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ANALYTICAL DIVISION LABORATORY ANALYSIS REPORTS 620684 REVISED VOLUME I OF IV NWS YORKTOWN VA
04/07/1997
OHM REMEDIATION SERVICES

03.14-04/07/97-00882

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

ANALYTICAL DIVISION

Laboratory Analysis

Report(s) #620684 **Volume I of IV**

Revised: April 7, 1997

Client: OHM Remediation Services Corp.
Eastern Region (Pittsburgh, PA)

Attn: Rick Wolfson
Larry Stearns

Project: 18221N - Yorktown NWS, Yorktown, VA

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Reviewed and Approved by: Joseph A. Hnatow ***Date:*** *April 7, 1997*

Joseph A. Hnatow, Laboratory Manager

16406 U.S. Route 224 East ■ P.O. Box 551 ■ Findlay, OH 45839-0551 ■ 419-423-3526

Narrative for SDG # A5-F1

Laboratory: OHM Remediation Services Corp.
Analytical Division

Project #: 18221N

Project Location: Yorktown NWS, Yorktown, VA

Samples in this Sample Delivery Group (SDG):

A5-F1	A5-F2	A5-F3	A5-F4	A5-F5	A5-W1
A5-W2	A5-W3	DUP001	DUP002	SSA7-F1	SSA7-F2
SSA7-F3	SSA7-F4	SSA7-F5	SSA7-TF1	SSA7-TF2	SSA7-TF3
SSA7-TF4	SSA7-TF5	SSA7-TF6	SSA7-TF7	SSA7-W1	SSA7-W2
SSA7-W3	SSA7-W4	SSA7-W5	SSA7-W6	SSA7-W8	

CLP Forms and/or analytical requirements do not apply to all TCLP Level C type deliverable requirements. Every effort was made to conform to the CLP format and all applicable CLP/Level C forms have been included.

Volatile Organics by GC/MS

Note that two analytical batches have been combined into one report for this SDG. For QC designation purposes Batch #N2V5309 has had an "A" suffix added to the method spike and method blank. Batch #N2V5315 has had a "B" suffix added.

Hexane appeared as an artifact that was known to be a laboratory contaminant. This compound elutes at approximately 8.8 minutes and was not included as part of the TIC screen data reported on Form I-VOA TIC.

One of 114 surrogate recoveries were outside QC limits.

Zero of 20 matrix spike recoveries and zero of 10 matrix RPD's were outside QC limits.

Zero of 10 method spike recoveries were outside QC limits.

All target compounds were spiked for this analytical batch. Only the required CLP spiking compounds were reported on Form III.

Low levels of Methylene Chloride and Acetone were detected in the method blank below the CRQL in Batch #N2V5309. This should be taken into consideration when assessing the data. All affected data has been flagged with the appropriate qualifier.

Low levels of Methylene Chloride and 1,1,1-Trichloroethane were detected in the method blank below the CRQL in Batch #N2V5315. This should be taken into consideration when assessing the data. All affected data has been flagged with the appropriate qualifier.

Initial and continuing calibration criteria were met.

All internal standard criteria were met for this SDG.

All holding times were met for this SDG.

Semivolatile Organics by GC/MS

Note that two analytical batches have been combined into one report for this SDG. For QC designation purposes Batch #N2C61322 has had an "A" suffix added to the method spike and method blank. Batch #N2C61321 has had a "B" suffix added.

Zero of 228 surrogates were outside QC limits.

Zero of 44 matrix spike recoveries and two of 22 matrix RPD's were outside QC limits.

Zero of 22 method spike recoveries were outside QC limits.

All method blank criteria were met for Batch #N2C61321.

Low levels of Bis-(2 Ethylhexyl phthalate) were detected in the method blank below the CRQL for Batch #N2C61322 and should therefore, be taken into consideration when assessing the data. All affected data has been flagged with the appropriate qualifier.

All compounds met initial and continuing calibration criteria.

All internal standard area counts and retention times were within QC limits.

All holding times were met for this SDG.

Pesticides/PCBs by GC

Note that two analytical batches have been combined into one report for this SDG. For QC designation purposes Batch #N2P61319 has had an "A" suffix added to the method spike and method blank. Batch #N2P61320 has had a "B" suffix added.

Multiple analytical runs were combined and reported on one CLP FORM I PEST data sheet. The chromatograms were arranged with all of the primary analysis presented first followed by the confirmation analytical runs.

Zero of 80 surrogates were outside QC limits.

Zero of 84 matrix spike recoveries and zero of 42 matrix RPD's were outside QC limits.

Zero of 42 method spike recoveries were outside QC limits.

All method blank criteria were met for this SDG.

All initial and continuing calibration criteria were met.

All holding times were met for this SDG.

Explosives by HPLC

Note that two analytical batches have been combined into one report for this SDG. For QC designation purposes Batch #N2Q61323 has had an "A" suffix added to the method spike and method blank. Batch #N2Q61324 has had a "B" suffix added.

One of 52 matrix spike recoveries and one of 26 matrix RPD's were outside QC limits due to high levels of the compound HMX present in the unspiked Sample #DUP001.

Zero of 26 method spike recoveries were outside QC limits.

All target compounds detected as hits in the samples were confirmed by secondary column analysis.

All method blank criteria were met for this SDG.

All initial and continuing calibration criteria were met for this SDG.

All sample holding times were met for this SDG.

Signature: Joseph A. Hnatow Name: Joseph A. Hnatow
Date: 4-7-97 Title: Laboratory Manager

Reason for Revision

Note that sample #SSA7-W5 has been wrongly identified in this report as sample #SSA-W5. Please take this into consideration when evaluating each analytical section of this report for sample #SSA7-W5.

Analytical results for sample #SSA7-TF2 for the Volatile Organics analysis were inadvertently excluded from the original report. Volatile Organics data for sample SSA7-TF2 have been included in the revised copy of this report.

SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
Conventionals		
Cyanide, Total	CLP	335.2
Metals		
Total Metals	SW-846	6010
Mercury by Cold Vapor	SW-846	7471
Arsenic by GFAA	SW-846	7060
Lead by GFAA	SW-846	7421
Selenium by GFAA	SW-846	7740
Thallium by GFAA	SW-846	7841
Organics		
USEPA SOW for Organic Analysis #OLM03.1 8/94	CLP SOW	OLM03.1
Pesticides by GC	SW-846	8080
Explosives by HPLC	SW-846	8330A

Volatile Organics by GC/MS

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0006

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Level: (low/med) ____

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VSPK01A	96	97	98		0
~~02~~	~~001~~	~~109~~	~~82~~	~~98~~		~~0~~ AS 4-7-97
~~03~~	~~002~~	~~103~~	~~84~~	~~95~~		~~0~~ AS 4-7-97
04	VBLK01A	99	100	94		0
05	SSA7-W3	99	99	96		0
06	SSA7-W3MS	100	101	101		0
07	SSA7-W3MSD	103	104	104		0
~~08~~	~~ONE~~	~~103~~	~~98~~	~~96~~		~~0~~ AS 4-7-97
09	SSA7-F1	97	97	93		0
10	SSA7-F2	95	96	93		0
11	SSA7-F3	93	90	91		0
12	SSA7-F4	95	97	90		0
13	SSA7-F5	101	102	99		0
14	SSA7-TF1	93	96	94		0
15	SSA7-TF5	77 *	113	92		1
16	SSA7-TF6	97	100	98		0
17	SSA7-TF3	99	102	100		0
18	SSA7-TF4	96	99	99		0
19	SSA7-W2	94	103	97		0
20	SSA7-W4	103	92	98		0
21	SSA-W5	99	98	96		0
22	SSA7-W6	101	98	97		0
23	SSA7-TF2	92	97	93		0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring compound diluted out

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

00007

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Level: (low/med) ____

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT	
01	VBLK01 B	95	98	97		0	
02	VSPK01 B	99	95	101		0	
~~03~~	~~ONE(6/25)~~	~~90~~	~~114 *~~	~~96~~		~~1~~	la
04	SSA7-TF7	102	96	102		0	
05	SSA7-TF7MS	105	100	104		0	
06	SSA7-TF7MSD	107	98	106		0	
07	SSA7-W8	98	112	97		0	
08	DUP-001	91	95	93		0	
09	A5-F1	96	96	97		0	
10	A5-F2	92	94	92		0	
11	A5-F5	98	101	100		0	
12	SSA7-W1	97	103	94		0	
13	SSA7-W7	96	101	92		0	
14	A5-W2	96	95	95		0	
15	A5-W3	99	97	101		0	
~~16~~	~~A1-F2~~	~~96~~	~~98~~	~~98~~		~~0~~	ls
~~17~~	~~A1-F3~~	~~95~~	~~98~~	~~95~~		~~0~~	ls
~~18~~	~~A1-W1~~	~~96~~	~~106~~	~~98~~		~~0~~	ls
~~19~~	~~A1-W2~~	~~96~~	~~94~~	~~96~~		~~0~~	ls
20	DUP-002	106	93	99		0	
21	A5-F4	96	94	93		0	
22	A5-W1	96	92	97		0	
~~23~~	~~A1-W3~~	~~96~~	~~85~~	~~94~~		~~0~~	ls
~~24~~	~~A2-F1~~	~~99~~	~~109~~	~~99~~		~~0~~	ls
25	A5-F3	105	86	98		0	

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring compound diluted out

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

00008

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix Spike - EPA Sample No.: SSA7-TF7 Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	57	0	59	104	59-172
Trichloroethene	57	4	57	93	62-137
Benzene	57	0	58	102	66-142
Toluene	57	6	64	102	59-139
Chlorobenzene	57	0	55	96	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56	62	111	6	22	59-172
Trichloroethene	56	60	100	7	24	62-137
Benzene	56	58	104	1	21	66-142
Toluene	56	64	104	1	21	59-139
Chlorobenzene	56	56	100	3	21	60-133

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

* Values outside of QC limits

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

COMMENTS: _____

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

00009

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix Spike - EPA Sample No.: SSA7-W3 Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	53	0	55	104	59-172
Trichloroethene	53	0	52	98	62-137
Benzene	53	0	50	94	66-142
Toluene	53	0	51	96	59-139
Chlorobenzene	53	0	53	100	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	53	56	106	2	22	59-172
Trichloroethene	53	53	100	2	24	62-137
Benzene	53	51	96	2	21	66-142
Toluene	53	53	100	4	21	59-139
Chlorobenzene	53	53	100	.3	21	60-133

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

* Values outside of QC limits

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

COMMENTS: _____

3B
SOIL VOLATILE BLANK SPIKE RECOVERY

00010

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix Spike - EPA Sample No.: VSPK01A

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	49	98	59-172
Trichloroethene	50	0	51	102	62-137
Benzene	50	0	50	100	66-142
Toluene	50	0	50	100	59-139
Chlorobenzene	50	0	49	98	60-133

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

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: _____

3B
SOIL VOLATILE BLANK SPIKE RECOVERY

00011

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix Spike - EPA Sample No.: VSPK01B

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	48	96	59-172
Trichloroethene	50	0	60	120	62-137
Benzene	50	0	48	96	66-142
Toluene	50	0	49	98	59-139
Chlorobenzene	50	0	49	98	60-133

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

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

0012

VBLK01A

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 18221N SAS No.: _____ SDG No.: A5-F1

Lab File ID: A8540 Lab Sample ID: N2V5309V

Date Analyzed: 06/29/96 Time Analyzed: 11:36

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

Instrument ID: MSA.i

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED	
~~01~~	~~001~~	~~JP9930V~~	~~A8541~~	~~12:12~~	AS 4-7-97
~~02~~	~~001~~	~~JP9930V~~	~~A8529~~	~~16:58~~	AS 4-7-97
~~03~~	~~002~~	~~JP9931V~~	~~A8530~~	~~17:32~~	AS 4-7-97
04	SSA7-W3	JP9910V	A8548	16:19	
~~05~~	~~ONE~~	~~JP9868V~~	~~A8555~~	~~20:28~~	AS 4-7-97
06	SSA7-F1	JP9896V	A8523	13:28	
07	SSA7-F2	JP9897V	A8524	14:03	
08	SSA7-F3	JP9898V	A8525	14:38	
09	SSA7-F4	JP9899V	A8526	15:13	
10	SSA7-F5	JP9900V	A8542	12:47	
11	SSA7-TF1	JP9901V	A8528	16:23	
12	SSA7-TF5	JP9905V	A8534	19:51	
13	SSA7-TF6	JP9906V	A8535	20:25	
14	SSA7-TF3	JP9903V	A8543	13:22	
15	SSA7-TF4	JP9904V	A8544	13:58	
16	SSA7-W2	JP9909V	A8547	15:43	
17	SSA7-W4	JP9911V	A8551	18:03	
18	SSA-W5	JP9912V	A8552	18:38	
19	SSA7-W6	JP9913V	A8553	19:13	
20	SSA7-TF2	JP9902V	A8531	18:07	
21	SSA7-W3MSD	JP9910VR	A8550	17:29	
22	VSPK01A	N2V5309VS	A8522	12:53	
23	SSA7-W3MS	JP9910VS	A8549	16:54	

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

00013

EPA SAMPLE NO.

VBLK01B

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID: A8560 Lab Sample ID: N2V5315V

Date Analyzed: 06/30/96 Time Analyzed: 17:59

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

Instrument ID: ~~SA~~ msa.i

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED	
~~01~~	~~ONE(6/25)~~	~~JP9934V~~	~~A8586~~	~~15:35~~	es
02	SSA7-TF7	JP9907V	A8587	16:17	
03	SSA7-W8	JP9915V	A8567	22:01	
04	DUP-001	JP9916V	A8568	22:36	
05	A5-F1	JP9918V	A8570	23:44	
06	A5-F2	JP9919V	A8571	00:18	
07	A5-F5	JP9922V	A8574	02:02	
08	SSA7-W1	JP9908V	A8588	16:52	
09	SSA7-W7	JP9914V	A8589	17:27	
10	A5-W2	JP9924V	A8593	19:47	
11	A5-W3	JP9925V	A8594	20:22	
~~12~~	~~A1-F2~~	~~JQ0169V~~	~~A8595~~	~~20:57~~	es
~~13~~	~~A1-F3~~	~~JQ0170V~~	~~A8596~~	~~21:32~~	es
~~14~~	~~A1-W1~~	~~JQ0172V~~	~~A8597~~	~~22:07~~	es
~~15~~	~~A1-W2~~	~~JQ0173V~~	~~A8598~~	~~22:41~~	es
16	DUP-002	JP9917V	A8605	10:12	
17	A5-F4	JP9921V	A8606	10:47	
18	A5-W1	JP9923V	A8607	11:22	
~~19~~	~~A1-W3~~	~~JQ0174V~~	~~A8608~~	~~11:57~~	es
~~20~~	~~A2-F1~~	~~JQ0175V~~	~~A8609~~	~~12:32~~	es
21	A5-F3	JP9920V	A8618	17:50	
22	SSA7-TF7MSD	JP9907VR	A8600	23:51	
23	VSPK01B	N2V5315VS	A8561	18:34	
24	SSA7-TF7MS	JP9907VS	A8599	23:16	

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: AS-F1

Lab File ID: A8290 BFB Injection Date: 6/18/96

Instrument ID: MSA-1 BFB Injection Time: 0822

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

m/e	ION ABUNDANCY CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.6
75	30.0 - 66.0% of mass 95	52.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.41
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	50.0 - 120.0% of mass 95	59.3
175	4.0 - 9.0 % of mass 174	4.82 (8.13)1
176	93.0 - 101.0% of mass 174	58.4 (98.4)1
177	5.0 - 9.0% of mass 176	4.24 (7.26)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A8294	6/18/96	1211
02	VSTD100	VSTD100	A8295		1245
03	VSTD200	VSTD200	A8296		1319
04	VSTD075	VSTD075	A8297		1353
05	VSTD010	VSTD010	A8299		1531
06	VSTD020	VSTD020	A8300		1606
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 16221N SAS No.: N/A SDG No.: A5-F1

Lab File ID: A8515 BFB Injection Date: 6/28/96

Instrument ID: MSA.1 BFB Injection Time: 0853

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.2
75	30.0 - 66.0% of mass 95	53.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.50
173	Less than 2.0% of mass 174	0.20 (0.33) 1
174	50.0 - 120.0% of mass 95	60.8
175	4.0 - 9.0 % of mass 174	4.98 (8.19) 1
176	93.0 - 101.0% of mass 174	58.6 (96.4) 1
177	5.0 - 9.0% of mass 176	4.14 (7.06) 2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A8517	6/28/96	0959
02	VSPK01A	N2V5309VS	A8522		1253
03	SSA7-F1	JP9896V	A8523		1328
04	SSA7-F2	JP9897V	A8524		1403
05	SSA7-F3	JP9898V	A8525		1438
06	SSA7-F4	JP9899V	A8526		1513
07	SSA7-TF1	JP9901V	A8528		1623
08	SSA7-TF5	JP9905V	A8534		1951
09	SSA7-TF6	JP9906V	A8535		2025
10	SSA7-TF2	JP9902V	A8531	6/28/96	1807
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Ohm Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID: A8538 BFB Injection Date: 6/29/96

Instrument ID: MSA.1 BFB Injection Time: 1043

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.2
75	30.0 - 66.0% of mass 95	53.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.81
173	Less than 2.0% of mass 174	0.62 (1.02) 1
174	50.0 - 120.0% of mass 95	61.2
175	4.0 - 9.0 % of mass 174	4.94 (8.08) 1
176	93.0 - 101.0% of mass 174	59.8 (97.6) 1
177	5.0 - 9.0% of mass 176	4.13 (6.91) 2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A8539	6/29/96	1101
02	VBLK01A	N2V5309V	A8540		1136
03	SSA7-F5	JP9900V	A8542		1247
04	SSA7-TF3	JP9903V	A8543		1322
05	SSA7-TF4	JP9904V	A8544		1358
06	SSA7-W2	JP9909V	A8547		1543
07	SSA7-W3	JP9910V	A8548		1619
08	SSA7-W3MS	JP9910VS	A8549		1654
09	SSA7-W3MSD	JP9910VR	A8550		1729
10	SSA7-W4	JP9911V	A8551		1803
11	SSA7-W5	JP9912V	A8552		1838
12	SSA7-W6	JP9913V	A8553		1913
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID: A8557 BFB Injection Date: 6/30/96

Instrument ID: MSa.i' BFB Injection Time: 1631

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.8
75	30.0 - 66.0% of mass 95	51.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.17
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	50.0 - 120.0% of mass 95	58.9
175	4.0 - 9.0 % of mass 174	4.65 (7.89) 1
176	93.0 - 101.0% of mass 174	58.6 (99.4) 1
177	5.0 - 9.0% of mass 176	3.89 (6.65) 2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A8558	6/30/96	1650
02	VBLK01B	N2VS315V	A8560		1759
03	VSPK01B	N2VS315VS	A8561		1834
04	SSA7-W8	JP9915V	A8567		2201
05	DUP-001	JP9916V	A8568		2236
06	A5-F1	JP9918V	A8570		2344
07	A5-F2	JP9919V	A8571	7/1/96	0018
08	A5-F5	JP9922V	A8574		0202
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID: A8583 BFB Injection Date: 7/1/96

Instrument ID: MSA.1 BFB Injection Time: 1357

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.3
75	30.0 - 66.0% of mass 95	52.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.42
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	50.0 - 120.0% of mass 95	60.4
175	4.0 - 9.0 % of mass 174	4.92 (8.14)1
176	93.0 - 101.0% of mass 174	59.2 (98.0)1
177	5.0 - 9.0% of mass 176	4.14 (7.00)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A8584	7/1/96	1014
02	SSA7-TF7	JP9907V	A8587	↓	1617
03	SSA7-W1	JP9908V	A8588		1652
04	SSA7-W7	JP9914V	A8589		1727
05	A5-W2	JP9924V	A8593		1947
06	A5-W3	JP9925V	A8594		2022
07	SSA7-TF7MS	JP9907VS	A8599		2316
08	SSA7-TF7MSD	JP9907VR	A8600		2351
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID: A8601 BFB Injection Date: 7/2/96

Instrument ID: MSa.1 BFB Injection Time: 0817

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	27.7
75	30.0 - 66.0% of mass 95	57.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.26
173	Less than 2.0% of mass 174	0.15 (0.25)1
174	50.0 - 120.0% of mass 95	58.8
175	4.0 - 9.0 % of mass 174	4.40 (7.49)1
176	93.0 - 101.0% of mass 174	55.6 (94.6)1
177	5.0 - 9.0% of mass 176	3.93 (7.07)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	A8603	7/2/96	0847
02	DUP-002	JP9917V	A8605		1012
03	A5-E4	JP9921V	A8606		1047
04	A5-W1	JP9923V	A8607		1122
05	A5-F3	JP9920V	A8618		1750
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18321N SAS No.: N/A SDG No.: A5-F1

Lab File ID (Standard): A8517 Date Analyzed: 6/28/96

Instrument ID: MSa.1 Time Analyzed: 0959

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

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	478841	9.44	1787572	10.74	1316208	15.09
UPPER LIMIT	957682	9.94	3575024	11.24	2632416	15.59
LOWER LIMIT	239420	8.94	893756	10.24	658104	14.59
EPA SAMPLE NO.						
01 15PK01A	420564	9.44	1560126	10.74	1145323	15.09
02 SSA7-F1	376399	9.43	1418823	10.73	1068304	15.08
03 SSA7-F2	384232	9.44	1434936	10.72	1116042	15.07
04 SSA7-F3	359140	9.43	1334918	10.73	1011211	15.07
05 SSA7-F4	383578	9.43	1406146	10.73	1025789	15.07
06 SSA7-TF1	377230	9.43	1394619	10.72	1054045	15.07
07 SSA7-TF5	384172	9.44	1357399	10.73	898791	15.08
08 SSA7-TF6	362681	9.43	1368968	10.74	1058910	15.08
09 SSA7-TF2	398411	9.42	1447474	10.71	1108492	15.07
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID (Standard): A8539 Date Analyzed: 6/29/96

Instrument ID: MSa.1 Time Analyzed: 1101

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

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	449966	9.44	1653058	10.73	1250887	15.08
UPPER LIMIT	899932	9.94	3306196	11.23	2501774	15.58
LOWER LIMIT	224983	8.94	826549	10.23	625444	14.58
EPA SAMPLE NO.						
01 VBLK01A	431053	9.45	1603030	10.73	1219218	15.08
02 SSA7-F5	415918	9.43	1532664	10.72	1192725	15.06
03 SSA7-TF3	380624	9.44	1447725	10.73	1131658	15.08
04 SSA7-TF4	374041	9.43	1410870	10.72	1108683	15.08
05 SSA7-W2	413022	9.45	1555053	10.73	1178959	15.08
06 SSA7-W3	432751	9.44	1583670	10.73	1236558	15.08
07 SSA7-W3MS	446432	9.44	1651780	10.74	1243966	15.08
08 SSA7-W3MSD	452962	9.45	1682362	10.73	1261783	15.08
09 SSA7-W4	313450	9.45	1118118	10.74	847852	15.08
10 SSA7-W5	330264	9.47	1220896	10.76	957440	15.10
11 SSA7-W6	383689	9.46	1414570	10.74	1079460	15.09
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHM ANALYTICAL Division Contract: NFESC

Lab Code: N/A Case No.: 15021N SAS No.: N/A SDG No.: A5-F1

Lab File ID (Standard): A8558 Date Analyzed: 6/30/96

Instrument ID: MSa.1 Time Analyzed: 1650

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

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	593135	9.43	2318970	10.72	1757875	15.08
UPPER LIMIT	1186270	9.93	4637940	11.22	3515750	15.58
LOWER LIMIT	296568	8.93	1159485	10.22	878938	14.58
EPA SAMPLE NO.						
01 UBLK01B	481645	9.42	1853205	10.72	1438290	15.07
02 USPK01B	487392	9.44	1840463	10.72	1390380	15.08
03 SSA7-W8	363427	9.46	1391377	10.75	984787	15.10
04 DUP-001	448222	9.47	1533480	10.76	1239975	15.10
05 A5-F1	400016	9.47	1505872	10.76	1194892	15.10
06 A5-F2	401506	9.46	1477534	10.74	1173596	15.10
07 A5-F5	350958	9.46	1316085	10.75	1080143	15.10
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID (Standard): A8584 Date Analyzed: 7/1/96

Instrument ID: MSa.1 Time Analyzed: 1014

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

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	535227	9.42	2007562	10.71	1506934	15.08
UPPER LIMIT	1070454	9.92	4015124	11.21	3013868	15.58
LOWER LIMIT	267614	8.92	1003781	10.21	753467	14.58
EPA SAMPLE NO.						
01 SSA7-TF7	437981	9.44	1736801	10.73	1235211	15.~~08~~ 08
02 SSA7-W1	498691	9.44	1879980	10.73	1432710	15.08
03 SSA7-W7	466258	9.45	1725761	10.73	1330802	15.08
04 SSA7-W2	514615	9.46	2060559	10.73	1526340	15.09
05 A5-W3	427344	9.46	1611403	10.74	1215384	15.09
06 SSA7-TF7MS	376371	9.46	1277822	10.75	912284	15.10
07 SSA7-TF7MSD	339943	9.46	1194465	10.75	817359	15.10
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

page 1 of 1

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: OHM Analytical Division Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Lab File ID (Standard): A8603 Date Analyzed: 7/2/96

Instrument ID: MSa.1 Time Analyzed: 0847

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

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	489631	9.44	1818784	10.73	1355154	15.09
UPPER LIMIT	979262	9.94	3637568	11.23	2711508	15.59
LOWER LIMIT	244816	8.94	909392	10.23	677877	14.59
EPA SAMPLE NO.						
01 Dup002	417744	9.43	1507125	10.71	1067243	15.07
02 A5-F4	477555	9.44	1762987	10.73	1334938	15.08
03 A5-W1	422359	9.45	1545214	10.73	1214016	15.09
04 A5-F3	485496	9.44	1703876	10.73	1203667	15.08
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IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

00025

EPA SAMPLE NO.

A5-F1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9918V

Sample wt/vol: 5.19 (g/mL) G Lab File ID: A8570

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 9 Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	8	B
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	BJ
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00026

EPA SAMPLE NO.

A5-F1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9918V

Sample wt/vol: 5.19 (g/mL) G Lab File ID: A8570

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 9 Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

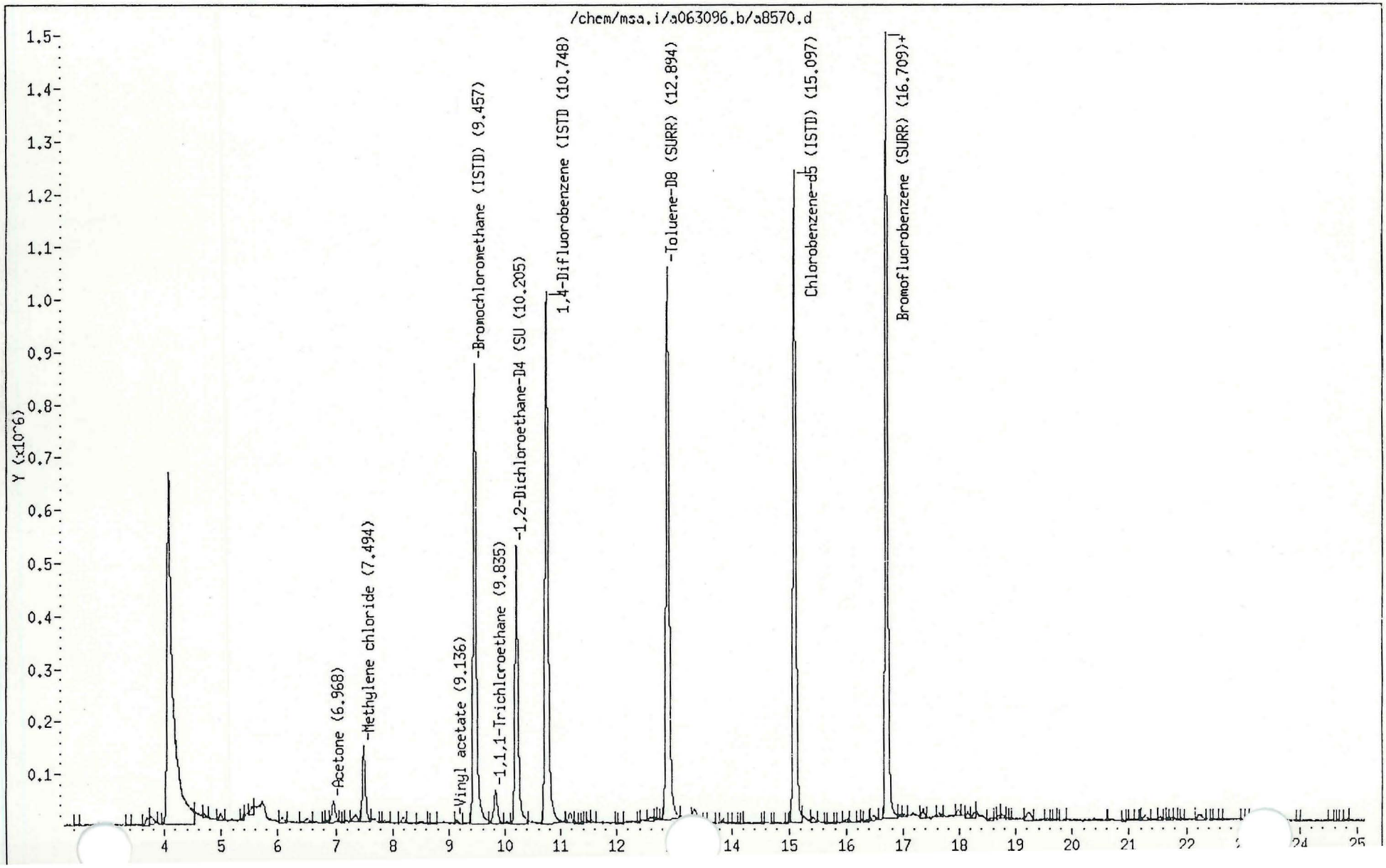
00027

Data File: /chem/msa.i/a063096.b/a8570.d
Date : 30-JUN-96 23:44
Client ID:
Sample Info: 18221n a5-f1

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a063096.b/a8570.d
Report Date: 01-Jul-1996 07:13

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 & TIC

Data file : /chem/msa.i/a063096.b/a8570.d
Lab Smp Id:
Inj Date : 30-JUN-96 23:44
Operator : jk Inst ID: msa.i
Smp Info : 18221n a5-f1
Misc Info : jp9918v,n2v5315,qv,5000,1,5.19,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 01-Jul-1996 06:56 glenn Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 15
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
11 Acetone	43.00	6.968	6.979	(0.736)	111461	8.86	8.86
Methylene chloride	84.00	7.494	7.425	(0.792)	121393	7.47	7.47
Vinyl acetate	43.00	9.136	9.181	(0.965)	12217	1.31	~~1.31~~
23 Bromochloromethane (ISTD)	128.00	9.465	9.428	(1.000)	410016	50.0	(Q)
25 1,1,1-Trichloroethane	97.00	9.827	9.791	(0.914)	83759	4.58	4.58
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.205	10.180	(1.078)	692899	48.4	48.4
32 1,4-Difluorobenzene (ISTD)	114.00	10.756	10.716	(1.000)	1505872	50.0	
41 Toluene-D8 (SURR)	98.00	12.894	12.863	(0.854)	1435883	48.2	48.2
50 Chlorobenzene-d5 (ISTD)	117.00	15.097	15.075	(1.000)	1194892	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.709	16.686	(1.107)	958835	48.0	48.0(QM)

C Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.

Data File: /chem/msa.i/a063096.b/a8570.d

Date : 30-JUN-96 23:44

Client ID:

Sample Info: 18221n a5-f1

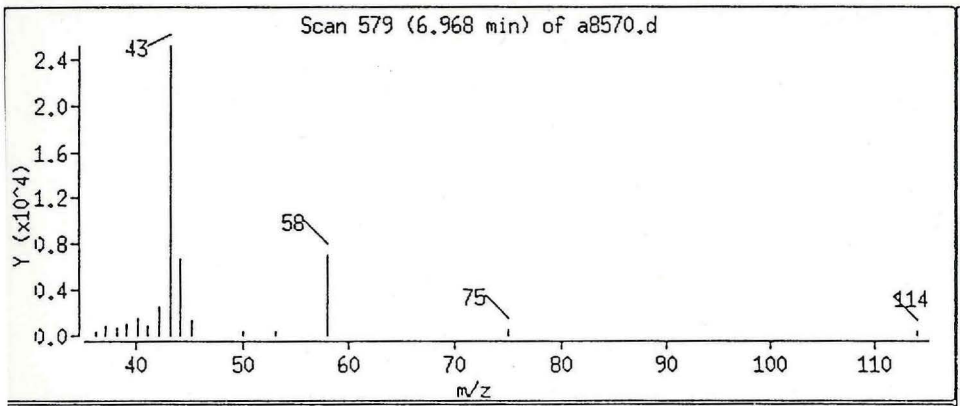
Instrument: msa.i

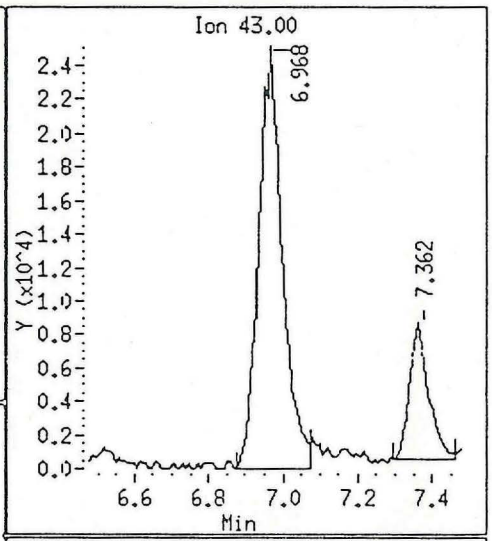
Operator: jk

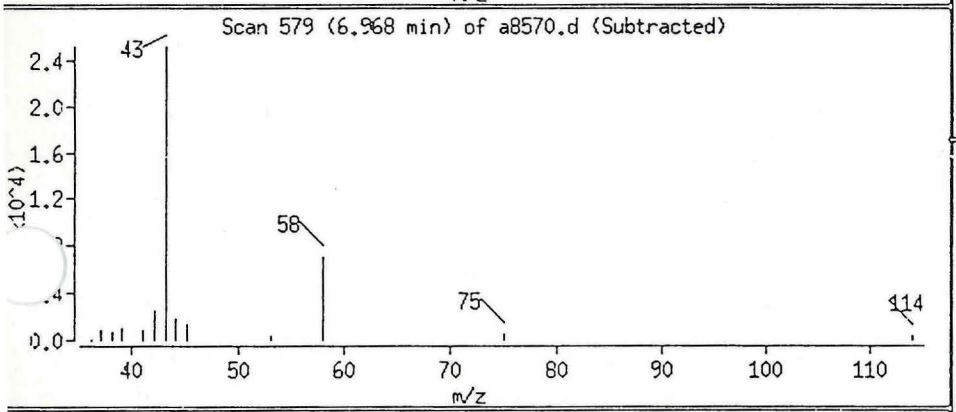
Column phase: DB-624 75m x 0.53mm

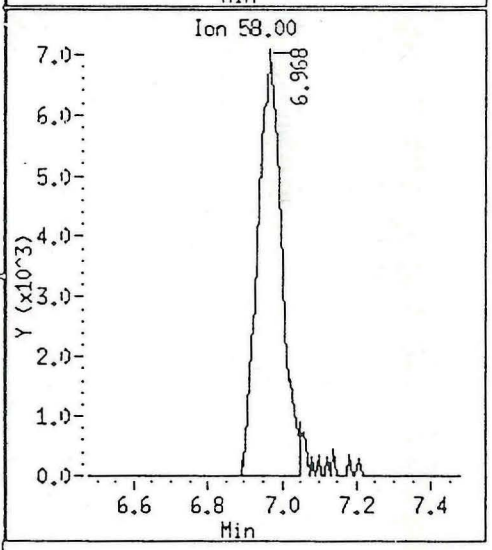
Column diameter: 0.53

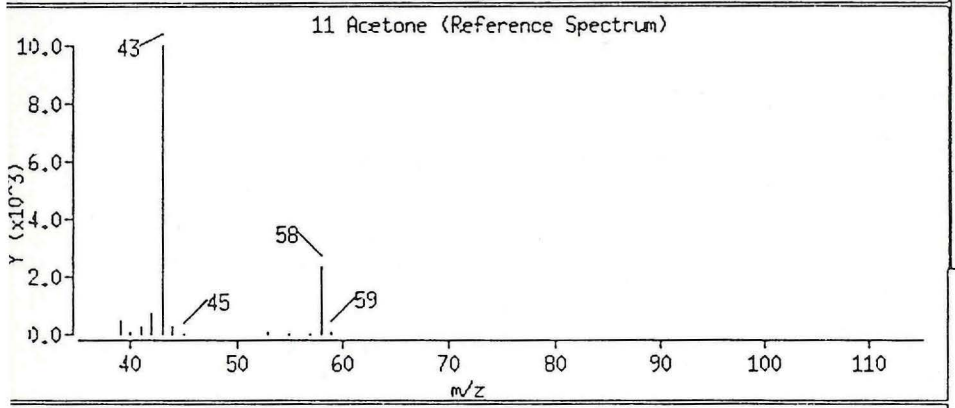
11 Acetone

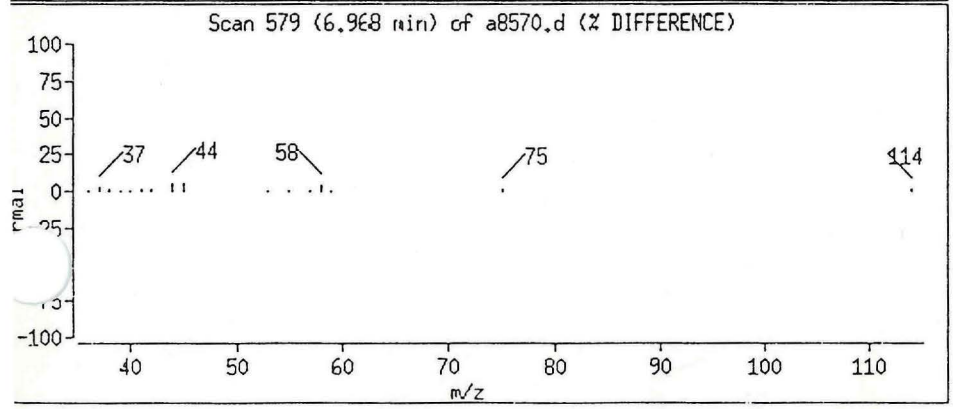












Data File: /chem/msa.i/a063096.b/a8570.d

Date : 30-JUN-96 23:44

Client ID:

Instrument: msa.i

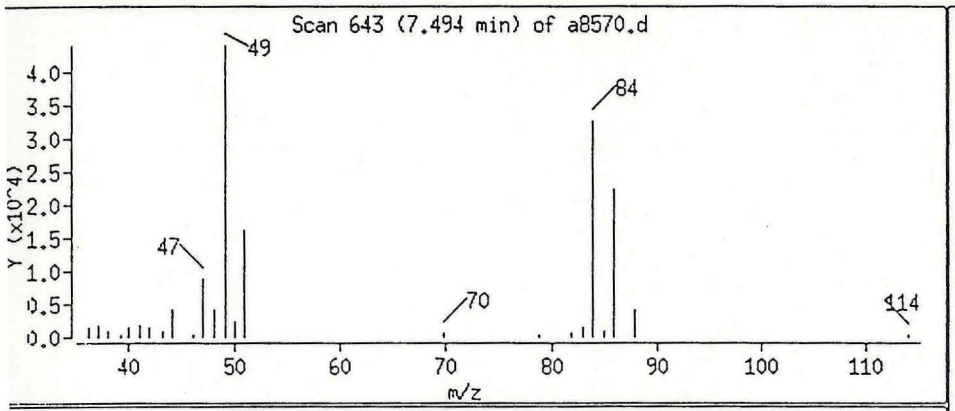
Sample Info: 18221n a5-f1

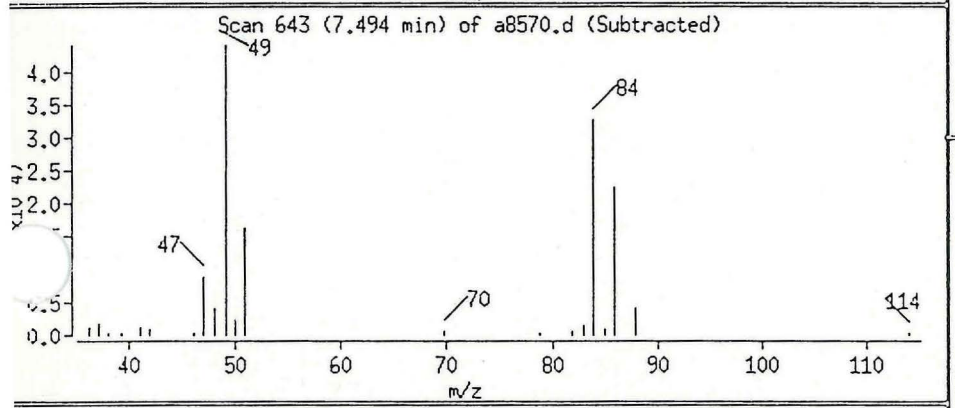
Operator: jk

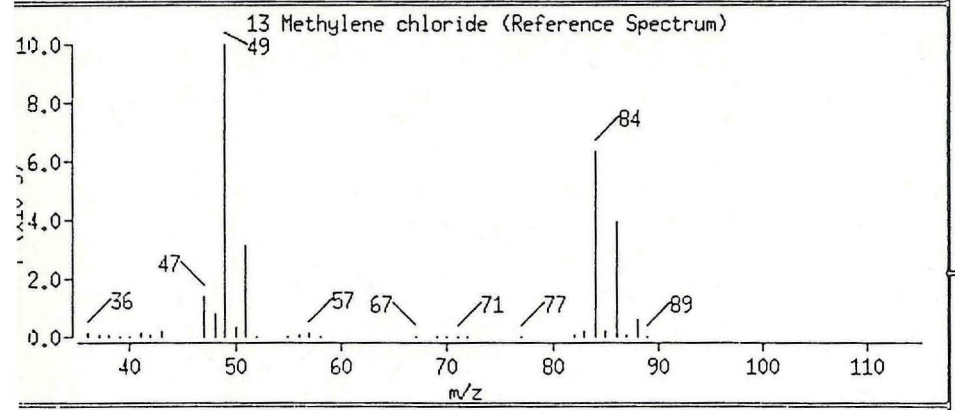
Column phase: DB-624 75m x 0.53mm

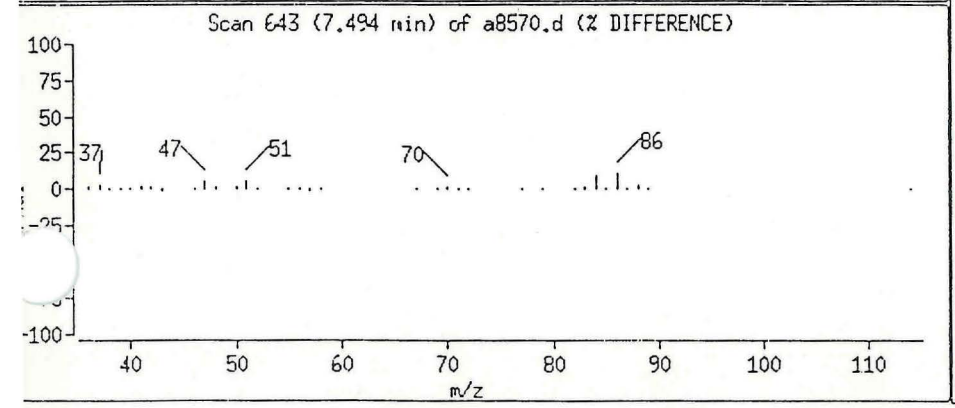
Column diameter: 0.53

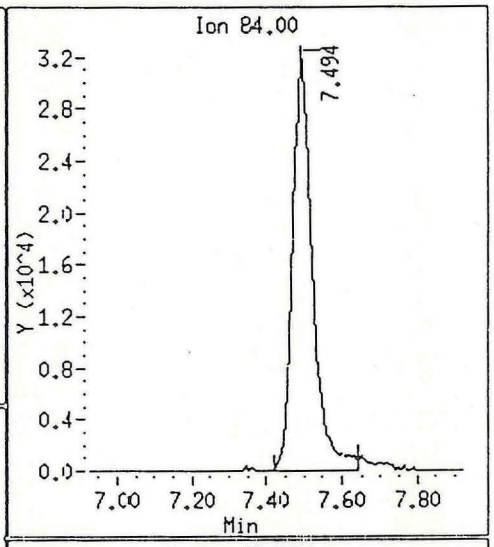
13 Methylene chloride

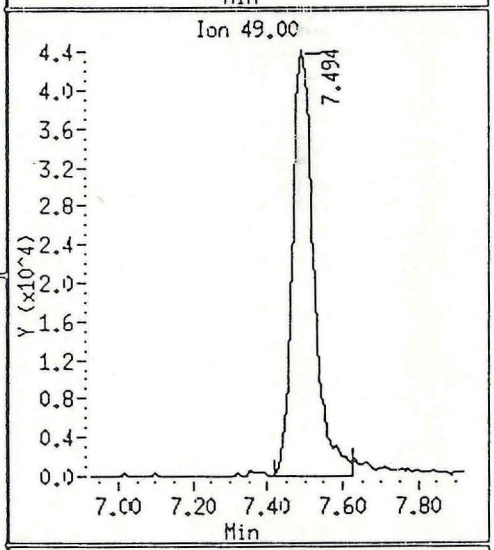


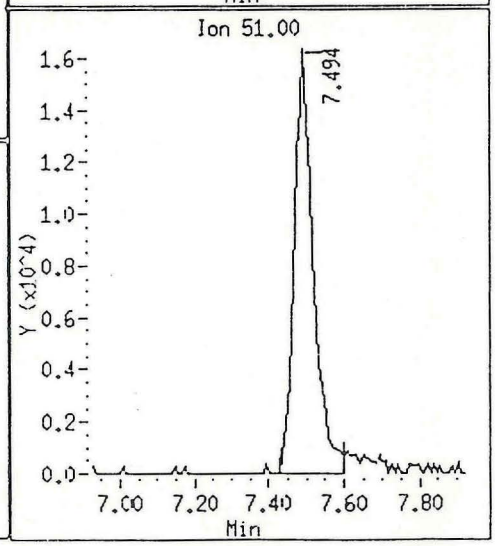












Data File: /chem/msa.i/a063096.b/a8570.d

Date : 30-JUN-96 23:44

Client ID:

Instrument: msa.i

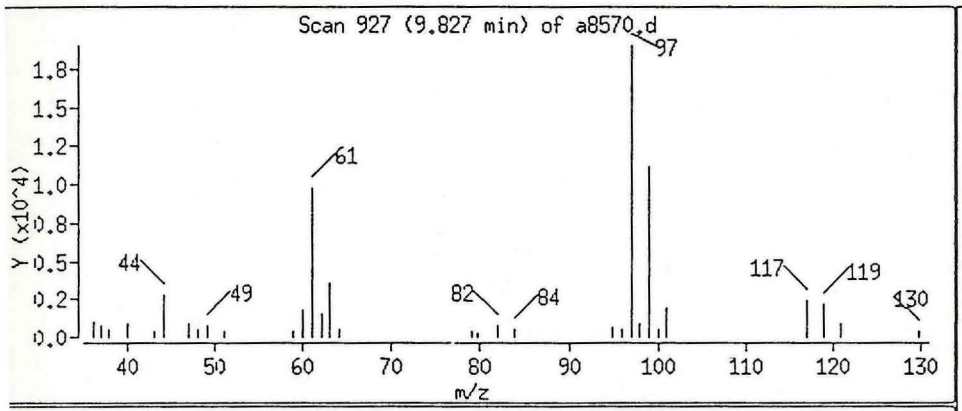
Sample Info: 18221n a5-f1

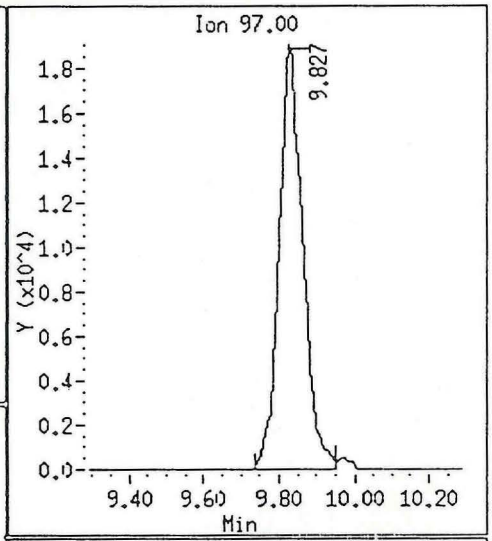
Operator: jk

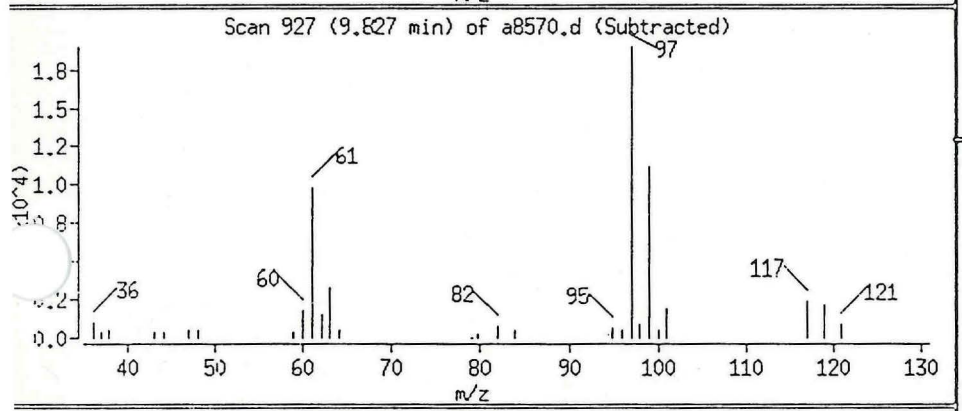
Column phase: DB-624 75m x 0.53mm

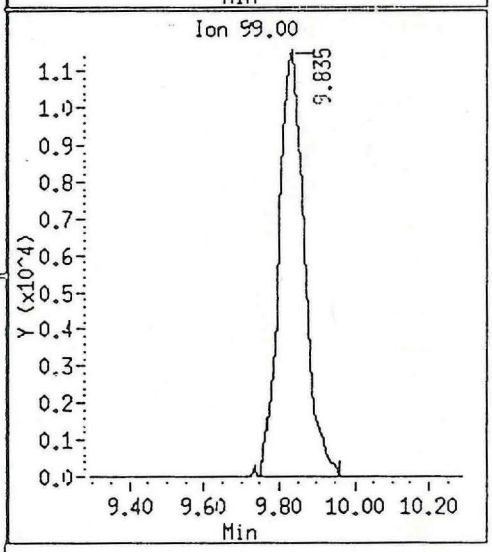
Column diameter: 0.53

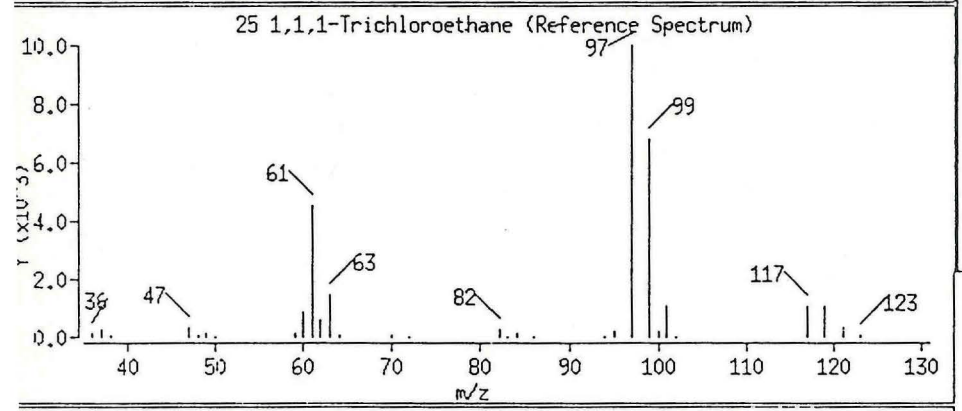
25 1,1,1-Trichloroethane

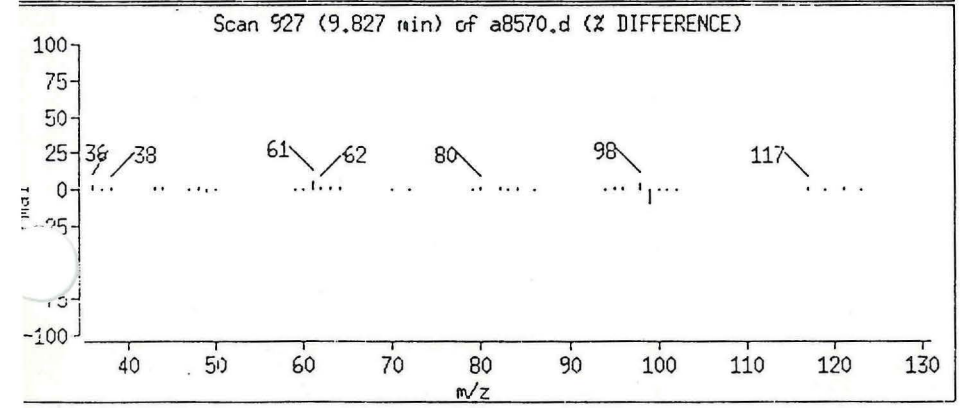












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00032

A5-F2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9919V

Sample wt/vol: 5.40 (g/mL) G Lab File ID: A8571

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	6	B
67-64-1	Acetone	4	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	4	BJ
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00033

EPA SAMPLE NO.

A5-F2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9919V

Sample wt/vol: 5.40 (g/mL) G Lab File ID: A8571

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

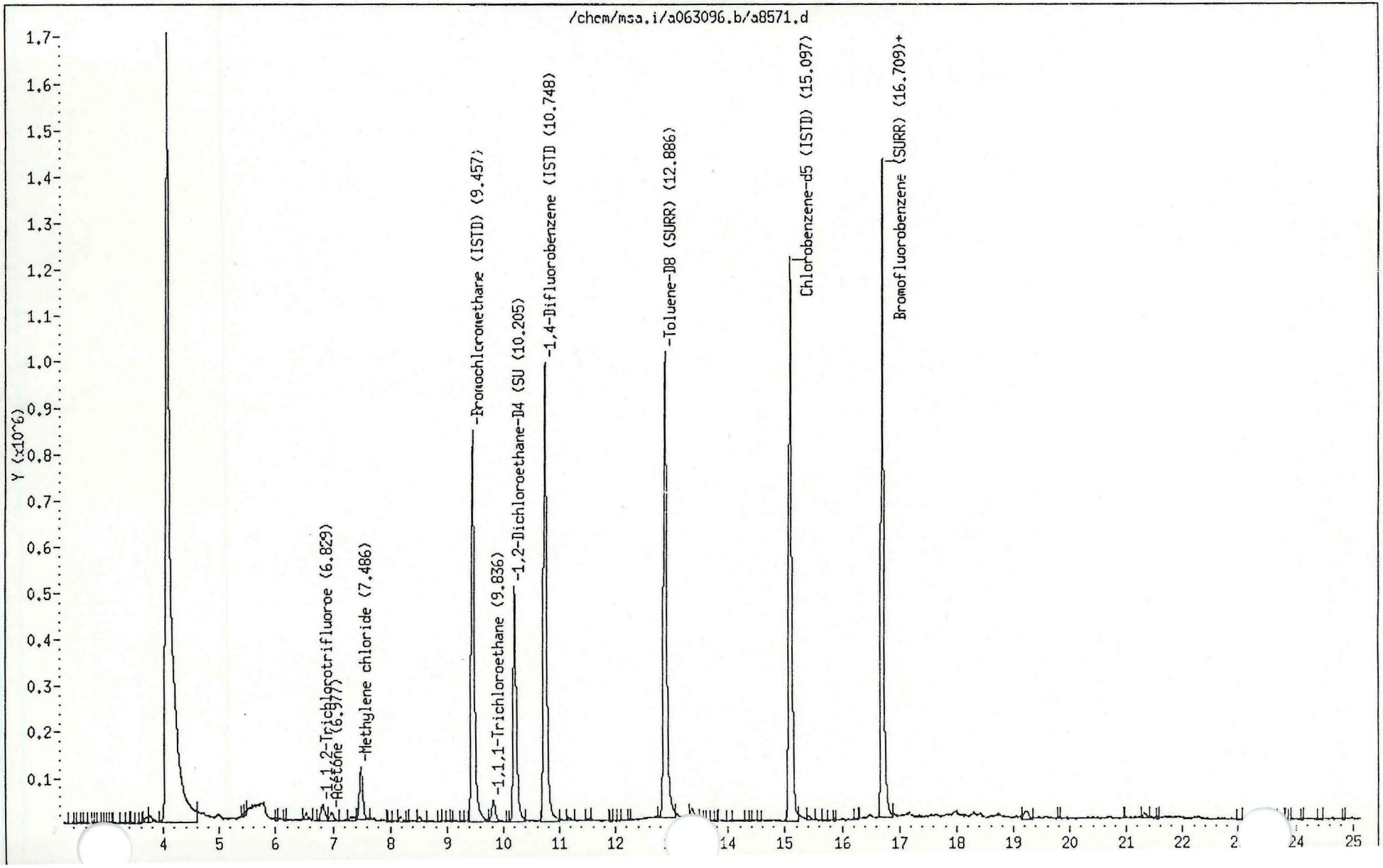
00034

Data File: /chem/msa.i/a063096.b/a8571.d
Date : 01-JUL-96 00:18
Client ID:
Sample Info: 18221n a5-f2

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a063096.b/a8571.d
Report Date: 01-Jul-1996 07:14

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

+TIC

Data file : /chem/msa.i/a063096.b/a8571.d
Lab Smp Id:
Inj Date : 01-JUL-96 00:18
Operator : jk Inst ID: msa.i
Smp Info : 18221n a5-f2
Misc Info : jp9919v,n2v5315,qv,5000,1,5.40,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 01-Jul-1996 06:56 glenn Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 16
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MC 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
9 1,1,2-Trichlorotrifluoroethan	101.00	6.829	6.698	(0.722)	41768	2.16	2.16
Acetone	43.00	6.985	6.979	(0.739)	48503	3.94	3.94
Methylene chloride	84.00	7.486	7.425	(0.792)	99313	6.24	6.24
23 Bromochloromethane (ISTD)	128.00	9.457	9.428	(1.000)	401506	50.0	(Q)
25 1,1,1-Trichloroethane	97.00	9.836	9.791	(0.916)	62528	3.49	3.49
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.205	10.180	(1.079)	647702	46.2	46.2
32 1,4-Difluorobenzene (ISTD)	114.00	10.740	10.716	(1.000)	1477534	50.0	
41 Toluene-D8 (SURR)	98.00	12.886	12.863	(0.854)	1351464	46.2	46.2
50 Chlorobenzene-d5 (ISTD)	117.00	15.097	15.075	(1.000)	1173596	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.701	16.686	(1.106)	917649	46.8	46.8 (QM)

C Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.

Data File: /chem/msa.i/a063096.b/a8571.d
Date : 01-JUL-96 00:18
Client ID:
Sample Info: 18221n a5-f2

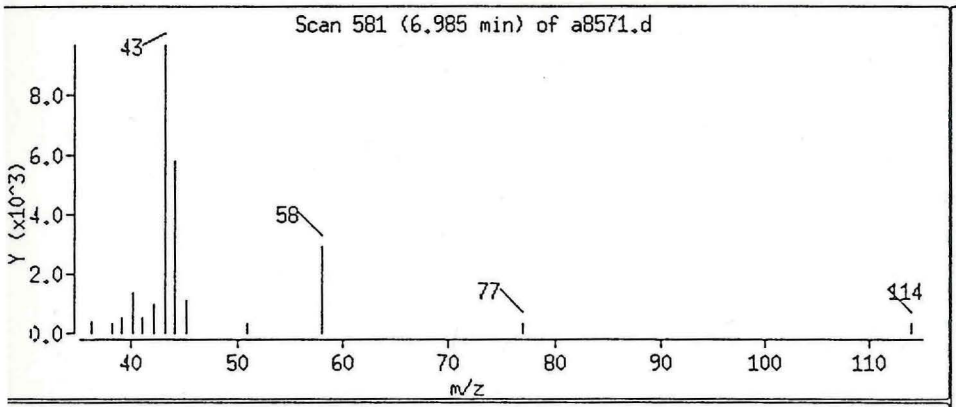
Instrument: msa.i

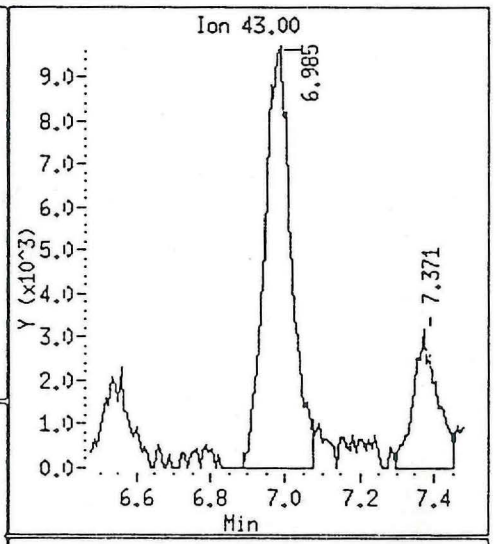
Operator: jk

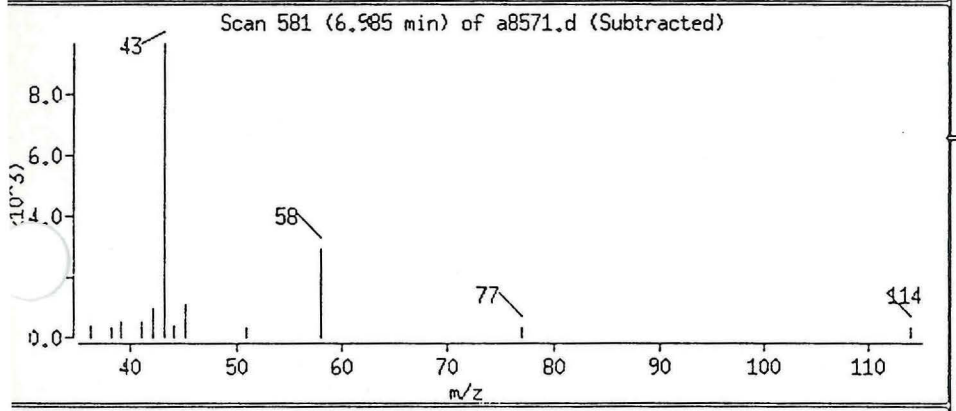
Column phase: DB-624 75m x 0.53mm

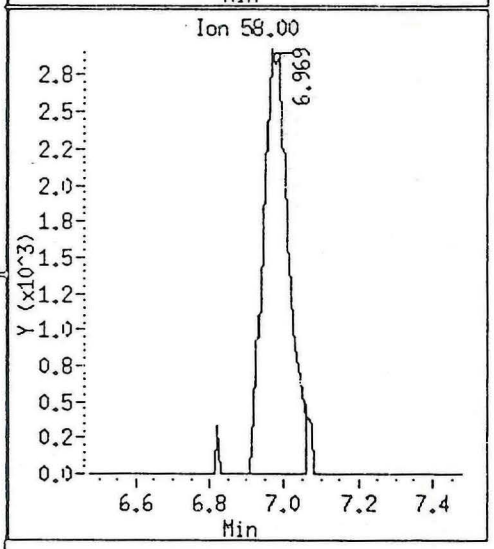
Column diameter: 0.53

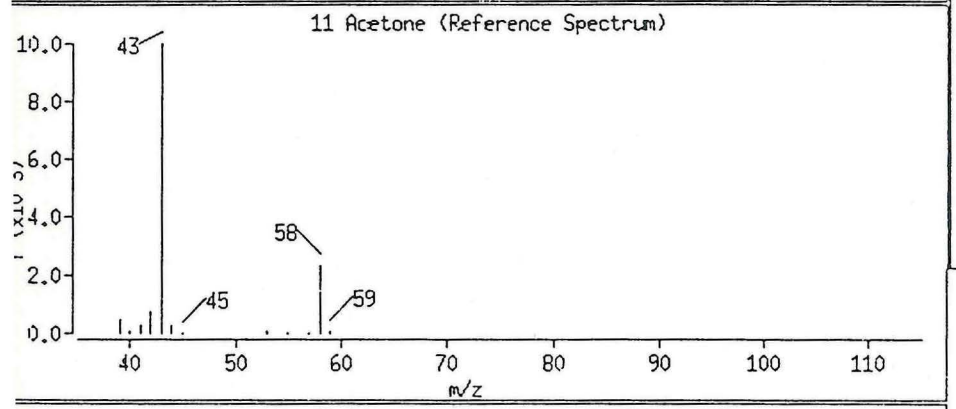
11 Acetone

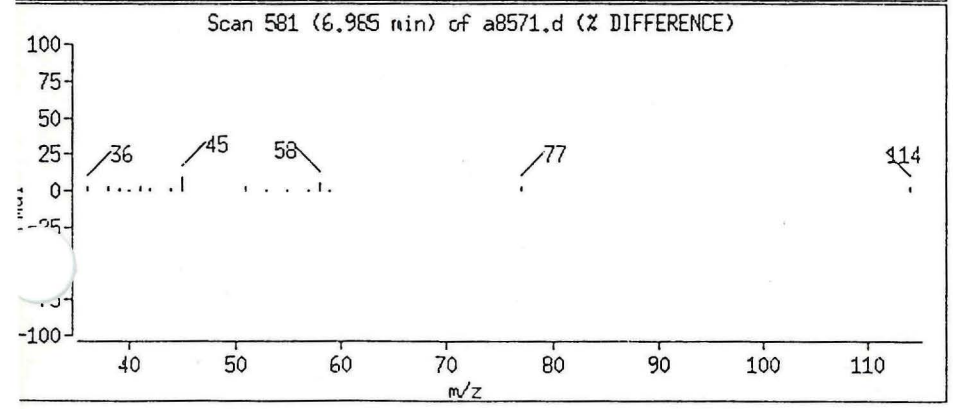












Data File: /chem/msa.i/a063096.b/a8571.d

Date : 01-JUL-96 00:18

Client ID:

Instrument: msa.i

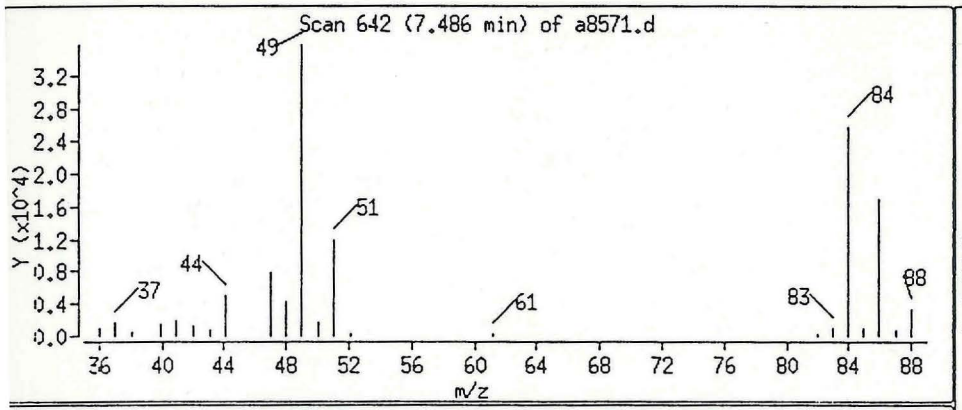
Sample Info: 18221n a5-f2

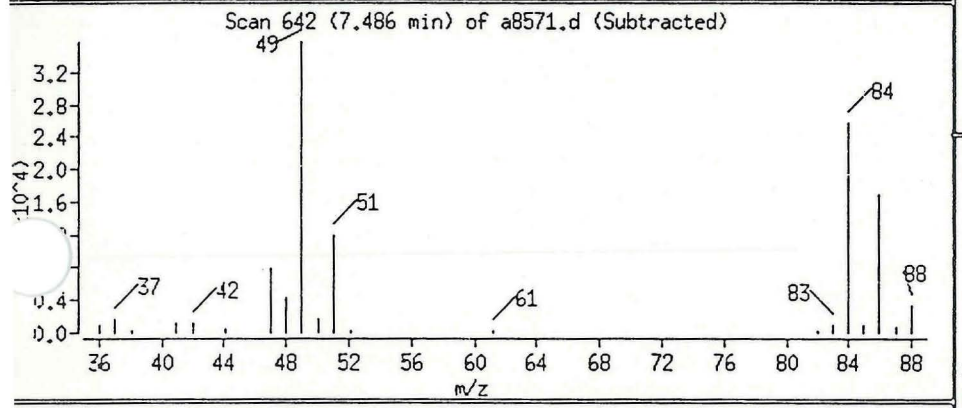
Operator: jk

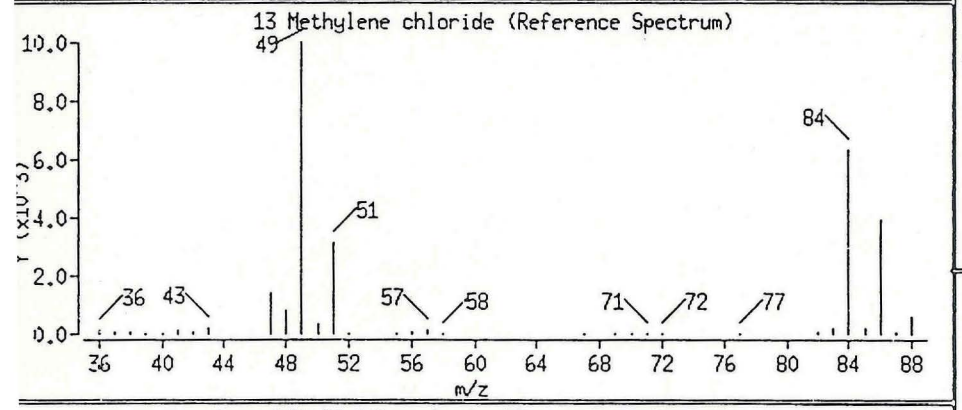
Column phase: DB-624 75m x 0.53mm

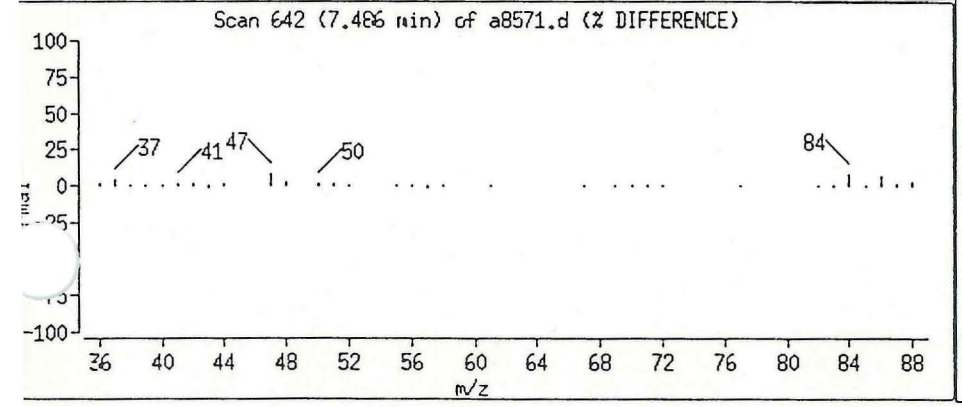
Column diameter: 0.53

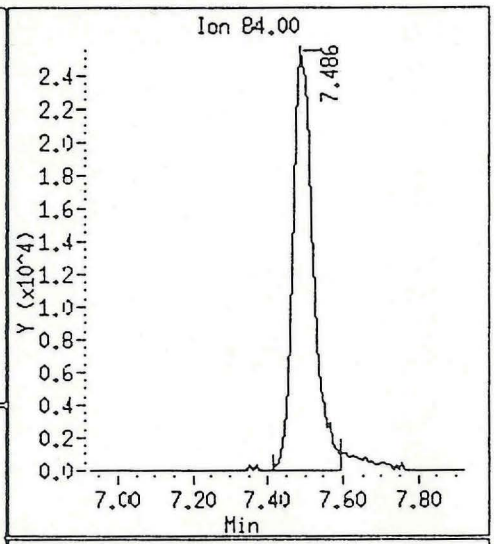
13 Methylene chloride

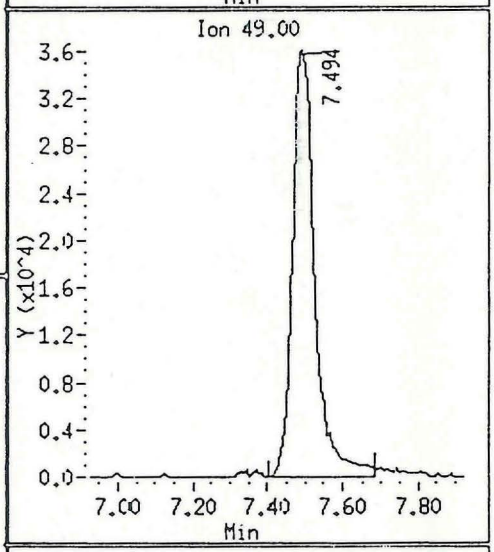


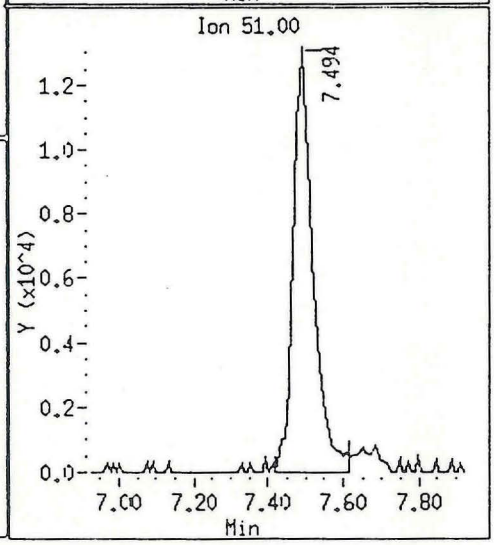












Data File: /chem/msa.i/a063096.b/a8571.d

Date : 01-JUL-96 00:18

Client ID:

Instrument: msa.i

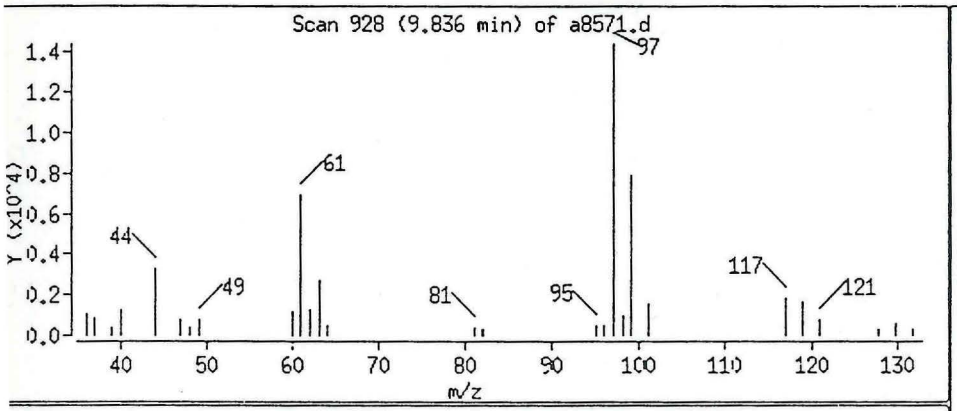
Sample Info: 18221n a5-f2

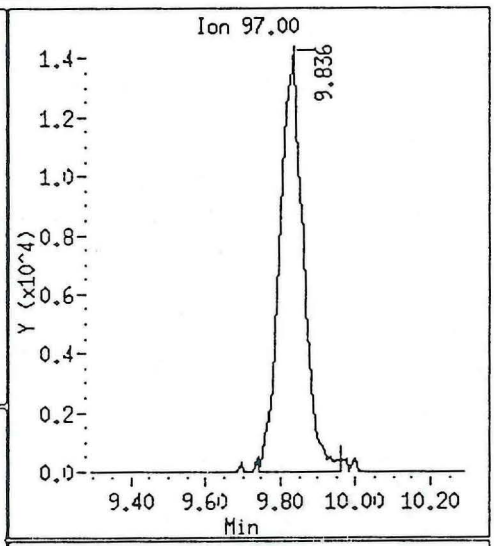
Operator: jk

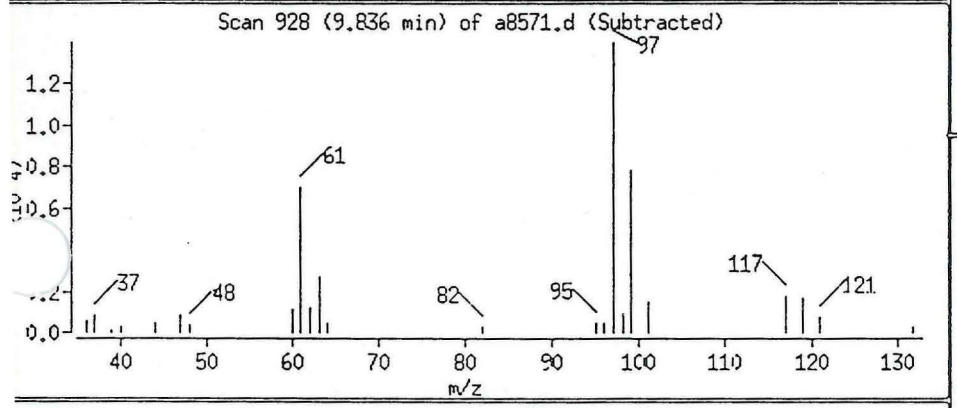
Column phase: DB-624 75m x 0.53mm

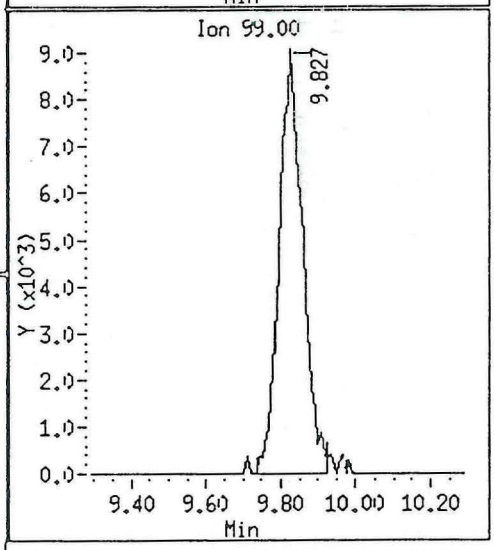
Column diameter: 0.53

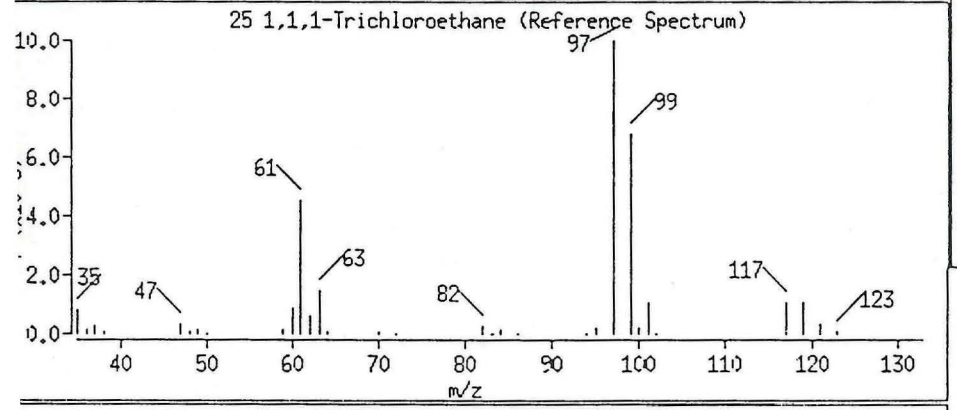
25 1,1,1-Trichloroethane

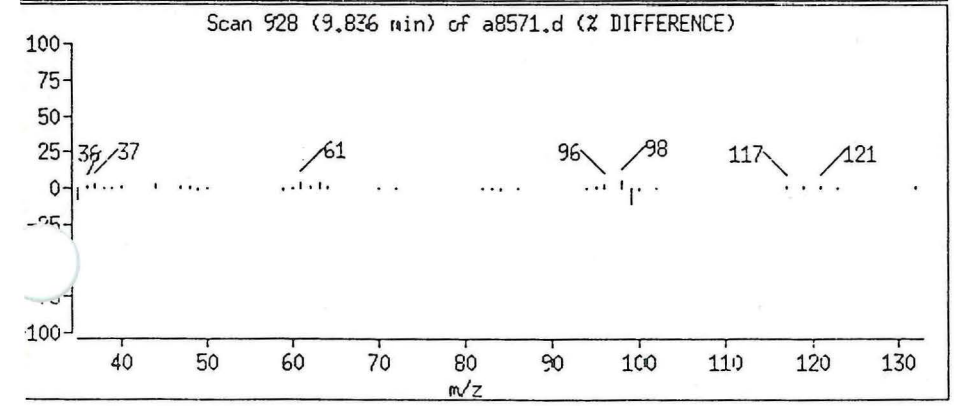












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00039

A5-F3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9920V

Sample wt/vol: 5.30 (g/mL) G Lab File ID: A8618

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 11 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	17	B
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	5	U

9-6-96

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

00040

EPA SAMPLE NO.

A5-F3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9920V

Sample wt/vol: 5.30 (g/mL) G Lab File ID: A8618

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 11 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

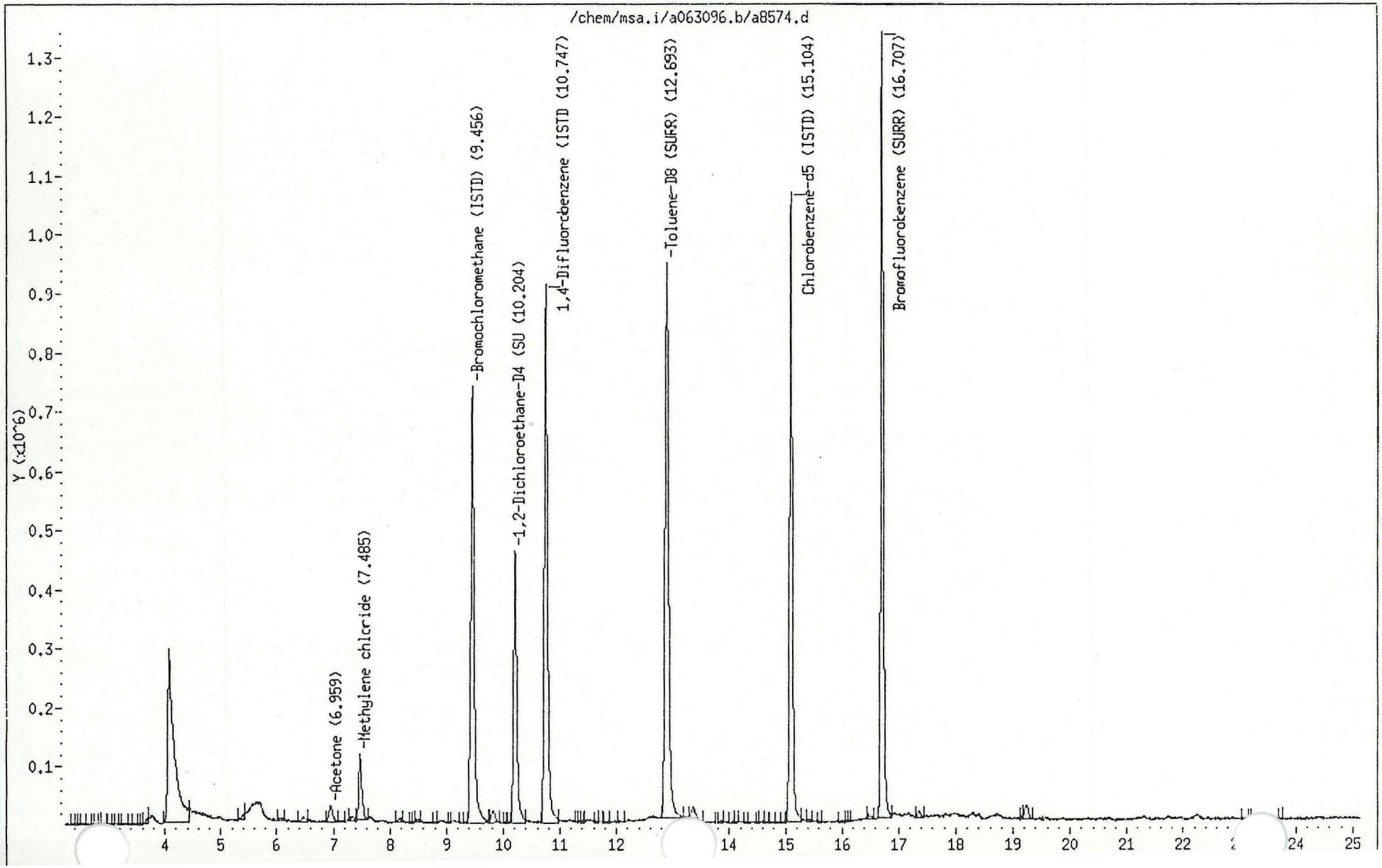
00041

Data File: /chem/msa.i/a063096.b/a8574.d
Date : 01-JUL-96 02:02
Client ID:
Sample Info: 18221n a5-f5

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a063096.b/a8574.d
Report Date: 01-Jul-1996 07:00

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 - TIC

Data file : /chem/msa.i/a063096.b/a8574.d
Lab Smp Id:
Inj Date : 01-JUL-96 02:02
Operator : jk Inst ID: msa.i
Smp Info : 18221n a5-f5
Misc Info : jp9922v,n2v5315,qv,5000,1,5.08,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 01-Jul-1996 06:56 glenn Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.951	6.979	(0.734)	83693	7.77	7.77
Methylene chloride	84.00	7.485	7.425	(0.791)	96653	6.95	6.95
23 Bromochloromethane (ISTD)	128.00	9.464	9.428	(1.000)	350958	50.0	(Q)
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.212	10.180	(1.079)	610102	49.8	49.8
32 1,4-Difluorobenzene (ISTD)	114.00	10.747	10.716	(1.000)	1310685	50.0	
41 Toluene-D8 (SURR)	98.00	12.893	12.863	(0.854)	1241867	48.8	48.8
50 Chlorobenzene-d5 (ISTD)	117.00	15.104	15.075	(1.000)	1020143	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.707	16.686	(1.106)	859769	50.4	50.4

C Flag Legend

- Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a063096.b/a8574.d

Date : 01-JUL-96 02:02

Client ID:

Instrument: msa.i

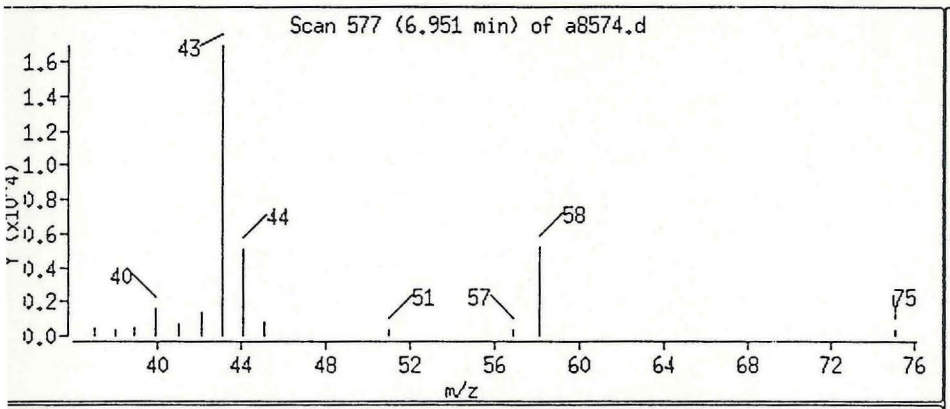
Sample Info: 18221n a5-f5

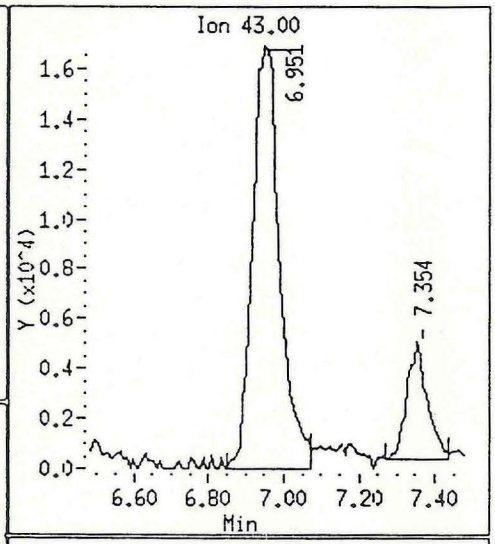
Operator: jk

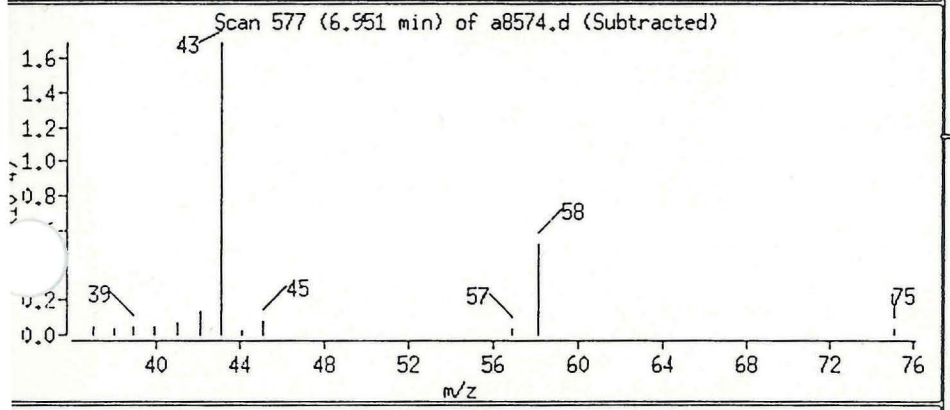
Column phase: DB-624 75m x 0.53mm

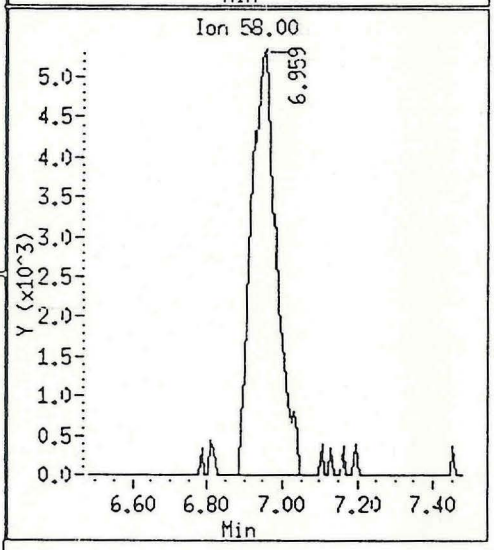
Column diameter: 0.53

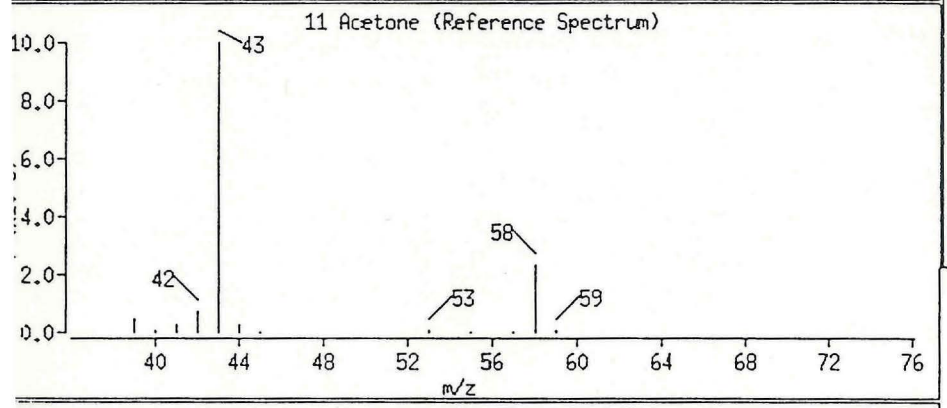
11 Acetone

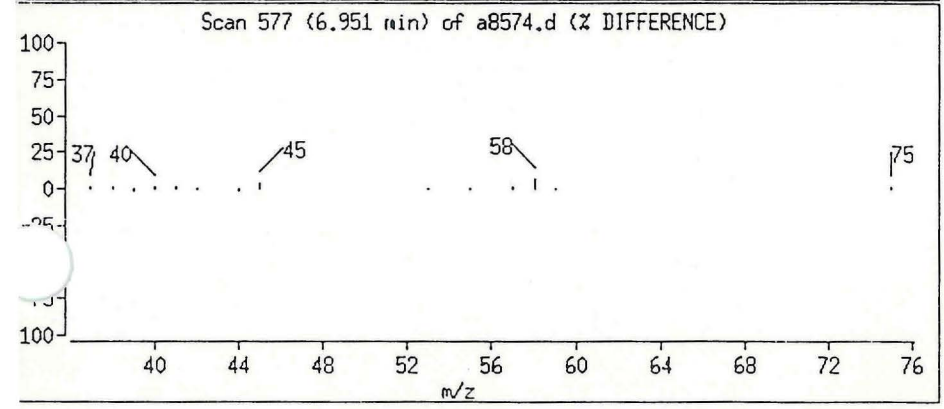












Data File: /chem/msa.i/a063096.b/a8574.d

Date : 01-JUL-96 02:02

Client ID:

Instrument: msa.i

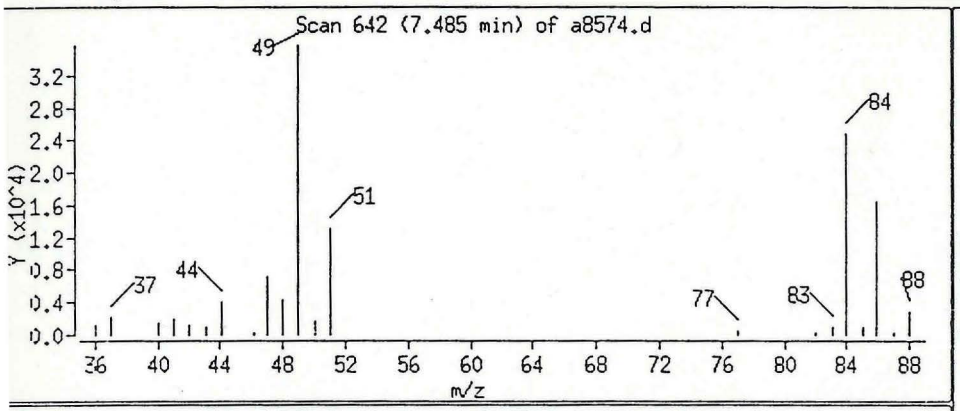
Sample Info: 18221n a5-f5

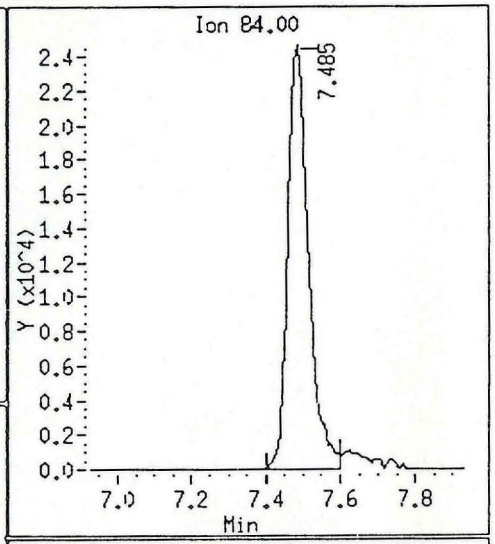
Operator: jk

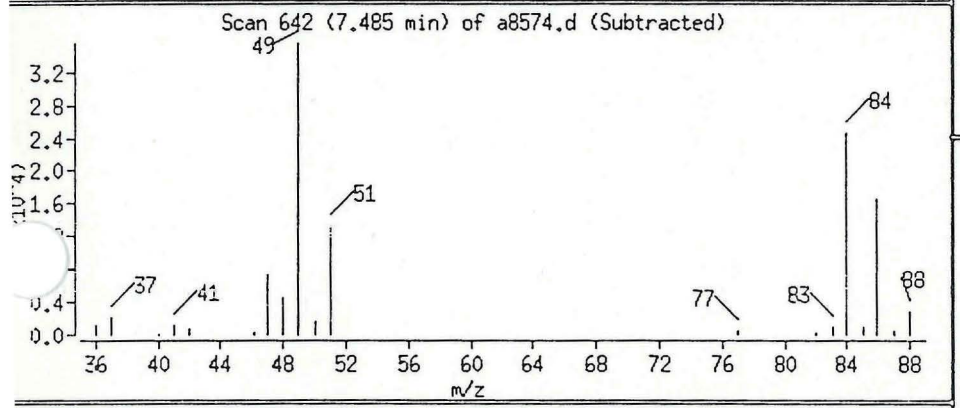
Column phase: DB-624 75m x 0.53mm

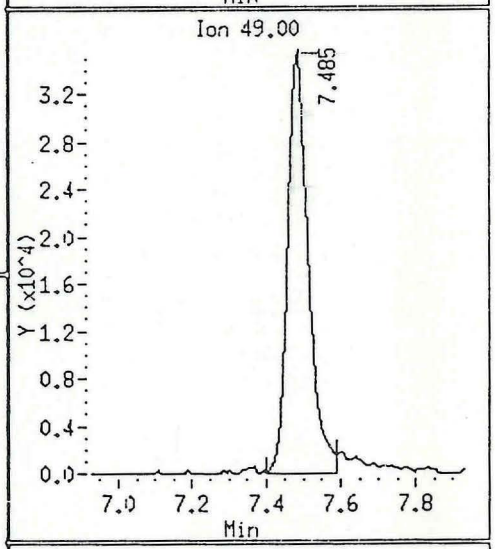
Column diameter: 0.53

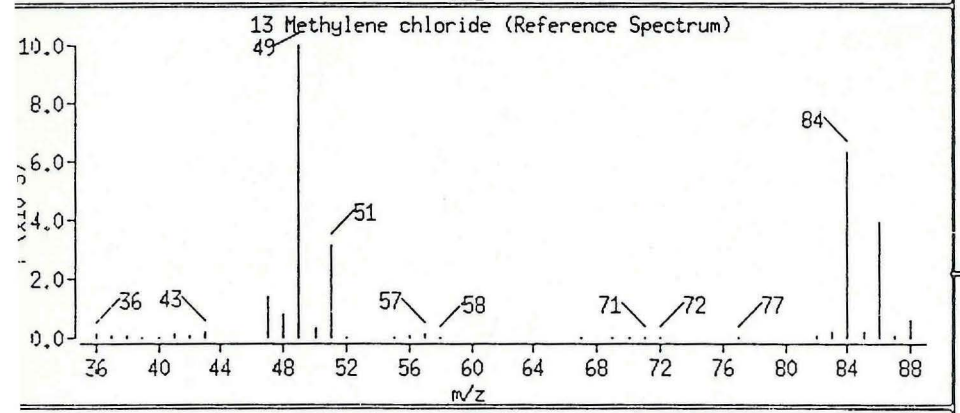
13 Methylene chloride

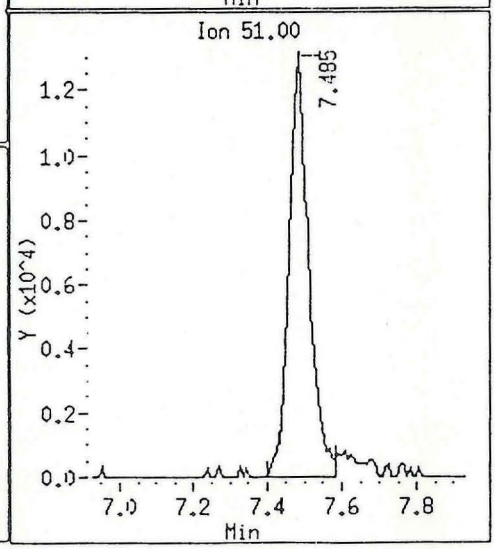


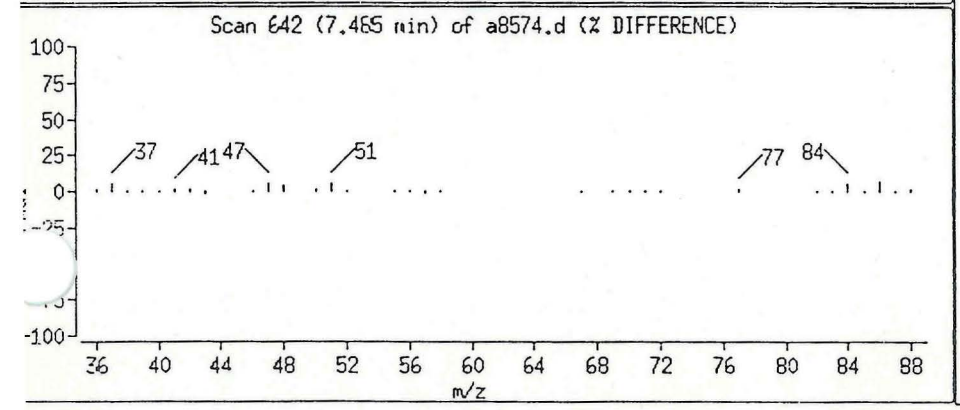












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00045

A5-F4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9921V

Sample wt/vol: 5.08 (g/mL) G Lab File ID: A8606

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 16 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	19	B
67-64-1	Acetone	14	
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
156-60-5	1,2-Trans-dichloroethylene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	6	U

9-16-96

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

00046

EPA SAMPLE NO.

A5-F4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9921V

Sample wt/vol: 5.08 (g/mL) G Lab File ID: A8606

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 16 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

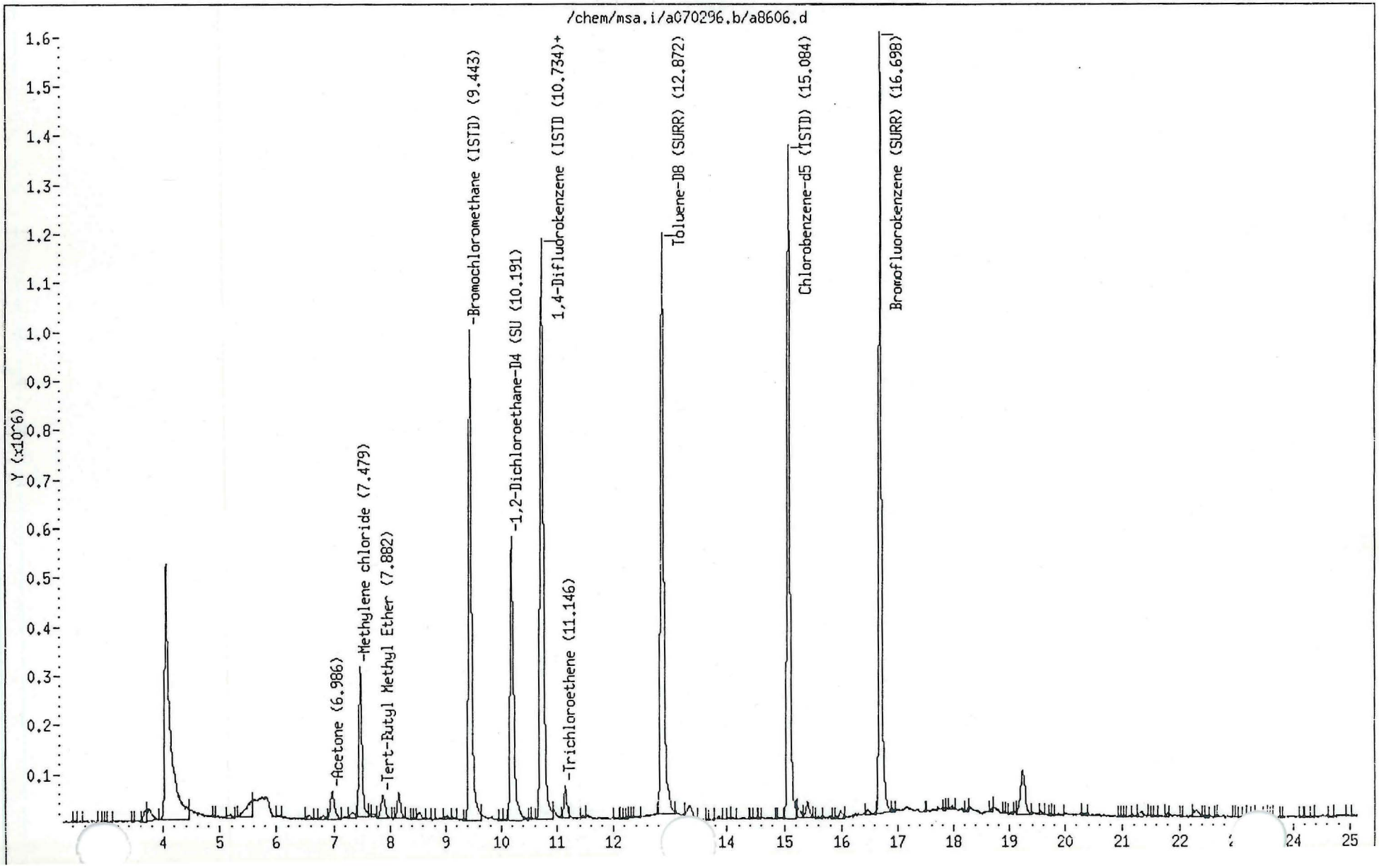
00047

Data File: /chem/msa.i/a070296.b/a8606.d
Date : 02-JUL-96 10:47
Client ID:
Sample Info: 18221n-a5-f4

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070296.b/a8606.d
Report Date: 02-Jul-1996 13:13

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070296.b/a8606.d
Lab Smp Id:
Inj Date : 02-JUL-96 10:47
Operator : jk AIC 7/3 Inst ID: msa.i
Smp Info : 18221n-a5-f4
Misc Info : jp9921v,n2v5318,qv,5000,1,5.08,5.0,960702
Comment : 15
Method : /chem/msa.i/a070296.b/061896_heata.m
Meth Date : 02-Jul-1996 13:12 glenn Quant Type: ISTD
Cal Date : 02-JUL-96 08:47 Cal File: a8603.d
Als bottle: 12
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

jk

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.978	6.997	(0.739)	189919	12.0	12.0
Methylene chloride	84.00	7.471	7.417	(0.791)	274042	16.6	16.6
16 Tert-Butyl Methyl Ether	73.00	7.882	7.903	(0.835)	96160	2.83	2.83
23 Bromochloromethane (ISTD)	128.00	9.443	9.444	(1.000)	477555	50.0	(Q)
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.191	10.187	(1.079)	734550	46.5	46.5
32 1,4-Difluorobenzene (ISTD)	114.00	10.734	10.732	(1.000)	1762987	50.0	
33 Trichloroethene	130.00	11.154	11.145	(1.039)	42346	2.56	2.56
35 Methyl methacrylate	69.00	10.734	10.897	(1.000)	64016	4.24	~~4.24(Q)~~ ms 5
41 Toluene-D8 (SURR)	98.00	12.872	12.877	(0.853)	1569654	47.9	47.9
50 Chlorobenzene-d5 (ISTD)	117.00	15.084	15.089	(1.000)	1334938	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.698	16.702	(1.107)	1047911	47.0	47.0

Q Flag Legend

- Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a070296.b/a8606.d

Date : 02-JUL-96 10:47

Client ID:

Instrument: msa.i

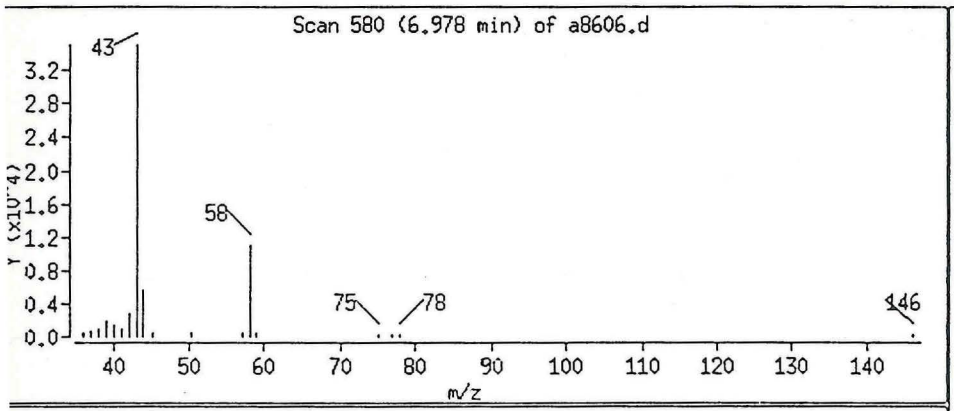
Sample Info: 18221n-a5-f4

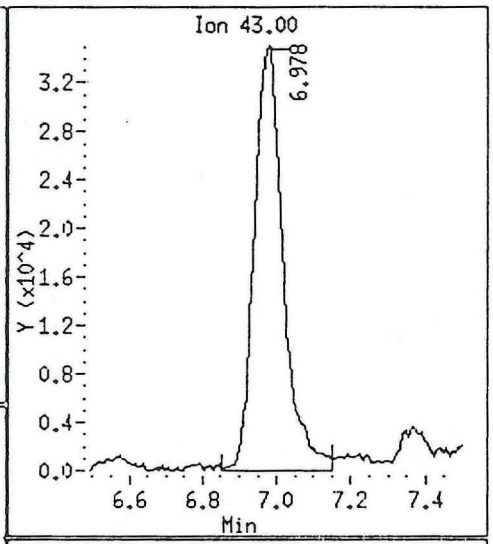
Operator: jk

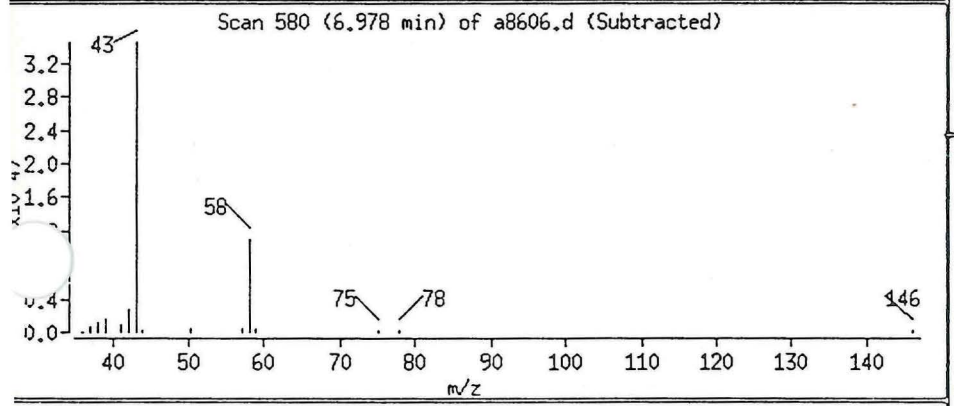
Column phase: DB-624 75m x 0.53mm

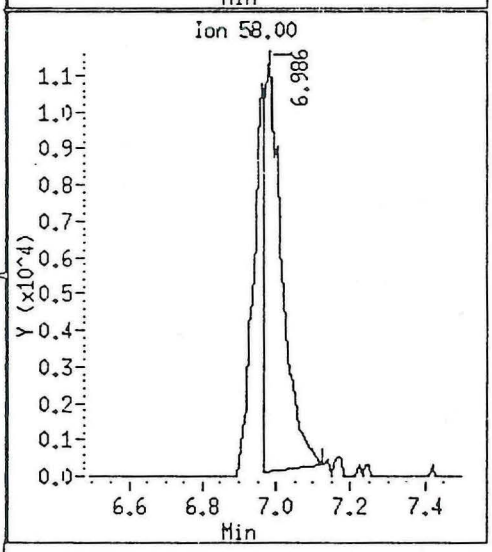
Column diameter: 0.53

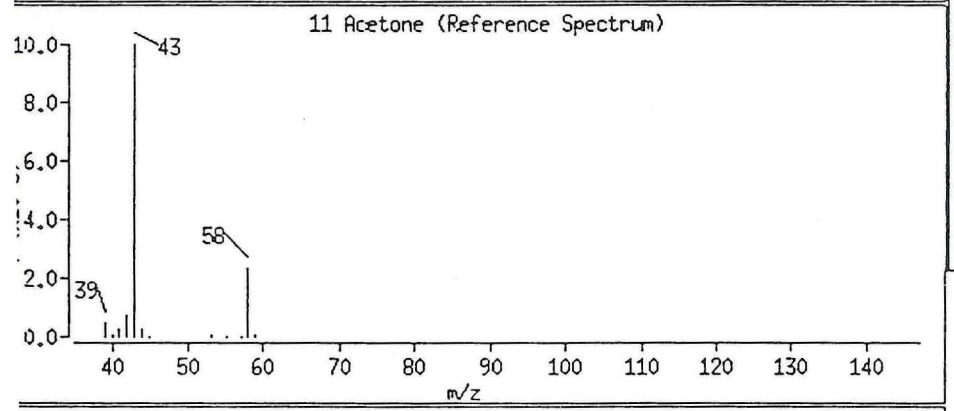
11 Acetone

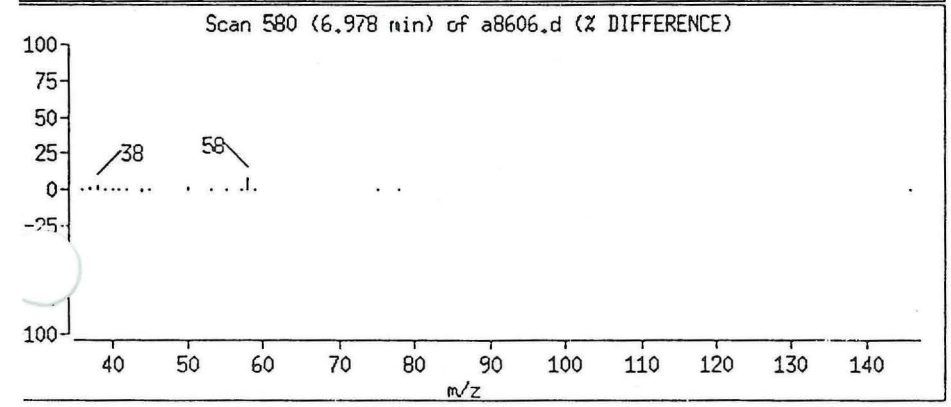












Data File: /chem/msa.i/a070296.b/a8606.d

Date : 02-JUL-96 10:47

Client ID:

Instrument: msa.i

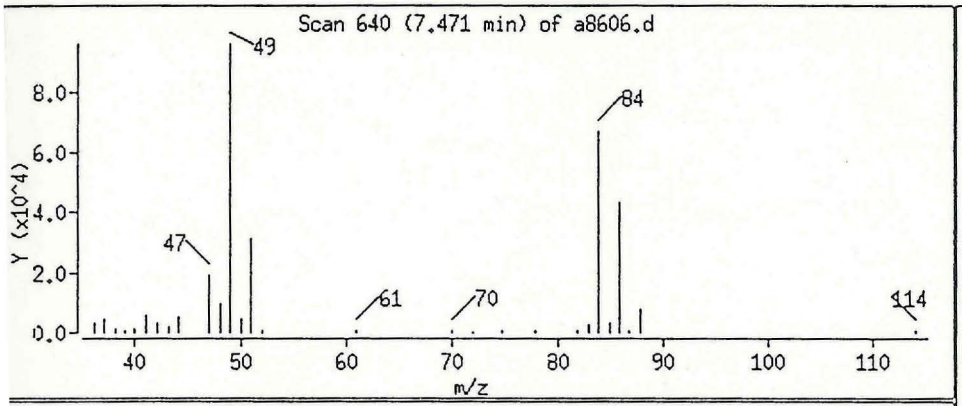
Sample Info: 18221n-a5-f4

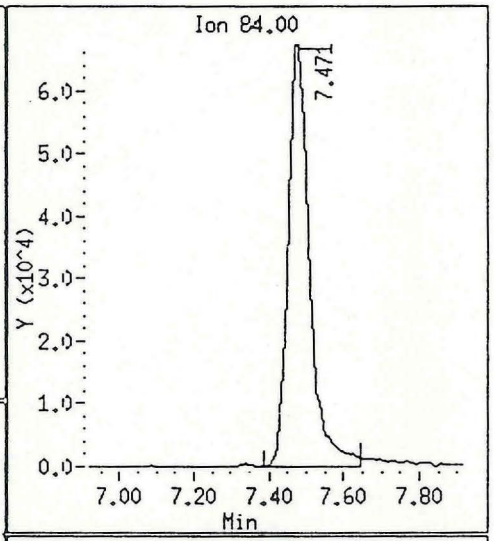
Operator: jk

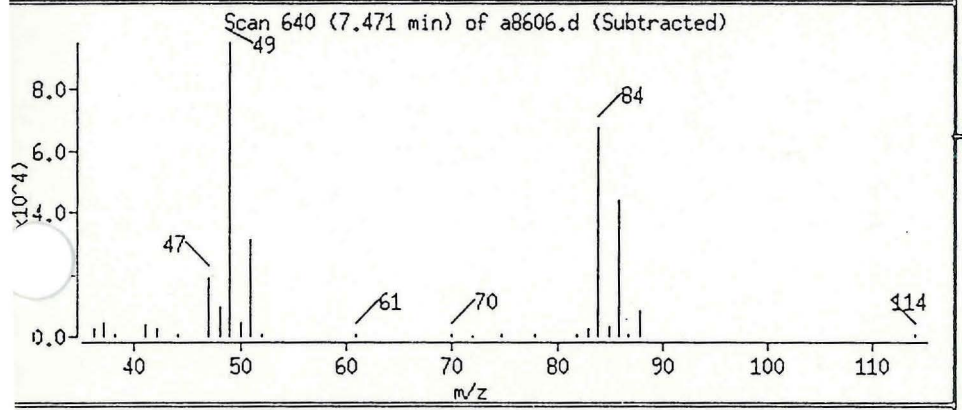
Column phase: DB-624 75m x 0.53mm

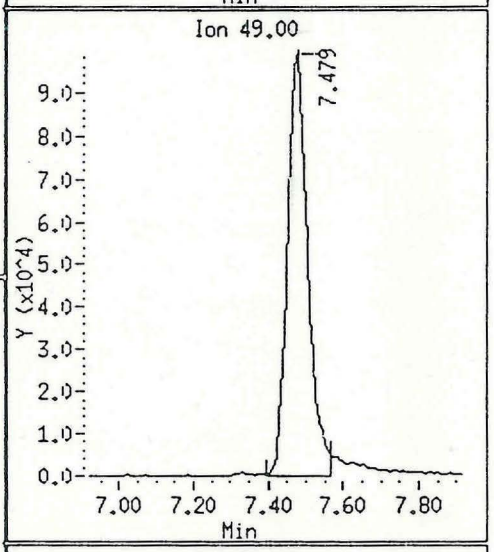
Column diameter: 0.53

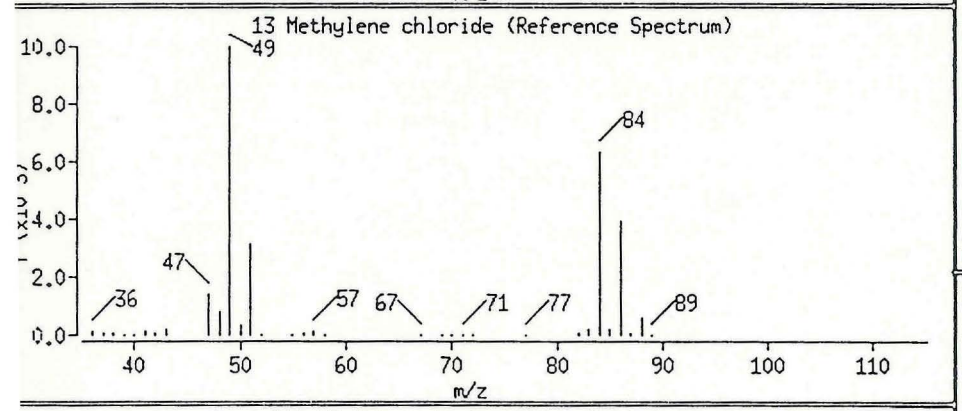
13 Methylene chloride

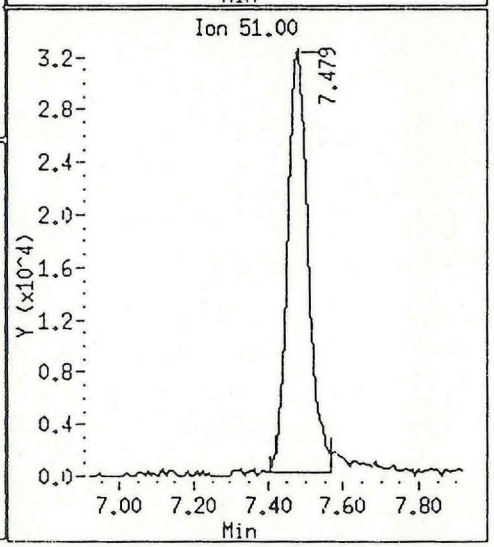


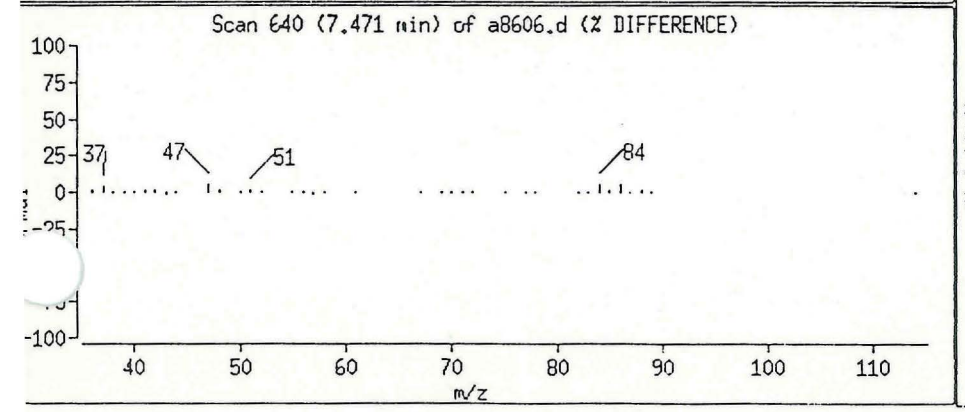












Data File: /chem/msa.i/a070296.b/a8606.d

Date : 02-JUL-96 10:47

Client ID:

Instrument: msa.i

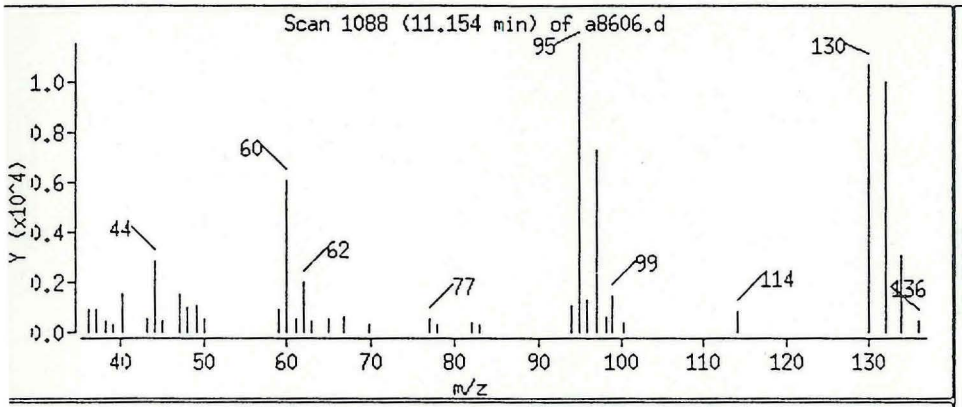
Sample Info: 18221n-a5-f4

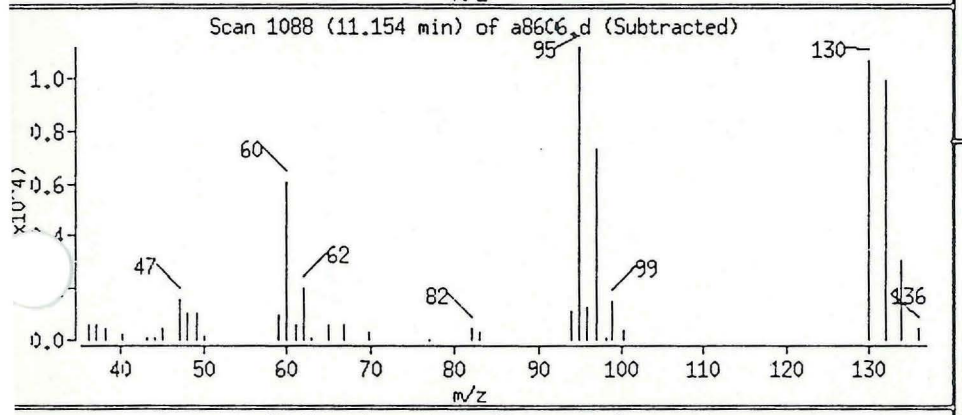
Operator: jk

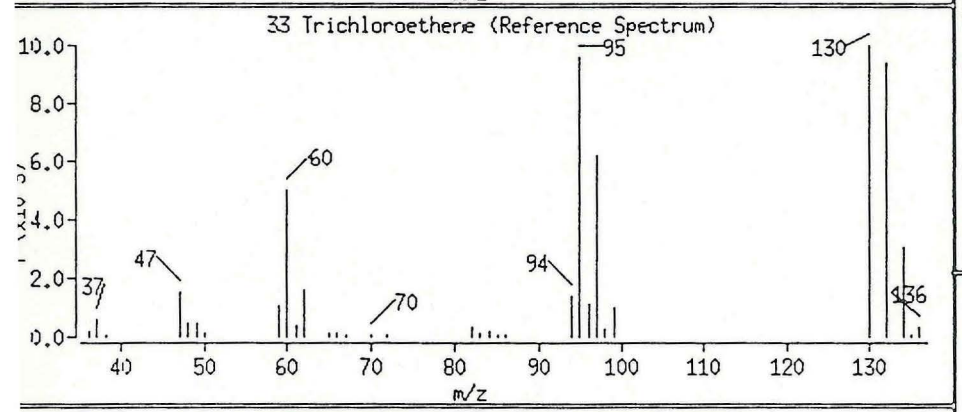
Column phase: DB-624 75m x 0.53mm

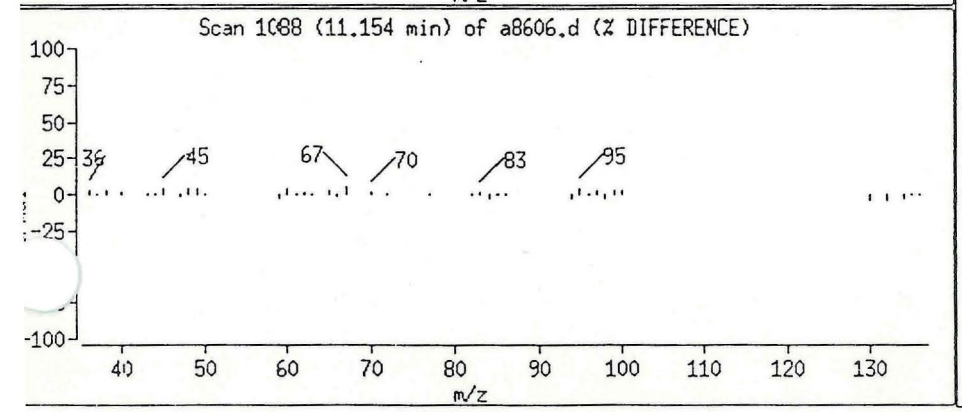
Column diameter: 0.53

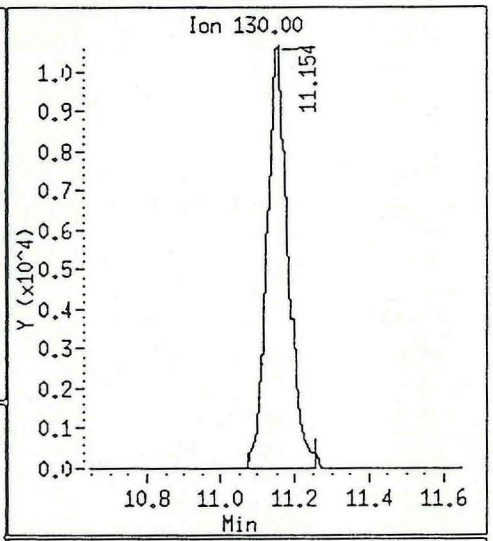
33 Trichloroethene

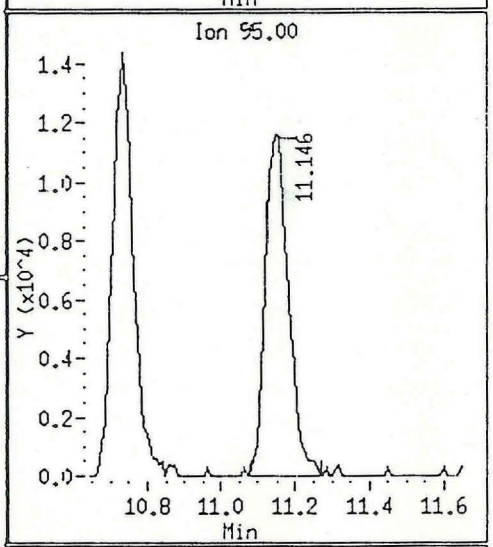


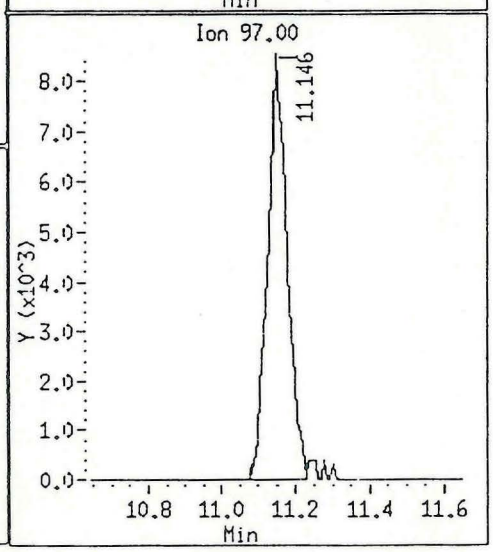












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET 00052

EPA SAMPLE NO.

A5-F5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9922V

Sample wt/vol: 5.08 (g/mL) G Lab File ID: A8574

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 6 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	7	B
67-64-1	Acetone	8	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00053

EPA SAMPLE NO.

A5-F5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9922V

Sample wt/vol: 5.08 (g/mL) G Lab File ID: A8574

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 6 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

00054

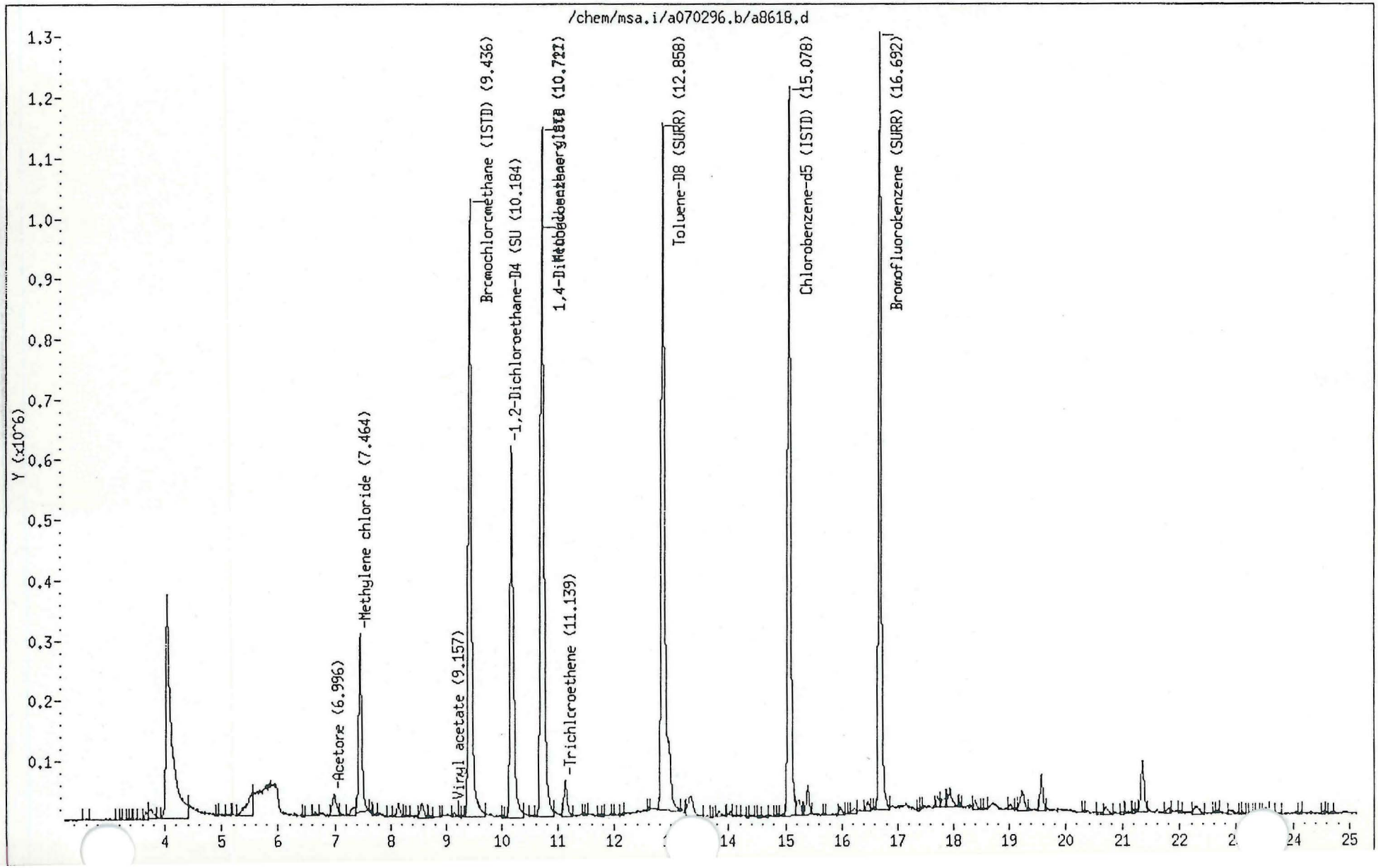
Data File: /chem/msa.i/a070296.b/a8618.d
Date : 02-JUL-96 17:50
Client ID:
Sample Info: 18221-a5-f3

Instrument: msa.i

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



Data File: /chem/msa.i/a070296.b/a8618.d
Report Date: 03-Jul-1996 07:05

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070296.b/a8618.d
Lab Smp Id:
Inj Date : 02-JUL-96 17:50
Operator : jk Inst ID: msa.i
Smp Info : 18221-a5-f3
Misc Info : jp9920v,n2v5315,qv,5000,1,5.30,5.0,960702
Comment :
Method : /chem/msa.i/a070296.b/061896_heata.m
Meth Date : 03-Jul-1996 07:01 glenn Quant Type: ISTD
Cal Date : 02-JUL-96 08:47 Cal File: a8603.d
Als bottle: 9
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

ML 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.996	6.997	(0.741)	130608	8.14	8.14
Methylene chloride	84.00	7.456	7.417	(0.789)	268702	16.0	16.0
18 Vinyl acetate	43.00	9.157	9.197	(0.970)	14737	1.39	~~1.39~~ MS
23 Bromochloromethane (ISTD)	128.00	9.444	9.444	(1.000)	485496	50.0	
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.184	10.187	(1.078)	790141	49.2	49.2
32 1,4-Difluorobenzene (ISTD)	114.00	10.727	10.732	(1.000)	1703876	50.0	
33 Trichloroethene	130.00	11.139	11.145	(1.038)	37753	2.36	~~2.36~~
35 Methyl methacrylate	69.00	10.711	10.897	(0.998)	59106	4.05	~~4.05(2)~~ MS
41 Toluene-D8 (SURR)	98.00	12.858	12.877	(0.853)	1553944	52.6	52.6
50 Chlorobenzene-d5 (ISTD)	117.00	15.078	15.089	(1.000)	1203667	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.692	16.702	(1.107)	863329	42.9	42.9

C Flag Legend

- Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a070296.b/a8618.d

Date : 02-JUL-96 17:50

Client ID:

Sample Info: 18221-a5-f3

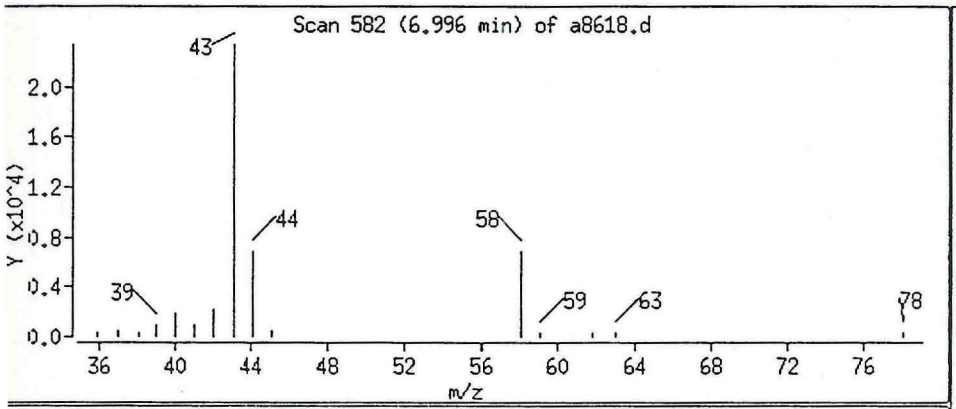
Instrument: msa.i

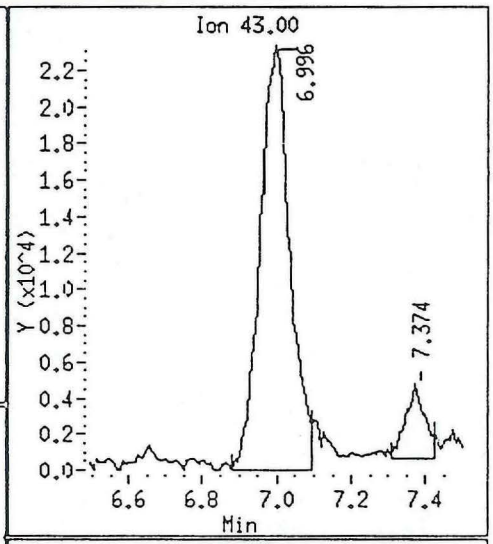
Operator: jk

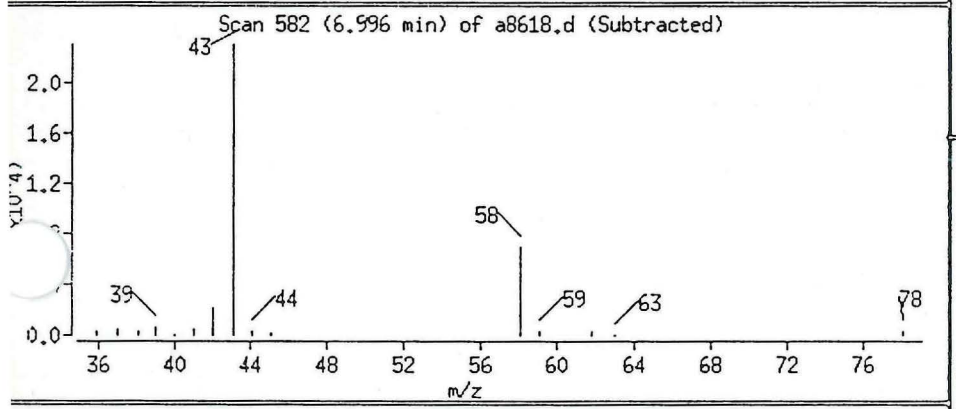
Column phase: DB-624 75m x 0.53mm

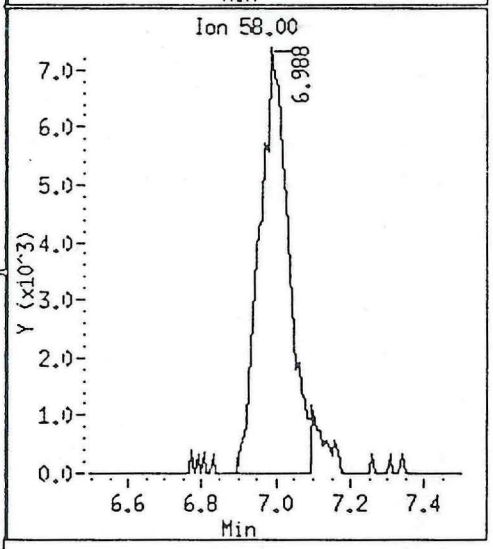
Column diameter: 0.53

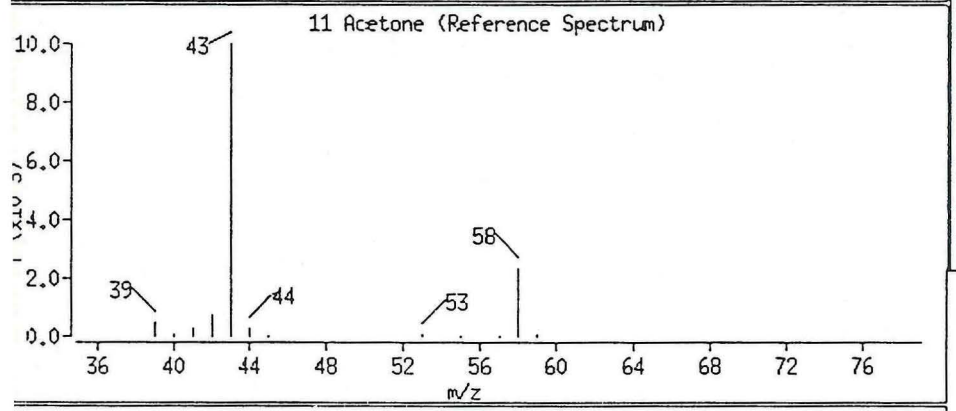
11 Acetone

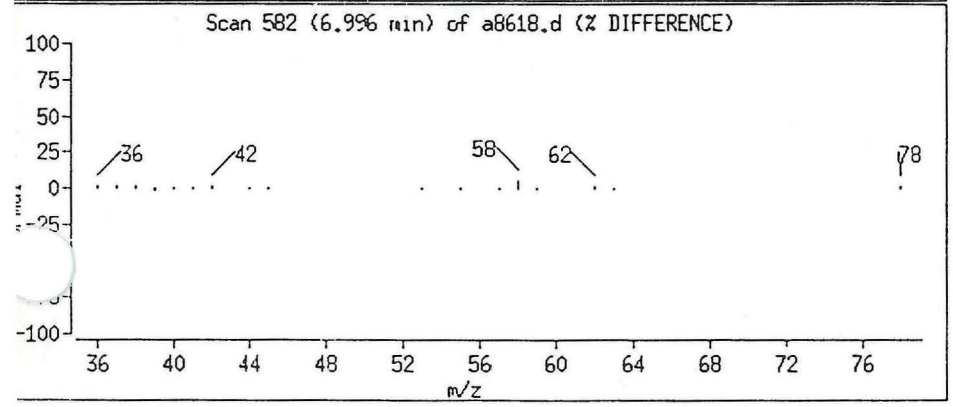












Data File: /chem/msa.i/a070296.b/a8618.d

Date : 02-JUL-96 17:50

Client ID:

Instrument: msa.i

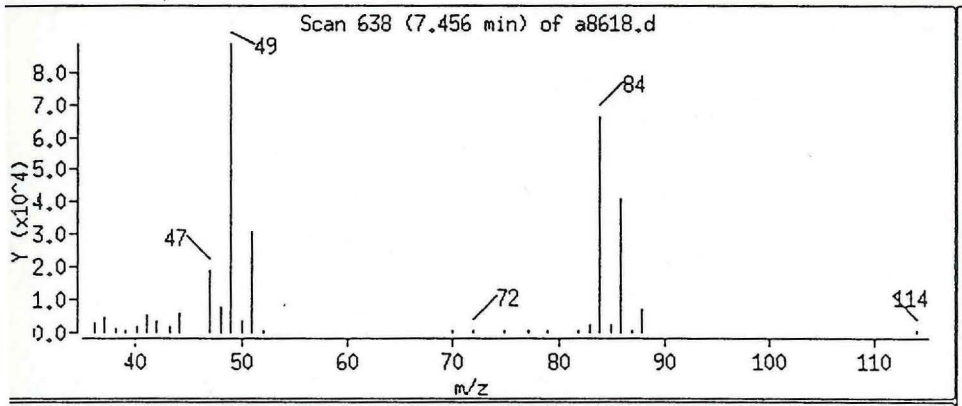
Sample Info: 18221-a5-f3

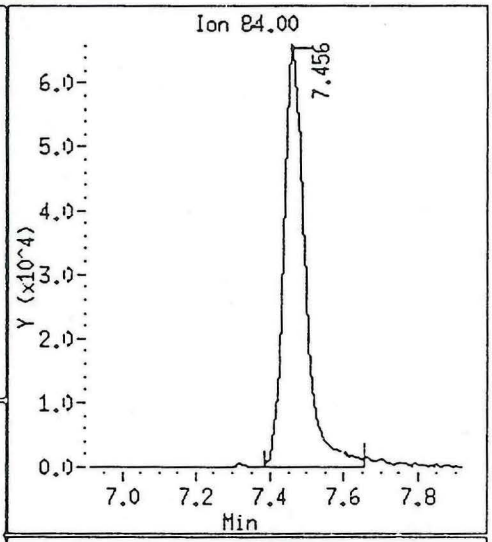
Operator: jk

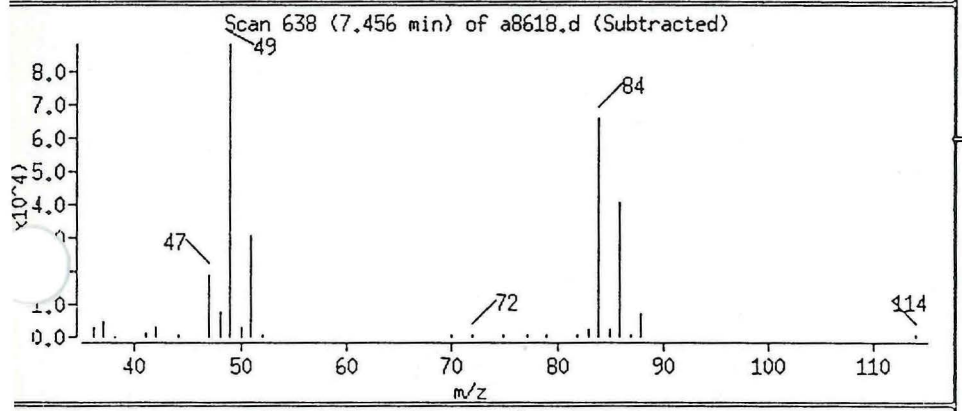
Column phase: DB-624 75m x 0.53mm

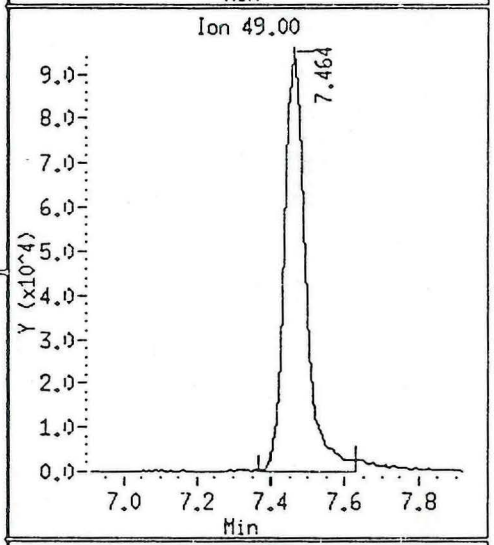
Column diameter: 0.53

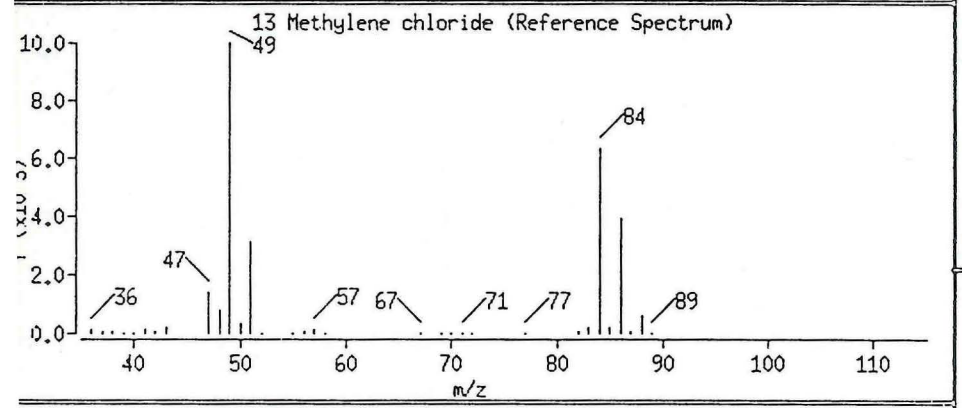
13 Methylene chloride

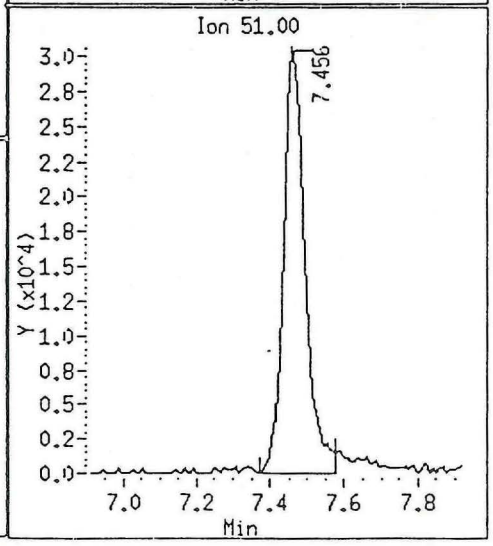


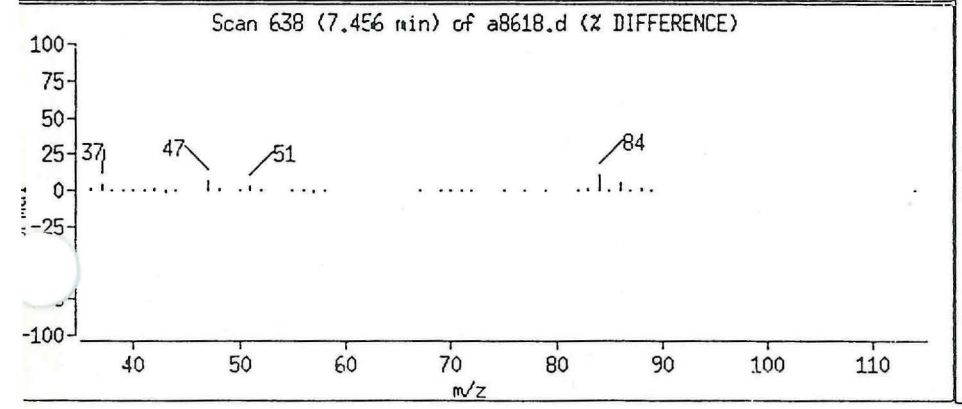












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00058 A5-W1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9923V

Sample wt/vol: 5.29 (g/mL) G Lab File ID: A8607

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	29	B
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

9-16-96

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00059

EPA SAMPLE NO.

A5-W1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9923V

Sample wt/vol: 5.29 (g/mL) G Lab File ID: A8607

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

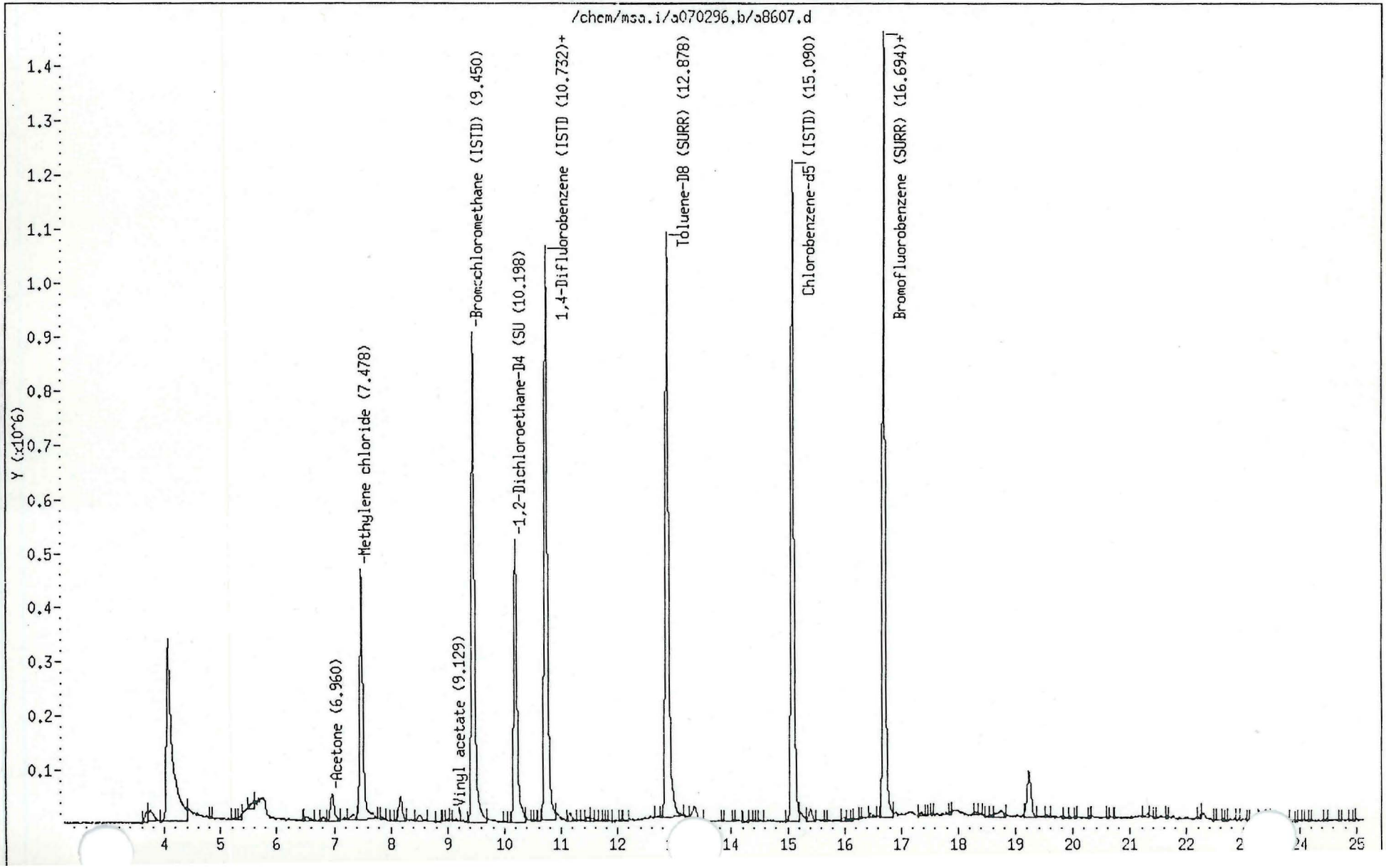
00060

Data File: /chem/msa.i/a070296.b/a8607.d
Date : 02-JUL-96 11:22
Client ID:
Sample Info: 18221n-a5-w1

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070296.b/a8607.d
Report Date: 02-Jul-1996 13:31

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070296.b/a8607.d
Lab Smp Id:
Inj Date : 02-JUL-96 11:22
Operator : jk Inst ID: msa.i
Smp Info : 18221n-a5-w1
Misc Info : jp9923v,n2v5319,qv,5000,1,5.29,5.0,960702
Comment :
Method : /chem/msa.i/a070296.b/061896_heata.m
Meth Date : 02-Jul-1996 13:12 glenn Quant Type: ISTD
Cal Date : 02-JUL-96 08:47 Cal File: a8603.d
Als bottle: 13
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
11 Acetone	43.00	6.969	6.997	(0.737)	156923	11.2	11.2
Methylene chloride	84.00	7.478	7.417	(0.791)	405775	27.8	27.8
Vinyl acetate	43.00	9.129	9.197	(0.966)	10595	1.15	~~1.15~~
23 Bromochloromethane (ISTD)	128.00	9.450	9.444	(1.000)	422359	50.0	
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.198	10.187	(1.079)	679179	48.6	48.6
32 1,4-Difluorobenzene (ISTD)	114.00	10.732	10.732	(1.000)	1595214	50.0	
35 Methyl methacrylate	69.00	10.741	10.897	(1.001)	55334	4.05	~~4.05(Q)~~
41 Toluene-D8 (SURR)	98.00	12.878	12.877	(0.853)	1431347	48.0	48.0
50 Chlorobenzene-d5 (ISTD)	117.00	15.090	15.089	(1.000)	1214016	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.694	16.702	(1.106)	933952	46.0	46.0(QM)

C Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.

Data File: /chem/msa.i/a070296.b/a8607.d

Date : 02-JUL-96 11:22

Client ID:

Instrument: msa.i

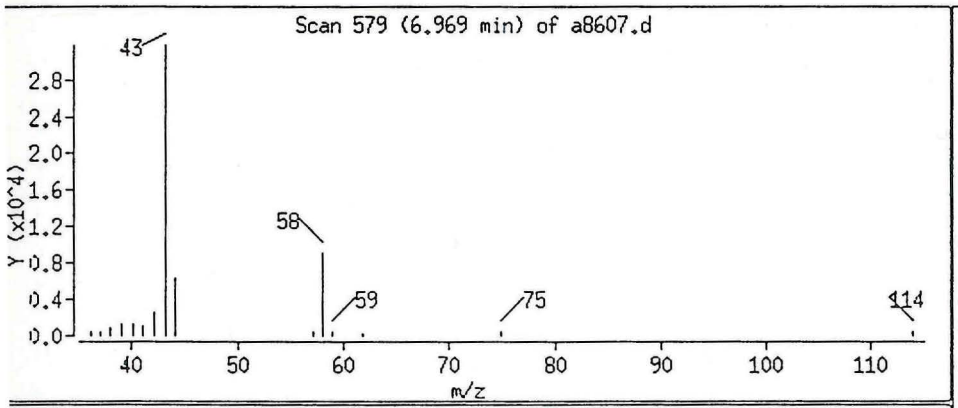
Sample Info: 18221n-a5-w1

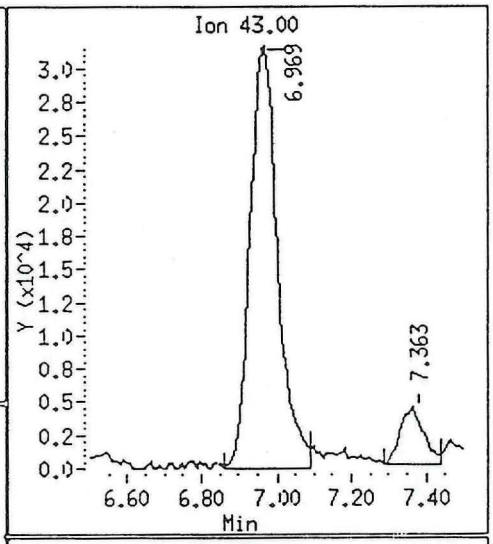
Operator: jk

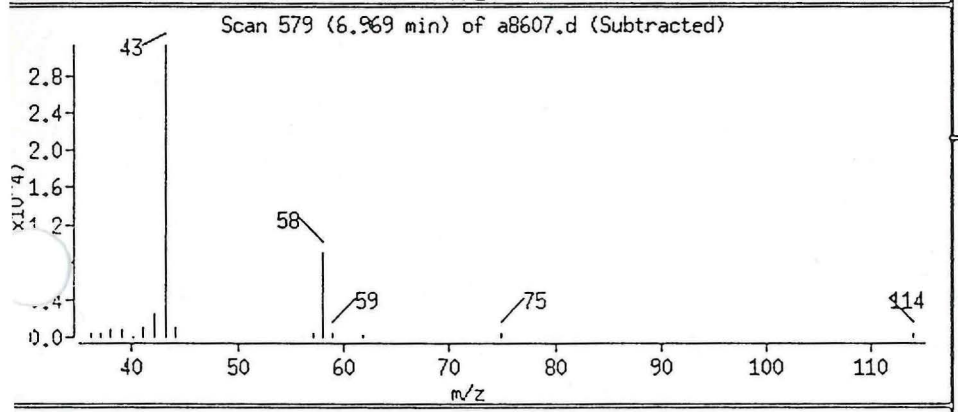
Column phase: DB-624 75m x 0.53mm

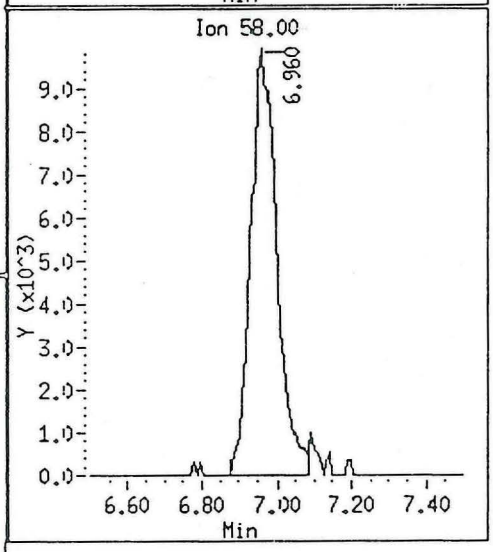
Column diameter: 0.53

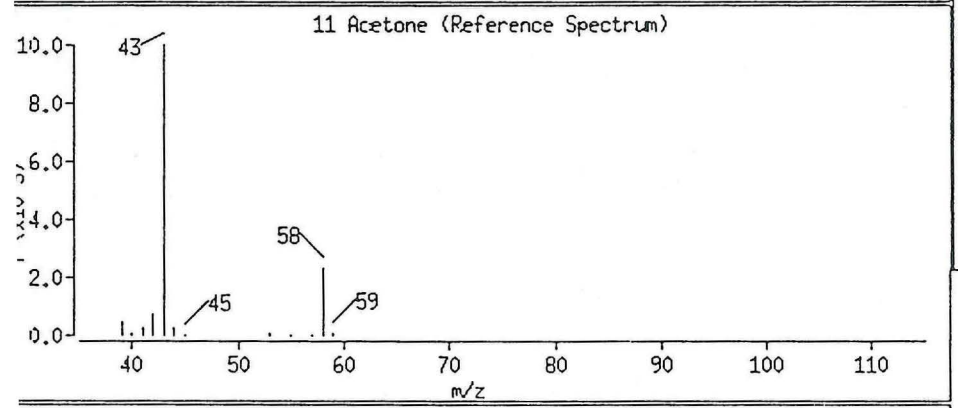
11 Acetone

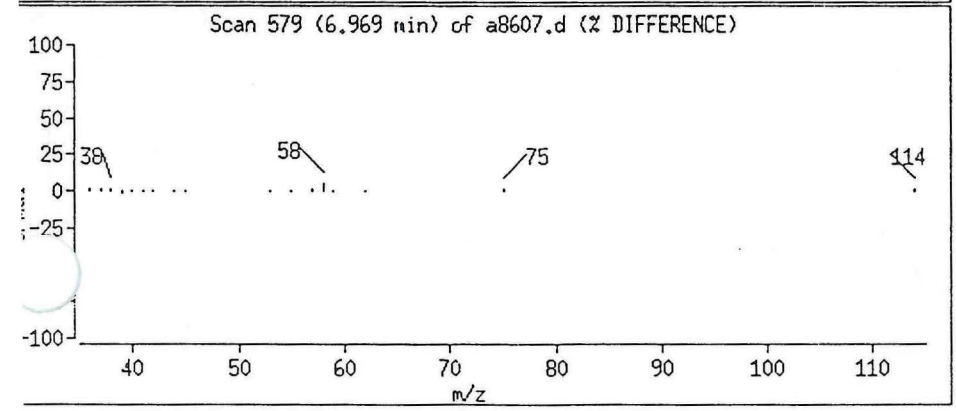












Data File: /chem/msa.i/a070296.b/a8607.d

Date : 02-JUL-96 11:22

Client ID:

Instrument: msa.i

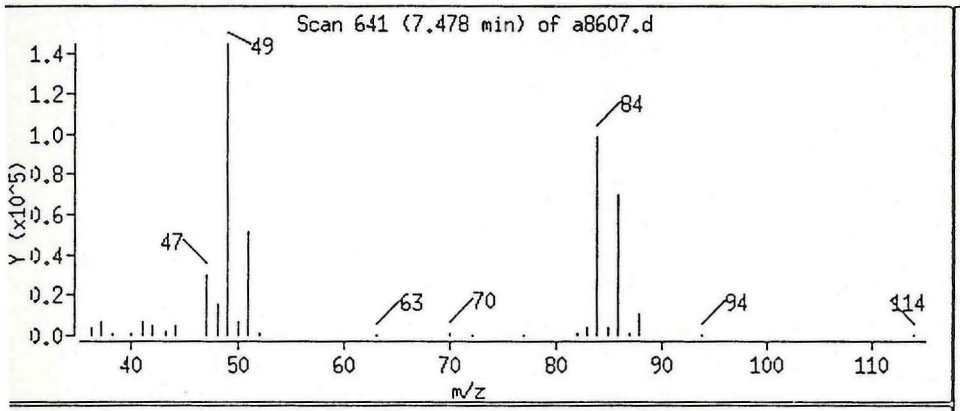
Sample Info: 18221n-a5-w1

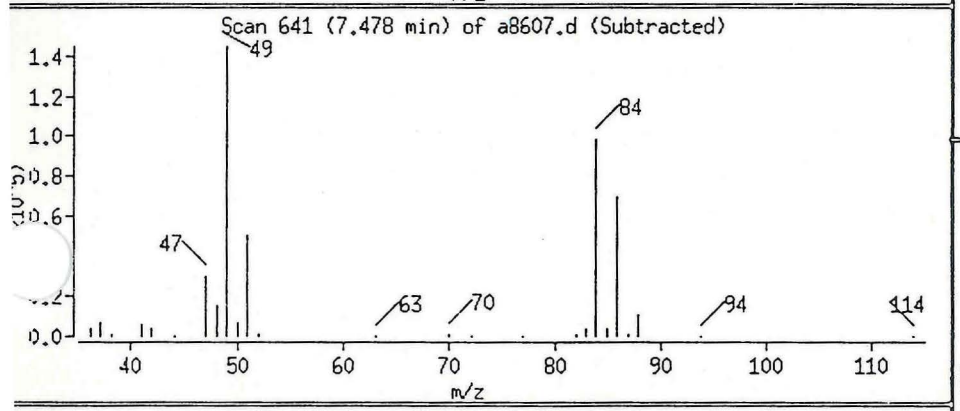
Operator: jk

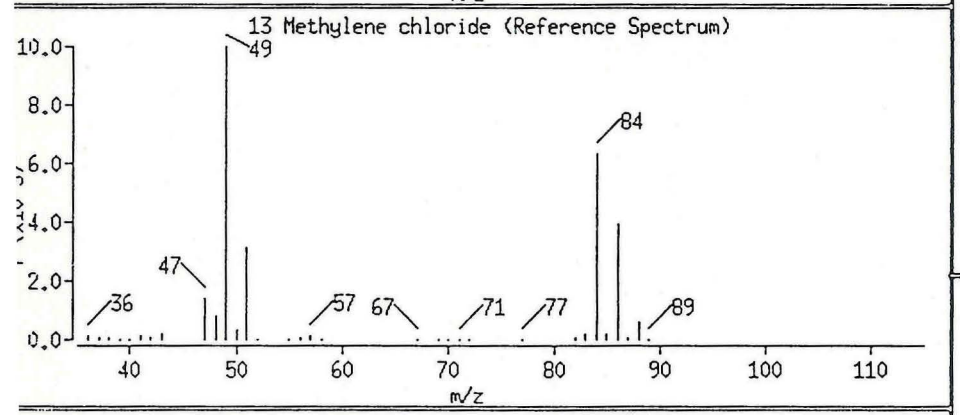
Column phase: DB-624 75m x 0.53mm

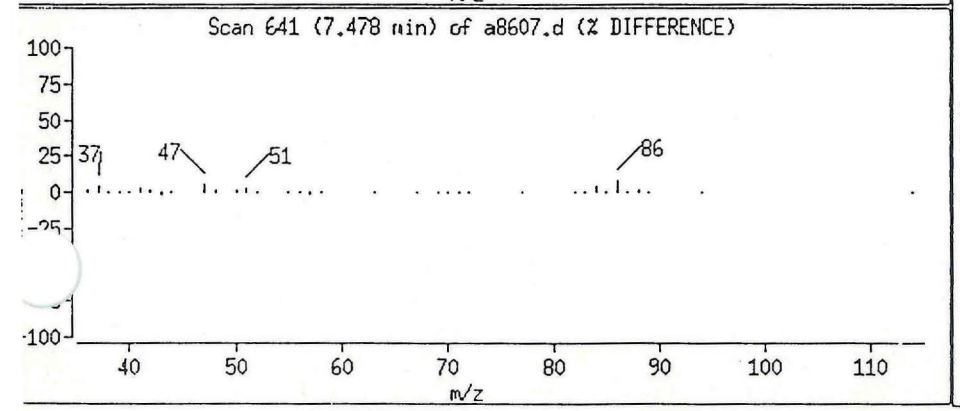
Column diameter: 0.53

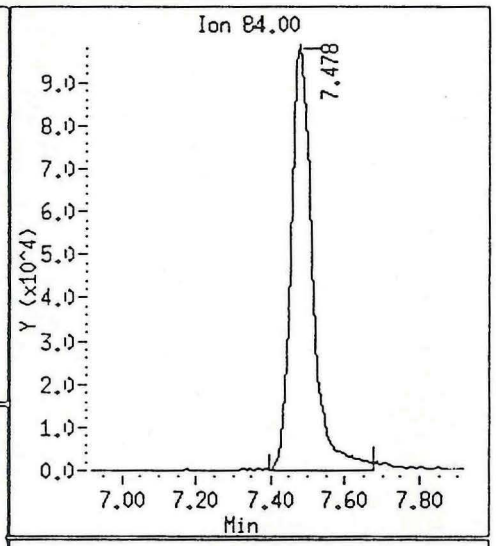
13 Methylene chloride

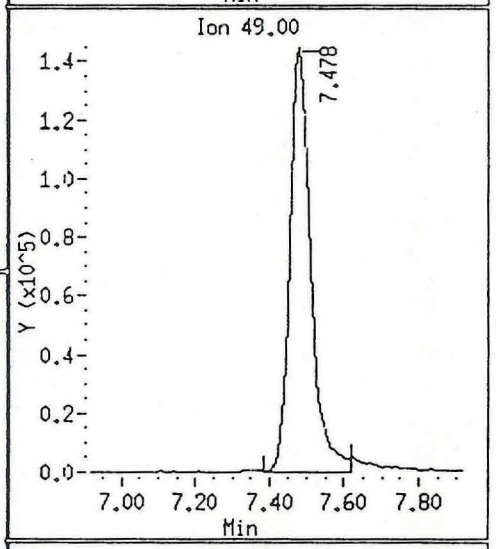


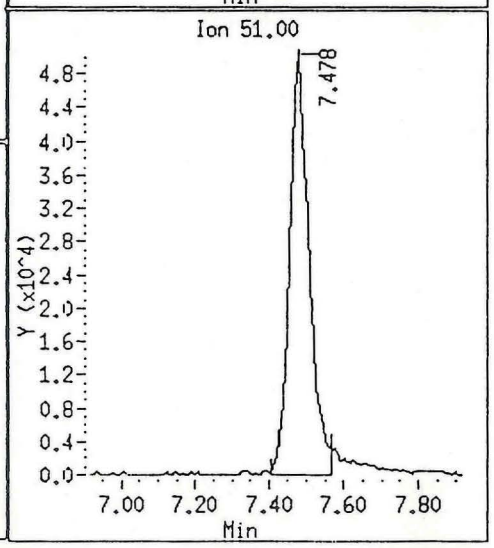












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00064

A5-W2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9924V

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8593

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 7 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	6	B
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

TDS 9-16-93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

00065

EPA SAMPLE NO.

A5-W2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9924V

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8593

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 7 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 7385-10-6	Silane, 9H-fluoren-9-yltrime	19.23	8	JN

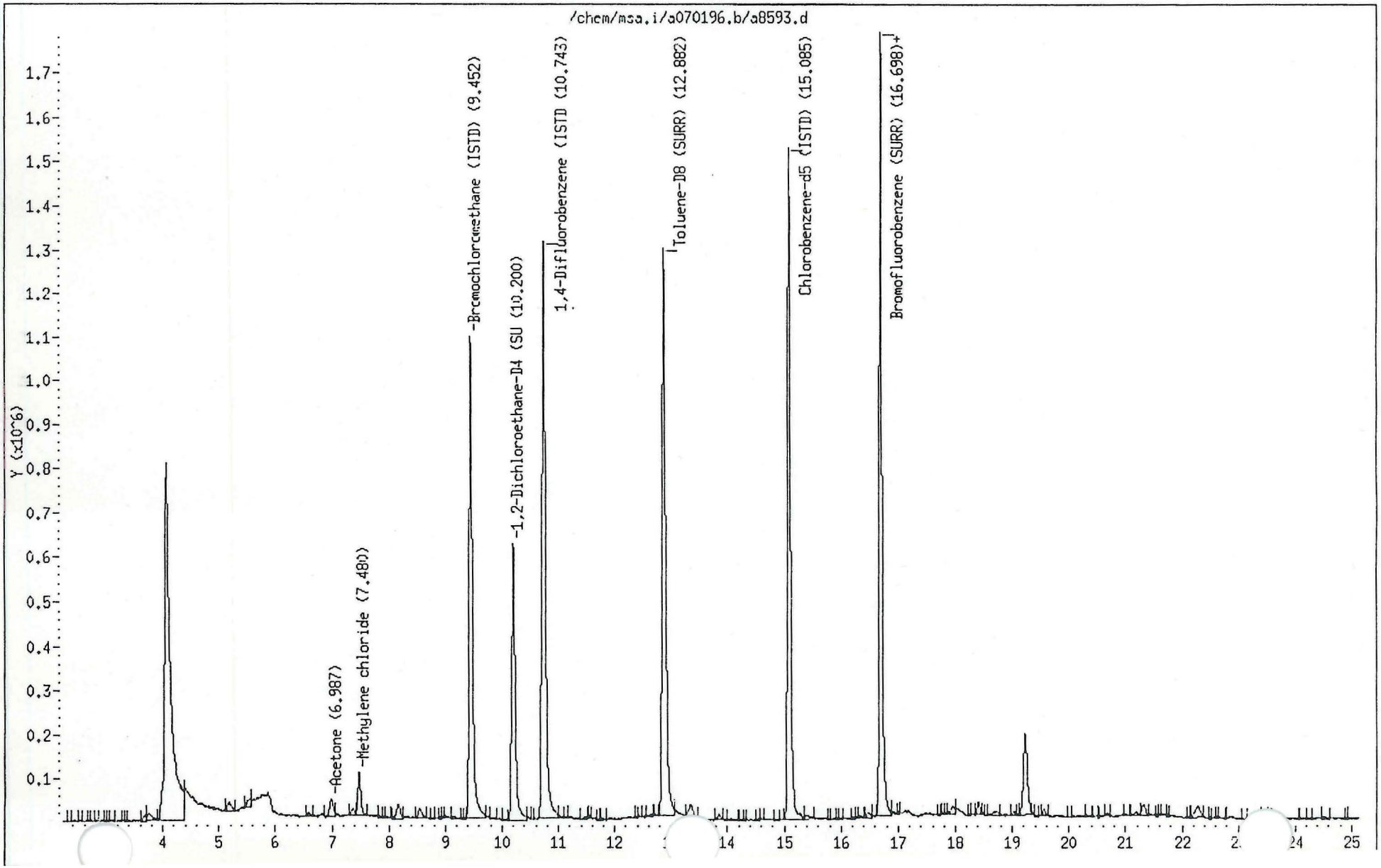
00066

Data File: /chem/msa.i/a070196.b/a8593.d
Date : 01-JUL-96 19:47
Client ID:
Sample Info: 18221n-a5w2

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8593.d
Report Date: 02-Jul-1996 07:40

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070196.b/a8593.d
Lab Smp Id:
Inj Date : 01-JUL-96 19:47
Operator : jk Inst ID: msa.i
Smp Info : 18221n-a5w2
Misc Info : jp9924v,n2v5315,qv,5000,1,5.17,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Als bottle: 11
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
11 Acetone	43.00	6.987	6.987	(0.739)	131616	8.61	8.61
Methylene chloride	84.00	7.488	7.408	(0.792)	89436	5.42	5.42
Bromochloromethane (ISTD)	128.00	9.460	9.418	(1.000)	514615	50.0	
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.200	10.177	(1.078)	814067	47.7	47.7
32 1,4-Difluorobenzene (ISTD)	114.00	10.735	10.713	(1.000)	2060559	50.0	
41 Toluene-D8 (SURR)	98.00	12.882	12.859	(0.853)	1779177	47.8	47.8
50 Chlorobenzene-d5 (ISTD)	117.00	15.094	15.078	(1.000)	1526340	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.698	16.697	(1.106)	1167818	47.3	47.3(QM)

C Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.

Data File: /chem/msa.i/a070196.b/a8593.d

Date : 01-JUL-96 19:47

Client ID:

Sample Info: 18221n-a5w2

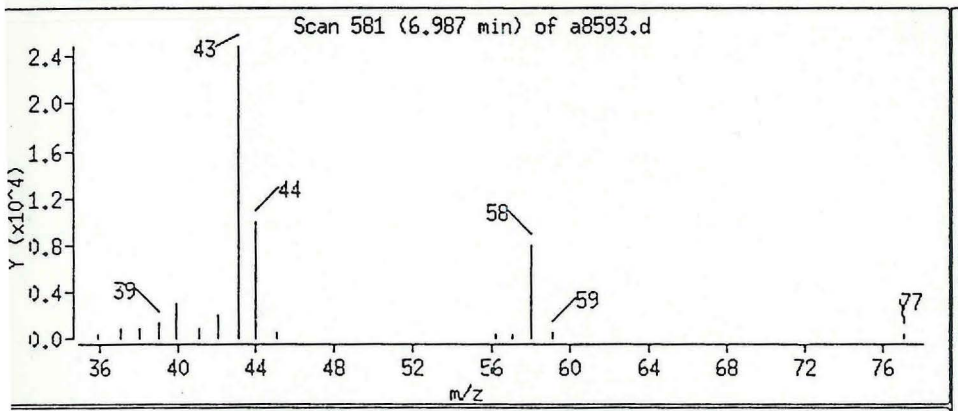
Instrument: msa.i

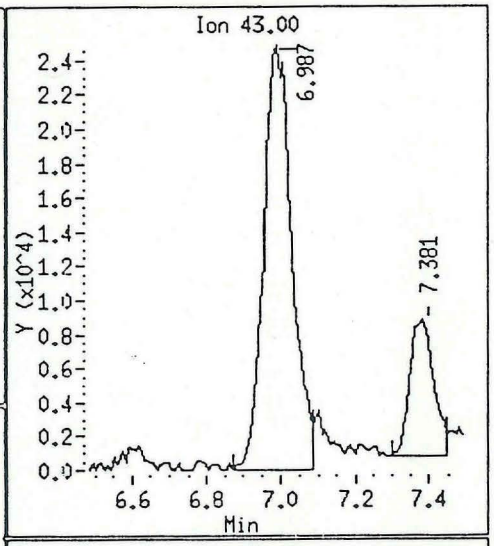
Operator: jk

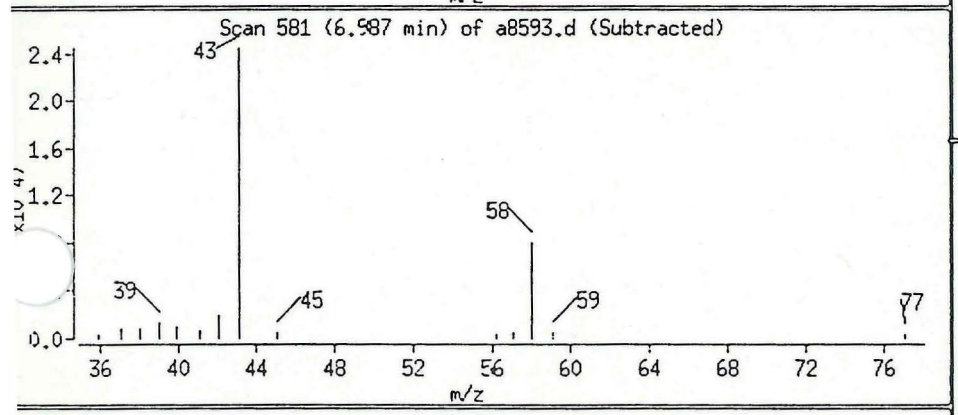
Column phase: DB-624 75m x 0.53mm

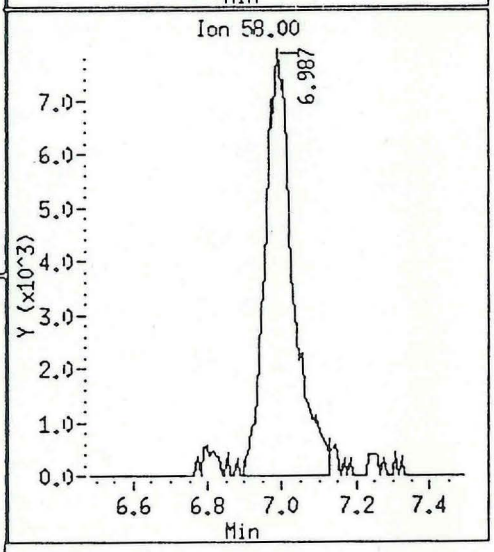
Column diameter: 0.53

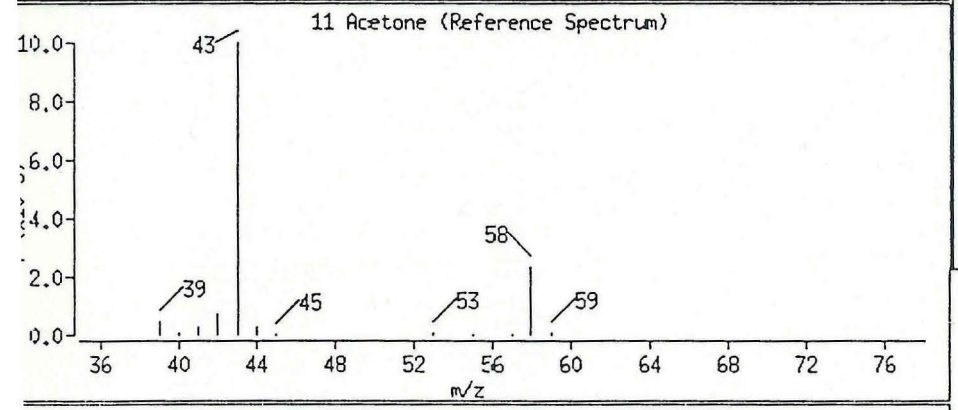
11 Acetone

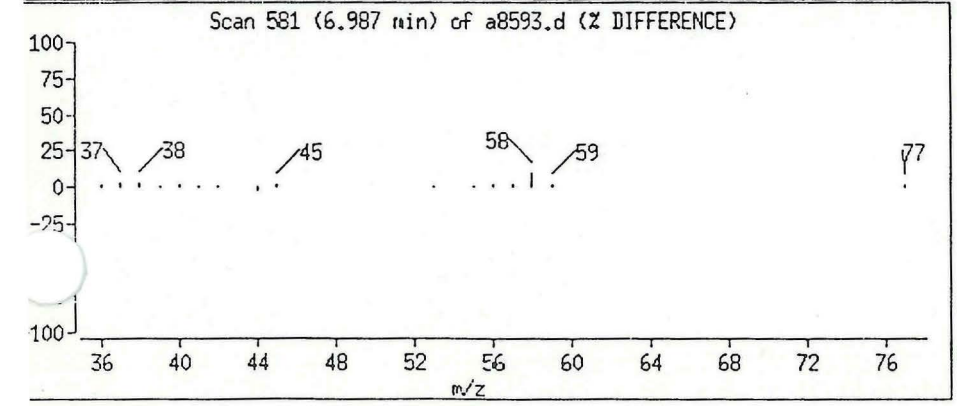












Data File: /chem/msa.i/a070196.b/a8593.d

Date : 01-JUL-96 19:47

Client ID:

Instrument: msa.i

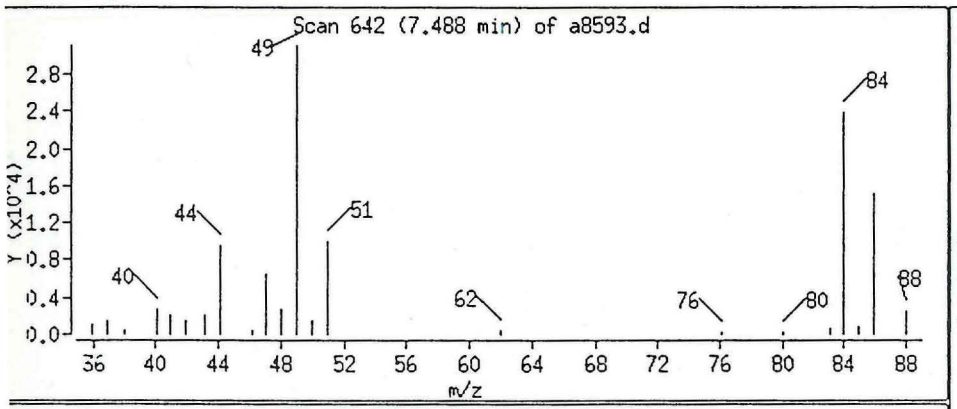
Sample Info: 18221n-a5w2

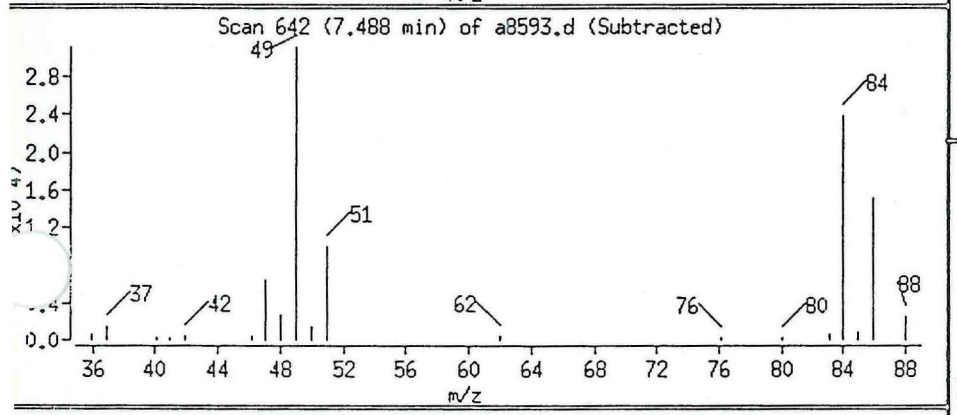
Operator: jk

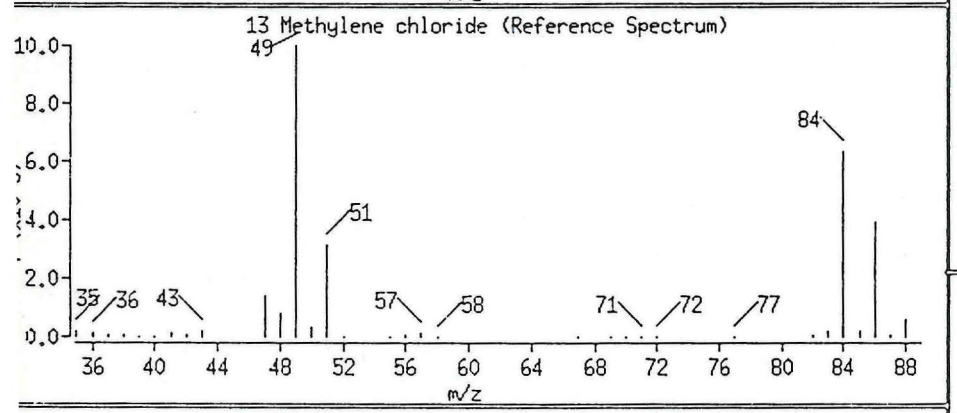
Column phase: DB-624 75m x 0.53mm

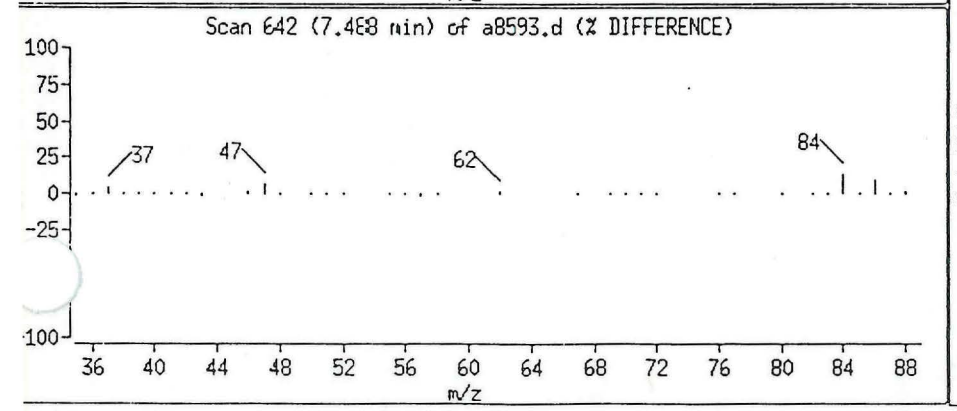
Column diameter: 0.53

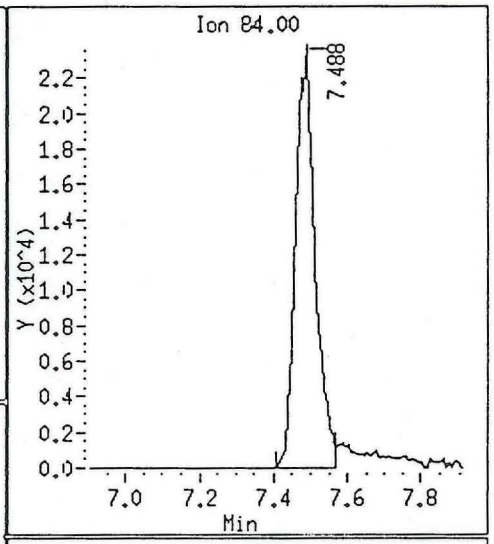
13 Methylene chloride

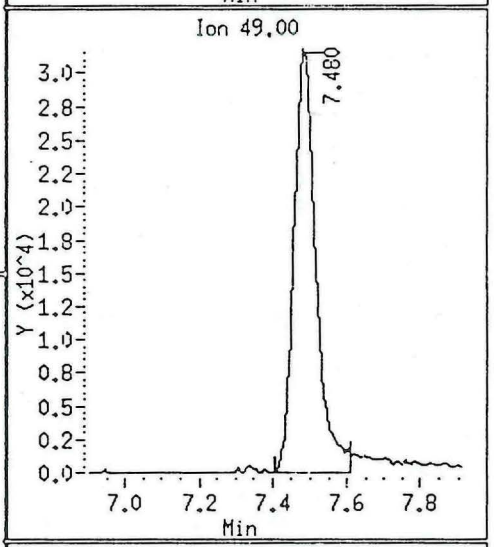


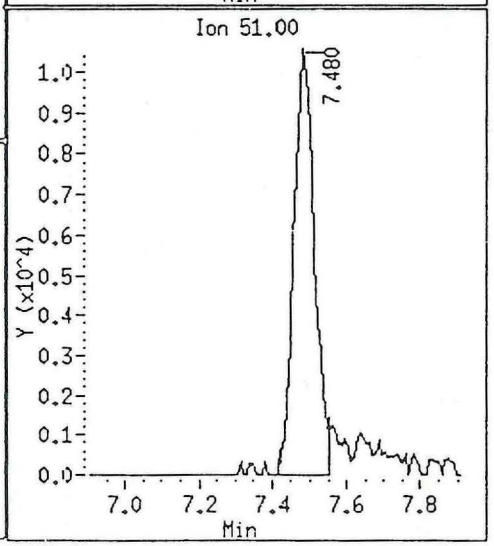












Data File: /chem/msa.i/a070196.b/a8593.d

Date : 01-JUL-96 19:47

Client ID:

Instrument: msa.i

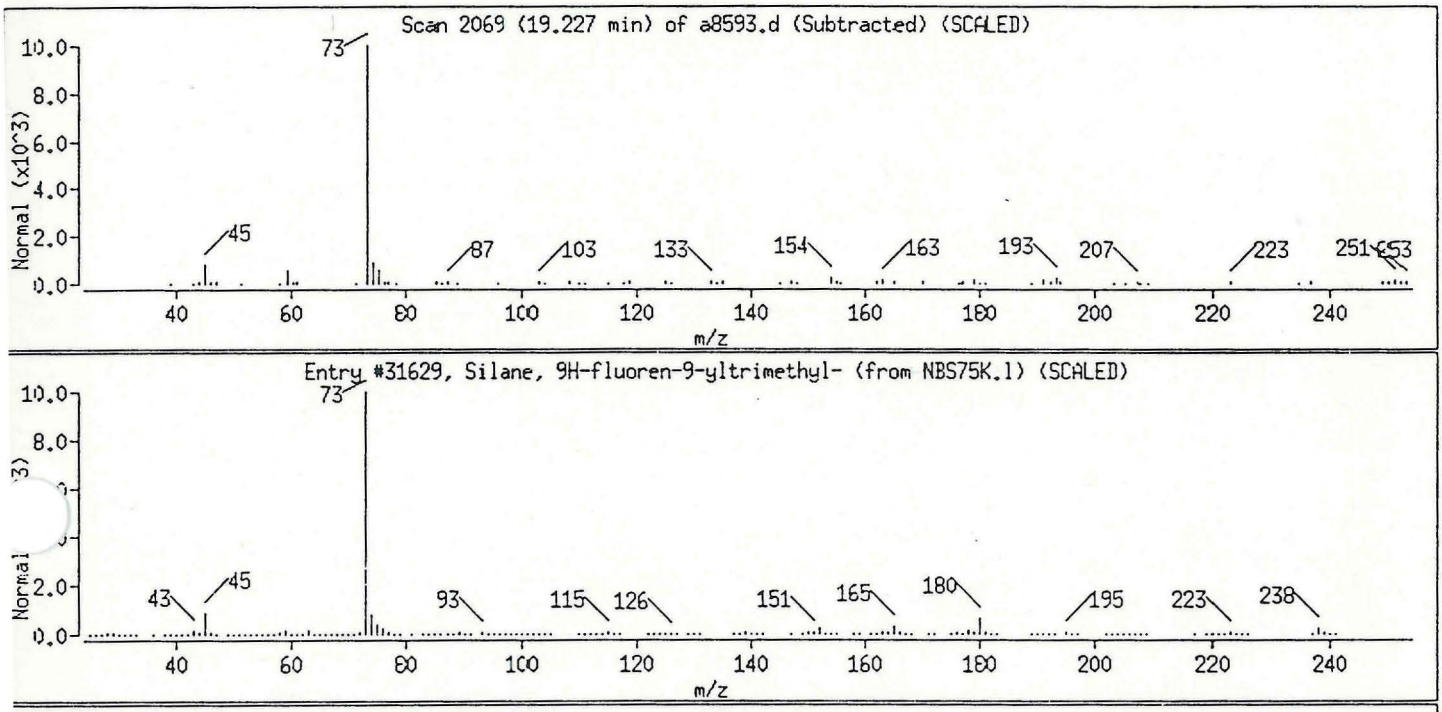
Sample Info: 18221n-a5w2

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Silane, 9H-fluoren-9-yltrimethyl-	7385-10-6	NBS75K.l	31629	23	C16H18Si	238



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

00071

EPA SAMPLE NO.

A5-W3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9925V

Sample wt/vol: 5.31 (g/mL) G Lab File ID: A8594

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 4 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	8	B
67-64-1	Acetone	6	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U 9-16-96
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00072 A5-W3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9925V

Sample wt/vol: 5.31 (g/mL) G Lab File ID: A8594

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 4 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

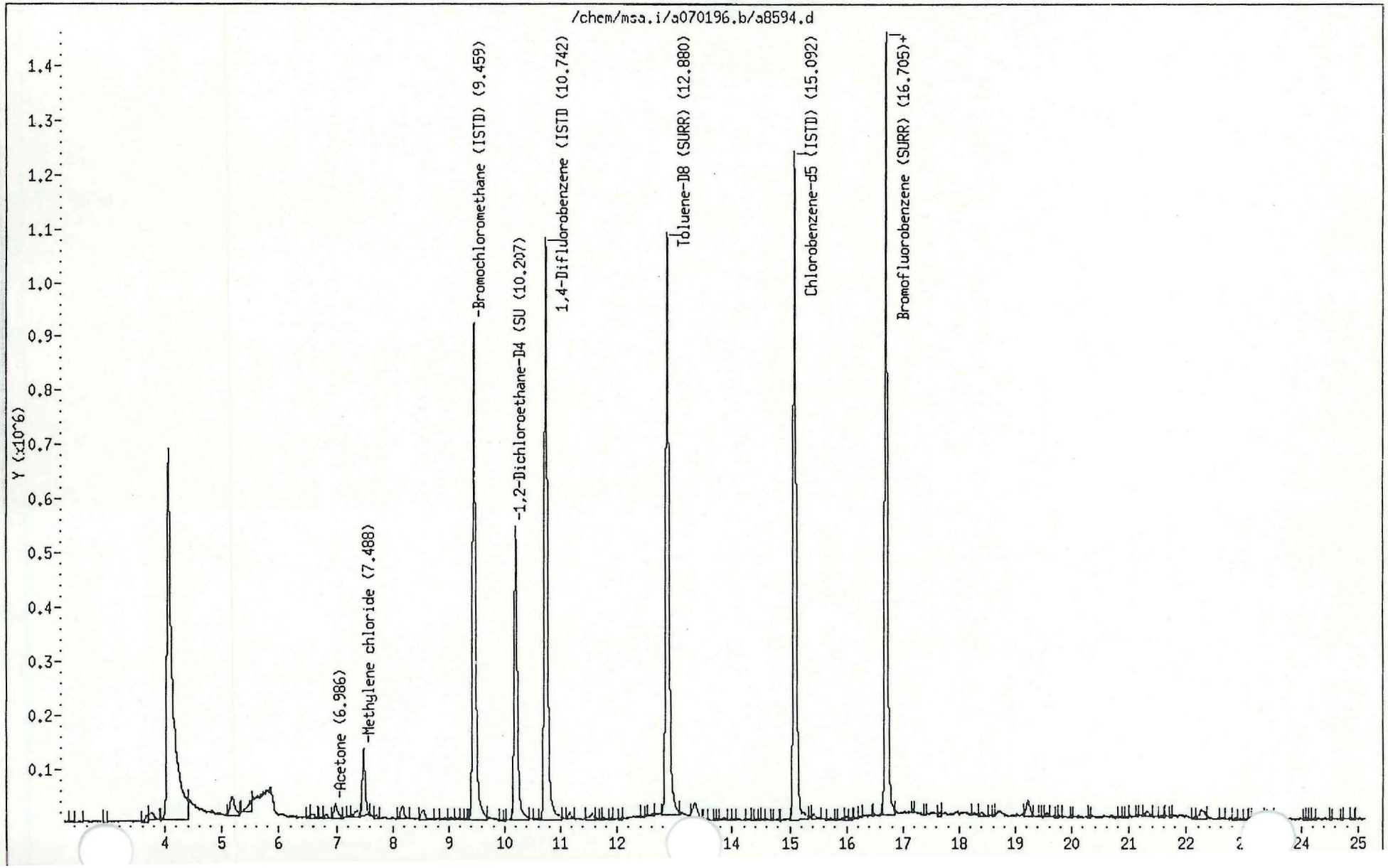
00073

Data File: /chem/msa.i/a070196.b/a8594.d
Date : 01-JUL-96 20:22
Client ID:
Sample Info: 18221n-a5-w3

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8594.d
Report Date: 02-Jul-1996 07:41

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070196.b/a8594.d
Lab Smp Id:
Inj Date : 01-JUL-96 20:22
Operator : jk Inst ID: msa.i
Smp Info : 18221n-a5-w3
Misc Info : jp9925v,n2v5315,qv,5000,1,5.31,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Vials bottle: 12
Vial Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
11 Acetone	43.00	6.986	6.987	(0.739)	82406	6.49	6.49
Methylene chloride	84.00	7.479	7.408	(0.791)	111991	8.18	8.18
Bromochloromethane (ISTD)	128.00	9.459	9.418	(1.000)	427344	50.0	
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.199	10.177	(1.078)	714816	50.4	50.4
32 1,4-Difluorobenzene (ISTD)	114.00	10.742	10.713	(1.000)	1611403	50.0	
41 Toluene-D8 (SURR)	98.00	12.880	12.859	(0.853)	1467000	49.5	49.5
50 Chlorobenzene-d5 (ISTD)	117.00	15.092	15.078	(1.000)	1215384	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.705	16.697	(1.107)	949902	48.3	48.3(QM)

Q Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.

Data File: /chem/msa.i/a070196.b/a8594.d

Date : 01-JUL-96 20:22

Client ID:

Sample Info: 18221n-a5-w3

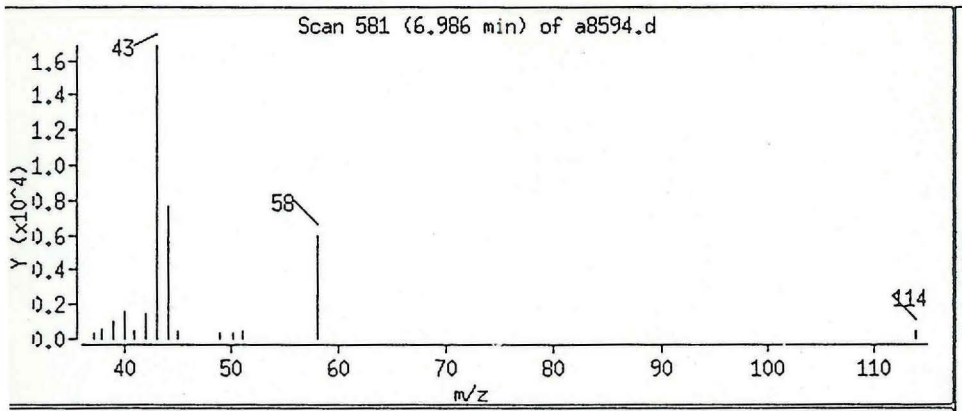
Instrument: msa.i

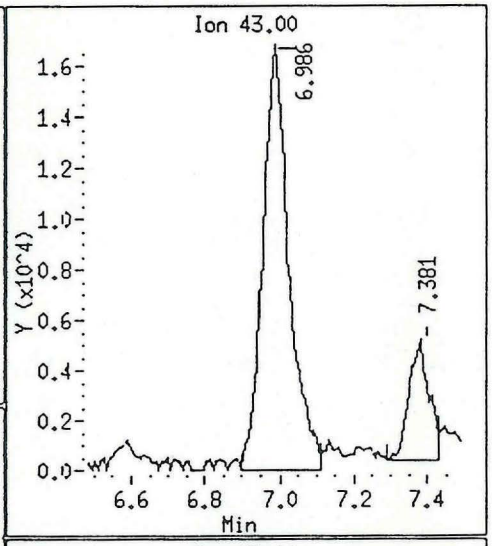
Operator: jk

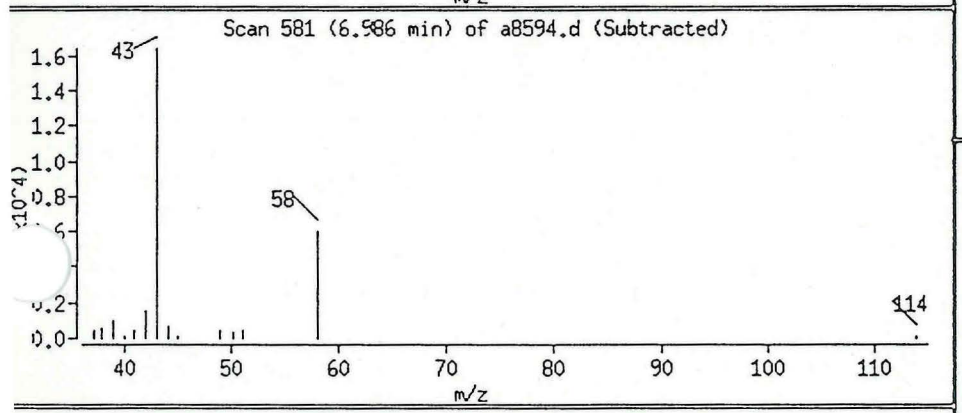
Column phase: DB-624 75m x 0.53mm

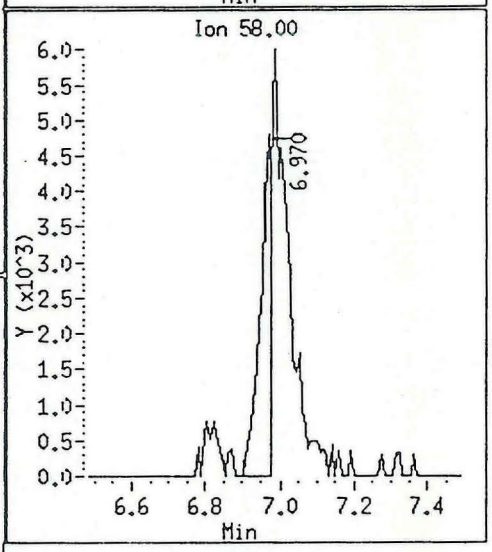
Column diameter: 0.53

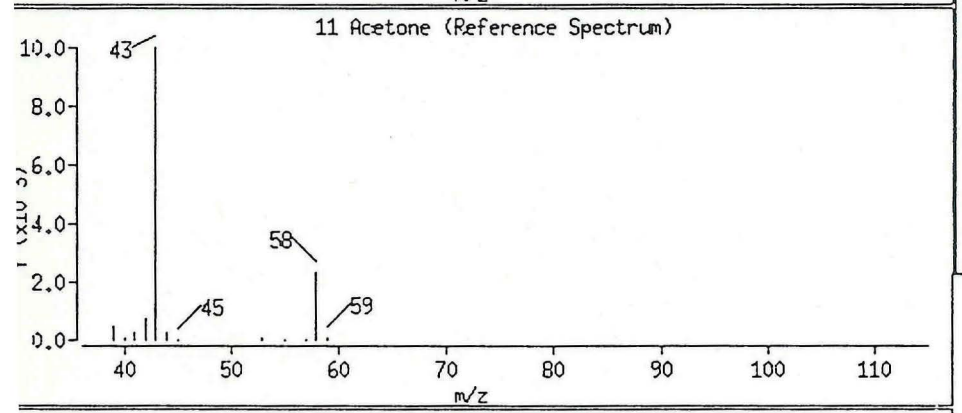
11 Acetone

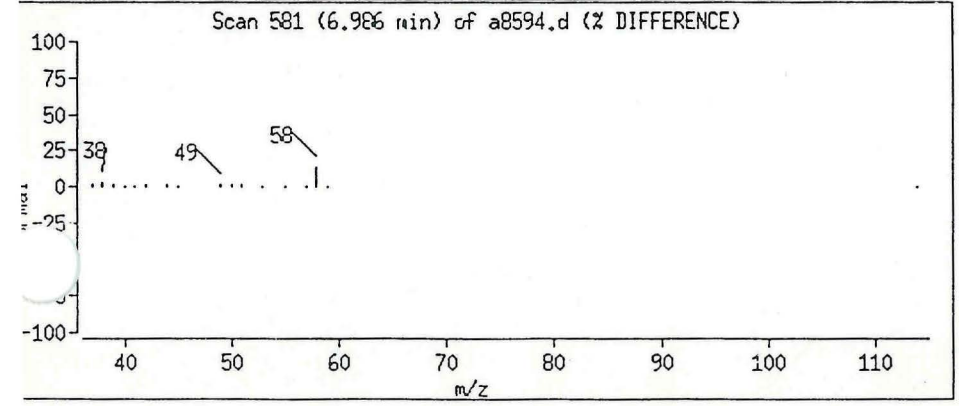












Data File: /chem/msa.i/a070196.b/a8594.d

Date : 01-JUL-96 20:22

Client ID:

Sample Info: 18221n-a5-w3

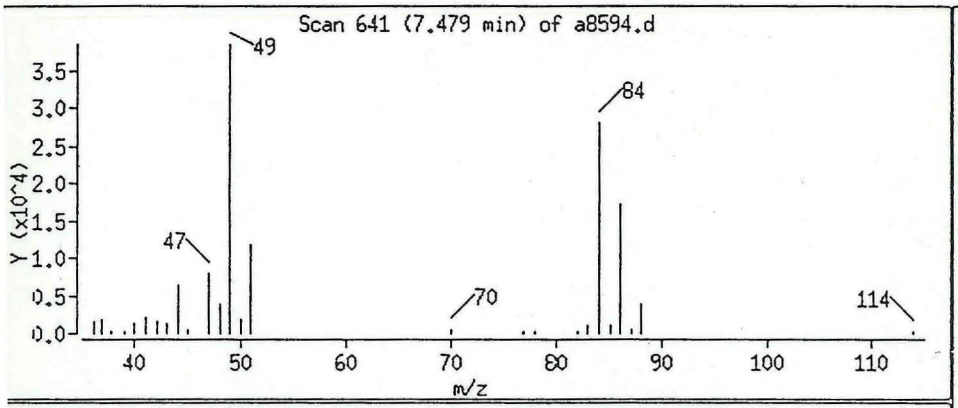
Instrument: msa.i

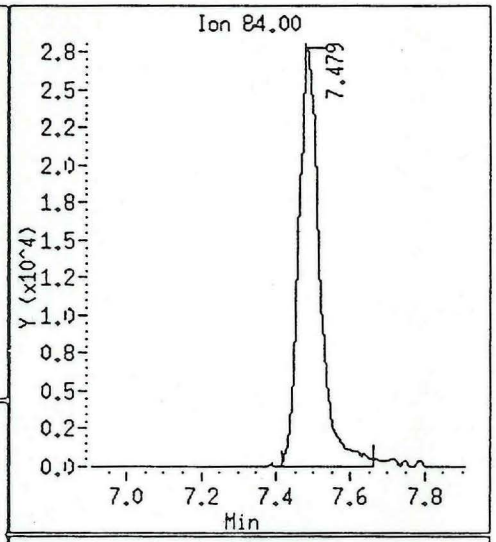
Operator: jk

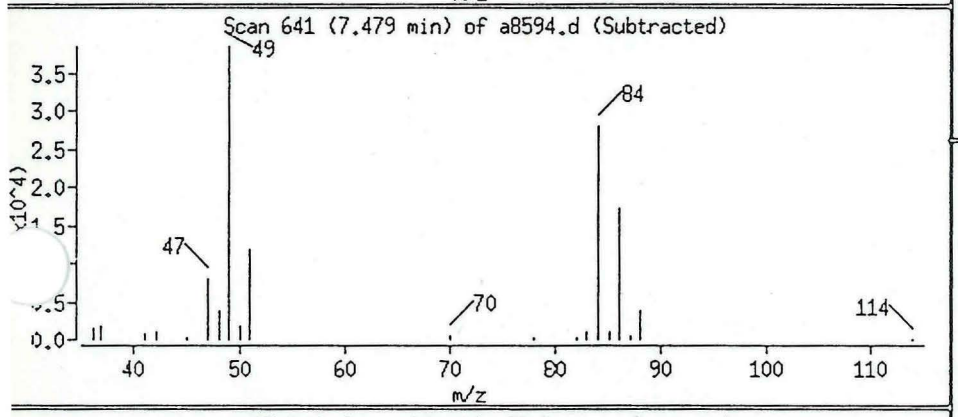
Column phase: DB-624 75m x 0.53mm

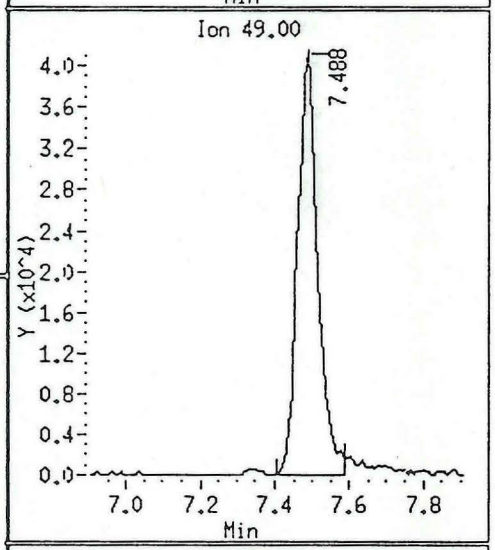
Column diameter: 0.53

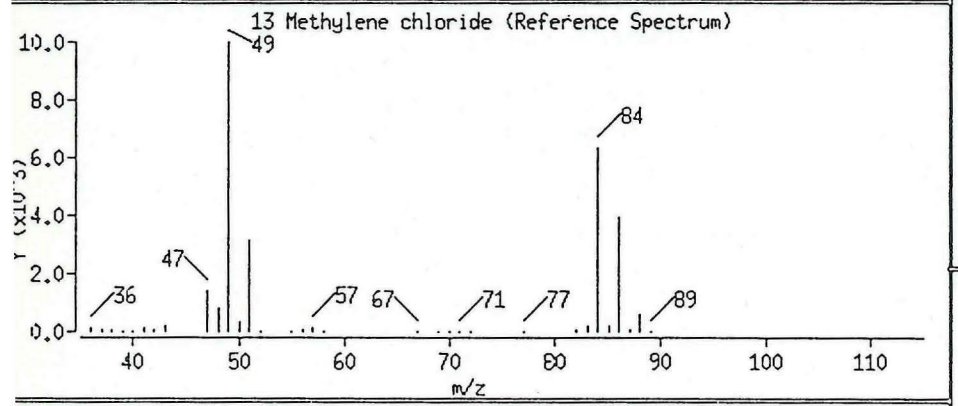
13 Methylene chloride

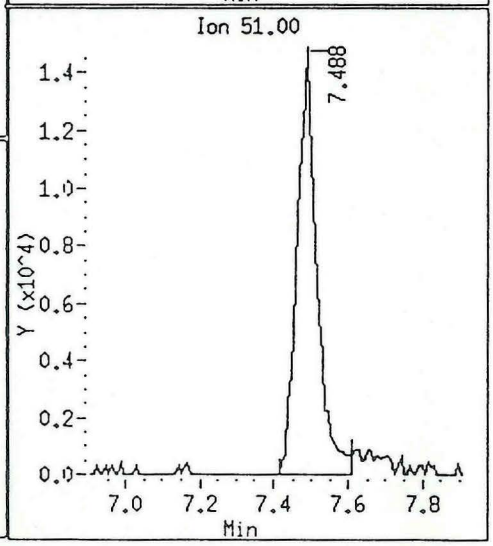


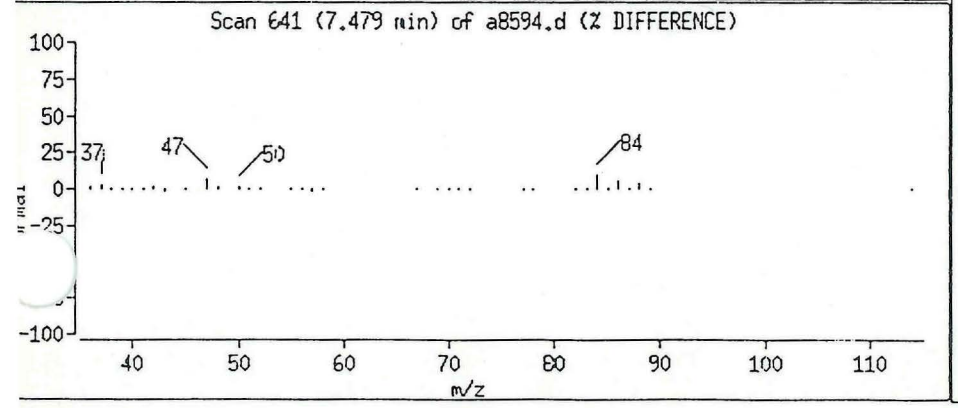












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

00077

EPA SAMPLE NO.

DUP-001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9916V

Sample wt/vol: 5.35 (g/mL) G Lab File ID: A8568

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 23 Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	5	BJ
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
156-60-5	1,2-Trans-dichloroethylene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
75-27-4	Bromodichloromethane	6	U

10/19-16-96

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00078

EPA SAMPLE NO.

DUP-001

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9916V

Sample wt/vol: 5.35 (g/mL) G Lab File ID: A8568

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 23 Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

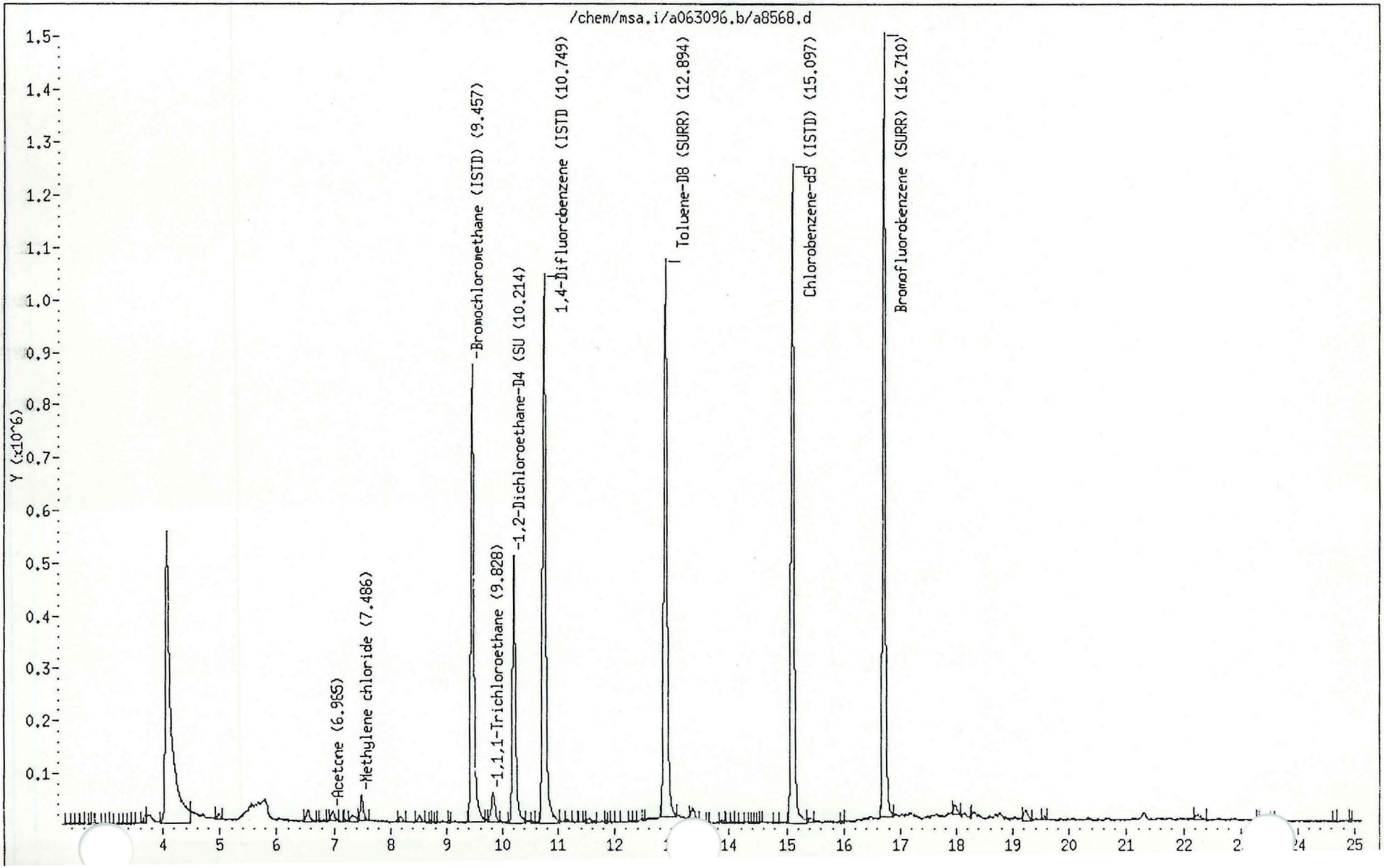
00079

Data File: /chem/msa.i/a063096.b/a8568.d
Date : 30-JUN-96 22:36
Client ID:
Sample Info: 18221n dup-001

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a063096.b/a8568.d
Report Date: 01-Jul-1996 06:58

OHM Analytical Division & TIC

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a063096.b/a8568.d
Lab Smp Id:
Inj Date : 30-JUN-96 22:36
Operator : jk Inst ID: msa.i
Smp Info : 18221n dup-001
Misc Info : jp9916v,n2v5315,qv,5000,1,5.35,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 01-Jul-1996 06:56 glenn Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 13
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MC 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.977	6.979	(0.737)	55036	4.29	4.29
Methylene chloride	84.00	7.486	7.425	(0.791)	39503	2.38	2.38
23 Bromochloromethane (ISTD)	128.00	9.466	9.428	(1.000)	418222	50.0	(Q)
25 1,1,1-Trichloroethane	97.00	9.828	9.791	(0.914)	77868	4.18	4.18
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.206	10.180	(1.078)	679552	46.6	46.6
32 1,4-Difluorobenzene (ISTD)	114.00	10.757	10.716	(1.000)	1533480	50.0	
41 Toluene-D8 (SURR)	98.00	12.894	12.863	(0.854)	1410244	45.6	45.6
50 Chlorobenzene-d5 (ISTD)	117.00	15.097	15.075	(1.000)	1239975	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.701	16.686	(1.106)	980843	47.3	47.3

C Flag Legend

- Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a063096.b/a8568.d
Date : 30-JUN-96 22:36
Client ID:
Sample Info: 18221n dup-001

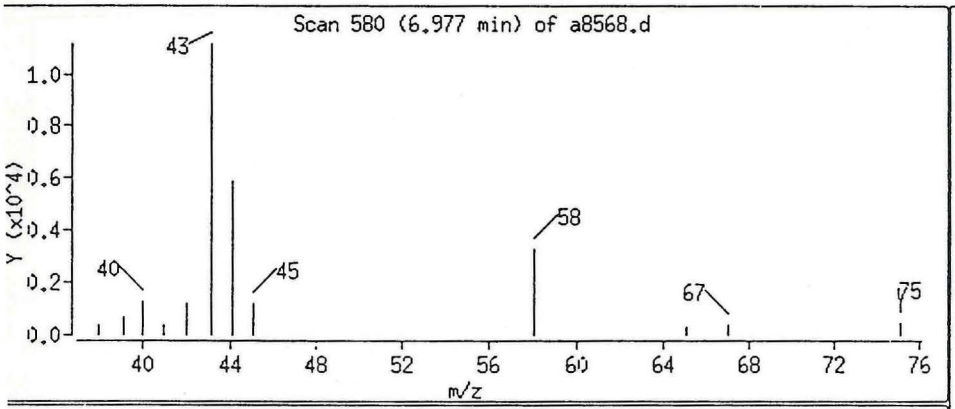
Instrument: msa.i

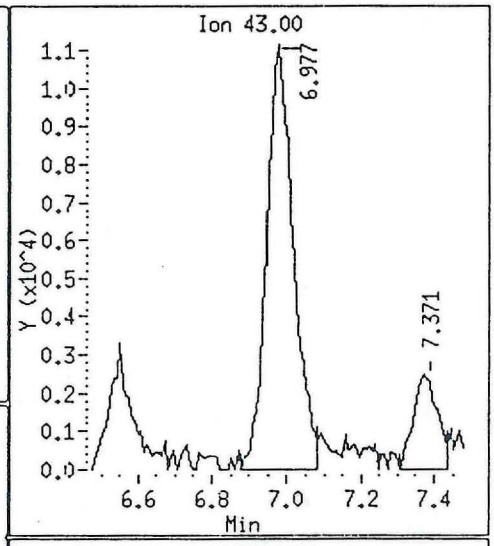
Operator: jk

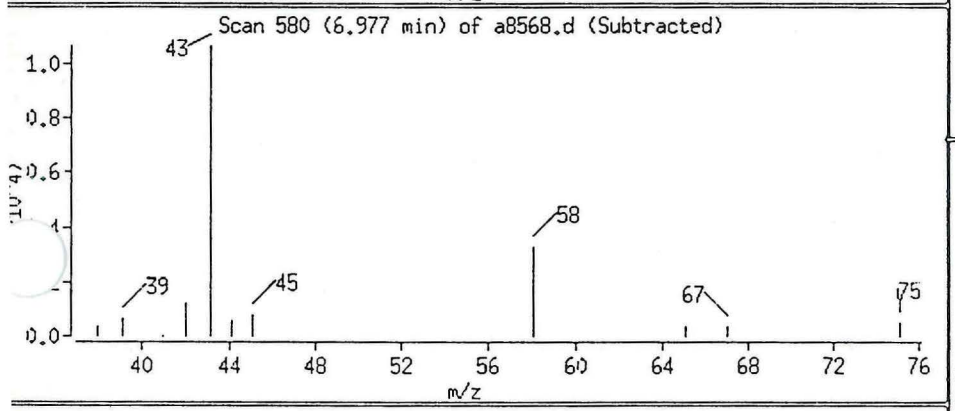
Column phase: DB-624 75m x 0.53mm

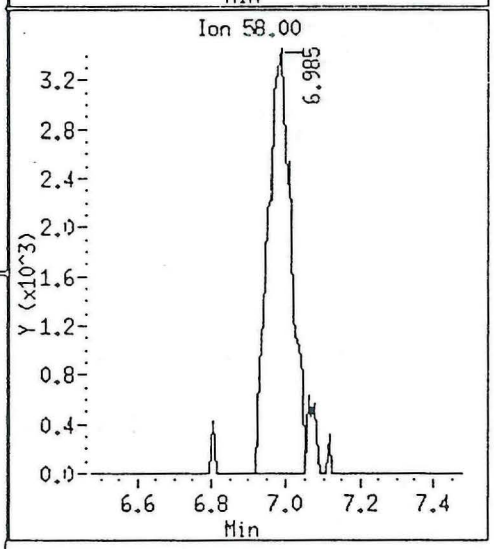
Column diameter: 0.53

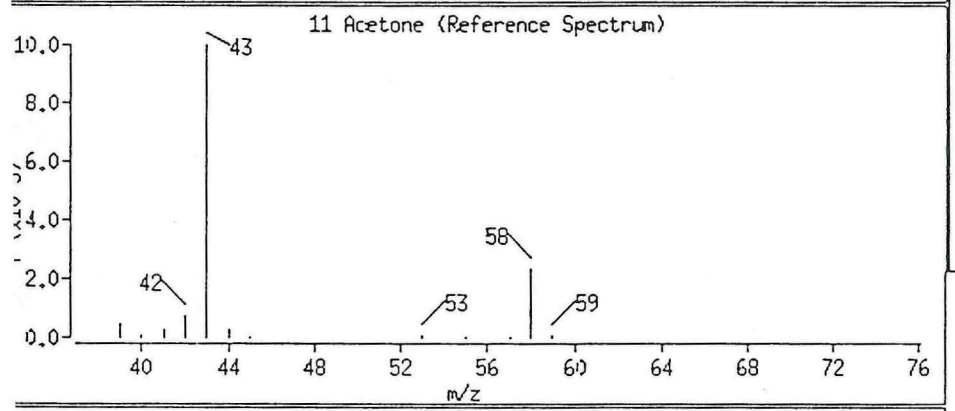
11 Acetone

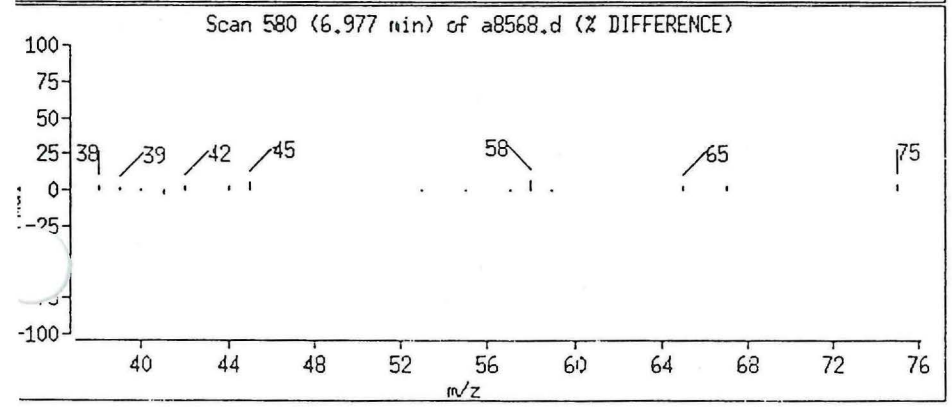












Data File: /chem/msa.i/a063096.b/a8568.d

Date : 30-JUN-96 22:36

Client ID:

Sample Info: 18221n dup-001

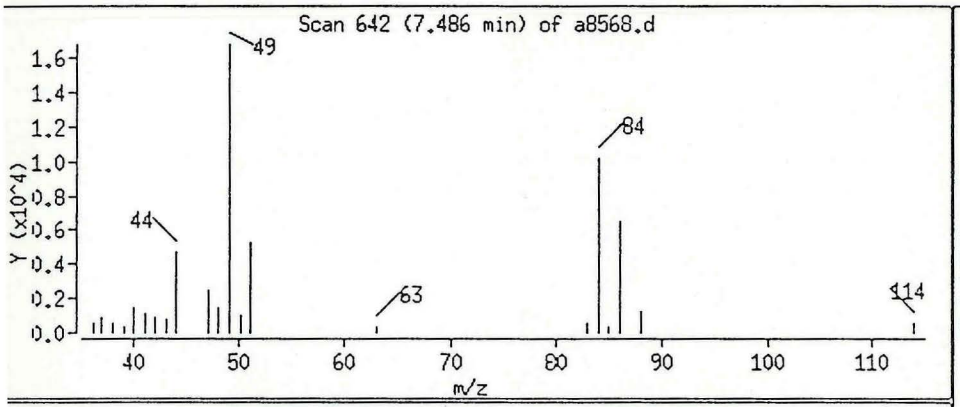
Instrument: msa.i

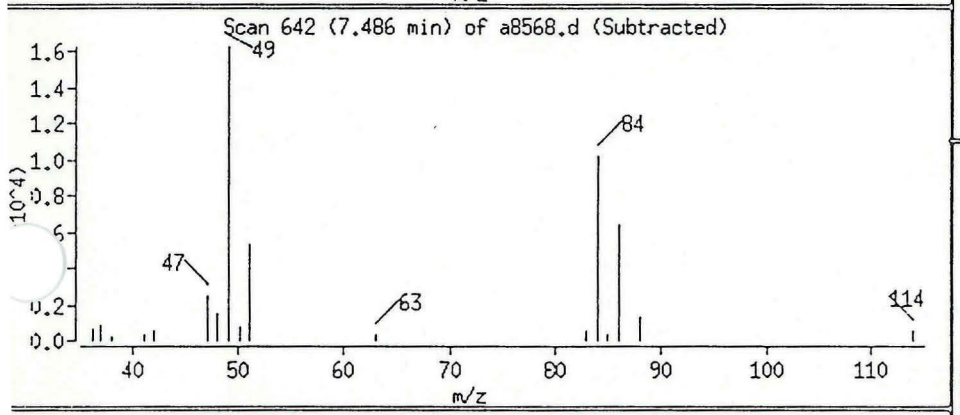
Operator: jk

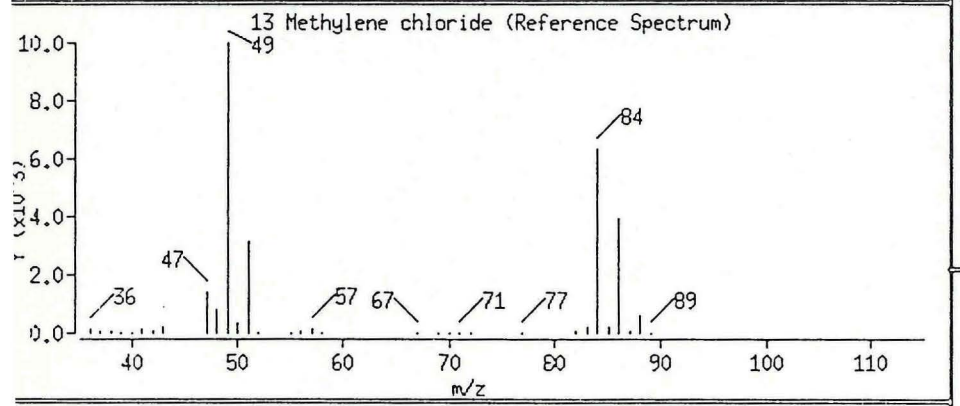
Column phase: DB-624 75m x 0.53mm

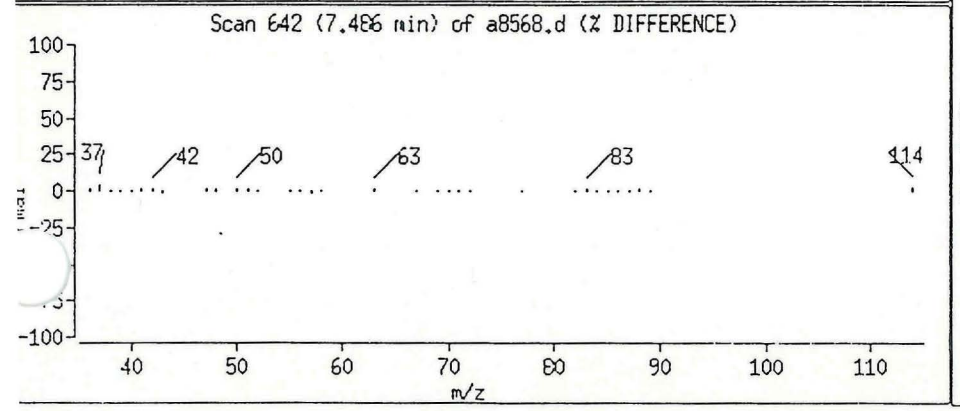
Column diameter: 0.53

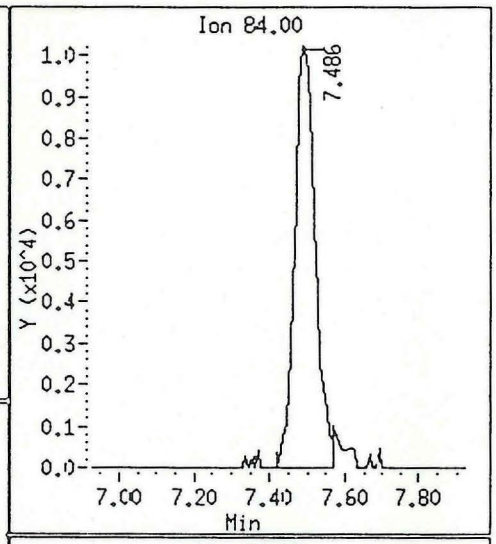
13 Methylene chloride

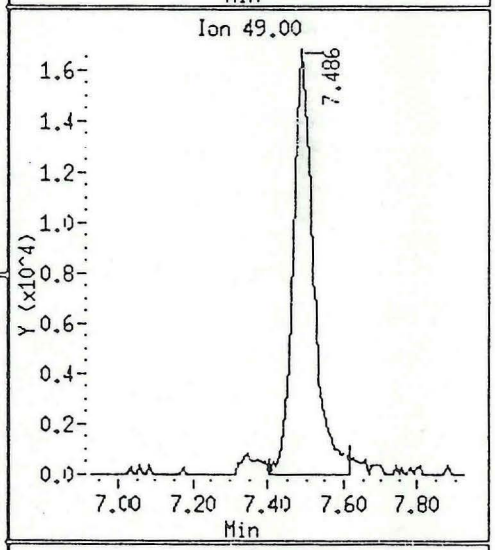


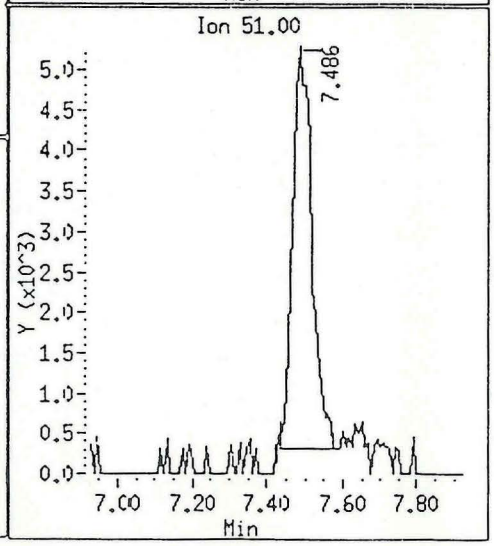












Data File: /chem/msa.i/a063096.b/a8568.d

Date : 30-JUN-96 22:36

Client ID:

Instrument: msa.i

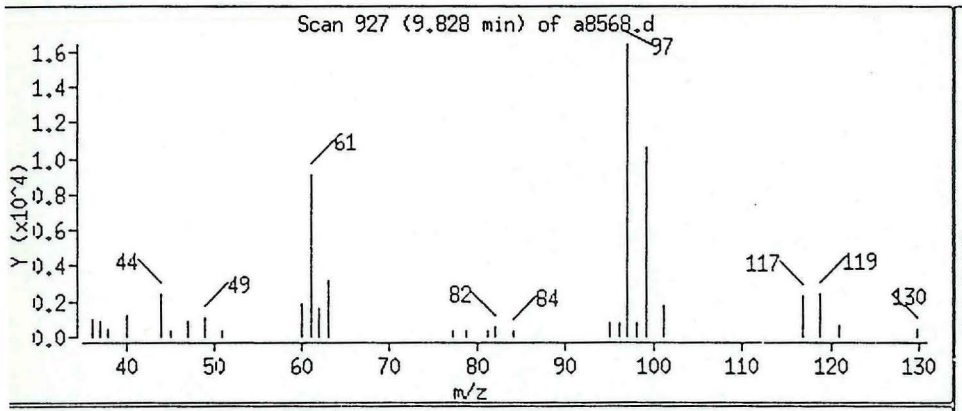
Sample Info: 18221n dup-001

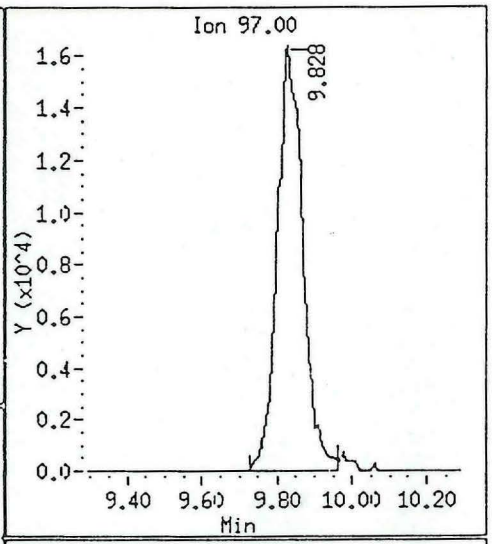
Operator: jk

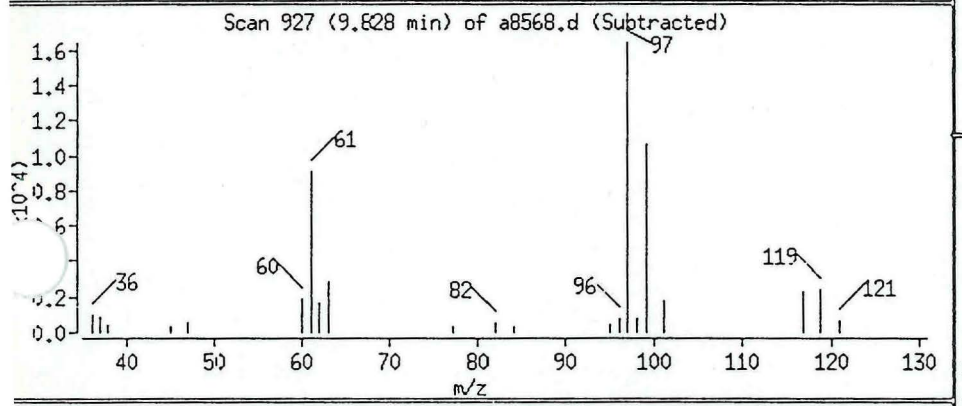
Column phase: DB-624 75m x 0.53mm

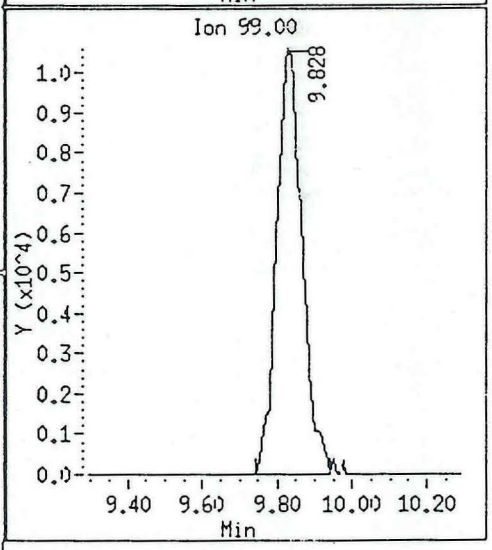
Column diameter: 0.53

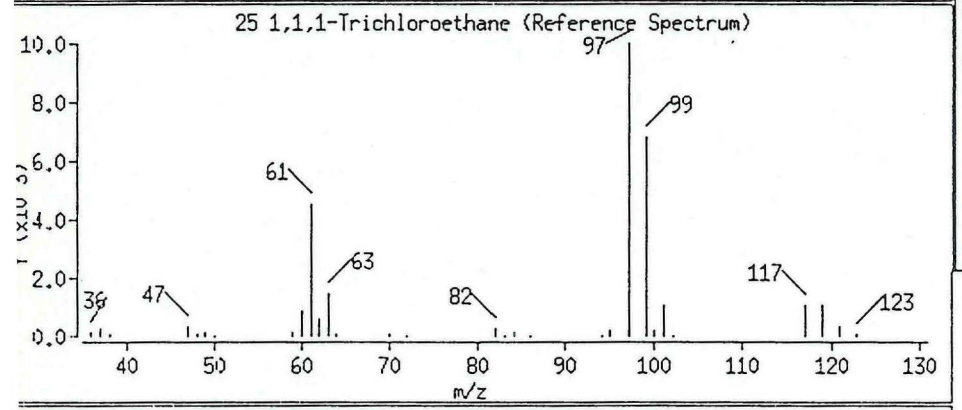
25 1,1,1-Trichloroethane

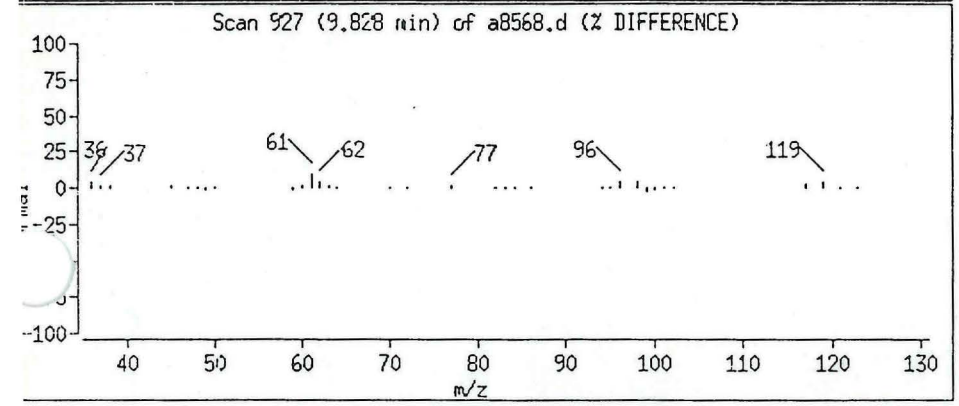












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00084

DUP-002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9917V

Sample wt/vol: 5.16 (g/mL) G Lab File ID: A8605

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 14 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	42	B
67-64-1	Acetone	18	
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	4	J
156-60-5	1,2-Trans-dichloroethylene	6	U JB 9-16-96
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00085

EPA SAMPLE NO.

DUP-002

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9917V

Sample wt/vol: 5.16 (g/mL) G Lab File ID: A8605

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 14 Date Analyzed: 07/02/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

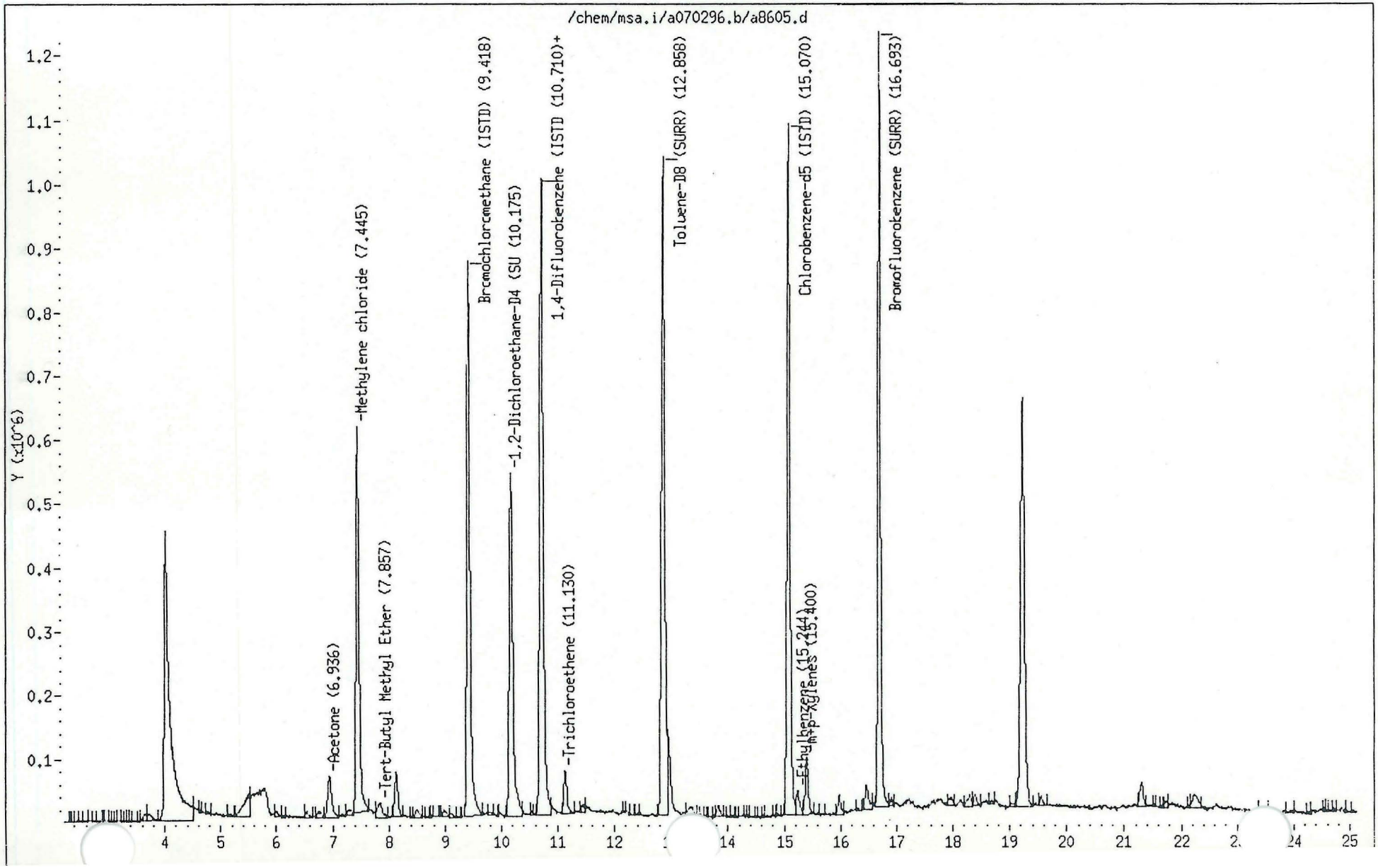
00086

Data File: /chem/msa.i/a070296.b/a8605.d
Date : 02-JUL-96 10:12
Client ID:
Sample Info: 18221n-dup002

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070296.b/a8605.d
Report Date: 02-Jul-1996 13:13

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

+ TIC OK

Data file : /chem/msa.i/a070296.b/a8605.d
Lab Smp Id:
Inj Date : 02-JUL-96 10:12
Operator : jk Inst ID: msa.i
Smp Info : 18221n-dup002
Misc Info : jp9917v,n2v53~~19~~15,qv,5000,1,5.16,5.0,960702
Comment :
Method : /chem/msa.i/a070296.b/061896_heata.m
Meth Date : 02-Jul-1996 13:12 glenn Quant Type: ISTD
Cal Date : 02-JUL-96 08:47 Cal File: a8603.d
Als bottle: 11
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

GLC 7/3

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.936	6.997	(0.736)	219445	15.9	15.9
Methylene chloride	84.00	7.445	7.417	(0.790)	542899	37.6	37.6
16 Tert-Butyl Methyl Ether	73.00	7.857	7.903	(0.833)	41538	1.40	~~1.40(Q)~~ ms
23 Bromochloromethane (ISTD)	128.00	9.426	9.444	(1.000)	417744	50.0	
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.175	10.187	(1.079)	681499	49.3	49.3
32 1,4-Difluorobenzene (ISTD)	114.00	10.710	10.732	(1.000)	1507125	50.0	
33 Trichloroethene	130.00	11.130	11.145	(1.039)	43368	3.06	3.06
35 Methyl methacrylate	69.00	10.718	10.897	(1.001)	55239	4.28	~~3.30(Q)~~ ms
41 Toluene-D8 (SURR)	98.00	12.858	12.877	(0.853)	1393352	53.2	53.2
50 Chlorobenzene-d5 (ISTD)	117.00	15.070	15.089	(1.000)	1067243	50.0	
53 Ethylbenzene	106.00	15.236	15.254	(1.011)	13587	1.33	1.33
54 m+p-Xylenes	106.00	15.400	15.420	(1.022)	46010	3.79	3.79
59 Bromofluorobenzene (SURR)	95.00	16.685	16.702	(1.107)	829556	46.5	46.5

C Flag Legend

- Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a070296.b/a8605.d

Date : 02-JUL-96 10:12

Client ID:

Instrument: msa.i

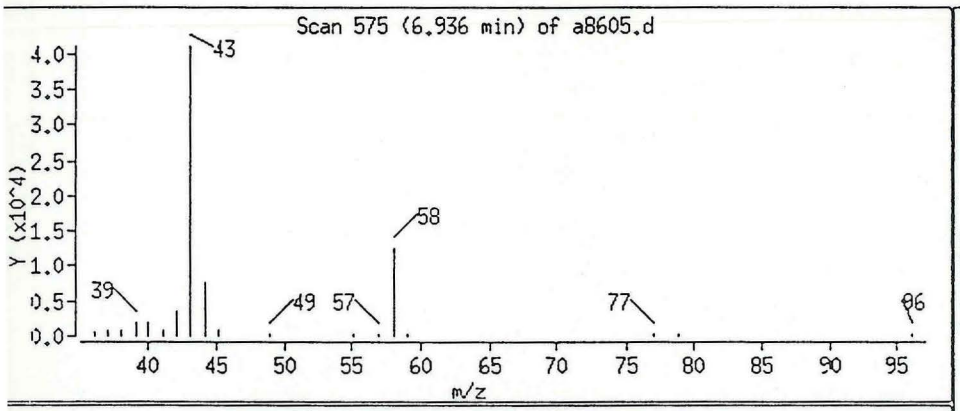
Sample Info: 18221n-dup002

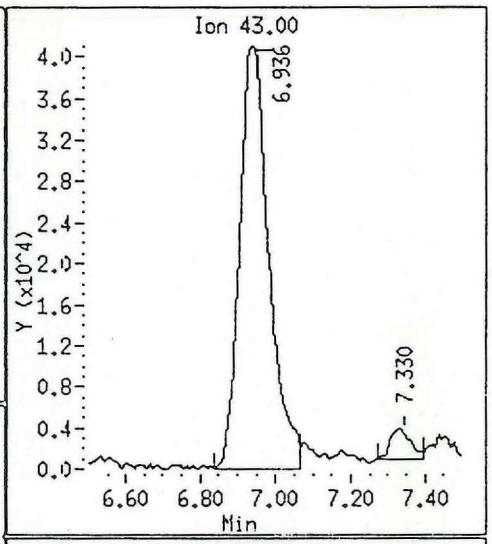
Operator: jk

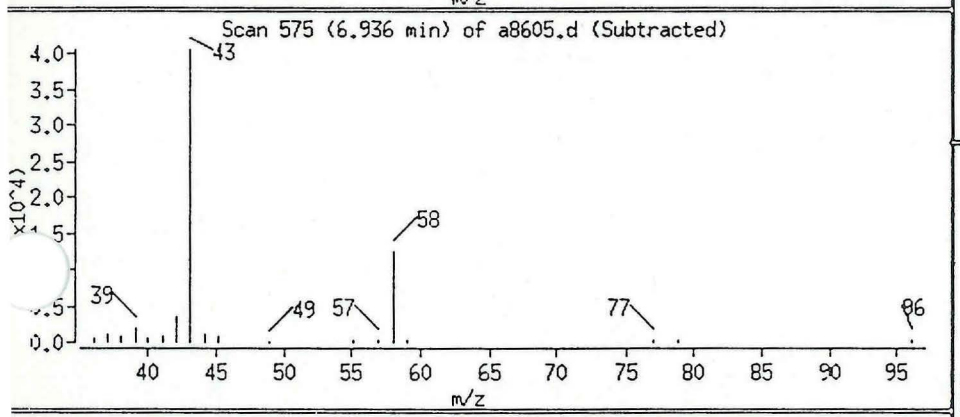
Column phase: DB-624 75m x 0.53mm

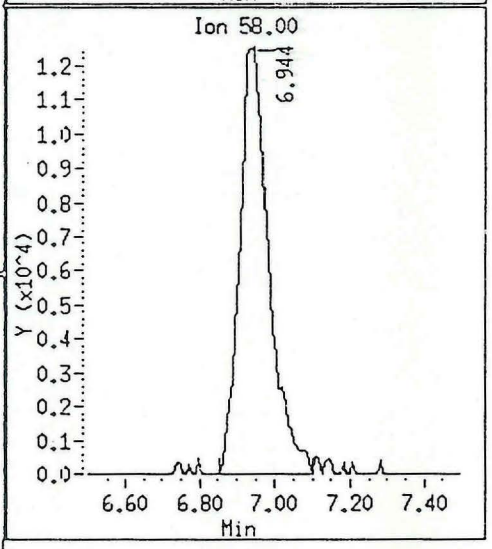
Column diameter: 0.53

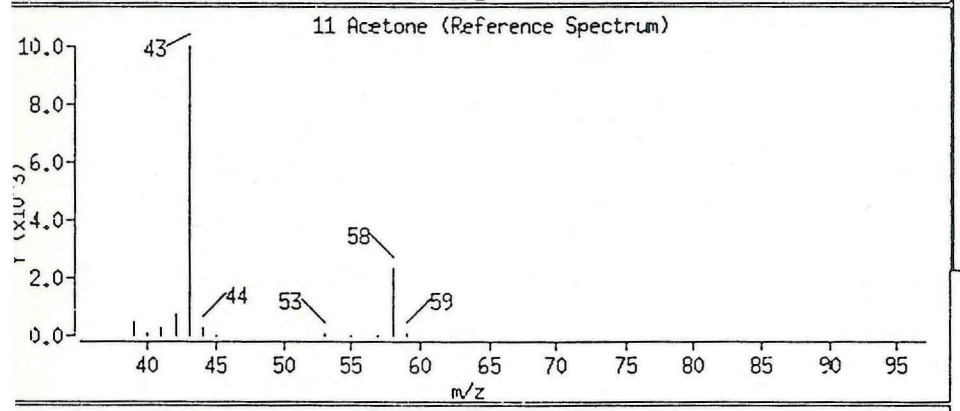
11 Acetone

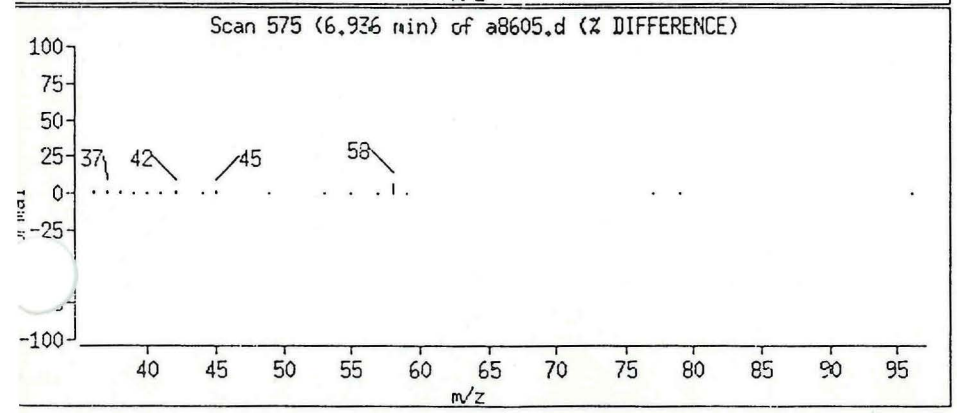












Data File: /chem/msa.i/a070296.b/a8605.d

Date : 02-JUL-96 10:12

Client ID:

Sample Info: 18221n-dup002

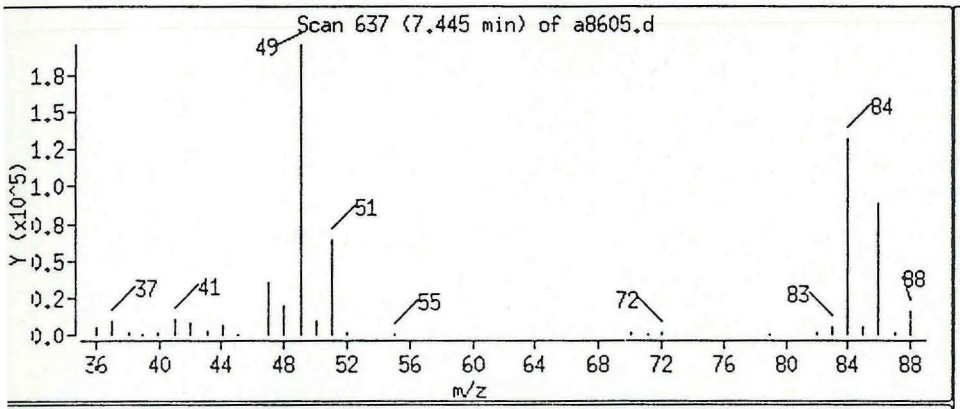
Instrument: msa.i

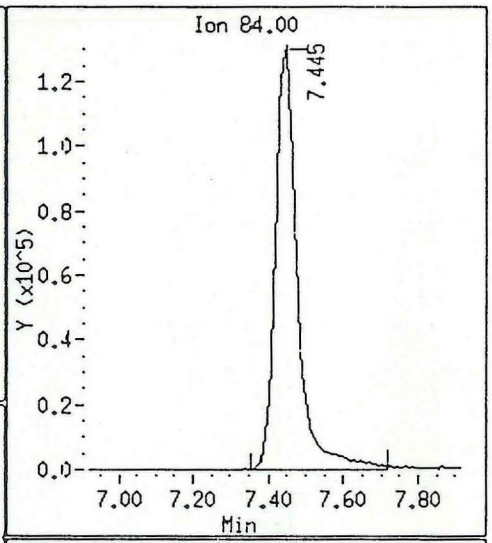
Operator: jk

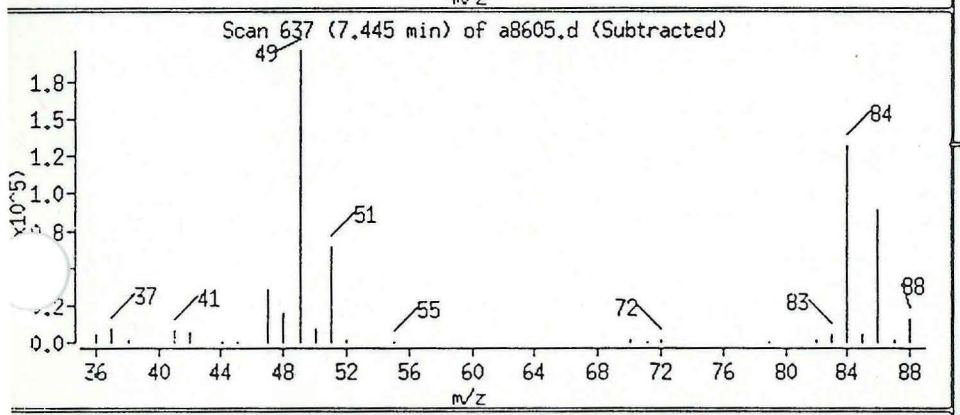
Column phase: DB-624 75m x 0.53mm

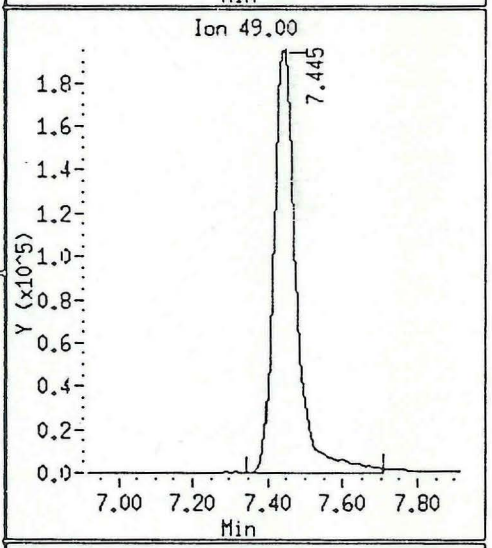
Column diameter: 0.53

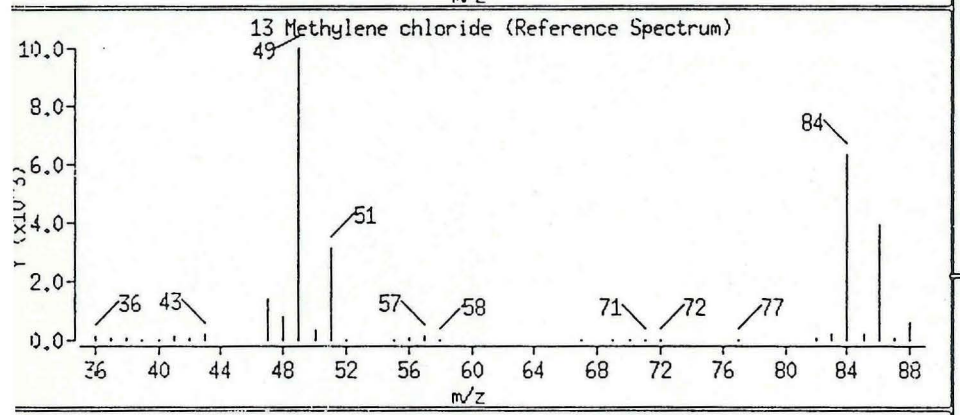
13 Methylene chloride

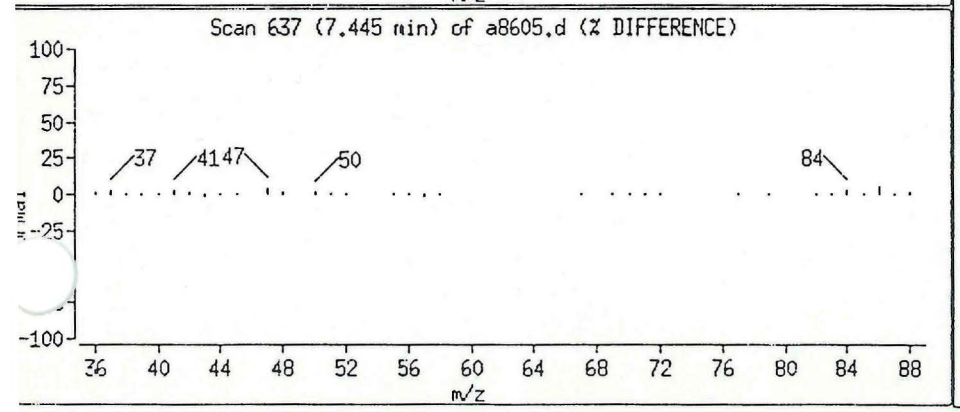


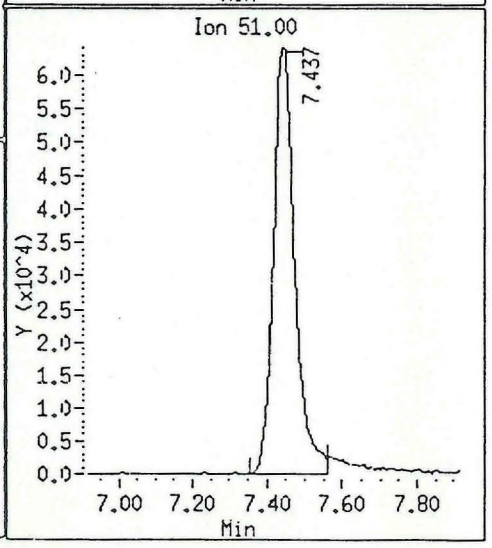












Data File: /chem/msa.i/a070296.b/a8605.d

Date : 02-JUL-96 10:12

Client ID:

Instrument: msa.i

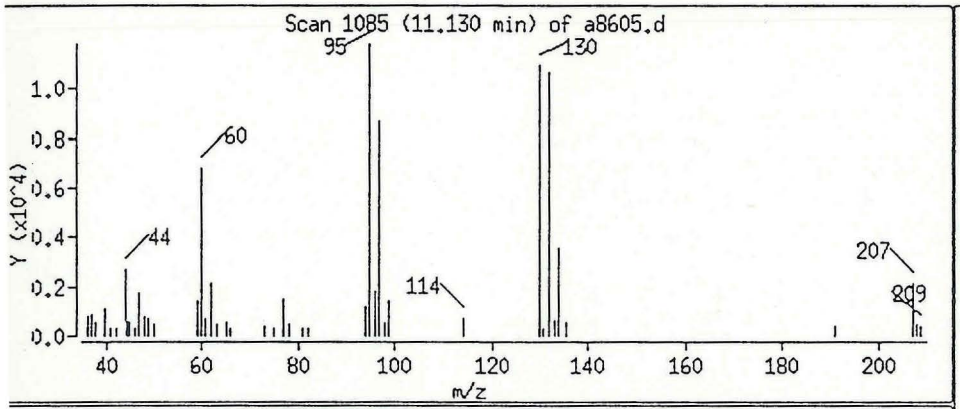
Sample Info: 18221n-dup002

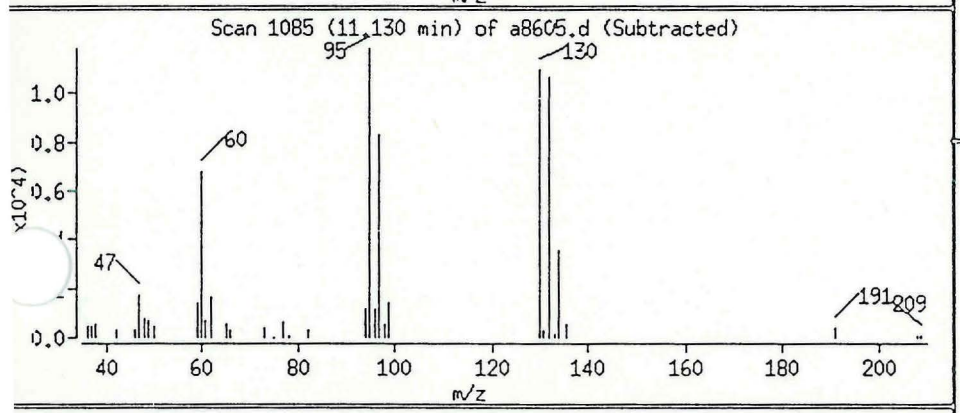
Operator: jk

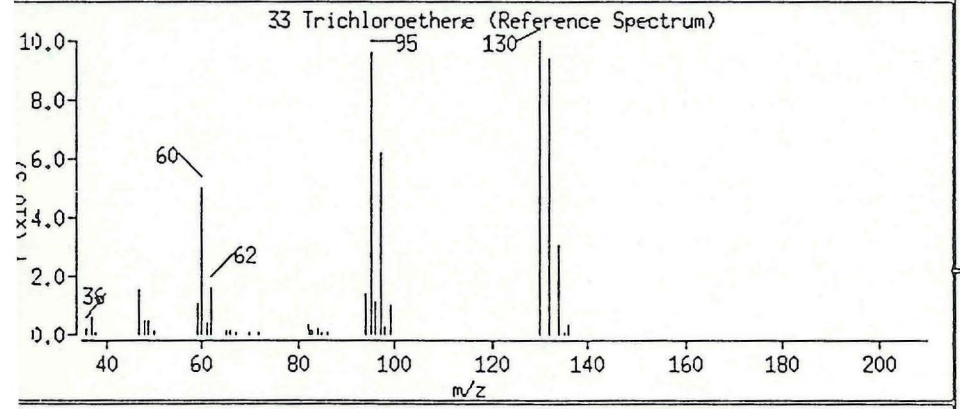
Column phase: DB-624 75m x 0.53mm

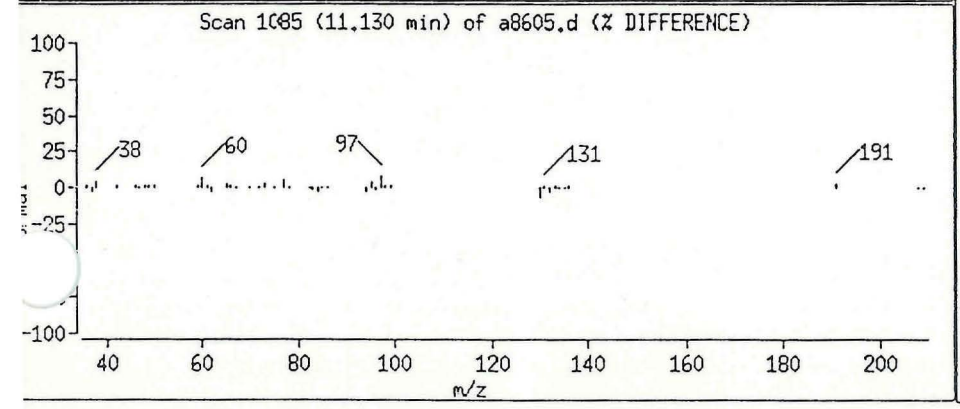
Column diameter: 0.53

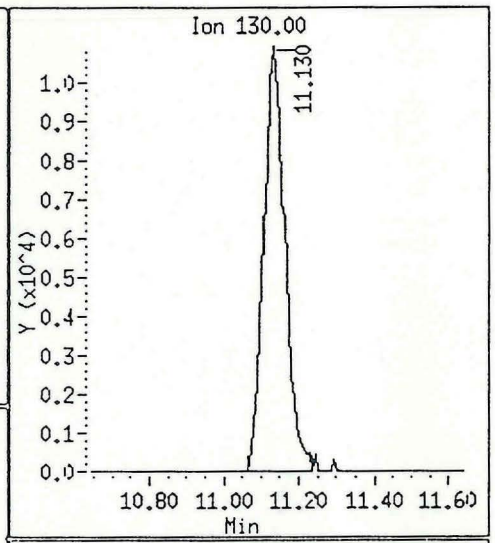
33 Trichloroethene

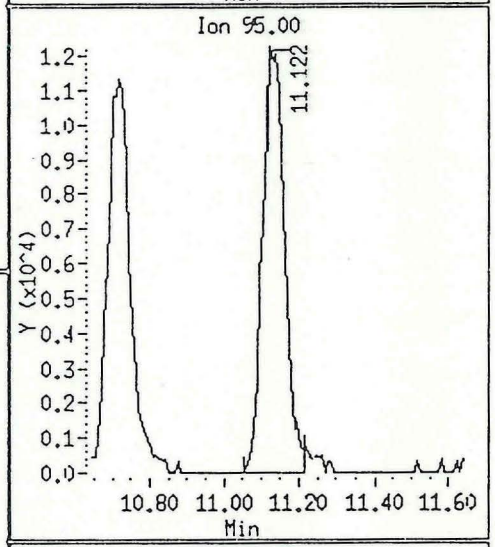


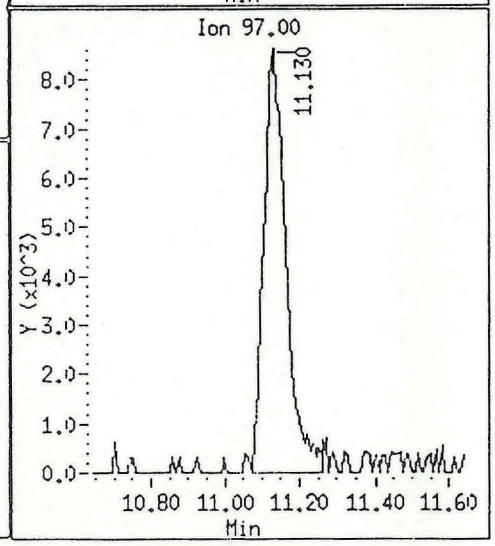












Data File: /chem/msa.i/a070296.b/a8605.d

Date : 02-JUL-96 10:12

Client ID:

Sample Info: 18221n-dup002

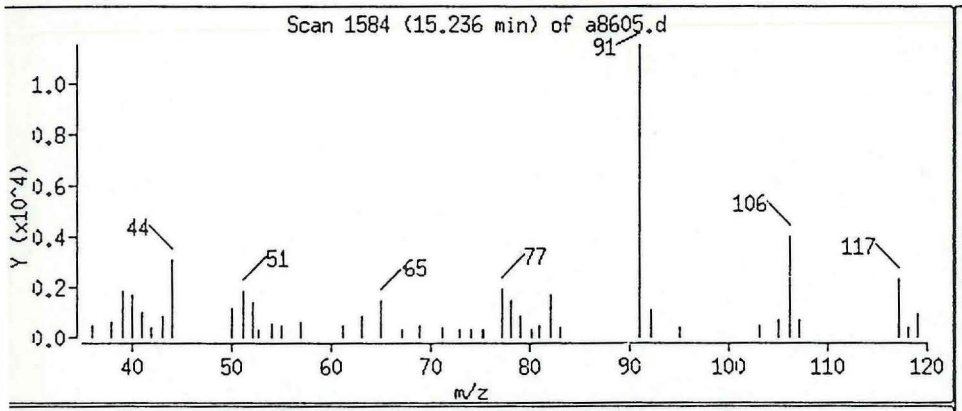
Instrument: msa.i

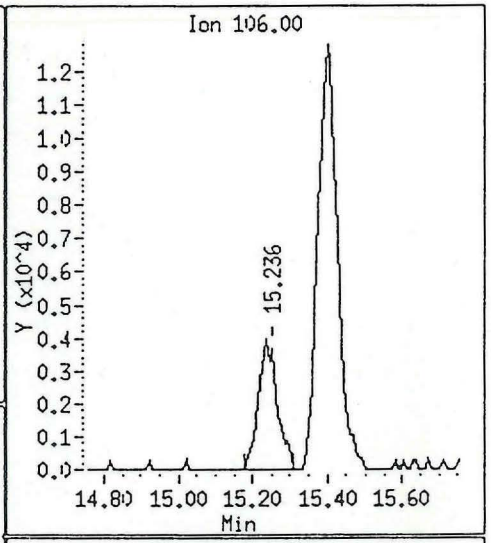
Operator: jk

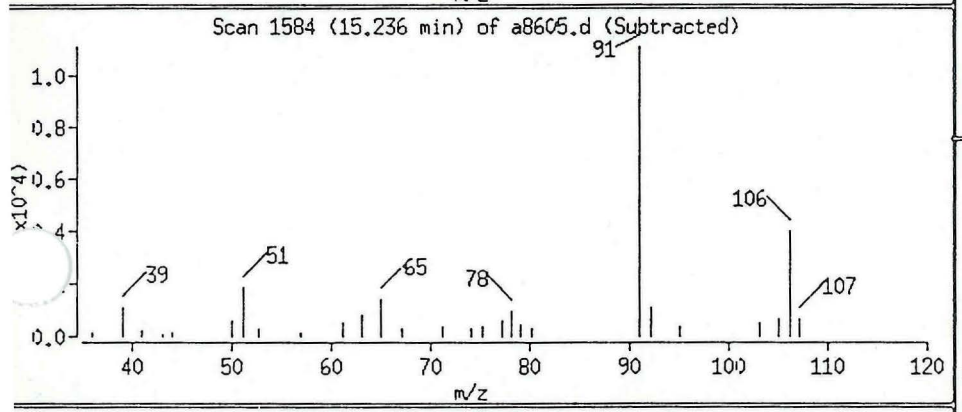
Column phase: DB-624 75m x 0.53mm

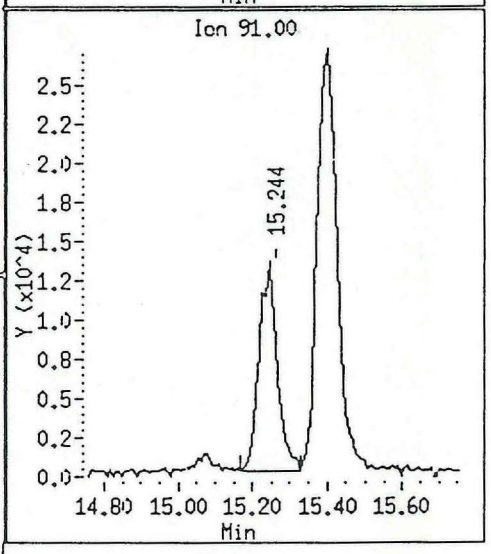
Column diameter: 0.53

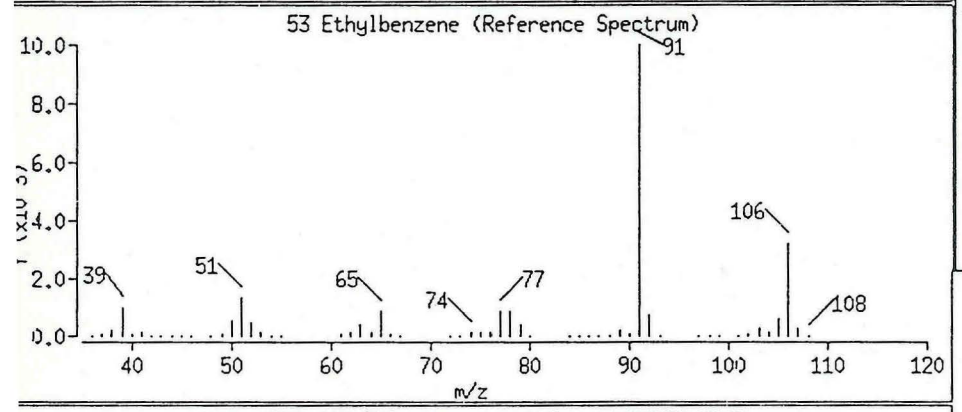
53 Ethylbenzene

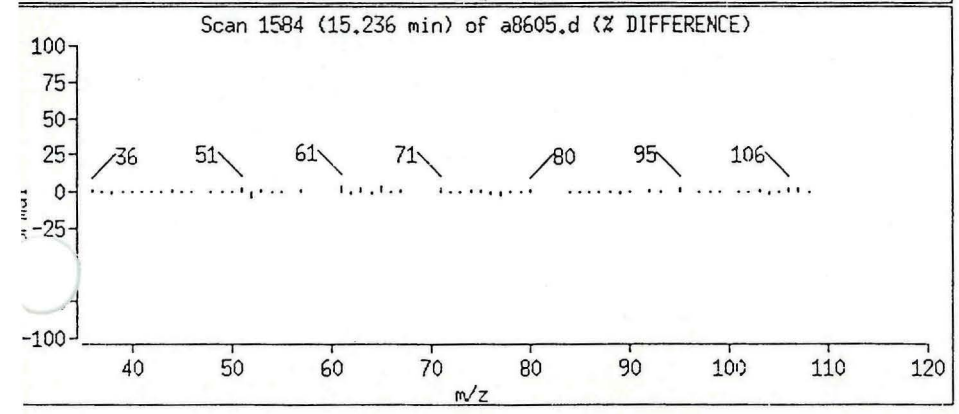












Data File: /chem/msa.i/a070296.b/a8605.d

Date : 02-JUL-96 10:12

Client ID:

Sample Info: 18221n-dup002

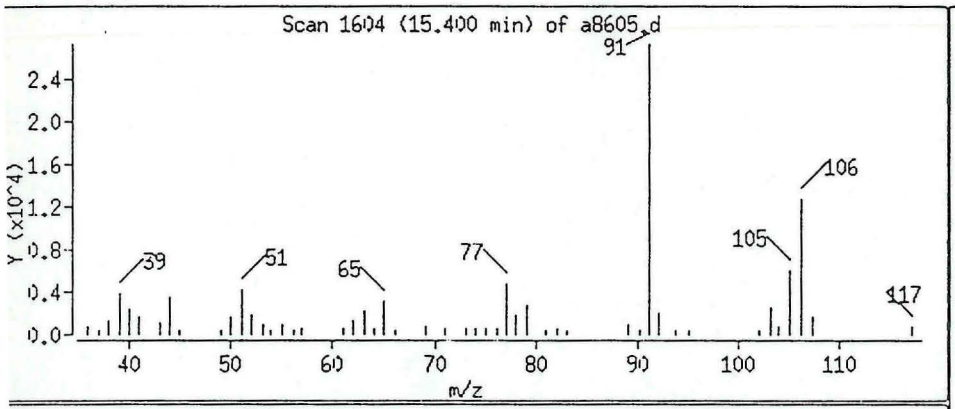
Instrument: msa.i

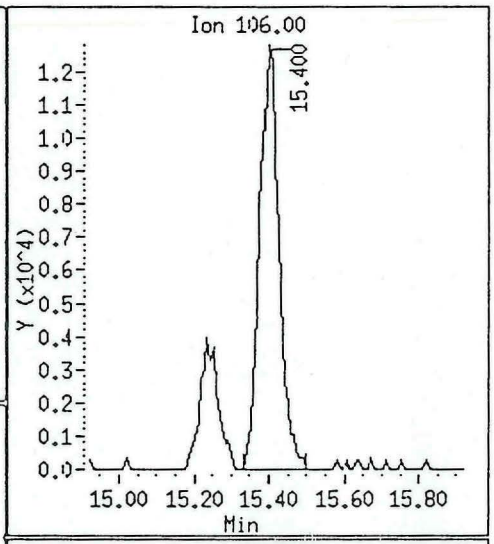
Operator: jk

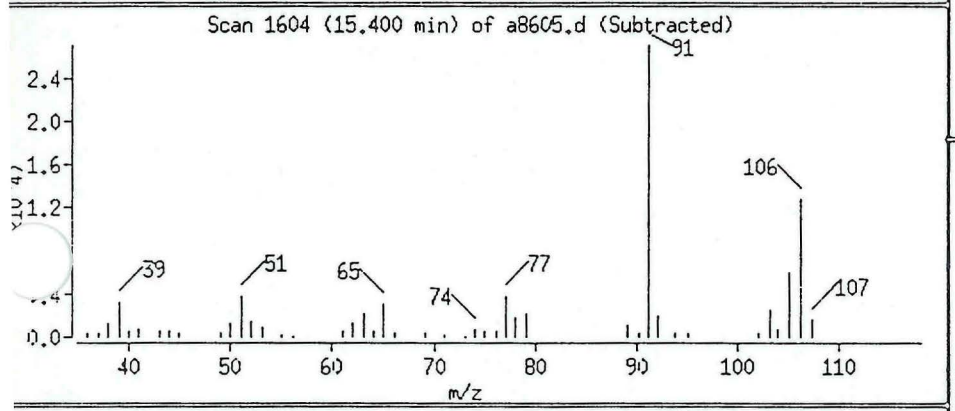
Column phase: DB-624 75m x 0.53mm

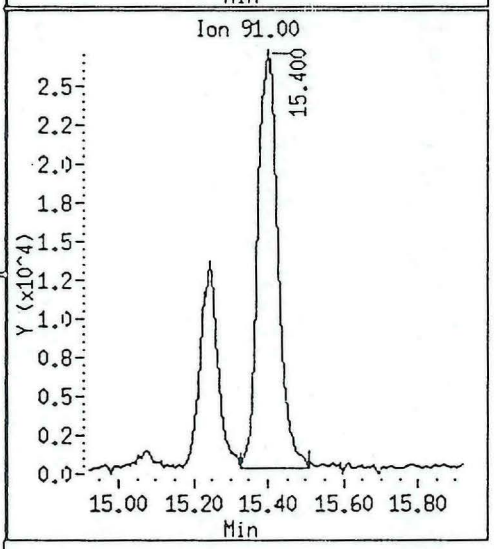
Column diameter: 0.53

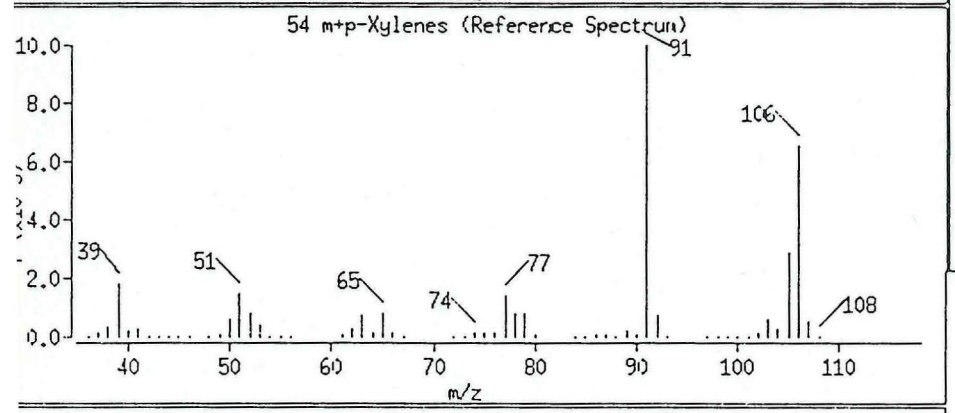
54 m+p-Xylenes

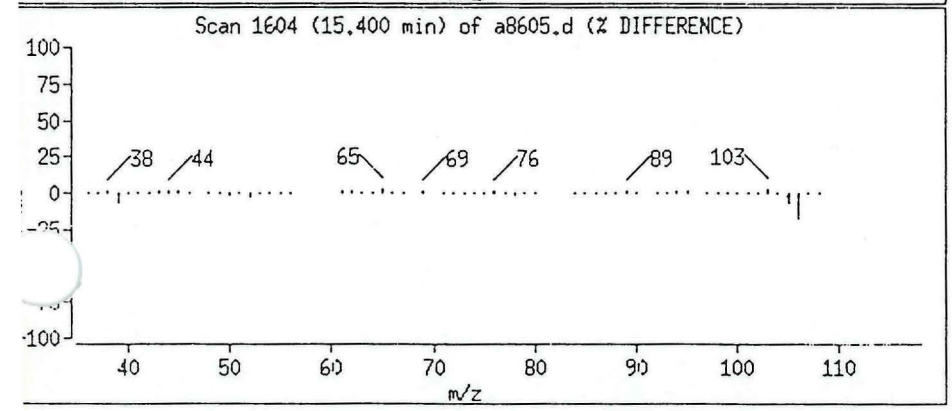












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SSA-W5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC 00093

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9912V

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8552

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 17 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	12	B
67-64-1	Acetone	11	BJ
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
75-27-4	Bromodichloromethane	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00094

EPA SAMPLE NO.

SSA-W5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9912V

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8552

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 17 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

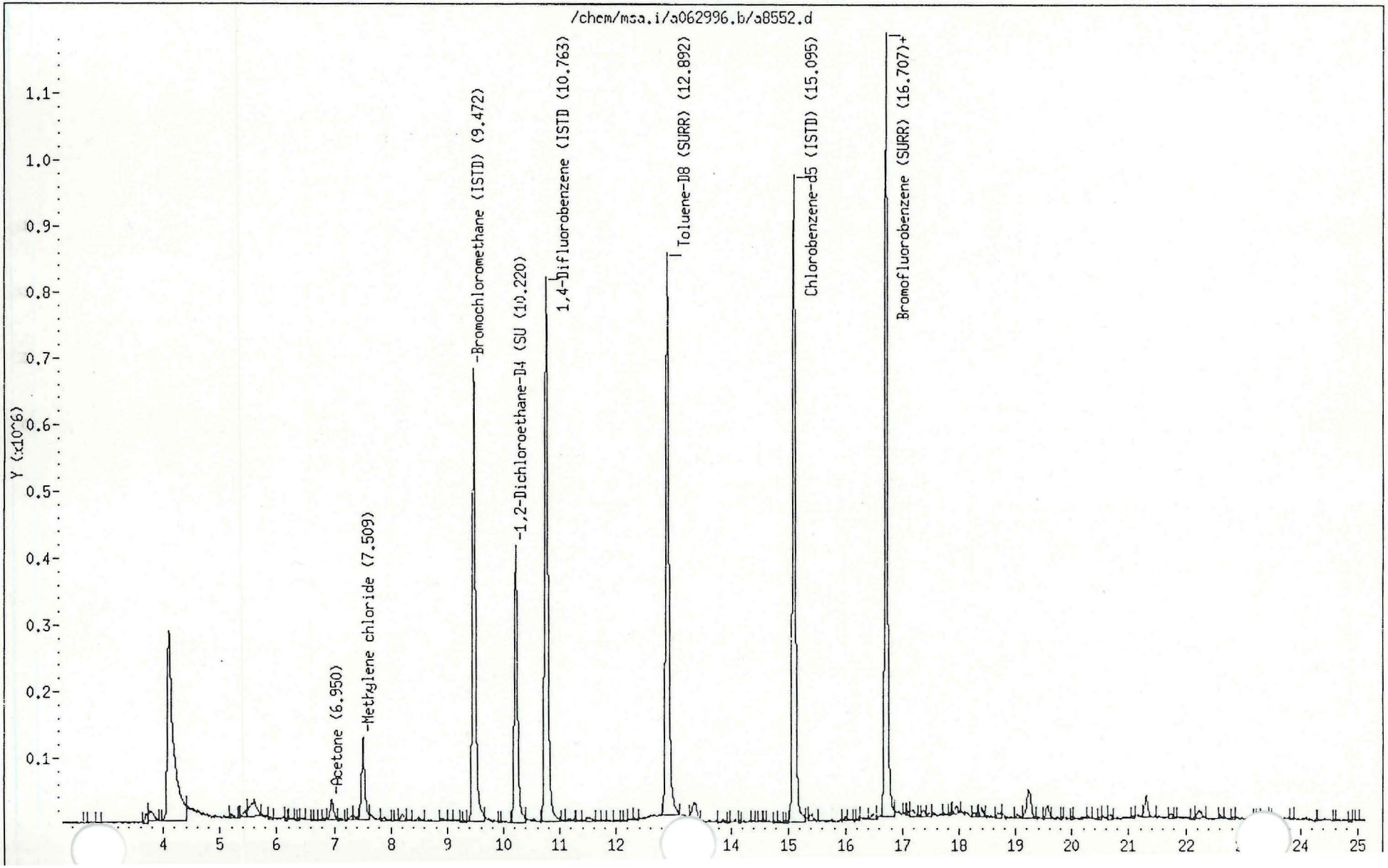
00095

Data File: /chem/msa.i/a062996.b/a8552.d
Date : 29-JUN-96 18:38
Client ID: 18221n ssa-w5
Sample Info: 18221n ssa-w5

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8552.d
Report Date: 10-Jul-1996 15:33

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062996.b/a8552.d
Lab Smp Id: Client Smp ID: 18221n ssa-w5
Inj Date : 29-JUN-96 18:38
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa-w5
Misc Info : jp9912v,n2v5309,qv,5000,1,5.00,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 10-Jul-1996 15:27 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.950	7.011	(0.734)	86713	9.51	9.51
Methylene chloride	84.00	7.509	7.439	(0.793)	105844	9.85	9.85
23 Bromochloromethane (ISTD)	128.00	9.472	9.441	(1.000)	330264	50.0	(Q)
29 1,2-Dichloroethane-D4 (SURR)	65.00	10.212	10.192	(1.078)	540192	48.1	48.1
32 1,4-Difluorobenzene (ISTD)	114.00	10.763	10.728	(1.000)	1220896	50.0	
41 Toluene-D8 (SURR)	98.00	12.900	12.881	(0.854)	1128143	49.3	49.3
50 Chlorobenzene-d5 (ISTD)	117.00	15.103	15.083	(1.000)	957440	50.0	
59 Bromofluorobenzene (SURR)	95.00	16.707	16.693	(1.106)	752512	48.8	48.8(QM)

QC Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.

Data File: /chem/msa.i/a062996.b/a8552.d

Date : 29-JUN-96 18:38

Client ID: 18221n ssa-w5

Sample Info: 18221n ssa-w5

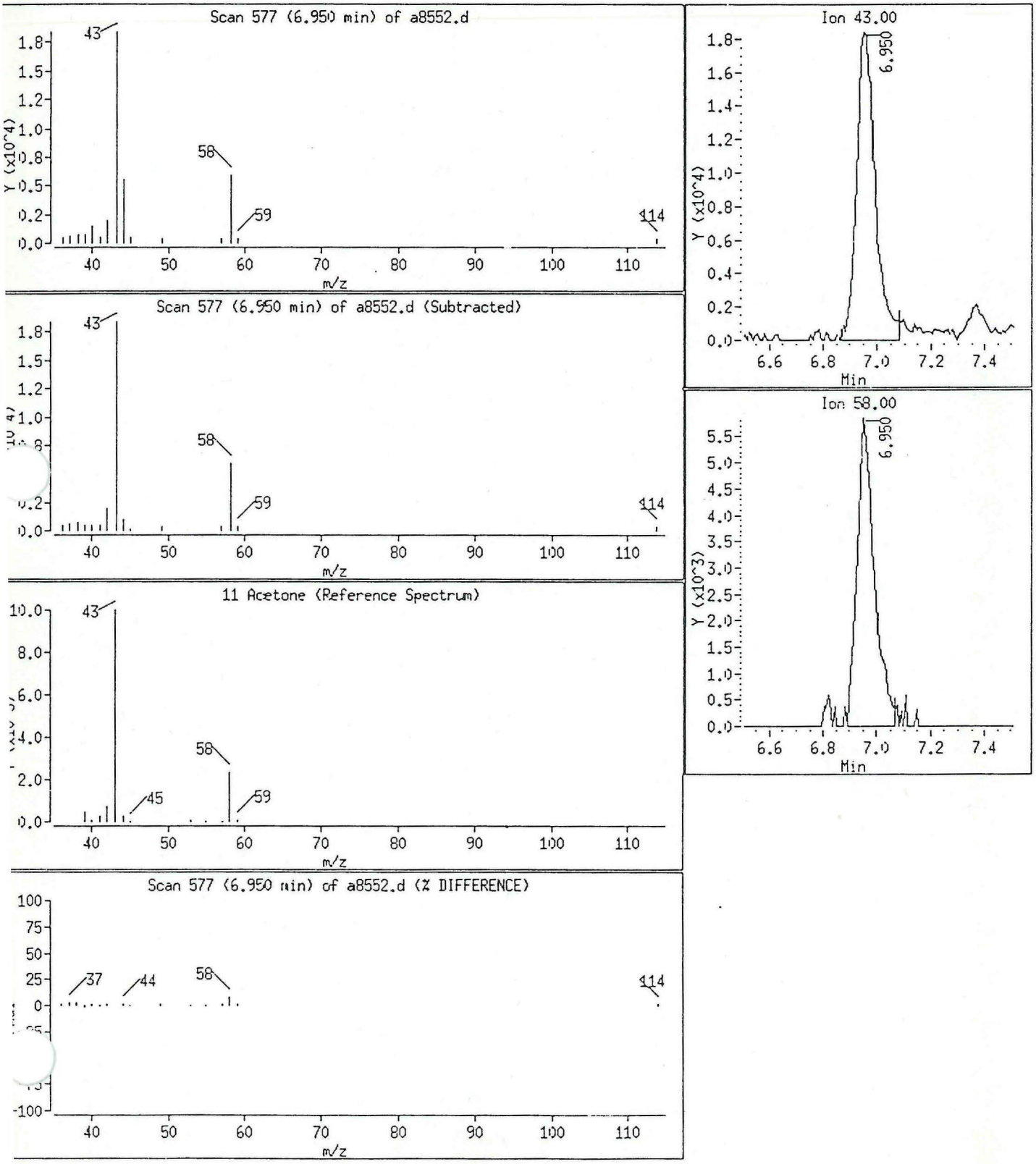
Instrument: msa.i

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

11 Acetone



Data File: /chem/msa.i/a062996.b/a8552.d

Date : 29-JUN-96 18:38

Client ID: 18221n ssa-w5

Instrument: msa.i

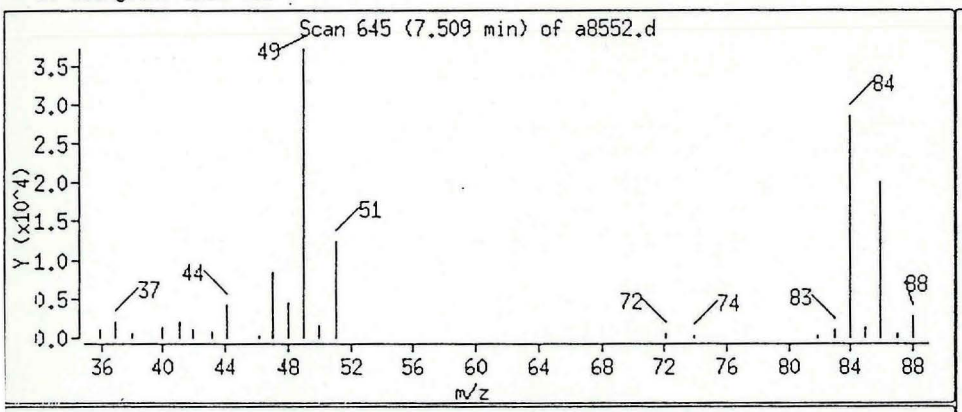
Sample Info: 18221n ssa-w5

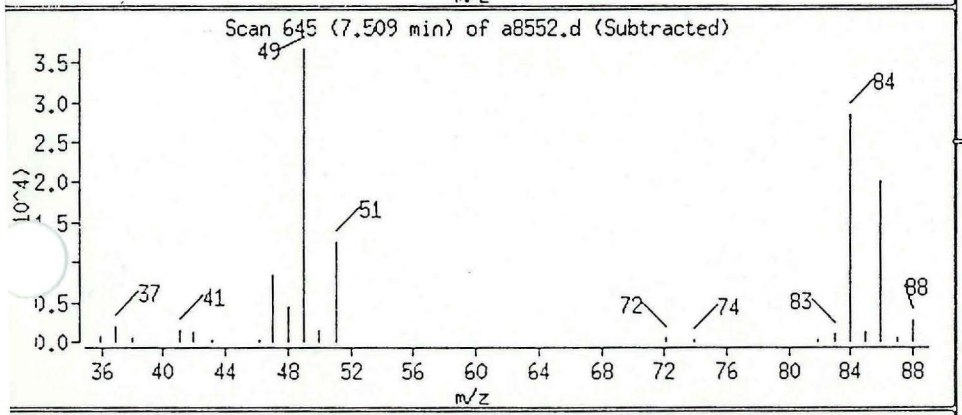
Operator: jk

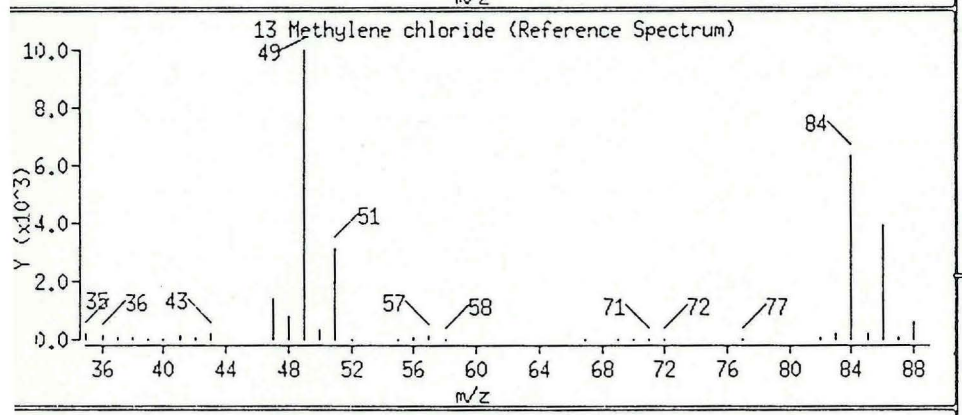
Column phase: DB-624 75m x 0.53mm

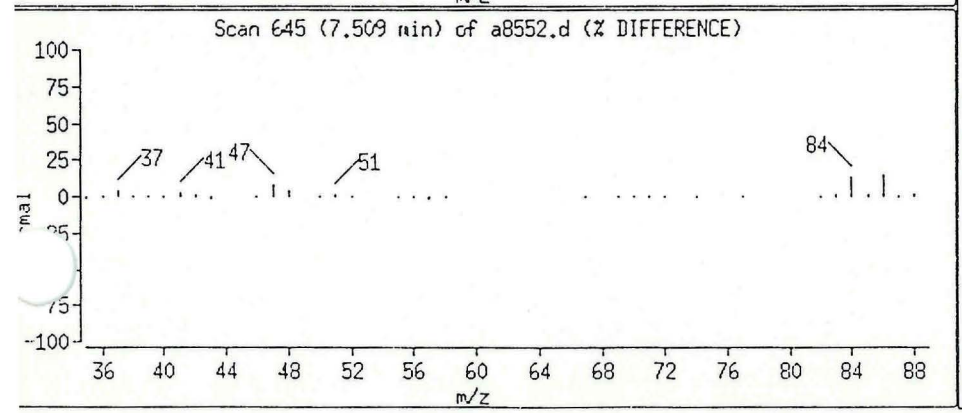
Column diameter: 0.53

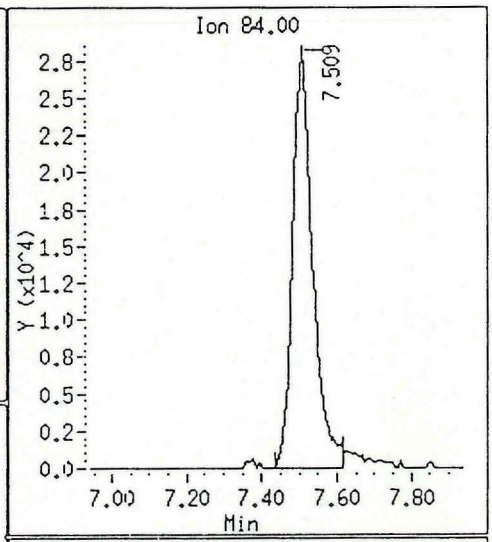
13 Methylene chloride

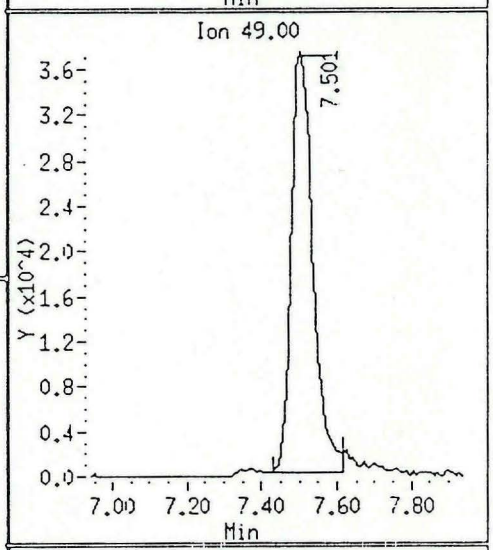


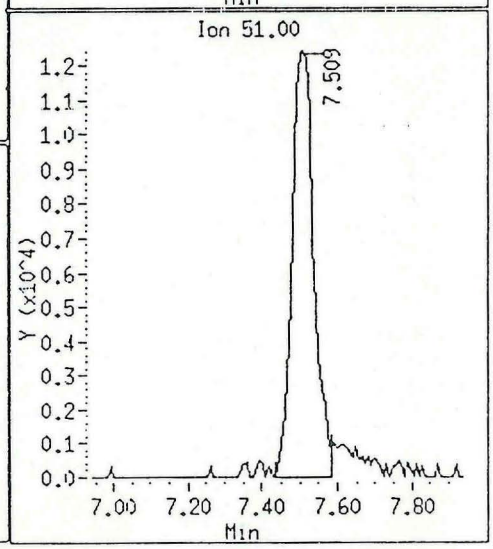












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00099 SSA7-F1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9896V

Sample wt/vol: 5.11 (g/mL) G Lab File ID: A8523

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 26 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	7	U
75-00-3	Chloroethane	7	U
75-09-2	Methylene Chloride	38	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	7	U
78-87-5	1,2-Dichloropropane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
75-25-2	Bromoform	7	U
591-78-6	2-Hexanone	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
75-35-4	1,1-Dichloroethene	7	U
78-93-3	2-Butanone	7	U
108-10-1	4-Methyl-2-pentanone	13	U
74-83-9	Bromomethane	7	U
74-87-3	Chloromethane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
124-48-1	Dibromochloromethane	7	U
127-18-4	Tetrachloroethene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
75-27-4	Bromodichloromethane	7	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00100

EPA SAMPLE NO.

SSA7-F1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9896V

Sample wt/vol: 5.11 (g/mL) G Lab File ID: A8523

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 26 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-07-0	Acetaldehyde	5.17	7	JN
2.	unknown	16.45	12	J
3.	unknown	21.35	13	J
4.	unknown	22.31	7	J

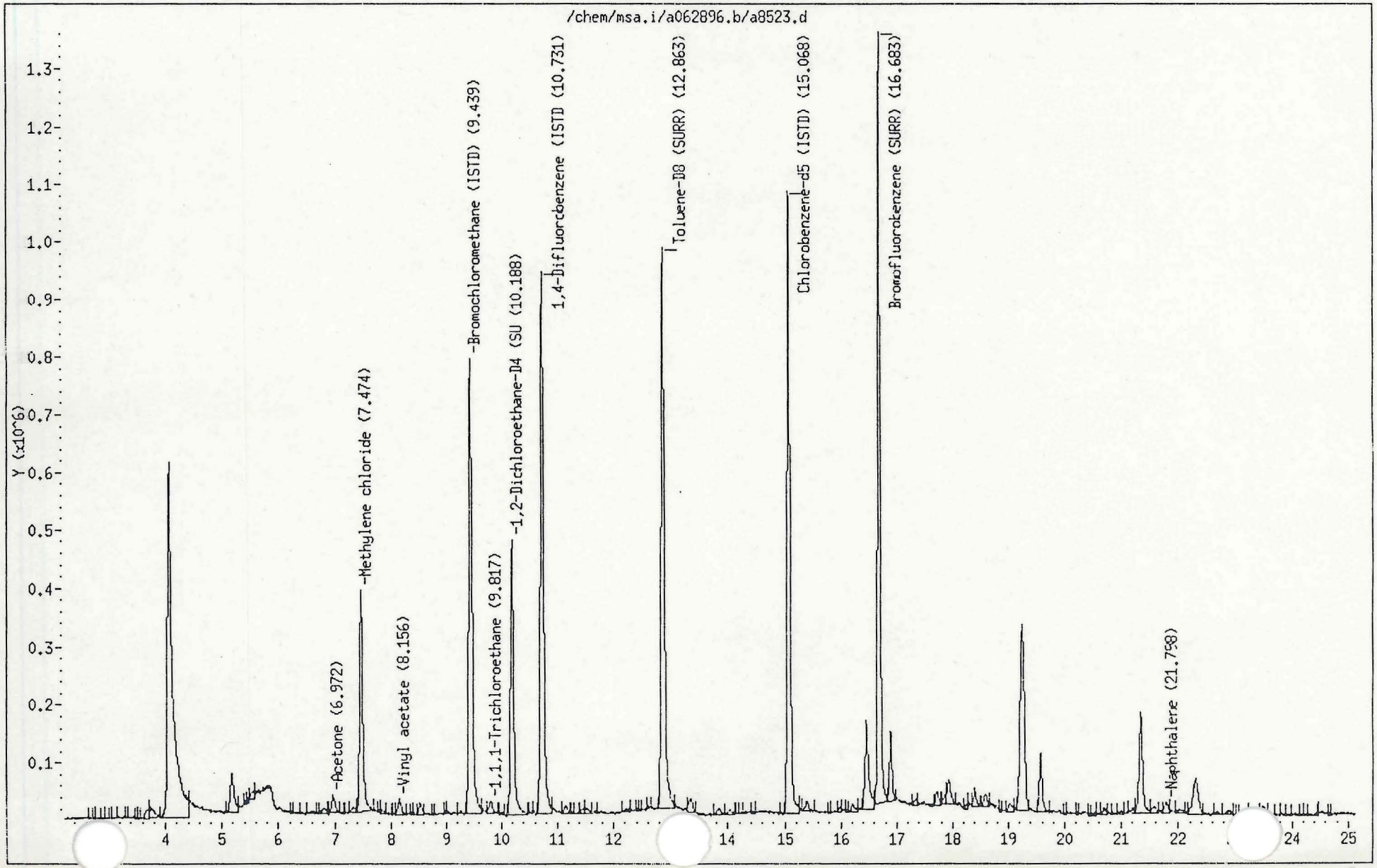
00101

Data File: /chem/msa.i/a062896.b/a8523.d
Date : 28-JUN-96 13:28
Client ID: 18221n ssa7-f1
Sample Info: 18221n ssa7-f1

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8523.d
Report Date: 10-Jul-1996 15:02

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062896.b/a8523.d
Lab Smp Id: Client Smp ID: 18221n ssa7-f1
Inj Date : 28-JUN-96 13:28
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-f1
Misc Info : jp9896v,n2v5309,qv,5000,1,5.11,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 11
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

TIC

MK 7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
====	====	==	======	======	========	=======	=======
cetone	43.00	6.972	7.017	(0.738)	102163	10.5	10.5
Methylene chloride	84.00	7.474	7.430	(0.791)	334431	28.6	28.6
18 Vinyl acetate	43.00	8.165	8.411	(0.864)	18023	0.568	~~0.568~~ ms
* 23 Bromochloromethane (ISTD)	128.00	9.447	9.442	(1.000)	376399	50.0	
25 1,1,1-Trichloroethane	97.00	9.809	9.797	(0.914)	29829	1.69	1.69
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.188	10.202	(1.078)	604579	46.3	46.3
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.731	10.739	(1.000)	1418823	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.863	12.877	(0.853)	1307769	48.4	48.4
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.076	15.091	(1.000)	1068304	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.683	16.703	(1.107)	872707	48.4	48.4
78 Naphthalene	128.00	21.798	21.745	(1.446)	37618	0.856	0.856

Data File: /chem/msa.i/a062896.b/a8523.d

Date : 28-JUN-96 13:28

Client ID: 18221n ssa7-f1

Instrument: msa.i

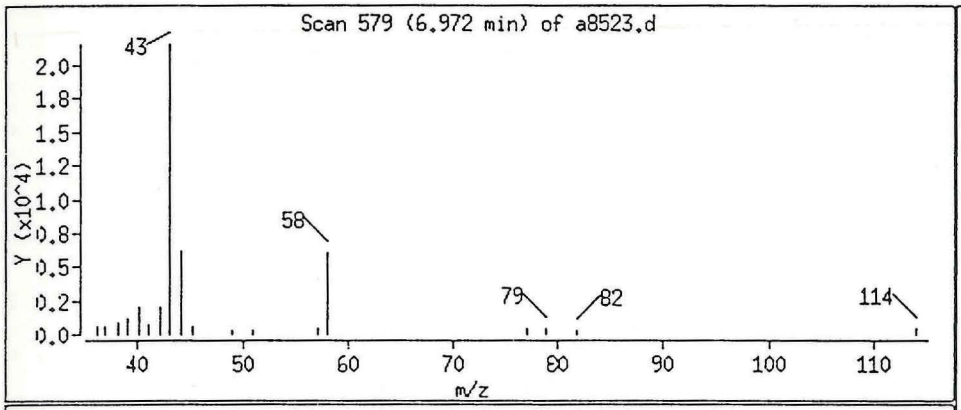
Sample Info: 18221n ssa7-f1

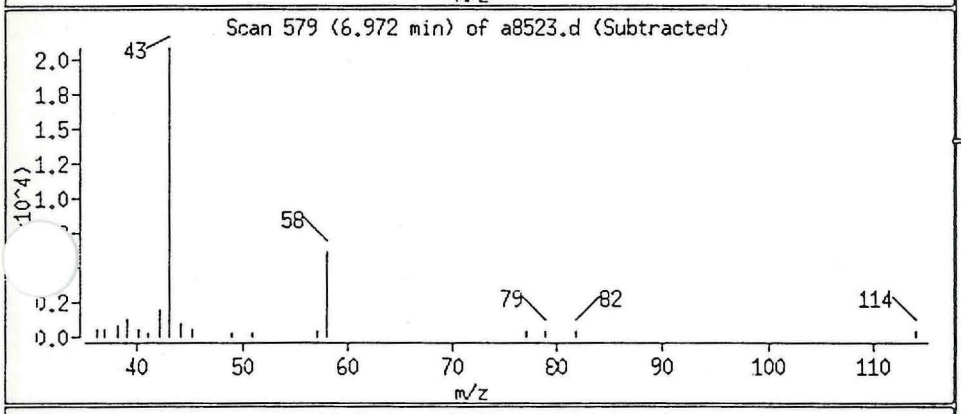
Operator: jk

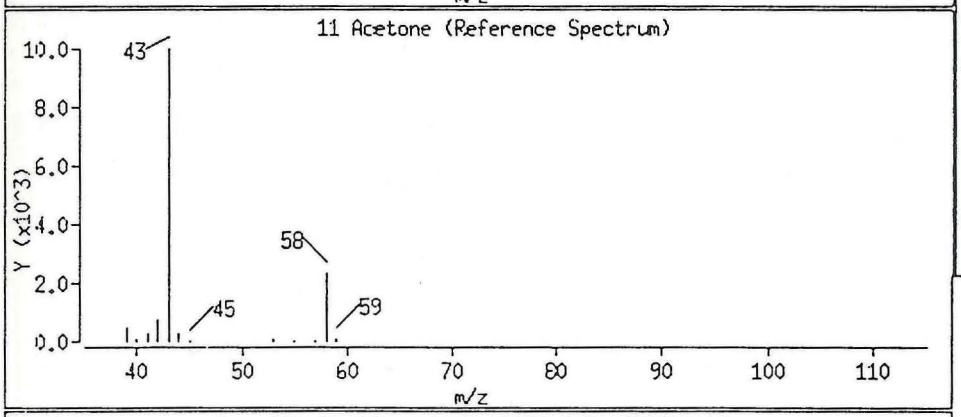
Column phase: DB-624 75m x 0.53mm

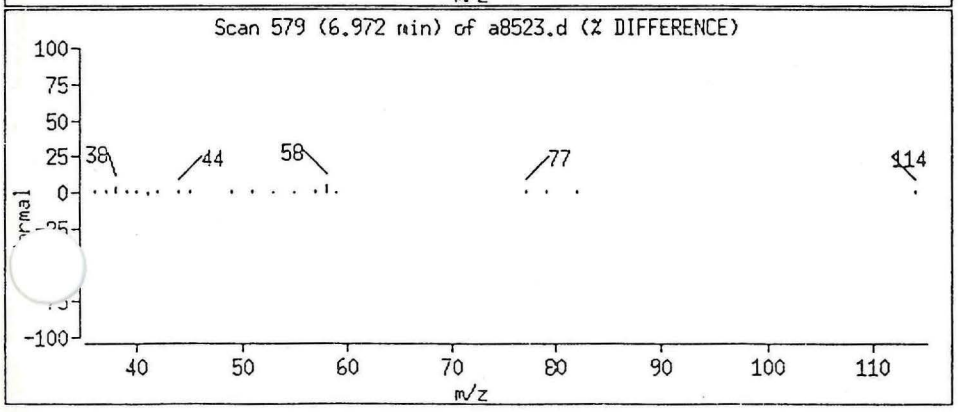
Column diameter: 0.53

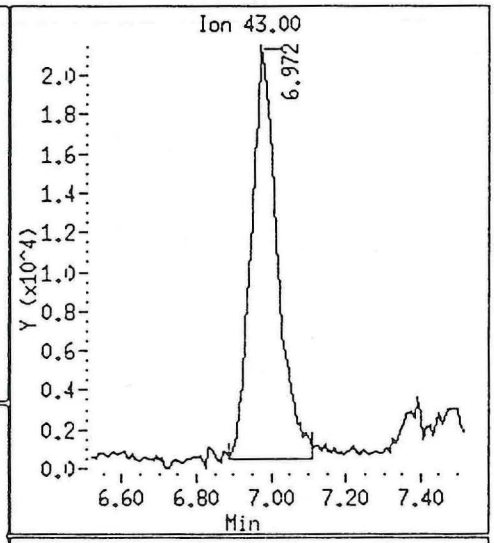
11 Acetone

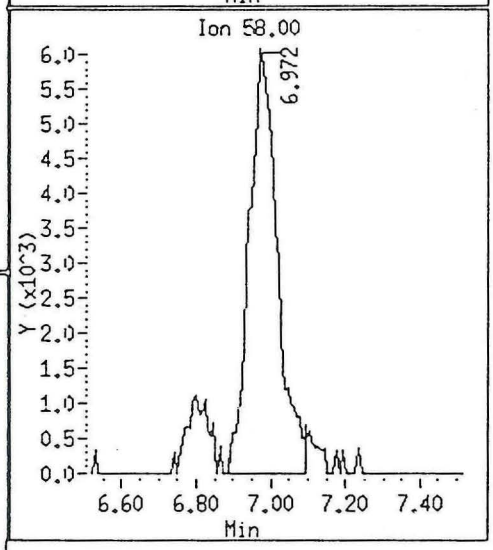












Data File: /chem/msa.i/a062896.b/a8523.d

Date : 28-JUN-96 13:28

Client ID: 18221n ssa7-f1

Sample Info: 18221n ssa7-f1

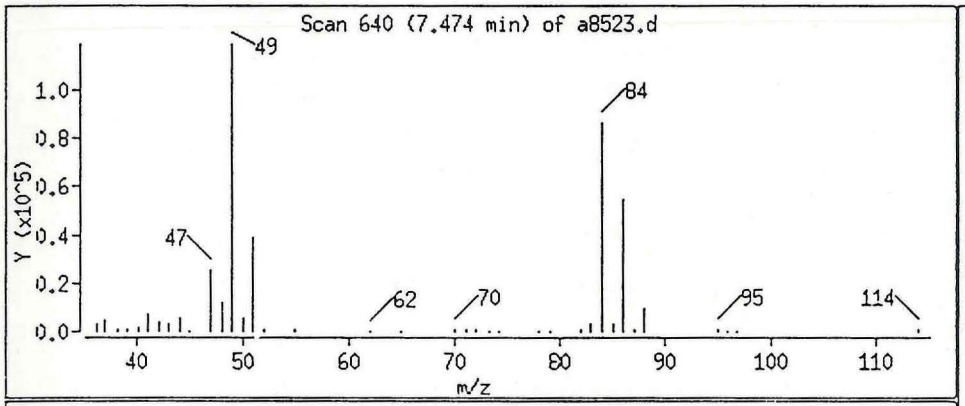
Instrument: msa.i

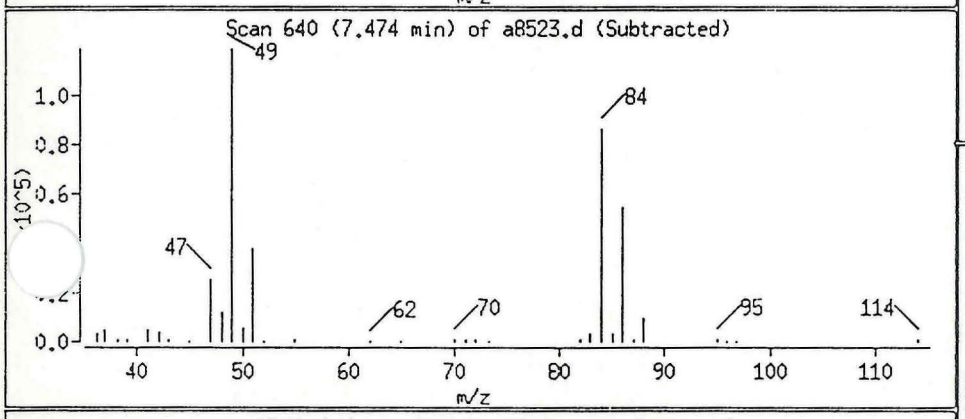
Operator: jk

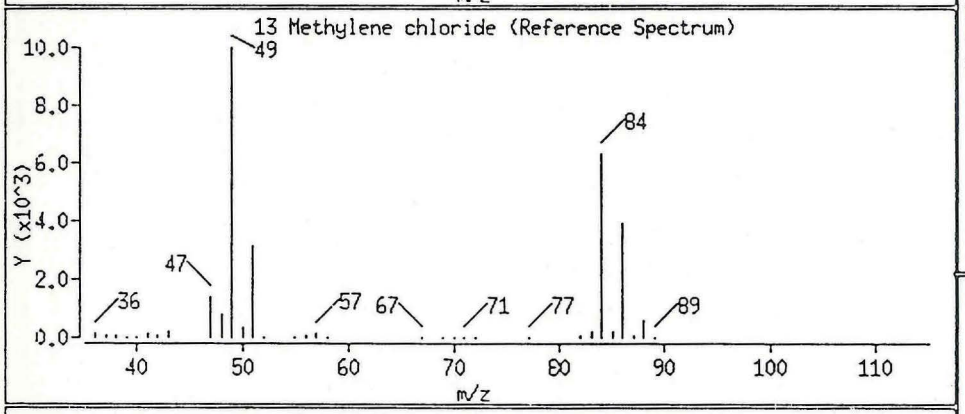
Column phase: DB-624 75m x 0.53mm

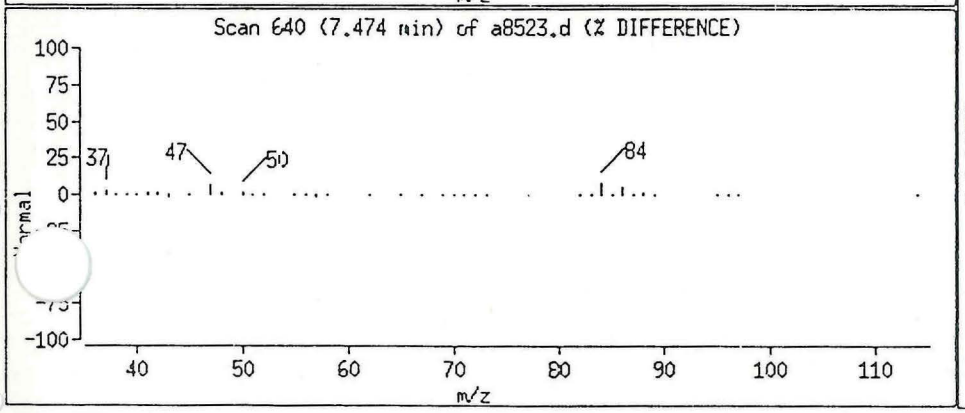
Column diameter: 0.53

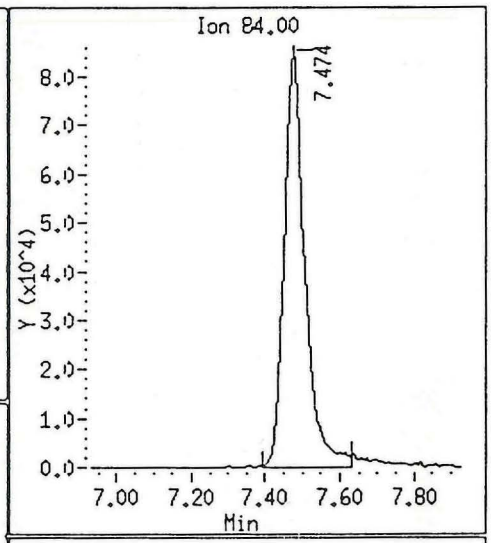
13 Methylene chloride

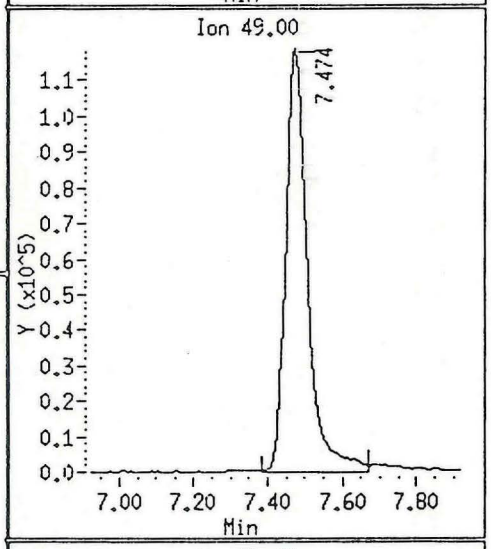


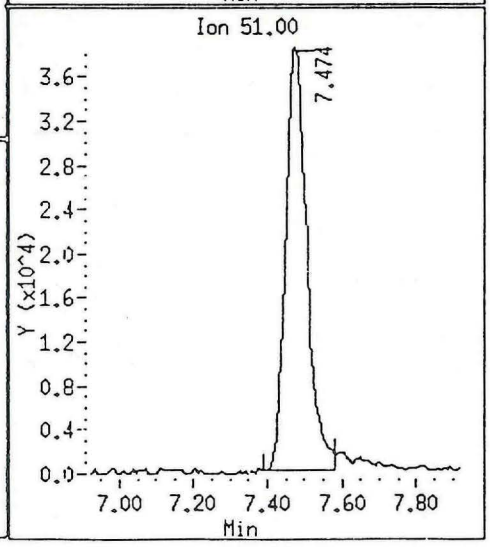












Data File: /chem/msa.i/a062896.b/a8523.d

Date : 28-JUN-96 13:28

Client ID: 18221n ssa7-f1

Instrument: msa.i

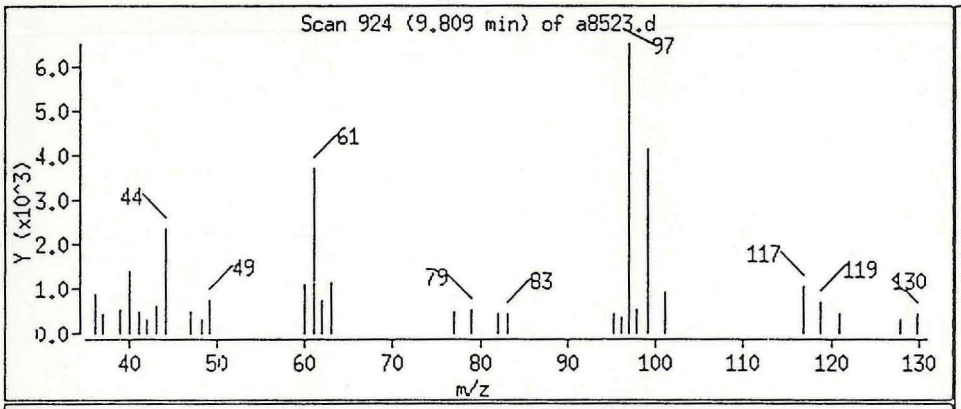
Sample Info: 18221n ssa7-f1

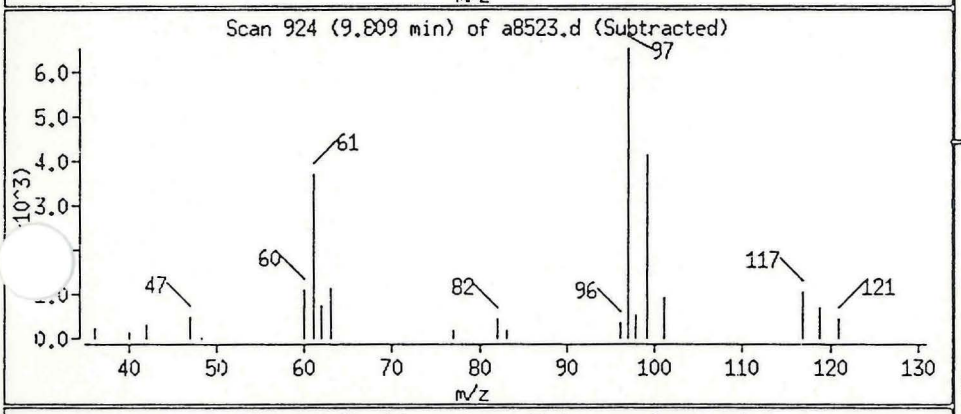
Operator: jk

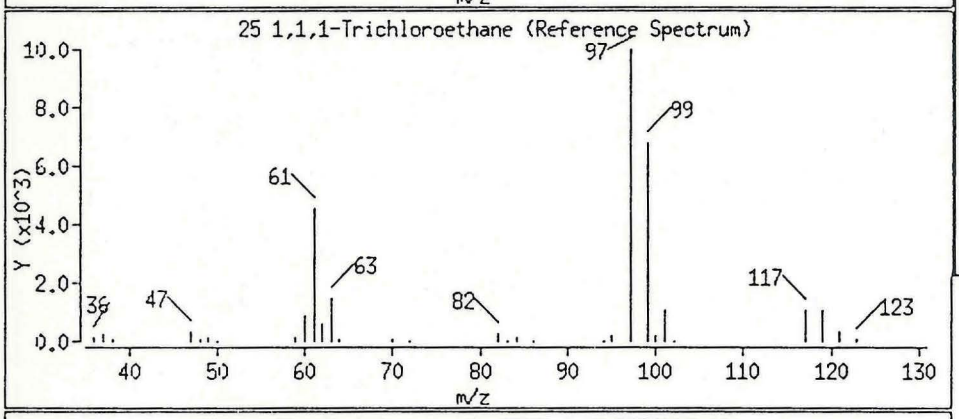
Column phase: DB-624 75m x 0.53mm

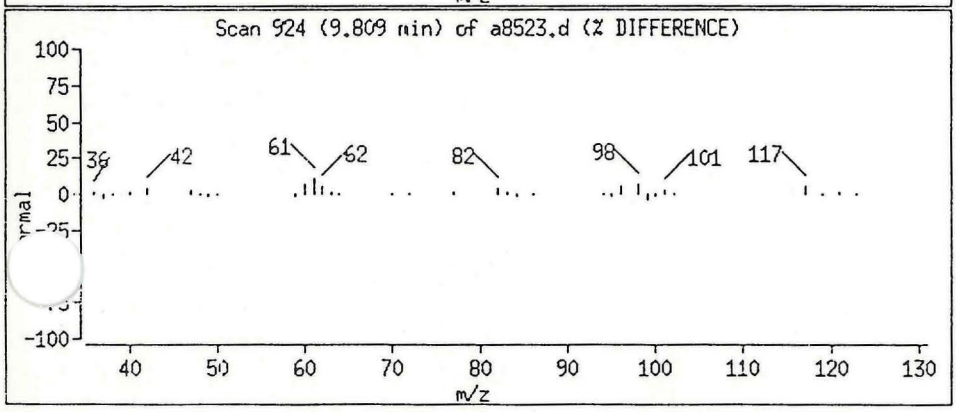
Column diameter: 0.53

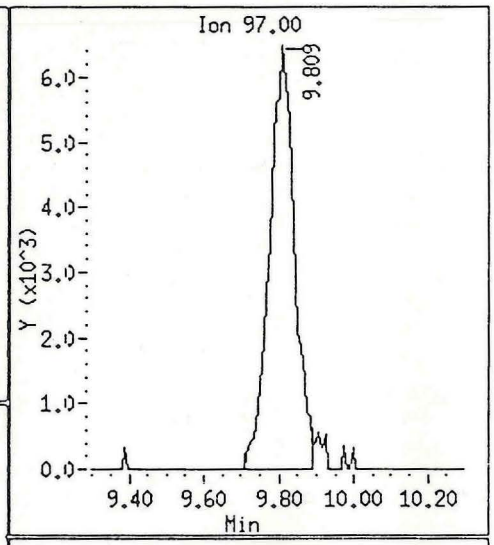
25 1,1,1-Trichloroethane

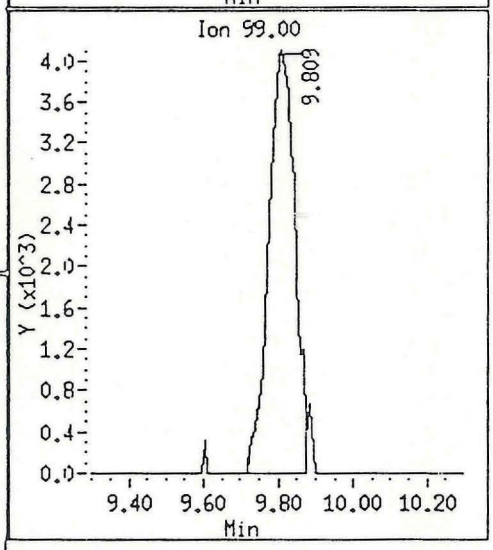












Data File: /chem/msa.i/a062896.b/a8523.d
Date : 28-JUN-96 13:28
Client ID: 18221n ssa7-f1
Sample Info: 18221n ssa7-f1

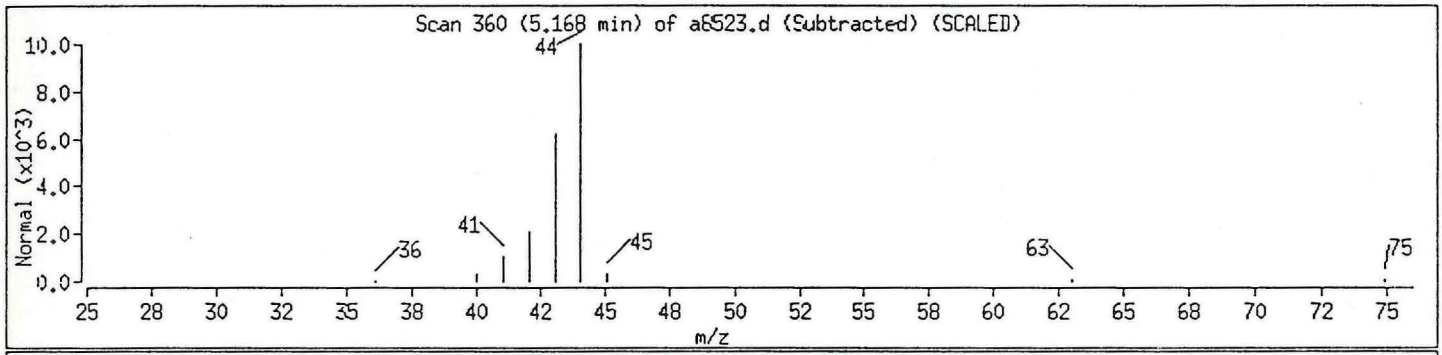
Instrument: msa.i

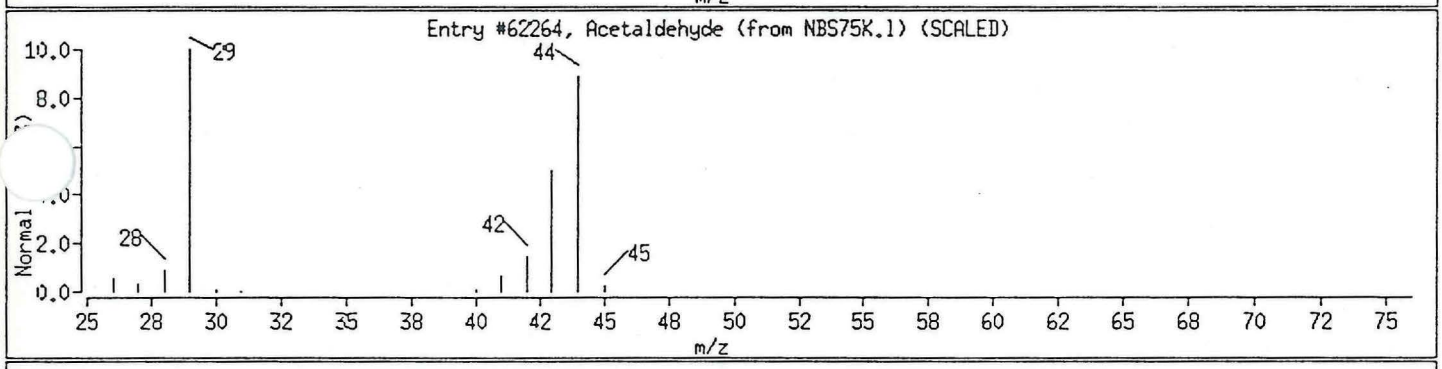
Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NBS75K.l	62264	74	C2H4O	44





Data File: /chem/msa.i/a062896.b/a8523.d

Date : 28-JUN-96 13:28

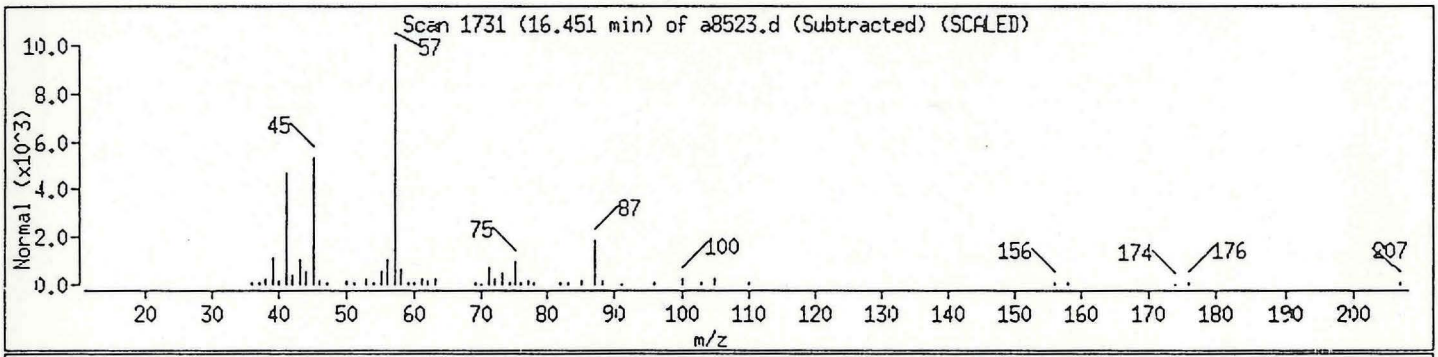
Client ID: 18221n ssa7-f1 Instrument: msa.i

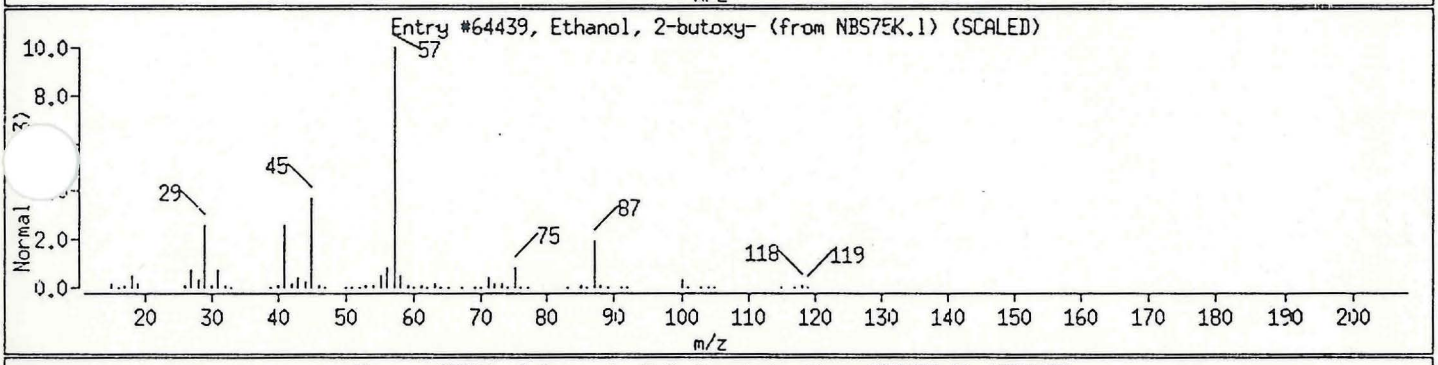
Sample Info: 18221n ssa7-f1

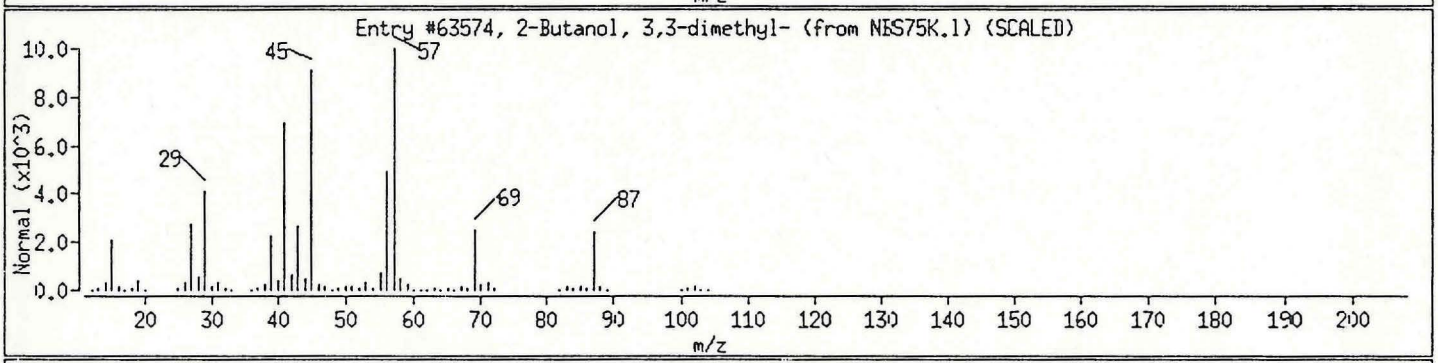
Operator: jk

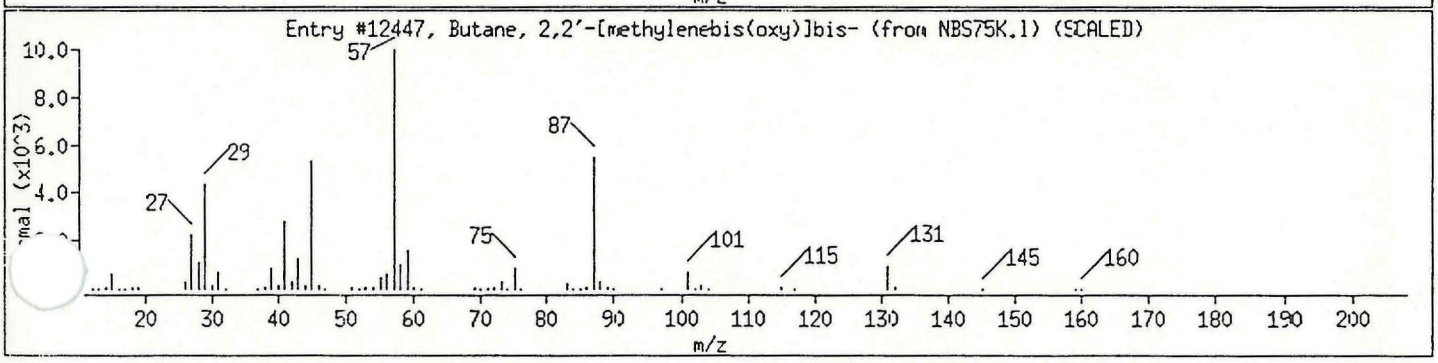
Column phase: DB-624 75m x 0.53mm Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanol, 2-butoxy-	111-76-2	NBS75K.l	64439	78	C6H14O2	118
2-Butanol, 3,3-dimethyl-	464-07-3	NBS75K.l	63574	42	C6H14O	102
Butane, 2,2'-[methylenebis(oxy)]bis-	2568-92-5	NBS75K.l	12447	40	C9H20O2	160









Data File: /chem/msa.i/a062896.b/a8523.d

Date : 28-JUN-96 13:28

Client ID: 18221n ssa7-f1

Instrument: msa.i

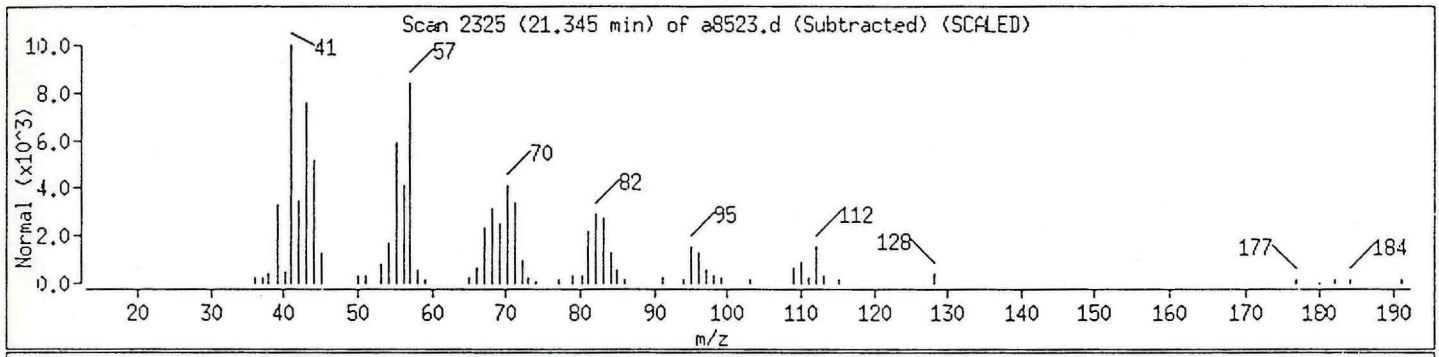
Sample Info: 18221n ssa7-f1

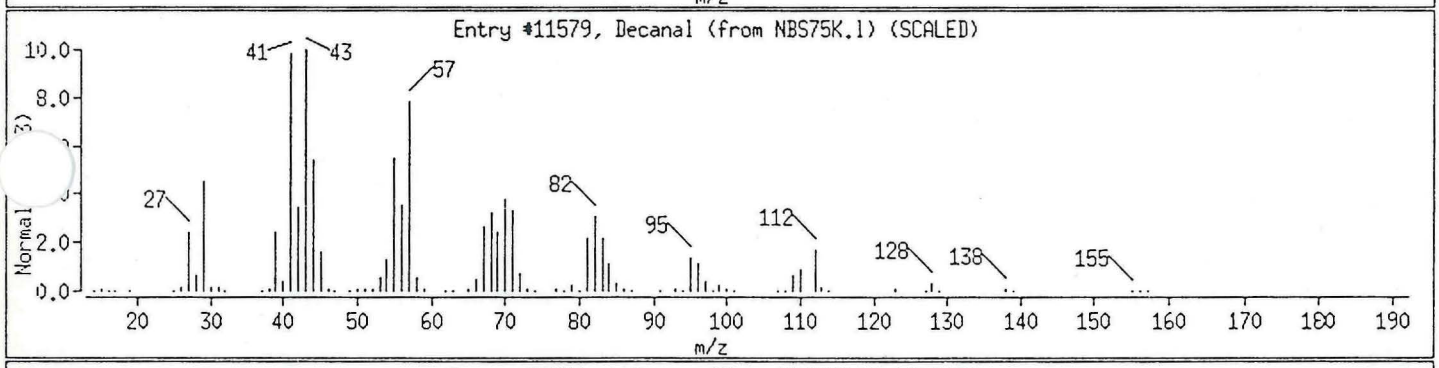
Operator: jk

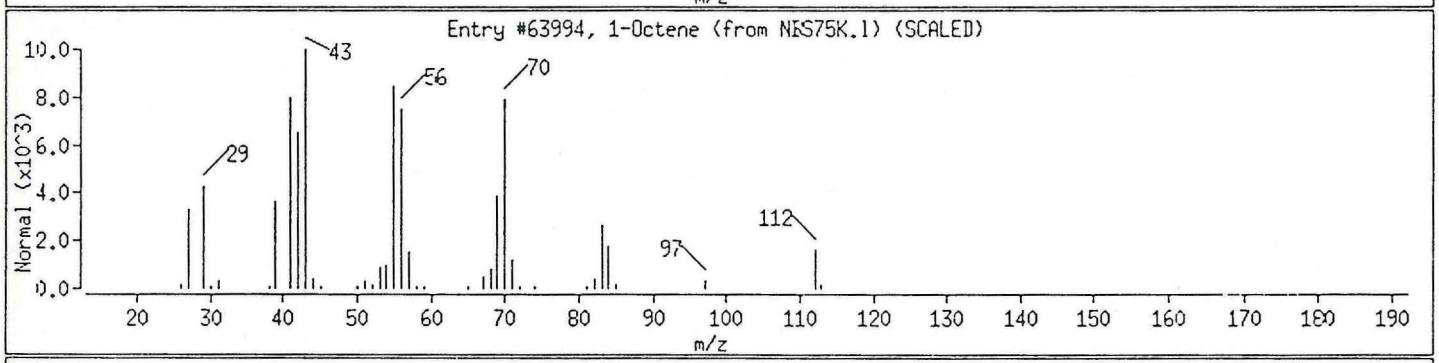
Column phase: DB-624 75m x 0.53mm

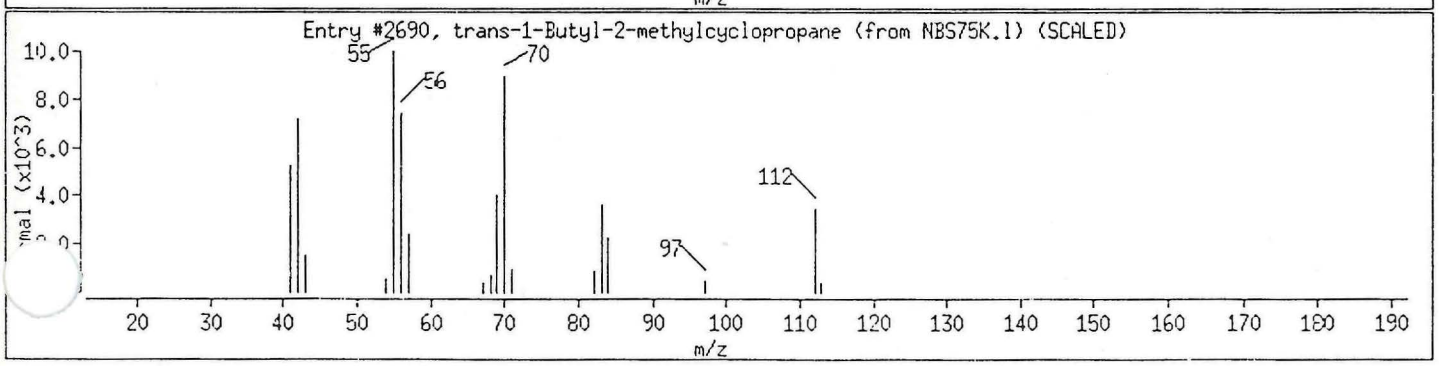
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decanal	112-31-2	NBS75K.l	11579	74	C10H20O	156
1-Octene	111-66-0	NBS75K.l	63994	50	C8H16	112
trans-1-Butyl-2-methylcyclopropane	38851-70-6	NBS75K.l	2690	49	C8H16	112









Data File: /chem/msa.i/a062896.b/a8523.d

Date : 28-JUN-96 13:28

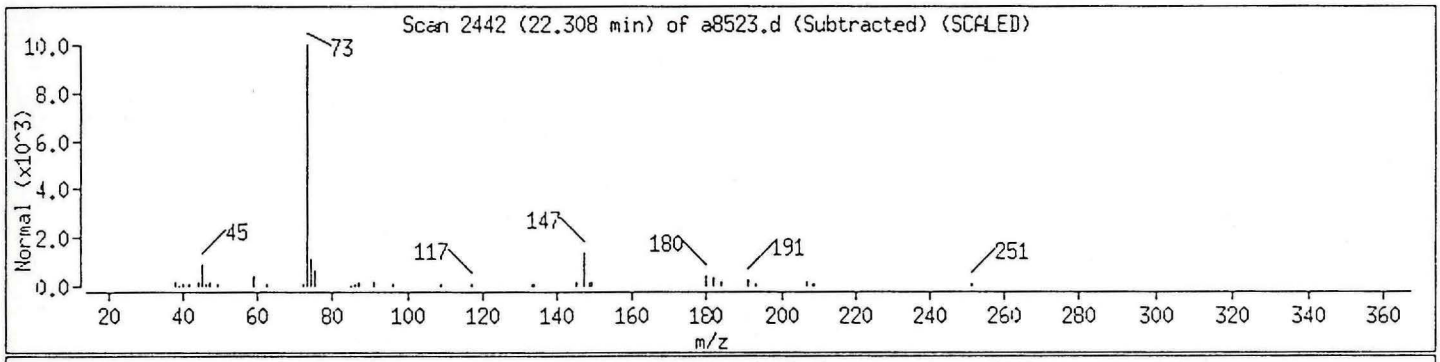
Client ID: 18221n ssa7-f1 Instrument: msa.i

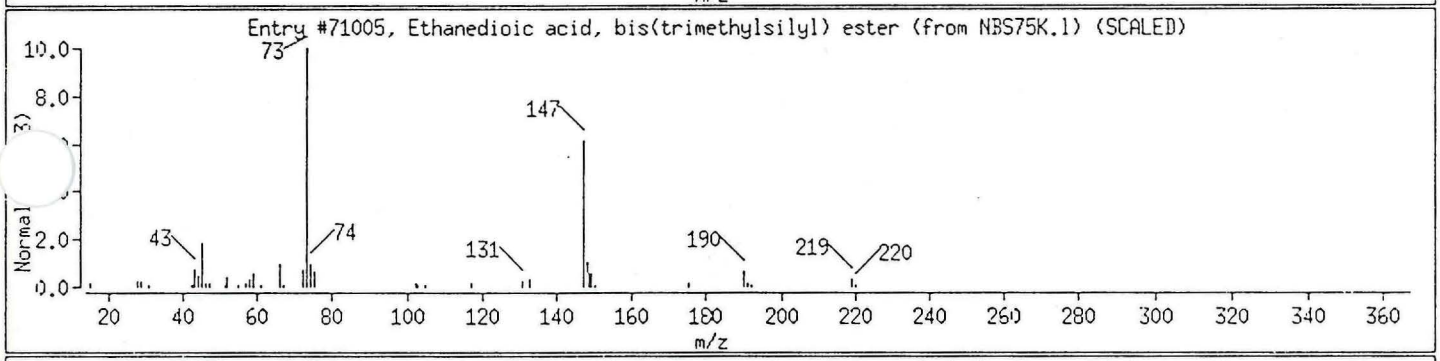
Sample Info: 18221n ssa7-f1

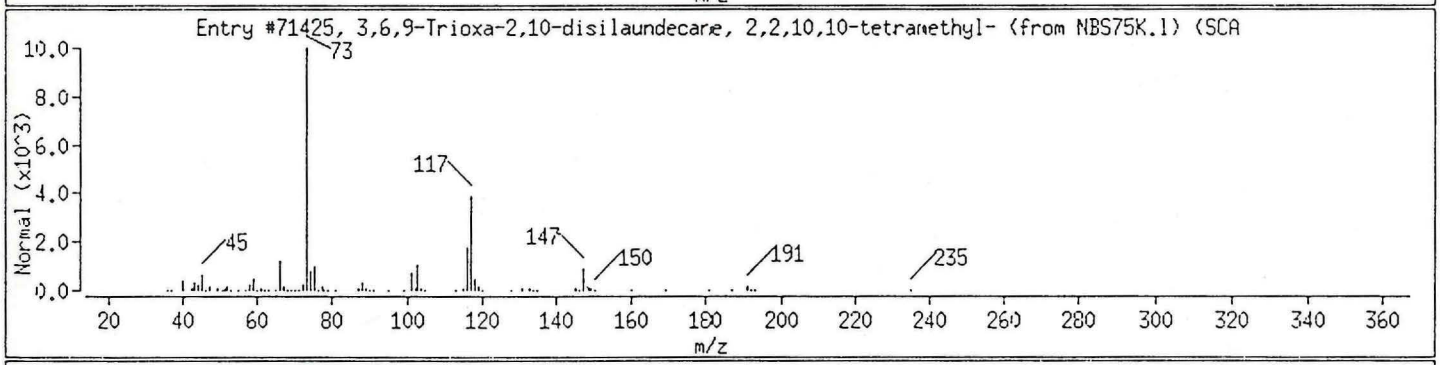
Operator: jk

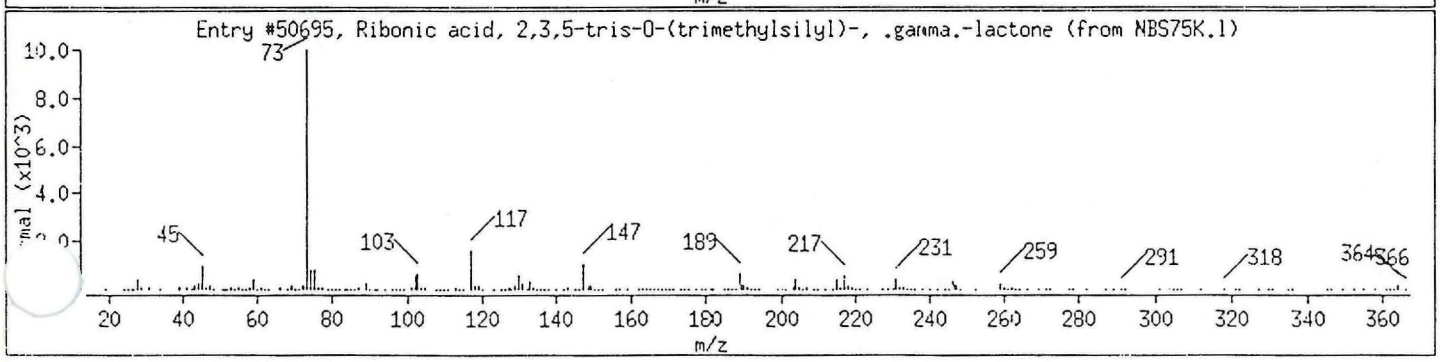
Column phase: DB-624 75m x 0.53mm Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethanedioic acid, bis(trimethylsilyl) es	18294-04-7	NBS75K.l	71005	47	C8H18O4Si2	234
3,6,9-Trioxa-2,10-disilaundecane, 2,2,10	16654-74-3	NBS75K.l	71425	45	C10H26O3Si2	250
Ribonic acid, 2,3,5-tris-O-(trimethylsil	74742-38-4	NBS75K.l	50695	28	C14H32O5Si3	364









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00110

SSA7-F2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9897V

Sample wt/vol: 5.25 (g/mL) G Lab File ID: A8524

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 28 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	7	U
75-00-3	Chloroethane	7	U
75-09-2	Methylene Chloride	28	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	7	U
78-87-5	1,2-Dichloropropane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
75-25-2	Bromoform	7	U
591-78-6	2-Hexanone	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U
75-35-4	1,1-Dichloroethene	7	U
78-93-3	2-Butanone	7	U
108-10-1	4-Methyl-2-pentanone	13	U
74-83-9	Bromomethane	7	U
74-87-3	Chloromethane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
124-48-1	Dibromochloromethane	7	U
127-18-4	Tetrachloroethene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
75-27-4	Bromodichloromethane	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00111

EPA SAMPLE NO.

SSA7-F2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9897V

Sample wt/vol: 5.25 (g/mL) G Lab File ID: A8524

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 28 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-07-0	Acetaldehyde	5.19	9	JN

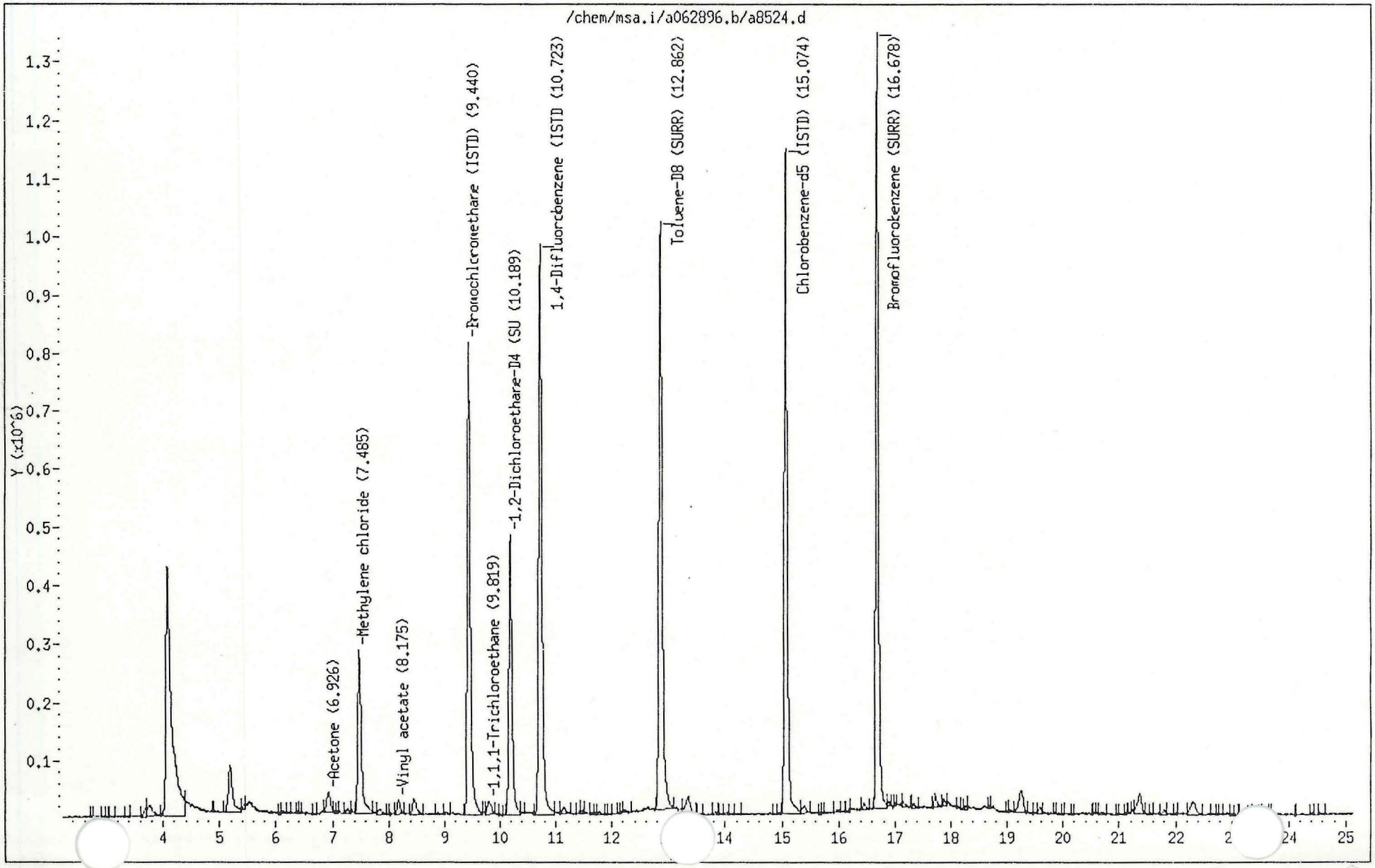
00112

Data File: /chem/msa.i/a062896.b/a8524.d
Date : 28-JUN-96 14:03
Client ID: 18221n ssa7-f2
Sample Info: 18221n ssa7-f2

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8524.d
Report Date: 10-Jul-1996 15:02

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062896.b/a8524.d
Lab Smp Id: Client Smp ID: 18221n ssa7-f2
Inj Date : 28-JUN-96 14:03
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-f2
Misc Info : jp9897v,n2v5309,qv,5000,1,5.25,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 12
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/10/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	Acetone	43.00	6.926	7.017	(0.734)	108679	10.9	10.9
	Methylene chloride	84.00	7.476	7.430	(0.792)	250079	21.0	21.0
	18 Vinyl acetate	43.00	8.175	8.411	(0.866)	18973	0.585	~~0.585~~ ms
*	23 Bromochloromethane (ISTD)	128.00	9.440	9.442	(1.000)	384232	50.0	
	25 1,1,1-Trichloroethane	97.00	9.810	9.797	(0.915)	31141	1.75	1.75
$	29 1,2-Dichloroethane-D4 (SURR)	65.00	10.189	10.202	(1.079)	620381	46.6	46.6
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.723	10.739	(1.000)	1434836	50.0	
$	41 Toluene-D8 (SURR)	98.00	12.862	12.877	(0.853)	1340472	47.5	47.5
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.074	15.091	(1.000)	1116042	50.0	
$	59 Bromofluorobenzene (SURR)	95.00	16.678	16.703	(1.106)	900457	47.8	47.8

Data File: /chem/msa.i/a062896.b/a8524.d

Date : 28-JUN-96 14:03

Client ID: 18221n ssa7-f2

Instrument: msa.i

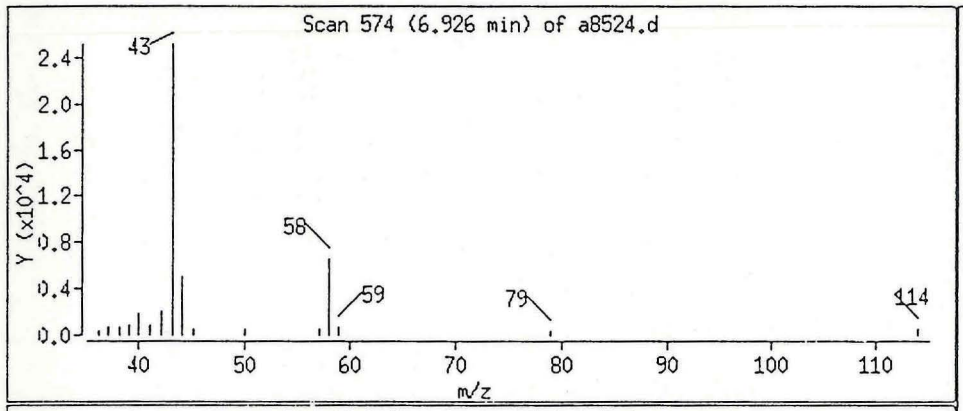
Sample Info: 18221n ssa7-f2

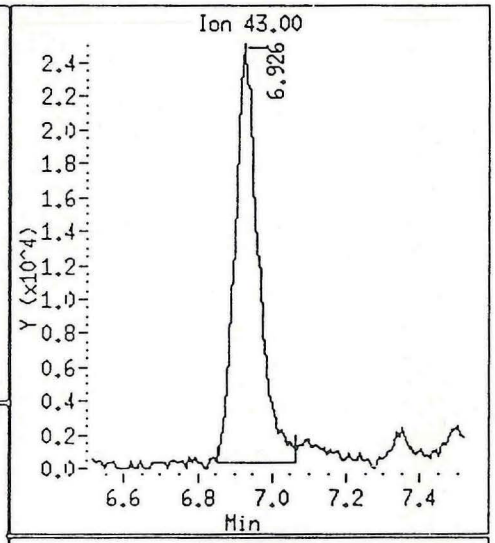
Operator: jk

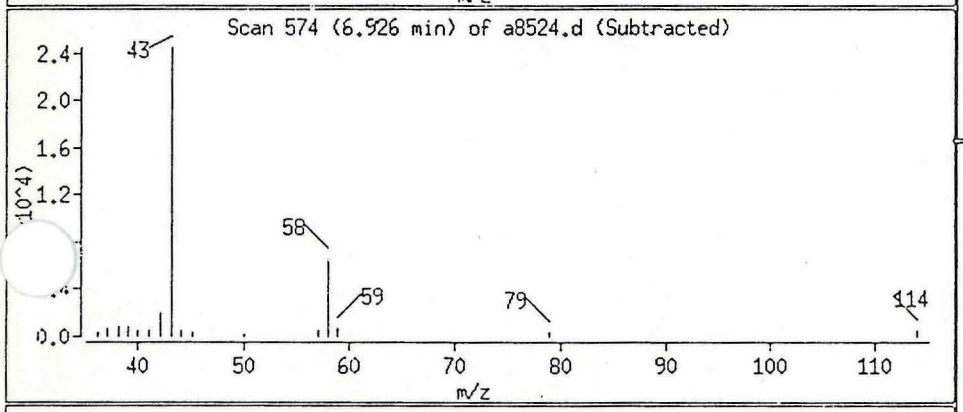
Column phase: DB-624 75m x 0.53mm

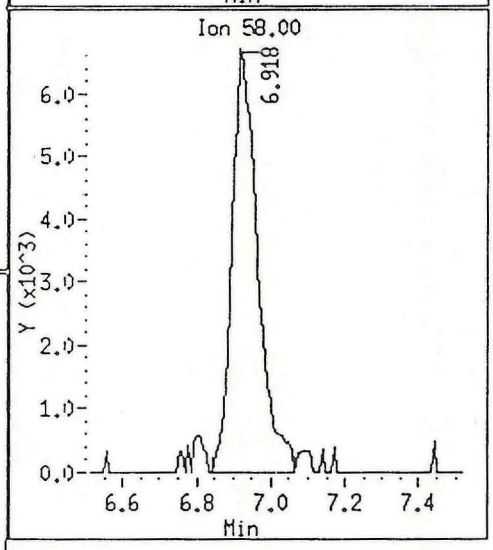
Column diameter: 0.53

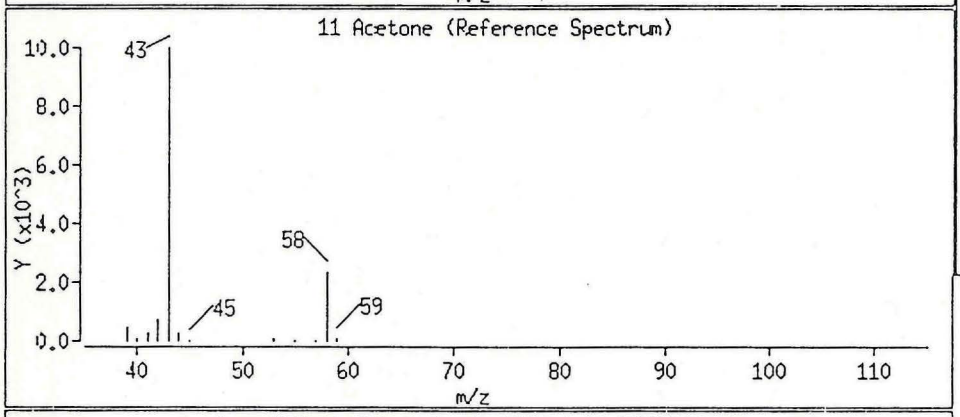
11 Acetone

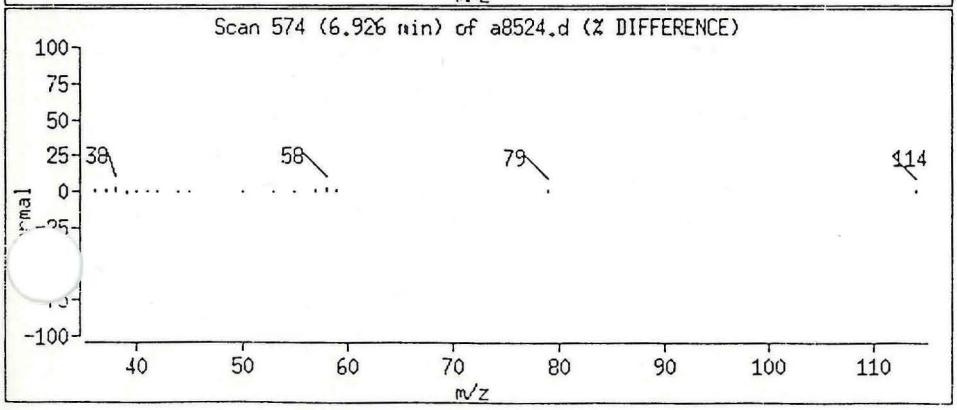












Data File: /chem/msa.i/a062896.b/a8524.d

Date : 28-JUN-96 14:03

Client ID: 18221n ssa7-f2

Instrument: msa.i

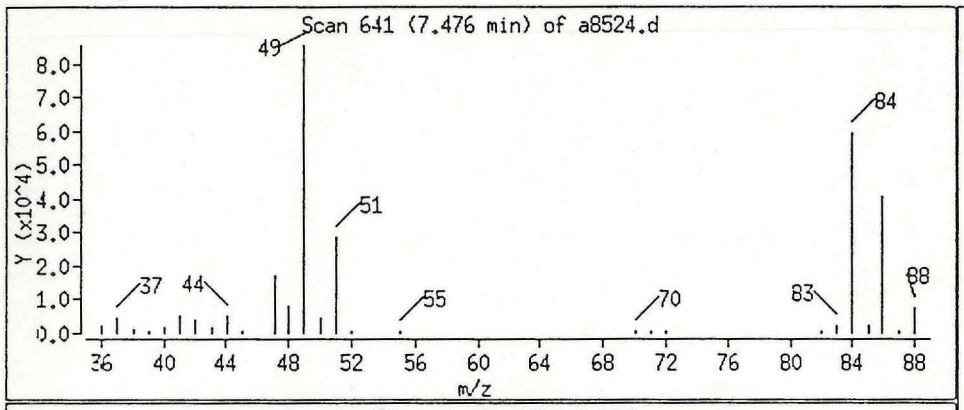
Sample Info: 18221n ssa7-f2

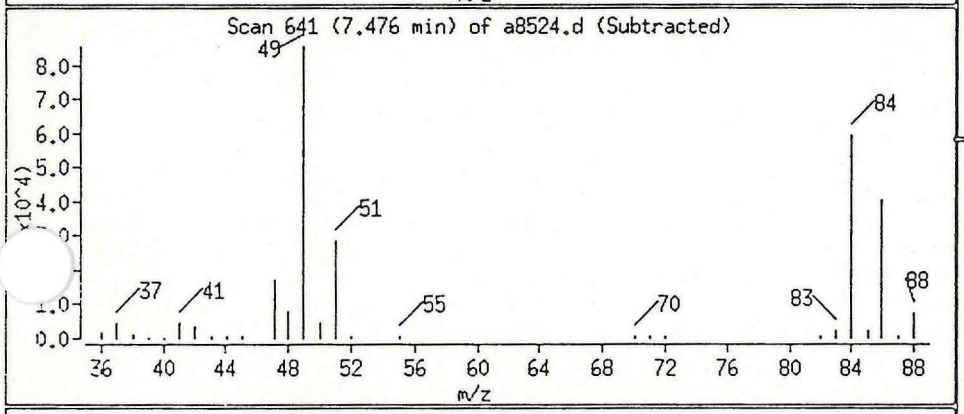
Operator: jk

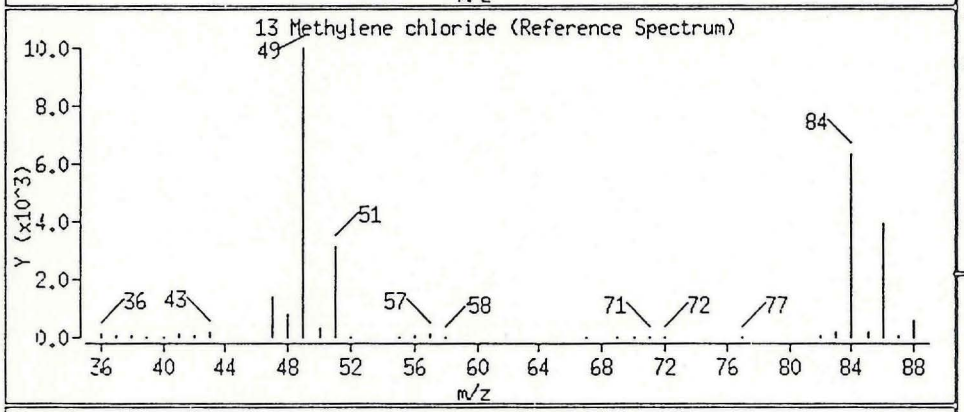
Column phase: DB-624 75m x 0.53mm

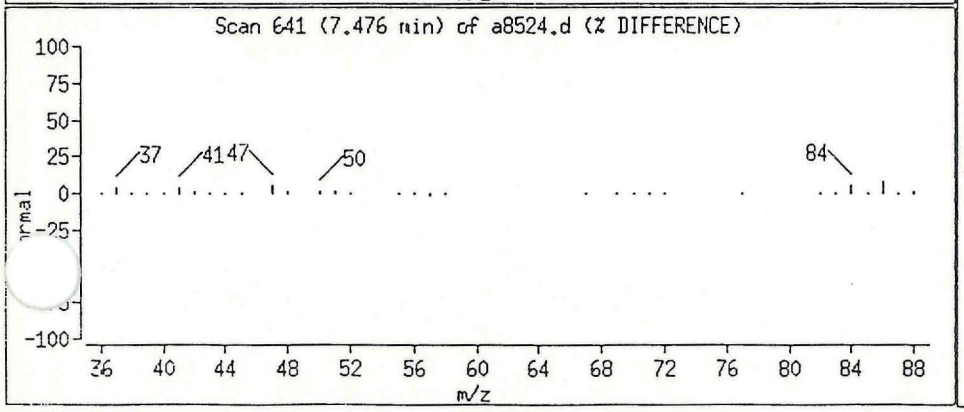
Column diameter: 0.53

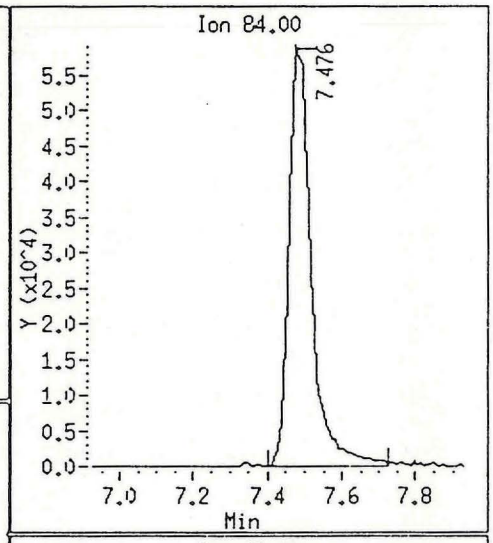
13 Methylene chloride

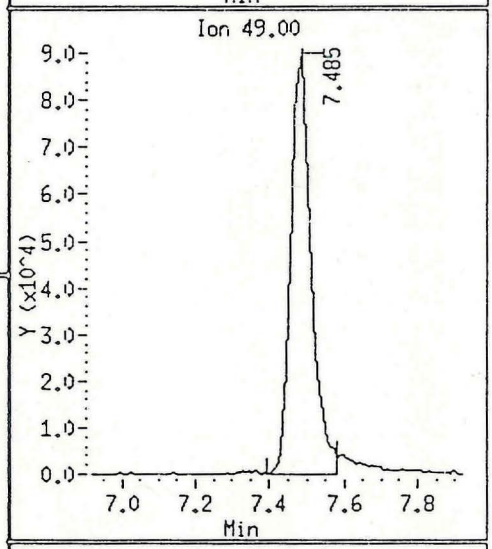


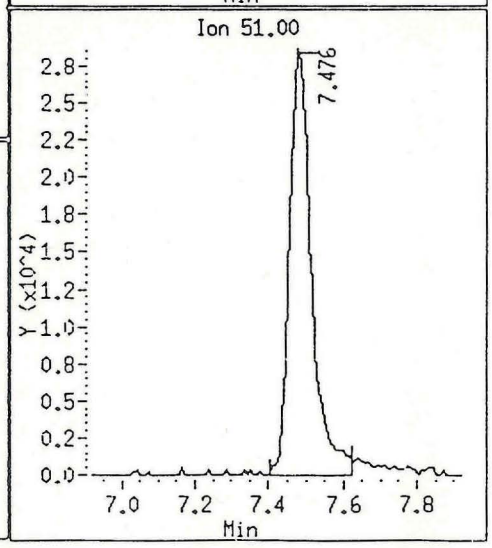












Data File: /chem/msa.i/a062896.b/a8524.d
Date : 28-JUN-96 14:03
Client ID: 18221n ssa7-f2
Sample Info: 18221n ssa7-f2

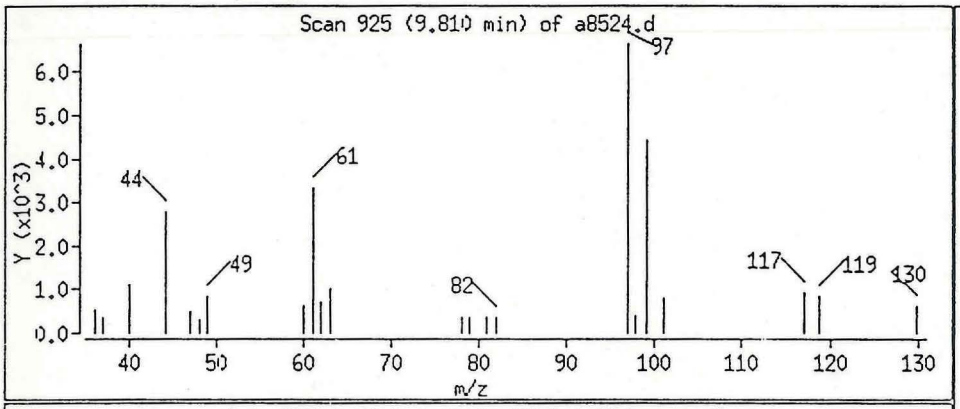
Instrument: msa.i

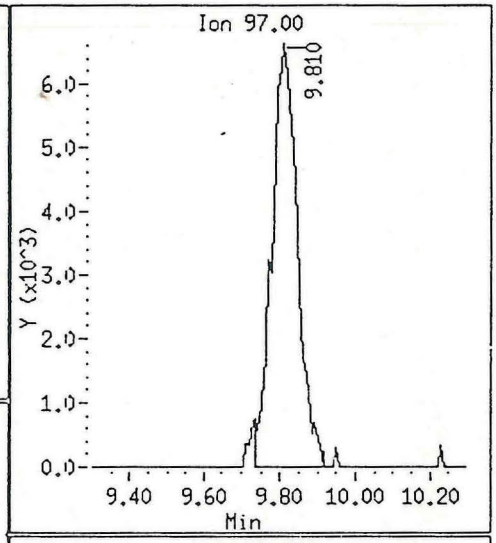
Operator: jk

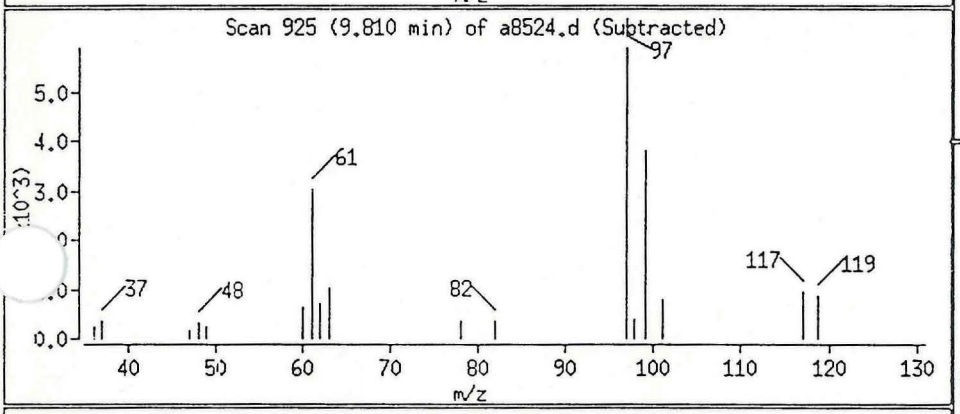
Column phase: DB-624 75m x 0.53mm

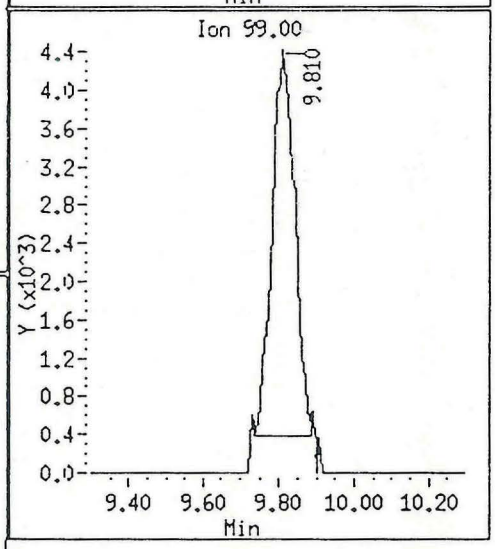
Column diameter: 0.53

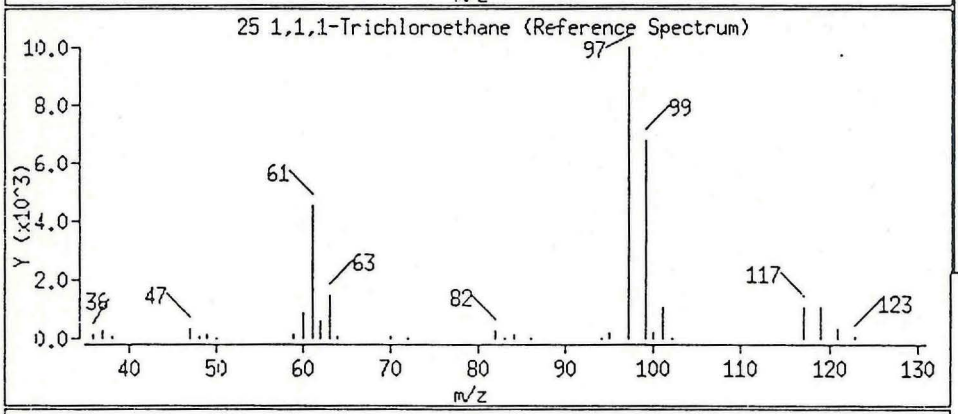
25 1,1,1-Trichloroethane

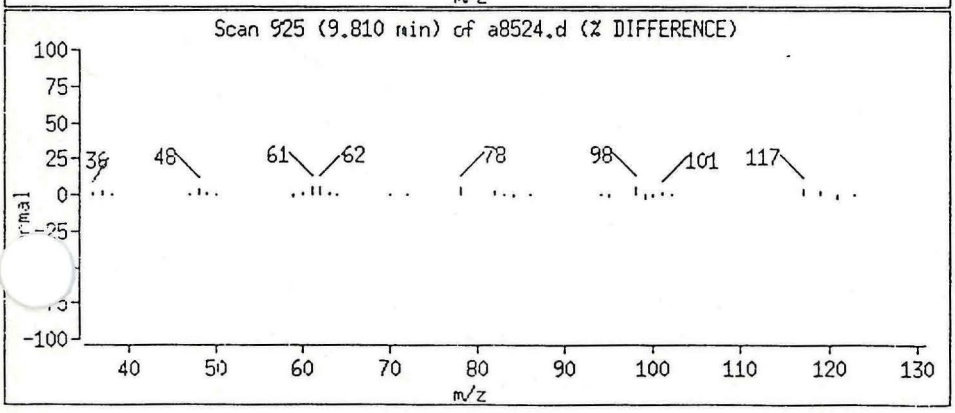












Data File: /chem/msa.i/a062896.b/a8524.d

Date : 28-JUN-96 14:03

Client ID: 18221n ssa7-f2

Instrument: msa.i

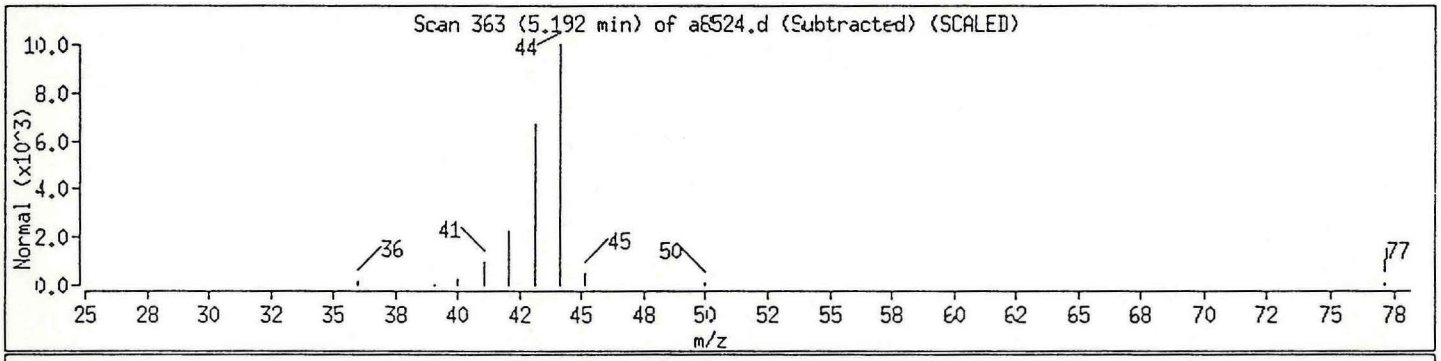
Sample Info: 18221n ssa7-f2

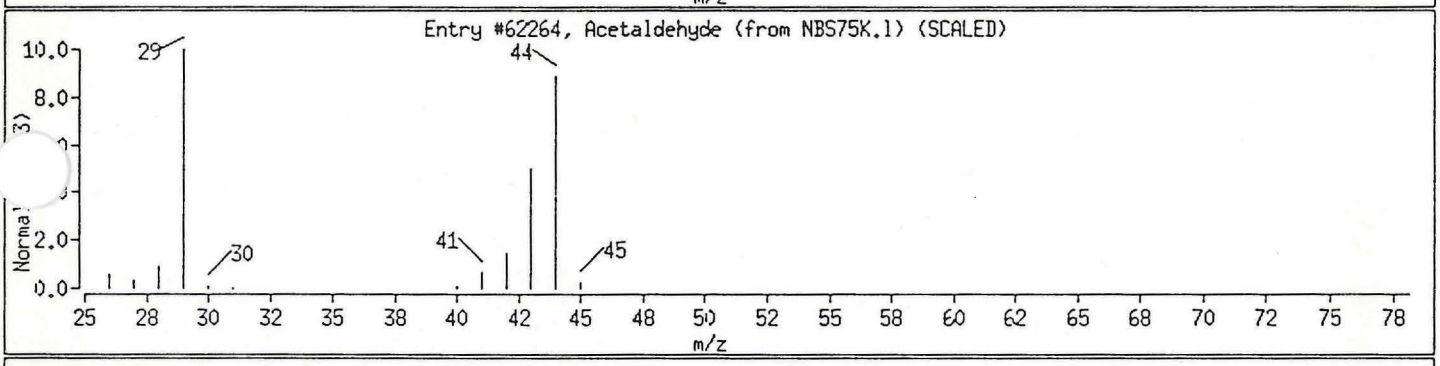
Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NBS75K.l	62264	74	C2H4O	44





1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00118

SSA7-F3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9898V

Sample wt/vol: 5.22 (g/mL) G Lab File ID: A8525

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 26 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	21	B
67-64-1	Acetone	24	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	13	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	5	J
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00119

EPA SAMPLE NO.

SSA7-F3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9898V

Sample wt/vol: 5.22 (g/mL) G Lab File ID: A8525

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 26 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-07-0	Acetaldehyde	5.16	8	JN

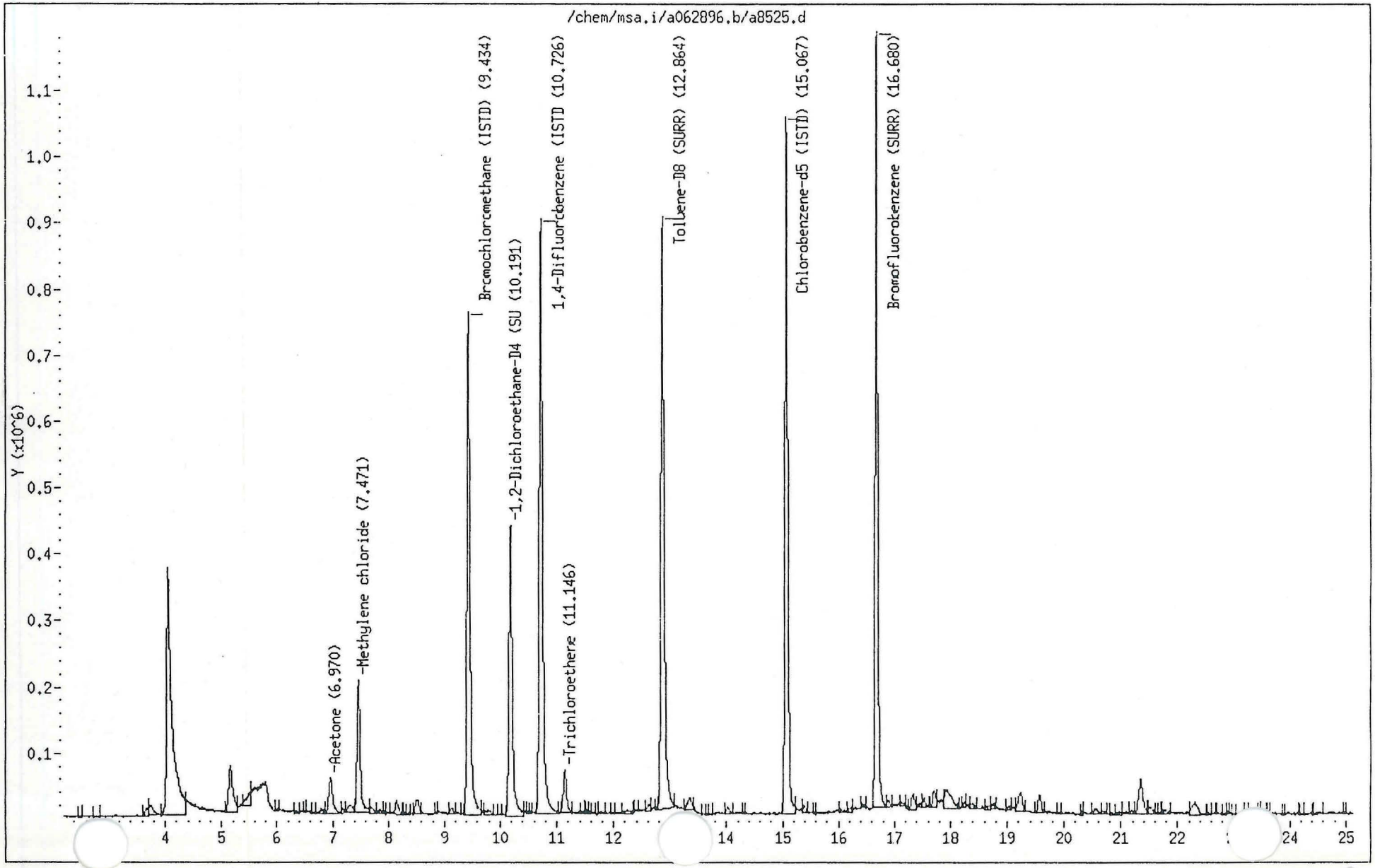
00120

Data File: /chem/msa.i/a062896.b/a8525.d
Date : 28-JUN-96 14:38
Client ID: 18221n ssa7-f3
Sample Info: 18221n ssa7-f3

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 & TIC

Data file : /chem/msa.i/a062896.b/a8525.d
Lab Smp Id: Client Smp ID: 18221n ssa7-f3
Inj Date : 28-JUN-96 14:38
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-f3
Misc Info : jp9898v,n2v5309,qv,5000,1,5.22,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 13
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.970	7.017	(0.739)	169542	18.2	18.2
Methylene chloride	84.00	7.471	7.430	(0.792)	176837	15.9	15.9
* 23 Bromochloromethane (ISTD)	128.00	9.434	9.442	(1.000)	359140	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.191	10.202	(1.080)	568241	45.6	45.6
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.726	10.739	(1.000)	1334918	50.0	
33 Trichloroethene	130.00	11.137	11.151	(1.038)	42438	3.63	3.63
$ 41 Toluene-D8 (SURR)	98.00	12.864	12.877	(0.854)	1190002	46.5	46.5
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.067	15.091	(1.000)	1011211	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.680	16.703	(1.107)	769206	45.1	45.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062896.b/a8525.d

Date : 28-JUN-96 14:38

Client ID: 18221n ssa7-f3

Instrument: msa.i

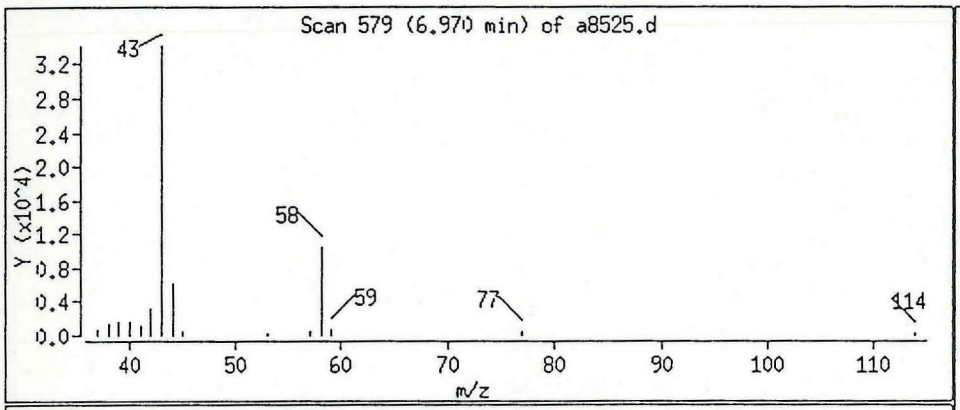
Sample Info: 18221n ssa7-f3

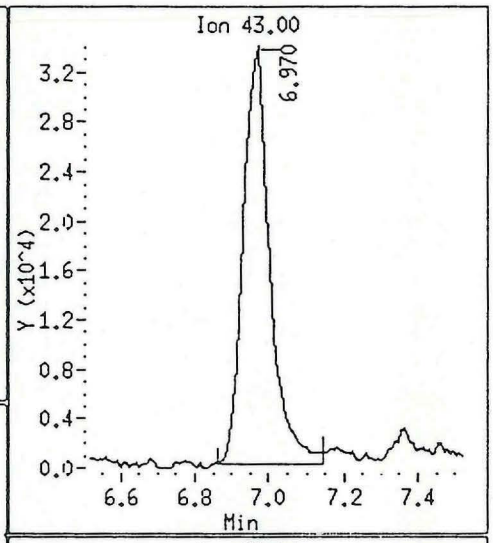
Operator: jk

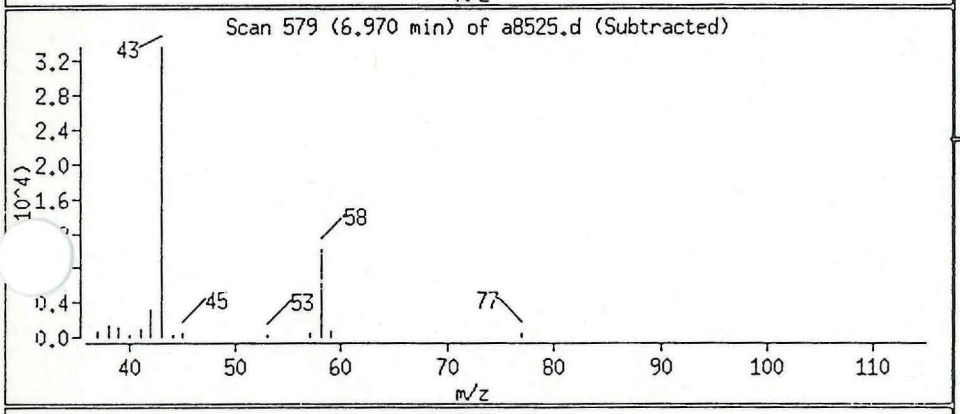
Column phase: DB-624 75m x 0.53mm

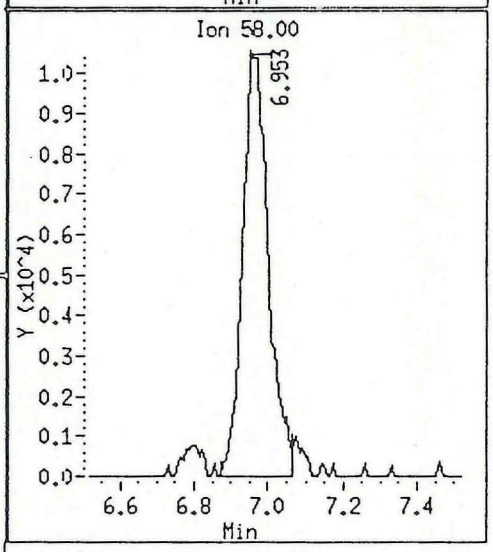
Column diameter: 0.53

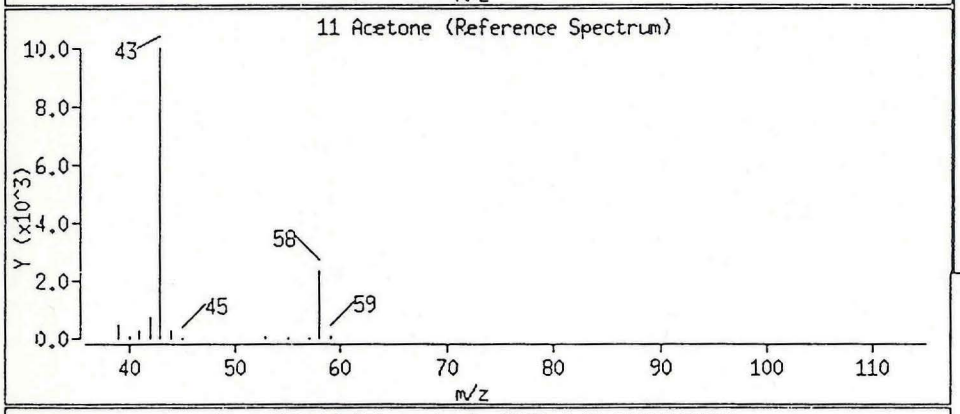
11 Acetone

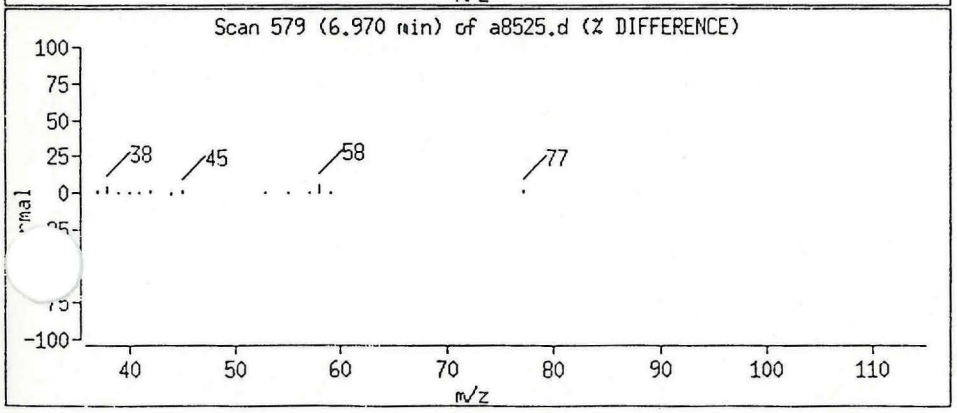












Data File: /chem/msa.i/a062896.b/a8525.d

Date : 28-JUN-96 14:38

Client ID: 18221n ssa7-f3

Instrument: msa.i

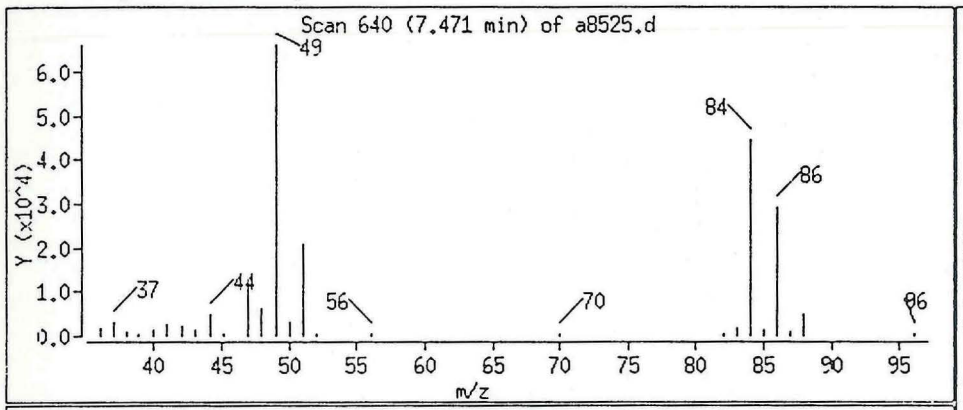
Sample Info: 18221n ssa7-f3

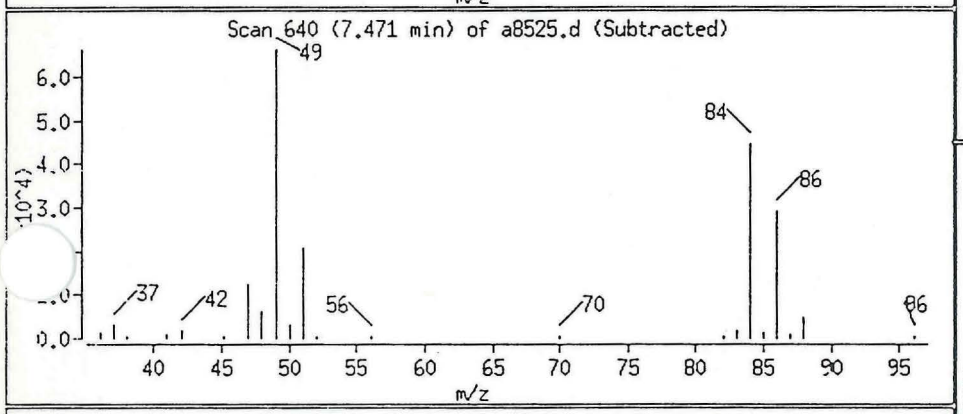
Operator: jk

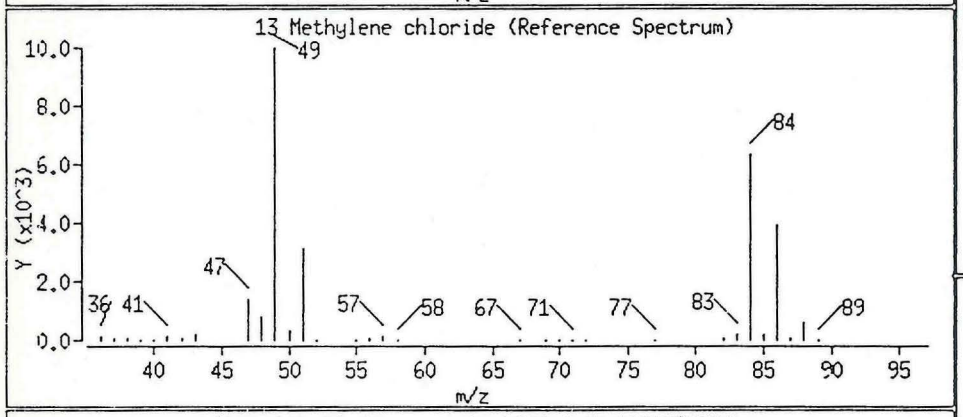
Column phase: DB-624 75m x 0.53mm

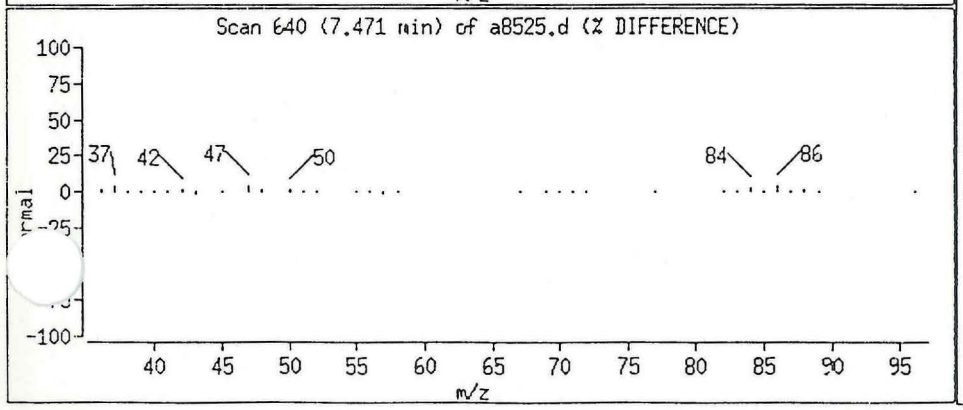
Column diameter: 0.53

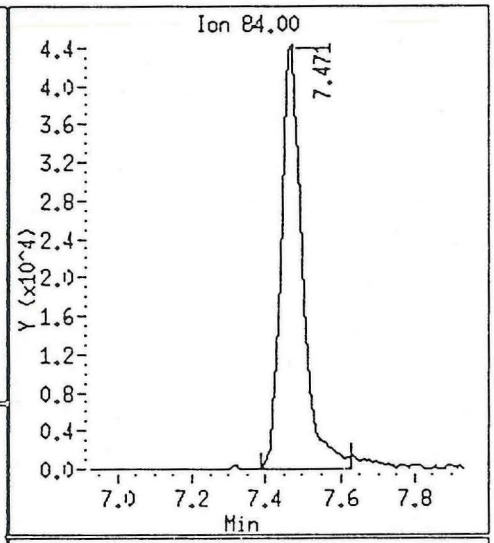
13 Methylene chloride

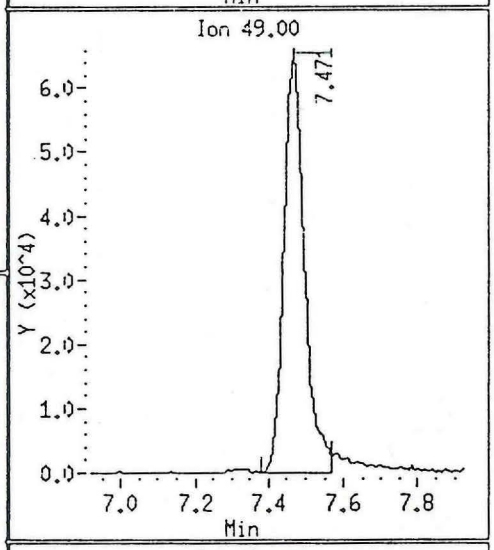


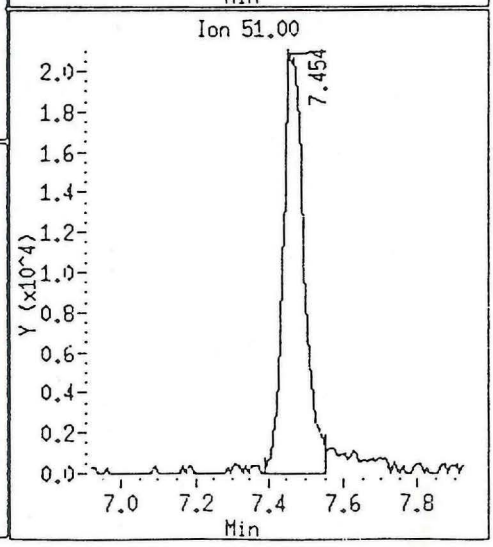












Data File: /chem/msa.i/a062896.b/a8525.d

Date : 28-JUN-96 14:38

Client ID: 18221n ssa7-f3

Sample Info: 18221n ssa7-f3

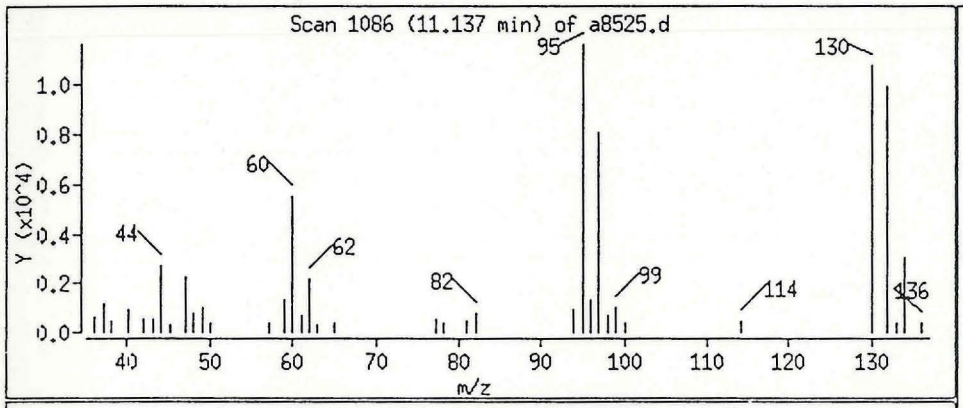
Instrument: msa.i

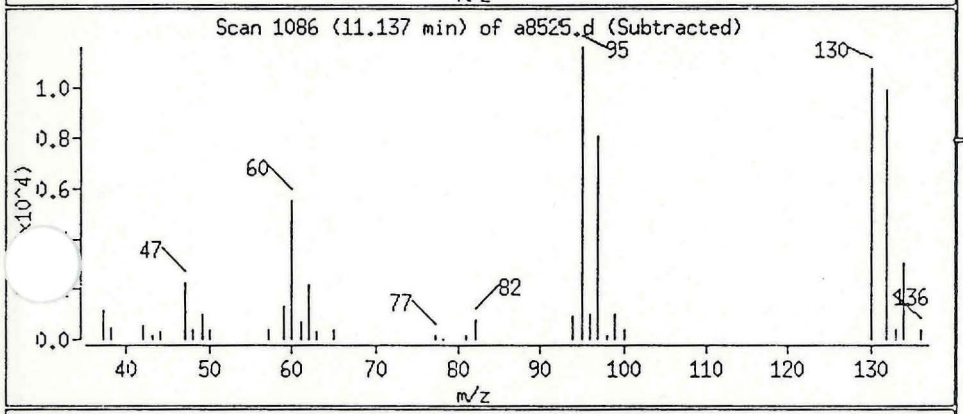
Operator: jk

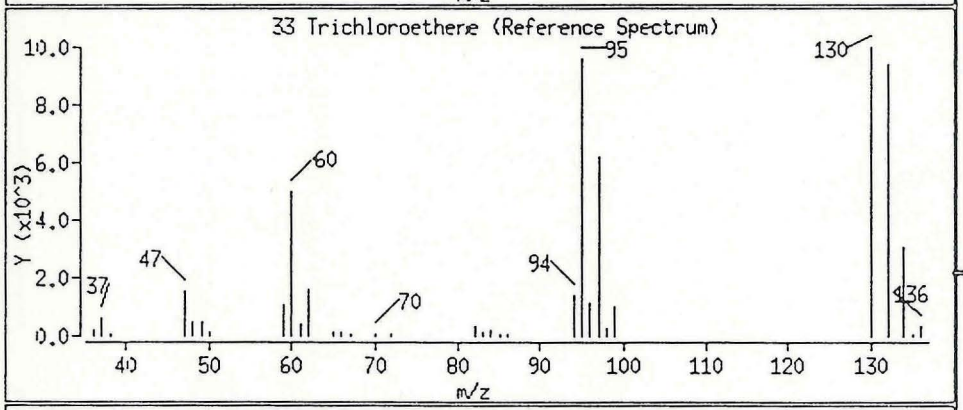
Column phase: DB-624 75m x 0.53mm

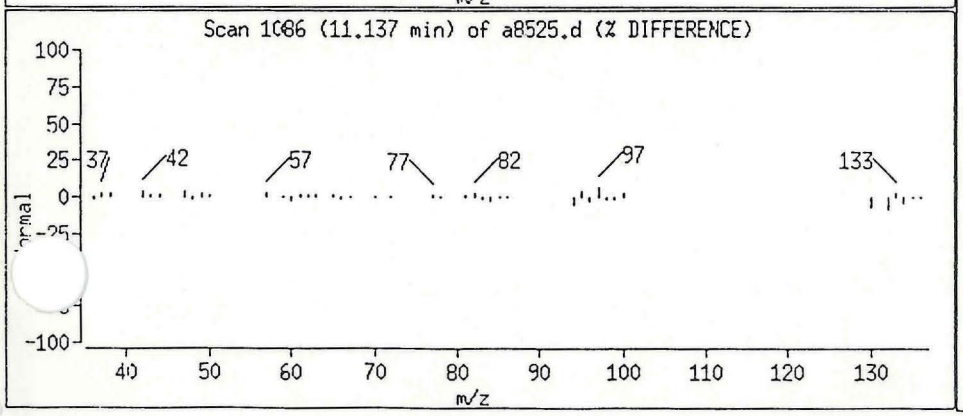
Column diameter: 0.53

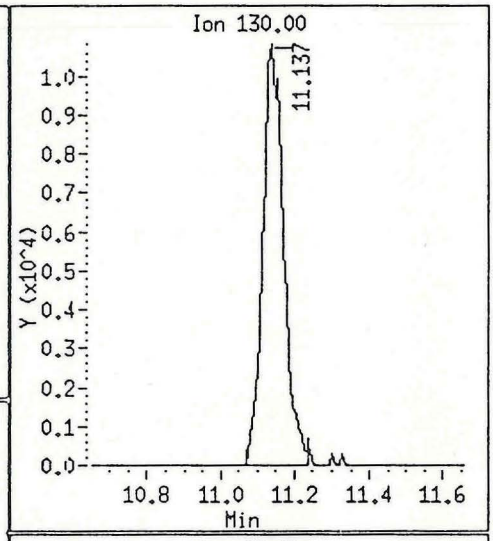
33 Trichloroethene

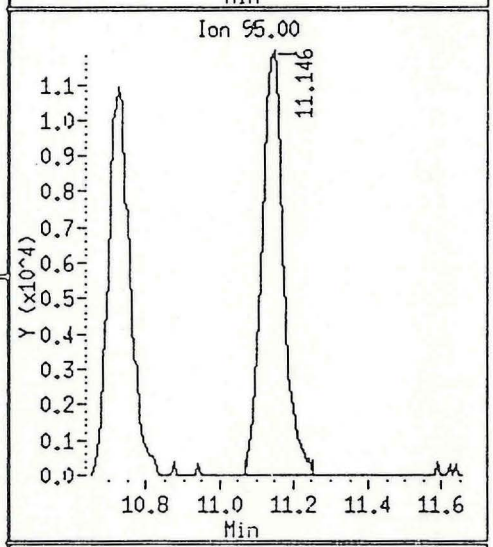


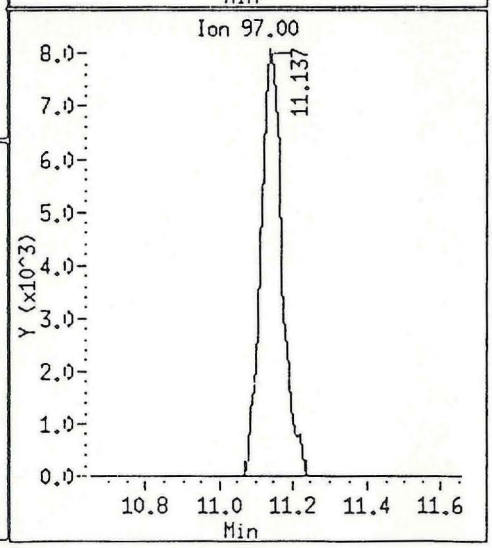












Data File: /chem/msa.i/a062896.b/a8525.d

Date : 28-JUN-96 14:38

Client ID: 18221n ssa7-f3

Sample Info: 18221n ssa7-f3

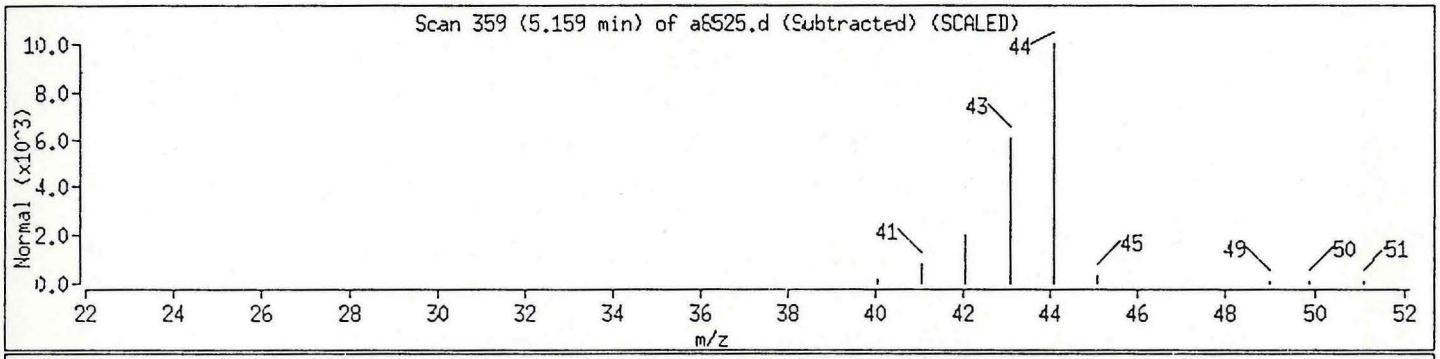
Instrument: msa.i

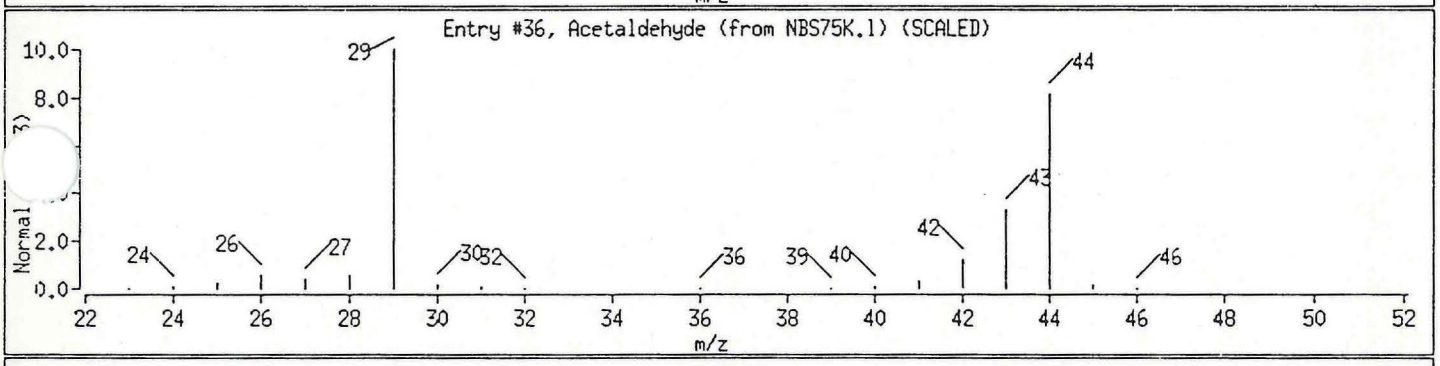
Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NBS75K.l	36	90	C2H4O	44





1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00126

SSA7-F4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9899V

Sample wt/vol: 5.06 (g/mL) G Lab File ID: A8526

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 19 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00127

EPA SAMPLE NO.

SSA7-F4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9899V

Sample wt/vol: 5.06 (g/mL) G Lab File ID: A8526

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 19 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

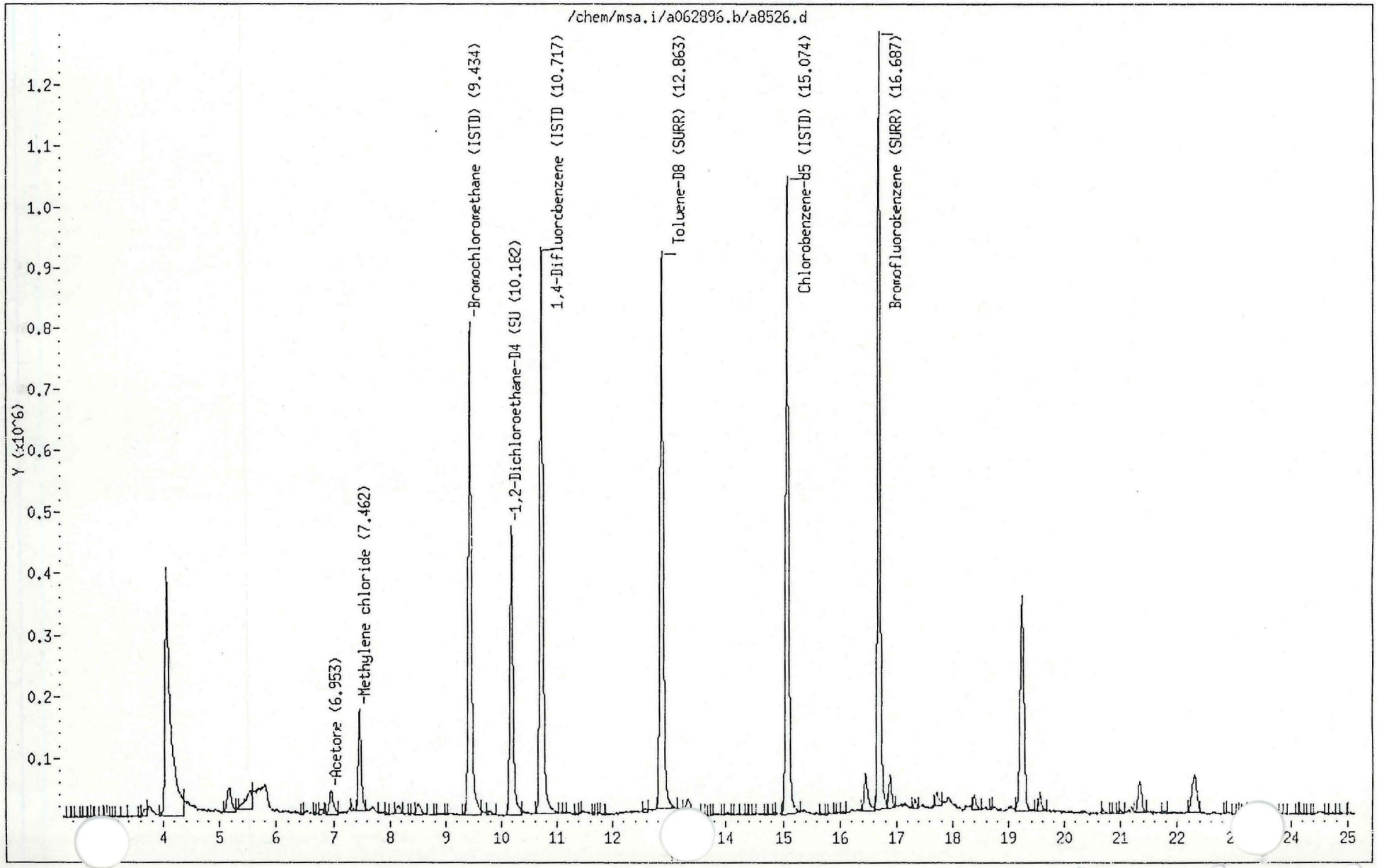
00128

Data File: /chem/msa.i/a062896.b/a8526.d
Date : 28-JUN-96 15:13
Client ID: 18221n ssa7-f4
Sample Info: 18221n ssa7-f4

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8526.d
Report Date: 10-Jul-1996 15:03

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 TIC

Data file : /chem/msa.i/a062896.b/a8526.d
Lab Smp Id: Client Smp ID: 18221n ssa7-f4
Inj Date : 28-JUN-96 15:13
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-f4
Misc Info : jp9899v,n2v5309,qv,5000,1,5.06,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 14
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
cetone	43.00	6.961	7.017	(0.739)	117379	11.8	11.8
Methylene chloride	84.00	7.462	7.430	(0.792)	146925	12.4	12.4
* 23 Bromochloromethane (ISTD)	128.00	9.426	9.442	(1.000)	383518	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.182	10.202	(1.080)	600844	45.2	45.2
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.725	10.739	(1.000)	1406146	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.863	12.877	(0.853)	1229533	47.4	47.4
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.074	15.091	(1.000)	1025189	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.687	16.703	(1.107)	836964	48.4	48.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062896.b/a8526.d
Date : 28-JUN-96 15:13
Client ID: 18221n ssa7-f4
Sample Info: 18221n ssa7-f4

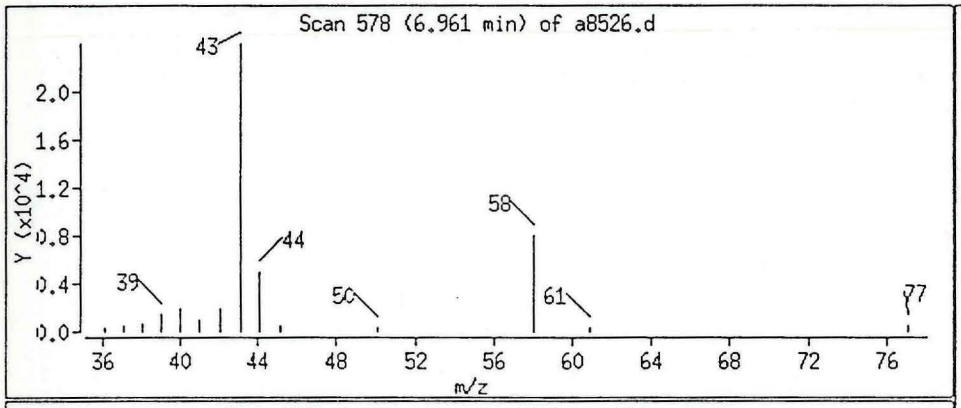
Instrument: msa.i

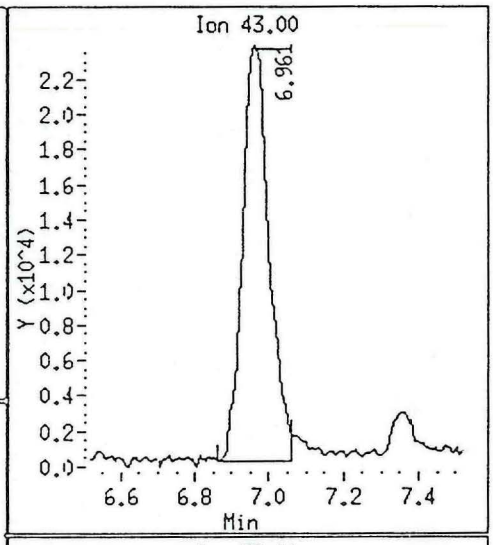
Operator: jk

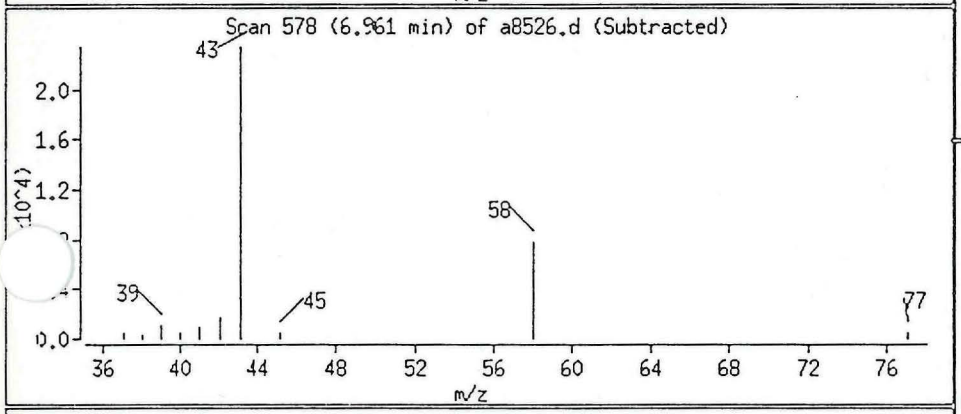
Column phase: DB-624 75m x 0.53mm

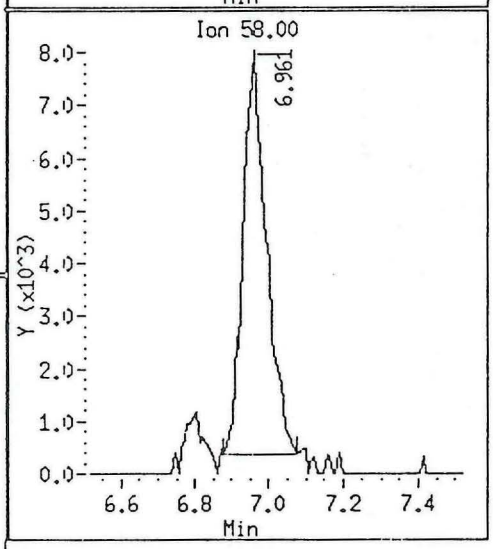
Column diameter: 0.53

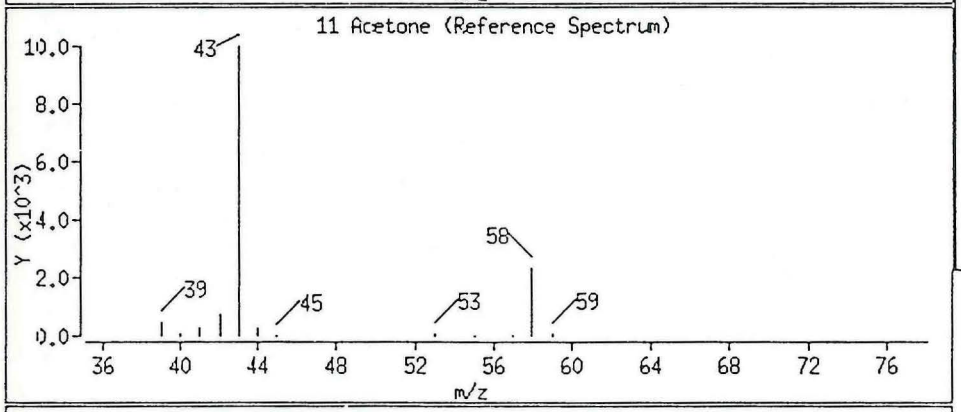
11 Acetone

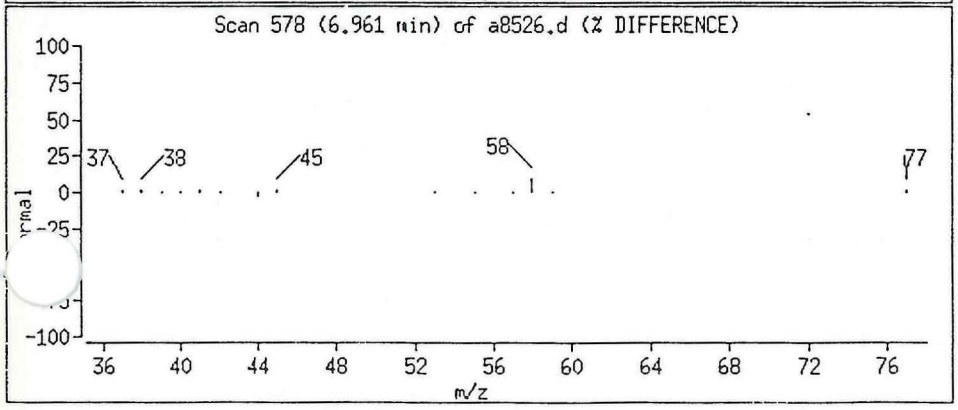












Data File: /chem/msa.i/a062896.b/a8526.d

Date : 28-JUN-96 15:13

Client ID: 18221n ssa7-f4

Instrument: msa.i

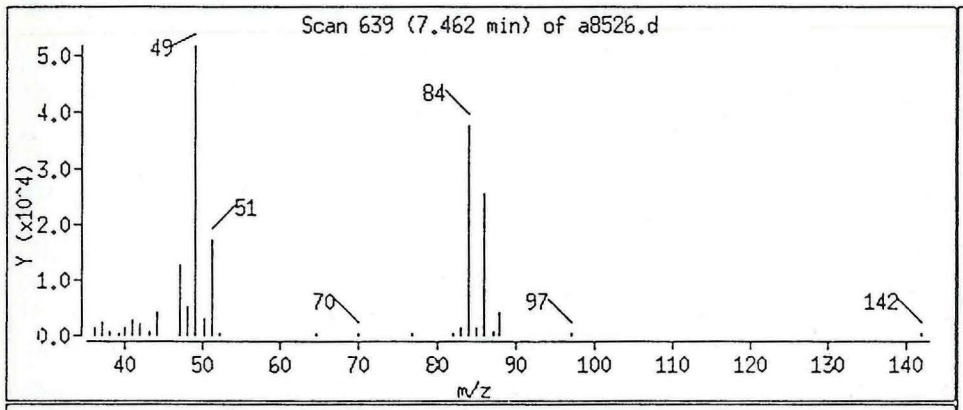
Sample Info: 18221n ssa7-f4

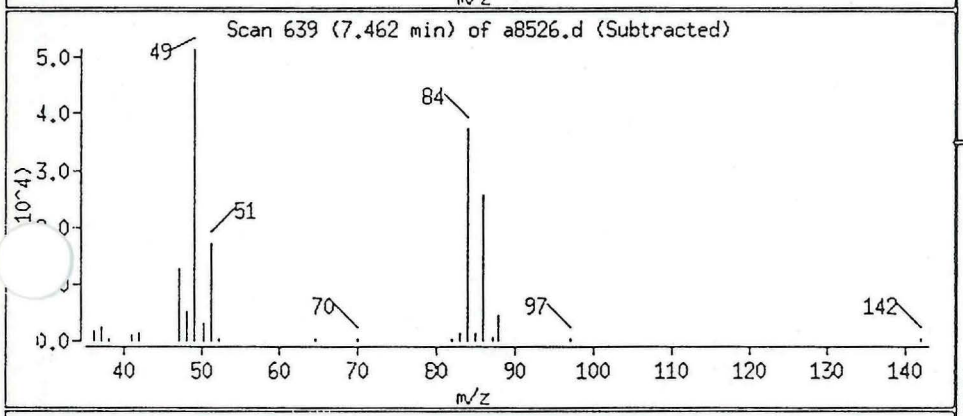
Operator: jk

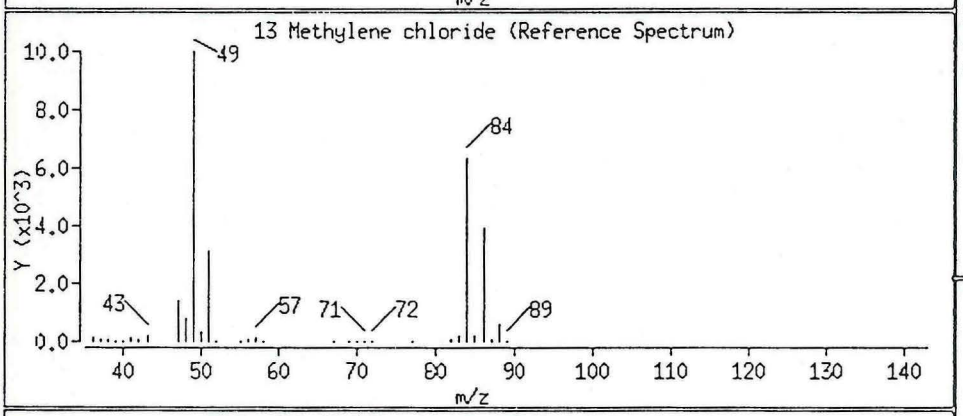
Column phase: DB-624 75m x 0.53mm

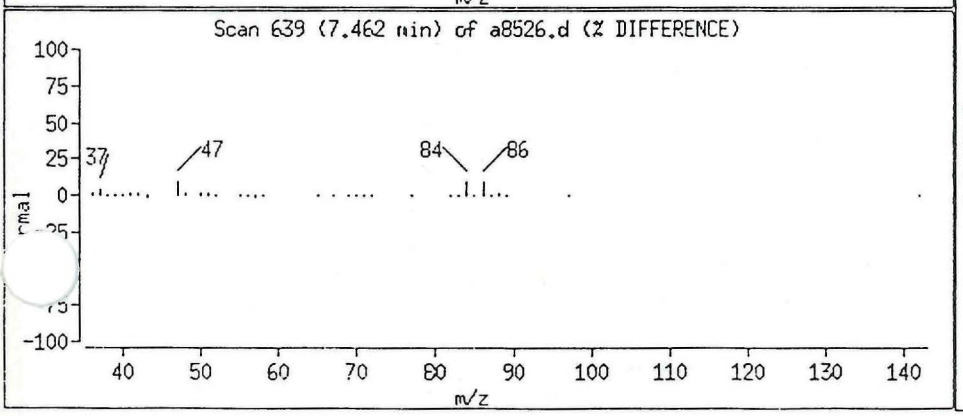
Column diameter: 0.53

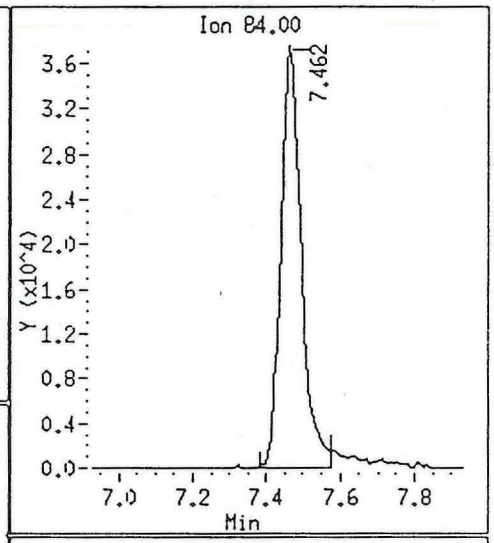
13 Methylene chloride

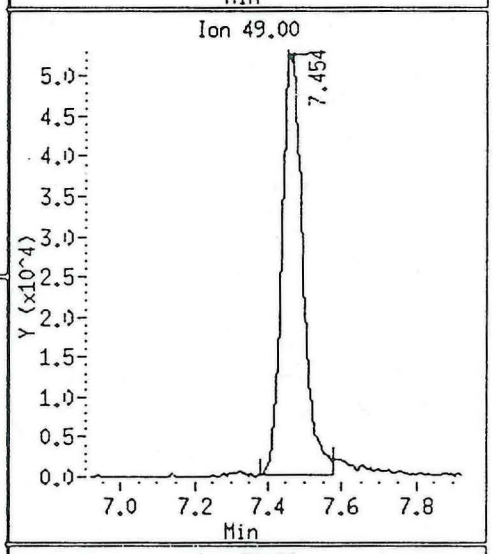


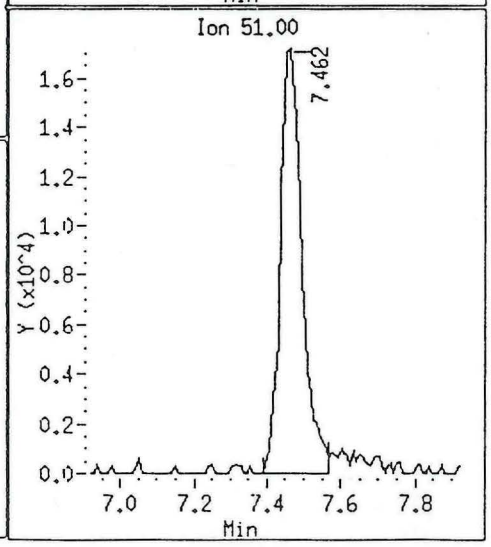












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00132 SSA7-F5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9900V

Sample wt/vol: 5.39 (g/mL) G Lab File ID: A8542

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 21 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	45	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	J
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	4	J
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	2	J
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

00133

EPA SAMPLE NO.

SSA7-F5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9900V

Sample wt/vol: 5.39 (g/mL) G Lab File ID: A8542

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 21 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

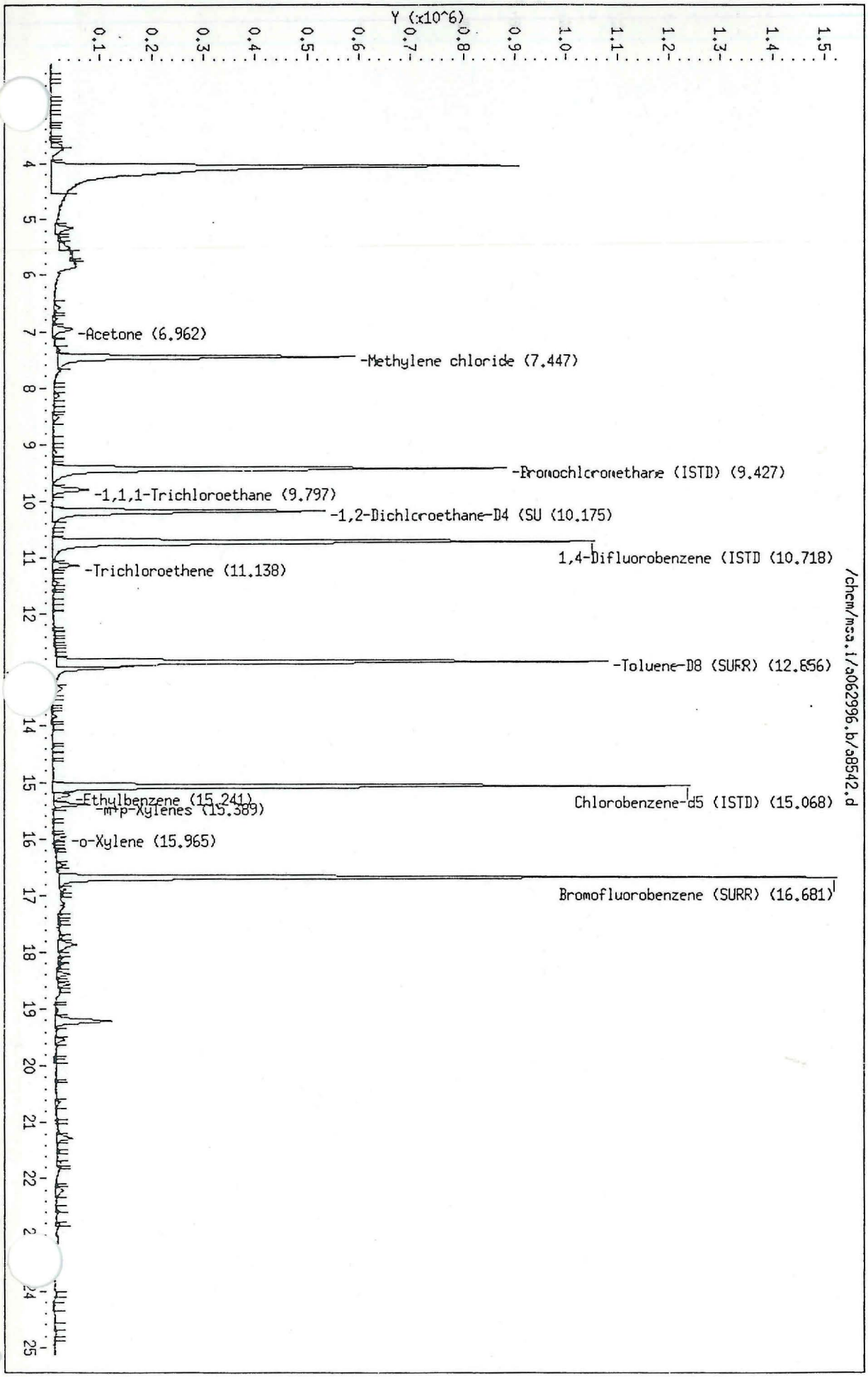
00134

Data File: /chem/msa.i/a062996.b/a8542.d
Date : 29-JUN-96 12:47
Client ID:
Sample Info: 18221n ssa7-f5

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8542.d
Report Date: 05-Jul-1996 08:21

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062996.b/a8542.d
Lab Smp Id:
Inj Date : 29-JUN-96 12:47
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-f5
Misc Info : jp9900v,n2v5309,qv,5000,1,5.39,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:55 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

T. [illegible] 7/5/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
11 Acetone	43.00	6.962	7.011	(0.739)	134127	11.7	11.7
Methylene chloride	84.00	7.447	7.439	(0.790)	522424	38.6	38.6
Bromochloromethane (ISTD)	128.00	9.427	9.441	(1.000)	415918	50.0	
25 1,1,1-Trichloroethane	97.00	9.789	9.804	(0.913)	92563	4.80	4.80
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.183	10.192	(1.080)	702567	49.7	49.7
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.718	10.728	(1.000)	1532664	50.0	
33 Trichloroethene	130.00	11.138	11.149	(1.039)	28909	2.12	2.12
$ 41 Toluene-D8 (SURR)	98.00	12.856	12.881	(0.854)	1433371	50.3	50.3
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.060	15.083	(1.000)	1192725	50.0	
53 Ethylbenzene	106.00	15.249	15.257	(1.013)	10535	0.912	0.912
54 m+p-Xylenes	106.00	15.389	15.414	(1.022)	35013	2.59	2.59 (M)
55 o-Xylene	106.00	15.965	15.983	(1.060)	9066	0.664	0.664 (M)
$ 59 Bromofluorobenzene (SURR)	95.00	16.681	16.693	(1.108)	975724	50.8	50.8

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/msa.i/a062996.b/a8542.d
Date : 29-JUN-96 12:47
Client ID:
Sample Info: 18221n ssa7-f5

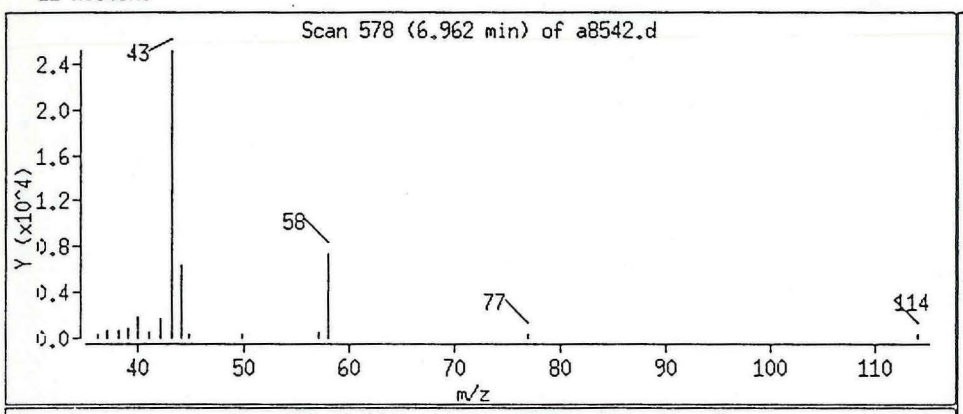
Instrument: msa.i

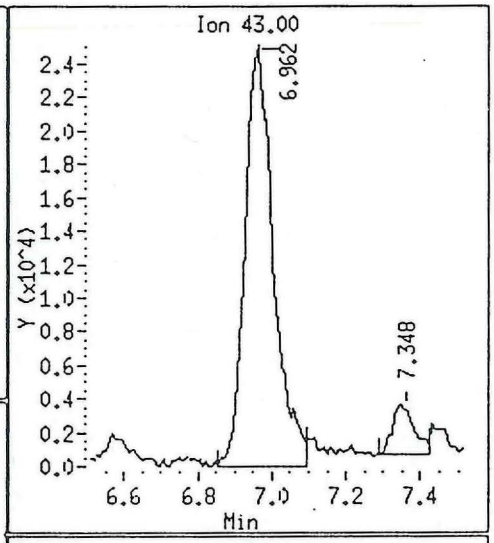
Operator: jk

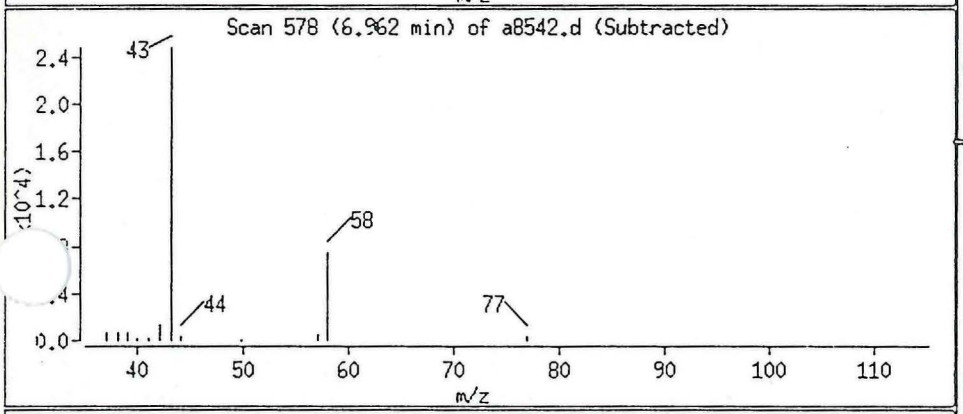
Column phase: DB-624 75m x 0.53mm

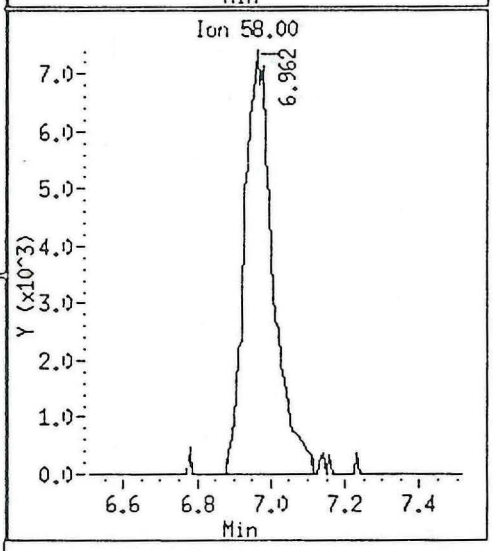
Column diameter: 0.53

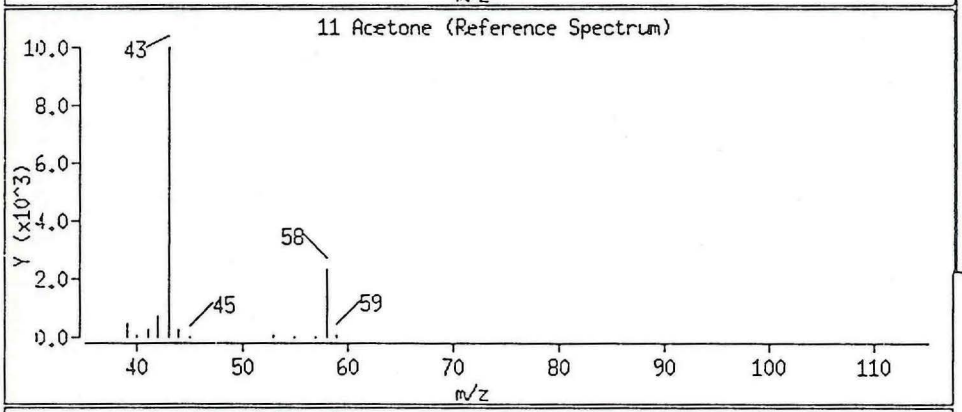
11 Acetone

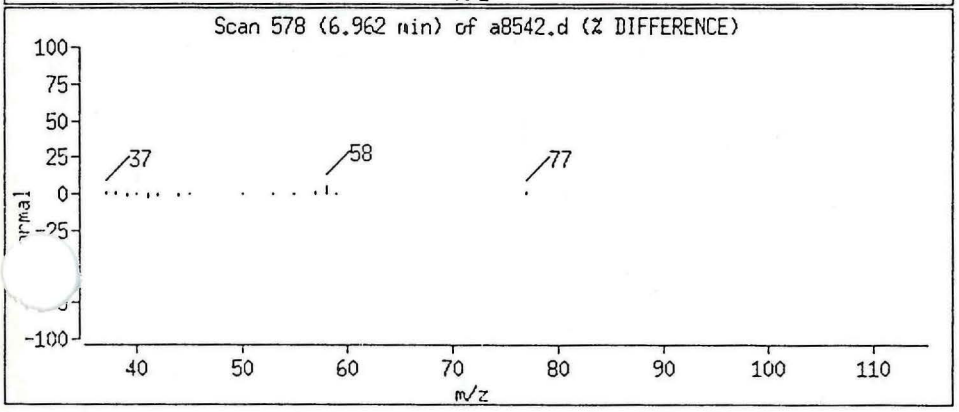












Data File: /chem/msa.i/a062996.b/a8542.d

Date : 29-JUN-96 12:47

Client ID:

Instrument: msa.i

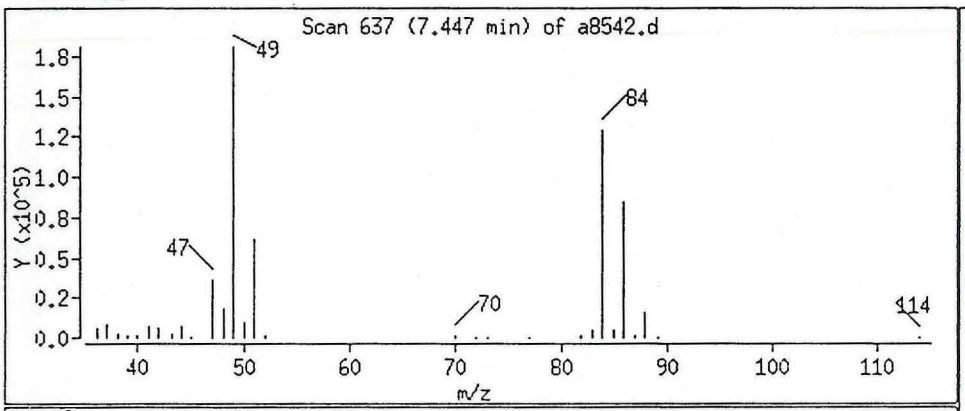
Sample Info: 18221n ssa7-f5

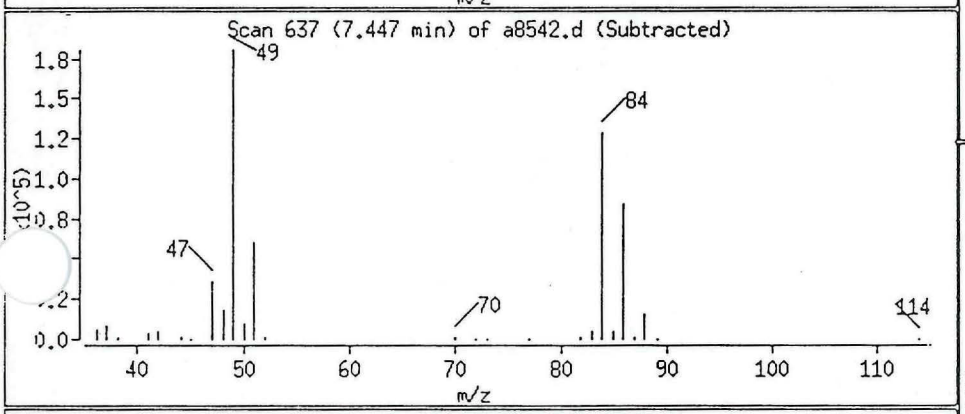
Operator: jk

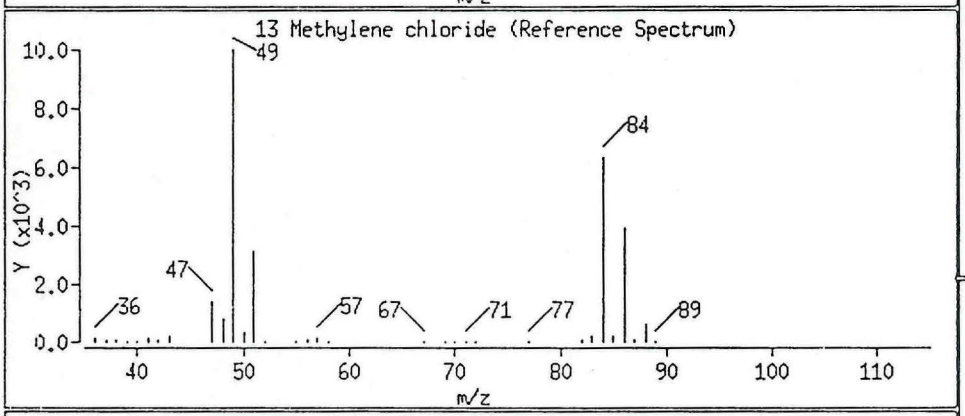
Column phase: DB-624 75m x 0.53mm

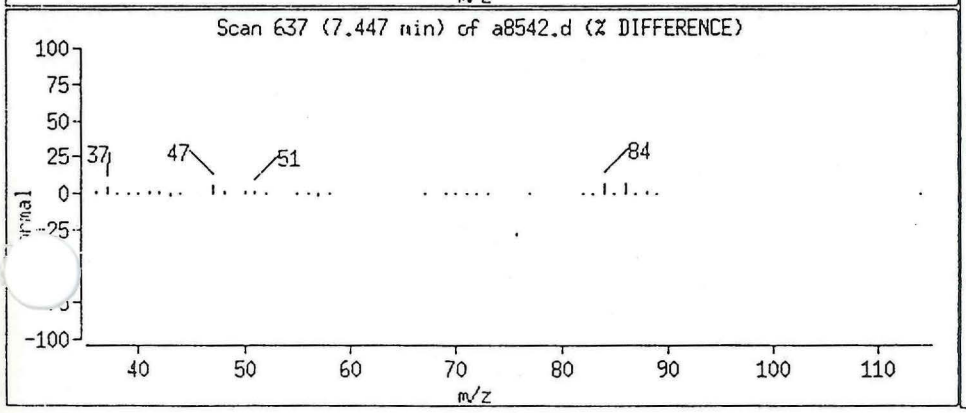
Column diameter: 0.53

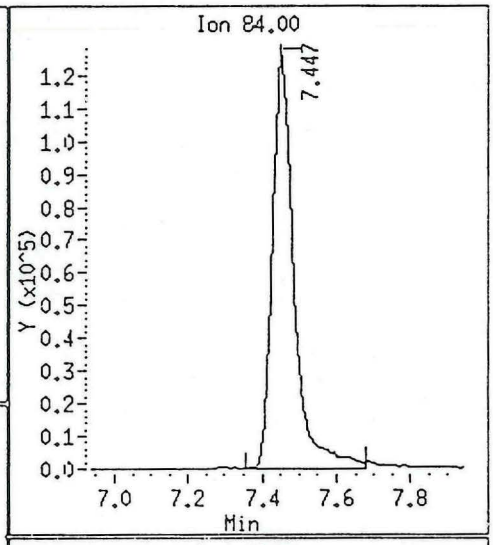
13 Methylene chloride

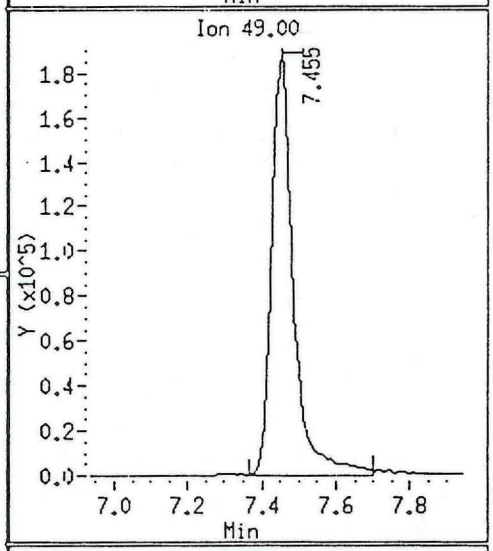


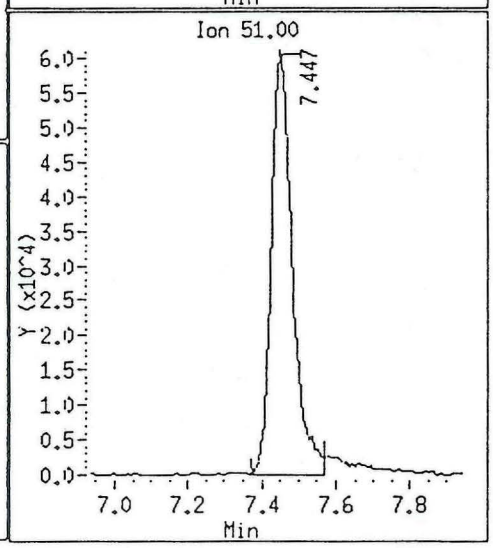












Data File: /chem/msa.i/a062996.b/a8542.d

Date : 29-JUN-96 12:47

Client ID:

Instrument: msa.i

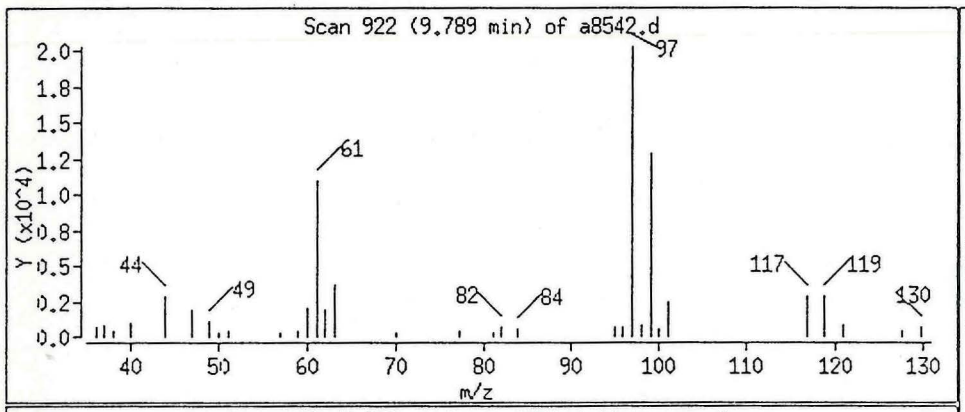
Sample Info: 18221n ssa7-f5

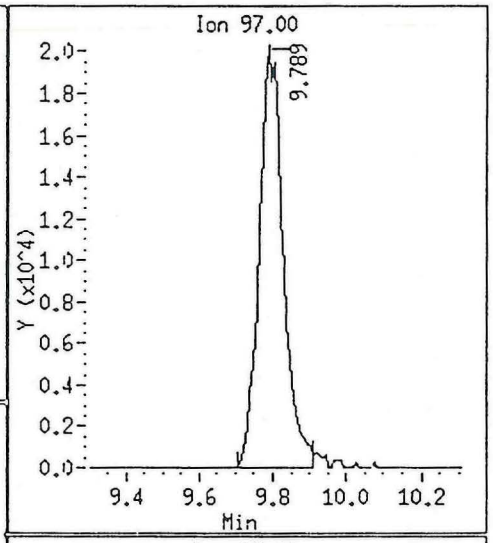
Operator: jk

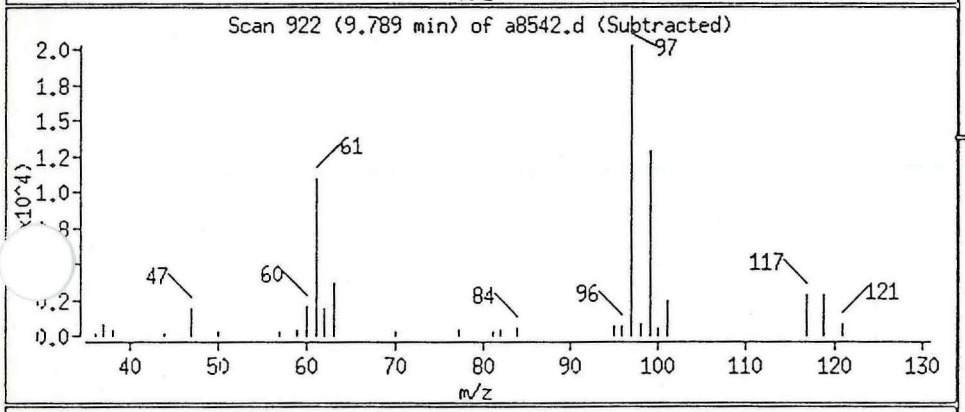
Column phase: DB-624 75m x 0.53mm

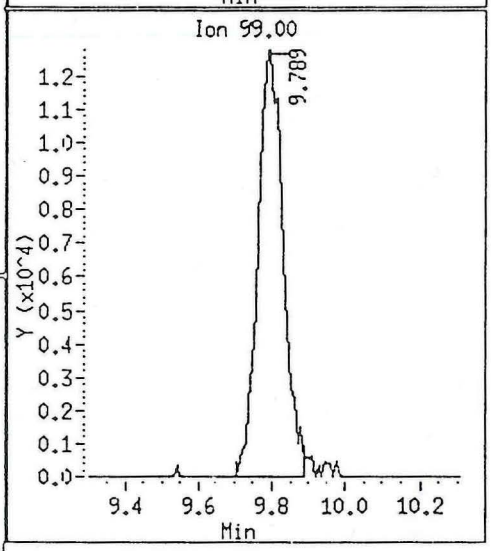
Column diameter: 0.53

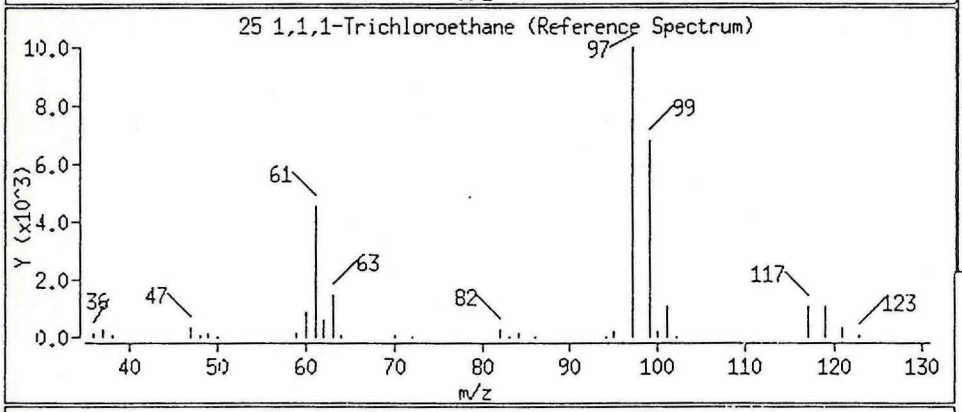
25 1,1,1-Trichloroethane

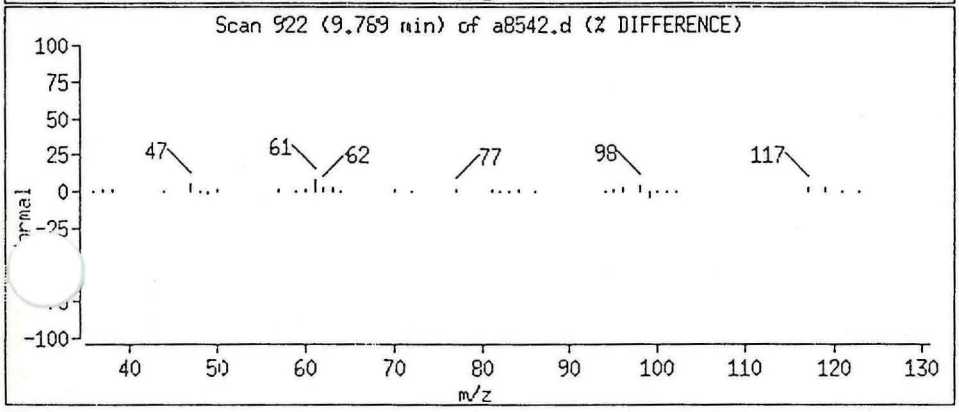












Data File: /chem/msa.i/a062996.b/a8542.d

Date : 29-JUN-96 12:47

Client ID:

Instrument: msa.i

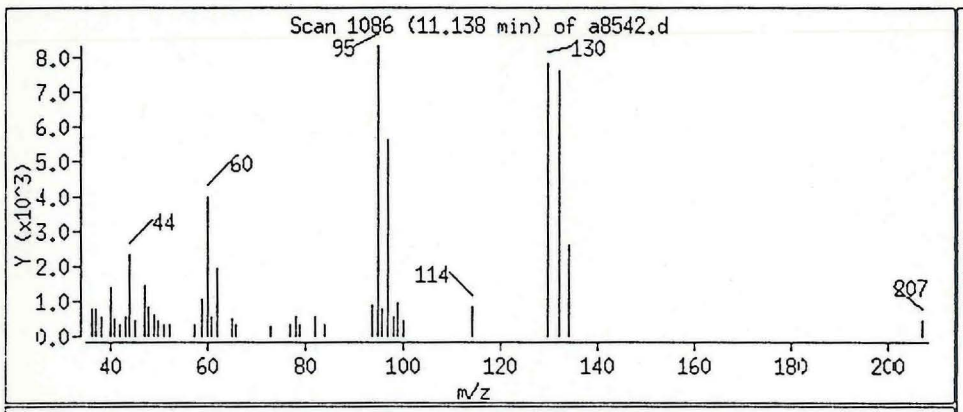
Sample Info: 18221n ssa7-f5

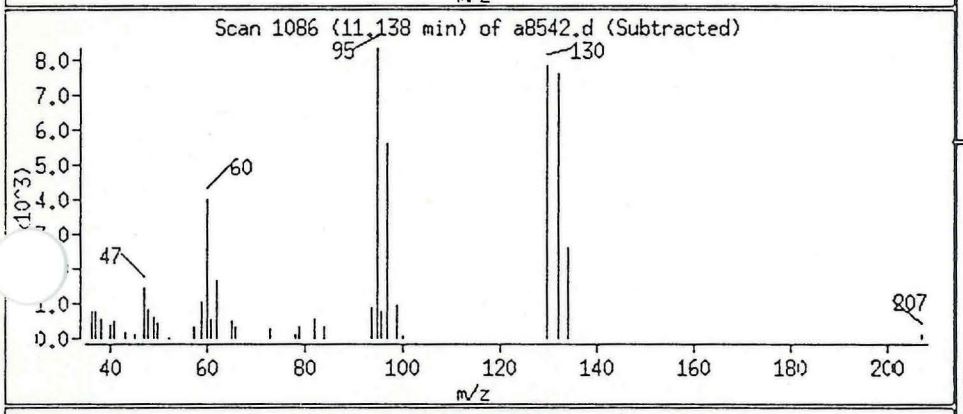
Operator: jk

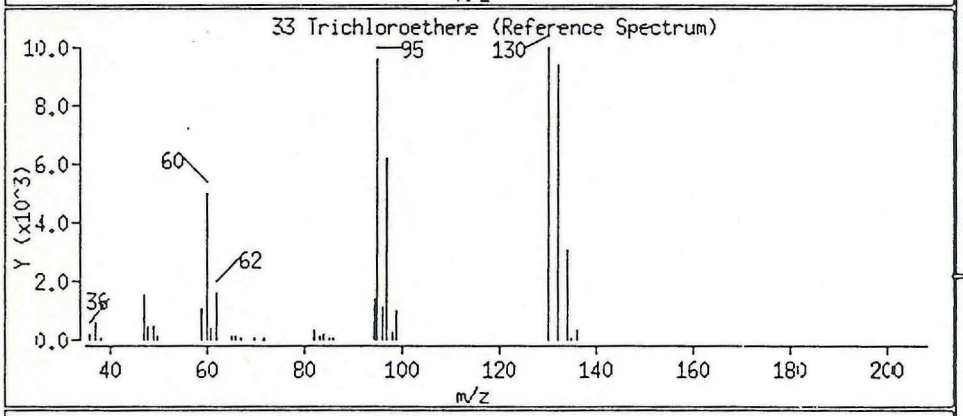
Column phase: DB-624 75m x 0.53mm

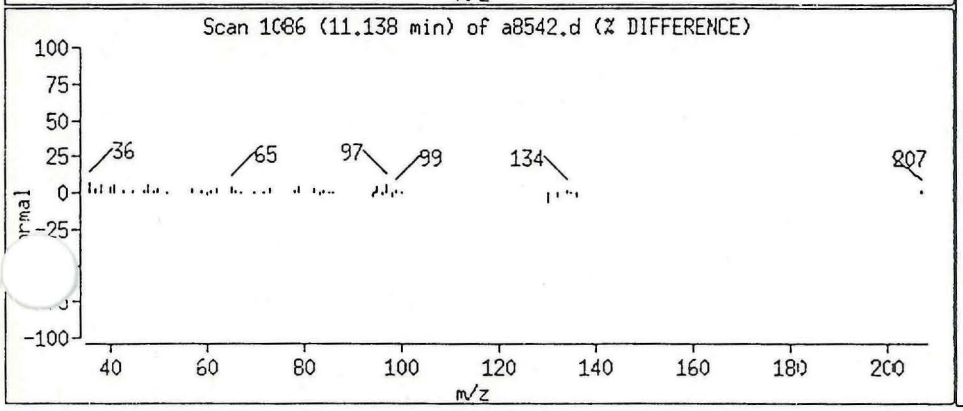
Column diameter: 0.53

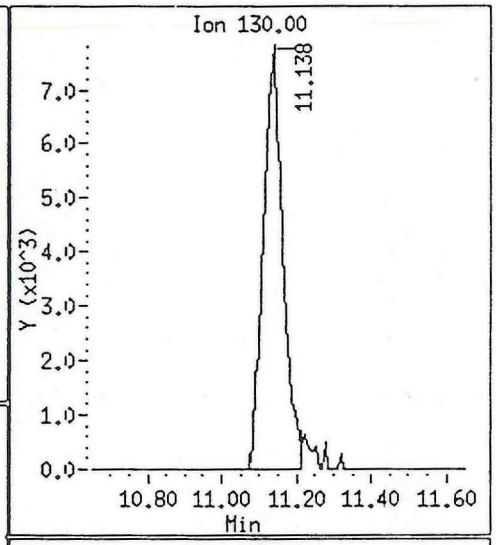
33 Trichloroethene

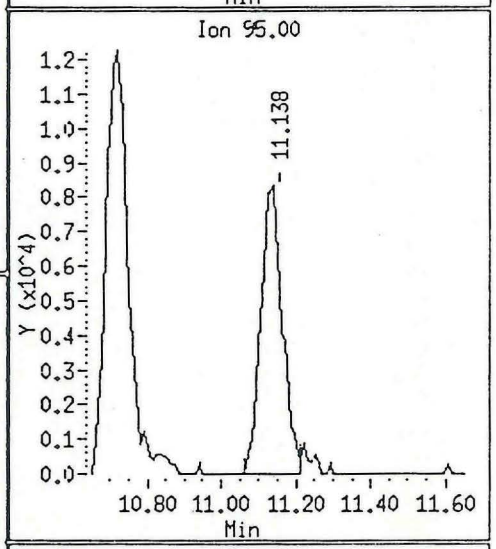


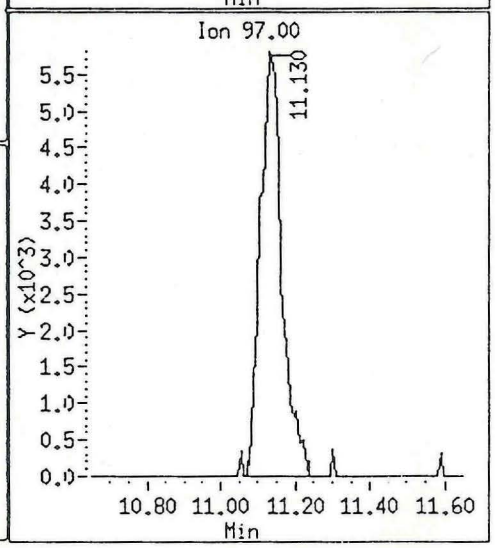












Data File: /chem/msa.i/a062996.b/a8542.d

Date : 29-JUN-96 12:47

Client ID:

Instrument: msa.i

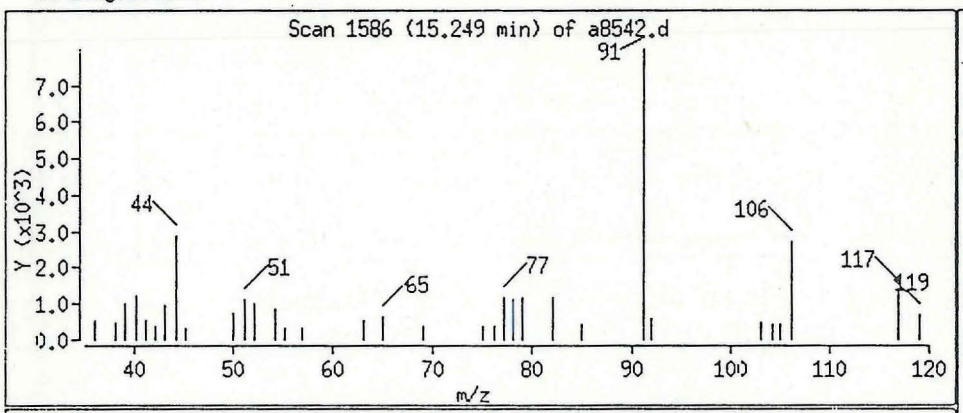
Sample Info: 18221n ssa7-f5

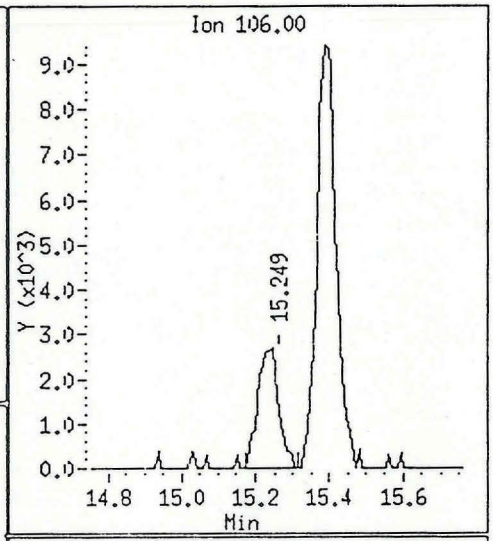
Operator: jk

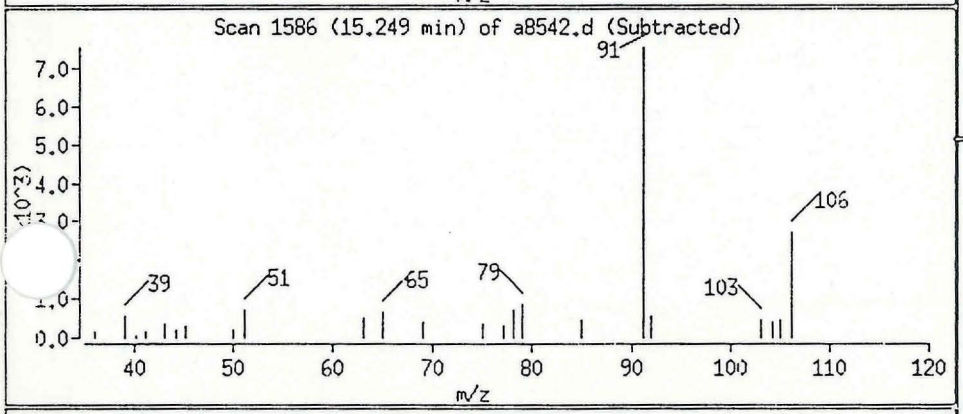
Column phase: DB-624 75m x 0.53mm

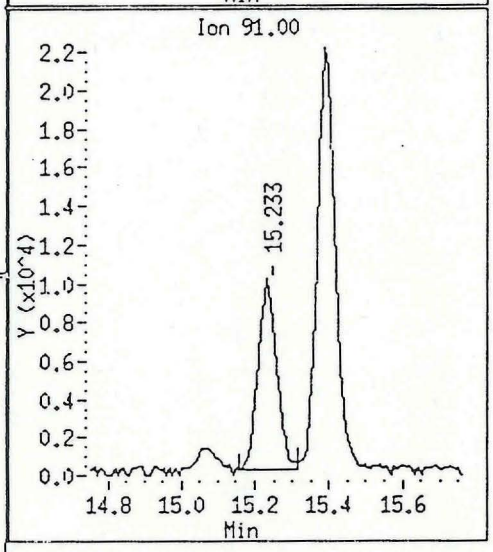
Column diameter: 0.53

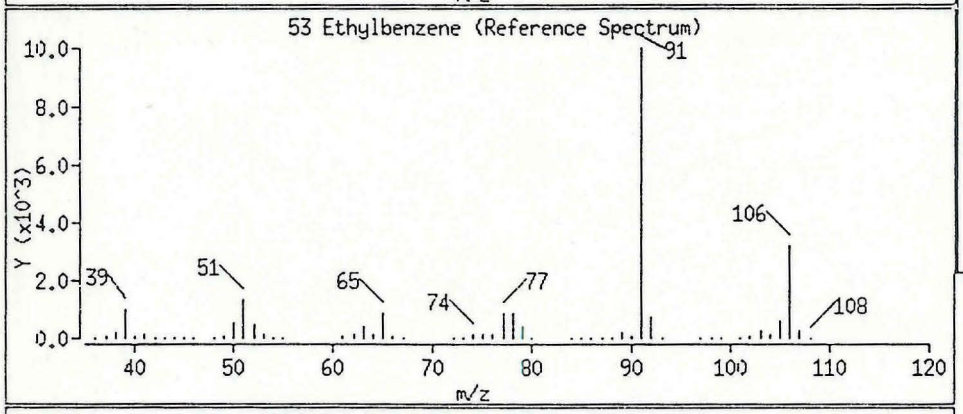
53 Ethylbenzene

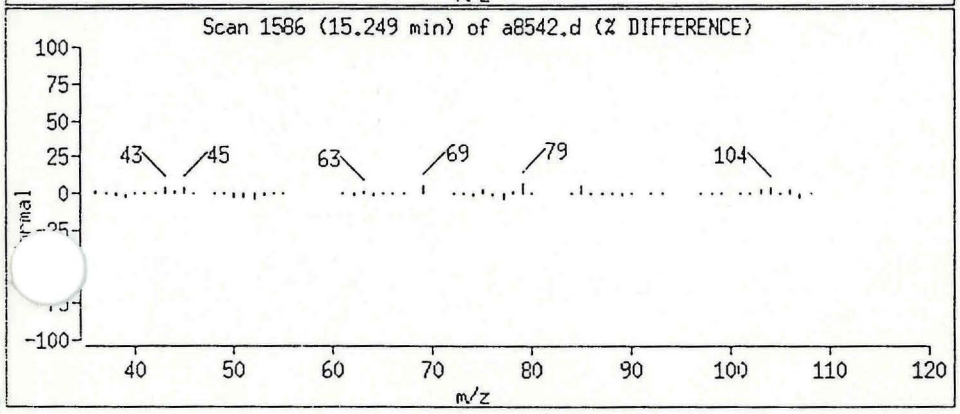












Data File: /chem/msa.i/a062996.b/a8542.d

Date : 29-JUN-96 12:47

Client ID:

Instrument: msa.i

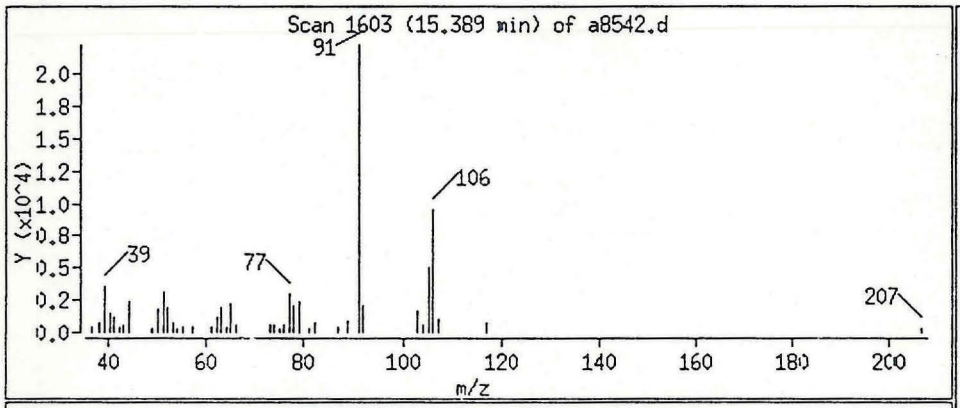
Sample Info: 18221n ssa7-f5

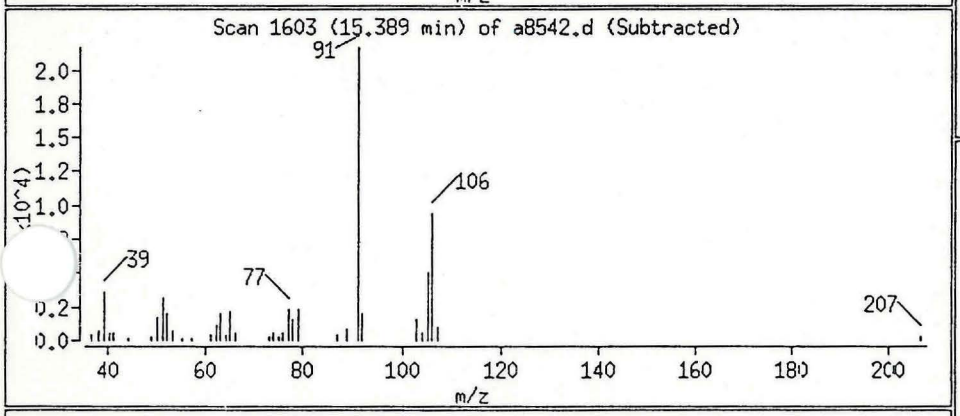
Operator: jk

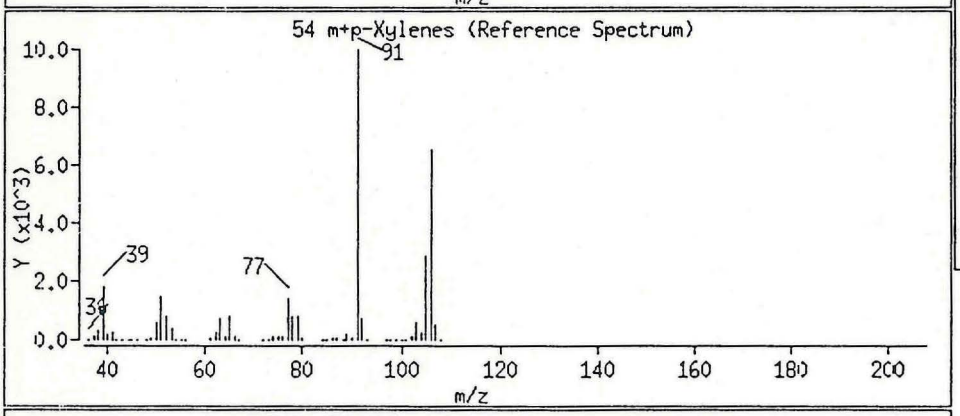
Column phase: DB-624 75m x 0.53mm

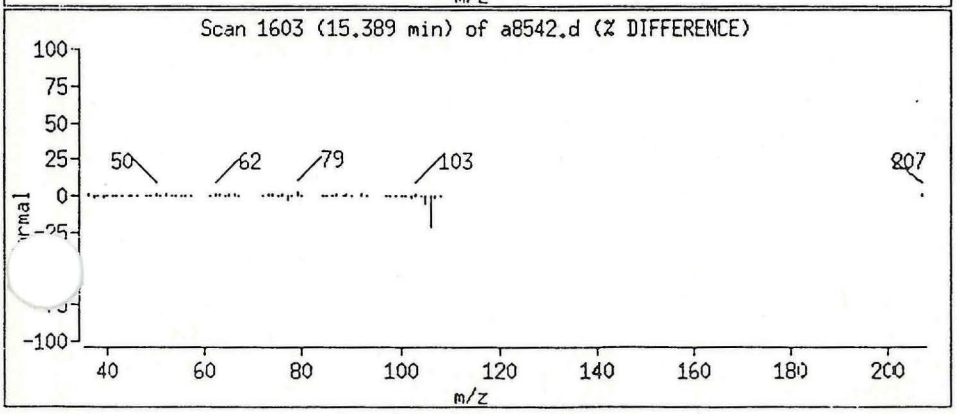
Column diameter: 0.53

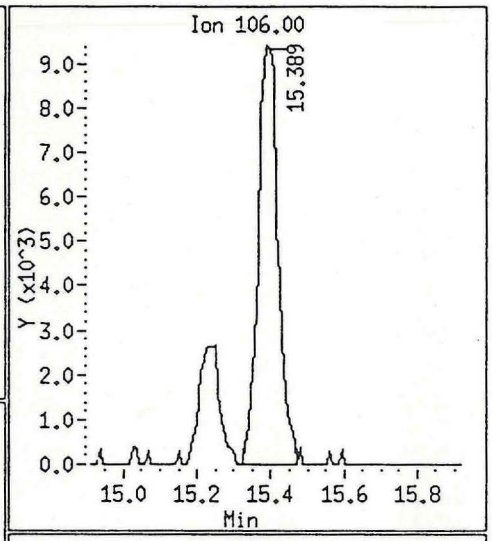
54 m+p-Xylenes

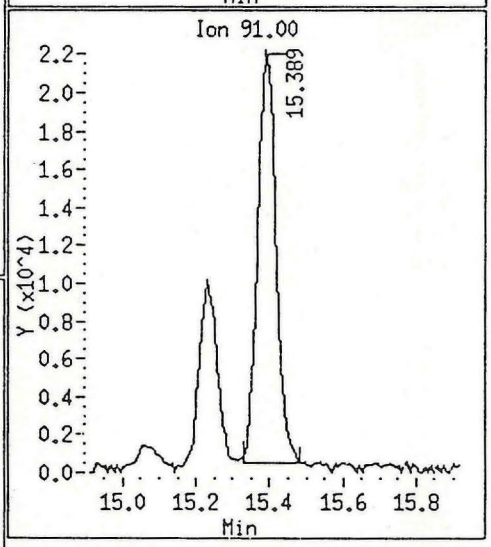












Data File: /chem/msa.i/a062996.b/a8542.d

Date : 29-JUN-96 12:47

Client ID:

Instrument: msa.i

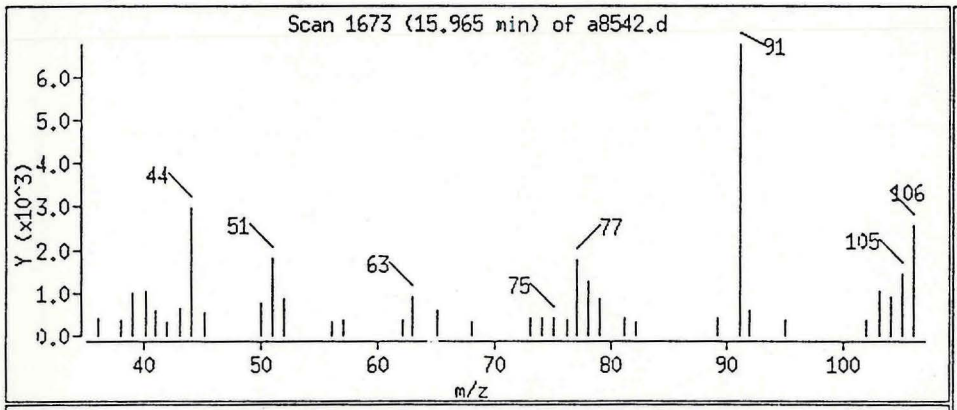
Sample Info: 18221n ssa7-f5

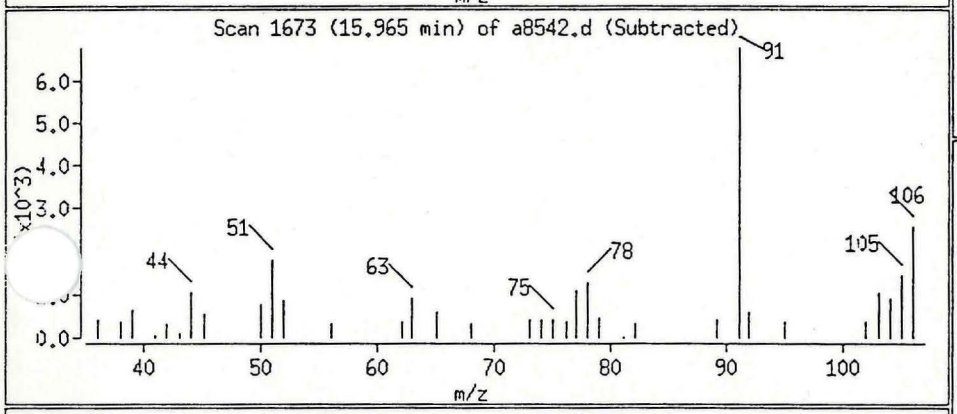
Operator: jk

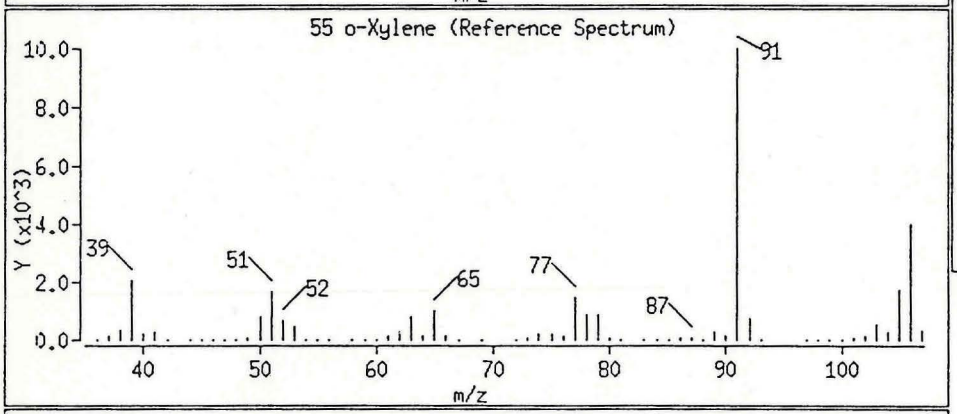
Column phase: DB-624 75m x 0.53mm

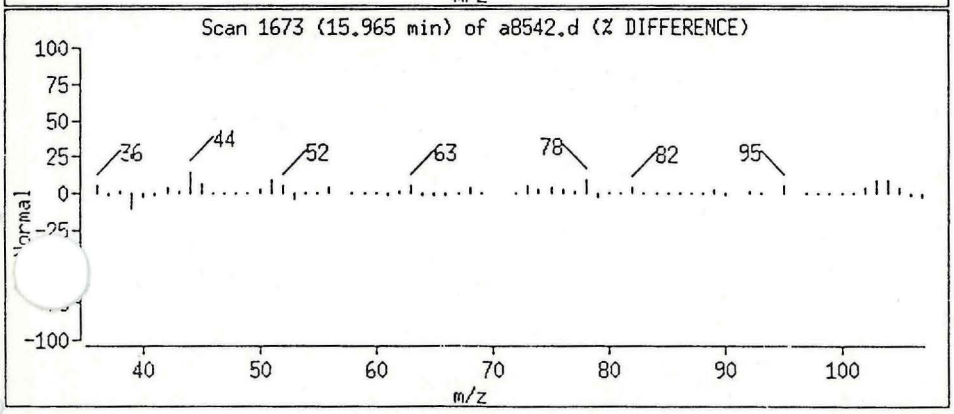
Column diameter: 0.53

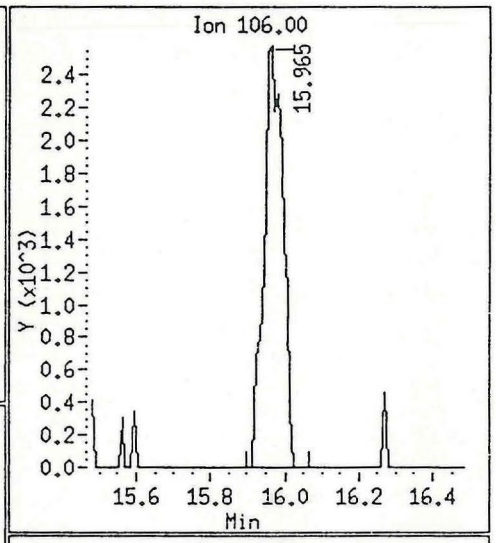
55 o-Xylene

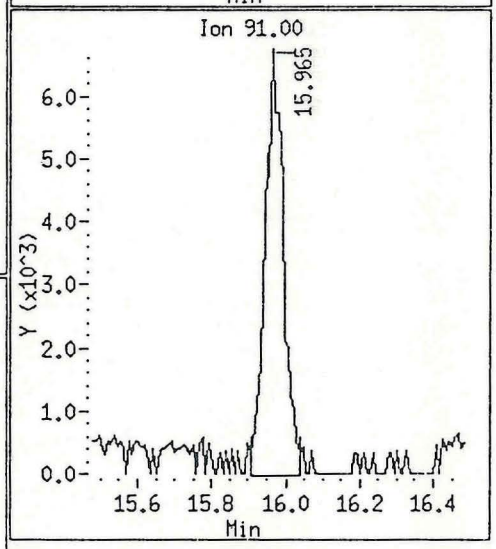












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00143

SSA7-TF1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9901V

Sample wt/vol: 5.19 (g/mL) G Lab File ID: A8528

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 28 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00144

SSA7-TF1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9901V

Sample wt/vol: 5.19 (g/mL) G Lab File ID: A8528

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 28 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

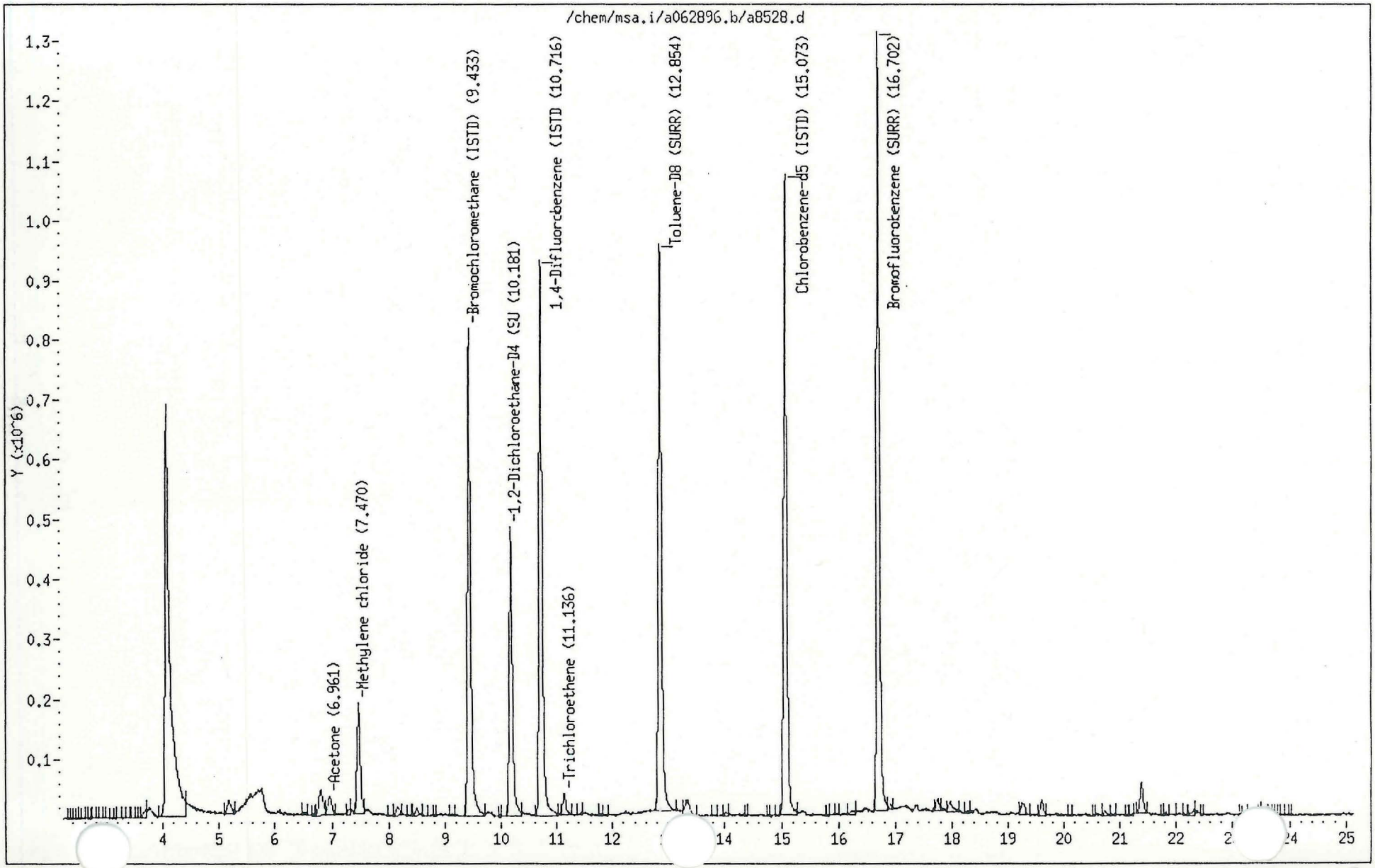
00145

Data File: /chem/msa.i/a062896.b/a8528.d
Date : 28-JUN-96 16:23
Client ID: 18221n ssa7-tf1
Sample Info: 18221n ssa7-tf1

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8528.d
Report Date: 10-Jul-1996 15:04

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062896.b/a8528.d
Lab Smp Id: Client Smp ID: 18221n ssa7-tf1
Inj Date : 28-JUN-96 16:23
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-tf1
Misc Info : jp9901v,n2v5309,qv,5000,1,5.19,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 16
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
cetone	43.00	6.961	7.017	(0.738)	93617	9.57	9.57
Methylene chloride	84.00	7.478	7.430	(0.793)	160152	13.7	13.7
* 23 Bromochloromethane (ISTD)	128.00	9.433	9.442	(1.000)	377230	50.0	
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.181	10.202	(1.079)	614740	47.0	47.0
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.724	10.739	(1.000)	1394619	50.0	
33 Trichloroethene	130.00	11.136	11.151	(1.038)	23485	1.92	1.92
$ 41 Toluene-D8 (SURR)	98.00	12.854	12.877	(0.853)	1241190	46.5	46.5
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.073	15.091	(1.000)	1054045	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.702	16.703	(1.108)	854506	48.1	48.1

Data File: /chem/msa.i/a062896.b/a8528.d

Date : 28-JUN-96 16:23

Client ID: 18221n ssa7-tf1

Sample Info: 18221n ssa7-tf1

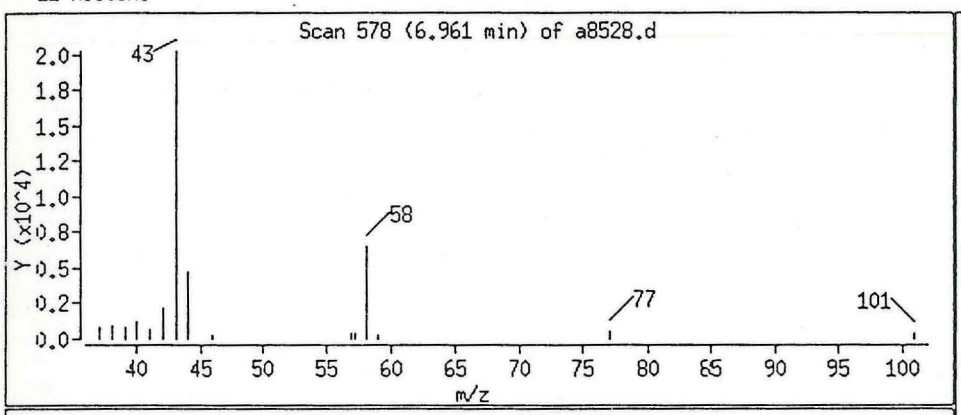
Instrument: msa.i

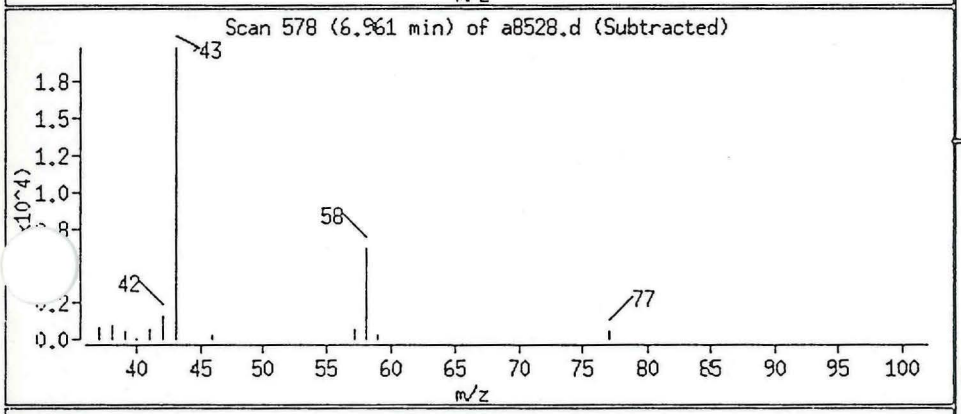
Operator: jk

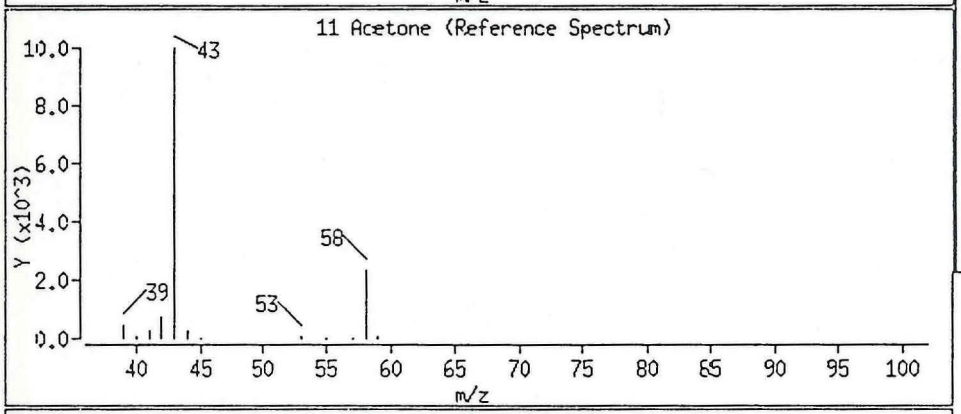
Column phase: DB-624 75m x 0.53mm

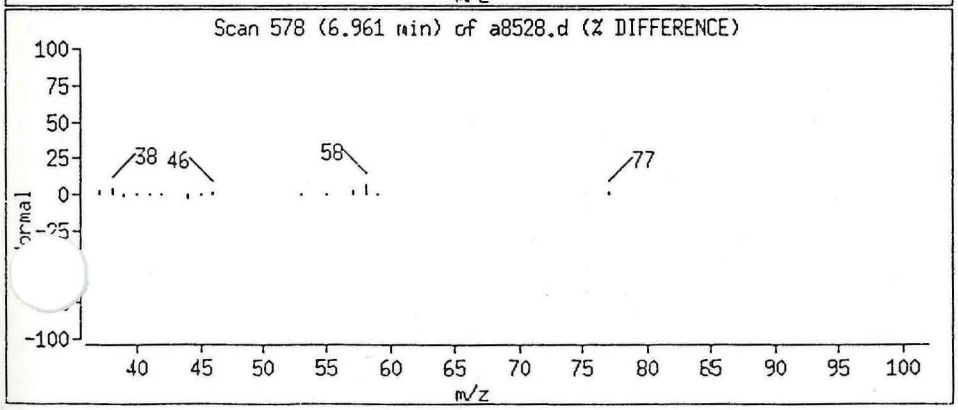
Column diameter: 0.53

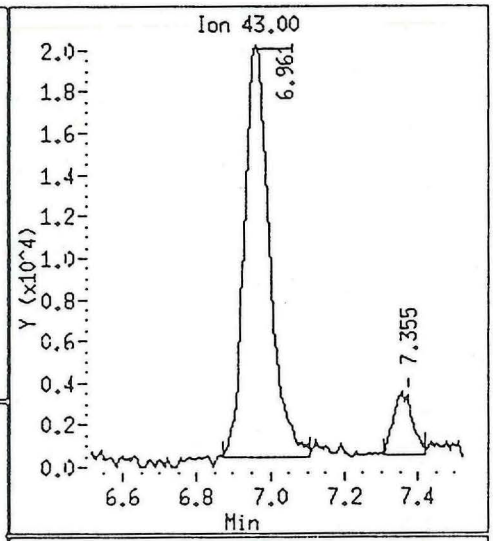
11 Acetone

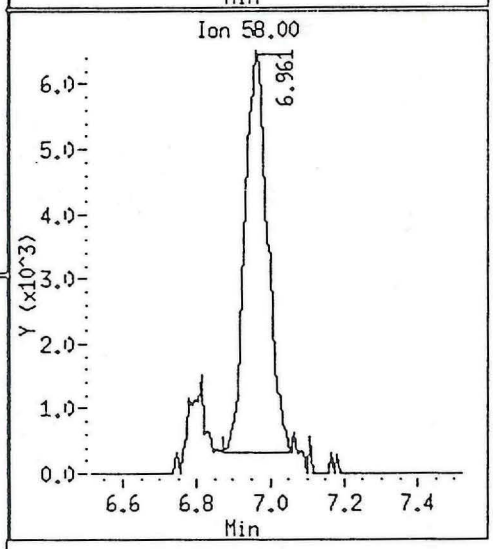












Data File: /chem/msa.i/a062896.b/a8528.d

Date : 28-JUN-96 16:23

Client ID: 18221n ssa7-tf1

Sample Info: 18221n ssa7-tf1

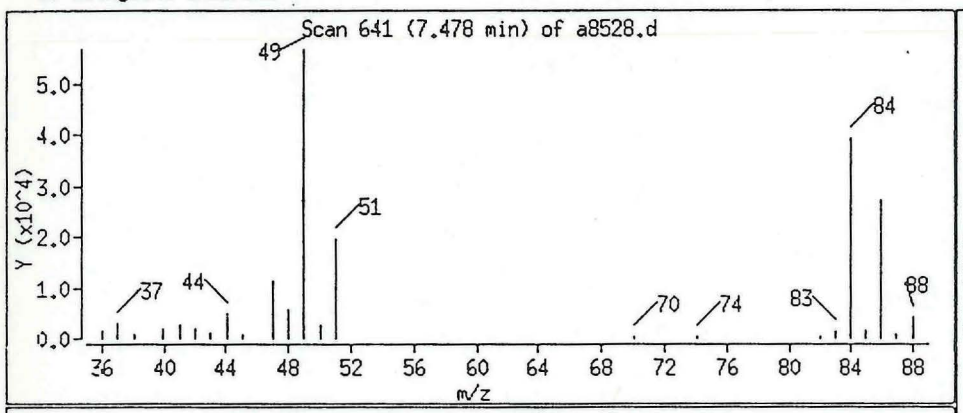
Instrument: msa.i

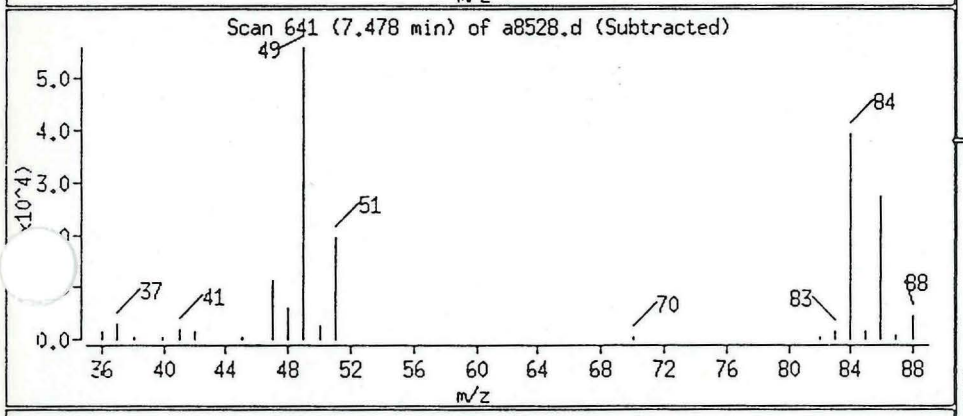
Operator: jk

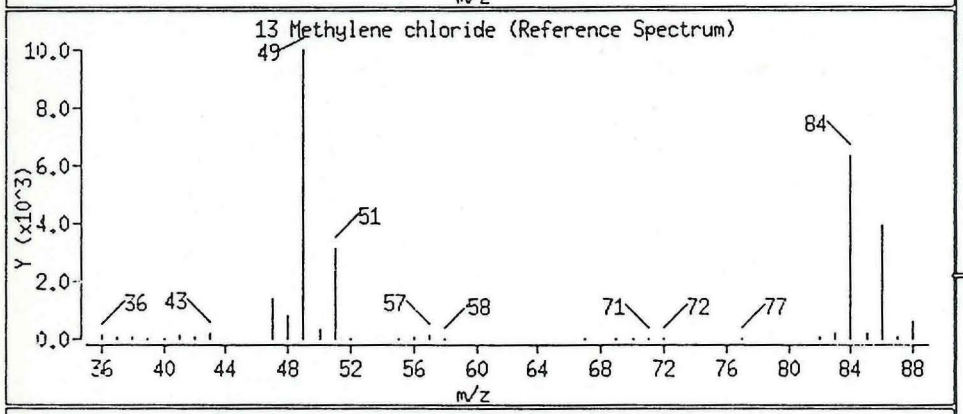
Column phase: DB-624 75m x 0.53mm

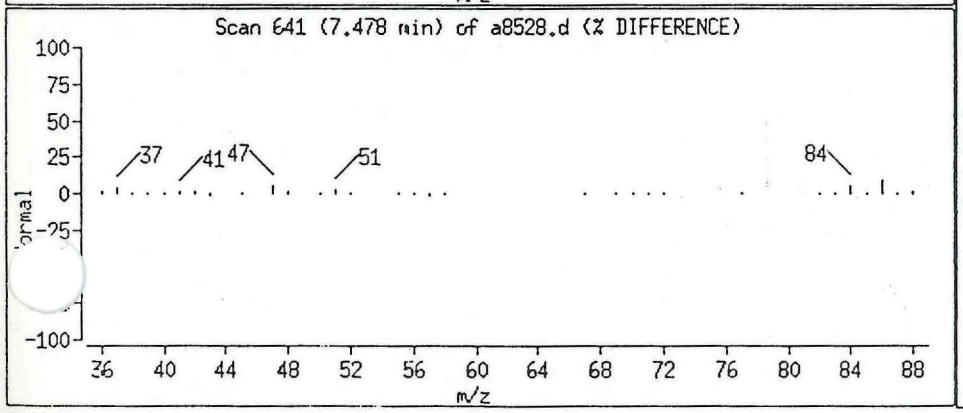
Column diameter: 0.53

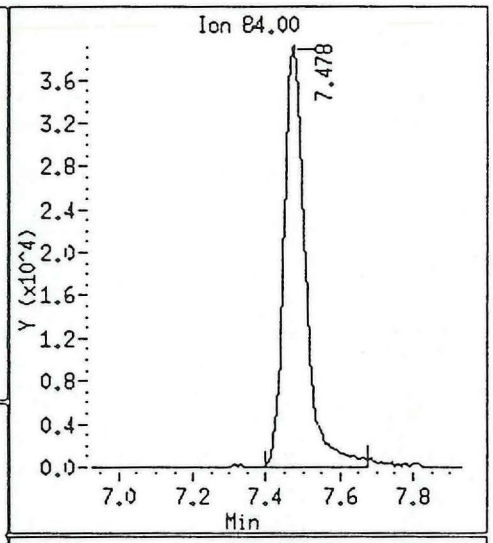
13 Methylene chloride

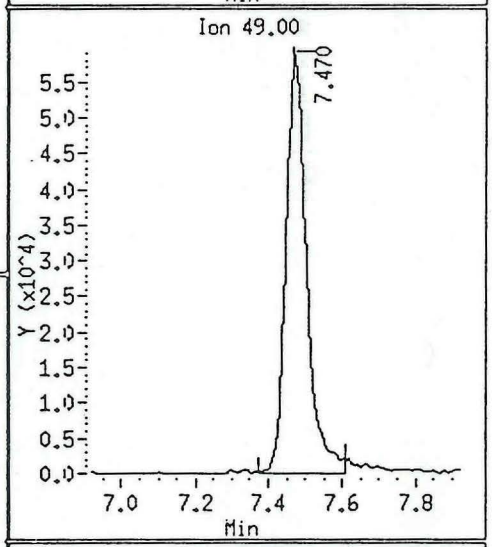


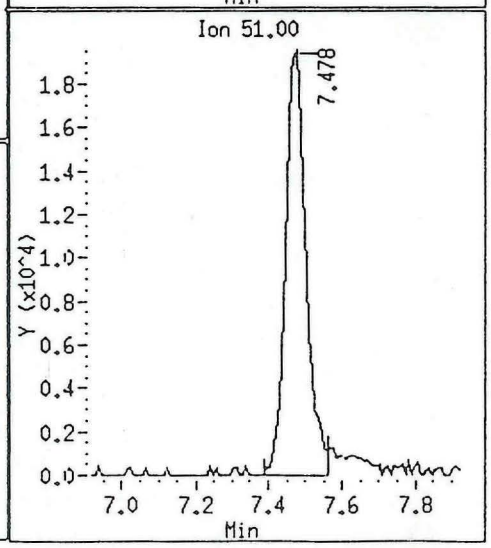












Data File: /chem/msa.i/a062896.b/a8528.d

Date : 28-JUN-96 16:23

Client ID: 18221n ssa7-tf1

Sample Info: 18221n ssa7-tf1

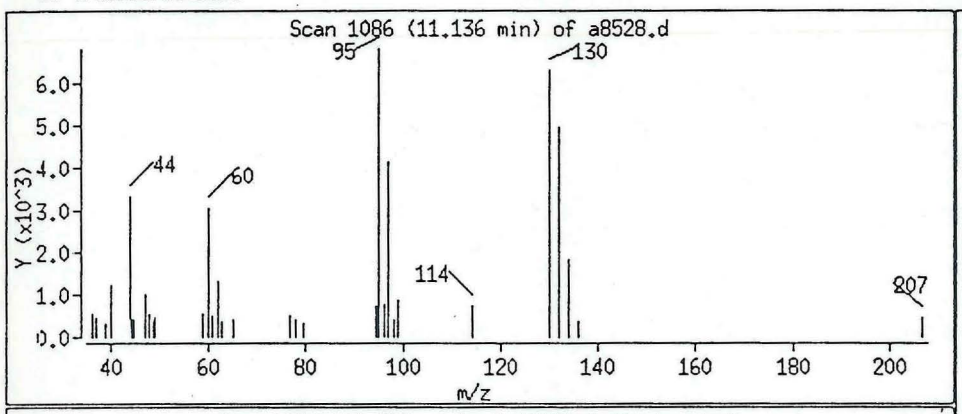
Instrument: msa.i

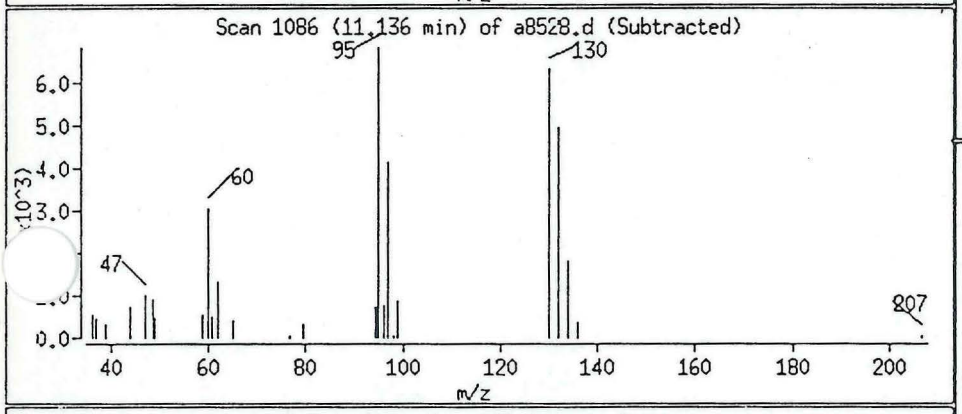
Operator: jk

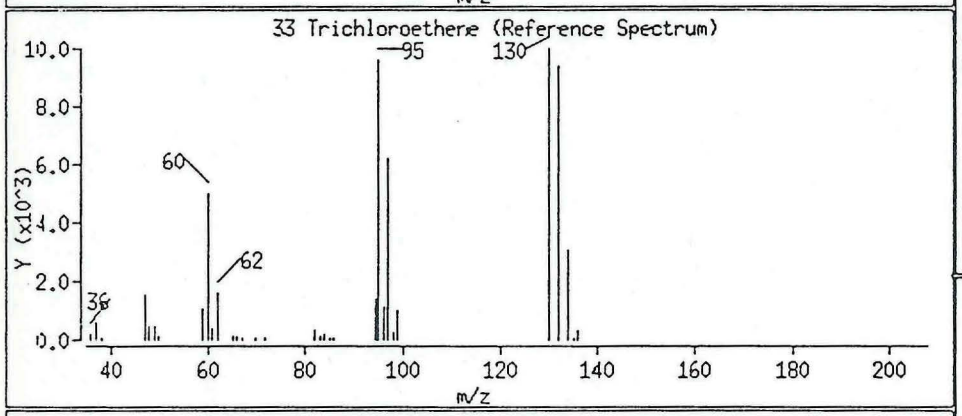
Column phase: DB-624 75m x 0.53mm

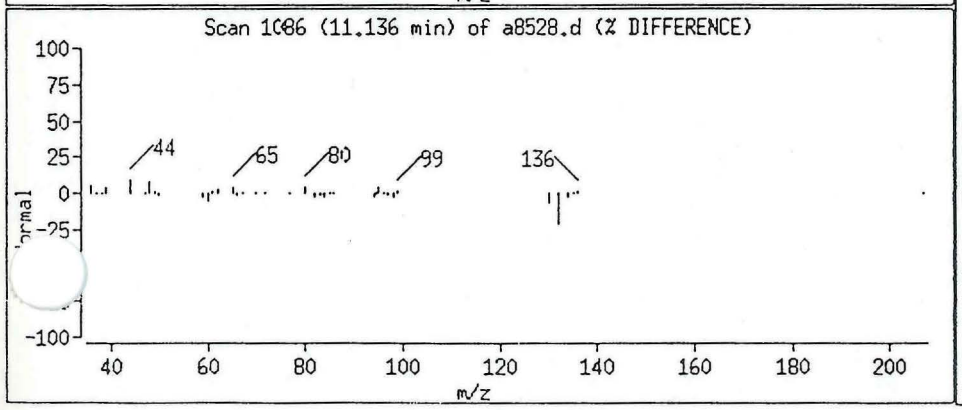
Column diameter: 0.53

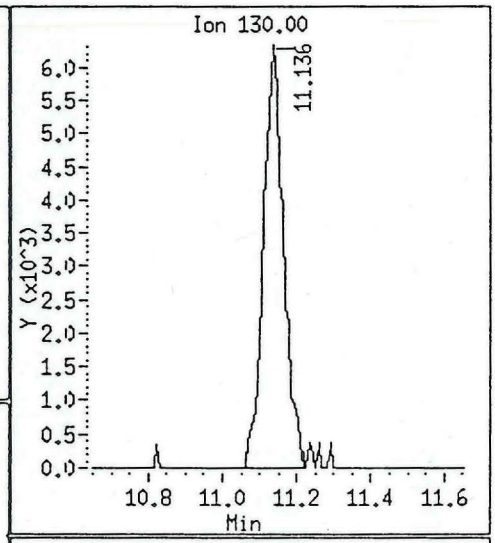
33 Trichloroethene

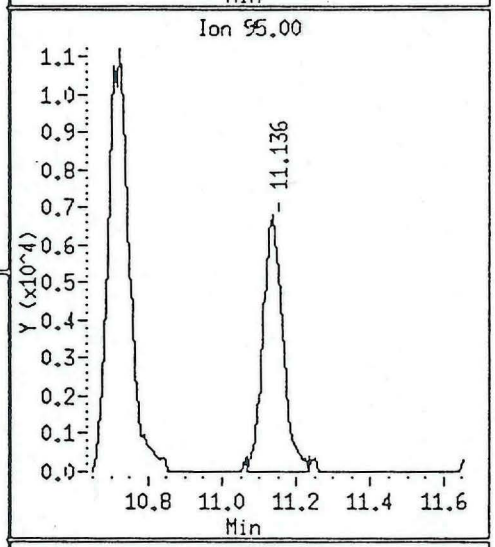


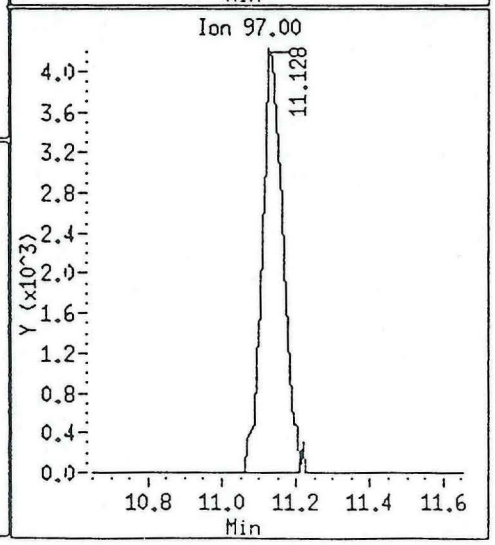












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0149A SSA7-TF2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 18221N SAS No.: _____ SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9902V

Sample wt/vol: 5.05 (g/mL) G Lab File ID: A8531

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 25 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	7	U
74-83-9	Bromomethane	7	U
75-01-4	Vinyl Chloride	7	U
75-00-3	Chloroethane	7	U
75-09-2	Methylene Chloride	24	B
67-64-1	Acetone	10	BJ
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	7	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	7	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Xylene (total)	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0149B

EPA SAMPLE NO.

SSA7-TF2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 18221N SAS No.: _____ SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9902V

Sample wt/vol: 5.05 (g/mL) G Lab File ID: A8531

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 25 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	4.04	120	J

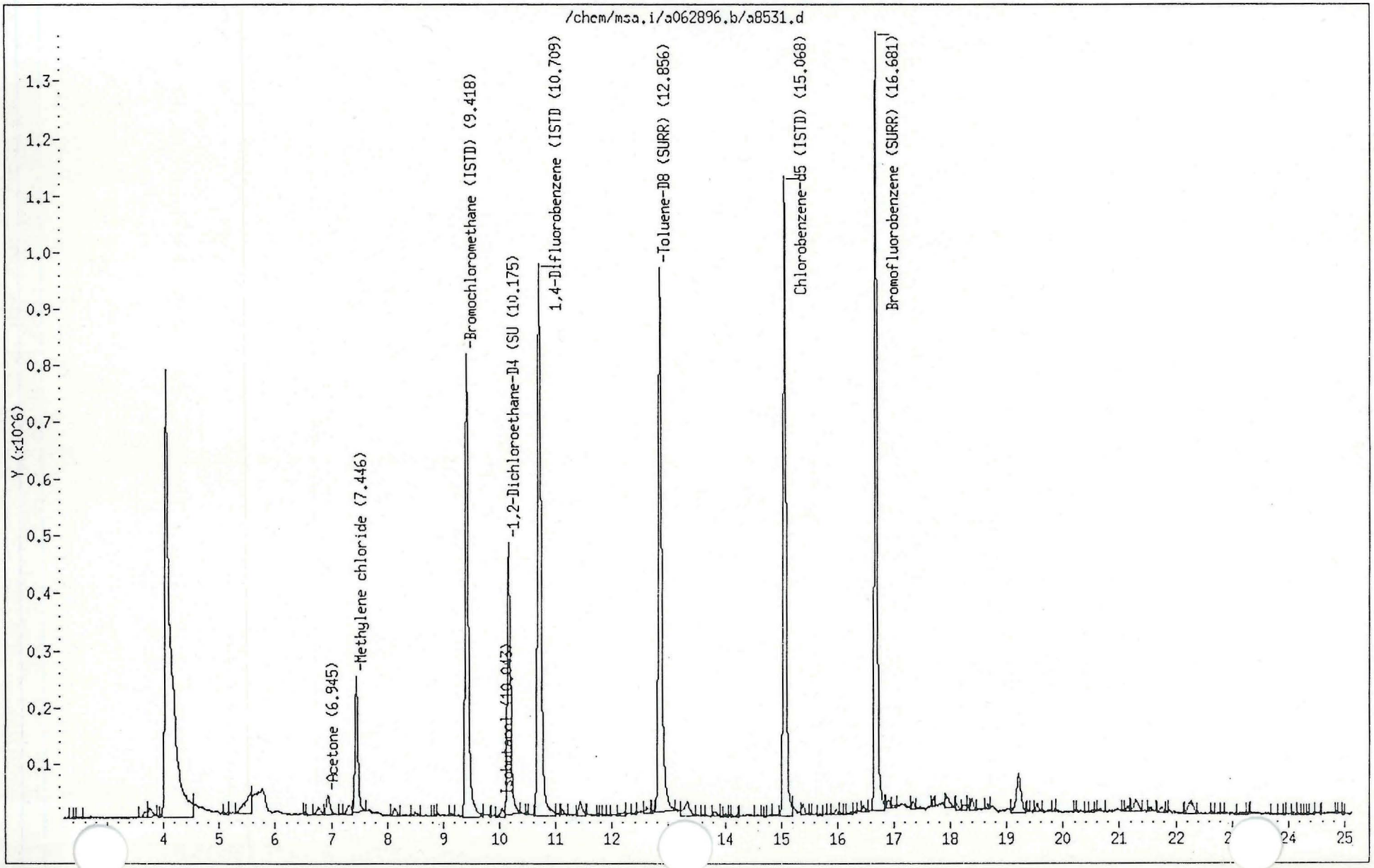
0149C

Data File: /chem/msa.i/a062896.b/a8531.d
Date : 28-JUN-96 18:07
Client ID:
Sample Info: 18221t ssa7-tf2

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8531.d
Report Date: 29-Jun-1996 09:33

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062896.b/a8531.d
Lab Smp Id:
Inj Date : 28-JUN-96 18:07
Operator : jk Inst ID: msa.i
Smp Info : 18221t ssa7-tf2
Misc Info : jp9902v,n2v5309,qv,5000,1,5.05,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
11 Acetone	43.00	6.945	7.380	(0.737)	97586	7.82	7.82
Methylene chloride	84.00	7.446	7.430	(0.791)	219493	17.8	17.8
Bromochloromethane (ISTD)	128.00	9.418	9.442	(1.000)	398411	50.0	
28 Isobutanol	43.00	10.043	10.210	(1.066)	15439	5.47	5.47
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.166	10.202	(1.079)	641176	46.4	46.4
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.709	10.739	(1.000)	1447474	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.856	12.877	(0.853)	1292247	46.1	46.1
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.068	15.091	(1.000)	1108492	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.681	16.703	(1.107)	904590	48.4	48.4

Data File: /chem/msa.i/a062896.b/a8531.d

Date : 28-JUN-96 18:07

Client ID:

Sample Info: 18221t ssa7-tf2

Column phase: DB-624 75m x 0.53mm

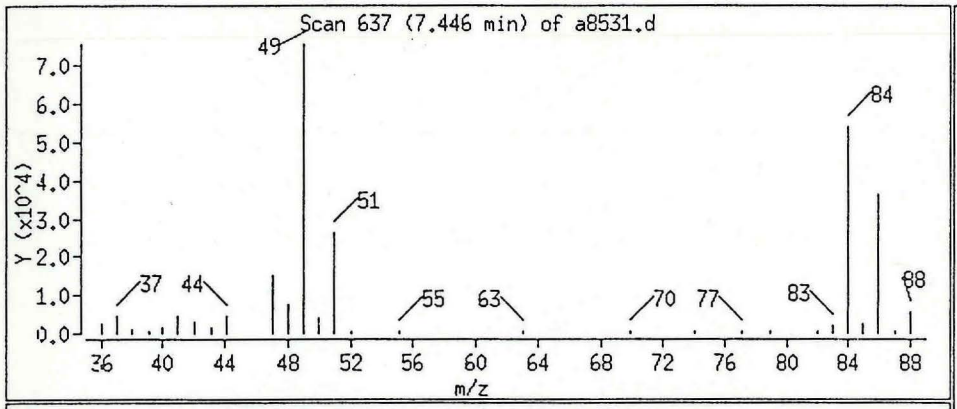
0149E

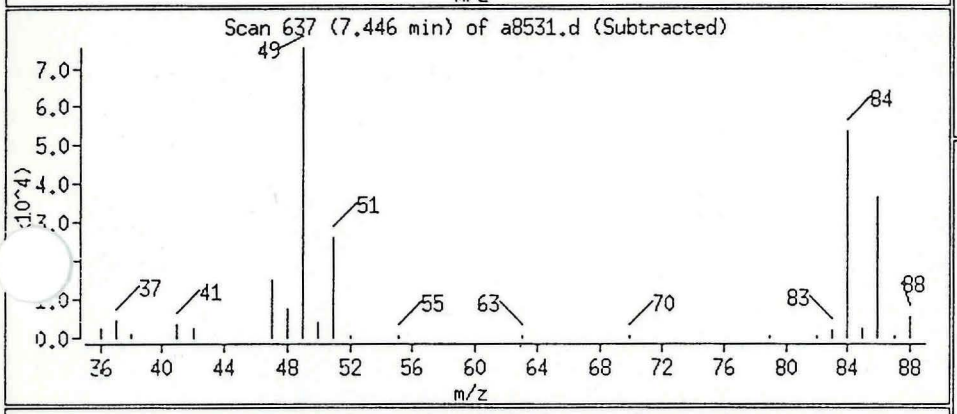
Instrument: msa.i

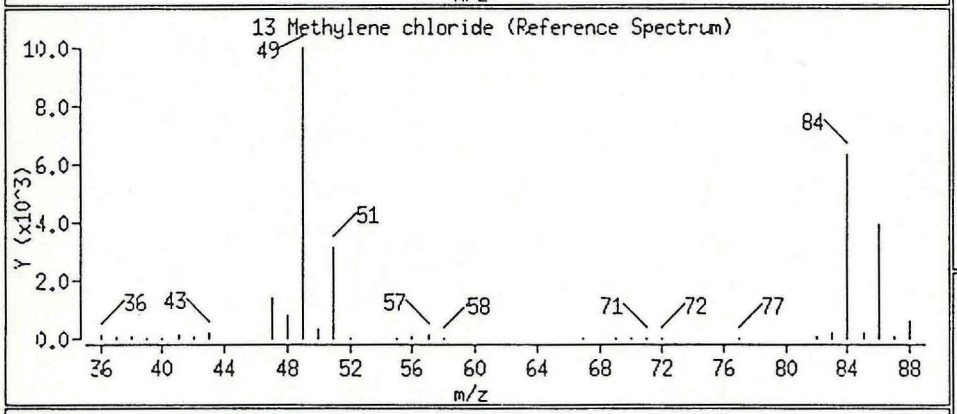
Operator: jk

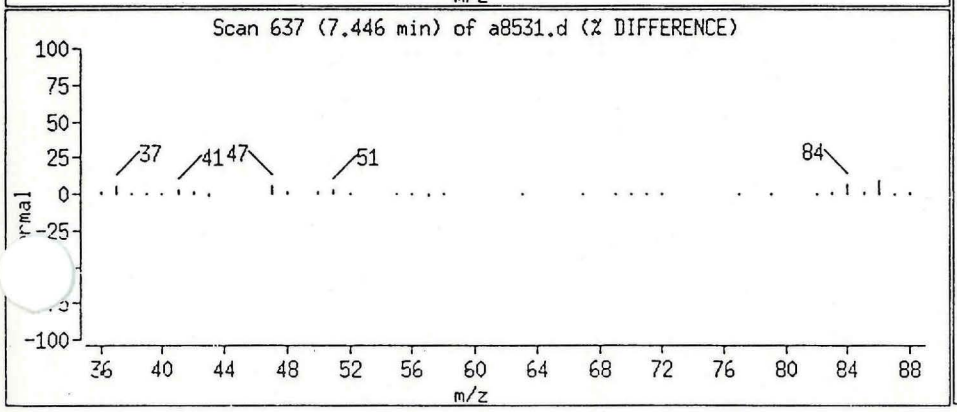
Column diameter: 0.53

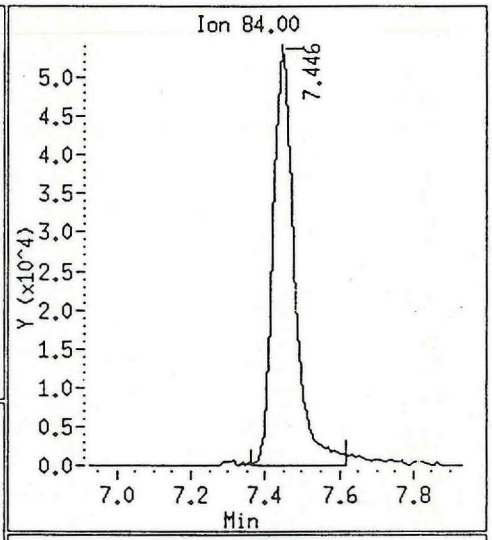
13 Methylene chloride

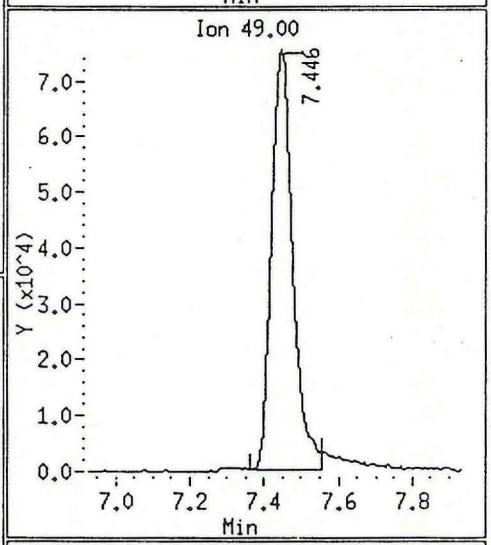


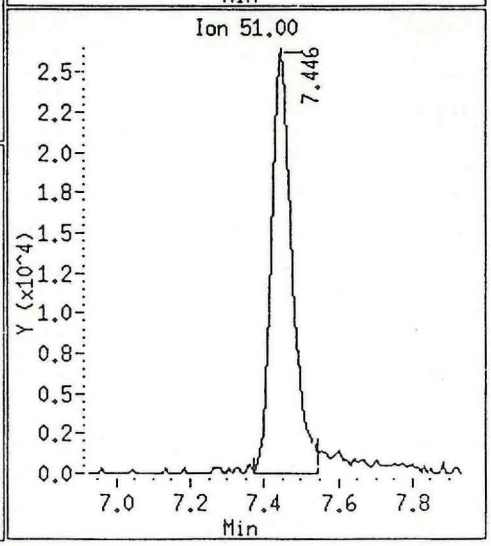












Data File: /chem/msa.i/a062896.b/a8531.d

Date : 28-JUN-96 18:07

Client ID:

Sample Info: 18221t ssa7-tf2

Column phase: DB-624 75m x 0.53mm

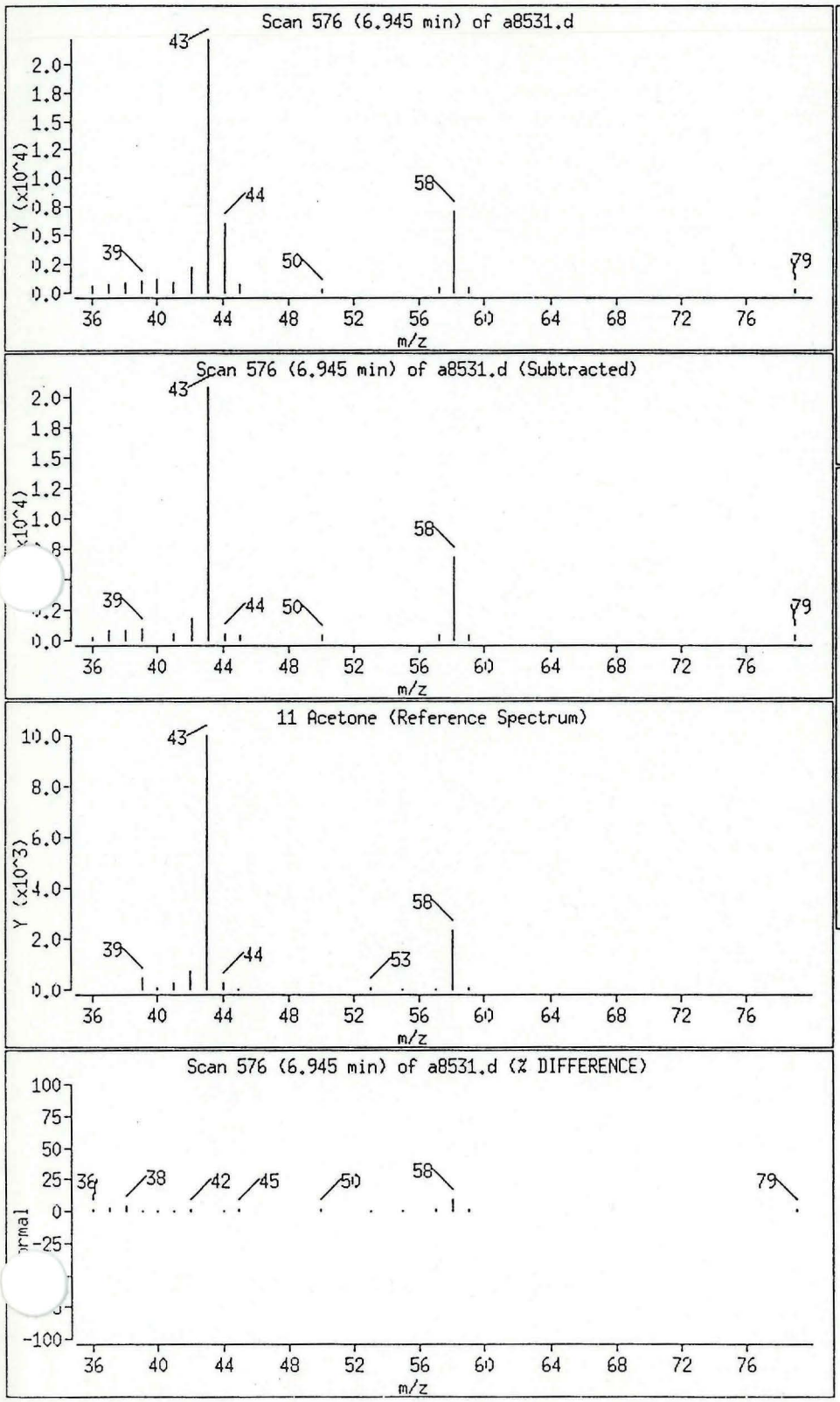
Instrument: msa.i

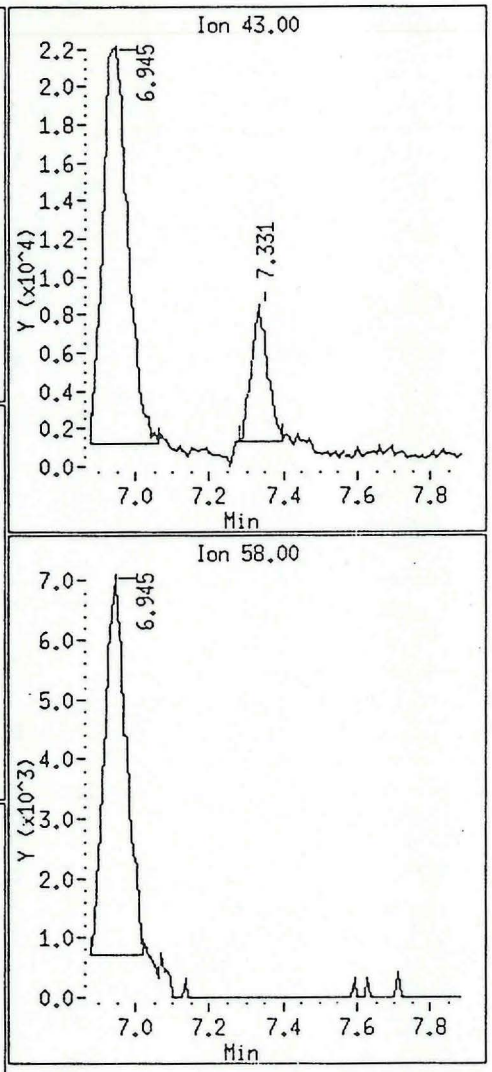
Operator: jk

Column diameter: 0.53

0149F

11 Acetone





Data File: /chem/msa.i/a062896.b/a8531.d
Report Date: 01-Nov-1996 16:06

0149G

OHM Analytical Division

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id:
Operator : jk
Sample Location:
Sample Matrix: None
Analysis Type: VOA

Client SDG: a062896

Sample Date:
Sample Point:
Date Received:
Level:

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/l

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1	4.043	87.4	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00150

SSA7-TF3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9903V

Sample wt/vol: 5.20 (g/mL) G Lab File ID: A8543

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 21 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	51	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	.8	J
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	2	J
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00151 SSA7-TF3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9903V

Sample wt/vol: 5.20 (g/mL) G Lab File ID: A8543

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 21 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

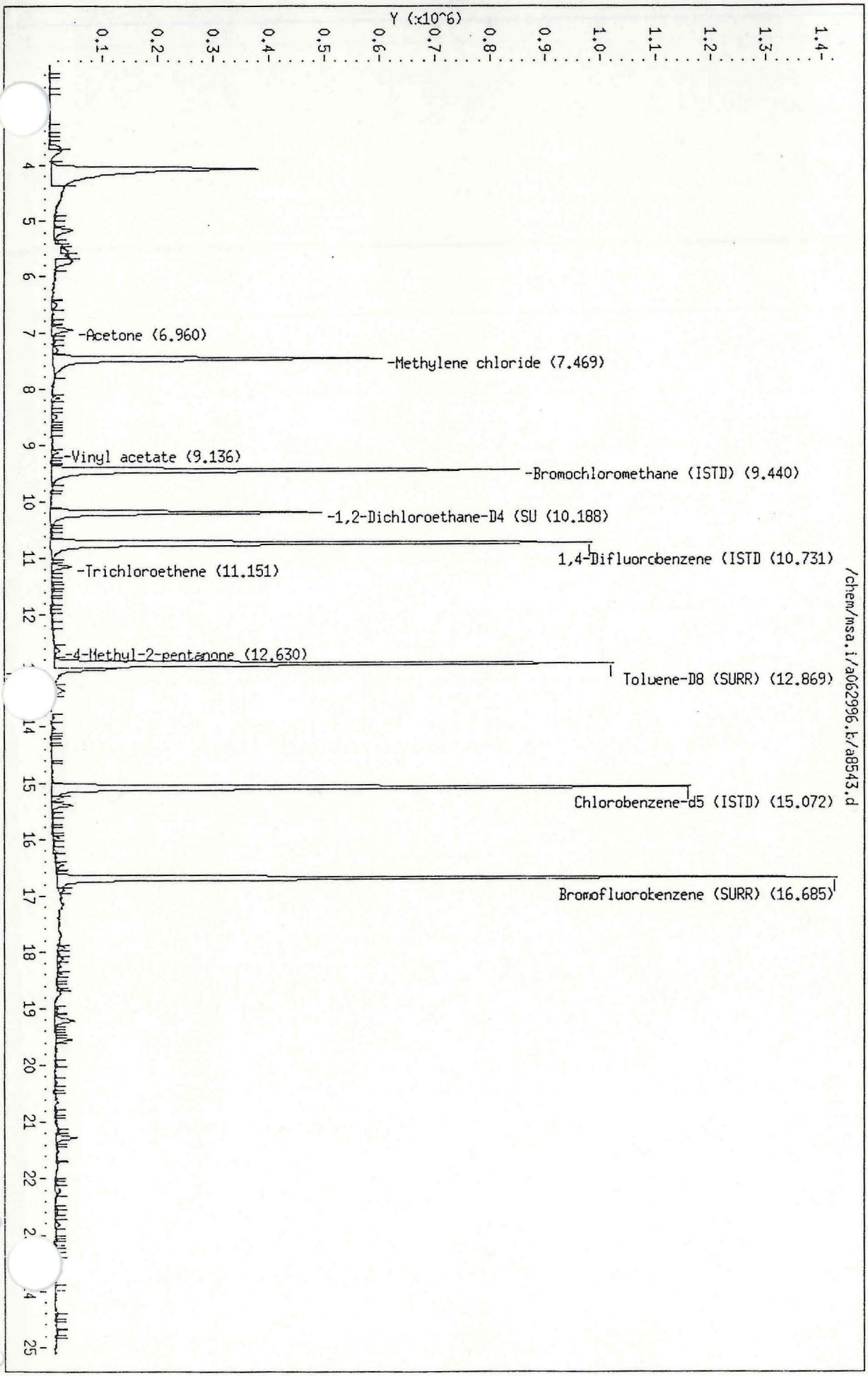
Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Data File: /chem/msa.i/a062996.b/a8543.d
Date : 29-JUN-96 13:22
Client ID:
Sample Info: 18221n ssa7-tf3
Column phase: DB-624 75m x 0.53mm

Instrument: msa.i
Operator: jk
Column diameter: 0.53



OHM Analytical Division

+ TIC

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062996.b/a8543.d
Lab Smp Id:
Inj Date : 29-JUN-96 13:22
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-tf3
Misc Info : jp9903v,n2v5309,qv,5000,1,5.20,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:37 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

T. Mcdaniel 7/5/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.951	7.011	(0.736)	116681	11.1	11.1
Methylene chloride	84.00	7.469	7.439	(0.791)	518570	41.9	41.9
18 Vinyl acetate	43.00	9.136	9.194	(0.968)	36324	~~4.45~~	~~4.45~~ MS
* 23 Bromochloromethane (ISTD)	128.00	9.440	9.441	(1.000)	380624	50.0	
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.188	10.192	(1.079)	645693	49.9	49.9
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.731	10.728	(1.000)	1447725	50.0	
33 Trichloroethene	130.00	11.143	11.149	(1.038)	22377	1.73	1.73
40 4-Methyl-2-pentanone	43.00	12.630	12.650	(0.838)	22579	0.692	0.692 (Q)
$ 41 Toluene-D8 (SURR)	98.00	12.869	12.881	(0.853)	1336434	49.4	49.4
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.080	15.083	(1.000)	1131658	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.685	16.693	(1.106)	927630	50.9	50.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062996.b/a8543.d

Date : 29-JUN-96 13:22

Client ID:

Instrument: msa.i

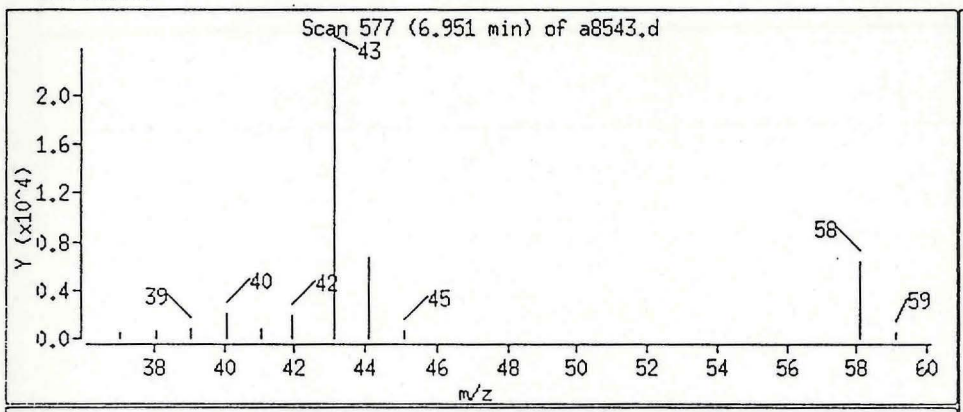
Sample Info: 18221n ssa7-tf3

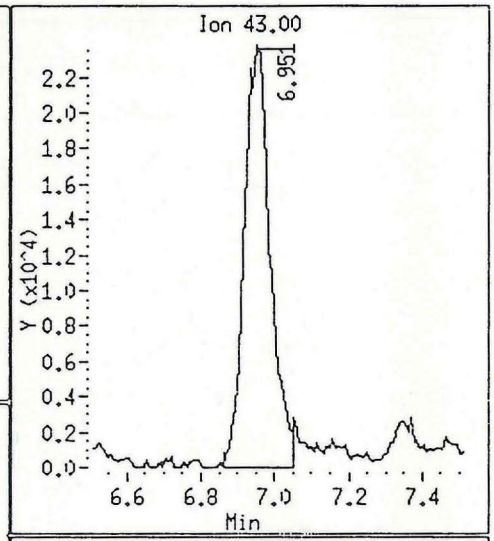
Operator: jk

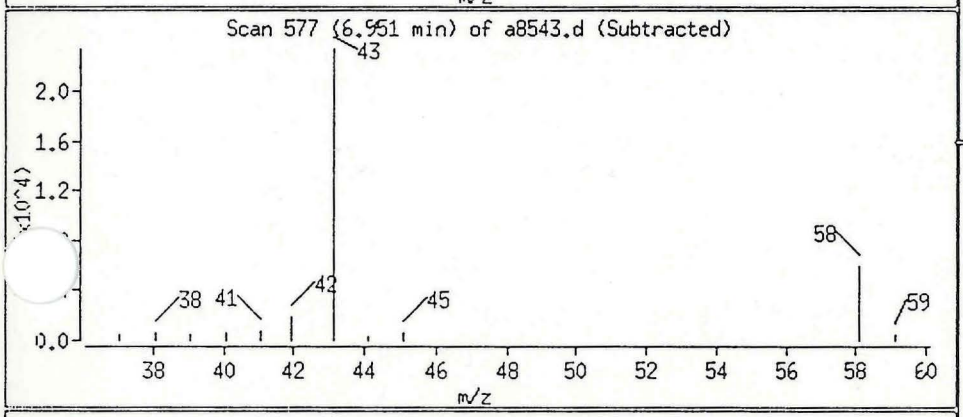
Column phase: DB-624 75m x 0.53mm

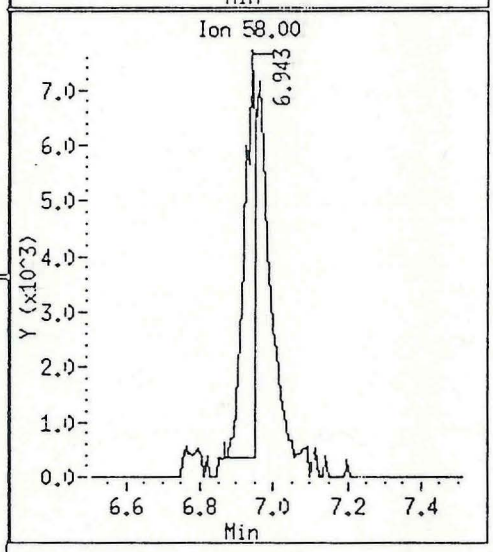
Column diameter: 0.53

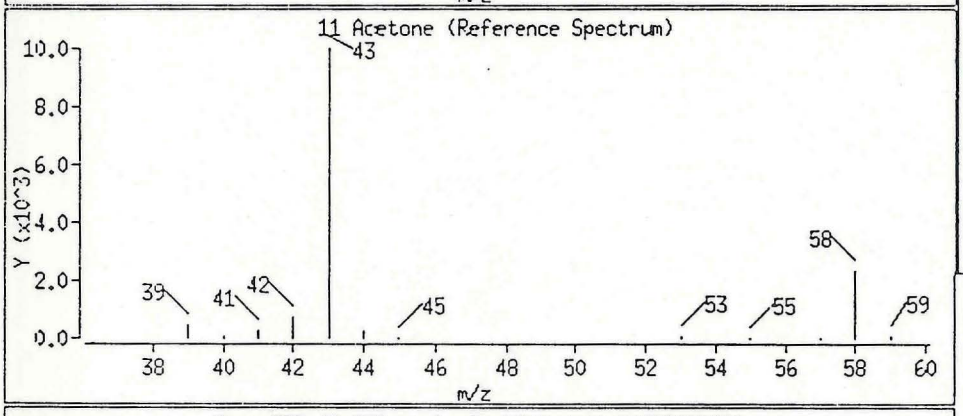
11 Acetone

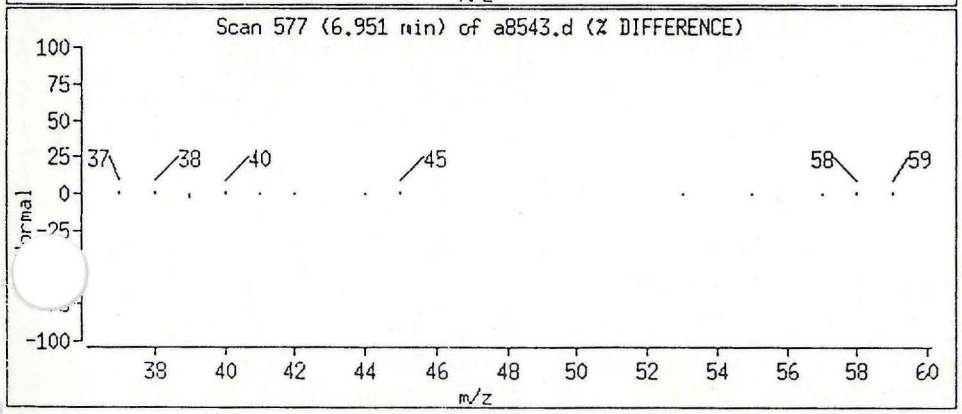












Data File: /chem/msa.i/a062996.b/a8543.d

Date : 29-JUN-96 13:22

Client ID:

Instrument: msa.i

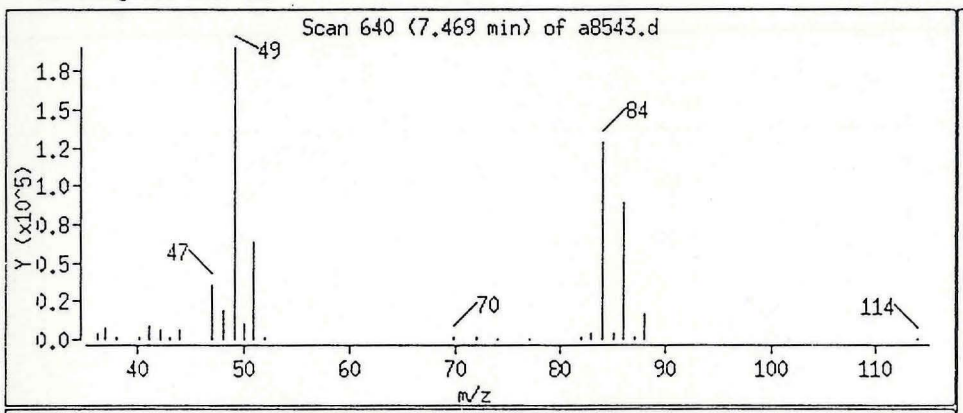
Sample Info: 18221n ssa7-tf3

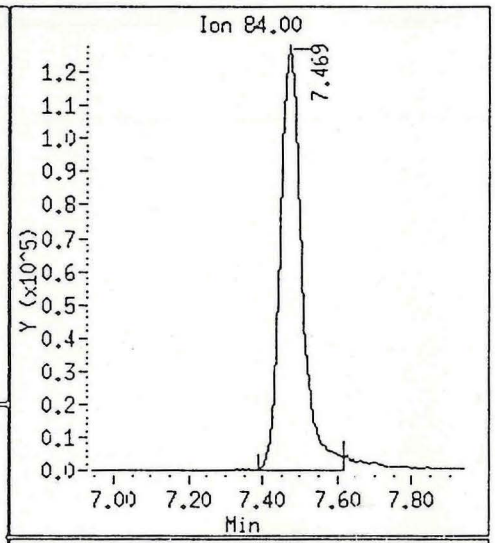
Operator: jk

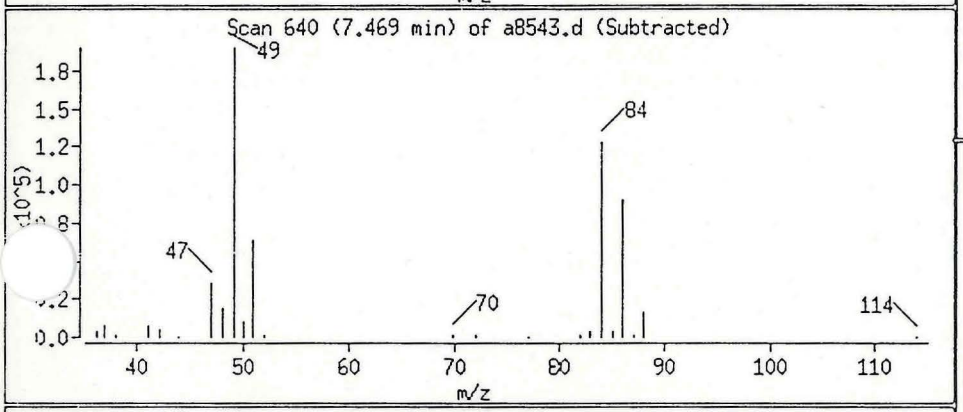
Column phase: DB-624 75m x 0.53mm

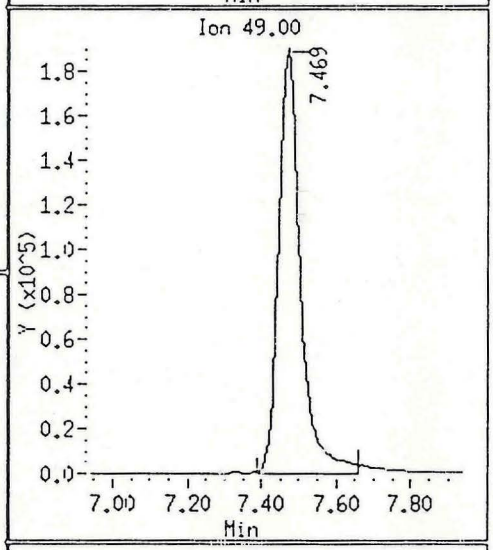
Column diameter: 0.53

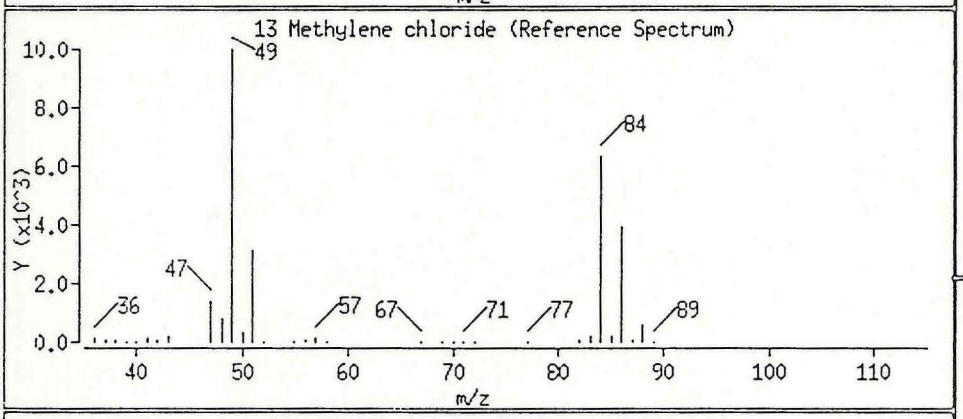
13 Methylene chloride

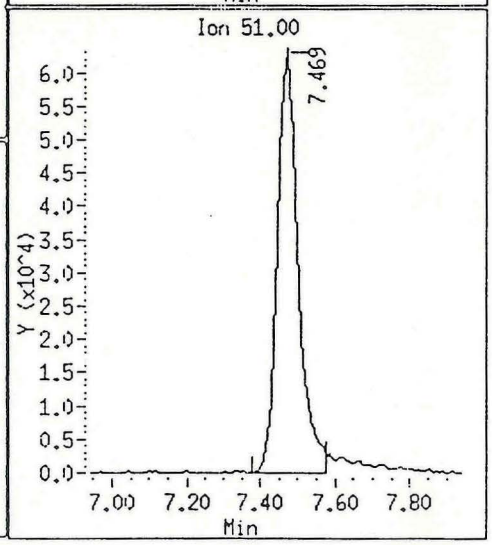


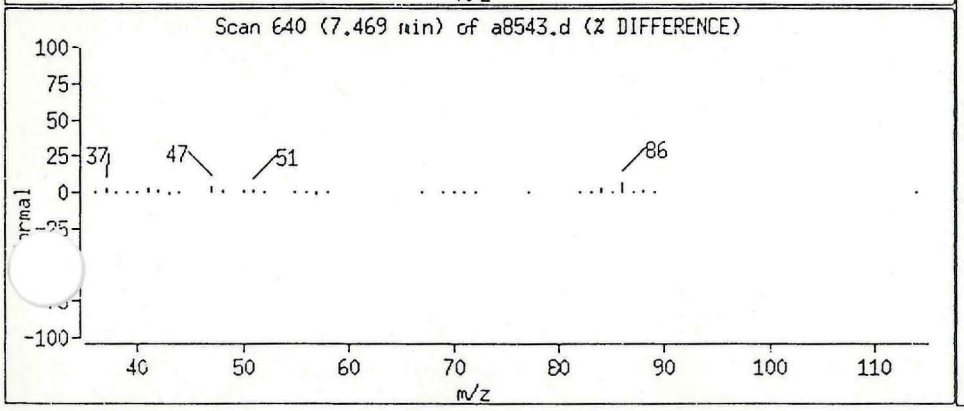












Data File: /chem/msa.i/a062996.b/a8543.d

Date : 29-JUN-96 13:22

Client ID:

Instrument: msa.i

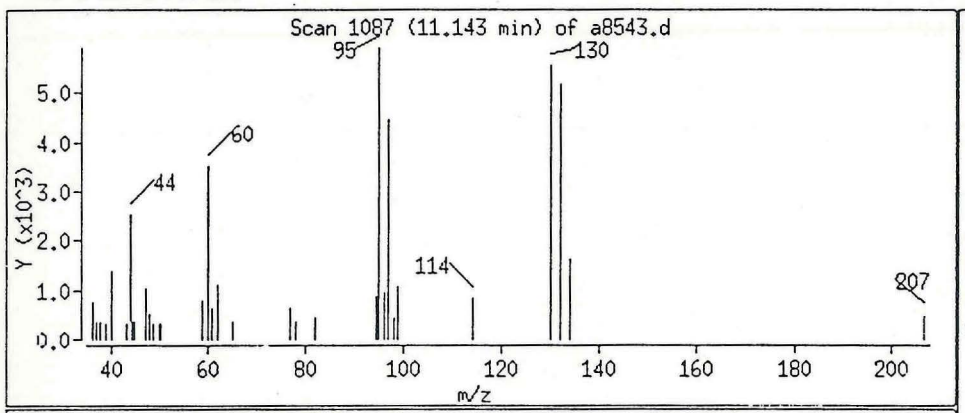
Sample Info: 18221n ssa7-tf3

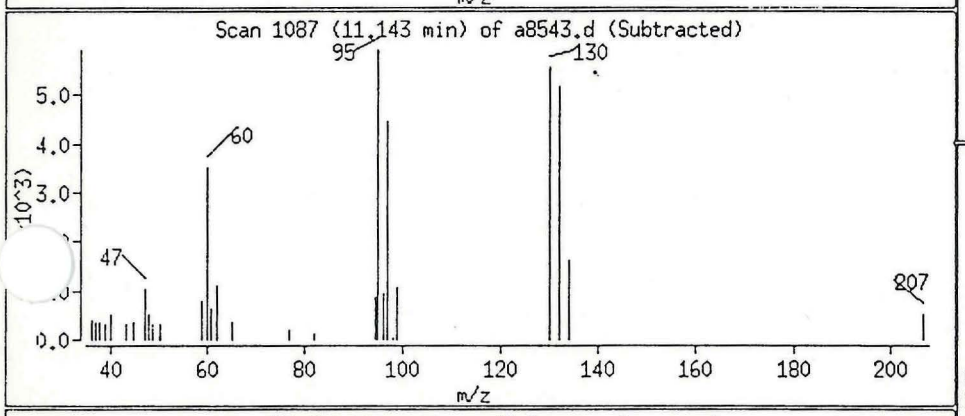
Operator: jk

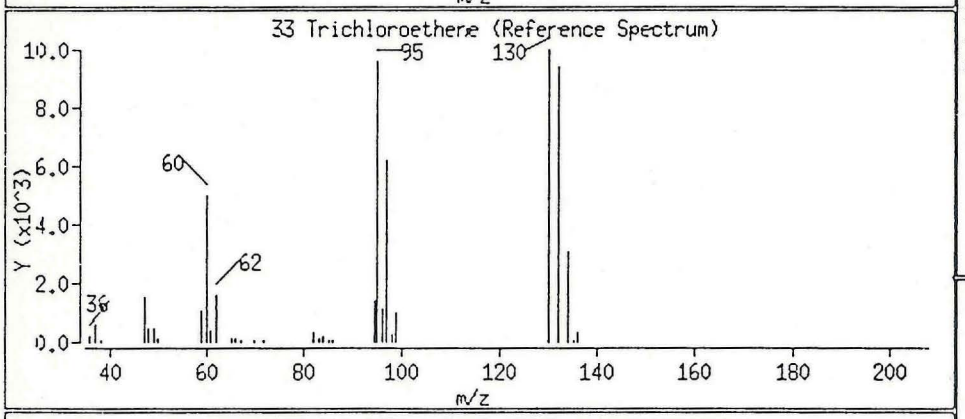
Column phase: DB-624 75m x 0.53mm

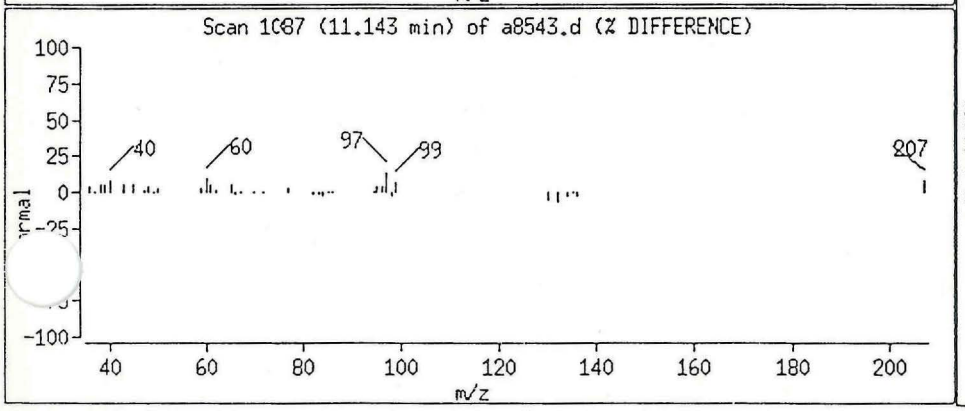
Column diameter: 0.53

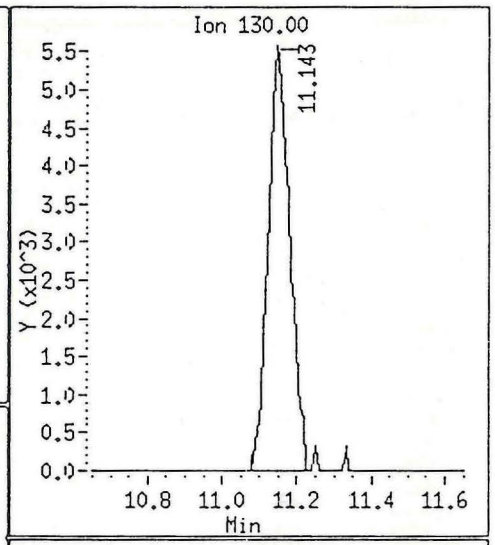
33 Trichloroethene

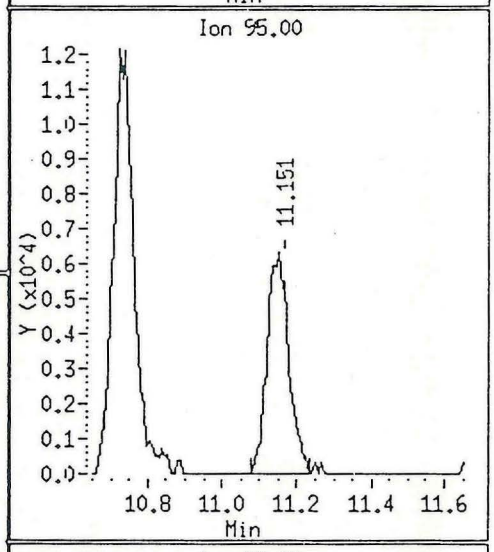


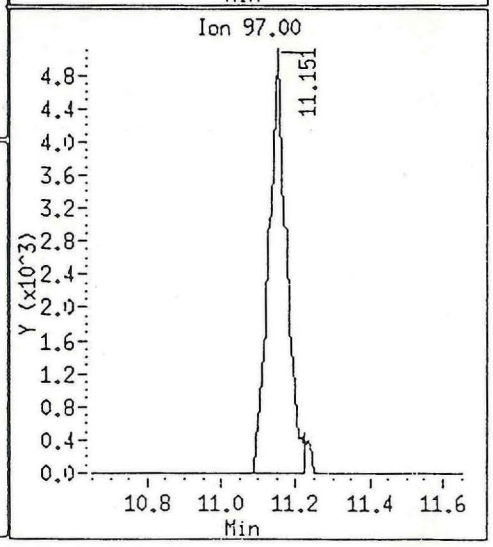












Data File: /chem/msa.i/a062996.b/a8543.d

Date : 29-JUN-96 13:22

Client ID:

Instrument: msa.i

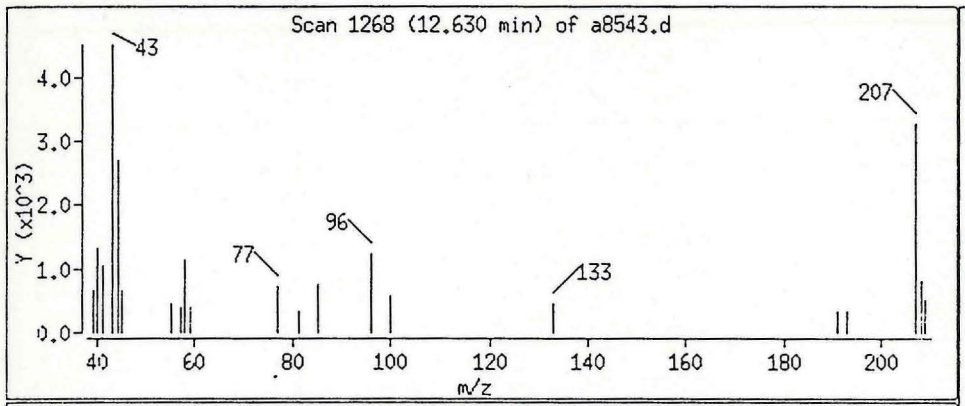
Sample Info: 18221n ssa7-tf3

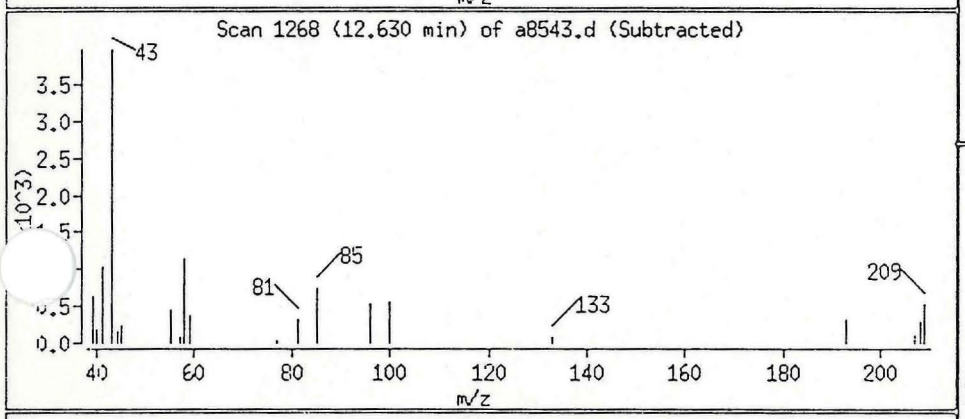
Operator: jk

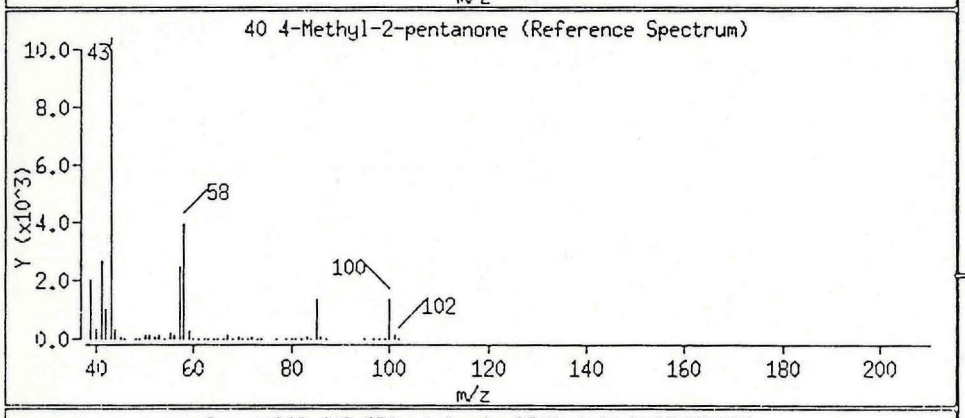
Column phase: DB-624 75m x 0.53mm

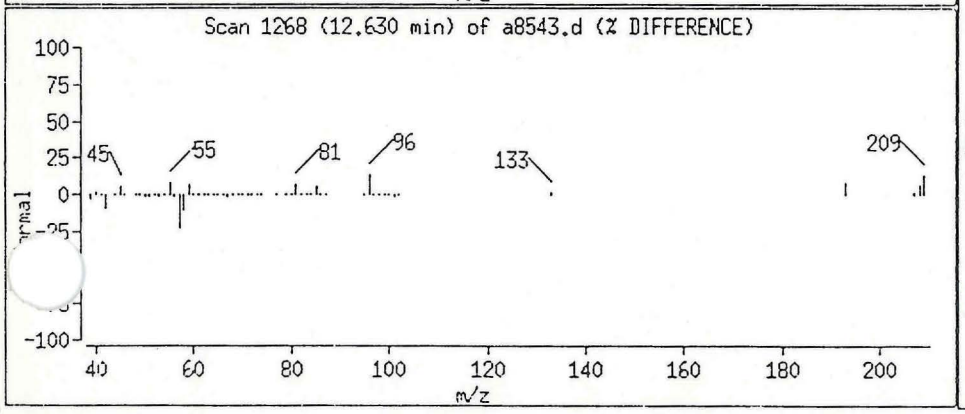
Column diameter: 0.53

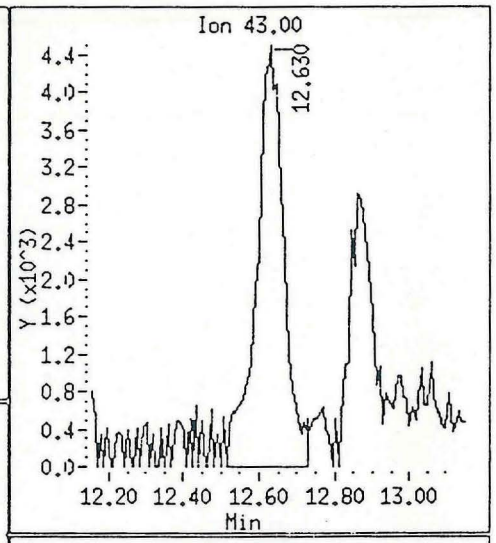
40 4-Methyl-2-pentanone

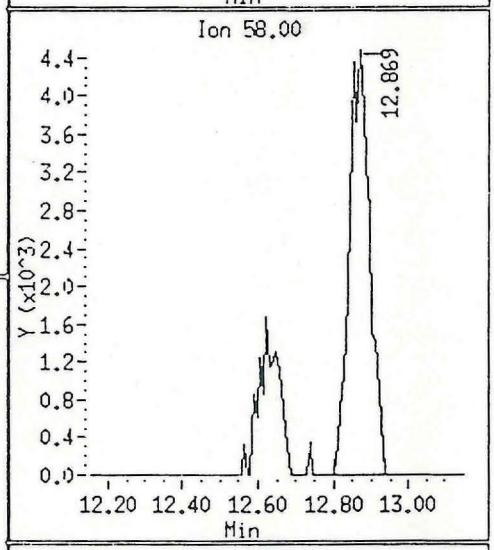


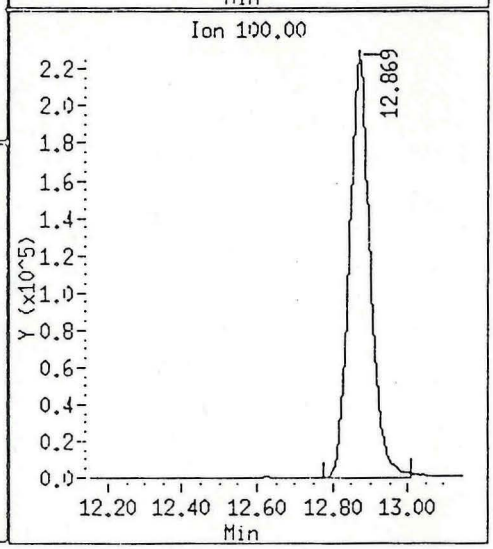












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00158 SSA7-TF4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9904V

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8544

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 21 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	81	B
67-64-1	Acetone	12	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00159

SSA7-TF4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9904V

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8544

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 21 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

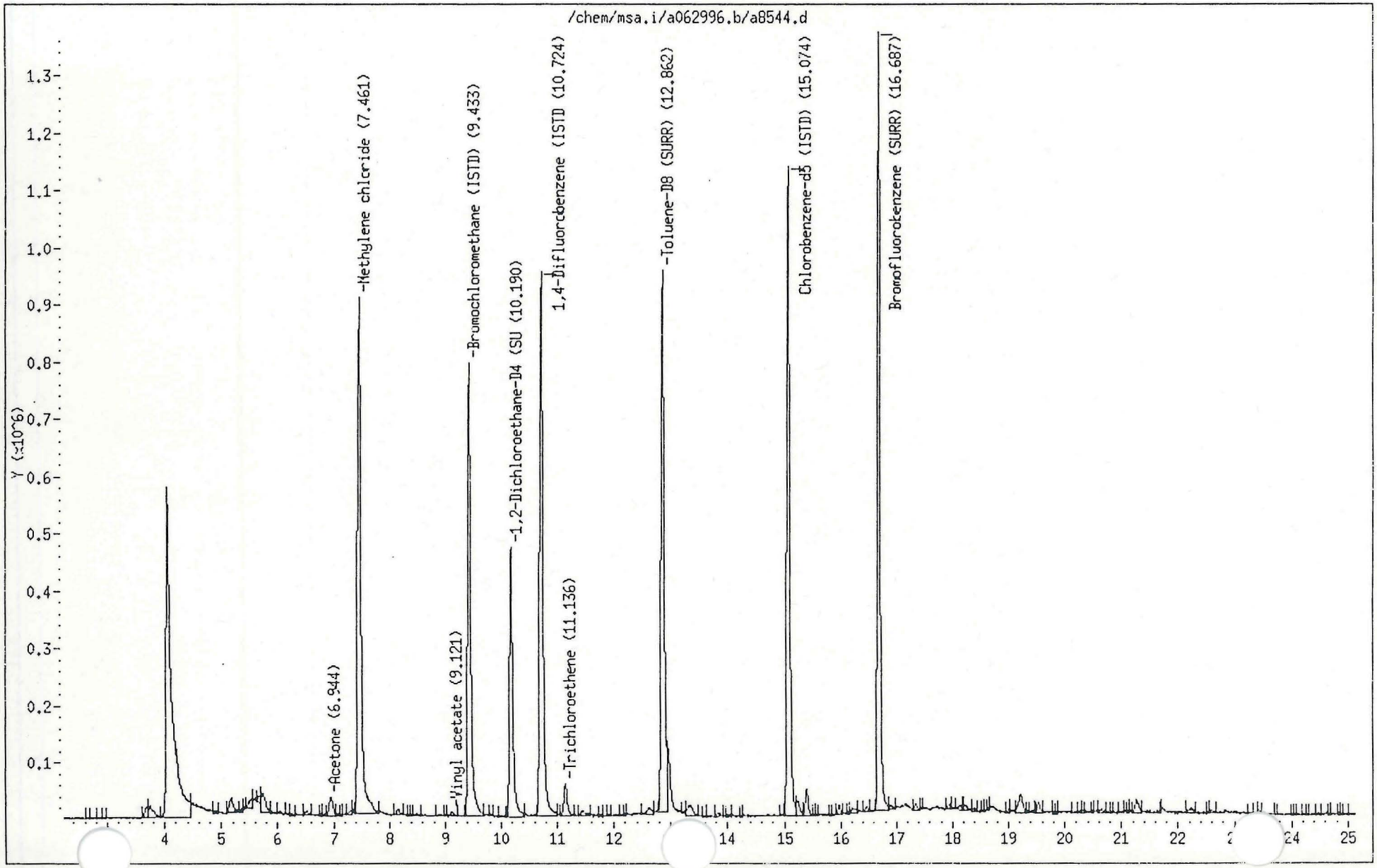
00160

Data File: /chem/msa.i/a062996.b/a8544.d
Date : 29-JUN-96 13:58
Client ID:
Sample Info: 18221n ssa7-tf4

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8544.d
Report Date: 30-Jun-1996 12:39

OHM Analytical Division

dTIC

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062996.b/a8544.d
Lab Smp Id:
Inj Date : 29-JUN-96 13:58
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-tf4
Misc Info : jp9904v,n2v5309,qv,5000,1,5.17,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:37 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 7
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

T. Meridith
7/5/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	Acetone	43.00	6.952	7.011	(0.737)	103622	10.0	10.0
	Methylene chloride	84.00	7.470	7.439	(0.792)	807139	66.3	66.3
18	Vinyl acetate	43.00	9.129	9.194	(0.968)	21844	~~2.73~~	~~2.73~~ MS
* 23	Bromochloromethane (ISTD)	128.00	9.433	9.441	(1.000)	374041	50.0	
$ 29	1,2-Dichloroethane-D4 (SURR)	65.00	10.190	10.192	(1.080)	629926	49.6	49.6
* 32	1,4-Difluorobenzene (ISTD)	114.00	10.724	10.728	(1.000)	1410870	50.0	
33	Trichloroethene	130.00	11.144	11.149	(1.039)	35837	2.85	2.85
$ 41	Toluene-D8 (SURR)	98.00	12.862	12.881	(0.853)	1267458	47.8	47.8
* 50	Chlorobenzene-d5 (ISTD)	117.00	15.082	15.083	(1.000)	1108683	50.0	
$ 59	Bromofluorobenzene (SURR)	95.00	16.687	16.693	(1.106)	879953	49.3	49.3

Data File: /chem/msa.i/a062996.b/a8544.d

Date : 29-JUN-96 13:58

Client ID:

Instrument: msa.i

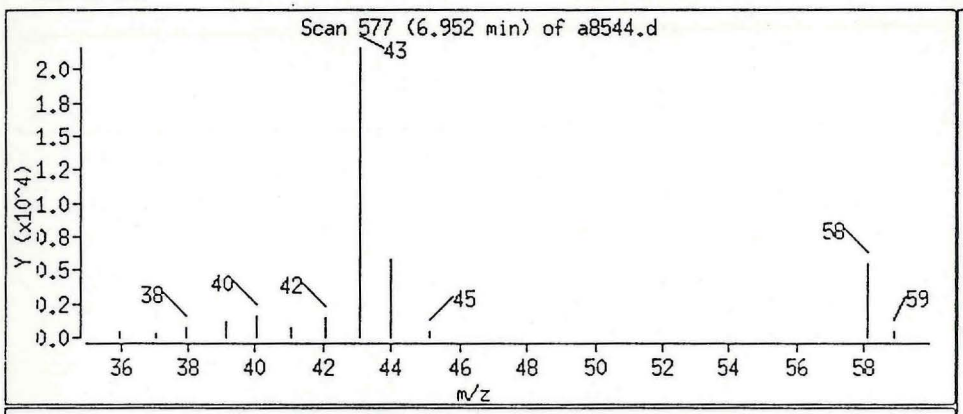
Sample Info: 18221n ssa7-tf4

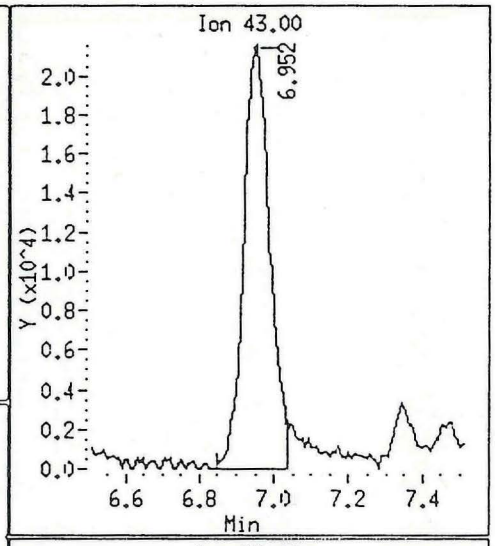
Operator: jk

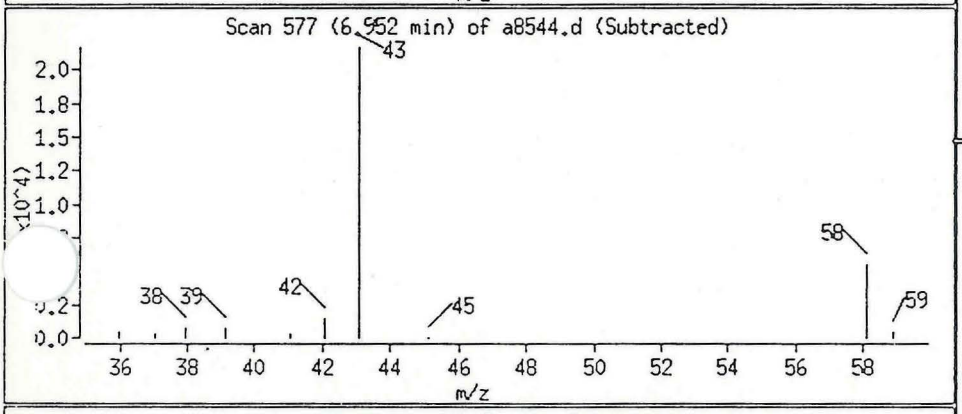
Column phase: DB-624 75m x 0.53mm

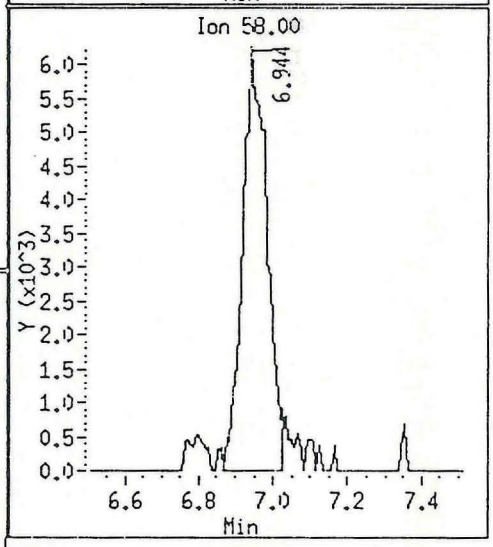
Column diameter: 0.53

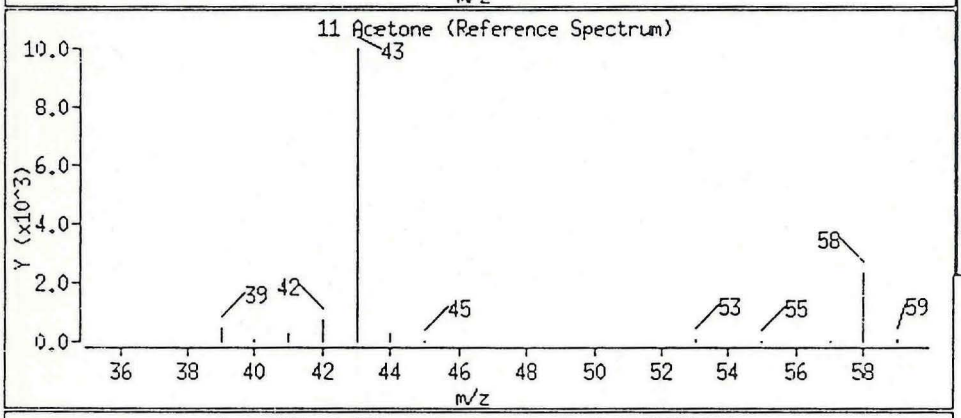
11 Acetone

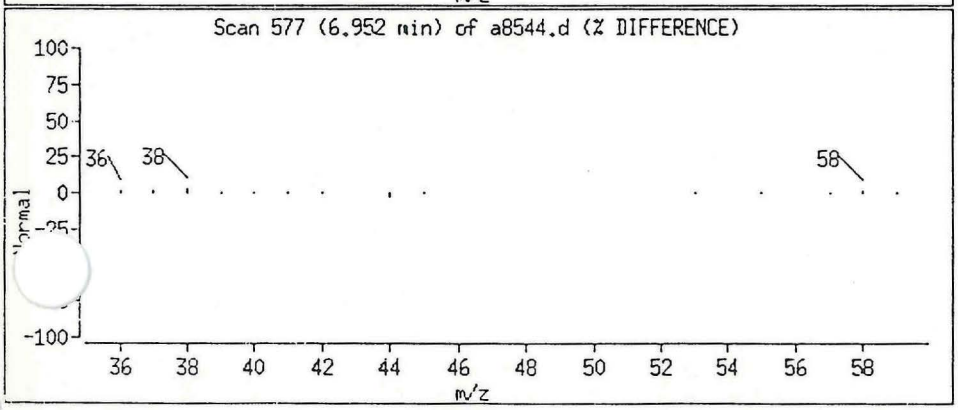












Data File: /chem/msa.i/a062996.b/a8544.d

Date : 29-JUN-96 13:58

Client ID:

Instrument: msa.i

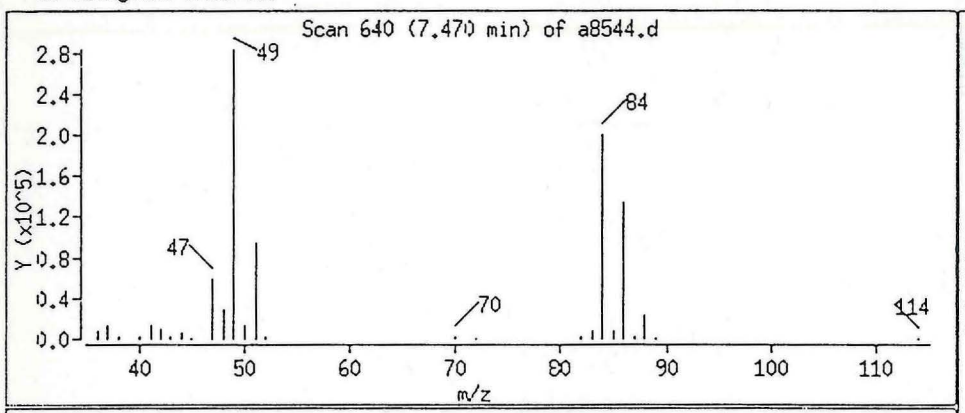
Sample Info: 18221n ssa7-tf4

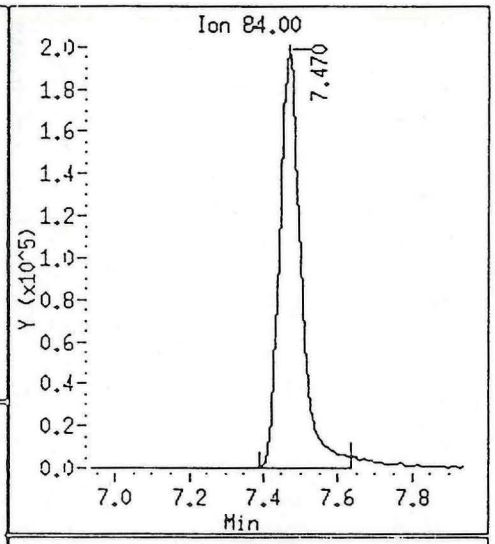
Operator: jk

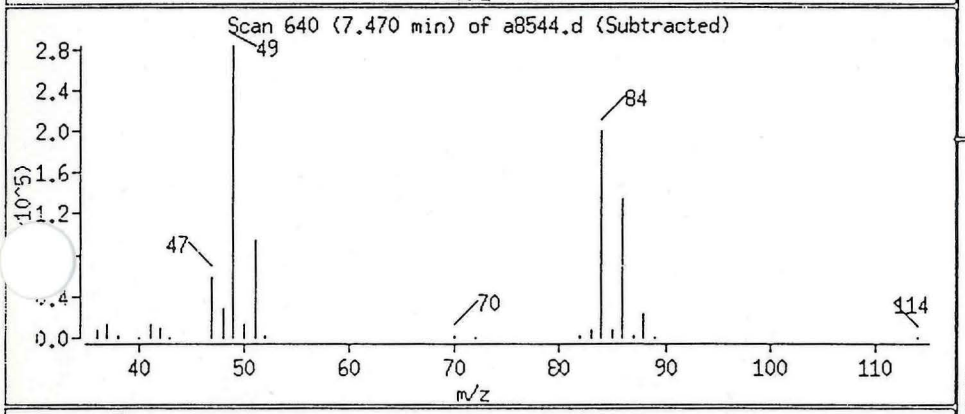
Column phase: DB-624 75m x 0.53mm

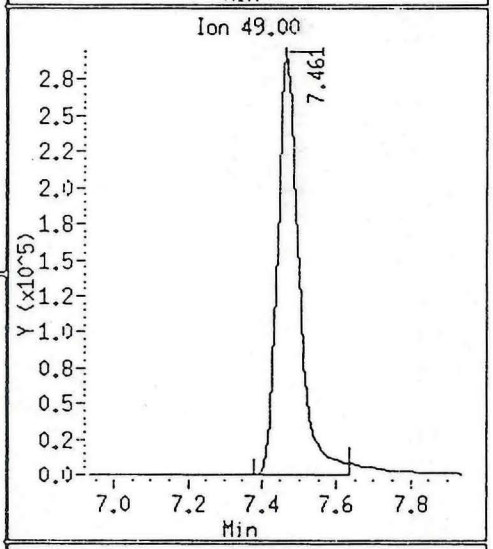
Column diameter: 0.53

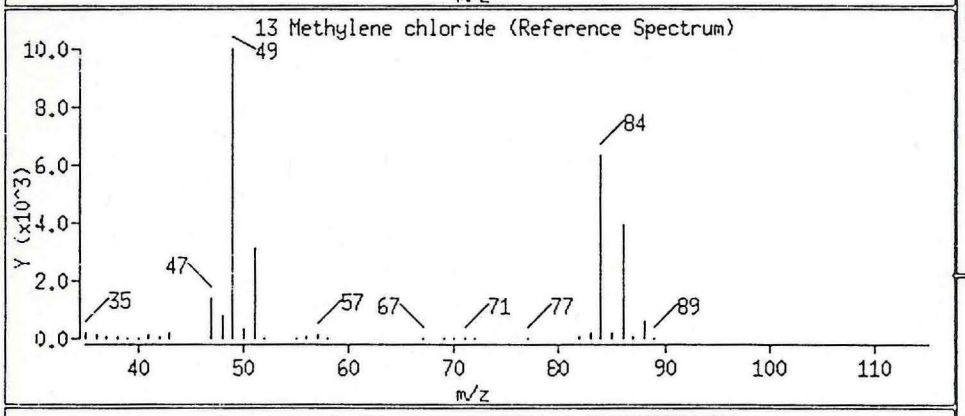
13 Methylene chloride

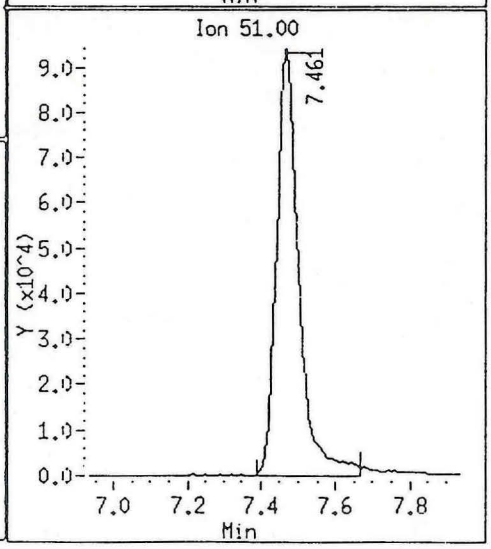


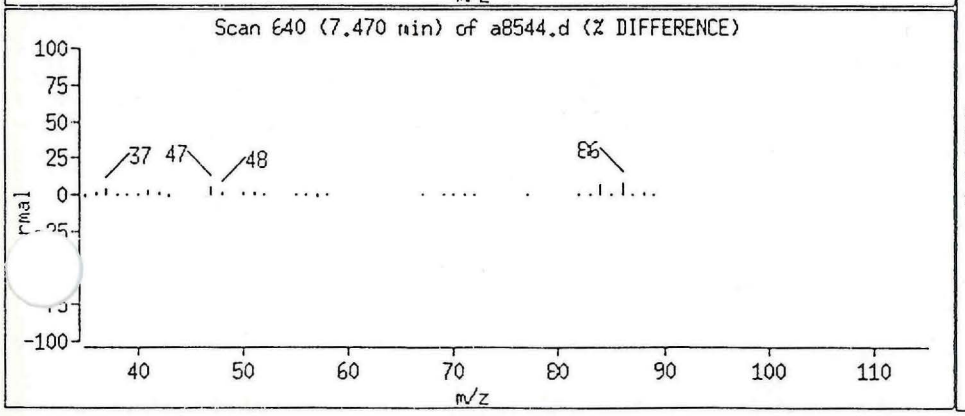












Data File: /chem/msa.i/a062996.b/a8544.d

Date : 29-JUN-96 13:58

Client ID:

Sample Info: 18221n ssa7-tf4

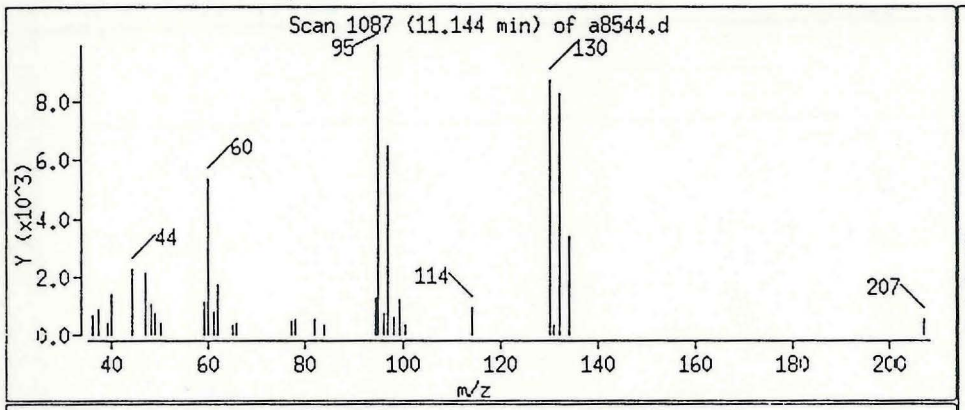
Instrument: msa.i

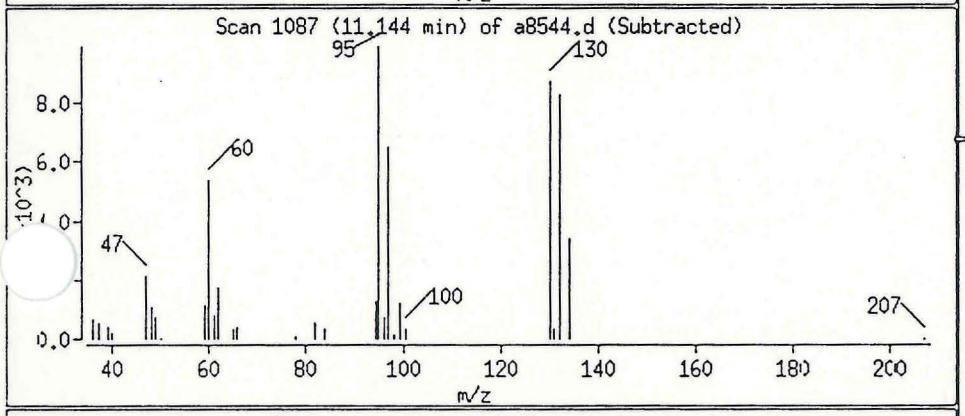
Operator: jk

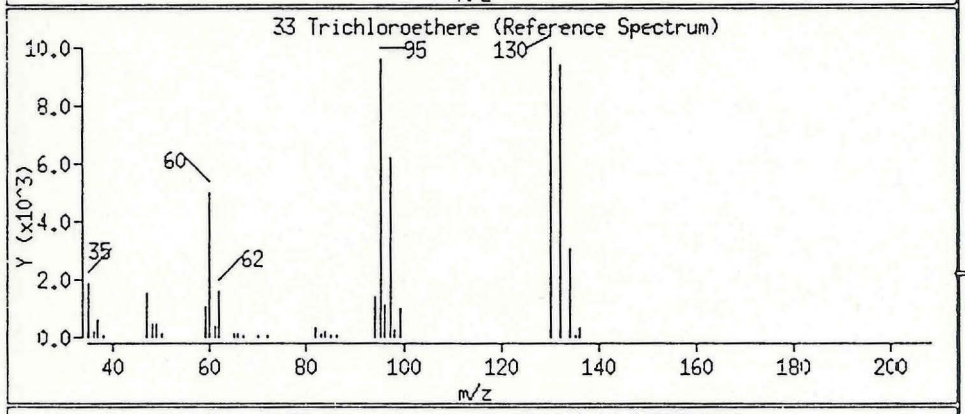
Column phase: DB-624 75m x 0.53mm

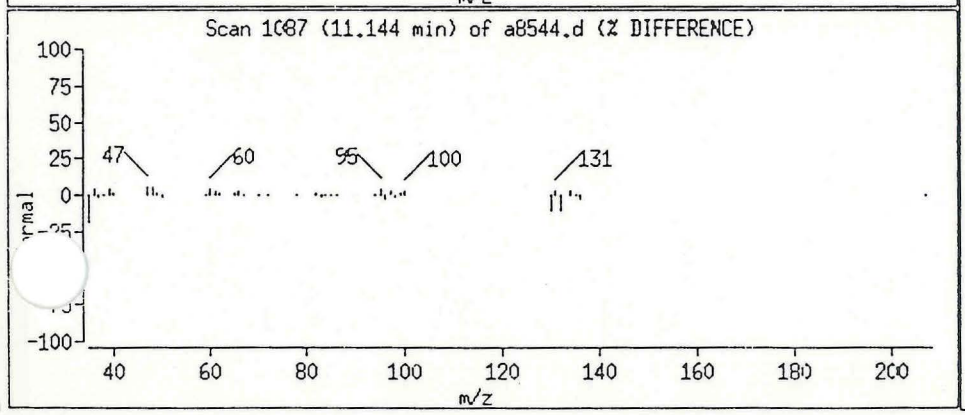
Column diameter: 0.53

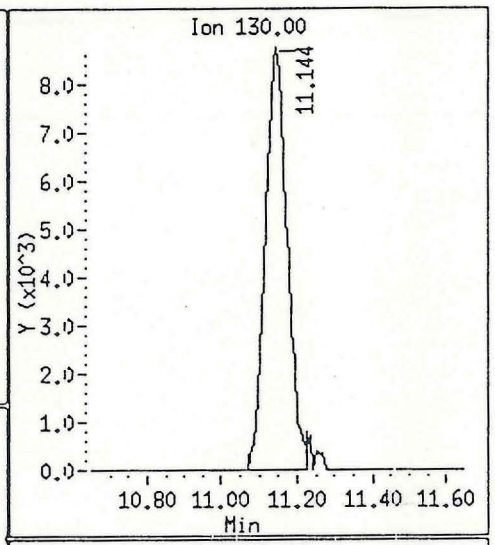
33 Trichloroethene

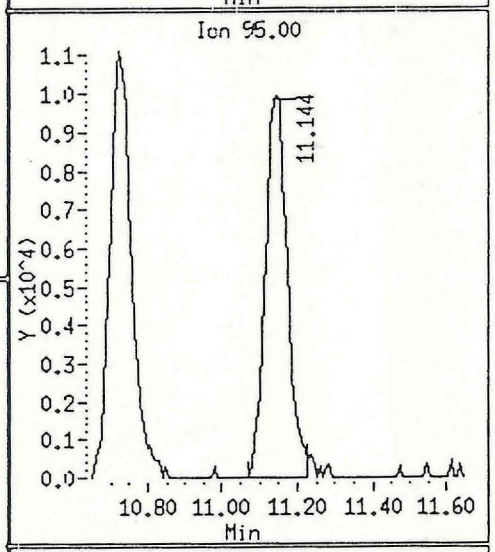


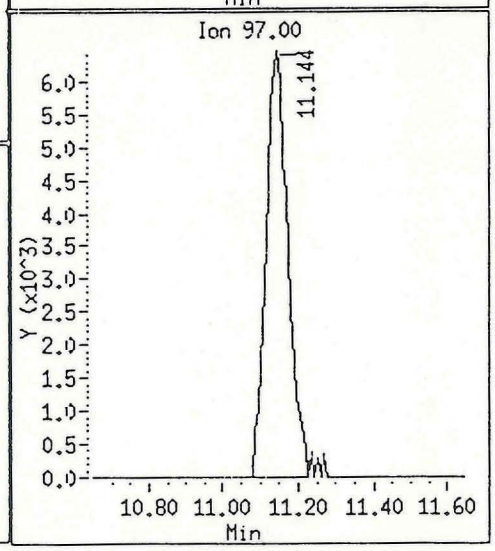












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00165

SSA7-TF5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9905V

Sample wt/vol: 5.05 (g/mL) G Lab File ID: A8534

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 22 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	25	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	13	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	J
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00166

SSA7-TF5

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9905V

Sample wt/vol: 5.05 (g/mL) G Lab File ID: A8534

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 22 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

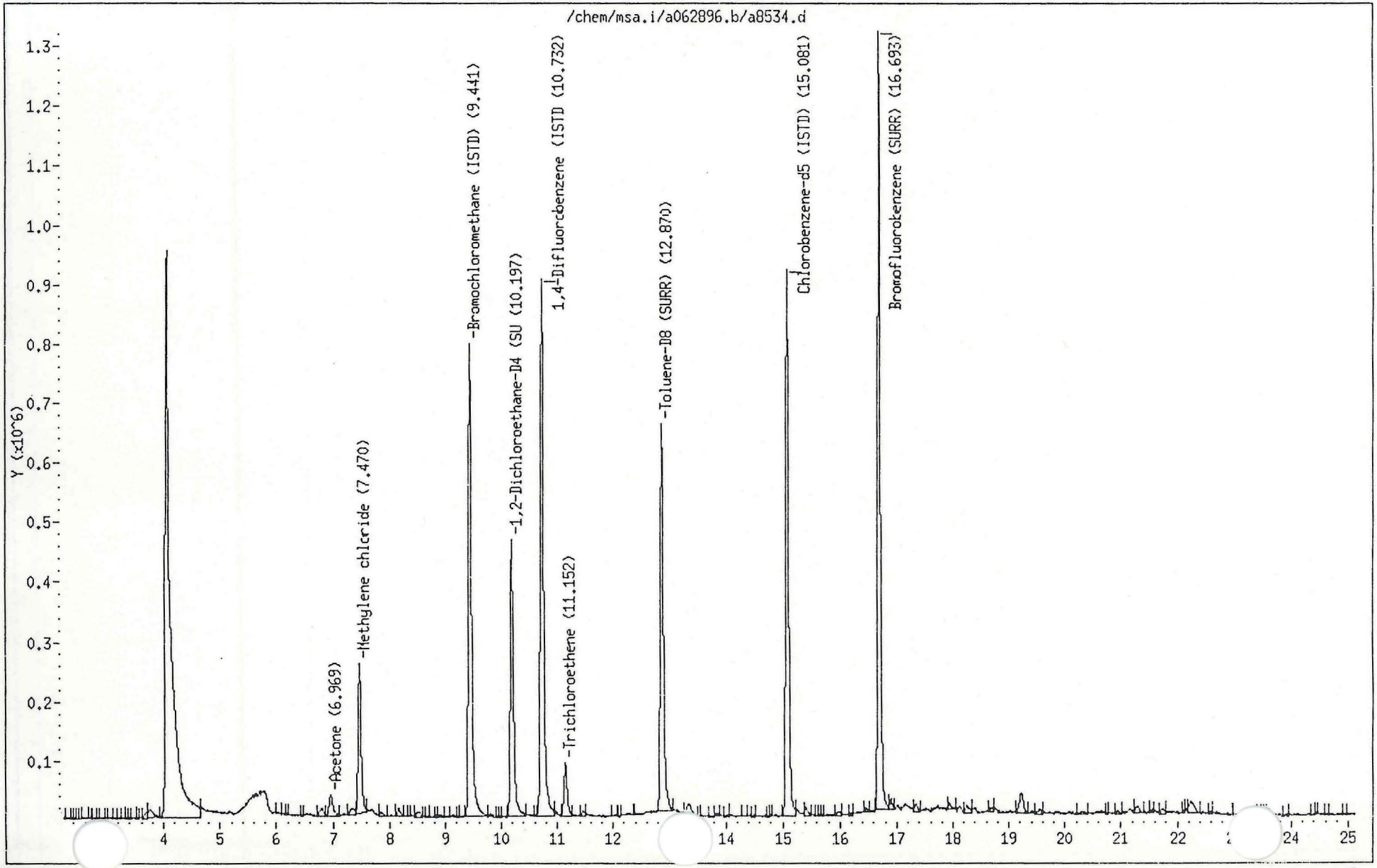
00167

Data File: /chem/msa.i/a062896.b/a8534.d
Date : 28-JUN-96 19:51
Client ID: 18221n ssa7-tf5
Sample Info: 18221n ssa7-tf5

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8534.d
Report Date: 10-Jul-1996 15:03

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062896.b/a8534.d
Lab Smp Id: Client Smp ID: 18221n ssa7-tf5
Inj Date : 28-JUN-96 19:51
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-tf5
Misc Info : jp9905v,n2v5309,qv,5000,1,5.05,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.969	7.017	(0.738)	107965	10.8	10.8
Methylene chloride	84.00	7.470	7.430	(0.791)	229866	19.3	19.3
* 23 Bromochloromethane (ISTD)	128.00	9.441	9.442	(1.000)	384172	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.189	10.202	(1.079)	615683	46.2	46.2
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.732	10.739	(1.000)	1357399	50.0	
33 Trichloroethene	130.00	11.152	11.151	(1.039)	58718	4.94	4.94
$ 41 Toluene-D8 (SURR)	98.00	12.878	12.877	(0.854)	879378	38.7	38.7
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.081	15.091	(1.000)	898791	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.693	16.703	(1.107)	858242	56.6	56.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062896.b/a8534.d

Date : 28-JUN-96 19:51

Client ID: 18221n ssa7-tf5

Sample Info: 18221n ssa7-tf5

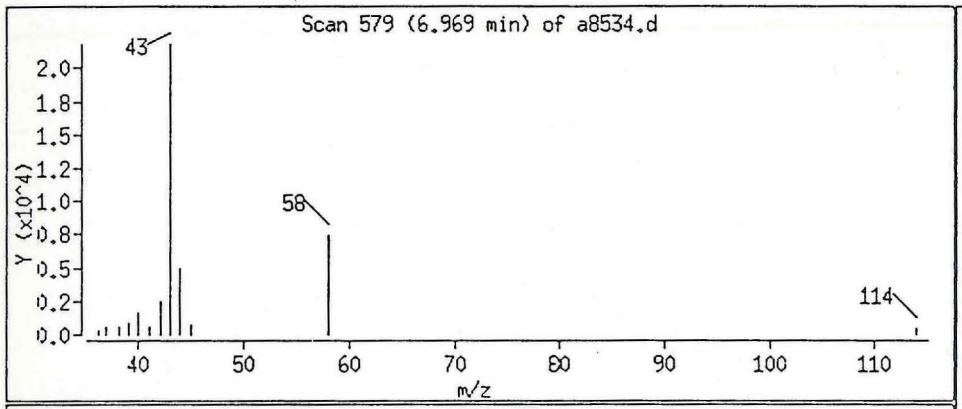
Instrument: msa.i

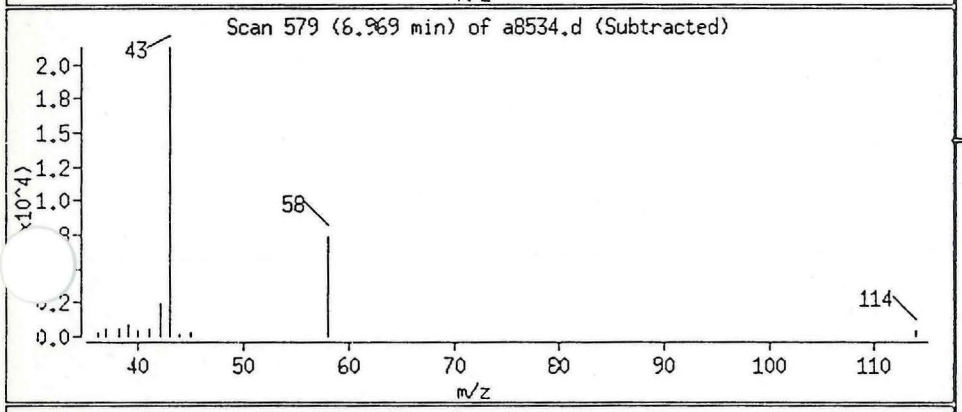
Operator: jk

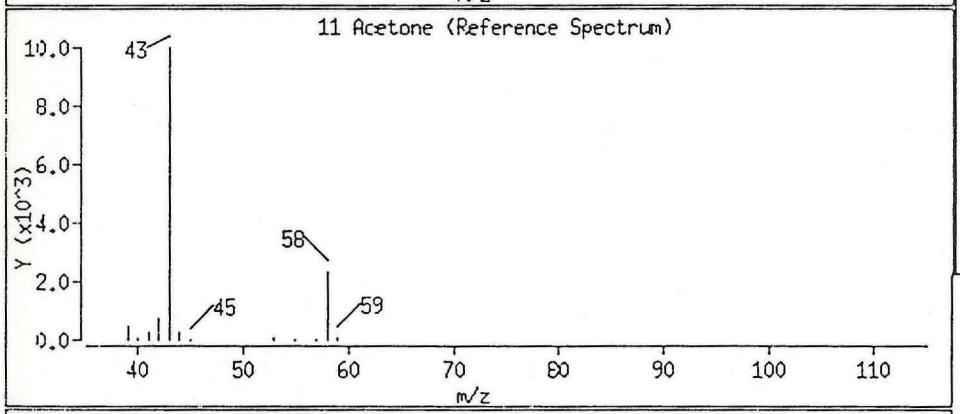
Column phase: DB-624 75m x 0.53mm

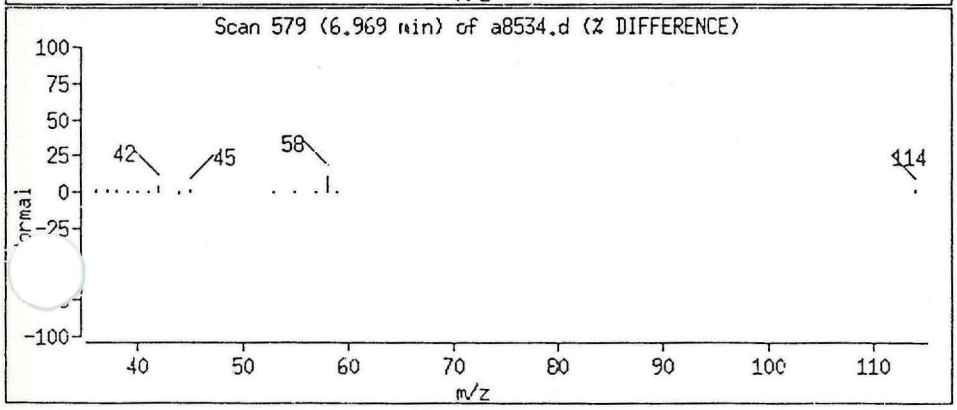
Column diameter: 0.53

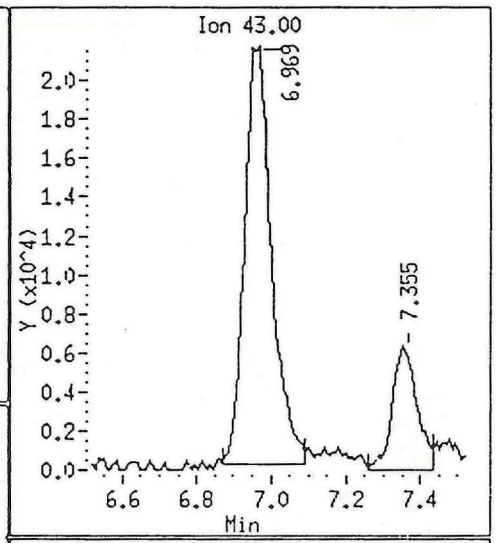
11 Acetone

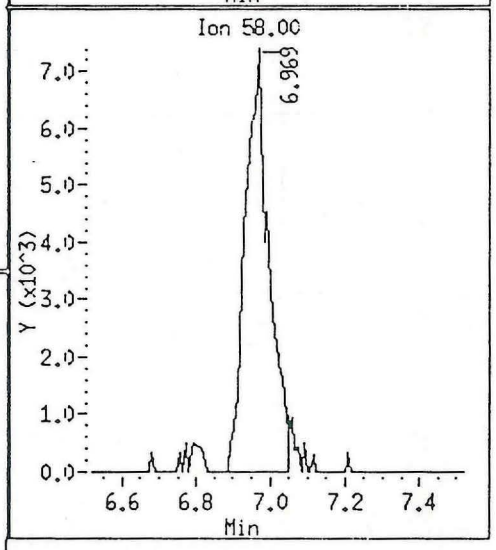












Data File: /chem/msa.i/a062896.b/a8534.d
Date : 28-JUN-96 19:51
Client ID: 18221n ssa7-tf5
Sample Info: 18221n ssa7-tf5

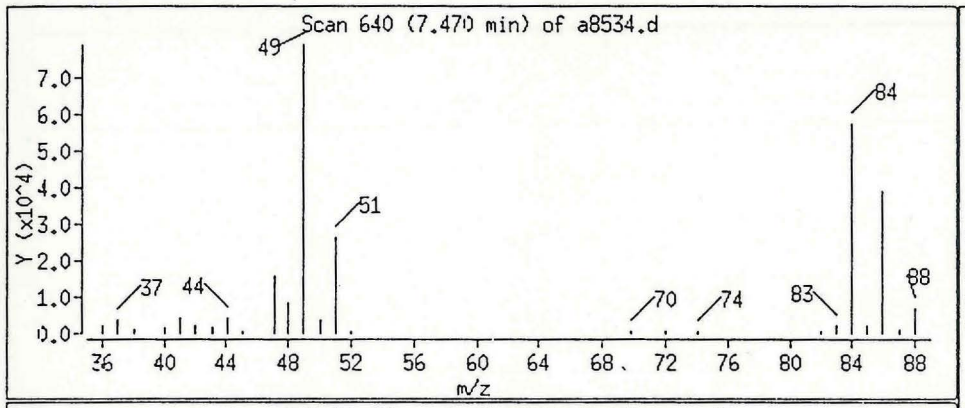
Instrument: msa.i

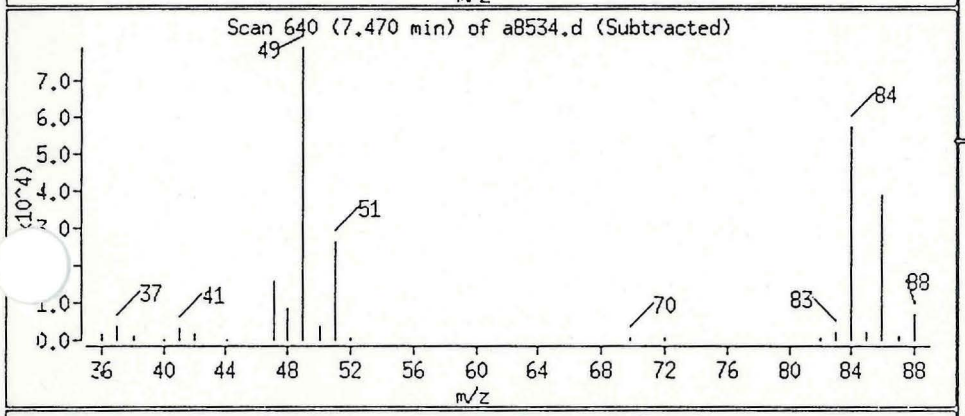
Operator: jk

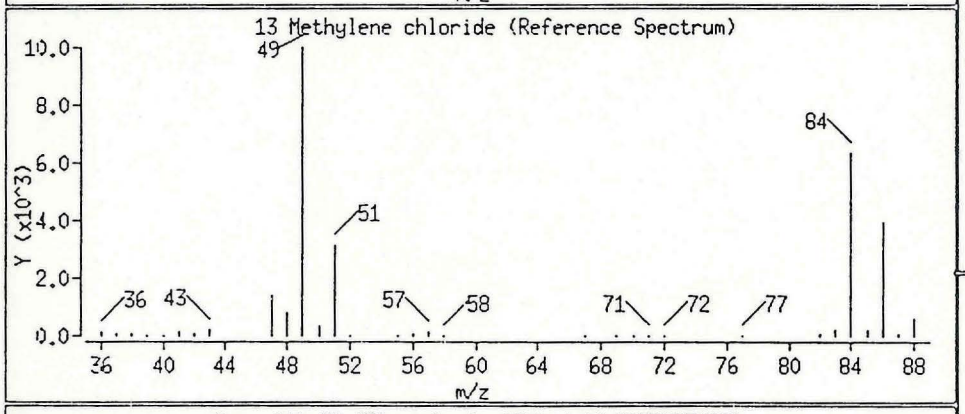
Column phase: DB-624 75m x 0.53mm

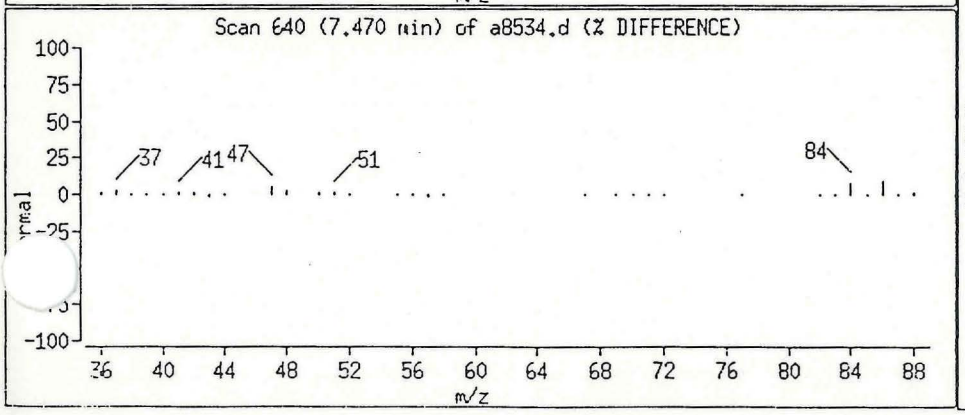
Column diameter: 0.53

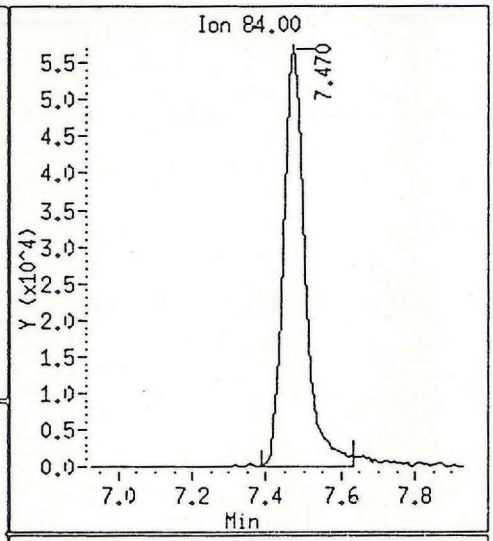
13 Methylene chloride

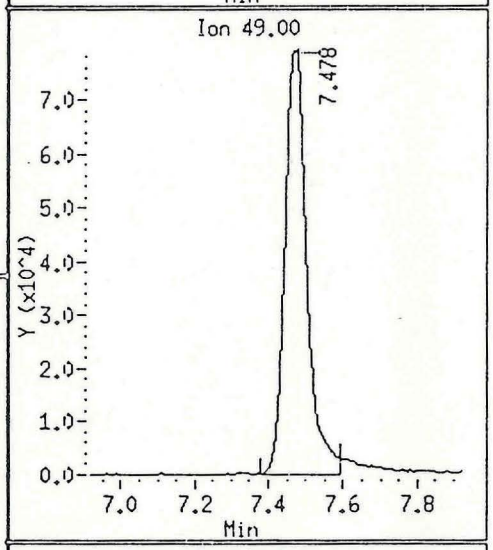


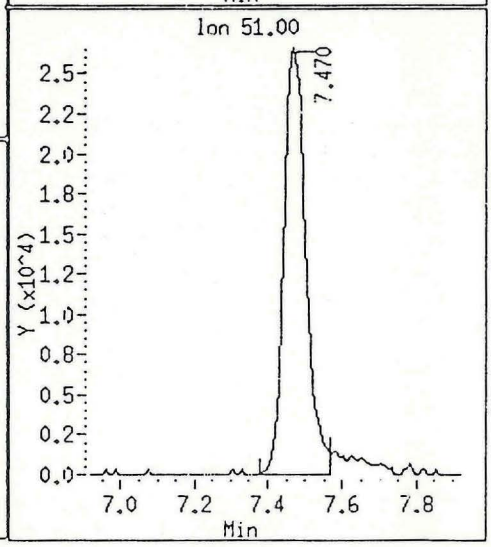












Data File: /chem/msa.i/a062896.b/a8534.d
Date : 28-JUN-96 19:51
Client ID: 18221n ssa7-tf5
Sample Info: 18221n ssa7-tf5

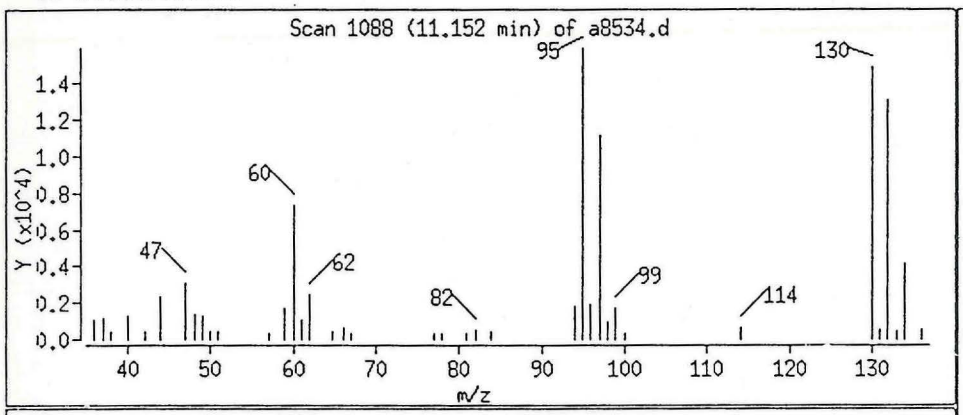
Instrument: msa.i

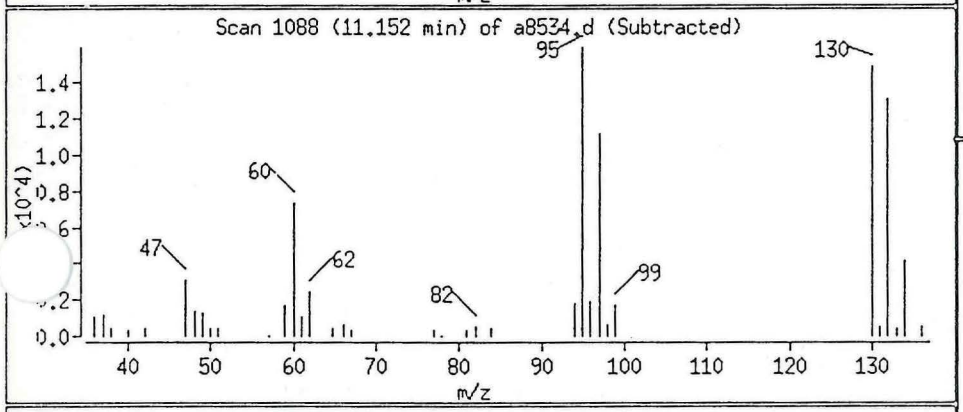
Operator: jk

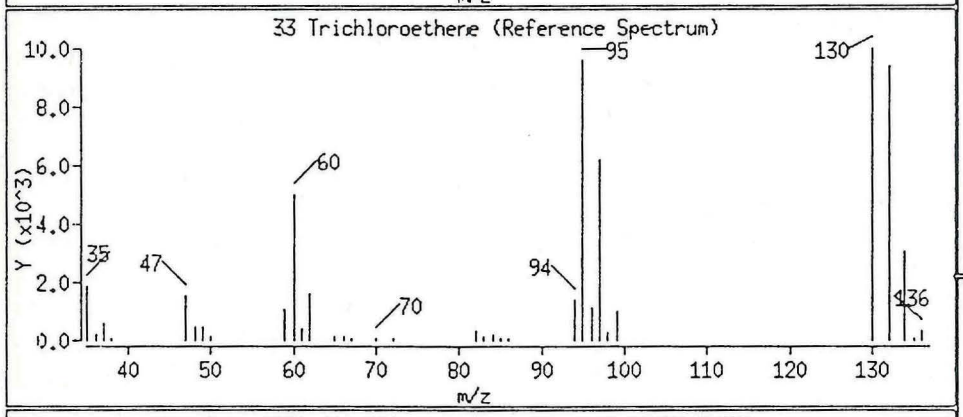
Column phase: DB-624 75m x 0.53mm

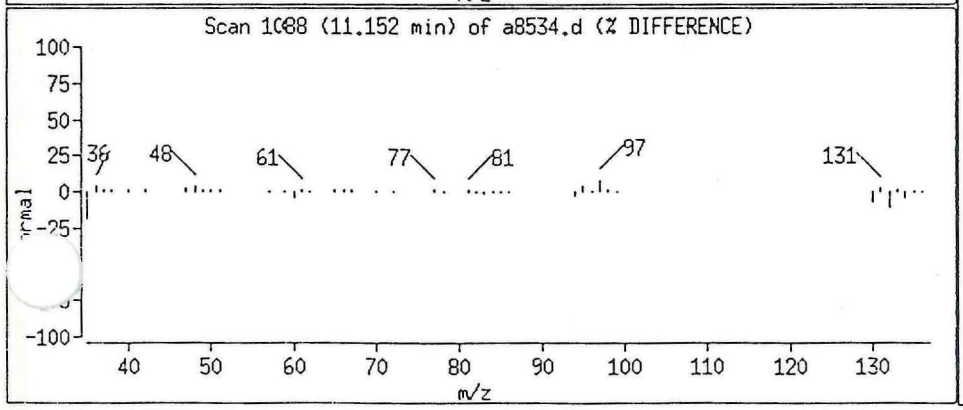
Column diameter: 0.53

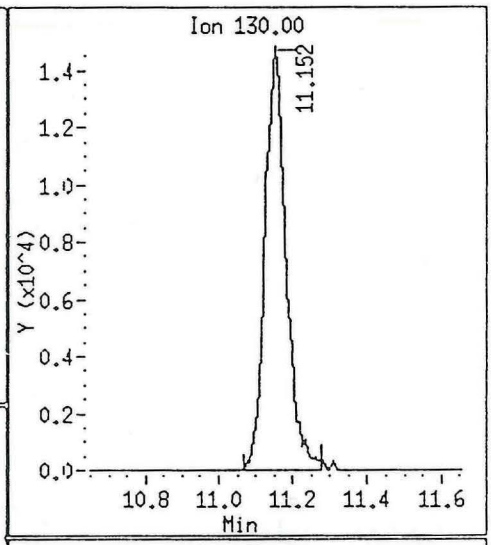
33 Trichloroethene

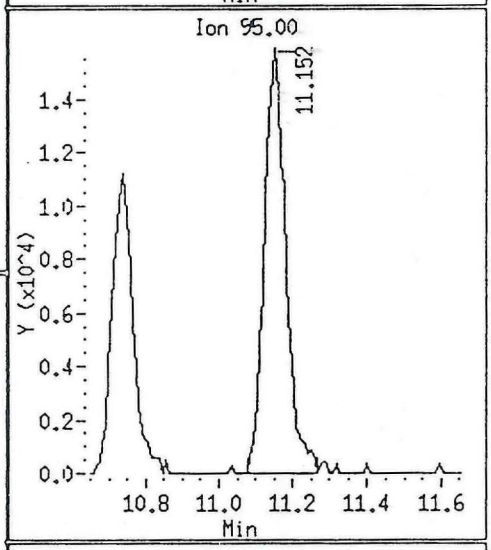


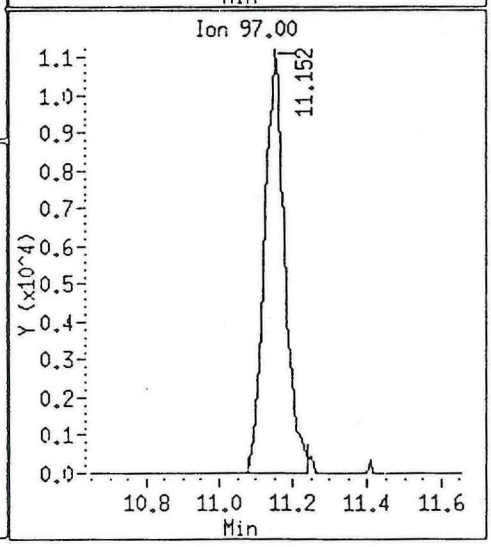












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00172

SSA7-TF6

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9906V

Sample wt/vol: 5.03 (g/mL) G Lab File ID: A8535

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 20 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	39	B
67-64-1	Acetone	13	B
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

00173

EPA SAMPLE NO.

SSA7-TF6

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9906V

Sample wt/vol: 5.03 (g/mL) G Lab File ID: A8535

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 20 Date Analyzed: 06/28/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

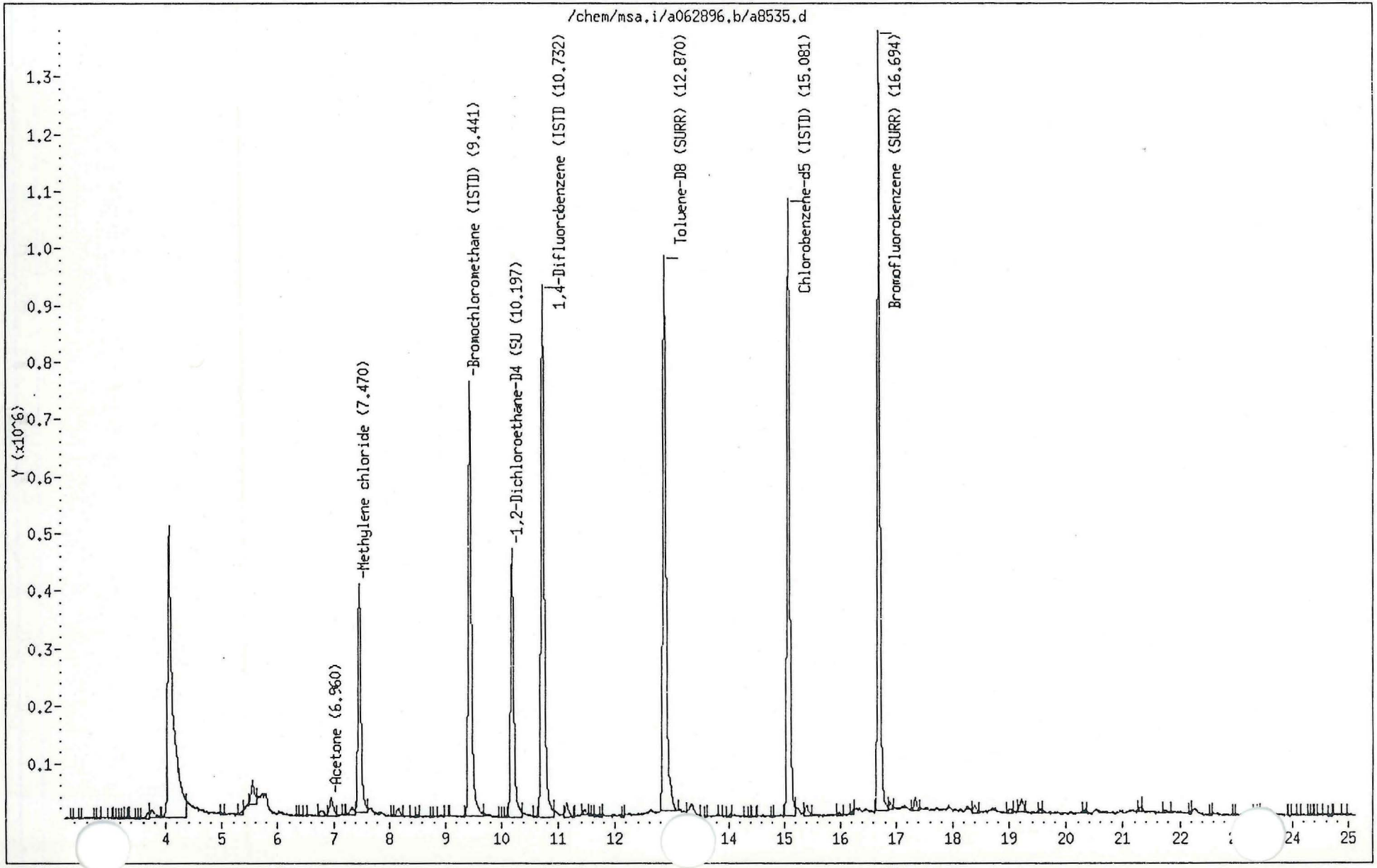
00174

Data File: /chem/msa.i/a062896.b/a8535.d
Date : 28-JUN-96 20:25
Client ID: 18221n ssa7-tf6
Sample Info: 18221n ssa7-tf6

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8535.d
Report Date: 10-Jul-1996 15:04

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062896.b/a8535.d
Lab Smp Id: Client Smp ID: 18221n ssa7-tf6
Inj Date : 28-JUN-96 20:25
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-tf6
Misc Info : jp9906v,n2v5309,qv,5000,1,5.03,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 7
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.952	7.017	(0.736)	97364	10.3	10.3
Methylene chloride	84.00	7.470	7.430	(0.790)	355248	31.6	31.6
* 23 Bromochloromethane (ISTD)	128.00	9.449	9.442	(1.000)	362681	50.0	
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.197	10.202	(1.079)	619122	49.2	49.2
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.740	10.739	(1.000)	1368968	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.870	12.877	(0.853)	1301562	48.6	48.6
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.081	15.091	(1.000)	1058910	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.694	16.703	(1.107)	888568	49.8	49.8

Data File: /chem/msa.i/a062896.b/a8535.d

Date : 28-JUN-96 20:25

Client ID: 18221n ssa7-tf6

Instrument: msa.i

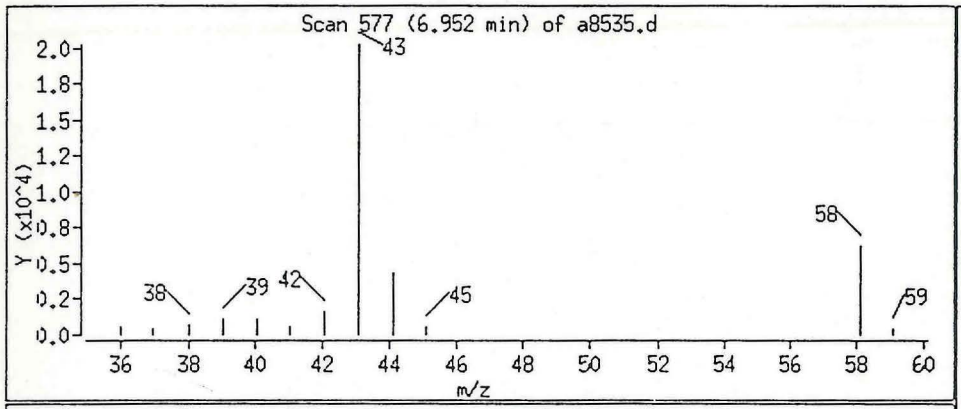
Sample Info: 18221n ssa7-tf6

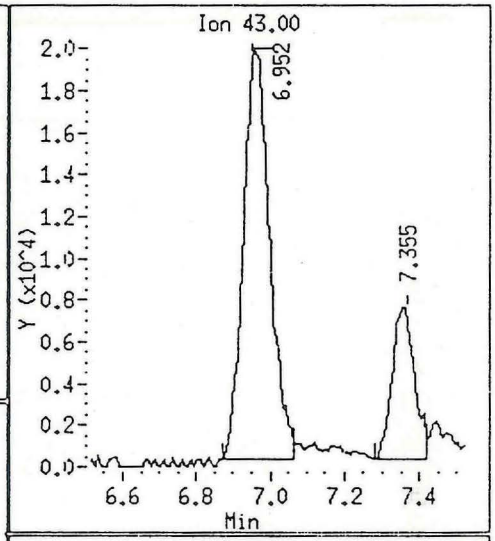
Operator: jk

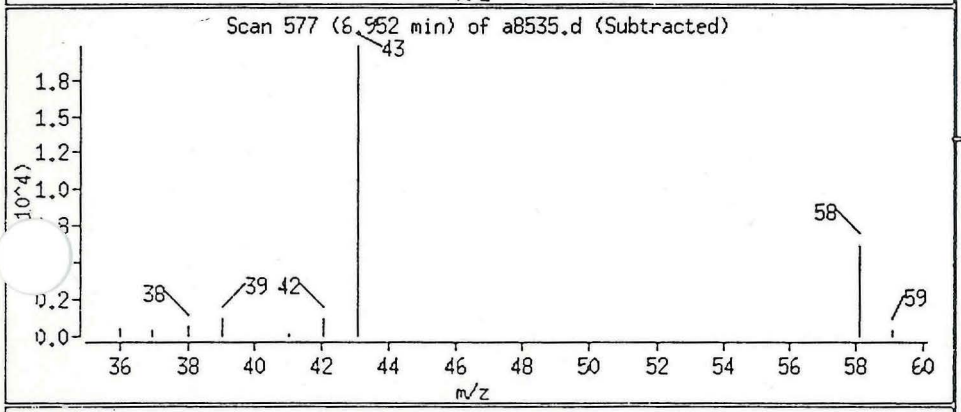
Column phase: DB-624 75m x 0.53mm

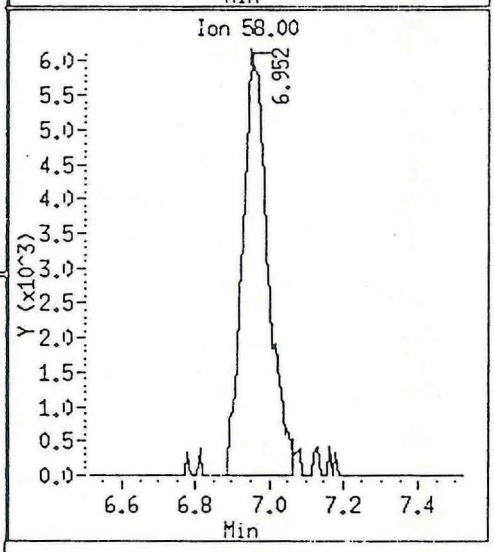
Column diameter: 0.53

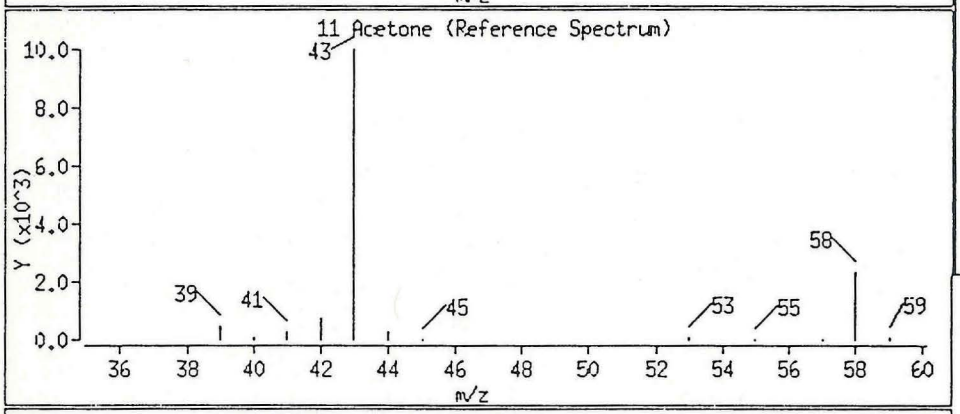
11 Acetone

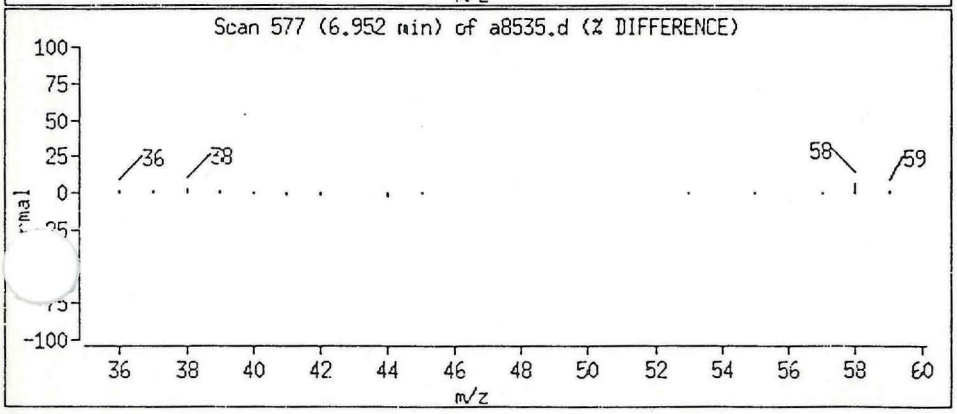












Data File: /chem/msa.i/a062896.b/a8535.d

Date : 28-JUN-96 20:25

Client ID: 18221n ssa7-tf6

Sample Info: 18221n ssa7-tf6

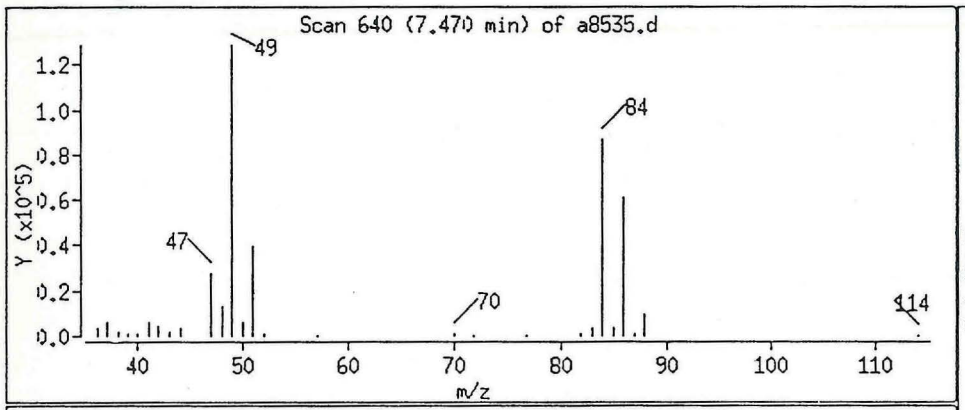
Instrument: msa.i

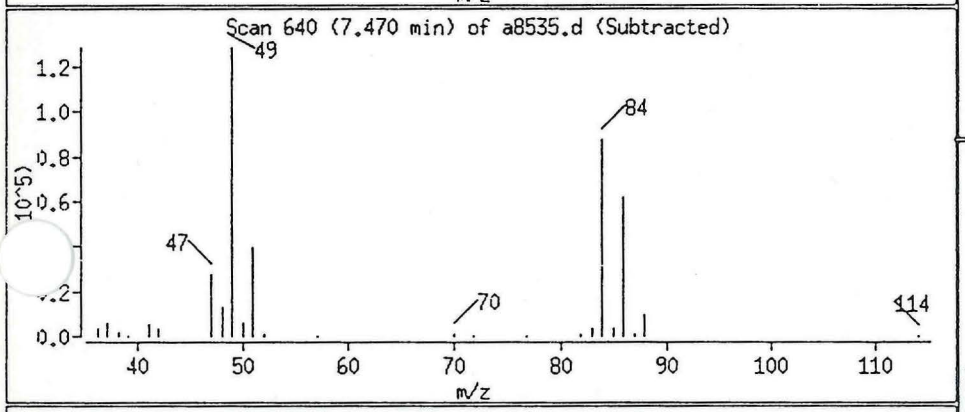
Operator: jk

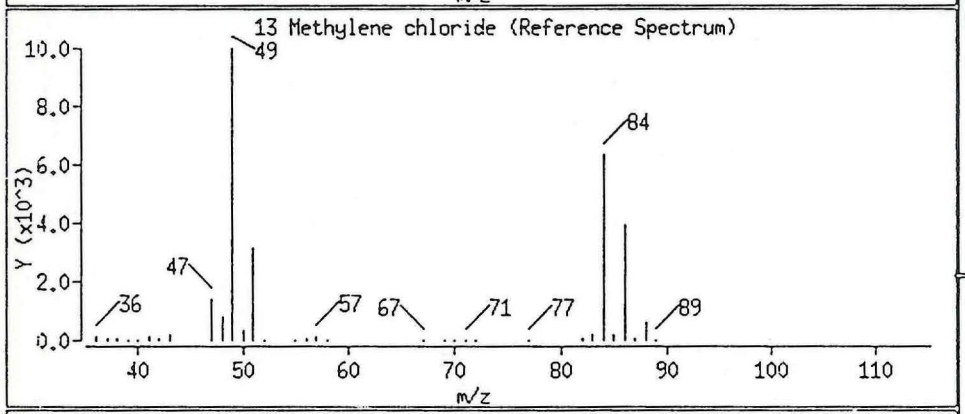
Column phase: DB-624 75m x 0.53mm

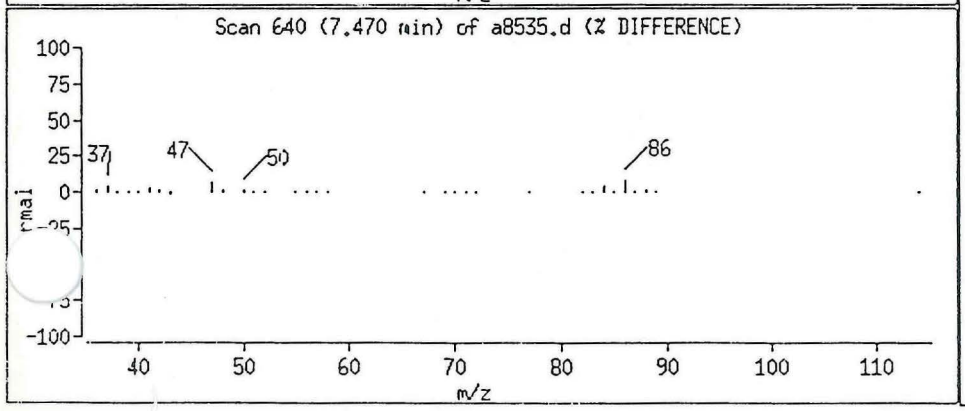
Column diameter: 0.53

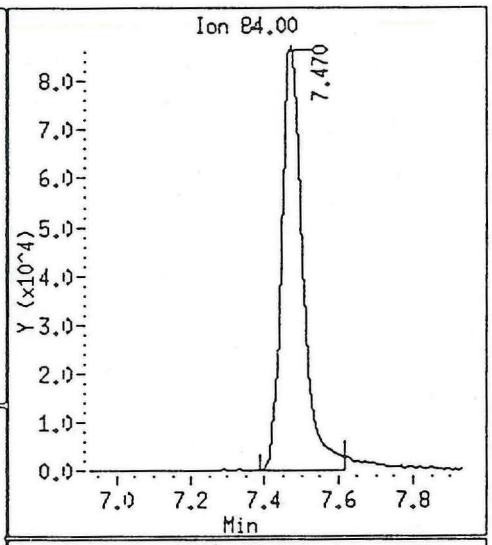
13 Methylene chloride

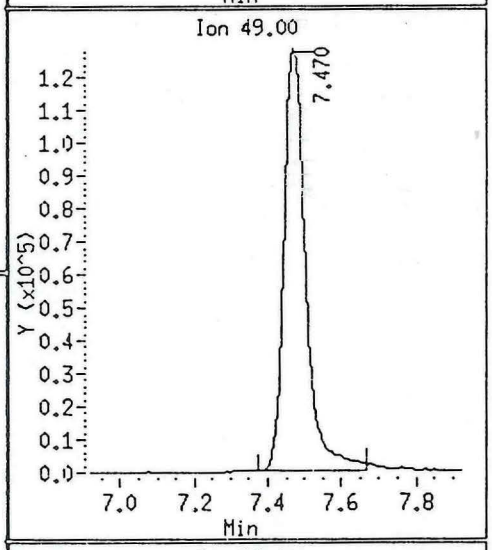


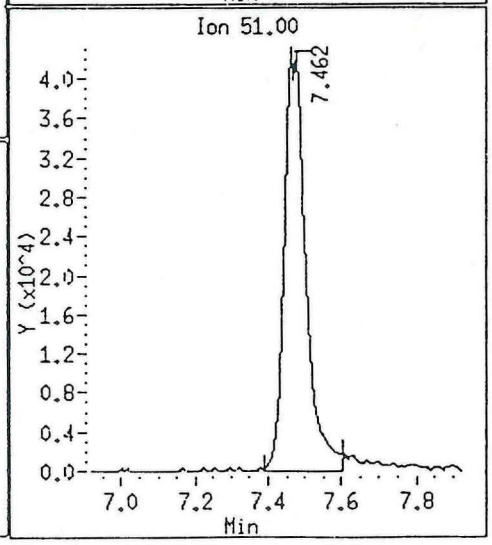












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00178

SSA7-TF7

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9907V

Sample wt/vol: 5.15 (g/mL) G Lab File ID: A8587

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 16 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	23	B
67-64-1	Acetone	7	J
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	15	B
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	u
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	9	
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	4	J
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00179

EPA SAMPLE NO.

SSA7-TF7

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9907V

Sample wt/vol: 5.15 (g/mL) G Lab File ID: A8587

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 16 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-07-0	Acetaldehyde	5.16	9	JN
2.	unknown	17.87	12	J

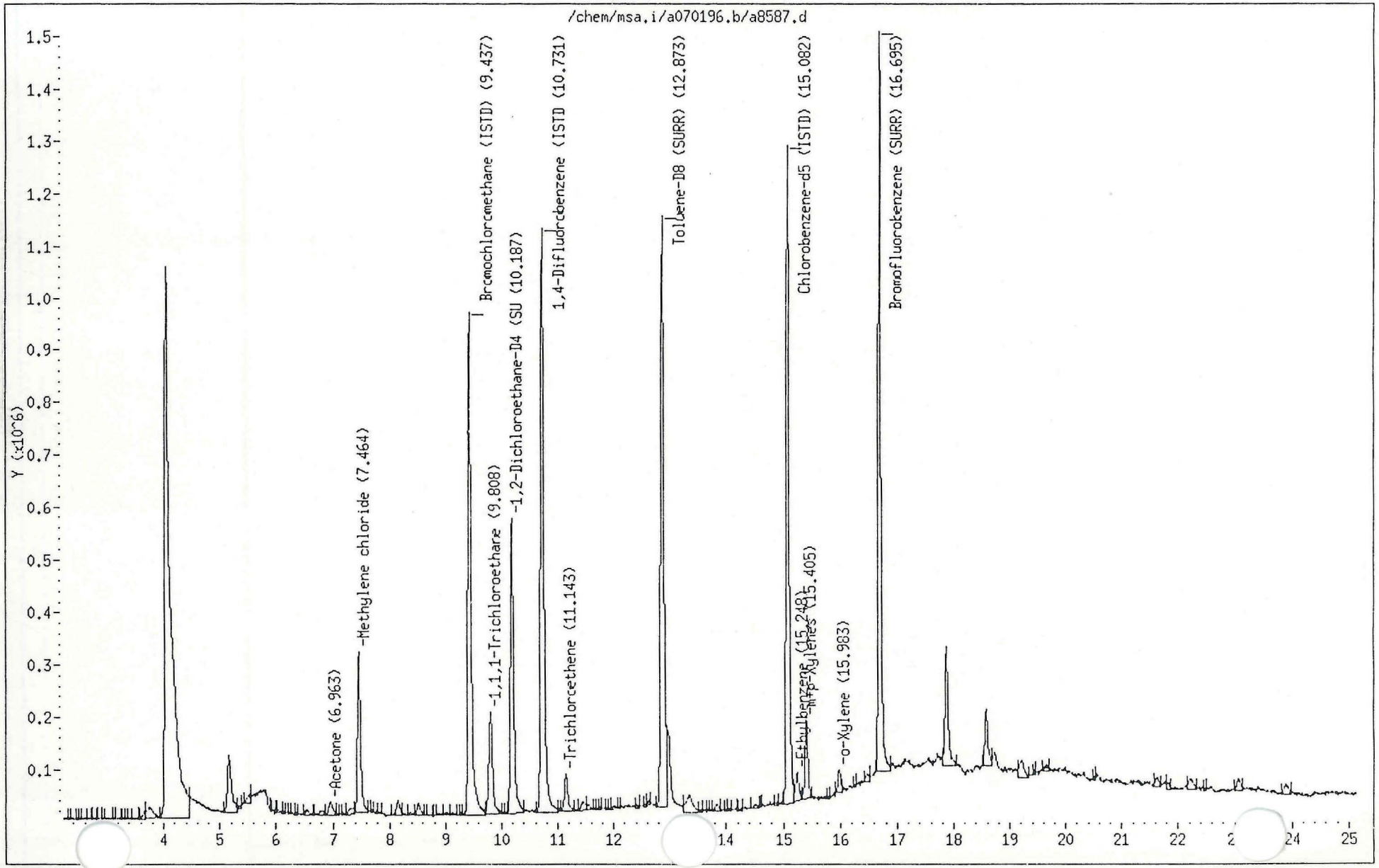
00180

Data File: /chem/msa.i/a070196.b/a8587.d
Date : 01-JUL-96 16:17
Client ID:
Sample Info: 18221n-ssa7-tf7

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8587.d
Report Date: 02-Jul-1996 07:16

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070196.b/a8587.d
Lab Smp Id:
Inj Date : 01-JUL-96 16:17
Operator : jk Inst ID: msa.i
Smp Info : 18221n-ssa7-tf7
Misc Info : jp9907v,n2v5315,qv,5000,1,5.15,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Als bottle: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MW 7/2/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	Acetone	43.00	6.963	6.987	(0.738)	76446	5.87	5.87
	Methylene chloride	84.00	7.464	7.406	(0.791)	283908	20.2	20.2
*	23 Bromochloromethane (ISTD)	128.00	9.437	9.418	(1.000)	437981	50.0	
	25 1,1,1-Trichloroethane	97.00	9.808	9.773	(0.914)	265017	12.6	12.6
$	29 1,2-Dichloroethane-D4 (SURR)	65.00	10.187	10.177	(1.079)	743611	51.2	51.2
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.731	10.713	(1.000)	1736801	50.0	
	33 Trichloroethene	130.00	11.143	11.126	(1.038)	47450	3.06	3.06
$	41 Toluene-D8 (SURR)	98.00	12.873	12.859	(0.854)	1543423	51.2	51.2
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.082	15.078	(1.000)	1235211	50.0	
	53 Ethylbenzene	106.00	15.248	15.244	(1.011)	19400	1.66	1.66
	54 m+p-Xylenes	106.00	15.405	15.409	(1.021)	78497	5.62	5.62
	55 o-Xylene	106.00	15.983	15.978	(1.060)	23830	1.73	1.73
$	59 Bromofluorobenzene (SURR)	95.00	16.695	16.697	(1.107)	959914	48.0	48.0

Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

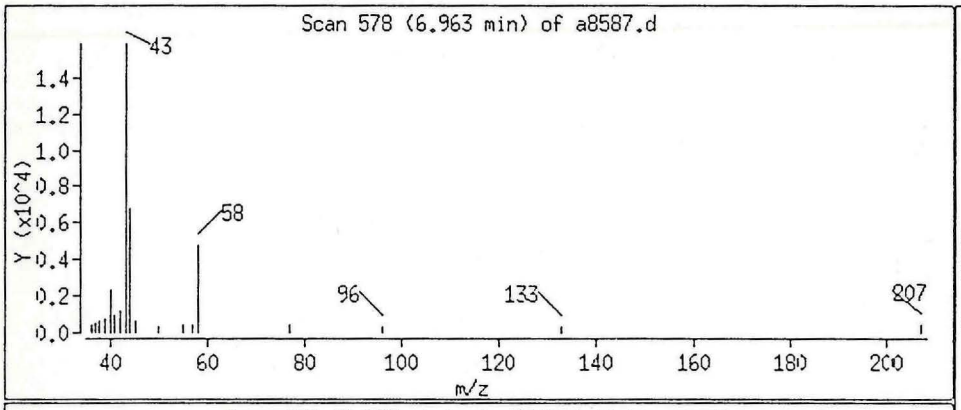
Sample Info: 18221n-ssa7-tf7

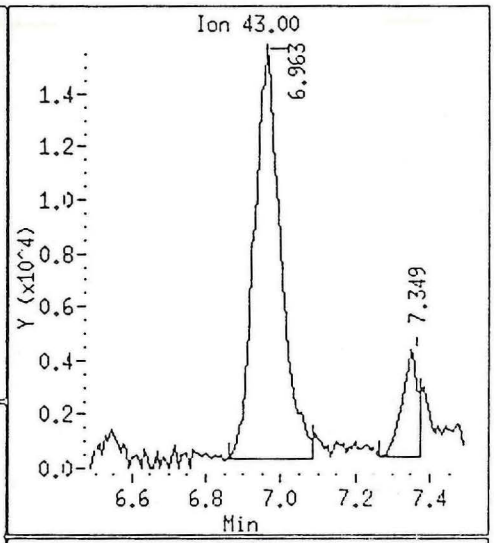
Operator: jk

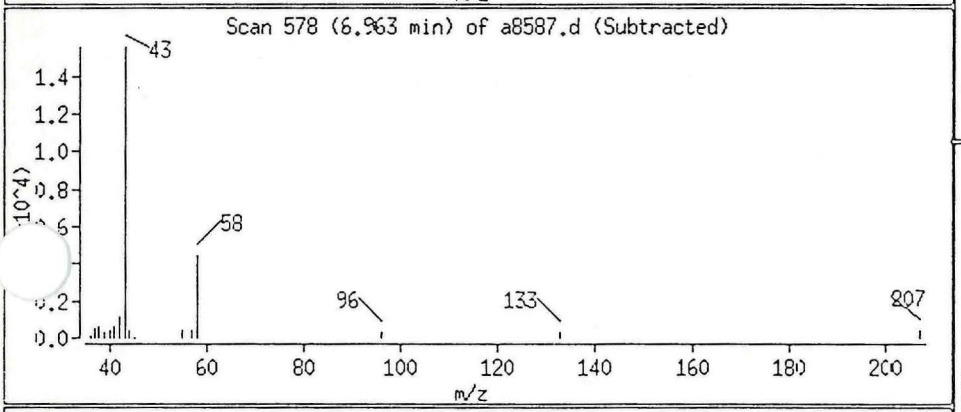
Column phase: DB-624 75m x 0.53mm

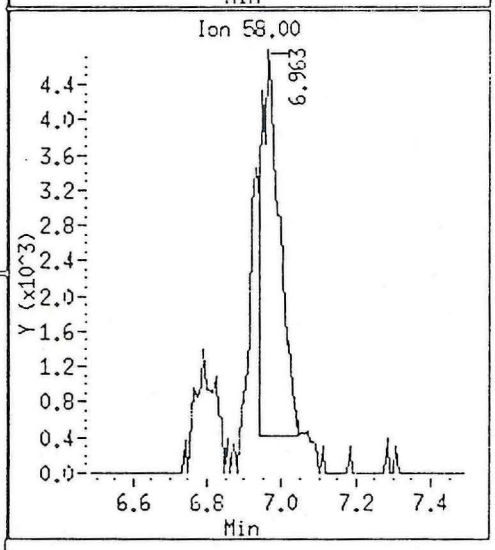
Column diameter: 0.53

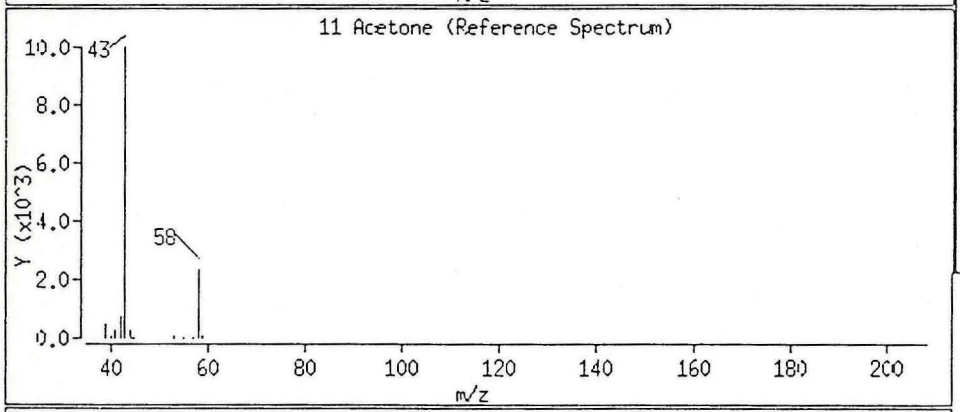
11 Acetone

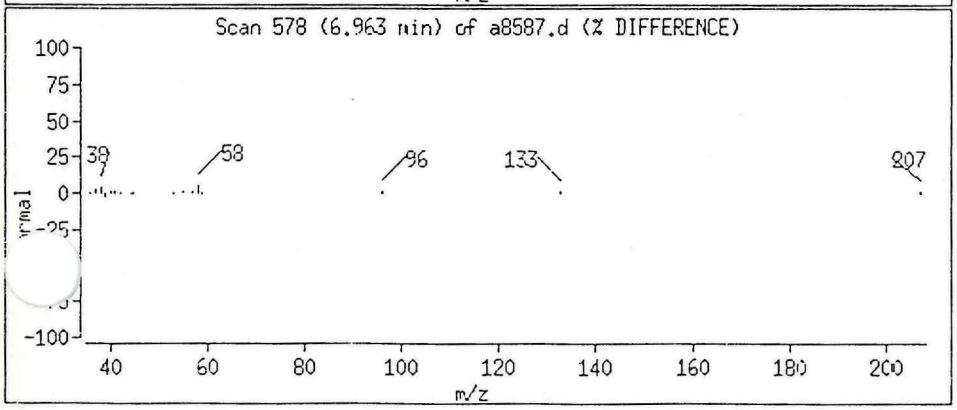








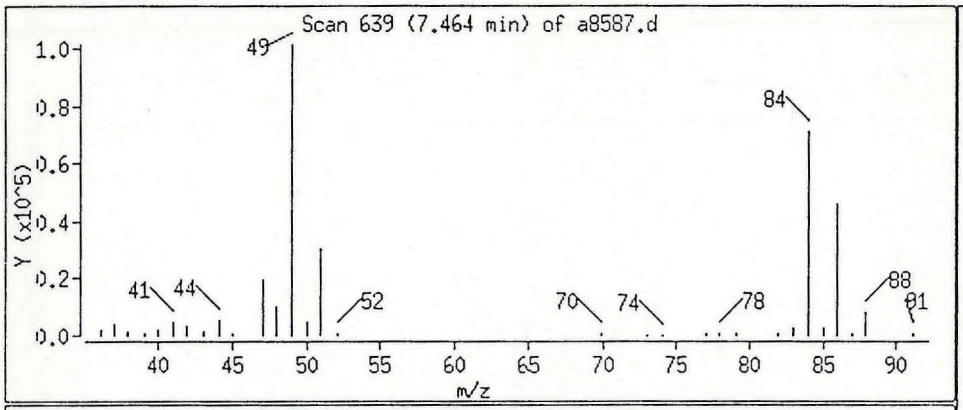


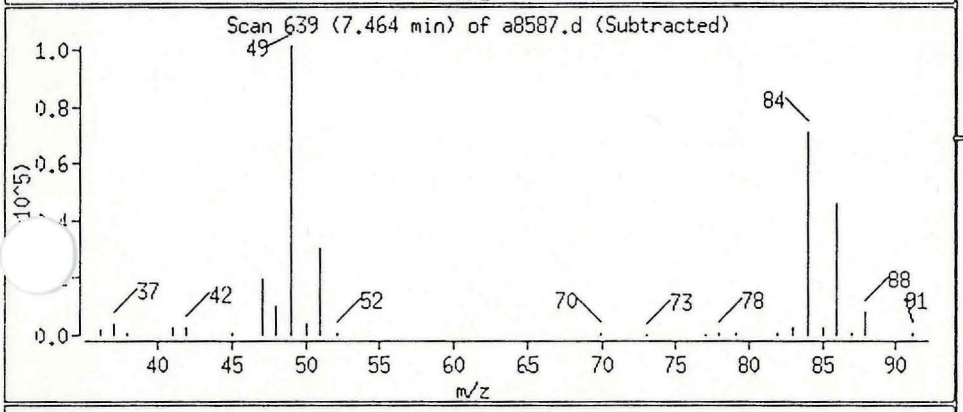


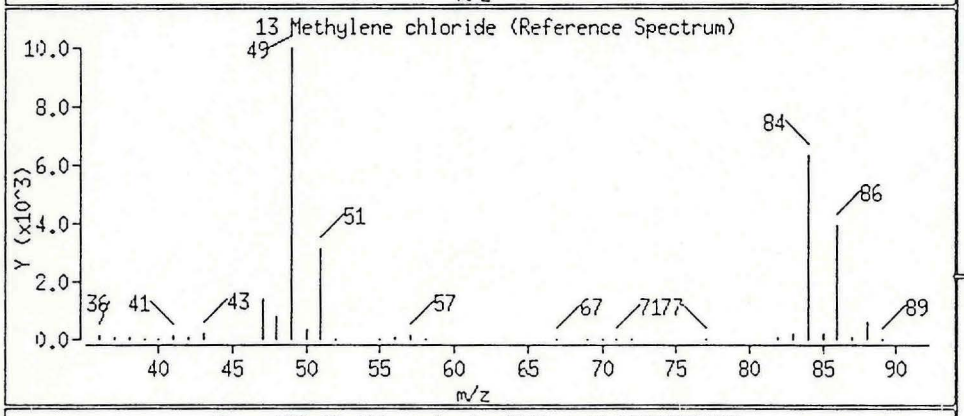
Data File: /chem/msa.i/a070196.b/a8587.d
Date : 01-JUL-96 16:17
Client ID:
Sample Info: 18221n-ssa7-tf7

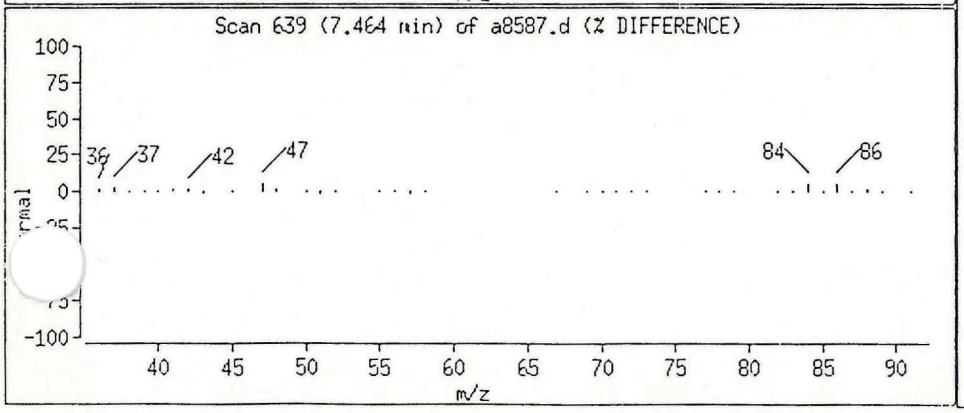
Instrument: msa.i
Operator: jk
Column phase: DB-624 75m x 0.53mm
Column diameter: 0.53

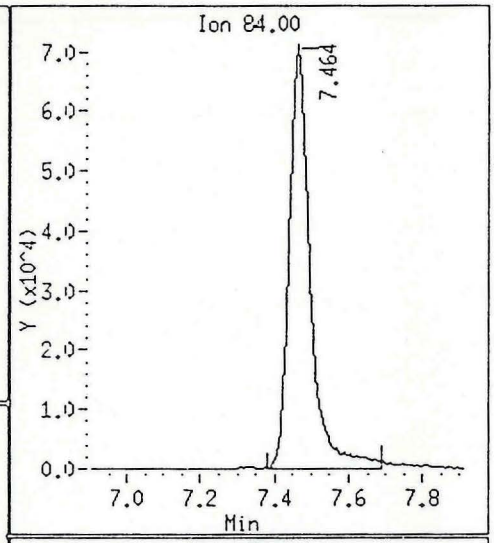
13 Methylene chloride

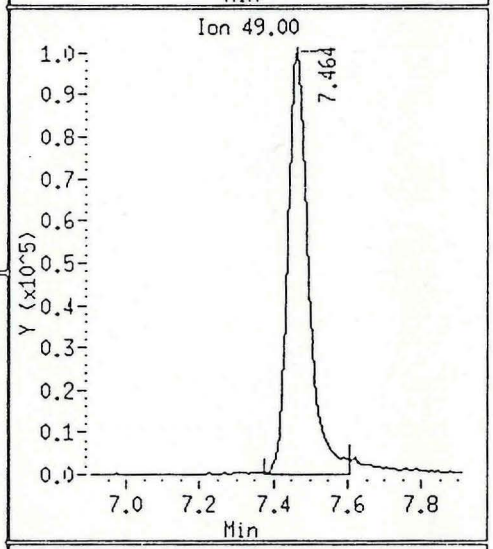


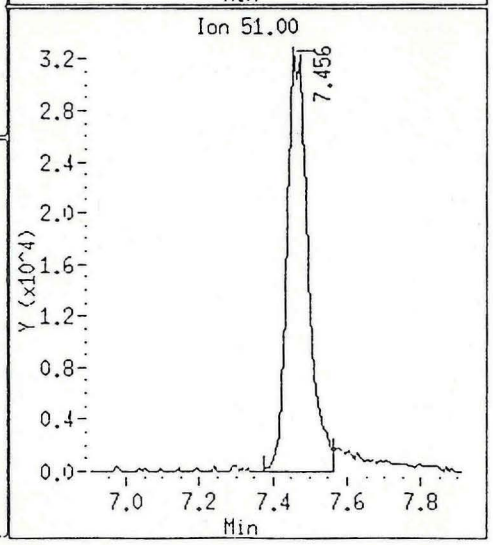












Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

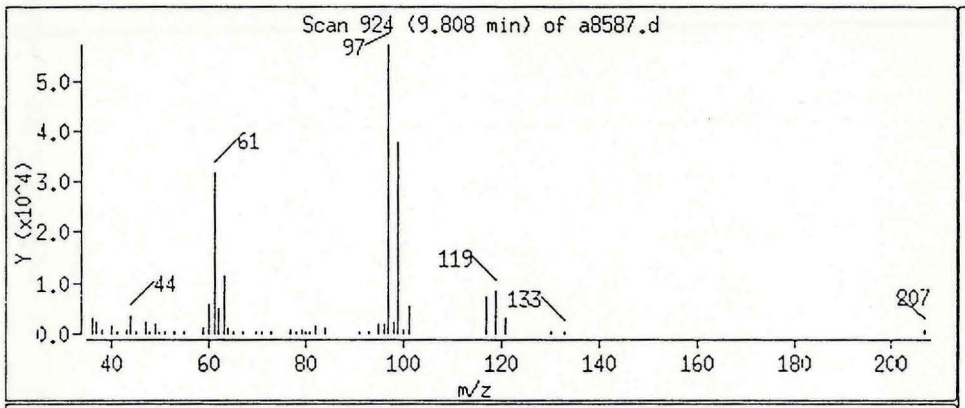
Sample Info: 18221n-ssa7-tf7

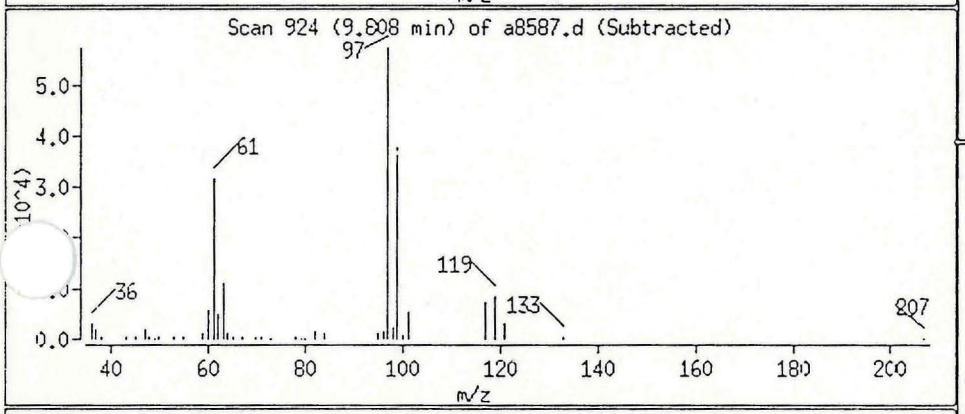
Operator: jk

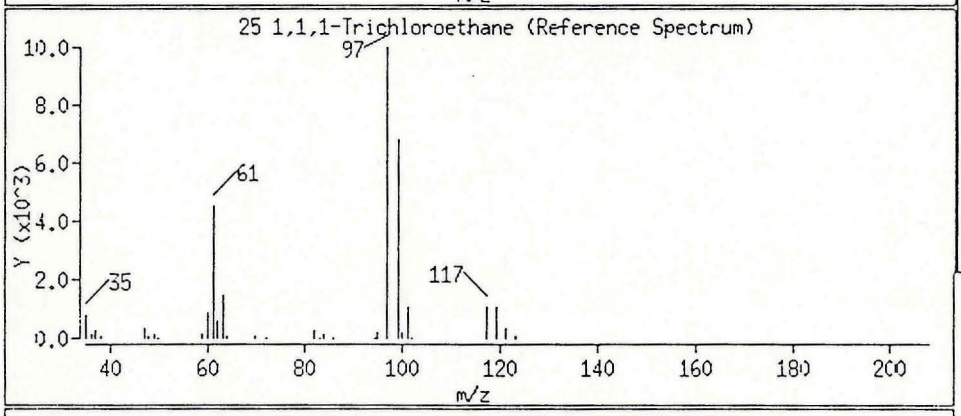
Column phase: DB-624 75m x 0.53mm

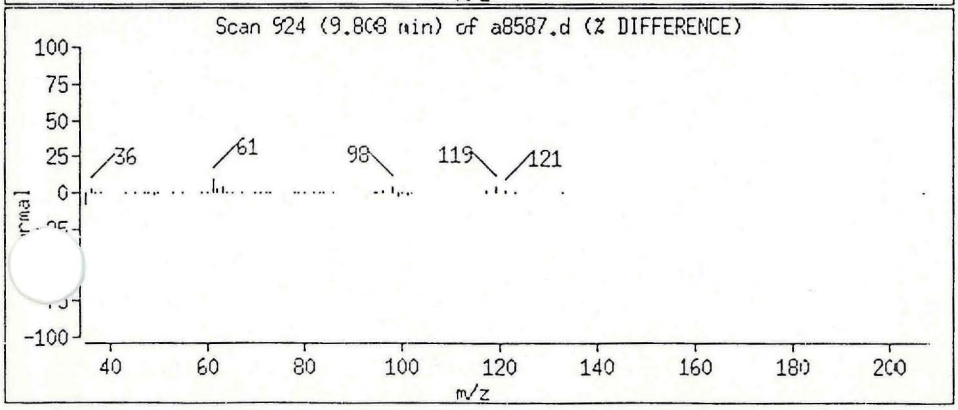
Column diameter: 0.53

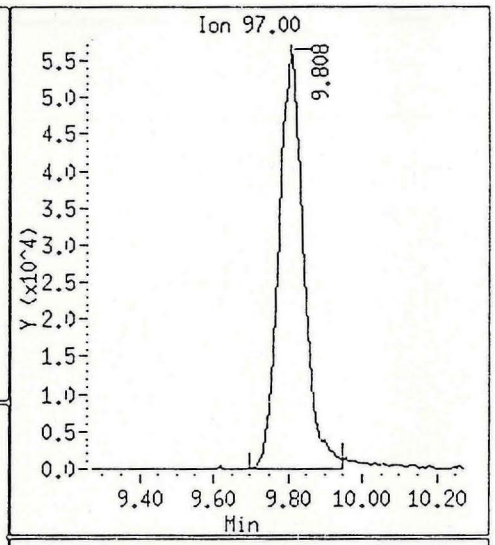
25 1,1,1-Trichloroethane

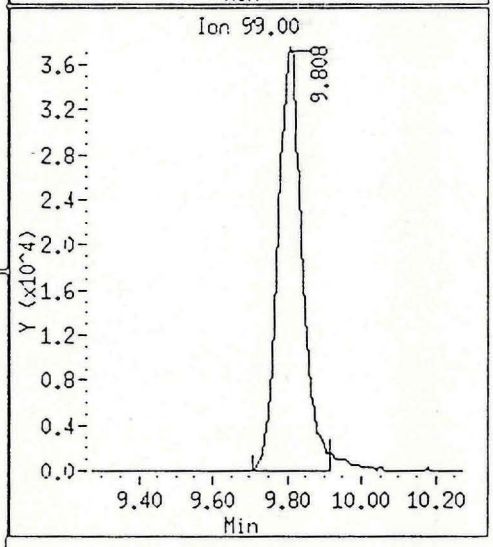












Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

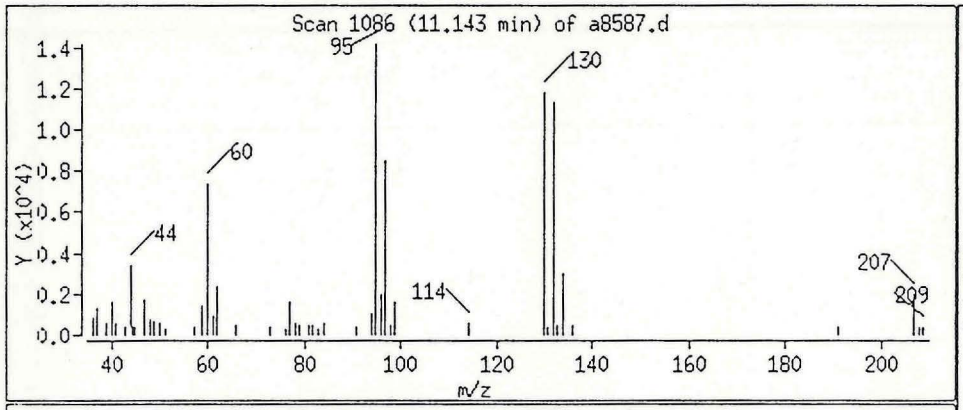
Sample Info: 18221n-ssa7-tf7

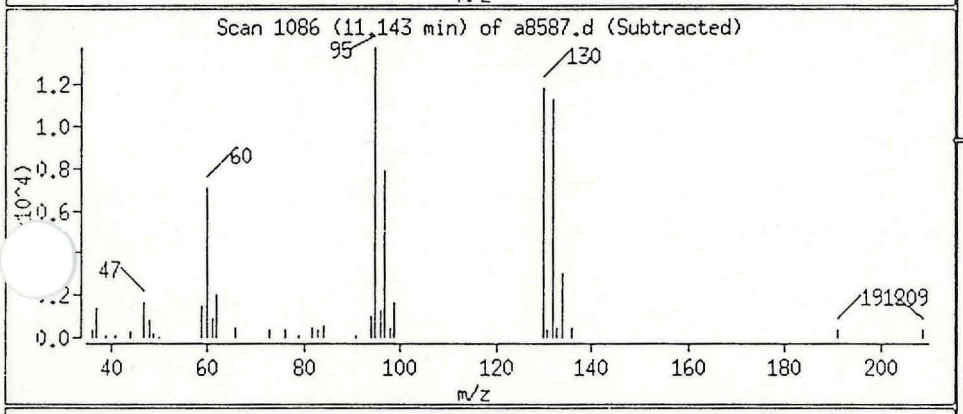
Operator: jk

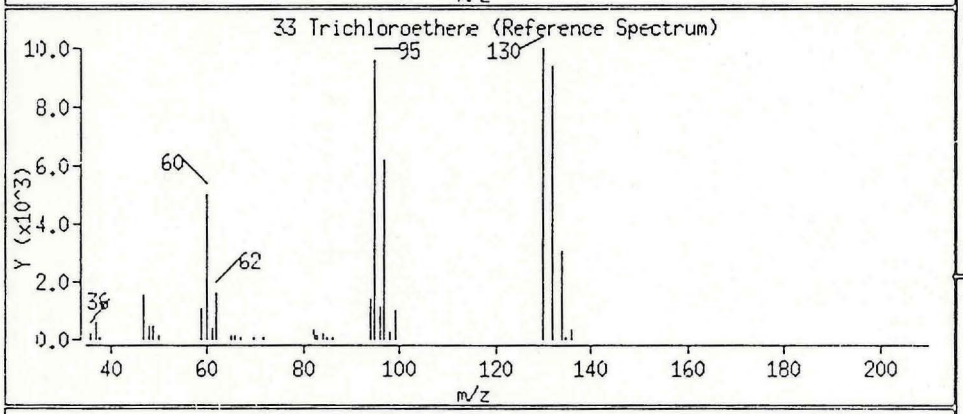
Column phase: DB-624 75m x 0.53mm

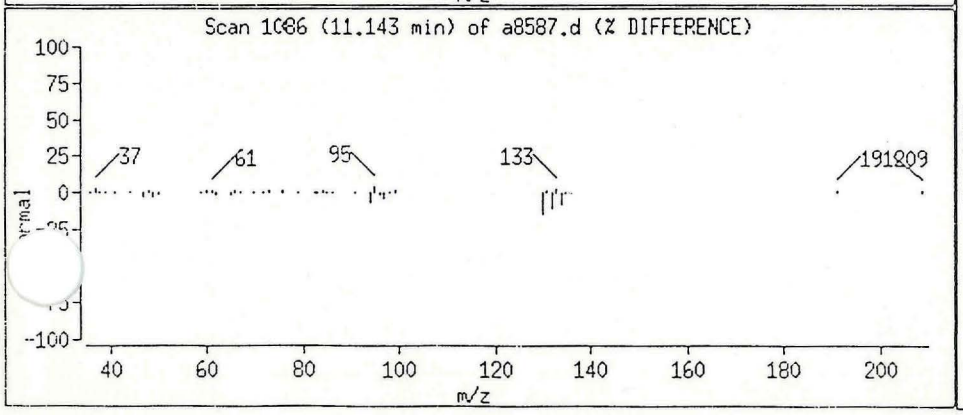
Column diameter: 0.53

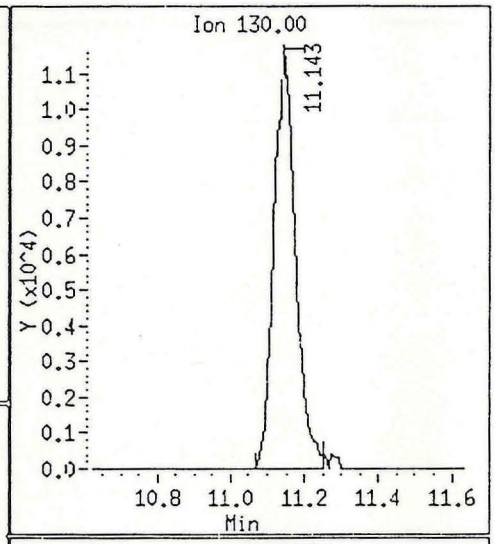
33 Trichloroethene

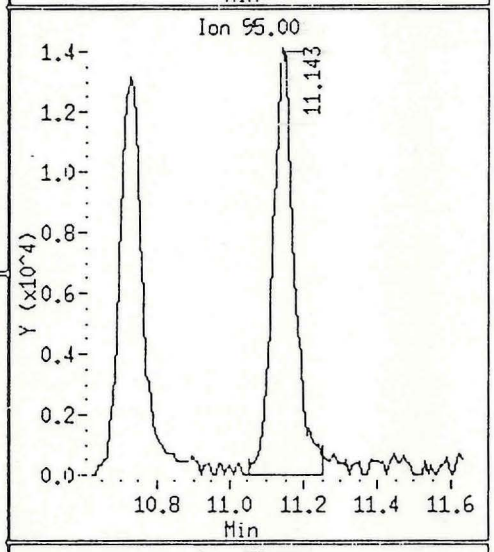


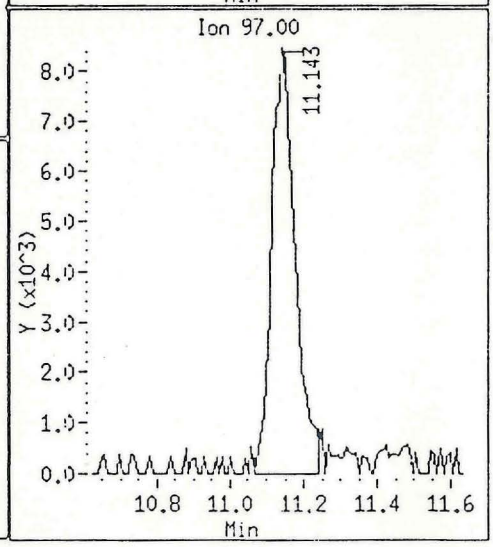












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Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

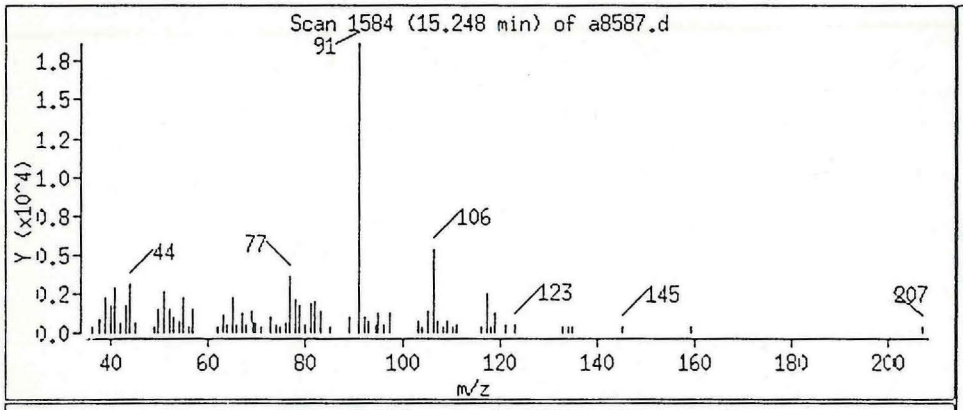
Sample Info: 18221n-ssa7-tf7

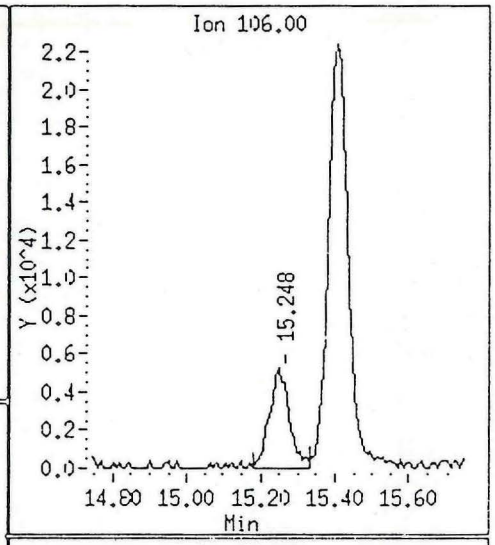
Operator: jk

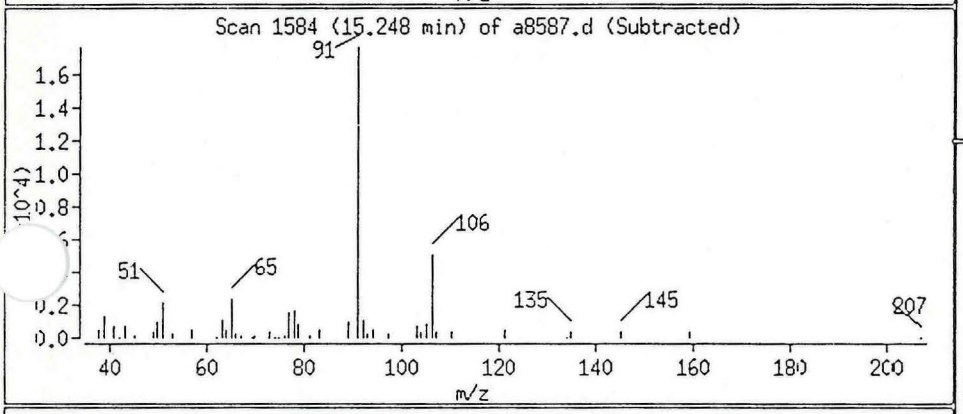
Column phase: DB-624 75m x 0.53mm

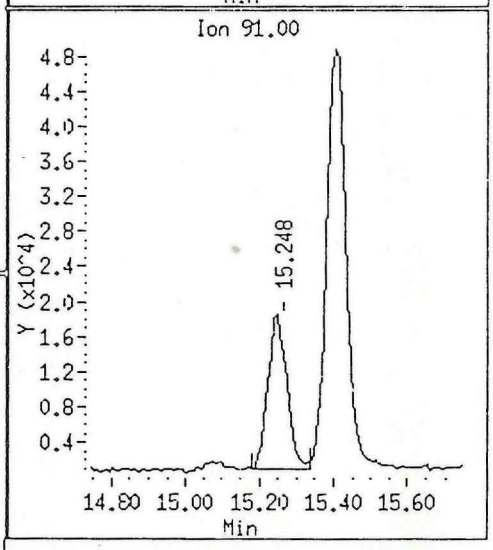
Column diameter: 0.53

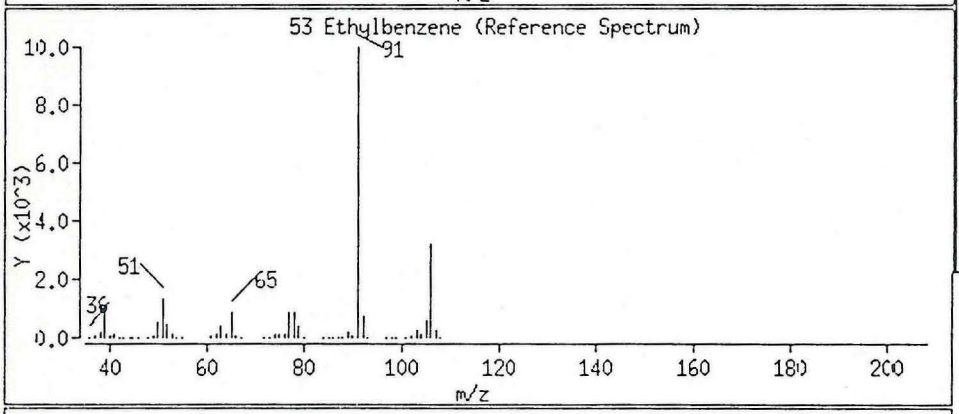
53 Ethylbenzene

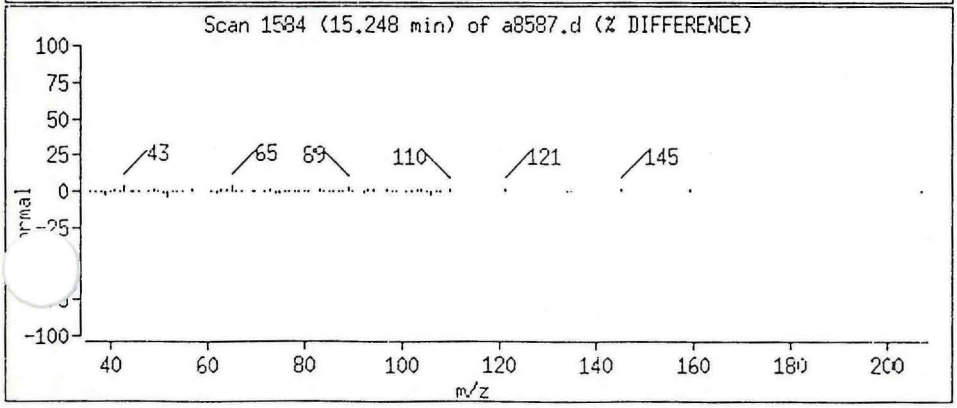












Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

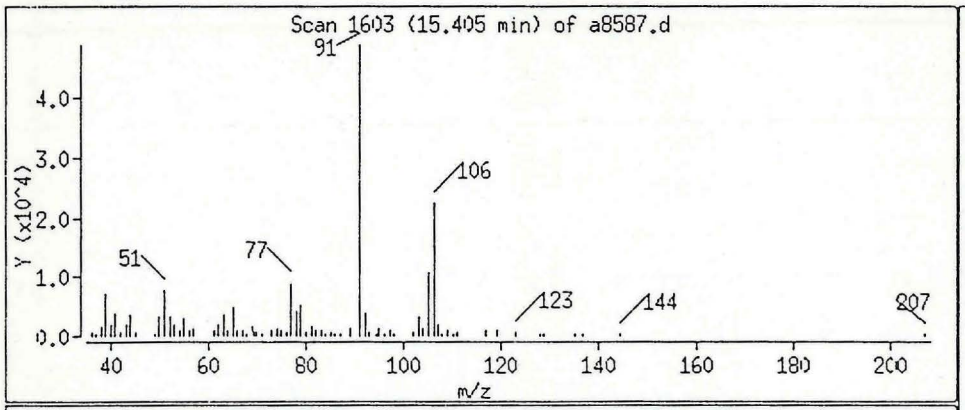
Sample Info: 18221n-ssa7-tf7

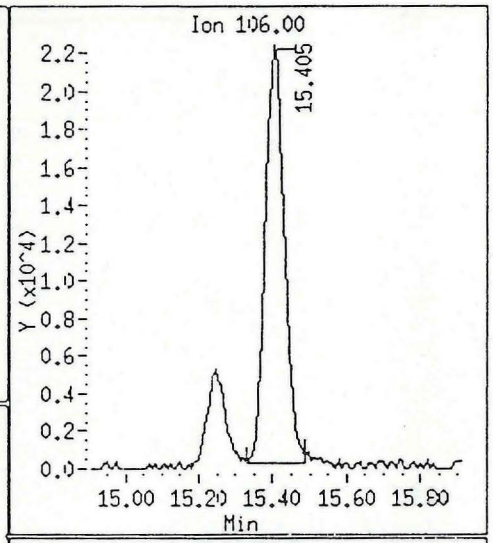
Operator: jk

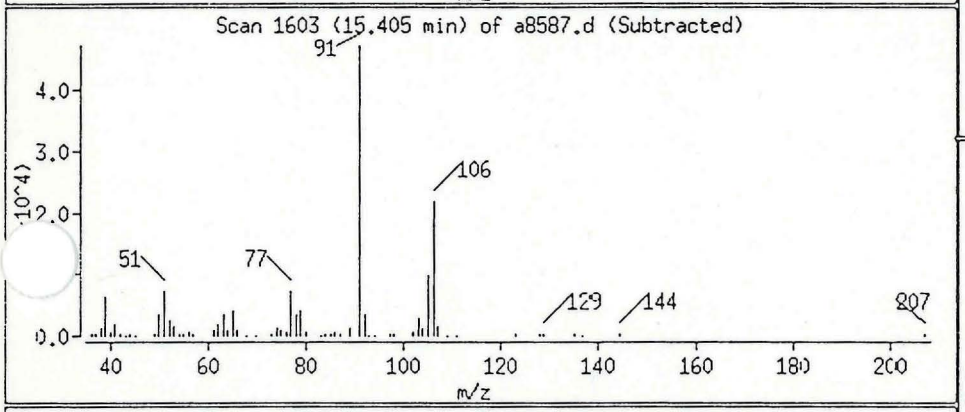
Column phase: DB-624 75m x 0.53mm

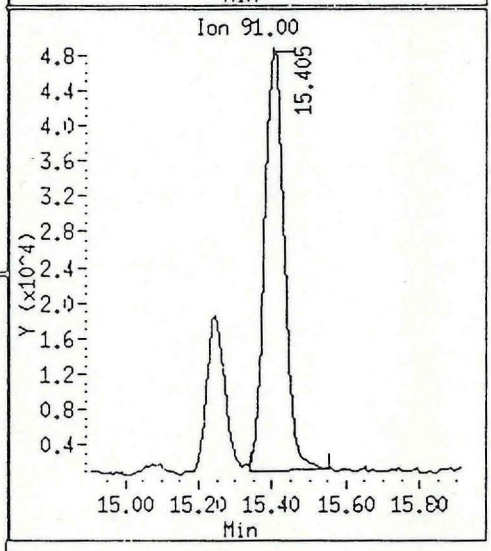
Column diameter: 0.53

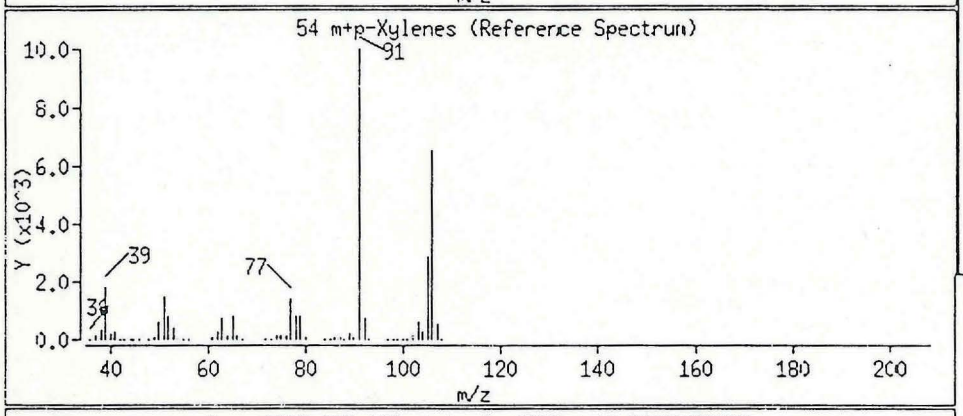
54 m+p-Xylenes

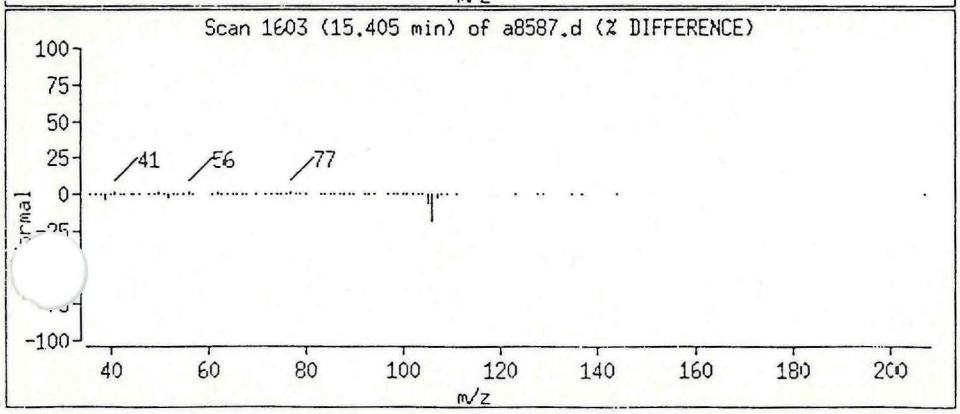












Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

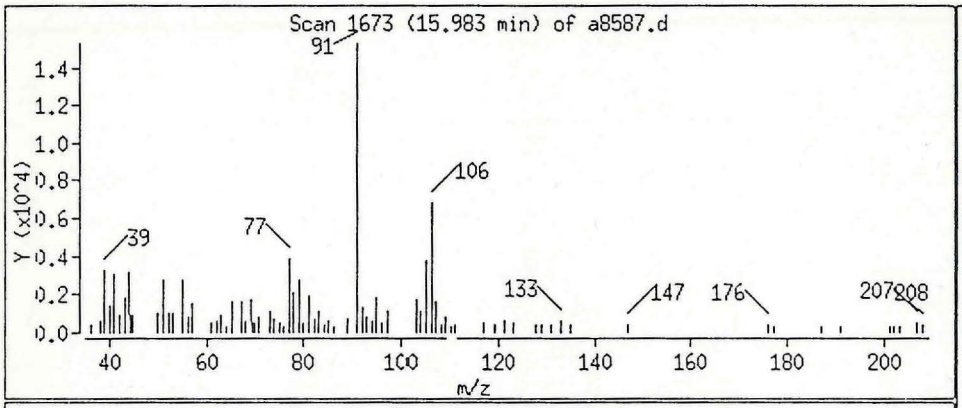
Sample Info: 18221n-ssa7-tf7

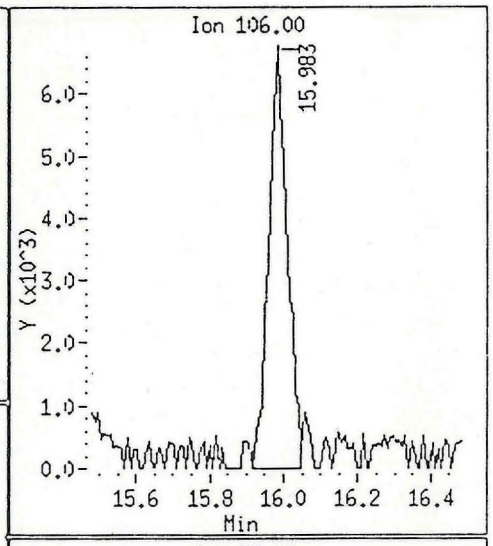
Operator: jk

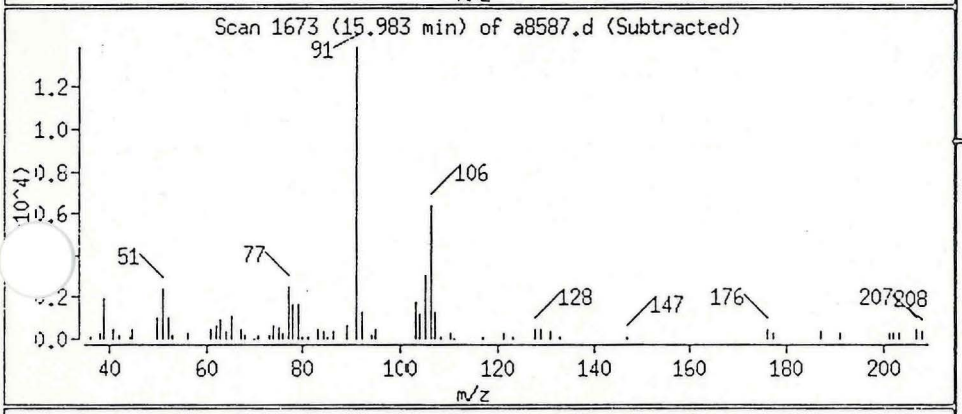
Column phase: DB-624 75m x 0.53mm

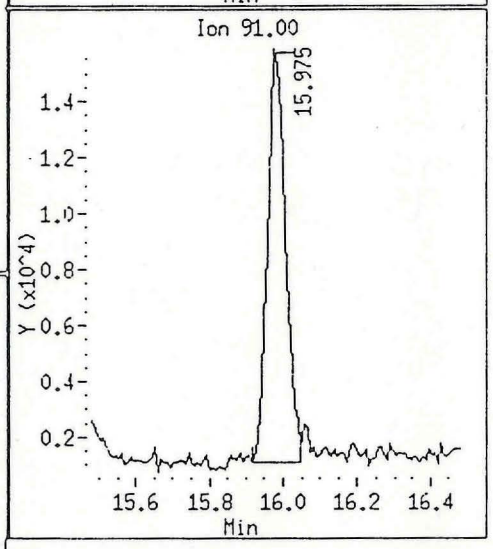
Column diameter: 0.53

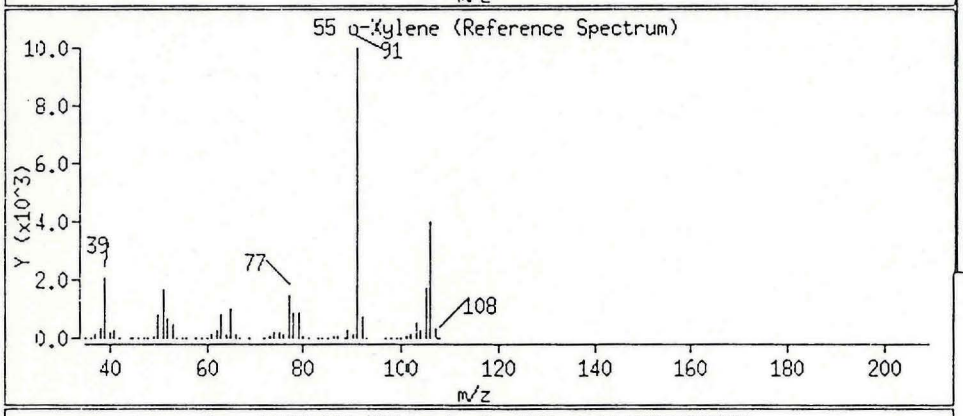
55 o-Xylene

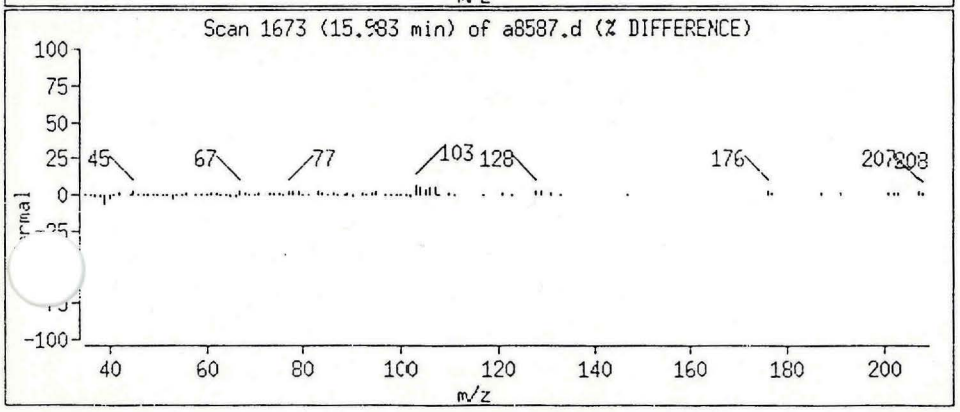












Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

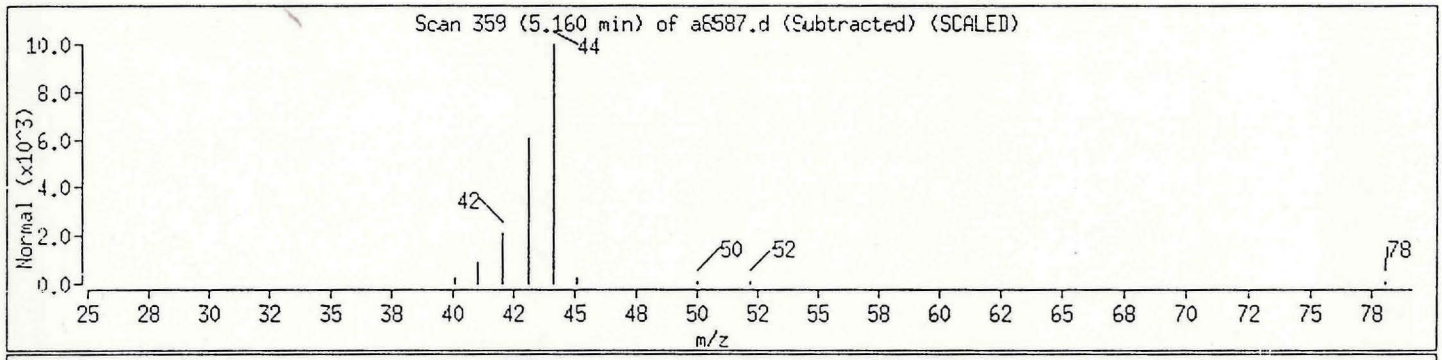
Sample Info: 18221n-ssa7-tf7

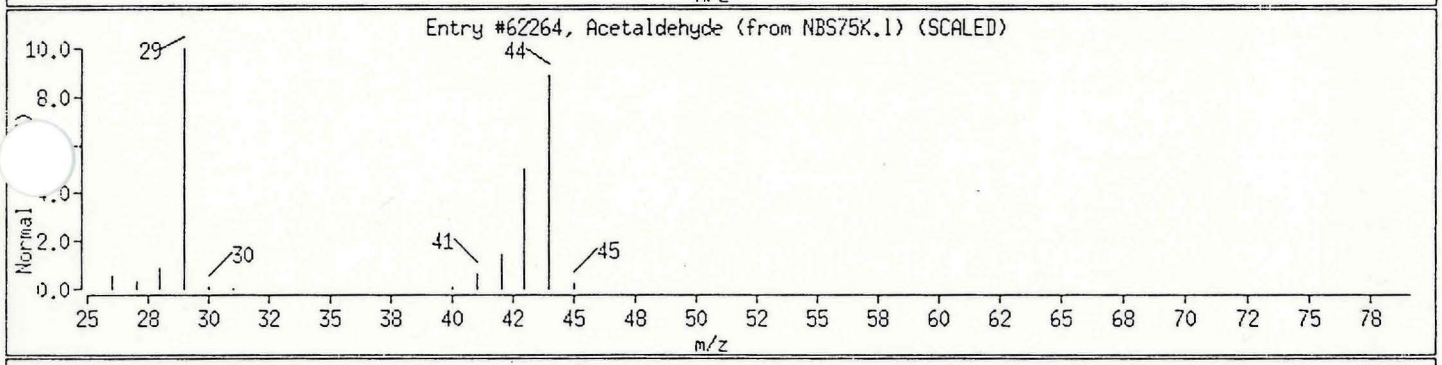
Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetaldehyde	75-07-0	NBS75K.l	62264	74	C2H4O	44





Data File: /chem/msa.i/a070196.b/a8587.d

Date : 01-JUL-96 16:17

Client ID:

Instrument: msa.i

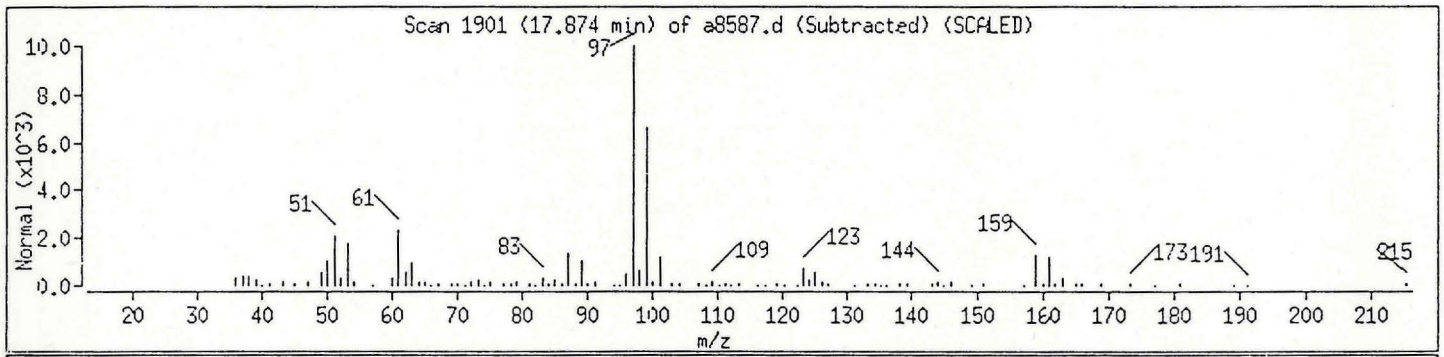
Sample Info: 18221n-ssa7-tf7

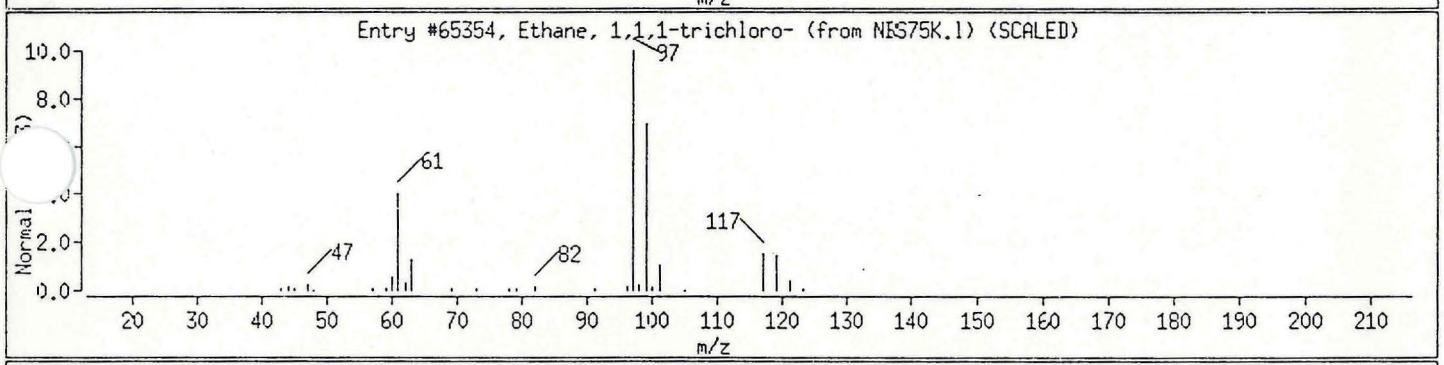
Operator: jk

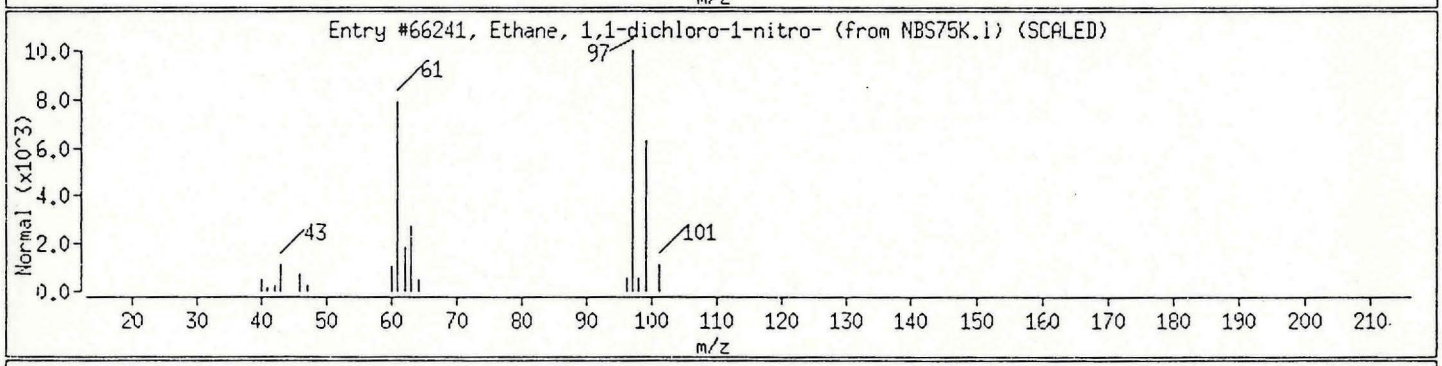
Column phase: DB-624 75m x 0.53mm

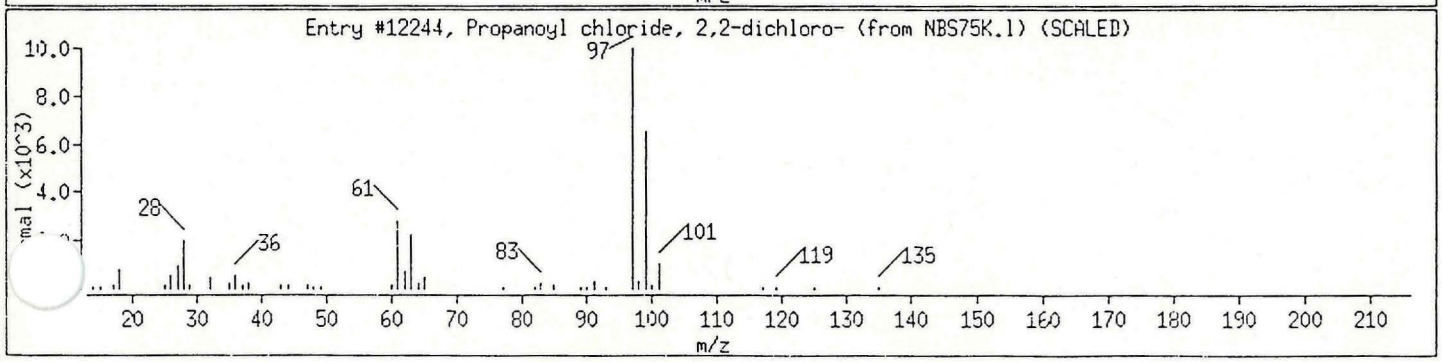
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Ethane, 1,1,1-trichloro-	71-55-6	NBS75K.l	65354	53	C2H3Cl3	132
Ethane, 1,1-dichloro-1-nitro-	594-72-9	NBS75K.l	66241	53	C2H3Cl2NO2	143
Propanoyl chloride, 2,2-dichloro-	26073-26-7	NBS75K.l	12244	42	C3H3Cl3O	160









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00191

SSA7-W1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9908V

Sample wt/vol: 5.82 (g/mL) G Lab File ID: A8588

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 12 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	29	B
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	1	J
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00192 SSA7-W1

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9908V

Sample wt/vol: 5.82 (g/mL) G Lab File ID: A8588

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 12 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

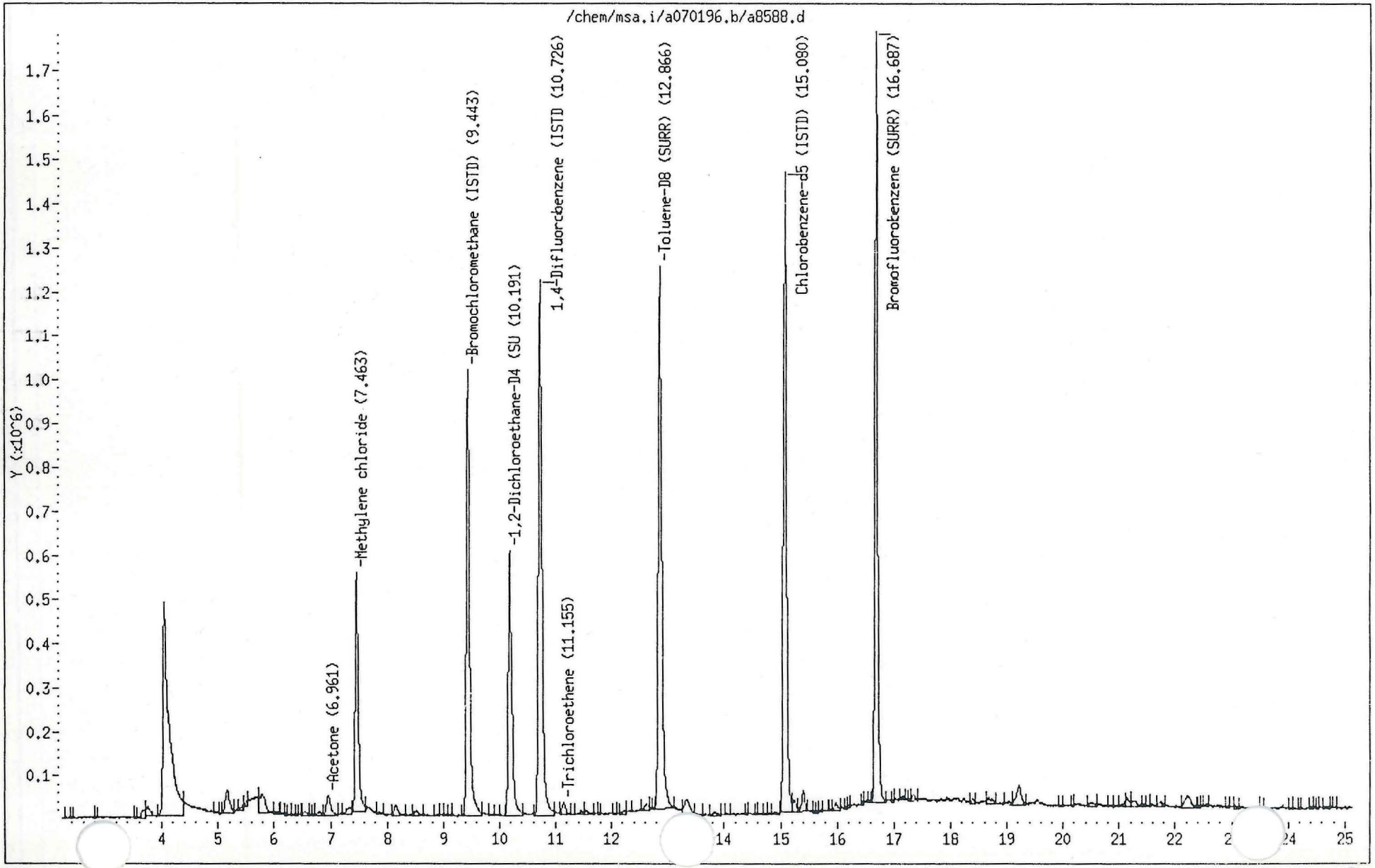
00193

Data File: /chem/msa.i/a070196.b/a8588.d
Date : 01-JUL-96 16:52
Client ID:
Sample Info: 18221n-ssa7-w1

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8588.d
Report Date: 02-Jul-1996 07:17

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 & TIC

Data file : /chem/msa.i/a070196.b/a8588.d
Lab Smp Id:
Inj Date : 01-JUL-96 16:52
Operator : jk Inst ID: msa.i
Smp Info : 18221n-ssa7-w1
Misc Info : jp9908v,n2v5315,qv,5000,1,5.82,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Als bottle: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
cetone	43.00	6.961	6.987	(0.737)	143565	9.69	9.69
Methylene chloride	84.00	7.463	7.408	(0.790)	481295	30.1	30.1
* 23 Bromochloromethane (ISTD)	128.00	9.443	9.418	(1.000)	498691	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.191	10.177	(1.079)	778427	47.1	47.1
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.726	10.713	(1.000)	1879980	50.0	
33 Trichloroethene	130.00	11.147	11.126	(1.039)	17627	1.05	1.05
$ 41 Toluene-D8 (SURR)	98.00	12.866	12.859	(0.853)	1686128	48.3	48.3
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.080	15.078	(1.000)	1432710	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.687	16.697	(1.107)	1197808	51.7	51.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a070196.b/a8588.d

Date : 01-JUL-96 16:52

Client ID:

Instrument: msa.i

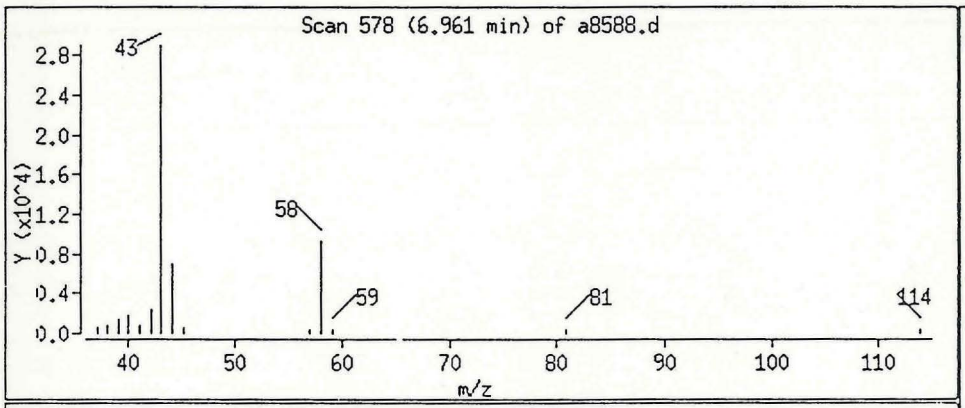
Sample Info: 18221n-ssa7-w1

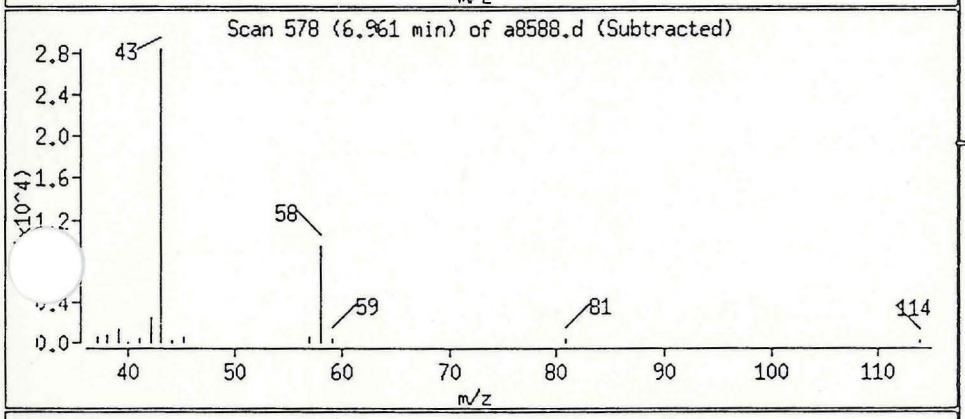
Operator: jk

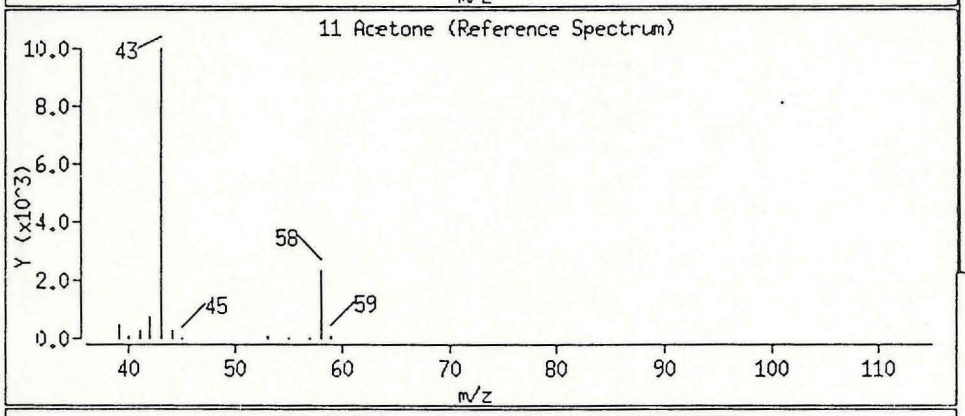
Column phase: DB-624 75m x 0.53mm

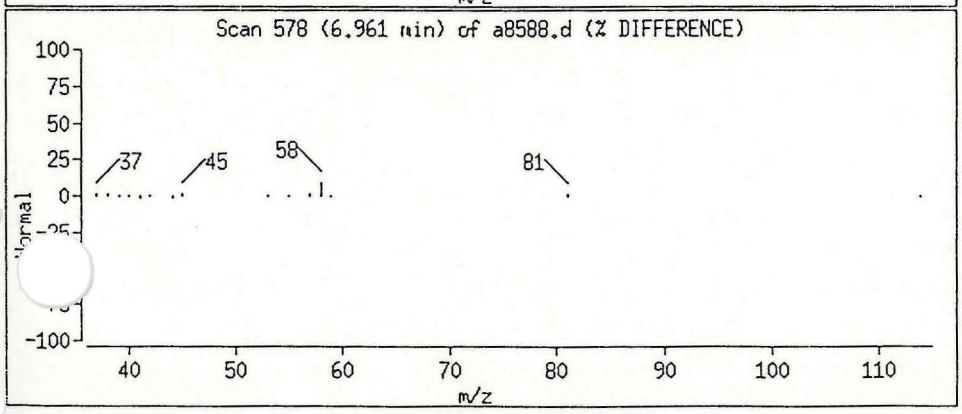
Column diameter: 0.53

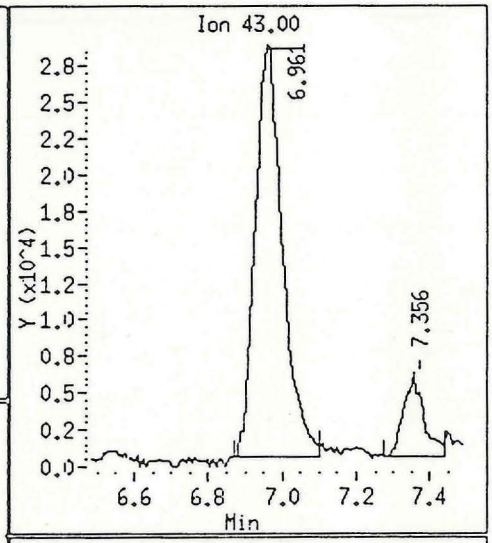
11 Acetone

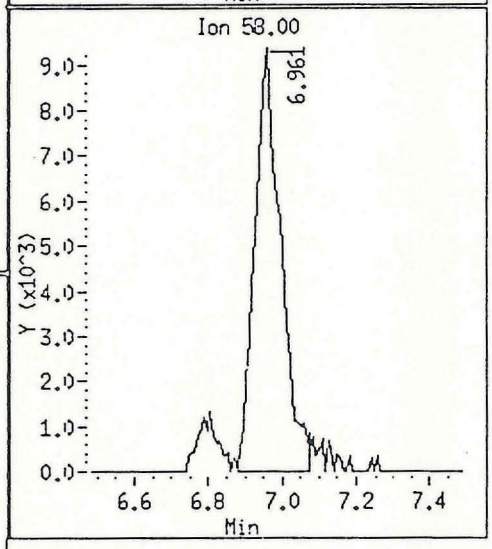












Data File: /chem/msa.i/a070196.b/a8588.d

Date : 01-JUL-96 16:52

Client ID:

Sample Info: 18221n-ssa7-w1

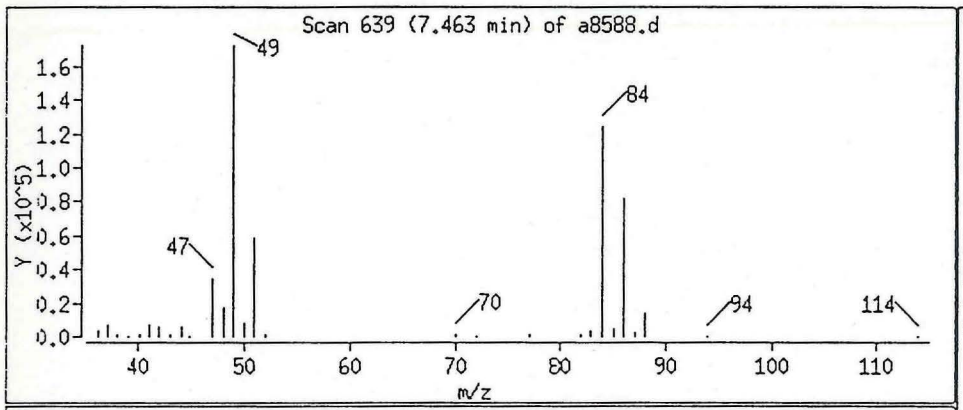
Instrument: msa.i

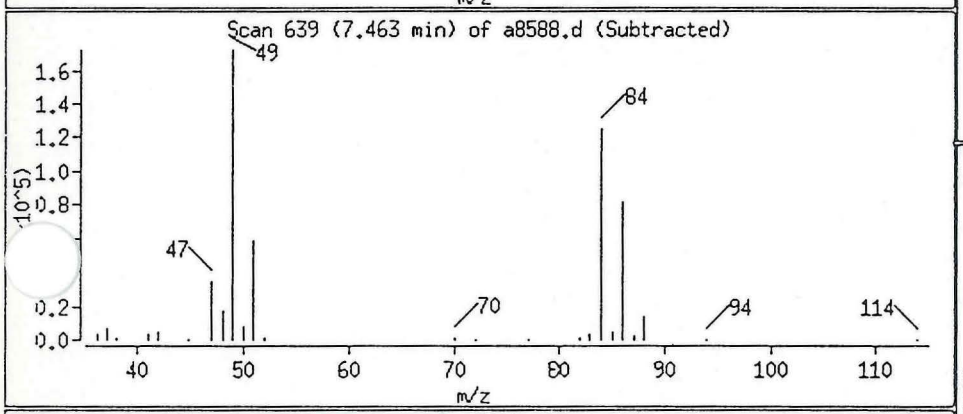
Operator: jk

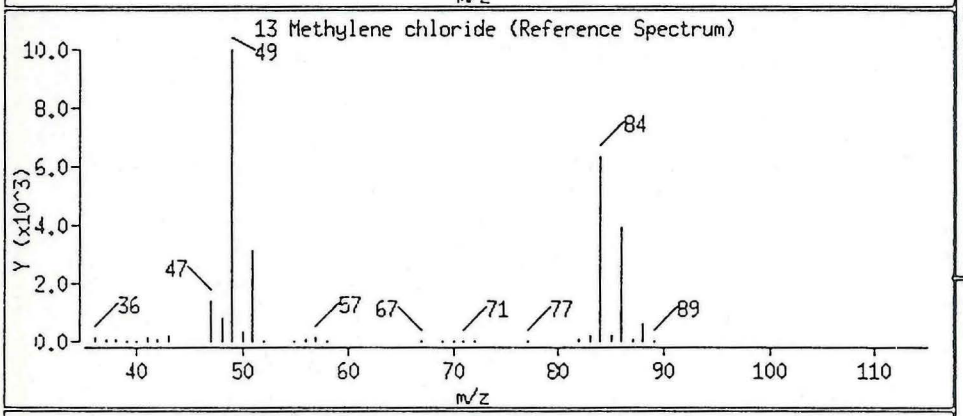
Column phase: DB-624 75m x 0.53mm

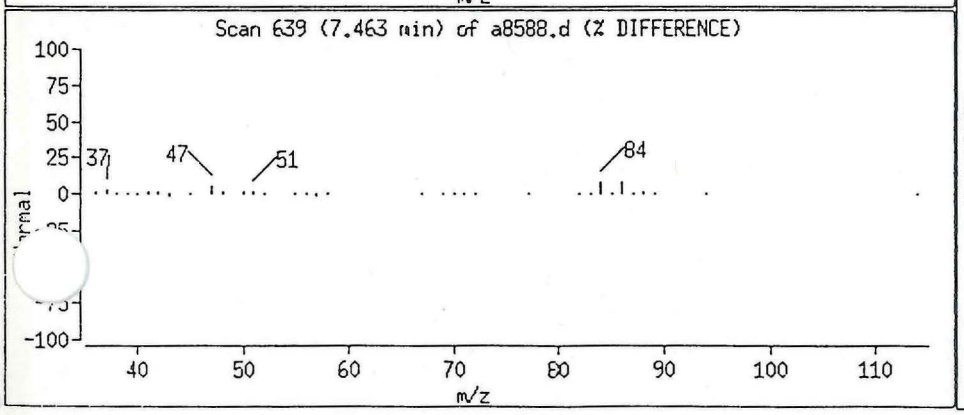
Column diameter: 0.53

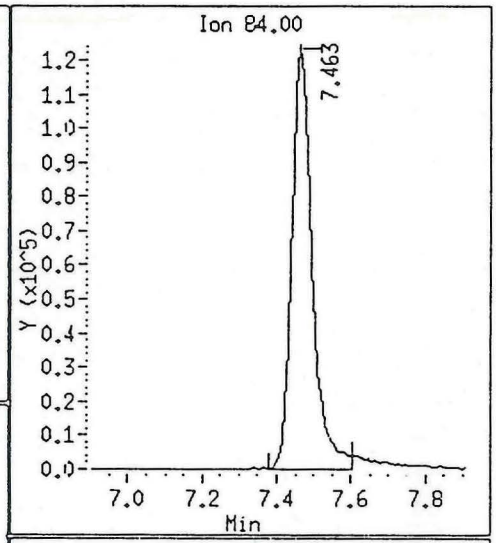
13 Methylene chloride

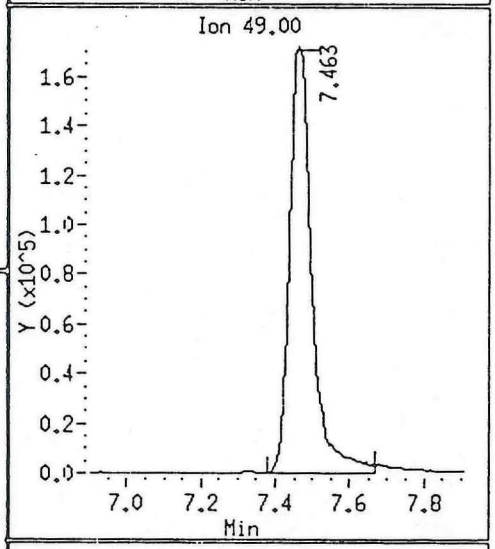


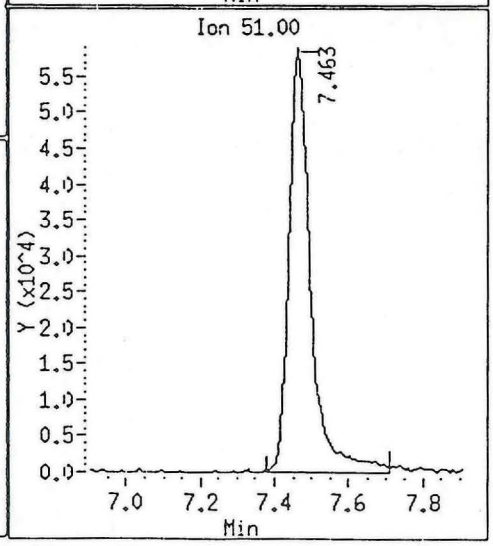












Data File: /chem/msa.i/a070196.b/a8588.d

Date : 01-JUL-96 16:52

Client ID:

Instrument: msa.i

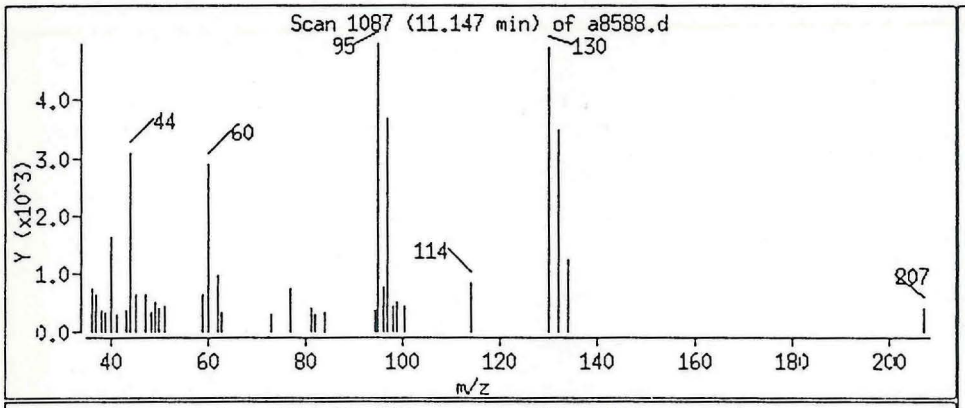
Sample Info: 18221n-ssa7-w1

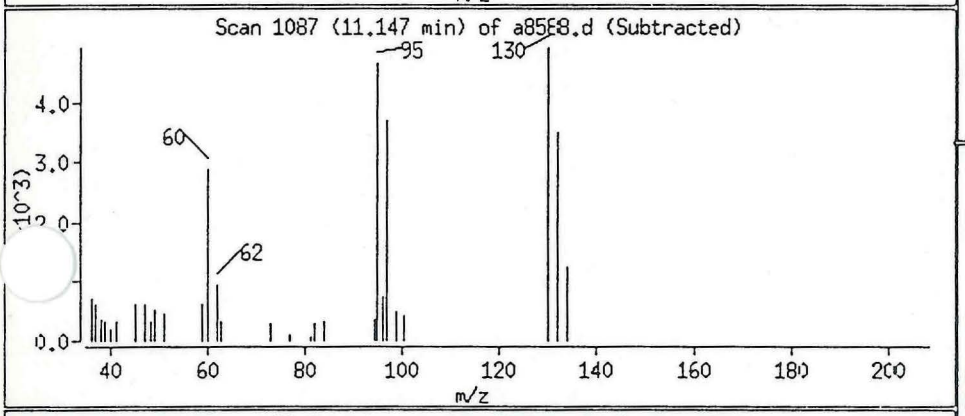
Operator: jk

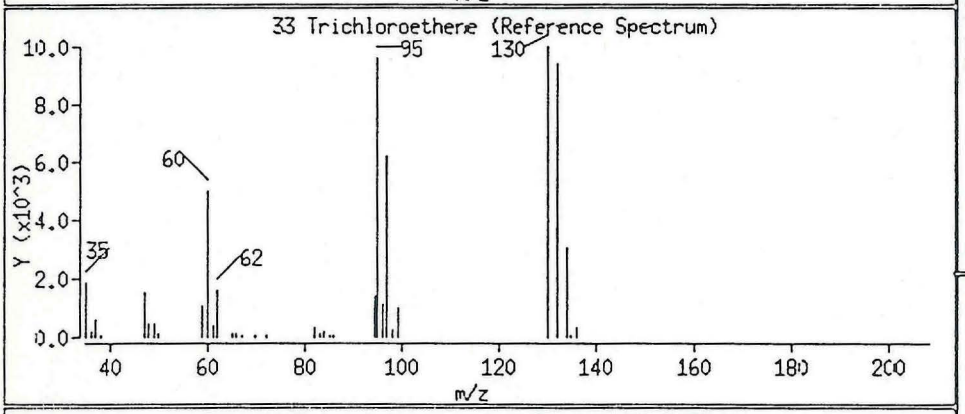
Column phase: DB-624 75m x 0.53mm

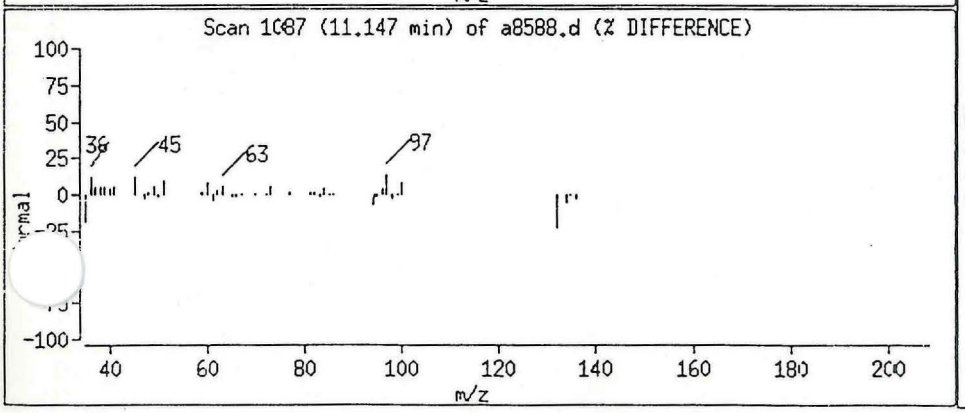
Column diameter: 0.53

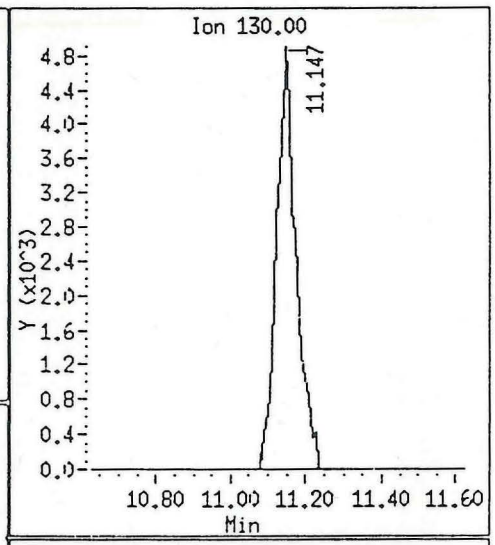
33 Trichloroethene

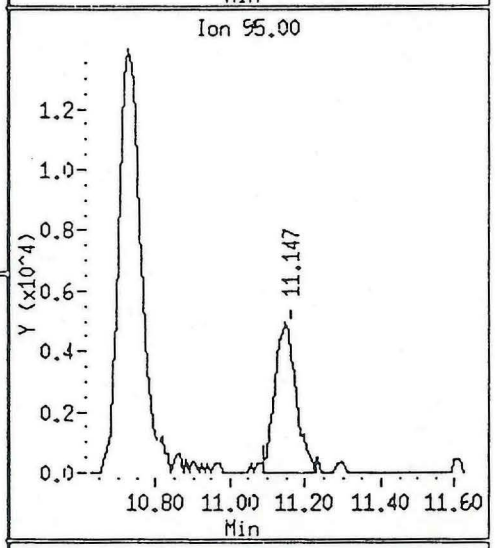


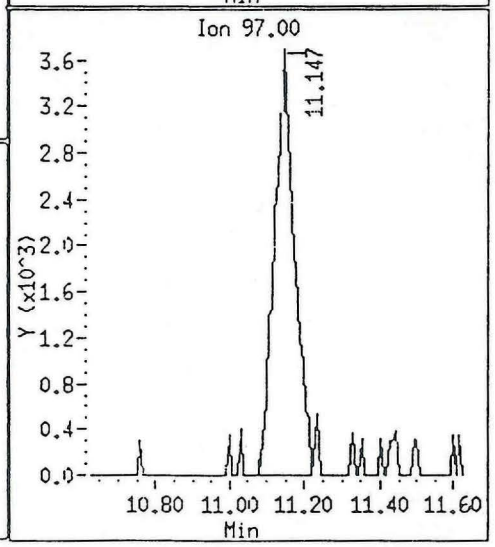












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00198

SSA7-W2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9909V

Sample wt/vol: 5.20 (g/mL) G Lab File ID: A8547

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 10 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	30	B
67-64-1	Acetone	9	BJ
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
75-35-4	1,1-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00199 SSA7-W2

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9909V

Sample wt/vol: 5.20 (g/mL) G Lab File ID: A8547

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 10 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

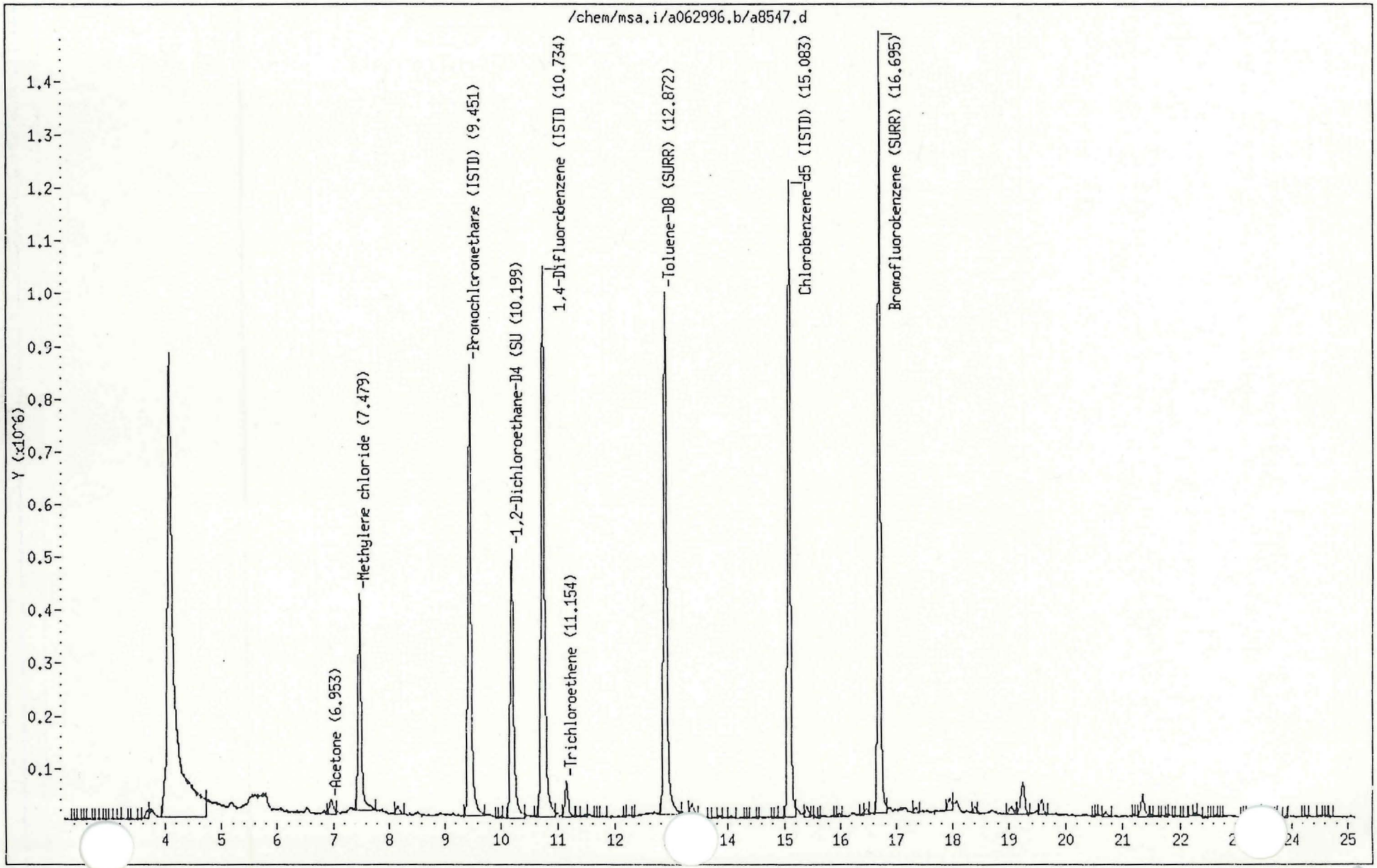
00200

Data File: /chem/msa.i/a062996.b/a8547.d
Date : 29-JUN-96 15:43
Client ID:
Sample Info: 18221n ssa7-w2

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8547.d
Report Date: 30-Jun-1996 12:40

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

+TIC

Data file : /chem/msa.i/a062996.b/a8547.d
Lab Smp Id:
Inj Date : 29-JUN-96 15:43
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w2
Misc Info : jp9909v,n2v5309,qv,5000,1,5.20,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:37 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 12
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

T. metabolite 7/5/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.953	7.011	(0.736)	37591	3.30	3.30(Q)
Methylene chloride	84.00	7.479	7.439	(0.791)	375759	28.0	25.0
* 23 Bromochloromethane (ISTD)	128.00	9.451	9.441	(1.000)	413022	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.199	10.192	(1.079)	682966	48.7	48.7
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.734	10.728	(1.000)	1555053	50.0	
33 Trichloroethene	130.00	11.162	11.149	(1.040)	42784	3.09	3.09
$ 41 Toluene-D8 (SURR)	98.00	12.872	12.881	(0.853)	1329613	47.2	47.2
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.083	15.083	(1.000)	1178959	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.695	16.693	(1.107)	974824	51.4	51.4

8.46

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062996.b/a8547.d

Date : 29-JUN-96 15:43

Client ID:

Instrument: msa.i

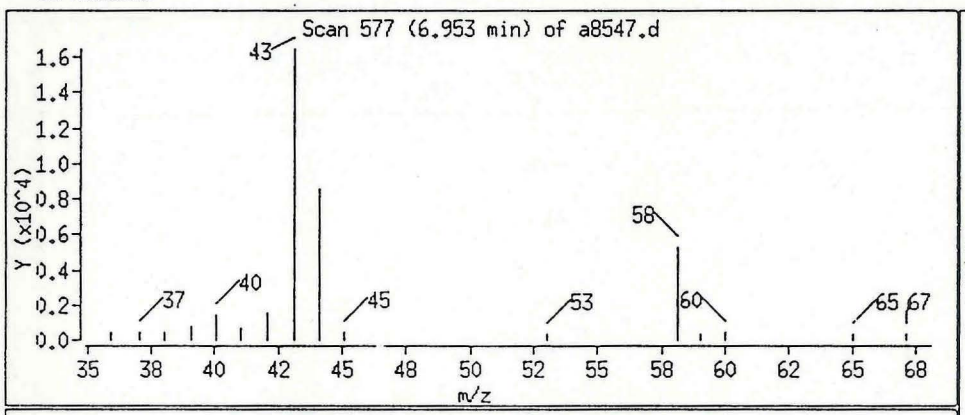
Sample Info: 18221n ssa7-w2

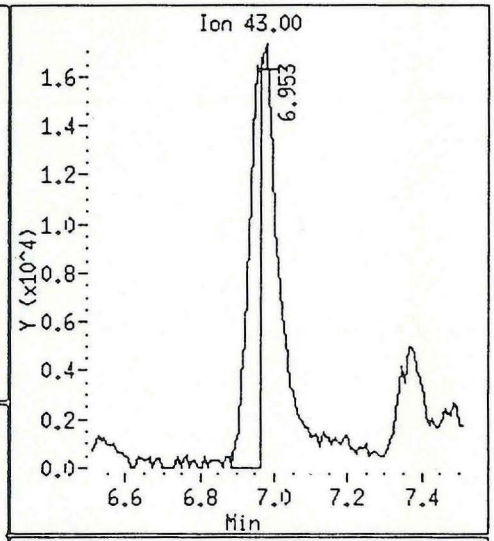
Operator: jk

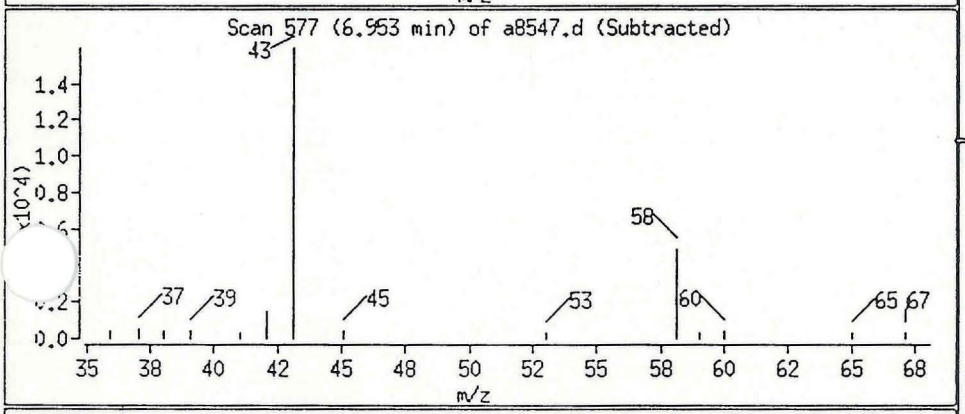
Column phase: DB-624 75m x 0.53mm

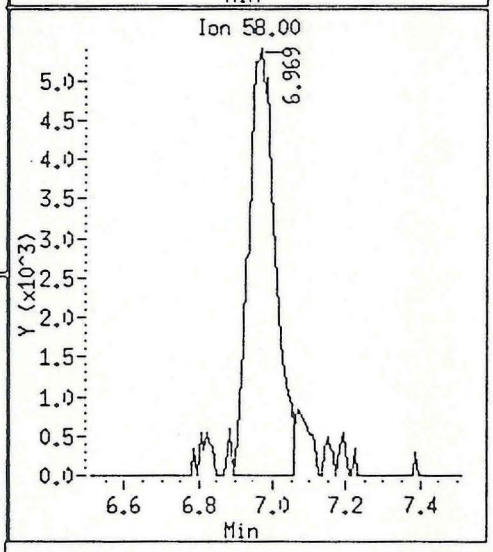
Column diameter: 0.53

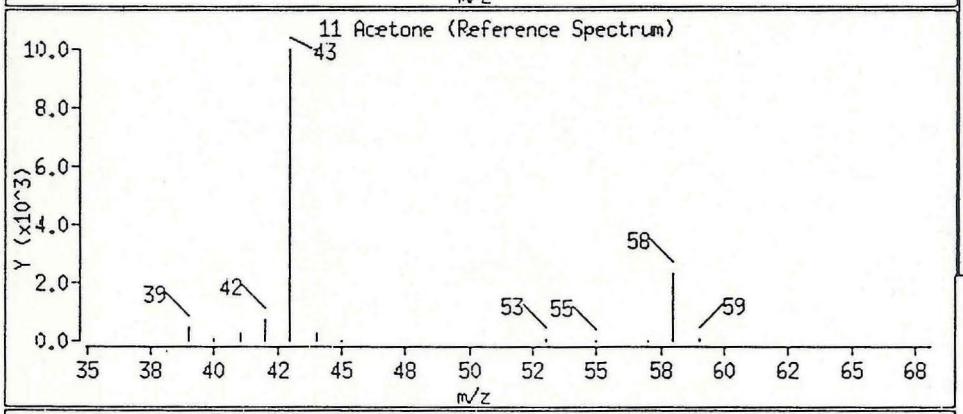
11 Acetone

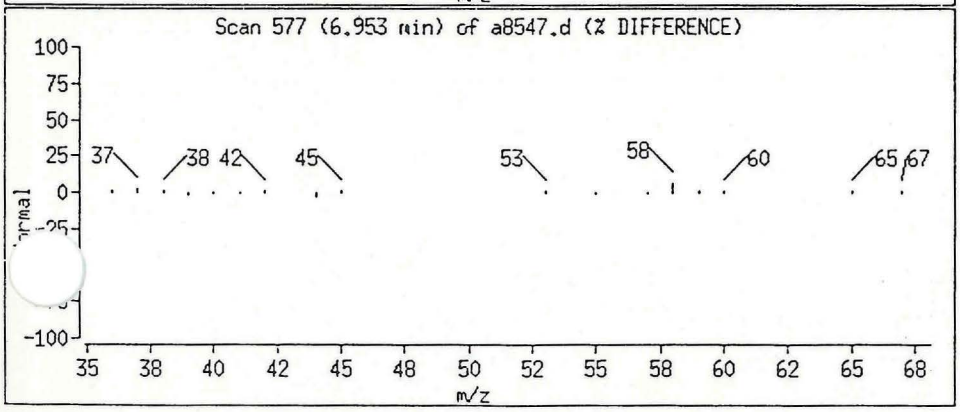












Data File: /chem/msa.i/a062996.b/a8547.d

Date : 29-JUN-96 15:43

Client ID:

Sample Info: 18221n ssa7-w2

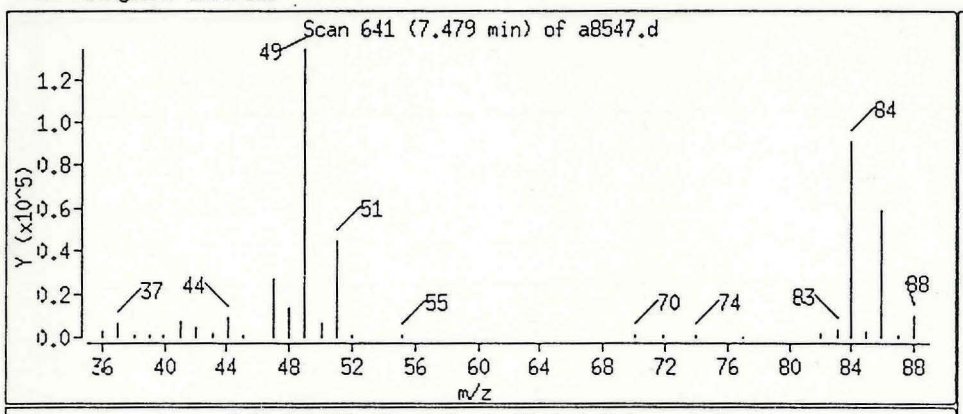
Instrument: msa.i

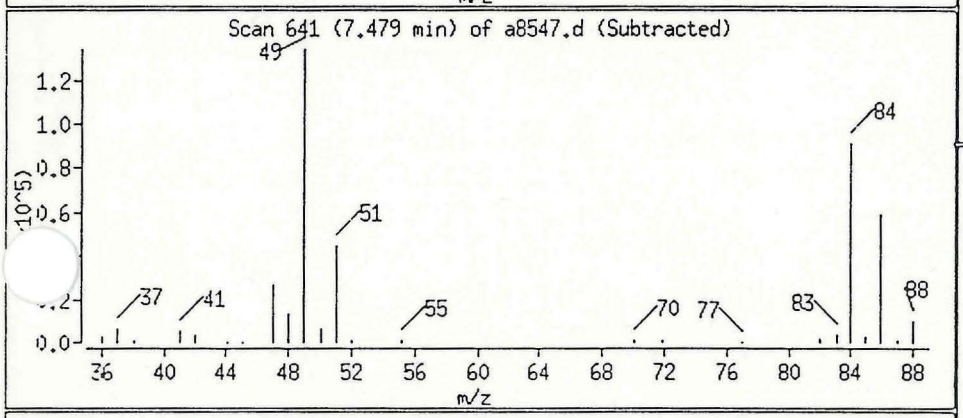
Operator: jk

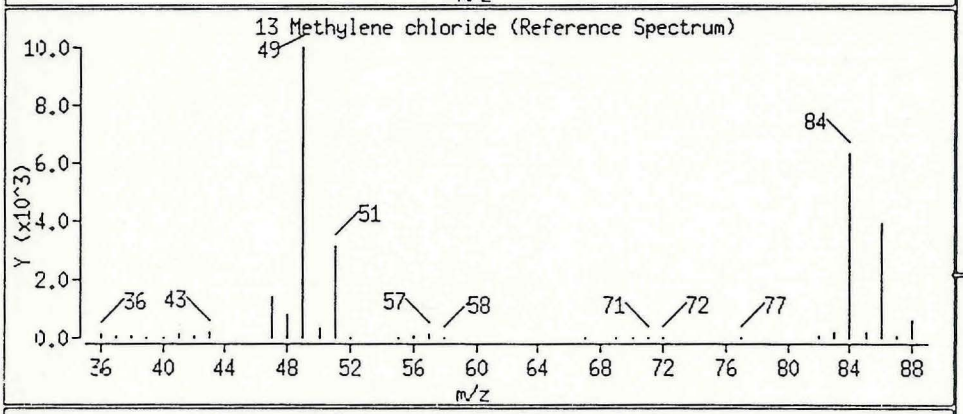
Column phase: DB-624 75m x 0.53mm

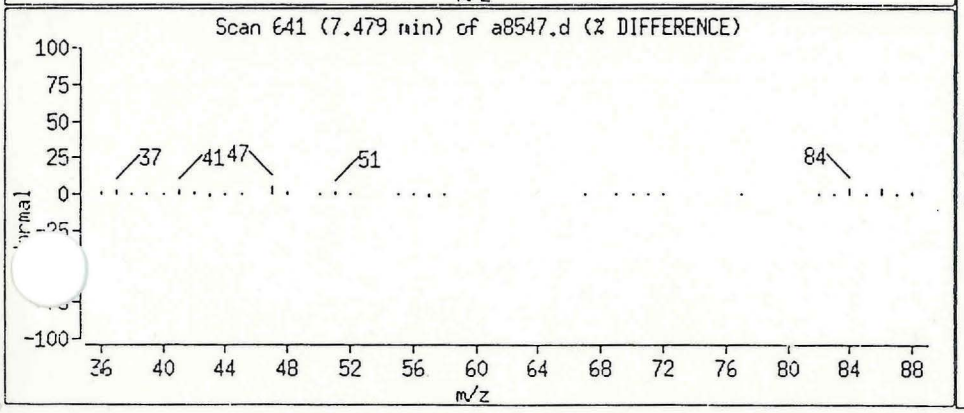
Column diameter: 0.53

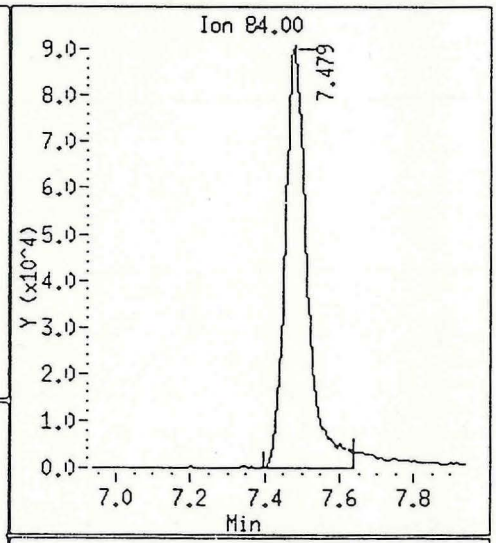
13 Methylene chloride

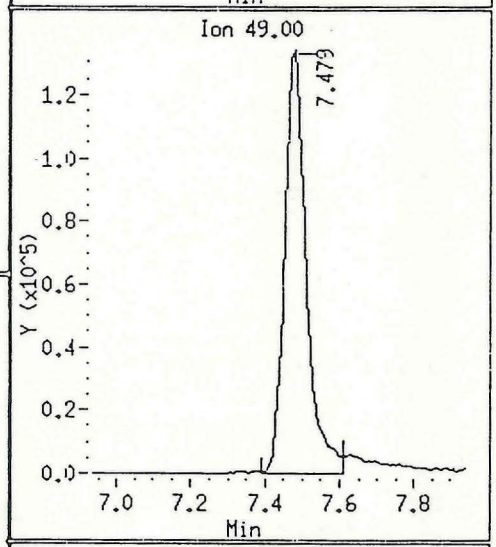


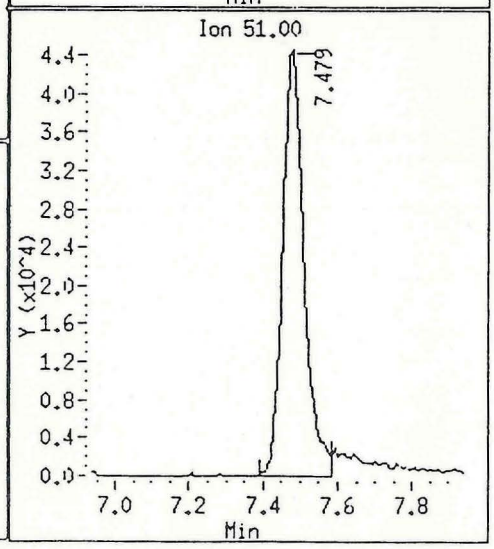












Data File: /chem/msa.i/a062996.b/a8547.d
Date : 29-JUN-96 15:43
Client ID:
Sample Info: 18221n ssa7-w2

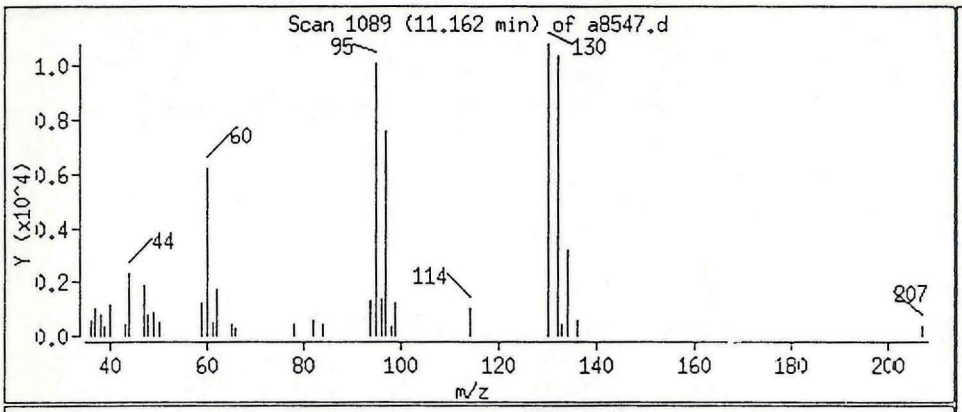
Instrument: msa.i

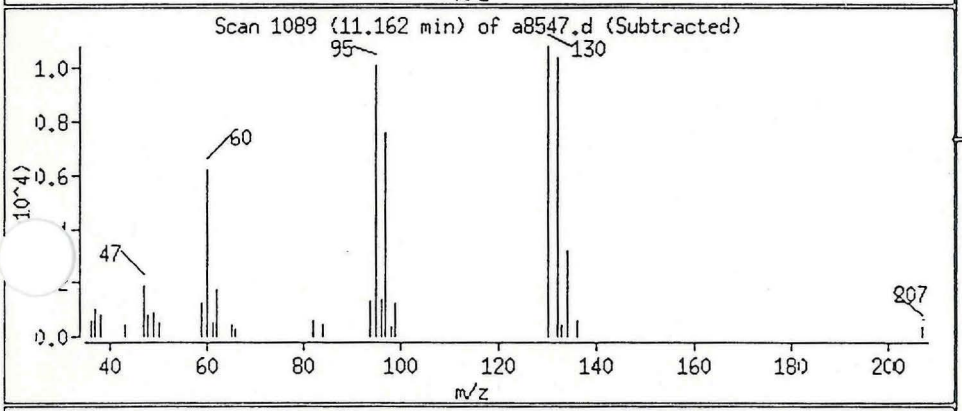
Operator: jk

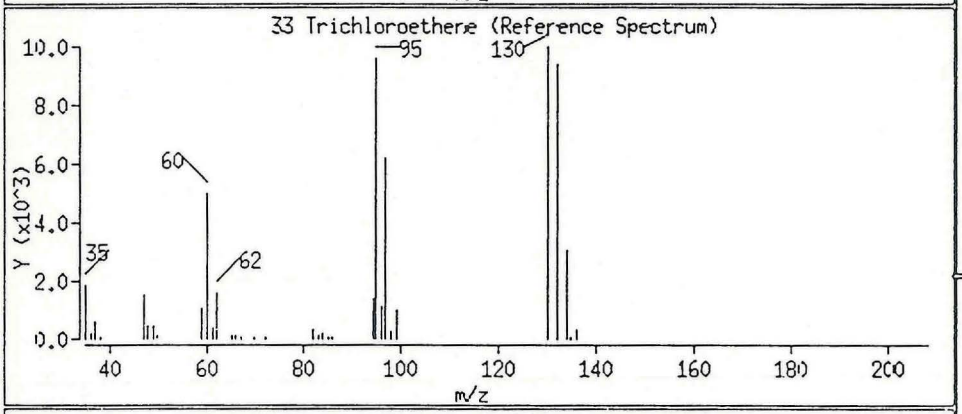
Column phase: DB-624 75m x 0.53mm

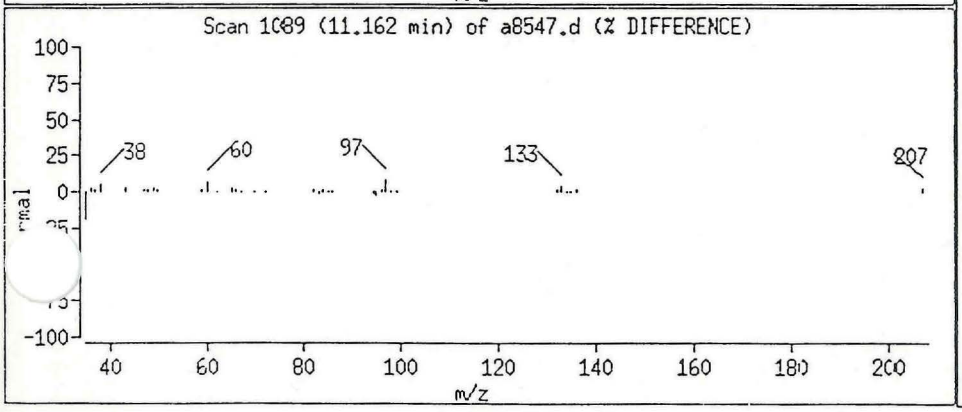
Column diameter: 0.53

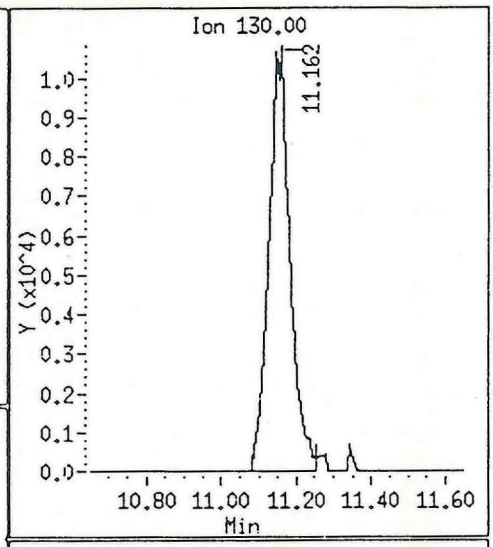
33 Trichloroethene

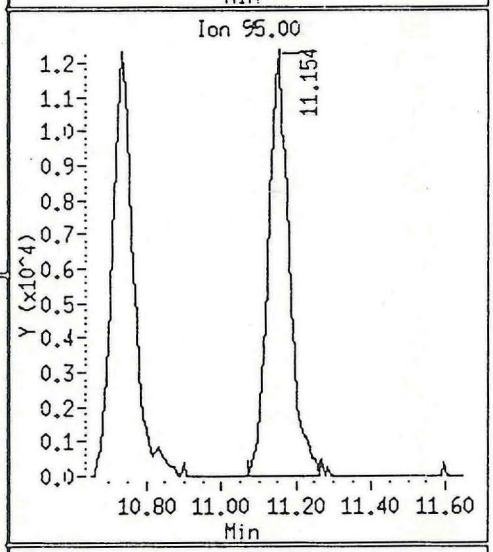


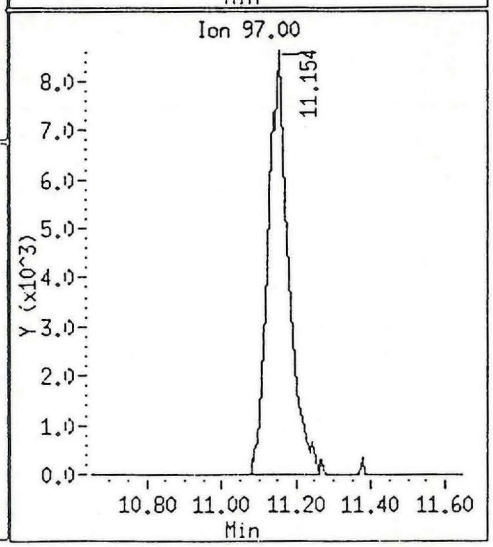












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00205

SSA7-W3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9910V

Sample wt/vol: 5.13 (g/mL) G Lab File ID: A8548

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	6	BJ
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
75-35-4	1,1-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00206

EPA SAMPLE NO.

SSA7-W3

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9910V

Sample wt/vol: 5.13 (g/mL) G Lab File ID: A8548

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

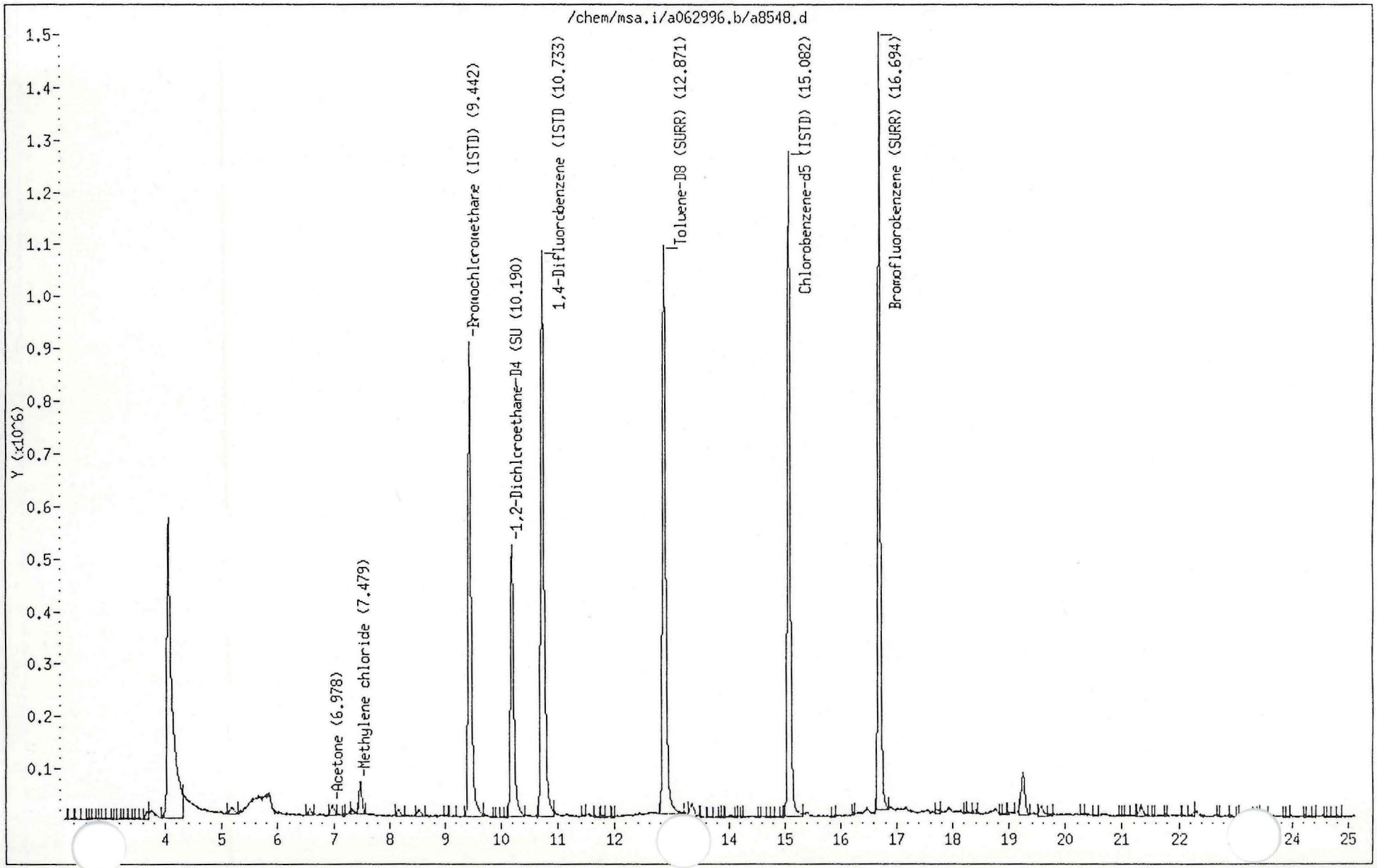
00207

Data File: /chem/msa.i/a062996.b/a8548.d
Date : 29-JUN-96 16:19
Client ID:
Sample Info: 18221n ssa7-w3

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8548.d
Report Date: 30-Jun-1996 12:40

OHM Analytical Division

+ TIC

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062996.b/a8548.d
Lab Smp Id:
Inj Date : 29-JUN-96 16:19
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w3
Misc Info : jp9910v,n2v5309,qv,5000,1,5.13,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:37 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 13
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

7/2/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.986	7.011	(0.740)	64262	5.38	5.38
Methylene chloride	84.00	7.479	7.439	(0.792)	53841	3.82	3.82
* 23 Bromochloromethane (ISTD)	128.00	9.442	9.441	(1.000)	432751	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.190	10.192	(1.079)	707961	48.2	48.2
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.733	10.728	(1.000)	1583670	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.871	12.881	(0.853)	1470135	49.7	49.7
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.082	15.083	(1.000)	1236558	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.686	16.693	(1.106)	988045	49.6	49.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062996.b/a8548.d

Date : 29-JUN-96 16:19

Client ID:

Instrument: msa.i

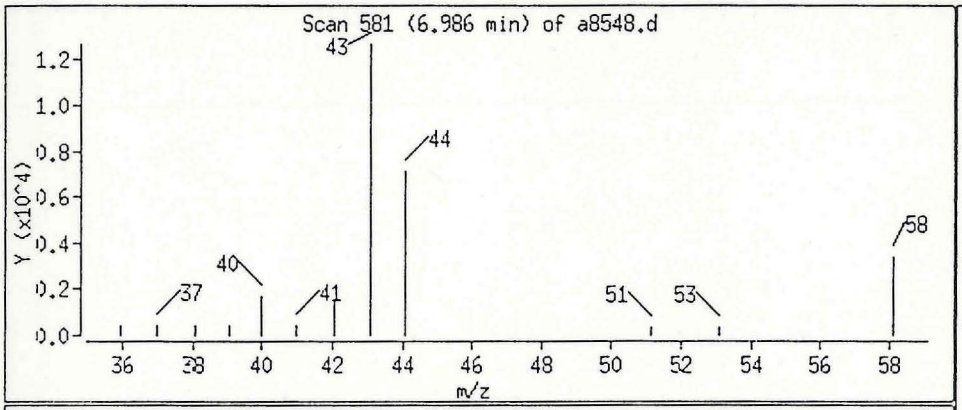
Sample Info: 18221n ssa7-w3

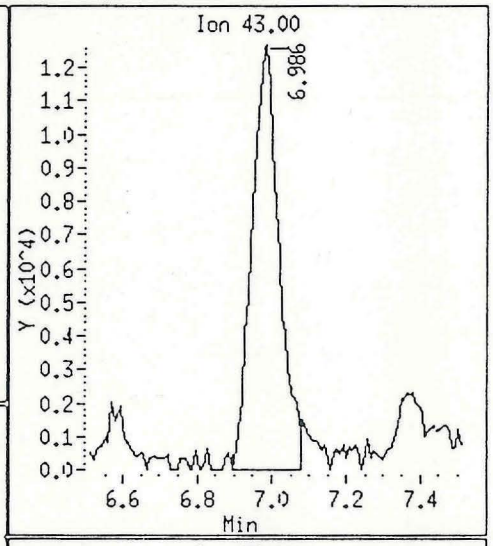
Operator: jk

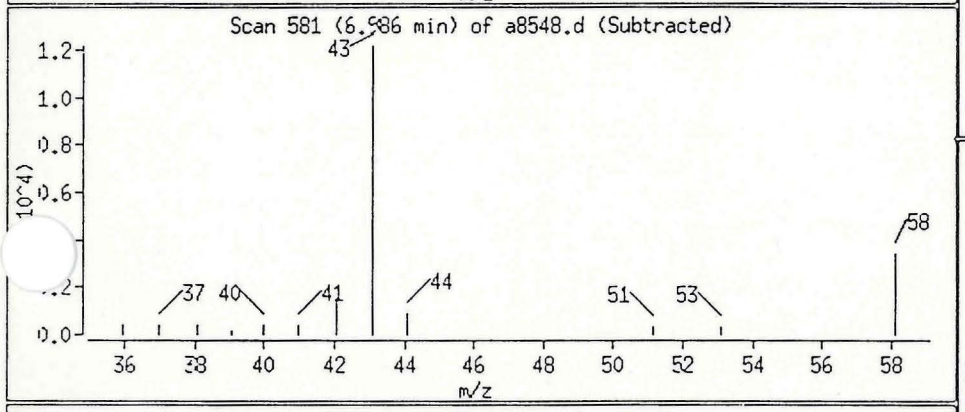
Column phase: DB-624 75m x 0.53mm

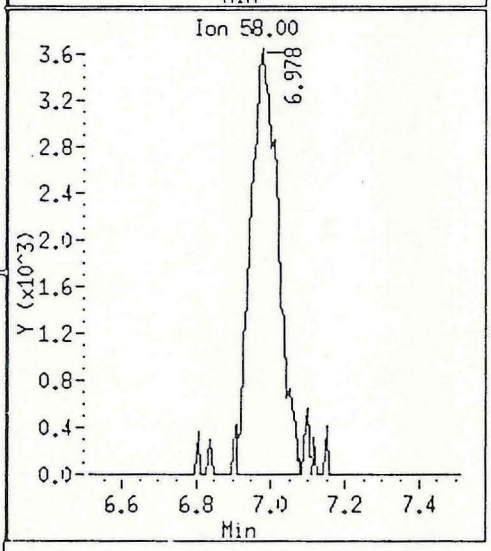
Column diameter: 0.53

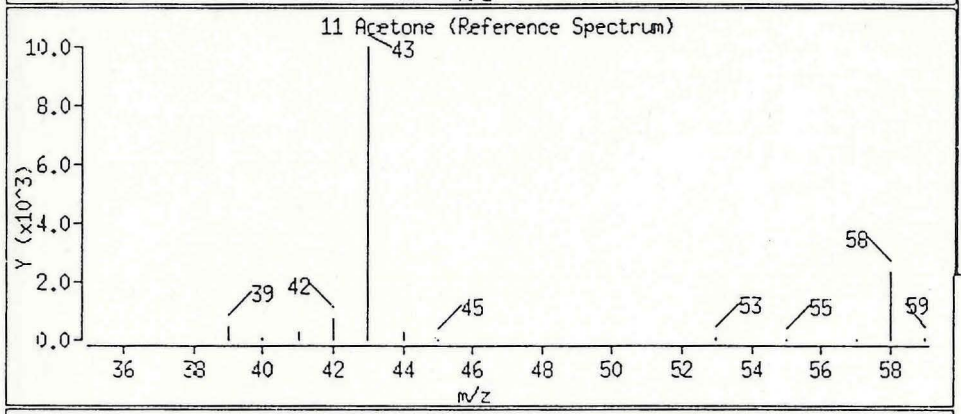
11 Acetone

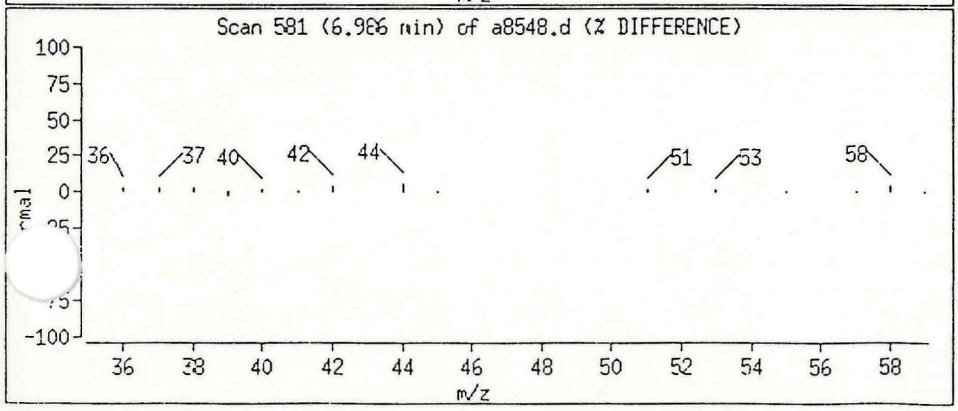












Data File: /chem/msa.i/a062996.b/a8548.d

Date : 29-JUN-96 16:19

Client ID:

Sample Info: 18221n ssa7-w3

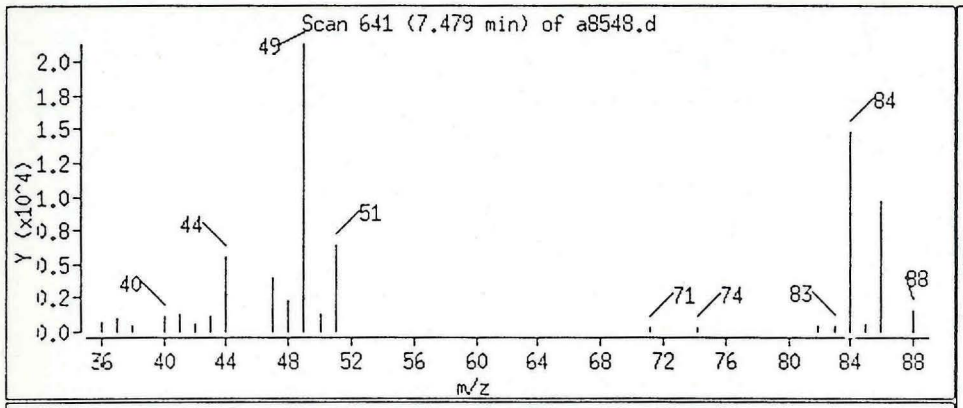
Instrument: msa.i

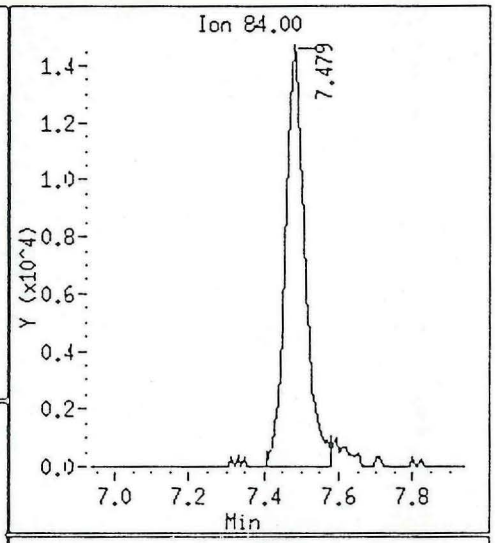
Operator: jk

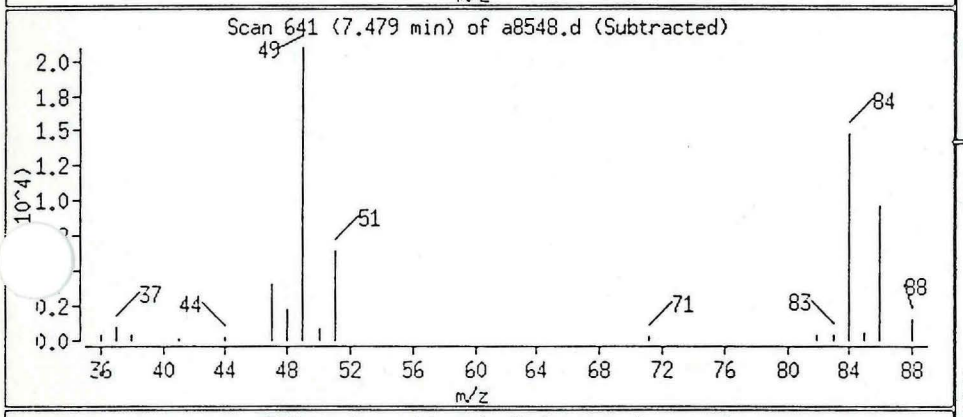
Column phase: DB-624 75m x 0.53mm

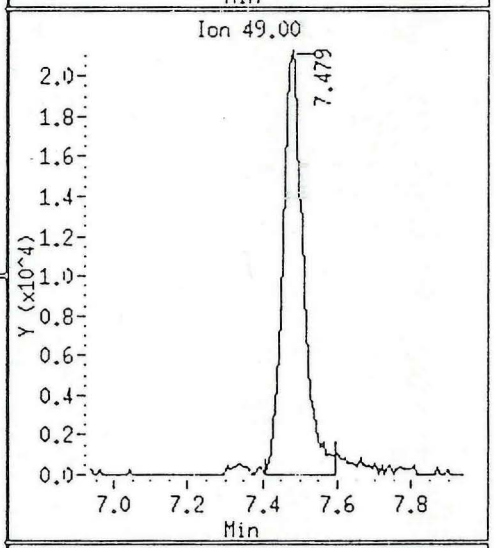
Column diameter: 0.53

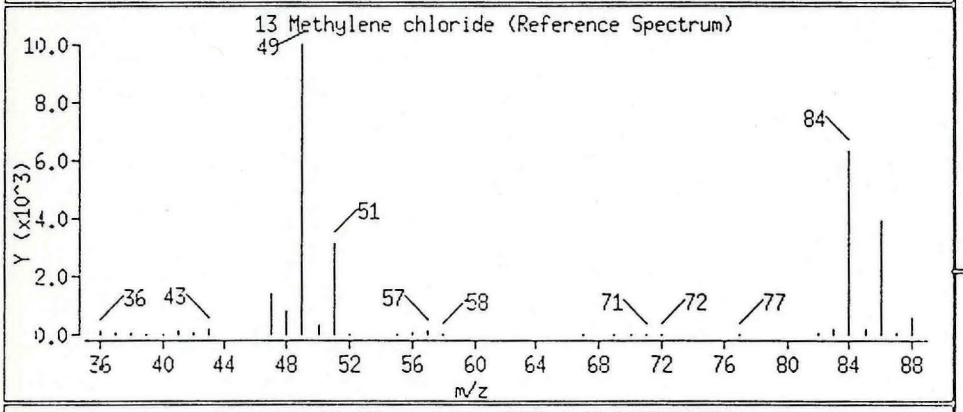
13 Methylene chloride

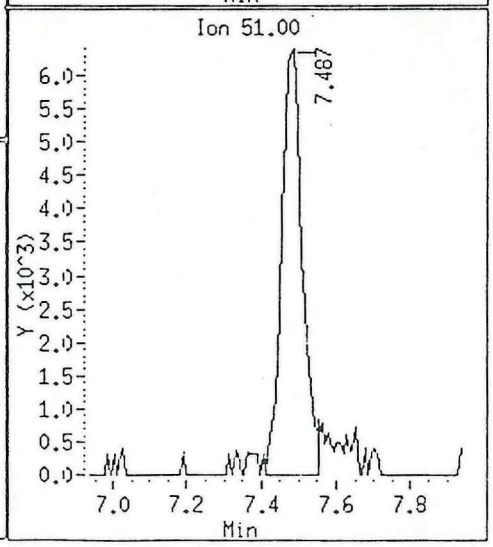


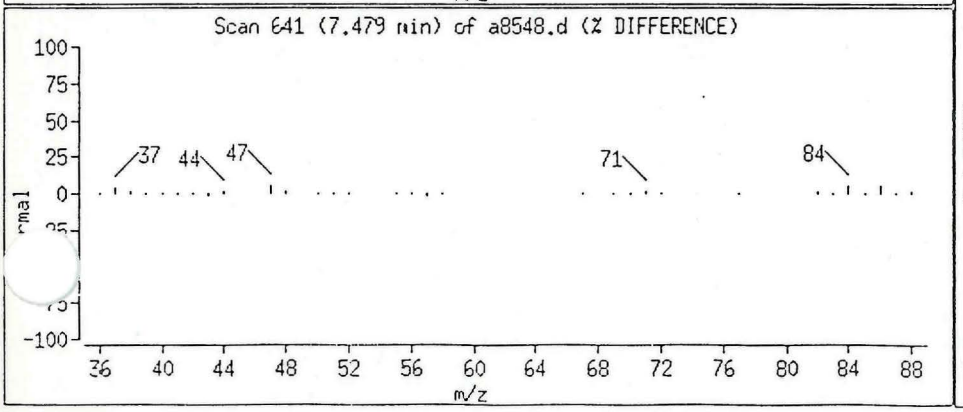












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00211

SSA7-W4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9911V

Sample wt/vol: 5.36 (g/mL) G Lab File ID: A8551

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 12 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	27	B
67-64-1	Acetone	6	BJ
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
75-35-4	1,1-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	13	
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00212

EPA SAMPLE NO.

SSA7-W4

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9911V

Sample wt/vol: 5.36 (g/mL) G Lab File ID: A8551

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 12 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	5.58	6	J

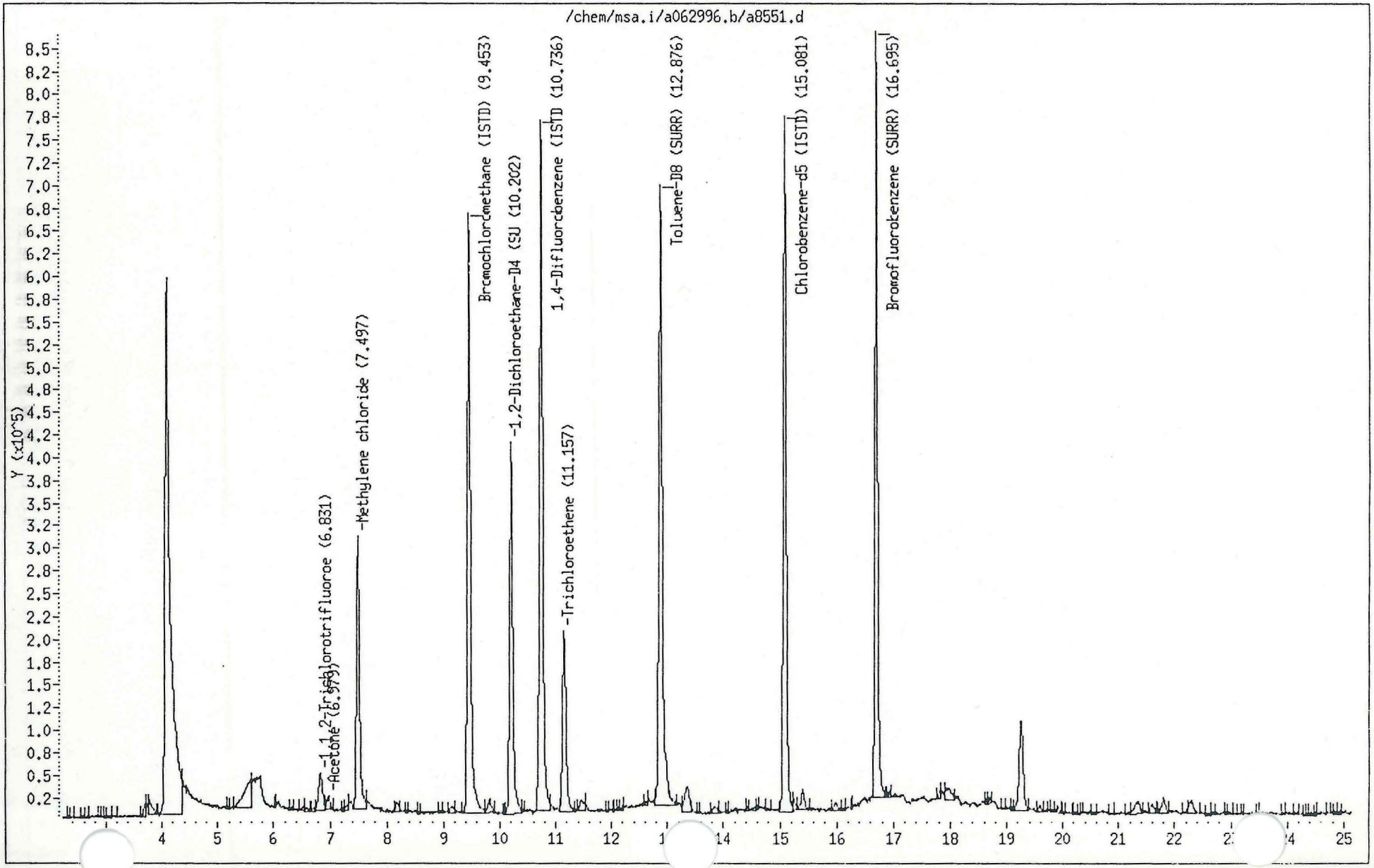
00213

Data File: /chem/msa.i/a062996.b/a8551.d
Date : 29-JUN-96 18:03
Client ID:
Sample Info: 18221n ssa7-w4

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8551.d
Report Date: 30-Jun-1996 12:41

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062996.b/a8551.d
Lab Smp Id:
Inj Date : 29-JUN-96 18:03
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w4
Misc Info : jp9911v,n2v5309,qv,5000,1,5.36,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:37 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 16
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

T. Marcilito 7/5/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	1,1,2-Trichlorotrifluoroethan	101.00	6.831	6.722	(0.723)	47623	3.10	3.10
	Acetone	43.00	6.971	7.011	(0.737)	48040	5.55	5.55
13	Methylene chloride	84.00	7.497	7.439	(0.793)	260360	25.5	25.5
* 23	Bromochloromethane (ISTD)	128.00	9.453	9.441	(1.000)	313450	50.0	(Q)
$ 29	1,2-Dichloroethane-D4 (SURR)	65.00	10.202	10.192	(1.079)	519322	48.8	48.8
* 32	1,4-Difluorobenzene (ISTD)	114.00	10.736	10.728	(1.000)	1118118	50.0	
33	Trichloroethene	130.00	11.157	11.149	(1.039)	126199	12.7	12.7
$ 41	Toluene-D8 (SURR)	98.00	12.876	12.881	(0.854)	921501	51.6	51.6
* 50	Chlorobenzene-d5 (ISTD)	117.00	15.081	15.083	(1.000)	747852	50.0	
$ 59	Bromofluorobenzene (SURR)	95.00	16.695	16.693	(1.107)	552332	45.9	45.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062996.b/a8551.d

Date : 29-JUN-96 18:03

Client ID:

Instrument: msa.i

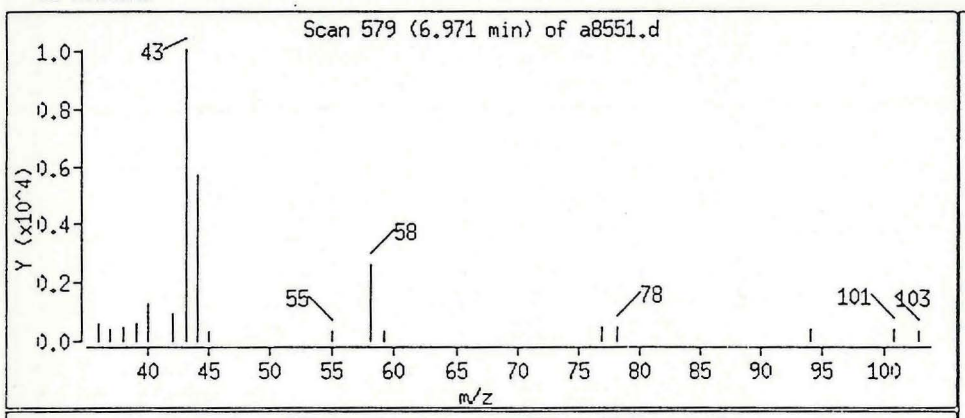
Sample Info: 18221n ssa7-w4

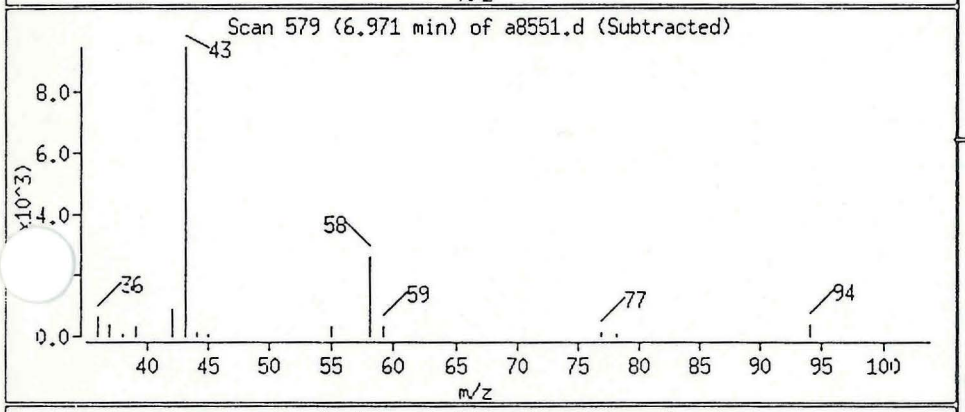
Operator: jk

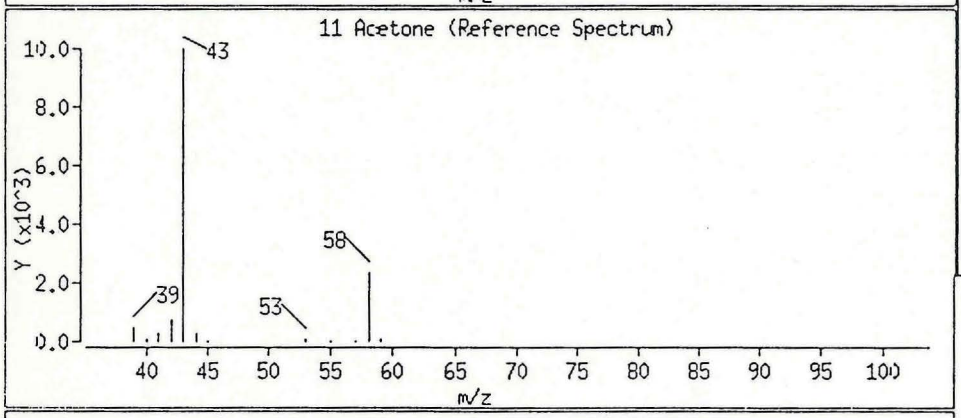
Column phase: DB-624 75m x 0.53mm

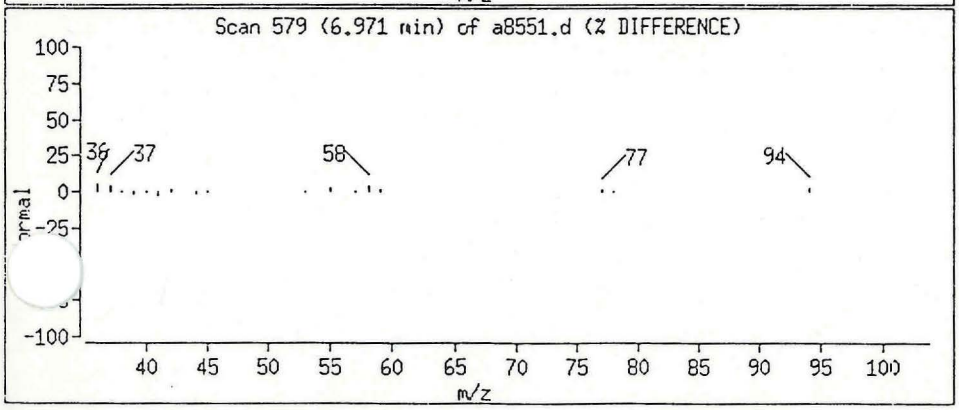
Column diameter: 0.53

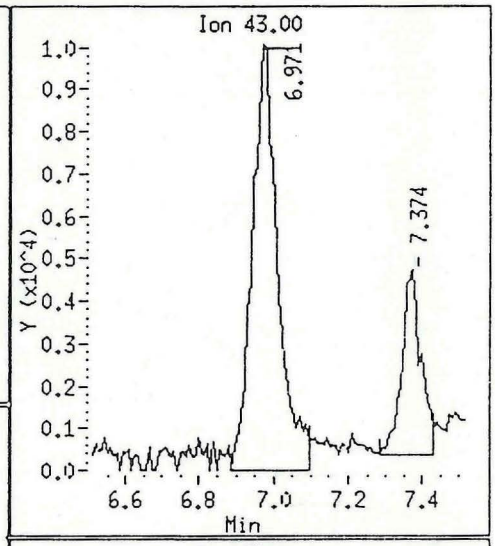
11 Acetone

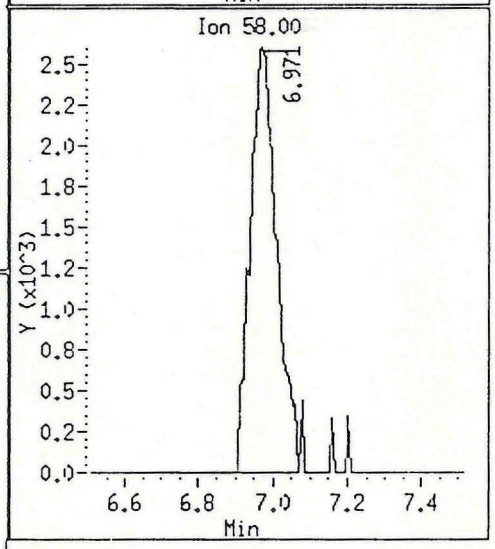












Data File: /chem/msa.i/a062996.b/a8551.d

Date : 29-JUN-96 18:03

Client ID:

Instrument: msa.i

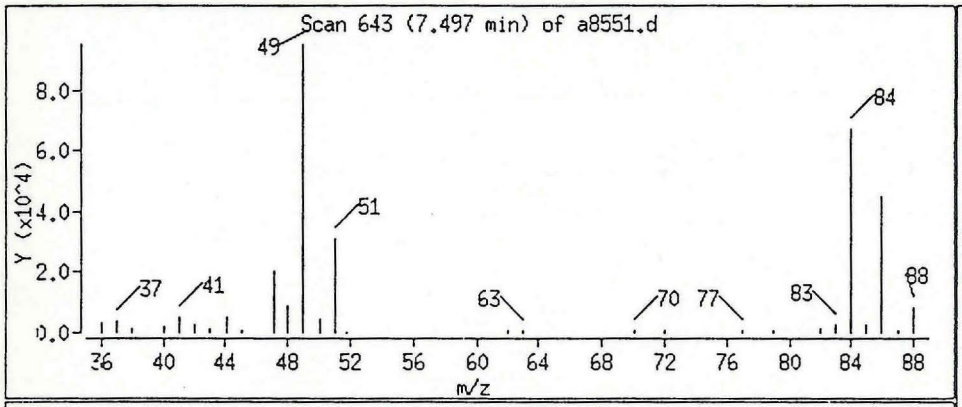
Sample Info: 18221n ssa7-w4

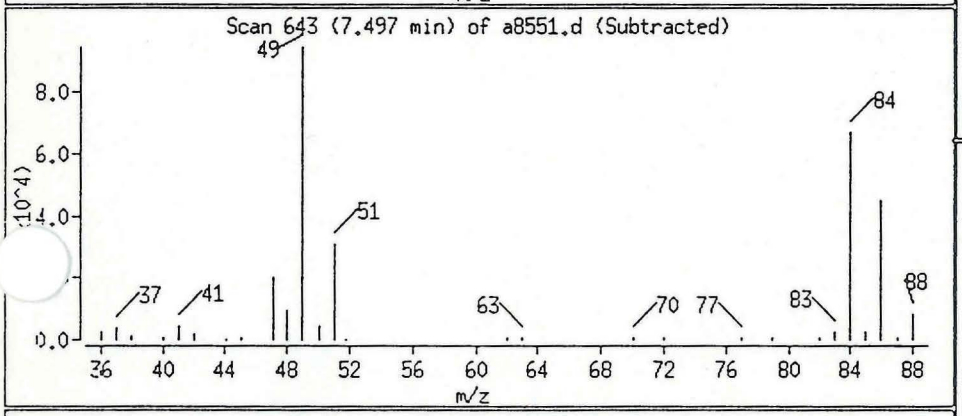
Operator: jk

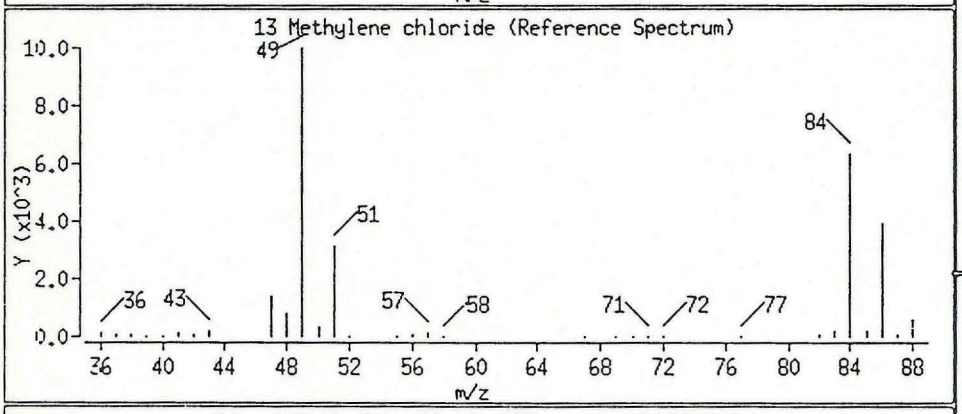
Column phase: DB-624 75m x 0.53mm

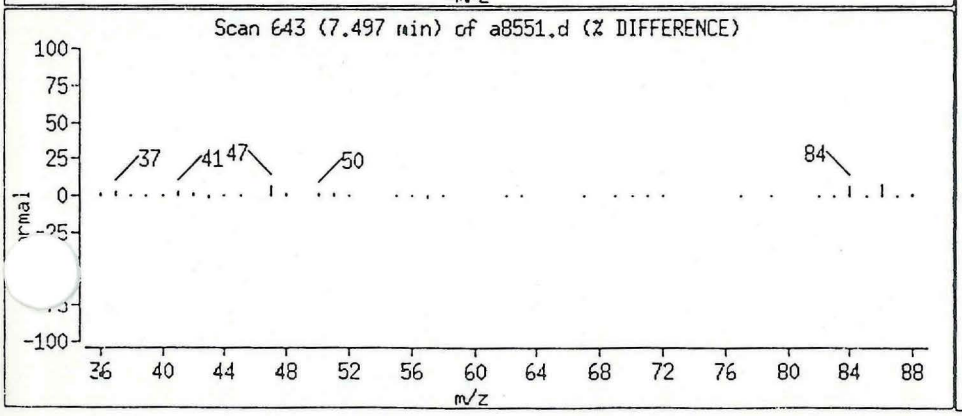
Column diameter: 0.53

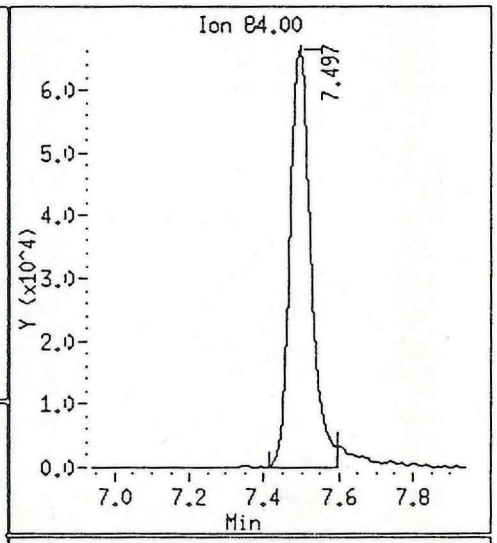
13 Methylene chloride

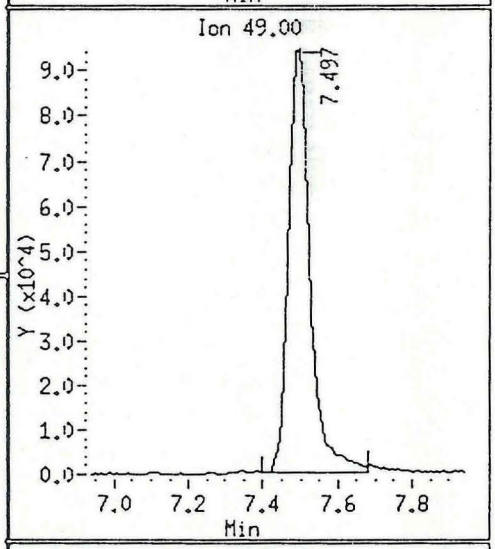


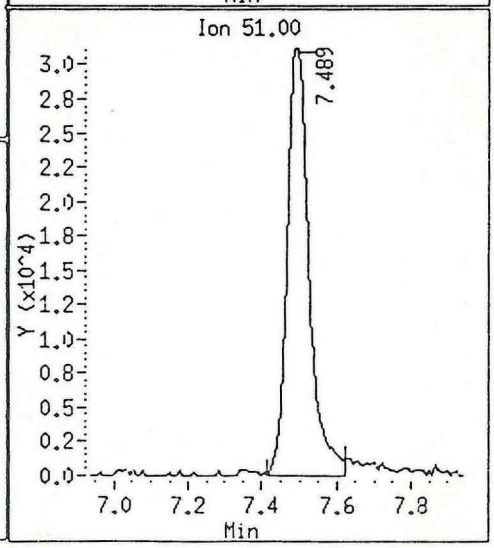












Data File: /chem/msa.i/a062996.b/a8551.d

Date : 29-JUN-96 18:03

Client ID:

Instrument: msa.i

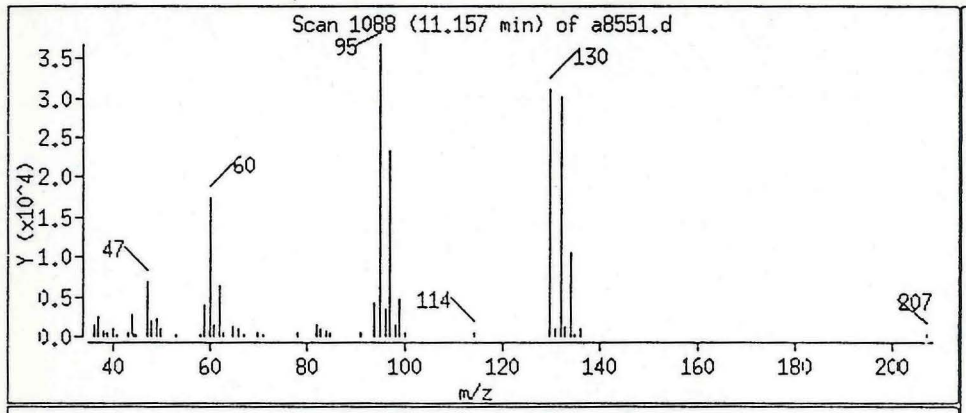
Sample Info: 18221n ssa7-w4

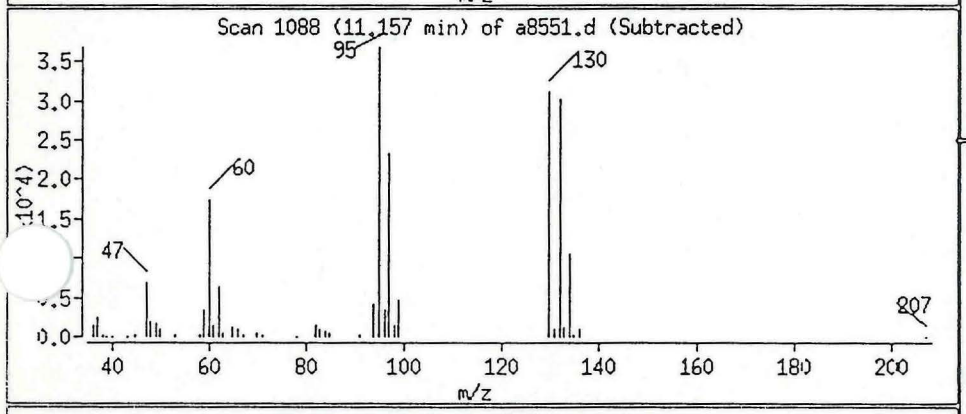
Operator: jk

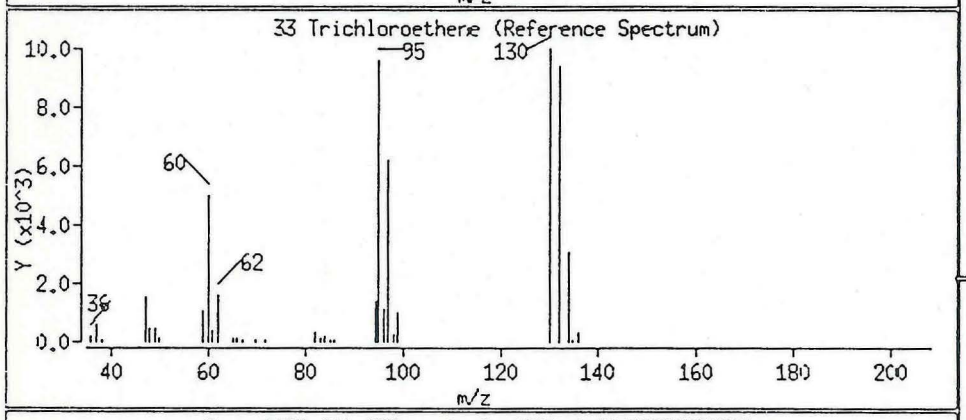
Column phase: DB-624 75m x 0.53mm

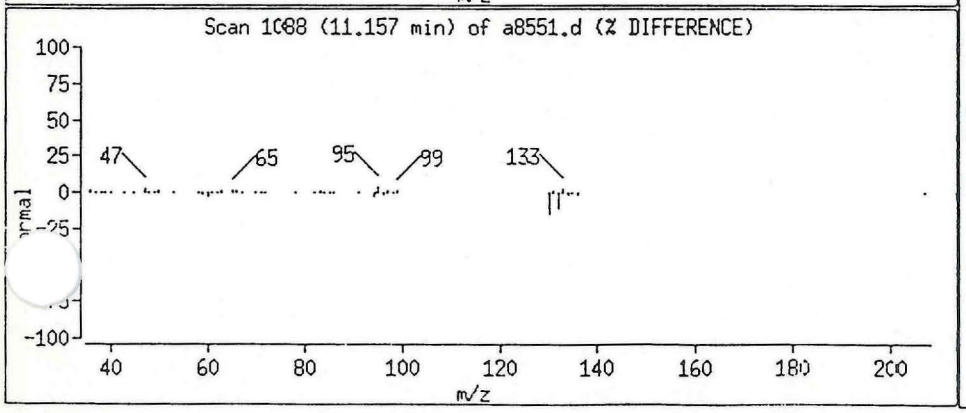
Column diameter: 0.53

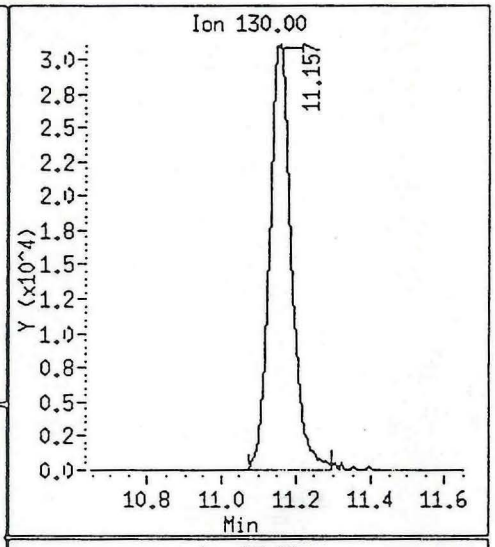
33 Trichloroethene

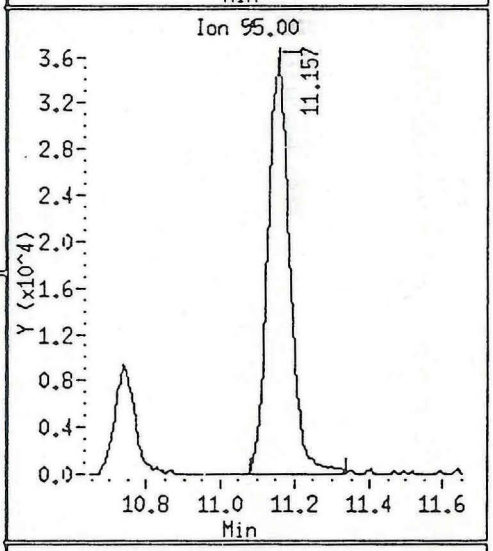


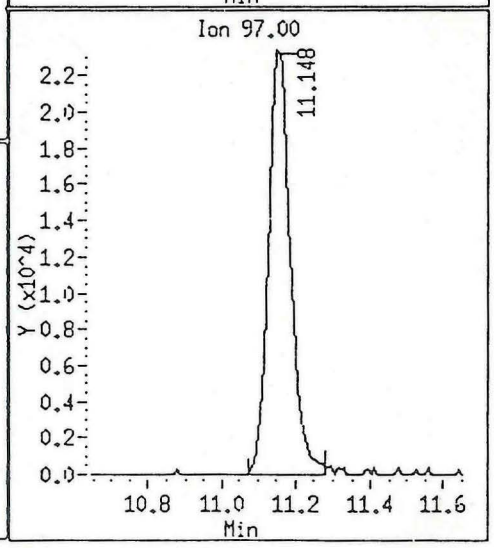












Data File: /chem/msa.i/a062996.b/a8551.d

Date : 29-JUN-96 18:03

Client ID:

Instrument: msa.i

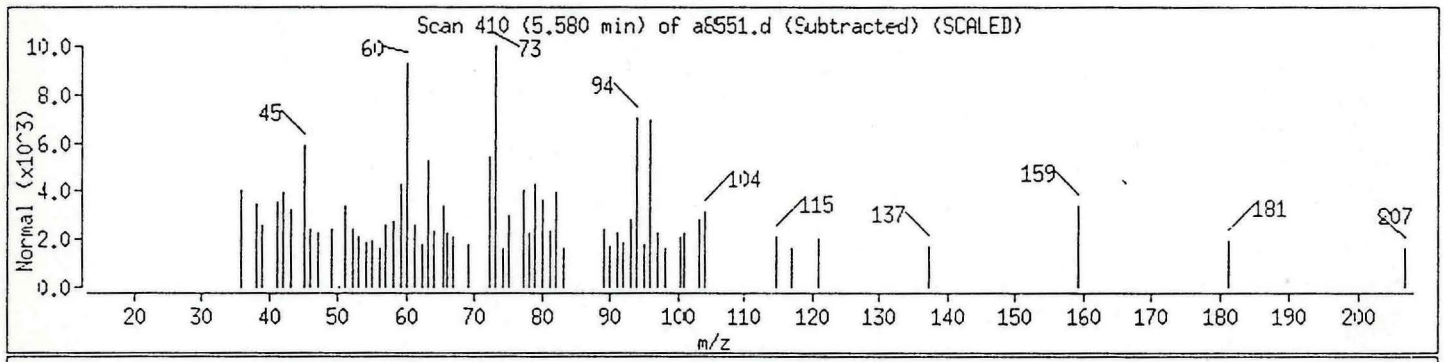
Sample Info: 18221n ssa7-w4

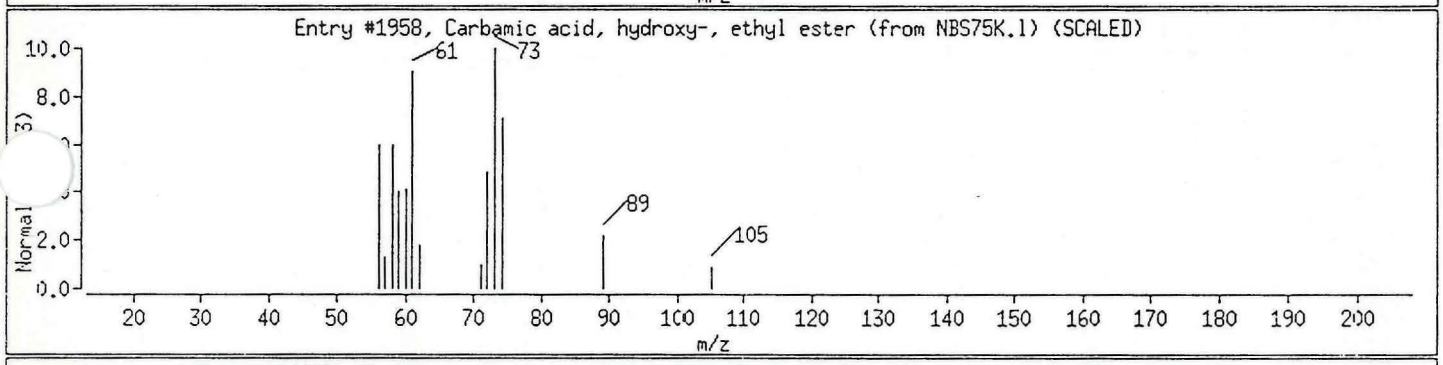
Operator: jk

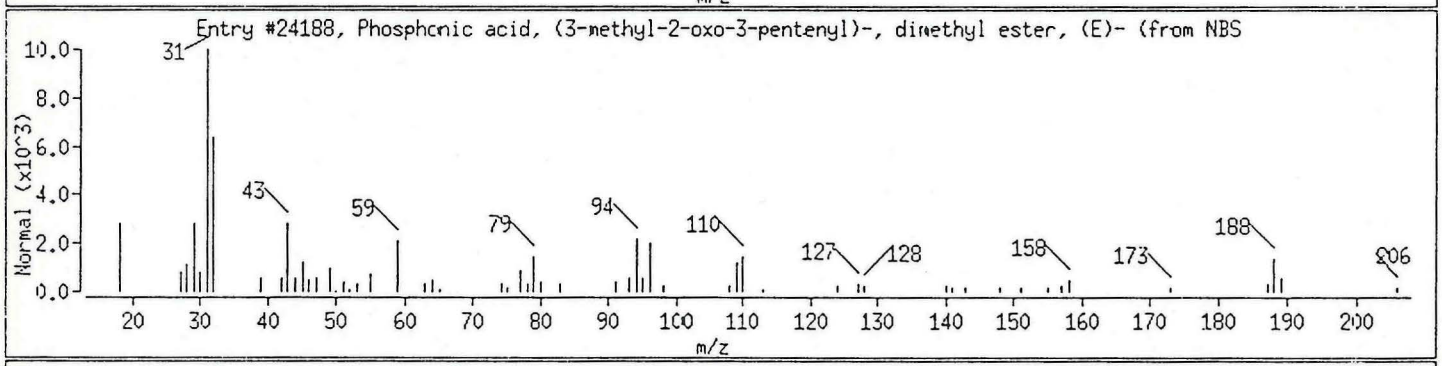
Column phase: DB-624 75m x 0.53mm

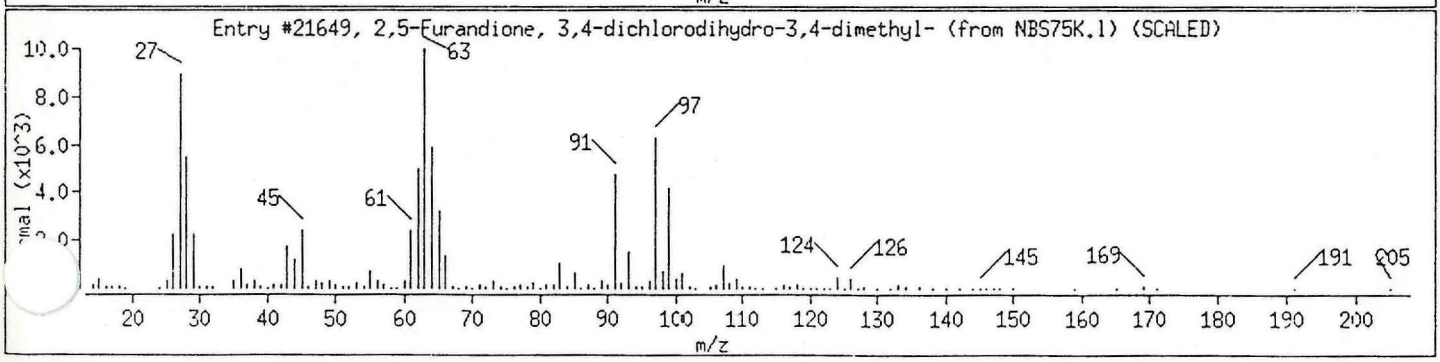
Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Carbamic acid, hydroxy-, ethyl ester	589-41-3	NBS75K.l	1958	10	C3H7NO3	105
Phosphonic acid, (3-methyl-2-oxo-3-pente	54543-04-3	NBS75K.l	24188	10	C6H1504P	206
2,5-Furandione, 3,4-dichlorodihydro-3,4-	54845-45-3	NBS75K.l	21649	10	C6H6Cl2O3	196









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00219

SSA7-W6

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9913V

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8553

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 20 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	5	BJ
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
75-35-4	1,1-Dichloroethene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00220

SSA7-W6

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9913V

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8553

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 20 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Data File: /chem/msa.i/a062996.b/a8553.d
Report Date: 30-Jun-1996 12:41

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a062996.b/a8553.d
Lab Smp Id:
Inj Date : 29-JUN-96 19:13
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w6
Misc Info : jp9913v,n2v5309,qv,5000,1,5.17,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:37 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

T. Meredith 7/5/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.977	7.011	(0.738)	46309	4.37	4.37
Methylene chloride	84.00	7.478	7.439	(0.791)	156748	12.6	12.6
* 23 Bromochloromethane (ISTD)	128.00	9.457	9.441	(1.000)	383689	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.197	10.192	(1.078)	634873	48.7	48.7
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.740	10.728	(1.000)	1414570	50.0	
33 Trichloroethene	130.00	11.160	11.149	(1.039)	33080	2.62	2.62
$ 41 Toluene-D8 (SURR)	98.00	12.878	12.881	(0.853)	1297980	50.3	50.3
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.089	15.083	(1.000)	1079460	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.701	16.693	(1.107)	849988	48.9	48.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

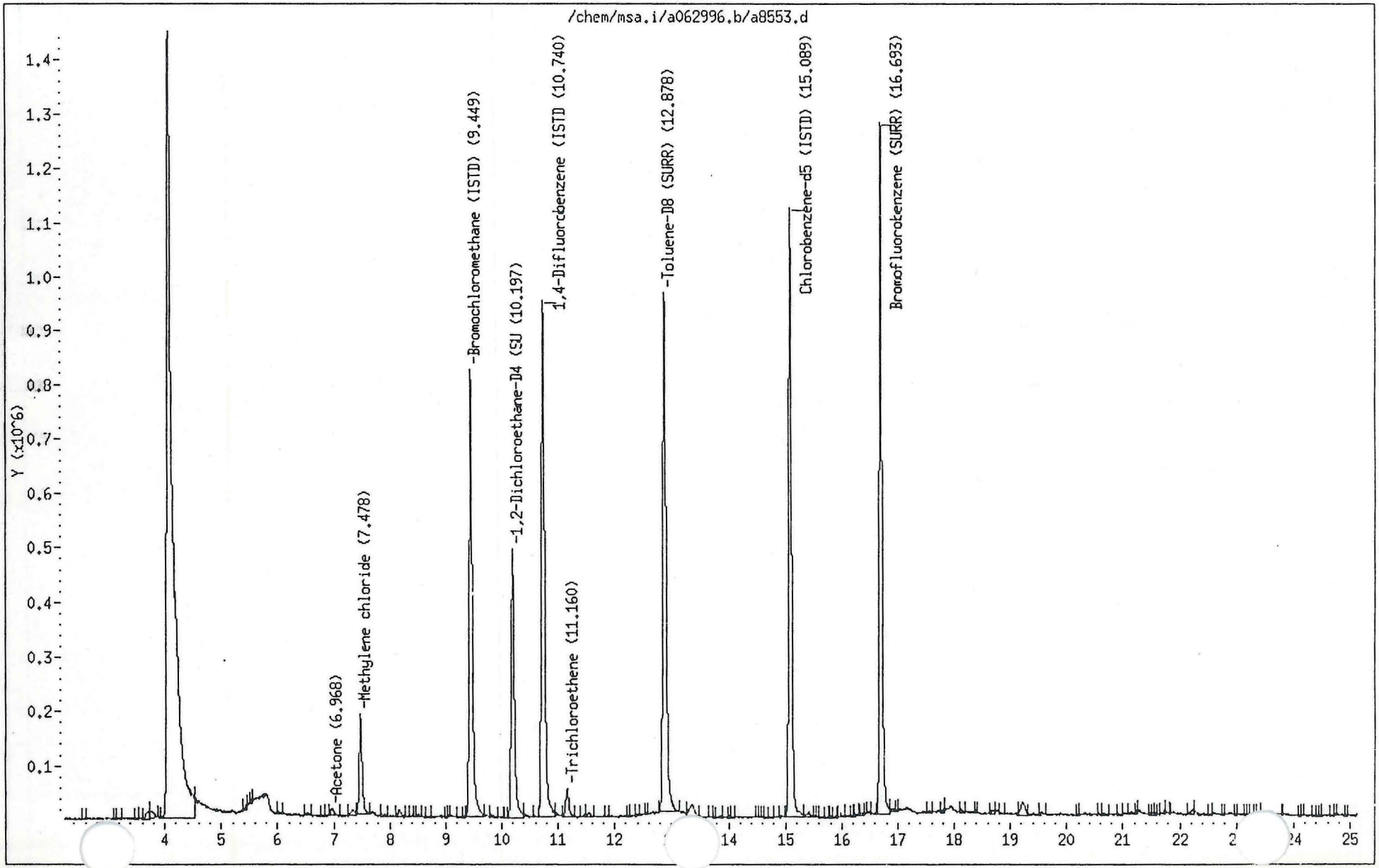
00222

Data File: /chem/msa.i/a062996.b/a8553.d
Date : 29-JUN-96 19:13
Client ID:
Sample Info: 18221n ssa7-w6

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8553.d

Date : 29-JUN-96 19:13

Client ID:

Instrument: msa.i

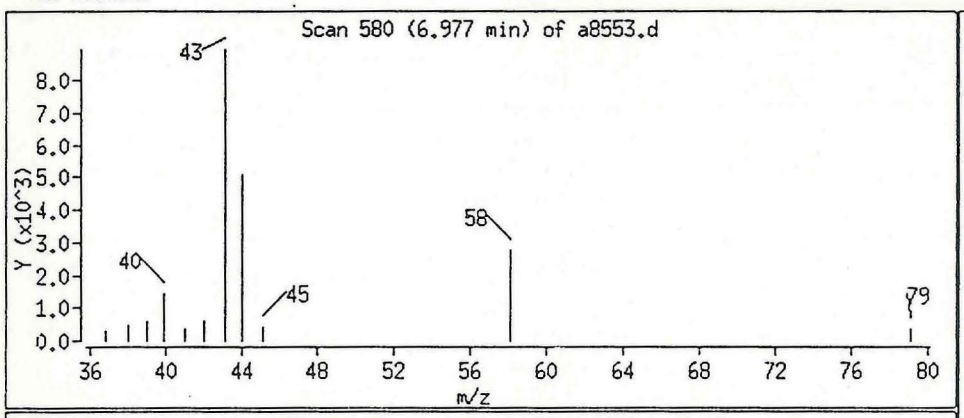
Sample Info: 18221n ssa7-w6

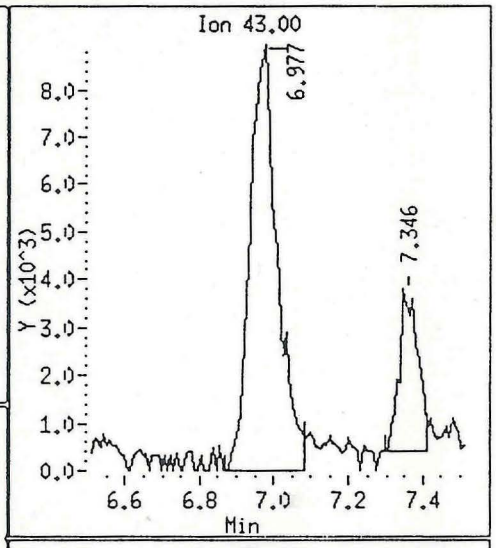
Operator: jk

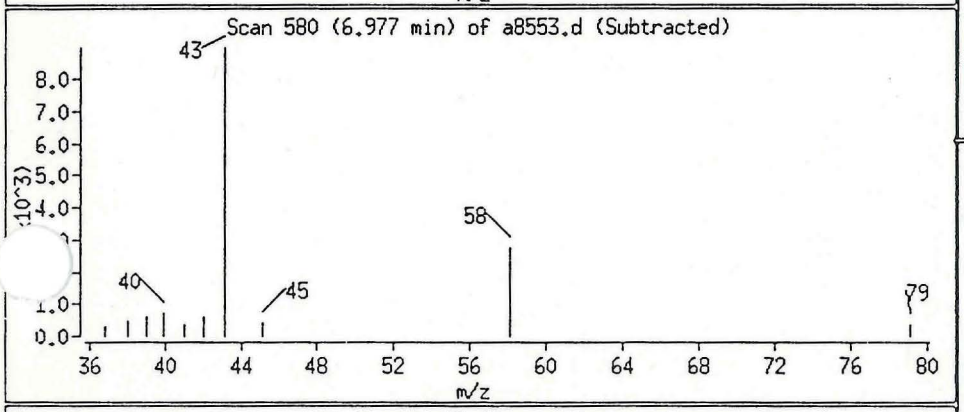
Column phase: DB-624 75m x 0.53mm

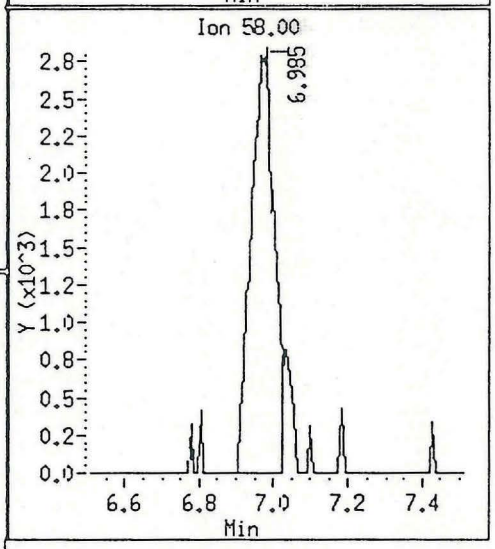
Column diameter: 0.53

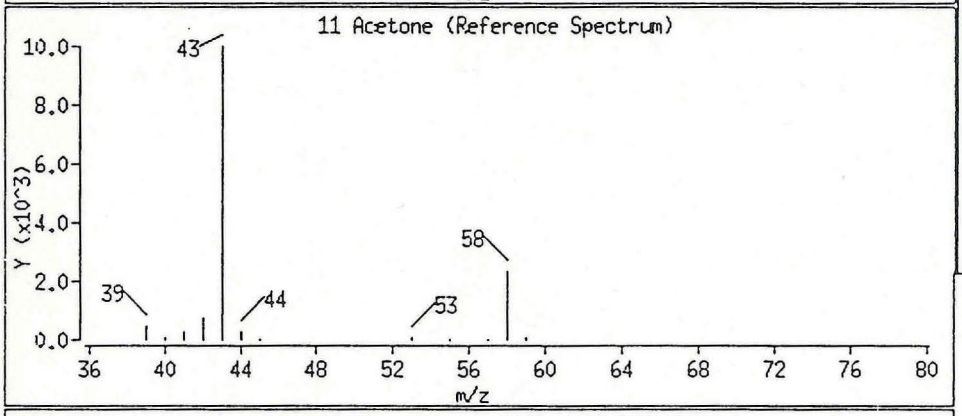
11 Acetone

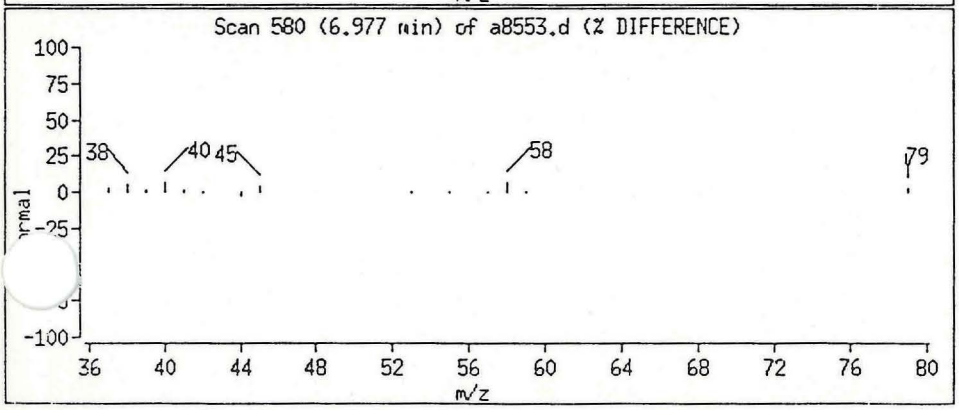












Data File: /chem/msa.i/a062996.b/a8553.d

Date : 29-JUN-96 19:13

Client ID:

Instrument: msa.i

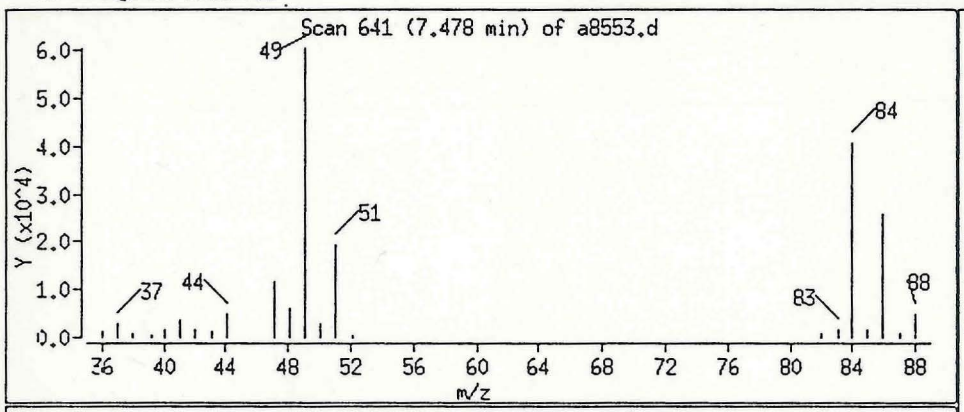
Sample Info: 18221n ssa7-w6

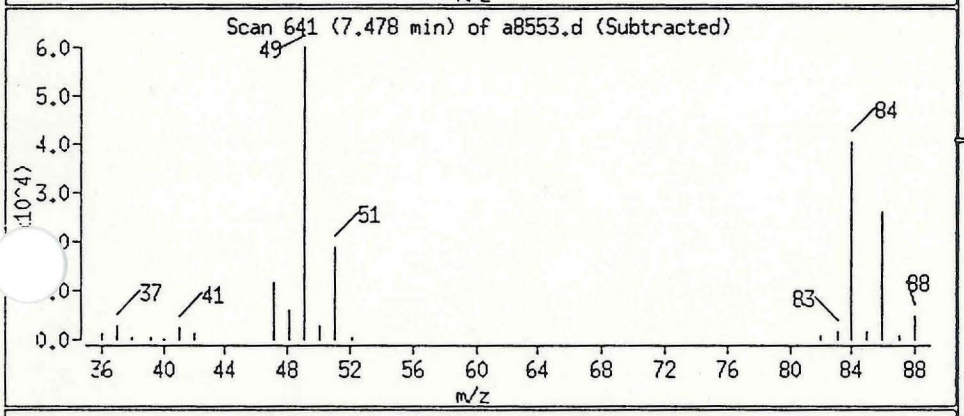
Operator: jk

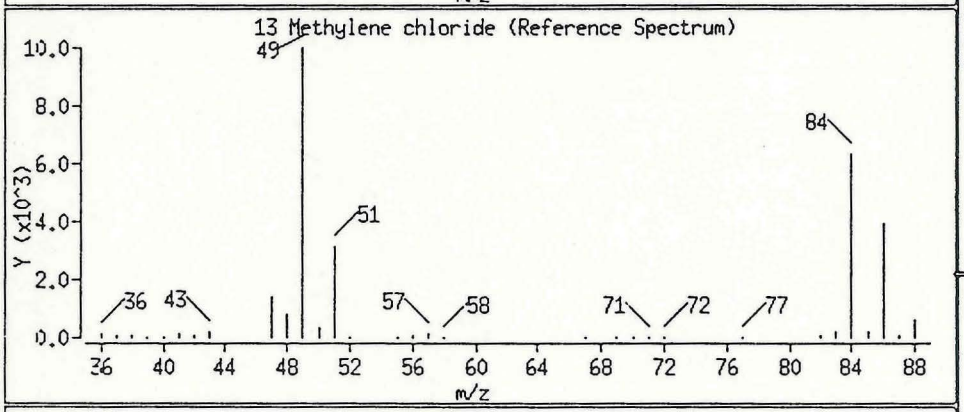
Column phase: DB-624 75m x 0.53mm

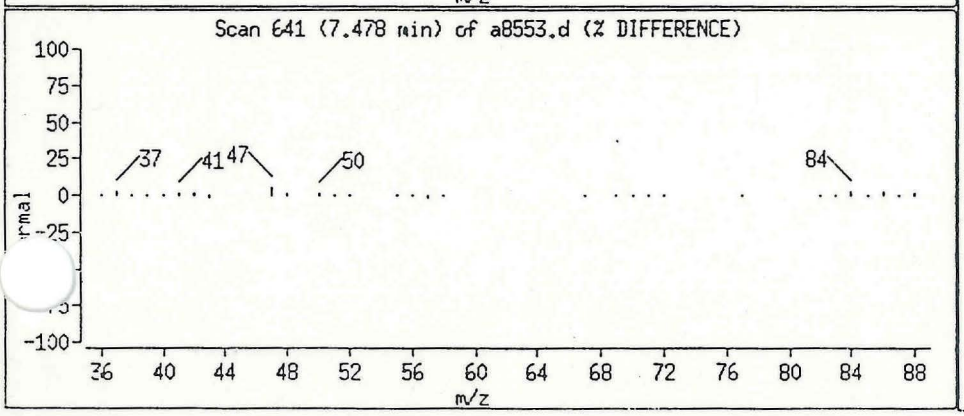
Column diameter: 0.53

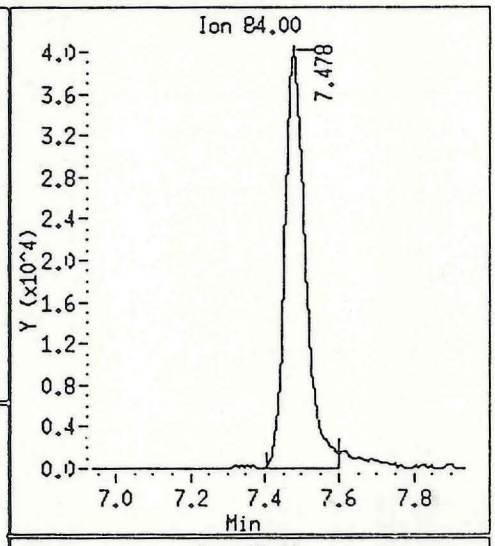
13 Methylene chloride

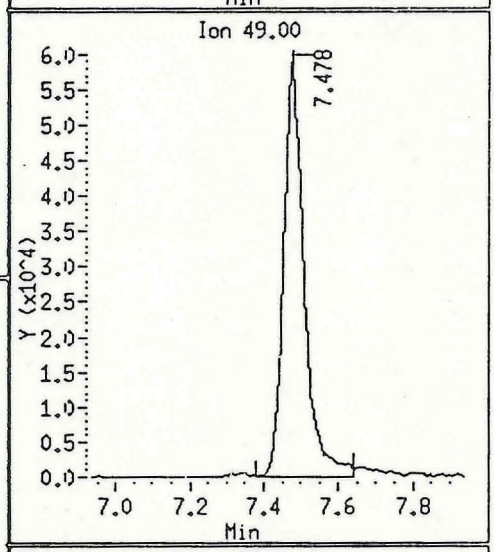


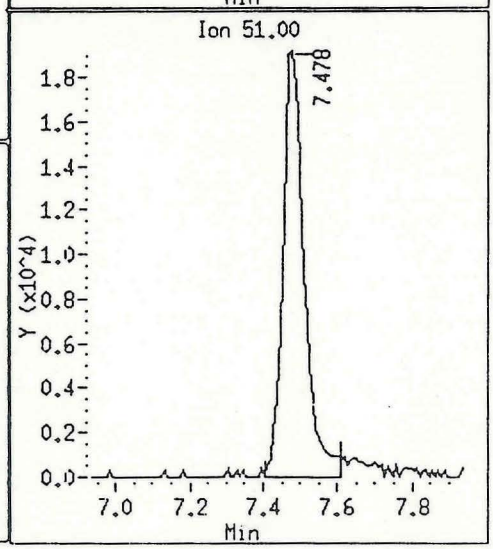












Data File: /chem/msa.i/a062996.b/a8553.d

Date : 29-JUN-96 19:13

Client ID:

Instrument: msa.i

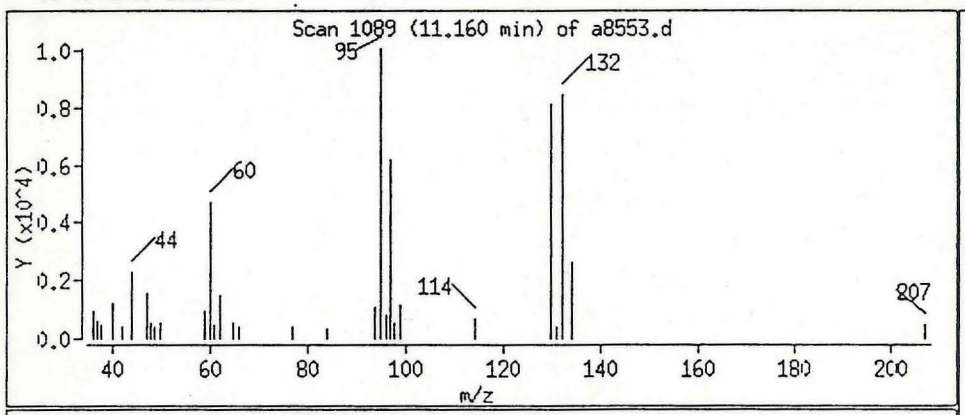
Sample Info: 18221n ssa7-w6

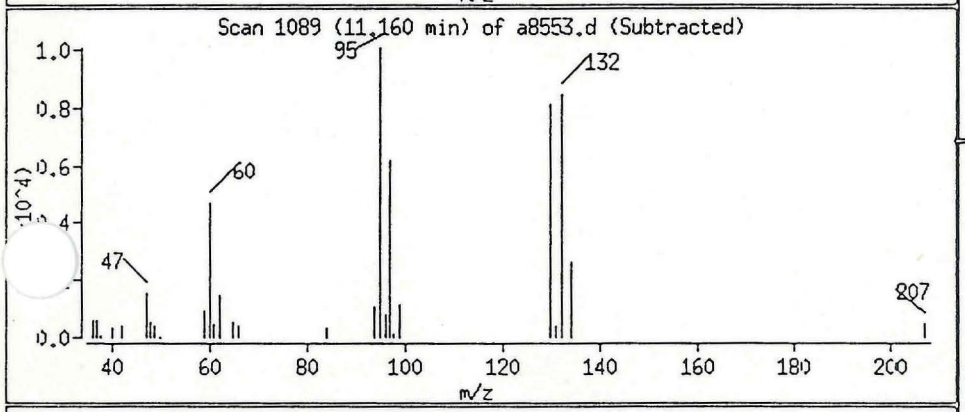
Operator: jk

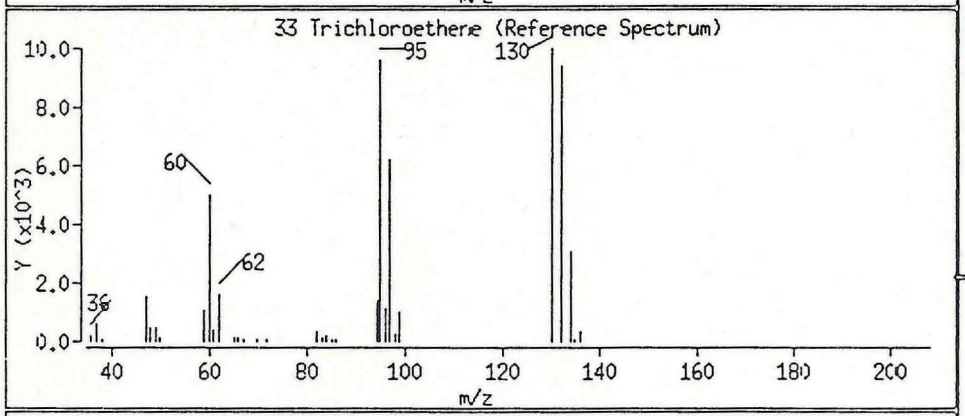
Column phase: DB-624 75m x 0.53mm

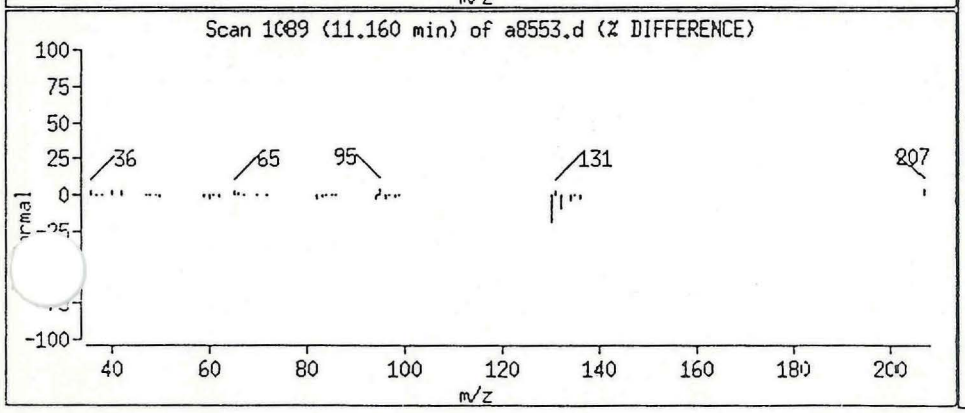
Column diameter: 0.53

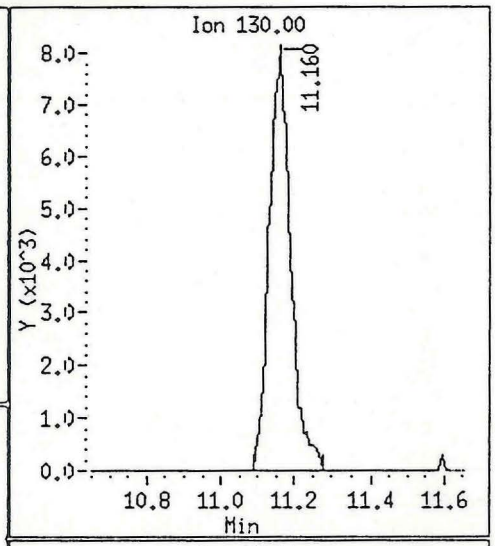
33 Trichloroethene

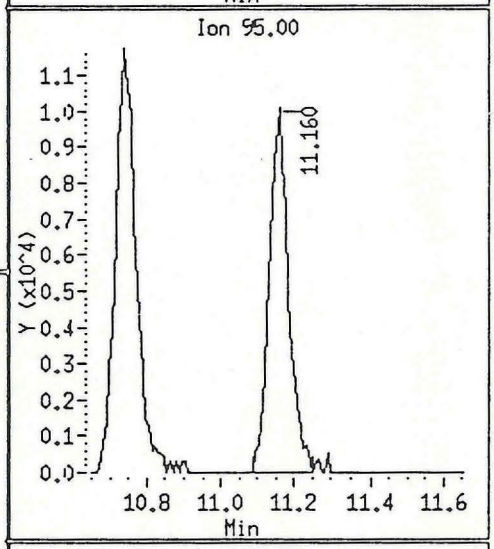


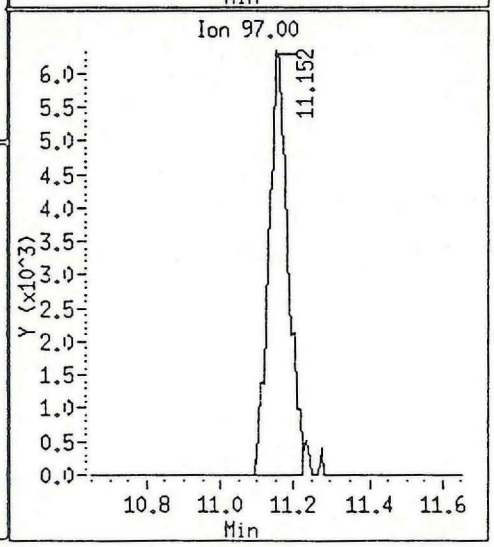












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00226

SSA7-W7

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9914V

Sample wt/vol: 5.24 (g/mL) G Lab File ID: A8589

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 15 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	9	B
67-64-1	Acetone	23	
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
156-60-5	1,2-Trans-dichloroethylene	6	U
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	11	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
75-27-4	Bromodichloromethane	6	U

9-16-96

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00227

SSA7-W7

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9914V

Sample wt/vol: 5.24 (g/mL) G Lab File ID: A8589

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 15 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

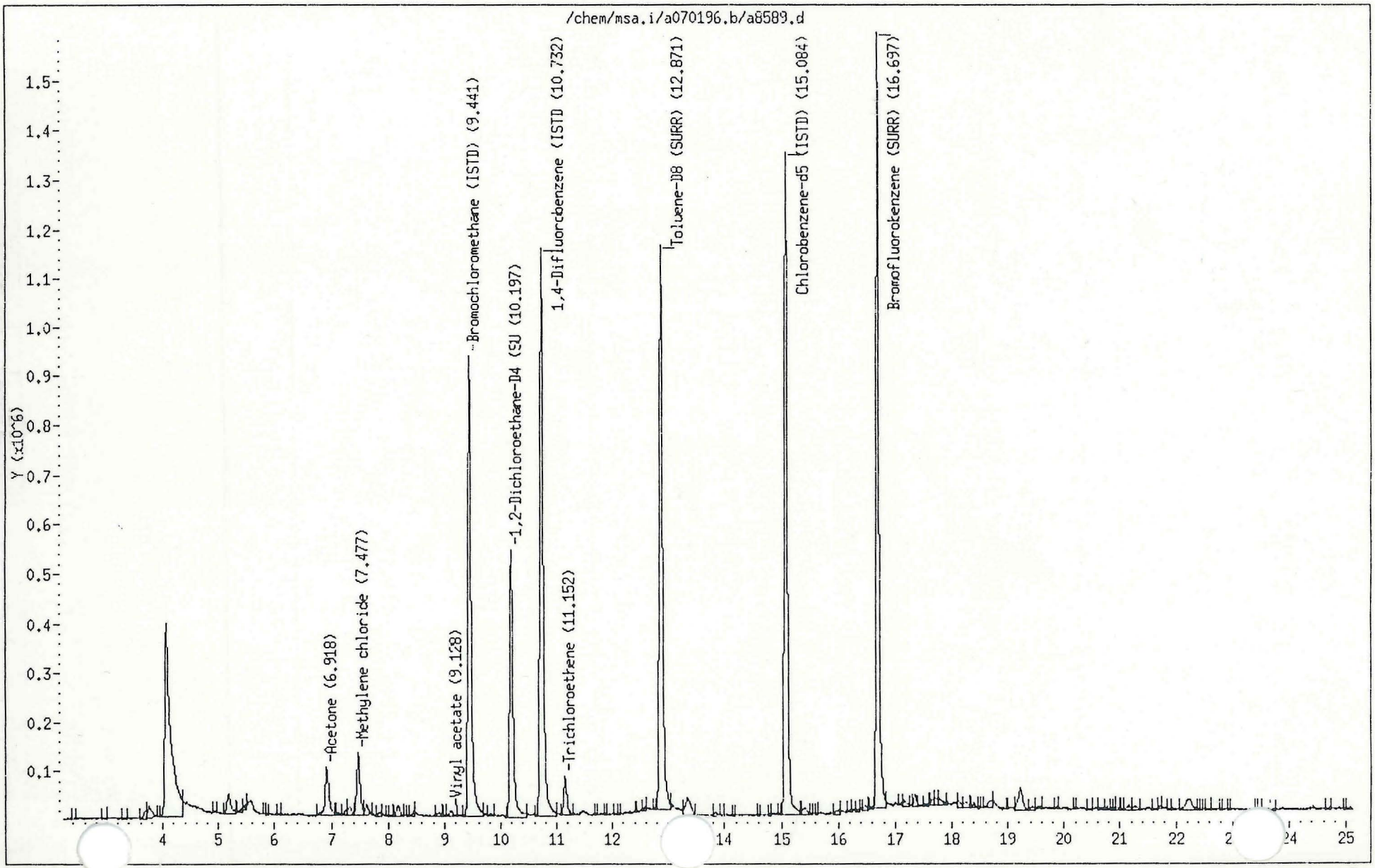
00228

Data File: /chem/msa.i/a070196.b/a8589.d
Date : 01-JUL-96 17:27
Client ID:
Sample Info: 18221n-ssa7-w7

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8589.d
Report Date: 02-Jul-1996 07:17

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a070196.b/a8589.d
Lab Smp Id:
Inj Date : 01-JUL-96 17:27
Operator : jk Inst ID: msa.i
Smp Info : 18221n-ssa7-w7
Misc Info : jp9914v,n2v5315,qv,5000,1,5.24,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
cetone	43.00	6.918	6.987	(0.732)	282948	20.4	20.4
Methylene chloride	84.00	7.469	7.408	(0.790)	115345	7.72	7.72
18 Vinyl acetate	43.00	9.128	9.178	(0.966)	15007	1.56	~~1.56~~ ns
* 23 Bromochloromethane (ISTD)	128.00	9.449	9.418	(1.000)	466258	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.189	10.177	(1.078)	713288	46.1	46.1
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.732	10.713	(1.000)	1725761	50.0	
33 Trichloroethene	130.00	11.152	11.126	(1.039)	46746	3.03	3.03
$ 41 Toluene-D8 (SURR)	98.00	12.871	12.859	(0.853)	1562854	48.2	48.2
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.084	15.078	(1.000)	1330802	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.689	16.697	(1.106)	1082785	50.3	50.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a070196.b/a8589.d

Date : 01-JUL-96 17:27

Client ID:

Instrument: msa.i

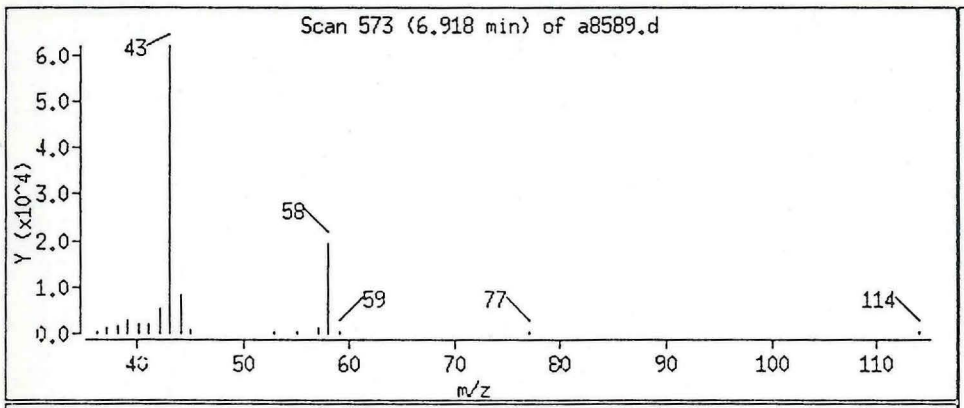
Sample Info: 18221n-ssa7-w7

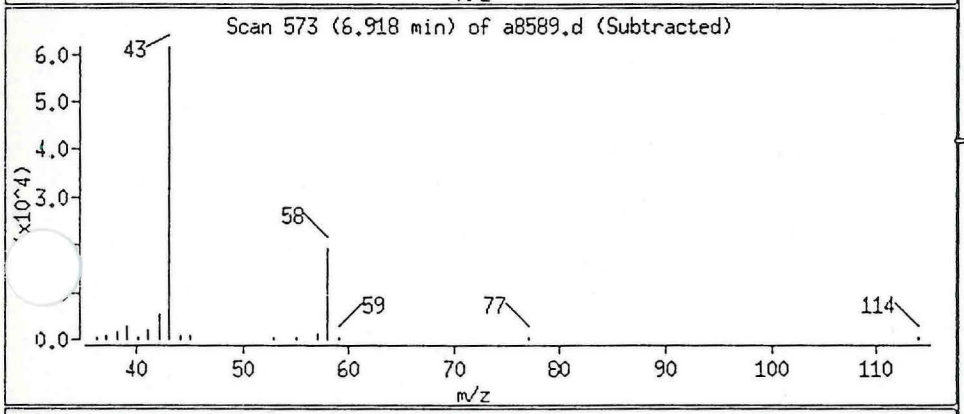
Operator: jk

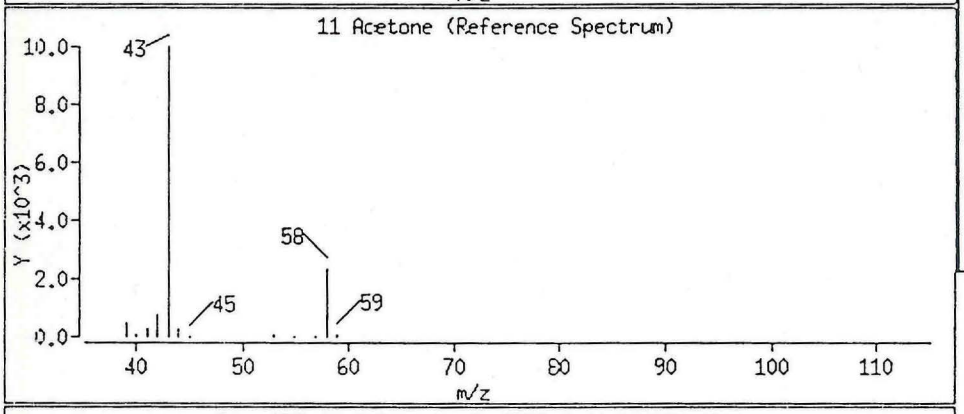
Column phase: DB-624 75m x 0.53mm

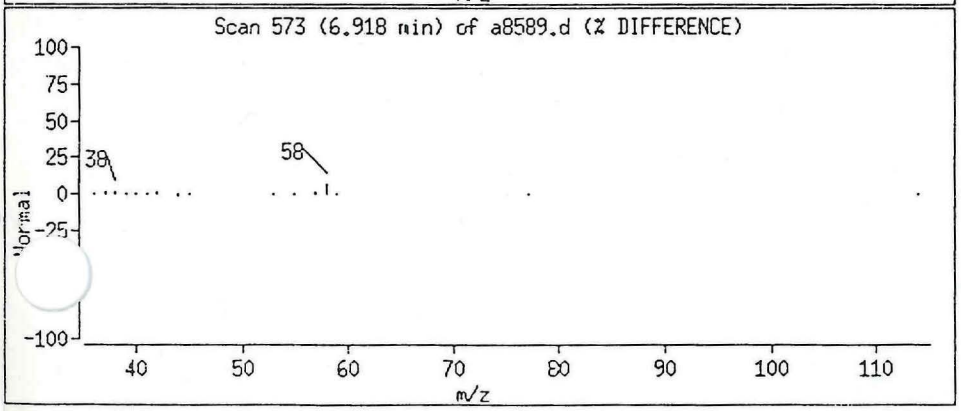
Column diameter: 0.53

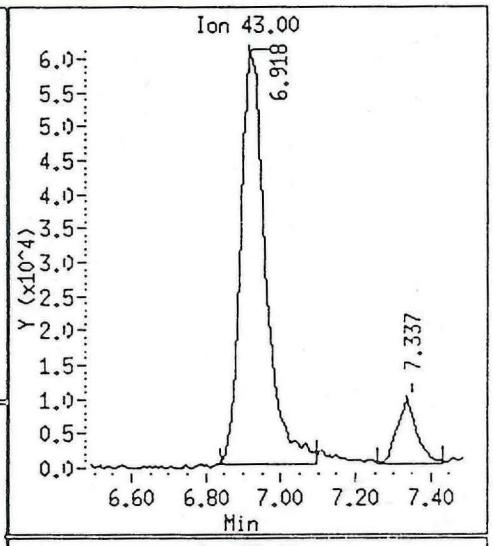
11 Acetone

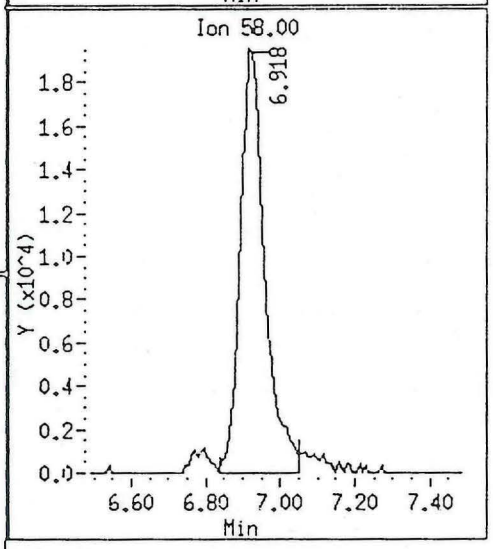












Data File: /chem/msa.i/a070196.b/a8589.d

Date : 01-JUL-96 17:27

Client ID:

Sample Info: 18221n-ssa7-w7

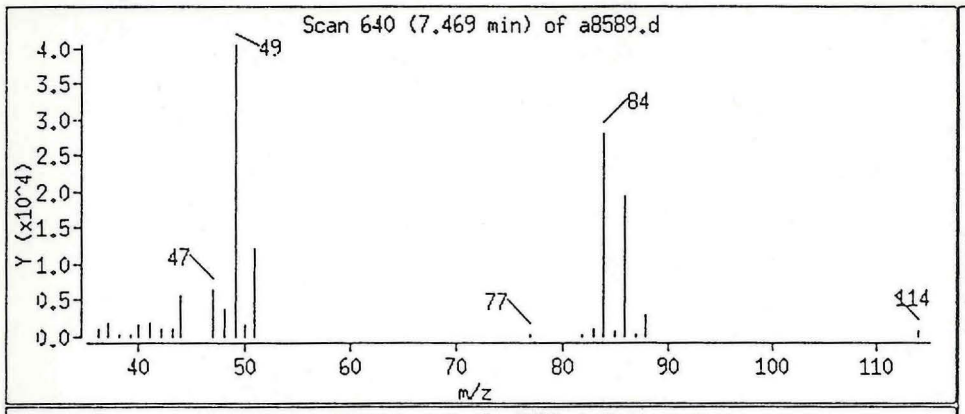
Instrument: msa.i

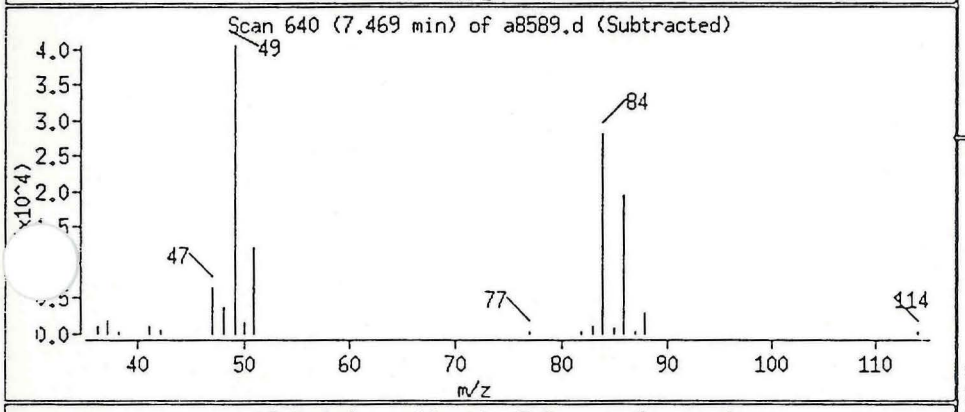
Operator: jk

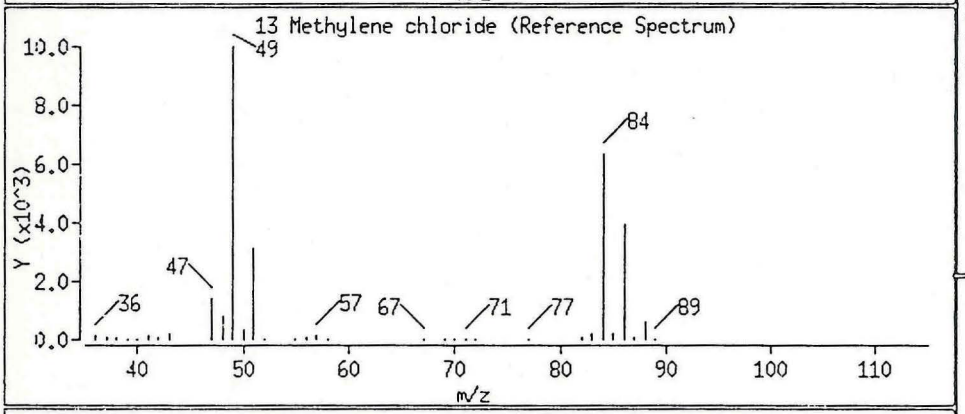
Column phase: DB-624 75m x 0.53mm

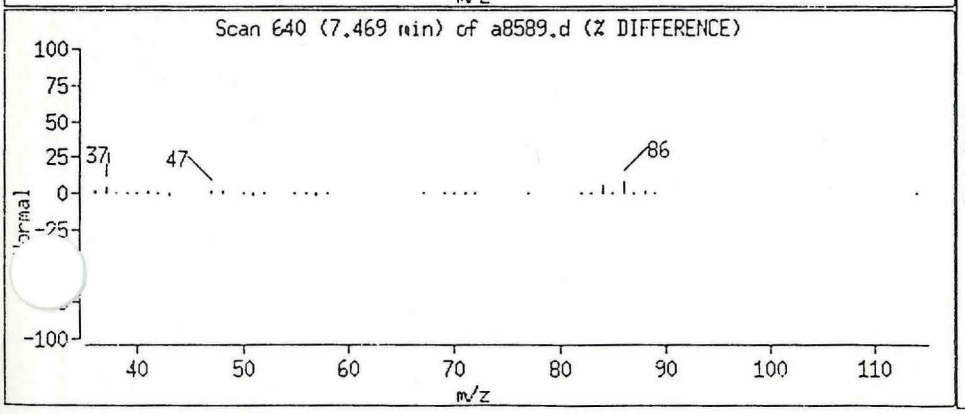
Column diameter: 0.53

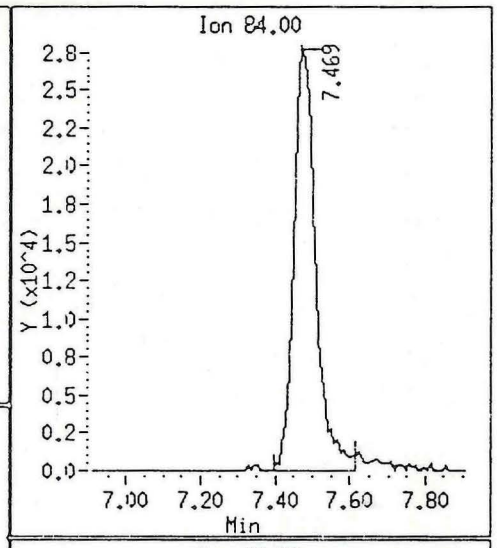
13 Methylene chloride

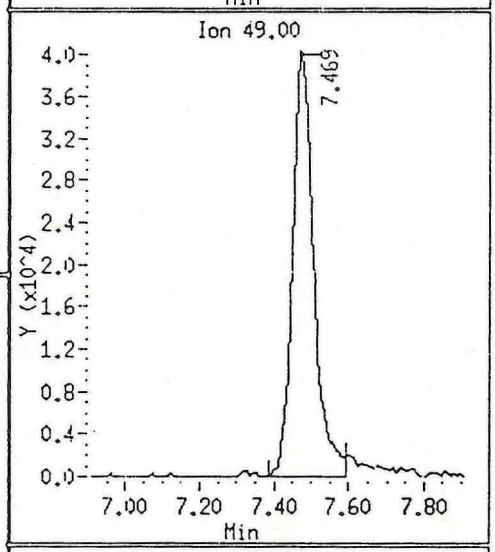


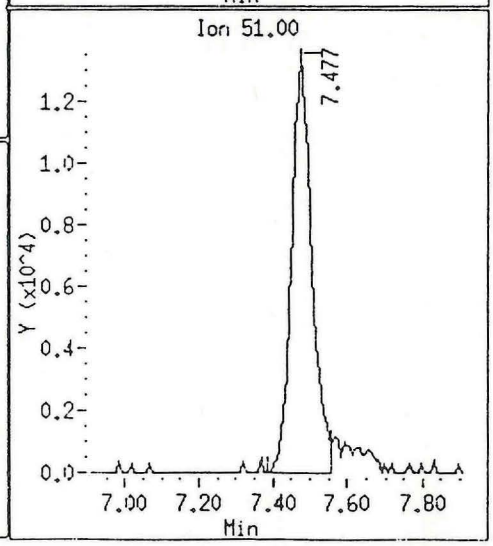












Data File: /chem/msa.i/a070196.b/a8589.d

Date : 01-JUL-96 17:27

Client ID:

Sample Info: 18221n-ssa7-w7

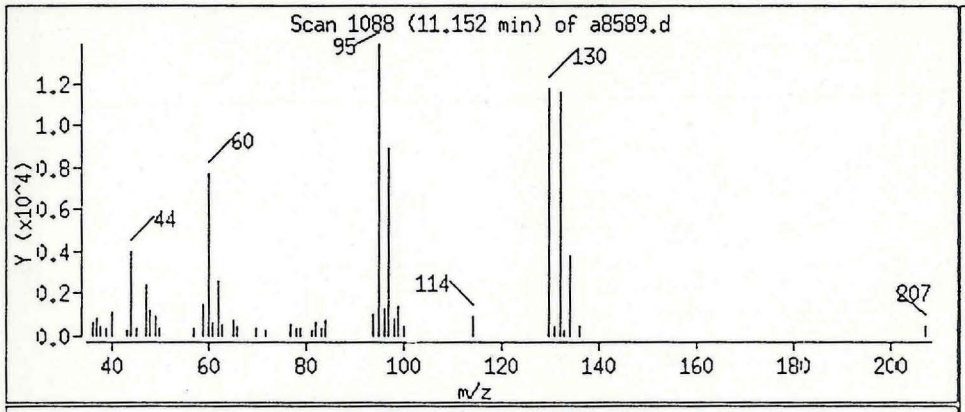
Instrument: msa.i

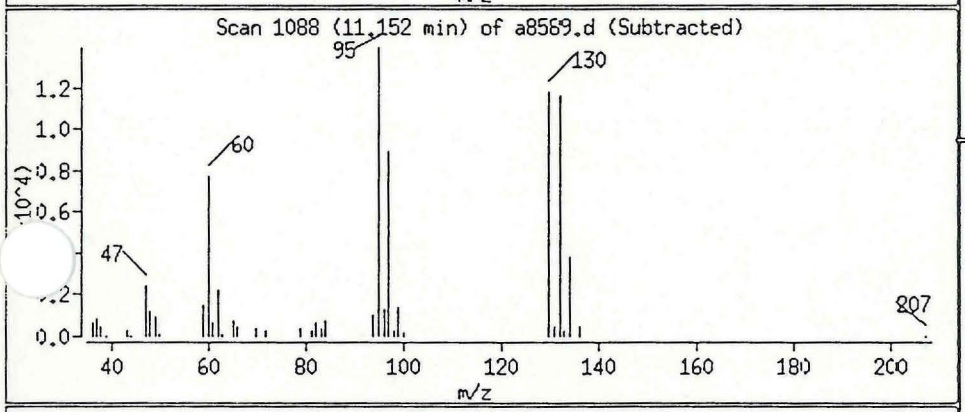
Operator: jk

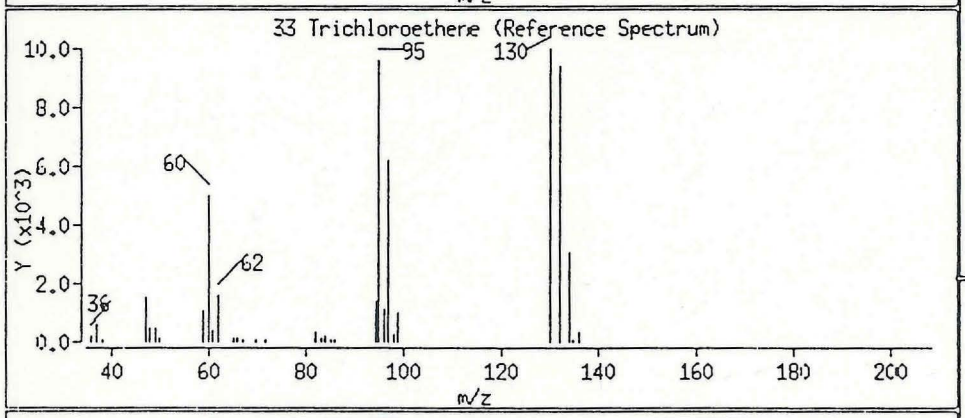
Column phase: DB-624 75m x 0.53mm

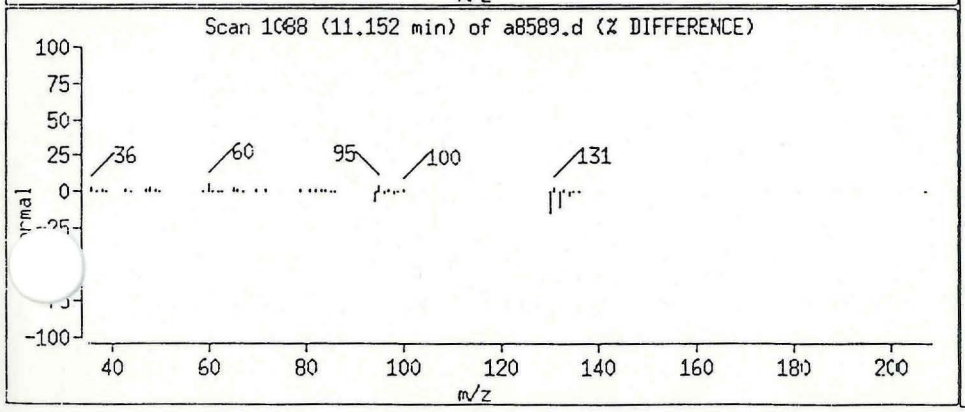
Column diameter: 0.53

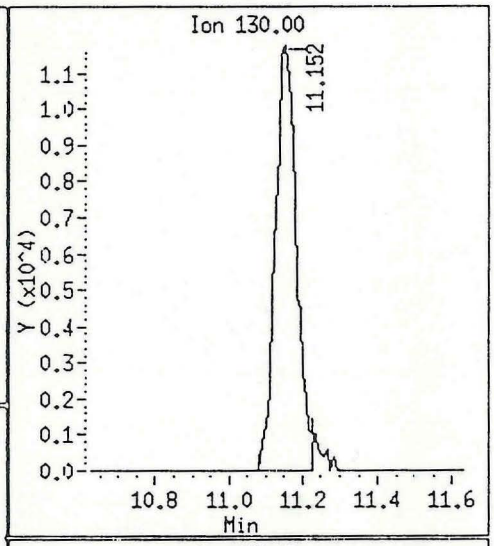
33 Trichloroethene

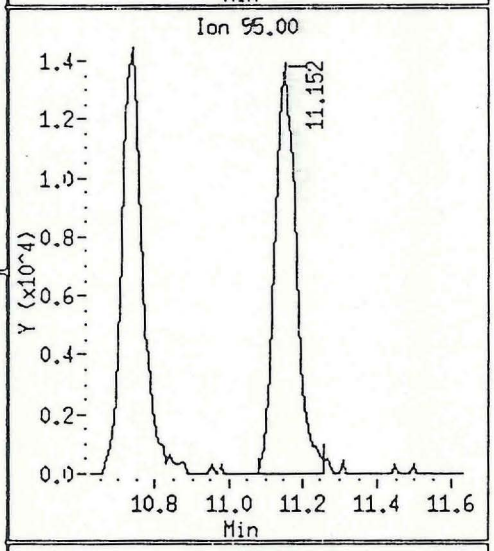


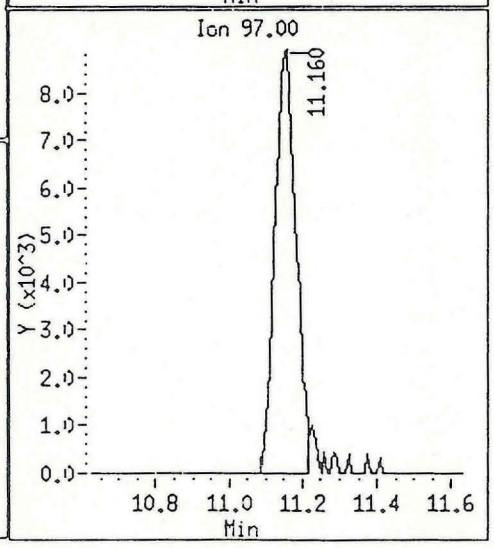












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00233

SSA7-W8

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9915V

Sample wt/vol: 5.10 (g/mL) G Lab File ID: A8567

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 19 Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	6	U
75-00-3	Chloroethane	6	U
75-09-2	Methylene Chloride	21	B
67-64-1	Acetone	7	J
75-15-0	Carbon Disulfide	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
71-55-6	1,1,1-Trichloroethane	5	BJ
56-23-5	Carbon Tetrachloride	6	U
78-87-5	1,2-Dichloropropane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
75-25-2	Bromoform	6	U
591-78-6	2-Hexanone	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U
156-60-5	1,2-Trans-dichloroethylene	6	U 7/9/96
78-93-3	2-Butanone	6	U
108-10-1	4-Methyl-2-pentanone	12	U
74-83-9	Bromomethane	6	U
74-87-3	Chloromethane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
124-48-1	Dibromochloromethane	6	U
127-18-4	Tetrachloroethene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
75-27-4	Bromodichloromethane	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00234

EPA SAMPLE NO.

SSA7-W8

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9915V

Sample wt/vol: 5.10 (g/mL) G Lab File ID: A8567

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 19 Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

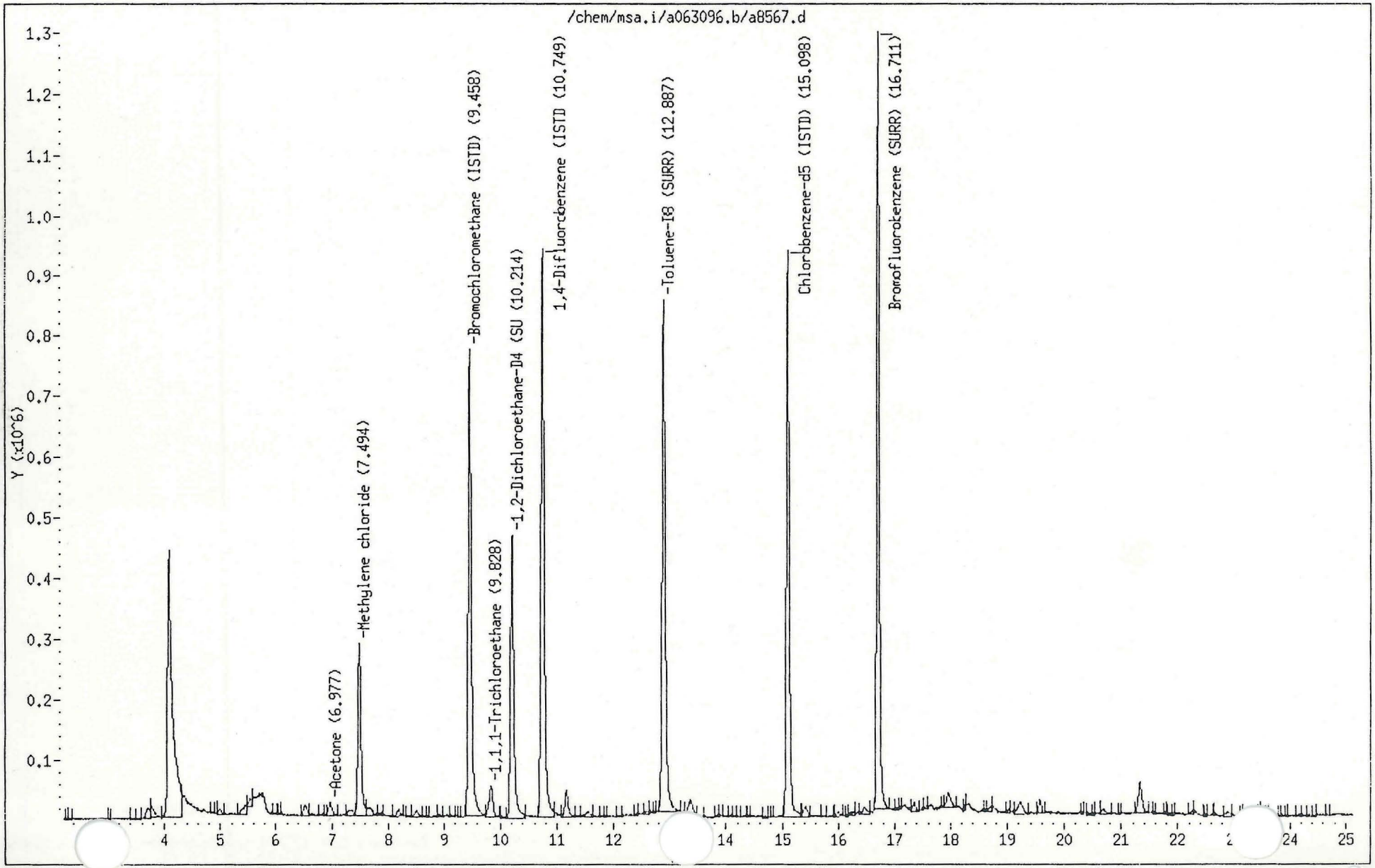
00235

Data File: /chem/msa.i/a063096.b/a8567.d
Date : 30-JUN-96 22:01
Client ID:
Sample Info: 18221n ssa7-w8

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a063096.b/a8567.d
Report Date: 01-Jul-1996 06:58

OHM Analytical Division

& TIC

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a063096.b/a8567.d
Lab Smp Id:
Inj Date : 30-JUN-96 22:01
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w8
Misc Info : jp9915v,n2v5315,qv,5000,1,5.10,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 01-Jul-1996 06:56 glenn Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 12
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/15/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
cetone	43.00	6.977	6.979	(0.738)	65799	5.90	5.90
Methylene chloride	84.00	7.494	7.425	(0.792)	248686	17.3	17.3
* 23 Bromochloromethane (ISTD)	128.00	9.458	9.428	(1.000)	363427	50.0	(Q)
25 1,1,1-Trichloroethane	97.00	9.820	9.791	(0.914)	68411	4.05	4.05
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.214	10.180	(1.080)	612151	48.3	48.3
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.749	10.716	(1.000)	1391377	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.887	12.863	(0.854)	1111235	49.2	49.2
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.098	15.075	(1.000)	904747	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.711	16.686	(1.107)	845605	55.9	55.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a063096.b/a8567.d

Date : 30-JUN-96 22:01

Client ID:

Instrument: msa.i

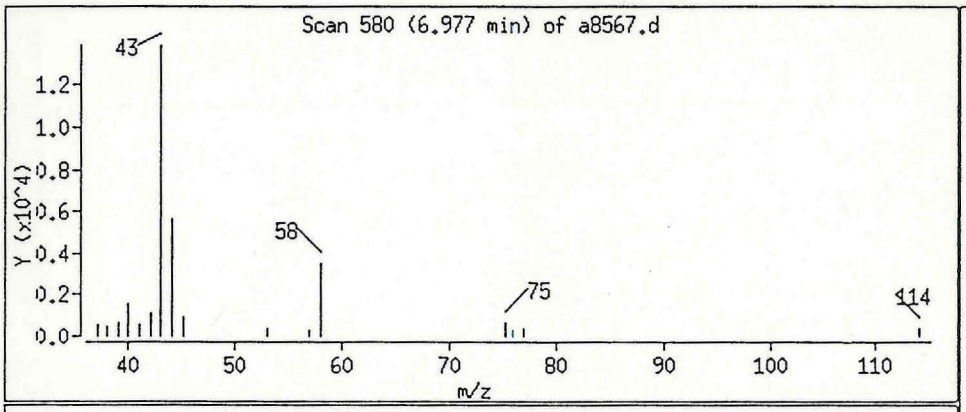
Sample Info: 18221n ssa7-w8

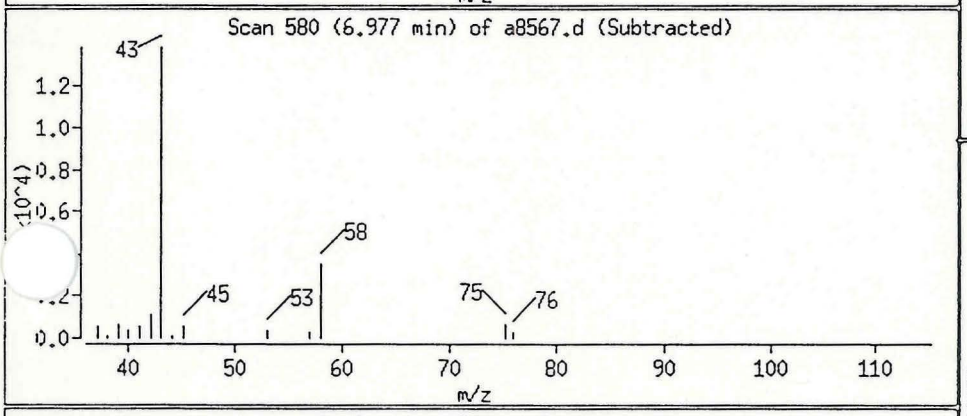
Operator: jk

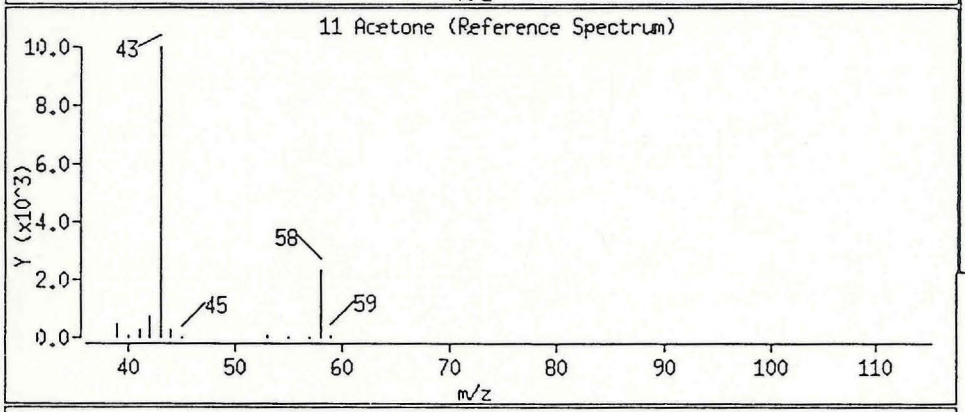
Column phase: DB-624 75m x 0.53mm

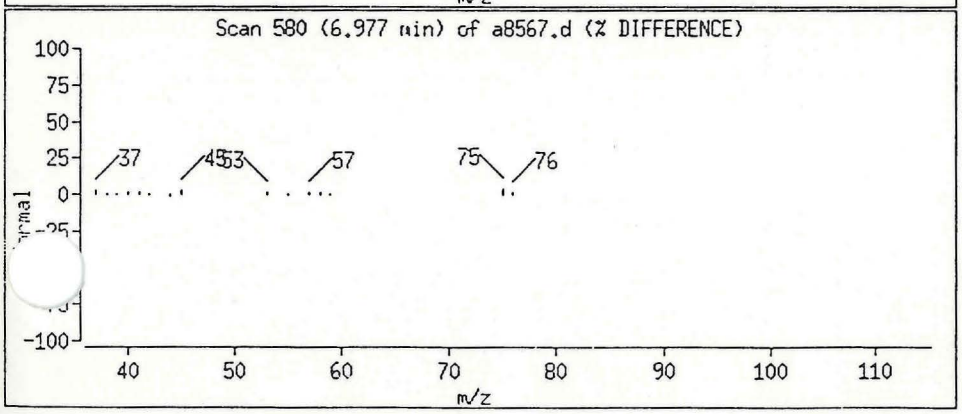
Column diameter: 0.53

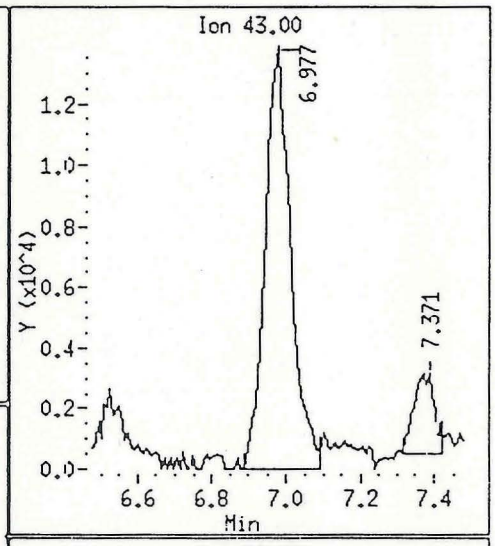
11 Acetone

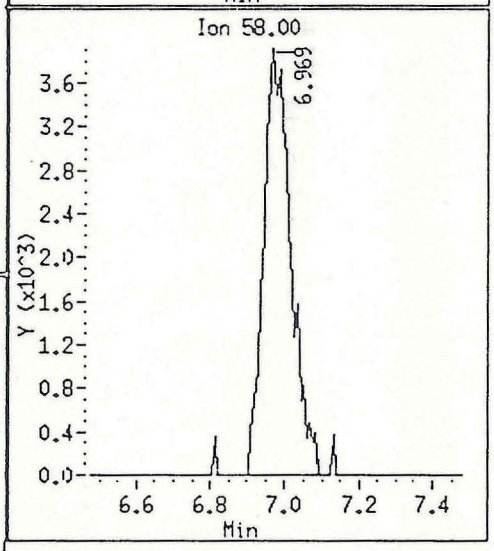












Data File: /chem/msa.i/a063096.b/a8567.d

Date : 30-JUN-96 22:01

Client ID:

Instrument: msa.i

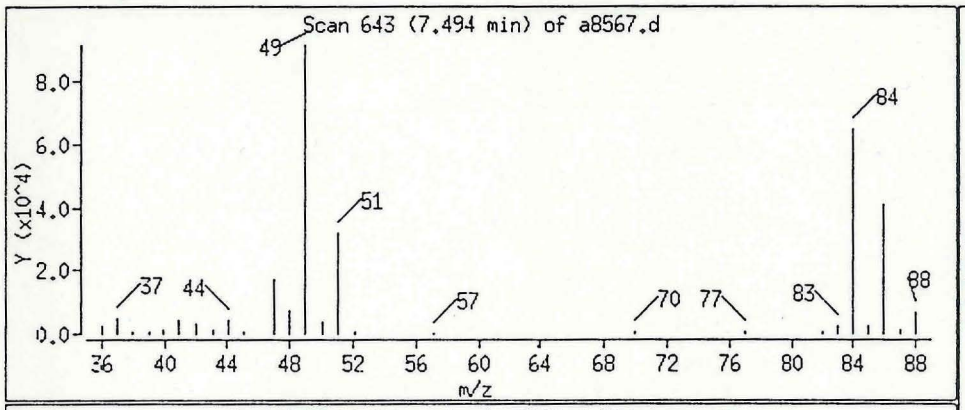
Sample Info: 18221n ssa7-w8

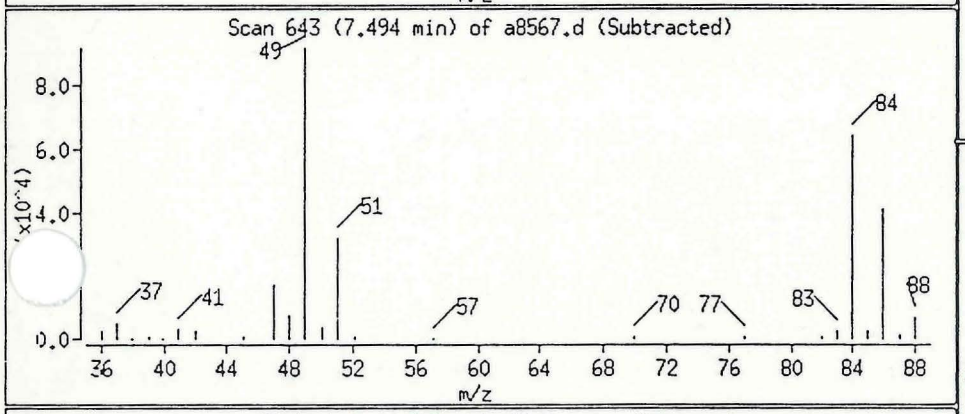
Operator: jk

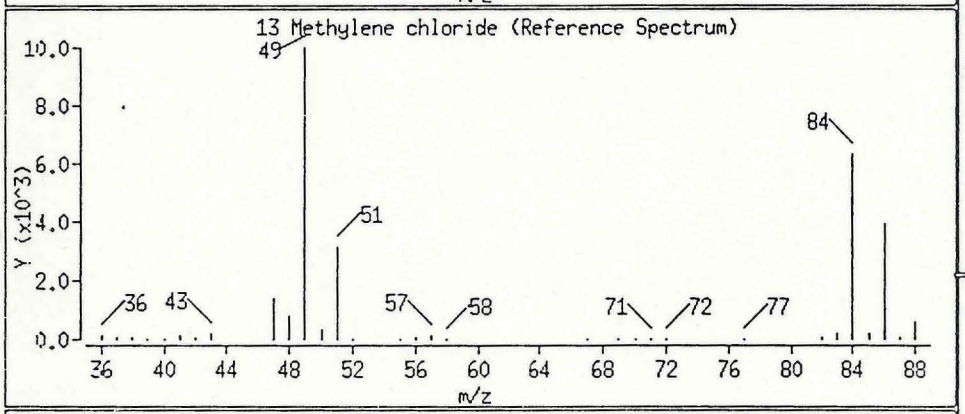
Column phase: DB-624 75m x 0.53mm

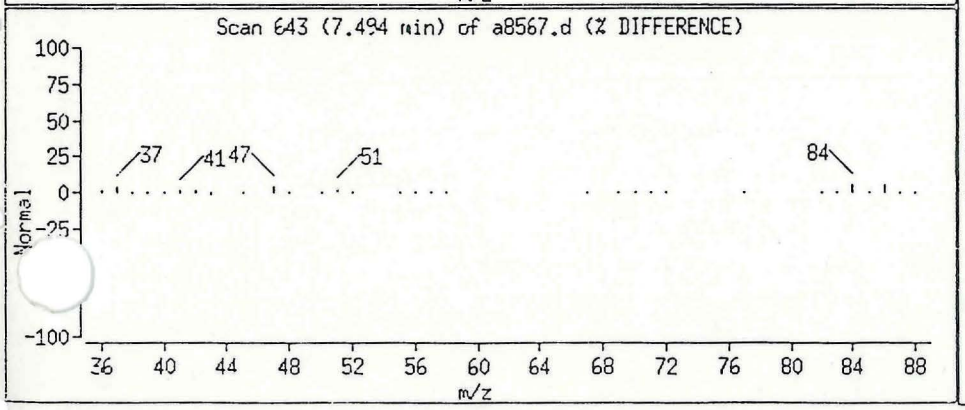
Column diameter: 0.53

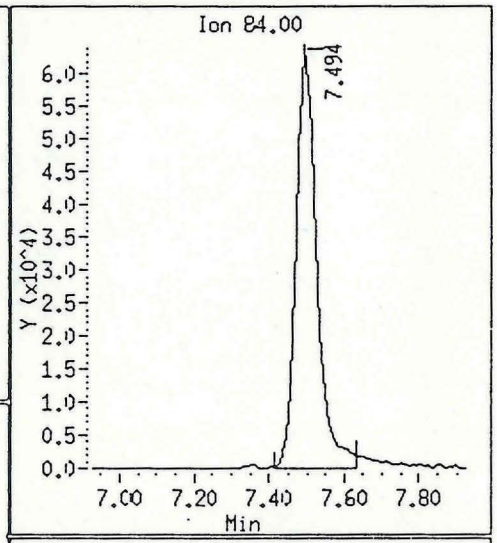
13 Methylene chloride

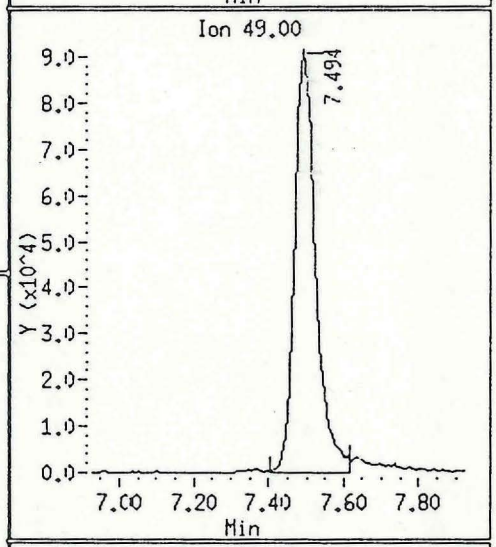


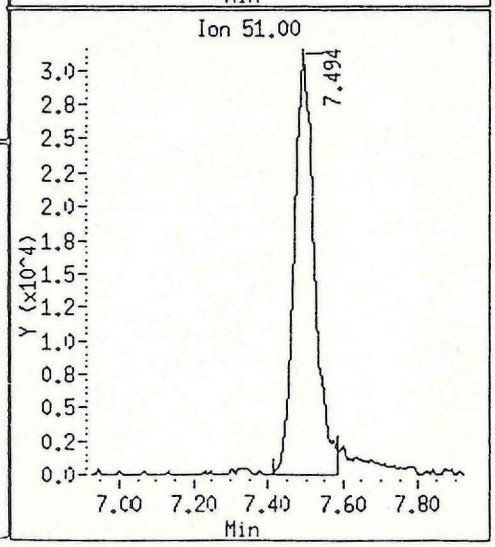












Data File: /chem/msa.i/a063096.b/a8567.d

Date : 30-JUN-96 22:01

Client ID:

Instrument: msa.i

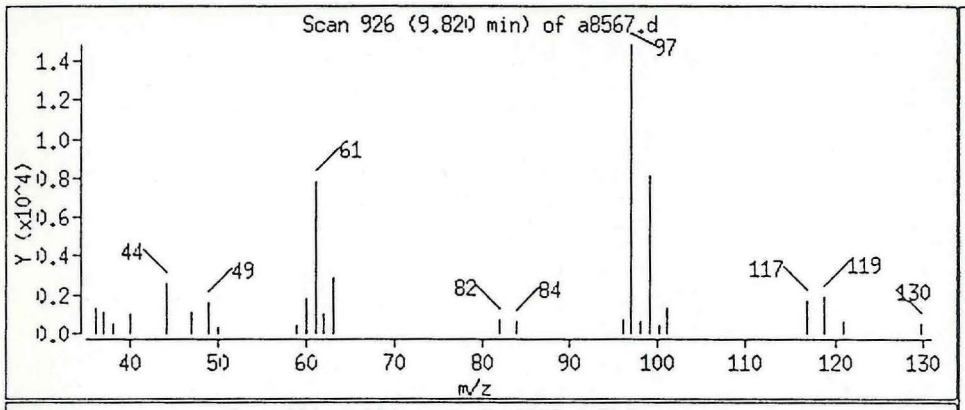
Sample Info: 18221n ssa7-w8

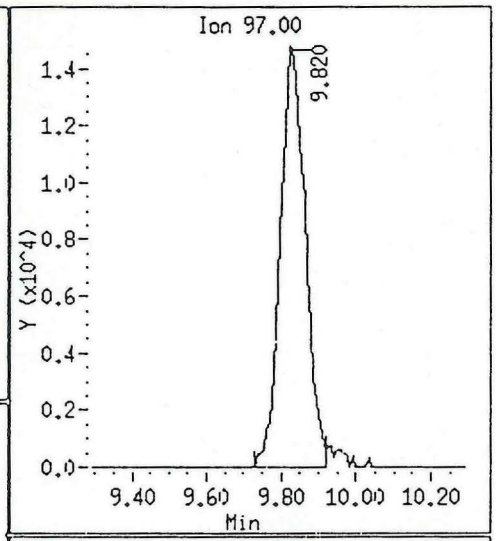
Operator: jk

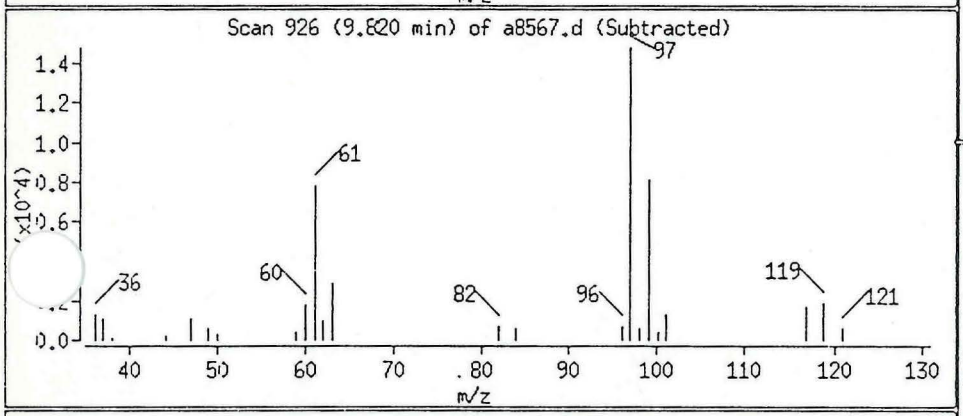
Column phase: DB-624 75m x 0.53mm

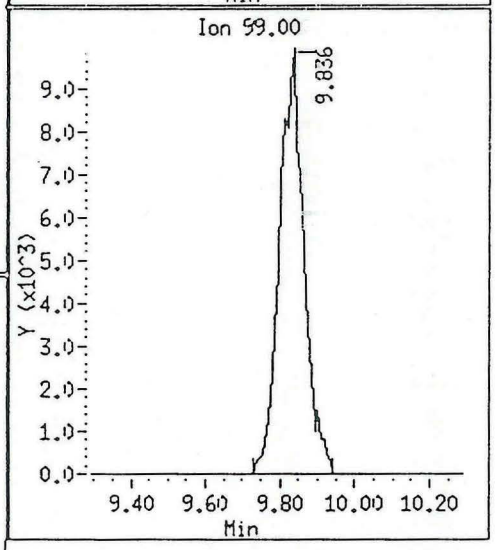
Column diameter: 0.53

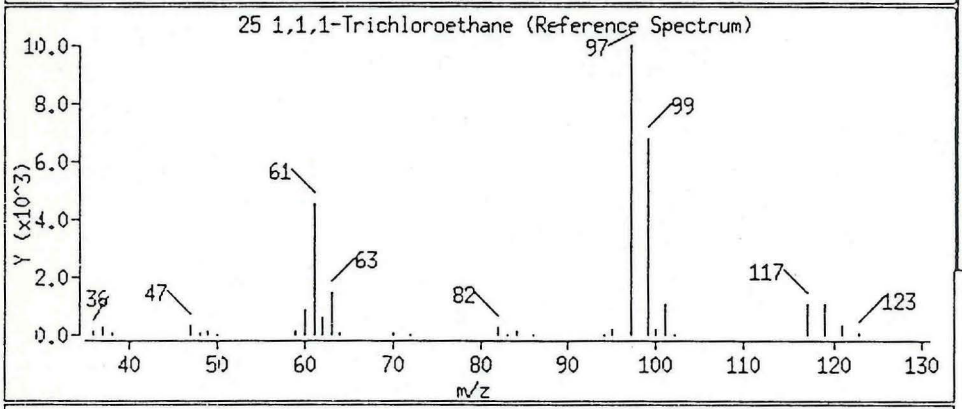
25 1,1,1-Trichloroethane

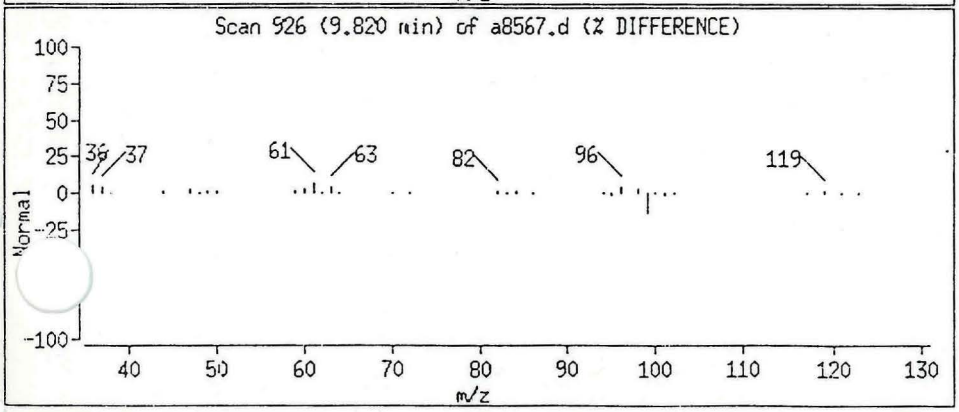












Report Date : 19-Jun-1996 10:08

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 18-JUN-96 12:11
End Cal Date : 18-JUN-96 16:06
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem/aux/msa.i/a061896.b/061896_heata.m
Cal Date : 19-Jun-1996 07:16 glenn
Curve Type : Average

8240 - ok
CLP - ok

Calibration File Names:
Level 1: /chem/aux/msa.i/a061896.b/a8299.d
Level 2: /chem/aux/msa.i/a0618a96.b/a8300.d
Level 3: /chem/aux/msa.i/a0618a96.b/a8294.d
Level 4: /chem/aux/msa.i/a0618a96.b/a8295.d
Level 5: /chem/aux/msa.i/a061896.b/a8296.d
Level 6: /chem/aux/msa.i/a061896.b/a8297.d

Compound	10 Level 1	20 Level 2	50 Level 3	100 Level 4	200 Level 5	75 Level 6	___ RRF	% RSD	
1 Dichlorodifluoromethane	1.39910	1.28750	1.77006	1.66513	1.45058	1.50298	1.51256	11.717	
2 Chloromethane	1.29747	0.97972	1.23941	1.18015	1.03141	1.12458	1.14212	10.650	
3 Vinyl chloride	1.11430	1.04007	1.35558	1.23710	1.11471	1.20153	1.17722	9.510	
4 Bromomethane	1.29829	1.02642	1.27316	1.12897	0.99394	1.11011	1.13848	10.972	
5 Chloroethane	0.60285	0.47833	0.61640	0.56844	0.50533	0.54156	0.55215	9.826	
6 Trichlorofluoromethane	2.43518	2.32416	2.29541	2.07936	1.90027	2.04103	2.17923	9.335	
7 Ethyl ether	1.00756	0.94474	1.10353	0.60916	+++++	0.85032	0.90306	20.864	
8 Acrolein	2.13750	2.13569	2.51240	2.31097	+++++	2.35426	2.29016	6.942	
9 1,1,2-Trichlorotrifluoroethan	2.49288	2.33163	3.01080	2.60483	+++++	2.40977	2.56998	10.367	
10 1,1-Dichloroethene	1.34337	1.24703	1.47576	1.32639	+++++	1.22722	1.32395	7.430	
11 Acetone	3.37712	2.31303	2.11688	1.37075	+++++	1.88262	2.21208	33.472	<-
12 Carbon disulfide	3.60414	3.42910	4.37054	4.21262	3.73619	3.95698	3.88493	9.332	
13 Methylene chloride	+++++	+++++	2.03993	1.67421	1.45189	1.53565	1.67542	15.502	
14 Acrylonitrile	0.92362	0.86219	0.94979	0.92781	0.81398	0.98340	0.91013	6.769	
15 1,2-Trans-dichloroethylene	1.34554	1.26384	1.54749	1.51538	1.36020	1.43627	1.41145	7.676	
16 Tert-Butyl Methyl Ether	3.55174	3.31963	3.76592	3.76234	3.33041	3.60714	3.55620	5.568	
17 1,1-Dichloroethane	2.85005	2.50278	2.97485	2.96172	2.57732	2.79806	2.77746	7.094	
18 Vinyl acetate	3.81191	3.58180	3.89417	3.75639	2.72064	3.66920	3.57235	12.071	
19 2-Butanone	0.15334	0.13365	0.15443	0.12646	0.10735	0.15571	0.13849	14.109	
20 1,2-cis-Dichloroethylene	1.54037	1.38994	1.64982	1.58859	1.45609	1.54446	1.52821	6.080	
21 2,2-Dichloropropane	2.07323	1.75479	2.10570	2.13019	1.94443	1.97903	1.99789	6.976	
22 Ethyl acetate	10.25605	9.57126	10.59072	9.94800	8.72453	10.35606	9.90777	6.851	
24 Chloroform	3.25856	3.05371	3.42620	3.21954	3.01746	3.16948	3.19082	4.651	
25 1,1,1-Trichloroethane	0.62296	0.56249	0.67713	0.66562	0.62439	0.63746	0.63168	6.398	
1,1-Dichloropropene	0.59417	0.51805	0.62677	0.58877	0.54226	0.58037	0.57506	6.771	
Carbon tetrachloride	0.28062	0.28030	0.39426	0.45001	0.45379	0.43851	0.38292	21.452	

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 18-JUN-96 12:11
End Cal Date : 18-JUN-96 16:06
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem/aux/msa.i/a061896.b/061896_heata.m
Cal Date : 19-Jun-1996 07:16 glenn
Curve Type : Average

Compound	10 Level 1	20 Level 2	50 Level 3	100 Level 4	200 Level 5	75 Level 6	___ RRF	% RSD
28 Isobutanol	0.34454	0.36312	0.36255	0.32320	0.23251	0.39520	0.33685	16.734
30 Benzene	1.06369	0.91323	1.06226	0.97752	0.92015	0.98810	0.98749	6.647
31 1,2-Dichloroethane	2.13288	1.90826	2.18610	1.99156	1.88097	1.99350	2.01554	6.017
33 Trichloroethene	0.47561	0.41796	0.48474	0.45012	0.42226	0.45728	0.45133	6.028
34 1,2-Dichloropropane	0.50216	0.46930	0.53943	0.50344	0.47742	0.50615	0.49982	4.955
35 Methyl methacrylate	0.42397	0.41128	0.45143	0.42611	0.41052	0.44745	0.42846	4.084
36 Dibromomethane	0.57624	0.52794	0.61068	0.56893	0.53998	0.57658	0.56673	5.201
Bromodichloromethane	0.78301	0.72590	0.87805	0.83851	0.81685	0.85250	0.81580	6.691
2-Chloroethylvinyl ether	0.25124	0.20330	0.24982	0.25160	0.28526	0.26484	0.25101	10.753
39 cis-1,3-Dichloropropene	0.66921	0.60144	0.70020	0.68049	0.65327	0.68410	0.66479	5.228
40 4-Methyl-2-pentanone	1.20927	1.29947	1.52701	1.40110	1.34129	1.50883	1.38116	8.913
42 Toluene	1.24239	1.29032	1.52284	1.42341	1.36412	1.43027	1.37889	7.399
43 trans-1,3-Dichloropropene	0.55014	0.50224	0.60471	0.58039	0.56846	0.59534	0.56688	6.546
44 1,1,2-Trichloroethane	0.48214	0.43519	0.50037	0.46604	0.44237	0.47954	0.46761	5.339
45 1,3-Dichloropropane	0.80312	0.83504	0.97201	0.90573	0.84768	0.93067	0.88237	7.281
46 Tetrachloroethene	0.39954	0.43146	0.51207	0.47461	0.43960	0.47381	0.45518	8.711
47 2-Hexanone	1.06599	1.11512	1.38871	1.22159	1.10304	1.36494	1.20990	11.527
48 Dibromochloromethane	0.72094	0.62118	0.76359	0.74946	0.73266	0.76532	0.72552	7.439
49 Ethylene dibromide	0.84526	0.92443	1.07625	1.02548	0.99636	1.05861	0.98773	8.903
51 Chlorobenzene	0.91478	0.95328	1.12532	1.06284	1.02179	1.07498	1.02550	7.715
52 1,1,1,2-Tetrachloroethane	0.41438	0.45701	0.56495	0.54604	0.53412	0.56520	0.51362	12.258
53 Ethylbenzene	0.41930	0.43909	0.51265	0.47182	0.43921	0.47931	0.46023	7.407
54 m+p-Xylenes	0.48935	0.50988	0.60255	0.56308	0.52520	0.57918	0.54487	8.012
55 o-Xylene	0.50439	0.50065	0.59349	0.55691	0.51475	0.56415	0.53906	7.029
56 Styrene	0.84807	0.90437	1.06104	0.99058	0.94307	1.02180	0.96149	8.171
57 Bromoform	0.50467	0.48897	0.62357	0.58709	0.58579	0.62104	0.56852	10.207
58 Isopropylbenzene	1.25694	1.31611	1.56532	1.45946	1.41649	1.49010	1.41740	8.041
60 1,1,2,2-Tetrachloroethane	1.21512	1.27424	1.60143	1.45727	1.38865	1.50711	1.40730	10.304
61 1,2,3-Trichloropropane	1.02587	0.98190	1.17696	1.04520	0.97025	1.12269	1.05381	7.700
62 Bromobenzene	0.48751	0.51162	0.59540	0.55277	0.53765	0.57062	0.54260	7.231
63 n-Propylbenzene	1.79679	1.91576	2.29648	2.12694	2.02777	2.16945	2.05553	8.794
64 o-Chlorotoluene	1.27547	1.35221	1.60794	1.52457	1.45642	1.53135	1.45799	8.501
1,3,5-Trimethylbenzene	1.11397	1.19034	1.43408	1.33828	1.27933	1.35475	1.28513	9.086
p-Chlorotoluene	1.28115	1.31598	1.60886	1.46190	1.43716	1.55567	1.44345	8.922

OHM Analytical Division

INITIAL CALIBRATION DATA

Start Cal Date : 18-JUN-96 12:11
End Cal Date : 18-JUN-96 16:06
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem/aux/msa.i/a061896.b/061896_heata.m
Cal Date : 19-Jun-1996 07:16 glenn
Curve Type : Average

Compound	10 Level 1	20 Level 2	50 Level 3	100 Level 4	200 Level 5	75 Level 6	___ RRF	% RSD
67 tert-Butylbenzene	1.14349	1.21488	1.45650	1.34810	1.31509	1.37426	1.30872	8.633
68 1,2,4-Trimethylbenzene	1.20413	1.22847	1.45522	1.37293	1.32583	1.46353	1.34168	8.212
69 sec-Butylbenzene	1.66496	1.76547	2.19875	1.97845	1.93126	2.05975	1.93311	10.049
70 1,3-Dichlorobenzene	0.79534	0.85299	1.01814	0.93465	0.87515	0.95816	0.90574	8.850
71 4-Isopropyltoluene	1.32013	1.33420	1.61209	1.44309	1.40838	1.50715	1.43751	7.662
72 1,4-Dichlorobenzene	0.84785	0.89717	1.11445	0.99854	0.99227	1.02118	0.97858	9.649
73 n-Butylbenzene	1.48822	1.59742	1.96432	1.75031	1.71143	1.81776	1.72158	9.684
1,2-Dichlorobenzene	0.80880	0.83975	1.03695	0.93796	0.92169	0.96902	0.91903	9.130
1,2-Dibromo-3-chloropropane	0.46102	0.52235	0.64704	0.57146	0.53854	0.63320	0.56227	12.503
76 1,2,4-Trichlorobenzene	0.65998	0.73066	0.88077	0.74754	0.74562	0.79776	0.76039	9.706
77 Hexachlorobutadiene	0.39256	0.41844	0.50449	0.41741	0.45569	0.46943	0.44300	9.275
78 Naphthalene	1.87378	1.87214	2.28343	2.02316	1.97400	2.14276	2.02821	7.933
79 1,2,3-Trichlorobenzene	0.68061	0.72161	0.88137	0.76530	0.75422	0.78544	0.76476	8.884
$ 29 1,2-Dichloroethane-D4 (SURR)	1.72124	1.50274	1.71539	1.63664	1.53387	1.68793	1.63297	5.771
$ 41 Toluene-D8 (SURR)	1.44112	1.07057	1.20608	1.16032	1.12256	1.21476	1.20257	10.693
$ 59 Bromofluorobenzene (SURR)	+++++	0.77190	0.83193	0.80121	0.76167	0.82242	0.79783	3.842

Data File: /chem/msa.i/a062896.b/a8517.d
Report Date: 10-Jul-1996 14:40

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8517.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 28-JUN-96 09:59
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a062896.b/061896_heata.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	1 Dichlorodifluoromethane	1.513	1.327	0.100	12.3	30.0	
	2 Chloromethane	1.142	1.079	0.300	5.6	30.0	
	3 Vinyl chloride	1.177	1.275	0.100	8.3	20.0	
	4 Bromomethane	1.138	1.053	0.100	7.5	30.0	
	5 Chloroethane	0.552	0.571	0.100	3.3	30.0	
	6 Trichlorofluoromethane	2.179	2.041	0.100	6.4	30.0	
	7 Ethyl ether	0.903	0.884	0.100	2.1	30.0	
	8 Acrolein	2.290	2.062	0.100	10.0	30.0	
	9 1,1,2-Trichlorotrifluoroetha	2.570	2.254	0.100	12.3	30.0	
	10 1,1-Dichloroethene	1.324	1.157	0.100	12.6	20.0	
	11 Acetone	2.212	1.297	0.100	41.4	30.0	<-
	12 Carbon disulfide	3.885	3.295	0.100	15.2	30.0	
	13 Methylene chloride	1.675	1.551	0.100	7.4	30.0	
	14 Acrylonitrile	0.910	0.932	0.100	2.4	30.0	
	15 1,2-Trans-dichloroethylene	1.411	1.384	0.100	1.9	30.0	
	16 Tert-Butyl Methyl Ether	3.556	3.411	0.100	4.1	30.0	
	17 1,1-Dichloroethane	2.777	2.837	0.300	2.2	30.0	
	18 Vinyl acetate	3.572	4.218	0.100	18.1	30.0	
	19 2-Butanone	0.138	0.126	0.010	9.0	30.0	
	20 1,2-cis-Dichloroethylene	1.528	1.555	0.100	1.8	30.0	
	21 2,2-Dichloropropane	1.998	1.961	0.100	1.9	30.0	
	22 Ethyl acetate	9.908	9.804	0.100	1.0	30.0	
	24 Chloroform	3.191	3.115	0.200	2.4	20.0	
	25 1,1,1-Trichloroethane	0.632	0.620	0.100	1.8	30.0	
	26 1,1-Dichloropropene	0.575	0.563	0.100	2.2	30.0	
	27 Carbon tetrachloride	0.383	0.506	0.100	32.2	30.0	<-
	28 Isobutanol	0.337	0.354	0.010	5.2	30.0	
$	29 1,2-Dichloroethane-D4 (SURR)	1.633	1.733	0.100	6.1	30.0	
	30 Benzene	0.987	0.986	0.500	0.1	30.0	
	31 1,2-Dichloroethane	2.016	1.956	0.100	3.0	30.0	
	33 Trichloroethene	0.451	0.438	0.300	3.0	30.0	
	34 1,2-Dichloropropane	0.500	0.519	0.100	3.7	20.0	
	35 Methyl methacrylate	0.428	0.464	0.100	8.3	30.0	
	36 Dibromomethane	0.567	0.563	0.100	0.7	30.0	
	37 Bromodichloromethane	0.816	0.810	0.200	0.8	30.0	
	38 2-Chloroethylvinyl ether	0.251	0.253	0.100	1.0	30.0	
	39 cis-1,3-Dichloropropene	0.665	0.664	0.200	0.1	30.0	
	40 4-Methyl-2-pentanone	1.381	1.428	0.100	3.4	30.0	
$	41 Toluene-D8 (SURR)	1.203	1.265	0.100	5.2	30.0	
	42 Toluene	1.379	1.445	0.400	4.8	20.0	

MLC
7/10/96

CLP-OK

Data File: /chem/msa.i/a062896.b/a8517.d
Report Date: 10-Jul-1996 14:40

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8517.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 28-JUN-96 09:59
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a062896.b/061896_heata.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	43 trans-1,3-Dichloropropene	0.567	0.576	0.100	1.6	30.0	
	44 1,1,2-Trichloroethane	0.468	0.472	0.100	1.0	30.0	
	45 1,3-Dichloropropane	0.882	0.950	0.100	7.6	30.0	
	46 Tetrachloroethene	0.455	0.479	0.200	5.1	30.0	
	47 2-Hexanone	1.210	1.234	0.100	2.0	30.0	
	48 Dibromochloromethane	0.726	0.743	0.100	2.5	30.0	
	49 Ethylene dibromide	0.988	1.041	0.100	5.4	30.0	
	51 Chlorobenzene	1.026	1.071	0.500	4.4	30.0	
	52 1,1,1,2-Tetrachloroethane	0.514	0.571	0.100	11.2	30.0	
	53 Ethylbenzene	0.460	0.480	0.100	4.3	20.0	
	54 m+p-Xylenes	0.545	0.576	0.300	5.7	30.0	
	55 o-Xylene	0.539	0.577	0.300	7.1	30.0	
	56 Styrene	0.961	1.016	0.300	5.6	30.0	
	57 Bromoform	0.569	0.577	0.100	1.4	30.0	
	58 Isopropylbenzene	1.417	1.662	0.100	17.2	30.0	
$	59 Bromofluorobenzene (SURR)	0.798	0.843	0.200	5.7	30.0	
	60 1,1,2,2-Tetrachloroethane	1.407	1.522	0.300	8.1	30.0	
	61 1,2,3-Trichloropropane	1.054	1.392	0.100	32.1	30.0	<-
	62 Bromobenzene	0.543	0.562	0.100	3.6	30.0	
	63 n-Propylbenzene	2.056	2.142	0.100	4.2	30.0	
	64 o-Chlorotoluene	1.458	1.521	0.100	4.3	30.0	
	65 1,3,5-Trimethylbenzene	1.285	1.327	0.100	3.3	30.0	
	66 p-Chlorotoluene	1.443	1.469	0.100	1.7	30.0	
	67 tert-Butylbenzene	1.309	1.519	0.100	16.1	30.0	
	68 1,2,4-Trimethylbenzene	1.342	1.412	0.100	5.2	30.0	
	69 sec-Butylbenzene	1.933	2.042	0.100	5.6	30.0	
	70 1,3-Dichlorobenzene	0.906	0.940	0.100	3.8	30.0	
	71 4-Isopropyltoluene	1.438	1.557	0.100	8.3	30.0	
	72 1,4-Dichlorobenzene	0.979	0.997	0.100	1.8	30.0	
	73 n-Butylbenzene	1.722	1.784	0.100	3.6	30.0	
	74 1,2-Dichlorobenzene	0.919	0.953	0.100	3.7	30.0	
	75 1,2-Dibromo-3-chloropropane	0.562	0.567	0.100	0.9	30.0	
	76 1,2,4-Trichlorobenzene	0.760	0.785	0.100	3.2	30.0	
	77 Hexachlorobutadiene	0.443	0.462	0.100	4.4	30.0	
	78 Naphthalene	2.028	2.056	0.100	1.4	30.0	
	79 1,2,3-Trichlorobenzene	0.765	0.780	0.100	2.0	30.0	

Data File: /chem/msa.i/a062996.b/a8539.d
Report Date: 29-Jun-1996 11:48

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8539.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 29-JUN-96 11:01
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a062996.b/061896_heata.m

ND
6/28/96
CLP ✓

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
1 Dichlorodifluoromethane	1.513	1.315	0.100	13.1	30.0	
2 Chloromethane	1.142	1.205	0.300	5.5	30.0	
3 Vinyl chloride	1.177	1.336	0.100	13.5	20.0	
4 Bromomethane	1.138	0.940	0.100	17.4	30.0	
5 Chloroethane	0.552	0.631	0.100	14.3	30.0	
6 Trichlorofluoromethane	2.179	2.094	0.100	3.9	30.0	
7 Ethyl ether	0.903	0.990	0.100	9.7	30.0	
8 Acrolein	2.290	2.159	0.100	5.7	30.0	
9 1,1,2-Trichlorotrifluoroetha	2.570	2.447	0.100	4.8	30.0	
10 1,1-Dichloroethene	1.324	1.182	0.100	10.7	20.0	
11 Acetone	2.212	1.381	0.100	37.6	30.0	<- OK
12 Carbon disulfide	3.885	3.471	0.100	10.7	30.0	
13 Methylene chloride	1.675	1.627	0.100	2.9	30.0	
14 Acrylonitrile	0.910	0.938	0.100	3.0	30.0	
15 1,2-Trans-dichloroethylene	1.411	1.421	0.100	0.6	30.0	
16 Tert-Butyl Methyl Ether	3.556	3.485	0.100	2.0	30.0	
17 1,1-Dichloroethane	2.777	2.869	0.300	3.3	30.0	
18 Vinyl acetate	3.572	1.070	0.100	70.0	30.0	<- OK
19 2-Butanone	0.138	0.134	0.010	3.2	30.0	
20 1,2-cis-Dichloroethylene	1.528	1.537	0.100	0.6	30.0	
21 2,2-Dichloropropane	1.998	1.953	0.100	2.3	30.0	
22 Ethyl acetate	9.908	10.194	0.100	2.9	30.0	
24 Chloroform	3.191	3.158	0.200	1.0	20.0	
25 1,1,1-Trichloroethane	0.632	0.629	0.100	0.4	30.0	
26 1,1-Dichloropropene	0.575	0.570	0.100	1.0	30.0	
27 Carbon tetrachloride	0.383	0.398	0.100	3.9	30.0	
28 Isobutanol	0.337	++++	0.010	++++	30.0	<- Not in std
$ 29 1,2-Dichloroethane-D4 (SURR)	1.633	1.699	0.100	4.0	30.0	
30 Benzene	0.987	1.013	0.500	2.6	30.0	
31 1,2-Dichloroethane	2.016	1.992	0.100	1.1	30.0	
33 Trichloroethene	0.451	0.446	0.300	1.2	30.0	
34 1,2-Dichloropropane	0.500	0.512	0.100	2.4	20.0	
35 Methyl methacrylate	0.428	++++	0.100	++++	30.0	<- Not in std
36 Dibromomethane	0.567	0.562	0.100	0.9	30.0	
37 Bromodichloromethane	0.816	0.809	0.200	0.8	30.0	
38 2-Chloroethylvinyl ether	0.251	0.276	0.100	9.8	30.0	
39 cis-1,3-Dichloropropene	0.665	0.659	0.200	0.8	30.0	
40 4-Methyl-2-pentanone	1.381	1.442	0.100	4.4	30.0	
$ 41 Toluene-D8 (SURR)	1.203	1.195	0.100	0.6	30.0	
42 Toluene	1.379	1.449	0.400	5.1	20.0	

Data File: /chem/msa.i/a062996.b/a8539.d
Report Date: 29-Jun-1996 11:48

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8539.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 29-JUN-96 11:01
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a062996.b/061896_heata.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	43 trans-1,3-Dichloropropene	0.567	0.567	0.100	0.1	30.0
	44 1,1,2-Trichloroethane	0.468	0.477	0.100	2.0	30.0
	45 1,3-Dichloropropane	0.882	0.927	0.100	5.1	30.0
	46 Tetrachloroethene	0.455	0.476	0.200	4.5	30.0
	47 2-Hexanone	1.210	1.249	0.100	3.2	30.0
	48 Dibromochloromethane	0.726	0.735	0.100	1.3	30.0
	49 Ethylene dibromide	0.988	1.008	0.100	2.0	30.0
	51 Chlorobenzene	1.026	1.048	0.500	2.2	30.0
	52 1,1,1,2-Tetrachloroethane	0.514	0.543	0.100	5.8	30.0
	53 Ethylbenzene	0.460	0.484	0.100	5.2	20.0
	54 m+p-Xylenes	0.545	0.567	0.300	4.1	30.0
	55 o-Xylene	0.539	0.572	0.300	6.2	30.0
	56 Styrene	0.961	1.010	0.300	5.1	30.0
	57 Bromoform	0.569	0.571	0.100	0.5	30.0
	58 Isopropylbenzene	1.417	1.624	0.100	14.5	30.0
$	59 Bromofluorobenzene (SURR)	0.798	0.805	0.200	0.9	30.0
	60 1,1,2,2-Tetrachloroethane	1.407	1.521	0.300	8.1	30.0
	61 1,2,3-Trichloropropane	1.054	1.112	0.100	5.5	30.0
	62 Bromobenzene	0.543	0.565	0.100	4.1	30.0
	63 n-Propylbenzene	2.056	2.165	0.100	5.3	30.0
	64 o-Chlorotoluene	1.458	1.535	0.100	5.3	30.0
	65 1,3,5-Trimethylbenzene	1.285	1.340	0.100	4.3	30.0
	66 p-Chlorotoluene	1.443	1.484	0.100	2.8	30.0
	67 tert-Butylbenzene	1.309	1.396	0.100	6.6	30.0
	68 1,2,4-Trimethylbenzene	1.342	1.398	0.100	4.2	30.0
	69 sec-Butylbenzene	1.933	2.040	0.100	5.5	30.0
	70 1,3-Dichlorobenzene	0.906	0.953	0.100	5.2	30.0
	71 4-Isopropyltoluene	1.438	1.527	0.100	6.2	30.0
	72 1,4-Dichlorobenzene	0.979	1.015	0.100	3.7	30.0
	73 n-Butylbenzene	1.722	1.788	0.100	3.9	30.0
	74 1,2-Dichlorobenzene	0.919	0.948	0.100	3.2	30.0
	75 1,2-Dibromo-3-chloropropane	0.562	0.584	0.100	3.9	30.0
	76 1,2,4-Trichlorobenzene	0.760	0.780	0.100	2.6	30.0
	77 Hexachlorobutadiene	0.443	0.448	0.100	1.1	30.0
	78 Naphthalene	2.028	2.006	0.100	1.1	30.0
	79 1,2,3-Trichlorobenzene	0.765	0.787	0.100	2.9	30.0

Data File: /chem/msa.i/a063096.b/a8558.d
Report Date: 30-Jun-1996 17:25

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8558.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 30-JUN-96 16:50
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a063096.b/061896_heata.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	1 Dichlorodifluoromethane	1.513	1.305	0.100	13.7	30.0	
	2 Chloromethane	1.142	1.311	0.300	14.8	30.0	
	3 Vinyl chloride	1.177	1.474	0.100	25.2	20.0	<-
	4 Bromomethane	1.138	0.950	0.100	16.6	30.0	
	5 Chloroethane	0.552	0.625	0.100	13.1	30.0	
	6 Trichlorofluoromethane	2.179	1.857	0.100	14.8	30.0	
	7 Ethyl ether	0.903	0.992	0.100	9.9	30.0	
	8 Acrolein	2.290	2.464	0.100	7.6	30.0	
	9 1,1,2-Trichlorotrifluoroetha	2.570	2.406	0.100	6.4	30.0	
	10 1,1-Dichloroethene	1.324	1.260	0.100	4.8	20.0	
	11 Acetone	2.212	1.535	0.100	30.6	30.0	<- OK
	12 Carbon disulfide	3.885	3.570	0.100	8.1	30.0	
	13 Methylene chloride	1.675	1.982	0.100	18.3	30.0	
	14 Acrylonitrile	0.910	1.082	0.100	18.9	30.0	
	15 1,2-Trans-dichloroethylene	1.411	1.418	0.100	0.5	30.0	
	16 Tert-Butyl Methyl Ether	3.556	3.697	0.100	4.0	30.0	
	17 1,1-Dichloroethane	2.777	3.106	0.300	11.8	30.0	
	18 Vinyl acetate	3.572	1.134	0.100	68.2	30.0	<- OK
	19 2-Butanone	0.138	0.138	0.010	0.2	30.0	
	20 1,2-cis-Dichloroethylene	1.528	1.645	0.100	7.6	30.0	
	21 2,2-Dichloropropane	1.998	2.046	0.100	2.4	30.0	
	22 Ethyl acetate	9.908	11.344	0.100	14.5	30.0	
	24 Chloroform	3.191	3.219	0.200	0.9	20.0	
	25 1,1,1-Trichloroethane	0.632	0.607	0.100	4.0	30.0	
	26 1,1-Dichloropropene	0.575	0.583	0.100	1.3	30.0	
	27 Carbon tetrachloride	0.383	0.416	0.100	8.7	30.0	
	28 Isobutanol	0.337	++++	0.010	++++	30.0	<- Not in std
$	29 1,2-Dichloroethane-D4 (SURR)	1.633	1.745	0.100	6.8	30.0	
	30 Benzene	0.987	1.033	0.500	4.6	30.0	
	31 1,2-Dichloroethane	2.016	1.998	0.100	0.9	30.0	
	33 Trichloroethene	0.451	0.436	0.300	3.3	30.0	
	34 1,2-Dichloropropane	0.500	0.543	0.100	8.7	20.0	
	35 Methyl methacrylate	0.428	++++	0.100	++++	30.0	<- Not in std
	36 Dibromomethane	0.567	0.558	0.100	1.6	30.0	
	37 Bromodichloromethane	0.816	0.792	0.200	3.0	30.0	
	38 2-Chloroethylvinyl ether	0.251	0.291	0.100	15.9	30.0	
	39 cis-1,3-Dichloropropene	0.665	0.683	0.200	2.7	30.0	
	40 4-Methyl-2-pentanone	1.381	1.513	0.100	9.6	30.0	
$	41 Toluene-D8 (SURR)	1.203	1.247	0.100	3.7	30.0	
	42 Toluene	1.379	1.461	0.400	5.9	20.0	

CLP OK
JCL 6/30/96

VC > 25% however still meets CLP Table 5 criteria
JCL 6/30/96

Data File: /chem/msa.i/a063096.b/a8558.d
Report Date: 30-Jun-1996 17:25

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8558.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 30-JUN-96 16:50
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a063096.b/061896_heata.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	43 trans-1,3-Dichloropropene	0.567	0.568	0.100	0.3	30.0
	44 1,1,2-Trichloroethane	0.468	0.478	0.100	2.2	30.0
	45 1,3-Dichloropropane	0.882	0.951	0.100	7.8	30.0
	46 Tetrachloroethene	0.455	0.453	0.200	0.4	30.0
	47 2-Hexanone	1.210	1.303	0.100	7.7	30.0
	48 Dibromochloromethane	0.726	0.703	0.100	3.1	30.0
	49 Ethylene dibromide	0.988	0.989	0.100	0.2	30.0
	51 Chlorobenzene	1.026	1.071	0.500	4.5	30.0
	52 1,1,1,2-Tetrachloroethane	0.514	0.524	0.100	2.0	30.0
	53 Ethylbenzene	0.460	0.482	0.100	4.7	20.0
	54 m+p-Xylenes	0.545	0.577	0.300	5.8	30.0
	55 o-Xylene	0.539	0.564	0.300	4.7	30.0
	56 Styrene	0.961	1.005	0.300	4.5	30.0
	57 Bromoform	0.569	0.532	0.100	6.4	30.0
	58 Isopropylbenzene	1.417	1.627	0.100	14.8	30.0
$	59 Bromofluorobenzene (SURR)	0.798	0.835	0.200	4.7	30.0
	60 1,1,2,2-Tetrachloroethane	1.407	1.508	0.300	7.2	30.0
	61 1,2,3-Trichloropropane	1.054	1.091	0.100	3.6	30.0
	62 Bromobenzene	0.543	0.530	0.100	2.3	30.0
	63 n-Propylbenzene	2.056	2.157	0.100	4.9	30.0
	64 o-Chlorotoluene	1.458	1.494	0.100	2.5	30.0
	65 1,3,5-Trimethylbenzene	1.285	1.313	0.100	2.2	30.0
	66 p-Chlorotoluene	1.443	1.459	0.100	1.0	30.0
	67 tert-Butylbenzene	1.309	1.340	0.100	2.4	30.0
	68 1,2,4-Trimethylbenzene	1.342	1.381	0.100	2.9	30.0
	69 sec-Butylbenzene	1.933	2.011	0.100	4.0	30.0
	70 1,3-Dichlorobenzene	0.906	0.910	0.100	0.5	30.0
	71 4-Isopropyltoluene	1.438	1.516	0.100	5.4	30.0
	72 1,4-Dichlorobenzene	0.979	0.975	0.100	0.4	30.0
	73 n-Butylbenzene	1.722	1.768	0.100	2.7	30.0
	74 1,2-Dichlorobenzene	0.919	0.908	0.100	1.2	30.0
	75 1,2-Dibromo-3-chloropropane	0.562	0.558	0.100	0.7	30.0
	76 1,2,4-Trichlorobenzene	0.760	0.732	0.100	3.7	30.0
	77 Hexachlorobutadiene	0.443	0.428	0.100	3.3	30.0
	78 Naphthalene	2.028	1.906	0.100	6.0	30.0
	79 1,2,3-Trichlorobenzene	0.765	0.734	0.100	4.1	30.0

Data File: /chem/msa.i/a070196.b/a8584.d
Report Date: 01-Jul-1996 15:10

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8584.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 01-JUL-96 14:25
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a070196.b/061896_heata.m

7/1/96

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	1 Dichlorodifluoromethane	1.513	1.403	0.100	7.2	30.0	
	2 Chloromethane	1.142	1.144	0.300	0.2	30.0	
	3 Vinyl chloride	1.177	1.251	0.100	6.3	20.0	
	4 Bromomethane	1.138	0.952	0.100	16.4	30.0	
	5 Chloroethane	0.552	0.621	0.100	12.4	30.0	
	6 Trichlorofluoromethane	2.179	1.998	0.100	8.3	30.0	
	7 Ethyl ether	0.903	0.976	0.100	8.1	30.0	
	8 Acrolein	2.290	2.447	0.100	6.9	30.0	
	9 1,1,2-Trichlorotrifluoroetha	2.570	2.444	0.100	4.9	30.0	
	10 1,1-Dichloroethene	1.324	1.250	0.100	5.6	20.0	
	11 Acetone	2.212	1.486	0.100	32.8	30.0	<- OK
	12 Carbon disulfide	3.885	4.094	0.100	5.4	30.0	
	13 Methylene chloride	1.675	1.602	0.100	4.4	30.0	
	14 Acrylonitrile	0.910	0.982	0.100	7.9	30.0	
	15 1,2-Trans-dichloroethylene	1.411	1.450	0.100	2.7	30.0	
	16 Tert-Butyl Methyl Ether	3.556	3.592	0.100	1.0	30.0	
	17 1,1-Dichloroethane	2.777	2.901	0.300	4.4	30.0	
	18 Vinyl acetate	3.572	1.031	0.100	71.1	30.0	<- OK
	19 2-Butanone	0.138	0.140	0.010	0.8	30.0	
	20 1,2-cis-Dichloroethylene	1.528	1.601	0.100	4.8	30.0	
	21 2,2-Dichloropropane	1.998	1.959	0.100	1.9	30.0	
	22 Ethyl acetate	9.908	10.308	0.100	4.0	30.0	
	24 Chloroform	3.191	3.099	0.200	2.9	20.0	
	25 1,1,1-Trichloroethane	0.632	0.606	0.100	4.1	30.0	
	26 1,1-Dichloropropene	0.575	0.579	0.100	0.7	30.0	
	27 Carbon tetrachloride	0.383	0.436	0.100	13.8	30.0	
	~~28 Isobutanol~~	~~0.337~~	~~1.035~~	~~0.010~~	~~207.2~~	~~30.0~~	<- Not Spiked
$	29 1,2-Dichloroethane-D4 (SURR)	1.633	1.658	0.100	1.5	30.0	
	30 Benzene	0.987	0.985	0.500	0.3	30.0	
	31 1,2-Dichloroethane	2.016	1.930	0.100	4.2	30.0	
	33 Trichloroethene	0.451	0.447	0.300	1.0	30.0	
	34 1,2-Dichloropropane	0.500	0.512	0.100	2.5	20.0	
	~~35 Methyl methacrylate~~	~~0.428~~	~~0.000~~	~~0.100~~	~~99.9~~	~~30.0~~	<- Not Spiked
	36 Dibromomethane	0.567	0.554	0.100	2.3	30.0	
	37 Bromodichloromethane	0.816	0.779	0.200	4.5	30.0	
	38 2-Chloroethylvinyl ether	0.251	0.281	0.100	11.9	30.0	
	39 cis-1,3-Dichloropropene	0.665	0.659	0.200	0.9	30.0	
	40 4-Methyl-2-pentanone	1.381	1.418	0.100	2.7	30.0	
$	41 Toluene-D8 (SURR)	1.203	1.219	0.100	1.4	30.0	
	42 Toluene	1.379	1.423	0.400	3.2	20.0	

Data File: /chem/msa.i/a070196.b/a8584.d
Report Date: 01-Jul-1996 15:10

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8584.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 01-JUL-96 14:25
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a070196.b/061896_heata.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
43 trans-1,3-Dichloropropene	0.567	0.556	0.100	2.0	30.0
44 1,1,2-Trichloroethane	0.468	0.465	0.100	0.6	30.0
45 1,3-Dichloropropane	0.882	0.921	0.100	4.4	30.0
46 Tetrachloroethene	0.455	0.468	0.200	2.8	30.0
47 2-Hexanone	1.210	1.235	0.100	2.1	30.0
48 Dibromochloromethane	0.726	0.714	0.100	1.6	30.0
49 Ethylene dibromide	0.988	1.005	0.100	1.7	30.0
51 Chlorobenzene	1.026	1.051	0.500	2.5	30.0
52 1,1,1,2-Tetrachloroethane	0.514	0.533	0.100	3.8	30.0
53 Ethylbenzene	0.460	0.472	0.100	2.6	20.0
54 m+p-Xylenes	0.545	0.566	0.300	3.8	30.0
55 o-Xylene	0.539	0.556	0.300	3.2	30.0
56 Styrene	0.961	0.993	0.300	3.3	30.0
57 Bromoform	0.569	0.542	0.100	4.7	30.0
58 Isopropylbenzene	1.417	1.620	0.100	14.3	30.0
$ 59 Bromofluorobenzene (SURR)	0.798	0.809	0.200	1.4	30.0
60 1,1,2,2-Tetrachloroethane	1.407	1.383	0.300	1.7	30.0
61 1,2,3-Trichloropropane	1.054	1.055	0.100	0.1	30.0
62 Bromobenzene	0.543	0.540	0.100	0.4	30.0
63 n-Propylbenzene	2.056	2.130	0.100	3.6	30.0
64 o-Chlorotoluene	1.458	1.469	0.100	0.8	30.0
65 1,3,5-Trimethylbenzene	1.285	1.311	0.100	2.0	30.0
66 p-Chlorotoluene	1.443	1.439	0.100	0.3	30.0
67 tert-Butylbenzene	1.309	1.339	0.100	2.3	30.0
68 1,2,4-Trimethylbenzene	1.342	1.368	0.100	2.0	30.0
69 sec-Butylbenzene	1.933	1.984	0.100	2.6	30.0
70 1,3-Dichlorobenzene	0.906	0.913	0.100	0.8	30.0
71 4-Isopropyltoluene	1.438	1.513	0.100	5.2	30.0
72 1,4-Dichlorobenzene	0.979	0.990	0.100	1.2	30.0
73 n-Butylbenzene	1.722	1.745	0.100	1.4	30.0
74 1,2-Dichlorobenzene	0.919	0.919	0.100	0.0	30.0
75 1,2-Dibromo-3-chloropropane	0.562	0.564	0.100	0.3	30.0
76 1,2,4-Trichlorobenzene	0.760	0.761	0.100	0.1	30.0
77 Hexachlorobutadiene	0.443	0.463	0.100	4.6	30.0
78 Naphthalene	2.028	1.957	0.100	3.5	30.0
79 1,2,3-Trichlorobenzene	0.765	0.752	0.100	1.7	30.0

Data File: /chem/msa.i/a070296.b/a8603.d
Report Date: 02-Jul-1996 09:55

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8603.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 02-JUL-96 08:47
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a070296.b/061896_heata.m

CLP ✓
8240 ✓
7/2/96

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
	1 Dichlorodifluoromethane	1.513	1.274	0.100	15.8	30.0	
	2 Chloromethane	1.142	1.223	0.300	7.1	30.0	
	3 Vinyl chloride	1.177	1.289	0.100	9.5	20.0	✓
	4 Bromomethane	1.138	0.944	0.100	17.0	30.0	
	5 Chloroethane	0.552	0.620	0.100	12.3	30.0	
	6 Trichlorofluoromethane	2.179	1.965	0.100	9.8	30.0	
	7 Ethyl ether	0.903	1.022	0.100	13.1	30.0	
	8 Acrolein	2.290	2.497	0.100	9.0	30.0	
	9 1,1,2-Trichlorotrifluoroetha	2.570	2.682	0.100	4.4	30.0	
	10 1,1-Dichloroethene	1.324	1.380	0.100	4.2	20.0	✓
	11 Acetone	2.212	1.651	0.100	25.3	30.0	✓
	12 Carbon disulfide	3.885	4.054	0.100	4.3	30.0	
	13 Methylene chloride	1.675	1.730	0.100	3.3	30.0	
	14 Acrylonitrile	0.910	1.044	0.100	14.8	30.0	
	15 1,2-Trans-dichloroethylene	1.411	1.448	0.100	2.6	30.0	
	16 Tert-Butyl Methyl Ether	3.556	3.559	0.100	0.1	30.0	
	17 1,1-Dichloroethane	2.777	2.991	0.300	7.7	30.0	
	18 Vinyl acetate	3.572	1.093	0.100	69.4	30.0	<- ok not a Target
	19 2-Butanone	0.138	0.149	0.010	7.4	30.0	
	20 1,2-cis-Dichloroethylene	1.528	1.575	0.100	3.1	30.0	
	21 2,2-Dichloropropane	1.998	2.007	0.100	0.5	30.0	
	22 Ethyl acetate	9.908	10.929	0.100	10.3	30.0	
	24 Chloroform	3.191	3.112	0.200	2.5	20.0	✓
	25 1,1,1-Trichloroethane	0.632	0.621	0.100	1.7	30.0	
	26 1,1-Dichloropropene	0.575	0.585	0.100	1.7	30.0	
	27 Carbon tetrachloride	0.383	0.458	0.100	19.6	30.0	
	28 Isobutanol	0.337	++++	0.010	++++	30.0	<- Not Spiked
$	29 1,2-Dichloroethane-D4 (SURR)	1.633	1.655	0.100	1.3	30.0	
	30 Benzene	0.987	1.042	0.500	5.5	30.0	
	31 1,2-Dichloroethane	2.016	1.994	0.100	1.1	30.0	
	33 Trichloroethene	0.451	0.470	0.300	4.0	30.0	
	34 1,2-Dichloropropane	0.500	0.528	0.100	5.7	20.0	✓
	35 Methyl methacrylate	0.428	++++	0.100	++++	30.0	<- Not Spiked
	36 Dibromomethane	0.567	0.555	0.100	2.0	30.0	
	37 Bromodichloromethane	0.816	0.805	0.200	1.3	30.0	
	38 2-Chloroethylvinyl ether	0.251	0.301	0.100	19.8	30.0	
	39 cis-1,3-Dichloropropene	0.665	0.671	0.200	1.0	30.0	
	40 4-Methyl-2-pentanone	1.381	1.513	0.100	9.5	30.0	
$	41 Toluene-D8 (SURR)	1.203	1.227	0.100	2.1	30.0	
	42 Toluene	1.379	1.465	0.400	6.2	20.0	✓

Data File: /chem/msa.i/a070296.b/a8603.d
Report Date: 02-Jul-1996 09:55

OHM Analytical Division

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msa.i
Lab File ID: a8603.d
Analysis Type:
Lab Sample ID:
Quant Type: ISTD

Injection Date: 02-JUL-96 08:47
Init. Calibration Date(s): 06/18/96 06/18/96
Init. Calibration Times: 12:11 15:31
Method File: /chem/msa.i/a070296.b/061896_heata.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
	43 trans-1,3-Dichloropropene	0.567	0.574	0.100	1.2	30.0
	44 1,1,2-Trichloroethane	0.468	0.471	0.100	0.8	30.0
	45 1,3-Dichloropropane	0.882	0.947	0.100	7.4	30.0
	46 Tetrachloroethene	0.455	0.474	0.200	4.1	30.0
	47 2-Hexanone	1.210	1.324	0.100	9.4	30.0
	48 Dibromochloromethane	0.726	0.725	0.100	0.1	30.0
	49 Ethylene dibromide	0.988	1.025	0.100	3.7	30.0
	51 Chlorobenzene	1.026	1.070	0.500	4.3	30.0
	52 1,1,1,2-Tetrachloroethane	0.514	0.554	0.100	7.9	30.0
	53 Ethylbenzene	0.460	0.480	0.100	4.3	20.0
	54 m+p-Xylenes	0.545	0.569	0.300	4.4	30.0
	55 o-Xylene	0.539	0.559	0.300	3.7	30.0
	56 Styrene	0.961	1.014	0.300	5.5	30.0
	57 Bromoform	0.569	0.564	0.100	0.7	30.0
	58 Isopropylbenzene	1.417	1.674	0.100	18.1	30.0
$	59 Bromofluorobenzene (SURR)	0.798	0.835	0.200	4.7	30.0
	60 1,1,2,2-Tetrachloroethane	1.407	1.532	0.300	8.9	30.0
	61 1,2,3-Trichloropropane	1.054	1.135	0.100	7.7	30.0
	62 Bromobenzene	0.543	0.575	0.100	6.0	30.0
	63 n-Propylbenzene	2.056	2.148	0.100	4.5	30.0
	64 o-Chlorotoluene	1.458	1.516	0.100	4.0	30.0
	65 1,3,5-Trimethylbenzene	1.285	1.330	0.100	3.5	30.0
	66 p-Chlorotoluene	1.443	1.509	0.100	4.5	30.0
	67 tert-Butylbenzene	1.309	1.365	0.100	4.3	30.0
	68 1,2,4-Trimethylbenzene	1.342	1.379	0.100	2.8	30.0
	69 sec-Butylbenzene	1.933	2.035	0.100	5.3	30.0
	70 1,3-Dichlorobenzene	0.906	0.950	0.100	4.9	30.0
	71 4-Isopropyltoluene	1.438	1.581	0.100	10.0	30.0
	72 1,4-Dichlorobenzene	0.979	1.009	0.100	3.1	30.0
	73 n-Butylbenzene	1.722	1.843	0.100	7.0	30.0
	74 1,2-Dichlorobenzene	0.919	0.942	0.100	2.5	30.0
	75 1,2-Dibromo-3-chloropropane	0.562	0.599	0.100	6.5	30.0
	76 1,2,4-Trichlorobenzene	0.760	0.780	0.100	2.6	30.0
	77 Hexachlorobutadiene	0.443	0.475	0.100	7.3	30.0
	78 Naphthalene	2.028	2.121	0.100	4.6	30.0
	79 1,2,3-Trichlorobenzene	0.765	0.789	0.100	3.1	30.0

Data File: /chem/aux/msa.i/a061896.b/a8290.d

Date : 18-JUN-96 08:22

Client ID: bfb tune

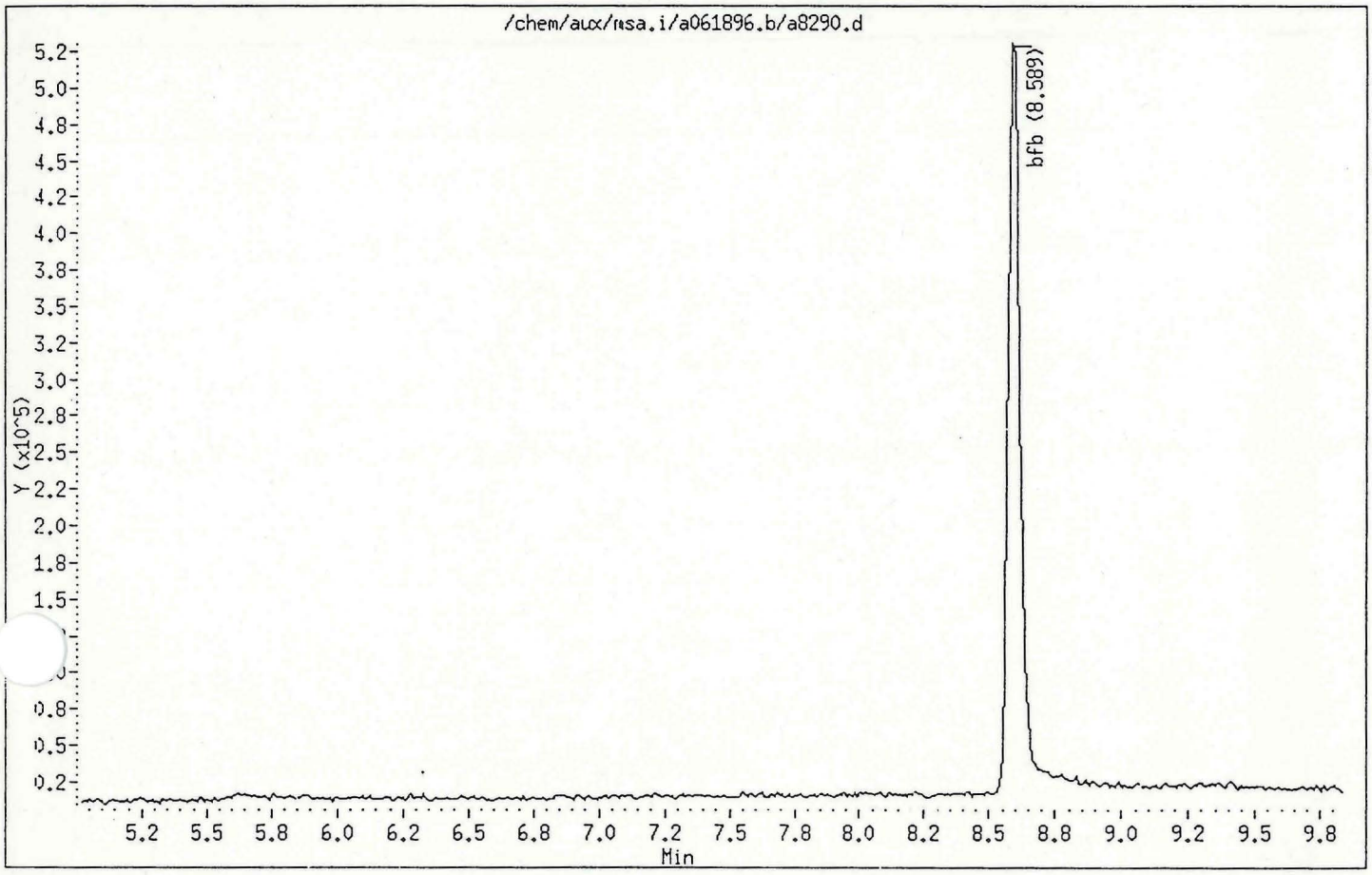
Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



Data File: /chem/aux/msa.i/a061896.b/a8290.d

Date : 18-JUN-96 08:22

Client ID: bfb tune

Instrument: msa.i

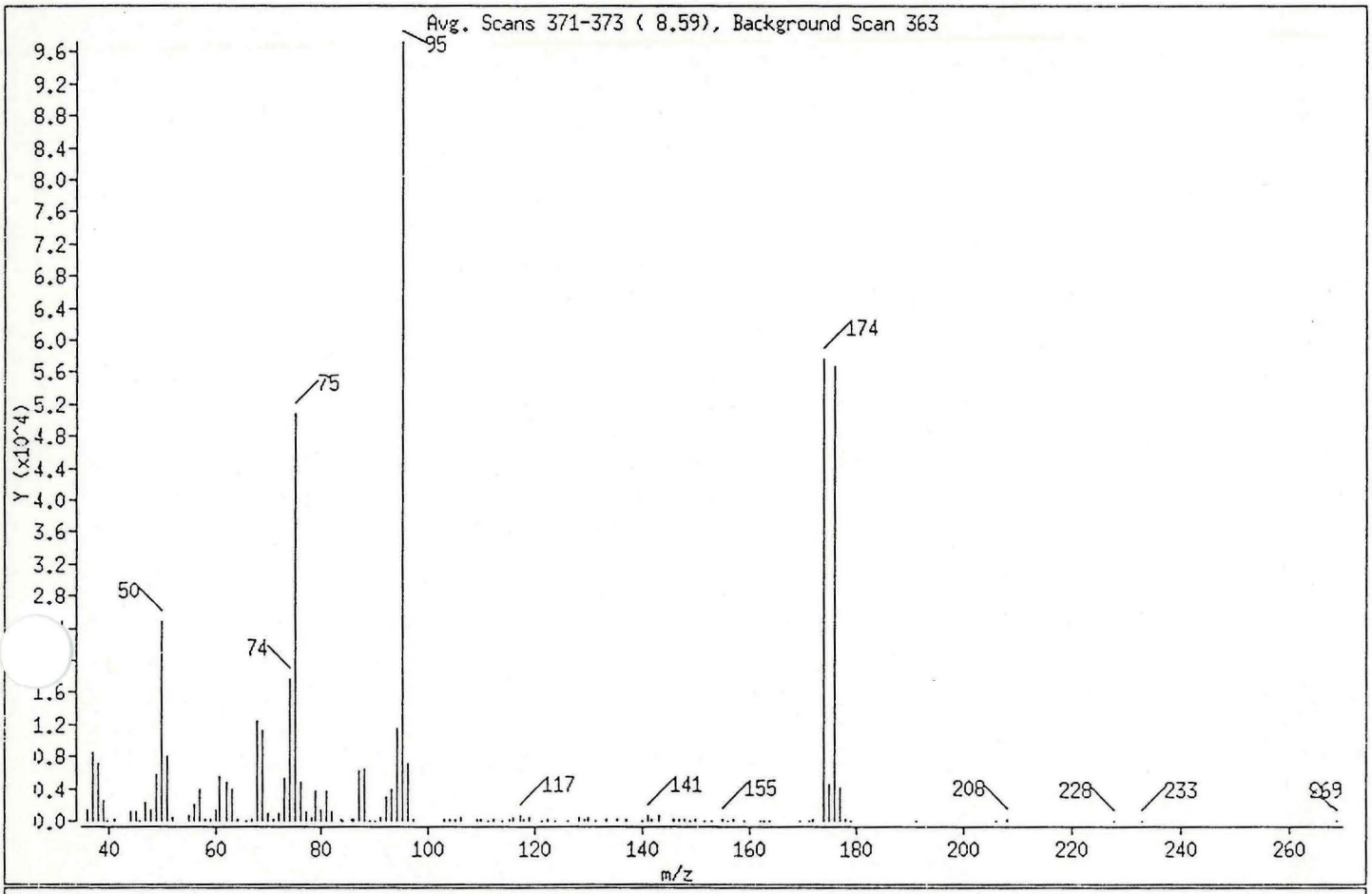
Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.59
75	30.00 - 60.00% of mass 95	52.14
96	5.00 - 9.00% of mass 95	7.41
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	59.33
175	5.00 - 9.00% of mass 174	4.82 (8.13)
176	95.00 - 101.00% of mass 174	58.36 (98.36)
177	5.00 - 9.00% of mass 176	4.24 (7.26)

Data File: /chem/aux/msa.i/a061896.b/a8290.d

Date : 18-JUN-96 08:22

Client ID: bfb tune

Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Data File: a8290.d
Spectrum : Avg. Scans 371-373 (8.59), Background Scan 363
Largest m/z: 95.05
Number of peaks: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1401	70.10	1024	104.00	331	146.75	236
37.05	8424	71.00	217	105.00	139	147.85	133
38.05	7057	72.05	814	105.90	549	148.75	60
39.05	2439	73.05	5319	109.10	177	149.95	124
39.95	17	74.05	17600	109.80	166	151.65	61
41.05	337	75.05	50688	111.00	65	152.85	59
44.10	1259	76.05	4817	112.10	136	154.95	182
45.10	1228	77.05	1217	113.90	87	155.95	50
45.90	10	78.05	423	115.00	171	156.90	153
47.10	2204	78.95	3758	116.00	384	159.00	62
48.10	1283	79.95	1271	117.20	792	162.10	81
49.10	5823	80.95	3644	118.00	333	162.80	52
50.10	24880	81.95	1084	119.00	555	163.70	51
51.10	7950	83.45	319	121.30	51	169.50	61
52.10	349	83.95	55	122.20	211	171.10	70
55.10	685	85.65	280	123.80	55	171.90	222
56.00	2036	86.05	257	126.10	58	173.90	57680
57.00	3909	87.05	6220	128.05	440	174.90	4689
58.10	296	87.95	6368	129.05	172	175.90	56736
59.10	192	89.15	61	129.85	392	176.90	4122
60.00	1280	90.05	58	131.05	71	177.90	209
61.00	5565	90.95	558	133.05	204	179.00	61
62.10	4913	91.95	3017	135.05	241	191.15	58
63.10	3877	93.05	4006	136.95	164	206.15	53
64.10	273	94.05	11524	139.95	52	208.05	133
65.90	107	95.05	97216	140.95	718	227.80	68
66.90	328	96.05	7205	141.75	202	232.80	57
68.00	12332	97.05	252	142.95	661	268.95	50
69.00	11370	103.10	136	145.85	241		

Data File: /chem/msa.i/a062896.b/a8515.d

Date : 28-JUN-96 08:53

lient ID:

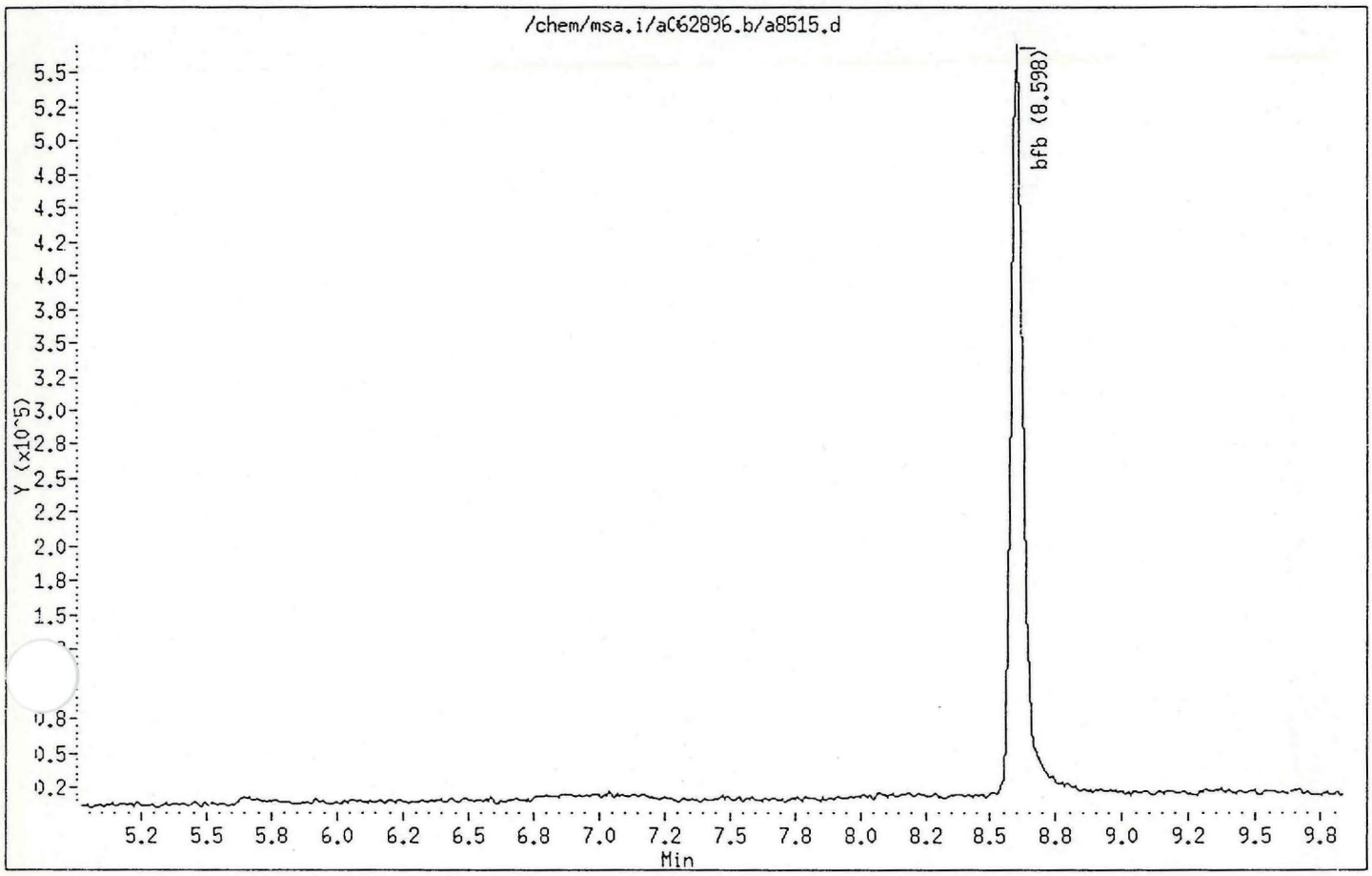
Instrument: msa.i

ample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8515.d

Date : 28-JUN-96 08:53

Client ID:

Instrument: msa.i

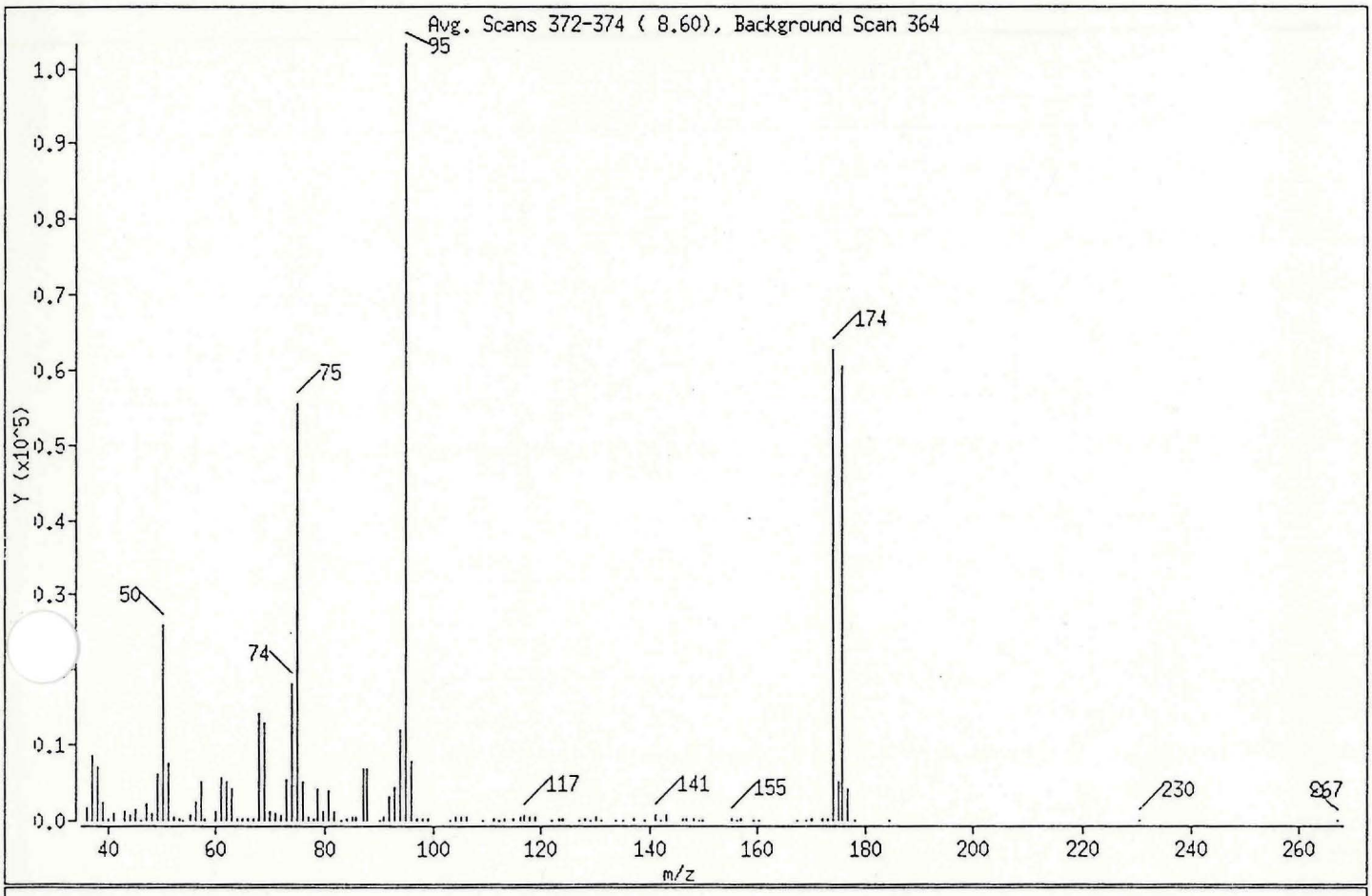
Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.21
75	30.00 - 60.00% of mass 95	53.84
96	5.00 - 9.00% of mass 95	7.50
173	Less than 2.00% of mass 174	0.20 (0.33)
174	50.00 - 100.00% of mass 95	60.78
175	5.00 - 9.00% of mass 174	4.98 (8.19)
176	95.00 - 101.00% of mass 174	58.61 (96.44)
177	5.00 - 9.00% of mass 176	4.14 (7.06)

Data File: /chem/msa.i/a062896.b/a8515.d

Date : 28-JUN-96 08:53

Client ID: Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm Column diameter: 0.53

Data File: a8515.d
Spectrum : Avg. Scans 372-374 (8.60), Background Scan 364
Largest m/z: 95.05
Number of peaks: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1656	67.00	360	97.05	169	141.95	80
37.05	8505	68.00	14132	98.15	217	142.95	697
38.05	6985	69.00	12887	99.05	127	145.95	212
39.05	2542	70.00	1172	102.90	18	146.95	222
39.95	218	71.10	987	103.90	592	148.05	355
41.05	864	72.05	792	105.00	426	149.05	50
43.10	1225	73.05	5406	106.00	489	149.85	115
44.10	680	74.05	18048	109.00	113	155.05	349
45.10	1572	75.05	55616	111.10	143	156.05	76
46.00	90	76.05	5112	112.10	5	157.00	186
47.10	2306	77.05	521	113.10	153	159.10	59
48.10	1093	78.05	273	114.80	199	160.20	55
49.10	6153	78.95	4084	116.00	484	167.40	51
50.10	26048	79.95	1200	116.90	690	169.00	107
51.10	7635	80.95	3816	117.90	437	170.10	161
52.10	567	81.95	1145	119.00	518	171.90	234
53.10	245	83.05	98	122.00	58	173.00	207
54.00	76	84.05	165	123.10	133	173.90	62792
55.10	639	85.05	503	124.00	124	175.00	5142
56.10	2427	85.95	370	126.90	117	175.90	60552
57.10	5130	87.05	6967	127.95	349	176.90	4278
58.10	327	87.95	6846	129.05	88	178.00	118
60.00	1274	90.25	53	129.85	369	184.40	51
61.00	5635	90.95	511	131.05	110	230.60	58
62.00	5102	92.05	3251	133.75	62	266.95	118
63.00	4094	93.05	4406	135.15	108		
64.00	317	94.05	11939	136.95	184		
65.00	322	95.05	103312	139.05	71		
66.10	203	96.05	7750	140.95	759		

Data File: /chem/msa.i/a062996.b/a8538.d

Date : 29-JUN-96 10:43

Client ID:

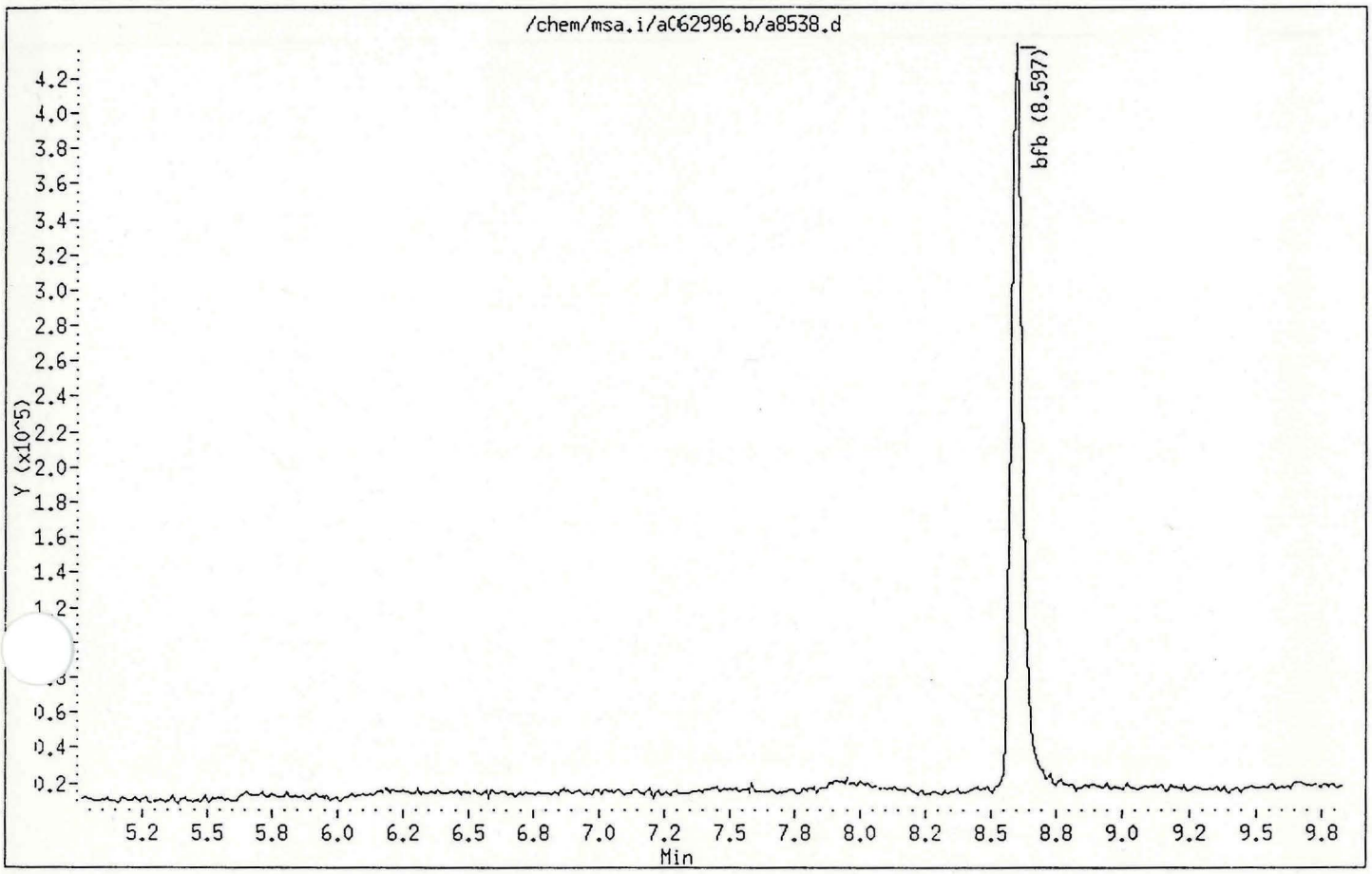
Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8538.d

Date : 29-JUN-96 10:43

Client ID:

Instrument: msa.i

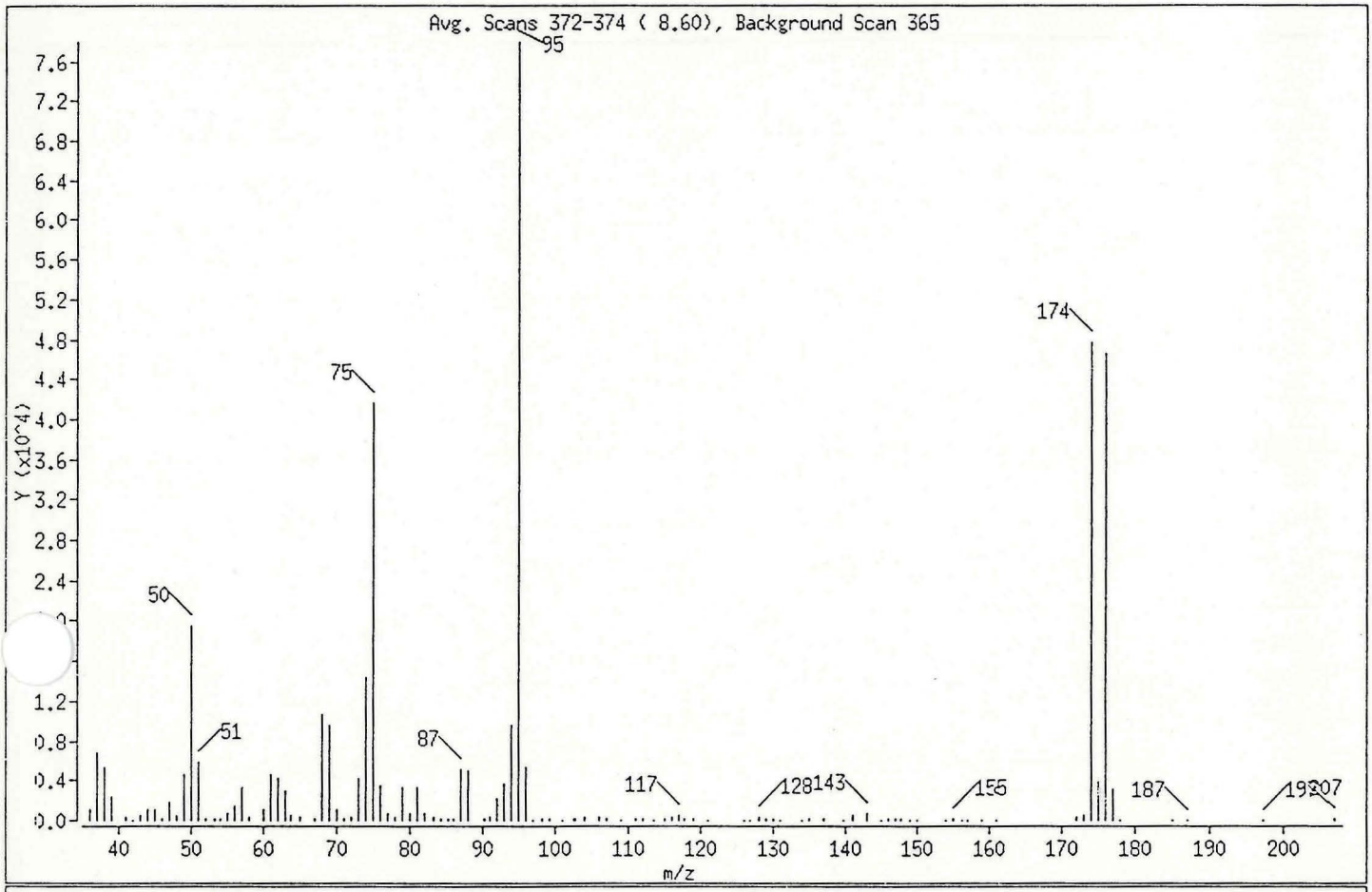
Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.17
75	30.00 - 60.00% of mass 95	53.46
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.62 (1.02)
174	50.00 - 100.00% of mass 95	61.22
175	5.00 - 9.00% of mass 174	4.94 (8.08)
176	95.00 - 101.00% of mass 174	59.77 (97.63)
177	5.00 - 9.00% of mass 176	4.13 (6.91)

Data File: /chem/msa.i/a062996.b/a8538.d

Date : 29-JUN-96 10:43

Client ID:

Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Data File: a8538.d
Spectrum : Avg. Scans 372-374 (8.60), Background Scan 365
Largest m/z: 95.05
Number of peaks: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1135	67.00	209	96.05	5307	136.95	211
37.05	6730	68.00	10601	96.95	20	139.85	60
38.05	5270	69.00	9529	98.15	105	140.95	523
39.05	2472	70.00	1095	99.15	101	142.95	676
41.05	374	71.00	207	100.90	52	144.95	75
42.05	65	72.15	444	102.50	116	146.05	105
43.10	541	73.05	4182	102.80	218	146.95	112
44.10	1182	74.05	14419	104.00	393	147.85	151
45.10	1086	75.05	41664	105.90	355	149.05	75
46.10	251	76.05	3456	107.10	157	149.95	54
47.10	1821	77.05	756	109.10	58	154.05	72
48.00	609	77.95	375	111.00	178	154.95	148
49.10	4603	78.95	3252	112.10	266	156.20	69
50.10	19616	79.95	740	113.60	53	157.10	62
51.10	5981	80.95	3266	115.00	143	159.00	59
52.00	266	81.95	810	115.90	398	161.10	52
53.20	112	83.15	346	117.00	550	171.90	293
54.10	272	84.15	168	117.80	178	172.90	485
55.00	681	85.15	106	118.90	243	173.90	47720
56.10	1515	86.05	159	121.00	82	174.90	3854
57.10	3246	86.95	5130	126.00	55	175.90	46592
58.10	323	87.95	4891	126.70	80	176.90	3220
60.00	1099	90.15	138	128.05	306	178.00	55
61.00	4546	90.95	311	129.05	167	184.85	52
62.00	4253	91.95	2175	129.95	189	187.05	74
63.00	3008	93.05	3735	131.05	21	197.15	58
63.90	508	94.05	9620	134.05	53	206.95	143
65.00	349	95.05	77952	135.05	265		

Data File: /chem/msa.i/a063096.b/a8557.d

Date : 30-JUN-96 16:31

Client ID:

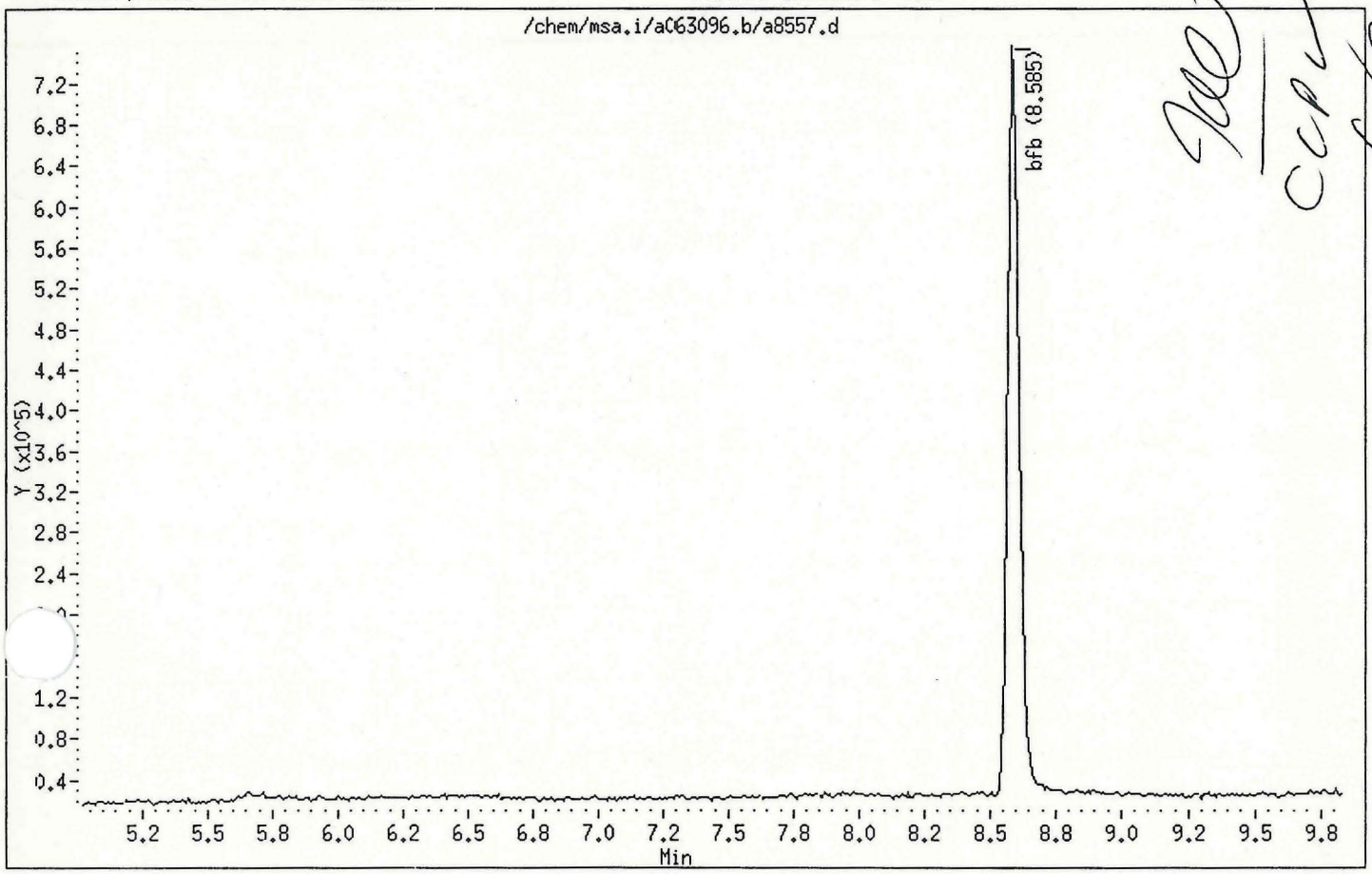
Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



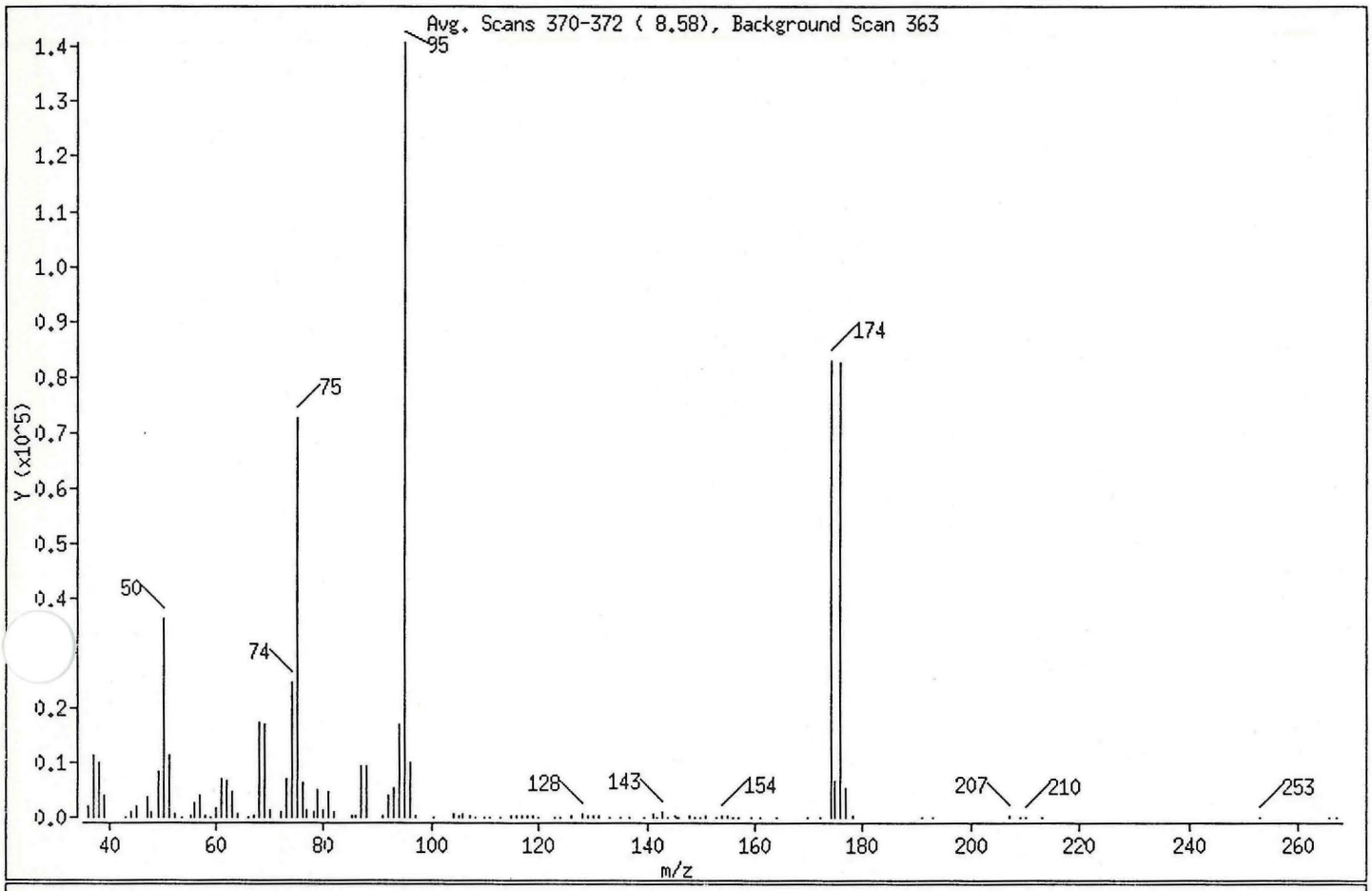
Data File: /chem/msa.i/a063096.b/a8557.d
Date : 30-JUN-96 16:31
Client ID:
Sample Info: bfb tune

Instrument: msa.i

Operator: jk

Column phase: DB-624 75m x 0.53mm
Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.80
75	30.00 - 60.00% of mass 95	51.51
96	5.00 - 9.00% of mass 95	7.17
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	58.93
175	5.00 - 9.00% of mass 174	4.65 (7.89)
176	95.00 - 101.00% of mass 174	58.60 (99.44)
177	5.00 - 9.00% of mass 176	3.89 (6.65)

Data File: /chem/msa.i/a063096.b/a8557.d

Date : 30-JUN-96 16:31

Client ID:

Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Data File: a8557.d
Spectrum : Avg. Scans 370-372 (8.58), Background Scan 363
Largest m/z: 95.05
Number of peaks: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	2101	70.00	1497	108.20	50	148.85	84
37.05	11443	72.05	982	109.90	137	149.95	79
38.05	9988	73.05	7115	110.90	121	150.95	172
39.05	3878	74.05	24624	112.90	145	153.05	160
43.20	53	75.05	72560	115.00	316	153.95	190
44.10	1025	76.05	6344	115.90	478	154.95	187
45.10	2069	76.95	1305	116.90	475	155.85	68
47.10	3688	78.05	882	118.00	436	157.00	59
48.00	1086	78.95	4892	119.00	409	159.20	133
49.10	8399	79.95	1455	120.00	71	161.00	82
50.10	36344	80.95	4734	123.00	133	163.90	54
51.10	11398	81.95	1018	124.00	51	169.60	52
52.10	711	85.15	197	125.90	186	172.00	114
53.60	124	85.95	177	127.95	632	174.00	83008
55.10	350	86.95	9465	128.95	336	174.90	6548
56.00	2594	87.95	9456	129.95	496	175.90	82544
57.10	4040	91.05	308	130.95	316	176.90	5486
58.10	310	92.05	3915	133.05	85	178.00	228
59.00	4	93.05	5446	135.05	110	190.85	155
60.00	1647	94.05	16912	136.75	22	192.95	71
61.00	6937	95.05	140800	139.35	162	207.05	241
62.00	6651	96.05	10099	140.95	624	209.05	82
63.00	4765	97.05	361	141.95	119	210.15	59
64.00	650	100.30	62	142.95	879	213.00	55
66.00	110	104.00	536	143.95	74	253.05	82
67.00	407	105.00	226	145.15	190	265.85	53
68.00	17184	105.90	645	145.95	146	267.05	52
69.00	16824	107.00	231	147.95	430		

Data File: /chem/msa.i/a070196.b/a8583.d

Date : 01-JUL-96 13:57

Client ID:

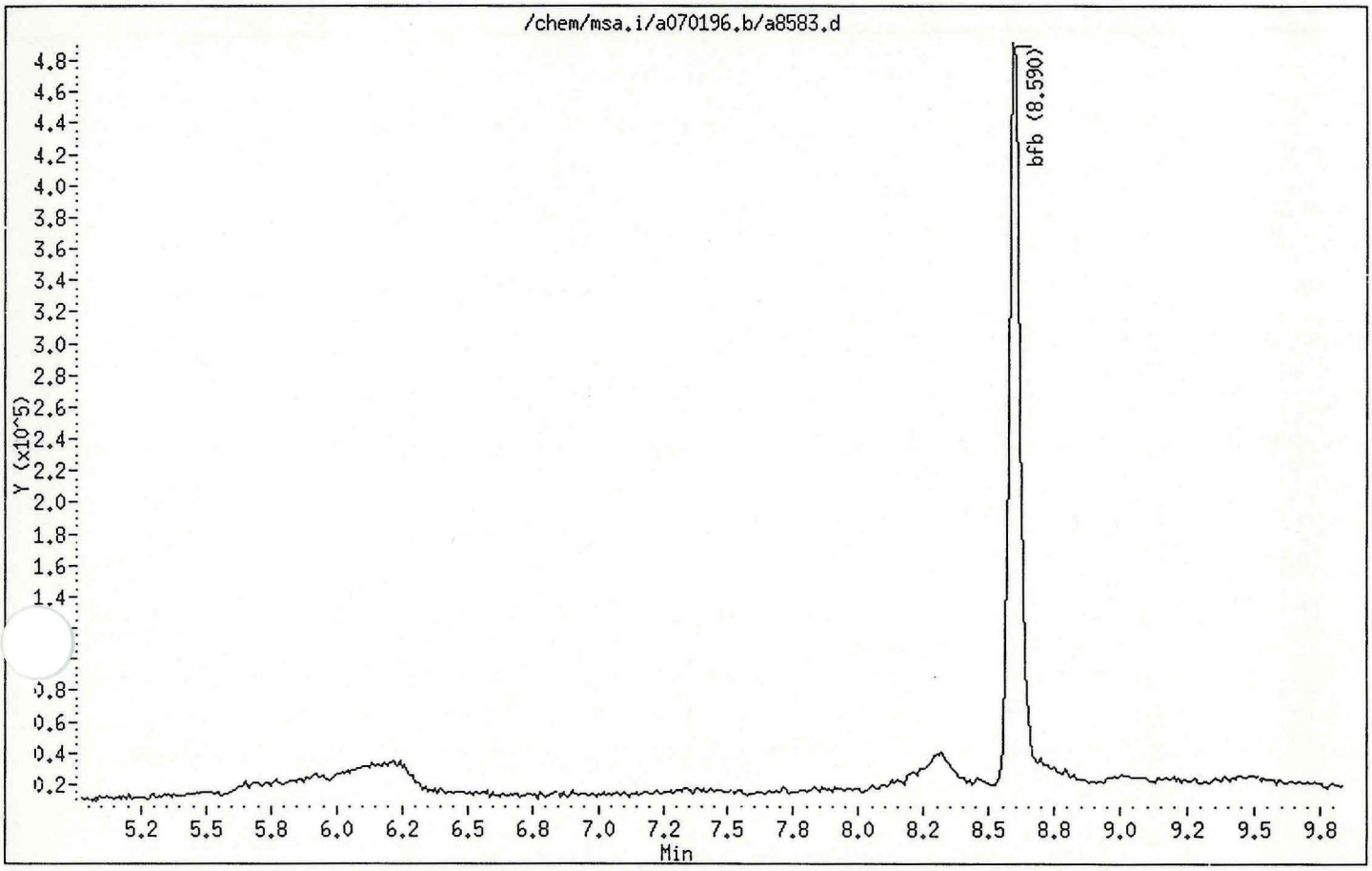
Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8583.d

Date : 01-JUL-96 13:57

Client ID:

Instrument: msa.i

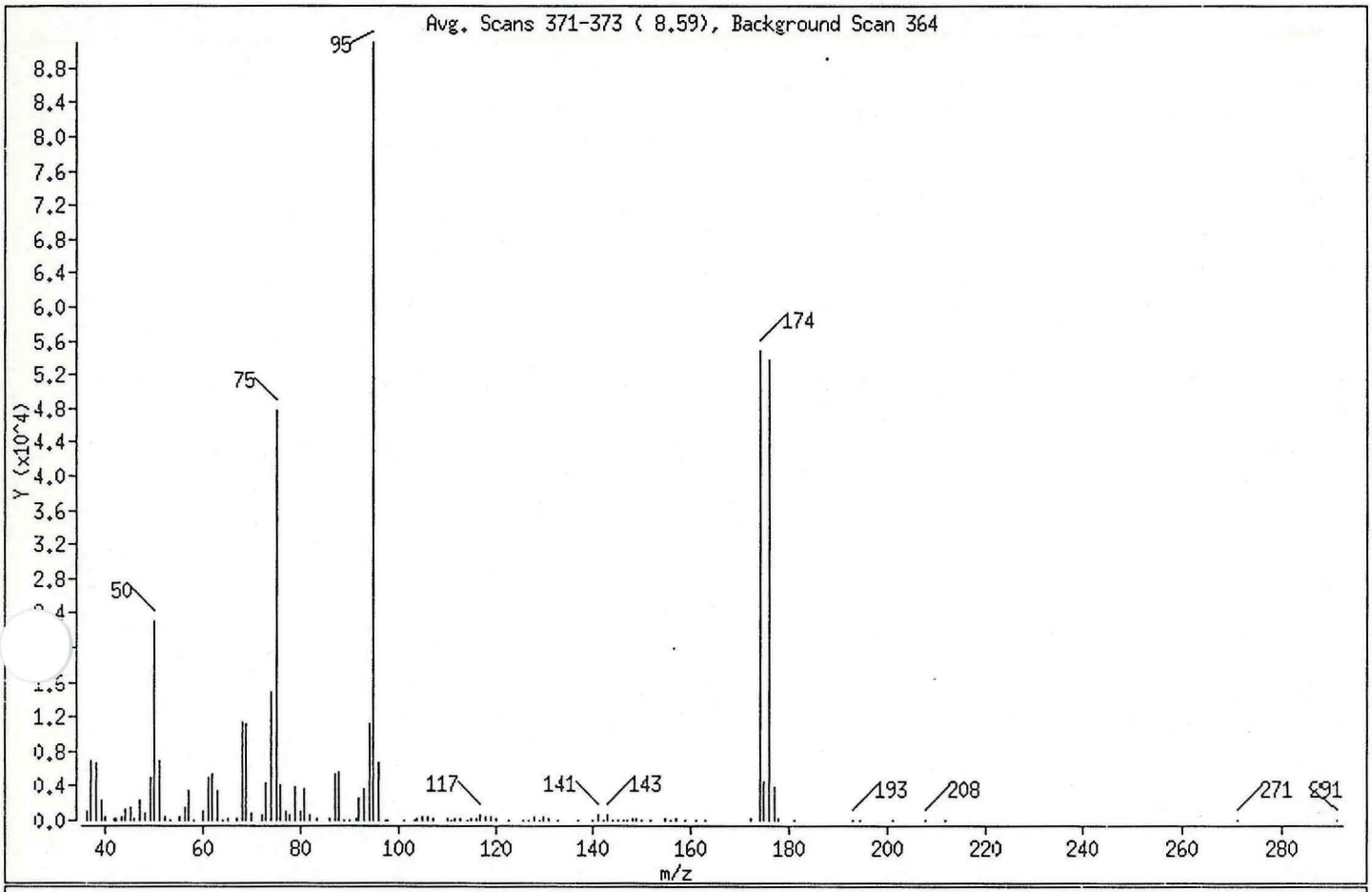
Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.26
75	30.00 - 60.00% of mass 95	52.43
96	5.00 - 9.00% of mass 95	7.42
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	60.39
175	5.00 - 9.00% of mass 174	4.92 (8.14)
176	95.00 - 101.00% of mass 174	59.15 (97.95)
177	5.00 - 9.00% of mass 176	4.14 (7.00)

Data File: /chem/msa.i/a070196.b/a8583.d

Date : 01-JUL-96 13:57

ient ID:

Instrument: msa.i

ample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Data File: a8583.d
Spectrum : Avg. Scans 371-373 (8.59), Background Scan 364
Largest m/z: 95.05
Number of peaks: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1070	68.00	11342	103.00	50	143.95	51
37.05	6894	69.00	11277	103.90	268	145.15	70
38.05	6712	70.00	934	105.00	358	146.25	106
39.05	2308	72.05	641	105.90	466	146.95	40
39.95	487	73.05	4355	107.10	156	148.05	218
41.65	263	74.05	14775	110.20	148	148.95	125
42.15	256	75.05	47704	111.00	59	149.95	53
43.10	385	76.05	4082	111.80	153	151.85	57
44.10	1289	77.05	1056	112.80	127	154.85	227
45.10	1458	77.95	713	114.40	68	155.95	97
45.90	267	78.95	3769	115.10	123	156.90	145
47.10	2389	79.95	1046	116.00	157	159.00	63
48.00	908	80.95	3639	116.90	587	160.90	63
49.10	5048	81.85	656	117.90	393	163.10	54
50.10	22984	83.55	109	119.00	458	172.10	199
51.10	6869	85.85	315	120.10	133	174.00	54944
52.00	476	87.05	5444	122.80	55	175.00	4473
53.20	57	87.95	5521	125.80	69	176.00	53824
55.10	468	89.05	53	126.70	66	177.00	3770
56.10	1407	90.05	51	127.95	422	177.90	193
57.10	3502	91.05	233	129.05	106	181.30	55
58.00	72	92.05	2683	129.95	326	193.05	98
60.00	1182	93.05	3639	130.95	213	194.35	50
61.10	4921	94.05	11121	132.95	52	201.35	54
62.00	5280	95.05	90984	136.95	60	207.85	63
63.00	3421	96.05	6749	139.85	72	211.95	52
64.00	56	96.95	34	140.95	579	271.00	50
65.10	278	97.95	78	142.15	64	291.30	54
67.00	206	101.20	106	142.95	629		

Data File: /chem/msa.i/a070296.b/a8601.d

Date : 02-JUL-96 08:17

Client ID: bfb tune

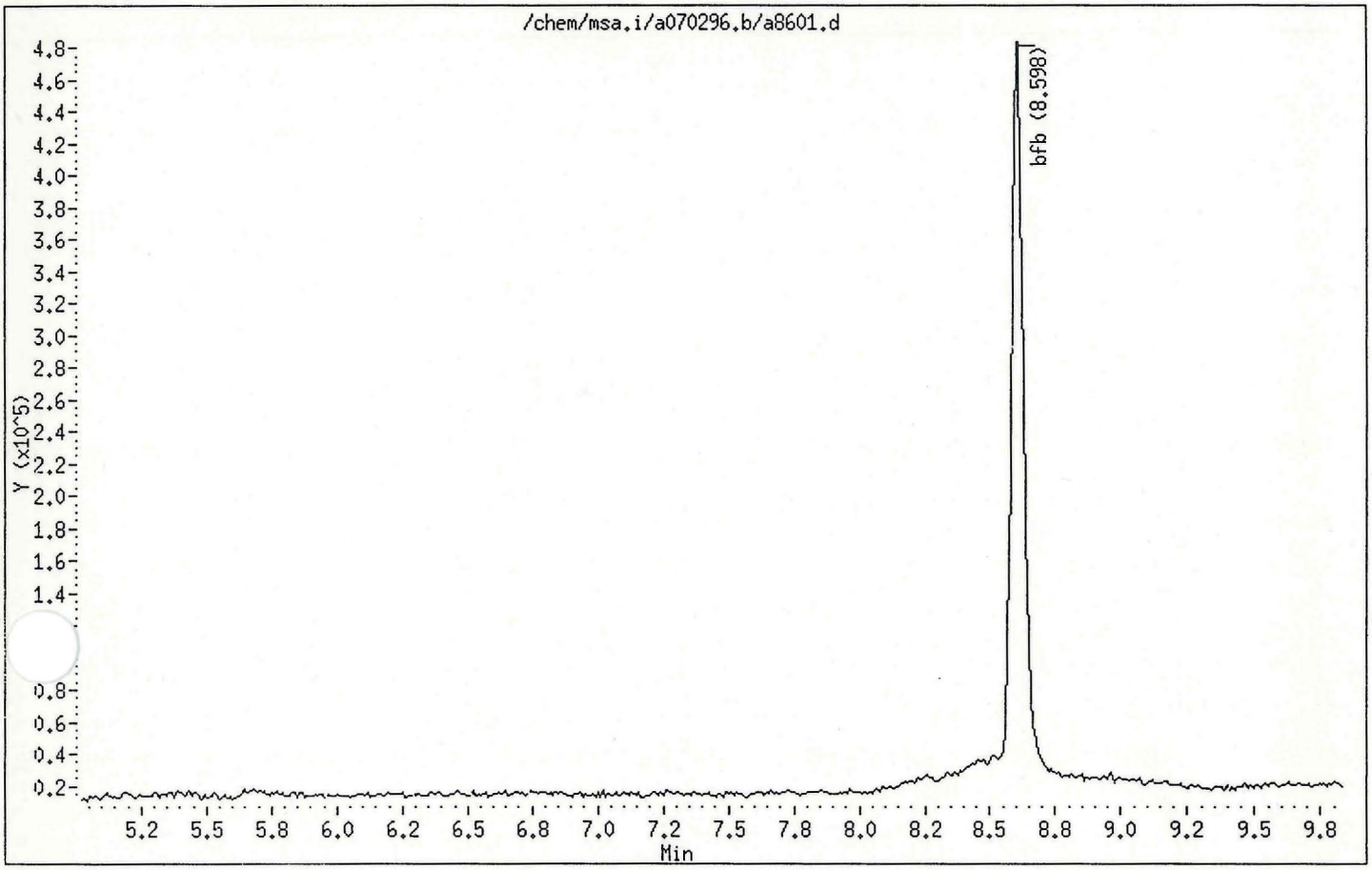
Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53



Data File: /chem/msa.i/a070296.b/a8601.d

Date : 02-JUL-96 08:17

Client ID: bfb tune

Sample Info: bfb tune

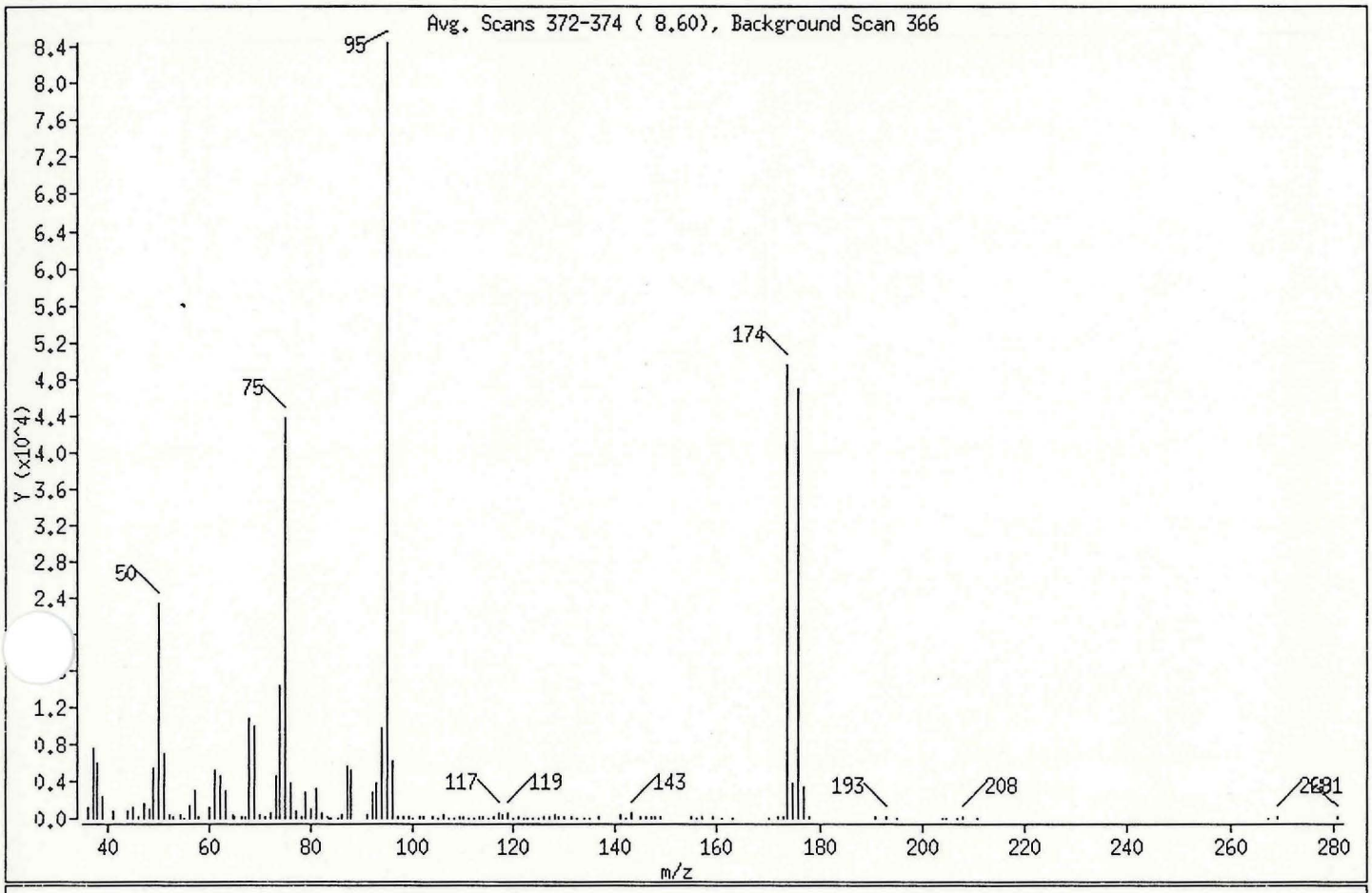
Instrument: msa.i

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.72
75	30.00 - 60.00% of mass 95	51.77
96	5.00 - 9.00% of mass 95	7.26
173	Less than 2.00% of mass 174	0.15 (0.25)
174	50.00 - 100.00% of mass 95	58.75
175	5.00 - 9.00% of mass 174 CCT	4.40 (7.49)
176	95.00 - 101.00% of mass 174 93-101%	55.59 (94.62) *
177	5.00 - 9.00% of mass 176	3.93 (7.07)

CLP ok
JCL
7/2/96

Data File: /chem/msa.i/a070296.b/a8601.d

Date : 02-JUL-96 08:17

Client ID: bfb tune

Instrument: msa.i

Sample Info: bfb tune

Operator: jk

Column phase: DB-624 75m x 0.53mm

Column diameter: 0.53

Data File: a8601.d
Spectrum : Avg. Scans 372-374 (8.60), Background Scan 366
Largest m/z: 95.05
Number of peaks: 126

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.05	1201	72.05	542	107.00	54	144.75	109
37.05	7531	73.05	4497	108.00	50	145.85	126
38.05	6038	74.05	14371	109.10	112	146.85	166
39.05	2458	75.05	43728	109.90	169	147.75	158
41.05	733	76.05	3753	111.10	11	148.95	138
44.00	766	77.05	729	112.20	56	154.95	143
45.10	1223	78.05	278	113.10	190	155.85	55
46.20	147	78.95	2880	113.80	105	157.00	135
47.10	1666	79.95	946	115.10	51	159.10	215
48.10	945	80.95	3199	115.90	284	160.80	66
49.10	5327	81.95	689	117.00	600	163.10	50
50.10	23416	83.15	114	117.90	399	170.10	66
51.10	7075	83.95	7	118.90	507	172.00	152
52.10	455	85.15	41	119.80	57	173.00	124
53.00	107	86.05	303	121.10	105	173.90	49624
54.20	351	86.95	5498	122.20	55	175.00	3715
55.10	70	87.95	5145	122.90	2	175.90	46960
56.10	1411	90.95	463	123.90	73	176.90	3318
57.10	2992	92.05	2703	124.90	76	177.90	139
58.00	210	92.95	3824	125.90	221	191.05	136
60.00	1144	94.05	9747	127.10	134	192.95	244
61.00	5228	95.05	84472	127.95	330	195.15	96
62.00	4550	96.05	6136	128.85	257	204.05	60
63.10	3018	96.95	130	130.05	152	204.85	73
64.60	412	98.25	130	131.15	142	207.05	11
65.00	173	99.15	132	132.25	58	208.15	168
66.40	128	100.00	53	133.95	54	210.75	67
67.00	297	101.20	137	134.95	52	267.05	93
68.00	10784	102.20	157	136.85	203	269.05	126
69.00	9955	104.00	159	141.05	460	280.80	143
70.10	475	105.00	66	141.85	58		
71.00	287	105.90	454	142.95	634		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00271

VBLK01A

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: N2V5309V

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8540

Level: (low/med) LOW Date Received:

% Moisture: not dec. N/A Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
75-35-4	1,1-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

00272

EPA SAMPLE NO.

VBLK01A

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: N2V5309V

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8540

Level: (low/med) LOW Date Received:

% Moisture: not dec. N/A Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

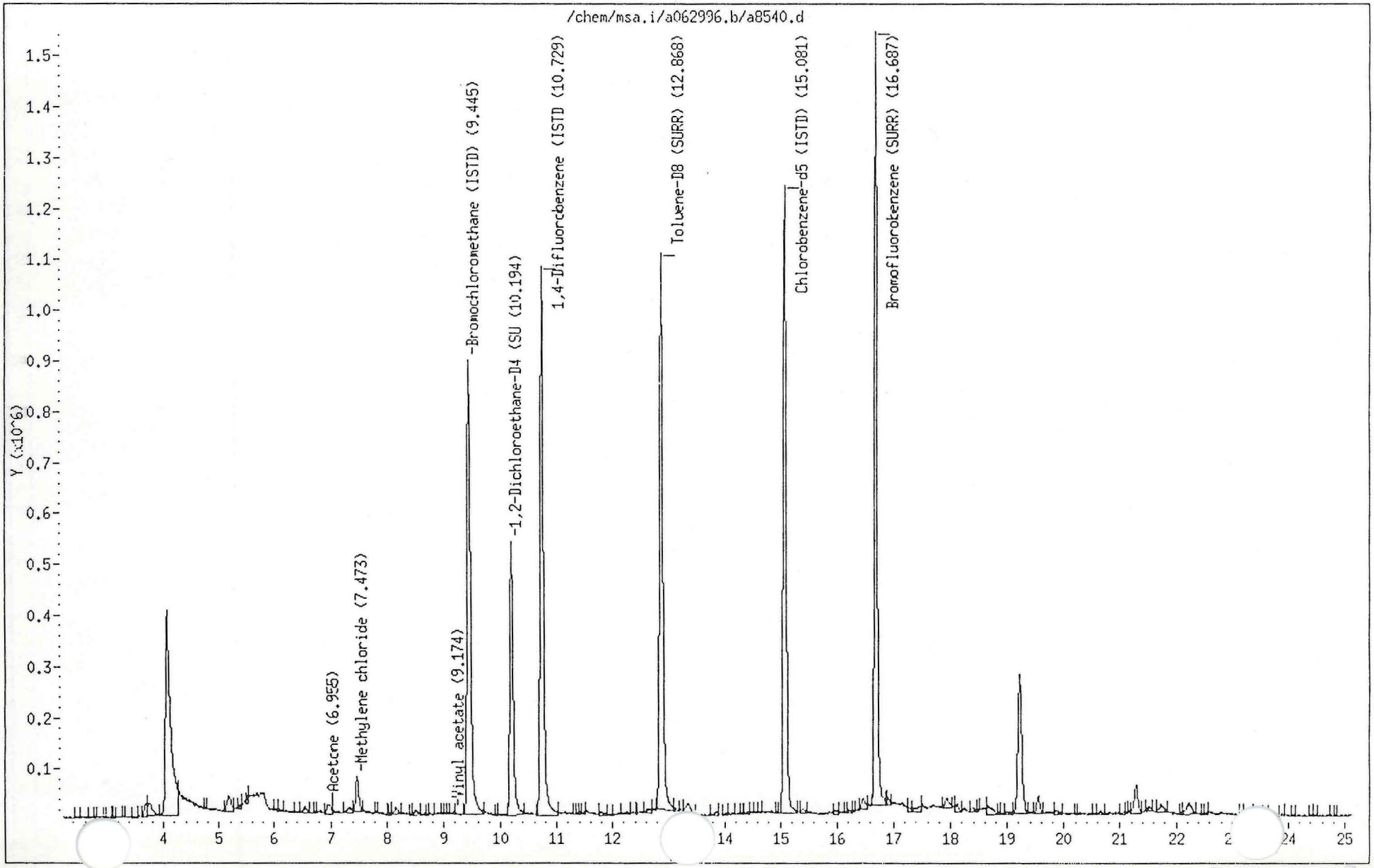
00273

Data File: /chem/msa.i/a062996.b/a8540.d
Date : 29-JUN-96 11:36
Client ID:
Sample Info: met blk n2v5309

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8540.d
Report Date: 29-Jun-1996 12:05

OHM Analytical Division

+TIC

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062996.b/a8540.d
Lab Smp Id:
Inj Date : 29-JUN-96 11:36
Operator : jk Inst ID: msa.i
Smp Info : met blk n2v5309
Misc Info : n2v5309v,n2v5309,qv,5000,1,5.0,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 29-Jun-1996 12:05 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MR 7/2/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Acetone	43.00	6.963	7.011	(0.737)	61256	5.15	5.15
Methylene chloride	84.00	7.473	7.439	(0.791)	61656	4.40	4.40
18 Vinyl acetate	43.00	9.165	9.194	(0.970)	13641	1.48	~~1.48~~ ms
* 23 Bromochloromethane (ISTD)	128.00	9.445	9.441	(1.000)	431053	50.0	(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.194	10.192	(1.079)	689520	47.1	47.1
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.729	10.728	(1.000)	1603030	50.0	
$ 41 Toluene-D8 (SURR)	98.00	12.868	12.881	(0.853)	1447753	49.7	49.7
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.081	15.083	(1.000)	1219218	50.0	
$ 59 Bromofluorobenzene (SURR)	95.00	16.687	16.693	(1.106)	986434	50.2	50.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a062996.b/a8540.d

Date : 29-JUN-96 11:36

Client ID:

Instrument: msa.i

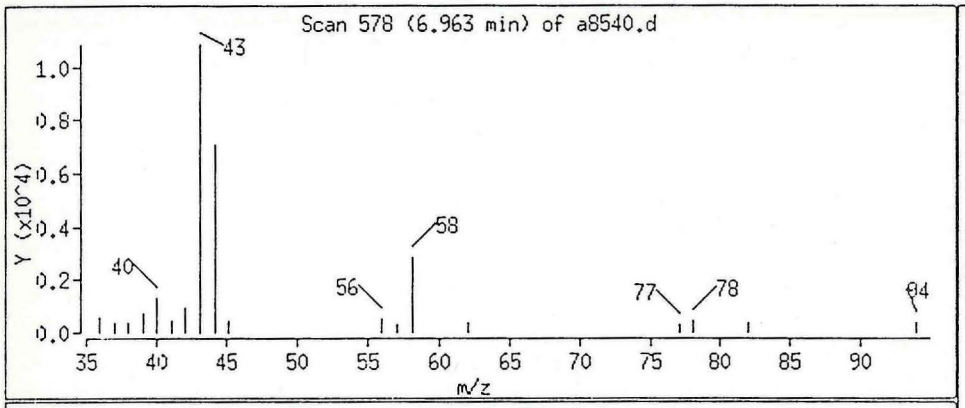
Sample Info: met blk n2v5309

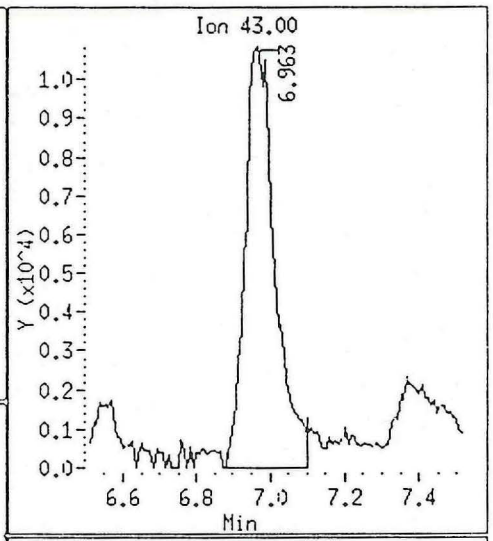
Operator: jk

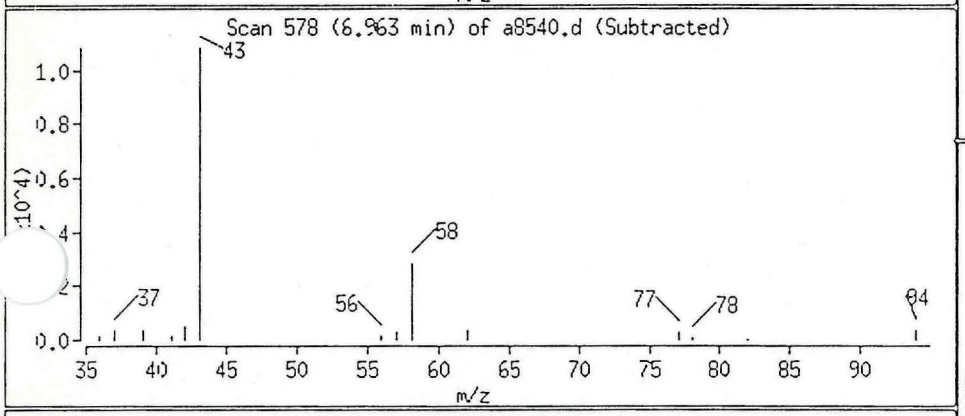
Column phase: DB-624 75m x 0.53mm

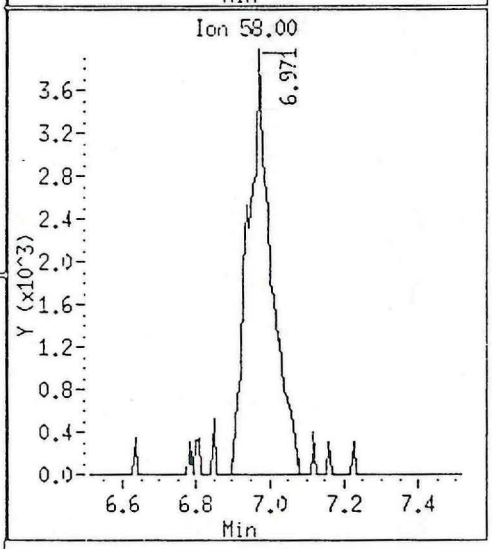
Column diameter: 0.53

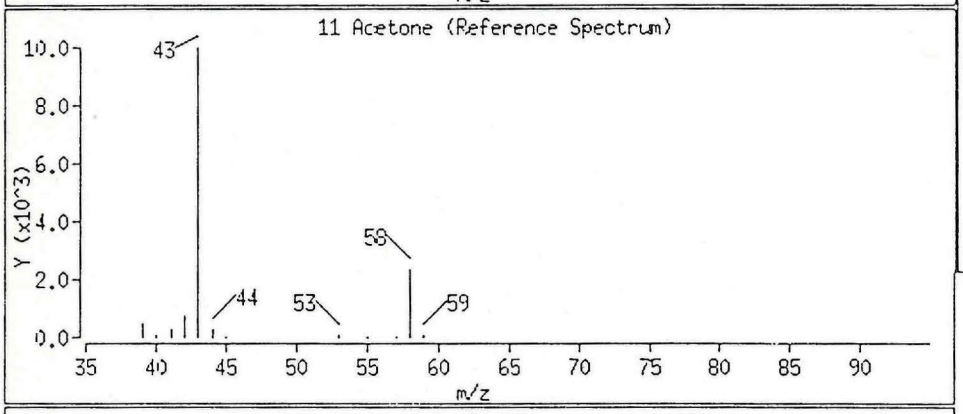
11 Acetone

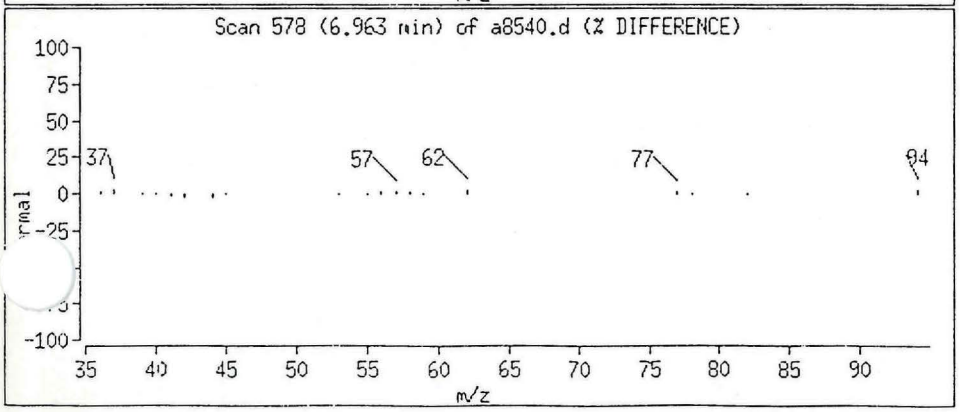












Data File: /chem/msa.i/a062996.b/a8540.d

Date : 29-JUN-96 11:36

Client ID:

Instrument: msa.i

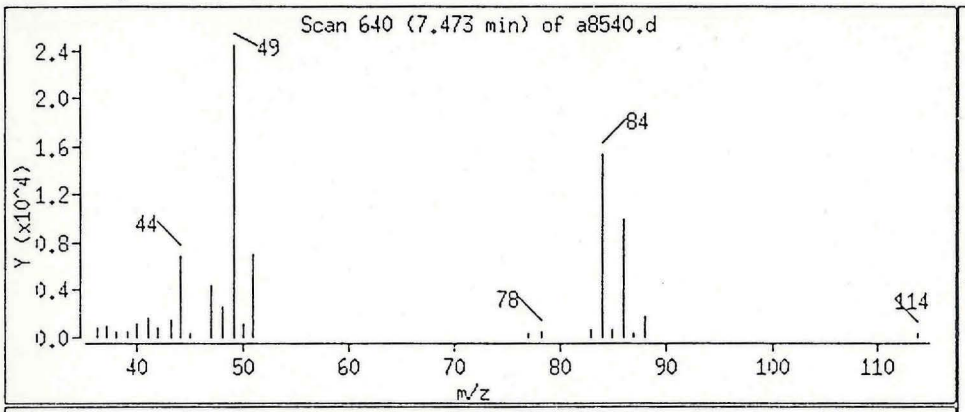
Sample Info: met blk n2v5309

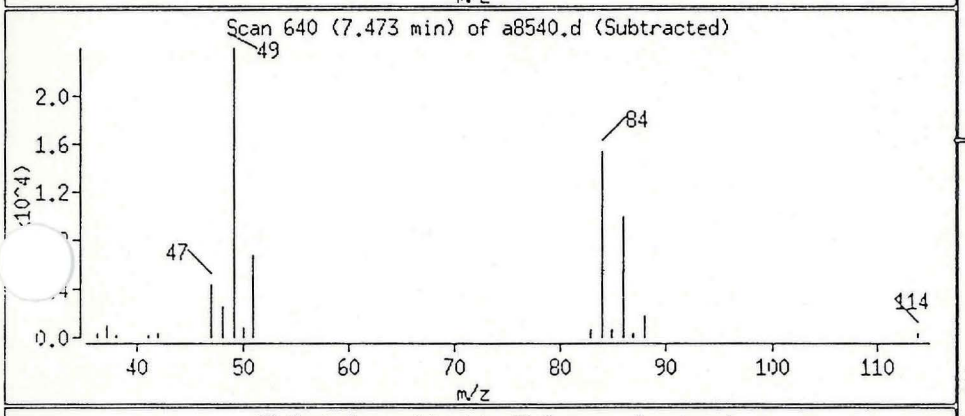
Operator: jk

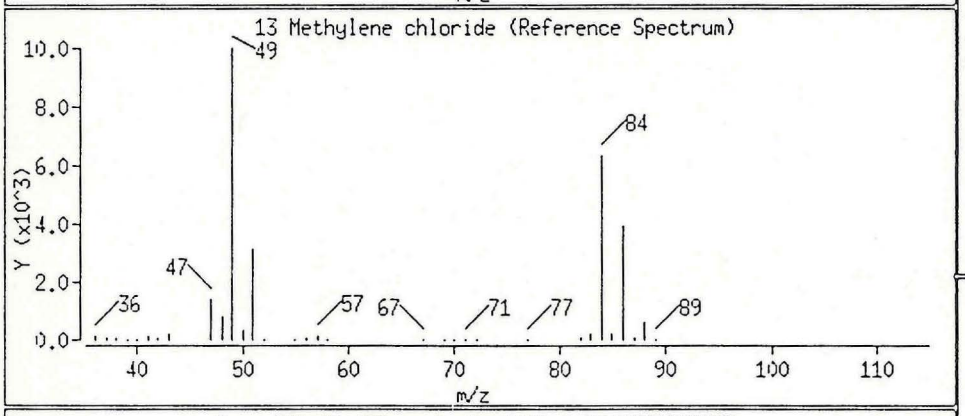
Column phase: DB-624 75m x 0.53mm

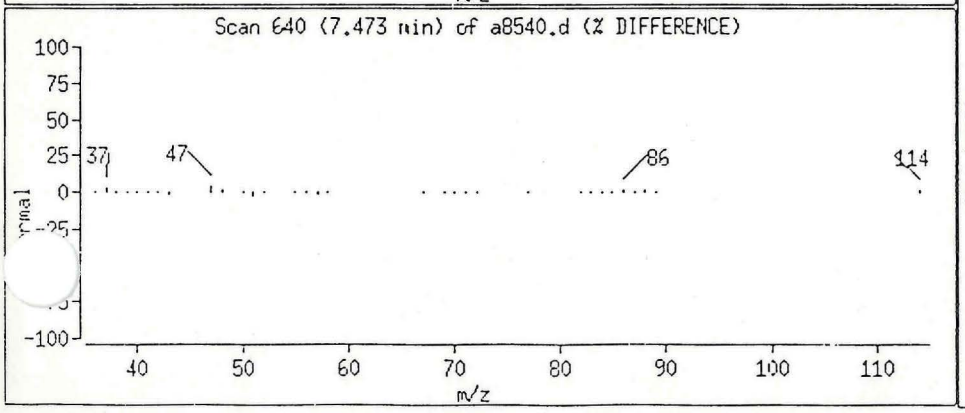
Column diameter: 0.53

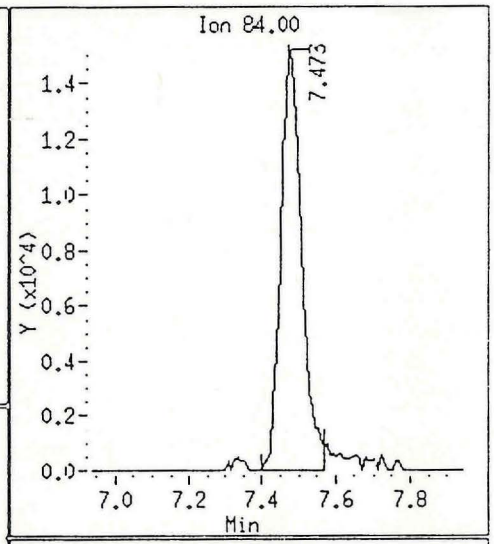
13 Methylene chloride

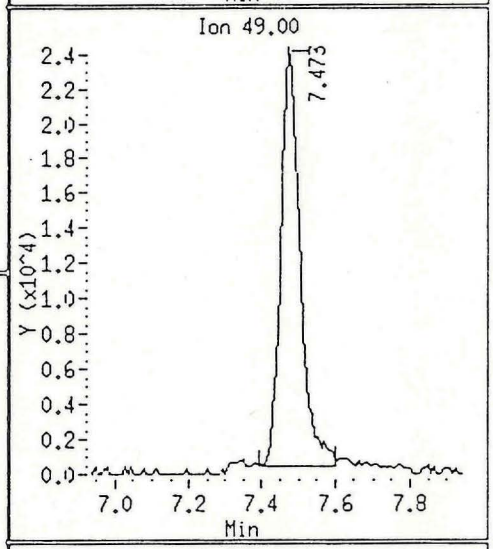


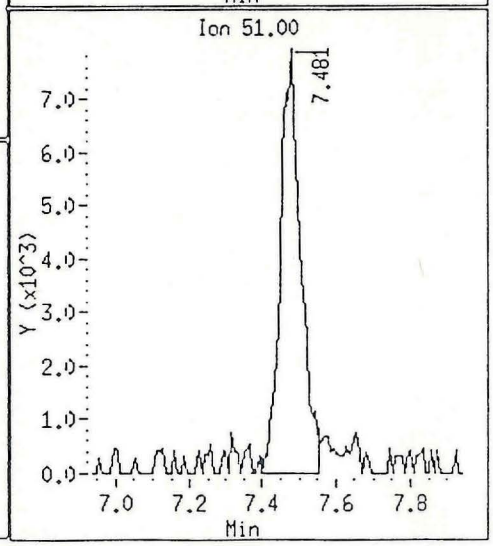












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00277

VBLK01B

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: N2V5315V

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8560

Level: (low/med) LOW Date Received:

% Moisture: not dec. N/A Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	10	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	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
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	5	U
78-87-5	1,2-Dichloropropane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	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
156-60-5	1,2-Trans-dichloroethylene	5	U
78-93-3	2-Butanone	5	U
108-10-1	4-Methyl-2-pentanone	10	U
74-83-9	Bromomethane	5	U
74-87-3	Chloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
124-48-1	Dibromochloromethane	5	U
127-18-4	Tetrachloroethene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
75-27-4	Bromodichloromethane	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00278

EPA SAMPLE NO.

VBLK01 B

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: N2V5315V

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8560

Level: (low/med) LOW Date Received:

% Moisture: not dec. N/A Date Analyzed: 06/30/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

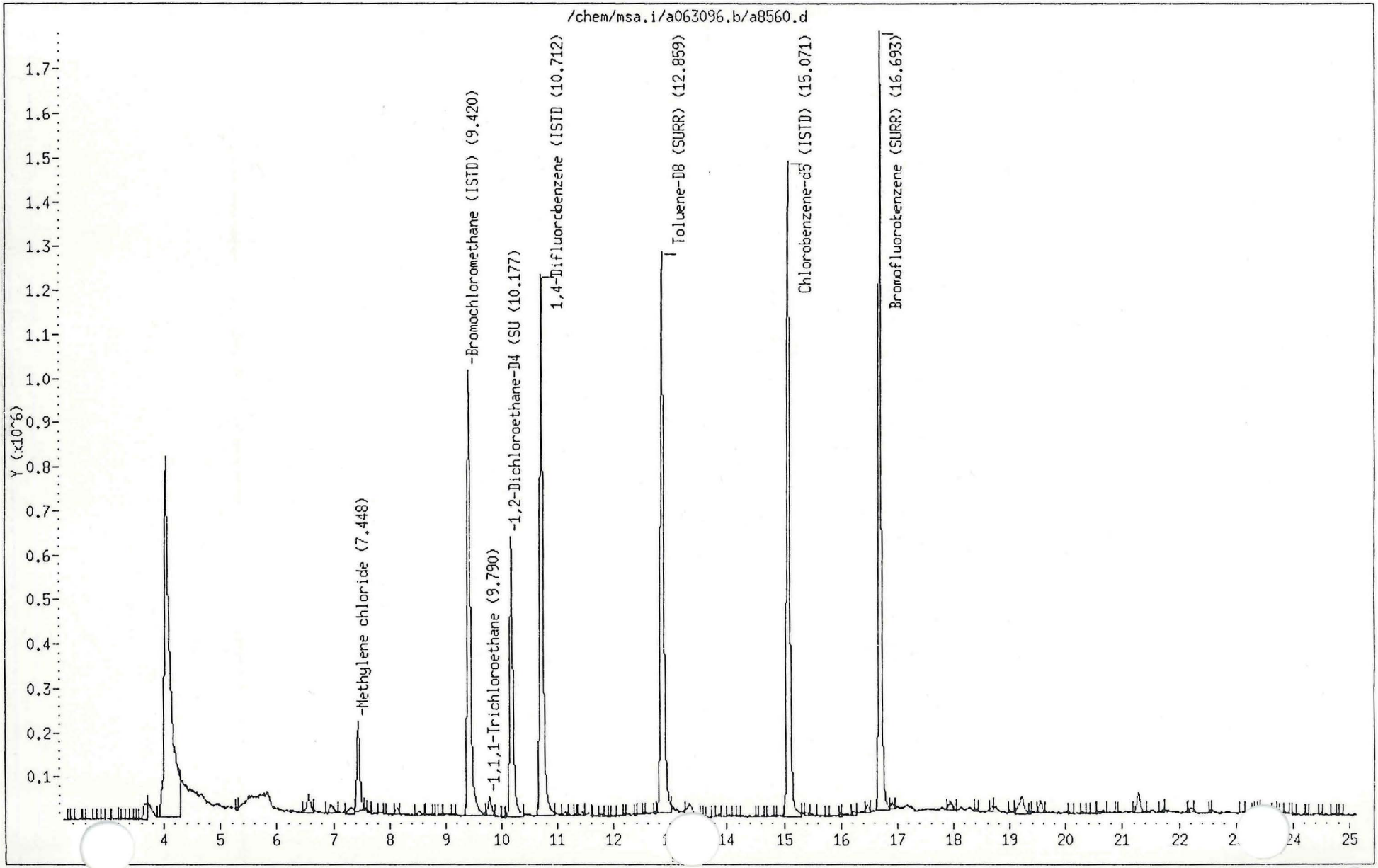
00279

Data File: /chem/msa.i/a063096.b/a8560.d
Date : 30-JUN-96 17:59
Client ID: n2v5315 blk
Sample Info: n2v5315 blk

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240 + TIC

Data file : /chem/msa.i/a063096.b/a8560.d
Lab Smp Id: Client Smp ID: n2v5315 blk
Inj Date : 30-JUN-96 17:59
Operator : jk Inst ID: msa.i
Smp Info : n2v5315 blk
Misc Info : n2v5315v,n2v5315,qv,5000,1,5.0,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 02-Jul-1996 10:40 jeff Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/2/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
thylene chloride	84.00	7.448	7.425	(0.791)	181994	9.53	9.53
* omochloromethane (ISTD)	128.00	9.420	9.428	(1.000)	481645	50.0	(Q)
25 1,1,1-Trichloroethane	97.00	9.790	9.791	(0.913)	57035	2.54	2.54
S 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.177	10.180	(1.030)	813726	48.4	48.4
* 32 1,4-Difluorobenzene (ISTD)	114.00	10.720	10.716	(1.000)	1353205	50.0	
S 41 Toluene-D8 (SURR)	98.00	12.859	12.863	(0.853)	1710439	47.7	47.7
* 50 Chlorobenzene-d5 (ISTD)	117.00	15.071	15.075	(1.000)	1438290	50.0	
S 59 Bromofluorobenzene (SURR)	95.00	16.693	16.686	(1.108)	1182572	49.2	49.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/msa.i/a063096.b/a8560.d

Date : 30-JUN-96 17:59

Client ID: n2v5315 blk

Instrument: msa.i

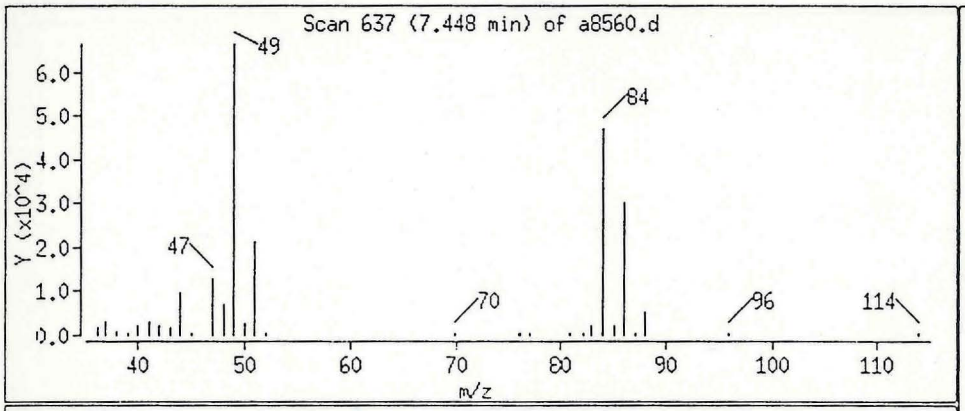
Sample Info: n2v5315 blk

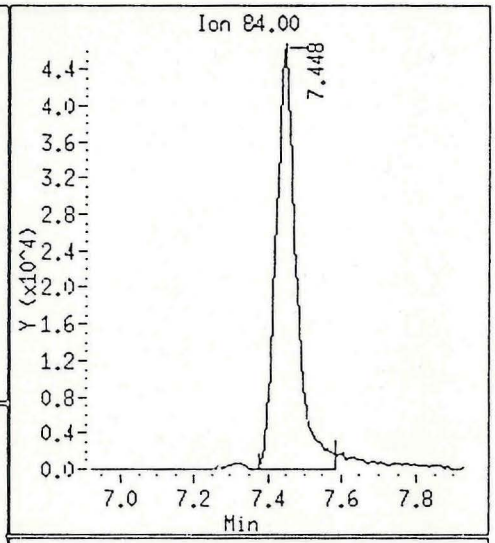
Operator: jk

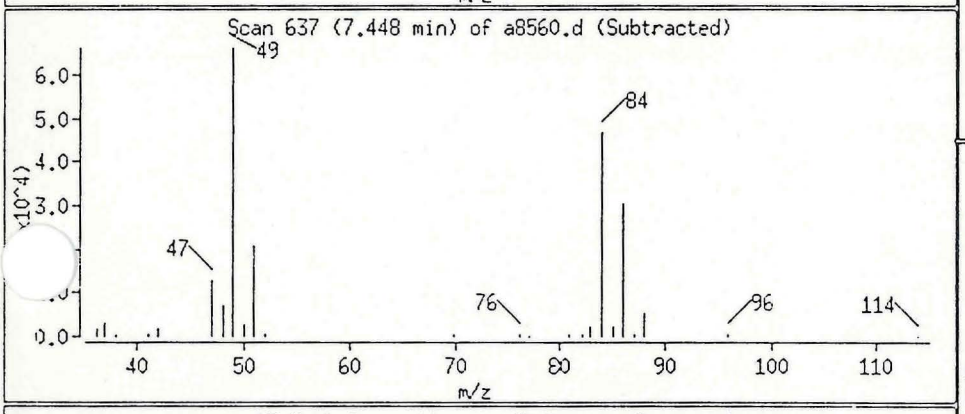
Column phase: DB-624 75m x 0.53mm

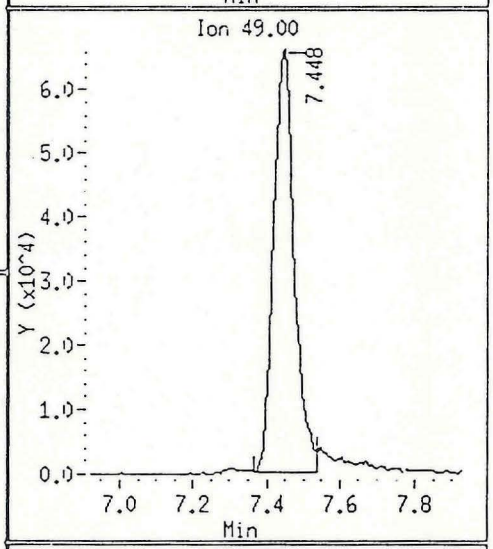
Column diameter: 0.53

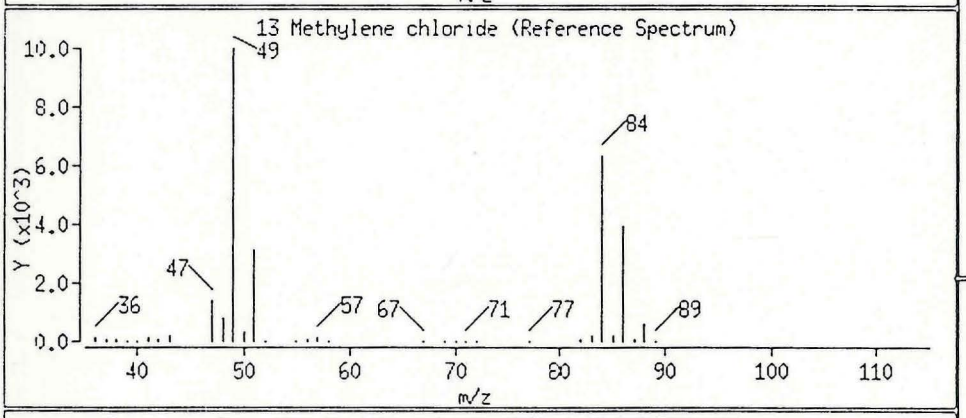
13 Methylene chloride

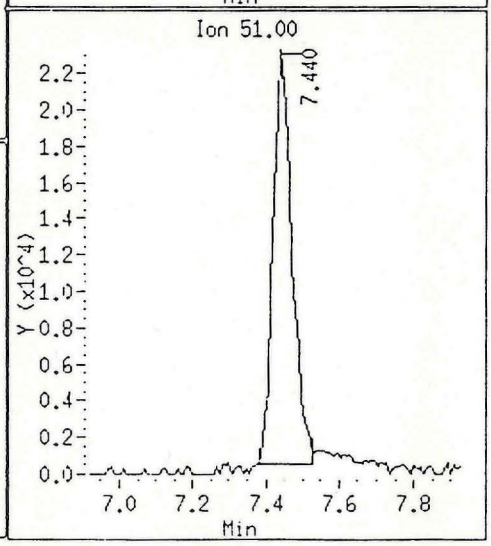


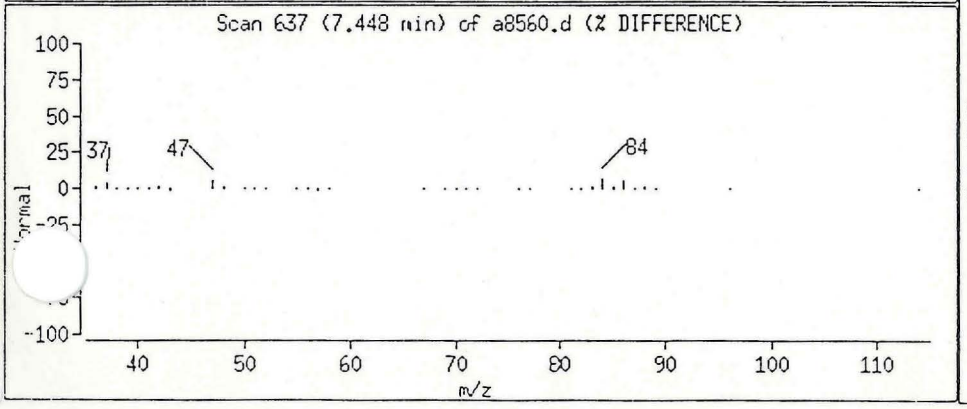












Data File: /chem/msa.i/a063096.b/a8560.d

Date : 30-JUN-96 17:59

Client ID: n2v5315 blk

Sample Info: n2v5315 blk

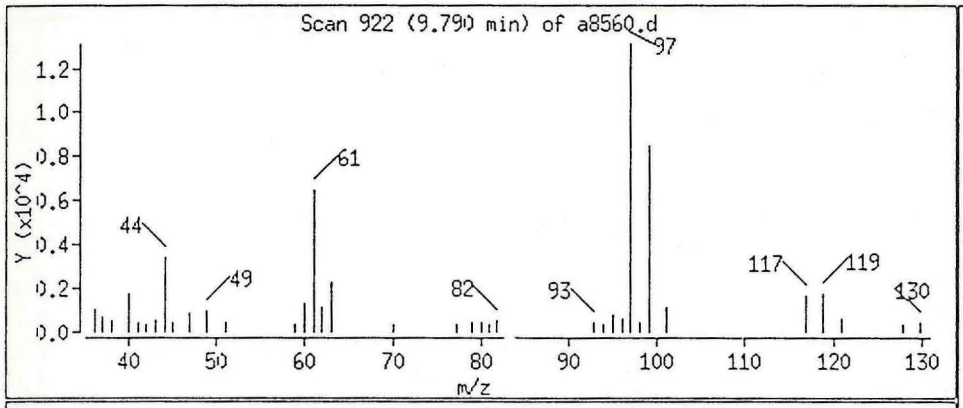
Instrument: msa.i

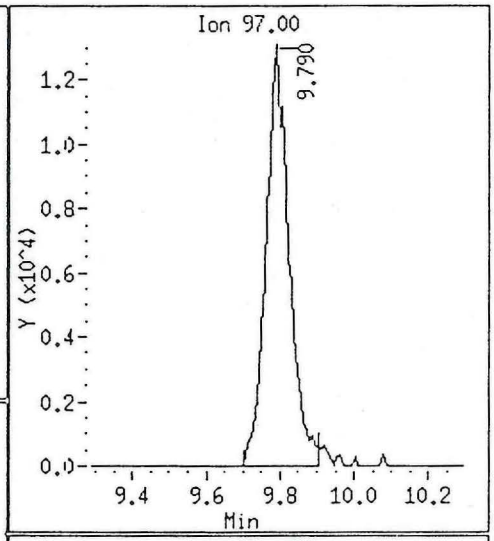
Operator: jk

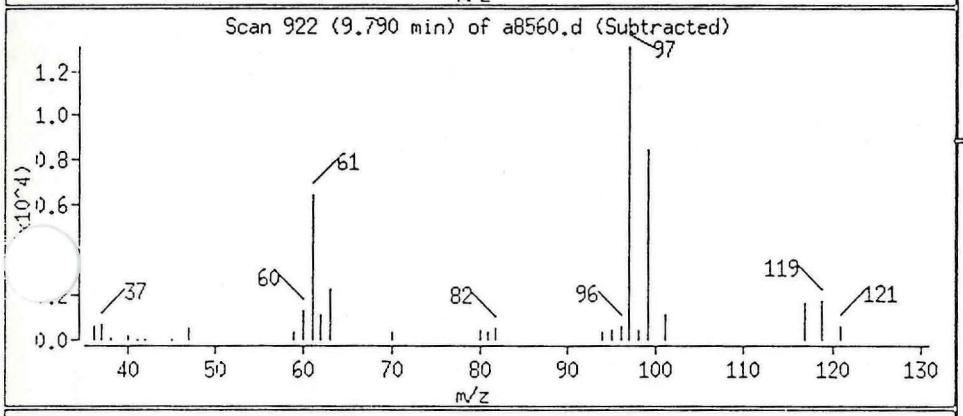
Column phase: DB-624 75m x 0.53mm

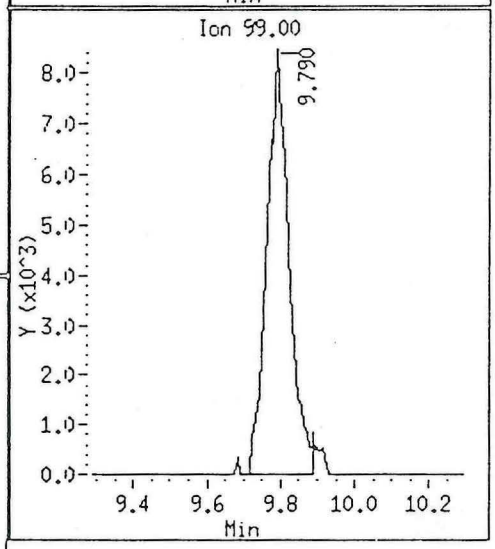
Column diameter: 0.53

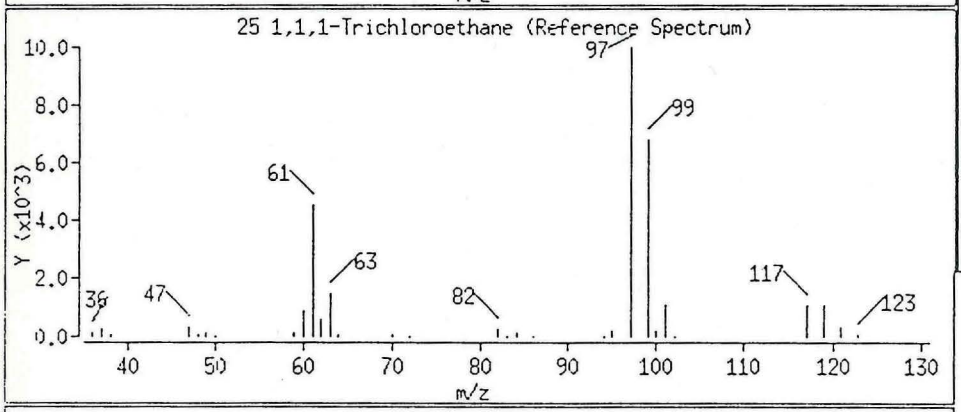
25 1,1,1-Trichloroethane

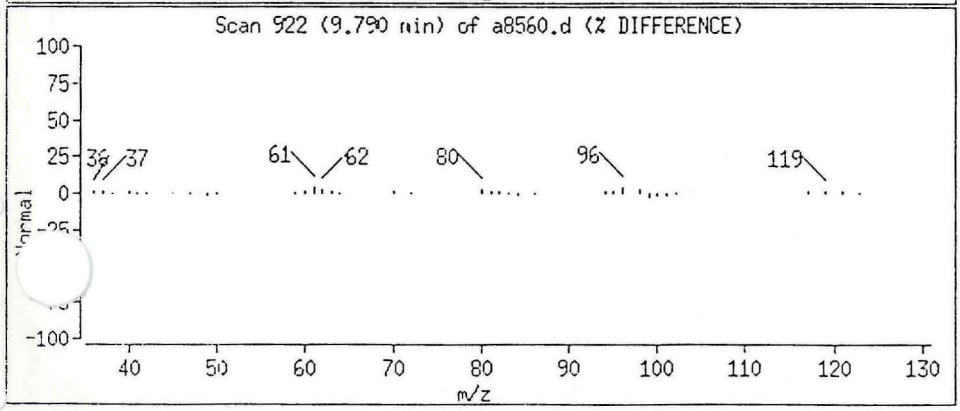












1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00283

SSA7-TF7MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9907VS

Sample wt/vol: 5.29 (g/mL) G Lab File ID: A8599

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 16 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	55	
75-00-3	Chloroethane	55	
75-09-2	Methylene Chloride	75	B
67-64-1	Acetone	61	
75-15-0	Carbon Disulfide	49	
75-34-3	1,1-Dichloroethane	55	
540-59-0	1,2-Dichloroethene (total)	100	
67-66-3	Chloroform	55	
107-06-2	1,2-Dichloroethane	56	
71-55-6	1,1,1-Trichloroethane	98	B
56-23-5	Carbon Tetrachloride	54	
78-87-5	1,2-Dichloropropane	59	
79-00-5	1,1,2-Trichloroethane	59	
71-43-2	Benzene	58	
75-25-2	Bromoform	56	
591-78-6	2-Hexanone	59	
79-34-5	1,1,2,2-Tetrachloroethane	65	
108-88-3	Toluene	64	
108-90-7	Chlorobenzene	55	
100-41-4	Ethylbenzene	56	
100-42-5	Styrene	50	
1330-20-7	Xylene (total)	170	
75-35-4	1,1-Dichloroethene	59	
78-93-3	2-Butanone	59	
108-10-1	4-Methyl-2-pentanone	65	
74-83-9	Bromomethane	47	
74-87-3	Chloromethane	54	
10061-01-5	cis-1,3-Dichloropropene	50	
124-48-1	Dibromochloromethane	58	
127-18-4	Tetrachloroethene	54	
10061-02-6	trans-1,3-Dichloropropene	51	
79-01-6	Trichloroethene	57	
75-27-4	Bromodichloromethane	59	

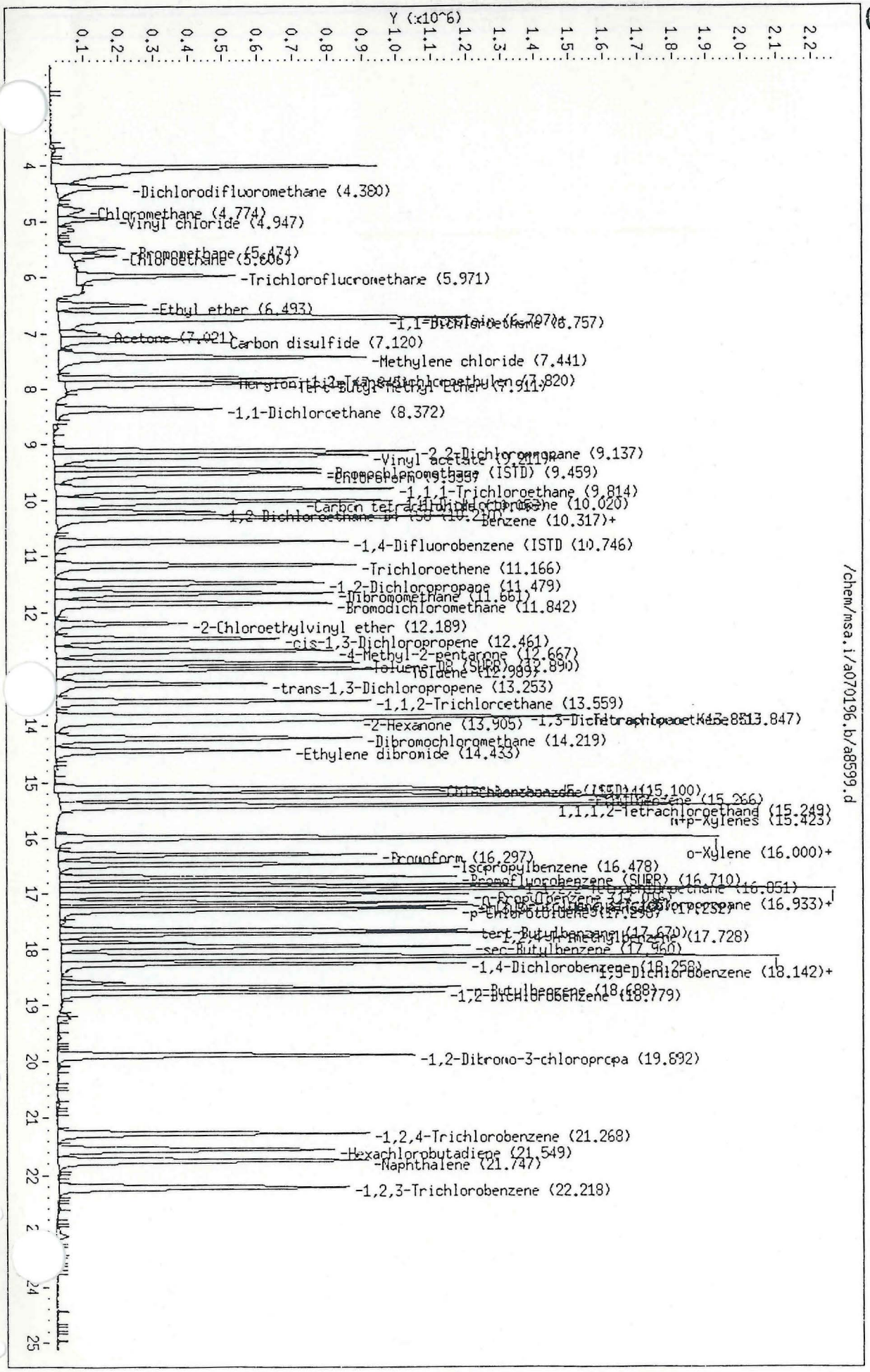
00284

Data File: /chem/msa.i/a070196.b/a8599.d
Date : 01-JUL-96 23:16
Client ID:
Sample Info: mtx spk

Instrument: msa.i

Operator: jk
Column diameter: 0.53

Column phase: DB-624 75m x 0.53mm



Data File: /chem/msa.i/a070196.b/a8599.d
Report Date: 02-Jul-1996 11:17

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a070196.b/a8599.d
Lab Smp Id:
Inj Date : 01-JUL-96 23:16
Operator : jk Inst ID: msa.i
Smp Info : mtx spk
Misc Info : jp9907vs,n2v5315,qv,5000,1,5.29,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

mr 7/2/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
1	Dichlorodifluoromethane	85.00	4.380	4.338	(0.463)	485373	46.0	46.0
	Chloromethane	50.00	4.782	4.733	(0.506)	414563	48.1	48.1
	Vinyl chloride	62.00	4.947	4.905	(0.523)	456588	48.5	48.5
4	Bromomethane	94.00	5.474	5.432	(0.579)	297932	41.6	41.6
5	Chloroethane	64.00	5.606	5.564	(0.593)	229020	49.0	49.0
6	Trichlorofluoromethane	101.00	5.962	5.929	(0.630)	814934	54.2	54.2
7	Ethyl ether	59.00	6.501	6.451	(0.687)	376432	51.2	51.2
8	Acrolein	56.00	6.707	6.673	(0.709)	415328	22.5	22.5
9	1,1,2-Trichlorotrifluoroethan	101.00	6.715	6.665	(0.710)	948999	51.6	51.6
10	1,1-Dichloroethene	96.00	6.757	6.715	(0.714)	488641	51.9	51.9
11	Acetone	43.00	7.021	6.987	(0.742)	607125	54.3	54.3
12	Carbon disulfide	76.00	7.120	7.078	(0.753)	1347823	43.7	43.7
13	Methylene chloride	84.00	7.449	7.408	(0.788)	799870	66.3	66.3
14	Acrylonitrile	53.00	7.845	7.803	(0.829)	341402	46.2	46.2
15	1,2-Trans-dichloroethylene	96.00	7.812	7.778	(0.826)	478277	43.8	43.8
16	Tert-Butyl Methyl Ether	73.00	7.911	7.877	(0.836)	1314941	48.6	48.6
17	1,1-Dichloroethane	63.00	8.372	8.339	(0.885)	1066543	48.8	48.8
18	Vinyl acetate	43.00	9.220	9.178	(0.975)	2461384	317	317
19	2-Butanone	72.00	9.211	9.170	(0.857)	185142	51.9	51.9(Q)
20	1,2-cis-Dichloroethylene	96.00	9.137	9.088	(0.966)	542884	45.0	45.0(QM)
21	2,2-Dichloropropane	77.00	9.145	9.104	(0.967)	589556	40.0	40.0
22	Ethyl acetate	43.00	9.220	9.178	(0.975)	2461384	31.7	31.7
* 23	Bromochloromethane (ISTD)	128.00	9.459	9.418	(1.000)	376371	50.0	
24	Chloroform	83.00	9.533	9.492	(1.008)	1133848	48.6	48.6
25	1,1,1-Trichloroethane	97.00	9.814	9.773	(0.913)	1336010	86.3	86.3
26	1,1-Dichloropropene	75.00	10.012	9.979	(0.932)	718100	48.5	48.5
	arbon tetrachloride	117.00	10.053	10.012	(0.936)	533089	47.9	47.9
$	,2-Dichloroethane-D4 (SURR)	65.00	10.210	10.177	(1.079)	647044	51.8	51.8
30	Benzene	78.00	10.309	10.276	(0.959)	1295199	51.4	51.4

Data File: /chem/msa.i/a070196.b/a8599.d
Report Date: 02-Jul-1996 11:17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	31 1,2-Dichloroethane	62.00	10.317	10.276	(1.091)	724394	49.9	49.9
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.746	10.713	(1.000)	1277822	50.0	
	33 Trichloroethene	130.00	11.158	11.126	(1.038)	579118	50.7	50.7
	34 1,2-Dichloropropane	63.00	11.479	11.447	(1.068)	683261	52.2	52.2
	36 Dibromomethane	93.00	11.653	11.629	(1.084)	750385	53.0	53.0
	37 Bromodichloromethane	83.00	11.842	11.811	(1.102)	1034178	51.9	51.9
	38 2-Chloroethylvinyl ether	63.00	12.189	12.157	(1.134)	336003	46.8	46.8
	39 cis-1,3-Dichloropropene	75.00	12.461	12.438	(1.160)	741372	44.0	44.0
	40 4-Methyl-2-pentanone	43.00	12.667	12.644	(0.839)	1483826	57.4	57.4
$	41 Toluene-D8 (SURR)	98.00	12.890	12.859	(0.854)	1162995	52.3	52.3
	42 Toluene	91.00	12.989	12.966	(0.860)	1473787	56.8	56.8
	43 trans-1,3-Dichloropropene	75.00	13.253	13.222	(1.233)	638740	45.0	45.0
	44 1,1,2-Trichloroethane	97.00	13.567	13.544	(1.263)	621803	52.3	52.3
	45 1,3-Dichloropropane	76.00	13.831	13.808	(0.916)	919991	54.7	54.7
	46 Tetrachloroethene	164.00	13.847	13.833	(0.917)	410064	48.0	48.0
	47 2-Hexanone	43.00	13.905	13.891	(0.921)	1170092	51.9	51.9
	48 Dibromochloromethane	129.00	14.219	14.188	(1.323)	929499	51.0	51.0
	49 Ethylene dibromide	107.00	14.433	14.411	(0.956)	971595	53.0	53.0
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.100	15.078	(1.000)	912284	50.0	
	51 Chlorobenzene	112.00	15.141	15.119	(1.003)	927661	48.4	48.4
	52 1,1,1,2-Tetrachloroethane	133.00	15.241	15.219	(1.009)	507338	52.2	52.2
	Ethylbenzene	106.00	15.266	15.244	(1.011)	423189	49.1	49.1
	m+p-Xylenes	106.00	15.423	15.409	(1.021)	1064962	103	103
	55 o-Xylene	106.00	16.000	15.978	(1.060)	517508	51.0	51.0
	56 Styrene	104.00	16.008	15.986	(1.060)	800384	44.2	44.2
	57 Bromoform	173.00	16.297	16.283	(1.517)	685117	49.5	49.5
	58 Isopropylbenzene	105.00	16.478	16.465	(1.091)	1377486	46.6	46.6
$	59 Bromofluorobenzene (SURR)	95.00	16.710	16.697	(1.107)	735415	49.8	49.8
	60 1,1,2,2-Tetrachloroethane	83.00	16.851	16.838	(1.116)	1445652	57.3	57.3
	61 1,2,3-Trichloropropane	75.00	16.925	16.912	(1.121)	1072304	55.7	55.7
	62 Bromobenzene	156.00	16.933	16.921	(1.121)	467079	47.4	47.4
	63 n-Propylbenzene	91.00	17.025	17.004	(1.127)	1717369	44.2	44.2
	64 o-Chlorotoluene	91.00	17.165	17.153	(1.137)	1283134	47.9	47.9
	65 1,3,5-Trimethylbenzene	105.00	17.232	17.219	(1.141)	1118701	46.8	46.8
	66 p-Chlorotoluene	91.00	17.298	17.286	(1.146)	1196037	45.6	45.6
	67 tert-Butylbenzene	119.00	17.670	17.658	(1.170)	1141429	46.7	46.7
	68 1,2,4-Trimethylbenzene	105.00	17.728	17.716	(1.174)	1153253	46.2	46.2
	69 sec-Butylbenzene	105.00	17.960	17.947	(1.189)	1594566	44.0	44.0
	70 1,3-Dichlorobenzene	146.00	18.150	18.138	(1.202)	745375	44.7	44.7
	71 4-Isopropyltoluene	119.00	18.133	18.121	(1.201)	1208498	43.8	43.8
	72 1,4-Dichlorobenzene	146.00	18.266	18.254	(1.210)	796219	44.1	44.1
	73 n-Butylbenzene	91.00	18.688	18.676	(1.238)	1307455	41.0	41.0
	74 1,2-Dichlorobenzene	146.00	18.787	18.767	(1.244)	768647	45.8	45.8
	75 1,2-Dibromo-3-chloropropane	75.00	19.884	19.872	(1.317)	577148	56.1	56.1
	76 1,2,4-Trichlorobenzene	180.00	21.276	21.257	(1.409)	541449	39.0	39.0
	77 Hexachlorobutadiene	225.00	21.549	21.539	(1.427)	327575	38.7	38.7
	aphthalene	128.00	21.747	21.738	(1.440)	1531764	42.9	42.9
	,2,3-Trichlorobenzene	180.00	22.218	22.209	(1.471)	549120	40.0	40.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00287

SSA7-W3MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9910VS

Sample wt/vol: 5.14 (g/mL) G Lab File ID: A8549

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 06/29/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	47	
75-00-3	Chloroethane	49	
75-09-2	Methylene Chloride	52	B
67-64-1	Acetone	57	B
75-15-0	Carbon Disulfide	51	
75-34-3	1,1-Dichloroethane	52	
540-59-0	1,2-Dichloroethene (total)	100	
67-66-3	Chloroform	52	
107-06-2	1,2-Dichloroethane	53	
71-55-6	1,1,1-Trichloroethane	52	
56-23-5	Carbon Tetrachloride	56	
78-87-5	1,2-Dichloropropane	53	
79-00-5	1,1,2-Trichloroethane	52	
71-43-2	Benzene	50	
75-25-2	Bromoform	53	
591-78-6	2-Hexanone	49	
79-34-5	1,1,2,2-Tetrachloroethane	52	
108-88-3	Toluene	51	
108-90-7	Chlorobenzene	53	
100-41-4	Ethylbenzene	51	
100-42-5	Styrene	51	
1330-20-7	Xylene (total)	160	
75-35-4	1,1-Dichloroethene	55	
78-93-3	2-Butanone	53	
108-10-1	4-Methyl-2-pentanone	51	
74-83-9	Bromomethane	53	
74-87-3	Chloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	51	
124-48-1	Dibromochloromethane	54	
127-18-4	Tetrachloroethene	52	
10061-02-6	trans-1,3-Dichloropropene	50	
79-01-6	Trichloroethene	52	
75-27-4	Bromodichloromethane	53	

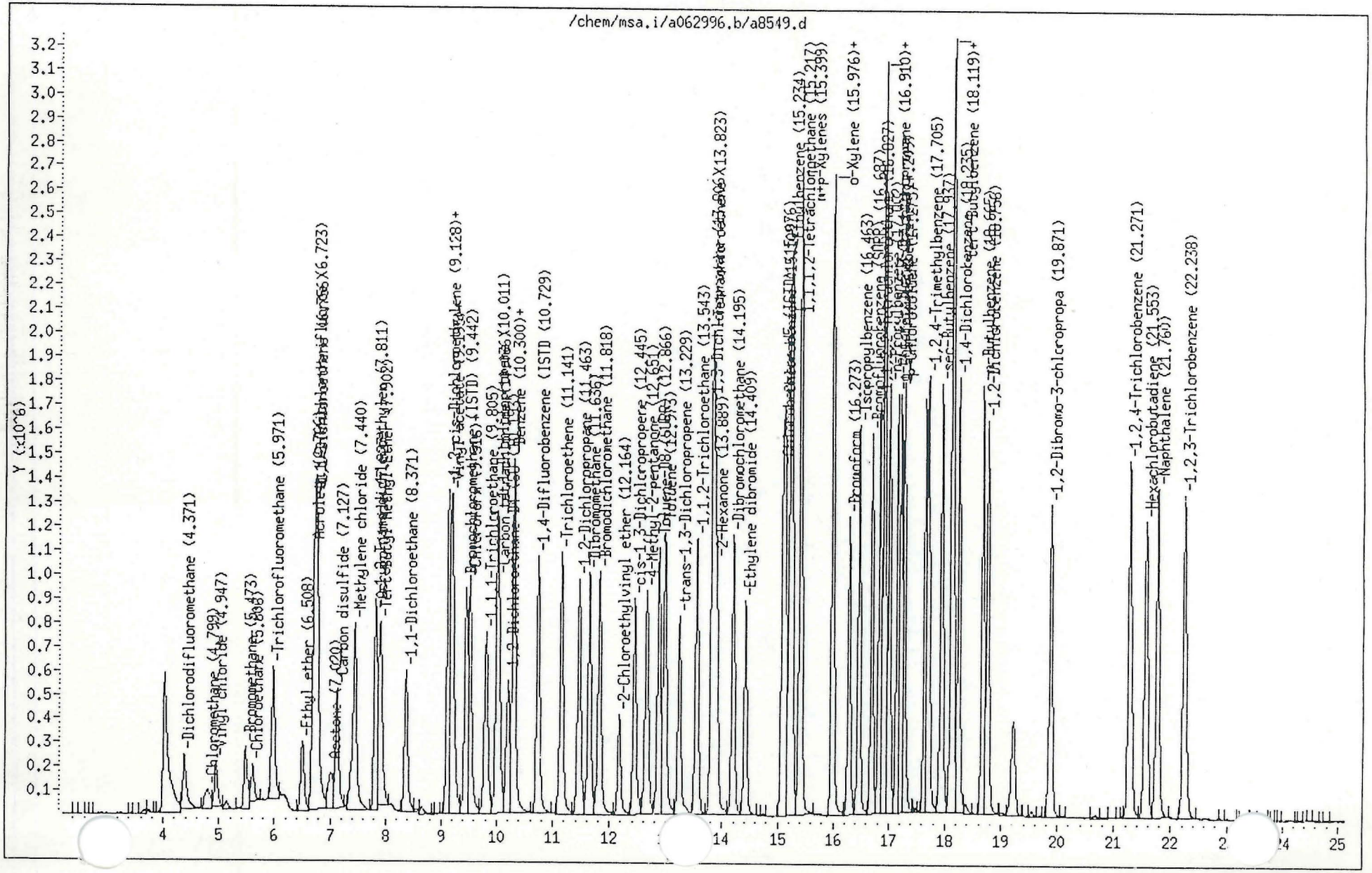
00288

Data File: /chem/msa.i/a062996.b/a8549.d
Date : 29-JUN-96 16:54
Client ID:
Sample Info: 18221n ssa7-w3 ms n2v5309

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062996.b/a8549.d
Report Date: 02-Jul-1996 13:49

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062996.b/a8549.d
Lab Smp Id:
Inj Date : 29-JUN-96 16:54
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w3 ms n2v5309
Misc Info : jp9910vs,n2v5309,qv,5000,1,5.14,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:55 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 14
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

7/2/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
1	Dichlorodifluoromethane	85.00	4.379	4.379	(0.464)	540440	46.0	46.0
	Chloromethane	50.00	4.790	4.766	(0.507)	460948	42.8	42.8
	Vinyl chloride	62.00	4.947	4.947	(0.524)	524673	44.0	44.0
4	Bromomethane	94.00	5.473	5.473	(0.580)	421059	50.1	50.1
5	Chloroethane	64.00	5.606	5.597	(0.594)	259218	46.0	46.0
6	Trichlorofluoromethane	101.00	5.971	5.962	(0.632)	989807	52.9	52.9
7	Ethyl ether	59.00	6.508	6.499	(0.689)	428632	48.5	48.5
8	Acrolein	56.00	6.706	6.705	(0.710)	583803	30.3	30.3
9	1,1,2-Trichlorotrifluoroethan	101.00	6.723	6.722	(0.712)	1073967	49.2	49.2
10	1,1-Dichloroethene	96.00	6.756	6.755	(0.716)	551132	52.2	52.2
11	Acetone	43.00	7.028	7.011	(0.744)	656094	53.2	53.2
12	Carbon disulfide	76.00	7.127	7.126	(0.755)	1498564	48.4	48.4
13	Methylene chloride	84.00	7.440	7.439	(0.788)	713954	49.2	49.2
14	Acrylonitrile	53.00	7.827	7.835	(0.829)	420983	50.3	50.3
15	1,2-Trans-dichloroethylene	96.00	7.819	7.810	(0.828)	602849	47.5	47.5
16	Tert-Butyl Methyl Ether	73.00	7.910	7.901	(0.838)	1515844	48.7	48.7
17	1,1-Dichloroethane	63.00	8.363	8.362	(0.886)	1254113	49.0	49.0
18	Vinyl acetate	43.00	9.195	9.194	(0.974)	3436913	360	360
19	2-Butanone	72.00	9.186	9.185	(0.856)	219476	49.6	49.6(Q)
20	1,2-cis-Dichloroethylene	96.00	9.120	9.119	(0.966)	677476	49.4	49.4
21	2,2-Dichloropropane	77.00	9.128	9.128	(0.967)	766202	43.9	43.9
22	Ethyl acetate	43.00	9.195	9.194	(0.974)	3436913	37.8	37.8
* 23	Bromochloromethane (ISTD)	128.00	9.442	9.441	(1.000)	446432	50.0	
24	Chloroform	83.00	9.516	9.515	(1.008)	1376397	48.8	48.8
25	1,1,1-Trichloroethane	97.00	9.805	9.804	(0.913)	1016091	48.9	48.9
26	1,1-Dichloropropene	75.00	10.003	10.002	(0.932)	912851	48.5	48.5
	Carbon tetrachloride	117.00	10.036	10.044	(0.935)	690685	52.6	52.6
$	1,2-Dichloroethane-D4 (SURR)	65.00	10.193	10.192	(1.080)	764427	50.4	50.4
30	Benzene	78.00	10.300	10.300	(0.959)	1582538	47.3	47.3

Data File: /chem/msa.i/a062996.b/a8549.d
Report Date: 02-Jul-1996 13:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	31 1,2-Dichloroethane	62.00	10.300	10.300	(1.091)	882062	49.6	49.6
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.737	10.728	(1.000)	1651780	50.0	
	33 Trichloroethene	130.00	11.150	11.149	(1.038)	718547	48.8	48.8
	34 1,2-Dichloropropane	63.00	11.463	11.462	(1.068)	843279	49.9	49.9
	36 Dibromomethane	93.00	11.636	11.635	(1.084)	918354	49.5	49.5
	37 Bromodichloromethane	83.00	11.826	11.825	(1.101)	1331164	49.8	49.8
	38 2-Chloroethylvinyl ether	63.00	12.164	12.172	(1.133)	373659	41.0	41.0
	39 cis-1,3-Dichloropropene	75.00	12.445	12.444	(1.159)	1038885	47.7	47.7
	40 4-Methyl-2-pentanone	43.00	12.651	12.650	(0.839)	1711222	47.7	47.7
$	41 Toluene-D8 (SURR)	98.00	12.866	12.881	(0.853)	1480546	49.8	49.8
	42 Toluene	91.00	12.973	12.980	(0.861)	1736500	48.2	48.2
	43 trans-1,3-Dichloropropene	75.00	13.229	13.236	(1.232)	887632	47.4	47.4
	44 1,1,2-Trichloroethane	97.00	13.543	13.550	(1.261)	776898	49.3	49.3
	45 1,3-Dichloropropane	76.00	13.806	13.814	(0.916)	1150703	49.9	49.9
	46 Tetrachloroethene	164.00	13.831	13.839	(0.917)	583481	49.3	49.3
	47 2-Hexanone	43.00	13.889	13.888	(0.921)	1436387	46.2	46.2
	48 Dibromochloromethane	129.00	14.195	14.202	(1.322)	1233876	50.8	50.8
	49 Ethylene dibromide	107.00	14.409	14.416	(0.956)	1261770	50.3	50.3
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.076	15.083	(1.000)	1243966	50.0	
	51 Chlorobenzene	112.00	15.118	15.133	(1.003)	1299185	49.8	49.8
	52 1,1,1,2-Tetrachloroethane	133.00	15.217	15.224	(1.009)	688565	50.9	50.9
	Ethylbenzene	106.00	15.242	15.257	(1.011)	581581	48.3	48.3
	m+p-Xylenes	106.00	15.399	15.414	(1.021)	1389776	98.4	98.4
	55 o-Xylene	106.00	15.976	15.983	(1.060)	677753	47.6	47.6
	56 Styrene	104.00	15.984	15.991	(1.060)	1214450	48.3	48.3
	57 Bromoform	173.00	16.273	16.288	(1.516)	933724	49.5	49.5
	58 Isopropylbenzene	105.00	16.463	16.470	(1.092)	2010942	49.8	49.8
$	59 Bromofluorobenzene (SURR)	95.00	16.687	16.693	(1.107)	1010683	50.5	50.5
	60 1,1,2,2-Tetrachloroethane	83.00	16.827	16.834	(1.116)	1856617	49.0	49.0
	61 1,2,3-Trichloropropane	75.00	16.910	16.917	(1.122)	1375540	49.7	49.7
	62 Bromobenzene	156.00	16.919	16.925	(1.122)	693440	49.3	49.3
	63 n-Propylbenzene	91.00	17.002	17.016	(1.128)	2603985	48.3	48.3
	64 o-Chlorotoluene	91.00	17.142	17.157	(1.137)	1891281	49.5	49.5
	65 1,3,5-Trimethylbenzene	105.00	17.209	17.223	(1.141)	1634204	49.0	49.0
	66 p-Chlorotoluene	91.00	17.275	17.290	(1.146)	1799034	48.7	48.7
	67 tert-Butylbenzene	119.00	17.647	17.661	(1.171)	1623588	46.8	46.8 (M)
	68 1,2,4-Trimethylbenzene	105.00	17.705	17.719	(1.174)	1700210	48.9	48.9
	69 sec-Butylbenzene	105.00	17.937	17.951	(1.190)	2442576	48.1	48.1
	70 1,3-Dichlorobenzene	146.00	18.128	18.141	(1.202)	1164339	49.1	49.1
	71 4-Isopropyltoluene	119.00	18.111	18.125	(1.201)	1849299	48.7	48.7
	72 1,4-Dichlorobenzene	146.00	18.235	18.257	(1.210)	1253379	49.6	49.6
	73 n-Butylbenzene	91.00	18.665	18.679	(1.238)	2055505	46.2	46.2
	74 1,2-Dichlorobenzene	146.00	18.756	18.778	(1.244)	1141527	48.4	48.4
	75 1,2-Dibromo-3-chloropropane	75.00	19.871	19.875	(1.318)	706654	48.6	48.6
	76 1,2,4-Trichlorobenzene	180.00	21.271	21.260	(1.411)	908874	46.8	46.8
	77 Hexachlorobutadiene	225.00	21.561	21.549	(1.430)	527295	47.3	47.3
	Naphthalene	128.00	21.751	21.740	(1.443)	2360535	47.3	47.3
	1,2,3-Trichlorobenzene	180.00	22.238	22.211	(1.475)	910351	46.5	46.5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

00291

EPA SAMPLE NO.

SSA7-TF7MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9907VR

Sample wt/vol: 5.38 (g/mL) G Lab File ID: A8600

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 16 Date Analyzed: 07/01/96

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	53	
75-00-3	Chloroethane	54	
75-09-2	Methylene Chloride	73	B
67-64-1	Acetone	60	
75-15-0	Carbon Disulfide	49	
75-34-3	1,1-Dichloroethane	57	
540-59-0	1,2-Dichloroethene (total)	110	
67-66-3	Chloroform	57	
107-06-2	1,2-Dichloroethane	58	
71-55-6	1,1,1-Trichloroethane	110	B
56-23-5	Carbon Tetrachloride	53	
78-87-5	1,2-Dichloropropane	60	
79-00-5	1,1,2-Trichloroethane	59	
71-43-2	Benzene	58	
75-25-2	Bromoform	56	
591-78-6	2-Hexanone	60	
79-34-5	1,1,2,2-Tetrachloroethane	66	
108-88-3	Toluene	64	
108-90-7	Chlorobenzene	56	
100-41-4	Ethylbenzene	56	
100-42-5	Styrene	49	
1330-20-7	Xylene (total)	180	
75-35-4	1,1-Dichloroethene	62	
78-93-3	2-Butanone	54	
108-10-1	4-Methyl-2-pentanone	69	
74-83-9	Bromomethane	50	
74-87-3	Chloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	49	
124-48-1	Dibromochloromethane	58	
127-18-4	Tetrachloroethene	56	
10061-02-6	trans-1,3-Dichloropropene	50	
79-01-6	Trichloroethene	60	
75-27-4	Bromodichloromethane	59	

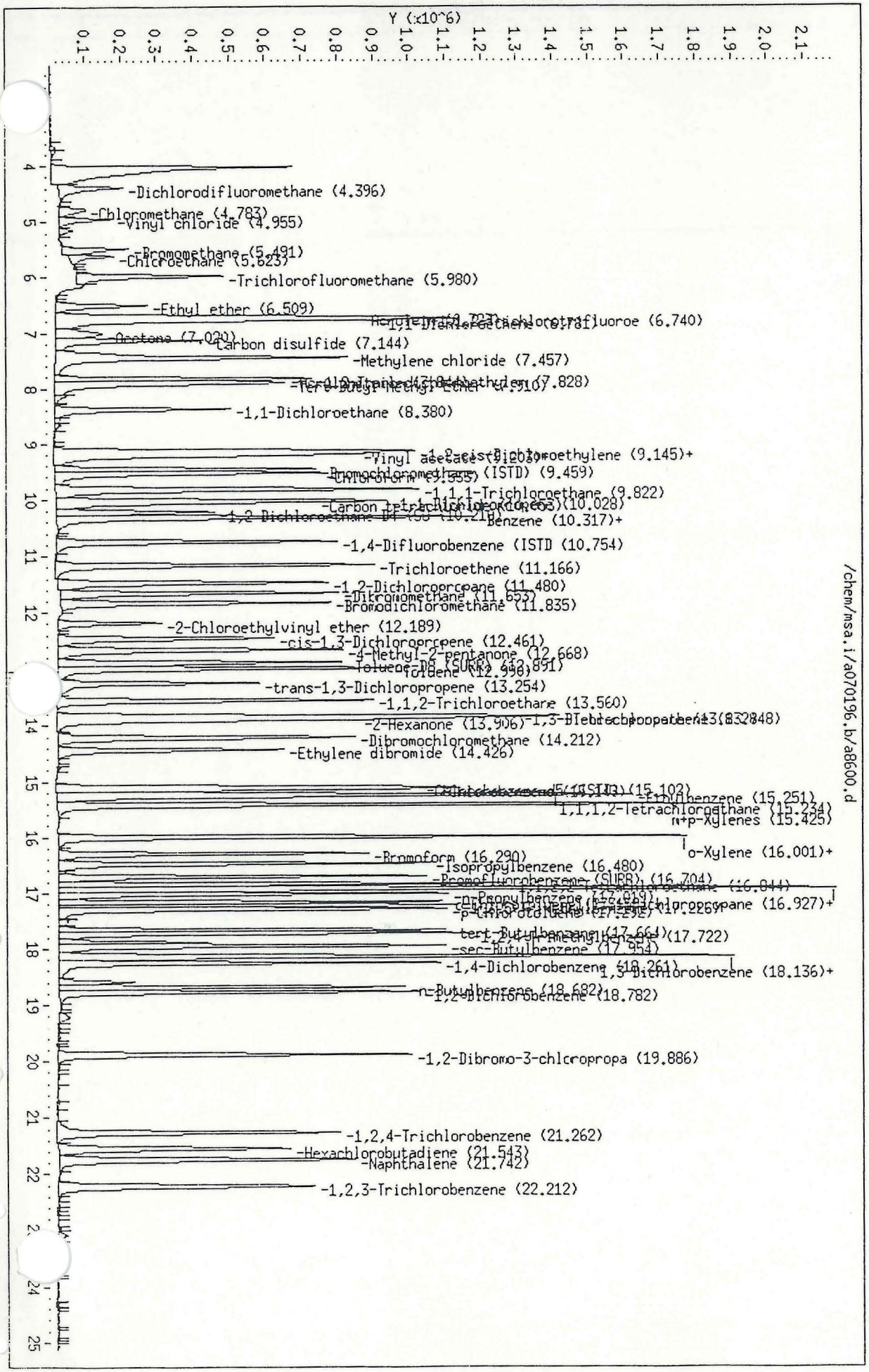
00292

Data File: /chem/msa.i/a070196.b/a8600.d
Date : 01-JUL-96 23:51
Client ID:
Sample Info: mtx spk dup

Column phase: DB-624 75m x 0.53mm

Instrument: msa.i

Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a070196.b/a8600.d
Report Date: 02-Jul-1996 11:19

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a070196.b/a8600.d
Lab Smp Id:
Inj Date : 01-JUL-96 23:51
Operator : jk Inst ID: msa.i
Smp Info : mtx spk dup
Misc Info : jp9907vr,n2v5315,qv,5000,1,5.38,5.0,960701
Comment :
Method : /chem/msa.i/a070196.b/061896_heata.m
Meth Date : 02-Jul-1996 07:15 glenn Quant Type: ISTD
Cal Date : 01-JUL-96 14:25 Cal File: a8584.d
Als bottle: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MV 7/2/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	1 Dichlorodifluoromethane	85.00	4.396	4.338	(0.465)	442174	46.4	46.4
	Chloromethane	50.00	4.783	4.733	(0.506)	356388	45.8	45.8
	Vinyl chloride	62.00	4.955	4.905	(0.524)	403384	47.4	47.4
	4 Bromomethane	94.00	5.491	5.432	(0.580)	287759	44.5	44.5
	5 Chloroethane	64.00	5.623	5.564	(0.594)	206124	48.8	48.8
	6 Trichlorofluoromethane	101.00	5.988	5.929	(0.633)	694047	51.1	51.1
	7 Ethyl ether	59.00	6.509	6.451	(0.688)	371489	56.0	56.0
	8 Acrolein	56.00	6.723	6.673	(0.711)	303164	18.2	18.2
	9 1,1,2-Trichlorotrifluoroethan	101.00	6.740	6.665	(0.713)	874254	52.6	52.6
	10 1,1-Dichloroethene	96.00	6.781	6.715	(0.717)	472124	55.6	55.6
	11 Acetone	43.00	7.020	6.987	(0.742)	543588	53.8	53.8
	12 Carbon disulfide	76.00	7.144	7.078	(0.755)	1223496	44.0	44.0
	13 Methylene chloride	84.00	7.457	7.408	(0.788)	716985	65.8	65.8
	14 Acrylonitrile	53.00	7.844	7.803	(0.829)	313092	46.9	46.9
	15 1,2-Trans-dichloroethylene	96.00	7.828	7.778	(0.828)	458960	46.6	46.6
	16 Tert-Butyl Methyl Ether	73.00	7.919	7.877	(0.837)	1231707	50.4	50.4
	17 1,1-Dichloroethane	63.00	8.380	8.339	(0.886)	1015633	51.5	51.5
	18 Vinyl acetate	43.00	9.203	9.178	(0.973)	2038039	291	291
	19 2-Butanone	72.00	9.203	9.170	(0.856)	160427	48.1	48.1(Q)
	20 1,2-cis-Dichloroethylene	96.00	9.137	9.088	(0.966)	519981	47.8	47.8
	21 2,2-Dichloropropane	77.00	9.154	9.104	(0.968)	513839	38.6	38.6
	22 Ethyl acetate	43.00	9.203	9.178	(0.973)	2038039	29.1	29.1
*	23 Bromochloromethane (ISTD)	128.00	9.459	9.418	(1.000)	339943	50.0	
	24 Chloroform	83.00	9.533	9.492	(1.008)	1070159	50.8	50.8
	25 1,1,1-Trichloroethane	97.00	9.822	9.773	(0.913)	1385471	95.7	95.7
	26 1,1-Dichloropropene	75.00	10.020	9.979	(0.932)	668264	48.3	48.3
	Carbon tetrachloride	117.00	10.053	10.012	(0.935)	495638	47.6	47.6
	1,2-Dichloroethane-D4 (SURR)	65.00	10.210	10.177	(1.079)	599784	53.2	53.2
	30 Benzene	78.00	10.317	10.276	(0.959)	1218345	51.8	51.8

Data File: /chem/msa.i/a070196.b/a8600.d
Report Date: 02-Jul-1996 11:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	31 1,2-Dichloroethane	62.00	10.317	10.276	(1.091)	685724	52.2	52.2
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.754	10.713	(1.000)	1194465	50.0	
	33 Trichloroethene	130.00	11.166	11.126	(1.038)	574877	53.9	53.9
	34 1,2-Dichloropropane	63.00	11.480	11.447	(1.067)	659920	53.9	53.9
	36 Dibromomethane	93.00	11.653	11.629	(1.084)	724178	54.8	54.8
	37 Bromodichloromethane	83.00	11.843	11.811	(1.101)	991619	53.2	53.2
	38 2-Chloroethylvinyl ether	63.00	12.181	12.157	(1.133)	262749	39.2	39.2
	39 cis-1,3-Dichloropropene	75.00	12.461	12.438	(1.159)	690718	43.9	43.9
	40 4-Methyl-2-pentanone	43.00	12.668	12.644	(0.839)	1431782	61.8	61.8
$	41 Toluene-D8 (SURR)	98.00	12.891	12.859	(0.854)	1066596	53.5	53.5
	42 Toluene	91.00	12.990	12.966	(0.860)	1339999	57.6	57.6
	43 trans-1,3-Dichloropropene	75.00	13.246	13.222	(1.232)	591032	44.5	44.5
	44 1,1,2-Trichloroethane	97.00	13.560	13.544	(1.261)	588251	53.0	53.0
	45 1,3-Dichloropropane	76.00	13.832	13.808	(0.916)	878308	58.3	58.3
	46 Tetrachloroethene	164.00	13.857	13.833	(0.918)	382963	50.1	50.1
	47 2-Hexanone	43.00	13.906	13.891	(0.921)	1097053	54.3	54.3
	48 Dibromochloromethane	129.00	14.212	14.188	(1.322)	885537	51.9	51.9
	49 Ethylene dibromide	107.00	14.426	14.411	(0.955)	922524	56.2	56.2
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.102	15.078	(1.000)	817359	50.0	
	51 Chlorobenzene	112.00	15.143	15.119	(1.003)	868856	50.6	50.6
	52 1,1,1,2-Tetrachloroethane	133.00	15.234	15.219	(1.009)	480519	55.1	55.1
	Ethylbenzene	106.00	15.259	15.244	(1.010)	385870	50.0	50.0
	m+p-Xylenes	106.00	15.416	15.409	(1.021)	965394	104	104
	55 o-Xylene	106.00	15.993	15.978	(1.059)	485810	53.4	53.4
	56 Styrene	104.00	16.001	15.986	(1.060)	711277	43.8	43.8
	57 Bromoform	173.00	16.299	16.283	(1.516)	651288	50.3	50.3
	58 Isopropylbenzene	105.00	16.480	16.465	(1.091)	1264332	47.7	47.7
$	59 Bromofluorobenzene (SURR)	95.00	16.704	16.697	(1.106)	646319	48.9	48.9
	60 1,1,2,2-Tetrachloroethane	83.00	16.844	16.838	(1.115)	1339562	59.3	59.3
	61 1,2,3-Trichloropropane	75.00	16.927	16.912	(1.121)	1009771	58.6	58.6
	62 Bromobenzene	156.00	16.936	16.921	(1.121)	432961	49.0	49.0
	63 n-Propylbenzene	91.00	17.019	17.004	(1.127)	1544517	44.3	44.3
	64 o-Chlorotoluene	91.00	17.159	17.153	(1.136)	1148450	47.8	47.8
	65 1,3,5-Trimethylbenzene	105.00	17.226	17.219	(1.141)	1012297	47.2	47.2
	66 p-Chlorotoluene	91.00	17.292	17.286	(1.145)	1071419	45.5	45.5
	67 tert-Butylbenzene	119.00	17.672	17.658	(1.170)	1020968	46.6	46.6
	68 1,2,4-Trimethylbenzene	105.00	17.722	17.716	(1.173)	1048784	46.9	46.9
	69 sec-Butylbenzene	105.00	17.954	17.947	(1.189)	1397297	43.1	43.1
	70 1,3-Dichlorobenzene	146.00	18.144	18.138	(1.201)	681632	45.7	45.7
	71 4-Isopropyltoluene	119.00	18.128	18.121	(1.200)	1069520	43.2	43.2
	72 1,4-Dichlorobenzene	146.00	18.261	18.254	(1.209)	703906	43.5	43.5
	73 n-Butylbenzene	91.00	18.690	18.676	(1.238)	1111781	39.0	39.0
	74 1,2-Dichlorobenzene	146.00	18.782	18.767	(1.244)	696595	46.4	46.4
	75 1,2-Dibromo-3-chloropropane	75.00	19.886	19.872	(1.317)	540843	58.6	58.6
	76 1,2,4-Trichlorobenzene	180.00	21.270	21.257	(1.408)	468572	37.7	37.7
	77 Hexachlorobutadiene	225.00	21.551	21.539	(1.427)	264324	34.9	34.9
	Naphthalene	128.00	21.742	21.738	(1.440)	1417677	44.3	44.3
	1,2,3-Trichlorobenzene	180.00	22.220	22.209	(1.471)	479270	39.0	39.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00295

SSA7-W3MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: JP9910VR

Sample wt/vol: 5.17 (g/mL) G Lab File ID: A8550

Level: (low/med) LOW Date Received: 06/24/96

% Moisture: not dec. 8 Date Analyzed: 06/29/96

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

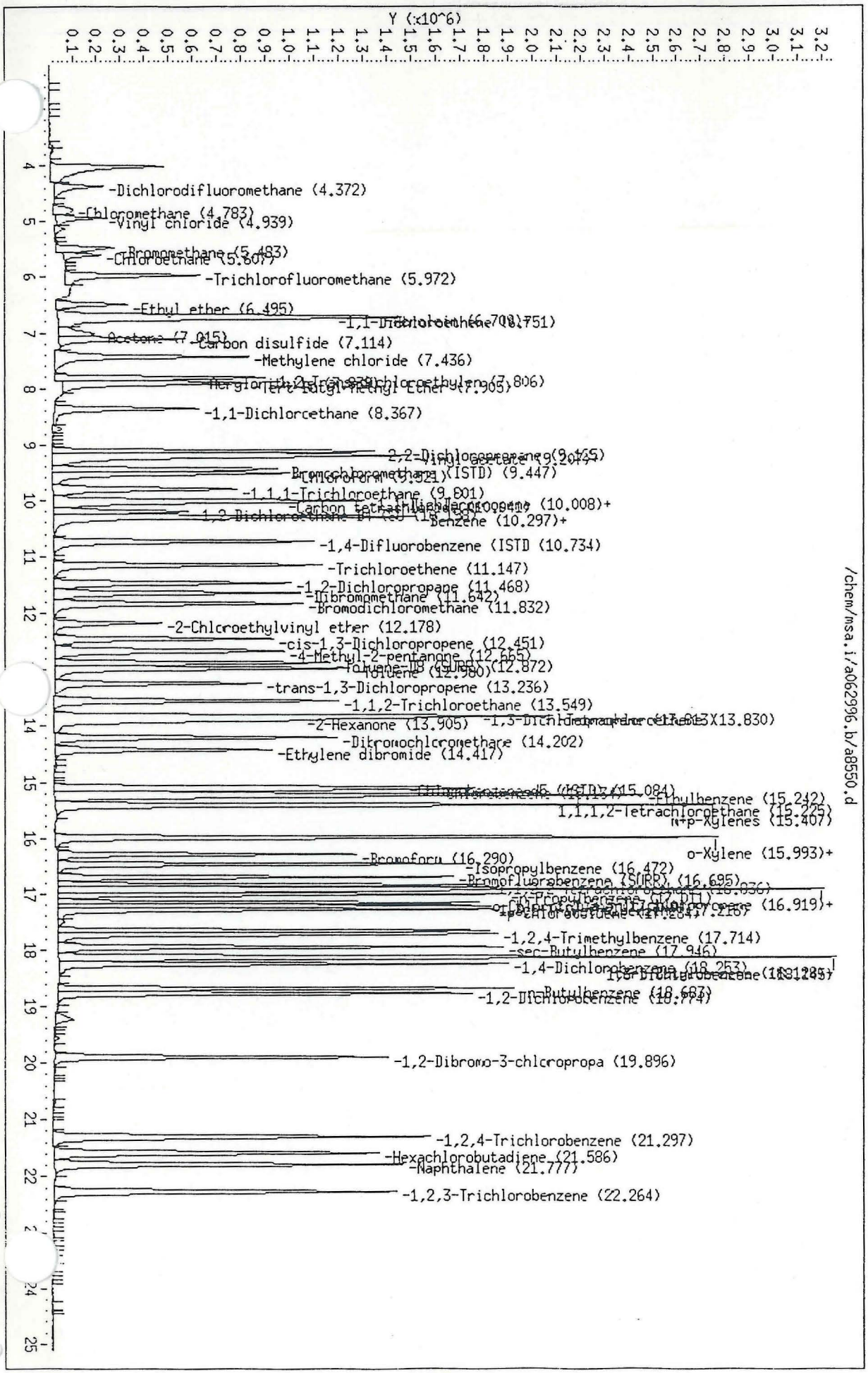
Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND		Q
75-01-4	Vinyl Chloride	48	
75-00-3	Chloroethane	49	
75-09-2	Methylene Chloride	52	B
67-64-1	Acetone	62	B
75-15-0	Carbon Disulfide	51	
75-34-3	1,1-Dichloroethane	53	
540-59-0	1,2-Dichloroethene (total)	110	
67-66-3	Chloroform	53	
107-06-2	1,2-Dichloroethane	53	
71-55-6	1,1,1-Trichloroethane	53	
56-23-5	Carbon Tetrachloride	58	
78-87-5	1,2-Dichloropropane	54	
79-00-5	1,1,2-Trichloroethane	53	
71-43-2	Benzene	51	
75-25-2	Bromoform	53	
591-78-6	2-Hexanone	53	
79-34-5	1,1,2,2-Tetrachloroethane	52	
108-88-3	Toluene	53	
108-90-7	Chlorobenzene	53	
100-41-4	Ethylbenzene	52	
100-42-5	Styrene	52	
1330-20-7	Xylene (total)	160	
75-35-4	1,1-Dichloroethene	56	
78-93-3	2-Butanone	57	
108-10-1	4-Methyl-2-pentanone	54	
74-83-9	Bromomethane	55	
74-87-3	Chloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	51	
124-48-1	Dibromochloromethane	54	
127-18-4	Tetrachloroethene	53	
10061-02-6	trans-1,3-Dichloropropene	52	
79-01-6	Trichloroethene	53	
75-27-4	Bromodichloromethane	54	

Data File: /chem/msa.i/a062996.b/a8550.d
Date : 29-JUN-96 17:29
Client ID:
Sample Info: 18221n ssa7-w3 msd n2v5309
Column phase: DB-624 75m x 0.53mm

Instrument: msa.i
Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062996.b/a8550.d
Lab Smp Id:
Inj Date : 29-JUN-96 17:29
Operator : jk Inst ID: msa.i
Smp Info : 18221n ssa7-w3 msd n2v5309
Misc Info : jp9910vr,n2v5309,qv,5000,1,5.17,5.0,960629
Comment :
Method : /chem/msa.i/a062996.b/061896_heata.m
Meth Date : 30-Jun-1996 12:55 glenn Quant Type: ISTD
Cal Date : 29-JUN-96 11:01 Cal File: a8539.d
Als bottle: 15
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/2/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	1 Dichlorodifluoromethane	85.00	4.372	4.379	(0.463)	550442	46.2	46.2
	Chloromethane	50.00	4.783	4.766	(0.506)	478230	43.8	43.8
	Vinyl chloride	62.00	4.939	4.947	(0.523)	549346	45.4	45.4
	4 Bromomethane	94.00	5.475	5.473	(0.580)	439302	51.6	51.6
	5 Chloroethane	64.00	5.607	5.597	(0.594)	267221	46.8	46.8
	6 Trichlorofluoromethane	101.00	5.972	5.962	(0.632)	1011217	53.3	53.3
	7 Ethyl ether	59.00	6.495	6.499	(0.688)	434543	48.4	48.4
	8 Acrolein	56.00	6.709	6.705	(0.710)	805206	41.2	41.2
	9 1,1,2-Trichlorotrifluoroethan	101.00	6.701	6.722	(0.709)	986627	44.5	44.5
	10 1,1-Dichloroethene	96.00	6.751	6.755	(0.715)	568050	53.0	53.0
	11 Acetone	43.00	7.023	7.011	(0.743)	727676	58.2	58.2
	12 Carbon disulfide	76.00	7.114	7.126	(0.753)	1525151	48.5	48.5
	13 Methylene chloride	84.00	7.444	7.439	(0.788)	719607	48.8	48.8
	14 Acrylonitrile	53.00	7.839	7.835	(0.830)	458666	54.0	54.0(Q)
	15 1,2-Trans-dichloroethylene	96.00	7.806	7.810	(0.826)	648315	50.4	50.4
	16 Tert-Butyl Methyl Ether	73.00	7.914	7.901	(0.838)	1599094	50.6	50.6
	17 1,1-Dichloroethane	63.00	8.367	8.362	(0.886)	1299751	50.0	50.0
	18 Vinyl acetate	43.00	9.207	9.194	(0.975)	4220514	435	435
	19 2-Butanone	72.00	9.207	9.185	(0.858)	244670	54.2	54.2(Q)
	20 1,2-cis-Dichloroethylene	96.00	9.125	9.119	(0.966)	697572	50.1	50.1(QM)
	21 2,2-Dichloropropane	77.00	9.133	9.128	(0.967)	778191	44.0	44.0
	22 Ethyl acetate	43.00	9.207	9.194	(0.975)	4220514	45.7	45.7
*	23 Bromochloromethane (ISTD)	128.00	9.447	9.441	(1.000)	452962	50.0	
	24 Chloroform	83.00	9.521	9.515	(1.008)	1446365	50.6	50.6
	25 1,1,1-Trichloroethane	97.00	9.810	9.804	(0.914)	1070515	50.5	50.5
	26 1,1-Dichloropropene	75.00	10.000	10.002	(0.932)	948995	49.5	49.5
	Carbon tetrachloride	117.00	10.041	10.044	(0.935)	731574	54.6	54.6
	Isobutanol	43.00	10.016	9.994	(1.060)	2299	0.753	0.753(Q)
S	29 1,2-Dichloroethane-D4 (SURR)	65.00	10.198	10.192	(1.080)	797674	51.8	51.8

Data File: /chem/msa.i/a062996.b/a8550.d
Report Date: 02-Jul-1996 13:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	30 Benzene	78.00	10.305	10.300	(0.960)	1648549	48.4	48.4
	31 1,2-Dichloroethane	62.00	10.305	10.300	(1.091)	904473	50.1	50.1
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.734	10.728	(1.000)	1682362	50.0	
	33 Trichloroethene	130.00	11.147	11.149	(1.038)	748886	49.9	49.9
	34 1,2-Dichloropropane	63.00	11.468	11.462	(1.068)	873504	50.7	50.7
	36 Dibromomethane	93.00	11.642	11.635	(1.085)	961288	50.9	50.9
	37 Bromodichloromethane	83.00	11.823	11.825	(1.101)	1380690	50.7	50.7
	38 2-Chloroethylvinyl ether	63.00	12.178	12.172	(1.135)	416551	44.9	44.9
	39 cis-1,3-Dichloropropene	75.00	12.451	12.444	(1.160)	1078045	48.6	48.6
	40 4-Methyl-2-pentanone	43.00	12.657	12.650	(0.839)	1848040	50.8	50.8
$	41 Toluene-D8 (SURR)	98.00	12.872	12.881	(0.853)	1557419	51.6	51.6
	42 Toluene	91.00	12.980	12.980	(0.860)	1817809	49.7	49.7
	43 trans-1,3-Dicnloropropene	75.00	13.236	13.236	(1.233)	930411	48.8	48.8
	44 1,1,2-Trichloroethane	97.00	13.549	13.550	(1.262)	802050	50.0	50.0
	45 1,3-Dichloropropane	76.00	13.813	13.814	(0.916)	1182406	50.5	50.5
	46 Tetrachloroethene	164.00	13.838	13.839	(0.917)	599648	50.0	50.0
	47 2-Hexanone	43.00	13.905	13.888	(0.922)	1586020	50.3	50.3
	48 Dibromochloromethane	129.00	14.202	14.202	(1.323)	1271921	51.4	51.4
	49 Ethylene dibromide	107.00	14.417	14.416	(0.956)	1302034	51.2	51.2
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.084	15.083	(1.000)	1261783	50.0	
	51 Chlorobenzene	112.00	15.134	15.133	(1.003)	1336231	50.5	50.5
	1,1,1,2-Tetrachloroethane	133.00	15.225	15.224	(1.009)	710964	51.8	51.8
	Ethylbenzene	106.00	15.250	15.257	(1.011)	605542	49.6	49.6
	54 m+p-Xylenes	106.00	15.407	15.414	(1.021)	1484531	104	104
	55 o-Xylene	106.00	15.984	15.983	(1.060)	723541	50.1	50.1
	56 Styrene	104.00	15.993	15.991	(1.060)	1264164	49.6	49.6
	57 Bromoform	173.00	16.282	16.288	(1.517)	959086	49.9	49.9
	58 Isopropylbenzene	105.00	16.464	16.470	(1.091)	2066001	50.4	50.4
$	59 Bromofluorobenzene (SURR)	95.00	16.695	16.693	(1.107)	1054380	51.9	51.9
	60 1,1,2,2-Tetrachloroethane	83.00	16.836	16.834	(1.116)	1905321	49.6	49.6
	61 1,2,3-Trichloropropane	75.00	16.919	16.917	(1.122)	1396108	49.8	49.8
	62 Bromobenzene	156.00	16.928	16.925	(1.122)	717413	50.3	50.3
	63 n-Propylbenzene	91.00	17.011	17.016	(1.128)	2712925	49.6	49.6
	64 o-Chlorotoluene	91.00	17.151	17.157	(1.137)	1919698	49.6	49.6
	65 1,3,5-Trimethylbenzene	105.00	17.218	17.223	(1.141)	1694107	50.1	50.1
	66 p-Chlorotoluene	91.00	17.284	17.290	(1.146)	1836854	49.0	49.0
	67 tert-Butylbenzene	119.00	17.656	17.661	(1.171)	1628148	46.2	46.2(M)
	68 1,2,4-Trimethylbenzene	105.00	17.714	17.719	(1.174)	1748333	49.6	49.6
	69 sec-Butylbenzene	105.00	17.946	17.951	(1.190)	2542703	49.4	49.4
	70 1,3-Dichlorobenzene	146.00	18.145	18.141	(1.203)	1208058	50.2	50.2
	71 4-Isopropyltoluene	119.00	18.120	18.125	(1.201)	1909783	49.6	49.6
	72 1,4-Dichlorobenzene	146.00	18.253	18.257	(1.210)	1265817	49.4	49.4
	73 n-Butylbenzene	91.00	18.683	18.679	(1.239)	2220759	49.2	49.2
	74 1,2-Dichlorobenzene	146.00	18.774	18.778	(1.245)	1197451	50.0	50.0
	75 1,2-Dibromo-3-chloropropane	75.00	19.888	19.875	(1.318)	766937	52.0	52.0
	76 1,2,4-Trichlorobenzene	180.00	21.297	21.260	(1.412)	971006	49.3	49.3
	Hexachlorobutadiene	225.00	21.578	21.549	(1.431)	571974	50.6	50.6
	Naphthalene	128.00	21.777	21.740	(1.444)	2498542	49.3	49.3
	79 1,2,3-Trichlorobenzene	180.00	22.272	22.211	(1.476)	966461	48.7	48.7

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VSPK01A

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC 00299

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: N2V5309VS

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8522

Level: (low/med) LOW Date Received:

% Moisture: not dec. N/A Date Analyzed: 06/28/96

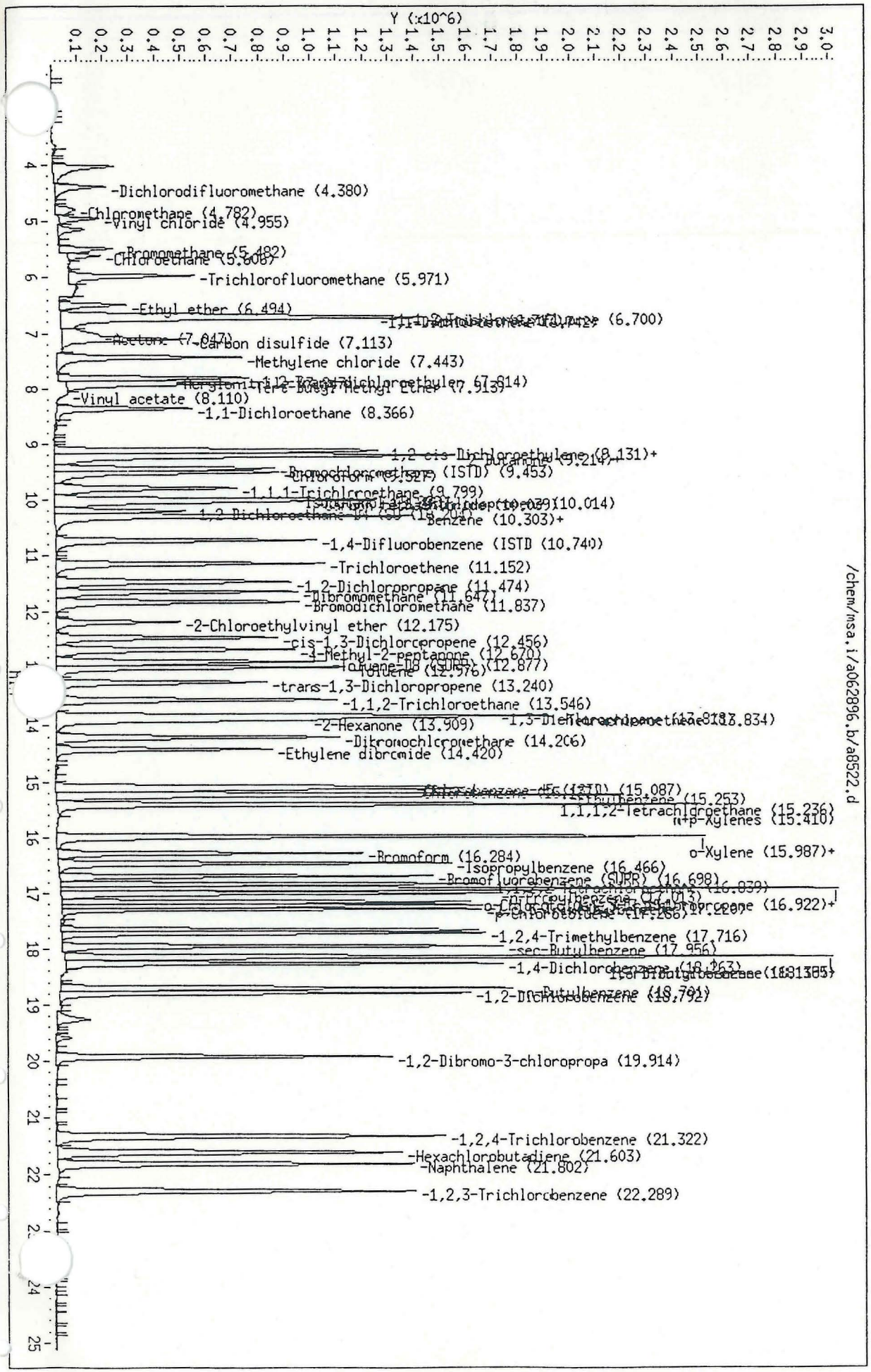
GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	46	
75-00-3	Chloroethane	47	
75-09-2	Methylene Chloride	53	B
67-64-1	Acetone	54	B
75-15-0	Carbon Disulfide	50	
75-34-3	1,1-Dichloroethane	49	
540-59-0	1,2-Dichloroethene (total)	97	
67-66-3	Chloroform	50	
107-06-2	1,2-Dichloroethane	50	
71-55-6	1,1,1-Trichloroethane	52	
56-23-5	Carbon Tetrachloride	49	
78-87-5	1,2-Dichloropropane	50	
79-00-5	1,1,2-Trichloroethane	51	
71-43-2	Benzene	50	
75-25-2	Bromoform	50	
591-78-6	2-Hexanone	55	
79-34-5	1,1,2,2-Tetrachloroethane	51	
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	48	
100-42-5	Styrene	49	
1330-20-7	Xylene (total)	140	
75-35-4	1,1-Dichloroethene	49	
78-93-3	2-Butanone	61	
108-10-1	4-Methyl-2-pentanone	54	
74-83-9	Bromomethane	43	
74-87-3	Chloromethane	46	
10061-01-5	cis-1,3-Dichloropropene	49	
124-48-1	Dibromochloromethane	50	
127-18-4	Tetrachloroethene	51	
10061-02-6	trans-1,3-Dichloropropene	48	
79-01-6	Trichloroethene	51	
75-27-4	Bromodichloromethane	50	

Data File: /chem/msa.i/a062896.b/a8522.d
Date : 28-JUN-96 12:53
Client ID: n2v5309 blk spk
Sample Info: met spk q2v5309
Column phase: DB-624 75m x 0.53mm

Instrument: msa.i
Operator: jk
Column diameter: 0.53



Data File: /chem/msa.i/a062896.b/a8522.d
Report Date: 10-Jul-1996 14:37

OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a062896.b/a8522.d
Lab Smp Id: Client Smp ID: n2v5309 blk spk
Inj Date : 28-JUN-96 12:53
Operator : jk Inst ID: msa.i
Smp Info : met spk q2v5309
Misc Info : n2v5309vs,n2v5309,qv,5000,1,5.0,5.0,960628
Comment :
Method : /chem/msa.i/a062896.b/061896_heata.m
Meth Date : 29-Jun-1996 09:27 glenn Quant Type: ISTD
Cal Date : 28-JUN-96 09:59 Cal File: a8517.d
Als bottle: 9
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/10/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
Dichlorodifluoromethane	85.00	4.380	4.364	(0.464)	538297	48.2	48.2
Chloromethane	50.00	4.782	4.759	(0.506)	414171	45.6	45.6
3 Vinyl chloride	62.00	4.955	4.932	(0.525)	490942	45.8	45.8
4 Bromomethane	94.00	5.482	5.451	(0.580)	376990	42.6	42.6
5 Chloroethane	64.00	5.606	5.583	(0.594)	226716	47.2	47.2
6 Trichlorofluoromethane	101.00	5.971	5.948	(0.632)	826095	48.1	48.1
7 Ethyl ether	59.00	6.494	6.471	(0.688)	384016	51.7	51.7
8 Acrolein	56.00	6.717	6.694	(0.711)	913936	52.7	52.7
9 1,1,2-Trichlorotrifluoroethan	101.00	6.700	6.678	(0.709)	1006988	53.1	53.1
10 1,1-Dichloroethene	96.00	6.742	6.711	(0.714)	477615	49.1	49.1
11 Acetone	43.00	7.047	7.017	(0.746)	706729	64.8	64.8
12 Carbon disulfide	76.00	7.113	7.091	(0.753)	1386913	50.0	50.0
13 Methylene chloride	84.00	7.443	7.430	(0.788)	691837	53.0	53.0
14 Acrylonitrile	53.00	7.847	7.850	(0.831)	438663	55.9	55.9
15 1,2-Trans-dichloroethylene	96.00	7.805	7.792	(0.826)	554001	47.6	47.6
16 Tert-Butyl Methyl Ether	73.00	7.921	7.916	(0.839)	1453208	50.6	50.6
17 1,1-Dichloroethane	63.00	8.366	8.353	(0.886)	1177291	49.3	49.3
18 Vinyl acetate	43.00	8.110	8.411	(0.859)	19424	0.548	0.548
19 2-Butanone	72.00	9.222	9.219	(0.859)	239542	60.9	60.9(Q)
20 1,2-cis-Dichloroethylene	96.00	9.131	9.120	(0.967)	642344	49.1	49.1
21 2,2-Dichloropropane	77.00	9.131	9.120	(0.967)	796827	48.3	48.3
22 Ethyl acetate	43.00	9.214	9.211	(0.976)	4504409	54.6	54.6
* 23 Bromochloromethane (ISTD)	128.00	9.445	9.442	(1.000)	420564	50.0	
24 Chloroform	83.00	9.527	9.525	(1.009)	1297277	49.5	49.5
25 1,1,1-Trichloroethane	97.00	9.808	9.797	(0.913)	1005983	52.0	52.0
,1-Dichloropropene	75.00	10.006	9.995	(0.932)	883959	50.4	50.4
Carbon tetrachloride	117.00	10.039	10.037	(0.935)	777367	49.2	49.2
28 Isobutanol	43.00	9.989	10.210	(1.058)	1977	0.663	0.663(Q)
$ 29 1,2-Dichloroethane-D4 (SURR)	65.00	10.204	10.202	(1.080)	717076	49.2	49.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	30 Benzene	78.00	10.303	10.293	(0.959)	1537600	50.0	50.0
	31 1,2-Dichloroethane	62.00	10.311	10.301	(1.092)	827241	50.3	50.3
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.740	10.739	(1.000)	1560126	50.0	
	33 Trichloroethene	130.00	11.152	11.151	(1.038)	696907	51.0	51.0
	34 1,2-Dichloropropane	63.00	11.466	11.473	(1.068)	814661	50.3	50.3
	36 Dibromomethane	93.00	11.656	11.647	(1.085)	887621	50.5	50.5
	37 Bromodichloromethane	83.00	11.837	11.829	(1.102)	1254663	49.7	49.7
	38 2-Chloroethylvinyl ether	63.00	12.175	12.184	(1.134)	442535	56.0	56.0
	39 cis-1,3-Dichloropropene	75.00	12.447	12.456	(1.159)	1012756	48.9	48.9
	40 4-Methyl-2-pentanone	43.00	12.662	12.671	(0.839)	1753289	53.6	53.6
$	41 Toluene-D8 (SURR)	98.00	12.877	12.877	(0.853)	1386589	47.8	47.8
	42 Toluene	91.00	12.976	12.985	(0.860)	1639054	49.5	49.5
	43 trans-1,3-Dichloropropene	75.00	13.240	13.250	(1.233)	870340	48.4	48.4
	44 1,1,2-Trichloroethane	97.00	13.554	13.556	(1.262)	743761	50.5	50.5
	45 1,3-Dichloropropane	76.00	13.818	13.820	(0.916)	1106789	50.9	50.9
	46 Tetrachloroethene	164.00	13.843	13.845	(0.917)	561866	51.3	51.3
	47 2-Hexanone	43.00	13.909	13.911	(0.922)	1551003	54.9	54.9
	48 Dibromochloromethane	129.00	14.206	14.208	(1.323)	1167705	50.3	50.3
	49 Ethylene dibromide	107.00	14.420	14.432	(0.956)	1208296	50.7	50.7
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.087	15.091	(1.000)	1145323	50.0	
	51 Chlorobenzene	112.00	15.137	15.133	(1.003)	1208621	49.3	49.3
	1,1,1,2-Tetrachloroethane	133.00	15.228	15.232	(1.009)	662327	50.6	50.6
	Ethylbenzene	106.00	15.253	15.257	(1.011)	532698	48.4	48.4
	54 m+p-Xylenes	106.00	15.410	15.414	(1.021)	1266826	96.0	96.0
	55 o-Xylene	106.00	15.987	15.992	(1.060)	640890	48.4	48.4
	56 Styrene	104.00	15.996	16.000	(1.060)	1149708	49.4	49.4
	57 Bromoform	173.00	16.293	16.298	(1.517)	905444	50.3	50.3
	58 Isopropylbenzene	105.00	16.474	16.479	(1.092)	1826519	48.0	48.0
$	59 Bromofluorobenzene (SURR)	95.00	16.698	16.703	(1.107)	935839	48.4	48.4
	60 1,1,2,2-Tetrachloroethane	83.00	16.839	16.844	(1.116)	1773193	50.9	50.9
	61 1,2,3-Trichloropropane	75.00	16.913	16.927	(1.121)	1324432	41.5	41.5
	62 Bromobenzene	156.00	16.930	16.935	(1.122)	649348	50.4	50.4
	63 n-Propylbenzene	91.00	17.013	17.018	(1.128)	2483813	50.6	50.6
	64 o-Chlorotoluene	91.00	17.154	17.159	(1.137)	1750484	50.2	50.2
	65 1,3,5-Trimethylbenzene	105.00	17.220	17.226	(1.141)	1547105	50.9	50.9
	66 p-Chlorotoluene	91.00	17.286	17.292	(1.146)	1685831	50.1	50.1
	67 tert-Butylbenzene	119.00	18.130	18.128	(1.202)	1796200	51.6	51.6
	68 1,2,4-Trimethylbenzene	105.00	17.725	17.722	(1.175)	1579614	48.8	48.8
	69 sec-Butylbenzene	105.00	17.956	17.954	(1.190)	2355791	50.4	50.4
	70 1,3-Dichlorobenzene	146.00	18.155	18.153	(1.203)	1111150	51.6	51.6
	71 4-Isopropyltoluene	119.00	18.130	18.128	(1.202)	1796200	50.4	50.4
	72 1,4-Dichlorobenzene	146.00	18.271	18.261	(1.211)	1164817	51.0	51.0
	73 n-Butylbenzene	91.00	18.701	18.683	(1.239)	2055106	50.3	50.3
	74 1,2-Dichlorobenzene	146.00	18.792	18.782	(1.246)	1104324	50.6	50.6
	75 1,2-Dibromo-3-chloropropane	75.00	19.914	19.888	(1.320)	709123	54.6	54.6
	76 1,2,4-Trichlorobenzene	180.00	21.322	21.273	(1.413)	909654	50.6	50.6
	exachlorobutadiene	225.00	21.603	21.546	(1.432)	562342	53.1	53.1
	aphthalene	128.00	21.810	21.745	(1.446)	2395265	50.9	50.9
	79 1,2,3-Trichlorobenzene	180.00	22.289	22.225	(1.477)	922527	51.6	51.6

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00303

VSPK01B

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: N/A Case No.: 18221N SAS No.: N/A SDG No.: A5-F1

Matrix: (soil/water) SOIL Lab Sample ID: N2V5315VS

Sample wt/vol: 5.00 (g/mL) G Lab File ID: A8561

Level: (low/med) LOW Date Received:

% Moisture: not dec. N/A Date Analyzed: 06/30/96

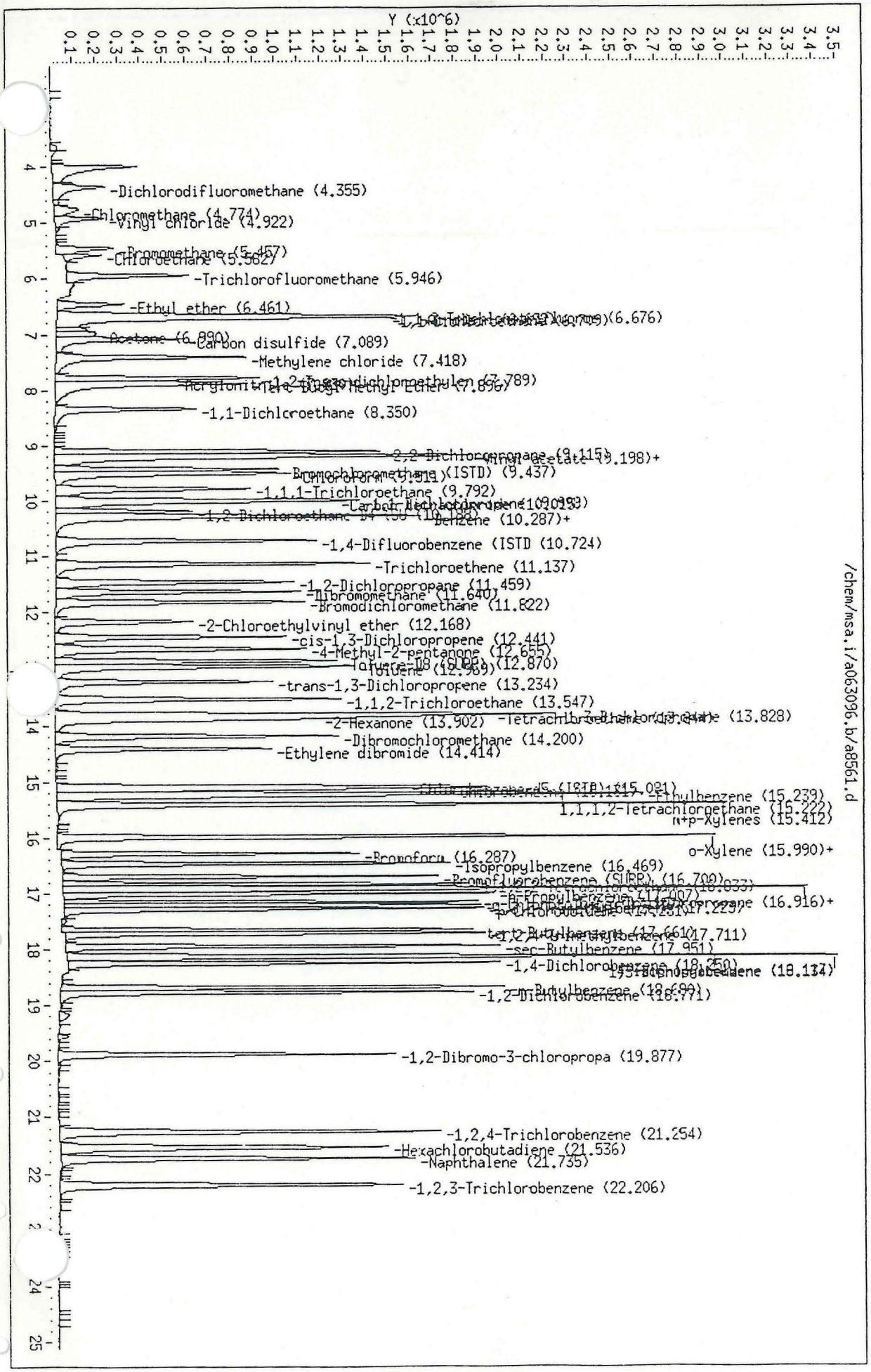
GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-01-4	Vinyl Chloride	41	
75-00-3	Chloroethane	46	
75-09-2	Methylene Chloride	43	B
67-64-1	Acetone	51	
75-15-0	Carbon Disulfide	45	
75-34-3	1,1-Dichloroethane	47	
540-59-0	1,2-Dichloroethene (total)	97	
67-66-3	Chloroform	49	
107-06-2	1,2-Dichloroethane	51	
71-55-6	1,1,1-Trichloroethane	55	B
56-23-5	Carbon Tetrachloride	52	
78-87-5	1,2-Dichloropropane	48	
79-00-5	1,1,2-Trichloroethane	50	
71-43-2	Benzene	48	
75-25-2	Bromoform	52	
591-78-6	2-Hexanone	50	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-88-3	Toluene	49	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	49	
100-42-5	Styrene	48	
1330-20-7	Xylene (total)	150	
156-60-5	1,2-Trans-dichloroethylene	48	
78-93-3	2-Butanone	52	
108-10-1	4-Methyl-2-pentanone	50	
74-83-9	Bromomethane	49	
74-87-3	Chloromethane	42	
10061-01-5	cis-1,3-Dichloropropene	49	
124-48-1	Dibromochloromethane	53	
127-18-4	Tetrachloroethene	50	
10061-02-6	trans-1,3-Dichloropropene	50	
79-01-6	Trichloroethene	60	
75-27-4	Bromodichloromethane	51	

Data File: /chem/msa.i/a063096.b/a8561.d
Date : 30-JUN-96 18:34
Client ID:
Sample Info: met spk n2v5315
Column phase: DB-624 75m x 0.53mm

Instrument: msa.i
Operator: jk
Column diameter: 0.53



OHM Analytical Division

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/msa.i/a063096.b/a8561.d
Lab Smp Id:
Inj Date : 30-JUN-96 18:34
Operator : jk Inst ID: msa.i
Smp Info : met spk n2v5315
Misc Info : n2v5315vs,n2v5315,qv,5000,1,5.0,5.0,960630
Comment :
Method : /chem/msa.i/a063096.b/061896_heata.m
Meth Date : 02-Jul-1996 10:40 jeff Quant Type: ISTD
Cal Date : 30-JUN-96 16:50 Cal File: a8558.d
Als bottle: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.10

MK 7/2/96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
1	Dichlorodifluoromethane	85.00	4.355	4.371	(0.462)	561740	44.2	44.2
	Chloromethane	50.00	4.774	4.758	(0.506)	535819	41.9	41.9
	Vinyl chloride	62.00	4.922	4.931	(0.522)	587349	40.9	40.9
4	Bromomethane	94.00	5.457	5.458	(0.578)	450661	48.7	48.7
5	Chloroethane	64.00	5.582	5.590	(0.591)	277422	45.6	45.6
6	Trichlorofluoromethane	101.00	5.946	5.947	(0.630)	959067	53.0	53.0
7	Ethyl ether	59.00	6.461	6.492	(0.685)	453035	46.8	46.8
8	Acrolein	56.00	6.684	6.690	(0.708)	1158303	48.2	48.2
9	1,1,2-Trichlorotrifluoroethan	101.00	6.676	6.698	(0.707)	1101310	47.0	47.0
10	1,1-Dichloroethene	96.00	6.709	6.740	(0.711)	585732	47.7	47.7
11	Acetone	43.00	6.990	6.979	(0.741)	763424	51.0	51.0
12	Carbon disulfide	76.00	7.089	7.111	(0.751)	1572427	45.2	45.2
13	Methylene chloride	84.00	7.418	7.425	(0.786)	824493	42.7	42.7
14	Acrylonitrile	53.00	7.830	7.804	(0.830)	520423	49.3	49.3
15	1,2-Trans-dichloroethylene	96.00	7.789	7.796	(0.825)	691084	50.0	50.0
16	Tert-Butyl Methyl Ether	73.00	7.896	7.878	(0.837)	1728161	48.0	48.0
17	1,1-Dichloroethane	63.00	8.350	8.348	(0.885)	1436850	47.4	47.4
18	Vinyl acetate	43.00	9.198	9.181	(0.975)	5329335	482	482
19	2-Butanone	72.00	9.198	9.164	(0.858)	265100	52.1	52.1(Q)
20	1,2-cis-Dichloroethylene	96.00	9.107	9.098	(0.965)	751194	46.8	46.8(QM)
21	2,2-Dichloropropane	77.00	9.115	9.106	(0.966)	902837	45.3	45.3
22	Ethyl acetate	43.00	9.198	9.181	(0.975)	5329335	48.2	48.2
* 23	Bromochloromethane (ISTD)	128.00	9.437	9.428	(1.000)	487392	50.0	
24	Chloroform	83.00	9.511	9.494	(1.008)	1548104	49.3	49.3
25	1,1,1-Trichloroethane	97.00	9.792	9.791	(0.913)	1220943	54.7	54.7
26	1,1-Dichloropropene	75.00	9.990	9.981	(0.931)	1039983	48.5	48.5
	arbon tetrachloride	117.00	10.015	10.023	(0.934)	802191	52.4	52.4
$	,2-Dichloroethane-D4 (SURR)	65.00	10.188	10.180	(1.080)	861619	50.7	50.7
30	Benzene	78.00	10.287	10.287	(0.959)	1820927	47.9	47.9

Data File: /chem/msa.i/a063096.b/a8561.d
Report Date: 02-Jul-1996 10:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	31 1,2-Dichloroethane	62.00	10.296	10.279	(1.091)	997370	51.2	51.2
*	32 1,4-Difluorobenzene (ISTD)	114.00	10.724	10.716	(1.000)	1840463	50.0	
	33 Trichloroethene	130.00	11.145	11.137	(1.039)	965836	60.1	60.1
	34 1,2-Dichloropropane	63.00	11.467	11.450	(1.069)	961688	48.1	48.1
	36 Dibromomethane	93.00	11.640	11.624	(1.085)	1038178	50.6	50.6
	37 Bromodichloromethane	83.00	11.822	11.806	(1.102)	1476622	50.7	50.7
	38 2-Chloroethylvinyl ether	63.00	12.168	12.161	(1.135)	571259	53.4	53.4
	39 cis-1,3-Dichloropropene	75.00	12.441	12.433	(1.160)	1219224	48.5	48.5
	40 4-Methyl-2-pentanone	43.00	12.655	12.640	(0.839)	2110737	50.2	50.2
$	41 Toluene-D8 (SURR)	98.00	12.870	12.863	(0.853)	1720567	49.6	49.6
	42 Toluene	91.00	12.969	12.970	(0.860)	1985076	48.9	48.9
	43 trans-1,3-Dichloropropene	75.00	13.234	13.226	(1.234)	1038590	49.6	49.6
	44 1,1,2-Trichloroethane	97.00	13.547	13.532	(1.263)	871635	49.5	49.5
	45 1,3-Dichloropropane	76.00	13.819	13.804	(0.916)	1295987	49.0	49.0
	46 Tetrachloroethene	164.00	13.844	13.829	(0.918)	627448	49.8	49.8
	47 2-Hexanone	43.00	13.902	13.879	(0.922)	1819896	50.2	50.2
	48 Dibromochloromethane	129.00	14.200	14.193	(1.324)	1365330	52.8	52.8
	49 Ethylene dibromide	107.00	14.414	14.408	(0.956)	1395465	50.7	50.7
*	50 Chlorobenzene-d5 (ISTD)	117.00	15.081	15.075	(1.000)	1390380	50.0	
	51 Chlorobenzene	112.00	15.131	15.116	(1.003)	1450256	48.7	48.7
	52 1,1,1,2-Tetrachloroethane	133.00	15.222	15.208	(1.009)	747437	51.3	51.3
	Ethylbenzene	106.00	15.247	15.241	(1.011)	656670	49.0	49.0
	m+p-Xylenes	106.00	15.412	15.406	(1.022)	1565093	97.6	97.6
	55 o-Xylene	106.00	15.981	15.976	(1.060)	749304	47.8	47.8
	56 Styrene	104.00	15.990	15.992	(1.060)	1330816	47.6	47.6
	57 Bromoform	173.00	16.287	16.281	(1.519)	1014622	51.8	51.8
	58 Isopropylbenzene	105.00	16.469	16.463	(1.092)	2166215	47.9	47.9
$	59 Bromofluorobenzene (SURR)	95.00	16.692	16.686	(1.107)	1106819	47.6	47.6
	60 1,1,2,2-Tetrachloroethane	83.00	16.833	16.827	(1.116)	2037053	48.6	48.6
	61 1,2,3-Trichloropropane	75.00	16.916	16.910	(1.122)	1481462	48.8	48.8
	62 Bromobenzene	156.00	16.924	16.919	(1.122)	747503	50.7	50.7
	63 n-Propylbenzene	91.00	17.007	17.002	(1.128)	2851232	47.5	47.5
	64 o-Chlorotoluene	91.00	17.157	17.151	(1.138)	2002033	48.2	48.2
	65 1,3,5-Trimethylbenzene	105.00	17.223	17.209	(1.142)	1771122	48.5	48.5
	66 p-Chlorotoluene	91.00	17.281	17.284	(1.146)	1949191	48.1	48.1
	67 tert-Butylbenzene	119.00	17.661	17.648	(1.171)	1808866	48.6	48.6
	68 1,2,4-Trimethylbenzene	105.00	17.719	17.714	(1.175)	1826715	47.6	47.6
	69 sec-Butylbenzene	105.00	17.951	17.937	(1.190)	2697924	48.2	48.2
	70 1,3-Dichlorobenzene	146.00	18.142	18.128	(1.203)	1255955	49.6	49.6
	71 4-Isopropyltoluene	119.00	18.117	18.120	(1.201)	2029665	48.2	48.2
	72 1,4-Dichlorobenzene	146.00	18.250	18.244	(1.210)	1341658	49.5	49.5
	73 n-Butylbenzene	91.00	18.680	18.666	(1.239)	2385834	48.5	48.5
	74 1,2-Dichlorobenzene	146.00	18.771	18.766	(1.245)	1268695	50.3	50.3
	75 1,2-Dibromo-3-chloropropane	75.00	19.877	19.865	(1.318)	834060	53.7	53.7
	76 1,2,4-Trichlorobenzene	180.00	21.262	21.251	(1.410)	1036893	50.9	50.9
	77 Hexachlorobutadiene	225.00	21.536	21.533	(1.428)	599738	50.3	50.3
	Naphthalene	128.00	21.735	21.724	(1.441)	2700455	51.0	51.0
	1,2,3-Trichlorobenzene	180.00	22.214	22.203	(1.473)	1044007	51.2	51.2