UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

REPORT ON REMEDIAL INVESTIGATION
ENARC-O MACHINE PRODUCTS
LIMA, NEW YORK
NYSDEC REGISTRY NO. 8-26-011

Volume IV of VI

by

Haley & Aldrich of New York
Rochester, New York

for

Kaddis Manufacturing Corporation
Rochester, New York

File No. 70372-047
January 1996

APPENDIX J

Groundwater Analytical Data Deliverables Packages

Section 1

General Testing Corporation

A Full Service Environmental Laboratory

August 15, 1994

Mr. Denis Conley
H&A of New York
189 North Water Street
Rochester, New York 14604

Re: Project #70372-42 - R94/2648, SDG# D1MW

Dear Mr. Conley:

Enclosed you will find a report for the above referenced site. The samples were received on 07/15/94. Ten (10) water samples were analyzed for 91-1 (volatiles).

A detailed case narrative is enclosed identifying any difficulties encountered during analysis. Please review and submit any questions in writing to me. These will be answered promptly by our QA officer.

Thank you for your continued business.

Sincerely,

GENERAL TESTING CORPORATION

Cindy Toomey

Cindy Toomey
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-3760 • (716) 454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 488-5242 • Fax: (201) 488-6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele: (716) 634-0454 • Fax: (716) 634-9019
1201 E. Fayette Street, Suite 42 • Syracuse, NY 13210 • Tele: (315) 471-0936 • Fax: (315) 471-0943

ORGANICS QUALIFIERS - 1991

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result isless than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tenatively identified compound, where the identification is based on a mass spectral library search.

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

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC.MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

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

X - As specified in Case Narrative.

General Testing Corporation

Job #: R94/02648

SAMPLE DATA PACKAGE

SECTION A:	SDG Narrative
SECTION B:	Chains of Custody, Internal Chains, Summary Forms
SECTION C:	Volatile Organic Data

General Testing Corporation

Job #: R94/02648

SECTION A

SDG NARRATIVE

CASE NARRATIVE

COMPANY: H & A of New York
Enarc-O Machine Products
JOB #: R94/02648
SDG #: D1MW

VOLATILE ORGANICS

H & A water samples were analyzed for Target Compound List volatile organics by Method 91-1 from the NYSDEC 1991 ASP. The following samples are associated with SDG # D1MW:

EPA Sample ID	GTC Sample ID
D1MW (DUP 1)	R94/02648-10
MW-1	-01
MW-2	-02
MW-3	-03
MW-4	-04
MW-5	-05
MW-6	-06
MW-201	-07
MW-202	-08
MW-202MS	-08MS
MW-202MSD	-08MSD
MWTB (Trip Blank)	-010
VBLK1	METHOD BLANK
VBLK1MS	BLANK SPIKE
VBLK2	METHOD BLANK

All Tuning criteria for BFB were QC within limits.

All Initial Calibration criteria were compliant.

All Continuing Calibration Check (CCC) criteria were compliant.

All internal standard areas were within QC limits.

All samples were screened prior to analysis and determined to be high in volatile organic content. Samples MW-2, MW-3, MW-5, MW-201, and D1MW were analyzed at dilutions to obtain target compounds within the calibration range of the method.

All surrogate compounds were within QC limits for recovery.

All recoveries for the Matrix Spike and Matrix Spike Duplicate were within QC limits for sample MW-201. All %RPD were within precision limits on the MS/MSD of MW-201. All Blank Spike recoveries were within QC limits.

No other analytical or QC problems were encountered during the analysis of this SDG.

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 the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Director

8/15/94
Date

General Testing Corporation

Job #: R94/02648

SECTION B

CHAIN OF CUSTODY

INTERNAL CHAINS

SUMMARY FORMS

94/2648

H & A OF NEW YORK
189 North Water Street
Rochester, New York 14604
(716) 232-7386

ANALYSIS REQUEST FORM AND CHAIN-OF-CUSTODY RECORD

Page 1 of 1 Nº 518
Delivery Date:

Project Name: Enarc-O RI/FS	Laboratory: General Testing	Project Manager: R.J. Mahoney
H & A File No. 70372-42	Address: Exchange Blvd	Final Report Due Date:
H & A REP. Denis Conley	Rochester, N.Y	Turnaround Time: days
WORK ORDER No.	Client Rep.: Cindy Toomey	

Sample Information

H & A Sample ID.	Laboratory ID.	Sample Date	Sample Time	Sample Depth	Sample Matrix	Analysis Requested: 91-1 (TCL) 40 ml VOA						TOTAL	Preservative: pH < 2.0 HNO3 (N)	pH < 2.0 HCl (C)	pH < 2.0 H_2SO_4 (S)	pH > 10 NaOH/ZA (Z)	pH 7.0 4 C (T)
1. MW-1	-001	7/15/94	0930		H_2O	2						2					2
2. MW-2	-002	7/15/94	1030		H_2O	2						2					2
3. MW-3	-003	7/15/94	1630		H_2O	2						2					2
4. MW-4	-004	7/15/94	1415		H_2O	2						2					2
5. MW-5	-005	7/15/94	1100		H_2O	2						2					2
6. MW-6	-006	7/15/94	1200		H_2O	2						2					2
7. MW-201-D	-007	7/15/94	1300		H_2O	2						2					2
8. MW-202	MS+MSD -008	7/15/94	1530		H_2O	4						4					4
9. Dup 1	-009	7/15/94	1115		H_2O	2						2					2
10. Trip Blank	-010	7/15/94			H_2O	2						2					2
11.																	
12.																	
13.																	
14.																	
15.																	

Sampler Comments/Site Observations

Sample Conditions		Broken Containers
Custody Seal:	Intact:	List Type / Sample No.
Cooler Temp.:	C	
Any Broken Containers ?		

Preservation
No. Of Samples: (N) (C) (S) (Z) (T)
(List all pH measurements outside criteria in the Comments Section by H & A No. / Cont. / pres.)
Comments:

Sampled and Relinquished By: Margaret Corrigan	Samples Received By: V. Gardner
Signature: Margaret Corrigan	Signature: Gardner
Company Name: H&A	Company Name: GTL
Date: 7/15/94 Time: 0835	Date: 7/15/94 Time: 0835
Samples Relinquished By:	Samples Received By:
Signature:	Signature:
Company Name:	Company Name:
Date: Time:	Date: Time:
Samples Relinquished By:	Samples Received By:
Signature:	Signature:
Company Name:	Company Name:
Date: Time:	Date: Time:

900

SDG # D1MW GTC # R94/2648-001 Document I.D. # _____

Date/Time Received 07/15/94 @ 0855

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[signature]	[signature]	7/15	12:35
			[signature]	[signature]	7/21	10:00

0000

Document I.D. #_____

SDG # D1MW GTC # R94/2648-002 Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[signature]	[signature]	7/15	12:35
			[signature]	[signature]	7/21	16:00

SDG # D1MW GTC # R94/2648-003 Document I.D. # _____

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[signature]	[signature]	7/15	12:35
			[signature]	[signature]	7/21	16:00

60000

SDG # DIMW GTC # R94/2648-004 Document I.D. # _____

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[illegible]	R	7/15	12:35
			R	RJH	7/21	16:00

0001

SDG # DIMW GTC # R94/2648-005 Document I.D. #

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[signature]	[signature]	7/15	12:35
			[signature]	[signature]	7/21	16:00

SDG # D1MW GTC # R94/2648-006 Document I.D. # _____

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[redacted]	[redacted]	7/15	12:35

SDG # 01MW GTC # R94/2648-007

Document I.D. #

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml		P	7/15	12:35

0001

Document I.D. #_____

SDG # D1MW GTC # R94/2648-008 QC Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		120ml	[redacted]	IP	7/15	12:35
			IP	DJH	7/21	16:00

SDG # DIMW GTC # R94/2648-009 Document I.D. # _____

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml				

0015

SDG # D1MW GTC # R94/2648-010 T.B. Document I.D. # _____

Date/Time Received 07/15/94 @ 0835

Parameters	Fraction I.D.	Volume	Relinquished by	Received by	Date	Time
91-1		80 ml	[signature]	[signature]	7/15	12:35

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements* NYSDEC 1991 CLP PROTOCOL					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER
MW1	R94/02648-001	X					
MW2	R94/02648-002	X					
MW3	R94/02648-003	X					
MW4	R94/02648-004	X					
MW5	R94/02648-005	X					
MW6	R94/02648-006	X					
MW201	R94/02648-007	X					
MW202	R94/02648-008	X					
DIMW	R94/02648-009	X					
MWTB	R94/02648-010	X					

*Check Appropriate Boxes

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOA
ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	LOW LEVEL MED LEVEL	DATE ANALYZED
R94/02648-001	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-002	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-003	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-004	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-005	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-006	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-007	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-008	WATER	07/14/94	07/15/94	LOW	07/21/94
R94/02648-009	WATER	07/14/94	07/15/94	LOW	07/22/94
R94/02648-010	WATER	07/14/94	07/15/94	LOW	07/22/94

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

ORGANIC ANALYSES

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
R94/02648-1	WATER	91-1			1.0
R94/02648-2	WATER	91-1			10.0
R94/02648-3	WATER	91-1			10.0
R94/02648-4	WATER	91-1			1.0
R94/02648-5	WATER	91-1			5.0
R94/02648-6	WATER	91-1			1.0
R94/02648-7	WATER	91-1			50.0
R94/02648-8	WATER	91-1			1.0
R94/02648-9	WATER	91-1			5.0
R94/02648-10	WATER	91-1			1.0

General Testing Corporation

Job #: R94/02648

SECTION C

VOLATILES DATA

- QC Summary
- Sample Data
- Standards Data
- Raw QC Data

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	D1MW	100	100	88		0
02	MW1	100	100	96		0
03	MW2	102	100	112		0
04	MW201	100	102	88		0
05	MW202	100	102	94		0
06	MW202MS	98	100	102		0
07	MW202MSD	104	106	96		0
08	MW3	104	104	100		0
09	MW4	100	100	96		0
10	MW5	102	102	102		0
11	MW6	100	98	102		0
12	MWTB	98	102	86		0
13	VBLK1	100	102	102		0
14	VBLK1MS	98	102	94		0
15	VBLK2	100	100	86		0
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix Spike - EPA Sample No.: MW202

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	54.	108	61-145
Trichloroethene	50.	15.	63.	96	71-120
Benzene	50.	0.	50.	100	76-127
Toluene	50.	0.	49.	98	76-125
Chlorobenzene	50.	0.	51.	102	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	50.	100	8	14	61-145
Trichloroethene	50.	64.	98	2	14	71-120
Benzene	50.	49.	98	2	11	76-127
Toluene	50.	52.	104	6	13	76-125
Chlorobenzene	50.	52.	104	2	13	75-130

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:

00023

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix Spike - EPA Sample No.: VBLK1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	44.	88	61-145
Trichloroethene	50.	0.	51.	102	71-120
Benzene	50.	0.	52.	104	76-127
Toluene	50.	0.	52.	104	76-125
Chlorobenzene	50.	0.	54.	108	75-130

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

* Values outside of QC limits

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

COMMENTS:

00024

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:Q0385 Lab Sample ID:METHOD BLANK

Date Analyzed: 7/21/94 Time Analyzed:2054

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW1	2648-1	Q0392	0122
02	MW2	2648-2	Q0393	0155
03	MW202	2648-8	Q0389	2342
04	MW202MS	2648-8MS	Q0390	~~1215~~ 0015
05	MW202MSD	2648-8MSD	Q0391	~~1249~~ 0049
06	MW3	2648-3	Q0394	0228
07	MW4	2648-4	Q0395	0301
08	MW5	2648-5	Q0396	0333
09	VBLK1MS	BLANK SPIKE	Q0386	2142
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

mw 8/11/94

COMMENTS:

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:Q0400 Lab Sample ID:METHOD BLANK

Date Analyzed: 7/22/94 Time Analyzed:1114

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D1MW	2648-9	Q0403	1325
02	MW201	2648-7	Q0402	1252
03	MW6	2648-6	Q0401	1219
04	MWTB	2648-10	Q0404	1359
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

00026

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:E9683 BFB Injection Date: 6/07/94

Instrument ID:MS5 BFB Injection Time:0754

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.7
75	30.0 - 60.0% of mass 95	55.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	70.8
175	5.0 - 9.0% of mass 174	5.2(7.3)1
176	95.0 - 101.0% of mass 174	67.4(95.2)1
177	5.0 - 9.0% of mass 176	5.0(7.4)2

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

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

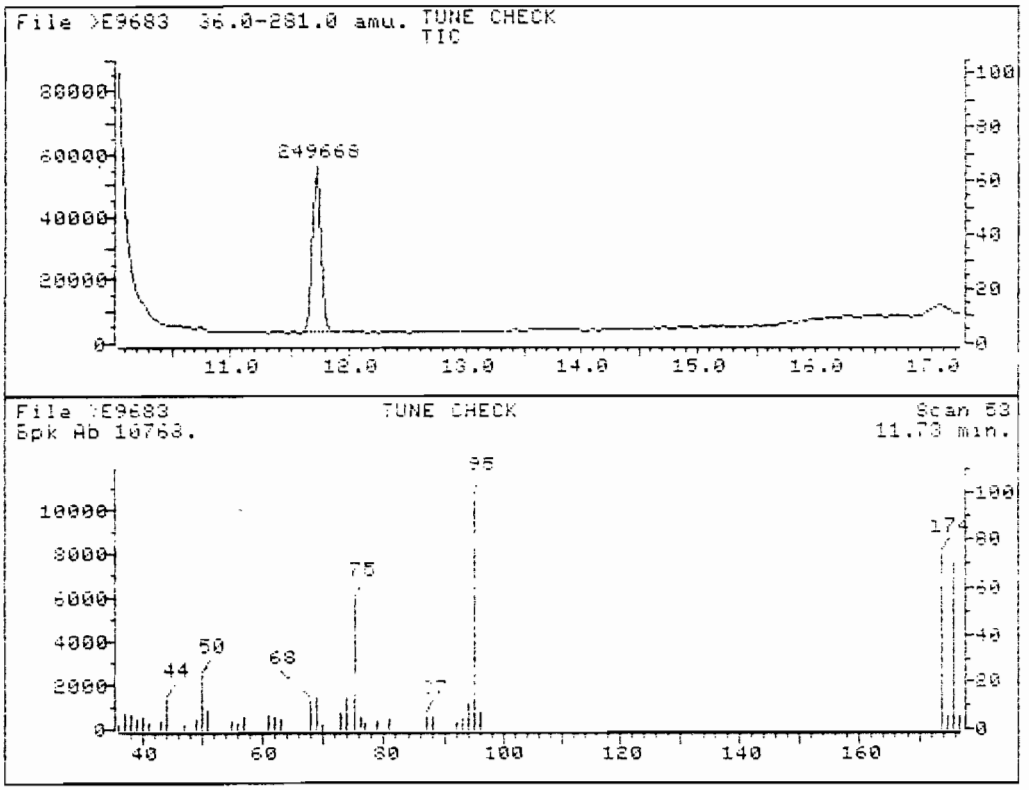
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 PPB	E9684	6/07/94	0834
02	VSTD020	20 PPB	E9685	6/07/94	0918
03	VSTD050	50 PPB	E9686	6/07/94	0953
04	VSTD100	100 PPB	E9687	6/07/94	1039
05	VSTD200	200 PPB	E9688	6/07/94	1125
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

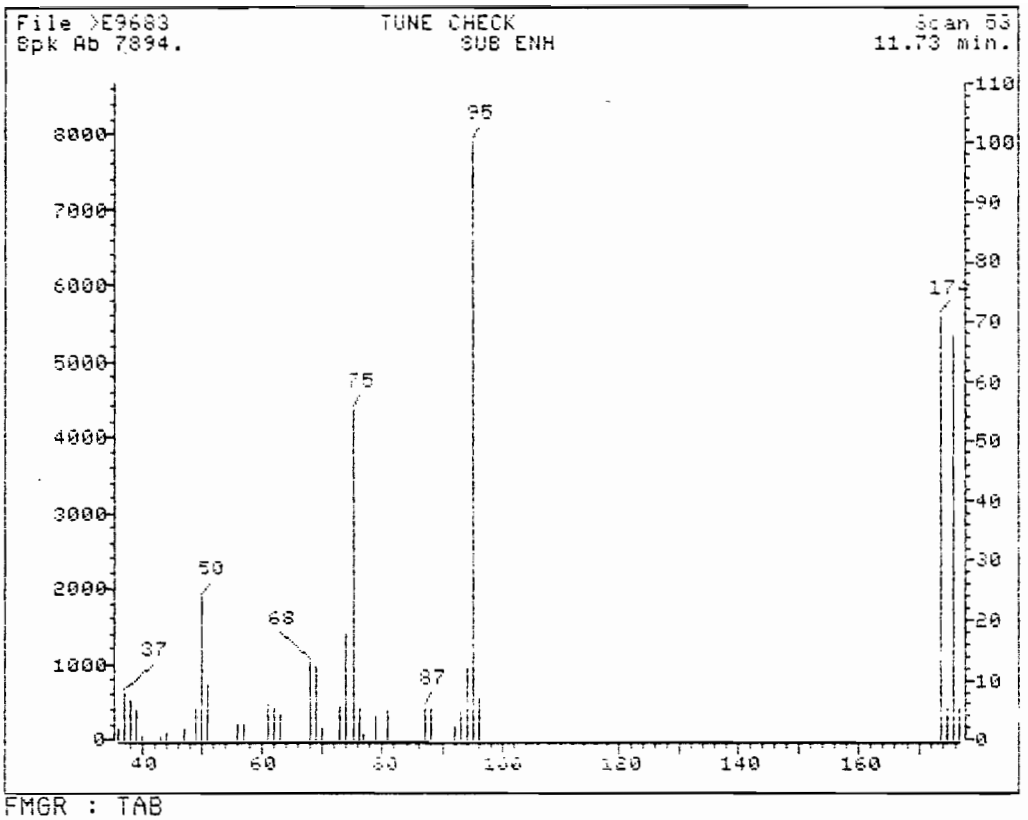
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	23.66	23.66	Ok
75	30-60% of mass 95	55.09	55.09	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.24	7.24	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	70.81	70.81	Ok
175	5-9% of mass 174	5.17	7.31	Ok
176	95-101% of mass 174	67.39	95.18	Ok
177	5-9% of mass 176	5.00	7.42	Ok

Injection Date: 06/07/94
Injection Time: 07:54
Data File: >E9683
Scan: 53





FMGR : TAB

>E9683 TUNE CHECK
53 SUB ENH

File: >E9683 Scan #: 53 Retn. time: 11.73

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.10	130.67	49.00	395.67	68.05	1013.33	77.00	65.67	94.00	936.67
37.05	902.00	50.10	1867.33	69.00	957.33	78.95	313.33	95.10	7893.67
38.05	510.33	51.10	715.33	70.00	127.67	80.95	374.00	96.10	571.33
39.05	370.67	56.10	191.33	73.00	432.33	87.05	431.00	173.80	5589.33
40.05	34.67	57.10	206.33	74.00	1403.67	88.05	404.00	174.90	408.33
43.15	35.33	61.05	457.67	75.10	4348.33	92.00	174.33	175.90	5319.67
44.05	80.00	62.05	436.00	79.10	418.67	93.00	372.00	176.90	334.67
47.10	139.33	63.05	327.00						

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:Q0383 BFB Injection Date: 7/21/94

Instrument ID:MS5 BFB Injection Time:1938

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.8
75	30.0 - 60.0% of mass 95	55.4
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	0.0(0.0)1
174	50.0 - 120.0% of mass 95	69.9
175	5.0 - 9.0% of mass 174	5.4(7.7)1
176	95.0 - 101.0% of mass 174	66.5(95.0)1
177	5.0 - 9.0% of mass 176	4.1(6.1)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050A	50 PPB	Q0384	7/21/94	2011
02	VBLK1	METHOD BLANK	Q0385	7/21/94	2054
03	VBLK1MS	BLANK SPIKE	Q0386	7/21/94	2142
04	MW202	2648-8	Q0389	7/21/94	2342
05	MW1	2648-1	Q0392	7/22/94	0122
06	MW2	2648-2	Q0393	7/22/94	0155
07	MW3	2648-3	Q0394	7/22/94	0228
08	MW4	2648-4	Q0395	7/22/94	0301
09	MW5	2648-5	Q0396	7/22/94	0333
10	MW202MS	2648-8MS	Q0390	7/22/94	~~1215~~ 0015
11	MW202MSD	2648-8MSD	Q0391	7/22/94	~~1249~~ 0049
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

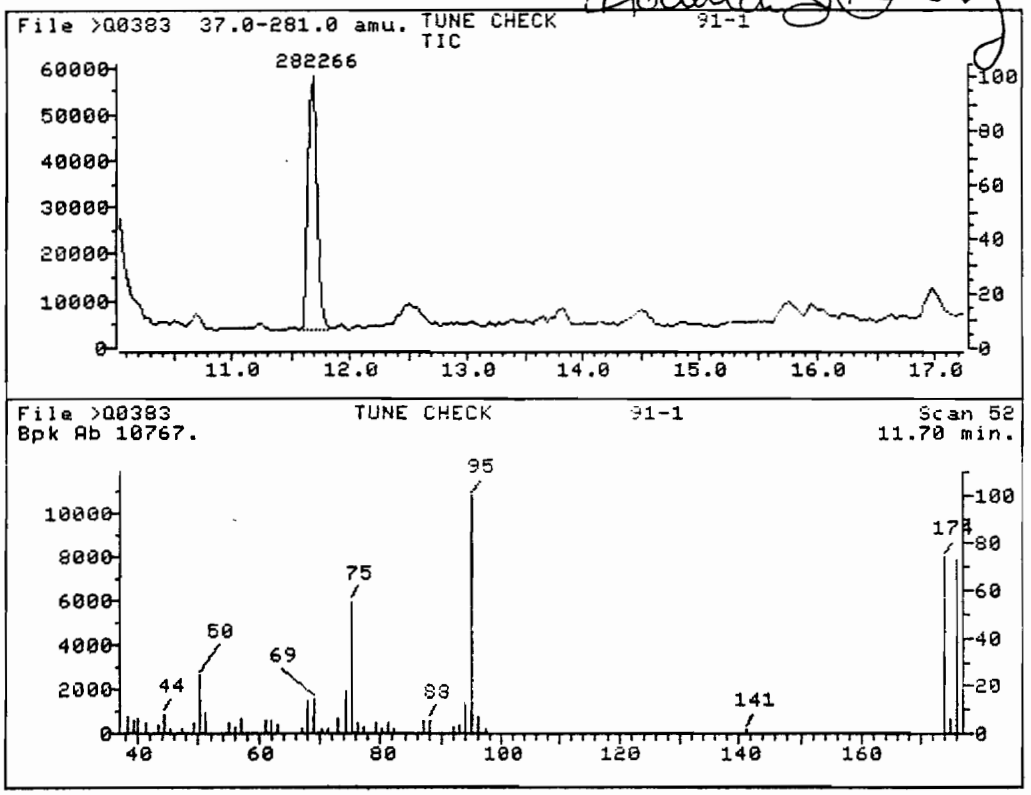
mw 8/11/94

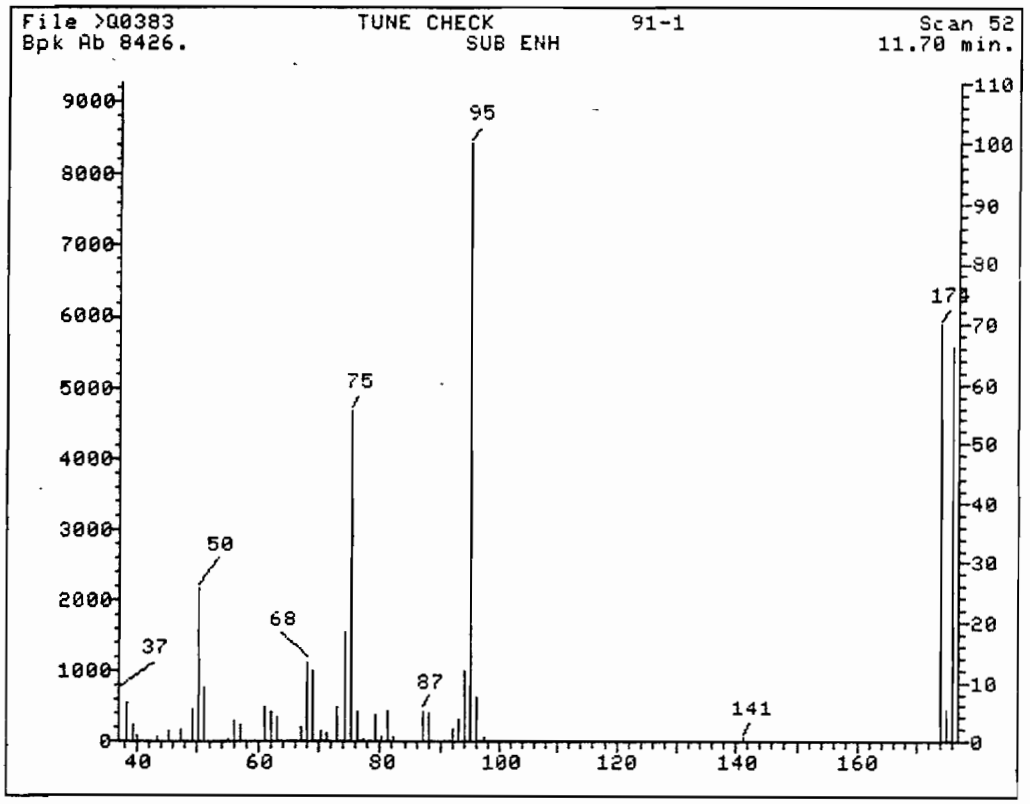
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	25.75	25.75	Ok
75	30-60% of mass 95	55.35	55.35	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.49	7.49	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	69.93	69.93	Ok
175	5-9% of mass 174	5.39	7.71	Ok
176	95-101% of mass 174	66.45	95.03	Ok
177	5-9% of mass 176	4.07	6.13	Ok

Injection Date: 07/21/94
Injection Time: 19:38
Data File: >Q0383
Scan: 52





>Q0383 TUNE CHECK 91-1
52 SUB ENH

File: >Q0383 Scan #: 52 Retn. time: 11.70

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	697.67	51.10	784.33	69.10	999.33	80.05	64.67	95.10	8426.33
38.15	561.67	55.10	24.00	70.20	148.00	81.05	434.67	96.10	631.33
39.15	240.33	56.20	280.33	71.20	126.67	82.05	60.00	97.20	78.00
40.05	82.67	57.20	224.67	73.10	501.33	87.05	435.00	141.10	61.33
43.15	63.33	61.05	485.67	74.10	1539.00	88.05	411.00	174.00	5892.33
45.15	136.00	62.15	429.67	75.10	4664.00	92.00	189.00	175.00	454.33
47.10	164.33	63.05	354.67	76.10	439.67	93.10	318.67	176.00	5599.33
49.10	449.00	67.15	201.00	77.10	26.67	94.10	997.33	177.00	343.00
50.10	2170.00	68.10	1119.00	79.05	381.67				

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID:Q0397 BFB Injection Date: 7/22/94

Instrument ID:MS5 BFB Injection Time:0831

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.3
75	30.0 - 60.0% of mass 95	54.3
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	72.7
175	5.0 - 9.0% of mass 174	5.3(7.3)1
176	95.0 - 101.0% of mass 174	72.8(100.2)1
177	5.0 - 9.0% of mass 176	4.6(6.3)2

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

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

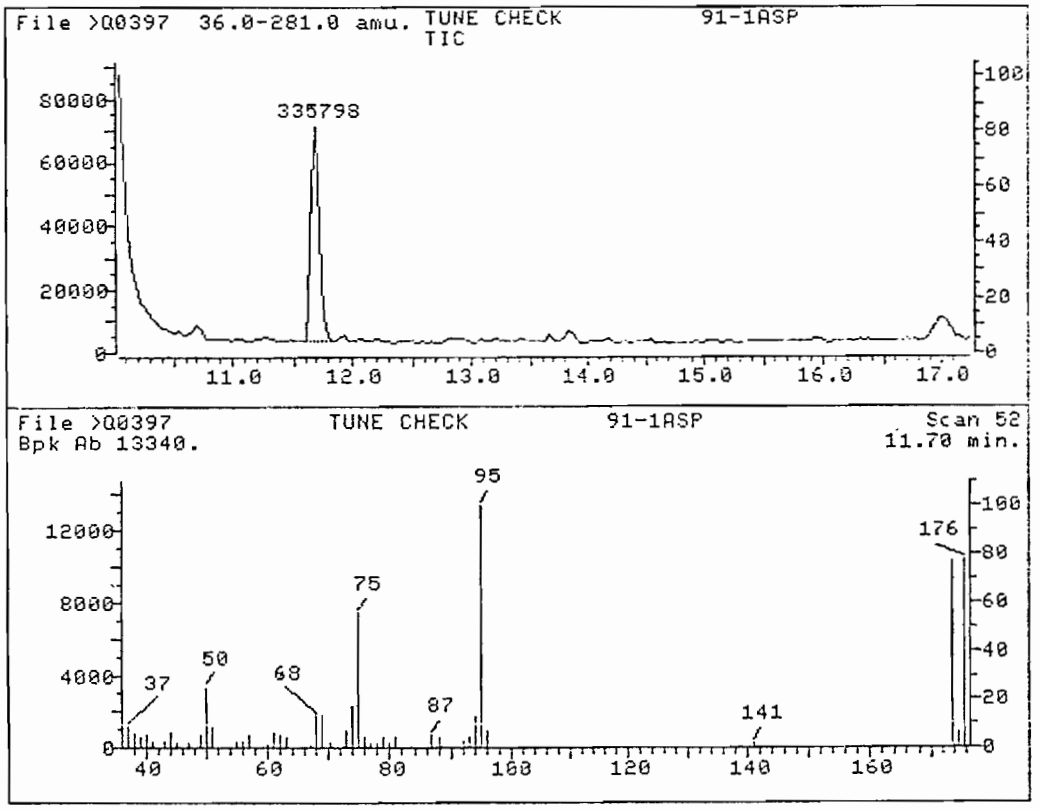
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050B	50 PPB	Q0399	7/22/94	1019
02	VBLK2	METHOD BLANK	Q0400	7/22/94	1114
03	MW6	2648-6	Q0401	7/22/94	1219
04	MW201	2648-7	Q0402	7/22/94	1252
05	D1MW	2648-9	Q0403	7/22/94	1325
06	MWTB	2648-10	Q0404	7/22/94	1359
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

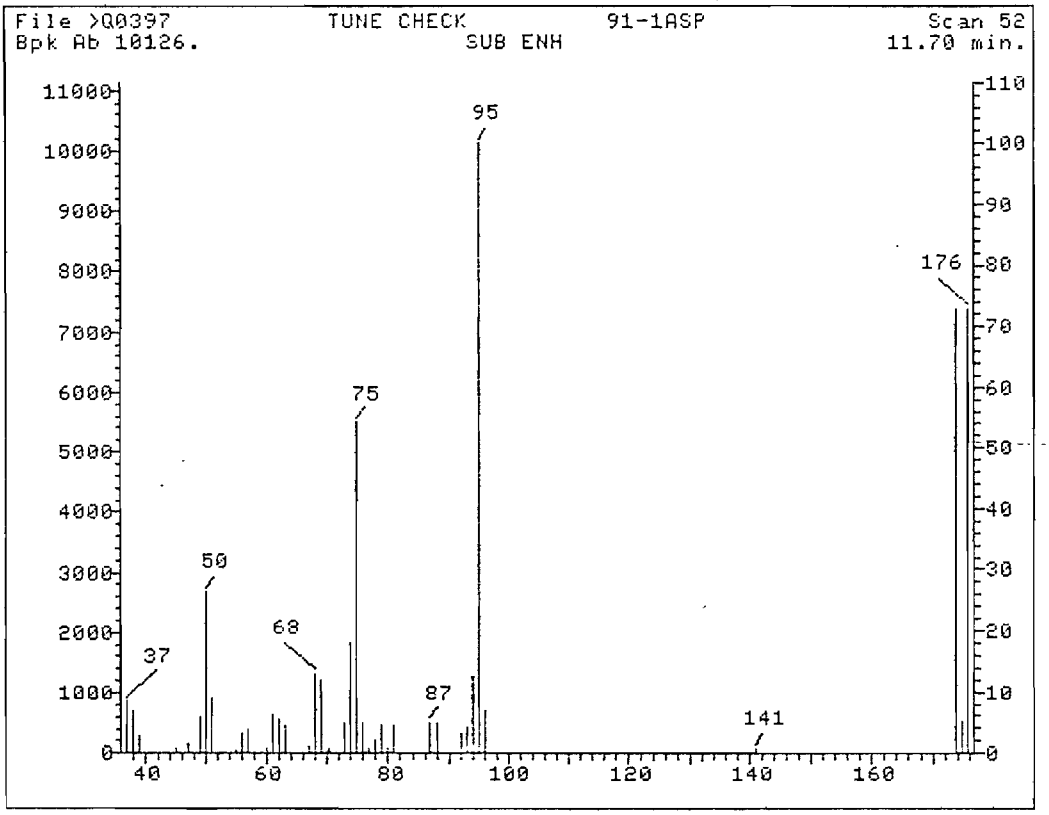
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	26.30	26.30	Ok
75	30-60% of mass 95	54.33	54.33	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.85	6.85	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	72.67	72.67	Ok
175	5-9% of mass 174	5.29	7.28	Ok
176	95-101% of mass 174	72.80	100.17	Ok
177	5-9% of mass 176	4.58	6.29	Ok

Injection Date: 07/22/94
Injection Time: 08:31
Data File: >Q0397
Scan: 52





>Q0397 TUNE CHECK 91-1ASP
52 SUB ENH

File: >Q0397 Scan #: 52 Retn. time: 11.70

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.10	145.0	50.00	2663.0	67.05	127.0	78.00	227.0	94.00	1258.3
37.05	852.3	51.00	892.3	68.05	1322.3	78.85	444.3	95.00	10126.0
38.05	708.7	55.10	34.3	69.00	1217.7	79.95	71.3	96.00	693.7
39.05	291.7	56.10	324.0	70.10	80.7	80.85	454.0	140.90	75.0
43.15	2.7	57.10	397.3	73.00	493.0	86.95	496.0	173.90	7359.0
44.05	20.7	60.05	62.7	74.00	1827.0	88.05	476.0	174.90	536.0
45.05	75.0	61.05	629.7	75.00	5501.3	92.00	300.7	175.90	7371.7
47.05	142.3	62.05	564.7	76.00	488.3	93.00	415.7	176.90	463.3
49.00	589.3	63.05	445.3	77.00	75.7				

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID (Standard):Q0384 Date Analyzed: 7/21/94

Instrument ID:MS5 Time Analyzed:2011

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	99669	10.17	455176	11.95	392084	18.52
	UPPER LIMIT	199338	10.67	910352	12.45	784168	19.02
	LOWER LIMIT	49835	9.67	227588	11.45	196042	18.02
	EPA SAMPLE NO.						
01	VBLK1	93153	10.20	458217	11.98	391445	18.52
02	VBLK1MS	100866	10.17	450890	11.94	385925	18.49
03	MW202	105810	10.17	469096	11.94	393569	18.49
04	MW1	104956	10.20	486465	11.97	390675	18.52
05	MW2	89787	10.20	460499	11.97	352130	18.52
06	MW3	105735	10.20	499328	11.97	384162	18.55
07	MW4	109635	10.17	501556	11.97	408818	18.52
08	MW5	104617	10.23	500442	12.01	392442	18.55
09	MW202MS	97364	10.20	473984	11.97	400332	18.52
10	MW202MSD	106247	10.20	486370	11.94	372383	18.49
1							
12							
13							
14							
15							
16							
17							
18							
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 of QC limits with an asterisk.
* Values outside of QC limits.

00036

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Lab File ID (Standard):Q0399 Date Analyzed: 7/22/94

Instrument ID:MS5 Time Analyzed:1019

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	93947	10.24	496543	12.01	403758	18.55
	UPPER LIMIT	187894	10.74	993086	12.51	807516	19.05
	LOWER LIMIT	46974	9.74	248272	11.51	201879	18.05
01	VBLK2	97585	10.20	440825	11.97	355405	18.52
02	MW6	75808	10.27	406580	12.04	324015	18.58
03	MW201	83261	10.23	378229	12.01	304482	18.55
04	D1MW	99306	10.27	447222	12.04	370173	18.58
05	MWTB	93916	10.23	413548	12.01	344938	18.55
06							
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18							
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 of QC limits with an asterisk.
* Values outside of QC limits.

00037

Instrument Detection Limit Study / MDL
General Testing Corporation

EPA Method #: VOA's

Date: 06/94

Instrument: MS #5

Analyst: RJ Herring

Analyte	Amount Added (ug/L)	Trial #1	Trial #2	Trial #3	Mean (ug/L)	S (ug/L)	N #of reps	IDL* (ug/L)
Chloromethane	10.00	10.49	9.52	10.26	10.09	0.4138	3	2.882
Vinyl chloride	10.00	10.10	9.54	9.50	9.71	0.2739	3	1.908
Bromomethane	10.00	12.12	11.43	11.81	11.79	0.2822	3	1.965
Chloroethane	10.00	10.04	9.44	9.31	9.60	0.3179	3	2.214
Trichlorofluoromethane	10.00	12.72	12.16	11.44	12.11	0.5239	3	3.649
Acetone	50.00	31.83	32.78	31.80	32.14	0.4551	3	3.170
1,1-Dichloroethene	10.00	11.10	10.45	10.38	10.64	0.3242	3	2.258
Methylene chloride	10.00	10.66	9.79	10.03	10.16	0.3669	3	2.555
Carbon Disulfide	50.00	52.46	54.99	53.01	53.49	1.0865	3	7.567
trans-1,2-Dichloroethene	10.00	11.22	10.24	10.09	10.52	0.5011	3	3.490
1,1-Dichloroethane	10.00	10.53	9.73	9.48	9.91	0.4478	3	3.119
2-Butanone	10.00	50.05	50.60	51.82	50.82	0.7397	3	5.152
Chloroform	10.00	10.04	9.56	9.30	9.63	0.3065	3	2.135
1,2-Dichloroethane	10.00	11.02	10.52	10.43	10.66	0.2595	3	1.808
1,2-Dichloroethane-d4	10.00	9.11	8.56	8.59	8.75	0.2525	3	1.759
1,1,1-Trichloroethane	10.00	10.61	10.01	9.20	9.94	0.5778	3	4.024
Carbon tetrachloride	10.00	10.37	9.57	9.20	9.71	0.4883	3	3.401
Benzene	10.00	10.82	10.09	9.77	10.23	0.4394	3	3.061
Trichloroethene	10.00	10.79	9.96	9.51	10.09	0.5302	3	3.693
1,2-Dichloropropane	10.00	11.19	10.51	10.15	10.62	0.4312	3	3.003
Bromodichloromethane	10.00	11.01	10.10	10.02	10.38	0.4490	3	3.127
cis-1,3-Dichloropropene	10.00	10.30	9.80	9.82	9.97	0.2311	3	1.610
trans-1,3-Dichloropropene	10.00	12.22	11.54	11.32	11.69	0.3831	3	2.668
1,1,2-Trichloroethane	10.00	11.77	11.07	10.79	11.21	0.4121	3	2.871
Dibromochloromethane	10.00	11.81	11.36	11.08	11.42	0.3007	3	2.094
Bromoform	10.00	12.92	12.11	11.79	12.27	0.4756	3	3.312
4-Methyl-2-Pentanone	50.00	52.22	50.99	52.07	51.76	0.5479	3	3.816
Toluene-d8	10.00	7.74	7.43	7.31	7.49	0.1812	3	1.262
Toluene	10.00	10.60	9.92	10.02	10.18	0.2998	3	2.088
2-Hexanone	50.00	50.31	51.52	51.77	51.20	0.6375	3	4.441
Tetrachloroethene	10.00	9.55	9.13	9.02	9.23	0.2284	3	1.591
Chlorobenzene	10.00	10.25	9.71	9.44	9.80	0.3367	3	2.345
Ethylbenzene	10.00	11.14	11.09	10.75	10.99	0.1733	3	1.207
o-Xylene	50.00	53.07	52.04	53.20	52.77	0.5189	3	3.614
Styrene	50.00	81.36	79.63	81.34	80.78	0.8109	3	5.648
1,1,2,2-Tetrachloroethane	10.00	11.87	12.35	12.42	12.21	0.2444	3	1.703
Bromofluorobenzene	10.00	10.34	10.01	10.39	10.25	0.1686	3	1.174
1,3-Dichlorobenzene	10.00	11.11	11.34	11.33	11.26	0.1061	3	0.739
1,4-Dichlorobenzene	10.00	11.05	11.08	11.25	11.13	0.0881	3	0.613
1,2-Dichlorobenzene	10.00	10.97	10.82	10.95	10.91	0.0665	3	0.463

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWTB

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0404

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWTB

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0404

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.98	6.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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24.					
25.					
26.					
27.					
28.					
29.					
30.					

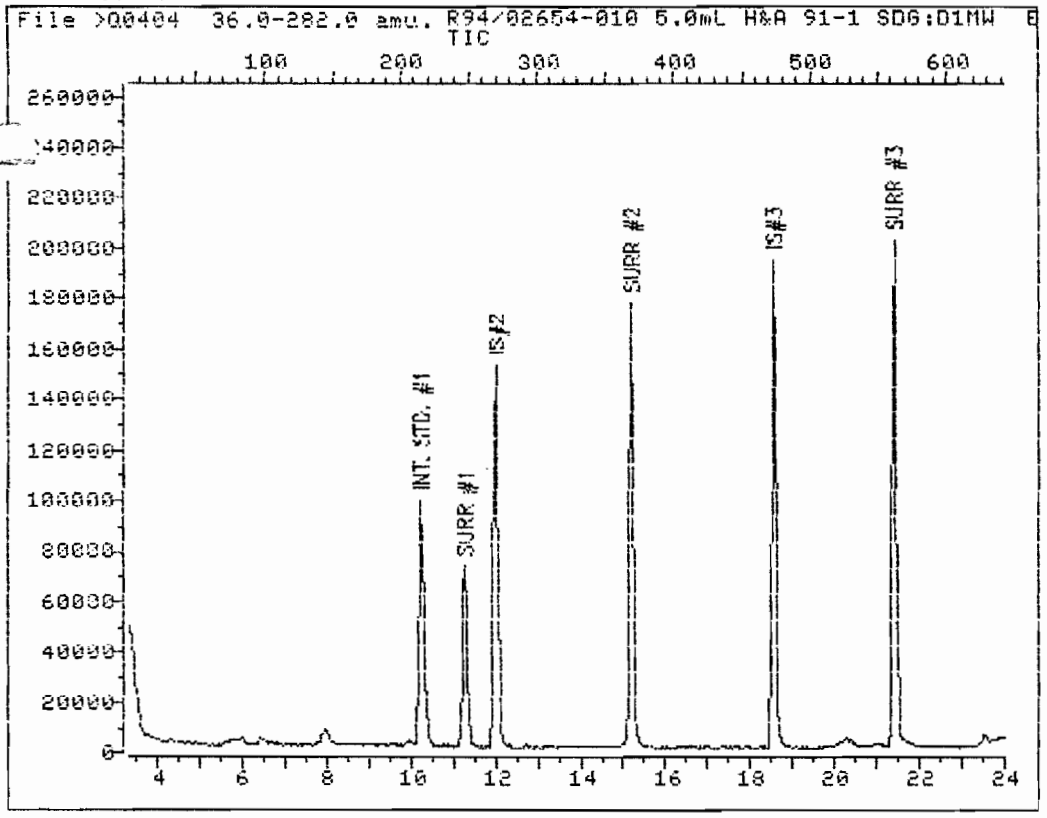
Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 14:33
Output File: ^Q0404::D3 Injected at: 940722 13:59
Data File: >Q0404::D3 Dilution Factor: 1.00000
Name: R94/02654-010 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MWTB

MD File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.23	128.0	93916	50.00	ppb	94
16)	1,2-Dichloroethane-d4	11.27	65.0	192518	43.25	ppb	92
17)	*1,4-Difluorobenzene	12.01	114.0	413548	50.00	ppb	81
29)	*Chlorobenzene-d5	18.55	117.0	344938	50.00	ppb	96
31)	Toluene-d8	15.20	98.0	391744	49.09	ppb	91
41)	Bromofluorobenzene	21.42	95.0	241718	51.13	ppb	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0404::D3 Quant Output File: ^Q0404::D3
Name: R94/02654-010 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MWTB

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

Operator ID: TOMT
Quant Time : 940722 14:33
Injected at: 940722 13:59

MS data file header from : >Q0404::D3

Sample: R94/02654-010 5.0mL Operator: TOMT 7/22/94 13:59
Misc : H&A 91-1 SDG:D1MW EPA:MWTB
s. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 4 Equip ID: MS5
Method file: REGU0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q0404 R94/02654-010 5.0mL H&A 91-1 SDG:D1MW EPA:MWTB
36.01 282.0 CLP TIC
Upslope: .2000 Area Reject: 76653. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ0404 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	7.98	135	145	155	6245	200936	87330	100.00	100.000

Sum of corrected areas: 87330.

Summary of Unknowns PBM Library Search and Quantitation

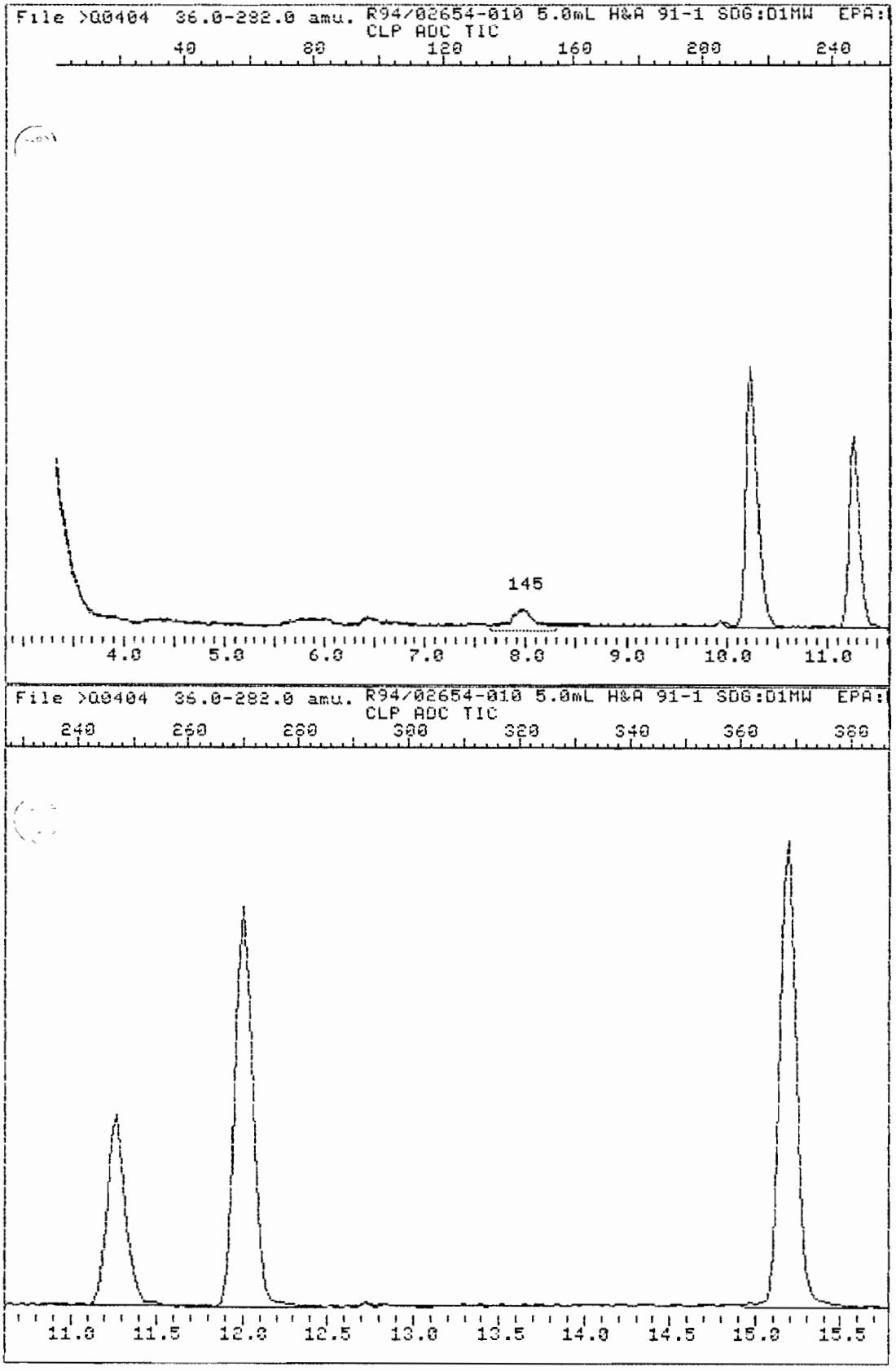
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	766527.	10.23	3.34 - 11.12
2	50.0	1089129.	12.01	11.12 - 15.28
3	50.0	1173211.	18.55	15.28 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

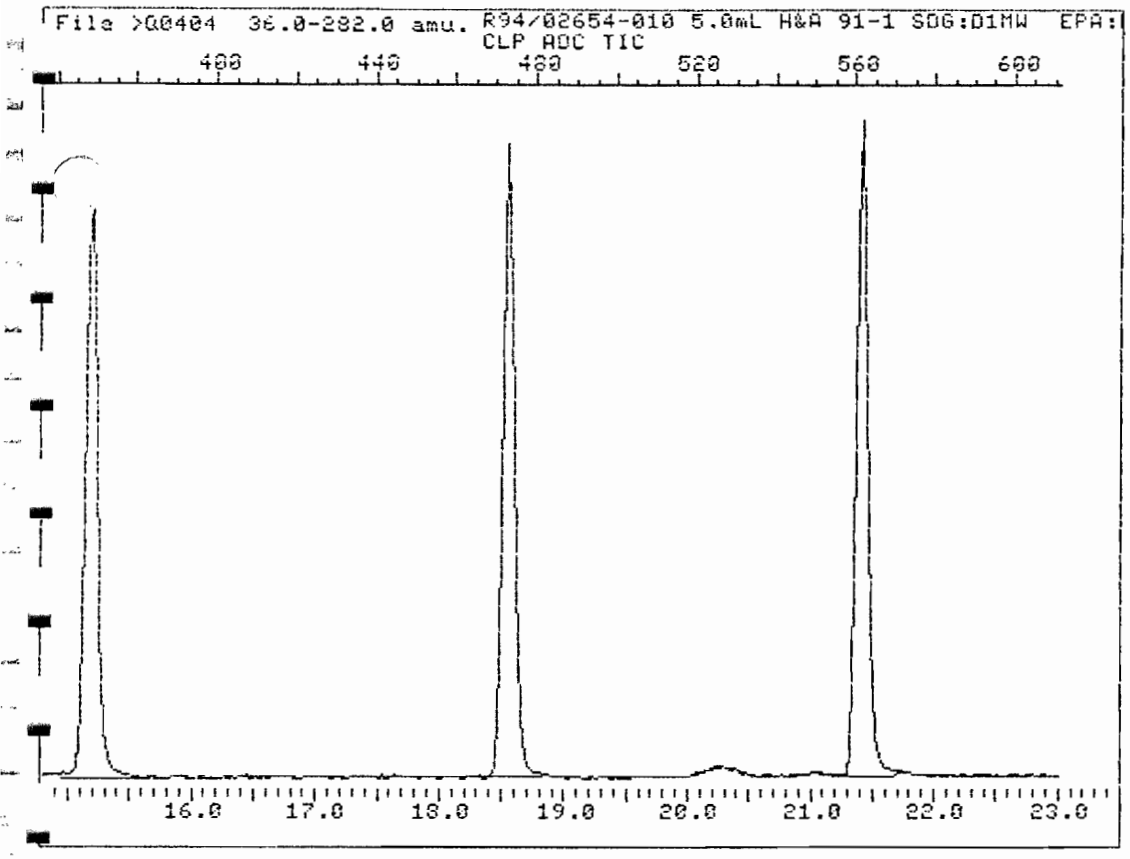
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

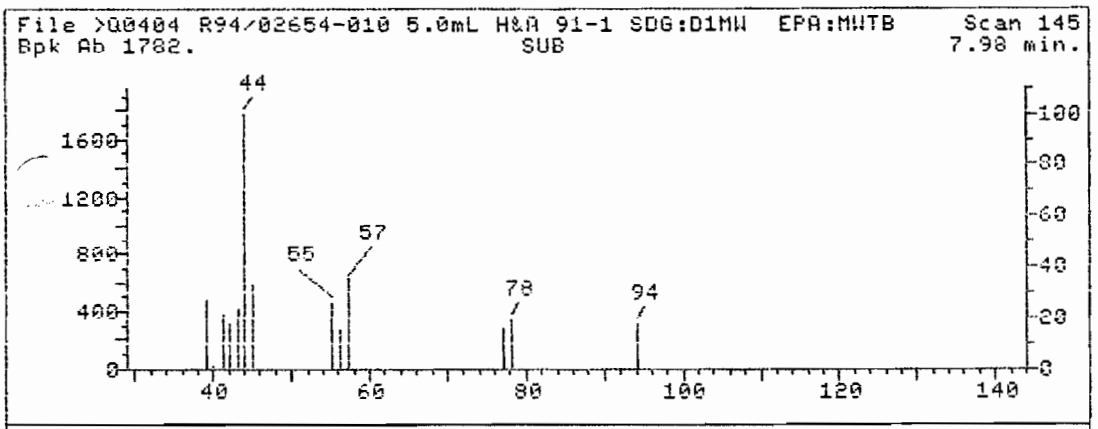
9:07 AM THU., 28 JULY, 1994

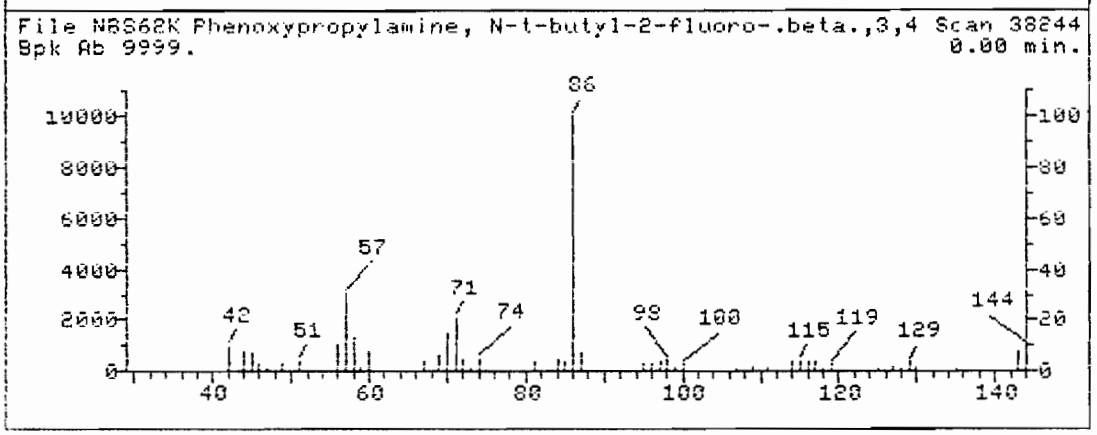


Instrument ID: MS5 Analyzed on: 7/22/94 13:59



Instrument ID: MS5 Analyzed on: 7/22/94 13:59





Instrument ID: MS6 Analyzed on: 7/22/94 13:59

Result 1 in PBM results file: LQ0404

Retention Time: 7.98 Area: 87330 Tentative Conc: 6.00

The unknown area is 11.39% of the nearest internal standard

1.	Phenoxypropylamine, N-t-butyl-2-fluoro-.beta.,3,4-trihydroxy-	273	C13H20FNO4

Sample file: >Q0404 Spectrum #: 145

Search speed: 1 Tilting option: N No. of ion ranges searched: 33

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	29	38244	385	NBS62K	30	52	0	0	100	43	8	17

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

D1MW

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0403

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	51.	
71-55-6	1,1,1-Trichloroethane	21.	J
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	500.	
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: D1MW

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0403

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.78	29.	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.					

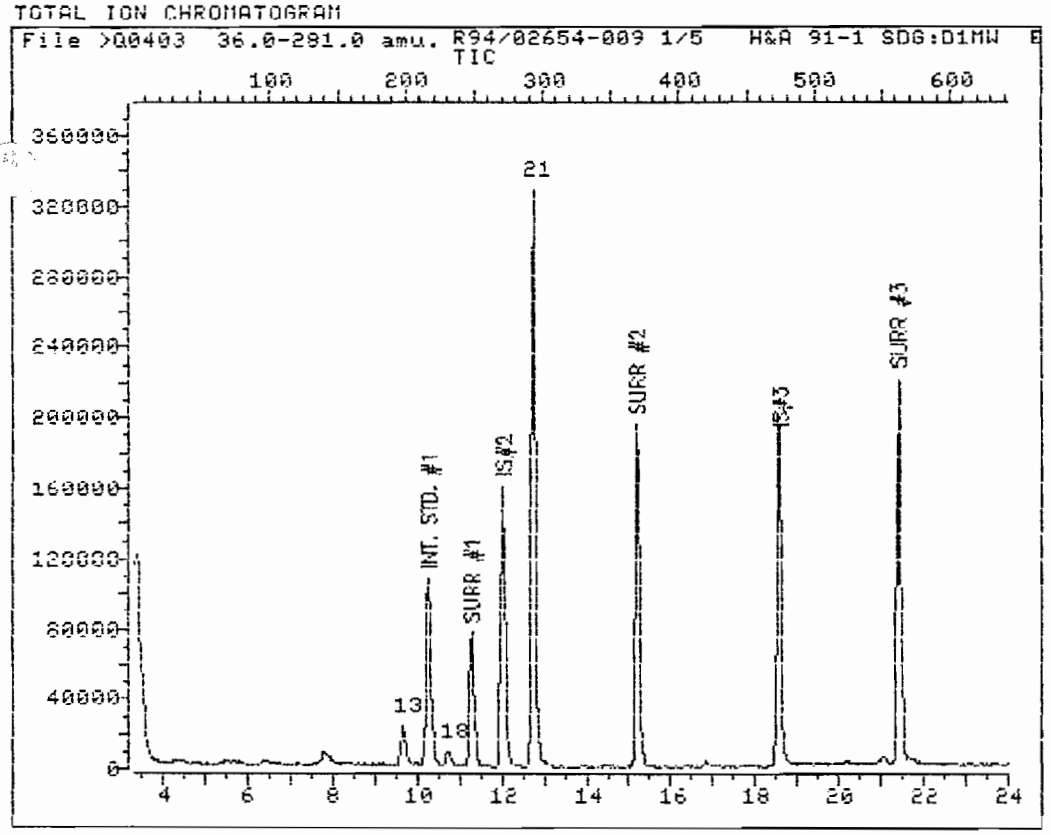
Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 14:32
Output File: ^Q0403::D3 Injected at: 940722 13:25
Data File: >Q0403::D3 Dilution Factor: 1.00000
Name: R94/02654-009 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:D1MW

MD File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	99306	50.00	ppb	95
13)	cis-1,2-Dichloroethene	9.69	96.0	33667	10.37	ppb	98
16)	1,2-Dichloroethane-d4	11.30	65.0	208634	44.33	ppb	90
17)	*1,4-Difluorobenzene	12.04	114.0	447222	50.00	ppb	80
18)	1,1,1-Trichloroethane	10.75	97.0	24113	4.30	ppb	91
21)	Trichloroethene	12.75	130.0	414057	100.74	ppb	96
29)	*Chlorobenzene-d5	18.58	117.0	370173	50.00	ppb	95
31)	Toluene-d8	15.20	98.0	424215	49.53	ppb	88
41)	Bromofluorobenzene	21.42	95.0	255208	50.31	ppb	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM

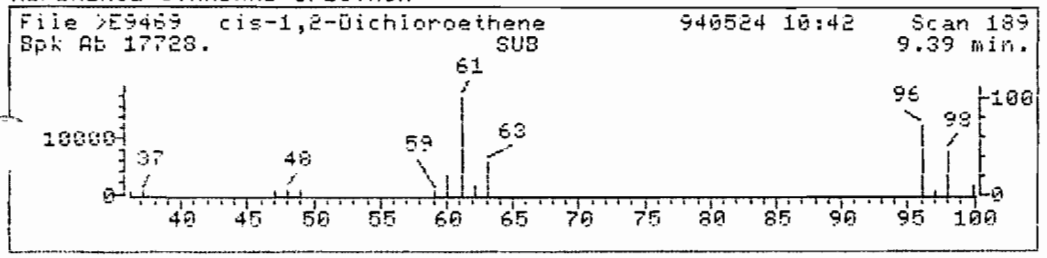


Data File: >Q0403::D3 Quant Output File: ^Q0403::D3
Name: R94/02654-009 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:D1MW

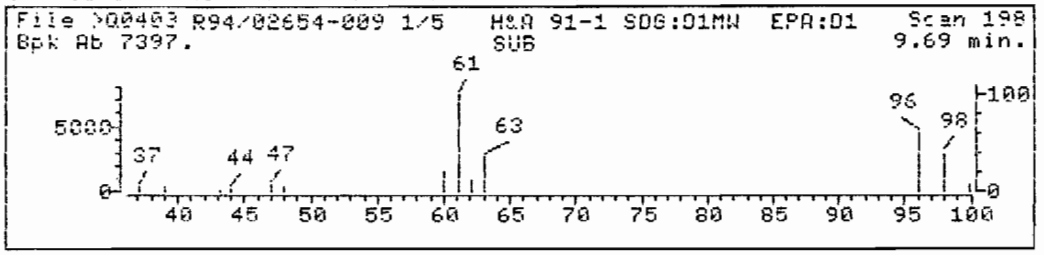
Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

Operator ID: TOMT
Quant Time : 940722 14:32
Injected at: 940722 13:25

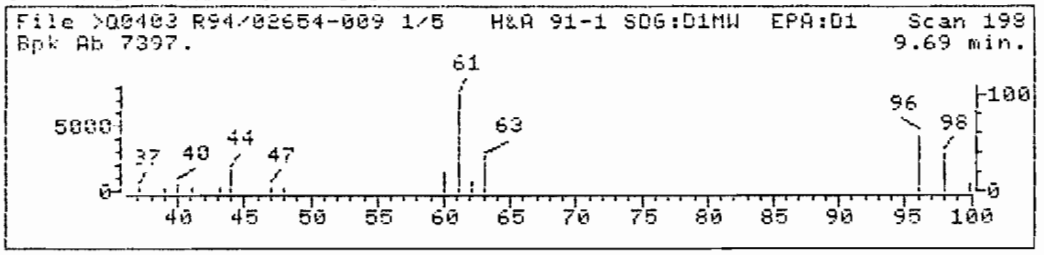
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



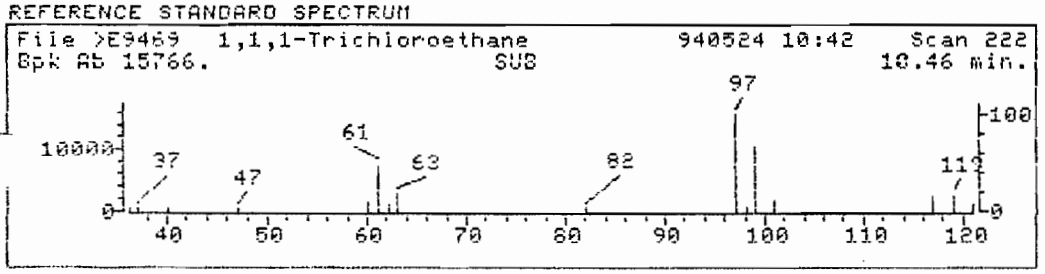
SAMPLE SPECTRUM (UNALTERED)



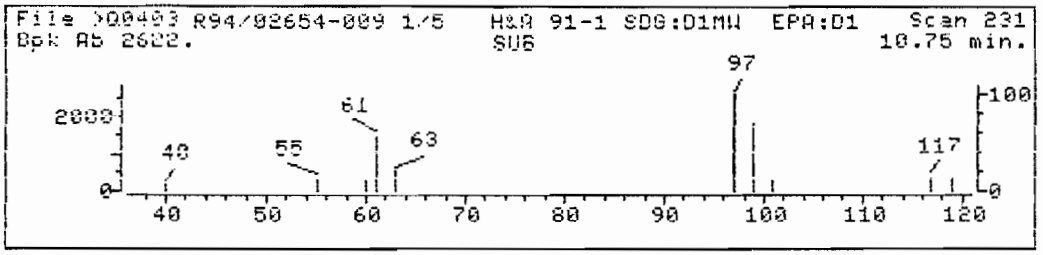
Data File: >Q0403::D3 Quant Output File: ^Q0403::D3
Name: R94/02654-009 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:D1MW
Quant Time: 940722 14:32 Quant ID File: ID5CLP::QT
Injected at: 940722 13:25 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 198
Retention Time: 9.69 min.
Quant Ion : 96.0
Area : 33667
Concentration : 10.37 ppb
q-value : 98

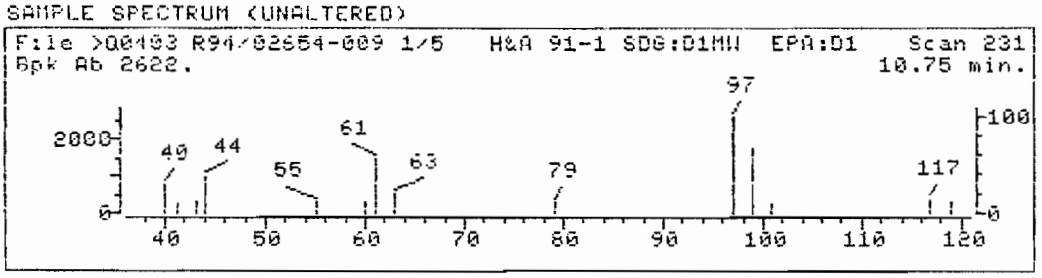
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



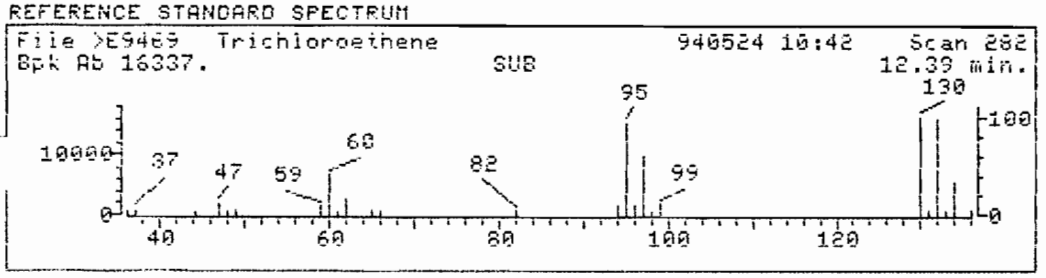
SAMPLE SPECTRUM (UNALTERED)



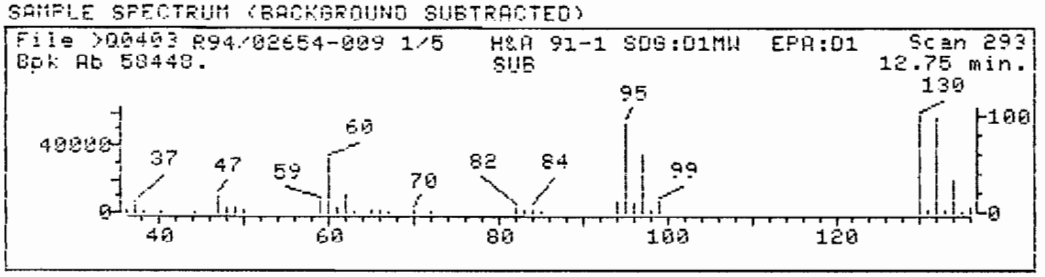
Data File: >Q0403::D3 Quant Output File: ^Q0403::D3
Name: R94/02654-009 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:D1MW
Quant Time: 940722 14:32 Quant ID File: ID5CLP::QT
Injected at: 940722 13:25 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 231
Retention Time: 10.75 min.
Quant Ion : 97.0
Area : 24113
Concentration : 4.30 ppb
q-value : 91

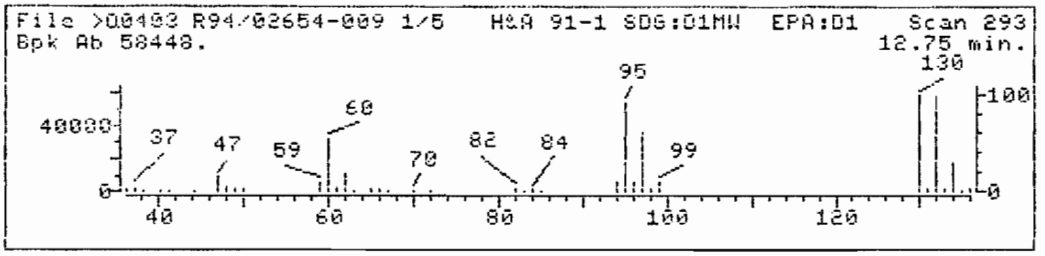
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0403::D3 Quant Output File: ^Q0403::D3
Name: R94/02654-009 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:D1MW
Quant Time: 940722 14:32 Quant ID File: ID5CLP::QT
Injected at: 940722 13:25 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 293
Retention Time: 12.75 min.
Quant Ion : 130.0
Area : 414057
Concentration : 100.74 ppb
q-value : 96

MS data file header from : >Q0403::D3

Sample: R94/02654-009 1/5 Operator: TOMT 7/22/94 13:25
Misc : H&A 91-1 SDG:D1MW EPA:D1MW
Ins. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 3 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q0403 R94/02654-009 1/5 H&A 91-1 SDG:D1MW EPA:D1MW
36.01 281.0 CLP TIC
Upslope: .2000 Area Reject: 79872. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ0403 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	7.78	133	139	151	6881	201454	91407	100.00	100.000

Sum of corrected areas: 91407.

Summary of Unknowns PBM Library Search and Quantitation

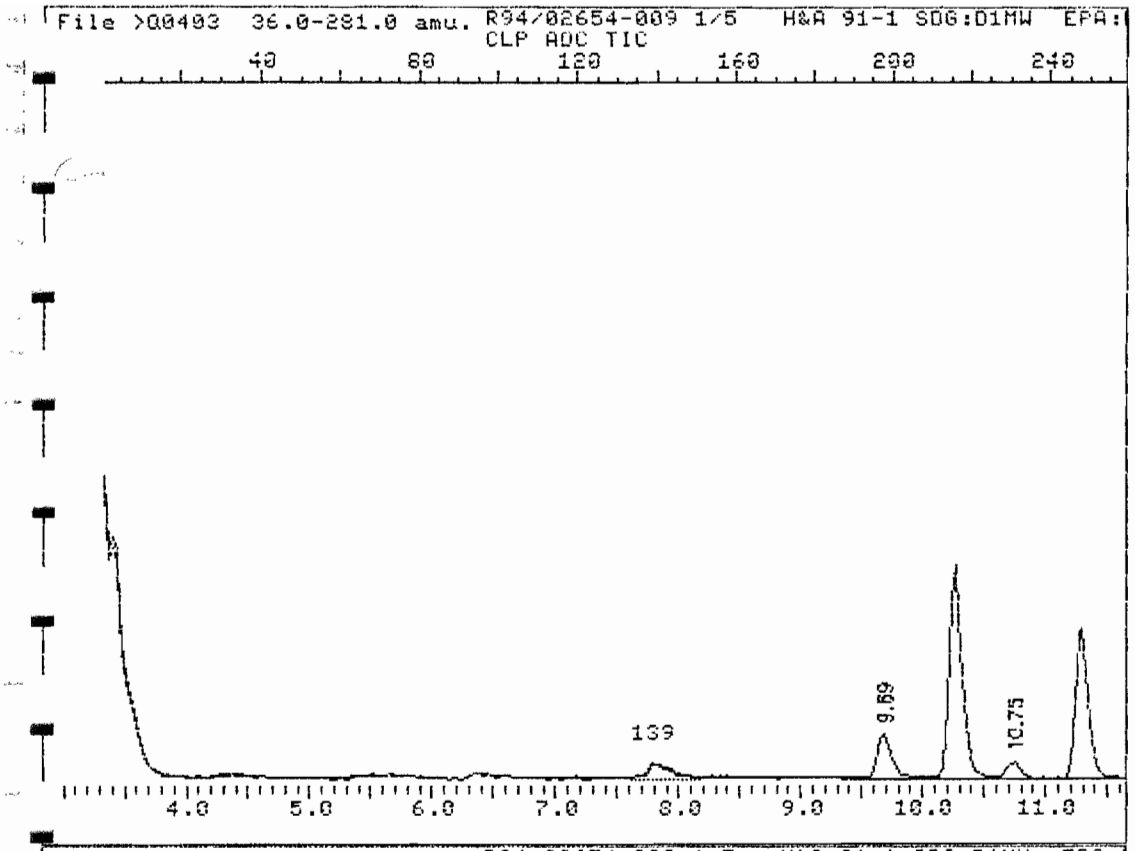
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	798719.	10.27	3.34 - 11.15
2	50.0	1192295.	12.04	11.15 - 15.31
3	50.0	1318689.	18.58	15.31 - 23.00

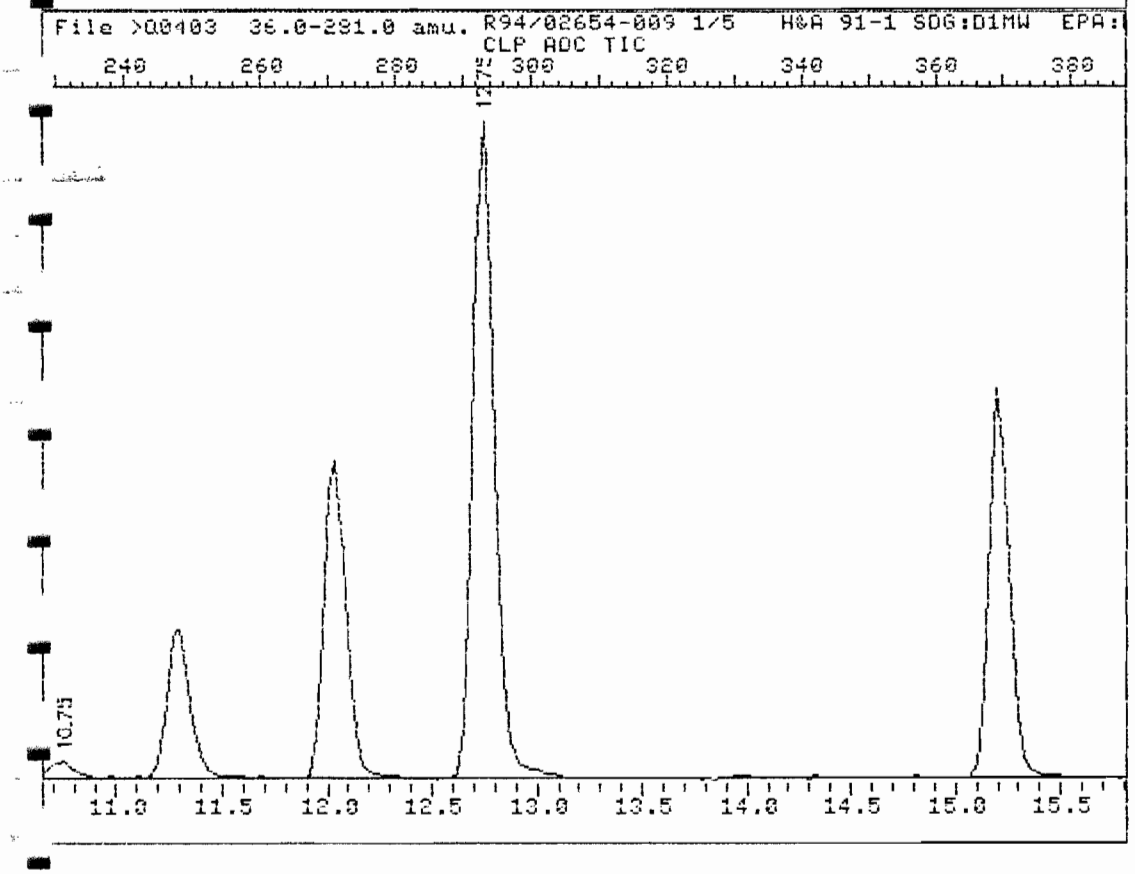
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 5.00

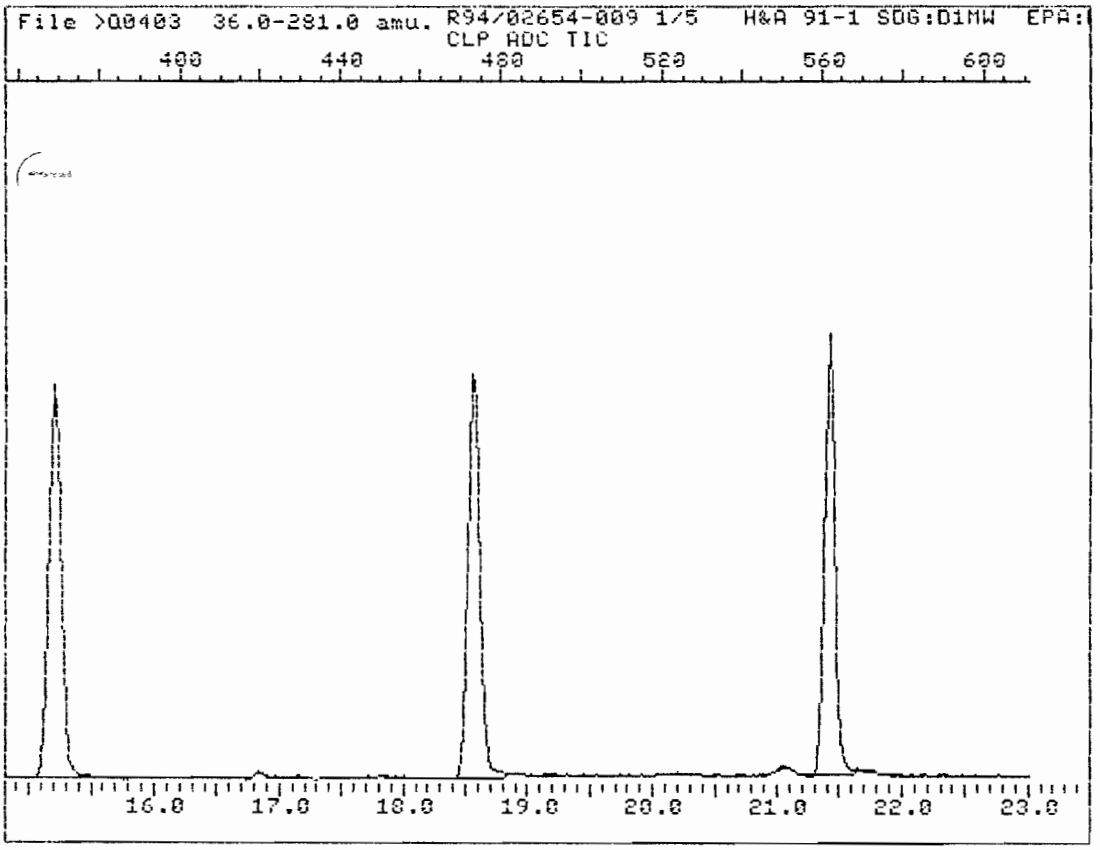
$$\text{Unknown Concentration} = \frac{|\text{Conc Int Std} * \text{Area Unknown}|}{|\text{Area Int Std}|} * \text{Correction Factor}$$

8:59 AM THU., 28 JULY, 1994

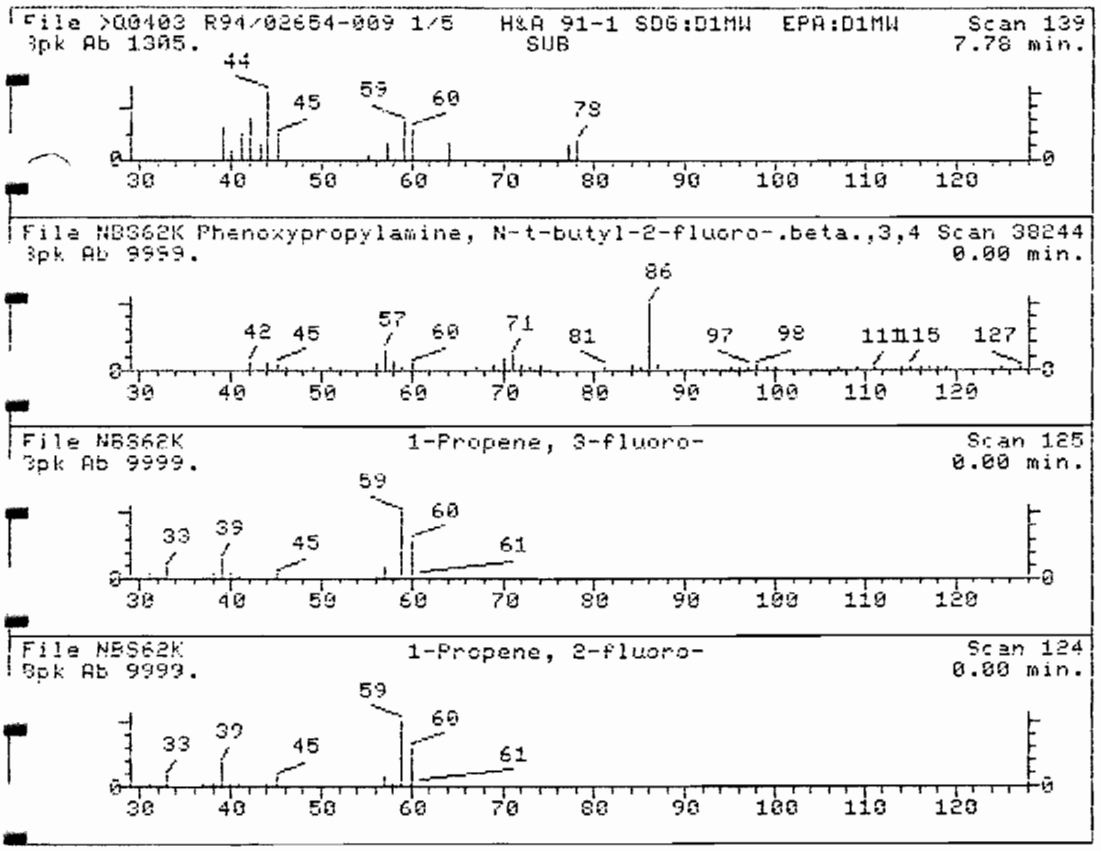




Instrument ID: MS5 Analyzed on: 7/22/94 13:25



Instrument ID: MS5 Analyzed on: 7/22/94 13:25



Instrument ID: MS5 Analyzed on: 7/22/94 13:25
Result 1 in PBM results file: LQ0403
Retention Time: 7.78 Area: 91407 Tentative Conc: 29.00 β
The unknown area is 11.44% of the nearest internal standard

1. Phenoxypropylamine, N-t-butyl-2-fluoro-.beta.,3,4-tr 273 C13H20FNO4
   ihydroxy-
2. 1-Propene, 3-fluoro- 60 C3H5F
3. 1-Propene, 2-fluoro- 60 C3H5F

Sample file: >Q0403 Spectrum #: 139
Search speed: 1 Tilting option: N No. of ion ranges searched: 33

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11	38244	385	NBS62K	26	56	0	0	100	65	2	13

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0392

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	2.	J
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00059

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0392

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

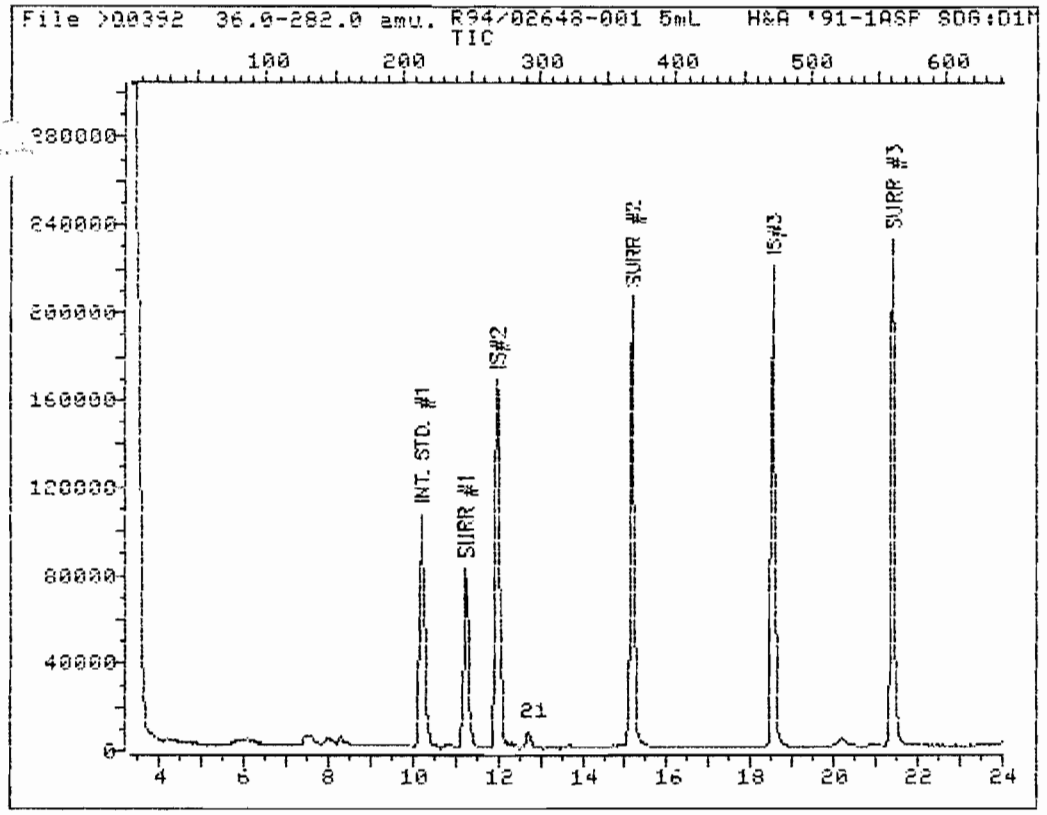
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:47
Output File: ^Q0392::D3 Injected at: 940722 01:22
Data File: >Q0392::D3 Dilution Factor: 1.00000
Name: R94/02648-001 5mL Instrument ID: MS5
Misc: H&A `91-1ASP SDG:D1MW EPA:MW1

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	104956	50.00	ppb	91
16)	1,2-Dichloroethane-d4	11.23	65.0	219179	48.11	ppb	89
17)	*1,4-Difluorobenzene	11.97	114.0	486465	50.00	ppb	78
21)	Trichloroethene	12.72	130.0	9832	2.09	ppb	98
29)	*Chlorobenzene-d5	18.52	117.0	390675	50.00	ppb	96
31)	Toluene-d8	15.17	98.0	450442	50.29	ppb	92
41)	Bromofluorobenzene	21.39	95.0	267206	50.46	ppb	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM

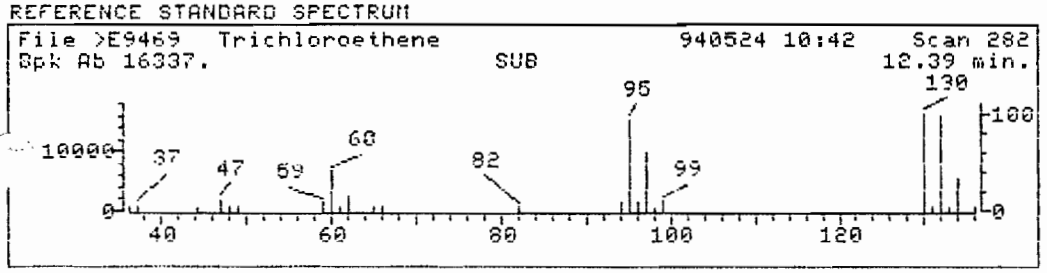


Data File: >Q0392::D3 Quant Output File: ^Q0392::D3
Name: R94/02648-001 5mL Instrument ID: MS5
Misc: H&A `91-1ASP SDG:D1MW EPA:MW1

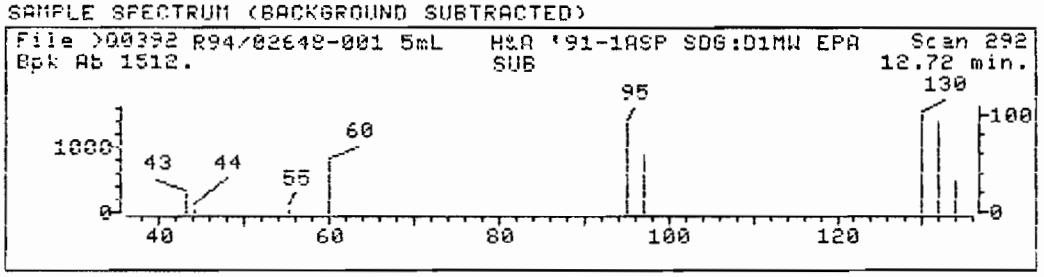
Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:47
Injected at: 940722 01:22

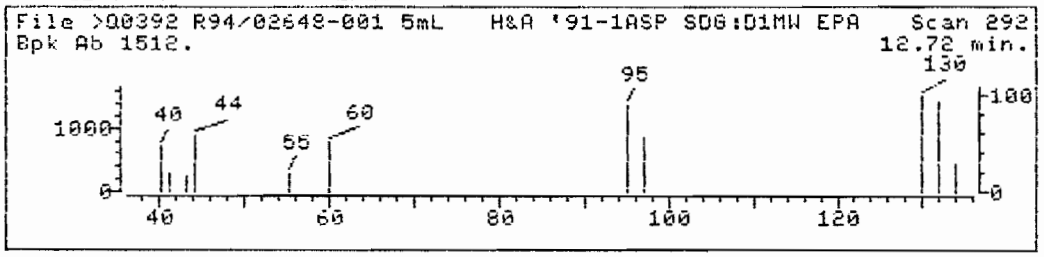
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0392::D3 Quant Output File: ^Q0392::D3
Name: R94/02648-001 5mL Instrument ID: MS5
Misc: H&A `91-1ASP SDG:D1MW EPA:MW1
Quant Time: 940722 07:47 Quant ID File: ID5CLP::QT
Injected at: 940722 01:22 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 292
Retention Time: 12.72 min.
Quant Ion : 130.0
Area : 9832
Concentration : 2.09 ppb
q-value : 98

MS data file header from : >Q0392::D3

Sample: R94/02648-001 5mL Operator: RODH 7/22/94 1:22
Misc : H&A '91-1ASP SDG:D1MW EPA:MW1
. £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 36 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

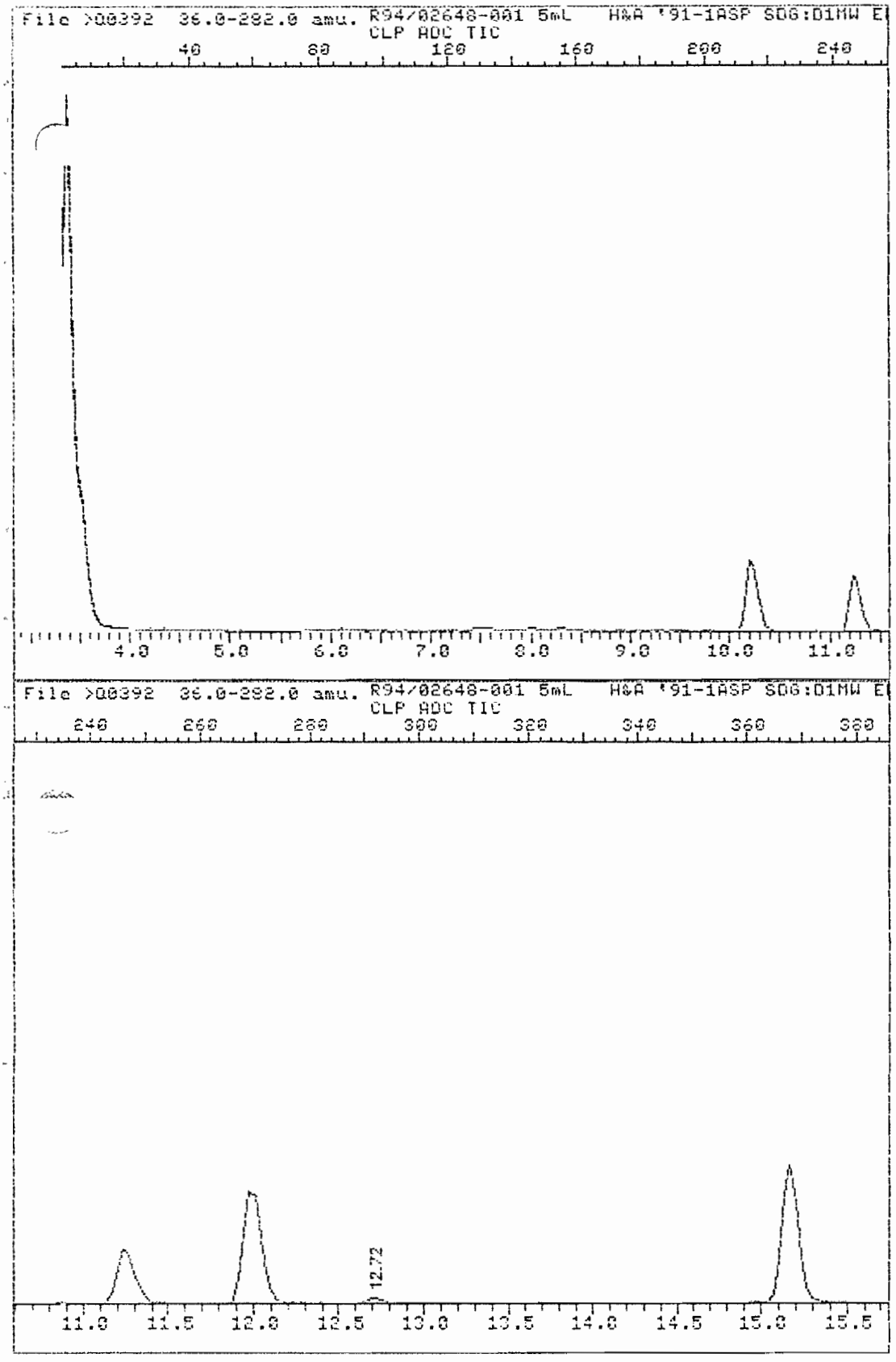
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	855255.	10.20	3.34 - 11.09
2	50.0	1256350.	11.97	11.09 - 15.25
3	50.0	1349606.	18.52	15.25 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

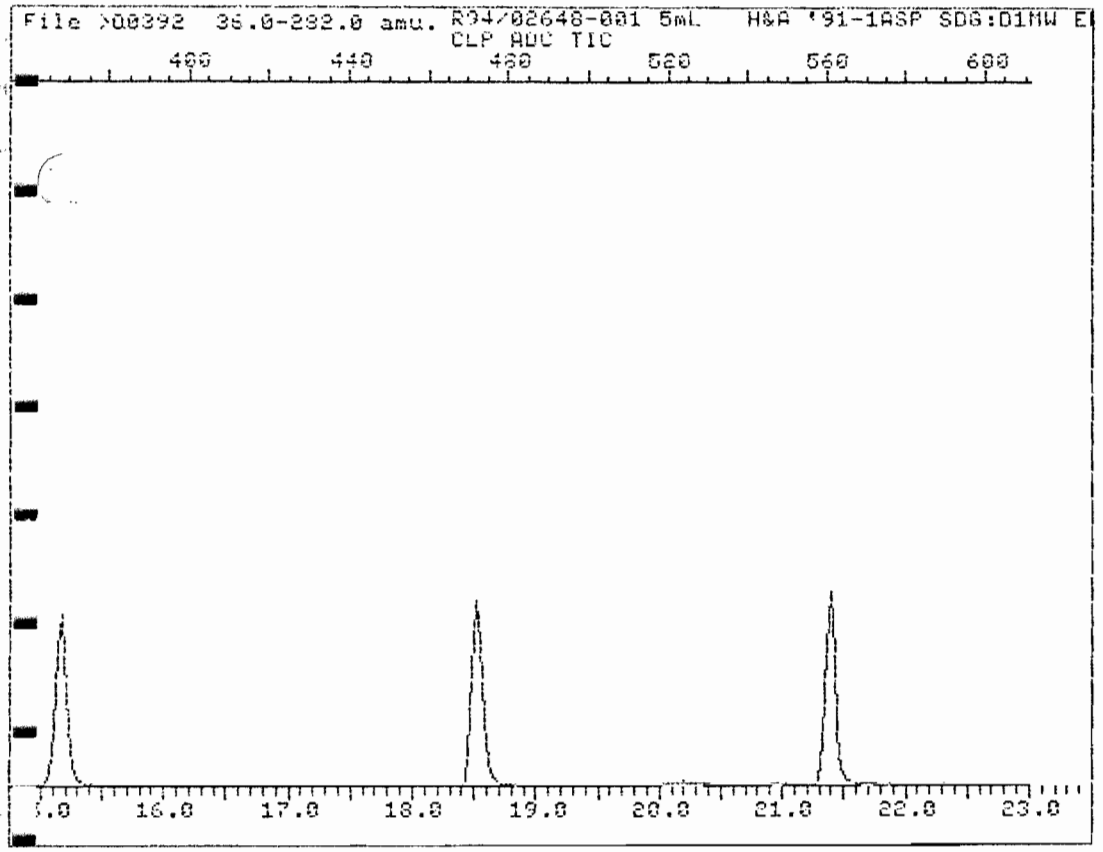
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

6:18 AM THU., 28 JULY, 1994



Instrument ID: MS5 Analyzed on: 7/22/94 1:22



Instrument ID: MS5 Analyzed on: 7/22/94 1:22

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: MW2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0393

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	25.	J
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	23.	J
71-55-6	1,1,1-Trichloroethane	100.	U
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1400.	
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

00067

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0393

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.66	120.	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.					

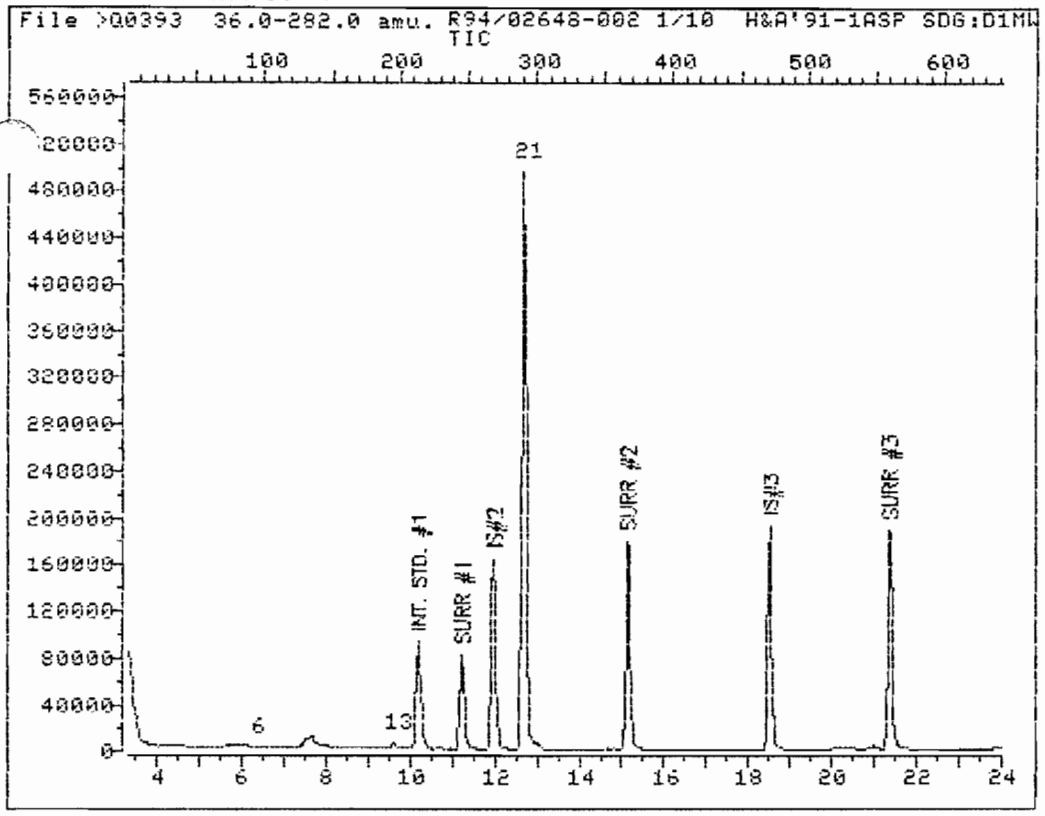
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:48
Output File: ^Q0393::D3 Injected at: 940722 01:55
Data File: >Q0393::D3 Dilution Factor: 1.00000
Name: R94/02648-002 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW2

ID File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	89787	50.00	ppb	93
6)	Acetone	6.33	43.0	3485M	2.49	ppb	88
13)	cis-1,2-Dichloroethene	9.62	96.0	6223	2.29	ppb	97
16)	1,2-Dichloroethane-d4	11.23	65.0	217881	55.90	ppb	91
17)	*1,4-Difluorobenzene	11.97	114.0	460499	50.00	ppb	81
21)	Trichloroethene	12.68	130.0	643791	144.72	ppb	97
29)	*Chlorobenzene-d5	18.52	117.0	352130	50.00	ppb	95
31)	Toluene-d8	15.13	98.0	413157	51.17	ppb	91
41)	Bromofluorobenzene	21.36	95.0	238104	49.89	ppb	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM

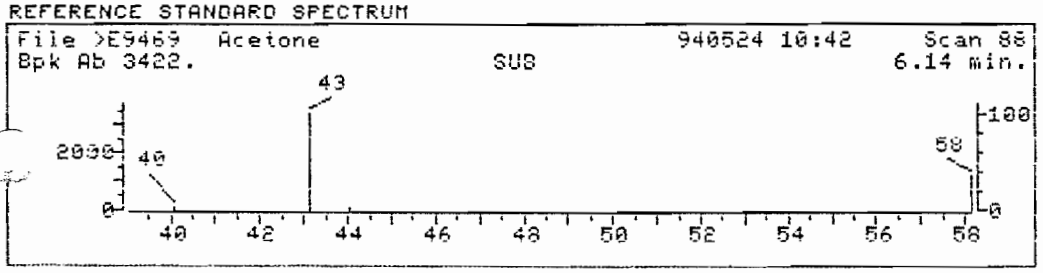


Data File: >Q0393::D3 Quant Output File: ^Q0393::D3
Name: R94/02648-002 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW2

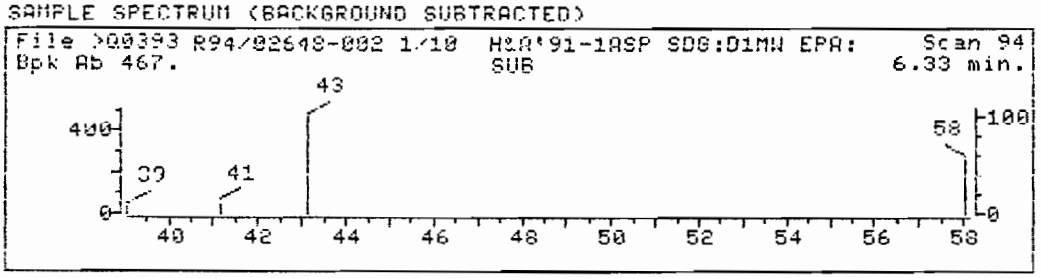
Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:48
Injected at: 940722 01:55

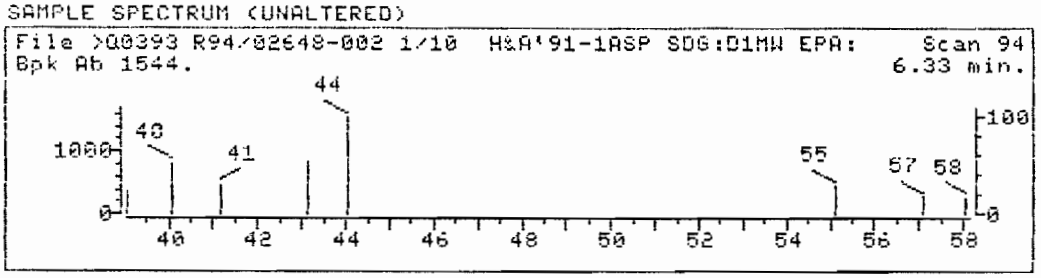
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



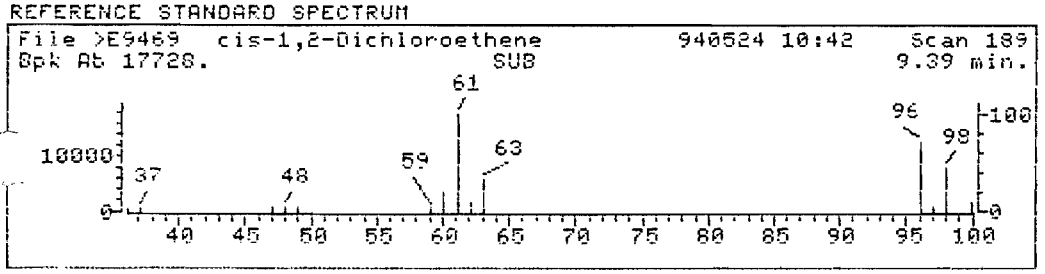
SAMPLE SPECTRUM (UNALTERED)



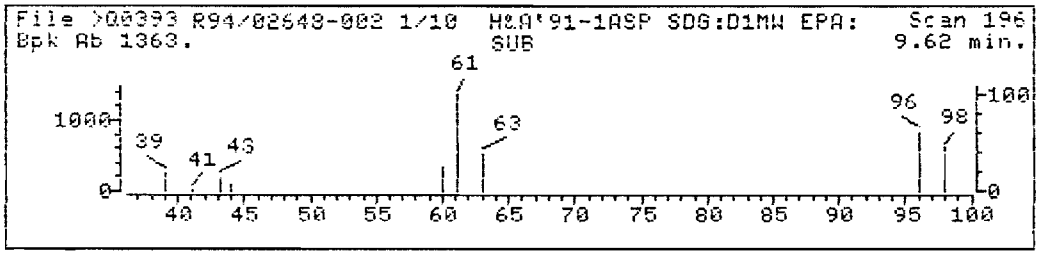
Data File: >Q0393::D3 Quant Output File: ^Q0393::D3
Name: R94/02648-002 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW2
Quant Time: 940722 07:48 Quant ID File: 1D5CLP::QT
Injected at: 940722 01:55 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 6
Compound Name : Acetone
Scan Number : 94
Retention Time: 6.33 min.
Quant Ion : 43.0
Area : 3485M
Concentration : 2.49 ppb
q-value : 88

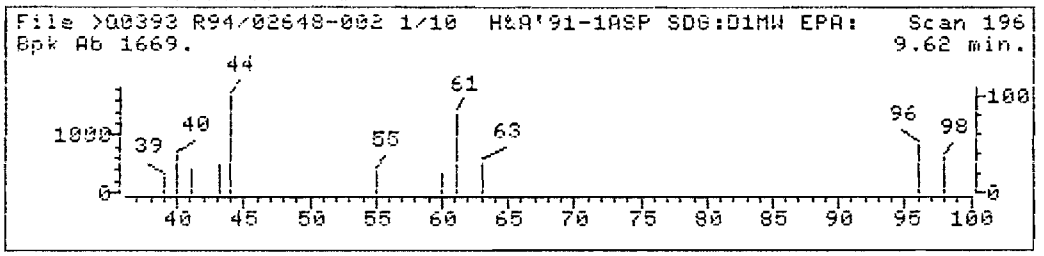
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



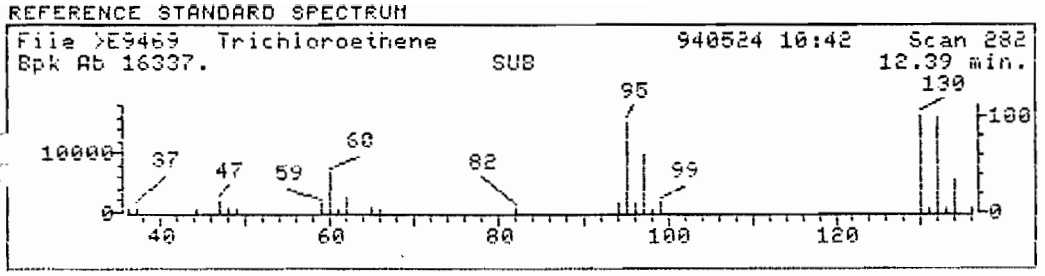
SAMPLE SPECTRUM (UNALTERED)



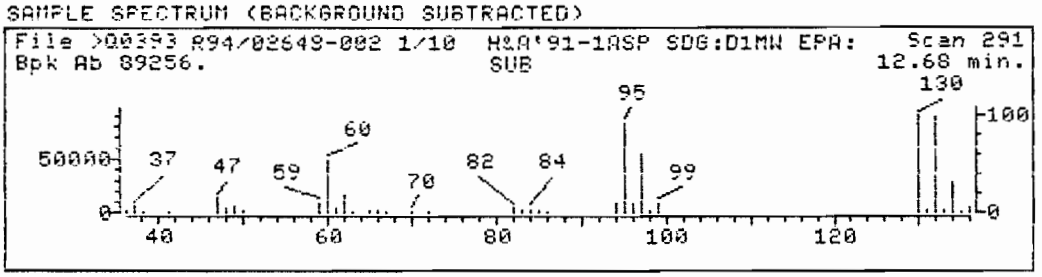
Data File: >Q0393::D3 Quant Output File: ^Q0393::D3
Name: R94/02648-002 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW2
Quant Time: 940722 07:48 Quant ID File: ID5CLP::QT
Injected at: 940722 01:55 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 196
Retention Time: 9.62 min.
Quant Ion : 96.0
Area : 6223
Concentration : 2.29 ppb
q-value : 97

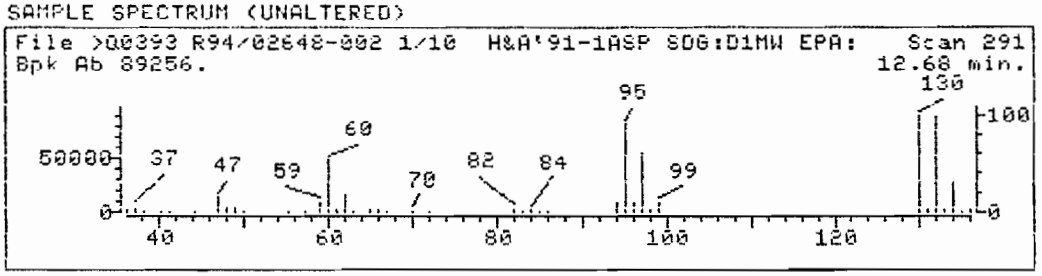
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0393::D3 Quant Output File: ^Q0393::D3
Name: R94/02648-002 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW2
Quant Time: 940722 07:48 Quant ID File: ID5CLP::QT
Injected at: 940722 01:55 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 291
Retention Time: 12.68 min.
Quant Ion : 130.0
Area : 643791
Concentration : 144.72 ppb
q-value : 97

MS data file header from : >Q0393::D3

Sample: R94/02648-002 1/10 Operator: RODH 7/22/94 1:55
Misc : H&A`91-1ASP SDG:D1MW EPA:MW2
. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 37 Equip ID: MS5
Method file: REGU0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

Q0393 R94/02648-002 1/10 H&A`91-1ASP SDG:D1MW EPA:MW2
36.00 282.0 CLP TIC
Upslope: .2000 Area Reject: 72430. Max Peaks: 1 Bunch: -1 Valley >100 %
Onslope: 0.0000 Results File IQ0393 Sorted by Time/Area INT

Peak f	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	7.66	122	135	143	9929	321936	169168	100.00	100.000

Sum of corrected areas: 169168.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	724300.	10.20	3.34 - 11.09
2	50.0	1193128.	11.97	11.09 - 15.25
3	50.0	1197079.	18.52	15.25 - 23.00

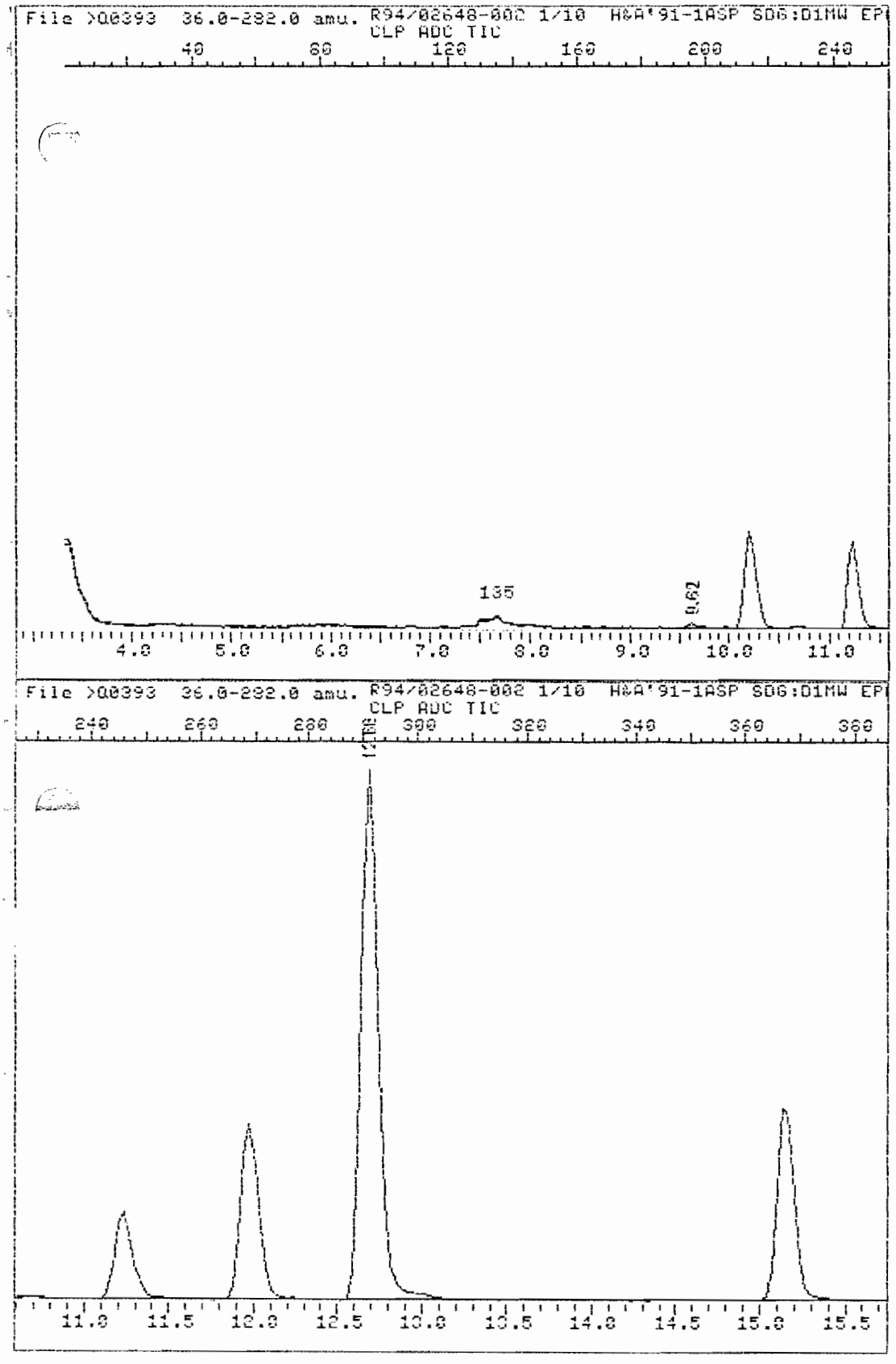
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 10.00

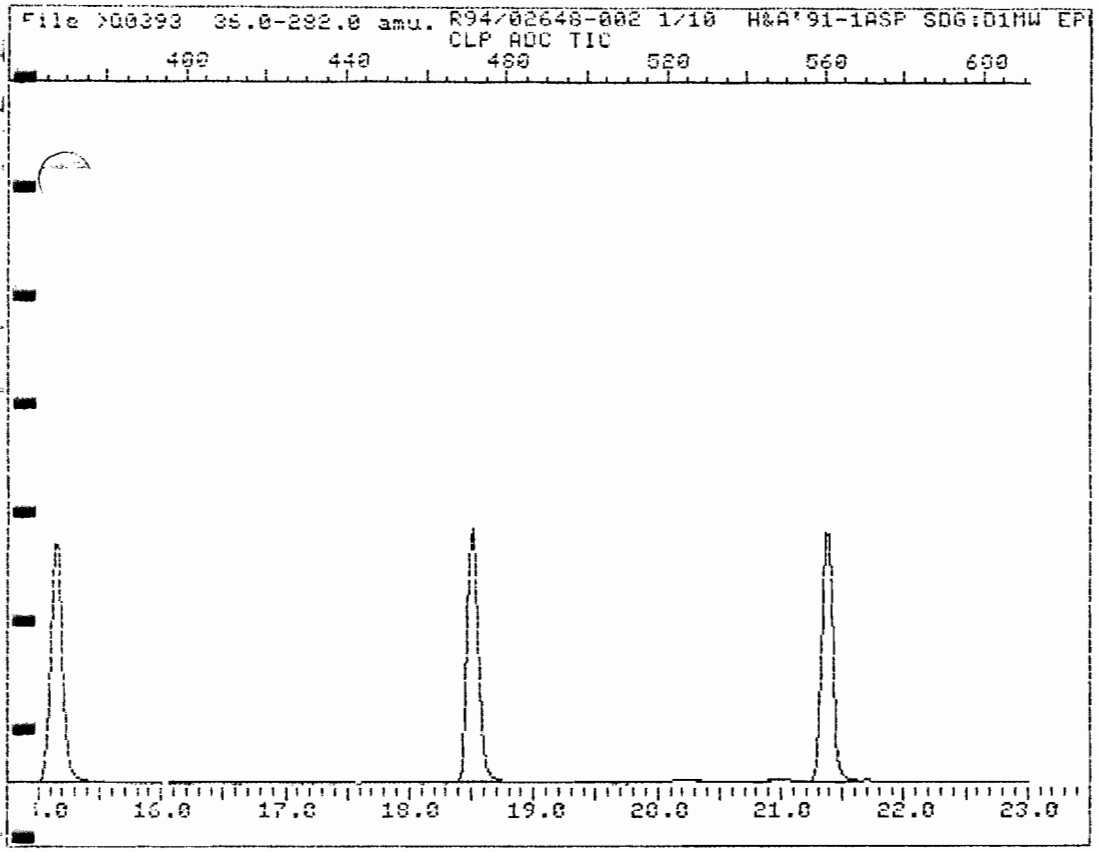
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

6:23 AM THU., 28 JULY, 1994

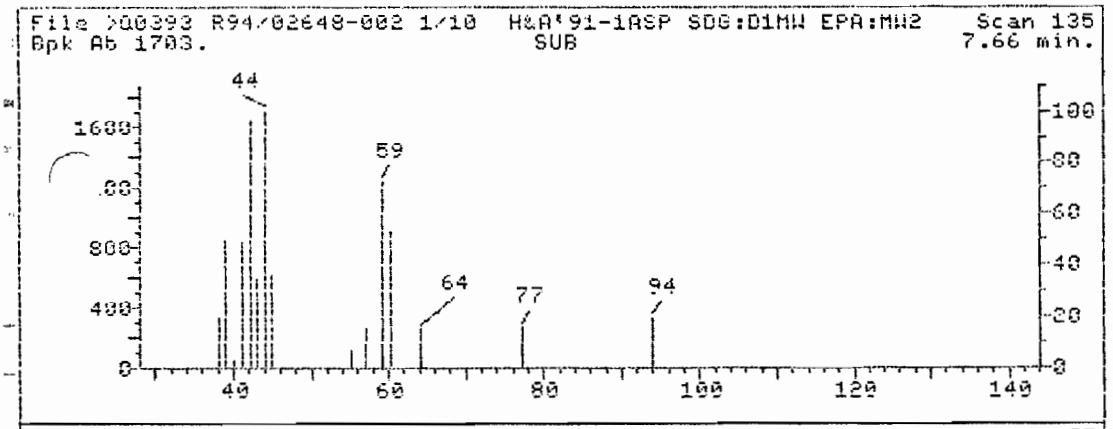
00074

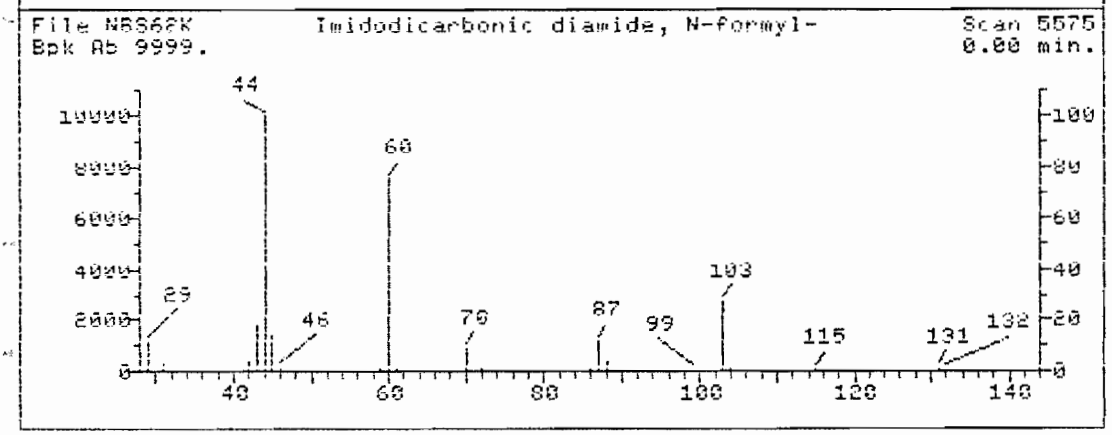


Instrument ID: MS5 Analyzed on: 7/22/94 1:55



Instrument ID: MS5 Analyzed on: 7/22/94 1:55





Instrument ID: MS5 Analyzed on: 7/22/94 1:55
Result 1 in PBM results file: LQ0393
Retention Time: 7.66 Area: 169168 Tentative Conc: 120.00
The unknown area is 23.36% of the nearest internal standard

1. Imidodicarbonic diamide, N-formyl- 131 C3H5N3O3

Sample file: >Q0393 Spectrum #: 135
Search speed: 1 Tilting option: N No. of ion ranges searched: 32

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	2148096	2473	NBS62K	28	62	2	0	70	58	3	14

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW201

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0402

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 50.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	500.	U
74-83-9	Bromomethane	500.	U
75-01-4	Vinyl chloride	500.	U
75-00-3	Chloroethane	500.	U
75-09-2	Methylene chloride	500.	U
67-64-1	Acetone	500.	U
75-15-0	Carbon Disulfide	500.	U
75-35-4	1,1-Dichloroethene	500.	U
75-34-3	1,1-Dichloroethane	500.	U
156-60-5	trans-1,2-Dichloroethene	500.	U
67-66-3	Chloroform	500.	U
107-06-2	1,2-Dichloroethane	500.	U
78-93-3	2-Butanone	500.	U
156-59-2	cis-1,2-Dichloroethene	1100.	
71-55-6	1,1,1-Trichloroethane	390.	J
56-23-5	Carbon tetrachloride	500.	U
75-27-4	Bromodichloromethane	500.	U
78-87-5	1,2-Dichloropropane	500.	U
10061-01-5	cis-1,3-Dichloropropene	500.	U
79-01-6	Trichloroethene	7400.	
124-48-1	Dibromochloromethane	500.	U
79-00-5	1,1,2-Trichloroethane	500.	U
71-43-2	Benzene	500.	U
50061-02-6	trans-1,3-Dichloropropene	500.	U
75-25-2	Bromoform	500.	U
108-10-1	4-Methyl-2-Pentanone	500.	U
591-78-6	2-Hexanone	500.	U
127-18-4	Tetrachloroethene	160.	J
79-34-5	1,1,2,2-Tetrachloroethane	500.	U
108-88-3	Toluene	500.	U
108-90-7	Chlorobenzene	500.	U
100-41-4	Ethylbenzene	500.	U
100-42-5	Styrene	500.	U
108-38-3	(m+p)Xylene	500.	U
95-47-6	o-Xylene	500.	U

00078

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW201

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0402

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 50.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

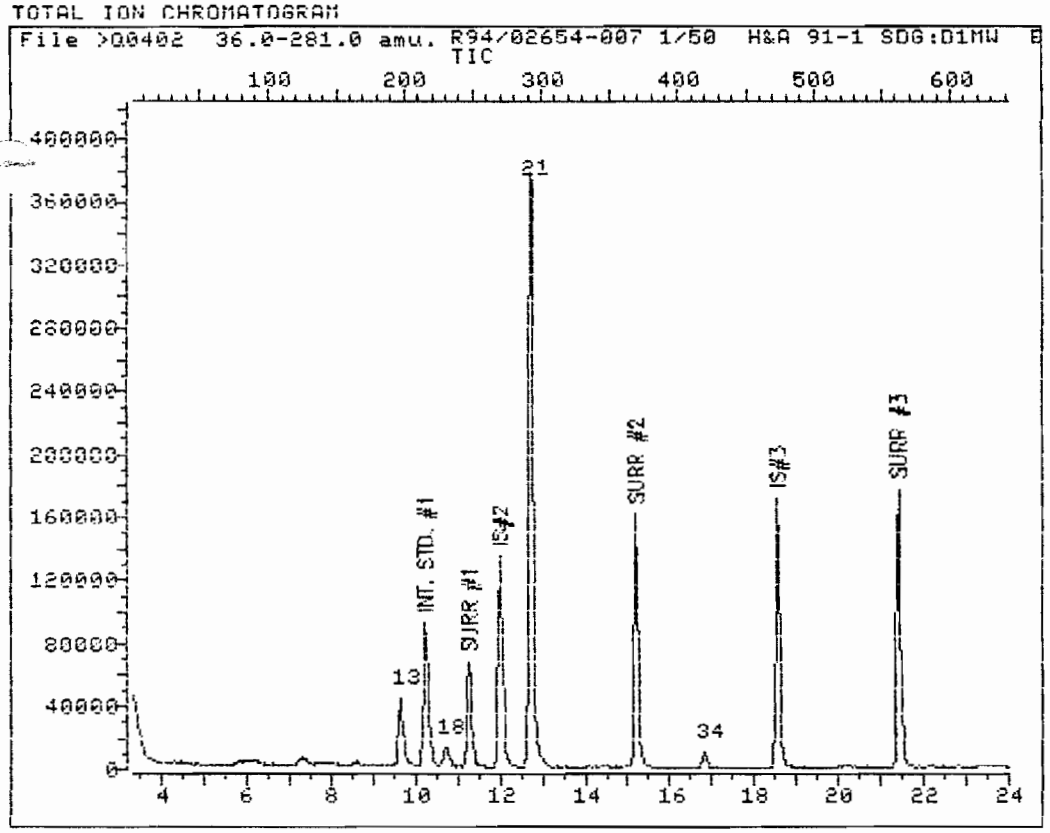
Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 14:31
Output File: ^Q0402::D3 Injected at: 940722 12:52
Data File: >Q0402::D3 Dilution Factor: 1.00000
Name: R94/02654-007 1/50 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW201

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.23	128.0	83261	50.00	ppb	88
13)	cis-1,2-Dichloroethene	9.65	96.0	62589	23.00	ppb	95
16)	1,2-Dichloroethane-d4	11.27	65.0	175324	44.43	ppb	91
17)	*1,4-Difluorobenzene	12.01	114.0	378229	50.00	ppb	77
18)	1,1,1-Trichloroethane	10.72	97.0	36780	7.75	ppb	91
21)	Trichloroethene	12.75	130.0	513182	147.63	ppb	95
29)	*Chlorobenzene-d5	18.55	117.0	304482	50.00	ppb	96
31)	Toluene-d8	15.20	98.0	352290	50.01	ppb	90
34)	Tetrachloroethene	16.84	164.0	9102	3.13	ppb	98
41)	Bromofluorobenzene	21.42	95.0	211838	50.77	ppb	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

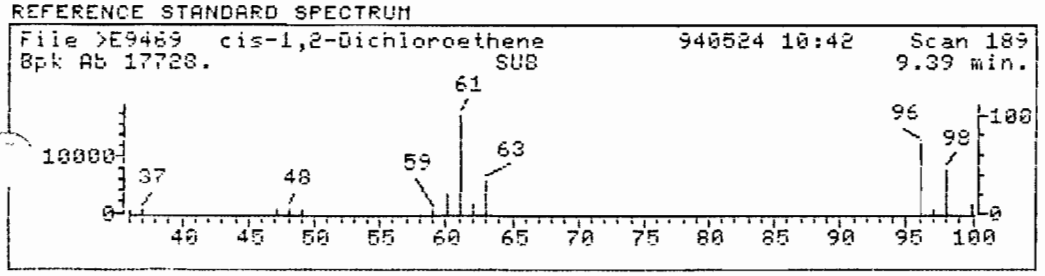


Data File: >Q0402::D3 Quant Output File: ^Q0402::D3
Name: R94/02654-007 1/50 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW201

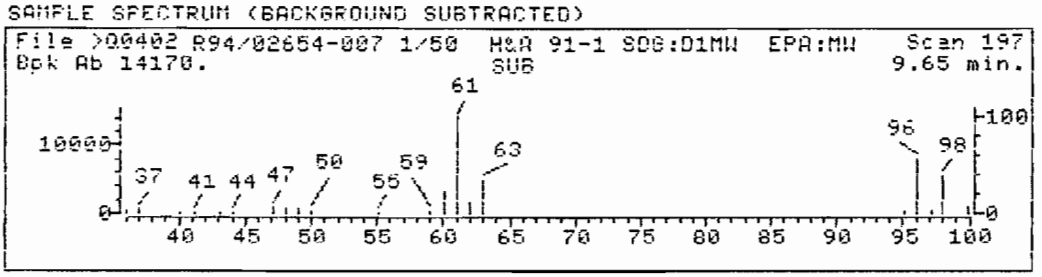
Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

Operator ID: TOMT
Quant Time : 940722 14:31
Injected at: 940722 12:52

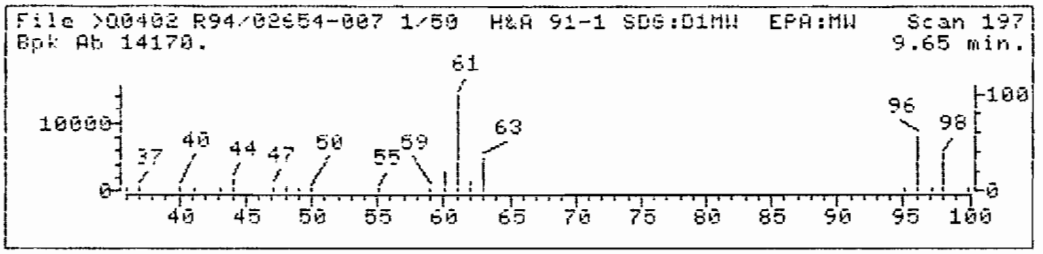
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



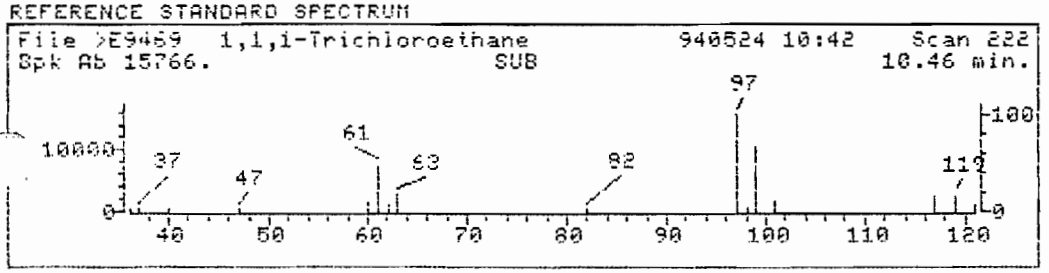
SAMPLE SPECTRUM (UNALTERED)



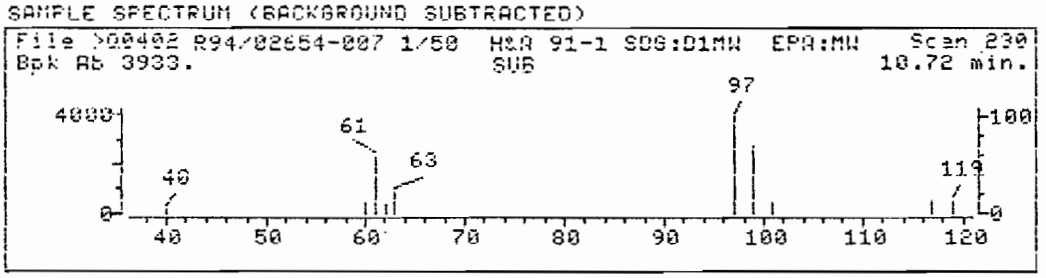
Data File: >Q0402::D3 Quant Output File: ^Q0402::D3
Name: R94/02654-007 1/50 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW201
Quant Time: 940722 14:31 Quant ID File: ID5CLP::QT
Injected at: 940722 12:52 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 197
Retention Time: 9.65 min.
Quant Ion : 96.0
Area : 62589
Concentration : 23.00 ppb
q-value : 95

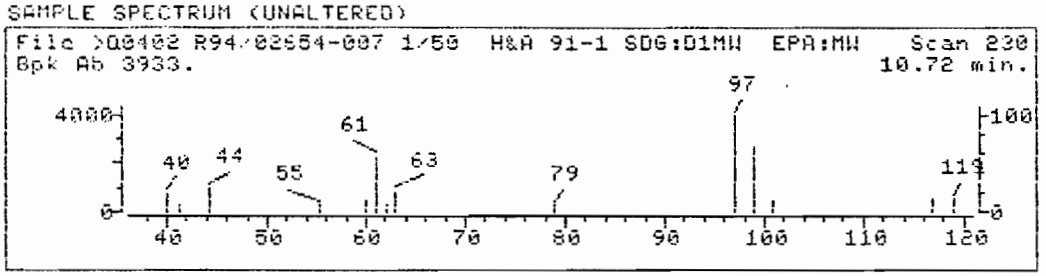
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



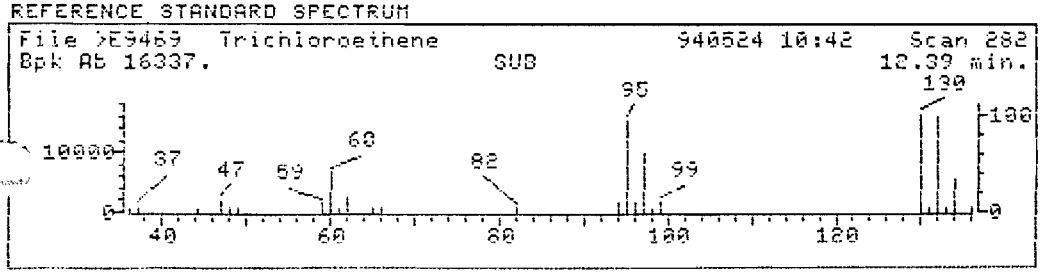
SAMPLE SPECTRUM (UNALTERED)



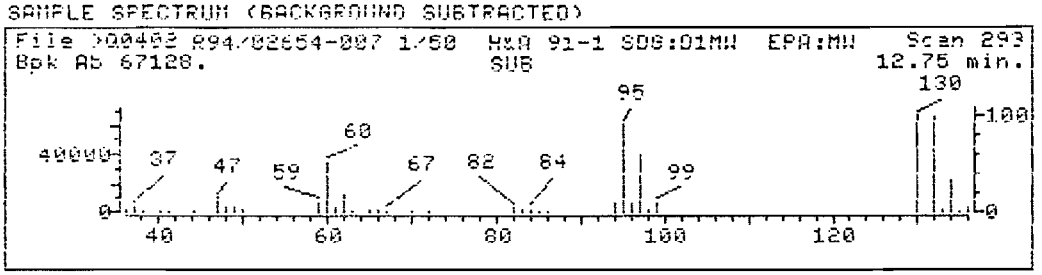
Data File: >Q0402::D3 Quant Output File: ^Q0402::D3
Name: R94/02654-007 1/50 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW201
Quant Time: 940722 14:31 Quant ID File: ID5CLP::QT
Injected at: 940722 12:52 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 230
Retention Time: 10.72 min.
Quant Ion : 97.0
Area : 36780
Concentration : 7.79 ppb
q-value : 91

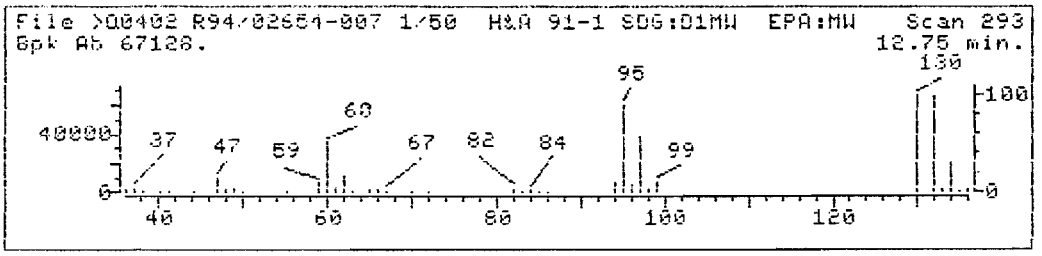
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



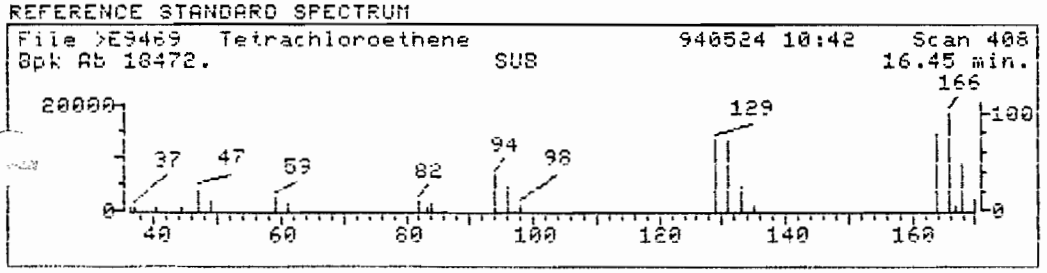
SAMPLE SPECTRUM (UNALTERED)



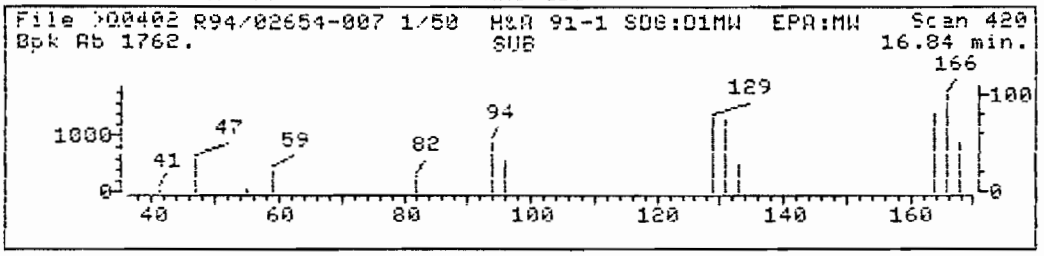
Data File: >Q0402::D3 Quant Output File: ^Q0402::D3
Name: R94/02654-007 1/50 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW201
Quant Time: 940722 14:31 Quant ID File: ID5CLP::QT
Injected at: 940722 12:52 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 293
Retention Time: 12.75 min.
Quant Ion : 130.0
Area : 513182
Concentration : 147.63 ppb
q-value : 95

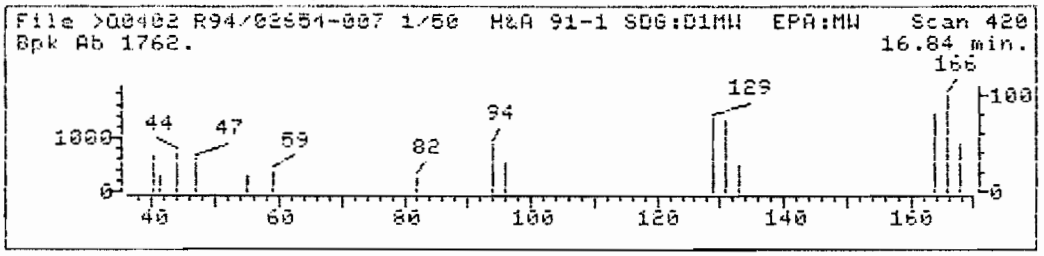
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0402::D3 Quant Output File: ^Q0402::D3
Name: R94/02654-007 1/50 Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW201
Quant Time: 940722 14:31 Quant ID File: ID5CLP::QT
Injected at: 940722 12:52 Last Calibration: 940607 12:24
Last Qcal Time: 940722 10:19

Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 420
Retention Time: 16.84 min.
Quant Ion : 164.0
Area : 9102
Concentration : 3.13 ppb
q-value : 98

MS data file header from : >Q0402::D3

Sample: R94/02654-007 1/50 Operator: TOMT 7/22/94 12:52
Misc : H&A 91-1 SDG:D1MW EPA:MW201
s. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 2 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

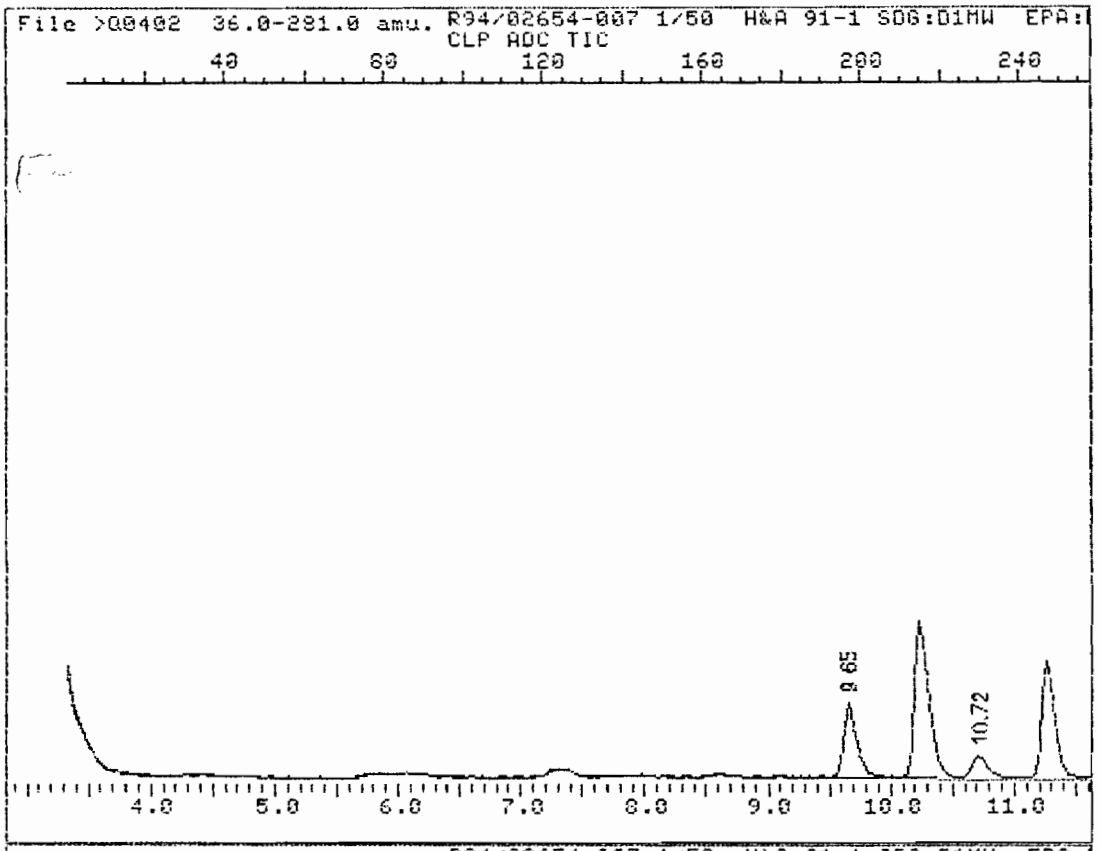
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	699240.	10.23	3.34 - 11.12
2	50.0	1012708.	12.01	11.12 - 15.28
3	50.0	1032387.	18.55	15.28 - 23.00

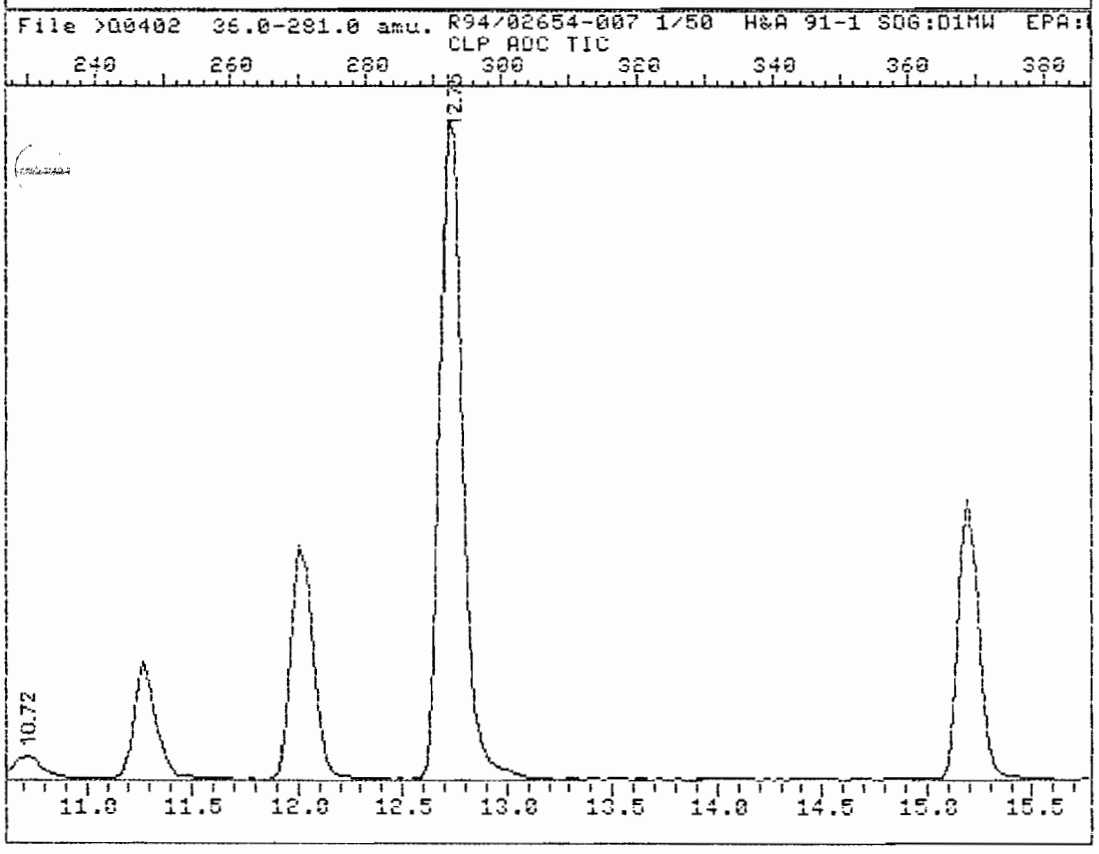
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 50.00

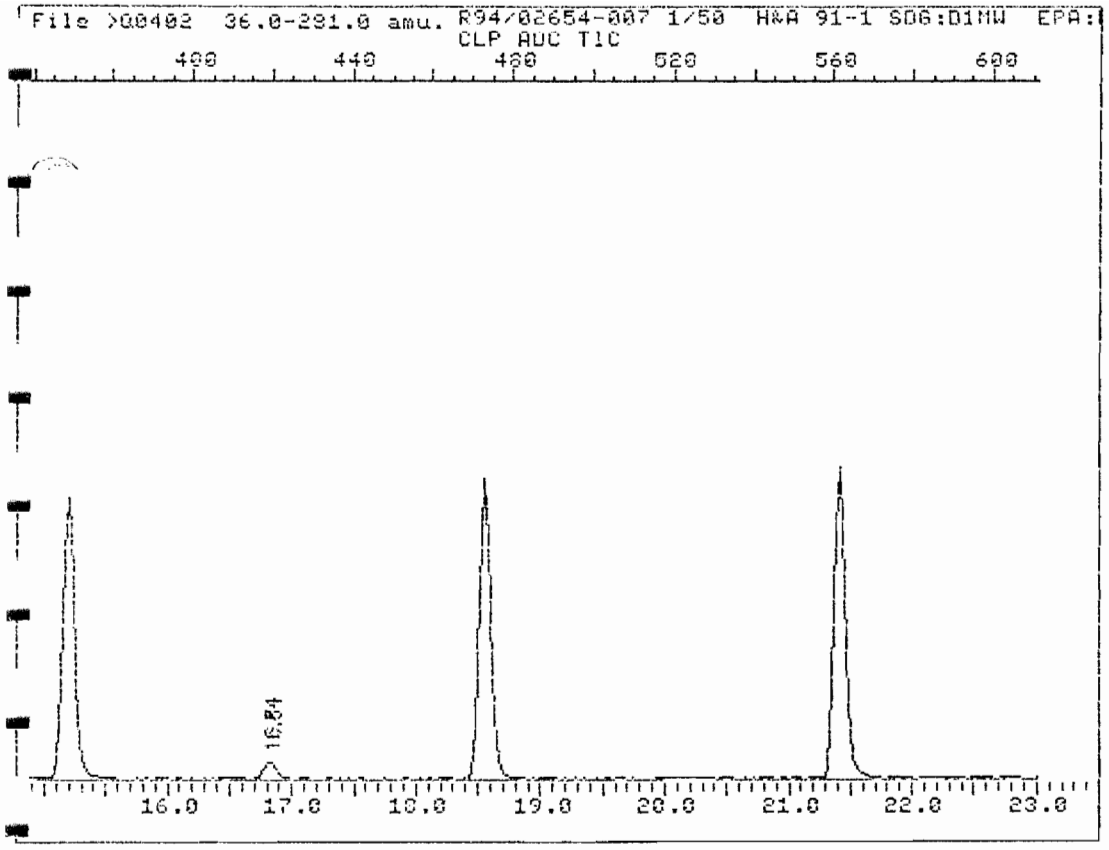
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

8:44 AM THU., 28 JULY, 1994





Instrument ID: MS5 Analyzed on: 7/22/94 12:52



Instrument ID: MS5 Analyzed on: 7/22/94 12:52

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0389

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/21/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	11.	
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	15.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW202

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0389

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/21/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.78	5.	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.					

00090

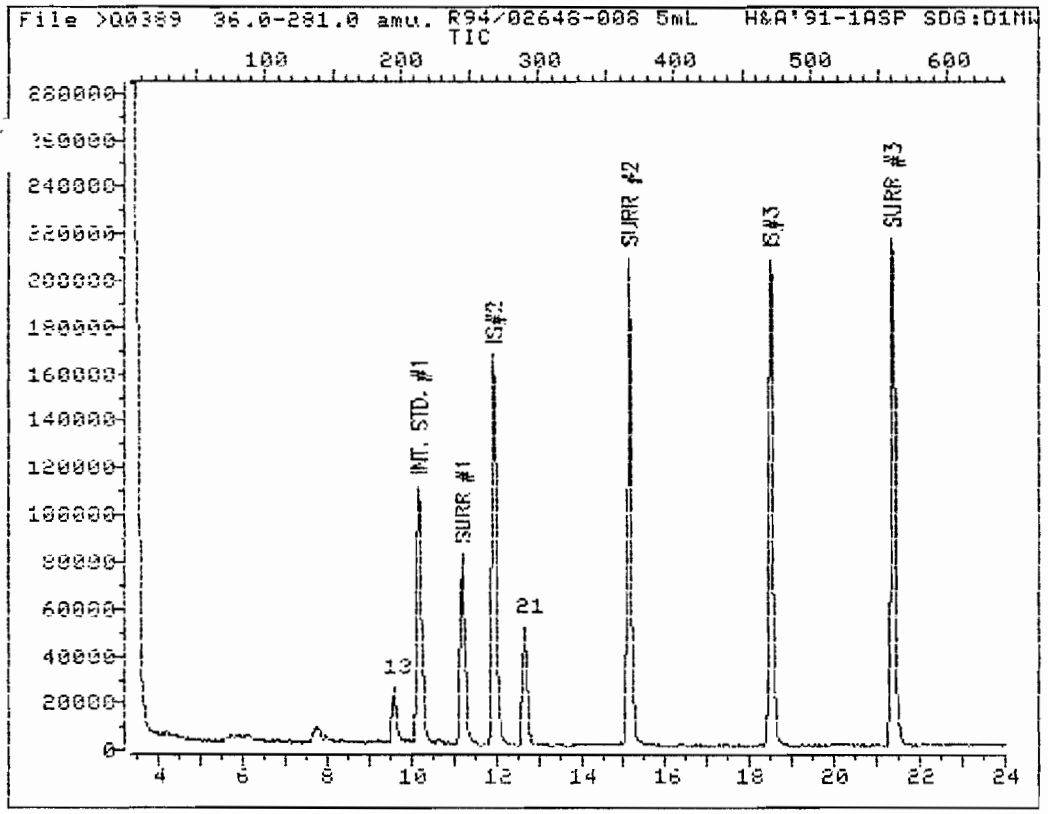
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:44
Output File: ^Q0389::D3 Injected at: 940721 23:42
Data File: >Q0389::D3 Dilution Factor: 1.00000
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202

ID File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.17	128.0	105810	50.00	ppb	91
13)	cis-1,2-Dichloroethene	9.59	96.0	35820	11.17	ppb	95
16)	1,2-Dichloroethane-d4	11.20	65.0	217662	47.39	ppb	92
17)	*1,4-Difluorobenzene	11.94	114.0	469096	50.00	ppb	77
21)	Trichloroethene	12.68	130.0	67742	14.95	ppb	95
29)	*Chlorobenzene-d5	18.49	117.0	393569	50.00	ppb	95
31)	Toluene-d8	15.13	98.0	453979	50.31	ppb	90
41)	Bromofluorobenzene	21.35	95.0	269901	50.60	ppb	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

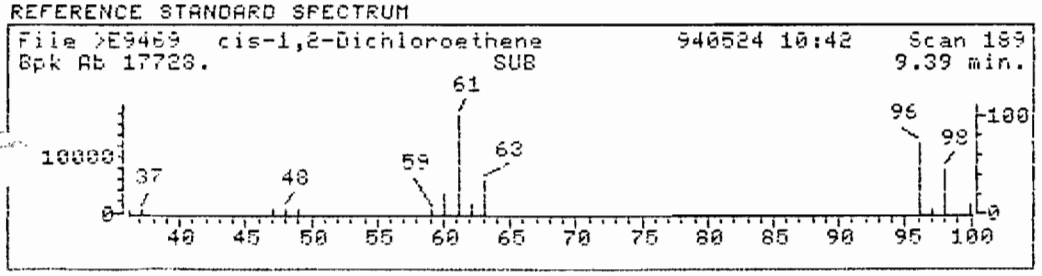


Data File: >Q0389::D3 Quant Output File: ^Q0389::D3
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202

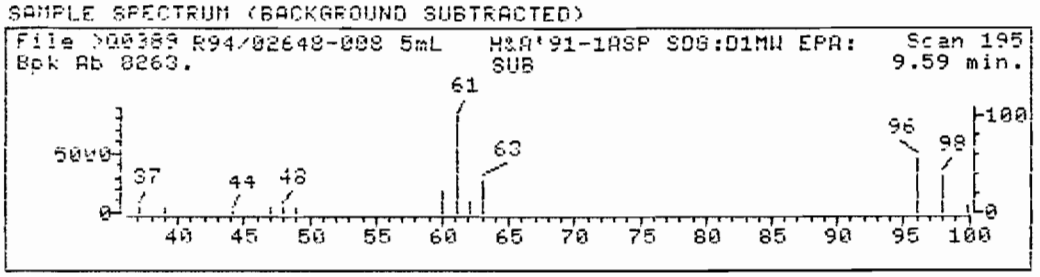
Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: ROOH
Quant Time : 940722 07:44
Injected at: 940721 23:42

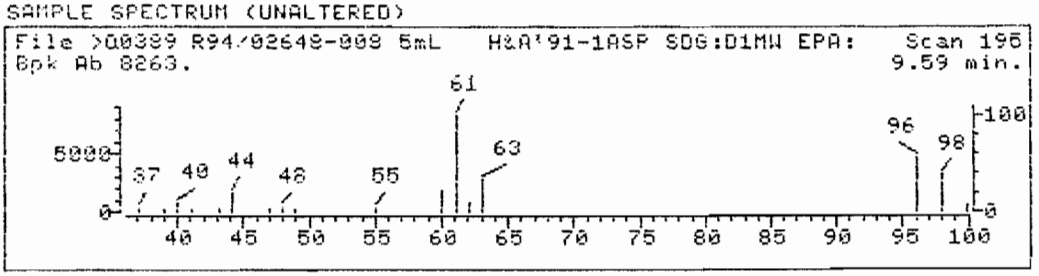
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



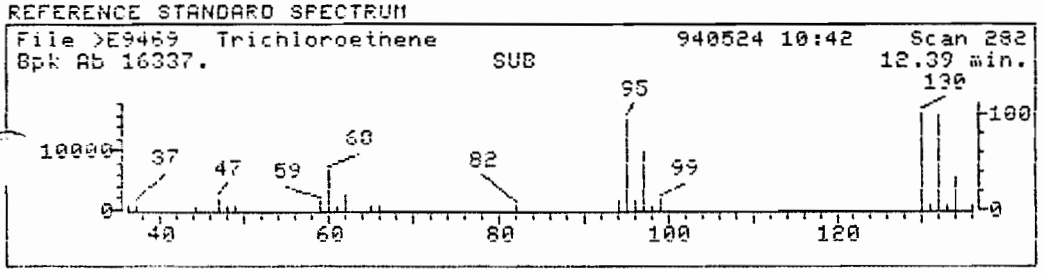
SAMPLE SPECTRUM (UNALTERED)



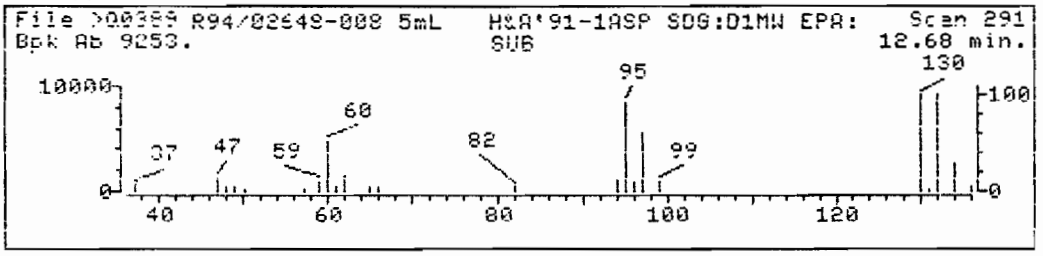
Data File: >Q0389::D3 Quant Output File: ^Q0389::D3
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202
Quant Time: 940722 07:44 Quant ID File: ID5CLP::QT
Injected at: 940721 23:42 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 195
Retention Time: 9.59 min.
Quant Ion : 96.0
Area : 35820
Concentration : 11.17 ppb
q-value : 95

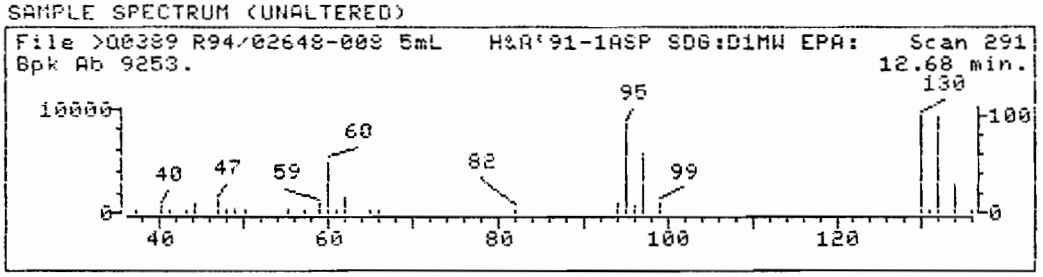
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0389::D3 Quant Output File: ^Q0389::D3
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202
Quant Time: 940722 07:44 Quant ID File: ID5CLP::QT
Injected at: 940721 23:42 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 291
Retention Time: 12.68 min.
Quant Ion : 130.0
Area : 67742
Concentration : 14.95 ppb
q-value : 95

MS data file header from : >Q0389::D3

Sample: R94/02648-008 5mL Operator: RODH 7/21/94 23:42
Misc : H&A`91-1ASP SDG:D1MW EPA:MW202
Inj. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 33 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q0389 R94/02648-008 5mL H&A`91-1ASP SDG:D1MW EPA:MW202
36.01 281.0 CLP TIC
Upslope: .2000 Area Reject: 84706. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ0389 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	7.78	128	139	143	7116	189629	85160	100.00	100.000

Sum of corrected areas: 85160.

Summary of Unknowns PBM Library Search and Quantitation

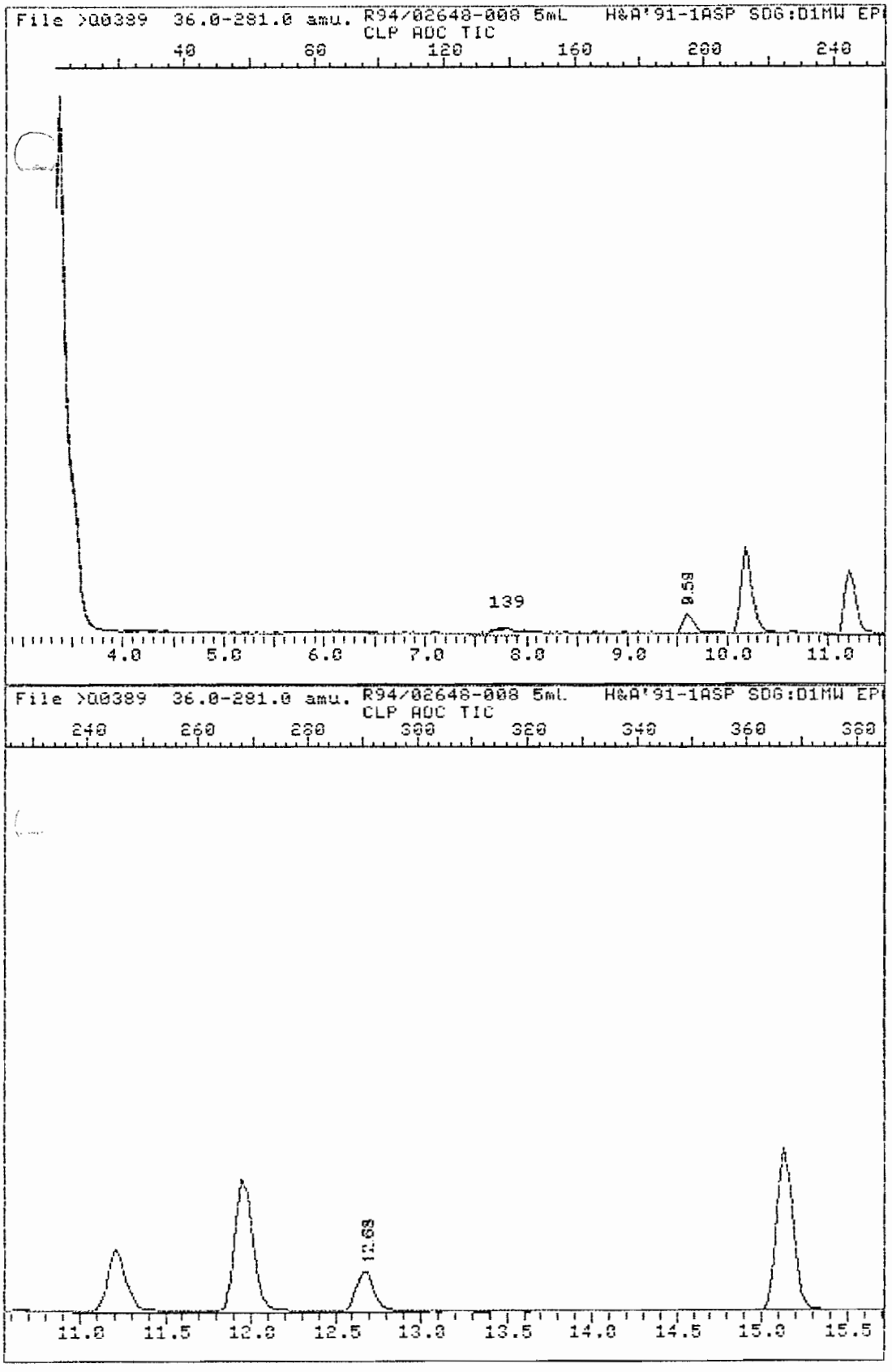
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	847062.	10.17	3.34 - 11.06
2	50.0	1243360.	11.94	11.06 - 15.21
3	50.0	1322558.	18.49	15.21 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

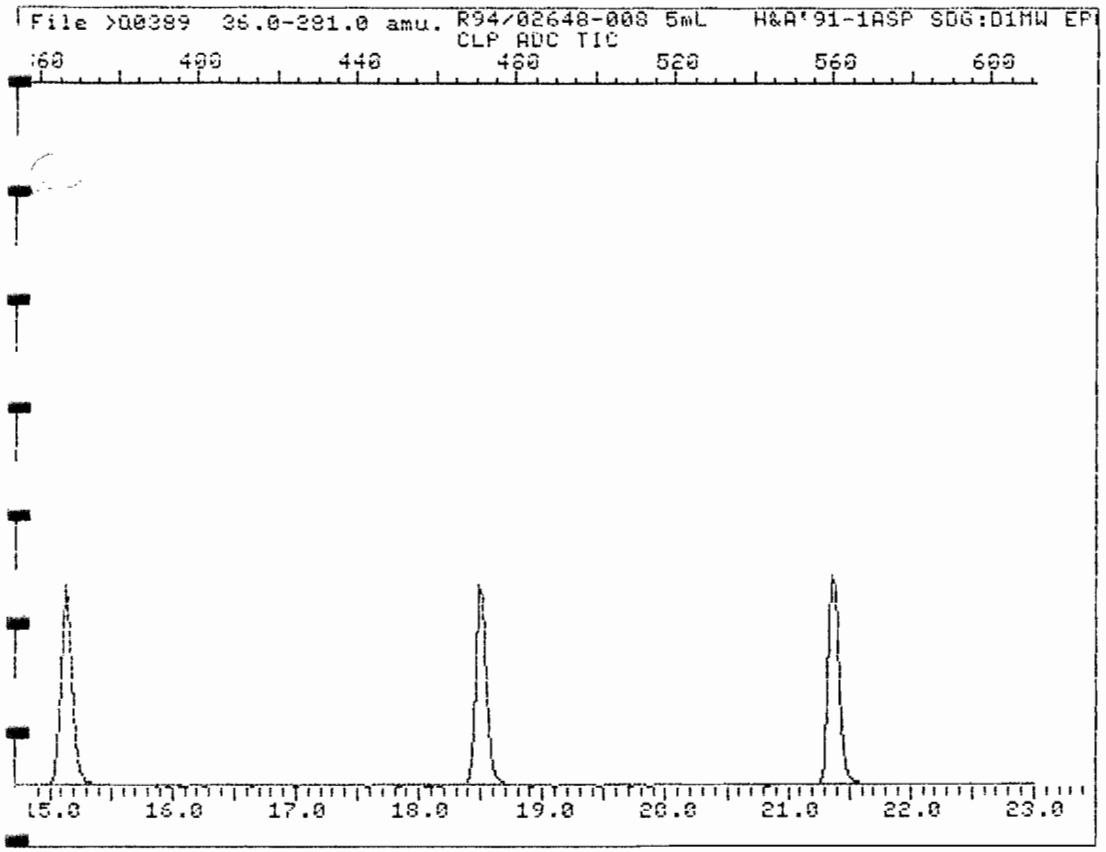
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

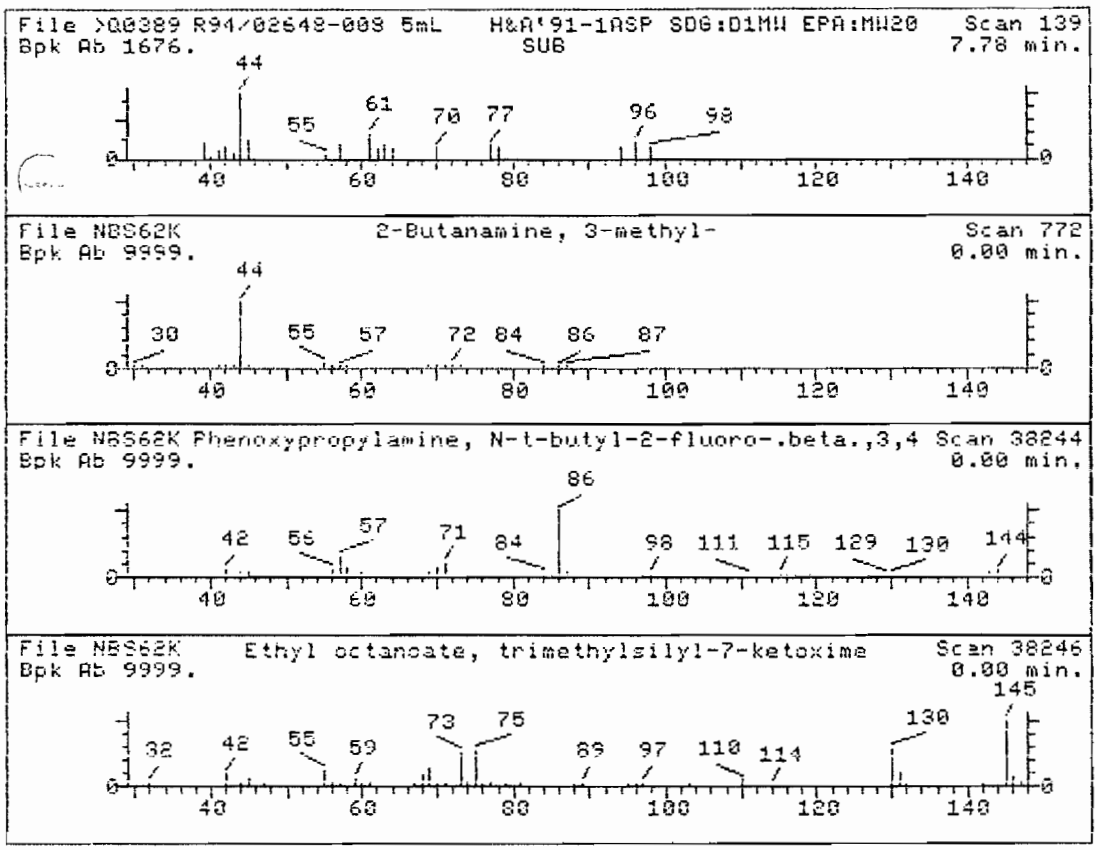
8:50 AM THU., 28 JULY, 1994



Instrument ID: MS5 Analyzed on: 7/21/94 23:42



Instrument ID: MS5 Analyzed on: 7/21/94 23:42



Instrument ID: MS5 Analyzed on: 7/21/94 23:42
Result 1 in PBM results file: LQ0389
Retention Time: 7.78 Area: 85160 Tentative Conc: 5.00 B
The unknown area is 10.05% of the nearest internal standard

1.	2-Butanamine, 3-methyl-	87	C5H13N
2.	Phenoxypropylamine, N-t-butyl-2-fluoro-.beta.,3,4-trihydroxy-	273	C13H20FNO4
3.	Ethyl octanoate, trimethylsilyl-7-ketoxime	273	C13H27NO3Si
4.	Tuaminoheptane	115	C7H17N

Sample file: >Q0389 Spectrum #: 139
Search speed: 1 Tilting option: N No. of ion ranges searched: 33

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	12*	598743	323	NBS62K	44	28	1	0	98	64	2	26

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0394

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	14.	J
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	30.	J
71-55-6	1,1,1-Trichloroethane	130.	
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1100.	
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	17.	J
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0394

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.75	82.	J
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.					

00100

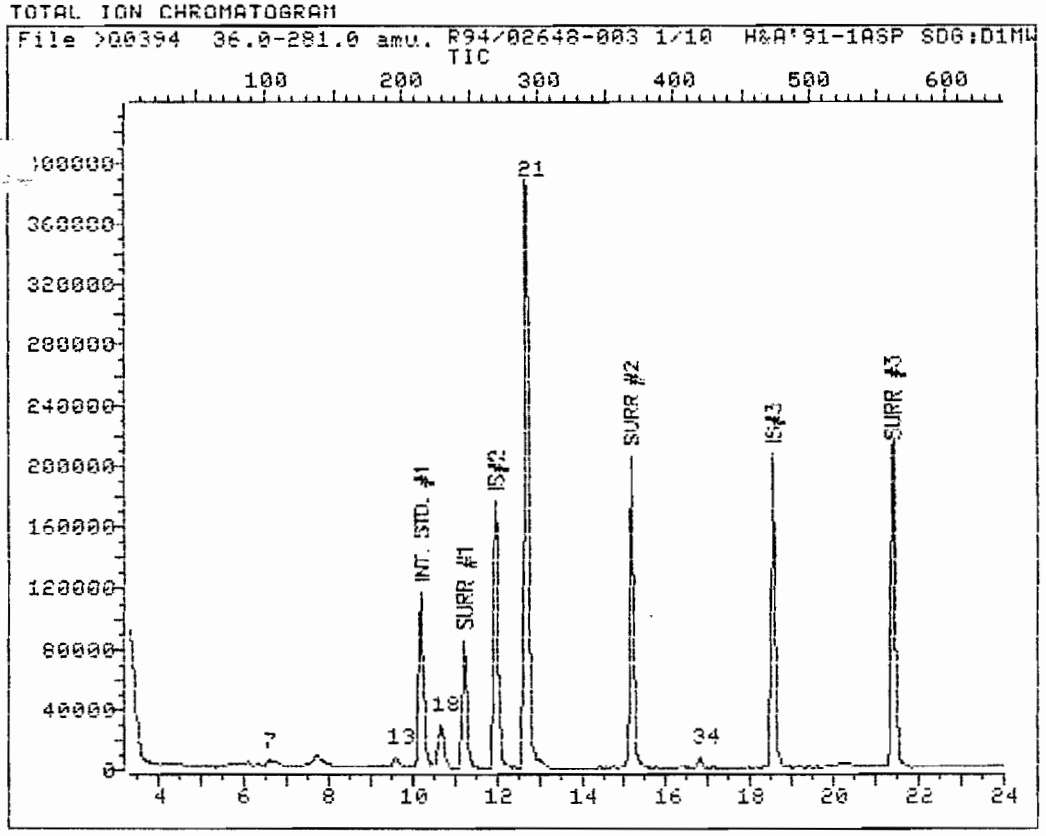
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:49
Output File: ^Q0394::D3 Injected at: 940722 02:28
Data File: >Q0394::D3 Dilution Factor: 1.00000
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3

MD File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	105735	50.00	ppb	93
7)	1,1-Dichloroethene	6.56	96.0	4069	1.41	ppb	88
13)	cis-1,2-Dichloroethene	9.62	96.0	9776	3.05	ppb	97
16)	1,2-Dichloroethane-d4	11.23	65.0	228518	49.79	ppb	90
17)	*1,4-Difluorobenzene	11.97	114.0	499328	50.00	ppb	80
18)	1,1,1-Trichloroethane	10.68	97.0	82036	13.38	ppb	94
21)	Trichloroethene	12.72	130.0	538290	111.60	ppb	96
29)	*Chlorobenzene-d5	18.55	117.0	384162	50.00	ppb	96
31)	Toluene-d8	15.17	98.0	460362	52.26	ppb	94
34)	Tetrachloroethene	16.81	164.0	5830	1.67	ppb	95
41)	Bromofluorobenzene	21.39	95.0	268924	51.65	ppb	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

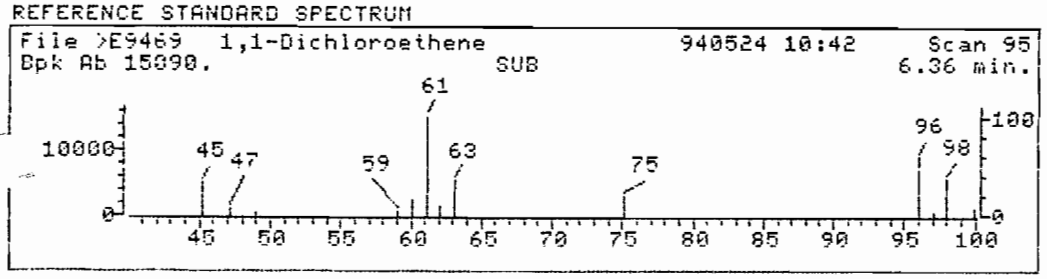


Data File: >Q0394::D3 Quant Output File: ^Q0394::D3
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3

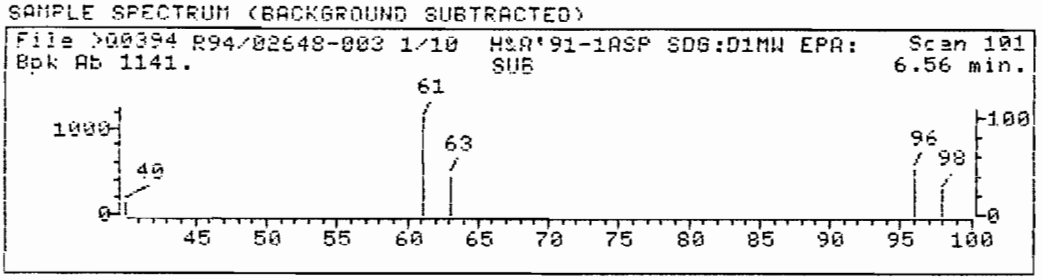
Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:49
Injected at: 940722 02:28

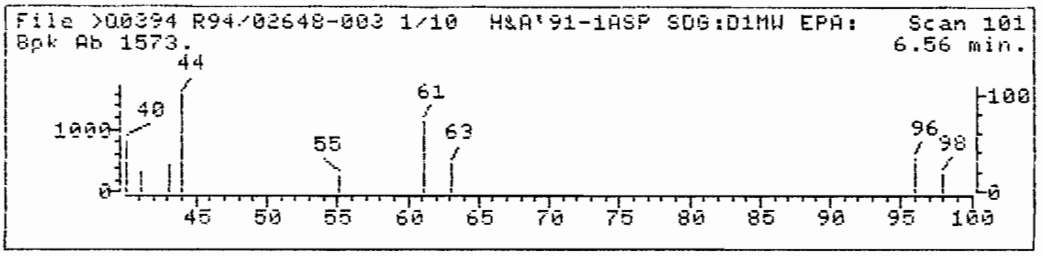
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



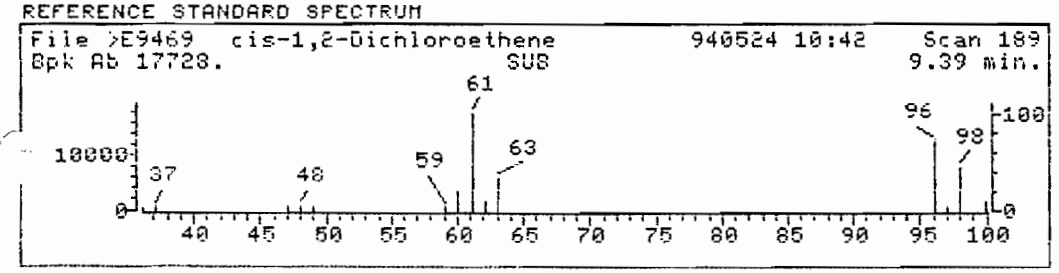
SAMPLE SPECTRUM (UNALTERED)



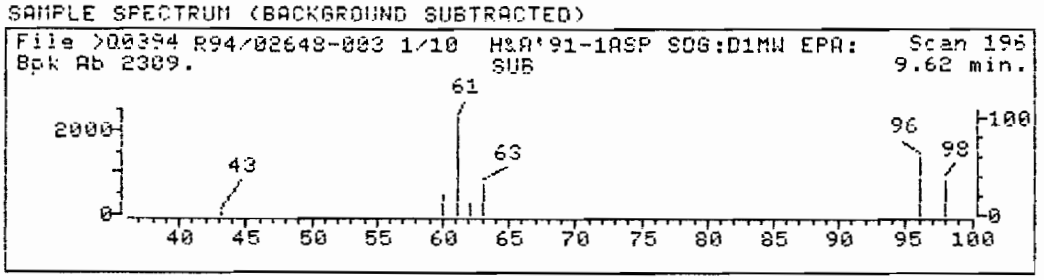
Data File: >Q0394::D3 Quant Output File: ^Q0394::D3
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3
Quant Time: 940722 07:49 Quant ID File: ID5CLP::QT
Injected at: 940722 02:28 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 7
Compound Name : 1,1-Dichloroethene
Scan Number : 101
Retention Time: 6.56 min.
Quant Ion : 96.0
Area : 4069
Concentration : 1.41 ppb
q-value : 88

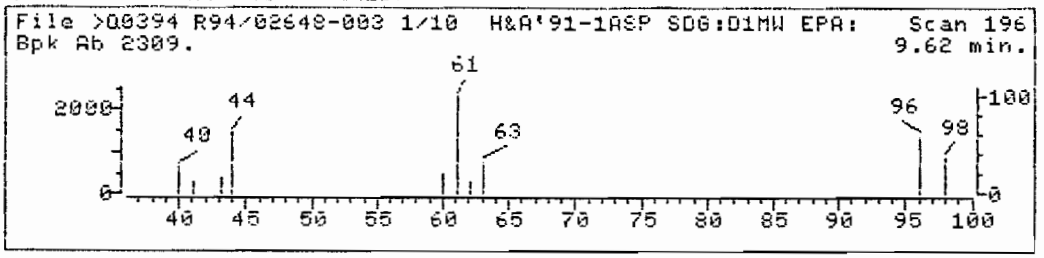
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



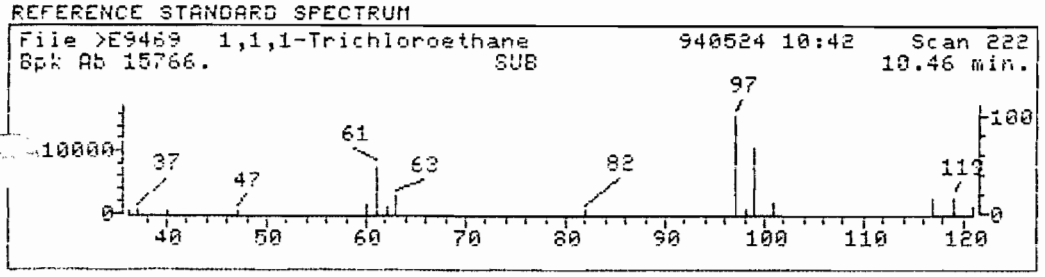
SAMPLE SPECTRUM (UNALTERED)



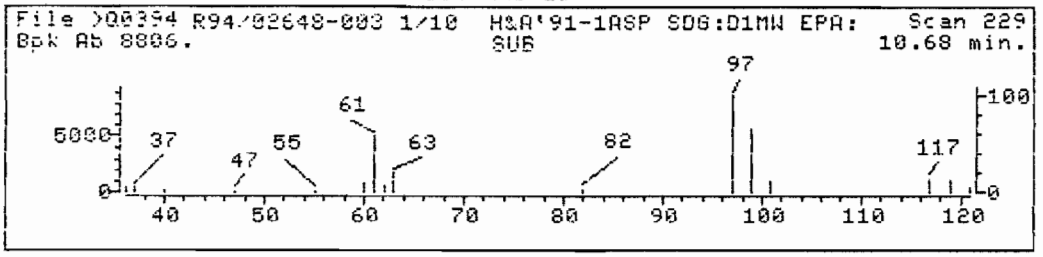
Data File: >Q0394::D3 Quant Output File: ^Q0394::D3
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3
Quant Time: 940722 07:49 Quant ID File: ID5CLP::QT
Injected at: 940722 02:28 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 196
Retention Time: 9.62 min.
Quant Ion : 96.0
Area : 9776
Concentration : 3.05 ppb
q-value : 97

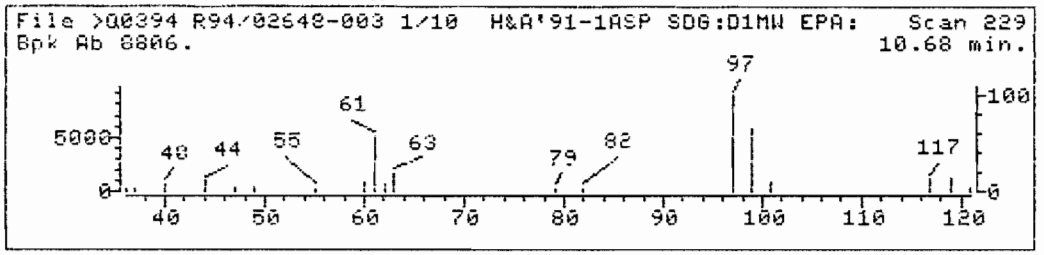
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



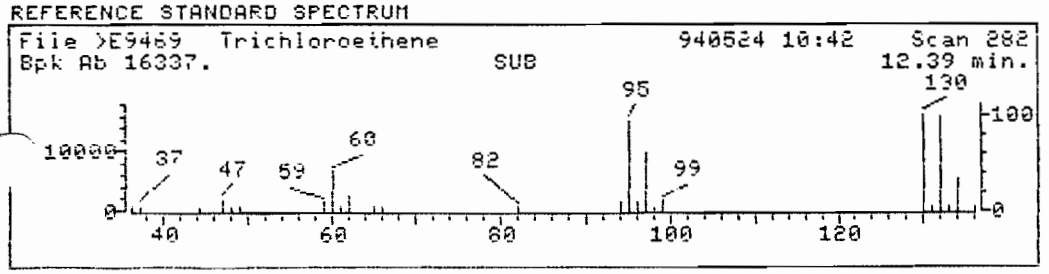
SAMPLE SPECTRUM (UNALTERED)



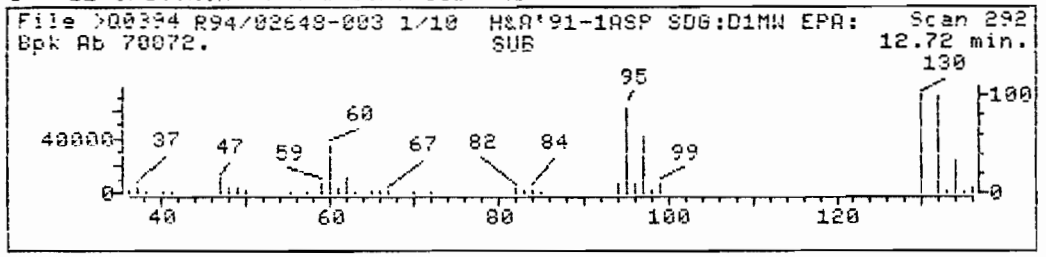
Data File: >Q0394::D3 Quant Output File: ^Q0394::D3
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3
Quant Time: 940722 07:49 Quant ID File: ID5CLP::QT
Injected at: 940722 02:28 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 229
Retention Time: 10.68 min.
Quant Ion : 97.0
Area : 82036
Concentration : 13.38 ppb
q-value : 94

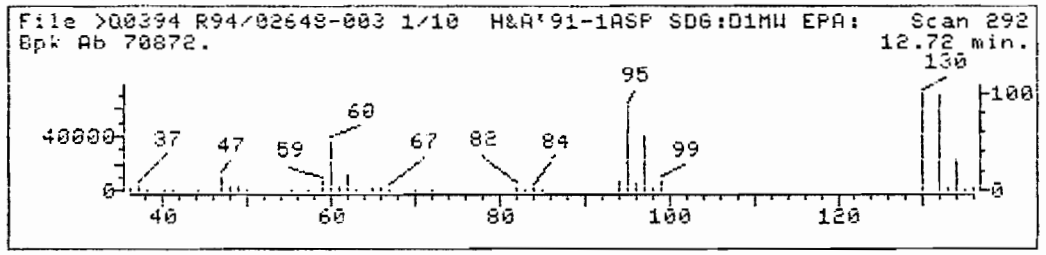
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



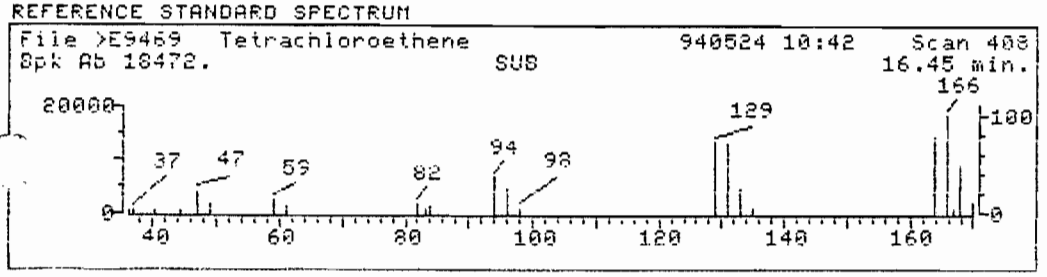
SAMPLE SPECTRUM (UNALTERED)



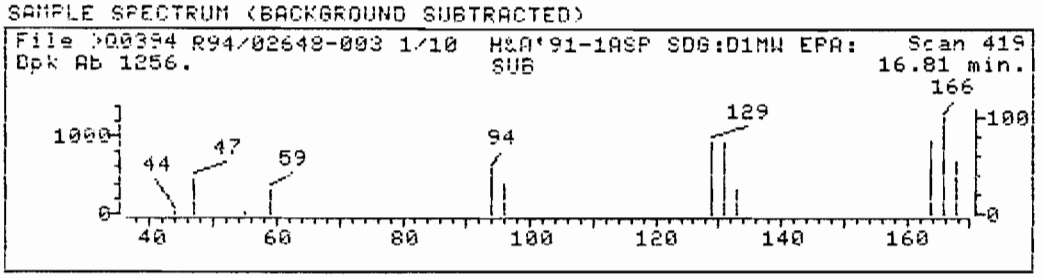
Data File: >Q0394::D3 Quant Output File: ^Q0394::D3
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3
Quant Time: 940722 07:49 Quant ID File: ID5CLP::QT
Injected at: 940722 02:28 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 292
Retention Time: 12.72 min.
Quant Ion : 130.0
Area : 538290
Concentration : 111.60 ppb
q-value : 96

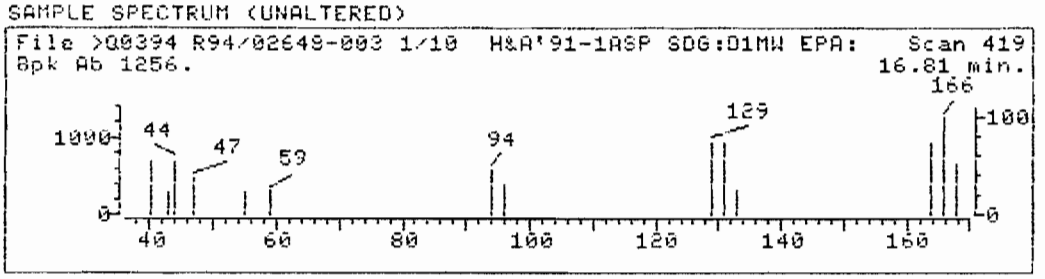
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0394::D3 Quant Output File: ^Q0394::D3
Name: R94/02648-003 1/10 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW3
Quant Time: 940722 07:49 Quant ID File: ID5CLP::QT
Injected at: 940722 02:28 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 419
Retention Time: 16.81 min.
Quant Ion : 164.0
Area : 5830
Concentration : 1.67 ppb
q-value : 95

MS data file header from : >Q0394::D3

Sample: R94/02648-003 1/10 Operator: RODH 7/22/94 2:28
Misc : H&A`91-1ASP SDG:D1MW EPA:MW3
S . £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 38 Equip ID: MS5
Method file: REGUOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q0394 R94/02648-003 1/10 H&A`91-1ASP SDG:D1MW EPA:MW3
36.00 281.0 CLP TIC
Upslope: .2000 Area Reject: 85253. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ0394 Sorted by Time/Area INT

Peak £	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	7.75	123	138	153	7870	311318	139106	100.00	100.000

Sum of corrected areas: 139106.

Summary of Unknowns PBM Library Search and Quantitation

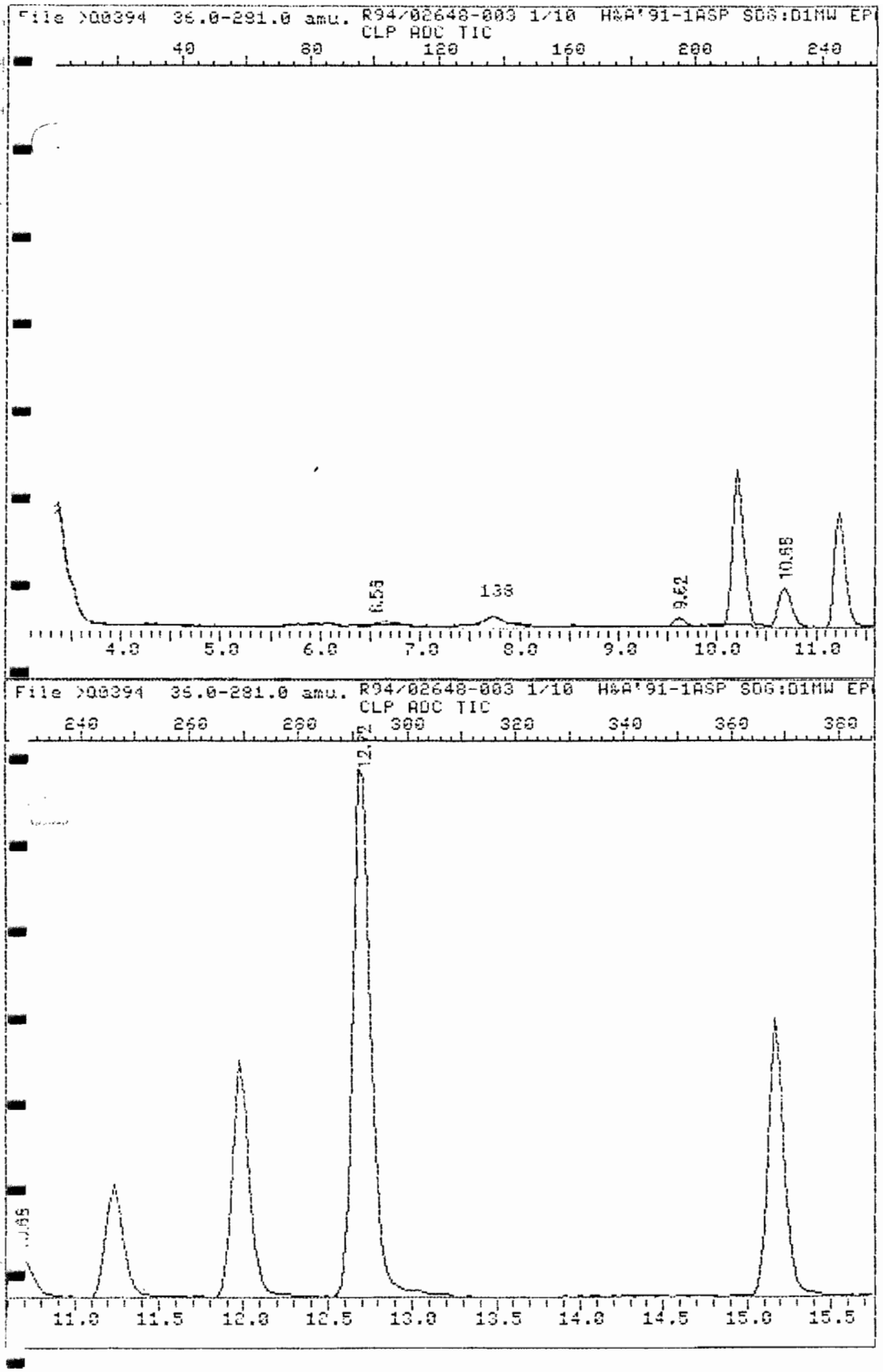
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	852527.	10.20	3.34 - 11.09
2	50.0	1283135.	11.97	11.09 - 15.26
3	50.0	1303943.	18.55	15.26 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

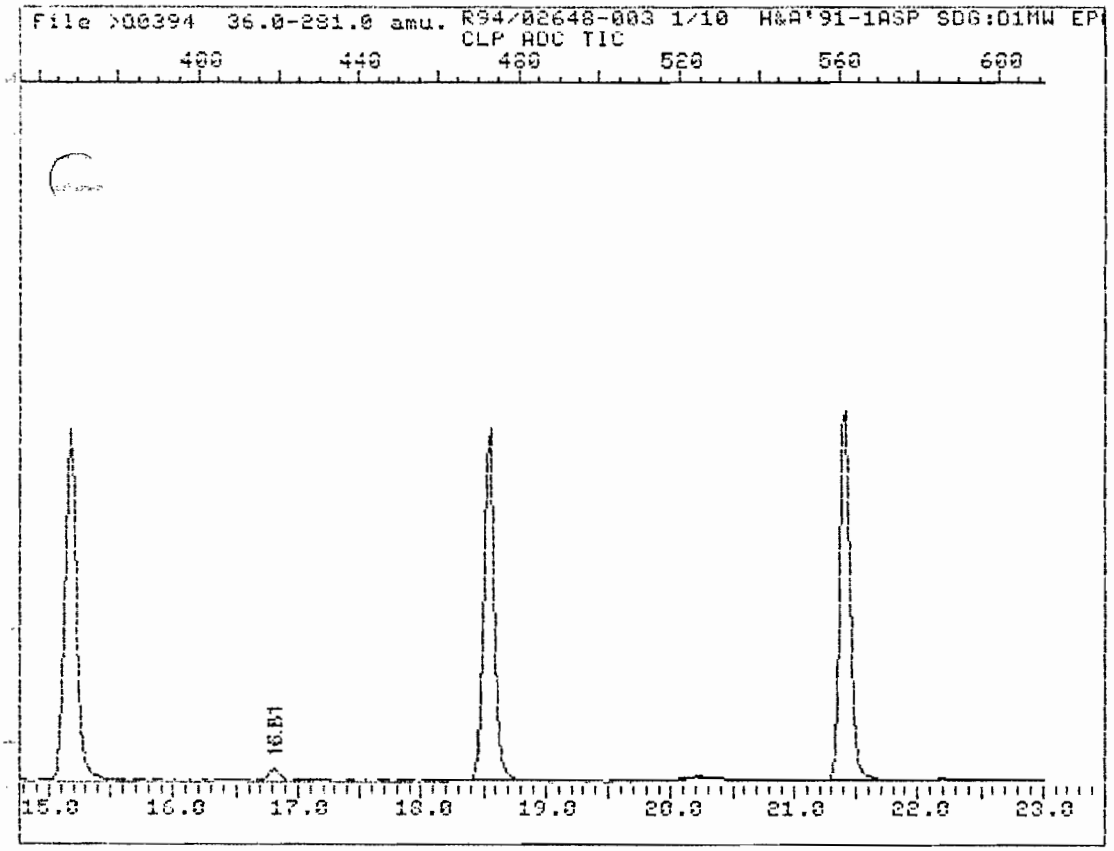
Correction Factor = 10.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

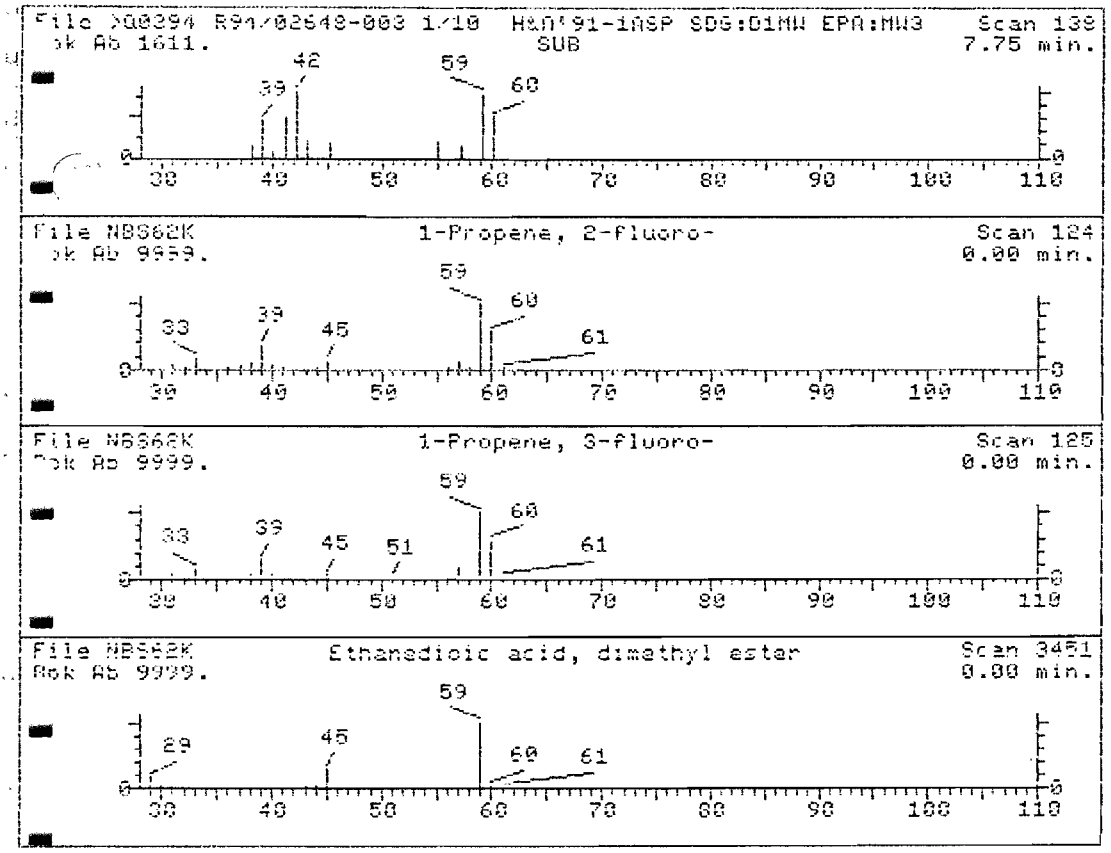
6:32 AM THU., 28 JULY, 1994



Instrument ID: MS5 Analyzed on: 7/22/94 2:28



Instrument ID: MS5 Analyzed on: 7/22/94 2:28



Instrument ID: MS9 Analyzed on: 7/22/94 2:28
Result 1 in PBM results file: LQ0394
Retention Time: 7.75 Area: 139106 Tentative Conc: 82.00
The unknown area is 16.32% of the nearest internal standard

1.	1-Propene, 2-fluoro-	60 C3H5F
2.	1-Propene, 3-fluoro-	60 C3H5F
3.	Ethanedioic acid, dimethyl ester	118 C4H6O4
4.	2-Butanol, 3-methoxy-	104 C5H12O2
5.	2-Propanol, 1-methoxy-2-methyl-	104 C5H12O2
6.	Pentane, 2-methoxy-	102 C6H14O

Sample file: >Q0394 Spectrum #: 138
Search speed: 1 Tilting option: N No. of ion ranges searched: 32

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	1184607	2416	NBS62K	35	57	1	0	97	53	5	19
2.	20*	818928	2417	NBS62K	30	64	1	0	97	54	5	16

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0395

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	28.	
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.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00112

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0395

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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30.					

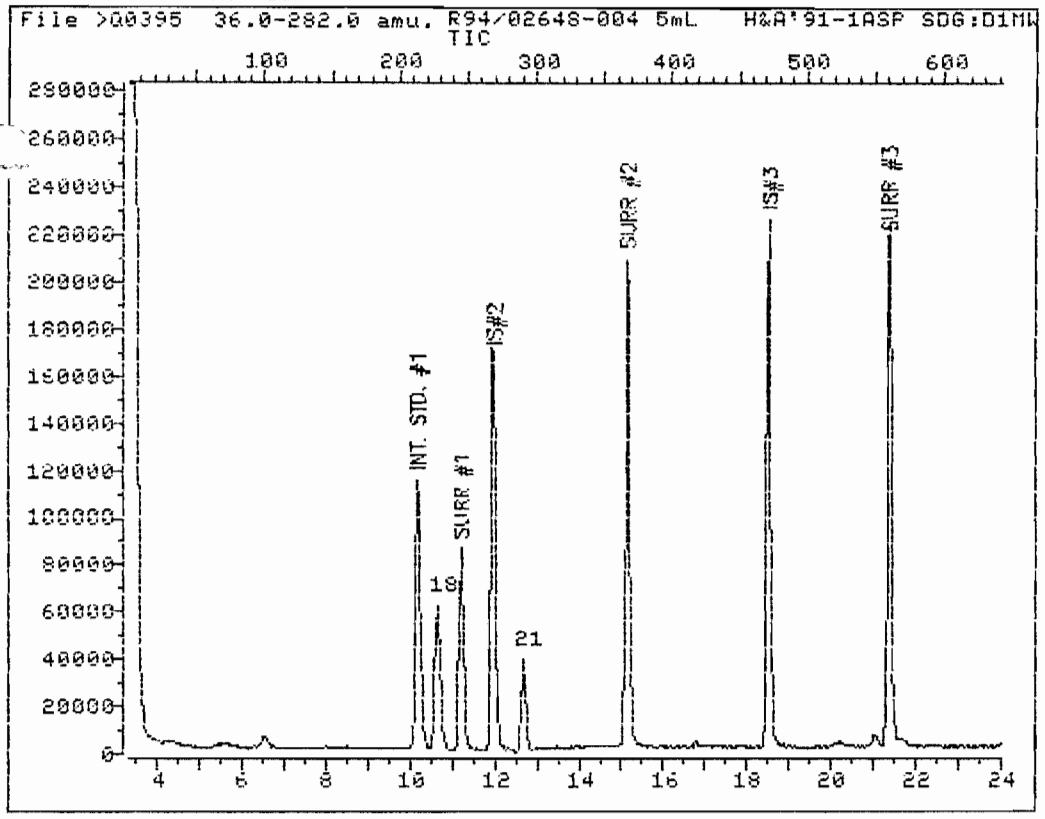
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:50
Output File: ^Q0395::03 Injected at: 940722 03:01
Data File: >Q0395::03 Dilution Factor: 1.00000
Name: R94/02648-004 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW4

ID File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.17	128.0	109635	50.00	ppb	88
16)	1,2-Dichloroethane-d4	11.20	65.0	228151	47.94	ppb	91
17)	*1,4-Difluorobenzene	11.97	114.0	501556	50.00	ppb	82
18)	1,1,1-Trichloroethane	10.65	97.0	171219	27.81	ppb	95
21)	Trichloroethene	12.68	130.0	49655	10.25	ppb	93
29)	*Chlorobenzene-d5	18.52	117.0	408818	50.00	ppb	94
31)	Toluene-d8	15.13	98.0	473090	50.47	ppb	94
41)	Bromofluorobenzene	21.35	95.0	278937	50.34	ppb	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM

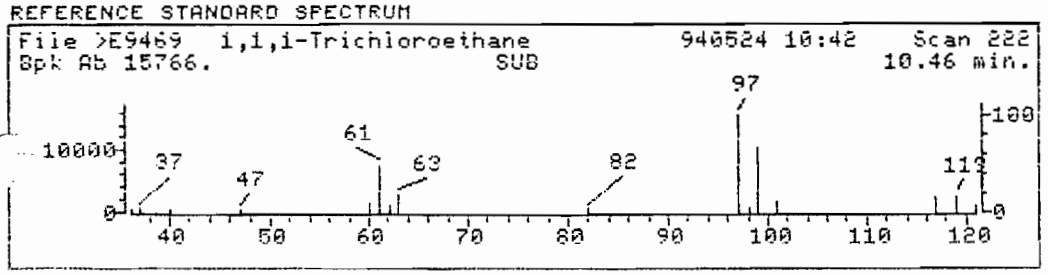


Data File: >Q0395::D3 Quant Output File: ^Q0395::D3
Name: R94/02648-004 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW4

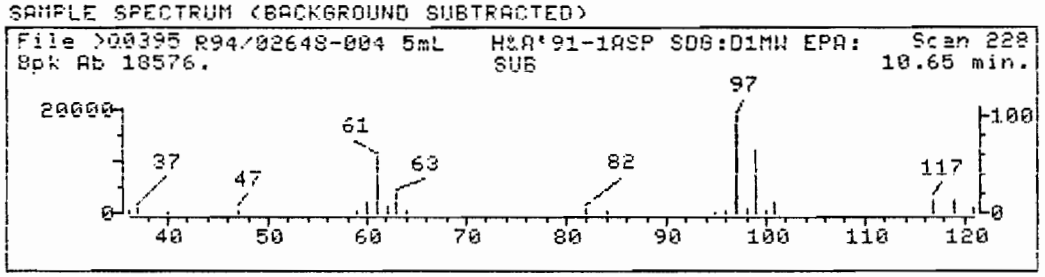
Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:50
Injected at: 940722 03:01

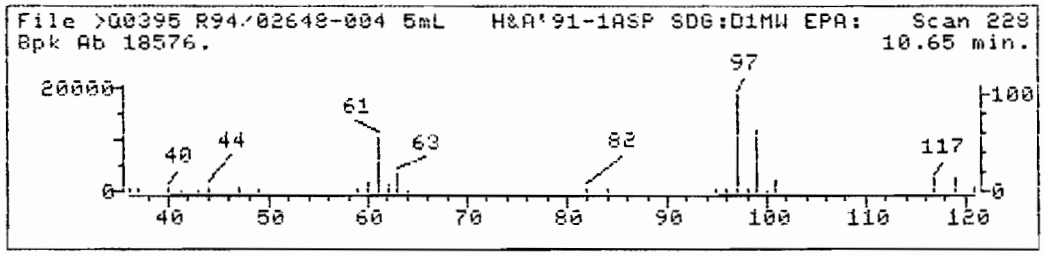
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



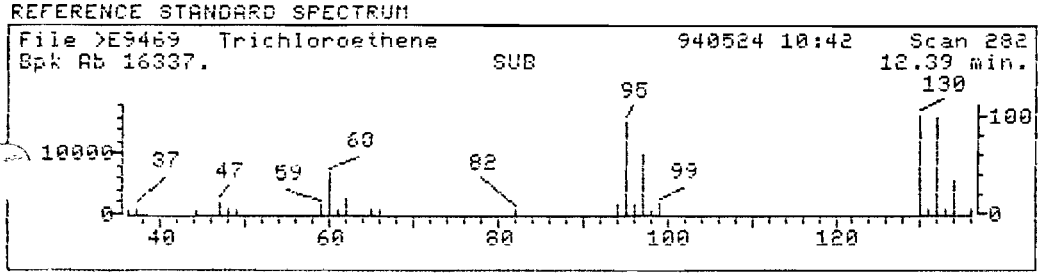
SAMPLE SPECTRUM (UNALTERED)



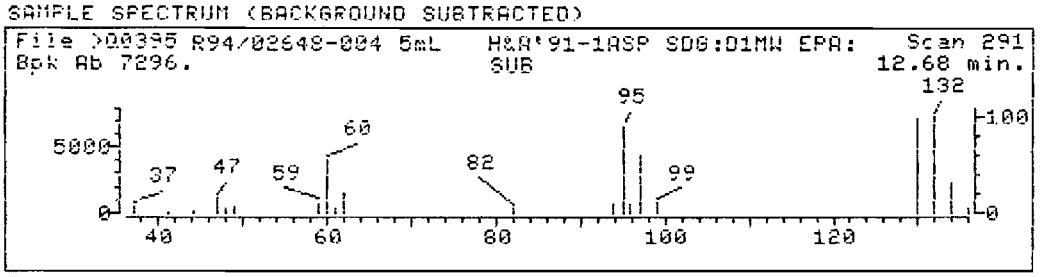
Data File: >Q0395::D3 Quant Output File: ^Q0395::D3
Name: R94/02648-004 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW4
Quant Time: 940722 07:50 Quant ID File: ID5CLP::QT
Injected at: 940722 03:01 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 228
Retention Time: 10.65 min.
Quant Ion : 97.0
Area : 171219
Concentration : 27.81 ppb
q-value : 95

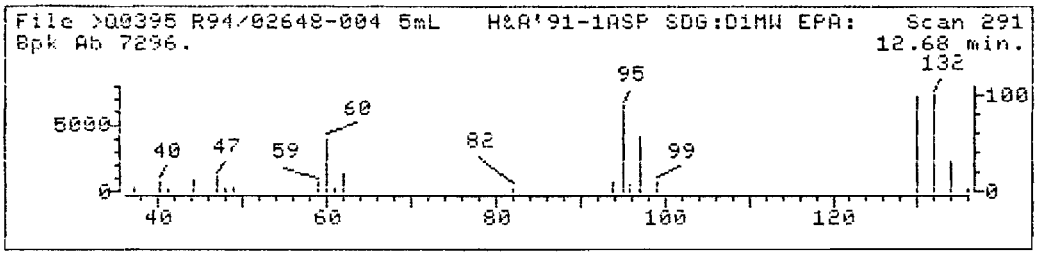
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0395::D3 Quant Output File: ^Q0395::D3
Name: R94/02648-004 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW4
Quant Time: 940722 07:50 Quant ID File: ID5CLP::QT
Injected at: 940722 03:01 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 291
Retention Time: 12.68 min.
Quant Ion : 130.0
Area : 49655
Concentration : 10.25 ppb
q-value : 93

MS data file header from : >Q0395::D3

Sample: R94/02648-004 5mL Operator: RODH 7/22/94 3:01
Misc : H&A`91-1ASP SDG:D1MW EPA:MW4
s. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 39 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

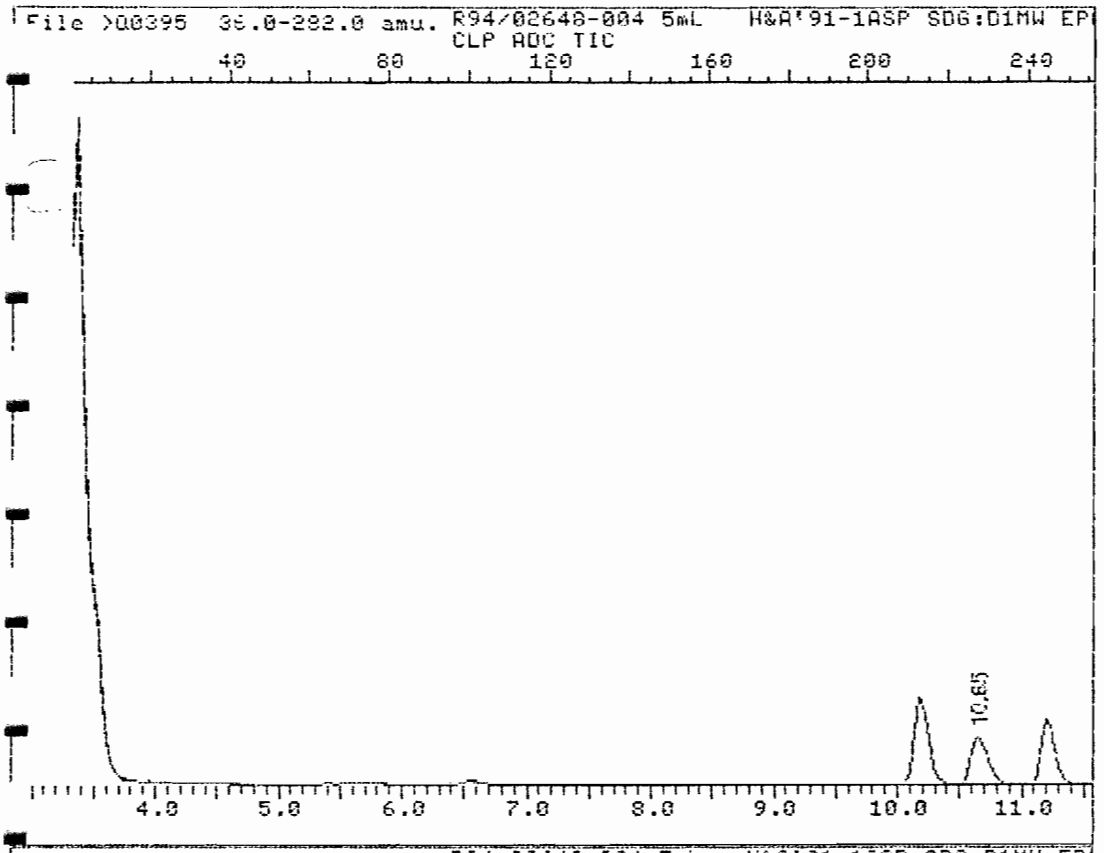
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	885634.	10.17	3.34 - 11.07
2	50.0	1316017.	11.97	11.07 - 15.25
3	50.0	1389540.	18.52	15.25 - 23.00

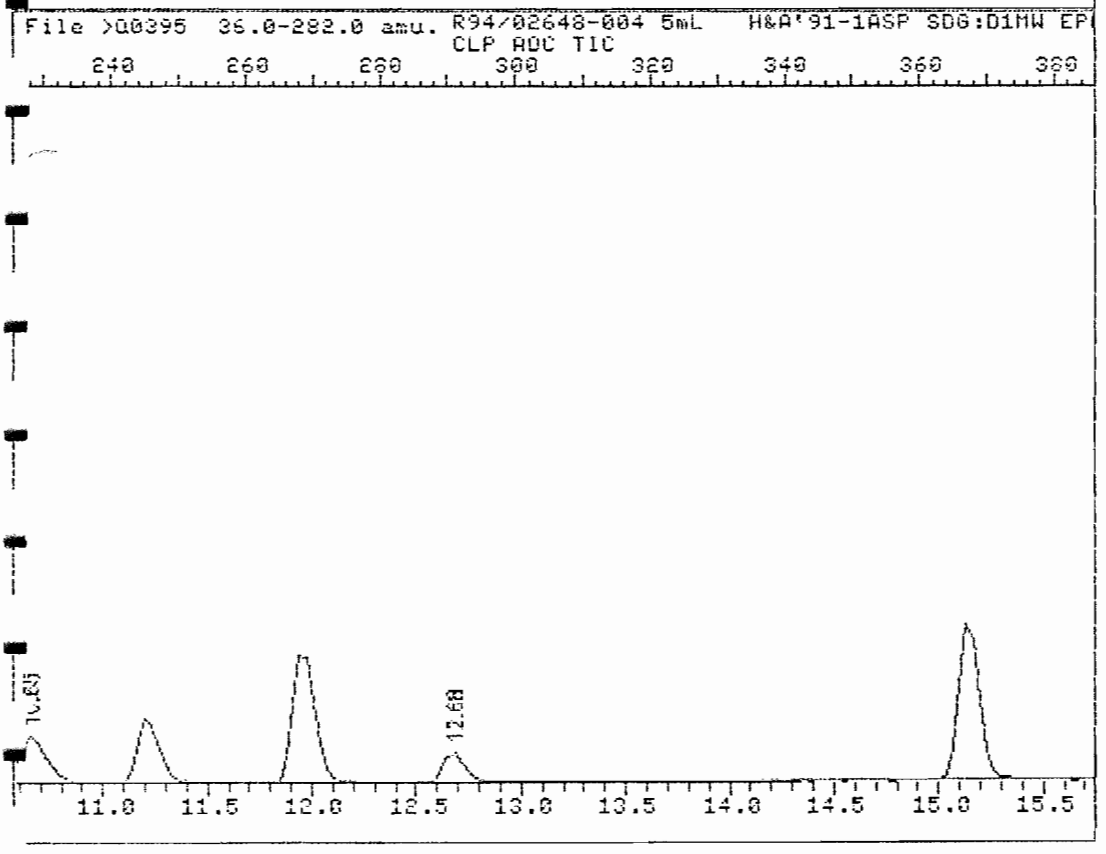
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

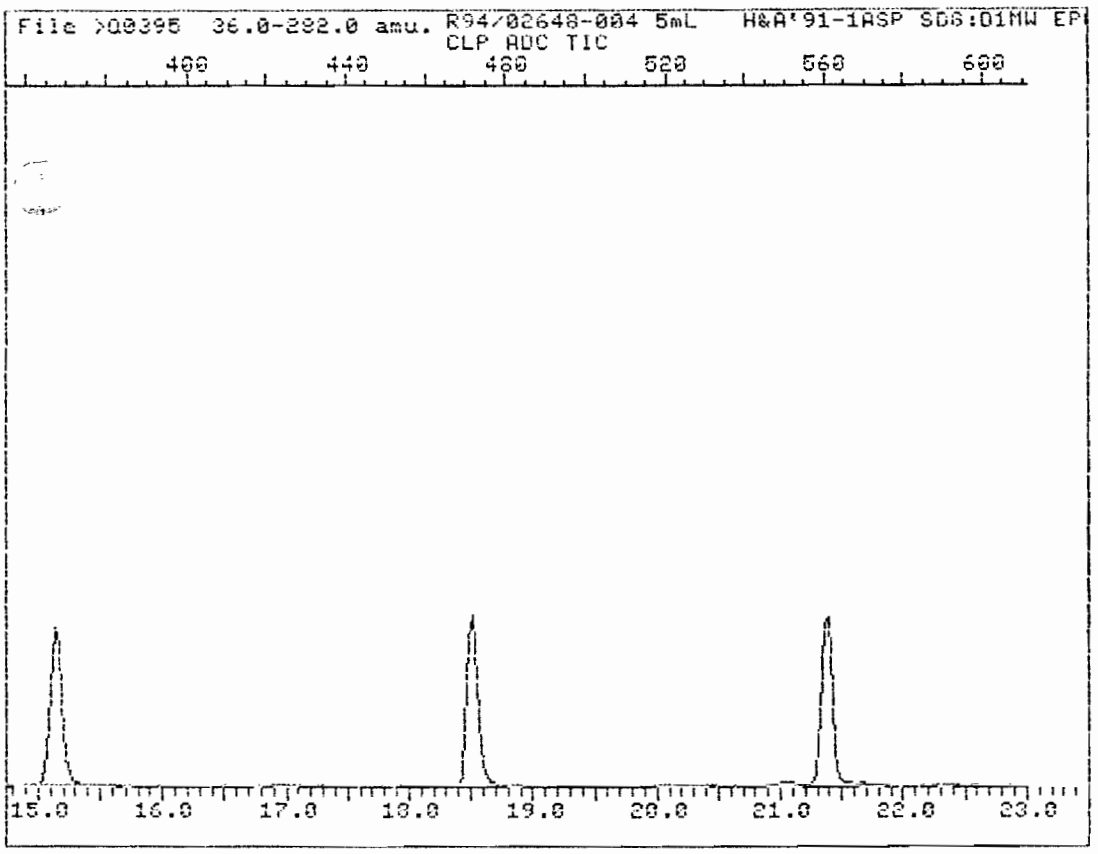
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

8:27 AM THU., 28 JULY, 1994





Instrument ID: MS5 Analyzed on: 7/22/94 3:01



Instrument ID: MS5 Analyzed on: 7/22/94 3:01

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0396

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	58.	
71-55-6	1,1,1-Trichloroethane	23.	J
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	510.	
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0396

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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24.					
25.					
26.					
27.					
28.					
29.					
30.					

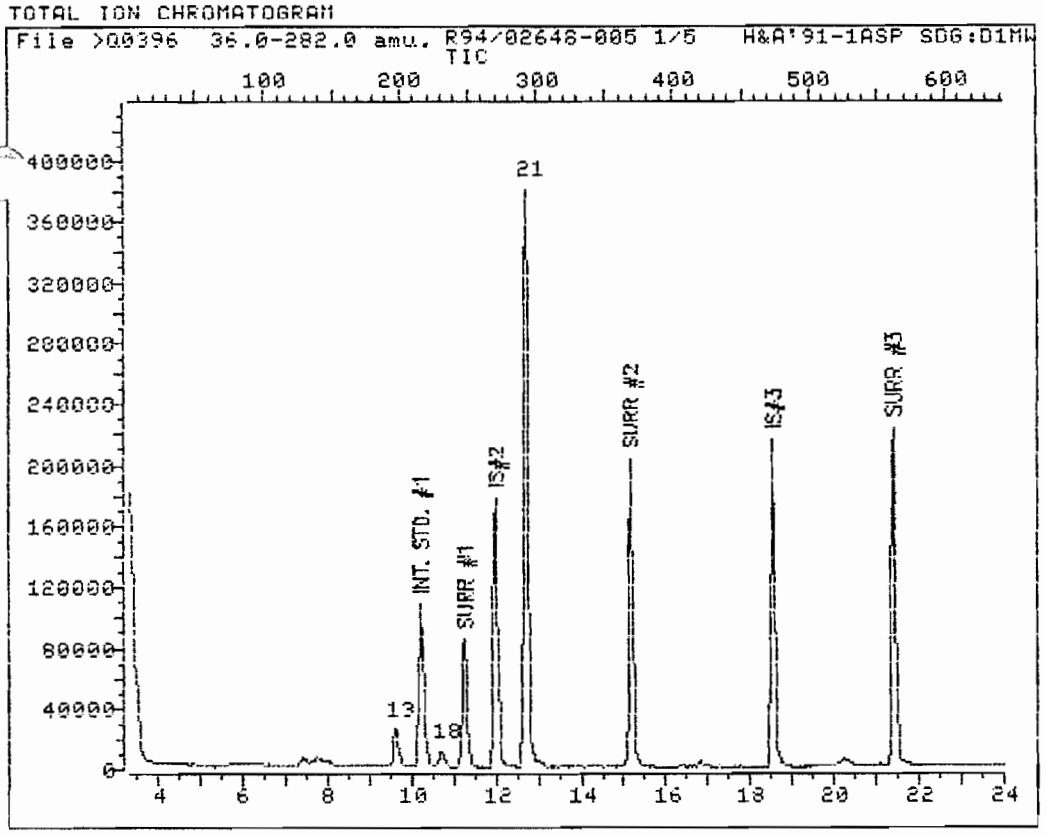
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:51
Output File: ^Q0396::D3 Injected at: 940722 03:33
Data File: >Q0396::D3 Dilution Factor: 1.00000
Name: R94/02648-005 1/5 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW5

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.23	128.0	104617	50.00	ppb	95
13)	cis-1,2-Dichloroethene	9.62	96.0	37051	11.68	ppb	99
16)	1,2-Dichloroethane-d4	11.27	65.0	231776	51.04	ppb	91
17)	*1,4-Difluorobenzene	12.01	114.0	500442	50.00	ppb	81
18)	1,1,1-Trichloroethane	10.72	97.0	28841	4.70	ppb	90
21)	Trichloroethene	12.72	130.0	490562	101.47	ppb	94
29)	*Chlorobenzene-d5	18.55	117.0	392442	50.00	ppb	96
31)	Toluene-d8	15.17	98.0	458118	50.91	ppb	93
41)	Bromofluorobenzene	21.42	95.0	270427	50.84	ppb	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM

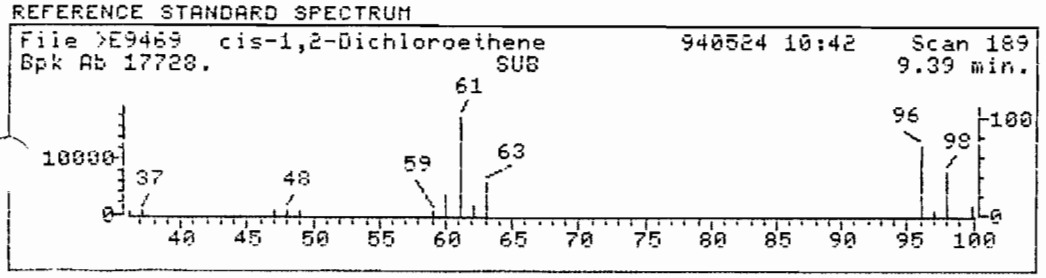


Data File: >Q0396::D3 Quant Output File: ^Q0396::D3
Name: R94/02648-005 1/5 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW5

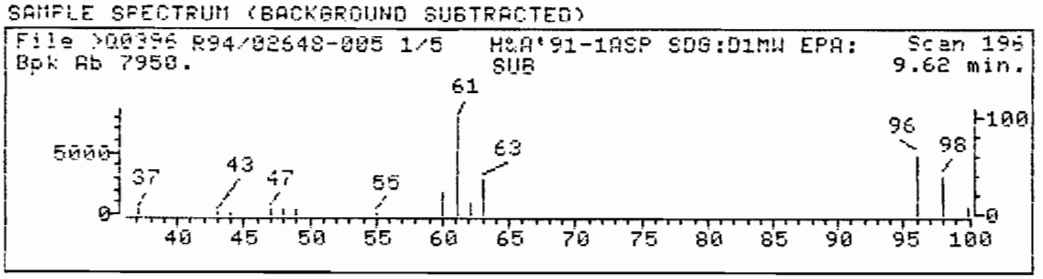
Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:51
Injected at: 940722 03:33

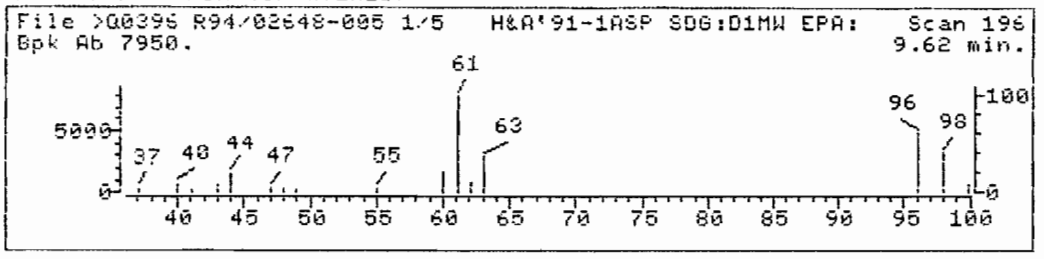
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



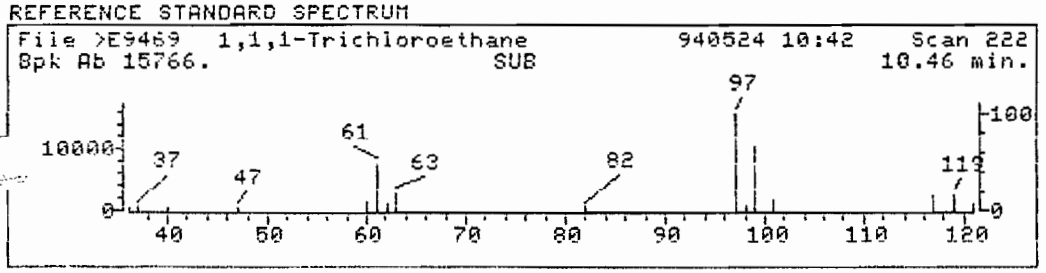
SAMPLE SPECTRUM (UNALTERED)



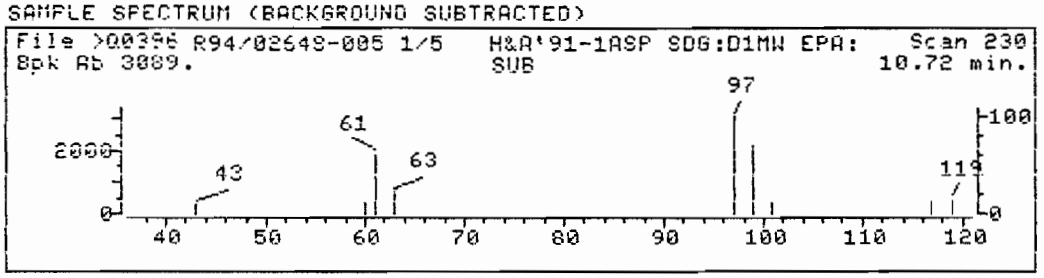
Data File: >Q0396::D3 Quant Output File: ^Q0396::D3
Name: R94/02648-005 1/5 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW5
Quant Time: 940722 07:51 Quant ID File: ID5CLP::QT
Injected at: 940722 03:33 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 196
Retention Time: 9.62 min.
Quant Ion : 96.0
Area : 37051
Concentration : 11.68 ppb
q-value : 99

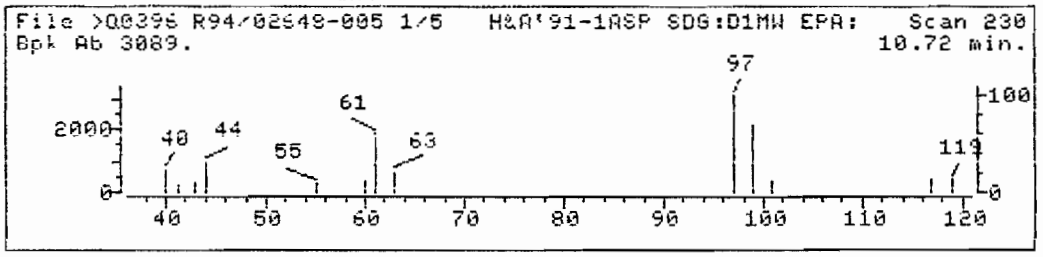
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



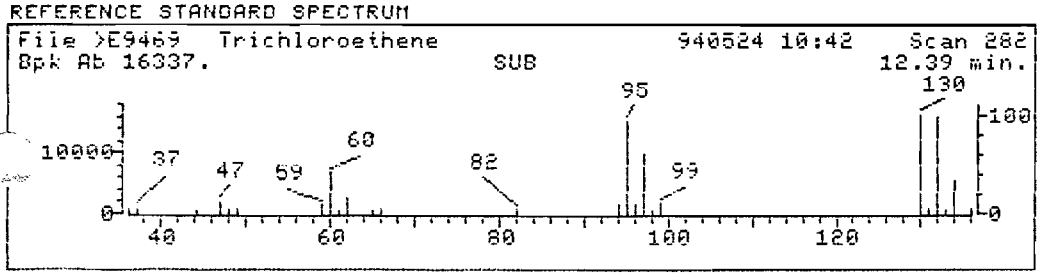
SAMPLE SPECTRUM (UNALTERED)



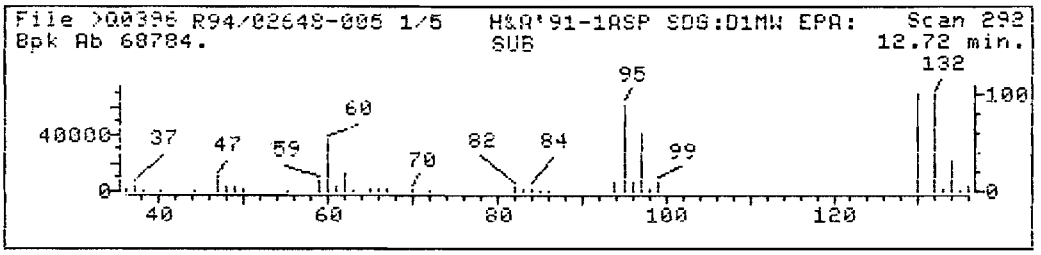
Data File: >Q0396::D3 Quant Output File: ^Q0396::D3
Name: R94/02648-005 1/5 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW5
Quant Time: 940722 07:51 Quant ID File: ID5CLP::QT
Injected at: 940722 03:33 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 230
Retention Time: 10.72 min.
Quant Ion : 97.0
Area : 28841
Concentration : 4.70 ppb
q-value : 90

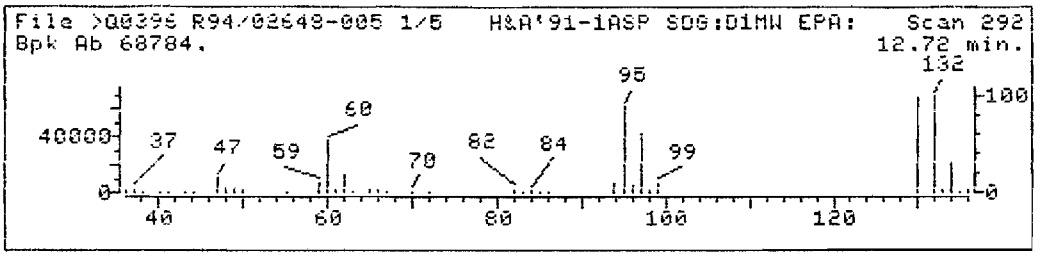
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q0396::D3 Quant Output File: ^Q0396::D3
Name: R94/02648-005 1/5 Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW5
Quant Time: 940722 07:51 Quant ID File: ID5CLP::QT
Injected at: 940722 03:33 Last Calibration: 940607 12:24
Last Qcal Time: 940721 20:11

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 292
Retention Time: 12.72 min.
Quant Ion : 130.0
Area : 490562
Concentration : 101.47 ppb
q-value : 94

MS data file header from : >Q0396::D3

Sample: R94/02648-005 1/5 Operator: RODH 7/22/94 3:33
Misc : H&A'91-1ASP SDG:01MW EPA:MW5
Lab. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 40 Equip ID: MS5
Method file: REGU0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

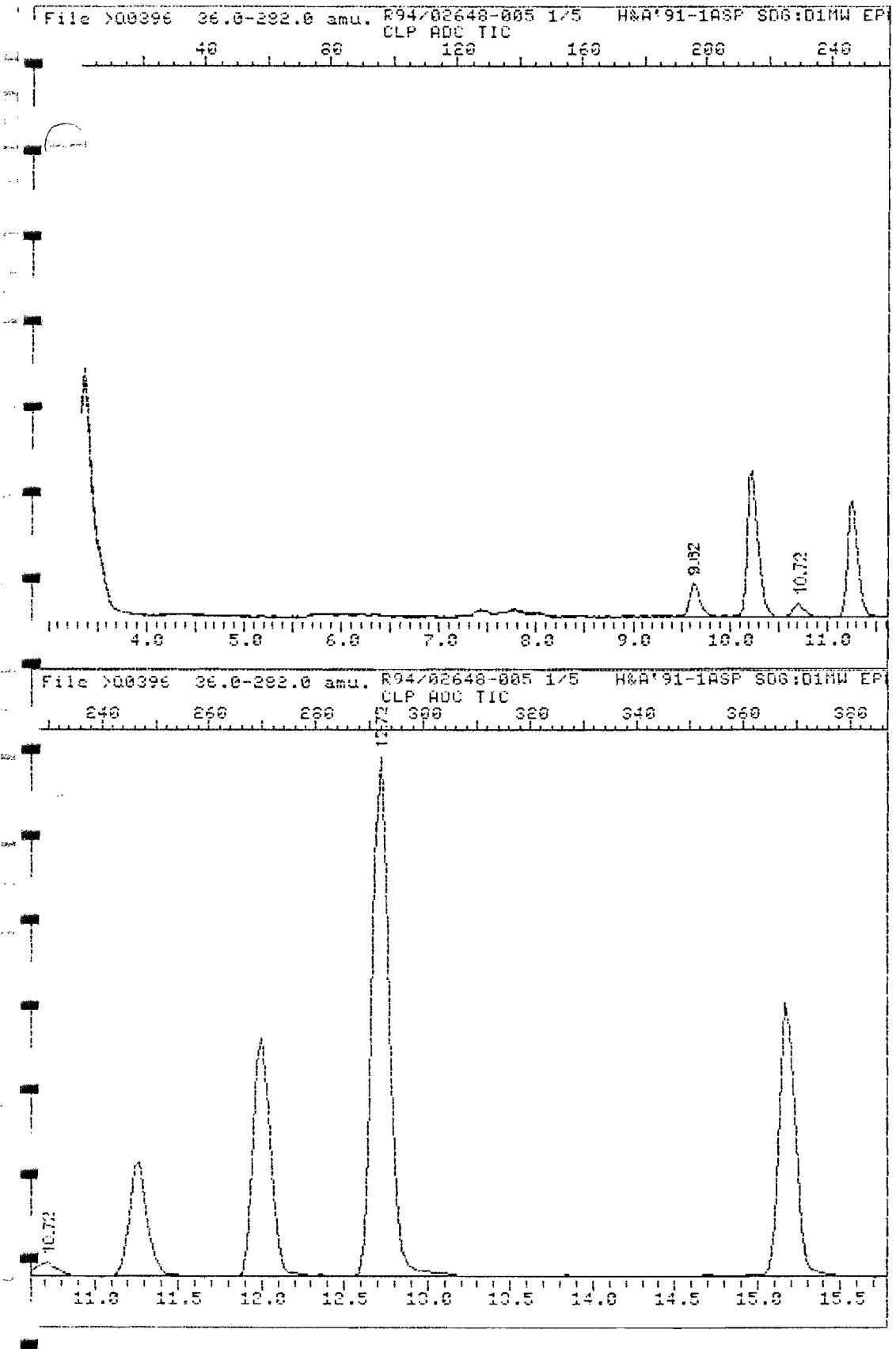
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	818431.	10.23	3.34 - 11.12
2	50.0	1274470.	12.01	11.12 - 15.28
3	50.0	1337832.	18.55	15.28 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

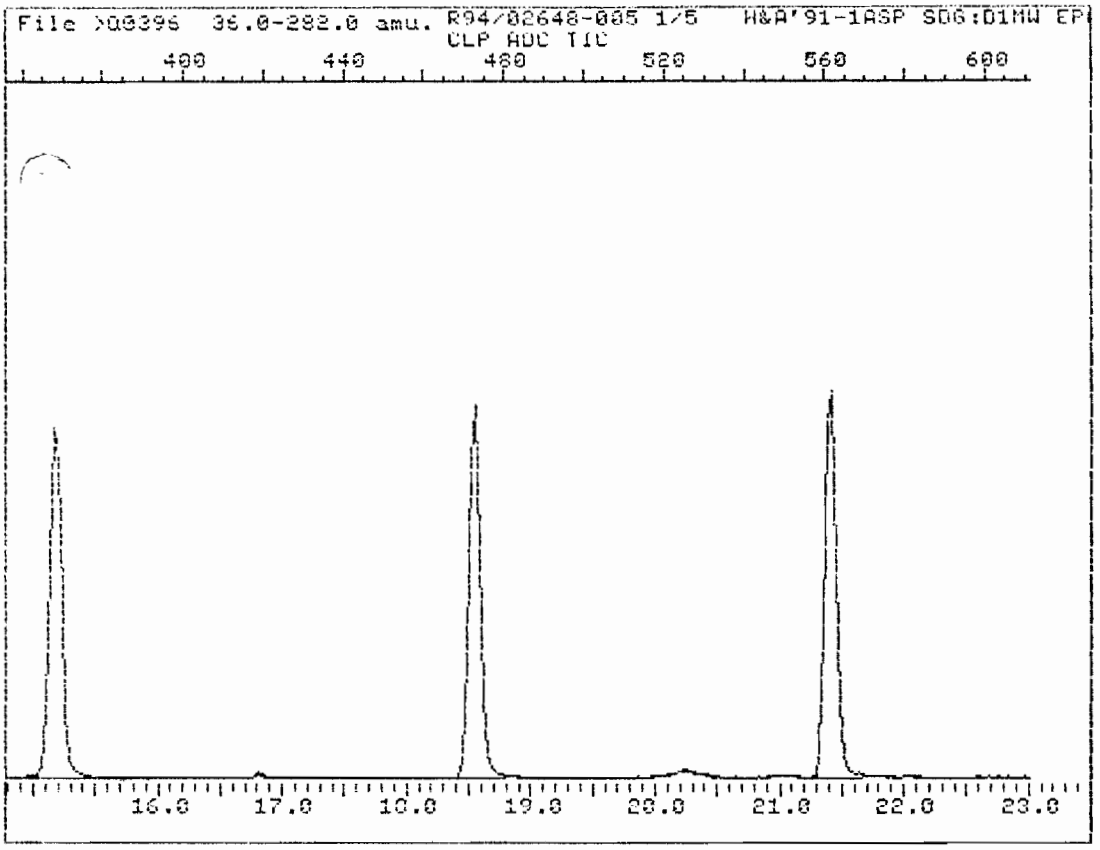
Correction Factor = 5.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

8:33 AM THU., 28 JULY, 1994



Instrument ID: MS9 Analyzed on: 7/22/94 3:33



Instrument ID: MS5 Analyzed on: 7/22/94 3:33

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0401

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	3.	J
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00131

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW6

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0401

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

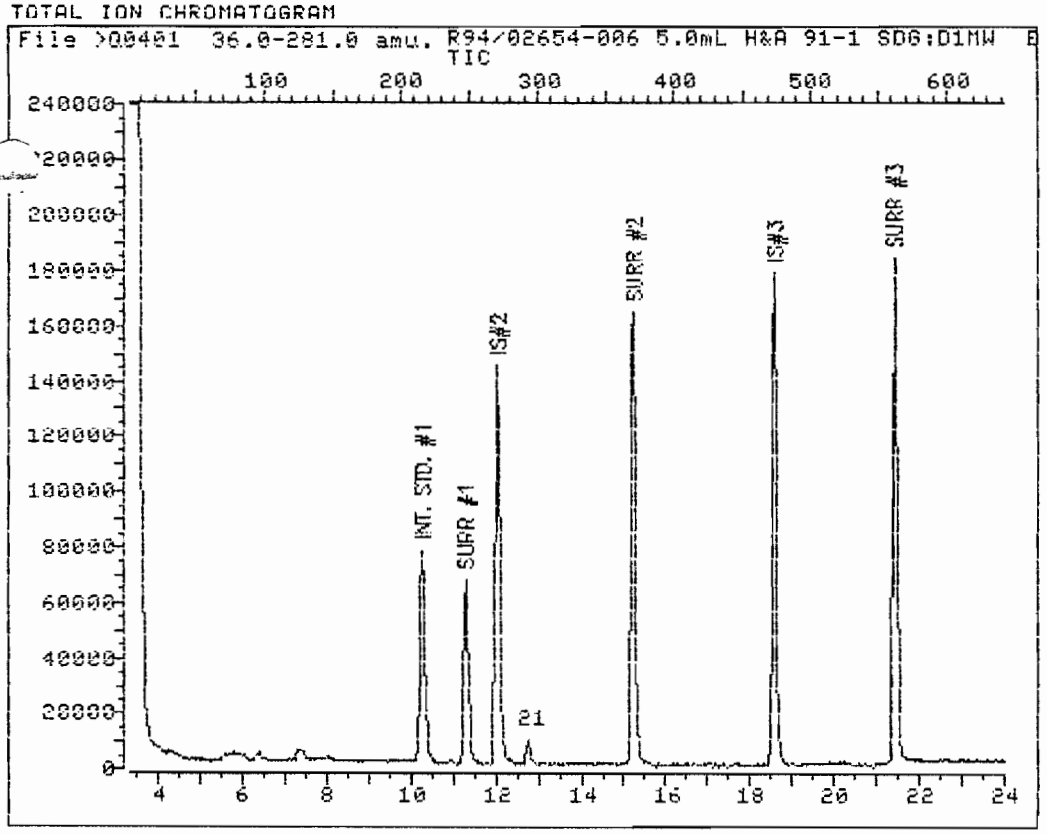
Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 14:30
Output File: ^Q0401::D3 Injected at: 940722 12:19
Data File: >Q0401::D3 Dilution Factor: 1.00000
Name: R94/02654-006 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW6

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.27	128.0	75808	50.00	ppb	92
16)	1,2-Dichloroethane-d4	11.30	65.0	183935	51.19	ppb	91
17)	*1,4-Difluorobenzene	12.04	114.0	406580	50.00	ppb	79
21)	Trichloroethene	12.75	130.0	11960	3.20	ppb	97
29)	*Chlorobenzene-d5	18.58	117.0	324015	50.00	ppb	95
31)	Toluene-d8	15.23	98.0	377643	50.37	ppb	91
41)	Bromofluorobenzene	21.42	95.0	216043	48.65	ppb	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0401::D3 Quant Output File: ^Q0401::D3
Name: R94/02654-006 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:D1MW EPA:MW6

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

Operator ID: TOMT
Quant Time : 940722 14:30
Injected at: 940722 12:19

MS data file header from : >Q0401::D3

Sample: R94/02654-006 5.0mL Operator: TOMT 7/22/94 12:19
Misc : H&A 91-1 SDG:01MW EPA:MW6
Inj. #: 1 MS model: 70 SW/HW rev.: FF ALS # : 1 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

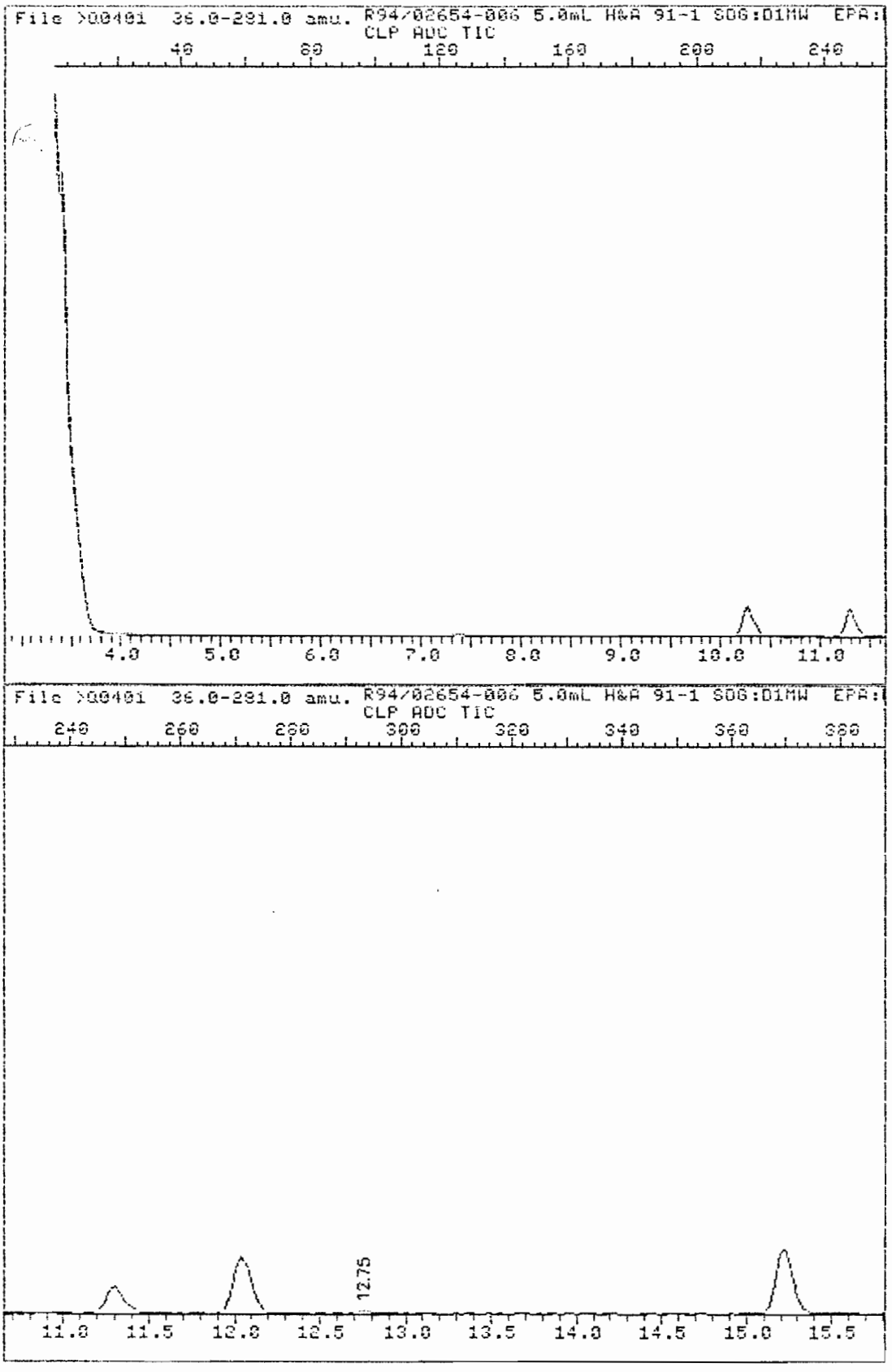
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	614433.	10.27	3.34 - 11.15
2	50.0	1059316.	12.04	11.15 - 15.31
3	50.0	1096161.	18.58	15.31 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

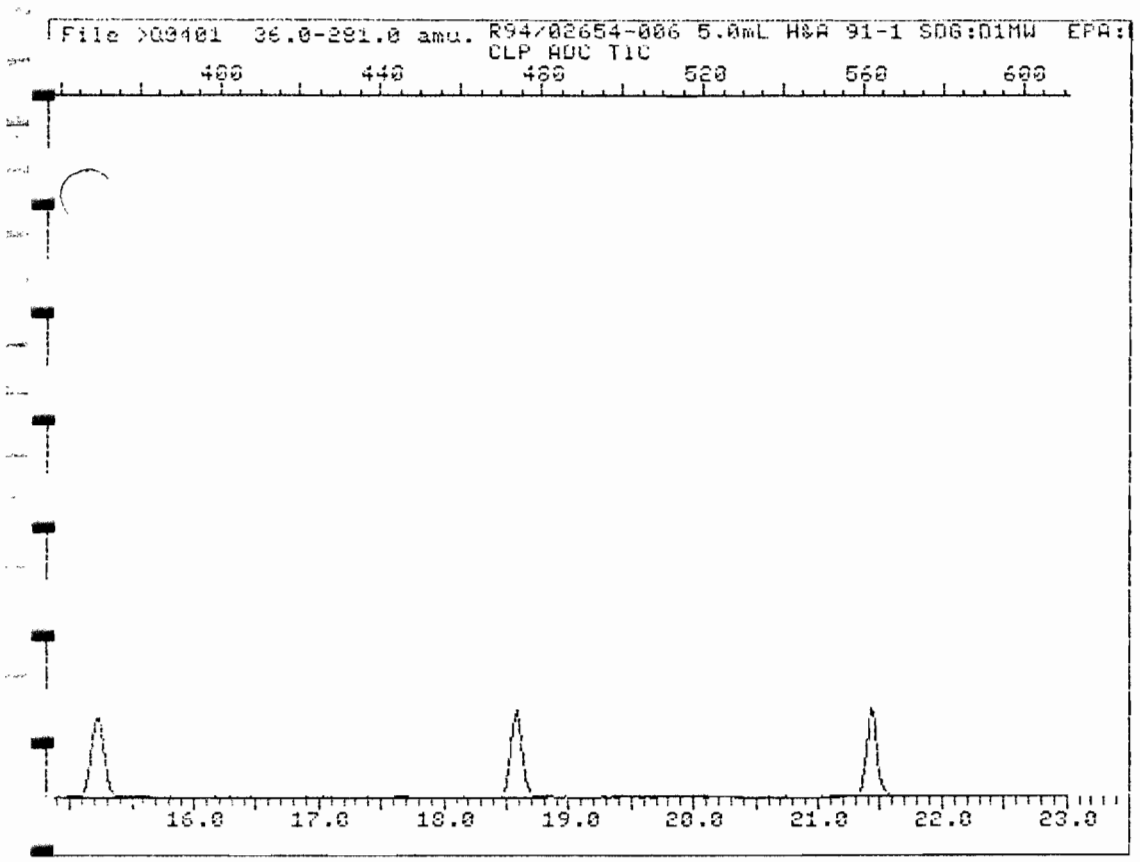
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

8:39 AM THU., 28 JULY, 1994



Instrument ID: MS5 Analyzed on: 7/22/94 12:19



Instrument ID: MS5 Analyzed on: 7/22/94 12:19

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Instrument ID:MS5 Calibration Date(s): 6/07/94 6/07/94

Heated Purge: (Y/N) N Calibration Times: 0834 1125

GC Column:RTX-502 ID: 0.53 (mm)

LAB FILE ID: RRF10 =E9684 RRF20 =E9685
RRF50 =E9686 RRF100=E9687 RRF200=E9688

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
Chloromethane		1.822	2.004	1.464	1.731	1.701	1.744	11.3	
Bromomethane	*	1.616	1.607	1.176	1.353	1.304	1.411	13.7	*
Vinyl chloride	*	1.887	1.964	1.507	1.819	1.827	1.801	9.7	*
Chloroethane		1.225	1.295	0.945	1.107	1.036	1.122	12.6	
Methylene chloride		1.803	2.402	1.534	1.518	1.542	1.760	21.5	
Acetone		1.877	1.417	0.793	0.764	0.714	1.113	46.2	
Carbon Disulfide		4.295	4.515	3.338	3.865	3.967	3.996	11.3	
1,1-Dichloroethene	*	1.377	1.477	1.052	1.220	1.274	1.280	12.6	*
1,1-Dichloroethane	*	3.553	3.917	2.819	3.431	3.432	3.430	11.5	*
trans-1,2-Dichloroethene		1.550	1.656	1.265	1.459	1.495	1.485	9.7	
Chloroform	*	3.542	3.979	2.932	3.341	3.316	3.422	11.2	*
1,2-Dichloroethane	*	2.359	2.919	2.066	2.456	2.372	2.434	12.7	*
2-Butanone		1.465	1.391	0.851	1.106	0.987	1.160	22.6	
cis-1,2-Dichloroethene		1.550	1.656	1.265	1.459	1.495	1.485	9.7	
,1,1-Trichloroethane	*	0.702	0.797	0.585	0.699	0.674	0.691	11.0	*
Carbon tetrachloride	*	0.638	0.752	0.553	0.669	0.665	0.655	10.9	*
Bromodichloromethane	*	0.733	0.841	0.630	0.753	0.748	0.741	10.1	*
1,2-Dichloropropane		0.522	0.576	0.437	0.516	0.508	0.512	9.7	
cis-1,3-Dichloropropene	*	0.701	0.810	0.597	0.710	0.708	0.705	10.7	*
Trichloroethene	*	0.475	0.506	0.378	0.452	0.450	0.452	10.5	*
Dibromochloromethane	*	0.555	0.683	0.482	0.578	0.595	0.579	12.5	*
1,1,2-Trichloroethane	*	0.374	0.443	0.308	0.360	0.374	0.372	13.0	*
Benzene	*	1.181	1.285	0.942	1.101	1.053	1.112	11.7	*
trans-1,3-Dichloropropene	*	0.517	0.645	0.456	0.560	0.586	0.553	12.9	*
Bromoform	*	0.354	0.431	0.314	0.395	0.430	0.385	13.1	*
4-Methyl-2-Pentanone		0.754	0.703	0.506	0.627	0.609	0.640	14.8	
2-Hexanone		0.507	0.537	0.373	0.519	0.482	0.484	13.4	
Tetrachloroethene	*	0.449	0.510	0.358	0.470	0.467	0.451	12.5	*
1,1,2,2-Tetrachloroethane	*	0.870	0.949	0.694	0.920	0.929	0.872	11.9	*
Toluene	*	1.326	1.499	1.126	1.465	1.469	1.377	11.3	*
Chlorobenzene	*	1.082	1.151	0.862	1.042	1.043	1.036	10.3	*
Ethylbenzene	*	0.508	0.559	0.399	0.491	0.500	0.491	11.8	*
Styrene	*	0.690	0.758	0.590	0.778	0.727	0.709	10.5	*
(m+p)Xylene	*	0.622	0.675	0.519	0.674	0.631	0.624	10.2	*
o-Xylene	*	0.622	0.675	0.519	0.674	0.631	0.624	10.2	*
Toluene-d8		1.004	0.894	1.119	1.175	1.137	1.066	10.8	
Bromofluorobenzene	*	0.730	0.685	0.732	0.861	0.823	0.766	9.5	*
1,2-Dichloroethane-d4		1.908	1.977	2.129	2.067	1.990	2.014	4.2	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 09:01
Output File: ^E9684::D2 Injected at: 940607 08:34
Data File: >E9684::D2 Dilution Factor: 1.00000
File: 10 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	65463	50.00	ppb	89
2)	Chloromethane	4.08	50.0	23852	18.64	ppb	96
3)	Vinyl chloride	4.24	62.0	24704	19.55	ppb	92
4)	Bromomethane	4.98	94.0	21152	16.27	ppb	95
5)	Chloroethane	5.11	64.0	16039	17.77	ppb	97
6)	Acetone	6.33	43.0	24569	21.01	ppb	84
7)	1,1-Dichloroethene	6.56	96.0	18032	12.22	ppb	87
8)	Methylene chloride	7.33	84.0	23605	13.35	ppb	87
9)	Carbon Disulfide	7.43	76.0	56233	12.13	ppb	96
10)	trans-1,2-Dichloroethene	7.85	96.0	19406	10.97	ppb	91
11)	1,1-Dichloroethane	8.56	63.0	46523	11.61	ppb	97
12)	2-Butanone	9.30	43.0	19185	10.69	ppb	83
13)	cis-1,2-Dichloroethene	9.62	96.0	21175	11.97	ppb	95
14)	Chloroform	9.91	83.0	46376	9.38	ppb	95
15)	1,2-Dichloroethane	11.39	62.0	30880	8.73	ppb	91
16)	1,2-Dichloroethane-d4	11.20	65.0	24979	7.76	ppb	86
17)	*1,4-Difluorobenzene	11.94	114.0	265610	50.00	ppb	76
18)	1,1,1-Trichloroethane	10.68	97.0	37308	7.84	ppb	94
19)	Carbon tetrachloride	11.17	117.0	33882	7.42	ppb	95
20)	Benzene	11.46	78.0	62749	14.21	ppb	89
21)	Trichloroethene	12.65	130.0	25252	13.35	ppb	92
22)	1,2-Dichloropropane	12.97	63.0	27710	13.96	ppb	97
23)	Bromodichloromethane	13.42	83.0	38941	8.96	ppb	98
24)	cis-1,3-Dichloropropene	14.52	75.0	37238	11.21	ppb	96
25)	trans-1,3-Dichloropropene	15.55	75.0	27475	9.47	ppb	96
26)	1,1,2-Trichloroethane	15.94	97.0	19860	11.59	ppb	94
27)	Dibromochloromethane	17.10	129.0	29489	9.16	ppb	92
28)	Bromoform	20.74	173.0	18808	8.43	ppb	94
29)	*Chlorobenzene-d5	18.45	117.0	223688	50.00	ppb	95
30)	4-Methyl-2-Pentanone	14.10	43.0	33736	11.71	ppb	89
31)	Toluene-d8	15.07	98.0	44898	8.89	ppb	84
32)	Toluene	15.26	91.0	59339	11.13	ppb	99
33)	2-Hexanone	15.94	43.0	22695	7.88	ppb	95
34)	Tetrachloroethene	16.71	164.0	20098	11.22	ppb	96
35)	Chlorobenzene	18.55	112.0	48414	12.46	ppb	97
36)	Ethylbenzene	18.65	106.0	22713	11.86	ppb	97
37)	(m+p)Xylene	18.84	106.0	58929	22.36	ppb	92
38)	o-Xylene	19.87	106.0	27824	12.36	ppb	87
39)	Styrene	19.93	104.0	30862	11.71	ppb	98
40)	1,1,2,2-Tetrachloroethane	21.06	83.0	38932	12.14	ppb	96

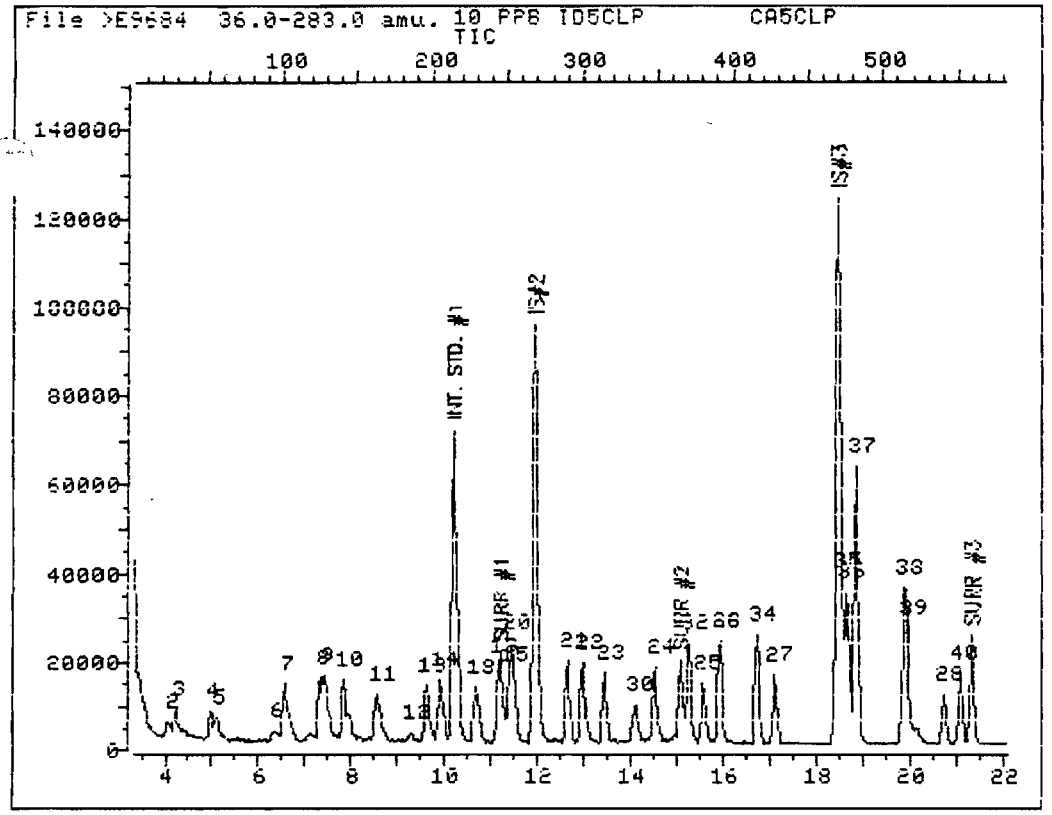
Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 09:01
Output File: ^E9684::D2 Injected at: 940607 08:34
Data File: >E9684::D2 Dilution Factor: 1.00000
File: 10 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

MTD File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.32	95.0	32676	9.73	ppb	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E9684::D2 Quant Output File: ^E9684::D2
Name: 10 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

Operator ID: TOMT
Quant Time : 940607 09:01
Injected at: 940607 08:34

Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 09:41
Output File: ^E9685::D2 Injected at: 940607 09:18
Data File: >E9685::D2 Dilution Factor: 1.00000
File: 20 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.23	128.0	52229	50.00	ppb	92
2)	Chloromethane	4.08	50.0	41858	41.00	ppb	99
3)	Vinyl chloride	4.24	62.0	41024	40.68	ppb	94
4)	Bromomethane	4.98	94.0	33578	32.36	ppb	97
5)	Chloroethane	5.11	64.0	27059	37.58	ppb	97
6)	Acetone	6.36	43.0	29605	31.74	ppb	95
7)	1,1-Dichloroethene	6.59	96.0	30851	26.20	ppb	87
8)	Methylene chloride	7.33	84.0	50179	35.58	ppb	81
9)	Carbon Disulfide	7.43	76.0	94333	25.51	ppb	98
10)	trans-1,2-Dichloroethene	7.88	96.0	34546	24.47	ppb	90
11)	1,1-Dichloroethane	8.56	63.0	81839	25.60	ppb	96
12)	2-Butanone	9.30	43.0	29061	20.29	ppb	97
13)	cis-1,2-Dichloroethene	9.62	96.0	34648	24.54	ppb	97
14)	Chloroform	9.91	83.0	83131	21.07	ppb	99
15)	1,2-Dichloroethane	11.39	62.0	60980	21.60	ppb	95
16)	1,2-Dichloroethane-d4	11.23	65.0	41302	16.08	ppb	88
17)	*1,4-Difluorobenzene	11.97	114.0	218686	50.00	ppb	77
18)	1,1,1-Trichloroethane	10.68	97.0	69693	17.80	ppb	93
19)	Carbon tetrachloride	11.20	117.0	65792	17.50	ppb	97
20)	Benzene	11.49	78.0	112389	30.92	ppb	92
21)	Trichloroethene	12.68	130.0	44306	28.45	ppb	94
22)	1,2-Dichloropropane	13.01	63.0	50422	30.86	ppb	95
23)	Bromodichloromethane	13.46	83.0	73601	20.57	ppb	96
24)	cis-1,3-Dichloropropene	14.55	75.0	70863	25.92	ppb	96
25)	trans-1,3-Dichloropropene	15.62	75.0	56435	23.64	ppb	95
26)	1,1,2-Trichloroethane	15.97	97.0	38790	27.50	ppb	95
27)	Dibromochloromethane	17.16	129.0	59750	22.55	ppb	98
28)	Bromoform	20.81	173.0	37675	20.50	ppb	98
29)	*Chlorobenzene-d5	18.52	117.0	197233	50.00	ppb	96
30)	4-Methyl-2-Pentanone	14.13	43.0	55454	21.84	ppb	88
31)	Toluene-d8	15.13	98.0	70519	15.84	ppb	88
32)	Toluene	15.29	91.0	118271	25.16	ppb	99
33)	2-Hexanone	16.00	43.0	42336	16.66	ppb	95
34)	Tetrachloroethene	16.78	164.0	40264	25.49	ppb	98
35)	Chlorobenzene	18.58	112.0	90829	26.52	ppb	95
36)	Ethylbenzene	18.71	106.0	44099	26.11	ppb	96
37)	(m+p)Xylene	18.90	106.0	112093	48.25	ppb	93
38)	o-Xylene	19.94	106.0	53260	26.84	ppb	89
39)	Styrene	20.00	104.0	59792	25.74	ppb	96
40)	1,1,2,2-Tetrachloroethane	21.13	83.0	74856	26.48	ppb	96

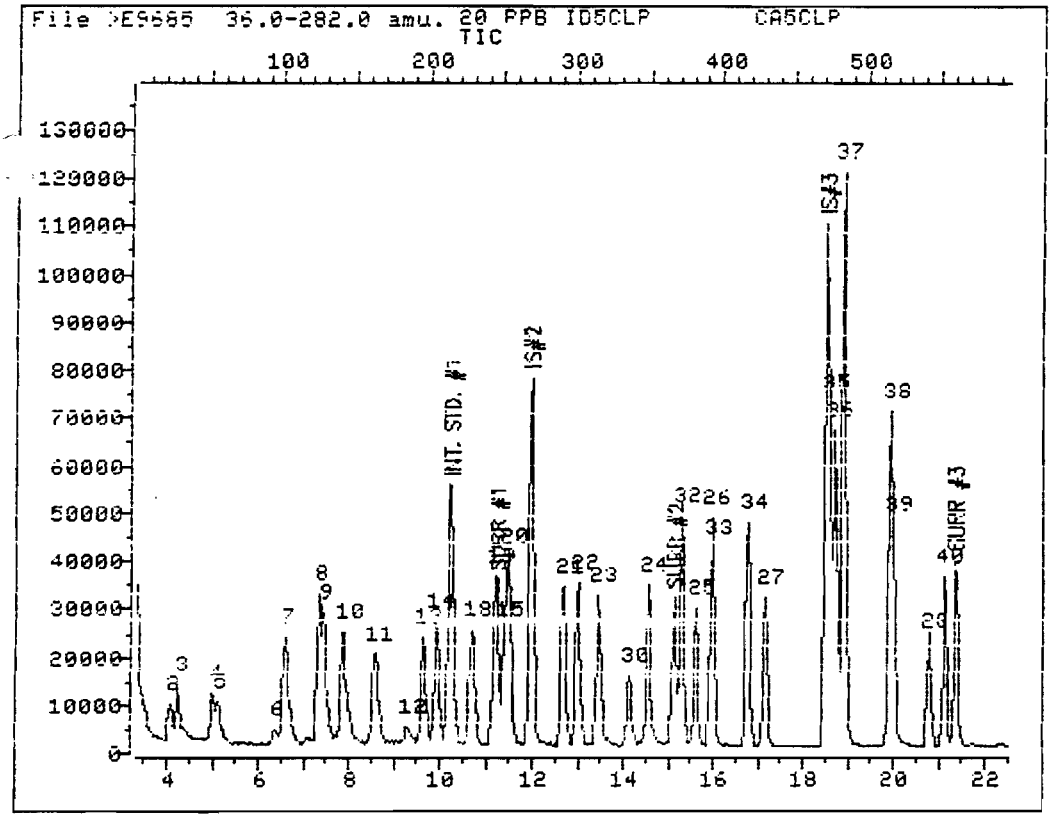
Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 09:41
Output File: ^E9685::D2 Injected at: 940607 09:18
Data File: >E9685::D2 Dilution Factor: 1.00000
File: 20 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.35	95.0	54072	18.25	ppb	85

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E9685::D2 Quant Output File: ^E9685::D2
Name: 20 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

Id File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

Operator ID: TOMT
Quant Time : 940607 09:41
Injected at: 940607 09:18

Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 10:20
Output File: ^E9686::D2 Injected at: 940607 09:53
Data File: >E9686::D2 Dilution Factor: 1.00000
Name: 50 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	57567	50.00	ppb	91
2)	Chloromethane	4.01	50.0	84289	74.90	ppb	96
3)	Vinyl chloride	4.17	62.0	86753	78.05	ppb	91
4)	Bromomethane	4.95	94.0	67676	59.18	ppb	96
5)	Chloroethane	5.08	64.0	54376	68.51	ppb	96
6)	Acetone	6.30	43.0	45649	44.40	ppb	92
7)	1,1-Dichloroethene	6.53	96.0	60551	46.65	ppb	88
8)	Methylene chloride	7.30	84.0	88306	56.81	ppb	87
9)	Carbon Disulfide	7.40	76.0	192157	47.15	ppb	98
10)	trans-1,2-Dichloroethene	7.82	96.0	68786	44.20	ppb	85
11)	1,1-Dichloroethane	8.52	63.0	162288	46.06	ppb	96
12)	2-Butanone	9.27	43.0	48963	31.01	ppb	90
13)	cis-1,2-Dichloroethene	9.59	96.0	76187	48.96	ppb	96
14)	Chloroform	9.88	83.0	168760	38.80	ppb	98
15)	1,2-Dichloroethane	11.39	62.0	118923	38.21	ppb	96
16)	1,2-Dichloroethane-d4	11.20	65.0	122546	43.30	ppb	90
17)	*1,4-Difluorobenzene	11.94	114.0	241011	50.00	ppb	75
18)	1,1,1-Trichloroethane	10.68	97.0	141036	32.68	ppb	93
19)	Carbon tetrachloride	11.17	117.0	133262	32.16	ppb	98
20)	Benzene	11.46	78.0	226981	56.66	ppb	92
21)	Trichloroethene	12.65	130.0	91030	53.03	ppb	95
22)	1,2-Dichloropropane	12.97	63.0	105435	58.56	ppb	94
23)	Bromodichloromethane	13.46	83.0	151793	38.49	ppb	96
24)	cis-1,3-Dichloropropene	14.55	75.0	143938	47.77	ppb	95
25)	trans-1,3-Dichloropropene	15.58	75.0	109915	41.77	ppb	94
26)	1,1,2-Trichloroethane	15.97	97.0	74232	47.76	ppb	95
27)	Dibromochloromethane	17.16	129.0	116083	39.75	ppb	98
28)	Bromoform	20.84	173.0	75759	37.40	ppb	97
29)	*Chlorobenzene-d5	18.52	117.0	204817	50.00	ppb	97
30)	4-Methyl-2-Pentanone	14.10	43.0	103657	39.31	ppb	87
31)	Toluene-d8	15.10	98.0	229229	49.57	ppb	91
32)	Toluene	15.29	91.0	230675	47.26	ppb	99
33)	2-Hexanone	15.97	43.0	76483	28.99	ppb	96
34)	Tetrachloroethene	16.75	164.0	73298	44.68	ppb	95
35)	Chlorobenzene	18.61	112.0	176539	49.64	ppb	98
36)	Ethylbenzene	18.71	106.0	81639	46.55	ppb	97
37)	(m+p)Xylene	18.91	106.0	219235	90.87	ppb	92
38)	o-Xylene	19.94	106.0	106223	51.55	ppb	88
39)	Styrene	20.03	104.0	120776	50.06	ppb	95
40)	1,1,2,2-Tetrachloroethane	21.16	83.0	142209	48.44	ppb	98

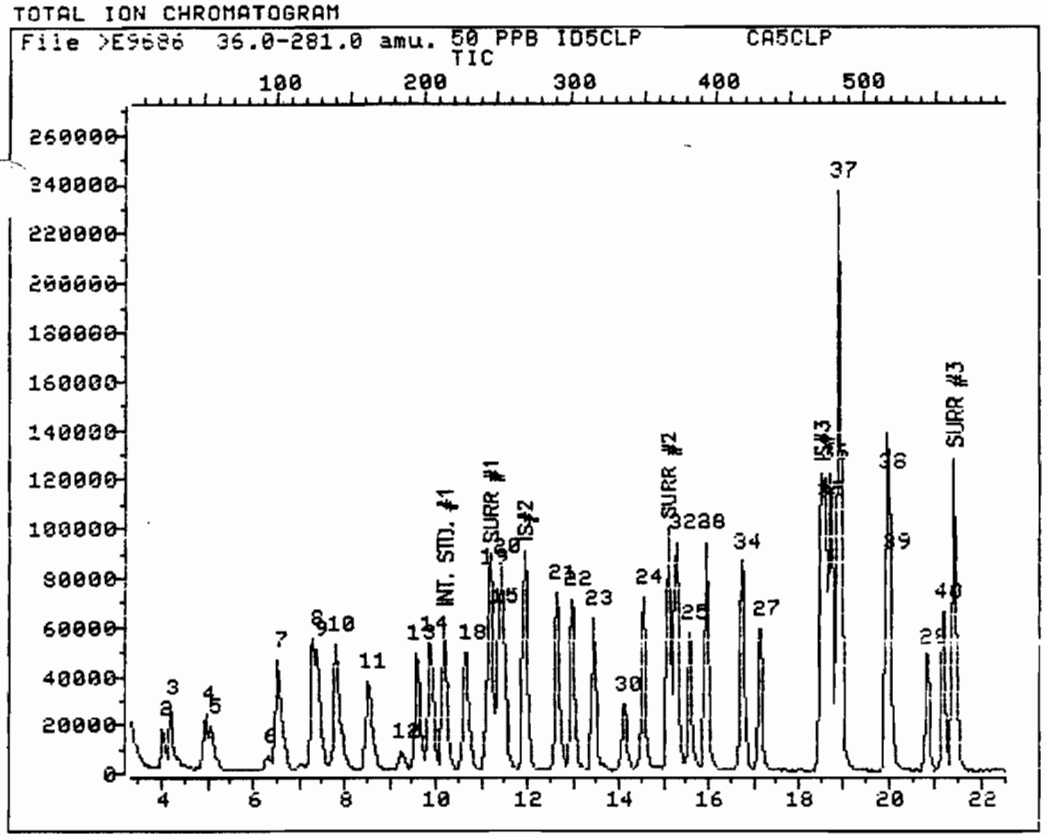
Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 10:20
Output File: ^E9686::D2 Injected at: 940607 09:53
Data File: >E9686::D2 Dilution Factor: 1.00000
File: 50 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

RD File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.42	95.0	149927	48.74	ppb	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E9686::D2 Quant Output File: ^E9686::D2
Name: 50 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

Operator ID: TOMT
Quant Time : 940607 10:20
Injected at: 940607 09:53

Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 11:08
Output File: ^E9687::D2 Injected at: 940607 10:39
Data File: >E9687::D2 Dilution Factor: 1.00000
File: 100 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	58565	50.00	ppb	88
2)	Chloromethane	4.01	50.0	202707	177.06	ppb	97
3)	Vinyl chloride	4.17	62.0	213036	188.40	ppb	95
4)	Bromomethane	4.91	94.0	158500	136.24	ppb	93
5)	Chloroethane	5.04	64.0	129677	160.60	ppb	97
6)	Acetone	6.30	43.0	89496	85.57	ppb	91
7)	1,1-Dichloroethene	6.53	96.0	142856	108.18	ppb	85
8)	Methylene chloride	7.30	84.0	177783	112.42	ppb	87
9)	Carbon Disulfide	7.40	76.0	452656	109.17	ppb	97
10)	trans-1,2-Dichloroethene	7.82	96.0	158913	100.38	ppb	86
11)	1,1-Dichloroethane	8.52	63.0	401858	112.12	ppb	97
12)	2-Butanone	9.27	43.0	129542	80.66	ppb	92
13)	cis-1,2-Dichloroethene	9.62	96.0	182846	115.49	ppb	98
14)	Chloroform	9.91	83.0	391360M	88.45	ppb	
)	1,2-Dichloroethane	11.39	62.0	287622	90.85	ppb	95
16)	1,2-Dichloroethane-d4	11.20	65.0	242073	84.07	ppb	89
17)	*1,4-Difluorobenzene	11.94	114.0	244696	50.00	ppb	76
18)	1,1,1-Trichloroethane	10.68	97.0	342116	78.09	ppb	93
19)	Carbon tetrachloride	11.17	117.0	327404	77.83	ppb	97
20)	Benzene	11.46	78.0	538952	132.52	ppb	93
21)	Trichloroethene	12.65	130.0	221059	126.85	ppb	97
22)	1,2-Dichloropropane	12.97	63.0	252415	138.07	ppb	92
23)	Bromodichloromethane	13.43	83.0	368288	91.99	ppb	96
24)	cis-1,3-Dichloropropene	14.52	75.0	347233	113.51	ppb	93
25)	trans-1,3-Dichloropropene	15.59	75.0	273892	102.52	ppb	97
26)	1,1,2-Trichloroethane	15.94	97.0	176073	111.57	ppb	95
27)	Dibromochloromethane	17.13	129.0	283027	95.46	ppb	96
28)	Bromoform	20.81	173.0	193097	93.90	ppb	96
29)	*Chlorobenzene-d5	18.49	117.0	190159	50.00	ppb	96
30)	4-Methyl-2-Pentanone	14.10	43.0	238276	97.32	ppb	87
31)	Toluene-d8	15.10	98.0	446928	104.10	ppb	88
32)	Toluene	15.26	91.0	557002	122.90	ppb	99
33)	2-Hexanone	15.94	43.0	197428	80.60	ppb	97
34)	Tetrachloroethene	16.75	164.0	178886	117.44	ppb	97
35)	Chlorobenzene	18.58	112.0	396204	119.99	ppb	97
36)	Ethylbenzene	18.71	106.0	186704	114.66	ppb	94
37)	(m+p)Xylene	18.87	106.0	491431	219.39	ppb	91
38)	o-Xylene	19.91	106.0	256269	133.96	ppb	87
39)	Styrene	19.97	104.0	295767	132.04	ppb	94
)	1,1,2,2-Tetrachloroethane	21.16	83.0	350015	128.40	ppb	98

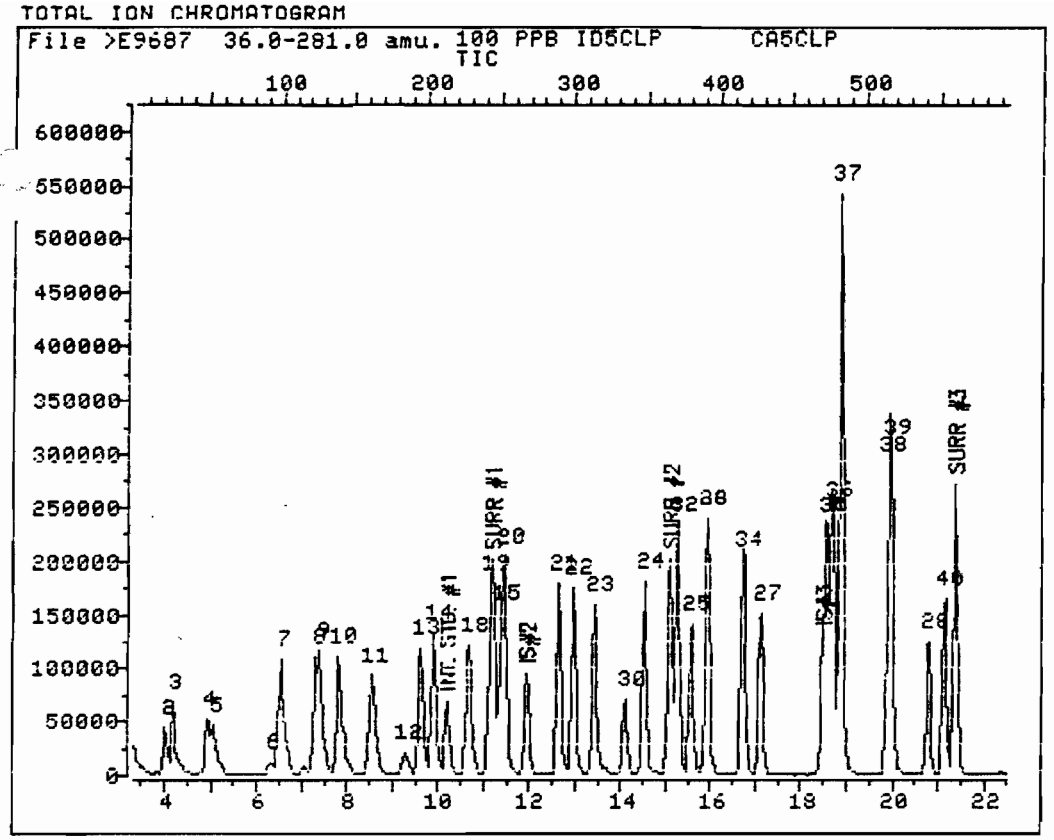
Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 11:08
Output File: ^E9687::D2 Injected at: 940607 10:39
Data File: >E9687::D2 Dilution Factor: 1.00000
Name: 100 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.39	95.0	327351	114.61	ppb	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E9687::D2 Quant Output File: ^E9687::D2
Name: 100 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

Operator ID: TOMT
Quant Time : 940607 11:08
Injected at: 940607 10:39

Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 12:09
Output File: ^E9688::D2 Injected at: 940607 11:25
Data File: >E9688::D2 Dilution Factor: 1.00000
File: 200 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	62876	50.00	ppb	92
2)	Chloromethane	4.01	50.0	427775	348.02	ppb	95
3)	Vinyl chloride	4.17	62.0	459596	378.58	ppb	95
4)	Bromomethane	4.91	94.0	327927	262.54	ppb	94
5)	Chloroethane	5.01	64.0	260659	300.68	ppb	97
6)	Acetone	6.33	43.0	179477	159.83	ppb	91
7)	1,1-Dichloroethene	6.53	96.0	320449	226.02	ppb	87
8)	Methylene chloride	7.30	84.0	387716	228.36	ppb	88
9)	Carbon Disulfide	7.36	76.0	997706	224.12	ppb	97
10)	trans-1,2-Dichloroethene	7.82	96.0	360367	212.02	ppb	87
11)	1,1-Dichloroethane	8.53	63.0	863077	224.29	ppb	97
12)	2-Butanone	9.27	43.0	248123M	143.90	ppb	
13)	cis-1,2-Dichloroethene	9.59	96.0	391806	230.51	ppb	96
14)	Chloroform	9.88	83.0	833933M	175.54	ppb	
15)	1,2-Dichloroethane	11.36	62.0	596635	175.53	ppb	96
16)	1,2-Dichloroethane-d4	11.17	65.0	500510	161.90	ppb	90
17)	*1,4-Difluorobenzene	11.91	114.0	260827	50.00	ppb	77
18)	1,1,1-Trichloroethane	10.65	97.0	703048M	150.54	ppb	
19)	Carbon tetrachloride	11.14	117.0	694105	154.80	ppb	97
20)	Benzene	11.43	78.0	1098590M	253.42	ppb	
21)	Trichloroethene	12.62	130.0	469434	252.71	ppb	98
22)	1,2-Dichloropropane	12.94	63.0	529641	271.80	ppb	93
23)	Bromodichloromethane	13.40	83.0	780709	182.94	ppb	96
24)	cis-1,3-Dichloropropene	14.46	75.0	739067	226.66	ppb	93
25)	trans-1,3-Dichloropropene	15.52	75.0	611250	214.65	ppb	95
26)	1,1,2-Trichloroethane	15.88	97.0	390239	231.99	ppb	94
27)	Dibromochloromethane	17.04	129.0	620901	196.46	ppb	97
28)	Bromoform	20.68	173.0	448637	204.66	ppb	95
29)	*Chlorobenzene-d5	18.39	117.0	207881	50.00	ppb	97
30)	4-Methyl-2-Pentanone	14.04	43.0	506197	189.13	ppb	86
31)	Toluene-d8	15.04	98.0	945119	201.38	ppb	91
32)	Toluene	15.20	91.0	1221494	246.55	ppb	99
33)	2-Hexanone	15.88	43.0	400894	149.72	ppb	97
34)	Tetrachloroethene	16.65	164.0	388077	233.06	ppb	98
35)	Chlorobenzene	18.46	112.0	867376	240.29	ppb	95
36)	Ethylbenzene	18.59	106.0	415865	233.62	ppb	96
37)	(m+p)Xylene	18.78	106.0	1072944	438.15	ppb	92
38)	o-Xylene	19.81	106.0	524554	250.83	ppb	89
39)	Styrene	19.88	104.0	604469	246.84	ppb	97
40)	1,1,2,2-Tetrachloroethane	21.04	83.0	772580	259.26	ppb	97

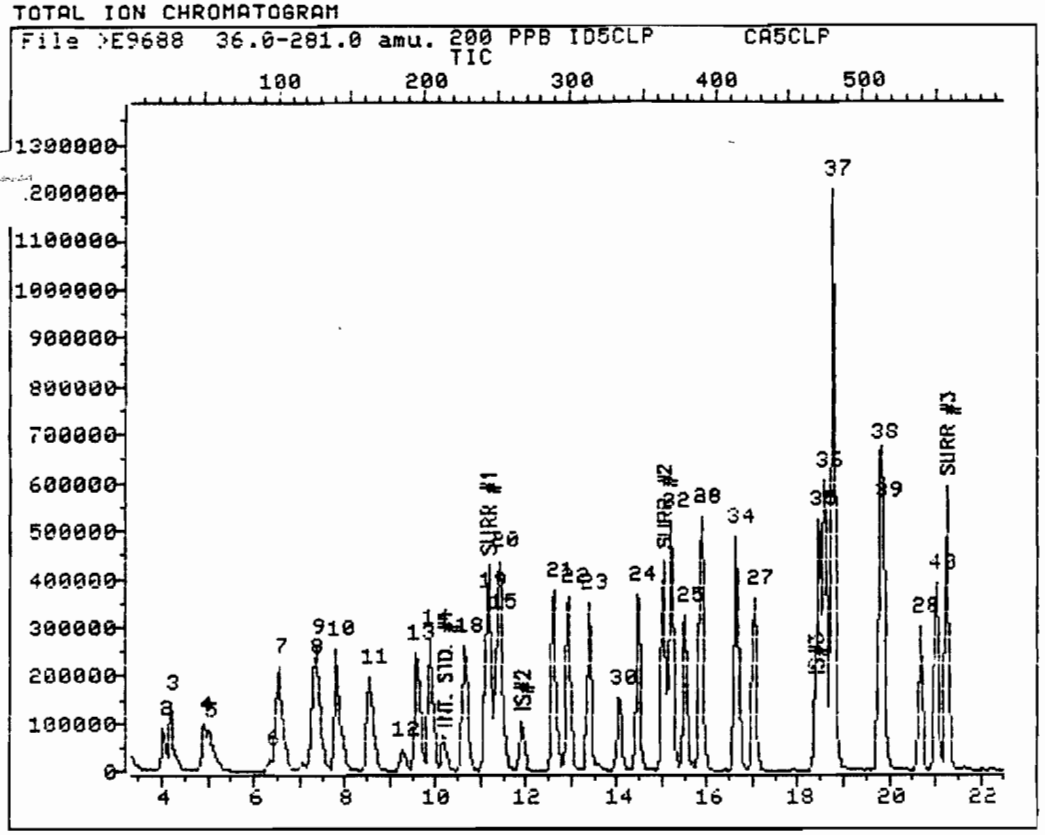
Operator ID: TOMT Quant Rev: 7 Quant Time: 940607 12:09
Output File: ^E9688::D2 Injected at: 940607 11:25
Data File: >E9688::D2 Dilution Factor: 1.00000
Name: 200 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

QD File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.26	95.0	684425	219.20	ppb	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E9688::D2 Quant Output File: ^E9688::D2
Name: 200 PPB ID5CLP Instrument ID: MS5
Misc: CA5CLP

Id File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940222 17:05 Last Qcal Time: 940330 21:48

Operator ID: TOMT
Quant Time : 940607 12:09
Injected at: 940607 11:25

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Instrument ID:MS5 Calibration Date: 7/21/94 Time:2011

Lab File ID:Q0384 Init. Calib. Date(s): 6/07/94 6/07/94

Heated Purge: (Y/N) N Init. Calib. Times: 0834 1125

GC Column:RTX-502 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.744	1.641	0.010	5.9	
Bromomethane	1.411	1.286	0.100	8.9	25.0
Vinyl chloride	1.801	1.790	0.100	0.6	25.0
Chloroethane	1.122	1.080	0.010	3.7	
Methylene chloride	1.760	1.813	0.010	3.0	
Acetone	1.113	0.780	0.010	29.9	
Carbon Disulfide	3.996	4.079	0.010	2.1	
1,1-Dichloroethene	1.280	1.362	0.100	6.4	25.0
1,1-Dichloroethane	3.430	3.136	0.200	8.6	25.0
trans-1,2-Dichloroethene	1.485	1.530	0.010	3.0	
Chloroform	3.422	3.326	0.200	2.8	25.0
1,2-Dichloroethane	2.434	2.670	0.100	9.7	25.0
2-Butanone	1.160	1.210	0.010	4.3	
cis-1,2-Dichloroethene	1.485	1.530	0.010	3.0	
1,1,1-Trichloroethane	0.691	0.614	0.100	11.1	25.0
Carbon tetrachloride	0.655	0.638	0.100	2.6	25.0
Bromodichloromethane	0.741	0.697	0.200	5.9	25.0
1,2-Dichloropropane	0.512	0.510	0.010	0.4	
cis-1,3-Dichloropropene	0.705	0.728	0.200	3.3	25.0
Trichloroethene	0.452	0.483	0.300	6.9	25.0
Dibromochloromethane	0.579	0.607	0.100	4.8	25.0
1,1,2-Trichloroethane	0.372	0.386	0.100	3.8	25.0
Benzene	1.112	1.080	0.500	2.9	25.0
trans-1,3-Dichloropropene	0.553	0.560	0.100	1.3	25.0
Bromoform	0.385	0.396	0.100	2.9	25.0
4-Methyl-2-Pentanone	0.640	0.716	0.010	11.9	
2-Hexanone	0.484	0.559	0.010	15.5	
Tetrachloroethene	0.451	0.454	0.200	0.7	25.0
1,1,2,2-Tetrachloroethane	0.872	0.907	0.500	4.0	25.0
Toluene	1.377	1.376	0.400	0.1	25.0
Chlorobenzene	1.036	0.988	0.500	4.6	25.0
Ethylbenzene	0.491	0.496	0.100	1.0	25.0
Styrene	0.709	0.577	0.300	18.6	25.0
(m+p)Xylene	0.624	0.578	0.300	7.4	25.0
o-Xylene	0.624	0.578	0.300	7.4	25.0
Toluene-d8	1.066	1.146	0.010	7.5	
Bromofluorobenzene	0.766	0.678	0.200	11.5	25.0
1,2-Dichloroethane-d4	2.014	2.171	0.010	7.8	

All other compounds must meet a minimum RRF of 0.010

perator ID: RODH Quant Rev: 7 Quant Time: 940721 20:43
utput File: ^Q0384::D3 Injected at: 940721 20:11
File: >Q0384::D3 Dilution Factor: 1.00000
...e: CAL. CHECK Instrument ID: MS5
isc: 91-1

D File: ID5CLP::QT
itle: Volatile Organics on MS5
ast Calibration: 940607 12:24 Last Qcal Time: 940721 08:31

	Compound	R.T.	Scan	Area	Conc	Units	q
1)	*Bromochloromethane	10.17	213	99669	50.00	ppb	91
2)	Chloromethane	4.09	23	163551	51.14	ppb	98
3)	Vinyl chloride	4.21	28	178444	53.59	ppb	94
4)	Bromomethane	4.95	51	128145	50.90	ppb	92
5)	Chloroethane	5.08	55	107616	51.72	ppb	95
6)	Acetone	6.33	94	77746	55.16	ppb	94
7)	1,1-Dichloroethene	6.56	101	135736	53.05	ppb	84
8)	Methylene chloride	7.27	123	180678	48.27	ppb	91
9)	Carbon Disulfide	7.40	127	406567	49.10	ppb	97
10)	trans-1,2-Dichloroethene	7.82	140	153926	54.17	ppb	85
11)	1,1-Dichloroethane	8.49	161	312527	46.98	ppb	97
12)	2-Butanone	9.24	184	120580M	58.15	ppb	
13)	cis-1,2-Dichloroethene	9.59	195	151073	53.17	ppb	96
14)	Chloroform	9.88	204	331539	53.00	ppb	99
15)	1,2-Dichloroethane	11.40	251	266113	53.99	ppb	97
16)	1,2-Dichloroethane-d4	11.20	245	216333	49.46	ppb	90
17)	*1,4-Difluorobenzene	11.95	268	455176	50.00	ppb	79
18)	1,1,1-Trichloroethane	10.65	228	279352	51.40	ppb	94
19)	Carbon tetrachloride	11.17	244	290335	53.65	ppb	98
20)	Benzene	11.46	253	491471	52.65	ppb	90
21)	Trichloroethene	12.69	291	219854	54.86	ppb	96
22)	1,2-Dichloropropane	13.01	301	231976	55.28	ppb	94
23)	Bromodichloromethane	13.46	315	317366	54.07	ppb	98
24)	cis-1,3-Dichloropropene	14.59	350	331158	56.55	ppb	95
25)	trans-1,3-Dichloropropene	15.62	382	254793	56.01	ppb	94
26)	1,1,2-Trichloroethane	15.98	393	175667	57.29	ppb	91
27)	Dibromochloromethane	17.17	430	276348	57.85	ppb	96
28)	Bromoform	20.78	542	180386	58.73	ppb	97
29)	*Chlorobenzene-d5	18.52	472	392084	50.00	ppb	97
30)	4-Methyl-2-Pentanone	14.14	336	280564	55.71	ppb	89
31)	Toluene-d8	15.14	367	449499	48.33	ppb	93
32)	Toluene	15.30	372	539358	52.50	ppb	99
33)	2-Hexanone	16.01	394	219047	50.89	ppb	94
34)	Tetrachloroethene	16.78	418	178145	49.71	ppb	98
35)	Chlorobenzene	18.59	474	387260	50.37	ppb	96
36)	Ethylbenzene	18.72	478	194335	55.14	ppb	95
37)	(m+p)Xylene	18.91	484	465412	108.23	ppb	94
38)	o-Xylene	19.94	516	226675	52.71	ppb	91
39)	Styrene	19.97	517	226187	51.00	ppb	91
40)	1,1,2,2-Tetrachloroethane	21.13	553	355768	60.63	ppb	97

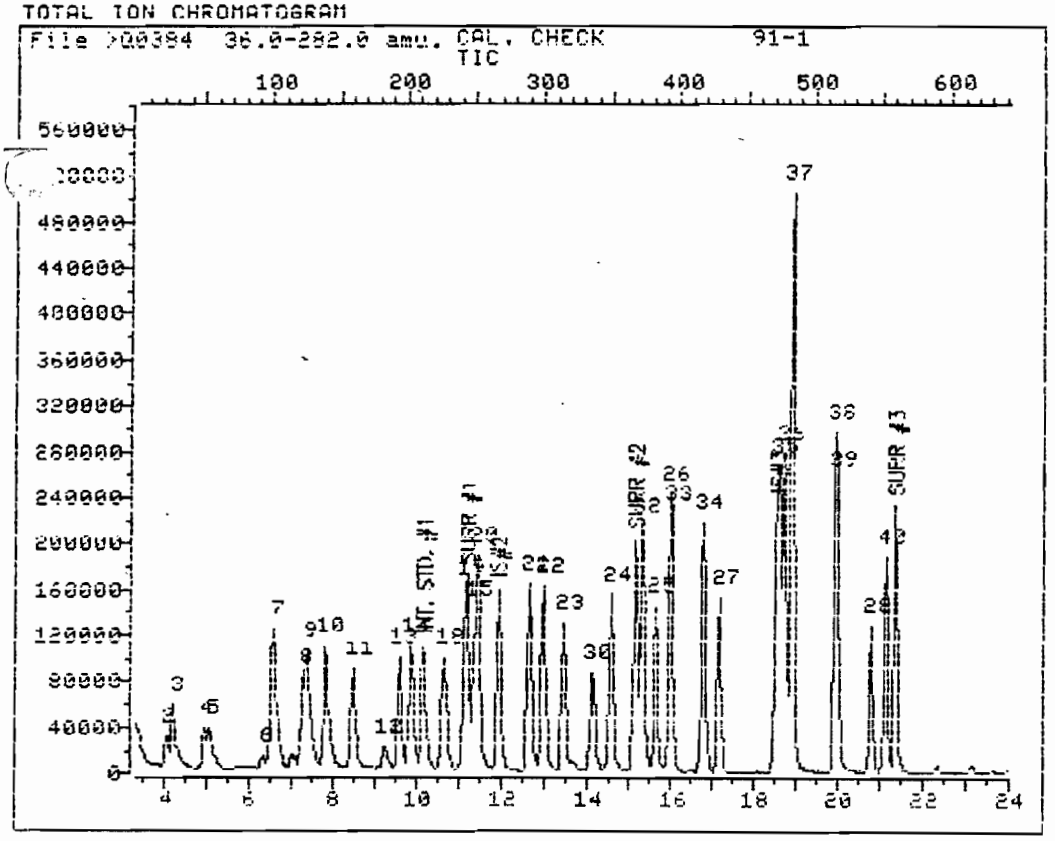
Operator ID: RODH Quant Rev: 7 Quant Time: 940721 20:43
Output File: ^Q0384::D3 Injected at: 940721 20:11
Data File: >Q0384::D3 Dilution Factor: 1.00000
Name: CAL. CHECK Instrument ID: MS5
Misc: 91-1

LIMS File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 08:31

	Compound	R.T.	Scan#	Area	Conc	Units	q
(1)	Bromofluorobenzene	21.36	560	265709	48.62	ppb	93

(1) Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0384::D3
Name: CAL. CHECK
Misc: 91-1

Quant Output File: ^Q0384::D3
Instrument ID: MS5

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24

Last Qcal Time: 940721 08:31

Operator ID: RNOH
Quant Time : 940721 20:43
Injected at: 940721 20:11

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Instrument ID:MS5 Calibration Date: 7/22/94 Time:1019

Lab File ID:Q0399 Init. Calib. Date(s): 6/07/94 6/07/94

Heated Purge: (Y/N) N Init. Calib. Times: 0834 1125

GC Column:RTX-502 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.744	1.835	0.010	5.2	
Bromomethane	1.411	1.470	0.100	4.2	25.0
Vinyl chloride	1.801	1.926	0.100	6.9	25.0
Chloroethane	1.122	1.208	0.010	7.7	
Methylene chloride	1.760	2.483	0.010	41.1	
Acetone	1.113	0.912	0.010	18.1	
Carbon Disulfide	3.996	4.489	0.010	12.3	
1,1-Dichloroethene	1.280	1.389	0.100	8.5	25.0
1,1-Dichloroethane	3.430	3.865	0.200	12.7	25.0
trans-1,2-Dichloroethene	1.485	1.606	0.010	8.1	
Chloroform	3.422	3.664	0.200	7.1	25.0
1,2-Dichloroethane	2.434	2.966	0.100	21.9	25.0
2-Butanone	1.160	1.412	0.010	21.7	
cis-1,2-Dichloroethene	1.485	1.662	0.010	11.9	
1,1,1-Trichloroethane	0.691	0.627	0.100	9.3	25.0
Carbon tetrachloride	0.655	0.630	0.100	3.8	25.0
Bromodichloromethane	0.741	0.681	0.200	8.1	25.0
1,2-Dichloropropane	0.512	0.480	0.010	6.2	
cis-1,3-Dichloropropene	0.705	0.680	0.200	3.5	25.0
Trichloroethene	0.452	0.460	0.300	1.8	25.0
Dibromochloromethane	0.579	0.571	0.100	1.4	25.0
1,1,2-Trichloroethane	0.372	0.361	0.100	3.0	25.0
Benzene	1.112	1.064	0.500	4.3	25.0
trans-1,3-Dichloropropene	0.553	0.542	0.100	2.0	25.0
Bromoform	0.385	0.372	0.100	3.4	25.0
4-Methyl-2-Pentanone	0.640	0.695	0.010	8.6	
2-Hexanone	0.484	0.622	0.010	28.5	
Tetrachloroethene	0.451	0.478	0.200	6.0	25.0
1,1,2,2-Tetrachloroethane	0.872	0.836	0.500	4.1	25.0
Toluene	1.377	1.356	0.400	1.5	25.0
Chlorobenzene	1.036	1.015	0.500	2.0	25.0
Ethylbenzene	0.491	0.476	0.100	3.1	25.0
Styrene	0.709	0.587	0.300	17.2	25.0
(m+p)Xylene	0.624	0.578	0.300	7.4	25.0
o-Xylene	0.624	0.567	0.300	9.1	25.0
Toluene-d8	1.066	1.157	0.010	8.5	
Bromofluorobenzene	0.766	0.685	0.200	10.6	25.0
1,2-Dichloroethane-d4	2.014	2.370	0.010	17.7	

All other compounds must meet a minimum RRF of 0.010

00160

Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 10:58
Output File: ^Q0399::D3 Injected at: 940722 10:19
Data File: >Q0399::D3 Dilution Factor: 1.00000
Name: cal check Instrument ID: MS5
Misc: ID5CLP/CA5CLP

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.24	128.0	93947	50.00	ppb	95
2)	Chloromethane	4.08	50.0	172412	55.92	ppb	99
3)	Vinyl chloride	4.24	62.0	180924	53.78	ppb	96
4)	Bromomethane	4.98	94.0	138140	57.18	ppb	93
5)	Chloroethane	5.11	64.0	113459	55.93	ppb	94
6)	Acetone	6.33	43.0	85712	58.48	ppb	91
7)	1,1-Dichloroethene	6.59	96.0	130508	51.00	ppb	85
8)	Methylene chloride	7.33	84.0	233315	68.50	ppb	90
9)	Carbon Disulfide	7.40	76.0	421692	55.02	ppb	99
10)	trans-1,2-Dichloroethene	7.88	96.0	150844	51.98	ppb	89
11)	1,1-Dichloroethane	8.56	63.0	363069	61.62	ppb	97
12)	2-Butanone	9.30	43.0	132679	58.37	ppb	89
13)	cis-1,2-Dichloroethene	9.62	96.0	156153	54.83	ppb	97
[illegible])	Chloroform	9.91	83.0	344205	55.07	ppb	98
[illegible]	1,2-Dichloroethane	11.43	62.0	278666	55.55	ppb	96
[illegible]	1,2-Dichloroethane-d4	11.27	65.0	222633M	54.59	ppb	90
17)	*1,4-Difluorobenzene	12.01	114.0	496543	50.00	ppb	80
18)	1,1,1-Trichloroethane	10.72	97.0	311540	51.12	ppb	92
19)	Carbon tetrachloride	11.24	117.0	312868	49.39	ppb	99
20)	Benzene	11.53	78.0	528077	49.25	ppb	94
21)	Trichloroethene	12.72	130.0	228178	47.57	ppb	97
22)	1,2-Dichloropropane	13.04	63.0	238579	47.14	ppb	94
23)	Bromodichloromethane	13.52	83.0	338111	48.83	ppb	98
24)	cis-1,3-Dichloropropene	14.62	75.0	337531	46.72	ppb	93
25)	trans-1,3-Dichloropropene	15.65	75.0	269216	48.43	ppb	94
26)	1,1,2-Trichloroethane	16.04	97.0	179042	46.72	ppb	92
27)	Dibromochloromethane	17.20	129.0	283512	47.02	ppb	97
28)	Bromoform	20.84	173.0	184780	46.95	ppb	97
29)	*Chlorobenzene-d5	18.55	117.0	403758	50.00	ppb	94
30)	4-Methyl-2-Pentanone	14.17	43.0	280556	48.55	ppb	87
31)	Toluene-d8	15.20	98.0	467090	50.45	ppb	93
32)	Toluene	15.36	91.0	547487	49.29	ppb	99
33)	2-Hexanone	16.04	43.0	251225M	55.69	ppb	
34)	Tetrachloroethene	16.81	164.0	192871	52.57	ppb	98
35)	Chlorobenzene	18.65	112.0	409821	51.38	ppb	96
36)	Ethylbenzene	18.78	106.0	192045	47.98	ppb	92
37)	(m+p)Xylene	18.94	106.0	482500	103.35	ppb	94
38)	o-Xylene	19.97	106.0	228882	49.03	ppb	89
39)	Styrene	20.04	104.0	237189	50.92	ppb	98
[illegible]	1,1,2,2-Tetrachloroethane	21.17	83.0	337687	46.09	ppb	97

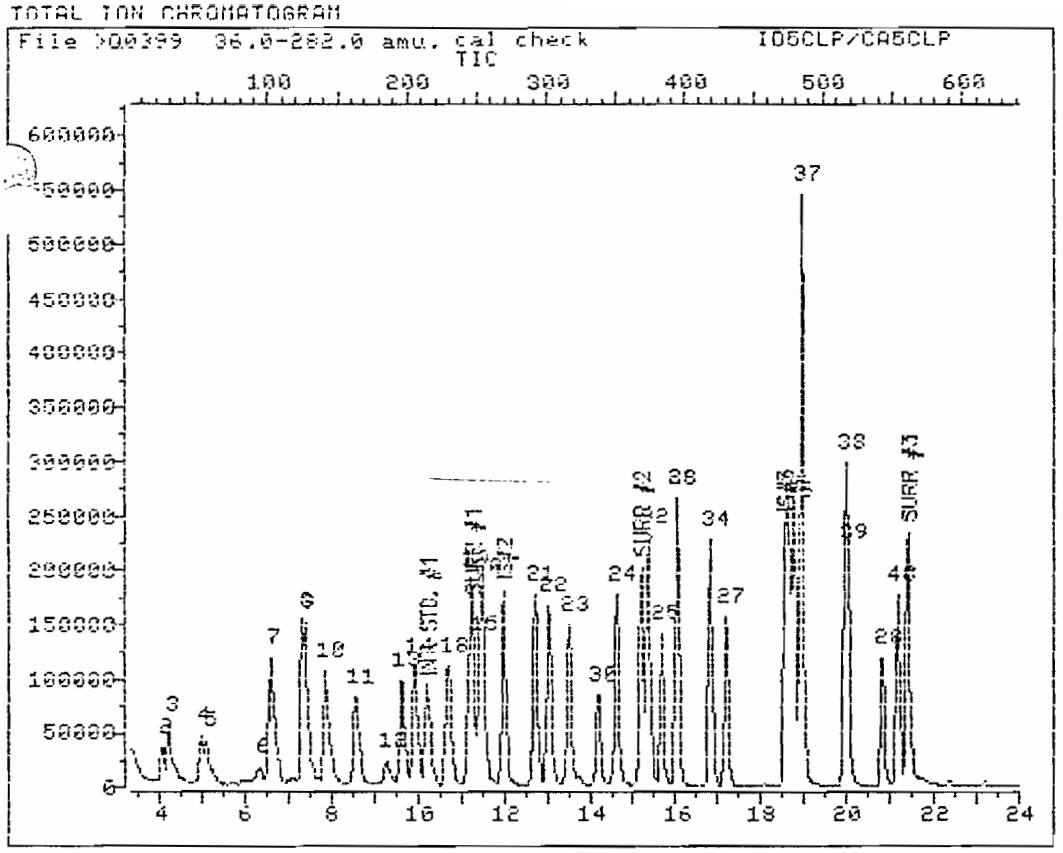
Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 10:58
Output File: ^Q0399::D3 Injected at: 940722 10:19
( ) File: >Q0399::D3 Dilution Factor: 1.00000
: cal check Instrument ID: MS5
Misc: ID5CLP/CA5CLP

) File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.42	95.0	276670	50.56	ppb	89

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0399::D3 Quant Output File: ^Q0399::D3
Name: cal check Instrument ID: MS5
Misc: ID5CLP/CA5CLP

Id File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

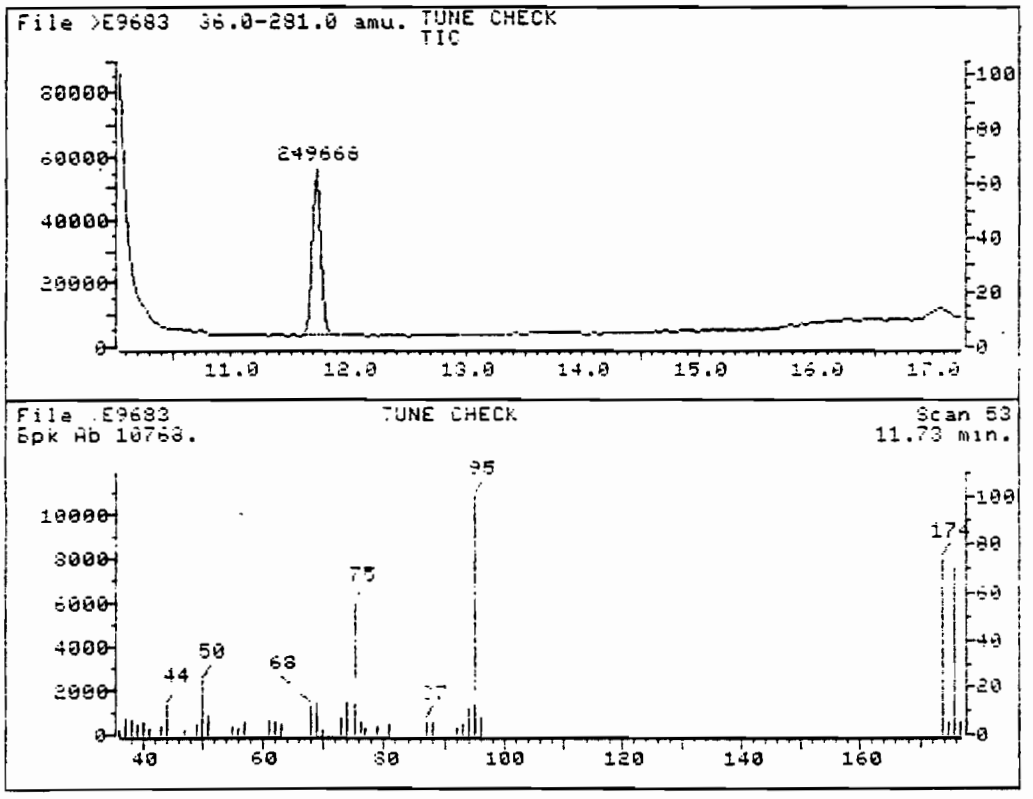
Operator ID: TOMT
Quant Time : 940722 10:58
Injected at: 940722 10:19

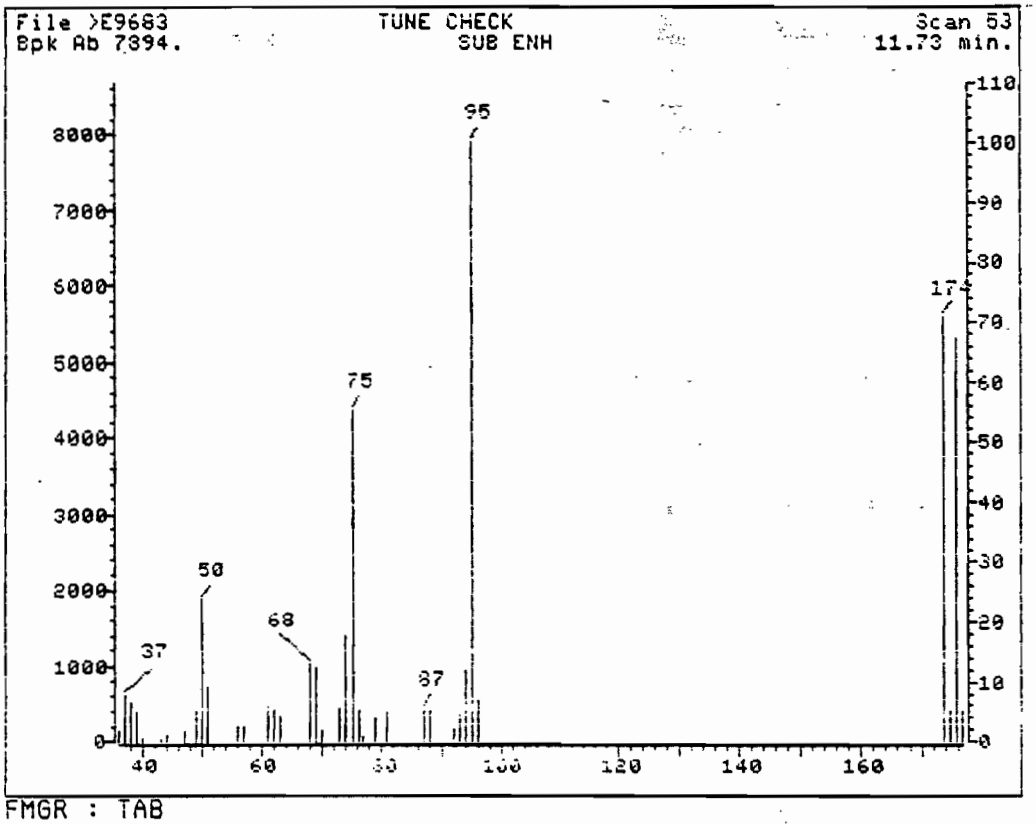
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	23.66	23.66	Ok
75	30-60% of mass 95	55.09	55.09	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.24	7.24	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	70.81	70.81	Ok
175	5-9% of mass 174	5.17	7.31	Ok
176	95-101% of mass 174	67.39	95.18	Ok
177	5-9% of mass 176	5.00	7.42	Ok

Injection Date: 06/07/94
Injection Time: 07:54
Data File: >E9683
Scan: 53





FMGR : TAB

>E9683 TUNE CHECK
53 SUB ENH

File: >E9683 Scan #: 53 Retn. time: 11.73

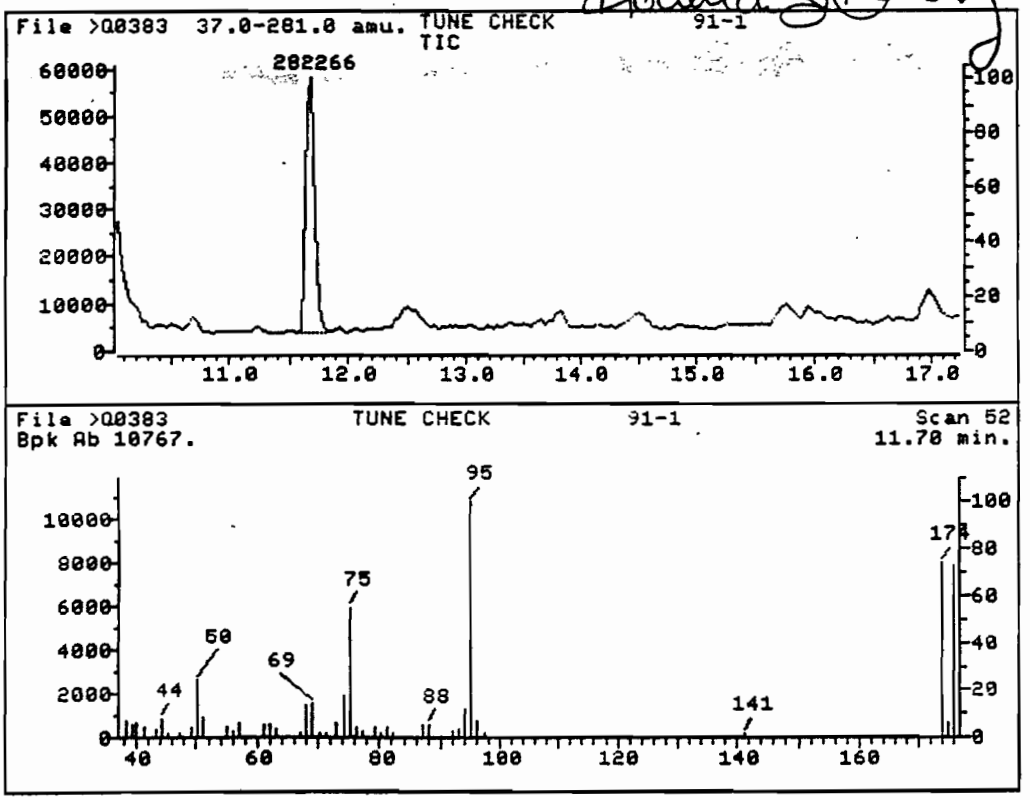
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.10	130.67	49.00	395.67	68.05	1013.33	77.00	65.67	94.00	936.67
37.05	902.00	50.10	1967.33	69.00	957.33	78.95	313.33	95.10	7893.67
38.05	510.33	51.10	715.33	70.00	127.67	80.95	374.00	96.10	571.33
39.05	370.67	56.10	191.33	73.00	432.33	87.05	431.00	173.90	5589.33
40.05	34.67	57.10	106.33	74.00	403.67	88.05	404.00	174.90	408.33
43.15	35.33	61.05	457.67	75.10	4348.33	92.00	174.33	175.90	5319.67
44.05	80.00	62.05	436.00	76.10	418.67	93.00	372.00	176.90	384.67
47.10	139.33	63.05	327.00						

GC/MS PERFORMANCE STANDARD

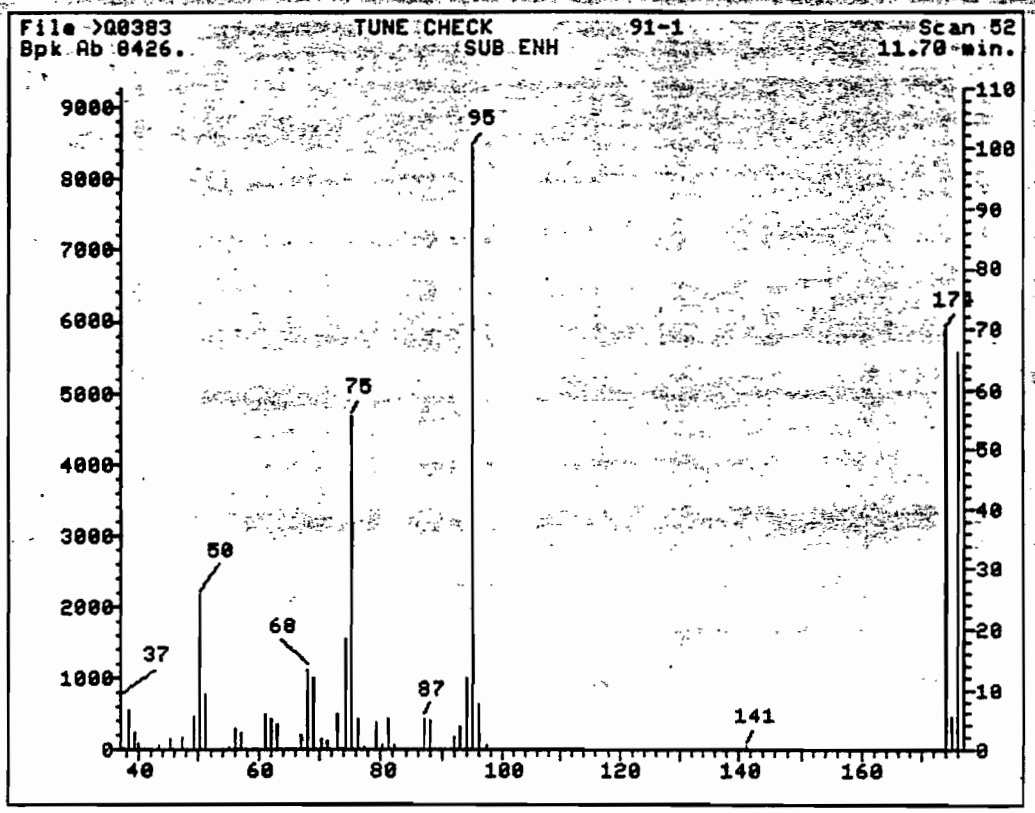
Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	25.75	25.75	Ok
75	30-60% of mass 95	55.35	55.35	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.49	7.49	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	69.93	69.93	Ok
175	5-9% of mass 174	5.39	7.71	Ok
176	95-101% of mass 174	66.45	95.03	Ok
177	5-9% of mass 176	4.07	6.13	Ok

Injection Date: 07/21/94
Injection Time: 19:38
Data File: >Q0383
Scan: 52



00167



>Q0383 TUNE CHECK 91-1
52 SUB ENH

File: >Q0383 Scan #: 52 Retn. time: 11.70

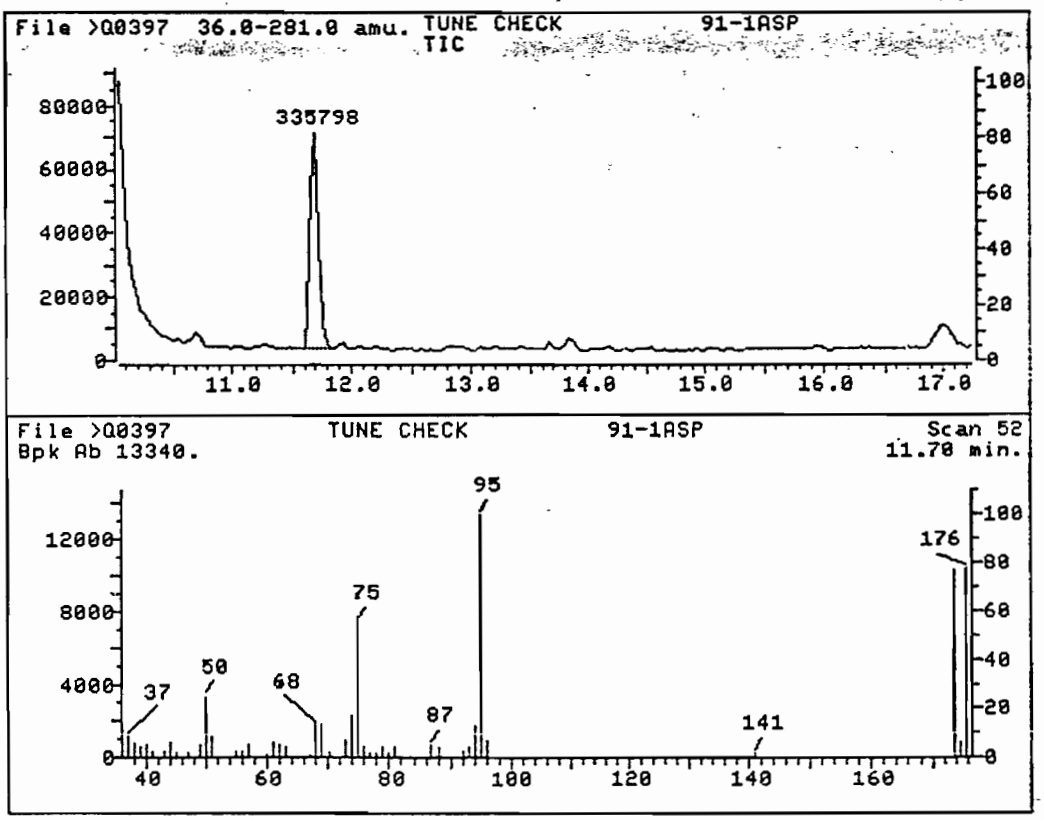
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	697.67	51.10	784.33	69.10	999.33	80.05	64.67	95.10	8426.33
38.15	561.67	55.10	24.00	70.20	148.00	81.05	434.67	96.10	631.33
39.15	240.33	56.20	280.33	71.20	126.67	82.05	60.00	97.20	78.00
40.05	82.67	57.20	224.67	73.10	501.33	87.05	435.00	141.10	61.33
43.15	63.33	61.05	485.67	74.10	1539.00	88.05	411.00	174.00	5892.33
45.15	136.00	62.15	429.67	75.10	4664.00	92.00	189.00	175.00	454.33
47.10	164.33	63.05	354.67	76.10	439.67	93.10	318.67	176.00	5599.33
49.10	449.00	67.15	201.00	77.10	26.67	94.10	997.33	177.00	343.00
50.10	2170.00	68.10	1119.00	79.05	381.67				

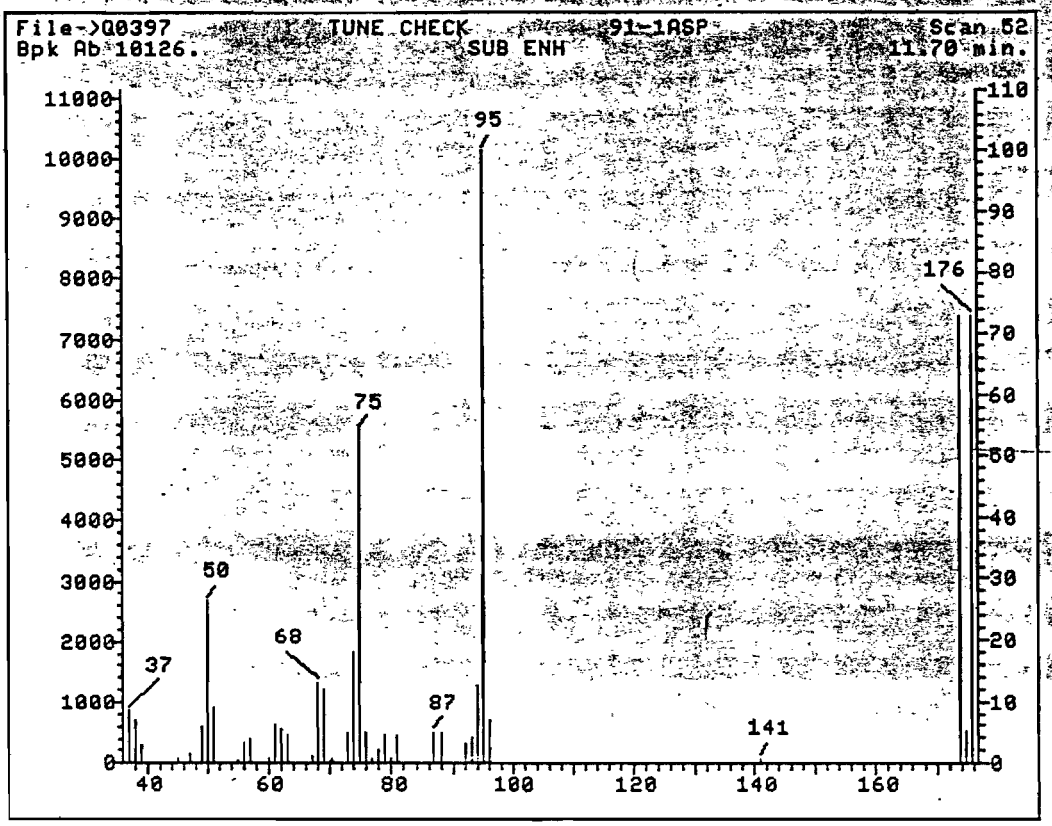
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	26.30	26.30	Ok
75	30-60% of mass 95	54.33	54.33	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.85	6.85	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	72.67	72.67	Ok
175	5-9% of mass 174	5.29	7.28	Ok
176	95-101% of mass 174	72.80	100.17	Ok
177	5-9% of mass 176	4.58	6.29	Ok

Injection Date: 07/22/94
Injection Time: 08:31
Data File: >Q0397
Scan: 52





>Q0397 TUNE CHECK 91-1ASP
52 SUB ENH

File: >Q0397 Scan #: 52 Retn. time: 11.70

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.10	145.0	50.00	2663.0	67.05	127.0	78.00	227.0	94.00	1258.3
37.05	852.3	51.00	892.3	68.05	1322.3	78.85	444.3	95.00	10126.0
38.05	708.7	55.10	34.3	69.00	1217.7	79.95	71.3	96.00	693.7
39.05	291.7	56.10	324.0	70.10	80.7	80.85	454.0	140.90	75.0
43.15	2.7	57.10	397.3	73.00	493.0	86.95	496.0	173.90	7359.0
44.05	20.7	60.05	62.7	74.00	1827.0	88.05	476.0	174.90	536.0
45.05	75.0	61.05	629.7	75.00	5501.3	92.00	300.7	175.90	7371.7
47.05	142.3	62.05	564.7	76.00	488.3	93.00	415.7	176.90	463.3
49.00	589.3	63.05	445.3	77.00	75.7				

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0385

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/21/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00171

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0385

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/21/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 2

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.04	7.	J
2.		Unknown	22.00	6.	J
3.					
4.					
5.					
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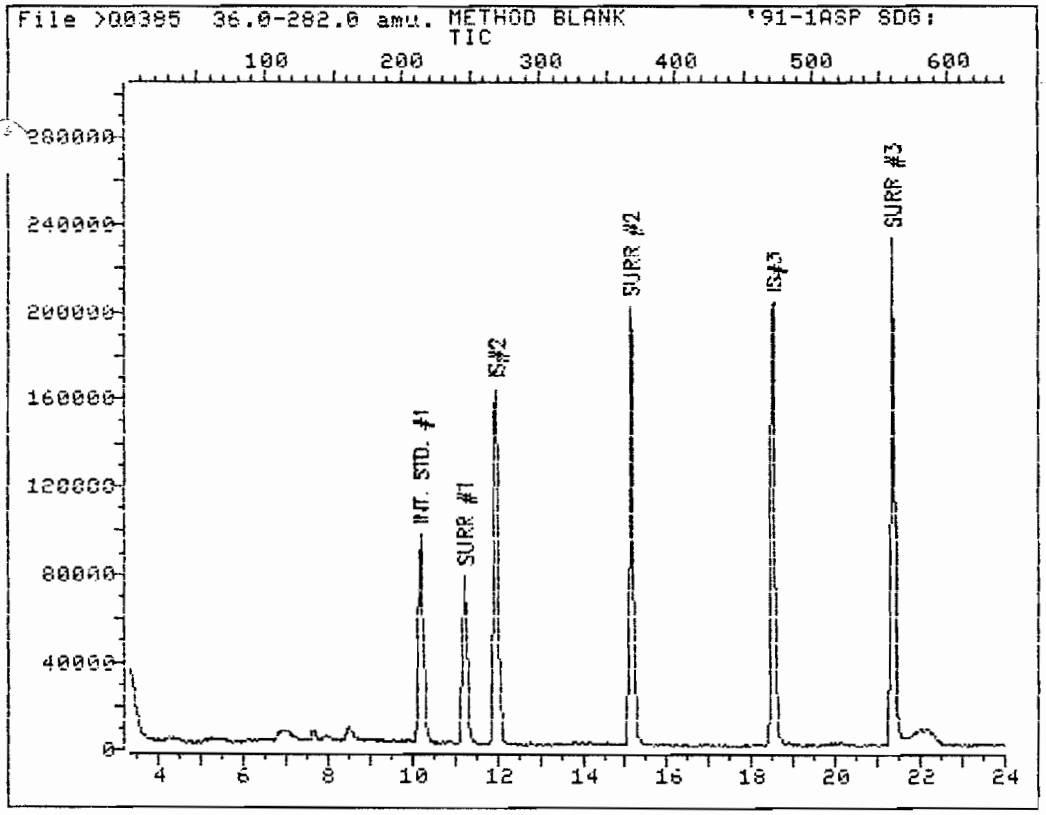
Operator ID: RODH Quant Rev: 7 Quant Time: 940721 21:30
Output File: ^Q0385::D3 Injected at: 940721 20:54
Data File: >Q0385::D3 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: MS5
Misc: `91-1ASP SDG: EPA:VBLK

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	93153	50.00	ppb	93
16)	1,2-Dichloroethane-d4	11.23	65.0	205453	50.81	ppb	93
17)	*1,4-Difluorobenzene	11.98	114.0	458217	50.00	ppb	82
29)	*Chlorobenzene-d5	18.52	117.0	391445	50.00	ppb	95
31)	Toluene-d8	15.13	98.0	444433	49.52	ppb	92
41)	Bromofluorobenzene	21.36	95.0	273111	51.48	ppb	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0385::D3 Quant Output File: ^Q0385::D3
Name: METHOD BLANK Instrument ID: MS5
Misc: `91-1ASP SDG: EPA:VBLK

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: ROOH
Quant Time : 940721 21:30
Injected at: 940721 20:54

MS data file header from : >Q0385::D3

Sample: METHOD BLANK Operator: RODH 7/21/94 20:54
Misc : `91-1ASP SDG: EPA:V8LK
Sys. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 1 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q0385 METHOD BLANK `91-1ASP SDG: EPA:V8LK
36.00 282.0 CLP TIC
Upslope: .2000 Area Reject: 74642. Max Peaks: 2 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ0385 Sorted by Time/Area INT

Peak f	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	7.04	105	116	124	4952	270977	105405	68.36	40.602
2	22.00	567	580	583	7381	238224	154200	100.00	59.398

Sum of corrected areas: 259605.

Summary of Unknowns PBM Library Search and Quantitation

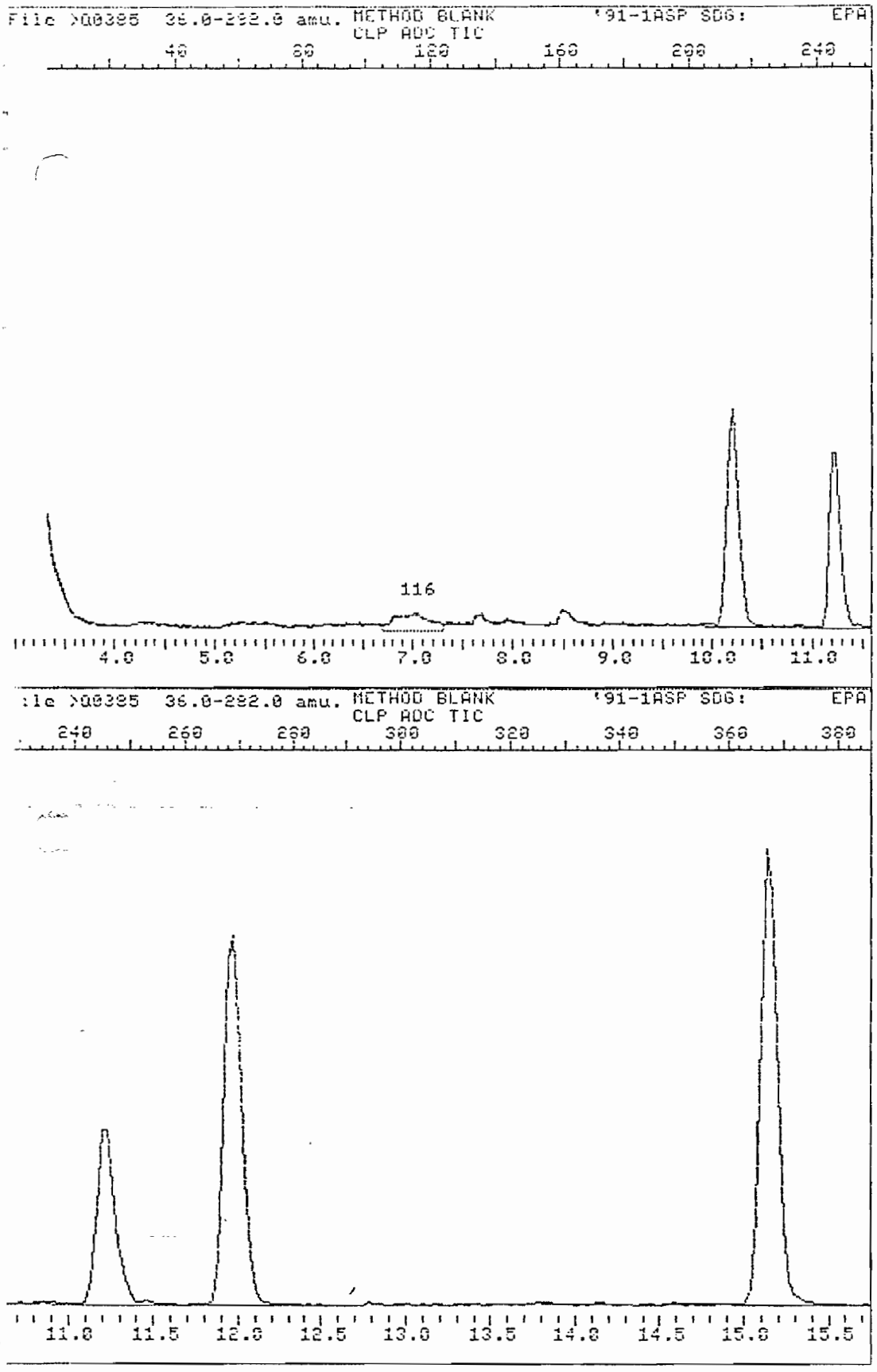
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	746419.	10.20	3.34 - 11.09
2	50.0	1196596.	11.98	11.09 - 15.25
3	50.0	1313536.	18.52	15.25 - 23.00

Dilution Factor = 1.00 This sample was 5.00000 g or mL

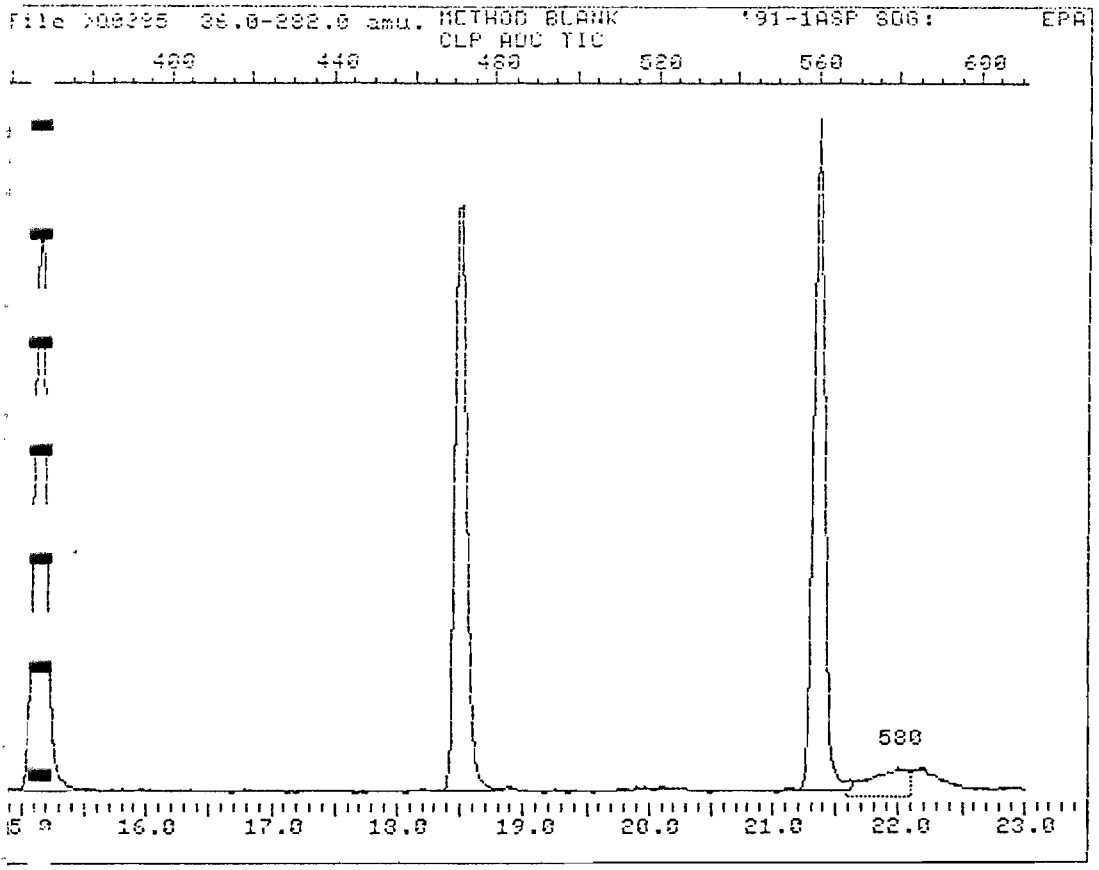
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

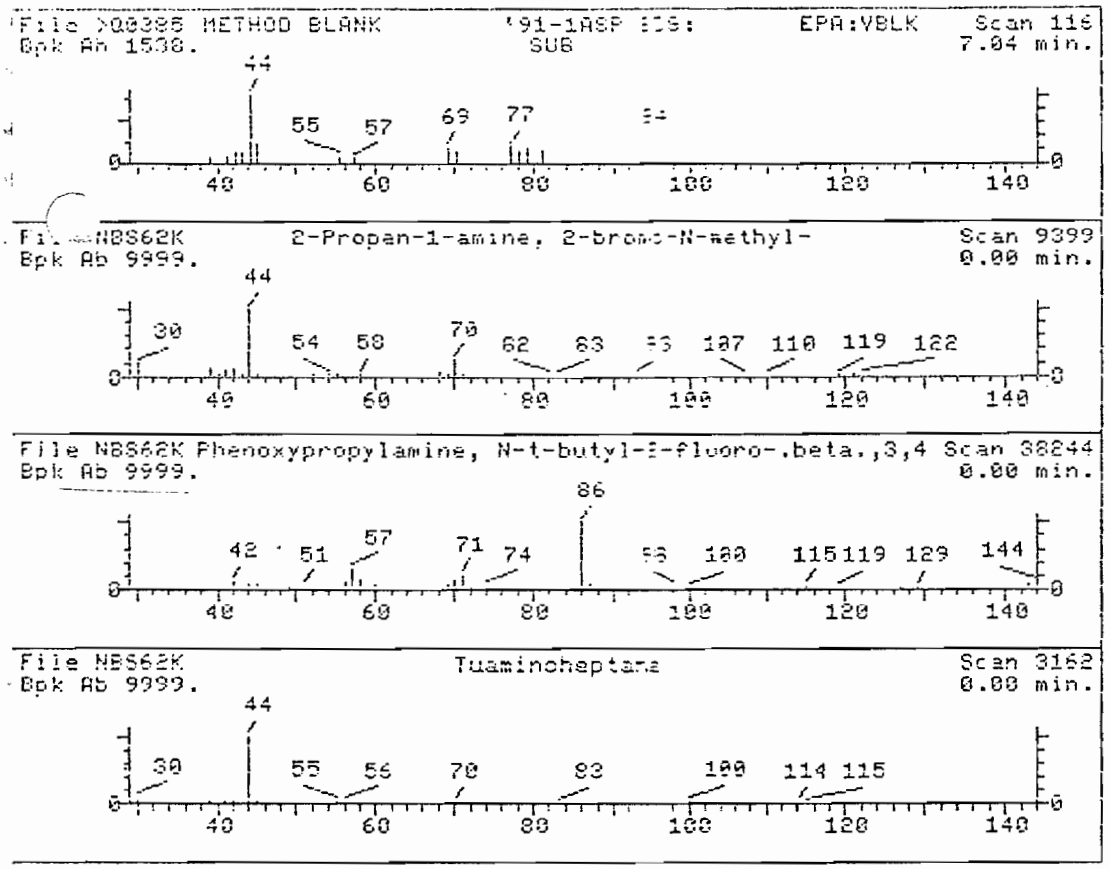
12:16 AM WED., 27 JULY, 1994



Instrument ID: MS5 Analyzed on: 7/21/94 20:54



Instrument ID: MS5 Analyzed on: 7/21/94 20:54

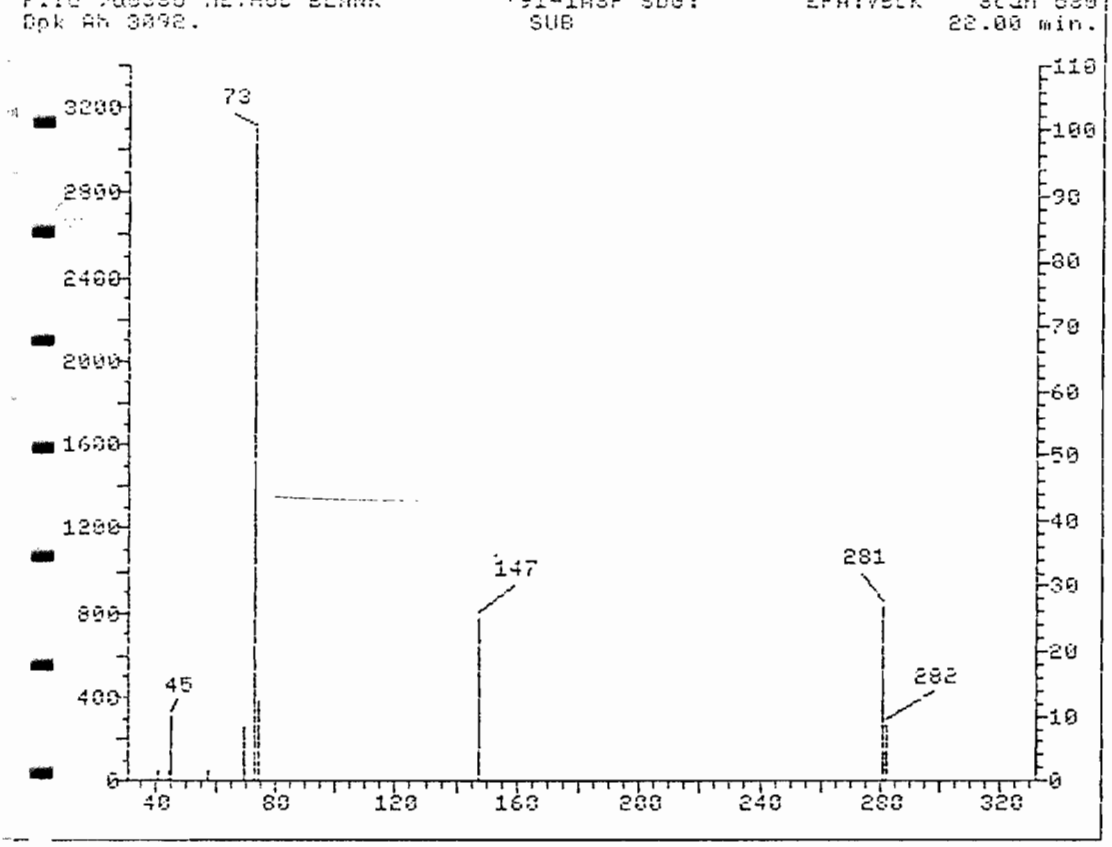


Instrument ID: MS5 Analyzed on: 7/21/94 20:54
Result 1 in PBM results file: LQ0385
Retention Time: 7.04 Area: 105405 Tentative Conc: 7.00
The unknown area is 14.12% of the nearest internal standard

1.	2-Propen-1-amine, 2-bromo-N-methyl-	149	C4H8BrN
2.	Phenoxypropylamine, N-t-butyl-2-fluoro-.beta.,3,4-trihydroxy-	273	C13H20FNO4
3.	Tuaminoheptane	115	C7H17N

Sample file: >Q0385 Spectrum #: 116
Search speed: 1 Tilting option: N No. of ion ranges searched: 33

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25	28952707	4852	NBS62K	34	48	1	0	73	50	7	12
2.	20	38244	385	NBS62K	27	55	0	0	100	52	5	14
3.	20*	123820	335	NBS62K	20	48	1	0	100	54	5	14



Instrument ID: MS5 Analyzed on: 7/21/94 20:54
Result 2 in PBM results file: LQ0385
Retention Time: 22.00 Area: 154200 Tentative Conc: * 6.00
The unknown area is 11.74% of the nearest internal standard

Sample file: >Q0385 Spectrum f: 580

0 data base entries were retrieved.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0400

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00180

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0400

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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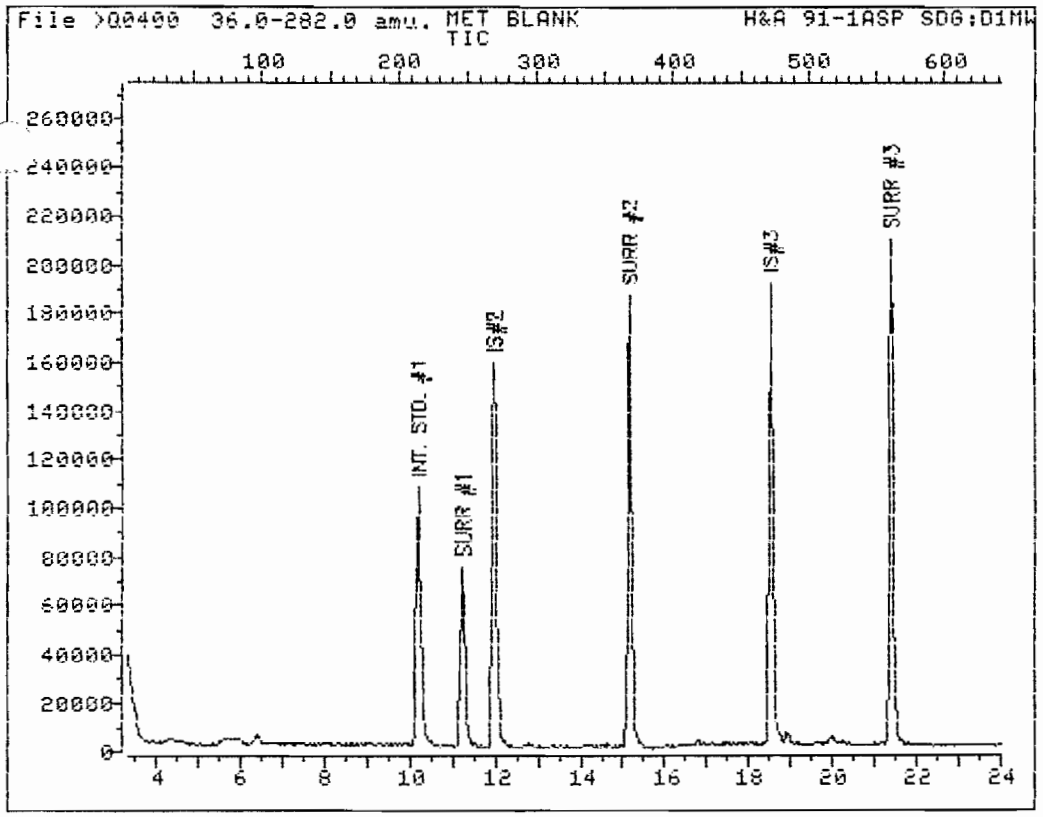
Operator ID: TOMT Quant Rev: 7 Quant Time: 940722 12:01
Output File: ^Q0400::D3 Injected at: 940722 11:14
Data File: >Q0400::D3 Dilution Factor: 1.00000
Name: MET BLANK Instrument ID: MS5
Misc: H&A 91-1ASP SDG:D1MW EPA:VBLK

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	97585	50.00	ppb	93
16)	1,2-Dichloroethane-d4	11.23	65.0	199495	43.13	ppb	91
17)	*1,4-Difluorobenzene	11.97	114.0	440825	50.00	ppb	79
29)	*Chlorobenzene-d5	18.52	117.0	355405	50.00	ppb	94
31)	Toluene-d8	15.17	98.0	412795	50.20	ppb	93
41)	Bromofluorobenzene	21.39	95.0	243532	50.00	ppb	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0400::D3 Quant Output File: ^Q0400::D3
Name: MET BLANK Instrument ID: MS5
Misc: H&A 91-1ASP SDG:D1MW EPA:VBLK

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940722 10:19

Operator ID: TOMT
Quant Time : 940722 12:01
Injected at: 940722 11:14

MS data file header from : >Q0400::D3

Sample: MET BLANK Operator: TOMT 7/22/94 11:14
Misc : H&A 91-1ASP SDG:D1MW EPA:VBLK
S . F: 1 MS model: 70 SW/HW rev.: FF ALS F : 1 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

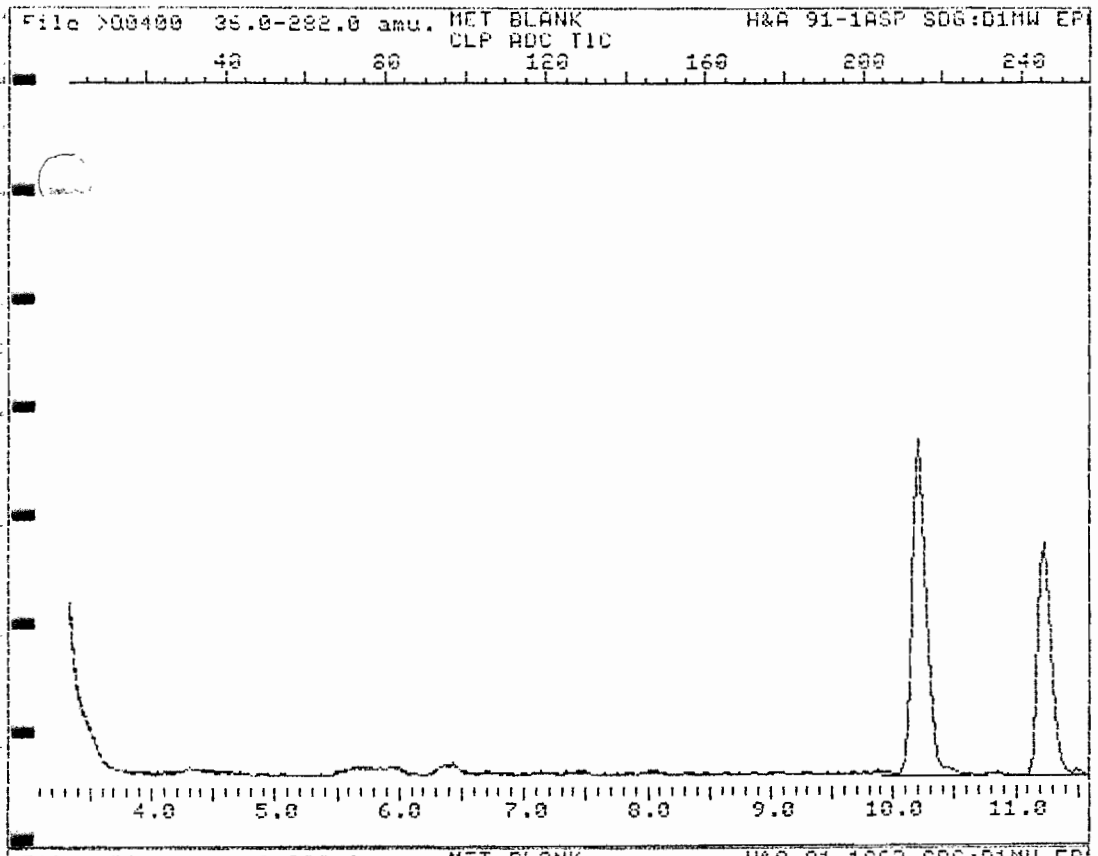
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	807172.	10.20	3.34 - 11.09
2	50.0	1153923.	11.97	11.09 - 15.25
3	50.0	1229888.	18.52	15.25 - 23.00

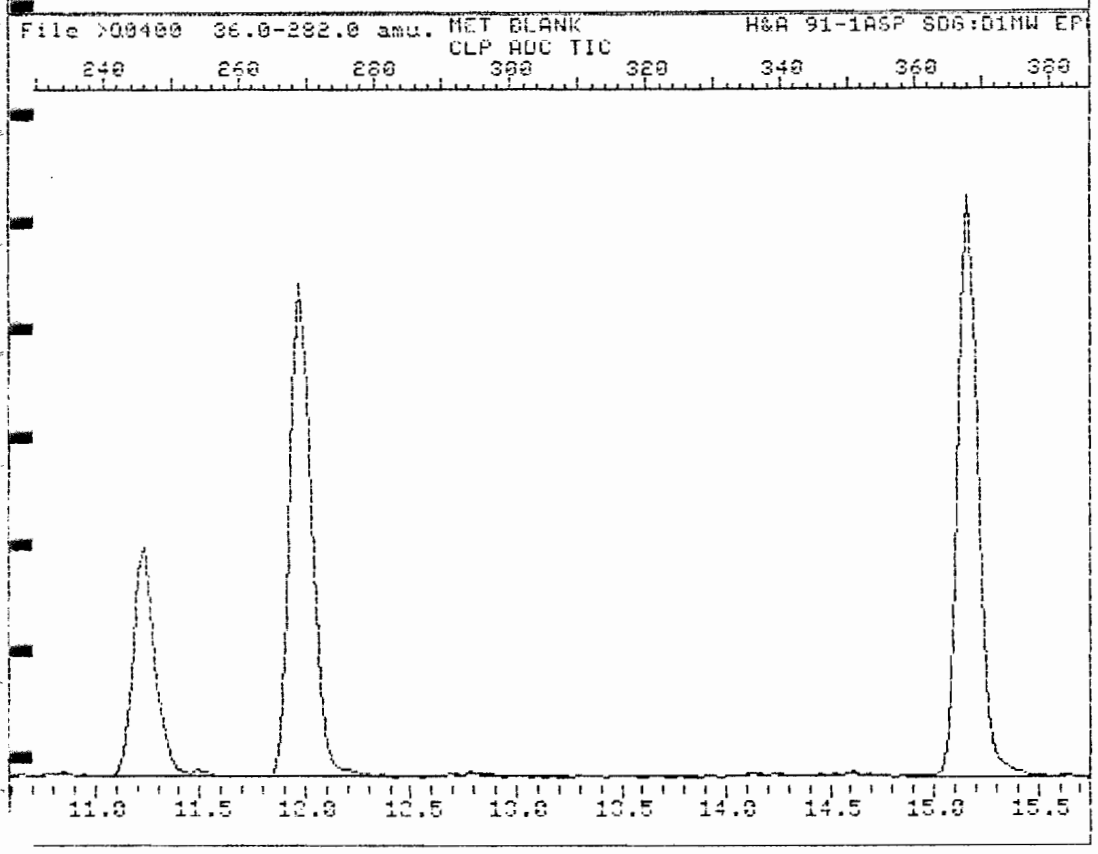
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

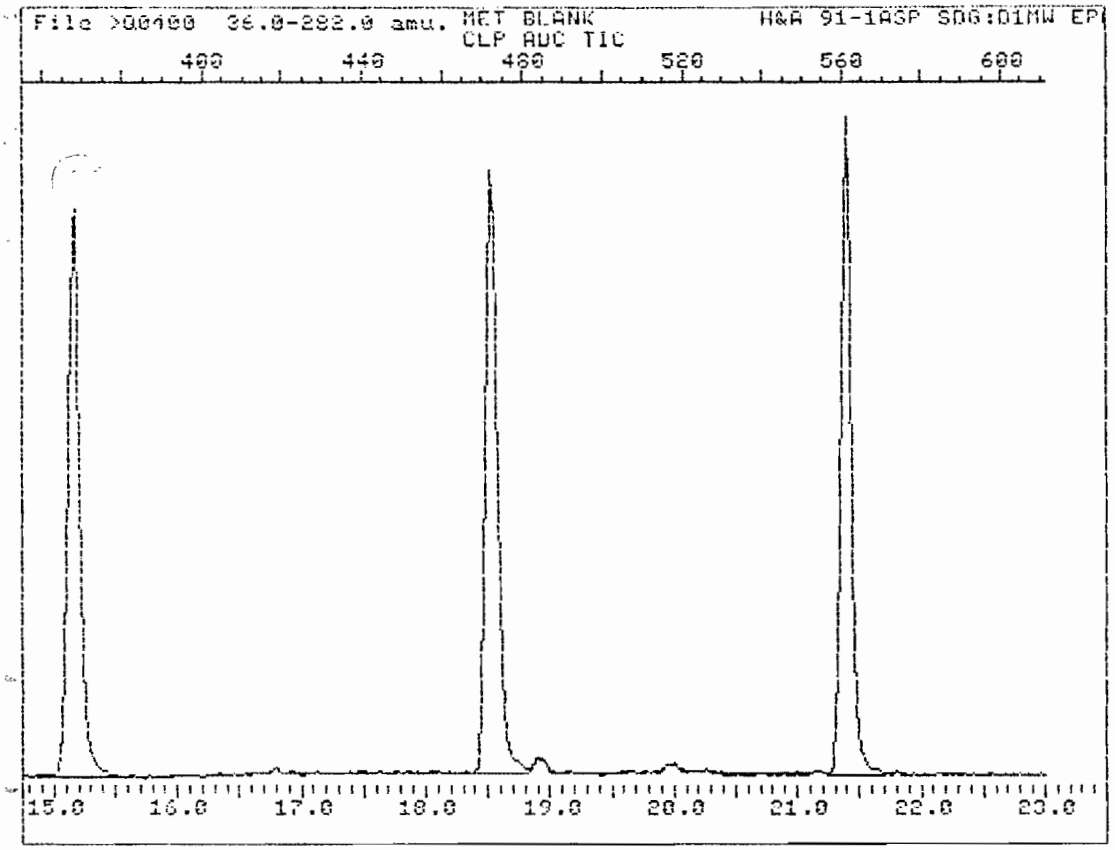
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

6:12 AM THU., 28 JULY, 1994





Instrument ID: MS9 Analyzed on: 7/22/94 11:14



Instrument ID: MS5 Analyzed on: 7/22/94 11:14

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:BLANK SPIKE

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0386

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed: 7/21/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	44.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	51.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	52.	
50061-02-6	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	52.	
108-90-7	Chlorobenzene	54.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00187

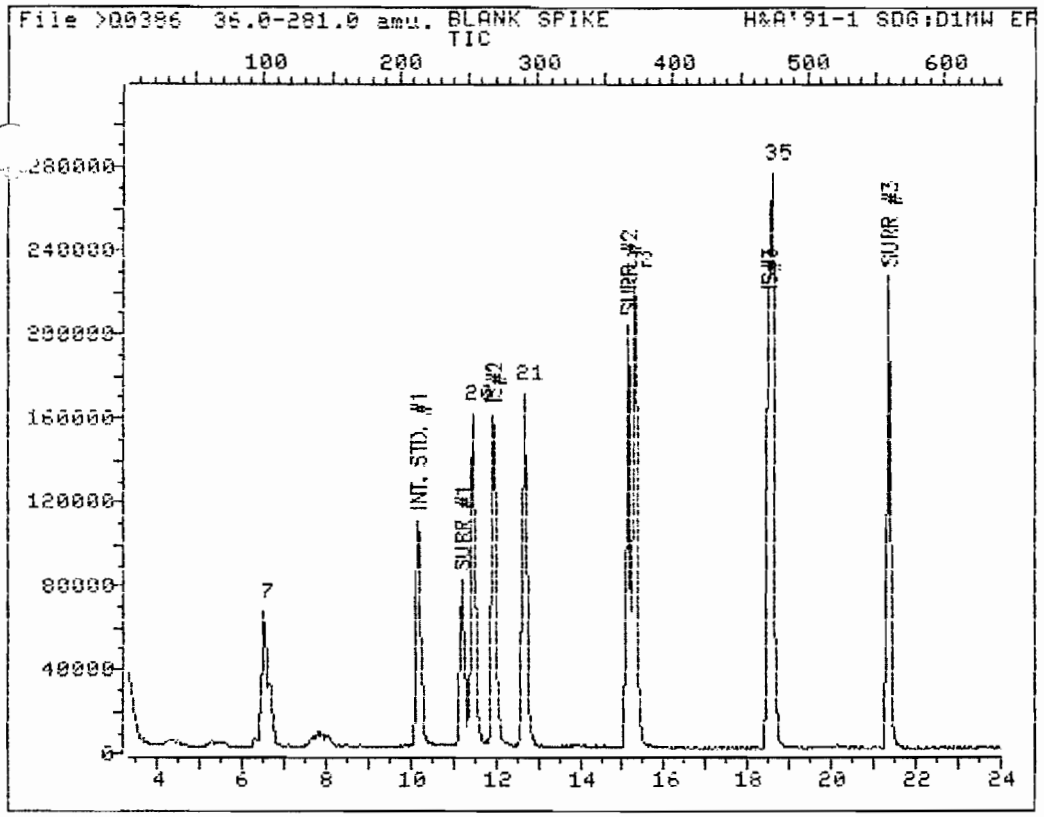
Operator ID: RODH Quant Rev: 7 Quant Time: 940721 22:14
Output File: ^Q0386::D3 Injected at: 940721 21:42
Data File: >Q0386::D3 Dilution Factor: 1.00000
Name: BLANK SPIKE Instrument ID: MS5
Misc: H&A`91-1 SDG:D1MW EPA:BLSP

ID File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.17	128.0	100866	50.00	ppb	89
7)	1,1-Dichloroethene	6.53	96.0	121848	44.35	ppb	83
16)	1,2-Dichloroethane-d4	11.20	65.0	207429	47.37	ppb	92
17)	*1,4-Difluorobenzene	11.94	114.0	450890	50.00	ppb	78
20)	Benzene	11.46	78.0	509566	52.33	ppb	94
21)	Trichloroethene	12.68	130.0	223338	51.28	ppb	97
29)	*Chlorobenzene-d5	18.49	117.0	385925	50.00	ppb	96
31)	Toluene-d8	15.13	98.0	436889	49.37	ppb	90
32)	Toluene	15.30	91.0	555072	52.28	ppb	98
35)	Chlorobenzene	18.58	112.0	408803	53.62	ppb	98
41)	Bromofluorobenzene	21.36	95.0	264786	50.62	ppb	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0386::D3 Quant Output File: ^Q0386::D3
Name: BLANK SPIKE Instrument ID: MS5
Misc: H&A`91-1 SDG:D1MW EPA:BLSP

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RDDH
Quant Time : 940721 22:14
Injected at: 940721 21:42

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8MS

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0390

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	54.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	12.	
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	63.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	50.	
50061-02-6	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	49.	
108-90-7	Chlorobenzene	51.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00199

Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:46
Output File: ^Q0390::D3 Injected at: 940722 ~~12:15~~ 0015
Data File: >Q0390::D3 Dilution Factor: 1.00000
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202MS

ID File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

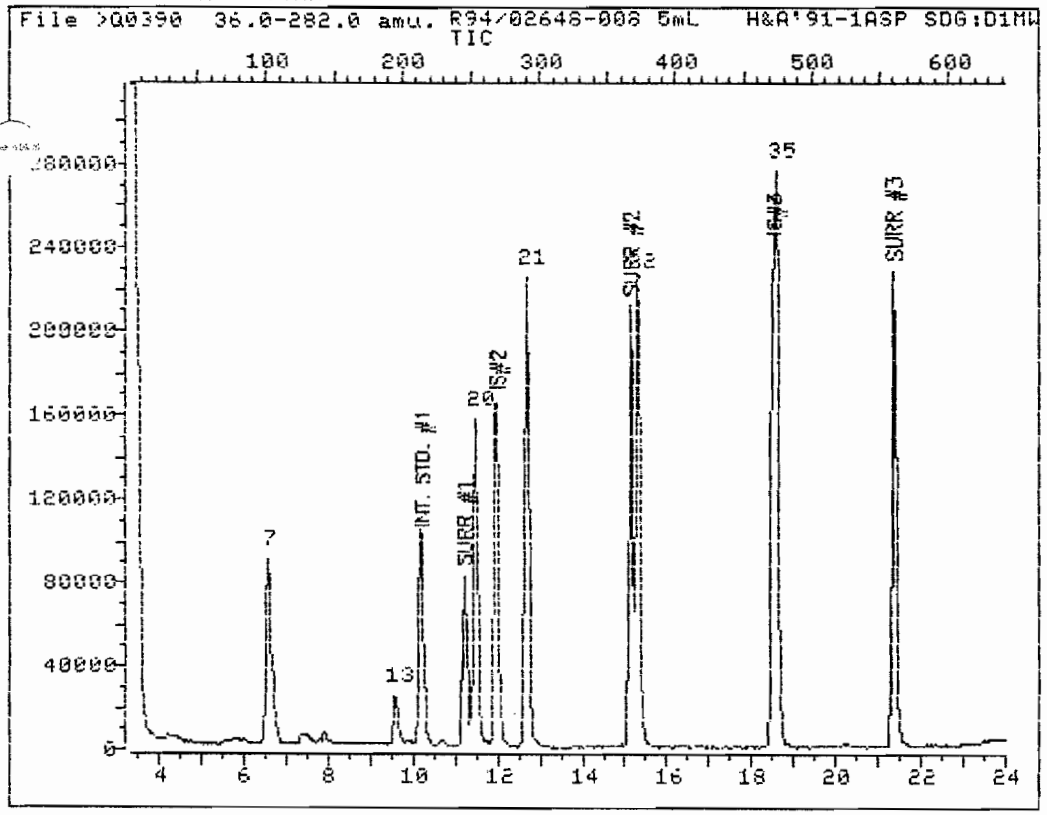
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	97364	50.00	ppb	98
7)	1,1-Dichloroethene	6.56	96.0	142779	53.84	ppb	86
13)	cis-1,2-Dichloroethene	9.59	96.0	35581	12.05	ppb	95
16)	1,2-Dichloroethane-d4	11.20	65.0	217154	51.38	ppb	91
17)	*1,4-Difluorobenzene	11.97	114.0	473984	50.00	ppb	80
20)	Benzene	11.46	78.0	512714	50.09	ppb	94
21)	Trichloroethene	12.68	130.0	289604	63.25	ppb	94
29)	*Chlorobenzene-d5	18.52	117.0	400332	50.00	ppb	95
31)	Toluene-d8	15.13	98.0	451698	49.21	ppb	89
32)	Toluene	15.29	91.0	543314	49.33	ppb	99
35)	Chlorobenzene	18.58	112.0	407291	51.50	ppb	98
41)	Bromofluorobenzene	21.35	95.0	272685	50.26	ppb	91

* Compound is ISTD

MW 8/11

00191

TOTAL ION CHROMATOGRAM



Data File: >Q0390::D3 Quant Output File: ^Q0390::D3
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202MS

Id File: ID5CLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:46
Injected at: 940722 ~~12:15~~ 0015 MW 8/11

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202MSD

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:D1MW

Matrix: (soil/water) WATER Lab Sample ID:2648-8MSD

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q0391

Level: (low/med) LOW Date Received: 7/15/94

% Moisture: not dec. Date Analyzed: 7/22/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	50.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	11.	
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	64.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	49.	
50061-02-6	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	52.	
108-90-7	Chlorobenzene	52.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

00193

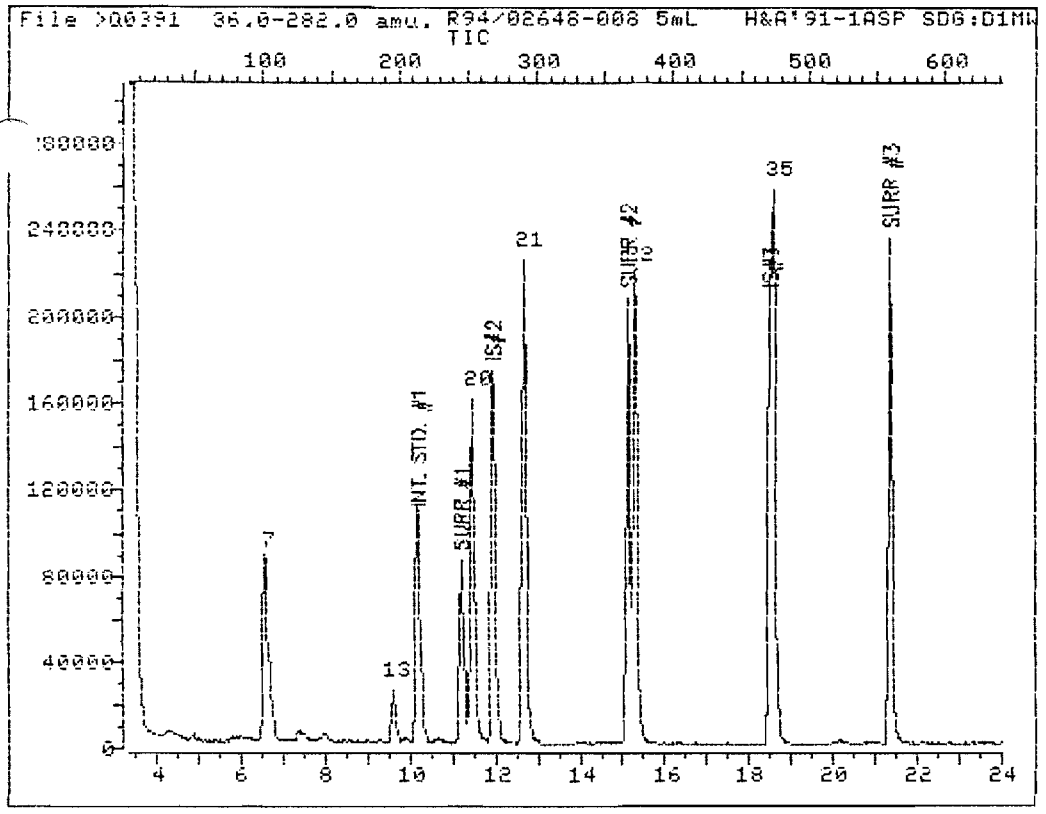
Operator ID: RODH Quant Rev: 7 Quant Time: 940722 07:46
Output File: ^Q0391::D3 Injected at: 940722 ~~12:47~~ 0049
Data File: >Q0391::D3 Dilution Factor: 1.00000
Name: R94/02648-008 5mL Instrument ID: MS5 MW
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202MSD 8/11

ID File: ID5CLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	106247	50.00	ppb	98
7)	1,1-Dichloroethene	6.59	96.0	145329	50.22	ppb	87
13)	cis-1,2-Dichloroethene	9.59	96.0	35513	11.03	ppb	93
16)	1,2-Dichloroethane-d4	11.20	65.0	223553	48.47	ppb	90
17)	*1,4-Difluorobenzene	11.94	114.0	486370	50.00	ppb	78
20)	Benzene	11.46	78.0	516691	49.19	ppb	95
21)	Trichloroethene	12.68	130.0	300055	63.86	ppb	98
29)	*Chlorobenzene-d5	18.49	117.0	372383	50.00	ppb	97
31)	Toluene-d8	15.13	98.0	446230	52.26	ppb	90
32)	Toluene	15.30	91.0	533013	52.03	ppb	98
35)	Chlorobenzene	18.58	112.0	385478	52.40	ppb	98
41)	Bromofluorobenzene	21.36	95.0	268368	53.17	ppb	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q0391::D3 Quant Output File: ^Q0391::D3
Name: R94/02648-008 5mL Instrument ID: MS5
Misc: H&A`91-1ASP SDG:D1MW EPA:MW202MSD

Id File: ID5CLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940607 12:24 Last Qcal Time: 940721 20:11

Operator ID: RODH
Quant Time : 940722 07:46
Injected at: 940722 ~~12:47~~ 0049

MW
8/11

Section 2

Section 2

General Testing Corporation

A Full Service Environmental Laboratory

November 29, 1994

Mr. Denis Conley
H&A of New York
189 North Water Street
Rochester, New York 14604

Re: Project #70372-48 - R94/4290, SDG# HADUP

Dear Mr. Conley:

Enclosed you will find a report for the above referenced site. The samples were received on 11/02/94. Ten (10) water samples were analyzed for 91-1 (volatiles).

A detailed case narrative is enclosed identifying any difficulties encountered during analysis. Please review and submit any questions in writing to me. These will be answered promptly by our QA officer.

Thank you for your continued business.

Sincerely,

GENERAL TESTING CORPORATION

Cindy Toomey

Cindy Toomey
Customer Service Representative

Enc.

710 Exchange Street • Rochester, NY 14608 • Tele: (716) 454-3760 • (716) 454-1245
85 Trinity Place • Hackensack, NJ 07601 • Tele: (201) 488-5242 • Fax: (201) 488-6386
435 Lawrence Bell Drive • Amherst, NY 14221 • Tele: (716) 634-0454 • Fax: (716) 634-9019

General Testing Corporation

Job #: R94/04290

SAMPLE DATA PACKAGE

SECTION A: SDG Narrative

SECTION B: Chains of Custody, Internal Chains, Summary Forms

SECTION C: Volatile Organic Data

ORGANICS QUALIFIERS - 1991

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result isless than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tenatively identified compound, where the identification is based on a mass spectral library search.

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

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC.MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

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

X - As specified in Case Narrative.

General Testing Corporation

Job #: R94/04290

SECTION A

SDG NARRATIVE

000001

CASE NARRATIVE

COMPANY: H & A of New York
Enarco Machine
JOB #: R94/04290
SDG#: HADUP

Volatile Organics

Water samples were analyzed for Target Compound List (TCL) volatile organics by Method 91-1 from the NYSDEC 1991 ASP. The following samples were analyzed with SDG# HADUP:

Client Sample ID	GTC Sample ID
HATB	R94/04290-1
MW202D	R94/04290-2
MW201D	R94/04290-3
MW5	R94/04290-4
MW5DL	R94/04290-4DL
HADUP	R94/04290-5
HADUPDL	R94/04290-5DL
MW4	R94/04290-6
MW6	R94/04290-7
MW2	R94/04290-8
MW2DL	R94/04290-8DL
MW1	R94/04290-9
MW3	R94/04290-10
MW3DL	R94/04290-10DL
VBLK1	METHOD BLANK
VBLK2	METHOD BLANK
VBLK1MS	BLANK SPIKE
MW6MS	R94/04290-7MS
MW6MSD	R94/04290-7MSD

All tuning criteria for BFB were within limits.

All Initial Calibration criteria were compliant.

All Continuing Calibration Check (CCC) criteria were compliant.

All surrogate compounds were within QC limits for recovery

All internal standard areas were within QC limits.

All matrix spiking compounds were within limits for recovery in the MS/MSD of MW6 and VBLK1MS. All %RPD were within limits in the MS/MSD of MW6.

Samples MW-5, HANDUP, MW-2, and MW-3 were reaanalyzed at dilutions to bring target analytes within the calibration range of the method.

No other analytical or QC problems were encountered during the analysis of this SDG.

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 the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Michael K. Perry
Laboratory Director

11/29/94
Date

General Testing Corporation

Job #: R94/04290

SECTION B

CHAIN OF CUSTODY

INTERNAL CHAINS

SUMMARY FORMS

000007

R94, 1290

H & A OF NEW YORK
189 North Water Street
Rochester, New York 14604
(716) 232-7386

ANALYSIS REQUEST FORM AND CHAIN-OF-CUSTODY RECORD

Page 1 of 1 Nº 454
Delivery Date: 11-2-94

Project Name: Enarco Machine	Laboratory: GTC	Project Manager: K. Mahoney
H & A File No. 10372 - C48	Address: 710 Exchange Rochester	Final Report Due Date:
H & A REP. B. Hanna		Turnaround Time: 14 days
WORK ORDER No.	Client Rep.: Cindy Toomey	

Sample Information

H & A Sample ID.	Laboratory ID.	Sample Date	Sample Time	Sample Depth	Sample Matrix
-001 1. Trip blank		11-2-94	—		water
-002 2. MW2C2D			950		
-003 3. MW201D			1600		
-004 4. MW5			900		
-005 5. DUP			900		
-006 6. MW4			1050		
-007 7. MW6			1100		
-008 8. MW6 MS/MSD			1100		
-009 9. MW2			1325		
-010 10. MW-1			1350		
-011 11. MW3			1430		
12.					
13.					
14.					
15.					

Analysis Requested

91-1 40ml						TOTAL
2						2
2						2
2						2
3						3
2						2
2						2
2						2
2						2
2						2
2						2
2						2

Preservative

pH < 2.0			pH > 10	pH 7.0
HNO3 (N)	HCl (C)	H_2SO_4 (S)	NaOH/ZA (Z)	4 C (T)
				X
				X
				X
				X
				X
				X
				X
				X
				X
				X
				X

Sampler Comments/Site Observations

Sample Conditions		Broken Containers
Custody Seal:	Intact:	List Type / Sample No.
Cooler Temp.:	C	
Any Broken Containers ?		

Preservation
No. Of Samples: (N) (C) (S) (Z) (T)
(List all pH measurements outside criteria in the Comments Section by H & A No. / Cont. / pres.)

Comments:

Sampled and Relinquished By: B. Hanna	Samples Received By: V. Gardner
Signature: Brenda Hanna	Signature: V Gardner
Company Name: H&A of New York	Company Name: GTC
Date: 11-2-94 Time: 1540	Date: 11/2/94 Time: 1540
Samples Relinquished By:	Samples Received By:
Signature:	Signature:
Company Name:	Company Name:
Date: Time:	Date: Time:
Samples Relinquished By:	Samples Received By:
Signature:	Signature:
Company Name:	Company Name:
Date: Time:	Date: Time:

Sub # HADUP JOB# R94/4290-001 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	R	11/3	10:30
			R	DJ Deming	11/8	16:05

000001

SDG # HADUP JOB# R94/4290-002 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	R	11/3	10:30
			R	R. Gehring	11/8	16:00

000003

SDG # HADUP JOB# R94/4290-003 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	R	11/3	10:30
			R	DJ Henry	11/8	16:00

00000

SDG # HADUP JOB# R94/4290-004 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		120 ml	[redacted]	R	11/3	10:30
			R	D.J. Dunig	11/6	16:00

000010

Sub # HADUP JOB# R94/4290-005 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	R	11/3	10:30
			R DJ Dung		11/8	16:00

00001

SDG # HADUP JOB# R94/4290-006 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	R	11/3	10:30
			R DJ Long		11/8	16:00

00001

SDG # HADUP JOB# R94/4290-007 QC DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		160 ml	[redacted]	R	11/3	10:30
			R D.J. Hunig		11/8	16:00

000013

SDG # HADUP JOB# R94/4290-008 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	[redacted]	11/3	10:30
			[redacted]	[redacted]	11/6	16:00

00001

SDG # HADUP JOB# R94/4290-009 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	R	11/3	10:30
			R	[signature]	11/8	16:00

000015

SDG # HADUP JOB# R94/4290-010 DATE/TIME REC'D 11/2/94 @ 15:40

PARAMETERS	FRACTION ID	VOLUME	RELINQUISHED BY	RECEIVED BY	DATE	TIME
91-1		80 ml	[redacted]	[redacted]	11/3	10:30
			[redacted]	[redacted]	11/8	16:00

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	Analytical Requirements* NYSDEC 1991 CLP PROTOCOL					
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER
HATB	R94/04290-1	X					
MW202D	R94/04290-2	X					
MW201D	R94/04290-3	X					
MW5	R94/04290-4	X					
HADUP	R94/04290-5	X					
MW4	R94/04290-6	X					
MW6	R94/04290-7	X					
MW2	R94/04290-8	X					
MW1	R94/04290-9	X					
MW3	R94/04290-10	X					

*Check Appropriate Boxes

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOA
ANALYSES

LABORATORY SAMPLE ID	MATRIX	DATE COLLECTED	DATE REC'D AT LAB	LOW LEVEL MED LEVEL	DATE ANALYZED
R94/04290-1	WATER	11/02/94	11/02/94	LOW	11/08/94
R94/04290-2	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-3	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-4	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-5	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-6	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-7	WATER	11/02/94	11/02/94	LOW	11/08/94
R94/04290-8	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-9	WATER	11/02/94	11/02/94	LOW	11/09/94
R94/04290-10	WATER	11/02/94	11/02/94	LOW	11/09/94

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

ORGANIC ANALYSES

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
R94/04290-1	WATER	91-1			1.0
R94/04290-2	WATER	91-1			1.0
R94/04290-3	WATER	91-1			25
R94/04290-4	WATER	91-1			2.0, 10
R94/04290-5	WATER	91-1			2.0, 10
R94/04290-6	WATER	91-1			1.0
R94/04290-7	WATER	91-1			1.0
R94/04290-8	WATER	91-1			1.0, 5.0
R94/04290-9	WATER	91-1			1.0
R94/04290-10	WATER	91-1			10, 20

General Testing Corporation

Job #: R94/04290

SECTION C

VOLATILES DATA

- QC Summary
- Sample Data
- Standards Data
- Raw QC Data

D.C. SUMMARY

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	HADUP	98	98	98		0
02	HADUPDL	100	100	96		0
03	HATB	98	96	96		0
04	MW1	94	98	98		0
05	MW2	98	98	96		0
06	MW201D	98	98	96		0
07	MW202D	100	104	94		0
08	MW2DL	100	100	82		0
09	MW3	98	102	106		0
10	MW3DL	102	104	92		0
11	MW4	102	98	100		0
12	MW5	98	98	98		0
13	MW5DL	100	102	92		0
14	MW6	102	98	94		0
15	MW6MS	100	100	92		0
16	MW6MSD	98	100	92		0
17	VBLK1	98	94	96		0
18	VBLK1MS	98	100	88		0
19	VBLK2	104	102	88		0
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix Spike - EPA Sample No.: MW6

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	54.	108	61-145
Trichloroethene	50.	0.	48.	96	71-120
Benzene	50.	0.	49.	98	76-127
Toluene	50.	0.	47.	94	76-125
Chlorobenzene	50.	0.	47.	94	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	50.	100	8	14	61-145
Trichloroethene	50.	49.	98	2	14	71-120
Benzene	50.	48.	96	2	11	76-127
Toluene	50.	47.	94	0	13	76-125
Chlorobenzene	50.	47.	94	0	13	75-130

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:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix Spike - EPA Sample No.: VBLK1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.	0.	62.	124	61-145
Trichloroethene	50.	0.	53.	106	71-120
Benzene	50.	0.	53.	106	76-127
Toluene	50.	0.	52.	104	76-125
Chlorobenzene	50.	0.	51.	102	75-130

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

* Values outside of QC limits

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

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID:Q2247 Lab Sample ID:METHOD BLANK

Date Analyzed:11/08/94 Time Analyzed:2024

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	HADUP	4290-5	Q2256	0213
02	HATB	4290-1	Q2252	2349
03	MW1	4290-9	Q2259	0402
04	MW2	4290-8	Q2258	0326
05	MW201D	4290-3	Q2254	0101
06	MW202D	4290-2	Q2253	0025
07	MW3	4290-10	Q2260	0438
08	MW4	4290-6	Q2257	0250
09	MW5	4290-4	Q2255	0137
10	MW6	4290-7	Q2249	2144
11	MW6MS	4290-7MS	Q2250	2228
12	MW6MSD	4290-7MSD	Q2251	2313
13	VBLK1MS	BLANK SPIKE	Q2248	2104
14				
15				
16				
17				
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25				
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30				

COMMENTS:

000020

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID:Q2264 Lab Sample ID:METHOD BLANK

Date Analyzed:11/09/94 Time Analyzed:0927

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID:MS5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	HADUPDL	4290-5DL	Q2271	1424
02	MW2DL	4290-8DL	Q2269	1313
03	MW3DL	4290-10DL	Q2266	1054
04	MW5DL	4290-4DL	Q2270	1348
05				
06				
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11				
12				
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID:Q1922 BFB Injection Date:10/24/94

Instrument ID:MS5 BFB Injection Time:1229

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.3
75	30.0 - 60.0% of mass 95	54.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	67.2
175	5.0 - 9.0% of mass 174	5.0(7.4)1
176	95.0 - 101.0% of mass 174	65.2(96.9)1
177	5.0 - 9.0% of mass 176	5.0(7.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 PPB	Q1923	10/24/94	1309
02	VSTD020	20 PPB	Q1924	10/24/94	1347
03	VSTD050	50 PPB	Q1925	10/24/94	1424
04	VSTD100	100 PPB	Q1926	10/24/94	1503
05	VSTD200	200 PPB	Q1927	10/24/94	1602
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

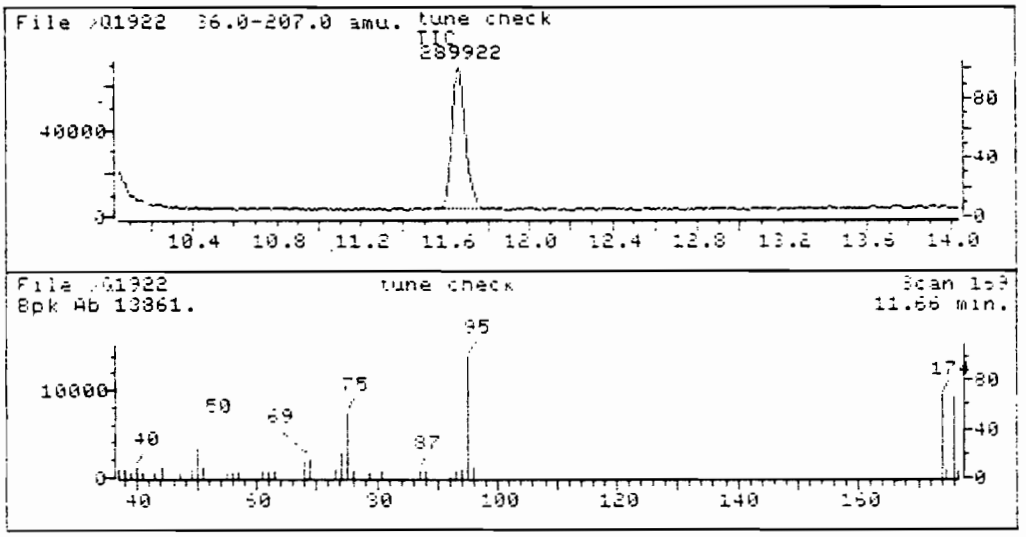
GC/MS PERFORMANCE STANDARD

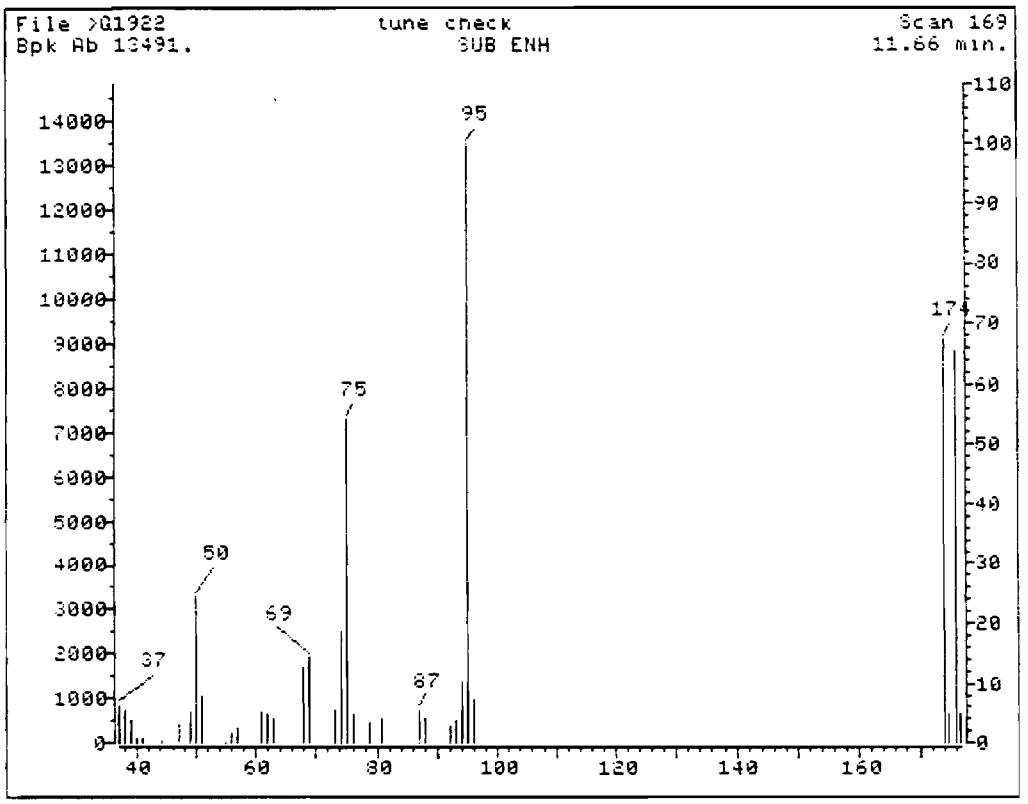
Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.31	24.31	Ok
75	30-60% of mass 95	54.08	54.08	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.15	7.15	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	67.22	67.22	Ok
175	5-9% of mass 174	4.98	7.41	Ok
176	95-101% of mass 174	65.17	96.95	Ok
177	5-9% of mass 176	4.97	7.63	Ok

Injection Date: 10/24/94
Injection Time: 12:29
Data File: >Q1922
Scan: 169

Thomas J. Jaeger





>Q1922 tune check
169 SUB ENH

File: >Q1922 Scan #: 169 Retn. time: 11.66

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	847.0	49.05	677.7	62.00	629.7	76.05	650.0	94.05	1380.0
38.00	738.7	50.05	3279.3	63.10	558.0	78.90	480.3	95.05	13490.7
39.00	508.7	51.05	1081.3	68.00	1682.0	80.90	541.7	96.05	964.7
40.00	115.0	55.05	22.0	68.95	1911.7	87.00	763.7	173.95	9068.7
41.00	85.0	56.15	230.7	73.05	740.3	88.00	570.7	174.85	671.7
44.10	41.7	57.05	321.3	74.05	2502.7	91.95	398.7	175.95	8792.0
47.10	407.7	61.00	675.7	75.05	7296.3	92.95	525.7	176.85	671.0

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID:Q2245 BFB Injection Date:11/08/94

Instrument ID:MS5 BFB Injection Time:1901

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.4
75	30.0 - 60.0% of mass 95	54.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	63.7
175	5.0 - 9.0% of mass 174	4.8(7.5)1
176	95.0 - 101.0% of mass 174	63.5(99.6)1
177	5.0 - 9.0% of mass 176	4.4(7.0)2

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

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

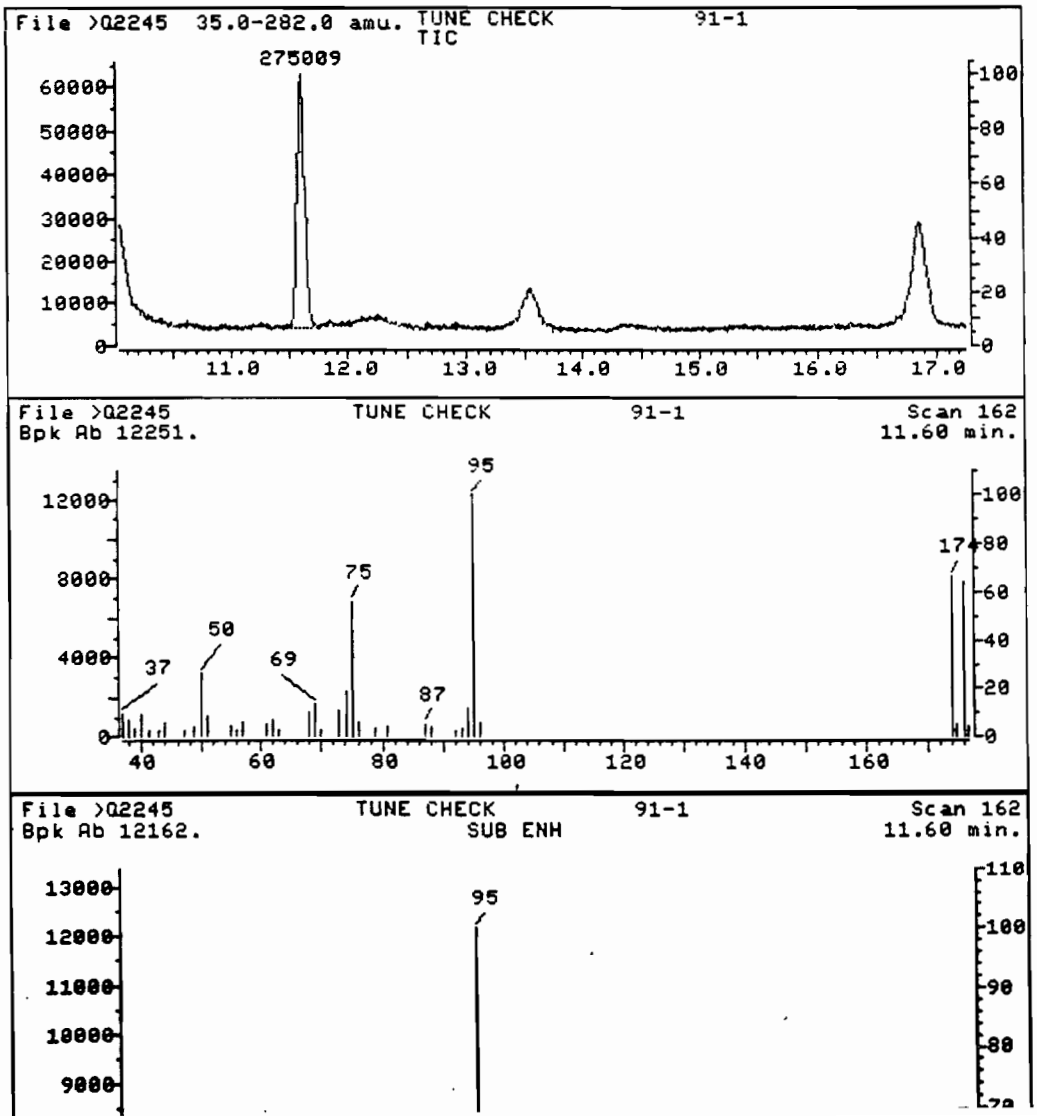
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050A	50 PPB	Q2246	11/08/94	1935
02	VBLK1	METHOD BLANK	Q2247	11/08/94	2024
03	VBLK1MS	BLANK SPIKE	Q2248	11/08/94	2104
04	MW6	4290-7	Q2249	11/08/94	2144
05	MW6MS	4290-7MS	Q2250	11/08/94	2228
06	MW6MSD	4290-7MSD	Q2251	11/08/94	2313
07	HATB	4290-1	Q2252	11/08/94	2349
08	MW202D	4290-2	Q2253	11/09/94	0025
09	MW201D	4290-3	Q2254	11/09/94	0101
10	MW5	4290-4	Q2255	11/09/94	0137
11	HADUP	4290-5	Q2256	11/09/94	0213
12	MW4	4290-6	Q2257	11/09/94	0250
13	MW2	4290-8	Q2258	11/09/94	0326
14	MW1	4290-9	Q2259	11/09/94	0402
15	MW3	4290-10	Q2260	11/09/94	0438
16					
17					
18					
19					
20					
21					
22					

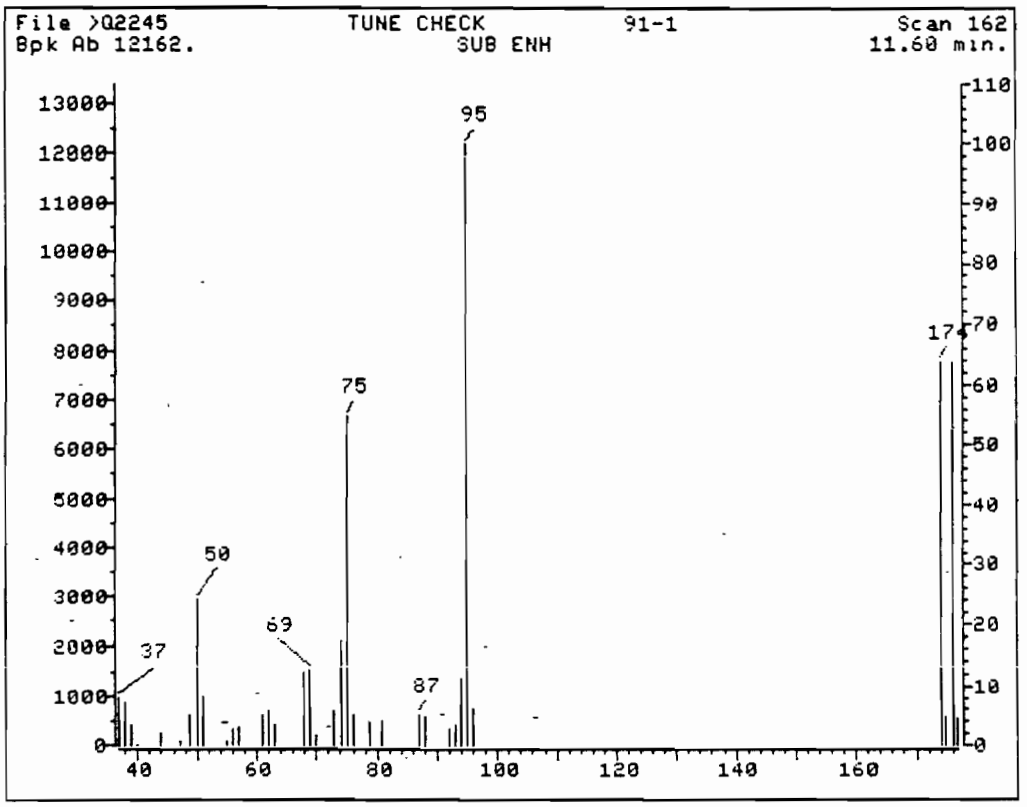
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.39	24.39	Ok
75	30-60% of mass 95	54.75	54.75	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.28	6.28	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	63.72	63.72	Ok
175	5-9% of mass 174	4.77	7.48	Ok
176	95-101% of mass 174	63.46	99.59	Ok
177	5-9% of mass 176	4.43	6.98	Ok

Injection Date: 11/08/94
Injection Time: 19:01
Data File: >Q2245
Scan: 162





>Q2245 TUNE CHECK 91-1
162 SUB ENH

File: >Q2245 Scan #: 162 Retn. time: 11.60

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	960.7	50.05	2966.3	63.00	418.3	76.05	620.0	94.05	1367.3
38.00	858.7	51.05	1004.3	68.00	1500.0	78.90	452.7	95.05	12162.3
39.00	404.3	55.05	86.3	69.05	1526.3	80.90	509.0	96.05	763.3
40.00	11.0	56.05	340.0	69.95	203.7	87.00	627.7	173.95	7749.7
44.00	241.3	57.05	397.0	72.95	714.7	88.00	600.3	174.85	580.0
47.00	94.3	61.00	624.3	74.05	2123.0	92.05	320.3	175.95	7718.0
48.95	623.3	62.00	699.3	75.05	6658.7	92.95	402.3	176.85	538.3

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID:Q2261 BFB Injection Date:11/09/94

Instrument ID:MS5 BFB Injection Time:0721

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.9
75	30.0 - 60.0% of mass 95	54.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	63.1
175	5.0 - 9.0% of mass 174	4.4(6.9)1
176	95.0 - 101.0% of mass 174	62.4(98.7)1
177	5.0 - 9.0% of mass 176	3.8(6.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050B	50 PPB	Q2263	11/09/94	0833
02	VBLK2	METHOD BLANK	Q2264	11/09/94	0927
03	MW3DL	4290-10DL	Q2266	11/09/94	1054
04	MW2DL	4290-8DL	Q2269	11/09/94	1313
05	MW5DL	4290-4DL	Q2270	11/09/94	1348
06	HADUPDL	4290-5DL	Q2271	11/09/94	1424
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

000033

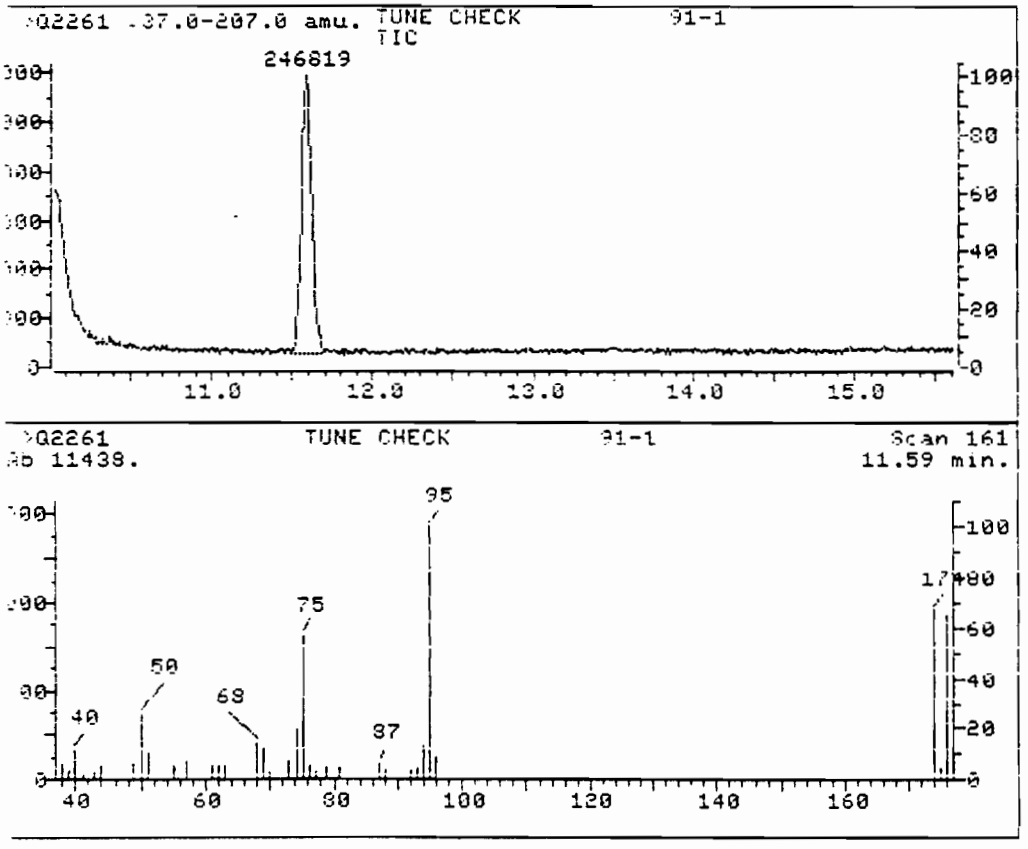
GC/MS PERFORMANCE STANDARD

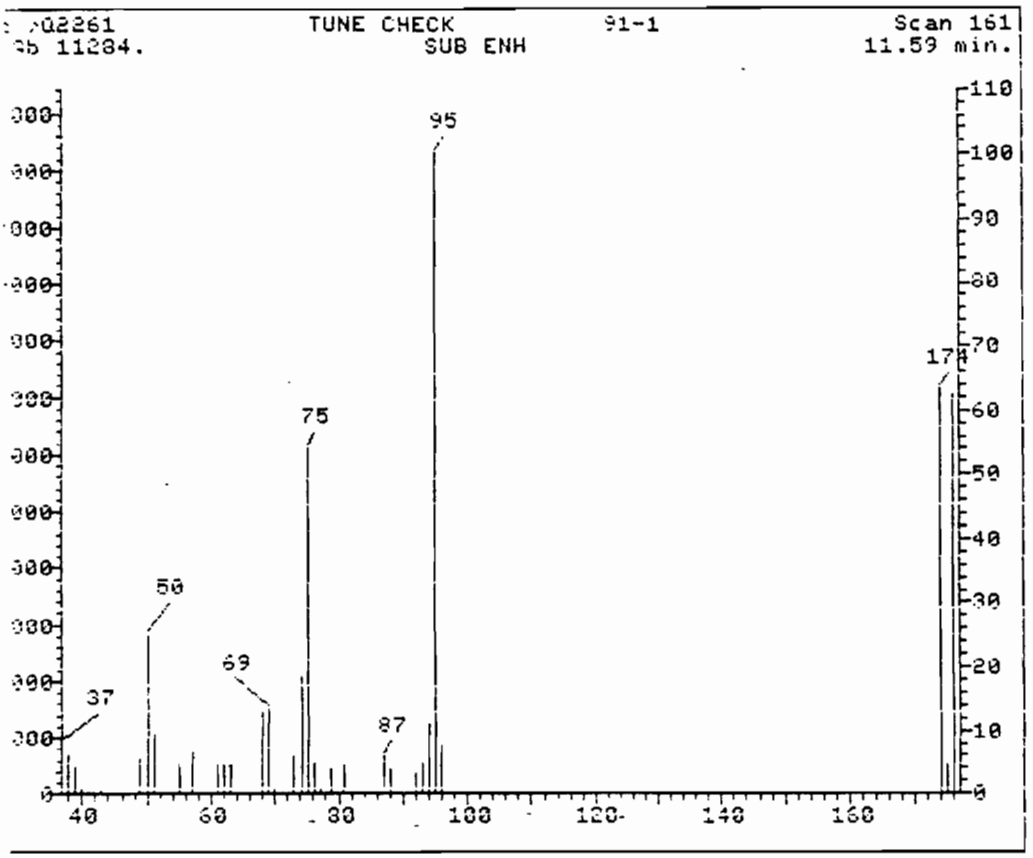
Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.92	24.92	Ok
75	30-60% of mass 95	54.02	54.02	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.56	7.56	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	63.15	63.15	Ok
175	5-9% of mass 174	4.36	6.90	Ok
176	95-101% of mass 174	62.36	98.75	Ok
177	5-9% of mass 176	3.77	6.05	Ok

Injection Date: 11/09/94
Injection Time: 07:21
Data File: >Q2261
Scan 161

Thomas F. Jones





261 TUNE CHECK 91-1
161 SUB ENH

e: >Q2261 Scan #: 161 Retn. time: 11.59

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
.00	876.7	50.05	2811.3	68.05	1471.0	77.05	102.3	94.05	1243.7
.00	702.3	51.05	1025.7	68.95	1490.0	78.90	422.0	95.05	11283.7
.00	467.7	55.05	458.3	70.05	100.0	80.90	499.0	96.05	853.3
.00	71.7	57.05	725.0	72.95	644.7	87.00	647.7	173.95	7125.3
.00	42.7	61.00	557.0	74.05	2062.0	88.00	444.0	174.95	491.7
.00	14.0	62.00	541.3	75.05	6096.0	92.05	366.3	175.95	7036.0
.95	607.0	63.10	491.3	76.05	558.7	93.05	529.0	176.95	425.7

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID (Standard):Q2246 Date Analyzed:11/08/94

Instrument ID:MS5 Time Analyzed:1935

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	101151	9.99	444974	11.75	374273	18.24
	UPPER LIMIT	202302	10.49	889948	12.25	748546	18.74
	LOWER LIMIT	50576	9.49	222487	11.25	187137	17.74
	EPA SAMPLE NO.						
01	VBLK1	97209	10.03	440283	11.78	378498	18.25
02	VBLK1MS	91419	10.04	397516	11.78	350167	18.30
03	MW6	94228	10.01	413464	11.76	347670	18.27
04	MW6MS	95686	9.98	415363	11.74	360564	18.27
05	MW6MSD	94428	9.97	415924	11.73	360045	18.25
06	HATB	91375	10.06	398403	11.83	348025	18.34
07	MW202D	90881	10.04	396130	11.79	333667	18.34
08	MW201D	90805	10.08	395874	11.83	348976	18.34
09	MW5	89293	10.06	398799	11.81	350080	18.29
10	HADUP	90049	10.08	405659	11.85	348104	18.34
11	MW4	84548	10.08	373708	11.85	319498	18.34
12	MW2	89172	10.08	379142	11.85	335804	18.35
13	MW1	88397	10.08	387126	11.83	343166	18.34
14	MW3	78764	10.09	358988	11.86	318211	18.34
15							
16							
17							
18							
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 of QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Lab File ID (Standard):Q2263 Date Analyzed:11/09/94

Instrument ID:MS5 Time Analyzed:0833

GC Column:RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	89932	10.06	401699	11.83	347452	18.35
	UPPER LIMIT	179864	10.56	803398	12.33	694904	18.85
	LOWER LIMIT	44966	9.56	200850	11.33	173726	17.85
	EPA SAMPLE NO.						
01	VBLK2	87685	9.94	362993	11.69	325999	18.23
02	MW3DL	81066	10.04	352335	11.78	307916	18.29
03	MW2DL	93267	9.94	347633	11.66	339842	18.22
04	MW5DL	82283	10.03	355307	11.78	310412	18.27
05	HADUPDL	85043	10.09	377162	11.85	329525	18.34
06							
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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 of QC limits with an asterisk.
* Values outside of QC limits.

Instrument Detection Limit Study / MDL
General Testing Corporation

EPA Method #: VOA's

Date: 06/94

Instrument: MS #5

Analyst: RJ Herring

Analyte	Amount Added (ug/L)	Trial #1	Trial #2	Trial #3	Mean (ug/L)	S (ug/L)	N #of reps	IDL* (ug/L)
Chloromethane	10.00	10.49	9.52	10.26	10.09	0.4138	3	2.882
Vinyl chloride	10.00	10.10	9.54	9.50	9.71	0.2739	3	1.908
Bromomethane	10.00	12.12	11.43	11.81	11.79	0.2822	3	1.965
Chloroethane	10.00	10.04	9.44	9.31	9.60	0.3179	3	2.214
Trichlorofluoromethane	10.00	12.72	12.16	11.44	12.11	0.5239	3	3.649
Acetone	50.00	31.83	32.78	31.80	32.14	0.4551	3	3.170
1,1-Dichloroethene	10.00	11.10	10.45	10.38	10.64	0.3242	3	2.258
Methylene chloride	10.00	10.66	9.79	10.03	10.16	0.3669	3	2.555
Carbon Disulfide	50.00	52.46	54.99	53.01	53.49	1.0865	3	7.567
trans-1,2-Dichloroethene	10.00	11.22	10.24	10.09	10.52	0.5011	3	3.490
1,1-Dichloroethane	10.00	10.53	9.73	9.48	9.91	0.4478	3	3.119
2-Butanone	10.00	50.05	50.60	51.82	50.82	0.7397	3	5.152
Chloroform	10.00	10.04	9.56	9.30	9.63	0.3065	3	2.135
1,2-Dichloroethane	10.00	11.02	10.52	10.43	10.66	0.2595	3	1.808
1,2-Dichloroethane-d4	10.00	9.11	8.56	8.59	8.75	0.2525	3	1.759
1,1,1-Trichloroethane	10.00	10.61	10.01	9.20	9.94	0.5778	3	4.024
Carbon tetrachloride	10.00	10.37	9.57	9.20	9.71	0.4883	3	3.401
Benzene	10.00	10.82	10.09	9.77	10.23	0.4394	3	3.061
Trichloroethene	10.00	10.79	9.96	9.51	10.09	0.5302	3	3.693
1,2-Dichloropropane	10.00	11.19	10.51	10.15	10.62	0.4312	3	3.003
Bromodichloromethane	10.00	11.01	10.10	10.02	10.38	0.4490	3	3.127
cis-1,3-Dichloropropene	10.00	10.30	9.80	9.82	9.97	0.2311	3	1.610
trans-1,3-Dichloropropene	10.00	12.22	11.54	11.32	11.69	0.3831	3	2.668
1,1,2-Trichloroethane	10.00	11.77	11.07	10.79	11.21	0.4121	3	2.871
Dibromochloromethane	10.00	11.81	11.36	11.08	11.42	0.3007	3	2.094
Bromoform	10.00	12.92	12.11	11.79	12.27	0.4756	3	3.312
4-Methyl-2-Pentanone	50.00	52.22	50.99	52.07	51.76	0.5479	3	3.816
Toluene-d8	10.00	7.74	7.43	7.31	7.49	0.1812	3	1.262
Toluene	10.00	10.60	9.92	10.02	10.18	0.2998	3	2.088
2-Hexanone	50.00	50.31	51.52	51.77	51.20	0.6375	3	4.441
Tetrachloroethene	10.00	9.55	9.13	9.02	9.23	0.2284	3	1.591
Chlorobenzene	10.00	10.25	9.71	9.44	9.80	0.3367	3	2.345
Ethylbenzene	10.00	11.14	11.09	10.75	10.99	0.1733	3	1.207
o-Xylene	50.00	53.07	52.04	53.20	52.77	0.5189	3	3.614
Styrene	50.00	81.36	79.63	81.34	80.78	0.8109	3	5.648
1,1,2,2-Tetrachloroethane	10.00	11.87	12.35	12.42	12.21	0.2444	3	1.703
Bromofluorobenzene	10.00	10.34	10.01	10.39	10.25	0.1686	3	1.174
1,3-Dichlorobenzene	10.00	11.11	11.34	11.33	11.26	0.1061	3	0.739
1,4-Dichlorobenzene	10.00	11.05	11.08	11.25	11.13	0.0881	3	0.613
1,2-Dichlorobenzene	10.00	10.97	10.82	10.95	10.91	0.0665	3	0.463

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HADUP

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2256

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	3.	J
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	73.	
71-55-6	1,1,1-Trichloroethane	46.	
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	850.	E
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	20.	U
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	9.	J
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

HADUP

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-5

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2256

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	14.08	15.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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25.					
26.					
27.					
28.					
29.					
30.					

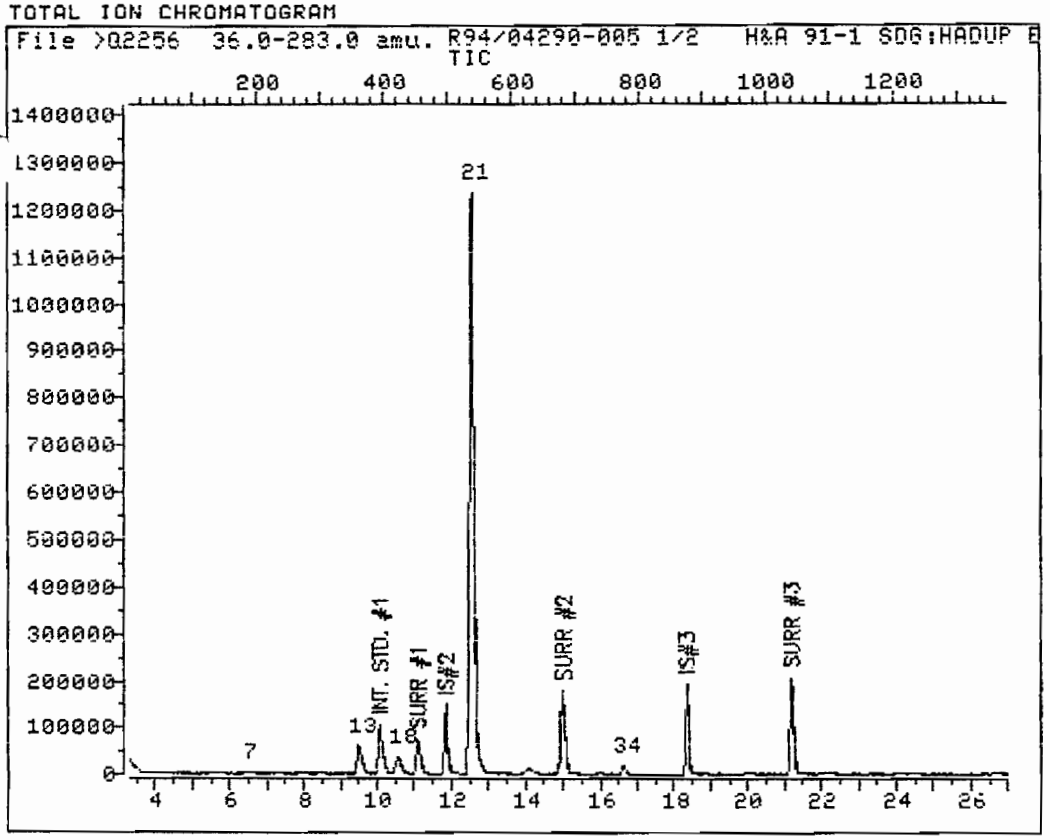
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:08
Output File: ^Q2256::D4 Injected at: 941109 02:13
Data File: >Q2256::D4 Dilution Factor: 1.00000
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.08	128.0	90049	50.00	ppb	92
7)	1,1-Dichloroethene	6.49	96.0	3473	1.56	ppb	92
13)	cis-1,2-Dichloroethene	9.49	96.0	94328	36.43	ppb	98
16)	1,2-Dichloroethane-d4	11.09	65.0	191050	49.07	ppb	92
17)	*1,4-Difluorobenzene	11.85	114.0	405659	50.00	ppb	77
18)	1,1,1-Trichloroethane	10.56	97.0	100180	22.88	ppb	93
21)	Trichloroethene	12.55	130.0	1591946	426.63	ppb	98
29)	*Chlorobenzene-d5	18.34	117.0	348104	50.00	ppb	97
31)	Toluene-d8	15.01	98.0	393593	49.26	ppb	89
34)	Tetrachloroethene	16.62	164.0	12866	4.27	ppb	95
41)	Bromofluorobenzene	21.19	95.0	242343	48.84	ppb	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM

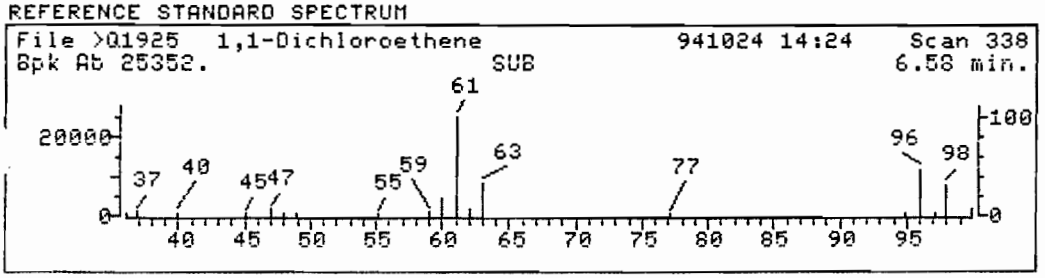


Data File: >Q2256::D4 Quant Output File: ^Q2256::D4
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP

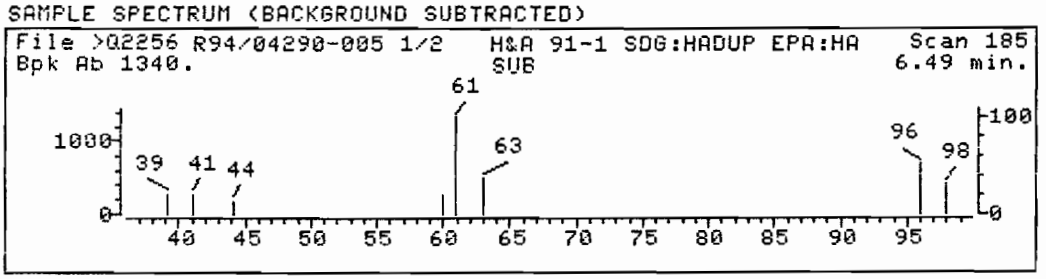
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:08
Injected at: 941109 02:13

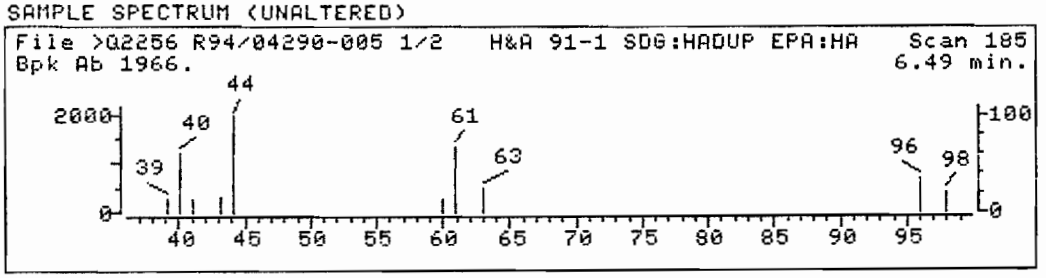
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



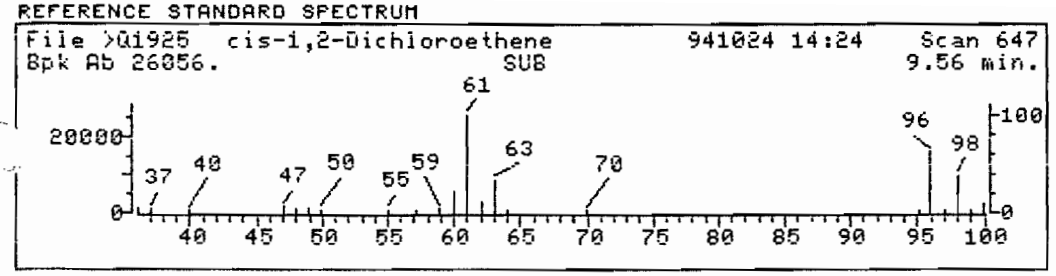
SAMPLE SPECTRUM (UNALTERED)



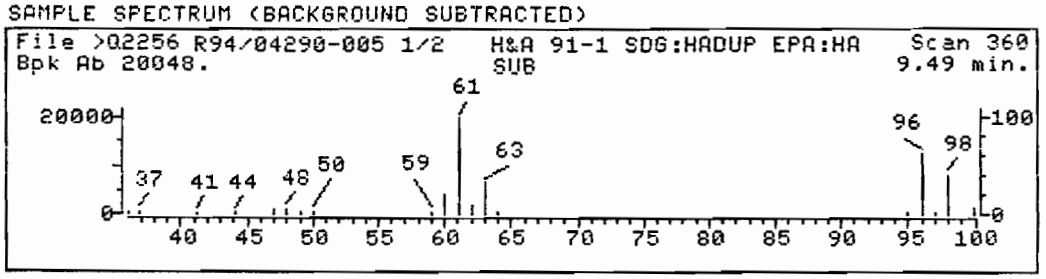
Data File: >Q2256::D4 Quant Output File: ^Q2256::D4
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP
Quant Time: 941109 07:08 Quant ID File: IDECLP::QT
Injected at: 941109 02:13 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 7
Compound Name : 1,1-Dichloroethene
Scan Number : 185
Retention Time: 6.49 min.
Quant Ion : 96.0
Area : 3473
Concentration : 1.56 ppb
q-value : 92

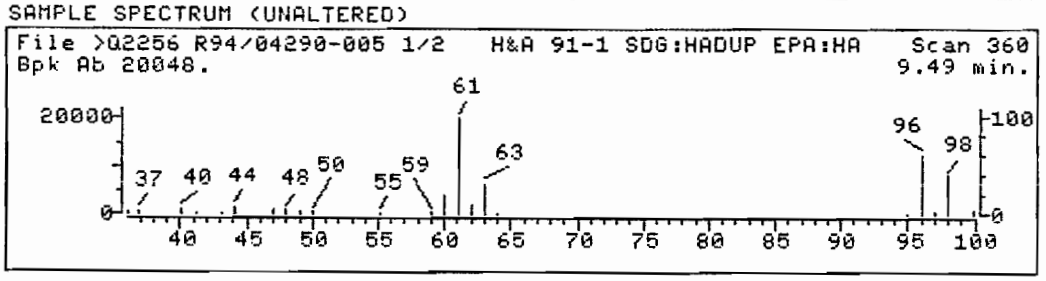
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



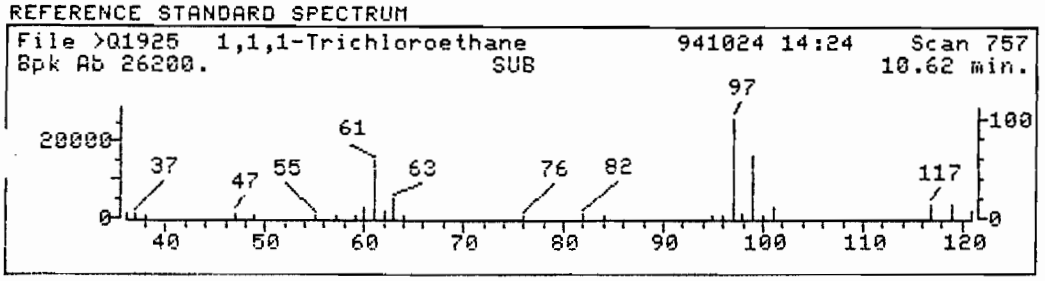
SAMPLE SPECTRUM (UNALTERED)



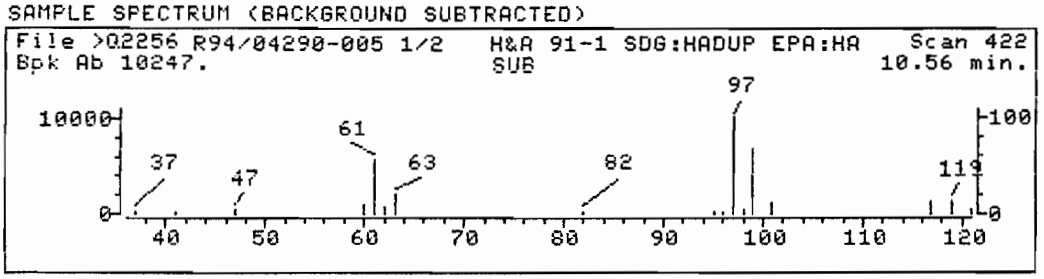
Data File: >Q2256::D4 Quant Output File: ^Q2256::D4
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP
Quant Time: 941109 07:08 Quant ID File: IDECLP::QT
Injected at: 941109 02:13 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 360
Retention Time: 9.49 min.
Quant Ion : 96.0
Area : 94328
Concentration : 36.43 ppb
q-value : 98

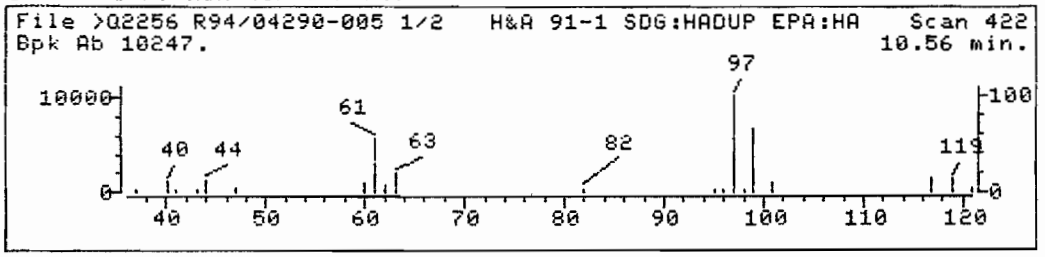
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



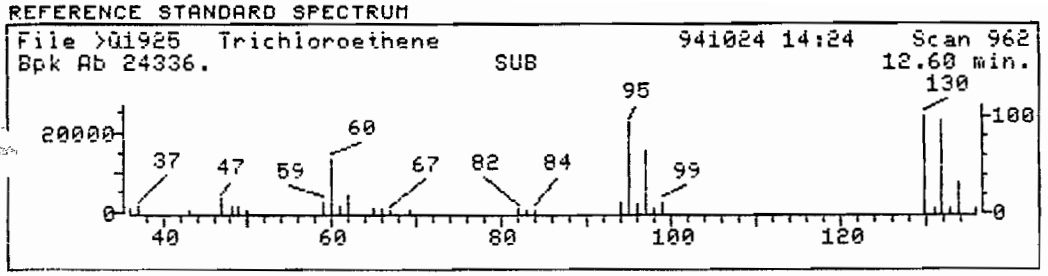
SAMPLE SPECTRUM (UNALTERED)



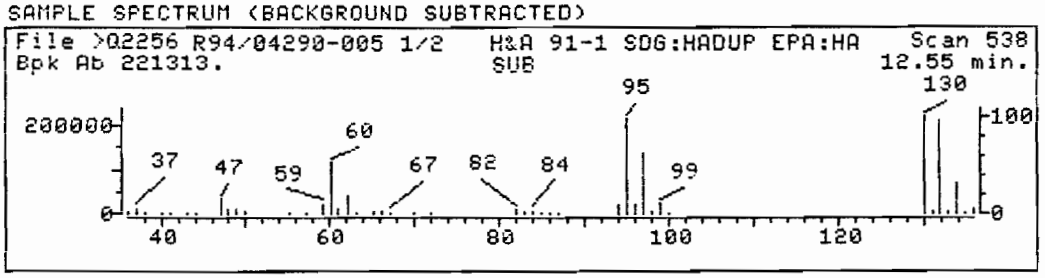
Data File: >Q2256::D4 Quant Output File: ^Q2256::D4
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP
Quant Time: 941109 07:08 Quant ID File: IDECLP::QT
Injected at: 941109 02:13 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 422
Retention Time: 10.56 min.
Quant Ion : 97.0
Area : 100180
Concentration : 22.88 ppb
q-value : 93

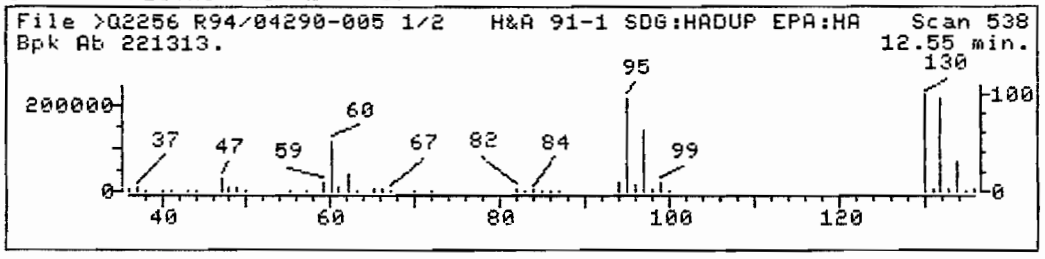
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



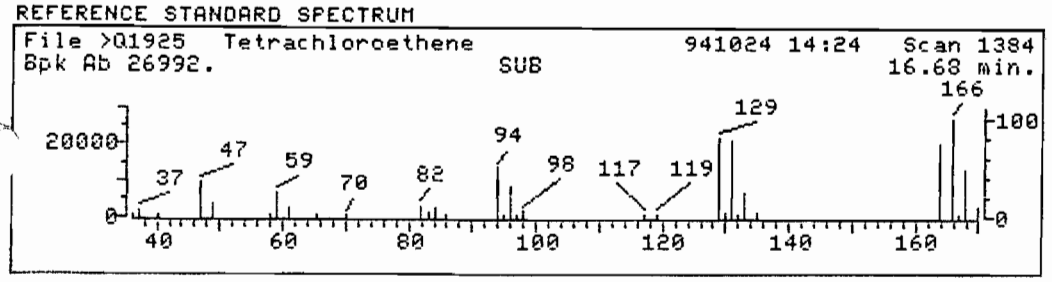
SAMPLE SPECTRUM (UNALTERED)



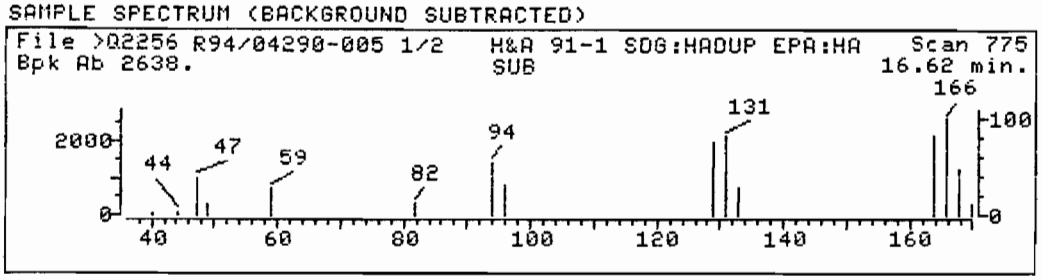
Data File: >Q2256::D4 Quant Output File: ^Q2256::D4
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP
Quant Time: 941109 07:08 Quant ID File: IDECLP::QT
Injected at: 941109 02:13 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 538
Retention Time: 12.55 min.
Quant Ion : 130.0
Area : 1591946
Concentration : 426.63 ppb
q-value : 98

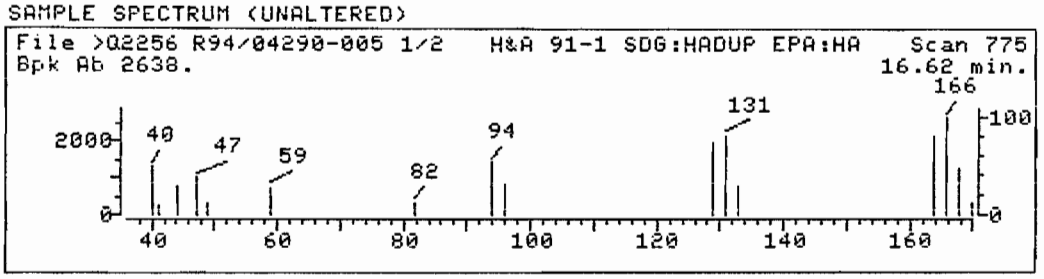
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2256::D4 Quant Output File: ^Q2256::D4
Name: R94/04290-005 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUP
Quant Time: 941109 07:08 Quant ID File: IDECLP::QT
Injected at: 941109 02:13 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 775
Retention Time: 16.62 min.
Quant Ion : 164.0
Area : 12866
Concentration : 4.27 ppb
q-value : 95

MS data file header from : >Q2256::D4

Sample: R94/04290-005 1/2 Operator: RODH 11/09/94 2:13
Misc : H&A 91-1 SDG:HADUP EPA:HADUP
s. £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 6 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q2256 R94/04290-005 1/2 H&A 91-1 SDG:HADUP EPA:HADUP
36.0ù 283.0 CLP TIC
Upslope: .2000 Area Reject: 73427. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ2256 Sorted by Time/Area INT

Peak £	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	14.08	614	627	644	11518	233045	163736	100.00	100.000

Sum of corrected areas: 163736.

Summary of Unknowns PBM Library Search and Quantitation

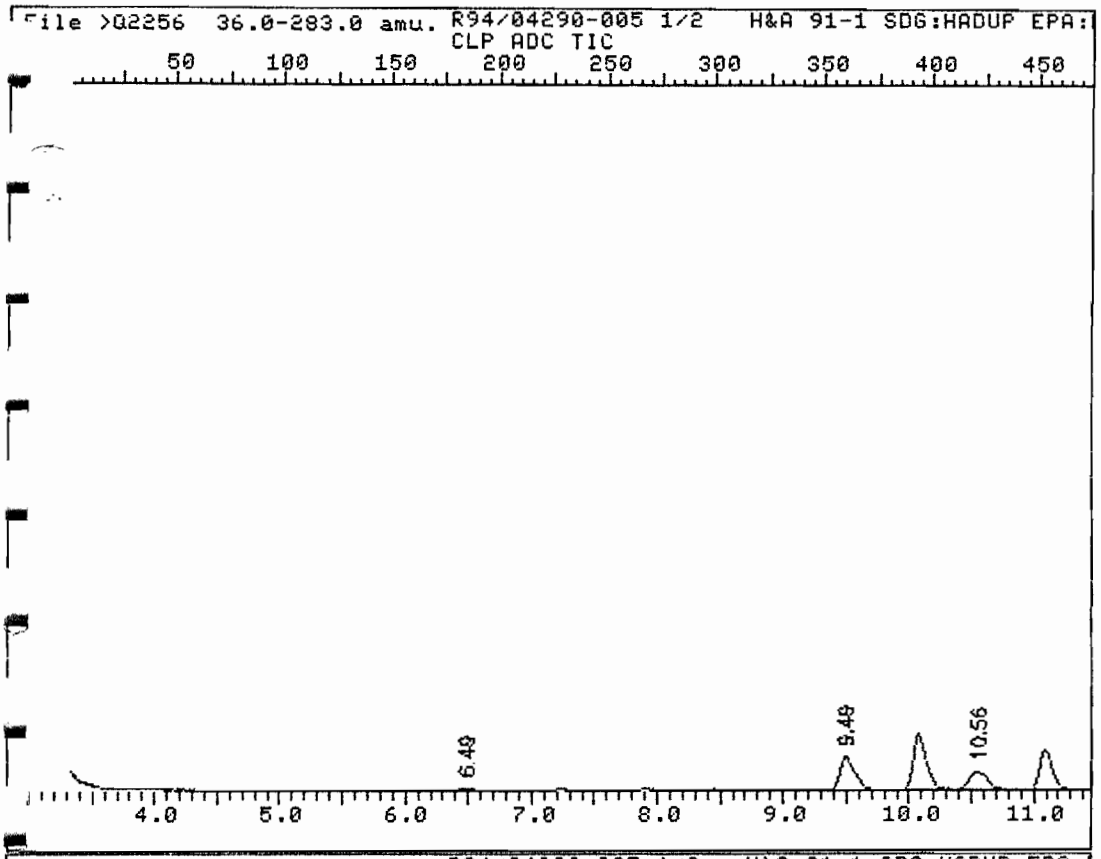
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	734269.	10.08	3.33 - 10.96
2	50.0	1073696.	11.85	10.96 - 15.09
3	50.0	1142470.	18.34	15.09 - 26.99

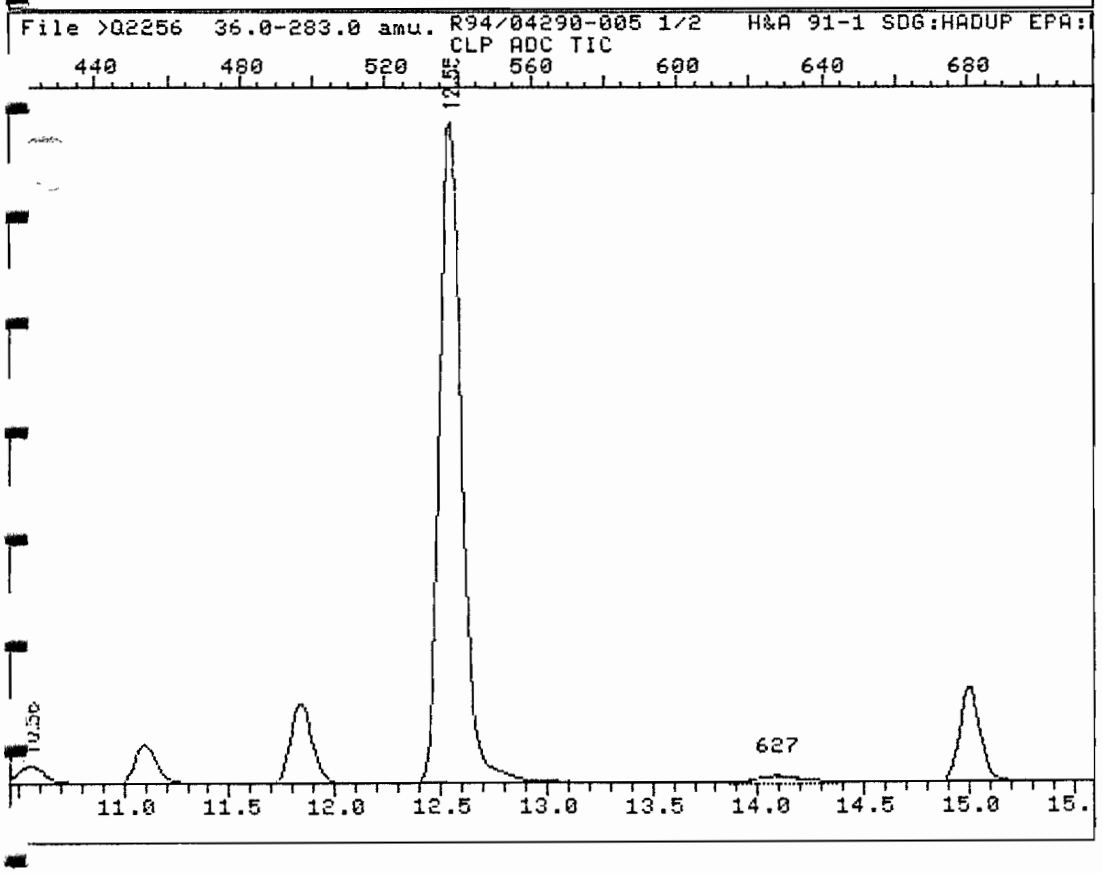
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 2.00

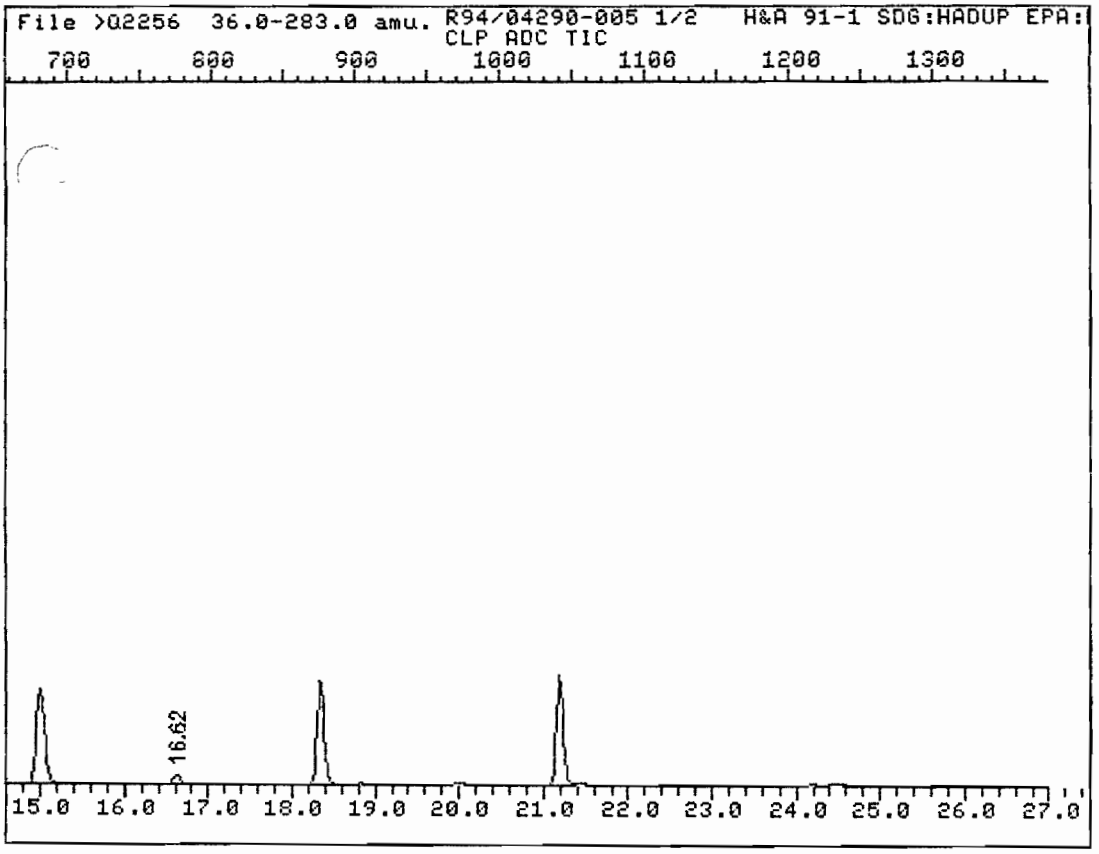
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:46 AM TUE., 15 NOV., 1994

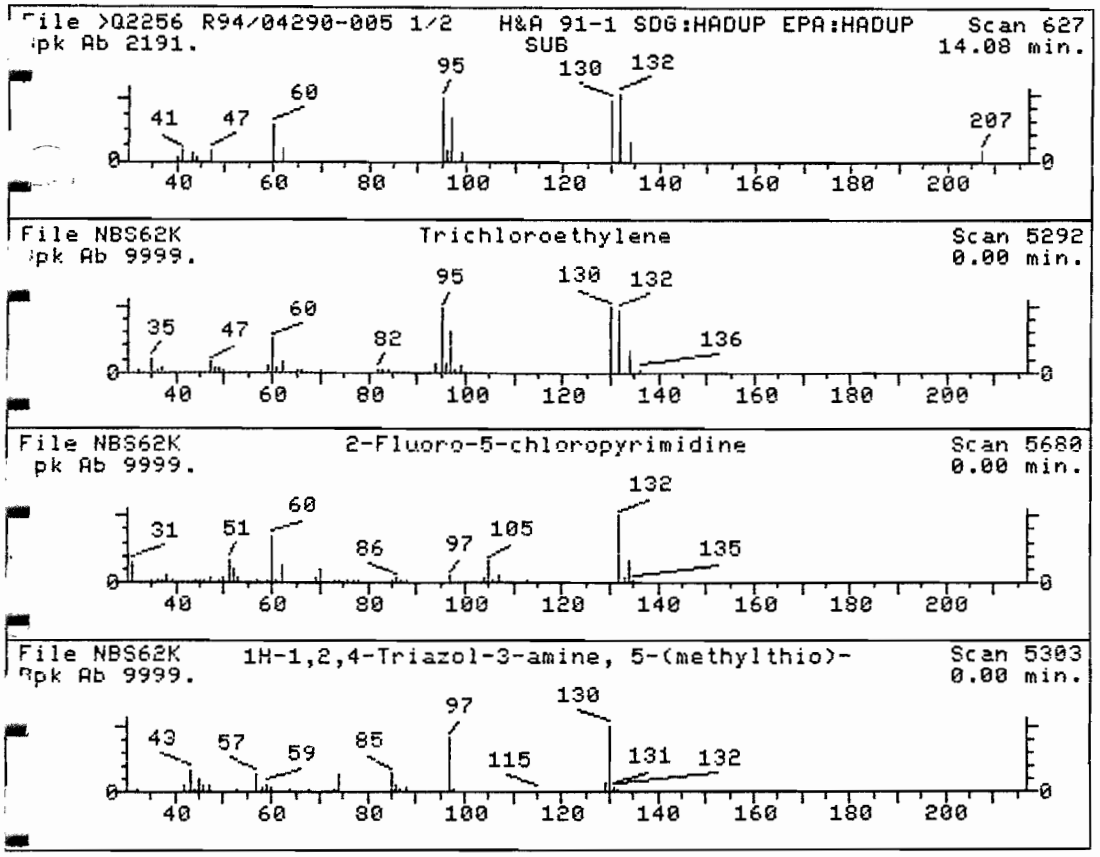




Instrument ID: MS5 Analyzed on: 11/09/94 2:13



Instrument ID: MS5 Analyzed on: 11/09/94 2:13



Instrument ID: MS5 Analyzed on: 11/09/94 2:13
Result 1 in PBM results file: LQ2256
Retention Time: 14.08 Area: 163736 Tentative Conc: 15.00
The unknown area is 15.25% of the nearest internal standard

1.	Trichloroethylene	130 C2HCl3
2.	2-Fluoro-5-chloropyrimidine	132 C4H2ClFN2
3.	1H-1,2,4-Triazol-3-amine, 5-(methylthio)-	130 C3H6N4S

Sample file: >Q2256 Spectrum f: 627
Search speed: 1 Tilting option: N No. of ion ranges searched: 44

	Prob.	CAS f	CON f	ROOT	K	DK	fFLG	TILT	%	CON	C_I	R_IV
1.	88*	79016	19537	NBS62K	85	50	3	0	90	2	65	50

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HADUPDL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-5DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2271

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	78.	DJ
71-55-6	1,1,1-Trichloroethane	50.	DJ
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1000.	D
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

HADUPDL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-5DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2271

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

000051

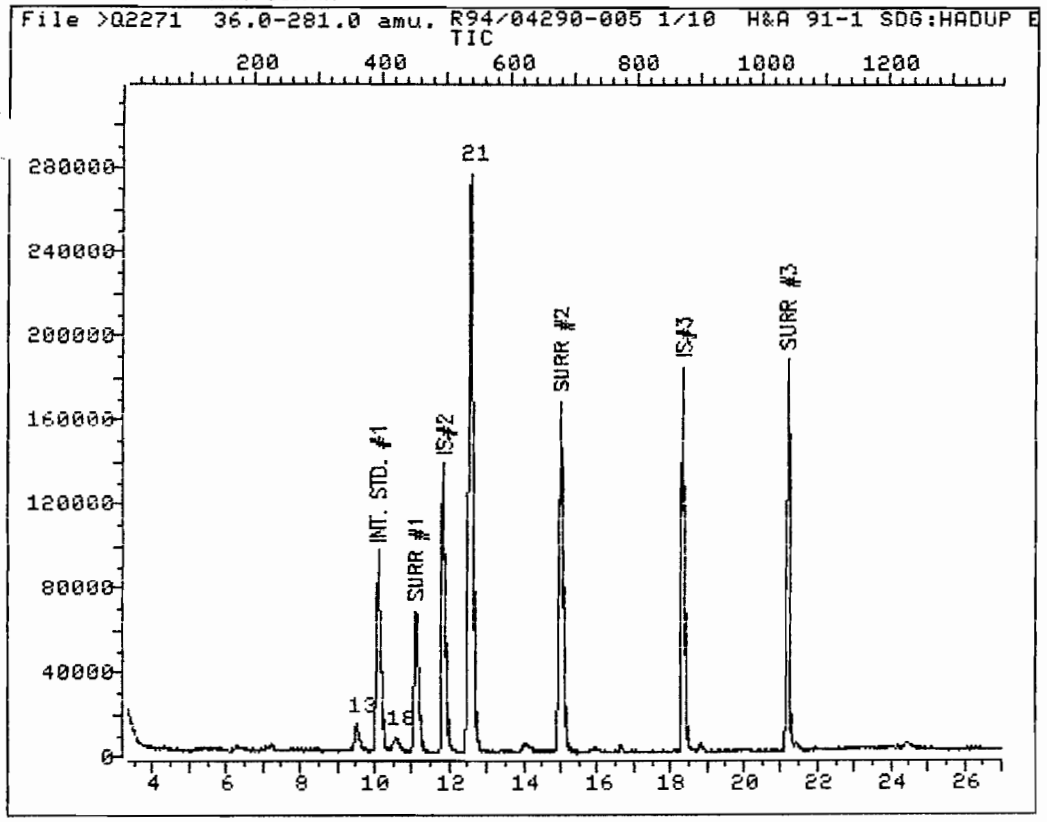
Operator ID: TOMT Quant Rev: 7 Quant Time: 941109 14:56
Output File: ^Q2271::D3 Injected at: 941109 14:24
Data File: >Q2271::D3 Dilution Factor: 1.00000
Name: R94/04290-005 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUPDL

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.09	128.0	85043	50.00	ppb	93
13)	cis-1,2-Dichloroethene	9.53	96.0	19468	7.82	ppb	91
16)	1,2-Dichloroethane-d4	11.09	65.0	178727	47.65	ppb	91
17)	*1,4-Difluorobenzene	11.85	114.0	377162	50.00	ppb	75
18)	1,1,1-Trichloroethane	10.57	97.0	21896	4.97	ppb	94
21)	Trichloroethene	12.55	130.0	350868	100.42	ppb	98
29)	*Chlorobenzene-d5	18.34	117.0	329525	50.00	ppb	95
31)	Toluene-d8	14.99	98.0	369294	49.72	ppb	88
41)	Bromofluorobenzene	21.17	95.0	231024	50.14	ppb	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM

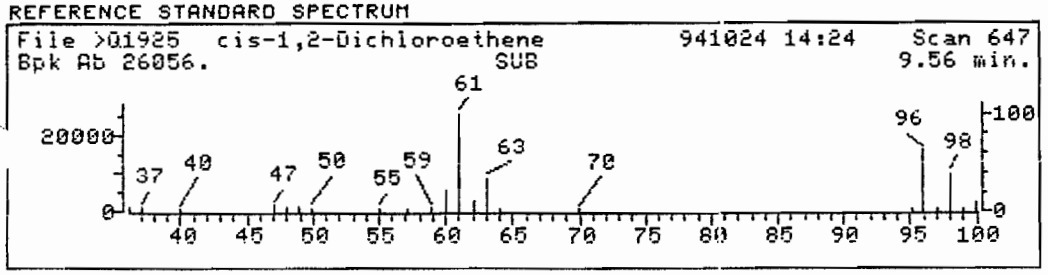


Data File: >Q2271::D3 Quant Output File: ^Q2271::D3
Name: R94/04290-005 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUPDL

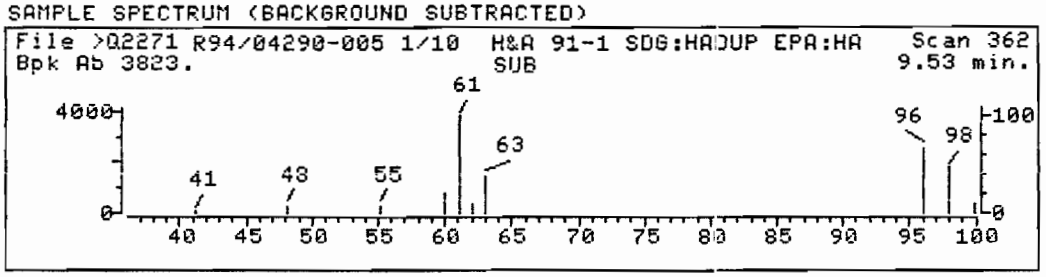
Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

Operator ID: TOMT
Quant Time : 941109 14:56
Injected at: 941109 14:24

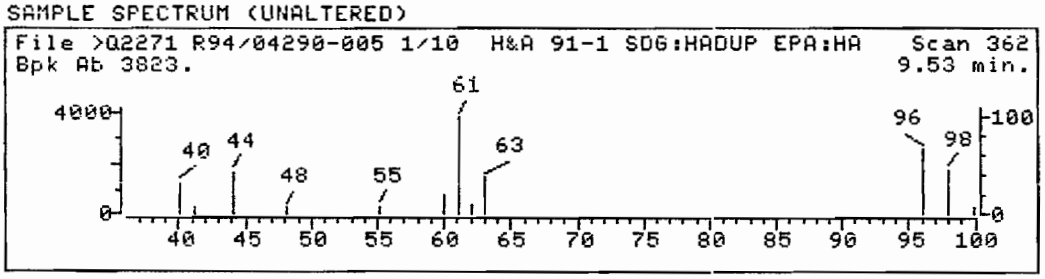
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



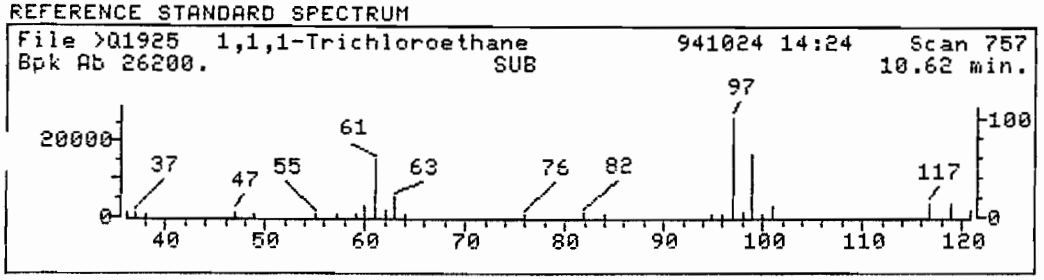
SAMPLE SPECTRUM (UNALTERED)



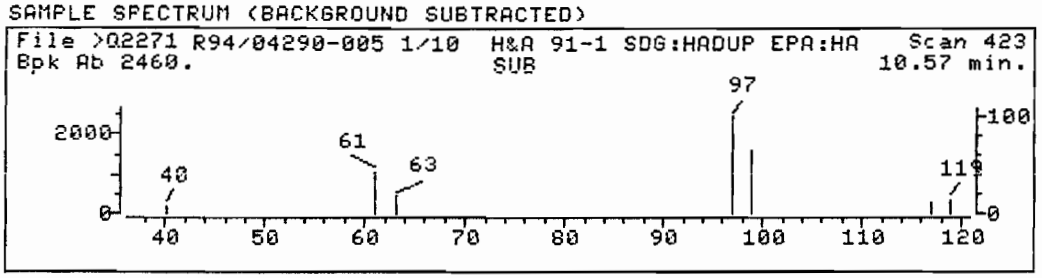
Data File: >Q2271::D3 Quant Output File: ^Q2271::D3
Name: R94/04290-005 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUPDL
Quant Time: 941109 14:56 Quant ID File: IDECLP::QT
Injected at: 941109 14:24 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 362
Retention Time: 9.53 min.
Quant Ion : 96.0
Area : 19468
Concentration : 7.82 ppb
q-value : 91

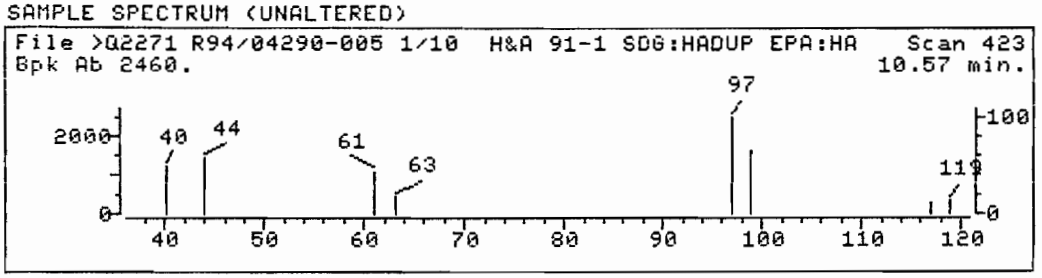
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



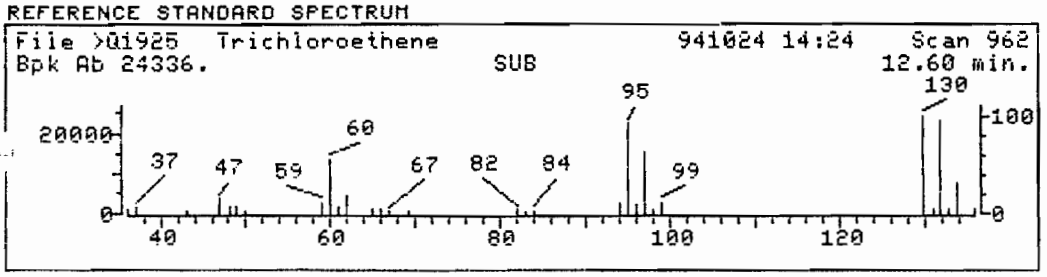
SAMPLE SPECTRUM (UNALTERED)



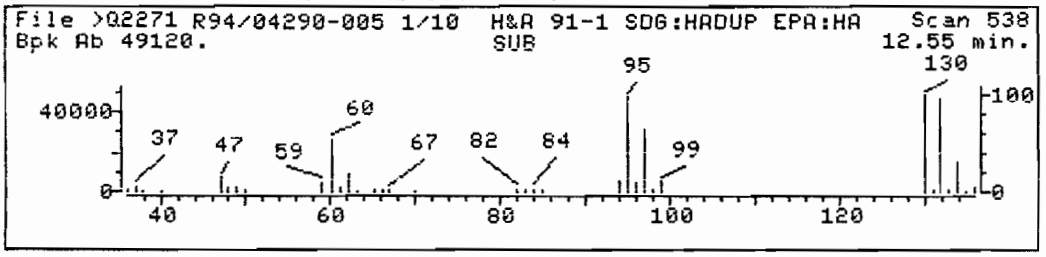
Data File: >Q2271::D3 Quant Output File: ^Q2271::D3
Name: R94/04290-005 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUPDL
Quant Time: 941109 14:56 Quant ID File: IDECLP::QT
Injected at: 941109 14:24 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 423
Retention Time: 10.57 min.
Quant Ion : 97.0
Area : 21896
Concentration : 4.97 ppb
q-value : 94

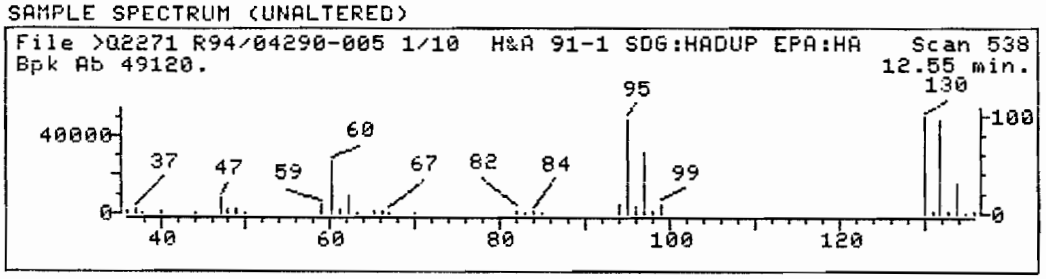
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2271::D3 Quant Output File: ^Q2271::D3
Name: R94/04290-005 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HADUPDL
Quant Time: 941109 14:56 Quant ID File: IDECLP::QT
Injected at: 941109 14:24 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 538
Retention Time: 12.55 min.
Quant Ion : 130.0
Area : 350868
Concentration : 100.42 ppb
q-value : 98

MS data file header from : >Q2271::D3

Sample: R94/04290-005 1/10 Operator: TOMT 11/09/94 14:24
Misc : H&A 91-1 SDG:HADUP EPA:HADUPDL
S. f: 1 MS model: 70 SW/HW rev.: FF ALS £ : 4 Equip ID: MS5
Method file: REGUOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	705107.	10.09	3.33 - 10.97
2	50.0	998860.	11.85	10.97 - 15.09
3	50.0	1078455.	18.34	15.09 - 27.01

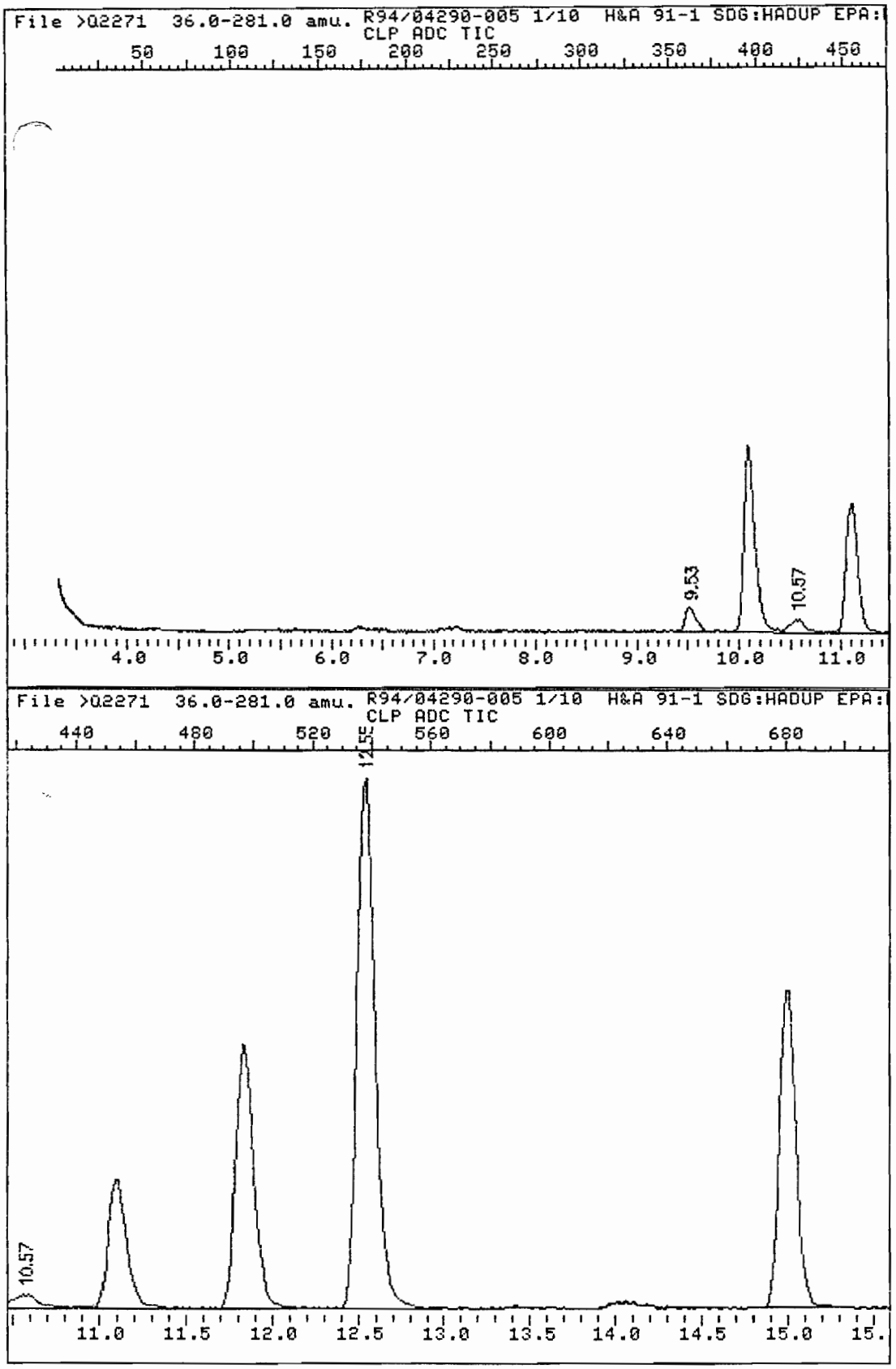
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 10.00

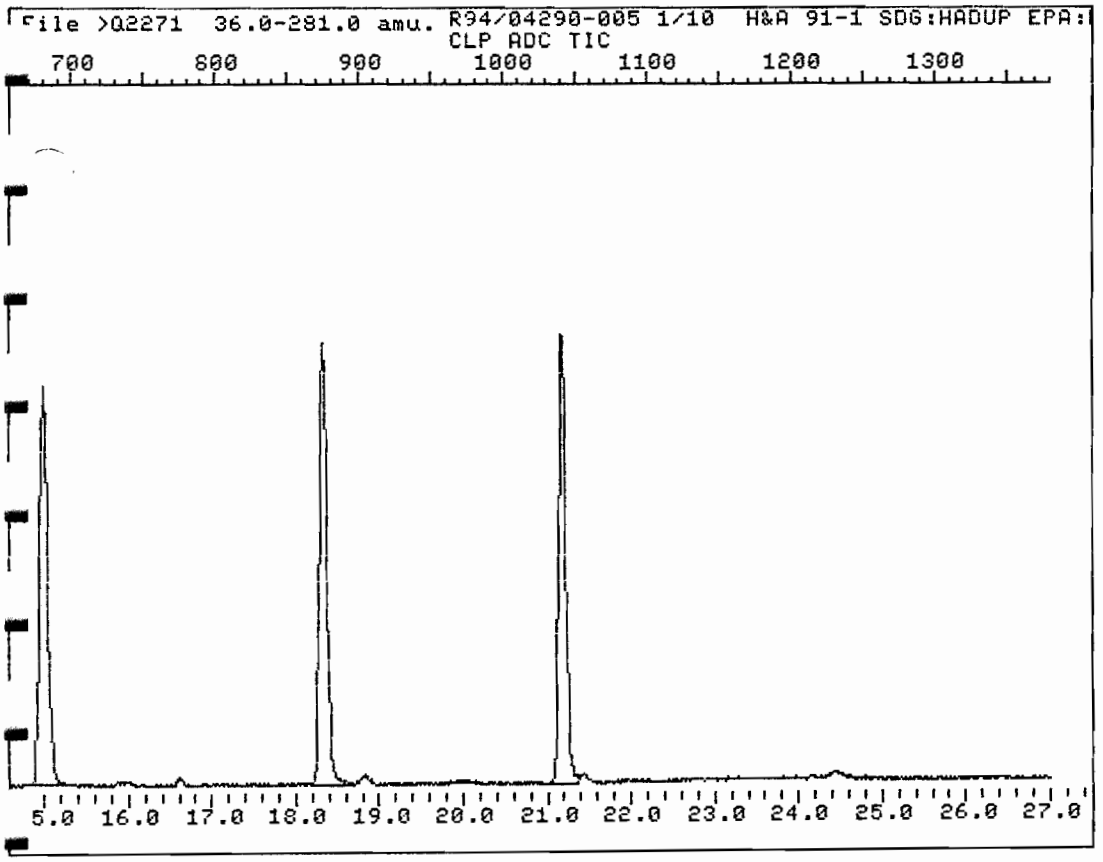
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:54 AM TUE., 15 NOV., 1994

000060



Instrument ID: MS5 Analyzed on: 11/09/94 14:24



Instrument ID: MS5 Analyzed on: 11/09/94 14:24

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HATB

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2252

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

000002

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

HATB

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-1

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2252

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000001

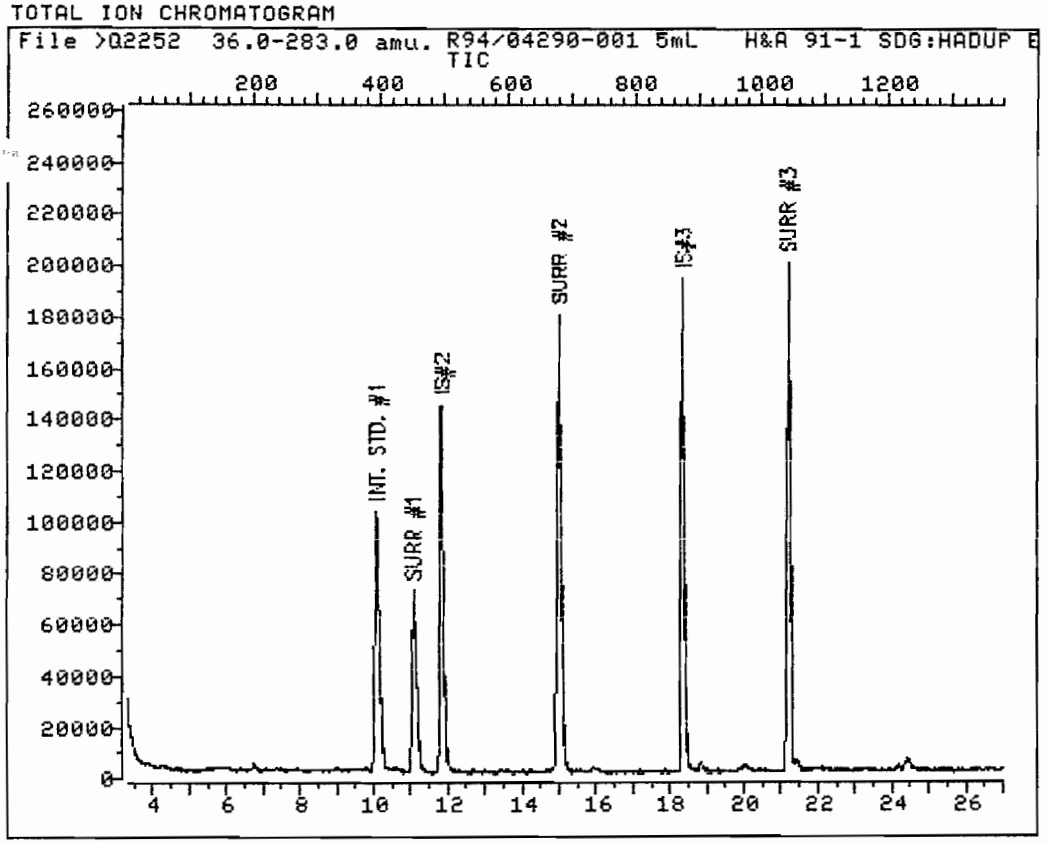
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:00
Output File: ^Q2252::D4 Injected at: 941108 23:49
Data File: >Q2252::D4 Dilution Factor: 1.00000
Name: R94/04290-001 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HATB

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.06	128.0	91375	50.00	ppb	91
16)	1,2-Dichloroethane-d4	11.07	65.0	188560	47.73	ppb	91
17)	*1,4-Difluorobenzene	11.83	114.0	398403	50.00	ppb	79
29)	*Chlorobenzene-d5	18.34	117.0	348025	50.00	ppb	96
31)	Toluene-d8	14.99	98.0	390157	48.84	ppb	89
41)	Bromofluorobenzene	21.17	95.0	239678	48.32	ppb	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2252::D4 Quant Output File: ^Q2252::D4
Name: R94/04290-001 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:HATB

Id File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:00
Injected at: 941108 23:49

MS data file header from : >Q2252::D4

Sample: R94/04290-001 5mL Operator: RODH 11/08/94 23:49
Misc : H&A 91-1 SDG:HADUP EPA:HATB
s. £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 2 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

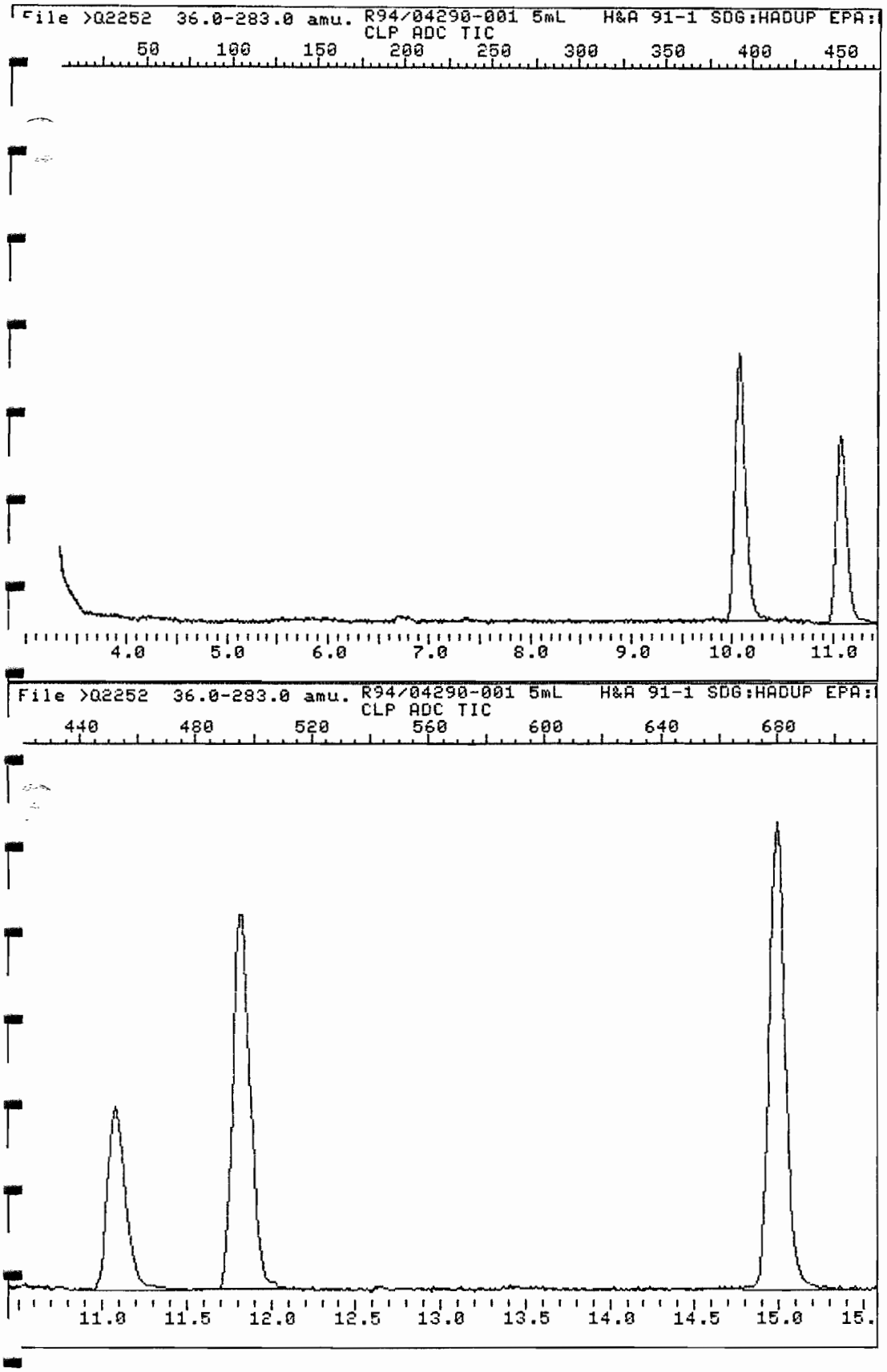
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	743156.	10.06	3.33 - 10.94
2	50.0	1045432.	11.83	10.94 - 15.08
3	50.0	1145344.	18.34	15.08 - 27.01

Dilution Factor = 1.00 This sample was 5.00000 g or mL

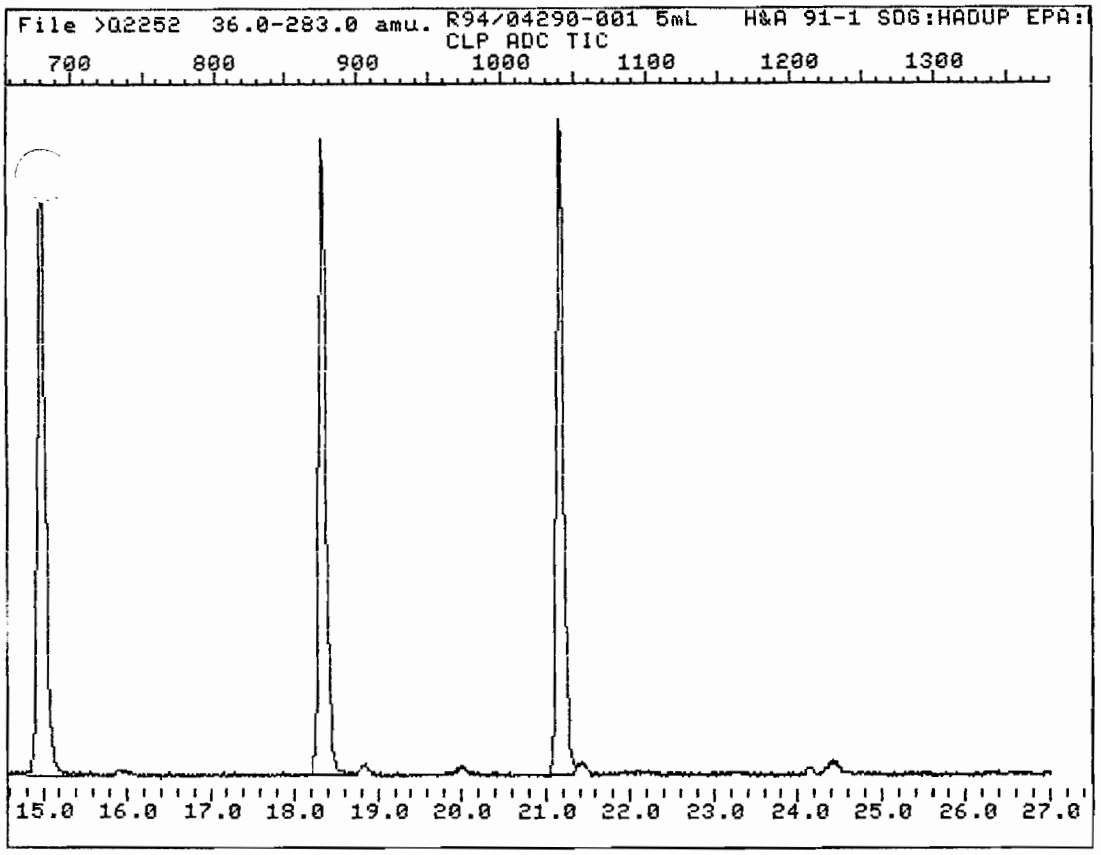
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:10 AM TUE., 15 NOV., 1994



Instrument ID: MS5 Analyzed on: 11/08/94 23:49



Instrument ID: MS5 Analyzed on: 11/08/94 23:49

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2259

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	3.	J
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-9

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2259

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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000071

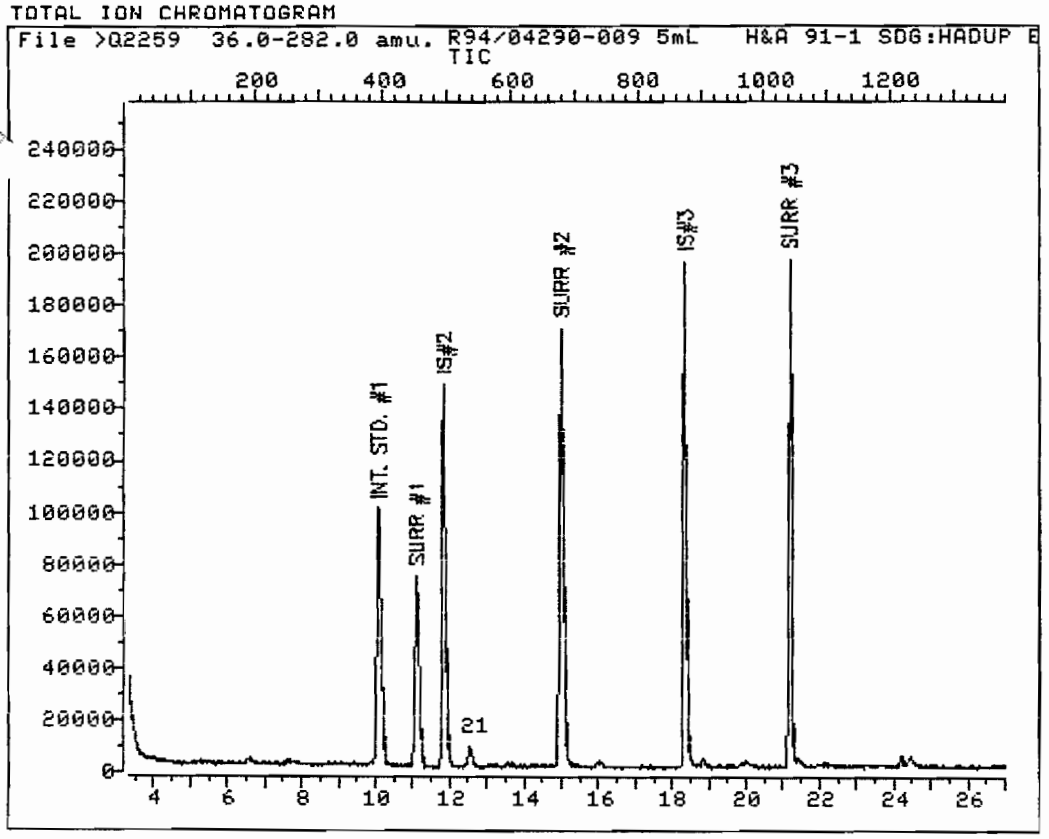
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:13
Output File: ^Q2259::D4 Injected at: 941109 04:02
Data File: >Q2259::D4 Dilution Factor: 1.00000
Name: R94/04290-009 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW1

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.08	128.0	88397	50.00	ppb	92
16)	1,2-Dichloroethane-d4	11.09	65.0	186848	48.89	ppb	92
17)	*1,4-Difluorobenzene	11.83	114.0	387126	50.00	ppb	77
21)	Trichloroethene	12.52	130.0	11942	3.35	ppb	91
29)	*Chlorobenzene-d5	18.34	117.0	343166	50.00	ppb	98
31)	Toluene-d8	14.99	98.0	366883	46.58	ppb	90
41)	Bromofluorobenzene	21.17	95.0	240444	49.16	ppb	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

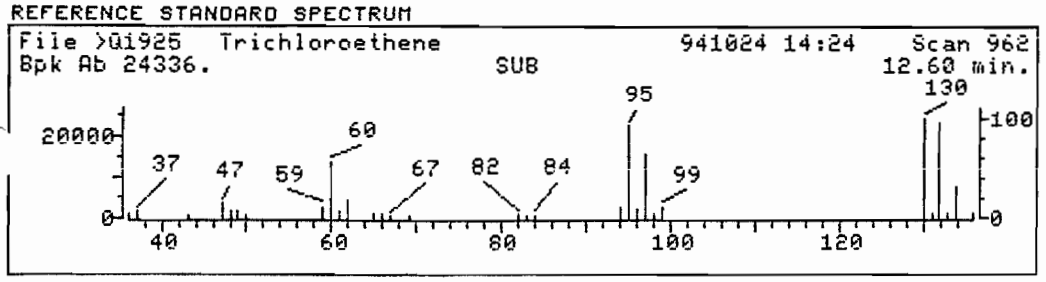


Data File: >Q2259::D4 Quant Output File: ^Q2259::D4
Name: R94/04290-009 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW1

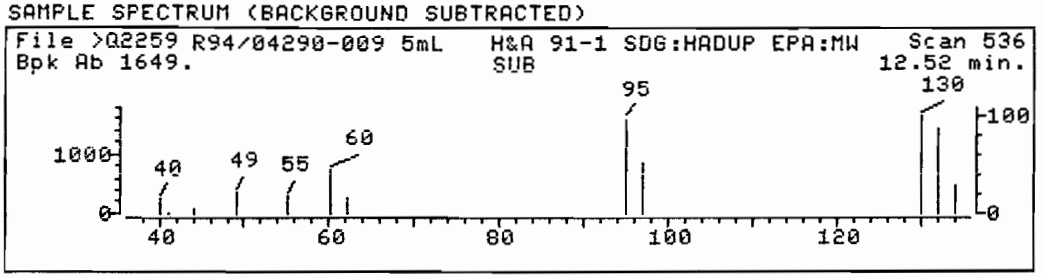
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:13
Injected at: 941109 04:02

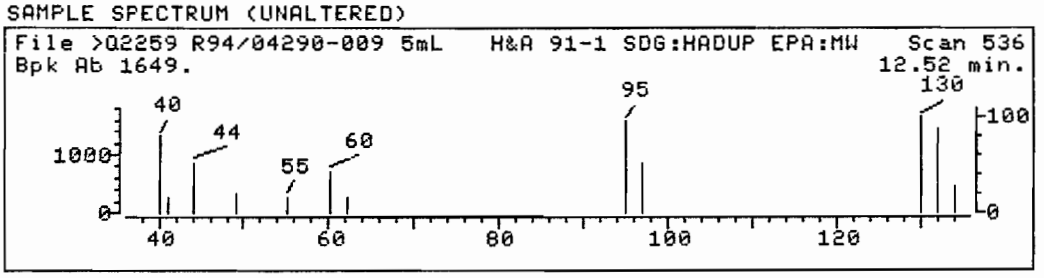
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2259::D4 Quant Output File: ^Q2259::D4
Name: R94/04290-009 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW1
Quant Time: 941109 07:13 Quant ID File: IDECLP::QT
Injected at: 941109 04:02 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 536
Retention Time: 12.52 min.
Quant Ion : 130.0
Area : 11942
Concentration : 3.35 ppb
q-value : 91

MS data file header from : >Q2259::D4

Sample: R94/04290-009 5mL Operator: RODH 11/09/94 4:02
Misc : H&A 91-1 SDG:HADUP EPA:MW1
s. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 9 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

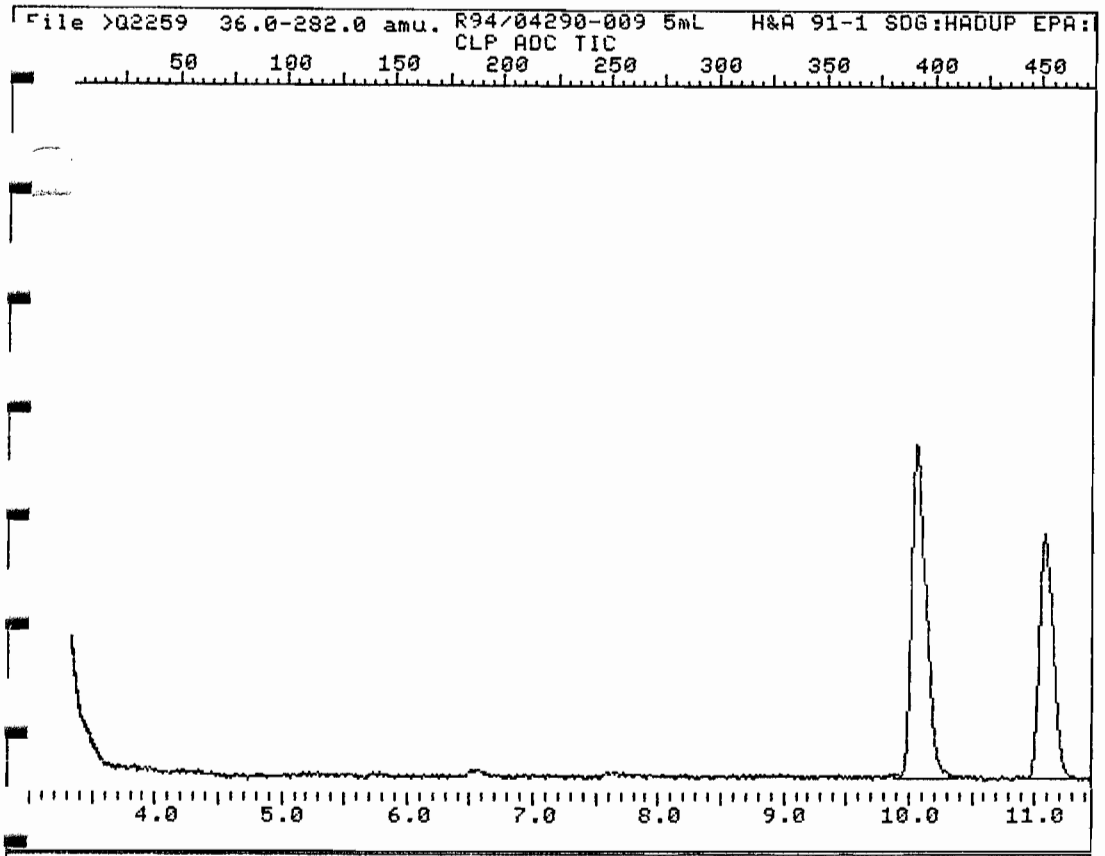
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	724707.	10.08	3.33 - 10.95
2	50.0	1041238.	11.83	10.95 - 15.08
3	50.0	1139391.	18.34	15.08 - 27.01

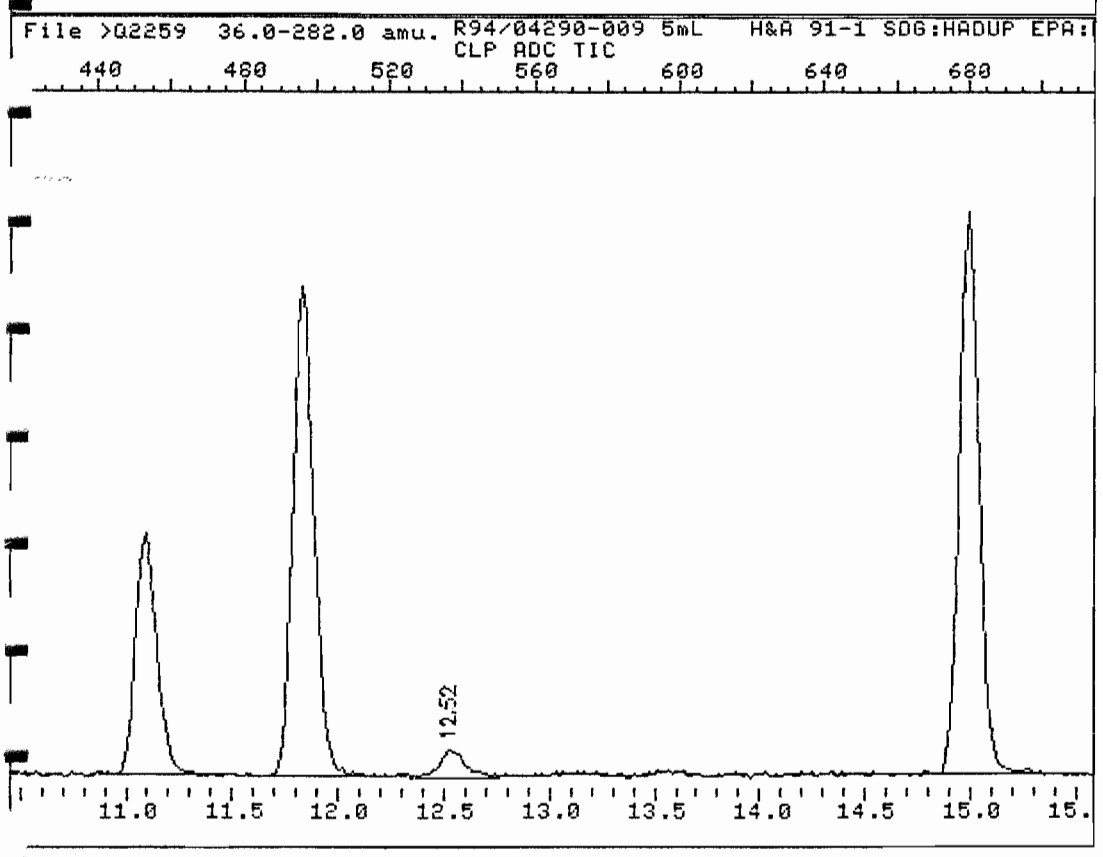
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

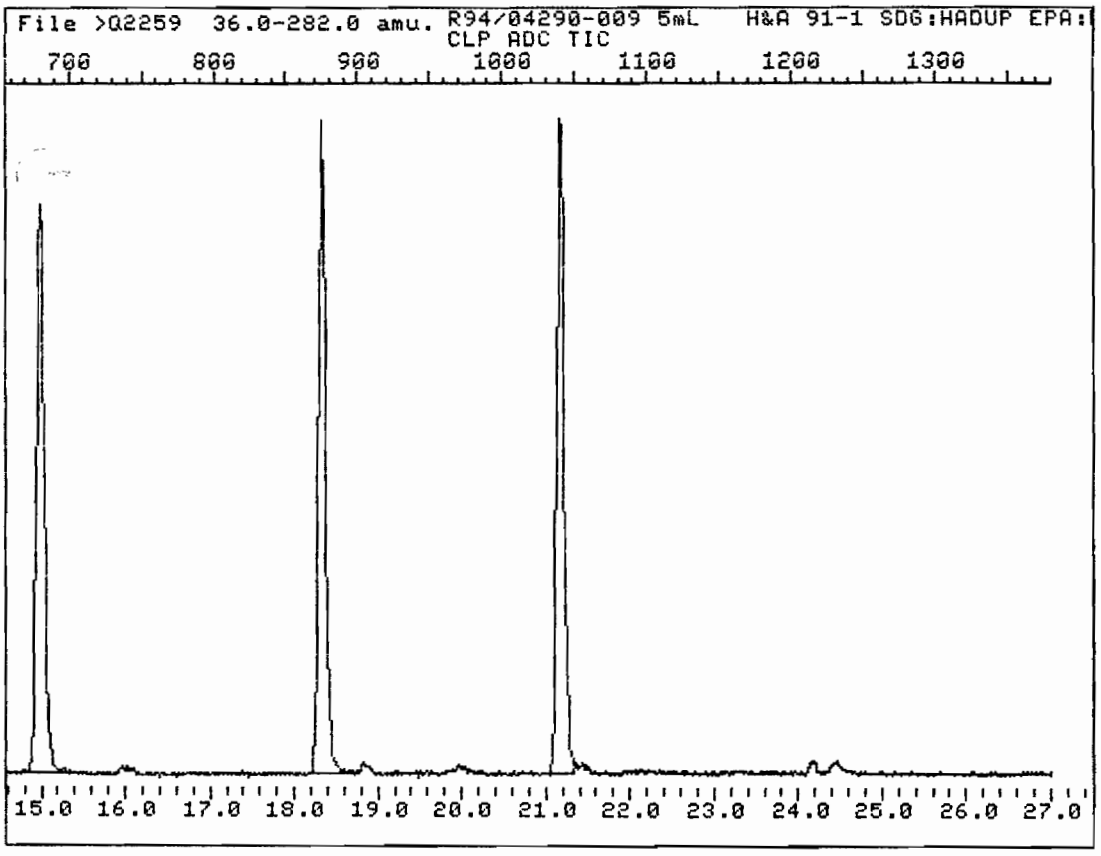
1:30 AM TUE., 15 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/09/94 4:02

000078



Instrument ID: MS5 Analyzed on: 11/09/94 4:02

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2258

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	29.	
71-55-6	1,1,1-Trichloroethane	6.	J
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	420.	E
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

EPA SAMPLE NO.

MW2

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-8

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2258

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	0	Unknown	14.06	10.	J
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.					

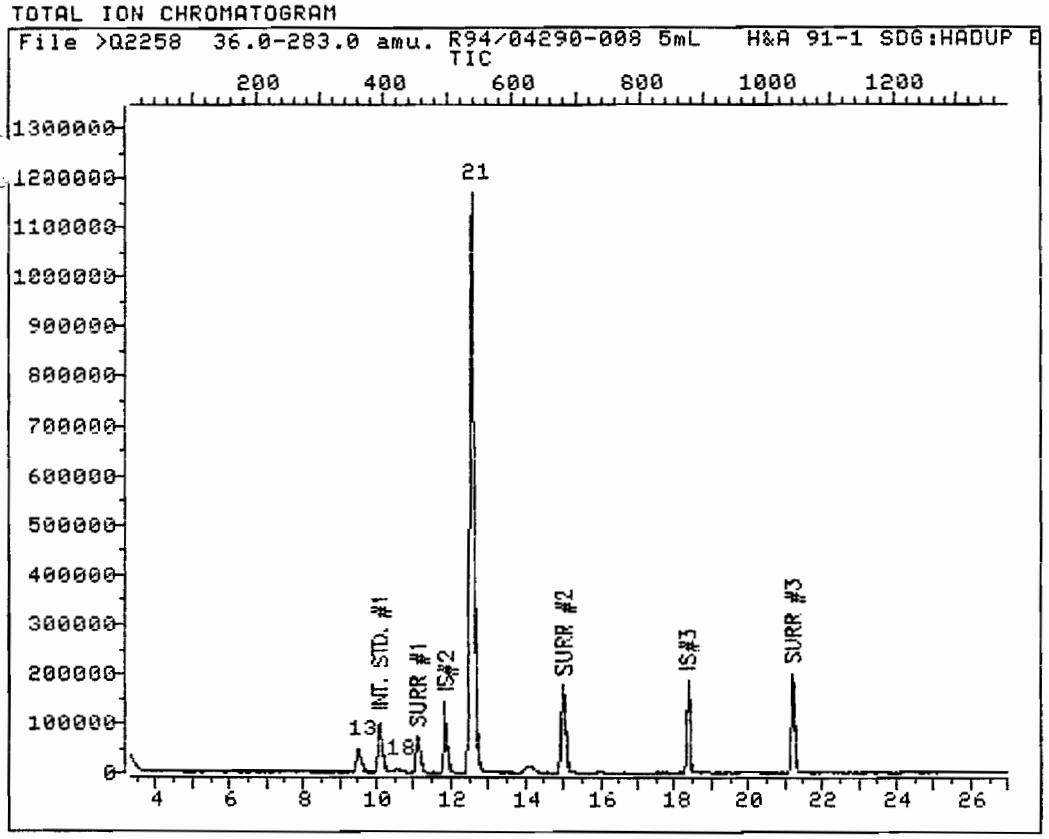
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:11
Output File: ^Q2258::D4 Injected at: 941109 03:26
Data File: >Q2258::D4 Dilution Factor: 1.00000
Name: R94/04290-008 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.08	128.0	89172	50.00	ppb	93
13)	cis-1,2-Dichloroethene	9.49	96.0	75624	29.49	ppb	96
16)	1,2-Dichloroethane-d4	11.09	65.0	185386	48.09	ppb	92
17)	*1,4-Difluorobenzene	11.85	114.0	379142	50.00	ppb	77
18)	1,1,1-Trichloroethane	10.54	97.0	26234	6.41	ppb	93
21)	Trichloroethene	12.55	130.0	1457528	417.93	ppb	97
29)	*Chlorobenzene-d5	18.35	117.0	335804	50.00	ppb	95
31)	Toluene-d8	15.01	98.0	379412	49.23	ppb	87
41)	Bromofluorobenzene	21.19	95.0	234597	49.01	ppb	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM

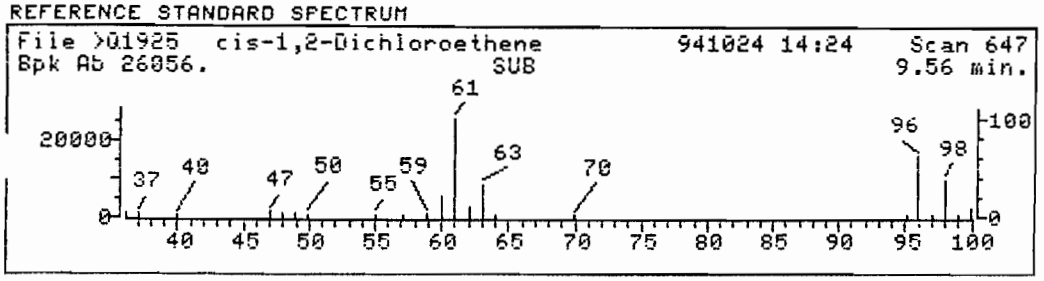


Data File: >Q2258::D4 Quant Output File: ^Q2258::D4
Name: R94/04290-008 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2

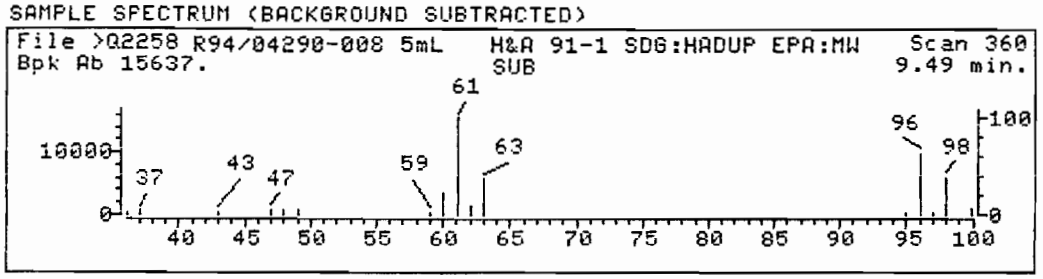
Id File: IDECLP::QT
Title: Volatile Organics on MSf5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:11
Injected at: 941109 03:26

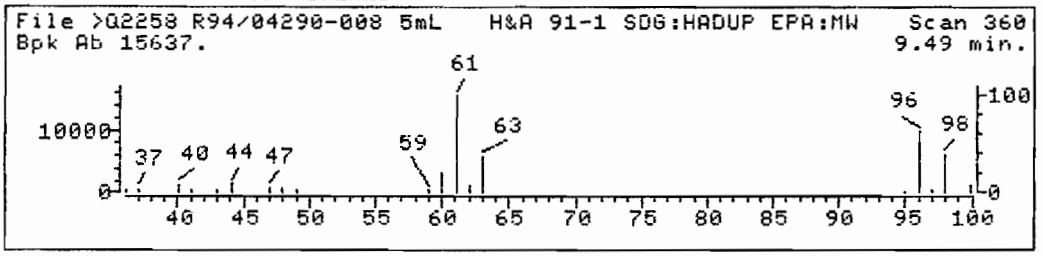
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



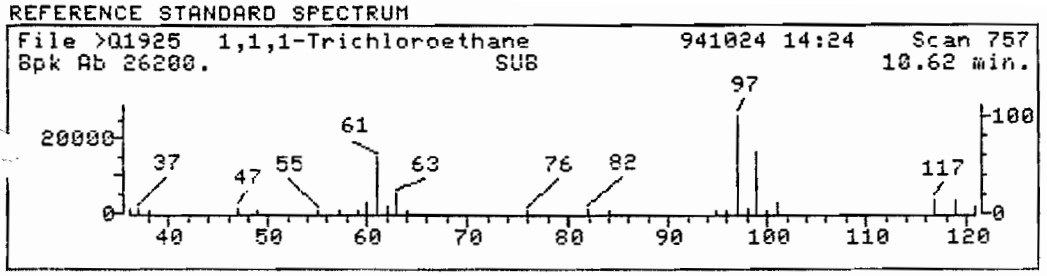
SAMPLE SPECTRUM (UNALTERED)



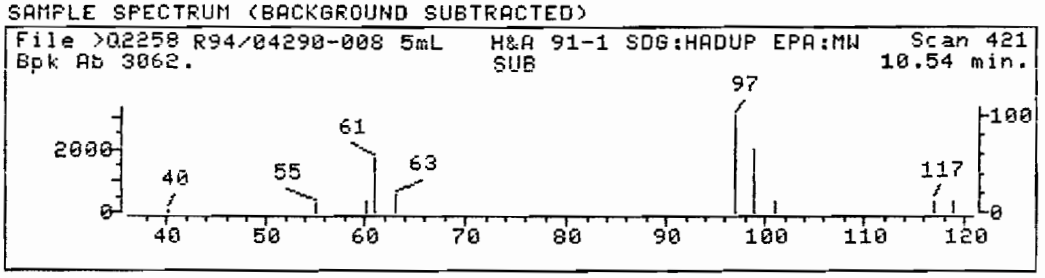
Data File: >Q2258::D4 Quant Output File: ^Q2258::D4
Name: R94/04290-008 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2
Quant Time: 941109 07:11 Quant ID File: IDECLP::QT
Injected at: 941109 03:26 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 360
Retention Time: 9.49 min.
Quant Ion : 96.0
Area : 75624
Concentration : 29.49 ppb
q-value : 96

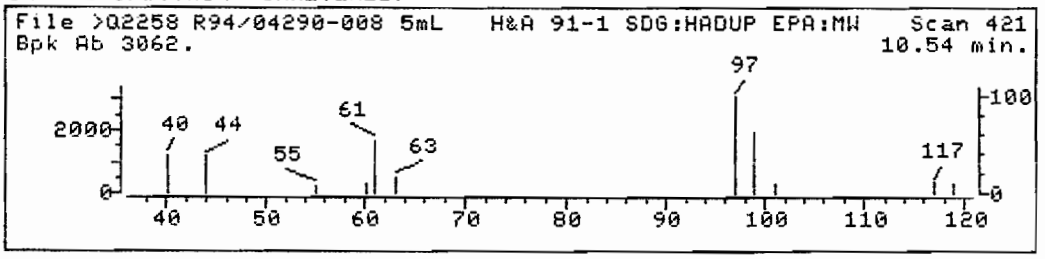
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



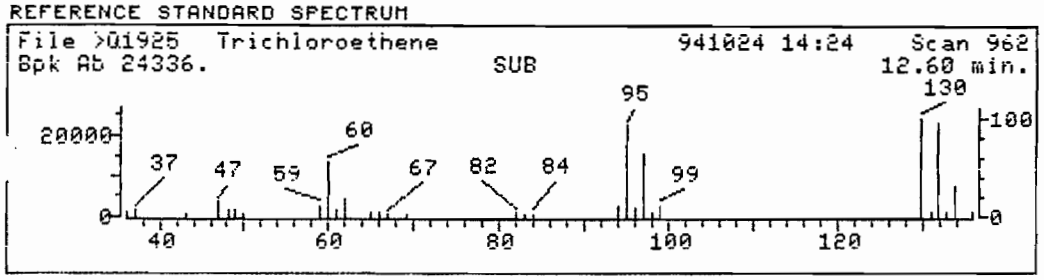
SAMPLE SPECTRUM (UNALTERED)



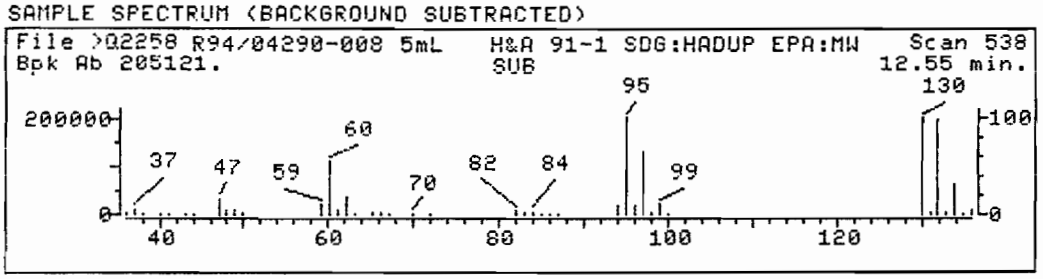
Data File: >Q2258::D4 Quant Output File: ^Q2258::D4
Name: R94/04290-008 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2
Quant Time: 941109 07:11 Quant ID File: IDECLP::QT
Injected at: 941109 03:26 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 421
Retention Time: 10.54 min.
Quant Ion : 97.0
Area : 26234
Concentration : 6.41 ppb
q-value : 93

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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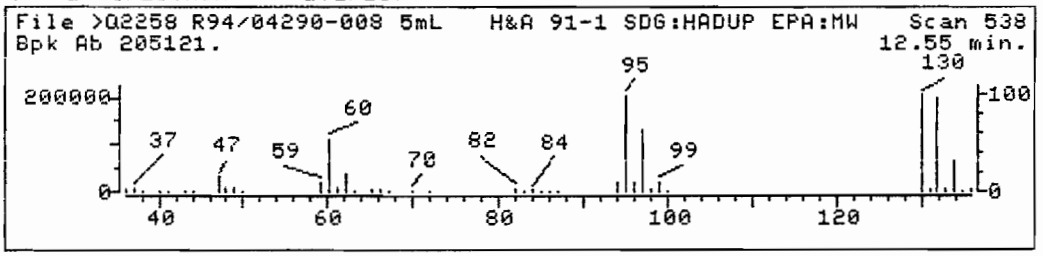


Data File: >Q2258::D4 Quant Output File: ^Q2258::D4
Name: R94/04290-008 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2
Quant Time: 941109 07:11 Quant ID File: IDECLP::QT
Injected at: 941109 03:26 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 538
Retention Time: 12.55 min.
Quant Ion : 130.0
Area : 1457528
Concentration : 417.93 ppb
q-value : 97

MS data file header from : >Q2258::D4

Sample: R94/04290-008 5mL Operator: RODH 11/09/94 3:26
Misc : H&A 91-1 SDG:HADUP EPA:MW2
Vs. £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 8 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q2258 R94/04290-008 5mL H&A 91-1 SDG:HADUP EPA:MW2
36.0ù 283.0 CLP TIC
Upslope: .2000 Area Reject: 71899. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ2258 Sorted by Time/Area INT

Peak £	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	14.06	613	626	646	14065	278363	205722	100.00	100.000

Sum of corrected areas: 205722.

Summary of Unknowns PBM Library Search and Quantitation

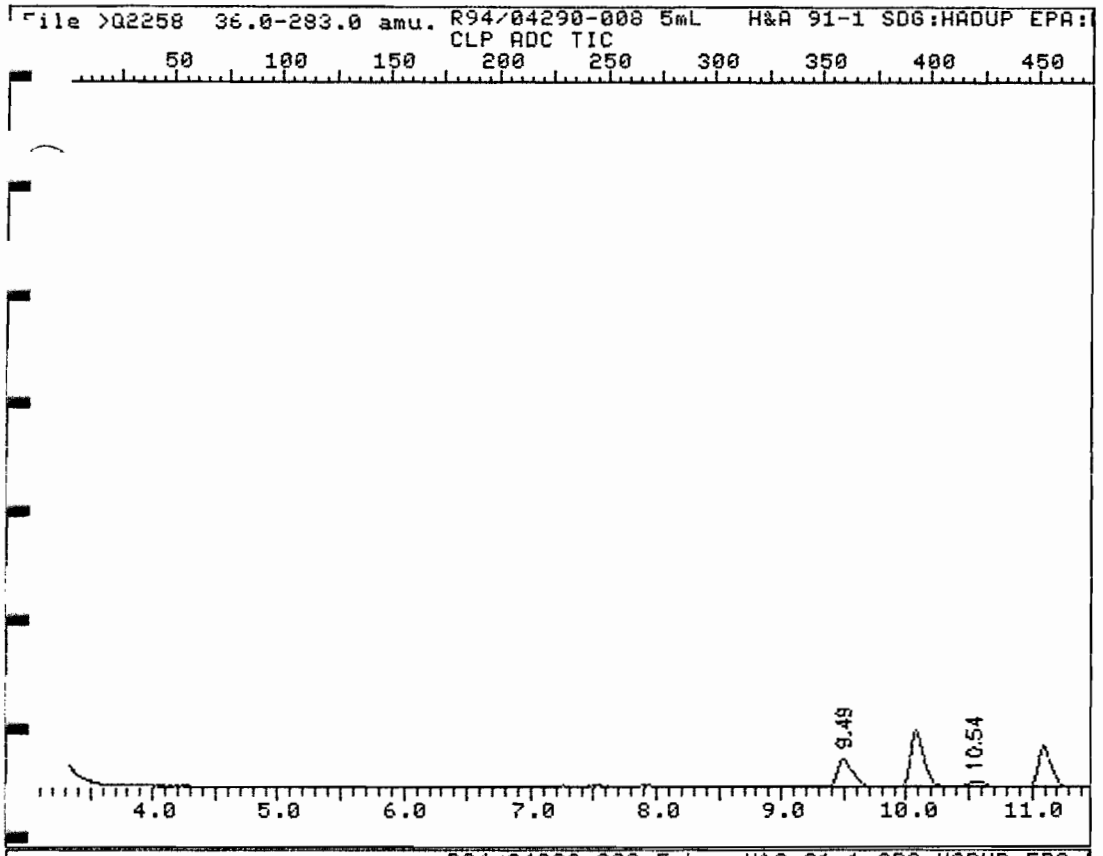
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	718992.	10.08	3.33 - 10.96
2	50.0	1015990.	11.85	10.96 - 15.10
3	50.0	1131361.	18.35	15.10 - 26.99

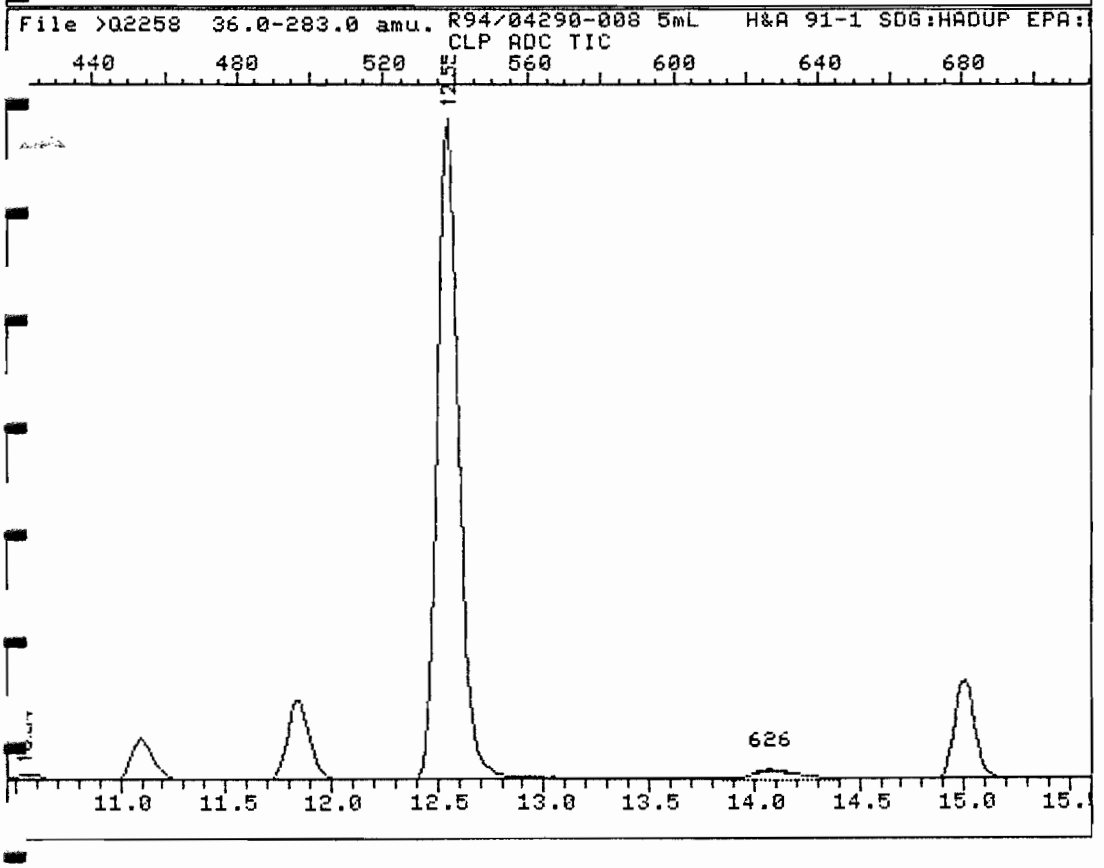
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

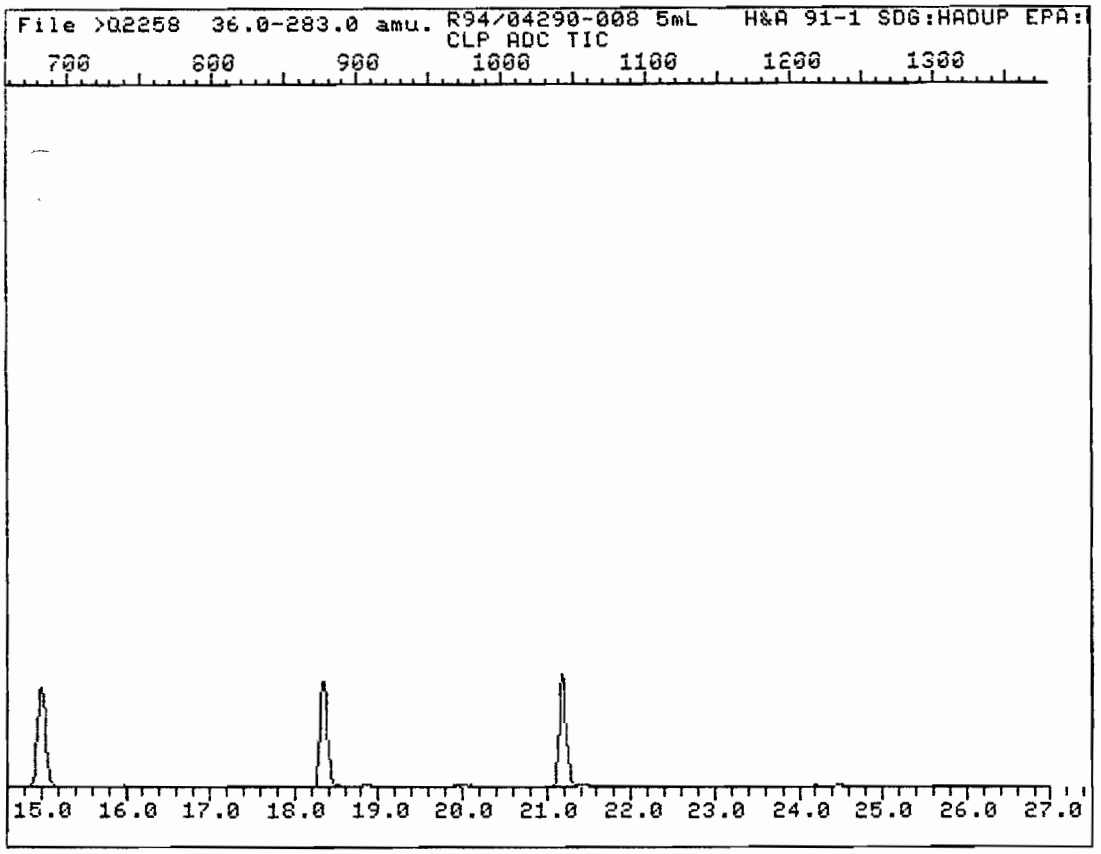
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:14 AM TUE., 15 NOV., 1994

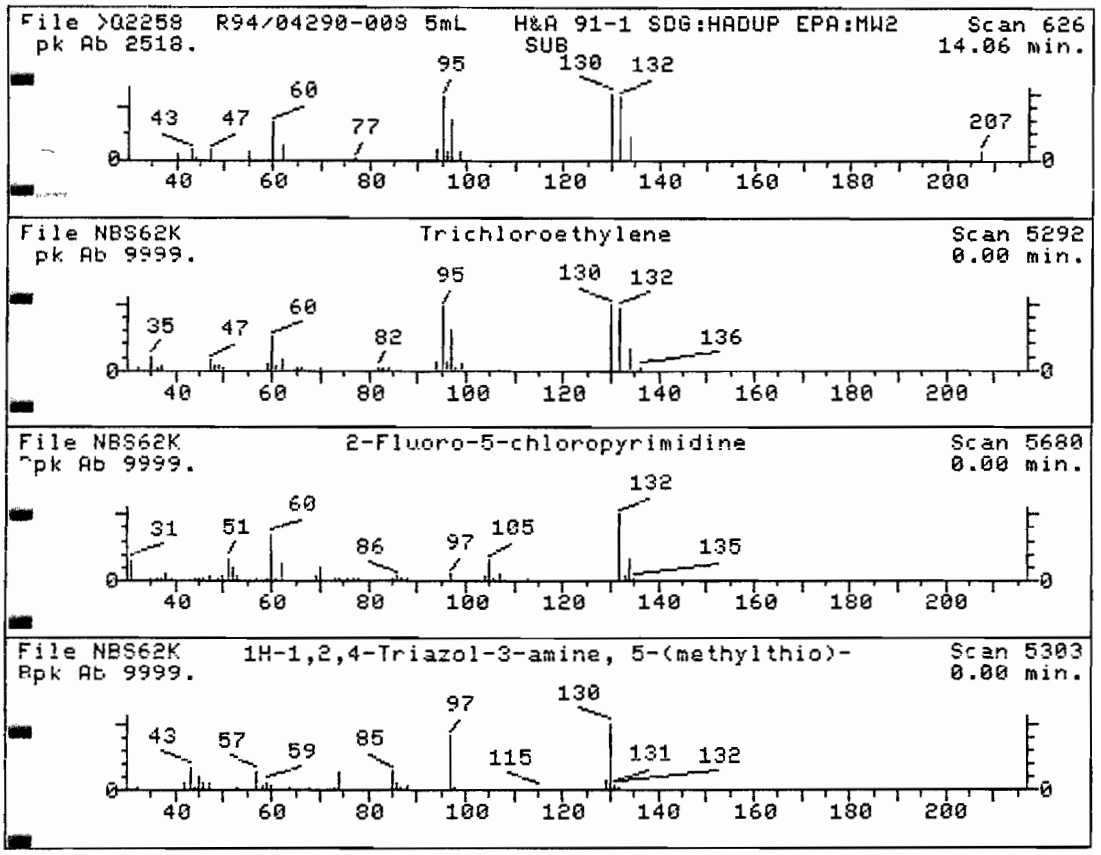




Instrument ID: MS5 Analyzed on: 11/09/94 3:26



Instrument ID: MS5 Analyzed on: 11/09/94 3:26



Instrument ID: MS5 Analyzed on: 11/09/94 3:26

Result 1 in PBM results file: LQ2258

Retention Time: 14.06 Area: 205722 Tentative Conc: 10.00

The unknown area is 20.25% of the nearest internal standard

1.	Trichloroethylene	130 C2HCl3
2.	2-Fluoro-5-chloropyrimidine	132 C4H2ClFN2
3.	1H-1,2,4-Triazol-3-amine, 5-(methylthio)-	130 C3H6N4S

Sample file: >Q2258 Spectrum £: 626

Search speed: 1 Tilting option: N No. of ion ranges searched: 44

	Prob.	CAS £	CON £	ROOT	K	DK	£FLG	TILT	%	CON	C_I	R_IV
1.	88*	79016	19537	NBS62K	93	42	3	0	97	2	65	59

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-8DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2269

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene chloride	50.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
156-60-5	trans-1,2-Dichloroethene	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	50.	U
156-59-2	cis-1,2-Dichloroethene	31.	DJ
71-55-6	1,1,1-Trichloroethane	50.	U
56-23-5	Carbon tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	500.	D
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
50061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	(m+p)Xylene	50.	U
95-47-6	o-Xylene	50.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW2DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-8DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2269

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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17.					
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27.					
28.					
29.					
30.					

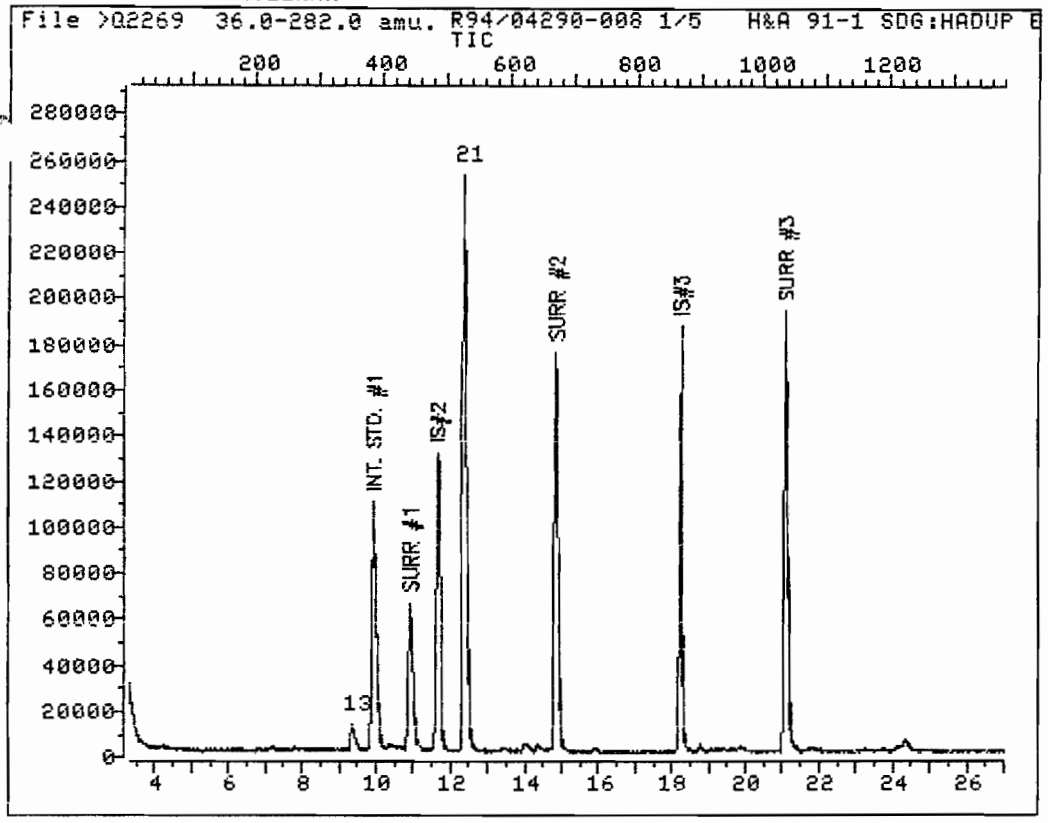
Operator ID: TOMT Quant Rev: 7 Quant Time: 941109 13:52
Output File: ^Q2269::D5 Injected at: 941109 13:13
Data File: >Q2269::D5 Dilution Factor: 1.00000
Name: R94/04290-008 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2DL

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.94	128.0	93267	50.00	ppb	92
13)	cis-1,2-Dichloroethene	9.39	96.0	17063	6.25	ppb	94
16)	1,2-Dichloroethane-d4	10.94	65.0	168063	40.86	ppb	89
17)	*1,4-Difluorobenzene	11.66	114.0	347633	50.00	ppb	77
21)	Trichloroethene	12.38	130.0	323315	100.40	ppb	97
29)	*Chlorobenzene-d5	18.22	117.0	339842	50.00	ppb	96
31)	Toluene-d8	14.85	98.0	383245	50.03	ppb	87
41)	Bromofluorobenzene	21.08	95.0	237385	49.96	ppb	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM

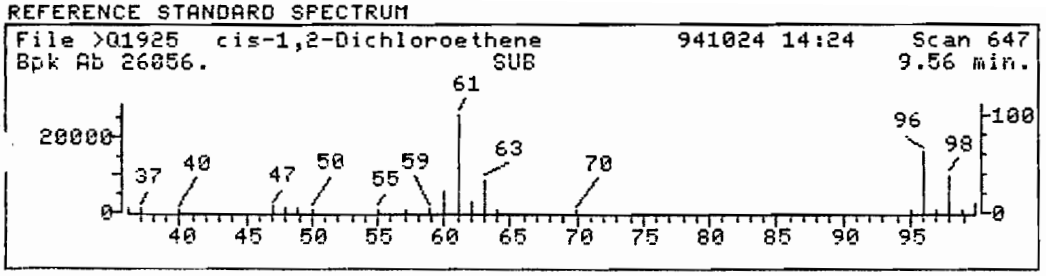


Data File: >Q2269::D5 Quant Output File: ^Q2269::D5
Name: R94/04290-008 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2DL

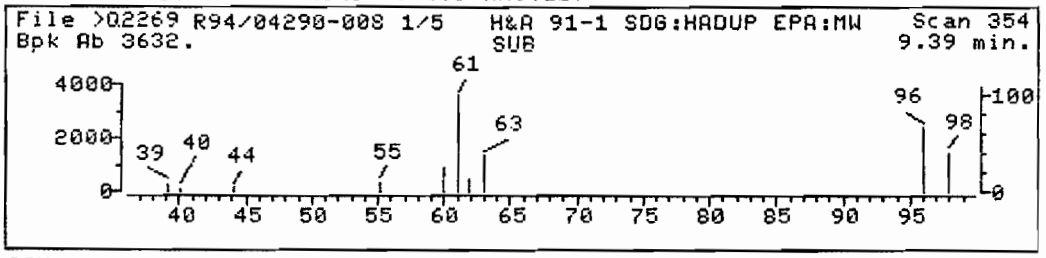
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

Operator ID: TOMT
Quant Time : 941109 13:52
Injected at: 941109 13:13

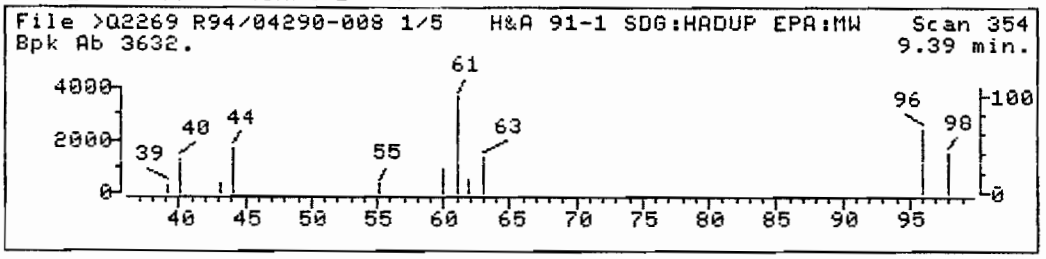
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



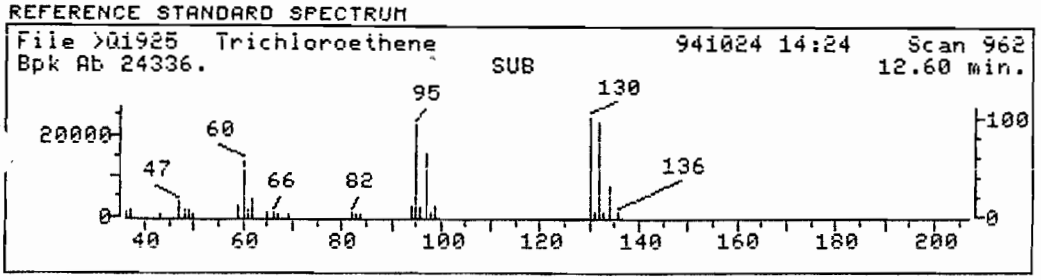
SAMPLE SPECTRUM (UNALTERED)



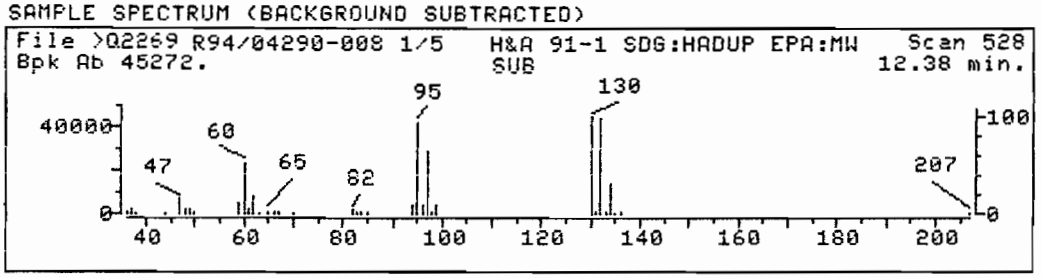
Data File: >Q2269::D5 Quant Output File: ^Q2269::D5
Name: R94/04290-008 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2DL
Quant Time: 941109 13:52 Quant ID File: IDECLP::QT
Injected at: 941109 13:13 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 354
Retention Time: 9.39 min.
Quant Ion : 96.0
Area : 17063
Concentration : 6.25 ppb
q-value : 94

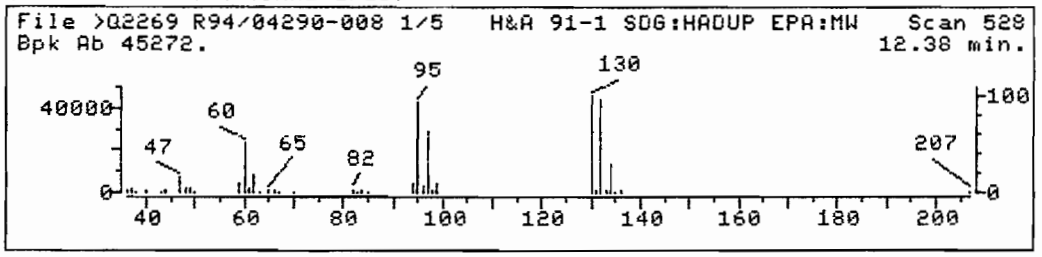
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2269::D5 Quant Output File: ^Q2269::D5
Name: R94/04290-008 1/5 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW2DL
Quant Time: 941109 13:52 Quant ID File: IDECLP::QT
Injected at: 941109 13:13 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 528
Retention Time: 12.38 min.
Quant Ion : 130.0
Area : 323315
Concentration : 100.40 ppb
q-value : 97

MS data file header from : >Q2269::D5

Sample: R94/04290-008 1/5 Operator: TOMT 11/09/94 13:13
Misc : H&A 91-1 SDG:HADUP EPA:MW2DL
Vol. £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 2 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

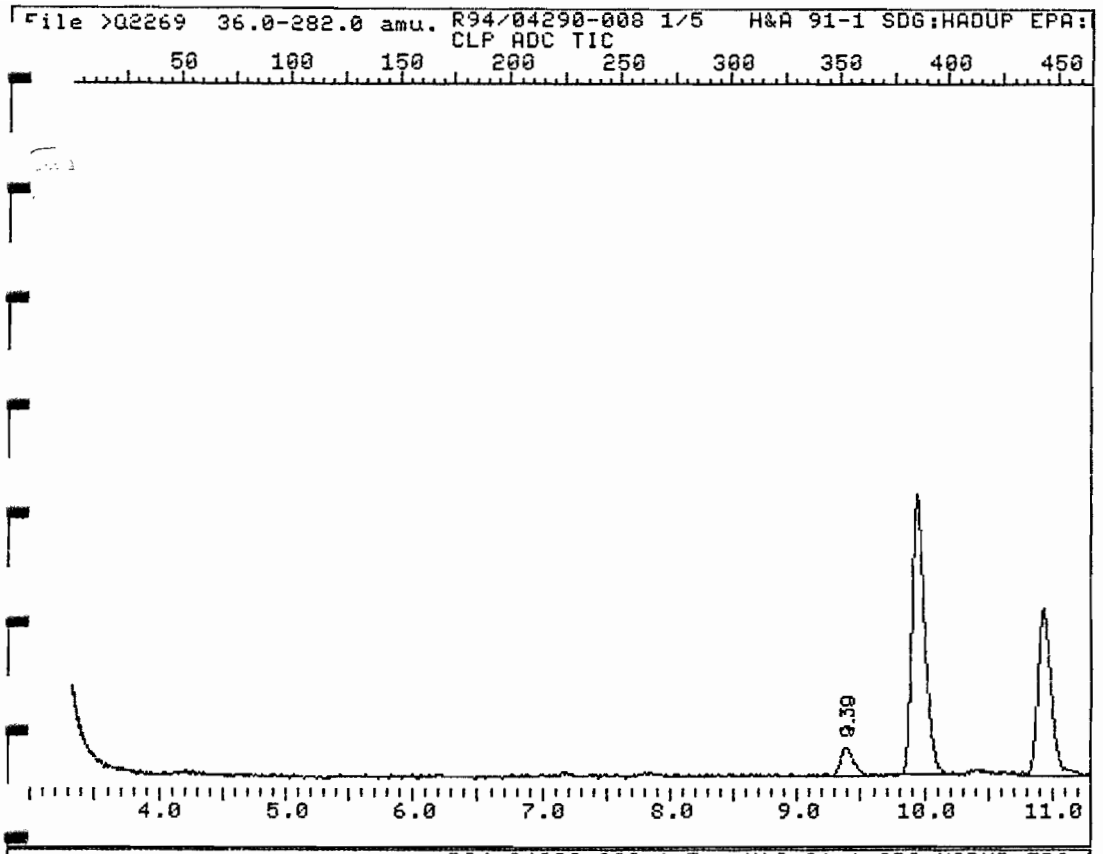
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	772753.	9.94	3.33 - 10.80
2	50.0	936792.	11.66	10.80 - 14.94
3	50.0	1125795.	18.22	14.94 - 27.01

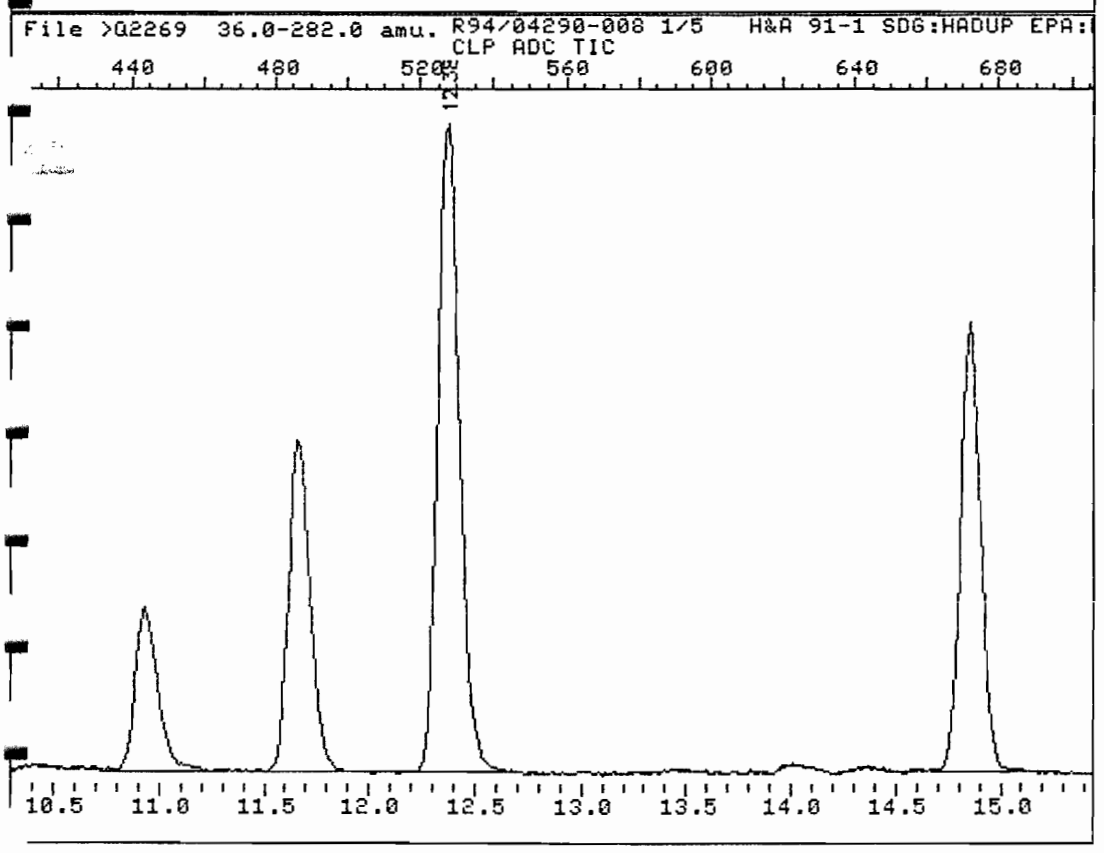
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 5.00

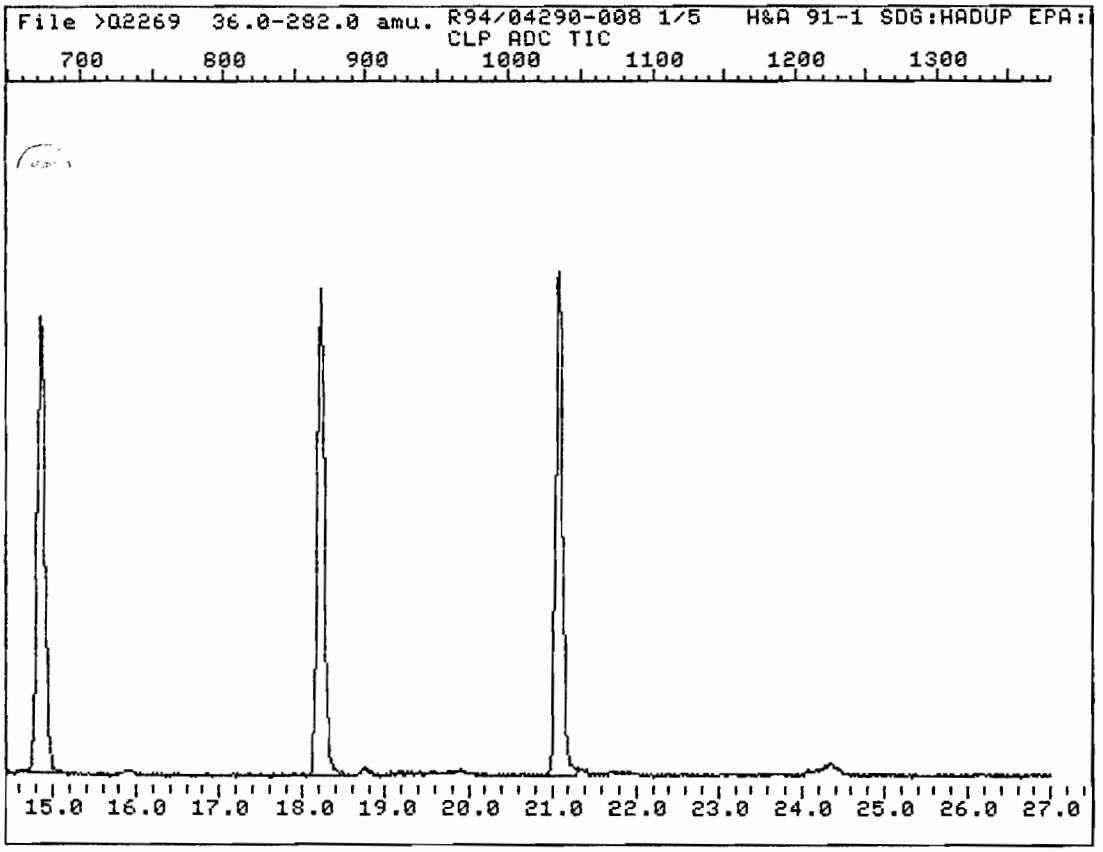
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:23 AM TUE., 15 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/09/94 13:13



Instrument ID: MS5 Analyzed on: 11/09/94 13:13

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW201D

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2254

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	250.	U
74-83-9	Bromomethane	250.	U
75-01-4	Vinyl chloride	250.	U
75-00-3	Chloroethane	250.	U
75-09-2	Methylene chloride	250.	U
67-64-1	Acetone	250.	U
75-15-0	Carbon Disulfide	250.	U
75-35-4	1,1-Dichloroethene	250.	U
75-34-3	1,1-Dichloroethane	250.	U
156-60-5	trans-1,2-Dichloroethene	250.	U
67-66-3	Chloroform	250.	U
107-06-2	1,2-Dichloroethane	250.	U
78-93-3	2-Butanone	250.	U
156-59-2	cis-1,2-Dichloroethene	830.	
71-55-6	1,1,1-Trichloroethane	100.	J
56-23-5	Carbon tetrachloride	250.	U
75-27-4	Bromodichloromethane	250.	U
78-87-5	1,2-Dichloropropane	250.	U
10061-01-5	cis-1,3-Dichloropropene	250.	U
79-01-6	Trichloroethene	4000.	
124-48-1	Dibromochloromethane	250.	U
79-00-5	1,1,2-Trichloroethane	250.	U
71-43-2	Benzene	250.	U
50061-02-6	trans-1,3-Dichloropropene	250.	U
75-25-2	Bromoform	250.	U
108-10-1	4-Methyl-2-Pentanone	250.	U
591-78-6	2-Hexanone	250.	U
127-18-4	Tetrachloroethene	61.	J
79-34-5	1,1,2,2-Tetrachloroethane	250.	U
108-88-3	Toluene	250.	U
108-90-7	Chlorobenzene	250.	U
100-41-4	Ethylbenzene	250.	U
100-42-5	Styrene	250.	U
108-38-3	(m+p)Xylene	250.	U
95-47-6	o-Xylene	250.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: MW201D

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-3

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2254

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

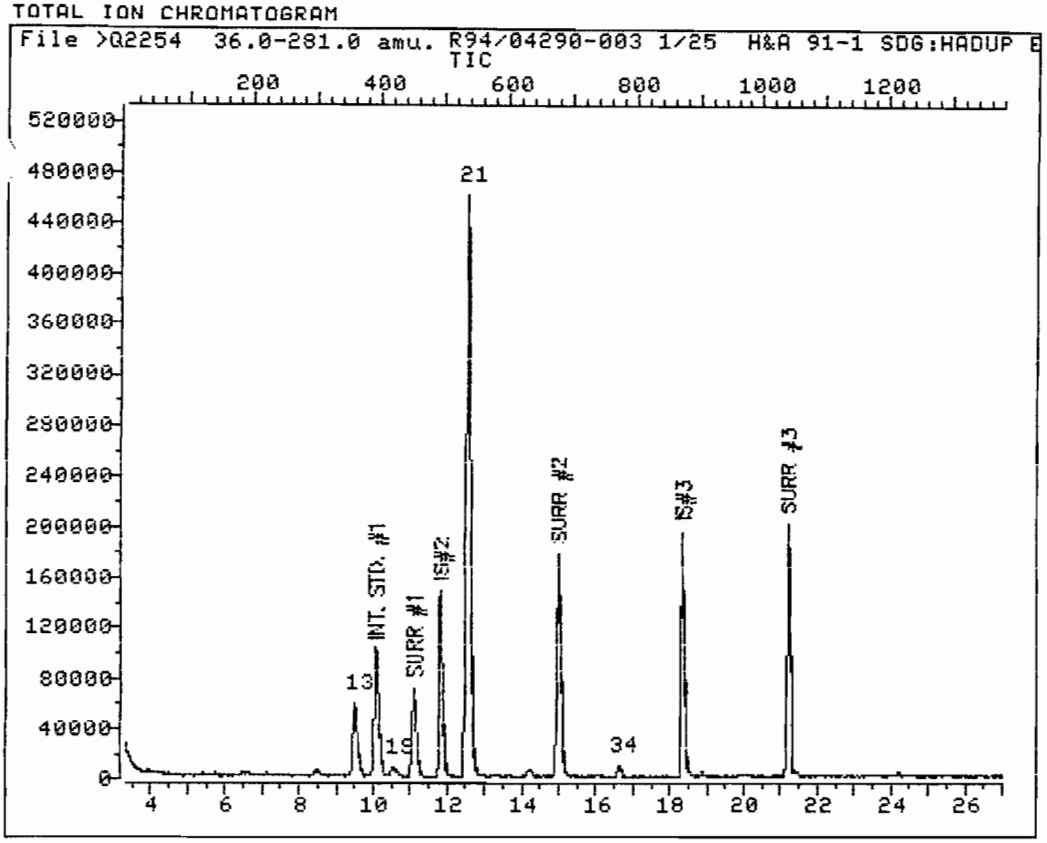
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:05
Output File: ^Q2254::D4 Injected at: 941109 01:01
Data File: >Q2254::D4 Dilution Factor: 1.00000
ne: R94/04290-003 1/25 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW201D

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.08	128.0	90805	50.00	ppb	93
13)	cis-1,2-Dichloroethene	9.49	96.0	86718	33.21	ppb	99
16)	1,2-Dichloroethane-d4	11.09	65.0	186692	47.56	ppb	89
17)	*1,4-Difluorobenzene	11.83	114.0	395874	(DL) 50.00	ppb	79
18)	1,1,1-Trichloroethane	10.56	97.0	17414M	11/15/94 4.08	ppb	
21)	Trichloroethene	12.53	130.0	577459	158.58	ppb	97
29)	*Chlorobenzene-d5	18.34	117.0	348976	50.00	ppb	97
31)	Toluene-d8	14.99	98.0	390973	48.81	ppb	90
34)	Tetrachloroethene	16.62	164.0	7424	2.46	ppb	90
41)	Bromofluorobenzene	21.19	95.0	243217	48.90	ppb	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM

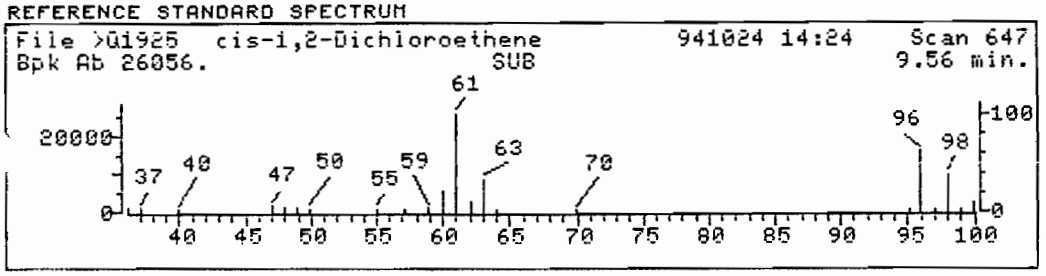


Data File: >Q2254::D4 Quant Output File: ^Q2254::D4
Name: R94/04290-003 1/25 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW201D

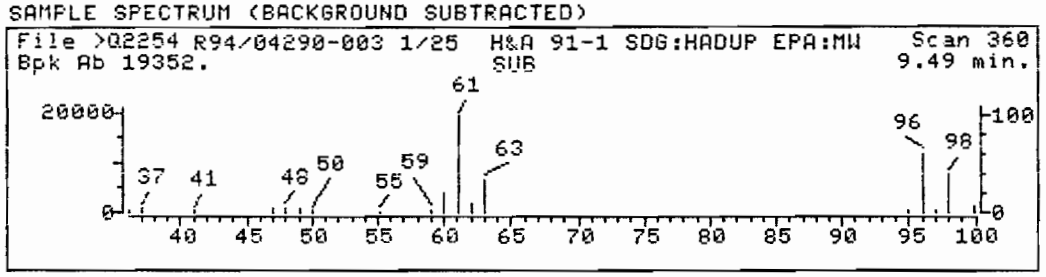
Id File: IDECLP::QT
Title: Volatile Organics on MSf5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:05
Injected at: 941109 01:01

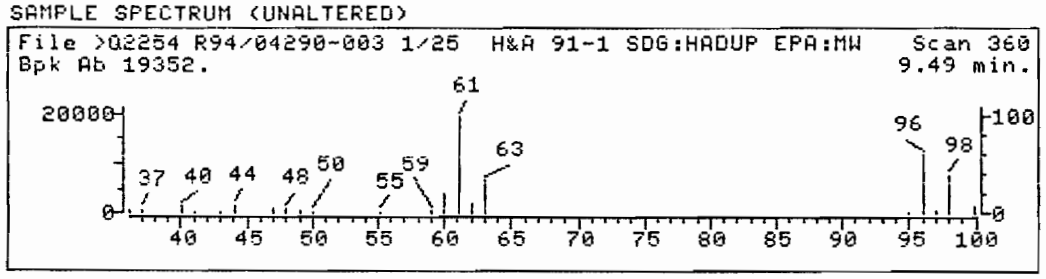
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



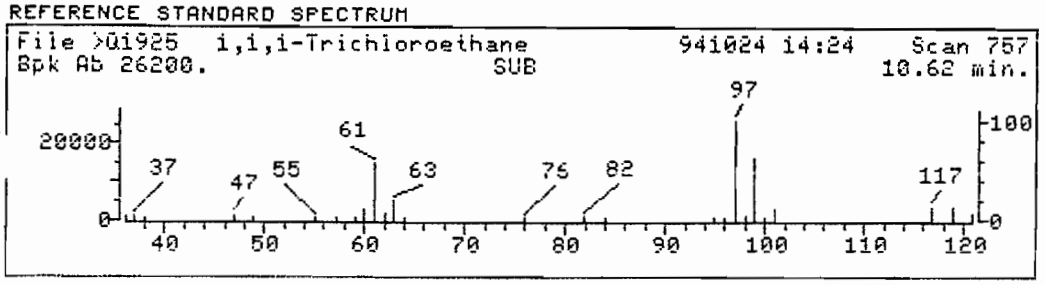
SAMPLE SPECTRUM (UNALTERED)



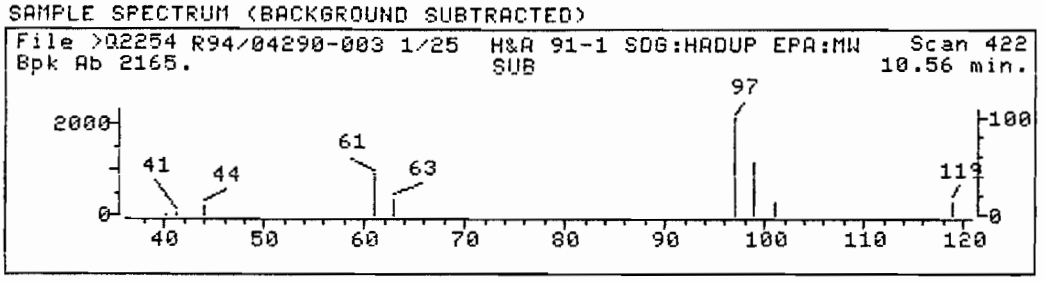
Data File: >Q2254::D4 Quant Output File: ^Q2254::D4
Name: R94/04290-003 1/25 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW201D
Quant Time: 941109 07:05 Quant ID File: IDECLP::QT
Injected at: 941109 01:01 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 360
Retention Time: 9.49 min.
Quant Ion : 96.0
Area : 86718
Concentration : 33.21 ppb
q-value : 99

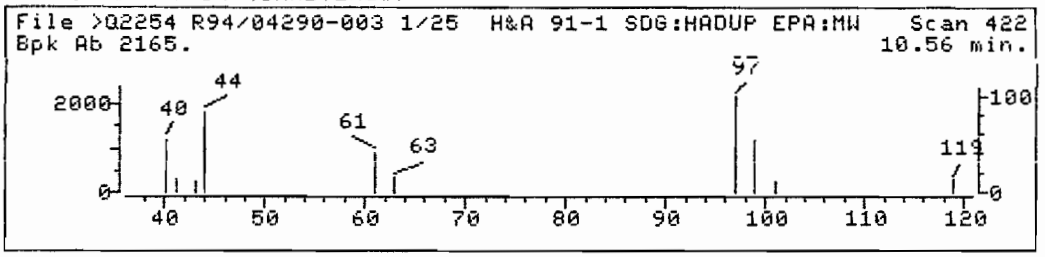
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



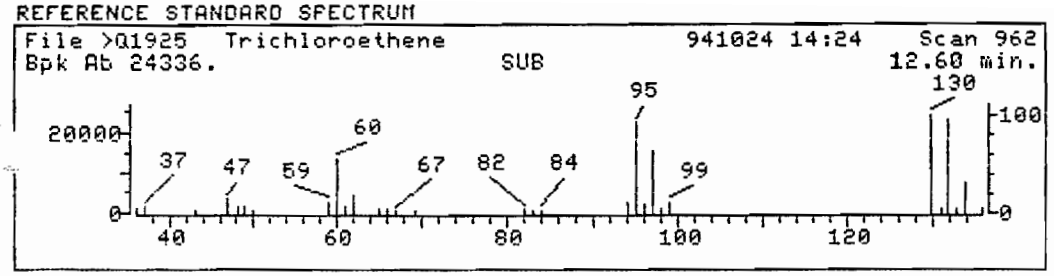
SAMPLE SPECTRUM (UNALTERED)



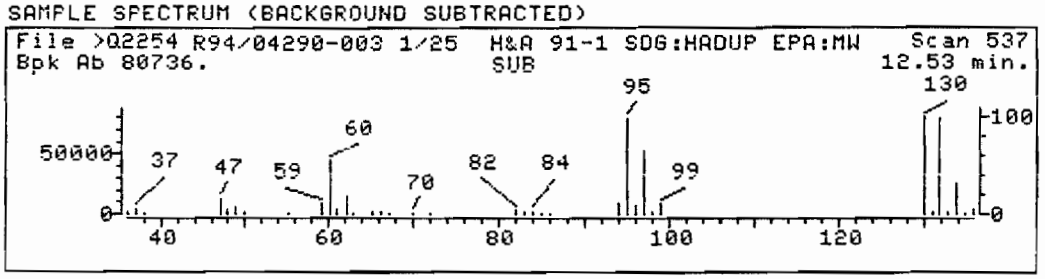
Data File: >Q2254::D4 Quant Output File: ^Q2254::D4
Name: R94/04290-003 1/25 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW201D
Quant Time: 941109 07:05 Quant ID File: IDECLP::QT
Injected at: 941109 01:01 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 422
Retention Time: 10.56 min.
Quant Ion : 97.0
Area : 17414M
Concentration : 4.08 ppb

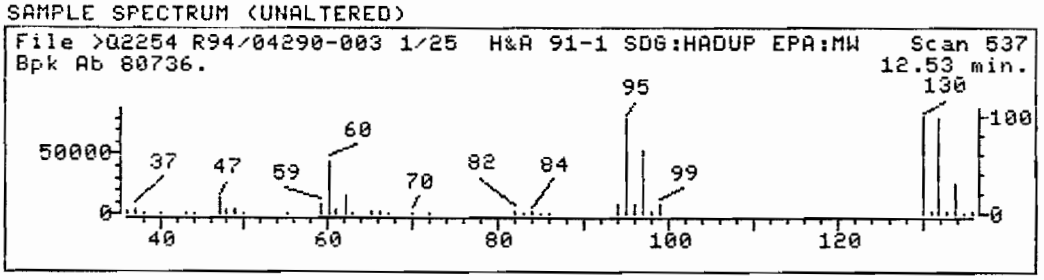
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



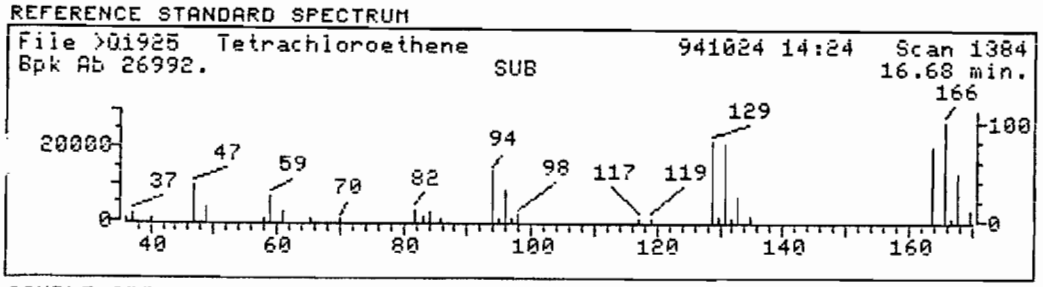
SAMPLE SPECTRUM (UNALTERED)



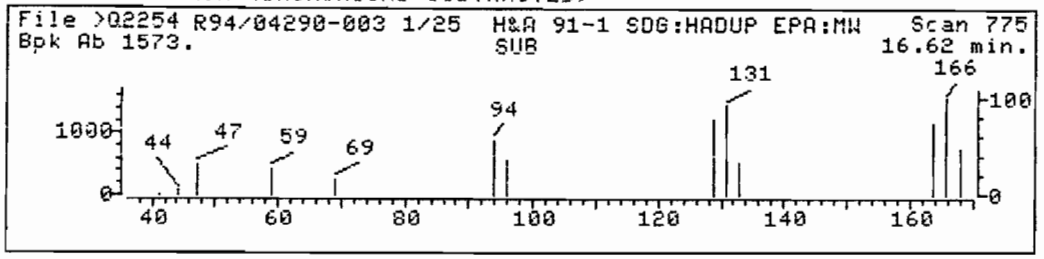
Data File: >Q2254::D4 Quant Output File: ^Q2254::D4
Name: R94/04290-003 1/25 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW201D
Quant Time: 941109 07:05 Quant ID File: IDECLP::QT
Injected at: 941109 01:01 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 537
Retention Time: 12.53 min.
Quant Ion : 130.0
Area : 577459
Concentration : 158.58 ppb
q-value : 97

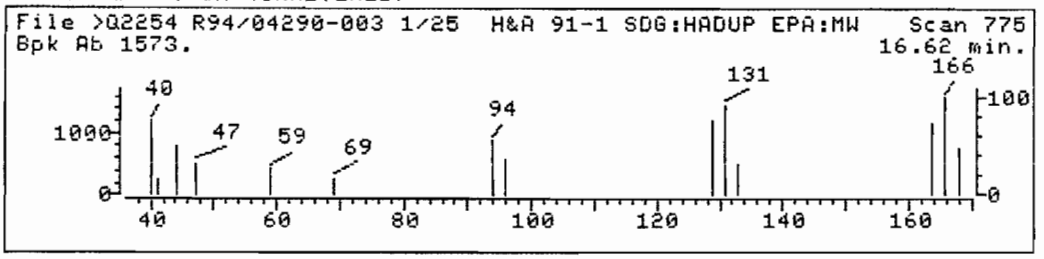
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2254::D4 Quant Output File: ^Q2254::D4
Name: R94/04290-003 1/25 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW201D
Quant Time: 941109 07:05 Quant ID File: IDECLP::QT
Injected at: 941109 01:01 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 775
Retention Time: 16.62 min.
Quant Ion : 164.0
Area : 7424
Concentration : 2.46 ppb
q-value : 90

MS data file header from : >Q2254::D4

Sample: R94/04290-003 1/25 Operator: RODH 11/09/94 1:01
Misc : H&A 91-1 SDG:HADUP EPA:MW201D
S. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 4 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

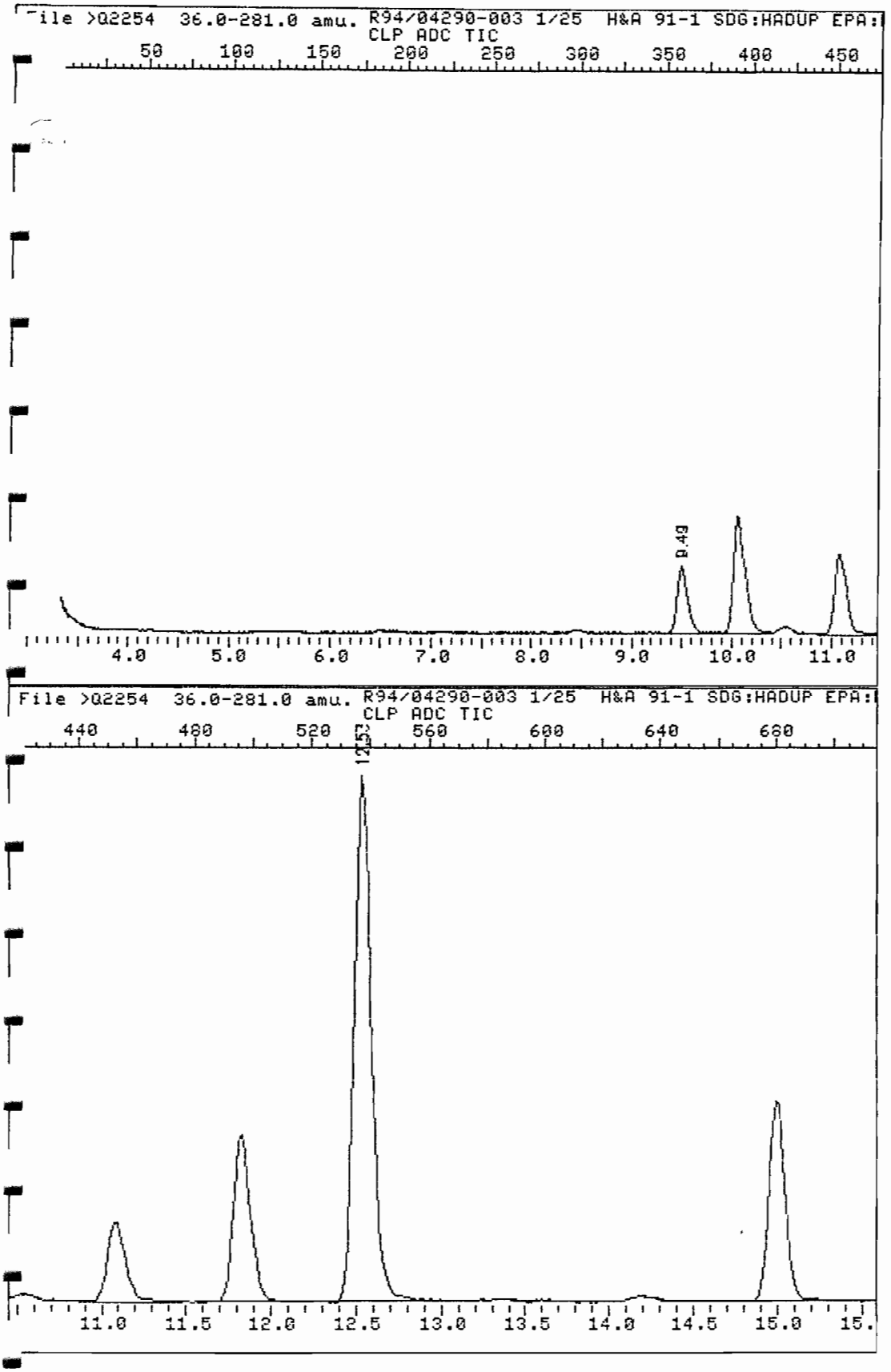
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	749722.	10.08	3.33 - 10.95
2	50.0	1048391.	11.83	10.95 - 15.08
3	50.0	1141623.	18.34	15.08 - 27.01

Dilution Factor = 1.00 This sample was 5.00000 g or mL

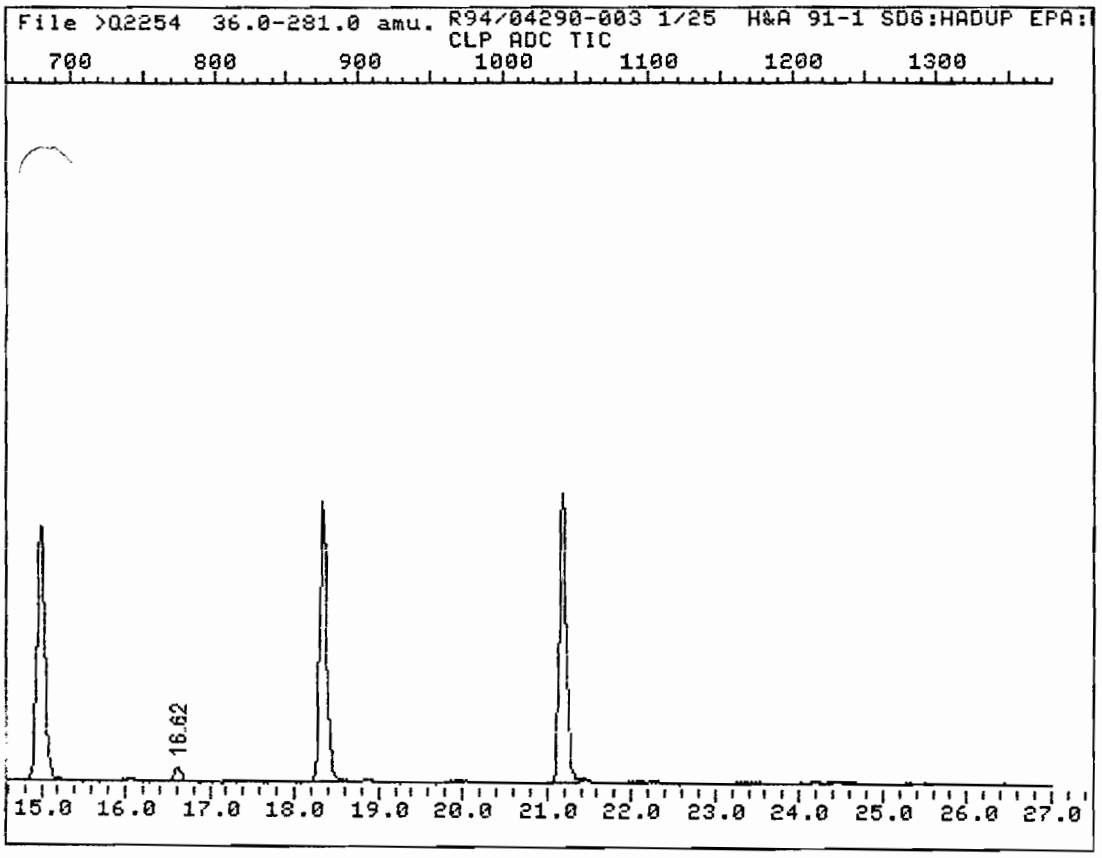
Correction Factor = 25.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:23 AM TUE., 15 NOV., 1994



Instrument ID: MS5 Analyzed on: 11/09/94 1:01



Instrument ID: MS5 Analyzed on: 11/09/94 1:01

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW202D

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2253

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl chloride	7.	J
75-00-3	Chloroethane	10.	U
75-09-2	Methylene chloride	10.	U
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
156-60-5	trans-1,2-Dichloroethene	3.	J
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	45.	
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	25.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

000100

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW202D

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-2

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2253

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

000118

Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:02
Output File: ^Q2253::D4 Injected at: 941109 ~~12:25~~ 00:25
Data File: >Q2253::D4 Dilution Factor: 1.00000
Name: R94/04290-002 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW202D

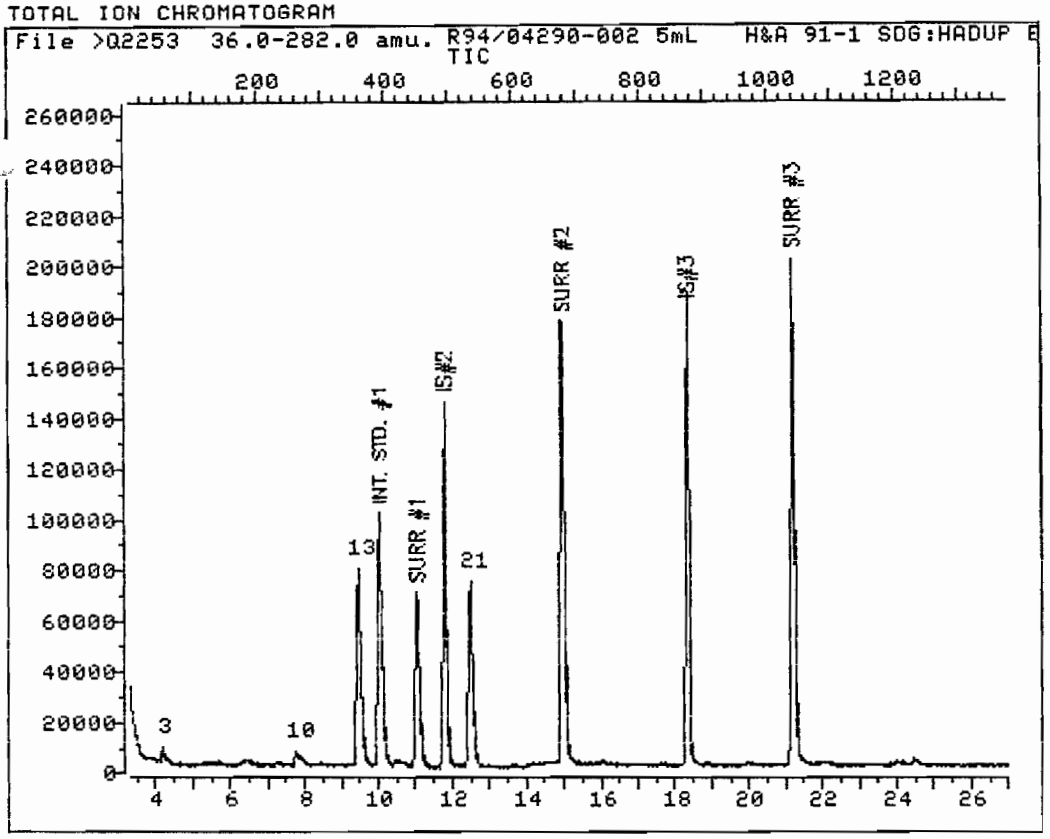
PD 11/15/94

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.04	128.0	90881	50.00	ppb	93
3)	Vinyl chloride	4.15	62.0	17746	6.60	ppb	93
10)	trans-1,2-Dichloroethene	7.74	96.0	8006	3.06	ppb	88
13)	cis-1,2-Dichloroethene	9.46	96.0	116944	44.75	ppb	98
16)	1,2-Dichloroethane-d4	11.04	65.0	185783	47.28	ppb	89
17)	*1,4-Difluorobenzene	11.79	114.0	396130	50.00	ppb	77
21)	Trichloroethene	12.50	130.0	91271	25.05	ppb	94
29)	*Chlorobenzene-d5	18.34	117.0	333667	50.00	ppb	95
31)	Toluene-d8	14.97	98.0	385369	50.32	ppb	91
41)	Bromofluorobenzene	21.19	95.0	245074	51.53	ppb	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

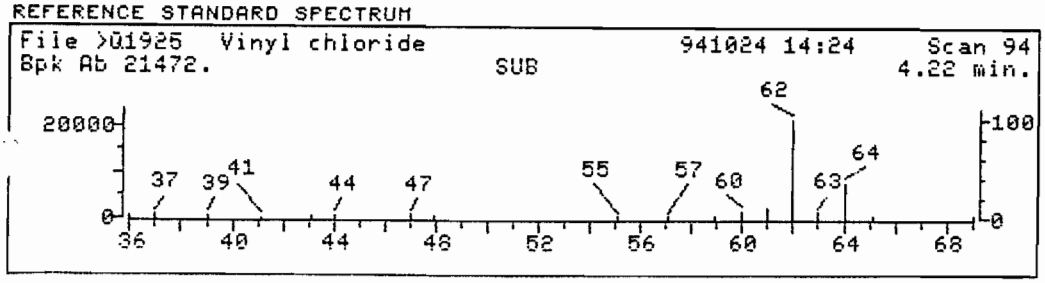


Data File: >Q2253::D4 Quant Output File: ^Q2253::D4
Name: R94/04290-002 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW202D

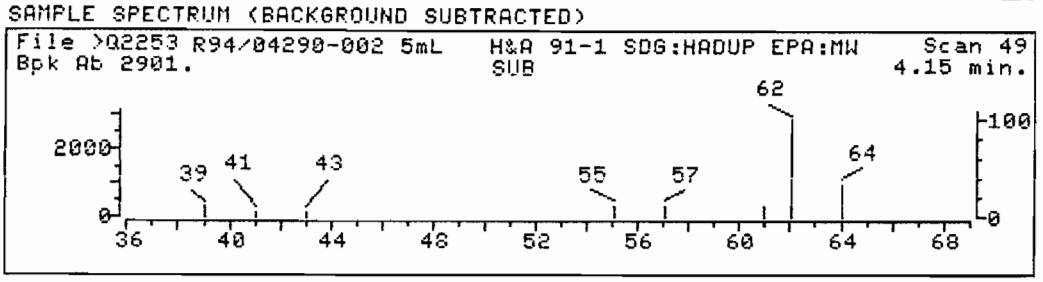
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:02
Injected at: 941109 12:25

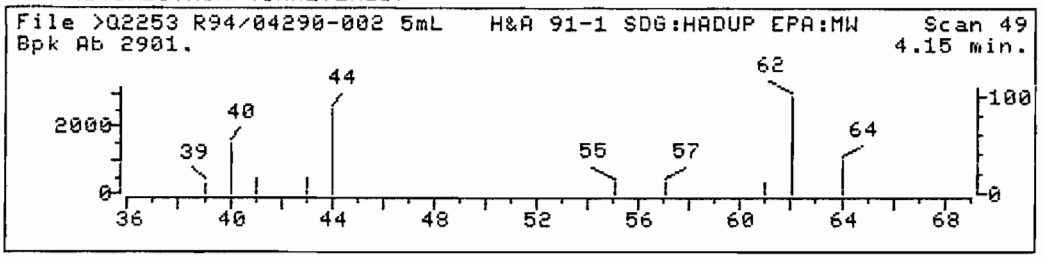
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



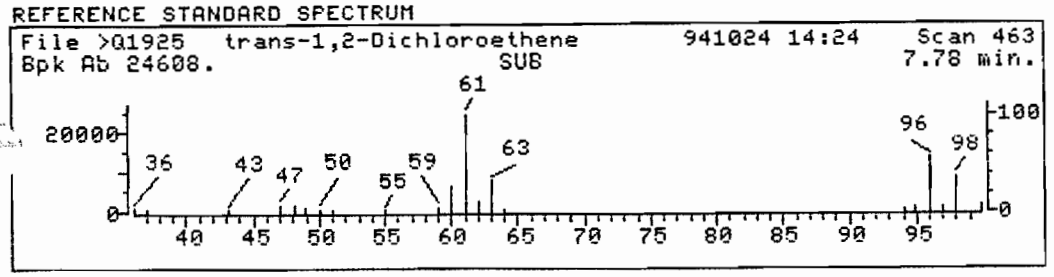
SAMPLE SPECTRUM (UNALTERED)



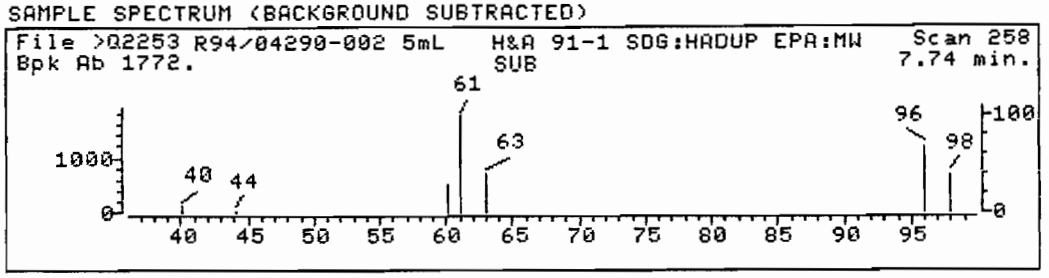
Data File: >Q2253::D4 Quant Output File: ^Q2253::D4
Name: R94/04290-002 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW202D
Quant Time: 941109 07:02 Quant ID File: IDECLP::QT
Injected at: 941109 12:25 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 3
Compound Name : Vinyl chloride
Scan Number : 49
Retention Time: 4.15 min.
Quant Ion : 62.0
Area : 17746
Concentration : 6.60 ppb
q-value : 93

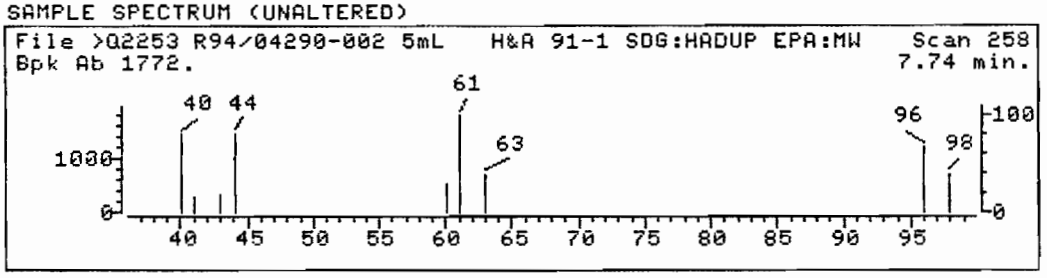
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



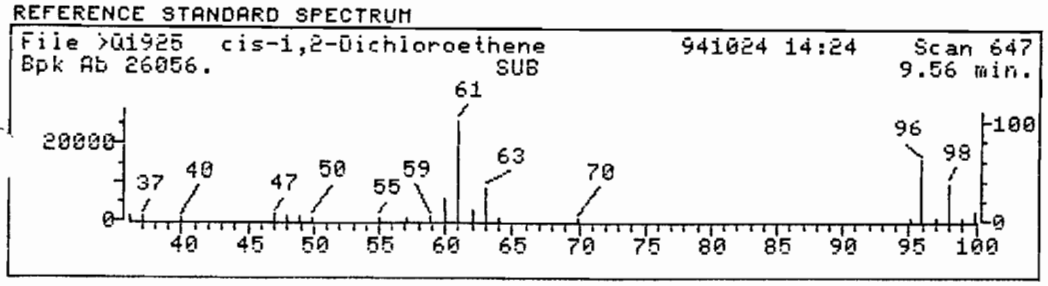
SAMPLE SPECTRUM (UNALTERED)



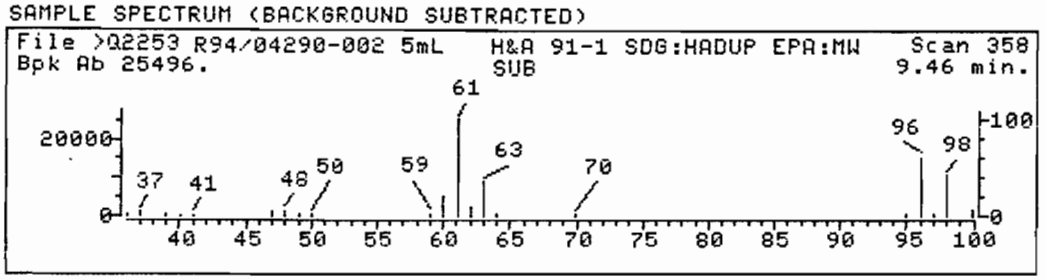
Data File: >Q2253::D4 Quant Output File: ^Q2253::D4
Name: R94/04290-002 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW202D
Quant Time: 941109 07:02 Quant ID File: IDECLP::QT
Injected at: 941109 12:25 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 10
Compound Name : trans-1,2-Dichloroethene
Scan Number : 258
Retention Time: 7.74 min.
Quant Ion : 96.0
Area : 8006
Concentration : 3.06 ppb
q-value : 88

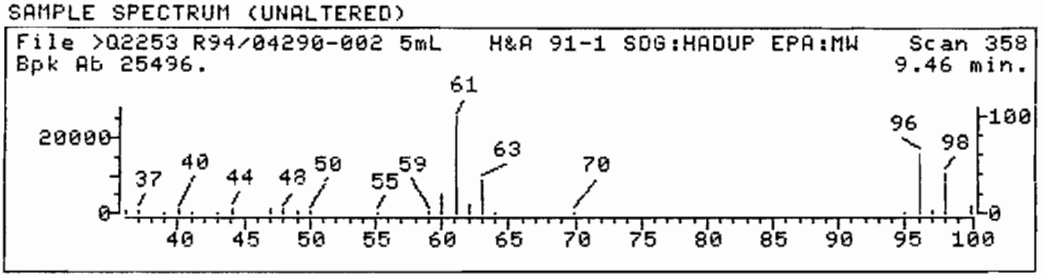
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



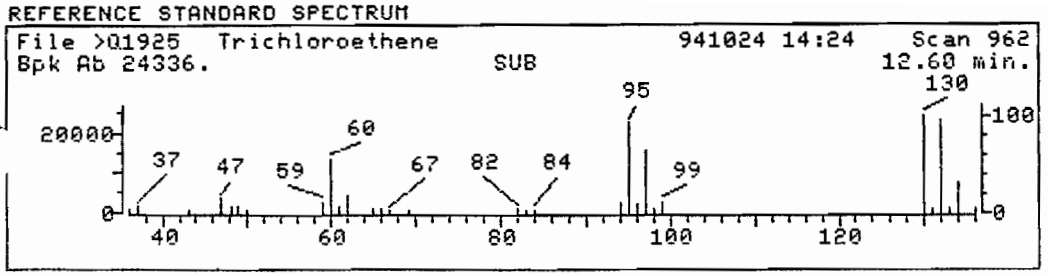
SAMPLE SPECTRUM (UNALTERED)



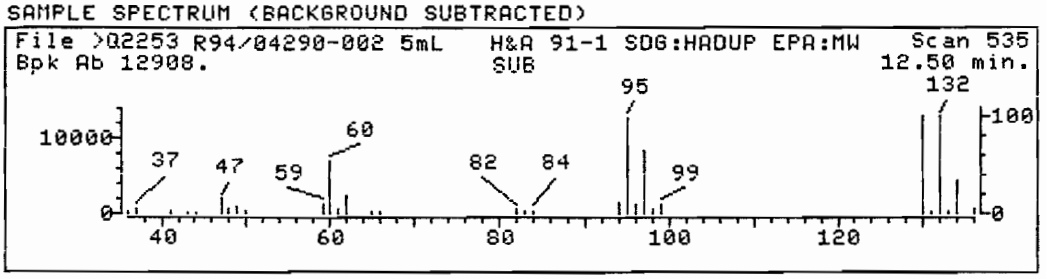
Data File: >Q2253::D4 Quant Output File: ^Q2253::D4
Name: R94/04290-002 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW202D
Quant Time: 941109 07:02 Quant ID File: IDECLP::QT
Injected at: 941109 12:25 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 358
Retention Time: 9.46 min.
Quant Ion : 96.0
Area : 116944
Concentration : 44.75 ppb
q-value : 98

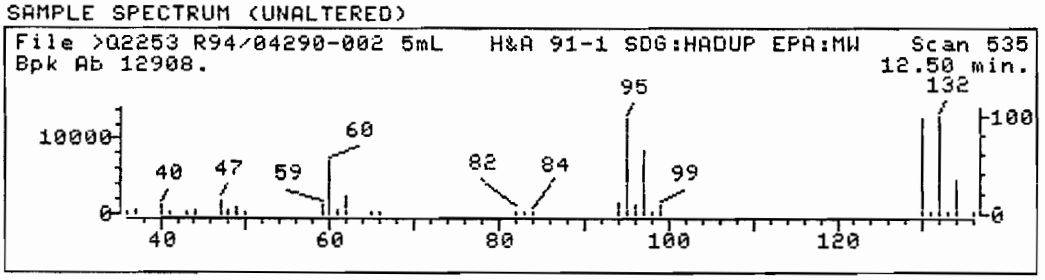
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2253::D4 Quant Output File: ^Q2253::D4
Name: R94/04290-002 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW202D
Quant Time: 941109 07:02 Quant ID File: IDECLP::QT
Injected at: 941109 12:25 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 535
Retention Time: 12.50 min.
Quant Ion : 130.0
Area : 91271
Concentration : 25.05 ppb
q-value : 94

MS data file header from : >Q2253::D4

Sample: R94/04290-002 5mL Operator: RODH 11/09/94 12:25
Misc : H&A 91-1 SDG:HADUP EPA:MW202D
s. f: 1 MS model: 70 SW/HW rev.: FF ALS £ : 3 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

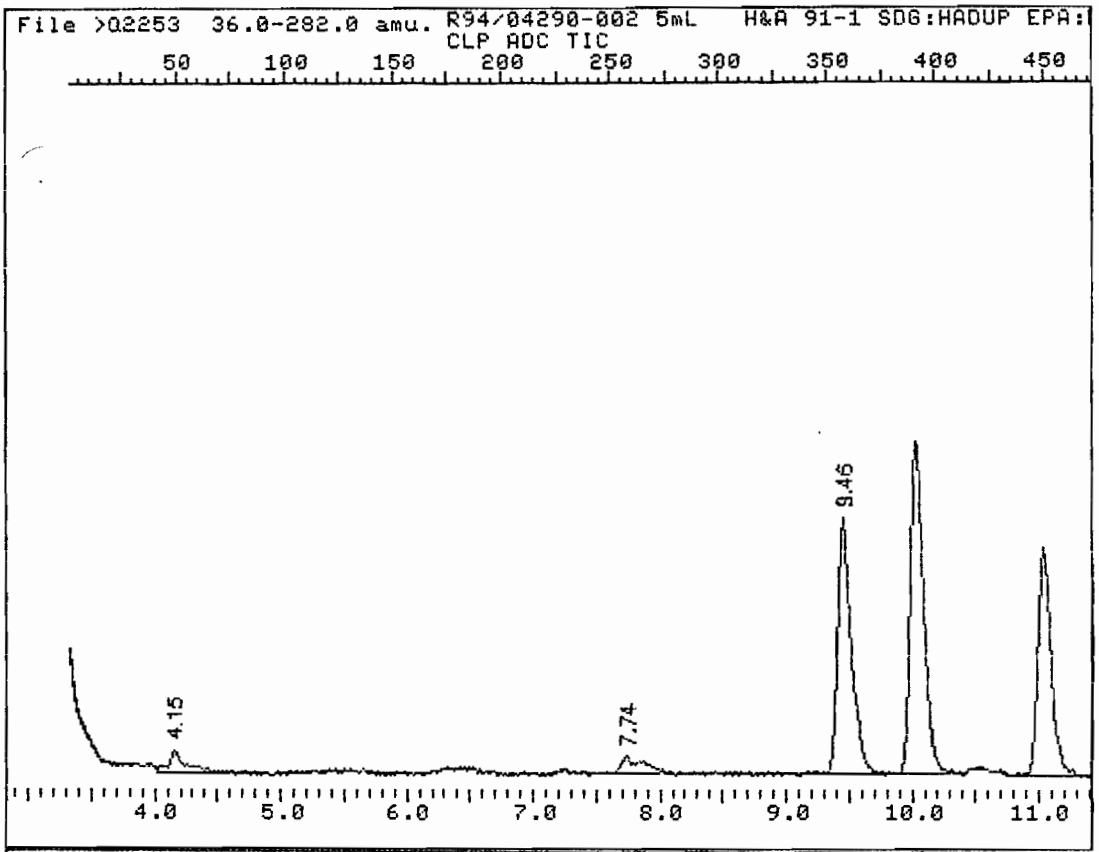
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	736842.	10.04	3.33 - 10.92
2	50.0	1050999.	11.79	10.92 - 15.07
3	50.0	1125379.	18.34	15.07 - 26.99

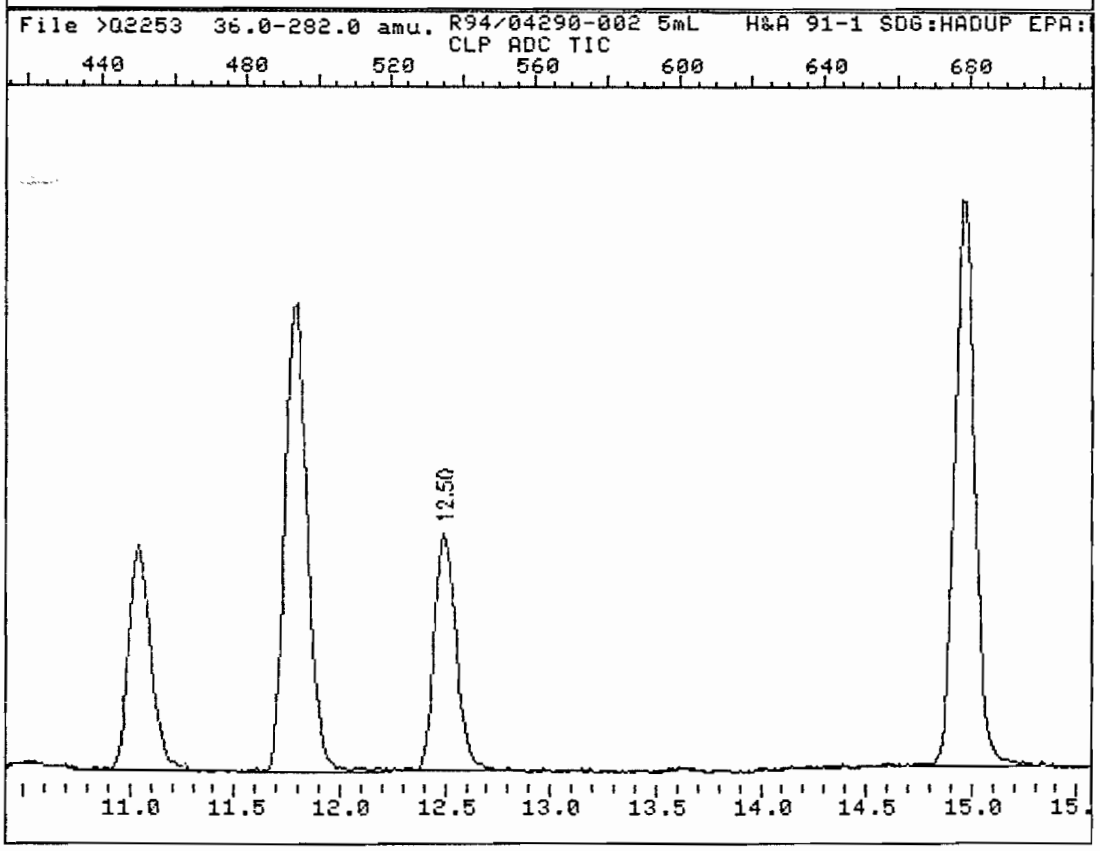
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

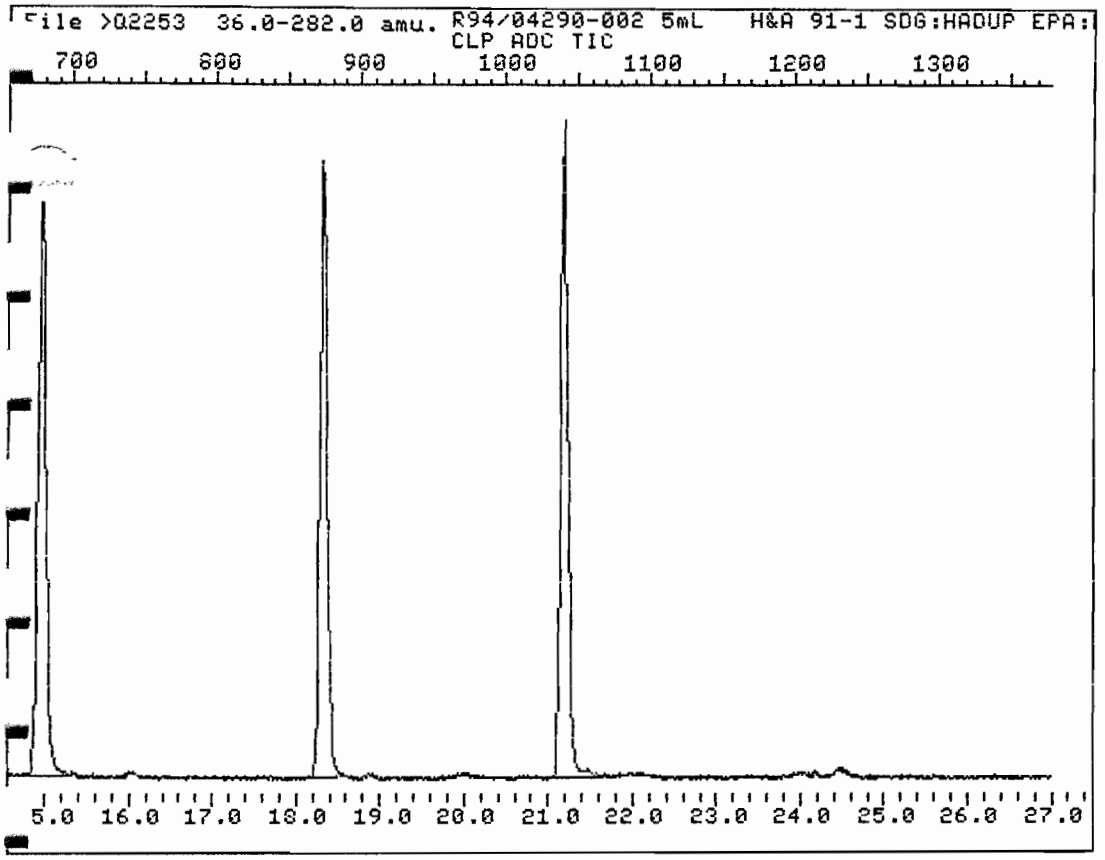
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:16 AM TUE., 15 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/09/94 12:25



Instrument ID: MS5 Analyzed on: 11/09/94 12:25

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2260

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	13.	J
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	51.	J
71-55-6	1,1,1-Trichloroethane	250.	
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	2700.	E
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	23.	J
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW3

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-10

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2260

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	14.10	67.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

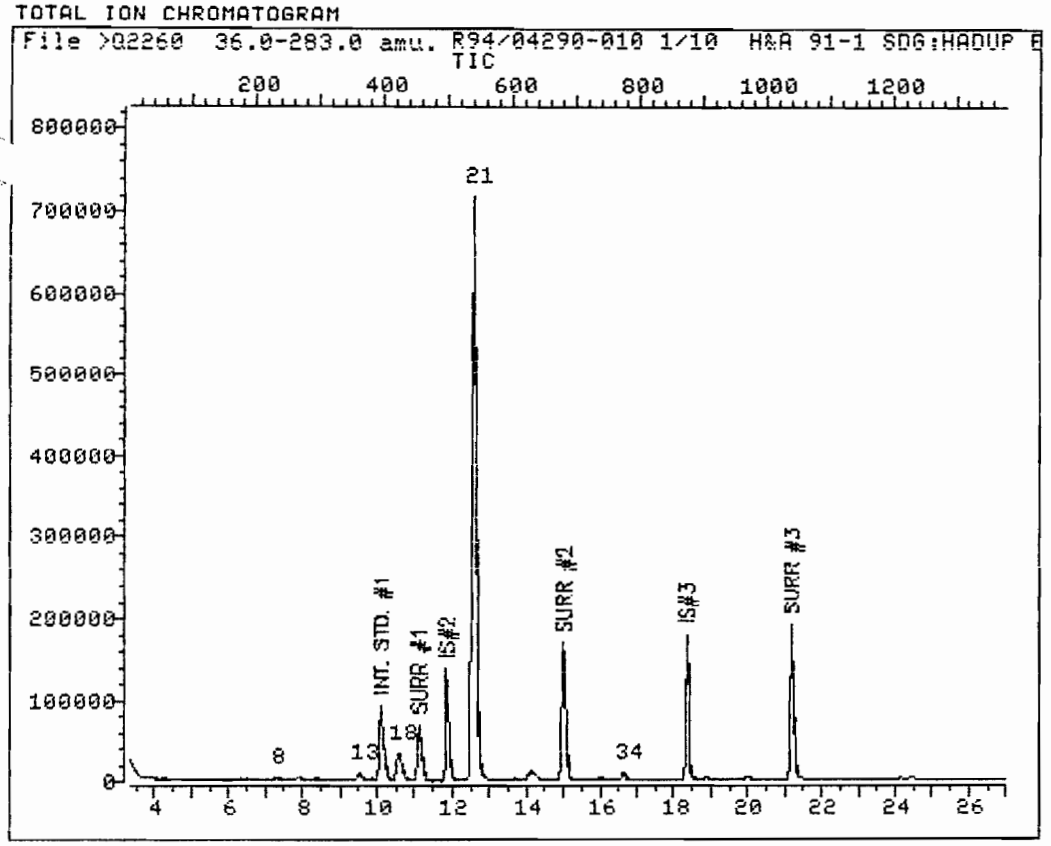
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:15
Output File: ^Q2260::D4 Injected at: 941109 04:38
Data File: >Q2260::D4 Dilution Factor: 1.00000
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.09	128.0	78764	50.00	ppb	93
8)	Methylene chloride	7.28	84.0	3261	1.30	ppb	91
13)	cis-1,2-Dichloroethene	9.53	96.0	11580	5.11	ppb	93
16)	1,2-Dichloroethane-d4	11.12	65.0	179889	52.83	ppb	91
17)	*1,4-Difluorobenzene	11.86	114.0	358988	50.00	ppb	76
18)	1,1,1-Trichloroethane	10.58	97.0	98017	25.30	ppb	95
21)	Trichloroethene	12.57	130.0	897126	271.68	ppb	99
29)	*Chlorobenzene-d5	18.34	117.0	318211	50.00	ppb	97
31)	Toluene-d8	15.01	98.0	355448	48.67	ppb	87
34)	Tetrachloroethene	16.64	164.0	6232	2.26	ppb	97
41)	Bromofluorobenzene	21.17	95.0	229730	50.65	ppb	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM

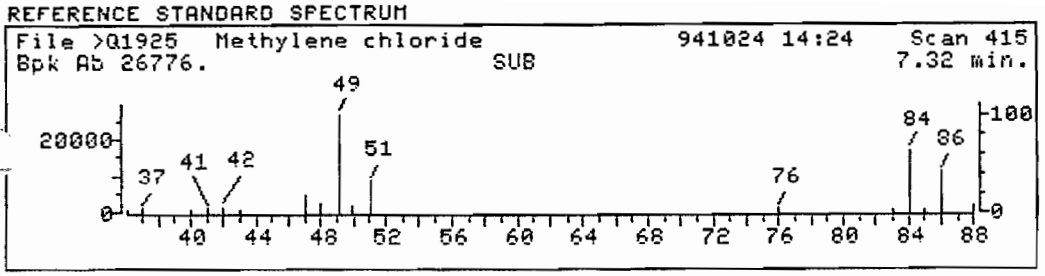


Data File: >Q2260::D4 Quant Output File: ^Q2260::D4
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3

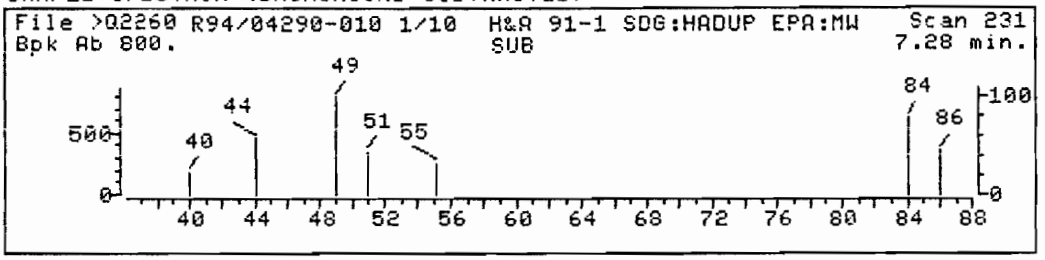
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:15
Injected at: 941109 04:38

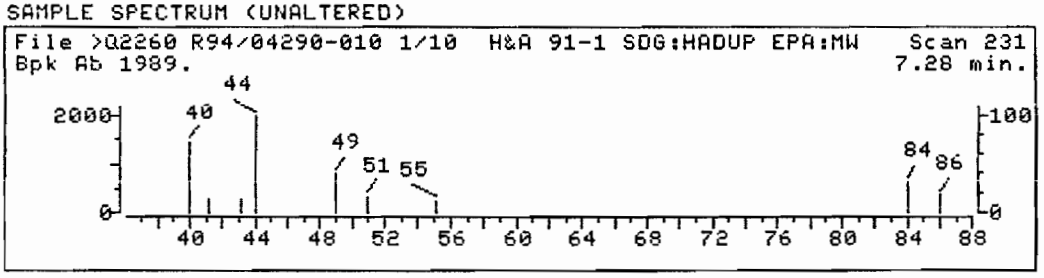
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



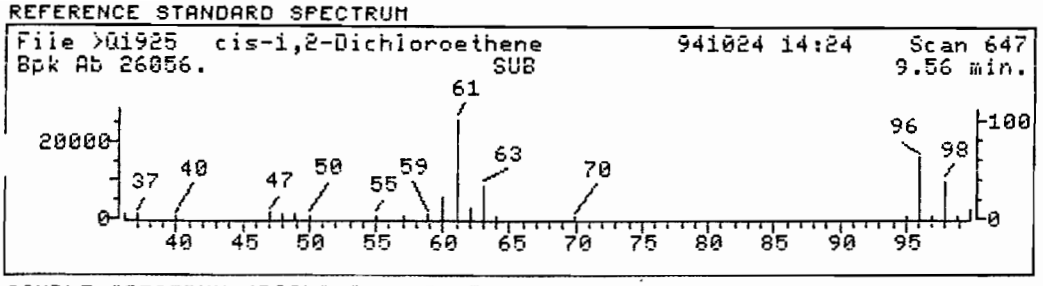
SAMPLE SPECTRUM (UNALTERED)



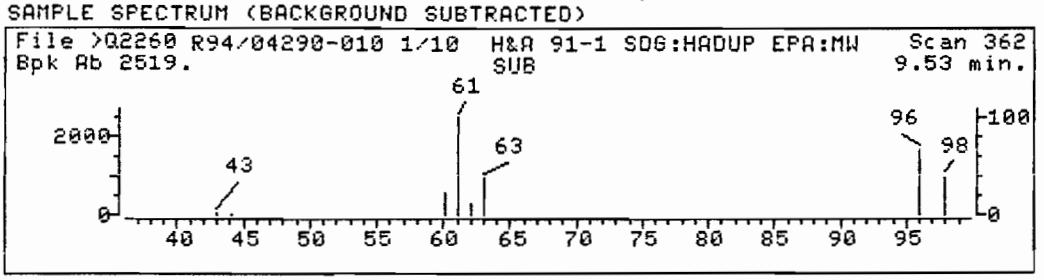
Data File: >Q2260::D4 Quant Output File: ^Q2260::D4
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3
Quant Time: 941109 07:15 Quant ID File: IDECLP::QT
Injected at: 941109 04:38 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 8
Compound Name : Methylene chloride
Scan Number : 231
Retention Time: 7.28 min.
Quant Ion : 84.0
Area : 3261
Concentration : 1.30 ppb
q-value : 91

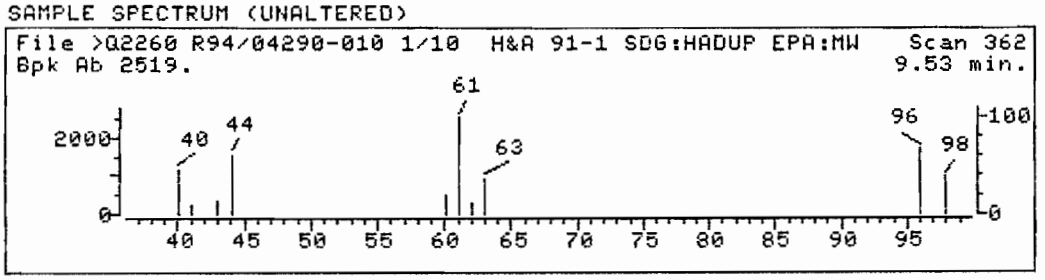
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



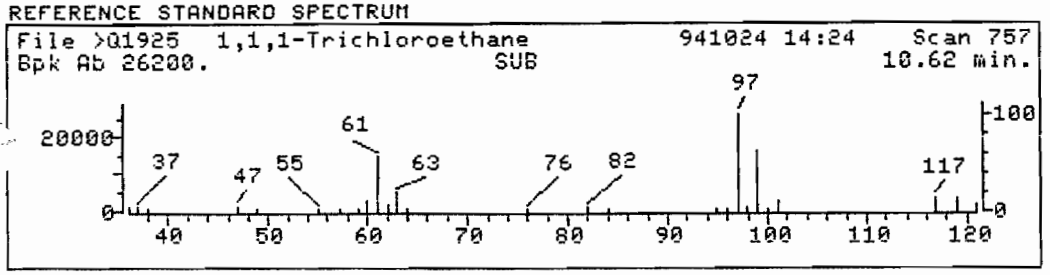
SAMPLE SPECTRUM (UNALTERED)



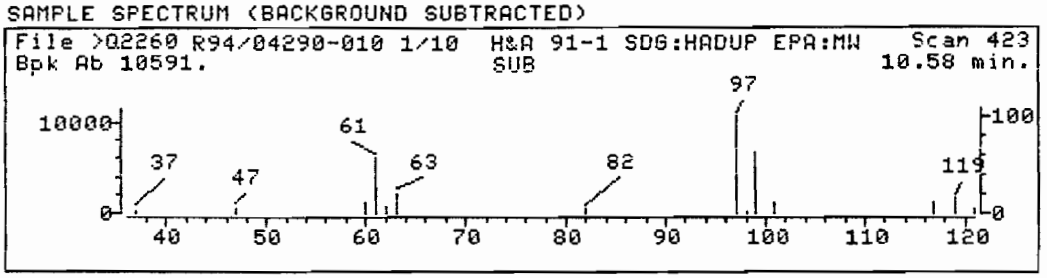
Data File: >Q2260::D4 Quant Output File: ^Q2260::D4
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3
Quant Time: 941109 07:15 Quant ID File: IDECLP::QT
Injected at: 941109 04:38 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 362
Retention Time: 9.53 min.
Quant Ion : 96.0
Area : 11580
Concentration : 5.11 ppb
q-value : 93

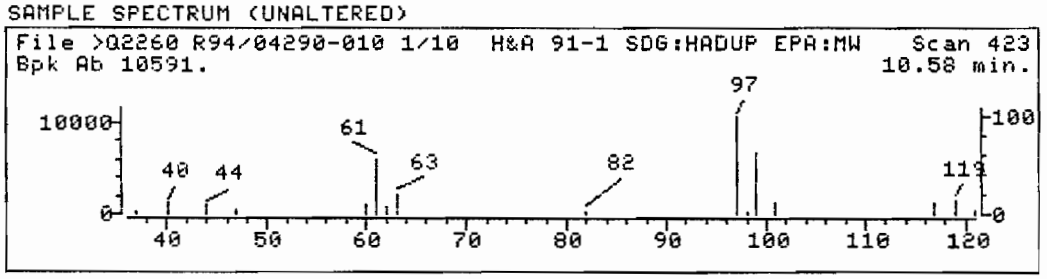
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



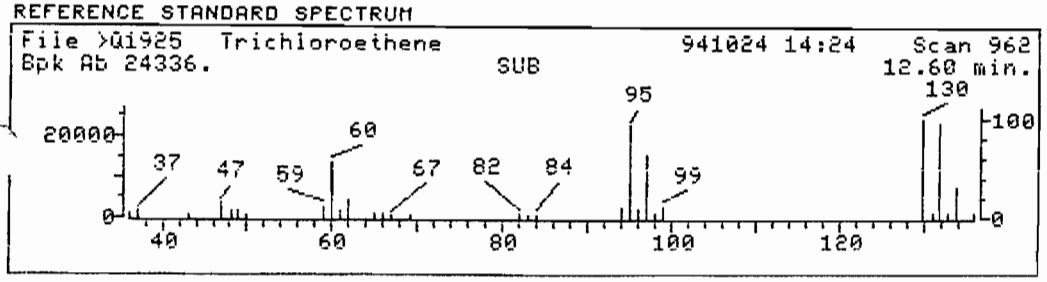
SAMPLE SPECTRUM (UNALTERED)



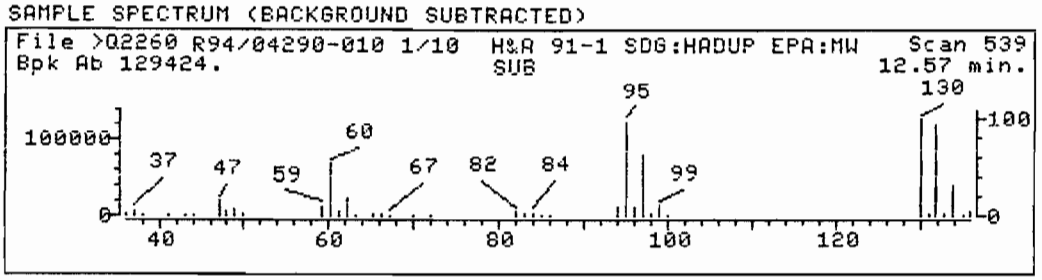
Data File: >Q2260::D4 Quant Output File: ^Q2260::D4
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3
Quant Time: 941109 07:15 Quant ID File: IDECLP::QT
Injected at: 941109 04:38 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 423
Retention Time: 10.58 min.
Quant Ion : 97.0
Area : 98017
Concentration : 25.30 ppb
q-value : 95

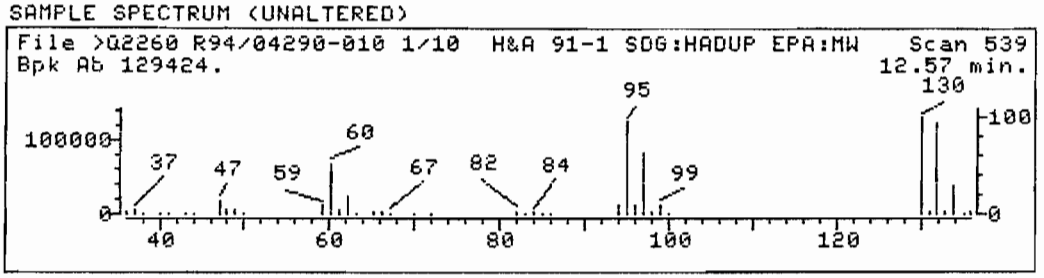
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



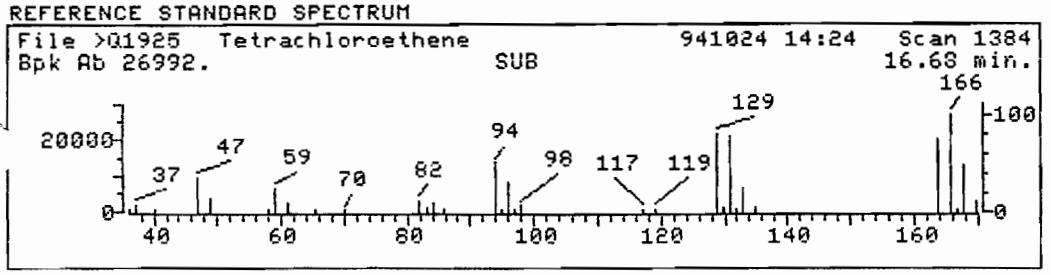
SAMPLE SPECTRUM (UNALTERED)



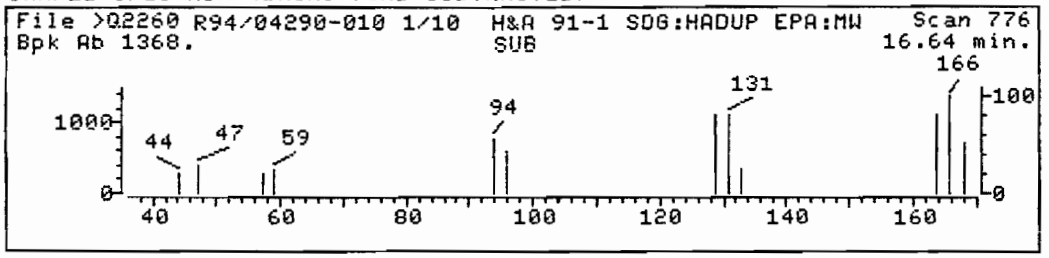
Data File: >Q2260::D4 Quant Output File: ^Q2260::D4
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3
Quant Time: 941109 07:15 Quant ID File: IDECLP::QT
Injected at: 941109 04:38 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 539
Retention Time: 12.57 min.
Quant Ion : 130.0
Area : 897126
Concentration : 271.68 ppb
q-value : 99

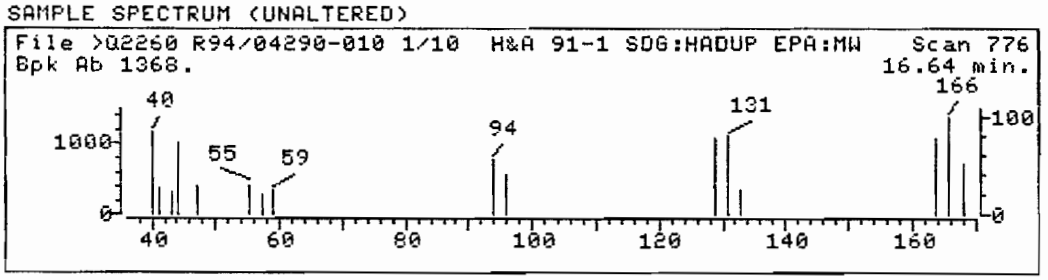
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



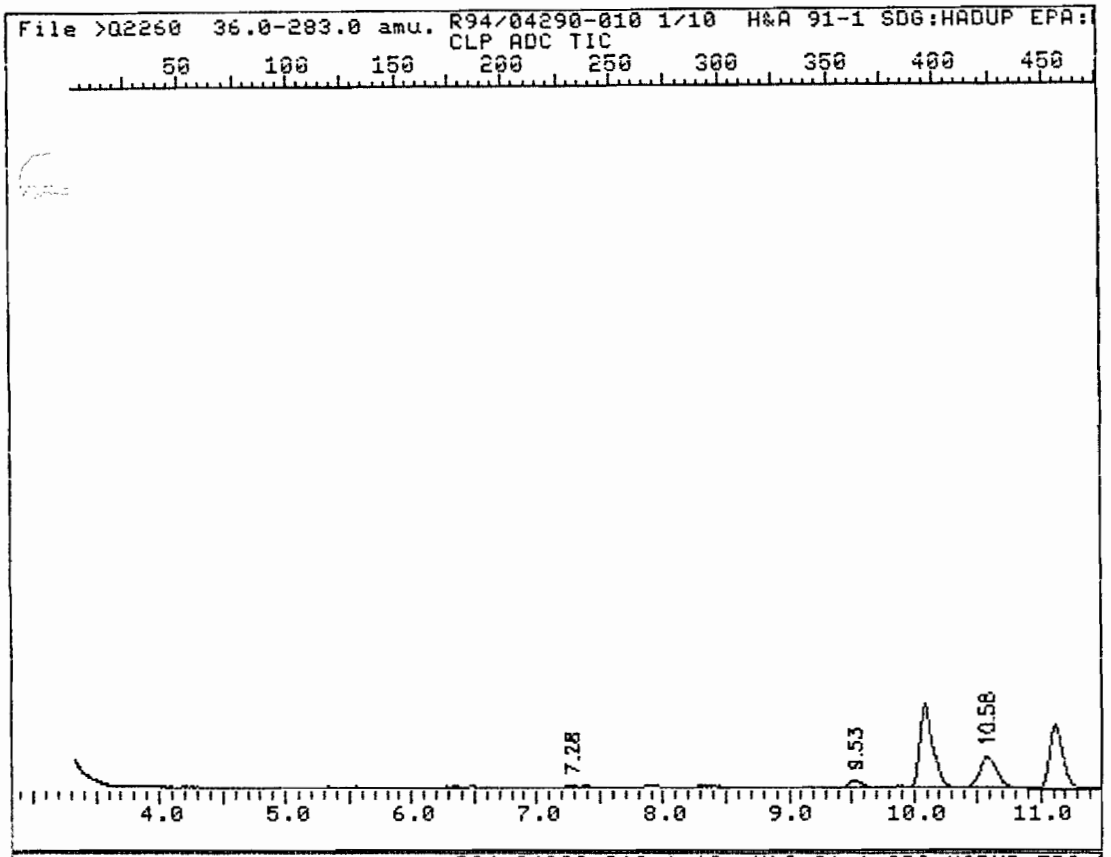
SAMPLE SPECTRUM (UNALTERED)

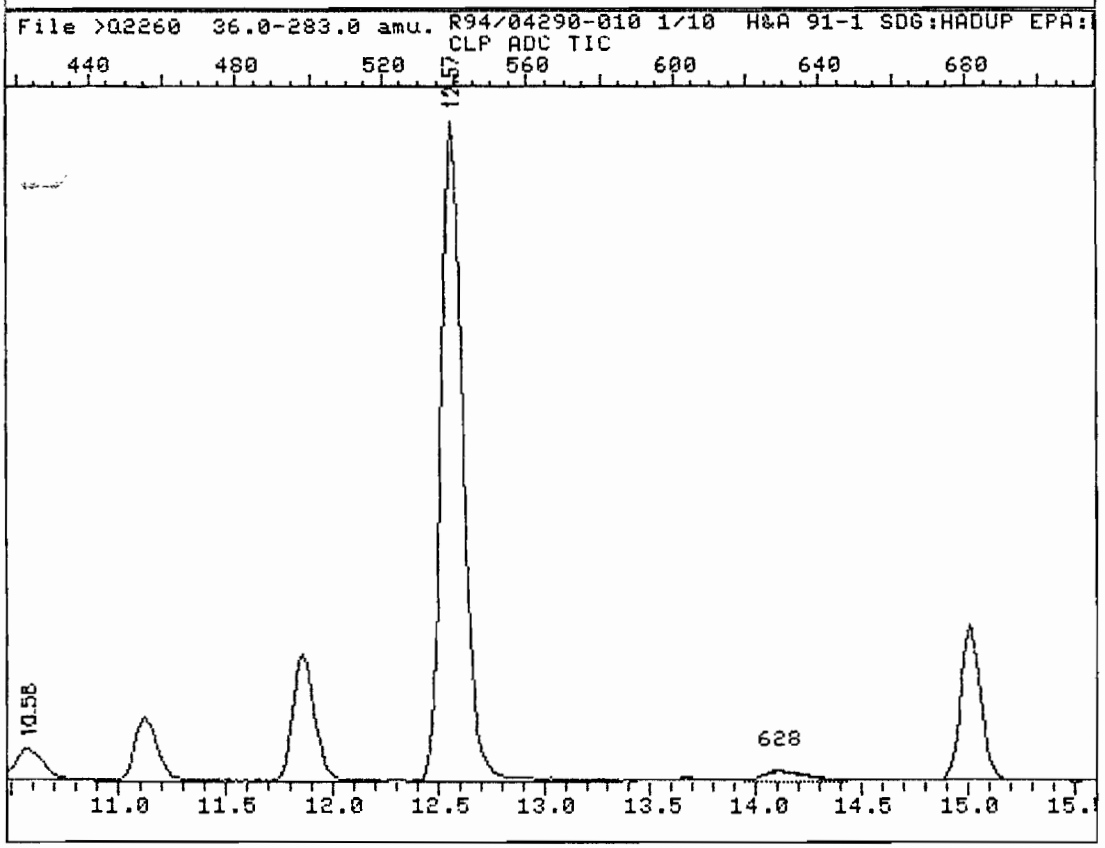


Data File: >Q2260::D4 Quant Output File: ^Q2260::D4
Name: R94/04290-010 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3
Quant Time: 941109 07:15 Quant ID File: IDECLP::QT
Injected at: 941109 04:38 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

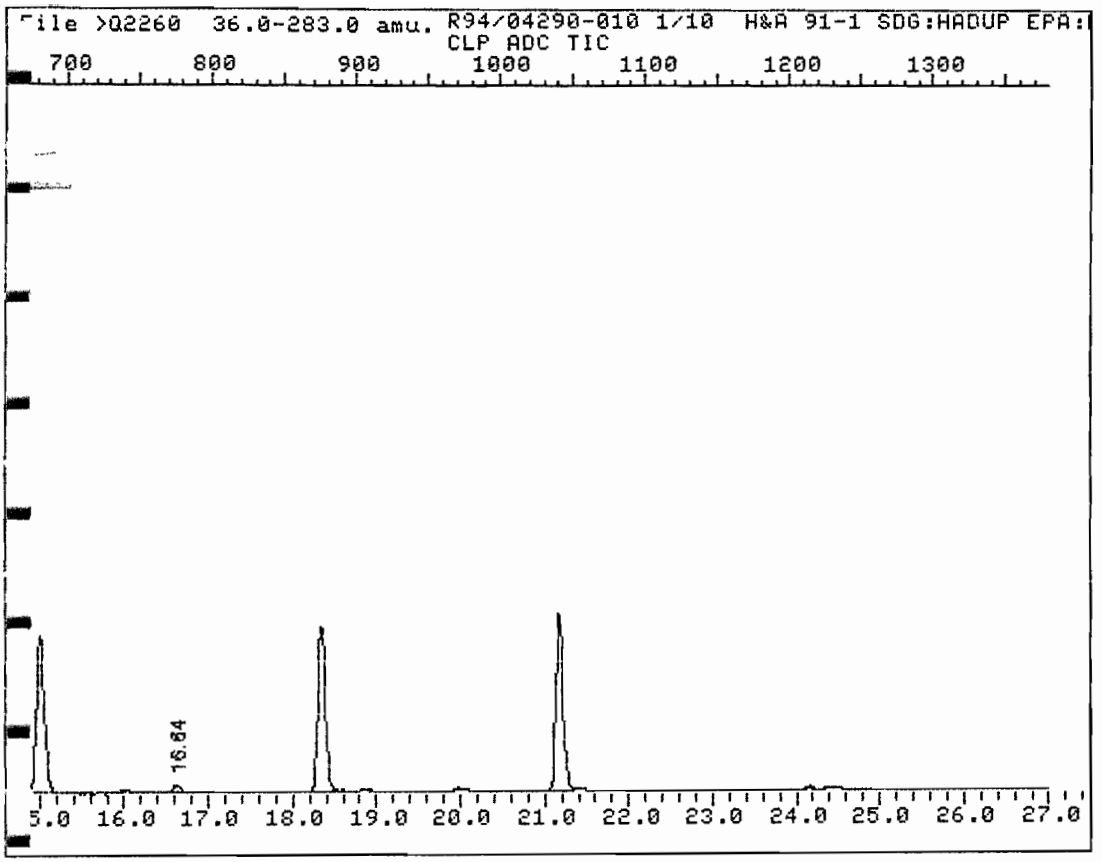
Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 776
Retention Time: 16.64 min.
Quant Ion : 164.0
Area : 6232
Concentration : 2.26 ppb
q-value : 97

```
 1S data file header from : >Q2260::D4

 Sample: R94/04290-010 1/10    Operator: RODH                    11/09/94  4:38
 Misc  : H&A 91-1 SDG:HADUP EPA:MW3
 S. £:    1  MS model:  70  SW/HW rev.: FF  ALS £ : 10    Equip ID: MS5
  Method file: REGVOA    Tuning file:  N / A   No. of extra records:  2
  Source temp.:   N/A  Analyzer temp.:  N/A     Transfer line temp. :   0

      Chromatographic temperatures :   0.     0.     0.     0.     0.
      Chromatographic times, min.  :  0.0    0.0    0.0    0.0    0.0
      Chromatographic rate, deg/min:  0.0    0.0    0.0    0.0    0.0


 >Q2260        R94/04290-010 1/10  H&A 91-1 SDG:HADUP EPA:MW3
  36.0ù 283.0 CLP TIC
 Upslope:  .2000 Area Reject:   64020. Max Peaks:  1  Bunch: -1 Valley >100 %
 Onslope: 0.0000 Results File IQ2260   Sorted by Time/Area      INT

 Peak    R.T.   first    max    last    peak      raw      corr.    corr.    % of
   £     min.    scan    scan   scan   height    area     area    % max.    total
 ---   ------  -----  -----  -----  ------  -------  -------  -------  -------
   1   14.10     619    628    648    10487   202163   129672   100.00   100.000

                          Sum of corrected areas:     129672.

      Summary of Unknowns PBM Library Search and Quantitation

                                          Retention      Unknown
      Standard   Concentration   Area       Time         Window
      --------   ------------- ---------  ---------   ----------------
         1            50.0      640195.     10.09      3.33 -   10.98
         2            50.0      964451.     11.86     10.98 -   15.10
         3            50.0     1060967.     18.34     15.10 -   26.99

   Dilution Factor =     1.00         This sample was 5.00000  g or mL

  Correction Factor =    10.00

                        ùConc Int Std * Area Unknownù
 Unknown Concentration = ù-------------------------ù * Correction Factor
                        ù        Area Int Std      ù


                                        8:25 AM  TUE., 15  NOV., 1994
```

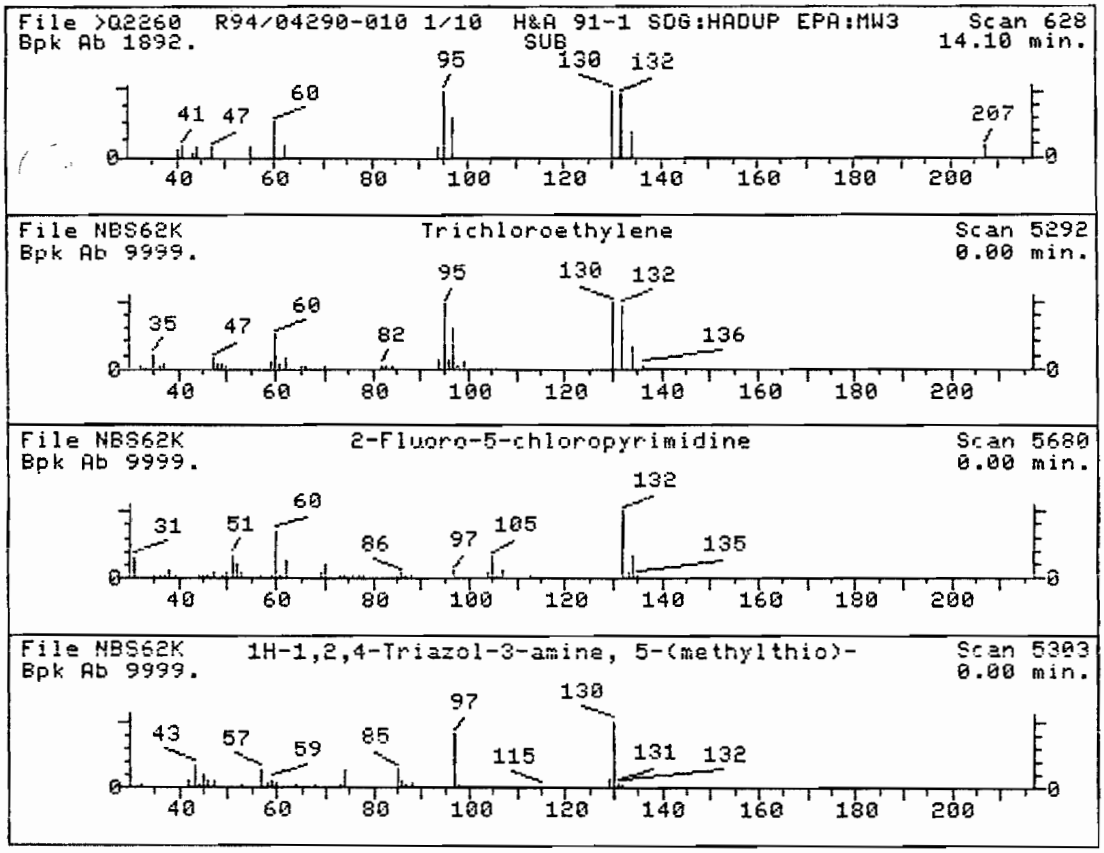




Instrument ID: MS5 Analyzed on: 11/09/94 4:38



Instrument ID: MS5 Analyzed on: 11/09/94 4:38



Instrument ID: MS5 Analyzed on: 11/09/94 4:38
Result 1 in PBM results file: LQ2260
Retention Time: 14.10 Area: 129672 Tentative Conc: 67.00
The unknown area is 13.45% of the nearest internal standard

1.	Trichloroethylene	130 C2HCl3
2.	2-Fluoro-5-chloropyrimidine	132 C4H2ClFN2
3.	1H-1,2,4-Triazol-3-amine, 5-(methylthio)-	130 C3H6N4S

Sample file: >Q2260 Spectrum #: 628
Search speed: 1 Tilting option: N No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	79016	19537	NBS62K	77	58	3	0	98	2	63	42

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-10DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2266

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 20.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	200.	U
74-83-9	Bromomethane	200.	U
75-01-4	Vinyl chloride	200.	U
75-00-3	Chloroethane	200.	U
75-09-2	Methylene chloride	200.	U
67-64-1	Acetone	200.	U
75-15-0	Carbon Disulfide	200.	U
75-35-4	1,1-Dichloroethene	200.	U
75-34-3	1,1-Dichloroethane	200.	U
156-60-5	trans-1,2-Dichloroethene	200.	U
67-66-3	Chloroform	200.	U
107-06-2	1,2-Dichloroethane	200.	U
78-93-3	2-Butanone	200.	U
156-59-2	cis-1,2-Dichloroethene	58.	DJ
71-55-6	1,1,1-Trichloroethane	260.	D
56-23-5	Carbon tetrachloride	200.	U
75-27-4	Bromodichloromethane	200.	U
78-87-5	1,2-Dichloropropane	200.	U
10061-01-5	cis-1,3-Dichloropropene	200.	U
79-01-6	Trichloroethene	3200.	D
124-48-1	Dibromochloromethane	200.	U
79-00-5	1,1,2-Trichloroethane	200.	U
71-43-2	Benzene	200.	U
50061-02-6	trans-1,3-Dichloropropene	200.	U
75-25-2	Bromoform	200.	U
108-10-1	4-Methyl-2-Pentanone	200.	U
591-78-6	2-Hexanone	200.	U
127-18-4	Tetrachloroethene	28.	DJ
79-34-5	1,1,2,2-Tetrachloroethane	200.	U
108-88-3	Toluene	200.	U
108-90-7	Chlorobenzene	200.	U
100-41-4	Ethylbenzene	200.	U
100-42-5	Styrene	200.	U
108-38-3	(m+p)Xylene	200.	U
95-47-6	o-Xylene	200.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW3DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-10DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2266

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 20.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

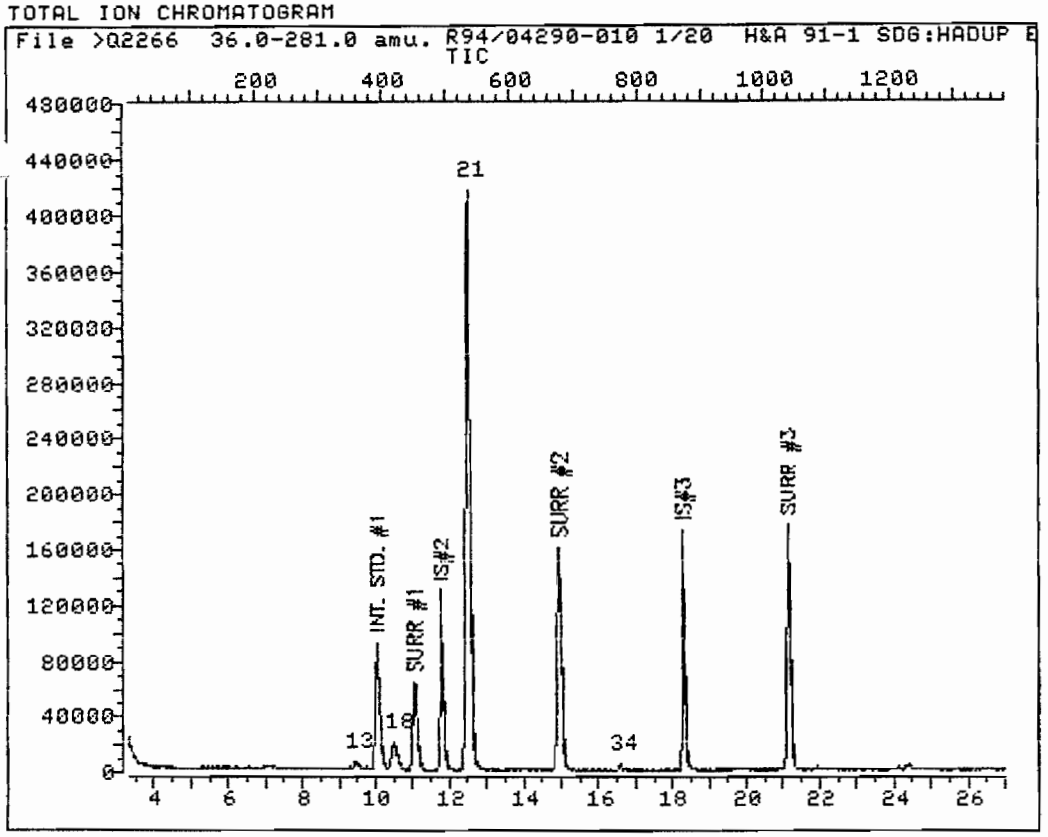
Operator ID: TOMT Quant Rev: 7 Quant Time: 941109 12:28
Output File: ^Q2266::D5 Injected at: 941109 10:54
Data File: >Q2266::D3 Dilution Factor: 1.00000
Name: R94/04290-010 1/20 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3DL

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.04	128.0	81066	50.00	ppb	92
13)	cis-1,2-Dichloroethene	9.46	96.0	6866	2.89	ppb	93
16)	1,2-Dichloroethane-d4	11.04	65.0	164339	45.96	ppb	91
17)	*1,4-Difluorobenzene	11.78	114.0	352335	50.00	ppb	78
18)	1,1,1-Trichloroethane	10.51	97.0	53437	13.00	ppb	94
21)	Trichloroethene	12.50	130.0	523244	160.31	ppb	96
29)	*Chlorobenzene-d5	18.28	117.0	307916	50.00	ppb	97
31)	Toluene-d8	14.95	98.0	351442	50.64	ppb	91
34)	Tetrachloroethene	16.59	164.0	3581	1.38	ppb	92
41)	Bromofluorobenzene	21.14	95.0	222101	51.59	ppb	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

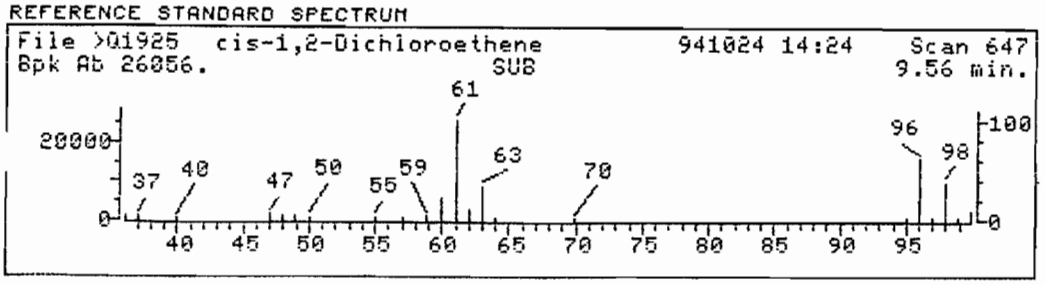


Data File: >Q2266::D3 Quant Output File: ^Q2266::D5
Name: R94/04290-010 1/20 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3DL

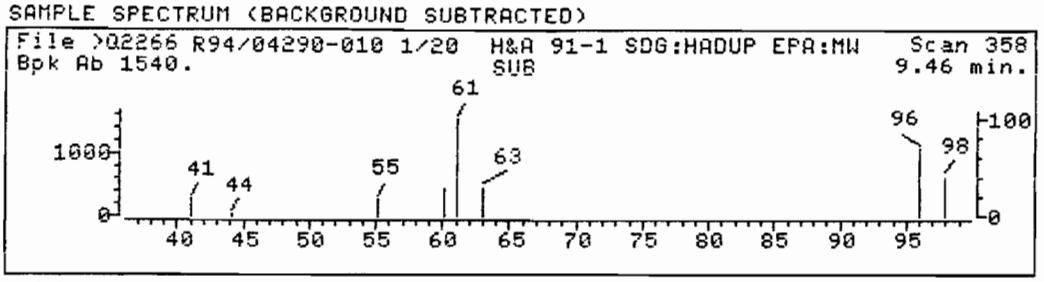
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

Operator ID: TOMT
Quant Time : 941109 12:28
Injected at: 941109 10:54

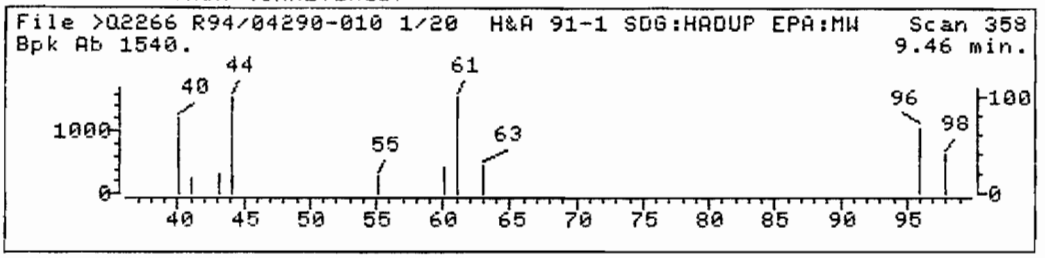
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



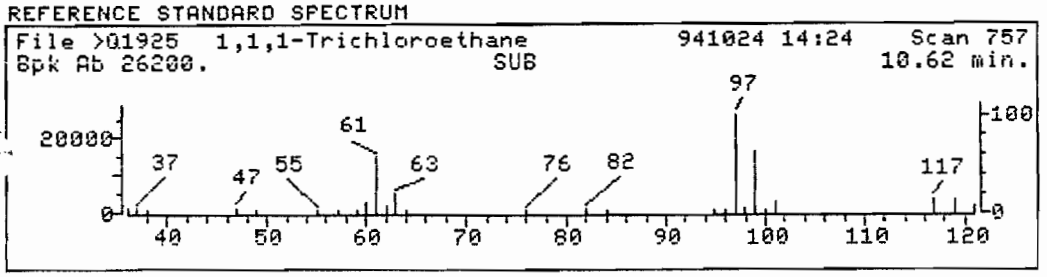
SAMPLE SPECTRUM (UNALTERED)



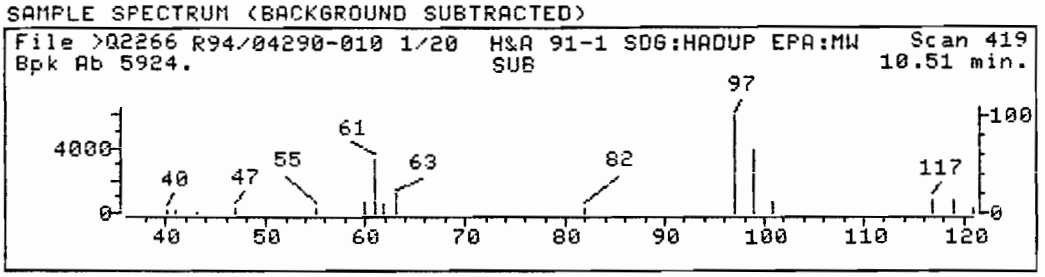
Data File: >Q2266::D3 Quant Output File: ^Q2266::D5
Name: R94/04290-010 1/20 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3DL
Quant Time: 941109 12:28 Quant ID File: IDECLP::QT
Injected at: 941109 10:54 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 358
Retention Time: 9.46 min.
Quant Ion : 96.0
Area : 6866
Concentration : 2.89 ppb
q-value : 93

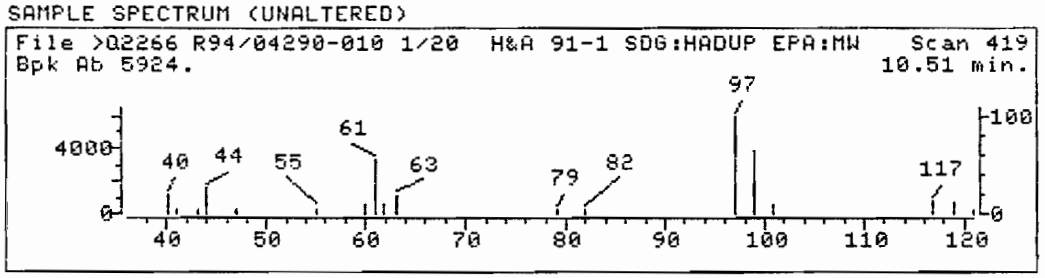
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



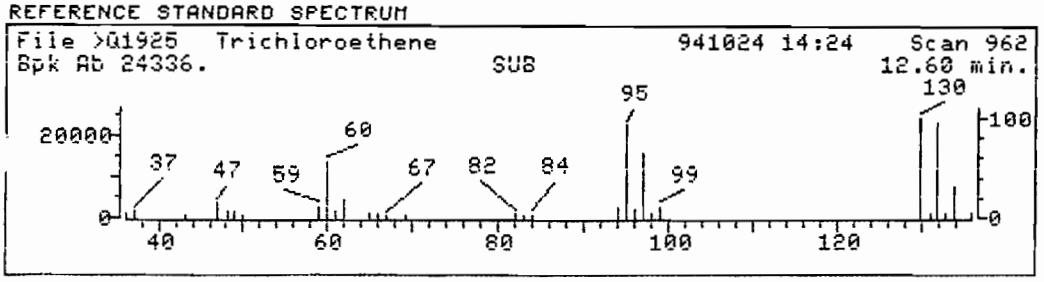
SAMPLE SPECTRUM (UNALTERED)



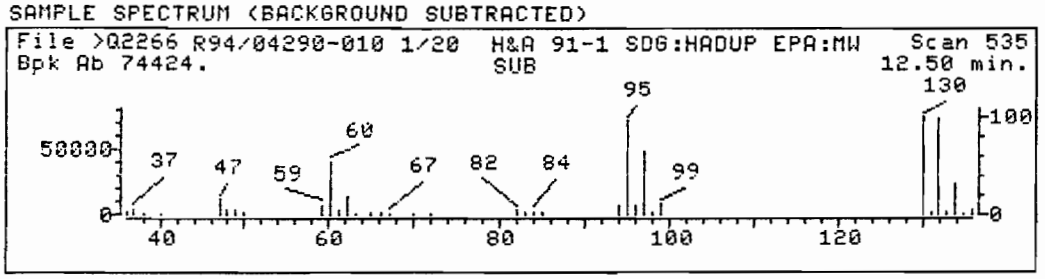
Data File: >Q2266::D3 Quant Output File: ^Q2266::D5
Name: R94/04290-010 1/20 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3DL
Quant Time: 941109 12:28 Quant ID File: IDECLP::QT
Injected at: 941109 10:54 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 419
Retention Time: 10.51 min.
Quant Ion : 97.0
Area : 53437
Concentration : 13.00 ppb
q-value : 94

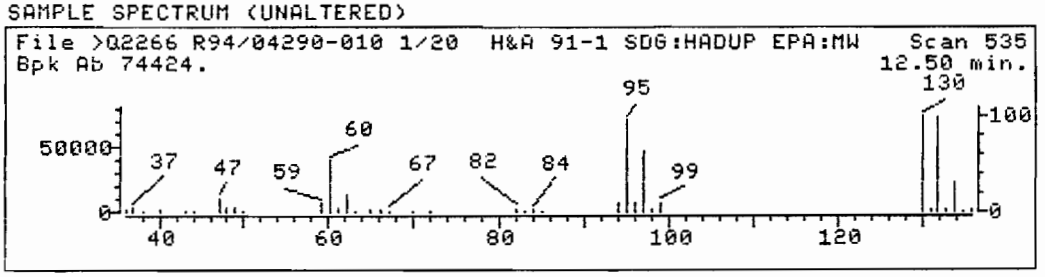
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



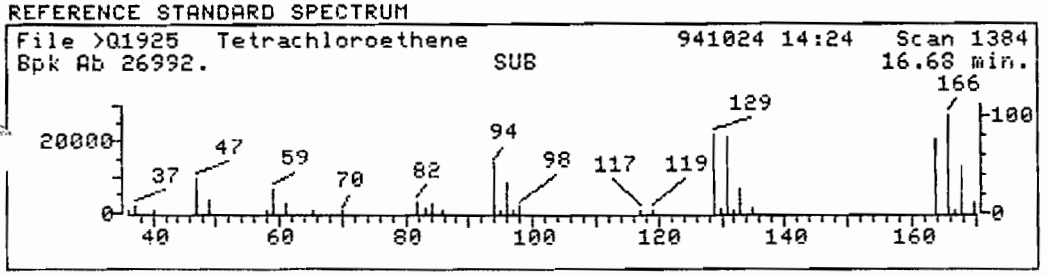
SAMPLE SPECTRUM (UNALTERED)



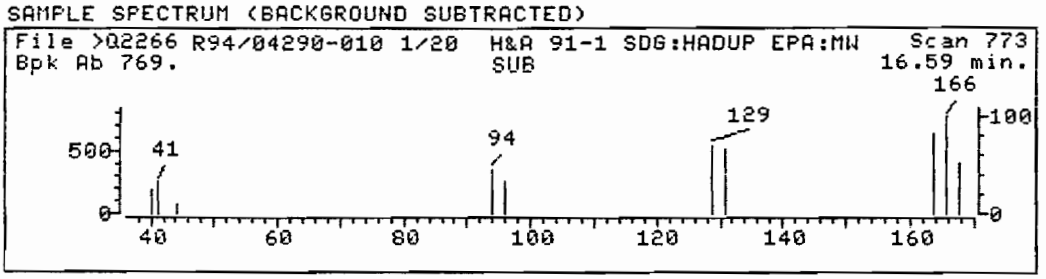
Data File: >Q2266::D3 Quant Output File: ^Q2266::D5
Name: R94/04290-010 1/20 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3DL
Quant Time: 941109 12:28 Quant ID File: IDECLP::QT
Injected at: 941109 10:54 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 535
Retention Time: 12.50 min.
Quant Ion : 130.0
Area : 523244
Concentration : 160.31 ppb
q-value : 96

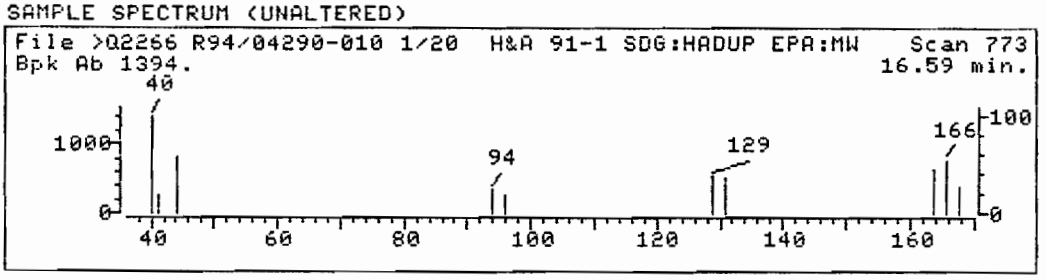
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2266::D3 Quant Output File: ^Q2266::D5
Name: R94/04290-010 1/20 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW3DL
Quant Time: 941109 12:28 Quant ID File: IDECLP::QT
Injected at: 941109 10:54 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 773
Retention Time: 16.59 min.
Quant Ion : 164.0
Area : 3581
Concentration : 1.38 ppb
q-value : 92

MS data file header from : >Q2266::D3

Sample: R94/04290-010 1/20 Operator: TOMT 11/09/94 10:54
Misc : H&A 91-1 SDG:HADUP EPA:MW3DL
S. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 1 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

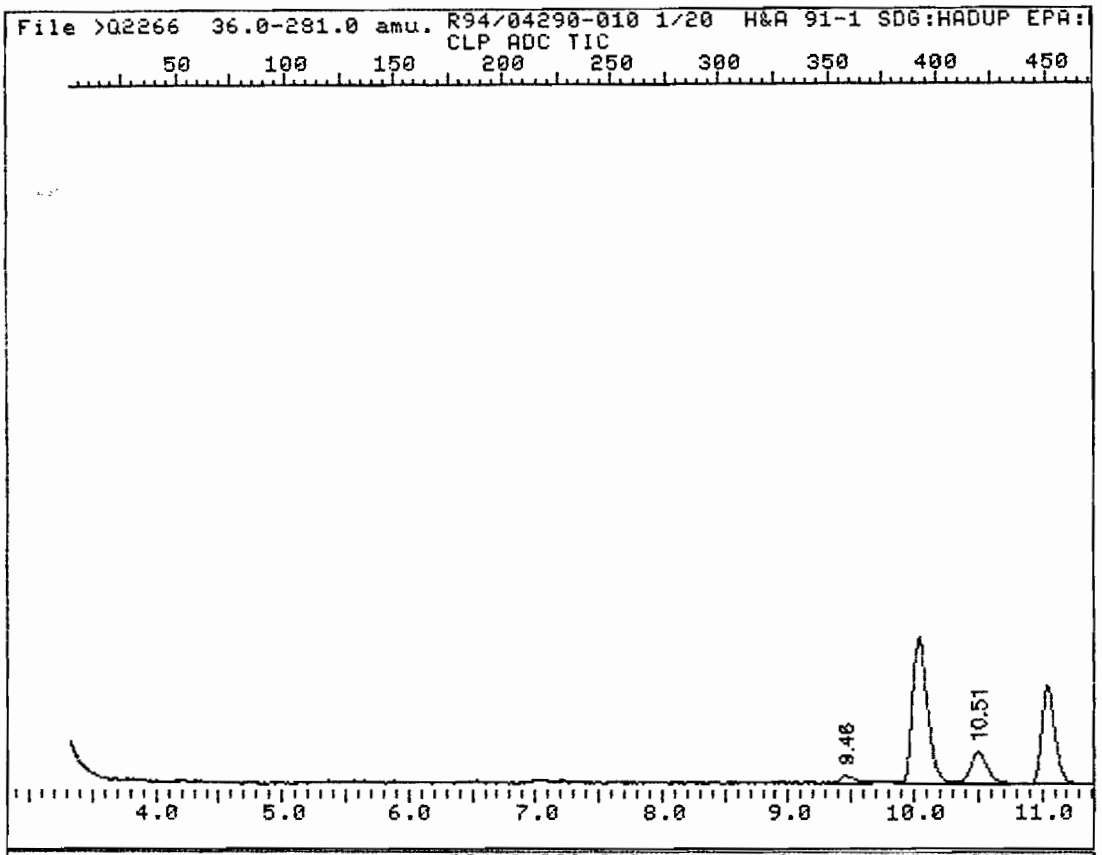
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	666231.	10.04	3.33 - 10.91
2	50.0	932400.	11.78	10.91 - 15.03
3	50.0	1020723.	18.28	15.03 - 27.01

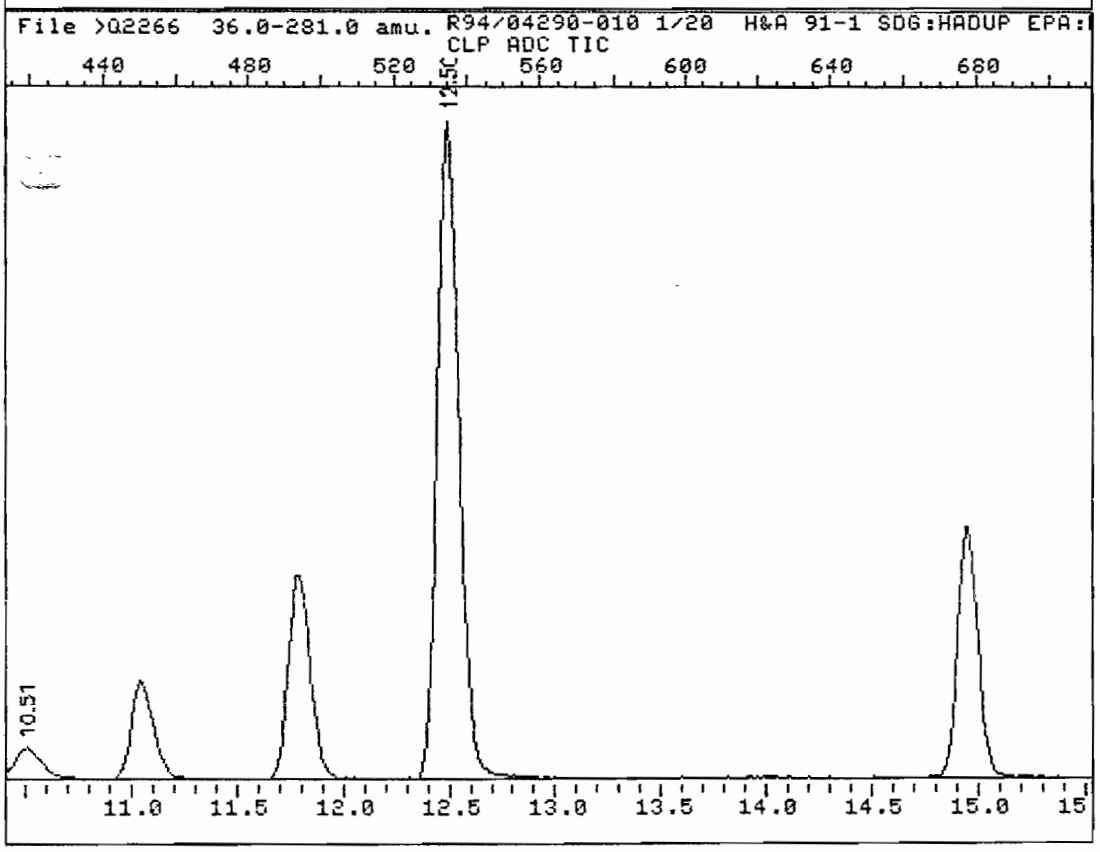
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 20.00

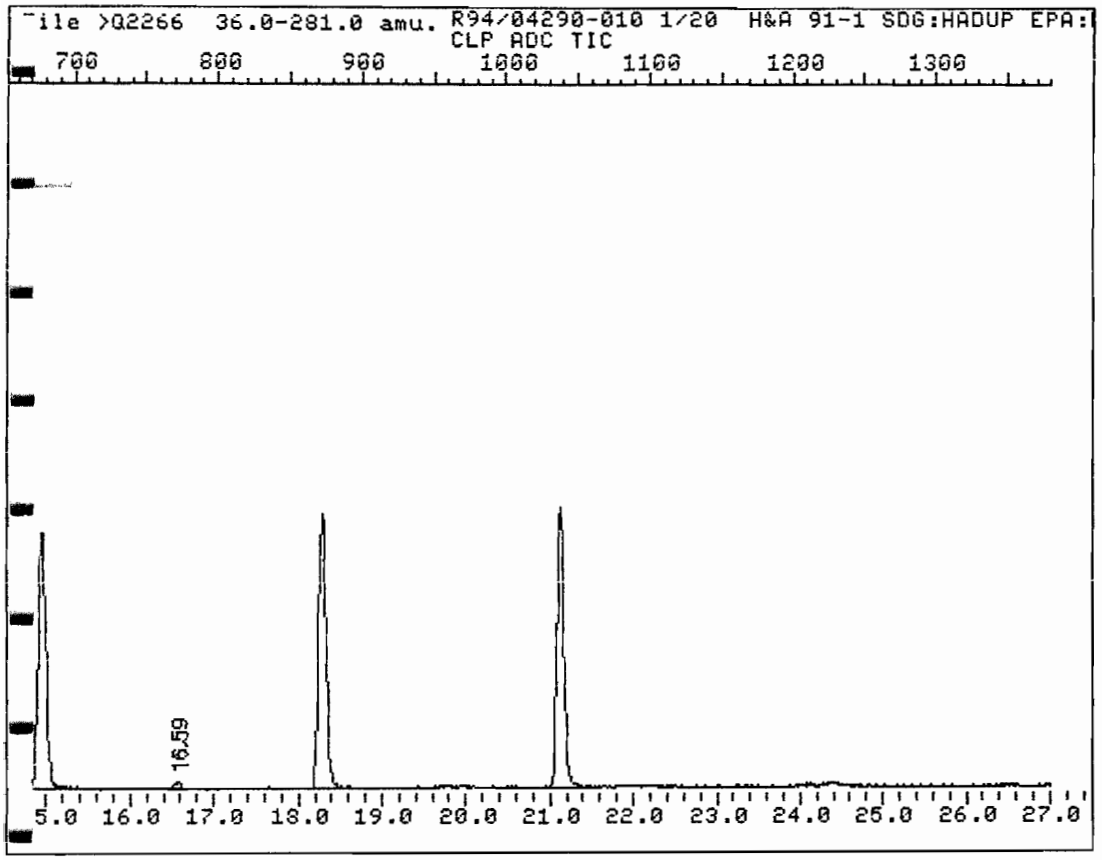
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:43 AM TUE., 15 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/09/94 10:54



Instrument ID: MS5 Analyzed on: 11/09/94 10:54

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2257

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	2.	J
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	10.	U
71-55-6	1,1,1-Trichloroethane	15.	
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	15.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW4

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-6

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2257

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

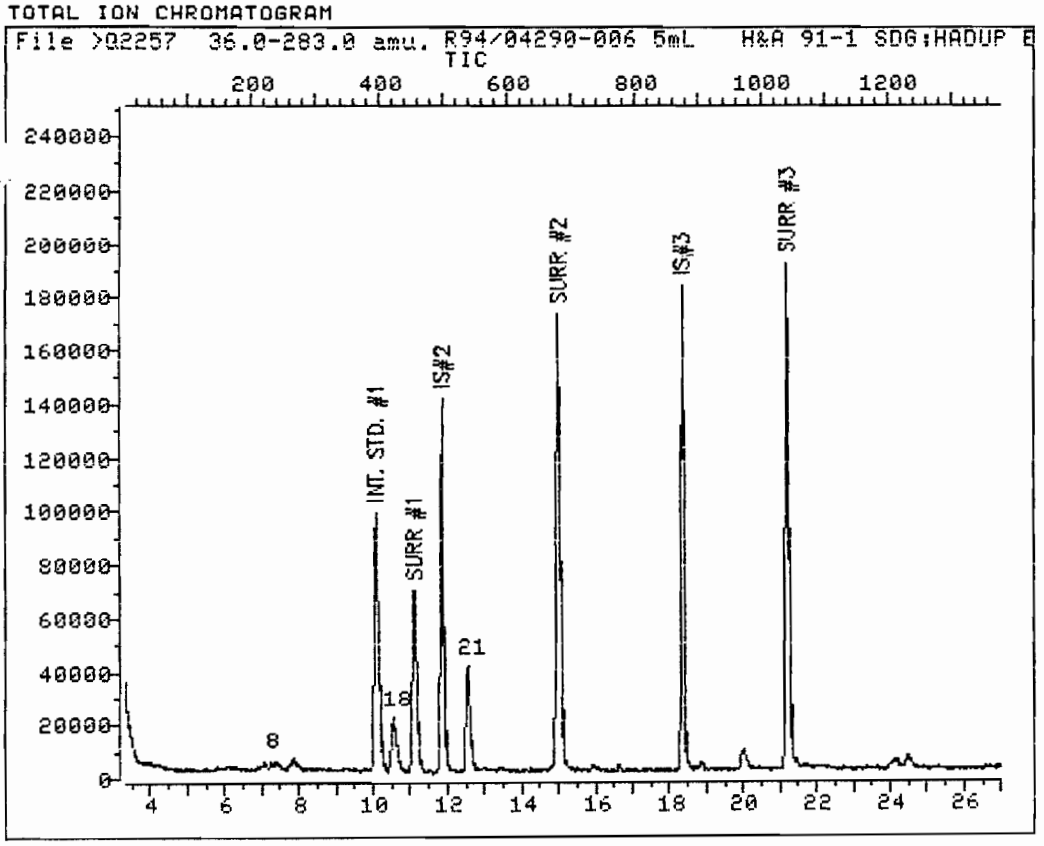
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:10
Output File: ^Q2257::D4 Injected at: 941109 02:50
Data File: >Q2257::D4 Dilution Factor: 1.00000
Name: R94/04290-006 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW4

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.08	128.0	84548	50.00	ppb	92
8)	Methylene chloride	7.23	84.0	5044	1.87	ppb	77
16)	1,2-Dichloroethane-d4	11.11	65.0	181688	49.71	ppb	91
17)	*1,4-Difluorobenzene	11.85	114.0	373708	50.00	ppb	76
18)	1,1,1-Trichloroethane	10.54	97.0	59128	14.66	ppb	95
21)	Trichloroethene	12.53	130.0	50237	14.61	ppb	94
29)	*Chlorobenzene-d5	18.34	117.0	319498	50.00	ppb	97
31)	Toluene-d8	14.99	98.0	375383	51.19	ppb	91
41)	Bromofluorobenzene	21.19	95.0	224461	49.29	ppb	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM

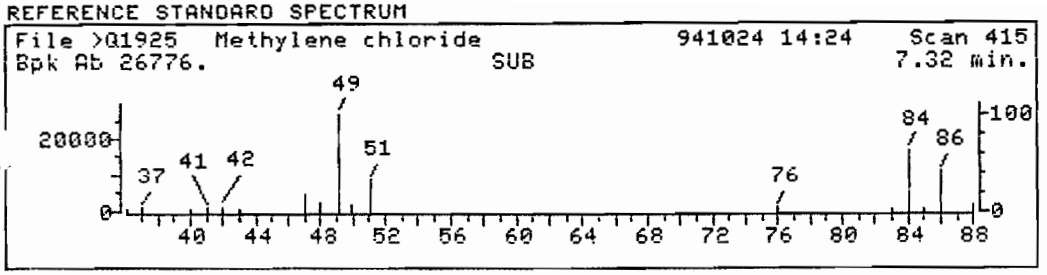


Data File: >Q2257::D4 Quant Output File: ^Q2257::D4
Name: R94/04290-006 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW4

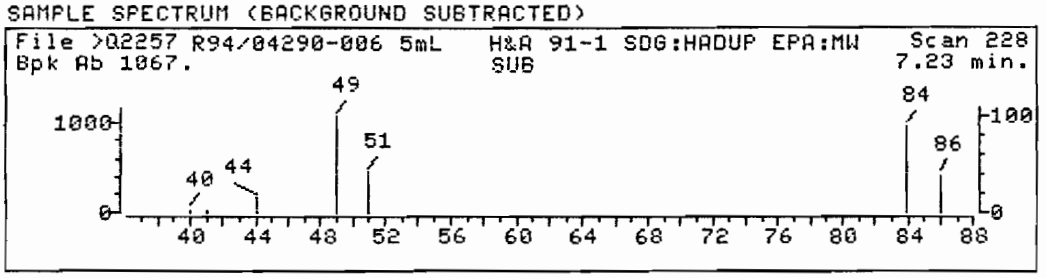
Id File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:10
Injected at: 941109 02:50

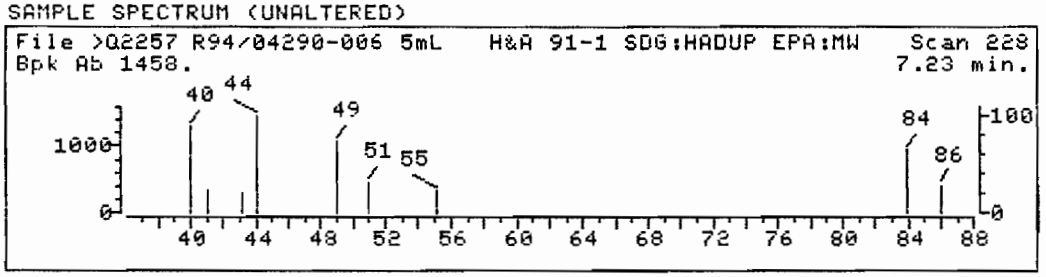
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



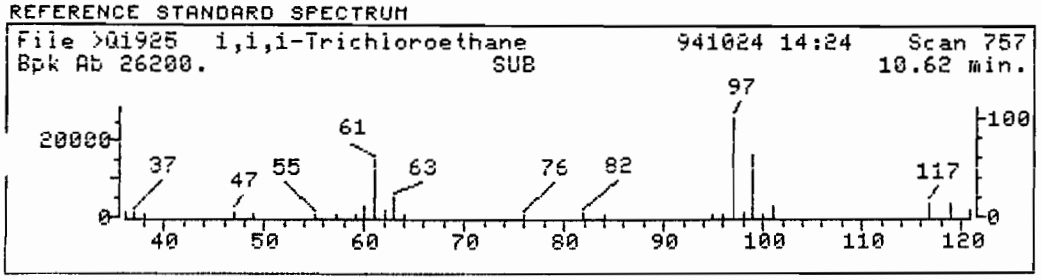
SAMPLE SPECTRUM (UNALTERED)



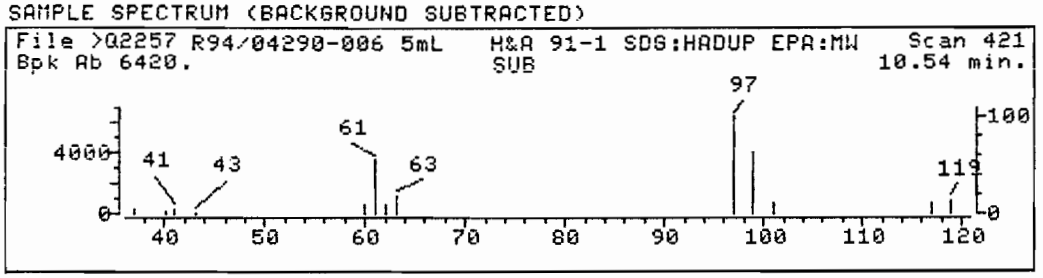
Data File: >Q2257::D4 Quant Output File: ^Q2257::D4
Name: R94/04290-006 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW4
Quant Time: 941109 07:10 Quant ID File: IDECLP::QT
Injected at: 941109 02:50 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 8
Compound Name : Methylene chloride
Scan Number : 228
Retention Time: 7.23 min.
Quant Ion : 84.0
Area : 5044
Concentration : 1.87 ppb
q-value : 77

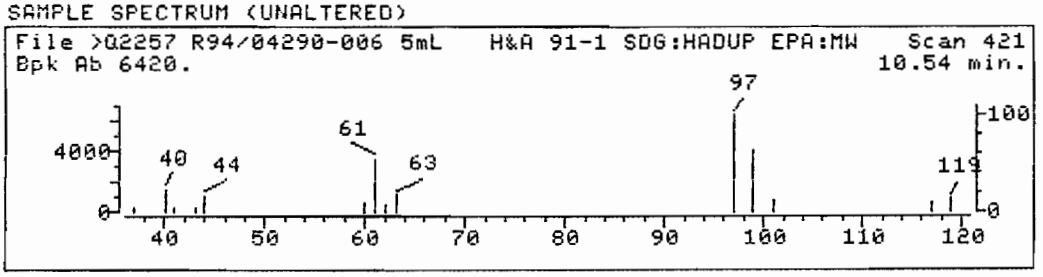
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



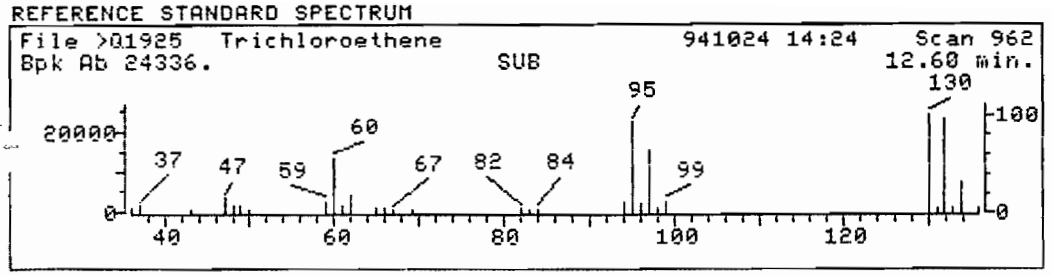
SAMPLE SPECTRUM (UNALTERED)



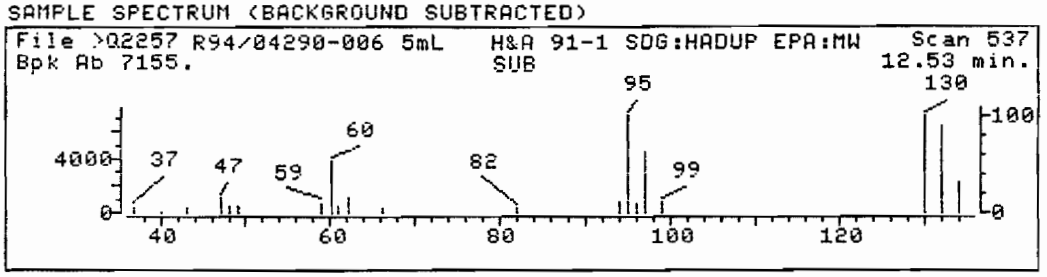
Data File: >Q2257::D4 Quant Output File: ^Q2257::D4
Name: R94/04290-006 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW4
Quant Time: 941109 07:10 Quant ID File: IDECLP::QT
Injected at: 941109 02:50 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 421
Retention Time: 10.54 min.
Quant Ion : 97.0
Area : 59128
Concentration : 14.66 ppb
q-value : 95

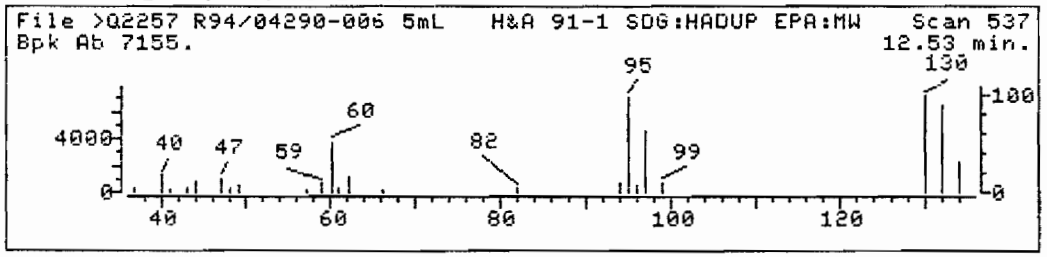
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2257::D4 Quant Output File: ^Q2257::D4
Name: R94/04290-006 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW4
Quant Time: 941109 07:10 Quant ID File: IDECLP::QT
Injected at: 941109 02:50 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 537
Retention Time: 12.53 min.
Quant Ion : 130.0
Area : 50237
Concentration : 14.61 ppb
q-value : 94

MS data file header from : >Q2257::D4

Sample: R94/04290-006 5mL Operator: RODH 11/09/94 2:50
Misc : H&A 91-1 SDG:HADUP EPA:MW4
s. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 7 Equip ID: MS5
Method file: REGUOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q2257 R94/04290-006 5mL H&A 91-1 SDG:HADUP EPA:MW4
36.0ù 283.0 CLP TIC
Upslope: .2000 Area Reject: 69863. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ2257 Sorted by Time/Area INT

Peak f	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	20.04	959	974	985	7627	164705	83392	100.00	100.000

Sum of corrected areas: 83392.

Summary of Unknowns PBM Library Search and Quantitation

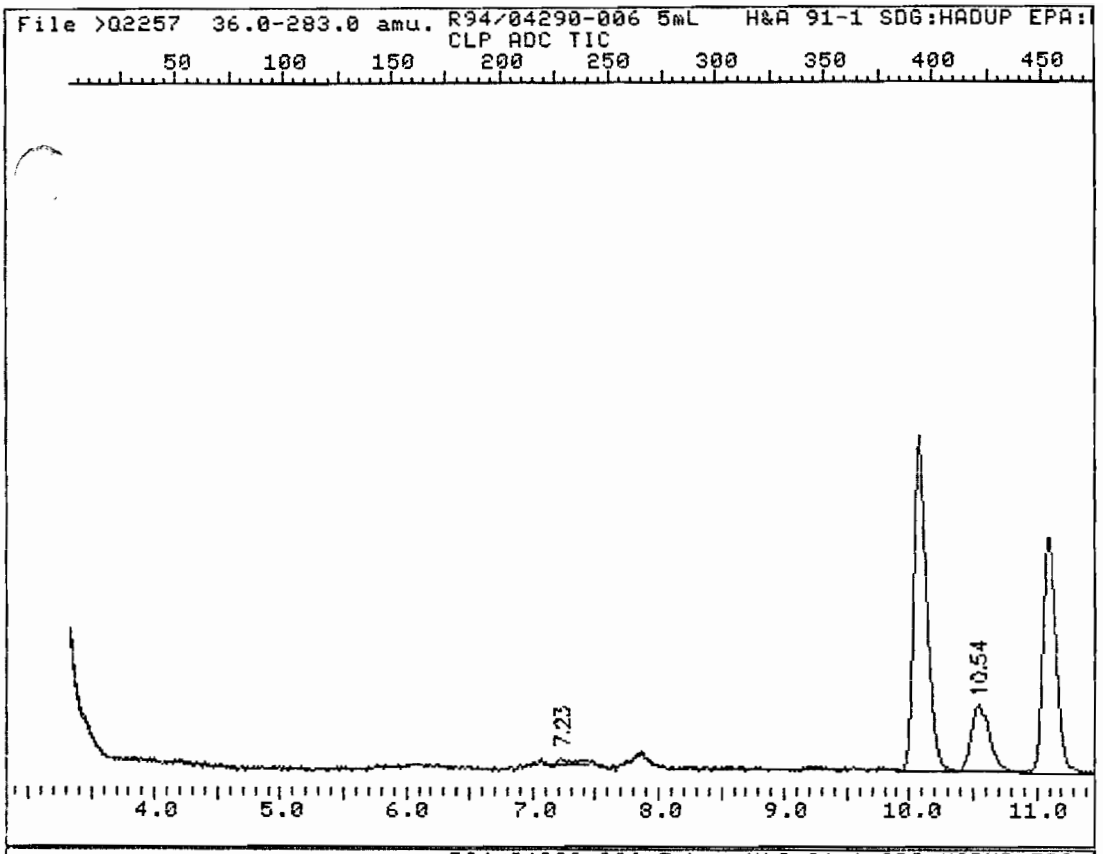
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	698632.	10.08	3.33 - 10.96
2	50.0	1002316.	11.85	10.96 - 15.09
3	50.0	1069403.	18.34	15.09 - 26.99

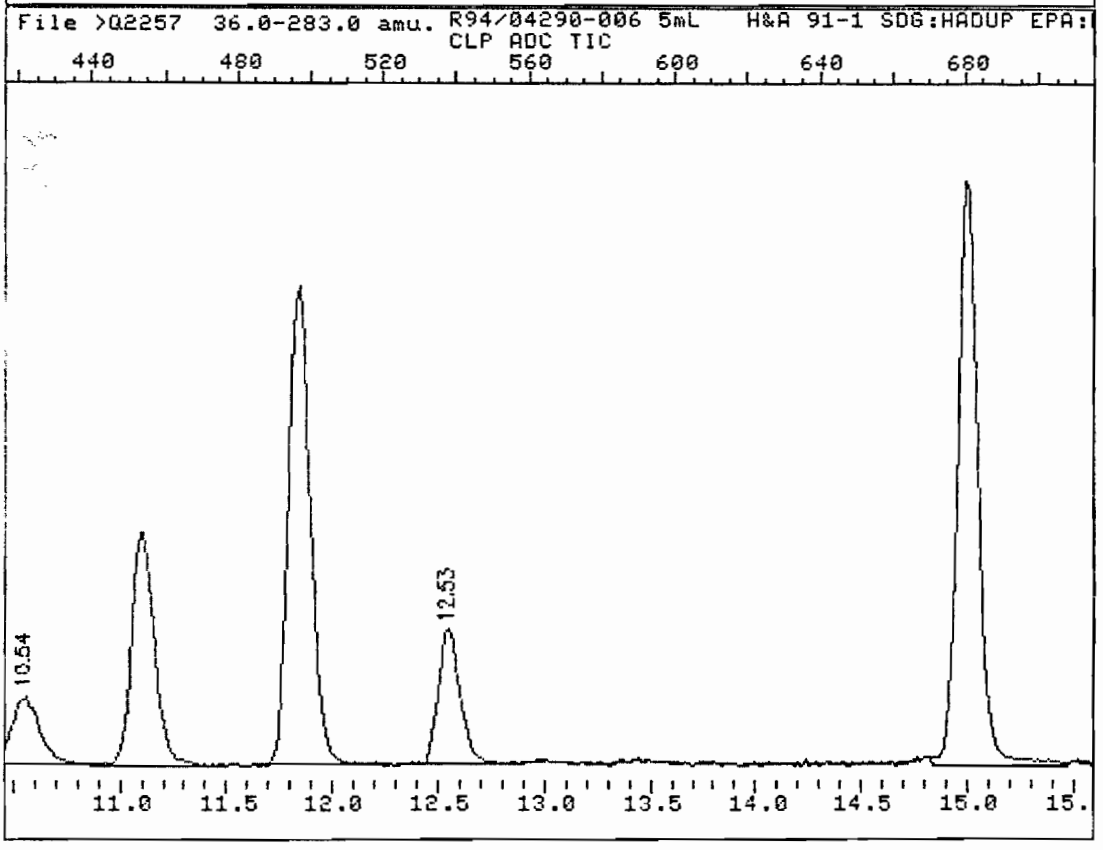
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

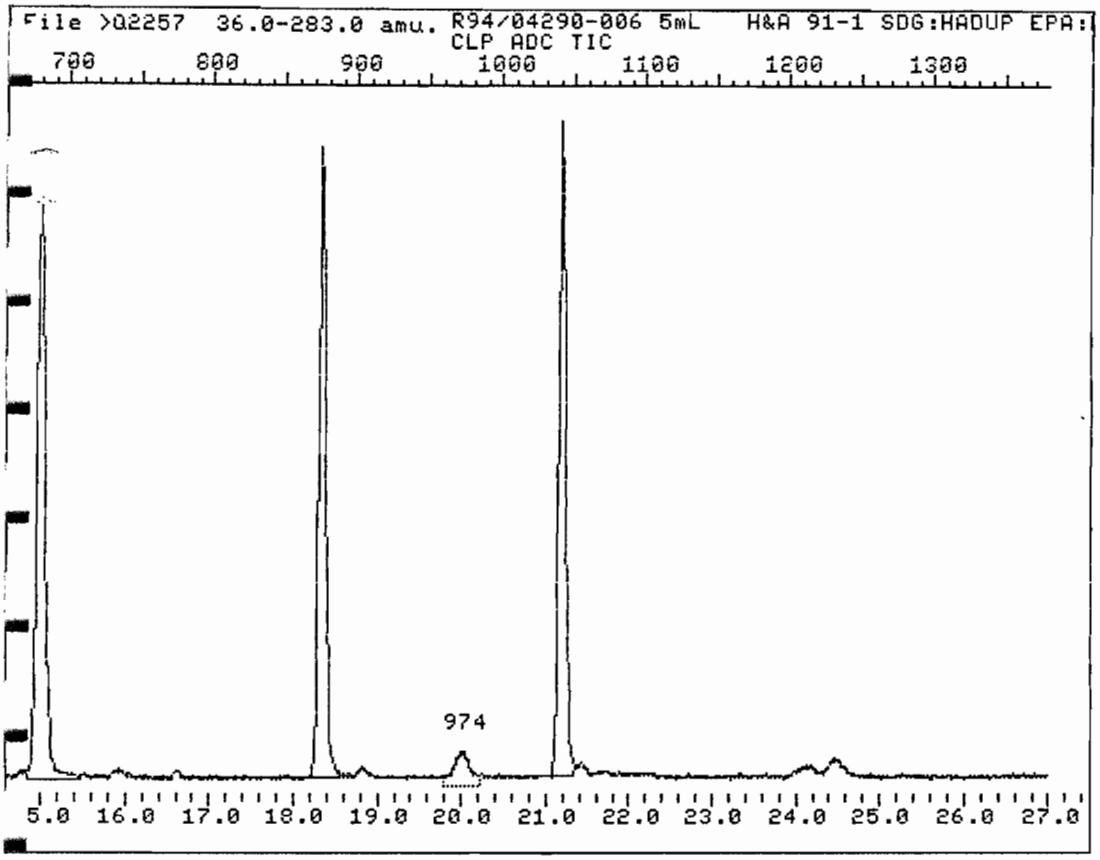
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:01 AM TUE., 15 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/09/94 2:50



Instrument ID: MS5 Analyzed on: 11/09/94 2:50

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2255

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	20.	U
74-83-9	Bromomethane	20.	U
75-01-4	Vinyl chloride	20.	U
75-00-3	Chloroethane	20.	U
75-09-2	Methylene chloride	20.	U
67-64-1	Acetone	20.	U
75-15-0	Carbon Disulfide	20.	U
75-35-4	1,1-Dichloroethene	5.	J
75-34-3	1,1-Dichloroethane	20.	U
156-60-5	trans-1,2-Dichloroethene	20.	U
67-66-3	Chloroform	20.	U
107-06-2	1,2-Dichloroethane	20.	U
78-93-3	2-Butanone	20.	U
156-59-2	cis-1,2-Dichloroethene	72.	
71-55-6	1,1,1-Trichloroethane	55.	
56-23-5	Carbon tetrachloride	20.	U
75-27-4	Bromodichloromethane	20.	U
78-87-5	1,2-Dichloropropane	20.	U
10061-01-5	cis-1,3-Dichloropropene	20.	U
79-01-6	Trichloroethene	900.	E
124-48-1	Dibromochloromethane	20.	U
79-00-5	1,1,2-Trichloroethane	20.	U
71-43-2	Benzene	20.	U
50061-02-6	trans-1,3-Dichloropropene	20.	U
75-25-2	Bromoform	20.	U
108-10-1	4-Methyl-2-Pentanone	20.	U
591-78-6	2-Hexanone	20.	U
127-18-4	Tetrachloroethene	9.	J
79-34-5	1,1,2,2-Tetrachloroethane	20.	U
108-88-3	Toluene	20.	U
108-90-7	Chlorobenzene	20.	U
100-41-4	Ethylbenzene	20.	U
100-42-5	Styrene	20.	U
108-38-3	(m+p)Xylene	20.	U
95-47-6	o-Xylene	20.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW5

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-4

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2255

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 2.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	14.15	14.	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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16.					
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18.					
19.					
20.					
21.					
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23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

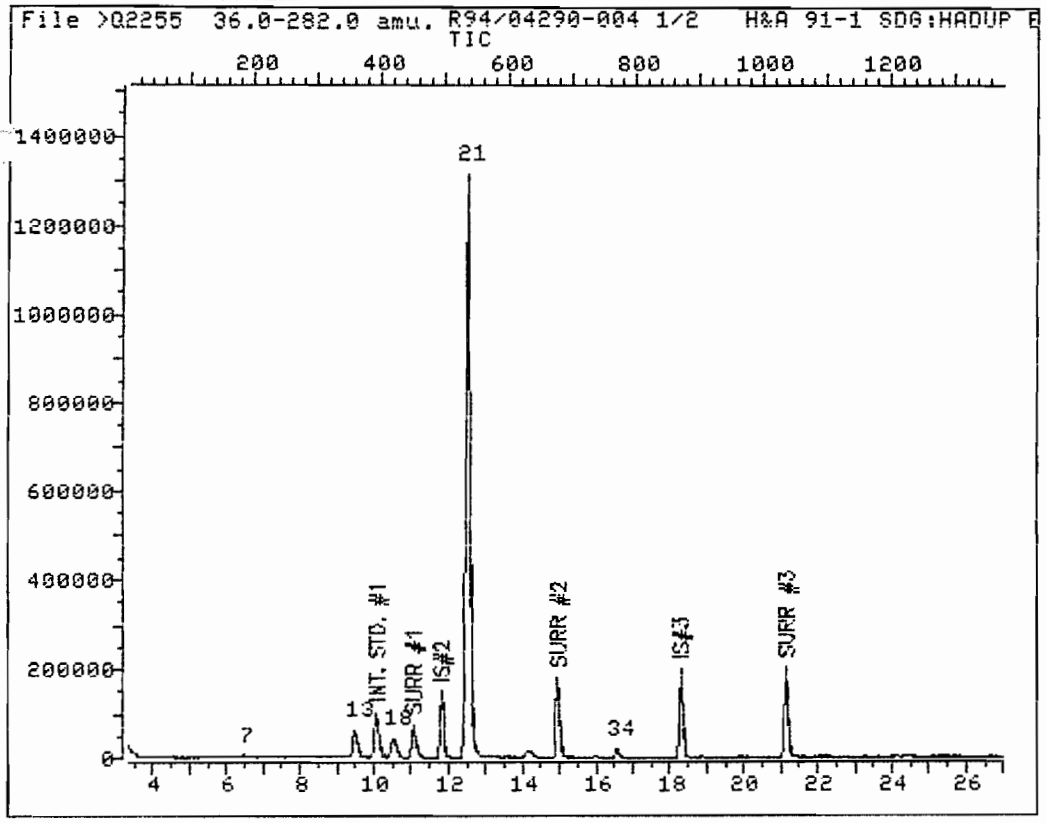
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 07:06
Output File: ^Q2255::D4 Injected at: 941109 01:37
Data File: >Q2255::D4 Dilution Factor: 1.00000
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.06	128.0	89293	50.00	ppb	94
7)	1,1-Dichloroethene	6.49	96.0	5289	2.40	ppb	95
13)	cis-1,2-Dichloroethene	9.48	96.0	92338	35.96	ppb	98
16)	1,2-Dichloroethane-d4	11.06	65.0	190070	49.24	ppb	89
17)	*1,4-Difluorobenzene	11.81	114.0	398799	50.00	ppb	77
18)	1,1,1-Trichloroethane	10.52	97.0	118609	27.56	ppb	93
21)	Trichloroethene	12.50	130.0	1642842	447.85	ppb	98
29)	*Chlorobenzene-d5	18.29	117.0	350080	50.00	ppb	95
31)	Toluene-d8	14.96	98.0	392751	48.88	ppb	90
34)	Tetrachloroethene	16.57	164.0	13693	4.52	ppb	95
41)	Bromofluorobenzene	21.14	95.0	244460	48.99	ppb	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

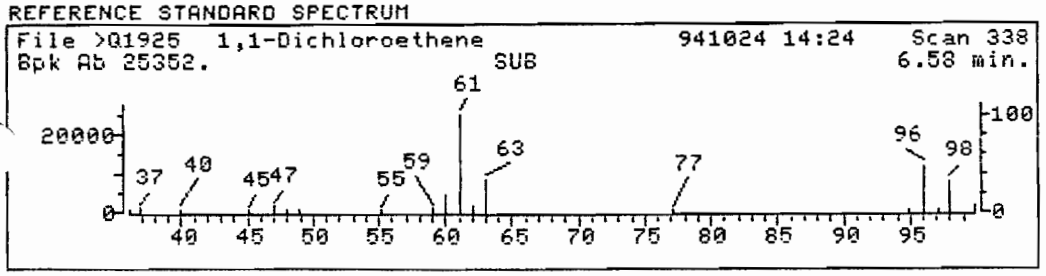


Data File: >Q2255::D4 Quant Output File: ^Q2255::D4
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5

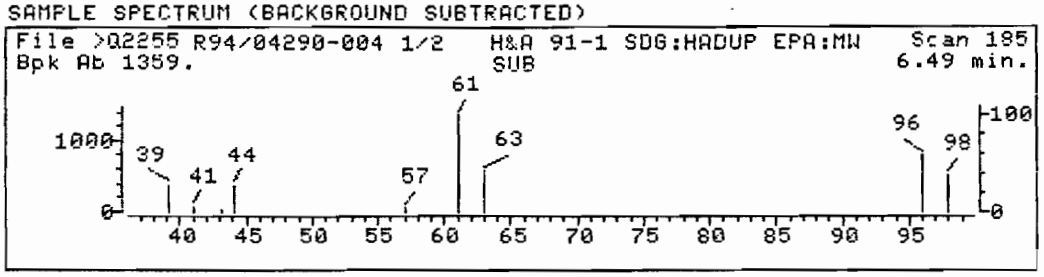
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 07:06
Injected at: 941109 01:37

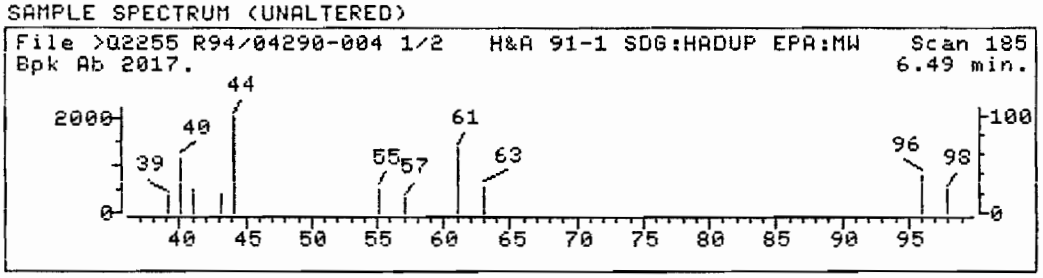
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



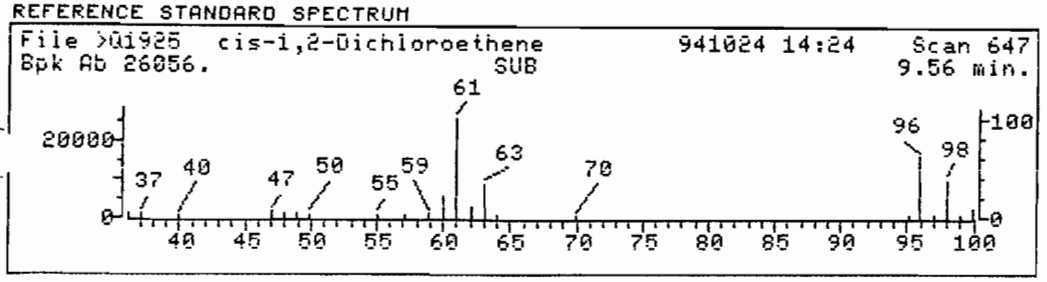
SAMPLE SPECTRUM (UNALTERED)



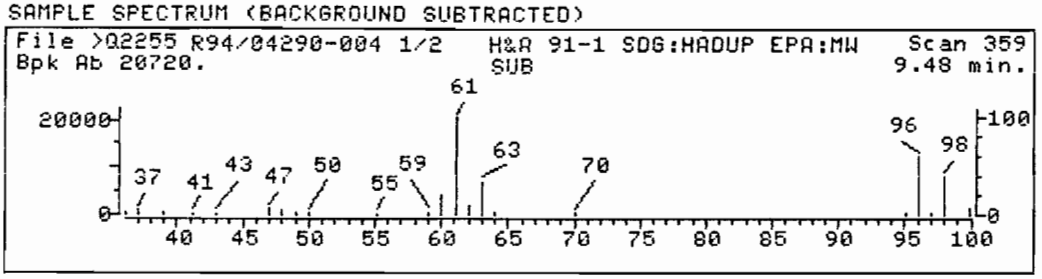
Data File: >Q2255::D4 Quant Output File: ^Q2255::D4
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5
Quant Time: 941109 07:06 Quant ID File: IDECLP::QT
Injected at: 941109 01:37 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 7
Compound Name : 1,1-Dichloroethene
Scan Number : 185
Retention Time: 6.49 min.
Quant Ion : 96.0
Area : 5289
Concentration : 2.40 ppb
q-value : 95

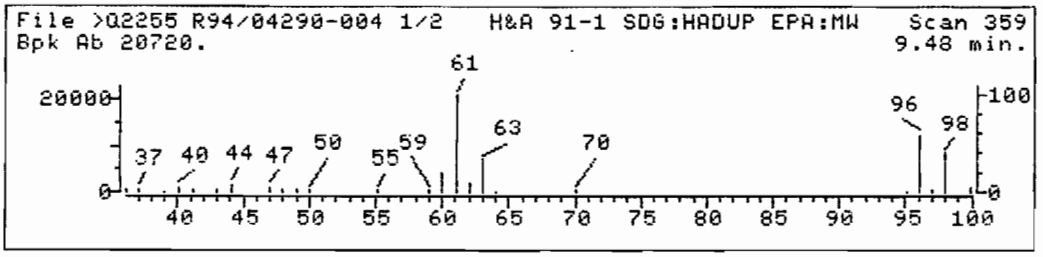
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



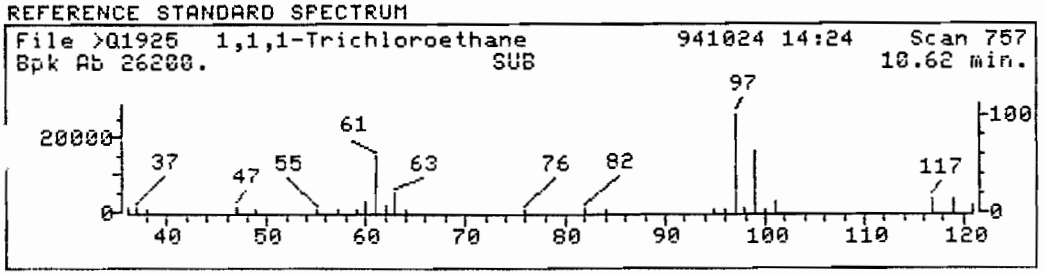
SAMPLE SPECTRUM (UNALTERED)



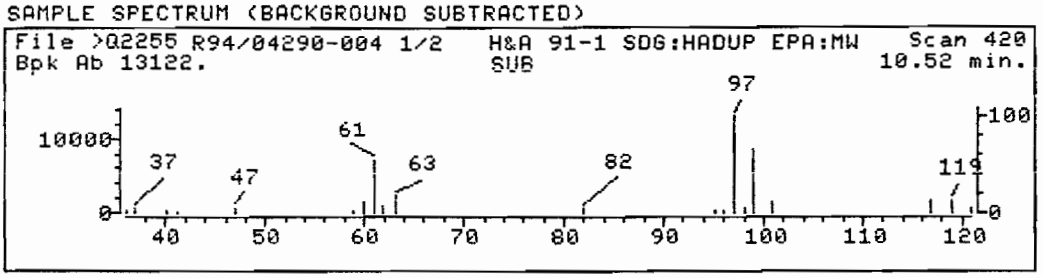
Data File: >Q2255::D4 Quant Output File: ^Q2255::D4
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5
Quant Time: 941109 07:06 Quant ID File: IDECLP::QT
Injected at: 941109 01:37 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 359
Retention Time: 9.48 min.
Quant Ion : 96.0
Area : 92338
Concentration : 35.96 ppb
q-value : 98

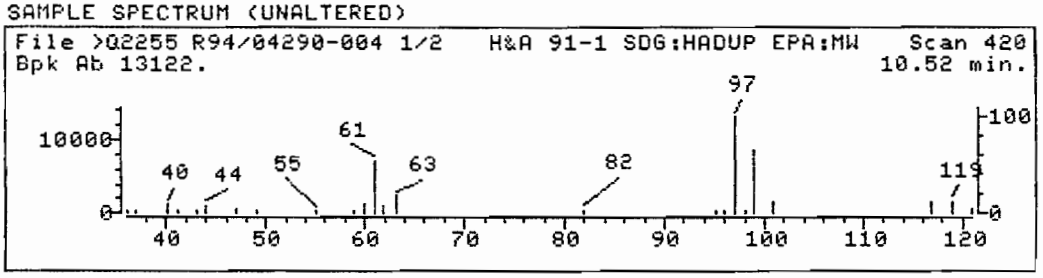
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



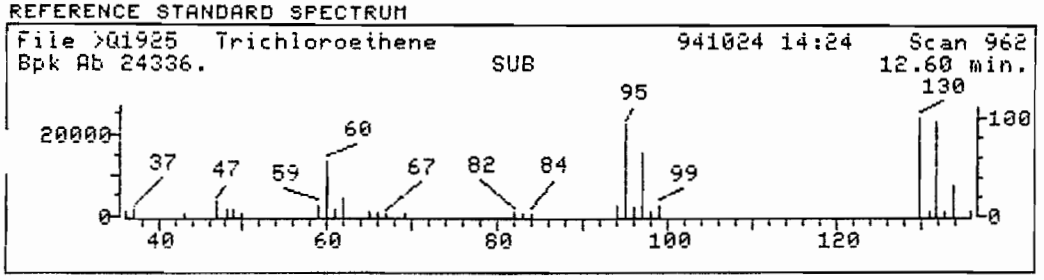
SAMPLE SPECTRUM (UNALTERED)



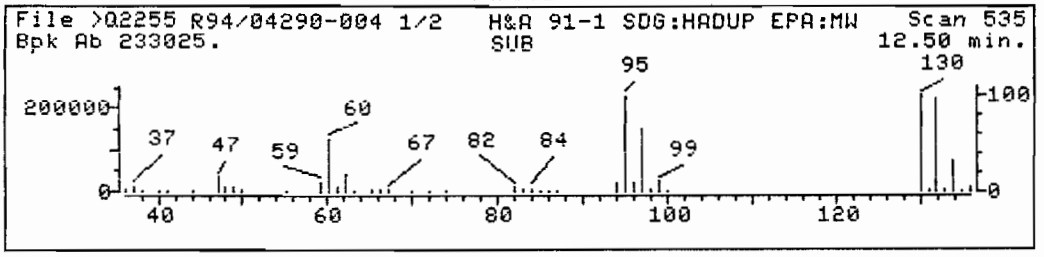
Data File: >Q2255::D4 Quant Output File: ^Q2255::D4
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5
Quant Time: 941109 07:06 Quant ID File: IDECLP::QT
Injected at: 941109 01:37 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 420
Retention Time: 10.52 min.
Quant Ion : 97.0
Area : 118609
Concentration : 27.56 ppb
q-value : 93

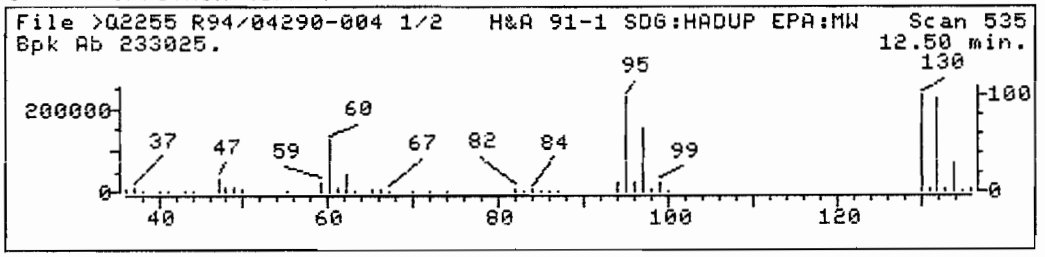
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



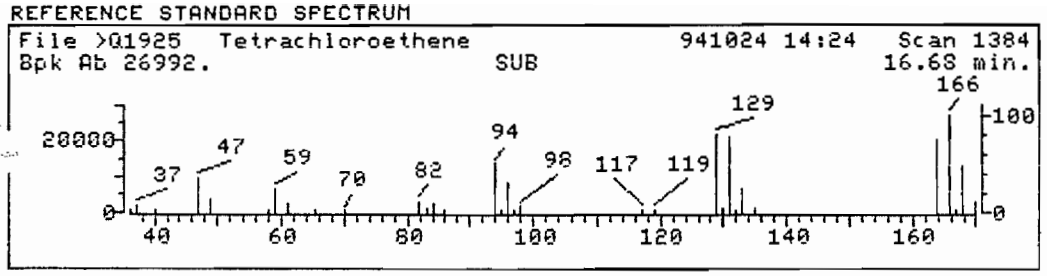
SAMPLE SPECTRUM (UNALTERED)



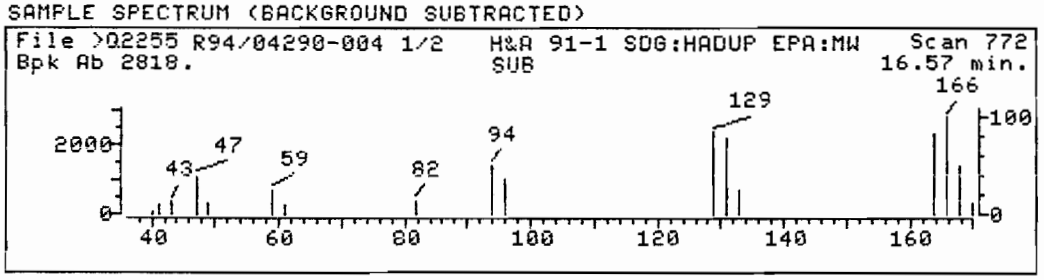
Data File: >Q2255::D4 Quant Output File: ^Q2255::D4
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5
Quant Time: 941109 07:06 Quant ID File: IDECLP::QT
Injected at: 941109 01:37 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 535
Retention Time: 12.50 min.
Quant Ion : 130.0
Area : 1642842
Concentration : 447.85 ppb
q-value : 98

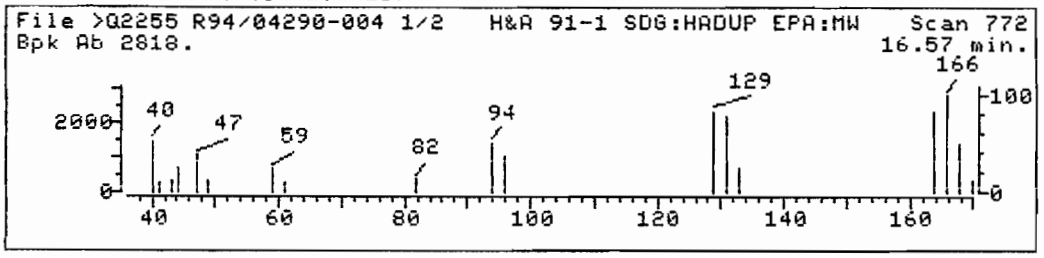
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2255::D4 Quant Output File: ^Q2255::D4
Name: R94/04290-004 1/2 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5
Quant Time: 941109 07:06 Quant ID File: IDECLP::QT
Injected at: 941109 01:37 Last Calibration: 941024 18:35
Last Qcal Time: 941108 19:35

Compound No : 34
Compound Name : Tetrachloroethene
Scan Number : 772
Retention Time: 16.57 min.
Quant Ion : 164.0
Area : 13693
Concentration : 4.52 ppb
q-value : 95

MS data file header from : >Q2255::D4

Sample: R94/04290-004 1/2 Operator: RODH 11/09/94 1:37
Misc : H&A 91-1 SDG:HADUP EPA:MW5
S. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 5 Equip ID: MS5
Method file: REGUOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q2255 R94/04290-004 1/2 H&A 91-1 SDG:HADUP EPA:MW5
36.0ù 282.0 CLP TIC
Upslope: .2000 Area Reject: 74231. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ2255 Sorted by Time/Area INT

Peak f	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	14.15	620	631	646	14609	221647	153269	100.00	100.000

Sum of corrected areas: 153269.

Summary of Unknowns PBM Library Search and Quantitation

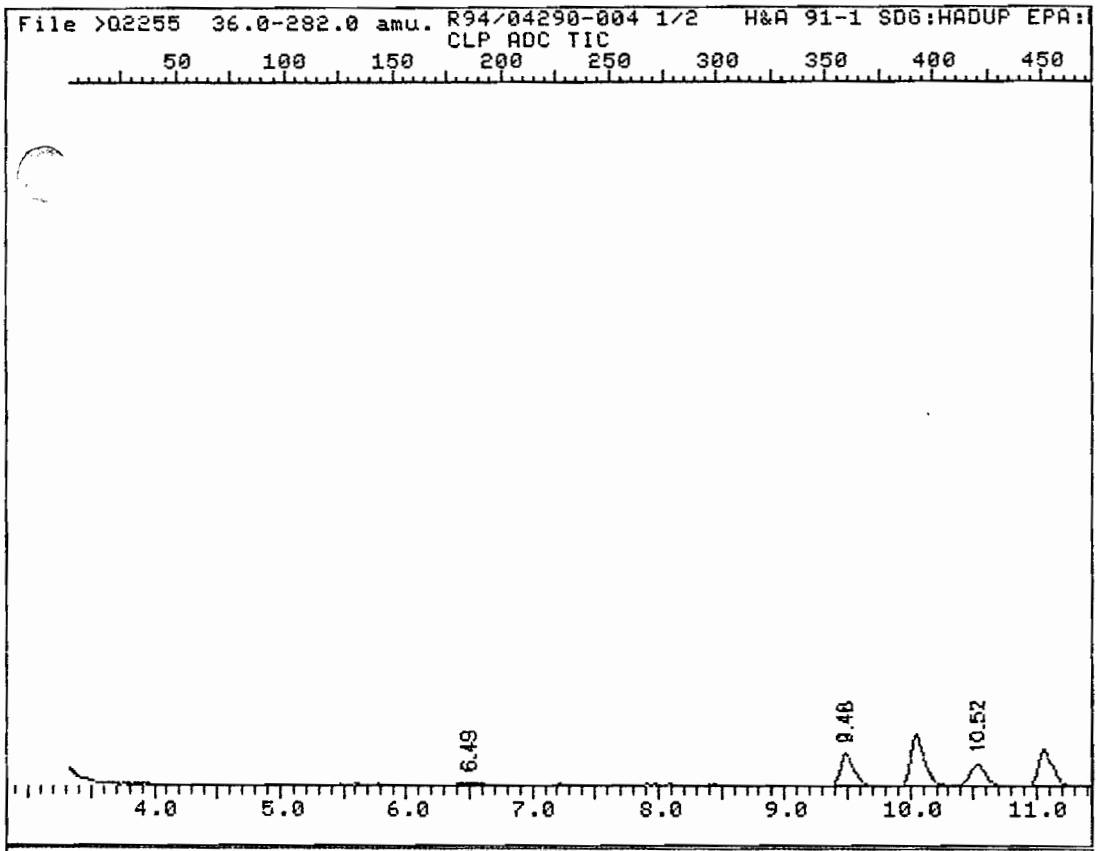
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	742308.	10.06	3.33 - 10.94
2	50.0	1064422.	11.81	10.94 - 15.05
3	50.0	1158780.	18.29	15.05 - 26.99

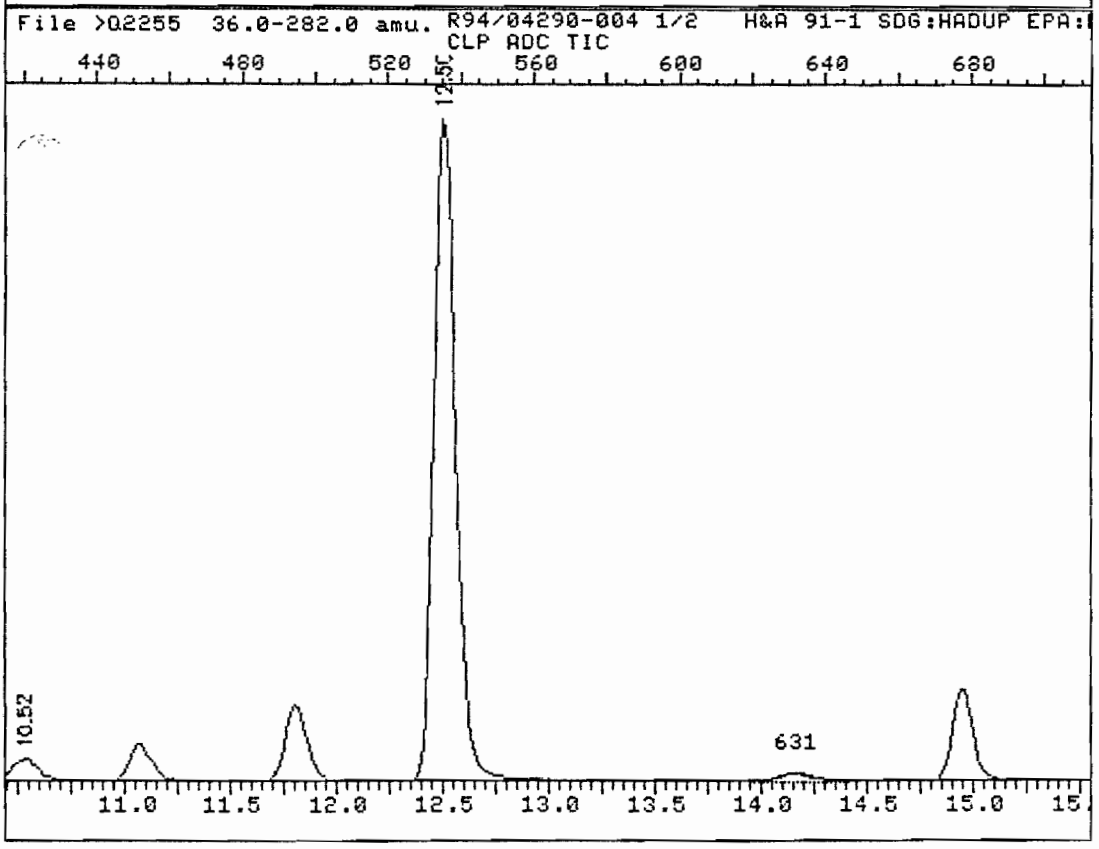
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 2.00

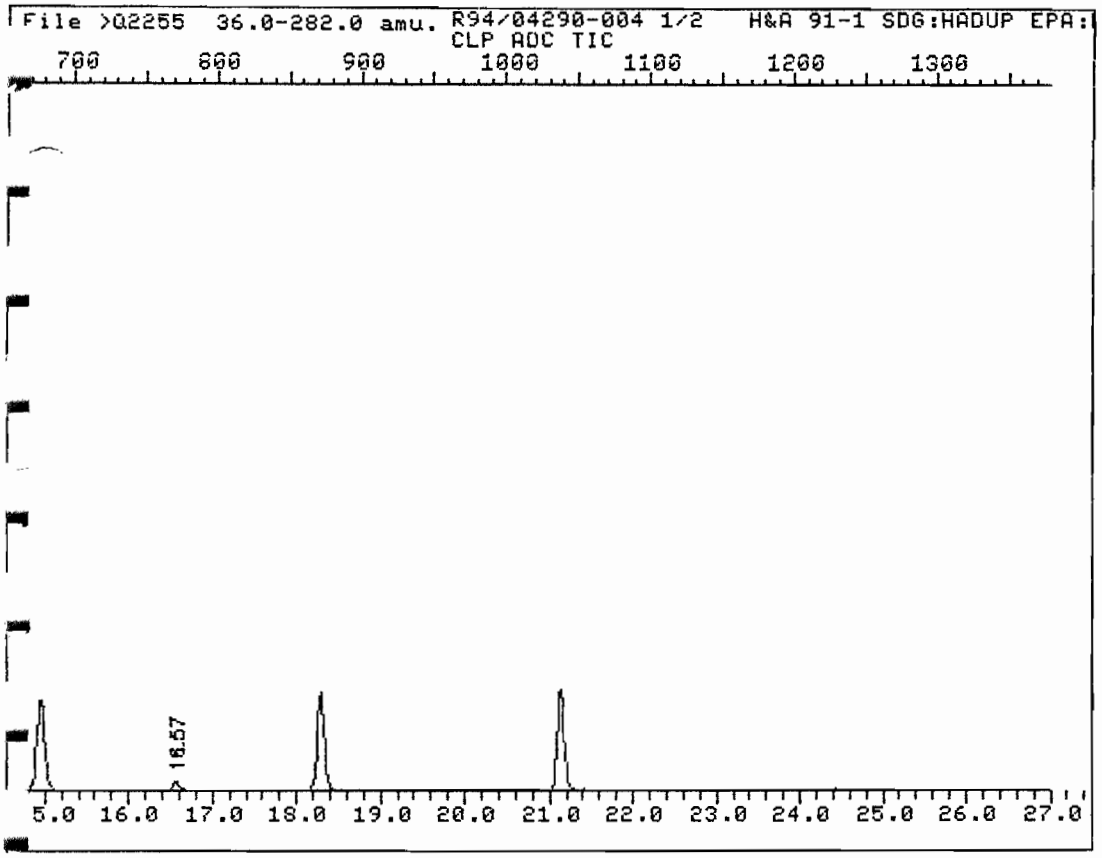
Unknown Concentration = ùConc Int Std * Area Unknownù / ùArea Int Stdù * Correction Factor

12:29 AM TUE., 15 NOV., 1994

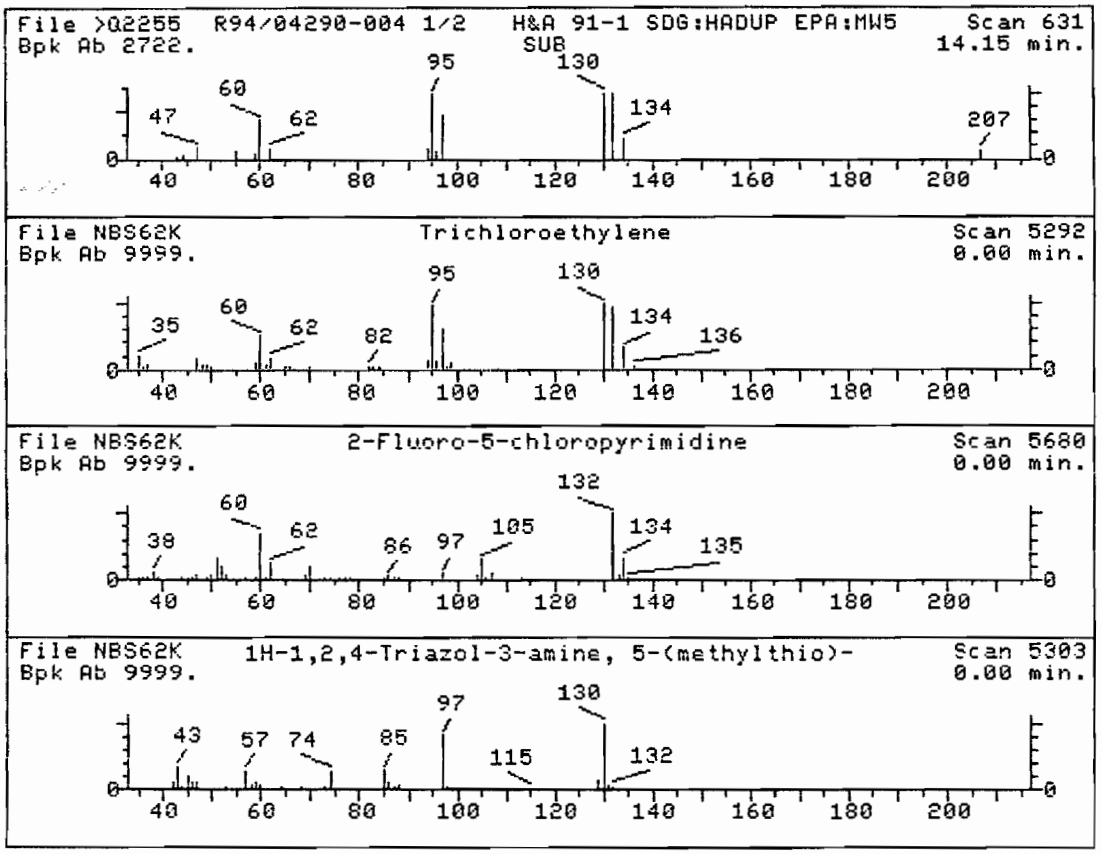




Instrument ID: MS5 Analyzed on: 11/09/94 1:37



Instrument ID: MS5 Analyzed on: 11/09/94 1:37



Instrument ID: MS5 Analyzed on: 11/09/94 1:37
Result 1 in PBM results file: LQ2255
Retention Time: 14.15 Area: 153269 Tentative Conc: 14.00
The unknown area is 14.40% of the nearest internal standard

1.	Trichloroethylene	130 C2HCl3
2.	2-Fluoro-5-chloropyrimidine	132 C4H2ClFN2
3.	1H-1,2,4-Triazol-3-amine, 5-(methylthio)-	130 C3H6N4S

Sample file: >Q2255 Spectrum £: 631
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS £	CON £	ROOT	K	DK	£FLG	TILT	%	CON	C_I	R_IV
1.	87*	79016	19537	NBS62K	76	59	3	0	100	2	63	41

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5DL

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-4DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2270

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene chloride	100.	U
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	100.	U
75-35-4	1,1-Dichloroethene	100.	U
75-34-3	1,1-Dichloroethane	100.	U
156-60-5	trans-1,2-Dichloroethene	100.	U
67-66-3	Chloroform	100.	U
107-06-2	1,2-Dichloroethane	100.	U
78-93-3	2-Butanone	100.	U
156-59-2	cis-1,2-Dichloroethene	83.	DJ
71-55-6	1,1,1-Trichloroethane	63.	DJ
56-23-5	Carbon tetrachloride	100.	U
75-27-4	Bromodichloromethane	100.	U
78-87-5	1,2-Dichloropropane	100.	U
10061-01-5	cis-1,3-Dichloropropene	100.	U
79-01-6	Trichloroethene	1100.	D
124-48-1	Dibromochloromethane	100.	U
79-00-5	1,1,2-Trichloroethane	100.	U
71-43-2	Benzene	100.	U
50061-02-6	trans-1,3-Dichloropropene	100.	U
75-25-2	Bromoform	100.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	100.	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	U
108-88-3	Toluene	100.	U
108-90-7	Chlorobenzene	100.	U
100-41-4	Ethylbenzene	100.	U
100-42-5	Styrene	100.	U
108-38-3	(m+p)Xylene	100.	U
95-47-6	o-Xylene	100.	U

EPA SAMPLE NO.

MW5DL

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-4DL

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2270

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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21.					
22.					
23.					
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25.					
26.					
27.					
28.					
29.					
30.					

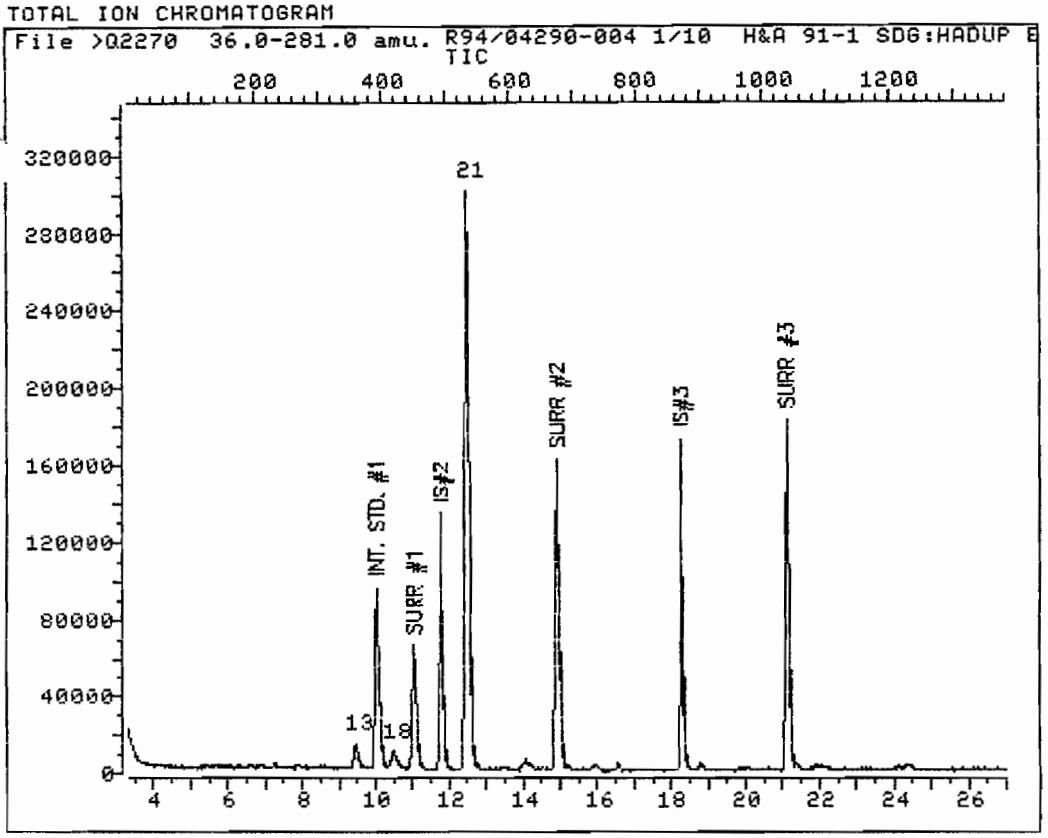
Operator ID: TOMT Quant Rev: 7 Quant Time: 941109 14:32
Output File: ^Q2270::D3 Injected at: 941109 13:48
Data File: >Q2270::D3 Dilution Factor: 1.00000
Name: R94/04290-004 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5DL

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.03	128.0	82283	50.00	ppb	91
13)	cis-1,2-Dichloroethene	9.46	96.0	19893	8.26	ppb	96
16)	1,2-Dichloroethane-d4	11.04	65.0	168043	46.30	ppb	90
17)	*1,4-Difluorobenzene	11.78	114.0	355307	50.00	ppb	76
18)	1,1,1-Trichloroethane	10.49	97.0	26194	6.32	ppb	95
21)	Trichloroethene	12.48	130.0	376427	114.37	ppb	94
29)	*Chlorobenzene-d5	18.27	117.0	310412	50.00	ppb	96
31)	Toluene-d8	14.94	98.0	352555	50.39	ppb	90
41)	Bromofluorobenzene	21.12	95.0	219239	50.52	ppb	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM

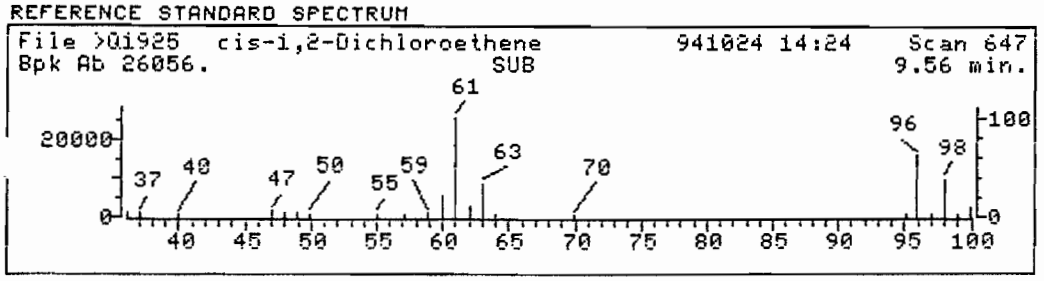


Data File: >Q2270::D3 Quant Output File: ^Q2270::D3
Name: R94/04290-004 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5DL

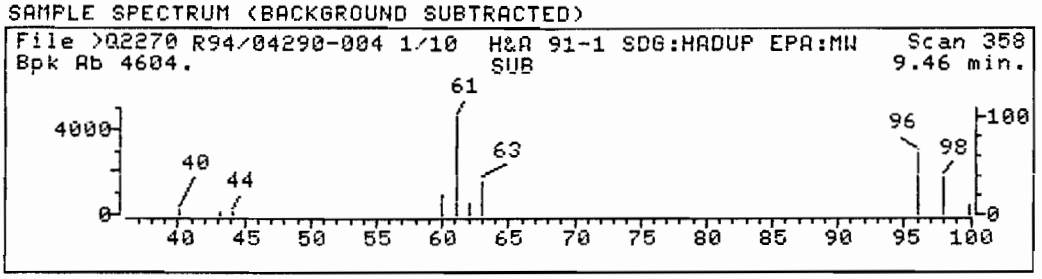
Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

Operator ID: TOMT
Quant Time : 941109 14:32
Injected at: 941109 13:48

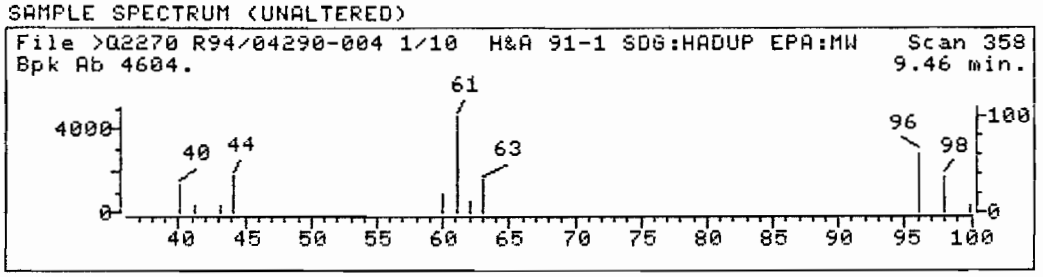
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



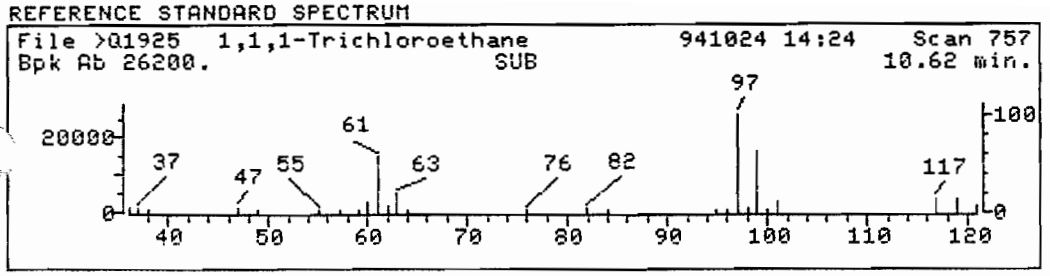
SAMPLE SPECTRUM (UNALTERED)



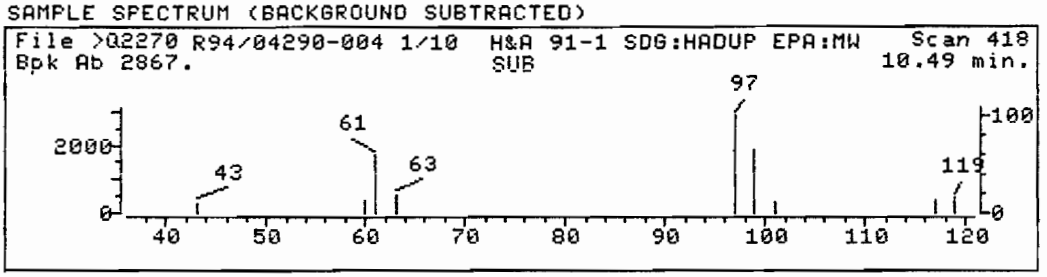
Data File: >Q2270::D3 Quant Output File: ^Q2270::D3
Name: R94/04290-004 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5DL
Quant Time: 941109 14:32 Quant ID File: IDECLP::QT
Injected at: 941109 13:48 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 13
Compound Name : cis-1,2-Dichloroethene
Scan Number : 358
Retention Time: 9.46 min.
Quant Ion : 96.0
Area : 19893
Concentration : 8.26 ppb
q-value : 96

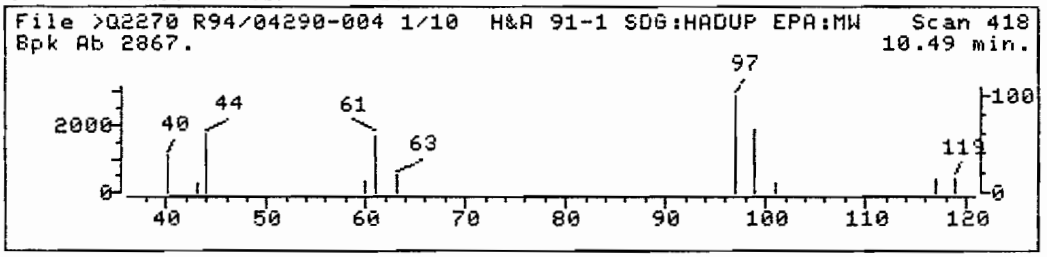
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



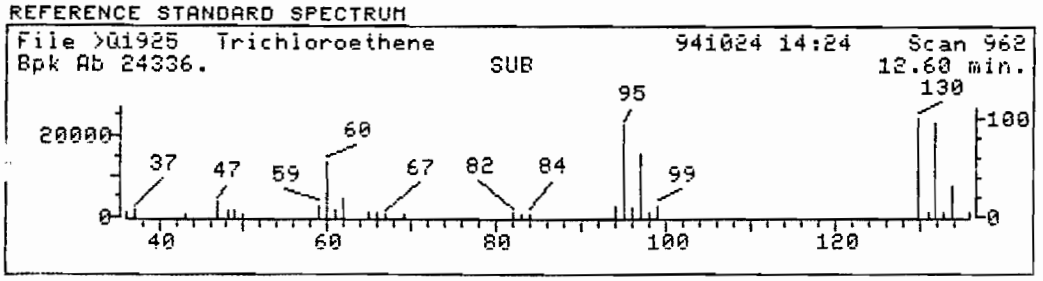
SAMPLE SPECTRUM (UNALTERED)



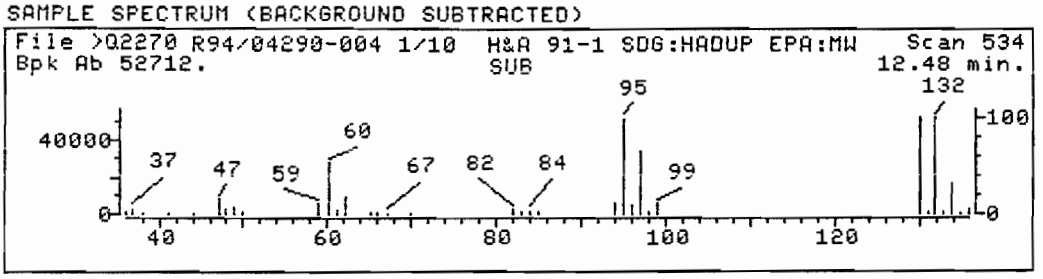
Data File: >Q2270::D3 Quant Output File: ^Q2270::D3
Name: R94/04290-004 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5DL
Quant Time: 941109 14:32 Quant ID File: IDECLP::QT
Injected at: 941109 13:48 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 18
Compound Name : 1,1,1-Trichloroethane
Scan Number : 418
Retention Time: 10.49 min.
Quant Ion : 97.0
Area : 26194
Concentration : 6.32 ppb
q-value : 95

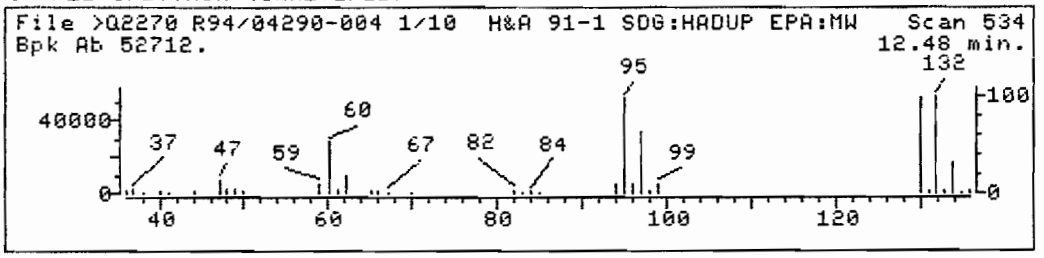
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >Q2270::D3 Quant Output File: ^Q2270::D3
Name: R94/04290-004 1/10 Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW5DL
Quant Time: 941109 14:32 Quant ID File: IDECLP::QT
Injected at: 941109 13:48 Last Calibration: 941024 18:35
Last Qcal Time: 941109 08:33

Compound No : 21
Compound Name : Trichloroethene
Scan Number : 534
Retention Time: 12.48 min.
Quant Ion : 130.0
Area : 376427
Concentration : 114.37 ppb
q-value : 94

MS data file header from : >Q2270::D3

Sample: R94/04290-004 1/10 Operator: TOMT 11/09/94 13:48
Misc : H&A 91-1 SDG:HADUP EPA:MW5DL
Vials. £: 1 MS model: 70 SW/HW rev.: FF ALS £ : 3 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

>Q2270 R94/04290-004 1/10 H&A 91-1 SDG:HADUP EPA:MW5DL
36.0ù 281.0 CLP TIC
Upslope: .2000 Area Reject: 66813. Max Peaks: 1 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IQ2270 Sorted by Time/Area INT

Peak £	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	14.04	616	625	639	5692	113496	69562	100.00	100.000

Sum of corrected areas: 69562.

Summary of Unknowns PBM Library Search and Quantitation

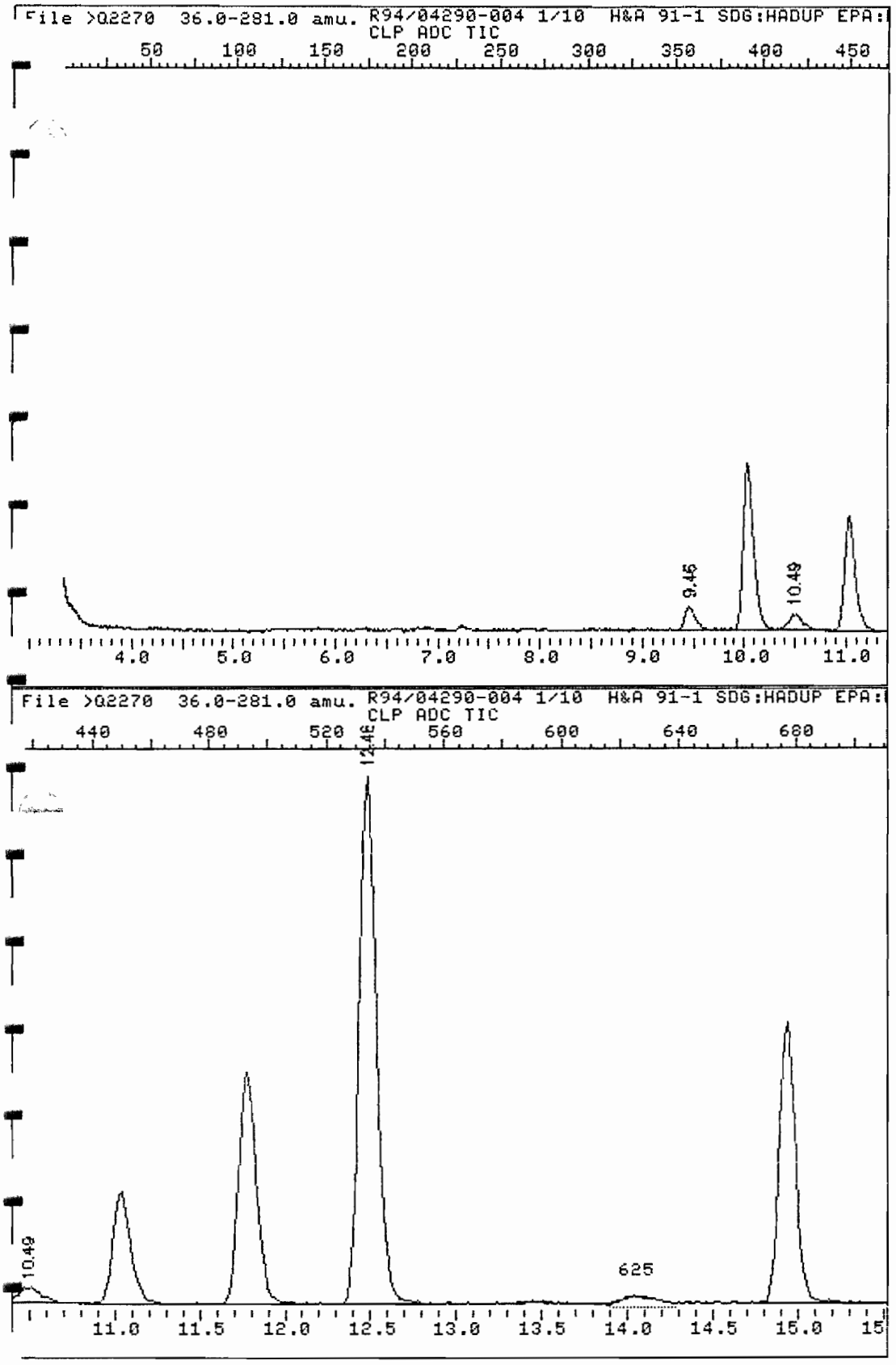
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	668133.	10.03	3.33 - 10.90
2	50.0	948724.	11.78	10.90 - 15.02
3	50.0	1037593.	18.27	15.02 - 27.01

Dilution Factor = 1.00 This sample was 5.00000 g or mL

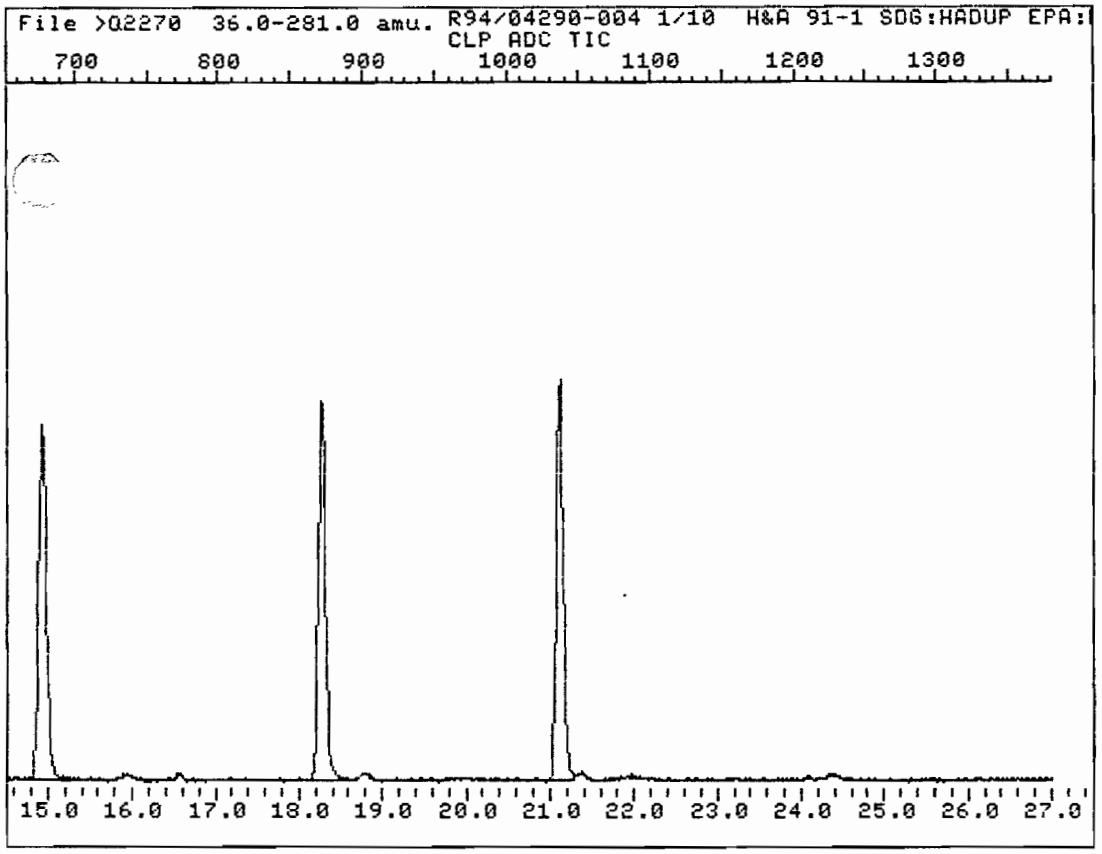
Correction Factor = 10.00

Unknown Concentration = ùConc Int Std * Area Unknownù / ù Area Int Std ù * Correction Factor

12:38 AM TUE., 15 NOV., 1994



Instrument ID: MS5 Analyzed on: 11/09/94 13:48



Instrument ID: MS5 Analyzed on: 11/09/94 13:48

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2249

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

EPA SAMPLE NO.

MW6

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-7

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2249

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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.					

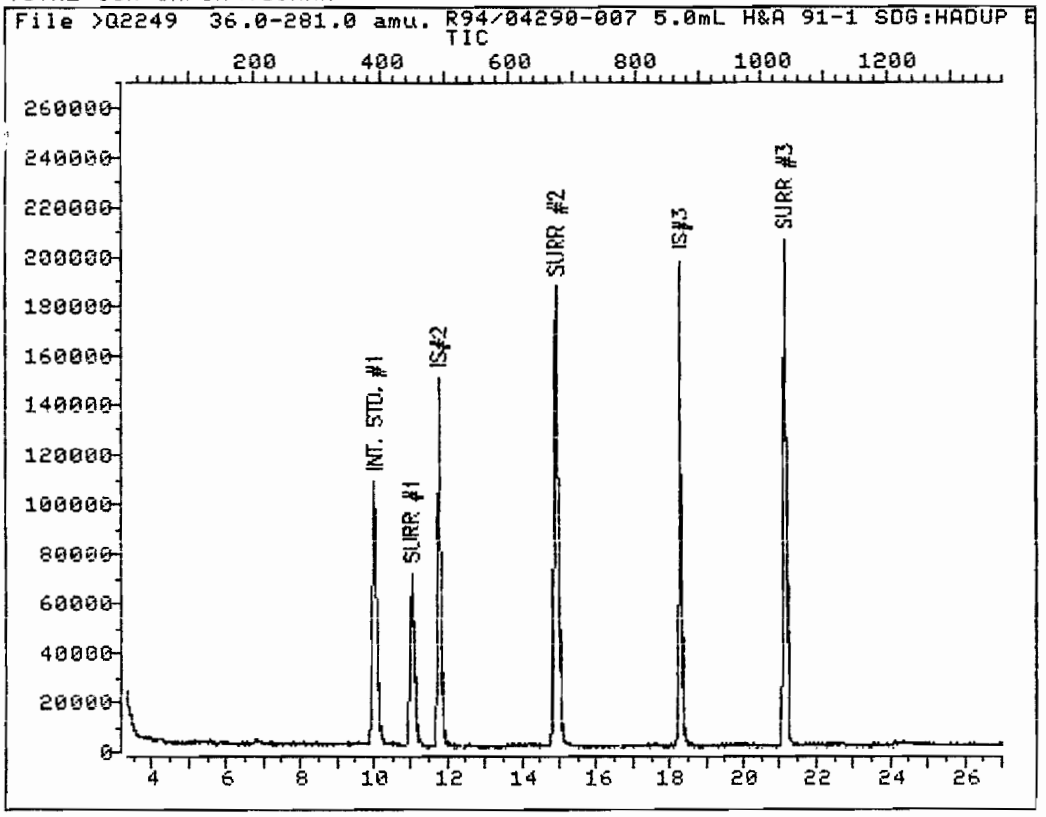
Operator ID: RODH Quant Rev: 7 Quant Time: 941108 22:13
Output File: ^Q2249::D3 Injected at: 941108 21:44
Data File: >Q2249::D3 Dilution Factor: 1.00000
Name: R94/04290-007 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW6

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.01	128.0	94228	50.00	ppb	91
16)	1,2-Dichloroethane-d4	11.00	65.0	189507	46.52	ppb	90
17)	*1,4-Difluorobenzene	11.76	114.0	413464	50.00	ppb	78
29)	*Chlorobenzene-d5	18.27	117.0	347670	50.00	ppb	95
31)	Toluene-d8	14.92	98.0	403141	50.52	ppb	89
41)	Bromofluorobenzene	21.12	95.0	244805	49.40	ppb	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2249::D3 Quant Output File: ^Q2249::D3
Name: R94/04290-007 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW6

Id File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941108 22:13
Injected at: 941108 21:44

MS data file header from : >Q2249::D3

Sample: R94/04290-007 5.0mL Operator: RODH 11/08/94 21:44
Misc : H&A 91-1 SDG:HADUP EPA:MW6
Vs. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 1 Equip ID: MS5
Method file: REGUOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

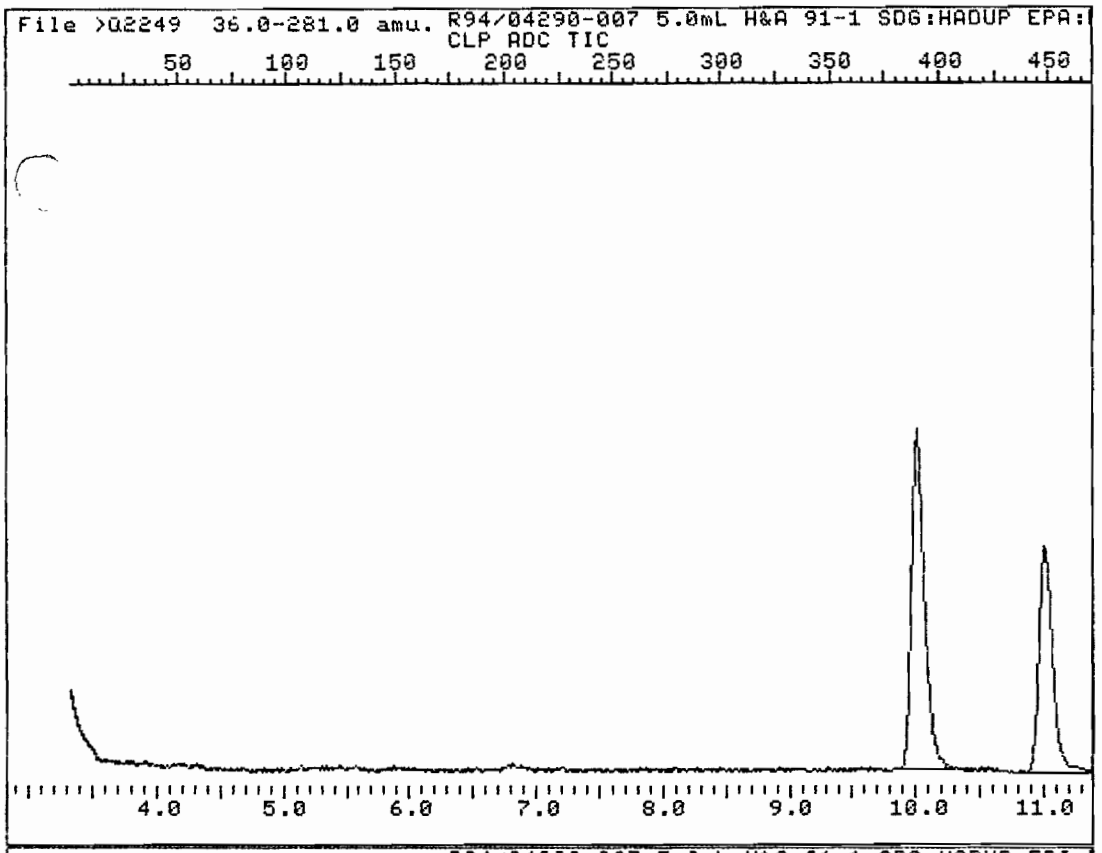
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	762591.	10.01	3.33 - 10.88
2	50.0	1087186.	11.76	10.88 - 15.01
3	50.0	1176885.	18.27	15.01 - 27.01

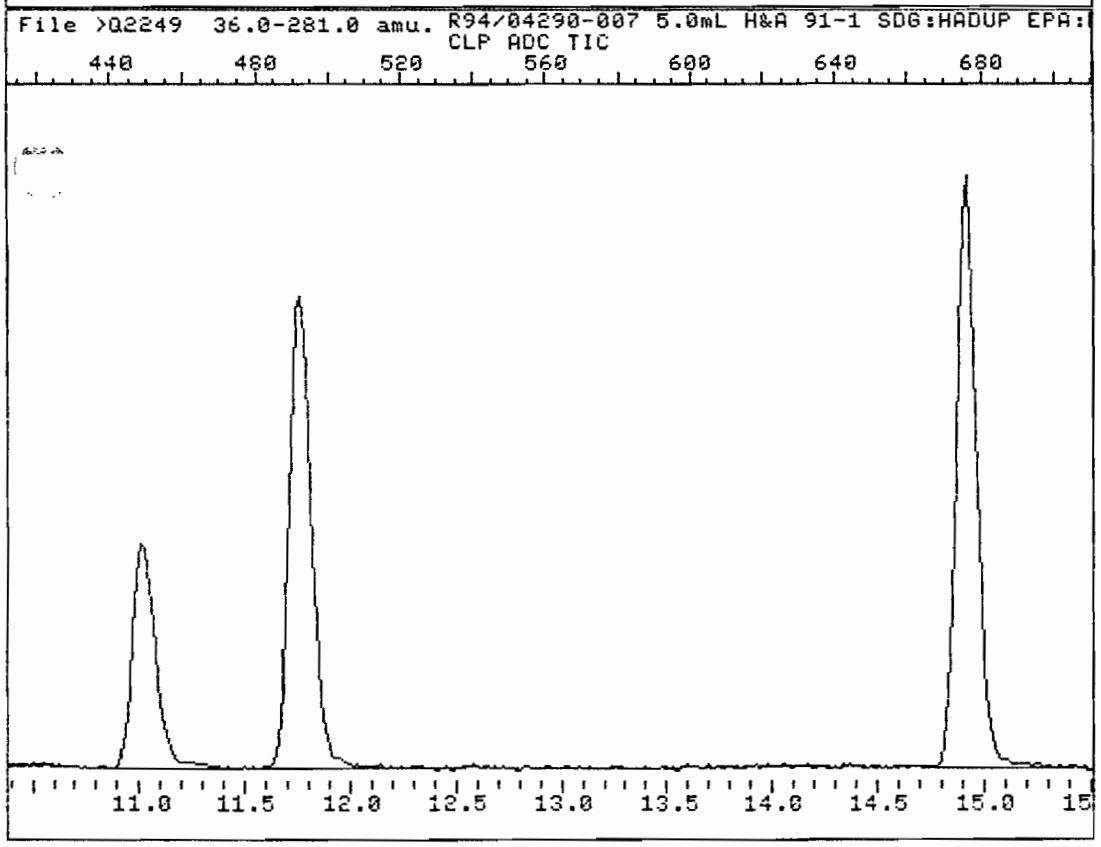
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

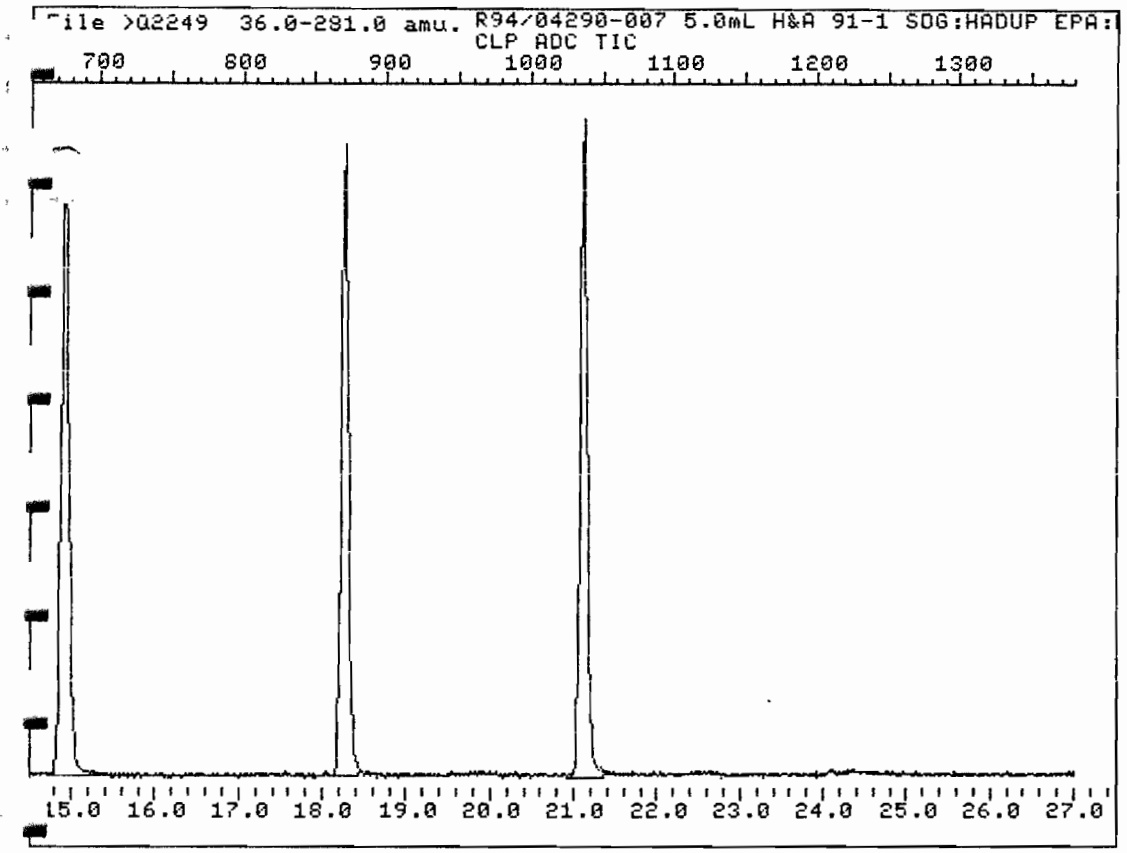
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

1:08 AM TUE., 15 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/08/94 21:44



Instrument ID: MS5 Analyzed on: 11/08/94 21:44

STANDARDS DATA

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Instrument ID:MS5 Calibration Date(s):10/24/94 10/24/94

Heated Purge: (Y/N) N Calibration Times: 1309 1602

GC Column:RTX-502 ID: 0.53 (mm)

LAB FILE ID: RRF10 =Q1923 RRF20 =Q1924
RRF50 =Q1925 RRF100=Q1926 RRF200=Q1927

	COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
	Chloromethane	1.164	1.387	1.363	1.455	1.701	1.414	13.7	
*	Bromomethane	0.991	1.219	1.132	1.192	1.211	1.149	8.2	*
*	Vinyl chloride	1.145	1.470	1.396	1.517	1.692	1.444	13.8	*
	Chloroethane	0.725	1.026	0.950	0.983	1.100	0.957	14.8	
	Methylene chloride	1.195	1.490	1.403	1.300	1.662	1.410	12.7	
	Acetone	0.754	0.831	0.779	0.615	0.865	0.769	12.5	
	Carbon Disulfide	2.796	3.645	3.682	3.061	4.350	3.507	17.3	
*	1,1-Dichloroethene	0.870	1.166	1.120	1.154	1.452	1.152	17.9	*
*	1,1-Dichloroethane	2.340	2.992	2.763	2.945	3.153	2.839	11.0	*
	trans-1,2-Dichloroethene	1.105	1.398	1.169	1.370	1.611	1.331	15.1	
*	Chloroform	2.429	2.954	2.780	2.950	3.340	2.891	11.4	*
*	1,2-Dichloroethane	1.720	2.276	2.263	2.386	2.690	2.267	15.5	*
	2-Butanone	0.694	1.041	0.716	0.700	0.776	0.785	18.7	
	cis-1,2-Dichloroethene	1.105	1.398	1.169	1.370	1.611	1.331	15.1	
*	1,1,1-Trichloroethane	0.435	0.558	0.550	0.564	0.657	0.553	14.3	*
*	Carbon tetrachloride	0.386	0.555	0.535	0.573	0.646	0.539	17.7	*
*	Bromodichloromethane	0.568	0.681	0.647	0.707	0.755	0.672	10.4	*
	1,2-Dichloropropane	0.388	0.477	0.446	0.469	0.505	0.457	9.6	
*	cis-1,3-Dichloropropene	0.561	0.691	0.652	0.707	0.764	0.675	11.2	*
*	Trichloroethene	0.332	0.435	0.398	0.423	0.470	0.412	12.5	*
*	Dibromochloromethane	0.494	0.616	0.595	0.624	0.685	0.603	11.5	*
*	1,1,2-Trichloroethane	0.309	0.362	0.336	0.348	0.381	0.347	7.8	*
*	Benzene	0.739	0.997	0.927	0.984	1.088	0.947	13.7	*
*	trans-1,3-Dichloropropene	0.395	0.522	0.508	0.536	0.571	0.506	13.1	*
*	Bromoform	0.318	0.415	0.400	0.426	0.460	0.404	13.1	*
	4-Methyl-2-Pentanone	0.628	0.666	0.645	0.593	0.617	0.630	4.4	
	2-Hexanone	0.487	0.440	0.442	0.405	0.427	0.440	6.8	
*	Tetrachloroethene	0.302	0.399	0.367	0.404	0.443	0.383	13.8	*
*	1,1,2,2-Tetrachloroethane	0.623	0.803	0.748	0.755	0.771	0.740	9.3	*
*	Toluene	0.974	1.286	1.183	1.263	1.382	1.218	12.6	*
*	Chlorobenzene	0.741	0.939	0.860	0.921	0.999	0.892	11.0	*
*	Ethylbenzene	0.337	0.448	0.404	0.434	0.467	0.418	12.1	*
*	Styrene	0.714	0.904	0.855	0.910	0.957	0.868	10.8	*
*	(m+p)Xylene	0.414	0.540	0.511	0.542	0.566	0.515	11.6	*
*	o-Xylene	0.414	0.540	0.511	0.542	0.566	0.515	11.6	*
	Toluene-d8	1.113	1.135	1.147	1.146	1.166	1.141	1.7	
*	Bromofluorobenzene	0.673	0.684	0.692	0.702	0.683	0.687	1.6	*
	1,2-Dichloroethane-d4	1.805	2.017	2.136	2.112	2.250	2.064	8.1	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 14:05
Input File: ^Q1923::D1 Injected at: 941024 13:09
Data File: >Q1923::D1 Dilution Factor: 1.00000
Name: 10 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.15	128.0	97489	50.00	ppb	94
2)	Chloromethane	4.14	50.0	22690	7.77	ppb	87
3)	Vinyl chloride	4.26	62.0	22317	4.10	ppb	94
4)	Bromomethane	5.00	94.0	19328	8.22	ppb	99
5)	Chloroethane	5.15	64.0	14140	7.11	ppb	83
6)	Acetone	6.36	43.0	14706	7.99	ppb	99
7)	1,1-Dichloroethene	6.60	96.0	16970	7.11	ppb	96
8)	Methylene chloride	7.37	84.0	23297	10.11	ppb	90
9)	Carbon Disulfide	7.45	76.0	54518	7.63	ppb	96
10)	trans-1,2-Dichloroethene	7.88	96.0	20712	7.32	ppb	85
11)	1,1-Dichloroethane	8.55	63.0	45619	7.05	ppb	98
12)	2-Butanone	9.24	43.0	13540	8.19	ppb	97
13)	cis-1,2-Dichloroethene	9.57	96.0	22361	7.91	ppb	86
14)	Chloroform	9.87	83.0	47368	7.84	ppb	96
15)	1,2-Dichloroethane	11.33	62.0	33542	6.59	ppb	97
16)	1,2-Dichloroethane-d4	11.16	65.0	35190	8.16	ppb	89
17)	*1,4-Difluorobenzene	11.90	114.0	419941	50.00	ppb	79
18)	1,1,1-Trichloroethane	10.62	97.0	36540	7.12	ppb	95
19)	Carbon tetrachloride	11.12	117.0	32434	6.36	ppb	98
20)	Benzene	11.41	78.0	62078	6.72	ppb	88
21)	Trichloroethene	12.61	130.0	27864	7.06	ppb	94
22)	1,2-Dichloropropane	12.96	63.0	32560	7.48	ppb	88
23)	Bromodichloromethane	13.43	83.0	47690	7.82	ppb	94
24)	cis-1,3-Dichloropropene	14.51	75.0	47086	7.51	ppb	94
25)	trans-1,3-Dichloropropene	15.58	75.0	33215	6.91	ppb	94
26)	1,1,2-Trichloroethane	15.93	97.0	25957	8.39	ppb	98
27)	Dibromochloromethane	17.09	129.0	41516	7.62	ppb	94
28)	Bromoform	20.73	173.0	26747	7.87	ppb	90
29)	*Chlorobenzene-d5	18.45	117.0	360879	50.00	ppb	96
30)	4-Methyl-2-Pentanone	14.10	43.0	45343	8.87	ppb	93
31)	Toluene-d8	15.08	98.0	80311	9.41	ppb	95
32)	Toluene	15.26	91.0	70294	7.02	ppb	94
33)	2-Hexanone	15.96	43.0	35154	10.28	ppb	96
34)	Tetrachloroethene	16.73	164.0	21812	6.64	ppb	97
35)	Chlorobenzene	18.53	112.0	53480	7.31	ppb	98
36)	Ethylbenzene	18.66	106.0	24295	7.38	ppb	91
37)	(m+p)Xylene	18.85	106.0	64419	15.79	ppb	93
38)	o-Xylene	19.87	106.0	29888	7.33	ppb	92
39)	Styrene	19.93	104.0	51517	7.45	ppb	98
40)	1,1,2,2-Tetrachloroethane	21.07	83.0	44966	8.13	ppb	94

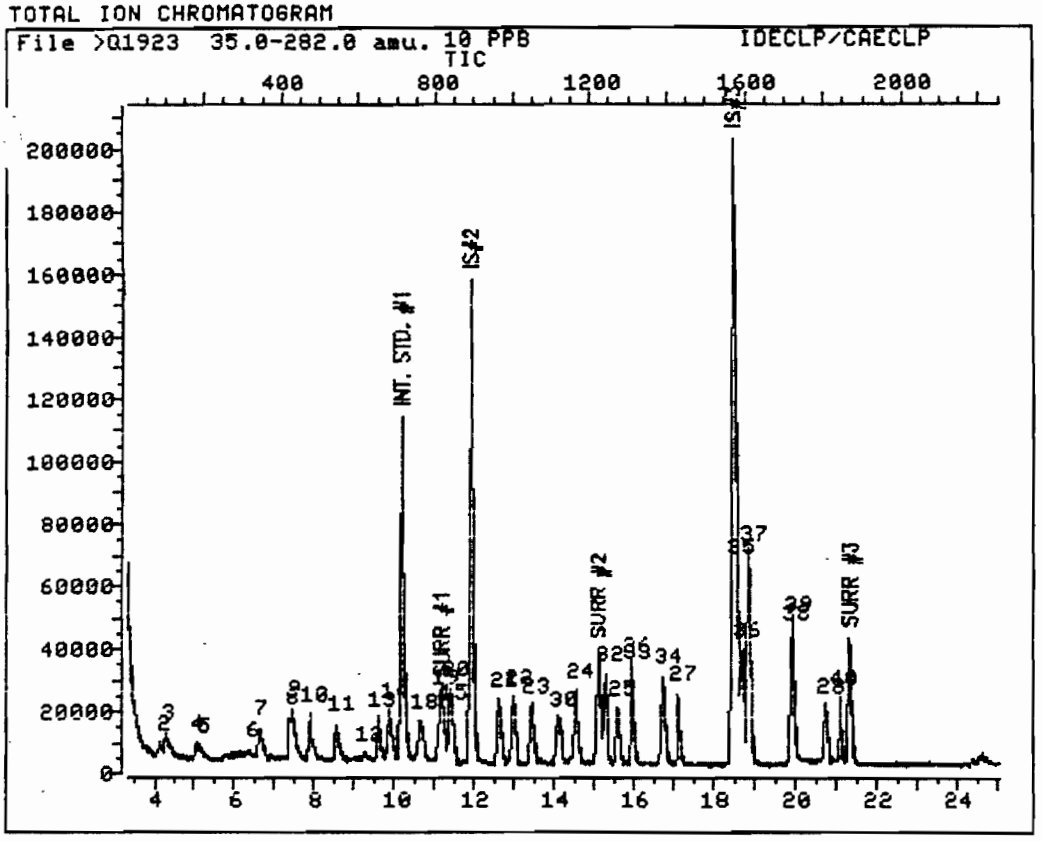
Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 14:05
Input File: ^Q1923::D1 Injected at: 941024 13:09
Data File: >Q1923::D1 Dilution Factor: 1.00000
Name: 10 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.31	95.0	48567	10.04	ppb	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q1923::D1 Quant Output File: ^Q1923::D1
Name: 10 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

Operator ID: TOMT
Quant Time : 941024 14:05
Injected at: 941024 13:09

Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 14:22
Input File: ^Q1924::D1 Injected at: 941024 13:47
Data File: >Q1924::D1 Dilution Factor: 1.00000
Name: 20 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.10	128.0	95092	50.00	ppb	91
2)	Chloromethane	4.09	50.0	52747	18.51	ppb	89
3)	Vinyl chloride	4.19	62.0	55901	10.53	ppb	92
4)	Bromomethane	4.97	94.0	46383	20.21	ppb	97
5)	Chloroethane	5.06	64.0	39029	20.13	ppb	97
6)	Acetone	6.32	43.0	31605	17.61	ppb	94
7)	1,1-Dichloroethene	6.54	96.0	44352	19.06	ppb	83
8)	Methylene chloride	7.28	84.0	56670	25.20	ppb	88
9)	Carbon Disulfide	7.38	76.0	138654	19.90	ppb	97
10)	trans-1,2-Dichloroethene	7.79	96.0	52559	19.05	ppb	87
11)	1,1-Dichloroethane	8.48	63.0	113798	18.04	ppb	98
12)	2-Butanone	9.18	43.0	39591	24.54	ppb	95
3)	cis-1,2-Dichloroethene	9.52	96.0	53787	19.50	ppb	96
)	Chloroform	9.82	83.0	112357	19.06	ppb	98
15)	1,2-Dichloroethane	11.31	62.0	86577	17.44	ppb	95
16)	1,2-Dichloroethane-d4	11.14	65.0	76734	18.24	ppb	94
17)	*1,4-Difluorobenzene	11.88	114.0	415211	50.00	ppb	81
18)	1,1,1-Trichloroethane	10.59	97.0	92721	18.27	ppb	96
19)	Carbon tetrachloride	11.09	117.0	92208	18.28	ppb	99
20)	Benzene	11.39	78.0	165643	18.14	ppb	93
21)	Trichloroethene	12.62	130.0	72260	18.51	ppb	95
22)	1,2-Dichloropropane	12.95	63.0	79184	18.39	ppb	97
23)	Bromodichloromethane	13.42	83.0	113167	18.76	ppb	95
24)	cis-1,3-Dichloropropene	14.54	75.0	114712	18.50	ppb	92
25)	trans-1,3-Dichloropropene	15.62	75.0	86716	18.24	ppb	97
26)	1,1,2-Trichloroethane	15.97	97.0	60137	19.65	ppb	95
27)	Dibromochloromethane	17.15	129.0	102323	19.00	ppb	89
28)	Bromoform	20.77	173.0	68893	20.49	ppb	97
29)	*Chlorobenzene-d5	18.50	117.0	354054	50.00	ppb	94
30)	4-Methyl-2-Pentanone	14.13	43.0	94374	18.82	ppb	92
31)	Toluene-d8	15.13	98.0	160807	19.21	ppb	90
32)	Toluene	15.29	91.0	182147	18.55	ppb	98
33)	2-Hexanone	15.99	43.0	62327	18.57	ppb	95
34)	Tetrachloroethene	16.76	164.0	56547	17.55	ppb	89
35)	Chlorobenzene	18.59	112.0	132965	18.54	ppb	97
36)	Ethylbenzene	18.71	106.0	63421	19.64	ppb	95
37)	(m+p)Xylene	18.89	106.0	157800	39.43	ppb	93
38)	o-Xylene	19.92	106.0	76492	19.11	ppb	92
)	Styrene	19.99	104.0	127986	18.87	ppb	93
)	1,1,2,2-Tetrachloroethane	21.12	83.0	113678	20.96	ppb	99

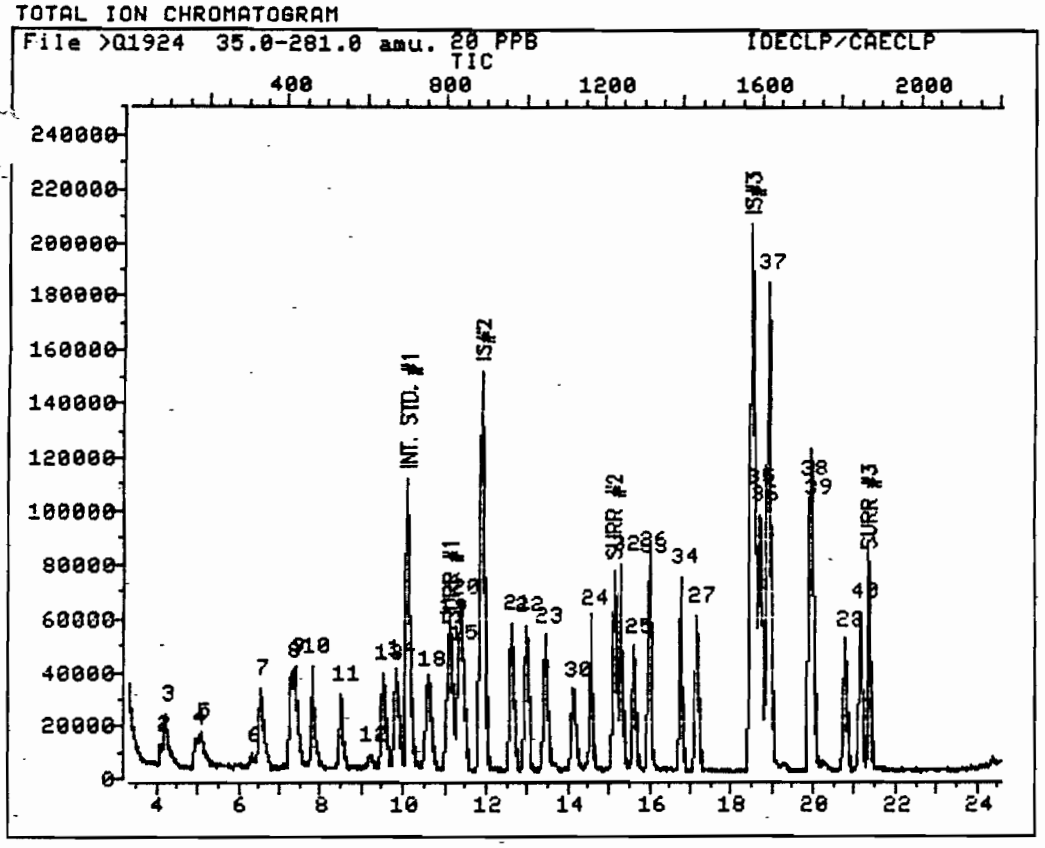
Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 14:22
Input File: ^Q1924::D1 Injected at: 941024 13:47
Data File: >Q1924::D1 Dilution Factor: 1.00000
Name: 20 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.34	95.0	96819	20.39	ppb	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q1924::D1 Quant Output File: ^Q1924::D1
Name: 20 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

Id File: .IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

Operator ID: TOMT
Quant Time : 941024 14:22
Injected at: 941024 13:47

Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 14:57
Input File: ^Q1925::D1 Injected at: 941024 14:24
Data File: >Q1925::D1 Dilution Factor: 1.00000
Name: 50 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.15	128.0	91184	50.00	ppb	93
2)	Chloromethane	4.13	50.0	124276	45.48	ppb	92
3)	Vinyl chloride	4.22	62.0	127326	25.02	ppb	89
4)	Bromomethane	4.99	94.0	103226	46.92	ppb	95
5)	Chloroethane	5.12	64.0	86662	46.61	ppb	87
6)	Acetone	6.34	43.0	71011	41.26	ppb	92
7)	1,1-Dichloroethene	6.58	96.0	102152	45.77	ppb	86
8)	Methylene chloride	7.32	84.0	127926	59.33	ppb	90
9)	Carbon Disulfide	7.41	76.0	335720	50.25	ppb	98
10)	trans-1,2-Dichloroethene	7.78	96.0	92977	35.15	ppb	87
11)	1,1-Dichloroethane	8.53	63.0	251931	41.65	ppb	97
12)	2-Butanone	9.22	43.0	65324	42.23	ppb	92
13)	cis-1,2-Dichloroethene	9.56	96.0	120269	45.47	ppb	97
14)	Chloroform	9.87	83.0	253514	44.86	ppb	96
15)	1,2-Dichloroethane	11.35	62.0	206326	43.33	ppb	95
16)	1,2-Dichloroethane-d4	11.16	65.0	194746	48.27	ppb	92
17)	*1,4-Difluorobenzene	11.90	114.0	415830	50.00	ppb	80
18)	1,1,1-Trichloroethane	10.62	97.0	228560	44.96	ppb	96
19)	Carbon tetrachloride	11.11	117.0	222553	44.06	ppb	96
20)	Benzene	11.41	78.0	385308	42.13	ppb	91
21)	Trichloroethene	12.60	130.0	165341	42.28	ppb	99
22)	1,2-Dichloropropane	12.95	63.0	185291	42.98	ppb	93
23)	Bromodichloromethane	13.40	83.0	268908	44.51	ppb	98
24)	cis-1,3-Dichloropropene	14.49	75.0	271033	43.65	ppb	94
25)	trans-1,3-Dichloropropene	15.55	75.0	211091	44.34	ppb	95
26)	1,1,2-Trichloroethane	15.89	97.0	139632	45.56	ppb	92
27)	Dibromochloromethane	17.07	129.0	247429	45.88	ppb	99
28)	Bromoform	20.65	173.0	166159	49.34	ppb	94
29)	*Chlorobenzene-d5	18.40	117.0	356653	50.00	ppb	95
30)	4-Methyl-2-Pentanone	14.08	43.0	229920	45.51	ppb	89
31)	Toluene-d8	15.05	98.0	408920	48.48	ppb	92
32)	Toluene	15.23	91.0	422074	42.66	ppb	99
33)	2-Hexanone	15.91	43.0	157719	46.65	ppb	92
34)	Tetrachloroethene	16.68	164.0	130795	40.31	ppb	97
35)	Chlorobenzene	18.49	112.0	306617	42.44	ppb	97
36)	Ethylbenzene	18.62	106.0	144250	44.35	ppb	94
37)	(m+p)Xylene	18.79	106.0	370295	91.86	ppb	94
38)	o-Xylene	19.81	106.0	182224	45.20	ppb	90
39)	Styrene	19.88	104.0	305062	44.65	ppb	95
40)	1,1,2,2-Tetrachloroethane	21.01	83.0	266609	48.80	ppb	98

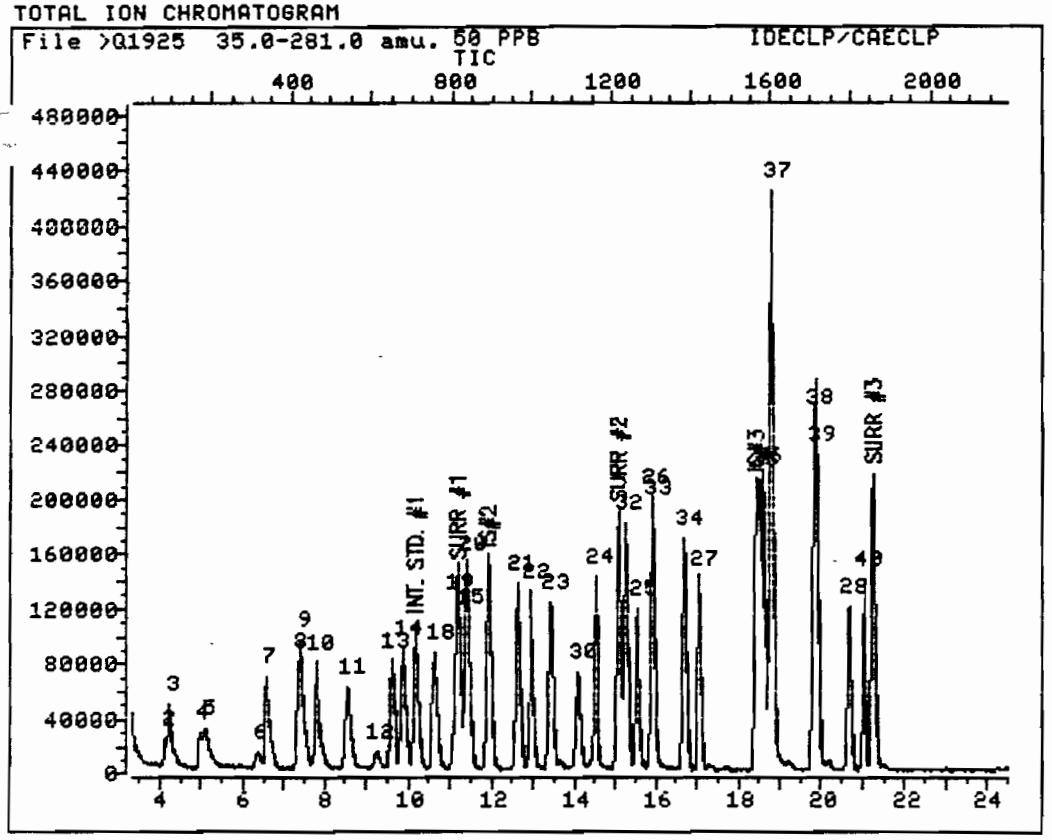
Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 14:57
Input File: ^Q1925::D1 Injected at: 941024 14:24
Data File: >Q1925::D1 Dilution Factor: 1.00000
Name: 50 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.23	95.0	246767	51.60	ppb	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q1925::D1
Name: 50 PPB
Misc: IDECLP/CAECLP

Quant Output File: ^Q1925::D1
Instrument ID: MS5

Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940725 17:27

Last Qcal Time: 940823 09:14

Operator ID: TOMT
Quant Time : 941024 14:57
Injected at: 941024 14:24

Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 15:38
Output File: ^Q1926::D1 Injected at: 941024 15:03
Data File: >Q1926::D1 Dilution Factor: 1.00000
Name: 100 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.20	128.0	93192	50.00	ppb	93
2)	Chloromethane	4.14	50.0	271172	97.09	ppb	98
3)	Vinyl chloride	4.25	62.0	282736	54.35	ppb	96
4)	Bromomethane	5.00	94.0	222192	98.81	ppb	96
5)	Chloroethane	5.13	64.0	183292	96.46	ppb	96
6)	Acetone	6.36	43.0	114539	65.13	ppb	94
7)	1,1-Dichloroethene	6.61	96.0	215095	94.30	ppb	89
8)	Methylene chloride	7.33	84.0	242377	110.00	ppb	87
9)	Carbon Disulfide	7.41	76.0	570528	83.56	ppb	99
10)	trans-1,2-Dichloroethene	7.86	96.0	248893	92.06	ppb	86
11)	1,1-Dichloroethane	8.56	63.0	548936	88.81	ppb	97
12)	2-Butanone	9.28	43.0	130424	82.50	ppb	94
13)	cis-1,2-Dichloroethene	9.61	96.0	261974	96.90	ppb	98
14)	Chloroform	9.90	83.0	549910	95.21	ppb	97
15)	1,2-Dichloroethane	11.39	62.0	444764	91.40	ppb	98
16)	1,2-Dichloroethane-d4	11.20	65.0	393720	95.49	ppb	90
17)	*1,4-Difluorobenzene	11.94	114.0	426210	50.00	ppb	88
18)	1,1,1-Trichloroethane	10.66	97.0	481129	92.34	ppb	95
19)	Carbon tetrachloride	11.16	117.0	488275	94.31	ppb	97
20)	Benzene	11.45	78.0	839071	89.52	ppb	93
21)	Trichloroethene	12.65	130.0	360497	89.95	ppb	98
22)	1,2-Dichloropropane	12.99	63.0	399492	90.41	ppb	92
23)	Bromodichloromethane	13.45	83.0	602639	97.33	ppb	95
24)	cis-1,3-Dichloropropene	14.54	75.0	602400	94.66	ppb	93
25)	trans-1,3-Dichloropropene	15.59	75.0	457124	93.67	ppb	95
26)	1,1,2-Trichloroethane	15.95	97.0	296960	94.54	ppb	92
27)	Dibromochloromethane	17.12	129.0	531751	96.20	ppb	93
28)	Bromoform	20.70	173.0	363342	105.27	ppb	97
29)	*Chlorobenzene-d5	18.45	117.0	366152	50.00	ppb	94
30)	4-Methyl-2-Pentanone	14.12	43.0	433959	83.67	ppb	89
31)	Toluene-d8	15.11	98.0	839530	96.95	ppb	90
32)	Toluene	15.28	91.0	924788	91.05	ppb	98
33)	2-Hexanone	15.97	43.0	296224	85.34	ppb	96
34)	Tetrachloroethene	16.73	164.0	296149	88.89	ppb	98
35)	Chlorobenzene	18.53	112.0	674799	90.97	ppb	97
36)	Ethylbenzene	18.66	106.0	318112	95.26	ppb	94
37)	(m+p)Xylene	18.83	106.0	807768	195.19	ppb	94
38)	o-Xylene	19.85	106.0	396554	95.82	ppb	90
39)	Styrene	19.92	104.0	666517	95.01	ppb	97
40)	1,1,2,2-Tetrachloroethane	21.05	83.0	552836	98.57	ppb	97

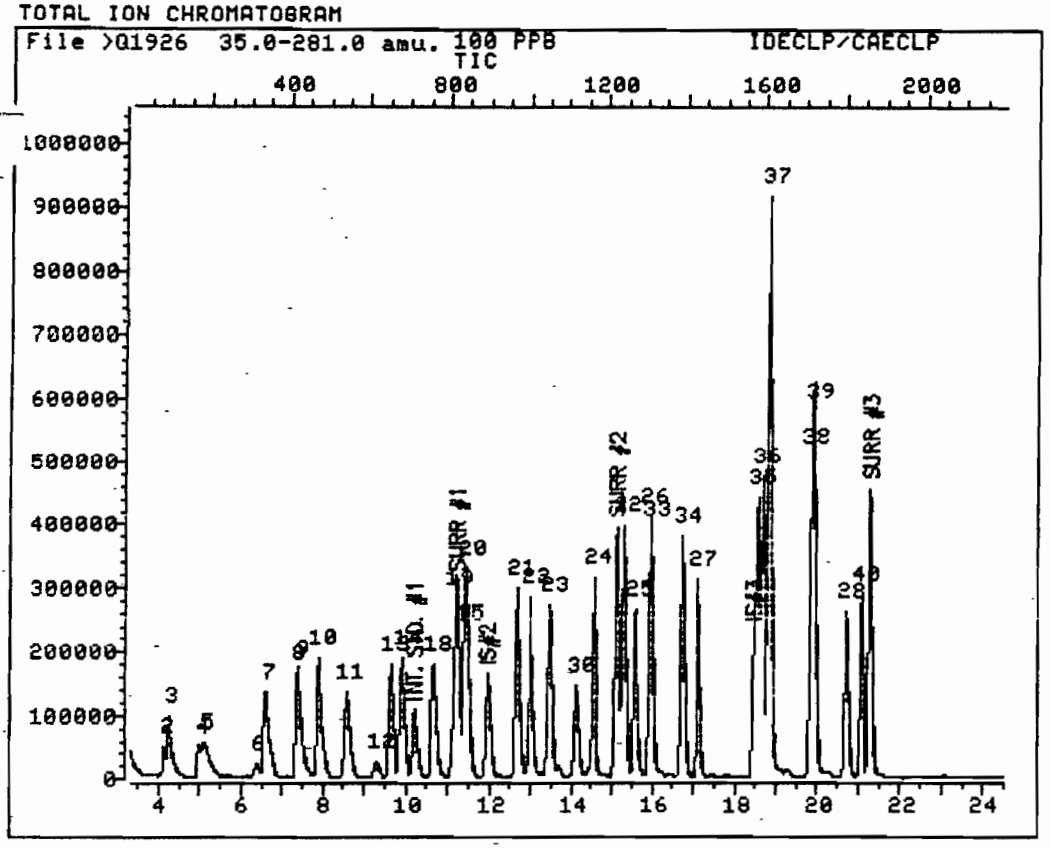
Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 15:38
Input File: ^Q1926::D1 Injected at: 941024 15:03
Data File: >Q1926::D1 Dilution Factor: 1.00000
Name: 100 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.28	95.0	513956	104.68	ppb	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q1926::D1 Quant Output File: ^Q1926::D1
Name: 100 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

Id File: IDECLP::QT
Title: Volatile Organics on MS£5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

Operator ID: TOMT
Quant Time : 941024 15:38
Injected at: 941024 15:03

Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 16:46
Input File: ^Q1927::D1 Injected at: 941024 16:02
Data File: >Q1927::D1 Dilution Factor: 1.00000
Name: 200 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.13	128.0	96401	50.00	ppb	89
2)	Chloromethane	4.08	50.0	655753	226.98	ppb	97
3)	Vinyl chloride	4.19	62.0	652296	121.22	ppb	93
4)	Bromomethane	4.88	94.0	466964	200.74	ppb	95
5)	Chloroethane	5.01	64.0	424198	215.80	ppb	97
6)	Acetone	6.38	43.0	333713	183.43	ppb	95
7)	1,1-Dichloroethene	6.51	96.0	559878	237.29	ppb	86
8)	Methylene chloride	7.28	84.0	640914	281.18	ppb	91
9)	Carbon Disulfide	7.36	76.0	1677183	237.45	ppb	96
10)	trans-1,2-Dichloroethene	7.79	96.0	615965	220.25	ppb	89
11)	1,1-Dichloroethane	8.52	63.0	1215629	190.12	ppb	97
12)	2-Butanone	9.24	43.0	299256	182.98	ppb	92
13)	cis-1,2-Dichloroethene	9.55	96.0	626374	223.97	ppb	99
14)	Chloroform	9.84	83.0	1287859	215.54	ppb	98
15)	1,2-Dichloroethane	11.33	62.0	1037137	206.04	ppb	96
16)	1,2-Dichloroethane-d4	11.16	65.0	867437	203.38	ppb	91
17)	*1,4-Difluorobenzene	11.89	114.0	461451	50.00	ppb	78
18)	1,1,1-Trichloroethane	10.61	97.0	1213096	215.03	ppb	94
19)	Carbon tetrachloride	11.11	117.0	1192418	212.72	ppb	97
20)	Benzene	11.40	78.0	2007776	197.85	ppb	93
21)	Trichloroethene	12.60	130.0	867591	199.94	ppb	99
22)	1,2-Dichloropropane	12.93	63.0	931354	194.67	ppb	93
23)	Bromodichloromethane	13.40	83.0	1393599	207.88	ppb	97
24)	cis-1,3-Dichloropropene	14.49	75.0	1409868	204.62	ppb	93
25)	trans-1,3-Dichloropropene	15.54	75.0	1054475	199.58	ppb	96
26)	1,1,2-Trichloroethane	15.89	97.0	703268	206.79	ppb	94
27)	Dibromochloromethane	17.06	129.0	1264667	211.33	ppb	96
28)	Bromoform	20.66	173.0	848683	227.11	ppb	95
29)	*Chlorobenzene-d5	18.41	117.0	400095	50.00	ppb	96
30)	4-Methyl-2-Pentanone	14.08	43.0	986922	174.15	ppb	88
31)	Toluene-d8	15.05	98.0	1866467	197.26	ppb	93
32)	Toluene	15.23	91.0	2211355	199.25	ppb	99
33)	2-Hexanone	15.91	43.0	682818	180.03	ppb	97
34)	Tetrachloroethene	16.68	164.0	709400	194.87	ppb	97
35)	Chlorobenzene	18.49	112.0	1599134	197.29	ppb	98
36)	Ethylbenzene	18.61	106.0	747515	204.86	ppb	94
37)	(m+p)Xylene	18.79	106.0	1901770	420.55	ppb	92
38)	o-Xylene	19.81	106.0	905784	200.30	ppb	88
39)	Styrene	19.88	104.0	1531849	199.84	ppb	97
40)	1,1,2,2-Tetrachloroethane	21.02	83.0	1233634	201.29	ppb	98

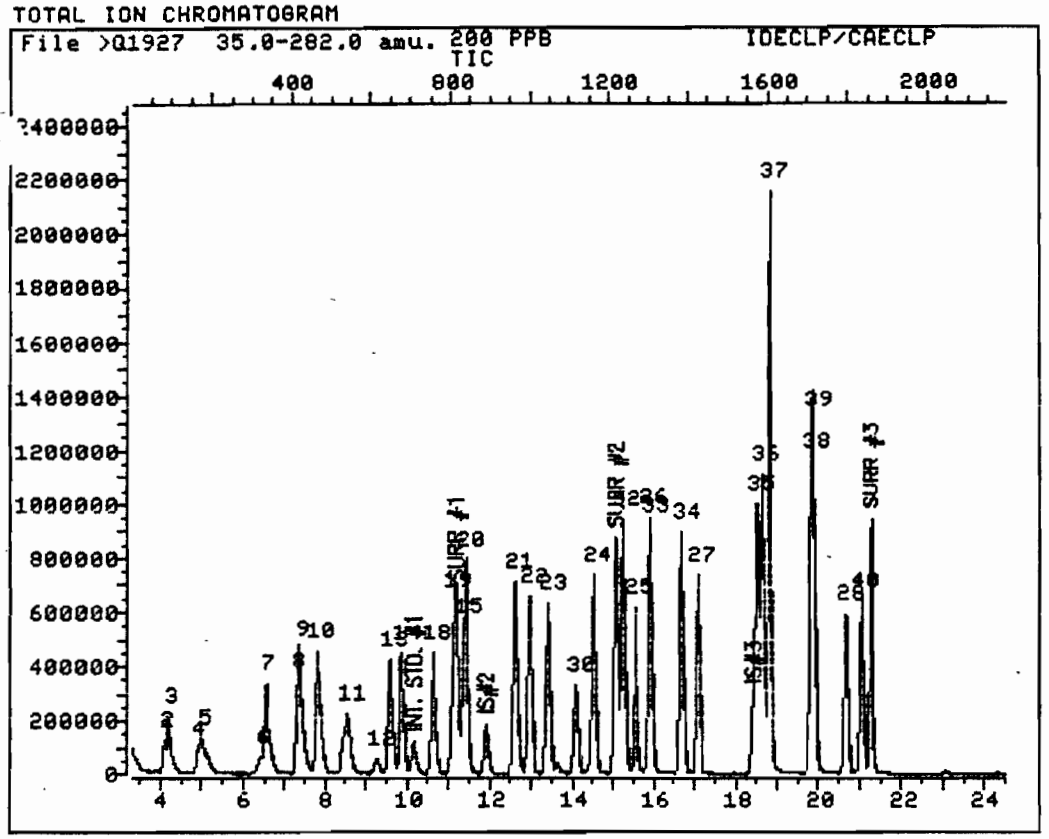
Operator ID: TOMT Quant Rev: 7 Quant Time: 941024 16:46
Input File: ^Q1927::D1 Injected at: 941024 16:02
Data File: >Q1927::D1 Dilution Factor: 1.00000
Name: 200 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	Bromofluorobenzene	21.25	95.0	1092385	203.62	ppb	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q1927::D1 Quant Output File: ^Q1927::D1
Name: 200 PPB Instrument ID: MS5
Misc: IDECLP/CAECLP

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 940725 17:27 Last Qcal Time: 940823 09:14

Operator ID: TOMT
Quant Time : 941024 16:46
Injected at: 941024 16:02

/A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Instrument ID:MS5 Calibration Date:11/08/94 Time:1935

Lab File ID:Q2246 Init. Calib. Date(s):10/24/94 10/24/94

Heated Purge: (Y/N) N Init. Calib. Times: 1309 1602

GC Column:RTX-502 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.414	1.442	0.010	2.0	
Bromomethane	1.149	1.259	0.100	9.6	25.0
Vinyl chloride	1.444	1.479	0.100	2.4	25.0
Chloroethane	0.957	1.045	0.010	9.2	
Methylene chloride	1.410	1.593	0.010	13.0	
Acetone	0.769	0.639	0.010	16.9	
Carbon Disulfide	3.507	4.058	0.010	15.7	
1,1-Dichloroethene	1.152	1.235	0.100	7.2	25.0
1,1-Dichloroethane	2.839	3.114	0.200	9.7	25.0
trans-1,2-Dichloroethene	1.331	1.438	0.010	8.0	
Chloroform	2.891	3.143	0.200	8.7	25.0
1,2-Dichloroethane	2.267	2.465	0.100	8.7	25.0
2-Butanone	0.785	0.853	0.010	8.7	
cis-1,2-Dichloroethene	1.331	1.438	0.010	8.0	
1,1,1-Trichloroethane	0.553	0.540	0.100	2.4	25.0
Carbon tetrachloride	0.539	0.631	0.100	17.1	25.0
Bromodichloromethane	0.672	0.760	0.200	13.1	25.0
1,2-Dichloropropane	0.457	0.513	0.010	12.3	
cis-1,3-Dichloropropene	0.675	0.725	0.200	7.4	25.0
Trichloroethene	0.412	0.460	0.300	11.7	25.0
Dibromochloromethane	0.603	0.672	0.100	11.4	25.0
1,1,2-Trichloroethane	0.347	0.388	0.100	11.8	25.0
Benzene	0.947	1.066	0.500	12.6	25.0
trans-1,3-Dichloropropene	0.506	0.573	0.100	13.2	25.0
Bromoform	0.404	0.443	0.100	9.7	25.0
4-Methyl-2-Pentanone	0.630	0.669	0.010	6.2	
2-Hexanone	0.440	0.427	0.010	3.0	
Tetrachloroethene	0.383	0.433	0.200	13.1	25.0
1,1,2,2-Tetrachloroethane	0.740	0.845	0.500	14.2	25.0
Toluene	1.218	1.373	0.400	12.7	25.0
Chlorobenzene	0.892	1.013	0.500	13.6	25.0
Ethylbenzene	0.418	0.453	0.100	8.4	25.0
Styrene	0.868	0.964	0.300	11.1	25.0
(m+p)Xylene	0.515	0.569	0.300	10.5	25.0
o-Xylene	0.515	0.569	0.300	10.5	25.0
Toluene-d8	1.141	1.148	0.010	0.6	
Bromofluorobenzene	0.687	0.713	0.200	3.8	25.0
1,2-Dichloroethane-d4	2.064	2.162	0.010	4.7	

All other compounds must meet a minimum RRF of 0.010

erator ID: RODH Quant Rev: 7 Quant Time: 941108 20:07
iput File: ^Q2246::D3 Injected at: 941108 19:35
a File: >Q2246::D3 Dilution Factor: 1.00000
ne: CAL. CHECK Instrument ID: MS5
sc: 91-1

File: IDECLP::QT
le: Volatile Organics on MS#5
t Calibration: 941024 18:35 Last Qcal Time: 941103 07:51

	Compound	R.T.	Q ion	Area	Conc	Units	q
)	*Bromochloromethane	9.99	128.0	101151	50.00	ppb	93
)	Chloromethane	3.98	50.0	145875	56.65	ppb	99
)	Vinyl chloride	4.12	62.0	149563	56.51	ppb	94
)	Bromomethane	4.86	94.0	127384	57.07	ppb	91
)	Chloroethane	5.00	64.0	105722	55.08	ppb	95
)	Acetone	6.16	43.0	64592	43.40	ppb	95
)	1,1-Dichloroethene	6.42	96.0	124893	52.79	ppb	87
)	Methylene chloride	7.18	84.0	161180	59.50	ppb	84
)	Carbon Disulfide	7.23	76.0	410420	58.33	ppb	97
)	trans-1,2-Dichloroethene	7.69	96.0	141294	53.13	ppb	91
)	1,1-Dichloroethane	8.38	63.0	315034	54.25	ppb	97
)	2-Butanone	9.07	43.0	86281	65.95	ppb	93
)	cis-1,2-Dichloroethene	9.43	96.0	149585	56.25	ppb	97
)	Chloroform	9.70	83.0	317904	59.52	ppb	99
)	1,2-Dichloroethane	11.18	62.0	249370	54.85	ppb	99
)	1,2-Dichloroethane-d4	11.01	65.0	218651	50.31	ppb	89
)	*1,4-Difluorobenzene	11.75	114.0	444974	50.00	ppb	78
)	1,1,1-Trichloroethane	10.44	97.0	240140	44.83	ppb	94
)	Carbon tetrachloride	10.96	117.0	280806	54.16	ppb	98
)	Benzene	11.25	78.0	474119	53.08	ppb	92
)	Trichloroethene	12.45	130.0	204653	54.30	ppb	97
)	1,2-Dichloropropane	12.78	63.0	228489	55.18	ppb	93
)	Bromodichloromethane	13.24	83.0	338383	54.09	ppb	97
)	cis-1,3-Dichloropropene	14.34	75.0	322706	54.53	ppb	96
)	trans-1,3-Dichloropropene	15.39	75.0	255112	55.59	ppb	95
)	1,1,2-Trichloroethane	15.73	97.0	172649	55.25	ppb	96
)	Dibromochloromethane	16.90	129.0	298825	55.50	ppb	97
)	Bromoform	20.49	173.0	197335	55.62	ppb	96
)	*Chlorobenzene-d5	18.24	117.0	374273	50.00	ppb	97
)	4-Methyl-2-Pentanone	13.91	43.0	250418	58.86	ppb	89
)	Toluene-d8	14.89	98.0	429510	50.39	ppb	87
)	Toluene	15.06	91.0	513873	54.86	ppb	97
)	2-Hexanone	15.77	43.0	159707	53.79	ppb	96
)	Tetrachloroethene	16.52	164.0	161975	53.60	ppb	95
)	Chlorobenzene	18.33	112.0	379323	54.41	ppb	98
)	Ethylbenzene	18.45	106.0	169434	54.37	ppb	96
)	(m+p)Xylene	18.64	106.0	434663	114.23	ppb	92
)	o-Xylene	19.65	106.0	212936	55.96	ppb	89
)	Styrene	19.70	104.0	360919	54.57	ppb	97
)	1,1,2,2-Tetrachloroethane	20.84	83.0	316440	57.84	ppb	97

000201

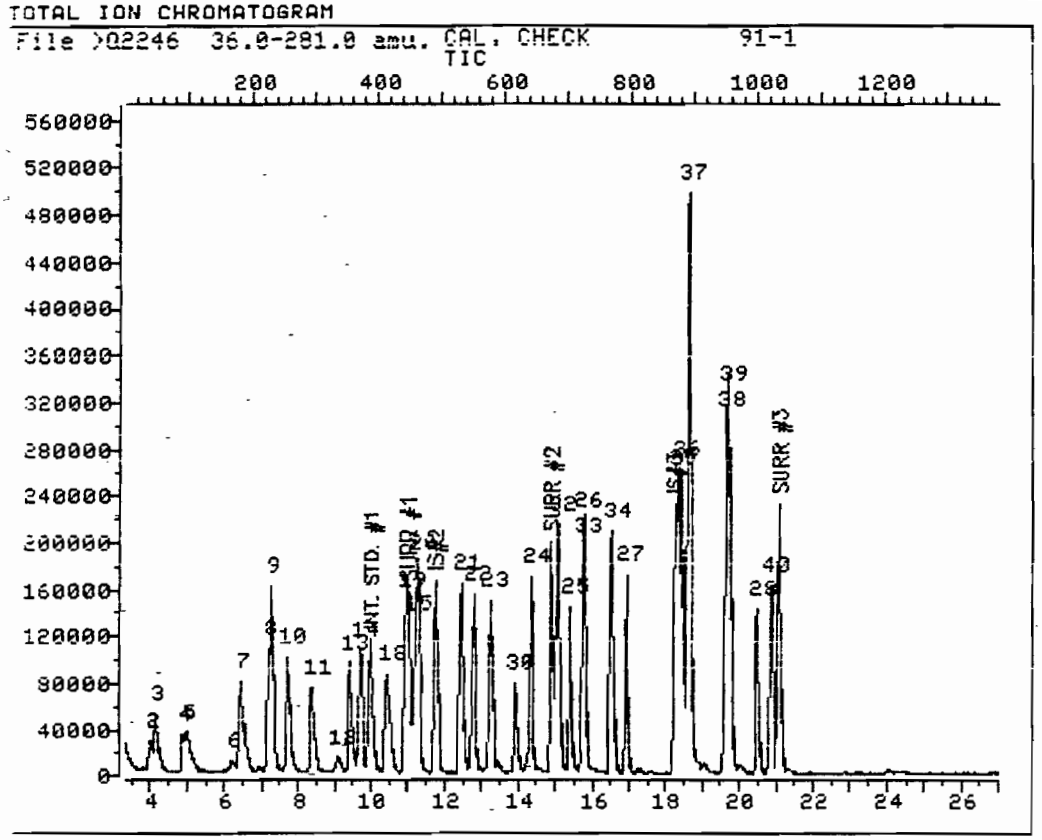
erator ID: RODH Quant Rev: 7 Quant Time: 941108 20:07
tput File: ^Q2246::D3 Injected at: 941108 19:35
a File: >Q2246::D3 Dilution Factor: 1.00000
ne: CAL. CHECK Instrument ID: MS5
sc: 91-1

File: IDECLP::QT
le: Volatile Organics on MS#5
st Calibration: 941024 18:35 Last Qcal Time: 941103 07:51

	Compound	R.T.	Q ion	Area	Conc	Units	q
)	Bromofluorobenzene	21.08	95.0	266735	52.21	ppb	94

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2246::D3 Quant Output File: ^Q2246::D3
Name: CAL. CHECK Instrument ID: MS5
Misc: 91-1

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941103 07:51

Operator ID: RODH
Quant Time : 941108 20:07
Injected at: 941108 19:35

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Instrument ID:MS5 Calibration Date:11/09/94 Time:0833

Lab File ID:Q2263 Init. Calib. Date(s):10/24/94 10/24/94

Heated Purge: (Y/N) N Init. Calib. Times: 1309 1602

GC Column:RTX-502 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.414	1.508	0.010	6.6	
Bromomethane	1.149	1.290	0.100	12.3	25.0
Vinyl chloride	1.444	1.506	0.100	4.3	25.0
Chloroethane	0.957	1.055	0.010	10.2	
Methylene chloride	1.410	1.646	0.010	16.7	
Acetone	0.769	1.000	0.010	30.0	
Carbon Disulfide	3.507	4.125	0.010	17.6	
1,1-Dichloroethene	1.152	1.282	0.100	11.3	25.0
1,1-Dichloroethane	2.839	3.206	0.200	12.9	25.0
trans-1,2-Dichloroethene	1.331	1.464	0.010	10.0	
Chloroform	2.891	3.221	0.200	11.4	25.0
1,2-Dichloroethane	2.267	2.526	0.100	11.4	25.0
2-Butanone	0.785	1.023	0.010	30.3	
cis-1,2-Dichloroethene	1.331	1.464	0.010	10.0	
1,1,1-Trichloroethane	0.553	0.583	0.100	5.4	25.0
Carbon tetrachloride	0.539	0.644	0.100	19.5	25.0
Bromodichloromethane	0.672	0.765	0.200	13.8	25.0
1,2-Dichloropropane	0.457	0.518	0.010	13.3	
cis-1,3-Dichloropropene	0.675	0.726	0.200	7.6	25.0
Trichloroethene	0.412	0.463	0.300	12.4	25.0
Dibromochloromethane	0.603	0.678	0.100	12.4	25.0
1,1,2-Trichloroethane	0.347	0.391	0.100	12.7	25.0
Benzene	0.947	1.077	0.500	13.7	25.0
trans-1,3-Dichloropropene	0.506	0.575	0.100	13.6	25.0
Bromoform	0.404	0.446	0.100	10.4	25.0
4-Methyl-2-Pentanone	0.630	0.716	0.010	13.7	
2-Hexanone	0.440	0.498	0.010	13.2	
Tetrachloroethene	0.383	0.422	0.200	10.2	25.0
1,1,2,2-Tetrachloroethane	0.740	0.836	0.500	13.0	25.0
Toluene	1.218	1.357	0.400	11.4	25.0
Chlorobenzene	0.892	0.996	0.500	11.7	25.0
Ethylbenzene	0.418	0.458	0.100	9.6	25.0
Styrene	0.868	0.954	0.300	9.9	25.0
(m+p)Xylene	0.515	0.558	0.300	8.3	25.0
o-Xylene	0.515	0.558	0.300	8.3	25.0
Toluene-d8	1.141	1.127	0.010	1.2	
Bromofluorobenzene	0.687	0.699	0.200	1.7	25.0
1,2-Dichloroethane-d4	2.064	2.205	0.010	6.8	

All other compounds must meet a minimum RRF of 0.010

erator ID: TOMT Quant Rev: 7 Quant Time: 941109 09:06
tput File: ^Q2263::D3 Injected at: 941109 08:33
a File: >Q2263::D3 Dilution Factor: 1.00000
me: CALCHECK Instrument ID: MS5
sc: IDECLP/CAECLP

File: IDECLP::QT
le: Volatile Organics on MS#5
st Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.06	128.0	89932	50.00	ppb	89
2)	Chloromethane	4.00	50.0	135636	52.29	ppb	98
3)	Vinyl chloride	4.10	62.0	135480	50.94	ppb	94
4)	Bromomethane	4.86	94.0	116056	51.24	ppb	96
5)	Chloroethane	5.00	64.0	94860	50.46	ppb	99
6)	Acetone	6.23	43.0	89934	78.30	ppb	94
7)	1,1-Dichloroethene	6.46	96.0	115337	51.93	ppb	87
8)	Methylene chloride	7.21	84.0	147996	51.64	ppb	85
9)	Carbon Disulfide	7.28	76.0	370960	50.83	ppb	98
10)	trans-1,2-Dichloroethene	7.73	96.0	125715	48.61	ppb	90
11)	1,1-Dichloroethane	8.43	63.0	288306	51.47	ppb	96
12)	2-Butanone	9.14	43.0	91989	59.96	ppb	88
13)	cis-1,2-Dichloroethene	9.48	96.0	137534	53.18	ppb	98
14)	Chloroform	9.77	83.0	289635	51.24	ppb	99
15)	1,2-Dichloroethane	11.27	62.0	227144	51.23	ppb	98
16)	1,2-Dichloroethane-d4	11.08	65.0	198325	51.01	ppb	91
17)	*1,4-Difluorobenzene	11.83	114.0	401699	50.00	ppb	78
18)	1,1,1-Trichloroethane	10.53	97.0	234383	54.06	ppb	92
19)	Carbon tetrachloride	11.04	117.0	258643	51.02	ppb	95
20)	Benzene	11.33	78.0	432616	50.54	ppb	93
21)	Trichloroethene	12.54	130.0	186060	50.35	ppb	97
22)	1,2-Dichloropropane	12.86	63.0	208204	50.47	ppb	92
23)	Bromodichloromethane	13.35	83.0	307188	50.28	ppb	99
24)	cis-1,3-Dichloropropene	14.43	75.0	291583	50.04	ppb	95
25)	trans-1,3-Dichloropropene	15.48	75.0	230884	50.13	ppb	96
26)	1,1,2-Trichloroethane	15.84	97.0	157060	50.39	ppb	98
27)	Dibromochloromethane	17.01	129.0	272479	50.50	ppb	95
28)	Bromoform	20.60	173.0	179184	50.29	ppb	94
29)	*Chlorobenzene-d5	18.34	117.0	347452	50.00	ppb	98
30)	4-Methyl-2-Pentanone	14.02	43.0	248669	53.48	ppb	85
31)	Toluene-d8	14.99	98.0	391557	49.10	ppb	88
32)	Toluene	15.17	91.0	471614	49.43	ppb	99
33)	2-Hexanone	15.85	43.0	173206	58.41	ppb	94
34)	Tetrachloroethene	16.63	164.0	146783	48.81	ppb	98
35)	Chlorobenzene	18.43	112.0	346150	49.15	ppb	98
36)	Ethylbenzene	18.55	106.0	159089	50.57	ppb	96
37)	(m+p)Xylene	18.74	106.0	401359	101.52	ppb	92
38)	o-Xylene	19.75	106.0	193956	49.06	ppb	86
39)	Styrene	19.81	104.0	331430	49.46	ppb	98
40)	1,1,2,2-Tetrachloroethane	20.96	83.0	290398	49.43	ppb	97

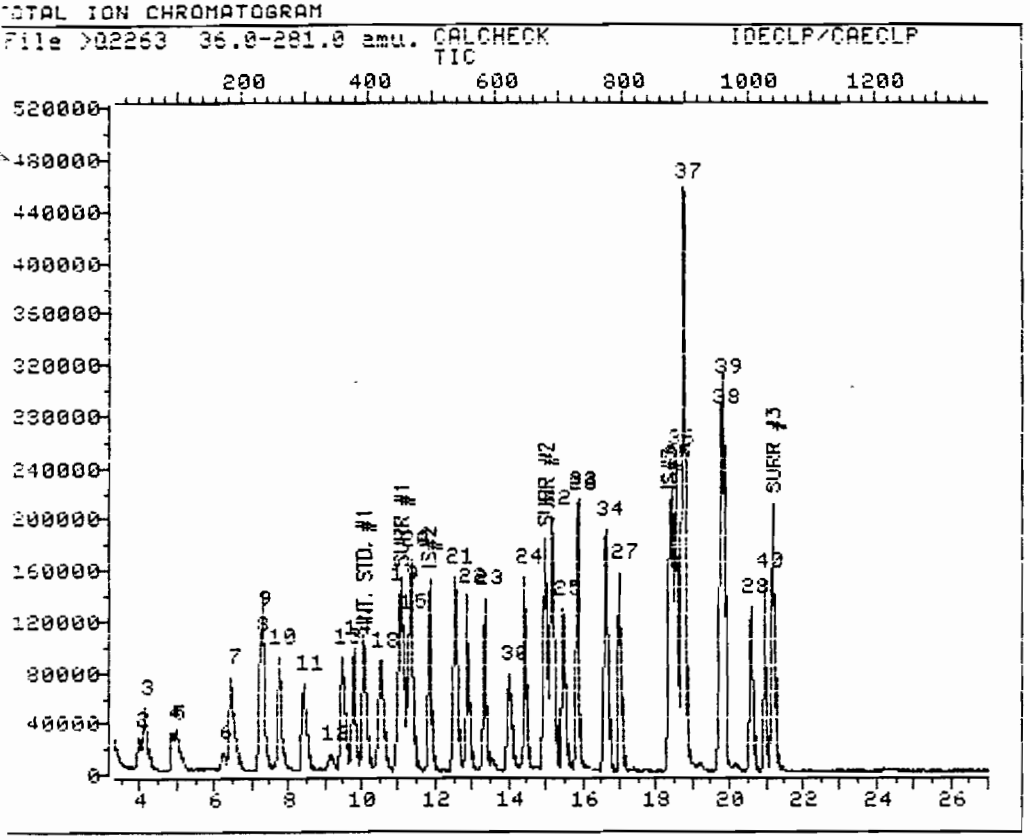
erator ID: TOMT Quant Rev: 7 Quant Time: 941109 09:06
tput File: ^Q2263::D3 Injected at: 941109 08:33
a File: >Q2263::D3 Dilution Factor: 1.00000
ie: CALCHECK Instrument ID: MS5
sc: IDECLP/CAECLP

File: IDECLP::QT
le: Volatile Organics on MS#5
st Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
)	Bromofluorobenzene	21.18	95.0	242890	49.04	ppb	94

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2263::D3 Quant Output File: ^Q2263::D3
Name: CALCHECK Instrument ID: MS5
Misc: IDECLP/CAECLP

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: TOMT
Quant Time : 941109 09:06
Injected at: 941109 08:33

RAW O.C. DATA

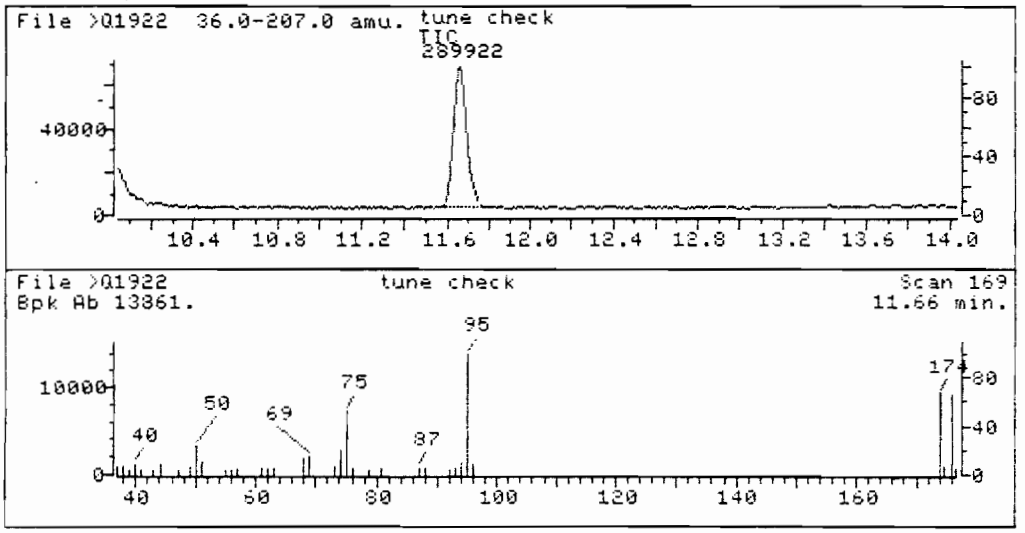
GC/MS PERFORMANCE STANDARD

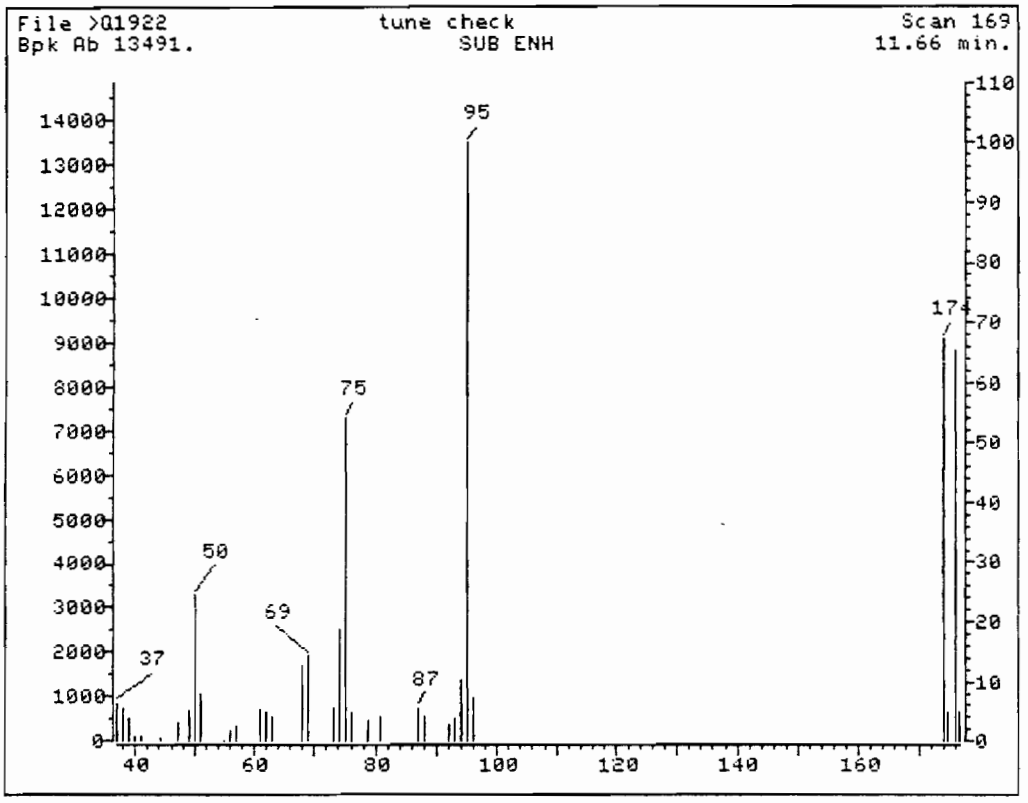
Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.31	24.31	Ok
75	30-60% of mass 95	54.08	54.08	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.15	7.15	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	67.22	67.22	Ok
175	5-9% of mass 174	4.98	7.41	Ok
176	95-101% of mass 174	65.17	96.95	Ok
177	5-9% of mass 176	4.97	7.63	Ok

Injection Date: 10/24/94
Injection Time: 12:29
Data File: >Q1922
Scan: 169

Thomas J. Bauer





>Q1922 tune check
169 SUB ENH

File: >Q1922 Scan #: 169 Retn. time: 11.66

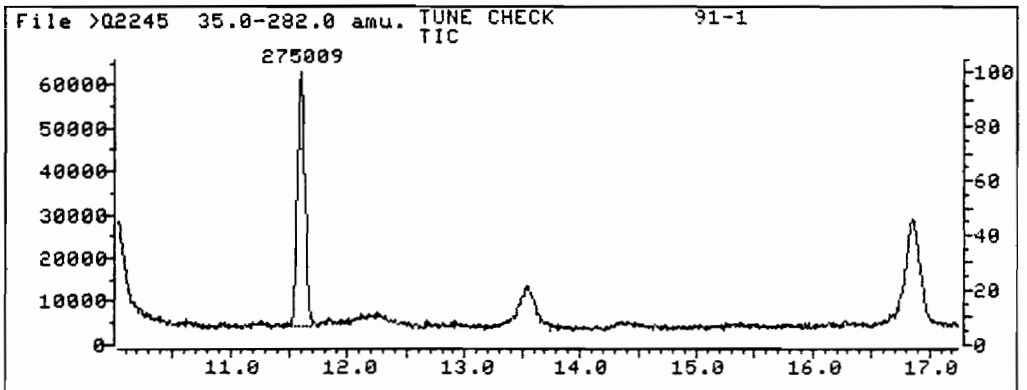
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	847.0	49.05	677.7	62.00	629.7	76.05	650.0	94.05	1380.0
38.00	738.7	50.05	3279.3	63.10	558.0	78.90	480.3	95.05	13490.7
39.00	508.7	51.05	1081.3	68.00	1682.0	80.90	541.7	96.05	964.7
40.00	115.0	55.05	22.0	68.95	1911.7	87.00	763.7	173.95	9068.7
41.00	85.0	56.15	230.7	73.05	740.3	88.00	570.7	174.85	671.7
44.10	41.7	57.05	321.3	74.05	2502.7	91.95	398.7	175.95	8792.0
47.10	407.7	61.00	675.7	75.05	7296.3	92.95	525.7	176.85	671.0

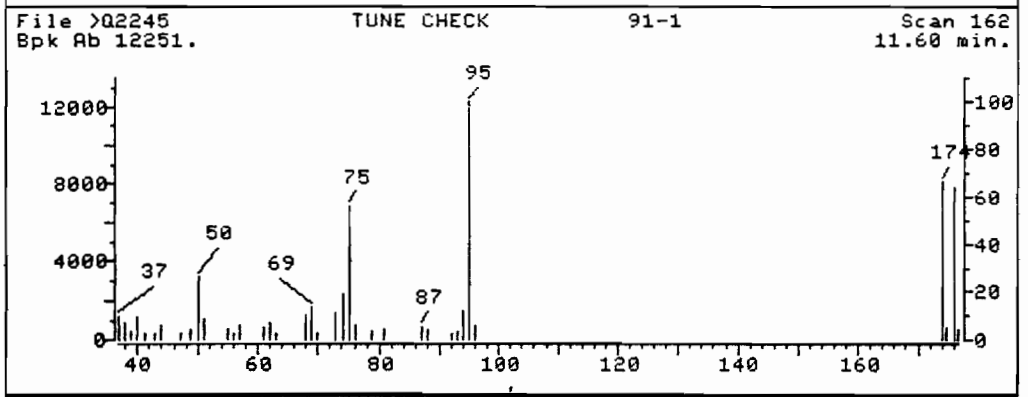
GC/MS PERFORMANCE STANDARD

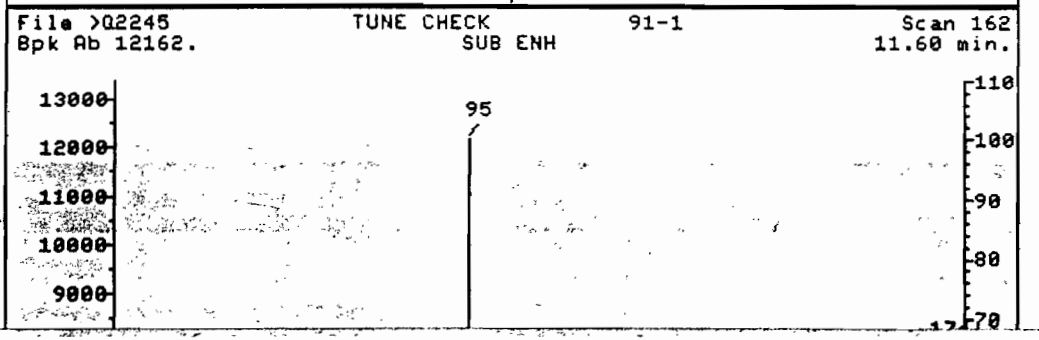
Bromofluorobenzene (BFB)

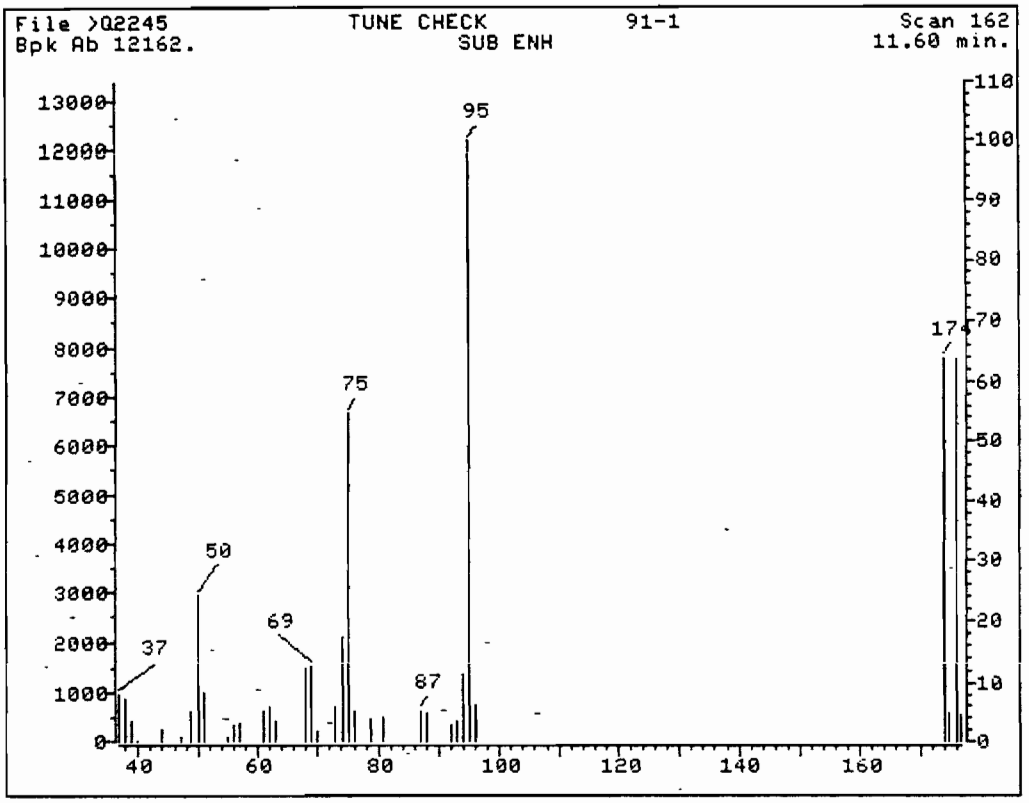
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	24.39	24.39	Ok
75	30-60% of mass 95	54.75	54.75	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.28	6.28	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	63.72	63.72	Ok
175	5-9% of mass 174	4.77	7.48	Ok
176	95-101% of mass 174	63.46	99.59	Ok
177	5-9% of mass 176	4.43	6.98	Ok

Injection Date: 11/08/94
Injection Time: 19:01
Data File: >Q2245
Scan: 162









>Q2245 TUNE CHECK 91-1
162 SUB ENH

File: >Q2245 Scan #: 162 Retn. time: 11.60

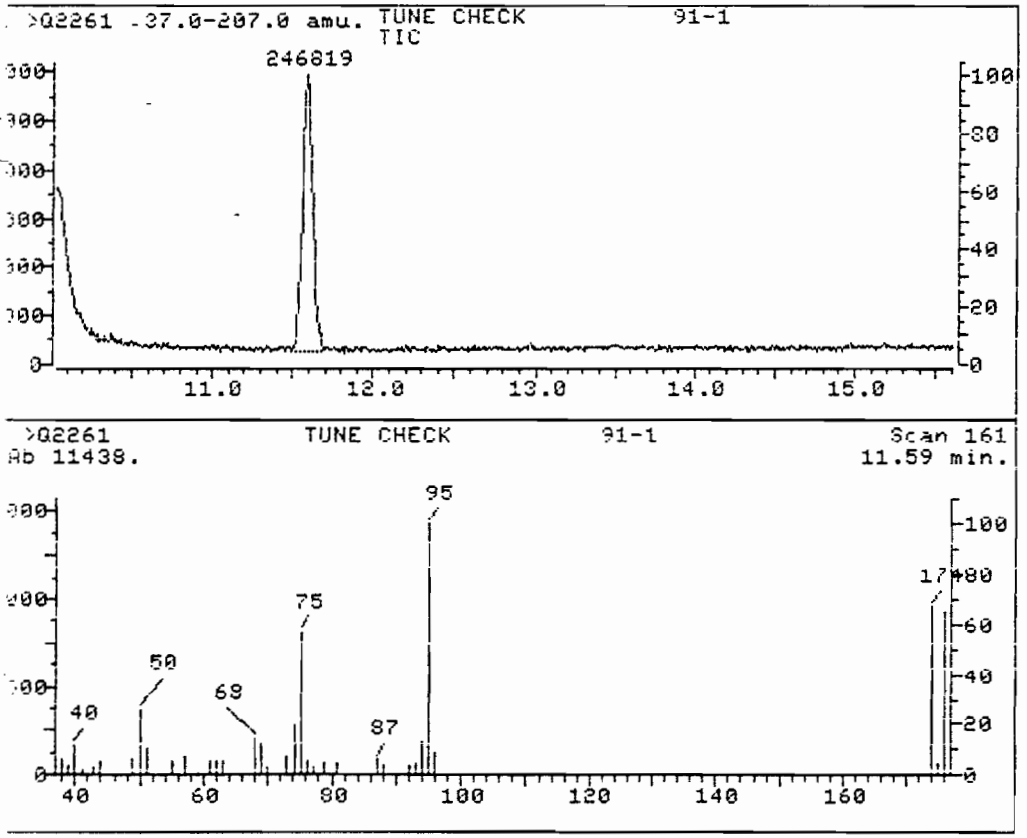
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	960.7	50.05	2966.3	63.00	418.3	76.05	620.0	94.05	1367.3
38.00	858.7	51.05	1004.3	68.00	1500.0	78.90	452.7	95.05	12162.3
39.00	404.3	55.05	86.3	69.05	1526.3	80.90	509.0	96.05	763.3
40.00	11.0	56.05	340.0	69.95	203.7	87.00	627.7	173.95	7749.7
44.00	241.3	57.05	397.0	72.95	714.7	88.00	600.3	174.85	580.0
47.00	94.3	61.00	624.3	74.05	2123.0	92.05	320.3	175.95	7718.0
48.95	623.3	62.00	699.3	75.05	6658.7	92.95	402.3	176.85	538.3

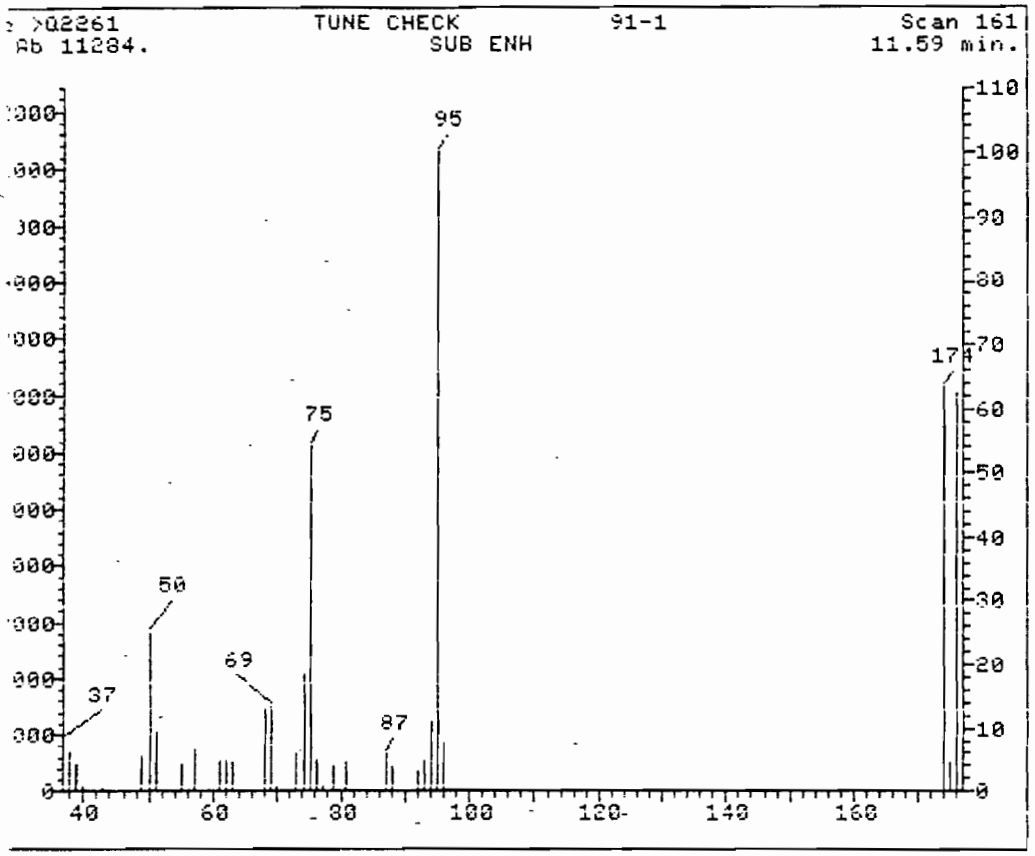
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.92	24.92	Ok
75	30-60% of mass 95	54.02	54.02	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.56	7.56	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	50-120% of mass 95	63.15	63.15	Ok
175	5-9% of mass 174	4.36	6.90	Ok
176	95-101% of mass 174	62.36	98.75	Ok
177	5-9% of mass 176	3.77	6.05	Ok

Injection Date: 11/09/94
Injection Time: 07:21
Data File: >Q2261
Scan: 161





261 TUNE CHECK 91-1
161 SUB ENH

e: >Q2261 Scan #: 161 Retn. time: 11.59

/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
.00	876.7	50.05	2811.3	68.05	1471.0	77.05	102.3	94.05	1243.7
.00	702.3	51.05	1025.7	68.95	1490.0	78.90	422.0	95.05	11283.7
.00	467.7	55.05	458.3	70.05	100.0	80.90	499.0	96.05	853.3
.00	71.7	57.05	725.0	72.95	644.7	87.00	647.7	173.95	7125.3
.00	42.7	61.00	557.0	74.05	2062.0	88.00	444.0	174.95	491.7
.00	14.0	62.00	541.3	75.05	6096.0	92.05	366.3	175.95	7036.0
.95	607.0	63.10	491.3	76.05	558.7	93.05	529.0	176.95	425.7

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2247

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2247

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

215R

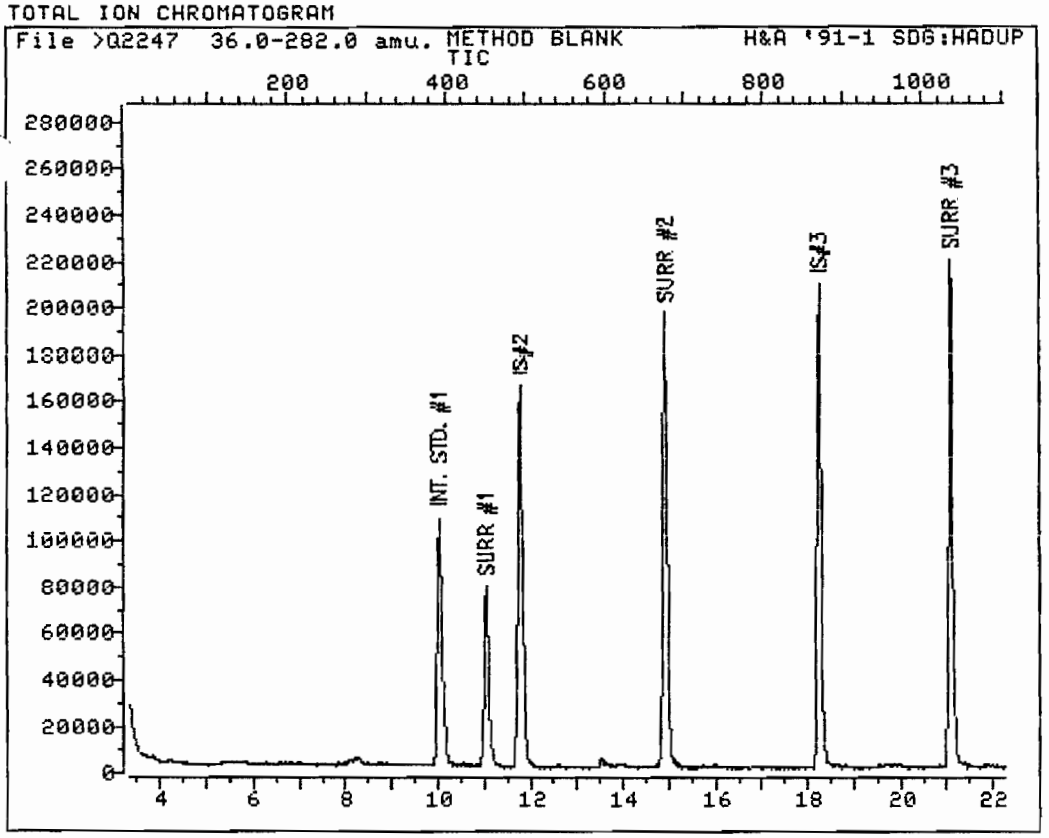
Operator ID: RODH Quant Rev: 7 Quant Time: 941108 20:48
Output File: ^Q2247::D3 Injected at: 941108 20:24
Data File: >Q2247::D3 Dilution Factor: 1.00000
Name: METHOD BLANK Instrument ID: MS5
Misc: H&A `91-1 SDG:HADUP EPA:VBLK

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.03	128.0	97209	50.00	ppb	91
16)	1,2-Dichloroethane-d4	11.04	65.0	202540	48.19	ppb	89
17)	*1,4-Difluorobenzene	11.78	114.0	440283	50.00	ppb	77
29)	*Chlorobenzene-d5	18.25	117.0	378498	50.00	ppb	96
31)	Toluene-d8	14.92	98.0	426470	49.09	ppb	89
41)	Bromofluorobenzene	21.08	95.0	255235	47.31	ppb	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2247::D3 Quant Output File: ^Q2247::D3
Name: METHOD BLANK Instrument ID: MS5
Misc: H&A `91-1 SDG:HADUP EPA:VBLK

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941108 20:48
Injected at: 941108 20:24

MS data file header from : >Q2247::D3

Sample: METHOD BLANK Operator: RODH 11/08/94 20:24
Misc : H&A `91-1 SDG:HADUP EPA:VBLK
S. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 1 Equip ID: MS5
Method file: REGVOA Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

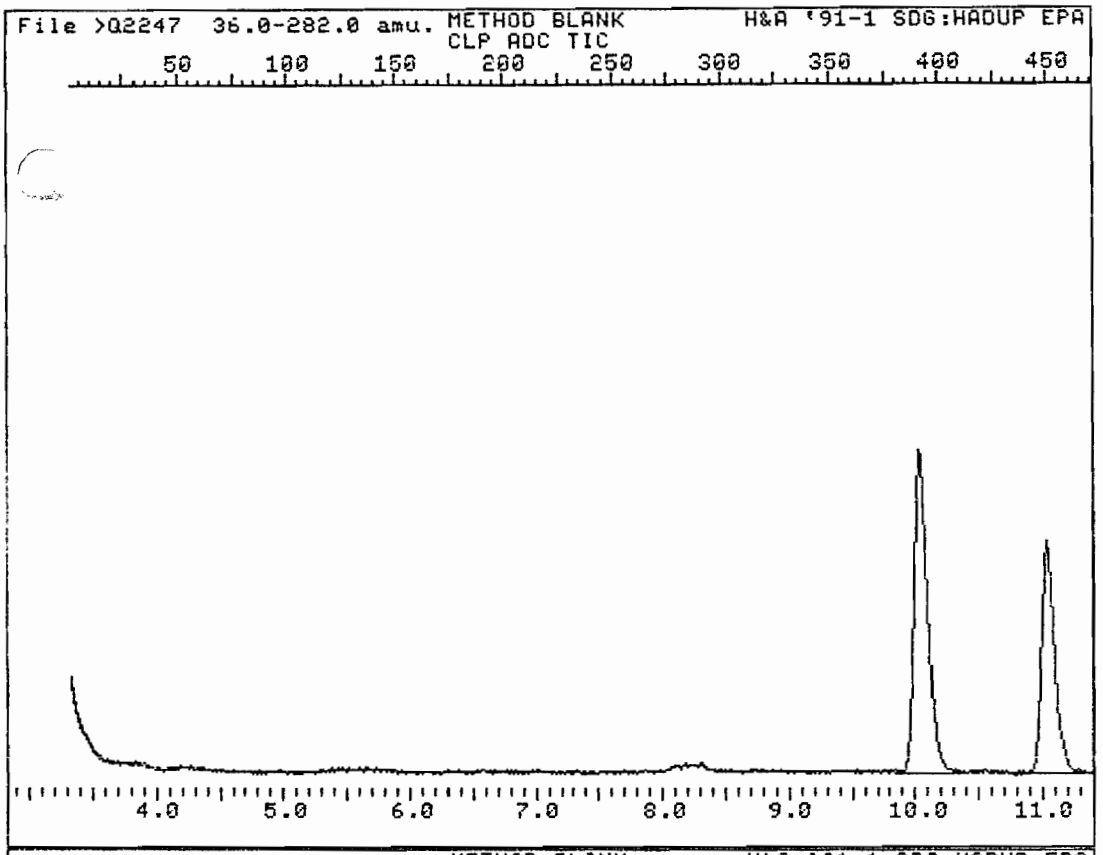
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	787285.	10.03	3.33 - 10.90
2	50.0	1172300.	11.78	10.90 - 15.01
3	50.0	1257920.	18.25	15.01 - 22.27

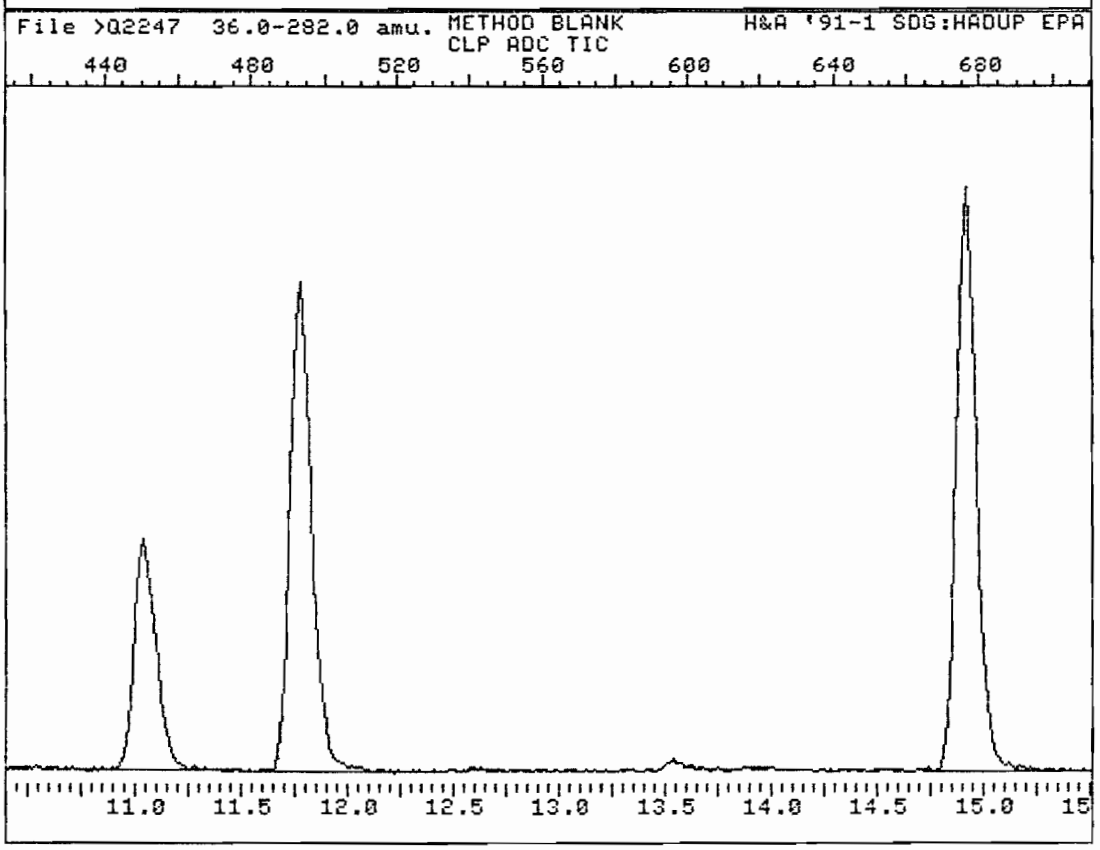
Dilution Factor = 1.00 This sample was 5.00000 g or mL

Correction Factor = 1.00

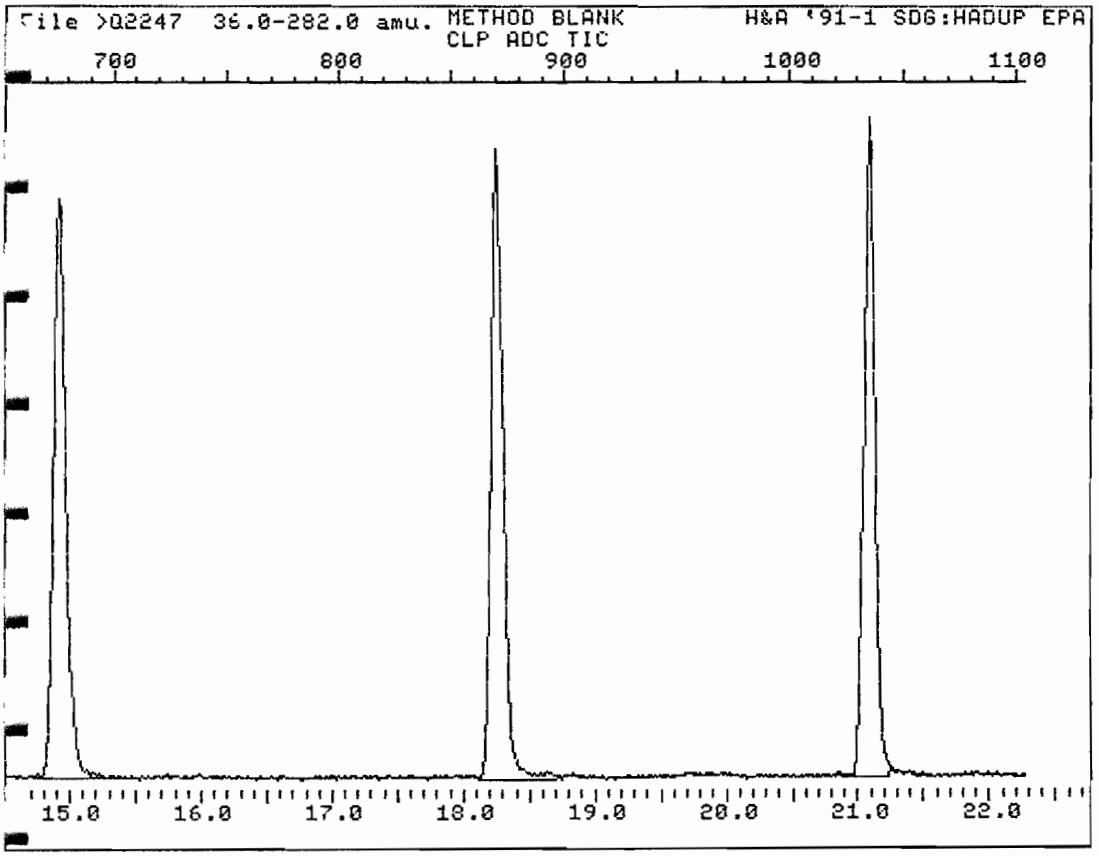
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

11:58 PM MON., 14 NOV., 1994





Instrument ID: MS5 Analyzed on: 11/08/94 20:24



Instrument ID: MS5 Analyzed on: 11/08/94 20:24

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2264

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
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
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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
50061-02-6	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
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:METHOD BLANK

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2264

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed:11/09/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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25.					
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27.					
28.					
29.					
30.					

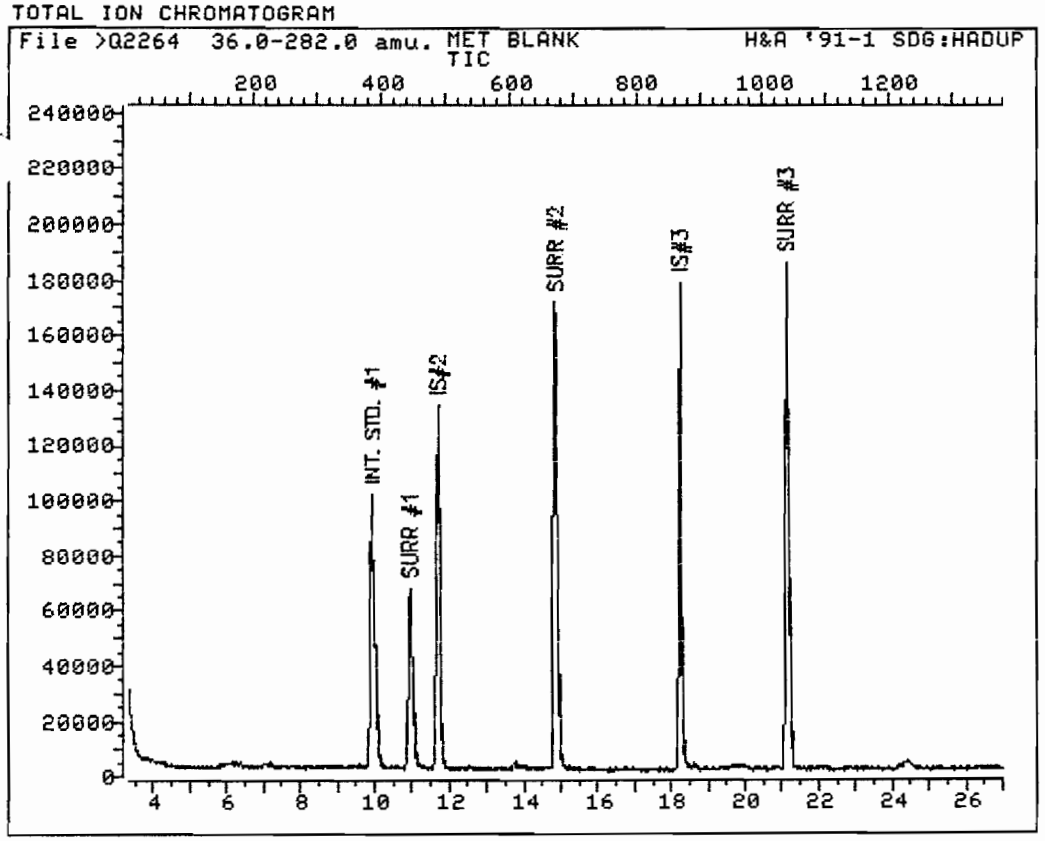
Operator ID: TOMT Quant Rev: 7 Quant Time: 941109 09:56
Output File: ^Q2264::D3 Injected at: 941109 09:27
Data File: >Q2264::D3 Dilution Factor: 1.00000
Name: MET BLANK Instrument ID: MS5
Misc: H&A `91-1 SDG:HADUP EPA:VBLK

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.94	128.0	87685	50.00	ppb	90
16)	1,2-Dichloroethane-d4	10.95	65.0	169715	43.88	ppb	89
17)	*1,4-Difluorobenzene	11.69	114.0	362993	50.00	ppb	78
29)	*Chlorobenzene-d5	18.23	117.0	325999	50.00	ppb	99
31)	Toluene-d8	14.85	98.0	380031	51.72	ppb	91
41)	Bromofluorobenzene	21.12	95.0	230684	50.61	ppb	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2264::D3 Quant Output File: ^Q2264::D3
Name: MET BLANK Instrument ID: MS5
Misc: H&A `91-1 SDG:HADUP EPA:VBLK

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941109 08:33

Operator ID: TOMT
Quant Time : 941109 09:56
Injected at: 941109 09:27

MS data file header from : >Q2264::D3

Sample: MET BLANK Operator: TOMT 11/09/94 9:27
Misc : H&A `91-1 SDG:HADUP EPA:VBLK
s. f: 1 MS model: 70 SW/HW rev.: FF ALS f : 1 Equip ID: MS5
Method file: REGV0A Tuning file: N / A No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

No peaks found.

Summary of Unknowns PBM Library Search and Quantitation

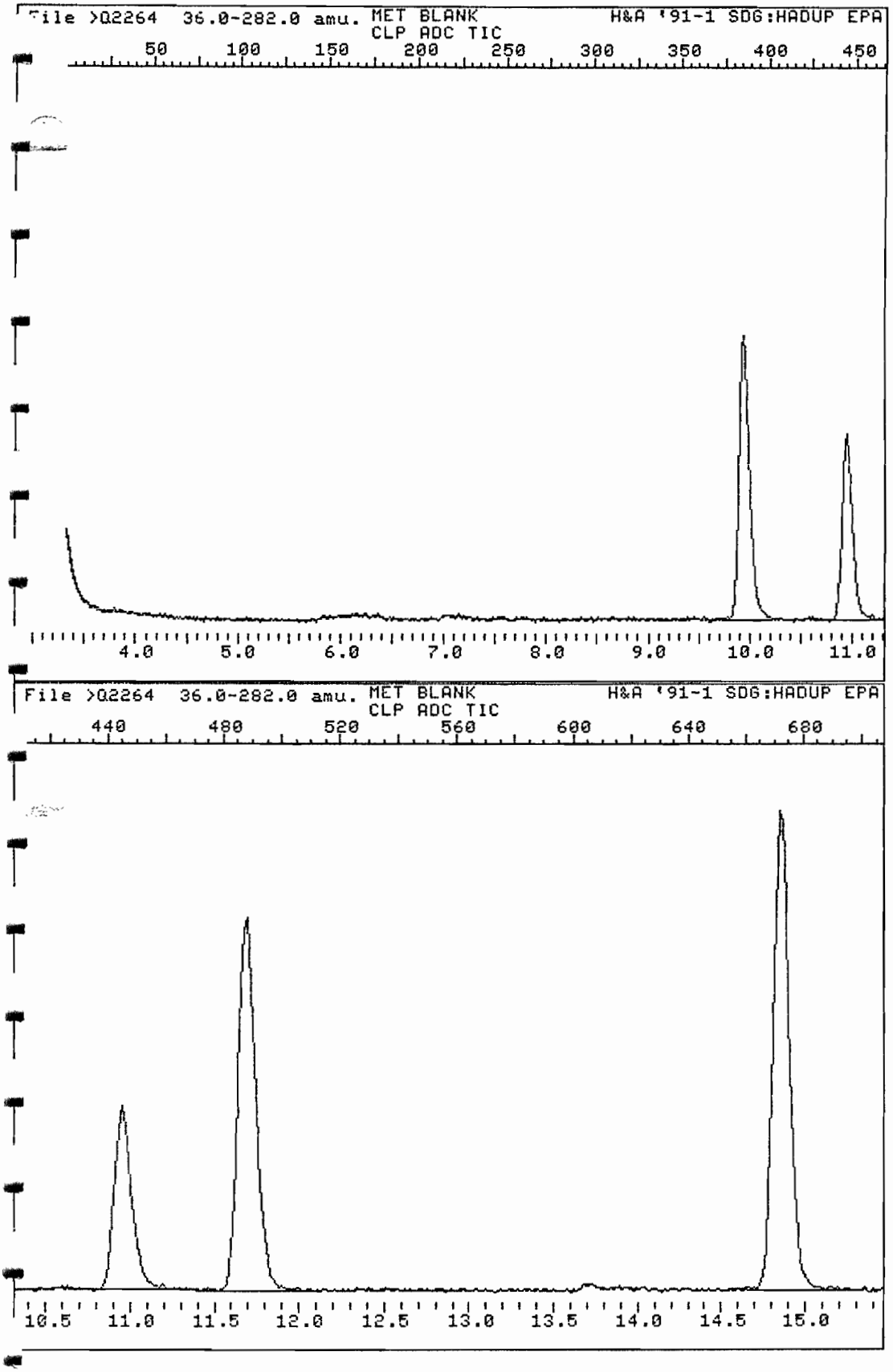
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	728531.	9.94	3.33 - 10.82
2	50.0	961977.	11.69	10.82 - 14.96
3	50.0	1096384.	18.23	14.96 - 27.01

Dilution Factor = 1.00 This sample was 5.00000 g or mL

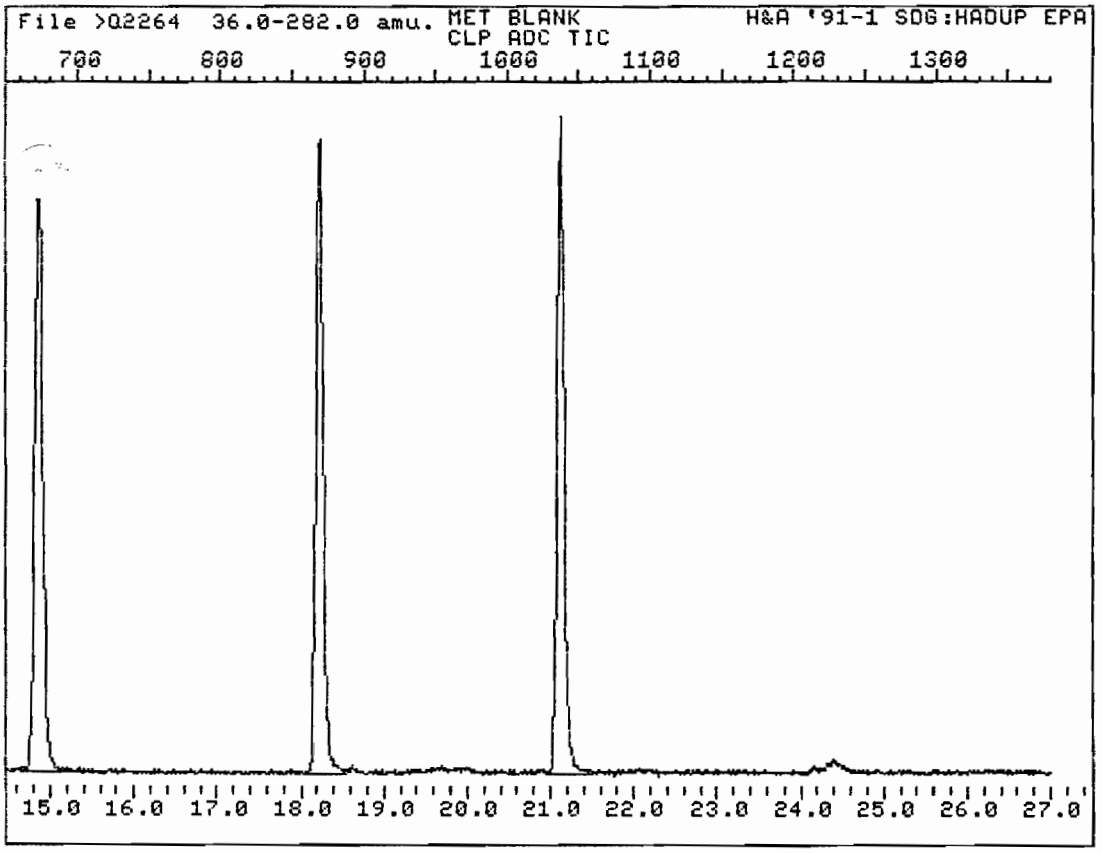
Correction Factor = 1.00

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

12:04 AM TUE., 15 NOV., 1994



Instrument ID: MS5 Analyzed on: 11/09/94 9:27



Instrument ID: MS5 Analyzed on: 11/09/94 9:27

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:BLANK SPIKE

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2248

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	62.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	53.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	53.	
50061-02-6	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	52.	
108-90-7	Chlorobenzene	51.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

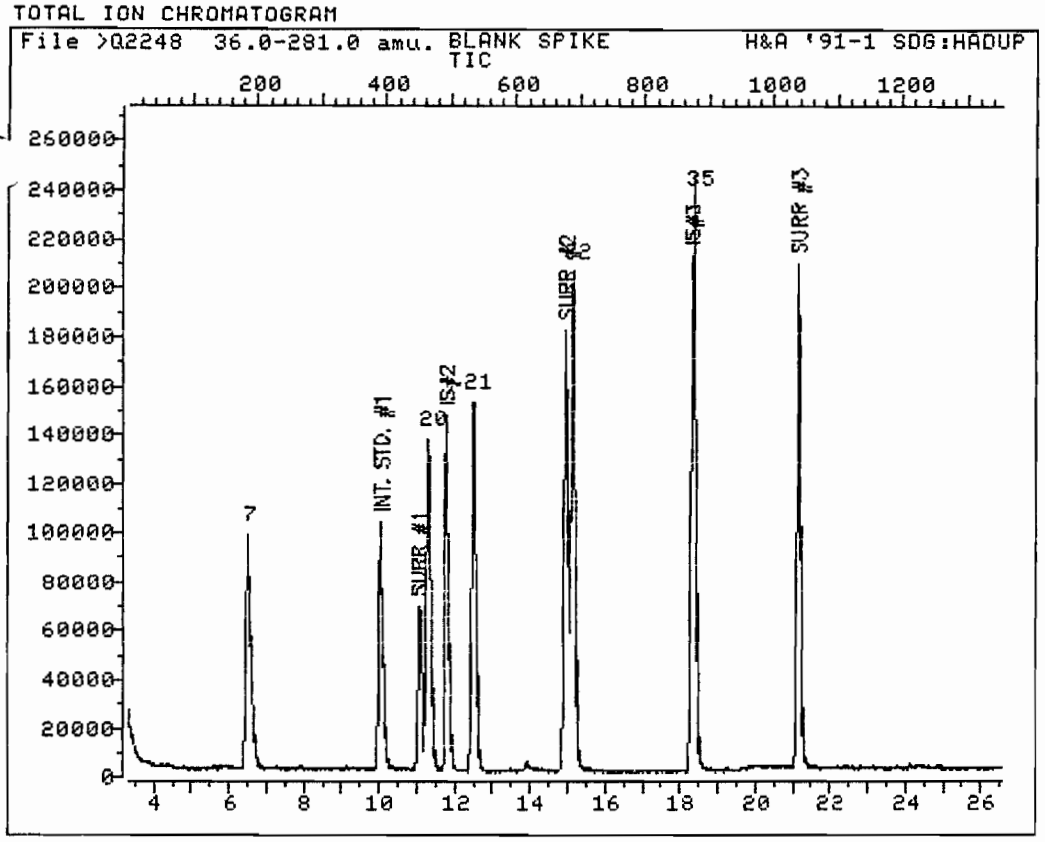
Operator ID: RODH Quant Rev: 7 Quant Time: 941108 21:37
Output File: ^Q2248::D3 Injected at: 941108 21:04
Data File: >Q2248::D3 Dilution Factor: 1.00000
Name: BLANK SPIKE Instrument ID: MS5
Misc: H&A `91-1 SDG:HADUP EPA:BLSP

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.04	128.0	91419	50.00	ppb	93
7)	1,1-Dichloroethene	6.49	96.0	141005	62.46	ppb	87
16)	1,2-Dichloroethane-d4	11.04	65.0	174952	44.27	ppb	91
17)	*1,4-Difluorobenzene	11.78	114.0	397516	50.00	ppb	75
20)	Benzene	11.30	78.0	446883	52.75	ppb	95
21)	Trichloroethene	12.48	130.0	193120	52.82	ppb	99
29)	*Chlorobenzene-d5	18.30	117.0	350167	50.00	ppb	95
31)	Toluene-d8	14.95	98.0	391412	48.70	ppb	89
32)	Toluene	15.13	91.0	502852	52.30	ppb	96
35)	Chlorobenzene	18.39	112.0	365271	51.46	ppb	98
41)	Bromofluorobenzene	21.14	95.0	248128	49.71	ppb	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2248::D3 Quant Output File: ^Q2248::D3
Name: BLANK SPIKE Instrument ID: MS5
Misc: H&A `91-1 SDG:HADUP EPA:BLSP

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941108 21:37
Injected at: 941108 21:04

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6MS

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-7MS

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2250

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	54.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	48.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	49.	
50061-02-6	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	47.	
108-90-7	Chlorobenzene	47.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

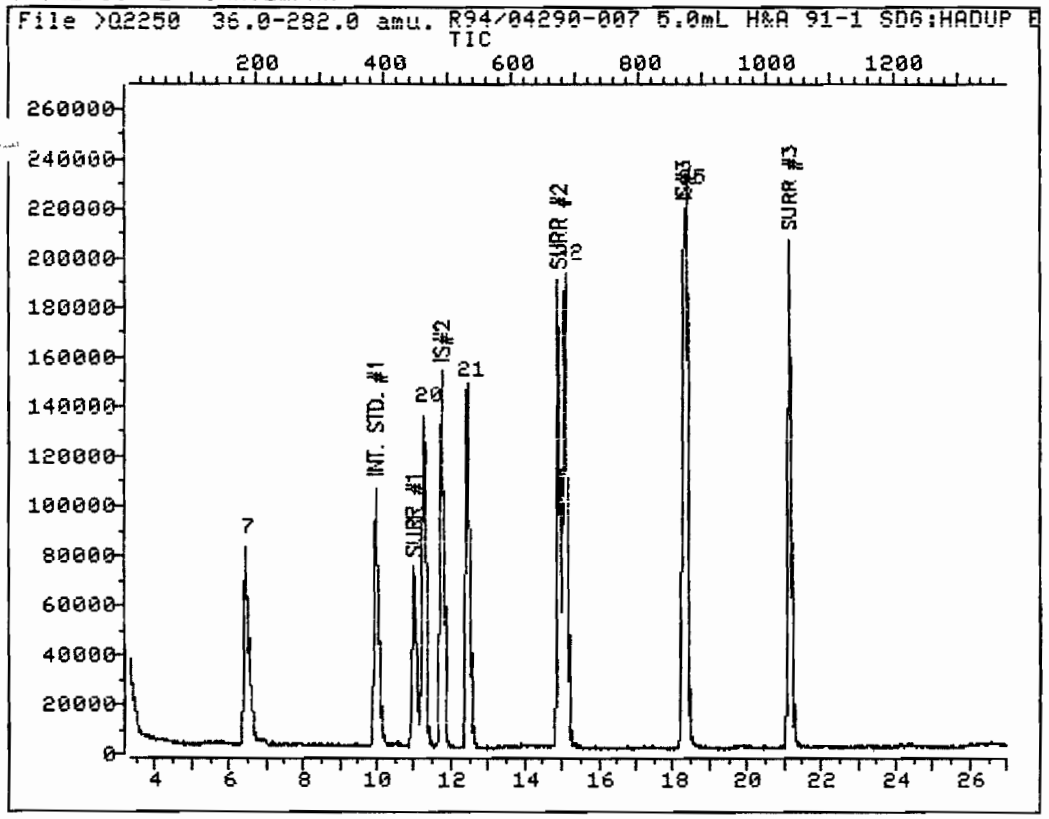
Operator ID: RODH Quant Rev: 7 Quant Time: 941108 22:57
Output File: ^Q2250::D3 Injected at: 941108 22:28
Data File: >Q2250::D3 Dilution Factor: 1.00000
Name: R94/04290-007 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW6MS

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.98	128.0	95686	50.00	ppb	90
7)	1,1-Dichloroethene	6.44	96.0	127481	53.95	ppb	89
16)	1,2-Dichloroethane-d4	10.99	65.0	191669	46.33	ppb	91
17)	*1,4-Difluorobenzene	11.74	114.0	415363	50.00	ppb	77
20)	Benzene	11.25	78.0	434094	49.04	ppb	95
21)	Trichloroethene	12.43	130.0	185232	48.48	ppb	99
29)	*Chlorobenzene-d5	18.27	117.0	360564	50.00	ppb	95
31)	Toluene-d8	14.90	98.0	411053	49.67	ppb	88
32)	Toluene	15.08	91.0	466025	47.07	ppb	99
35)	Chlorobenzene	18.36	112.0	341904	46.78	ppb	97
41)	Bromofluorobenzene	21.12	95.0	255035	49.62	ppb	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2250::D3 Quant Output File: ^Q2250::D3
Name: R94/04290-007 5.0mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW6MS

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941108 22:57
Injected at: 941108 22:28

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW6MSD

Lab Name:GENERAL TESTING Contract:H & A

Lab Code:10145 Case No.: SAS No.: SDG No.:HADUP

Matrix: (soil/water) WATER Lab Sample ID:4290-7MSD

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: Q2251

Level: (low/med) LOW Date Received:11/02/94

% Moisture: not dec. Date Analyzed:11/08/94

GC Column:RTX-502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	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	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	50.	
75-34-3	1,1-Dichloroethane	10.	U
156-60-5	trans-1,2-Dichloroethene	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
156-59-2	cis-1,2-Dichloroethene	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	49.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	48.	
50061-02-6	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	47.	
108-90-7	Chlorobenzene	47.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
108-38-3	(m+p)Xylene	10.	U
95-47-6	o-Xylene	10.	U

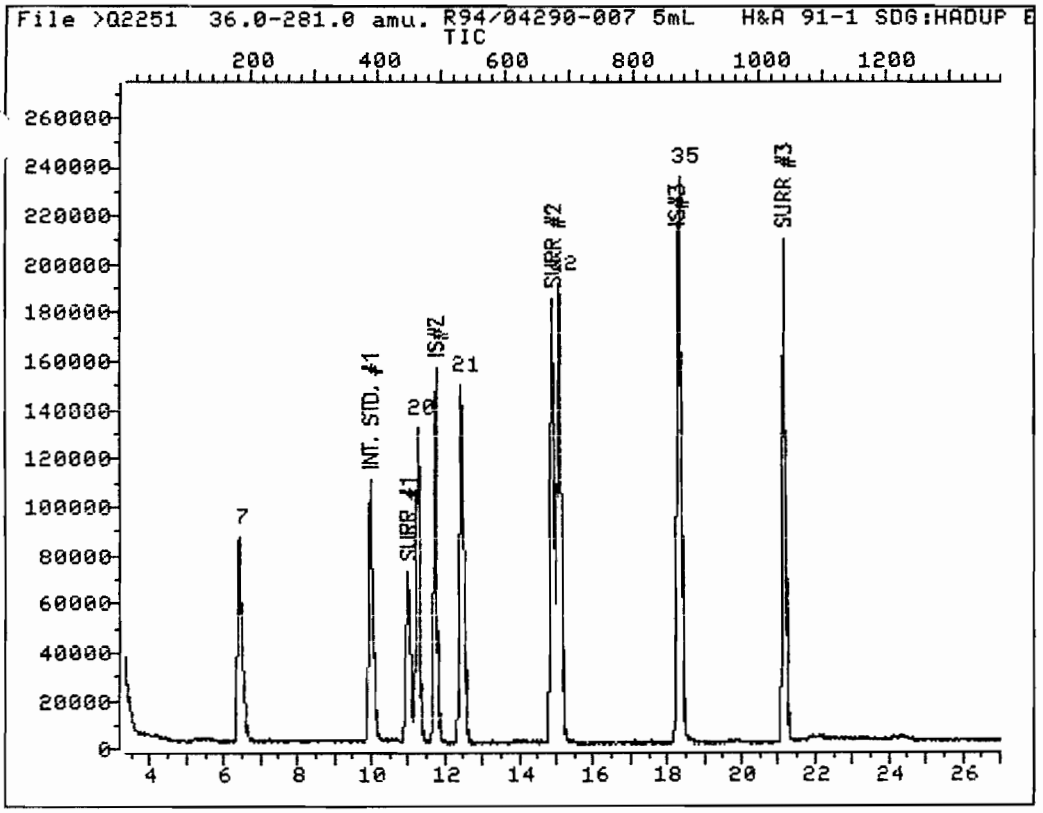
Operator ID: RODH Quant Rev: 7 Quant Time: 941109 06:58
Output File: ^Q2251::D4 Injected at: 941108 23:13
Data File: >Q2251::D4 Dilution Factor: 1.00000
ne: R94/04290-007 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW6MSD

ID File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.97	128.0	94428	50.00	ppb	90
7)	1,1-Dichloroethene	6.42	96.0	115839	49.68	ppb	86
16)	1,2-Dichloroethane-d4	10.99	65.0	187698	45.98	ppb	90
17)	*1,4-Difluorobenzene	11.73	114.0	415924	50.00	ppb	76
20)	Benzene	11.23	78.0	427331	48.21	ppb	95
21)	Trichloroethene	12.43	130.0	186818	48.83	ppb	96
29)	*Chlorobenzene-d5	18.25	117.0	360045	50.00	ppb	95
31)	Toluene-d8	14.90	98.0	406169	49.15	ppb	90
32)	Toluene	15.06	91.0	462773	46.81	ppb	98
35)	Chlorobenzene	18.34	112.0	343995	47.14	ppb	95
41)	Bromofluorobenzene	21.12	95.0	254188	49.53	ppb	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >Q2251::D4 Quant Output File: ^Q2251::D4
Name: R94/04290-007 5mL Instrument ID: MS5
Misc: H&A 91-1 SDG:HADUP EPA:MW6MSD

Id File: IDECLP::QT
Title: Volatile Organics on MS#5
Last Calibration: 941024 18:35 Last Qcal Time: 941108 19:35

Operator ID: RODH
Quant Time : 941109 06:58
Injected at: 941108 23:13