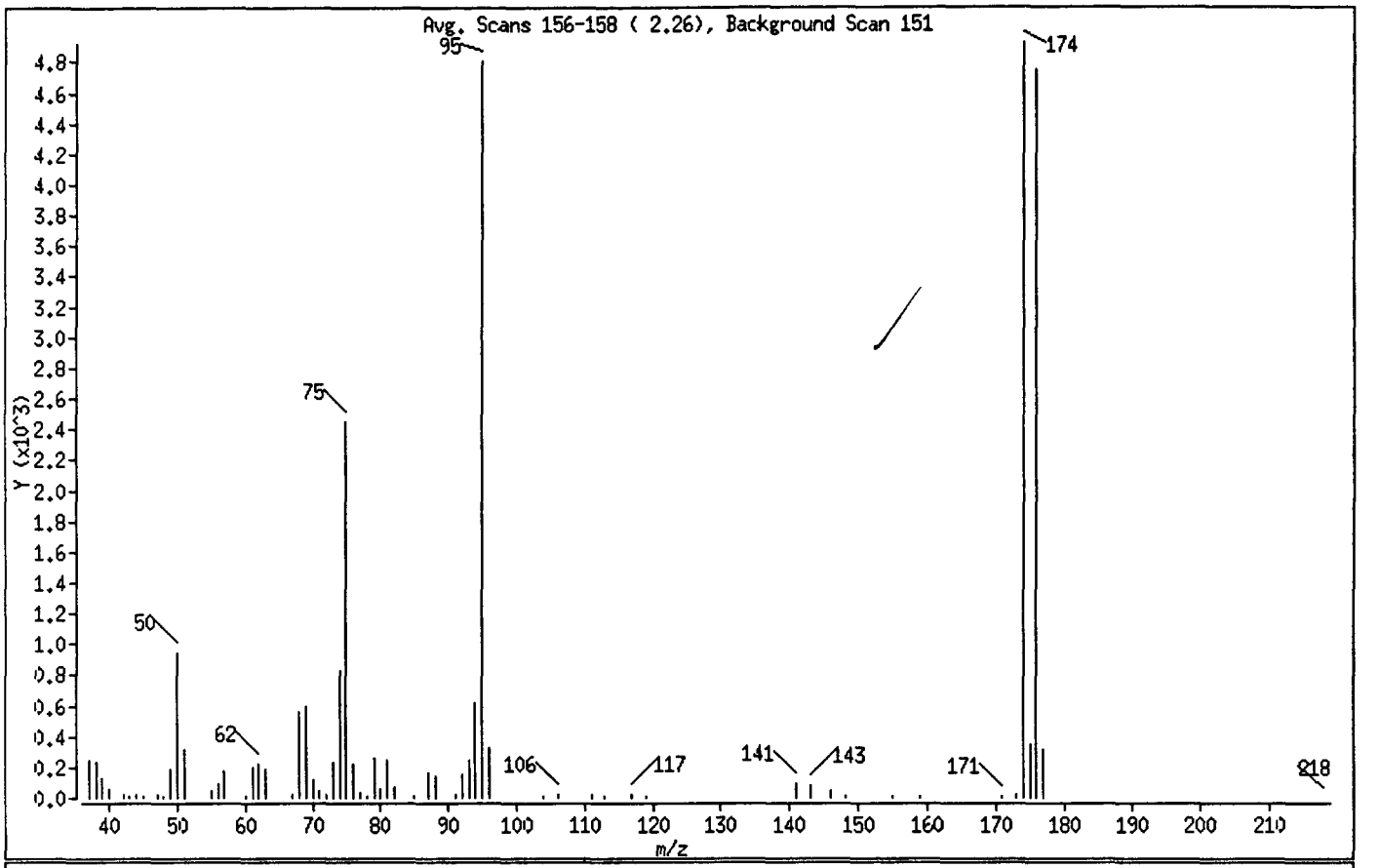
Sample Info: BFB TUNE

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.71
75	30.00 - 66.00% of mass 95	50.98
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.46 (0.45)
174	50.00 - 120.00% of mass 95	102.33
175	4.00 - 9.00% of mass 174	7.36 (7.19)
176	93.00 - 101.00% of mass 174	98.63 (96.38)
177	5.00 - 9.00% of mass 176	6.44 (6.53)

Data File: /chem/f50052.1/BG960727C52.b/BG960727C52.d

Date : 27-JUL-96 03:47

Client ID: BFB

Instrument: f50052.1

Sample Info: BFB TUNE

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BG960727C52.d

Spectrum : Avg. Scans 156-158 (2.26), Background Scan 151

Largest m/z: 174.00

Number of peaks: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	241	62.00	222	83.00	2	117.00	18
38.00	235	63.00	181	85.00	7	119.00	6
39.00	126	67.00	27	86.00	5	141.00	90
40.00	60	68.00	556	87.00	163	143.00	86
42.00	21	69.00	594	88.00	138	146.00	45
43.00	12	70.00	116	91.00	26	148.00	10
44.00	23	71.00	50	92.00	147	155.00	6
45.00	12	72.00	29	93.00	246	159.00	6
47.00	21	73.00	231	94.00	620	171.00	7
48.00	12	74.00	828	95.00	4810	173.00	22
49.00	184	75.00	2452	96.00	328	174.00	4922
50.00	948	76.00	221	97.00	5	175.00	354
51.00	310	77.00	31	98.00	5	176.00	4744
55.00	50	78.00	12	104.00	12	177.00	310
56.00	95	79.00	252	106.00	27	218.00	5
57.00	177	80.00	61	111.00	19		
60.00	15	81.00	250	113.00	15		
61.00	202	82.00	66	115.00	5		

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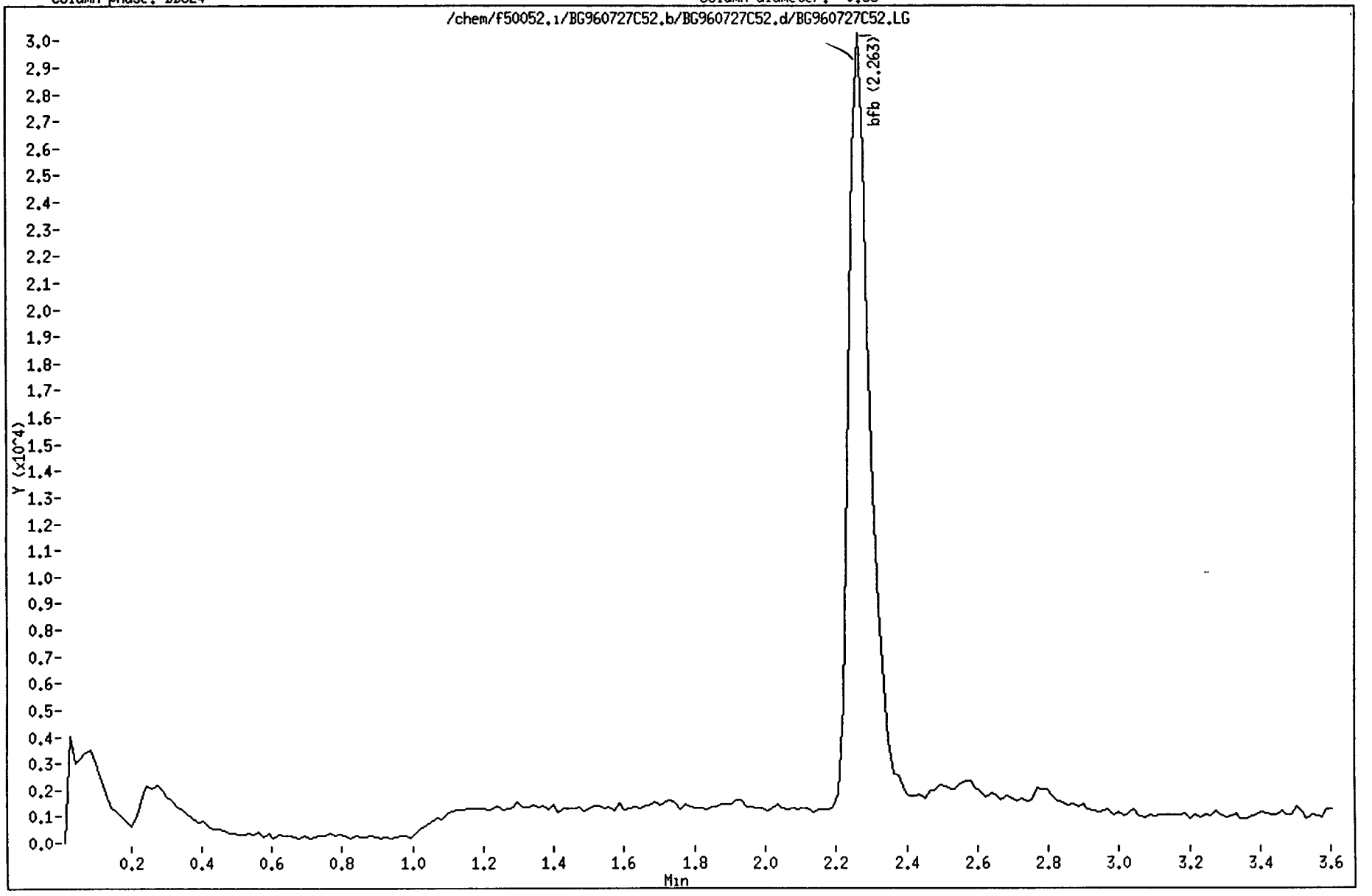
Data File: /chem/f50052.i/BG960727C52.b/BG960727C52.d
Date : 27-JUL-96 03:47
Client ID: BFB
Sample Info: BFB TUNE

Instrument: f50052.i

Operator: 2141
Column diameter: 0.53

Column phase: DB624



323

Data File: /chem/f50052.1/BG960728B52.b/BG960728B52.d

Date : 28-JUL-96 20:24

Client ID: BFB

Instrument: f50052.1

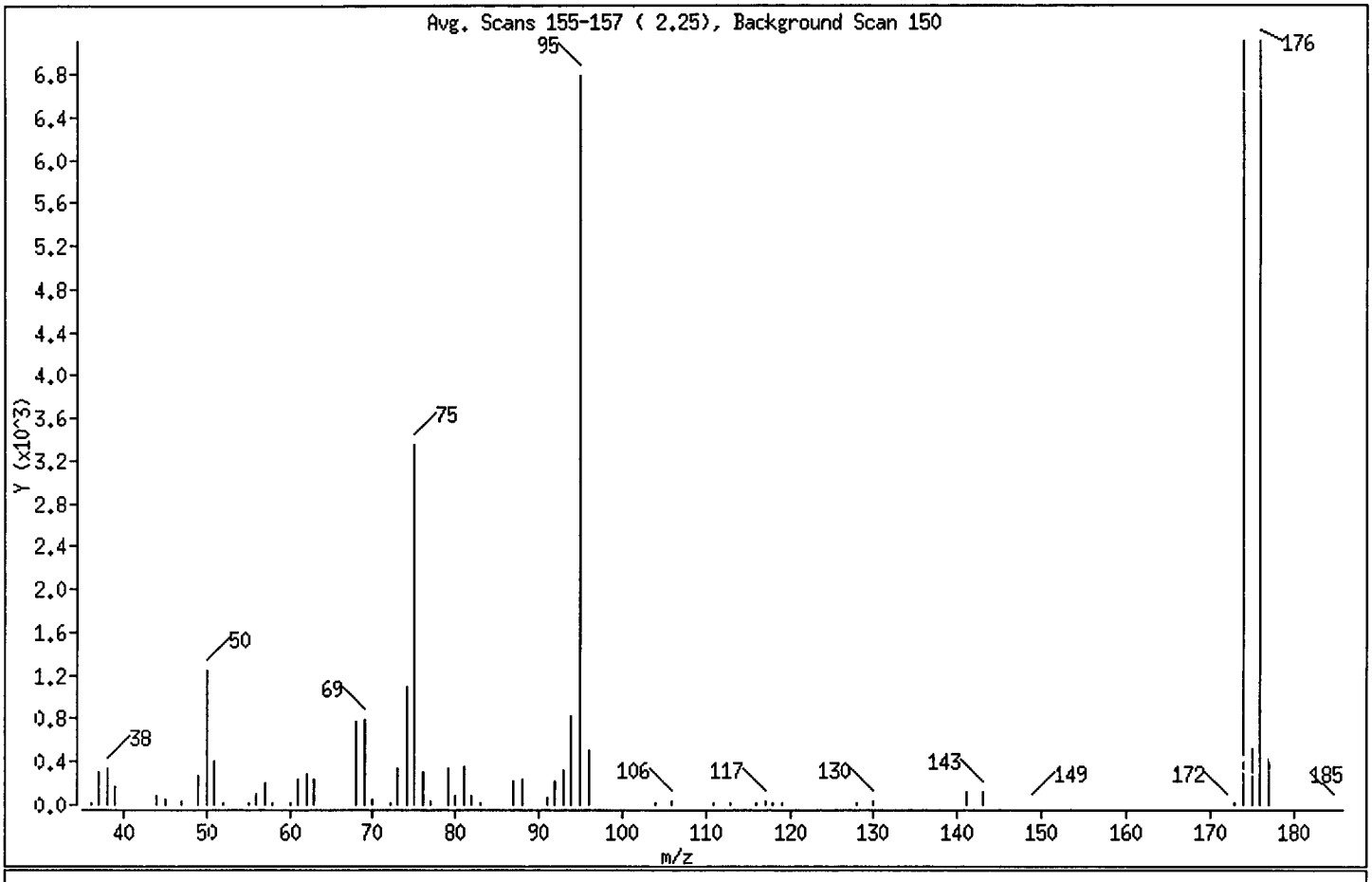
Sample Info: BFB TUNE

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.32
75	30.00 - 66.00% of mass 95	49.31
96	5.00 - 9.00% of mass 95	7.32
173	Less than 2.00% of mass 174	0.16 (0.15)
174	50.00 - 120.00% of mass 95	104.69
175	4.00 - 9.00% of mass 174	7.80 (7.45)
176	93.00 - 101.00% of mass 174	104.72 (100.03)
177	5.00 - 9.00% of mass 176	7.46 (7.12)

Data File: /chem/f50052.1/BG960728B52.b/BG960728B52.d

Date : 28-JUL-96 20:24 ✓

Client ID: BFB

Instrument: f50052.1

Sample Info: BFB TUNE

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BG960728B52.d

Spectrum : Avg. Scans 155-157 (2.25), Background Scan 150

Largest m/z: 176.00

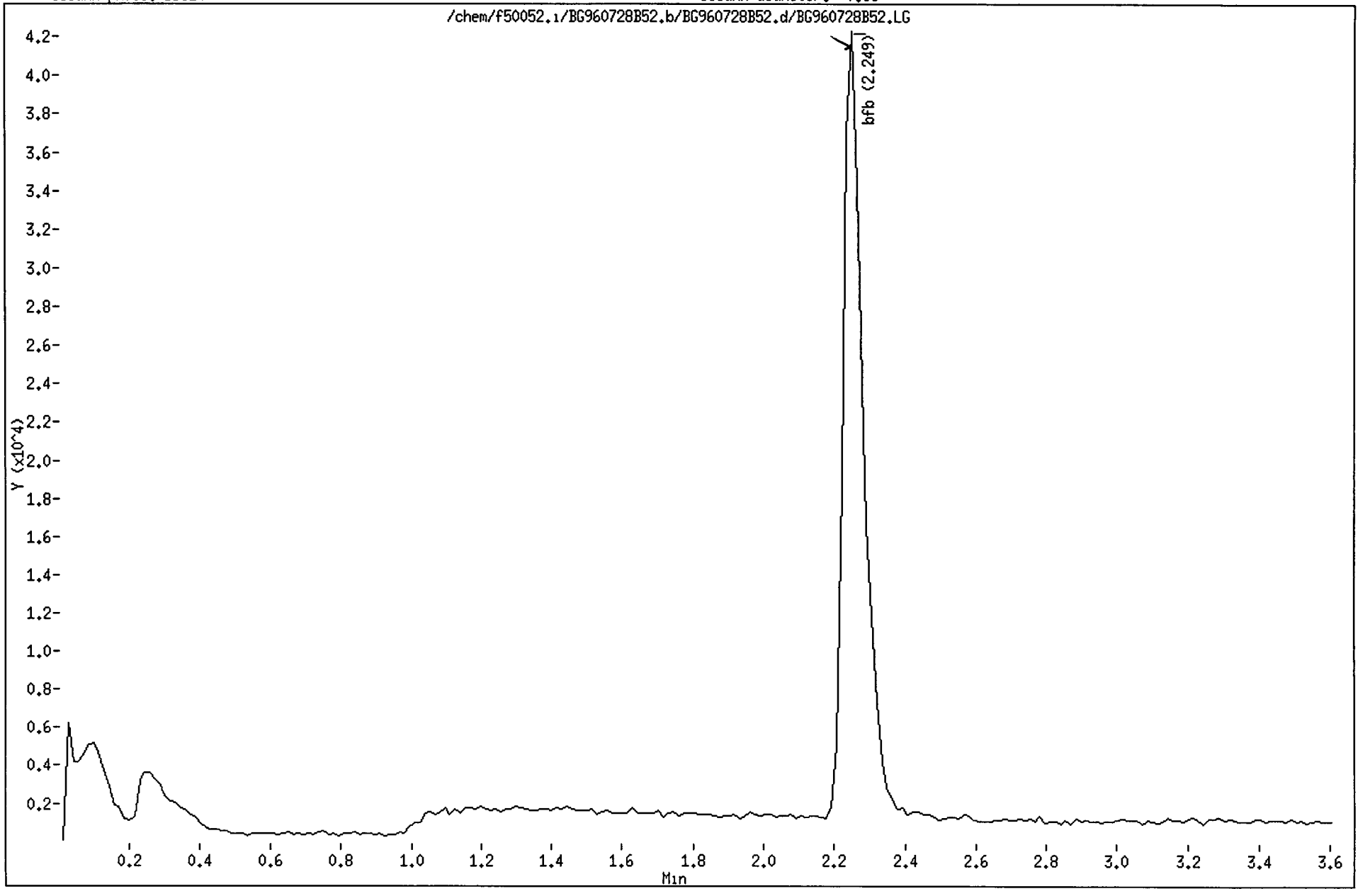
Number of peaks: 76

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	21	62.00	279	87.00	227	137.00	5
37.00	303	63.00	239	88.00	237	140.00	5
38.00	329	64.00	6	91.00	63	141.00	114
39.00	166	67.00	7	92.00	220	143.00	126
42.00	5	68.00	783	93.00	321	149.00	5
44.00	79	69.00	795	94.00	826	155.00	5
45.00	56	70.00	45	95.00	6786	157.00	5
47.00	42	71.00	2	96.00	497	171.00	1
48.00	5	72.00	16	97.00	6	172.00	5
49.00	262	73.00	338	104.00	19	173.00	11
50.00	1243	74.00	1088	105.00	5	174.00	7104
51.00	407	75.00	3346	106.00	28	175.00	529
52.00	12	76.00	303	111.00	9	176.00	7106
53.00	8	77.00	36	113.00	24	177.00	506
55.00	9	78.00	6	116.00	21	178.00	5
56.00	95	79.00	342	117.00	38	185.00	5
57.00	200	80.00	81	118.00	11		
58.00	13	81.00	354	119.00	16		
60.00	23	82.00	90	128.00	24		
61.00	238	83.00	21	130.00	26		

Data File: /chem/f50052.1/BG960728B52.b/BG960728B52.d
Date : 28-JUL-96 20:24
Client ID: BFB
Sample Info: BFB TUNE

Instrument: f50052.1

Operator: 2141
Column phase: DB624
Column diameter: 0.53



Data File: /chem/f50056.i/BF960723A560LM.b/BF960723A56.d

Date : 23-JUL-1996 07:48

Client ID: BFB

Instrument: f50056.i

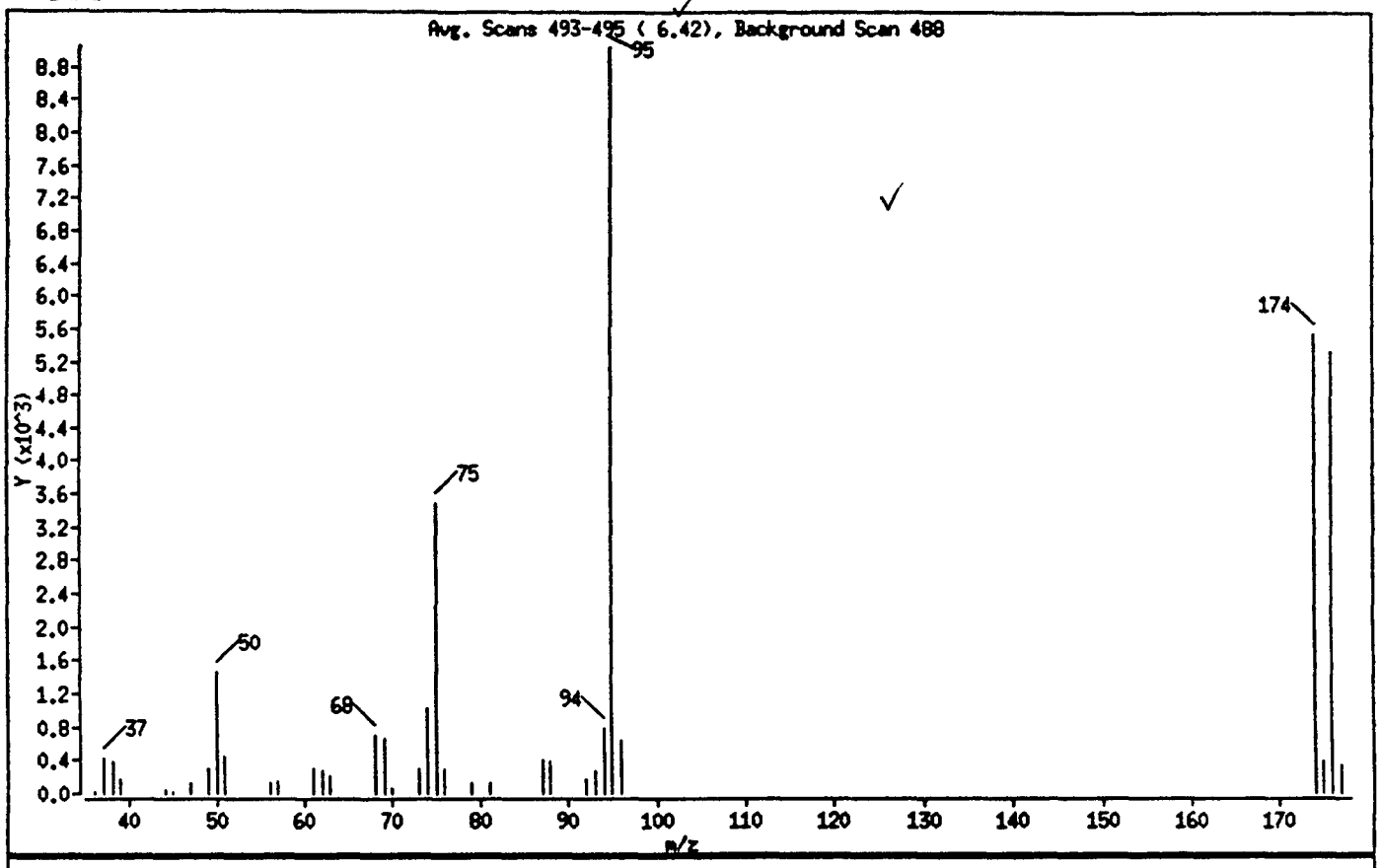
Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	16.10
75	30.00 - 66.00% of mass 95	38.61
96	5.00 - 9.00% of mass 95	6.99
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	61.08
175	4.00 - 9.00% of mass 174	4.30 (7.04)
176	93.00 - 101.00% of mass 174	58.78 (96.24)
177	5.00 - 9.00% of mass 176	3.88 (6.60)

Data File: /chem/f50056.1/BF960723A56OLM.b/BF960723A56.d

Date : 23-JUL-1996 07:48 ✓

Client ID: BFB

Instrument: f50056.1

Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BF960723A56.d

Spectrum : Avg. Scans 493-495 (6.42), Background Scan 488

Largest m/z: 95.00

Number of peaks: 36

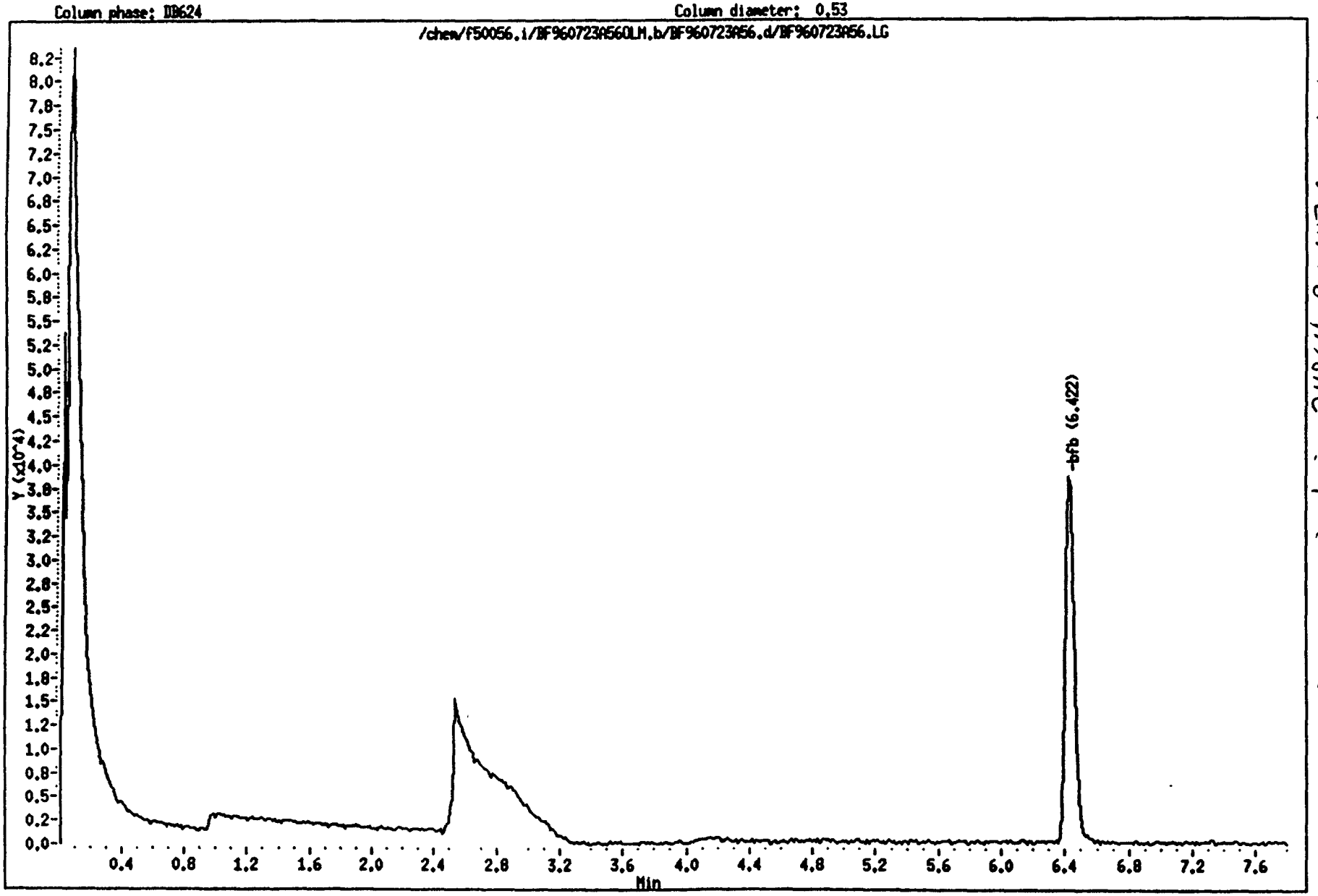
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	27	55.00	2	74.00	1027	95.00	9050
37.00	431	56.00	129	75.00	3494	96.00	633
38.00	376	57.00	153	76.00	307	174.00	5528
39.00	175	61.00	304	79.00	134	175.00	389
44.00	41	62.00	280	81.00	137	176.00	5320
45.00	31	63.00	209	87.00	402	177.00	351
47.00	131	68.00	704	88.00	394		
49.00	300	69.00	665	92.00	168		
50.00	1457	70.00	68	93.00	279		
51.00	445	73.00	290	94.00	794		

Data File: /chem/f50056.i/BF960723A56OLM.b/BF960723A56.d
Date : 23-JUL-1996 07:48
Client ID: BFB
Sample Info: BFB

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53

Column phase: DB624



Copy original in 24864-BNN17 BWB 7/30/96

Data File: /chem/f50056.i/BF960731B56.b/BF960731B56.d

Date : 31-JUL-96 18:12

Client ID: BFB

Instrument: f50056.i

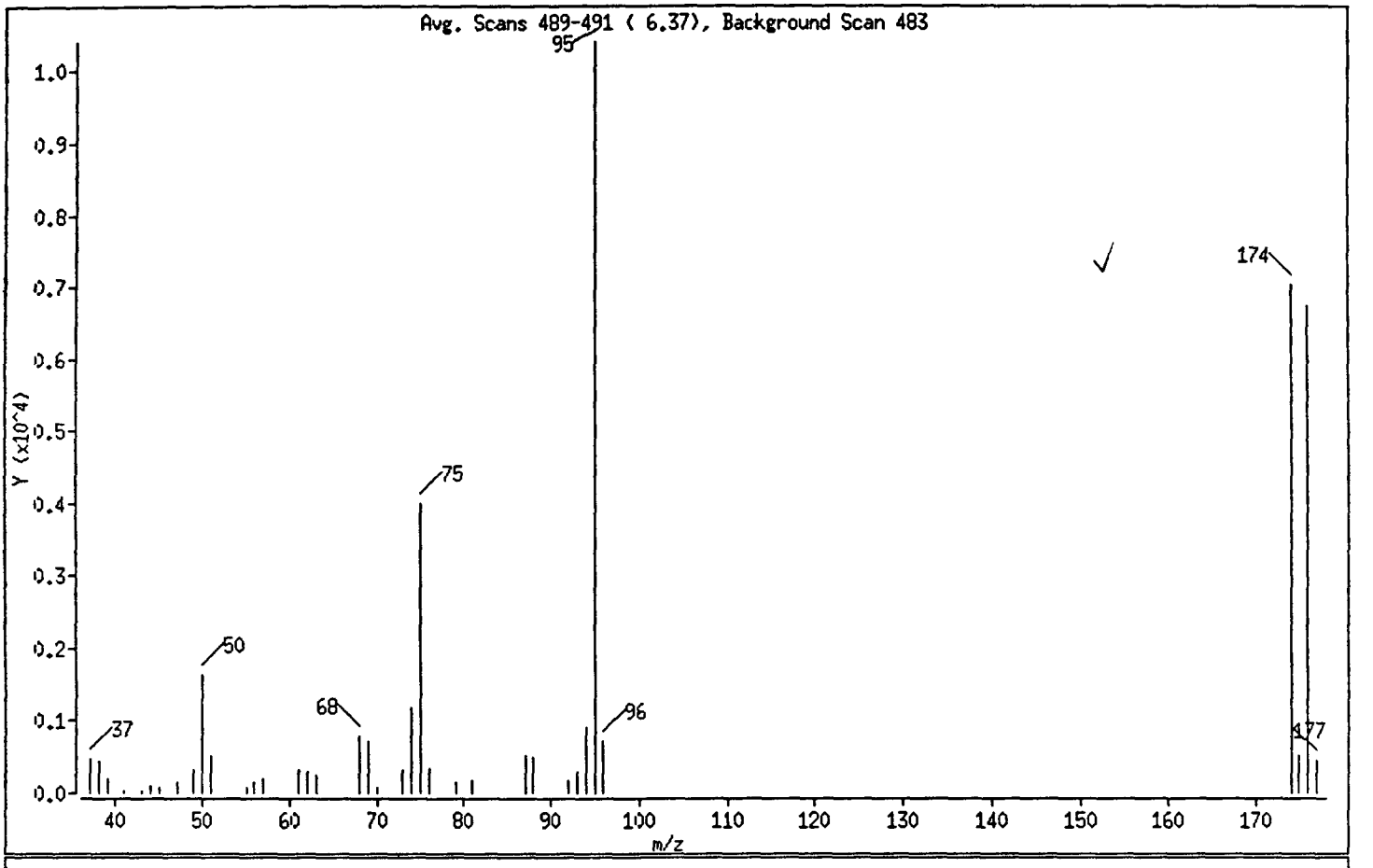
Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.67
75	30.00 - 66.00% of mass 95	38.46
96	5.00 - 9.00% of mass 95	6.93
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	67.60
175	4.00 - 9.00% of mass 174	4.89 (7.24)
176	93.00 - 101.00% of mass 174	64.76 (95.79)
177	5.00 - 9.00% of mass 176	4.22 (6.52)

Data File: /chem/f50056.i/BF960731B56.b/BF960731B56.d

Date : 31-JUL-96 18:12 √

Client ID: BFB

Instrument: f50056.i

Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BF960731B56.d

Spectrum : Avg. Scans 489-491 (6.37), Background Scan 483

Largest m/z: 95.00

Number of peaks: 37

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	459	51.00	506	73.00	323	94.00	918
38.00	438	55.00	85	74.00	1173	95.00	10405
39.00	207	56.00	147	75.00	4002	96.00	721
41.00	27	57.00	196	76.00	339	174.00	7034
43.00	26	61.00	319	79.00	147	175.00	509
44.00	88	62.00	308	81.00	165	176.00	6738
45.00	65	63.00	246	87.00	506	177.00	439
47.00	138	68.00	777	88.00	485		
49.00	332	69.00	722	92.00	176		
50.00	1630	70.00	71	93.00	300		

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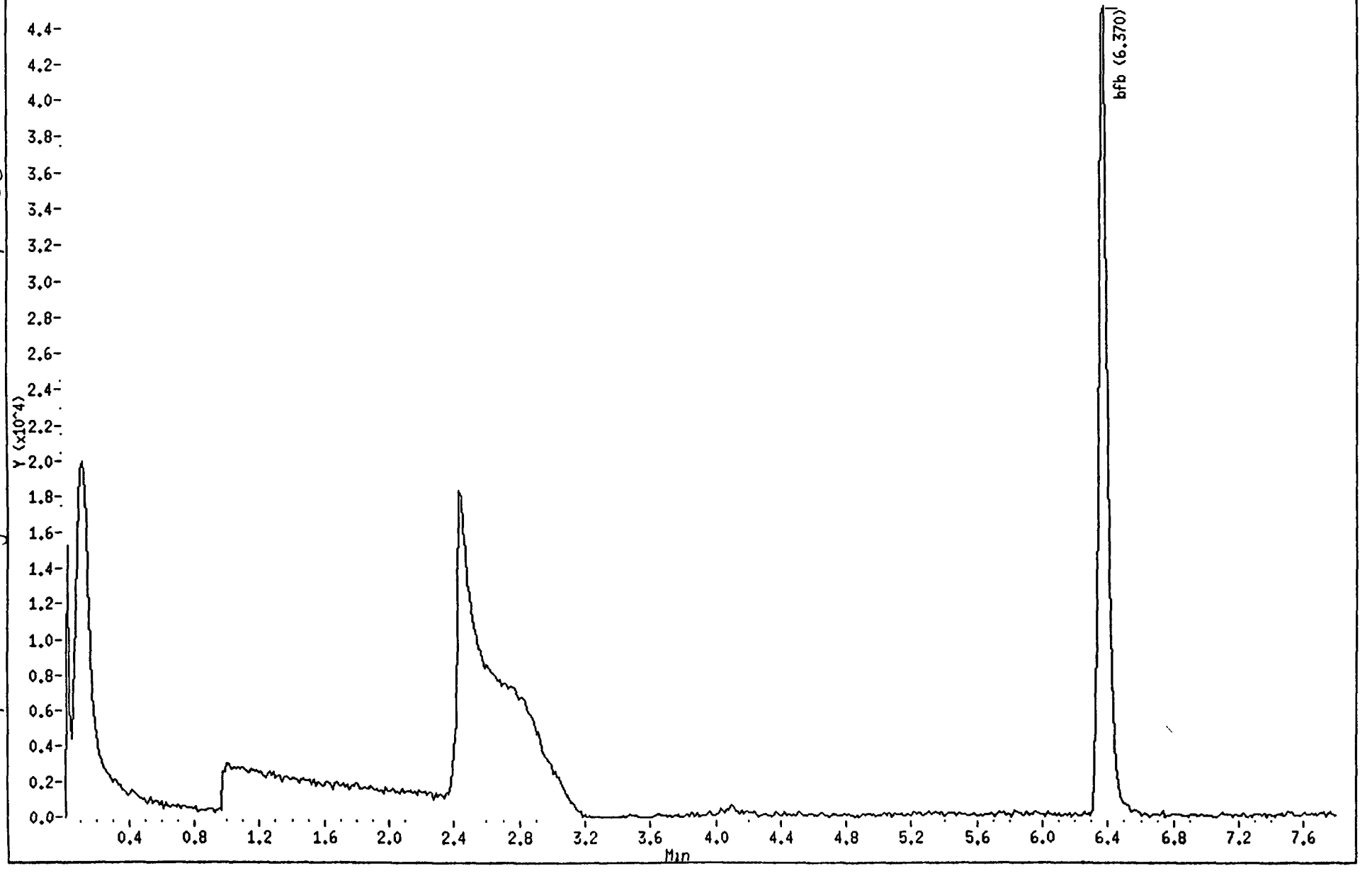
Data File: /chem/f50056.1/BF960731B56.b/BF960731B56.d
Date : 31-JUL-96 18:12
Client ID: BFB
Sample Info: BFB

Instrument: f50056.1

Operator: 2141
Column diameter: 0.53

Column phase: DB624

/chem/f50056.1/BF960731B56.b/BF960731B56.d/BF960731B56.LG



Data File: /chem/f50056.1/BF960803C56.b/BF960803C56.d

Date : 03-AUG-96 00:20

Client ID: BFB

Instrument: f50056.1

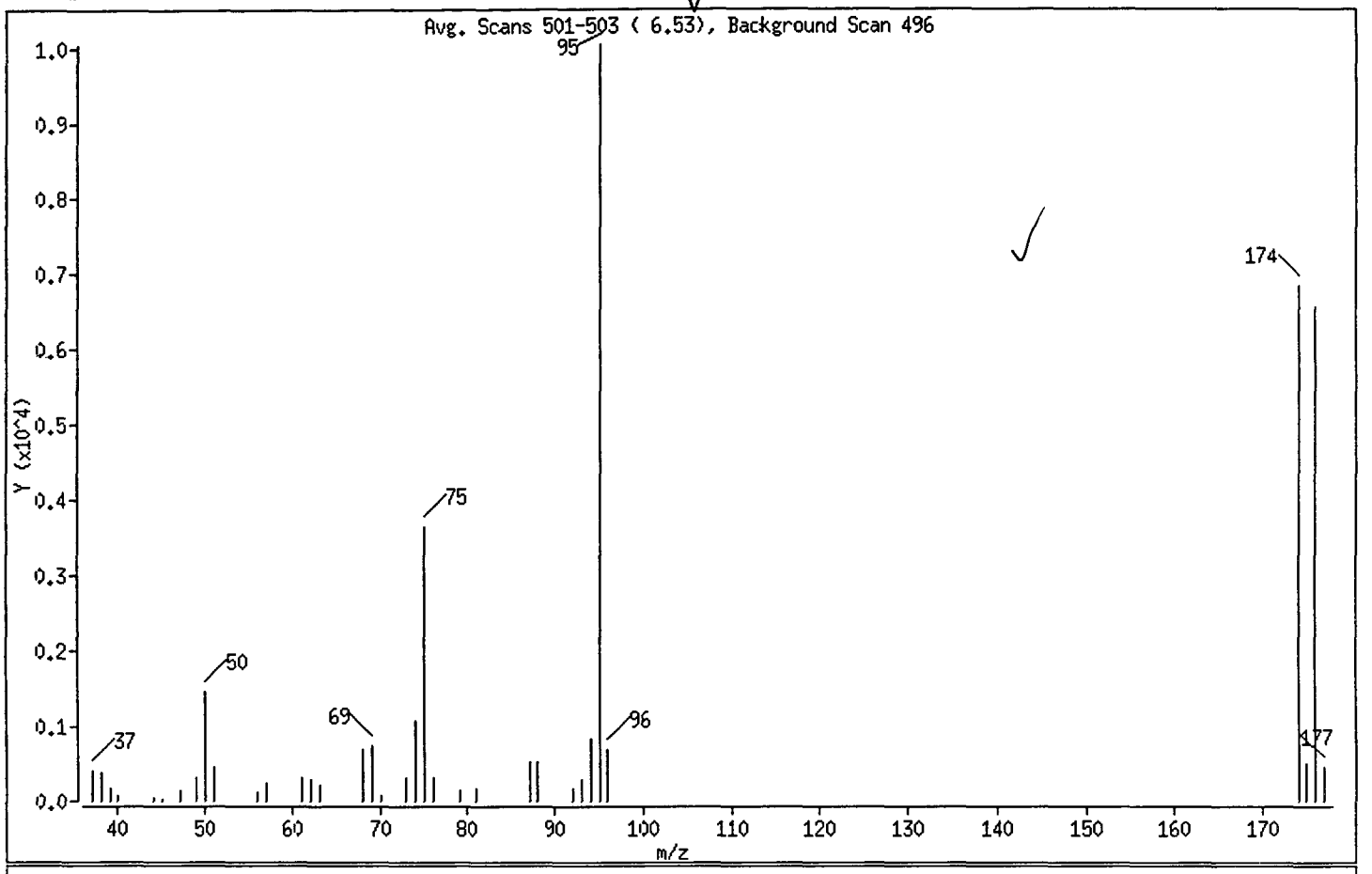
Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	14.53
75	30.00 - 66.00% of mass 95	36.32
96	5.00 - 9.00% of mass 95	6.92
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	68.01
175	4.00 - 9.00% of mass 174	4.93 (7.25)
176	93.00 - 101.00% of mass 174	65.19 (95.86)
177	5.00 - 9.00% of mass 176	4.46 (6.85)

Data File: /chem/f50056.1/BF960803C56.b/BF960803C56.d

Date : 03-AUG-96 00:20

Client ID: BFB

Instrument: f50056.1

Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BF960803C56.d

Spectrum : Avg. Scans 501-503 (6.53), Background Scan 496

Largest m/z: 95.00

Number of peaks: 35

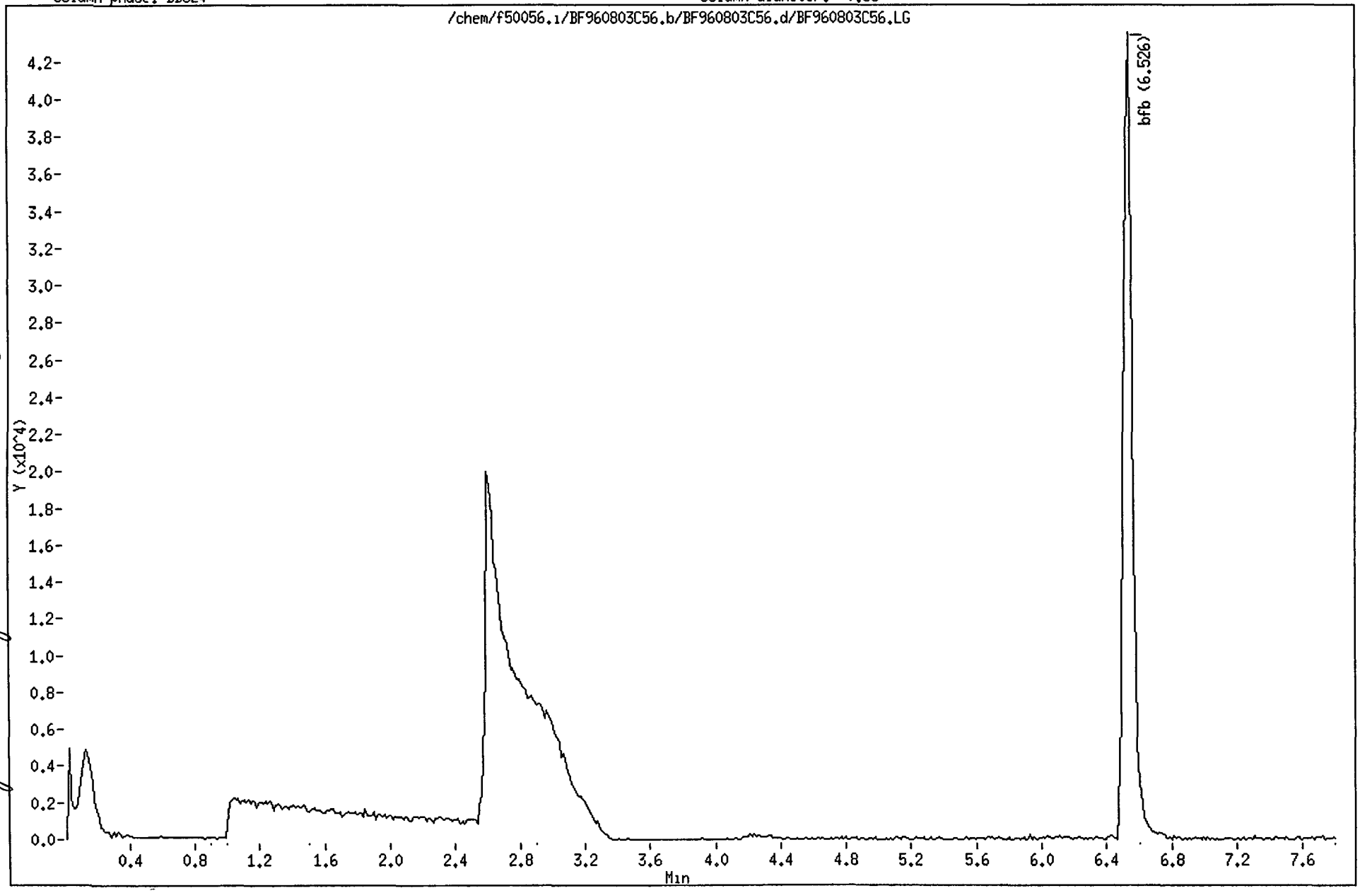
m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	398	51.00	447	73.00	308	93.00	284
38.00	386	56.00	120	74.00	1062	94.00	844
39.00	170	57.00	249	75.00	3653	95.00	10058
40.00	83	61.00	298	76.00	312	96.00	696
44.00	41	62.00	279	79.00	153	174.00	6840
45.00	25	63.00	208	81.00	160	175.00	496
47.00	135	68.00	688	87.00	534	176.00	6557
49.00	300	69.00	733	88.00	524	177.00	449
50.00	1461	70.00	65	92.00	174		

Data File: /chem/f50056.i/BF960803C56.b/BF960803C56.d
Date : 03-AUG-96 00:20
Client ID: BFB
Sample Info: BFB

Column phase: DB624

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53



Copy Original in 24877-YW779 JMcCormack 8/6/96

Data File: /chem/f50056.1/BG960803A56OLM.b/BG960803A56.d

Date : 03-AUG-1996 10:54

Client ID: BFB

Instrument: f50056.1

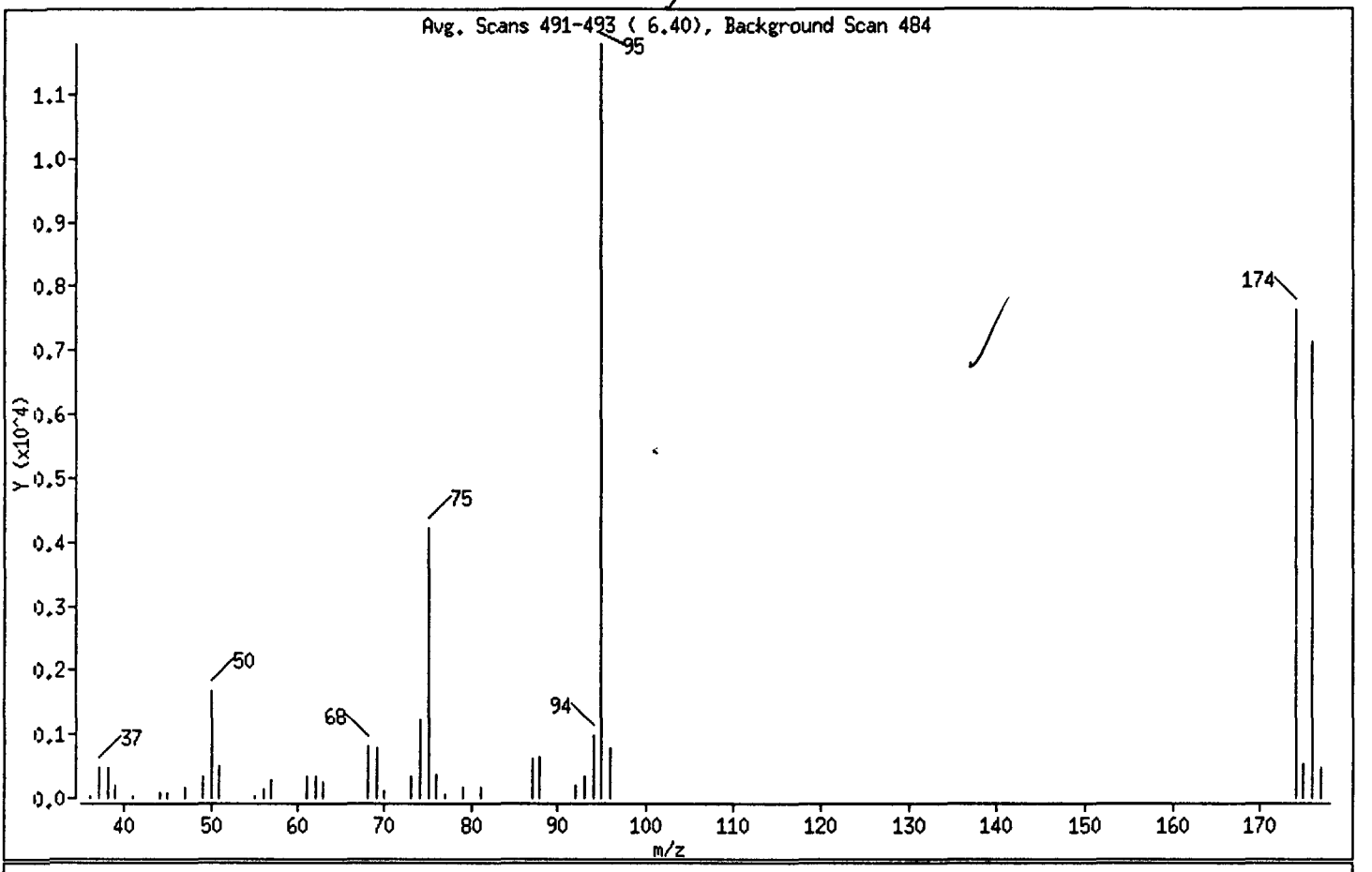
Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	14.33
75	30.00 - 66.00% of mass 95	35.79
96	5.00 - 9.00% of mass 95	6.74
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	64.73
175	4.00 - 9.00% of mass 174	4.56 (7.04)
176	93.00 - 101.00% of mass 174	60.50 (93.47)
177	5.00 - 9.00% of mass 176	4.04 (6.68)

Data File: /chem/f50056.i/BG960803A56OLM.b/BG960803A56.d

Date : 03-AUG-1996 10:54

Client ID: BFB

Instrument: f50056.i

Sample Info: BFB

Operator: 2141

Column phase: DB624

Column diameter: 0.53

Data File: BG960803A56.d

Spectrum : Avg. Scans 491-493 (6.40), Background Scan 484

Largest m/z: 95.00

Number of peaks: 38

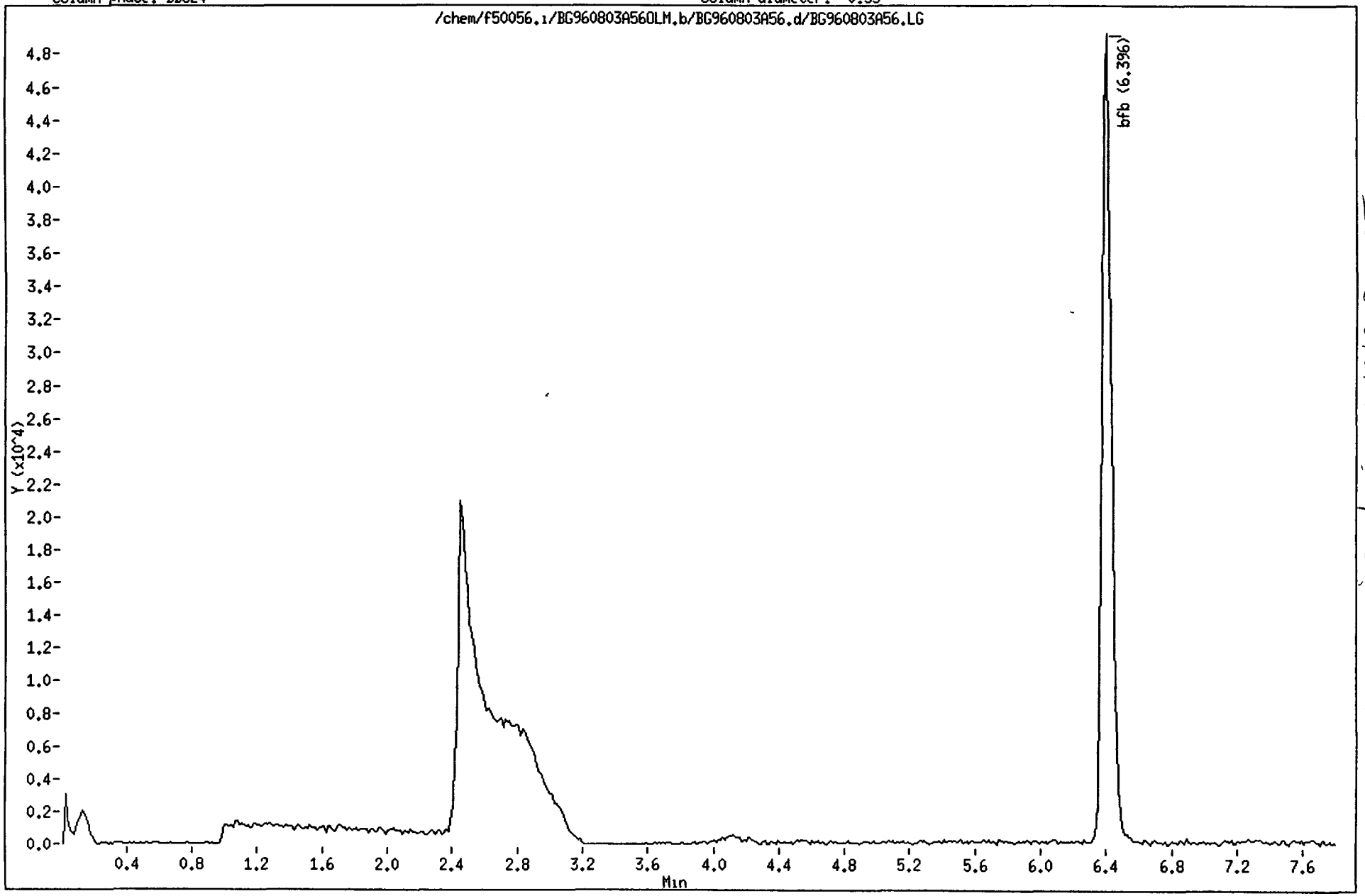
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	28	51.00	504	73.00	343	93.00	347
37.00	482	55.00	31	74.00	1242	94.00	966
38.00	472	56.00	137	75.00	4216	95.00	11781
39.00	202	57.00	280	76.00	360	96.00	794
41.00	30	61.00	346	77.00	65	174.00	7626
44.00	72	62.00	329	79.00	169	175.00	537
45.00	95	63.00	255	81.00	174	176.00	7128
47.00	171	68.00	806	87.00	625	177.00	476
49.00	344	69.00	777	88.00	634		
50.00	1688	70.00	104	92.00	201		

Data File: /chem/f50056.i/BG960803A56OLM.b/BG960803A56.d
Date : 03-AUG-1996 10:54
Client ID: BFB
Sample Info: BFB

Instrument: f50056.i

Operator: 2141
Column diameter: 0.53

Column phase: DB624



Copy original in 24869-BRC05 SWB 8/6/96

338

b. Blank Data

In chronological order.

(1) Form I VOA
Blank's Organic Analysis Data Sheet (OADS)

(2) Form I VOA-TIC
Blank's Tentatively Identified Compounds: even if none found.

(3) RIC and quantitation report

(4) TCL spectra with lab generated standard.

(5) GC/MS library search spectra for TICs

(6) Quantitation / calculation of TICs

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKT1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815393

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015393A52

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKT1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815393

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015393A52

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		CO2 (NOT IN TIC TOTAL)	0.97	5	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
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19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/f50052.1/BG960727C52.b/GH015393A52.d
Date : 27-JUL-1996 10:22
Client ID: VBLKT1
Sample Info:

Column phase: DB624

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53

ORIGINAL

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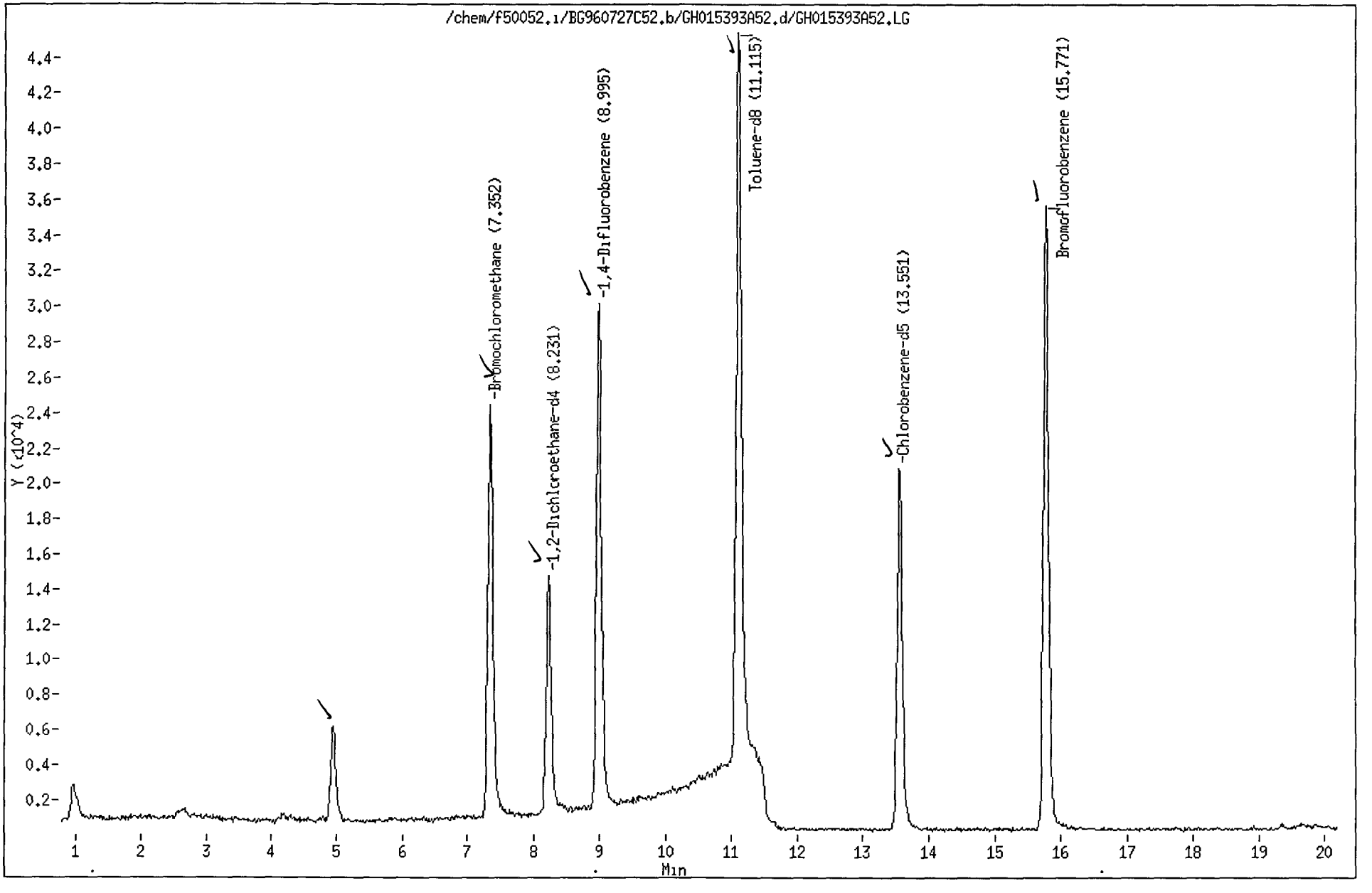


Data File: /chem/f50052.i/BG960727C52.b/GH015393A52.d
Report Date: 30-Jul-1996 13:12

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH015393A52.d
Lab Smp Id: 815393 Client Smp ID: VBLKT1
Inj Date : 27-JUL-1996 10:22
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 352	7 280	(1 000)	17211	250 0	
* 2 1,4-Difluorobenzene	114 00	8 995	8 923	(1 000)	62677	250 0	
* 3 Chlorobenzene-d5	117 00	13 551	13 508	(1 000)	40191	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 231	8 174	(1 120)	26474	219 4	43.88
$ 5 Toluene-d8	98 00	11.115	11 057	(0 820)	76692	267 2	53 44
$ 6 Bromofluorobenzene	95 00	15 771	15 728	(1 164)	33967	224 5	44 91
7 Chloromethane	50 00		1 312	Compound Not Detected			
8 Vinyl Chloride	62 00		1 571	Compound Not Detected			
9 Bromomethane	94 00		2 278	Compound Not Detected			
10 Chloroethane	64 00		2 451	Compound Not Detected			
11 1,1-Dichloroethene	96 00		3 979	Compound Not Detected			
12 Carbon Disulfide	76 00		4 109	Compound Not Detected			
13 Acetone	43 00		4 267	Compound Not Detected			
14 Methylene Chloride	84 00	4 959	4 873	(0 674)	6608	57 00	11 40
15 trans-1,2-Dichloroethene	96 00		5 305	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		6 934	Compound Not Detected			
18 2-Butanone	43 00		7 121	Compound Not Detected			
19 Chloroform	83 00		7 511	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7 612	Compound Not Detected			
21 Carbon Tetrachloride	117 00		7 842	Compound Not Detected			
22 Benzene	78 00		8 174	Compound Not Detected			

Data File: /chem/f50052.i/BG960727C52.b/GH015393A52.d
Report Date: 30-Jul-1996 13:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		
	24 Trichloroethene	130 00		9 212		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 527		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 825		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 762		Compound Not Detected		
	39 Styrene	104 00		14 819		Compound Not Detected		
	40 Bromoform	173 00		15 065		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 762		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH015393A52.d
Report Date: 30-Jul-1996 13:27

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960727C52.b/GH015393A52.d
Lab Smp Id: 815393 Client Smp ID: VBLKT1
Inj Date : 27-JUL-1996 10:22
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 13:27 riedl
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.352	126311	250.000

	RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)	0 966	13459	26 64	5 33	0	CAS #	0	1

Data File: /chem/f50052.i/BG960727C52.b/GH015393A52.d

Date : 27-JUL-1996 10:22

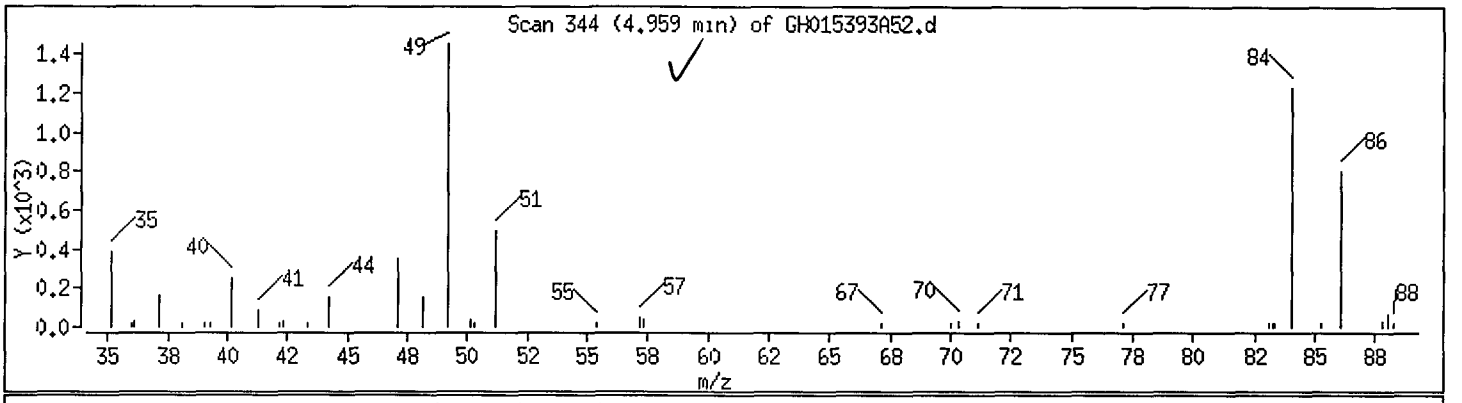
Client ID: VBLKT1 Instrument: f50052.i

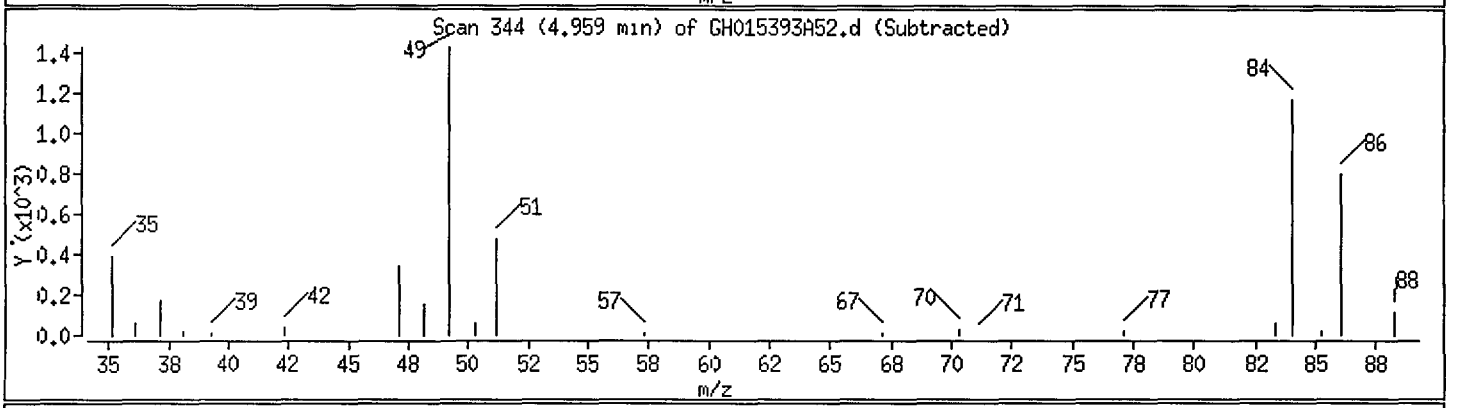
Sample Info:

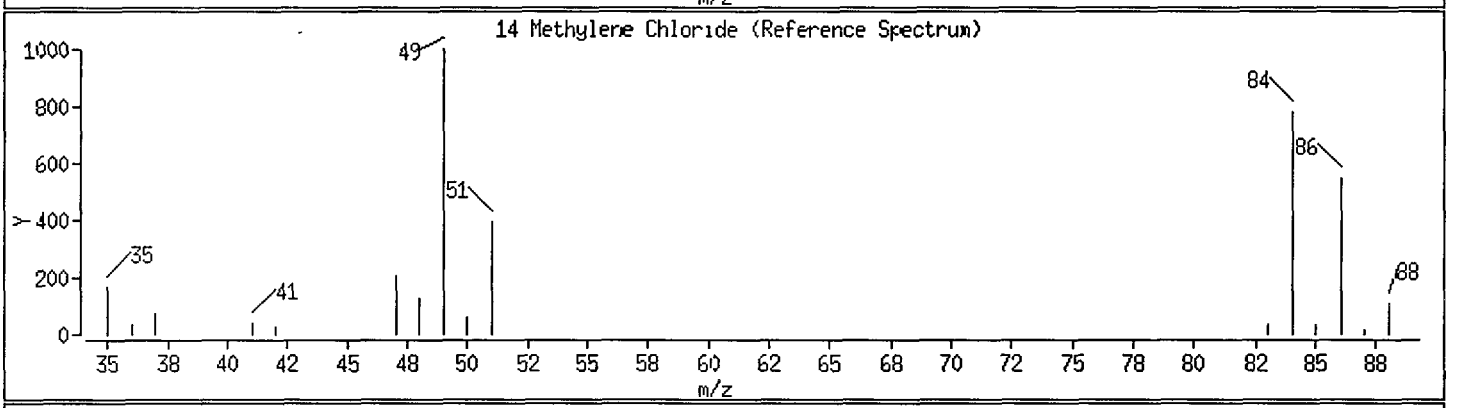
Operator: 2141

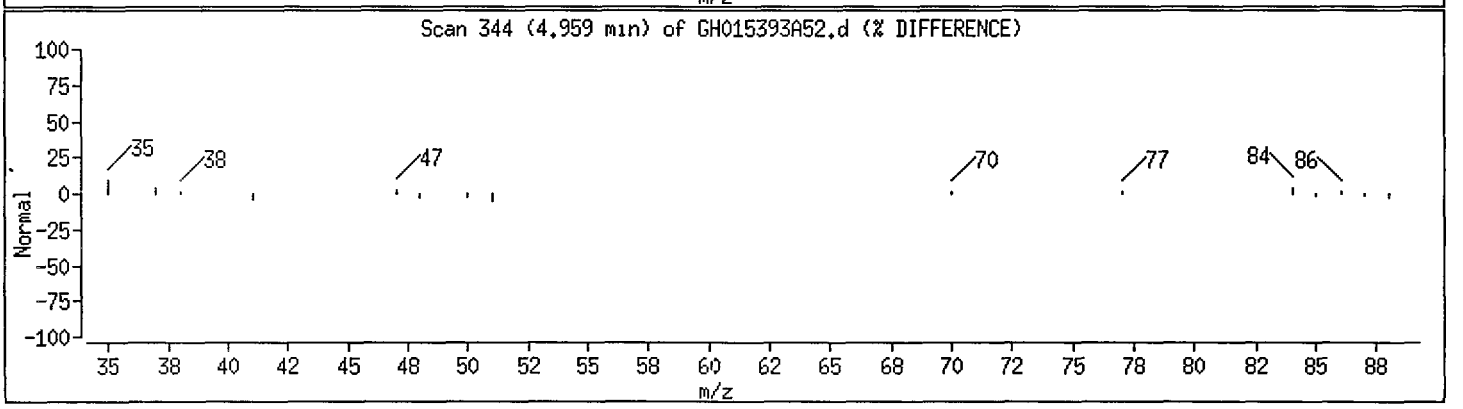
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.i/BG960727C52.b/GH015393A52.d

Date : 27-JUL-1996 10:22

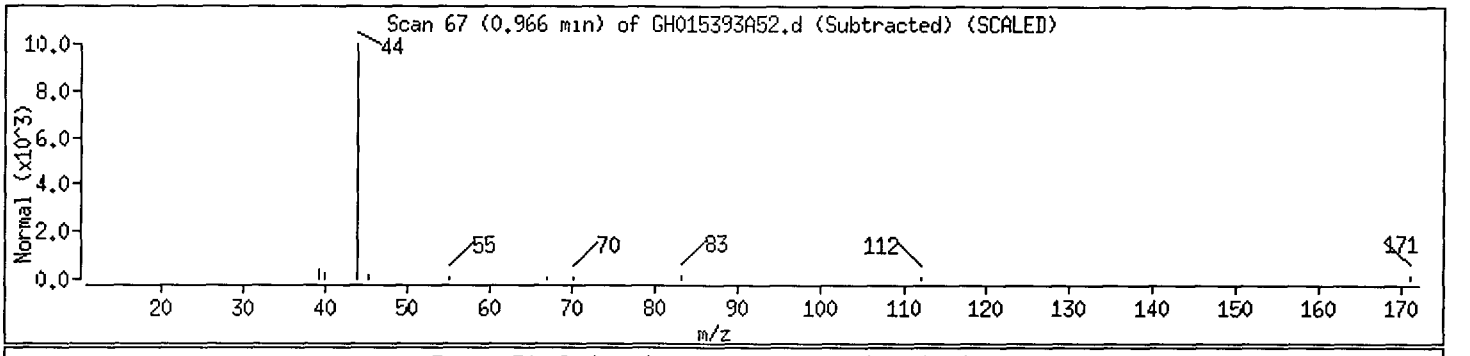
Client ID: VBLKT1 Instrument: f50052.i

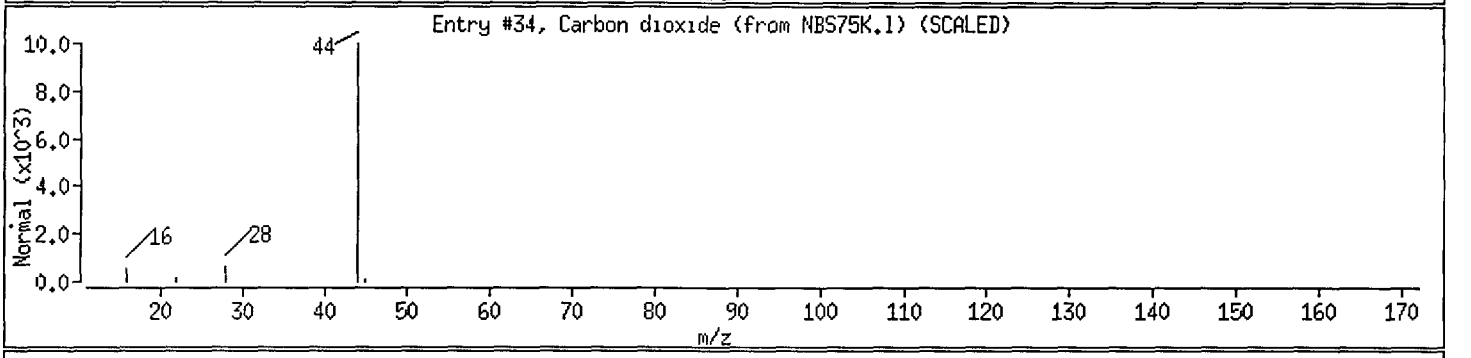
Sample Info:

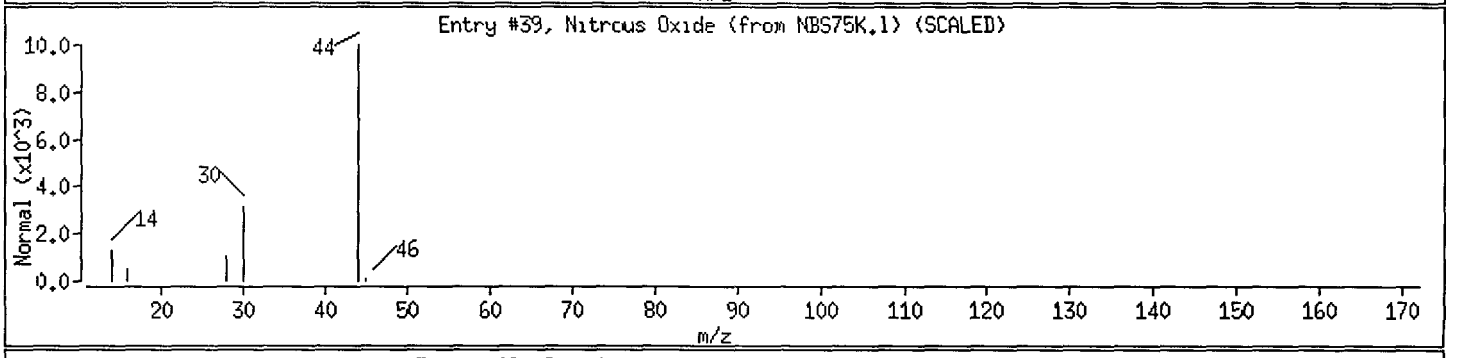
Operator: 2141

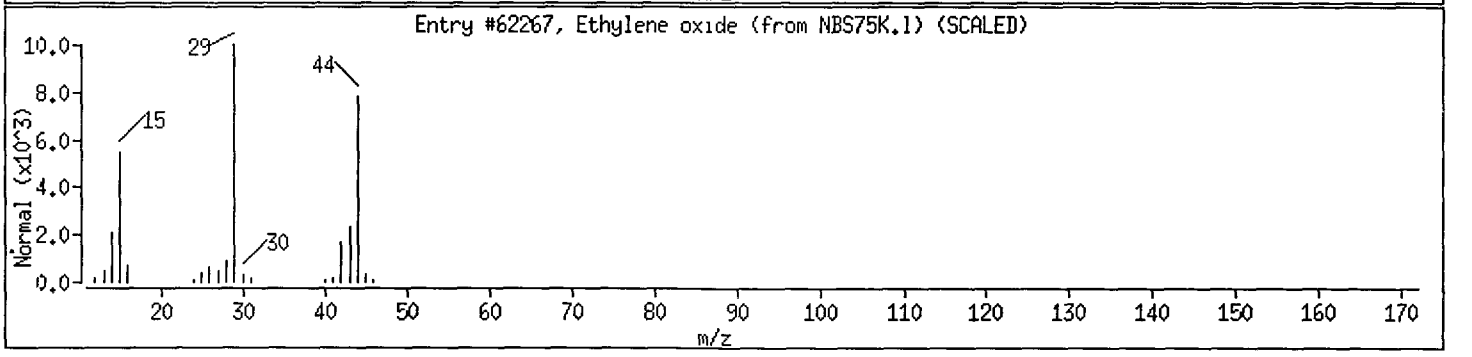
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Carbon dioxide	124-38-9	NBS75K.l	34	3	CO2	44
Nitrous Oxide	10024-97-2	NBS75K.l	39	3	N2O	44
Ethylene oxide	75-21-8	NBS75K.l	62267	2	C2H4O	44









LAB INSTRUCTIONS:
USE FOR QC

PPS#: _____

RECEIPT DATE: 07/25/96 CASE#: SAS#: DUE DATE: 07/23/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815393

J[ ] J3[ ] D[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: VBLKT1 Dry Weight Factor _____

GC/MS ANALYSIS
Amount Purged: [ ] ~~10~~ 5g ~~ml~~ 3.27.96 s/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG960727A52 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2141 Work-up 2141QR

GC/MS REVIEW

CONDITION CODE OK

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review JM Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Tom Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815394

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015394B52

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/28/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	24	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815394

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015394B52

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/28/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.99	15	J
2.				
3.				
4.				
5.				
6.				
7.				
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9.				
10.				
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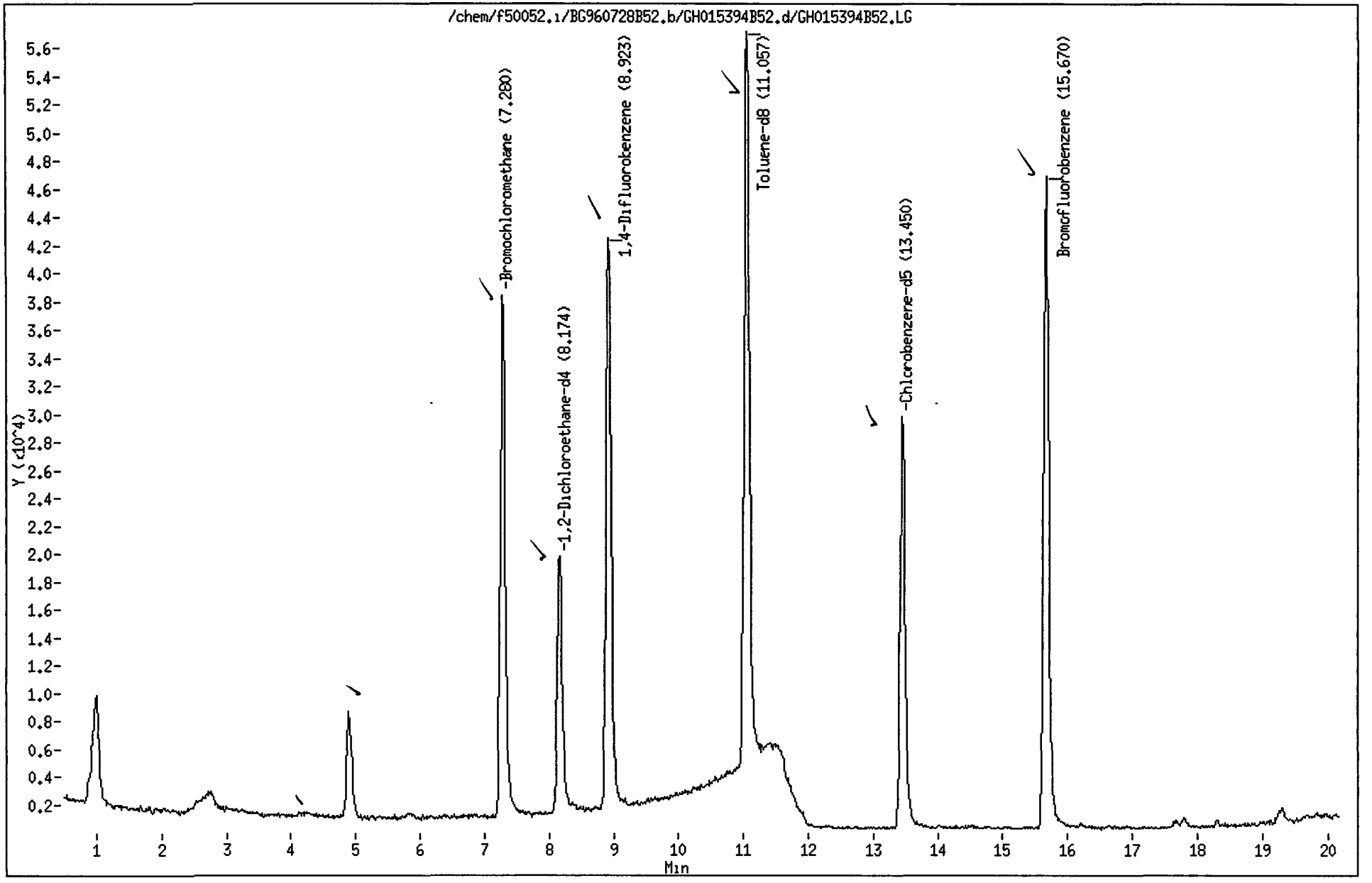
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50052.1/BG960728B52.b/GH015394B52.d
Date : 28-JUL-1996 21:49
Client ID: VBLKT2
Sample Info:

Column phase: DB624

Instrument: f50052.1

Operator: 2227
Column diameter: 0.53



Data File: /chem/f50052.i/BG960728B52.b/GH015394B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960728B52.b/GH015394B52.d
Lab Smp Id: 815394 Client Smp ID: VBLKT2
Inj Date : 28-JUL-1996 21:49
Operator : 2227 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass Quant Type: ISTD
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 280	7 309	(1 000)	27364	250 0	
* 2 1,4-Difluorobenzene	114 00	8 923	8 938	(1 000)	88241	250 0	
* 3 Chlorobenzene-d5	117 00	13 450	13 508	(1 000)	58422	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 174	8 188	(1 123)	35862	212 6	42 51
$ 5 Toluene-d8	98 00	11.057	11 071	(0 822)	94114	237 8	47 57
$ 6 Bromofluorobenzene	95.00	15 670	15 728	(1 165)	44983	228 7	45 74
7 Chloromethane	50 00		1 542	Compound Not Detected			
8 Vinyl Chloride	62 00		1 744	Compound Not Detected.			
9 Bromomethane	94 00		2 335	Compound Not Detected.			
10 Chloroethane	64 00		2.537	Compound Not Detected			
11 1,1-Dichloroethene	96 00		4 036	Compound Not Detected			
12 Carbon Disulfide	76 00		4 152	Compound Not Detected			
13 Acetone	43.00	4 282	4 296	(0 588)	1648	117 6	23 51(M) 2
14 Methylene Chloride	84 00	4 901	4 930	(0 673)	9456	57.12	11 42
15 trans-1,2-Dichloroethene	96 00		5 348	Compound Not Detected			
16 1,1-Dichloroethane	63 00		6 011	Compound Not Detected			
17 cis-1,2-Dichloroethene	96.00		6 963	Compound Not Detected			
18 2-Butanone	43 00		7 136	Compound Not Detected			
19 Chloroform	83 00		7 539	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		7.640	Compound Not Detected			
21 Carbon Tetrachloride	117 00		7 871	Compound Not Detected			
22 Benzene	78.00		8 188	Compound Not Detected			

Sws 7/29/96

Data File: /chem/f50052.i/BG960728B52.b/GH015394B52.d
Report Date: 29-Jul-1996 16:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		8 289		Compound Not Detected		
	24 Trichloroethene	130 00		9 226		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		9 543		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00		11 158		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		11 691		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 965		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 037		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 542		Compound Not Detected		
	35 Chlorobenzene	112 00		13 565		Compound Not Detected		
	36 Ethylbenzene	106 00		13 839		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 776		Compound Not Detected		
	39 Styrene	104 00		14 834		Compound Not Detected.		
	40 Bromoform	173 00		15 079		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 776		Compound Not Detected		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/f50052.i/BG960728B52.b/GH015394B52.d

Date : 28-JUL-1996 21:49

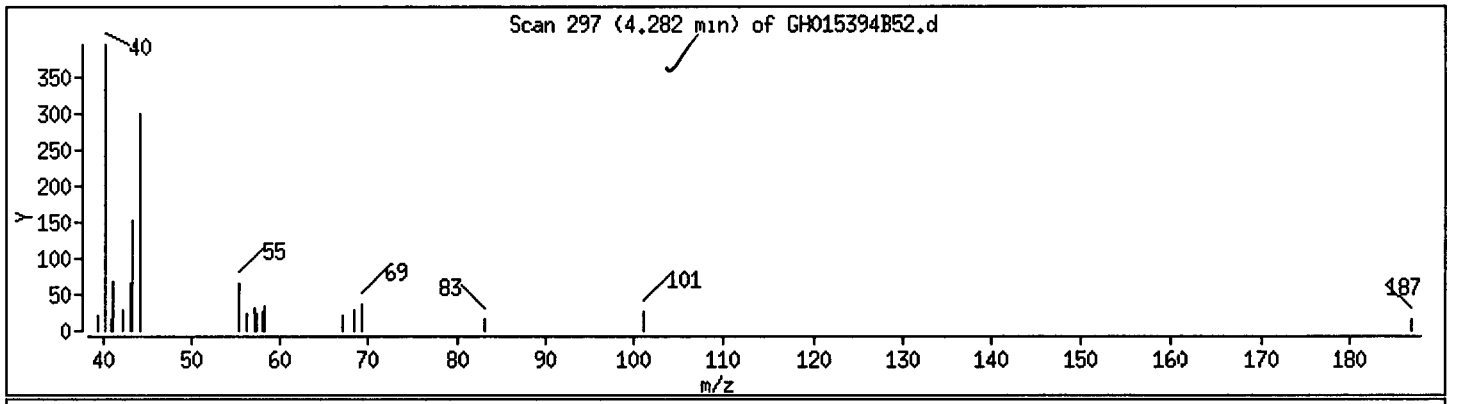
Client ID: VBLKT2 Instrument: f50052.i

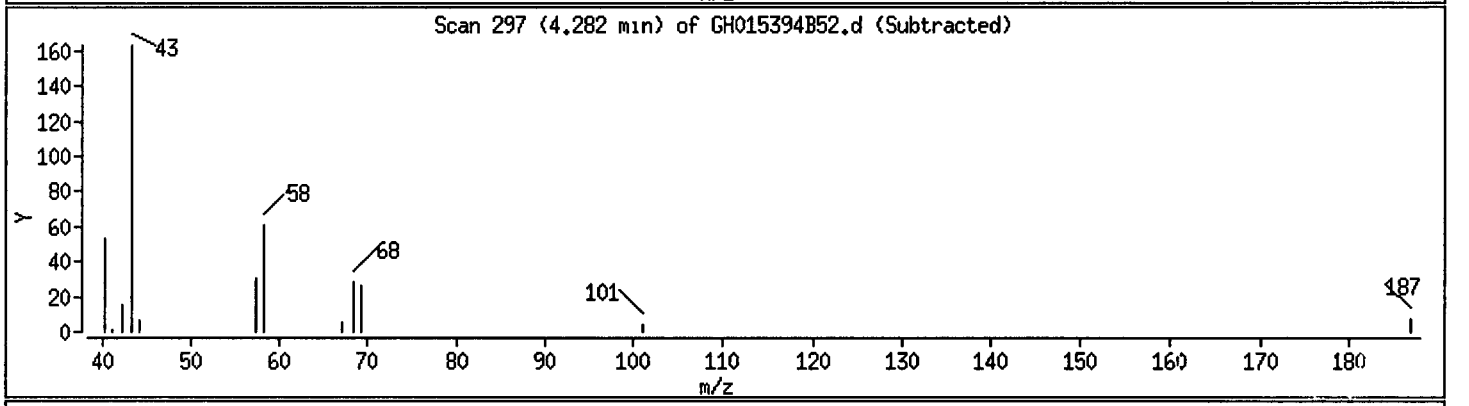
Sample Info:

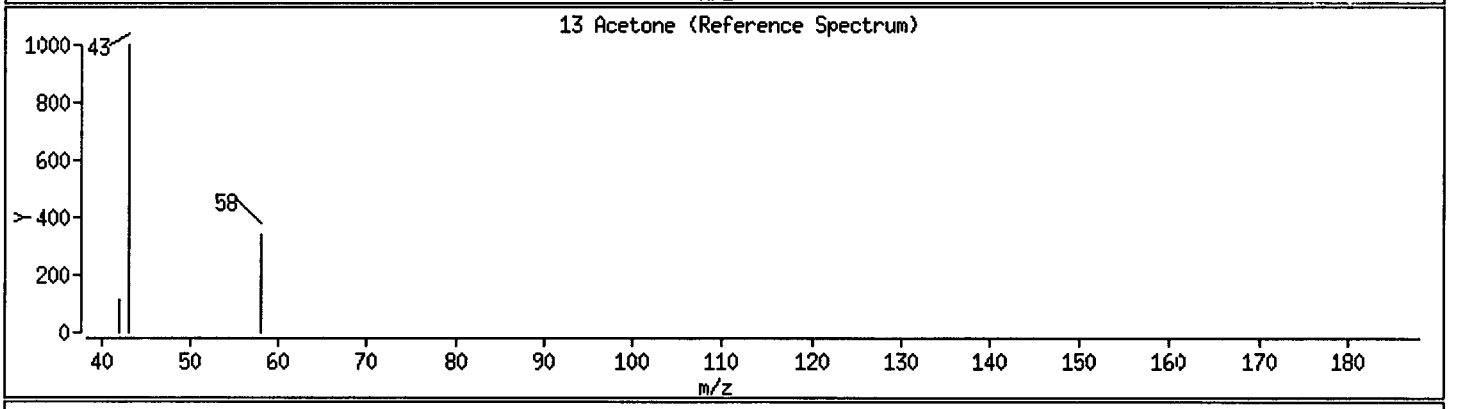
Operator: 2227

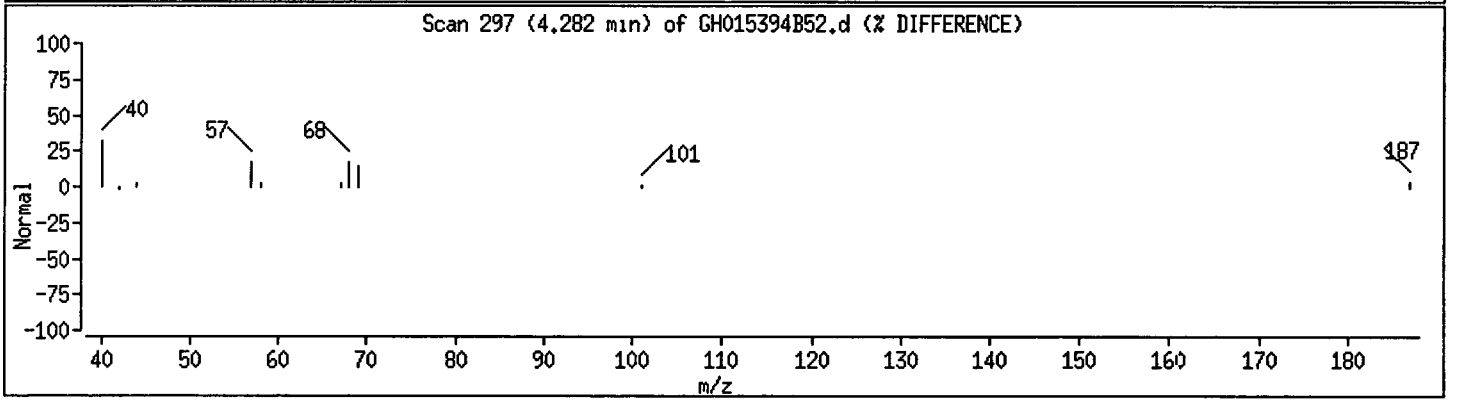
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50052.1/BG960728B52.b/GH015394B52.d

Date : 28-JUL-1996 21:49

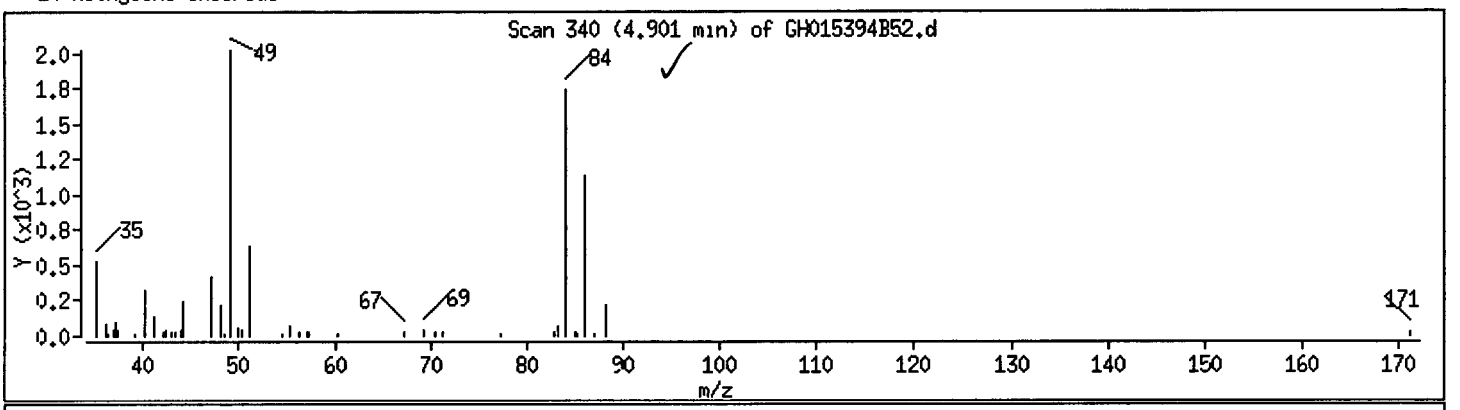
Client ID: VBLKT2 Instrument: f50052.1

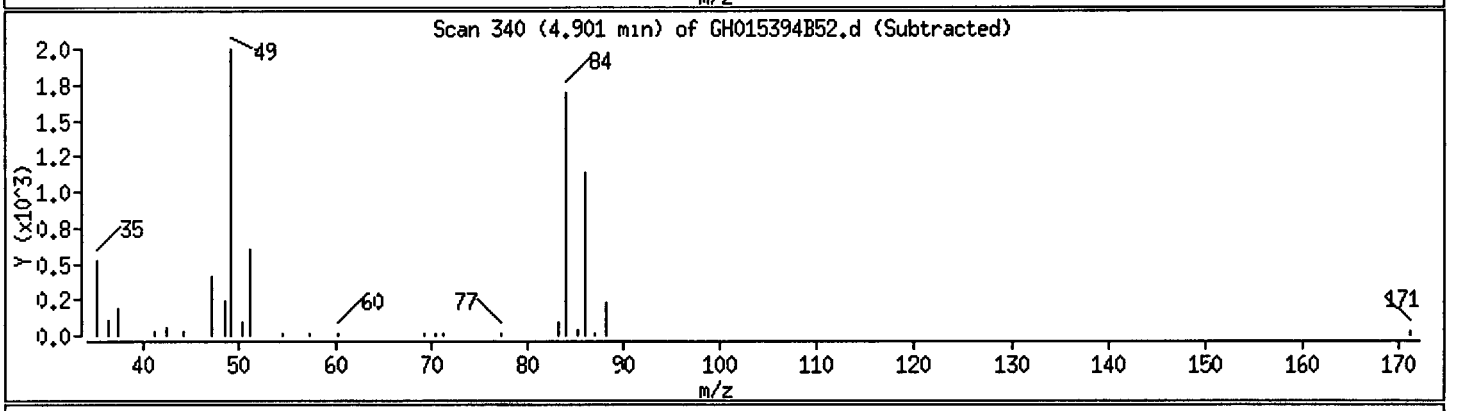
Sample Info:

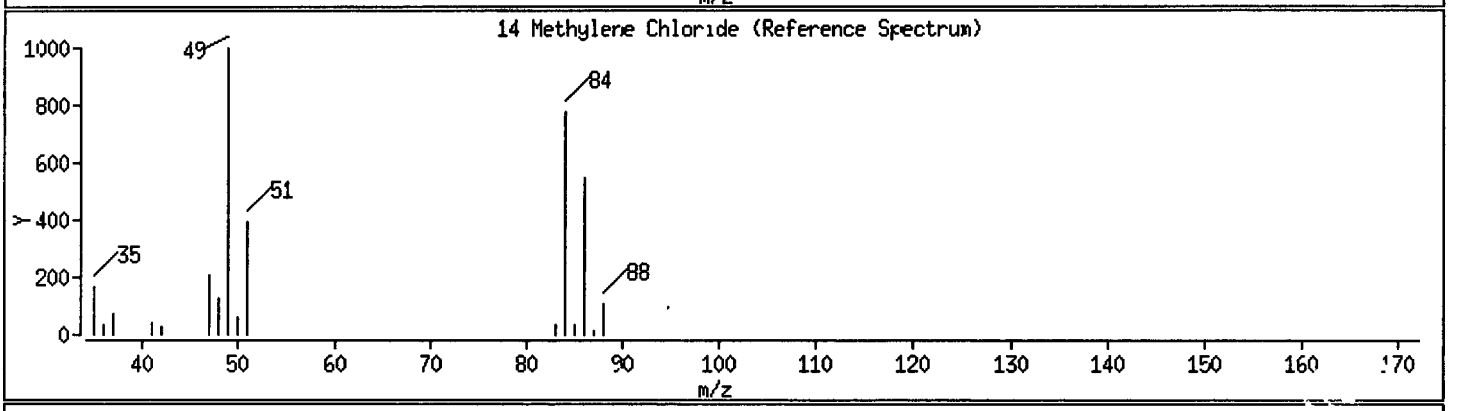
Operator: 2227

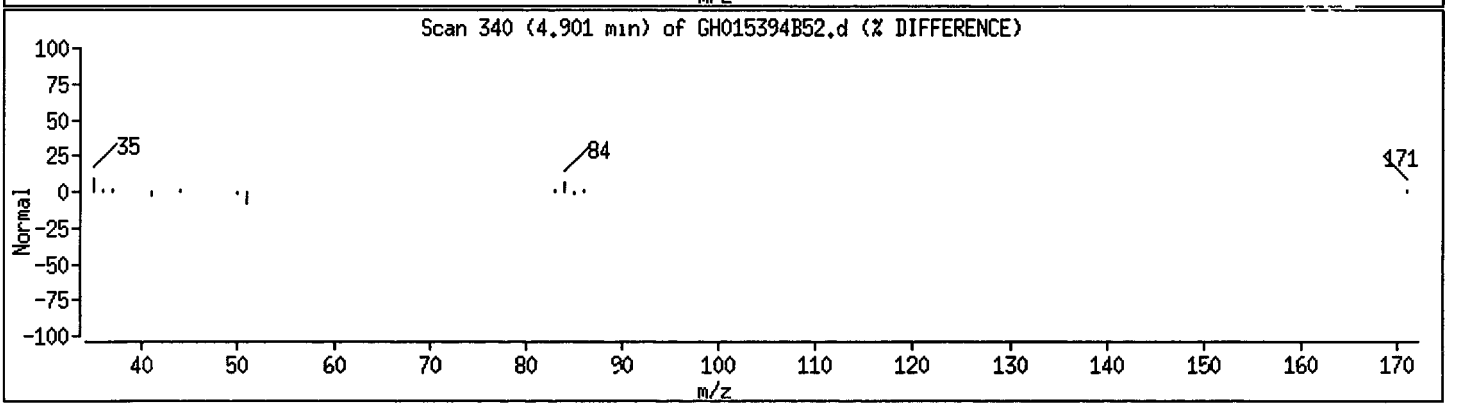
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









Data File: /chem/f50052.1/BG960728B52.b/GH015394B52.d

Date : 28-JUL-1996 21:49

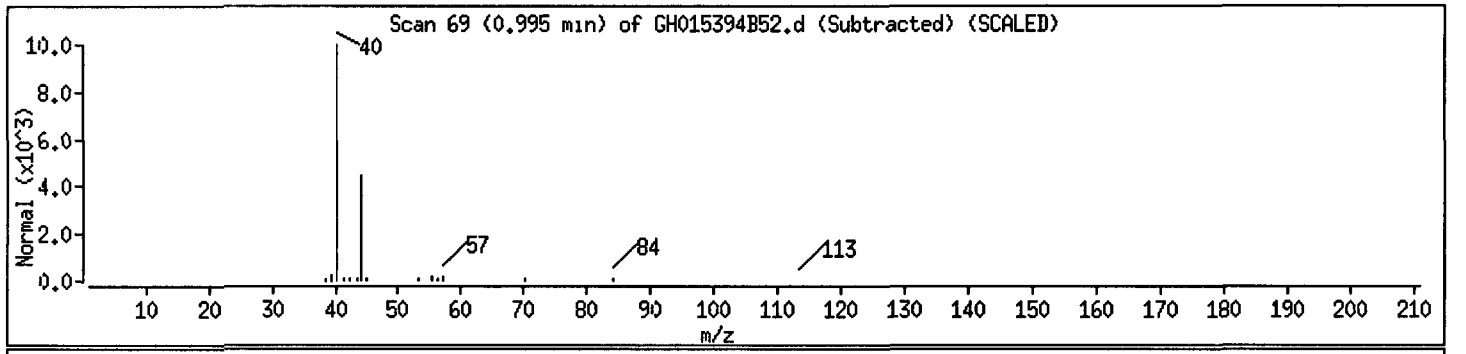
Client ID: VBLKT2 Instrument: f50052.1

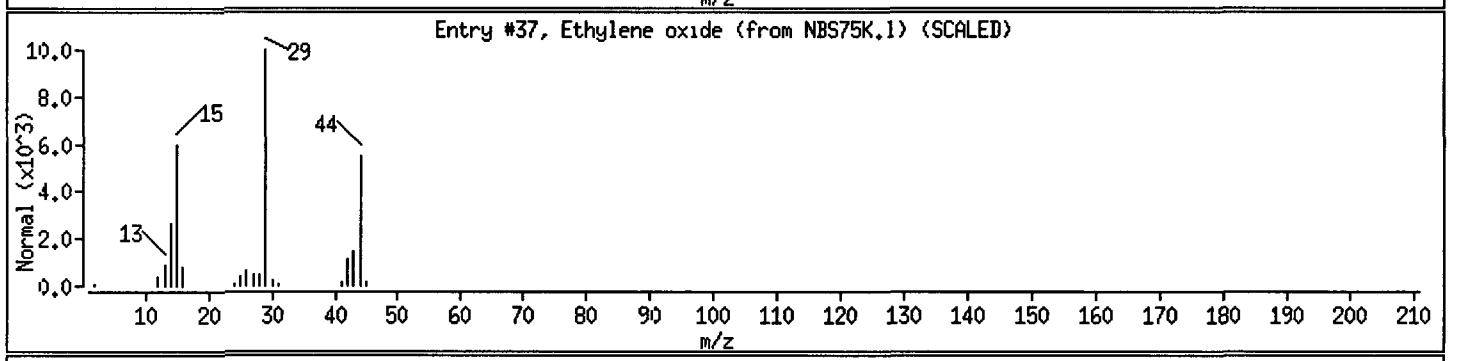
Sample Info:

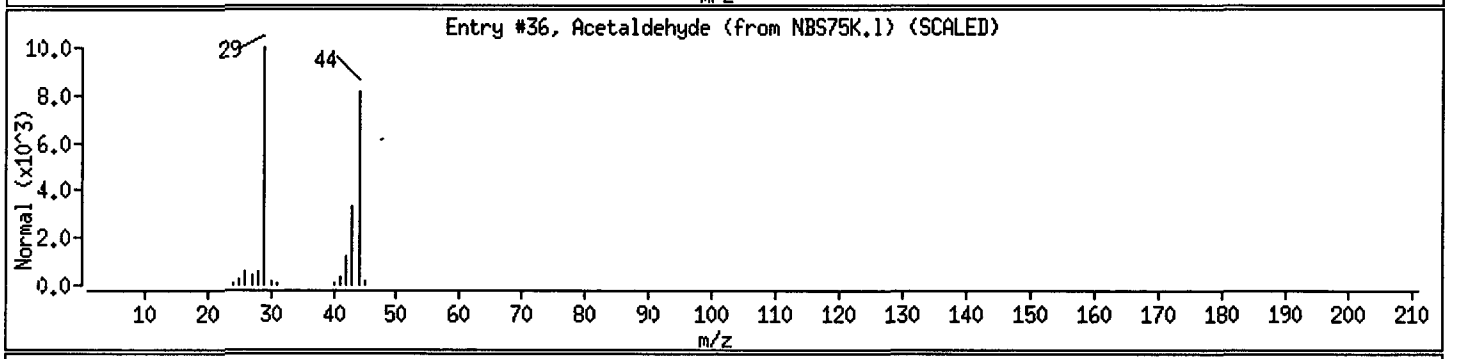
Operator: 2227

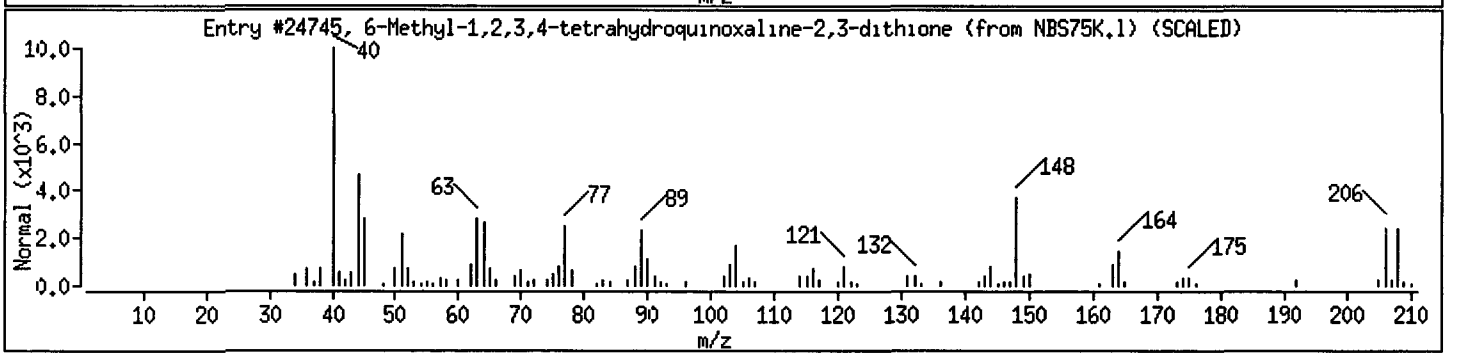
Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
CO2 (NOT IN TIC TOTAL)						
Ethylene oxide	75-21-8	NBS75K.1	37	3	C2H4O	44
Acetaldehyde	75-07-0	NBS75K.1	36	3	C2H4O	44
6-Methyl-1,2,3,4-tetrahydroquinoxaline-2	0-00-0	NBS75K.1	24745	2	C9H8N2S2	208



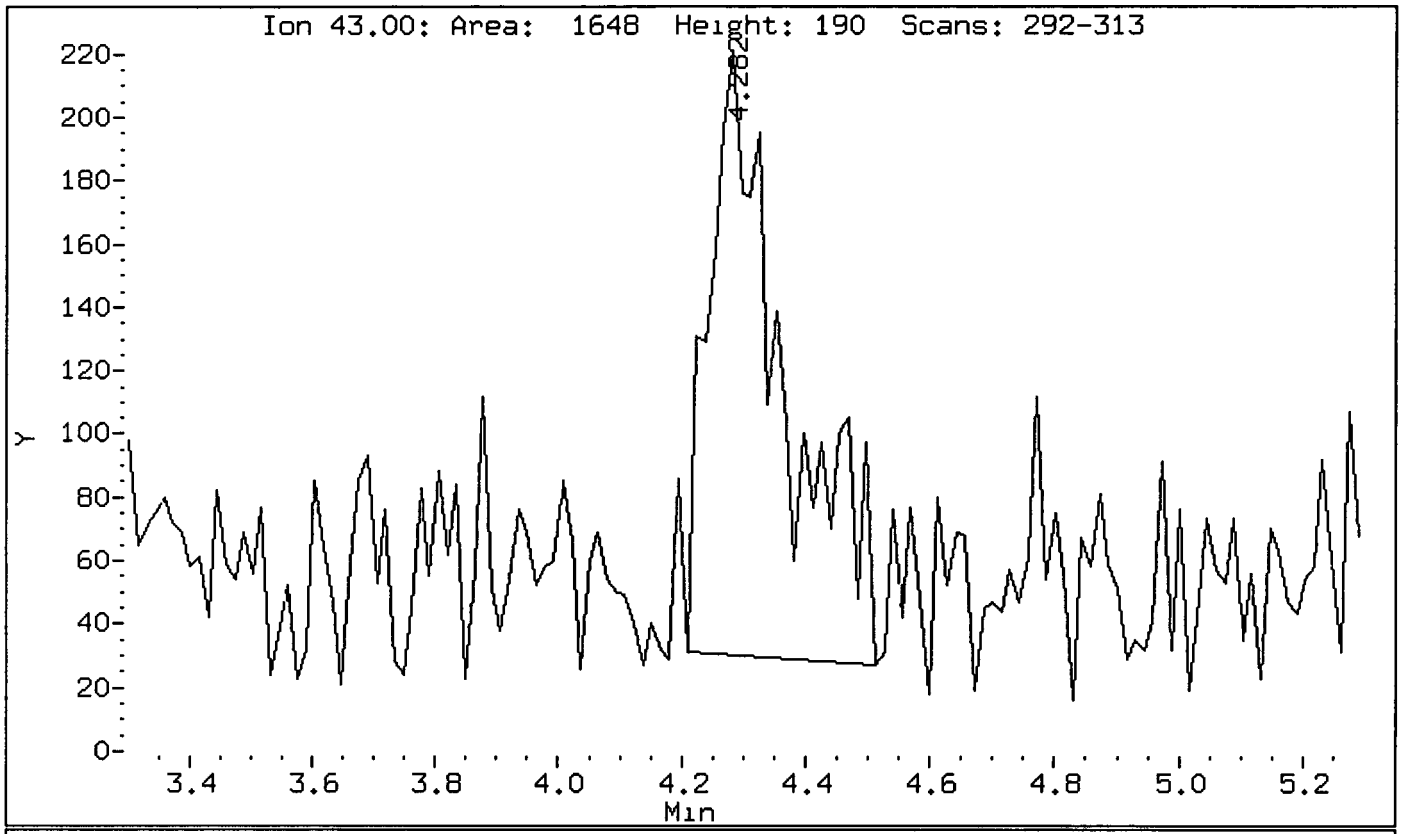


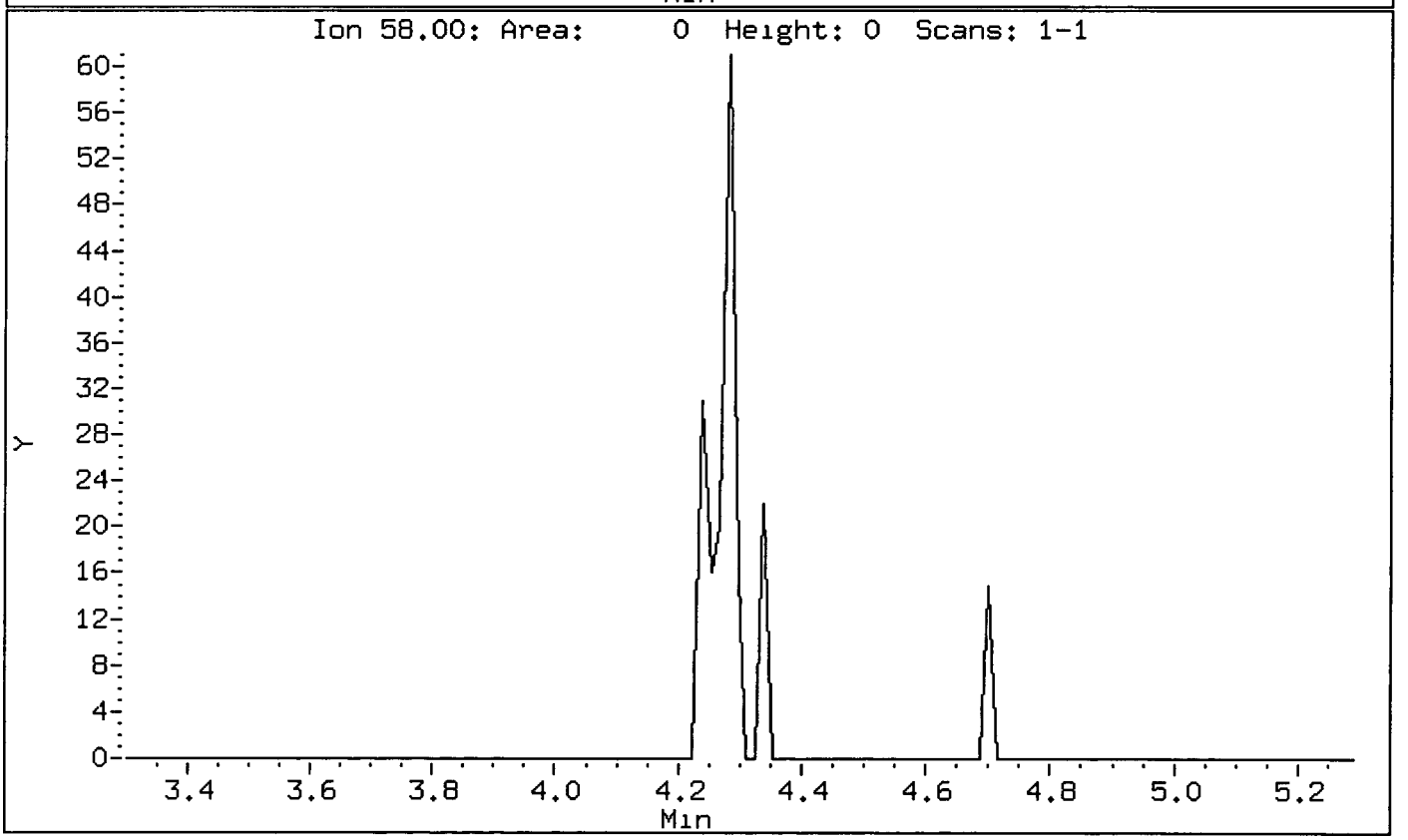




Data File: /chem/f50052.i/BG960728B52.b/GH015394B52.d/GH015394B52.LG
Injection Date: 08-JUL-96 21:49
Instrument: f50052.i
Client Sample ID: VBLKT2

Compound: Acetone
CAS Number: 67-64-1





Data File: /chem/f50052.i/BG960728B52.b/GH015394B52.d
Report Date: 29-Jul-1996 16:14

CompuChem Environmental Corporation

Unknown Compounds Quantitation Report

Data file : /chem/f50052.i/BG960728B52.b/GH015394B52.d
Lab Smp Id: 815394 Client Smp ID: VBLKT2
Inj Date : 28-JUL-1996 21:49
Operator : 2227 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960728B52.b/SOLM03.1.m
Meth Date : 29-Jul-1996 16:02 bass
Cal Date : 28-JUL-1996 20:37 Cal File: GU960728B52.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: all.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

ISTD	RT	AREA	AMOUNT
* 1 Bromochloromethane	7.280	201082	250.000

	RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
CO2 (NOT IN TIC TOTAL)	0 995	60172	74 81	14 96	0	CAS #	0	1(L)

QC Flag Legend

L - Operator selected an alternate library search match.

LAB INSTRUCTIONS:
USE FOR QC

PPS#: _____

RECEIPT DATE: 07/25/96 CASE#: SAS#: DUE DATE: 07/23/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815394

J[ ] J3[ ] D[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

GC/MS; TCL VOA: LL S/S; SOW OLM03.1

Sample date: Report type: A

SAMPLE ID#: VBLKT2 Dry Weight Factor _____

GC/MS ANALYSIS
Amount Purged: [✓] 10mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BK960728B Disk ( )
Blank Filename G Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2227 Work-up S Simpson

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review SWBen Date 7/29/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999	↓	↓	SS	814998	5.0g	FFE82MS	
815000	↓	↓	SS	814998	5.0g	FFE82MSD	
815007	↓	↓			5.0g	FFE84	
815008	↓	↓			5.0g	FFE85	
815009	↓	↓			5.0g	FFE86	
815010	↓	↓			5.0g	FFE87	
815011	↓	↓			5.0g	FFE88	
815012	↓	↓			5.0g	FFE89	
815013	↓	↓			5.0g	FFF25	
815014	↓	↓			5.0g	FFF26	
815015	↓	↓			5.0g	FFF27	
815016	↓	↓			5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997	↓	↓			5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Tom Storage DATE 7/26/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKK1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 817050

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH017050B56

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/31/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	22	
67-64-1	Acetone	25	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKK1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 817050

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH017050B56

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/31/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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30.				

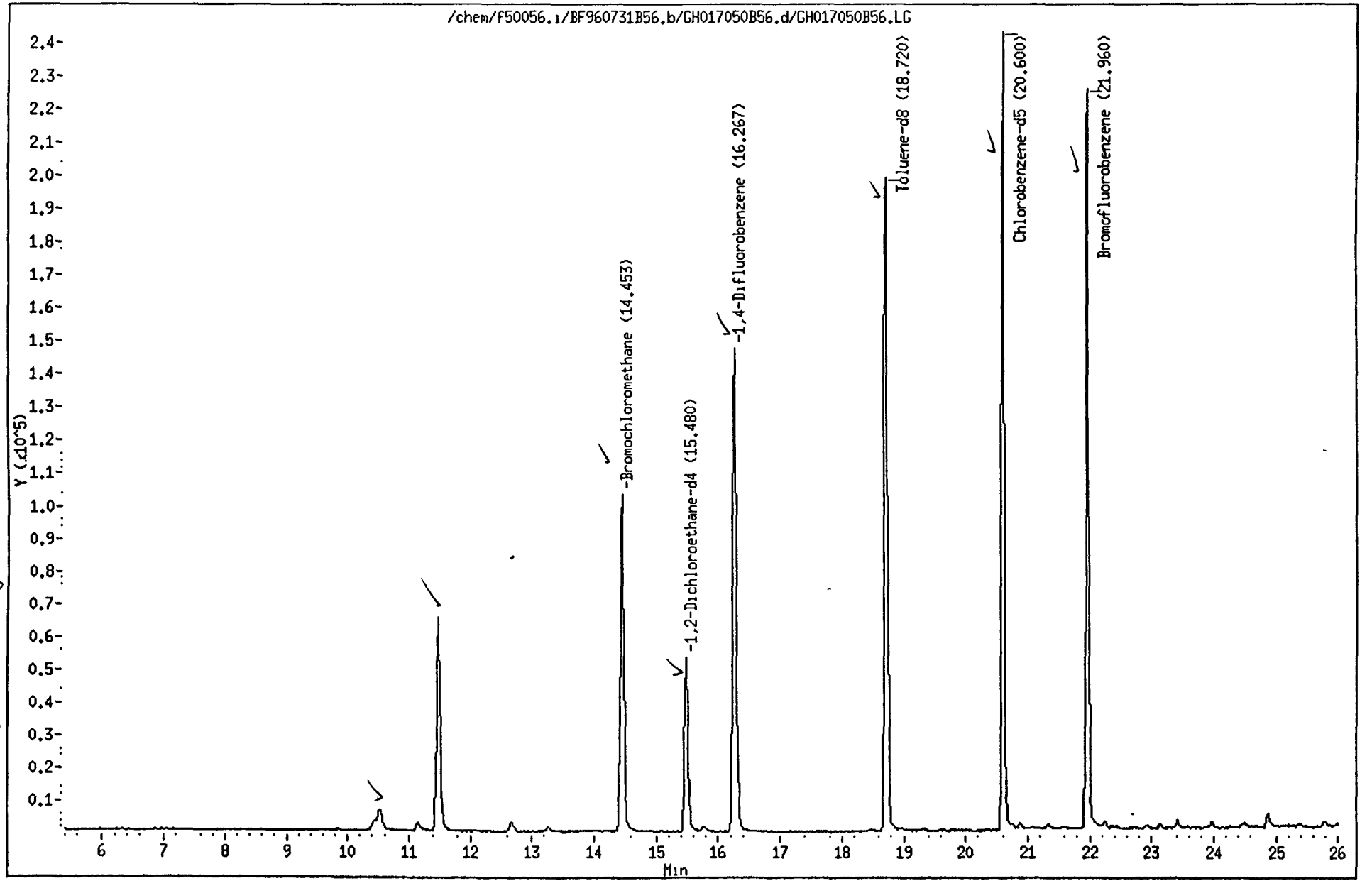
Data File: /chem/f50056.i/BF960731B56.b/GH017050B56.d
Date : 31-JUL-1996 19:15
Client ID: VBLKK1
Sample Info:

Column phase: DB624

Instrument: f50056.i

Operator: 2230
Column diameter: 0.53

Copy Original in 24877-YW736 Nicol McConnach 8/11/96



Data File: /chem/f50056.i/BF960731B56.b/GH017050B56.d
Report Date: 01-Aug-1996 12:51

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960731B56.b/GH017050B56.d
Lab Smp Id: 817050 Client Smp ID: VBLKK1
Inj Date : 31-JUL-1996 19:15
Operator : 2230 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960731B56.b/SOLM03.1.m
Meth Date : 01-Aug-1996 11:35 riedl Quant Type: ISTD
Cal Date : 31-JUL-1996 18:27 Cal File: GS960731B56.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	14 453	14 507	(1 000)	61523	250 0	
* 2 1,4-Difluorobenzene	114 00	16 267	16 307	(1 000)	262814	250 0	
* 3 Chlorobenzene-d5	117 00	20 600	20 627	(1 000)	227251	250 0	
$ 4 1,2-Dichloroethane-d4	65.00	15 480	15 533	(1 071)	63795	282 4	56 48
$ 5 Toluene-d8	98 00	18 720	18 747	(0 909)	250905	246 9	49 38
$ 6 Bromofluorobenzene	95 00	21 960	21 987	(1 066)	157624	252 8	50 57
7 Chloromethane	50.00		5 920	Compound Not Detected.			
8 Vinyl Chloride	62.00		6 480	Compound Not Detected			
9 Bromomethane	94 00		7 760	Compound Not Detected			
10 Chloroethane	64.00		8.133	Compound Not Detected.			
11 1,1-Dichloroethene	96.00		10 387	Compound Not Detected			
12 Carbon Disulfide	76 00		10 800	Compound Not Detected.			
13 Acetone	43.00	10 533	10 600	(0.729)	18736	123 4	24 68
14 Methylene Chloride	84.00	11 480	11 547	(0 794)	64012	111 1	22 22
15 trans-1,2-Dichloroethene	96.00		12.133	Compound Not Detected.			
16 1,1-Dichloroethane	63.00		12 973	Compound Not Detected			
17 cis-1,2-Dichloroethene	96.00		14.067	Compound Not Detected.			
18 2-Butanone	43.00		14.120	Compound Not Detected.			
19 Chloroform	83.00		14.653	Compound Not Detected.			
20 1,1,1-Trichloroethane	97.00		15.000	Compound Not Detected.			
21 Carbon Tetrachloride	117.00		15.293	Compound Not Detected			
22 Benzene	78.00		15 653	Compound Not Detected			

Data File: /chem/f50056.i/BF960731B56.b/GH017050B56.d
Report Date: 01-Aug-1996 12:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62.00		15.667		Compound Not Detected.		
	24 Trichloroethene	130.00		16.787		Compound Not Detected.		
	25 1,2-Dichloropropane	63.00		17.173		Compound Not Detected		
	26 Bromodichloromethane	83.00		17.640		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75.00		18.333		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43.00		18 547		Compound Not Detected		
	29 Toluene	91 00		18 853		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		19 120		Compound Not Detected		
	31 1,1,2-Trichloroethane	97.00		19 373		Compound Not Detected		
	32 Tetrachloroethene	164 00		19 613		Compound Not Detected		
	33 Dibromochloromethane	129 00		19 907		Compound Not Detected		
	34 2-Hexanone	43 00		19 693		Compound Not Detected		
	35 Chlorobenzene	112 00		20 667		Compound Not Detected		
	36 Ethylbenzene	106 00		20 773		Compound Not Detected		
	37 m,p-Xylene	106 00		20 907		Compound Not Detected		
	38 o-Xylene	106 00		21 373		Compound Not Detected		
	39 Styrene	104 00		21 373		Compound Not Detected		
	40 Bromoform	173 00		21 613		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		22 120		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		21 373		Compound Not Detected		

Data File: /chem/f50056.i/BF960731B56.b/GH017050B56.d

Date : 31-JUL-1996 19:15

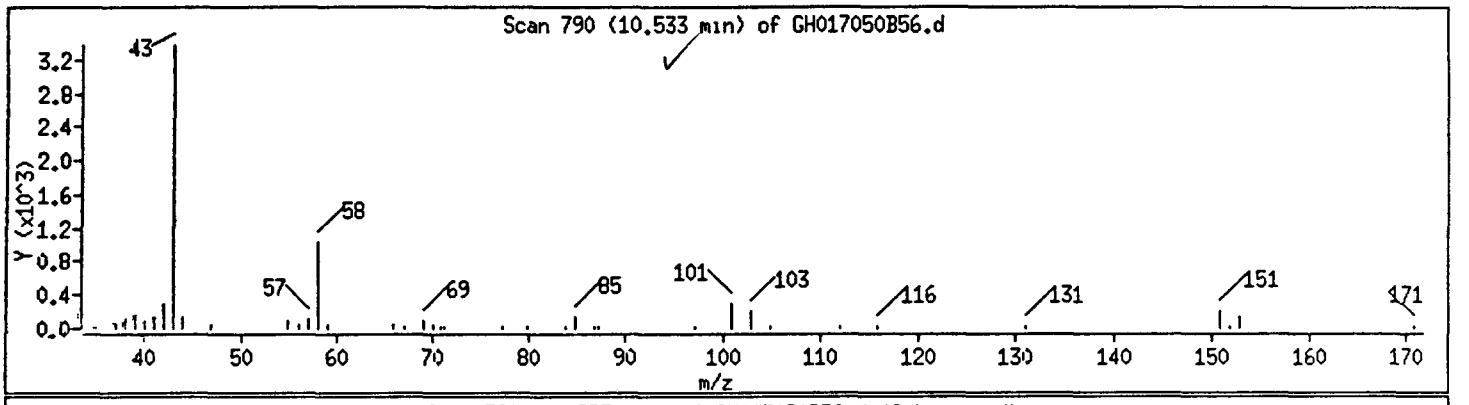
Client ID: VBLKK1 Instrument: f50056.i

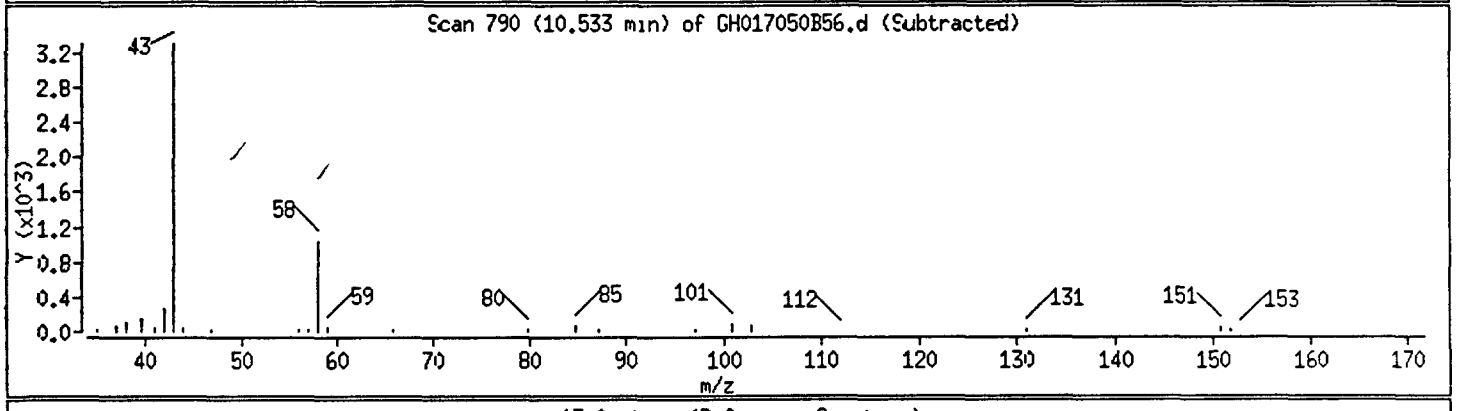
Sample Info:

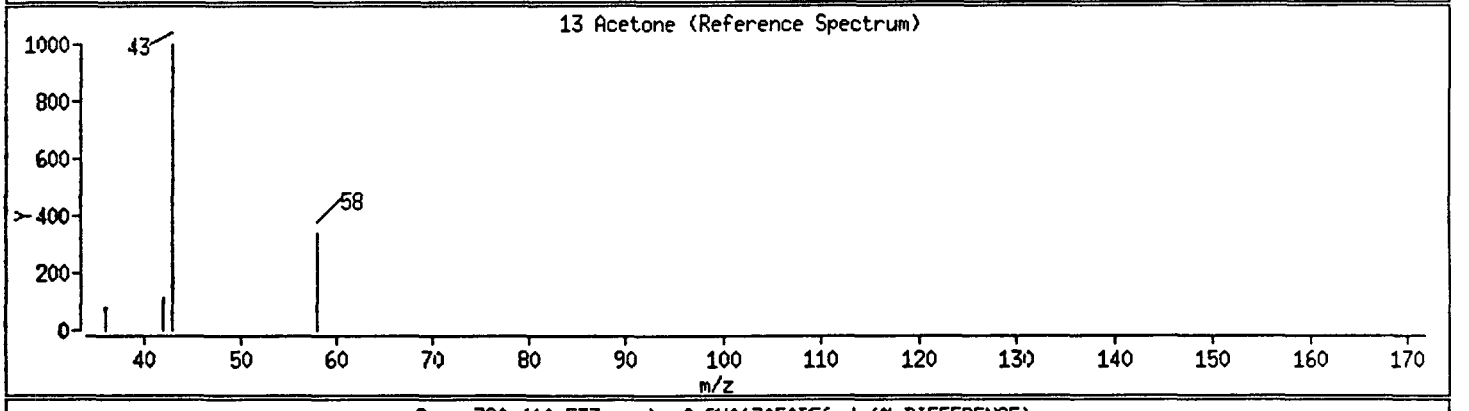
Operator: 2230

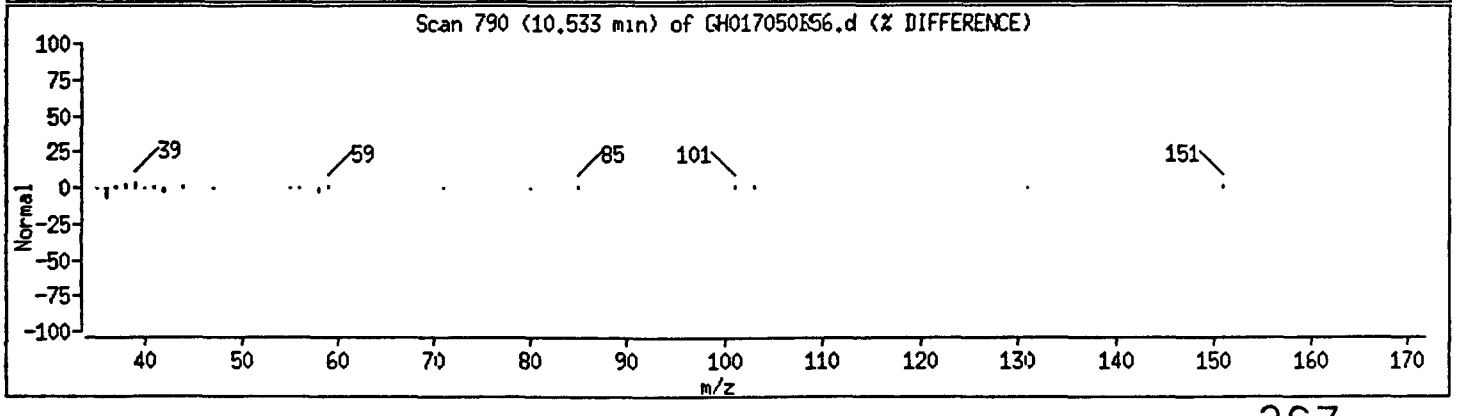
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50056.i/BF960731B56.b/GH017050B56.d

Date : 31-JUL-1996 19:15

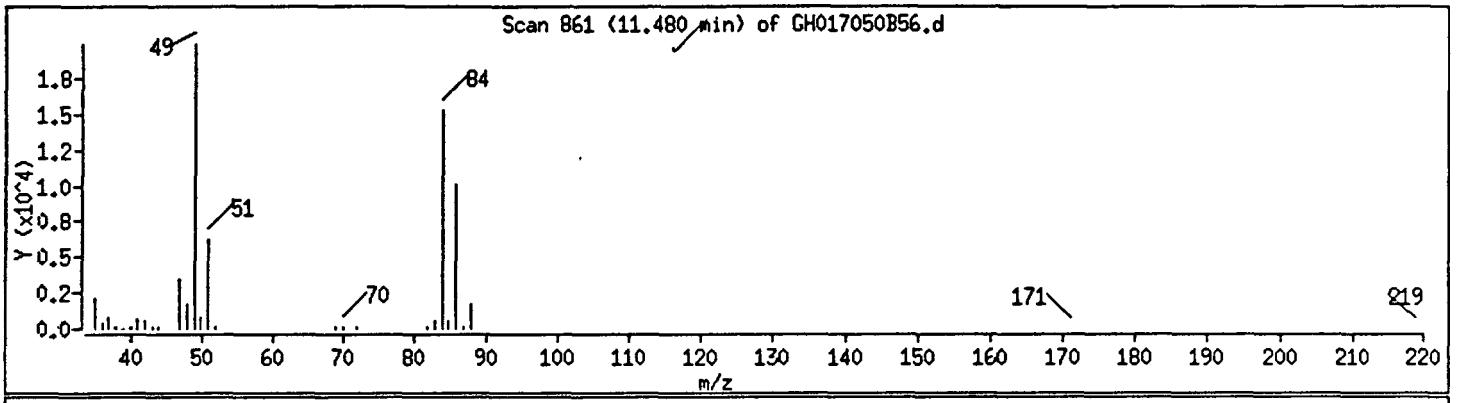
Client ID: VBLKK1 Instrument: f50056.i

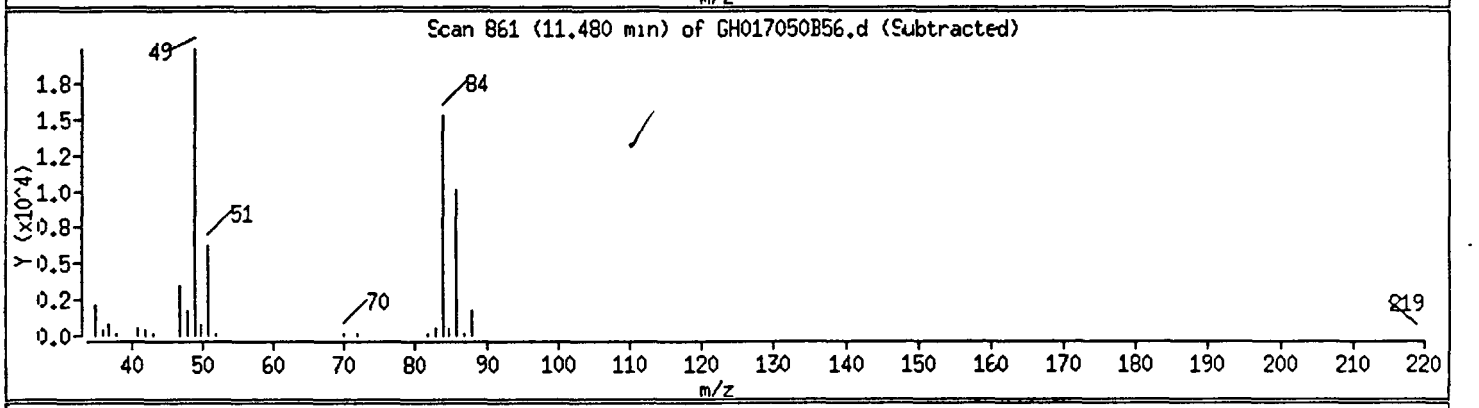
Sample Info:

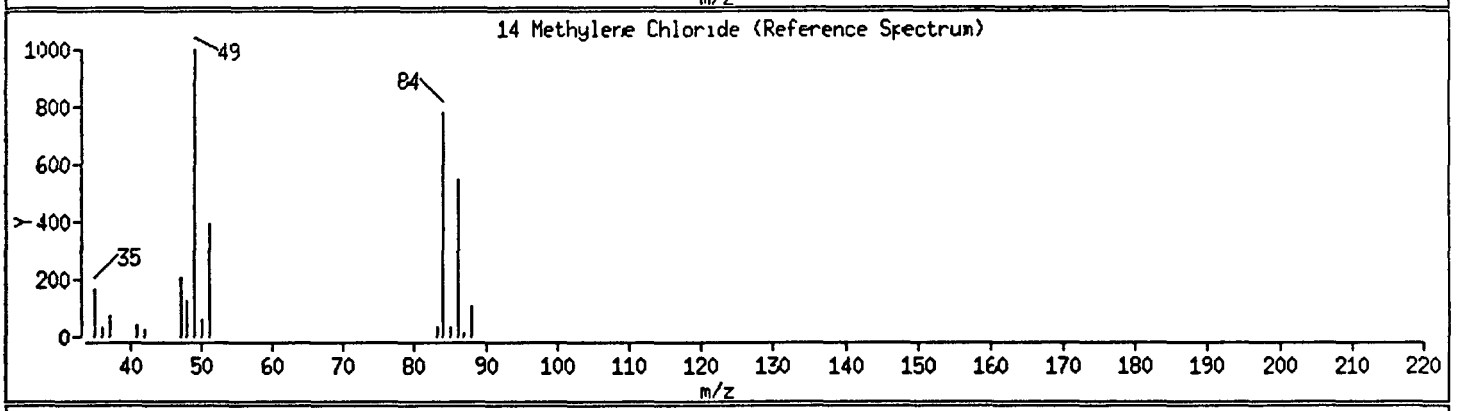
Operator: 2230

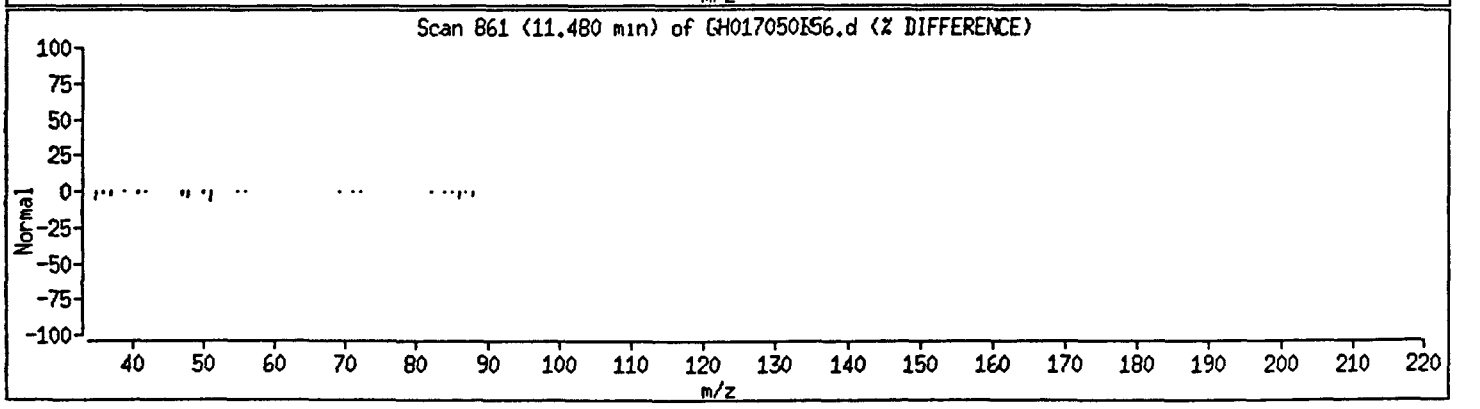
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









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2230 [illegible]

OK

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JRM 8 1 96

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/31/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
815096R2	24877	YW736			5.0g	YW753	5.0g back-up
815000R2	24893	FFE82	SS	814998	5.0g	FFE82MSD	
815012R2	↓	↓			5.0g	FFE89	
815462R3	24877	YW757			5.0g	YW759	
815105R2	↓	↓			5.0g	YW758	
816482R	24869	BRL05			5.0g	BRL22	
816483R	↓	↓			5.0g	BRL25	
815206R	32474	00104			5.0g	DSB124B0	
815166R	↓	↓	SS	815690	5.0g	DTP01B7MS	
815167R	↓	↓	SS	815690	5.0g	DTP01B7MSD	
814036R3	32474	00017	SS	815680	5.0g	DTP006B7MSD	
814035R3	↓	↓	SS	815680	5.0g	DTP006B7MS	
817050			B1		5.0g	VBLKK1	
817051			B2		5.0g	VBLKK2	
817052			B3		5.0g	VBLKK3	
817053			B4		5.0g	VBLKK4	
817054			B5		5.0g	VBLKK5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1357, 757

RELINQUISHED BY [illegible] DATE 7/31/96 RECEIVED BY Temp Storage DATE 7/31/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 817754

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH017754C56

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	✓ 18	
67-64-1	Acetone	✓ 24	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 817754

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH017754C56

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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Data File: /chem/f50056.1/BF960803C56.b/GH017754C56.d
Date : 03-AUG-1996 01:27
Client ID: VBLKS1
Sample Info:

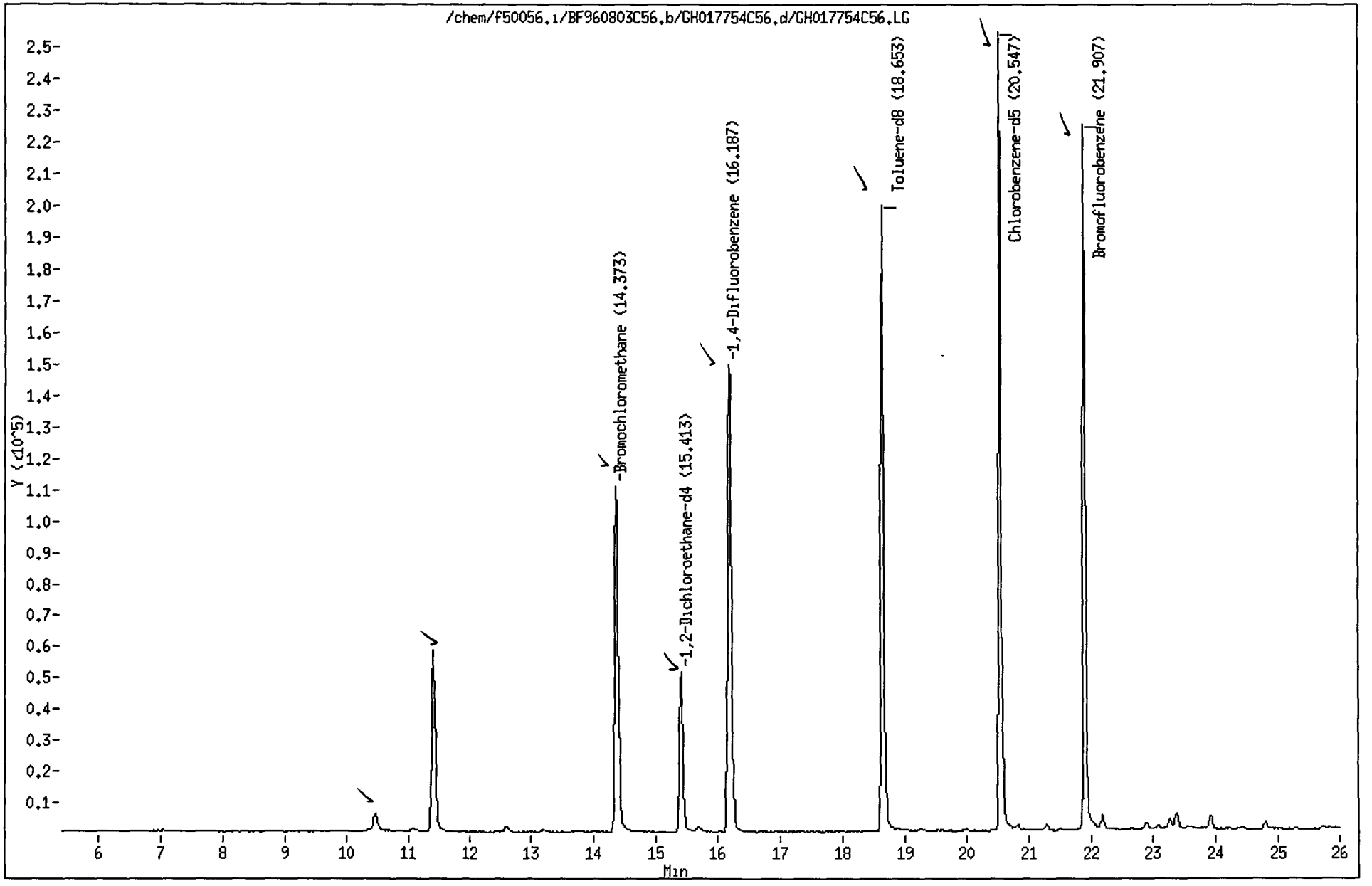
Column phase: DB624

Instrument: f50056.1

Operator: 2227
Column diameter: 0.53

ORIGINAL

373



Data File: /chem/f50056.i/BF960803C56.b/GH017754C56.d
Report Date: 06-Aug-1996 15:34

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960803C56.b/GH017754C56.d
Lab Smp Id: 817754 Client Smp ID: VBLKS1
Inj Date : 03-AUG-1996 01:27
Operator : 2227 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960803C56.b/SOLM03.1.m
Meth Date : 06-Aug-1996 15:12 riedl Quant Type: ISTD
Cal Date : 03-AUG-1996 00:36 Cal File: GS960803C56.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	14.373	14 560	(1 000)	68040	250 0	
* 2 1,4-Difluorobenzene	114 00	16 187	16 373	(1 000)	277204	250 0	
* 3 Chlorobenzene-d5	117 00	20 547	20 680	(1 000)	241904	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 413	15 600	(1 072)	58369	270 9	54 17
$ 5 Toluene-d8	98 00	18 653	18 800	(0 908)	244900	242 4	48 48
$ 6 Bromofluorobenzene	95 00	21 907	22 027	(1 066)	152859	243.5	48 70
7 Chloromethane	50 00		5 987	Compound Not Detected			
8 Vinyl Chloride	62 00		6 547	Compound Not Detected			
9 Bromomethane	94 00		7 840	Compound Not Detected			
10 Chloroethane	64 00		8 160	Compound Not Detected			
11 1,1-Dichloroethene	96 00		10 440	Compound Not Detected			
12 Carbon Disulfide	76 00		10 853	Compound Not Detected			
13 Acetone	43 00	10 467	10 653	(0 728)	21238	120 0	24 01
14 Methylene Chloride	84 00	11 413	11 600	(0 794)	60319	89 51	17 90
15 trans-1,2-Dichloroethene	96 00		12 200	Compound Not Detected			
16 1,1-Dichloroethane	63 00		13 040	Compound Not Detected			
17 cis-1,2-Dichloroethene	96.00		14 133	Compound Not Detected			
18 2-Butanone	43 00		14 173	Compound Not Detected			
19 Chloroform	83 00		14 720	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		15 053	Compound Not Detected.			
21 Carbon Tetrachloride	117 00		15 360	Compound Not Detected			
22 Benzene	78 00		15 720	Compound Not Detected			

Data File: /chem/f50056.i/BF960803C56.b/GH017754C56.d
Report Date: 06-Aug-1996 15:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
23 1,2-Dichloroethane	62 00		15 733		Compound Not Detected		
24 Trichloroethene	130 00		16 853		Compound Not Detected		
25 1,2-Dichloropropane	63 00		17 240		Compound Not Detected		
26 Bromodichloromethane	83 00		17 693		Compound Not Detected.		
27 cis-1,3-Dichloropropene	75.00		18 387		Compound Not Detected		
28 4-Methyl-2-Pentanone	43 00		18 600		Compound Not Detected		
29 Toluene	91.00		18 907		Compound Not Detected		
30 trans-1,3-Dichloropropene	75 00		19 173		Compound Not Detected		
31 1,1,2-Trichloroethane	97 00		19 427		Compound Not Detected		
32 Tetrachloroethene	164 00		19 653		Compound Not Detected		
33 Dibromochloromethane	129 00		19 960		Compound Not Detected.		
34 2-Hexanone	43 00		19 733		Compound Not Detected		
35 Chlorobenzene	112.00		20 707		Compound Not Detected		
36 Ethylbenzene	106 00		20 827		Compound Not Detected		
37 m,p-Xylene	106 00		20 947		Compound Not Detected.		
38 o-Xylene	106 00		21 413		Compound Not Detected		
39 Styrene	104.00		21 427		Compound Not Detected.		
40 Bromoform	173 00		21 667		Compound Not Detected		
41 1,1,2,2-Tetrachloroethane	83 00		22 160		Compound Not Detected		
M 42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M 43 Xylene (Total)	106 00		21 413		Compound Not Detected.		

Data File: /chem/f50056.i/BF960803C56.b/GH017754C56.d

Date : 03-AUG-1996 01:27

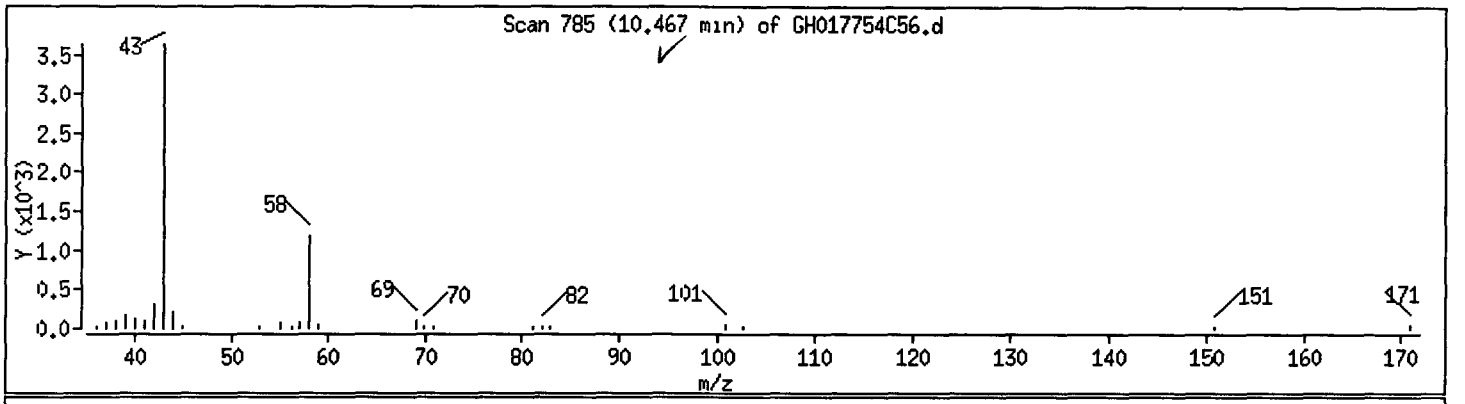
Client ID: VBLKS1 Instrument: f50056.i

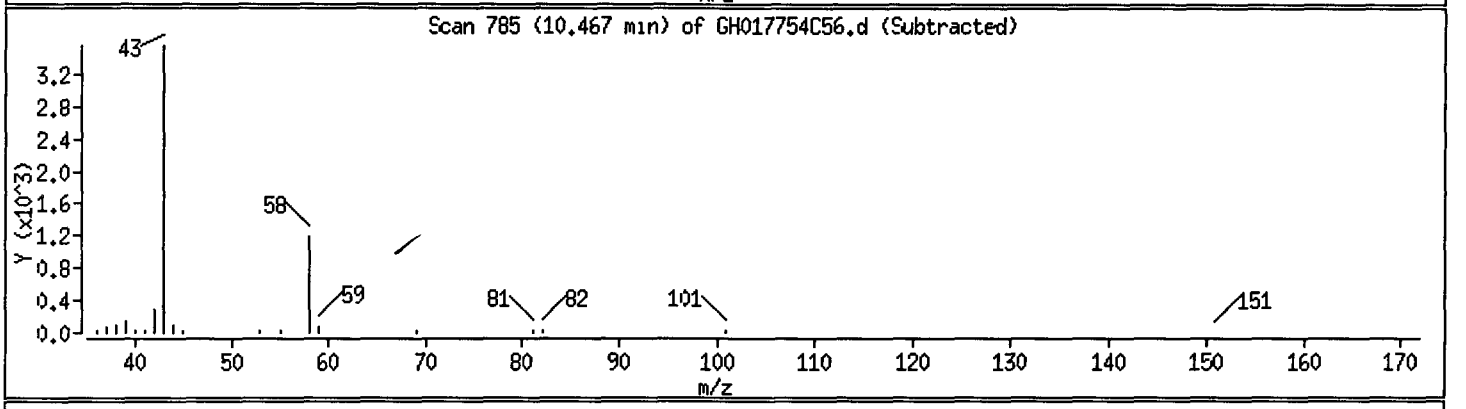
Sample Info:

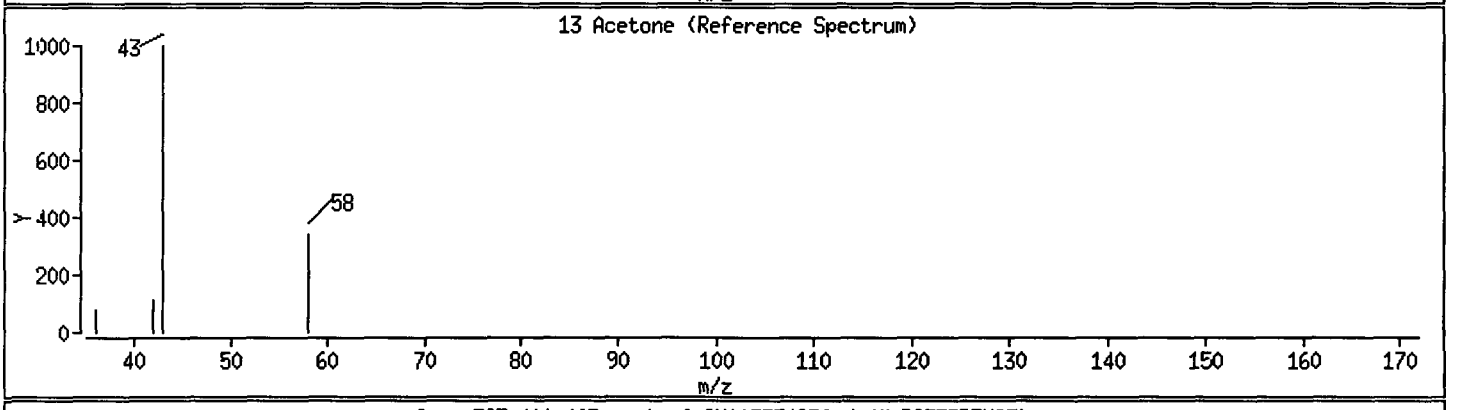
Operator: 2227

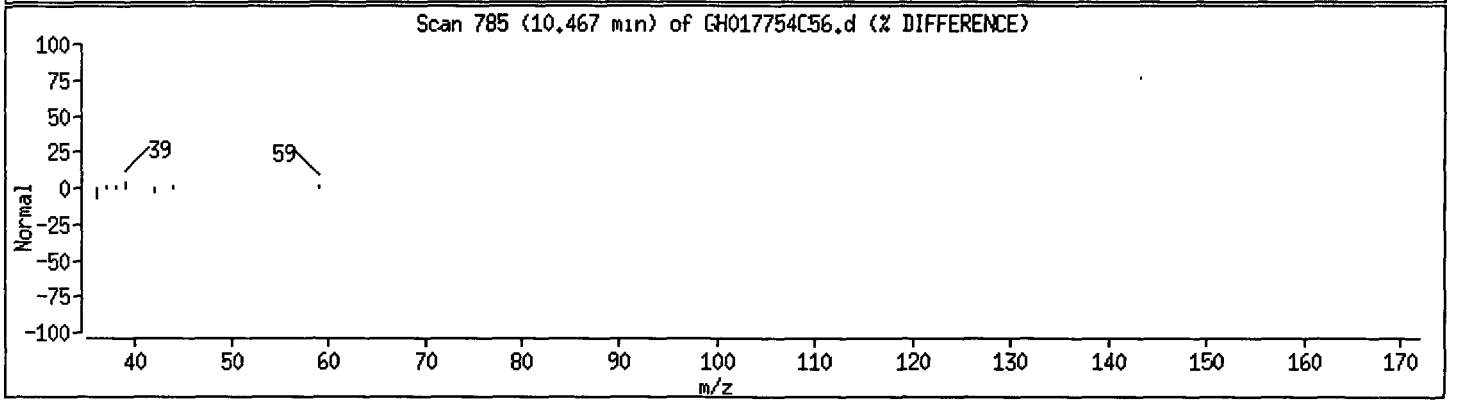
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50056.1/BF960803C56.b/GH017754C56.d

Date : 03-AUG-1996 01:27

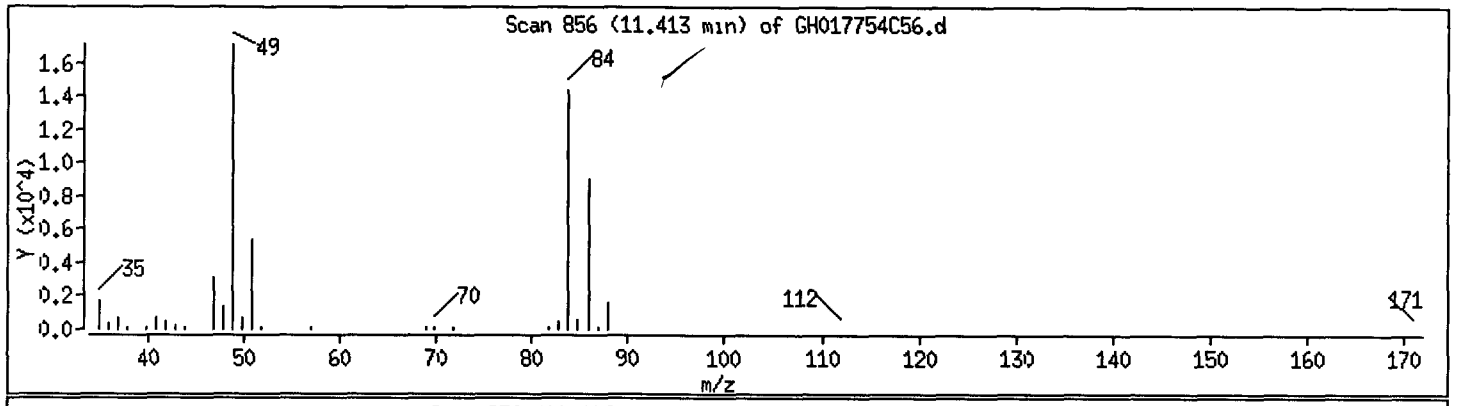
Client ID: VBLKS1 Instrument: f50056.1

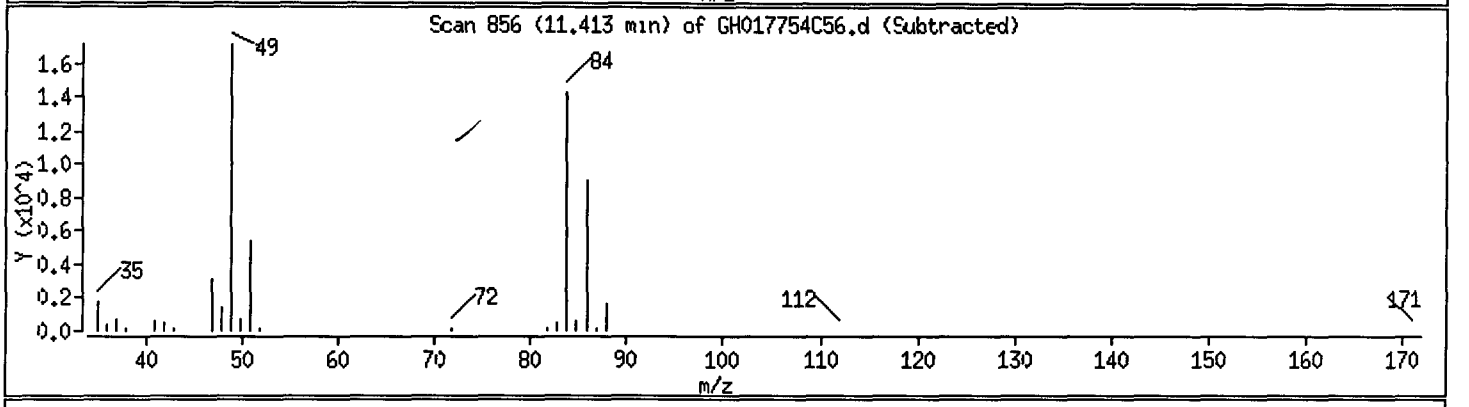
Sample Info:

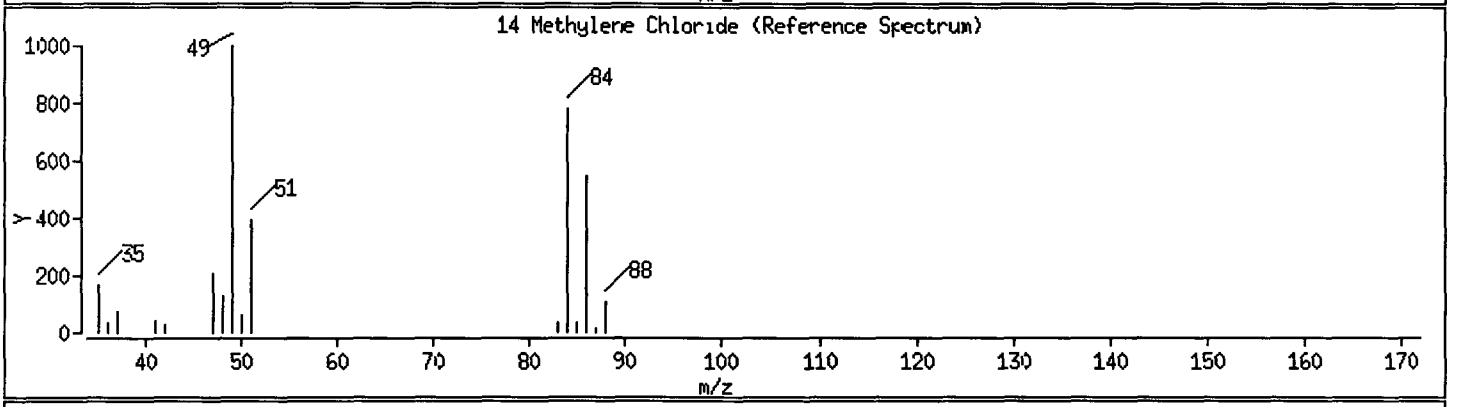
Operator: 2227

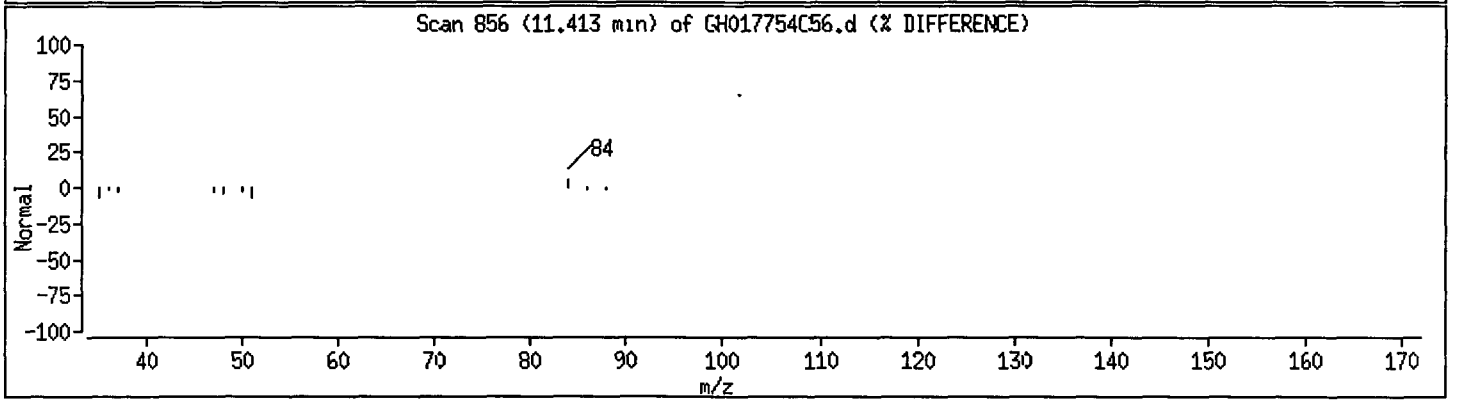
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









INSTRUCTIONS:

PPS#: _____

RECEIPT DATE: 08/02/96 CASE#: SAS# DUE DATE: 07/30/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 817754

J1[ ] J3[ ] D1[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03 1

Sample date: Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 80C
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: VBLKS1 Dry Weight Factor _____

GC/MS ANALYSIS
Amount Purged: [✓] 10mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF960803C56 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2227 Work-up S Simpson

GC/MS REVIEW

CONDITION CODE OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 0

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required _____

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review MM Date 8/6/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

1536 / 1588

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 8/2/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
815012	24693	FFE82			5.0g	FFE89	Bottle 1 of 3
815012	24693	FFE82			5.0g	FFE89	2 of 3
816486	24869	BRL05			5.0g	BRL29	5.0g BU
816868	24474	250			5.0g	CTP003B12	5.0g DU
816858					5.0g	BTP001B5 RCA 8/2/96	
816884					5.0g	CTP005B10	
816016			SS	816858	5.0g	BTP001B5MS	
816017			SS	816858	5.0g	BTP001B5MSD	
817754			B1		5.0g	VBIK S1	
817755			B2		5.0g	VBIK S2	
817756			B3		5.0g	VBIK S3	
817757			B4		5.0g	VBIK S4	
817758			B5		5.0g	VBIK S5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 75?

RELINQUISHED BY [signature] DATE 8/2/96 RECEIVED BY Temp Storage DATE 8/2/96

1099

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 817755

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH017755A56

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	✓17	
67-64-1	Acetone	✓45	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 817755

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH017755A56

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
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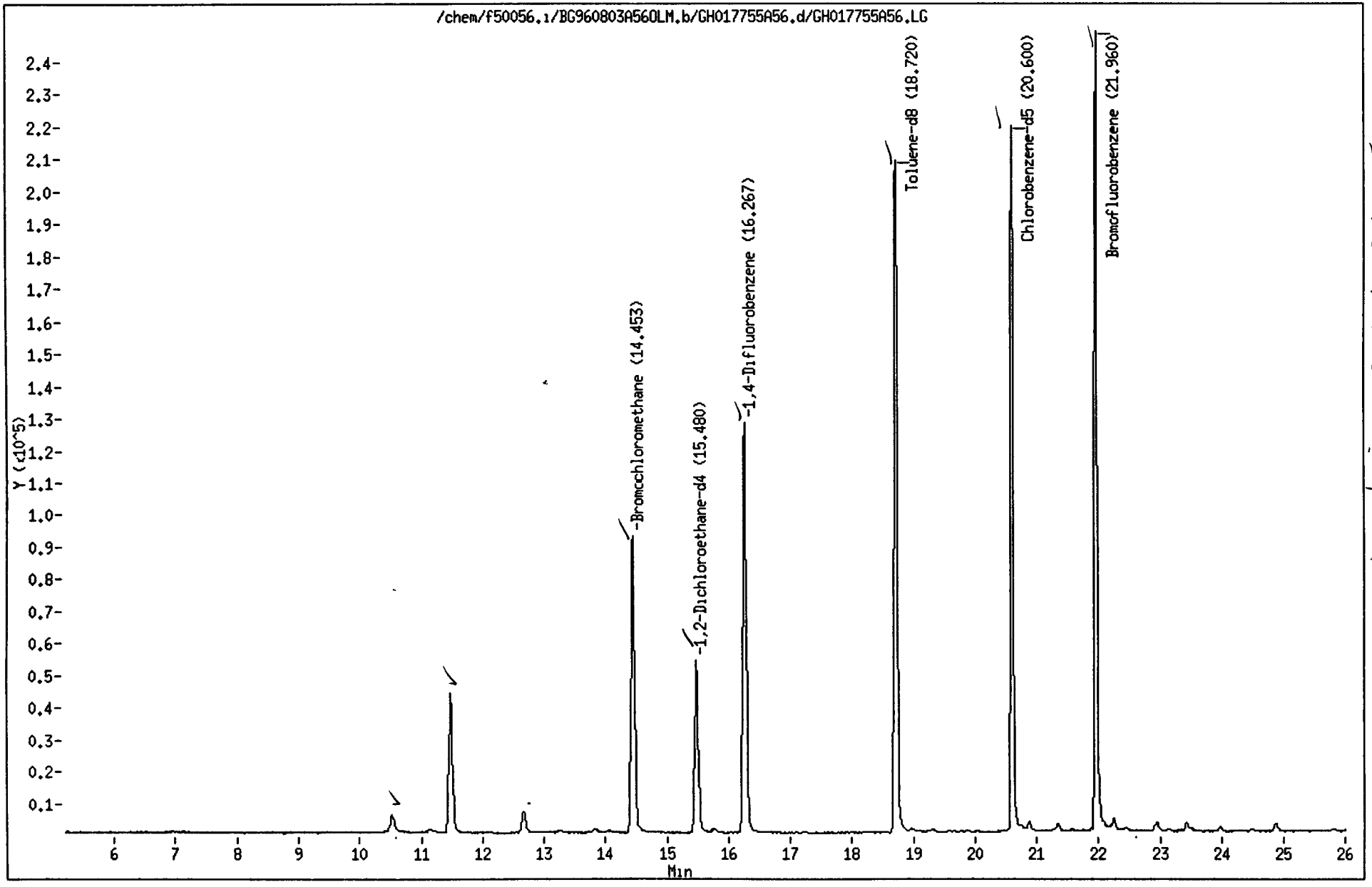
26.				
27.				
28.				
29.				
30.				

Data File: /chem/f50056.1/BG960803A560LM.b/GH017755A56.d
Date : 03-AUG-1996 11:58
Client ID: VBLKS2
Sample Info:

Instrument: f50056.1

Operator: 2141
Column diameter: 0.53

Column phase: DB624



382

COPY original in 2 4869-BRLOS 8/6/96

Data File: /chem/f50056.i/BG960803A56OLM.b/GH017755A56.d
Report Date: 06-Aug-1996 10:18

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BG960803A56OLM.b/GH017755A56.d
Lab Smp Id: 817755 Client Smp ID: VBLKS2
Inj Date : 03-AUG-1996 11:58
Operator : 2141 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BG960803A56OLM.b/SOLM03.1.m
Meth Date : 06-Aug-1996 10:14 bass Quant Type: ISTD
Cal Date : 03-AUG-1996 11:08 Cal File: GU960803A56.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	14 453	14 507	(1 000)	59406	250 0	
* 2 1,4-Difluorobenzene	114 00	16 267	16 320	(1 000)	238265	250 0	
* 3 Chlorobenzene-d5	117 00	20 600	20 640	(1 000)	211263	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 480	15 533	(1 071)	60924	286 4	57 28
$ 5 Toluene-d8	98 00	18 720	18 760	(0 909)	265315	268 8	53 76
$ 6 Bromofluorobenzene	95 00	21 960	21 987	(1 066)	170644	274 4	54 88
7 Chloromethane	50 00		5 933	Compound Not Detected			
8 Vinyl Chloride	62 00		6 480	Compound Not Detected			
9 Bromomethane	94 00		7 747	Compound Not Detected			
10 Chloroethane	64 00		8 120	Compound Not Detected			
11 1,1-Dichloroethene	96 00		10 373	Compound Not Detected			
12 Carbon Disulfide	76 00		10 800	Compound Not Detected			
13 Acetone	43 00	10 533	10 587	(0.729)	21044	223 4	44 67
14 Methylene Chloride	84 00	11 480	11 547	(0 794)	43121	86 35	17 27
15 trans-1,2-Dichloroethene	96 00		12 133	Compound Not Detected			
16 1,1-Dichloroethane	63 00		12 973	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		14 080	Compound Not Detected			
18 2-Butanone	43 00		14.120	Compound Not Detected			
19 Chloroform	83 00		14 667	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		15 000	Compound Not Detected			
21 Carbon Tetrachloride	117 00		15 307	Compound Not Detected			
22 Benzene	78 00		15 653	Compound Not Detected			

Data File: /chem/f50056.i/BG960803A56OLM.b/GH017755A56.d
Report Date: 06-Aug-1996 10:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		15.667		Compound Not Detected		
	24 Trichloroethene	130 00		16 800		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		17.187		Compound Not Detected		
	26 Bromodichloromethane	83 00		17 640		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		18 347		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		18 547		Compound Not Detected		
	29 Toluene	91 00		18 853		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		19 120		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		19 387		Compound Not Detected		
	32 Tetrachloroethene	164 00		19 613		Compound Not Detected.		
	33 Dibromochloromethane	129 00		19 907		Compound Not Detected		
	34 2-Hexanone	43 00		19 693		Compound Not Detected		
	35 Chlorobenzene	112 00		20 667		Compound Not Detected		
	36 Ethylbenzene	106 00		20 787		Compound Not Detected		
	37 m,p-Xylene	106 00		20 907		Compound Not Detected		
	38 o-Xylene	106 00		21 373		Compound Not Detected		
	39 Styrene	104 00		21 387		Compound Not Detected		
	40 Bromoform	173 00		21 627		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		22 120		Compound Not Detected.		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		21 373		Compound Not Detected		

Data File: /chem/f50056.1/BG960803A560LM.b/GH017755A56.d

Date : 03-AUG-1996 11:58

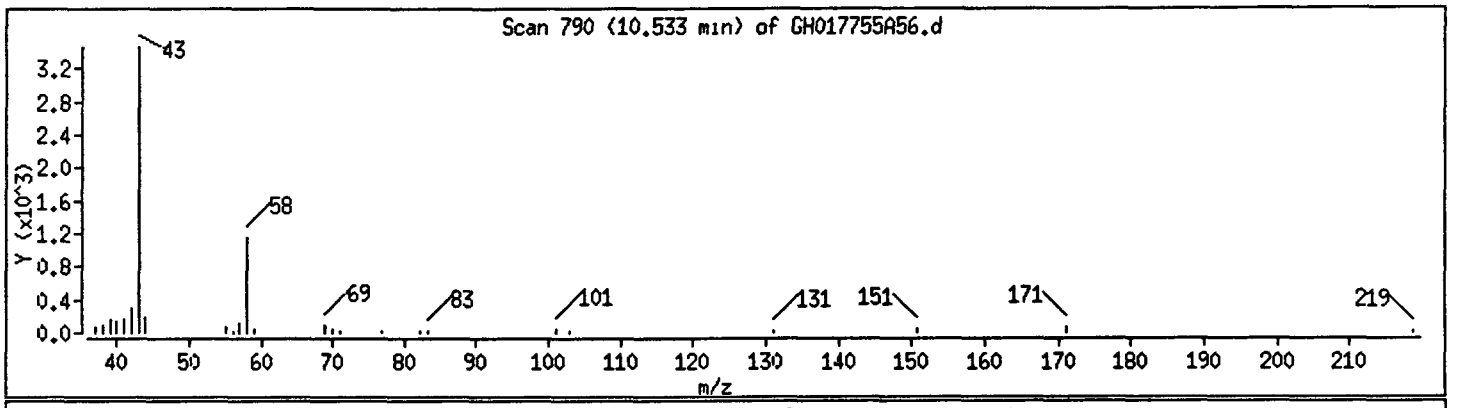
Client ID: VBLKS2 Instrument: f50056.1

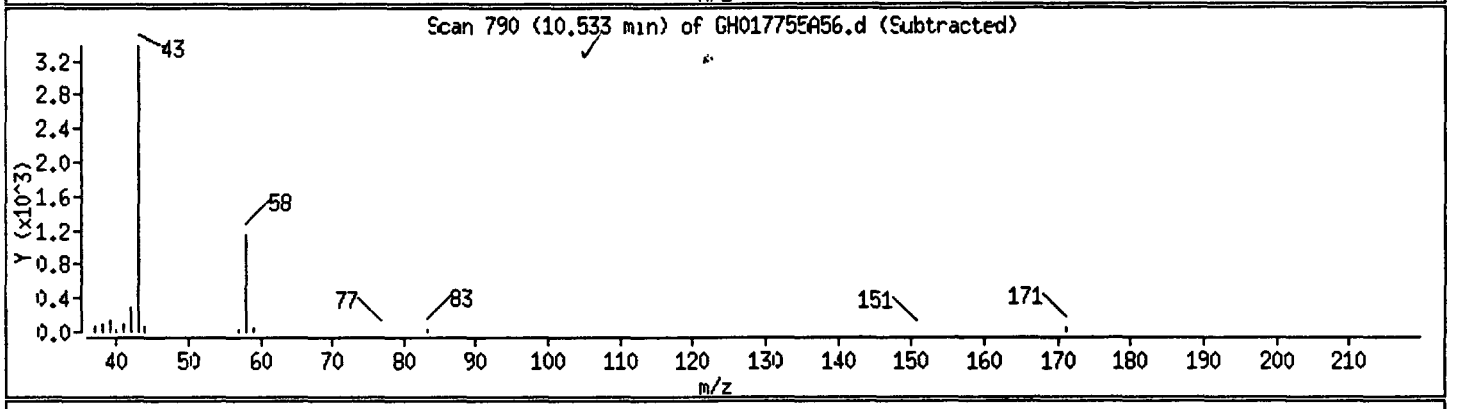
Sample Info:

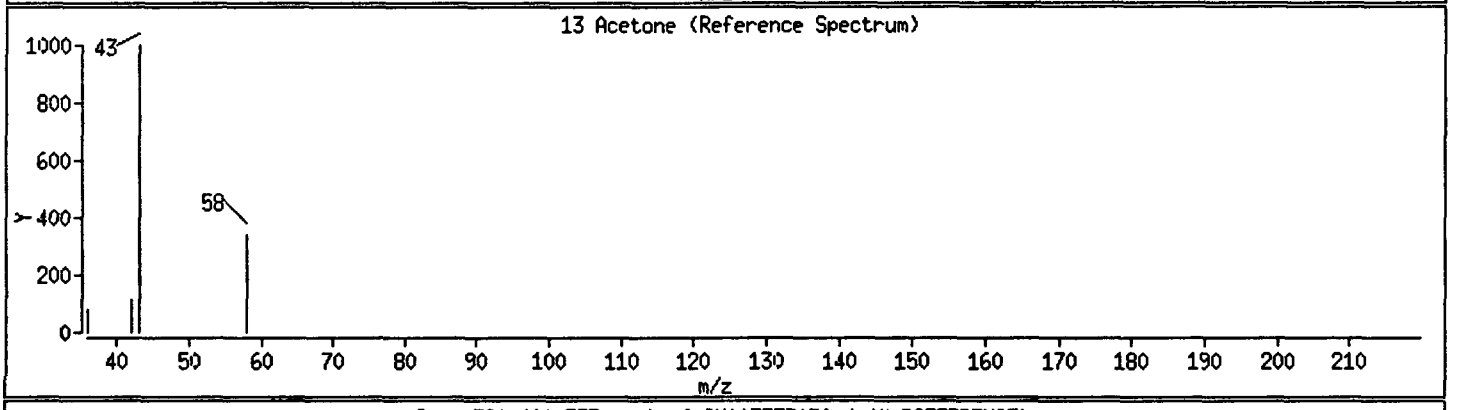
Operator: 2141

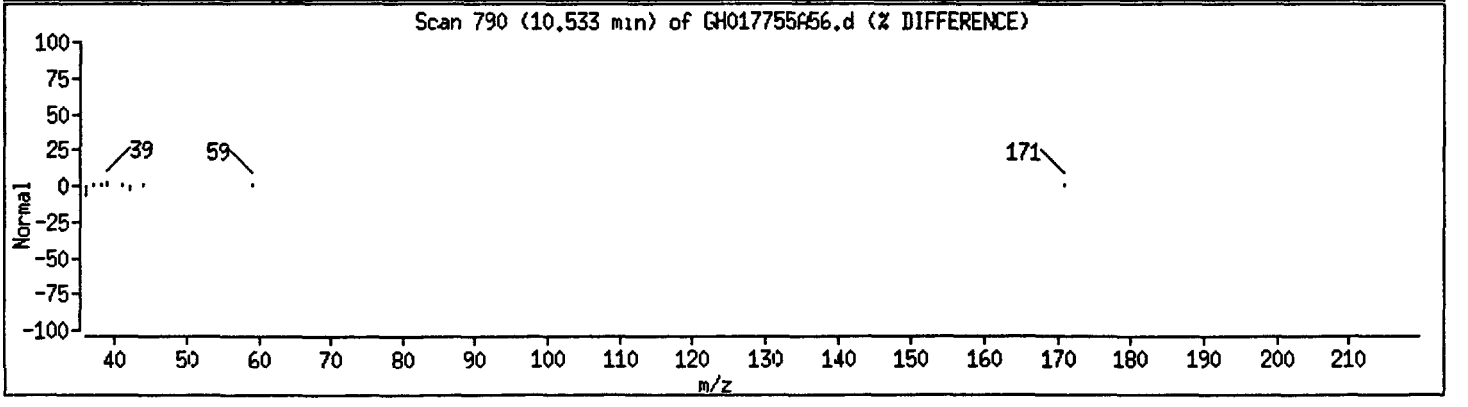
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50056.1/BG960803A560LM.b/GH017755A56.d

Date : 03-AUG-1996 11:58

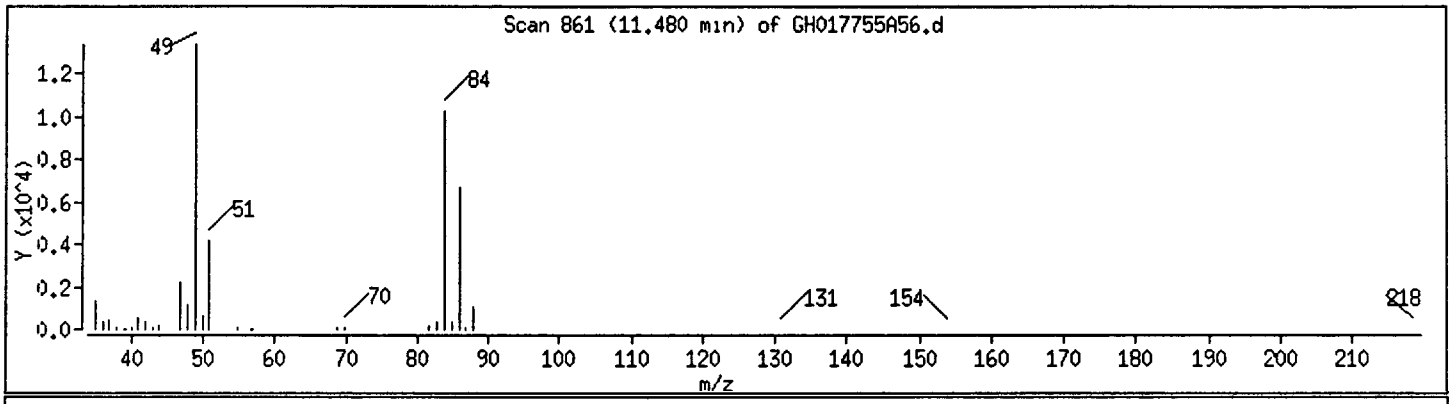
Client ID: VBLKS2 Instrument: f50056.1

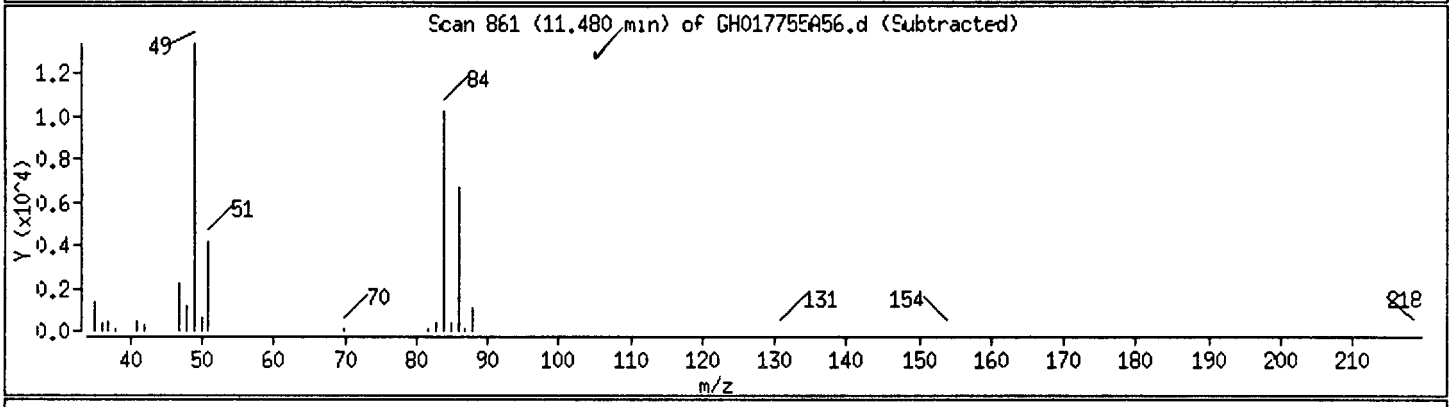
Sample Info:

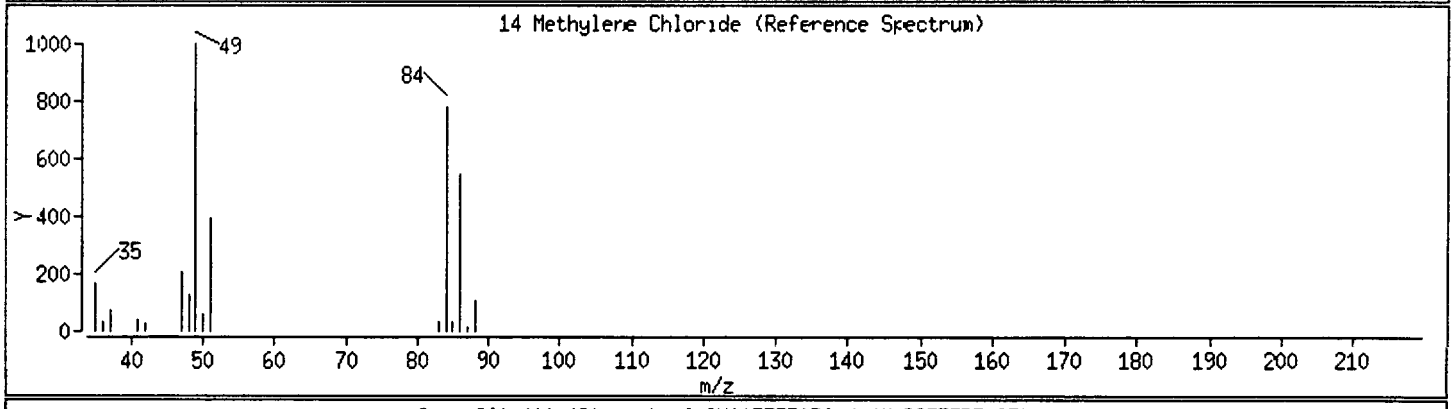
Operator: 2141

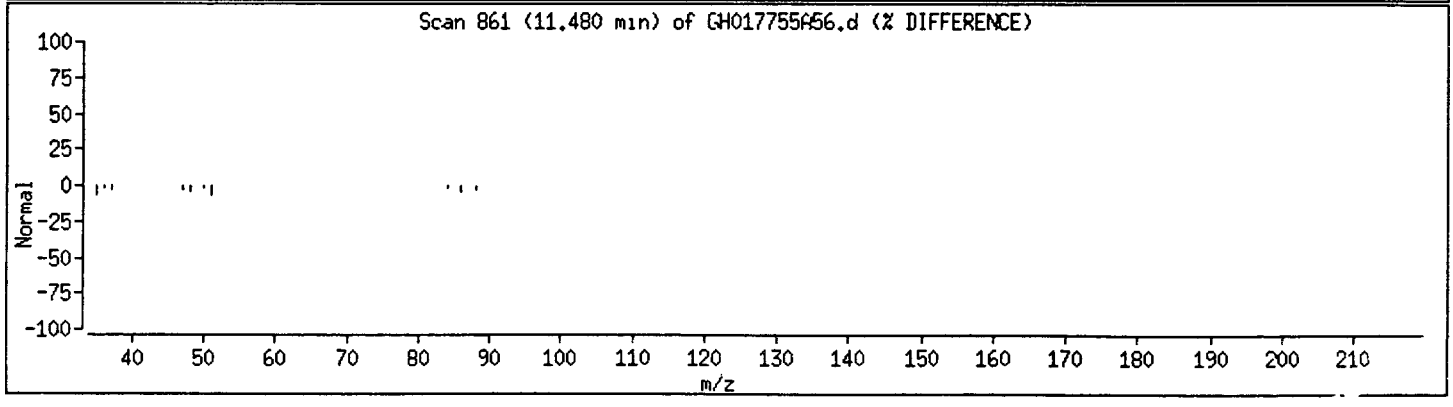
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









LAB INSTRUCTIONS PPS# _____

RECEIPT DATE: 08/02/96 CASE# SAS#: DUE DATE: 07/30/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 817755

J[ ] J3[ ] D[ ] (:1)
J2[ ] J4[ ] D2[ ] (:1)

GC/MS: TCL VOA: LL S/S: SOW OLM03 1

Sample date: Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: VBLKS2 Dry Weight Factor _____

GC/MS ANALYSIS
Amount Purged: [ ] ~~10~~ 5gMB8396 ls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BK900803A56 Disk ( )
Blank Filename GMB8396 Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2141 Workup 2141UR

GC/MS REVIEW

CONDITION CODE OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review SUBass Date 8 / 6 / 96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

A01349

COPY original in 24869-BRL05 SUB 8/6/96 387

1531 / 1588

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 8/2/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
815012	24693	FFE82			5.0g	FFE89	Bottle 1 of 3
815012	24693	FFE82			5.0g	FFE89	2 of 3
816486	24869	BRL05			5.0g	BRL20	5.0g Bu
816868	24874	250			5.0g	CTP003B12	5.0g DU
816858					5.0g	BTP001B5 Rick	
816854					5.0g	CTP005B10	
816016			SS	816858	5.0g	BTP001B5MS	
816017			SS	816858	5.0g	BTP001B5MSD	
817754			B1		5.0g	VBIK S1	
817755			B2		5.0g	VBIK S2	
817756			B3		5.0g	VBIK S3	
817757			B4		5.0g	VBIK S4	
817758			B5		5.0g	VBIK S5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER _____

RELINQUISHED BY [illegible] DATE 8/2/96 RECEIVED BY Temp Storage DATE 8/2/96

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLKV1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815001

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015001B56

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. _____ Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	17	B
67-64-1	Acetone	33	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLKV1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815001

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH015001B56

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. _____ Date Analyzed: 08/03/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
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25.				
26.				
27.				
28.				
29.				
30.				

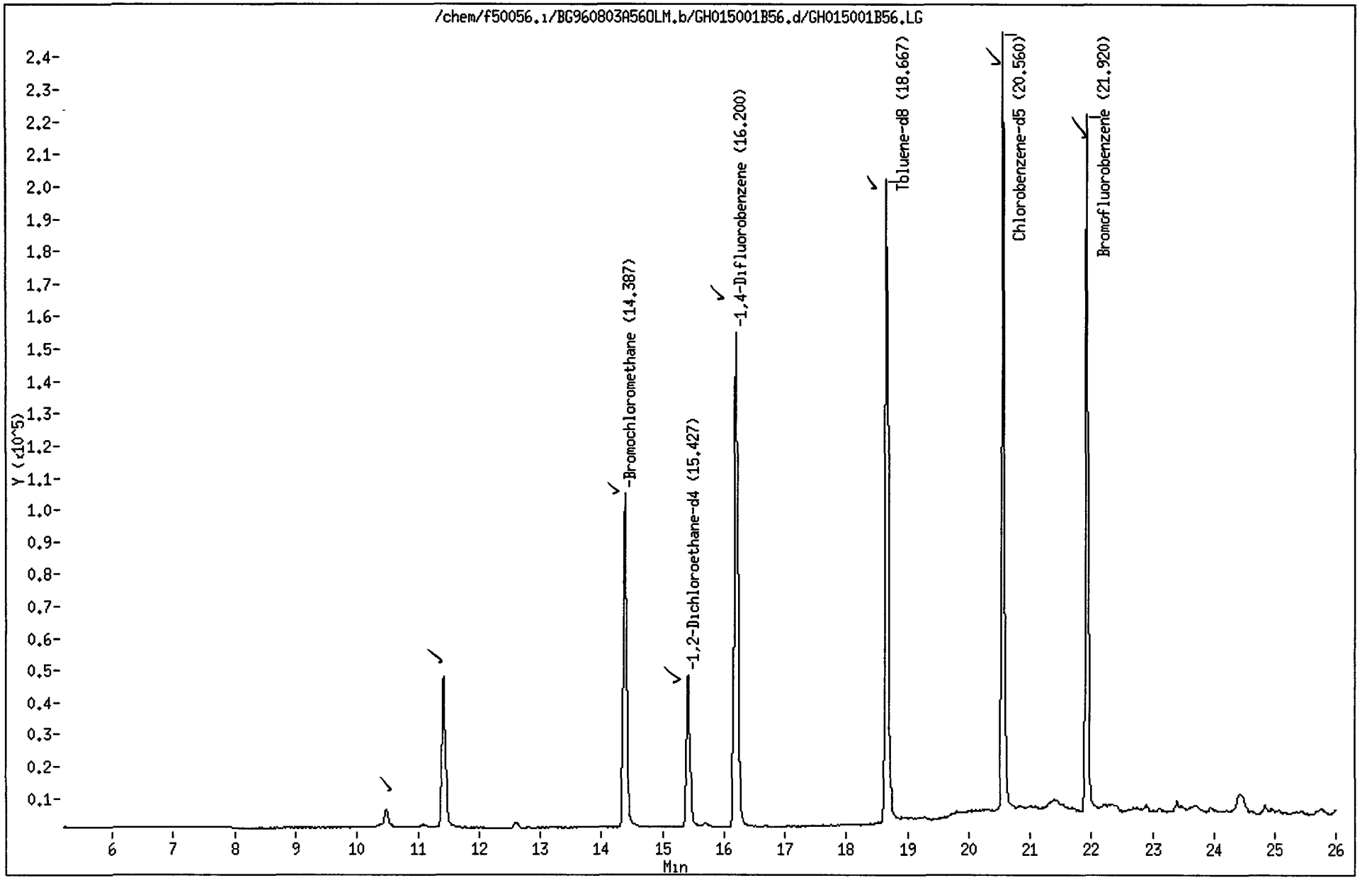
Data File: /chem/f50056.1/BG960803A560LM.b/GH015001B56.d
Date : 03-AUG-1996 17:27
Client ID: VHBLKV1
Sample Info:

Instrument: f50056.1

Operator: 2230

Column phase: DB624

Column diameter: 0.53



Data File: /chem/f50056.i/BG960803A56OLM.b/GH015001B56.d
Report Date: 06-Aug-1996 10:18

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BG960803A56OLM.b/GH015001B56.d
Lab Smp Id: 815001 Client Smp ID: VHBLKV1
Inj Date : 03-AUG-1996 17:27
Operator : 2230 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BG960803A56OLM.b/SOLM03.1.m
Meth Date : 06-Aug-1996 10:14 bass Quant Type: ISTD
Cal Date : 03-AUG-1996 11:08 Cal File: GU960803A56.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	14 387	14 507	(1 000)	66084	250 0	
* 2 1,4-Difluorobenzene	114 00	16 200	16 320	(1 000)	285297	250.0	
* 3 Chlorobenzene-d5	117 00	20 560	20 640	(1 000)	234771	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 427	15 533	(1 072)	54998	232 4	46.48
$ 5 Toluene-d8	98 00	18 667	18.760	(0 908)	249083	227 1	45 42
$ 6 Bromofluorobenzene	95 00	21.920	21.987	(1 066)	149107	215 8	43 16
7 Chloromethane	50 00		5 933	Compound Not Detected.			
8 Vinyl Chloride	62 00		6 480	Compound Not Detected.			
9 Bromomethane	94 00		7 747	Compound Not Detected.			
10 Chloroethane	64 00		8 120	Compound Not Detected			
11 1,1-Dichloroethene	96 00		10 373	Compound Not Detected			
12 Carbon Disulfide	76 00		10.800	Compound Not Detected			
13 Acetone	43 00	10 480	10 587	(0 728)	17408	166 1	33 22
14 Methylene Chloride	84 00	11 413	11 547	(0 793)	47263	85 08	17 02
15 trans-1,2-Dichloroethene	96 00		12 133	Compound Not Detected			
16 1,1-Dichloroethane	63 00		12 973	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		14 080	Compound Not Detected			
18 2-Butanone	43 00		14 120	Compound Not Detected			
19 Chloroform	83 00		14 667	Compound Not Detected.			
20 1,1,1-Trichloroethane	97 00		15 000	Compound Not Detected			
21 Carbon Tetrachloride	117 00		15 307	Compound Not Detected			
22 Benzene	78 00		15 653	Compound Not Detected			

Data File: /chem/f50056.i/BG960803A56OLM.b/GH015001B56.d
Report Date: 06-Aug-1996 10:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	23 1,2-Dichloroethane	62 00		15 667		Compound Not Detected		
	24 Trichloroethene	130 00		16 800		Compound Not Detected		
	25 1,2-Dichloropropane	63 00		17 187		Compound Not Detected		
	26 Bromodichloromethane	83 00		17 640		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		18 347		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		18 547		Compound Not Detected		
	29 Toluene	91 00		18 853		Compound Not Detected		
	30 trans-1,3-Dichloropropene	75 00		19 120		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		19 387		Compound Not Detected		
	32 Tetrachloroethene	164 00		19 613		Compound Not Detected		
	33 Dibromochloromethane	129 00		19 907		Compound Not Detected		
	34 2-Hexanone	43 00		19 693		Compound Not Detected		
	35 Chlorobenzene	112 00		20 667		Compound Not Detected.		
	36 Ethylbenzene	106 00		20 787		Compound Not Detected		
	37 m,p-Xylene	106 00		20 907		Compound Not Detected		
	38 o-Xylene	106 00		21 373		Compound Not Detected		
	39 Styrene	104 00		21 387		Compound Not Detected		
	40 Bromoform	173 00		21 627		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		22 120		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		21 373		Compound Not Detected		

Data File: /chem/f50056.i/BG960803A560LM.b/GH015001B56.d

Date : 03-AUG-1996 17:27

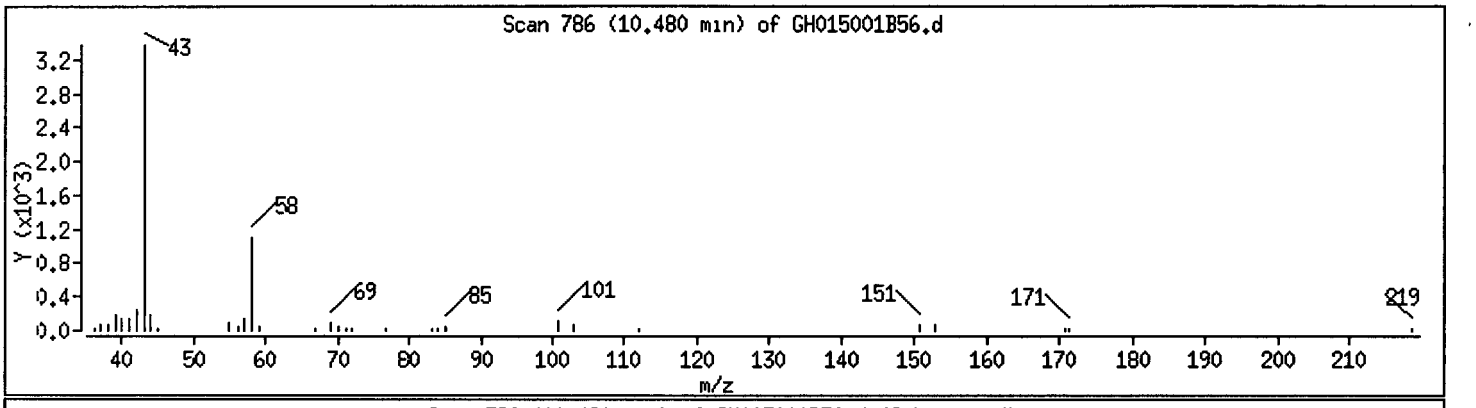
Client ID: VHBLKV1 Instrument: f50056.i

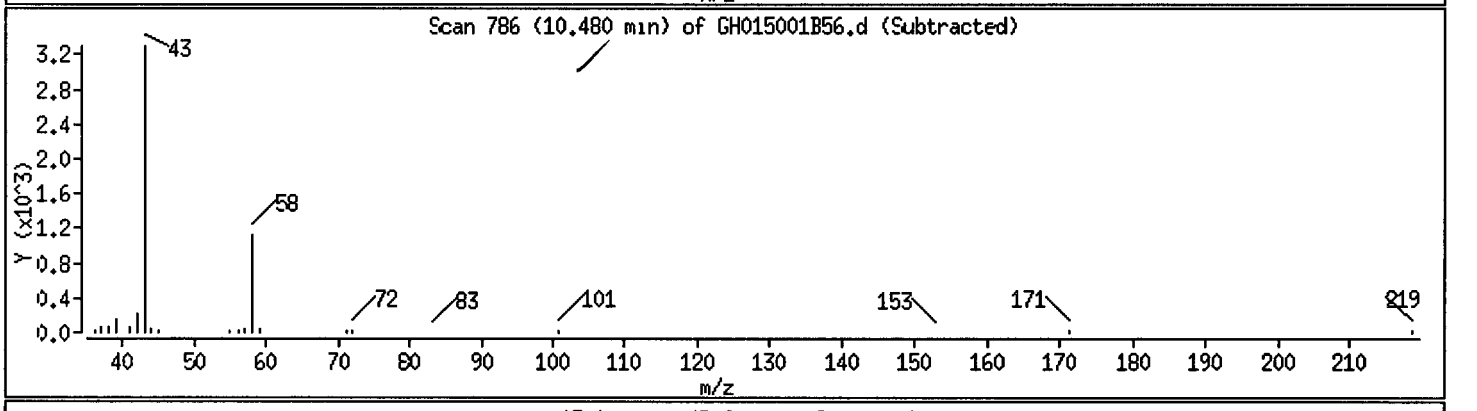
Sample Info:

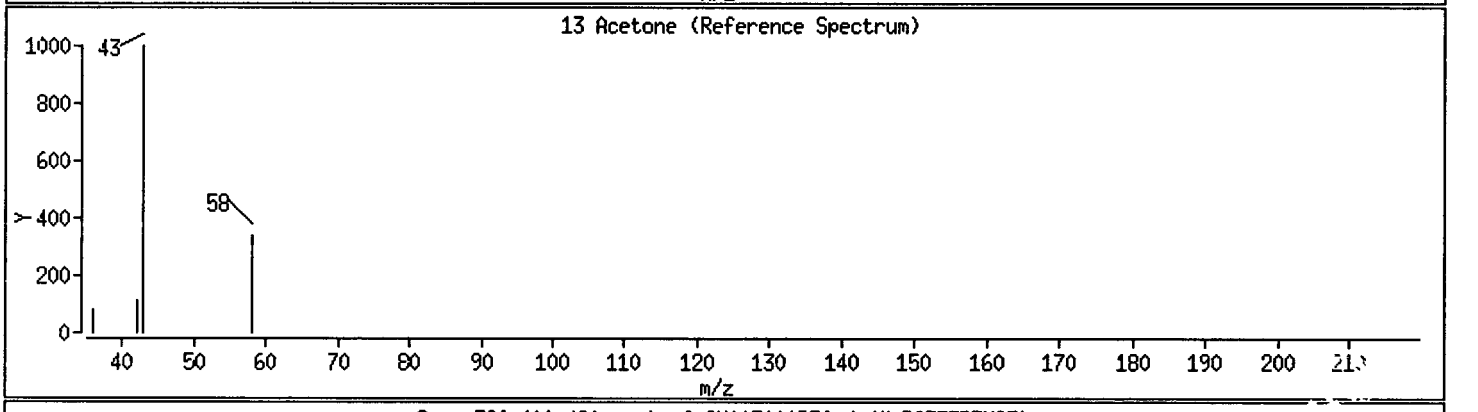
Operator: 2230

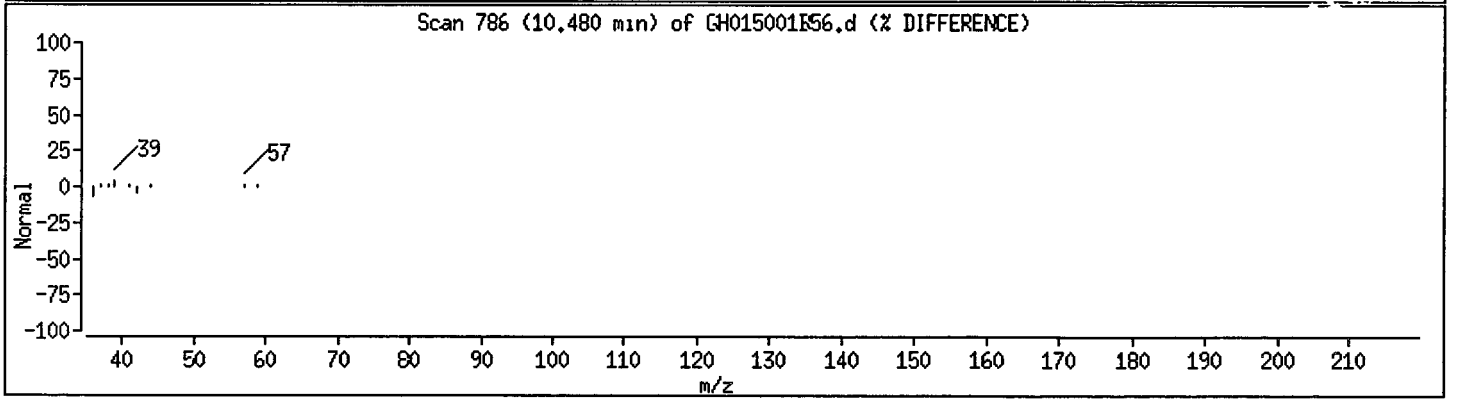
Column phase: DB624 Column diameter: 0.53

13 Acetone









Data File: /chem/f50056.1/BG960803A560LM.b/GH015001B56.d

Date : 03-AUG-1996 17:27

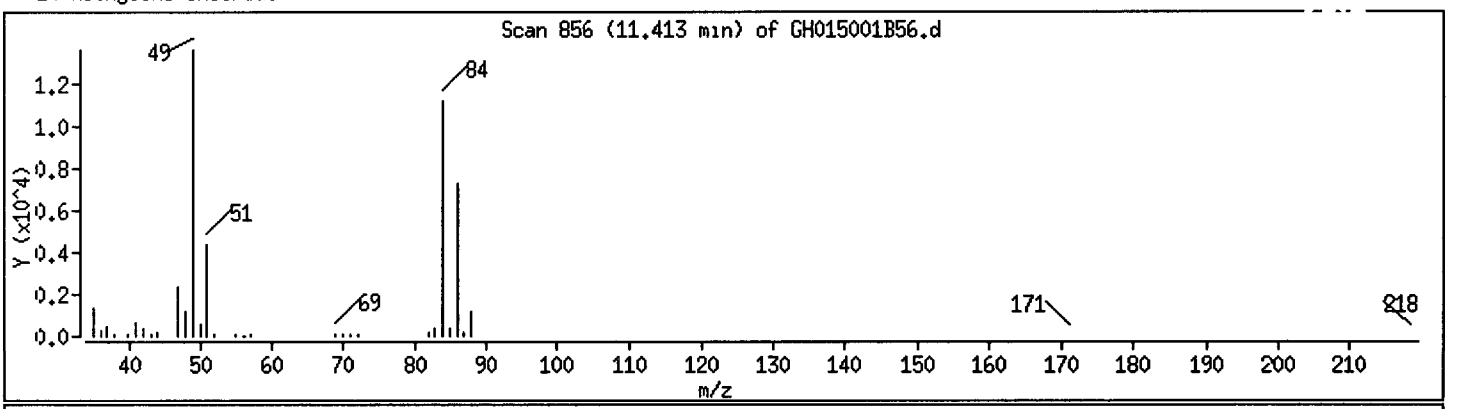
Client ID: VHBLKV1 Instrument: f50056.1

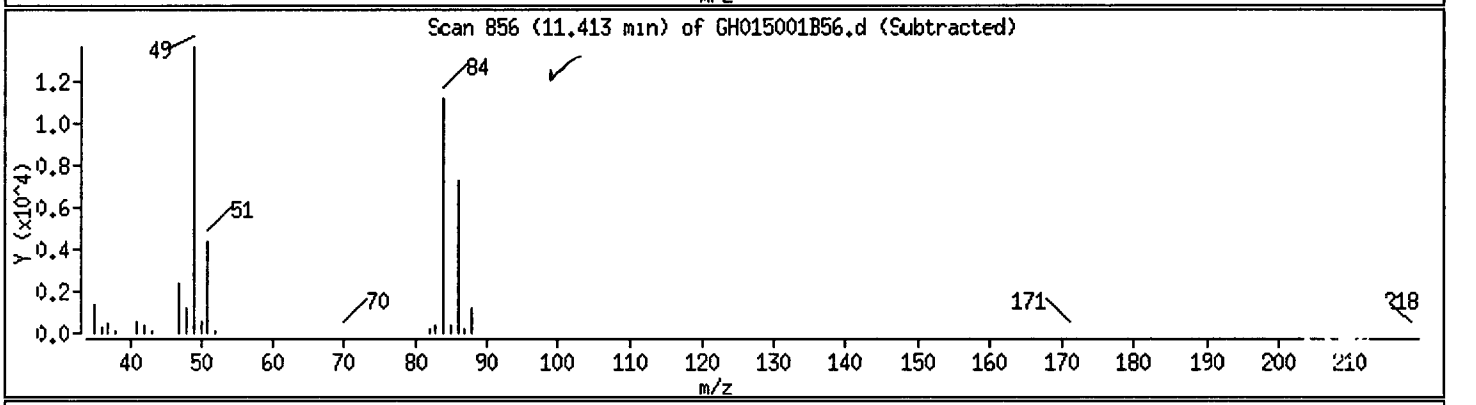
Sample Info:

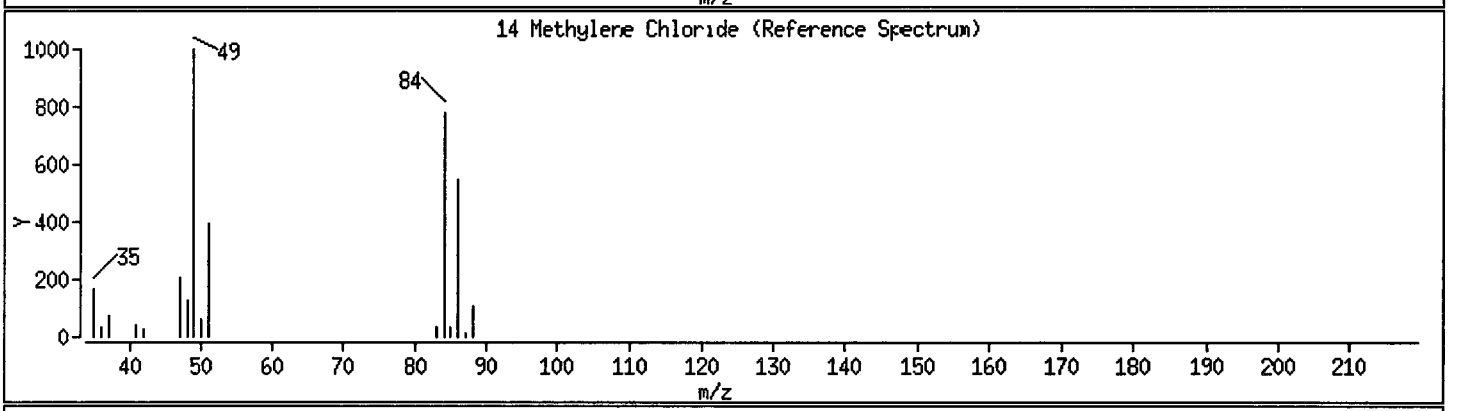
Operator: 2230

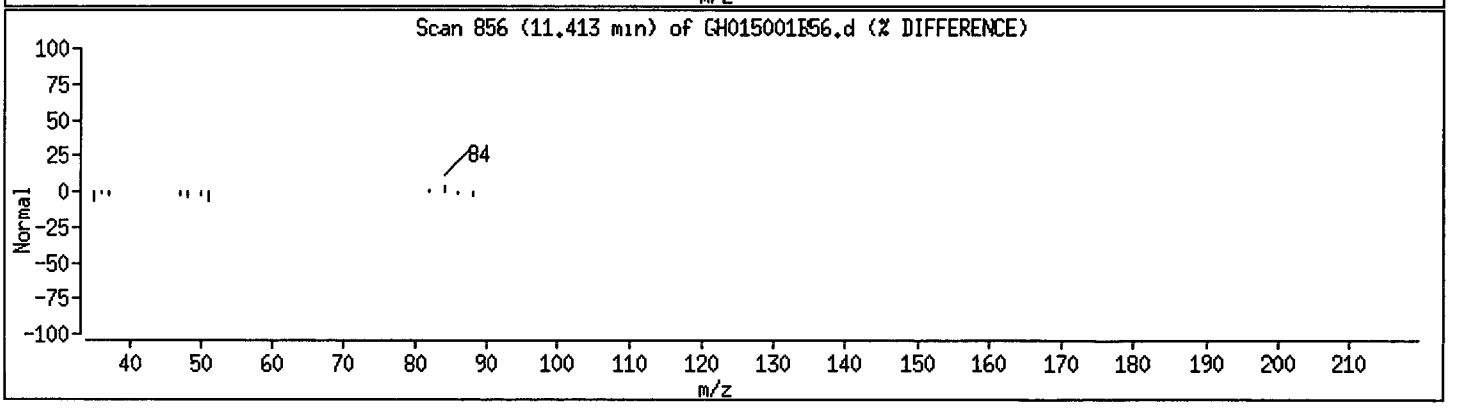
Column phase: DB624 Column diameter: 0.53

14 Methylene Chloride









LAB INSTRUCTIONS: PPS#: _____
USE FOR QC

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 07/28/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 815001
J2[ ] J4[ ] D2[ ] (:1)

Sample Prep Code--- -155
GC/MS; TCL VOA; LL S/S; SOW OLM03 1 Instrument Code---- 461
Compound List------ 802
Sample date: Report type: A Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID# VABLKV1 Dry Weight Factor _____

GC/MS ANALYSIS
Amount Purged: [ ] 10mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename FG-960603A56 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2230 Work-up 2230

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Convergence Peak Search Results:
# of Peaks Found: Ø [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review [illegible] Date 8/6/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1340

c. Matrix Spike Data

(1) Form I VOA

Matrix Spike's Organic Analysis Data Sheet (OADS); TICs not required.

(2) RIC and quantitation report

Spectra not required.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE82MS

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 814999

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH014999A52

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 74 Date Analyzed: 07/27/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

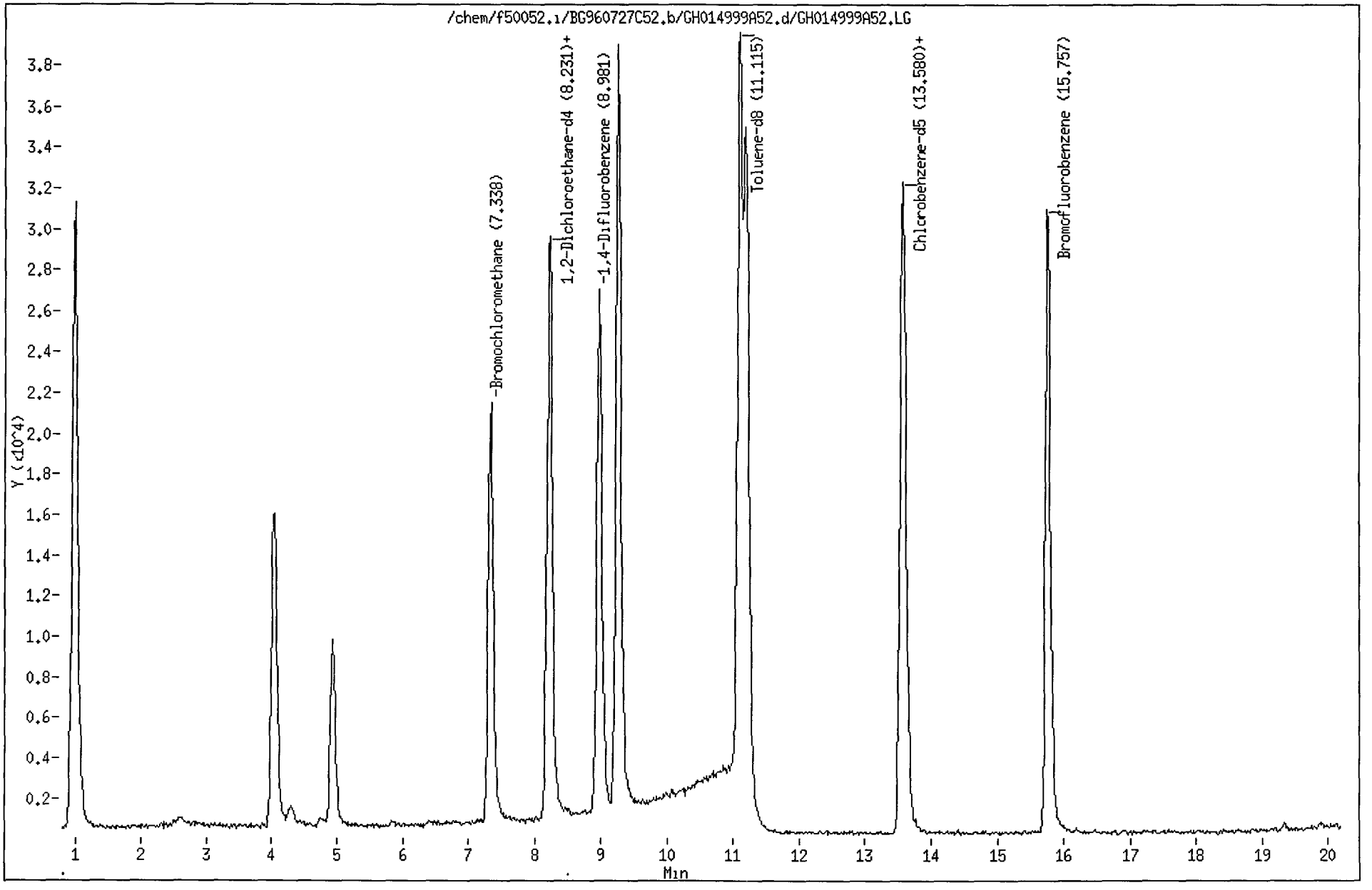
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	38	U
74-83-9	Bromomethane	38	U
75-01-4	Vinyl Chloride	38	U
75-00-3	Chloroethane	38	U
75-09-2	Methylene Chloride	84	B
67-64-1	Acetone	340	
75-15-0	Carbon Disulfide	38	U
75-35-4	1,1-Dichloroethene	200	
75-34-3	1,1-Dichloroethane	38	U
540-59-0	1,2-Dichloroethene (total)	38	U
67-66-3	Chloroform	38	U
107-06-2	1,2-Dichloroethane	38	U
78-93-3	2-Butanone	38	U
71-55-6	1,1,1-Trichloroethane	38	U
56-23-5	Carbon Tetrachloride	38	U
75-27-4	Bromodichloromethane	38	U
78-87-5	1,2-Dichloropropane	38	U
10061-01-5	cis-1,3-Dichloropropene	38	U
79-01-6	Trichloroethene	200	
124-48-1	Dibromochloromethane	38	U
79-00-5	1,1,2-Trichloroethane	38	U
71-43-2	Benzene	200	
10061-02-6	trans-1,3-Dichloropropene	38	U
75-25-2	Bromoform	38	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	38	U
79-34-5	1,1,2,2-Tetrachloroethane	38	U
108-88-3	Toluene	190	
108-90-7	Chlorobenzene	200	
100-41-4	Ethylbenzene	38	U
100-42-5	Styrene	38	U
1330-20-7	Xylene (Total)	38	U

Data File: /chem/f50052.1/BG960727C52.b/GH014999A52.d
Date : 27-JUL-1996 11:40
Client ID: FFE82MS
Sample Info:

Instrument: f50052.1

Operator: 2141
Column diameter: 0.53

Column phase: DB624



Data File: /chem/f50052.i/BG960727C52.b/GH014999A52.d
Report Date: 30-Jul-1996 13:11

CompuChem Environmental Corporation

Data file : /chem/f50052.i/BG960727C52.b/GH014999A52.d
Lab Smp Id: 814999 Client Smp ID: FFE82MS
Inj Date : 27-JUL-1996 11:40
Operator : 2141 Inst ID: f50052.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50052.i/BG960727C52.b/SOLM03.1.m
Meth Date : 30-Jul-1996 11:48 riedl Quant Type: ISTD
Cal Date : 27-JUL-1996 04:09 Cal File: GU960727C52.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	74.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	7 338	7 280	(1 000)	15744	250 0	
* 2 1,4-Difluorobenzene	114 00	8 981	8 923	(1 000)	57362	250 0	
* 3 Chlorobenzene-d5	117 00	13.565	13 508	(1 000)	37033	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	8 217	8 174	(1 120)	23062	208 9	160 7
$ 5 Toluene-d8	98 00	11 100	11 057	(0 818)	67217	254 2	195 5
$ 6 Bromofluorobenzene	95 00	15 771	15 728	(1 163)	30098	215 9	166 1
7 Chloromethane	50 00		1 312		Compound Not Detected		
8 Vinyl Chloride	62 00		1 571		Compound Not Detected		
9 Bromomethane	94 00		2 278		Compound Not Detected		
10 Chloroethane	64 00		2 451		Compound Not Detected.		
11 1,1-Dichloroethene	96 00	4 051	3 979	(0 552)	16364	254.0	195 4
12 Carbon Disulfide	76 00		4 109		Compound Not Detected		
13 Acetone	43 00	4 310	4 267	(0 587)	4962	439 7	338 2
14 Methylene Chloride	84 00	4 930	4 873	(0 672)	11592	109 3	84 08
15 trans-1,2-Dichloroethene	96 00		5 305		Compound Not Detected.		
16 1,1-Dichloroethane	63 00		6 011		Compound Not Detected		
17 cis-1,2-Dichloroethene	96 00		6 934		Compound Not Detected		
18 2-Butanone	43 00		7 121		Compound Not Detected		
19 Chloroform	83 00		7 511		Compound Not Detected		
20 1,1,1-Trichloroethane	97 00		7 612		Compound Not Detected		
21 Carbon Tetrachloride	117 00		7 842		Compound Not Detected		
22 Benzene	78 00	8 231	8 174	(0 917)	44441	263 3	202 6
23 1,2-Dichloroethane	62 00		8 275		Compound Not Detected		

Data File: /chem/f50052.i/BG960727C52.b/GH014999A52.d
Report Date: 30-Jul-1996 13:11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
	24 Trichloroethene	130 00	9 269	9 212	(1 032)	30342	263 6	202 8
	25 1,2-Dichloropropane	63 00		9 529		Compound Not Detected		
	26 Bromodichloromethane	83 00		10 048		Compound Not Detected		
	27 cis-1,3-Dichloropropene	75 00		10 725		Compound Not Detected		
	28 4-Methyl-2-Pentanone	43 00		11 100		Compound Not Detected		
	29 Toluene	91 00	11 201	11 158	(0 826)	59139	242 2	186 3
	30 trans-1,3-Dichloropropene	75 00		11 677		Compound Not Detected		
	31 1,1,2-Trichloroethane	97 00		11 951		Compound Not Detected		
	32 Tetrachloroethene	164 00		12 023		Compound Not Detected		
	33 Dibromochloromethane	129 00		12 556		Compound Not Detected		
	34 2-Hexanone	43 00		12 527		Compound Not Detected		
	35 Chlorobenzene	112 00	13 594	13 565	(1 002)	37644	255 6	196 6
	36 Ethylbenzene	106 00		13 825		Compound Not Detected		
	37 m,p-Xylene	106 00		14 070		Compound Not Detected		
	38 o-Xylene	106 00		14 762		Compound Not Detected		
	39 Styrene	104 00		14 819		Compound Not Detected		
	40 Bromoform	173 00		15 065		Compound Not Detected		
	41 1,1,2,2-Tetrachloroethane	83 00		16 175		Compound Not Detected		
M	42 1,2-Dichloroethene (total)	96 00		1 000		Compound Not Detected		
M	43 Xylene (Total)	106 00		14 762		Compound Not Detected		

LAB INSTRUCTIONS: PPS#: _____
USE FOR QC

RECEIPT DATE: 07/24/96 CASE#: 24893-FFE82 SAS#: DUE DATE: 07/28/96

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 814999
J2[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; LL S/S; SOW OLM03.1

Sample date: Report type: A

Sample Prep Code--- -155
Instrument Code---- 461
Compound List------ 802
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: FFE82MS Dry Weight Factor 74

GC/MS ANALYSIS
Amount Purged: [ ] ~~10~~ 5g 7-27-96 mls/Xg or [ ] Dilution _____ ul/10000ul/Xg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BG9607270S2 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S): Injection 2141 Work-up 2141WB

GC/MS REVIEW

CONDITION CODE OK

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required _____

COMMENTS:

#GC/MS Review JRM Date 7/30/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____/_____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1348

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/25/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
814998	24893	FFE82			5.0g	FFE82	
814999			SS	814998	5.0g	FFE82MS	
815000			SS	814998	5.0g	FFE82MSD	
815007					5.0g	FFE84	
815008					5.0g	FFE85	
815009					5.0g	FFE86	
815010					5.0g	FFE87	
815011					5.0g	FFE88	
815012					5.0g	FFE89	
815013					5.0g	FFF25	
815014					5.0g	FFF26	
815015					5.0g	FFF27	
815016					5.0g	FFF28	
814996	24893	FFE91			5.0g	FFE79	
814997					5.0g	FFE80	
815393			B1		5.0g	VBLKT1	
815394			B2		5.0g	VBLKT2	
815395			B3		5.0g	VBLKT3	
815396			B4		5.0g	VBLKT4	
815397			B5		5.0g	VBLKT5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 745

RELINQUISHED BY [signature] DATE 7/26/96 RECEIVED BY Tom Storage DATE 7/26/96

d. Matrix Spike Duplicate Data

(1) Form I VOA

Matrix Spike Duplicate's Organic Analysis Data Sheet (OADS); TICs not required.

(2) RIC and quantitation report

Spectra not required.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFE82MSD

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50004

Lab Code: COMPU Case No.: 24893 SAS No.: SDG No.: FFE82

Matrix: (soil/water) SOIL Lab Sample ID: 815000

Sample wt/vol: 5.0 (g/mL) g Lab File ID: G2R15000B56

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: not dec. 72 Date Analyzed: 07/31/96

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

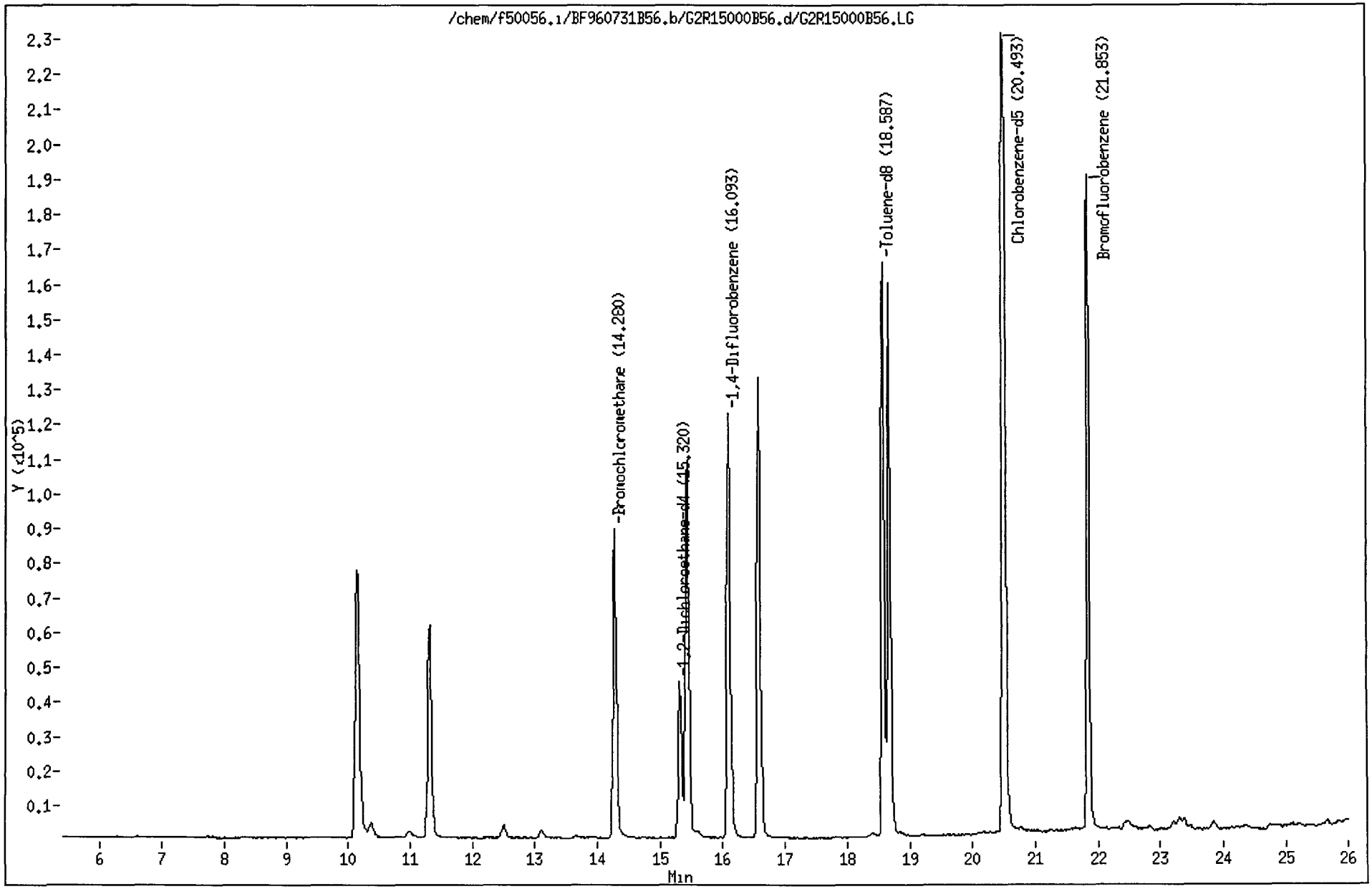
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	36	U
74-83-9	Bromomethane	36	U
75-01-4	Vinyl Chloride	36	U
75-00-3	Chloroethane	36	U
75-09-2	Methylene Chloride	83	
67-64-1	Acetone	70	
75-15-0	Carbon Disulfide	36	U
75-35-4	1,1-Dichloroethene	160	
75-34-3	1,1-Dichloroethane	36	U
540-59-0	1,2-Dichloroethene (total)	36	U
67-66-3	Chloroform	36	U
107-06-2	1,2-Dichloroethane	36	U
78-93-3	2-Butanone	7	J
71-55-6	1,1,1-Trichloroethane	36	U
56-23-5	Carbon Tetrachloride	36	U
75-27-4	Bromodichloromethane	36	U
78-87-5	1,2-Dichloropropane	36	U
10061-01-5	cis-1,3-Dichloropropene	36	U
79-01-6	Trichloroethene	180	
124-48-1	Dibromochloromethane	36	U
79-00-5	1,1,2-Trichloroethane	36	U
71-43-2	Benzene	220	
10061-02-6	trans-1,3-Dichloropropene	36	U
75-25-2	Bromoform	36	U
108-10-1	4-Methyl-2-Pentanone	36	U
591-78-6	2-Hexanone	36	U
127-18-4	Tetrachloroethene	36	U
79-34-5	1,1,2,2-Tetrachloroethane	36	U
108-88-3	Toluene	190	
108-90-7	Chlorobenzene	180	
100-41-4	Ethylbenzene	36	U
100-42-5	Styrene	36	U
1330-20-7	Xylene (Total)	36	U

Data File: /chem/f50056.1/BF960731B56.b/G2R15000B56.d
Date : 31-JUL-1996 21:05
Client ID: FFE82MSD
Sample Info:

Column phase: DB624

Instrument: f50056.1

Operator: 2230
Column diameter: 0.53



Data File: /chem/f50056.i/BF960731B56.b/G2R15000B56.d
Report Date: 01-Aug-1996 12:50

CompuChem Environmental Corporation

Data file : /chem/f50056.i/BF960731B56.b/G2R15000B56.d
Lab Smp Id: 815000 Client Smp ID: FFE82MSD
Inj Date : 31-JUL-1996 21:05
Operator : 2230 Inst ID: f50056.i
Smp Info :
Misc Info :
Comment :
Method : /chem/f50056.i/BF960731B56.b/SOLM03.1.m
Meth Date : 01-Aug-1996 11:35 riedl Quant Type: ISTD
Cal Date : 31-JUL-1996 18:27 Cal File: GS960731B56.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12
Concentration Formula: 1/(Ws)*(100/(100-M))

Name	Value	Description
Ws	5.000	Weight of sample extracted (g)
M	72.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Bromochloromethane	128 00	14 280	14 507	(1 000)	52900	250 0	
* 2 1,4-Difluorobenzene	114 00	16 093	16 307	(1 000)	224547	250 0	
* 3 Chlorobenzene-d5	117 00	20 493	20 627	(1 000)	187071	250 0	
$ 4 1,2-Dichloroethane-d4	65 00	15 320	15 533	(1 073)	54353	279 8	199 9
$ 5 Toluene-d8	98 00	18 587	18 747	(0 907)	205076	245 2	175 1
$ 6 Bromofluorobenzene	95 00	21 853	21 987	(1 066)	130989	255 2	182 3
7 Chloromethane	50 00		5 920	Compound Not Detected			
8 Vinyl Chloride	62 00		6 480	Compound Not Detected			
9 Bromomethane	94 00		7 760	Compound Not Detected			
10 Chloroethane	64 00		8 133	Compound Not Detected			
11 1,1-Dichloroethene	96 00	10 147	10 387	(0 711)	78382	226 1	161 5
12 Carbon Disulfide	76 00		10 800	Compound Not Detected			
13 Acetone	43 00	10 373	10 600	(0 726)	12756	97 72	69 80
14 Methylene Chloride	84 00	11 320	11 547	(0 793)	57603	116 3	83 07
15 trans-1,2-Dichloroethene	96 00		12 133	Compound Not Detected			
16 1,1-Dichloroethane	63 00		12 973	Compound Not Detected			
17 cis-1,2-Dichloroethene	96 00		14 067	Compound Not Detected			
18 2-Butanone	43 00	13 907	14 120	(0 974)	1153	9 63	6 88(a)
19 Chloroform	83 00		14 653	Compound Not Detected			
20 1,1,1-Trichloroethane	97 00		15 000	Compound Not Detected.			
21 Carbon Tetrachloride	117 00		15 293	Compound Not Detected			
22 Benzene	78 00	15 440	15 653	(0 959)	203993	305 9	218 5
23 1,2-Dichloroethane	62 00		15 667	Compound Not Detected			

Data File: /chem/f50056.i/BF960731B56.b/G2R15000B56.d
Report Date: 01-Aug-1996 12:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
24 Trichloroethene	130 00	16 573	16 787	(1 030)	102560	253 9	181 3
25 1,2-Dichloropropane	63 00		17 173	Compound Not Detected			
26 Bromodichloromethane	83 00		17 640	Compound Not Detected			
27 cis-1,3-Dichloropropene	75 00		18 333	Compound Not Detected			
28 4-Methyl-2-Pentanone	43 00		18 547	Compound Not Detected			
29 Toluene	91 00	18 680	18 853	(0 911)	206815	261 3	186 6
30 trans-1,3-Dichloropropene	75 00		19 120	Compound Not Detected			
31 1,1,2-Trichloroethane	97 00		19 373	Compound Not Detected			
32 Tetrachloroethene	164 00		19 613	Compound Not Detected			
33 Dibromochloromethane	129 00		19 907	Compound Not Detected			
34 2-Hexanone	43 00		19 693	Compound Not Detected			
35 Chlorobenzene	112 00	20 520	20 667	(1 001)	158528	259 9	185 6
36 Ethylbenzene	106 00		20 773	Compound Not Detected			
37 m,p-Xylene	106 00		20 907	Compound Not Detected			
38 o-Xylene	106 00		21 373	Compound Not Detected			
39 Styrene	104 00		21 373	Compound Not Detected			
40 Bromoform	173 00		21 613	Compound Not Detected			
41 1,1,2,2-Tetrachloroethane	83 00		22 120	Compound Not Detected			
M 42 1,2-Dichloroethene (total)	96 00		1 000	Compound Not Detected			
M 43 Xylene (Total)	106 00		21 373	Compound Not Detected			

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

LAB INSTRUCTIONS:
USE FOR QC

PPS#: _____

RECEIPT DATE: 07/24/96 CAS#: 24893-FFE82 SAS#: DUE DATE: 07/28/96

VOA
GC/MS WORKSHEET COMPUCHEM#: 815000 R2

J1 I J3 I D1 I C :1
J2 I J4 I D2 I C :1

GC/MS, TCL VOA; LL S/S; SOW OLM03.1

Sample date: Report type: A

Sample Prep Code---- 155
Instrument Code---- 461
Compound List------- 302
Surrogate Std------- 421
Internal Std------- 34

SAMPLE ID#: FFE82MSD Dry Weight Factor: _____

GC/MS ANALYSIS
Amount Purged: [ ] ~~10~~ 5g RAC 7/31/96 mls/Kg [ ] Dilution _____ ul/10000ul Kg SOIL
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
SPE Filename BF960731B56 Disk ( )
Blank Filename _____ Disk ( )
Standard Filename _____ Disk ( )
Sample Filename _____ Disk ( )

ANALYST(S) Injection 2230 Work-up 2230 [illegible]

GC/MS REVIEW

CONDITION CODE JA

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: Ø [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute ( )
Notices Required _____

COMMENTS:

#GC/MS Review JRM Date 8/1/96 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): _____

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC134

CompuChem Environmental Corporation

VOLATILE PREPARATION WORKSHEET

QUEUE 19 PREP CODE -155 ASSIGNED TO Lisa Williams DATE 7/31/96

CCN	CASE	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	WEIGHT (g)	SAMPLE ID	COMMENTS
815096R2	24877	YW736			5.0g	YW753	5.0g back-up
815000R2	24893	FFE82	SS	814998	5.0g	FFE82MSD	
815012R2	↓	↓			5.0g	FFE89	
815462R3	24877	YW757			5.0g	YW759	
815105R2	↓	↓			5.0g	YW758	
816482R	24869	BRL05			5.0g	BRL22	
816483R	↓	↓			5.0g	BRL25	
815206R	32474	00104			5.0g	DSB124B0	
815166R	↓	↓	SS	815690	5.0g	DTP010B7MS	
815167R	↓	↓	SS	815690	5.0g	DTP010B7MSD	
814036R3	32474	00017	SS	815680	5.0g	DTP006B7MSD	
814035R3	↓	↓	SS	815680	5.0g	DTP006B7MS	
817050			B1		5.0g	VBLKK1	
817051			B2		5.0g	VBLKK2	
817052			B3		5.0g	VBLKK3	
817053			B4		5.0g	VBLKK4	
817054			B5		5.0g	VBLKK5	

SURROGATE# _____ AMOUNT _____ LOT# _____ MANUAL COUNTER 1337, 757

RELINQUISHED BY [illegible] DATE 7/31/96 RECEIVED BY Temp Storage DATE 7/31/96