PELA

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TECHNICAL MEMORANDUM NO. 3A
FOR
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
CITY DISPOSAL CORPORATION LANDFILL
(DUNN LANDFILL)

(PELA Reference No. 495207)

Appendix G

Results of Analyses
Soil and Ground-Water Samples

Volume 10 of 16

Technical Report

SAMPLES: CA5571-CA5572, CA5575-CA5583,
CA5585-CA5587, CA5594-CA5596,
CA5602-CA5603

April 1991

OHM Corporation

ETC Environmental Testing and Certification Corp.

Technical Report

for

CITY DISPOSAL CORPORATION LANDFILL

Chain of Custody Data Required for ETC Data Management Summary Reports						
CA5571-CA5572, CA5575-CA5583, CA5585-CA5587, CA5594-CA5596 CA5602-CA5603	WASTE MANAGEMENT, INC.		405			
ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours

Richard P. Albert

Vice President, General Manager

This Technical Report is an INSITE℠ service generated by LODESTAR℠ Data Management Software.

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CASE NARRATIVE

ETC

SDG NARRATIVE

This technical report submitted by ETC Corporation contains the analytical results and required deliverables for WASTE MANAGEMENT, INC. Site 405 samples as identified below:

ETC ID	CLIENT ID	ETC ID	CLIENT ID
CA5571	3GWB18RR	CA5583	3GWFB
CA5572	3GWB7RR	CA5585	3GWPZ18
CA5575	3GWP1A	CA5586	3GWPZ21S
CA5576	3GWB16RR	CA5587	3GWPZ10
CA5577	3GWP5A	CA5594	3GWPZ18DUP
CA5578	3GWP8A	CA5595	3GWPZ10
CA5579	3GWB7RR	CA5596	3GWPZ9
CA5580	3GWP1B	CA5602	02TB
CA5581	3GWPZ15	CA5603	02TB
CA5582	3GWPZ14		

During the preparation and analysis of these samples, the following was observed:

VOLATILES:

(OV70442, OV70443 and OV70445):

Problems were not observed during the analysis of these samples.

Release of the data contained in this hardcopy data package has been authorized by the following signature.

Gregory G. Morrison
Laboratory Manager

2-11-91
Date

File # 000452

METHODOLOGY

INTRODUCTION

Environmental Testing and Certification Corp.
284 Raritan Center Parkway, CN 7808
Edison, New Jersey 08818-7808
(201) 225-6700

This report contains analytical results in tabular form for your sample. It includes comprehensive data for each analytical process. Associated quality control data is also presented, including QC batch results for the laboratory blank, spiked blank, matrix spike and a replicated sample spike, as well as results from surrogate compound analyses. Quality control data for instrument performance is also included. Other appendices may include data system printouts and chain of custody records.

Analytical Methodology

ETC utilizes a wide variety of methodologies and EPA approved procedures which are listed below. Analytical results and Quality Assurance protocols are based upon the approriate guideline dependent upon the level of deliverable requested.

- "Methods of Organic Chemical Analysis of Municipal and Industrial Wastewater", Federal Register Vol. 49, No. 209, October 26, 1984;
- "Test Methods for Evaluating Solid Waste", SW-846 Third Edition, September 1986, USEPA;
- "Standard Methods for the Examination of Water and Wastewater" 1985, 14th, 15th and 16th Edition;
- "Methods for Chemical Analysis of Water and Wastes" March 1983, EMSL, EPA 600 4-79-020;
- Organic Analysis: Multi-media, Multi-Concentration-IFB-CLP, SOW February 1988;
- Inorganic Analysis: Multi-media, Multi-Concentration IFB-CLP, SOW July 1987;
- Dioxin Analysis: Soil/Sediment/Water Matrix; Multi-Concentration, Selected Ion Monitoring with Jar Extraction Procedure; IFB WA86-K357.
- "Methods for the Determination of Organic Compounds in Drinking Water" December 1988, EPA-600/4-88/039;
- "Handbook for Analytical Quality Control in Water and Wastewater Laboratories", EPA-600/4-79-019, March 1979;
- "National Enforcement Investigation Center Policies and Procedures Manual,EPA-330/9/78/001-R, Revised May 1986.

ETC

ETC Network Laboratories are certified to perform analytical analyses upon samples collected throughout the United States. It may be required that this environmental data be reported with reference to a certified laboratory. The Laboratory Identification Numbers for ETC Corp., Edison NJ Laboratory are summarized below for your information and reference. Please contact your Program Manager should you require certification verification for an ETC Network Laboratory.

Certification Summary, January 1990

State Agency	Certification Number
Alabama Department of Environmental Management	40280
Arizona Department of Environmental Quality	322
California Department of Health Services	162
Connecticut Department of Health Services	0511
Florida Department of Health and Rehabilitative Services	E87074 & 87262
Illinois Environmental Protection Agency	100224
Kansas Department of Health and Environment	E-148 & E1122
New Hampshire Department of Environmental Services	198948-B
New Jersey Department of Environmental Protection	12257
New York Department of Public Health	10586
Oklahoma Water Resources Board	8703
Pennsylvania Department of Environmental Regulation	68-323
South Carolina Department of Health and Environmental Control	94002
Tennessee Department of Health and Environmental Laboratory Services	02915
Utah Department of Health	E-91
Virginia Department of General Services	00113
Wisconsin Department of Natural Resources	999464070

VOLATILE DATA

QC SUMMARY

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: ETC Corp. | Laboratory Contract:

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

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	VBLK01	98	98	104		0
02	A5554	98	98	104		0
03	A5554MS	99	95	98		0
04	A5554MSD	98	95	104		0
05	A5556	98	94	99		0
06	A5547	99	95	106		0
07	A5548	101	89	92		0
08	A5549	100	90	77		0
09	A5550	99	89	76 X		0
10	A5553	98	89	95		0
11	A5555	100	89	98		0
12	A5557	100	88	94		0
13	A5558	99	90	90		0
14	VBLK02	99	98	98		0
15	A5562	100	96	93		0
16	A5564	99	96	97		0
17	A5569	100	97	97		0
18	A5560	100	97	97		0
19	A5561	99	97	112		0
20	VBLK03	100	99	88		0
21	A5562	100	97	86		0
22	A5570	102	99	99		0
23	A5573	100	97	102		0
24	A5602	101	98	96		0
25	A5575	101	95	88		0
26	VBLK09	97	98	100		0
27	A5576	96	96	101		0
28						
29						
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AP 1/16/91

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: ETCNJ Contract:

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

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	VBLK01	100	99	97		0
02	A5563	98	97	98		0
03	A5574	98	99	97		0
04	A5559	99	100	101		0
05	A5580	102	99	97		0
06	A5581	97	97	98		0
07	A5582	96	96	99		0
08	A5603	96	98	100		0
09	A5594	98	99	97		0
10	A5595	107	106	98		0
11	VBLK02	107	107	93		0
12	A5805	78 *	78 *	92		2
13	A5599	76 *	76 *	93		2
14	A5806	84 *	84 *	94		2
15	A5591	75 *	75 *	91		2
16	A5805MS	77 *	76 *	90		2
17	A5806MSD	78 *	76 *	92		2
18	A5591MS	78 *	78 *	91		2
19	VBLK03	98	110	96		0
20	A5599MS	105	117 *	96		1
21	A5599MSD	128 *	144 *	94		2
22						
23						
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	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: ETC Corp. | Laboratory Contract:

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

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	VBLK01	96	100	90		0
02	A5577	100	99	86		0
03	A5585	101	99	91		0
04	A5586	97	100	92		0
05	A5587	97	101	91		0
06	A5596	96	99	90		0
07	A5571	97	99	91		0
08	A5583	97	99	113		0
09	A5584	97	99	112		0
10	A5589	96	98	91		0
11	A5593	96	98	109		0
12	VBLK02	98	99	100		0
13	A5578	98	99	105		0
14	A5579	98	98	102		0
15	A5590	98	98	113		0
16	A5568	96	99	128 *		1
17	A5592	98	98	125 *		1
18	VBLK03	98	100	100		0
19	A5577	97	101	114		0
20	A5572	97	98	101		0
21	A5572MS	100	99	112		0
22	A5572MSD	100	97	128 *		1
23	A5568RE	99	98	120 *		1
24	A5588	98	98	99		0
25	A5592RE	97	96	123 *		1
26	A5597	45 *	106	3 *		2
27						
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	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: ETCNJ Contract:

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

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	VBLK0[illegible]4	107	107	93		0
02	A5597[illegible]	76 *	77 *	88		2
03						
04						
05						
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07						
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	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix Spike - EPA Sample No.: A5554

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.000	0.000	41.687	83	61-145
Trichloroethene	50.000	0.000	44.717	89	71-120
Benzene	50.000	0.000	43.741	87	76-127
Toluene	50.000	0.000	43.212	86	76-125
Chlorobenzene	50.000	1.044	44.847	88	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.000	38.279	77	9	14	61-145
Trichloroethene	50.000	44.832	90	0	14	71-120
Benzene	50.000	44.356	89	1	11	76-127
Toluene	50.000	43.838	88	1	13	76-125
Chlorobenzene	50.000	45.137	88	1	13	75-130

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

* Values outside of limits

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

Comments: _____

FORM III VOA -1 1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix Spike - EPA Sample No.: A5572

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
1,1-Dichloroethene	50.000	0.000	45.263	91		61-145
Trichloroethene	50.000	0.000	42.619	85		71-120
Benzene	50.000	8.208	47.325	78		76-127
Toluene	50.000	0.000	42.458	85		76-125
Chlorobenzene	50.000	0.000	44.815	90		75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.000	42.742	85		6		14	61-145
Trichloroethene	50.000	38.810	78		9		14	71-120
Benzene	50.000	44.065	72	*	9		11	76-127
Toluene	50.000	40.039	80		6		13	76-125
Chlorobenzene	50.000	41.696	83		7		13	75-130

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

* Values outside of limits

RPD: 0 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

Comments: _____

FORM III VOA -1 1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETCNJ Contract:

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

Matrix Spike - EPA Sample No.: A5599

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.000	0.000	49.764	100	61-145
Trichloroethene	50.000	89.067	101.272	24 *	71-120
Benzene	50.000	0.000	45.558	91	76-127
Toluene	50.000	0.000	56.933	114	76-125
Chlorobenzene	50.000	0.000	9.432	19 *	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.000	45.417	91	9	14	61-145
Trichloroethene	50.000	99.757	21 *	13	14	71-120
Benzene	50.000	45.419	91	0	11	76-127
Toluene	50.000	65.130	130 *	13	13	76-125
Chlorobenzene	50.000	49.348	99	136 *	13	75-130

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

* Values outside of limits

R.D: 1 out of 5 outside limits
Spike Recovery: 4 out of 10 outside limits

Comments: _____

FORM III VOA -1 1/87 Rev.

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETCNJ Contract:

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

Lab File ID: >C2124 Lab Sample ID: VBLK01

Date Analyzed 01/11/91 Time Analyzed: 1304

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: GC/MS C

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5563	CA5563V	>C2125	1410
02	A5574	CA5574V	>C2126	1500
03	A5559	CA5559V	>C2127	1549
04	A5580	CA5580V	>C2133	2012
05	A5581	CA5581V	>C2134	2100
06	A5582	CA5582V	>C2135	2149
07	A5603	CA5603V	>C2136	2237
08	A5594	CA5594V	>C2137	2325
09	A5595	CA5595V	>C2138	0014
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Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETCNJ Contract:

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

Lab File ID: >C2186 Lab Sample ID: VBLK02

Date Analyzed 01/18/91 Time Analyzed: 1237

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: GC/MS C

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5805	CA5805V2	>C2187	1336
02	A5599	CA5599V2	>C2188	1424
03	A5806	CA5806V2	>C2190	1558
04	A5591	CA5591V2	>C2191	1646
05	A5805RE	CA5805V2	>C2192	1747
06	A5806RE	CA5806V2	>C2196	2058
07	A5591RE	CA5591V2	>C2197	2146
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Comments: _____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETCNJ Contract:

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

Lab File ID: >C2186 Lab Sample ID: VBLK04

Date Analyzed 01/18/91 Time Analyzed: 1237

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: GC/MS C

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5597RE	CA5597V2	>C2189	1511
02				
03				
04				
05				
06				
07				
08				
09				
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Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETCNJ Contract:

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

Lab File ID: >C2211 Lab Sample ID: VBLK03

Date Analyzed 01/19/91 Time Analyzed: 1626

Matrix: (soil/water WATER Level: (low/med) LOW

Instrument ID: GC/MS C

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5599MS	CA5599VS	>C2215	2024
02	A5599MSD	CA5599VR	>C2216	2112
03				
04				
05				
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Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2534 Lab Sample ID: VBLK01

Date Analyzed 01/09/91 Time Analyzed: 1716

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5554	CA5554V	>D2536	1825
02	A5554MS	CA5554VS	>D2537	1910
03	A5554MSD	CA5554VR	>D2538	1953
04	A5556	CA5556V	>D2539	2037
05	A5547	CA5547V	>D2540	2120
06	A5548	CA5548V	>D2541	2203
07	A5549	CA5549V	>D2542	2247
08	A5550	CA5550V	>D2543	2331
09	A5553	CA5553V	>D2544	0015
10	A5555	CA5555V	>D2545	0057
11	A5557	CA5557V	>D2546	0141
12	A5558	CA5558V	>D2547	0225
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Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2550 Lab Sample ID: VBLK02

Date Analyzed 01/10/91 Time Analyzed: 1054

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5562	CA5562V2	>D2553	1355
02	A5564	CA5564V2	>D2556	1614
03	A5569	CA5569V2	>D2557	1719
04	A5560	CA5560V2	>D2562	2114
05	A5561	CA5561V2	>D2563	2202
06				
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Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2571 Lab Sample ID: VBLK03

Date Analyzed 01/11/91 Time Analyzed: 1803

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5576	CA5576V3	>D2577	2248
02				
03				
04				
05				
06				
07				
08				
09				
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Comments: _____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2580 Lab Sample ID: VBLK04

Date Analyzed 01/13/91 Time Analyzed: 1302

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5562	CA5562U4	>D2581	1359
02	A5570	CA5570U4	>D2582	1446
03	A5573	CA5573U4	>D2583	1533
04	A5602	CA5602U4	>D2584	1620
05	A5575	CA5575U4	>D2585	1706
06				
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4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2590 Lab Sample ID: VBLK01

Date Analyzed 01/13/91 Time Analyzed: 1956

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5577	CA5577V	>D2591	2042
02	A5585	CA5585V	>D2593	2216
03	A5586	CA5586V	>D2594	2303
04	A5587	CA5587V	>D2595	2349
05	A5596	CA5596V	>D2596	0037
06	A5571	CA5571V	>D2597	0123
07	A5583	CA5583V	>D2599	0257
08	A5584	CA5584V	>D2600	0344
09	A5589	CA5589V	>D2601	0431
10	A5593	CA5593V	>D2602	0517
11				
12				
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Comments: _____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2606 Lab Sample ID: VBLK02

Date Analyzed 01/14/91 Time Analyzed: 1207

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5578	CA5578V2	>D2610	1526
02	A5579	CA5579V2	>D2612	1655
03	A5590	CA5590V2	>D2614	1826
04	A5568	CA5568V2	>D2615	1911
05	A5592	CA5592V2	>D2616	1956
06				
07				
08				
09				
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Comments:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D2621 Lab Sample ID: VBLK03

Date Analyzed 01/15/91 Time Analyzed: 1514

Matrix: (soil/water) WATER Level: (low/med) LOW

Instrument ID: GC/MS D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A5577	CA5577V3	>D2622	1609
02	A5572	CA5572V3	>D2624	1749
03	A5572MS	CA5572VS	>D2625	1836
04	A5572MSD	CA5572VR	>D2626	1922
05	A5568RE	CA5568V3	>D2627	2007
06	A5588	CA5588V3	>D2628	2051
07	A5592RE	CA5592V3	>D2629	2137
08				
09				
10				
11				
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Comments: _____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory | Contract:

Lab Code: | Case No.: | SAS No.: | SDG No.:

Lab File ID: >C2110 | BFB Injection Date: 01/10/91

Instrument ID: GC/MS C | BFB Injection Time: 1019

Matrix: (soil/water) WATER | Level: (low/med) LOW | Column: (pack/cap) ____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	47.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	.6 (.6)1
174	Greater than 50.0% of mass 95	92.1
175	5.0 - 9.0% of mass 174	7.9 (8.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	91.4 (99.2)1
177	5.0 - 9.0% of mass 176	6.4 (6.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		QC70443VS	>C2111	01/10/91	1048
02		QC70443VS	>C2113	01/10/91	1224
03		QC70443VS	>C2115	01/10/91	1401
04		QC70443VS	>C2117	01/10/91	1627
05		QC70443VS	>C2118	01/10/91	1715
06					
07					
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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory | Contract:

Lab Code: | Case No.: | SAS No.: | SDG No.:

Lab File ID: >C2120 | BFB Injection Date: 01/11/91

Instrument ID: GC/MS C | BFB Injection Time: 1013

Matrix: (soil/water) WATER | Level: (low/med) LOW | Column: (pack/cap) ____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.2
75	30.0 - 60.0% of mass 95	50.1
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	Greater than 50.0% of mass 95	87.0
175	5.0 - 9.0% of mass 174	7.7 (8.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	87.5 (100.6)1
177	5.0 - 9.0% of mass 176	7.7 (8.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		QC70443VS	>C2123	01/11/91	1216
02		QC70443V	>C2124	01/11/91	1304
03		CA5563V	>C2125	01/11/91	1410
04		CA5574V	>C2126	01/11/91	1500
05		CA5559V	>C2127	01/11/91	1549
06					
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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory | Contract:

Lab Code: | Case No.: | SAS No.: | SDG No.:

Lab File ID: >C2129 | BFB Injection Date: 01/11/91

Instrument ID: GC/MS C | BFB Injection Time: 1721

Matrix: (soil/water) WATER | Level: (low/med) LOW | Column: (pack/cap) ____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.0
75	30.0 - 60.0% of mass 95	49.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	93.0
175	5.0 - 9.0% of mass 174	6.8 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	90.2 (97.0)1
177	5.0 - 9.0% of mass 176	5.3 (5.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		CA5580V	>C2133	01/11/91	2012
02		CA5581V	>C2134	01/11/91	2100
03		CA5582V	>C2135	01/11/91	2149
04		CA5603V	>C2136	01/11/91	2237
05		CA5594V	>C2137	01/11/91	2325
06		CA5595V	>C2138	01/12/91	0014
07					
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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory Contract:

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

Lab File ID: >C2175 BFB Injection Date: 01/17/91

Instrument ID: GC/MS C BFB Injection Time: 1207

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) ____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	50.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	93.4
175	5.0 - 9.0% of mass 174	8.0 (8.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	92.4 (98.9)1
177	5.0 - 9.0% of mass 176	7.3 (7.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		QC70443VS	>C2177	01/17/91	1327
02		QC70443VS	>C2178	01/17/91	1414
03		QC70443VS	>C2179	01/17/91	1502
04		QC70443VS	>C2180	01/17/91	1550
05		QC70443VS	>C2181	01/17/91	1715
06					
07					
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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory | Contract:

Lab Code: | Case No.: | SAS No.: | SDG No.:

Lab File ID: >C2183 | BFB Injection Date: 01/18/91

Instrument ID: GC/MS C | BFB Injection Time: 1016

Matrix: (soil/water) WATER | Level: (low/med) LOW | Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.4
75	30.0 - 60.0% of mass 95	50.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.0
173	Less than 2.0% of mass 174	.4 (.4)1
174	Greater than 50.0% of mass 95	97.9
175	5.0 - 9.0% of mass 174	8.4 (8.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	97.6 (99.8)1
177	5.0 - 9.0% of mass 176	8.2 (8.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		QC70443VS	>C2184	01/18/91	1043
02		QC70443V2	>C2186	01/18/91	1237
03		CA5805V2	>C2187	01/18/91	1336
04		CA5599V2	>C2188	01/18/91	1424
05		CA5806V2	>C2190	01/18/91	1558
06		CA5591V2	>C2191	01/18/91	1646
07		CA5805V2	>C2192	01/18/91	1747
08		~~CA5599VS~~	~~>C2193~~	~~01/18/91~~	~~1859~~
09		~~CA5599VR~~	~~>C2194~~	~~01/18/91~~	~~1922~~
10		~~CA5597V2~~	~~>C2195~~	~~01/18/91~~	~~2010~~
11		CA5806V2	>C2196	01/18/91	2058
12		CA5591V2	>C2197	01/18/91	2146
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14					
15					
16					
17					
18					
19					
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21					
22					

} NA 1/23/

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUORDBENZENE (BFB)

Lab Name:ETCNJ | Laboratory Contract:

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

Lab File ID: >C2183 BFB Injection Date:01/18/91

Instrument ID: GC/MS C BFB Injection Time:1016

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) ____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.4
75	30.0 - 60.0% of mass 95	50.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.0
173	Less than 2.0% of mass 174	.4 (.4)1
174	Greater than 50.0% of mass 95	97.9
175	5.0 - 9.0% of mass 174	8.4 (8.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	97.6 (99.8)1
177	5.0 - 9.0% of mass 176	8.2 (8.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		QC70443VS	>C2184	01/18/91	1043
02		QC70443V2	>C2186	01/18/91	1237
03		CA5597V2BS	>C2189	01/18/91	1511
04					
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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory | Contract:

Lab Code: | Case No.: | SAS No.: | SDG No.:

Lab File ID: >C2198 | BFB Injection Date: 01/19/91

Instrument ID: GC/MS C | BFB Injection Time: 1358

Matrix: (soil/water) WATER | Level: (low/med) LOW | Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.2
75	30.0 - 60.0% of mass 95	45.7
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	Greater than 50.0% of mass 95	95.1
175	5.0 - 9.0% of mass 174	8.3 (8.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	94.9 (99.8)1
177	5.0 - 9.0% of mass 176	8.3 (8.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70443VS	>C2199	01/19/91	1434
02	_____	QC70443V3	>C2211	01/19/91	1626
03	_____	CA5599VS	>C2215	01/19/91	2024
04	_____	CA5599VR	>C2216	01/19/91	2112
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2520 BFB Injection Date: 01/08/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1622

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.2
75	30.0 - 60.0% of mass 95	54.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	78.8
175	5.0 - 9.0% of mass 174	6.6 (8.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	76.1 (96.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70441VS	>D2521	01/08/91	1643
02	_____	QC70441VS	>D2522	01/08/91	1728
03	_____	QC70441VS	>D2523	01/08/91	1811
04	_____	QC70441VS	>D2524	01/08/91	1855
05	_____	QC70441VS	>D2525	01/08/91	1939
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2531 BFB Injection Date: 01/09/91

Instrument ID: GC/MS_D___ . BFB Injection Time: 1223

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.6
75	30.0 - 60.0% of mass 95	59.3
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	1.5 (1.8)1
174	Greater than 50.0% of mass 95	80.1
175	5.0 - 9.0% of mass 174	5.9 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.1 (96.3)1
177	5.0 - 9.0% of mass 176	5.6 (7.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70442VS	>D2532	01/09/91	1442
02	_____	QC70442V	>D2534	01/09/91	1716
03	_____	_____	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2535 BFB Injection Date: 01/09/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1804

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	30.0
75	30.0 - 60.0% of mass 95	55.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	82.9
175	5.0 - 9.0% of mass 174	7.4 (8.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	79.6 (96.0)1
177	5.0 - 9.0% of mass 176	5.1 (6.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	CA5554V	>D2536	01/09/91	1825
02	_____	CA5554VS	>D2537	01/09/91	1910
03	_____	CA5554VR	>D2538	01/09/91	1953
04	_____	CA5556V	>D2539	01/09/91	2037
05	_____	CA5547V	>D2540	01/09/91	2120
06	_____	CA5548V	>D2541	01/09/91	2203
07	_____	CA5549V	>D2542	01/09/91	2247
08	_____	CA5550V	>D2543	01/09/91	2331
09	_____	CA5553V	>D2544	01/10/91	0015
10	_____	CA5555V	>D2545	01/10/91	0057
11	_____	CA5557V	>D2546	01/10/91	0141
12	_____	CA5558V	>D2547	01/10/91	0225
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2548 BFB Injection Date: 01/10/91

Instrument ID: GC/MS_D___ BFB Injection Time: 0948

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.3
75	30.0 - 60.0% of mass 95	50.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.2
173	Less than 2.0% of mass 174	.9 (1.1)1
174	Greater than 50.0% of mass 95	83.1
175	5.0 - 9.0% of mass 174	6.8 (8.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.2 (96.6)1
177	5.0 - 9.0% of mass 176	6.7 (8.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70442VS	>D2549	01/10/91	1010
02	_____	QC70442V2	>D2550	01/10/91	1054
03	_____	CA5562V2	>D2553	01/10/91	1355
04	_____	CA5564V2	>D2556	01/10/91	1614
05	_____	CA5569V2	>D2557	01/10/91	1719
06	_____	CA5560V2	>D2562	01/10/91	2114
07	_____	CA5561V2	>D2563	01/10/91	2202
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: ____ SAS No.: _____ SDG No.:

Lab File ID: >D2564 BFB Injection Date: 01/11/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1008

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

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	48.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	79.3
175	5.0 - 9.0% of mass 174	6.4 (8.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	76.3 (96.2)1
177	5.0 - 9.0% of mass 176	6.8 (8.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70442VS	>D2567	01/11/91	1505
02	_____	_____	_____	_____	_____
03	_____	_____	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _ _ SAS No.: _____ SDG No.:

Lab File ID: >D2569 BFB Injection Date: 01/11/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1652

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	51.0
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	Greater than 50.0% of mass 95	74.7
175	5.0 - 9.0% of mass 174	5.8 (7.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	72.0 (96.4)1
177	5.0 - 9.0% of mass 176	6.1 (8.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70442V3	>D2571	01/11/91	1803
02	_____	CA5576V3	>D2577	01/11/91	2248
03	_____	_____	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: ____ SAS No.: _____ SDG No.:

Lab File ID: >D2578 BFB Injection Date: 01/13/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1145

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.7
75	30.0 - 60.0% of mass 95	52.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	6.0 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.7 (95.4)1
177	5.0 - 9.0% of mass 176	6.5 (8.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70442VS	>D2579	01/13/91	1214
02	_____	QC70442VB 4	>D2580	01/13/91	1302
03	_____	CA5562V4 #1/20/91	>D2581	01/13/91	1359
04	_____	CA5570V4	>D2582	01/13/91	1446
05	_____	CA5573V4	>D2583	01/13/91	1533
06	_____	CA5602V4	>D2584	01/13/91	1620
07	_____	CA5575V4	>D2585	01/13/91	1706
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2578 BFB Injection Date: 01/13/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1145

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.7
75	30.0 - 60.0% of mass 95	52.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	6.0 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.7 (95.4)1
177	5.0 - 9.0% of mass 176	6.5 (8.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70445VS	>D2587	01/13/91	1757
02	_____	_____	_____	_____	_____
03	_____	_____	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2588 BFB Injection Date: 01/13/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1849

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	28.3
75	30.0 - 60.0% of mass 95	56.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	84.0
175	5.0 - 9.0% of mass 174	6.2 (7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	82.1 (97.8)1
177	5.0 - 9.0% of mass 176	6.6 (8.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70445V	>D2590	01/13/91	1956
02	_____	CA5577V	>D2591	01/13/91	2042
03	_____	CA5585V	>D2593	01/13/91	2216
04	_____	CA5586V	>D2594	01/13/91	2303
05	_____	CA5587V	>D2595	01/13/91	2349
06	_____	CA5596V	>D2596	01/14/91	0037
07	_____	CA5571V	>D2597	01/14/91	0123
08	_____	CA5579V	>D2598	01/14/91	0210
09	_____	CA5583V	>D2599	01/14/91	0257
10	_____	CA5584V	>D2600	01/14/91	0344
11	_____	CA5589V	>D2601	01/14/91	0431
12	_____	CA5593V	>D2602	01/14/91	0517
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2603 BFB Injection Date: 01/14/91

Instrument ID: GC/MS_O___ BFB Injection Time: 0958

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.0
75	30.0 - 60.0% of mass 95	50.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	84.8
175	5.0 - 9.0% of mass 174	7.4 (8.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	83.1 (98.0)1
177	5.0 - 9.0% of mass 176	6.8 (8.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70445VS	>D2604	01/14/91	1021
02	_____	QC70445V2	>D2606	01/14/91	1207
03	_____	CA5578V2	>D2610	01/14/91	1526
04	_____	CA5579V2	>D2612	01/14/91	1655
05	_____	CA5593V2	>D2613	01/14/91	1740
06	_____	CA5590V2	>D2614	01/14/91	1826
07	_____	CA5568V2	>D2615	01/14/91	1911
08	_____	CA5592V2	>D2616	01/14/91	1956
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.:

Lab File ID: >D2619 BFB Injection Date: 01/15/91

Instrument ID: GC/MS_D___ BFB Injection Time: 1402

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 60.0% of mass 95	44.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	75.0
175	5.0 - 9.0% of mass 174	6.7 (8.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.8 (98.4)1
177	5.0 - 9.0% of mass 176	5.4 (7.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70445VS	>D2620	01/15/91	1423
02	_____	QC70445V3	>D2621	01/15/91	1514
03	_____	CA5577V3	>D2622	01/15/91	1609
04	_____	CA5572V3	>D2624	01/15/91	1749
05	_____	CA5572VS	>D2625	01/15/91	1836
06	_____	CA5572VR	>D2626	01/15/91	1922
07	_____	CA5568V3RE	>D2627	01/15/91	2007
08	_____	CA5588V3	>D2628	01/15/91	2051
09	_____	CA5592V3RE	>D2629	01/15/91	2137
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5571

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5571V

Sample wt/vol: 1.0 (g/mL) ML Lab File ID: >D2597

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/14/91

Column: (pack/cap) PACK Dilution Factor: 5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	150	U
74-83-9	Bromomethane	150	U
75-01-4	Vinyl Chloride	112	J
75-00-3	Chloroethane	150	U
75-09-2	Methylene Chloride	125	U
67-64-1	Acetone	112	J
75-15-0	Carbon Disulfide	125	U
75-35-4	1,1-Dichloroethene	125	U
75-34-3	1,1-Dichloroethane	18	J
540-59-0	1,2-Dichloroethene (total)	111	J
67-66-3	Chloroform	125	U
107-06-2	1,2-Dichloroethane	125	U
78-93-3	2-Butanone	150	U
71-55-6	1,1,1-Trichloroethane	125	U
56-23-5	Carbon Tetrachloride	125	U
108-05-4	Vinyl Acetate	150	U
75-27-4	Bromodichloromethane	125	U
78-87-5	1,2-Dichloropropane	125	U
10061-01-5	cis-1,3-Dichloropropene	125	U
79-01-6	Trichloroethene	125	U
124-48-1	Dibromochloromethane	125	U
79-00-5	1,1,2-Trichloroethane	125	U
71-43-2	Benzene	125	U
10061-02-6	trans-1,3-Dichloropropene	125	U
75-25-2	Bromoform	125	U
108-10-1	4-Methyl-2-Pentanone	150	U
591-78-6	2-Hexanone	150	U
127-18-4	Tetrachloroethene	125	U
79-34-5	1,1,2,2-Tetrachloroethane	125	U
108-88-3	Toluene	196	
108-90-7	Chlorobenzene	125	U
100-41-4	Ethylbenzene	1200	
100-42-5	Styrene	125	U
1330-20-7	Xylene (total)	1250	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AS571

Lab Name: STL CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CAS571V

Sample wt/vol: 1 (G/ML) ML Lab File ID: SD2597

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/14/91

Column: (pack/cap) PACK Dilution Factor: 5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	1100	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5571

Lab Name: ETC Corp. | Laboratory   Contract:

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

Matrix: (soil/water) WATER   Lab Sample ID: CA5571V

Sample wt/vol: 1.0 (g/mL) ML   Lab File ID: >D2597

Level: (low/med) LOW   Date Received: 1/5/91

% Moisture: not dec.   Date Analyzed: 01/14/91

Column: (pack/cap) PACK   Dilution Factor: 5.0

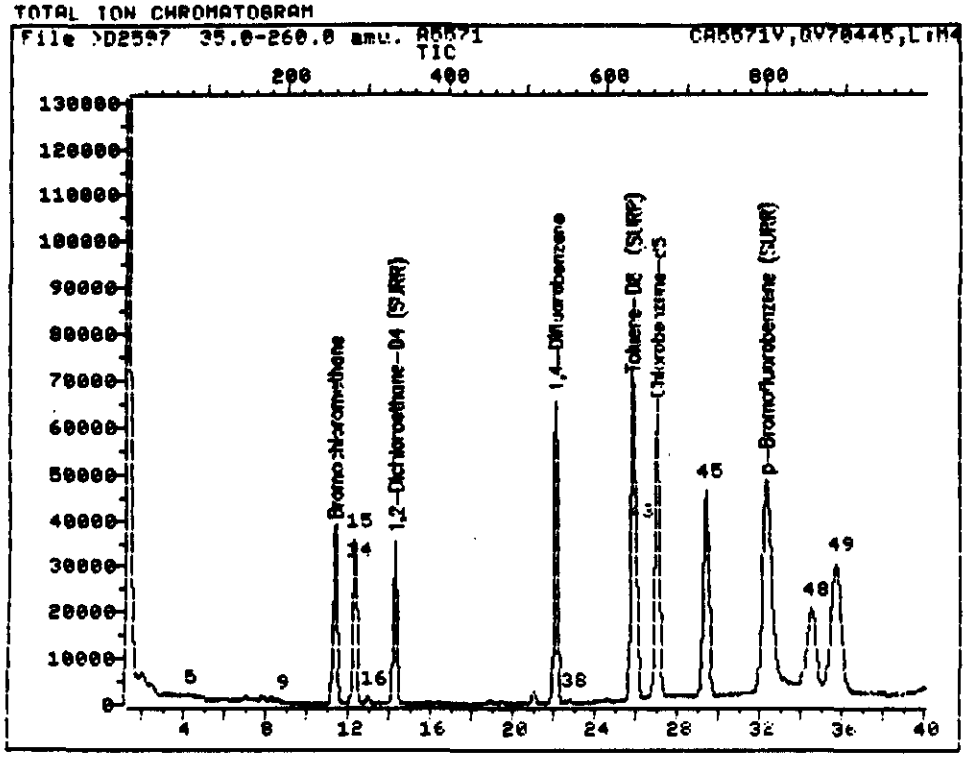
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

FORM I VOA-TIC   1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2597::U1 Quant Output File: ^D2597::AQ
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVUA13, XVUA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910114 02:04
Injected at: 910114 01:23

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 02:04
Output File: ^D2597::AQ Injected at: 910114 01:23
Data File: >D2597::U1 Dilution Factor: 1.00000
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,

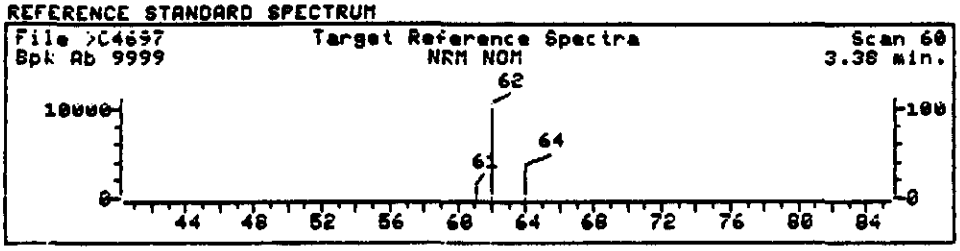
ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.30	259	70602	250.00	NG	94
5)	Vinyl chloride	4.17	75	2496	12.49	NG	88
9)	Acetone	8.67	191	2677	12.38	NG	73
14)	1,1-Dichloroethane	12.23	283	6659	7.90	NG	98
15)	Tetrahydrofuran	12.27	284	107085	1065.81	NG	100
16)	1,2-Trans-dichloroethylene	12.97	302	4310	10.80	NG	9[illegible]
18)	1,2-Dichloroethane-D4 (SURR)	14.25	335	171244	227.60	NG	95
21)	*1,4-Difluorobenzene	22.04	536	302797	250.00	NG	9[illegible]
37)	*Chlorobenzene-d5	26.98	663	255847	250.00	NG	82
38)	Methyl-iso-butyl ketone	22.78	555	2342	~~6.01~~	~~NG~~	7[illegible]
42)	Toluene-D8 (SURR)	25.77	632	311205	242.40	NG	9[illegible]
43)	Toluene	25.96	637	69517	96.18	NG	9[illegible]
45)	Ethylbenzene	29.34	724	93264	203.72	NG	81
46)	p-Bromofluorobenzene (SURR)	32.25	799	197910	248.46	NG	8[illegible]
48)	m-Xylene	34.47	856	69070	119.36	NG	98
49)	o+p-Xylenes	35.67	887	134143	251.80	NG	91

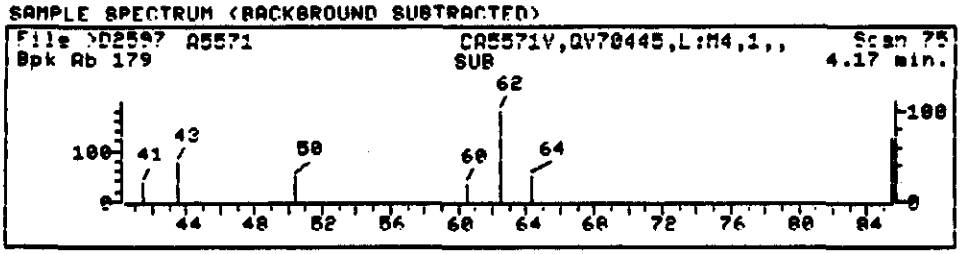
* Compound is ISTD

AP 1/22/91

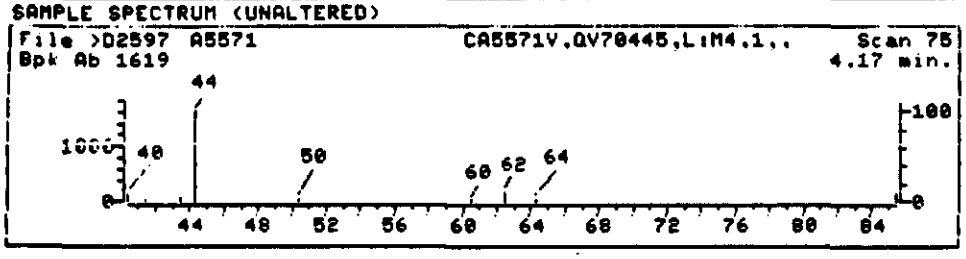
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

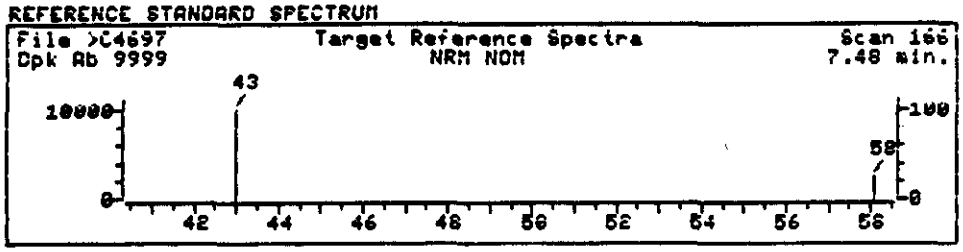


Data File: >D2597::U1
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04
Injected at: 910114 01:23

Quant Output File: ^D2597::AQ
Quant ID File: IDU31U::S5
Last Calibration: 91U113 18:53

Compound No: 5
Compound Name: Vinyl chloride
Scan Number: 75
Retention Time: 4.17 min.
Quant Ion: 62.0
Area: 2496
Concentration: 12.49 NG
Q-value: 85

REFERENCE STANDARD SPECTRUM



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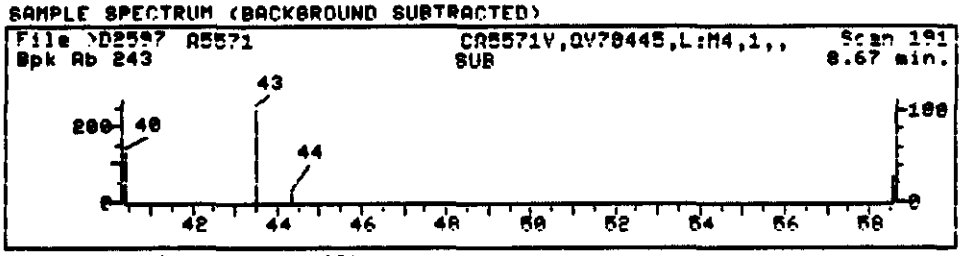

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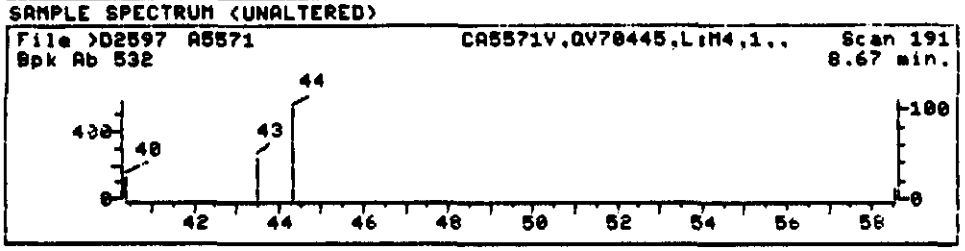


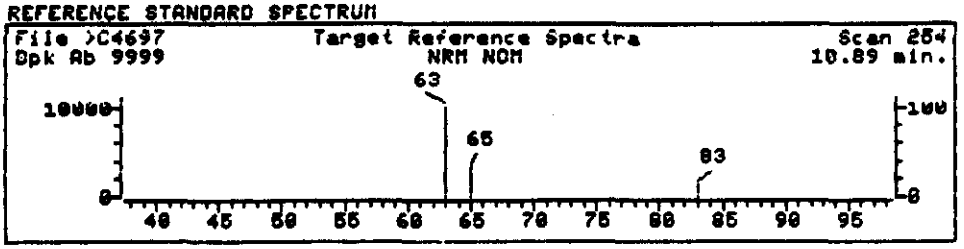
Data File: >D2597::U1
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04
Injected at: 910114 01:23

Quant Output File: ^D2597::AW

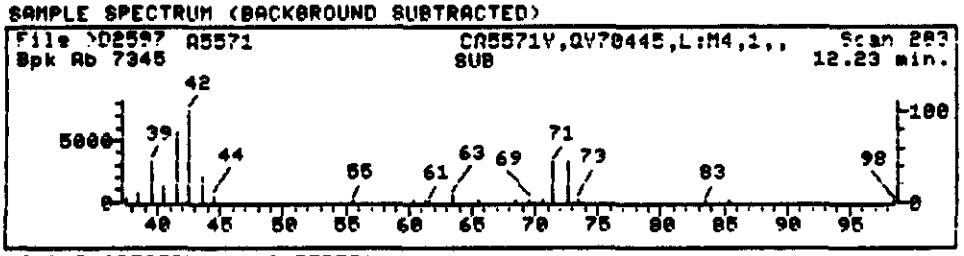
Quant ID File: ID0310::SS
Last Calibration: 910113 18:53

Compound No: 9
Compound Name: Acetone
Scan Number: 191
Retention Time: 8.67 min.
Quant Ion: 43.0
Area: 2677
Concentration: 12.38 NG
q-value: 73

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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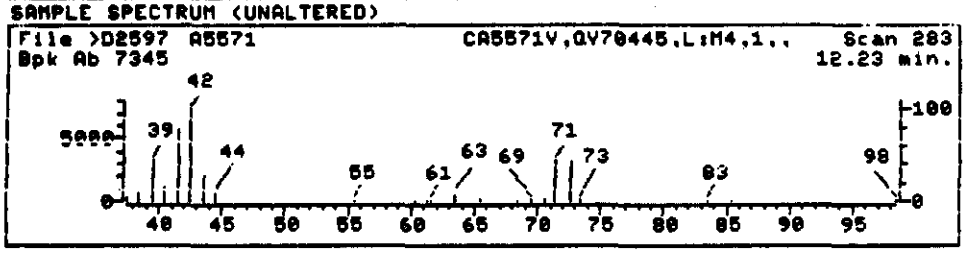
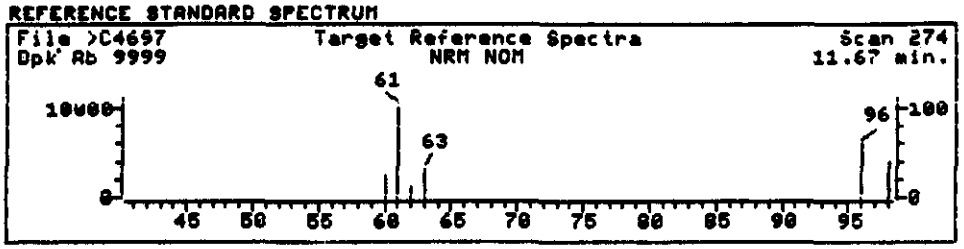


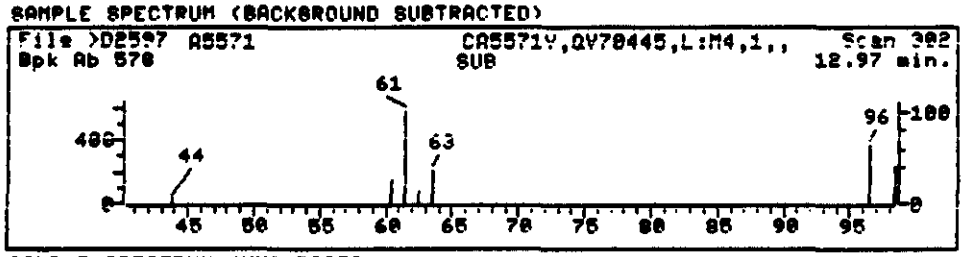
Data File: >D2597::U1 Quant Output File: ^D2597::AW
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04 Quant ID File: ID0310::SS
Injected at: 910114 01:23 Last Calibration: 910113 18:53

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 283
Retention Time: 12.23 min.
Quant Ion: 63.0
Area: 6659
Concentration: 7.90 NG
q-value: 98

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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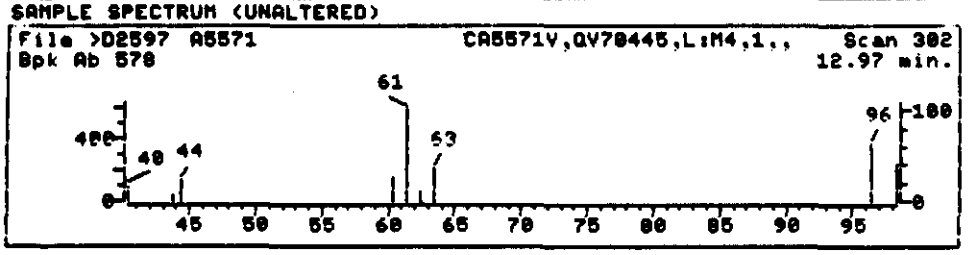
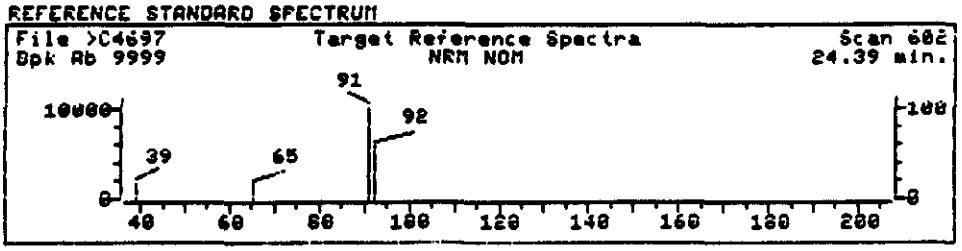


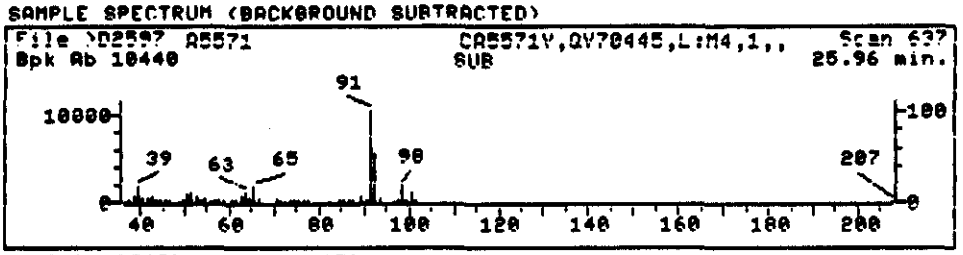
Data File: >D2597::U1 Quant Output File: ^D2597::AU
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04 Quant ID File: ID0310::SS
Injected at: 910114 01:23 Last Calibration: 910113 18:53

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 302
Retention Time: 12.97 min.
Quant Ion: 96.0
Area: 4310
Concentration: 10.80 NG
q-value: 97

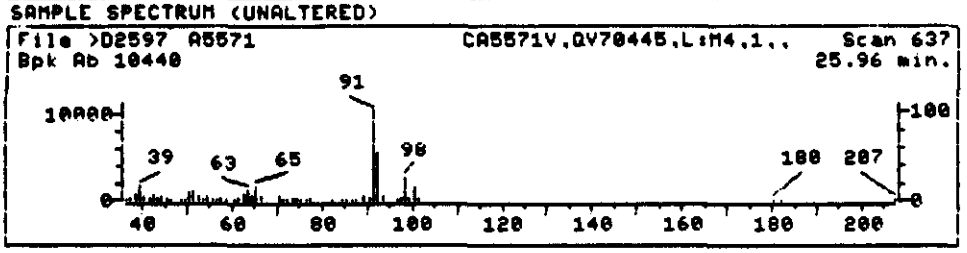
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



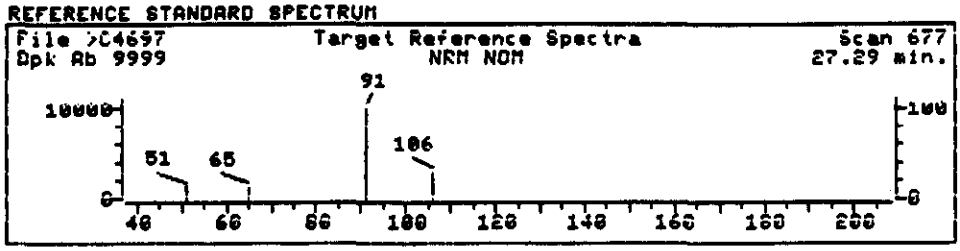
Data File: >D2597::U1
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04
Injected at: 910114 01:23

Quant Output File: ^D2597::AQ

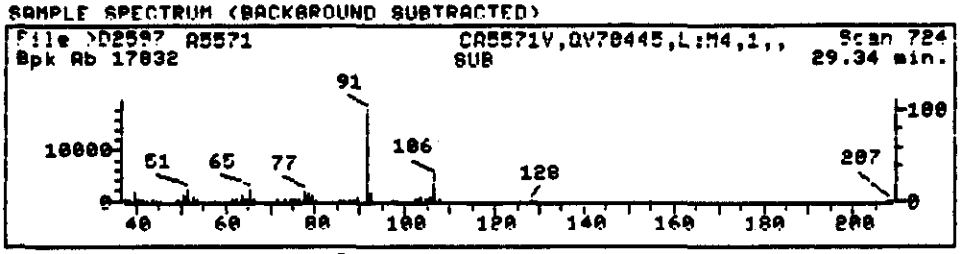
Quant ID File: 1D0310::55
Last Calibration: 910113 18:53

Compound No: 43
Compound Name: Toluene
Scan Number: 637
Retention Time: 25.96 min.
Quant Ion: 92.0
Area: 69517
Concentration: 96.18 NG
Q-Value: 95

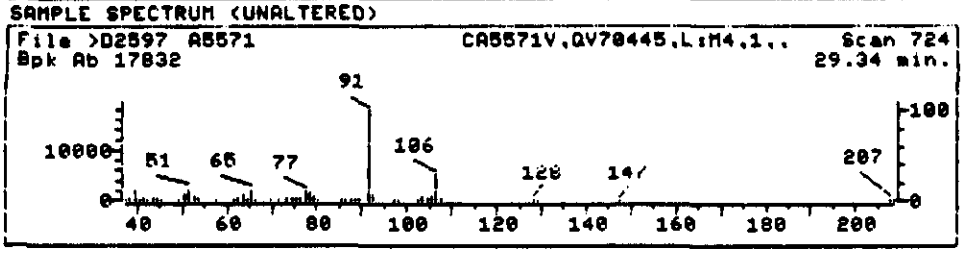
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



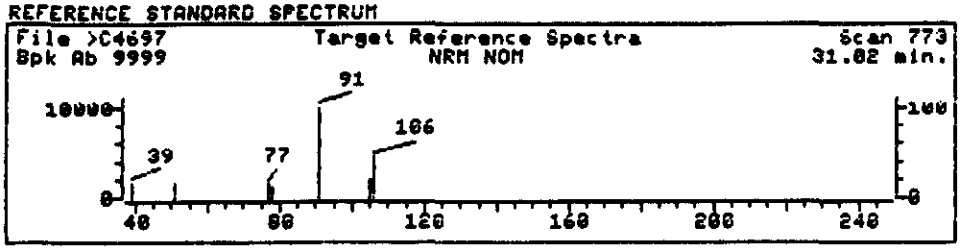
Data File: >D2597::U1
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04
Injected at: 910114 01:23

Quant Output File: ^D2597::AQ

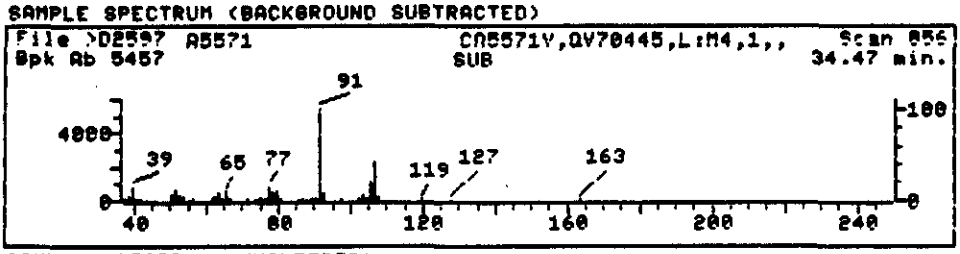
Quant ID File: ID0310::55
Last Calibration: 910113 18:53

Compound No: 45
Compound Name: Ethylbenzene
Scan Number: 724
Retention Time: 29.34 min.
Quant Ion: 106.0
Area: 93264
Concentration: 203.72 NG
Q-value: 81

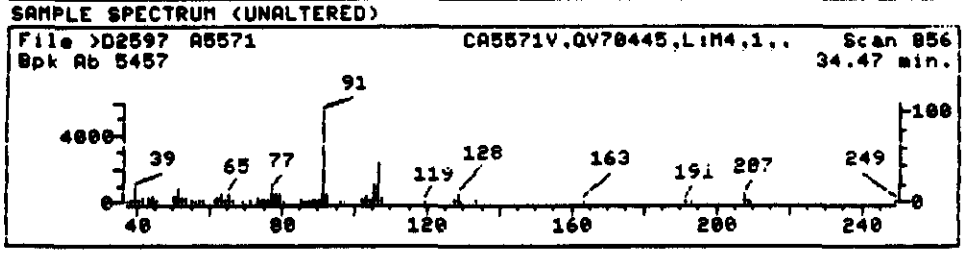
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



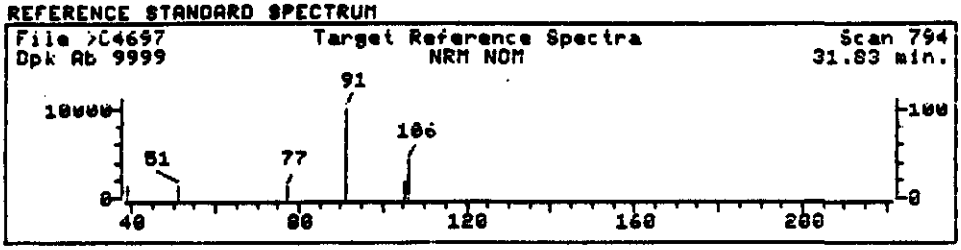
SAMPLE SPECTRUM (UNALTERED)



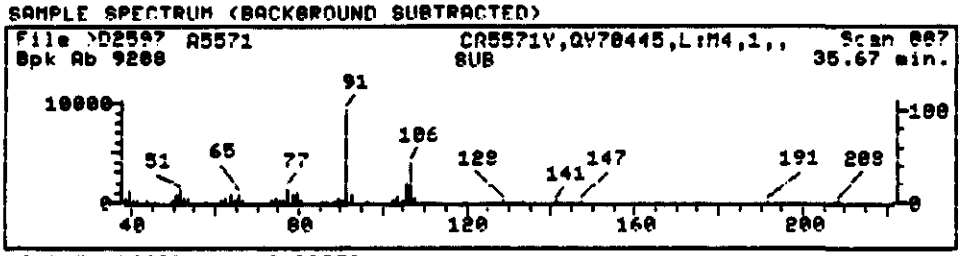
Data File: >D2597::U1 Quant Output File: ^D2597::AQ
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04 Quant ID File: ID0310::SS
Injected at: 910114 01:23 Last Calibration: 910113 18:53

Compound No: 48
Compound Name: m-Xylene
Scan Number: 856
Retention Time: 34.47 min.
Quant Ion: 106.0
Area: 69070
Concentration: 119.36 NG
q-value: 98

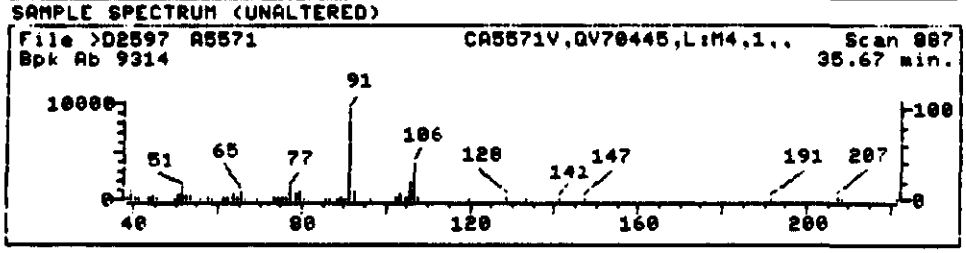
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



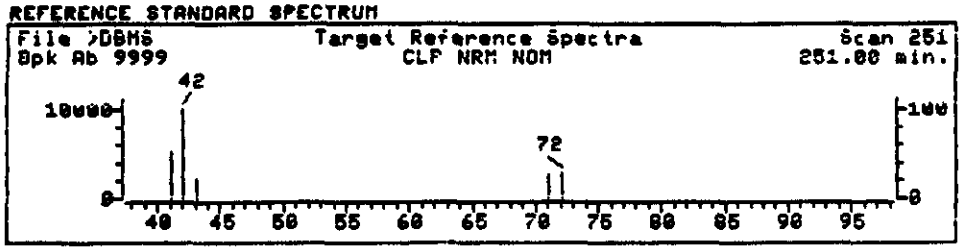
SAMPLE SPECTRUM (UNALTERED)



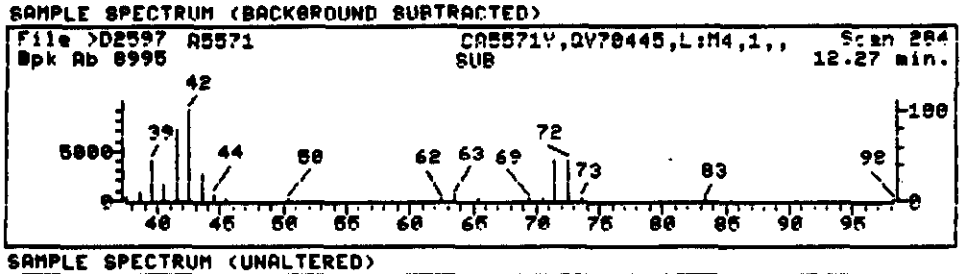
Data File: >D2597::U1 Quant Output File: ^D2597::AQ
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04 Quant ID File: IDQ91U::SS
Injected at: 910114 01:23 Last Calibration: 910113 18:53

Compound No: 49
Compound Name: o+p-Xylenes
Scan Number: 887
Retention Time: 35.67 min.
Quant Ion: 106.0
Area: 134143
Concentration: 251.80 NG
Q- Value: 91

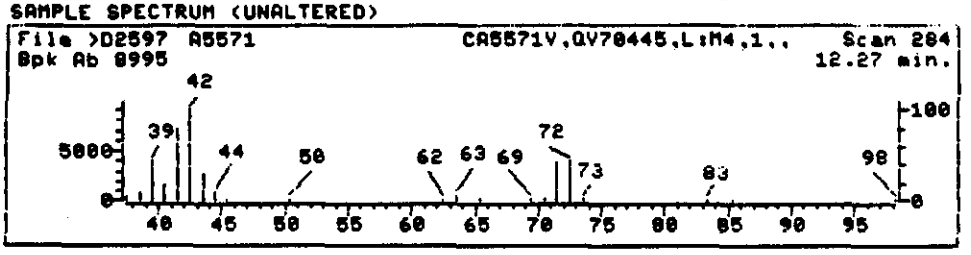
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2597::U1
Name: A5571
Misc: CA5571V,QV70445,L:M4,1,,
Quant Time: 910114 02:04
Injected at: 91U114 01:23

Quant Output File: ^D2597::AW

Quant ID File: ID031U::SS
Last Calibration: 91U113 18:53

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 284
Retention Time: 12.27 min.
Quant Ion: 42.0
Area: 107085
Concentration: 1065.81 NG
q-value: 100

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5572

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5572V3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2624

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/15/91

Column: (pack/cap) PACK Dilution Factor: 1

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	14	
75-09-2	Methylene Chloride	16	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	7	
540-59-0	1,2-Dichloroethene (total)	5	J
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	8	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5572

Lab Name: STL CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5572V3

Sample wt/vol: _____ (g/mL) ___ Lab File ID: 7D2624

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: net dec. _____ Date Analyzed: 1/15/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	110	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

A5572

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5572U3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2624

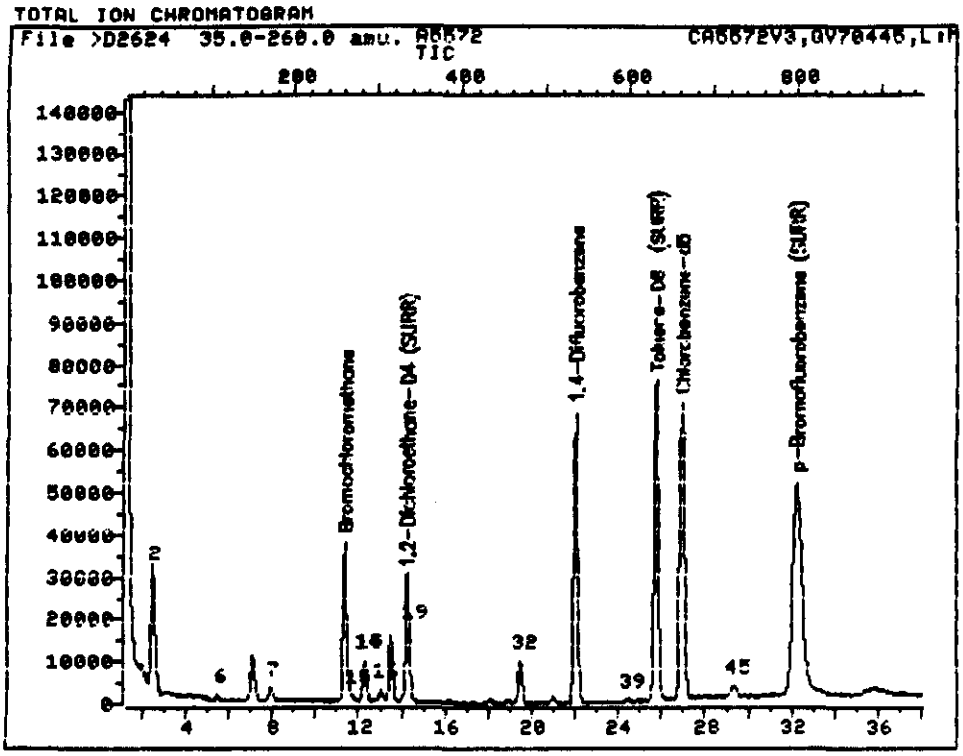
Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/15/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	Unknown	2.51	43	J
02. 60-29-7	Ethyl ether (8CI)	13.52	20	J
03. 75-43-4	Methane, dichlorofluoro-	7.08	15	J



Data File: >D2624::D1 Quant Output File: ^D2624::AW
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,

Id File: IDU310::SS
Title: PP/VOA, IPB, XVOA13, XVOA9
Last Calibration: 910114 11:09

Operator ID: RK2225
Quant Time: 910115 18:28
Injected at: 910115 17:49

Operator ID: RK2225 Quant Rev: 7 Quant Time: 910115 18:28
Output File: ^D2624::AW Injected at: 910115 17:49
Data File: >D2624::U1 Dilution Factor: 1.00000
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,

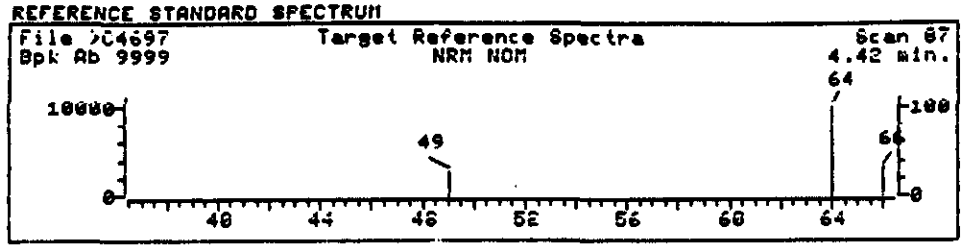
ID File: ID0310::SS
Title: PP/VOA, 1+B, XVOA13, XVOA9
Last Calibration: 910114 11:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.38	261	57385	250.00	NG	90
2)	Methyl chloride	2.47	51	6391	~~22.38~~	~~NG~~	64
6)	Chloroethane	5.49	109	8620	67.60	NG	94
7)	Methylene chloride	7.97	173	8499	80.16	NG	95
14)	1,1-Dichloroethane	12.28	284	17637	32.94	NG	98
15)	Tetrahydrofuran	11.77	271	5749	~~124.87~~	~~NG~~	100
15)	Tetrahydrofuran	12.31	285	24770	538.00	NG	100
16)	1,2-Trans-dichloroethylene	13.05	304	6137	22.77	NG	94
18)	1,2-Dichloroethane-D4 (SURR)	14.25	335	135573	253.38	NG	92
19)	1,2-Dichloroethane	14.37	338	4663	~~8.48~~	~~NG~~	61
21)	*1,4-Difluorobenzene	22.05	536	309985	250.00	NG	97
31)	bis(Chloromethyl)ether	19.49	470	3159	~~19.48~~	~~NG~~	100
32)	Benzene	19.49	470	45714	41.04	NG	94
37)	*Chlorobenzene-d5	26.94	662	278920	250.00	NG	81
39)	2-Hexanone	24.45	598	3640	~~2.78~~	~~NG~~	69
42)	Toluene-D8 (SURR)	25.27	632	333725	242.35	NG	96
45)	Ethylbenzene	29.31	725	5948	12.30	NG	82
46)	p-Bromofluorobenzene (SURR)	32.25	799	211900	245.10	NG	86

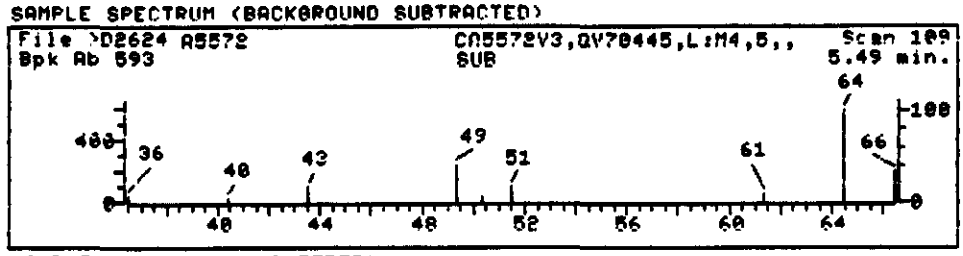
* Compound is ISTD

AP 1/22/91

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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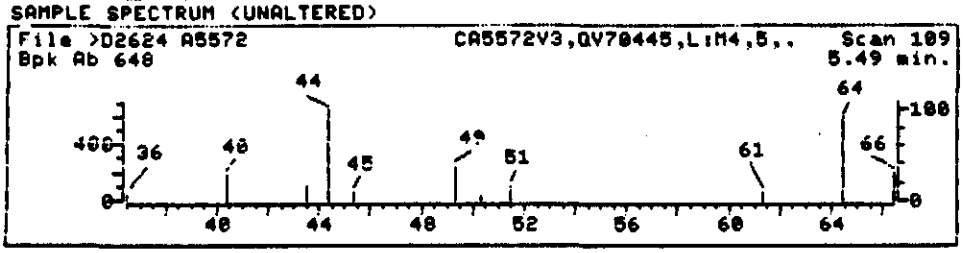
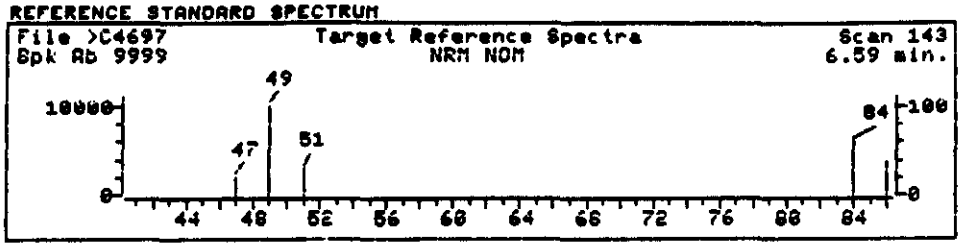


Data File: >D2624::U1
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 910115 18:28
Injected at: 910115 17:49

Quant Output File: ^D2624::AW
Quant ID File: ID0310::S5
Last Calibration: 910114 11:09

Compound No: 6
Compound Name: Chloroethane
Scan Number: 109
Retention Time: 5.49 min.
Quant Ion: 64.0
Area: 8620
Concentration: 67.60 NG
C- value: 94

REFERENCE STANDARD SPECTRUM



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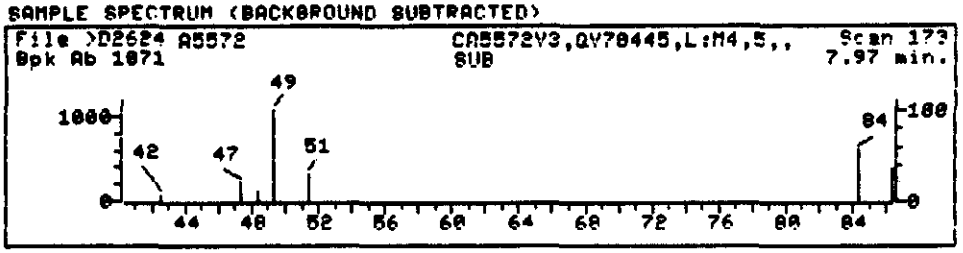

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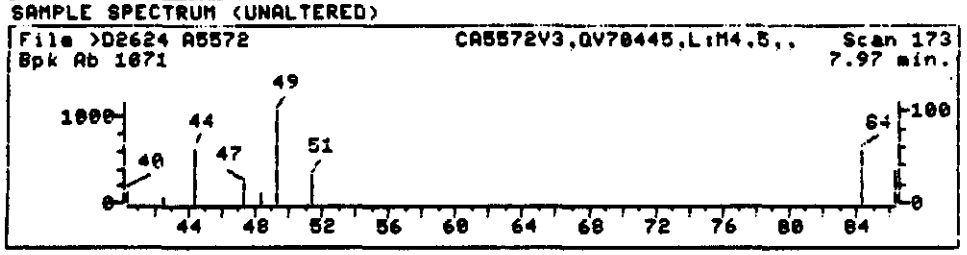
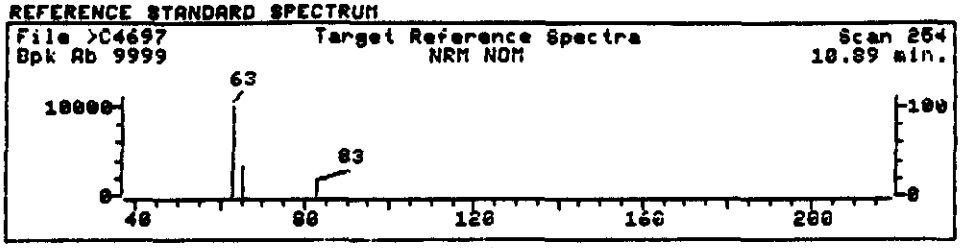


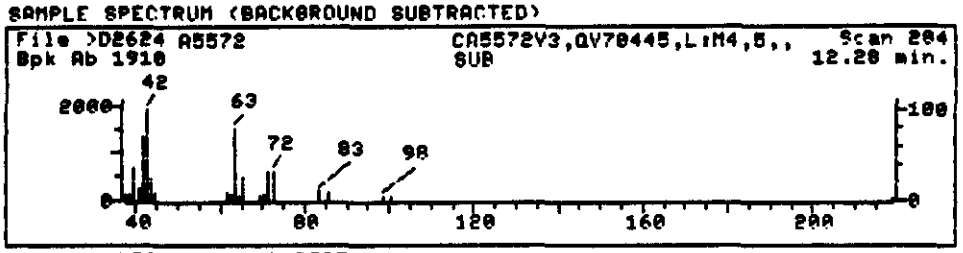
Data File: >D2624::U1 Quant Output File: ^D2624::AW
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 91U115 18:28 Quant ID File: 1DU31U::SS
Injected at: 91U115 17:49 Last Calibration: 91U114 11:09

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 173
Retention Time: 7.97 min.
Quant Ion: 84.0
Area: 8499
Concentration: 80.16 NG
q-value: 95

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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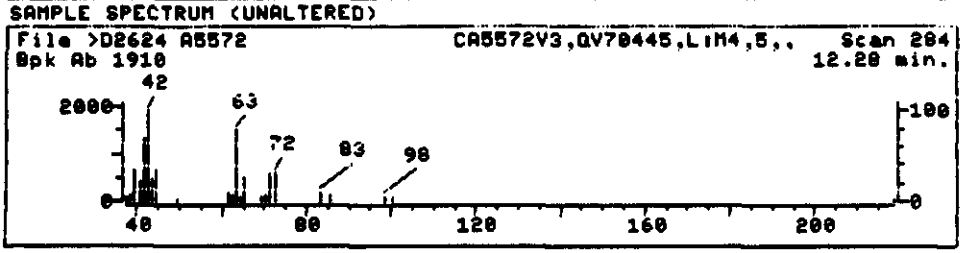
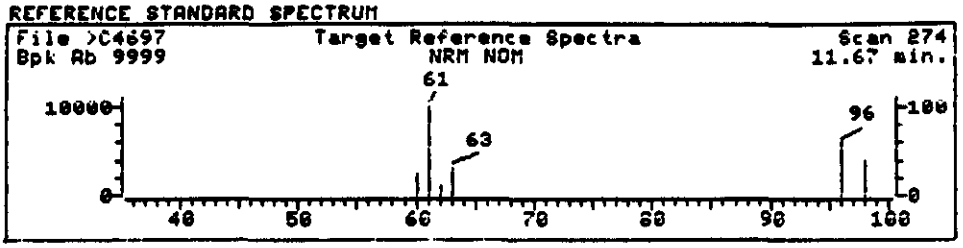


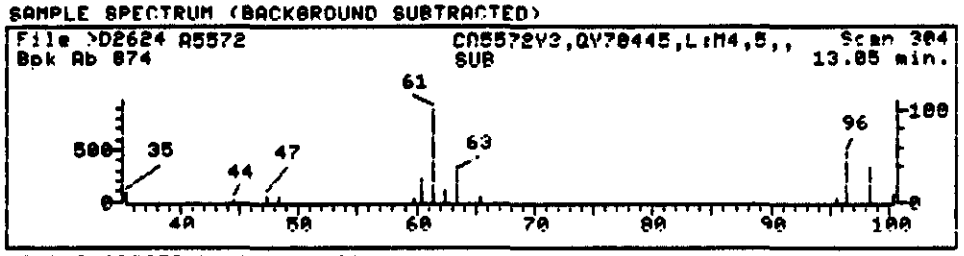
Data File: >D2624::U1 Quant Output File: ^D2624::AW
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 910115 18:28 Quant ID File: 100310::SS
Injected at: 91U115 17:49 Last Calibration: 91U114 11:U9

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 284
Retention Time: 12.28 min.
Quant Ion: 63.0
Area: 17637
Concentration: 32.94 NG
q-value: 98

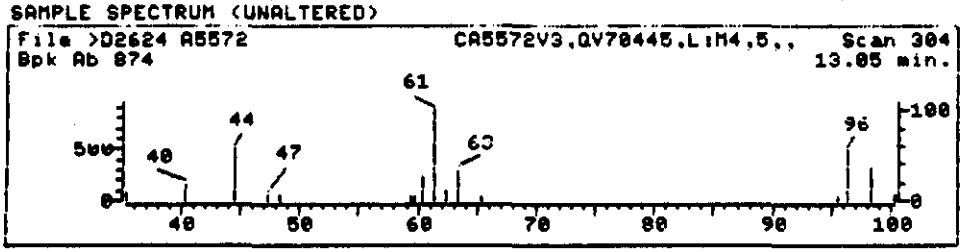
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



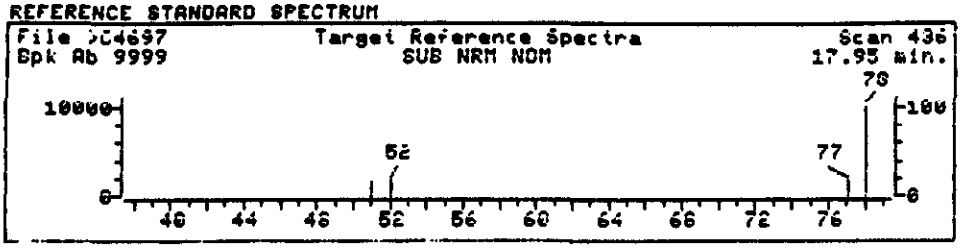
SAMPLE SPECTRUM (UNALTERED)



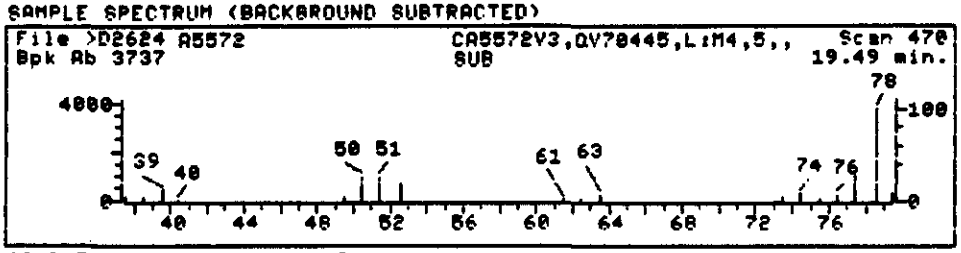
Data File: >D2624::U1 Quant Output File: ^D2624::AW
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 91U115 18:28 Quant ID File: 1D0310::S5
Injected at: 91U115 17:49 Last Calibration: 91U114 11:09

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 304
Retention Time: 13.05 min.
Quant Ion: 96.0
Area: 6137
Concentration: 22.77 NG
q-value: 94

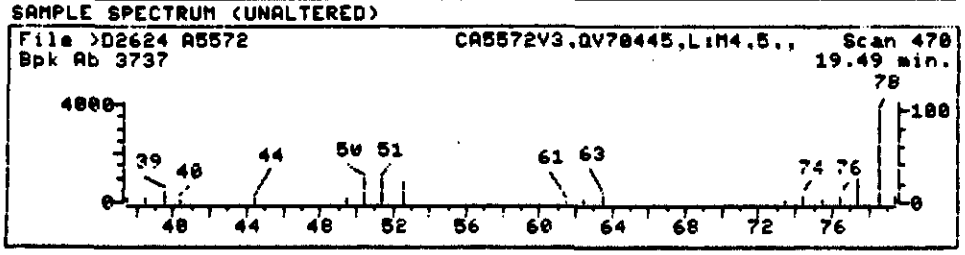
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

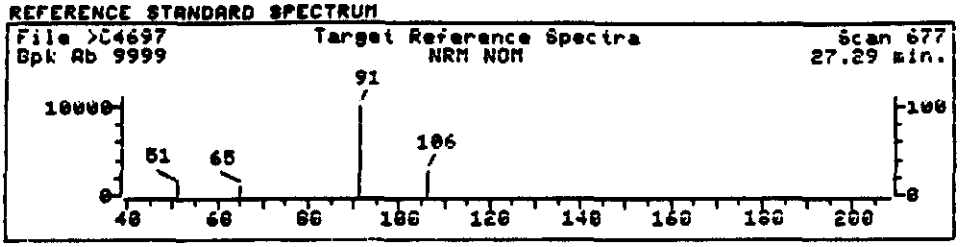


Data File: >D2624::U1
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 910115 18:28
Injected at: 910115 17:49

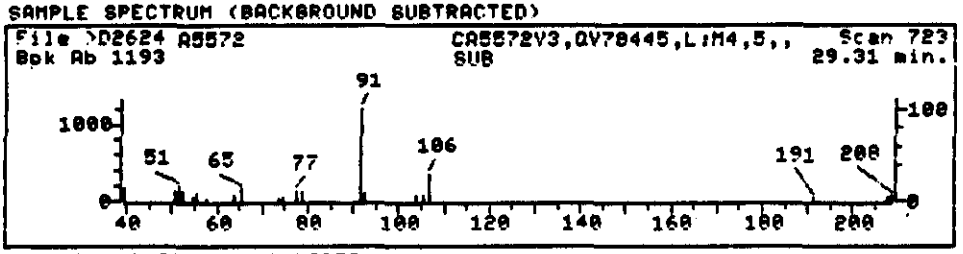
Quant Output File: ^D2624::AW
Quant ID File: 1DU310::55
Last Calibration: 910114 11:09

Compound No: 32
Compound Name: Benzene
Scan Number: 470
Retention Time: 19.49 min.
Quant Ion: 78.0
Area: 45714
Concentration: 41.04 NG
Q-Value: 94

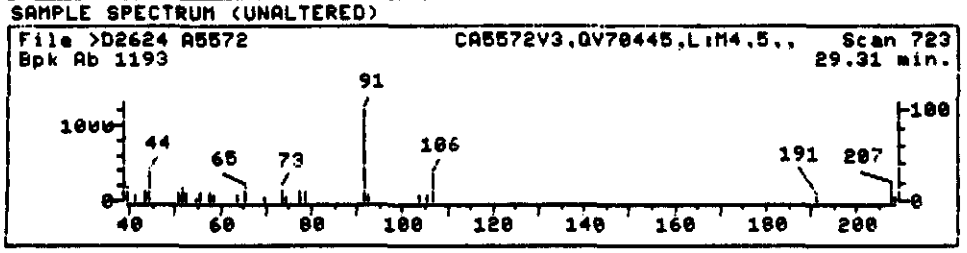
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

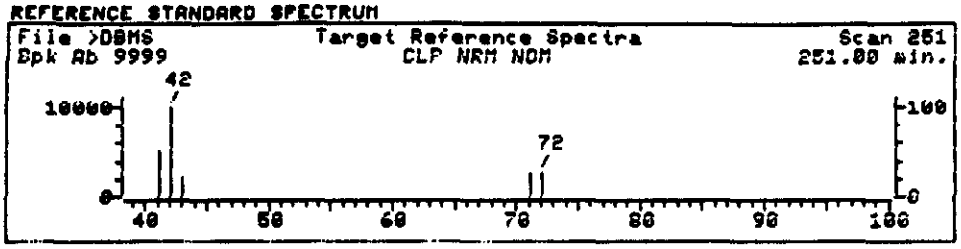


Data File: >D2624::U1
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 910115 18:28
Injected at: 910115 17:49

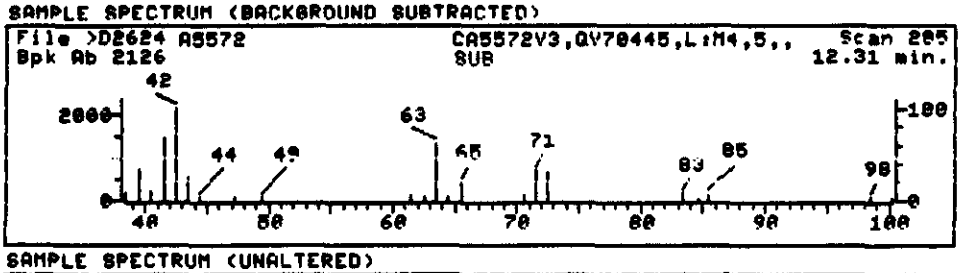
Quant Output File: ^D2624::AQ
Quant ID File: ID0310::SS
Last Calibration: 910114 11:09

Compound No: 45
Compound Name: Ethylbenzene
Scan Number: 723
Retention Time: 29.31 min.
Quant Ion: 106.0
Area: 5948
Concentration: 12.30 NG
q-value: 82

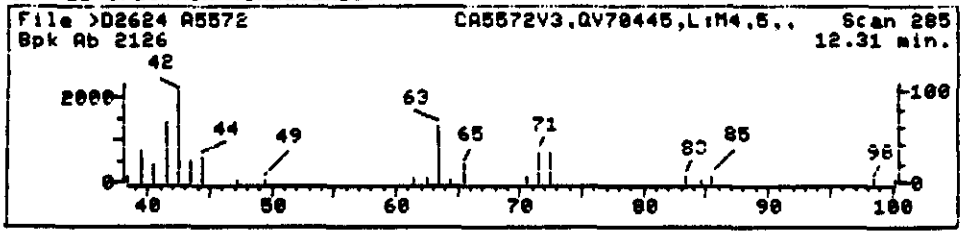
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

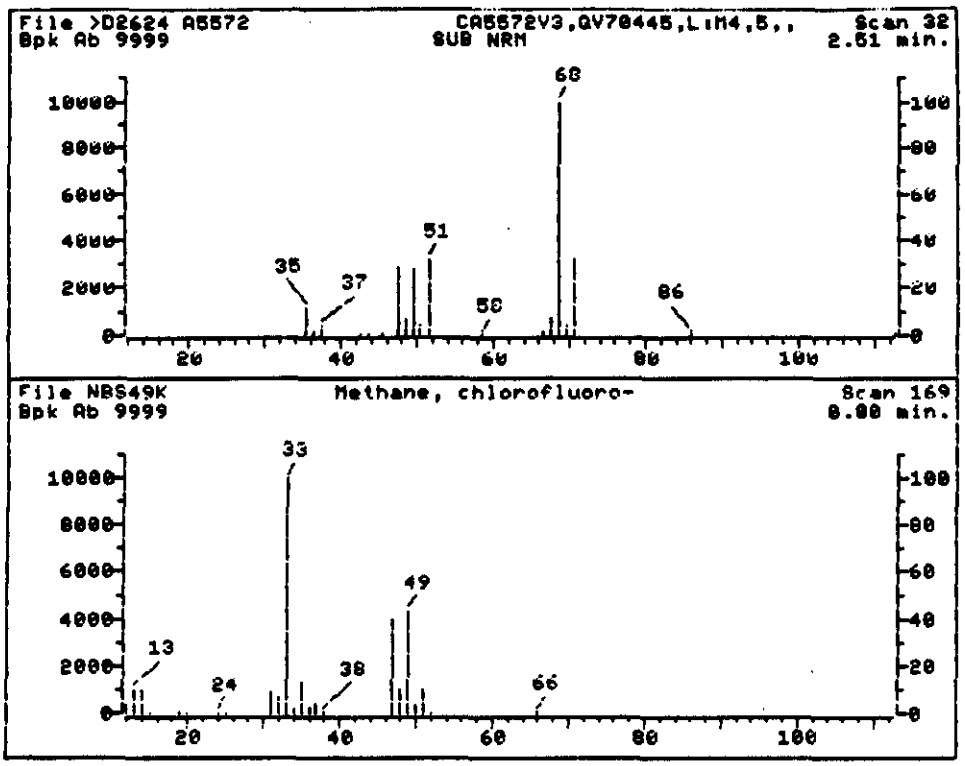


SAMPLE SPECTRUM (UNALTERED)



Data File: >D2624::U1
Quant Output File: ^D2624::AU
Name: A5572
Misc: CA5572V3,QV70445,L:M4,5,,
Quant Time: 910115 18:28
Quant ID File: ID0310::SS
Injected at: 910115 17:49
Last Calibration: 910114 11:09

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 285
Retention Time: 12.31 min.
Quant Ion: 42.0
Area: 24770
Concentration: 538.00 NG
q-value: 100

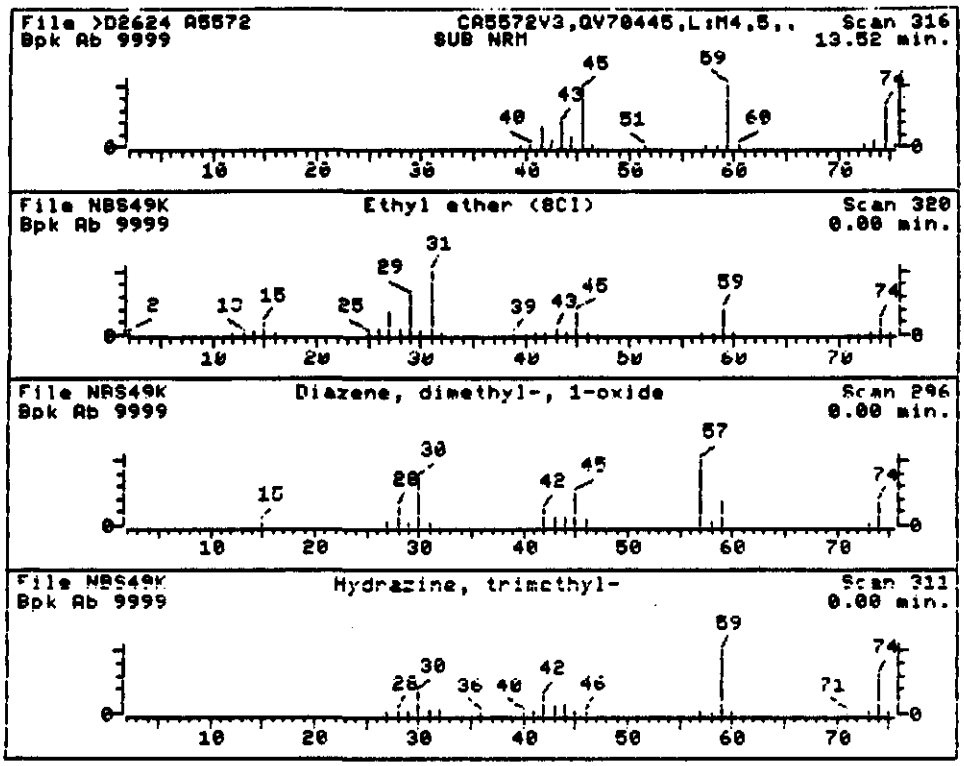


Data File: >D2624::U1
Name: A5572
Misc Data: CA5572U3,QV70445,L:M4,5,,
RT (min): 2.51
Scan: 32
Area: 390342 Rank: 3
Semi-quantitative Conc (uncorrected): 212.93 NG
Semi-quantitative Conc (corrected): 42.59 ug/l
Calculated using Istd: Bromochloromethane @ 11.38 minutes

1. Methane, chlorofluoro- 68 CH2ClF

Sample File: >D2624 Spectrum #: 32
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DI	#FLG	TILT	%	CON	L_I	H_IN
1.	22	593-70-4	444	NBS49K	54	60	0	0	55	62	2	2-

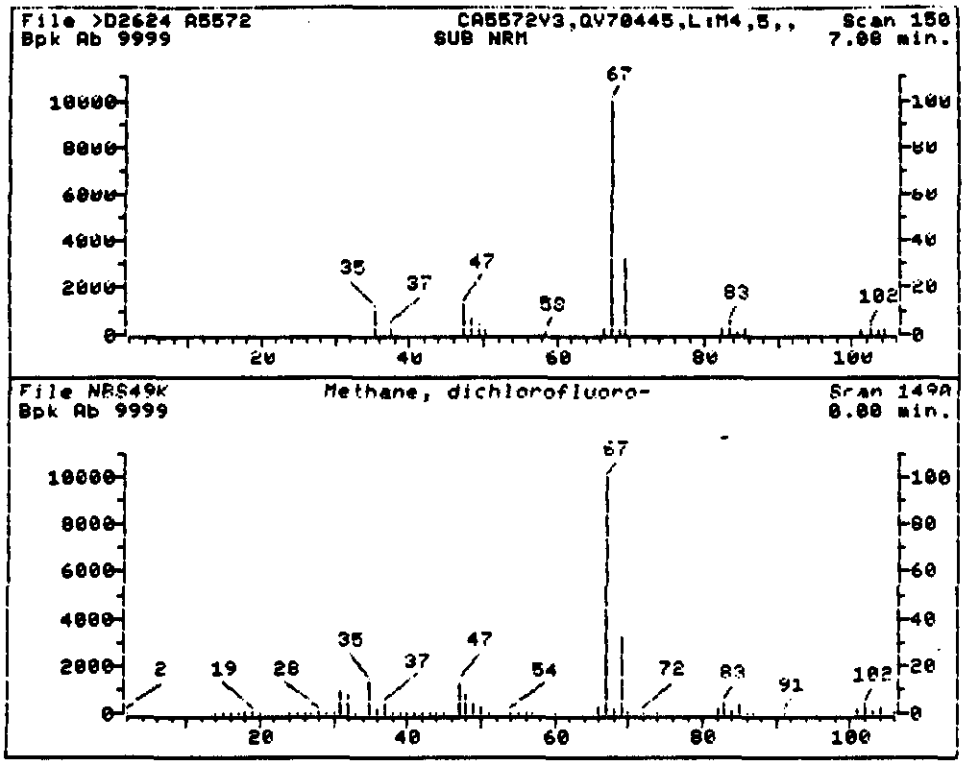


Data File: >D2624::U1
Name: A5572
Misc Data: CA5572V3,QV70445,L:M4,5,,
RT (min): 13.52
Scan: 316
Area: 1826/8 Rank: 5
Semi-quantitative Conc (uncorrected): 99.65 NG
Semi-quantitative Conc (corrected): 19.93 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

1. Ethyl ether (8Cl) /4 C4H10O
2. Diazene, dimethyl-, 1-oxide /4 C2H6N2O
3. Hydrazine, trimethyl- /4 C3H10N2

Sample file: >D2624 Spectrum #: 316
Search speed: 2 Fitting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CON #	RUUT	K	D	#F	FIT	%			
1.	81*	60297	1 18	NBS49K	42	51	0	0	252	6	55	--
2.	60*	25843492	4847	NBS49K	23	32	3	0	188	11	30	1.
3.	55*	1741011	1 12	NBS49K	39	48	2	0	100	24	10	1-



Data File: >D2624::U1
Name: A5572
Misc Data: CA5572V3,QV70445,L:M4,5,,
RT (min): 7.08
Scan: 150
Area: 140437 Rank: 6
Semi-quantitative Conc (uncorrected): 76.61 NG
Semi-quantitative Conc (corrected): 15.32 ug/l
Calculated using Istd: Bromochloromethane @ 11.38 minutes

1. Methane, dichlorofluoro- 102 CHCl2F

Sample file: >D2624 Spectrum #: 150
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	Lab #	Lib #	Name	K	Di	#Lib	Fit	%	Lib	Lab	Fit
1.	97*	25424	2473	NBS49K	94	0	0	0	2	0	-	-

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5575

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5575U4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2585

Level: (low/med) LOW Date Received: 1/8/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethene	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	35	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	18	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethene	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CA5575

Lab Name: ETC CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5575

Sample wt/vol: 5 (g/mL) ML Lab File ID: 7D2585

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS; (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5575

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5575U4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2585

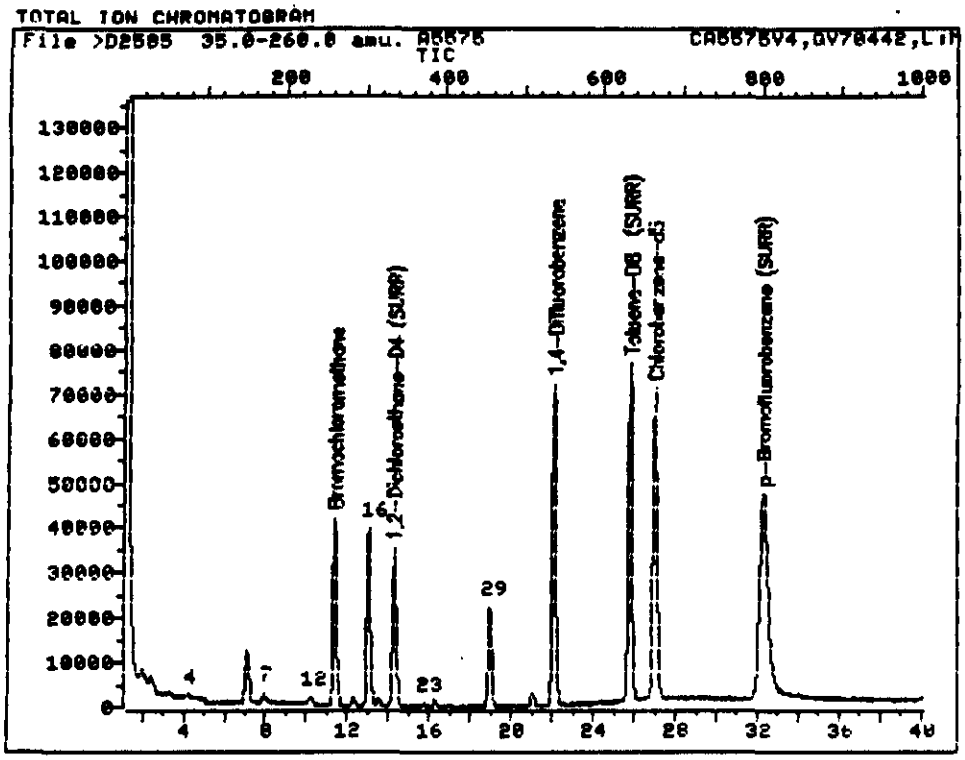
Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 75-43-4	Methane, dichlorofluoro-	7.10	16	J



Data File: >D2585::UU Quant Output File: ^D2585::AU
Name: A5575
Misc: CA5575V4,QV70442,L:M4,5,,

Id File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 13:03

Operator ID: KB6656
Quant Time: 910113 17:47
Injected at: 910113 17:06

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 17:4?
Output File: ^D2585::AQ Injected at: 910113 17:06
Data File: >D2585::U0 Dilution Factor: 1.0000
Name: A5575
Misc: CA5575V4,QV70442,L:M4,5,,

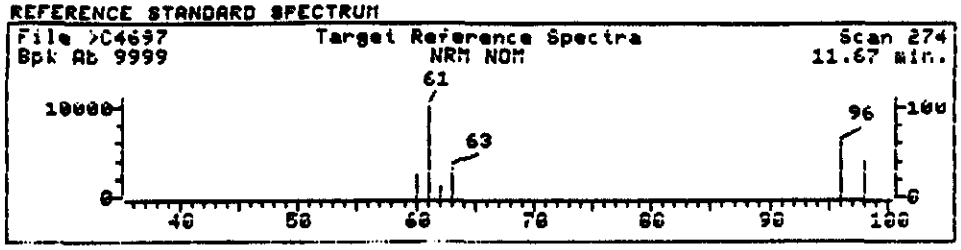
ID File: ID0309::SS
Title: PP/V0A, 1FB, XV0A13, XV0A9
Last Calibration: 910113 13:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.40	262	73485	250.00	NG	91
4)	Dichlorodifluoromethane	4.15	75	8127	~~22.60~~	~~NG~~	99
7)	Methylene chloride	7.95	173	4921	~~10.06~~	~~NG~~	95
12)	Trichlorofluoromethane	10.20	231	9951	~~12.08~~	~~NG~~	92
16)	1,2-Trans-dichloroethylene	13.07	305	89307	172.99	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	14.31	337	176965	220.06	NG	9?
21)	*1,4-Difluorobenzene	22.10	538	320409	250.00	NG	9?
23)	1,1,1-Trichloroethane	15.75	374	3251	~~4.64~~	~~NG~~	9?
29)	Trichloroethylene	18.96	457	47529	90.45	NG	91
37)	*Chlorobenzene-d5	27.00	664	274869	250.00	NG	?c
42)	Toluene-D8 (SURR)	25.83	634	334583	252.32	NG	91
46)	p-Bromofluorobenzene (SURR)	32.27	800	209141	236.60	NG	8c

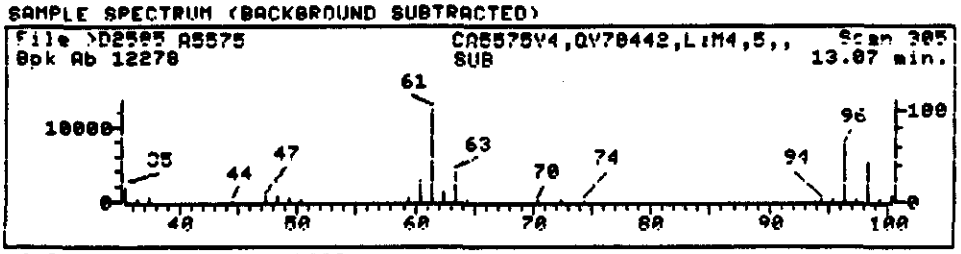
* Compound is ISTD

AP 1/14/91

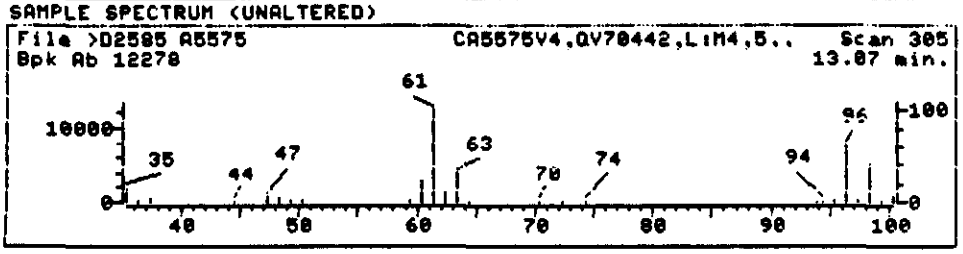
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



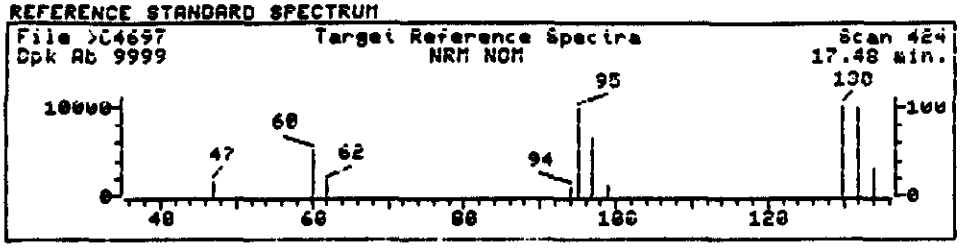
SAMPLE SPECTRUM (UNALTERED)



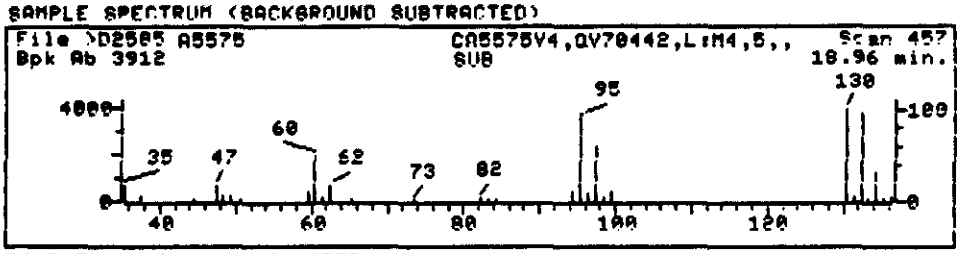
Data File: >D2585::UU Quant Output File: ^D2585::AU
Name: A5575
Misc: CA5575V4,QV70442,L:M4,5,,
Quant Time: 910113 17:47 Quant ID File: ID0309::SS
Injected at: 910113 17:06 Last Calibration: 910113 13:03

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 305
Retention Time: 13.07 min.
Quant Ion: 96.0
Area: 89307
Concentration: 172.99 NG
q-value: 98

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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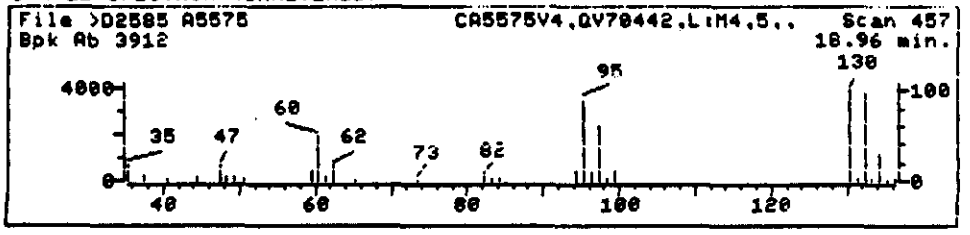
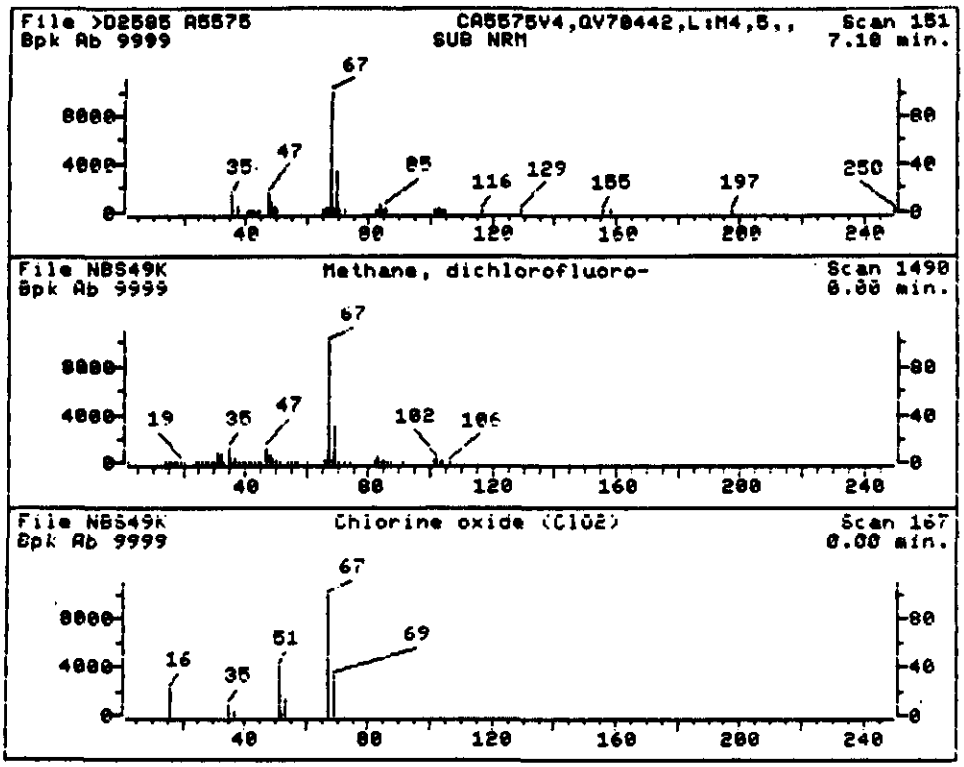


Data File: >D2585::UU
Quant Output File: ^D2585::AU
Name: A5575
Misc: CA5575U4,QU70442,L:M4,5,,
Quant Time: 910113 17:47
Quant ID File: 1D0309::SS
Injected at: 910113 17:06
Last Calibration: 910113 13:03

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 457
Retention Time: 18.96 min.
Quant Ion: 130.0
Area: 47529
Concentration: 90.45 NG
Q-value: 91



Data File: >D2585::UU
Name: A5575
Misc Data: CA5575V4,QV70442,L:M4,5,,
RT (min): 7.10
Scan: 151
Area: 159731 Rank: 6
Semi-quantitative Conc (uncorrected): 29.51 ng
Semi-quantitative Conc (corrected): 15.90 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. Methane, dichlorofluoro- 102 CHCl2F
2. Chlorine oxide (ClO2) 67 ClO2

Sample file: >D2585 Spectrum #: 151
Search speed: 2 Tilting option: S No. of ion ranges searched: --

	Prob.	CAS #	CON #	ROUT	K	DK	#-LG	TILT	%	CON	C_I	P_I
1.	96*	75434	3423	NB549K	85	9	0	0	72	5	72	99
2.	43*	10049044	3443	NB549K	29	28	3	0	100	25	17	1-

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5576

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5576V3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2577

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	3	J
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	4	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5576

Lab Name: BTC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5576

Sample wt/vol: 5 (g/mL) ML Lab File ID: >DA5571

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/11/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	58	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

IA5576

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5576V3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2577

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 01/11/91

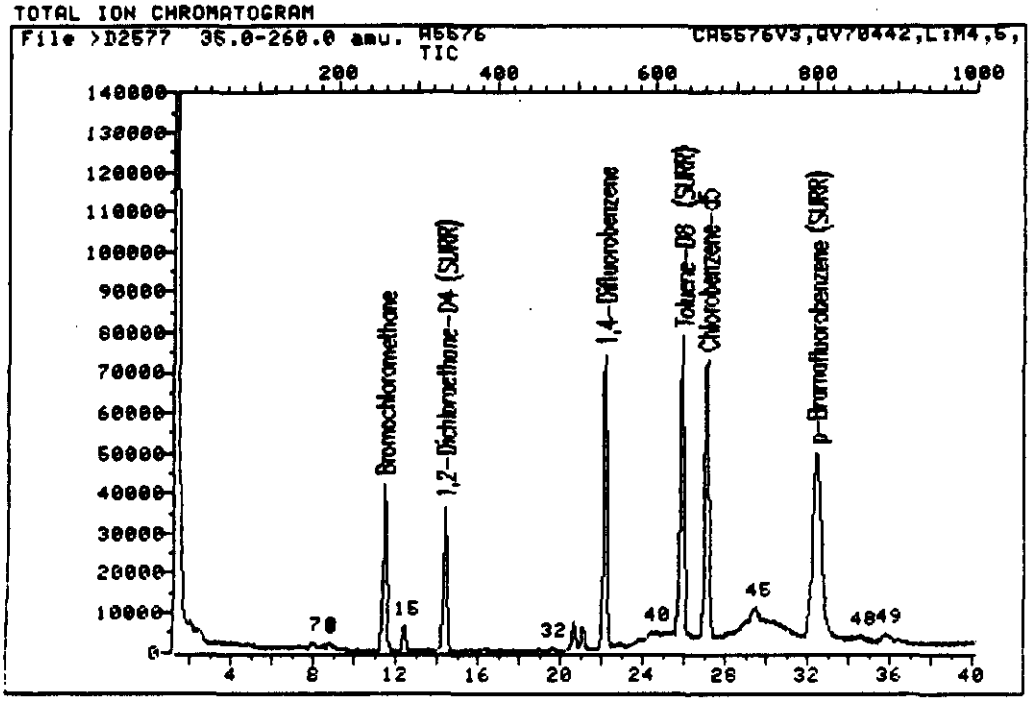
Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.		Unknown	20.63	5	J
02.		Unknown	21.10	4	J

FORM I VOA-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: ^D2577::UO Quant Output File: ^D2577::AQ
Name: A5576
Misc: CA5576V3,QV70442,L:M4,5,,

Id File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910111 16:10

Operator ID: KV0786
Quant Time: 910111 23:29
Injected at: 910111 22:48

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 910111 23:29
Output File: ^D2577::AQ Injected at: 910111 22:48
Data File: >D2577::U0 Dilution Factor: 1.00000
Name: A5576
Misc: CA5576V3,QV70442,L:M4,5,,

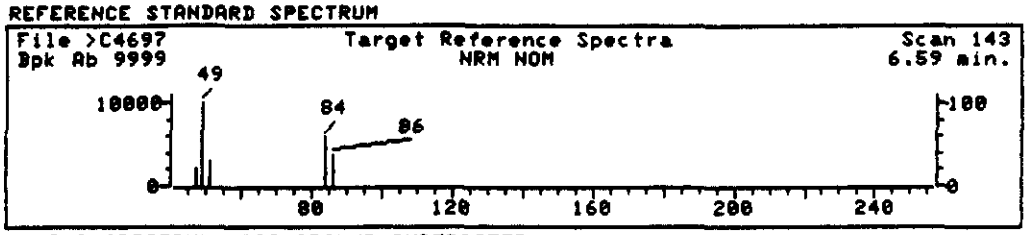
ID File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910111 16:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.44	261	75017	250.00	NG	92
7)	Methylene chloride	7.99	172	3265	25.46	NG	99
8)	Acrolein	8.81	193	5020	~~164.67~~	~~NG~~	80
9)	Acetone	8.77	192	4664	~~27.55~~	~~NG~~	90
15)	Tetrahydrofuran	12.41	286	18387	290.96	NG	100
18)	1,2-Dichloroethane-D4 (SURR)	14.35	336	174981	252.96	NG	92
21)	*1,4-Difluorobenzene	22.14	537	333782	250.00	NG	98
32)	Benzene	19.54	470	2710	~~2.28~~	~~NG~~	84
37)	*Chlorobenzene-d5	27.08	664	277048	250.00	NG	98
40)	1,1,2,2-Tetrachloroethane	24.59	600	3168	~~5.75~~	~~NG~~	83
42)	Toluene-D8 (SURR)	25.87	633	335067	240.89	NG	92
45)	Ethylbenzene	29.41	724	7429	16.04	NG	86
46)	p-Bromofluorobenzene (SURR)	32.36	800	206297	240.86	NG	84
48)	m-Xylene	34.57	857	4865	8.28	NG	93
49)	o+p-Xylenes	35.77	888	11660	21.91	NG	97

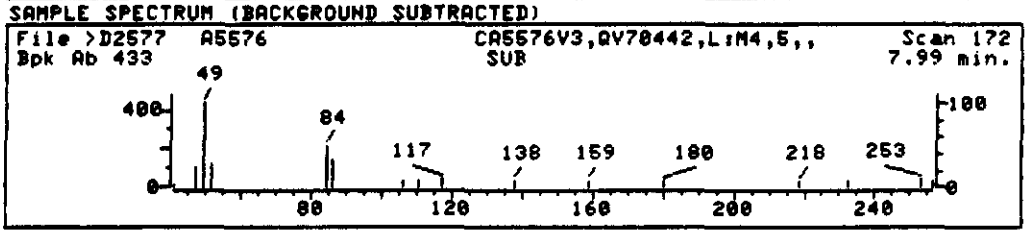
* Compound is ISTD

MP 1/25/91

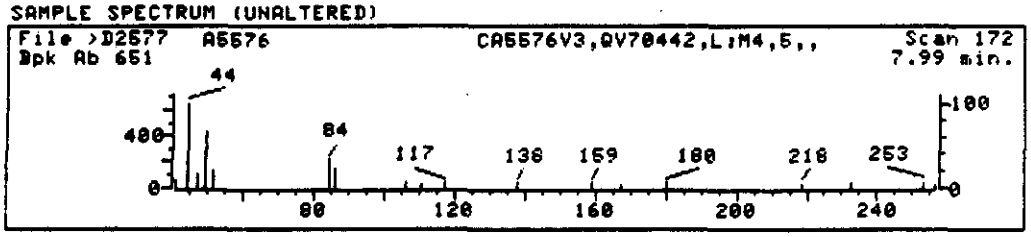
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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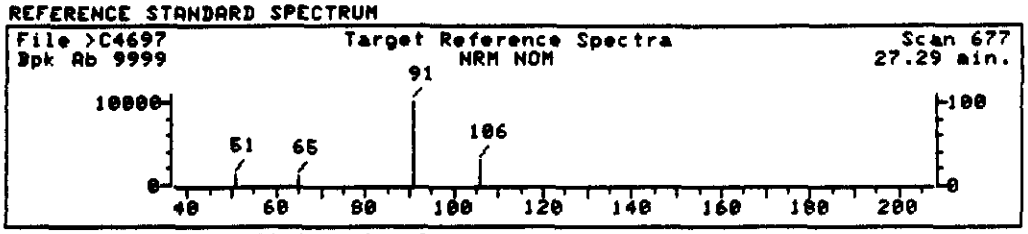
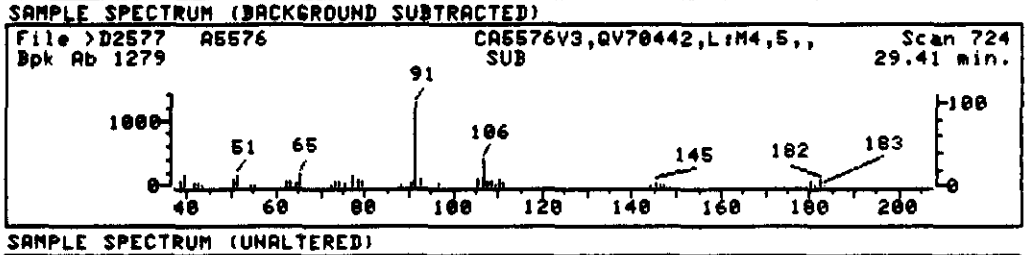
Name: A5576
Misc: CA5576V3,QV70442;L:M4,5,,
Quant Time: 910111 23:29 Quant ID File: ID0309::SS
Injected at: 910111 22:48 Last Calibration: 910111 16:10

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 172
Retention Time: 7.99 min.
Quant Ion: 84.0
Area: 3265
Concentration: 25.46 NG
q-value: 99

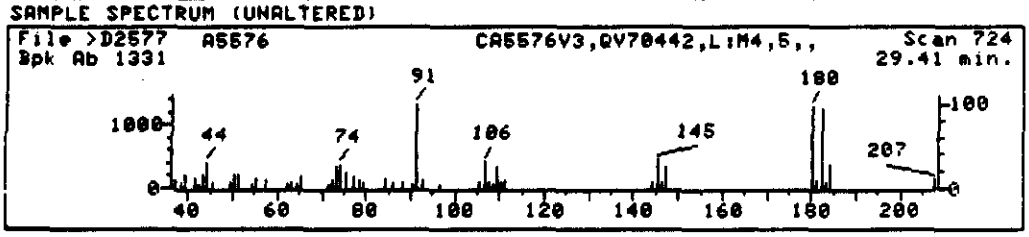
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



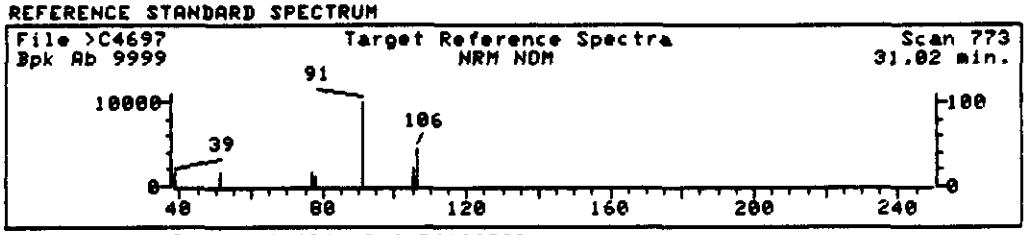
SAMPLE SPECTRUM (UNALTERED)



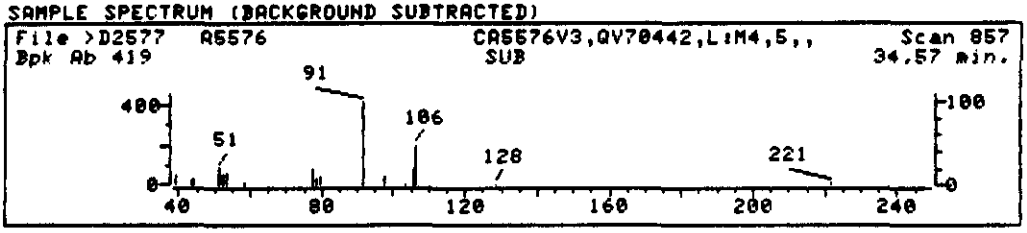
Data File: >D2577::U0 Quant Output File: ^D2577::A0
Name: A5576
Misc: CA5576V3,QV70442,L:M4,5,,
Quant Time: 910111 23:29 Quant ID File: ID0309::SS
Injected at: 910111 22:48 Last Calibration: 910111 16:10

Compound No: 45
Compound Name: Ethylbenzene
Scan Number: 724
Retention Time: 29.41 min.
Quant Ion: 106.0
Area: 7429
Concentration: 16.04 NG
q-value: 86

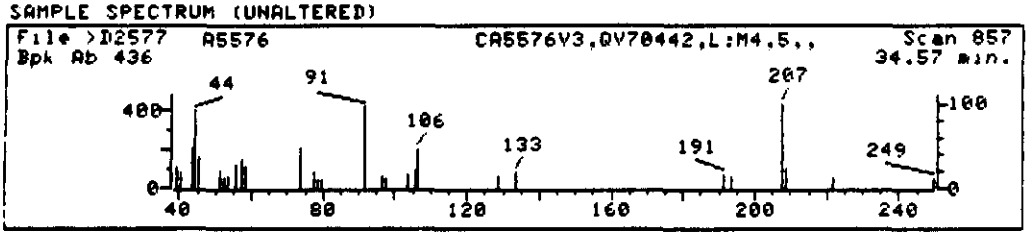
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



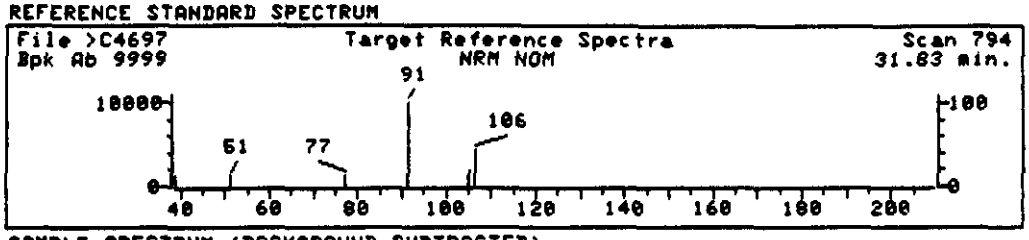
SAMPLE SPECTRUM (UNALTERED)



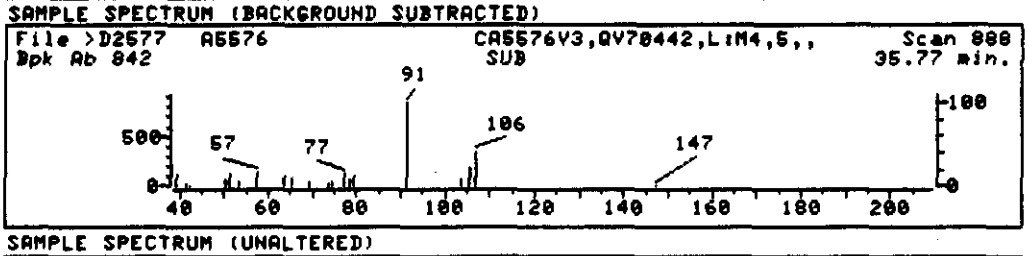
Data File: >D2577::U0 Quant Output File: >D2577::A0
Name: A5576
Misc: CA5576V3,QV70442,L:M4,5,,
Quant Time: 910111 23:29 Quant ID File: ID0309::SS
Injected at: 910111 22:48 Last Calibration: 910111 16:10

Compound No: 48
Compound Name: m-Xylene
Scan Number: 857
Retention Time: 34.57 min.
Quant Ion: 106.0
Area: 4865
Concentration: 8.28 NG
R- Value: 93

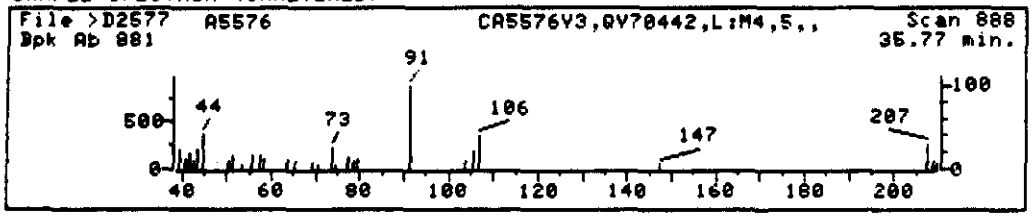
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



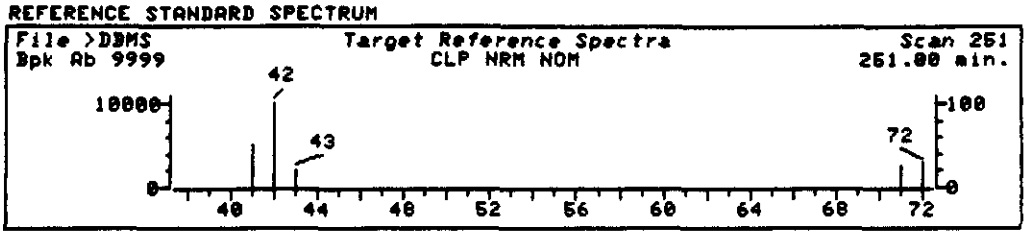
SAMPLE SPECTRUM (UNALTERED)



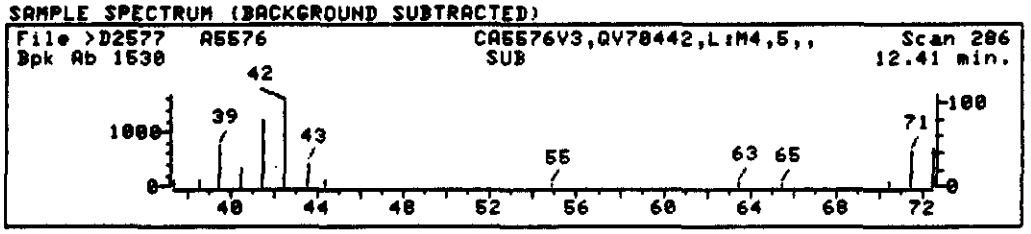
Data File: >D2577::U0 Quant Output File: ^D2577::AQ
Name: A5576
Misc: CA5576V3,QV70442,L:M4,5,,
Quant Time: 910111 23:29 Quant ID File: ID0309::SS
Injected at: 910111 22:48 Last Calibration: 910111 16:10

Compound No: 49
Compound Name: o+p-Xylenes
Scan Number: 888
Retention Time: 35.77 min.
Quant Ion: 106.0
Area: 11660
Concentration: 21.91 NG
q-value: 93

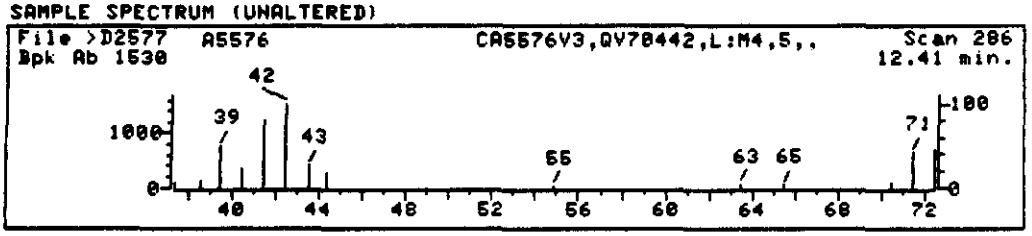
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



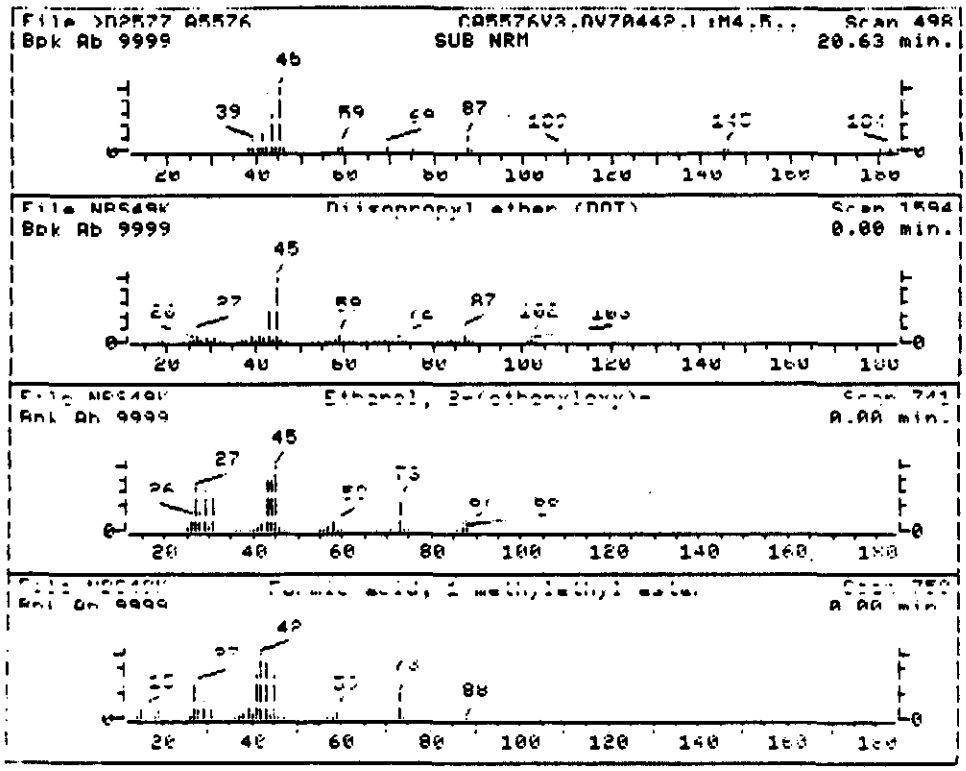
SAMPLE SPECTRUM (UNALTERED)



Data File: >D2577::U0
Name: A5576
Misc: CA5576V3,QV70442,L:M4,5,,
Quant Time: 910111 23:29
Injected at: 910111 22:48

Quant Output File: ^D2577::AQ
Quant ID File: ID0309::SS
Last Calibration: 910111 16:10

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 286
Retention Time: 12.41 min.
Quant Ion: 42.0
Area: 18387
Concentration: 290.96 NG
q-value: 100

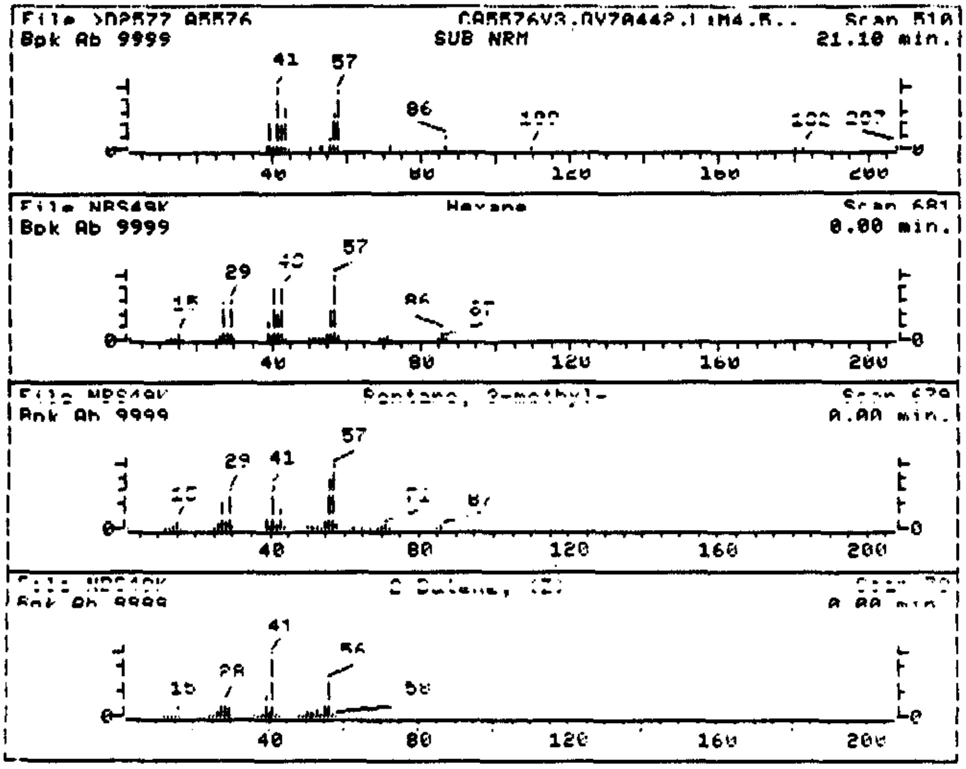


Data File: >UU577::UU
Name: [illegible]6
Misc Data: LA5576U3,QU7U442,L:M4.5,,
RT (min): 20.63
Scan: [illegible]
Area: 82410 Rank: 4
Non-Quantitative Conc (uncorrected): 23.29 NG
Non-Quantitative Conc (corrected): 4.66 ug/l
Calculated using Istd: 1,4-Difluorobenzene @ 21.14 minutes

[illegible]ether (DOI) .32 L:M14.
[illegible]ether, 2-(ethenyloxy)- 88 L=7U2
[illegible] acid, 1-methylethyl ester 78 L=M8U.

[illegible] Spectrum #: [illegible]
[illegible] Fitting option: 3 No. of ion ranges searched: 4

Mat.	CAS #	CUM #	RCUI	M	D#	#-Lg	Lcl	%	Lcl	C	F	P
[illegible]	108203	7296	NBS49K	48	94	1	U	100	1	70	1	
[illegible]	7e4487	342	NBS49K	2-	7e	1	U	72	3-	1-	1	
[illegible]	625558	94	NBS49K	28	74	3	U	61	13	1	1	



Data File: >D2577::D0
Name: A5576
Misc Data: CA5576V3,QV70442,L:M4.5,.
RT (min): 21.10
Scan: 510
Area: 20067 Rank: 6
Semi-quantitative Conc (uncorrected): 19.68 NG
Semi-quantitative Conc (corrected): 3.94 ug .
Calculated using Istd: 1,4-Difluorobenzene @ 22.14 minutes

1. Hexane — [illegible]
2. Pentane, 3-methyl- — [illegible]
3. 2-Butene, (Z)- — [illegible]

Sample File: >D25[illegible] Spectrum #: 510
Search speed: 2 Tilting option: 5 No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROOT	K	DK	#-LG	(L)	%	[illegible]	[illegible]	[illegible]
1.	56*	110543	6971	NBS49K	35	61	1	0	85	[illegible]	[illegible]	[illegible]
2.	25*	96140	1025	NBS49K	20	6[illegible]	2	0	74	4[illegible]	[illegible]	[illegible]
3.	15*	590181	996	NBS49K	22	57	3	0	48	[illegible]	[illegible]	1[illegible]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5577

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5577V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2591

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	J
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	1970	E
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	40	
540-59-0	1,2-Dichloroethene (total)	10	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	3300	E
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	3	J
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	8	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	9	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	89	
591-78-6	2-Hexanone	7	J
127-18-4	Tetrachloroethene	1.800	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	130	
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	4	J
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	12	

Lab Name: BTC CORP. Contract: AS577

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CAS577V

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D2591

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	1100	JE (CA) 1-29-91

FORM I VOA 1/87 Rev.

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

A5577

Lab Name: ETC Corp. | Laboratory | Contract:

Lab Code: | Case No.: | SAS No.: | SDG No.:

Matrix: (soil/water) WATER | Lab Sample ID: CA5577C

Sample wt/vol: 5.0 (g/mL) ML | Lab File ID: >02591

Level: (low/med) LOW | Date Received: 1/5/91

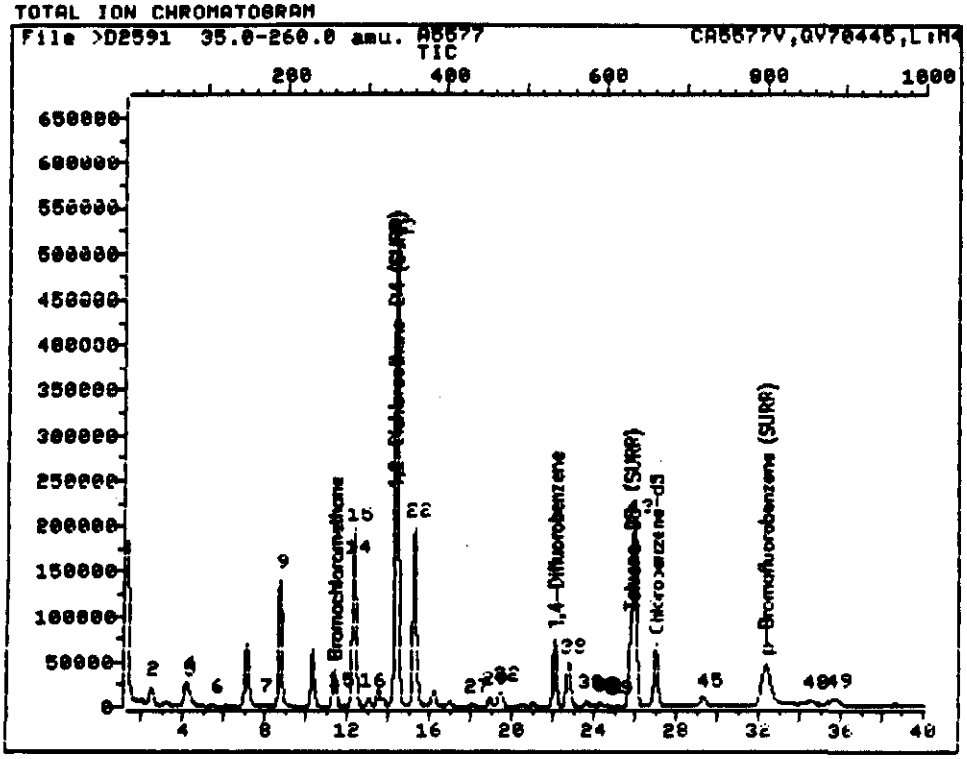
% Moisture: not dec. | Date Analyzed: 01/13/91

Column: (pack/cap) PACK | Dilution Factor: 1.0

Number TICs found: 11 | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	78-92-2	2-Butanol	15.28	230	J
02.	75-43-4	Methane, dichlorofluoro-	7.09	98	J
03.	67-63-0	2-Propanol	10.31	68	J
04.	75-71-8	Methane, dichlorodifluoro-	4.18	49	J
05.	75-45-6	Methane, chlorodifluoro-	2.48	29	J
06.		Unknown	16.21	27	J
07.	60-29-7	Ethyl ether (8CI)	13.53	23	J
08.		Unknown	29.34	10	J
09.		Unknown	23.65	4	J
10.	624-64-6	2-Butene, (E)-	16.98	4	J
11.		Unknown	3.21	6	J

TOTAL ION CHROMATOGRAM



Data File: >D2591::U1 Quant Output File: ^D2591::AU
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVUA13, XVUA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910113 21:23
Injected at: 910113 20:42

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 21:23
Output File: ^D2591::AQ Injected at: 910113 20:42
Data File: >D2591::U1 Dilution Factor: 1.00000
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,

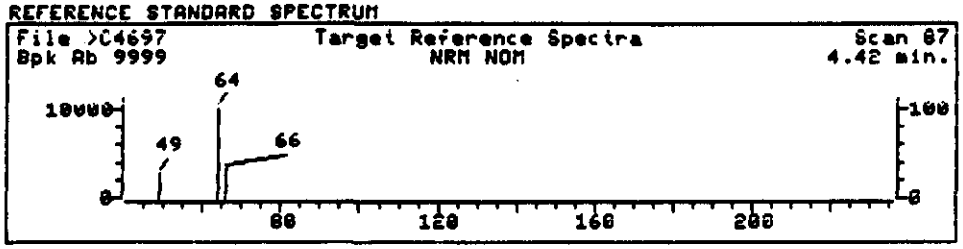
ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.40	261	73226	250.00	NG	94
2)	Methyl chloride	2.44	30	8030	~~19.85~~	NG	71
4)	Dichlorodifluoromethane	4.18	75	253333	~~999.95~~	NG	97
5)	Vinyl chloride	4.26	77	3658	~~17.65~~	NG	89
6)	Chloroethane	5.50	109	5143	23.90	NG	92
7)	Methylene chloride	7.91	171	2367	~~5.44~~	NG	94
9)	Acetone	8.72	192	1085563	4839.89	NG	90
14)	1,1-Dichloroethane	12.29	284	175263	200.40	NG	98
15)	Tetrahydrofuran	11.55	265	7166	~~68.77~~	NG	100
15)	Tetrahydrofuran	12.37	286	561858	5391.75	NG	100
16)	1,2-Trans-dichloroethylene	13.06	304	20955	50.61	NG	96
18)	1,2-Dichloroethane-D4 (SURR)	14.31	336	166803	213.75	NG	9?
21)	*1,4-Difluorobenzene	22.10	537	327295	250.00	NG	98
22)	Methyl ethyl ketone	14.38	338	671523	16627.56	NG	9?
22)	Methyl ethyl ketone	15.28	361	16010	~~346.42~~	NG	68
27)	1,2-Dichloropropane	18.11	434	5509	13.31	NG	9?
29)	Trichloroethylene	18.96	456	20241	37.89	NG	89
31)	bis(Chloromethyl)ether	19.50	470	3277	~~18.51~~	NG	100
32)	Benzene	19.50	470	51865	43.92	NG	99
37)	*Chlorobenzene-d5	27.01	663	265149	250.00	NG	7?
38)	Methyl-iso-butyl ketone	22.80	555	179218	443.78	NG	88
38)	Methyl-iso-butyl ketone	23.65	577	8868	~~21.96~~	NG	7?
39)	2-Hexanone	23.65	577	9035	~~17.84~~	NG	52
39)	2-Hexanone	24.35	595	16960	36.88	NG	96
39)	2-Hexanone	25.05	613	3935	~~8.56~~	NG	66
41)	Tetrachloroethylene	24.66	603	2145	4.14	NG	96
42)	Toluene-D8 (SURR)	25.83	633	331861	249.42	NG	95
43)	Toluene	25.98	637	469033	626.18	NG	9
45)	Ethylbenzene	29.42	725	9288	19.58	NG	8?
46)	p-Bromofluorobenzene (SURR)	32.33	800	205081	248.43	NG	81
48)	m-Xylene	34.54	857	16101	26.85	NG	9?
49)	o+p-Xylenes	35.74	888	33486	60.65	NG	89

* Compound is ISTD

NP 1/22/91

REFERENCE STANDARD SPECTRUM



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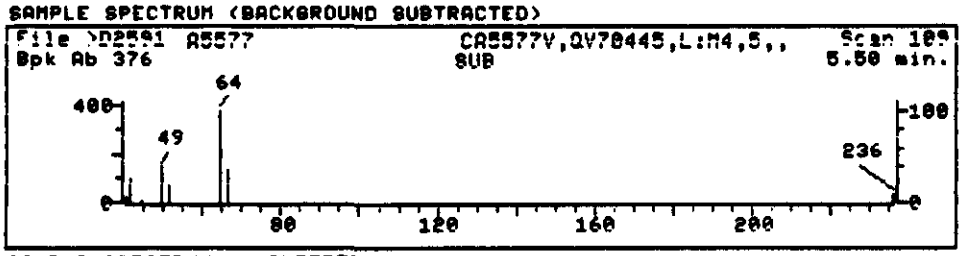
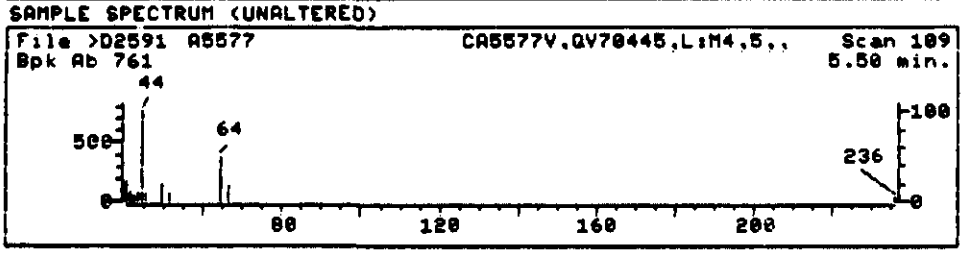


SAMPLE SPECTRUM (UNALTERED)

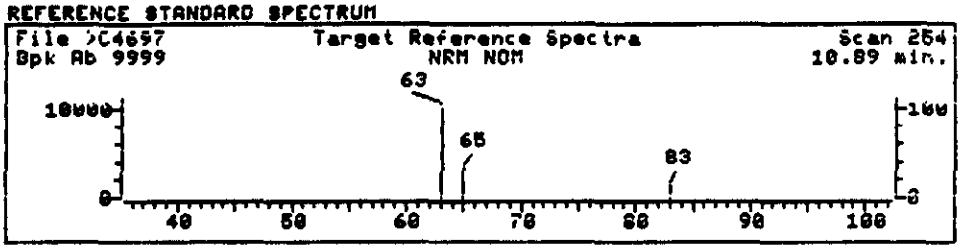


Data File: >D2591::U1
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

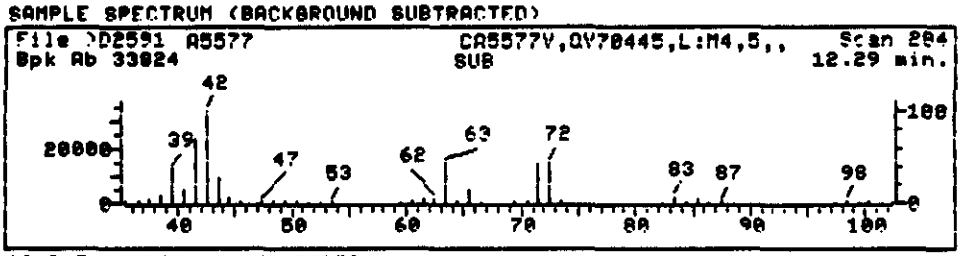
Quant Output File: ^D2591::AQ
Quant ID File: ID0310::S5
Last Calibration: 910113 18:53

Compound No: 6
Compound Name: Chloroethane
Scan Number: 109
Retention Time: 5.50 min.
Quant Ion: 64.0
Area: 5143
Concentration: 23.90 NG
Q-Value: 92

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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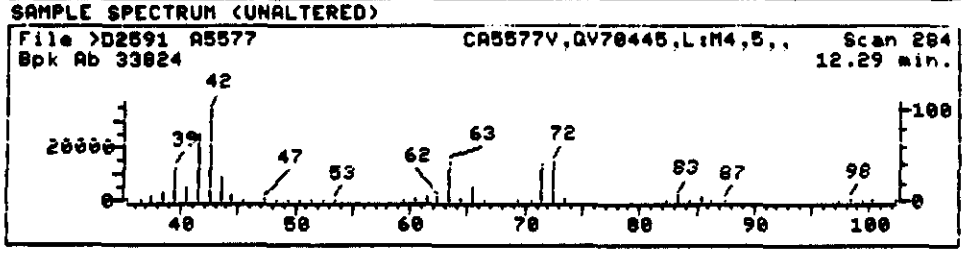
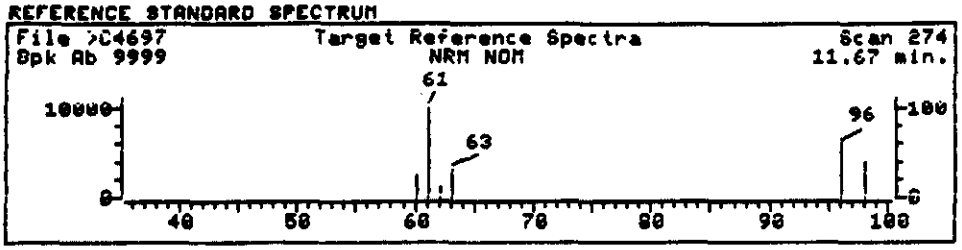


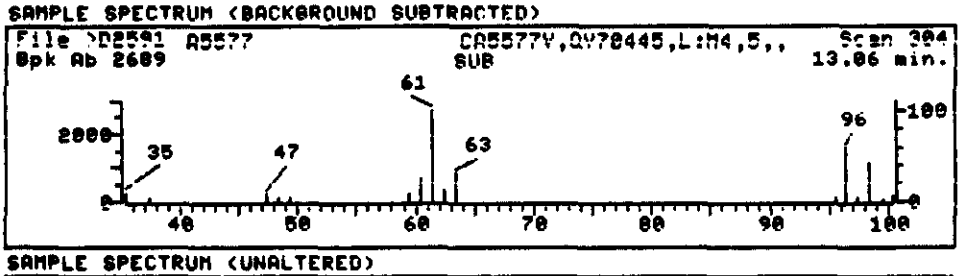
Data File: >D2591::U1 Quant Output File: ^D2591::AW
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23 Quant ID File: ID0310::S5
Injected at: 910113 20:42 Last Calibration: 910113 18:53

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 284
Retention Time: 12.29 min.
Quant Ion: 63.0
Area: 175263
Concentration: 200.40 NG
q-value: 98

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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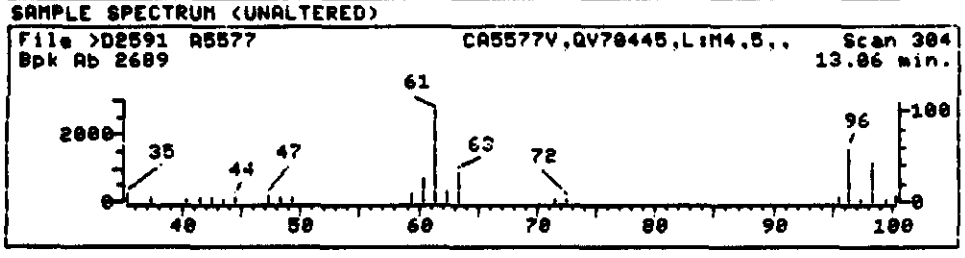
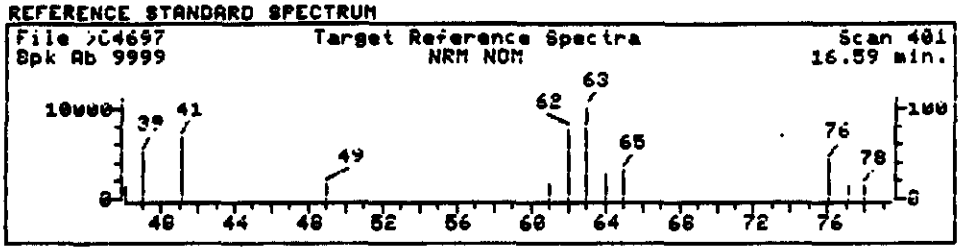


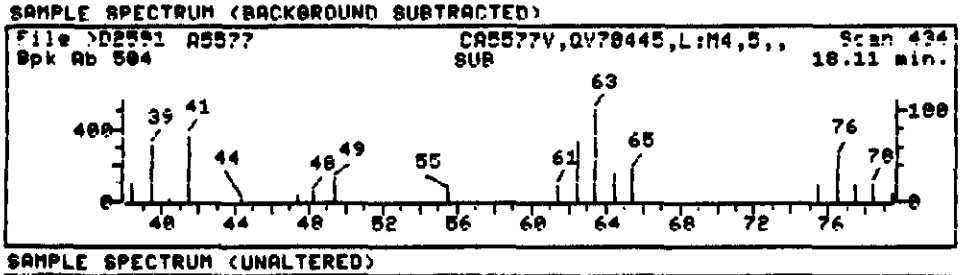
Data File: >D2591::U1 Quant Output File: ^D2591::AW
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23 Quant ID File: ID0310::SS
Injected at: 910113 20:42 Last Calibration: 910113 18:53

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 304
Retention Time: 13.06 min.
Quant Ion: 96.0
Area: 20955
Concentration: 50.61 NG
q-value: 96

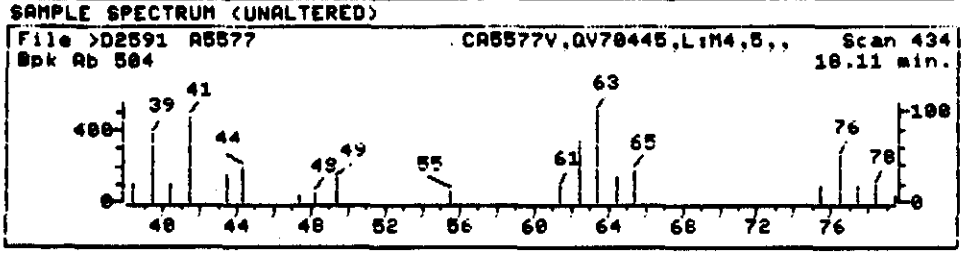
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



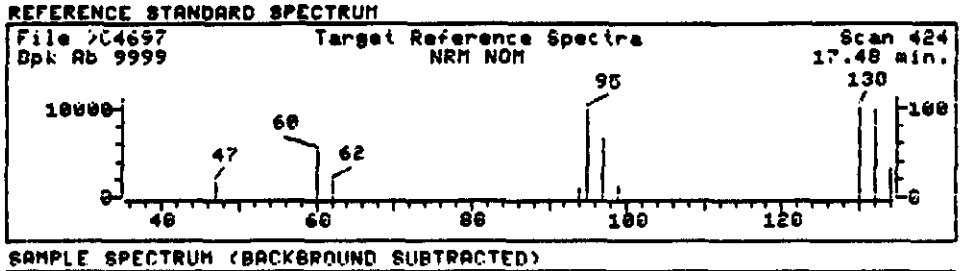
SAMPLE SPECTRUM (UNALTERED)



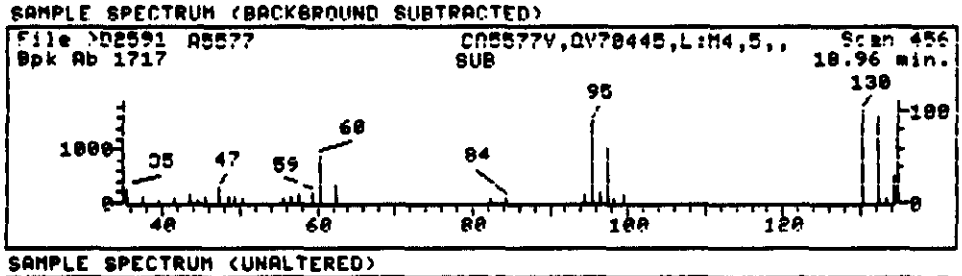
Data File: >D2591::U1 Quant Output File: ^D2591::AQ
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23 Quant ID File: 100310::S5
Injected at: 910113 20:42 Last Calibration: 910113 18:53

Compound No: 27
Compound Name: 1,2-Dichloropropane
Scan Number: 434
Retention Time: 18.11 min.
Quant Ion: 63.0
Area: 5509
Concentration: 13.31 NG
q-value: 99

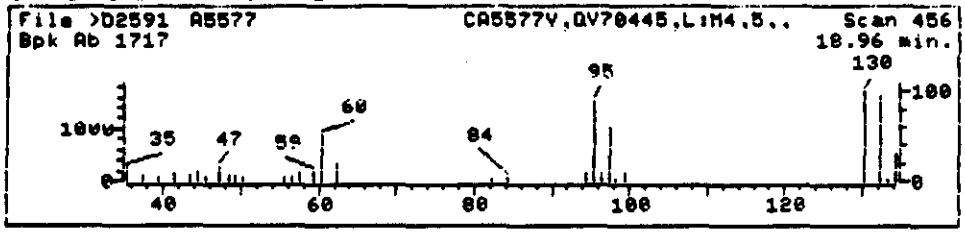
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



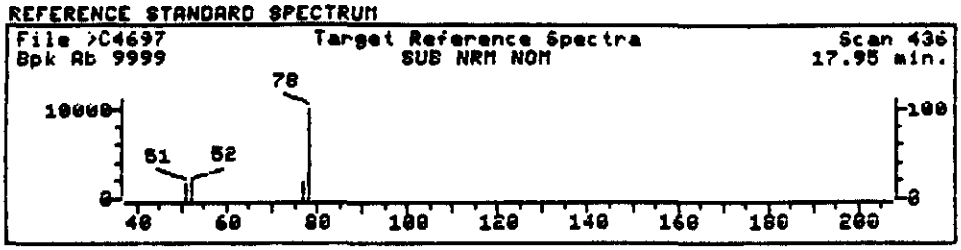
SAMPLE SPECTRUM (UNALTERED)



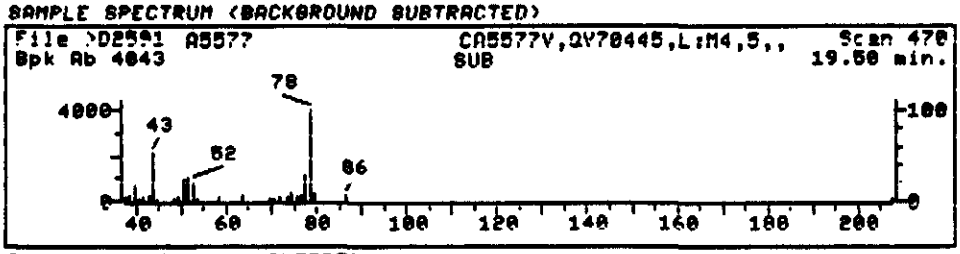
Data File: >D2591::U1 Quant Output File: ^D2591::AW
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23 Quant ID File: ID0310::S5
Injected at: 910113 20:42 Last Calibration: 910113 18:53

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 456
Retention Time: 18.96 min.
Quant Ion: 130.0
Area: 20241
Concentration: 37.89 NG
Q-Value: 89

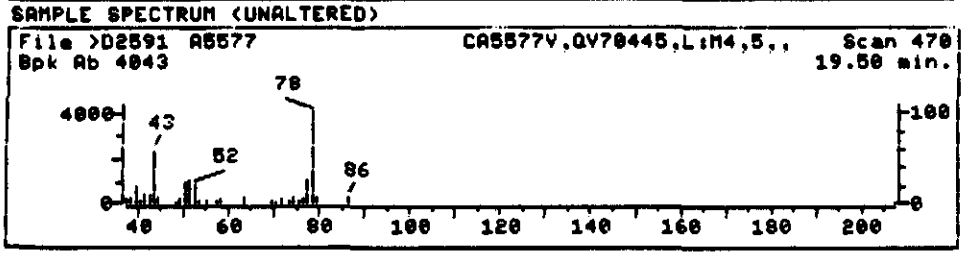
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



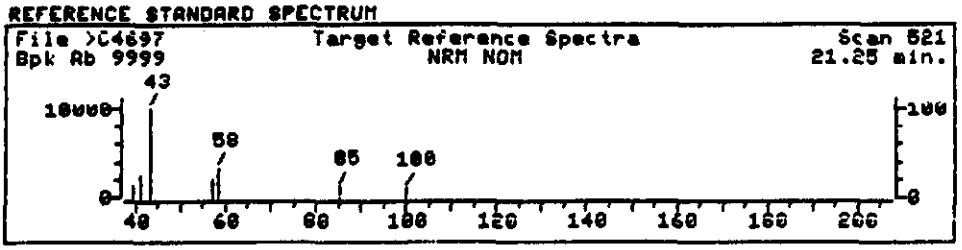
Data File: >D2591::U1
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

Quant Output File: ^D2591::AQ

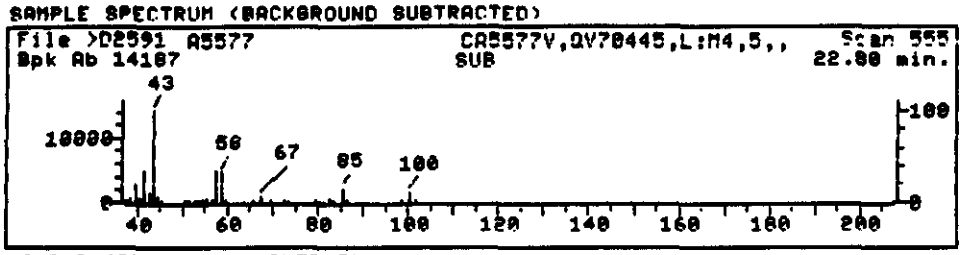
Quant ID File: ID0310::S5
Last Calibration: 910113 18:53

Compound No: 32
Compound Name: Benzene
Scan Number: 470
Retention Time: 19.50 min.
Quant Ion: 78.0
Area: 51865
Concentration: 43.92 NG
q-value: 95

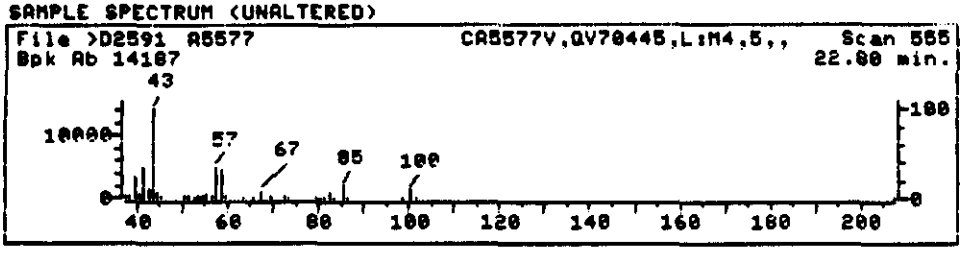
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



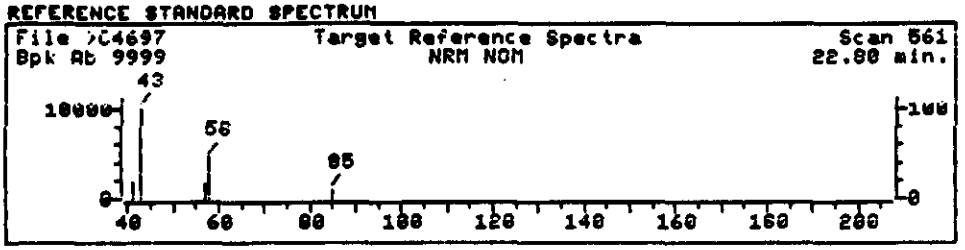
SAMPLE SPECTRUM (UNALTERED)



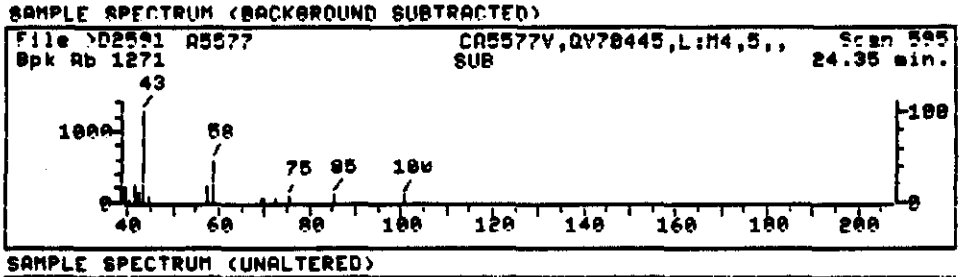
Data File: >D2591::U1 Quant Output File: ^D2591::AQ
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23 Quant ID File: ID0310::SS
Injected at: 910113 20:42 Last Calibration: 910113 18:53

Compound No: 38
Compound Name: Methyl-iso-butyl ketone
Scan Number: 555
Retention Time: 22.80 min.
Quant Ion: 43.0
Area: 179218
Concentration: 443.78 NG
q-value: 88

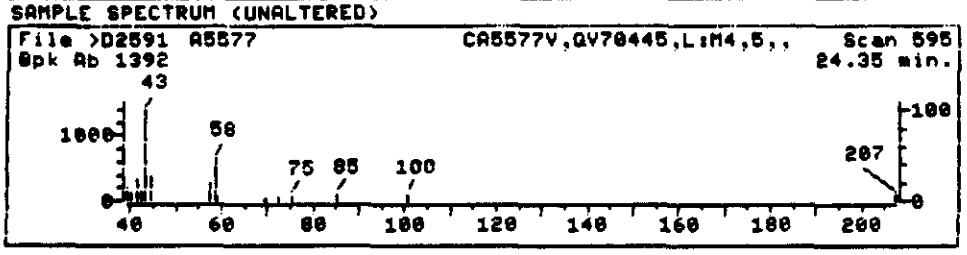
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



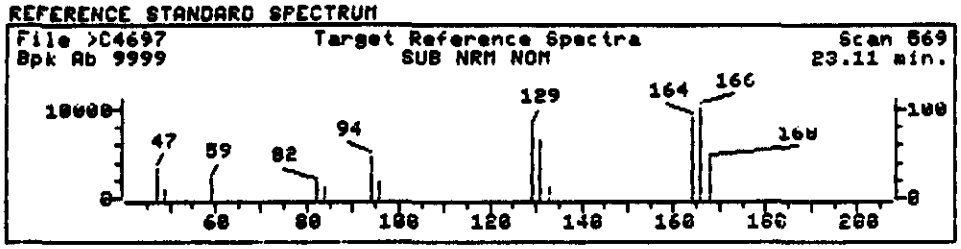
Data File: >D2591::U1
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

Quant Output File: ^D2591::AQ

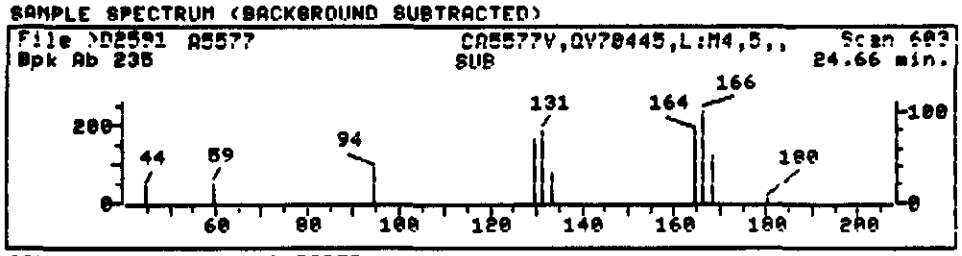
Quant ID File: ID0310::SS
Last Calibration: 910113 18:53

Compound No: 39
Compound Name: 2-Hexanone
Scan Number: 595
Retention Time: 24.35 min.
Quant Ion: 43.0
Area: 16960
Concentration: 36.88 NG
Q-Value: 96

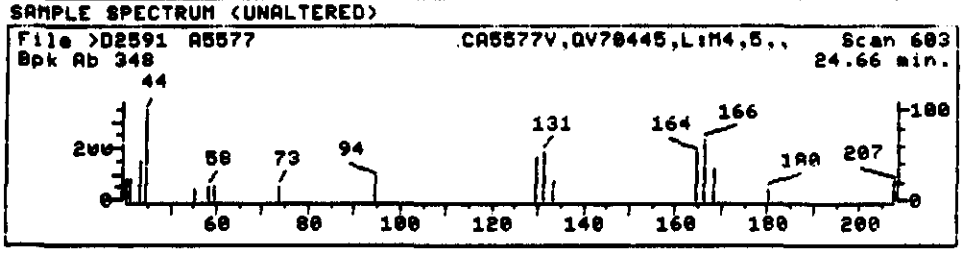
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



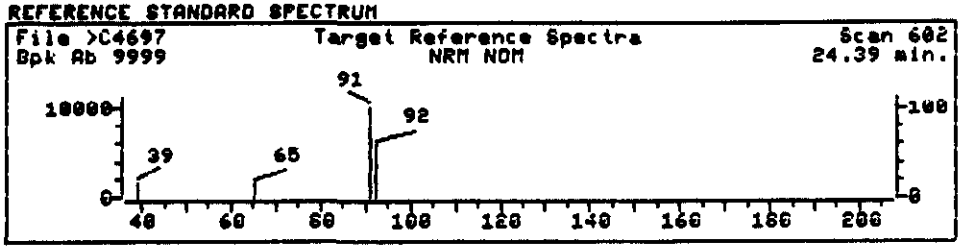
SAMPLE SPECTRUM (UNALTERED)



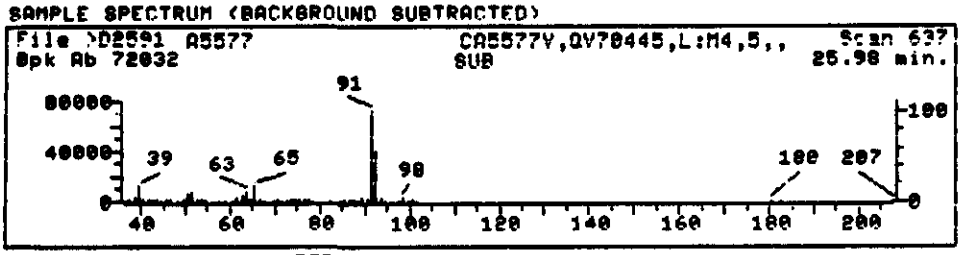
Data File: >D2591::U1 Quant Output File: ^D2591::AW
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23 Quant ID File: ID0310::SS
Injected at: 910113 20:42 Last Calibration: 910113 18:53

Compound No: 41
Compound Name: Tetrachloroethylene
Scan Number: 603
Retention Time: 24.66 min.
Quant Ion: 164.0
Area: 2145
Concentration: 4.14 NG
q-value: 96

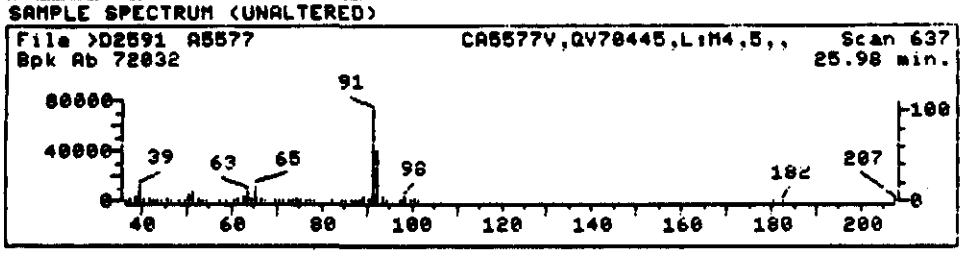
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

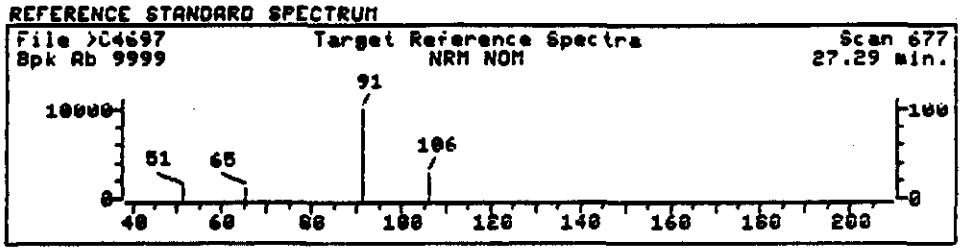


Data File: >D2591::U1
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

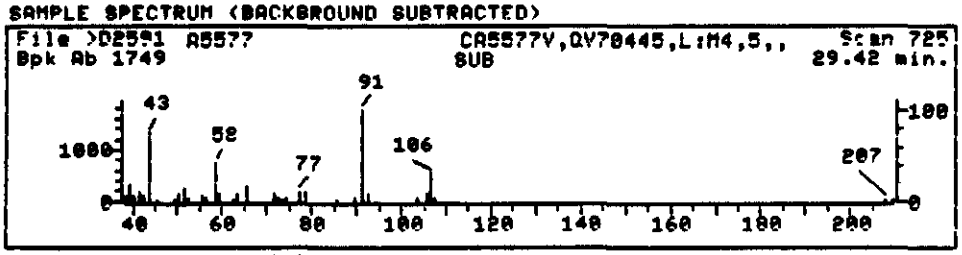
Quant Output File: ^D2591::AQ
Quant ID File: ID0310::SS
Last Calibration: 910113 18:53

Compound No: 43
Compound Name: Toluene
Scan Number: 637
Retention Time: 25.98 min.
Quant Ion: 92.0
Area: 469033
Concentration: 626.18 NG
q-value: 97

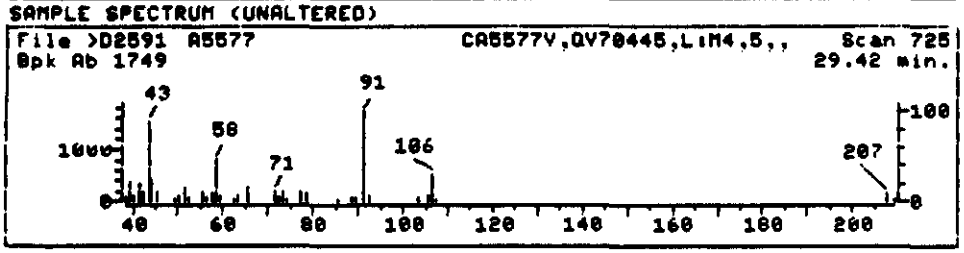
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



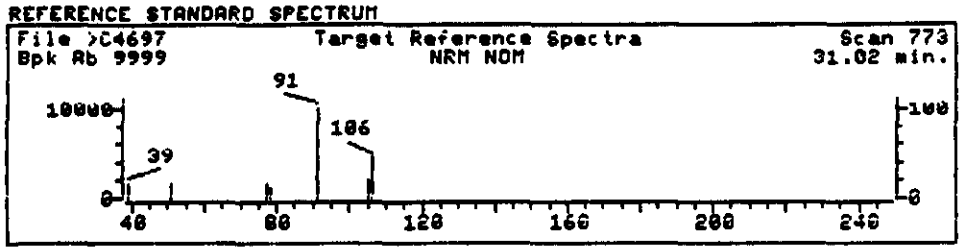
Data File: >D2591::U1
Name: A5577
Misc: CA5577V,QV70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

Quant Output File: ^D2591::AQ

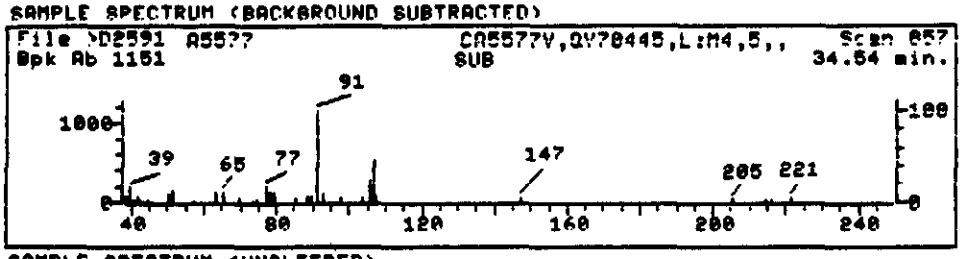
Quant ID File: ID0310::SS
Last Calibration: 910113 18:53

Compound No: 45
Compound Name: Ethylbenzene
Scan Number: 725
Retention Time: 29.42 min.
Quant Ion: 106.0
Area: 9288
Concentration: 19.58 NG
Q-value: 83

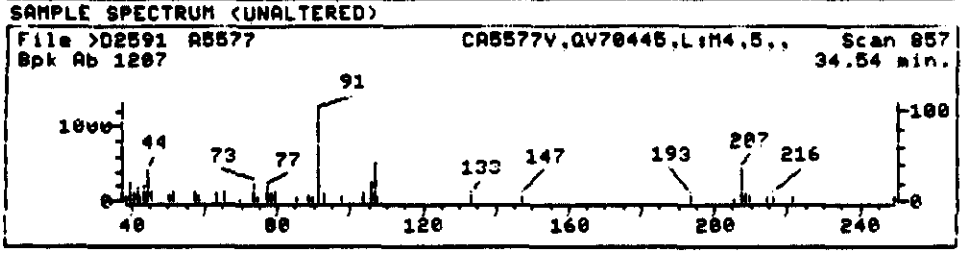
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

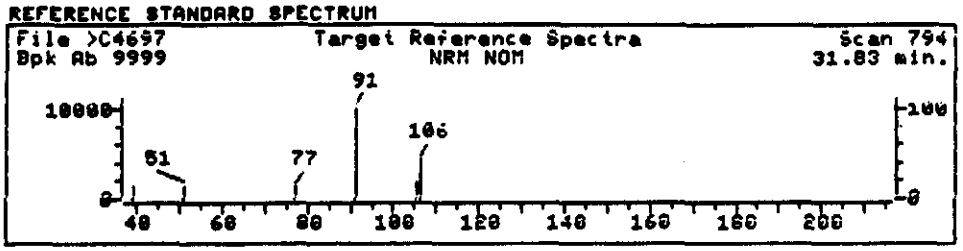


Data File: >D2591::U1
Name: A5577
Misc: CA5577U,QU70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

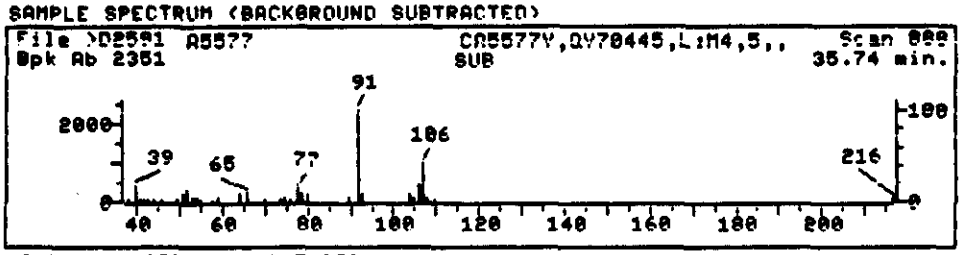
Quant Output File: ^D2591::AQ
Quant ID File: IDU31U::55
Last Calibration: 91U113 18:53

Compound No: 48
Compound Name: m-Xylene
Scan Number: 857
Retention Time: 34.54 min.
Quant Ion: 106.0
Area: 16101
Concentration: 26.85 NG
Q-value: 97

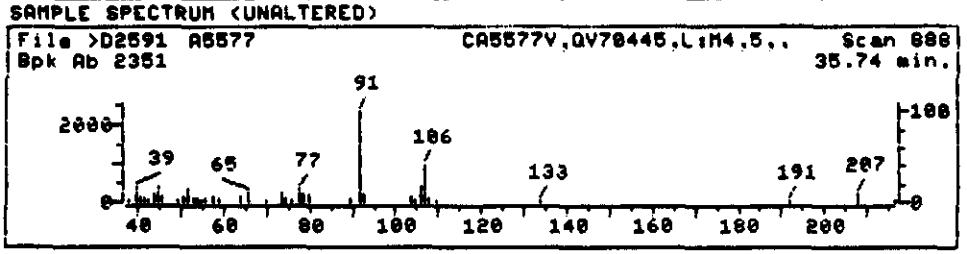
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

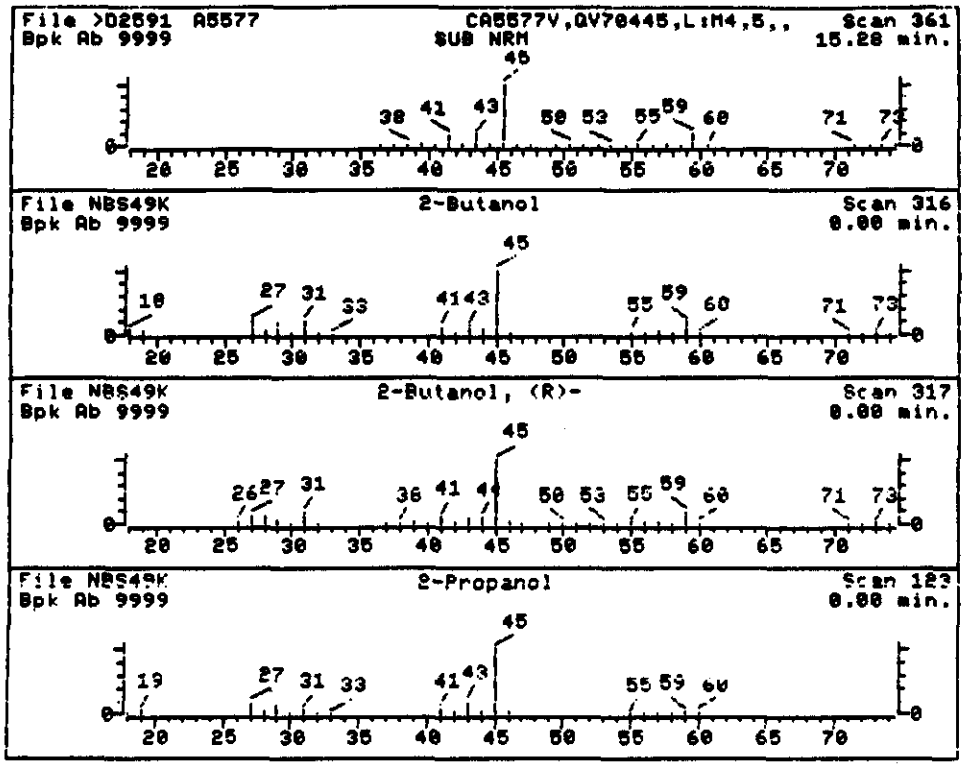


Data File: >D2591::U1
Name: A5577
Misc: CA5577U,QU70445,L:M4,5,,
Quant Time: 910113 21:23
Injected at: 910113 20:42

Quant Output File: ^D2591::AQ

Quant ID File: 1D031U::SS
Last Calibration: 91U113 18:53

Compound No: 49
Compound Name: o+p-Xylenes
Scan Number: 888
Retention Time: 35.74 min.
Quant Ion: 106.0
Area: 33486
Concentration: 6U.65 NG
q-value: 89

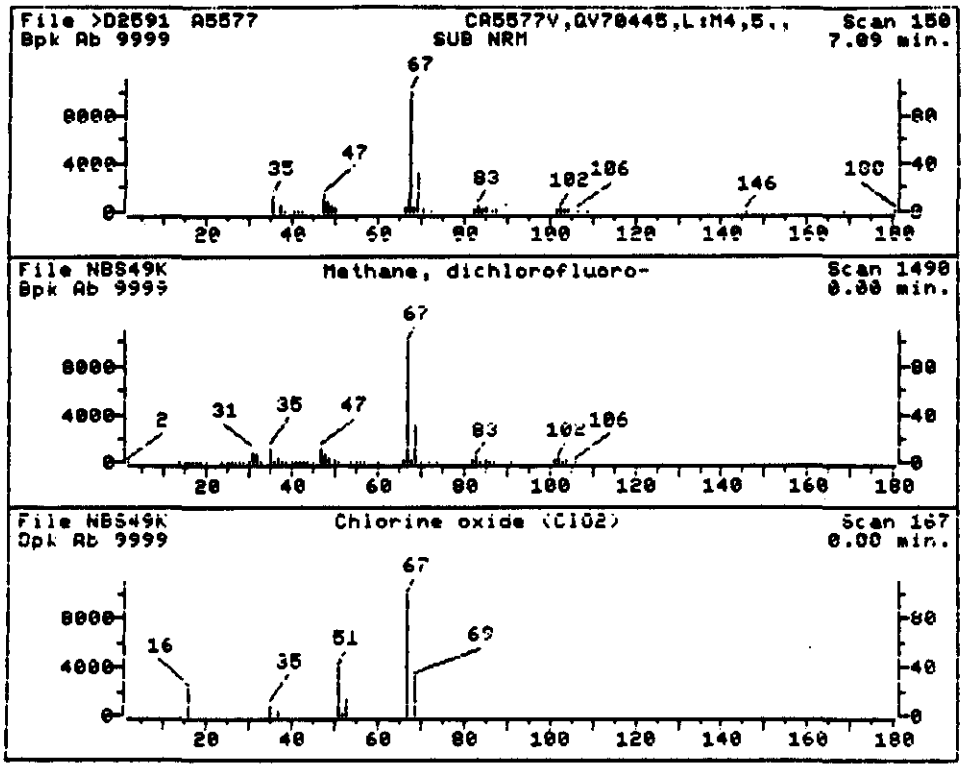


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 15.28
Scan: 361
Area: 2312963 Rank: 4
Semi-quantitative Conc (uncorrected): 1151.29 ng
Semi-quantitative Conc (corrected): 230.26 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. 2-Butanol — 74 C4H10O
2. 2-Butanol, (R)- — 74 C4H10O
3. 2-Propanol — 60 C3H8O

Sample file: >D2591 Spectrum #: 361
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	F	DI	#FLG	TILT	%	CON	C_1	P_1
1.	79	78922	1/15	NBS49K	53	50	0	0	92	8	48	31
2.	67	14898794	1/16	NBS49K	40	40	0	0	82	12	34	22
3.	59*	67630	331	NBS49K	23	44	0	0	70	28	14	10

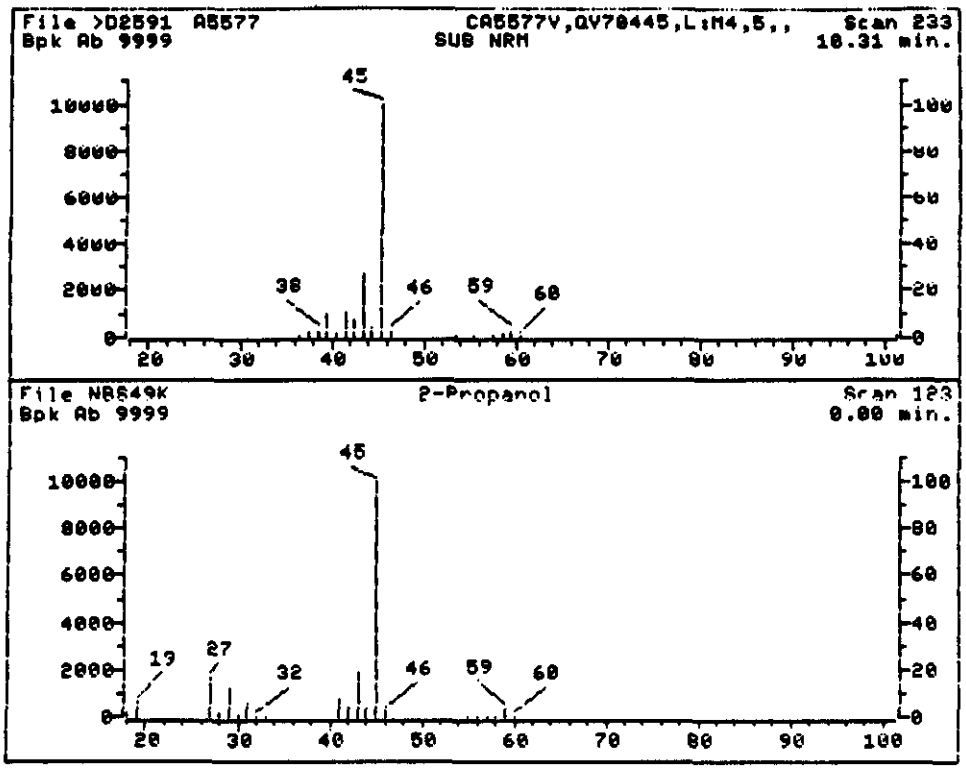


Data File: >D2591::01
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 7.09
Scan: 150
Area: 985420 Rank: 2
Semi-quantitative Conc (uncorrected): 490.50 ng
Semi-quantitative Conc (corrected): 98.10 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. Methane, dichlorofluoro- 102 CHCl2F
2. Chlorine oxide (ClO2) 67 ClO2

Sample File: >D2591 Spectrum #: 150
Search Speed: 2 Tilting option: S No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROUT	K	DK	#PEG	FILT	%	CON	C_I	R_I
1.	96*	75434	3423	NBS49K	94	0	0	2	76	0	72	9-
2.	43*	10049044	3443	NBS49K	29	28	3	0	100	24	17	1-

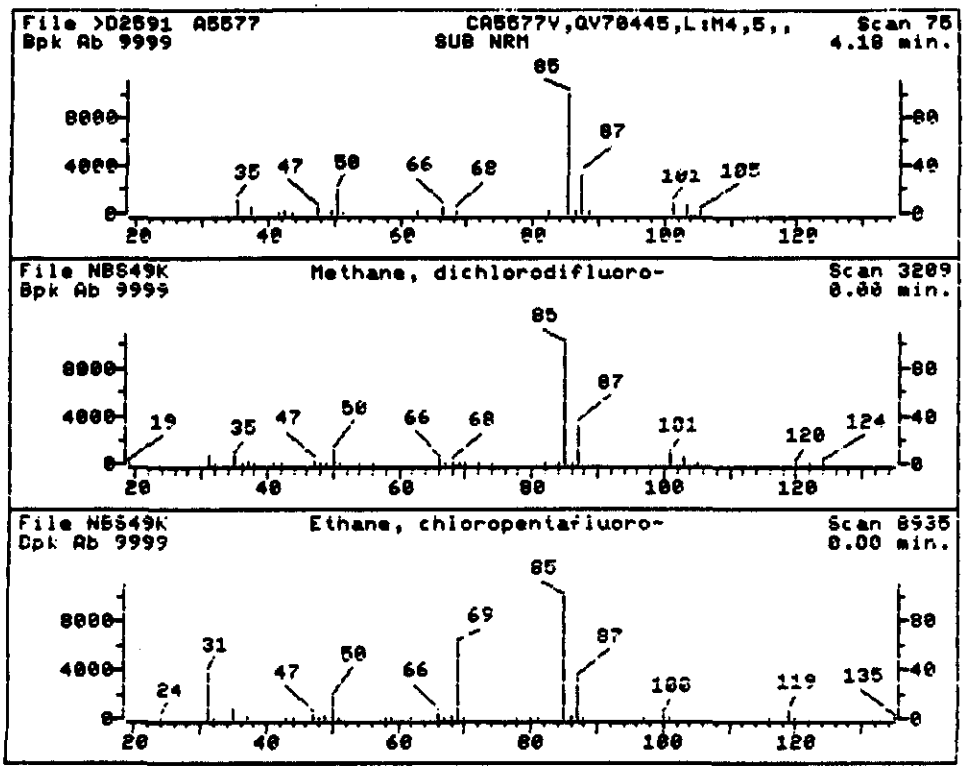


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 10.31
Scan: 233
Area: 684302 Rank: 8
Semi-quantitative Conc (uncorrected): 340.61 ng
Semi-quantitative Conc (corrected): 68.12 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. 2-Propanol 60 C3H8O

Sample file: >D2591 Spectrum #: 233
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CON #	NAME	K	DF	#LG	LI	%			
1.	71*	67630	351	NB549K	36	31	0	0	86	1.	33	33

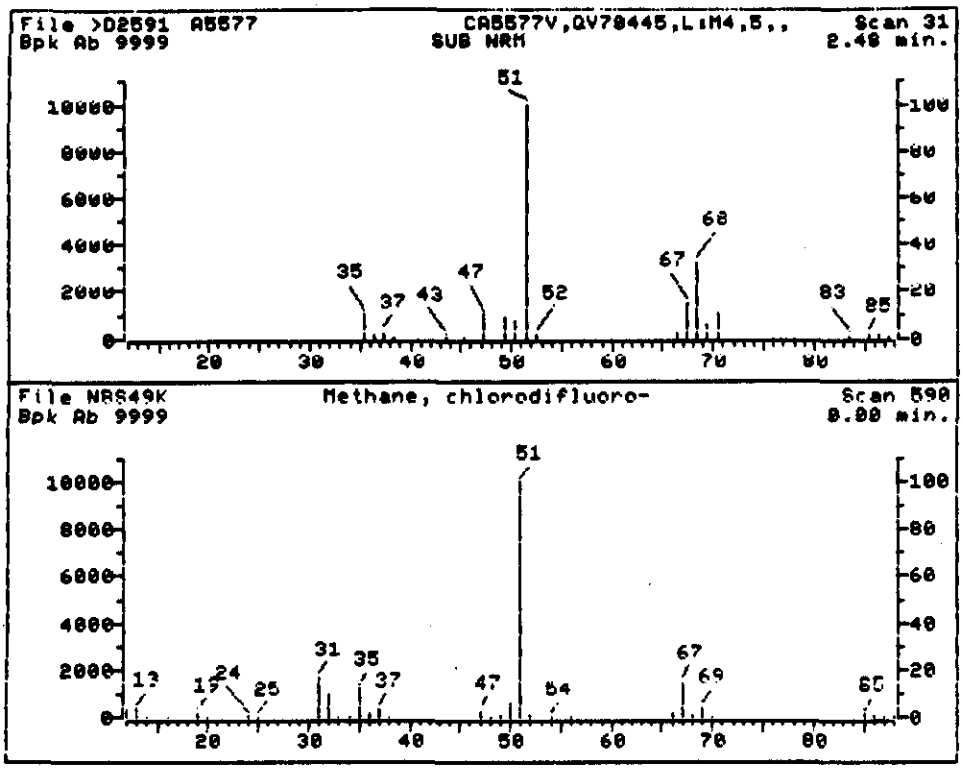


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 4.18
Scan: 75
Area: 494034 Rank: 10
Semi-quantitative Conc (uncorrected): 245.91 NG
Semi-quantitative Conc (corrected): 49.18 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. Methane, dichlorodifluoro- 120 CCl2F2
2. Ethane, chloropentafluoro- 154 C2ClF5

Sample file: >D2591 Spectrum #: 75
Search speed: 2 Tilting option: S No. of ion ranges searched: 4

	Prob.	LAS #	CUN #	ROOT	K	DK	#RLG	TIC	%	CUN	L_1	R_1
1.	79	75718	6573	NB549K	70	15	1	0	9[illegible]	8	46	[illegible]
2.	78	76153	6663	NB549K	59	55	3	0	100	4	[illegible]	[illegible]

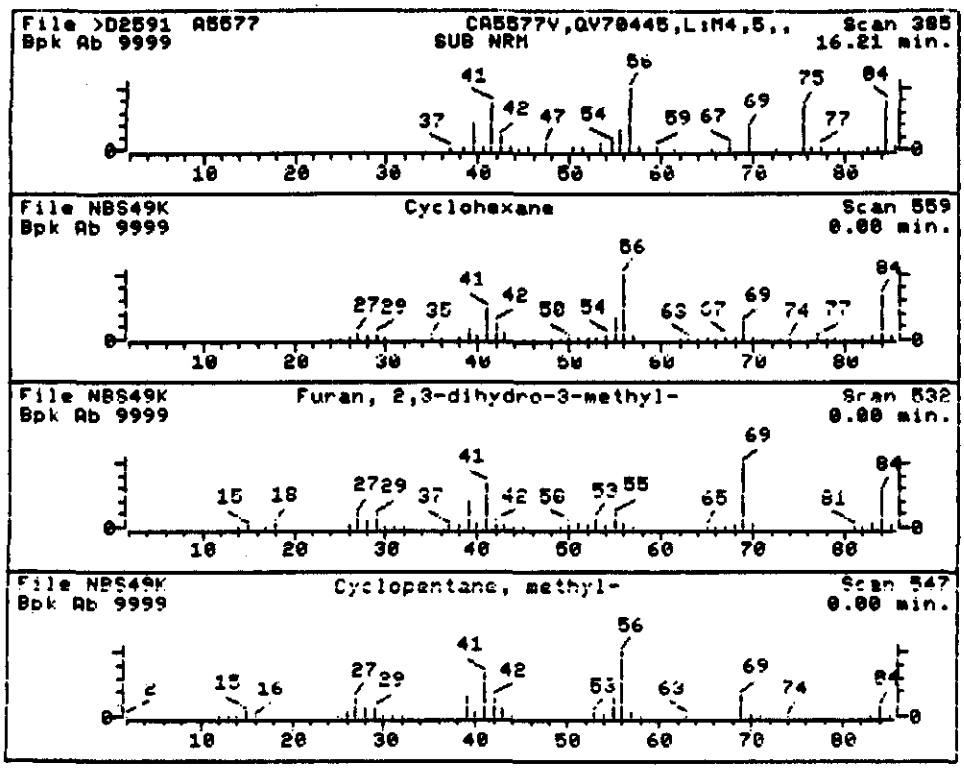


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 2.48
Scan: 31
Area: 288706 Rank: 11
Semi-quantitative Conc (uncorrected): 143.70 NG
Semi-quantitative Conc (corrected): 28.74 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. Methane, chlorodifluoro- 86 CHClF2

Sample file: >D2591 Spectrum #: 31
Search speed: 2 Tilting option: 5 No. of ion ranges searched: --

	Prob.	CAS #	CUT #	Name	M	DI	#FLG	TIC	%	L.I.	L.I.	F.I.
1.	62*	75456	475	NBS49K	57	54	1	0	9	20	13	46

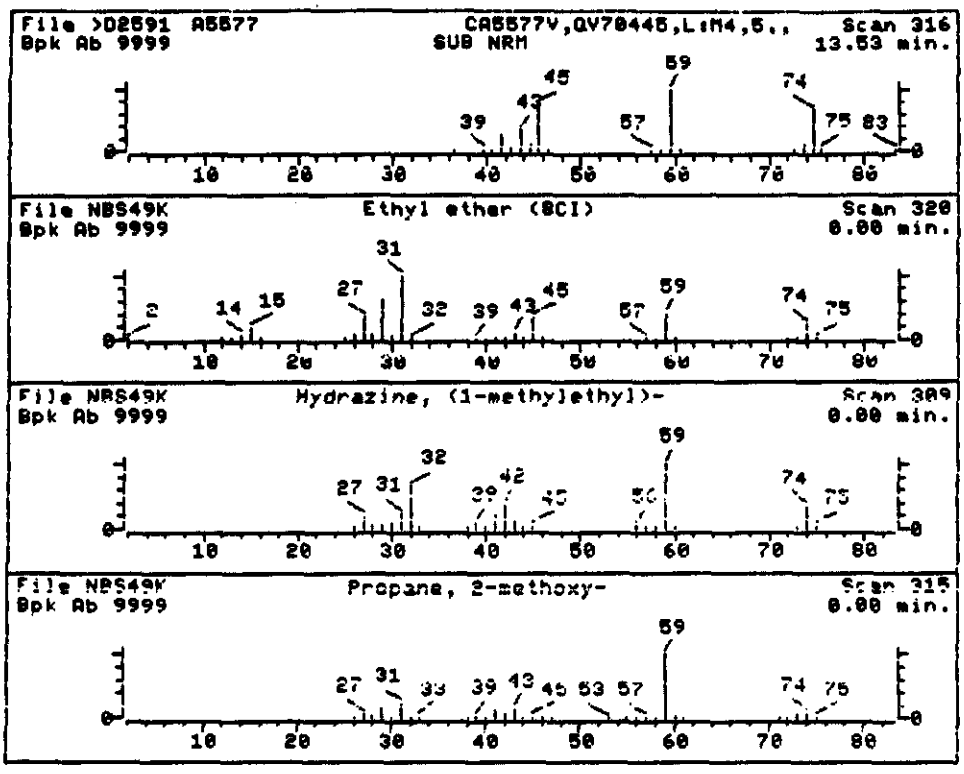


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577U,QU70445,L:M4,5,,
RT (min): 16.21
Scan: 385
Area: 275401 Rank: 12
Semi-quantitative Conc (uncorrected): 137.08 NG
Semi-quantitative Conc (corrected): 27.42 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. Cyclohexane 84 C6H12
2. Furan, 2,3-dihydro-3-methyl- 84 C5H8O
3. Cyclopentane, methyl- 84 C6H12

Sample file: >D2591 Spectrum #: 385
Search speed: 2 Hiting option: 3 No. of ion ranges searched: 40

	Prob.	CAS #	CUN #	NAME	K	DF	#PEG	HIT	%	CUN	C_I	R_IU
1.	40*	110827	6201	NBS49K	47	40	2	0	89	58	14	2
2.	25*	1708276	6285	NBS49K	43	50	3	0	113	50	7	15
3.	25*	96377	1015	NBS49K	40	50	2	0	100	50	7	14

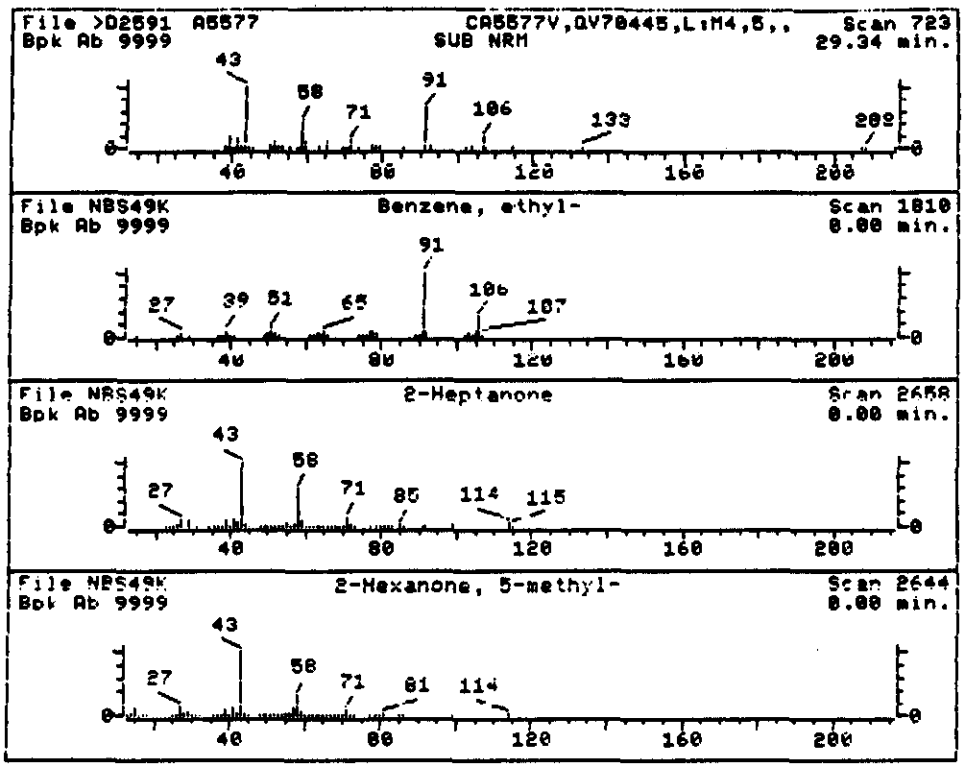


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 13.53
Scan: 316
Area: 226156 Rank: 13
Semi-quantitative Conc (uncorrected): 112.57 NG
Semi-quantitative Conc (corrected): 22.51 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. Ethyl ether (BCI) /4 C4H10O
2. Hydrazine, (1-methylethyl)- /4 C3H10N2
3. Propane, 2-methoxy- /4 C4H10O

Sample file: >D2591 Spectrum #: 316
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CUN #	RUUT	K	D	#_G	TIL	%	CUN	L_I	R_IU
1.	87*	60297	1/18	NBS49K	41	52	0	0	219	4	63	4
2.	25*	2257525	1/11	NBS49K	25	63	2	0	100	50	7	14
3.	20*	598538	1/14	NBS49K	28	48	1	0	100	54	5	1

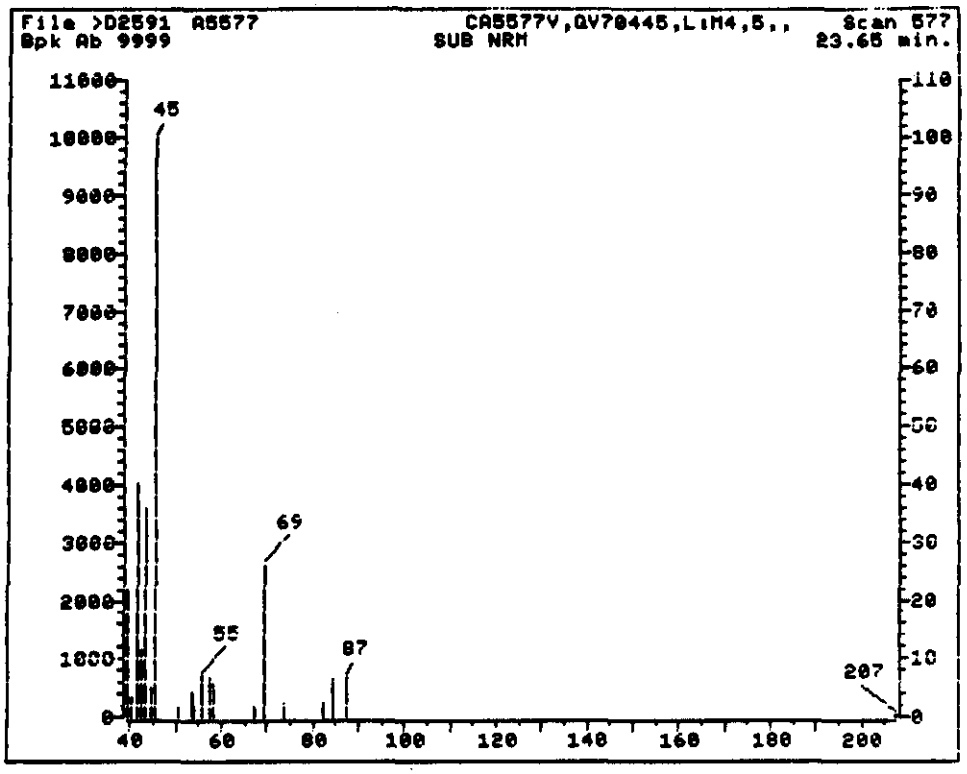


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577U,QV70445,L:M4,5,,
RT (min): 29.34
Scan: 723
Area: 185262 Rank: 14
Semi-quantitative Conc (uncorrected): 49.44 NG
Semi-quantitative Conc (corrected): 9.89 ug/l
Calculated using Istd: Chlorobenzene-d5 @ 27.01 minutes

1. Benzene, ethyl- 106 C8H10
2. 2-Heptanone 114 C7H14O
3. 2-Hexanone, 5-methyl- 114 C7H14O

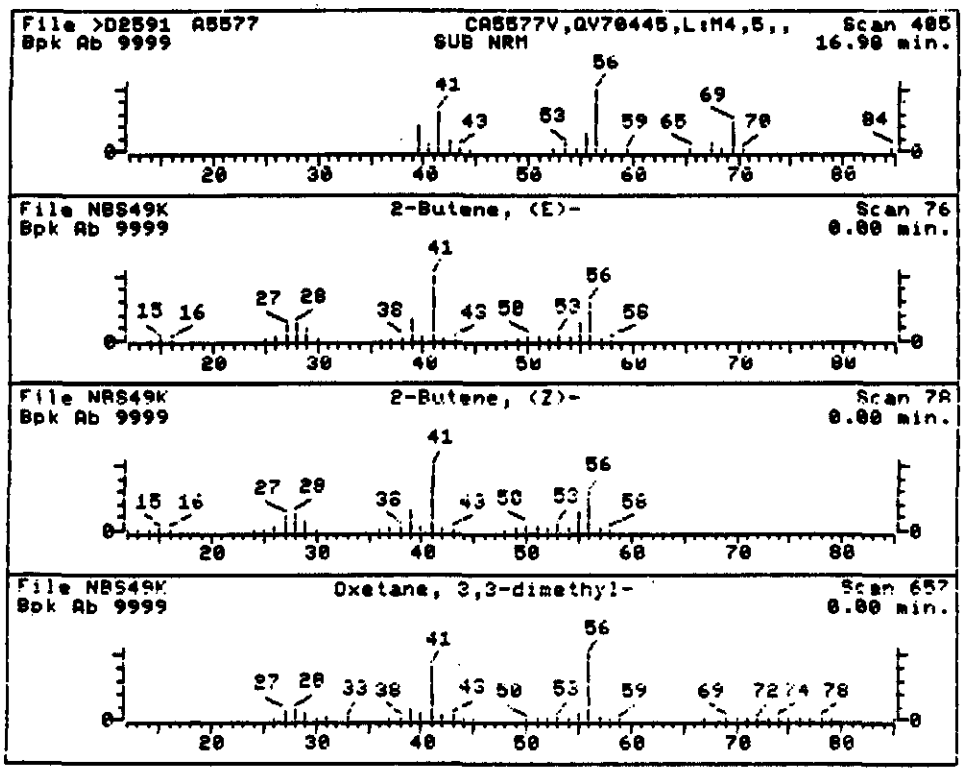
Search File: D2591 Spectrum #: 723
Search Type: 2 Fitting option: 5 No. of ion ranges searched: 4

	Prob.	LAB #	CON #	ROUT	K	DI	#rib	fit	%	CON	C_I	R_IN
1.	99*	100414	11006	NBS49K	52	52	2	0	60	52	8	31
2.	94*	110430	1414	NBS49K	44	39	2	0	72	54	7	23
3.	70*	110123	1411	NBS49K	39	42	3	0	100	54	5	16



Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 23.65
Scan: 577
Area: 75217 Rank: 20
Semi-quantitative Conc (uncorrected): 21.05 NG
Semi-quantitative Conc (corrected): 4.21 ug/l
Calculated using Istd: 1,4-Difluorobenzene @ 22.10 minutes

No PBM hits for this scan.

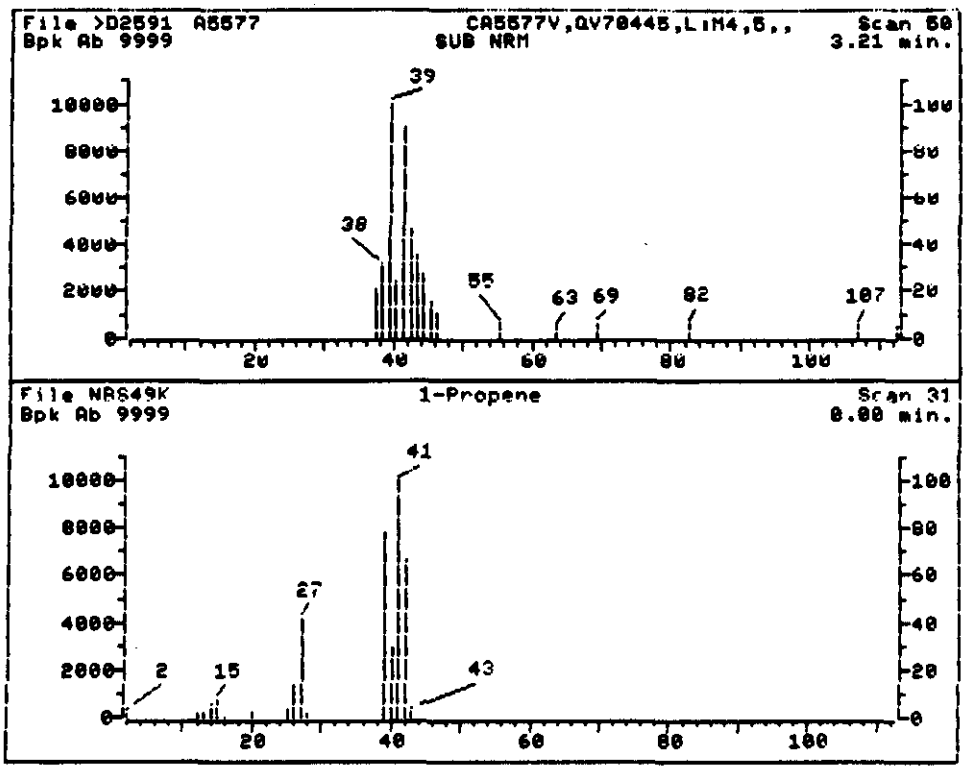


Data File: >D2591::U1
Name: A5577
Misc Data: CA5577V,QV70445,L:M4,5,,
RT (min): 16.98
Scan: 405
Area: 67990 Rank: 21
Semi-quantitative Conc (uncorrected): 19.05 NG
Semi-quantitative Conc (corrected): 3.81 ug/l
Calculated using Istd: 1,4-Difluorobenzene @ 22.10 minutes

1. 2-Butene, (E)- 56 C4H8
2. 2-Butene, (Z)- 56 C4H8
3. Oxetane, 3,3-dimethyl- 86 C5H10O

Sample file: >D2591 Spectrum #: 405
Search speed: 2 Fitting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CUN #	ROOT	K	DI	#rev	rLI	%	Con	L_I	R_IO
1.	30*	624646	994	NBS49K	26	53	3	0	191	55	12	1.
2.	30*	590181	996	NBS49K	26	52	2	0	190	55	1.	1.
3.	25	6921353	1022	NBS49K	26	48	0	0	78	50	.	1.



Data File: >D2591::U1
Name: A5577
Misc Data: CA5577U,QU70445,L:M4,5,,
RT (min): 3.21
Scan: 50
Area: 62793 Rank: 22
Semi-quantitative Conc (uncorrected): 31.26 NG
Semi-quantitative Conc (corrected): 6.25 ug/l
Calculated using Istd: Bromochloromethane @ 11.40 minutes

1. 1-Propene C3H6

Sample File: >D2591 Spectrum #: 50
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CUN #	RLOT	K	DI	#		%		
1.	20*	115071	215	NB549K	21	60	0	0	68	55	1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5577DL

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5577U3

Sample wt/vol: .1 (g/mL) ML Lab File ID: >D2622

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/15/91

Column: (pack/cap) PACK Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1500	U D
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	1740	
67-64-1	Acetone	11600	E
75-15-0	Carbon Disulfide	1250	U
75-35-4	1,1-Dichloroethene	1250	U
75-34-3	1,1-Dichloroethane	1250	U
540-59-0	1,2-Dichloroethene (total)	1250	U
67-66-3	Chloroform	1250	U
107-06-2	1,2-Dichloroethane	1250	U
78-93-3	2-Butanone	12900	E
71-55-6	1,1,1-Trichloroethane	1250	U
56-23-5	Carbon Tetrachloride	1250	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	1250	U
78-87-5	1,2-Dichloropropane	1250	U
10061-01-5	cis-1,3-Dichloropropene	1250	U
79-01-6	Trichloroethene	1250	U
124-48-1	Dibromochloromethane	1250	U
79-00-5	1,1,2-Trichloroethane	1250	U
71-43-2	Benzene	1250	U
10061-02-6	trans-1,3-Dichloropropene	1250	U
75-25-2	Bromoform	1250	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	1250	U
79-34-5	1,1,2,2-Tetrachloroethane	1250	U
108-88-3	Toluene	178	J
108-90-7	Chlorobenzene	1250	U
100-41-4	Ethylbenzene	1250	U
100-42-5	Styrene	1250	U
1330-20-7	Xylene (total)	1250	U

Lab Name: STC CORP. Contract: A5577 DL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5577V3

Sample wt/vol: 0.1 (g/mL) ml Lab File ID: >D2622

Level: (low/med) LOW Date Received: 1/5/91

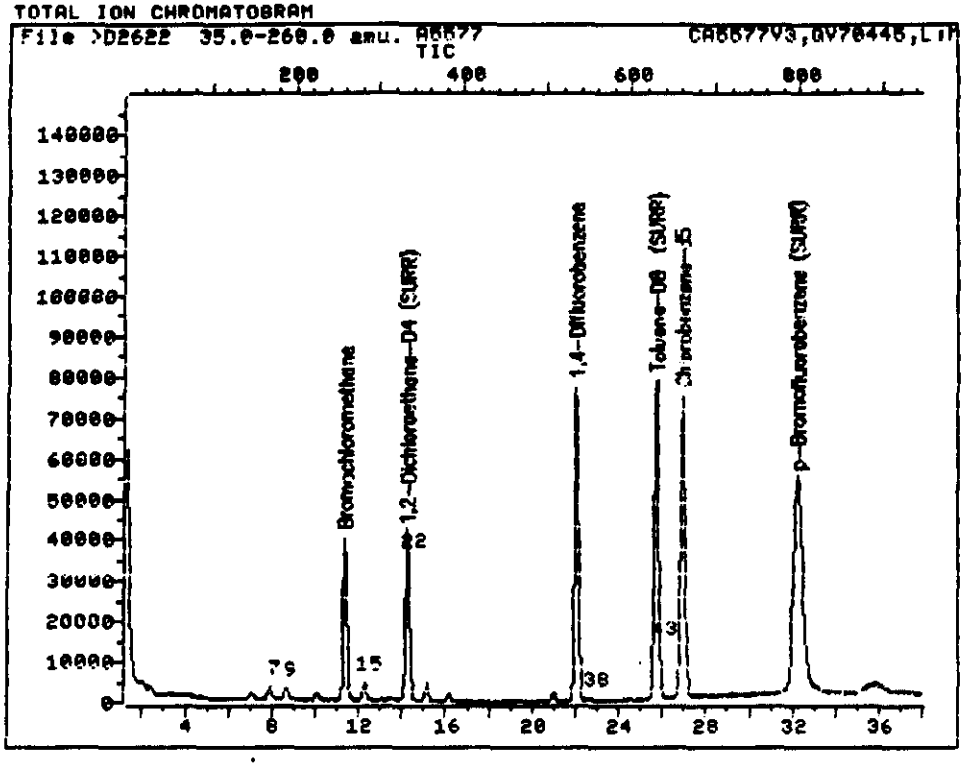
% Moisture: not dec. _____ Date Analyzed: 1/15/91

Column: (pack/cap) PACK Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	280	D

FORM I VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2622::U1 Quant Output File: ^D2622::AW
Name: A5577
Misc: CA5577V3,QV70445,L:M4,.1,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910114 11:09

Operator ID: RK2225
Quant Time: 910115 16:48
Injected at: 910115 16:09

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 910115 16:48
Output File: ^D2622::AQ Injected at: 910115 16:09
Data File: >D2622::U1 Dilution Factor: 1.00000
Name: A5577
Misc: CA5577V3,QV70445,L:M4,.1,,

ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910114 11:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.38	260	59801	250.00	NG	95
7)	Methylene chloride	7.93	171	8181	74.05	NG	90
9)	Acetone	8.67	190	24709	155.53	NG	91
15)	Tetrahydrofuran	12.27	283	13306	277.33	NG	100
18)	1,2-Dichloroethane-D4 (SURR)	14.25	334	159200	285.51	NG	91
21)	*1,4-Difluorobenzene	22.04	535	341715	250.00	NG	98
22)	Methyl ethyl ketone	14.33	336	13026	288.04	NG	98
37)	*Chlorobenzene-d5	26.94	661	292708	250.00	NG	78
38)	Methyl-iso-butyl ketone	22.74	553	3325	~~7.06~~	~~NG~~	82
42)	Toluene-D8 (SURR)	25.76	631	351293	243.09	NG	9-
43)	Toluene	25.92	635	6351	7.79	NG	95
46)	p-Bromofluorobenzene (SURR)	32.21	797	228514	251.65	NG	8-

* Compound is ISTD

AP 1/22/91

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5578

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5578U2

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2610

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/14/91

Column: (pack/cap) PACK Dilution Factor: 1

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	2	J
75-00-3	Chloroethane	3	J
75-09-2	Methylene Chloride	5	
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	47	
540-59-0	1,2-Dichloroethene (total)	66	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	17	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	2	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	49	
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	2	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5578

Lab Name: STC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: EA5578V2

Sample wt/vol: 5 (g/ML) ML Lab File ID: >DE610

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/10/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A55/8

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA55780Z

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2610

Level: (low/med) LOW Date Received: 1/5/91

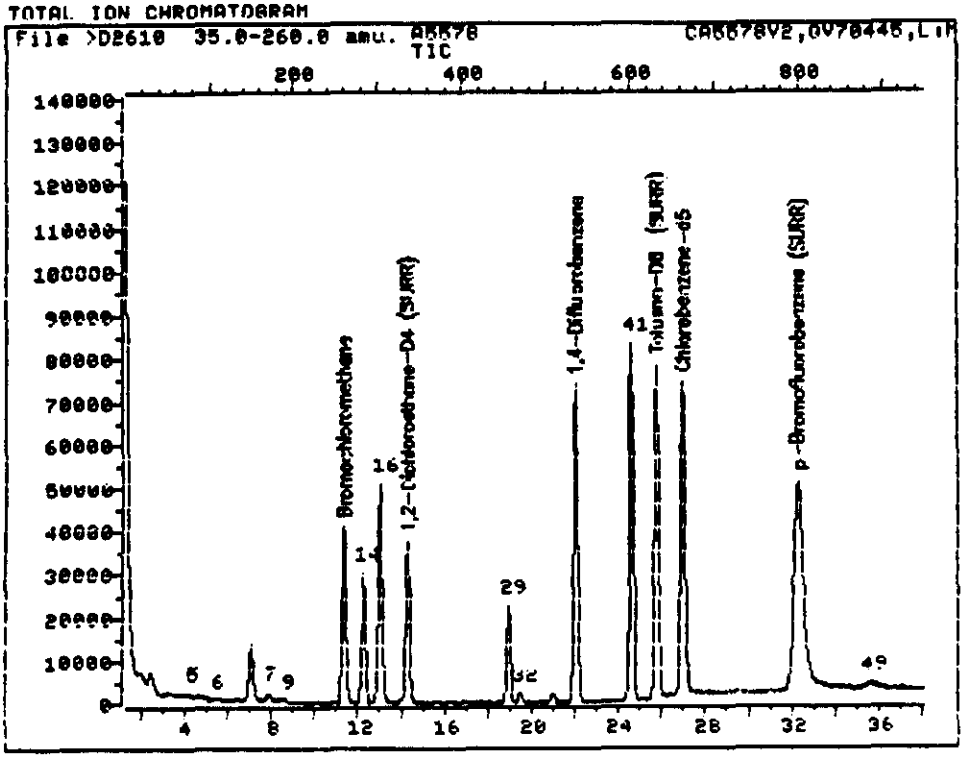
% Moisture: not dec. Date Analyzed: 01/14/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 75-43-4	Methane, dichlorofluoro-	7.08	18	J
02.	Unknown	2.42	8	J

TOTAL ION CHROMATOGRAM



Data File: >D2610::D1 Quant Output File: ^D2610::AW
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVUA13, XVUA9
Last Calibration: 910114 11:09

Operator ID: KB665e
Quant Time: 910114 16:05
Injected at: 910114 15:26

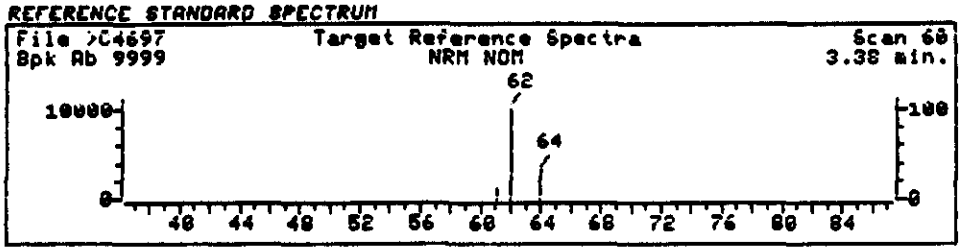
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 16:05
Output File: ^D2610::AQ Injected at: 910114 15:26
Data File: >D2610::U1 Dilution Factor: 1.00000
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910114 11:09

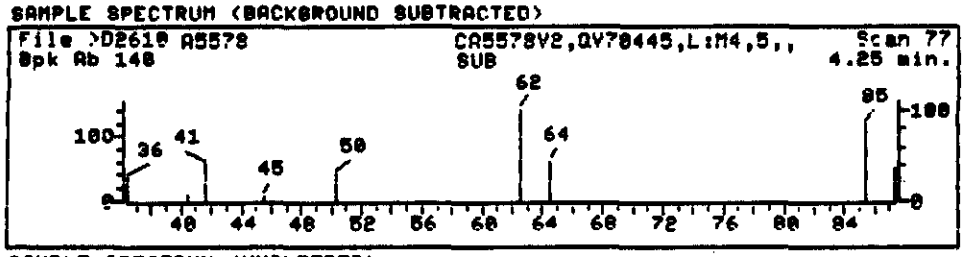
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.34	260	74874	250.00	NG	93
5)	Vinyl chloride	4.25	77	2105	7.53	NG	85
6)	Chloroethane	5.41	107	2789	16.76	NG	78
7)	Methylene chloride	7.85	170	3665	26.49	NG	98
9)	Acetone	8.71	192	4759	23.92	NG	94
14)	1,1-Dichloroethane	12.27	284	164265	235.14	NG	99
16)	1,2-Trans-dichloroethylene	13.01	303	116292	330.74	NG	96
18)	1,2-Dichloroethane-D4 (SURR)	14.29	336	182618	261.58	NG	92
21)	*1,4-Difluorobenzene	22.04	536	333550	250.00	NG	99
29)	Trichloroethylene	18.94	456	45713	83.61	NG	95
32)	Benzene	19.48	470	11608	9.68	NG	96
37)	*Chlorobenzene-d5	26.98	663	286999	250.00	NG	78
41)	Tetrachloroethylene	24.60	602	134255	244.31	NG	98
42)	Toluene-D8 (SURR)	25.77	632	348427	245.94	NG	94
46)	p-Bromofluorobenzene (SURR)	32.26	799	220495	247.86	NG	86
49)	o+p-Xylenes	35.60	885	4767	8.06	NG	93

* Compound is ISTD

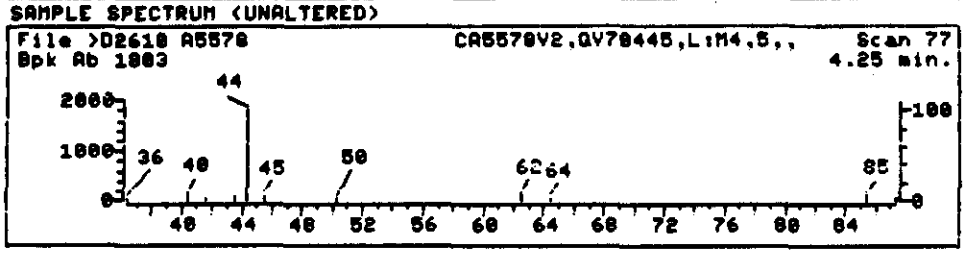
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



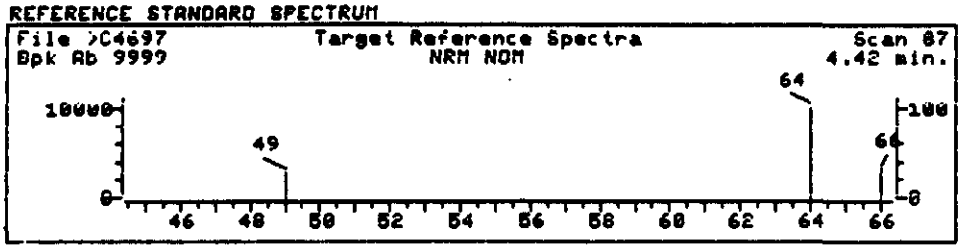
SAMPLE SPECTRUM (UNALTERED)



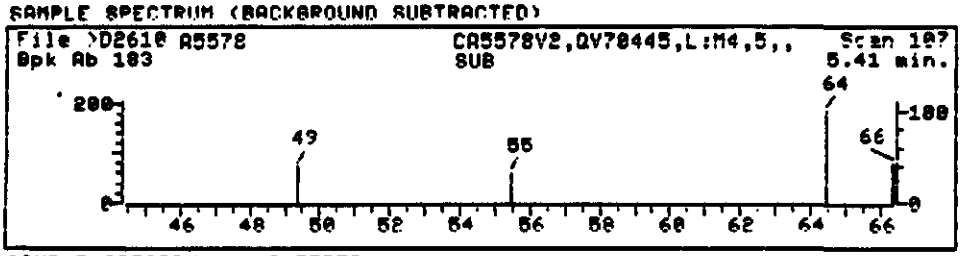
Data File: >D2610::U1 Quant Output File: ^D2610::AQ
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 91U114 16:05 Quant ID File: ID031U::S5
Injected at: 91U114 15:26 Last Calibration: 91U114 11:09

Compound No: 5
Compound Name: Vinyl chloride
Scan Number: 77
Retention Time: 4.25 min.
Quant Ion: 62.0
Area: 2105
Concentration: 7.53 NG
q-value: 85

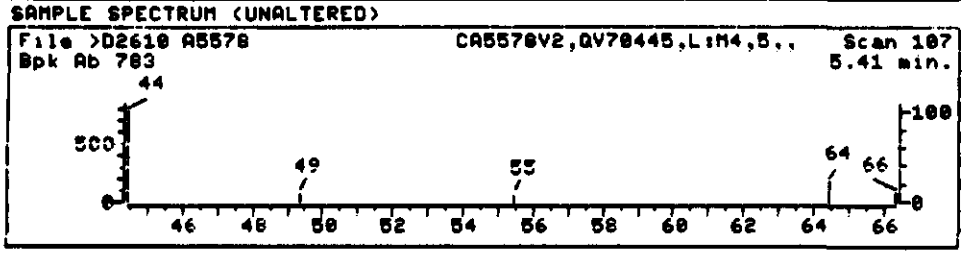
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



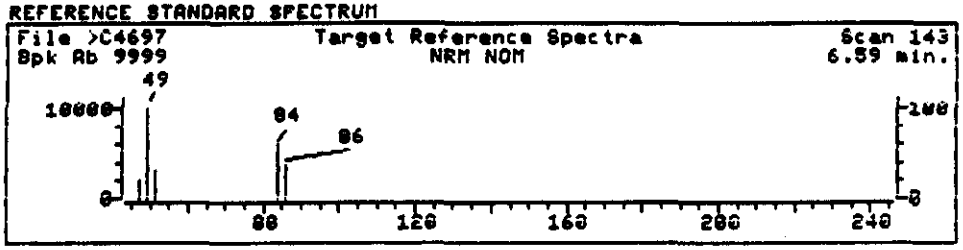
SAMPLE SPECTRUM (UNALTERED)



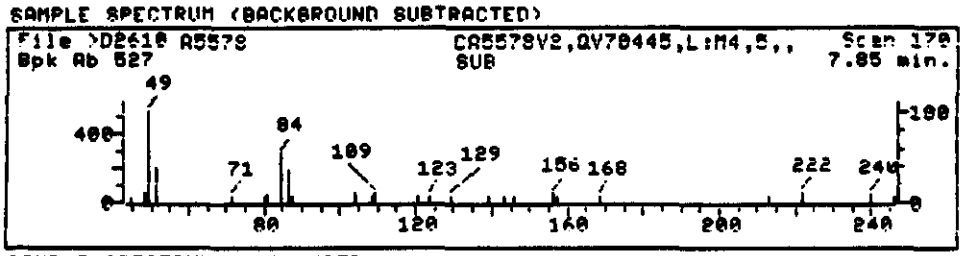
Data File: >D2610::U1 Quant Output File: ^D2610::AQ
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: ID0310::SS
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 6
Compound Name: Chloroethane
Scan Number: 107
Retention Time: 5.41 min.
Quant Ion: 64.0
Area: 2789
Concentration: 16.76 NG
Q-Value: 76

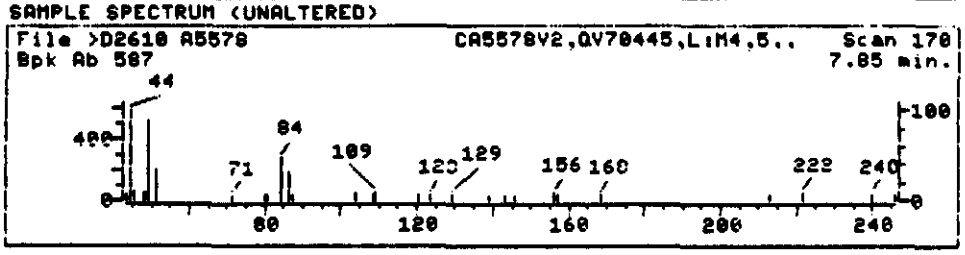
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



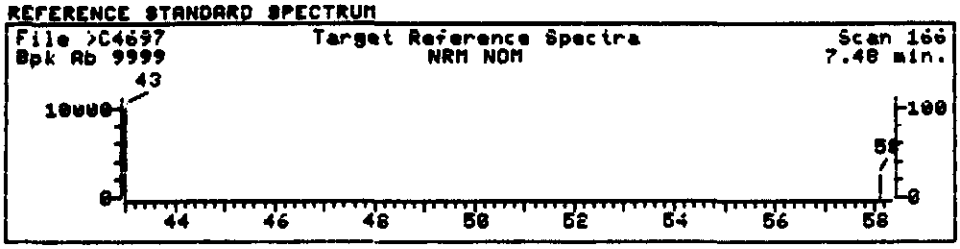
SAMPLE SPECTRUM (UNALTERED)



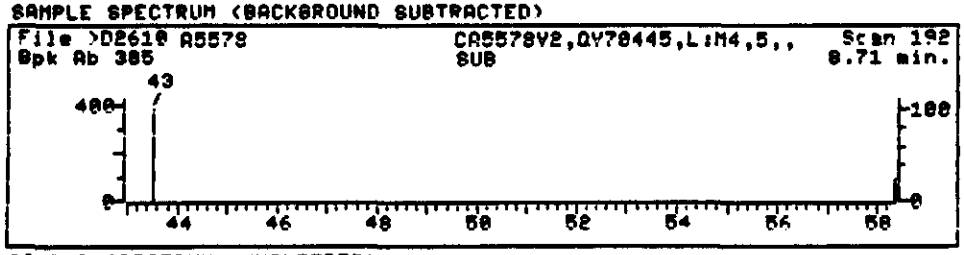
Data File: >D2610::D1 Quant Output File: ^D2610::AW
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 91U114 16:U5 Quant ID File: 1UU310::55
Injected at: 910114 15:26 Last Calibration: 91U114 11:U9

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 170
Retention Time: 7.85 min.
Quant Ion: 84.0
Area: 3665
Concentration: 26.49 NG
q-value: 98

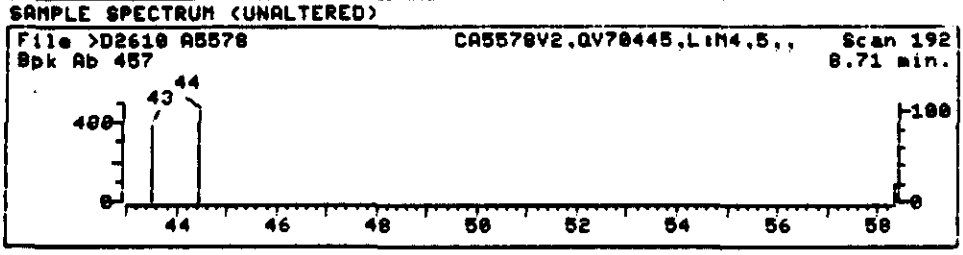
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



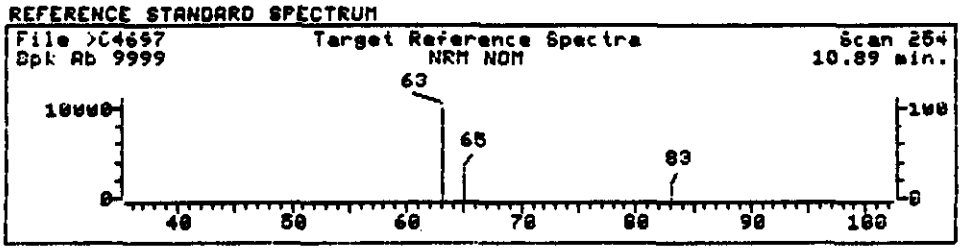
SAMPLE SPECTRUM (UNALTERED)



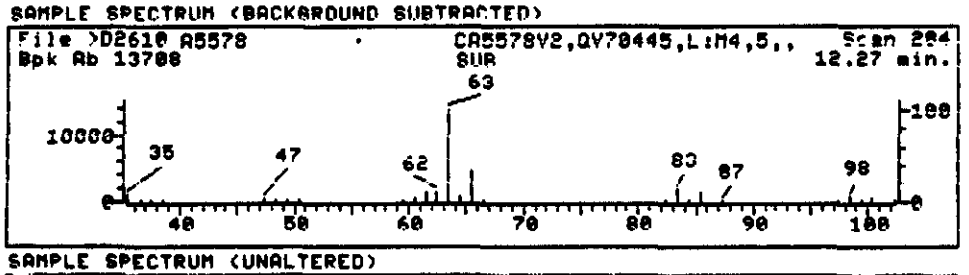
Data File: >D2610::U1 Quant Output File: ^D2610::AQ
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: IDU310::S5
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 9
Compound Name: Acetone
Scan Number: 192
Retention Time: 8.71 min.
Quant Ion: 43.0
Area: 4759
Concentration: 23.92 NG
q-value: 94

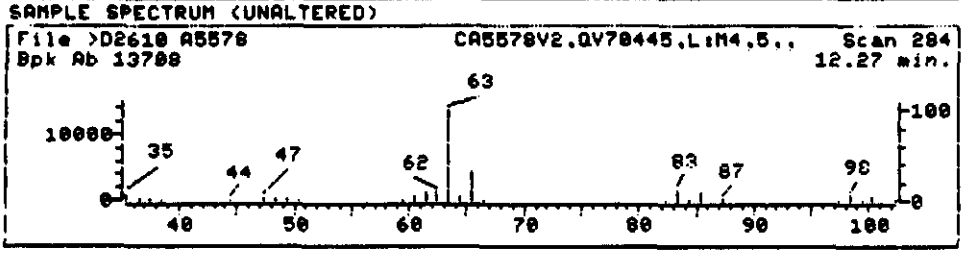
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



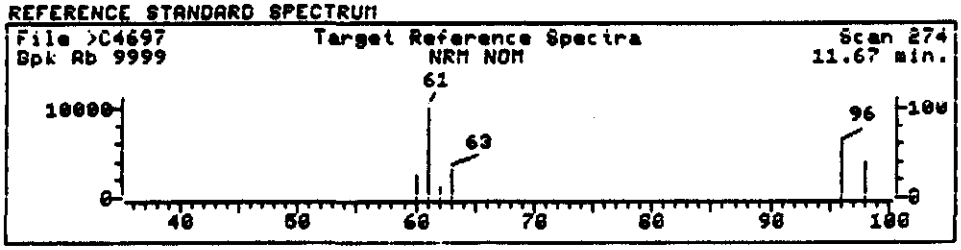
SAMPLE SPECTRUM (UNALTERED)



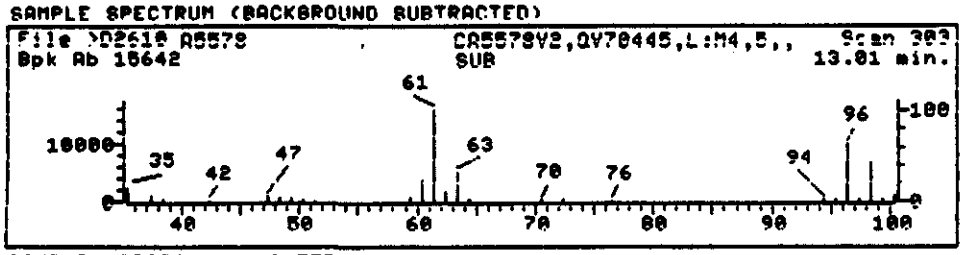
Data File: >D2610::U1 Quant Output File: ^D2610::AQ
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: IDU310::SS
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 284
Retention Time: 12.27 min.
Quant Ion: 63.0
Area: 164265
Concentration: 235.14 NG
Q-value: 99

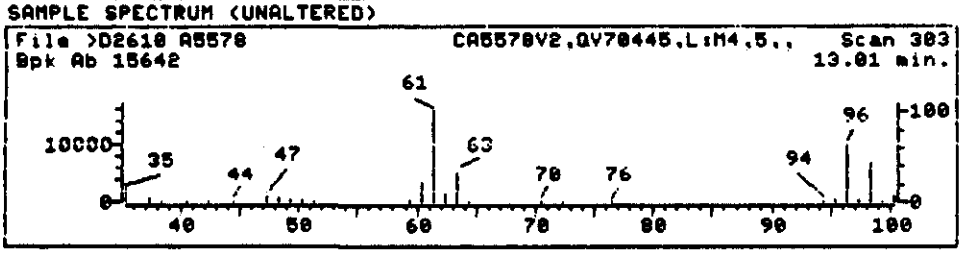
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



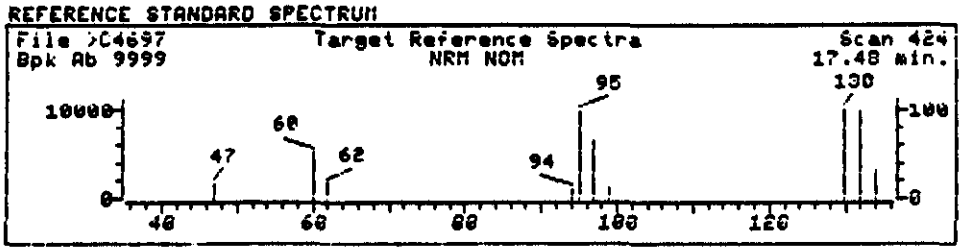
SAMPLE SPECTRUM (UNALTERED)



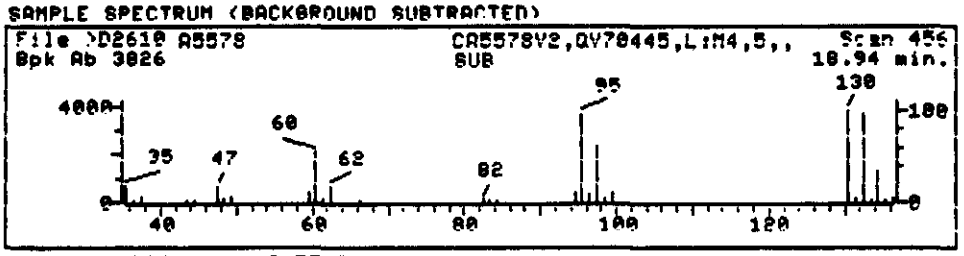
Data File: >D2610::U1 Quant Output File: ^D2610::AW
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: ID0310::55
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 303
Retention Time: 13.01 min.
Quant Ion: 96.0
Area: 116292
Concentration: 330.74 NG
Q-value: 96

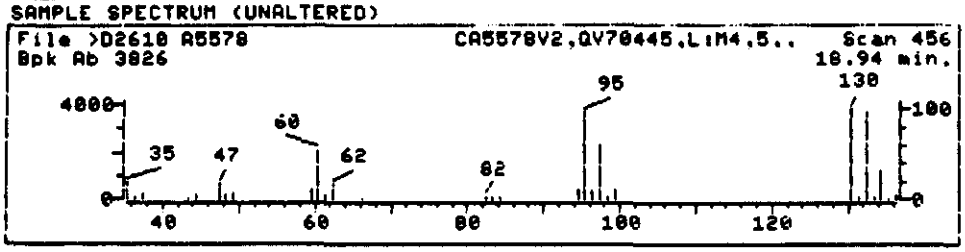
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



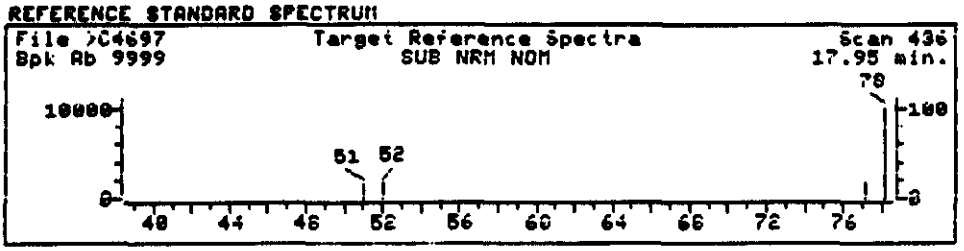
SAMPLE SPECTRUM (UNALTERED)



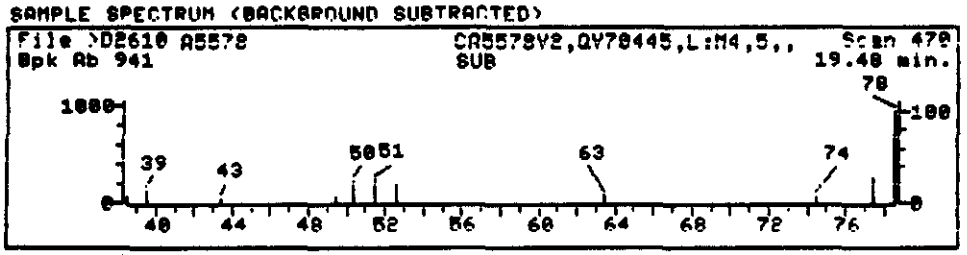
Data File: >D2610::U1 Quant Output File: ^D2610::AQ
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: IDU310::SS
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 456
Retention Time: 18.94 min.
Quant Ion: 130.0
Area: 45713
Concentration: 85.61 NG
Q- value: 95

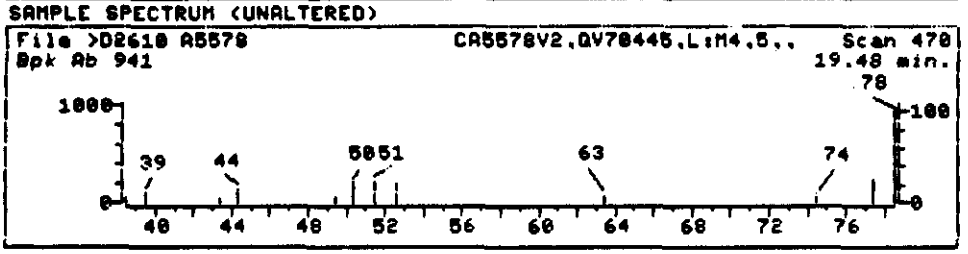
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



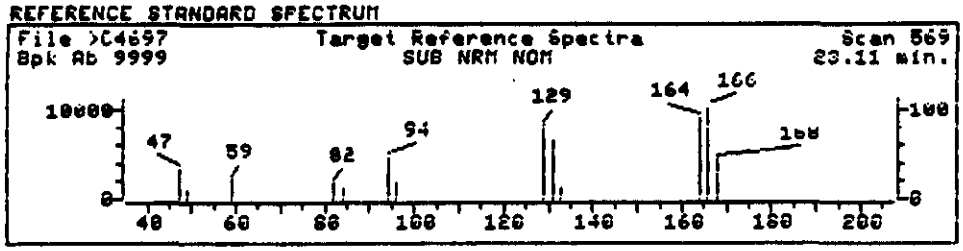
SAMPLE SPECTRUM (UNALTERED)



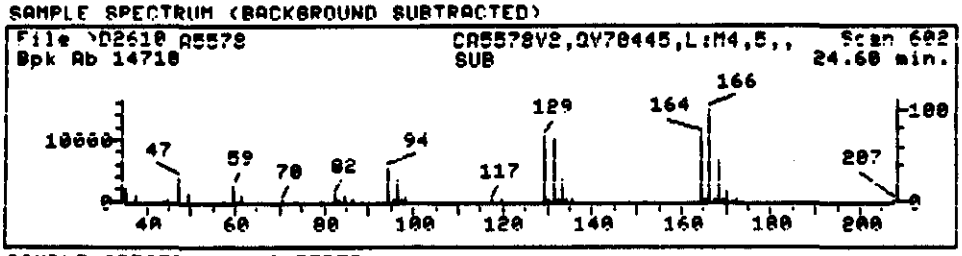
Data File: >D2610::U1 Quant Output File: ^D2610::AW
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: ID0310::S5
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 32
Compound Name: Benzene
Scan Number: 470
Retention Time: 19.48 min.
Quant Ion: 78.0
Area: 11608
Concentration: 9.68 NG
Q-value: 96

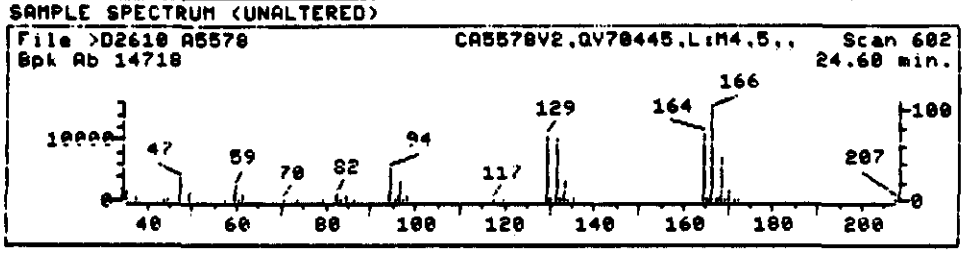
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



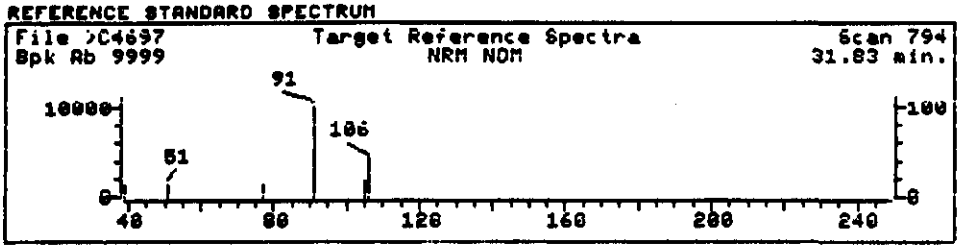
SAMPLE SPECTRUM (UNALTERED)



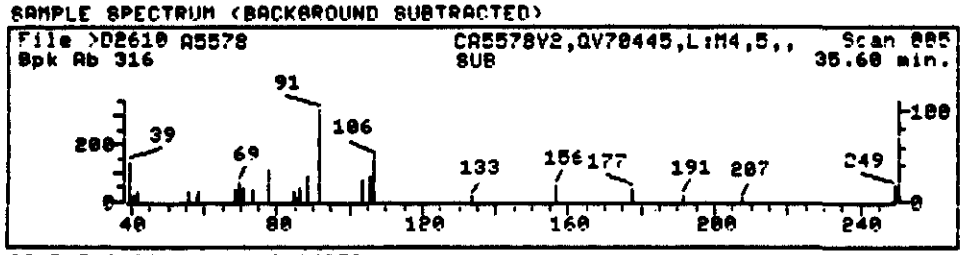
Data File: >D2610::U1 Quant Output File: ^D2610::AU
Name: A5578
Misc: CA5578U2,QU70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: ID0310::55
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 41
Compound Name: Tetrachloroethylene
Scan Number: 602
Retention Time: 24.60 min.
Quant Ion: 164.0
Area: 134255
Concentration: 244.31 NG
Q Value: 96

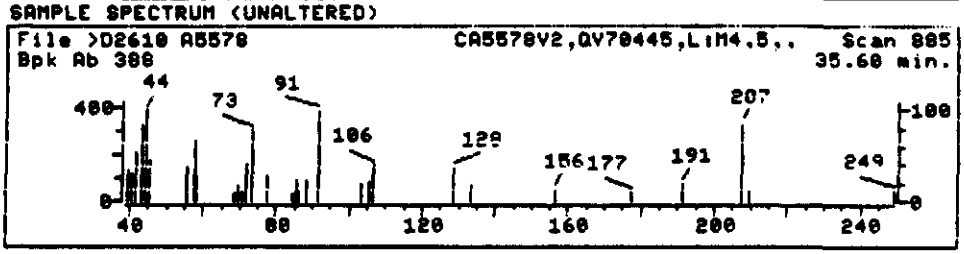
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

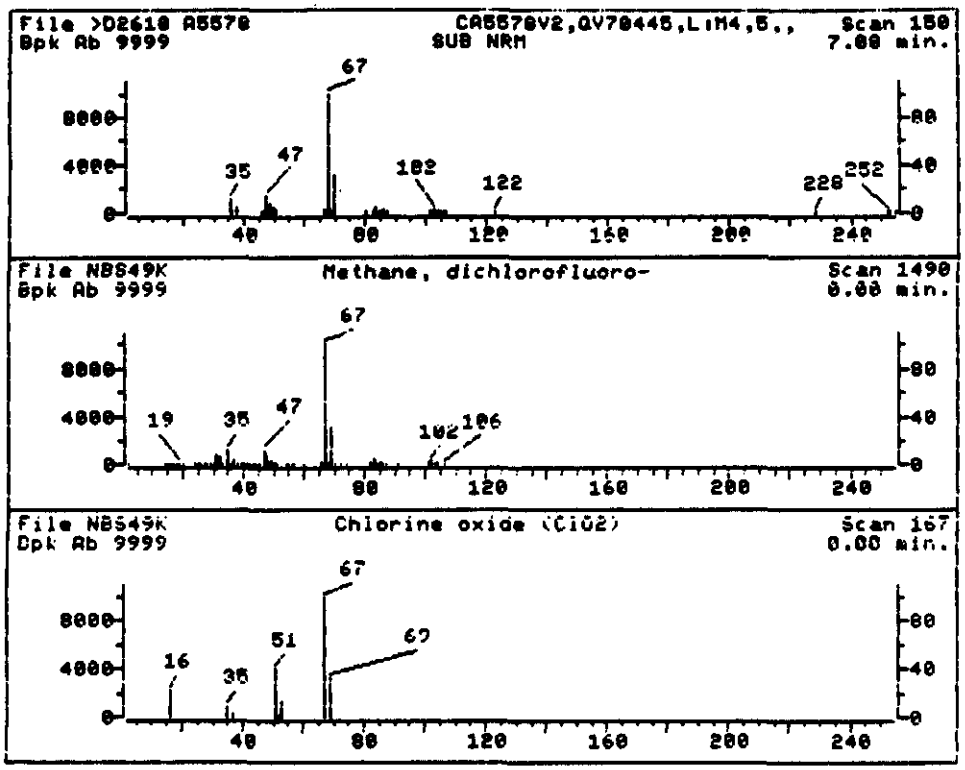


SAMPLE SPECTRUM (UNALTERED)



Data File: >D2610::U1 Quant Output File: ^D2610::AU
Name: A5578
Misc: CA5578V2,QV70445,L:M4,5,,
Quant Time: 910114 16:05 Quant ID File: ID0310::SS
Injected at: 910114 15:26 Last Calibration: 910114 11:09

Compound No: 49
Compound Name: o+p-Xylenes
Scan Number: 885
Retention Time: 35.60 min.
Quant Ion: 106.0
Area: 4767
Concentration: 8.06 NG
q-value: 93

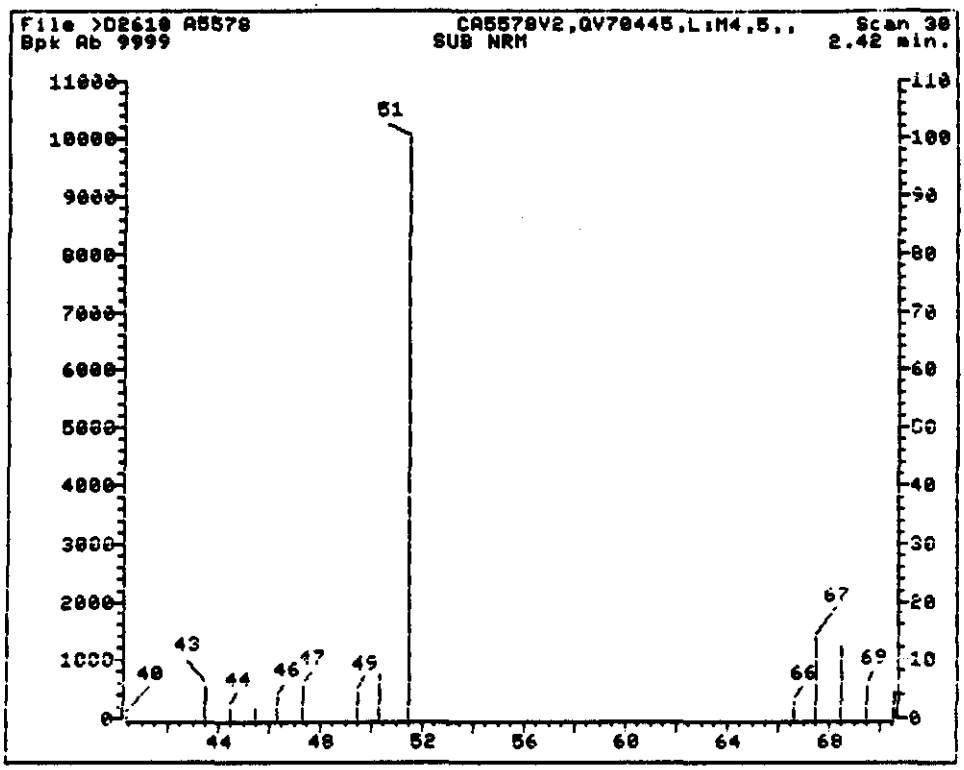


Data File: >D2610::U1
Name: A5578
Misc Data: CA5578V2,QV70445,L:M4,5,,
RT (min): 7.08
Scan: 150
Area: 179887 Rank: 8
Semi-quantitative Conc (uncorrected): 89.32 NG
Semi-quantitative Conc (corrected): 17.86 ug/l
Calculated using Istd: Bromochloromethane @ 11.34 minutes

1. Methane, dichlorofluoro- 102 CHCl2F
2. Chlorine oxide (ClO2) 67 ClO2

Sample file: >D2c10 Spectrum #: 150
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	LUN #	RUN	K	DK	#FLG	LI	%	LUN	L_1	M_1
1.	96*	75434	3473	NBS49K	94	0	0	1	75	5	75	44
2.	43*	10049044	3443	NBS49K	29	28	3	0	100	25	17	14



Data File: >D2610::U1
Name: A5578
Misc Data: CA5578V2,QV70445,L:M4,5,,
RT (min): 2.42
Scan: 30
Area: 80603 Rank: 9
Semi-quantitative Conc (uncorrected): 40.02 NG
Semi-quantitative Conc (corrected): 8.00 ug/l
Calculated using Istd: Bromochloromethane @ 11.34 minutes

No PBM hits for this scan.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IA5579

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5579V2

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: >D2612

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/14/91

Column: (pack/cap) PACK Dilution Factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	120	U
74-83-9	Bromomethane	120	U
75-01-4	Vinyl Chloride	120	U
75-00-3	Chloroethane	112	J
75-09-2	Methylene Chloride	110	U
67-64-1	Acetone	1390	
75-15-0	Carbon Disulfide	110	U
75-35-4	1,1-Dichloroethene	110	U
75-34-3	1,1-Dichloroethane	170	
540-59-0	1,2-Dichloroethene (total)	18	J
67-66-3	Chloroform	110	U
107-06-2	1,2-Dichloroethane	110	U
78-93-3	2-Butanone	1210	
71-55-6	1,1,1-Trichloroethane	110	U
56-23-5	Carbon Tetrachloride	110	U
108-05-4	Vinyl Acetate	120	U
75-27-4	Bromodichloromethane	110	U
78-87-5	1,2-Dichloropropane	13	J
10061-01-5	cis-1,3-Dichloropropene	110	U
79-01-6	Trichloroethene	119	
124-48-1	Dibromochloromethane	110	U
79-00-5	1,1,2-Trichloroethane	110	U
71-43-2	Benzene	18	J
10061-02-6	trans-1,3-Dichloropropene	110	U
75-25-2	Bromoform	110	U
108-10-1	4-Methyl-2-Pentanone	144	
591-78-6	2-Hexanone	120	U
127-18-4	Tetrachloroethene	12	J
79-34-5	1,1,2,2-Tetrachloroethane	110	U
108-88-3	Toluene	114	
108-90-7	Chlorobenzene	110	U
100-41-4	Ethylbenzene	110	U
100-42-5	Styrene	110	U
1330-20-7	Xylene (total)	13	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5579

Lab Name: STL CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5579V2

Sample wt/vol: 8.5 (g/mL) ml Lab File ID: >D2612

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/14/91

Column: (pack/cap) PACK Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	370	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

A5579

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5579U2

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: >02612

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. Date Analyzed: 01/14/91

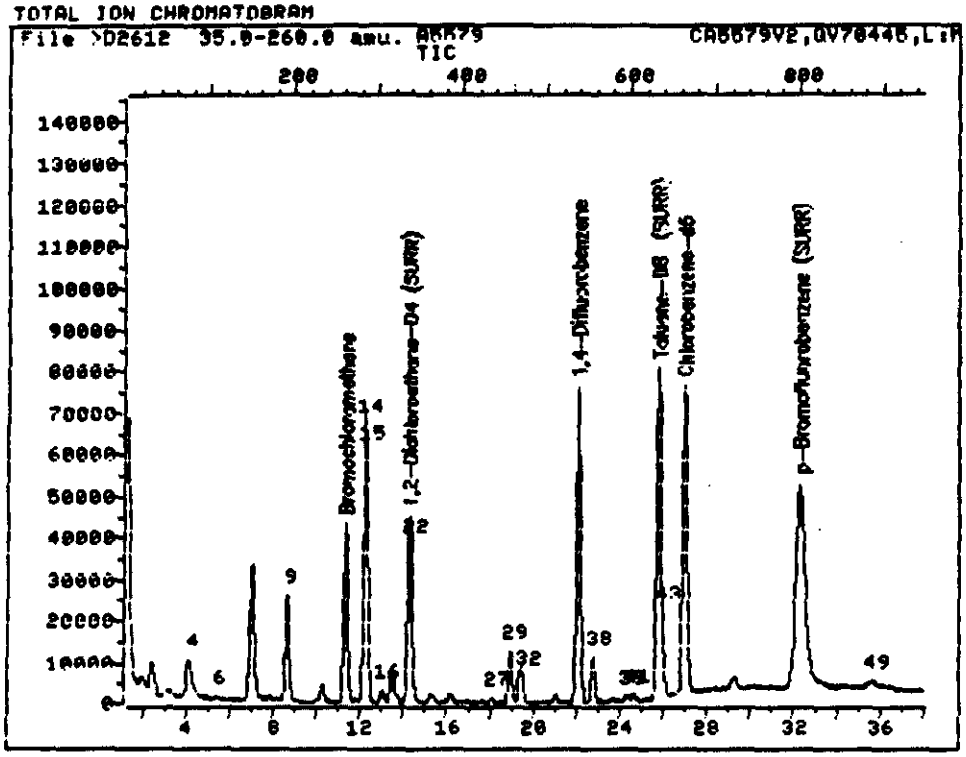
Column: (pack/cap) PACK Dilution Factor: 2.0

Number TICs found: 5

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	75-43-4	Methane, dichlorofluoro-	7.05	90	J
02.	75-71-8	Methane, dichlorodifluoro-	4.15	29	J
03.	75-45-6	Methane, chlorodifluoro-	2.44	25	J
04.	60-29-7	Ethyl ether (8CI)	13.53	22	J
05.		Unknown	10.31	10	J

TOTAL ION CHROMATOGRAM



Data File: >D2612::U1 Quant Output File: ^D2612::AQ
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,

Id File: IDU310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910114 11:09

Operator ID: KB6656
Quant Time: 910114 17:34
Injected at: 910114 16:55

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 17:34
Output File: ^D2612::AQ Injected at: 910114 16:55
Data File: >D2612::U1 Dilution Factor: 1.00000
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,

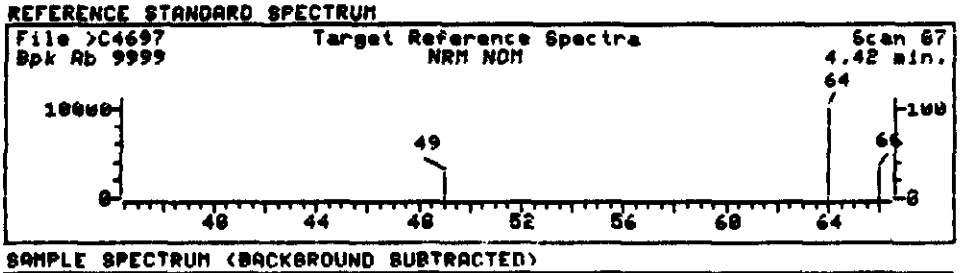
ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910114 11:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.36	260	77870	250.00	NG	93
4)	Dichlorodifluoromethane	4.15	74	88241	~~266.28~~	~~NG~~	99
6)	Chloroethane	5.39	106	5304	30.65	NG	84
9)	Acetone	8.64	190	199406	963.88	NG	90
14)	1,1-Dichloroethane	12.25	283	315293	433.97	NG	98
15)	Tetrahydrofuran	12.33	285	57025	912.74	NG	100
16)	1,2-Trans-dichloroethylene	13.07	304	7746	21.18	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	14.31	336	185459	255.43	NG	94
21)	*1,4-Difluorobenzene	22.10	537	343684	250.00	NG	99
22)	Methyl ethyl ketone	14.38	338	23524	517.20	NG	96
27)	1,2-Dichloropropene	18.14	435	2770	6.40	NG	86
29)	Trichloroethylene	18.96	456	27287	48.44	NG	91
32)	Benzene	19.54	471	23498	19.03	NG	90
37)	*Chlorobenzene-d5	27.00	663	296171	250.00	NG	78
38)	Methyl-iso-butyl ketone	22.80	555	47721	109.83	NG	99
39)	2-Hexanone	24.35	595	10685	~~21.58~~	~~NG~~	93
41)	Tetrachloroethylene	24.66	603	2599	4.58	NG	95
42)	Toluene-D8 (SURR)	25.82	633	358708	245.50	NG	94
43)	Toluene	25.98	637	28246	34.26	NG	96
46)	p-Bromofluorobenzene (SURR)	32.32	800	224748	244.82	NG	83
49)	o+p-Xylenes	35.69	887	5262	8.62	NG	84

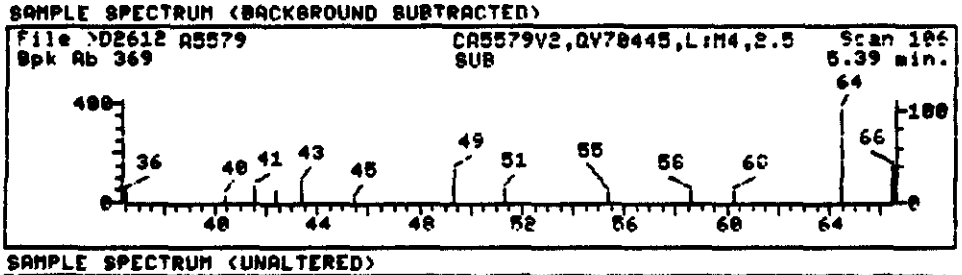
* Compound is ISTD

PP 1/22/91

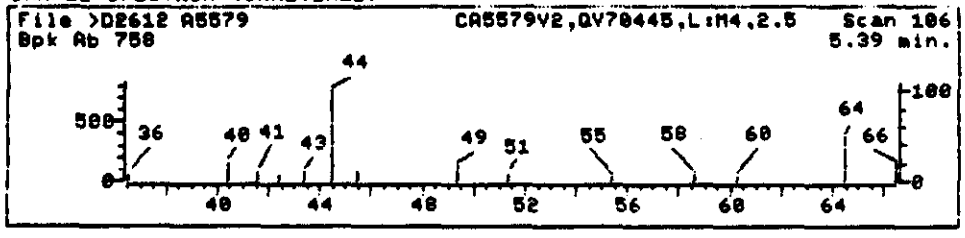
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



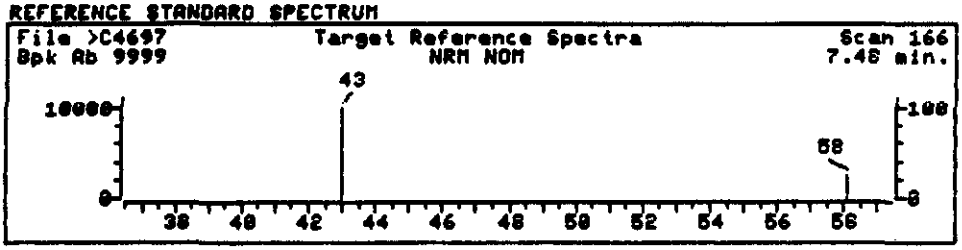
SAMPLE SPECTRUM (UNALTERED)



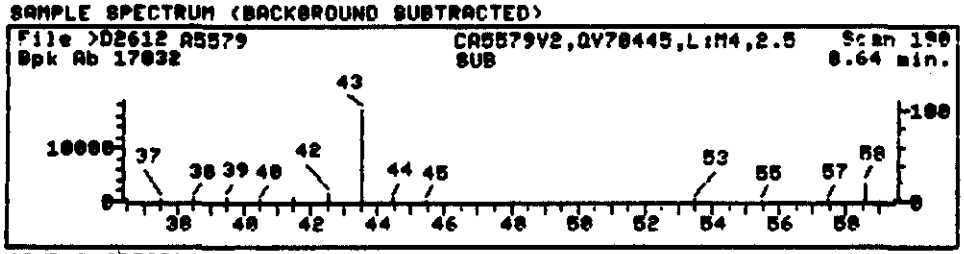
Data File: >D2612::U1 Quant Output File: ^D2612::AW
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: IDU31U::S5
Injected at: 910114 16:55 Last Calibration: 91U114 11:09

Compound No: 6
Compound Name: Chloroethane
Scan Number: 1U6
Retention Time: 5.39 min.
Quant Ion: 64.0
Area: 5304
Concentration: 3U.65 NG
Q-Value: 84

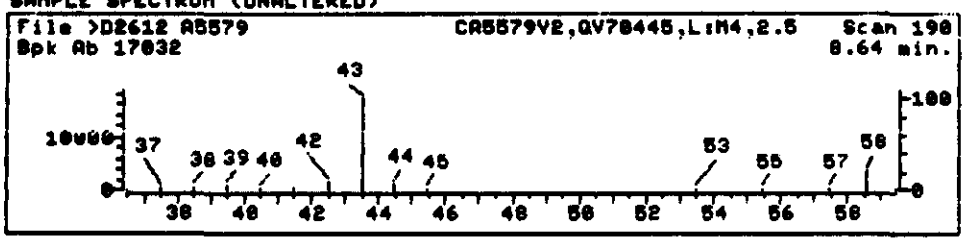
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



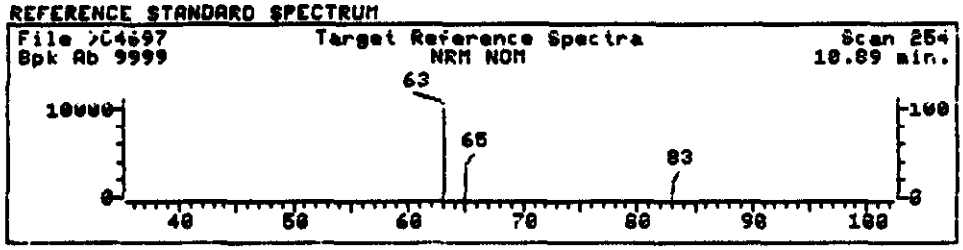
SAMPLE SPECTRUM (UNALTERED)



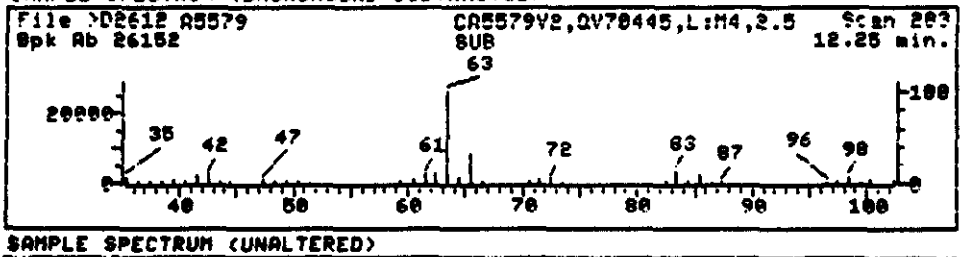
Data File: >D2612::U1 Quant Output File: ^D2612::AU
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 9
Compound Name: Acetone
Scan Number: 190
Retention Time: 8.64 min.
Quant Ion: 43.0
Area: 199406
Concentration: 963.88 NG
q-value: 90

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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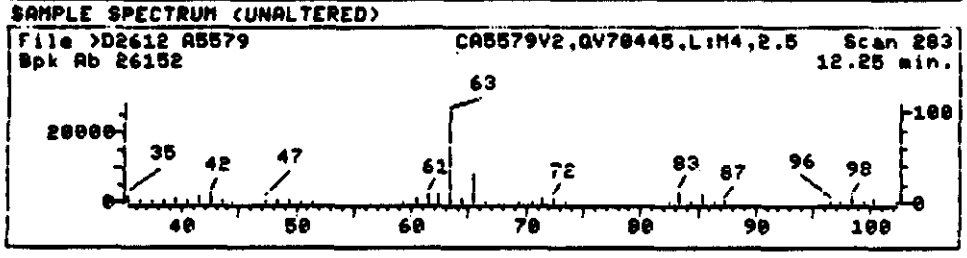
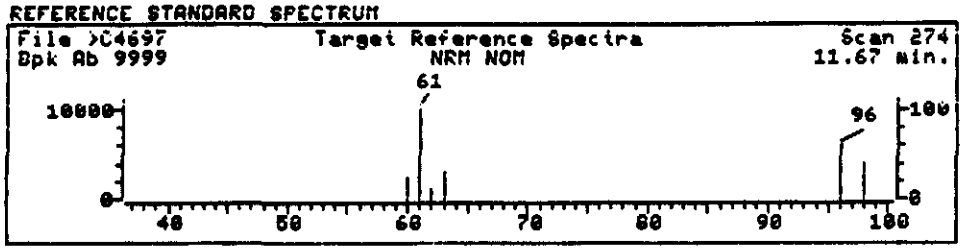


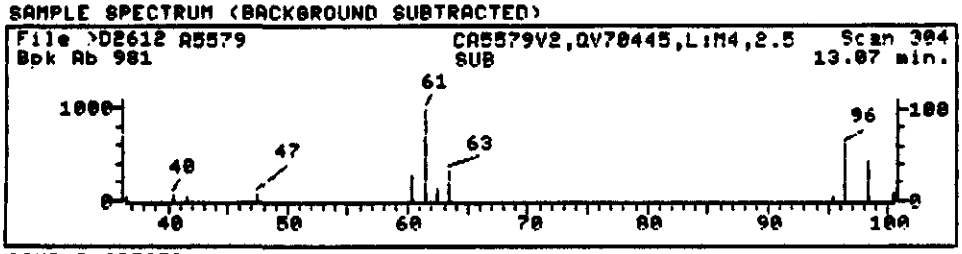
Data File: >D2612::U1 Quant Output File: ^D2612::AU
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID031U::S5
Injected at: 91U114 16:55 Last Calibration: 91U114 11:U9

Compound No: 14
Compound Name: 1,1-Dichloroethene
Scan Number: 283
Retention Time: 12.25 min.
Quant Ion: 63.0
Area: 315293
Concentration: 433.97 NG
Q-value: 98

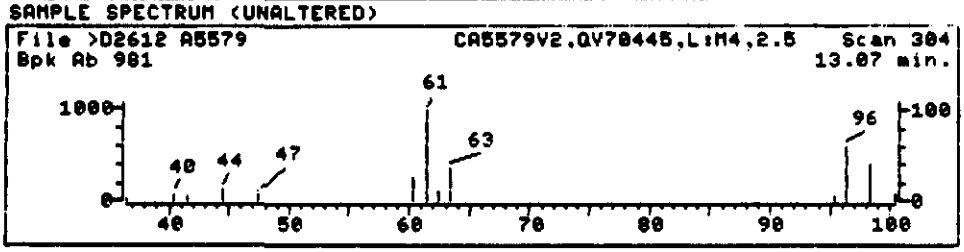
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



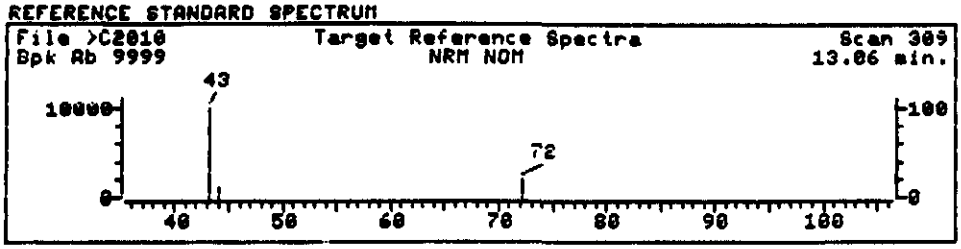
SAMPLE SPECTRUM (UNALTERED)



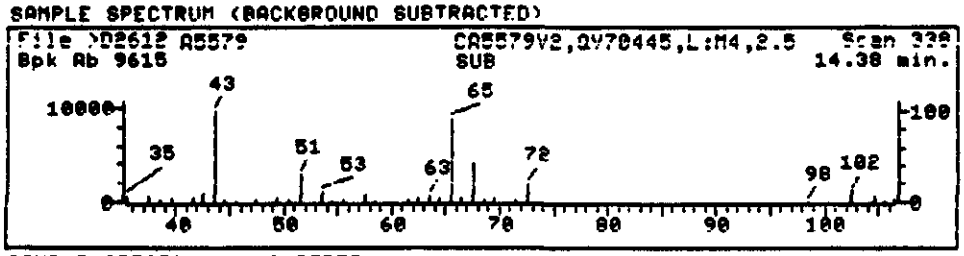
Data File: >D2612::U1 Quant Output File: ^D2612::AQ
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::S5
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 304
Retention Time: 13.07 min.
Quant Ion: 96.0
Area: 7746
Concentration: 21.18 NG
Q-Value: 98

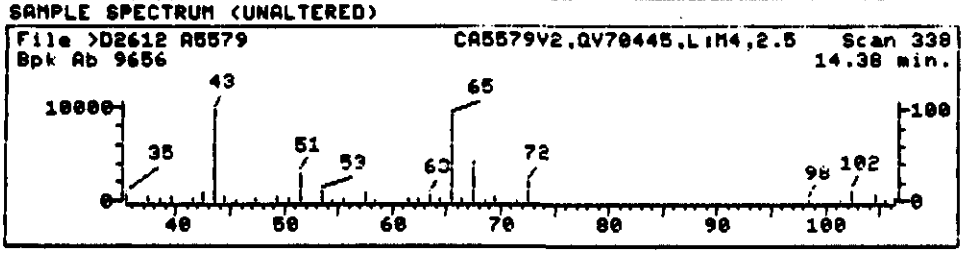
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



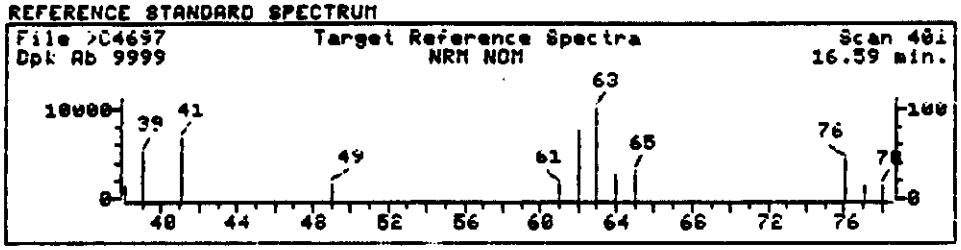
SAMPLE SPECTRUM (UNALTERED)



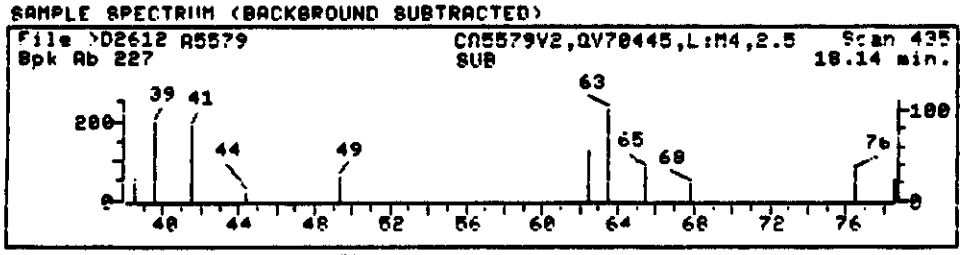
Data File: >D2612::U1 Quant Output File: ^D2612::AW
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 22
Compound Name: Methyl ethyl ketone
Scan Number: 338
Retention Time: 14.38 min.
Quant Ion: 72.0
Area: 23524
Concentration: 517.20 NG
q-value: 96

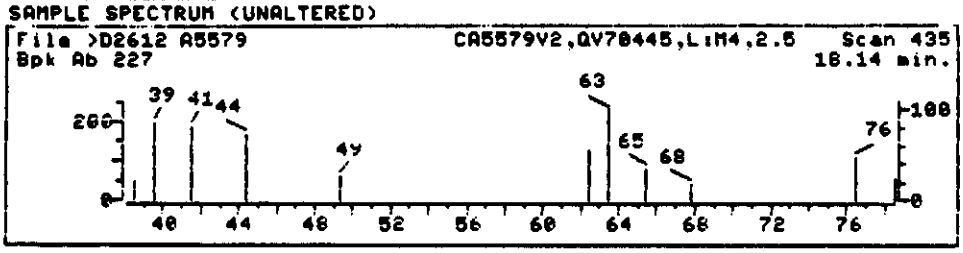
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



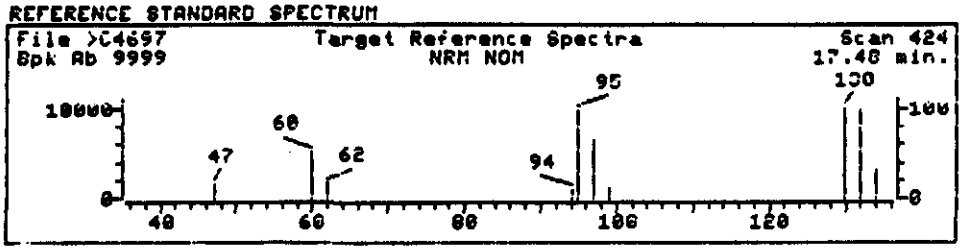
SAMPLE SPECTRUM (UNALTERED)



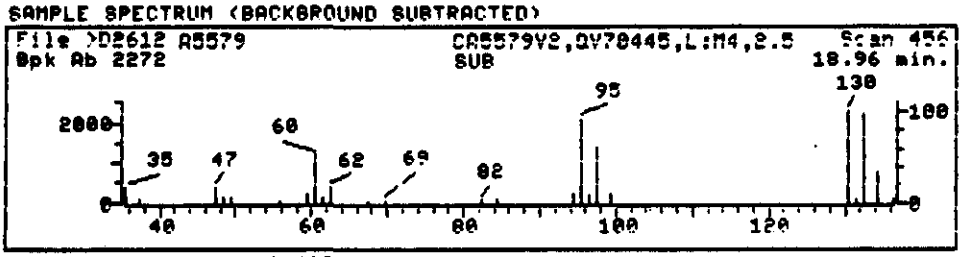
Data File: >D2612::U1 Quant Output File: ^D2612::AQ
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::S5
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 27
Compound Name: 1,2-Dichloropropane
Scan Number: 435
Retention Time: 18.14 min.
Quant Ion: 63.0
Area: 2770
Concentration: 6.40 ng
Q-Value: 86

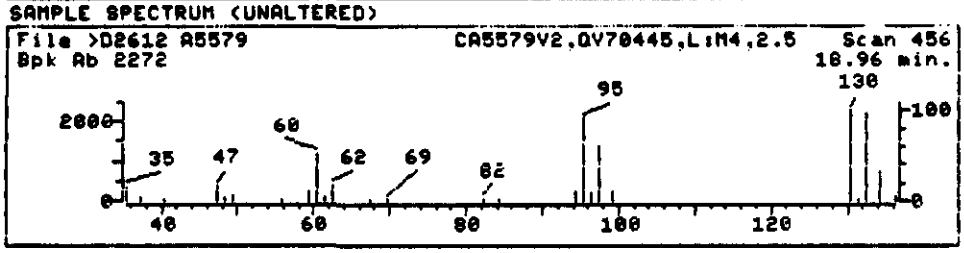
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



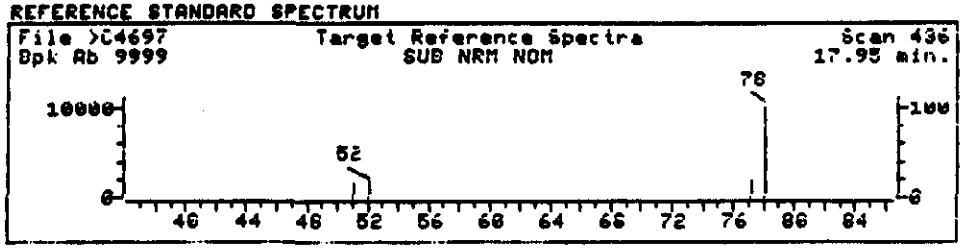
SAMPLE SPECTRUM (UNALTERED)



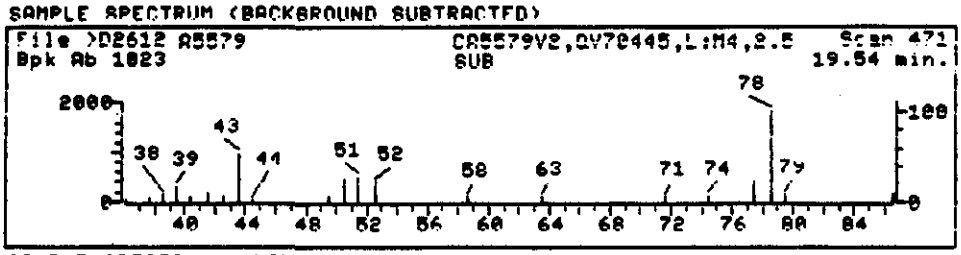
Data File: >D2612::U1 Quant Output File: ^D2612::AW
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 456
Retention Time: 18.96 min.
Quant Ion: 130.0
Area: 27287
Concentration: 48.44 NG
q-value: 91

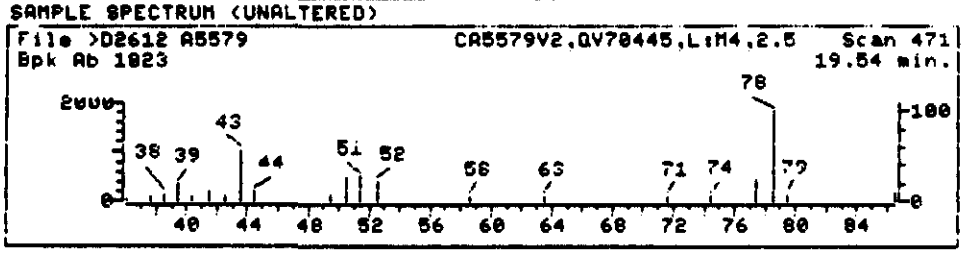
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



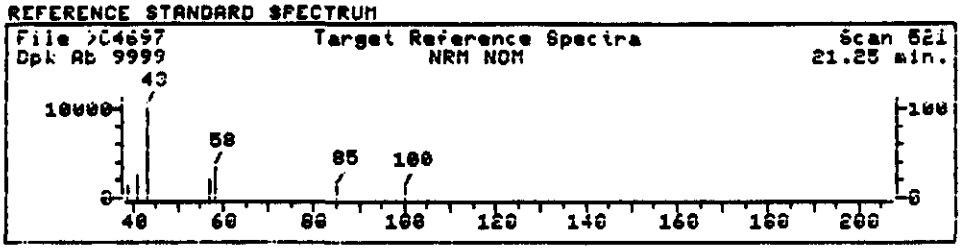
SAMPLE SPECTRUM (UNALTERED)



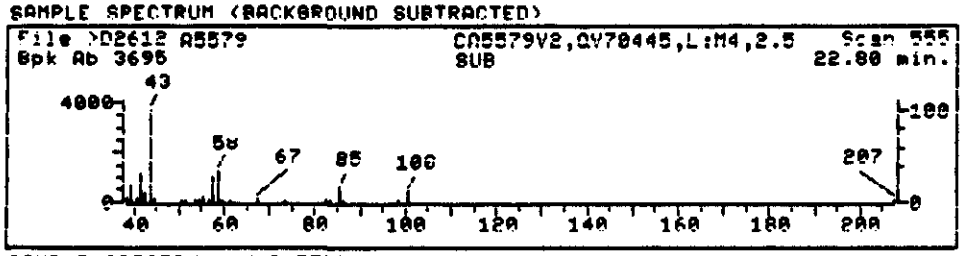
Data File: >D2612::U1 Quant Output File: >D2612::AU
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: IDU310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 32
Compound Name: Benzene
Scan Number: 471
Retention Time: 19.54 min.
Quant Ion: 78.0
Area: 23498
Concentration: 19.03 NG
Q-value: 90

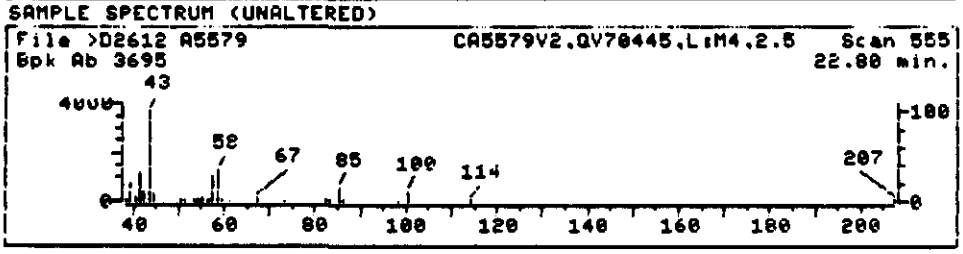
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



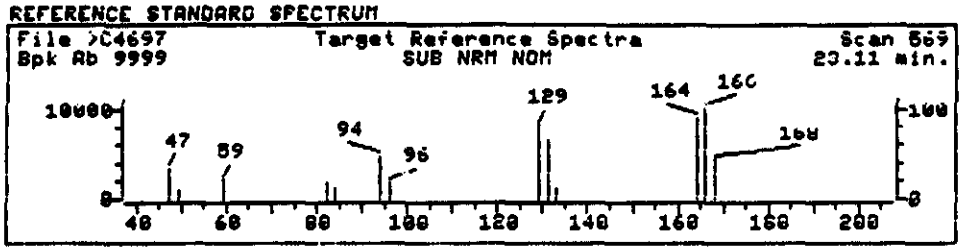
SAMPLE SPECTRUM (UNALTERED)



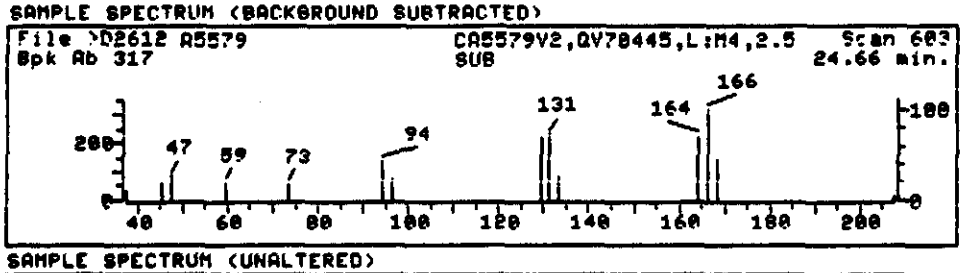
Data File: >D2612::U1 Quant Output File: ^D2612::AU
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 38
Compound Name: Methyl-iso-butyl ketone
Scan Number: 555
Retention Time: 22.80 min.
Quant Ion: 43.0
Area: 47721
Concentration: 109.83 NG
Q-value: 95

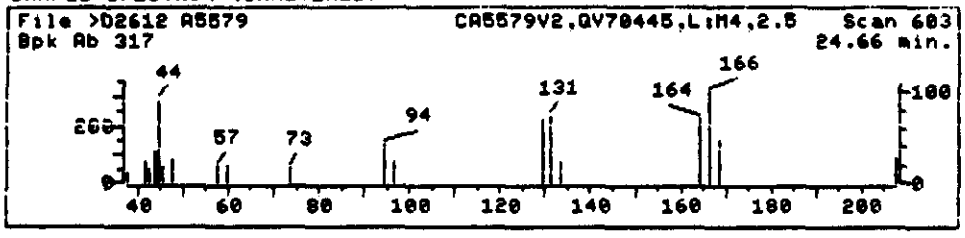
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



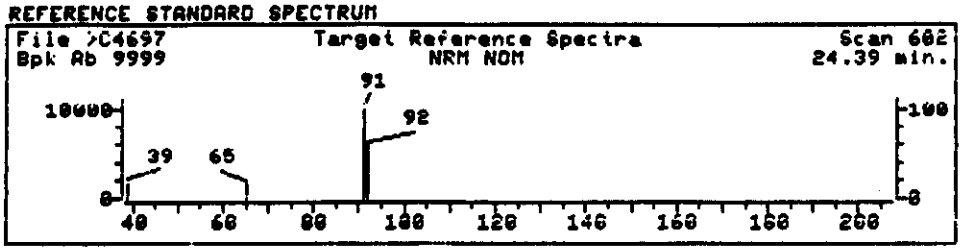
SAMPLE SPECTRUM (UNALTERED)



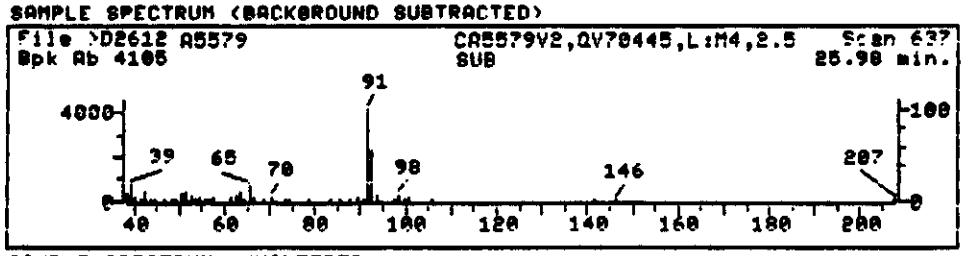
Data File: >D2612::U1 Quant Output File: ^D2612::AQ
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 41
Compound Name: Tetrachloroethylene
Scan Number: 603
Retention Time: 24.66 min.
Quant Ion: 164.0
Area: 2599
Concentration: 4.58 NG
Q-Value: 95

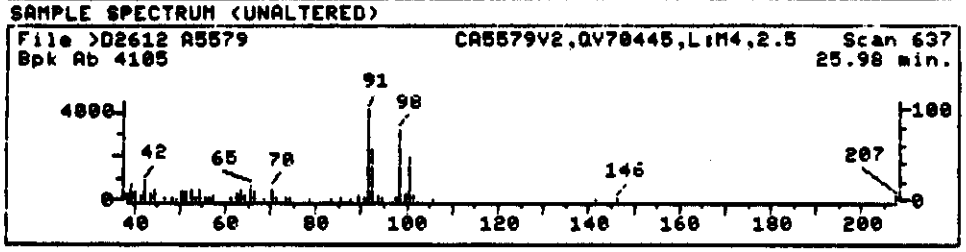
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2612::U1 Quant Output File: ^D2612::AQ
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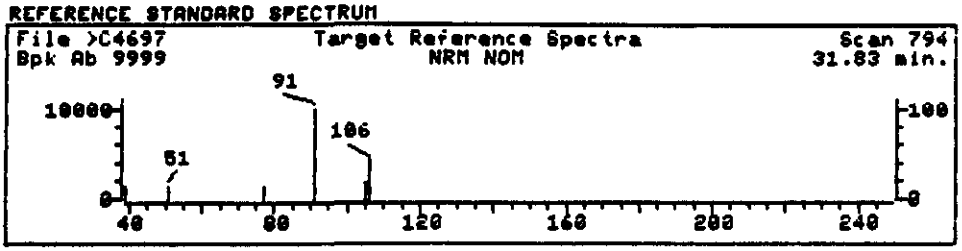
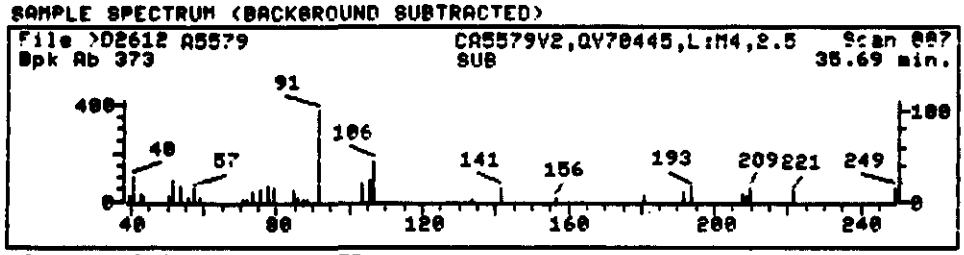
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 43
Compound Name: Toluene
Scan Number: 637
Retention Time: 25.98 min.
Quant Ion: 92.0
Area: 28246
Concentration: 34.26 NG
q-value: 96

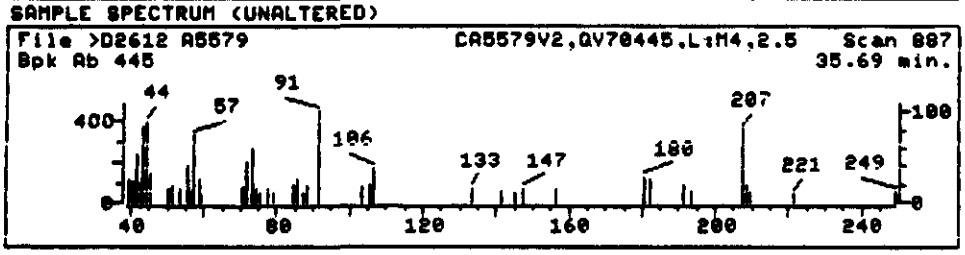
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



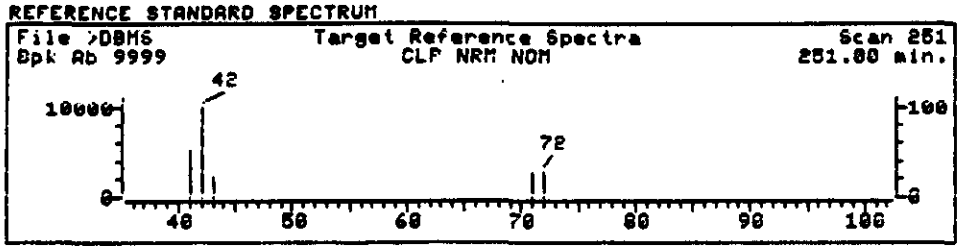
SAMPLE SPECTRUM (UNALTERED)



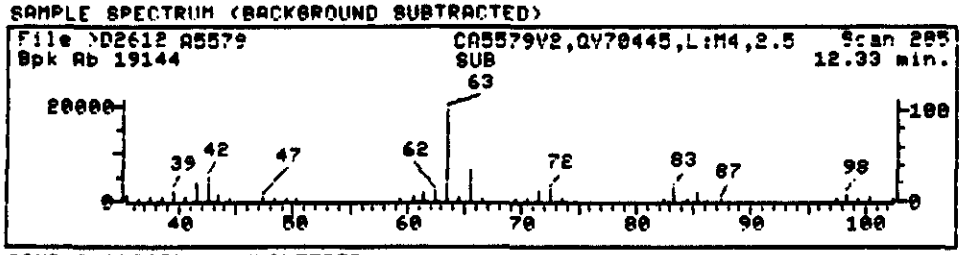
Data File: >D2612::U1 Quant Output File: ^D2612::AQ
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 49
Compound Name: o+p-Xylenes
Scan Number: 887
Retention Time: 35.69 min.
Quant Ion: 106.0
Area: 5262
Concentration: 8.62 NG
q-value: 89

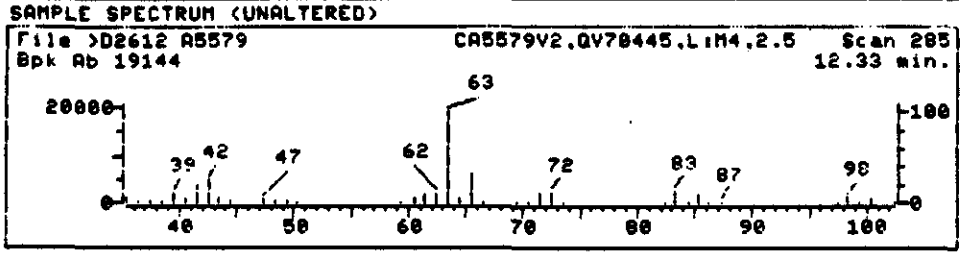
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

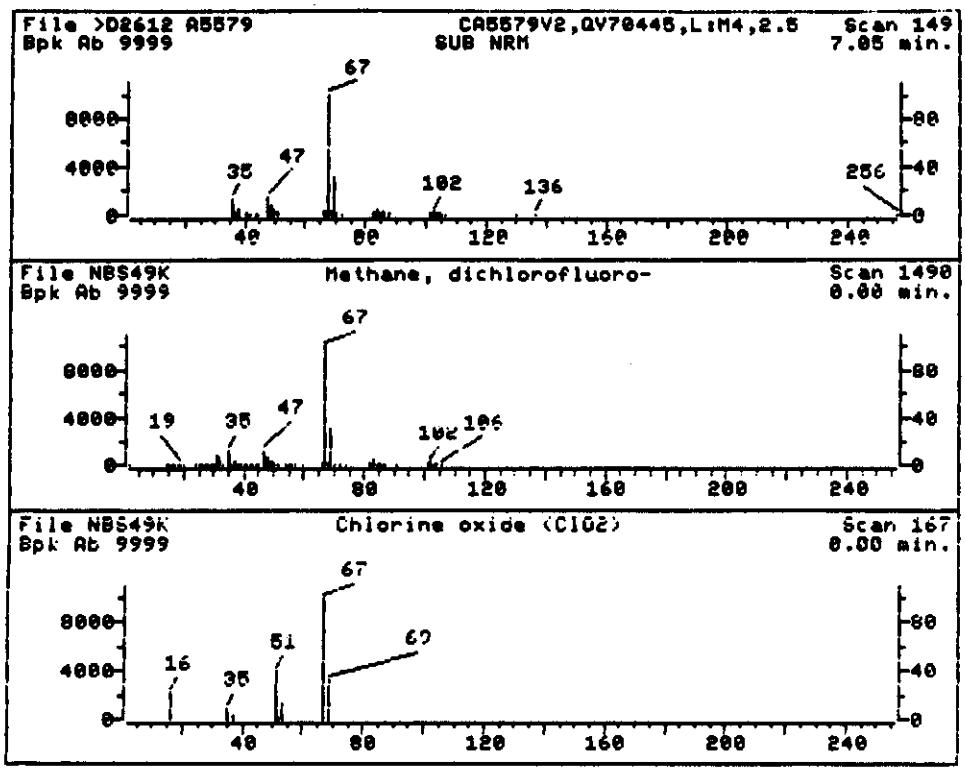


SAMPLE SPECTRUM (UNALTERED)



Data File: >D2612::U1 Quant Output File: ^D2612::AQ
Name: A5579
Misc: CA5579V2,QV70445,L:M4,2.5,,
Quant Time: 910114 17:34 Quant ID File: ID0310::SS
Injected at: 910114 16:55 Last Calibration: 910114 11:09

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 285
Retention Time: 12.33 min.
Quant Ion: 42.0
Area: 57025
Concentration: 912.74 NG
Q- alue: 100

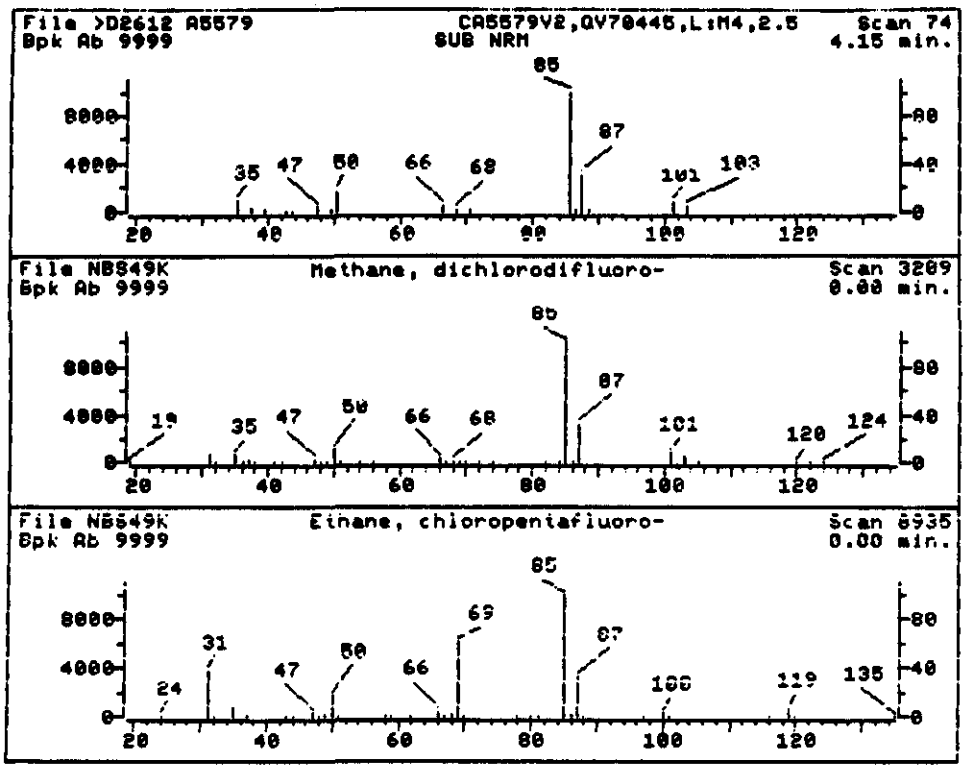


Data File: >D2612::U1
Name: A5579
Misc Data: CA5579V2,QV70445,L:M4,2.5,,
RT (min): 7.05
Scan: 149
Area: 471031 Rank: 5
Semi-quantitative Conc (uncorrected): 225.74 NG
Semi-quantitative Conc (corrected): 90.30 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

1. Methane, dichlorofluoro- 102 CHCl2F
2. Chlorine oxide (ClO2) 67 ClO2

Sample file: >D2612 Spectrum #: 149
Search speed: 2 Tilting option: S No. of ion ranges searched: --

	Prob.	CAS #	CON #	ROOT	K	DK	#PEG	#EL	%	CON	C_1	P_1
1.	96*	75434	3473	NBS49K	94	0	0	2	76	2	72	94
2.	43*	10049044	3443	NBS49K	29	28	3	0	100	24	17	1-

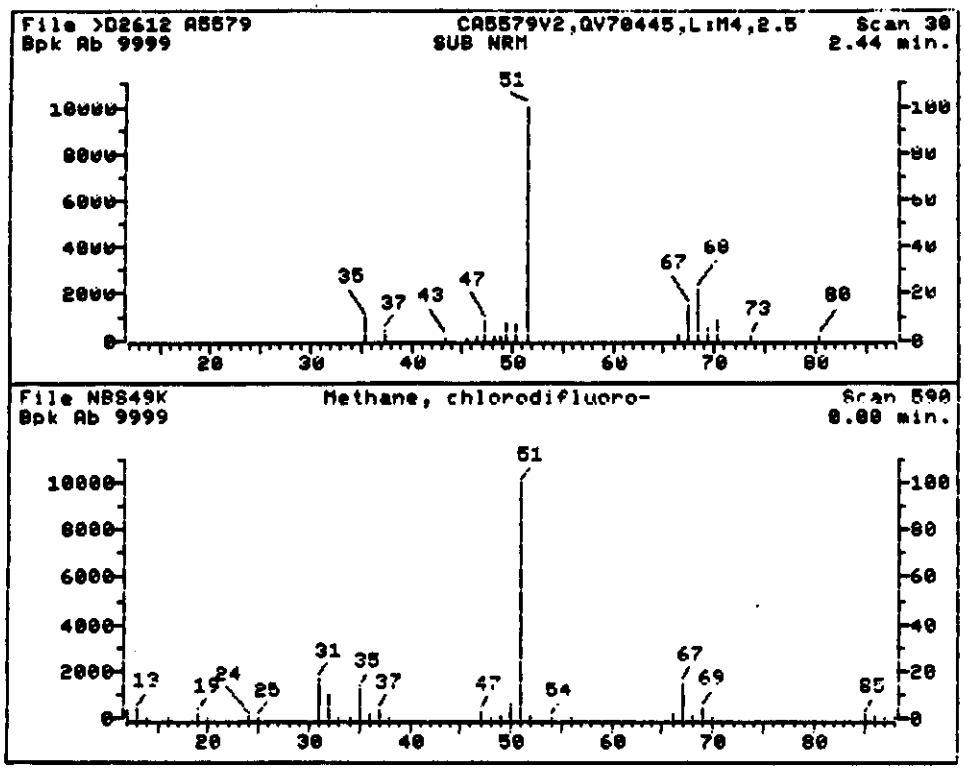


Data File: >D2612::U1
Name: A5579
Misc Data: CA5579V2,QV70445,L:M4,2.5,,
RT (min): 4.15
Scan: 74
Area: 151065 Rank: 2
Semi-quantitative Conc (uncorrected): 72.40 NG
Semi-quantitative Conc (corrected): 28.96 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

1. Methane, dichlorodifluoro- 120 CCl2F2
2. Ethane, chloropentafluoro- 154 C2ClF5

Sample file: >D2612 Spectrum #: 74
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 44

	Prob.	CAS #	CON #	REJT	K	UK	#-LG	#LI	%	CON	L_I	R_I
1.	85	75718	6623	NB549K	62	23	1	0	67	0	5	28
2.	70	76153	6663	NB549K	55	39	3	0	100	6	42	12

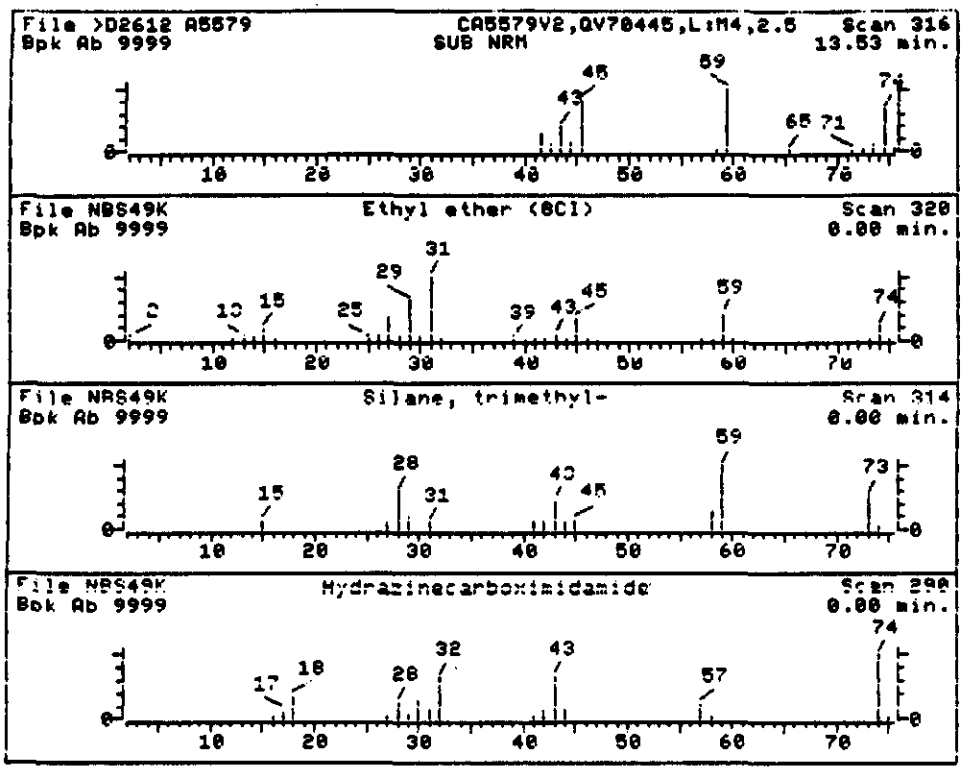


Data File: >D2612::U1
Name: A5579
Misc Data: CA5579U2,QU70445,L:M4,2.5,,
RT (min): 2.44
Scan: 30
Area: 130698 Rank: 10
Semi-quantitative Conc (uncorrected): 62.64 NG
Semi-quantitative Conc (corrected): 25.05 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

1. Methane, chlorodifluoro- 86 CHClF2

Sample file: >D2612 Spectrum #: 30
Search speed: 2 Tilting option: S No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROUT	K	Dk	#rG	rLT	%	CON	L_I	F_IV
1.	43	75456	475	NBS49K	47	44	2	0	74	25	17	1-

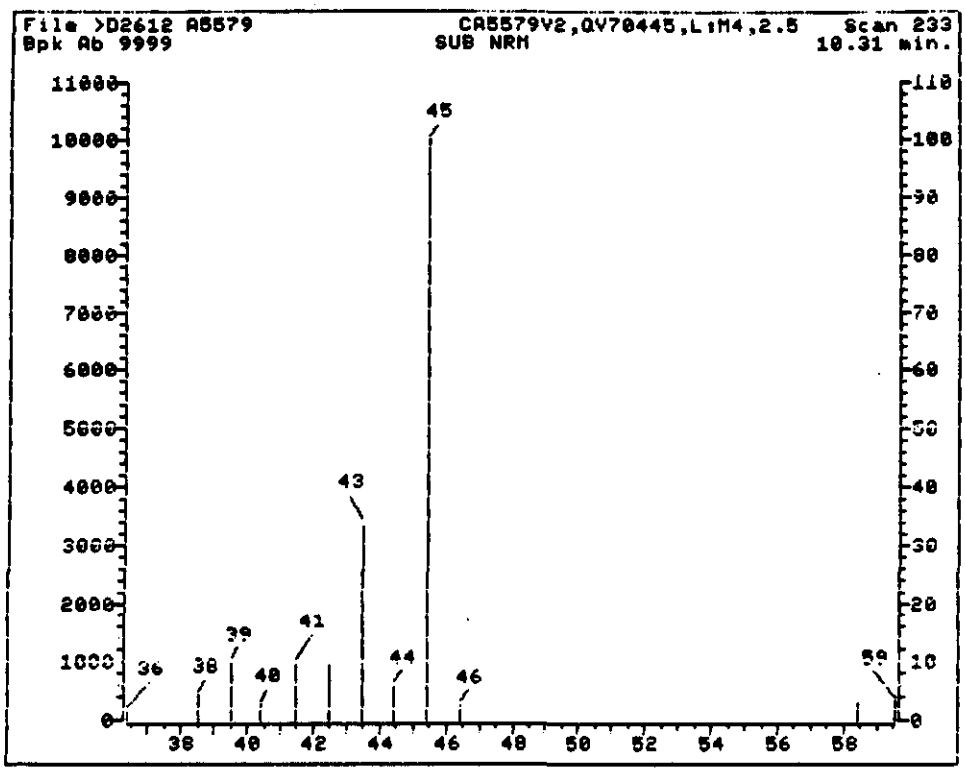


Data File: >D2612::U1
Name: A5579
Misc Data: CA5579V2,QV70445,L:M4,2.5,,
RT (min): 13.53
Scan: 316
Area: 11578 Rank: 12
Semi-quantitative Conc (uncorrected): 55.49 NG
Semi-quantitative Conc (corrected): 22.19 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

1. Ethyl ether (8CI) C4 C4H10O
2. Silane, trimethyl- C3 C3H10Si
3. Hydrazinecarboximidamide C1 CH6N4

Sample File: D2612 Spectrum #: 316
Search Speed: 2 Fitting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	LIB #	NAME	M	DI	#PEA	FIT	%	CON	C_I	R_I
1.	44*	60297	1718	NBS49K	32	61	2	U	248	22	1	1
2.	24*	99307	1713	NBS49K	21	62	2	U	86	41	0	1
3.	11*	7917 4	4844	NBS49K	30	51	2	U	61	62	2	1



Data File: >D2612::U1
Name: A5579
Misc Data: CA5579V2,QV70445,L:M4,2.5,,
RT (min): 10.31
Scan: 233
Area: 52900 Rank: 13
Semi-quantitative Conc (uncorrected): 25.35 NG
Semi-quantitative Conc (corrected): 10.14 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

No PBM hits for this scan.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5580

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5580V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2133

Level: (low/med) LOW Date Received: 01/ 5 /91

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1

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	25	
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	39	
540-59-0	1,2-Dichlorethene (total)	8	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	16	
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethene	5	U
78-87-5	1,2-Dichloropropane	2	J
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	120	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	4	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	70	
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	3	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5580

Lab Name: ETC CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5580

Sample wt/vol: 5 (g/ML) ML Lab File ID: >C2138

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/11/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5580

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5580U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2133

Level: (low/med) LOW Date Received: 01/S/91

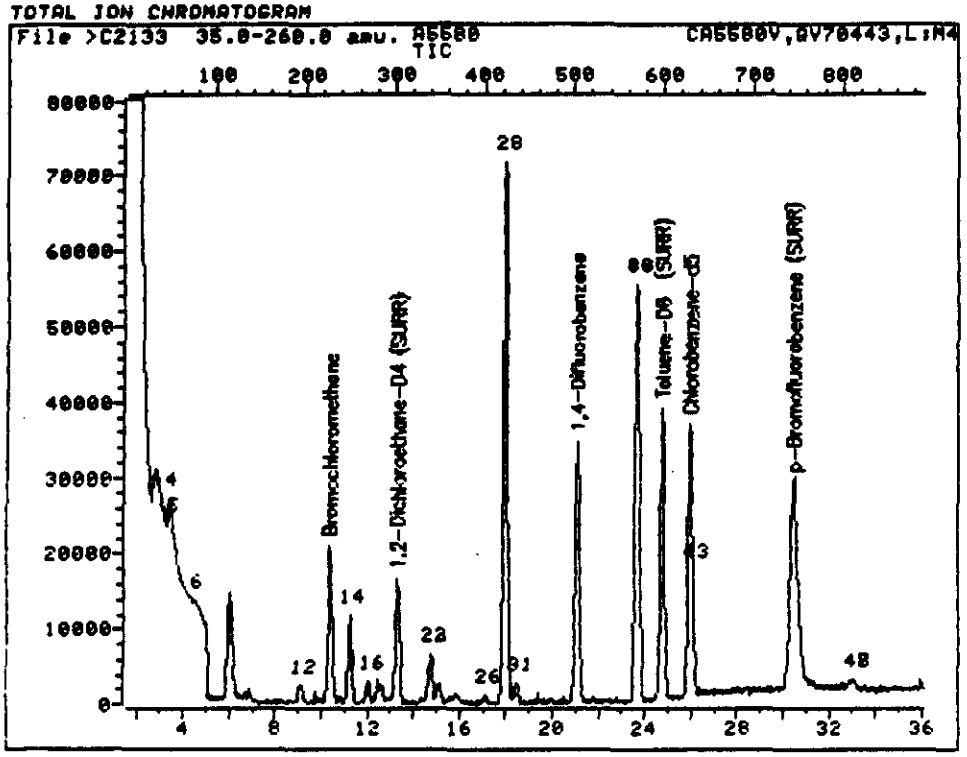
% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 75-43-4	Methane, dichlorofluoro-	6.00	37	J

TOTAL ION CHROMATOGRAM



Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

Operator ID: KB6656
Quant Time: 910111 20:55
Injected at: 910111 20:12

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910111 20:55
Output File: ^C2133::AQ Injected at: 910111 20:12
Data File: >C2133::U1 Dilution Factor: 1.00000
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,

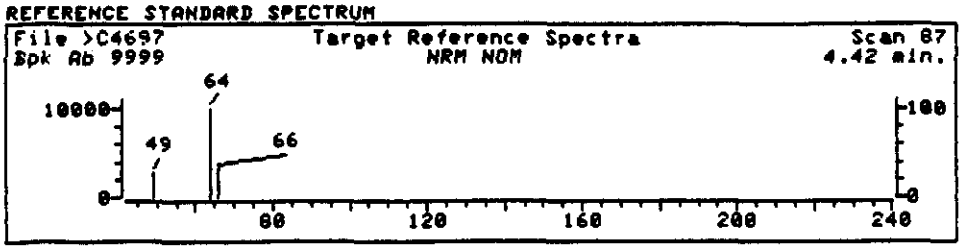
ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.38	227	39538	250.00	NG	97
4)	Dichlorodifluoromethane	3.44	48	46791	~~481.47~~	~~NG~~	97
5)	Vinyl chloride	3.56	51	4998	~~47.99~~	~~NG~~	94
6)	Chloroethane	4.57	77	4394	123.01	NG	90
12)	Trichlorofluoromethane	9.10	194	14932	35.36	NG	94
14)	1,1-Dichloroethane	11.23	249	70263	194.43	NG	96
16)	1,2-Trans-dichloroethylene	12.04	270	8013	40.68	NG	92
18)	1,2-Dichloroethane-D4 (SURR)	13.32	303	75283	242.34	NG	87
20)	*1,4-Difluorobenzene	21.07	503	176663	250.00	NG	93
22)	1,1,1-Trichloroethane	14.76	340	25477	80.98	NG	99
24)	Carbon tetrachloride	14.76	340	3923	~~12.36~~	~~NG~~	96
28)	1,2-Dichloropropane	17.16	402	2705	10.80	NG	99
30)	Trichloroethylene	17.97	423	160522	598.96	NG	91
31)	Benzene	18.48	436	14161	22.45	NG	94
36)	*Chlorobenzene-d5	25.95	629	136324	250.00	NG	88
39)	1,1,2,2-Tetrachloroethane	23.67	570	2041	~~6.89~~	~~NG~~	55
40)	Tetrachloroethylene	23.67	570	94722	350.37	NG	99
41)	Toluene-D8 (SURR)	24.75	598	177973	253.76	NG	91
47)	Chlorobenzene	26.09	632	3030	~~5.78~~	~~NG~~	89
45)	p-Bromofluorobenzene (SURR)	30.43	744	101587	248.26	NG	98
48)	m-Xylene	33.02	811	3966	~~13.11~~	~~NG~~	94
49)	o+p-Xylenes	33.02	811	3966	14.18	NG	89

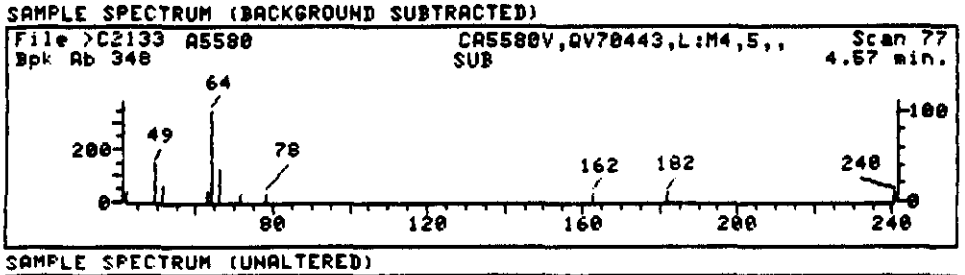
* Compound is ISTD

MP 1/25/91

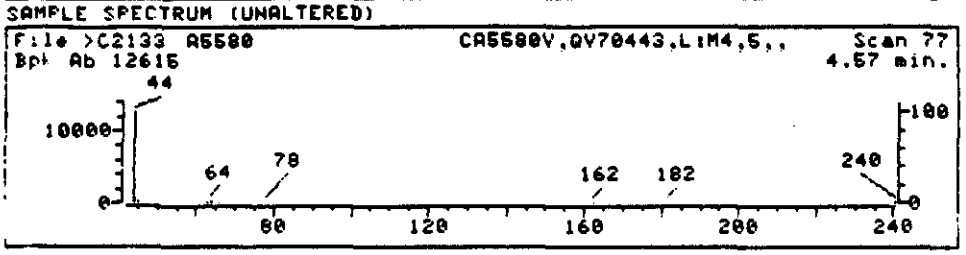
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



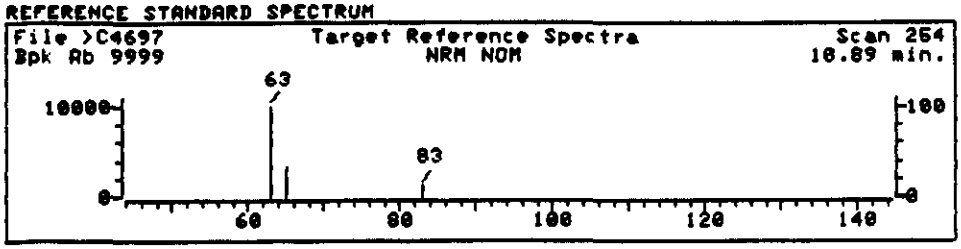
SAMPLE SPECTRUM (UNALTERED)



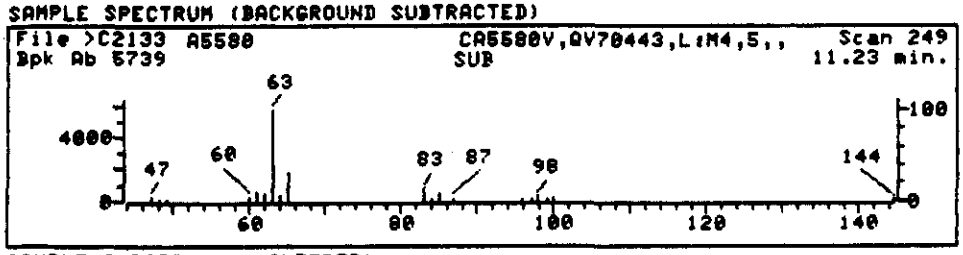
Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55 Quant ID File: IC1203::US
Injected at: 910111 20:12 Last Calibration: 910111 13:37

Compound No: 6
Compound Name: Chloroethane
Scan Number: 77
Retention Time: 4.57 min.
Quant Ion: 64.0
Area: 4394
Concentration: 123.01 NG
Q Value: 90

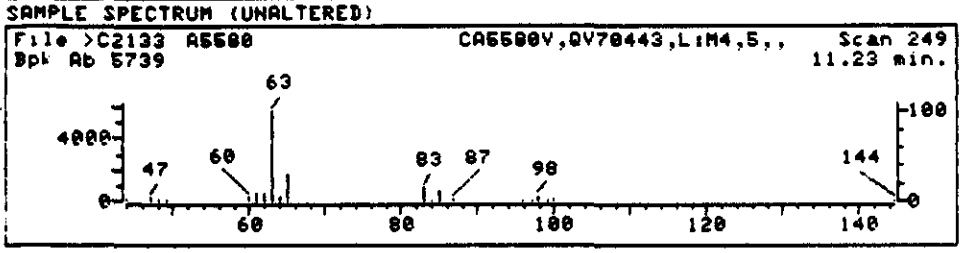
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



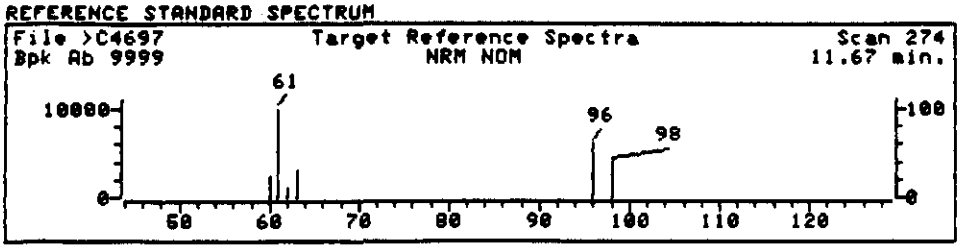
SAMPLE SPECTRUM (UNALTERED)



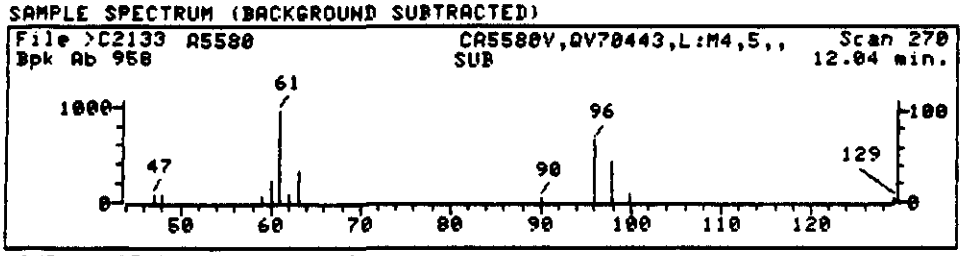
Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55 Quant ID File: IC1203::US
Injected at: 910111 20:12 Last Calibration: 910111 13:37

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 249
Retention Time: 11.23 min.
Quant Ion: 63.0
Area: 70263
Concentration: 194.43 NG
R-value: 96

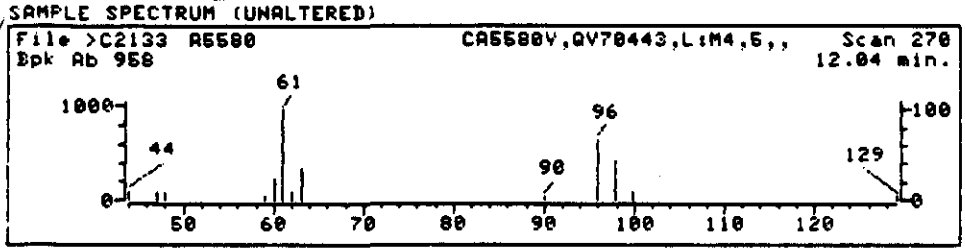
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



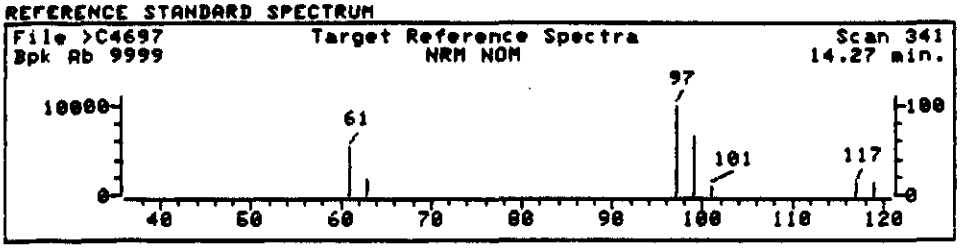
SAMPLE SPECTRUM (UNALTERED)



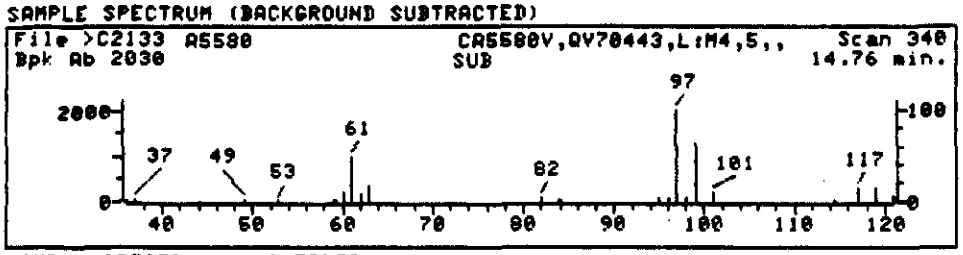
Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55 Quant ID File: IC1203::US
Injected at: 910111 20:12 Last Calibration: 910111 13:37

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 270
Retention Time: 12.04 min.
Quant Ion: 96.0
Area: 8013
Concentration: 40.68 NG
q-value: 92

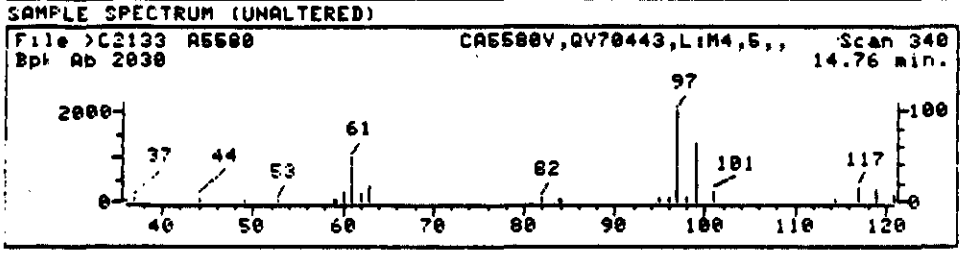
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



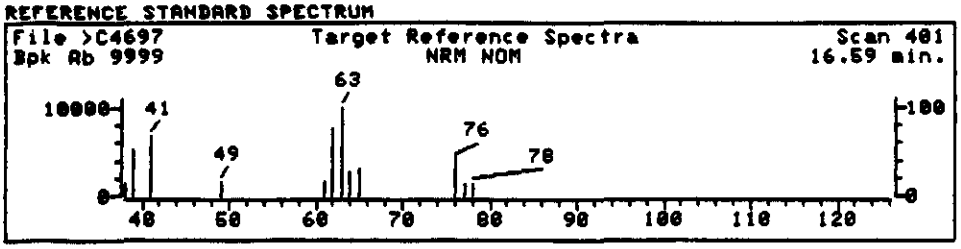
SAMPLE SPECTRUM (UNALTERED)



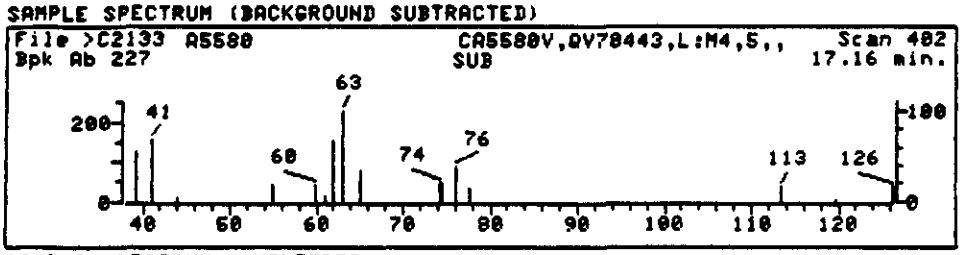
Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55 Quant ID File: IC1203::US
Injected at: 910111 20:12 Last Calibration: 910111 13:37

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 340
Retention Time: 14.76 min.
Quant Ion: 97.0
Area: 25477
Concentration: 80.98 NG
Value: 99

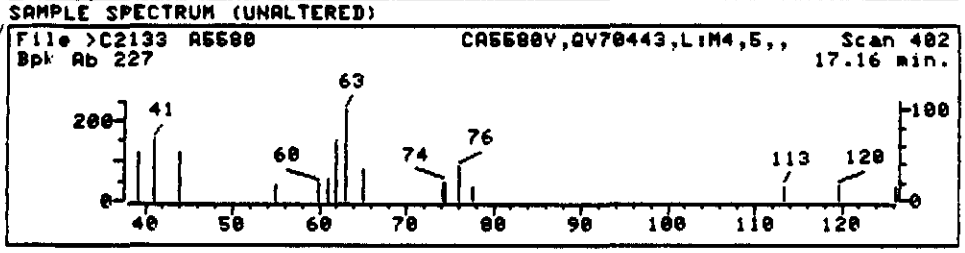
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



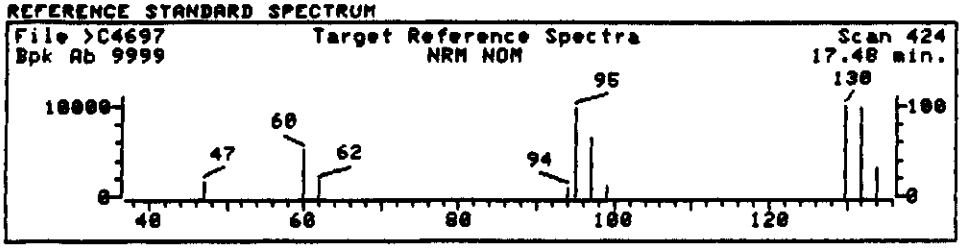
SAMPLE SPECTRUM (UNALTERED)



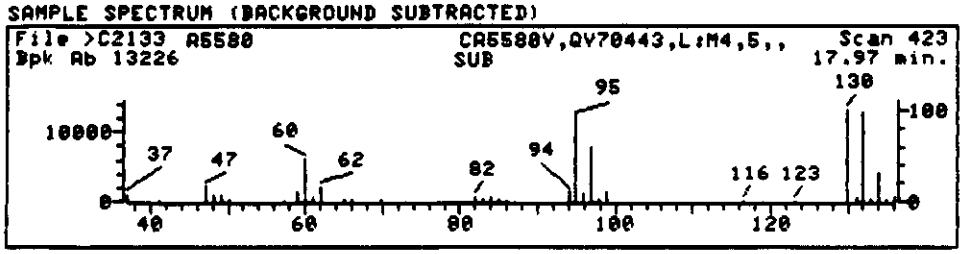
Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55 Quant ID File: IC1203::US
Injected at: 910111 20:12 Last Calibration: 910111 13:37

Compound No: 26
Compound Name: 1,2-Dichloropropane
Scan Number: 402
Retention Time: 17.16 min.
Quant Ion: 63.0
Area: 2705
Concentration: 10.80 NG
q-value: 99

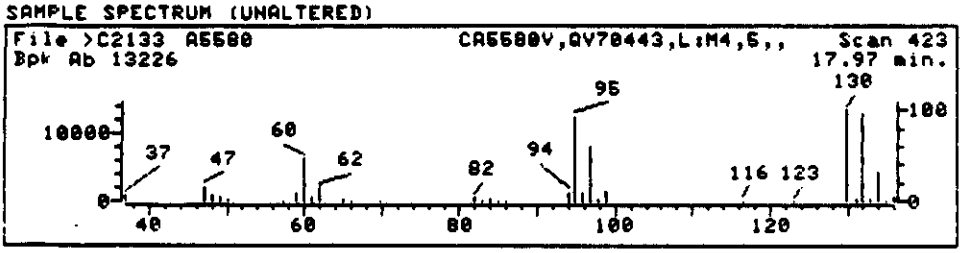
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

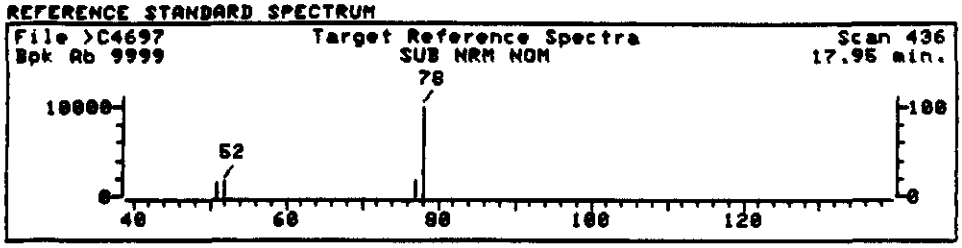


Data File: >C2133::U1
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55
Injected at: 910111 20:12

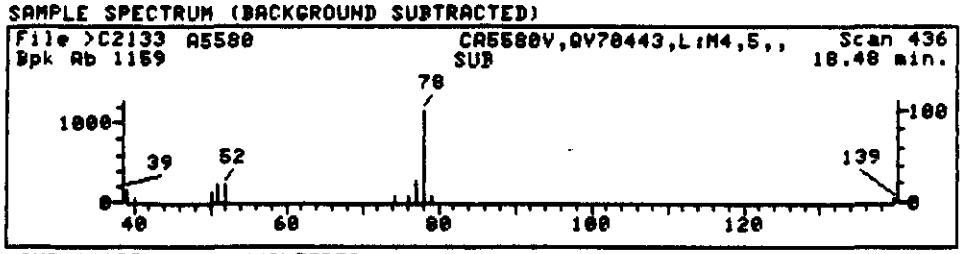
Quant Output File: ^C2133::AQ
Quant ID File: IC1203::US
Last Calibration: 910111 13:37

Compound No: 28
Compound Name: Trichloroethylene
Scan Number: 423
Retention Time: 17.97 min.
Quant Ion: 130.0
Area: 160522
Concentration: 598.96 NG
q-value: 91

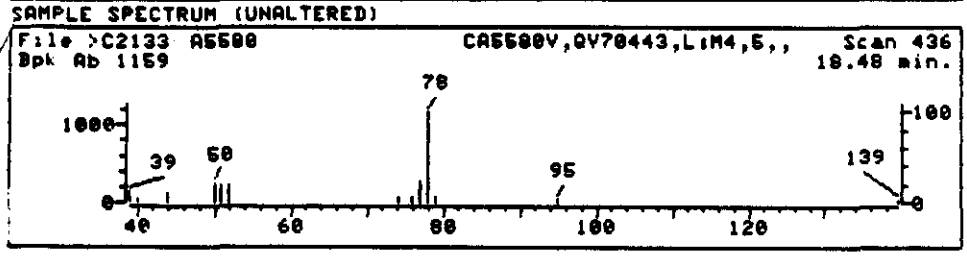
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



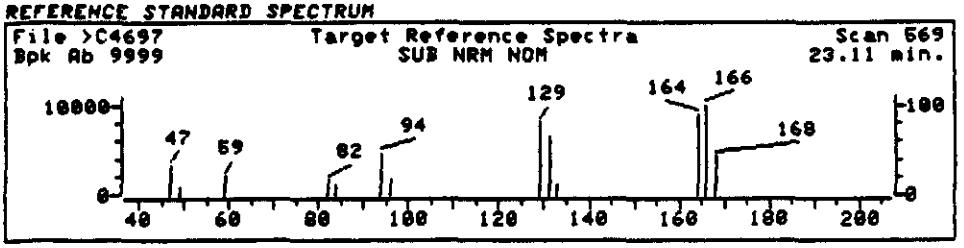
Data File: >C2133::U1
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55
Injected at: 910111 20:12

Quant Output File: ^C2133::AQ

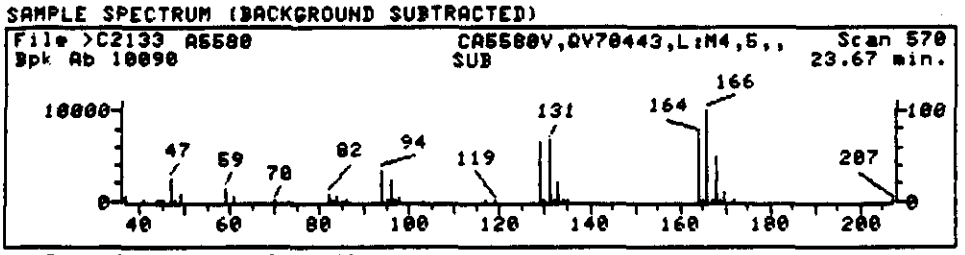
Quant ID File: IC1203::US
Last Calibration: 910111 13:37

Compound No: 31
Compound Name: Benzene
Scan Number: 436
Retention Time: 18.48 min.
Quant Ion: 78.0
Area: 14161
Concentration: 22.45 NG
Q-value: 94

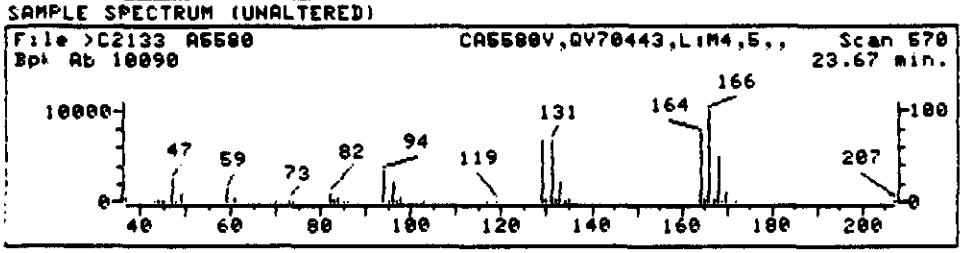
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



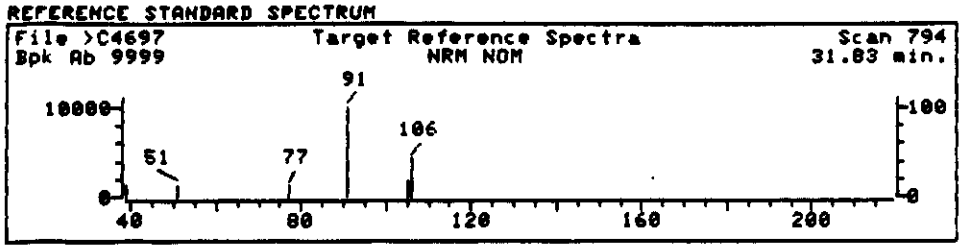
SAMPLE SPECTRUM (UNALTERED)



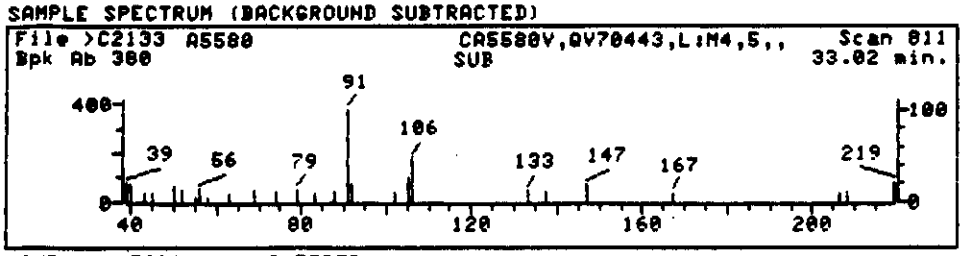
Data File: >C2133::U1 Quant Output File: ^C2133::AQ
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55 Quant ID File: IC1203::US
Injected at: 910111 20:12 Last Calibration: 910111 13:37

Compound No: 40
Compound Name: Tetrachloroethylene
Scan Number: 570
Retention Time: 23.67 min.
Quant Ion: 164.0
Area: 94722
Concentration: 350.37 NG
Q Value: 99

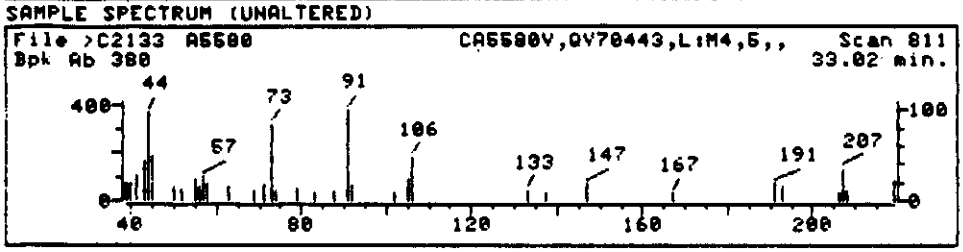
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

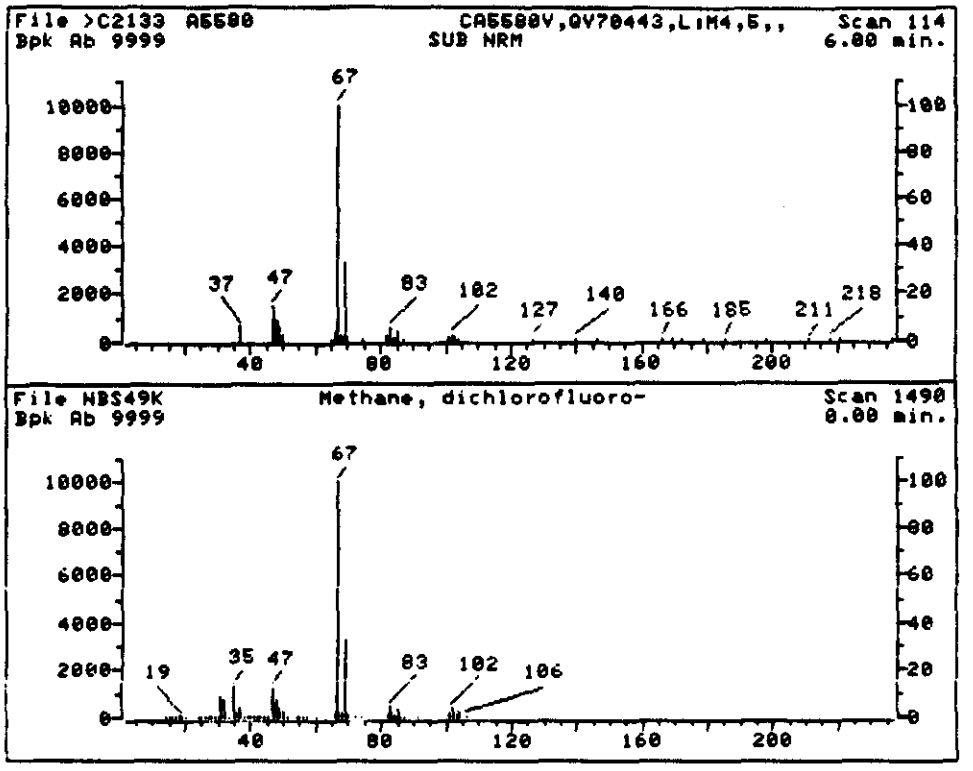


Data File: >C2133::U1
Name: A5580
Misc: CA5580V,QV70443,L:M4,5,,
Quant Time: 910111 20:55
Injected at: 910111 20:12

Quant Output File: ^C2133::AQ

Quant ID File: IC1203::US
Last Calibration: 910111 13:37

Compound No: 48
Compound Name: o+p-Xylenes
Scan Number: 811
Retention Time: 33.02 min.
Quant Ion: 106.0
Area: 3966
Concentration: 14.18 NG
q-value: 8%



Data File: >C2133::U1
Name: A5580
Misc Data: CA5580V,QV70443,L:M4,5,,
RT (min): 6.00
Scan: 114
Area: 192505 Rank: 6
Semi-quantitative Conc (uncorrected): 186.17 NG
Semi-quantitative Conc (corrected): 37.23 ug/l
Calculated using Istd: Bromochloromethane @ 10.38 minutes

1. Methane, dichlorofluoro- 102 CHCl2F

Sample file: >C2133 Spectrum #: 114
Search speed: 2 Tilting option: S No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_IV
1.	86*	75434	3473	NBS49K	79	15	1	3	88	8	59	78

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5581

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5581U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2134

Level: (low/med) LOW Date Received: 01/$ /91

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	U
67-64-1	Acetone	10	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5581

Lab Name: ETC GOEP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5581

Sample wt/vol: 5 (g/mL) mL Lab File ID: >c2154

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/11/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5581

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5581W

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2134

Level: (low/med) LOW Date Received: 01/5/91

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

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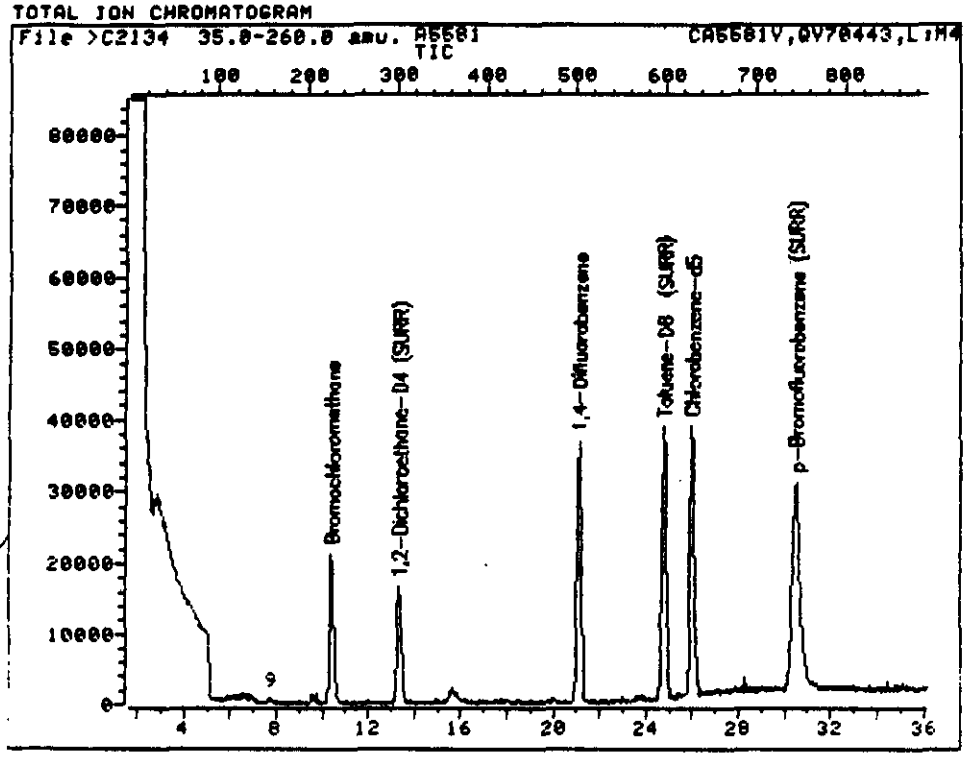
TOTAL ION CHROMATOGRAM



Data File: >C2134::U1 Quant Output File: ^C2134::AQ
Name: A5581
Misc: CA5581V,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

Operator ID: KB6656
Quant Time: 910111 21:54
Injected at: 910111 21:00

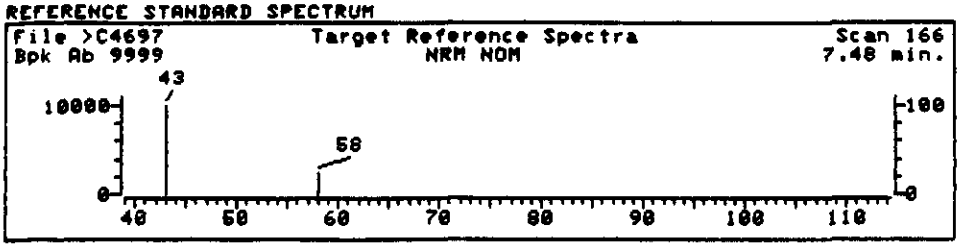
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910111 21:54
Output File: ^C2134::AQ Injected at: 910111 21:00
Data File: >C2134::U1 Dilution Factor: 1.00000
Name: A5581
Misc: CA5581V,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

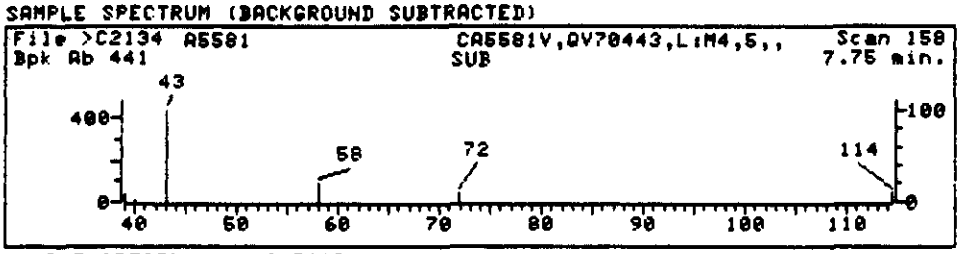
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.42	227	40356	250.00	NG	94
9)	Acetone	7.75	158	5426	49.79	NG	88
18)	1,2-Dichloroethane-D4 (SURR)	13.36	303	78029	246.09	NG	86
30)	*1,4-Difluorobenzene	21.11	503	179986	250.00	NG	94
36)	*Chlorobenzene-d5	26.00	629	144185	250.00	NG	86
41)	Toluene-D8 (SURR)	24.79	598	180108	242.80	NG	93
45)	p-Bromofluorobenzene (SURR)	30.50	745	105083	242.80	NG	98

* Compound is ISTD

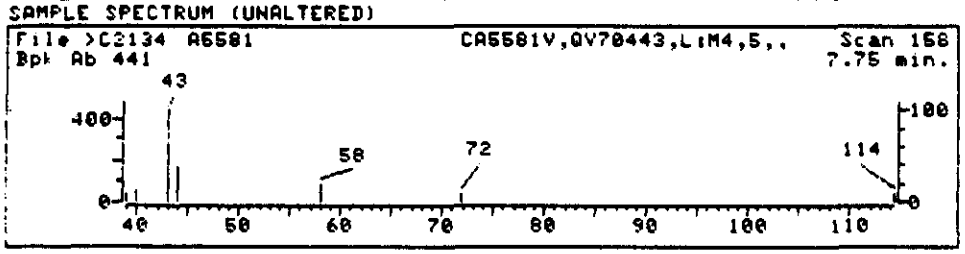
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C2134::U1
Name: A5581
Misc: CA5581V,QV70443,L:M4,5,,
Quant Time: 910111 21:54
Injected at: 910111 21:00

Quant Output File: ^C2134::AQ
Quant ID File: IC1203::US
Last Calibration: 910111 13:37

Compound No: 9
Compound Name: Acetone
Scan Number: 158
Retention Time: 7.75 min.
Quant Ion: 43.0
Area: 5426
Concentration: 49.79 NG
R-value: 88

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5582

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5582V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2135

Level: (low/med) LOW Date Received: 01/8 /91

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5S8A

Lab Name: STC CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5S8A

Sample wt/vol: 5 (g/ML) ML Lab File ID: >C2185

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/11/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5582

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5582U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2135

Level: (low/med) LOW Date Received: 01/S/91

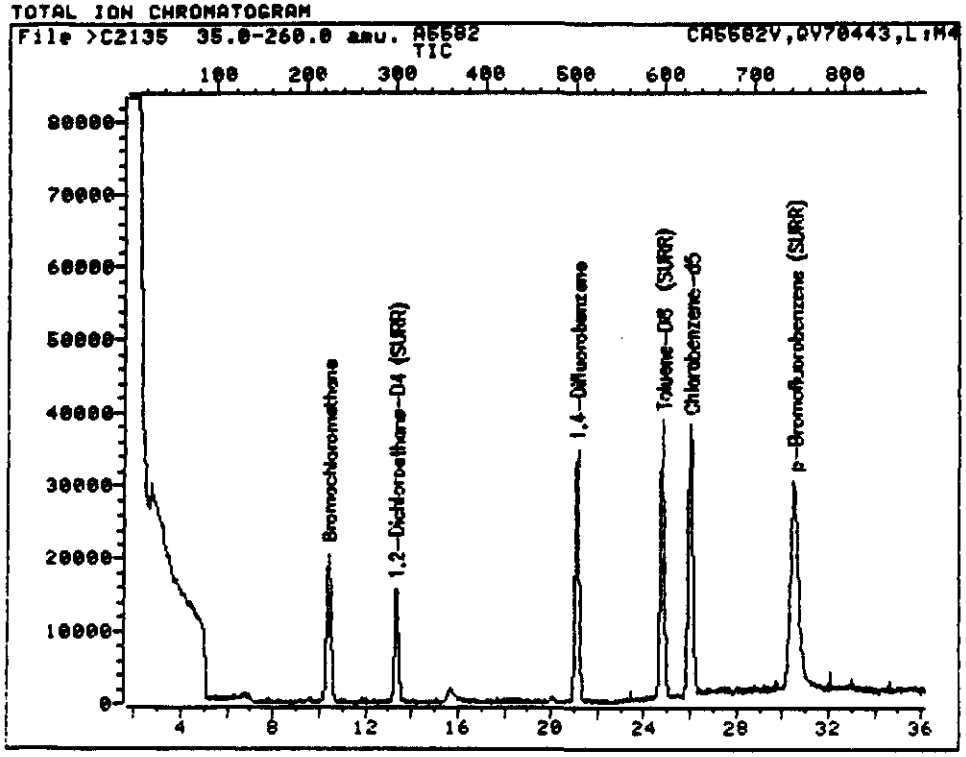
% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

TOTAL ION CHROMATOGRAM



Data File: >C2135::U1 Quant Output File: ^C2135::AQ
Name: A5582
Misc: CA5582V,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

Operator ID: KB6656
Quant Time: 910111 22:26
Injected at: 910111 21:49

QUANT REPORT Page 1

perator ID: KB6656 Quant Rev: 7 Quant Time: 910111 22:26
utput File: ^C2135::AQ Injected at: 910111 21:49
ata File: >C2135::U1 Dilution Factor: 1.00000
ame: A5582
isc: CA5582V,QV70443,L:M4,5,,

D File: IC1203::US
itle: IFB, PP/VOA, XVOA13
est Calibration: 910111 13:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.40	225	39095	250.00	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	13.35	301	76214	248.12	NG	89
20)	*1,4-Difluorobenzene	21.13	502	175116	250.00	NG	94
36)	*Chlorobenzene-d5	26.02	628	143586	250.00	NG	89
41)	Toluene-D8 (SURR)	24.81	597	177220	239.91	NG	93
45)	p-Bromofluorobenzene (SURR)	30.52	744	103507	240.16	NG	99

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5583

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5583V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2599

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. Date Analyzed: 01/14/91

Column: (pack/cap) PACK Dilution Factor: 1

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	3	J
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5583

Lab Name: STC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5583V

Sample wt/vol: 5 (g/mL) mL Lab File ID: >D2599

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. _____ Date Analyzed: 1/14/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5583

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5583V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2599

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. Date Analyzed: 01/14/91

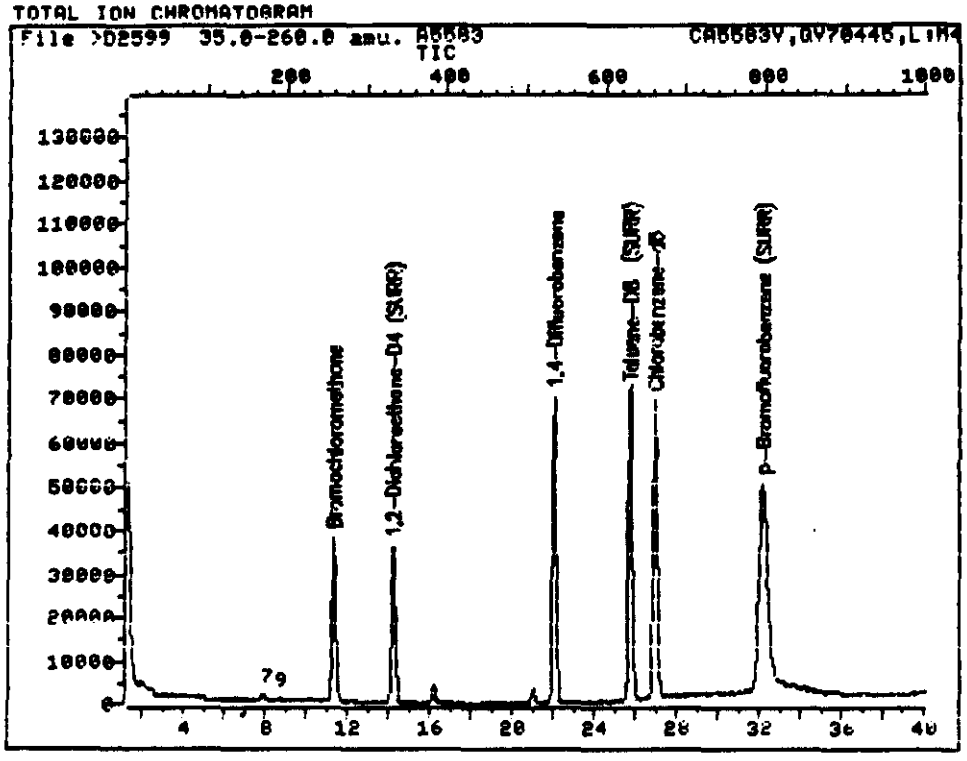
Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 1066-40-6	Silanol, trimethyl-	16.15	5	J

FORM I VOA-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2599::U1 Quant Output File: ^D2599::AU
Name: A5583
Misc: CA5583V,QV70445,L:M4,5,,

Id File: IDU310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910114 03:38
Injected at: 910114 02:57

QUANT REPORT Page 1

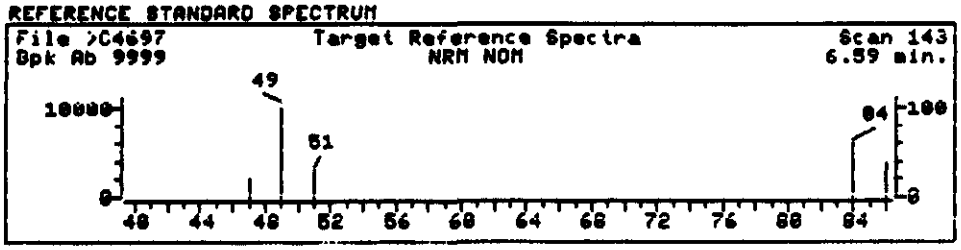
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 03:36
Output File: ^D2599::AQ Injected at: 910114 02:57
Data File: >D2599::U1 Dilution Factor: 1.00000
Name: A5583
Misc: CA5583U,QU70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

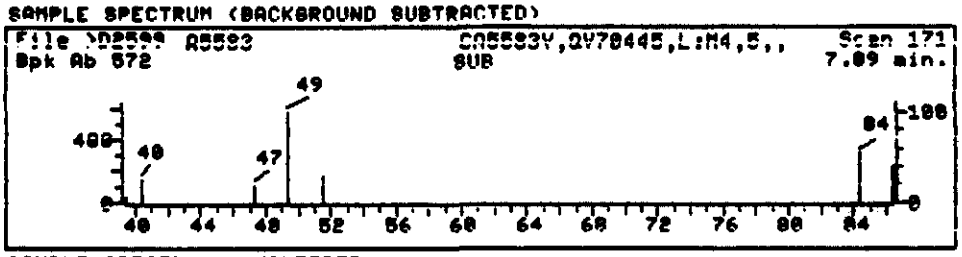
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.30	259	59277	250.00	NG	93
7)	Methylene chloride	7.89	171	4420	12.55	NG	91
9)	Acetone	8.63	190	4577	25.21	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	14.21	334	178879	283.17	NG	96
21)	*1,4-Difluorobenzene	22.04	536	313691	250.00	NG	98
37)	*Chlorobenzene-d5	26.94	662	267929	250.00	NG	82
42)	Toluene-D8 (SURR)	25.72	631	324774	241.56	NG	93
46)	p-Bromofluorobenzene (SURR)	32.17	797	207033	248.19	NG	84

* Compound is ISTD

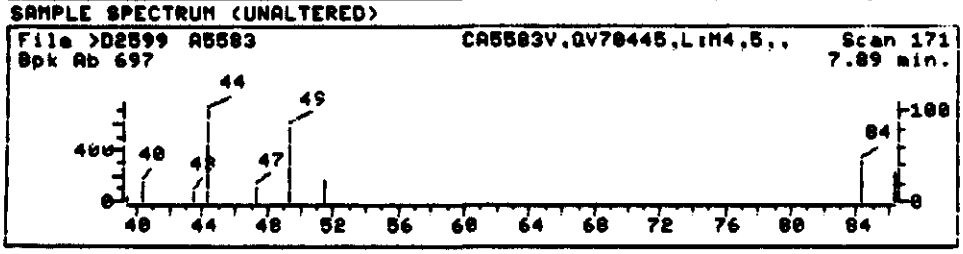
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



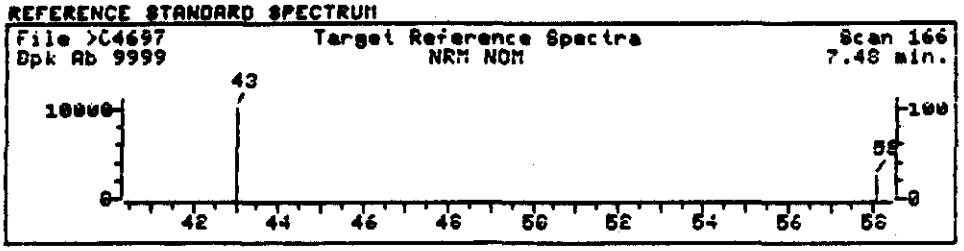
SAMPLE SPECTRUM (UNALTERED)



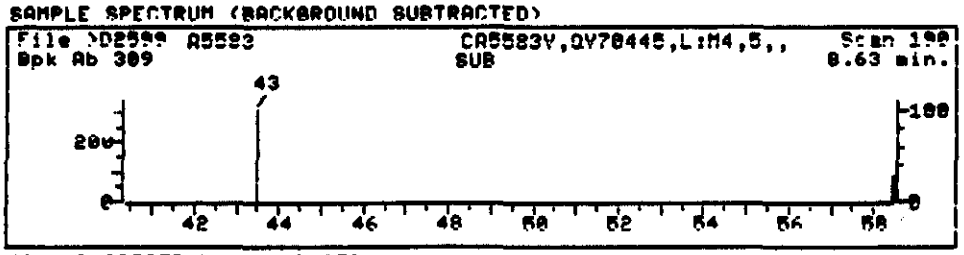
Data File: >D2599::U1 Quant Output File: ^D2599::AQ
Name: A5583
Misc: CA5583V,QV70445,L:M4,5,,
Quant Time: 910114 03:38 Quant ID File: 1D0310::S5
Injected at: 910114 02:57 Last Calibration: 910113 18:53

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 171
Retention Time: 7.89 min.
Quant Ion: 84.0
Area: 4420
Concentration: 12.55 NG
q-value: 91

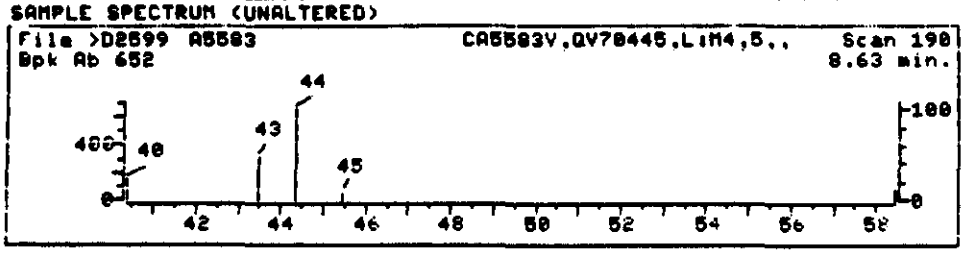
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



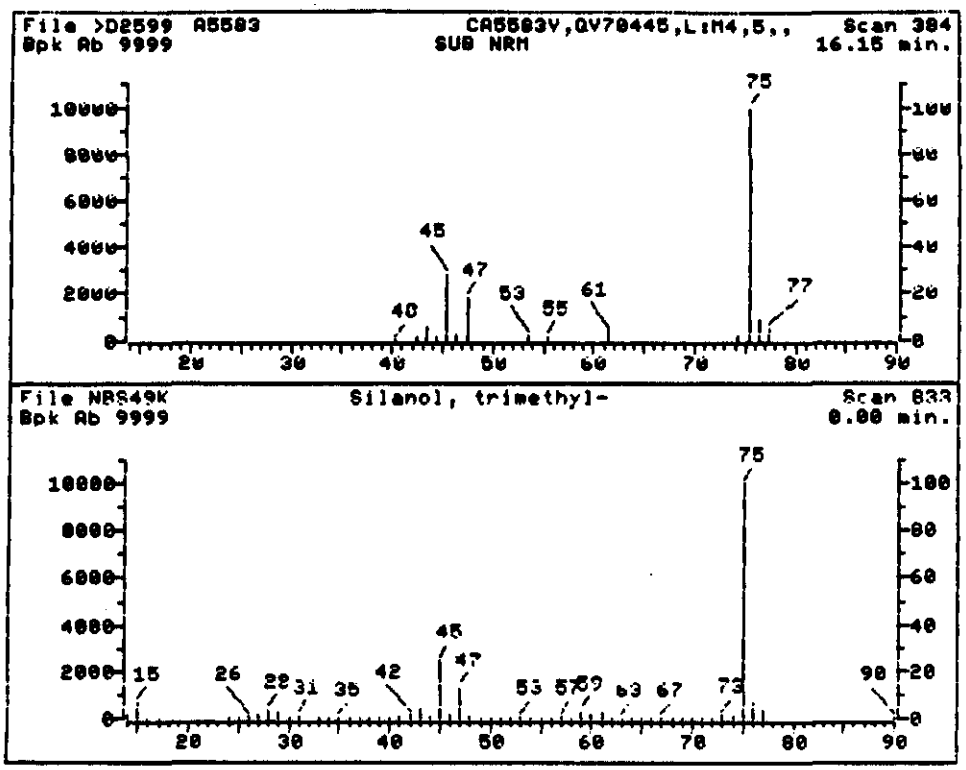
SAMPLE SPECTRUM (UNALTERED)



Data File: >D2599::U1
Name: A5583
Misc: CA5583V,QV70445,L:M4,5,,
Quant Time: 910114 03:38
Injected at: 910114 02:57

Quant Output File: ^D2599::AU
Quant ID File: 100310::SE
Last Calibration: 910113 18:53

Compound No: 9
Compound Name: Acetone
Scan Number: 190
Retention Time: 8.63 min.
Quant Ion: 43.0
Area: 4577
Concentration: 25.21 NG
Q-value: 9?



Data File: >D2599::U1
Name: A5583
Misc Data: CA5583U,QV70445,L:M4,5,,
RT (min): 16.15
Scan: 384
Area: 46732 Rank: 4
Semi-quantitative Conc (uncorrected): 25.56 NG
Semi-quantitative Conc (corrected): 5.11 ug/l
Calculated using Istd: Bromochloromethane @ 11.50 minutes

1. Silanol, trimethyl- 90 C3H10OSi

Sample file: >D2599 Spectrum #: 384
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DI	#-LG	TILT	%	[illegible]	[illegible]	[illegible]
1.	8	1066-40	4954	NBS49K	41	43	2	0	100	5	[illegible]	1-

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IA5585

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5585U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2593

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1

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	1	J
67-64-1	Acetone	36	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5585

Lab Name: STC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5585V

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D2513

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. _____ Date Analyzed: 1/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5585

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5585

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >02593

Level: (low/med) LOW Date Received: 1/7/91

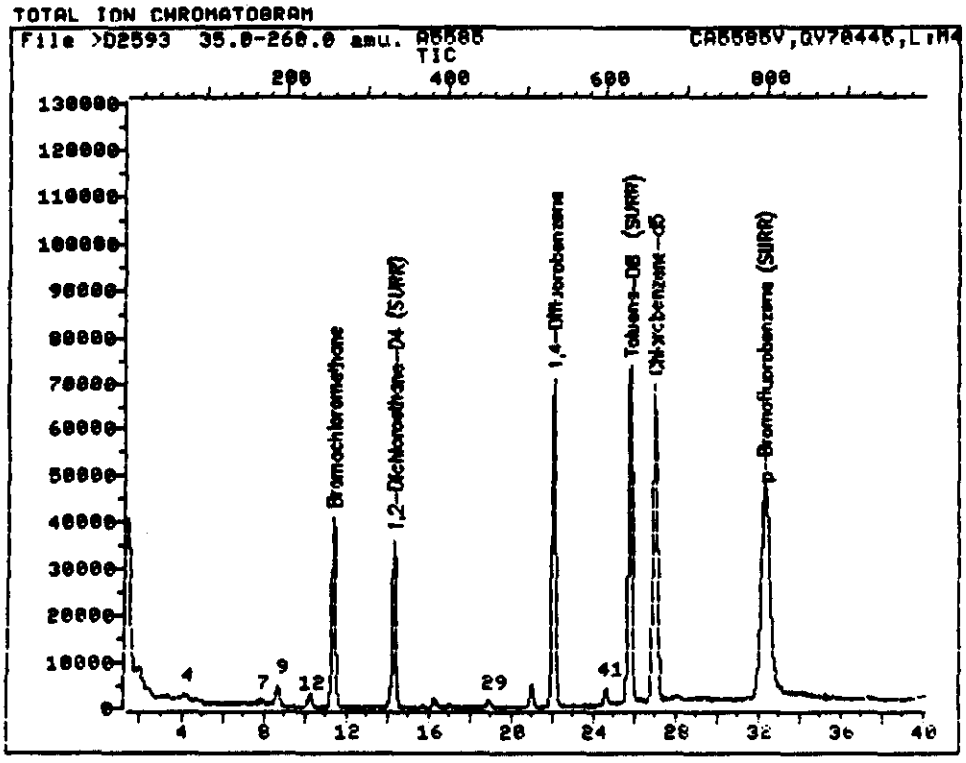
% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	Unknown	21.05	4	J

TOTAL ION CHROMATOGRAM



Data File: >D2593::U1 Quant Output File: ^D2593::AQ
Name: A5585
Misc: CA5585V,QV70445,L:M4,5,,

Id File: IDU310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910113 22:57
Injected at: 910113 22:16

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 22:57
Output File: ^D2593::AQ Injected at: 910113 22:16
Data File: >D2593::U1 Dilution Factor: 1.00000
Name: A5585
Misc: CA5585U,QU70445,L:M4,5,,

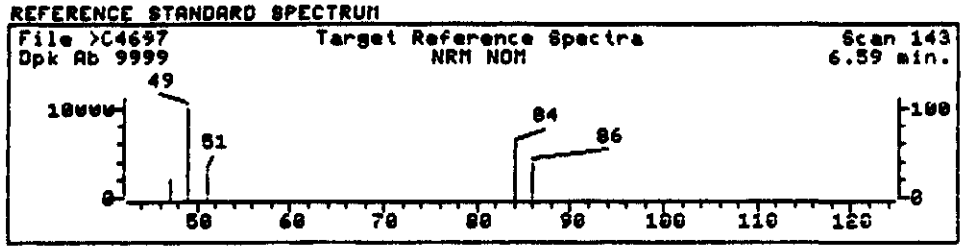
ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	259	73494	250.00	NG	92
4)	Dichlorodifluoromethane	4.18	73	13514	~~53.19~~	NG	91
7)	Methylene chloride	7.94	170	2318	5.31	NG	88
9)	Acetone	8.72	190	40622	180.45	NG	90
12)	Trichlorofluoromethene	10.19	228	8358	10.80	NG	94
18)	1,2-Dichloroethane-D4 (SURR)	14.34	335	177391	226.49	NG	94
21)	*1,4-Difluorobenzene	22.09	535	314967	250.00	NG	98
29)	Trichloroethylene	18.95	454	4271	8.31	NG	85
32)	*Chlorobenzene-d5	26.99	660	266666	250.00	NG	78
41)	Tetrachloroethylene	24.65	601	5604	10.76	NG	92
42)	Toluene-D8 (SURR)	25.82	631	336497	251.46	NG	93
46)	p-Bromofluorobenzene (SURR)	32.26	796	206271	248.57	NG	85

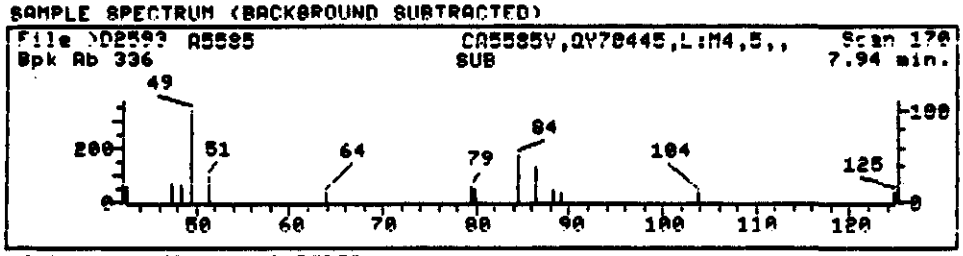
* Compound is ISTD

AP 1/24/91

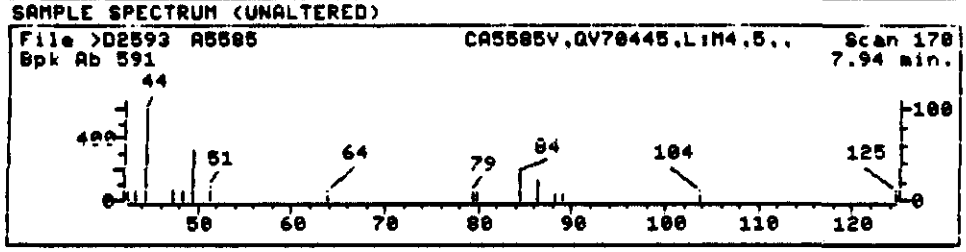
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



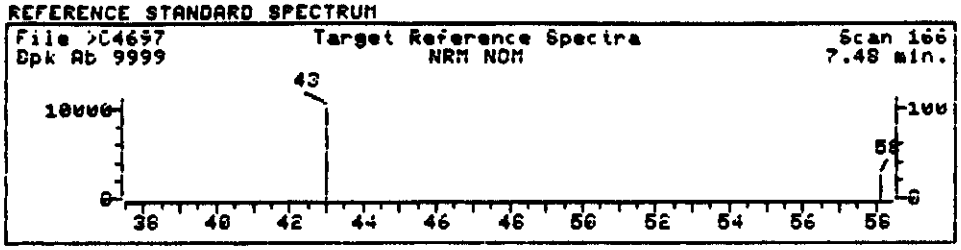
SAMPLE SPECTRUM (UNALTERED)



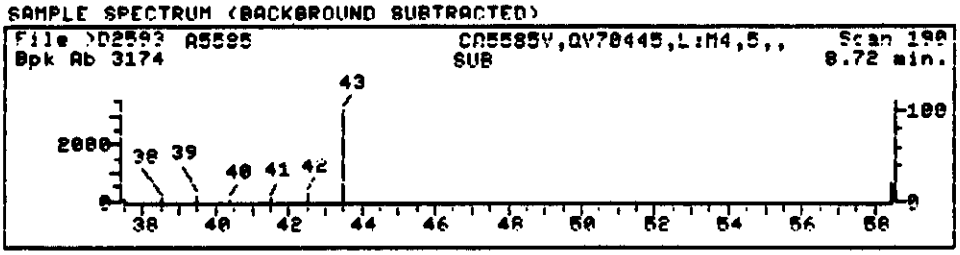
Data File: >D2593::U1 Quant Output File: ^D2593::AQ
Name: A5585
Misc: CA5585U,QV70445,L:M4,5,,
Quant Time: 910113 22:57 Quant ID File: 1D0310::S5
Injected at: 910113 22:16 Last Calibration: 910113 18:53

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 170
Retention Time: 7.94 min.
Quant Ion: 84.0
Area: 2318
Concentration: 5.31 NG
Q-value: 88

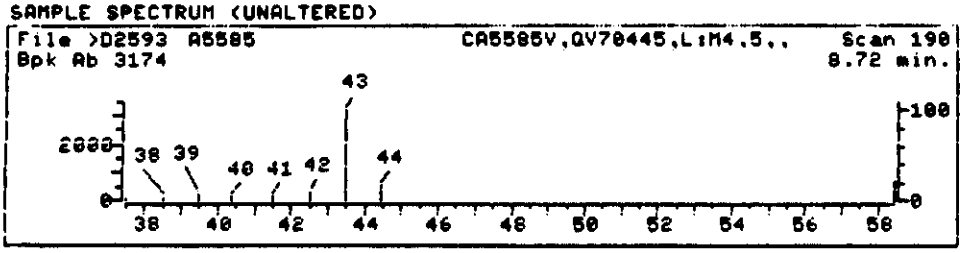
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



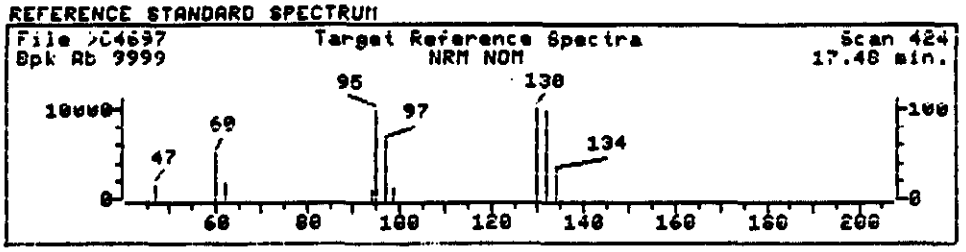
SAMPLE SPECTRUM (UNALTERED)



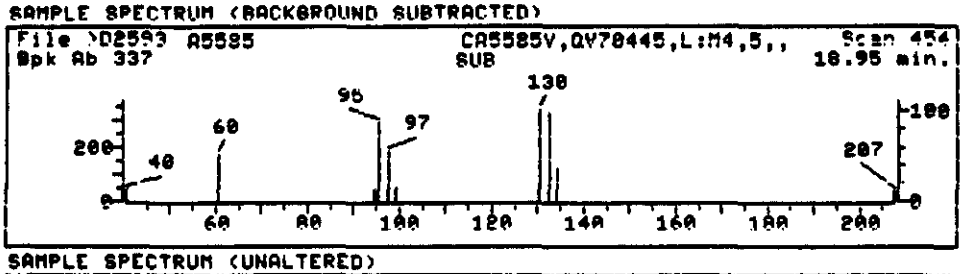
Data File: >D2593::U1 Quant Output File: ^D2593::AW
Name: A5585
Misc: CA5585V,QV70445,L:M4,5,,
Quant Time: 91U113 22:57 Quant ID File: 1D031U::S5
Injected at: 91U113 22:16 Last Calibration: 91U113 18:53

Compound No: 9
Compound Name: Acetone
Scan Number: 19U
Retention Time: 8.72 min.
Quant Ion: 43.0
Area: 4U622
Concentration: 18U.45 NG
Q-Value: 9U

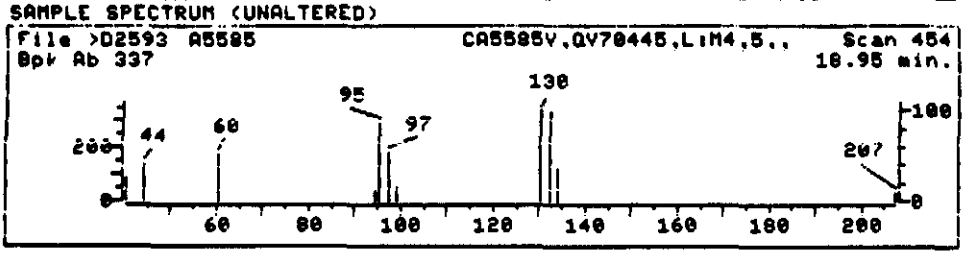
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

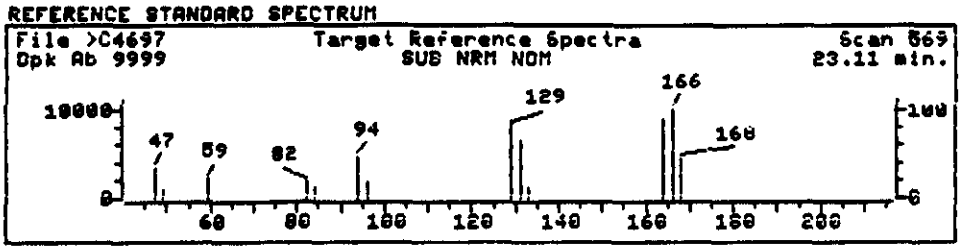


Data File: >D2593::U1
Name: A5585
Misc: CA5585V,QV70445,L:M4,5,,
Quant Time: 910113 22:57
Injected at: 910113 22:16

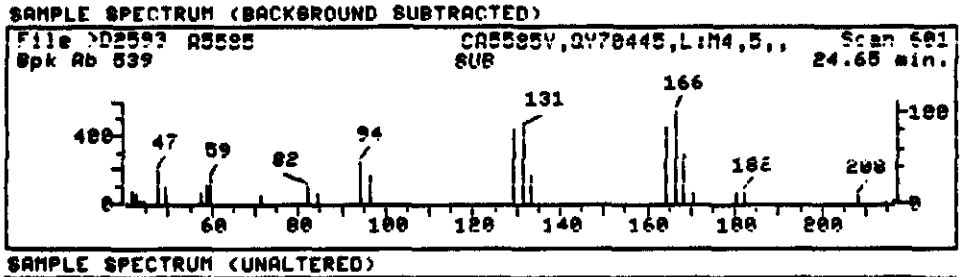
Quant Output File: ^D2593::AW
Quant ID File: ID0310::S5
Last Calibration: 910113 18:53

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 454
Retention Time: 18.95 min.
Quant Ion: 130.0
Area: 4271
Concentration: 8.31 NG
Q Value: 85

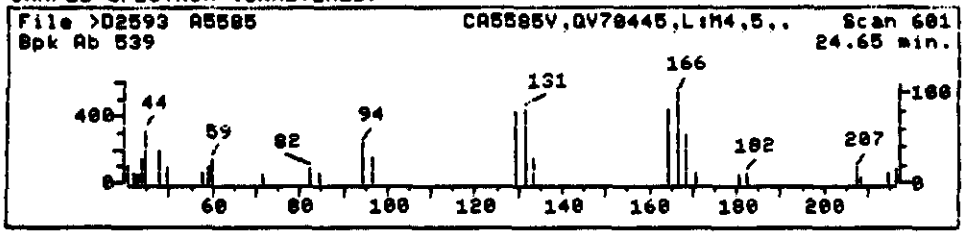
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

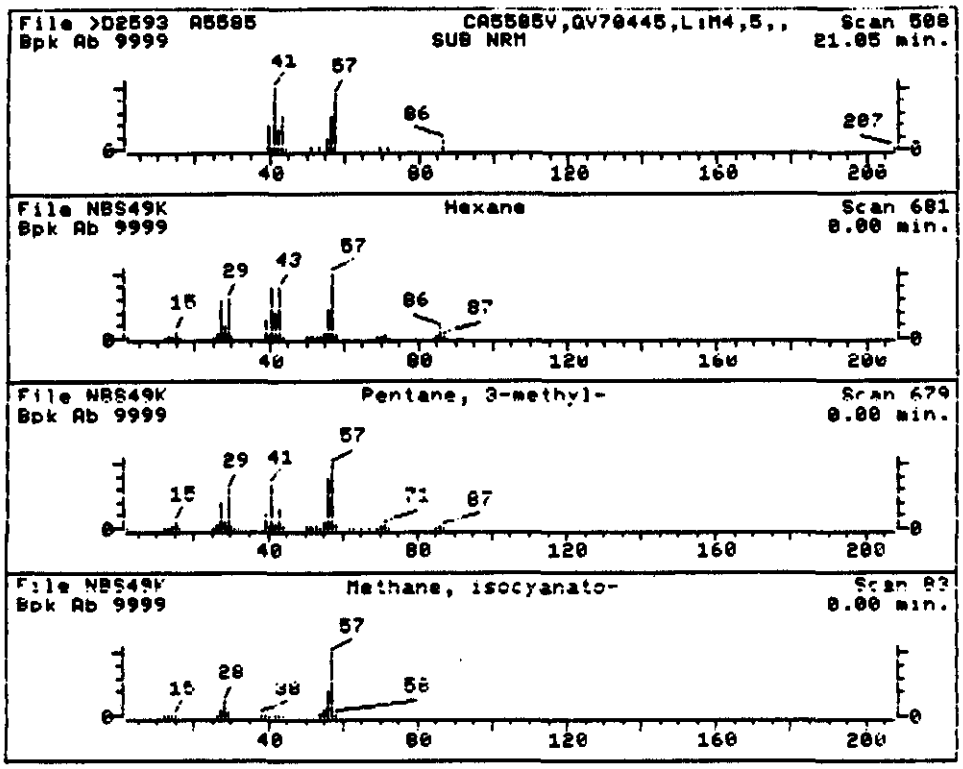


SAMPLE SPECTRUM (UNALTERED)



Data File: >D2593::U1 Quant Output File: ^D2593::AU
Name: A5585
Misc: CA5585V,QV70445,L:M4,5,,
Quant Time: 910113 22:57 Quant ID File: ID0310::SS
Injected at: 91U113 22:16 Last Calibration: 91U113 18:53

Compound No: 41
Compound Name: Tetrachloroethylene
Scan Number: 601
Retention Time: 24.65 min.
Quant Ion: 164.0
Area: 5604
Concentration: 10.76 NG
q-value: 92



Data File: >D2593::U1
Name: A5585
Misc Data: CA5585U,QV70445,L:M4,5,,
RT (min): 21.05
Scan: 508
Area: 61988 Rank: 4
Semi-quantitative Conc (uncorrected): 18.50 ng
Semi-quantitative Conc (corrected): 3.70 ug/l
Calculated using Istd: 1,4-Difluorobenzene @ 22.09 minutes

1. Hexane
2. Pentane, 3-methyl-
3. Methane, isocyanato-

Sample file: >D2593 Spectrum #: 508
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	LAB #	CON #	ROOT	K	DI	# LIB	TILT	%	CON	LIB	PRO
1.	41*	110543	6971	NBS49K	34	62	1	0	70	38	14	1
2.	26*	96140	1025	NBS49K	24	61	2	0	69	44	8	1
3.	25*	624639	1000	NBS49K	23	41	2	0	69	48	7	1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5586

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5586V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >02594

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1

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	1	J
67-64-1	Acetone	54	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	.900	J
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	7	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5586

Lab Name: STC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5536V

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D8594

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. _____ Date Analyzed: 1/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
A5586

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5586U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2594

Level: (low/med) LOW Date Received: 1/7/91

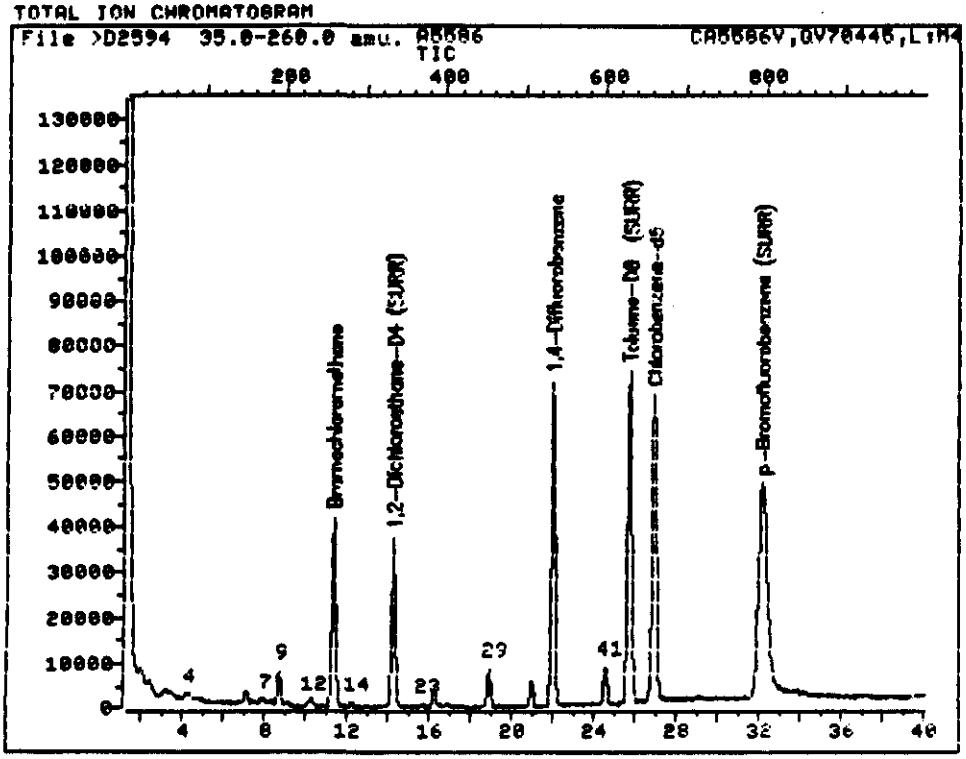
% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	Unknown	20.97	4	J
02. 1066-40-6	Silanol, trimethyl-	16.24	5	J

TOTAL ION CHROMATOGRAM



Data File: >D2594::U1 Quant Output File: ^D2594::AU
Name: A5586
Misc: CA5586V,QV70445,L:M4,5,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVUA13, XVUA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910113 23:44
Injected at: 910113 23:03

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 23:44
Output File: ^D2594::AQ Injected at: 910113 23:03
Data File: >D2594::U1 Dilution Factor: 1.00000
Name: A5586
Misc: CA5586V,QV70445,L:M4,5,,

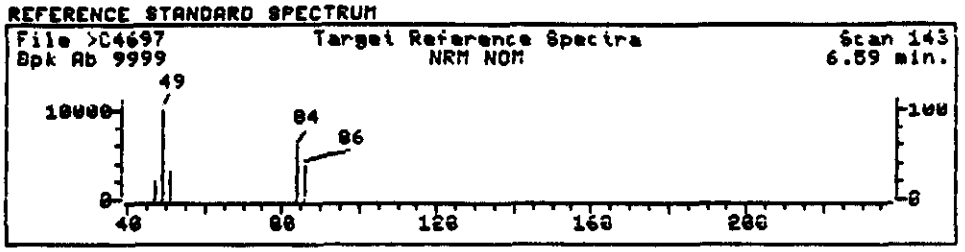
ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.36	260	74263	250.00	NG	94
4)	Dichlorodifluoromethane	4.22	76	12773	~~49.71~~	~~NG~~	82
7)	Methylene chloride	7.90	171	2166	4.91	NG	89
9)	Acetone	8.72	192	61507	270.39	NG	89
12)	Trichlorofluoromethane	10.15	229	4850	~~6.20~~	~~NG~~	87
14)	1,1-Dichloroethane	12.25	283	8122	9.16	NG	92
18)	1,2-Dichloroethane-D4 (SURR)	14.26	325	181716	229.61	NG	93
21)	*1,4-Difluorobenzene	22.02	535	323966	250.00	NG	9.
23)	1,1,1-Trichloroethane	15.74	373	2844	4.62	NG	85
29)	Trichloroethylene	18.92	455	17990	34.08	NG	9'
32)	*Chlorobenzene-d5	26.92	661	269541	250.00	NG	81
41)	Tetrachloroethylene	24.98	601	12632	24.00	NG	9
42)	Toluene-D8 (SURR)	25.74	631	329665	243.73	NG	94
46)	p-Bromofluorobenzene (SURR)	32.16	796	209249	249.34	NG	86

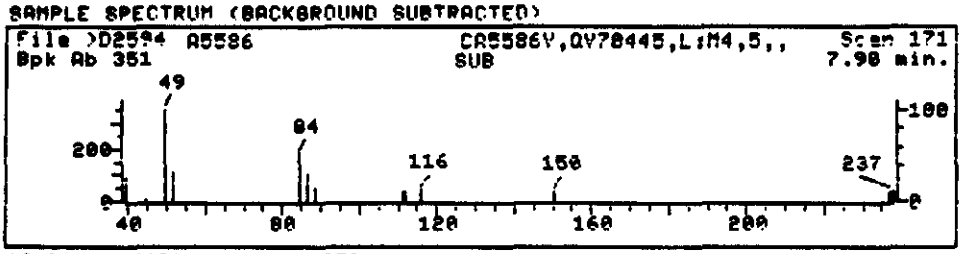
* Compound is ISTD

AP 1/30/91

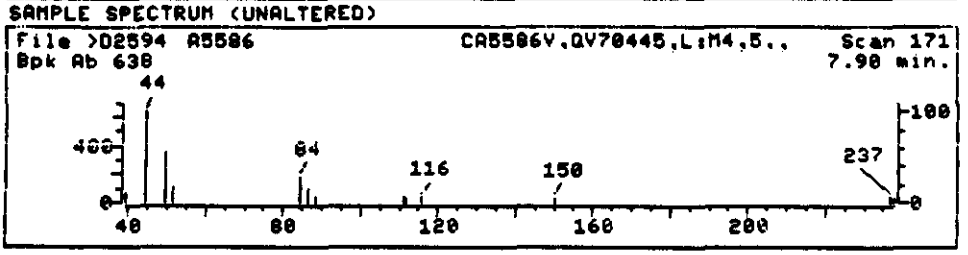
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



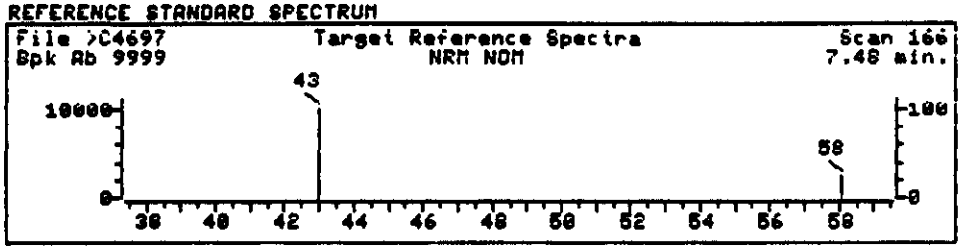
SAMPLE SPECTRUM (UNALTERED)



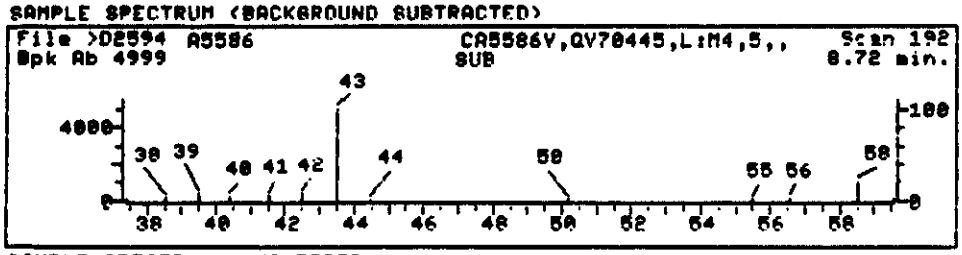
Data File: >D2594::U1 Quant Output File: ^D2594::AQ
Name: A5586
Misc: CA5586V,QV70445,L:M4,5,,
Quant Time: 910113 23:44 Quant ID File: ID0310::SS
Injected at: 910113 23:03 Last Calibration: 910113 18:53

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 171
Retention Time: 7.90 min.
Quant Ion: 84.0
Area: 2166
Concentration: 4.91 NG
Q-value: 89

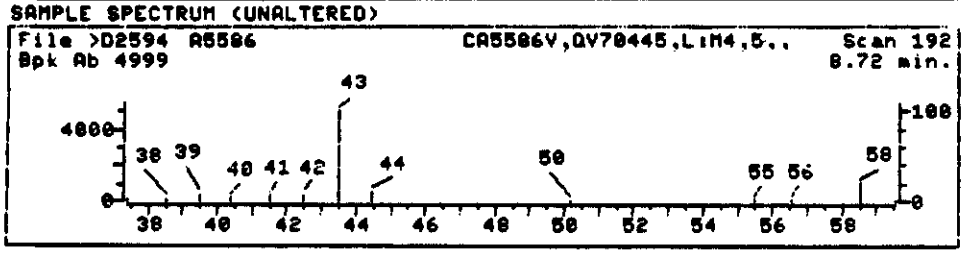
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



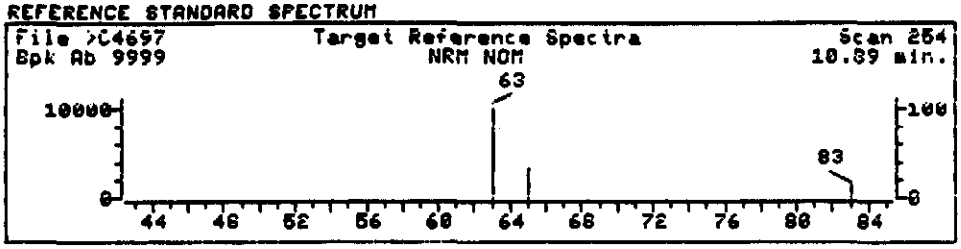
Data File: >D2594::U1
Name: A5586
Misc: CA5586V,QV70445,L:M4,5,,
Quant Time: 910113 23:44
Injected at: 910113 23:03

Quant Output File: ^D2594::AU

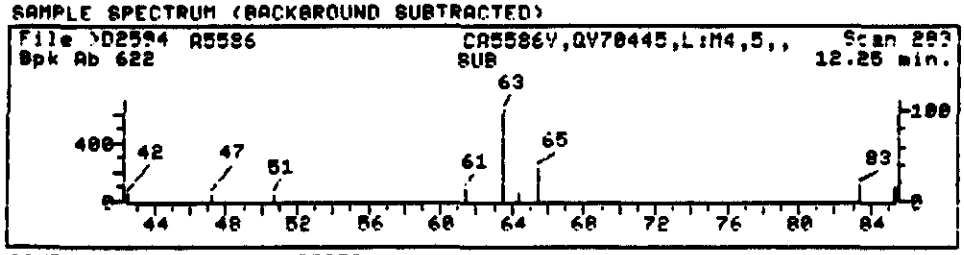
Quant ID File: 1D0310::SS
Last Calibration: 910113 18:53

Compound No: 9
Compound Name: Acetone
Scan Number: 192
Retention Time: 8.72 min.
Quant Ion: 43.0
Area: 61507
Concentration: 270.39 NG
q-value: 89

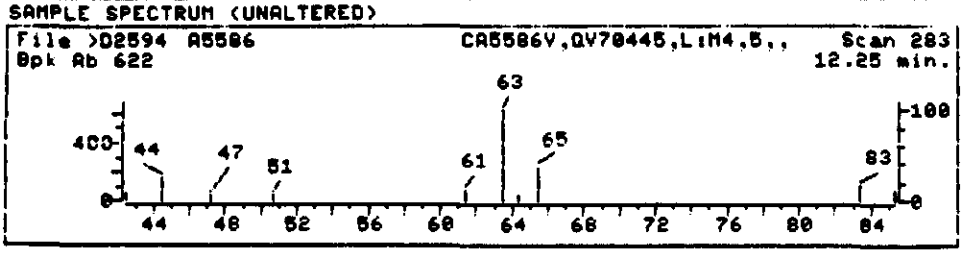
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



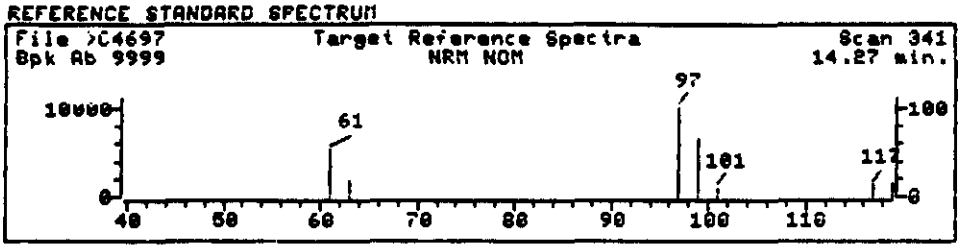
SAMPLE SPECTRUM (UNALTERED)



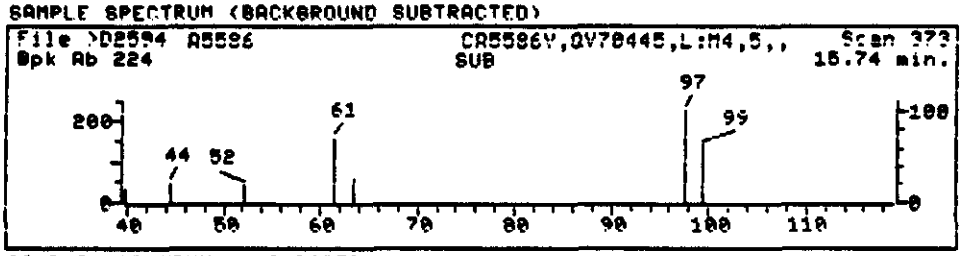
Data File: >D2594::U1 Quant Output File: ^D2594::AQ
Name: A5586
Misc: CA5586V,QV70445,L:M4,5,,
Quant Time: 910113 23:44 Quant ID File: IDU310::SS
Injected at: 910113 23:03 Last Calibration: 910113 18:53

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 283
Retention Time: 12.25 min.
Quant Ion: 63.0
Area: 8122
Concentration: 9.16 NG
Q-value: 92

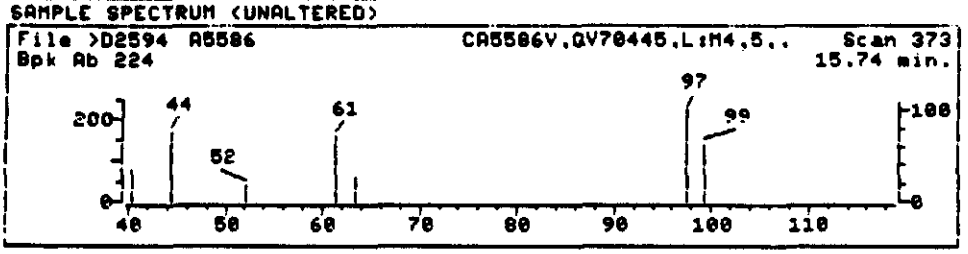
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



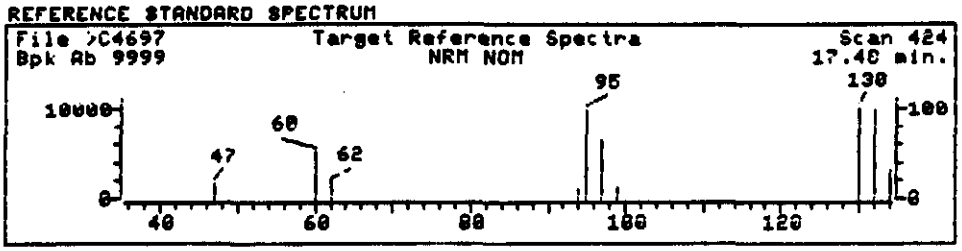
SAMPLE SPECTRUM (UNALTERED)



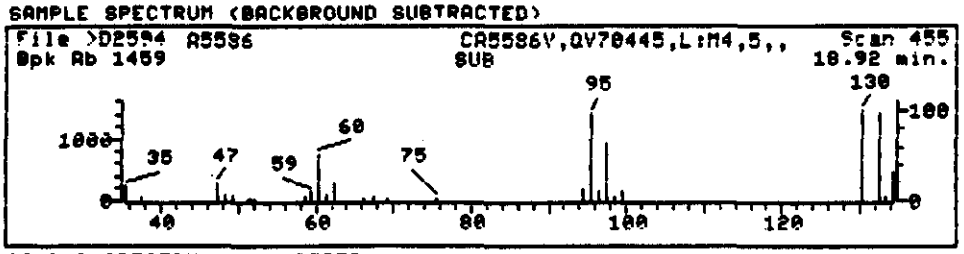
Data File: >D2594::U1 Quant Output File: ^D2594::AQ
Name: A5586
Misc: CA5586U,QV70445,L:M4,5,,
Quant Time: 910113 23:44 Quant ID File: 100310::SS
Injected at: 910113 23:03 Last Calibration: 910113 18:53

Compound No: 23
Compound Name: 1,1,1-Trichloroethane
Scan Number: 373
Retention Time: 15.74 min.
Quant Ion: 97.0
Area: 2844
Concentration: 4.62 NG
Q-value: 85

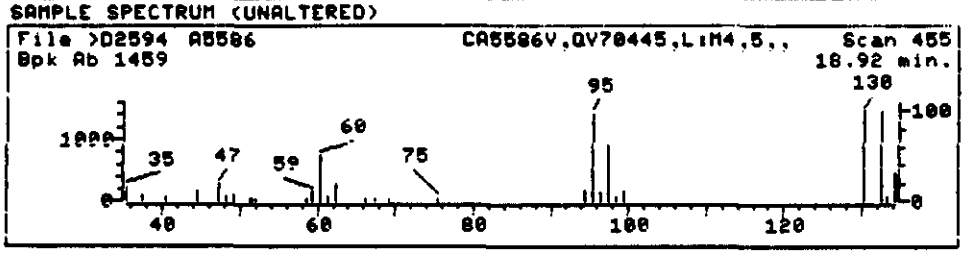
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



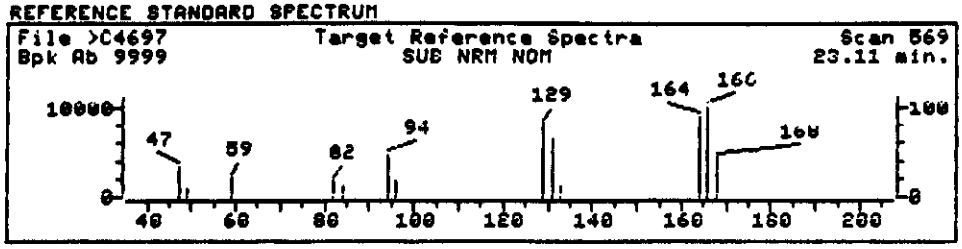
Data File: >D2594::U1
Name: A5586
Misc: CA5586U,QU70445,L:M4,5,,
Quant Time: 910113 23:44
Injected at: 910113 23:03

Quant Output File: ^D2594::AQ

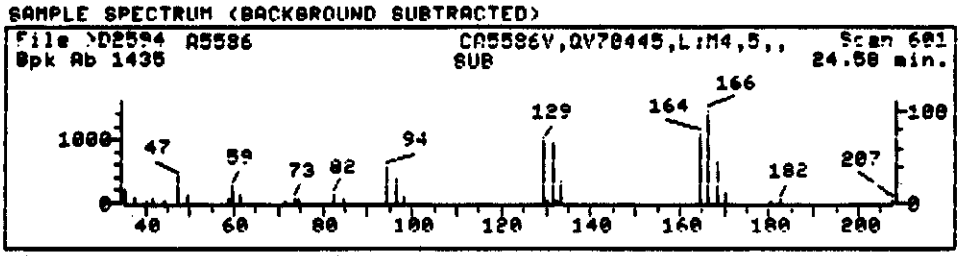
Quant ID File: 1D031U::SS
Last Calibration: 910113 18:53

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 455
Retention Time: 18.92 min.
Quant Ion: 130.0
Area: 17990
Concentration: 34.08 NG
q-value: 95

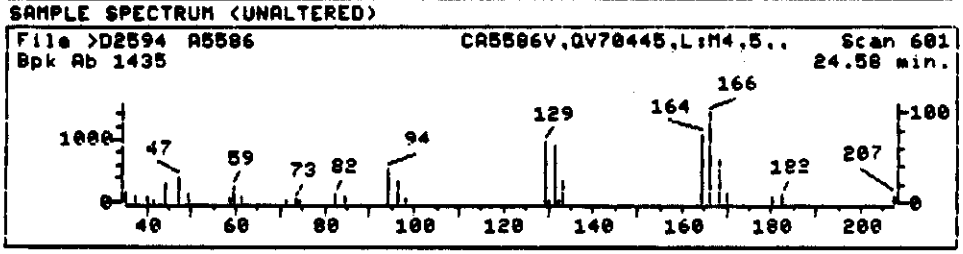
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

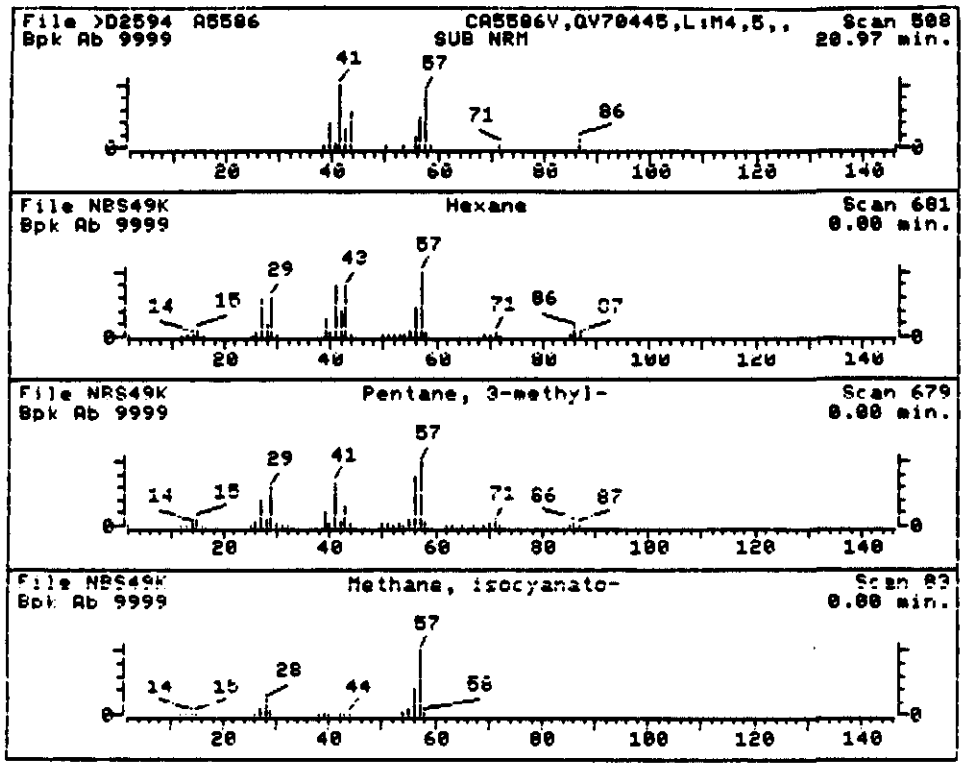


SAMPLE SPECTRUM (UNALTERED)



Data File: >D2594::U1 Quant Output File: ^D2594::AQ
Name: A5586
Misc: CA5586V,QV70445,L:M4,5,,
Quant Time: 910113 23:44 Quant ID File: ID0310::SS
Injected at: 910113 23:03 Last Calibration: 910113 18:53

Compound No: 41
Compound Name: Tetrachloroethylene
Scan Number: 601
Retention Time: 24.58 min.
Quant Ion: 164.0
Area: 12632
Concentration: 24.00 NG
q-value: 97

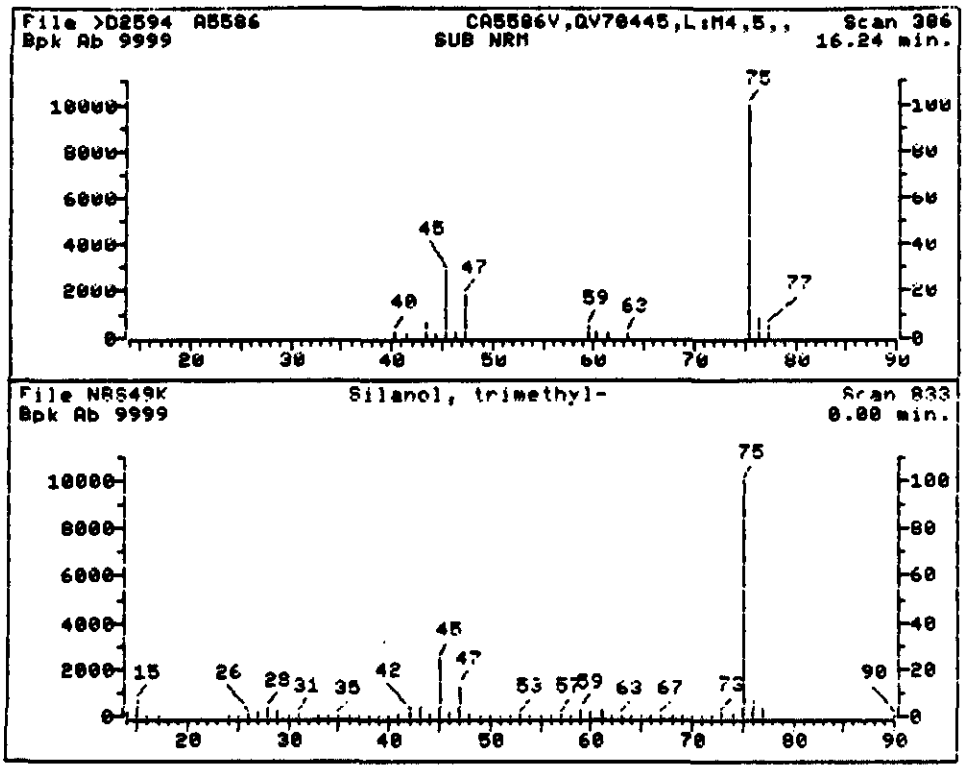


Data File: >D2594::U1
Name: A5586
Misc Data: CA5586V,QV70445,L:M4,5,,
RT (min): 20.97
Scan: 508
Area: 67630 Rank: 2
Semi-quantitative Conc (uncorrected): 19.77 NG
Semi-quantitative Conc (corrected): 3.95 ug/l
Calculated using Istd: 1,4-Difluorobenzene @ 22.02 minutes

1. Hexane 86 C6H14
2. Pentane, 3-methyl- 86 C6H14
3. Methane, isocyanato- 57 C2H3NO

Data File: D2594 Spectrum #: 508
Search Used: 2 Filting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DF	#FIG	FILT	%	CON	C_I	P_IO
1.	99*	110543	6971	NBS49K	48	48	0	0	72	11	40	5
2.	99*	96140	1025	NBS49K	25	59	1	0	64	23	17	14
3.	98*	624839	1000	NBS49K	23	41	2	0	89	26	14	13



Data File: >D2594::U1
Name: A5586
Misc Data: CA5586V,QV70445,L:M4,5,,
RT (min): 16.24
Scan: 386
Area: 52980 Rank: 8
Semi-quantitative Conc (uncorrected): 26.20 NG
Semi-quantitative Conc (corrected): 5.24 ug/l
Calculated using Istd: Bromochloromethane @ 11.36 minutes

1. Silanol, trimethyl- 90 CSH1OOS.

Sample file: >D2594 Spectrum #: 386
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 4

	Prob.	CAS #	CON #	NAME	K	D#	#-CB	TCL	%			
1.	78	1066406	4954	NB549K	51	33	2	0	100	3	--	1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5587

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5587V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2595

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

Lab Name: STC CORP Contract: A5587

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 9A5587V

Sample wt/vol: 5 (g/mL) ML Lab File ID: >D8595

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. _____ Date Analyzed: 1/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS; (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5587

Lab Name: ETC Corp. | Laboratory   Contract:

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

Matrix: (soil/water) WATER   Lab Sample ID: CA5587V

Sample wt/vol: 5.0 (g/mL) ML   Lab File ID: >D2595

Level: (low/med) LOW   Date Received: 1/7/91

% Moisture: not dec.   Date Analyzed: 01/13/91

Column: (pack/cap) PACK   Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found: 0   (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

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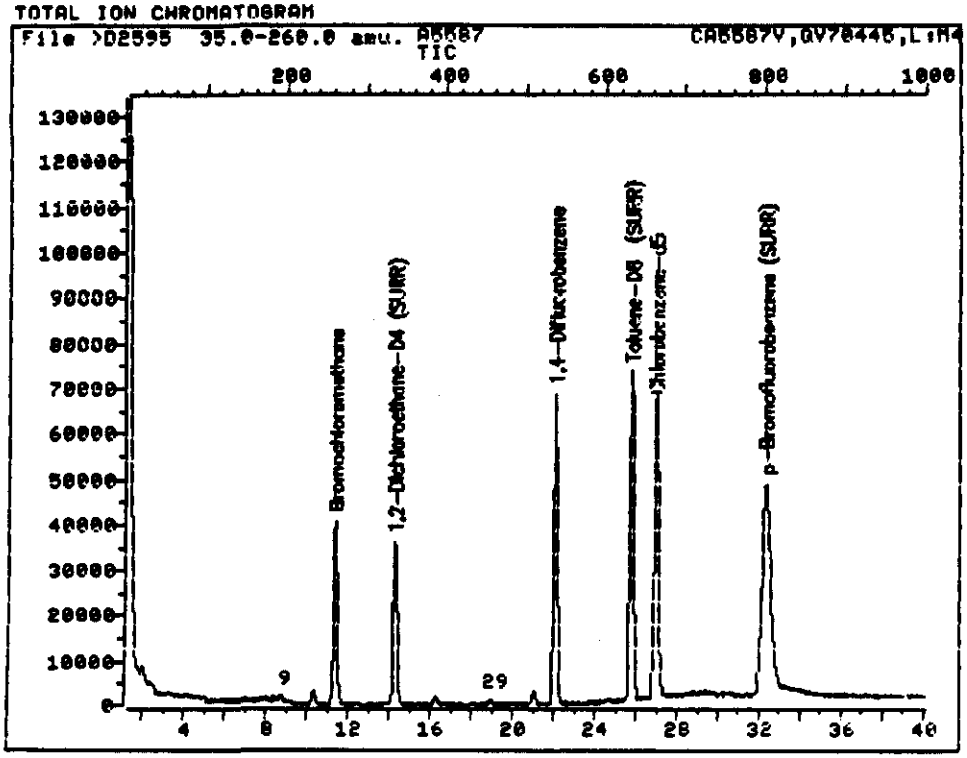
TOTAL ION CHROMATOGRAM



Data File: >D2595::U1 Quant Output File: ^D2595::AQ
Name: A5587
Misc: CA5587V,QV70445,L:M4,5,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910114 00:30
Injected at: 910113 23:49

QUANT REPORT Page 1

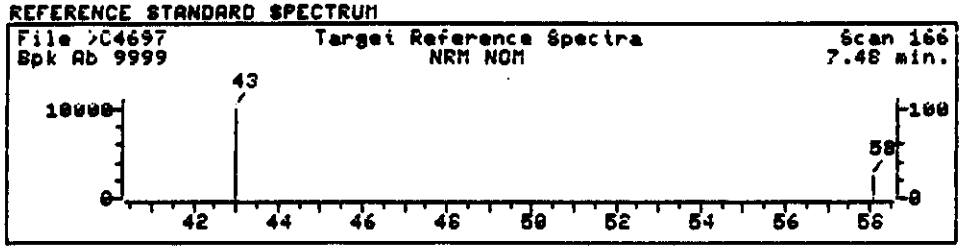
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 00:30
Output File: ^D2595::AQ Injected at: 910113 23:49
Data File: >D2595::U1 Dilution Factor: 1.00000
Name: A5587
Misc: CA5587V,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910113 18:53

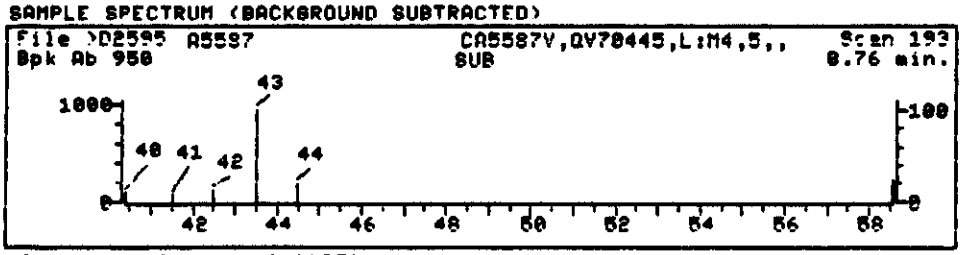
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	261	72817	250.00	NG	92
9)	Acetone	8.76	193	14984	67.18	NG	92
18)	1,2-Dichloroethane-D4 (SURR)	14.30	336	176493	227.44	NG	93
21)	*1,4-Difluorobenzene	22.09	537	313833	250.00	NG	97
29)	Trichloroethylene	18.95	456	3508	6.85	NG	86
37)	*Chlorobenzene-d5	26.99	663	264272	250.00	NG	80
42)	Toluene-D8 (SURR)	25.82	633	321317	242.29	NG	93
46)	p-Bromofluorobenzene (SURR)	32.34	801	207612	252.33	NG	83

* Compound is ISTD

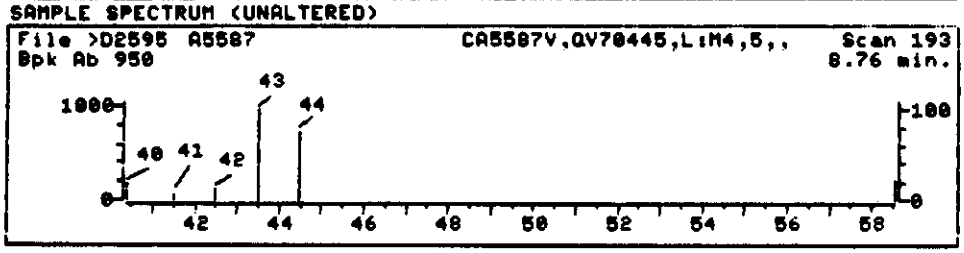
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



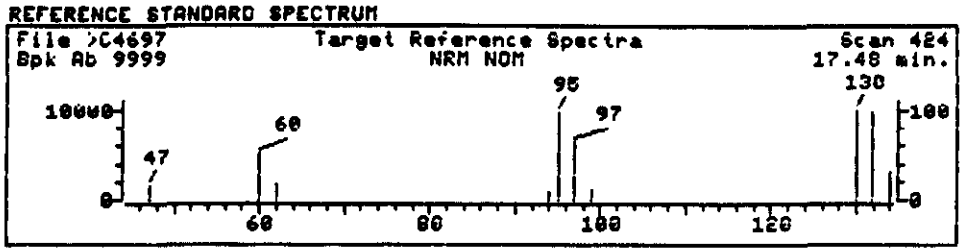
Data File: >D2595::U1
Name: A5587
Misc: CA5587V,QV70445,L:M4,5,,
Quant Time: 910114 00:30
Injected at: 910113 23:49

Quant Output File: ^D2595::AQ

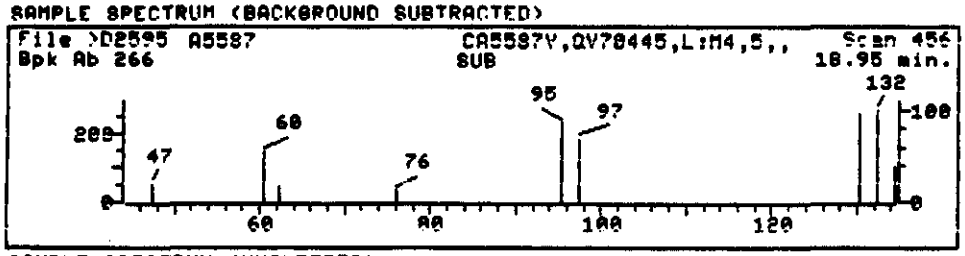
Quant ID File: ID0310::SS
Last Calibration: 910113 18:53

Compound No: 9
Compound Name: Acetone
Scan Number: 193
Retention Time: 8.76 min.
Quant Ion: 43.0
Area: 14984
Concentration: 67.18 NG
Q-Value: 92

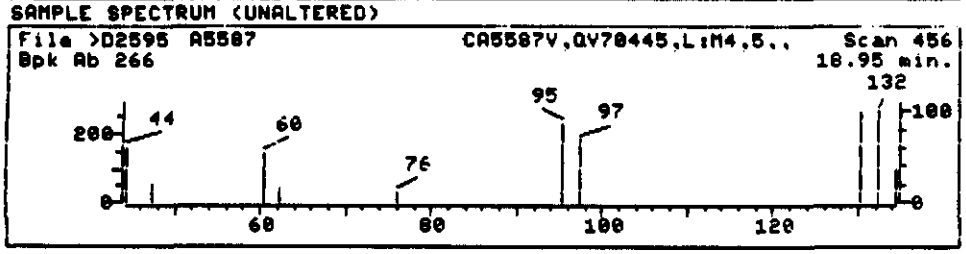
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2595::U1
Name: A5587
Misc: CA5587V,QV70445,L:M4,5,,
Quant Time: 910114 00:30
Injected at: 910113 23:49

Quant Output File: ^D2595::AQ

Quant ID File: ID0310::SS
Last Calibration: 910113 18:53

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 456
Retention Time: 18.95 min.
Quant Ion: 130.0
Area: 3508
Concentration: 6.85 NG
q-value: 86

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5594

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5594V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2137

Level: (low/med) LOW Date Received: 01/8/91

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	2	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AS594

Lab Name: STC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CAS594

Sample wt/vol: 5 (g/mL) ML Lab File ID: 702157

Level: (low/med) LOW Date Received: 1/8/91

% Moisture: not dec. _____ Date Analyzed: 1/11/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5594

Lab Name: ETCNJ   Contract:

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

Matrix: (soil/water) WATER   Lab Sample ID: CA5594U

Sample wt/vol: 5.0 (g/mL) ML   Lab File ID: >C2137

Level: (low/med) LOW   Date Received: 01/8/91

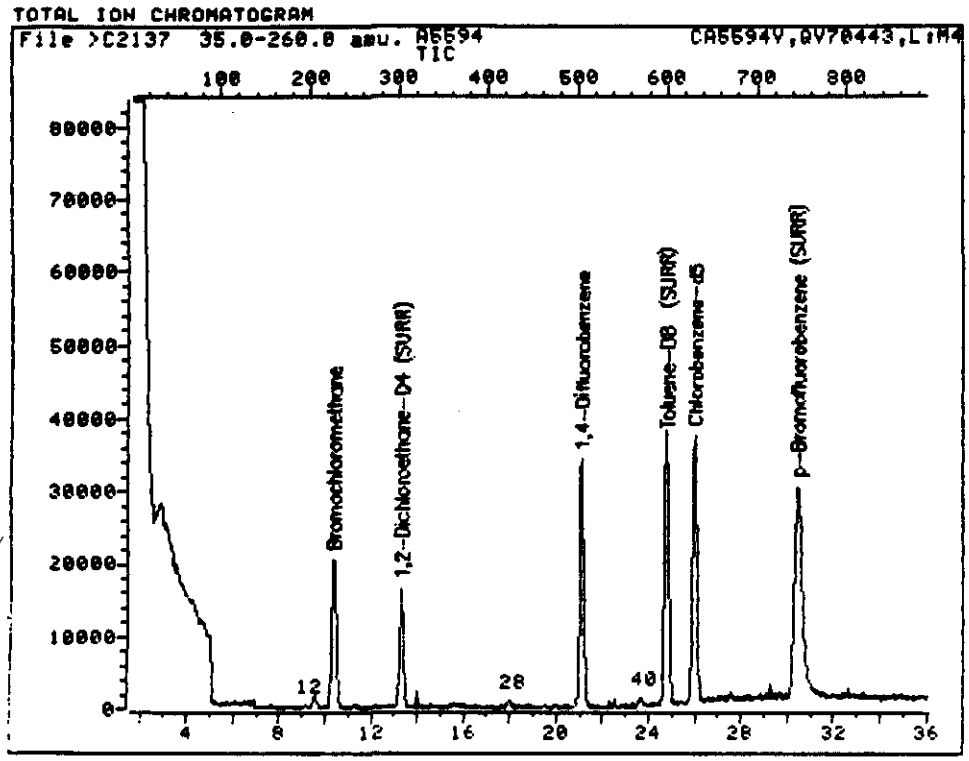
% Moisture: not dec.   Date Analyzed: 01/11/91

Column: (pack/cap) PACK   Dilution Factor: 1.0

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q



Data File: >C2137::U1 Quant Output File: ^C2137::AQ
Name: A5594
Misc: CA5594V,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

Operator ID: KB6656
Quant Time: 910112 00:02
Injected at: 910111 23:25

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910112 00:02
Output File: ^C2137::AQ Injected at: 910111 23:25
Data File: >C2137::U1 Dilution Factor: 1.00000
Name: A5594
Misc: CA5594V,QV70443,L:M4,5,,

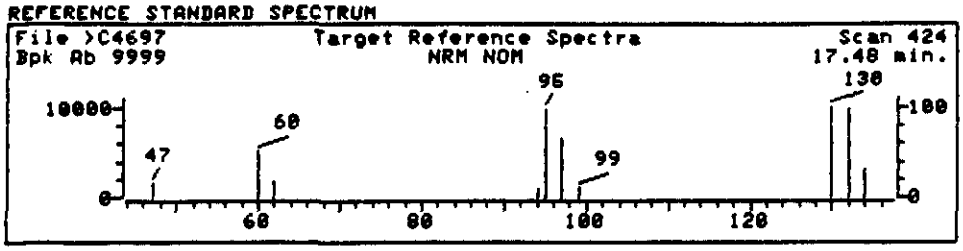
ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.37	227	39731	250.00	NG	95
12)	Trichlorofluoromethane	9.13	195	2247	~~5.30~~	~~NG~~	84
18)	1,2-Dichloroethane-D4 (SURR)	13.32	303	75411	241.57	NG	85
20)	*1,4-Difluorobenzene	21.10	504	171199	250.00	NG	94
28)	Trichloroethylene	18.00	424	2210	8.51	NG	89
36)	*Chlorobenzene-d5	26.00	630	136955	250.00	NG	88
40)	Tetrachloroethylene	23.70	571	2117	7.79	NG	90
41)	Toluene-D8 (SURR)	24.78	599	172507	244.83	NG	91
45)	p-Bromofluorobenzene (SURR)	30.45	745	101566	247.06	NG	99

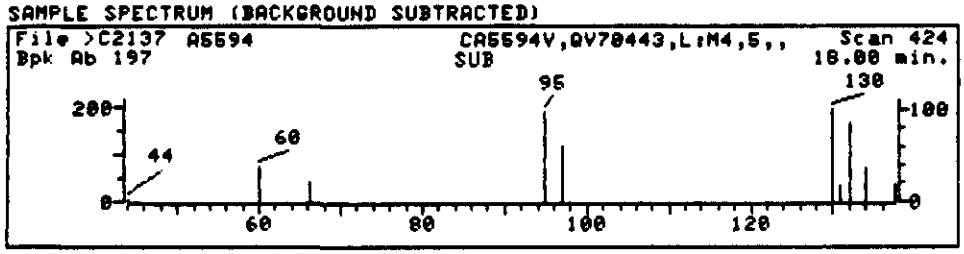
* Compound is ISTD

NP 1/29/91

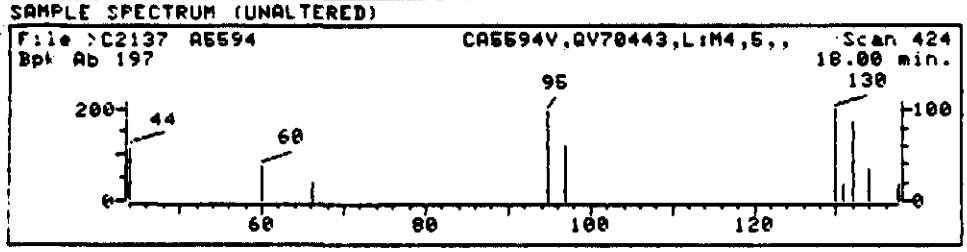
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



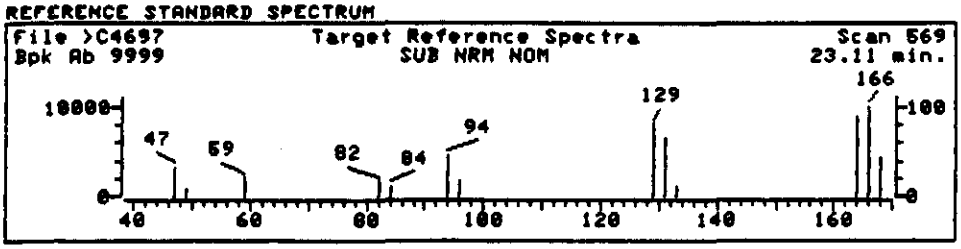
SAMPLE SPECTRUM (UNALTERED)



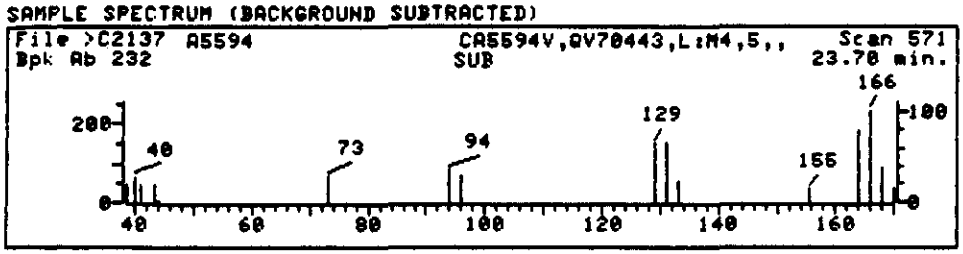
Data File: >C2137::U1 Quant Output File: ^C2137::AQ
Name: A5594
Misc: CA5594V,QV70443,L:M4,5,,
Quant Time: 910112 00:02 Quant ID File: IC1203::US
Injected at: 910111 23:25 Last Calibration: 910111 13:37

Compound No: 28
Compound Name: Trichloroethylene
Scan Number: 424
Retention Time: 18.00 min.
Quant Ion: 130.0
Area: 2210
Concentration: 8.51 NG
Q Value: 89

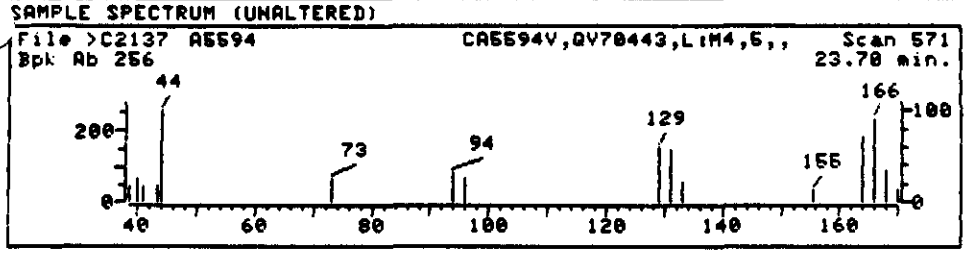
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C2137::U1 Quant Output File: ^C2137::AQ
Name: A5594
Misc: CA5594V,QV70443,L:M4,5,,
Quant Time: 910112 00:02 Quant ID File: IC1203::US
Injected at: 910111 23:25 Last Calibration: 910111 13:37

Compound No: 40
Compound Name: Tetrachloroethylene
Scan Number: 571
Retention Time: 23.70 min.
Quant Ion: 164.0
Area: 2117
Concentration: 7.79 NG
q-value: 90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5595

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5595U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2138

Level: (low/med) LOW Date Received: 01/8 /91

% Moisture: not dec. Date Analyzed: 01/12/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	U
67-64-1	Acetone	4	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	6	
540-59-0	1,2-Dichlorethene (total)	84	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	74	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	8	
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5595

Lab Name: STC CORP. Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5595

Sample wt/vol: 5 (g/mL) mL Lab File ID: XC4158

Level: (low/med) LOW Date Received: 1/8/91

% Moisture: not dec. _____ Date Analyzed: 1/12/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	12	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5595

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5595U

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2138

Level: (low/med) LOW Date Received: 01/8/91

% Moisture: not dec. Date Analyzed: 01/12/91

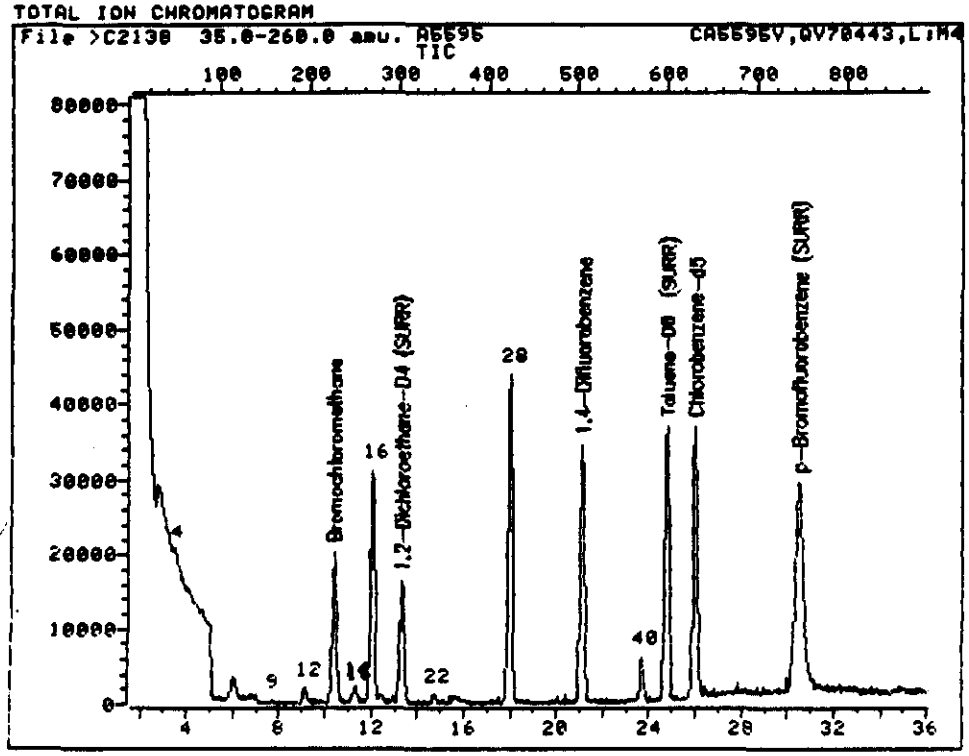
Column: (pack/cap) PACK Dilution Factor: 1.0

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

TOTAL ION CHROMATOGRAM



Data File: >C2138::U1 Quant Output File: ^C2138::AQ
Name: A5595
Misc: CA5595V,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

Operator ID: KB6656
Quant Time: 910112 00:51
Injected at: 910112 00:14

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910112 00:51
Output File: ^C2138::AQ Injected at: 910112 00:14
Data File: >C2138::U1 Dilution Factor: 1.00000
Name: A5595
Misc: CA5595V,QV70443,L:M4,5,,

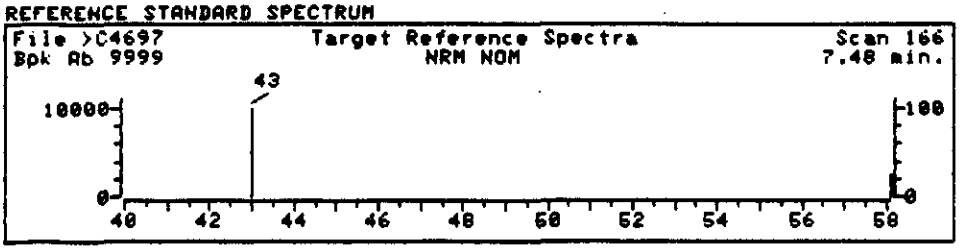
ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.38	227	39223	250.00	NG	96
4)	Dichlorodifluoromethane	3.48	49	10700	~~157.09~~	~~NG~~	97
9)	Acetone	7.70	158	2128	20.09	NG	98
12)	Trichlorofluoromethane	9.14	195	10437	~~24.92~~	~~NG~~	94
14)	1,1-Dichloroethane	11.27	250	11309	31.55	NG	91
15)	Tetrahydrofuran	11.38	253	2974	61.70	NG	100
16)	1,2-Trans-dichloroethylene	12.04	270	82210	420.72	NG	88
18)	1,2-Dichloroethane-D4 (SURR)	13.32	303	75182	243.96	NG	85
20)	*1,4-Difluorobenzene	21.11	504	169671	250.00	NG	94
22)	1,1,1-Trichloroethane	14.75	340	4766	15.77	NG	96
25)	Trichloroethylene	18.01	424	95529	371.14	NG	93
30)	*Chlorobenzene-d5	25.99	630	125034	250.00	NG	88
33)	Tetrachloroethylene	23.70	571	9864	39.78	NG	97
41)	Toluene-D8 (SURR)	24.79	599	172092	267.53	NG	90
45)	p-Bromofluorobenzene (SURR)	30.48	745	99452	264.98	NG	95

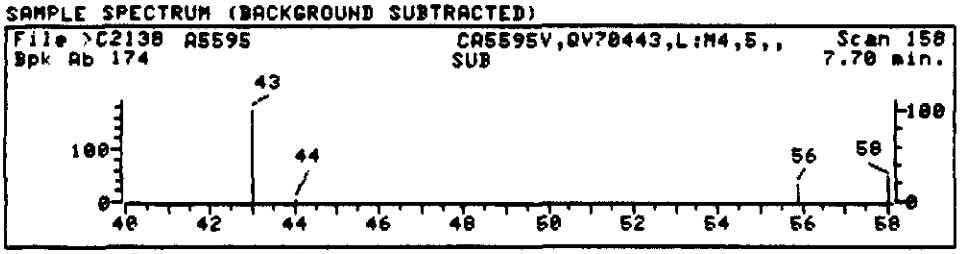
* Compound is ISTD

AP 1/25/91

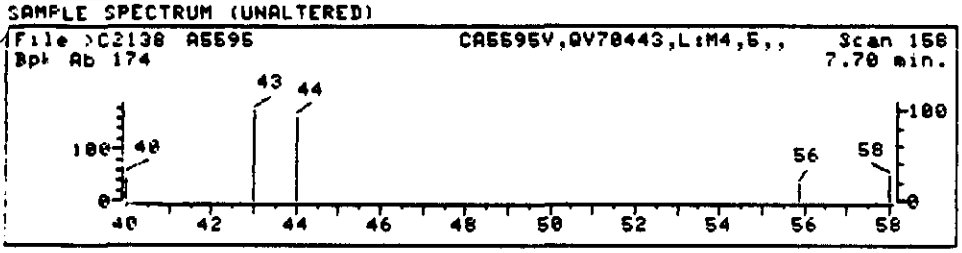
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



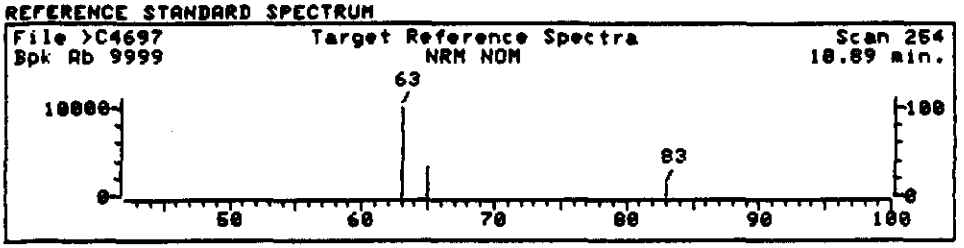
Data File: >C2138::U1
Name: A5595
Misc: CA5595U,QV70443,L:M4,5,,
Quant Time: 910112 00:51
Injected at: 910112 00:14

Quant Output File: ^C2138::AQ

Quant ID File: IC1203::US
Last Calibration: 910111 13:37

Compound No: 9
Compound Name: Acetone
Scan Number: 158
Retention Time: 7.70 min.
Quantitation: 43.0
Area: 2128
Concentration: 20.09 NG
Match: 98

REFERENCE STANDARD SPECTRUM



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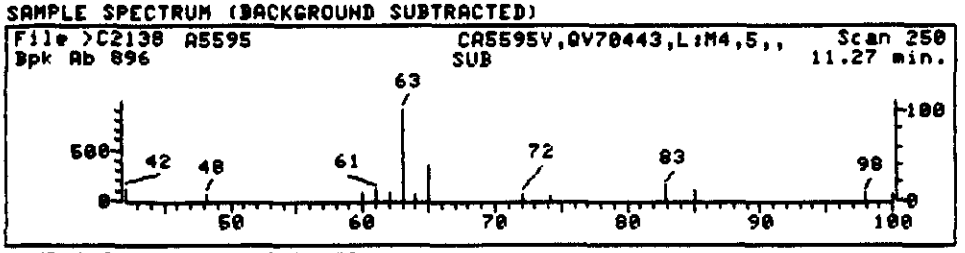

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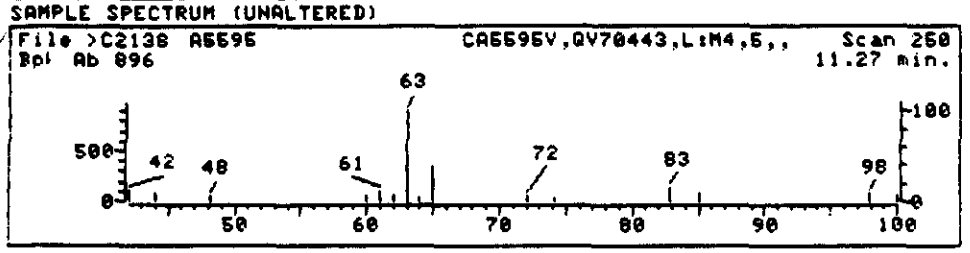
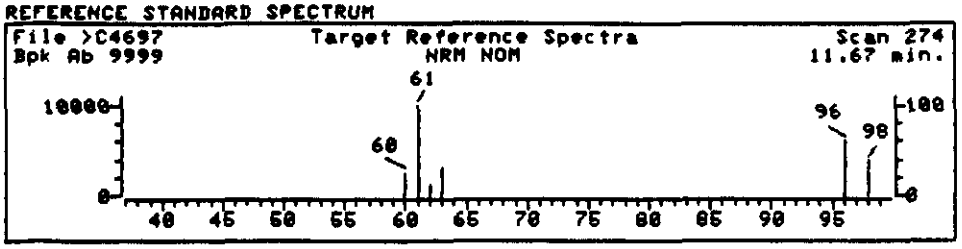


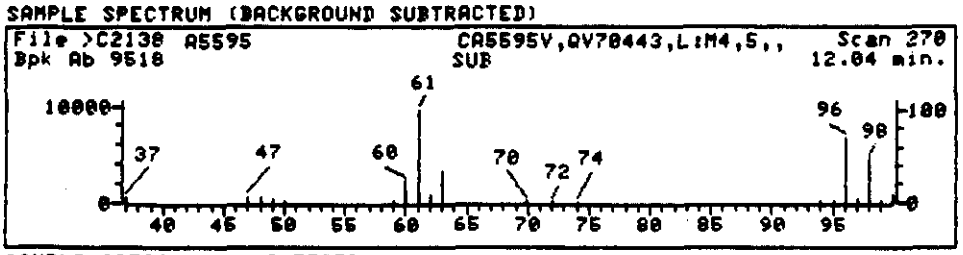
Data File: >C2138::U1 Quant Output File: ^C2138::AD
Name: A5595
Misc: CA5595V,QV70443,L:M4,5,,
Quant Time: 910112 00:51 Quant ID File: IC1203::US
Injected at: 910112 00:14 Last Calibration: 910111 13:37

Compound No: 14
Compound Name: 1,1-Dichloroethane
Scan Number: 250
Retention Time: 11.27 min.
Quant Ion: 63.0
Area: 11309
Concentration: 31.55 NG
q-value: 91

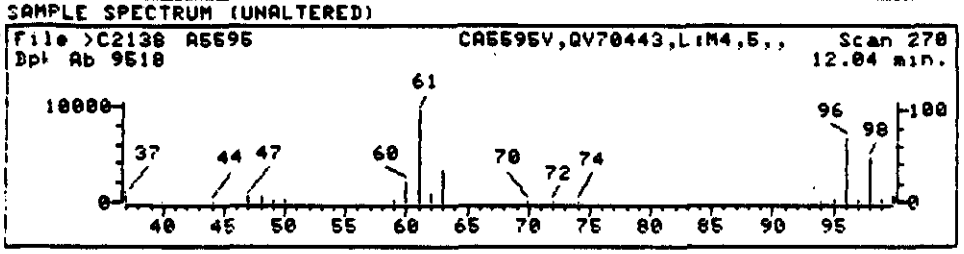
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



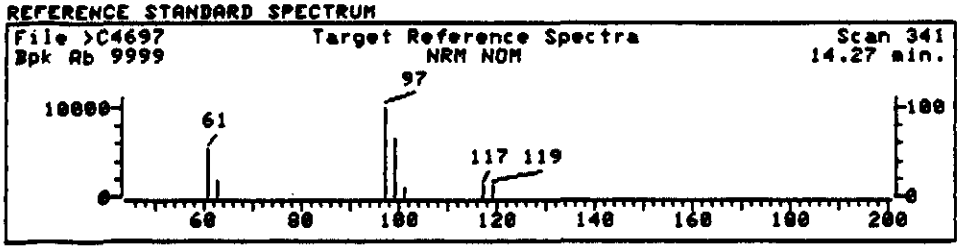
SAMPLE SPECTRUM (UNALTERED)



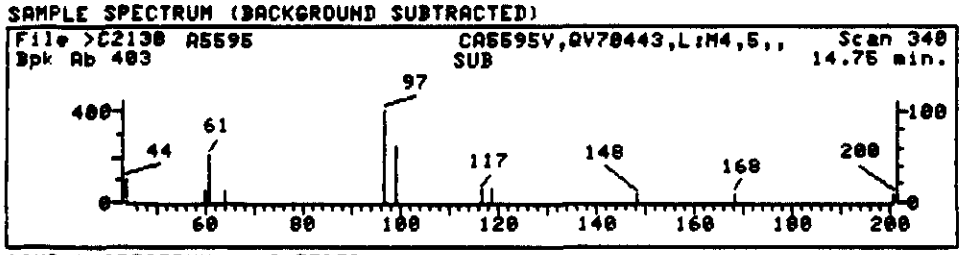
Data File: >C2138::U1 Quant Output File: ^C2138::AQ
Name: A5595
Misc: CA5595V,QV70443,L:M4,5,,
Quant Time: 910112 00:51 Quant ID File: IC1203::US
Injected at: 910112 00:14 Last Calibration: 910111 13:37

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 270
Retention Time: 12.04 min.
Quant Ion: 96.0
Area: 82210
Concentration: 420.72 NG
Q-value: 88

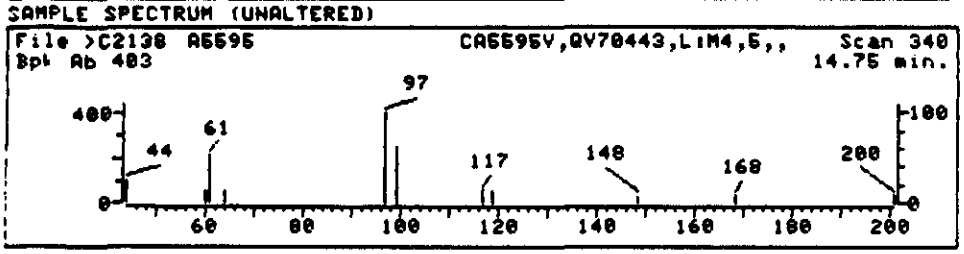
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



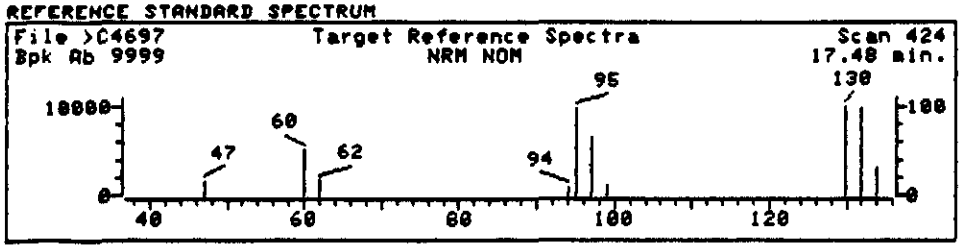
SAMPLE SPECTRUM (UNALTERED)



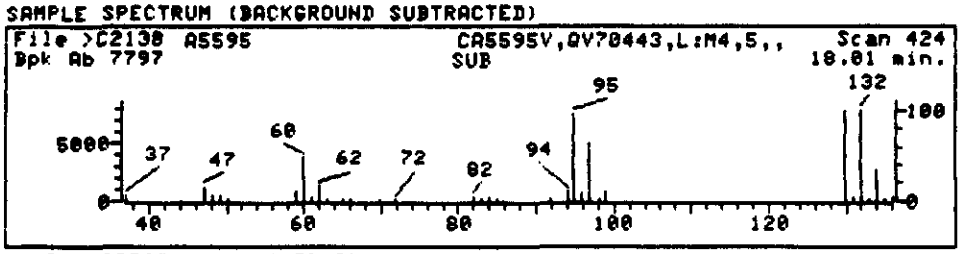
Data File: >C2138::U1 Quant Output File: ^C2138::AQ
Name: A5595
Misc: CA5595U,QV70443,L:M4,5,,
Quant Time: 910112 00:51 Quant ID File: IC1203::US
Injected at: 910112 00:14 Last Calibration: 910111 13:37

Compound No: 22
Compound Name: 1,1,1-Trichloroethane
Scan Number: 340
Retention Time: 14.75 min.
Quant Ion: 97.0
Area: 4766
Concentration: 15.77 NG
Q-value: 96

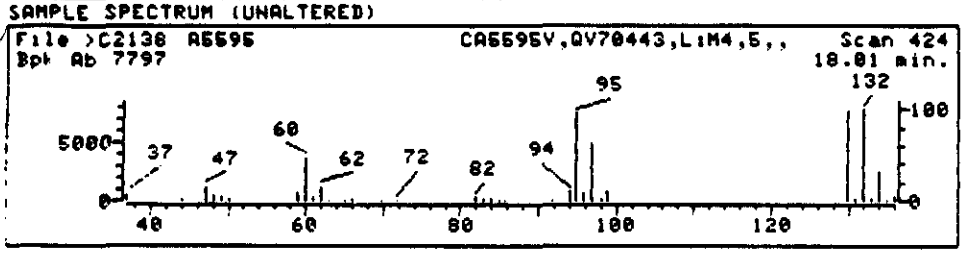
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



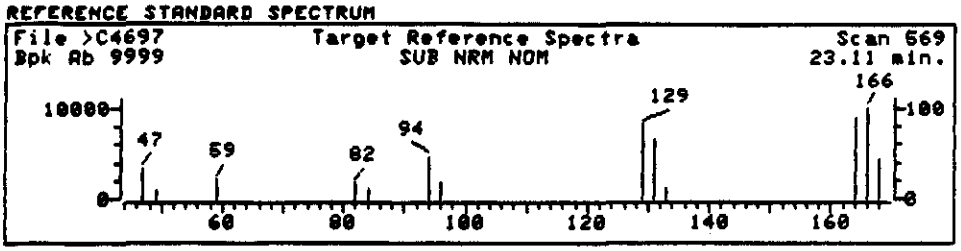
SAMPLE SPECTRUM (UNALTERED)



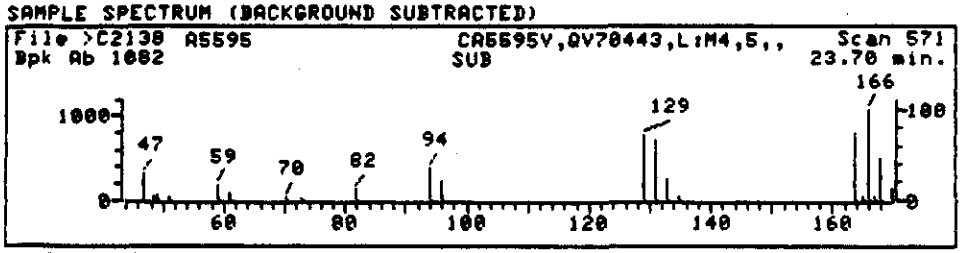
Data File: >C2138::U1 Quant Output File: ^C2138::AQ
Name: A5595
Misc: CA5595U,QV70443,L:M4,5,,
Quant Time: 910112 00:51 Quant ID File: IC1203::US
Injected at: 910112 00:14 Last Calibration: 910111 13:37

Compound No: 28
Compound Name: Trichloroethylene
Scan Number: 424
Retention Time: 18.01 min.
Quant Ion: 130.0
Area: 95529
Concentration: 371.14 NG
Q Value: 93

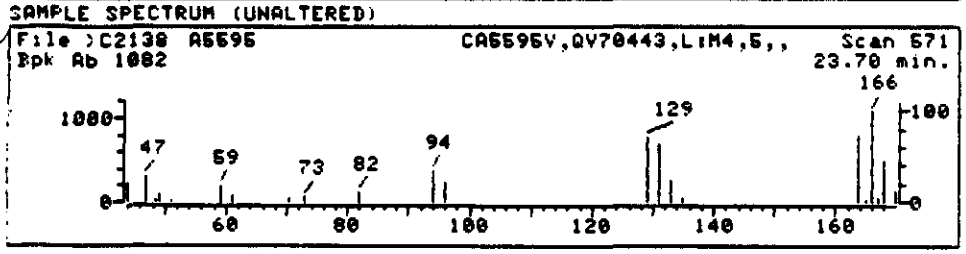
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



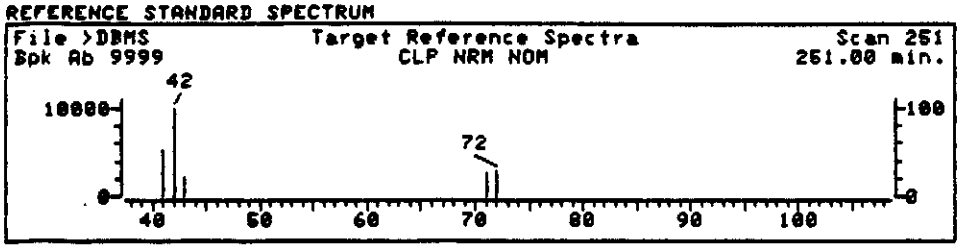
SAMPLE SPECTRUM (UNALTERED)



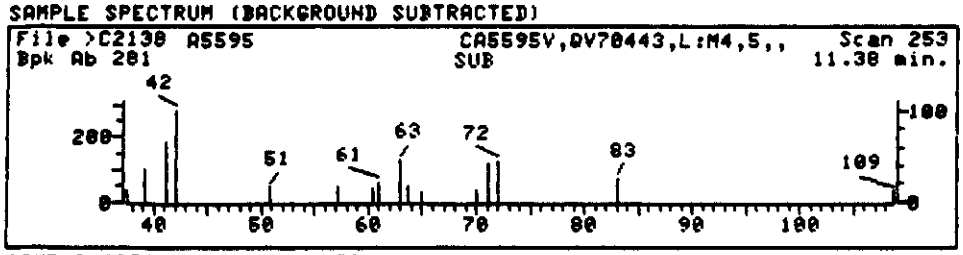
Data File: >C2138::U1 Quant Output File: ^C2138::AQ
Name: A5595
Misc: CA5595U,QV70443,L:M4,5,,
Quant Time: 910112 00:51 Quant ID File: IC1203::US
Injected at: 910112 00:14 Last Calibration: 910111 13:37

Compound No: 40
Compound Name: Tetrachloroethylene
Scan Number: 571
Retention Time: 23.70 min.
Quant Ion: 164.0
Area: 9864
Concentration: 39.78 NG
R Value: 97

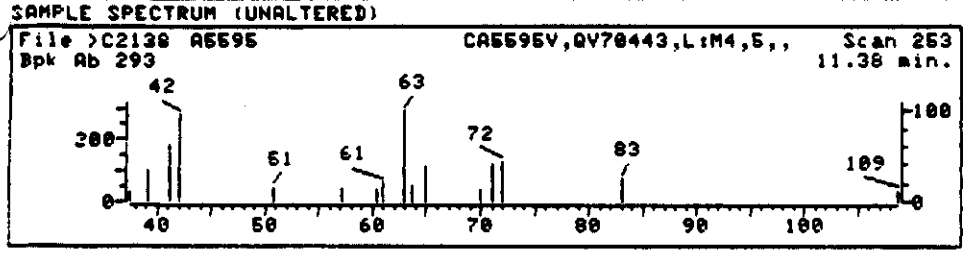
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C2138::U1
Name: A5595
Misc: CA5595V,QV70443,L:M4,5,,
Quant Time: 910112 00:51
Injected at: 910112 00:14

Quant Output File: ^C2138::AQ
Quant ID File: IC1203::US
Last Calibration: 910111 13:37

Compound No: 15
Compound Name: Tetrahydrofuran
Scan Number: 253
Retention Time: 11.38 min.
Quant Ion: 42.0
Area: 2974
Concentration: 61.70 NG
Q-value: 100

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5596

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5596U

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: >D2596

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. Date Analyzed: 01/14/91

Column: (pack/cap) PACK Dilution Factor: 2

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	10	U
67-64-1	Acetone	11	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	8	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
108-05-4	Vinyl Acetate	20	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	280	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	4	J
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

Lab Name: STC CORP. Contract: A5596

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CA5596V

Sample wt/vol: 2.5 (g/ML) ML Lab File ID: >DA596

Level: (low/med) LOW Date Received: 1/7/91

% Moisture: not dec. _____ Date Analyzed: 1/14/91

Column: (pack/cap) PACK Dilution Factor: 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	20	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5596

Lab Name: ETC Corp. | Laboratory   Contract:

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

Matrix: (soil/water) WATER   Lab Sample ID: CA5596V

Sample wt/vol: 2.5 (g/mL) ML   Lab File ID: >D2596

Level: (low/med) LOW   Date Received: 1/7/91

% Moisture: not dec.   Date Analyzed: 01/14/91

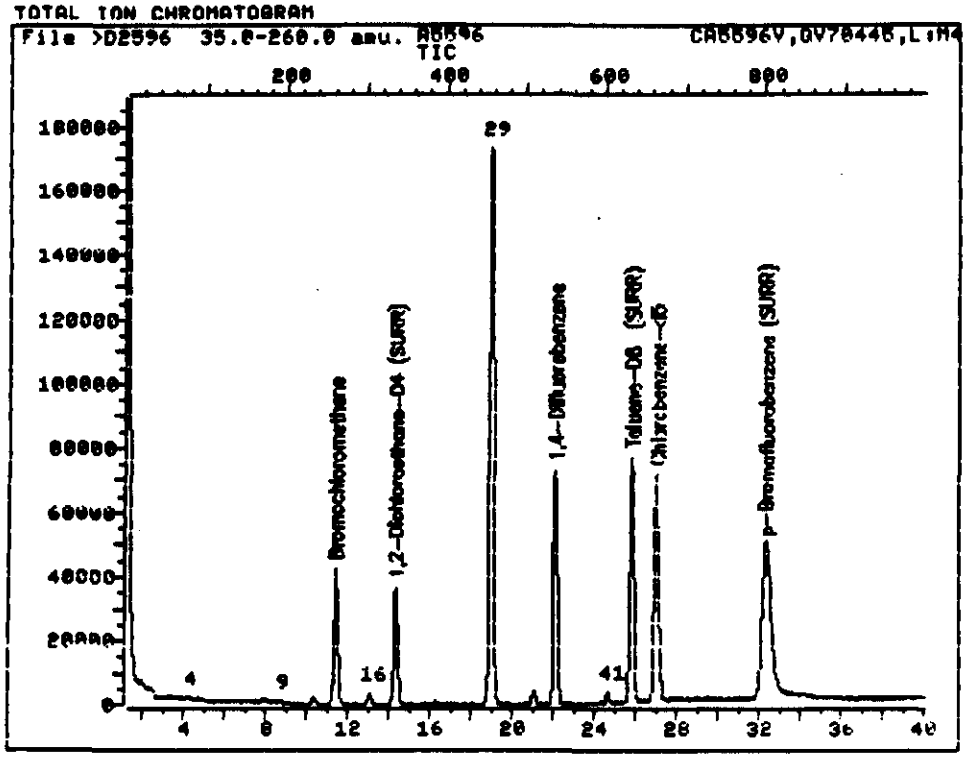
Column: (pack/cap) PACK   Dilution Factor: 2.0

CONCENTRATION UNITS:

Number TICs found: 0   (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

TOTAL ION CHROMATOGRAM



Data File: >D2596::U1 Quant Output File: ^D2596::AU
Name: A5596
Misc: CA5596V,QV70445,L:M4,2.5,,

Id File: 1D0310::SS
Title: PP/VOA, IFB, XVUA13, XVUA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910114 01:18
Injected at: 910114 00:37

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 01:18
Output File: ^D2596::AQ Injected at: 910114 00:37
Data File: >D2596::U1 Dilution Factor: 1.00000
Name: A5596
Misc: CA5596U,QU70445,L:M4,2.5,,

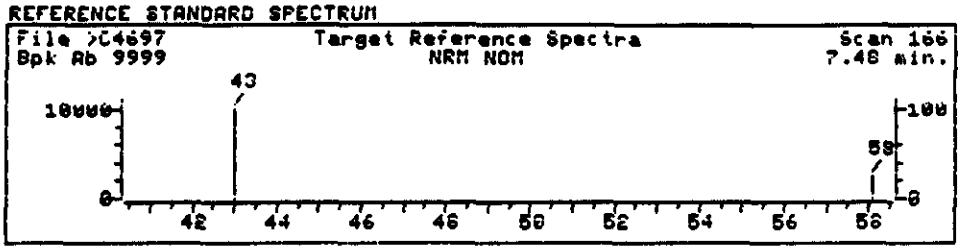
ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	261	75943	250.00	NG	94
4)	Dichlorodifluoromethane	4.18	75	2714	~~10.33~~	NG	96
9)	Acetone	8.72	192	6243	26.84	NG	96
16)	1,2-Trans-dichloroethylene	13.06	304	8567	19.95	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	14.34	337	181489	224.25	NG	96
21)	*1,4-Difluorobenzene	22.09	537	328055	250.00	NG	98
29)	Trichloroethylene	18.95	456	370885	692.60	NG	91
32)	*Chlorobenzene-d5	27.03	664	276965	250.00	NG	78
41)	Tetrachloroethylene	24.65	603	5698	10.53	NG	94
42)	Toluene-D8 (SURR)	25.82	633	334410	240.61	NG	9[illegible]
46)	p-Bromofluorobenzene (SURR)	32.30	800	213725	247.85	NG	88

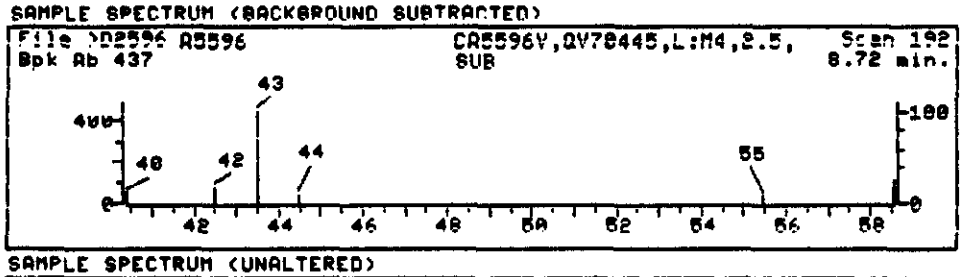
* Compound is ISTD

PP 1/22/91

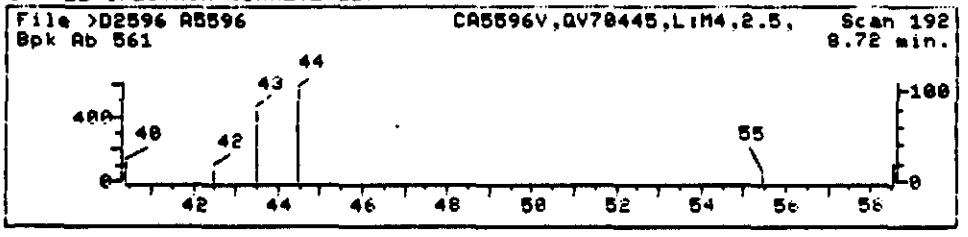
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



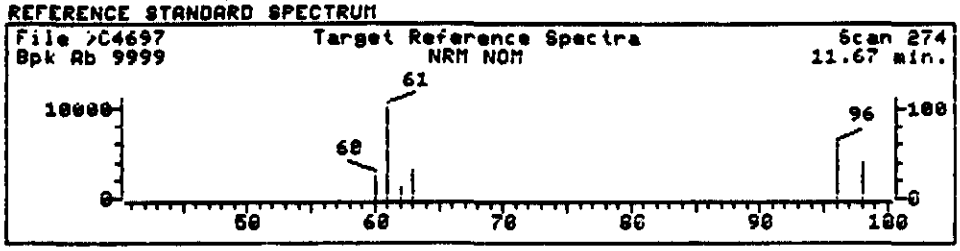
SAMPLE SPECTRUM (UNALTERED)



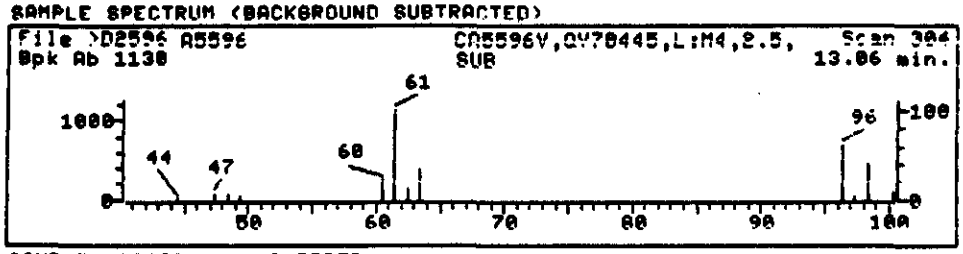
Data File: >D2596::U1 Quant Output File: ^D2596::AU
Name: A5596
Misc: CA5596V,QV70445,L:M4,2.5,,
Quant Time: 91U114 01:18 Quant ID File: ID031U::SS
Injected at: 91U114 00:37 Last Calibration: 91U113 18:53

Compound No: 9
Compound Name: Acetone
Scan Number: 192
Retention Time: 8.72 min.
Quant Ion: 43.0
Area: 6243
Concentration: 26.84 NG
Q-value: 96

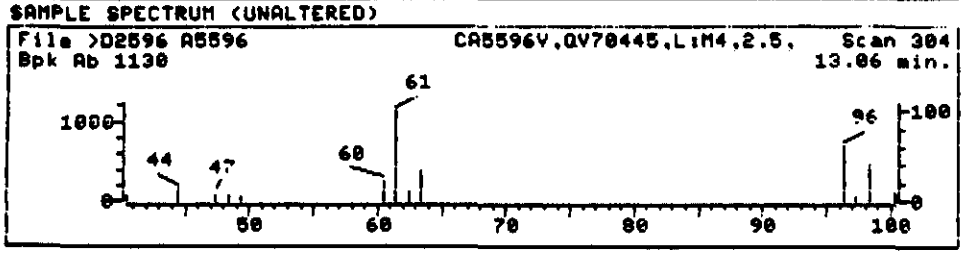
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



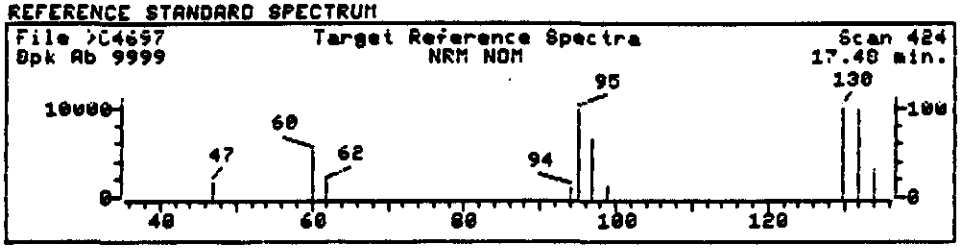
SAMPLE SPECTRUM (UNALTERED)



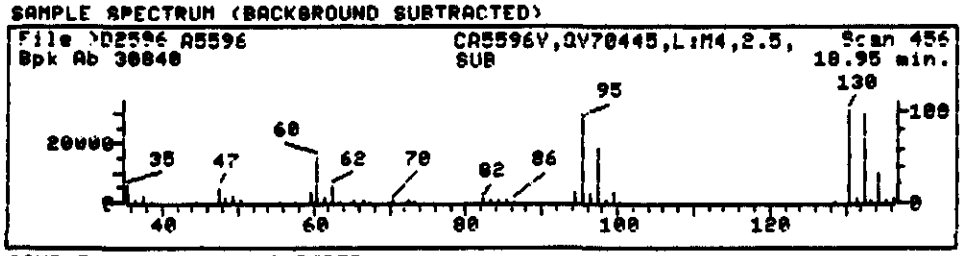
Data File: >D2596::U1 Quant Output File: ^D2596::AW
Name: A5596
Misc: CA5596V,QV70445,L:M4,2.5,,
Quant Time: 910114 01:18 Quant ID File: ID0310::SS
Injected at: 910114 00:37 Last Calibration: 910113 18:53

Compound No: 16
Compound Name: 1,2-Trans-dichloroethylene
Scan Number: 304
Retention Time: 13.06 min.
Quant Ion: 96.0
Area: 8567
Concentration: 19.95 NG
q-value: 98

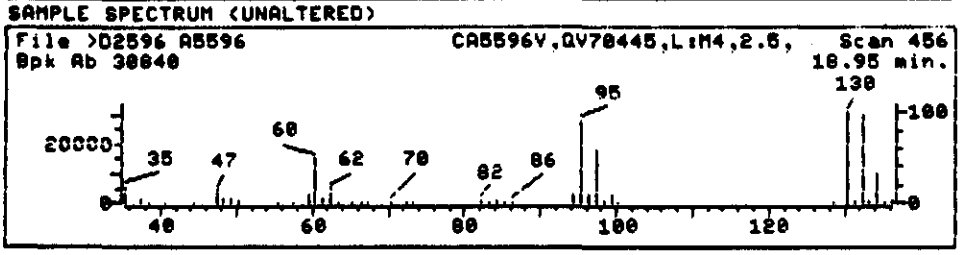
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



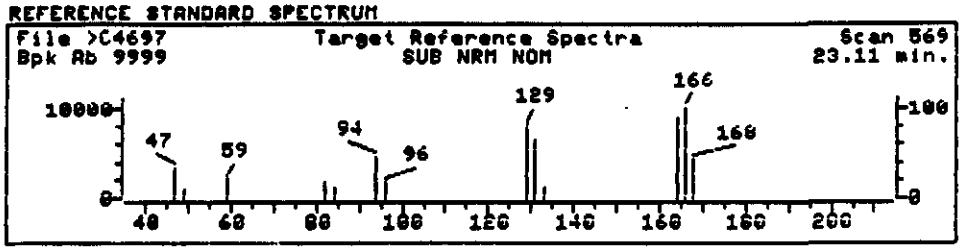
SAMPLE SPECTRUM (UNALTERED)



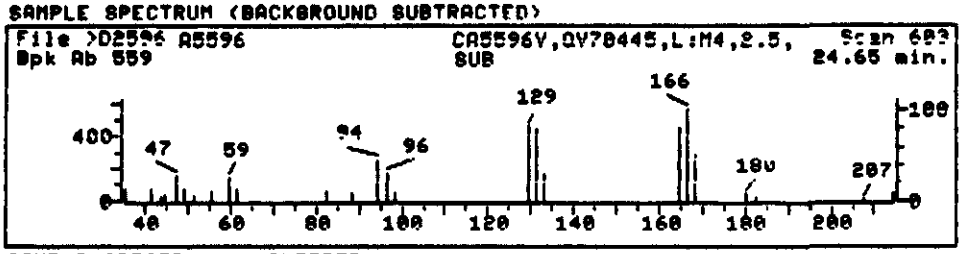
Data File: >D2596::U1 Quant Output File: ^D2596::AW
Name: A5596
Misc: CA5596V,QV70445,L:M4,2.5,,
Quant Time: 910114 01:18 Quant ID File: ID0310::S5
Injected at: 910114 00:37 Last Calibration: 910113 18:53

Compound No: 29
Compound Name: Trichloroethylene
Scan Number: 456
Retention Time: 18.95 min.
Quant Ion: 130.0
Area: 370885
Concentration: 692.60 NG
Q-value: 91

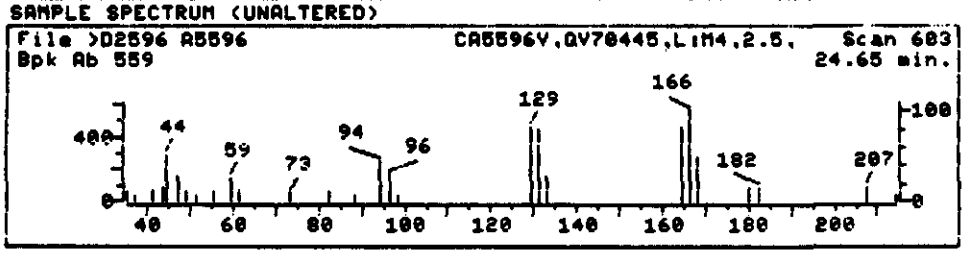
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D2596::U1 Quant Output File: ^D2596::AW
Name: A5596
Misc: CA5596V,QV70445,L:M4,2.5,,
Quant Time: 910114 01:18 Quant ID File: ID031U::S5
Injected at: 910114 00:37 Last Calibration: 910113 18:53

Compound No: 41
Compound Name: Tetrachloroethylene
Scan Number: 603
Retention Time: 24.65 min.
Quant Ion: 164.0
Area: 5698
Concentration: 10.53 NG
q-value: 94

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5602

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5602V4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2584

Level: (low/med) LOW Date Received: 1/4/91

% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1

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	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AP 1/17/91
CAS602

Lab Name: ETC CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CAS602

Sample wt/vol: 5 (g/mL) ML Lab File ID: 2DE52U

Level: (low/med) LOW Date Received: 1/4/91

% Moisture: not dec. _____ Date Analyzed: 1/13/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
A5602

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5602V4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >D2584

Level: (low/med) LOW Date Received: 1/14/91

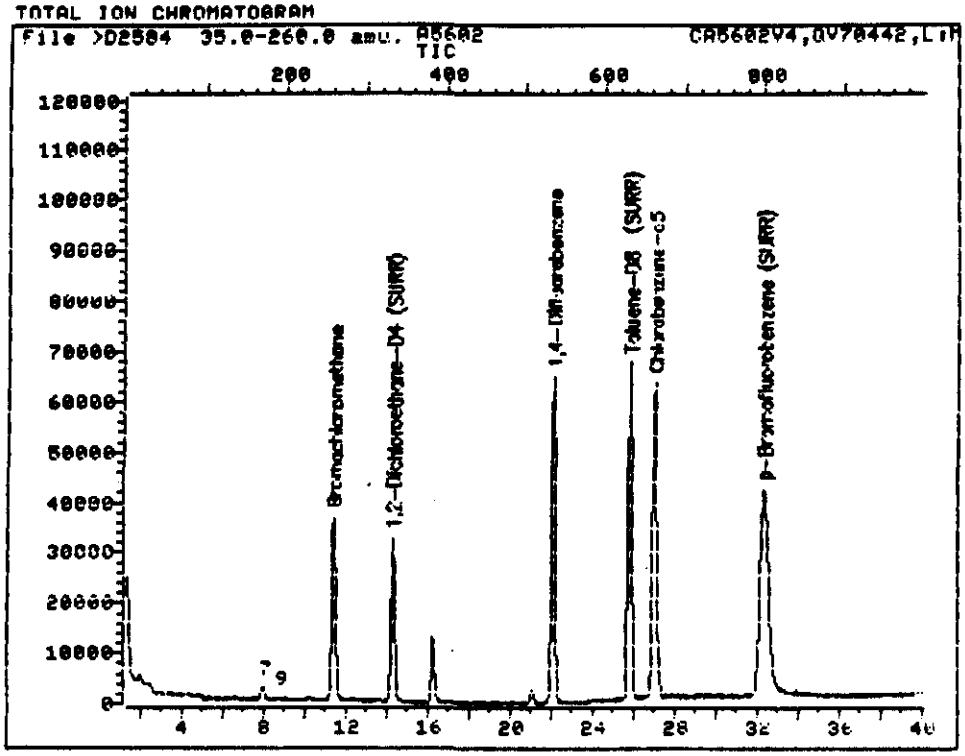
% Moisture: not dec. Date Analyzed: 01/13/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 1066-40-6	Silanol, trimethyl-	16.24	17	J

TOTAL ION CHROMATOGRAM



Data File: >D2584::UU Quant Output File: ^D2584::AW
Name: A56U2
Misc: CA56U2U4,QU70442,L:M4,5,,

Id File: IDU309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 13:03

Operator ID: KB6656
Quant Time: 910113 17:01
Injected at: 910113 16:20

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 17:01
Output File: ^D2584::AQ Injected at: 910113 16:20
Data File: >D2584::U0 Dilution Factor: 1.0000
Name: A5602
Misc: CA5602V4,QV70442,L:M4,5,,

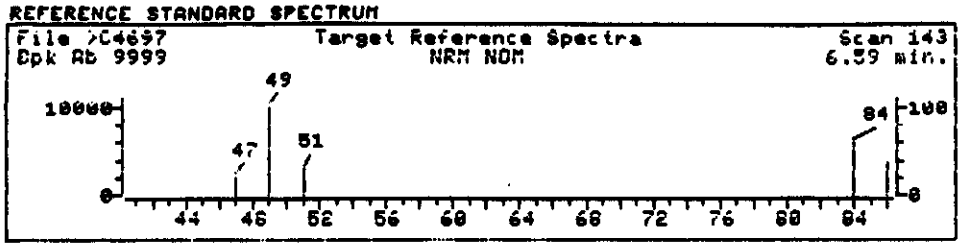
ID File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 13:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.44	261	57431	250.00	NG	96
7)	Methylene chloride	7.95	171	7402	19.36	NG	99
9)	Acetone	8.72	191	2546	~~14.86~~	~~NG~~	75
18)	1,2-Dichloroethane-D4 (SURR)	14.31	335	150360	239.78	NG	89
21)	*1,4-Difluorobenzene	22.10	536	290573	250.00	NG	99
37)	*Chlorobenzene-d5	27.03	663	243058	250.00	NG	78
42)	Toluene-D8 (SURR)	25.82	632	295835	252.29	NG	92
46)	p-Bromofluorobenzene (SURR)	32.31	799	192122	245.80	NG	86

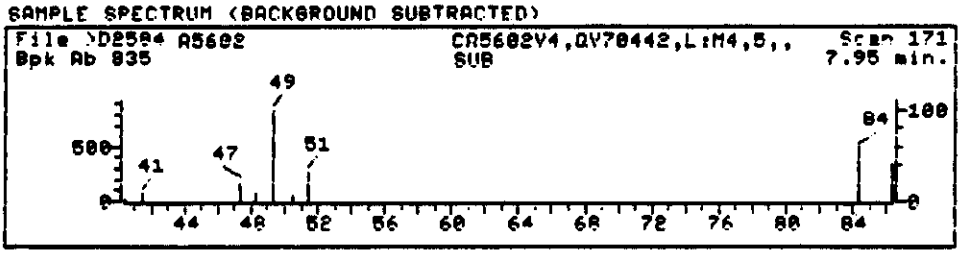
* Compound is ISTD

AP 1/16/91

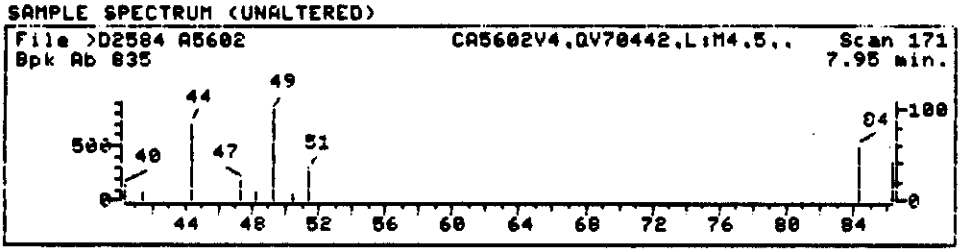
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

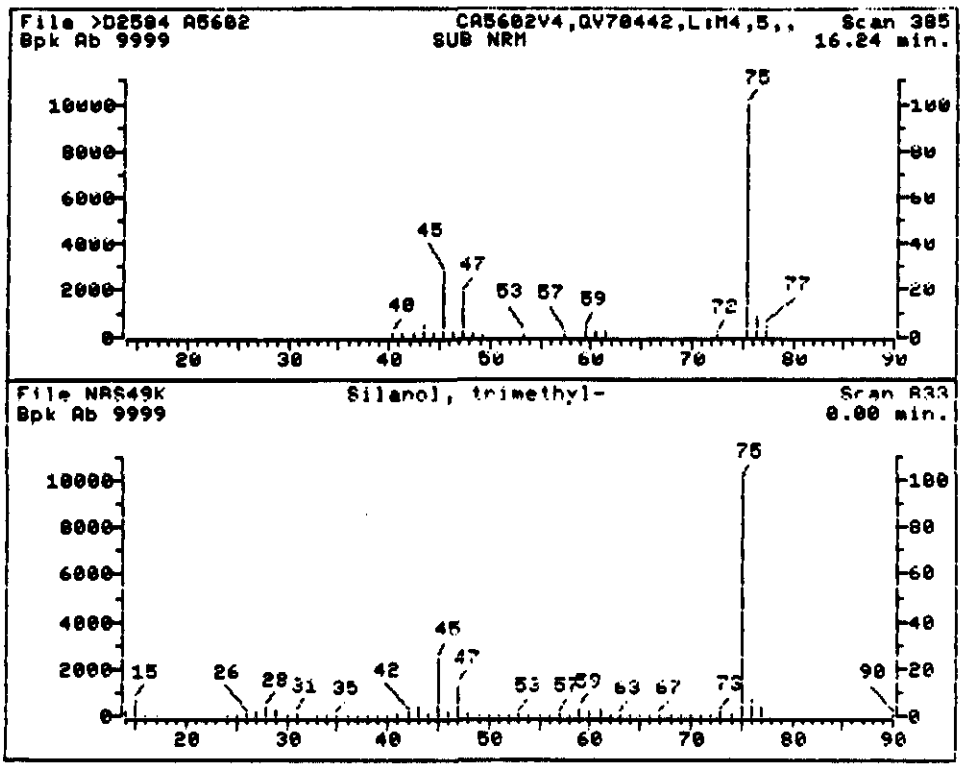


SAMPLE SPECTRUM (UNALTERED)



Data File: >D2584::UU Quant Output File: ^D2584::AU
Name: A5602
Misc: CA5602V4,QV70442,L:M4,5,,
Quant Time: 910113 17:01 Quant ID File: ID0309::S=
Injected at: 910113 16:20 Last Calibration: 910113 13:03

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 171
Retention Time: 7.95 min.
Quant Ion: 84.0
Area: [illegible]402
Concentration: 19.36 NG
Q- alue: [illegible]



Data File: >D2584::UU
Name: A5602
Misc Data: CA5602V4,QV70442,L:M4,5,,
RT (min): 16.24
Scan: 385
Area: 148095 Rank: 4
Semi-quantitative Conc (uncorrected): 83.96 NG
Semi-quantitative Conc (corrected): 16.80 ug/l
Calculated using Istd: Bromochloromethane @ 11.44 minutes

1. Silanol, trimethyl- 90 (SI:100)

Sample file: >D2584 Spectrum #: 385
Search speed: 2 Tilting option: S No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	F	D	#-C		%			
1.	78	1066406	4954	NBS49K	57	27	2	0	100	0		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A5603

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5603V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2136

Level: (low/med) LOW Date Received: 01/8/91

% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1

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	5	U
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AS603

Lab Name: STC CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: CAS603

Sample wt/vol: 5 (g/ML) ML Lab File ID: >C2186

Level: (low/med) LOW Date Received: 1/5/91

% Moisture: not dec. _____ Date Analyzed: 1/11/91

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A5603

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: CA5603V

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: >C2136

Level: (low/med) LOW Date Received: 01/5/91

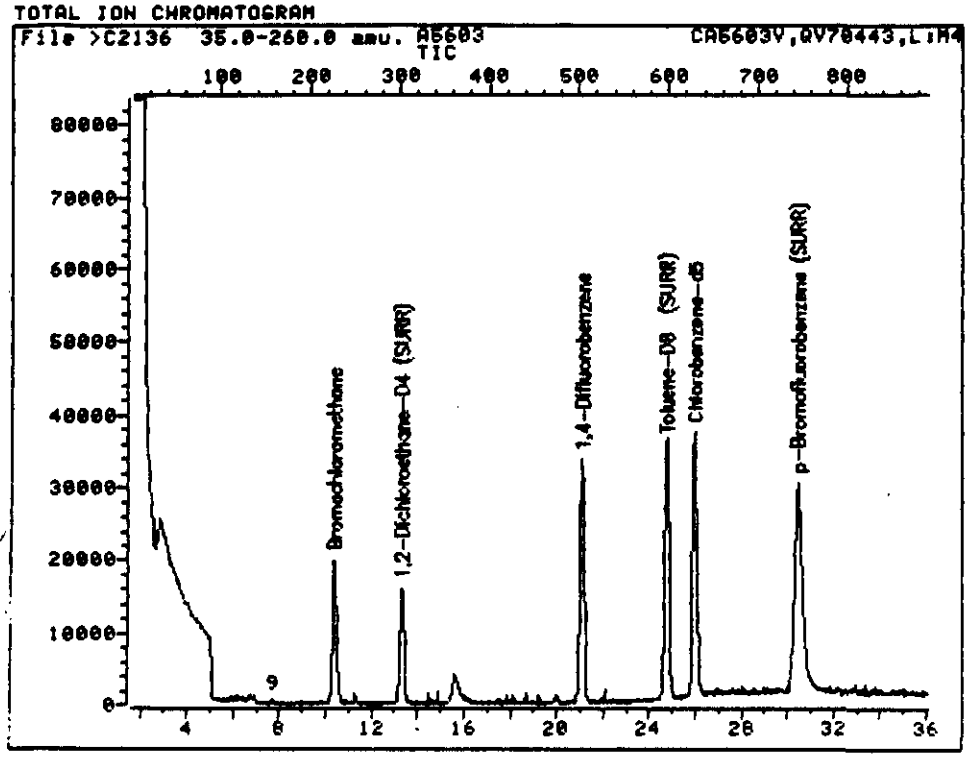
% Moisture: not dec. Date Analyzed: 01/11/91

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 1066-40-6	Silanol, trimethyl-	15.60	13	J

TOTAL ION CHROMATOGRAM



Data File: >C2136::U1 Quant Output File: ^C2136::AQ
Name: A5603
Misc: CA5603V,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910111 13:37

Operator ID: KB6656
Quant Time: 910111 23:14
Injected at: 910111 22:37

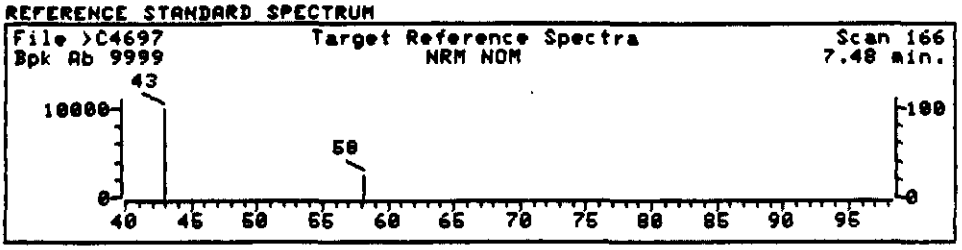
perator ID: KB6656 Quant Rev: 7 Quant Time: 910111 23:14
utput File: ^C2136::AQ Injected at: 910111 22:37
ata File: >C2136::U1 Dilution Factor: 1.00000
ame: A5603
isc: CA5603V,QV70443,L:M4,5,,

D File: IC1203::US
itle: IFB, PP/VOA, XVOA13
ast Calibration: 910111 13:37

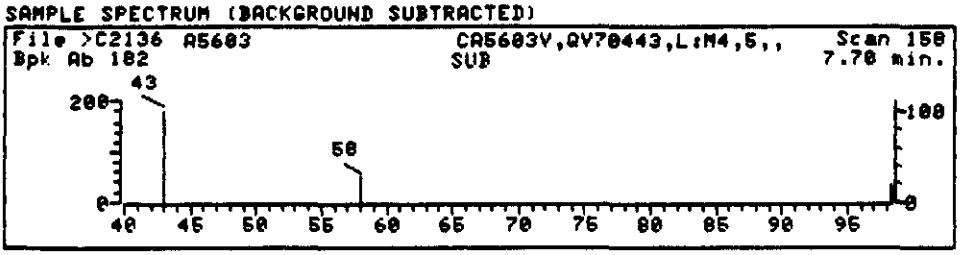
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.37	227	38632	250.00	NG	91
9)	Acetone	7.70	158	2353	22.56	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.32	303	75792	249.70	NG	87
30)	*1,4-Difluorobenzene	21.10	504	170000	250.00	NG	93
36)	*Chlorobenzene-d5	25.98	630	138427	250.00	NG	87
41)	Toluene-D8 (SURR)	24.74	598	170809	239.84	NG	93
45)	p-Bromofluorobenzene (SURR)	30.45	745	101710	244.78	NG	99

* Compound is ISTD

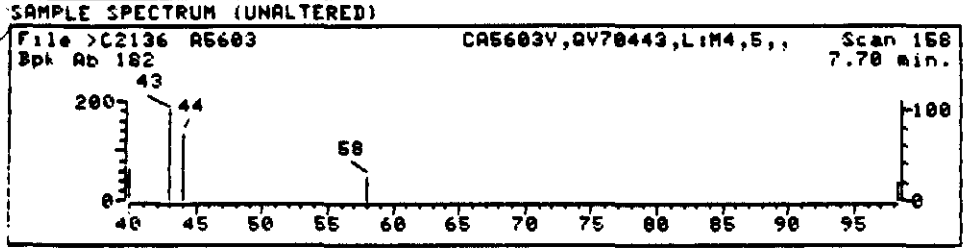
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

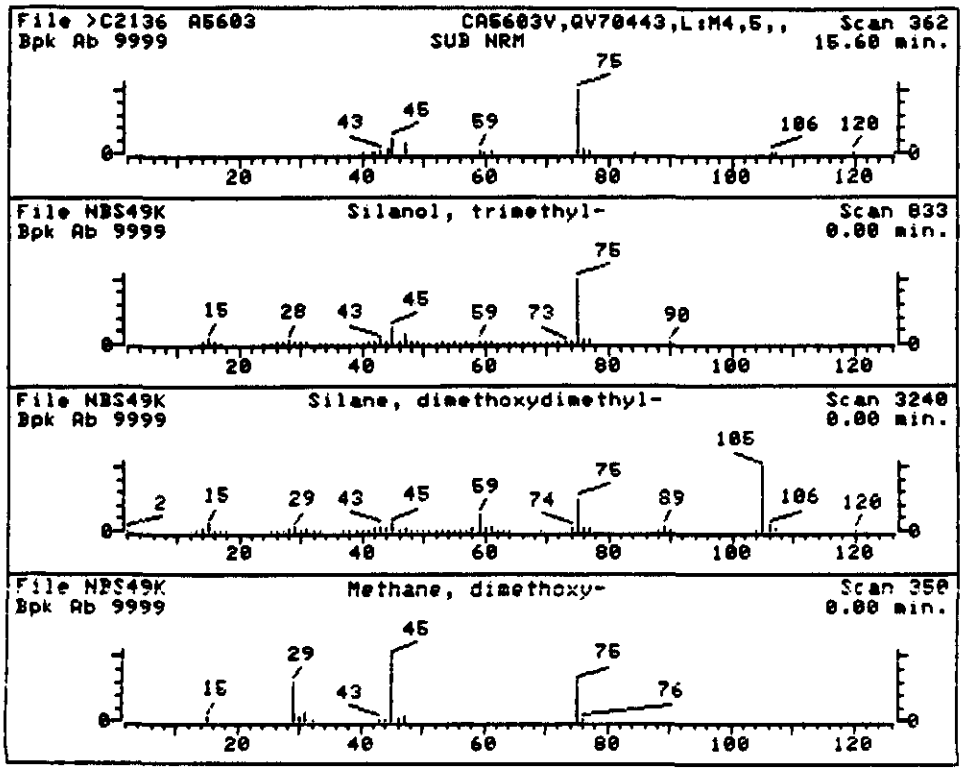


SAMPLE SPECTRUM (UNALTERED)



Data File: >C2136::U1 Quant Output File: ^C2136::AQ
Name: A5603
Misc: CA5603V,QV70443,L:M4,5,,
Quant Time: 910111 23:14 Quant ID File: IC1203::US
Injected at: 910111 22:37 Last Calibration: 910111 13:37

Compound No: 9
Compound Name: Acetone
Scan Number: 158
Retention Time: 7.70 min.
Quant Ion: 43.0
Area: 2353
Concentration: 22.56 NG
Qual Value: 99



Data File: >C2136::U1
Name: A5603
Misc Data: CA5603U,QV70443,L:M4,5,,
RT (min): 15.60
Scan: 362
Area: 65291 Rank: 4
Semi-quantitative Conc (uncorrected): 63.86 NG
Semi-quantitative Conc (corrected): 12.77 ug/l
Calculated using Istd: Bromochloromethane @ 10.41 minutes

1. Silanol, trimethyl- 90 C3H10OSi
2. Silane, dimethoxydimethyl- 120 C4H12O2Si
3. Methane, dimethoxy- 76 C3H8O2

Sample file: >C2136 Spectrum #: 362
Search speed: 2 Tilting option: S No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70	1066406	4954	NBS49K	40	44	2	0	97	7	42	14
2.	70*	1112396	4982	NBS49K	27	63	3	0	199	7	42	13
3.	36*	109875	4953	NBS49K	20	45	2	0	163	28	14	17

STANDARDS DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETCNJ Contract:

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

Instrument ID:GC/MS C Calibration Date(s) 01/10/91 01/10/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>C2115 RRF50 =>C2118
RRF100=>C2113 RRF150=>C2117 RRF200=>C2111

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	.338	.701	.374	.406	.715	.507	36.6#
Bromomethane	.189	.176	.180	.163	.198	.181	7.3
Vinyl Chloride *	.247	.299	.259	.227	.289	.264	11.3*
Chloroethane	.197	.220	.204	.188	.232	.208	8.5
Methylene Chloride	.844	1.224	1.108	.646	1.253	1.015	25.8
Acetone	.697	.765	.503	.612	.456	.607	21.3
Carbon Disulfide	4.043	3.867	3.637	3.709	3.896	3.830	4.2
1,1-Dichloroethene *	1.326	1.230	1.140	1.158	1.191	1.209	6.1*
1,1-Dichloroethane #	2.429	2.315	2.160	2.173	2.075	2.230	6.3#
1,2-Dichloroethene (total)	1.289	1.237	1.135	1.148	1.166	1.195	5.5
Chloroform *	2.802	2.659	2.512	2.444	2.491	2.581	5.7*
1,2-Dichloroethane	2.161	2.081	1.923	1.901	1.871	1.987	6.4
2-Butanone	.044	.047	.034	.040	.029	.039	19.3
1,1,1-Trichloroethane	.494	.473	.457	.438	.444	.461	4.9
Carbon Tetrachloride	.491	.466	.464	.440	.453	.463	4.1
Vinyl Acetate	.488	.783	.429	.782	.616	.620	26.4
Bromodichloromethane	.506	.484	.482	.462	.452	.477	4.4
1,2-Dichloropropane *	.396	.370	.357	.348	.316	.357	8.1*
cis-1,3-Dichloropropene	.778	.745	.727	.695	.659	.721	6.3
Trichloroethene	.413	.395	.372	.354	.349	.377	7.2
Dibromochloromethane	.542	.510	.503	.448	.443	.489	8.7
1,1,2-Trichloroethane	.317	.290	.273	.248	.230	.272	12.5
Benzene	1.022	.928	.883	.854	.810	.899	9.0
trans-1,3-Dichloropropene	.269	.257	.242	.228	.217	.243	8.8
Bromoform #	.552	.536	.560	.527	.498	.535	4.5#
4-Methyl-2-Pentanone	.898	.697	.809	.758	.404	.713	26.3
2-Hexanone	.668	.709	.685	.821	.453	.667	20.0
Tetrachloroethene	.745	.570	.737	.573	.448	.615	20.5
1,1,2,2-Tetrachloroethane #	.978	.740	.958	.769	.482	.786	25.6#
Toluene *	1.140	.865	1.175	.953	.704	.967	20.2*
Chlorobenzene #	1.179	1.114	1.480	.801	.945	1.104	23.3#
Ethylbenzene *	.689	.520	.730	.588	.438	.593	20.2*
Styrene	1.390	1.074	1.559	1.206	.912	1.228	20.7
Xylene (total)	.786	.610	.864	.670	.510	.688	20.4
Toluene-d8	1.762	1.469	2.083	1.783	1.304	1.680	18.0
Bromofluorobenzene	1.039	.862	1.287	1.078	.790	1.011	19.3
1,2-Dichloroethane-d4	1.961	1.985	1.955	2.072	2.112	2.017	3.5

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ETCAT Contract: ____________

Lab Code: ________ Case No.: ______ SAS No.: _______ SDG No.: _______

Instrument ID: C Calibration Date(s): 1/10/91 1/10/91

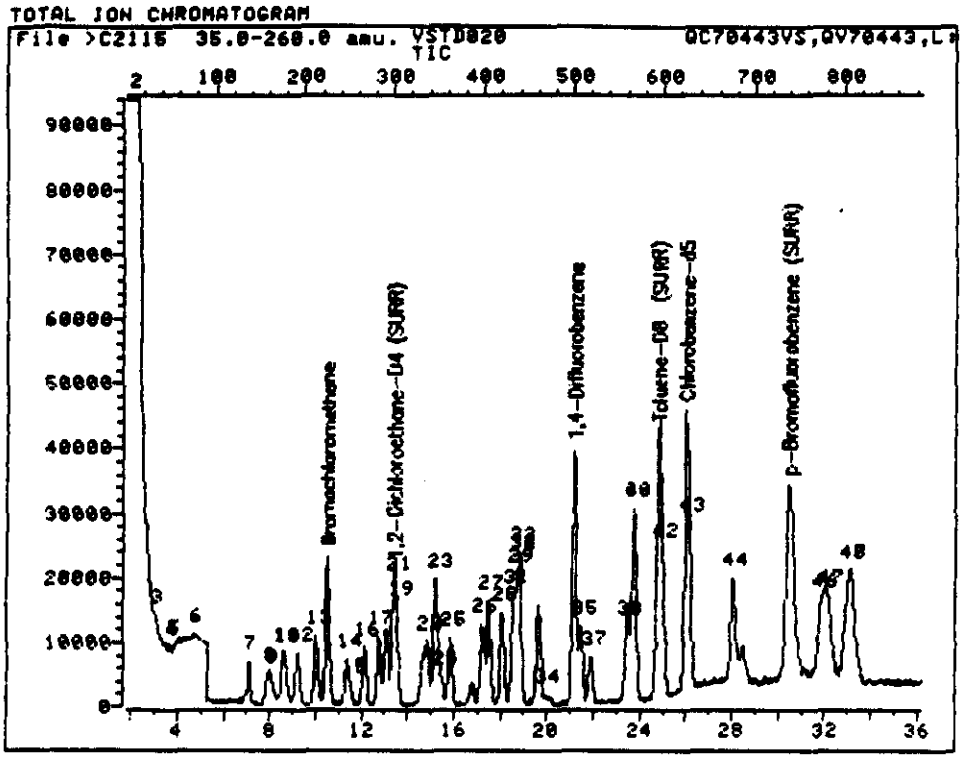
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >C2115 RRF50 = >C2112
RRF100= >C2113 RRF150= >C2117 RRF200= >C2111

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Tetrahydrofuran	0.52476	0.49490	0.35239	0.39658	0.23450	0.40061	29.068
Toluene-d8							
Bromofluorobenzene							
1,2-Dichloroethane-d4							

FORM VI VOA 1/87 Rev.



Data File: >C2115::U2 Quant Output File: ^C2115::AQ
Name: VSTD020
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

Operator ID: CA3875
Quant Time: 910110 15:24
Injected at: 910110 14:01

Operator ID: CA3875 Quant Rev: 7 Quant Time: 910110 15:24
Output File: ^C2115::AQ Injected at: 910110 14:01
Data File: >C2115::U2 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.50	225	41981	250.00	NG	93
2)	Methyl chloride	2.13	9	5670	40.13	NG	98
3)	Methyl bromide	3.06	33	3167	17.31	NG	83
4)	Dichlorodifluoromethane	3.68	49	5054	28.60	NG	91
5)	Vinyl chloride	3.76	51	4142	15.46	NG	88
6)	Chloroethane	4.77	77	3312	19.56	NG	87
7)	Methylene chloride	7.09	137	14171	42.42	NG	93
8)	Acrolein	7.91	158	44077	4009.02	NG	89
9)	Acetone	8.02	161	11709	46.16	NG	91
10)	Acrylonitrile	8.64	177	13561	215.26	NG	93
11)	Carbon disulfide	8.57	175	67891	114.74	NG	99
12)	Trichlorofluoromethane	9.23	192	44799	134.97	NG	94
13)	1,1-Dichloroethylene	10.00	212	22262	58.25	NG	98
14)	1,1-Dichloroethane	11.36	247	40791	85.40	NG	99
15)	Tetrahydrofuran	11.51	251	8812	7944.86	NG	100
16)	1,2-Trans-dichloroethylene	12.09	266	21640	64.41	NG	97
17)	Chloroform	12.75	283	47045	77.20	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.41	300	82323	192.12	NG	87
19)	1,2-Dichloroethane	13.53	303	36281	66.04	NG	98
20)	*1,4-Difluorobenzene	21.16	500	187083	250.00	NG	96
21)	Methyl ethyl ketone	13.49	302	3296	23.36	NG	97
22)	1,1,1-Trichloroethane	14.84	337	36951	63.34	NG	97
23)	Carbon tetrachloride	14.84	337	5834	11.27	NG	99
23)	Carbon tetrachloride	15.23	347	36718	70.93	NG	95
24)	Vinyl acetate	15.46	353	36521	85.14	NG	94
25)	Dichlorobromomethane	15.85	363	37892	76.24	NG	96
26)	1,2-Dichloropropane	17.21	398	29598	99.24	NG	99
27)	cis-1,3-Dichloropropylene	17.48	405	58202	136.53	NG	95
28)	Trichloroethylene	18.06	420	30923	90.03	NG	90
29)	Chlorodibromomethane	18.72	437	40529	109.40	NG	94
30)	bis(Chloromethyl)ether	18.76	438	12891	291.87	NG	100
31)	Benzene	18.56	433	76470	82.46	NG	96
32)	1,1,2-Trichloroethane	18.83	440	23716	91.78	NG	84
33)	trans-1,3-Dichloropropylene	18.79	439	20161	45.20	NG	98
34)	2-Chloroethylvinyl ether	18.83	440	5507	34.12	NG	100
34)	2-Chloroethylvinyl ether	19.88	467	4121	25.53	NG	100
35)	Bromoform	21.47	508	41324	194.79	NG	98
36)	*Chlorobenzene-d5	26.00	625	107322	250.00	NG	83
37)	Methyl-iso-butyl ketone	21.89	519	38569	210.54	NG	91
38)	2-Hexanone	23.41	558	28685	173.33	NG	87
39)	1,1,2,2-Tetrachloroethane	23.75	567	41983	144.51	NG	97
40)	Tetrachloroethylene	23.75	567	31976	89.40	NG	97
41)	Toluene-D8 (SURR)	24.80	594	189051	277.03	NG	92

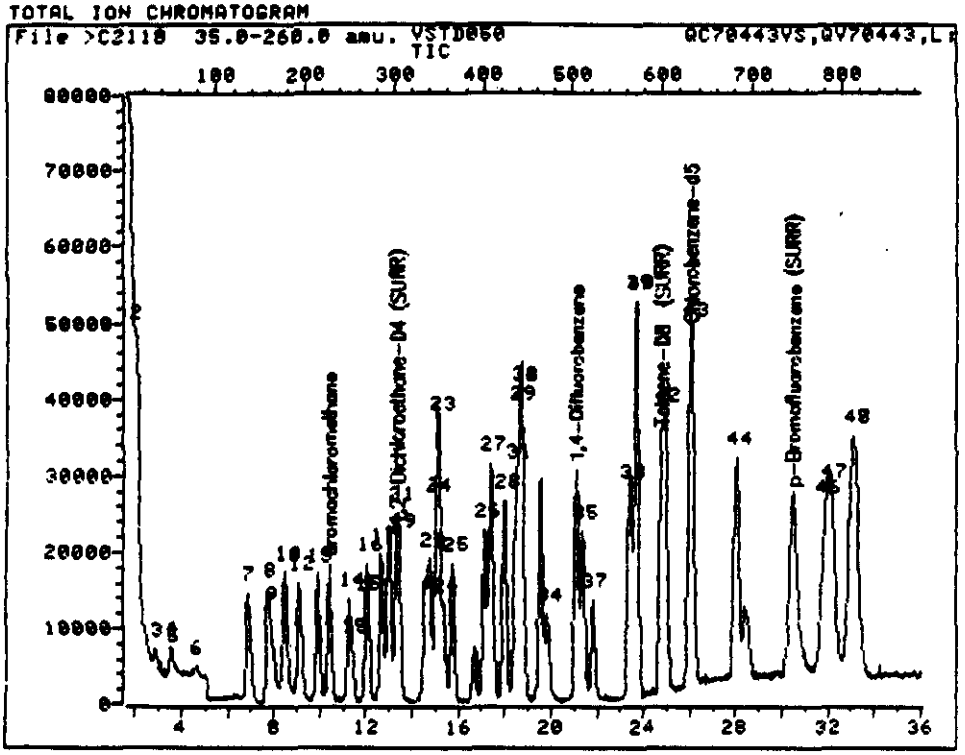
Operator ID: CA3875 Quant Rev: 7 Quant Time: 910110 15:24
Output File: ^C2115::AQ Injected at: 910110 14:01
Data File: >C2115::U2 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	24.99	599	48932	59.55	NG	96
43)	Chlorobenzene	26.17	627	50630	83.52	NG	97
44)	Ethylbenzene	28.03	675	29580	26.15	NG	80
45)	p-Bromofluorobenzene (SURR)	30.48	738	111518	254.50	NG	86
46)	Styrene	31.87	774	59671	67.12	NG	93
47)	m-Xylene	32.14	781	37243	34.03	NG	96
47)	m-Xylene	33.07	805	67493	61.66	NG	98
48)	o+p-Xylenes	33.07	805	67493	32.31	NG	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2118::U1 Quant Output File: ^C2118::AQ
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

Operator ID: MGRMS
Quant Time: 910110 17:55
Injected at: 910110 17:15

Operator ID: MGRMS Quant Rev: 7 Quant Time: 910110 17:55
Output File: ^C2118::AQ Injected at: 910110 17:15
Data File: >C2118::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.40	227	33162	250.00	NG	94
2)	Methyl chloride	1.95	9	23250	208.32	NG	96
3)	Methyl bromide	2.84	32	5839	40.41	NG	99
4)	Dichlorodifluoromethane	3.50	49	13466	96.46	NG	97
5)	Vinyl chloride	3.58	51	9925	46.91	NG	94
6)	Chloroethane	4.59	77	7312	54.66	NG	97
7)	Methylene chloride	6.87	136	40598	153.86	NG	97
8)	Acrolein	7.76	159	109393	12595.85	NG	95
9)	Acetone	7.84	161	25384	126.67	NG	97
10)	Acrylonitrile	8.50	178	25806	518.57	NG	96
11)	Carbon disulfide	8.46	177	128221	274.33	NG	98
12)	Trichlorofluoromethane	9.12	194	90111	343.68	NG	92
13)	1,1-Dichloroethylene	9.89	214	40796	135.14	NG	97
14)	1,1-Dichloroethane	11.29	250	76783	203.49	NG	97
15)	Tetrahydrofuran	11.41	253	16412	18732.04	NG	100
15)	Tetrahydrofuran	11.99	268	4338	4951.23	NG	100
16)	1,2-Trans-dichloroethylene	12.06	270	41008	154.52	NG	97
17)	Chloroform	12.68	286	88183	183.18	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	13.34	303	65814	194.44	NG	88
19)	1,2-Dichloroethane	13.46	306	69017	159.03	NG	98
20)	*1,4-Difluorobenzene	21.09	503	148377	250.00	NG	95
21)	Methyl ethyl ketone	13.42	305	6970	62.28	NG	98
22)	1,1,1-Trichloroethane	14.74	339	70235	151.81	NG	97
23)	Carbon tetrachloride	14.74	339	11255	27.41	NG	97
23)	Carbon tetrachloride	15.16	350	69205	168.57	NG	98
24)	Vinyl acetate	15.05	347	66758	196.22	NG	79
24)	Vinyl acetate	15.40	356	116227	341.63	NG	94
25)	Dichlorobromomethane	15.78	366	71810	182.17	NG	98
26)	1,2-Dichloropropane	17.14	401	54850	231.88	NG	98
27)	cis-1,3-Dichloropropylene	17.41	408	110585	327.09	NG	96
28)	Trichloroethylene	17.99	423	58645	215.28	NG	89
29)	Chlorodibromomethane	18.65	440	75621	257.37	NG	99
30)	bis(Chloromethyl)ether	18.65	440	23778	678.80	NG	100
31)	Benzene	18.50	436	137687	187.21	NG	94
32)	1,1,2-Trichloroethane	18.77	443	42982	209.73	NG	86
33)	trans-1,3-Dichloropropylene	18.77	443	38119	107.75	NG	98
34)	2-Chloroethylvinyl ether	18.77	443	10043	78.45	NG	100
34)	2-Chloroethylvinyl ether	19.81	470	32085	250.62	NG	100
35)	Bromoform	21.40	511	79556	472.82	NG	98
36)	*Chlorobenzene-d5	26.01	629	101980	250.00	NG	80
37)	Methyl-iso-butyl ketone	21.83	522	71093	408.42	NG	89
38)	2-Hexanone	23.38	562	72332	459.97	NG	86
39)	1,1,2,2-Tetrachloroethene	23.69	570	75513	273.53	NG	95

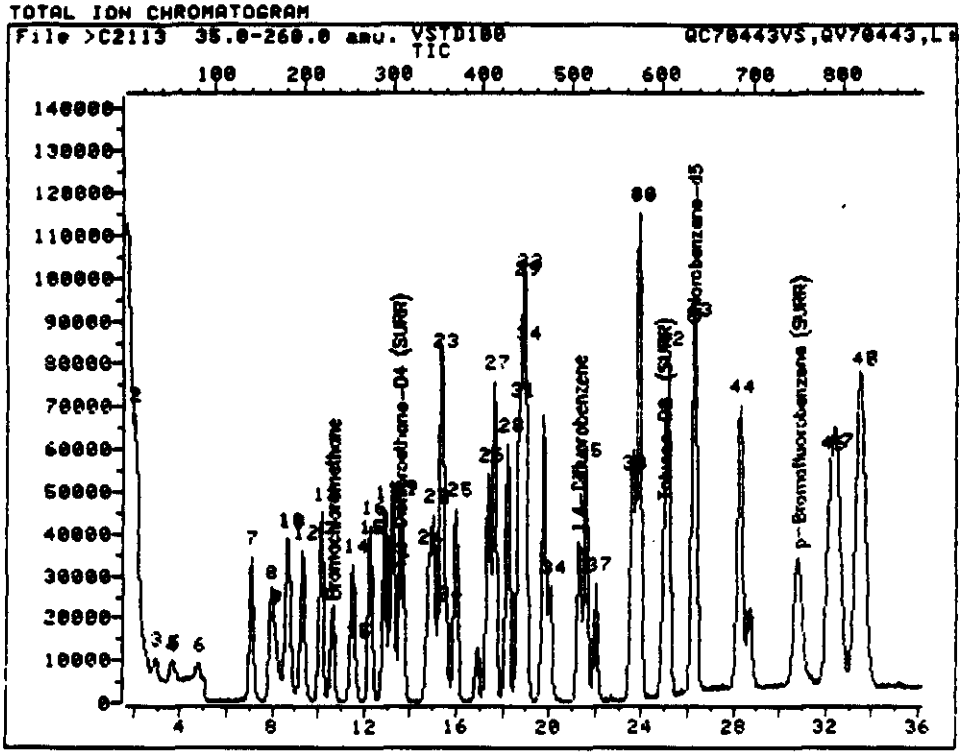
Operator ID: MGRMS Quant Rev: 7 Quant Time: 910110 17:55
Output File: ^C2118::AQ Injected at: 910110 17:15
Data File: >C2118::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
40)	Tetrachloroethylene	23.73	571	58176	171.18	NG	95
41)	Toluene-D8 (SURR)	24.77	598	149796	231.00	NG	91
42)	Toluene	24.97	603	88261	113.05	NG	95
43)	Chlorobenzene	26.09	631	113605	197.23	NG	96
44)	Ethylbenzene	28.03	681	53078	49.37	NG	80
45)	p-Bromofluorobenzene (SURR)	30.47	744	87881	211.07	NG	87
46)	Styrene	31.87	780	109573	129.70	NG	96
47)	m-Xylene	32.14	787	66777	64.21	NG	98
47)	m-Xylene	33.11	812	124370	119.58	NG	97
48)	o+p-Xylenes	33.11	812	124370	62.66	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2113::U2 Quant Output File: ^C2113::AQ
Name: VSTD100
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

Operator ID: CA3875
Quant Time: 910110 14:57
Injected at: 910110 12:24

Operator ID: CA3875 Quant Rev: 7 Quant Time: 910110 14:57
Output File: ^C2113::AQ Injected at: 910110 12:24
Data File: >C2113::U2 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.59	231	42548	250.00	NG	99
2)	Methyl chloride	1.99	9	31794	222.03	NG	98
3)	Methyl bromide	2.92	33	15337	82.73	NG	92
4)	Dichlorodifluoromethane	3.57	50	27680	154.54	NG	94
5)	Vinyl chloride	3.69	53	22049	81.22	NG	98
6)	Chloroethane	4.74	80	17347	101.08	NG	99
7)	Methylene chloride	7.06	140	94273	278.47	NG	96
8)	Acrolein	7.91	162	224660	20161.61	NG	90
9)	Acetone	8.07	166	42843	166.63	NG	98
10)	Acrylonitrile	8.69	182	54802	858.32	NG	94
11)	Carbon disulfide	8.65	181	309510	516.12	NG	99
12)	Trichlorofluoromethane	9.31	198	206579	614.08	NG	95
13)	1,1-Dichloroethylene	10.12	219	97051	250.57	NG	97
14)	1,1-Dichloroethane	11.48	254	183794	379.64	NG	98
15)	Tetrahydrofuran	11.63	258	29981	26670.50	NG	100
15)	Tetrahydrofuran	12.21	273	5848	5202.26	NG	100
16)	1,2-Trans-dichloroethylene	12.25	274	96542	283.53	NG	97
17)	Chloroform	12.87	290	213765	346.09	NG	96
18)	1,2-Dichloroethane-D4 (SURR)	13.53	307	83166	191.50	NG	96
19)	1,2-Dichloroethane	13.65	310	163608	293.83	NG	98
20)	*1,4-Difluorobenzene	21.28	507	181115	250.00	NG	96
21)	Methyl ethyl ketone	13.61	309	12325	90.22	NG	97
22)	1,1,1-Trichloroethane	14.97	344	165499	293.05	NG	96
23)	Carbon tetrachloride	14.97	344	24075	48.04	NG	98
23)	Carbon tetrachloride	15.39	355	168238	335.71	NG	96
24)	Vinyl acetate	14.77	339	59856	144.13	NG	77
24)	Vinyl acetate	15.59	360	155325	374.02	NG	93
25)	Dichlorobromomethane	15.97	370	174449	362.56	NG	98
26)	1,2-Dichloropropane	17.37	406	129422	448.23	NG	97
27)	cis-1,3-Dichloropropylene	17.64	413	263497	638.49	NG	96
28)	Trichloroethylene	18.22	428	134712	405.13	NG	95
29)	Chlorodibromomethane	18.88	445	182365	508.46	NG	98
30)	bis(Chloromethyl)ether	18.84	444	58095	1358.69	NG	100
31)	Benzene	18.69	440	319872	356.30	NG	95
32)	1,1,2-Trichloroethane	18.96	447	98857	395.19	NG	87
33)	trans-1,3-Dichloropropylene	18.96	447	87734	203.17	NG	98
34)	2-Chloroethylvinyl ether	19.00	448	23598	151.01	NG	100
34)	2-Chloroethylvinyl ether	20.04	475	75701	484.42	NG	100
35)	Bromoform	21.59	515	202810	987.48	NG	98
36)	*Chlorobenzene-d5	26.24	632	87622	250.00	NG	76
37)	Methyl-iso-butyl ketone	22.02	526	141834	948.33	NG	90
38)	2-Hexanone	23.57	566	120021	888.31	NG	87
39)	1,1,2,2-Tetrachloroethane	23.88	574	167949	708.05	NG	95

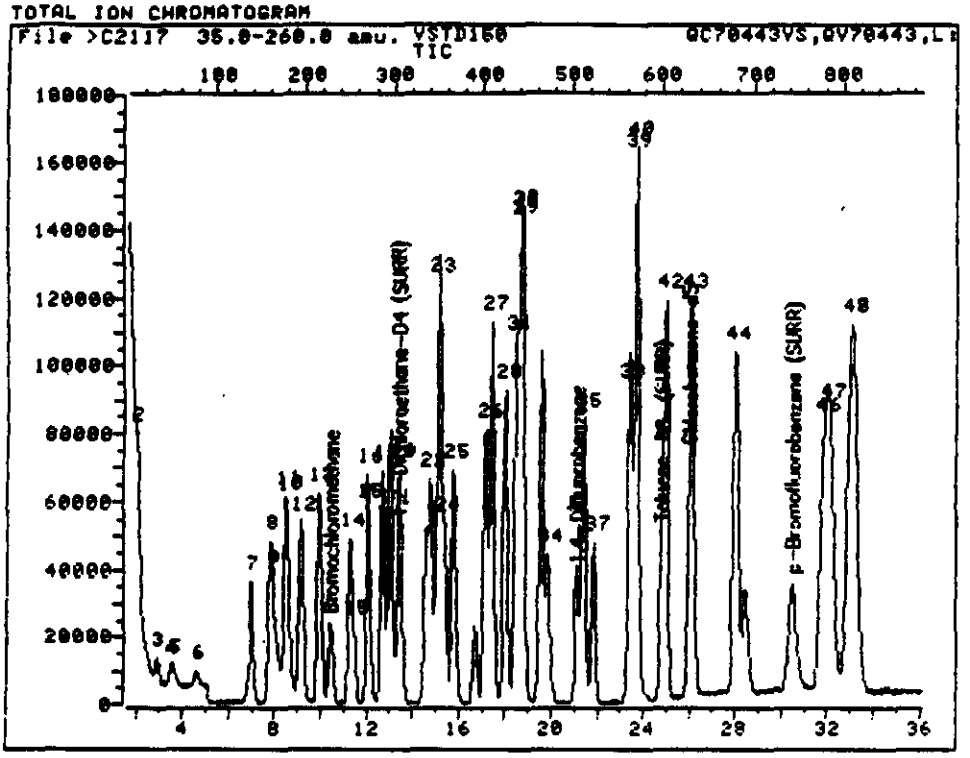
Operator ID: CA3875 Quant Rev: 7 Quant Time: 910110 14:57
Output File: ^C2113::AQ Injected at: 910110 12:24
Data File: >C2113::U2 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
40)	Tetrachloroethylene	23.88	574	129232	442.56	NG	95
41)	Toluene-D8 (SURR)	24.96	602	182504	327.56	NG	91
42)	Toluene	25.16	607	205964	307.03	NG	95
43)	Chlorobenzene	26.32	634	259358	524.05	NG	97
44)	Ethylbenzene	28.26	684	127978	138.55	NG	81
45)	p-Bromofluorobenzene (SURR)	30.82	750	112804	315.32	NG	88
46)	Styrene	32.21	786	273132	376.28	NG	95
47)	m-Xylene	32.52	794	165553	185.26	NG	96
47)	m-Xylene	33.53	820	302965	339.03	NG	96
48)	o+p-Xylenes	33.53	820	302965	177.66	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2117::U1 Quant Output File: ^C2117::AQ
Name: VSTD150
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

Operator ID: MGRMS
Quant Time: 910110 17:04
Injected at: 910110 16:27

Operator ID: MGRMS Quant Rev: 7 Quant Time: 910110 17:04
Output File: ^C2117::AQ Injected at: 910110 16:27
Data File: >C2117::U1 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.44	229	43358	250.00	NG	95
2)	Methyl chloride	2.00	11	52816	361.95	NG	99
3)	Methyl bromide	2.85	33	21208	112.26	NG	94
4)	Dichlorodifluoromethane	3.43	48	38598	211.47	NG	99
5)	Vinyl chloride	3.58	52	29509	106.67	NG	93
6)	Chloroethane	4.59	78	24488	140.02	NG	92
7)	Methylene chloride	7.00	140	84054	243.65	NG	99
8)	Acrolein	7.81	161	393349	34640.77	NG	93
9)	Acetone	7.93	164	79549	303.61	NG	94
10)	Acrylonitrile	8.55	180	93928	1443.63	NG	97
11)	Carbon disulfide	8.51	179	482496	789.56	NG	99
12)	Trichlorofluoromethane	9.13	195	327157	954.35	NG	92
13)	1,1-Dichloroethylene	9.94	216	150583	381.52	NG	96
14)	1,1-Dichloroethane	11.30	251	282672	572.98	NG	97
15)	Tetrahydrofuran	11.45	255	51585	45031.72	NG	100
15)	Tetrahydrofuran	12.03	270	19221	16779.19	NG	100
16)	1,2-Trans-dichloroethylene	12.07	271	149335	430.39	NG	98
17)	Chloroform	12.73	288	317847	504.99	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.39	305	89839	203.00	NG	92
19)	1,2-Dichloroethane	13.47	307	247220	435.70	NG	99
20)	*1,4-Difluorobenzene	21.10	504	193124	250.00	NG	96
21)	Methyl ethyl ketone	13.47	307	23009	157.95	NG	97
22)	1,1,1-Trichloroethane	14.78	341	253525	421.00	NG	97
23)	Carbon tetrachloride	14.78	341	37644	70.45	NG	95
23)	Carbon tetrachloride	15.21	352	254684	476.61	NG	99
24)	Vinyl acetate	15.41	357	452908	1022.79	NG	94
25)	Dichlorobromomethane	15.79	367	267577	521.52	NG	97
26)	1,2-Dichloropropane	17.19	403	201802	655.45	NG	99
27)	cis-1,3-Dichloropropylene	17.46	410	402613	914.92	NG	95
28)	Trichloroethylene	18.04	425	205357	579.18	NG	95
29)	Chlorodibromomethane	18.70	442	259605	678.81	NG	95
30)	bis(Chloromethyl)ether	18.66	441	85421	1873.55	NG	100
31)	Benzene	18.51	437	494655	516.72	NG	95
32)	1,1,2-Trichloroethane	18.78	444	143762	538.96	NG	85
33)	trans-1,3-Dichloropropylene	18.78	444	131945	286.55	NG	96
34)	2-Chloroethylvinyl ether	18.78	444	31926	191.59	NG	100
34)	2-Chloroethylvinyl ether	19.86	472	121972	731.97	NG	100
35)	Bromoform	21.41	512	305610	1395.48	NG	95
36)	*Chlorobenzene-d5	25.99	630	107637	250.00	NG	81
37)	Methyl-iso-butyl ketone	21.84	523	244822	1332.54	NG	90
38)	2-Hexanone	23.39	563	265242	1598.08	NG	86
39)	1,1,2,2-Tetrachloroethane	23.70	571	248315	852.20	NG	93
40)	Tetrachloroethylene	23.74	572	184961	515.62	NG	97

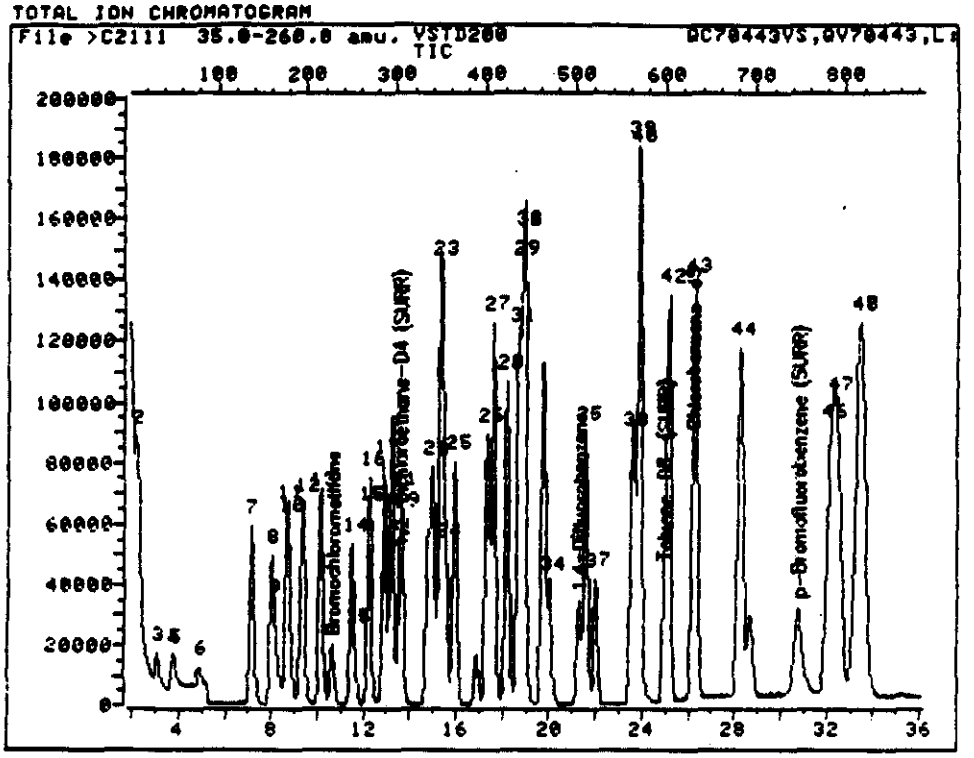
Operator ID: MGRMS Quant Rev: 7 Quant Time: 910110 17:04
Output File: ^C2117::AQ Injected at: 910110 16:27
Data File: >C2117::U1 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Toluene-D8 (SURR)	24.78	599	191965	280.48	NG	89
42)	Toluene	24.98	604	307697	373.39	NG	95
43)	Chlorobenzene	26.14	631	258569	425.31	NG	99
44)	Ethylbenzene	28.00	679	189767	167.25	NG	80
45)	p-Bromofluorobenzene (SURR)	30.49	743	115997	263.95	NG	88
46)	Styrene	31.84	778	389470	436.78	NG	95
47)	m-Xylene	32.11	785	235474	214.51	NG	98
47)	m-Xylene	33.08	810	432739	394.21	NG	94
48)	o+p-Xylenes	33.08	810	432739	206.58	NG	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2111::U2 Quant Output File: ^C2111::AQ
Name: VSTD200
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

Operator ID: CA3875
Quant Time: 910110 14:51
Injected at: 910110 10:48

Operator ID: CA3875 Quant Rev: 7 Quant Time: 910110 14:51
Output File: ^C2111::AQ Injected at: 910110 10:48
Data File: >C2111::U2 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.66	229	36266	250.00	NG	95
2)	Methyl chloride	2.18	10	103755	850.09	NG	99
3)	Methyl bromide	3.07	33	28738	181.87	NG	94
4)	Dichlorodifluoromethane	3.73	50	56330	368.97	NG	96
5)	Vinyl chloride	3.81	52	41973	181.40	NG	96
6)	Chloroethane	4.89	80	33687	230.29	NG	97
7)	Methylene chloride	7.14	138	181759	629.89	NG	99
8)	Acrolein	8.03	161	335545	35328.87	NG	94
9)	Acetone	8.14	164	66125	301.73	NG	95
10)	Acrylonitrile	8.76	180	71957	1322.22	NG	91
11)	Carbon disulfide	8.69	178	565151	1105.67	NG	99
12)	Trichlorofluoromethane	9.38	196	389665	1358.97	NG	95
13)	1,1-Dichloroethylene	10.12	215	172774	523.35	NG	95
14)	1,1-Dichloroethane	11.52	251	300940	729.29	NG	98
15)	Tetrahydrofuran	11.63	254	34018	35503.68	NG	100
15)	Tetrahydrofuran	12.21	269	17759	18534.60	NG	100
16)	1,2-Trans-dichloroethylene	12.25	270	169127	582.75	NG	98
17)	Chloroform	12.91	287	361363	686.40	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	13.57	304	76593	206.92	NG	95
19)	1,2-Dichloroethane	13.69	307	271475	572.00	NG	98
20)	*1,4-Difluorobenzene	21.28	503	168699	250.00	NG	94
21)	Methyl ethyl ketone	13.65	306	19249	151.27	NG	96
22)	1,1,1-Trichloroethane	14.96	340	299678	569.70	NG	97
23)	Carbon tetrachloride	14.96	340	43363	92.90	NG	94
23)	Carbon tetrachloride	15.39	351	305431	654.34	NG	98
24)	Vinyl acetate	15.58	356	415439	1074.00	NG	95
25)	Dichlorobromomethane	15.97	366	305194	680.96	NG	98
26)	1,2-Dichloropropane	17.37	402	213298	793.10	NG	99
27)	cis-1,3-Dichloropropylene	17.60	408	444854	1157.28	NG	97
28)	Trichloroethylene	18.18	423	235769	761.22	NG	91
29)	Chlorodibromomethane	18.84	440	299058	895.19	NG	97
30)	bis(Chloromethyl)ether	18.84	440	99374	2495.15	NG	100
31)	Benzene	18.69	436	546368	653.38	NG	95
32)	1,1,2-Trichloroethane	18.96	443	155418	667.02	NG	86
33)	trans-1,3-Dichloropropylene	18.96	443	146218	363.53	NG	96
34)	2-Chloroethylvinyl ether	18.96	443	36658	251.84	NG	100
34)	2-Chloroethylvinyl ether	20.04	471	113529	779.95	NG	100
35)	Bromoform	21.59	511	336141	1757.12	NG	98
36)	*Chlorobenzene-d5	26.19	629	125459	250.00	NG	83
37)	Methyl-iso-butyl ketone	22.02	522	202865	947.32	NG	91
38)	2-Hexanone	23.57	562	227498	1175.97	NG	87
39)	1,1,2,2-Tetrachloroethane	23.88	570	241745	711.80	NG	95
40)	Tetrachloroethylene	23.92	571	224873	537.83	NG	97

Operator ID: CA3875 Quant Rev: 7 Quant Time: 910110 14:51
Output File: ^C2111::AQ Injected at: 910110 10:48
Data File: >C2111::U2 Dilution Factor: 1.00000
Name: USTD200
Misc: QC70443US,QU70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 10:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Toluene-D8 (SURR)	24.96	598	163645	205.13	NG	93
42)	Toluene	25.16	603	353229	367.75	NG	98
43)	Chlorobenzene	26.31	632	474017	668.93	NG	97
44)	Ethylbenzene	28.25	682	220044	166.38	NG	79
45)	p-Bromofluorobenzene (SURR)	30.77	747	99110	193.49	NG	95
46)	Styrene	32.16	783	457588	440.27	NG	95
47)	m-Xylene	32.43	790	278802	217.90	NG	97
47)	m-Xylene	33.44	816	511983	400.14	NG	96
48)	o+p-Xylenes	33.44	816	511975	209.68	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ Contract:

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

Instrument ID: GC/MS C Calibration Date: 01/11/91 Time: 1216

Lab File ID: >C2123 Init Calib. Dates(s): 01/10/91 01/10/91

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	.507	.426	15.9#
Bromomethane	.181	.179	1.3
Vinyl Chloride *	.264	.323	22.0*
Chloroethane	.208	.226	8.4
Methylene Chloride	1.015	.240	76.3
Acetone	.607	.675	11.3
Carbon Disulfide	3.830	3.954	3.2
1,1-Dichloroethene *	1.209	1.258	4.1*
1,1-Dichloroethane #	2.230	2.285	2.4#
1,2-Dichloroethene (total)	1.195	1.245	4.2
Chloroform *	2.581	2.640	2.3*
1,2-Dichloroethane	1.987	2.038	2.6
2-Butanone	.039	.037	4.4
1,1,1-Trichloroethane	.461	.445	3.5
Carbon Tetrachloride	.463	.450	2.9
Vinyl Acetate	.620	.693	11.8
Bromodichloromethane	.477	.466	2.3
1,2-Dichloropropane *	.357	.354	.8*
cis-1,3-Dichloropropene	.721	.711	1.3
Trichloroethene	.377	.379	.6
Dibromochloromethane	.489	.475	2.8
1,1,2-Trichloroethane	.272	.264	2.9
Benzene	.899	.893	.7
trans-1,3-Dichloropropene	.243	.240	1.2
Bromoform #	.535	.462	13.5#
4-Methyl-2-Pentanone	.713	.480	32.8
2-Hexanone	.667	.503	24.7
Tetrachloroethene	.615	.496	19.3
1,1,2,2-Tetrachloroethane #	.786	.543	30.8#
Toluene *	.967	.728	24.7*
Chlorobenzene #	1.104	.961	12.9#
Ethylbenzene *	.593	.447	24.6*
Styrene	1.228	.920	25.1
Xylene (total)	.688	.513	25.5
Toluene-d8	1.680	1.286	23.5
Bromofluorobenzene	1.011	.750	25.8
1,2-Dichloroethane-d4	2.017	1.964	2.6

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNT Contract: ________

Lab Code: ______ Case No.: ______ SAS No.: ______ SDG No.: ______

Instrument ID: C Calibration Date: 1/11/91 Time: 1216

Lab File ID: >C2123 Init. Calib. Date(s): 1/10/91 1/10/91

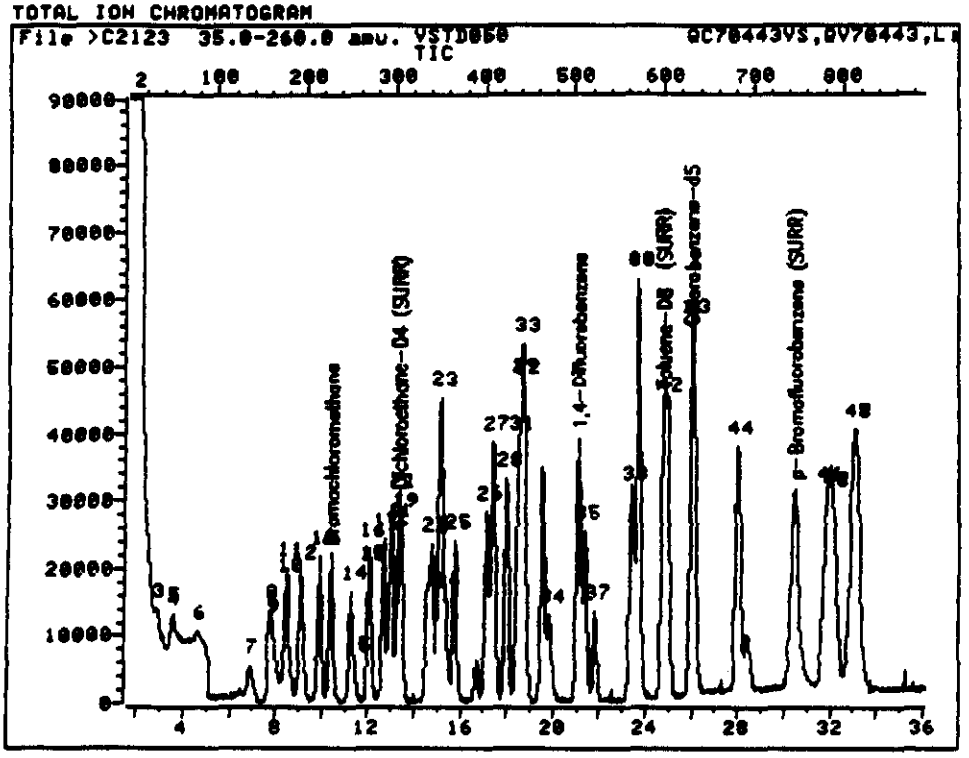
Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.4006	0.8072	23.3
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >C2123::U1 Quant Output File: ^C2123::AQ
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 18:04

Operator ID: KB6656
Quant Time: 910111 13:08
Injected at: 910111 12:16

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910111 13:08
Output File: ^C2123::AQ Injected at: 910111 12:16
Data File: >C2123::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 18:04

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.40	227	41336	250.00	NG	94
2)	Methyl chloride	1.99	10	17615	210.24	NG	98
3)	Methyl bromide	2.88	33	7394	246.78	NG	96
4)	Dichlorodifluoromethane	3.50	49	17946	316.00	NG	92
5)	Vinyl chloride	3.58	51	13331M	305.11	NG	98
6)	Chloroethane	4.63	78	9336	270.93	NG	89
7)	Methylene chloride	6.91	137	9938	59.22	NG	97
8)	Acrolein	7.77	159	109219	3801.55	NG	94
9)	Acetone	7.88	162	27906	278.18	NG	93
10)	Acrylonitrile	8.54	179	24830	348.44	NG	99
11)	Carbon disulfide	8.50	178	163427	258.04	NG	98
12)	Trichlorofluoromethane	9.12	194	110363	256.44	NG	96
13)	1,1-Dichloroethylene	9.94	215	52002	260.13	NG	99
14)	1,1-Dichloroethane	11.29	250	94454	256.12	NG	99
15)	Tetrahydrofuran	11.45	254	12699	191.71	NG	100
15)	Tetrahydrofuran	12.03	269	2550	38.50	NG	100
16)	1,2-Trans-dichloroethylene	12.07	270	51482	260.61	NG	97
17)	Chloroform	12.69	286	109116	255.64	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	13.35	303	81194	243.48	NG	82
19)	1,2-Dichloroethane	13.46	306	84251	256.41	NG	97
20)	*1,4-Difluorobenzene	21.10	503	192366	250.00	NG	95
21)	Methyl ethyl ketone	13.42	305	7108	238.96	NG	97
22)	1,1,1-Trichloroethane	14.78	340	85644	241.36	NG	94
23)	Carbon tetrachloride	14.78	340	13179	37.01	NG	92
23)	Carbon tetrachloride	15.17	350	86475	242.86	NG	99
24)	Vinyl acetate	15.40	356	133217	279.46	NG	93
25)	Dichlorobromomethane	15.79	366	89656	244.17	NG	98
26)	1,2-Dichloropropane	17.14	401	68182	247.95	NG	97
27)	cis-1,3-Dichloropropylene	17.42	408	136816	246.64	NG	97
28)	Trichloroethylene	18.00	423	72956	251.60	NG	90
29)	Chlorodibromomethane	18.66	440	91428	242.89	NG	97
30)	bis(Chloromethyl)ether	18.66	440	28980	239.10	NG	100
31)	Benzene	18.50	436	171726	248.17	NG	96
32)	1,1,2-Trichloroethane	18.77	443	50733	242.76	NG	85
33)	trans-1,3-Dichloropropylene	18.73	442	46116	247.05	NG	98
34)	2-Chloroethylvinyl ether	19.82	470	37096	280.60	NG	100
35)	Bromoform	21.37	510	88958	216.18	NG	95
36)	*Chlorobenzene-d5	25.99	629	148946	250.00	NG	86
37)	Methyl-iso-butyl ketone	21.83	522	71434	168.05	NG	87
38)	2-Hexanone	23.38	562	74848	188.23	NG	89
39)	1,1,2,2-Tetrachloroethane	23.69	570	80919	172.91	NG	96
40)	Tetrachloroethylene	23.69	570	73845	201.63	NG	96
41)	Toluene-D8 (SURR)	24.78	598	191571	191.37	NG	91

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910111 13:08
Output File: ^C2123::AQ Injected at: 910111 12:16
Data File: >C2123::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1203::US
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910110 18:04

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	24.97	603	108505	188.24	NG	97
43)	Chlorobenzene	26.10	632	143109	217.63	NG	96
44)	Ethylbenzene	28.00	681	66641	188.56	NG	80
45)	p-Bromofluorobenzene (SURR)	30.48	745	111772	185.53	NG	92
46)	Styrene	31.88	781	137068	187.32	NG	94
47)	m-Xylene	32.15	788	82647	184.87	NG	97
47)	m-Xylene	33.08	812	140206	313.62	NG	96
48)	o+p-Xylenes	32.15	788	79435	193.77	NG	91
48)	o+p-Xylenes	33.08	812	152777	372.67	NG	91

* Compound is ISTD

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETCNJ Contract:

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

Instrument ID:GC/MS C Calibration Date(s) 01/17/91 01/17/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>C2180 RRF50 =>C2179
RRF100=>C2178 RRF150=>C2177 RRF200=>C2181

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	.887	.879	.863	.994	1.019	.928	7.8#
Bromomethane	.193	.158	.154	.148	.145	.160	12.0
Vinyl Chloride *	.254	.260	.245	.297	.265	.264	7.5*
Chloroethane	.199	.186	.177	.195	.184	.188	4.7
Methylene Chloride	.630	.841	.821	.879	.395	.713	28.4
Acetone	.647	.617	.644	.630	.473	.602	12.1
Carbon Disulfide	3.065	3.287	3.121	3.175	2.800	3.089	5.9
1,1-Dichloroethene *	1.065	1.090	1.034	1.040	.981	1.042	3.9*
1,1-Dichloroethene #	2.500	2.546	2.426	2.363	2.235	2.414	5.1#
1,2-Dichlorethene (total)	1.224	1.218	1.160	1.159	1.101	1.173	4.3
Chloroform *	2.617	2.623	2.529	2.455	2.320	2.509	5.0*
1,2-Dichloroethane	2.073	2.021	2.022	1.910	1.810	1.967	5.4
2-Butanone	.049	.038	.037	.037	.031	.038	17.2
1,1,1-Trichloroethane	.435	.444	.427	.419	.398	.425	4.1
Carbon Tetrachloride	.412	.428	.412	.405	.376	.407	4.6
Vinyl Acetate	.477	.704	.902	.797	.748	.725	21.7
Bromodichloromethane	.497	.497	.503	.474	.450	.484	4.6
1,2-Dichloropropane *	.426	.417	.414	.391	.364	.402	6.2*
cis-1,3-Dichloropropene	.783	.772	.774	.729	.682	.748	5.7
Trichloroethene	.413	.394	.370	.353	.330	.372	9.8
Dibromochloromethane	.505	.491	.471	.422	.381	.454	11.3
1,1,2-Trichloroethane	.321	.296	.280	.248	.221	.273	14.4
Benzene	.981	.953	.920	.868	.789	.902	8.4
trans-1,3-Dichloropropene	.252	.250	.243	.223	.200	.234	9.7
Bromoform #	.513	.517	.538	.496	.463	.505	5.5#
4-Methyl-2-Pentanone	.595	.552	.677	.635	.550	.602	9.1
2-Hexanone	.498	.479	.592	.597	.554	.544	9.9
Tetrachloroethene	.537	.488	.503	.470	.387	.477	11.8
1,1,2,2-Tetrachloroethane #	.648	.585	.676	.599	.466	.595	13.6#
Toluene *	.789	.774	.880	.827	.691	.792	8.8*
Chlorobenzene #	1.043	1.006	1.155	1.057	.907	1.034	8.7#
Ethylbenzene *	.514	.492	.549	.523	.458	.507	5.8*
Styrene	1.066	1.031	1.166	1.101	.963	1.065	7.1
Xylene (total)	.613	.585	.648	.615	.535	.599	7.1
Toluene-d8	1.309	1.310	1.522	1.522	1.361	1.405	7.8
Bromofluorobenzene	.756	.745	.900	.881	.811	.819	8.6
1,2-Dichloroethene-d4	1.897	1.951	2.045	2.027	2.006	1.985	3.1

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ETCNJ Contract: ______

Lab Code: ______ Case No.: ______ SAS No.: ______ SDG No.: ______

Instrument ID: a Calibration Date(s): 1/17/91 11/17/91

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

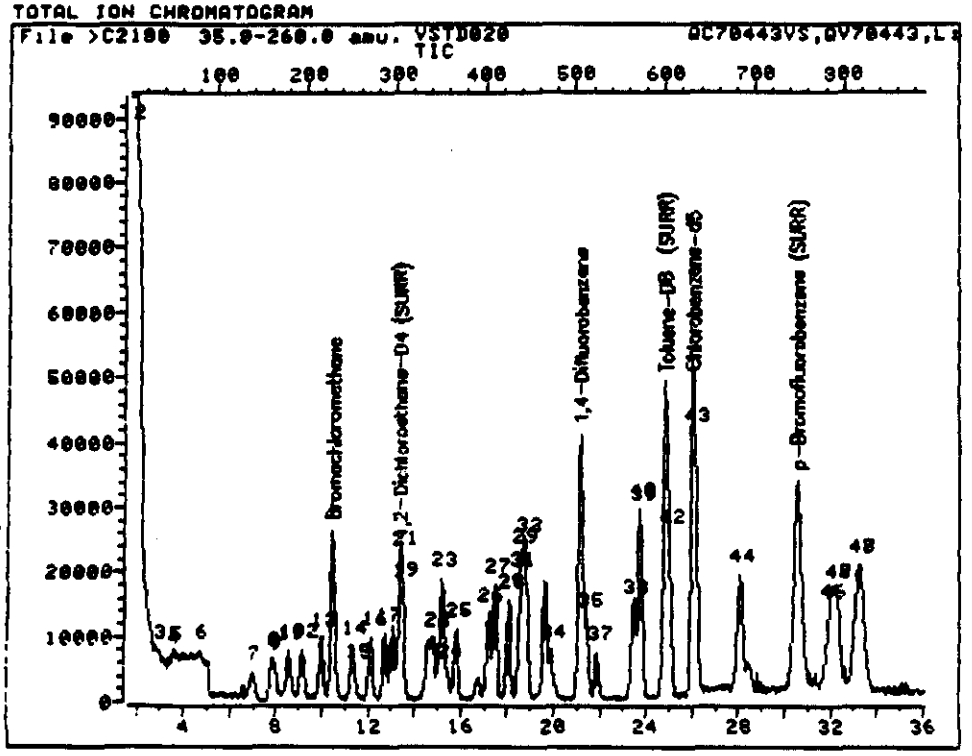
Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 3?.?%

LAB FILE ID: RRF20 = 7C2180 RRF50 = 7C2179
RRF100= 7C2178 RRF150= 7C2177 RRF200= 7C2181

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Tetrahydrofuran	0.53635	0.45100	0.44979	0.40120	0.51368	0.42984	18.992
Toluene-d8							
Bromofluorobenzene							
1,2-Dichloroethane-d4							

FORM VI VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >C2180::U1 Quant Output File: ^C2180::AQ
Name: VSTD020
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

Operator ID: KB6656
Quant Time: 910117 16:42
Injected at: 910117 15:50

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 16:42
Output File: ^C2180::AQ Injected at: 910117 15:50
Data File: >C2180::U1 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: 1FB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.46	229	45451	250.00	NG	96
2)	Methyl chloride	1.97	10	16117	180.58	NG	98
3)	Methyl bromide	2.90	34	3504	120.05	NG	96
4)	Dichlorodifluoromethane	3.52	50	5303	85.57	NG	87
5)	Vinyl chloride	3.64	53	4611	95.47	NG	89
6)	Chloroethane	4.68	80	3615	108.41	NG	87
7)	Methylene chloride	6.97	139	11452	252.88	NG	97
8)	Acrolein	7.82	161	42314	1570.38	NG	94
9)	Acetone	7.90	163	11769	91.26	NG	98
10)	Acrylonitrile	8.56	180	14934	217.80	NG	97
11)	Carbon disulfide	8.52	179	55714	85.92	NG	96
12)	Trichlorofluoromethane	9.14	195	41652	94.51	NG	94
13)	1,1-Dichloroethylene	9.95	216	19371	93.42	NG	96
14)	1,1-Dichloroethane	11.31	251	45444	120.57	NG	97
15)	Tetrahydrofuran	11.43	254	9787	157.13	NG	100
16)	1,2-Trans-dichloroethylene	12.09	271	22249	107.56	NG	95
17)	Chloroform	12.71	287	47575	109.65	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.37	304	86217	248.01	NG	83
19)	1,2-Dichloroethane	13.48	307	37683	120.69	NG	96
20)	*1,4-Difluorobenzene	21.16	505	203349	250.00	NG	96
21)	Methyl ethyl ketone	13.44	306	4008	146.20	NG	98
22)	1,1,1-Trichloroethane	14.80	341	35385	104.98	NG	94
23)	Carbon tetrachloride	14.80	341	5715	16.78	NG	92
23)	Carbon tetrachloride	15.19	351	33549	98.52	NG	95
24)	Vinyl acetate	15.42	357	38787	79.54	NG	92
25)	Dichlorobromomethane	15.81	367	40432	111.89	NG	97
26)	1,2-Dichloropropane	17.16	402	34618	125.11	NG	97
27)	cis-1,3-Dichloropropylene	17.47	410	63683	118.43	NG	95
28)	Trichloroethylene	18.06	425	33566	109.65	NG	91
29)	Chlorodibromomethane	18.68	441	41096	118.23	NG	95
30)	bis(Chloromethyl)ether	18.64	440	13010	96.07	NG	100
31)	Benzene	18.56	438	79772	117.05	NG	96
32)	1,1,2-Trichloroethane	18.79	444	26101	129.43	NG	87
33)	trans-1,3-Dichloropropylene	18.79	444	20499	123.93	NG	98
34)	2-Chloroethylvinyl ether	19.88	472	21066	128.10	NG	100
35)	Bromoform	21.43	512	41716	98.96	NG	96
36)	*Chlorobenzene-d5	26.01	630	162084	250.00	NG	84
37)	Methyl-iso-butyl ketone	21.86	523	38601	105.89	NG	89
38)	2-Hexanone	23.41	563	32316	92.59	NG	91
39)	1,1,2,2-Tetrachloroethane	23.72	571	42030	101.85	NG	95
40)	Tetrachloroethylene	23.75	572	34804	94.72	NG	98
41)	Toluene-D8 (SURR)	24.84	600	212164	224.82	NG	90
42)	Toluene	25.00	604	51182	98.68	NG	98

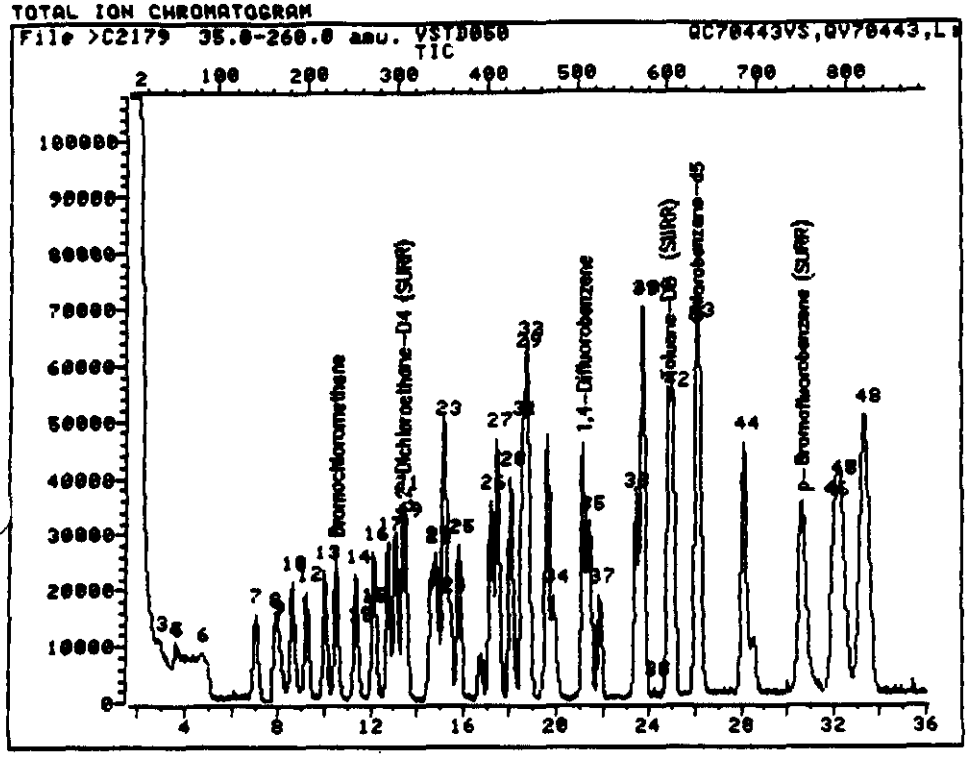
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 16:42
Output File: ^C2180::AQ Injected at: 910117 15:50
Data File: >C2180::U1 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Chlorobenzene	26.13	633	67625	102.03	NG	93
44)	Ethylbenzene	28.07	683	33311	103.32	NG	82
45)	p-Bromofluorobenzene (SURR)	30.55	747	122556	225.26	NG	95
46)	Styrene	31.95	783	69090	104.79	NG	98
47)	m-Xylene	32.22	790	41656	104.10	NG	98
47)	m-Xylene	33.19	815	71409	178.45	NG	99
48)	o+p-Xylenes	32.22	790	41657	113.36	NG	88
48)	o+p-Xylenes	33.19	815	79447	216.20	NG	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2179::U1 Quant Output File: ^C2179::AQ
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

Operator ID: KB6656
Quant Time: 910117 15:39
Injected at: 910117 15:02

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 15:39
Output File: ^C2179::AQ Injected at: 910117 15:02
Data File: >C2179::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.51	230	48248	250.00	NG	98
2)	Methyl chloride	1.98	10	42389	447.40	NG	99
3)	Methyl bromide	2.91	34	7627	246.17	NG	98
4)	Dichlorodifluoromethane	3.57	51	14318	217.65	NG	91
5)	Vinyl chloride	3.65	53	12561	244.99	NG	97
6)	Chloroethane	3.65	53	3941	111.34	NG	87
6)	Chloroethane	4.74	81	8966	253.30	NG	94
7)	Methylene chloride	7.02	140	40566	843.83	NG	97
8)	Acrolein	7.88	162	108801	3803.79	NG	90
9)	Acetone	7.99	165	29745	217.29	NG	99
10)	Acrylonitrile	8.61	181	35263	484.47	NG	94
11)	Carbon disulfide	8.61	181	158595	230.41	NG	99
12)	Trichlorofluoromethane	9.23	197	108192	231.26	NG	97
13)	1,1-Dichloroethylene	10.01	217	52582	238.89	NG	95
14)	1,1-Dichloroethane	11.36	252	122837	307.02	NG	99
15)	Tetrahydrofuran	11.48	255	21760	329.10	NG	100
15)	Tetrahydrofuran	12.06	270	5056	76.47	NG	100
16)	1,2-Trans-dichloroethylene	12.14	272	58771	267.65	NG	94
17)	Chloroform	12.76	288	126542	274.75	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.42	305	94143	255.11	NG	85
19)	1,2-Dichloroethane	13.54	308	97509	294.18	NG	98
20)	*1,4-Difluorobenzene	21.17	505	218189	250.00	NG	97
21)	Methyl ethyl ketone	13.50	307	8243	280.23	NG	93
22)	1,1,1-Trichloroethane	14.85	342	96863	267.82	NG	95
23)	Carbon tetrachloride	14.81	341	15382	42.10	NG	99
23)	Carbon tetrachloride	15.24	352	93307	255.37	NG	95
24)	Vinyl acetate	15.47	358	153546	293.46	NG	91
25)	Dichlorobromomethane	15.86	368	108392	279.56	NG	96
26)	1,2-Dichloropropane	17.22	403	90885	306.11	NG	97
27)	cis-1,3-Dichloropropylene	17.49	410	168443	291.94	NG	96
28)	Trichloroethylene	18.07	425	85890	261.50	NG	92
29)	Chlorodibromomethane	18.73	442	107113	287.20	NG	98
30)	bis(Chloromethyl)ether	18.73	442	34134	234.92	NG	100
31)	Benzene	18.58	438	208009	284.45	NG	95
32)	1,1,2-Trichloroethane	18.81	444	64553	298.33	NG	85
33)	trans-1,3-Dichloropropylene	18.81	444	54456	306.83	NG	97
34)	2-Chloroethylvinyl ether	19.89	472	50678	287.21	NG	100
35)	Bromoform	21.44	512	112740	249.27	NG	97
36)	*Chlorobenzene-d5	26.07	631	174939	250.00	NG	82
37)	Methyl-iso-butyl ketone	21.87	523	96622	245.57	NG	91
38)	2-Hexanone	23.42	563	83766	222.36	NG	88
38)	2-Hexanone	24.20	583	2377	6.31	NG	80
39)	1,1,2,2-Tetrachloroethane	23.73	571	102422	229.96	NG	96

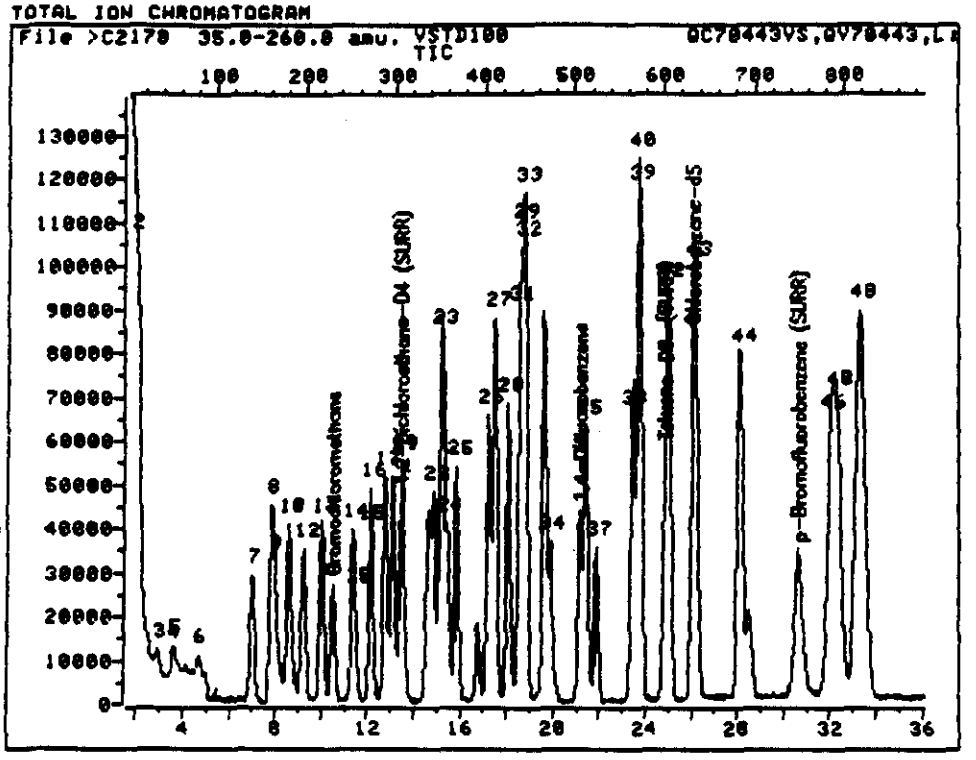
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 15:39
Output File: ^C2179::AQ Injected at: 910117 15:02
Data File: >C2179::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
40)	Tetrachloroethylene	23.77	572	85340	215.18	NG	95
41)	Toluene-D8 (SURR)	24.86	600	229172	224.99	NG	89
42)	Toluene	25.05	605	135318	241.72	NG	95
43)	Chlorobenzene	26.18	634	175970	245.99	NG	95
44)	Ethylbenzene	28.12	684	86035	247.25	NG	81
45)	p-Bromofluorobenzene (SURR)	30.64	749	130358	222.00	NG	93
46)	Styrene	32.04	785	180355	253.45	NG	97
47)	m-Xylene	32.35	793	109405	253.31	NG	99
48)	o+p-Xylenes	32.35	793	109406	275.85	NG	90
48)	o+p-Xylenes	33.36	819	204796	516.35	NG	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2178::U1 Quant Output File: ^C2178::AQ
Name: VSTD100
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

Operator ID: KB6656
Quant Time: 910117 14:55
Injected at: 910117 14:14

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 14:55
Output File: ^C2178::AQ Injected at: 910117 14:14
Data File: >C2178::U1 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.51	230	46815	250.00	NG	94
2)	Methyl chloride	1.98	10	80837	879.32	NG	99
3)	Methyl bromide	2.91	34	14378	478.27	NG	98
4)	Dichlorodifluoromethane	3.53	50	26276	411.65	NG	95
5)	Vinyl chloride	3.61	52	22929	460.90	NG	94
6)	Chloroethane	4.65	79	16532	481.35	NG	94
7)	Methylene chloride	6.98	139	76912	1648.84	NG	97
8)	Acrolein	7.83	161	333171	12004.53	NG	91
9)	Acetone	7.95	164	60284	453.85	NG	98
10)	Acrylonitrile	8.61	181	70327	995.78	NG	93
11)	Carbon disulfide	8.57	180	292189	437.49	NG	98
12)	Trichlorofluoromethane	9.23	197	194159	427.71	NG	93
13)	1,1-Dichloroethylene	10.00	217	96819	453.34	NG	93
14)	1,1-Dichloroethane	11.36	252	227137	585.08	NG	97
15)	Tetrahydrofuran	11.48	255	41571	647.97	NG	100
15)	Tetrahydrofuran	12.10	271	11551	180.05	NG	100
16)	1,2-Trans-dichloroethylene	12.14	272	108632	509.86	NG	93
17)	Chloroform	12.76	288	236767	529.81	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	13.45	306	95718	267.32	NG	87
19)	1,2-Dichloroethane	13.53	308	189313	588.64	NG	98
20)	*1,4-Difluorobenzene	21.17	505	206878	250.00	NG	96
21)	Methyl ethyl ketone	13.49	307	15255	546.96	NG	95
22)	1,1,1-Trichloroethane	14.85	342	176737	515.38	NG	93
23)	Carbon tetrachloride	14.85	342	26033	75.15	NG	95
24)	Carbon tetrachloride	15.28	353	170641	492.56	NG	94
25)	Vinyl acetate	15.47	358	323051	751.96	NG	91
26)	Dichlorobromomethane	15.86	368	208258	566.49	NG	98
28)	1,2-Dichloropropane	17.21	403	171383	608.81	NG	99
27)	cis-1,3-Dichloropropylene	17.52	411	320373	585.62	NG	94
28)	Trichloroethylene	18.07	425	152916	491.03	NG	93
29)	Chlorodibromomethane	18.73	442	194785	550.83	NG	99
30)	bis(Chloromethyl)ether	18.73	442	64133	465.52	NG	100
31)	Benzene	18.57	438	380453	548.70	NG	94
32)	1,1,2-Trichloroethane	18.84	445	116034	565.57	NG	85
33)	trans-1,3-Dichloropropylene	18.80	444	100442	596.87	NG	96
34)	2-Chloroethylvinyl ether	19.89	472	102648	613.54	NG	100
35)	Bromoform	21.44	512	222493	518.83	NG	99
36)	*Chlorobenzene-d5	26.07	630	141597	250.00	NG	78
37)	Methyl-iso-butyl ketone	21.87	523	191694	601.92	NG	89
38)	2-Hexanone	23.42	563	167544	549.48	NG	88
39)	1,1,2,2-Tetrachloroethane	23.73	571	191338	530.76	NG	94
40)	Tetrachloroethylene	23.77	572	142334	443.40	NG	96
41)	Toluene-D8 (SURR)	24.85	600	215498	261.39	NG	91

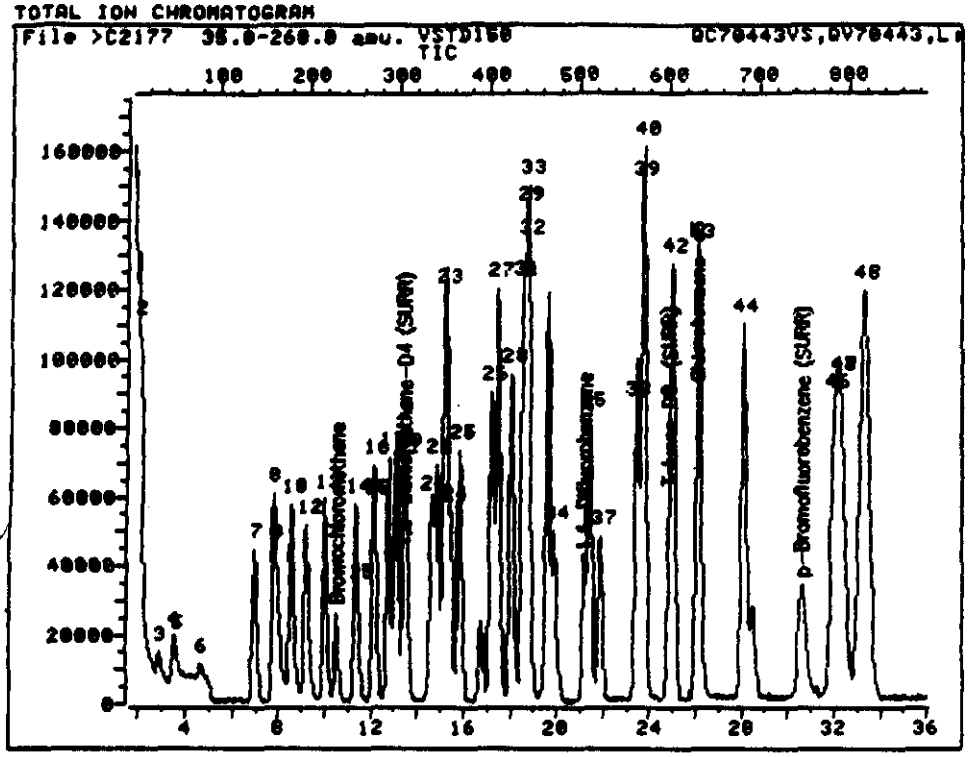
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 14:55
Output File: ^C2178::AQ Injected at: 910117 14:14
Data File: >C2178::U1 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	25.05	605	249345	550.29	NG	96
43)	Chlorobenzene	26.19	633	327228	565.14	NG	98
44)	Ethylbenzene	28.13	683	155350	551.58	NG	81
45)	p-Bromofluorobenzene (SURR)	30.65	748	127373	267.99	NG	90
46)	Styrene	32.04	784	330216	573.32	NG	95
47)	m-Xylene	32.31	791	196125	561.01	NG	97
48)	o+p-Xylenes	32.31	791	193566	602.96	NG	91
48)	o+p-Xylenes	33.32	817	367252	1143.99	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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Name: VSTD150
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

Operator ID: KB6656
Quant Time: 910117 14:04
Injected at: 910117 13:27

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 14:04
Output File: ^C2177::AQ Injected at: 910117 13:27
Data File: >C2177::U1 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.51	230	44714	250.00	NG	98
2)	Methyl chloride	1.98	10	133396	1519.23	NG	99
3)	Methyl bromide	2.87	33	19872	692.08	NG	95
4)	Dichlorodifluoromethane	3.49	49	52341	858.53	NG	98
5)	Vinyl chloride	3.61	52	39865	838.99	NG	96
6)	Chloroethane	4.65	79	26154	797.29	NG	93
7)	Methylene chloride	6.98	139	117907	2646.47	NG	99
8)	Acrolein	7.79	160	432334	16309.43	NG	93
9)	Acetone	7.91	163	84538	666.36	NG	93
10)	Acrylonitrile	8.57	180	89780	1330.96	NG	92
11)	Carbon disulfide	8.57	180	425852	667.58	NG	99
12)	Trichlorofluoromethane	9.23	197	295392	681.29	NG	93
13)	1,1-Dichloroethylene	10.00	217	139519	683.97	NG	96
14)	1,1-Dichloroethane	11.36	252	316922	854.72	NG	99
15)	Tetrahydrofuran	11.48	255	53952	880.47	NG	100
15)	Tetrahydrofuran	12.10	271	18309	298.80	NG	100
16)	1,2-Trans-dichloroethylene	12.14	272	155511	764.18	NG	93
17)	Chloroform	12.79	289	329317	771.53	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	13.42	305	90641	265.03	NG	84
19)	1,2-Dichloroethane	13.53	308	256245	834.19	NG	98
20)	*1,4-Difluorobenzene	21.17	505	199762	250.00	NG	96
21)	Methyl ethyl ketone	13.49	307	22409	832.08	NG	95
22)	1,1,1-Trichloroethane	14.85	342	251319	758.97	NG	95
23)	Carbon tetrachloride	14.85	342	37627	112.48	NG	91
27)	Carbon tetrachloride	15.28	353	242842	725.95	NG	96
24)	Vinyl acetate	14.62	336	98178	204.95	NG	75
24)	Vinyl acetate	15.47	358	477426	996.63	NG	91
25)	Dichlorobromomethane	15.86	368	283836	799.58	NG	97
26)	1,2-Dichloropropane	17.22	403	234207	861.61	NG	98
27)	cis-1,3-Dichloropropylene	17.49	410	436670	826.64	NG	92
28)	Trichloroethylene	18.07	425	211431	703.11	NG	94
29)	Chlorodibromomethane	18.73	442	252988	740.90	NG	99
30)	bis(Chloromethyl)ether	18.73	442	86249	648.35	NG	100
31)	Benzene	18.57	438	519963	776.62	NG	95
32)	1,1,2-Trichloroethane	18.84	445	148575	749.97	NG	83
33)	trans-1,3-Dichloropropylene	18.81	444	133892	823.99	NG	95
34)	2-Chloroethylvinyl ether	19.89	472	137380	850.39	NG	100
35)	Bromoform	21.44	512	297051	717.36	NG	96
36)	*Chlorobenzene-d5	26.06	630	134519	250.00	NG	81
37)	Methyl-iso-butyl ketone	21.91	524	256444	847.61	NG	87
38)	2-Hexanone	23.42	563	241091	832.28	NG	84
39)	1,1,2,2-Tetrachloroethane	23.73	571	241848	706.17	NG	94
40)	Tetrachloroethylene	23.77	572	189494	621.37	NG	97

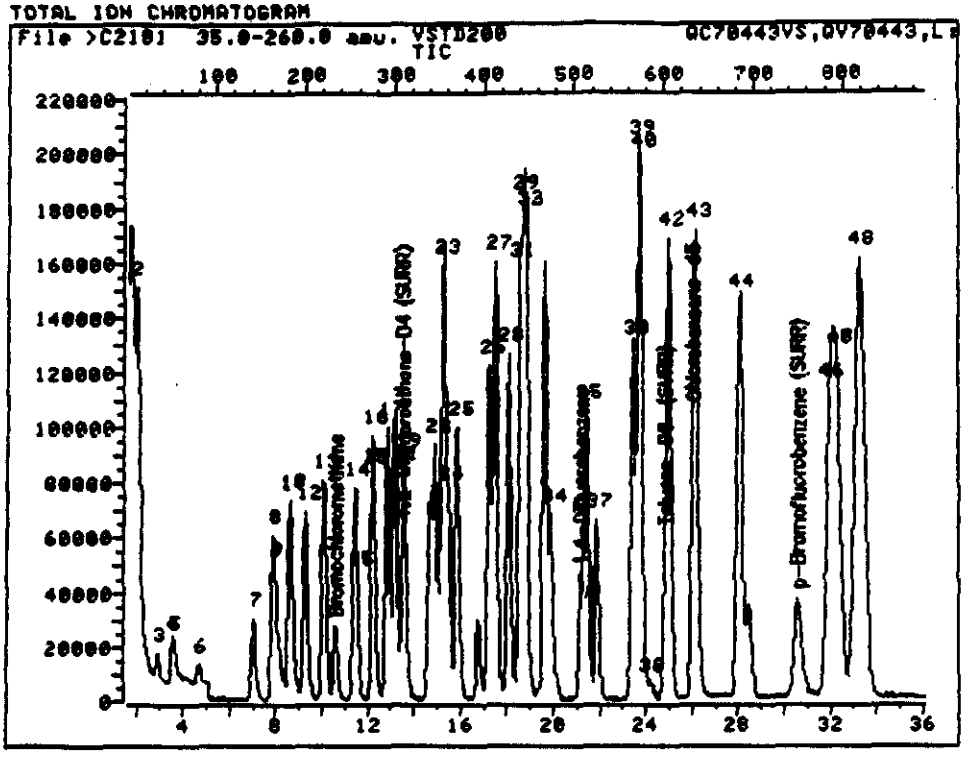
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 14:04
Output File: ^C2177::AQ Injected at: 910117 13:27
Data File: >C2177::U1 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Toluene-D8 (SURR)	24.85	600	204687	261.34	NG	91
42)	Toluene	25.01	604	333704	775.22	NG	95
43)	Chlorobenzene	26.17	633	426708	775.72	NG	98
44)	Ethylbenzene	28.07	682	211179	789.25	NG	80
45)	p-Bromofluorobenzene (SURR)	30.59	747	118498	262.44	NG	95
46)	Styrene	32.03	784	444303	811.99	NG	96
47)	m-Xylene	32.30	791	264328	795.89	NG	96
48)	o+p-Xylenes	32.30	791	260670	854.71	NG	91
48)	o+p-Xylenes	33.31	817	496282	1627.26	NG	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C2181::U1 Quant Output File: ^C2181::AQ
Name: VSTD200
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

Operator ID: KB6656
Quant Time: 910117 17:52
Injected at: 910117 17:15

perator ID: KB6656 Quant Rev: 7 Quant Time: 910117 17:52
utput File: ^C2181::AQ Injected at: 910117 17:15
ata File: >C2181::U1 Dilution Factor: 1.00000
ame: VSTD200
isc: QC70443VS,QU70443,L:M4,5,,

D File: IC1204::SS
itle: IFB, PP/VOA, XVOA13
ast Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.61	233	49324	250.00	NG	92
2)	Methyl chloride	2.01	11	200960	2074.79	NG	97
3)	Methyl bromide	2.94	35	28675	905.32	NG	95
4)	Dichlorodifluoromethane	3.56	51	66610	990.46	NG	97
5)	Vinyl chloride	3.63	53	52275	997.34	NG	98
6)	Chloroethane	4.72	81	36302	1003.22	NG	94
7)	Methylene chloride	7.05	141	77848	1584.02	NG	98
8)	Acrolein	7.90	163	408215	13960.26	NG	92
9)	Acetone	7.98	165	93410	667.47	NG	93
10)	Acrylonitrile	8.64	182	116205	1561.69	NG	97
11)	Carbon disulfide	8.67	183	552497	785.16	NG	99
12)	Trichlorofluoromethane	9.33	200	409329	855.84	NG	95
13)	1,1-Dichloroethylene	10.11	220	193475	859.83	NG	95
14)	1,1-Dichloroethane	11.47	255	440877	1077.89	NG	96
15)	Tetrahydrofuran	11.58	258	61888	915.59	NG	100
15)	Tetrahydrofuran	12.20	274	31588	467.32	NG	100
16)	1,2-Trans-dichloroethylene	12.24	275	217286	967.94	NG	92
17)	Chloroform	12.86	291	457671	972.03	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	13.52	308	98960	262.31	NG	85
19)	1,2-Dichloroethane	13.64	311	357076	1053.79	NG	98
20)	*1,4-Difluorobenzene	21.20	506	218756	250.00	NG	96
21)	Methyl ethyl ketone	13.56	309	27238	923.57	NG	97
22)	1,1,1-Trichloroethane	14.92	344	348304	960.53	NG	94
23)	Carbon tetrachloride	14.92	344	51954	141.83	NG	98
23)	Carbon tetrachloride	15.34	355	329341	899.04	NG	97
24)	Vinyl acetate	15.54	360	654950	1248.50	NG	90
25)	Dichlorobromomethane	15.93	370	393510	1012.28	NG	95
26)	1,2-Dichloropropane	17.28	405	318900	1071.32	NG	98
27)	cis-1,3-Dichloropropylene	17.55	412	596487	1031.14	NG	94
28)	Trichloroethylene	18.10	426	289001	877.62	NG	94
29)	Chlorodibromomethane	18.76	443	333561	892.05	NG	97
30)	bis(Chloromethyl)ether	18.76	443	115383	792.05	NG	100
31)	Benzene	18.60	439	690730	942.10	NG	95
32)	1,1,2-Trichloroethane	18.87	446	193381	891.39	NG	82
33)	trans-1,3-Dichloropropylene	18.87	446	175300	985.15	NG	94
34)	2-Chloroethylvinyl ether	19.92	473	188468	1065.33	NG	100
35)	Bromoform	21.43	512	405453	894.13	NG	97
36)	*Chlorobenzene-d5	26.05	631	161368	250.00	NG	80
37)	Methyl-iso-butyl ketone	21.90	524	355099	978.41	NG	98
38)	2-Hexanone	23.45	564	357546	1028.94	NG	85
38)	2-Hexanone	24.19	583	19206	55.27	NG	42
39)	1,1,2,2-Tetrachloroethane	23.76	572	300921	732.47	NG	94
40)	Tetrachloroethylene	23.80	573	249609	682.31	NG	95

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910117 17:52
Output File: ^C2181::AQ Injected at: 910117 17:15
Data File: >C2181::U1 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910114 18:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Toluene-D8 (SURR)	24.84	600	219578	233.71	NG	92
42)	Toluene	25.04	605	446136	863.97	NG	94
43)	Chlorobenzene	26.17	634	585280	886.96	NG	96
44)	Ethylbenzene	28.07	683	295477	920.57	NG	80
45)	p-Bromofluorobenzene (SURR)	30.59	748	130908	241.68	NG	95
46)	Styrene	31.99	784	621762	947.24	NG	96
47)	m-Xylene	32.30	792	371523	932.53	NG	97
48)	o+p-Xylenes	32.30	792	366072	1000.60	NG	91
48)	o+p-Xylenes	33.27	817	690610	1887.68	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETCNJ Contract:

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

Instrument ID:GC/MS C Calibration Date: 01/18/91 Time: 1043

Lab File ID: >C2184 Init Calib. Dates(s): 01/10/91 01/10/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D
Chloromethane	#	.507	.403	20.4#
Bromomethane		.181	.138	23.8
Vinyl Chloride	*	.264	.267	.9*
Chloroethane		.208	.147	29.7
Methylene Chloride		1.015	.840	17.2
Acetone		.607	.651	7.3
Carbon Disulfide		3.830	2.833	26.0
1,1-Dichloroethene	*	1.209	1.031	14.7*
1,1-Dichloroethane	#	2.230	2.136	4.2#
1,2-Dichlorethene (total)		1.195	1.156	3.3
Chloroform	*	2.581	2.322	10.0*
1,2-Dichloroethane		1.987	1.696	14.6
2-Butanone		.039	.036	6.5
1,1,1-Trichloroethane		.461	.413	10.5
Carbon Tetrachloride		.463	.431	6.9
Vinyl Acetate		.620	.695	12.1
Bromodichloromethane		.477	.455	4.6
1,2-Dichloropropane	*	.357	.361	.9*
cis-1,3-Dichloropropene		.721	.702	2.6
Trichloroethene		.377	.402	6.7
Dibromochloromethane		.489	.494	.9
1,1,2-Trichloroethane		.272	.279	2.7
Benzene		.899	.859	4.5
trans-1,3-Dichloropropene		.243	.224	7.8
Bromoform	#	.535	.528	1.2#
4-Methyl-2-Pentanone		.713	.612	14.2
2-Hexanone		.667	.650	2.7
Tetrachloroethene		.615	.659	7.2
1,1,2,2-Tetrachloroethane	#	.786	.673	14.3#
Toluene	*	.967	.906	6.4*
Chlorobenzene	#	1.104	1.034	6.3#
Ethylbenzene	*	.593	.579	2.4*
Styrene		1.228	1.179	4.0
Xylene (total)		.688	.658	4.4
Toluene-d8		1.680	1.588	5.5
Bromofluorobenzene		1.011	.863	14.7
1,2-Dichloroethane-d4		2.017	1.619	19.7

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ Contract: ____________

Lab Code: ________ Case No.: ______ SAS No.: _______ SDG No.: _______

Instrument ID: C Calibration Date: 1/18/91 Time: 1048

Lab File ID: >C2184 Init. Calib. Date(s): 1/17/91 1/17/91

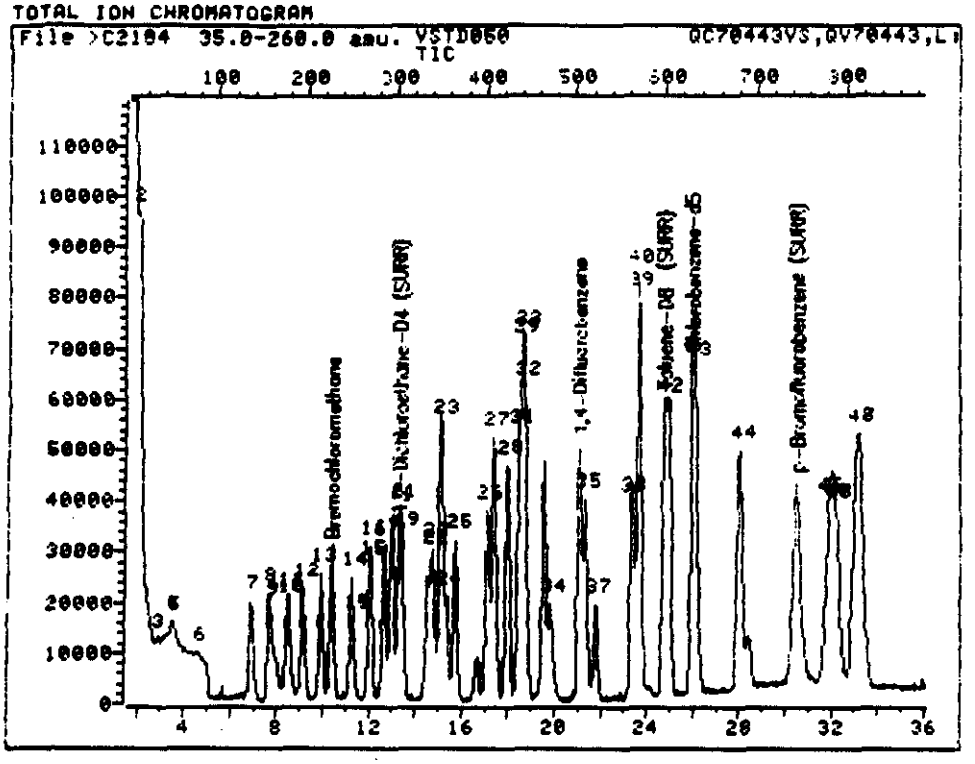
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.42984	0.32837	25.00
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >C2184::U1 Quant Output File: ^C2184::AQ
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910117 18:07

Operator ID: KB6656
Quant Time: 910118 11:37
Injected at: 910118 10:43

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910118 11:37
Output File: ^C2184::AQ Injected at: 910118 10:43
Data File: >C2184::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QU70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910117 18:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.38	227	61891	250.00	NG	96
2)	Methyl chloride	1.97	10	24965	108.63	NG	97
3)	Methyl bromide	2.86	33	8549	216.41	NG	95
4)	Dichlorodifluoromethane	3.48	49	21378	270.38	NG	92
5)	Vinyl chloride	3.56	51	16505	252.35	NG	98
6)	Chloroethane	4.61	78	9069	194.81	NG	94
7)	Methylene chloride	6.90	137	52017	294.64	NG	99
8)	Acrolein	7.67	157	165022	3969.86	NG	91
9)	Acetone	7.75	159	40285	270.19	NG	98
10)	Acrylonitrile	8.45	177	36304	329.38	NG	90
11)	Carbon disulfide	8.52	179	175317	229.22	NG	99
12)	Trichlorofluoromethane	9.14	195	128440	238.34	NG	94
13)	1,1-Dichloroethylene	9.92	215	63832	247.44	NG	95
14)	1,1-Dichloroethane	11.28	250	132223	221.27	NG	99
15)	Tetrahydrofuran	11.35	252	19952	187.50	NG	100
15)	Tetrahydrofuran	12.01	269	9325	87.63	NG	100
16)	1,2-Trans-dichloroethylene	12.05	270	71532	246.42	NG	98
17)	Chloroform	12.67	286	143722	231.42	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.33	303	100205	203.89	NG	91
19)	1,2-Dichloroethane	13.45	306	104982	215.57	NG	97
20)	*1,4-Difluorobenzene	21.09	503	270337	250.00	NG	92
21)	Methyl ethyl ketone	13.41	305	9773	234.82	NG	97
22)	1,1,1-Trichloroethane	14.27	340	111579	242.96	NG	99
23)	Carbon tetrachloride	14.73	339	17745	40.34	NG	94
23)	Carbon tetrachloride	15.15	350	116457	264.72	NG	97
24)	Vinyl acetate	15.39	356	187763	239.35	NG	93
25)	Dichlorobromomethane	15.73	365	123101	235.16	NG	96
26)	1,2-Dichloropropane	17.13	401	97458	224.02	NG	95
27)	cis-1,3-Dichloropropylene	17.40	408	189743	234.61	NG	96
28)	Trichloroethylene	17.98	423	108662	270.28	NG	89
29)	Chlorodibromomethane	18.64	440	133466	271.83	NG	98
30)	bis(Chloromethyl)ether	18.64	440	36978	228.01	NG	100
31)	Benzene	18.49	436	232100	237.93	NG	96
32)	1,1,2-Trichloroethane	18.76	443	75401	255.21	NG	87
33)	trans-1,3-Dichloropropylene	18.72	442	60498	239.48	NG	96
34)	2-Chloroethylvinyl ether	19.81	470	54269	211.94	NG	100
35)	Bromoform	21.36	510	142850	261.45	NG	98
36)	*Chlorobenzene-d5	25.97	629	163017	250.00	NG	91
37)	Methyl-iso-butyl ketone	21.78	521	99833	254.31	NG	90
38)	2-Hexanone	23.33	561	105895	298.50	NG	90
39)	1,1,2,2-Tetrachloroethane	23.64	569	109742	282.87	NG	94
40)	Tetrachloroethylene	23.68	570	107405	345.53	NG	96
41)	Toluene-D8 (SURR)	24.77	598	258848	282.61	NG	91

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910118 11:37
Output File: ^C2184::AQ Injected at: 910118 10:43
Data File: >C2184::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910117 18:07

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	24.96	603	147628	285.75	NG	94
43)	Chlorobenzene	26.12	631	168528	250.02	NG	92
44)	Ethylbenzene	28.02	680	94382	285.46	NG	82
45)	p-Bromofluorobenzene (SURR)	30.51	744	140630	263.46	NG	92
46)	Styrene	31.90	780	192230	276.71	NG	95
47)	m-Xylene	32.21	788	113759	273.36	NG	98
47)	m-Xylene	33.14	812	196053	471.11	NG	98
48)	o+p-Xylenes	32.21	788	108551	277.80	NG	89
48)	o+p-Xylenes	33.14	812	214576	549.13	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ Contract:

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

Instrument ID: GC/MS C Calibration Date: 01/19/91 Time: 1434

Lab File ID: >C2199 Init Calib. Dates(s): 01/17/91 01/17/91

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	.928	.459	50.5#
Bromomethane	.160	.129	19.0
Vinyl Chloride *	.264	.261	1.3*
Chloroethane	.188	.162	13.9
Methylene Chloride	.713	.292	59.0
Acetone	.602	.664	10.3
Carbon Disulfide	3.089	2.668	13.6
1,1-Dichloroethene *	1.042	.997	4.3*
1,1-Dichloroethane #	2.414	2.084	13.7#
1,2-Dichloroethene (total)	1.173	1.135	3.2
Chloroform *	2.509	2.315	7.7*
1,2-Dichloroethane	1.967	1.722	12.4
2-Butanone	.038	.042	8.6
1,1,1-Trichloroethane	.425	.415	2.2
Carbon Tetrachloride	.407	.424	4.2
Vinyl Acetate	.725	.688	5.2
Bromodichloromethane	.484	.468	3.4
1,2-Dichloropropane *	.402	.375	6.8*
cis-1,3-Dichloropropene	.748	.709	5.2
Trichloroethene	.372	.402	8.0
Dibromochloromethane	.454	.495	9.1
1,1,2-Trichloroethane	.273	.282	3.4
Benzene	.902	.881	2.4
trans-1,3-Dichloropropene	.234	.226	3.1
Bromoform #	.505	.518	2.6#
4-Methyl-2-Pentanone	.602	.480	20.2
2-Hexanone	.544	.491	9.8
Tetrachloroethene	.477	.511	7.2
1,1,2,2-Tetrachloroethane #	.595	.535	10.1#
Toluene *	.792	.723	8.8*
Chlorobenzene #	1.034	.973	5.9#
Ethylbenzene *	.507	.474	6.6*
Styrene	1.065	.991	7.0
Xylene (total)	.599	.560	6.6
Toluene-d8	1.405	1.269	9.6
Bromofluorobenzene	.819	.705	13.9
1,2-Dichloroethane-d4	1.985	1.644	17.2

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ Contract: ______

Lab Code: ______ Case No.: ______ SAS No.: ______ SDG No.: ______

Instrument ID: C Calibration Date: 1/19/91 Time: 1034

Lab File ID: >C2199 Init. Calib. Date(s): 1/17/91 1/17/91

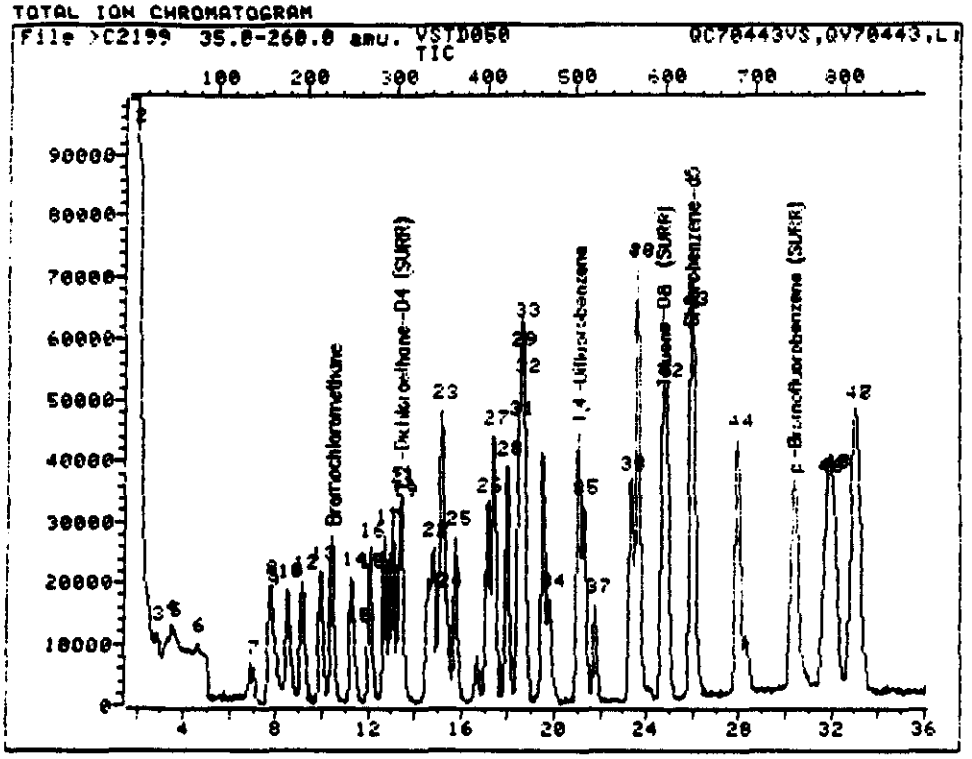
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.42984	0.37603	12.52
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >C2199::U1 Quant Output File: ^C2199::A0
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

Id File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910118 11:53

Operator ID: KB6656
Quant Time: 910119 15:11
Injected at: 910119 14:34

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910119 15:11
Output File: ^C2199::AQ Injected at: 910119 14:34
Data File: >C2199::U1 Dilution Factor: 1.00000
Name: USTD050
Misc: QC70443US,QU70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910118 11:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	10.45	229	54089	250.00	NG	97
2)	Methyl chloride	1.96	10	24829	284.50	NG	97
3)	Methyl bromide	2.86	33	6994	234.03	NG	97
4)	Dichlorodifluoromethane	3.48	49	17711	236.99	NG	92
5)	Vinyl chloride	3.59	52	14098	244.34	NG	96
6)	Chloroethane	4.60	78	8755	276.16	NG	97
7)	Methylene chloride	7.00	140	15802	86.90	NG	95
8)	Acrolein	7.74	159	137823	3822.59	NG	90
9)	Acetone	7.82	161	35934	255.16	NG	98
10	Acrylonitrile	8.52	179	31598	398.37	NG	99
11)	Carbon disulfide	8.52	179	144329	235.50	NG	98
12	Trichlorofluoromethane	9.14	195	115018	256.17	NG	96
13)	1,1-Dichloroethylene	9.95	216	53923	241.65	NG	95
14)	1,1-Dichloroethane	11.31	251	112703	243.83	NG	98
15)	Tetrahydrofuran	11.42	254	20339	291.61	NG	100
15)	Tetrahydrofuran	12.04	270	7478	107.22	NG	100
16)	1,2-Trans-dichloroethylene	12.08	271	61398	245.53	NG	96
17	Chloroform	12.70	287	125206	249.21	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	13.40	305	88929	253.87	NG	96
19	1,2-Dichloroethane	13.48	307	93168	253.87	NG	97
20)	*1,4-Difluorobenzene	21.08	503	222969	250.00	NG	91
21	Methyl ethyl ketone	13.44	306	9321	289.09	NG	99
22)	1,1,1-Trichloroethane	14.80	341	92584	251.51	NG	94
23	Carbon tetrachloride	14.80	341	14937	38.88	NG	98
23)	Carbon tetrachloride	15.18	351	94522	246.02	NG	98
24	Vinyl acetate	15.42	357	153425	247.68	NG	93
25	Dichlorobromomethane	15.77	366	104304	256.83	NG	98
26	1,2-Dichloropropene	17.12	401	83639	260.13	NG	99
27	cis-1,3-Dichloropropylene	17.39	408	158099	252.56	NG	97
28	Trichloroethylene	17.98	423	89526	249.73	NG	87
29	Chlorodibromomethane	18.60	439	110410	250.75	NG	94
30	bis(Chloromethyl)ether	18.63	440	31890	261.40	NG	100
31)	Benzene	18.48	436	196366	256.44	NG	97
32	1,1,2-Trichloroethane	18.75	443	62974	253.15	NG	87
33)	trans-1,3-Dichloropropylene	18.71	442	50466	252.85	NG	98
34	2-Chloroethylvinyl ether	19.80	470	47843	267.22	NG	100
35)	Bromoform	21.31	509	115535	245.15	NG	97
36)	*Chlorobenzene-d5	25.92	628	173290	250.00	NG	88
37)	Methyl-iso-butyl ketone	21.78	521	83204	196.01	NG	91
38)	2-Hexanone	23.33	561	85033	188.85	NG	86
39)	1,1,2,2-Tetrachloroethane	23.64	569	92699	198.66	NG	96
40)	Tetrachloroethylene	23.64	569	88583	193.97	NG	97
41)	Toluene-D8 (SURR)	24.72	597	219968	199.85	NG	99

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910119 15:11
Output File: ^C2199::AO Injected at: 910119 14:34
Data File: >C2199::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70443VS,QV70443,L:M4,5,,

ID File: IC1204::SS
Title: IFB, PP/VOA, XVOA13
Last Calibration: 910118 11:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	24.92	602	125250	199.53	NG	94
43)	Chlorobenzene	26.05	631	168606	235.29	NG	91
44)	Ethylbenzene	27.95	680	82071	204.50	NG	93
45	p-Bromofluorobenzene (SURR)	30.39	743	122151	204.28	NG	89
46)	Styrene	31.83	780	171709	210.07	NG	95
47)	m-Xylene	32.10	787	103036	213.01	NG	98
47)	m-Xylene	33.03	811	180691	373.55	NG	99
48)	o+p-Xylenes	32.10	787	98749	216.46	NG	89
48)	o+p-Xylenes	33.03	811	193988	425.23	NG	99

* Compound is ISTD

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date(s) 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>D2525 RRF50 =>D2524
RRF100=>D2523 RRF150=>D2522 RRF200=>D2521

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	% RSD
Chloromethane #	1.053	1.192	1.220	1.181	1.237	1.176	6.2#
Bromomethane	.455	.483	.483	.426	.436	.456	5.7
Vinyl Chloride *	1.078	.957	.911	.814	.957	.943	10.1*
Chloroethane	.848	.865	.817	.754	.799	.817	5.3
Methylene Chloride	1.792	1.603	1.451	1.206	1.304	1.471	15.9
Acetone	1.174	.692	.739	.625	.694	.785	28.2
Carbon Disulfide	3.839	4.205	4.206	4.133	4.446	4.166	5.2
1,1-Dichloroethene *	1.250	1.311	1.293	1.252	1.308	1.283	2.3*
1,1-Dichloroethane #	2.789	2.874	2.842	2.457	2.610	2.714	6.5#
1,2-Dichloroethene (total)	1.250	1.386	1.367	1.260	1.328	1.318	4.7
Chloroform *	3.502	3.513	3.529	3.228	3.320	3.418	4.0*
1,2-Dichloroethane	3.217	3.155	3.165	2.841	2.868	3.049	5.9
2-Butanone	.035	.028	.031	.028	.029	.030	10.4
1,1,1-Trichloroethane	.664	.667	.638	.622	.613	.641	3.8
Carbon Tetrachloride	.526	.548	.527	.515	.500	.523	3.4
Vinyl Acetate	.531	.608	.600	.698	.690	.626	11.1
Bromodichloromethane	.606	.609	.609	.597	.574	.599	2.4
1,2-Dichloropropane *	.342	.334	.348	.348	.355	.346	2.3*
cis-1,3-Dichloropropene	.734	.734	.767	.760	.745	.748	2.0
Trichloroethene	.443	.441	.425	.417	.407	.427	3.6
Dibromochloromethane	.477	.489	.504	.480	.442	.478	4.8
1,1,2-Trichloroethane	.289	.281	.288	.279	.264	.280	3.6
Benzene	.956	.949	.962	.970	.965	.960	.8
trans-1,3-Dichloropropene	.238	.241	.249	.240	.231	.240	2.8
Bromoform #	.299	.326	.349	.349	.328	.330	6.3#
4-Methyl-2-Pentanone	.458	.449	.479	.453	.449	.458	2.8
2-Hexanone	.414	.412	.545	.448	.525	.469	13.4
Tetrachloroethene	.517	.519	.510	.501	.481	.506	3.0
1,1,2,2-Tetrachloroethane #	.576	.569	.604	.597	.556	.580	3.4#
Toluene *	.752	.745	.752	.740	.753	.749	.8*
Chlorobenzene #	1.019	1.014	1.013	.993	.986	1.005	1.5#
Ethylbenzene *	.467	.467	.461	.461	.462	.464	.6*
Styrene	.942	.958	.949	.942	.957	.950	.8
Xylene (total)	.555	.560	.549	.546	.556	.553	1.0
Toluene-d8	1.228	1.250	1.266	1.267	1.260	1.254	1.3
Bromofluorobenzene	.866	.877	.868	.870	.877	.872	.6
1,2-Dichloroethane-d4	2.854	2.966	3.053	2.816	2.899	2.918	3.2

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ETC CORP Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: D Calibration Date(s): 01/8/91 01/08/91

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

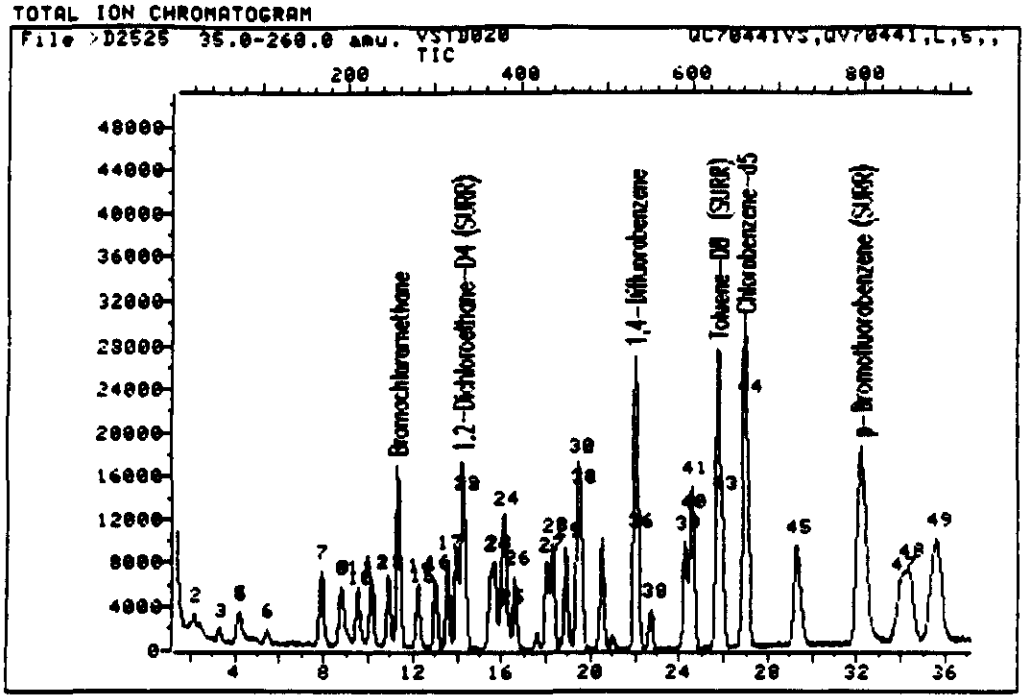
Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >D1525 RRF50 = >D8524
RRF100= >D8523 RRF150= >D8528 RRF200= >D1521

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	%RSD
Tetrahydrofuran	0.39183	0.37452	0.35915	0.34155	0.34006	0.36146	23.217
Toluene-d8							
Bromofluorobenzene							
1,2-Dichloroethane-d4							

FORM VI VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2525::U0 Quant Output File: >D2525::HU
Name: VSTD020
Misc: QC70441VS,QV70441,L,5,,

Id File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

Operator ID: KB6656
Quant Time: 910108 20:17
Injected at: 910108 19:39

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 20:17
Output File: ^D2525::AQ Injected at: 910108 19:39
Data File: >D2525::U0 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.35	259	26225	250.00	NG	97
2)	Methyl chloride	2.16	22	11044	125.13	NG	92
3)	Methyl bromide	3.25	50	4773	41.77	NG	90
4)	Dichlorodifluoromethane	4.14	73	13707	124.16	NG	94
5)	Vinyl chloride	4.18	74	11309	67.59	NG	95
6)	Chloroethane	5.42	106	8899	84.13	NG	93
7)	Methylene chloride	7.86	169	18797	90.08	NG	95
8)	Acrolein	8.75	192	28454	4142.92	NG	94
9)	Acetone	8.79	193	12318	77.73	NG	89
10)	Acrylonitrile	9.49	211	6525	165.80	NG	89
11)	Carbon disulfide	9.53	212	40267	108.94	NG	99
12)	Trichlorofluoromethane	10.15	228	31614	152.47	NG	97
13)	1,1-Dichloroethylene	10.89	247	13114	54.93	NG	92
14)	1,1-Dichloroethane	12.24	282	29257	98.05	NG	98
15)	Tetrahydrofuran	12.28	283	4104	5923.20	NG	100
16)	1,2-Trans-dichloroethylene	13.02	302	13110	62.47	NG	92
17)	Chloroform	13.56	316	36733	96.49	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	14.26	334	74838	279.59	NG	94
19)	1,2-Dichloroethane	14.34	336	33745	98.32	NG	96
21)	*1,4-Difluorobenzene	22.01	534	109421	250.00	NG	95
22)	Methyl ethyl ketone	14.34	336	1549M	18.77	NG	
23)	1,1,1-Trichloroethane	15.69	371	29043	85.12	NG	91
24)	Carbon tetrachloride	15.65	370	3648	12.05	NG	98
24)	Carbon tetrachloride	16.08	381	23002	75.97	NG	93
25)	Vinyl acetate	16.31	387	23224	92.57	NG	98
26)	Dichlorobromomethane	16.59	394	26503	91.17	NG	93
27)	1,2-Dichloropropane	18.06	432	14983	85.89	NG	98
28)	cis-1,3-Dichloropropylene	18.29	438	32129	128.86	NG	94
29)	Trichloroethylene	18.87	453	19395	96.54	NG	94
30)	Chlorodibromomethane	19.45	468	20896	96.44	NG	97
31)	bis(Chloromethyl)ether	19.45	468	7255	280.85	NG	100
32)	Benzene	19.45	468	41829	77.12	NG	89
33)	1,1,2-Trichloroethane	19.57	471	12668	83.82	NG	88
34)	trans-1,3-Dichloropropylene	19.57	471	10410	39.90	NG	93
36)	Bromoform	22.17	538	13071	105.34	NG	92
37)	*Chlorobenzene-d5	26.95	661	90573	250.00	NG	92
38)	Methyl-iso-butyl ketone	22.71	552	16577	107.23	NG	94
39)	2-Hexanone	24.26	592	15006	107.44	NG	90
40)	1,1,2,2-Tetrachloroethane	24.50	598	20863	85.09	NG	99
41)	Tetrachloroethylene	24.57	600	18731	62.05	NG	99
42)	Toluene-D8 (SURR)	25.74	630	111219	193.11	NG	94
43)	Toluene	25.93	635	27231	39.27	NG	96
44)	Chlorobenzene	27.06	664	36931	72.19	NG	97

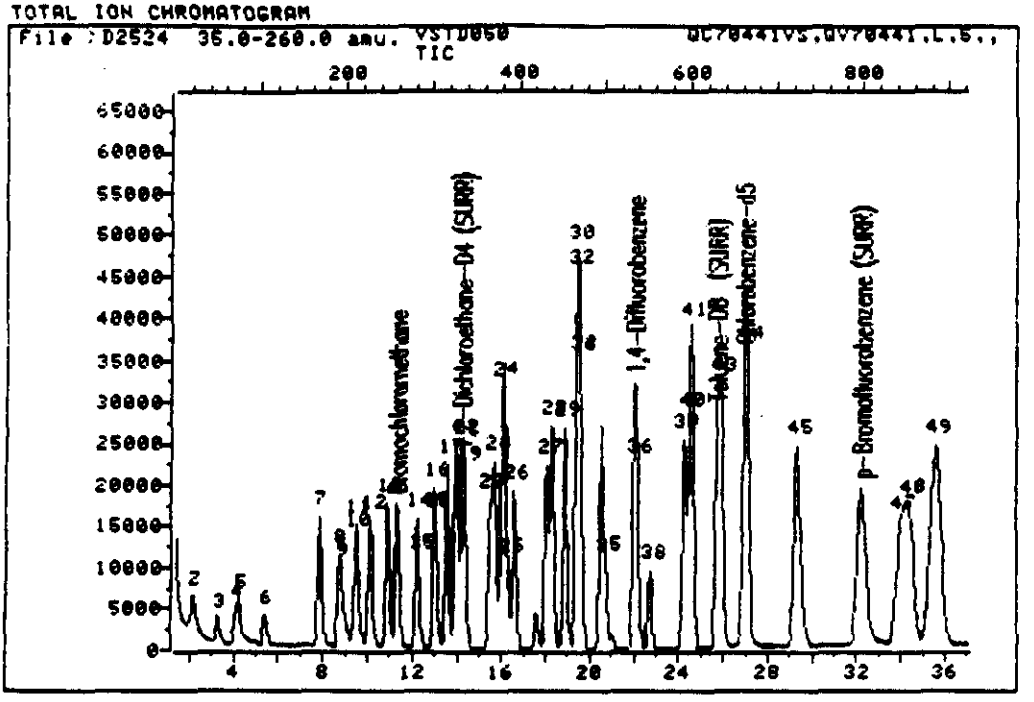
perator ID: KB6656 Quant Rev: 7 Quant Time: 910108 20:17
utput File: ^D2525::AQ Injected at: 910108 19:39
ata File: >D2525::U0 Dilution Factor: 1.00000
ame: VSTD020
isc: QC70441VS,QV70441,L,5,,

D File: ID0308::SS
itle: PP/VOA, IFB, XVOA13, XVOA9
est Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
45)	Ethylbenzene	29.27	721	16912	17.71	NG	79
46)	p-Bromofluorobenzene (SURR)	32.18	796	78451	212.15	NG	77
47)	Styrene	33.97	842	34140	45.50	NG	88
48)	m-Xylene	34.35	852	21541	23.32	NG	93
49)	o+p-Xylenes	35.56	883	40185	22.80	NG	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D2524::U0 Quant Output File: ^D2524::A0
Name: VSTD050
Misc: QC70441VS,QV70441,L,5,,

Id File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 10:44

Operator ID: KB6656
Quant Time: 910109 11:34
Injected at: 910108 18:55

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910109 11:34
Output File: ^D2524::AQ Injected at: 910108 18:55
Data File: >D2524::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 10:44

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.35	259	27235	250.00	NG	98
2)	Methyl chloride	2.16	22	32461	253.28	NG	97
3)	Methyl bromide	3.29	51	13144	264.34	NG	94
4)	Dichlorodifluoromethane	4.10	72	31864	254.55	NG	97
5)	Vinyl chloride	4.22	75	26051	253.49	NG	95
6)	Chloroethane	5.42	106	23562	264.78	NG	99
7)	Methylene chloride	7.90	170	43657	272.38	NG	98
8)	Acrolein	8.75	192	65137	3791.68	NG	88
9)	Acetone	8.83	194	18840	220.35	NG	91
10)	Acrylonitrile	9.49	211	18240	421.59	NG	92
11)	Carbon disulfide	9.53	212	114526	252.37	NG	99
12)	Trichlorofluoromethane	10.15	228	81304	244.42	NG	96
13)	1,1-Dichloroethylene	10.92	248	35706	255.47	NG	91
14)	1,1-Dichloroethane	12.24	282	78284	264.73	NG	98
15)	Tetrahydrofuran	12.32	284	10249	292.48	NG	100
15)	Tetrahydrofuran	12.98	301	4549	129.82	NG	100
16)	1,2-Trans-dichloroethylene	13.02	302	37760	262.92	NG	90
17)	Chloroform	13.60	317	95683	256.94	NG	96
18)	1,2-Dichloroethane-D4 (SURR)	14.26	334	80783	254.16	NG	95
19)	1,2-Dichloroethane	14.37	337	85915	258.65	NG	97
20)	Methyl tertiary butyl ether	15.50	366	76595	248.48	NG	98
21)	*1,4-Difluorobenzene	22.05	535	119343	250.00	NG	98
22)	Methyl ethyl ketone	14.34	336	3307	229.66	NG	96
23)	1,1,1-Trichloroethane	15.69	371	79592	260.24	NG	96
24)	Carbon tetrachloride	15.69	371	9268	37.12	NG	95
24)	Carbon tetrachloride	16.08	381	65396	261.93	NG	92
25)	Vinyl acetate	16.31	387	72619	243.18	NG	97
26)	Dichlorobromomethane	16.62	395	72659	254.12	NG	96
27)	1,2-Dichloropropane	18.06	432	39864	241.70	NG	92
28)	cis-1,3-Dichloropropylene	18.29	438	87586	245.25	NG	93
29)	Trichloroethylene	18.91	454	52607	258.38	NG	91
30)	Chlorodibromomethane	19.49	469	58313	255.31	NG	97
31)	bis(Chloromethyl)ether	19.46	468	19922	256.04	NG	100
32)	Benzene	19.46	468	113250	247.06	NG	90
33)	1,1,2-Trichloroethane	19.61	472	33520	250.53	NG	87
34)	trans-1,3-Dichloropropylene	19.61	472	28801	251.50	NG	90
35)	2-Chloroethylvinyl ether	20.74	501	23582	244.83	NG	100
36)	Bromoform	22.17	538	38858	246.59	NG	94
37)	*Chlorobenzene-d5	26.95	661	94976	250.00	NG	68
38)	Methyl-iso-butyl ketone	22.75	553	42632	245.23	NG	95
39)	2-Hexanone	24.26	592	39106	219.50	NG	88
40)	1,1,2,2-Tetrachloroethane	24.50	598	54029	245.02	NG	95
41)	Tetrachloroethylene	24.61	601	49268	256.45	NG	97

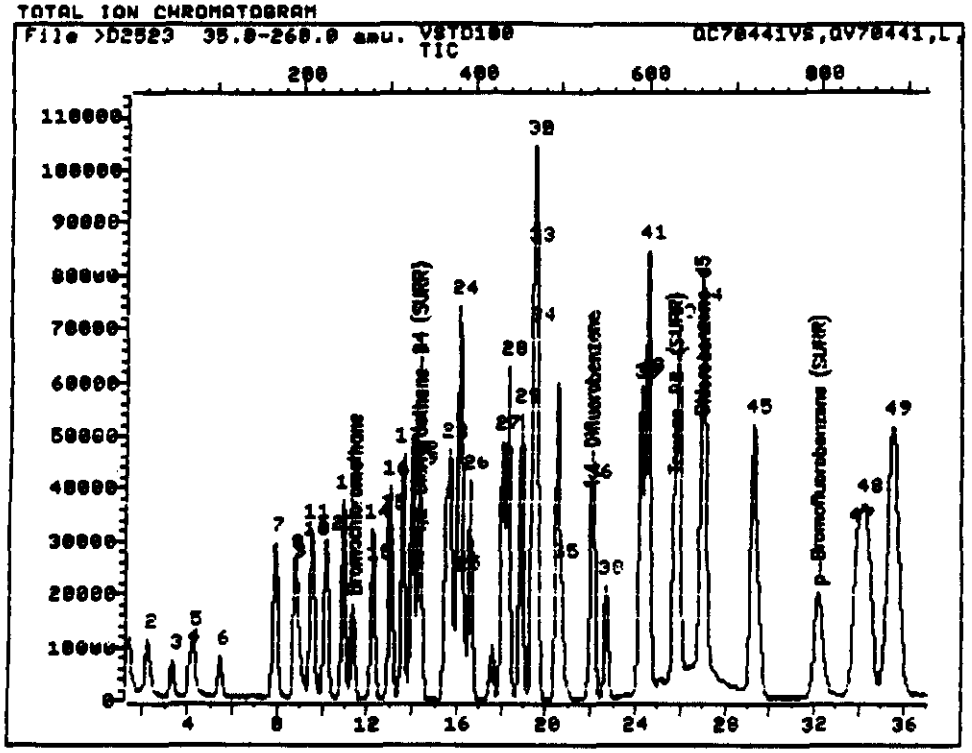
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910109 11:34
Output File: ^D2524::AQ Injected at: 910108 18:55
Data File: >D2524::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 10:44

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.74	630	118734	249.19	NG	94
43)	Toluene	25.93	635	70780	248.90	NG	97
44)	Chlorobenzene	27.10	665	96344	252.29	NG	94
45)	Ethylbenzene	29.31	722	44354	251.80	NG	79
46)	p-Bromofluorobenzene (SURR)	32.22	797	83266	251.47	NG	81
47)	Styrene	34.01	843	90977	252.12	NG	89
48)	m-Xylene	34.40	853	56479	251.07	NG	94
49)	o+p-Xylenes	35.60	884	106291	505.87	NG	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D2523::UO Quant Output File: ^D2523::AQ
Name: VSTD100
Misc: QC70441VS,QV70441,L,5,,

Id File: ID0308::SS
Title: PP/VOA, IFB, XVUA13, XVOA9
Last Calibration: 910108 16:09

Operator ID: KB6656
Quant Time: 910108 18:49
Injected at: 910108 18:11

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 18:49
Output File: ^D2523::AQ Injected at: 910108 18:11
Data File: >D2523::U0 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/V0A, IFB, XV0A13, XV0A9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.35	259	28139	250.00	NG	97
2)	Methyl chloride	2.16	22	68641	724.82	NG	98
3)	Methyl bromide	3.28	51	27166	221.57	NG	95
4)	Dichlorodifluoromethane	4.10	72	62618	528.62	NG	92
5)	Vinyl chloride	4.22	75	51280	285.62	NG	96
6)	Chloroethane	5.42	106	45998	405.27	NG	97
7)	Methylene chloride	7.90	170	81656	364.71	NG	98
8)	Acrolein	8.75	192	157811	21414.46	NG	94
9)	Acetone	8.83	194	41576	244.51	NG	92
10)	Acrylonitrile	9.49	211	38599	914.11	NG	94
11)	Carbon disulfide	9.53	212	236678	596.77	NG	99
12)	Trichlorofluoromethane	10.15	228	158821	713.87	NG	99
13)	1,1-Dichloroethylene	10.92	248	72773	284.10	NG	89
14)	1,1-Dichloroethane	12.24	282	159932	499.52	NG	98
15)	Tetrahydrofuran	12.32	284	20212	27187.22	NG	100
15)	Tetrahydrofuran	12.98	301	17511	23554.11	NG	100
16)	1,2-Trans-dichloroethylene	13.02	302	76936	341.66	NG	92
17)	Chloroform	13.60	317	198610	486.21	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	14.26	334	85920	299.15	NG	95
19)	1,2-Dichloroethane	14.38	337	178138	483.75	NG	98
21)	*1,4-Difluorobenzene	22.02	534	127964	250.00	NG	95
22)	Methyl ethyl ketone	14.34	336	7848	81.31	NG	96
23)	1,1,1-Trichloroethane	15.69	371	163268	409.18	NG	94
24)	Carbon tetrachloride	15.69	371	19901	56.21	NG	94
24)	Carbon tetrachloride	16.12	382	134963	381.18	NG	96
25)	Vinyl acetate	16.31	387	153621	523.57	NG	97
26)	Dichlorobromomethane	16.62	395	155916	458.63	NG	94
27)	1,2-Dichloropropane	18.06	432	89113	436.82	NG	92
28)	cis-1,3-Dichloropropylene	18.29	438	196385	673.52	NG	94
29)	Trichloroethylene	18.87	453	108811	463.15	NG	9-
30)	Chlorodibromomethane	19.46	468	129018	509.14	NG	98
31)	bis(Chloromethyl)ether	19.46	468	43005	1423.53	NG	100
32)	Benzene	19.46	468	246099	387.98	NG	90
33)	1,1,2-Trichloroethane	19.57	471	73744	417.24	NG	87
34)	trans-1,3-Dichloropropylene	19.61	472	63788	209.07	NG	90
35)	2-Chloroethylvinyl ether	20.70	500	52880	478.93	NG	100
36)	Bromoform	22.13	537	89299	615.39	NG	93
37)	*Chlorobenzene-d5	26.91	660	101831	250.00	NG	69
38)	Methyl-iso-butyl ketone	22.71	552	97629	561.68	NG	92
39)	2-Hexanone	24.27	592	111047	707.21	NG	88
40)	1,1,2,2-Tetrachloroethane	24.46	597	122971	446.09	NG	94
41)	Tetrachloroethylene	24.58	600	103964	306.35	NG	97
42)	Toluene-D8 (SURR)	25.74	630	128954	199.15	NG	93

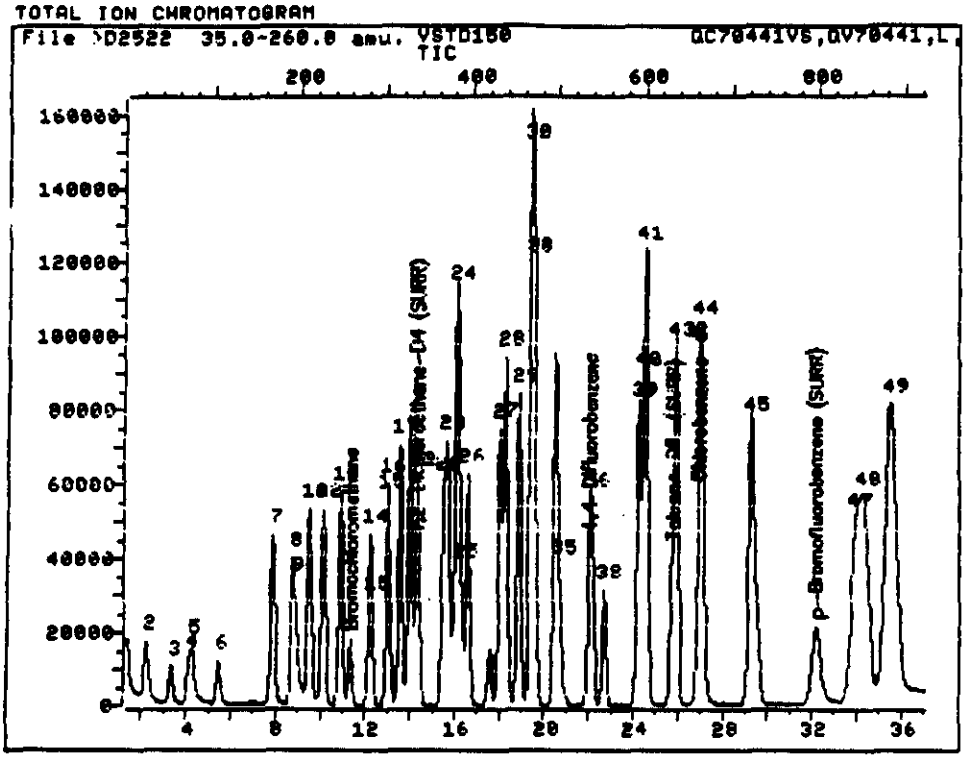
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 18:49
Output File: ^D2523::AQ Injected at: 910108 18:11
Data File: >D2523::U0 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Toluene	25.90	634	153225	196.54	NG	96
44)	Chlorobenzene	27.07	664	206293	358.67	NG	95
45)	Ethylbenzene	29.28	721	93973	87.54	NG	79
46)	p-Bromofluorobenzene (SURR)	32.15	795	88396	212.61	NG	78
47)	Styrene	33.94	841	193371	229.22	NG	86
48)	m-Xylene	34.32	851	119249	114.82	NG	91
49)	o+p-Xylenes	35.53	882	223670	112.86	NG	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D2522::U0 Quant Output File: ^D2522::AQ
Name: VSTD150
Misc: QC70441VS,QV70441,L,5,,

Id File: IDU308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

Operator ID: KB6656
Quant Time: 910108 18:05
Injected at: 910108 17:28

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 18:09
Output File: ^D2522::AQ Injected at: 910108 17:28
Data File: >D2522::U0 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.31	258	31640	250.00	NG	99
2)	Methyl chloride	2.16	22	112098	1052.73	NG	9?
3)	Methyl bromide	3.29	51	40422	293.21	NG	97
4)	Dichlorodifluoromethane	4.10	72	95559	717.44	NG	98
5)	Vinyl chloride	4.22	75	77293	382.88	NG	98
6)	Chloroethane	5.42	106	71591	560.96	NG	98
7)	Methylene chloride	7.86	169	114490	454.78	NG	98
8)	Acrolein	8.75	192	240602	29036.31	NG	9?
9)	Acetone	8.83	194	59358	310.45	NG	90
10)	Acrylonitrile	9.49	211	59999	1263.68	NG	9?
11)	Carbon disulfide	9.49	211	392266	879.64	NG	99
12)	Trichlorofluoromethane	10.11	227	285896	1142.85	NG	9?
13)	1,1-Dichloroethylene	10.89	247	118849	412.64	NG	92
14)	1,1-Dichloroethane	12.24	282	233209	647.79	NG	9?
15)	Tetrahydrofuran	12.32	284	22928	27427.99	NG	100
15)	Tetrahydrofuran	12.98	301	16855	20163.07	NG	100
16)	1,2-Trans-dichloroethylene	13.02	302	119585	472.28	NG	92
17)	Chloroform	13.56	316	306396	667.08	NG	9?
18)	1,2-Dichloroethane-D4 (SURR)	14.26	334	89088	275.86	NG	94
19)	1,2-Dichloroethane	14.34	336	269639	651.20	NG	9?
20)	Methyl tertiary butyl ether	15.50	366	257915	16074.45	NG	99
21)	*1,4-Difluorobenzene	22.02	534	135950	250.00	NG	99
22)	Methyl ethyl ketone	14.34	336	11367	111.34	NG	99
23)	1,1,1-Trichloroethane	15.69	371	252694	598.74	NG	94
24)	Carbon tetrachloride	15.69	371	30301	80.91	NG	99
24)	Carbon tetrachloride	16.08	381	208934	557.89	NG	94
25)	Vinyl acetate	16.32	387	283611	913.85	NG	96
26)	Dichlorobromomethane	16.59	394	242331	673.92	NG	98
27)	1,2-Dichloropropane	18.02	431	141220	654.47	NG	95
28)	cis-1,3-Dichloropropylene	18.29	438	308632	1000.73	NG	92
29)	Trichloroethylene	18.88	453	169163	680.75	NG	94
30)	Chlorodibromomethane	19.42	467	195035	727.66	NG	98
31)	bis(Chloromethyl)ether	19.42	467	65707	2056.31	NG	100
32)	Benzene	19.42	467	393724	586.85	NG	91
33)	1,1,2-Trichloroethane	19.57	471	113130	605.16	NG	88
34)	trans-1,3-Dichloropropylene	19.57	471	97502	302.14	NG	92
35)	2-Chloroethylvinyl ether	20.70	500	84053	719.73	NG	100
36)	Bromoform	22.13	537	141673	923.04	NG	9?
37)	*Chlorobenzene-d5	26.92	660	106592	250.00	NG	69
38)	Methyl-iso-butyl ketone	22.72	552	144918	796.51	NG	94
39)	2-Hexanone	24.27	592	143322	871.98	NG	89
40)	1,1,2,2-Tetrachloroethane	24.46	597	190471	661.82	NG	96
41)	Tetrachloroethylene	24.58	600	160248	451.11	NG	98

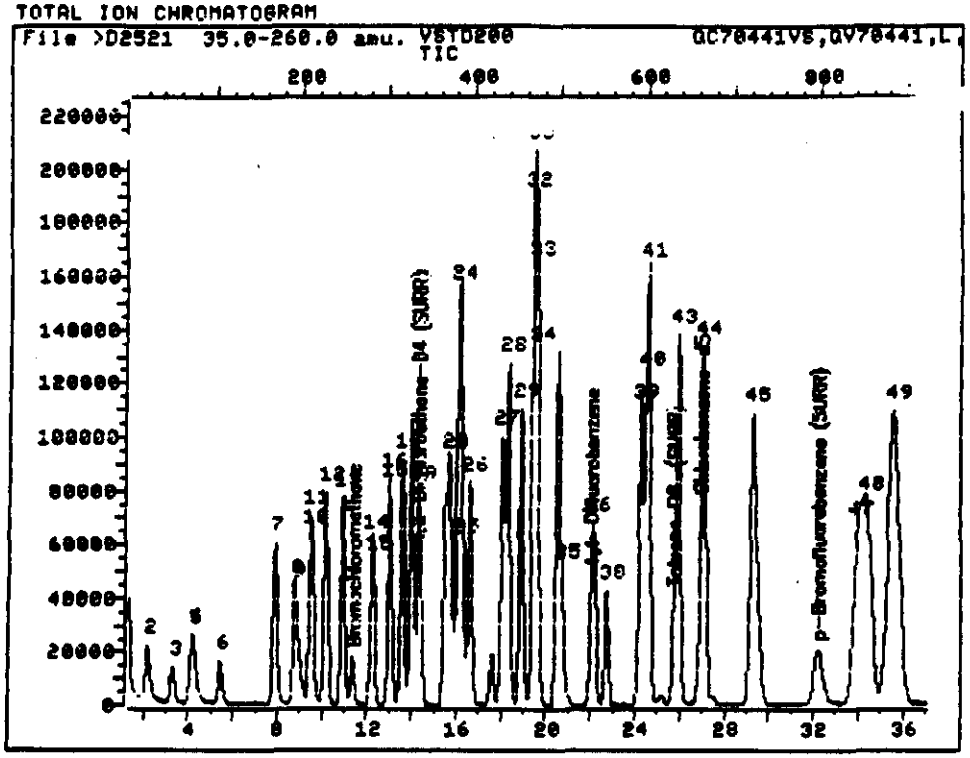
Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 18:05
Output File: ^D2522::AQ Injected at: 910108 17:28
Data File: >D2522::U0 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.74	630	135048	199.25	NG	96
43)	Toluene	25.94	635	236631	289.97	NG	9?
44)	Chlorobenzene	27.04	665	317676	527.65	NG	95
45)	Ethylbenzene	29.25	720	147464	131.24	NG	78
46)	p-Bromofluorobenzene (SURR)	32.16	795	92684	212.97	NG	76
47)	Styrene	33.94	841	301356	341.27	NG	88
48)	m-Xylene	34.33	851	188423	173.33	NG	92
49)	o+p-Xylenes	35.49	881	349134	168.30	NG	88

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D2521::U0 Quant Output File: ^D2521::AQ
Name: VSTD200
Misc: QC70441VS,QV70441,L,5,,

Id File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

Operator ID: KB6656
Quant Time: 910108 17:21
Injected at: 910108 16:43

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 17:21
Output File: ^D2521::AQ Injected at: 910108 16:43
Data File: >D2521::U0 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	260	30822	250.00	NG	99
2)	Methyl chloride	2.16	22	152504	1470.19	NG	96
3)	Methyl bromide	3.28	51	53751	400.25	NG	98
4)	Dichlorodifluoromethane	4.18	74	141691	1092.02	NG	96
5)	Vinyl chloride	4.21	75	117948	599.77	NG	96
6)	Chloroethane	5.42	106	98537	792.60	NG	98
7)	Methylene chloride	7.90	170	160825	655.79	NG	99
8)	Acrolein	8.75	192	267812	33177.82	NG	93
9)	Acetone	8.83	194	85569	459.42	NG	91
10)	Acrylonitrile	9.49	211	69956	1512.50	NG	91
11)	Carbon disulfide	9.53	212	548122	1261.76	NG	99
12)	Trichlorofluoromethane	10.19	229	423407	1737.46	NG	95
13)	1,1-Dichloroethylene	10.92	248	161302	574.90	NG	92
14)	1,1-Dichloroethane	12.24	282	321808	917.61	NG	96
15)	Tetrahydrofuran	12.32	284	29597	36345.54	NG	100
15)	Tetrahydrofuran	13.02	302	30519	37477.77	NG	100
16)	1,2-Trans-dichloroethylene	13.06	303	163787	664.03	NG	90
17)	Chloroform	13.60	317	409260	914.69	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	14.30	335	89352	284.02	NG	99
19)	1,2-Dichloroethane	14.38	337	353560	876.54	NG	9
21)	*1,4-Difluorobenzene	22.06	535	138548	250.00	NG	95
22)	Methyl ethyl ketone	14.38	337	16106	154.11	NG	9
23)	1,1,1-Trichloroethane	15.73	372	339502	785.86	NG	92
24)	Carbon tetrachloride	15.73	372	40850	106.56	NG	98
24)	Carbon tetrachloride	16.12	382	276882	722.26	NG	95
25)	Vinyl acetate	16.31	387	382391	1203.70	NG	96
26)	Dichlorobromomethane	16.62	395	318313	864.80	NG	95
27)	1,2-Dichloropropane	18.06	432	196832	891.14	NG	91
28)	cis-1,3-Dichloropropylene	18.33	439	412966	1308.12	NG	92
29)	Trichloroethylene	18.91	454	225448	886.31	NG	9
30)	Chlorodibromomethane	19.50	469	244821	892.32	NG	98
31)	bis(Chloromethyl)ether	19.50	469	84466	2582.36	NG	100
32)	Benzene	19.46	468	534994	779.00	NG	91
33)	1,1,2-Trichloroethane	19.61	472	146477	765.45	NG	85
34)	trans-1,3-Dichloropropylene	19.65	473	127978	387.42	NG	90
35)	2-Chloroethylvinyl ether	20.74	501	108549	908.02	NG	100
36)	Bromoform	22.17	538	182002	1158.42	NG	96
37)	*Chlorobenzene-d5	26.95	661	110683	250.00	NG	64
38)	Methyl-iso-butyl ketone	22.75	553	198782	1052.17	NG	95
39)	2-Hexanone	24.31	593	232606	1362.88	NG	8
40)	1,1,2,2-Tetrachloroethane	24.50	598	246372	822.26	NG	95
41)	Tetrachloroethylene	24.62	601	212991	577.42	NG	98
42)	Toluene-D8 (SURR)	25.74	630	139421	198.10	NG	96

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910108 17:21
Output File: ^D2521::AQ Injected at: 910108 16:45
Data File: >D2521::U0 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70441VS,QV70441,L,5,,

ID File: ID0308::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910108 16:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Toluene	25.93	635	333568	393.65	NG	97
44)	Chlorobenzene	27.07	664	436473	698.18	NG	96
45)	Ethylbenzene	29.32	722	204531	175.30	NG	78
46)	p-Bromofluorobenzene (SURR)	32.23	797	97121	214.92	NG	76
47)	Styrene	33.97	842	423776	462.17	NG	90
48)	m-Xylene	34.40	853	264185	234.04	NG	91
49)	o+p-Xylenes	35.56	883	492482	228.63	NG	87

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/09/91 Time: 1442

Lab File ID: >D2532 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	.961	18.3#
Bromomethane	.456	.557	22.1
Vinyl Chloride *	.943	.971	2.9*
Chloroethane	.817	.953	16.7
Methylene Chloride	1.471	1.577	7.2
Acetone	.785	.697	11.1
Carbon Disulfide	4.166	4.472	7.3
1,1-Dichloroethene *	1.283	1.353	5.4*
1,1-Dichloroethene #	2.714	2.972	9.5#
1,2-Dichloroethene (total)	1.318	1.427	8.3
Chloroform *	3.418	3.513	2.8*
1,2-Dichloroethane	3.049	3.095	1.5
2-Butanone	.030	.029	2.7
1,1,1-Trichloroethane	.641	.710	10.8
Carbon Tetrachloride	.523	.591	13.1
Vinyl Acetate	.626	.609	2.7
Bromodichloromethane	.599	.609	1.6
1,2-Dichloropropane *	.346	.304	12.1*
cis-1,3-Dichloropropene	.748	.735	1.7
Trichloroethene	.427	.413	3.1
Dibromochloromethane	.478	.480	.3
1,1,2-Trichloroethane	.280	.255	9.1
Benzene	.960	.889	7.5
trans-1,3-Dichloropropene	.240	.268	11.6
Bromoform #	.330	.318	3.7#
4-Methyl-2-Pentanone	.458	.388	15.3
2-Hexanone	.469	.465	.9
Tetrachloroethene	.506	.502	.8
1,1,2,2-Tetrachloroethane #	.580	.507	12.7#
Toluene *	.749	.702	6.3*
Chlorobenzene #	1.005	.960	4.5#
Ethylbenzene *	.464	.455	1.9*
Styrene	.950	.931	2.0
Xylene (total)	.553	.538	2.6
Toluene-d8	1.254	1.248	.5
Bromofluorobenzene	.872	.886	1.6
1,2-Dichloroethane-d4	2.918	2.799	4.1

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETC CORP. Contract: ____________

Lab Code: ________ Case No.: ______ SAS No.: _______ SDG No.: _______

Instrument ID: D Calibration Date: 1/9/91 Time: 1442

Lab File ID: 7D2552 Init. Calib. Date(s): 01/8/91 01/08/91

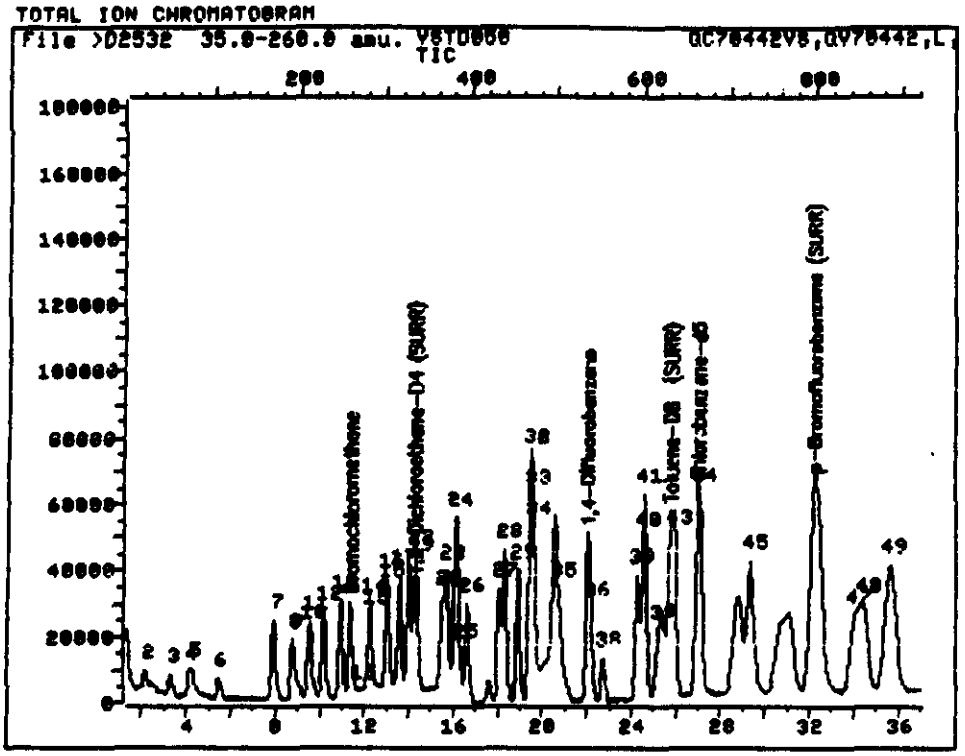
Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.32166	0.37899	17.79
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2532::U0 Quant Output File: ^D2532::AQ
Name: VSTD050
Misc: QC70442VS,QV70442,L,5,,

Id File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 10:44

Operator ID: MGRMS
Quant Time: 910109 15:20
Injected at: 910109 14:42

Operator ID: MGRMS Quant Rev: 7 Quant Time: 910109 15:20
Output File: ^D2532::AQ Injected at: 910109 14:42
Data File: >D2532::U0 Dilution Factor: 1.0000
Name: VSTD050
Misc: QC70442VS,QV70442,L,5,,

ID File: ID0309::SS
Title: PP/VOA, 1rB, XVOA13, XVOA9
Last Calibration: 910109 10:44

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	260	42809	250.00	NG	96
2)	Methyl chloride	2.16	22	41127	204.15	NG	91
3)	Methyl bromide	3.29	51	23865	305.34	NG	99
4)	Dichlorodifluoromethane	4.10	72	54238	275.66	NG	94
5)	Vinyl chloride	4.26	76	41558	257.27	NG	93
6)	Chloroethane	5.46	107	40807	291.74	NG	94
7)	Methylene chloride	7.94	171	67497	267.91	NG	96
8)	Acrolein	8.79	193	101142	3745.66	NG	94
9)	Acetone	8.83	194	29858	222.17	NG	87
10)	Acrylonitrile	9.53	212	25340	372.62	NG	92
11)	Carbon disulfide	9.57	213	191426	268.37	NG	99
12)	Trichlorofluoromethane	10.19	229	137964	263.86	NG	96
13)	1,1-Dichloroethylene	10.97	249	57914	263.62	NG	87
14)	1,1-Dichloroethane	12.29	283	127209	273.68	NG	97
15)	Tetrahydrofuran	11.78	270	3302	59.95	NG	100
15)	Tetrahydrofuran	12.32	284	16220	294.48	NG	100
15)	Tetrahydrofuran	13.02	302	21159	384.15	NG	100
16)	1,2-Trans-dichloroethylene	13.06	303	61106	270.69	NG	91
17)	Chloroform	13.60	317	150395	256.94	NG	95
18)	1,2-Dichloroethane-D4 (SURR)	14.26	334	119803	239.80	NG	96
19)	1,2-Dichloroethane	14.38	337	132480	253.74	NG	98
20)	Methyl tertiary butyl ether	15.54	367	120535	248.77	NG	99
21)	*1,4-Difluorobenzene	22.06	535	189142	250.00	NG	95
22)	Methyl ethyl ketone	14.34	336	5550	243.19	NG	98
23)	1,1,1-Trichloroethane	15.74	372	134282	277.04	NG	92
24)	Carbon tetrachloride	15.74	372	15381	38.87	NG	91
24)	Carbon tetrachloride	16.13	382	111840	282.65	NG	95
25)	Vinyl acetate	16.36	388	115173	243.35	NG	96
26)	Dichlorobromomethane	16.63	395	115130	254.07	NG	94
27)	1,2-Dichloropropane	18.10	433	57453	219.79	NG	96
28)	cis-1,3-Dichloropropylene	18.34	439	139067	245.70	NG	92
29)	Trichloroethylene	18.96	455	78150	242.19	NG	94
30)	Chlorodibromomethane	19.50	469	90780	250.79	NG	98
31)	bis(Chloromethyl)ether	19.50	469	31931	258.94	NG	100
32)	Benzene	19.50	469	168066	231.34	NG	87
33)	1,1,2-Trichloroethene	19.62	472	48205	227.33	NG	89
34)	trans-1,3-Dichloropropylene	19.66	473	50619	278.90	NG	89
35)	2-Chloroethylvinyl ether	20.74	501	34281	224.57	NG	100
36)	Bromoform	22.22	539	60149	240.85	NG	98
37)	*Chlorobenzene-d5	27.00	662	153083	250.00	NG	67
38)	Methyl-iso-butyl ketone	22.76	553	59335	211.76	NG	93
39)	2-Hexanone	24.31	593	71169	247.84	NG	87
39)	2-Hexanone	25.24	617	5444	18.96	NG	52

Operator ID: MGRMS Quant Rev: 7 Quant Time: 910109 15:20
Output File: ^D2532::AQ Injected at: 910109 14:42
Data File: >D2532::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70442VS,QV70442,L,5,,

ID File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 10:44

	Compound	R.T.	Scan#	Area	Conc	Units	q
40)	1,1,2,2-Tetrachloroethane	24.54	599	77611	218.36	NG	91
41)	Tetrachloroethylene	24.62	601	76797	248.01	NG	98
42)	Toluene-D8 (SURR)	25.79	631	191070	248.79	NG	94
43)	Toluene	25.99	636	107388	234.29	NG	94
44)	Chlorobenzene	27.11	665	146924	238.70	NG	95
45)	Ethylbenzene	29.37	723	69608	245.17	NG	78
46)	p-Bromofluorobenzene (SURR)	32.24	797	135570	254.02	NG	79
47)	Styrene	34.06	844	142482	244.97	NG	8?
48)	m-Xylene	34.45	854	89083	245.69	NG	91
49)	o+p-Xylenes	35.66	885	164863	486.80	NG	86

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/10/91 Time: 1010

Lab File ID: >D2549 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	1.183	.6#
Bromomethane	.456	.338	25.9
Vinyl Chloride *	.943	1.030	9.2*
Chloroethane	.817	.669	18.1
Methylene Chloride	1.471	.506	65.6
Acetone	.785	.657	16.3
Carbon Disulfide	4.166	4.169	.1
1,1-Dichloroethene *	1.283	1.324	3.2*
1,1-Dichloroethane #	2.714	2.497	8.0#
1,2-Dichloroethene (total)	1.318	1.345	2.0
Chloroform *	3.418	3.099	9.3*
1,2-Dichloroethane	3.049	2.408	21.0
2-Butanone	.030	.030	.9
1,1,1-Trichloroethane	.641	.549	14.3
Carbon Tetrachloride	.523	.432	17.4
Vinyl Acetate	.626	.565	9.6
Bromodichloromethane	.599	.501	16.4
1,2-Dichloropropane *	.346	.328	5.0*
cis-1,3-Dichloropropene	.748	.683	8.8
Trichloroethene	.427	.407	4.6
Dibromochloromethane	.478	.382	20.1
1,1,2-Trichloroethane	.280	.249	11.3
Benzene	.960	.942	1.9
trans-1,3-Dichloropropene	.240	.217	9.6
Bromoform #	.330	.253	23.3#
4-Methyl-2-Pentanone	.458	.406	11.2
2-Hexanone	.469	.460	2.0
Tetrachloroethene	.506	.487	3.7
1,1,2,2-Tetrachloroethane #	.580	.497	14.4#
Toluene *	.749	.751	.3*
Chlorobenzene #	1.005	.959	4.6#
Ethylbenzene *	.464	.457	1.5*
Styrene	.950	.912	3.9
Xylene (total)	.553	.543	1.9
Toluene-d8	1.254	1.244	.8
Bromofluorobenzene	.872	.806	7.6
1,2-Dichloroethane-d4	2.918	2.212	24.2

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETC CORP. Contract: ____

Lab Code: ____ Case No.: ____ SAS No.: ____ SDG No.: ____

Instrument ID: D Calibration Date: 1/10/91 Time: 1010

Lab File ID: >DE549 Init. Calib. Date(s): 1/8/91 1/8/91

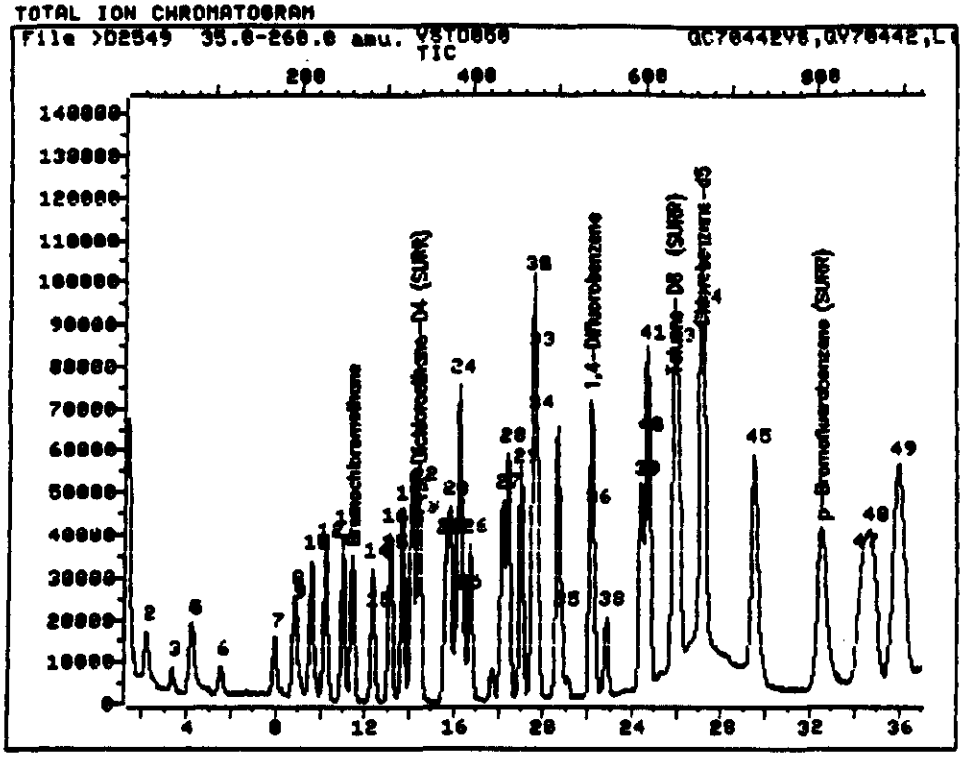
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.32166	0.19928	38.07
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2549::UO Quant Output File: ^D2549::AQ
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

Id File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 16:13

Operator ID: KB6656
Quant Time: 910110 10:48
Injected at: 910110 10:10

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910110 10:48
Output File: ^D2549::AQ Injected at: 910110 10:10
Data File: >D2549::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

ID File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910109 16:13

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.43	261	65743	250.00	NG	99
2)	Methyl chloride	2.16	22	77789	307.91	NG	9?
3)	Methyl bromide	3.32	52	22247	151.75	NG	97
4)	Dichlorodifluoromethane	4.18	74	81607	244.93	NG	9?
5)	Vinyl chloride	4.25	76	67741	265.35	NG	95
6)	Chloroethane	5.53	109	43987	175.48	NG	9?
7)	Methylene chloride	7.98	172	33286	80.28	NG	99
8)	Acrolein	8.83	194	127080	3272.59	NG	88
9)	Acetone	8.91	196	43168	235.36	NG	94
10)	Acrylonitrile	9.61	214	32465	333.70	NG	98
11)	Carbon disulfide	9.61	214	274058	233.06	NG	99
12)	Trichlorofluoromethane	10.23	230	187912	221.72	NG	9?
13)	1,1-Dichloroethylene	11.00	250	87049	244.68	NG	95
14)	1,1-Dichloroethane	12.36	285	164187	210.11	NG	9?
15)	Tetrahydrofuran	12.44	287	13097	131.45	NG	100
15)	Tetrahydrofuran	13.10	304	10097	101.34	NG	100
16)	1,2-Trans-dichloroethylene	13.14	305	88396	235.49	NG	96
17)	Chloroform	13.72	320	203?59	220.53	NG	9?
18)	1,2-Dichloroethane-D4 (SURR)	14.38	337	145410	197.58	NG	92
19)	1,2-Dichloroethane	14.50	340	158326	194.55	NG	98
20)	Methyl tertiary butyl ether	15.62	369	173115	233.80	NG	96
21)	*1,4-Difluorobenzene	22.18	538	291832	250.00	NG	9?
22)	Methyl ethyl ketone	14.46	339	8722	254.64	NG	97
23)	1,1,1-Trichloroethane	15.81	374	160315	193.44	NG	9?
24)	Carbon tetrachloride	15.81	374	19507	28.26	NG	91
24)	Carbon tetrachloride	16.24	385	126067	182.64	NG	9?
25)	Vinyl acetate	16.43	390	164955	232.07	NG	97
26)	Dichlorobromomethane	16.74	398	146126	205.65	NG	9?
27)	1,2-Dichloropropane	18.18	435	95787	270.14	NG	92
28)	cis-1,3-Dichloropropylene	18.41	441	199218	232.11	NG	9?
29)	Trichloroethylene	18.99	456	118735	246.18	NG	91
30)	Chlorodibromomethane	19.58	471	111596	199.18	NG	9?
31)	bis(Chloromethyl)ether	19.58	471	37907	192.35	NG	100
32)	Benzene	19.58	471	274974	265.10	NG	9?
33)	1,1,2-Trichloroethane	19.69	474	72530	243.79	NG	87
34)	trans-1,3-Dichloropropylene	19.73	475	63254	202.47	NG	94
35)	2-Chloroethylvinyl ether	20.86	504	45247	213.86	NG	100
36)	Bromoform	22.29	541	73923	199.13	NG	98
37)	*Chlorobenzene-d5	27.08	664	231908	250.00	NG	76
38)	Methyl-iso-butyl ketone	22.88	556	94215	262.04	NG	9?
39)	2-Hexanone	24.43	596	106581	247.14	NG	90
40)	1,1,2,2-Tetrachloroethane	24.62	601	115266	245.09	NG	89
41)	Tetrachloroethylene	24.74	604	112921	242.65	NG	97

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910110 10:48
Output File: ^D2549::AQ Injected at: 910110 10:10
Data File: >D2549::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

ID File: ID0309::SS
Title: PP/VOA, IFB, XVUA13, XVOA9
Last Calibration: 910109 16:13

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.86	633	288524	249.20	NG	95
43)	Toluene	26.07	638	174093	267.53	NG	96
44)	Chlorobenzene	27.23	668	222503	249.92	NG	98
45)	Ethylbenzene	29.48	726	105887	251.04	NG	79
46)	p-Bromofluorobenzene (SURR)	32.51	804	186856	227.45	NG	81
47)	Styrene	34.34	851	211582	245.06	NG	93
48)	m-Xylene	34.76	862	135326	250.69	NG	93
49)	o+p-Xylenes	34.76	862	123489	247.22	NG	89
49)	o+p-Xylenes	35.97	893	251662	503.82	NG	89

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/11/91 Time: 1505

Lab File ID: >D2567 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	1.001	14.9#
Bromomethane	.456	.327	28.3
Vinyl Chloride *	.943	.977	3.6*
Chloroethane	.817	.597	26.9
Methylene Chloride	1.471	.427	71.0
Acetone	.785	.564	28.1
Carbon Disulfide	4.166	3.880	6.9
1,1-Dichloroethene *	1.283	1.180	8.0*
1,1-Dichloroethane #	2.714	2.365	12.9#
1,2-Dichloroethene (total)	1.318	1.230	6.7
Chloroform *	3.418	2.875	15.9*
1,2-Dichloroethane	3.049	2.348	23.0
2-Butanone	.030	.024	21.3
1,1,1-Trichloroethane	.641	.505	21.2
Carbon Tetrachloride	.523	.408	21.9
Vinyl Acetate	.626	.559	10.7
Bromodichloromethane	.599	.486	18.9
1,2-Dichloropropane *	.346	.325	6.0*
cis-1,3-Dichloropropene	.748	.670	10.5
Trichloroethene	.427	.394	7.6
Dibromochloromethane	.478	.395	17.4
1,1,2-Trichloroethane	.280	.250	10.9
Benzene	.960	.892	7.1
trans-1,3-Dichloropropene	.240	.207	13.7
Bromoform #	.330	.265	19.7#
4-Methyl-2-Pentanone	.458	.406	11.3
2-Hexanone	.469	.459	2.1
Tetrachloroethene	.506	.459	9.3
1,1,2,2-Tetrachloroethane #	.580	.497	14.3#
Toluene *	.749	.674	9.9*
Chlorobenzene #	1.005	.882	12.2#
Ethylbenzene *	.464	.418	9.9*
Styrene	.950	.825	13.1
Xylene (total)	.553	.480	13.2
Toluene-d8	1.254	1.255	.1
Bromofluorobenzene	.872	.773	11.3
1,2-Dichloroethane-d4	2.918	2.305	21.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETC CORP Contract: ______

Lab Code: ______ Case No.: ______ SAS No.: ______ SDG No.: ______

Instrument ID: 2 Calibration Date: 1/11/91 Time: 1505

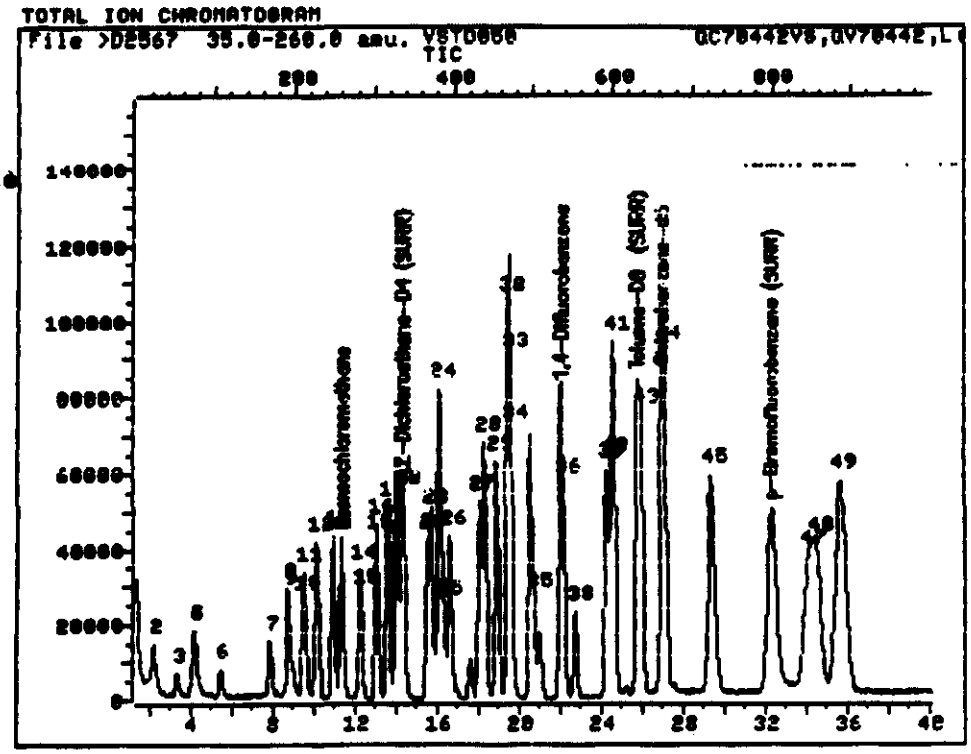
Lab File ID: 2D8567 Init. Calib. Date(s): 1/8/91 1/8/91

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.5216	0.2160	58.53
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.



Data File: >D2567::U0 Quant Output File: ^D2567::AQ
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

Id File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910110 11:56

Operator ID: KVU786
Quant Time: 910111 15:46
Injected at: 910111 15:05

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 910111 15:46
Output File: ^D2567::AQ Injected at: 910111 15:05
Data File: >D2567::U0 Dilution Factor: 1.0000U
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

ID File: ID0309::SS
Title: PP/VOA, IF8, XVOA13, XVOA9
Last Calibration: 910110 11:56

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.35	259	75970	250.00	NG	93
2)	Methyl chloride	2.16	22	76025	211.44	NG	96
3)	Methyl bromide	3.29	51	24856	241.72	NG	97
4)	Dichlorodifluoromethane	4.14	73	88919	235.73	NG	96
5)	Vinyl chloride	4.18	74	74251	237.14	NG	97
6)	Chloroethane	5.42	106	45355	223.07	NG	95
7)	Methylene chloride	7.90	170	32467	211.02	NG	95
8)	Acrolein	8.72	191	123493	3363.82	NG	90
9)	Acetone	8.76	192	42857	214.79	NG	95
10)	Acrylonitrile	9.45	210	31040	330.96	NG	8/
11)	Carbon disulfide	9.53	212	294772	232.70	NG	99
12)	Trichlorofluoromethane	10.15	228	213666	246.00	NG	9/
13)	1,1-Dichloroethylene	10.93	248	89644	222.79	NG	92
14)	1,1-Dichloroethane	12.25	282	179660	236.73	NG	9/
15)	Tetrahydrofuran	12.32	284	15999	264.28	NG	100
15)	Tetrahydrofuran	13.02	302	16681	275.55	NG	100
16)	1,2-Trans-dichloroethylene	13.06	303	93481	228.79	NG	95
17)	Chloroform	13.60	317	218422	231.94	NG	9/
18)	1,2-Dichloroethane-D4 (SURR)	14.30	335	175131	260.57	NG	92
19)	1,2-Dichloroethane	14.38	337	178402	243.78	NG	96
20)	Methyl tertiary butyl ether	15.54	367	175786	219.68	NG	97
21)	*1,4-Difluorobenzene	22.06	535	340304	250.00	NG	99
22)	Methyl ethyl ketone	14.38	337	8077	198.54	NG	99
23)	1,1,1-Trichloroethane	15.74	372	171892	229.87	NG	9/
24)	Carbon tetrachloride	15.74	372	21992	37.40	NG	99
24)	Carbon tetrachloride	16.13	382	138998	236.38	NG	95
25)	Vinyl acetate	16.36	388	190206	247.21	NG	97
26)	Dichlorobromomethane	16.63	395	165308	242.53	NG	96
27)	1,2-Dichloropropane	18.07	432	110528	247.38	NG	98
28)	cis-1,3-Dichloropropylene	18.34	439	227862	245.22	NG	9-
29)	Trichloroethylene	18.92	454	134039	242.02	NG	91
30)	Chlorodibromomethane	19.46	468	134469	298.33	NG	9c
31)	bis(Chloromethyl)ether	19.50	469	44324	250.68	NG	100
32)	Benzene	19.46	468	303503	236.63	NG	9/
33)	1,1,2-Trichloroethane	19.62	472	84971	251.16	NG	86
34)	trans-1,3-Dichloropropylene	19.66	473	70448	238.77	NG	9/
35)	2-Chloroethylvinyl ether	20.74	501	59744	283.08	NG	100
36)	Bromoform	22.18	538	90248	261.74	NG	93
37)	*Chlorobenzene-d5	26.96	661	270911	250.00	NG	80
38)	Methyl-iso-butyl ketone	22.76	553	109956	249.76	NG	96
39)	2-Hexanone	24.31	593	124349	249.68	NG	90
40)	1,1,2,2-Tetrachloroethane	24.51	598	134686	250.06	NG	9-
41)	Tetrachloroethylene	24.62	601	124316	235.60	NG	99

Operator ID: KV0786 Quant Rev: 7 Quant Time: 910111 15:46
Output File: ^D2567::AQ Injected at: 910111 15:05
Data File: >D2567::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

ID File: ID0309::SS
Title: PP/VOA, IFB, XV0A13, XV0A9
Last Calibration: 910110 11:56

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.79	631	340039	252.22	NG	94
43)	Toluene	25.99	636	182640	224.51	NG	9[illegible]
44)	Chlorobenzene	27.12	665	239044	229.92	NG	97
45)	Ethylbenzene	29.37	723	113203	228.79	NG	79
46)	p-Bromofluorobenzene (SURR)	32.28	798	209379	239.80	NG	80
47)	Styrene	34.10	845	223535	226.10	NG	86
48)	m-Xylene	34.49	855	143675	227.21	NG	94
49)	o+p-Xylenes	35.69	886	260144	442.44	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/13/91 Time: 1214

Lab File ID: >D2579 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	1.368	16.3#
Bromomethane	.456	.528	15.8
Vinyl Chloride *	.943	1.089	15.4*
Chloroethane	.817	.813	.5
Methylene Chloride	1.471	1.664	13.1
Acetone	.785	.746	5.0
Carbon Disulfide	4.166	4.483	7.6
1,1-Dichloroethene *	1.283	1.328	3.5*
1,1-Dichloroethane #	2.714	3.025	11.5#
1,2-Dichloroethene (total)	1.318	1.756	33.2
Chloroform *	3.418	3.443	.7*
1,2-Dichloroethane	3.049	2.831	7.2
2-Butanone	.030	.033	11.0
1,1,1-Trichloroethane	.641	.546	14.7
Carbon Tetrachloride	.523	.431	17.7
Vinyl Acetate	.626	.550	12.1
Bromodichloromethane	.599	.495	17.4
1,2-Dichloropropane *	.346	.302	12.7*
cis-1,3-Dichloropropene	.748	.645	13.8
Trichloroethene	.427	.410	3.9
Dibromochloromethane	.478	.393	17.9
1,1,2-Trichloroethane	.280	.252	10.1
Benzene	.960	.866	9.9
trans-1,3-Dichloropropene	.240	.226	5.9
Bromoform #	.330	.257	22.2#
4-Methyl-2-Pentanone	.458	.368	19.5
2-Hexanone	.469	.417	11.0
Tetrachloroethene	.506	.497	1.8
1,1,2,2-Tetrachloroethane #	.580	.497	14.4#
Toluene *	.749	.699	6.7*
Chlorobenzene #	1.005	.902	10.3#
Ethylbenzene *	.464	.437	5.8*
Styrene	.950	.855	10.0
Xylene (total)	.553	.492	11.1
Toluene-d8	1.254	1.206	3.8
Bromofluorobenzene	.872	.804	7.8
1,2-Dichloroethane-d4	2.918	2.730	6.4

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETC CORP Contract: ____

Lab Code: ____ Case No.: ____ SAS No.: ____ SDG No.: ____

Instrument ID: D Calibration Date: 1/13/91 Time: 1214

Lab File ID: >D2579 Init. Calib. Date(s): 1/8/91 1/8/91

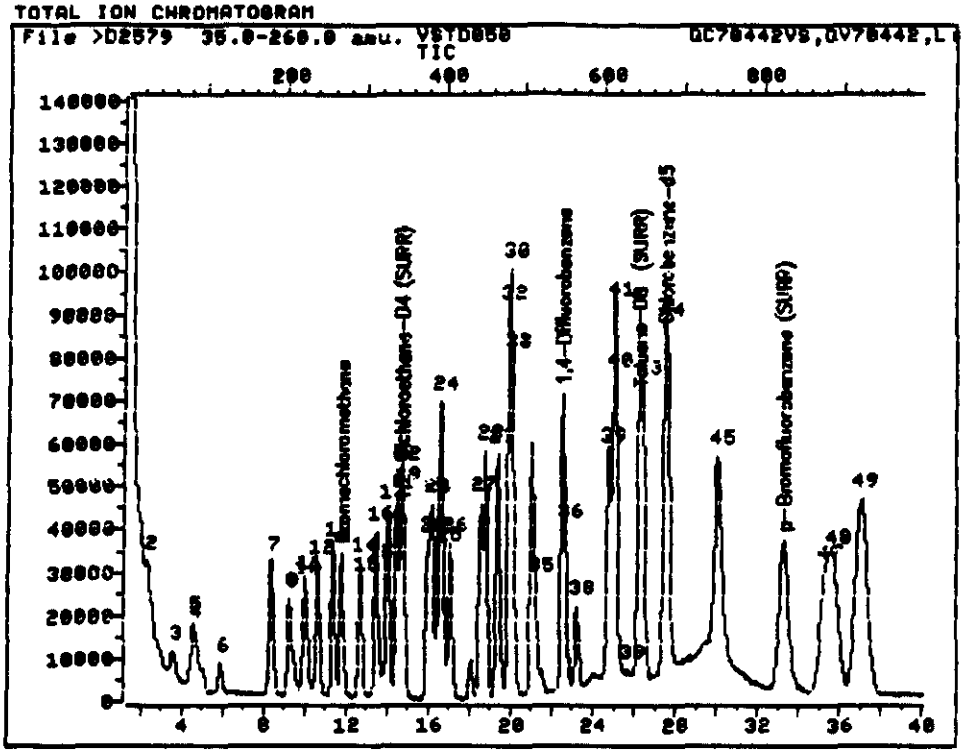
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.32166	0.38755	20.45
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2579::UO Quant Output File: ^D2579::AQ
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

Id File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910111 16:10

Operator ID: KB6656
Quant Time: 910113 12:55
Injected at: 910113 12:14

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 12:55
Output File: ^D2579::AQ Injected at: 910113 12:14
Data File: >D2579::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

ID File: ID0309::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910111 16:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.78	270	54151	250.00	NG	98
2)	Methyl chloride	2.32	26	74065	341.69	NG	98
3)	Methyl bromide	3.56	58	28610	403.70	NG	96
4)	Dichlorodifluoromethane	4.53	83	66251	261.32	NG	91
5)	Vinyl chloride	4.57	84	58961	278.51	NG	92
6)	Chloroethane	5.85	117	44016	340.38	NG	9[illegible]
7)	Methylene chloride	8.33	181	90134	973.69	NG	99
8)	Acrolein	9.22	204	131795	5988.97	NG	8[illegible]
9)	Acetone	9.26	205	40575	[illegible]	NG	94
10)	Acrylonitrile	9.96	[illegible]	[illegible]	695.76	NG	9[illegible]
11)	Carbon disulfide	10.04	225	242757	288.84	NG	98
[illegible]	richlorofluoromethane	10.62	240	151795	249.17	NG	9[illegible]
[illegible]	1,1-Dichloroethylene	11.36	259	71897	281.30	NG	91
14)	1,1-Dichloroethane	12.71	294	163850	319.83	NG	9[illegible]
15)	Tetrahydrofuran	12.75	295	20986	460.06	NG	100
15)	Tetrahydrofuran	13.41	312	15510	340.01	NG	10[illegible]
16)	1,2-Trans-dichloroethylene	13.49	314	95105	356.83	NG	89
17)	Chloroform	14.03	328	186460	299.41	NG	9[illegible]
18)	1,2-Dichloroethane-D4 (SURR)	14.69	345	147814	296.02	NG	94
19)	1,2-Dichloroethane	14.81	348	153284	301.35	NG	9[illegible]
20)	Methyl tertiary butyl ether	15.97	378	167167	333.54	NG	98
21)	*1,4-Difluorobenzene	22.53	547	297333	250.00	NG	9[illegible]
22)	Methyl ethyl ketone	14.77	347	9954	352.62	NG	9[illegible]
23)	1,1,1-Trichloroethane	16.17	383	162461	270.43	NG	9[illegible]
24)	Carbon tetrachloride	16.17	383	19925	41.02	NG	94
24)	Carbon tetrachloride	16.59	394	128008	263.51	NG	9[illegible]
25)	Vinyl acetate	16.75	398	163426	245.84	NG	97
26)	Dichlorobromomethane	17.06	406	147179	254.75	NG	9[illegible]
27)	1,2-Dichloropropane	18.53	444	89707	252.23	NG	91
28)	cis-1,3-Dichloropropylene	18.76	450	191731	240.76	NG	9[illegible]
29)	Trichloroethylene	19.39	466	121903	260.22	NG	93
30)	Chlorodibromomethane	19.97	481	116772	248.47	NG	9[illegible]
31)	bis(Chloromethyl)ether	19.93	480	38942	251.39	NG	100
32)	Benzene	19.93	480	257376	242.64	NG	9[illegible]
33)	1,1,2-Trichloroethane	20.08	484	74936	252.34	NG	89
34)	trans-1,3-Dichloropropylene	20.08	484	67126	272.64	NG	9[illegible]
35)	2-Chloroethylvinyl ether	21.21	513	51794	248.06	NG	100
36)	Bromoform	22.68	551	76325	241.99	NG	9[illegible]
37)	*Chlorobenzene-d5	27.54	676	240614	250.00	NG	77
38)	Methyl-iso-butyl ketone	23.23	565	88603	226.82	NG	9[illegible]
39)	2-Hexanone	24.82	606	100456	227.39	NG	93
39)	2-Hexanone	25.71	629	3145	7.12	NG	6[illegible]
40)	1,1,2,2-Tetrachloroethane	25.01	611	119544	249.83	NG	96

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 12:55
Output File: ^D2579::AQ Injected at: 910113 12:14
Data File: >D2579::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70442VS,QV70442,L:M4,5,,

ID File: ID0309::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910111 16:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Tetrachloroethylene	25.13	614	119517	270.61	NG	97
42)	Toluene-D8 (SURR)	26.26	643	290197	240.22	NG	95
43)	Toluene	26.46	648	168089	259.05	NG	97
44)	Chlorobenzene	27.66	679	216956	255.47	NG	96
45)	Ethylbenzene	30.11	742	105115	261.37	NG	80
46)	p-Bromofluorobenzene (SURR)	33.29	824	193443	260.06	NG	7?
47)	Styrene	35.31	876	205614	258.91	NG	87
48)	m-Xylene	35.73	887	133758	262.01	NG	95
49)	o+p-Xylenes	35.73	887	150620	282.66	NG	91
49)	o+p-Xylenes	37.09	922	236600	512.01	NG	89

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/13/91 Time: 175/

Lab File ID: >D2587 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	1.374	16.8#
Bromomethane	.456	.400	12.3
Vinyl Chloride *	.943	.708	25.0*
Chloroethane	.817	.735	10.0
Methylene Chloride	1.471	1.485	.9
Acetone	.785	.766	2.4
Carbon Disulfide	4.166	4.340	4.2
1,1-Dichloroethene *	1.283	1.273	.8*
1,1-Dichloroethane #	2.714	2.986	10.0#
1,2-Dichloroethene (total)	1.318	1.414	7.2
Chloroform *	3.418	3.339	2.3*
1,2-Dichloroethane	3.049	2.808	7.9
2-Butanone	.030	.031	2.3
1,1,1-Trichloroethane	.641	.476	25.7
Carbon Tetrachloride	.523	.400	23.4
Vinyl Acetate	.626	.582	7.0
Bromodichloromethane	.599	.509	15.0
1,2-Dichloropropane *	.346	.316	8.5*
cis-1,3-Dichloropropene	.748	.673	10.1
Trichloroethene	.427	.408	4.3
Dibromochloromethane	.478	.428	10.6
1,1,2-Trichloroethane	.280	.269	4.1
Benzene	.960	.902	6.1
trans-1,3-Dichloropropene	.240	.222	7.4
Bromoform #	.330	.289	12.6#
4-Methyl-2-Pentanone	.458	.381	16.8
2-Hexanone	.469	.434	7.5
Tetrachloroethene	.506	.488	3.5
1,1,2,2-Tetrachloroethane #	.580	.521	10.2#
Toluene *	.749	.706	5.6*
Chlorobenzene #	1.005	.930	7.5#
Ethylbenzene *	.464	.447	3.5*
Styrene	.950	.881	7.3
Xylene (total)	.553	.521	5.9
Toluene-d8	1.254	1.255	.0
Bromofluorobenzene	.872	.778	10.7
1,2-Dichloroethane-d4	2.918	2.664	8.7

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: E7GNJ Contract: ______

Lab Code: ______ Case No.: ______ SAS No.: ______ SDG No.: ______

Instrument ID: ED Calibration Date: 1/18/91 Time: 1757

Lab File ID: 7D2S87 Init. Calib. Date(s): 1/9/91 1/8/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.32166	0.35577	10.60
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

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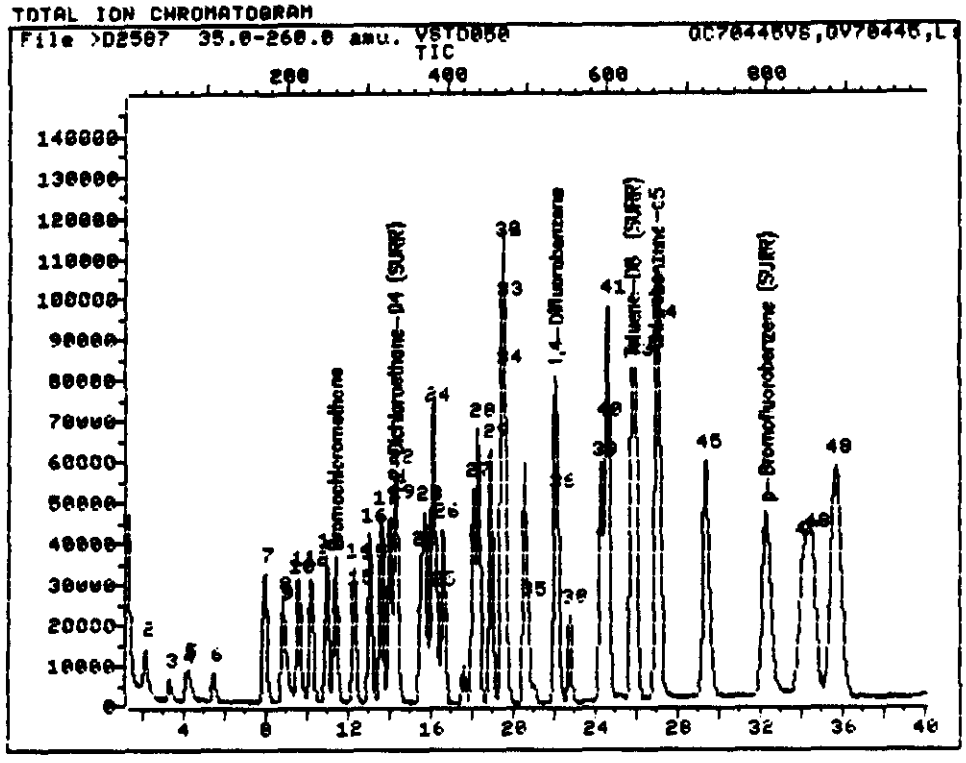

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Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

Id File: IDU310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 13:03

Operator ID: KB6656
Quant Time: 910113 18:38
Injected at: 910113 17:57

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 18:38
Output File: ^D2587::AQ Injected at: 910113 17:57
Data File: >D2587::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910113 13:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.40	260	56050	250.00	NG	96
2)	Methyl chloride	2.17	22	77033	251.21	NG	98
3)	Methyl bromide	3.33	52	22436	189.41	NG	93
4)	Dichlorodifluoromethane	4.14	73	48481	176.75	NG	9[illegible]
5)	Vinyl chloride	4.30	77	39657	162.45	NG	93
6)	Chloroethane	5.50	108	41185	226.00	NG	96
7)	Methylene chloride	7.98	172	83245	223.07	NG	99
8)	Acrolein	8.84	194	141582	4145.59	NG	92
9)	Acetone	8.91	196	42921	256.76	NG	95
10)	Acrylonitrile	9.57	213	37443	398.92	NG	94
11)	Carbon disulfide	9.61	214	243232	242.00	NG	99
12)	Trichlorofluoromethane	10.23	230	147591	234.84	NG	9[illegible]
13)	1,1-Dichloroethylene	10.97	249	71330	239.63	NG	91
14)	1,1-Dichloroethane	12.29	283	167354	246.73	NG	98
15)	Tetrahydrofuran	12.36	285	19941	229.50	NG	100
15)	Tetrahydrofuran	13.02	302	17435	200.66	NG	100
16)	1,2-Trans-dichloroethylene	13.10	304	79232	201.22	NG	86
17)	Chloroform	13.64	318	187145	242.42	NG	95
18)	1,2-Dichloroethane-D4 (SURR)	14.30	335	149329	244.01	NG	91
19)	1,2-Dichloroethane	14.42	338	157405	248.02	NG	9[illegible]
20)	Methyl tertiary butyl ether	15.55	367	143555	207.41	NG	90
21)	*1,4-Difluorobenzene	22.10	536	321702	250.00	NG	98
22)	Methyl ethyl ketone	14.38	337	9924	230.37	NG	9[illegible]
23)	1,1,1-Trichloroethane	15.24	372	153124	217.78	NG	92
24)	Carbon tetrachloride	15.24	372	19652	35.47	NG	95
24)	Carbon tetrachloride	16.13	382	128802	232.50	NG	95
25)	Vinyl acetate	16.36	388	187078	264.50	NG	95
26)	Dichlorobromomethane	16.63	395	163[illegible]50	257.08	NG	96
27)	1,2-Dichloropropene	18.11	433	101[illegible]27	262.02	NG	95
28)	cis-1,3-Dichloropropylene	18.34	439	216[illegible]95	260.74	NG	9[illegible]
29)	Trichloroethylene	18.96	455	131281	248.84	NG	92
30)	Chlorodibromomethane	19.30	469	137582	272.24	NG	95
31)	bis(Chloromethyl)ether	19.50	469	45515	258.20	NG	100
32)	Benzene	19.50	469	290188	260.52	NG	95
33)	1,1,2-Trichloroethane	19.62	472	86475	266.64	NG	87
34)	trans-1,3-Dichloropropylene	19.66	473	71440	245.91	NG	92
35)	2-Chloroethylvinyl ether	20.78	502	56229	250.85	NG	100
36)	Bromoform	22.22	539	92852	281.10	NG	95
37)	*Chlorobenzene-d5	27.00	662	263014	250.00	NG	77
38)	Methyl-iso-butyl ketone	22.80	554	100148	258.51	NG	94
39)	2-Hexanone	24.35	594	114056	259.67	NG	92
40)	1,1,2,2-Tetrachloroethane	24.54	599	137126	262.35	NG	99
41)	Tetrachloroethylene	24.66	602	128407	245.72	NG	98

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910113 18:38
Output File: ^D2587::AQ Injected at: 910113 17:57
Data File: >D2587::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 13:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.83	632	329960	260.05	NG	93
43)	Toluene	25.98	636	185752	252.74	NG	96
44)	Chlorobenzene	27.15	666	244579	257.83	NG	96
45)	Ethylbenzene	29.40	724	117656	255.99	NG	80
46)	p-Bromofluorobenzene (SURR)	32.31	799	204719	242.04	NG	82
47)	Styrene	34.14	846	231642	257.66	NG	92
48)	m-Xylene	34.56	857	148716	254.32	NG	95
48)	m-Xylene	35.69	886	265823	454.59	NG	94
49)	o+p-Xylenes	35.69	886	273828	529.39	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/14/91 Time: 1021

Lab File ID: >D2604 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	1.020	13.3#
Bromomethane	.456	.301	34.1
Vinyl Chloride *	.943	.934	1.0*
Chloroethane	.817	.556	32.0
Methylene Chloride	1.471	.462	68.6
Acetone	.785	.664	15.4
Carbon Disulfide	4.166	3.225	22.6
1,1-Dichloroethene *	1.283	1.146	10.7*
1,1-Dichloroethane #	2.714	2.333	14.1#
1,2-Dichloroethene (total)	1.318	1.174	10.9
Chloroform *	3.418	2.927	14.4*
1,2-Dichloroethane	3.049	2.397	21.4
2-Butanone	.030	.033	9.7
1,1,1-Trichloroethane	.641	.521	18.7
Carbon Tetrachloride	.523	.426	18.6
Vinyl Acetate	.626	.543	13.2
Bromodichloromethane	.599	.507	15.3
1,2-Dichloropropane *	.346	.315	8.8*
cis-1,3-Dichloropropene	.748	.671	10.3
Trichloroethene	.427	.410	3.9
Dibromochloromethane	.478	.424	11.5
1,1,2-Trichloroethane	.280	.261	7.0
Benzene	.960	.898	6.4
trans-1,3-Dichloropropene	.240	.215	10.3
Bromoform #	.330	.289	12.3#
4-Methyl-2-Pentanone	.458	.367	19.8
2-Hexanone	.469	.420	10.5
Tetrachloroethene	.506	.479	5.3
1,1,2,2-Tetrachloroethane #	.580	.530	8.7#
Toluene *	.749	.696	7.0*
Chlorobenzene #	1.005	.912	9.2#
Ethylbenzene *	.464	.433	6.5*
Styrene	.950	.858	9.7
Xylene (total)	.553	.515	6.9
Toluene-d8	1.254	1.234	1.6
Bromofluorobenzene	.872	.775	11.1
1,2-Dichloroethane-d4	2.918	2.331	20.1

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ   Contract: ____

Lab Code: ____   Case No.: ____   SAS No.: ____   SDG No.: ____

Instrument ID: &D   Calibration Date: 1/14/91   Time: 1021

Lab File ID: 7D2604   Init. Calib. Date(s): 1/8/91   1/8/91

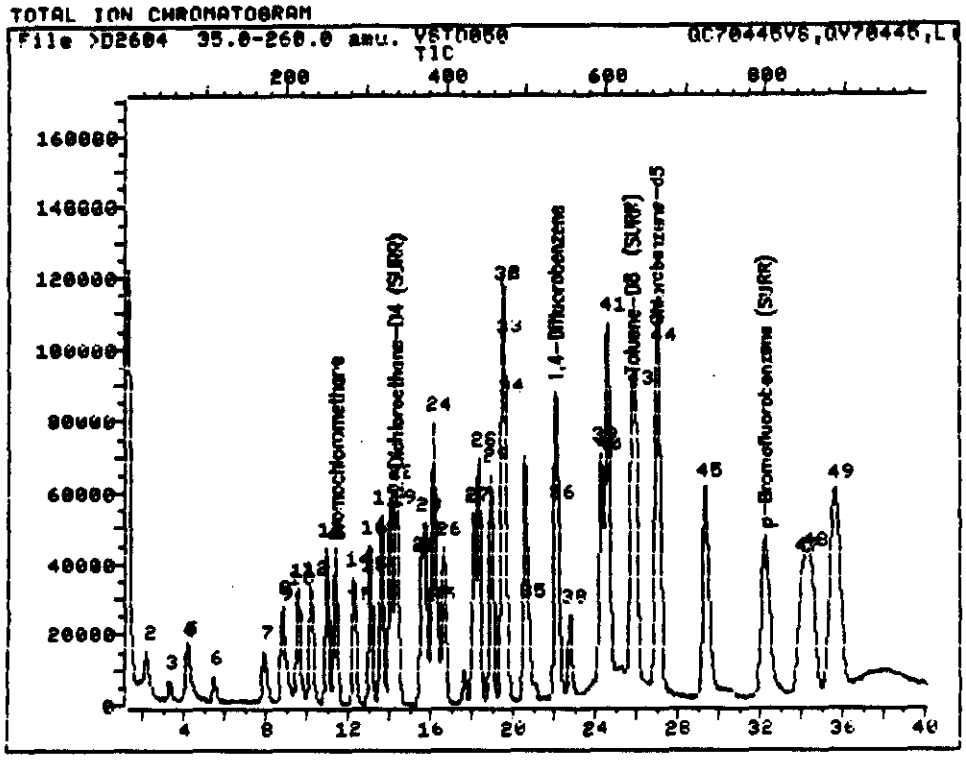
Matrix:(soil/water) ____   Level:(low/med) LOW   Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.32166	0.20058	37.64
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA   1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2604::U1 Quant Output File: ^D2604::AW
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

Id File: ID0310::SS
Title: PP70UA, IFB, XUUA13, XUUA9
Last Calibration: 910113 18:53

Operator ID: KB6656
Quant Time: 910114 11:02
Injected at: 910114 10:21

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 11:02
Output File: ^D2604::AQ Injected at: 910114 10:21
Data File: >D2604::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.41	261	78044	250.00	NG	94
2)	Methyl chloride	2.18	23	79605	185.54	NG	9[illegible]
3)	Methyl bromide	3.30	52	23460	187.74	NG	97
4)	Dichlorodifluoromethane	4.15	74	83050	307.50	NG	9[illegible]
5)	Vinyl chloride	4.23	76	72879	329.96	NG	9[illegible]
6)	Chloroethane	5.47	108	43394	189.00	NG	9[illegible]
7)	Methylene chloride	7.92	171	36047	77.75	NG	99
8)	Acrolein	8.81	194	154286	3134.93	NG	91
9)	Acetone	8.85	195	51835	216.84	NG	9[illegible]
10)	Acrylonitrile	9.55	213	40720	312.42	NG	9[illegible]
11)	Carbon disulfide	9.58	214	251729	185.82	NG	99
12)	Trichlorofluoromethane	10.21	230	160584	195.35	NG	9[illegible]
13)	1,1-Dichloroethylene	10.98	250	89420	225.08	NG	9[illegible]
14)	1,1-Dichloroethane	12.30	284	182058	195.30	NG	9
15)	Tetrahydrofuran	12.38	286	15694	140.95	NG	100
15)	Tetrahydrofuran	13.04	303	11422	102.84	NG	100
16)	1,2-Trans-dichloroethylene	13.08	304	91625	207.63	NG	9[illegible]
17)	Chloroform	13.66	319	228408	219.13	NG	9[illegible]
18)	1,2-Dichloroethane-D4 (SURR)	14.32	336	181922	218.73	NG	9[illegible]
19)	1,2-Dichloroethane	14.43	339	187060	213.37	NG	9[illegible]
20)	Methyl tertiary butyl ether	15.56	368	175489	219.49	NG	98
21)	*1,4-Difluorobenzene	22.11	537	337312	250.00	NG	9[illegible]
22)	Methyl ethyl ketone	14.39	338	11160	268.13	NG	9[illegible]
23)	1,1,1-Trichloroethane	15.25	373	175762	273.68	NG	9[illegible]
24)	Carbon tetrachloride	15.75	373	22358	41.39	NG	98
24)	Carbon tetrachloride	16.18	384	143621	265.86	NG	9[illegible]
25)	Vinyl acetate	16.37	389	183135	233.41	NG	98
26)	Dichlorobromomethane	16.68	397	171178	249.25	NG	9[illegible]
27)	1,2-Dichloropropane	18.12	434	106241	249.01	NG	9[illegible]
28)	cis-1,3-Dichloropropylene	18.35	440	220285	249.37	NG	9[illegible]
29)	Trichloroethylene	18.97	456	138229	251.05	NG	9[illegible]
30)	Chlorodibromomethane	19.51	470	142891	247.63	NG	9[illegible]
31)	bis(Chloromethyl)ether	19.51	470	44112	241.70	NG	100
32)	Benzene	19.51	470	303052	248.98	NG	9[illegible]
33)	1,1,2-Trichloroethane	19.63	473	87961	242.53	NG	88
34)	trans-1,3-Dichloropropylene	19.67	474	72554	242.15	NG	9[illegible]
35)	2-Chloroethylvinyl ether	20.80	503	59590	252.68	NG	100
36)	Bromoform	22.23	540	97649	250.75	NG	9[illegible]
37)	*Chlorobenzene-d5	27.01	663	275420	250.00	NG	78
38)	Methyl-iso-butyl ketone	22.77	554	101017	240.81	NG	9[illegible]
39)	2-Hexanone	24.33	594	115542	241.85	NG	94
40)	1,1,2,2-Tetrachloroethane	24.52	599	145928	254.06	NG	94
41)	Tetrachloroethylene	24.64	602	131839	245.12	NG	98

Operator ID: KB6656 Quant Rev: 7 Quant Time: 910114 11:02
Output File: ^D2604::AQ Injected at: 910114 10:21
Data File: >D2604::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910113 18:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.80	632	339940	245.96	NG	94
43)	Toluene	26.00	637	191661	246.33	NG	9?
44)	Chlorobenzene	27.13	666	251275	245.28	NG	95
45)	Ethylbenzene	29.34	723	119350	242.18	NG	80
46)	p-Bromofluorobenzene (SURR)	32.25	798	213424	248.89	NG	84
47)	Styrene	34.08	845	236300	243.54	NG	91
48)	m-Xylene	34.50	856	152035	244.07	NG	96
49)	o+p-Xylenes	35.71	887	283729	494.74	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 01/15/91 Time: 1429

Lab File ID: >D2620 Init Calib. Dates(s): 01/08/91 01/08/91

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.176	1.464	24.4#
Bromomethane	.456	.392	14.2
Vinyl Chloride *	.943	1.103	16.9*
Chloroethane	.817	.809	.9
Methylene Chloride	1.471	1.560	6.0
Acetone	.785	.789	.5
Carbon Disulfide	4.166	4.524	8.6
1,1-Dichloroethene *	1.283	1.370	6.8*
1,1-Dichloroethane #	2.714	3.117	14.8#
1,2-Dichloroethene (total)	1.318	1.502	13.9
Chloroform *	3.418	3.513	2.8*
1,2-Dichloroethane	3.049	2.856	6.3
2-Butanone	.030	.029	2.5
1,1,1-Trichloroethane	.641	.579	9.7
Carbon Tetrachloride	.523	.476	9.0
Vinyl Acetate	.626	.514	17.9
Bromodichloromethane	.599	.526	12.2
1,2-Dichloropropane *	.346	.326	5.7*
cis-1,3-Dichloropropene	.748	.679	9.3
Trichloroethene	.427	.429	.7
Dibromochloromethane	.478	.435	9.0
1,1,2-Trichloroethane	.280	.265	5.4
Benzene	.960	.946	1.5
trans-1,3-Dichloropropene	.240	.221	8.0
Bromoform #	.330	.291	11.9#
4-Methyl-2-Pentanone	.458	.354	22.6
2-Hexanone	.469	.385	17.9
Tetrachloroethene	.506	.501	1.0
1,1,2,2-Tetrachloroethane #	.580	.509	12.3#
Toluene *	.749	.721	3.7*
Chlorobenzene #	1.005	.947	5.8#
Ethylbenzene *	.464	.454	2.1*
Styrene	.950	.900	5.2
Xylene (total)	.553	.538	2.8
Toluene-d8	1.254	1.221	2.6
Bromofluorobenzene	.872	.789	9.5
1,2-Dichloroethane-d4	2.918	2.643	9.4

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ Contract: ____

Lab Code: ____ Case No.: ____ SAS No.: ____ SDG No.: ____

Instrument ID: D Calibration Date: 1/15/91 Time: 1428

Lab File ID: 7D2620 Init. Calib. Date(s): 1/9/91 1/8/91

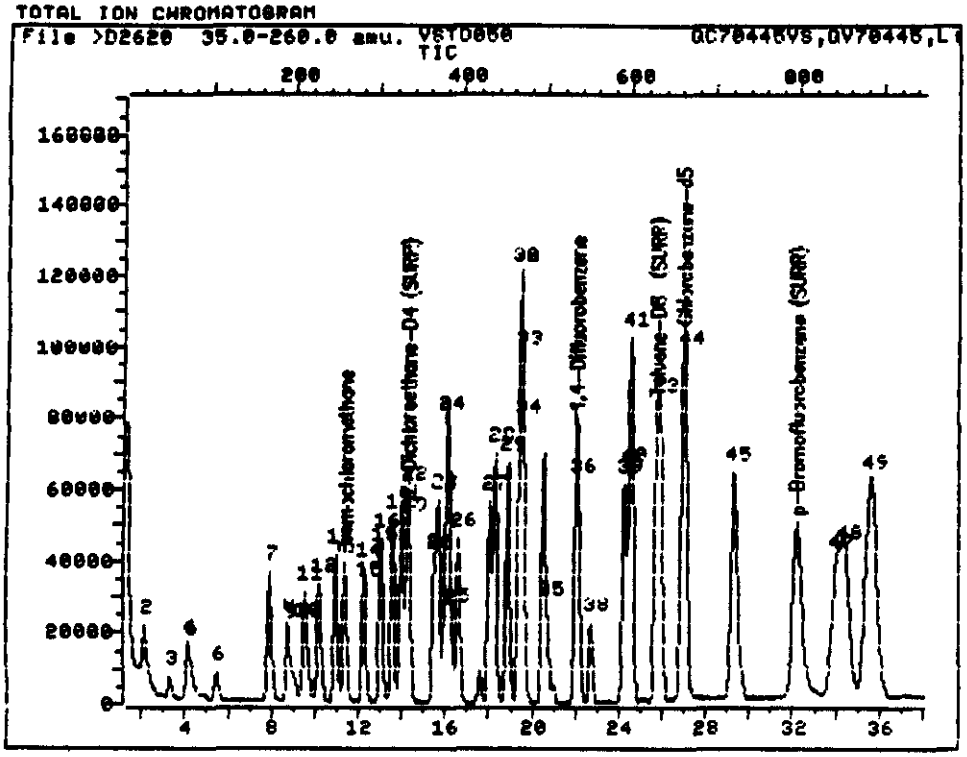
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Tetrahydrofuran	0.32166	0.33645	4.60
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D2620::U1 Quant Output File: ^D2620::AU
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

Id File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910114 11:09

Operator ID: RK2225
Quant Time: 910115 15:02
Injected at: 910115 14:23

Operator ID: RK2225 Quant Rev: 7 Quant Time: 910115 15:02
Output File: ^D2620::AQ Injected at: 910115 14:23
Data File: >D2620::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, 1FB, XVOA13, XVOA9
Last Calibration: 910114 11:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	260	59156	250.00	NG	97
2)	Methyl chloride	2.16	22	86593	358.78	NG	9[illegible]
3)	Methyl bromide	3.28	51	23168	325.72	NG	95
4)	Dichlorodifluoromethane	4.14	73	76389	303.44	NG	91
5)	Vinyl chloride	4.21	75	65250	295.30	NG	91
6)	Chloroethane	5.46	107	47886	364.30	NG	9[illegible]
7)	Methylene chloride	7.94	171	92264	844.20	NG	98
8)	Acrolein	8.75	192	121440	4153.71	NG	91
9)	Acetone	8.83	194	46675	296.99	NG	92
10)	Acrylonitrile	9.49	211	36965	473.87	NG	9[illegible]
11)	Carbon disulfide	9.61	214	267650	350.68	NG	99
12)	Trichlorofluoromethane	10.23	230	163542	335.90	NG	9[illegible]
13)	1,1-Dichloroethylene	10.96	249	81061	298.99	NG	89
14)	1,1-Dichloroethane	12.28	283	184369	334.05	NG	9[illegible]
15)	Tetrahydrofuran	12.32	284	19903	419.35	NG	100
15)	Tetrahydrofuran	13.02	302	13824	291.27	NG	100
16)	1,2-Trans-dichloroethylene	13.06	303	88824	319.74	NG	89
17)	Chloroform	13.60	317	207843	300.13	NG	9[illegible]
18)	1,2-Dichloroethane-D4 (SURR)	14.26	334	196365	265.49	NG	92
19)	1,2-Dichloroethane	14.38	337	168746	297.88	NG	9[illegible]
20)	Methyl tertiary butyl ether	15.50	366	165849	311.70	NG	9[illegible]
21)	*1,4-Difluorobenzene	22.02	534	331306	250.00	NG	9[illegible]
22)	Methyl ethyl ketone	14.34	336	9740	222.15	NG	9[illegible]
23)	1,1,1-Trichloroethane	15.69	371	191671	2[illegible].57	NG	9[illegible]
24)	Carbon tetrachloride	15.69	371	24296	49.06	NG	9
24)	Carbon tetrachloride	16.08	381	15[illegible]65	2[illegible].42	NG	9
25)	Vinyl acetate	16.32	387	1[illegible]0291	2[illegible].63	NG	9[illegible]
26)	Dichlorobromomethane	16.63	395	1[illegible]265	259.12	NG	9[illegible]
27)	1,2-Dichloropropane	18.06	432	10[illegible]987	2[illegible].71	NG	9[illegible]
28)	cis-1,3-Dichloropropylene	18.29	438	22[illegible]14	252.99	NG	9[illegible]
29)	Trichloroethylene	18.91	454	1[illegible]226	261.9[illegible]	NG	9[illegible]
[illegible]	[illegible]hlorodibromomethane	19.46	468	[illegible]	[illegible]	NG	9[illegible]
[illegible]	bis(Chloromethyl)ether	19.46	468	[illegible]	[illegible]	NG	1[illegible]
32	Benzene	19.46	468	51[illegible]60	263.12	NG	9[illegible]
[illegible]	1,1,2-Trichloroethane	19.57	471	8[illegible]851	254.21	NG	87
34)	trans-1,3-Dichloropropylene	19.61	472	[illegible]3105	256.47	NG	9[illegible]
35)	2-Chloroethylvinyl ether	20.70	500	59490	25[illegible].02	NG	100
36)	Bromoform	22.13	537	96400	251.28	NG	9[illegible]
37)	*Chlorobenzene-d5	26.95	661	278115	250.00	NG	9[illegible]
38)	Methyl-iso-butyl ketone	22.72	552	98467	241.33	NG	9
39)	2-Hexanone	24.27	592	107075	229.43	NG	90
40)	1,1,2,2-Tetrachloroethane	24.46	597	141505	240.07	NG	9[illegible]
41)	Tetrachloroethylene	24.58	600	139211	261.42	NG	98

Operator ID: RK2225 Quant Rev: 7 Quant Time: 910115 15:02
Output File: ^D2620::AQ Injected at: 910115 14:25
Data File: >D2620::U1 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70445VS,QV70445,L:M4,5,,

ID File: ID0310::SS
Title: PP/VOA, IFB, XVOA13, XVOA9
Last Calibration: 910114 11:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene-D8 (SURR)	25.74	630	339612	247.34	NG	95
43)	Toluene	25.94	635	200522	259.02	NG	97
44)	Chlorobenzene	27.07	664	263324	259.45	NG	96
45)	Ethylbenzene	29.28	721	126299	261.99	NG	79
46)	p-Bromofluorobenzene (SURR)	32.19	796	219426	254.54	NG	83
47)	Styrene	34.01	843	250307	262.25	NG	95
48)	m-Xylene	34.44	854	160486	261.34	NG	97
49)	o+p-Xylenes	35.57	883	299152	522.07	NG	91

* Compound is ISTD