BAILEY SUPERFUND SITE

MONTHLY PROJECT STATUS REPORT
FEBRUARY 1997

General Description of Activities and Progress Made this Reporting Period:

Modified North Marsh and Pit B Remediation

- Parsons ES submitted a set of as-built drawings to EPA on December 5, 1996 and requested that EPA sign a Certificate of Completion for the work completed during the interim period at the Bailey Site. No response from EPA has been received.

Revised Remedial Design

- GeoSyntec responded to EPA comments on the Construction Quality Assurance Plan for the Revised Remedial Design and Remedial Action (GeoSyntec Consultants, August 1996) on January 28, 1997. EPA approved this plan on February 20, 1997.

Progress of Revised Final Remediation

- Chris Villarreal, EPA, visited the site on February 27, 1997 for the weekly site meeting.
- OHM work plans for final remediation were sent to Chris Villarreal and Trey Collins on February 25, 1997. These plans included the Site Work Plan, Wastewater Treatment Plan, Construction Quality Control Plan and Spill/Volatile Emissions Release Contingency Plan.
- OHM completed the following activities this month:

Preparatory Activities:

* Submittal of geosynthetic products, manufacturer and installer data, survey results, schedule updates, and resubmittals.
* Baseline survey of the North Dike.

East Dike Activities:

* Completion of the consolidation water collection system.
* Removal of ten existing drain pipes from the berm area.
* Installation of TX DOT silt fencing around the perimeter of the East Dike.
* Proof rolling and conditioning of soft areas, using lime kiln dust and geogrid.
* Completed cutting of the berms and placement of fill to the subgrade elevations.

North Dike Activities:

* Completed construction of the perimeter dike in Pond A, including the extension along the surficial waste area.
* Dewatered the North Marsh and Pond A areas between the North Dike and the perimeter dikes.
* Completed the North Marsh Perimeter Dike.
* Installed the consolidation water collection system.
* Began rough grading and conditioning of soft areas.
* Began excavation of surficial waste.

Wastewater Management and Treatment

- Parsons ES requested that EPA approve a contingency plan to take wastewater during the final phase of remediation which cannot be treated on site, off-site for disposal. This request was sent on January 31, 1997. Parsons ES spoke with EPA on February 18, 1997 and Chris Villarreal approved the contingency plan. Clarification of the disposal facility to where the wastewater would be taken as well as confirmation of EPA's approval of the plan were documented in a letter to EPA dated February 27, 1997.

- Parsons ES collected samples of the wastewater stored on site on January 30, 1997 to characterize the wastewater for disposal purposes. This wastewater contained some remaining Pit B water and did not meet TOC discharge criteria. Results of the characterization analyses are summarized in Table 1 and indicate that no VOCs, SVOCs, or metals on the TCLP list were detected in the wastewater. The laboratory results are in Attachment A of this report. Parsons ES confirmed EPA's agreement that this wastewater could be taken off-site in a letter dated January 21, 1997. This wastewater (221,904 gallons) was taken off-site to the CECOS West Lake Facility (#LAD000618256) between February 12 and 19, 1997. Parsons ES notified the facility by letter of the TNRCC waste code and LA generator code for the wastewater on February 10, 1997.

Air Monitoring

- Documentation samples were collected on February 15 and 22, 1997. Sample collection varied from the frequency specified in the Revised Air Monitoring Plan, (one per six days) either because no intrusive work was being performed or due to inclement weather. Data from these samples have not been received yet.

- Results from background samples collected on January 25, 1997 and documentation samples collected on January 31, 1997 are summarized in Table 2. Analytical data for these samples are in Attachment B of this report.

Activities to be Commenced or Completed During Next Reporting Period:

- EPA will be provided with copies of the Construction Quality Assurance Plan - Implementation of Revised Remedial Design (GeoSyntec Consultants, Nov. 1996) as EPA requested in their letter dated February 20, 1997.

- OHM plans to complete the following site activities next month:
  - * Complete riprap placement on the East Dike.
  - * Complete surficial and bulk waste excavation on the North Dike.
  - * Begin riprap placement on the North Dike.
  - * Complete filling and grading operations on the North Dike to the subgrade elevation.
  - * Begin installation of geosynthetic products on the East Dike.

Problems Encountered in Commencing or Completing Remedial Action:

- None at this time.

Schedule:

Pursuant to Chris Villarreal's agreement, as confirmed in a telephone conversation on February 6, 1997, the site activities listed under "Activities to be Commenced or Completed During Next Reporting Period" are provided in place of a schedule at this time.

TABLE 1

WASTEWATER DATA[1] FOR THE FEBRUARY 1997 MONTHLY REPORT

Bailey Superfund Site, Orange County, Texas

Compound	Maximum Concentration of Contaminants for the Toxicity Characteristic - TCLP Grab Sample (mg/L)[2]	TCLP Grab Sample No. WHT013097B2 Collected 1/30/97 (mg/L)
Arsenic	5.00	<0.2
Barium	100.00	<1.0
Cadmium	1.00	<0.01
Chromium	5.00	<0.02
Lead	5.00	<0.1
Mercury	0.20	<0.002
Selenium	1.00	<0.2
Silver	5.00	<0.01
Benzene	0.50	<0.05
2-Butanone	200.00	<0.2
Carbon Tetrachloride	0.50	<0.05
Chlorobenzene	100.00	<0.05
Chloroform	6.00	<0.05
1,2-Dichloroethane	0.50	<0.05
1,1-Dichloroethene	0.70	<0.05
Tetrachloroethene	0.70	<0.05
Trichloroethene	0.50	<0.05
Vinyl Chloride	0.20	<0.1
o- Cresol	200.00	<0.05
m-, p- Cresols	200.00	<0.1
1,4-Dichlorobenzene	7.50	<0.05
2,4-Dinitrotoluene	0.13	<0.05
Hexachlorobenzene	0.13	<0.05
Hexachlorobutadiene	0.50	<0.05
Hexachloroethane	3.00	<0.05
Nitrobenzene	2.00	<0.05
Pentachlorophenol	100.00	<0.25
Pyridine	5.00	<0.05
2,4,5-Trichlorophenol	400.00	<0.1
2,4,6-Trichlorophenol	2.00	<0.05

[1] Wastewater sample collected from the Wastewater Treatment Plant holding tank. Wastewater did not meet the disharge requirement, and therefore could not be discharged. This wastewater was sampled for the above constituents to characterize it for off-size disposal. Wastewater contained some Pit B wastewater from earlier remediation on-site.

[2] 40 CFR 261.24

TABLE 2
DOCUMENTATION AIR SAMPLING DATA FOR THE FEBRUARY 1997 MONTHLY REPORT
Bailey Superfund Site, Orange County, Texas

Air Samples taken 1/25/97 and 1/31/97

Compound	Action Level[1] (ppm)	Action Level[1] (ppb)	Analysis Results 012597D1 (ppb)	Analysis Results 012597U1 (ppb)	Analysis Results 012597U1A (ppb)	Analysis Results 013197D1 (ppb)	Analysis Results 013197U1 (ppb)
			Downwind	*Upwind*	*Duplicate Upwind*	*Downwind*	*Upwind*
Acetone	375	375,000	4.90	3.60	3.50	4.10	11.00
Benzene	0.5	500	0.43	0.40	0.44	0.73	0.84
Butanone, 2- (MEK)	100	100,000	1.40	1.30	1.60	1.30	3.40
Carbon Disulfide	2	2,000	1.00	<0.19	1.40	<0.94	<1.0
Chlorobenzene	5	5,000	<0.18	<0.19	<0.19	<0.19	<0.20
Dichloroethane, 1,2-	5	5,000	<0.18	<0.19	<0.19	<0.19	<0.20
Dichloroethene, cis-1,2-	100	100,000	<0.18	<0.19	<0.19	<0.19	<0.20
Dichloroethene, trans-1,2-	100	100,000	<0.18	<0.19	<0.19	<0.94	<1.0
Dichloropropane, 1,2-	37.5	37,500	<0.18	<0.19	<0.19	<0.19	<0.20
Ethyl Benzene	50	50,000	<0.18	<0.19	<0.19	<0.19	<0.20
Methylene Chloride	25	25,000	<0.92	<0.94	<0.94	<0.94	<1.0
Styrene	25	25,000	<0.18	<0.19	<0.19	<0.19	<0.20
Tetrachloroethene	12.5	12,500	<0.18	<0.19	<0.19	<0.19	<0.20
Toluene	25	25,000	0.39	0.34	0.36	0.64	0.66
Trichloroethane, 1,1,1-	5	5,000	<0.18	<0.19	<0.19	<0.19	<0.20
Trichloroethene	25	25,000	<0.18	<0.19	<0.19	<0.19	<0.20
Xylene, m,p-	50	50,000	<0.18	<0.19	<0.19	<0.19	<0.20
Xylene, o-	50	50,000	<0.18	<0.19	<0.19	<0.19	<0.20

[1] Action Levels for the site are specified in Table 2-2 of the Revised Air Monitoring Plan for Final Remediation (Parsons ES, January, 1997)

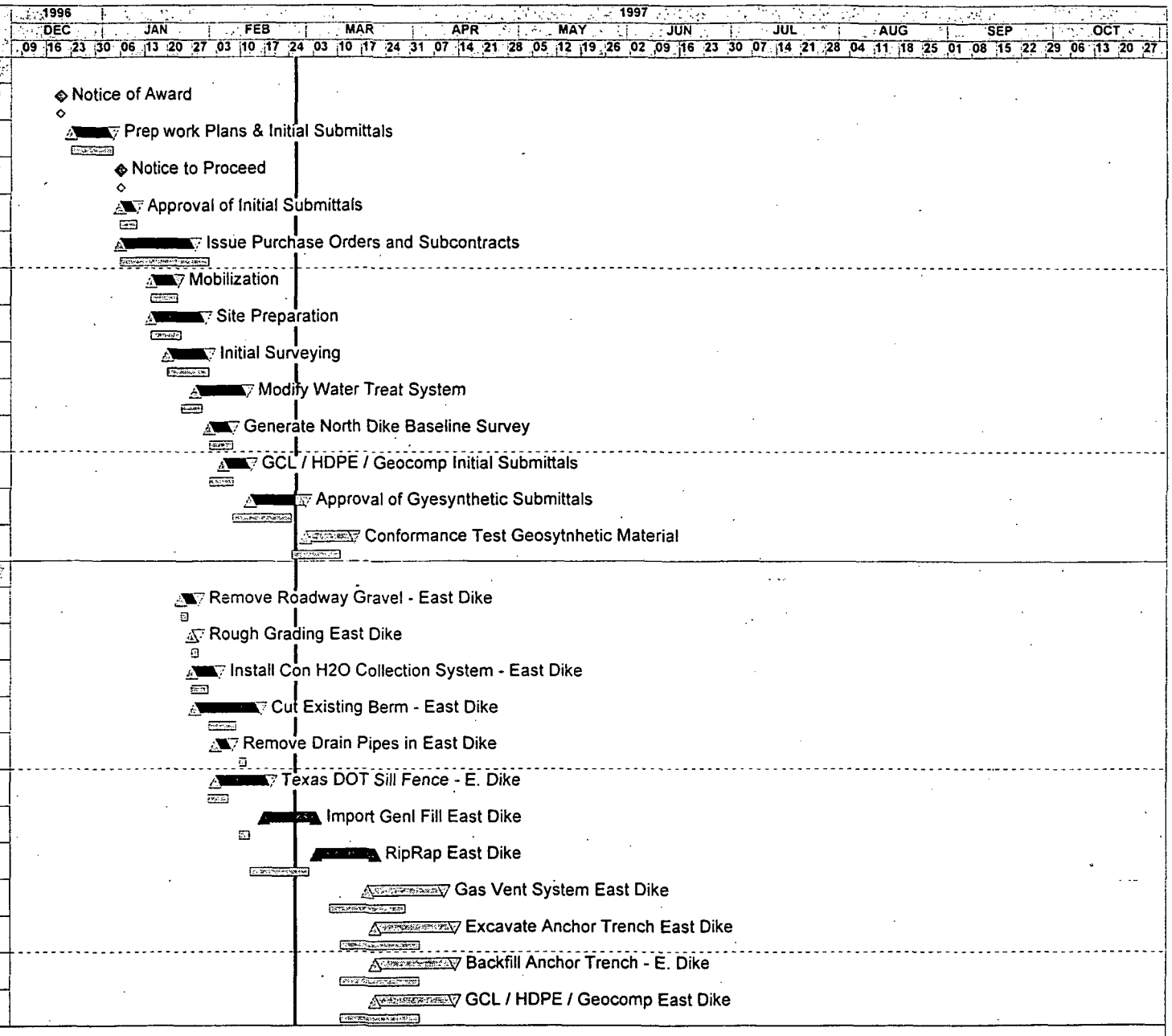
Note: Samples 012597D1, 012597U1, and 012597U1A are background samples.

ATTACHMENT A

WASTEWATER ANALYTICAL DATA

BAILEY SUPERFUND SITE
MONTHLY REPORT FOR FEBRUARY 1997

Act ID	Orig Dur	Early Start	Early Finish	%
Initial Operations				
0001	0	20DEC96 A		100
0005	8	23DEC96 A	03JAN97 A	100
0002	0	06JAN97 A		100
0007	5	06JAN97 A	10JAN97 A	100
0006	20	06JAN97 A	27JAN97 A	100
0101	6	15JAN97 A	22JAN97 A	100
0401	8	15JAN97 A	30JAN97 A	100
0011	10	20JAN97 A	31JAN97 A	100
1001	5	28JAN97 A	11FEB97 A	100
0013	6	01FEB97 A	07FEB97 A	100
0018	6	05FEB97 A	12FEB97 A	100
0019	14	13FEB97 A	28FEB97	50
0020	14	01MAR97	14MAR97	0
East Dike				
2003	2	24JAN97 A	28JAN97 A	100
2001	2	27JAN97 A	28JAN97 A	100
1801	5	27JAN97 A	03FEB97 A	100
2004	7	28JAN97 A	15FEB97 A	100
0402	2	03FEB97 A	07FEB97 A	100
0505	5	03FEB97 A	18FEB97 A	100
2101	3	17FEB97 A	03MAR97	90
2901	15	04MAR97	20MAR97	0
2201	19	19MAR97	09APR97	0
2401	20	21MAR97	12APR97	0
2403	20	21MAR97	12APR97	0
2501	20	21MAR97	12APR97	0



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Finish date	07JUN97
Run date	26FEB97
Page number	1A
Data date	26FEB97

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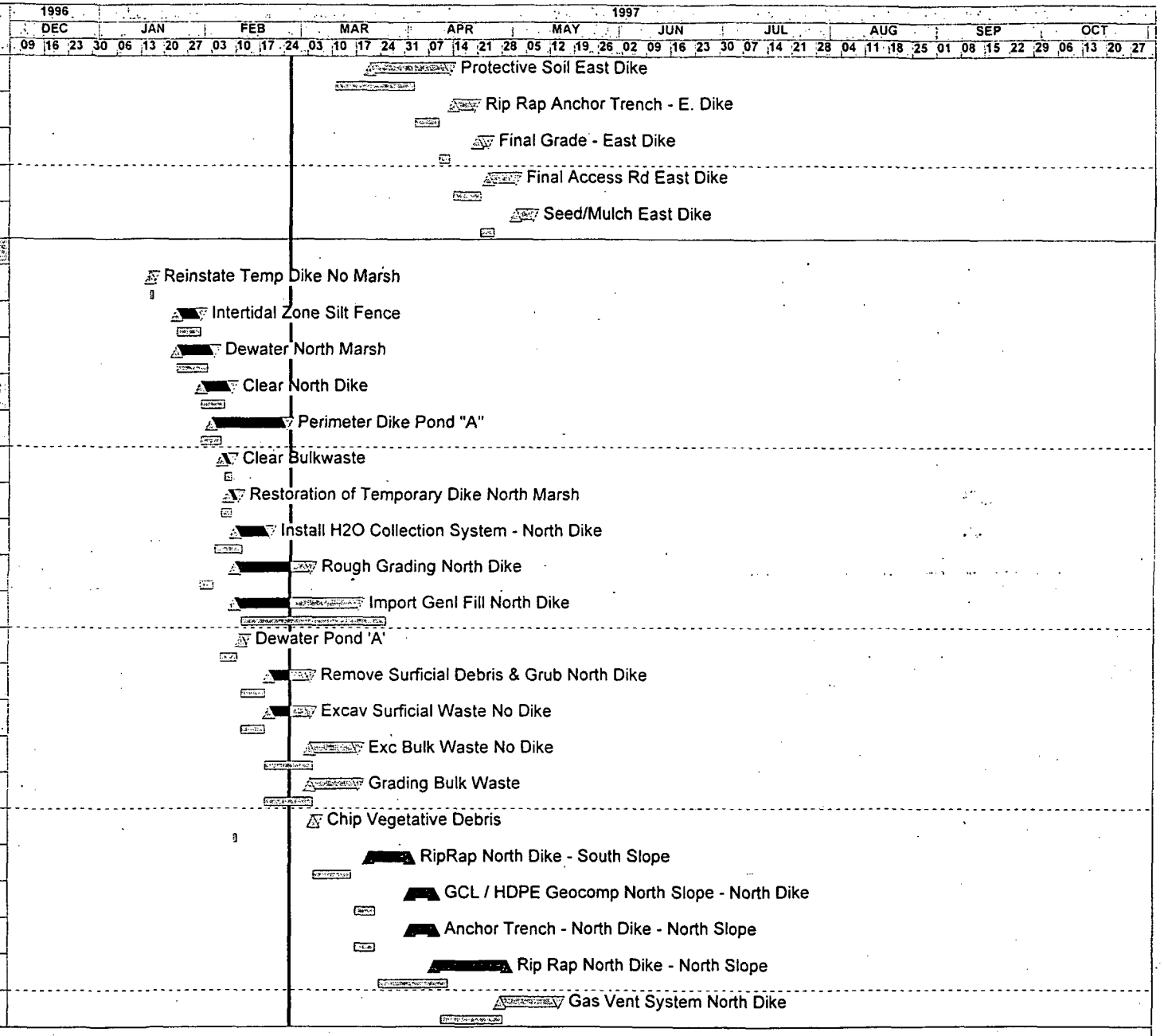
BLYA4U05

OHM Remediation Services Corp.
Revised Final Remediation
February 26, 1997

Act ID	Orig Dur	Early Start	Early Finish	%
2701	20	21MAR97	12APR97	0
2904	6	14APR97	19APR97	0
2005	3	21APR97	23APR97	0
3001	7	24APR97	01MAY97	0
2801	4	02MAY97	06MAY97	0
North Dike				
0801	1	16JAN97 A	16JAN97 A	100
0502	6	24JAN97 A	30JAN97 A	100
0901	8	24JAN97 A	03FEB97 A	100
0601	6	31JAN97 A	08FEB97 A	100
0701	5	03FEB97 A	24FEB97 A	100
0603	2	06FEB97 A	08FEB97 A	100
0803	3	08FEB97 A	10FEB97 A	100
1901	7	10FEB97 A	19FEB97 A	100
2002	3	10FEB97 A	03MAR97	50
2102	36	10FEB97 A	17MAR97	5
0904	4	12FEB97 A	12FEB97 A	100
0602	6	20FEB97 A	03MAR97	15
1401	6	20FEB97 A	03MAR97	15
1501	12	04MAR97	17MAR97	0
1701	12	04MAR97	17MAR97	0
0604	1	05MAR97	05MAR97	0
2902	10	21MAR97	01APR97	0
2402	6	02APR97	08APR97	0
2603	6	02APR97	08APR97	0
2903	18	09APR97	29APR97	0
2202	15	28APR97	14MAY97	0



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Page number	2A
Data date	26FEB97

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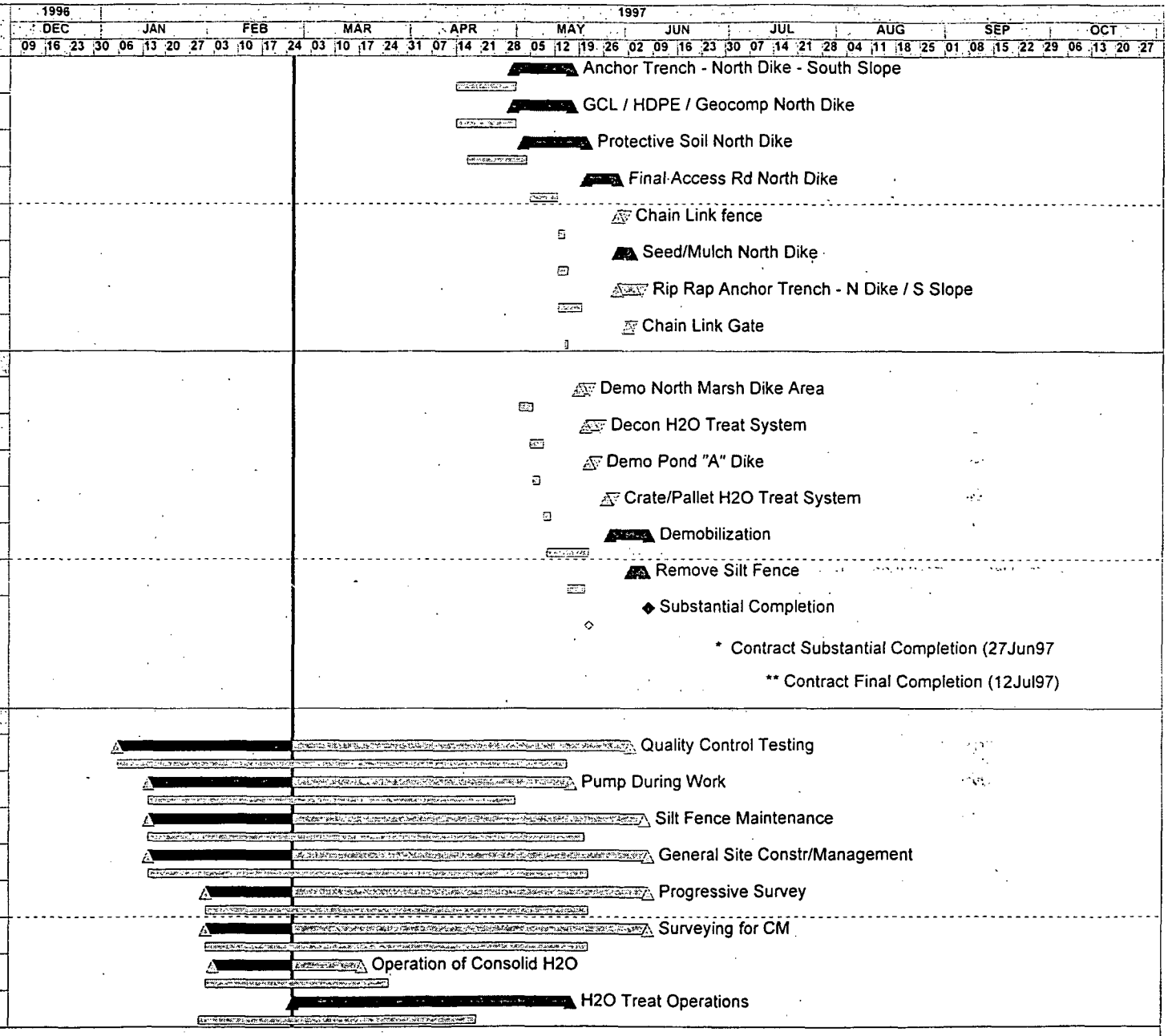
OHM Remediation Services Corp.
Revised Final Remediation
February 26, 1997

Act ID	Orig Dur	Early Start	Early Finish	%
2503	15	30APR97	16MAY97	0
2602	15	30APR97	16MAY97	0
2702	15	03MAY97	20MAY97	0
3002	7	21MAY97	29MAY97	0
3401	2	30MAY97	31MAY97	0
2802	3	30MAY97	02JUN97	0
2905	6	30MAY97	05JUN97	0
3501	1	02JUN97	02JUN97	0
Decon / Demobilization				
0802	3	19MAY97	21MAY97	0
3601	4	21MAY97	24MAY97	0
0702	2	22MAY97	23MAY97	0
3602	2	27MAY97	28MAY97	0
0201	10	28MAY97	07JUN97	0
0508	4	03JUN97	06JUN97	0
3630	0		07JUN97	0
Miscellaneous				
0015	126 *	06JAN97 A	02JUN97	35
0902	105 *	15JAN97 A	16MAY97	34
0507	122 *	15JAN97 A	06JUN97	30
3701	123 *	15JAN97 A	07JUN97	29
0012	108 *	01FEB97 A	07JUN97	19
3101	108 *	01FEB97 A	07JUN97	19
0903	37 *	03FEB97 A	17MAR97	54
1101	69	26FEB97	16MAY97	0



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Lead	5.00	<0.1
Mercury	0.20	<0.002
Selenium	1.00	<0.2
Silver	5.00	<0.01
Benzene	0.50	<0.05
2-Butanone	200.00	<0.2
Carbon Tetrachloride	0.50	<0.05
Chlorobenzene	100.00	<0.05
Chloroform	6.00	<0.05
1,2-Dichloroethane	0.50	<0.05
1,1-Dichloroethene	0.70	<0.05
Tetrachloroethene	0.70	<0.05
Trichloroethene	0.50	<0.05
Vinyl Chloride	0.20	<0.1
o- Cresol	200.00	<0.05
m-, p- Cresols	200.00	<0.1
1,4-Dichlorobenzene	7.50	<0.05
2,4-Dinitrotoluene	0.13	<0.05
Hexachlorobenzene	0.13	<0.05
Hexachlorobutadiene	0.50	<0.05
Hexachloroethane	3.00	<0.05
Nitrobenzene	2.00	<0.05
Pentachlorophenol	100.00	<0.25
Pyridine	5.00	<0.05
2,4,5-Trichlorophenol	400.00	<0.1
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[1] Wastewater sample collected from the Wastewater Treatment Plant holding tank. Wastewater did not meet the disharge requirement, and therefore could not be discharged. This wastewater was sampled for the above constituents to characterize it for off-size disposal. Wastewater contained some Pit B wastewater from earlier remediation on-site.

[2] 40 CFR 261.24

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

February 7, 1997

Ms. Jackie Travers
Parson Engineering Science
9906 Gulf Freeway, Suite 100
Houston, TX 77034

The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on January 31, 1997. The samples were assigned to Certificate of Analysis No. 9701C48 and analyzed for all parameters as listed on the chain of custody.

The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries for Silver by Method 6010 were outside QC limits. The Laboratory Control Sample (LCS) performed for this analyses to verify adequate instrument and method performance was acceptable for all parameters.

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

Ed Fry
Project Manager

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SOUTHERN PETROLEUM LABORATORIES, INC.

Certificate of Analysis Number: 97-01-C48

Approved for Release by:

Ed Fry, Project Manager

2/10/97
Date:

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9701C48-01

Parson Engineering Science
9906 Gulf Freeway, Suite 100
Houston, TX 77034
ATTN: Jackie Travers

DATE: 02/07/97

PROJECT: Bailey Superfund Site
SITE: Bridge City, TX
SAMPLED BY: Parson Engineer Science
SAMPLE ID: WHT 013097

PROJECT NO: 727931
MATRIX: WATER
DATE SAMPLED: 01/30/97 16:00:00
DATE RECEIVED: 01/31/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Silver, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.01	mg/L
Arsenic, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.2	mg/L
Barium, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	1	mg/L
Cadmium, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.01	mg/L
Chromium, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.02	mg/L
Mercury, TCLP Leachate METHOD 7470 *** Analyzed by: DD Date: 02/05/97 21:00:00	ND	0.002	mg/L

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9701C48-01

Parson Engineering Science
9906 Gulf Freeway, Suite 100
Houston, TX 77034
ATTN: Jackie Travers

DATE: 02/07/97

PROJECT: Bailey Superfund Site
SITE: Bridge City, TX
SAMPLED BY: Parson Engineer Science
SAMPLE ID: WHT 013097

PROJECT NO: 727931
MATRIX: WATER
DATE SAMPLED: 01/30/97 16:00:00
DATE RECEIVED: 01/31/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Acid Digestion of Leachate, ICP METHOD 3010A *** Analyzed by: MM Date: 01/31/97	01/31/97		
Lead, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.1	mg/L
TCLP Leachate extraction METHOD 1311 *** Analyzed by: WLR Date: 01/31/97	01/31/97		
Selenium, TCLP Leachate METHOD 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.2	mg/L
Zero Headspace extraction METHOD 1311 Analyzed by: WLR Date: 01/31/97	01/31/97		
TCLP Leachate extraction METHOD 1311 *** Analyzed by: WLR Date: 01/31/97	01/31/97		

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9701C48-01

Parson Engineering Science
9906 Gulf Freeway, Suite 100
Houston, TX 77034
ATTN: Jackie Travers

02/07/97

PROJECT: Bailey Superfund Site
SITE: Bridge City, TX
SAMPLED BY: Parson Engineer Science
SAMPLE ID: WHT 013097

PROJECT NO: 727931
MATRIX: LEACHATE
DATE SAMPLED: 01/30/97 16:00:00
DATE RECEIVED: 01/31/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS	RL ▲
Benzene	ND	50	ug/L	500
2-Butanone	ND	200	ug/L	200000
Carbon Tetrachloride	ND	50	ug/L	500
Chlorobenzene	ND	50	ug/L	100000
Chloroform	ND	50	ug/L	6000
1,2-Dichloroethane	ND	50	ug/L	500
1,1-Dichloroethene	ND	50	ug/L	700
Tetrachloroethene	ND	50	ug/L	700
Trichloroethene	ND	50	ug/L	500
Vinyl Chloride	ND	100	ug/L	200

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
4-Bromofluorobenzene	50 ug/L	97	86	115
1,2-Dichloroethane-d4	50 ug/L	96	76	114
Toluene-d8	50 ug/L	106	88	110

ANALYZED BY: GT DATE/TIME: 01/31/97 14:23:00
LEACHATE PREP(ZHE) BY: WLR DATE/TIME: 01/31/97
METHOD: 1311/8240, TCLP Volatiles
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed
▲ - Regulatory Limit. Reference Federal Register 55, 11862 (3/29/90), RCRA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9701C48-01

Parson Engineering Science
9906 Gulf Freeway, Suite 100
Houston, TX 77034
ATTN: Jackie Travers

02/07/97

PROJECT: Bailey Superfund Site
SITE: Bridge City, TX
SAMPLED BY: Parson Engineer Science
SAMPLE ID: WHT 013097

PROJECT NO: 727931
MATRIX: LEACHATE
DATE SAMPLED: 01/30/97 16:00:00
DATE RECEIVED: 01/31/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS	RL ▲
ortho-Cresol	ND	50	ug/L	200000
meta, para-Cresols	ND	100	ug/L	200000
1,4-Dichlorobenzene	ND	50	ug/L	7500
2,4-Dinitrotoluene	ND	50	ug/L	130
Hexachlorobenzene	ND	50	ug/L	130
Hexachlorobutadiene	ND	50	ug/L	500
Hexachloroethane	ND	50	ug/L	3000
Nitrobenzene	ND	50	ug/L	2000
Pentachlorophenol	ND	250	ug/L	100000
Pyridine	ND	50	ug/L	5000
2,4,5-Trichlorophenol	ND	100	ug/L	400000
2,4,6-Trichlorophenol	ND	50	ug/L	2000

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
Nitrobenzene-d5	50 ug/L	84	35	114
2-Fluorobiphenyl	50 ug/L	100	43	116
Terphenyl-d14	50 ug/L	75	33	141
Phenol-d5	75 ug/L	99	10	110
2-Fluorophenol	75 ug/L	87	21	110
2,4,6-Tribromophenol	75 ug/L	88	10	123

ANALYZED BY: PC DATE/TIME: 02/04/97 17:13:00
LEACHATE EXTRACTION BY: SW DATE/TIME: 01/31/97 13:00:00
METHOD: 1311/8270, TCLP Semivolatiles
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed
▲ - Regulatory Limit. Reference Federal Register 55, 11862 (3/29/90), RCRA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION

SPL Labs

RECOVERY REPORT

Client Name:
Sample Matrix: WATER
Lab Smp Id: 9701609-01AMS-TCLPV/10X
Level: LOW
Data Type: MS DATA
SpikeList File: 9701609-01A
Method File: /chem/m.i/m970120.b/m8240bwq.m
Misc Info: M020W1/M017S06/M020CW2

Client SDG: m970120
Fraction: VOA
Operator: GT
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 Vinyl Chloride	500	460	91.46	50-150
7 1,1-Dichloroethene	500	460	92.16	50-150
14 2-Butanone	500	200	40.74	30-150
17 Chloroform	500	460	91.34	50-150
20 1,2-Dichloroethane	500	460	92.34	50-150
21 Benzene	500	460	91.90	50-150
22 Carbon Tetrachlori	500	460	93.08	50-150
25 Trichloroethene	500	500	99.16	50-150
36 Tetrachloroethene	500	450	90.13	50-150
38 Chlorobenzene	500	460	92.42	50-150

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 18 1,2-Dichloroethane	50	53	105.41	76-114
$ 31 Toluene-d8	50	53	105.61	88-110
$ 46 Bromofluorobenzene	50	51	101.47	86-115

SPL Labs

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCS
Level: LOW
Data Type: MS DATA
SpikeList File: 8240water.spk
Method File: /chem/m.i/m970120.b/m8240bwq.m
Misc Info: M020W1//M020CW2

Client SDG: m970120
Fraction: VOA
Operator: GT
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 1,1-Dichloroethene	50	46	92.91	61-145
25 Trichloroethene	50	48	96.69	71-120
21 Benzene	50	48	95.22	76-127
32 Toluene	50	48	95.64	76-125
38 Chlorobenzene	50	45	89.59	75-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 18 1,2-Dichloroethane	50	53	106.08	76-114
$ 31 Toluene-d8	50	52	104.75	88-110
$ 46 Bromofluorobenzene	50	51	101.95	86-115

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Aqueous
Sample ID: VBLK
Batch: M970131113701

Reported on: 02/03/97 13:1
Analyzed on: 01/31/97 13:3
Analyst: GT

METHOD 8240 M031B01

Compound	Result	Detection Limit	Units
Vinyl Chloride	ND	10	ug/L
1,1-Dichloroethene	ND	5	ug/L
2-Butanone	ND	20	ug/L
Chloroform	ND	5	ug/L
1,2-Dichloroethane	ND	5	ug/L
Benzene	ND	5	ug/L
Carbon Tetrachloride	ND	5	ug/L
Trichloroethene	ND	5	ug/L
Tetrachloroethene	ND	5	ug/L
Chlorobenzene	ND	5	ug/L

Surrogate	Result	QC Criteria	Units
1,2-Dichloroethane-d4	104	76-114	% Recovery
Toluene-d8	108	88-110	% Recovery
Bromofluorobenzene	101	86-115	% Recovery

Samples in Batch 9701C48-01

Notes

ND - Not detected.

SPL Houston Labs

RECOVERY REPORT

Client Name: Client SDG: j970122
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: 9701609-01AMS
Level: LOW Operator: PC
Data Type: MS DATA SampleType: MS
SpikeList File: TCLP.spk Quant Type: ISTD
Method File: /chem/j.i/j970122.b/j8270Q.m
Misc Info: E020F3/J020B03a/J022CC1

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
17	ortho-Cresol	750	660	88.45	10-120
20	meta,para-Cresol	1500	1200	83.51	10-120
12	1,4-Dichlorobenzen	500	350	70.96	20-124
53	2,4-Dinitrotoluene	500	390	78.33	39-139
63	Hexachlorobenzene	500	190	38.87	1-152
35	Hexachlorobutadien	500	420	85.02	24-116
22	Hexachloroethane	500	380	75.15	40-113
24	Nitrobenzene	500	410	82.26	35-180
64	Pentachlorophenol	750	810	108.31	14-176
2	Pyridine	500	330	65.28	1-150
40	2,4,5-Trichlorophe	750	610	81.03	30-140
39	2,4,6-Trichlorophe	750	720	96.44	37-144

SURROGATE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 23	Nitrobenzene-d5	50	35	70.54	35-114
$ 41	2-Fluorobiphenyl	50	44	87.55	43-116
$ 72	Terphenyl-d14	50	48	95.37	33-141
$ 4	Phenol-d5	75	55	73.78	10-110
$ 61	2,4,6-Tribromophen	75	72	95.83	10-123
$ 3	2-Fluorophenol	75	50	67.20	21-110

SPL Houston Labs

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCS
Level: LOW
Data Type: MS DATA
SpikeList File: TCLP.spk
Method File: /chem/j.i/j970122.b/j8270Q.m
Misc Info: E020F3/J020B03a/J022CC1

Client SDG: j970122
Fraction: SV

Operator: PC
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
17 ortho-Cresol	750	410	54.23	10-120
20 meta,para-Cresol	1500	770	51.53	10-120
12 1,4-Dichlorobenzen	500	200	40.30	20-124
53 2,4-Dinitrotoluene	500	210	42.24	39-139
63 Hexachlorobenzene	500	170	33.70	1-152
35 Hexachlorobutadien	500	240	48.76	24-116
22 Hexachloroethane	500	220	44.25	40-113
24 Nitrobenzene	500	260	51.79	35-180
64 Pentachlorophenol	750	550	73.00	14-176
2 Pyridine	500	190	38.49	1-150
40 2,4,5-Trichlorophe	750	360	48.60	30-140
39 2,4,6-Trichlorophe	750	340	44.84	37-144

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	50	23	46.78	35-114
$ 41 2-Fluorobiphenyl	50	25	50.54	43-116
$ 72 Terphenyl-d14	50	40	80.40	33-141
$ 4 Phenol-d5	75	34	45.42	10-110
$ 61 2,4,6-Tribromophen	75	41	55.10	10-123
$ 3 2-Fluorophenol	75	26	34.69	21-110

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Aqueous
Sample ID: BLANK
Batch: E970131042249

Reported on: 02/05/97 16:13
Analyzed on: 02/01/97 16:37
Analyst: PC

METHOD 8270 BLANK J031B03

Compound	Result	Detection Limit	Units
Pyridine	ND	5	ug/L
ortho-Cresol	ND	5	ug/L
meta,para-Cresol	ND	10	ug/L
Hexachloroethane	ND	5	ug/L
Nitrobenzene	ND	5	ug/L
Hexachlorobutadiene	ND	5	ug/L
2,4,6-Trichlorophenol	ND	5	ug/L
2,4,5-Trichlorophenol	ND	10	ug/L
2,4-Dinitrotoluene	ND	5	ug/L
Hexachlorobenzene	ND	5	ug/L
Pentachlorophenol	ND	25	ug/L
1,4-Dichlorobenzene	ND	5	ug/L

Surrogate	Result	QC Criteria	Units
2-Fluorobiphenyl	91	43-116	% Recovery
2-Fluorophenol	64	21-110	% Recovery
Nitrobenzene-d5	88	35-114	% Recovery
Phenol-d5	43	10-110	% Recovery
Terphenyl-d14	74	33-141	% Recovery
2,4,6-Tribromophenol	83	10-123	% Recovery

Samples in Batch 9701C48-01

Notes

ND - Not detected.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Leachate
Sample ID: BLANK
Batch: E970131042249

Reported on: 02/05/97 16:1
Analyzed on: 02/01/97 17:42
Analyst: PC

METHOD 8270

Compound	Result	Detection Limit	Units
Pyridine	ND	5	ug/L
ortho-Cresol	ND	5	ug/L
meta,para-Cresol	ND	10	ug/L
Hexachloroethane	ND	5	ug/L
Nitrobenzene	ND	5	ug/L
Hexachlorobutadiene	ND	5	ug/L
2,4,6-Trichlorophenol	ND	5	ug/L
2,4,5-Trichlorophenol	ND	10	ug/L
2,4-Dinitrotoluene	ND	5	ug/L
Hexachlorobenzene	ND	5	ug/L
Pentachlorophenol	ND	25	ug/L
1,4-Dichlorobenzene	ND	5	ug/L

Surrogate	Result	QC Criteria	Units
2-Fluorobiphenyl	84	43-116	% Recovery
2-Fluorophenol	56	21-110	% Recovery
Nitrobenzene-d5	84	35-114	% Recovery
Phenol-d5	37	10-110	% Recovery
Terphenyl-d14	72	33-141	% Recovery
2,4,6-Tribromophenol	81	10-123	% Recovery

Samples in Batch 9701C48-01

Notes

ND - Not detected.

ICP Spectroscopy Method 6010 Quality Control Report

Matrix: TCLP Leachate - WATER Units: mg/L Analyst: JM

Date: 020497 Time: 1203 File Name: 020497M1 Checked: 2/6/97

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Laboratory Control Sample

Element	Mth. Blank	True Value	Result	% Recovery	Lower Limit	Upper Limit
Silver	ND	2.00	1.984	99	1.60	2.40
Arsenic	ND	4.00	3.902	98	3.20	4.80
Barium	ND	2.00	2.057	103	1.60	2.40
Beryllium						
Cadmium	ND	2.00	1.814	91	1.60	2.40
Cobalt						
Chromium	ND	2.00	1.918	96	1.60	2.40
Copper						
Thallium						
Nickel						
Lead	ND	2.00	1.848	92	1.60	2.40
Antimony						
Selenium	ND	4.00	3.936	98	3.20	4.80
Vanadium						
Zinc						

Work Orders in Batch

Work Order	Fractions
97-01-C48	01A

Matrix Spike - Spike Duplicate Results **Work Order Spiked: 97-01-C48 01A**

Element	Sample Result	Spike Added	Matrix Spike Result	Matrix Spike Recovery	*	Matrix Spike Duplicate Result	Matrix Spike Duplicate Recovery	*	QC Limits % Recovery		Spike RPD %	QC Limits %
Silver	ND	1.0	0.042	4	*	0.047	5	*	80	120	10.1	20.0
Arsenic	ND	2.0	1.978	99		2.043	102		80	120	3.2	20.0
Barium	0.1727	1.0	1.132	96		1.177	100		80	120	4.6	20.0
Beryllium												
Cadmium	ND	1.0	0.926	93		0.960	96		80	120	3.6	20.0
Cobalt												
Chromium	ND	1.0	0.937	94		0.971	97		80	120	3.5	20.0
Copper												
Thallium												
Nickel												
Lead	ND	1.0	0.923	92		0.953	95		80	120	3.2	20.0
Antimony												
Selenium	ND	2.0	1.907	95		2.009	100		80	120	5.2	20.0
Vanadium												
Zinc												

DIG 25/50

* Spike Results Outside Method Limits

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKWY
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

** SPL QUALITY CONTROL REPORT **

Matrix: Leachate

Reported on: 02/06/97
Analyzed on: 02/05/97
Analyst: DD

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, TCLP Leachate
Method 7470 A***

SPL Sample ID Number	Method Blank mg/L	Sample Result mg/L	Spike Added mg/L	Matrix Spike Result mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/L	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9702179-01A	ND	ND	.0050	.0054	108	.0055	110	1.8	20	80 -120

2100970205210000-9702244

Samples in batch:

9702179-01A 9702186-01A

COMMENTS:

LAFAYETTE AREA LAB
500 AMBASSADOR CAFFERY PKWY.
SCOTT, LOUISIANA
ZIP 70583-8544
PHONE: (318) 237-4775

** SPL QUALITY CONTROL REPORT **

Matrix: Leachate

Reported on: 02/06/97
Analyzed on: 02/05/97
Analyst: DD

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, TCLP Leachate
Method 7470 A***

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	0.0050	0.0055	110	80 - 120

2100970205210000-9702247

Samples in batch:

9702179-01A 9702186-01A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 97-01-C48

H- 13457

page 1 of 1

Client Name: PARSONS ES

Address/Phone: HOUSTON TX 713 943-5432

Client Contact: JACKIE TRAVERS

Project Name: BAILEY SUPERFUND SITE

Project Number: 727931

Project Location: BRIDGE CITY, TX. 77611

Invoice To: HOUSTON OFFICE

SAMPLE ID	DATE	TIME	comp	grab	matrix W=water S=soil SL=sludge O=other:	bottle P=plastic A=amber glass G=glass V=vial	size 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz	pres. 1=HCl 2=HNO3 3=H2SO4 O=other:	Number of Containers	TCLP-VOC	TCLP-SVOC	TCLP-METALS						
WHT013097	1/30/97	16:00		✓	W	G		—	6	✓	✓	✓						

Client/Consultant Remarks: 5 DAY TURNAROUND

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 40 CPOS

Requested TAT

24hr ☐ 72hr ☐

48hr ☐ Standard ☐

Other ☑ 5 DAY

Special Reporting Requirements: PER CONTRACT

Standard QC ☐ Fax Results ☐ Level 3 QC ☐ Raw Data ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

	date	time	
1. Relinquished by Sampler: Mark Murphy	1/30/97	17:00	2. Received by: [signature] 1/31/97 @ 1000
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 459 Hughes Drive, Traverse City, MI 49684 (616) 947-5777

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 1-31-97	Time: 1000

SPL Sample ID: 97-01-C48

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		4° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	0145913121	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: [signature]	Date: 1-31-97

ATTACHMENT B

DOCUMENTATION AIR SAMPLES ANALYTICAL DATA

BAILEY SUPERFUND SITE
MONTHLY REPORT FOR FEBRUARY 1997

TABLE 2
DOCUMENTATION AIR SAMPLING DATA FOR THE FEBRUARY 1997 MONTHLY REPORT
Bailey Superfund Site, Orange County, Texas

Air Samples taken 1/25/97 and 1/31/97

Compound	Action Level[1] (ppm)	Action Level[1] (ppb)	Analysis Results 012597D1 (ppb) *Downwind*	Analysis Results 012597U1 (ppb) *Upwind*	Analysis Results 012597U1A (ppb) *Duplicate Upwind*	Analysis Results 013197D1 (ppb) *Downwind*	Analysis Results 013197U1 (ppb) *Upwind*
Acetone	375	375,000	4.90	3.60	3.50	4.10	11.00
Benzene	0.5	500	0.43	0.40	0.44	0.73	0.84
Butanone, 2- (MEK)	100	100,000	1.40	1.30	1.60	1.30	3.40
Carbon Disulfide	2	2,000	1.00	<0.19	1.40	<0.94	<1.0
Chlorobenzene	5	5,000	<0.18	<0.19	<0.19	<0.19	<0.20
Dichloroethane, 1,2-	5	5,000	<0.18	<0.19	<0.19	<0.19	<0.20
Dichloroethene, cis-1,2-	100	100,000	<0.18	<0.19	<0.19	<0.19	<0.20
Dichloroethene, trans-1,2-	100	100,000	<0.18	<0.19	<0.19	<0.94	<1.0
Dichloropropane, 1,2-	37.5	37,500	<0.18	<0.19	<0.19	<0.19	<0.20
Ethyl Benzene	50	50,000	<0.18	<0.19	<0.19	<0.19	<0.20
Methylene Chloride	25	25,000	<0.92	<0.94	<0.94	<0.94	<1.0
Styrene	25	25,000	<0.18	<0.19	<0.19	<0.19	<0.20
Tetrachloroethene	12.5	12,500	<0.18	<0.19	<0.19	<0.19	<0.20
Toluene	25	25,000	0.39	0.34	0.36	0.64	0.66
Trichloroethane, 1,1,1-	5	5,000	<0.18	<0.19	<0.19	<0.19	<0.20
Trichloroethene	25	25,000	<0.18	<0.19	<0.19	<0.19	<0.20
Xylene, m,p-	50	50,000	<0.18	<0.19	<0.19	<0.19	<0.20
Xylene, o-	50	50,000	<0.18	<0.19	<0.19	<0.19	<0.20

[1] Action Levels for the site are specified in Table 2-2 of the Revised Air Monitoring Plan for Final Remediation (Parsons ES, January, 1997)

Note: Samples 012597D1, 012597U1, and 012597U1A are background samples.

QUALITY ASSURANCE SUMMARY REPORT FOR AIR SAMPLES COLLECTED FROM THE WASTEWATER TREATMENT PLANT AT THE BAILEY SUPERFUND SITE IN JANUARY 1997

INTRODUCTION

This report discusses the findings of the Quality Assurance (QA) review of the analytical data submitted in support of the air samples collected by Parsons ES at the Wastewater treatment plant at the Bailey Superfund Site in January 1997. Three air samples were collected on January 25, 1997: 012597D1, 012597U1, and 012597U1A.

The samples collected were analyzed for volatile organics (VOCs) using EPA method TO-14. All analyses were performed by Air Toxics LTD. of Folsom, California following the analytical methods specified in the project work plans.

The data package submitted by the laboratory has been reviewed using the QA Objectives specified for the project and standardized data validation procedures. This report discusses any deviations from the QA objectives and any limitations on the usability of the data resulting from these deviations.

SUMMARY

Generally, the samples were successfully analyzed as required for the project. All samples were prepared and analyzed within the specified holding times. Except as indicated in this report, the data as submitted by the laboratory is usable as reported.

Target VOCs detected in the samples at or above the target quantitation limits were benzene, toluene, acetone, carbon disulfide, and 2-butanone. Benzene concentration in the samples ranged from 0.40 ppbv to 0.44 ppbv. Toluene concentration in the samples ranged from 0.34 ppbv to 0.39 ppbv. Acetone concentration in the samples ranged from 3.5 ppbv to 4.9 ppbv. Carbon disulfide concentration in the samples ranged from 1 ppbv to 1.4 ppbv. Carbon disulfide was not detected in sample 012596U1. 2-Butanone concentration in the samples ranged from 1.3 ppbv to 1.6 ppbv. The laboratory

reported no problems associated with the receipt or analysis of the samples. All reported for the laboratory quality control samples and standards associated with the analysis of the samples were in control.

Based on the review of the data submitted by the laboratory, all data reported for the samples are usable as reported. No qualification of data was necessary.

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 9701221

Work Order Summary

CLIENT: Ms. Barbara Dye
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

BILL TO: Ms. Mary E. Miller
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

PHONE: 713-943-5432
FAX: 713-943-5427
DATE RECEIVED: 1/28/97
DATE COMPLETED: 2/10/97

INVOICE # 13253
P.O. # 727931-11000
PROJECT # 727931 Bailey Superfund

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	012597D1	TO-14-S	8.0 "Hg
02A	012597U1	TO-14-S	8.5 "Hg
03A	012597U1A	TO-14-S	8.5 "Hg
04A	Lab Blank	TO-14-S	NA

CERTIFIED BY: Linda L. Freeman
Laboratory Director

DATE: 2/10/97

180 BLUE RAVINE ROAD, SUITE B • FOLSOM, CA 95630
(916) 985-1000 • FAX (916) 985-1020

AIR TOXICS LTD.

SAMPLE NAME: 012597D1

ID#: 9701221-01A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j012905	Date of Collection:	1/25/97
Dil. Factor:	1.83	Date of Analysis:	1/29/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.92	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected
Benzene	0.18	0.43
1,2-Dichloroethane	0.18	Not Detected
Trichloroethene	0.18	Not Detected
1,2-Dichloropropane	0.18	Not Detected
Toluene	0.18	0.39
Tetrachloroethene	0.18	Not Detected
Chlorobenzene	0.18	Not Detected
Ethyl Benzene	0.18	Not Detected
m,p-Xylene	0.18	Not Detected
o-Xylene	0.18	Not Detected
Styrene	0.18	Not Detected
Acetone	0.92	4.9
Carbon Disulfide	0.92	1.0
trans-1,2-Dichloroethene	0.92	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	1.4

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	100	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: 012597U1

ID#: 9701221-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**j012906**	**Date of Collection:**	**1/25/97**
Dil. Factor:	**1.87**	**Date of Analysis:**	**1/29/97**

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.94	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected
Benzene	0.19	0.40
1,2-Dichloroethane	0.19	Not Detected
Trichloroethene	0.19	Not Detected
1,2-Dichloropropane	0.19	Not Detected
Toluene	0.19	0.34
Tetrachloroethene	0.19	Not Detected
Chlorobenzene	0.19	Not Detected
Ethyl Benzene	0.19	Not Detected
m,p-Xylene	0.19	Not Detected
o-Xylene	0.19	Not Detected
Styrene	0.19	Not Detected
Acetone	0.94	3.6
Carbon Disulfide	0.94	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	1.3

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	100	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

SAMPLE NAME: 012597U1A

ID#: 9701221-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j012907	**Date of Collection:**	1/25/97
Dil. Factor:	1.87	**Date of Analysis:**	1/29/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.94	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected
Benzene	0.19	0.44
1,2-Dichloroethane	0.19	Not Detected
Trichloroethene	0.19	Not Detected
1,2-Dichloropropane	0.19	Not Detected
Toluene	0.19	0.36
Tetrachloroethene	0.19	Not Detected
Chlorobenzene	0.19	Not Detected
Ethyl Benzene	0.19	Not Detected
m,p-Xylene	0.19	Not Detected
o-Xylene	0.19	Not Detected
Styrene	0.19	Not Detected
Acetone	0.94	3.5
Carbon Disulfide	0.94	1.4
trans-1,2-Dichloroethene	0.94	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	1.6

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	104	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	94	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 9701221-04A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j012904	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	1/29/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.50	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected
Benzene	0.10	Not Detected
1,2-Dichloroethane	0.10	Not Detected
Trichloroethene	0.10	Not Detected
1,2-Dichloropropane	0.10	Not Detected
Toluene	0.10	Not Detected
Tetrachloroethene	0.10	Not Detected
Chlorobenzene	0.10	Not Detected
Ethyl Benzene	0.10	Not Detected
m,p-Xylene	0.10	Not Detected
o-Xylene	0.10	Not Detected
Styrene	0.10	Not Detected
Acetone	0.50	Not Detected
Carbon Disulfide	0.50	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Octafluorotoluene	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

№ 009931

Contact Person: Barbara Dye
Company: Parsons E.S.
Address: 9906 Gulf Freeway / City: Houston State: TX Zip: 77034
Phone: (713) 943-5432 FAX: (713) 943-5427
Collected By: Signature: [signature]

Project info:
P.O. #: 727931-3004-00
Project #: 727931
Project Name: Bailey

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
C1	012597D1 MHM	01-25-97 8HRS	TO-14 See Att list	-30	-8	8.0 Hg
C2A	012597D1 MHM	01-25-97 8HRS	TO-14 See ATT list	-30	-8.5	8.5 Hg
C3A	012597D1A MHM	01-25-97 8HRS	TO-14 See ATT list	-30	-8	8.5 Hg
	THE FOLLOWING EQUIPMENT IS BEING RETURNED:					
	(1) 3EA - CONTROLLERS					
	(2) 3EA - PRESSURE GAUGES					
	(3) 4EA - FILTERS					

Relinquished By: (Signature) Date/Time: Mark Munsey 1/25/97 17:00 Print Name:
Relinquished By: (Signature) Date/Time: Received By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time: Received By: (Signature) Date/Time: [signature] ATL 1/25/97 1450

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FEDEX	0349535524	[signature]	1/25/97 1450	AMBIENT	GOOD	Yes No None N/A	9701221

Form 1293 rev. 06

LEVEL-IV VALIDATABLE

Volatile Organics Analysis
EPA Method TO-14

COMPLETE SDG FILE (CSF) DOCUMENT
INVENTORY SHEET

Lab Name: Air Toxics Ltd.
City/State: Folsom, CA
Lab Code:

Contract:
SDG:
Work Order: 9701221

	Page Nos. From	Page Nos. To	(Please Check:) Lab	(Please Check:) Region
1. Inventory Sheet (ATL-2) (Do Not Number)			√	
2. Laboratory Narrative (Do Not Number)			√	
3. QC Summary				
a. GC/MS Instrument Performance Check (BFB Tune)	1	2	√	
4. Sample Results	3	102	√	
5. Standards & Raw QC Data				
a. Initial Calibration Data (Summary Sheet + Raw Data)	103	215	√	
b. Continuing Calibration Data (Summary Sheet + Raw Data)	216	250	√	
c. BFB Tune (Raw Data)	251	261	√	
d. Blank Data	262	278	√	
6. Canister Certification	–	–	–	
7. Shipping/Receiving Documents:				
a. Airbill (No. of Shipments ____)	–	–	–	
b. Chain-of-Custody Records	279	279	√	
c. Sample Tags	–	–	–	
d. Sample Log-In Sheet	280	280	√	
e. Misc. Shipping/Receiving Records (list individual records)				
_____	–	–	–	
_____	–	–	–	
8. Internal Lab Sample Transfer Records & Tracking Sheets	–	–	–	
9. Internal Original Sample Preparation & Analysis Records (describe or list):				
a. Preparation Records	–	–	–	
b. Analysis Records Run Logs	281	283	√	
10. Other Records (decribe or list)				
a. Telephone Communication Log	–	–	–	
b. Dilution Factors	284	284	√	
_____	–	–	–	

Comments:

Completed by:

Julie R. Bellendir (Signature) — Julie R. Bellendir / Document Control (Print Name & Title) — 2/10/97 (Date)

FORM ATL-2

LABORATORY NARRATIVE
Analysis of VOLATILE ORGANICS by EPA Method TO-14
Work Order #9701221

Three 6L Summa™ canister samples were received on January 28, 1997. The laboratory performed analysis via EPA Method TO-14 using a capillary direct quadrupole GC/MS in the full scan mode. The method involves cryofocusing up to 0.5 L of air at liquid argon temperatures. The cryofocused aliquot is then flash vaporized to 225°C and swept through a hydrophobic drier to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. Please see the data sheets for the analytical detection limit. Library searching of the top ten tentatively identified compounds was not performed per the client's request.

The concentrations present in the samples were calculated using the technique of internal standards. Three internal standards (Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5) were spiked at 5 ppbv into every standard, blank and sample. Three surrogates (Octafluorotoluene, Toluene-d8 and 4-Bromofluorobenzene) were also spiked at 5 ppbv.

The analytical dilution factor reported on the data sheet is derived from a combination of canister receipt vacuum and laboratory dilution. All canisters are pressurized to 5 psi (unless they are received at a pressure greater than 5psi) prior to analysis. This results in an effective dilution factor governed by the equation:

$$DF_1 = \frac{14.7\text{ psi} + 5\text{ psi}}{14.7\text{ psi} - ((\text{Receipt Pressure})(14.7)/30)}$$

A table of canister pressure dilution factors appears at the end of this deliverable. Should additional dilution be required to ensure that all compounds are within the analytical curve, the additional dilution factor (DF_2) would be multiplied by the pressurization dilution factor. This would result in the dilution factor shown on the report.

$$DF_1 \times DF_2 = \text{DF Total}$$

Laboratory duplicates, when performed, are noted by the suffix - Duplicate.

EPA Method TO-14 does not specify Initial Calibration and Continuing Calibration Check (CCC) criteria. The laboratory established criteria is that all compounds must be less than or equal to 30% RSD in the Initial Calibration Curve prior to analysis of samples. The average relative response factors from the initial calibration curve are used to calculate results. The Laboratory Standard Operating Procedure requires that 90% of the standard TO-14 target analytes must be within 70% to 130% Recovery in the CCC. For the non-standard TO-14 compounds (Acetone, Carbon Disulfide, trans-1,2-Dichloroethene and 2-Butanone), 80% must be witin 60% to 140% Recovery in the CCC. A new analytical curve is analyzed if these criteria are not met.

The laboratory used automated data transfer to create the forms found in the package. The first set of quantitation pages for each sample are the reduced data. Next, an audit history has been included to show all changes made to the unreduced data and the analyst performing the change. Finally, the unreduced quantitation pages are included.

GC/MS Calculations:

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where:
- RRF - Relative Response Factor
- A_x - Area of Characteristic Ion of Compound
- A_{is} - Area of Characteristic Ion of Internal Standard
- C_{is} - Concentration of Internal Standard
- C_x - Concentration of Compound

Calculations continued on next page.

$$C_{sample} = \frac{A_{sample}}{A_{is}} \times \frac{C_{is}}{RRF} \times DF$$

Where: C_{sample} - Conc. of Compound in Sample
A_{sample} - Area of Cmpd's Ion in Sample
A_{is} - Area of Ion of Internal Std.
C_{is} - Conc. of Internal Standard
RRF - Relative Response Factor(the average RRF from the Initial Calibration Curve)
DF - Dilution Factor

All internal standard areas and retention times were within the allowed windows. All surrogate recoveries were within the allowed windows.

There were no out of the ordinary circumstances to report.

Five qualifiers may have been used on the data analysis sheets and indicate as follows:

- E - Exceeds instrument calibration range, but within linear range.
- S - Saturated Peak
- J - Reported below the detection limit, but supported by mass spectra.
- B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
- Q - Exceeds Quality Control Limits of 70% to 130%

Table 1

Client Sample No.	Lab Sample ID	Date Collected	Date Received	Date Analyzed	Receipt Vacuum ("Hg/psi)	Final Pressure (psi)
012597D1	9701221-01A	1/25/97	1/28/97	1/29/96	8.0 "Hg	5 psi
012597U1	9701221-02A	1/25/97	1/28/97	1/29/96	8.5 "Hg	5 psi
012597U1A	9701221-03A	1/25/97	1/28/97	1/29/96	8.5 "Hg	5 psi

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

0001

Lab Name: AIR TOXICS LIMITED
Lab Code:
Lab File ID: J010903
Instrument ID: MSD J
Matrix: Ambient Air

SDG No:
Comments:
BFB Injection Date: 1-9-97
BFB Injection Time: 09:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.19
75	30.0 - 60.0% of mass 95	45.57
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.57
173	< 2.0% of mass 174	(0.00
174	> 50.0% of mass 95	71.18
175	5.0 - 9.0% of mass 174	(6.99
176	> 95.0%, but < 101.0% of mass 174	(96.77
177	5.0 - 9.0% of mass 176	(6.97

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

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

	EPA SAMPLE ID.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZE
01		std 296-25 (0.1 ppbv)	J010904	1-9-97	09:24
02		std 296-25 (0.5 ppbv)	J010905	1-9-97	10:04
03		std 296-25 (5.0 ppbv)	J010906	1-9-97	10:44
04		std 296-25 (10.0 ppbv)	J010907	1-9-97	11:27
05		std 296-25 (25.0 ppbv)	J010908	1-9-97	12:08
06		std 296-25 (50.0 ppbv)	J010909	1-9-97	12:48
07		std 296-25 (75.0 ppbv)	J010910	1-9-97	13:31
08		System Blank	J010911	1-9-97	14:11
09		TO14-0001 (25.0 ppbv)	J010912	1-9-97	14:51
10		System Blank	J010913	1-9-97	15:41
11		TO14-0001 (25.0 ppbv)	J010914	1-9-97	16:21
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V-AT

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

Lab Name: AIR TOXICS LIMITED
Lab Code:
Lab File ID: J012901
Instrument ID: MSD-J
Matrix: Ambient Air

SDG No:
Contract:
BFB Injection Date: 1-29-97
BFB Injection Time: 8:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.38
75	30.0 - 60.0% of mass 95	44.10
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.51
173	< 2.0% of mass 174	(0.00) 1
174	> 50.0% of mass 95	75.09
175	5.0 - 9.0% of mass 174	(6.79) 1
176	> 95.0%, but < 101.0% of mass 174	(97.29) 1
177	5.0 - 9.0% of mass 176	(6.08) 2

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

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

	EPA SAMPLE ID.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED
01		R296-25 TO14 std. 100ppbv	J012902	1-29-97	8:34
02		System Blank	J012903	1-29-97	
03		Lab Blank	J012904	1-29-97	10:32
04		9701221-01A	J012905	1-29-97	11:7
05		9701221-02A	J012906	1-29-97	12:10
06		9701221-03A	J012907	1-29-97	12:54
07		System Blank	J012908	1-29-97	
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

AIR TOXICS LTD.

SAMPLE NAME: 012597D1

ID#: 9701221-01A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j012905	Date of Collection:	1/25/97
Dil. Factor:	1.83	Date of Analysis:	1/29/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.92	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected
1,1,1-Trichloroethane	0.18	Not Detected
Benzene	0.18	0.43
1,2-Dichloroethane	0.18	Not Detected
Trichloroethene	0.18	Not Detected
1,2-Dichloropropane	0.18	Not Detected
Toluene	0.18	0.39
Tetrachloroethene	0.18	Not Detected
Chlorobenzene	0.18	Not Detected
Ethyl Benzene	0.18	Not Detected
m,p-Xylene	0.18	Not Detected
o-Xylene	0.18	Not Detected
Styrene	0.18	Not Detected
Acetone	0.92	4.9
Carbon Disulfide	0.92	1.0
trans-1,2-Dichloroethene	0.92	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.92	1.4

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	100	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	92	70-130

MH 1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 13:00

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012905.d
Lab Smp Id: 9701221-01A Client Smp ID: 012597D
Inj Date : 29-JAN-1997 11:27
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#9542 TO14(Short)
Misc Info : 8"Hg-5psi Parsons
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.830
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.726	16.724 (1.000)	130	166769	5.0			100.00	9347
16.726	16.724 (0.000)	128	39216			23.09- 123.09	23.52	
16.726	16.724 (0.000)	49	86072			123.08- 223.08	51.61	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.222	17.235 (1.030)	217	382934	5.0	5.0		100.00	8045
17.222	17.235 (0.000)	186	82256			14.13- 114.13	21.48	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.053	18.067 (1.000)	114	713190	5.0			100.00	9414
18.053	18.067 (0.000)	88	39976			0.00- 67.67	5.61	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.082	20.111 (1.112)	98	673882	5.2	5.2		100.00	9888
20.082	20.111 (0.000)	70	23352			0.00- 62.02	3.47	
20.082	20.111 (0.000)	100	124528			13.96- 113.96	18.48	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.173	22.209 (1.000)	117	596077	5.0			100.00	9913
22.173	22.209 (0.000)	82	95192			11.09- 111.09	15.97	

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 13:00

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
S 66 Bromofluorobenzene						CAS #: 460-00-4			
24.042	24.086	(1.084)	95	426327	4.6	4.6		100.00	8147
24.042	24.086	(0.000)	174	62656			13.48- 113.48	14.70	
24.042	24.086	(0.000)	176	58328			7.57- 107.57	13.68	
20 Acetone						CAS #: 67-64-1			
13.506	13.413	(0.807)	43	175716	2.7	4.9		100.00	
13.506	13.413	(0.807)	58	44797			0.00- 79.57	25.49	
19 Carbon Disulfide						CAS #: 75-15-0			
13.674	13.550	(0.818)	76	70014	0.56	1.0		100.00	8044
32 2-Butanone						CAS #: 78-93-3			
16.367	16.358	(0.979)	72	14624	0.79	1.4		100.00	7797
16.367	16.358	(0.000)	43	18973			429.69- 529.69	129.74	
16.367	16.358	(0.000)	57	1213			0.00- 82.36	8.29	
40 Benzene						CAS #: 71-43-2			
17.611	17.617	(0.975)	78	32137	0.24	0.43		100.00	9322
17.611	17.617	(0.000)	77	2094			0.00- 74.19	6.52	
51 Toluene						CAS #: 108-88-3			
20.174	20.203	(1.117)	92	17465	0.21	0.39		100.00	7772
20.174	20.203	(0.000)	91	8945			118.56- 218.56	51.22	

Audit History For: /chem/msdj.i/j-29jan.b/j012905.d

1/27/97

Change Date: 29-Jan-97 11:46
Change Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

Change Date: 29-Jan-97 11:46
Change Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Complete Target Compound Processing

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: date
Old Value: 29-JAN-97 11:27
New Value: 29-JAN-1997 11:27
Reason For Change: N/A

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: Misc Information
Old Value:
New Value: 8"Hg-5psi Parsons
Reason For Change: N/A

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: Compound Sublist
Old Value: AT.sub
New Value: Parsons.sub
Reason For Change: N/A

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: Sample Info
Old Value: 9701221-01A 500mL Can#9542 Parsons 8"Hg-5psi ID:012597D
New Value: 500mL Can#9542 TO14(Short)
Reason For Change: N/A

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: Lab ID
Old Value:
New Value: 9701221-01A
Reason For Change: N/A

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: 012597D
Reason For Change: N/A

Change Date: 29-Jan-97 11:53
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Quantitation

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for 1,1,1-Trichlorethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Manual reintegration of Trichloroethene (Signal 1)
Old Value: No previous peak at 18.435
New Value: New Area/Time: 534 / 18.43

Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Manual reintegration of Tetrachloroethene (Signal 1)
Old Value: No previous peak at 20.960
New Value: New Area/Time: 256 / 20.96
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Manual reintegration of Chlorobenzene (Signal 1)
Old Value: No previous peak at 22.211
New Value: New Area/Time: 689 / 22.21
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:14
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Manual reintegration of Ethyl Benzene (Signal 1)
Old Value: Old Area/Time: 3836 / 22.46
New Value: New Area/Time: 1424 / 22.31
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Best Hit for Ethyl Benzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Best Hit for m,p-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Manual reintegration of o-Xylene (Signal 1)
Old Value: No previous peak at 23.142
New Value: New Area/Time: 1657 / 23.14
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:15
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:16
Change Made by: mhe

Parameter: Best Match for Unknown compound at 20.365 min. changed.
Old Value: Old match: Cyclotrisiloxane, hexamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 12:16
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.661 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 12:16
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.895 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 12:16
Change Made by: mhe

Parameter: Best Match for Unknown compound at 27.468 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

MH 1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 11:53

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012905.d
Lab Smp Id: 9701221-01A Client Smp ID: 012597D
Inj Date : 29-JAN-1997 11:27
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#9542 TO14(Short)
Misc Info : 8"Hg-5psi Parsons
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.830
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.726	16.724 (1.000)	130	166769	5.0			100.00	9347
16.726	16.724 (0.000)	128	39216			23.09- 123.09	23.52	
16.726	16.724 (0.000)	49	86072			123.08- 223.08	51.61	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.222	17.235 (1.030)	217	382934	5.0	5.0		100.00	8045
17.222	17.235 (0.000)	186	82256			14.13- 114.13	21.48	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.053	18.067 (1.000)	114	713190	5.0			100.00	9414
18.053	18.067 (0.000)	88	39976			0.00- 67.67	5.61	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.082	20.111 (1.112)	98	673882	5.2	5.2		100.00	9888
20.082	20.111 (0.000)	70	23352			0.00- 62.02	3.47	
20.082	20.111 (0.000)	100	124528			13.96- 113.96	18.48	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.173	22.209 (1.000)	117	596077	5.0			100.00	9913
22.173	22.209 (0.000)	82	95192			11.09- 111.09	15.97	

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 11:53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
66 Bromofluorobenzene					CAS #: 460-00-4			
24.042	24.086 (1.084)	95	426327	4.6	4.6		100.00	8147
24.042	24.086 (0.000)	174	62656			13.48- 113.48	14.70	
24.042	24.086 (0.000)	176	58328			7.57- 107.57	13.68	
20 Acetone					CAS #: 67-64-1			
13.506	13.413 (0.807)	43	175716	2.7	4.9		100.00	
13.506	13.413 (0.807)	58	44797			0.00- 79.57	25.49	
19 Carbon Disulfide					CAS #: 75-15-0			
13.674	13.550 (0.818)	76	70014	0.56	1.0		100.00	8044
23 Methylene Chloride					CAS #: 75-09-2			
14.330	14.267 (0.857)	84	4657	0.12	0.22		100.00	4614
14.330	14.267 (0.000)	49	2211			90.13- 190.13	47.48	
14.330	14.267 (0.000)	51	582			0.00- 96.86	12.50	
32 2-Butanone					CAS #: 78-93-3			
16.367	16.358 (0.979)	72	14624	0.79	1.4		100.00	7797
16.367	16.358 (0.000)	43	18973			429.69- 529.69	129.74	
16.367	16.358 (0.000)	57	1213			0.00- 82.36	8.29	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.092	17.090 (1.022)	97	4029	0.052	0.095		100.00	6747(a)
17.092	17.090 (0.000)	99	806			14.53- 114.53	20.00	
40 Benzene					CAS #: 71-43-2			
17.611	17.617 (0.975)	78	32137	0.24	0.43		100.00	9322
17.611	17.617 (0.000)	77	2094			0.00- 74.19	6.52	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.603	17.624 (0.975)	62	1133	0.021	0.039		100.00	3476(a)
17.603	17.624 (0.000)	64	105			0.00- 82.07	9.27	
51 Toluene					CAS #: 108-88-3			
20.174	20.203 (1.117)	92	17465	0.21	0.39		100.00	7772
20.174	20.203 (0.000)	91	8945			118.56- 218.56	51.22	
61 Ethyl Benzene					CAS #: 100-41-4			
22.463	22.339 (1.013)	106	3836	0.060	0.11		100.00	(aQ)
22.455	22.339 (1.013)	91	7800			296.25- 396.25	203.34	
62 m,p-Xylene					CAS #: 108-38-3			
22.463	22.499 (1.013)	106	3836	0.062	0.11		100.00	(a)
22.455	22.499 (1.013)	91	7911			164.96- 264.96	206.23	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-29jan.b/j012905.d
Lab Smp Id: 9701221-01A Client Smp ID: 012597D
Inj Date : 29-JAN-1997 11:27
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#9542 TO14(Short)
Misc Info : 8"Hg-5psi Parsons
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.830 Target Version: 3.12
Integrator: HP RTE Compound Sublist: Parsons.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

STD	RT	AREA	AMOUNT
33 Bromochloromethane	16.726	1080054	5.000
* 59 Chlorobenzene-d5	22.173	1969211	5.000

	RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Pentane						CAS #: 109-66-0		
	7.845	121071	0.56	1.0	50	NBS54K.l	271	33
Hydroperoxide, 1-methylethyl						CAS #: 3031-75-2		
	8.951	215586	1.00	1.8	50	NBS54K.l	354	33
Acetaldehyde						CAS #: 75-07-0		
	9.791	484084	2.2	4.1	80	NBS54K.l	37	33
Unknown						CAS #:		
	11.400	146409	0.68	1.2	0		0	33

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 11:53

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Pentane					CAS #: 109-66-0		
12.240	603158	2.8	5.1	72	NBS54K.l	271	33
Unknown					CAS #:		
14.055	64475	0.30	0.55	0		0	33
Unknown					CAS #:		
14.162	95181	0.44	0.81	0		0	33
Pentane, 3-methyl-					CAS #: 96-14-0		
14.765	78340	0.36	0.66	72	NBS54K.l	685	33
Butanal					CAS #: 123-72-8		
16.092	405014	1.9	3.4	86	NBS54K.l	257	33
Cyclotrisiloxane, hexamethyl-					CAS #: 541-05-9		
20.365	341074	0.87	1.6	64	NBS54K.l	23660	59
Acetamide, N,N-dimethyl-					CAS #: 127-19-5		
23.661	3021383	7.7	14.0	86	NBS54K.l	707	59
Phenol					CAS #: 108-95-2		
26.895	604006	1.5	2.8	90	NBS54K.l	933	59
Unknown					CAS #:		
27.468	113351	0.29	0.53	0		0	59

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 11:53

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j012905.d
Lab Smp Id: 9701221-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: 8"Hg-5psi Parsons

Calibration Date: JAN/29/97
Calibration Time: 0834
Client Smp ID: 012597D
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	203762	122257	285267	166769	-18.16
43 1,4-Difluorobenzene	881244	528746	1233742	713190	-19.07
59 Chlorobenzene-d5	706651	423991	989311	596077	-15.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.70	16.20	17.20	16.73	0.13
43 1,4-Difluorobenzene	18.05	17.55	18.55	18.05	0.04
59 Chlorobenzene-d5	22.18	21.68	22.68	22.17	-0.04

MH
1/29/97

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Report Date: 29-Jan-1997 11:53

Air Toxics Limited

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 9701221-01A
Level: LOW
Data Type: MS DATA
SpikeList File:
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: 8"Hg-5psi Parsons

Client SDG: j-29jan
Fraction: VOA
Client Smp ID: 012597D
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 39 Octafluorotoluene	5.0	5.0	99.10	60-140
$ 50 Toluene-d8	5.0	5.2	104.43	60-140
$ 66 Bromofluorobenzene	5.0	4.6	92.37	60-140

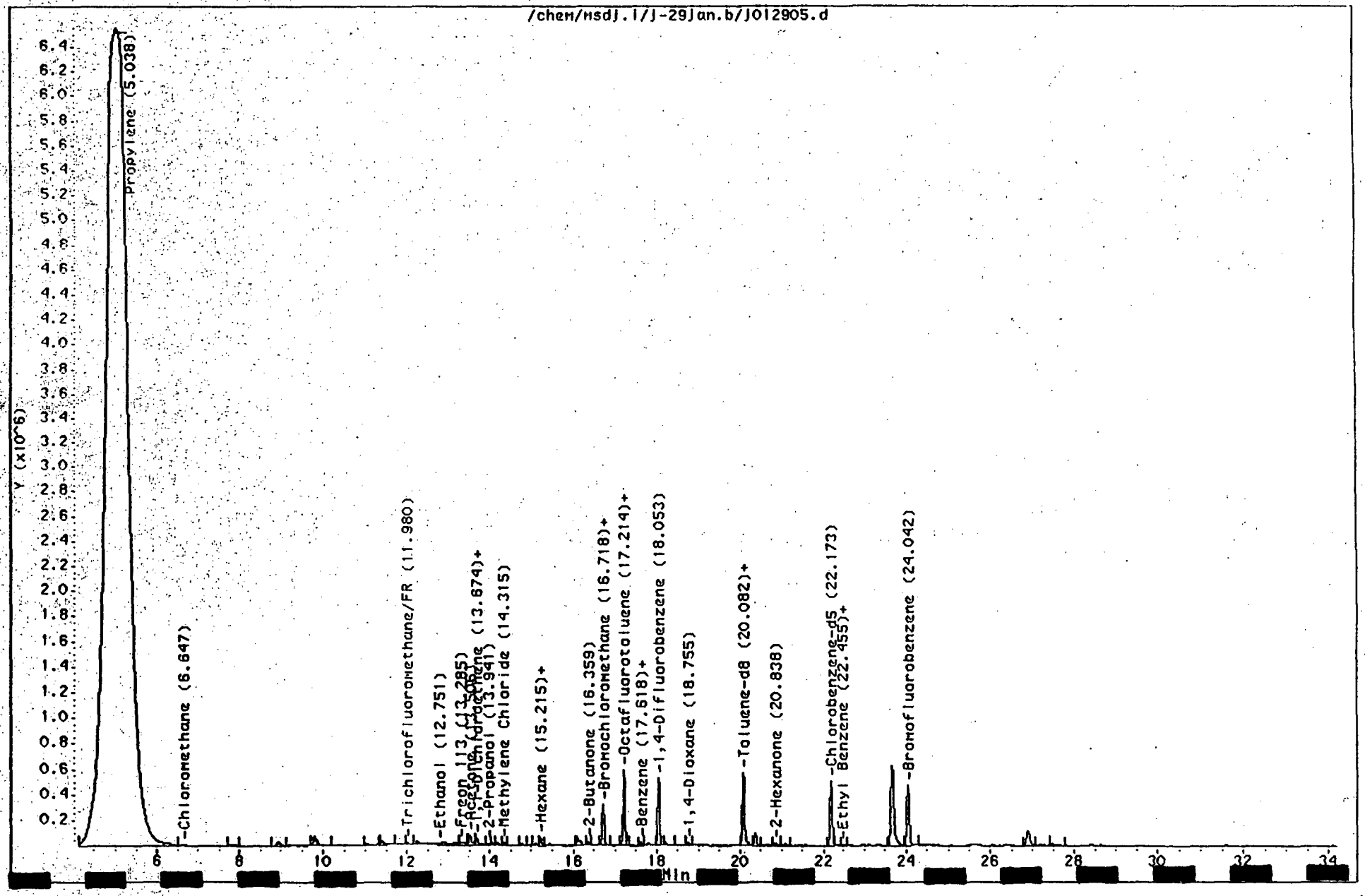
MH
1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Client ID: 012597D
Sample Info: 500mL Can#9542 TO14(Short)

Column phase: RTx-624

Instrument: msdj.i

Operator: MH
Column diameter: 0.58



Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

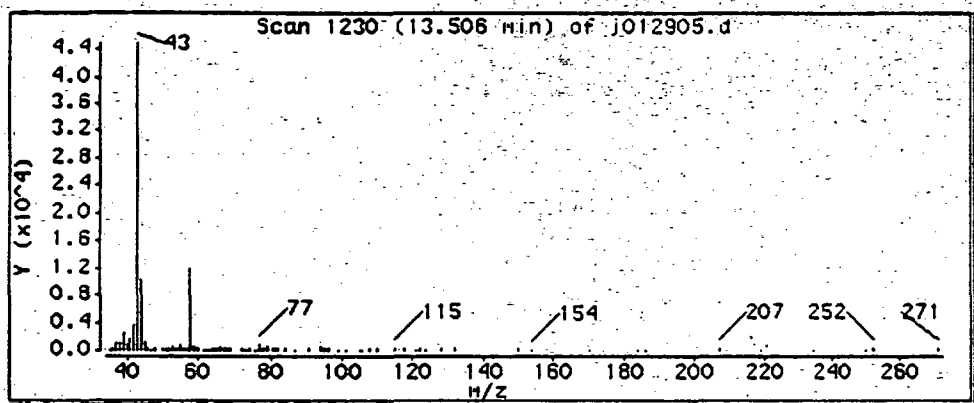
Sample Info: 500mL Can#9542 TO14(Short)

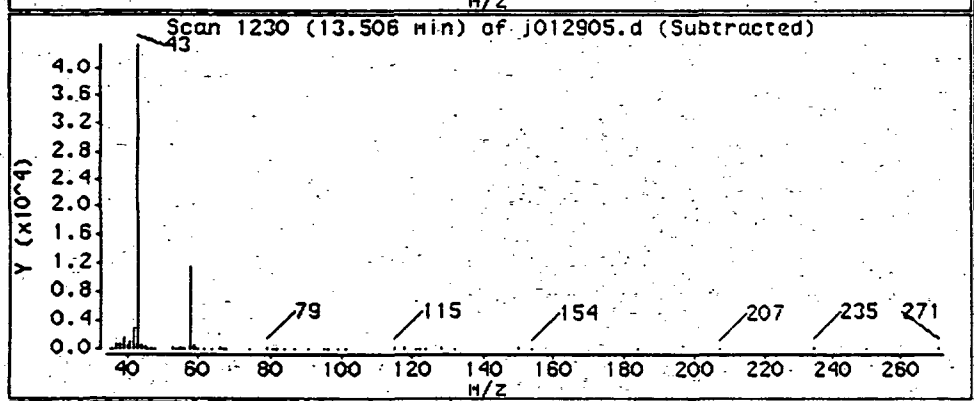
Operator: MH

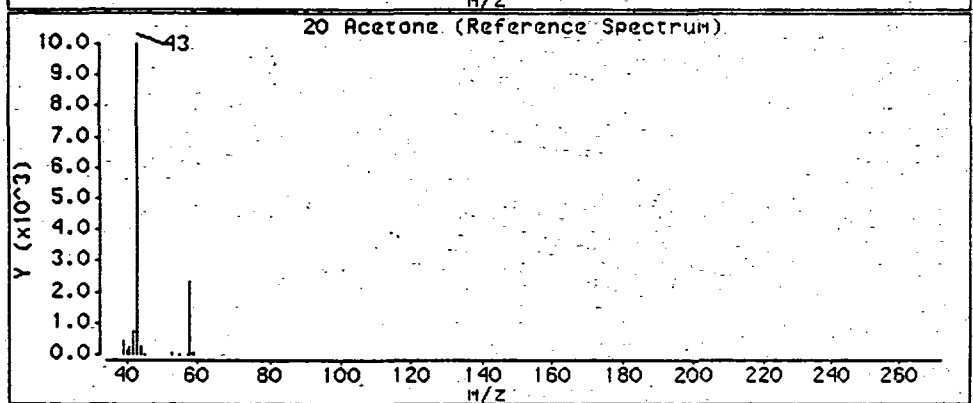
Column phase: RTx-624

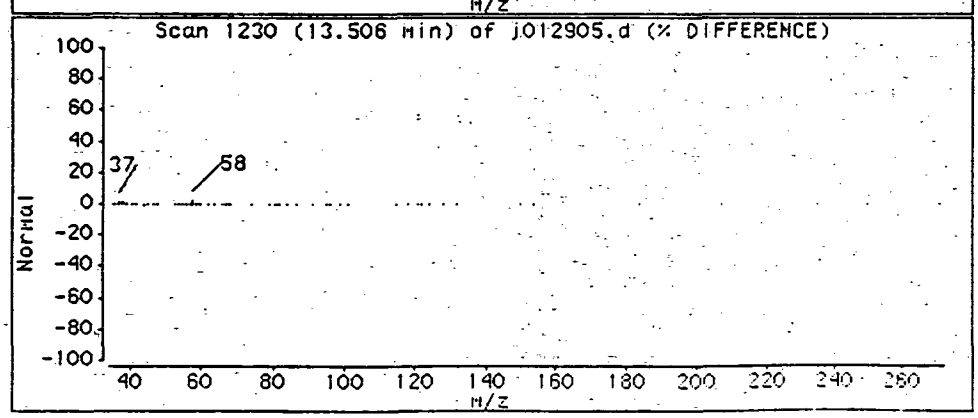
Column diameter: 0.58

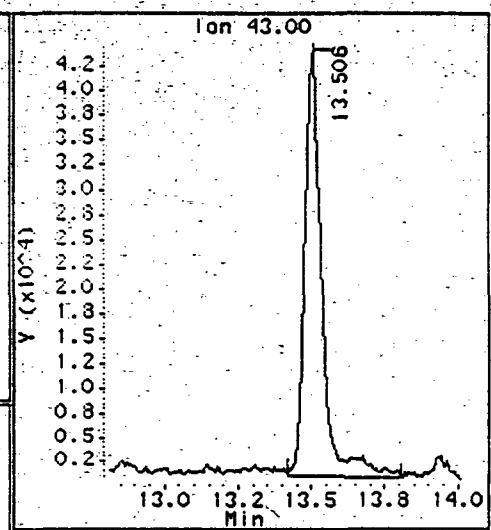
20 Acetone

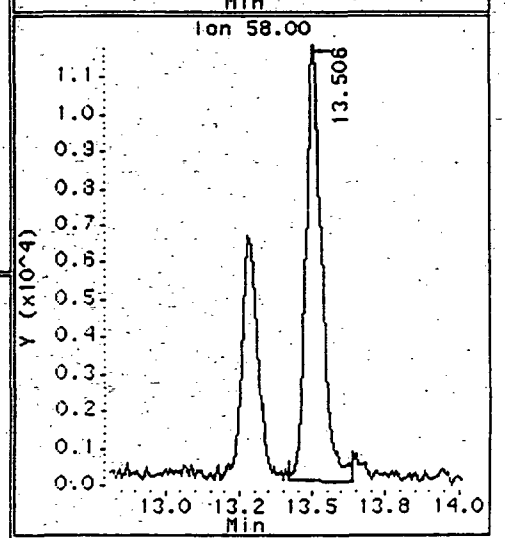












Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

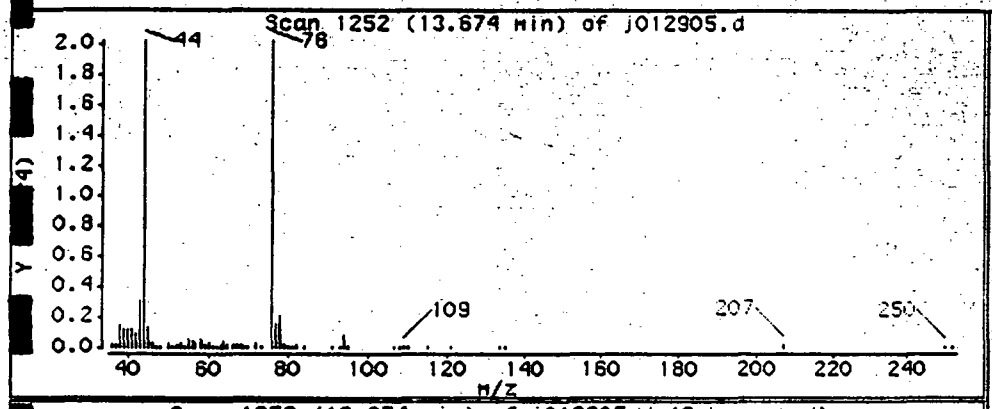
Sample Info: 500mL Can#9542 TO14(Short)

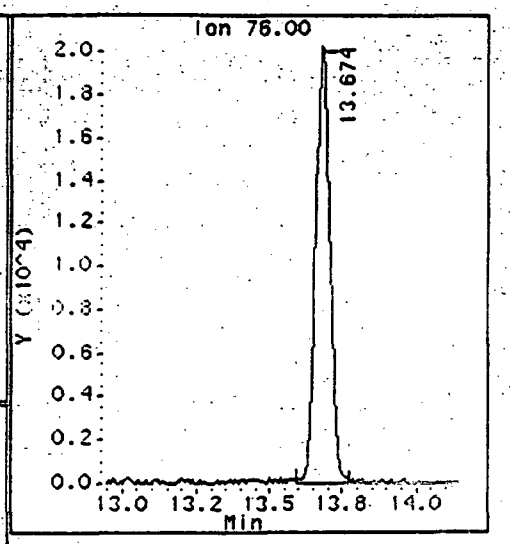
Operator: MH

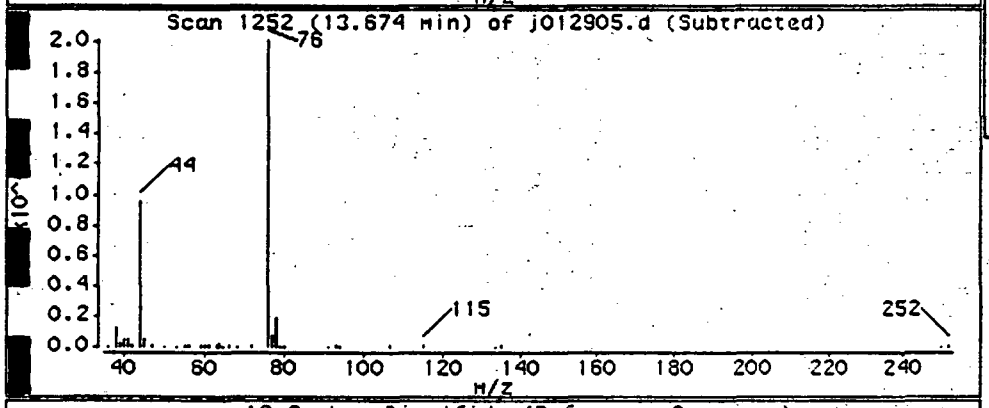
Column phase: RTx-624

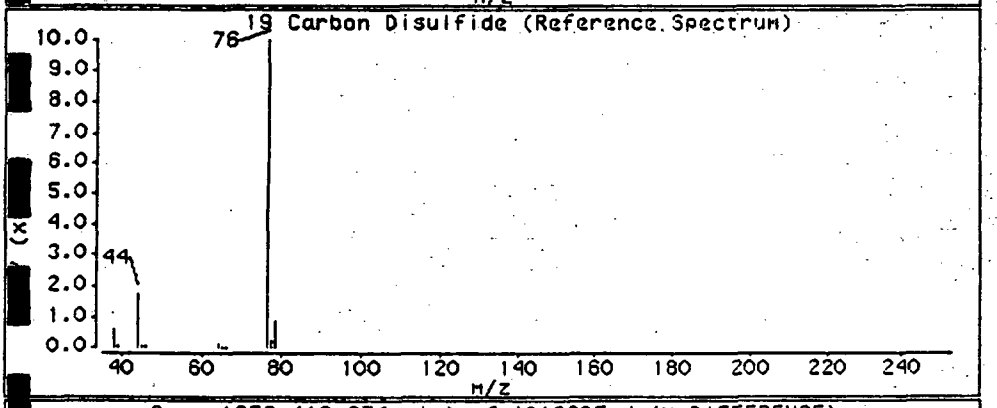
Column diameter: 0.58

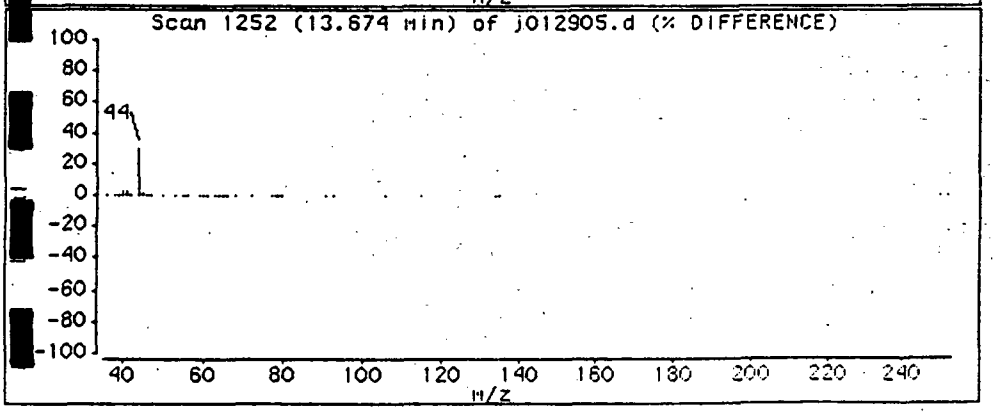
19 Carbon Disulfide











Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

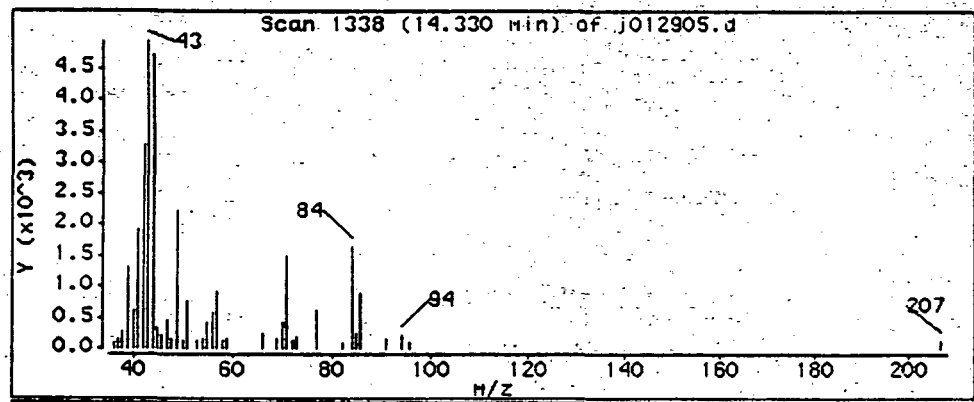
Sample Info: 500mL Can#9542 TO14(Short)

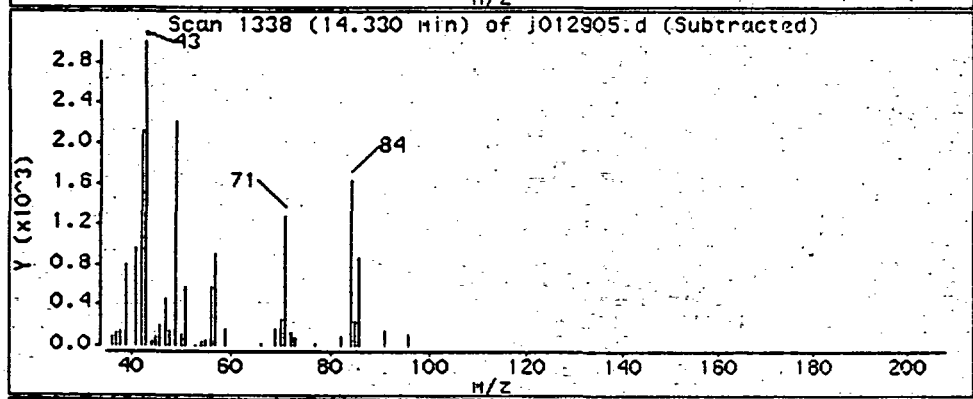
Operator: MH

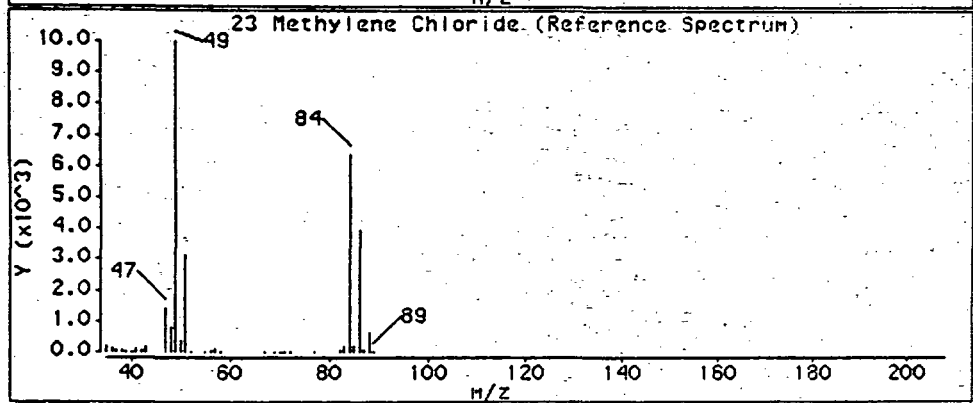
Column phase: RTx-624

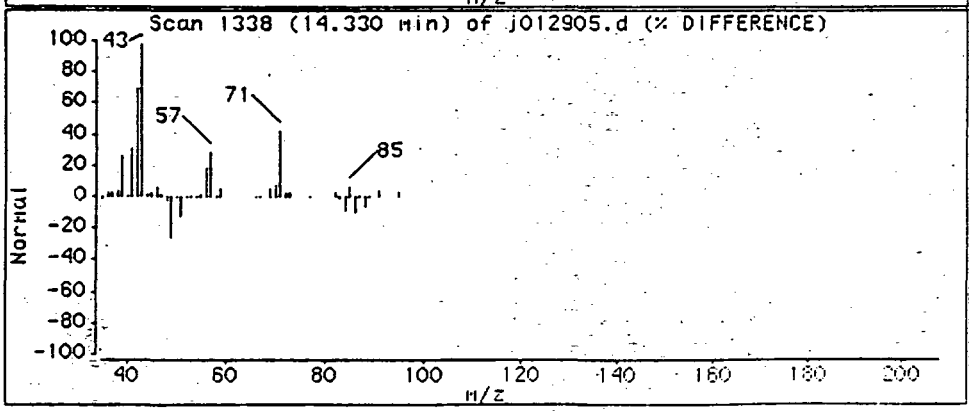
Column diameter: 0.58

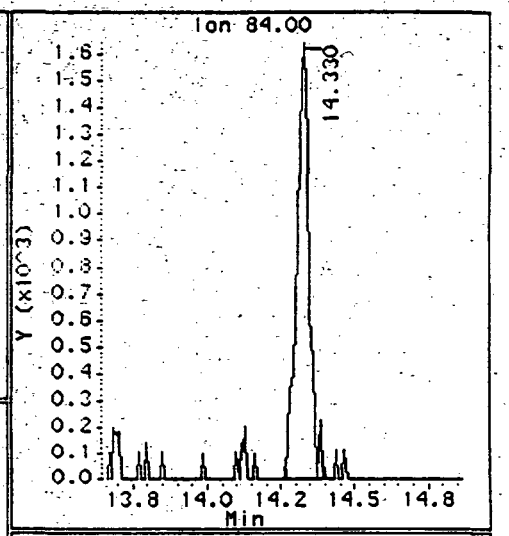
23 Methylene Chloride

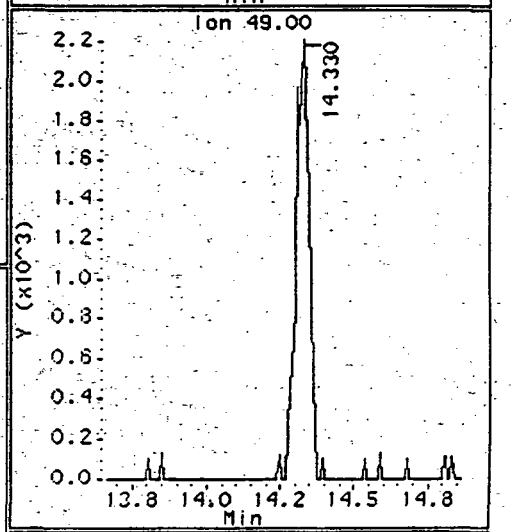


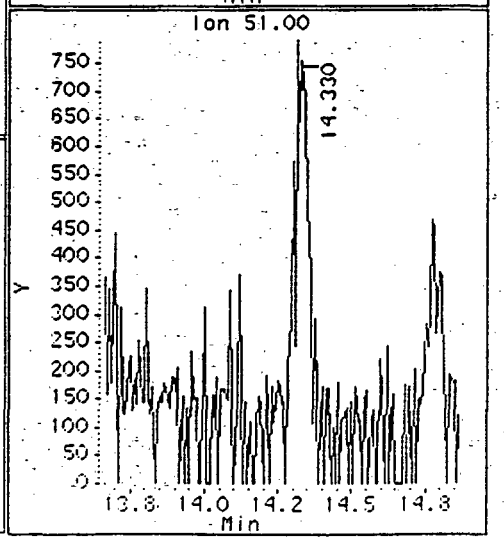






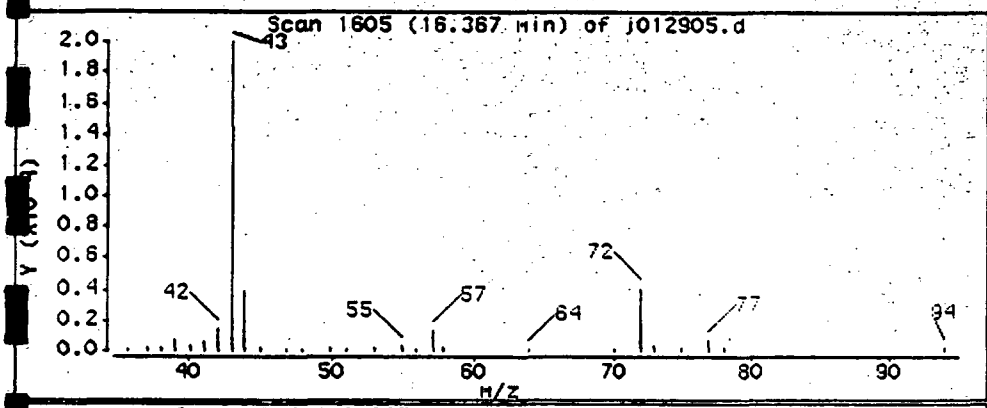


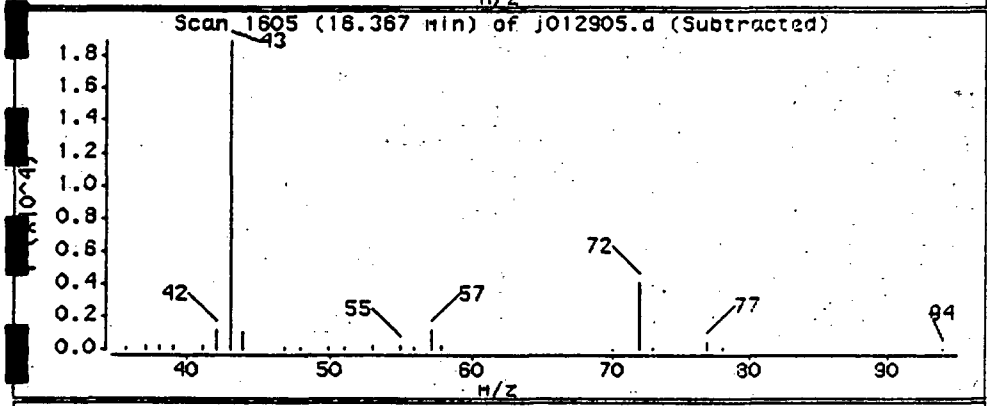


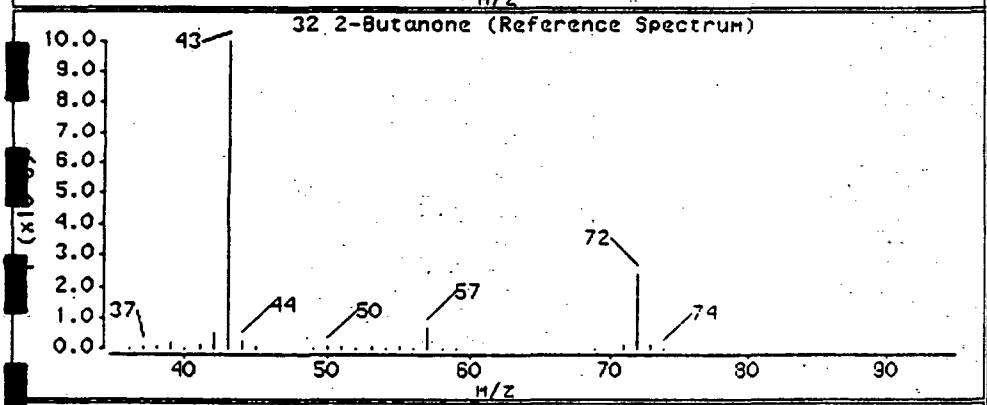


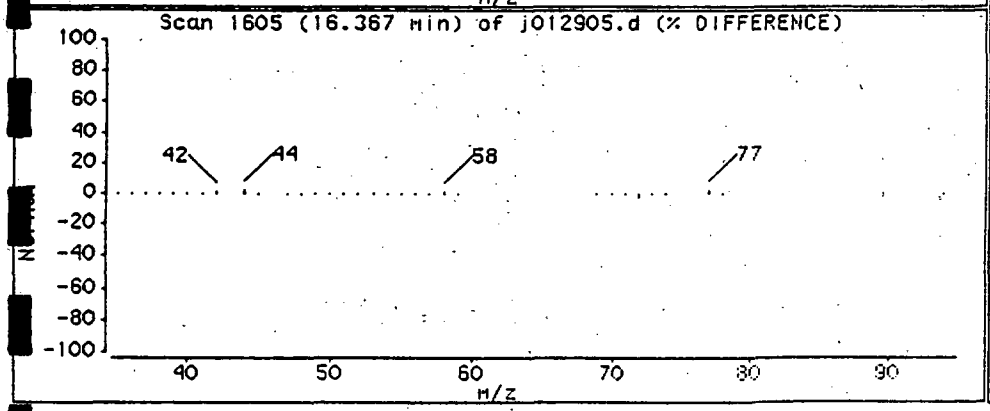
Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Client ID: 012597D
Instrument: msdj.i
Sample Info: 500mL Can#9542 TO14(Short)
Operator: MH
Column phase: RTx-624
Column diameter: 0.58

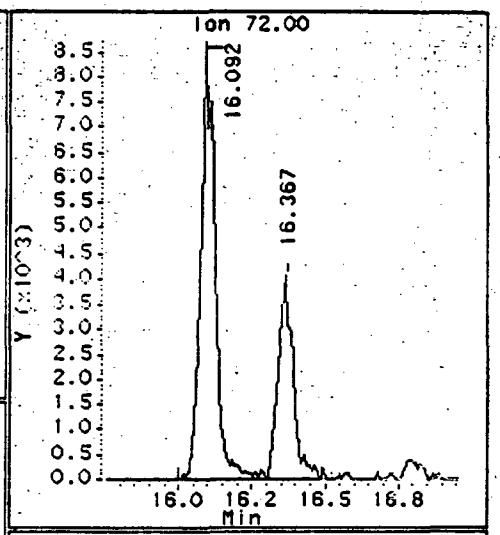
32 2-Butanone

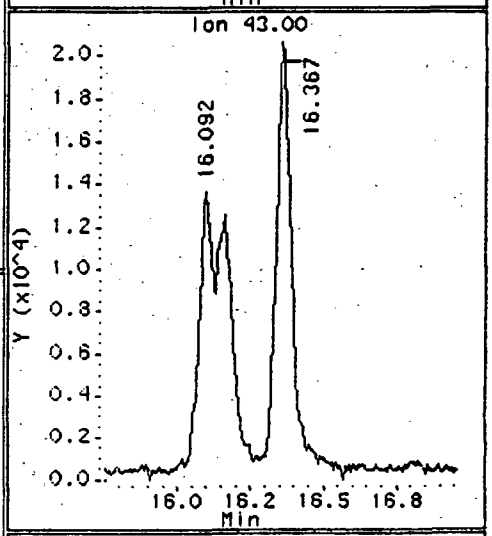


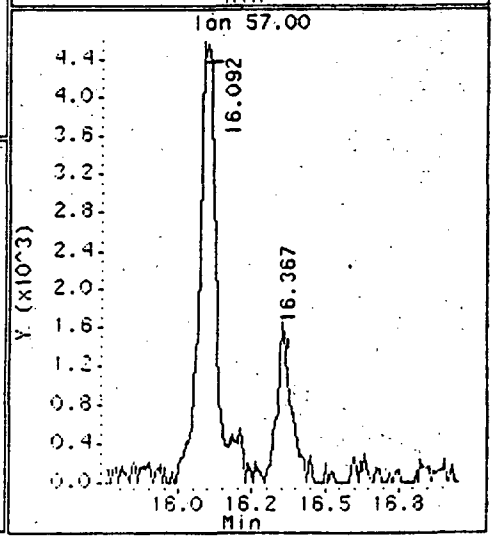












Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

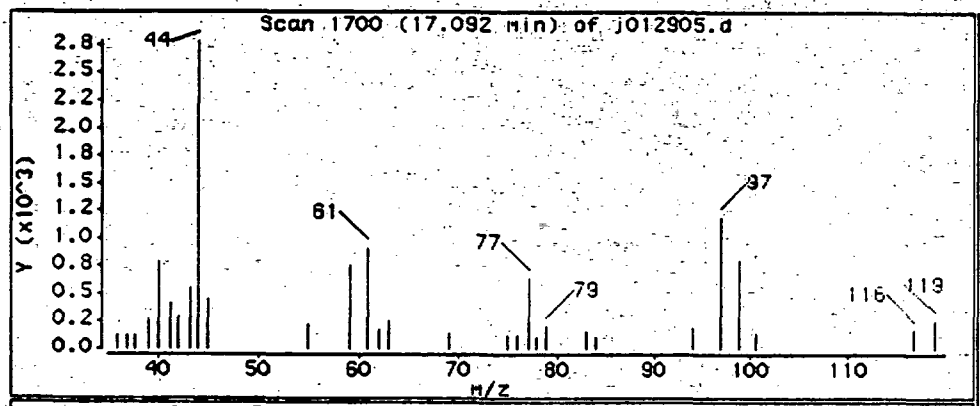
Sample Info: 500mL Can#9542 TO14(Short)

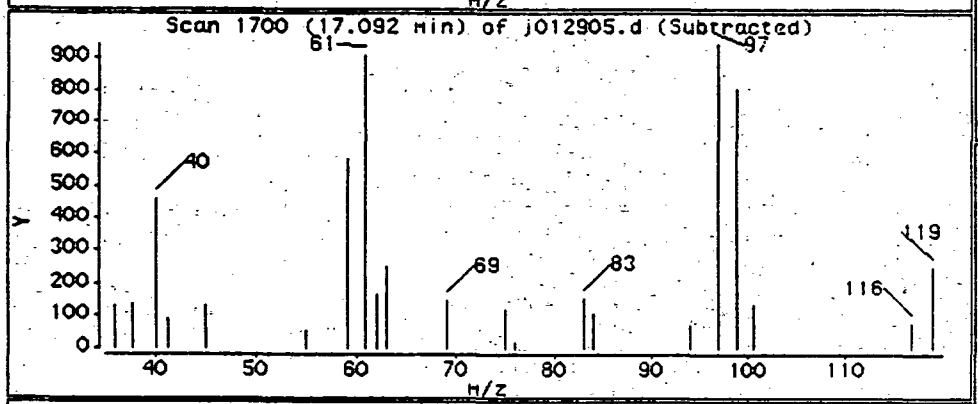
Operator: MH

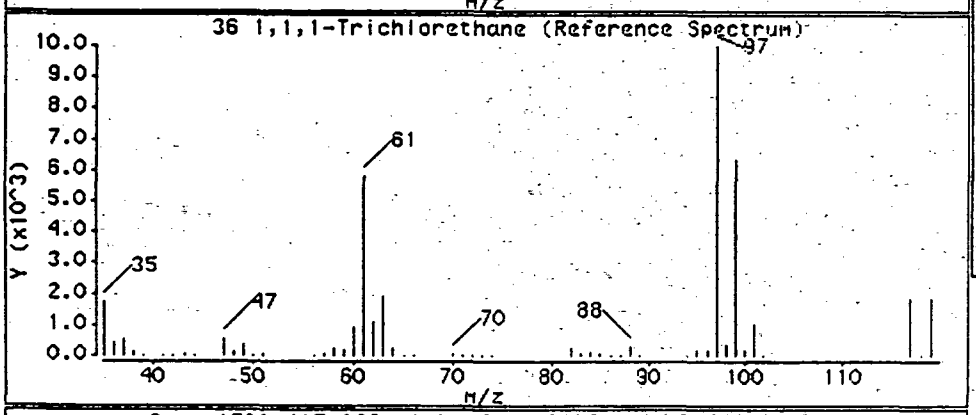
Column phase: RTx-624

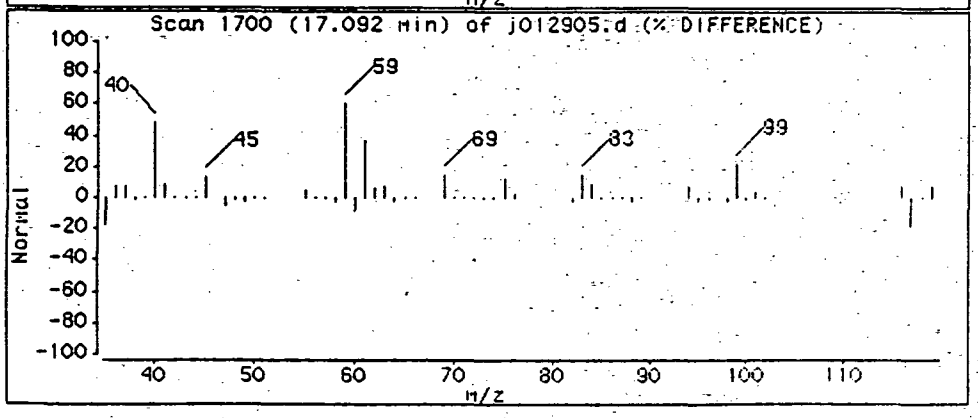
Column diameter: 0.58

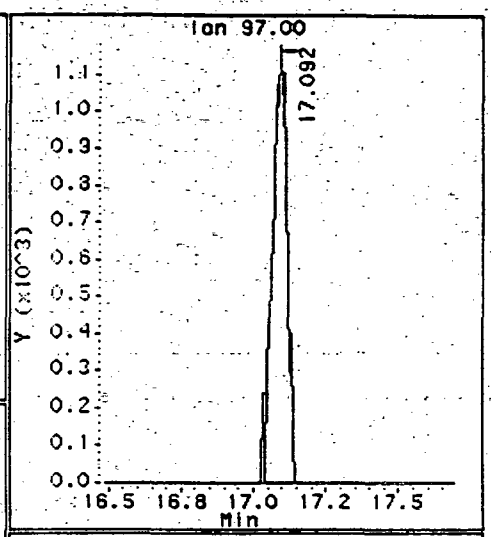
36 1,1,1-Trichlorethane

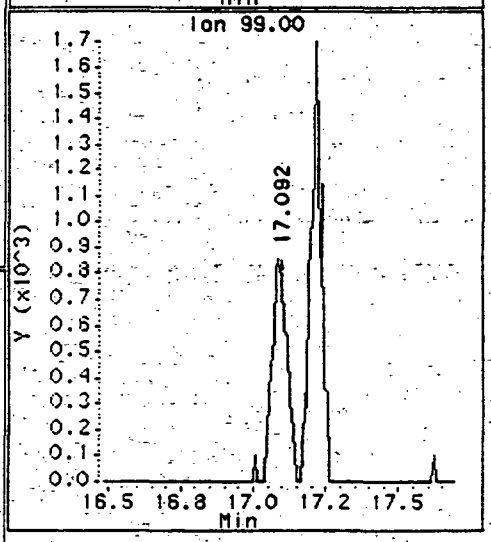






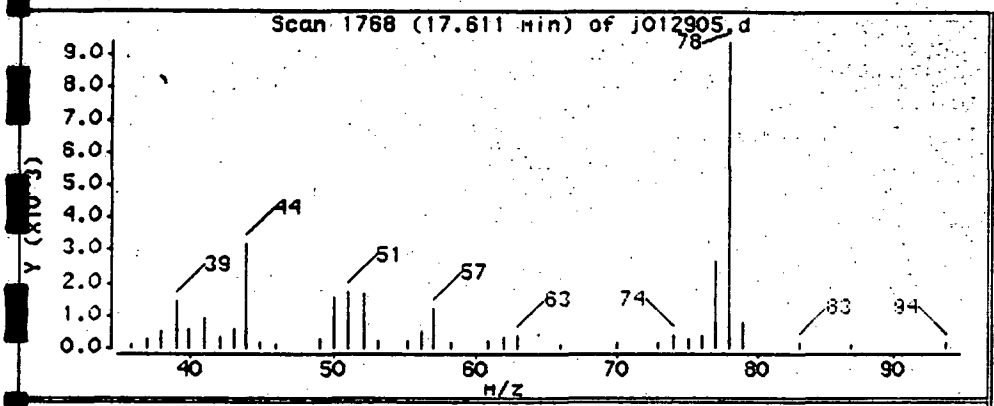


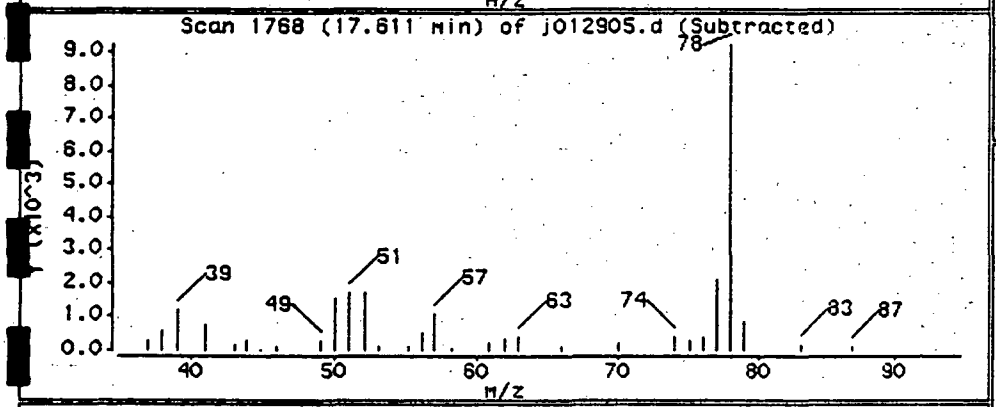


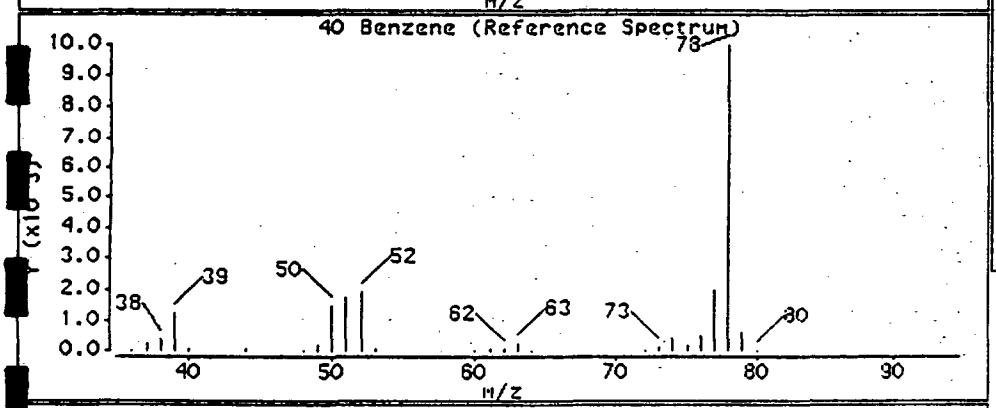


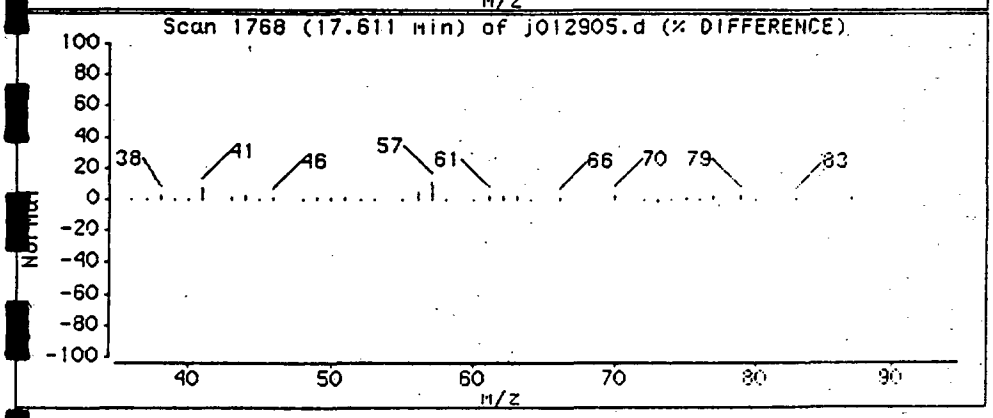
Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Client ID: 012597D
Instrument: msdj.i
Sample Info: 500mL Can#9542 TO14(Short)
Operator: MH
Column phase: RTx-624
Column diameter: 0.58

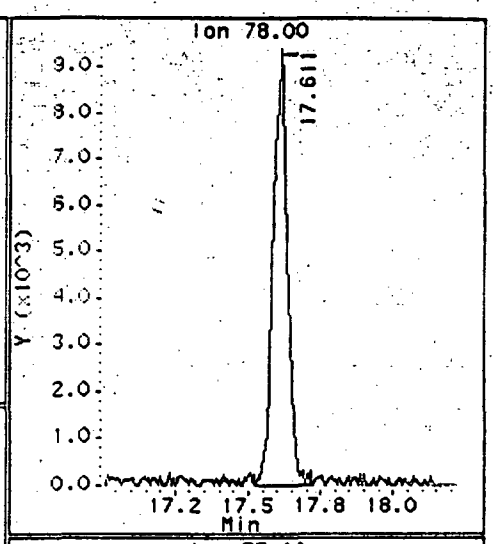
40 Benzene

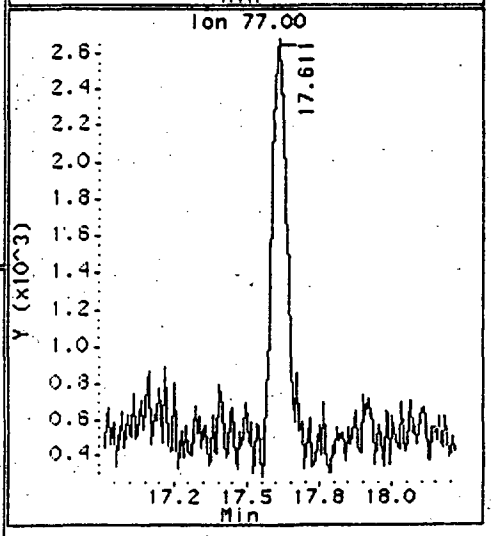












Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

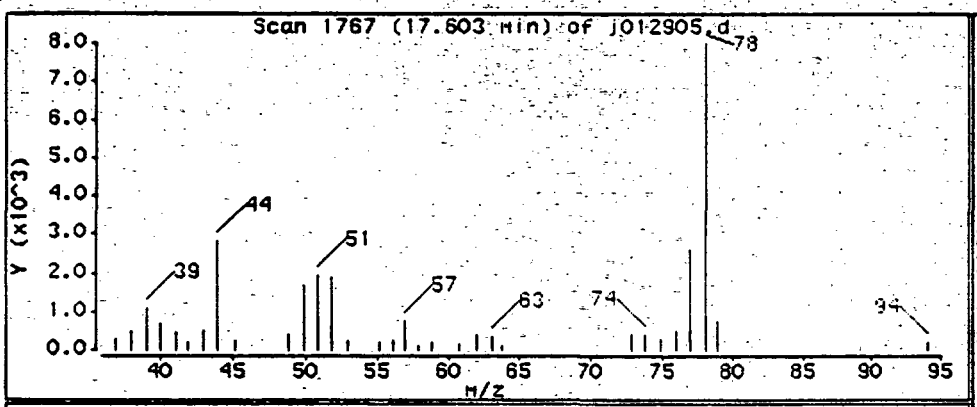
Sample Info: 500mL Can#9542 TO14(Short)

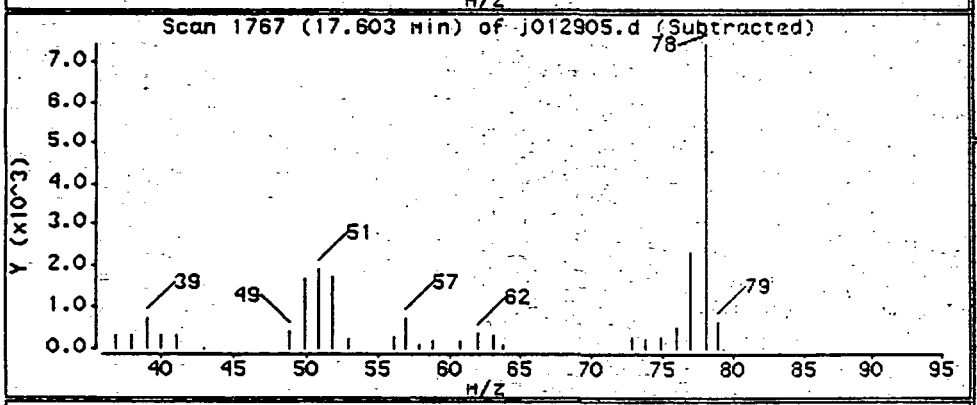
Operator: MH

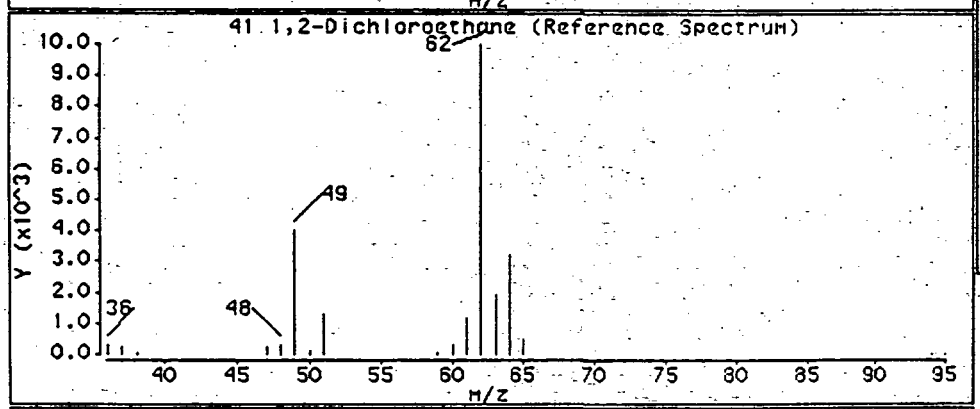
Column phase: RTx-624

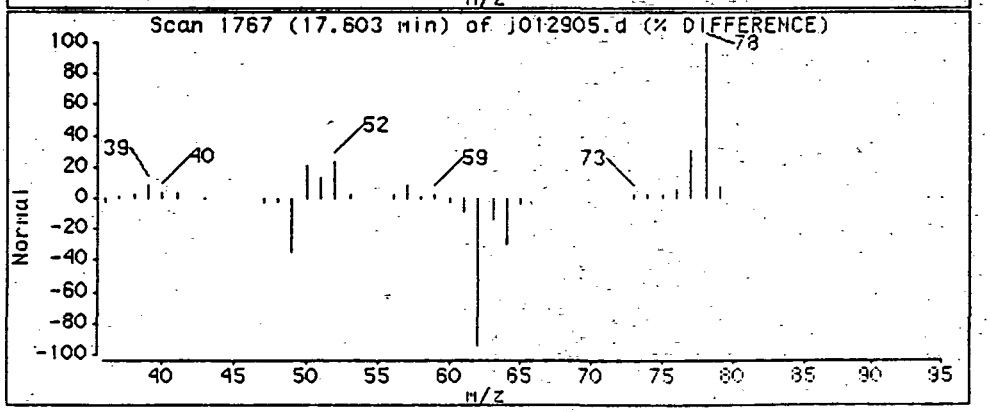
Column diameter: 0.58

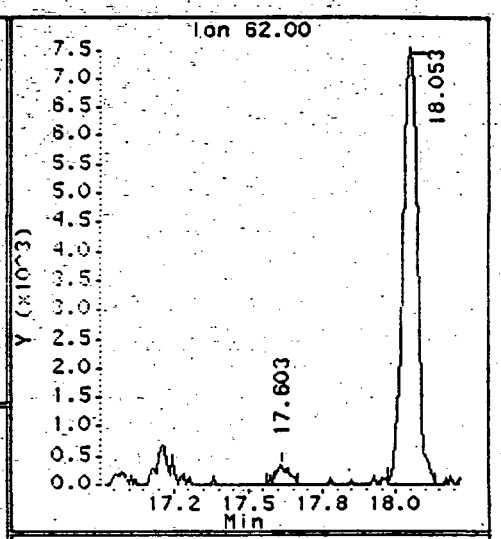
41 1,2-Dichloroethane

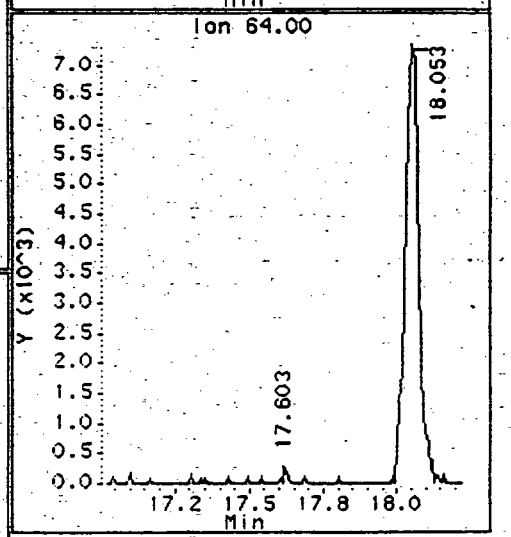












Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

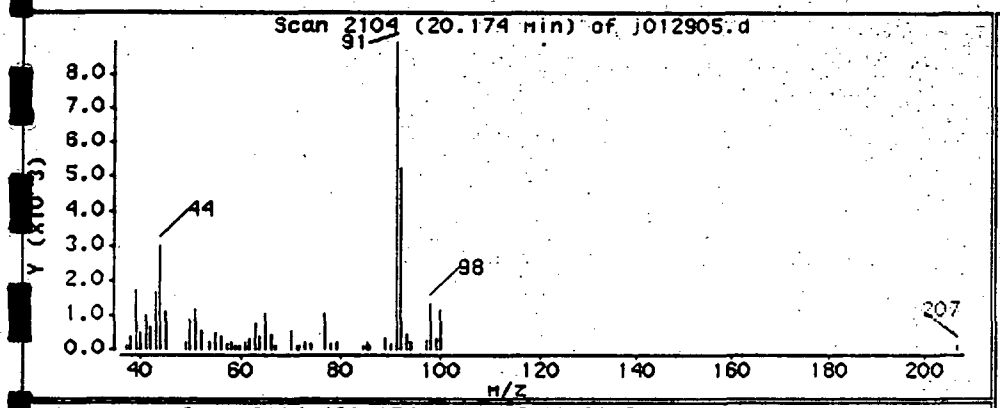
Sample Info: 500mL Can#9542 TO14(Short)

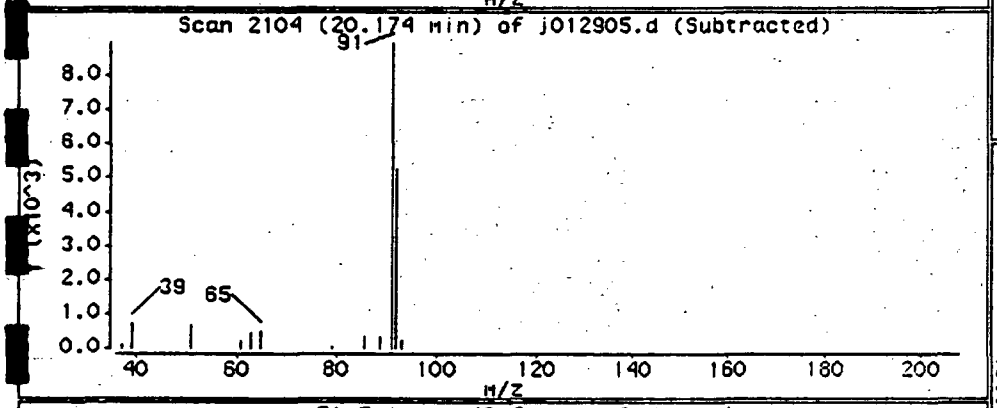
Operator: MH

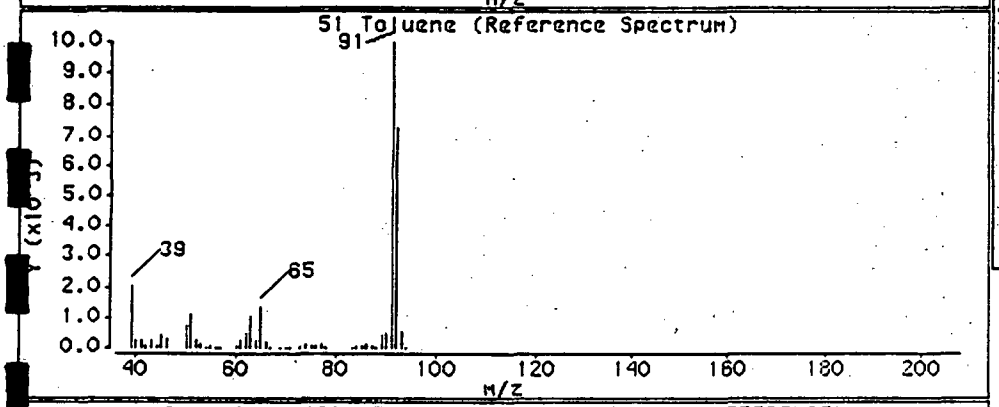
Column phase: RTx-624

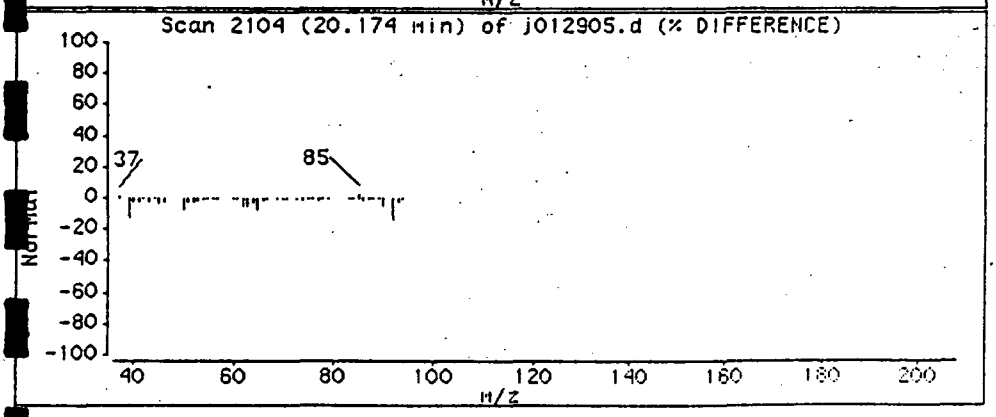
Column diameter: 0.58

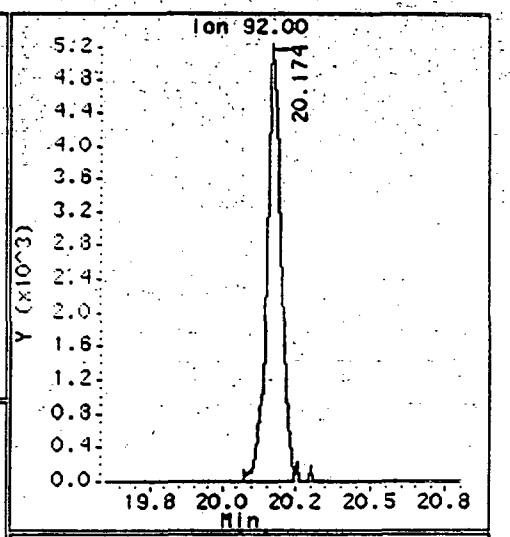
51 Toluene

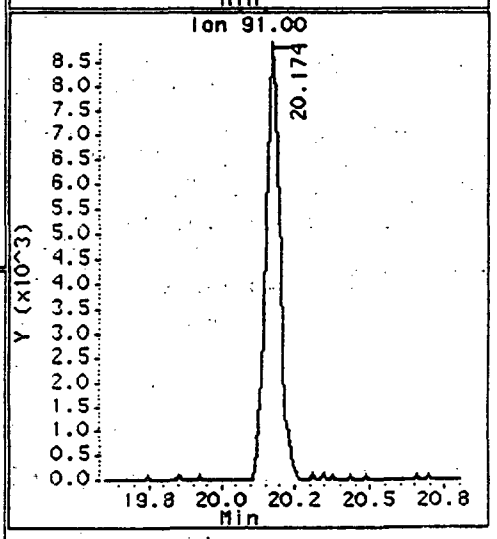












Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

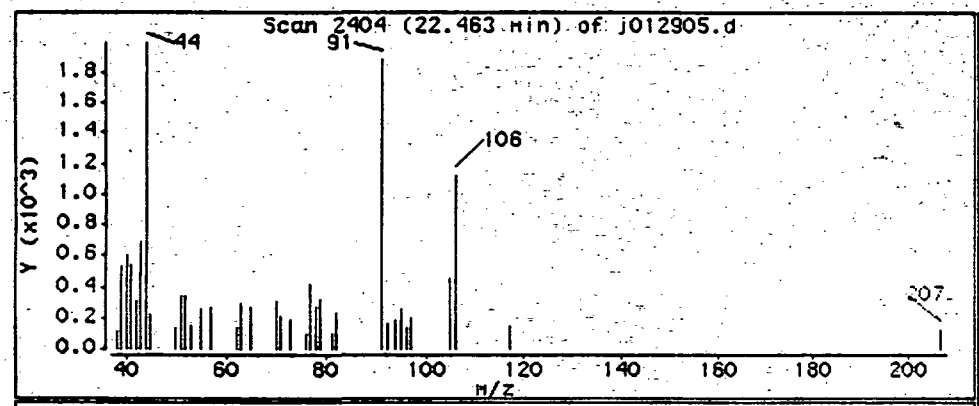
Sample Info: 500mL Can#9542 TO14(Short)

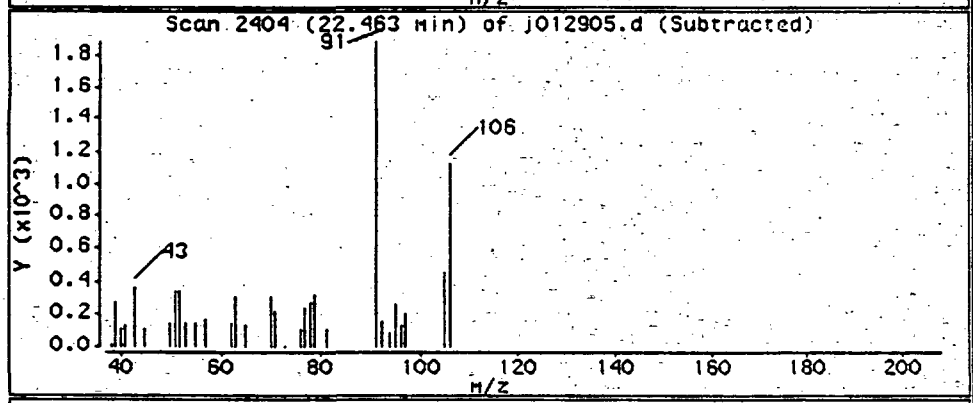
Operator: MH

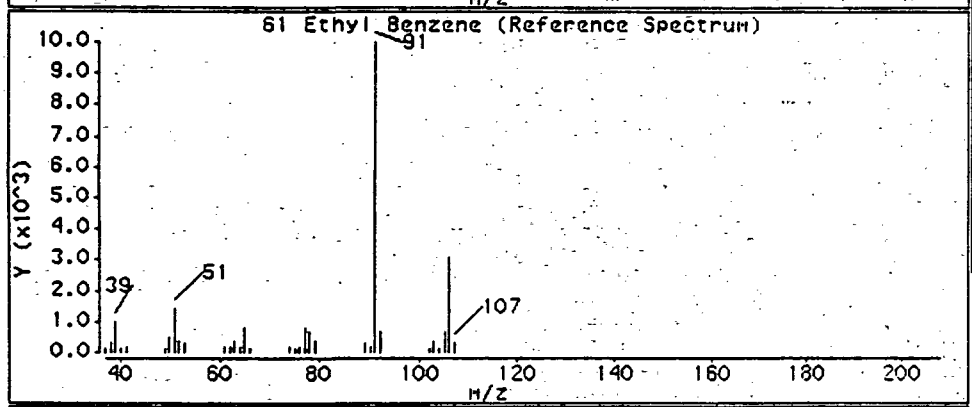
Column phase: RTx-624

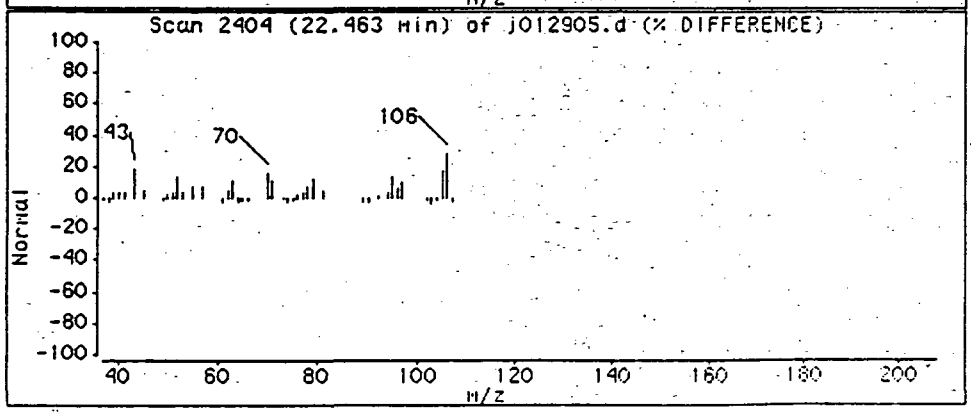
Column diameter: 0.53

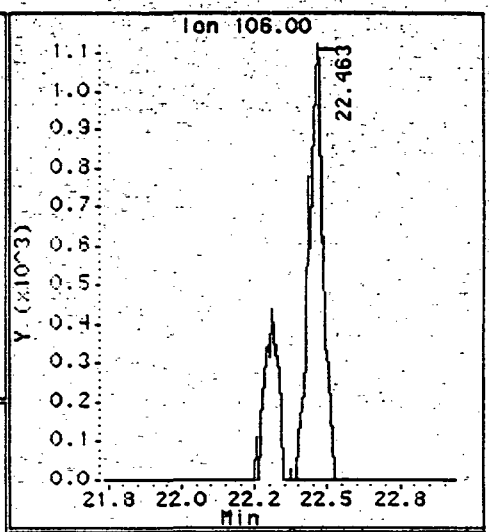
61 Ethyl Benzene

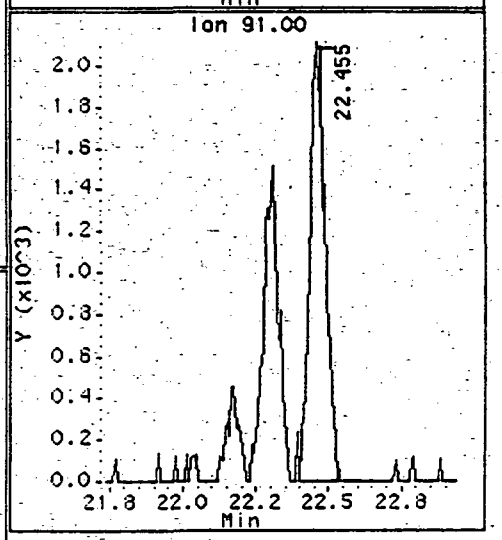












Data File: /chem/msdj.i/j-29jan.b/j012905.d

Date : 29-JAN-1997 11:27

Client ID: 012597D

Instrument: msdj.i

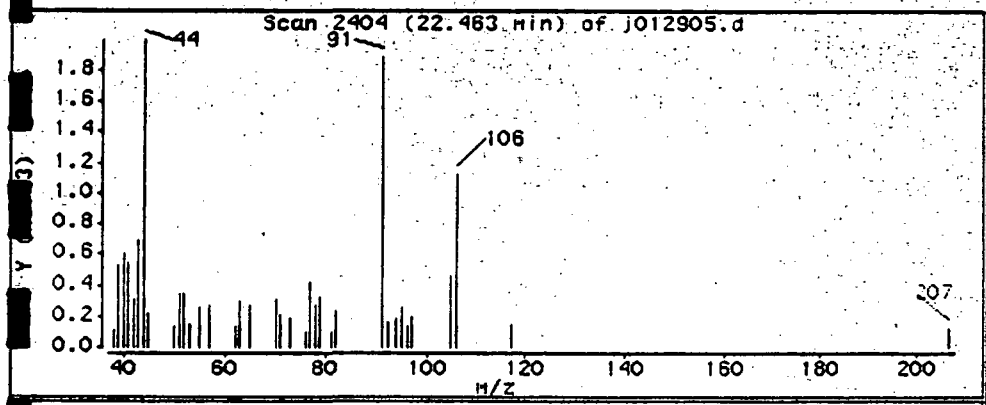
Sample Info: 500mL Can#9542 TO14(Short)

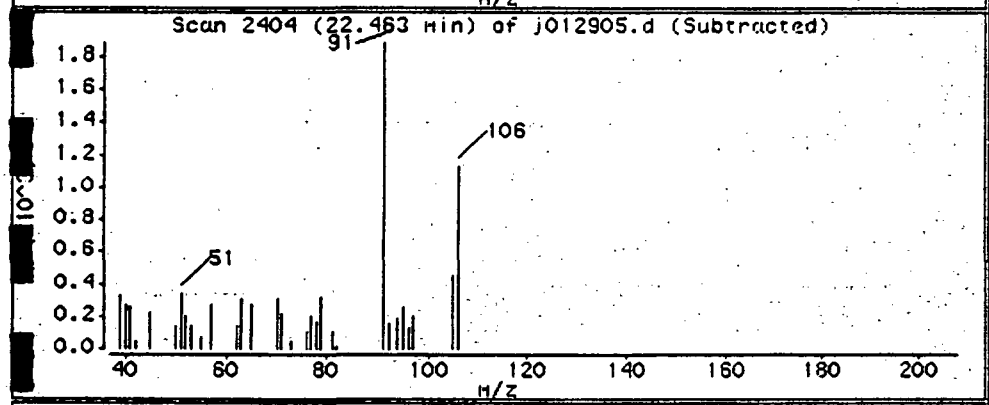
Operator: MH

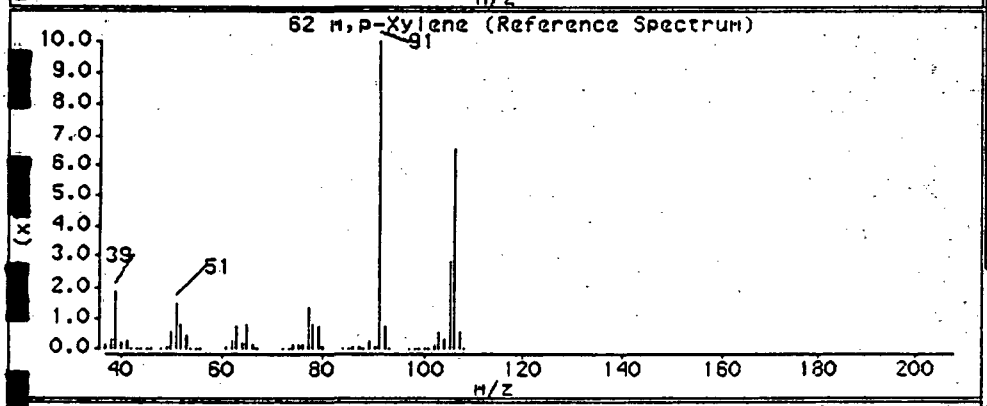
Column phase: RTx-624

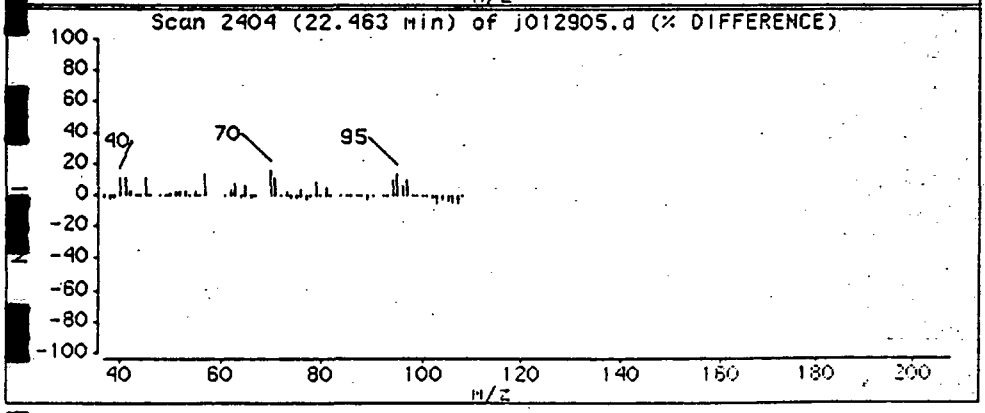
Column diameter: 0.53

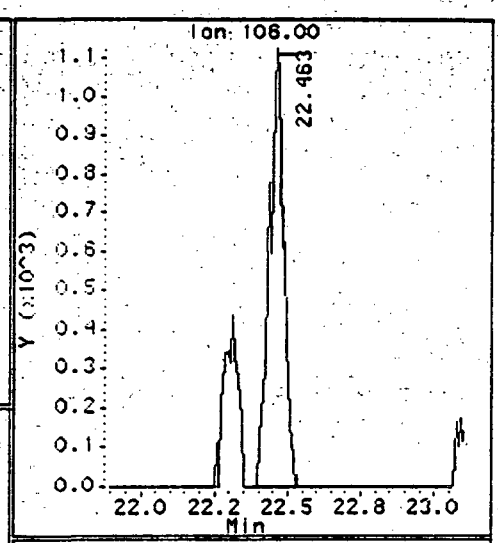
62 m,p-Xylene

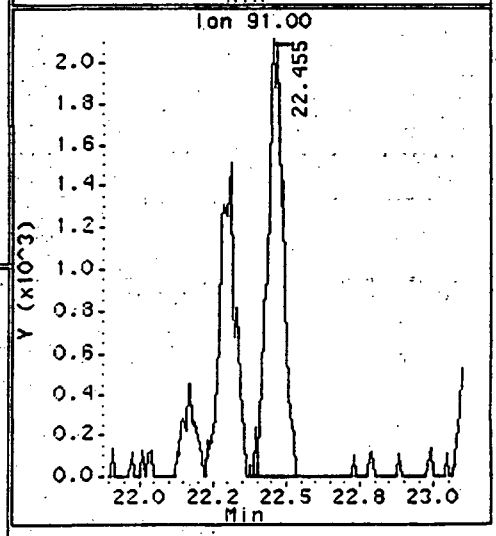








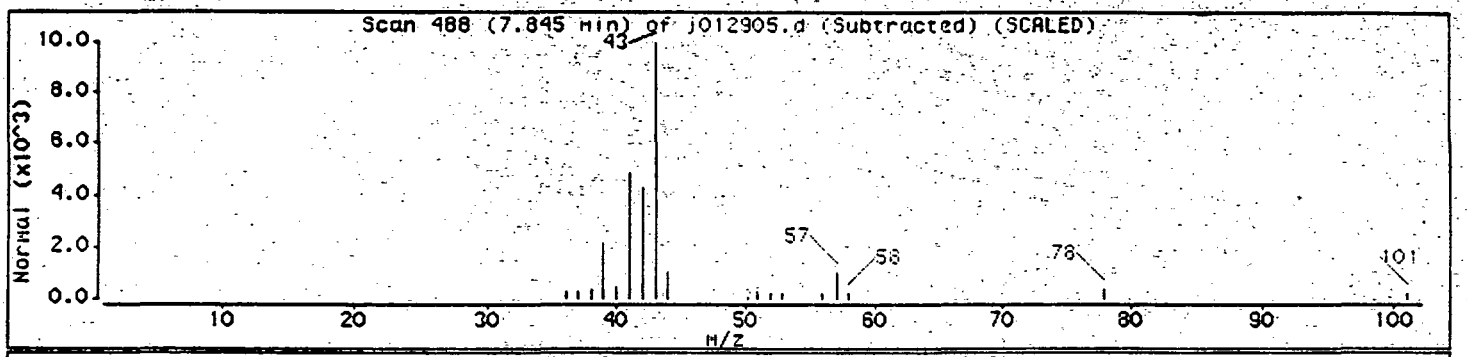


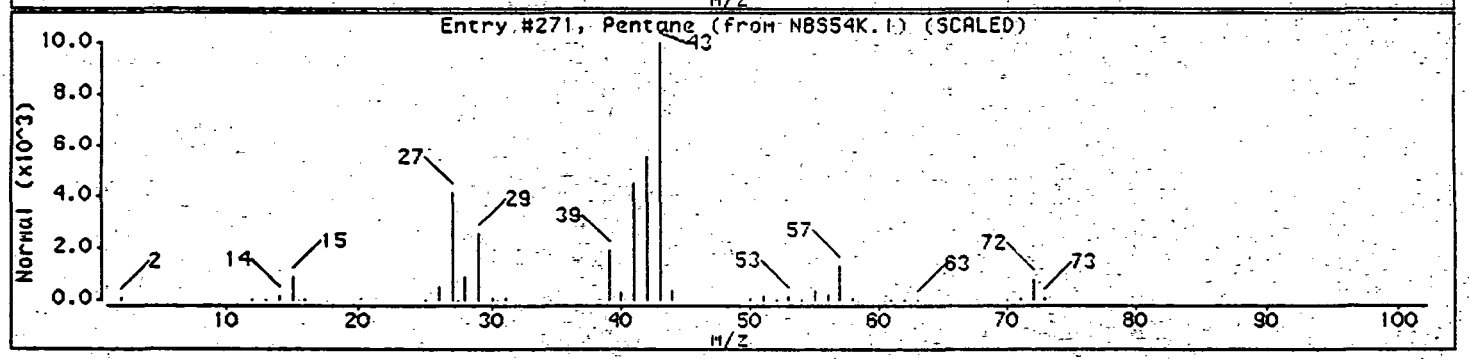


Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 012597D
Column phase: RTx-624

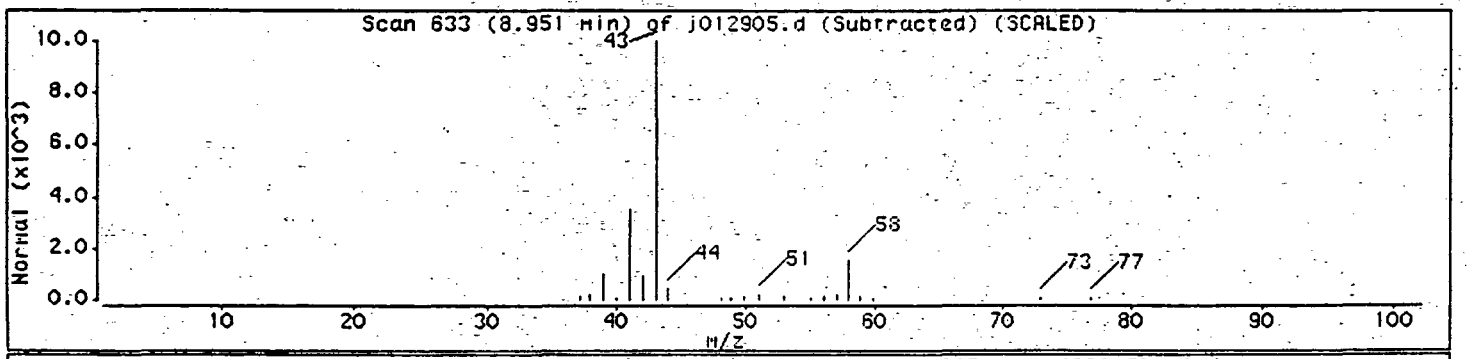
Column diameter: 0.58

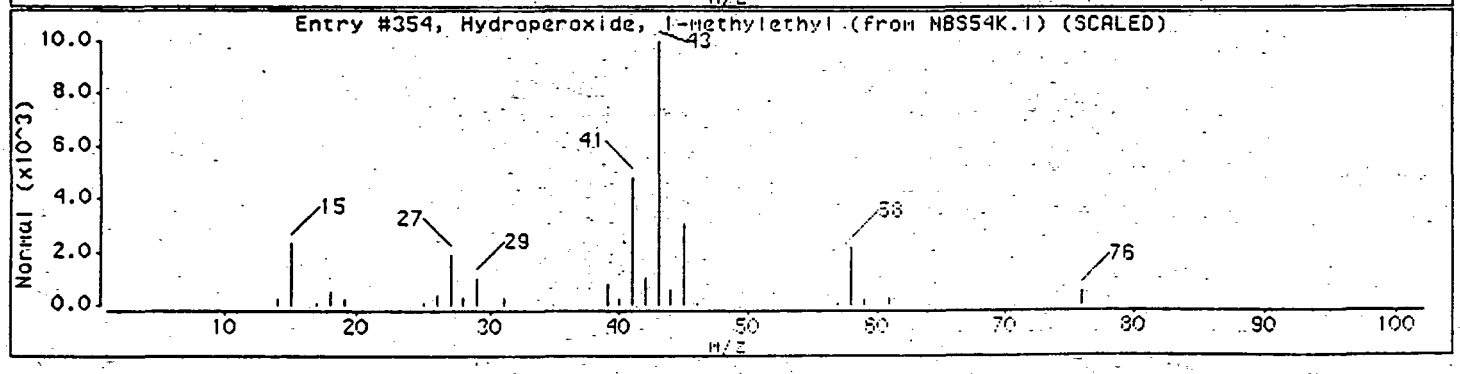
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentane	109-66-0	NBS54K.I	271	50





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hydroperoxide, 1-methylethyl	3031-75-2	NBS54K.I	354	50

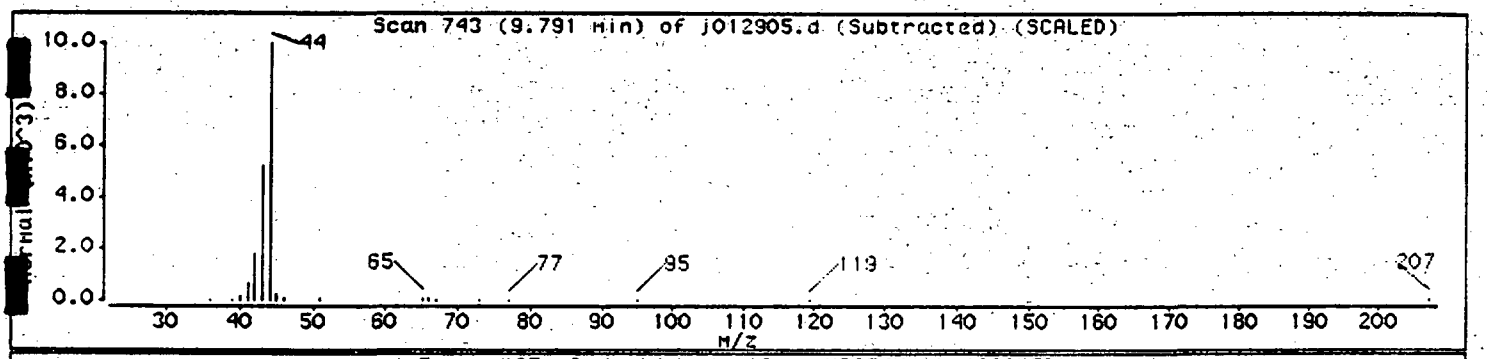


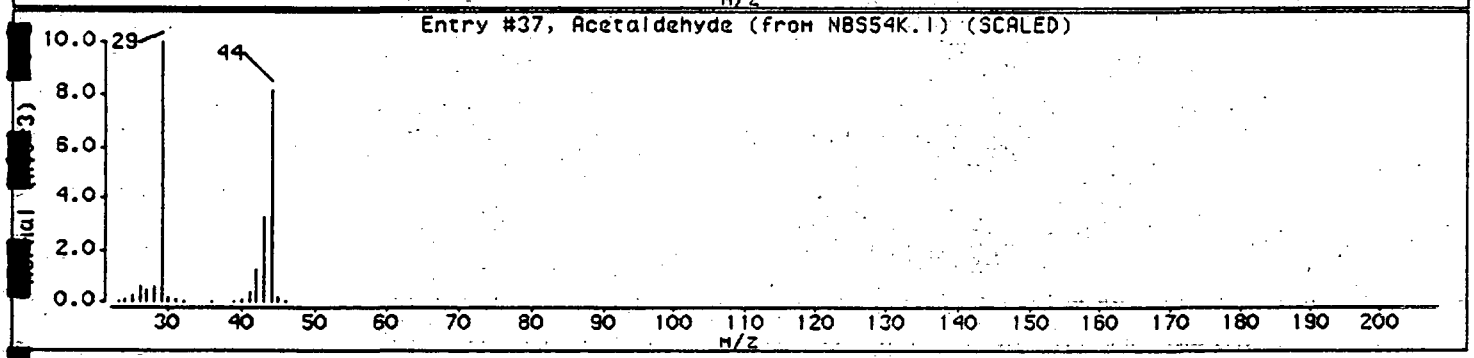


Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 0125970
Column phase: RTx-624

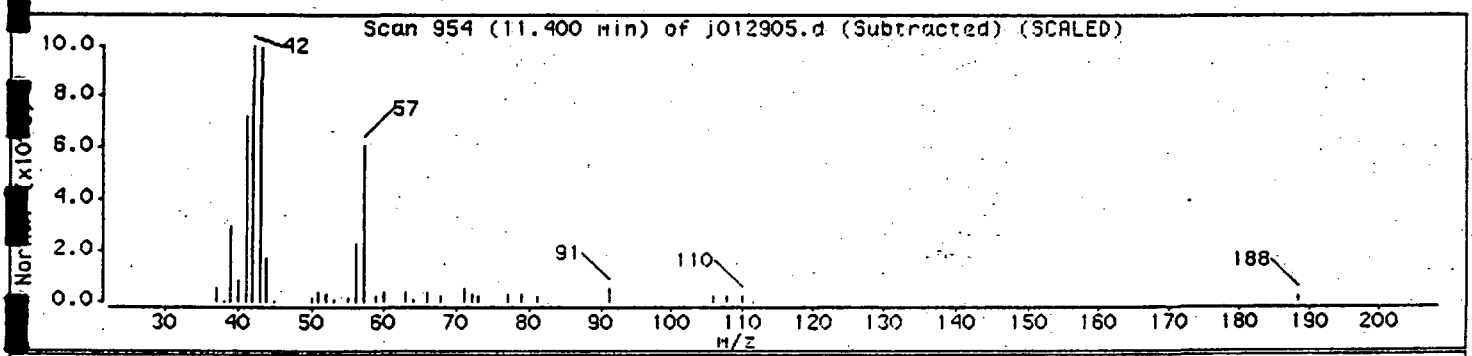
Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetaldehyde	75-07-0	NBS54K.I	37	80



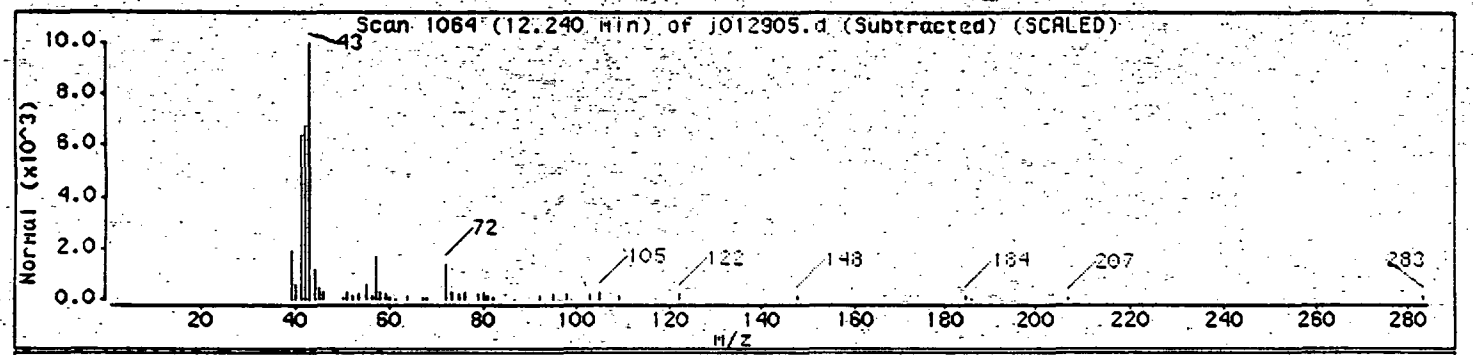


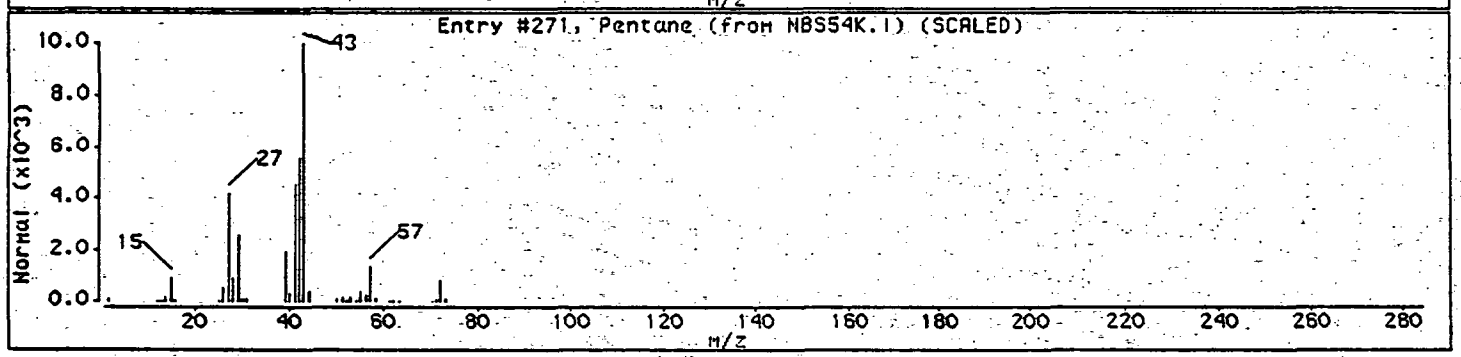
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



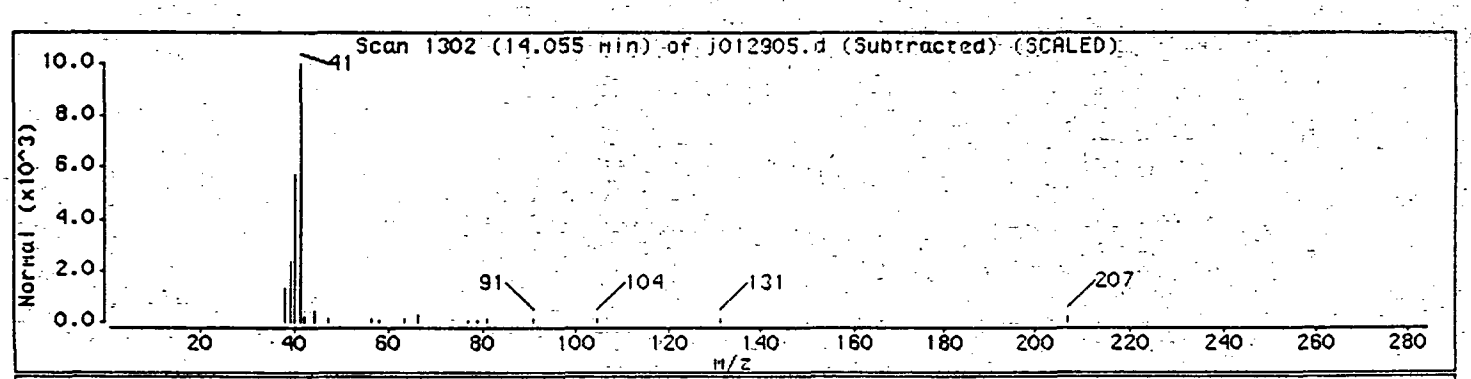
Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 012597D
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentane	109-66-0	NBS54K.I	271	72





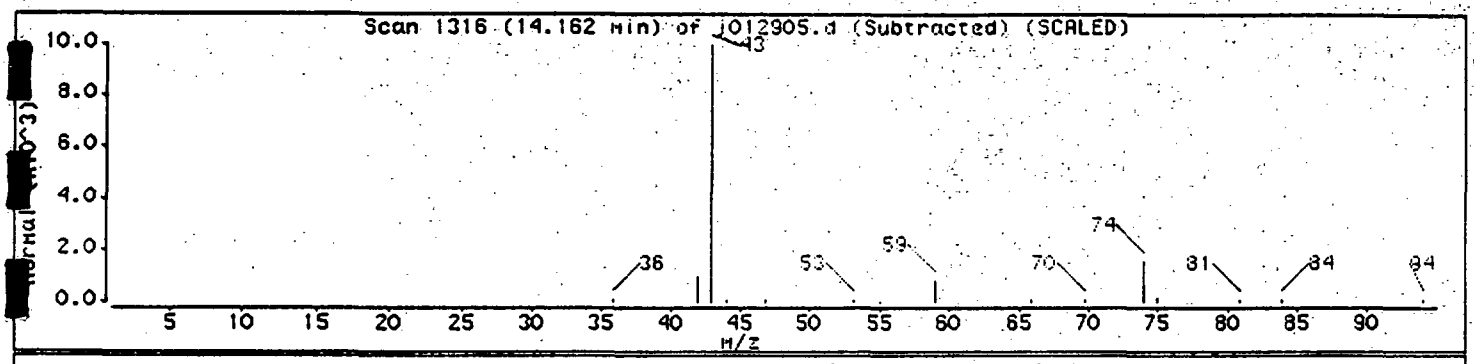
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



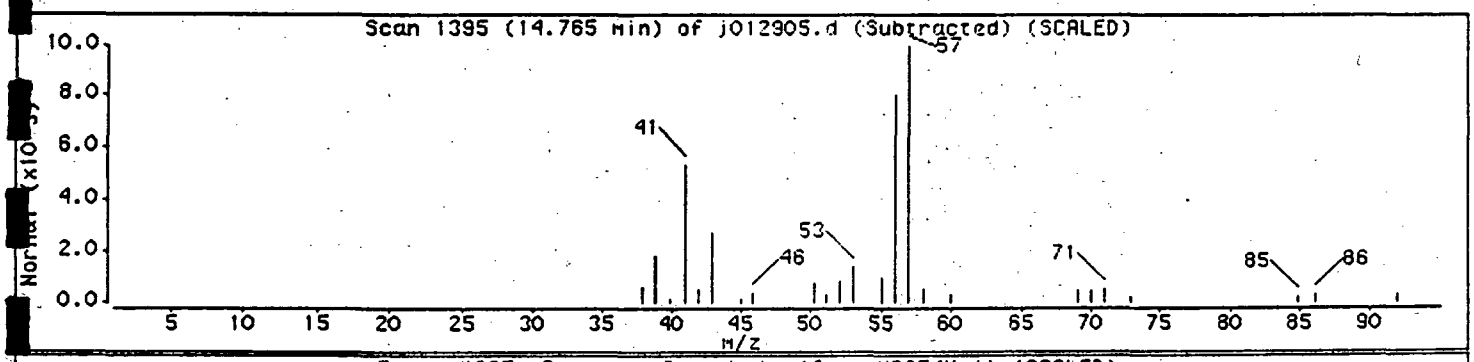
Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 012597D
Column phase: RTx-624

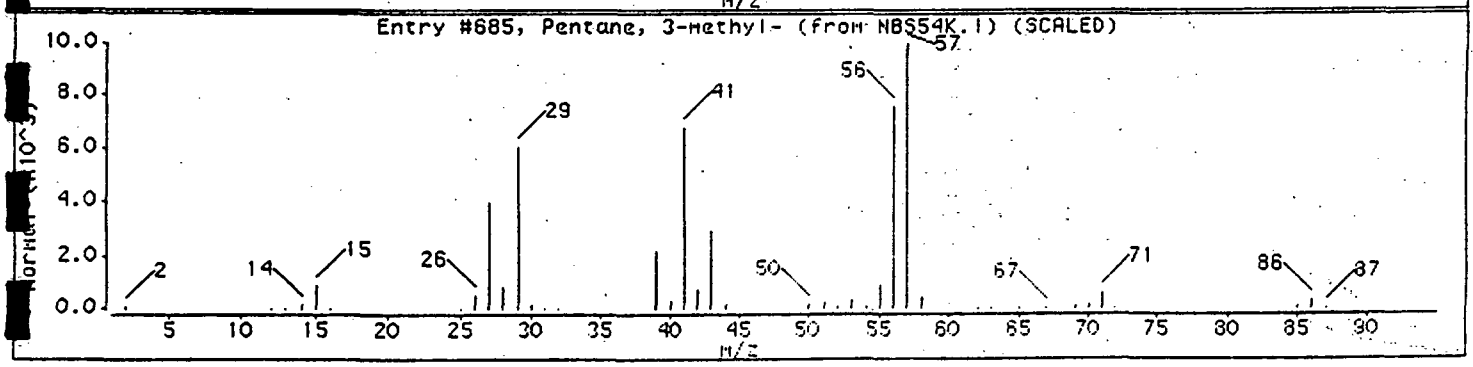
Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



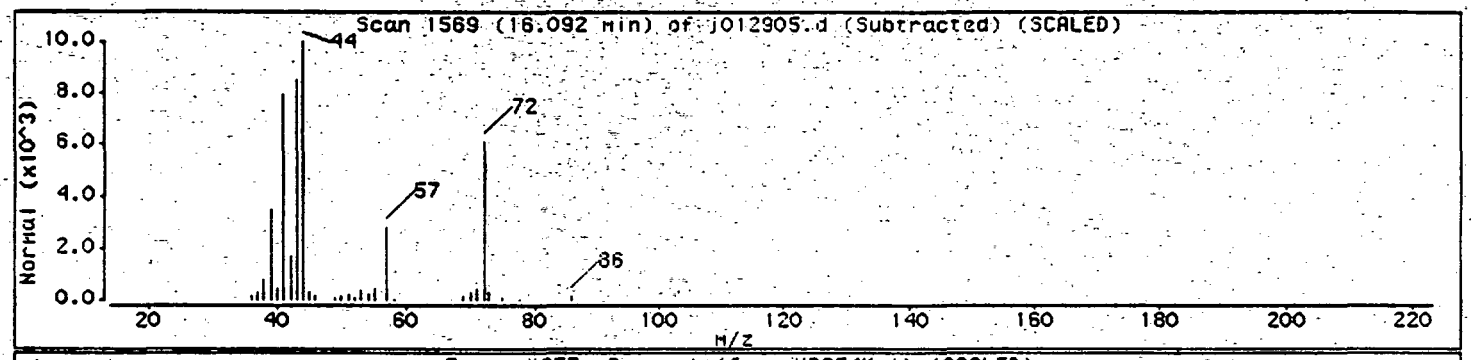
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentane, 3-methyl-	96-14-0	NBS54K.I	685	72

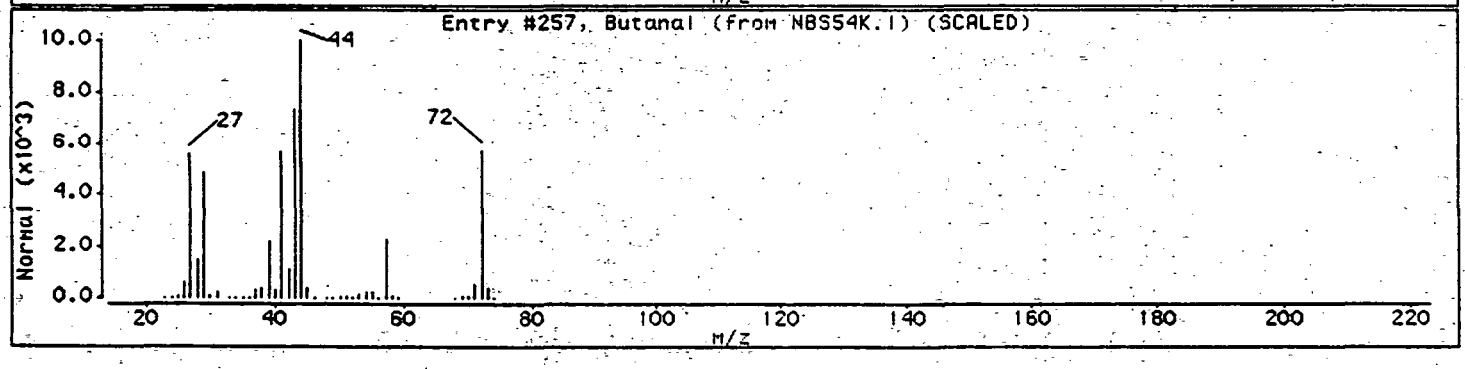




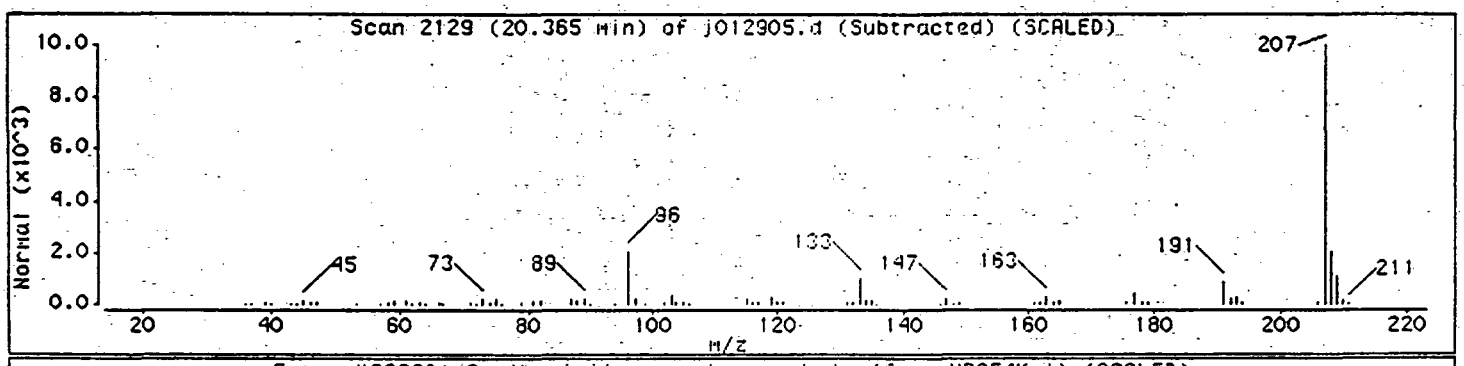
Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 012597D
Column phase: RTx-624 Column diameter: 0.53

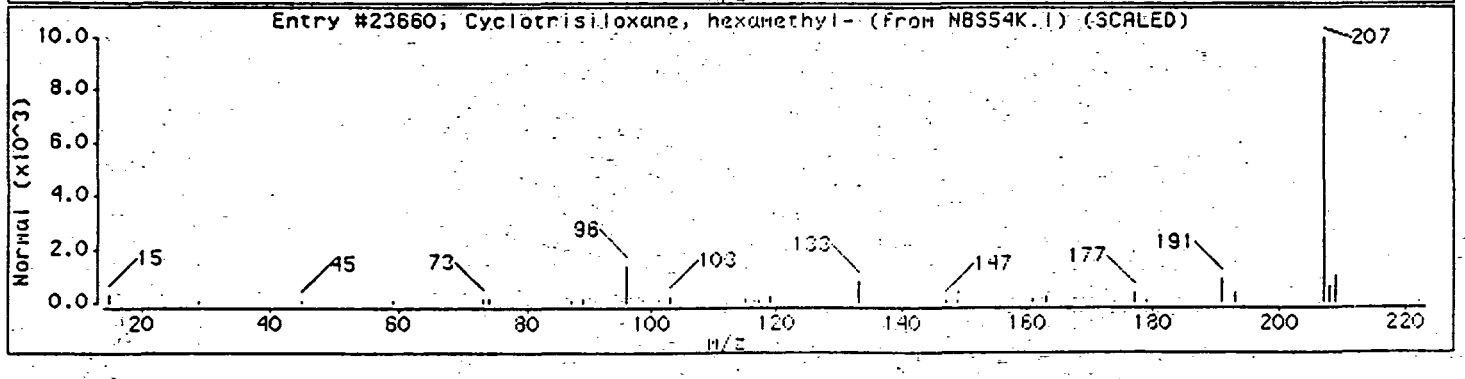
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butanal	123-72-8	NBS54K.I	257	86





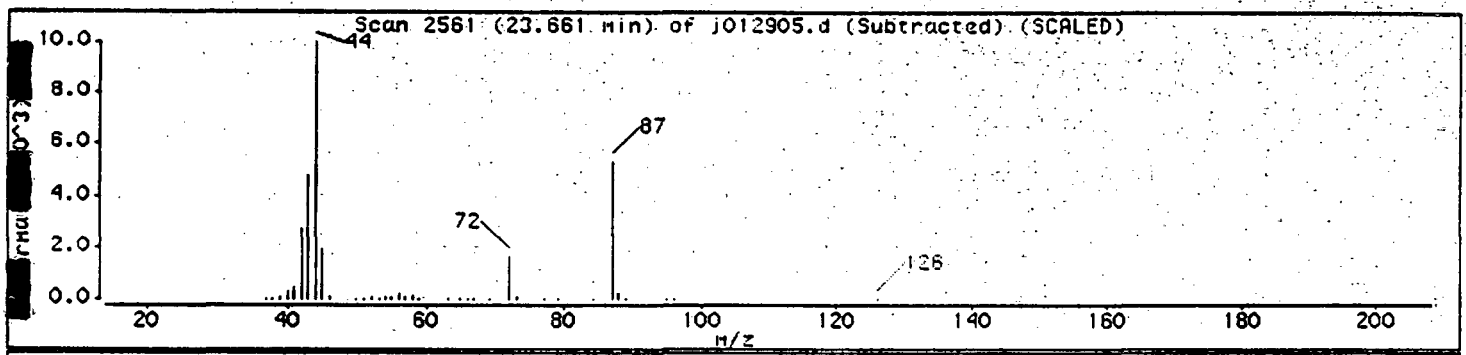
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotrisiloxane, hexamethyl-	541-05-9	NBS54K.I	23660	64

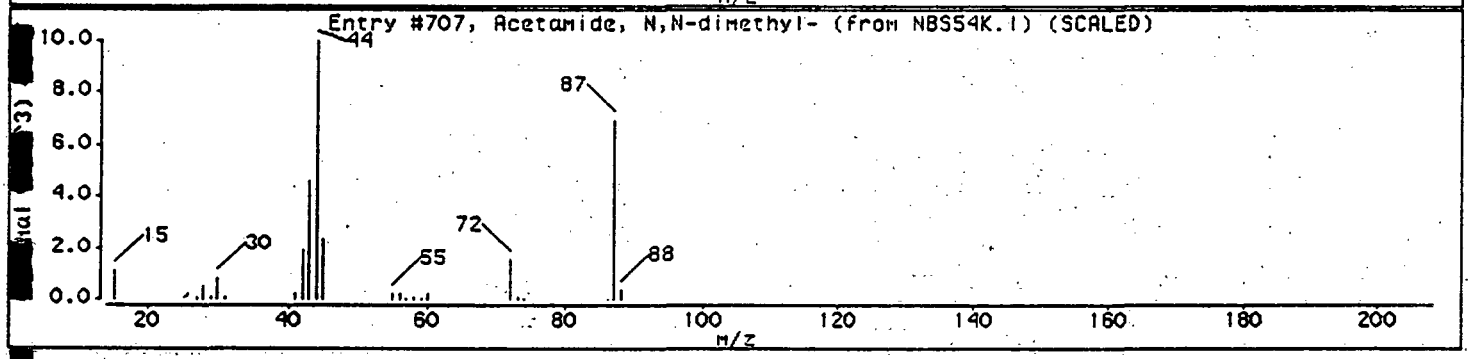




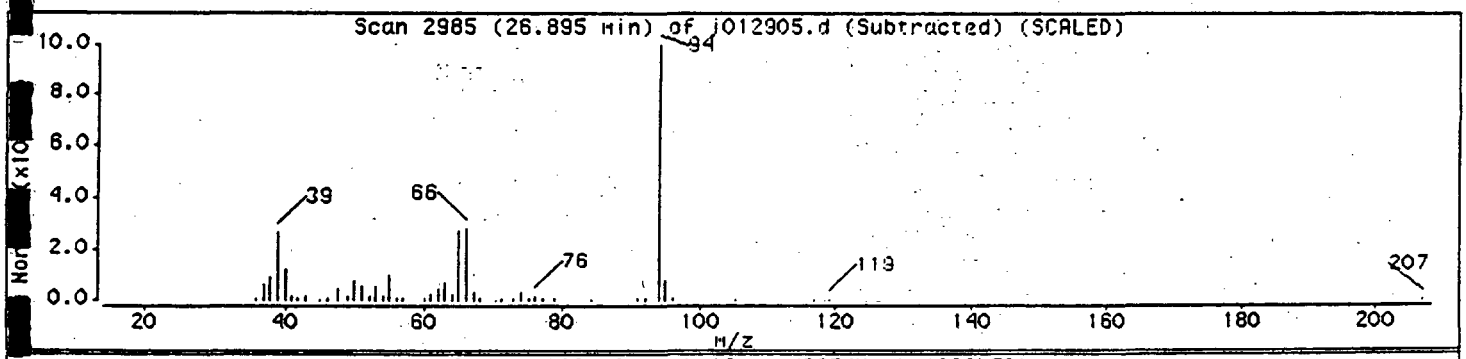
Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 012597D
Column phase: RTx-624 Column diameter: 0.58

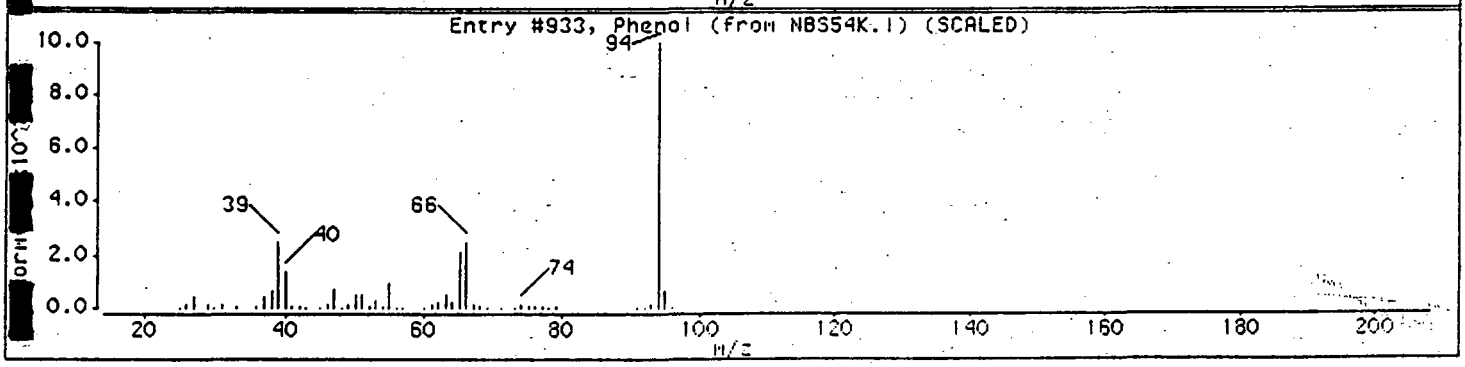
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.I	707	86





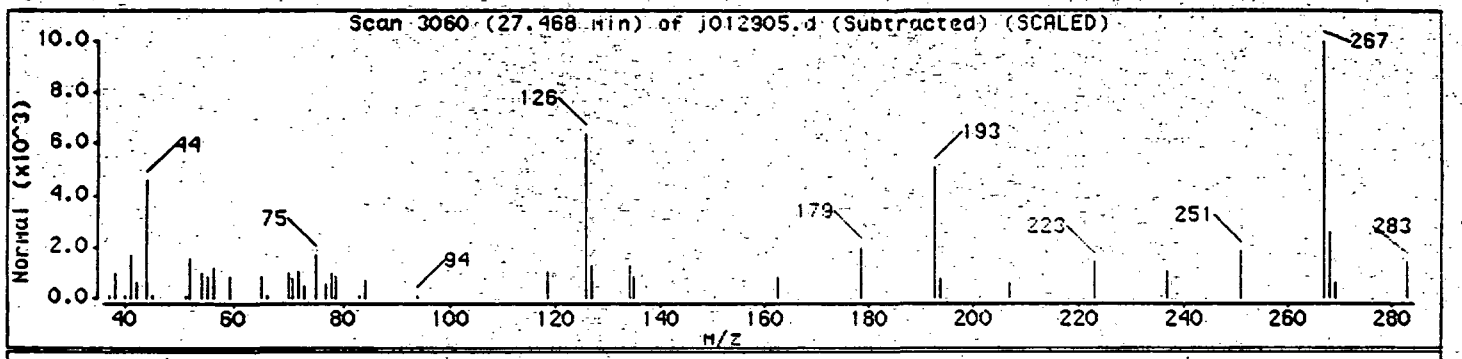
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	90





Data File: /chem/msdj.i/j-29jan.b/j012905.d
Date : 29-JAN-1997 11:27
Instrument: msdj.i
Client ID: 012597D
Column phase: RTx-624
Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



AIR TOXICS LTD.

SAMPLE NAME: 012597U1

ID#: 9701221-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j012906	Date of Collection:	1/25/97
Dil. Factor:	1.87	Date of Analysis:	1/29/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.94	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected
Benzene	0.19	0.40
1,2-Dichloroethane	0.19	Not Detected
Trichloroethene	0.19	Not Detected
1,2-Dichloropropane	0.19	Not Detected
Toluene	0.19	0.34
Tetrachloroethene	0.19	Not Detected
Chlorobenzene	0.19	Not Detected
Ethyl Benzene	0.19	Not Detected
m,p-Xylene	0.19	Not Detected
o-Xylene	0.19	Not Detected
Styrene	0.19	Not Detected
Acetone	0.94	3.6
Carbon Disulfide	0.94	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	1.3

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	100	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012906.d
Lab Smp Id: 9701221-02A Client Smp ID: 012597U1
Inj Date : 29-JAN-1997 12:10
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#419
Misc Info : 8.5"Hg-5psi Parsons
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.870
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.696	16.724 (1.000)	130	164059	5.0			100.00	9311
16.696	16.724 (0.000)	128	36456			23.09- 123.09	22.22	
16.696	16.724 (0.000)	49	86027			123.08- 223.08	52.44	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.215	17.235 (1.031)	217	380565	5.0	5.0		100.00	8038
17.215	17.235 (0.000)	186	77616			14.13- 114.13	20.39	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.039	18.067 (1.000)	114	705439	5.0			100.00	9458
18.039	18.067 (0.000)	88	37400			0.00- 67.67	5.30	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.076	20.111 (1.113)	98	660626	5.2	5.2		100.00	9867
20.076	20.111 (0.000)	70	22748			0.00- 62.02	3.44	
20.076	20.111 (0.000)	100	127728			13.96- 113.96	19.33	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.181	22.209 (1.000)	117	588111	5.0			100.00	9943
22.181	22.209 (0.000)	82	87576			11.09- 111.09	14.89	

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
66 Bromofluorobenzene						CAS #: 460-00-4			
24.043	24.086	(1.084)	95	420933	4.6	4.6		100.00	8132
24.043	24.086	(0.000)	174	61512			13.48- 113.48	14.61	
24.043	24.086	(0.000)	176	57728			7.57- 107.57	13.71	
20 Acetone						CAS #: 67-64-1			
13.385	13.413	(0.802)	43	124350	1.9	3.6		100.00	
13.385	13.413	(0.802)	58	31782			0.00- 79.57	25.56	
32 2-Butanone						CAS #: 78-93-3			
16.330	16.358	(0.978)	72	12330	0.68	1.3		100.00	7726
16.330	16.358	(0.000)	43	14897			429.69- 529.69	120.82	
16.330	16.358	(0.000)	57	1119			0.00- 82.36	9.08	
40 Benzene						CAS #: 71-43-2			
17.596	17.617	(0.975)	78	29298	0.22	0.40		100.00	9050
17.596	17.617	(0.000)	77	1728			0.00- 74.19	5.90	
51 Toluene						CAS #: 108-88-3			
20.175	20.203	(1.118)	92	14760	0.18	0.34		100.00	7047
20.175	20.203	(0.000)	91	6901			118.56- 218.56	46.75	

Audit History For: /chem/msdj.i/j-29jan.b/j012906.d

NM
1/27/97

Change Date: 29-Jan-97 12:30
Change Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

Change Date: 29-Jan-97 12:30
Change Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Complete Target Compound Processing

Change Date: 29-Jan-97 12:38
Change Made by: mhe

Parameter: Compound Sublist
Old Value:
New Value: Parsons.sub
Reason For Change: N/A

Change Date: 29-Jan-97 12:38
Change Made by: mhe

Parameter: Sample Info
Old Value: 500mL Can#419 Parsons 8.5"Hg-5psi (012597U1
New Value: 500mL Can#419
Reason For Change: N/A

Change Date: 29-Jan-97 12:38
Change Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: 012597U1
Reason For Change: N/A

Change Date: 29-Jan-97 12:38
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Quantitation

Change Date: 29-Jan-97 12:56
Change Made by: mhe

Parameter: Best Hit for Carbon Disulfide changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:56
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:56
Change Made by: mhe

Parameter: Best Hit for Methylene Chloride changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:56
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Best Hit for 1,1,1-Trichlorethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1

Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Manual reintegration of Trichloroethene (Signal 1)
Old Value: No previous peak at 18.451
New Value: New Area/Time: 240 / 18.45
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:57
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Best Hit for Ethyl Benzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Best Hit for m,p-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Manual reintegration of o-Xylene (Signal 1)
Old Value: No previous peak at 23.135
New Value: New Area/Time: 1569 / 23.14
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Best Hit for Styrene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Manual reintegration of Styrene (Signal 1)
Old Value: No previous peak at 23.143
New Value: New Area/Time: 567 / 23.14
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Best Hit for Styrene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 12:58
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

Change Date: 29-Jan-97 12:59
Change Made by: mhe

Parameter: Best Match for Unknown compound at 12.584 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 12:59
Change Made by: mhe

Parameter: Best Match for Unknown compound at 20.366 min. changed.
Old Value: Old match: Cyclotrisiloxane, hexamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 12:59
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.646 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 12:59
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.896 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Data File: /chem/msdj.i/j-29jan.b/j012906.d
Report Date: 29-Jan-1997 12:38

MH 1/29/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012906.d
Lab Smp Id: 9701221-02A Client Smp ID: 012597U1
Inj Date : 29-JAN-1997 12:10
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#419
Misc Info : 8.5"Hg-5psi Parsons
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.870
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.696	16.724 (1.000)	130	164059	5.0			100.00	9311
16.696	16.724 (0.000)	128	36456			23.09- 123.09	22.22	
16.696	16.724 (0.000)	49	86027			123.08- 223.08	52.44	
39 Octafluorotoluene					CAS #: 434-64-0			
17.215	17.235 (1.031)	217	380565	5.0	5.0		100.00	8038
17.215	17.235 (0.000)	186	77616			14.13- 114.13	20.39	
43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.039	18.067 (1.000)	114	705439	5.0			100.00	9458
18.039	18.067 (0.000)	88	37400			0.00- 67.67	5.30	
50 Toluene-d8					CAS #: 2037-26-5			
20.076	20.111 (1.113)	98	660626	5.2	5.2		100.00	9867
20.076	20.111 (0.000)	70	22748			0.00- 62.02	3.44	
20.076	20.111 (0.000)	100	127728			13.96- 113.96	19.33	
59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.181	22.209 (1.000)	117	588111	5.0			100.00	9943
22.181	22.209 (0.000)	82	87576			11.09- 111.09	14.89	

Data File: /chem/msdj.i/j-29jan.b/j012906.d
Report Date: 29-Jan-1997 12:38

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene					CAS #: 460-00-4			
24.043	24.086 (1.084)	95	420933	4.6	4.6		100.00	8132
24.043	24.086 (0.000)	174	61512			13.48- 113.48	14.61	
24.043	24.086 (0.000)	176	57728			7.57- 107.57	13.71	
20 Acetone					CAS #: 67-64-1			
13.385	13.413 (0.802)	43	124350	1.9	3.6		100.00	
13.385	13.413 (0.802)	58	31782			0.00- 79.57	25.56	
19 Carbon Disulfide					CAS #: 75-15-0			
13.492	13.550 (0.808)	76	19439	0.16	0.29		100.00	6574
23 Methylene Chloride					CAS #: 75-09-2			
14.216	14.267 (0.851)	84	3333	0.088	0.16		100.00	3632(aQ)
14.216	14.267 (0.000)	49	930			90.13- 190.13	27.90	
14.216	14.267 (0.000)	51	544			0.00- 96.86	16.32	
32 2-Butanone					CAS #: 78-93-3			
16.330	16.358 (0.978)	72	12330	0.68	1.3		100.00	7726
16.330	16.358 (0.000)	43	14897			429.69- 529.69	120.82	
16.330	16.358 (0.000)	57	1119			0.00- 82.36	9.08	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.062	17.090 (1.022)	97	4126	0.054	0.10		100.00	7356(a)
17.062	17.090 (0.000)	99	609			14.53- 114.53	14.76	
40 Benzene					CAS #: 71-43-2			
17.596	17.617 (0.975)	78	29298	0.22	0.40		100.00	9050
17.596	17.617 (0.000)	77	1728			0.00- 74.19	5.90	
41 1,2-Dichloroethane					CAS #: 107-06-2			
18.039	17.624 (1.000)	62	25756	0.49	0.91		100.00	3522(Q)
18.039	17.624 (0.000)	64	6994			0.00- 82.07	27.15	
51 Toluene					CAS #: 108-88-3			
20.175	20.203 (1.118)	92	14760	0.18	0.34		100.00	7047
20.175	20.203 (0.000)	91	6901			118.56- 218.56	46.75	
61 Ethyl Benzene					CAS #: 100-41-4			
22.464	22.339 (1.013)	106	4123	0.066	0.12		100.00	(aQ)
22.464	22.339 (1.013)	91	7762			296.25- 396.25	188.26	
62 m,p-Xylene					CAS #: 108-38-3			
22.464	22.499 (1.013)	106	4217	0.069	0.13		100.00	(a)
22.464	22.499 (1.013)	91	7762			164.96- 264.96	184.06	

C Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-29jan.b/j012906.d
Lab Smp Id: 9701221-02A Client Smp ID: 012597U1
Inj Date : 29-JAN-1997 12:10
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#419
Misc Info : 8.5"Hg-5psi Parsons
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.870 Target Version: 3.12
Integrator: HP RTE Compound Sublist: Parsons.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

ISTD	RT	AREA	AMOUNT
* 33 Bromochloromethane	16.696	1056464	5.000
* 43 1,4-Difluorobenzene	18.039	1762190	5.000
* 59 Chlorobenzene-d5	22.181	1954794	5.000

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Acetaldehyde				CAS #: 75-07-0			
9.219	287606	1.4	2.5	86	NBS54K.l	37	33
Butane, 2-methyl-				CAS #: 78-78-4			
11.058	134748	0.64	1.2	64	NBS54K.l	272	33
Pentane				CAS #: 109-66-0			
12.004	114531	0.54	1.0	72	NBS54K.l	271	33

ata File: /chem/msdj.i/j-29jan.b/j012906.d
Report Date: 29-Jan-1997 12:38

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
2.584	118361	0.56	1.0	0		0	33
Unknown					CAS #:		
2.996	223344	1.0	2.0	0		0	33
Unknown					CAS #:		
5.079	115082	0.54	1.0	0		0	33
Butanal					CAS #: 123-72-8		
16.063	216541	1.0	1.9	91	NBS54K.l	257	33
Unknown					CAS #:		
16.139	138879	0.66	1.2	0		0	33
Acetic acid					CAS #: 64-19-7		
17.764	279969	0.79	1.5	90	NBS54K.l	113	43
1-Butanol					CAS #: 71-36-3		
18.214	107542	0.30	0.57	56	NBS54K.l	322	43
Cyclotrisiloxane, hexamethyl-					CAS #: 541-05-9		
20.366	279224	0.71	1.3	72	NBS54K.l	23660	59
Hexanal					CAS #: 66-25-1		
21.083	146529	0.37	0.70	78	NBS54K.l	1424	59
Acetamide, N,N-dimethyl-					CAS #: 127-19-5		
23.646	3051249	7.8	14.6	86	NBS54K.l	707	59
Phenol					CAS #: 108-95-2		
25.896	254655	0.65	1.2	91	NBS54K.l	933	59

Data File: /chem/msdj.i/j-29jan.b/j012906.d
Report Date: 29-Jan-1997 12:38

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j012906.d
Lab Smp Id: 9701221-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: 8.5"Hg-5psi Parsons

Calibration Date: JAN/29/97
Calibration Time: 0834
Client Smp ID: 012597U1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	203762	122257	285267	164059	-19.48
43 1,4-Difluorobenzene	881244	528746	1233742	705439	-19.95
59 Chlorobenzene-d5	706651	423991	989311	588111	-16.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.70	16.20	17.20	16.70	-0.04
43 1,4-Difluorobenzene	18.05	17.55	18.55	18.04	-0.04
59 Chlorobenzene-d5	22.18	21.68	22.68	22.18	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

MH 1/29/97

ata File: /chem/msdj.i/j-29jan.b/j012906.d
Report Date: 29-Jan-1997 12:38

Air Toxics Limited

RECOVERY REPORT

lient Name:
ample Matrix: GAS
Lab Smp Id: 9701221-02A
Level: LOW
ata Type: MS DATA
pikeList File:
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: 8.5"Hg-5psi Parsons

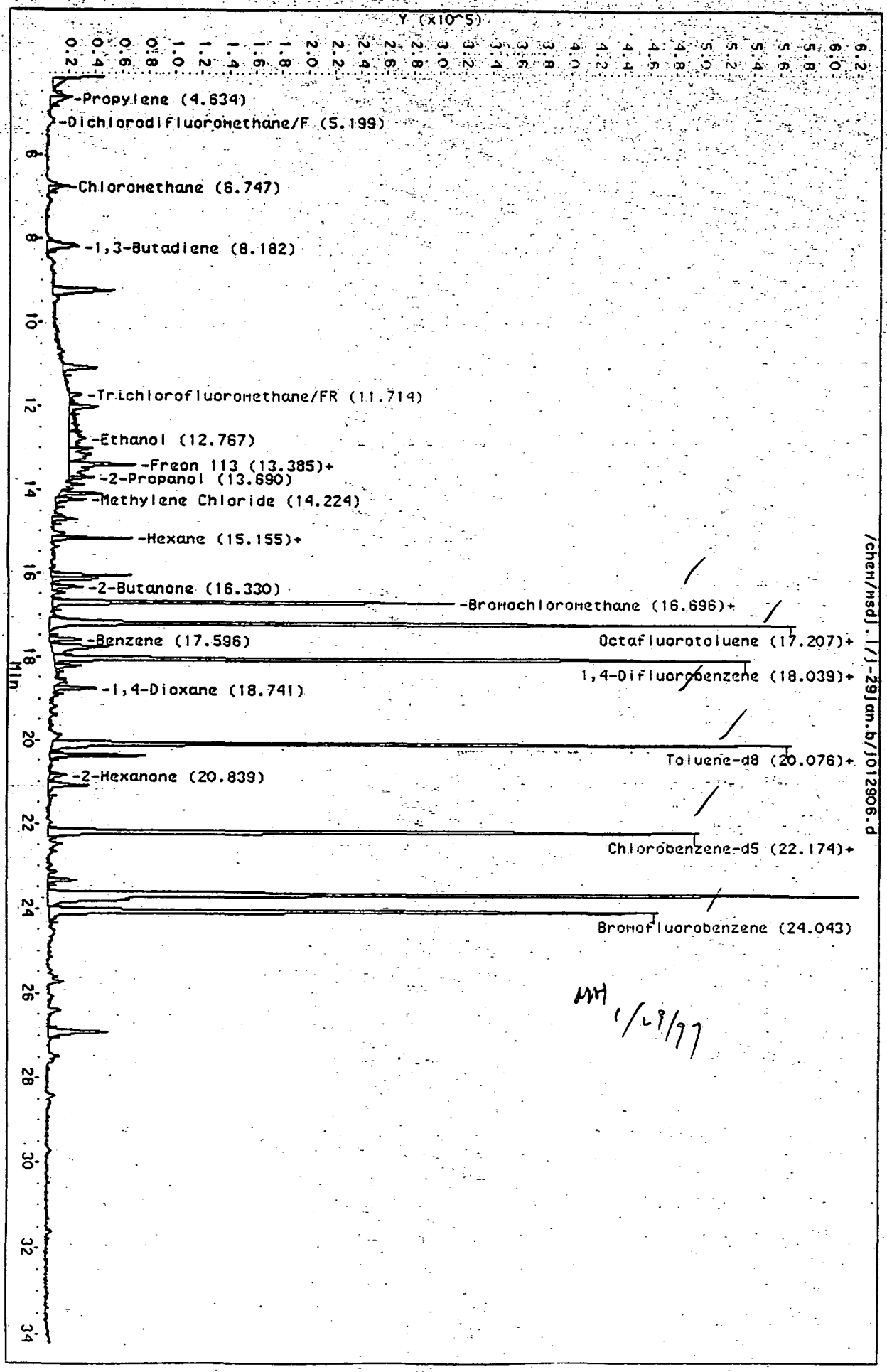
Client SDG: j-29jan
Fraction: VOA
Client Smp ID: 012597U1
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 39 Octafluorotoluene	5.0	5.0	100.12	60-140
$ 50 Toluene-d8	5.0	5.2	103.50	60-140
$ 66 Bromofluorobenzene	5.0	4.6	92.44	60-140

MH 1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Client ID: 0125970I
Sample Info: 500mL Can#419
Column phase: RTx-624

Instrument: msdj.i
Operator: MH
Column diameter: 0.58



MH 1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

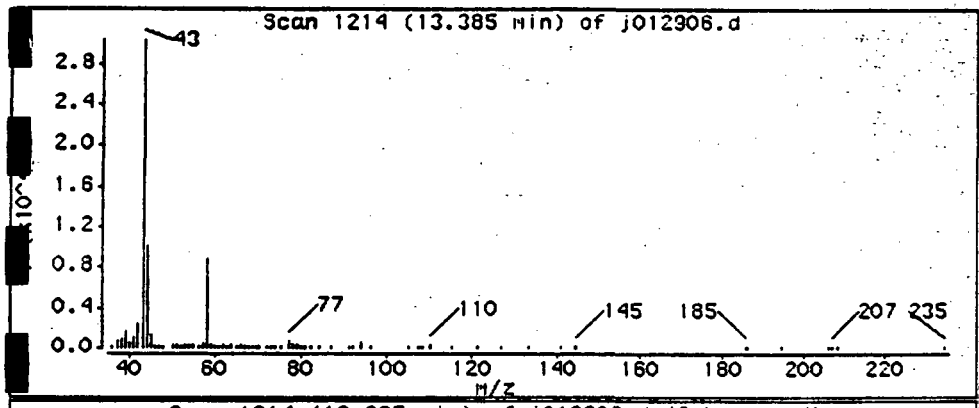
Sample Info: 500mL Can#419

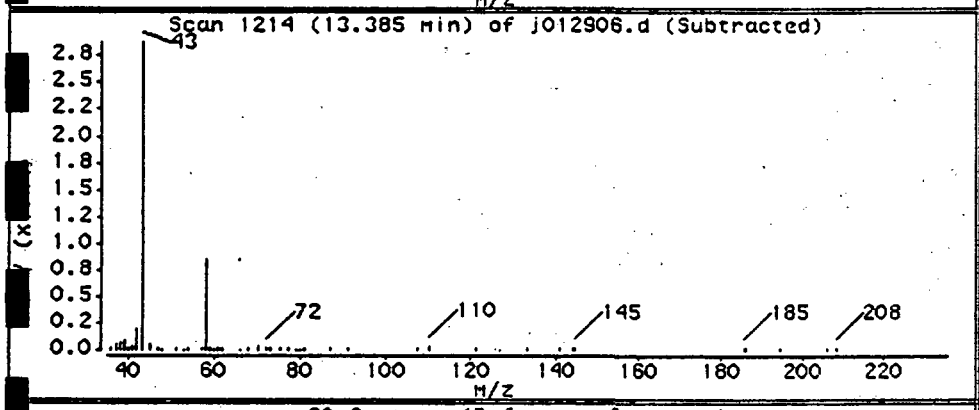
Operator: MH

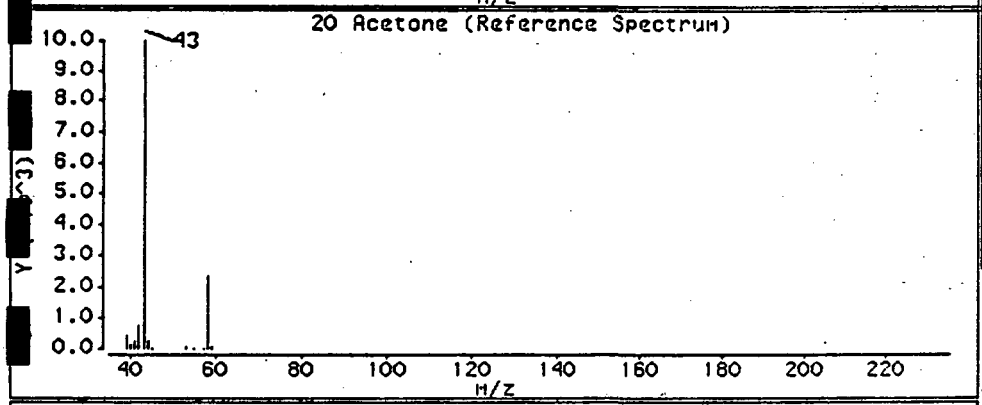
Column phase: RTx-624

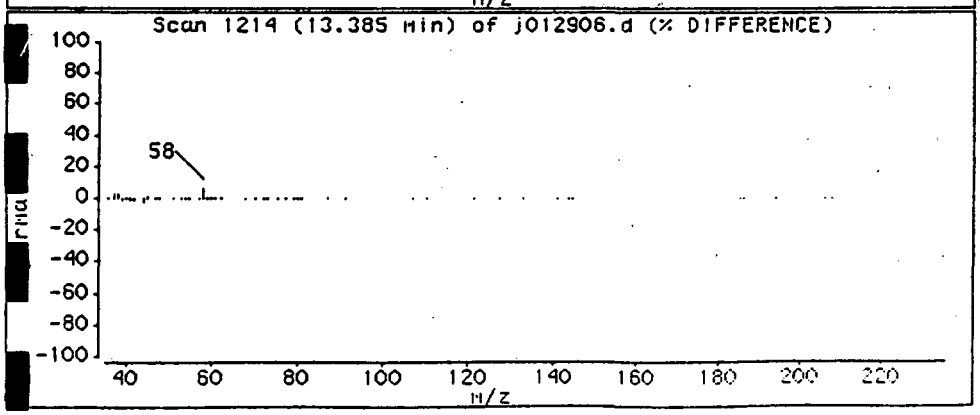
Column diameter: 0.58

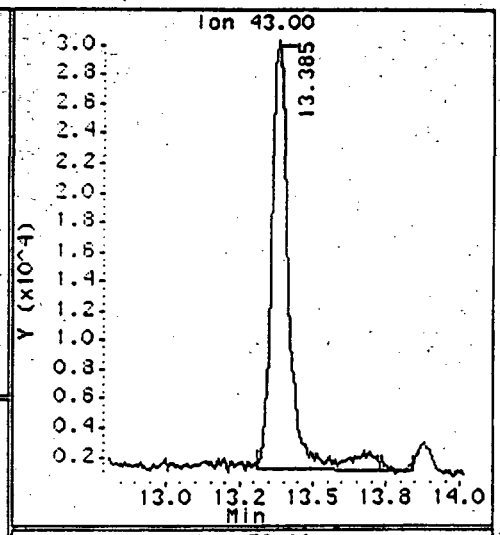
20 Acetone

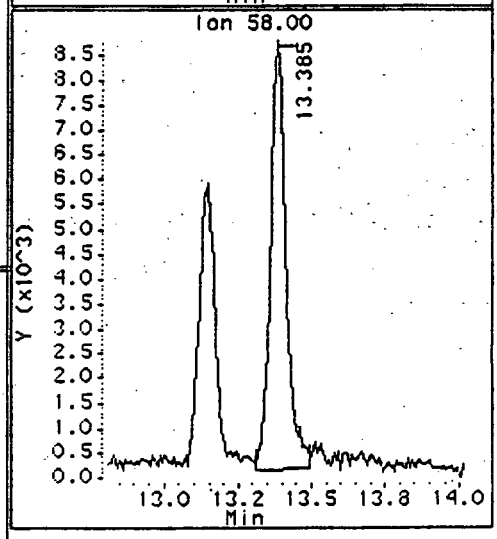












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

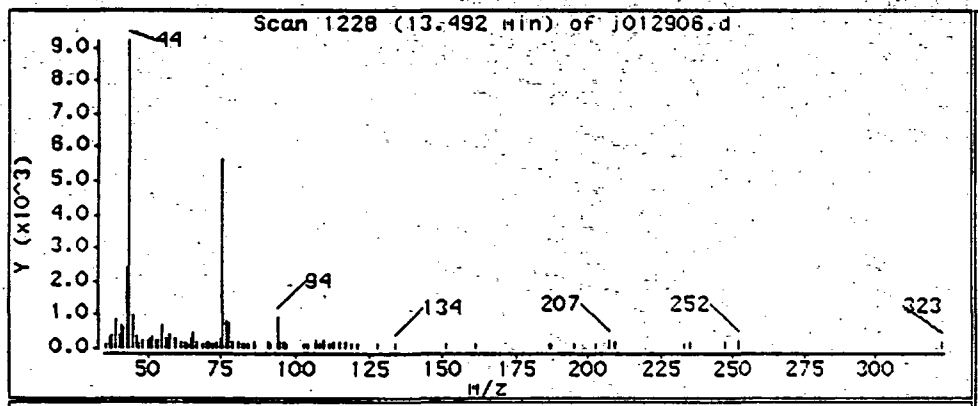
Sample Info: 500mL Can#419

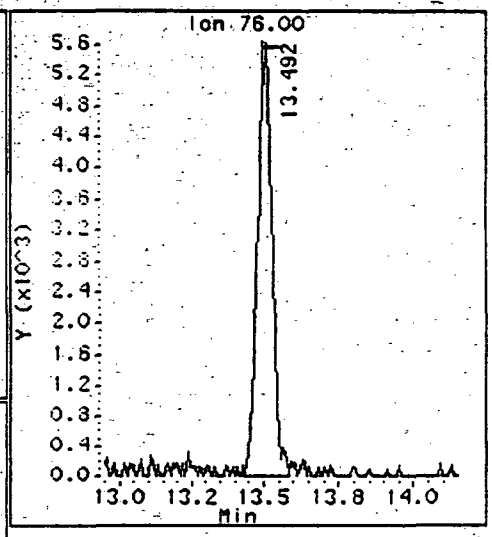
Operator: MH

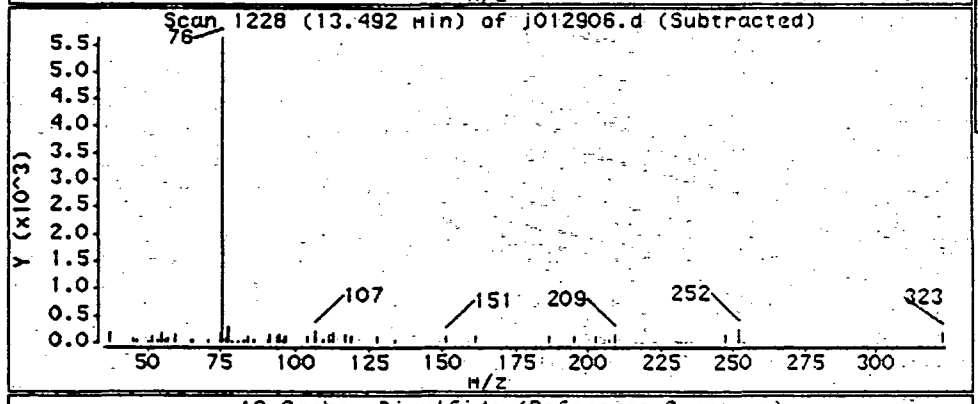
Column phase: RTx-624

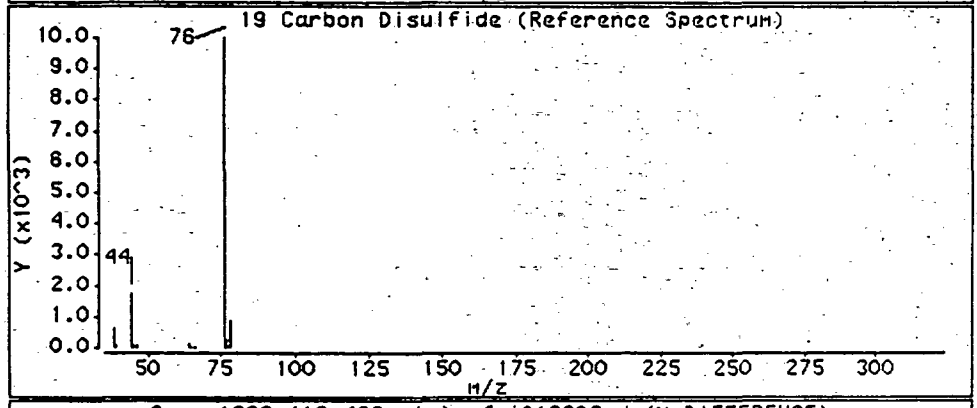
Column diameter: 0.58

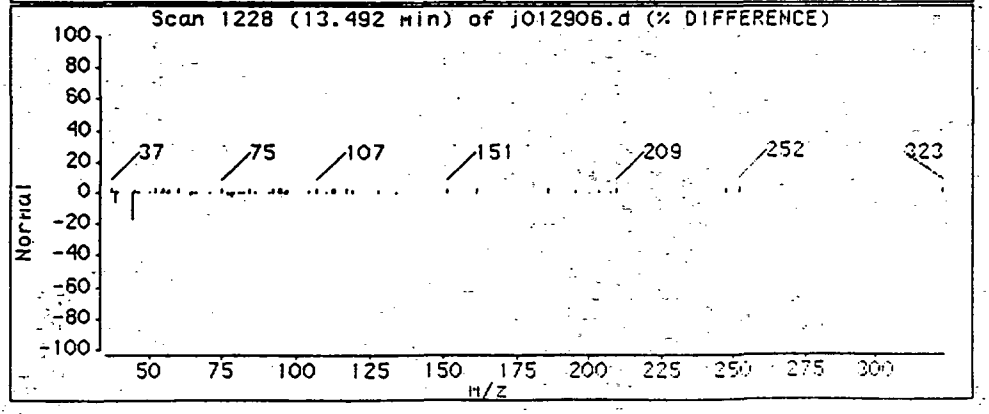
19 Carbon Disulfide











Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

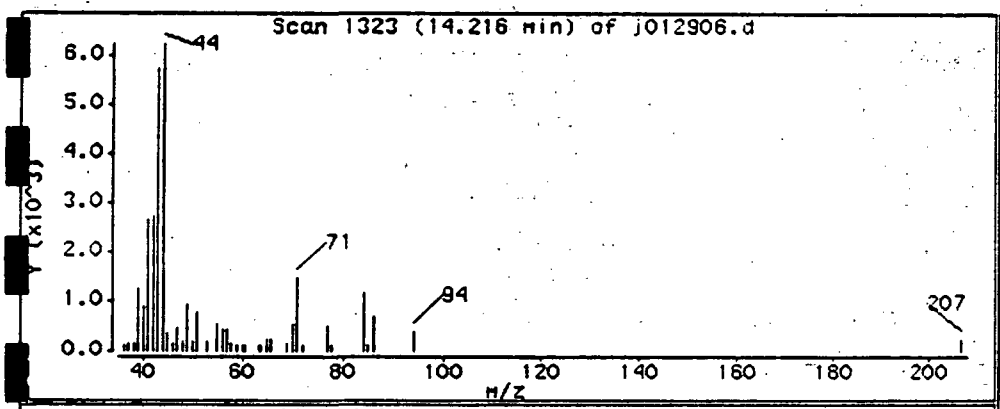
Sample Info: 500mL Can#419

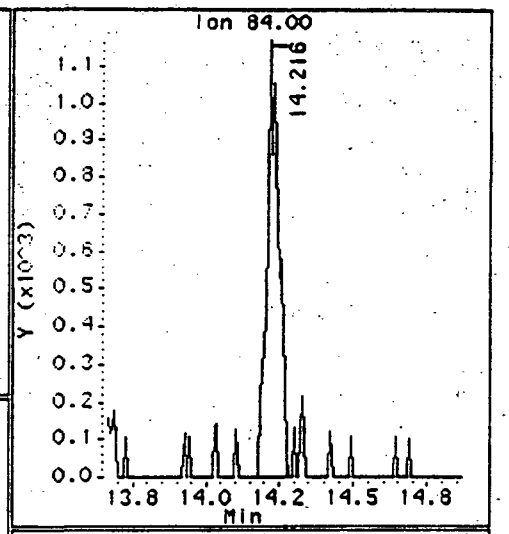
Operator: MH

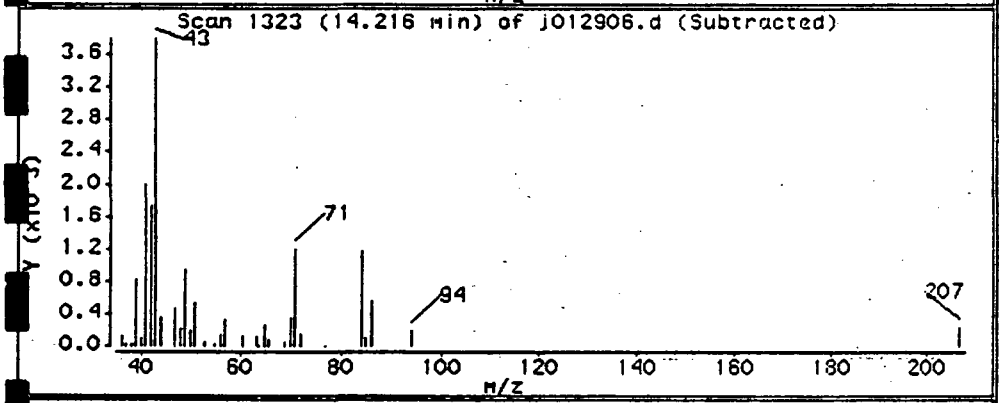
Column phase: RTx-624

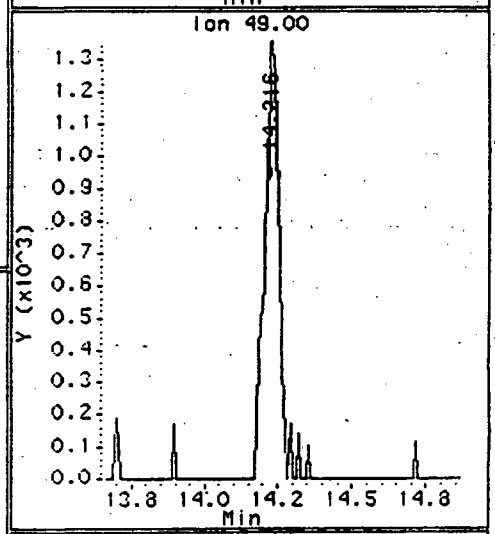
Column diameter: 0.53

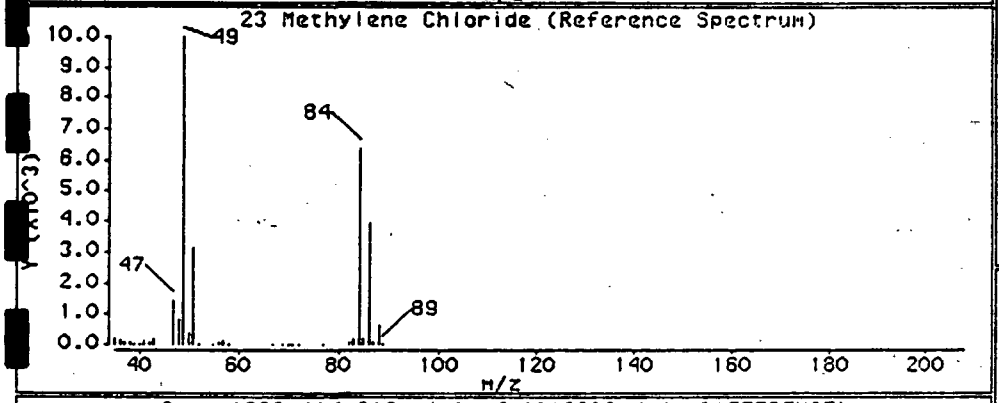
23 Methylene Chloride

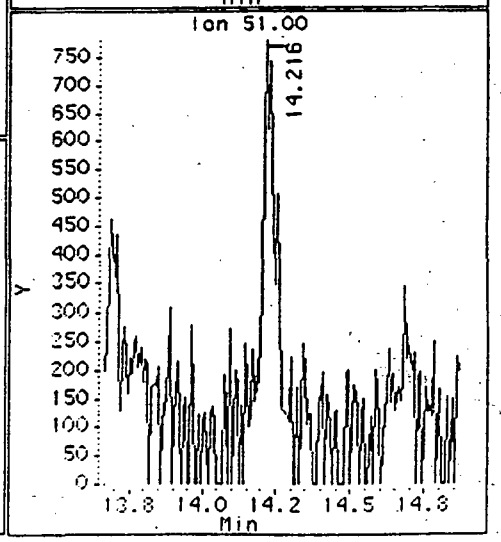


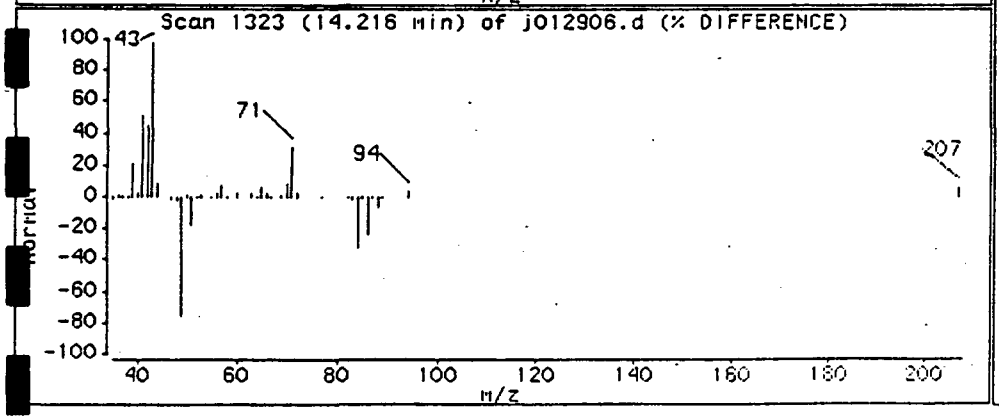












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

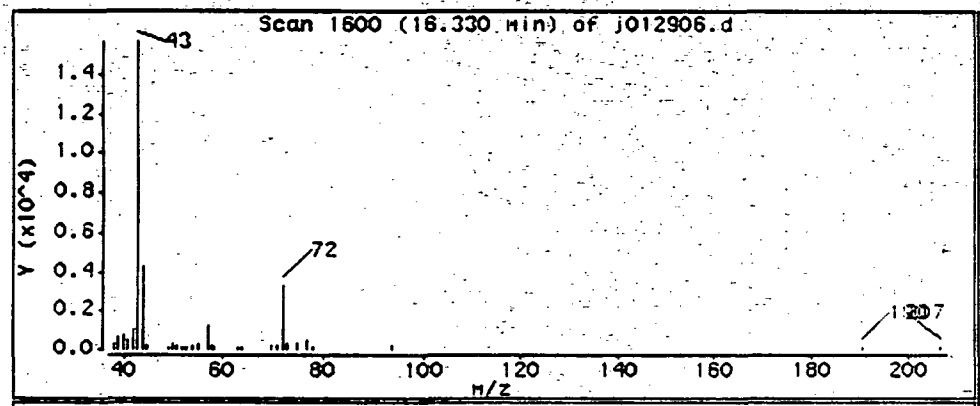
Sample Info: 500mL Can#419

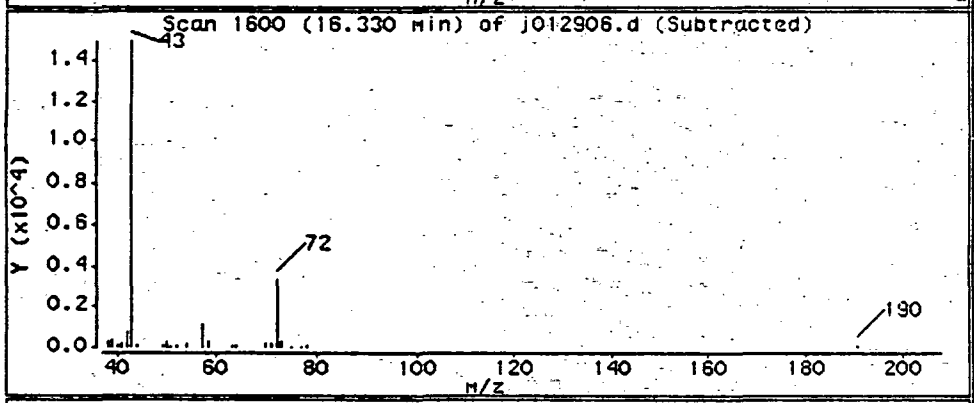
Operator: MH

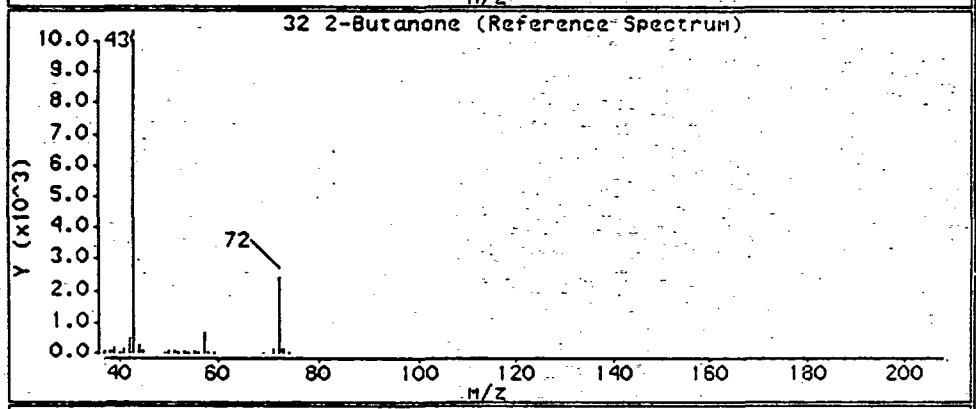
Column phase: RTx-624

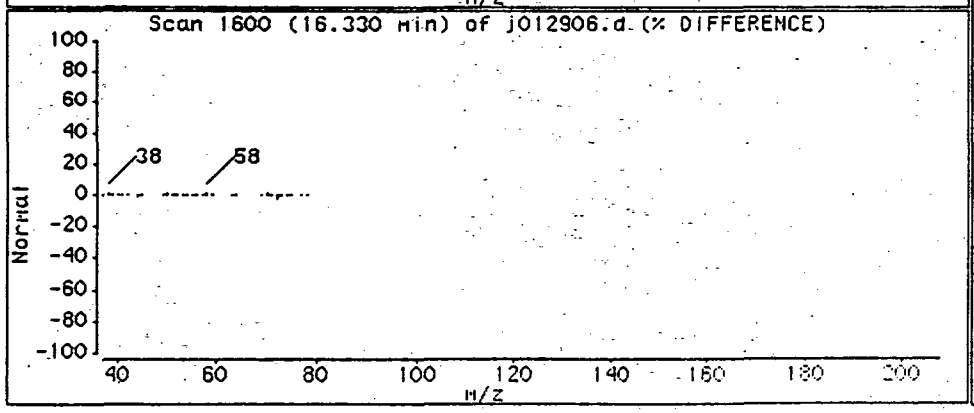
Column diameter: 0.53

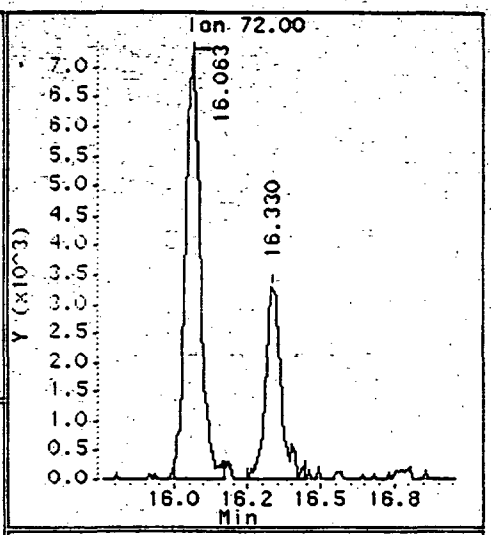
32 2-Butanone

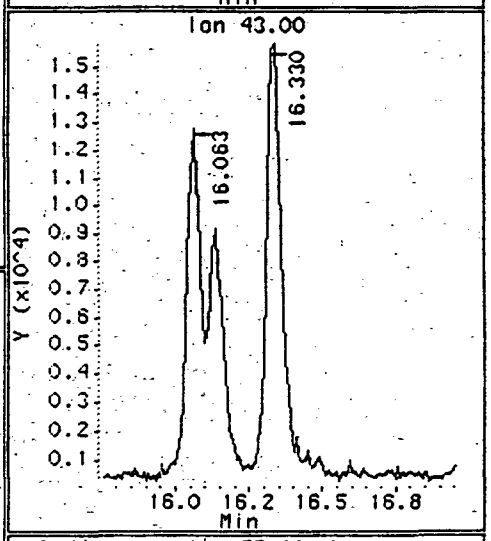


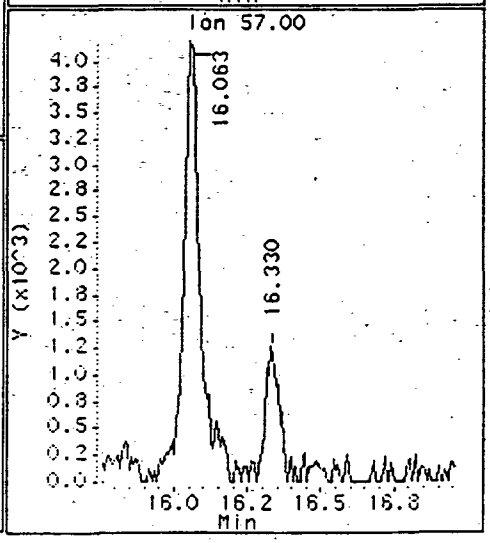












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

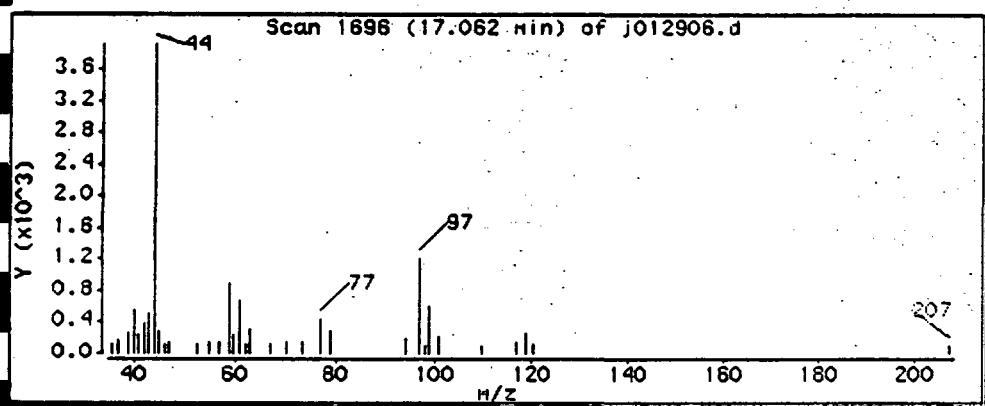
Sample Info: 500mL Can#419

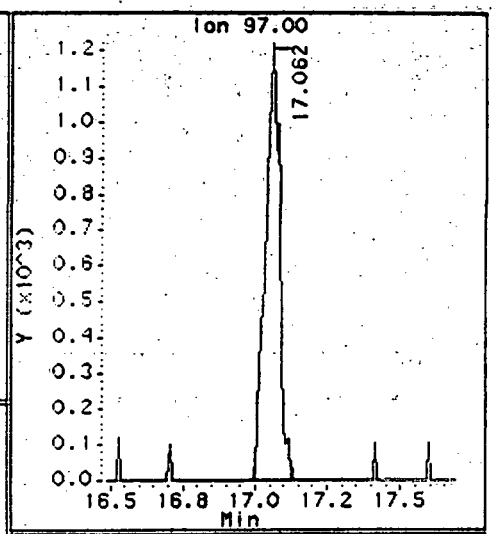
Operator: MH

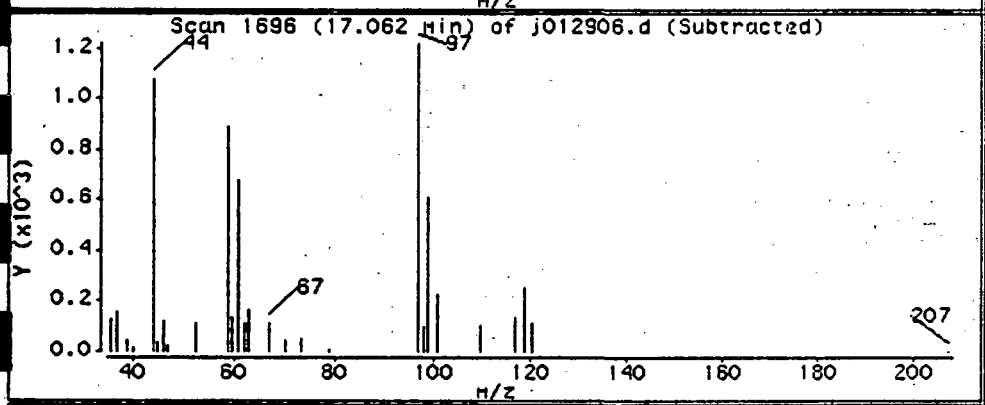
Column phase: RTx-624

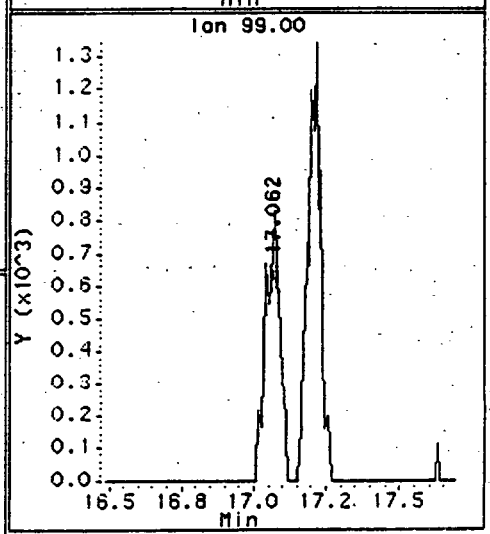
Column diameter: 0.58

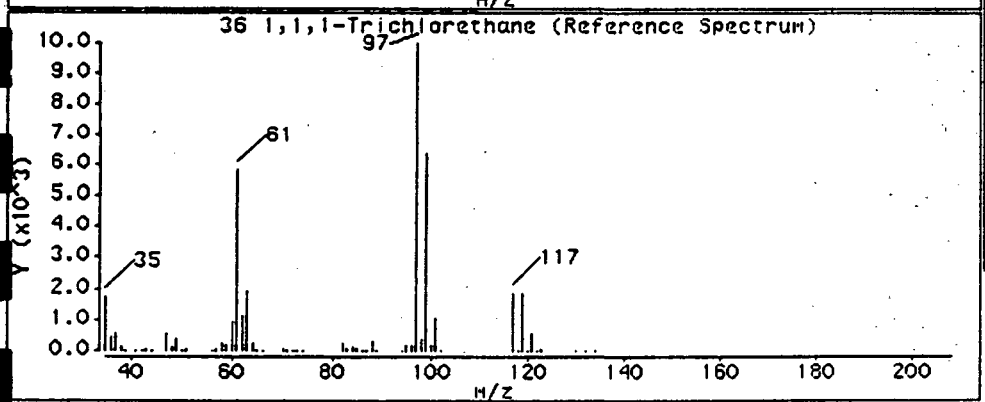
36 1,1,1-Trichlorethane

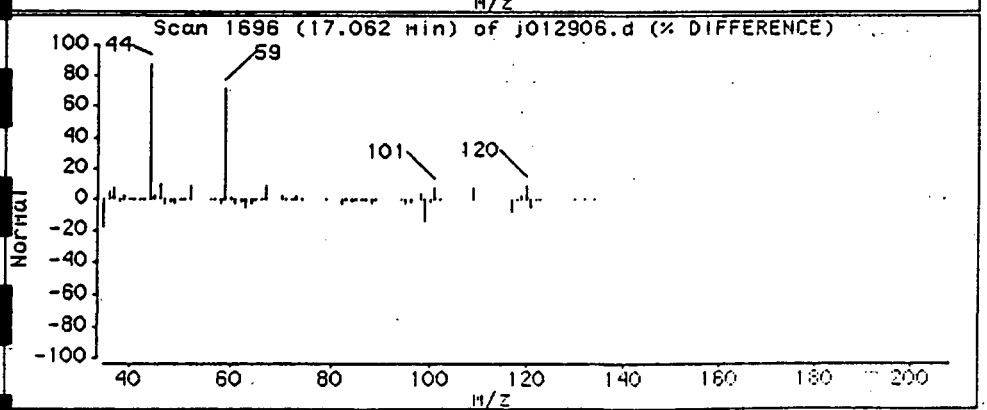












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

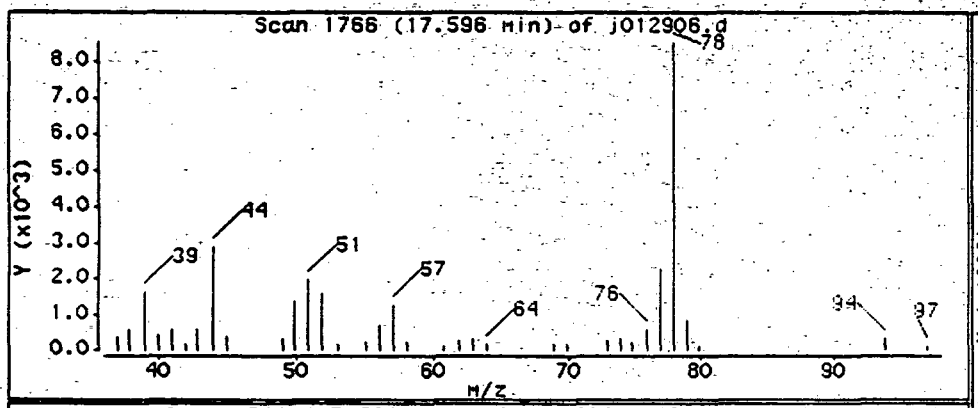
Sample Info: 500mL Can#419

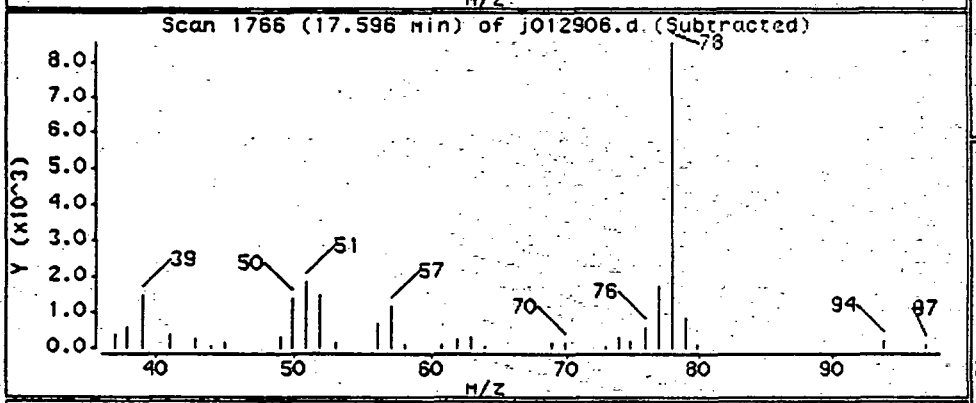
Operator: MH

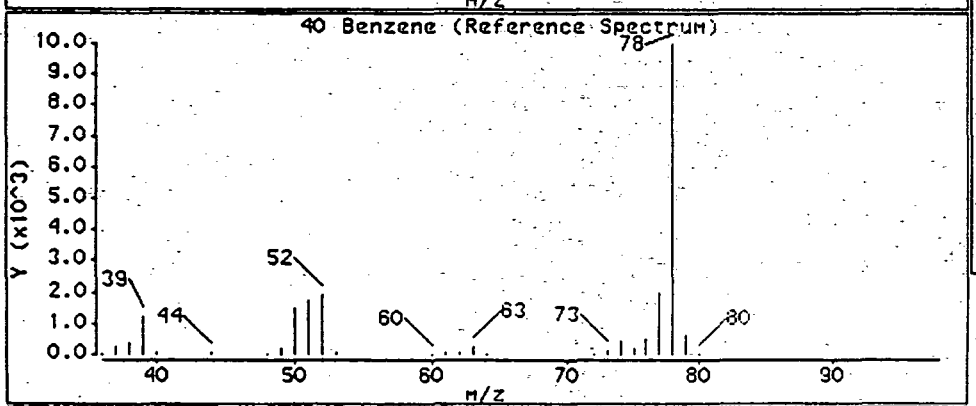
Column phase: RTx-624

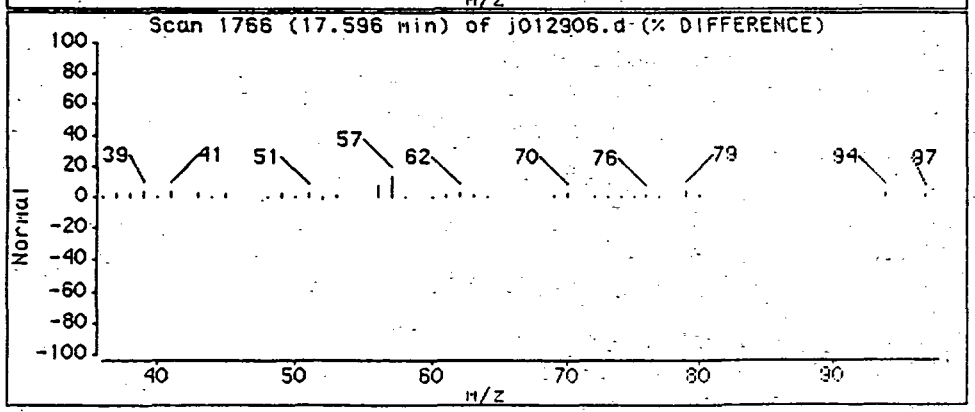
Column diameter: 0.58

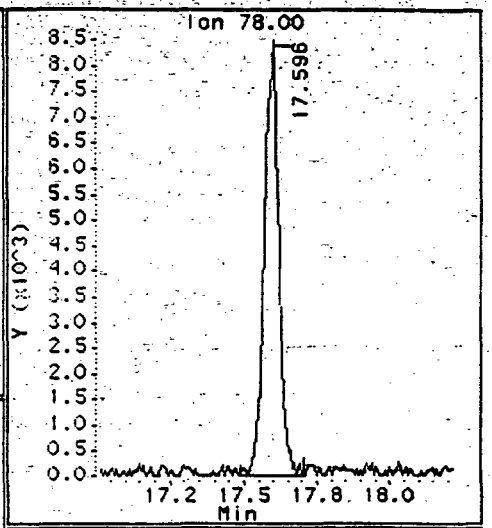
40 Benzene

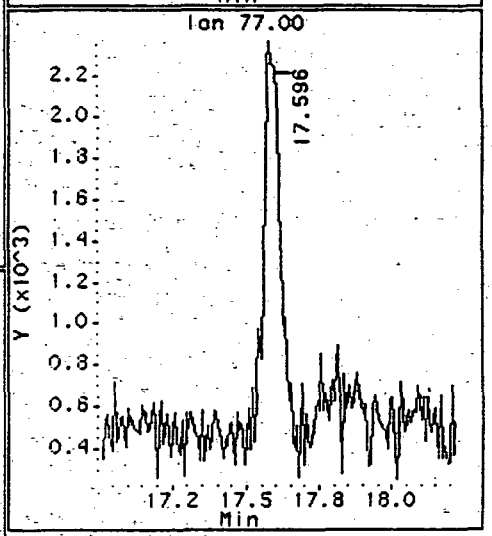












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

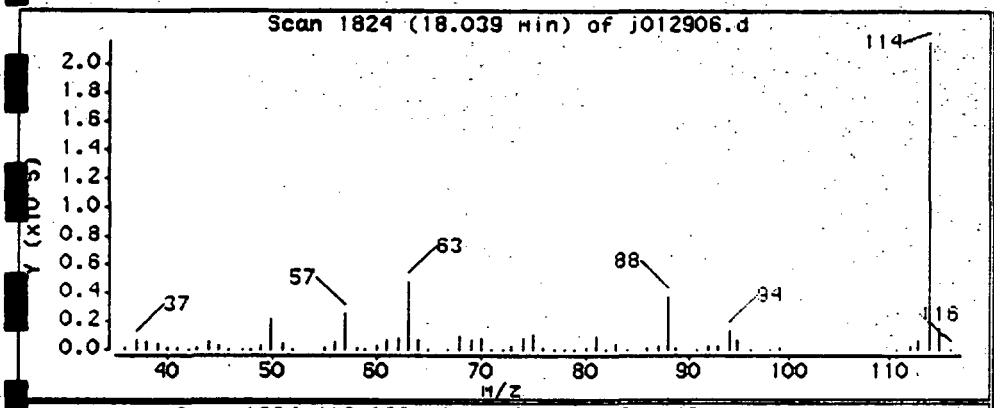
Sample Info: 500mL Can#419

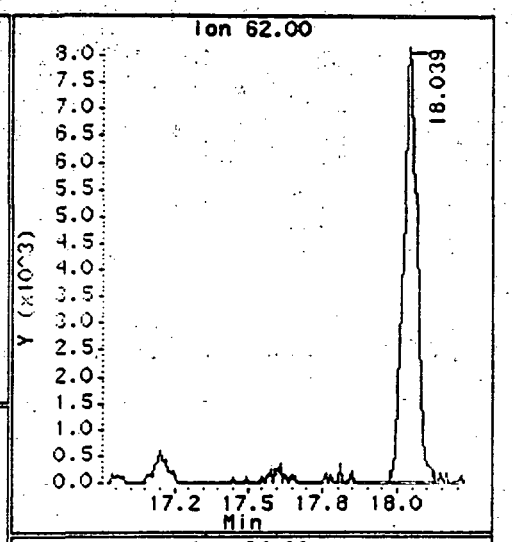
Operator: MH

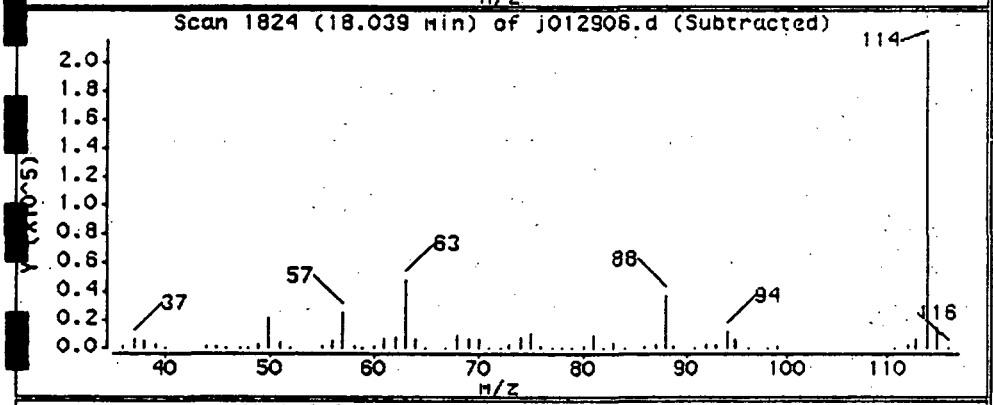
Column phase: RTx-624

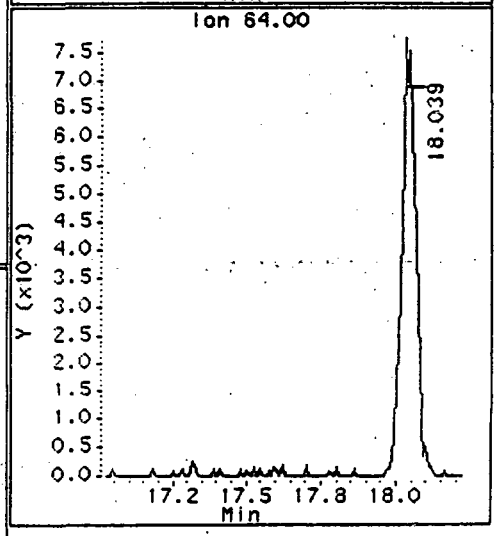
Column diameter: 0.58

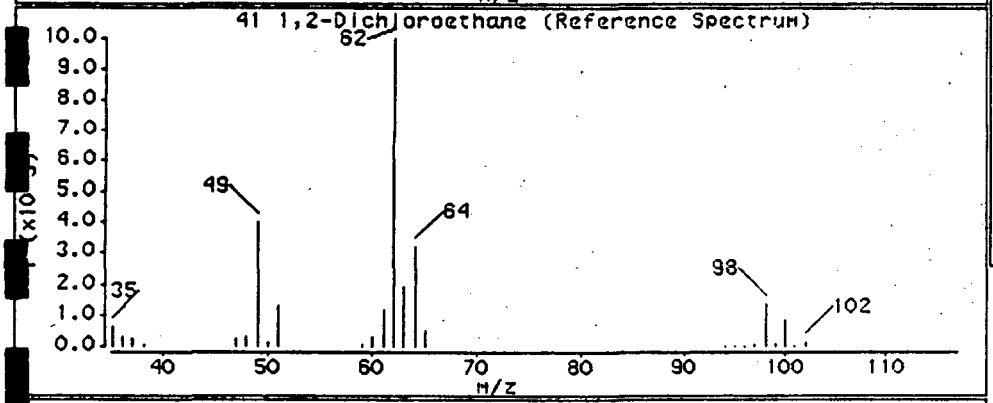
41 1,2-Dichloroethane

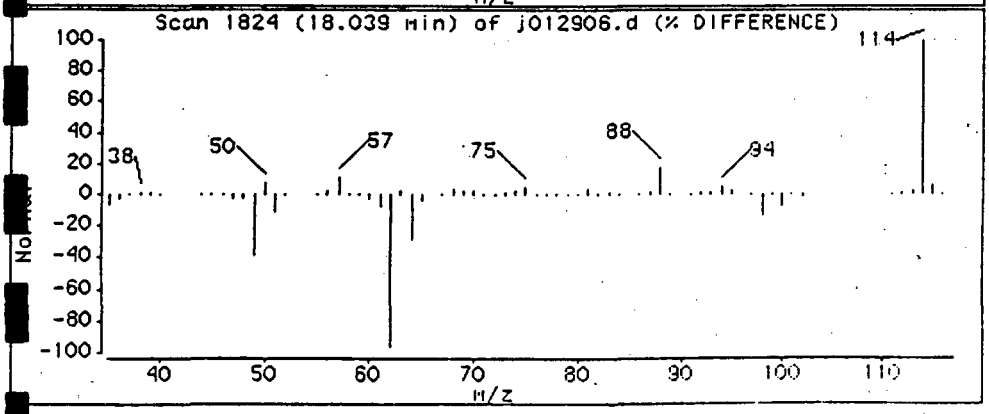












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

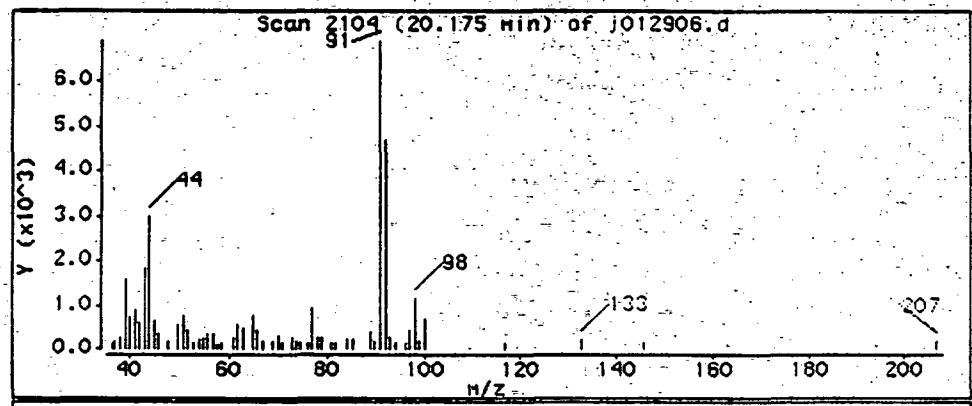
Sample Info: 500mL Can#419

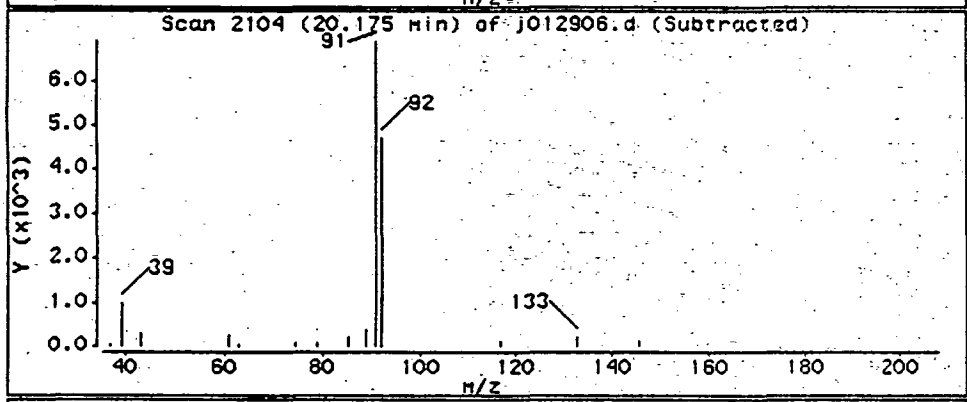
Operator: MH

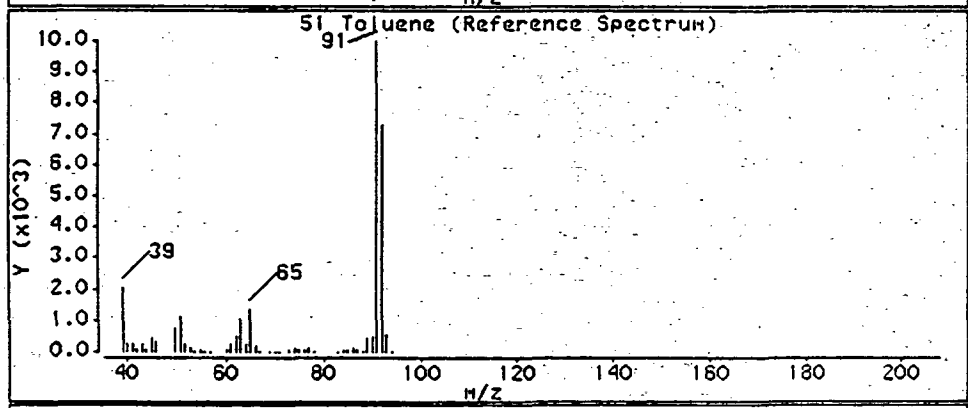
Column phase: RTx-624

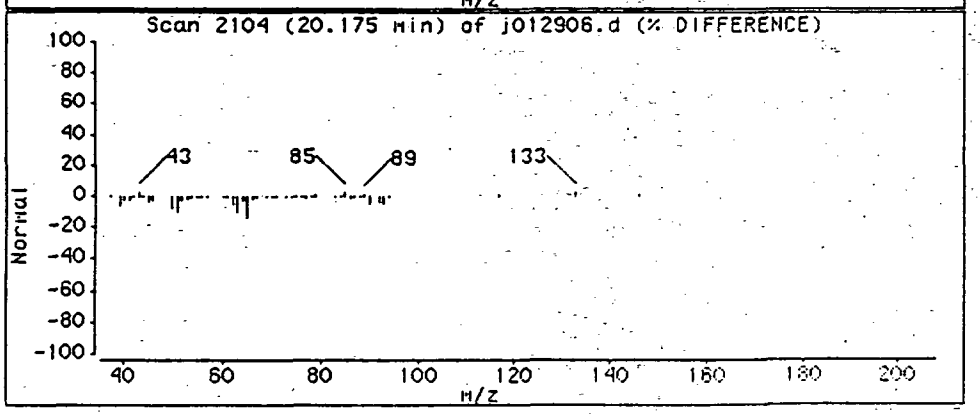
Column diameter: 0.58

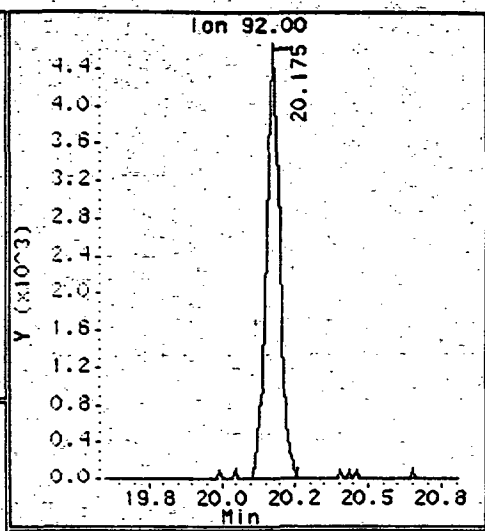
51 Toluene

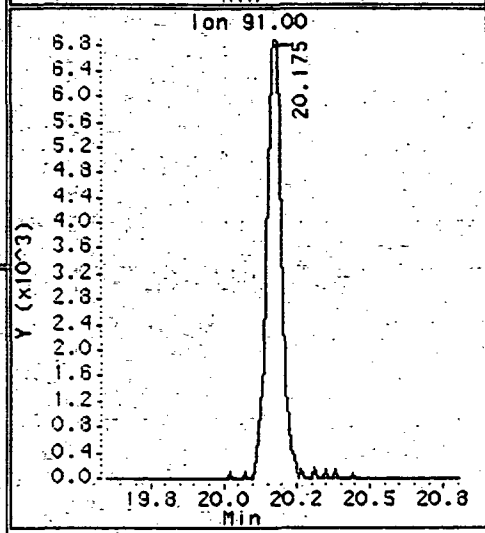












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

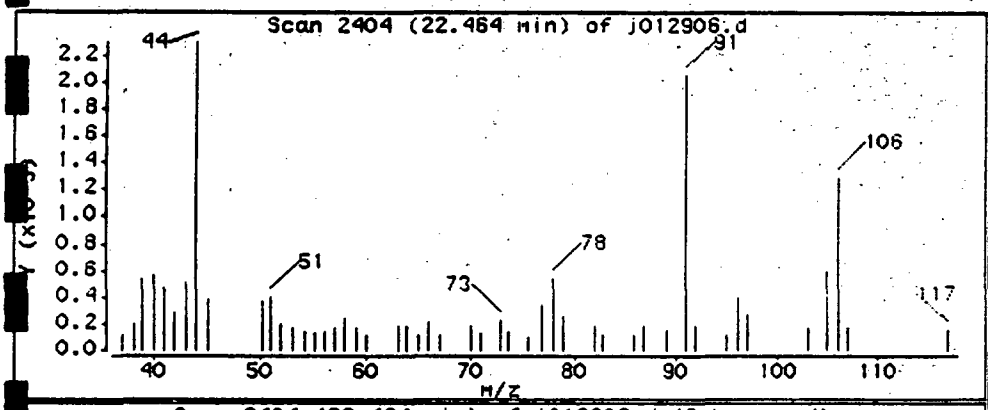
Sample Info: 500mL Can#419

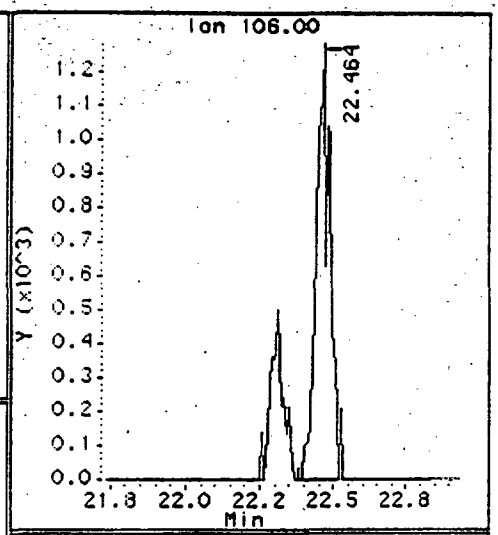
Operator: MH

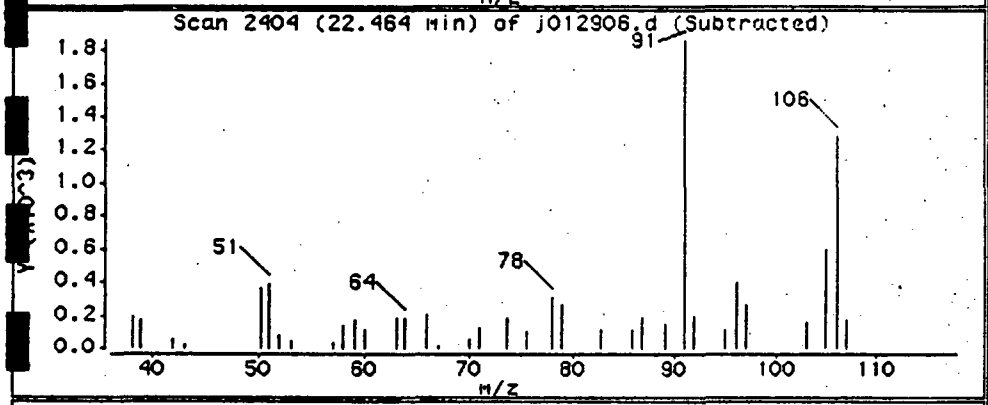
Column phase: RTx-624

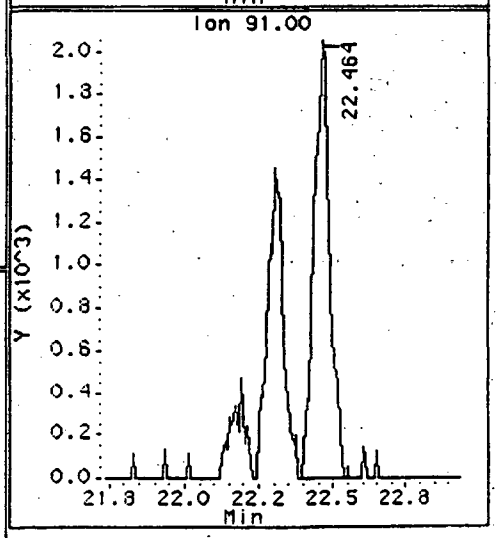
Column diameter: 0.53

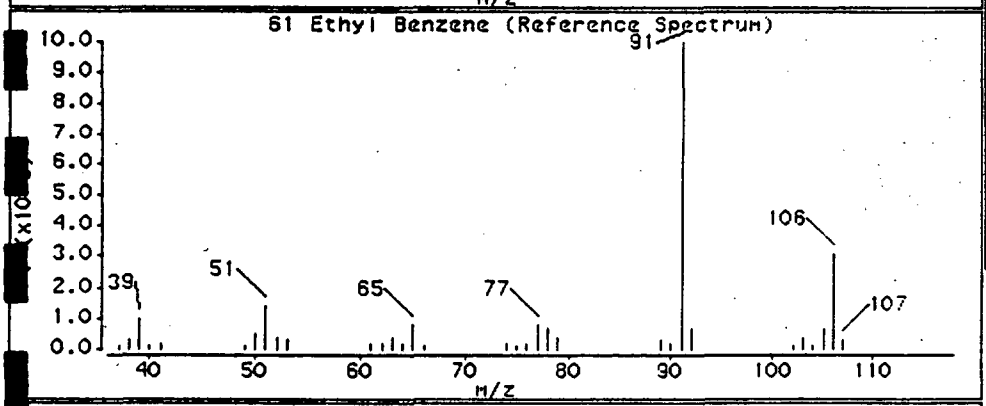
61 Ethyl Benzene

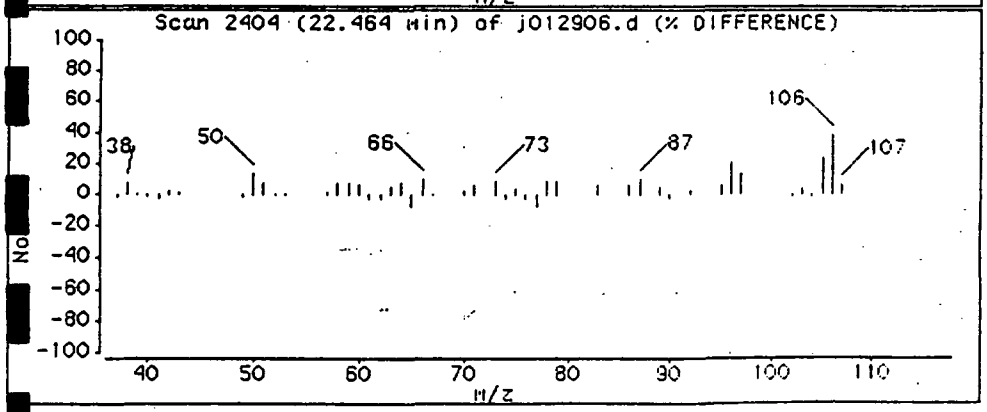












Data File: /chem/msdj.i/j-29jan.b/j012906.d

Date : 29-JAN-1997 12:10

Client ID: 012597U1

Instrument: msdj.i

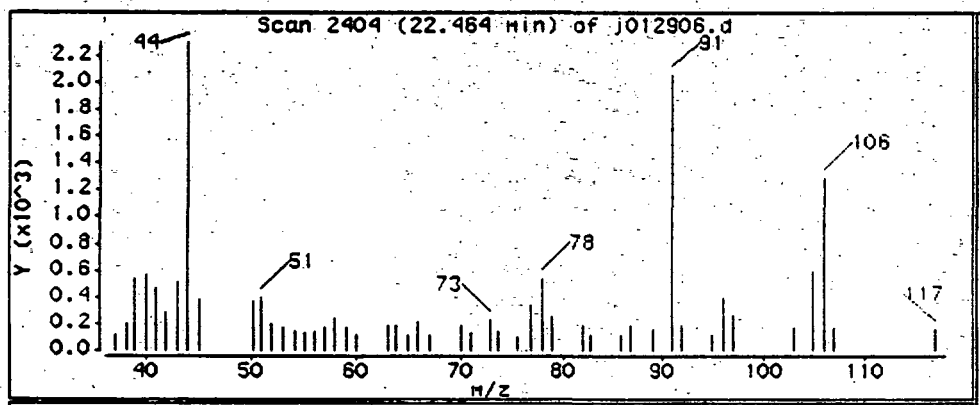
Sample Info: 500mL Can#419

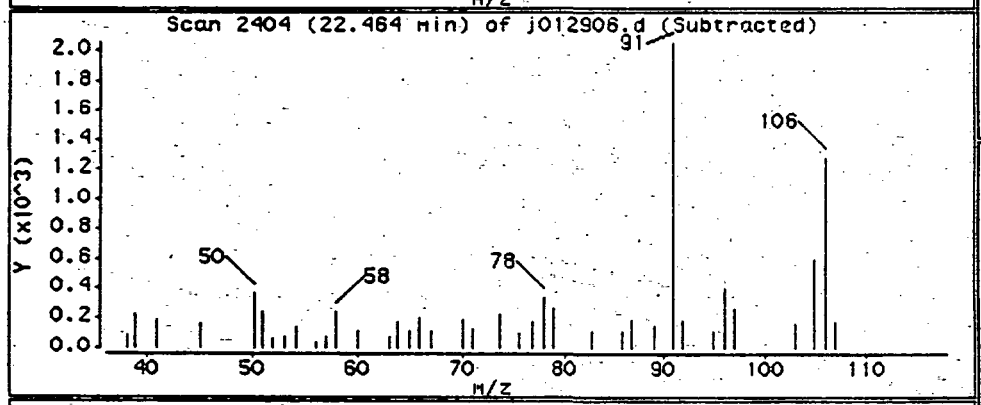
Operator: MH

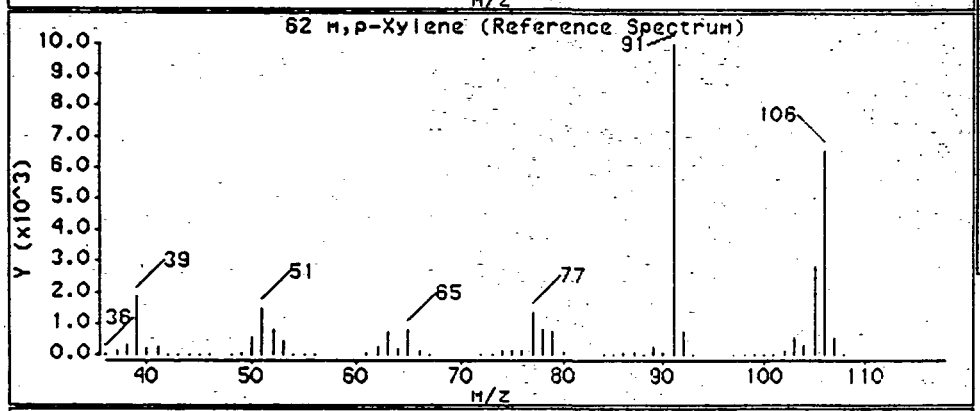
Column phase: RTx-624

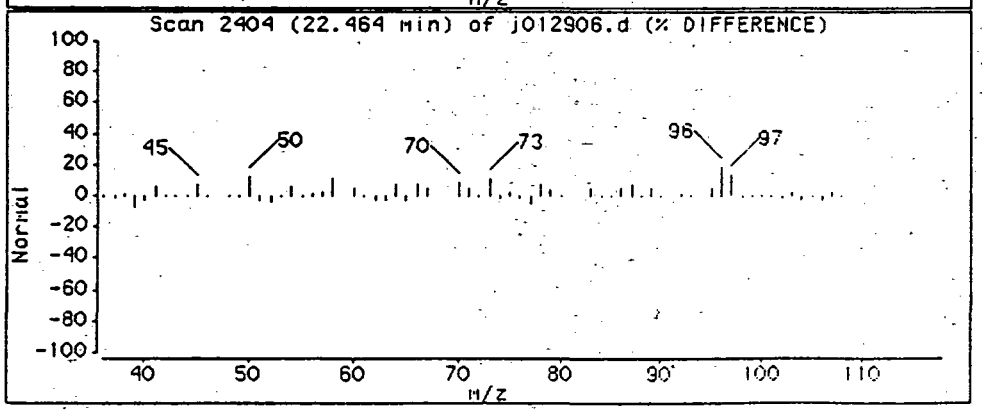
Column diameter: 0.58

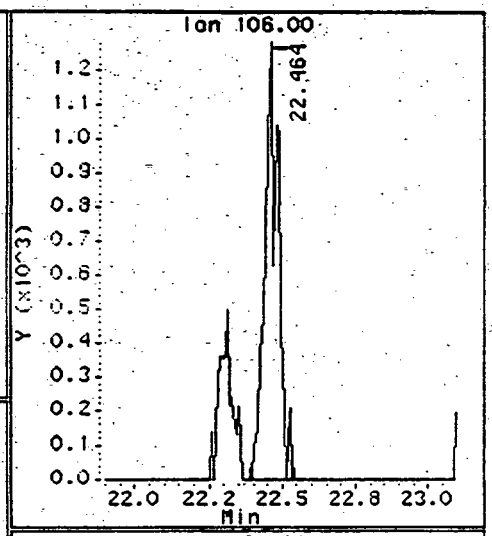
62 m,p-Xylene

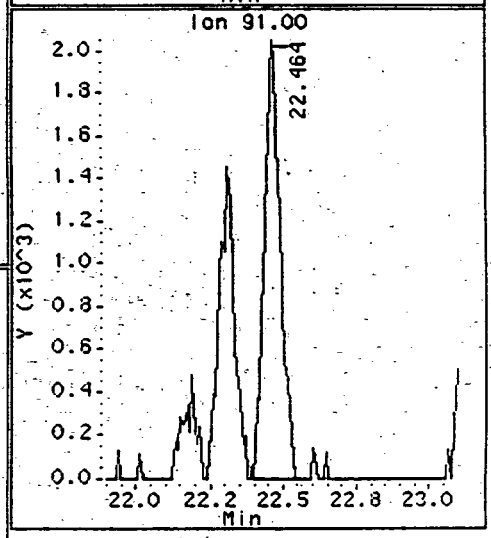






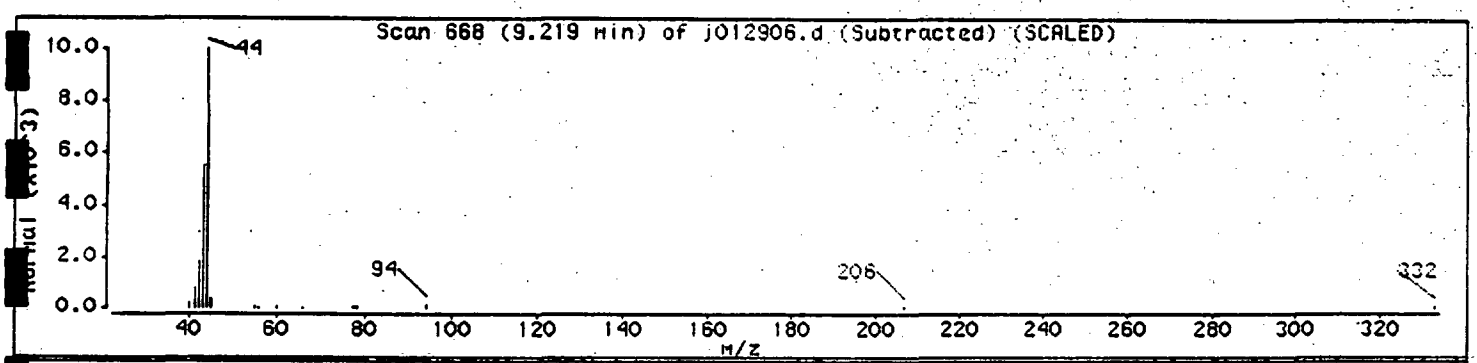


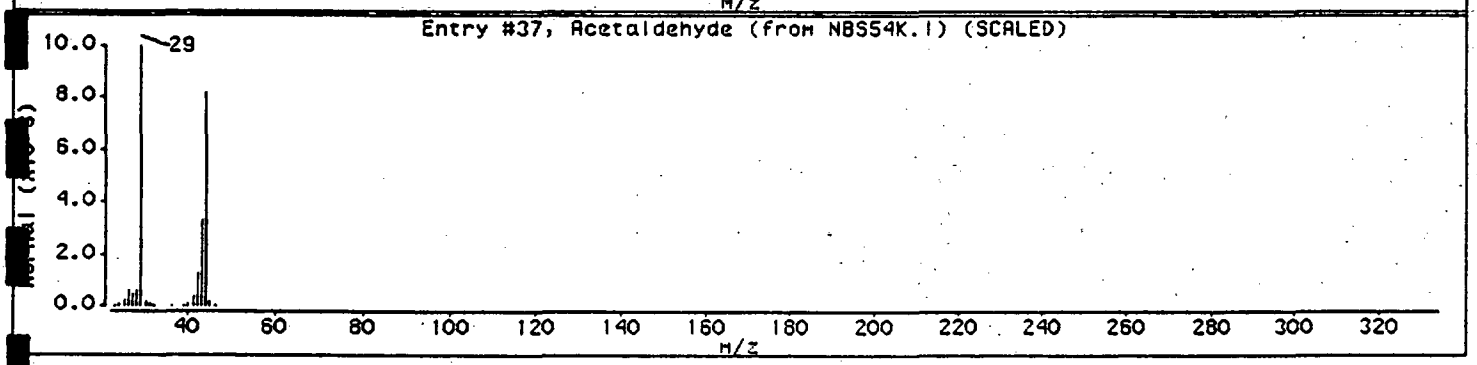




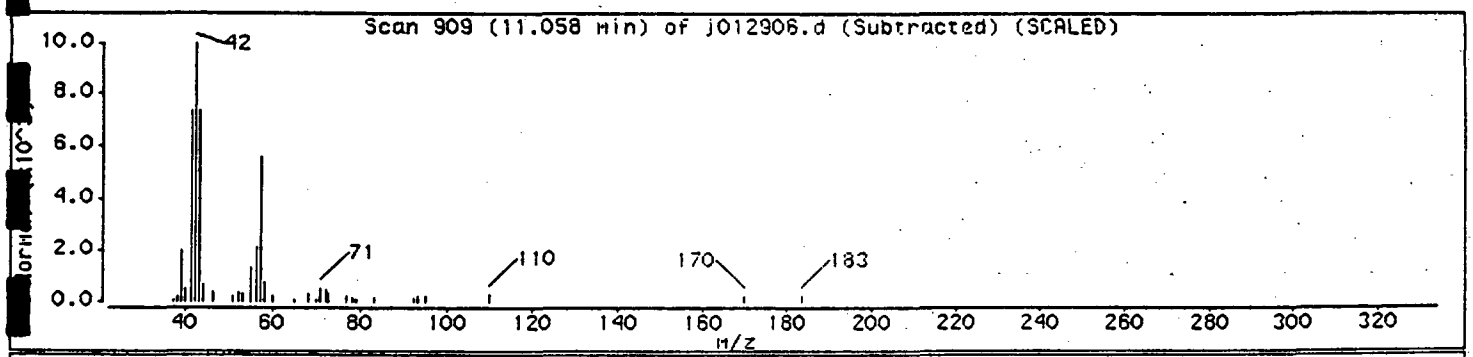
Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624 Column diameter: 0.53

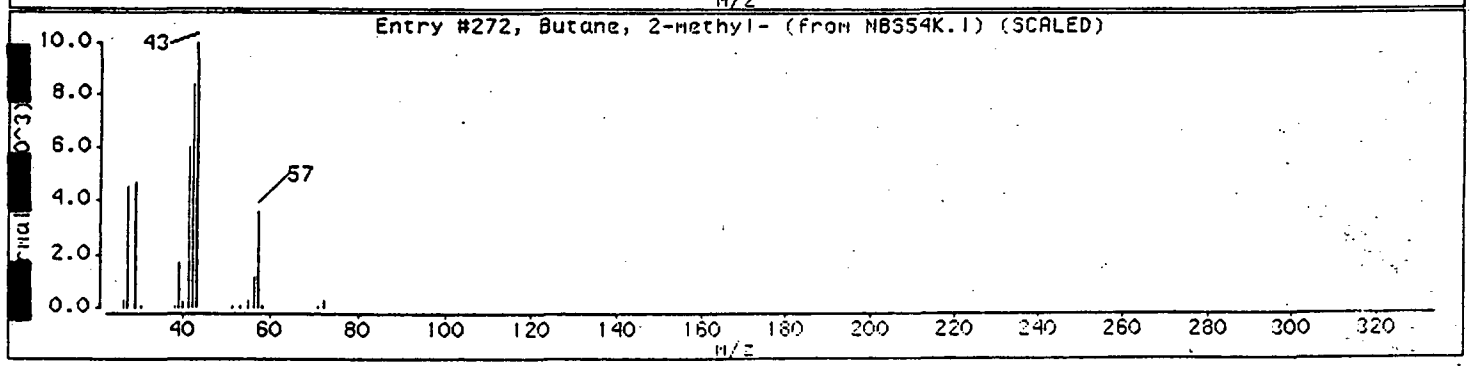
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetaldehyde	75-07-0	NBS54K.I	37	86





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 2-methyl-	78-78-4	NBS54K.I	272	64

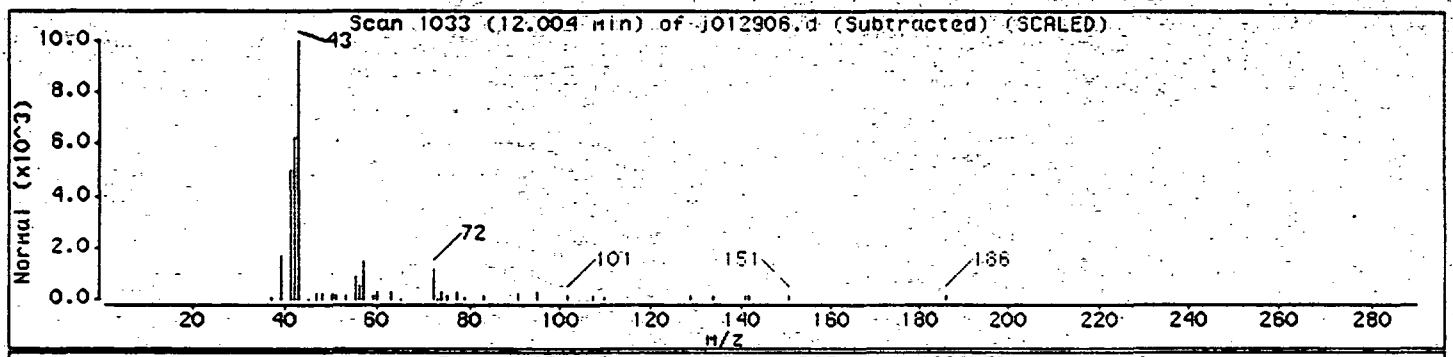


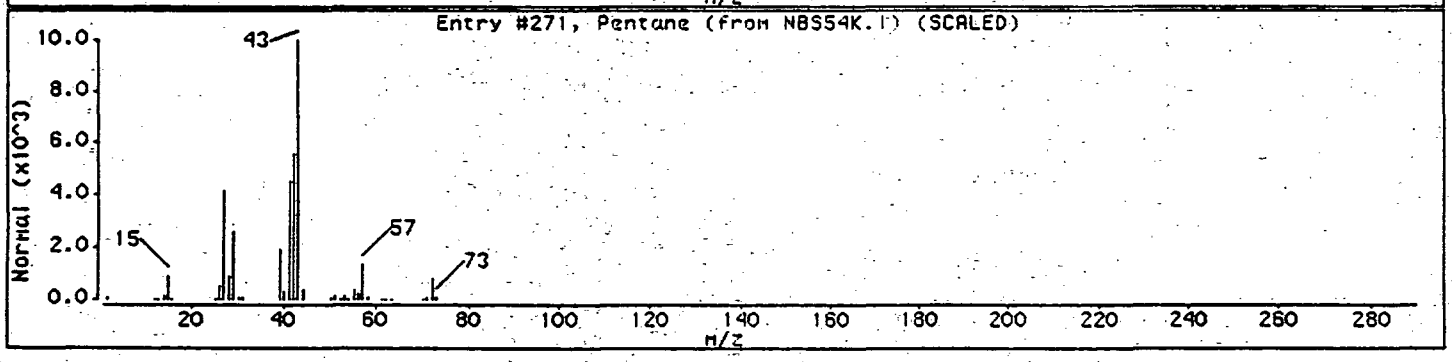


Data File: /chem/msdj.i/j-29jan.b/j012906.d

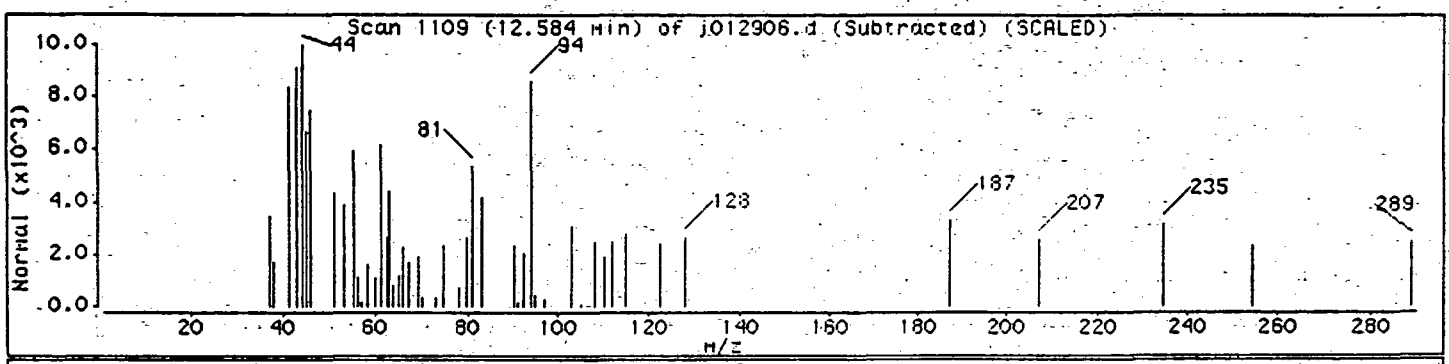
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentane	109-66-0	NBS54K.I	271	72





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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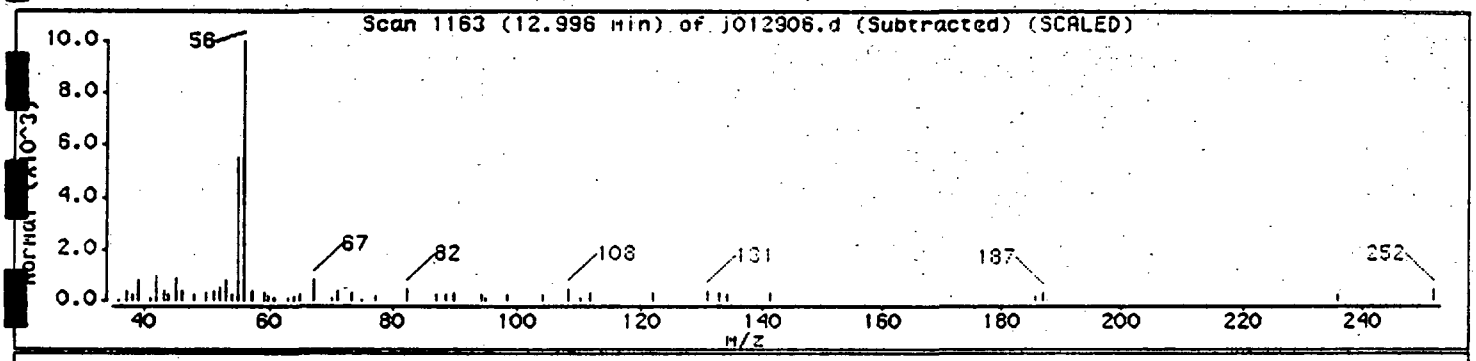
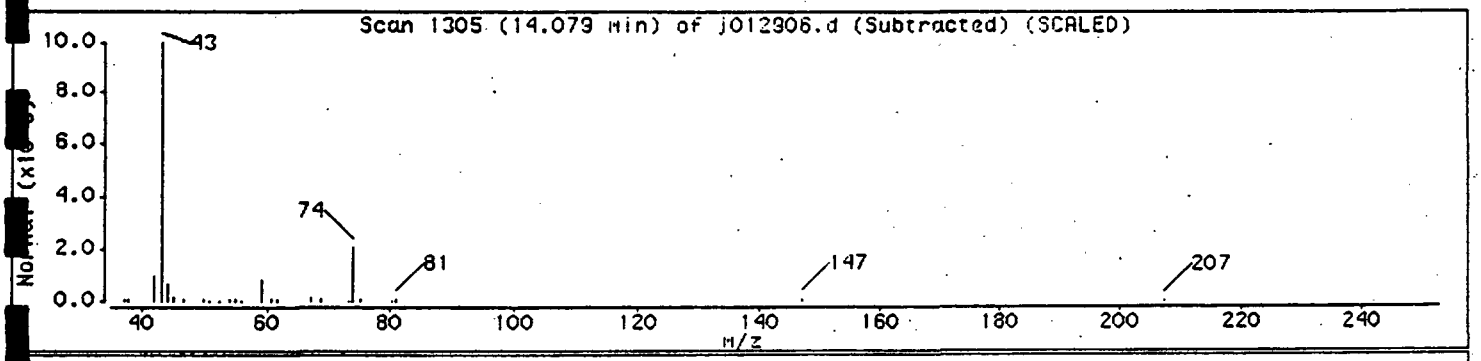
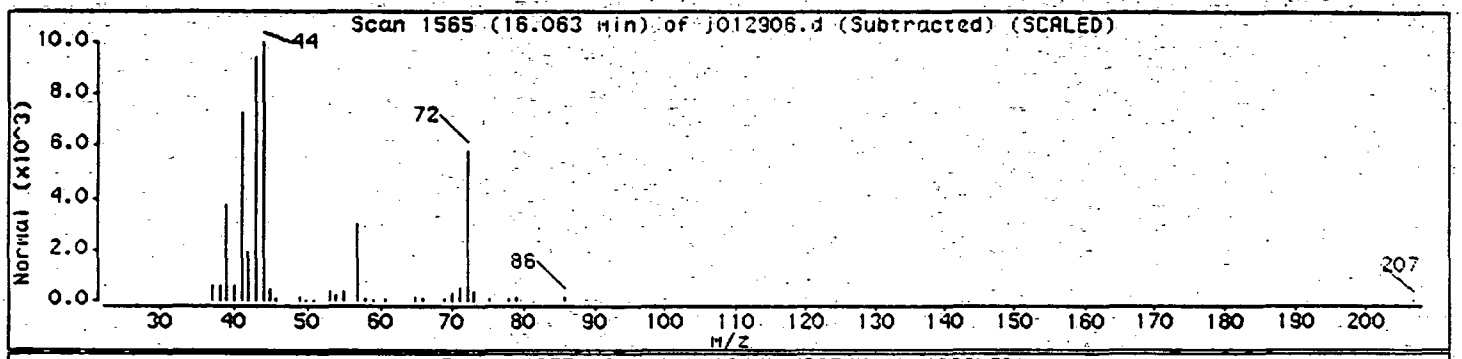


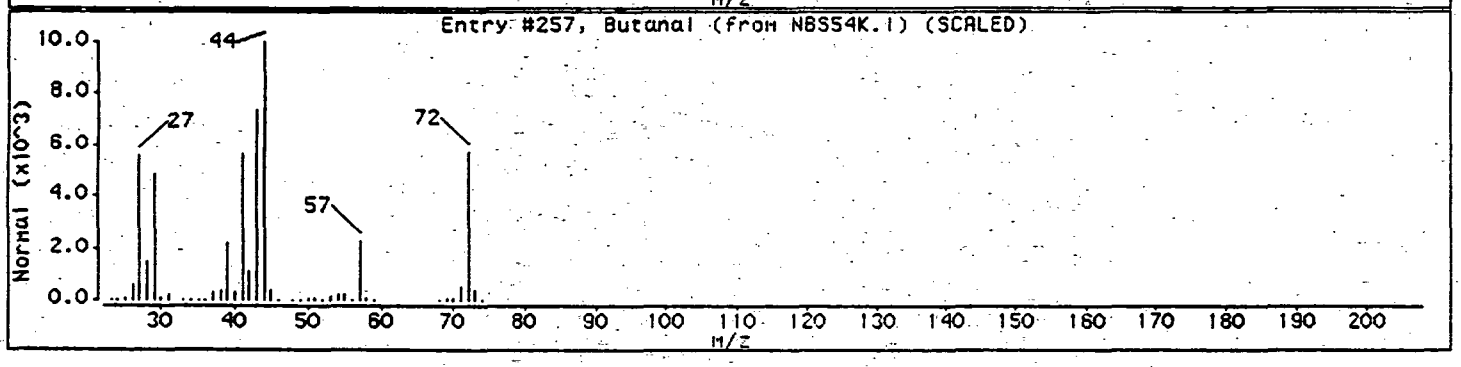
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butanal	123-72-8	NBS54K.I	257	91





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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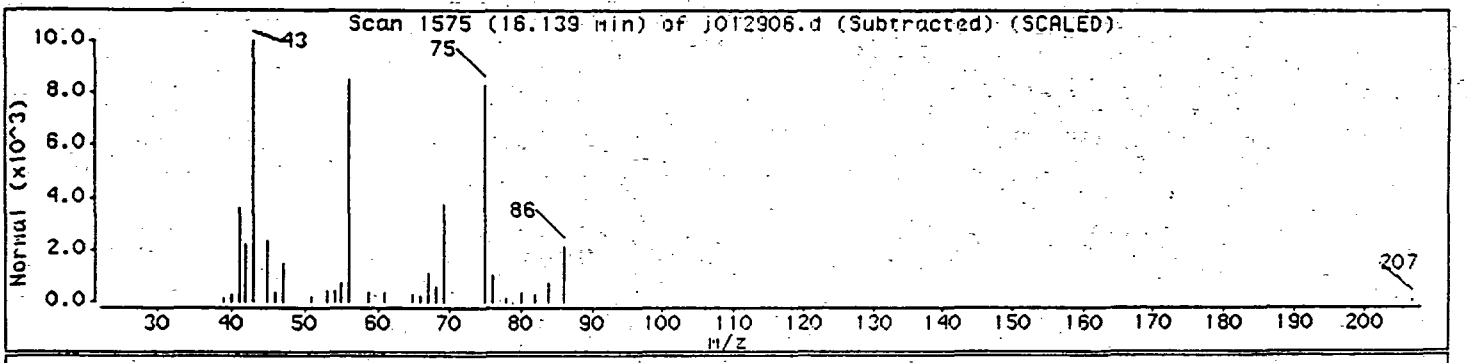
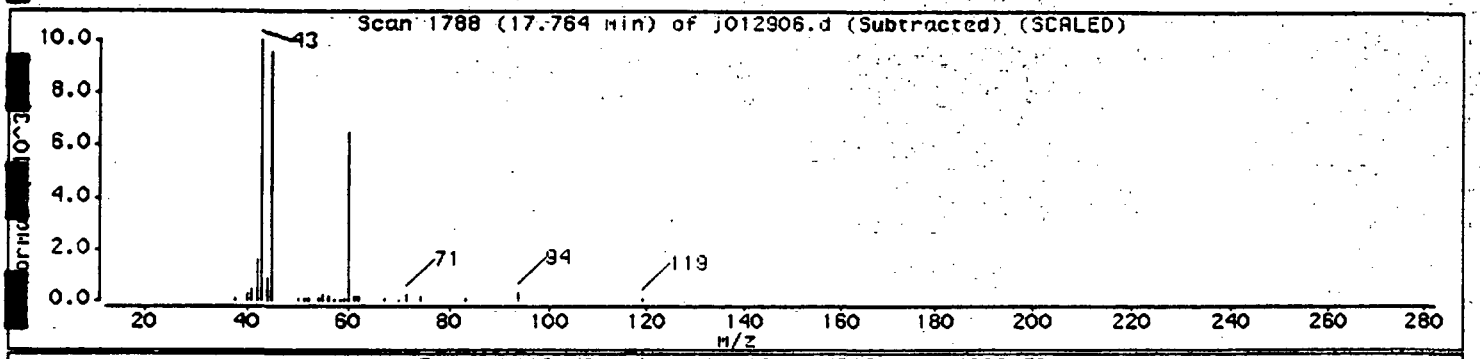
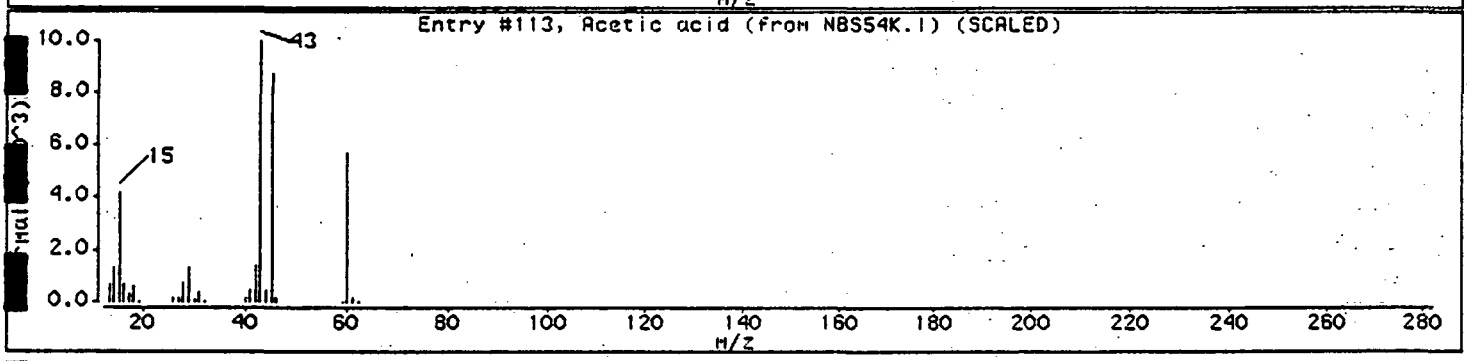


Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624

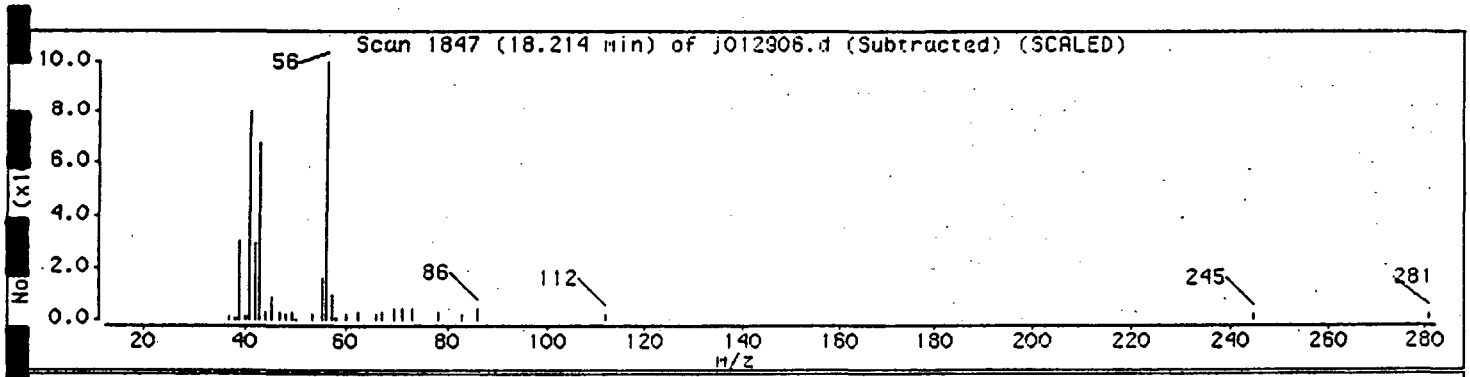
Column diameter: 0.58

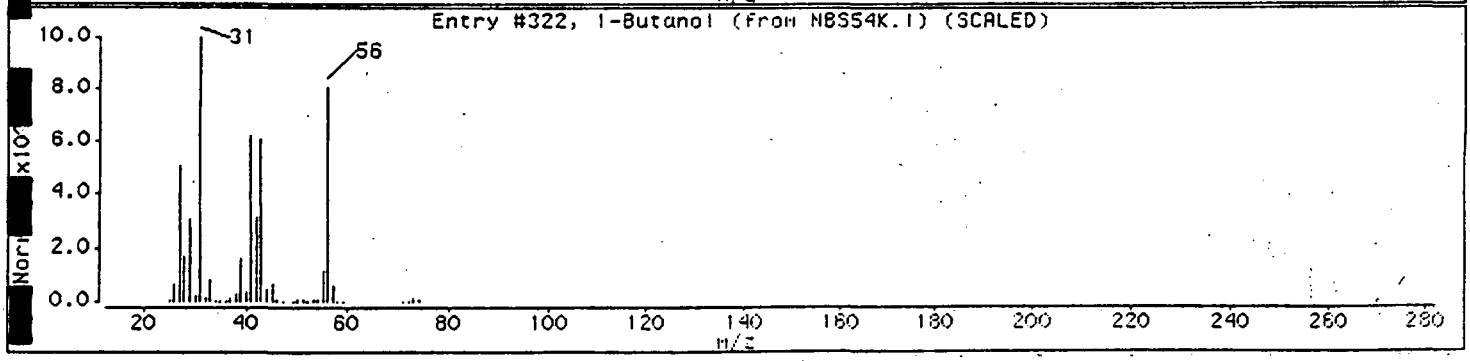
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetic acid	64-19-7	NBS54K.I	113	90





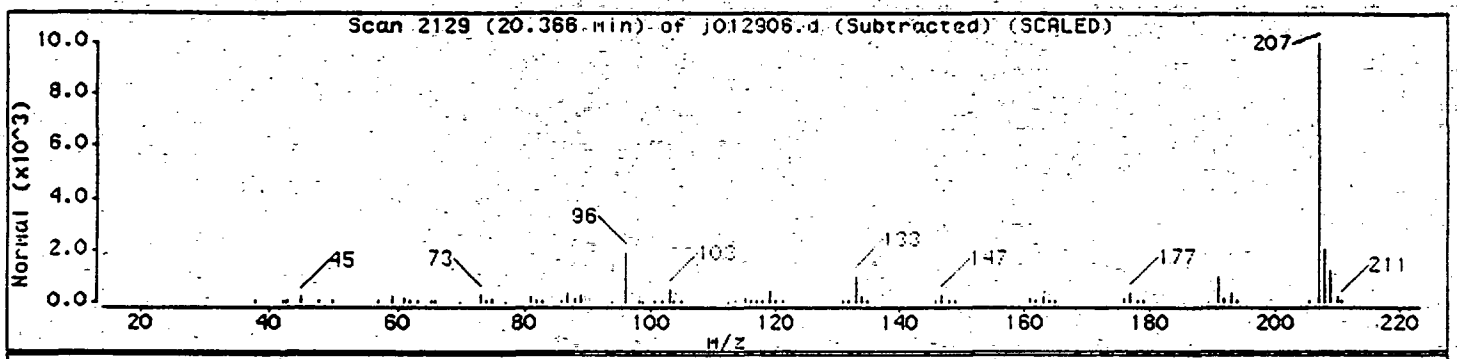
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1-Butanol	71-36-3	NBS54K.I	322	56

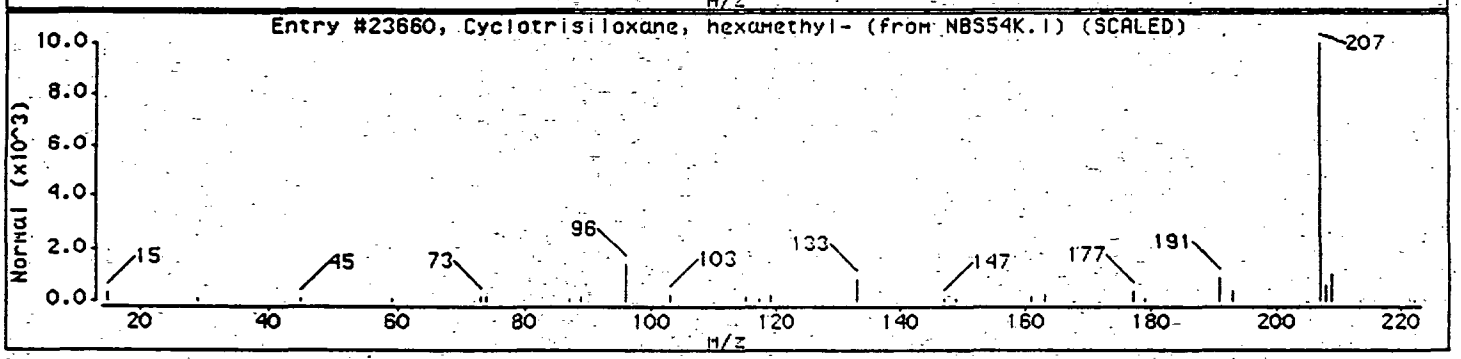




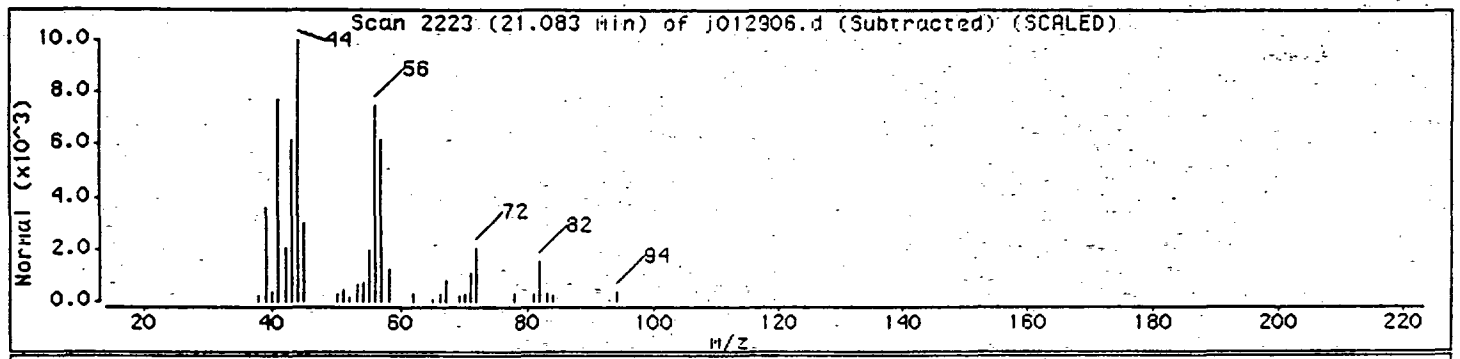
Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624 Column diameter: 0.53

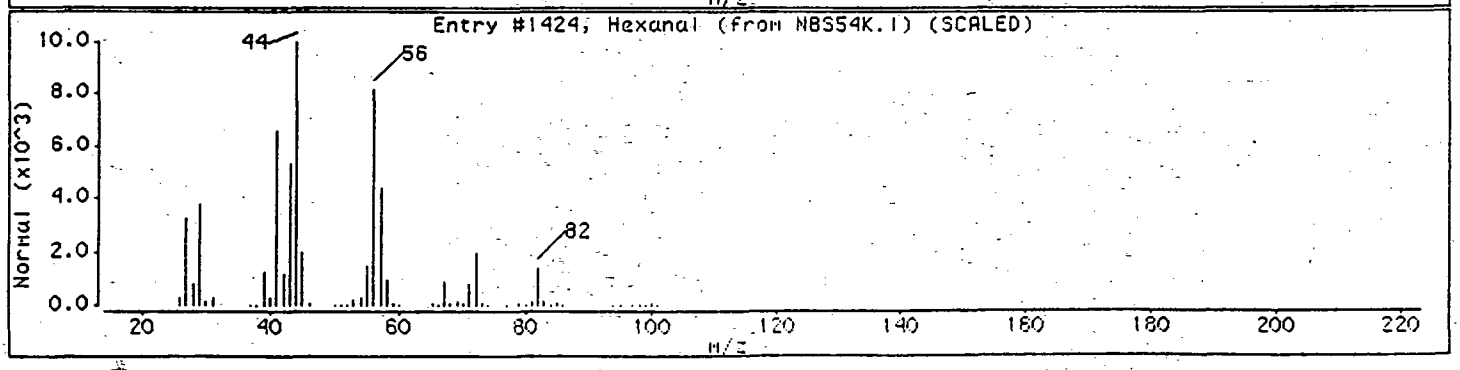
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotrisiloxane, hexamethyl-	541-05-9	NBS54K.I	23660	72





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hexanal	66-25-1	NBS54K.I	1424	78

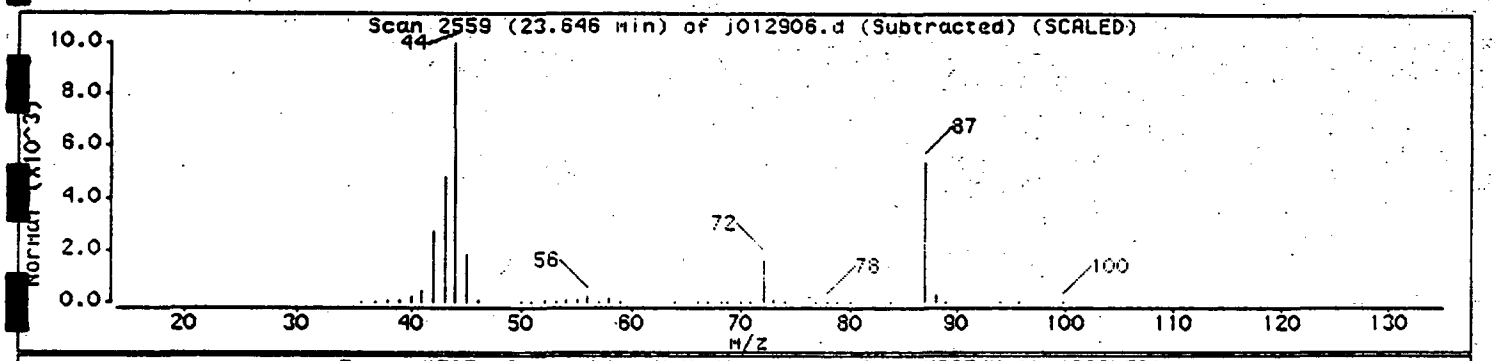


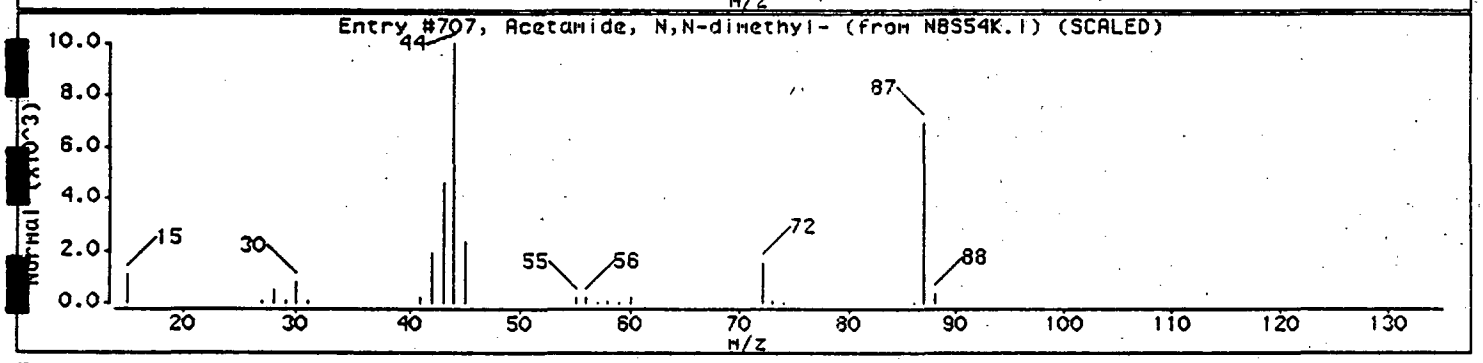


Data File: /chem/msdj.i/j-29jan.b/j012906.d
Date : 29-JAN-1997 12:10
Instrument: msdj.i
Client ID: 012597U1
Column phase: RTx-624

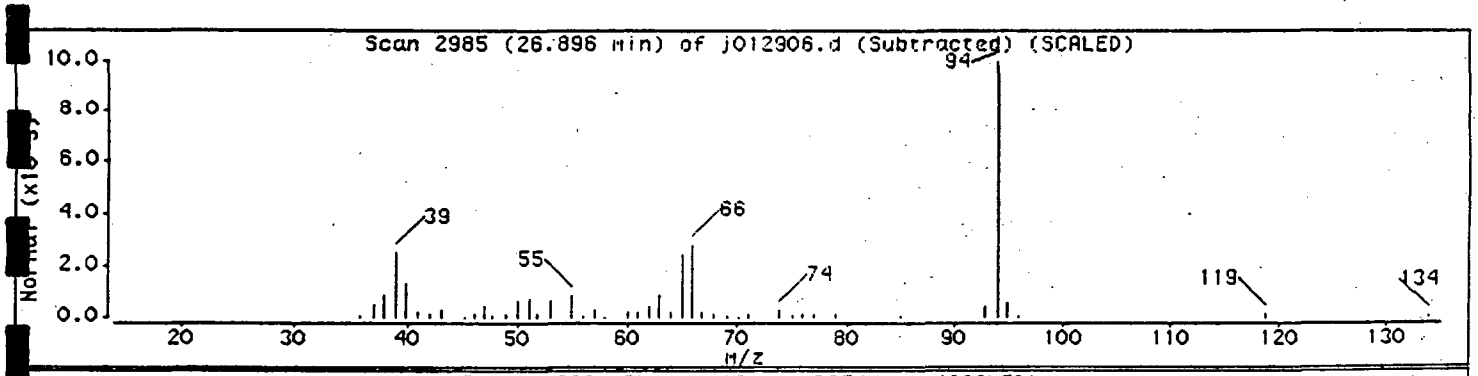
Column diameter: 0.53

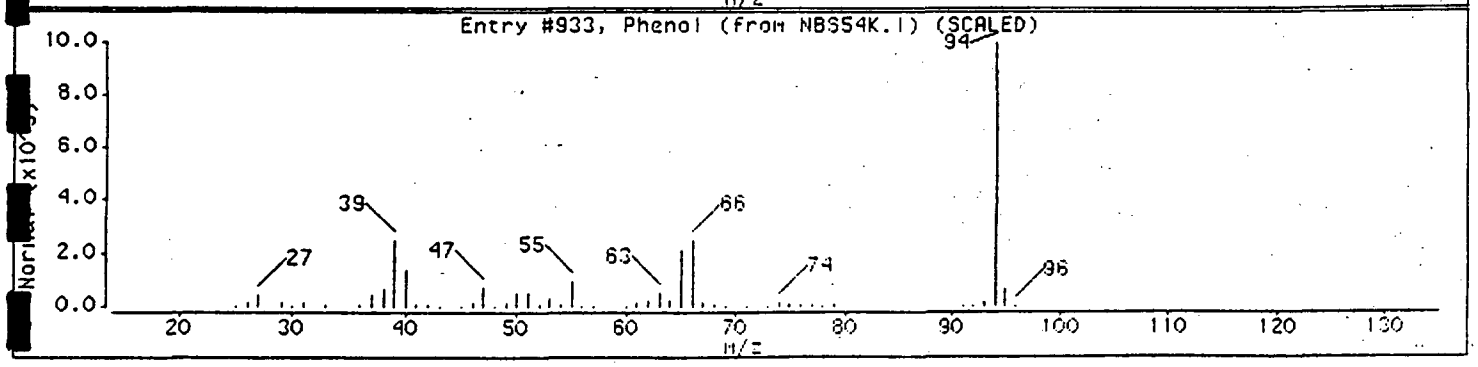
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.I	707	86





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	91





AIR TOXICS LTD.

SAMPLE NAME: 012597U1A

ID#: 9701221-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	1012907	Date of Collection:	1/25/97
Dil. Factor:	1.87	Date of Analysis:	1/29/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.94	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected
Benzene	0.19	0.44
1,2-Dichloroethane	0.19	Not Detected
Trichloroethene	0.19	Not Detected
1,2-Dichloropropane	0.19	Not Detected
Toluene	0.19	0.36
Tetrachloroethene	0.19	Not Detected
Chlorobenzene	0.19	Not Detected
Ethyl Benzene	0.19	Not Detected
m,p-Xylene	0.19	Not Detected
o-Xylene	0.19	Not Detected
Styrene	0.19	Not Detected
Acetone	0.94	3.5
Carbon Disulfide	0.94	1.4
trans-1,2-Dichloroethene	0.94	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	1.6

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	104	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	94	70-130

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Report Date: 29-Jan-1997 13:24

MM 1/29/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012907.d
Lab Smp Id: 9701221-03A Client Smp ID: 012597U1A
Inj Date : 29-JAN-1997 12:54
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#431
Misc Info : 8.5"Hg-5psi Parsons TO14(Short)
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Vials bottle: 1
Vial Factor: 1.870
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.718	16.724 (1.000)	130	159048	5.0			100.00	9242
16.718	16.724 (0.000)	128	36800			23.09- 123.09	23.14	
16.718	16.724 (0.000)	49	85208			123.08- 223.08	53.57	
39 Octafluorotoluene					CAS #: 434-64-0			
17.214	17.235 (1.030)	217	379923	5.2	5.2		100.00	8033
17.214	17.235 (0.000)	186	81056			14.13- 114.13	21.33	
43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.045	18.067 (1.000)	114	682352	5.0			100.00	9447
18.045	18.067 (0.000)	88	34464			0.00- 67.67	5.05	
50 Toluene-d8					CAS #: 2037-26-5			
20.082	20.111 (1.113)	98	641961	5.2	5.2		100.00	9874
20.082	20.111 (0.000)	70	22080			0.00- 62.02	3.44	
20.082	20.111 (0.000)	100	123600			13.96- 113.96	19.25	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.180	22.209 (1.000)	117	573024	5.0			100.00	9919
22.180	22.209 (0.000)	82	90104			11.09- 111.09	15.72	

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Report Date: 29-Jan-1997 13:24

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene						CAS #: 460-00-4			
24.057	24.086	(1.085)	95	416906	4.7	4.7		100.00	8243
24.057	24.086	(0.000)	174	60496			13.48- 113.48	14.51	
24.057	24.086	(0.000)	176	57448			7.57- 107.57	13.78	
20 Acetone						CAS #: 67-64-1			
13.506	13.413	(0.808)	43	118414	1.9	3.5		100.00	
13.498	13.413	(0.807)	58	34714			0.00- 79.57	29.32	
19 Carbon Disulfide						CAS #: 75-15-0			
13.712	13.550	(0.820)	76	92743	0.77	1.4		100.00	8060
32 2-Butanone						CAS #: 78-93-3			
16.359	16.358	(0.979)	72	14560	0.83	1.6		100.00	7782
16.359	16.358	(0.000)	43	20353			429.69- 529.69	139.79	
16.359	16.358	(0.000)	57	1195			0.00- 82.36	8.21	
40 Benzene						CAS #: 71-43-2			
17.611	17.617	(0.976)	78	30475	0.23	0.44		100.00	9295
17.611	17.617	(0.000)	77	1909			0.00- 74.19	6.26	
51 Toluene						CAS #: 108-88-3			
20.182	20.203	(1.118)	92	15299	0.19	0.36		100.00	6731
20.182	20.203	(0.000)	91	7109			118.56- 218.56	46.47	

Audit History For: /chem/msdj.i/j-29jan.b/j012907.d

MH 1/29/97

Change Date: 29-Jan-97 13:14
Change Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

Change Date: 29-Jan-97 13:14
Change Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Complete Target Compound Processing

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: date
Old Value: 29-JAN-97 12:54
New Value: 29-JAN-1997 12:54
Reason For Change: N/A

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: Misc Information
Old Value:
New Value: 8.5"Hg-5psi Parsons TO14(Short)
Reason For Change: N/A

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: Compound Sublist
Old Value: AT.sub
New Value: Parsons.sub
Reason For Change: N/A

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: Sample Info
Old Value: 9701221-03A 500mL Can#431Parsons 8.5-5psi (012597U1A)
New Value: 500mL Can#431
Reason For Change: N/A

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: Lab ID
Old Value:
New Value: 9701221-03A
Reason For Change: N/A

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: 012597U1A
Reason For Change: N/A

Change Date: 29-Jan-97 13:20
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Quantitation

Change Date: 29-Jan-97 13:21
Change Made by: mhe

Parameter: Best Hit for Methylene Chloride changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:21
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Best Hit for 1,1,1-Trichlorethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #2
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Compound Undetected
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:22
Change Made by: mhe

Parameter: Manual reintegration of 1,2-Dichloroethane (Signal 1)
Old Value: Old Area/Time: 1636 / 17.21
New Value: New Area/Time: 595 / 17.62
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Manual reintegration of 1,2-Dichloroethane (Signal 1)
Old Value: Old Area/Time: 595 / 17.62
New Value: New Area/Time: 1602 / 17.21
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Manual reintegration of Trichloroethene (Signal 1)
Old Value: No previous peak at 18.435
New Value: New Area/Time: 340 / 18.43
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:23
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Manual reintegration of Tetrachloroethene (Signal 1)
Old Value: No previous peak at 20.967
New Value: New Area/Time: 297 / 20.97
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Compound Manually Identified
New Value: New Hit #1

Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Manual reintegration of Chlorobenzene (Signal 1)
Old Value: No previous peak at 22.226
New Value: New Area/Time: 498 / 22.23
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for Ethyl Benzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for m,p-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Manual reintegration of o-Xylene (Signal 1)
Old Value: No previous peak at 23.134
New Value: New Area/Time: 1329 / 23.13
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Manual reintegration of o-Xylene (Signal 1)
Old Value: Old Area/Time: 1329 / 23.13
New Value: New Area/Time: 1481 / 23.13
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Match for Unknown compound at 6.106 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Match for Unknown compound at 20.372 min. changed.
Old Value: Old match: Cyclotrisiloxane, hexamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.645 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted

Reason For Change: N/A

Change Date: 29-Jan-97 13:24
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.911 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

MM 1/29/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012907.d
Lab Smp Id: 9701221-03A Client Smp ID: 012597U1A
Inj Date : 29-JAN-1997 12:54
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#431
Misc Info : 8.5"Hg-5psi Parsons TO14(Short)
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.870
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.718	16.724 (1.000)	130	159048	5.0			100.00	9242
16.718	16.724 (0.000)	128	36800			23.09- 123.09	23.14	
16.718	16.724 (0.000)	49	85208			123.08- 223.08	53.57	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.214	17.235 (1.030)	217	379923	5.2	5.2		100.00	8033
17.214	17.235 (0.000)	186	81056			14.13- 114.13	21.33	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.045	18.067 (1.000)	114	682352	5.0			100.00	9447
18.045	18.067 (0.000)	88	34464			0.00- 67.67	5.05	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.082	20.111 (1.113)	98	641961	5.2	5.2		100.00	9874
20.082	20.111 (0.000)	70	22080			0.00- 62.02	3.44	
20.082	20.111 (0.000)	100	123600			13.96- 113.96	19.25	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.180	22.209 (1.000)	117	573024	5.0			100.00	9919
22.180	22.209 (0.000)	82	90104			11.09- 111.09	15.72	

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Report Date: 29-Jan-1997 13:20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY	
66 Bromofluorobenzene					CAS #: 460-00-4				
24.057	24.086 (1.085)	95	416906	4.7	4.7		100.00	8243	
24.057	24.086 (0.000)	174	60496			13.48- 113.48	14.51		
24.057	24.086 (0.000)	176	57448			7.57- 107.57	13.78		
20 Acetone					CAS #: 67-64-1				
13.506	13.413 (0.808)	43	118414	1.9	3.5		100.00		
13.498	13.413 (0.807)	58	34714			0.00- 79.57	29.32		
19 Carbon Disulfide					CAS #: 75-15-0				
13.712	13.550 (0.820)	76	92743	0.77	1.4		100.00	8060	
23 Methylene Chloride					CAS #: 75-09-2				
14.322	14.267 (0.857)	84	3943	0.11	0.20		100.00	3477	
14.322	14.267 (0.000)	49	1278			90.13- 190.13	32.41		
14.322	14.267 (0.000)	51	655			0.00- 96.86	16.61		
32 2-Butanone					CAS #: 78-93-3				
16.359	16.358 (0.979)	72	14560	0.83	1.6		100.00	7782	
16.359	16.358 (0.000)	43	20353			429.69- 529.69	139.79		
16.359	16.358 (0.000)	57	1195			0.00- 82.36	8.21		
36 1,1,1-Trichlorethane					CAS #: 71-55-6				
17.084	17.090 (1.022)	97	4455	0.060	0.11		100.00	7295	(a)
17.084	17.090 (0.000)	99	815			14.53- 114.53	18.29		
40 Benzene					CAS #: 71-43-2				
17.611	17.617 (0.976)	78	30475	0.23	0.44		100.00	9295	
17.611	17.617 (0.000)	77	1909			0.00- 74.19	6.26		
41 1,2-Dichloroethane					CAS #: 107-06-2				
18.038	17.624 (1.000)	62	25365	0.50	0.93		100.00	3616	
18.038	17.624 (0.000)	64	5970			0.00- 82.07	23.54		
51 Toluene					CAS #: 108-88-3				
20.182	20.203 (1.118)	92	15299	0.19	0.36		100.00	6731	
20.182	20.203 (0.000)	91	7109			118.56- 218.56	46.47		
61 Ethyl Benzene					CAS #: 100-41-4				
22.478	22.339 (1.013)	106	3955	0.065	0.12		100.00		(aQ)
22.470	22.339 (1.013)	91	8109			296.25- 396.25	205.03		
62 m,p-Xylene					CAS #: 108-38-3				
22.478	22.499 (1.013)	106	4003	0.067	0.13		100.00		(a)
22.470	22.499 (1.013)	91	8162			164.96- 264.96	203.90		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-29jan.b/j012907.d
Lab Smp Id: 9701221-03A Client Smp ID: 012597U1A
Inj Date : 29-JAN-1997 12:54
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#431
Misc Info : 8.5"Hg-5psi Parsons TO14(Short)
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.870 Target Version: 3.12
Integrator: HP RTE Compound Sublist: Parsons.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

ISTD	RT	AREA	AMOUNT
* 33 Bromochloromethane	16.718	1025168	5.000
* 59 Chlorobenzene-d5	22.180	1939627	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(PPBV)	FINAL(PPBV)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
6.106	2.365e+08	1150	2160	0		0	33
Unknown					CAS #:		
8.379	142688	0.70	1.3	0		0	33
Butane					CAS #: 106-97-8		
9.302	271697	1.3	2.5	59	NBS54K.l	98	33
Acetaldehyde					CAS #: 75-07-0		
10.004	361269	1.8	3.3	64	NBS54K.l	37	33

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Report Date: 29-Jan-1997 13:20

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
3-Buten-1-ol					CAS #: 627-27-0		
1.492	130522	0.64	1.2	53	NBS54K.l	256	33
Pentane, 3-methyl-					CAS #: 96-14-0		
14.765	89607	0.44	0.82	56	NBS54K.l	685	33
tanal					CAS #: 123-72-8		
16.092	369477	1.8	3.4	91	NBS54K.l	257	33
clotrisiloxane, hexamethyl-					CAS #: 541-05-9		
20.372	289140	0.74	1.4	72	NBS54K.l	23660	59
etamide, N,N-dimethyl-					CAS #: 127-19-5		
3.645	1685465	4.3	8.1	86	NBS54K.l	707	59
Phenol					CAS #: 108-95-2		
6.911	152723	0.39	0.74	91	NBS54K.l	933	59

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Report Date: 29-Jan-1997 13:20

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j012907.d
Lab Smp Id: 9701221-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: 8.5"Hg-5psi Parsons TO14(Short)

Calibration Date: JAN/29/97
Calibration Time: 0834
Client Smp ID: 012597U1A
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	203762	122257	285267	159048	-21.94
43 1,4-Difluorobenzene	881244	528746	1233742	682352	-22.57
59 Chlorobenzene-d5	706651	423991	989311	573024	-18.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.70	16.20	17.20	16.72	0.09
43 1,4-Difluorobenzene	18.05	17.55	18.55	18.05	0.00
59 Chlorobenzene-d5	22.18	21.68	22.68	22.18	0.00

MM
1/29/97

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Report Date: 29-Jan-1997 13:20

Air Toxics Limited

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 9701221-03A
Level: LOW
Data Type: MS DATA
SpikeList File:
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: 8.5"Hg-5psi Parsons TO14(Short)

Client SDG: j-29jan
Fraction: VOA
Client Smp ID: 012597U1A
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 39 Octafluorotoluene	5.0	5.2	103.10	60-140
$ 50 Toluene-d8	5.0	5.2	103.98	60-140
$ 66 Bromofluorobenzene	5.0	4.7	93.96	60-140

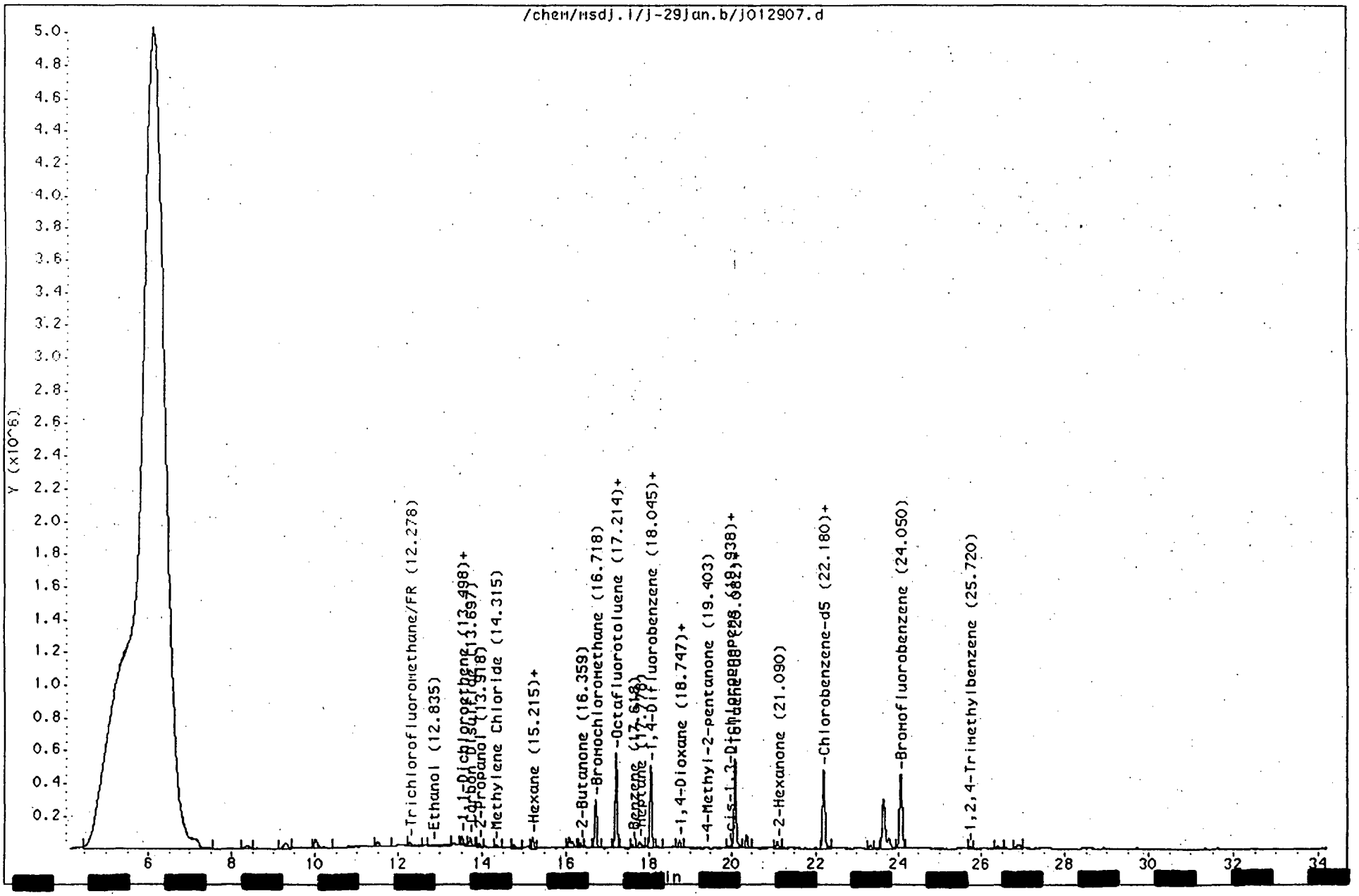
MH 1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012907.d
Date : 29-JAN-1997 12:54
Client ID: 012597U1A
Sample Info: 500mL Can#431

Column phase: RTx-624

Instrument: msdj.i

Operator: MH
Column diameter: 0.58



Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

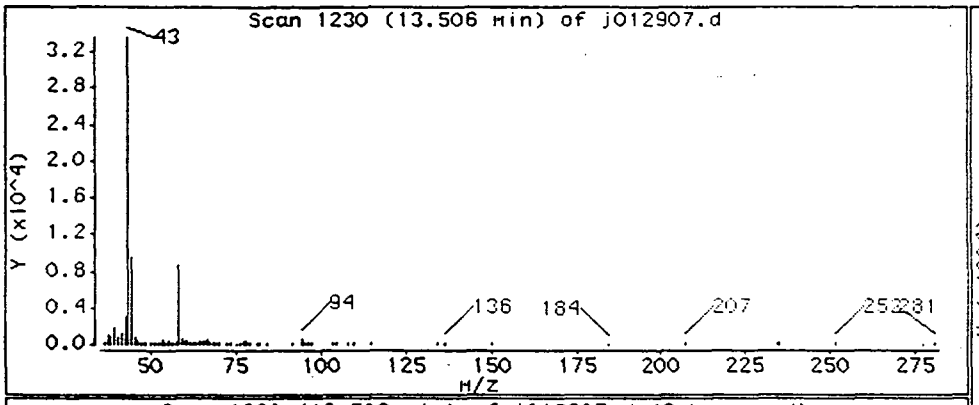
Sample Info: 500mL Can#431

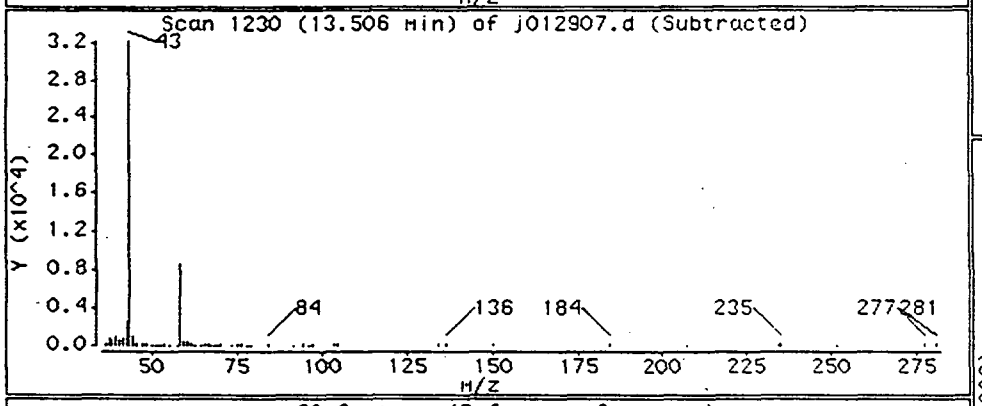
Operator: MH

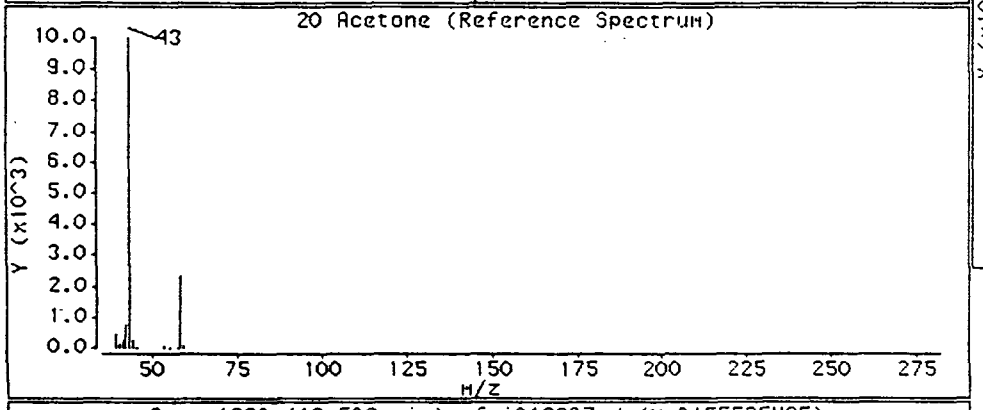
Column phase: RTx-624

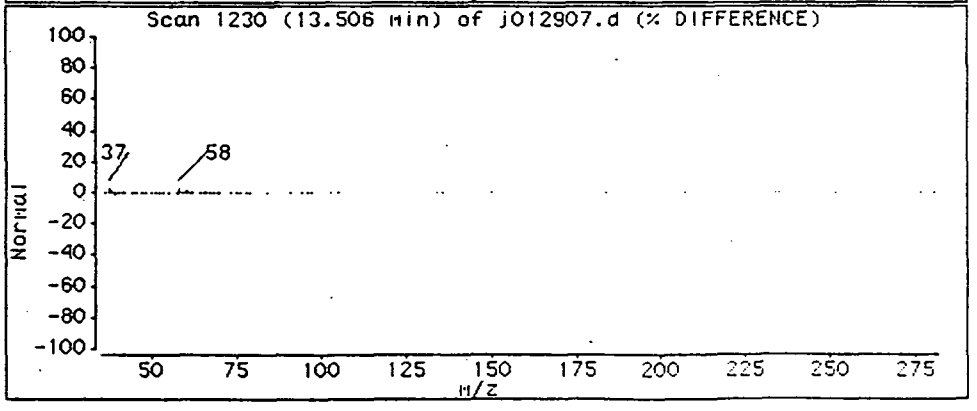
Column diameter: 0.58

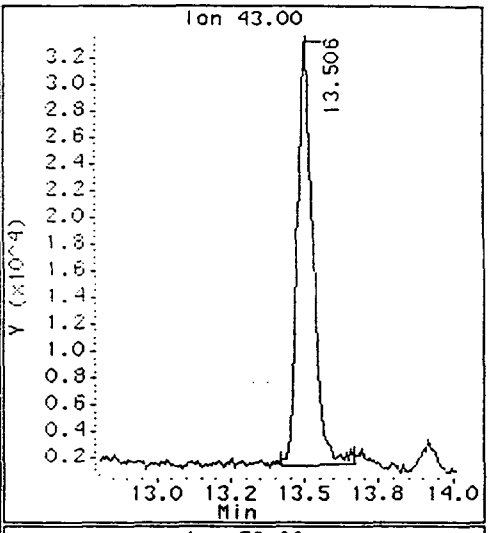
20 Acetone

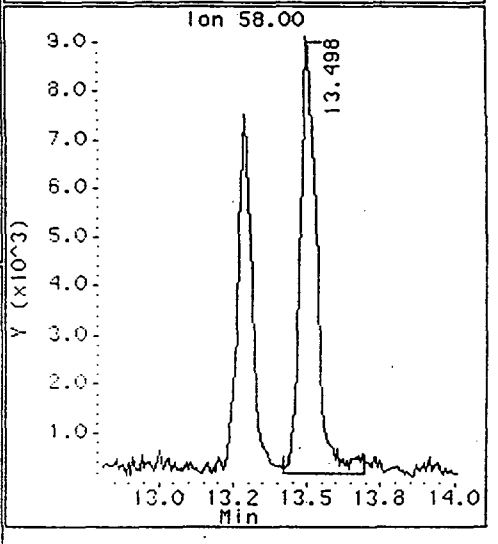












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

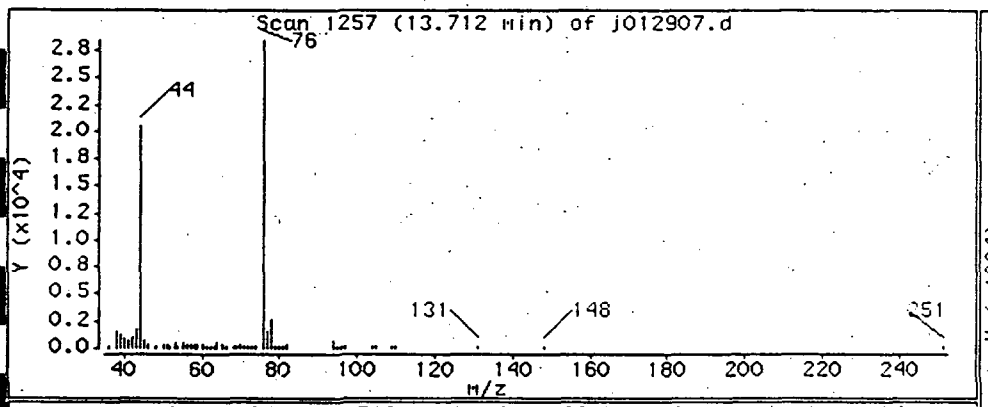
Sample Info: 500mL Can#431

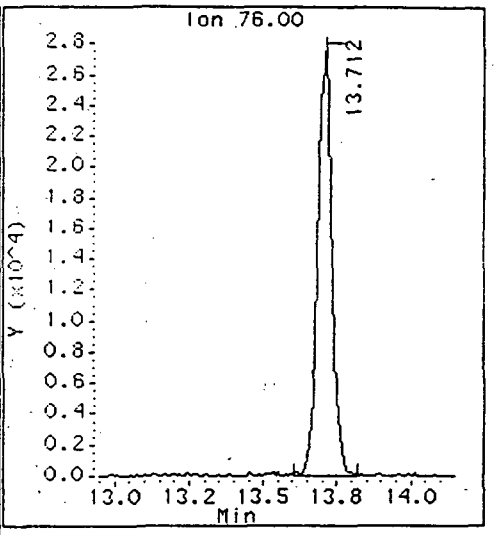
Operator: MH

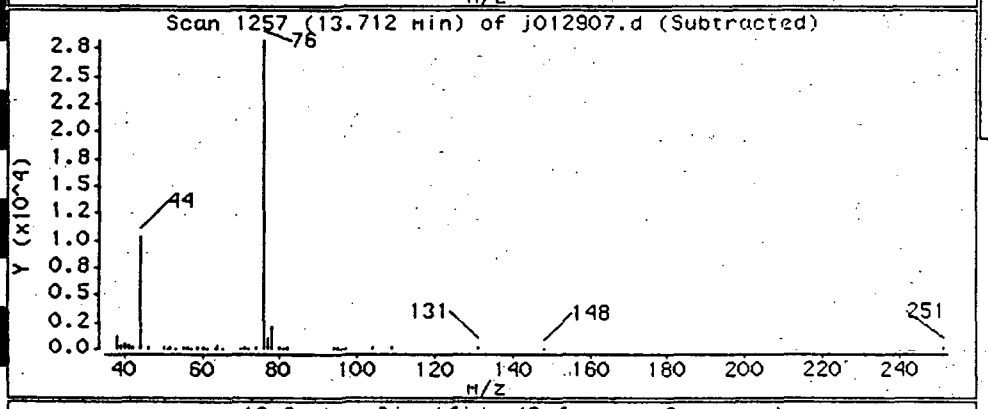
Column phase: RTx-624

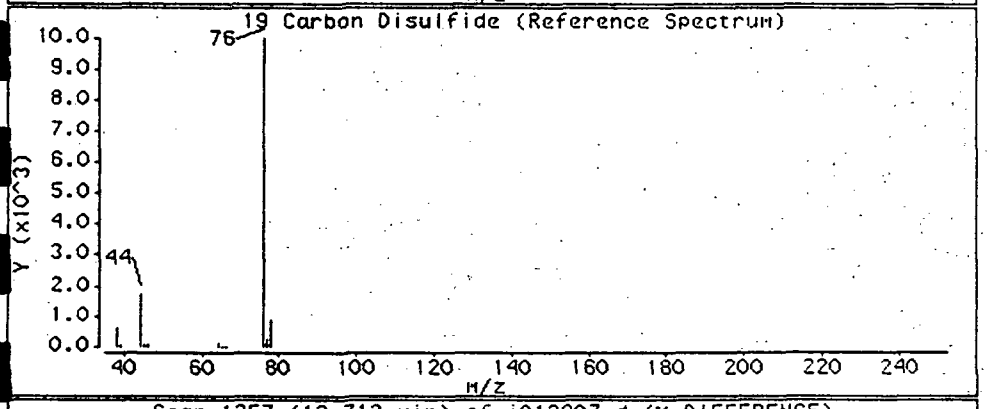
Column diameter: 0.58

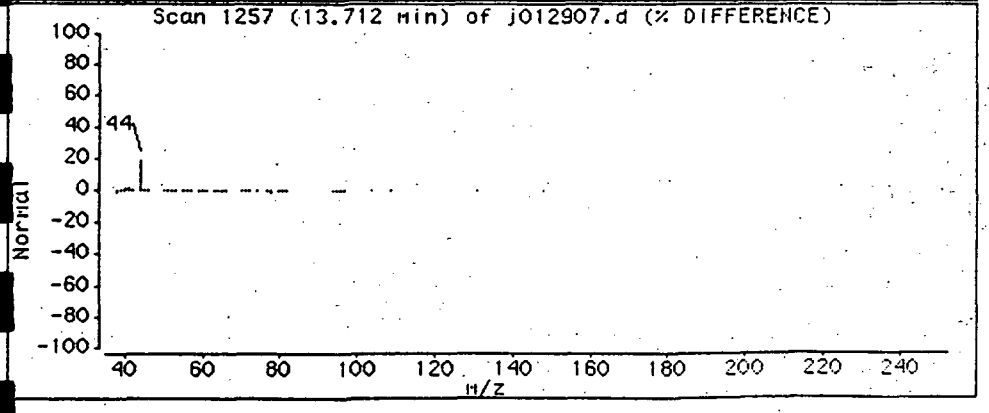
19 Carbon Disulfide











Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

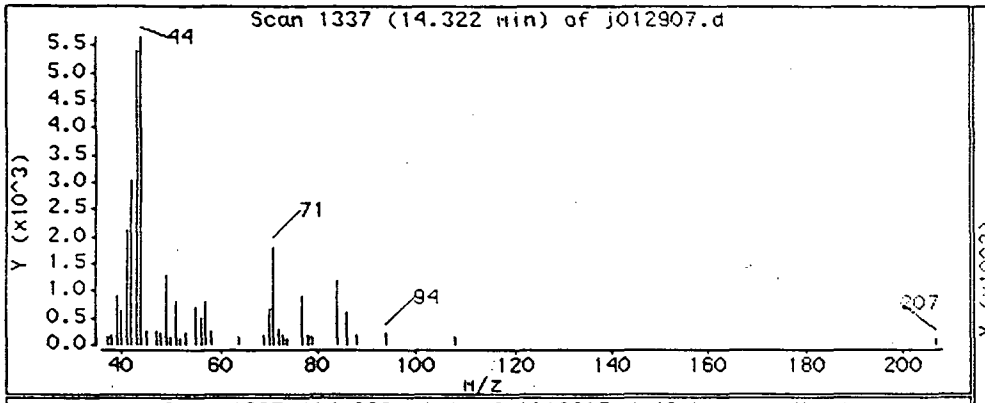
Sample Info: 500mL Can#431

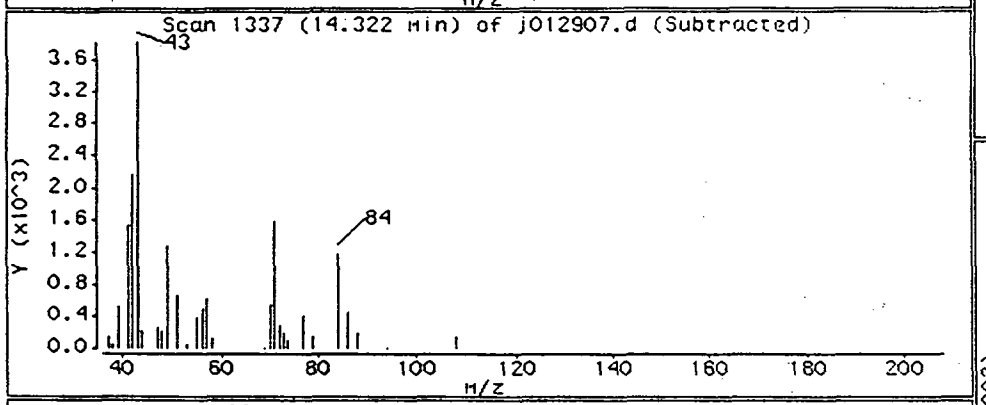
Operator: MH

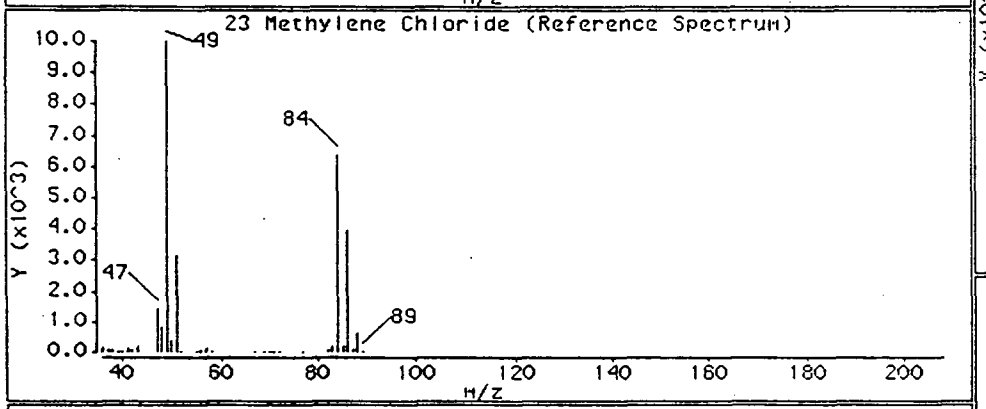
Column phase: RTx-624

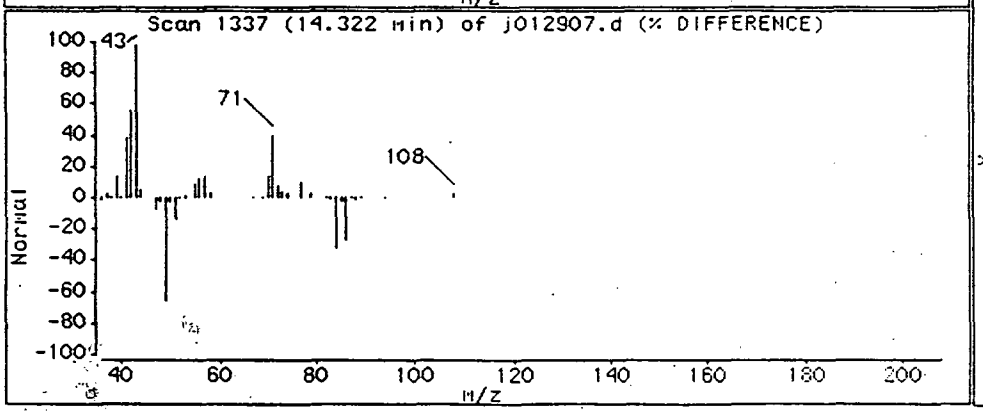
Column diameter: 0.58

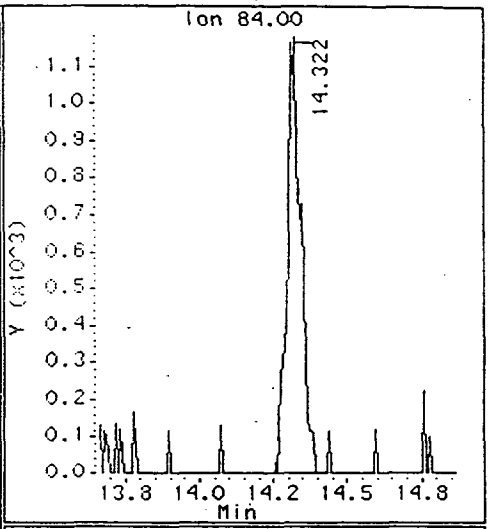
23 Methylene Chloride

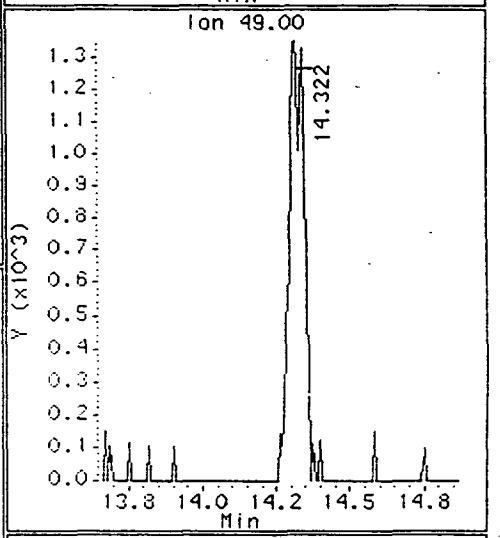


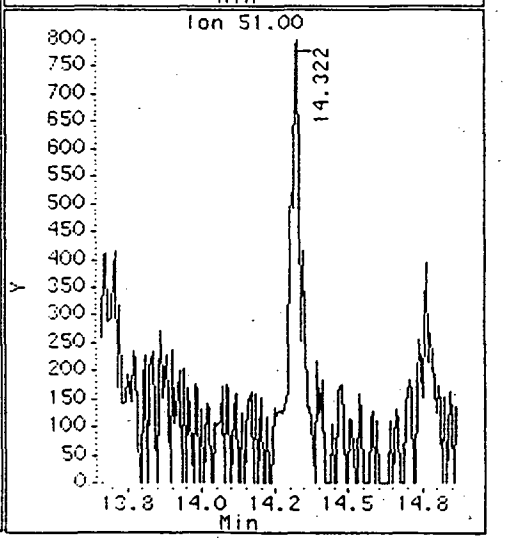












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

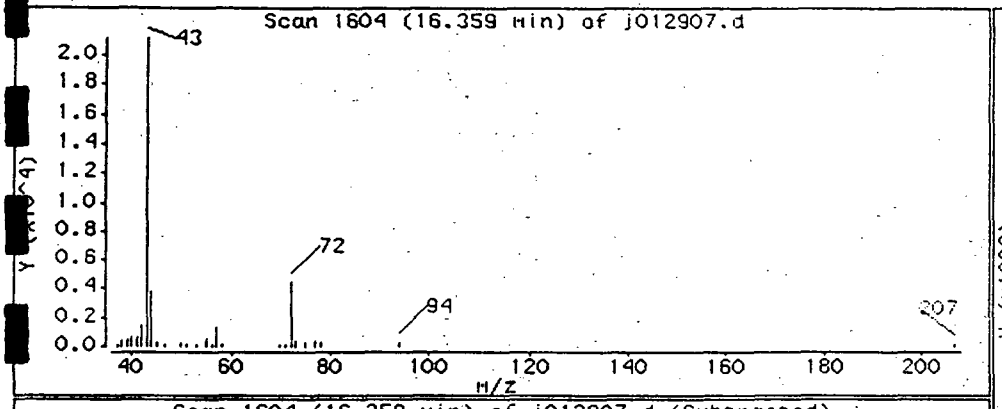
Sample Info: 500mL Can#431

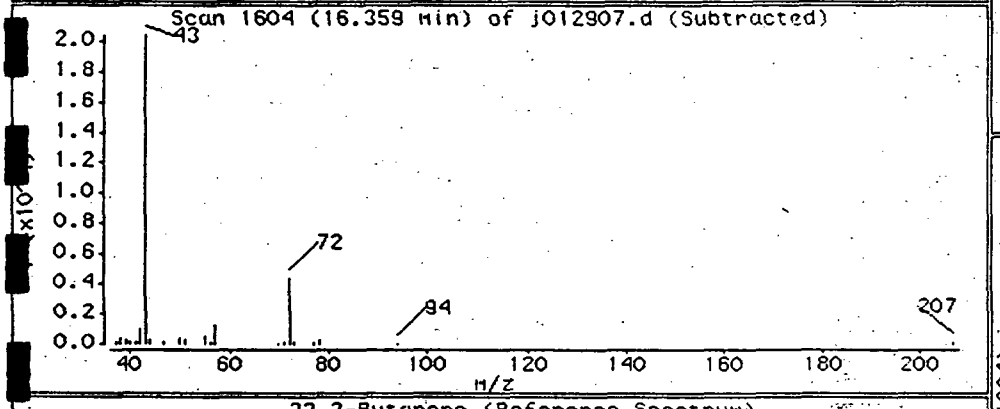
Operator: MH

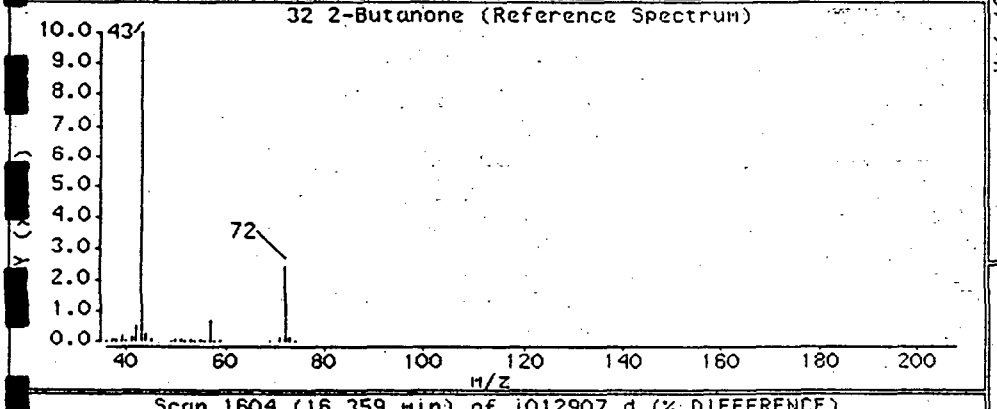
Column phase: RTx-624

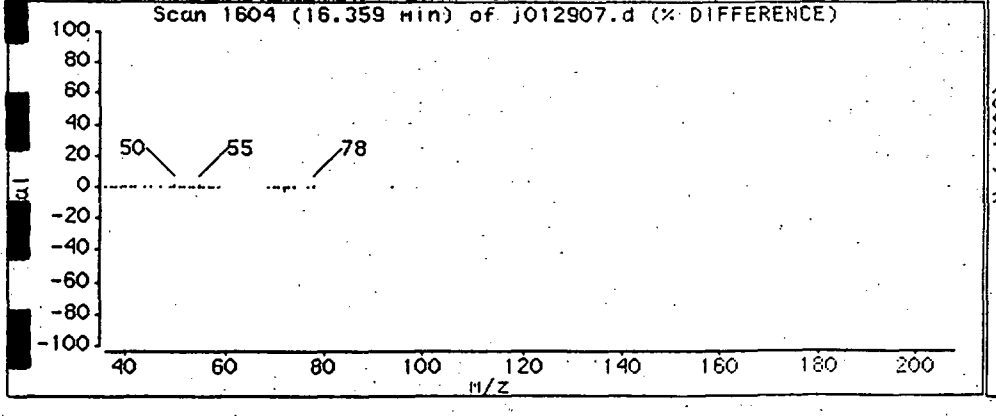
Column diameter: 0.58

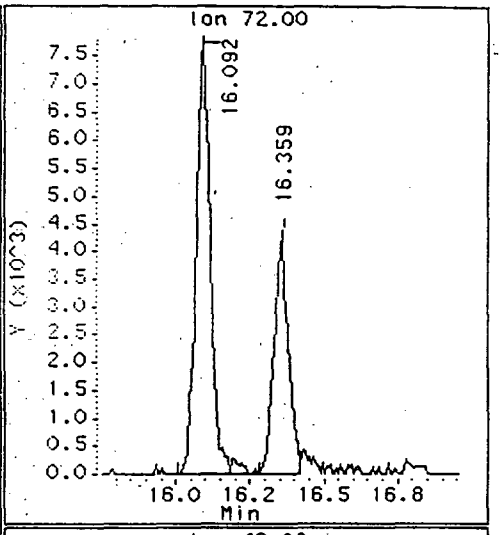
32 2-Butanone

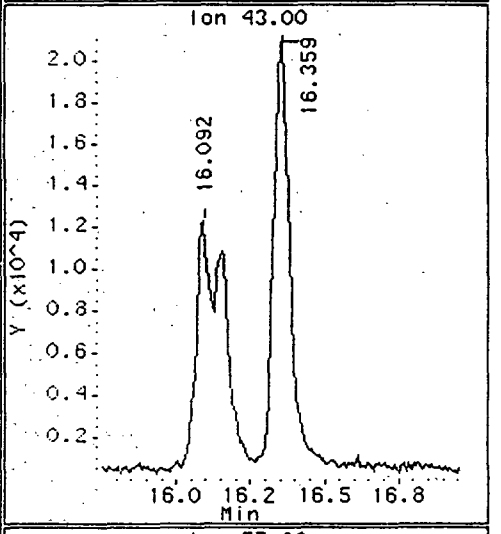


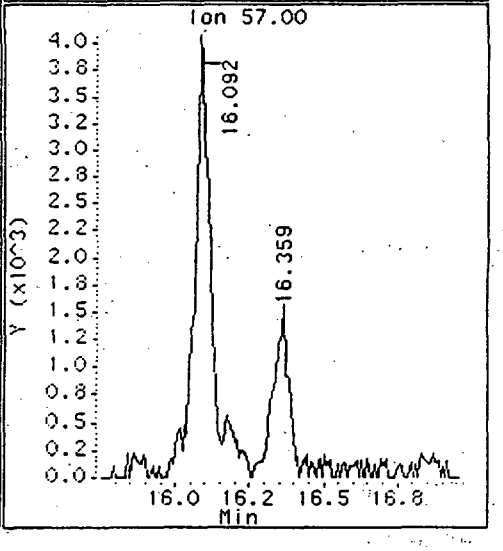












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

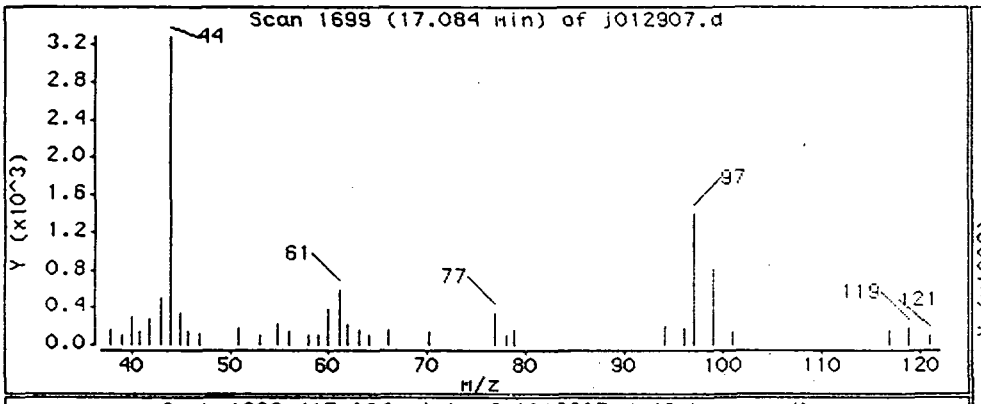
Sample Info: 500mL Can#431

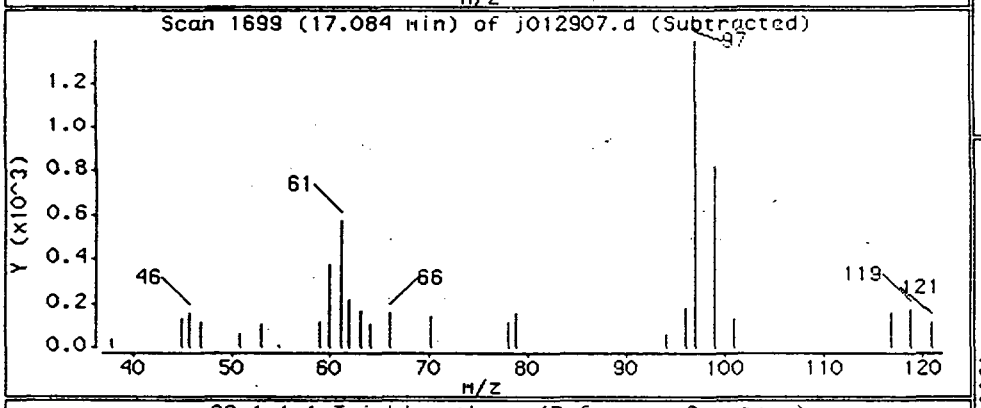
Operator: MH

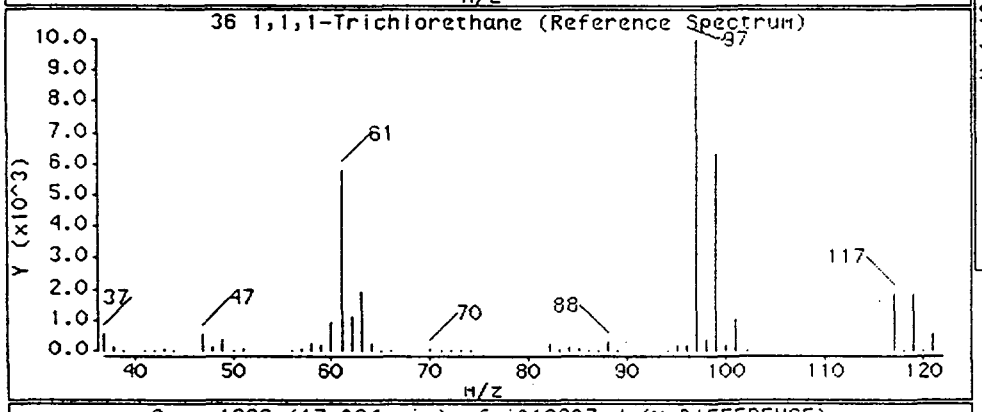
Column phase: RTx-624

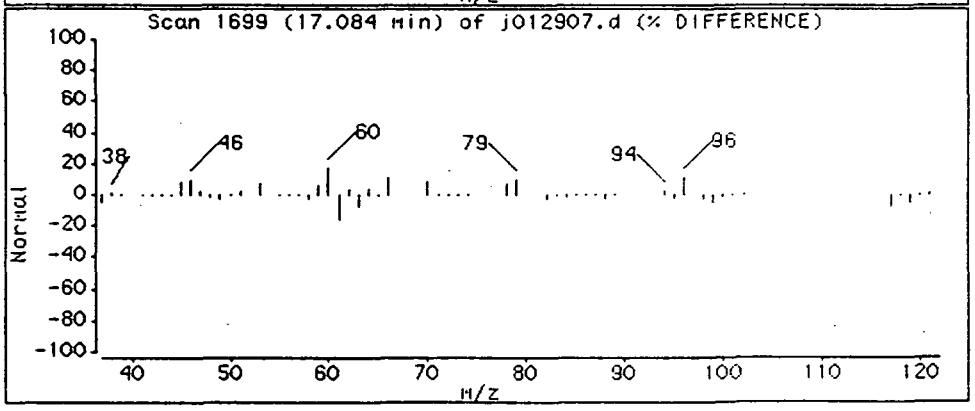
Column diameter: 0.58

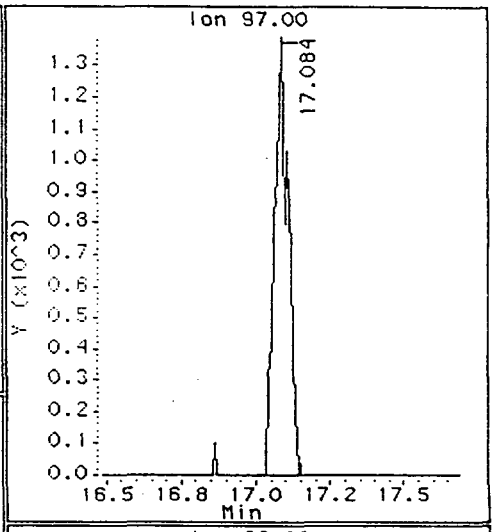
36 1,1,1-Trichlorethane

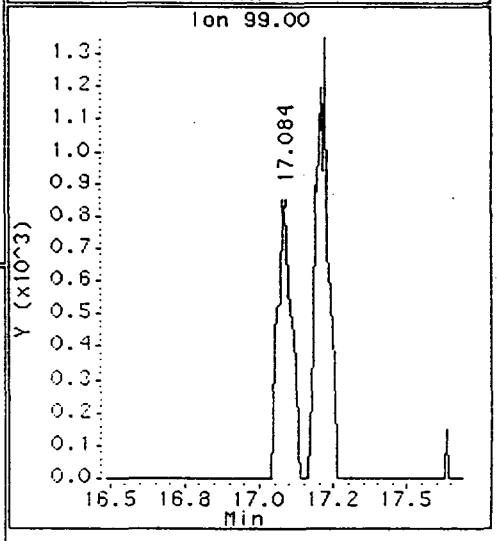












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

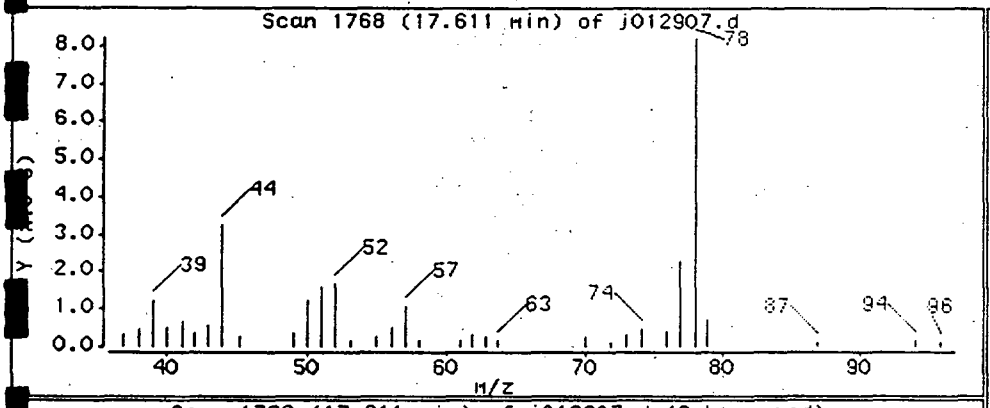
Sample Info: 500mL Can#431

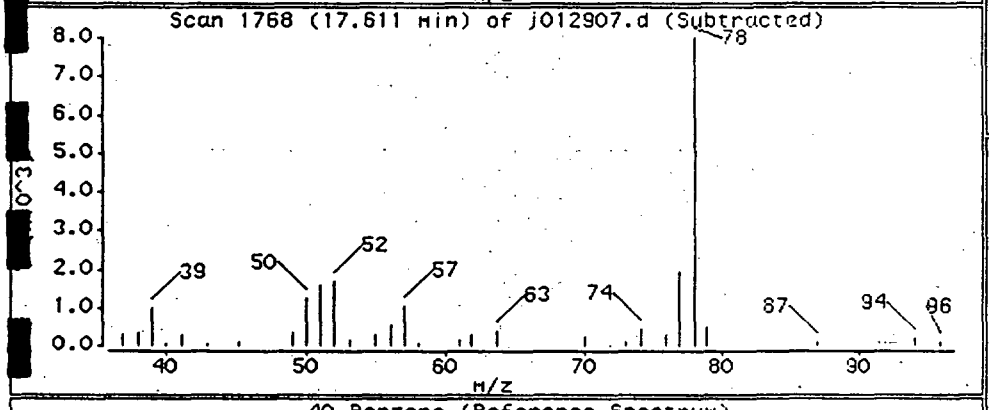
Operator: MH

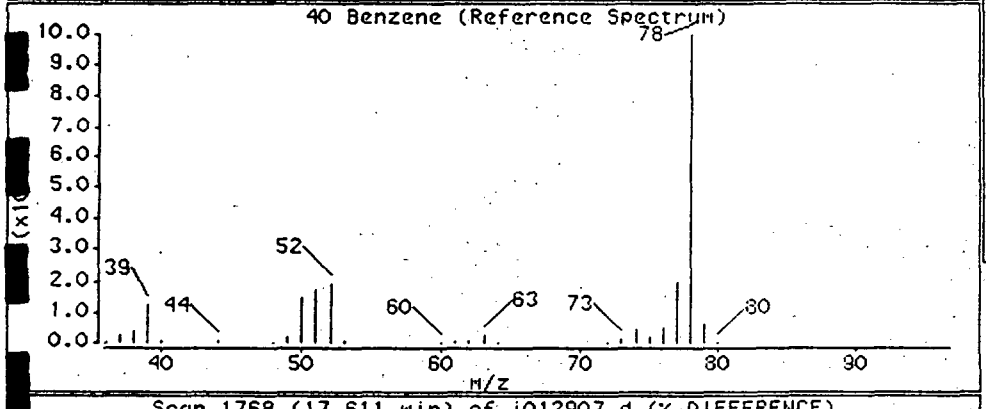
Column phase: RTx-624

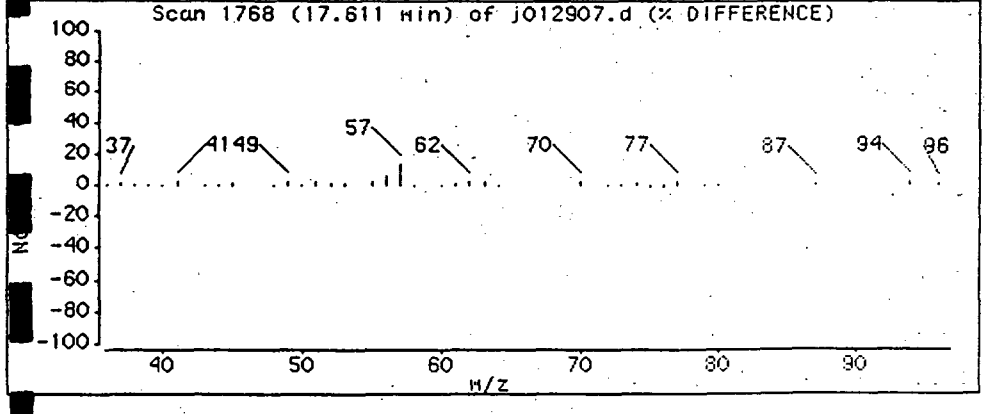
Column diameter: 0.58

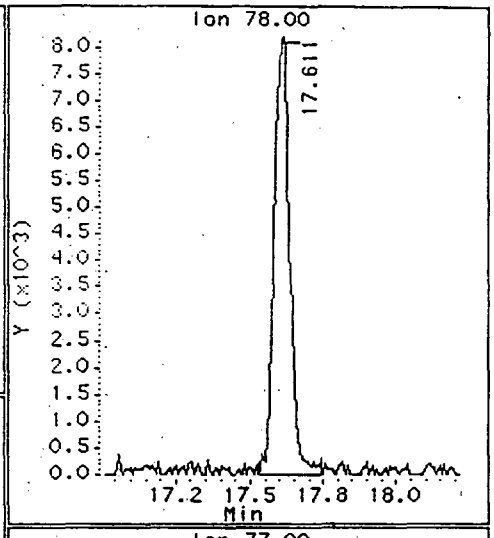
40 Benzene

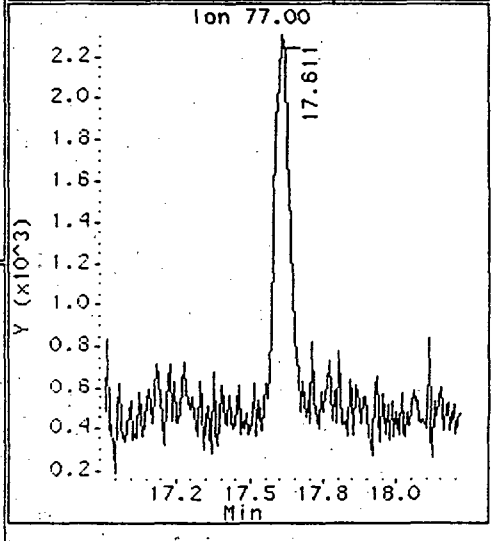












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

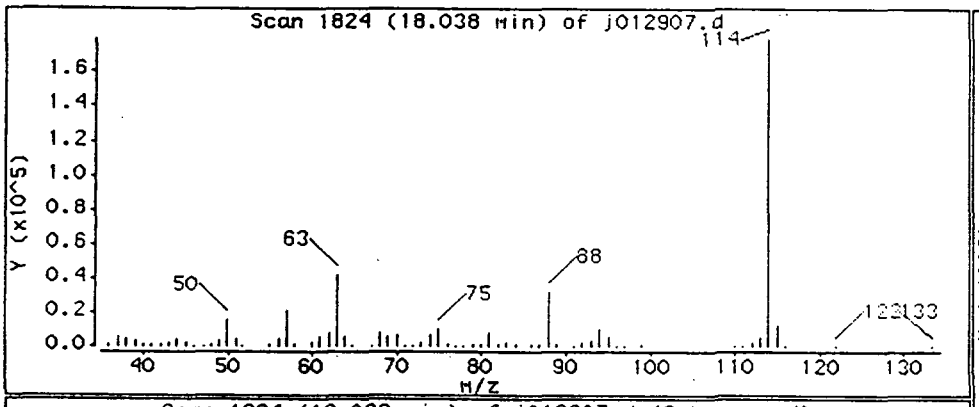
Sample Info: 500mL Can#431

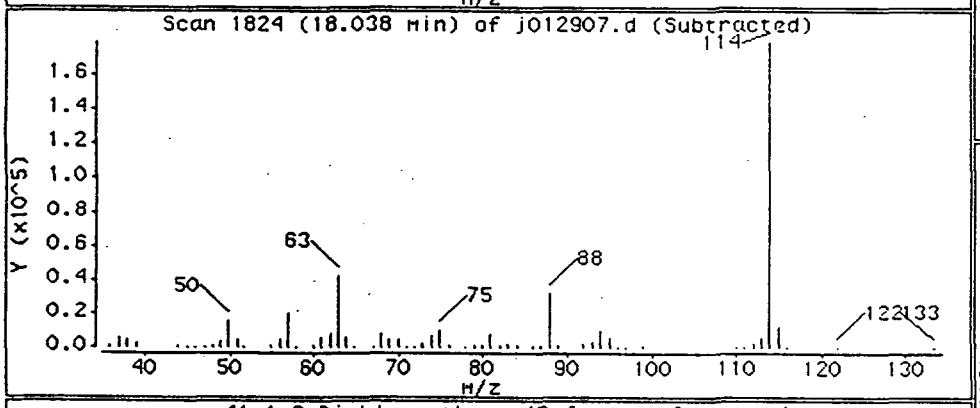
Operator: MH

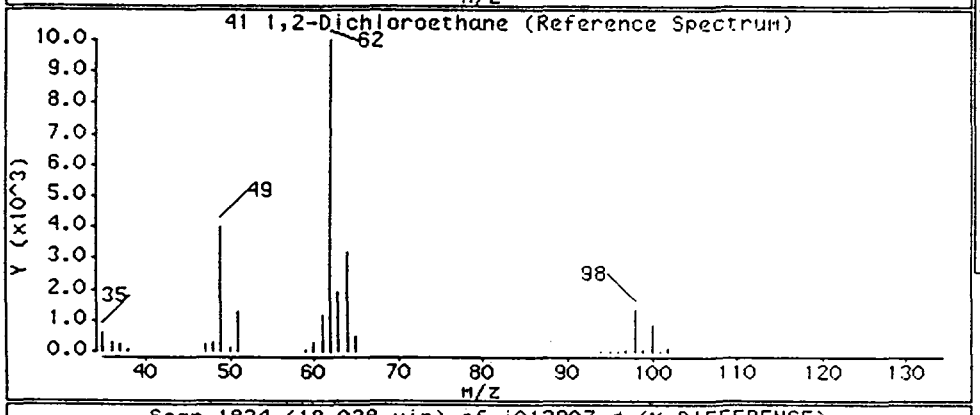
Column phase: RTx-624

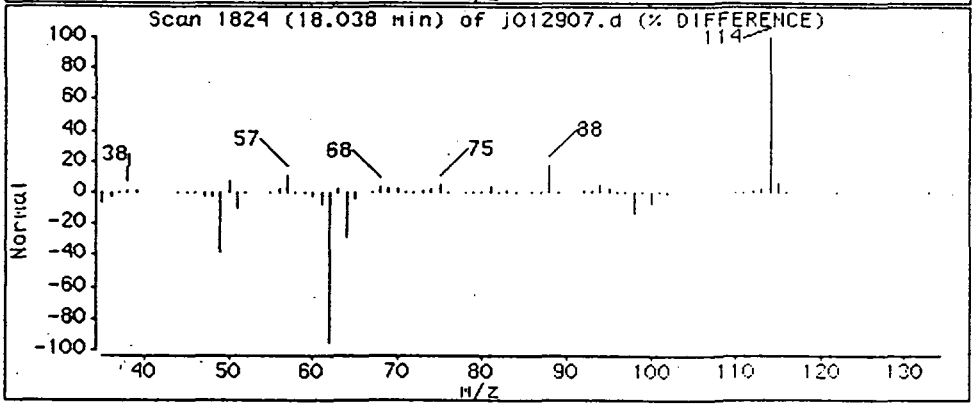
Column diameter: 0.58

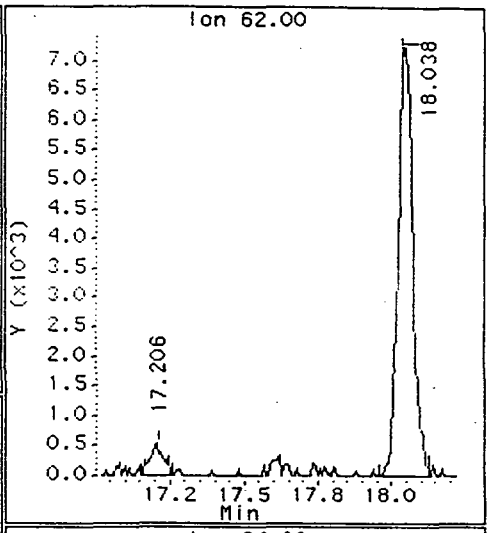
41 1,2-Dichloroethane

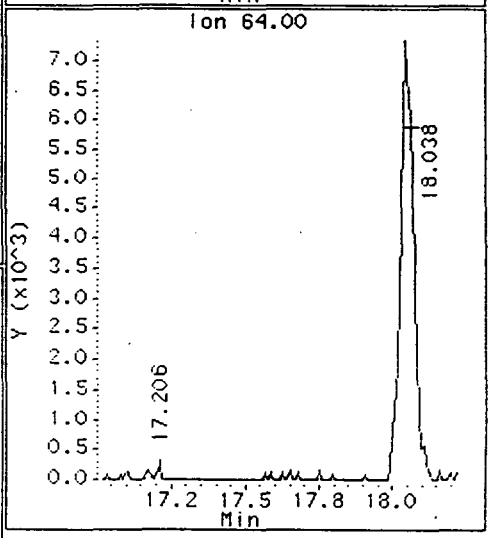












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

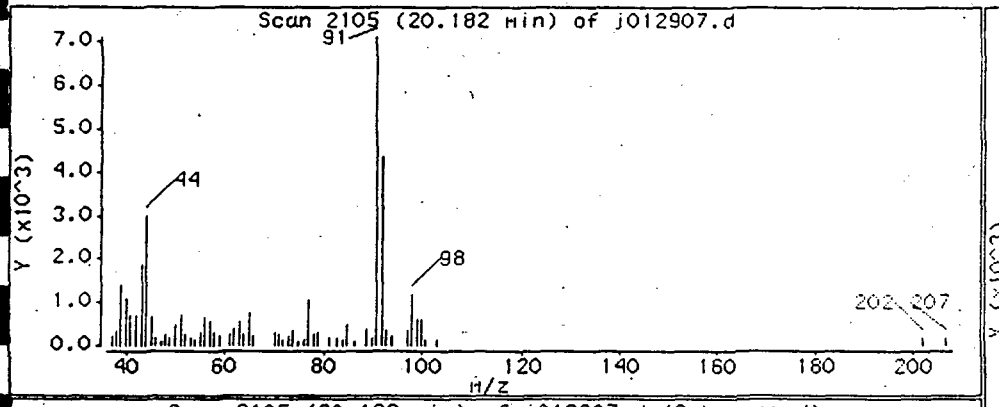
Sample Info: 500mL Can#431

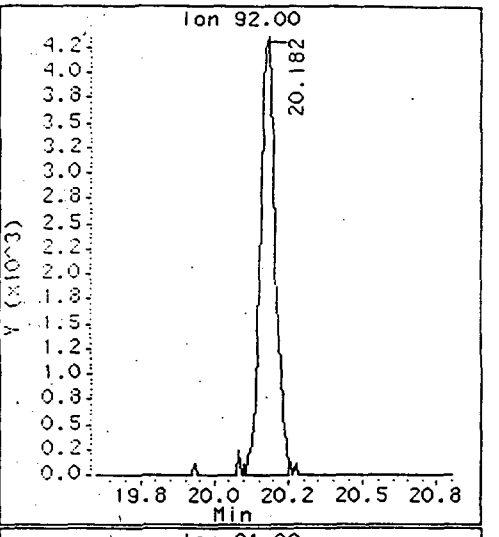
Operator: MH

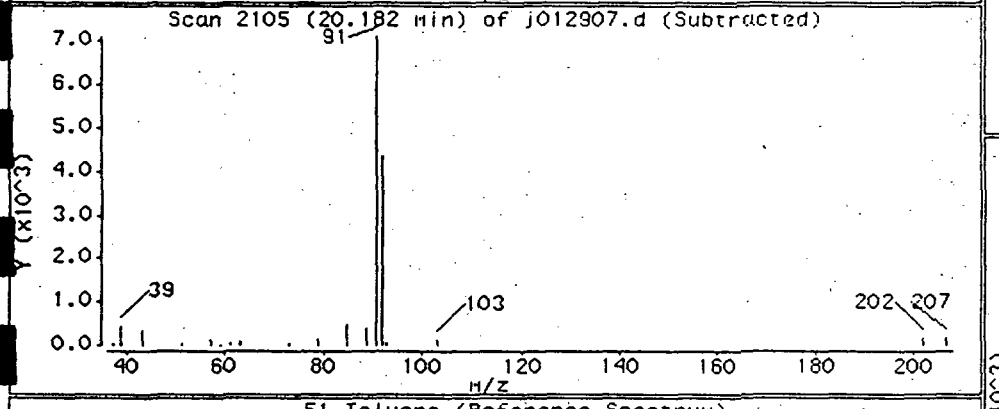
Column phase: RTx-624

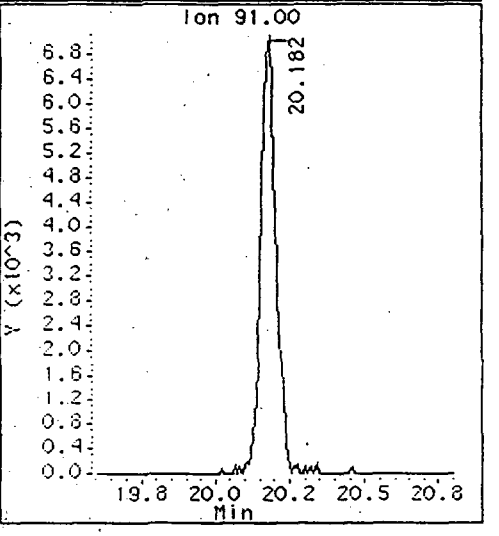
Column diameter: 0.53

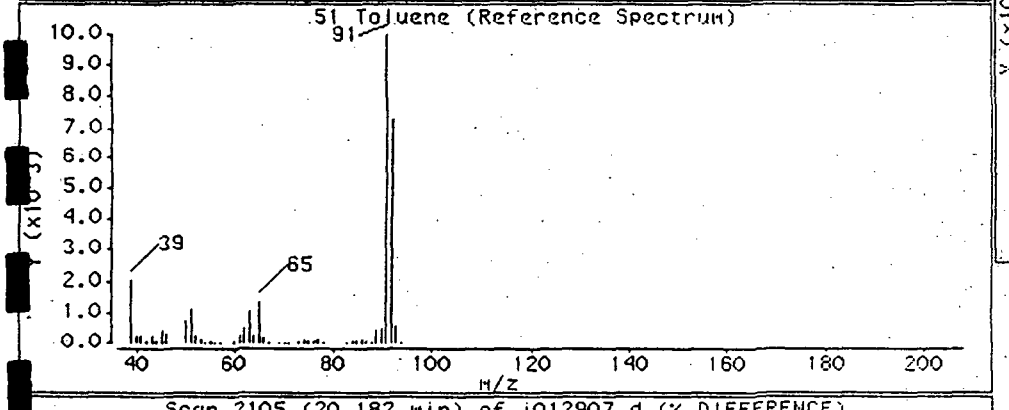
51 Toluene

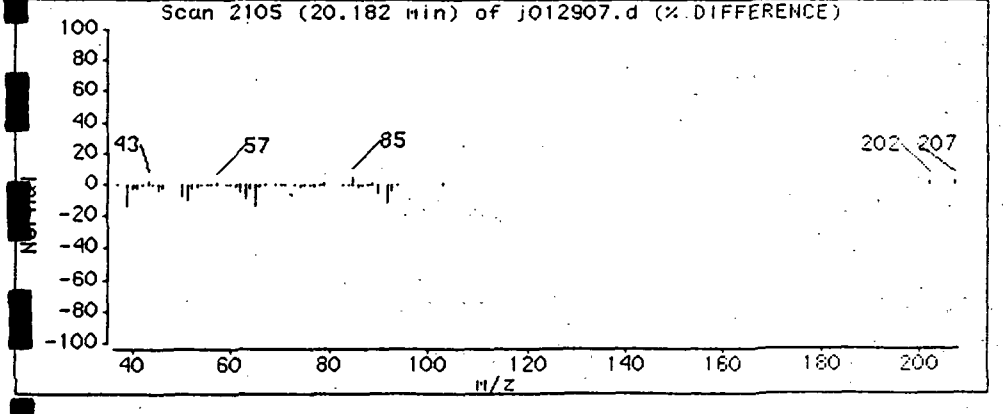












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

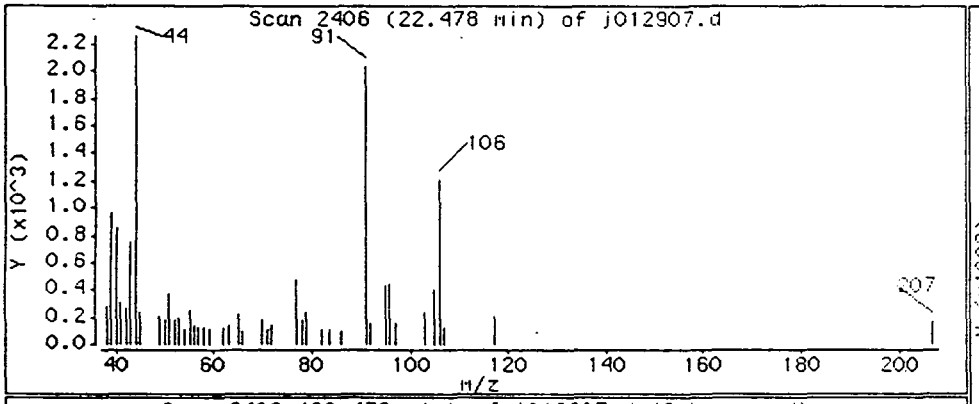
Sample Info: 500mL Can#431

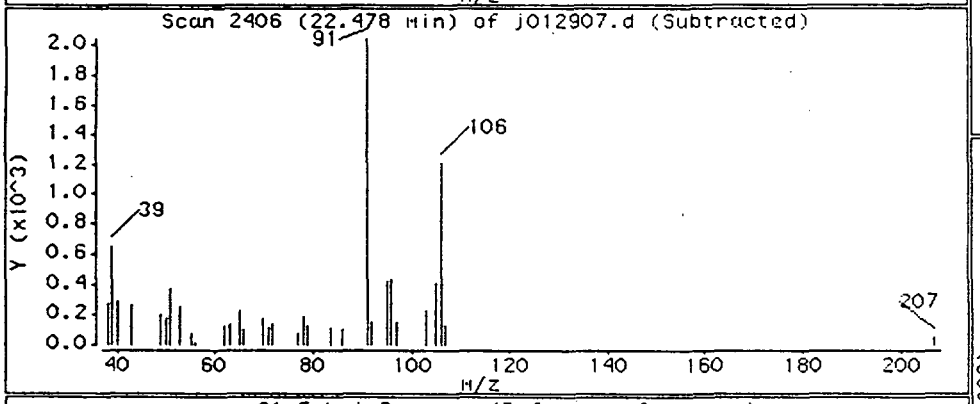
Operator: MH

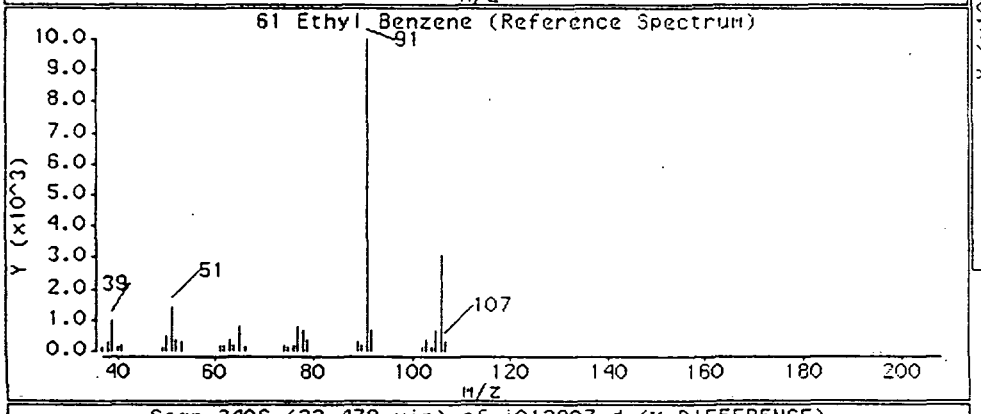
Column phase: RTx-624

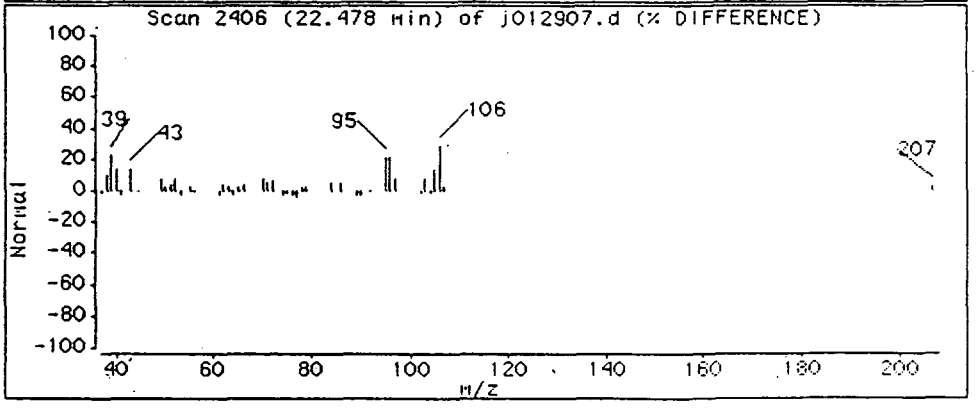
Column diameter: 0.58

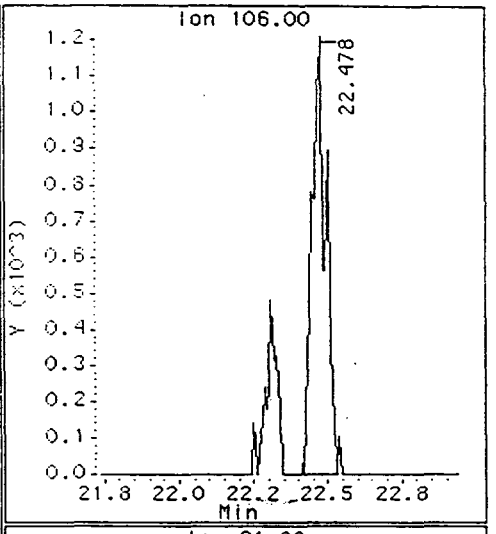
61 Ethyl Benzene

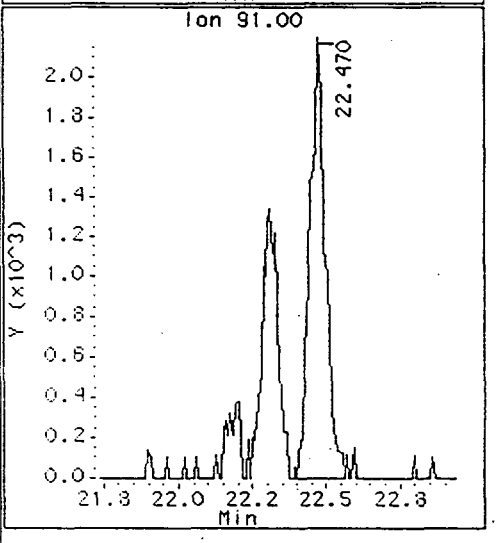












Data File: /chem/msdj.i/j-29jan.b/j012907.d

Date : 29-JAN-1997 12:54

Client ID: 012597U1A

Instrument: msdj.i

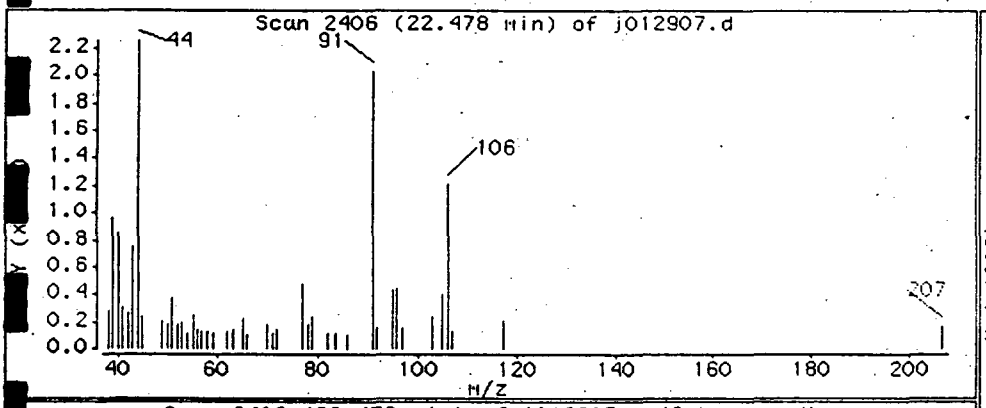
Sample Info: 500mL Can#431

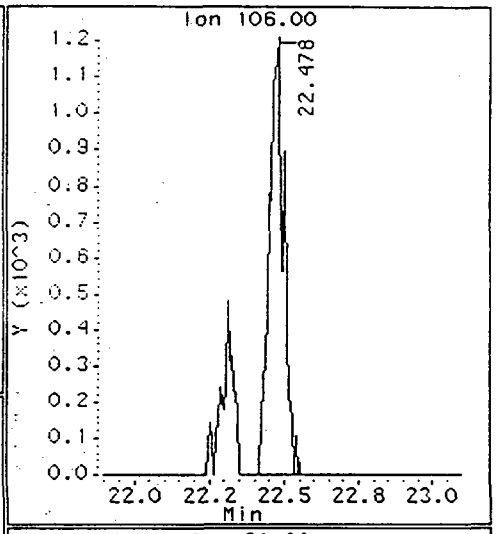
Operator: MH

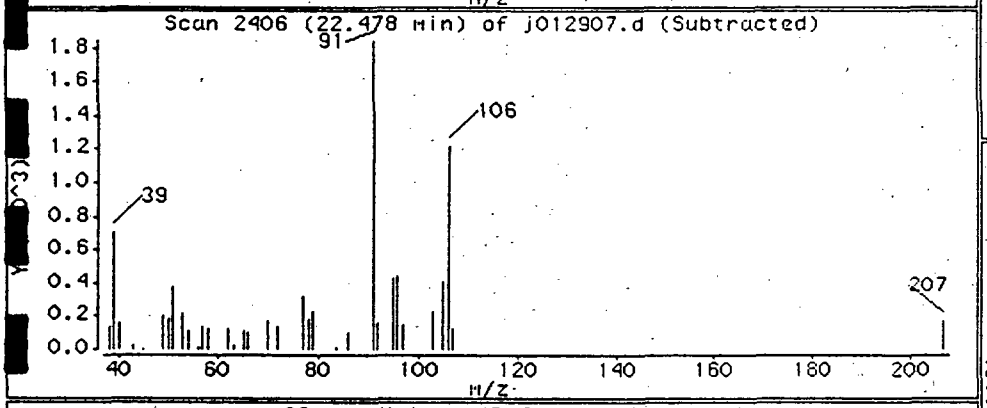
Column phase: RTx-624

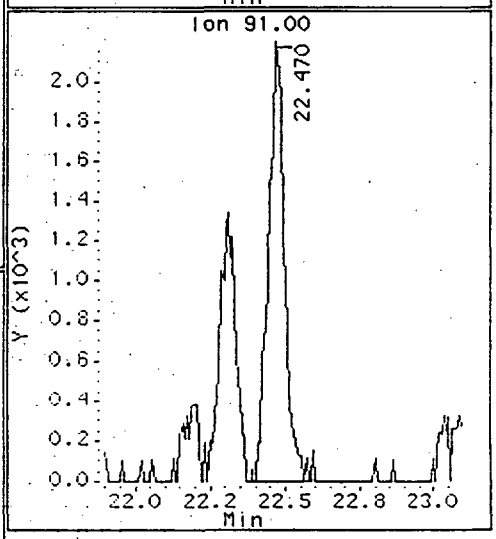
Column diameter: 0.58

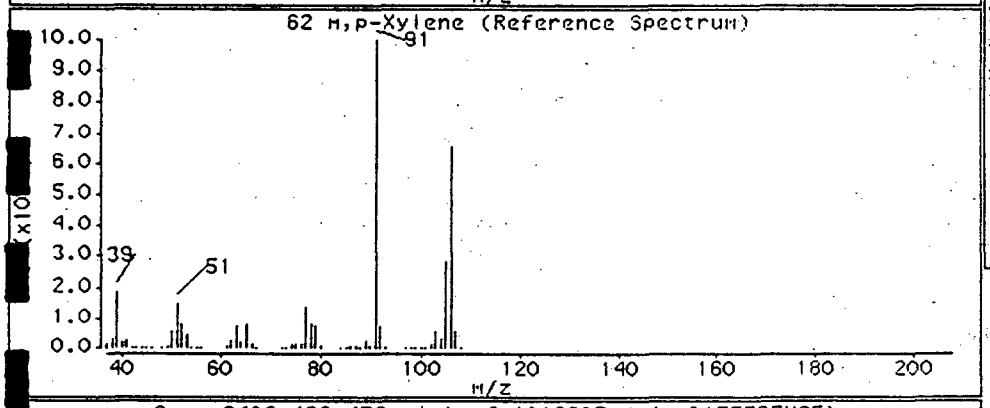
62 m,p-Xylene

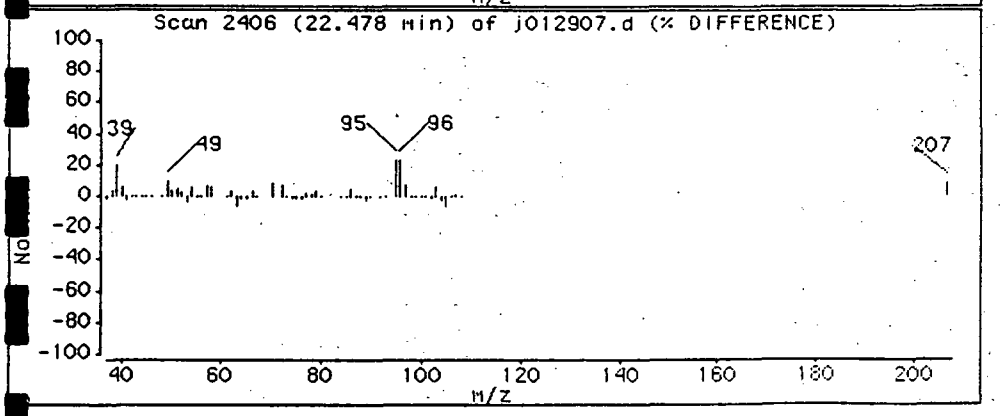






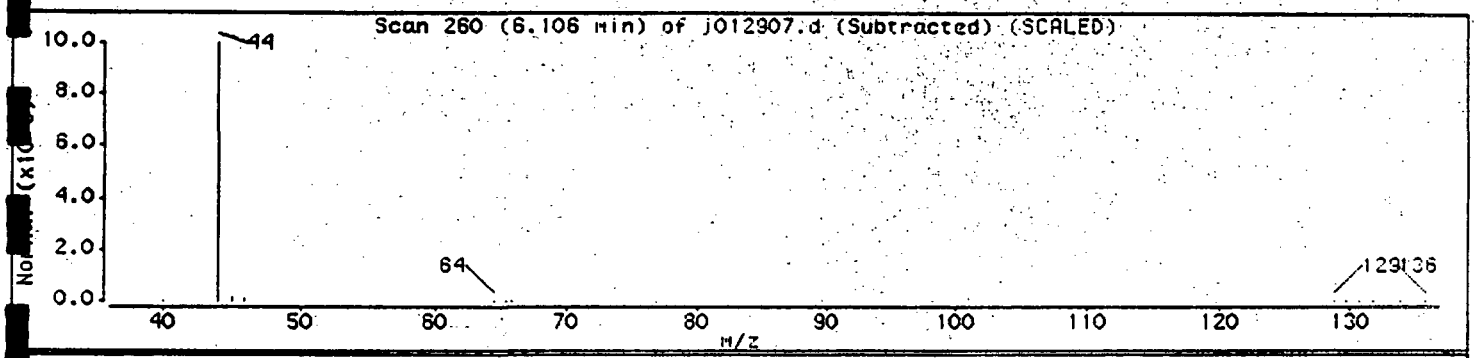




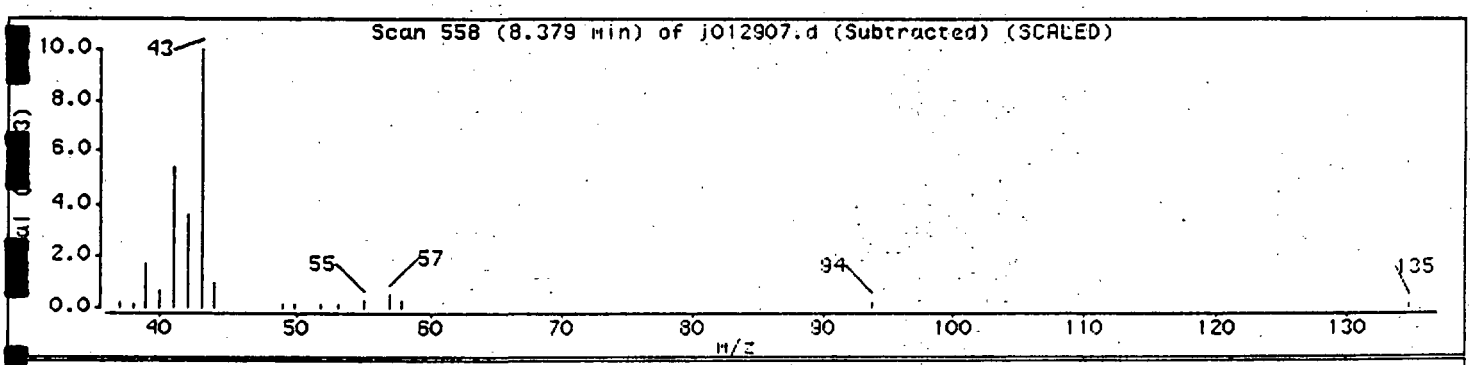


Data File: /chem/msdj.i/j-29jan.b/j012907.d
Date : 29-JAN-1997 12:54
Instrument: msdj.i
Client ID: 012597U1A
Column phase: RTx-624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				

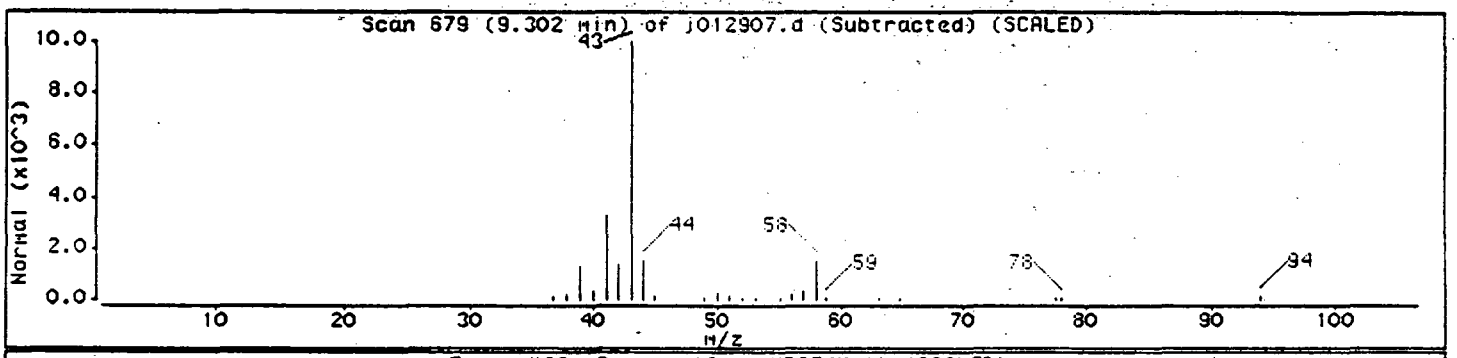


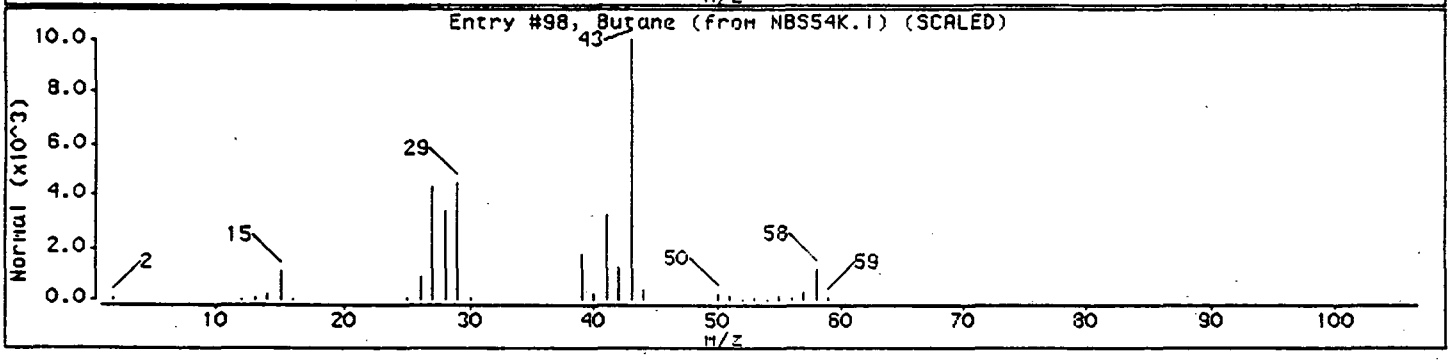
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



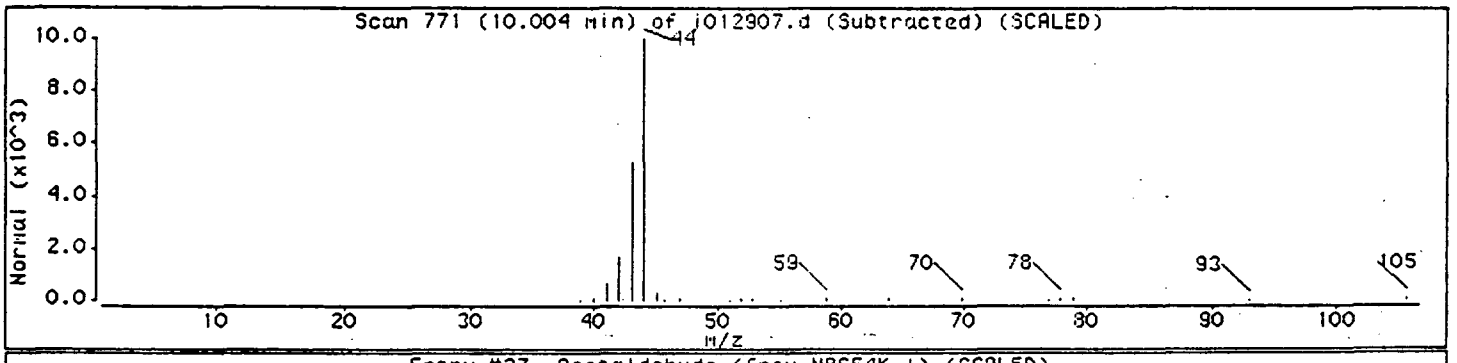
Data File: /chem/msdj.i/j-29jan.b/j012907.d
Date : 29-JAN-1997 12:54
Instrument: msdj.i
Client ID: 012597U1A
Column phase: RTx-624 Column diameter: 0.53

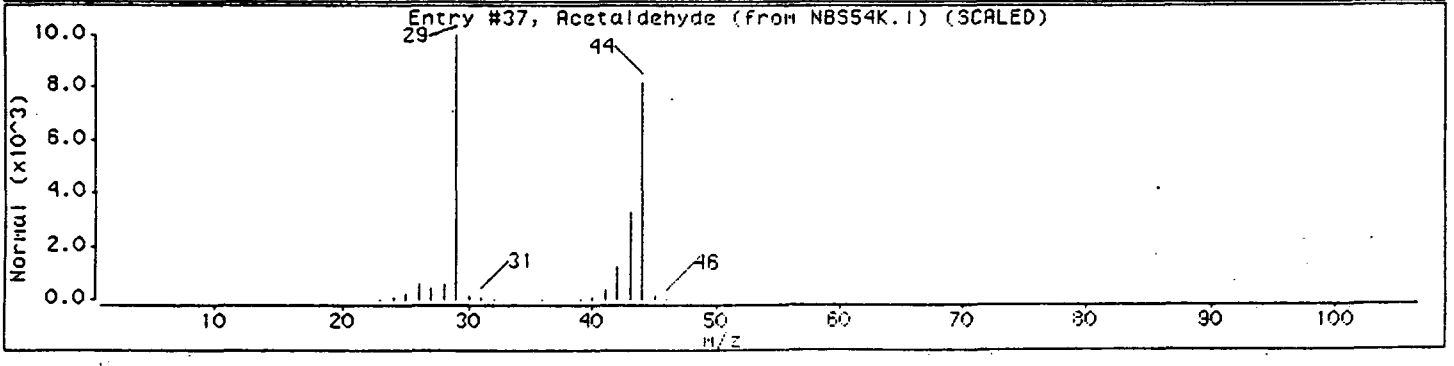
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane	106-97-8	NBS54K.I	98	59





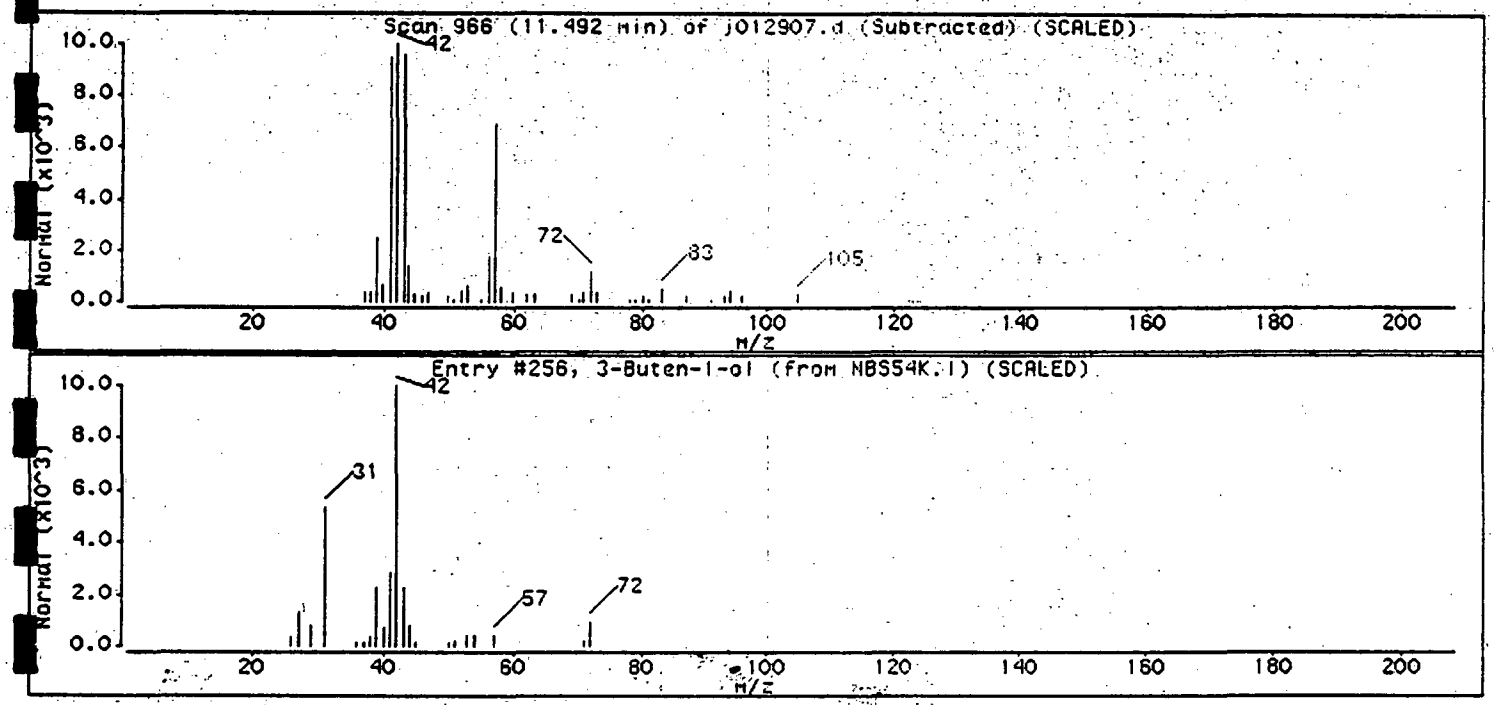
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetaldehyde	75-07-0	NBS54K.I	37	64



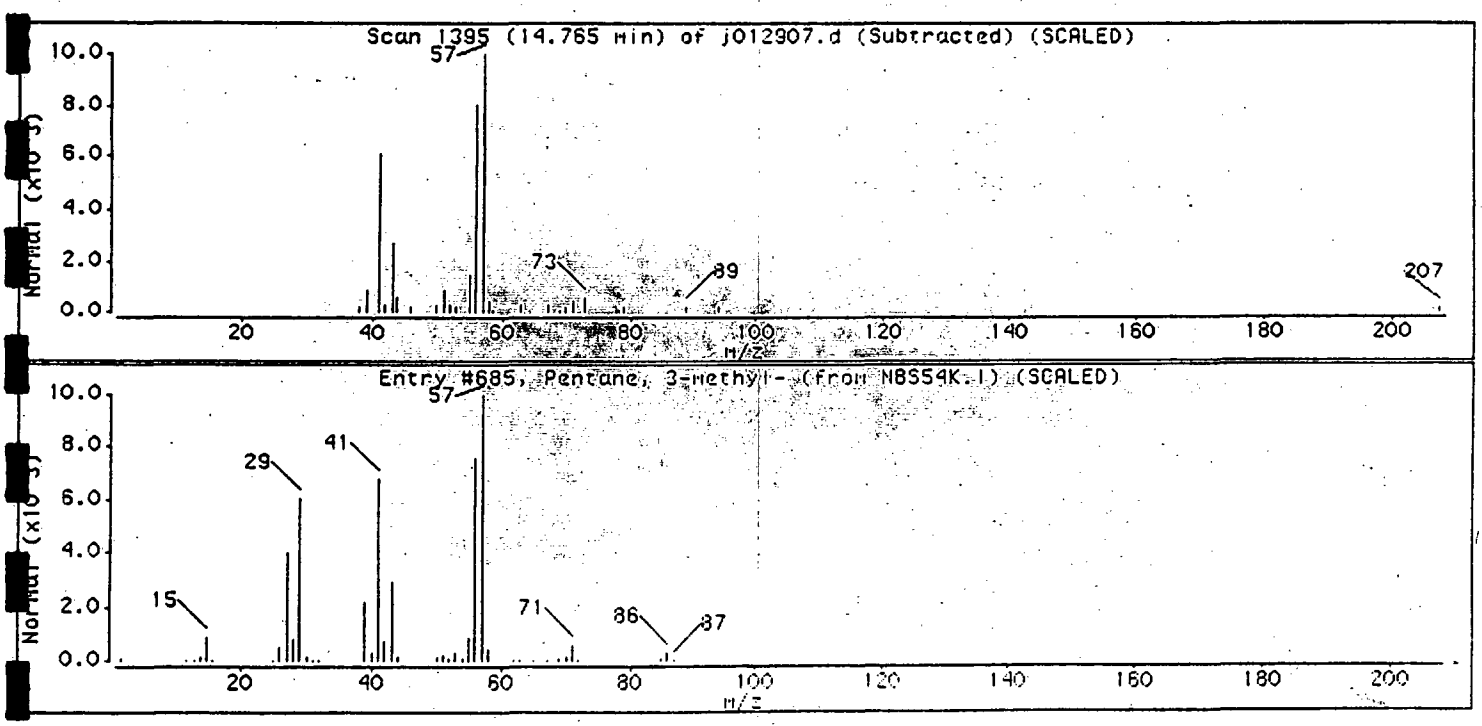


Data File: /chem/msdj.i/j-29jan.b/j012907.d
Date : 29-JAN-1997 12:54
Instrument: msdj.i
Client ID: 012597U1A
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
3-Buten-1-ol	627-27-0	NBS54K.I	256	53



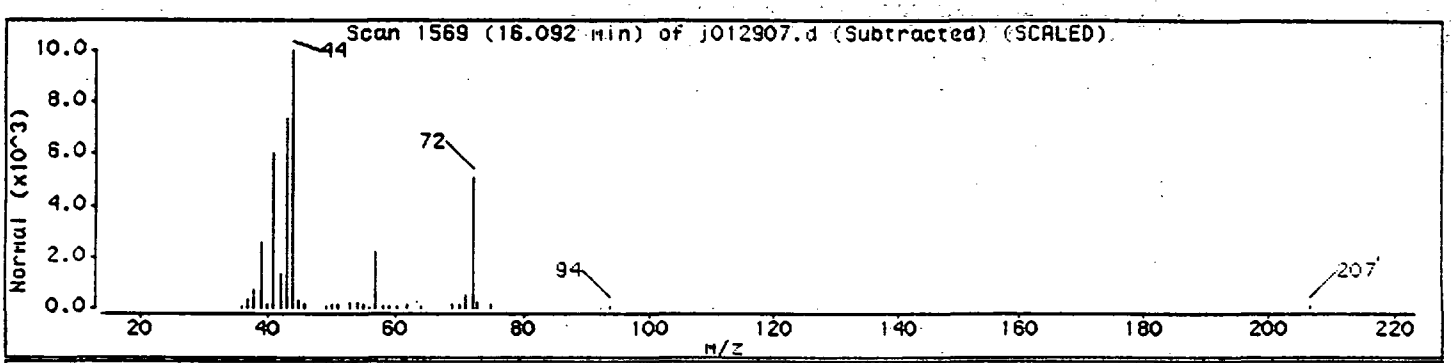
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentane, 3-methyl-	96-14-0	NBS54K.I	685	56

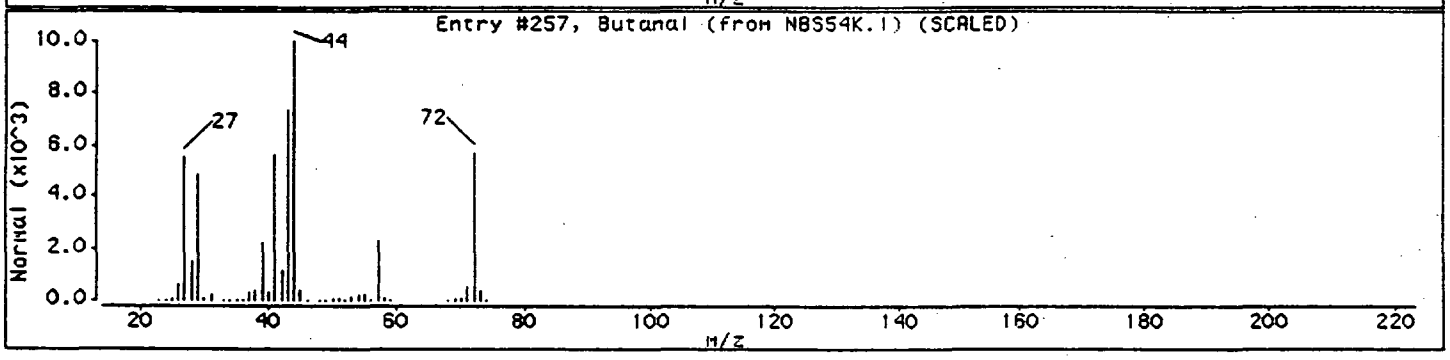


Data File: /chem/msdj.i/j-29jan.b/j012907.d
Date : 29-JAN-1997 12:54
Instrument: msdj.i
Client ID: 012597U1A
Column phase: RTx-624

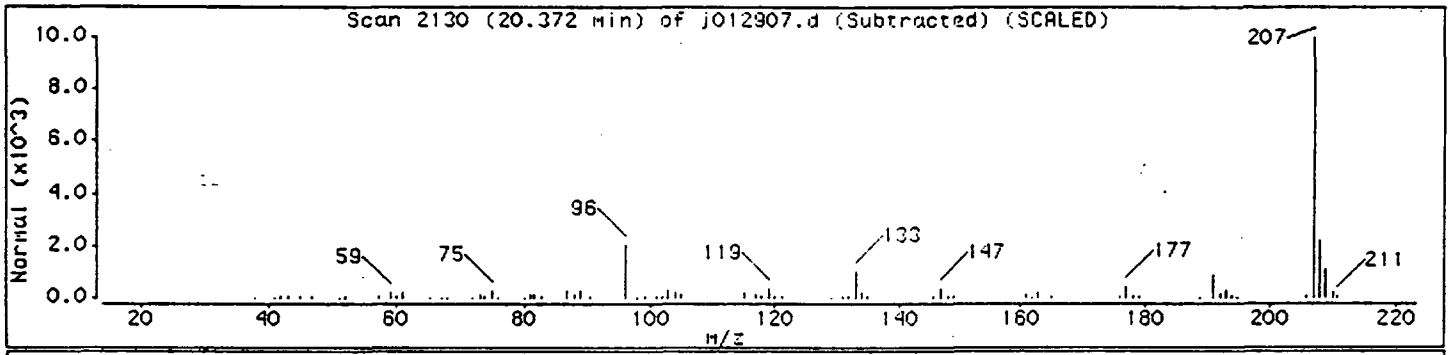
Column diameter: 0.56

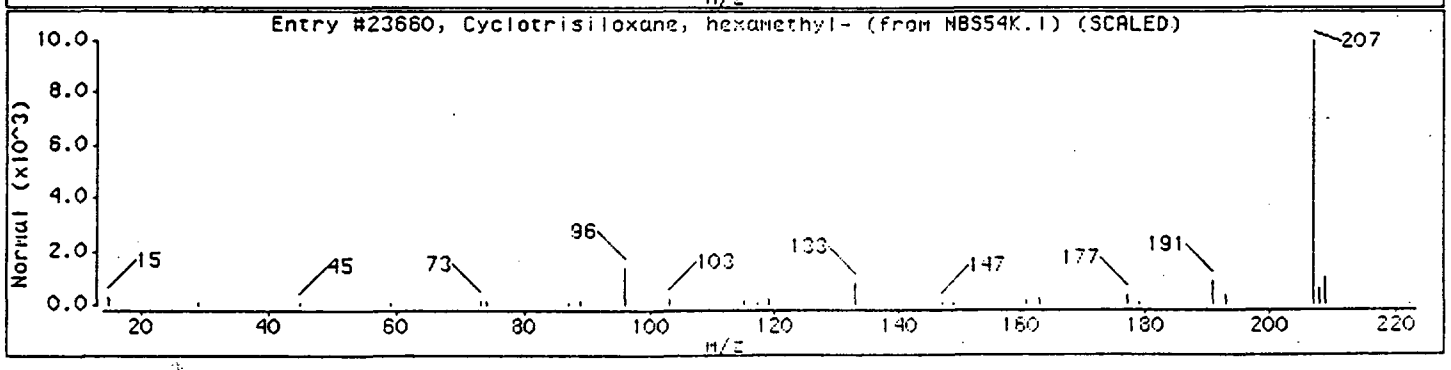
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butanal	123-72-8	NBS54K.I	257	91





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotrisiloxane, hexamethyl-	541-05-9	NBS54K.I	23660	72

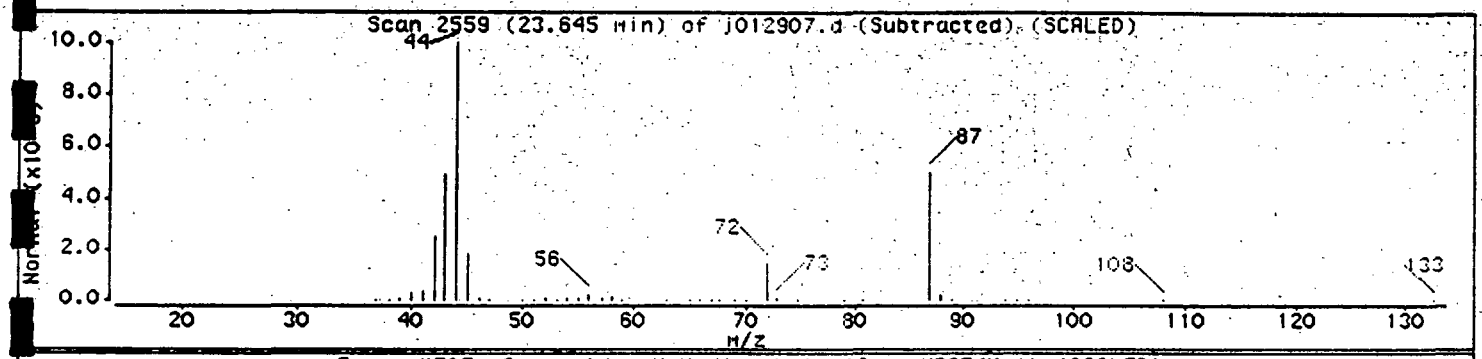


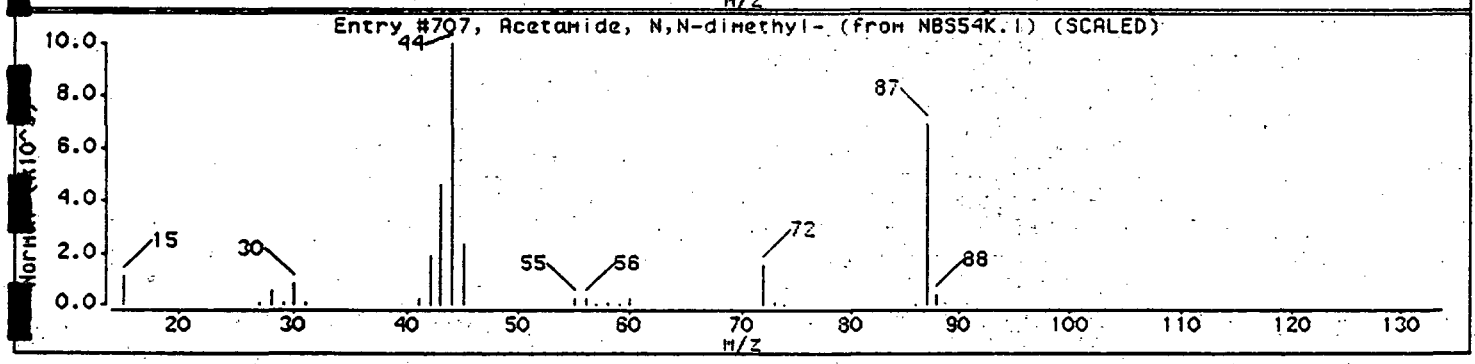


Data File: /chem/msdj.i/j-29jan.b/j012907.d

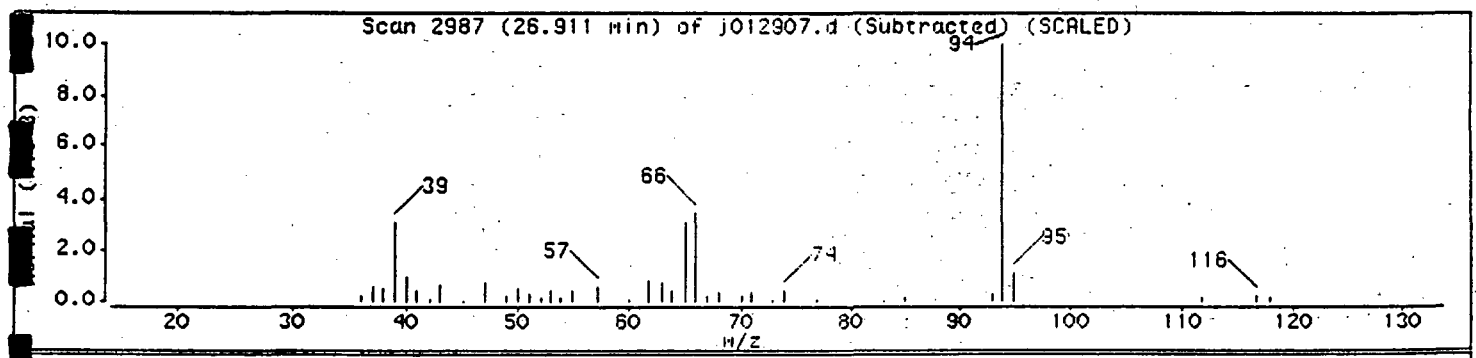
Date : 29-JAN-1997 12:54
Instrument: msdj.i
Client ID: 012597U1A
Column phase: RTx-624 Column diameter: 0.53

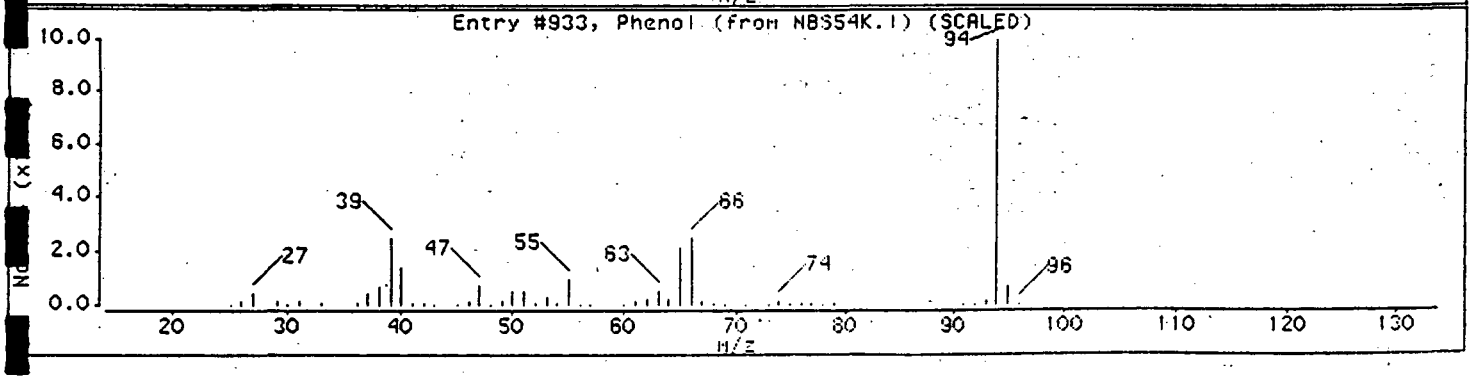
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.I	707	86





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	91





Air Toxics Limited

INITIAL CALIBRATION DATA

Start Cal Date : 09-JAN-97 10:44
End Cal Date : 09-JAN-1997 12:48
Quant Method : ISTD
Origin : Force
Target Version : 3.12
Integrator : HP RTE
Method file : /chem/msdj.i/j-09jan.b/to140109.m
Cal Date : 09-Jan-1997 14:23 fayala
Curve Type : Average

Calibration File Names:
Level 2: /chem/msdj.i/j-09jan.b/j010905.d
Level 3: /chem/msdj.i/j-09jan.b/j010906.d
Level 4: /chem/msdj.i/j-09jan.b/j010907.d
Level 5: /chem/msdj.i/j-09jan.b/j010908.d
Level 6: /chem/msdj.i/j-09jan.b/j010909.d

Compound	0.5000 Level 2	5 Level 3	10 Level 4	25 Level 5	50 Level 6	$\overline{RRF}$	% RSD	
1 Propylene	0.79308	0.68716	0.66328	1.07471	0.97050	0.83775	21.427	
6 Dichlorodifluoromethane/FR 12	2.93315	3.02482	2.95409	3.43582	3.23579	3.11673	6.893	
7 Freon 114	2.22430	2.21634	2.20251	2.33267	2.26964	2.24909	2.360	
8 Chloromethane	1.21097	1.29756	1.22782	1.45358	1.36465	1.31092	7.658	
9 Vinyl Chloride	1.35849	1.38630	1.35452	1.45919	1.39207	1.39012	3.021	
10 1,3-Butadiene	1.00120	1.05160	1.02401	1.13941	1.06458	1.05616	4.983	
11 Bromomethane	1.15310	1.12122	1.10518	1.15298	1.24260	1.15502	4.603	
12 Chloroethane	0.89087	0.81099	0.78733	0.76766	0.75192	0.80175	6.798	
13 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
14 Trichlorofluoromethane/FR 11	2.92572	3.12915	3.11398	3.12528	3.07652	3.07413	2.782	
15 Ethanol	0.34398	0.53100	0.53857	0.31021	0.32468	0.40969	28.035	
16 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
17 1,1-Dichloroethene	1.19957	1.24020	1.24330	0.85049	0.82986	1.07269	19.864	
18 Freon 113	1.61922	1.69085	1.68332	1.70465	1.67246	1.67410	1.961	
20 Acetone	2.04650	2.40857	2.36088	1.27516	1.80660	1.97954	23.424	
19 Carbon Disulfide	3.70910	3.81804	3.80469	3.80710	3.76203	3.78019	1.193	
22 2-Propanol	1.83843	2.54131	2.58455	2.69571	2.65392	2.46278	14.379	
21 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
23 Methylene Chloride	1.15640	1.16629	1.14944	1.14506	1.11677	1.14679	1.622	
25 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
24 trans-1,2-Dichloroethene	1.23119	1.25799	1.27469	1.30959	1.30209	1.27511	2.523	
26 MTBE	3.12518	3.36269	3.39170	3.43749	3.44219	3.35185	3.907	
27 Hexane	2.24699	2.37345	2.34206	2.36200	2.33037	2.33098	2.139	
28 1,1-Dichloroethane	2.31033	2.38615	2.35981	2.42335	2.34145	2.36422	1.822	
30 Vinyl Acetate	2.90308	3.90195	3.94374	4.11653	4.17636	3.80833	13.625	
29 Chloroprene	0.72169	0.84026	0.81546	0.83720	0.82280	0.80749	6.072	
32 2-Butanone	0.45941	0.56283	0.56051	0.58610	0.58984	0.55174	9.657	

FA 1-9-97

mle 1-10-97

Air Toxics Limited

INITIAL CALIBRATION DATA

Start Cal Date : 09-JAN-97 10:44
End Cal Date : 09-JAN-1997 12:48
Quant Method : ISTD
Origin : Force
Target Version : 3.12
Integrator : HP RTE
Method file : /chem/msdj.i/j-09jan.b/to140109.m
Cal Date : 09-Jan-1997 14:23 fayala
Curve Type : Average

Compound	0.5000 Level 2	5 Level 3	10 Level 4	25 Level 5	50 Level 6	RRF	% RSD	
31 cis-1,2-Dichloroethene	1.27313	1.34242	1.36752	1.38466	1.38425	1.35039	3.443	
35 Tetrahydrofuran	1.22139	1.30452	1.33778	1.34771	1.34424	1.31113	4.043	
34 Chloroform	2.37578	2.50641	2.51333	2.53491	2.51475	2.48904	2.579	
36 1,1,1-Trichlorethane	2.27582	2.35007	2.32087	2.36039	2.34502	2.33044	1.450	
37 Cyclohexane	2.16405	2.22698	2.18015	2.18465	2.14685	2.18054	1.372	
38 Carbon Tetrachloride	1.52623	1.86312	1.88808	1.94438	1.99956	1.84427	10.055	
40 Benzene	0.91745	0.94993	0.94534	0.97544	0.99807	0.95724	3.210	
41 1,2-Dichloroethane	0.34857	0.37226	0.37308	0.38384	0.39091	0.37373	4.300	
42 Heptane	0.59400	0.65634	0.65381	0.69350	0.69960	0.65945	6.387	
4 Dicyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
2 Bicycloheptadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
44 Trichloroethene	0.33974	0.36019	0.36286	0.37490	0.38702	0.36494	4.841	
45 1,2-Dichloropropane	0.30095	0.33158	0.33155	0.34037	0.34305	0.32950	5.091	
46 1,4-Dioxane	0.14842	0.17420	0.18038	0.19055	0.19912	0.17854	10.837	
47 Bromodichloromethane	0.50922	0.57100	0.58190	0.61115	0.62207	0.57907	7.640	
48 cis-1,3-Dichloropropene	0.13899	0.16138	0.16480	0.17198	0.17593	0.16262	8.856	
3 DMDS	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
49 4-Methyl-2-pentanone	0.63157	0.70911	0.72669	0.74509	0.75025	0.71254	6.749	
52 Octane	0.24123	0.25360	0.25893	0.28812	0.31257	0.27089	10.692	
51 Toluene	0.50929	0.56803	0.56702	0.60262	0.63770	0.57693	8.270	
53 trans-1,3-Dichloropropene	0.56209	0.40863	0.38802	0.39774	0.38286	0.42787	17.686	
54 1,1,2-Trichloroethane	0.35843	0.40656	0.38864	0.39902	0.38934	0.38840	4.716	
56 2-Hexanone	0.69137	0.97265	0.95260	0.99183	0.98288	0.91827	13.904	
55 Tetrachloroethene	0.39373	0.44280	0.43039	0.45117	0.47139	0.43790	6.589	
57 Dibromochloromethane	0.44537	0.54450	0.53521	0.56215	0.56464	0.53037	9.252	
58 1,2-Dibromoethane	0.46390	0.53634	0.51074	0.52934	0.52379	0.51282	5.638	
60 Chlorobenzene	0.79078	0.84965	0.83491	0.89292	0.90073	0.85380	5.264	
61 Ethyl Benzene	0.45419	0.53001	0.51086	0.57535	0.58796	0.53168	10.092	
62 m,p-Xylene	0.42424	0.50760	0.48990	0.56339	0.60391	0.51781	13.355	
63 o-Xylene	0.26877	0.32072	0.30830	0.35113	0.35209	0.32020	10.774	
64 Styrene	0.49831	0.66665	0.66425	0.75757	0.76958	0.67127	16.165	
65 Bromoform	0.19251	0.26325	0.25741	0.27892	0.28956	0.25633	14.774	
67 1,1,2,2-Tetrachloroethane	0.74745	0.84858	0.77533	0.79701	0.77437	0.78855	4.804	
68 4-Ethyltoluene(1)	0.89314	1.03981	1.05639	1.22314	1.17410	1.07732	11.959	
(2)	0.23154	0.26187	0.26843	0.32214	0.30122	0.27704	12.753	

Air Toxics Limited

INITIAL CALIBRATION DATA

Start Cal Date : 09-JAN-97 10:44
End Cal Date : 09-JAN-1997 12:48
Quant Method : ISTD
Origin : Force
Target Version : 3.12
Integrator : HP RTE
Method file : /chem/msdj.i/j-09jan.b/to140109.m
Cal Date : 09-Jan-1997 14:23 fayala
Curve Type : Average

Compound	0.5000 Level 2	5 Level 3	10 Level 4	25 Level 5	50 Level 6	$\overline{RRF}$	% RSD	
69 1,3,5-Trimethylbenzene(1)	0.37581	0.52191	0.51120	0.60695	0.56405	0.51598	16.866	
(2)	0.18938	0.24078	0.23927	0.26082	0.26040	0.23813	12.235	
70 alpha-Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
71 1,2,4-Trimethylbenzene	0.32796	0.41617	0.41030	0.48211	0.46330	0.41997	14.244	
72 1,3-Dichlorobenzene	0.43526	0.52652	0.50311	0.59652	0.59302	0.53089	12.672	
73 1,4-Dichlorobenzene	0.41464	0.51777	0.49948	0.57981	0.57694	0.51773	13.072	
74 Benzyl Chloride	0.70147	0.98722	0.97823	1.18188	1.14885	0.99953	19.048	
75 1,2-Dichlorobenzene	0.39804	0.47189	0.45709	0.53241	0.51562	0.47501	11.139	
5 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
76 1,2,4-Trichlorobenzene	0.16627	0.18587	0.16992	0.23615	0.24548	0.20074	18.664	
77 Hexachlorobutadiene	0.19126	0.20969	0.19172	0.23300	0.23201	0.21154	9.709	
$ 39 Octafluorotoluene	2.20966	2.20467	2.22502	2.41605	2.52799	2.31668	6.363	
$ 50 Toluene-d8	0.88011	0.89757	0.89390	0.92470	0.92760	0.90477	2.276	
$ 66 Bromofluorobenzene	0.78490	0.79243	0.76473	0.77199	0.75735	0.77428	1.855	

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Report Date: 09-Jan-1997 14:21

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010905.d
Lab Smp Id: VSTD0005 Client Smp ID: VSTD0005
Inj Date : 09-JAN-1997 10:04
Operator : FA Inst ID: msdj.i
Smp Info : 2.5ml #296-25 100ppbv (0.5ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:21 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
33 Bromochloromethane						CAS #: 74-97-5			
16.689	16.689	(1.000)	130	193877	5.0			100.00	9624(Q)
16.689	16.689	(0.000)	128	43688			27.42- 127.42	22.53	
16.689	16.689	(0.000)	49	99136			125.67- 225.67	51.13	
* 43 1,4-Difluorobenzene						CAS #: 540-36-3			
18.032	18.032	(1.000)	114	850139	5.0			100.00	9792
18.032	18.032	(0.000)	88	47264			0.00- 67.86	5.56	
* 59 Chlorobenzene-d5						CAS #: 3114-55-4			
22.167	22.167	(1.000)	117	656394	5.0			100.00	7253
22.167	22.167	(0.000)	82	103704			10.92- 110.92	15.80	
$ 39 Octafluorotoluene						CAS #: 434-64-0			
17.200	17.200	(1.031)	217	428402	5.0	4.8		100.00	9710
17.200	17.200	(0.000)	186	89248			17.99- 117.99	20.83	
$ 50 Toluene-d8						CAS #: 2037-26-5			
20.069	20.069	(1.113)	98	748213	5.0	4.9		100.00	9787
20.069	20.069	(0.000)	70	25808			0.00- 61.99	3.45	
20.069	20.069	(0.000)	100	145664			17.70- 117.70	19.47	

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Report Date: 09-Jan-1997 14:21

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
S 66 Bromofluorobenzene						CAS #: 460-00-4			
24.036	24.036	(1.084)	95	515201	5.0	5.1		100.00	9673
24.036	24.036	(0.000)	174	71136			9.51- 109.51	13.81	
24.036	24.036	(0.000)	176	70920			9.33- 109.33	13.77	
1 Propylene						CAS #: 115-07-1			
4.719	4.719	(0.283)	41	15376	0.50	0.47		100.00	7464(M)
4.680	4.680	(0.280)	42	293			0.00- 69.90	1.91	
4.680	4.680	(0.280)	39	566			0.00- 88.45	3.68	
6 Dichlorodifluoromethane/FR 12						CAS #: 75-71-8			
5.276	5.276	(0.316)	85	56867	0.50	0.47		100.00	8543(M)
5.276	5.276	(0.316)	87	1280			0.00- 81.43	2.25	
7 Freon 114						CAS #: 76-14-2			
7.015	7.015	(0.420)	135	43124	0.50	0.49		100.00	9511
7.015	7.015	(0.000)	137	1213			0.00- 77.56	2.81	
8 Chloromethane						CAS #: 74-87-3			
7.129	7.129	(0.427)	50	23478	0.50	0.46		100.00	8802(Q)
7.129	7.129	(0.000)	52	891			8.12- 108.12	3.80	
9 Vinyl Chloride						CAS #: 75-01-4			
8.236	8.236	(0.493)	62	26338	0.50	0.49		100.00	8364
8.236	8.236	(0.000)	64	745			0.00- 74.69	2.83	
10 1,3-Butadiene						CAS #: 106-99-0			
8.602	8.602	(0.515)	54	19411	0.50	0.47		100.00	9055(Q)
8.602	8.602	(0.000)	39	2676			54.41- 154.41	13.79	
11 Bromomethane						CAS #: 74-83-9			
10.151	10.151	(0.608)	94	22356	0.50	0.50		100.00	9050(Q)
10.151	10.151	(0.000)	96	2707			30.09- 130.09	12.11	
12 Chloroethane						CAS #: 75-00-3			
10.753	10.753	(0.644)	64	17272	0.50	0.56		100.00	8945
10.753	10.753	(0.000)	66	1021			0.00- 82.41	5.91	
14 Trichlorofluoromethane/FR 11						CAS #: 75-69-4			
11.730	11.730	(0.703)	101	56723	0.50	0.48		100.00	9577
11.730	11.730	(0.000)	103	8089			13.40- 113.40	14.26	
15 Ethanol						CAS #: 64-17-5			
12.943	12.943	(0.776)	45	6669	0.50	0.42		100.00	(M)
12.897	12.897	(0.773)	46	664			0.00- 59.96	9.96	
12.714	12.714	(0.762)	43	507			0.00- 57.60	7.60	
17 1,1-Dichloroethene						CAS #: 75-35-4			
13.149	13.149	(0.788)	96	23257	0.50	0.56		100.00	9392(Q)

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)									
13.149	13.149	(0.000)	61	10406			115.70- 215.70	44.74	
13.149	13.149	(0.000)	98	4000			13.69- 113.69	17.20	
18 Freon 113						CAS #: 76-13-1			
13.225	13.225	(0.792)	151	31393	0.50	0.48		100.00	9203(Q)
13.225	13.225	(0.000)	153	4874			16.69- 116.69	15.53	
13.225	13.225	(0.000)	101	12289			118.16- 218.16	39.15	
19 Carbon Disulfide						CAS #: 75-15-0			
13.530	13.530	(0.811)	76	71911	0.50	0.49		100.00	8000
20 Acetone						CAS #: 67-64-1			
13.446	13.446	(0.806)	43	39677	0.50	0.52		100.00	
13.446	13.446	(0.806)	58	13203			0.00- 83.28	33.28	
22 2-Propanol						CAS #: 67-63-0			
13.889	13.889	(0.832)	45	35643	0.50	0.37		100.00	7225
13.889	13.889	(0.000)	43	1230			0.00- 68.22	3.45	
13.889	13.889	(0.000)	59	329			0.00- 54.87	0.92	
23 Methylene Chloride						CAS #: 75-09-2			
14.240	14.240	(0.853)	84	22420	0.50	0.50		100.00	9691(Q)
14.240	14.240	(0.000)	49	8120			92.41- 192.41	36.22	
14.240	14.240	(0.000)	51	2590			0.00- 95.42	11.55	
26 trans-1,2-Dichloroethene						CAS #: 156-60-5			
14.736	14.736	(0.883)	96	23870	0.50	0.48		100.00	9422(Q)
14.736	14.736	(0.000)	61	8906			75.67- 175.67	37.31	
14.736	14.736	(0.000)	98	3813			3.80- 103.80	15.97	
26 MTBE						CAS #: 1634-04-4			
14.728	14.728	(0.882)	73	60590	0.50	0.47		100.00	6412
14.728	14.728	(0.000)	57	3341			0.00- 71.27	5.51	
14.728	14.728	(0.000)	41	4569			0.00- 79.08	7.54	
27 Hexane						CAS #: 110-54-3			
15.163	15.163	(0.909)	57	43564	0.50	0.48		100.00	7239(aQ)
15.163	15.163	(0.000)	43	9334			22.17- 122.17	21.43	
15.163	15.163	(0.000)	56	7065			4.62- 104.62	16.22	
28 1,1-Dichloroethane						CAS #: 75-34-3			
15.430	15.430	(0.925)	63	44792	0.50	0.49		100.00	9576
15.430	15.430	(0.000)	65	4252			0.00- 82.86	9.49	
29 Chloroprene						CAS #: 126-99-8			
15.560	15.560	(0.932)	53	13992	0.50	0.45		100.00	7903
15.560	15.560	(0.000)	88	1618			0.00- 92.08	11.56	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
15.560	15.560 (0.000)	50	1070			0.00- 77.83	7.65	
30 Vinyl Acetate					CAS #: 108-05-4			
15.514	15.514 (0.930)	43	56284	0.50	0.38		100.00	5917(a)
15.514	15.514 (0.000)	86	992			0.00- 57.95	1.76	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.338	16.338 (0.979)	96	24683	0.50	0.47		100.00	9101(Q)
16.338	16.338 (0.000)	61	8551			70.56- 170.56	34.64	
16.338	16.338 (0.000)	98	4091			7.68- 107.68	16.57	
32 2-Butanone					CAS #: 78-93-3			
16.323	16.323 (0.978)	72	8907	0.50	0.42		100.00	7766(Q)
16.323	16.323 (0.000)	43	9821			345.05- 445.05	110.26	
16.323	16.323 (0.000)	57	618			0.00- 74.86	6.94	
34 Chloroform					CAS #: 67-66-3			
16.773	16.773 (1.005)	83	46061	0.50	0.48		100.00	8125
16.773	16.773 (0.000)	85	8585			10.95- 110.95	18.64	
35 Tetrahydrofuran					CAS #: 109-99-9			
16.765	16.765 (1.005)	42	23680	0.50	0.46		100.00	7333
16.765	16.765 (0.000)	71	1794			0.00- 80.76	7.58	
16.765	16.765 (0.000)	72	2198			0.00- 87.69	9.28	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.055	17.055 (1.022)	97	44123	0.50	0.49		100.00	9537
17.055	17.055 (0.000)	99	8065			13.75- 113.75	18.28	
37 Cyclohexane					CAS #: 110-82-7			
17.139	17.139 (1.027)	56	41956	0.50	0.50		100.00	8184(Q)
17.139	17.139 (0.000)	84	8572			23.41- 123.41	20.43	
17.139	17.139 (0.000)	41	7796			16.76- 116.76	18.58	
38 Carbon Tetrachloride					CAS #: 56-23-5			
17.307	17.307 (1.037)	119	29590	0.50	0.41		100.00	6991
17.307	17.307 (0.000)	117	0			0.00- 50.00	0.00	
40 Benzene					CAS #: 71-43-2			
17.589	17.589 (0.975)	78	77996	0.50	0.48		100.00	9700
17.589	17.589 (0.000)	77	5151			0.00- 73.23	6.60	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.589	17.589 (0.975)	62	29633	0.50	0.47		100.00	8187
17.589	17.589 (0.000)	64	2769			0.00- 82.52	9.34	
42 Heptane					CAS #: 142-82-5			
17.810	17.810 (0.988)	43	50498	0.50	0.45		100.00	7604

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)									
17.810	17.810	(0.000)	57	8398			2.54- 102.54	16.63	
7.810	17.810	(0.000)	71	7675			0.00- 98.02	15.20	
44 Trichloroethene						CAS #: 79-01-6			
18.428	18.428	(1.022)	95	28883	0.50	0.46		100.00	7831(Q)
8.428	18.428	(0.000)	130	6035			24.68- 124.68	20.89	
8.428	18.428	(0.000)	97	4905			10.70- 110.70	16.98	
45 1,2-Dichloropropane						CAS #: 78-87-5			
8.741	18.741	(1.039)	63	25585	0.50	0.46		100.00	9515(Q)
8.741	18.741	(0.000)	62	4967			20.77- 120.77	19.41	
18.741	18.741	(0.000)	41	4996			21.18- 121.18	19.53	
46 1,4-Dioxane						CAS #: 123-91-1			
8.901	18.901	(1.048)	88	12618	0.50	0.42		100.00	8935
18.901	18.901	(0.000)	58	2294			15.56- 115.56	18.18	
8.901	18.901	(0.000)	57	975			0.00- 77.87	7.73	
47 Bromodichloromethane						CAS #: 75-27-4			
19.092	19.092	(1.059)	83	43291	0.50	0.44		100.00	9237
9.092	19.092	(0.000)	85	7151			9.04- 109.04	16.52	
48 cis-1,3-Dichloropropene						CAS #: 542-75-6			
19.687	19.687	(1.092)	75	17015	0.72	0.62		100.00	9191
9.687	19.687	(0.000)	77	1764			0.00- 91.71	10.37	
9.687	19.687	(0.000)	39	2217			2.42- 102.42	13.03	
49 4-Methyl-2-pentanone						CAS #: 108-10-1			
9.802	19.802	(1.098)	43	53692	0.50	0.44		100.00	9481
19.802	19.802	(0.000)	58	5680			0.00- 87.30	10.58	
19.802	19.802	(0.000)	85	1907			0.00- 62.52	3.55	
51 Toluene						CAS #: 108-88-3			
20.168	20.168	(1.118)	92	43297	0.50	0.44		100.00	8444(Q)
20.168	20.168	(0.000)	91	22089			132.99- 232.99	51.02	
52 Octane						CAS #: 111-65-9			
20.152	20.152	(1.118)	57	20508	0.50	0.44		100.00	7415(Q)
20.152	20.152	(0.000)	85	6379			45.68- 145.68	31.10	
0.152	20.152	(0.000)	43	15346			180.18- 280.18	74.83	
53 trans-1,3-Dichloropropene						CAS #: 542-75-6			
20.381	20.381	(0.919)	75	7379	0.10	0.13		100.00	4065
0.381	20.381	(0.000)	77	171			0.00- 60.23	2.32	
54 1,1,2-Trichloroethane						CAS #: 79-00-5			
0.687	20.687	(0.933)	97	23527	0.50	0.46		100.00	9685(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
54 1,1,2-Trichloroethane (continued)								
20.687	20.687 (0.000)	99	3870			8.34- 108.34	16.45	
20.687	20.687 (0.000)	83	5623			34.77- 134.77	23.90	
55 Tetrachloroethene					CAS #: 127-18-4			
20.954	20.954 (0.945)	166	25844	0.50	0.45		100.00	8606(Q)
20.954	20.954 (0.000)	129	5624			25.01- 125.01	21.76	
20.954	20.954 (0.000)	131	5443			22.59- 122.59	21.06	
56 2-Hexanone					CAS #: 591-78-6			
20.923	20.923 (0.944)	43	45381	0.50	0.38		100.00	8349
20.923	20.923 (0.000)	58	6457			5.10- 105.10	14.23	
20.923	20.923 (0.000)	100	1108			0.00- 59.45	2.44	
57 Dibromochloromethane					CAS #: 124-48-1			
21.297	21.297 (0.961)	129	29234	0.50	0.42		100.00	8135
21.297	21.297 (0.000)	208	191			0.00- 52.39	0.65	
58 1,2-Dibromoethane					CAS #: 106-93-4			
21.518	21.518 (0.971)	107	30450	0.50	0.45		100.00	9568(Q)
21.518	21.518 (0.000)	109	6565			34.81- 134.81	21.56	
60 Chlorobenzene					CAS #: 108-90-7			
22.220	22.220 (1.002)	112	51906	0.50	0.46		100.00	8814
22.220	22.220 (0.000)	114	4471			0.00- 82.51	8.61	
22.220	22.220 (0.000)	77	7504			4.56- 104.56	14.46	
61 Ethyl Benzene					CAS #: 100-41-4			
22.296	22.296 (1.006)	106	29813	0.50	0.43		100.00	
22.296	22.296 (1.006)	91	103451			297.00- 397.00	347.00	
62 m,p-Xylene					CAS #: 108-38-3			
22.457	22.457 (1.013)	106	55694	1.0	0.82		100.00	
22.457	22.457 (1.013)	91	120203			165.83- 265.83	215.83	
63 o-Xylene					CAS #: 95-47-6			
23.136	23.136 (1.044)	106	17642	0.50	0.42		100.00	9410(Q)
23.136	23.136 (0.000)	91	8283			134.56- 234.56	46.95	
64 Styrene					CAS #: 100-42-5			
23.143	23.143 (1.044)	104	32709	0.50	0.37		100.00	9444
23.143	23.143 (0.000)	78	3633			0.00- 95.19	11.11	
65 Bromoform					CAS #: 75-25-2			
23.563	23.563 (1.063)	171	12636	0.50	0.38		100.00	8554(Q)
23.563	23.563 (0.000)	173	5870			146.98- 246.98	46.45	
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
24.181	24.181 (1.091)	83	49062	0.50	0.47		100.00	8028

C Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Report Date: 09-Jan-1997 12:09

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j010905.d
Lab Smp Id: VSTD0005
Analysis Type: VOA
Quant Type: ISTD
Operator: FA
Method File: /chem/msdj.i/j-09jan.b/TO140109.m
Misc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD0005
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	193877	0.92
43 1,4-Difluorobenzene	832855	499713	1165997	850139	2.08
59 Chlorobenzene-d5	625059	375035	875083	656394	5.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.69	-0.02
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.03	-0.01
59 Chlorobenzene-d5	22.16	21.66	22.66	22.17	0.02

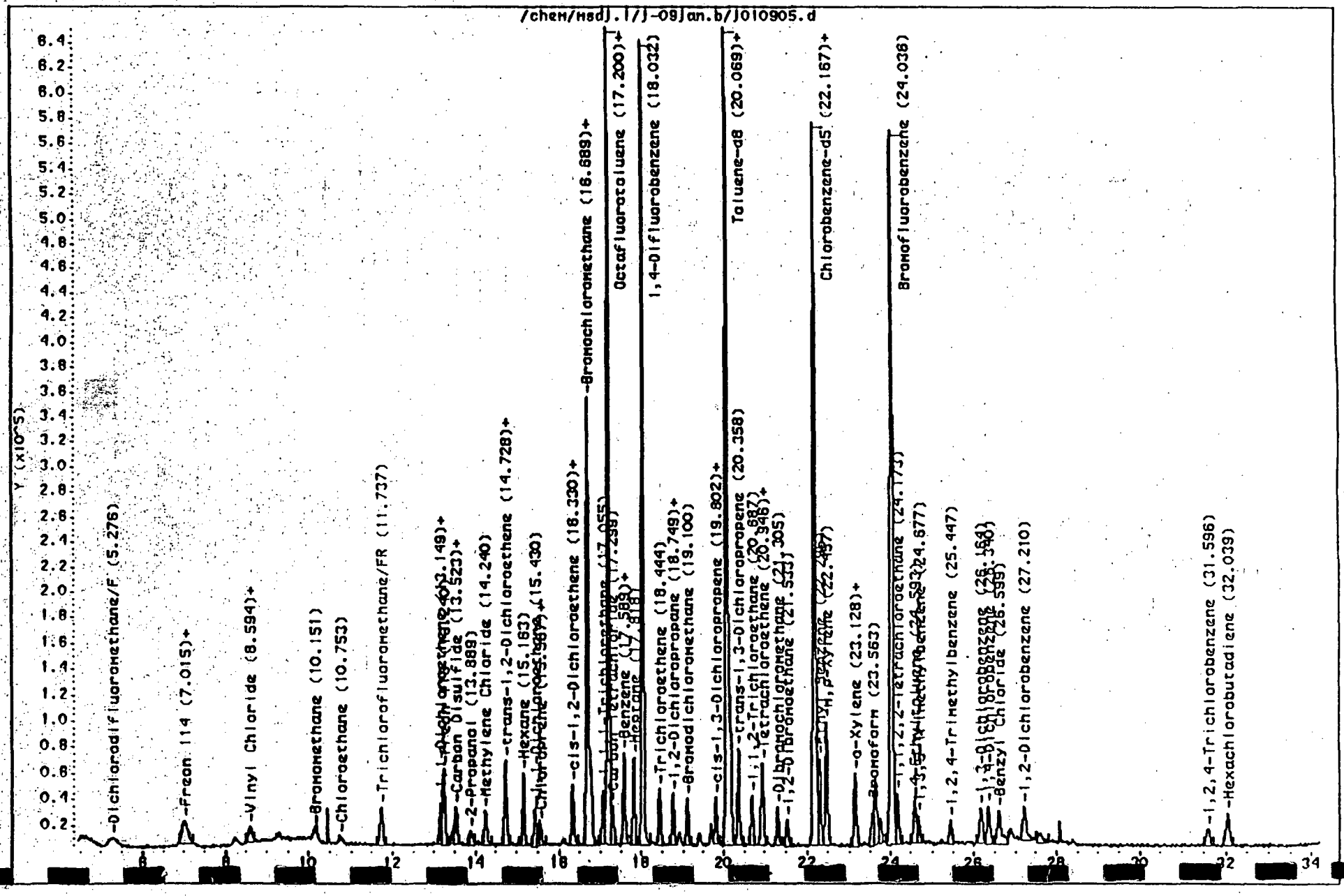
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Date : 09-JAN-1997 10:04
Client ID: VSTD0005
Sample Info: 2.5ml #298-25 100ppbv (0.5ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: FA
Column diameter: 0.58



Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010906.d
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 09-JAN-1997 10:44
Operator : FA Inst ID: msdj.i
Smp Info : 25.0ml #296-25 100ppbv (5.0ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:16 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:08 Cal File: j010908.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.691	16.691 (1.000)	130	192118	5.0			100.00	9568(Q)
16.691	16.691 (0.000)	128	44008			27.84- 127.84	22.91	
16.691	16.691 (0.000)	49	104608			135.03- 235.03	54.45	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.034	18.034 (1.000)	114	832855	5.0			100.00	9727
18.034	18.034 (0.000)	88	44176			0.00- 67.42	5.30	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.162	22.162 (1.000)	117	625059	5.0			100.00	7743
22.162	22.162 (0.000)	82	147072			23.02- 123.02	23.53	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.210	17.210 (1.031)	217	423557	5.0	4.8		100.00	9824
17.210	17.210 (0.000)	186	85760			14.15- 114.15	20.25	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.071	20.071 (1.113)	98	747546	5.0	5.0		100.00	9758
20.071	20.071 (0.000)	70	27300			0.00- 62.71	3.65	
20.071	20.071 (0.000)	100	139904			15.16- 115.16	18.72	

Data File: /chem/msdj.i/j-09jan.b/j010906.d
Report Date: 09-Jan-1997 14:16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
66 Bromofluorobenzene					CAS #: 460-00-4			
24.038	24.038 (1.085)	95	495314	5.0	5.1		100.00	9690
24.038	24.038 (0.000)	174	71272			10.63- 110.63	14.39	
24.038	24.038 (0.000)	176	66416			6.50- 106.50	13.41	
1 Propylene					CAS #: 115-07-1			
4.683	4.683 (0.281)	41	132016	5.0	4.1		100.00	7657(Q)
4.683	4.683 (0.000)	42	6001			10.63- 110.63	4.55	
4.683	4.683 (0.000)	39	6312			13.77- 113.77	4.78	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
5.263	5.263 (0.315)	85	581123	5.0	4.8		100.00	9571
5.263	5.263 (0.000)	87	12882			0.00- 81.97	2.22	
7 Freon 114					CAS #: 76-14-2			
7.018	7.018 (0.420)	135	425798	5.0	4.9		100.00	9745
7.018	7.018 (0.000)	137	13045			0.00- 82.14	3.06	
8 Chloromethane					CAS #: 74-87-3			
7.140	7.140 (0.428)	50	249285	5.0	4.9		100.00	9498
7.140	7.140 (0.000)	52	5860			0.00- 87.12	2.35	
9 Vinyl Chloride					CAS #: 75-01-4			
8.246	8.246 (0.494)	62	266334	5.0	5.0		100.00	9534
8.246	8.246 (0.000)	64	7965			0.00- 77.24	2.99	
10 1,3-Butadiene					CAS #: 106-99-0			
8.589	8.589 (0.515)	54	202031	5.0	5.0		100.00	9778(Q)
8.589	8.589 (0.000)	39	31153			48.46- 148.46	15.42	
11 Bromomethane					CAS #: 74-83-9			
10.161	10.161 (0.609)	94	215407	5.0	4.8		100.00	9526(Q)
10.161	10.161 (0.000)	96	36192			48.31- 148.31	16.80	
12 Chloroethane					CAS #: 75-00-3			
10.741	10.741 (0.643)	64	155805	5.0	5.0		100.00	9645
10.741	10.741 (0.000)	66	9294			0.00- 81.47	5.97	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
11.717	11.717 (0.702)	101	601167	5.0	5.1		100.00	9840
11.717	11.717 (0.000)	103	82176			11.64- 111.64	13.67	
15 Ethanol					CAS #: 64-17-5			
12.747	12.747 (0.764)	45	102015	5.0	6.5		100.00	(H)
12.747	12.747 (0.764)	46	42245			0.00- 91.41	41.41	
12.747	12.747 (0.764)	43	23904			0.00- 73.43	23.43	
17 1,1-Dichloroethene					CAS #: 75-35-4			
13.144	13.144 (0.787)	96	238265	5.0	5.8		100.00	9305(Q)

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
13.144	13.144 (0.000)	61	122000			127.49- 227.49	51.20	
13.144	13.144 (0.000)	98	43168			12.80- 112.80	18.12	
18 Freon 113					CAS #: 76-13-1			
13.235	13.235 (0.793)	151	324843	5.0	5.0		100.00	9290(Q)
13.235	13.235 (0.000)	153	48984			13.46- 113.46	15.08	
13.235	13.235 (0.000)	101	120300			105.85- 205.85	37.03	
19 Carbon Disulfide					CAS #: 75-15-0			
13.518	13.518 (0.810)	76	733514	5.0	5.0		100.00	8027
20 Acetone					CAS #: 67-64-1			
13.388	13.388 (0.802)	43	462729	5.0	6.1		100.00	
13.388	13.388 (0.802)	58	138984			0.00- 80.04	30.04	
22 2-Propanol					CAS #: 67-63-0			
13.869	13.869 (0.831)	45	488232	5.0	5.2		100.00	7544
13.869	13.869 (0.000)	43	26146			0.00- 70.31	5.36	
13.869	13.869 (0.000)	59	5069			0.00- 53.94	1.04	
23 Methylene Chloride					CAS #: 75-09-2			
14.242	14.242 (0.853)	84	224066	5.0	5.1		100.00	9651(Q)
14.242	14.242 (0.000)	49	101848			104.22- 204.22	45.45	
14.242	14.242 (0.000)	51	32472			0.00- 99.17	14.49	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.731	14.731 (0.883)	96	241682	5.0	4.9		100.00	9589(Q)
14.731	14.731 (0.000)	61	118536			107.35- 207.35	49.05	
14.731	14.731 (0.000)	98	49080			15.15- 115.15	20.31	
26 MTBE					CAS #: 1634-04-4			
14.731	14.731 (0.883)	73	646033	5.0	5.0		100.00	6447
14.731	14.731 (0.000)	57	43376			0.00- 74.88	6.71	
14.731	14.731 (0.000)	41	43978			0.00- 75.22	6.81	
27 Hexane					CAS #: 110-54-3			
15.166	15.166 (0.909)	57	455982	5.0	5.1		100.00	7284
15.166	15.166 (0.000)	43	101843			19.51- 119.51	22.33	
15.166	15.166 (0.000)	56	75048			1.22- 101.22	16.46	
28 1,1-Dichloroethane					CAS #: 75-34-3			
15.440	15.440 (0.925)	63	458422	5.0	5.0		100.00	9634
15.440	15.440 (0.000)	65	41836			0.00- 80.49	9.13	
29 Chloroprene					CAS #: 126-99-8			
15.570	15.570 (0.933)	53	161430	5.0	5.2		100.00	7889
15.570	15.570 (0.000)	88	24764			0.00- 99.91	15.34	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
15.570	15.570 (0.000)	50	12487			0.00- 75.17	7.74	
30 Vinyl Acetate					CAS #: 108-05-4			
15.501	15.501 (0.929)	43	749635	5.0	5.1		100.00	5945
15.501	15.501 (0.000)	86	16469			0.00- 57.56	2.20	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.333	16.333 (0.979)	96	257903	5.0	5.0		100.00	9750(Q)
16.333	16.333 (0.000)	61	111071			98.98- 198.98	43.07	
16.333	16.333 (0.000)	98	48344			14.85- 114.85	18.75	
32 2-Butanone					CAS #: 78-93-3			
16.318	16.318 (0.978)	72	108129	5.0	5.1		100.00	7902(Q)
16.318	16.318 (0.000)	43	148791			434.74- 534.74	137.61	
16.318	16.318 (0.000)	57	9883			0.00- 82.20	9.14	
34 Chloroform					CAS #: 67-66-3			
16.775	16.775 (1.005)	83	481526	5.0	5.0		100.00	9184
16.775	16.775 (0.000)	85	94335			15.56- 115.56	19.59	
35 Tetrahydrofuran					CAS #: 109-99-9			
16.760	16.760 (1.004)	42	250622	5.0	5.0		100.00	7488
16.760	16.760 (0.000)	71	26184			0.00- 87.36	10.45	
16.760	16.760 (0.000)	72	26934			0.00- 88.43	10.75	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.058	17.058 (1.022)	97	451490	5.0	5.0		100.00	9740
17.058	17.058 (0.000)	99	82088			12.67- 112.67	18.18	
37 Cyclohexane					CAS #: 110-82-7			
17.142	17.142 (1.027)	56	427842	5.0	5.1		100.00	8284(Q)
17.142	17.142 (0.000)	84	88251			21.88- 121.88	20.63	
17.142	17.142 (0.000)	41	72107			8.73- 108.73	16.85	
38 Carbon Tetrachloride					CAS #: 56-23-5			
17.309	17.309 (1.037)	119	357938	5.0	5.0		100.00	8578
17.309	17.309 (0.000)	117	40536			0.00- 89.33	11.32	
40 Benzene					CAS #: 71-43-2			
17.584	17.584 (0.975)	78	791151	5.0	5.0		100.00	9696
17.584	17.584 (0.000)	77	56750			0.00- 74.08	7.17	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.592	17.592 (0.975)	62	310040	5.0	5.0		100.00	8186
17.592	17.592 (0.000)	64	27950			0.00- 81.12	9.01	
42 Heptane					CAS #: 142-82-5			
17.821	17.821 (0.988)	43	546632	5.0	5.0		100.00	7677

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.821	17.821 (0.000)	57	84824			0.00- 98.34	15.52	
17.821	17.821 (0.000)	71	85616			0.00- 98.79	15.66	
44 Trichloroethene					CAS #: 79-01-6			
18.446	18.446 (1.023)	95	299983	5.0	4.9		100.00	7806(Q)
18.446	18.446 (0.000)	130	76000			35.60- 135.60	25.33	
18.446	18.446 (0.000)	97	56528			13.67- 113.67	18.84	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.751	18.751 (1.040)	63	276157	5.0	5.0		100.00	9705(Q)
18.751	18.751 (0.000)	62	61215			25.80- 125.30	22.17	
18.751	18.751 (0.000)	41	48193			9.67- 109.67	17.45	
46 1,4-Dioxane					CAS #: 123-91-1			
18.904	18.904 (1.048)	88	145083	5.0	4.9		100.00	9791(Q)
18.904	18.904 (0.000)	58	31616			28.21- 128.21	21.79	
18.904	18.904 (0.000)	57	10561			0.00- 76.12	7.28	
47 Bromodichloromethane					CAS #: 75-27-4			
19.102	19.102 (1.059)	83	475564	5.0	4.9		100.00	9379
19.102	19.102 (0.000)	85	86136			13.39- 113.39	18.11	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.682	19.682 (1.091)	75	193547	7.2	7.1		100.00	9557
19.682	19.682 (0.000)	77	16863			0.00- 80.06	8.71	
19.682	19.682 (0.000)	39	33537			9.78- 109.78	17.33	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.804	19.804 (1.098)	43	590585	5.0	5.0		100.00	9640
19.804	19.804 (0.000)	58	62135			0.00- 85.05	10.52	
19.804	19.804 (0.000)	85	21217			0.00- 61.97	3.59	
51 Toluene					CAS #: 108-88-3			
20.170	20.170 (1.118)	92	473090	5.0	4.9		100.00	9459(Q)
20.170	20.170 (0.000)	91	229824			118.43- 218.43	48.58	
52 Octane					CAS #: 111-65-9			
20.147	20.147 (1.117)	57	211213	5.0	4.7		100.00	8365(Q)
20.147	20.147 (0.000)	85	68920			48.51- 148.51	32.63	
20.147	20.147 (0.000)	43	186907			217.16- 317.16	88.49	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.399	20.399 (0.920)	75	51084	1.0	0.96		100.00	9676
20.399	20.399 (0.000)	77	3997			0.00- 77.26	7.82	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.689	20.689 (0.934)	97	254127	5.0	5.2		100.00	9745(Q)

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
54 1,1,2-Trichloroethane (continued)								
20.689	20.689 (0.000)	99	42120			8.45- 108.45	16.57	
20.689	20.689 (0.000)	83	63523			38.16- 138.16	25.00	
55 Tetrachloroethene					CAS #: 127-18-4			
20.956	20.956 (0.946)	166	276775	5.0	5.0		100.00	9270(Q)
20.956	20.956 (0.000)	129	64904			33.09- 133.09	23.45	
20.956	20.956 (0.000)	131	62344			29.81- 129.81	22.53	
56 2-Hexanone					CAS #: 591-78-6			
20.918	20.918 (0.944)	43	607966	5.0	5.3		100.00	8560
20.918	20.918 (0.000)	58	87648			0.00- 99.38	14.42	
20.918	20.918 (0.000)	100	16046			0.00- 59.04	2.64	
57 Dibromochloromethane					CAS #: 124-48-1			
21.307	21.307 (0.961)	129	340343	5.0	5.1		100.00	8205
21.307	21.307 (0.000)	208	4327			0.00- 54.97	1.27	
58 1,2-Dibromoethane					CAS #: 106-93-4			
21.528	21.528 (0.971)	107	335245	5.0	5.2		100.00	9790(Q)
21.528	21.528 (0.000)	109	80849			43.25- 143.25	24.12	
60 Chlorobenzene					CAS #: 108-90-7			
22.215	22.215 (1.002)	112	531080	5.0	5.0		100.00	9327
22.215	22.215 (0.000)	114	43088			0.00- 81.47	8.11	
22.215	22.215 (0.000)	77	87313			13.78- 113.78	16.44	
61 Ethyl Benzene					CAS #: 100-41-4			
22.299	22.299 (1.006)	106	331290	5.0	5.0		100.00	(H)
22.299	22.299 (1.006)	91	1148684			296.73- 396.73	346.73	
62 m,p-Xylene					CAS #: 108-38-3			
22.459	22.459 (1.013)	106	634566	10.0	9.8		100.00	(H)
22.459	22.459 (1.013)	91	1362372			164.69- 264.69	214.69	
63 o-Xylene					CAS #: 95-47-6			
23.123	23.123 (1.043)	106	200467	5.0	5.0		100.00	9728(Q)
23.123	23.123 (0.000)	91	112061			165.83- 265.83	55.90	
64 Styrene					CAS #: 100-42-5			
23.130	23.130 (1.044)	104	416695	5.0	5.0		100.00	9894
23.130	23.130 (0.000)	78	50240			0.00- 98.72	12.06	
65 Bromoform					CAS #: 75-25-2			
23.558	23.558 (1.063)	171	164546	5.0	5.1		100.00	8420(Q)
23.558	23.558 (0.000)	173	74536			143.98- 243.98	45.30	
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
24.176	24.176 (1.091)	83	530413	5.0	5.4		100.00	9128

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
24.176	24.176 (0.000)	85	77792			12.69- 112.69	14.67	
68 4-Ethyltoluene					CAS #: 622-96-8			
24.595	24.595 (1.110)	105	649945	5.0	4.8		100.00	9362(M)
24.595	24.595 (1.110)	120	163682	5.0	4.7	0.00- 76.35	25.18	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
24.687	24.687 (1.114)	105	326222	5.0	5.0		100.00	7991(M)
24.679	24.679 (1.114)	120	150504	5.0	5.0	0.00- 94.84	46.14	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
25.442	25.442 (1.148)	105	260129	5.0	5.0		100.00	8825
25.442	25.442 (0.000)	120	23798			0.00- 89.84	9.15	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
26.167	26.167 (1.181)	146	329109	5.0	5.0		100.00	
26.167	26.167 (1.181)	148	203666			11.88- 111.88	61.88	
26.167	26.167 (1.181)	111	153610			0.00- 96.67	46.67	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
26.342	26.342 (1.189)	146	323634	5.0	5.0		100.00	(H)
26.350	26.350 (1.189)	148	206187			13.71- 113.71	63.71	
26.350	26.350 (1.189)	111	144826			0.00- 94.75	44.75	
74 Benzyl Chloride					CAS #: 100-44-7			
26.594	26.594 (1.200)	91	617072	5.0	4.9		100.00	9278
26.594	26.594 (0.000)	126	21120			0.00- 66.49	3.42	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
27.227	27.227 (1.229)	146	294962	5.0	5.0		100.00	9764(Q)
27.227	27.227 (0.000)	148	35896			13.77- 113.77	12.17	
27.227	27.227 (0.000)	111	26496			0.00- 97.07	8.98	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
31.607	31.607 (1.426)	180	116181	5.0	4.6		100.00	9678(Q)
31.607	31.607 (0.000)	182	17792			45.53- 145.53	15.31	
77 Hexachlorobutadiene					CAS #: 87-68-3			
32.041	32.041 (1.446)	225	131070	5.0	5.0		100.00	9470
32.041	32.041 (0.000)	223	12093			7.67- 107.67	9.23	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/msdj.i/j-09jan.b/j010906.d
Report Date: 09-Jan-1997 12:02

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j010906.d
Lab Smp Id: VSTD005
Analysis Type: VOA
Quant Type: ISTD
Operator: FA
Method File: /chem/msdj.i/j-09jan.b/TO140109.m
Misc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD005
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	192118	0.00
43 1,4-Difluorobenzene	832855	499713	1165997	832855	0.00
59 Chlorobenzene-d5	625059	375035	875083	625059	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.69	0.00
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.03	0.00
59 Chlorobenzene-d5	22.16	21.66	22.66	22.16	0.00

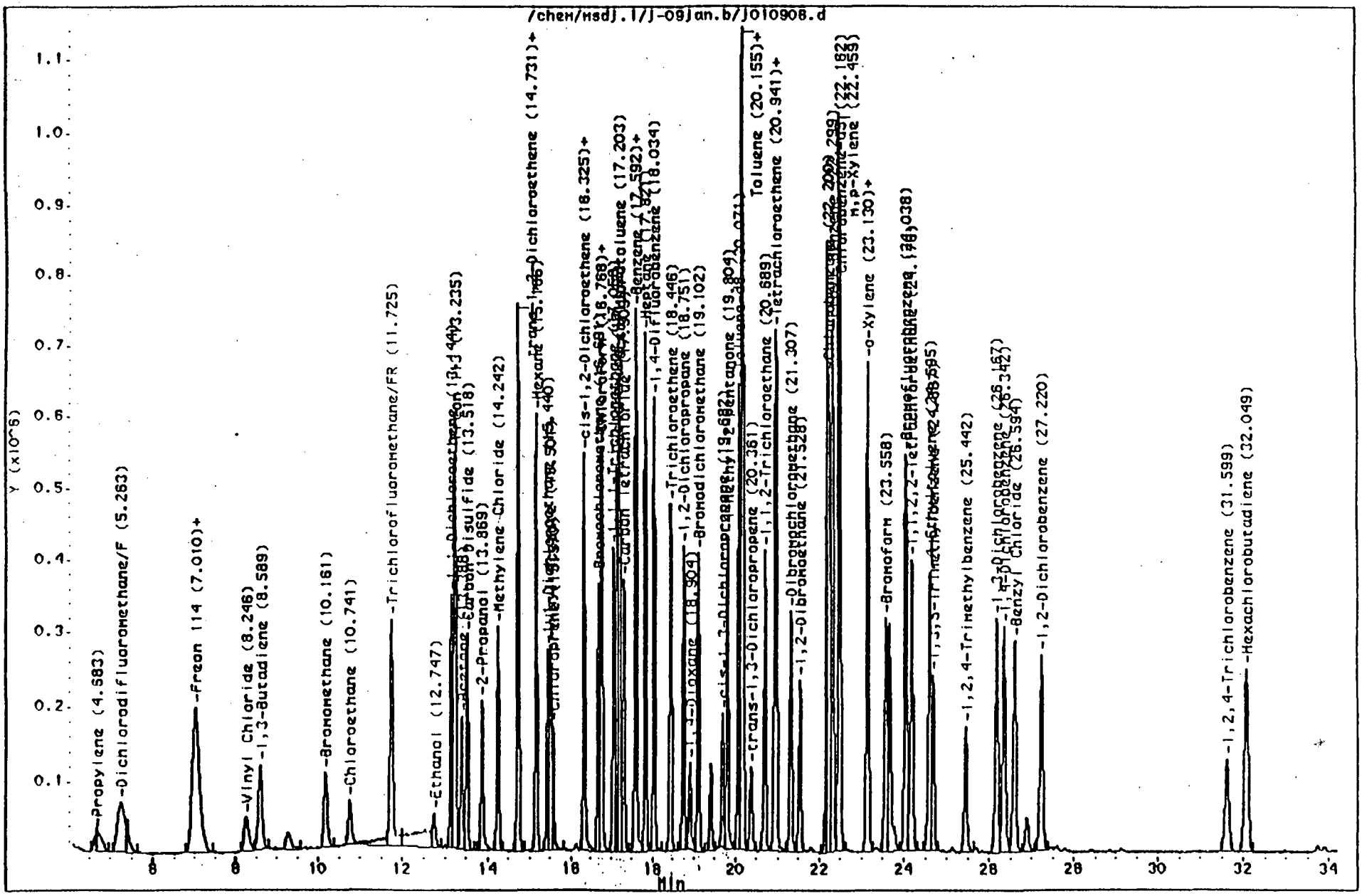
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-09jan.b/j010908.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: FA
Column diameter: 0.58



Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

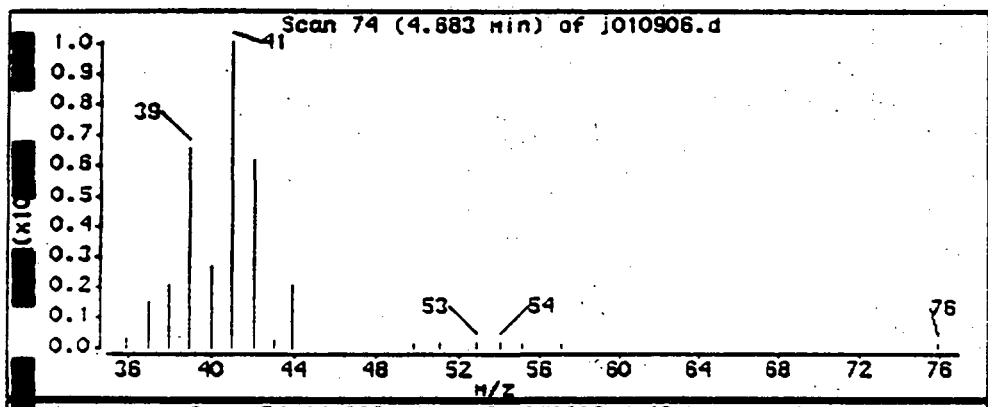
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

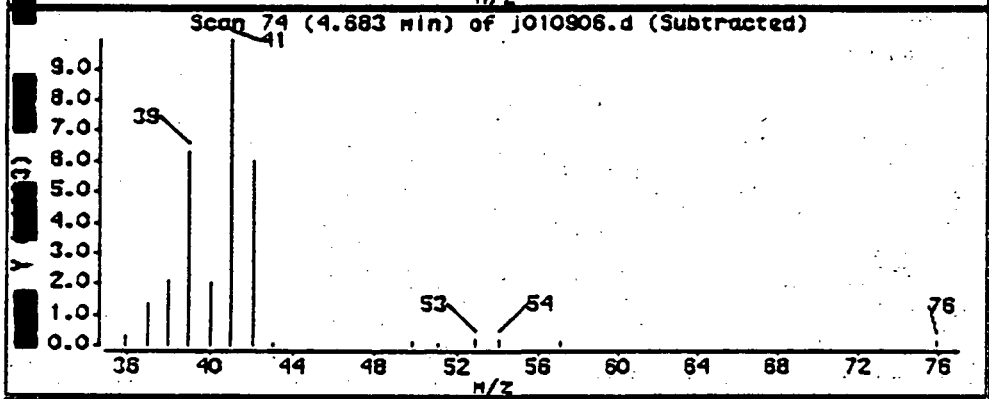
Operator: FA

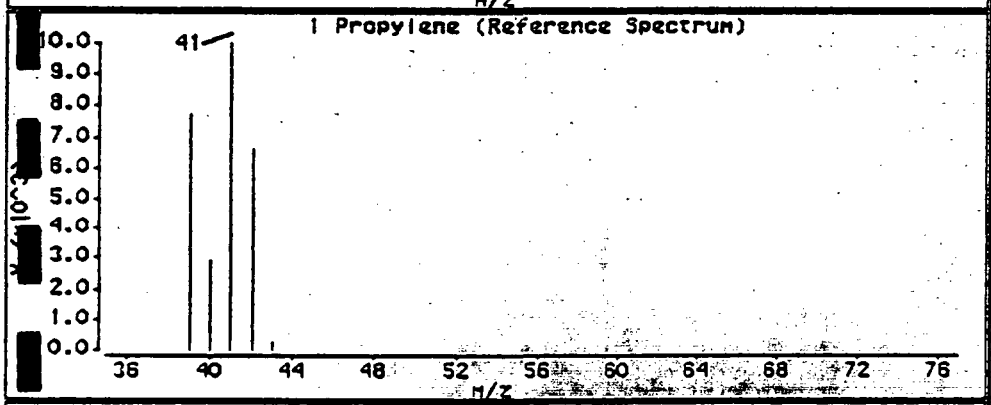
Column phase: RTx-624

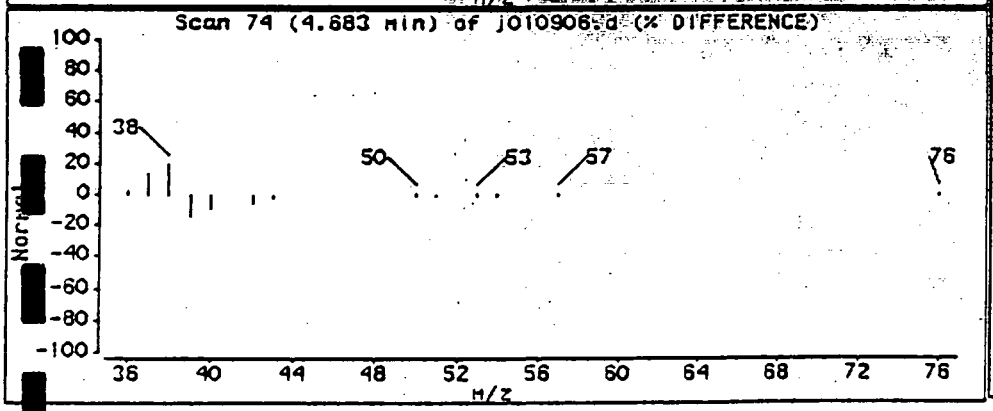
Column diameter: 0.58

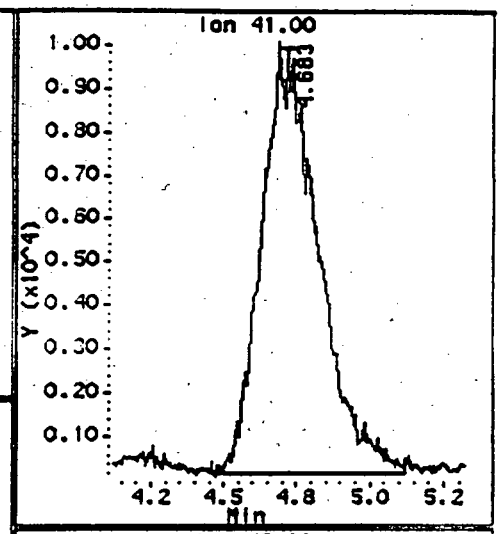
1 Propylene

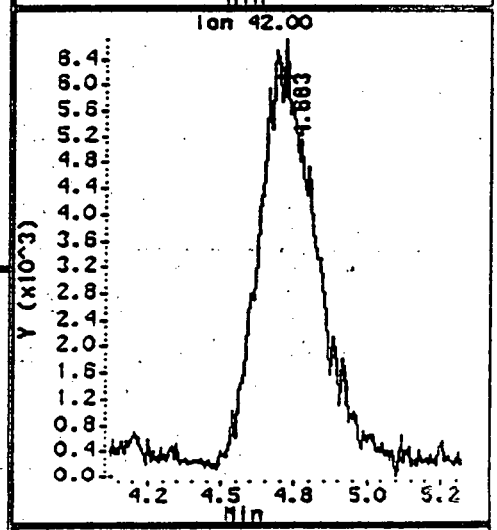


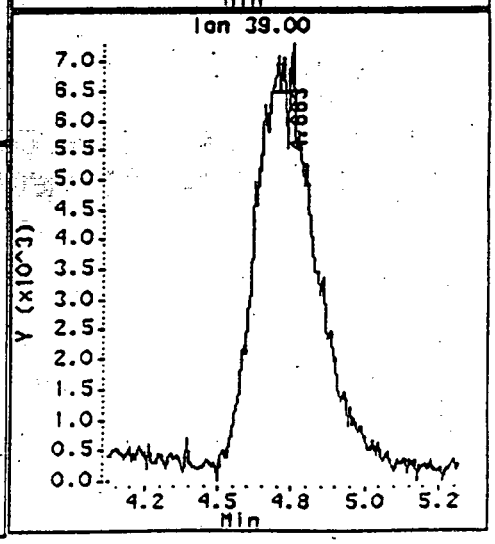












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

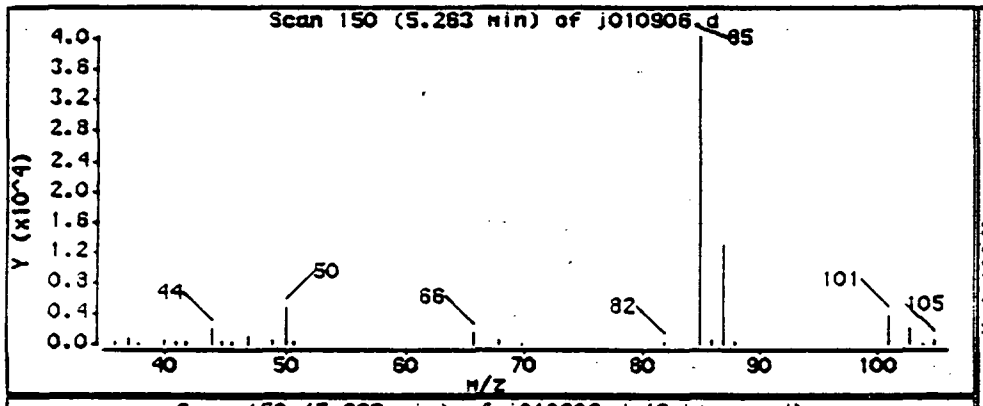
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

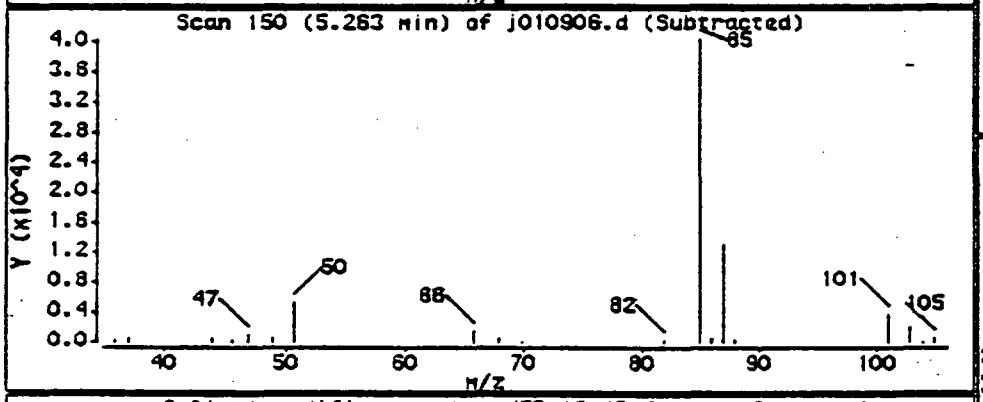
Operator: FR

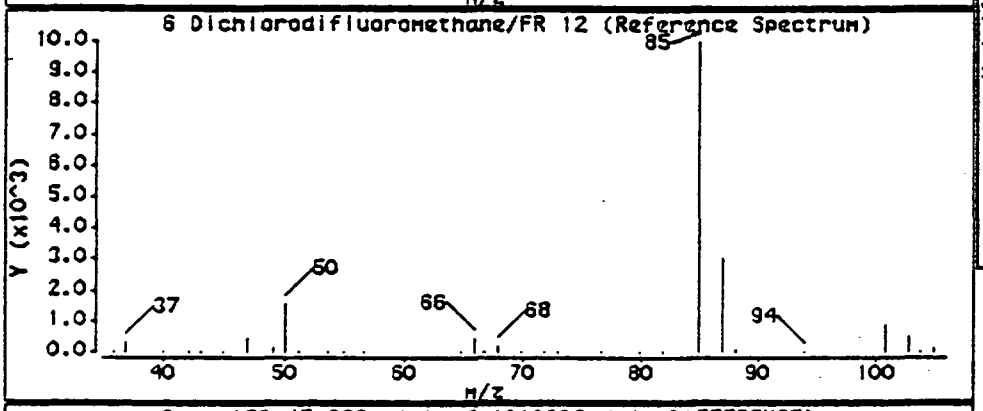
Column phase: RTx-624

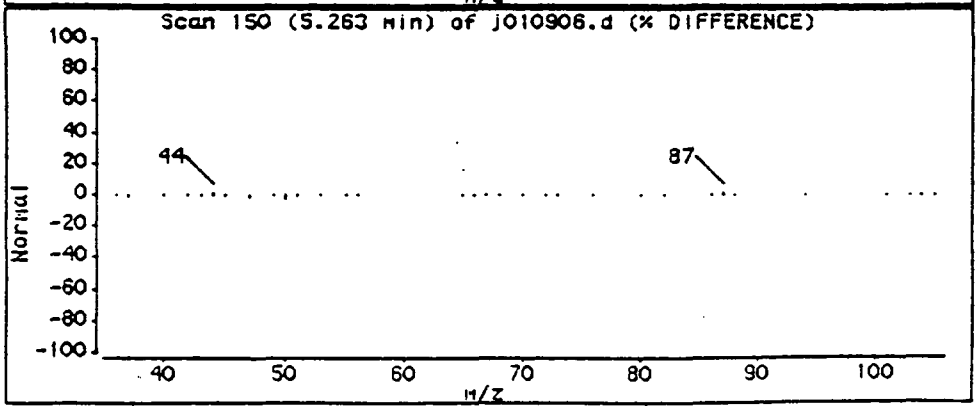
Column diameter: 0.58

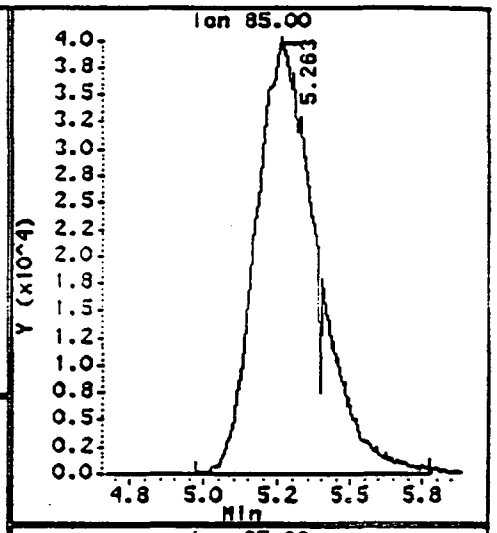
6 Dichlorodifluoromethane/FR 12

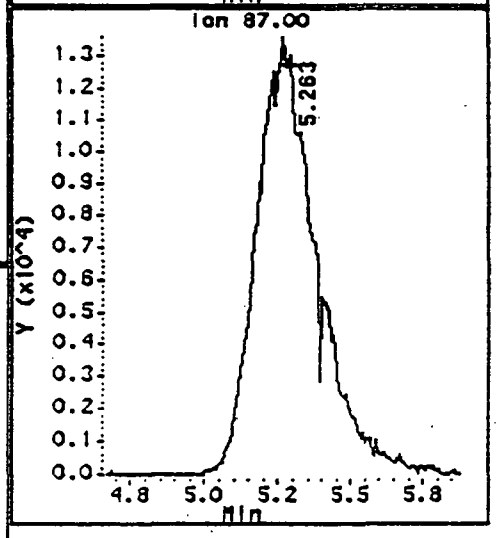












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Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

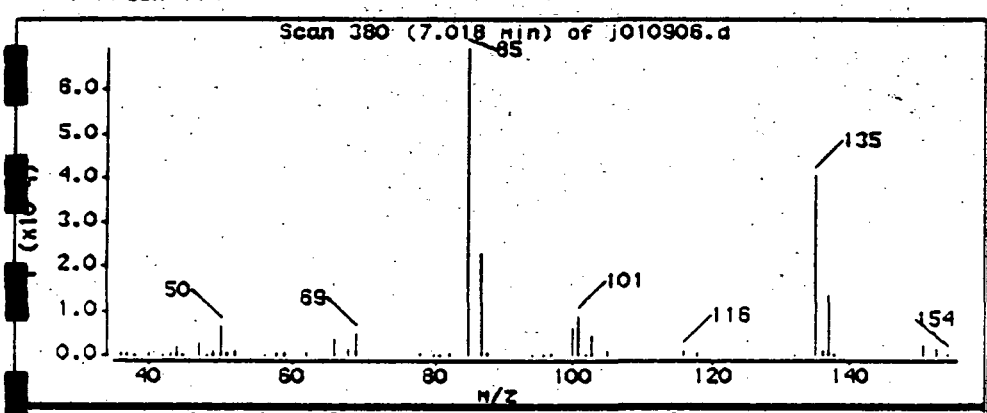
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

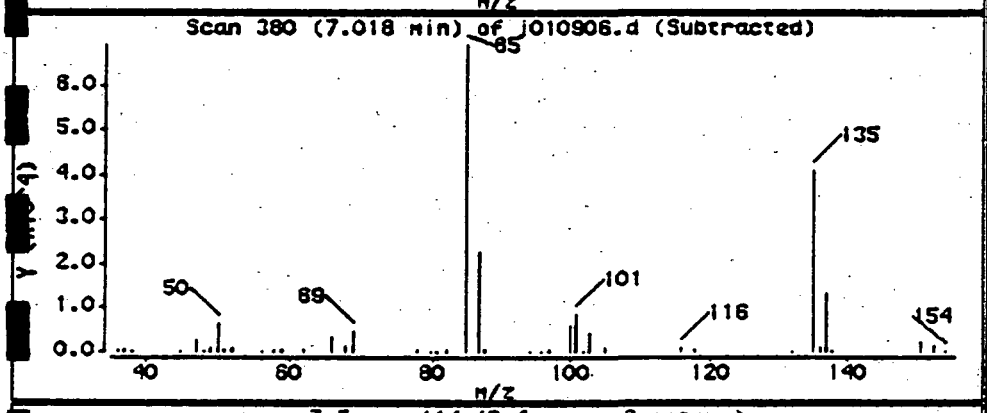
Operator: FA

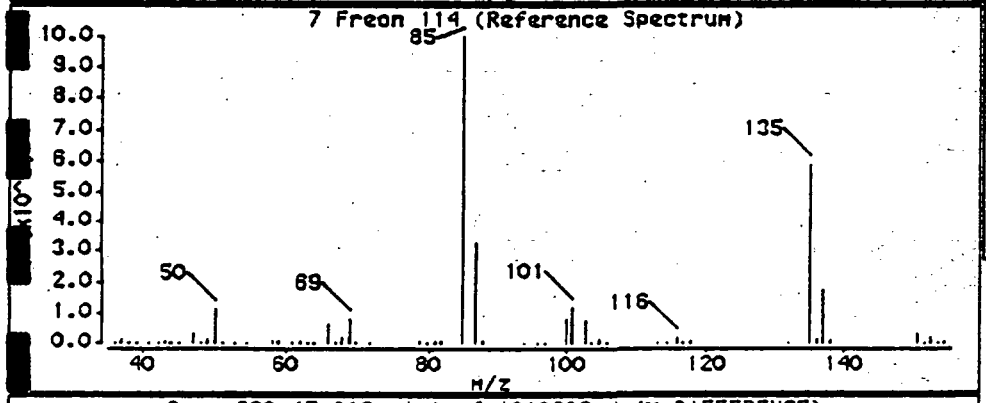
Column phase: RTx-624

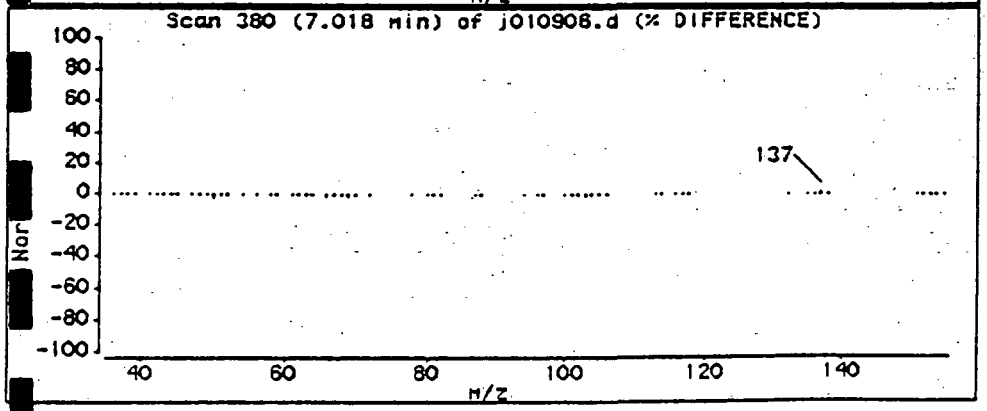
Column diameter: 0.58

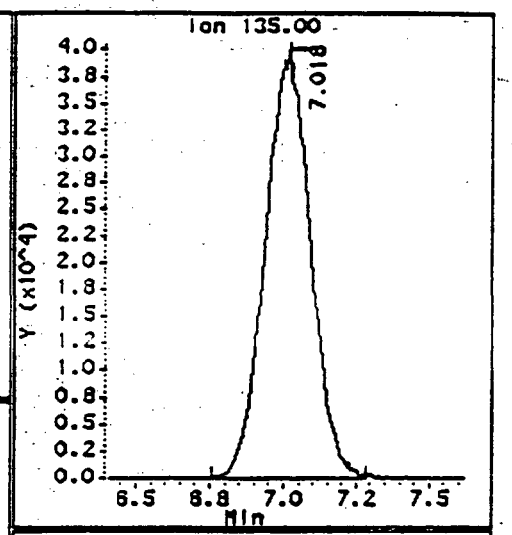
7 Freon 114

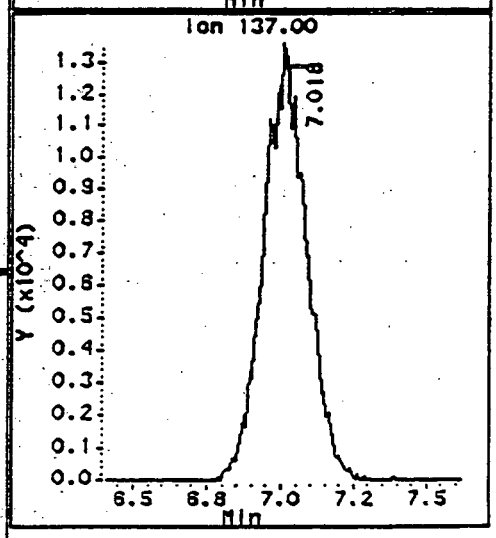












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

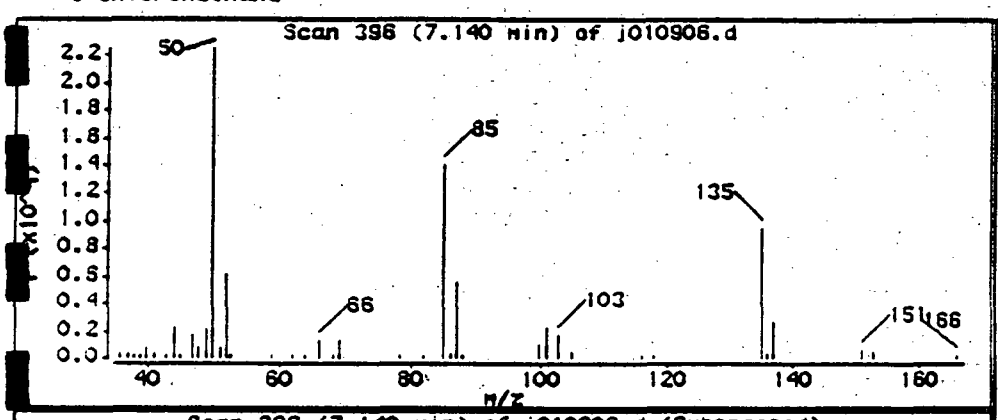
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

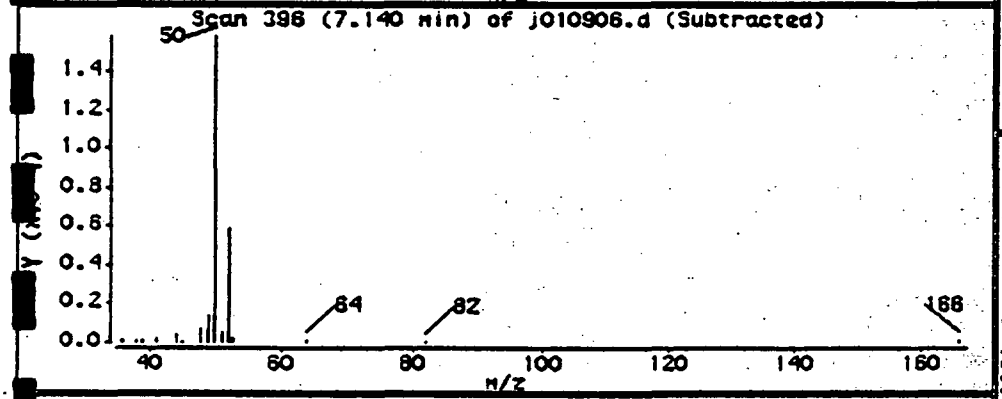
Operator: FA

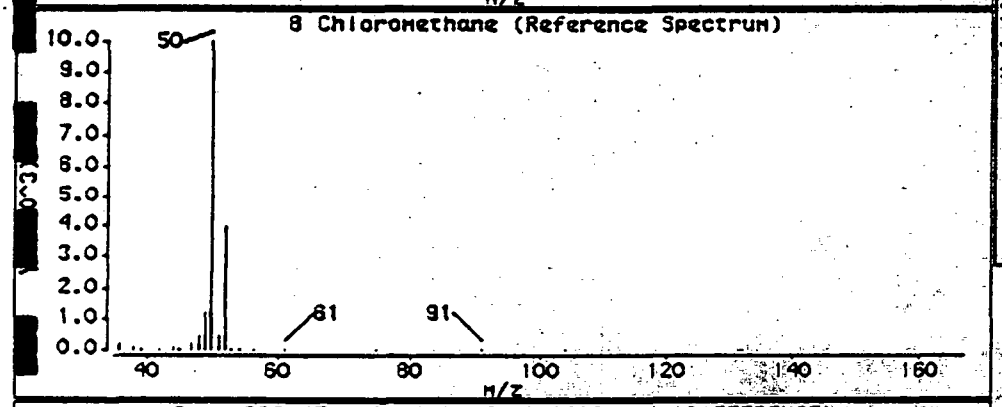
Column phase: RTx-624

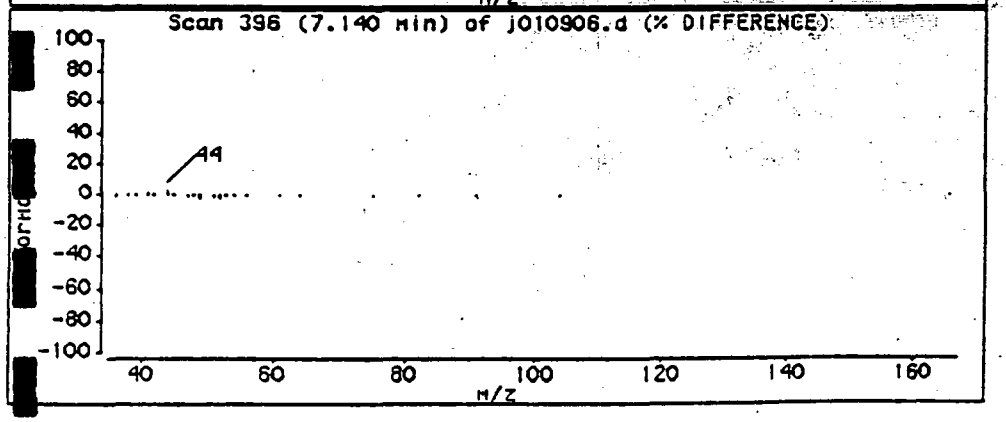
Column diameter: 0.58

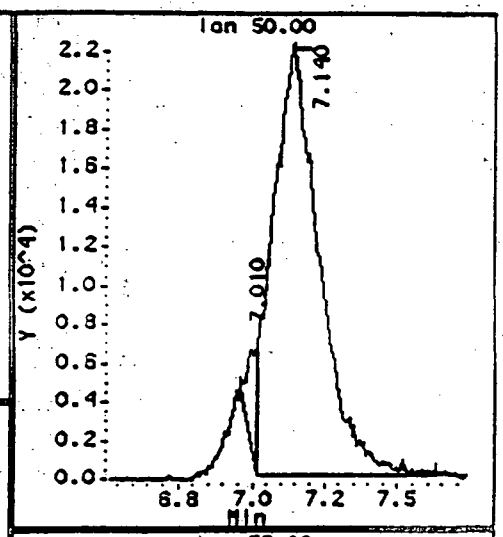
8 Chloromethane

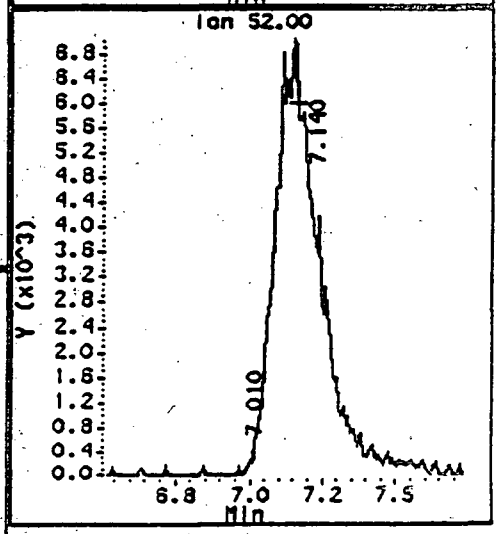












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

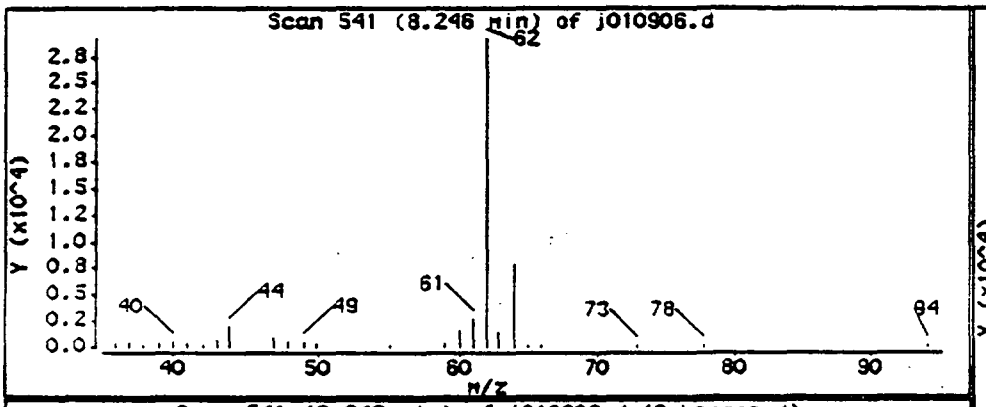
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

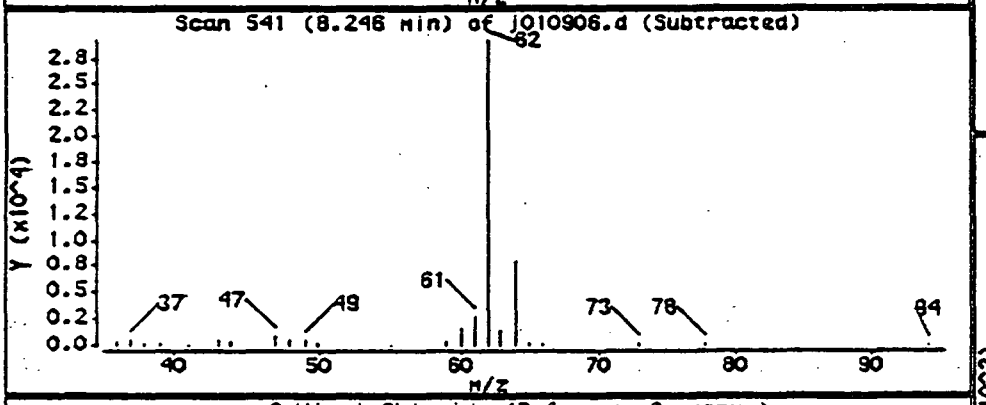
Operator: FA

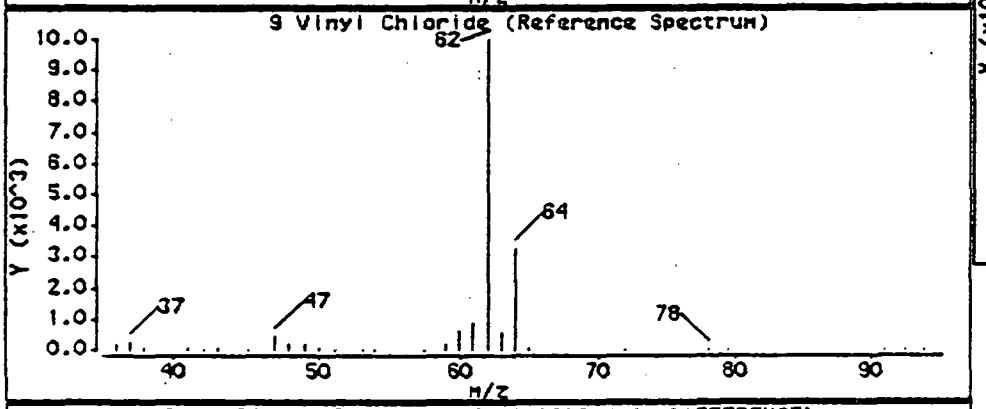
Column phase: RTx-624

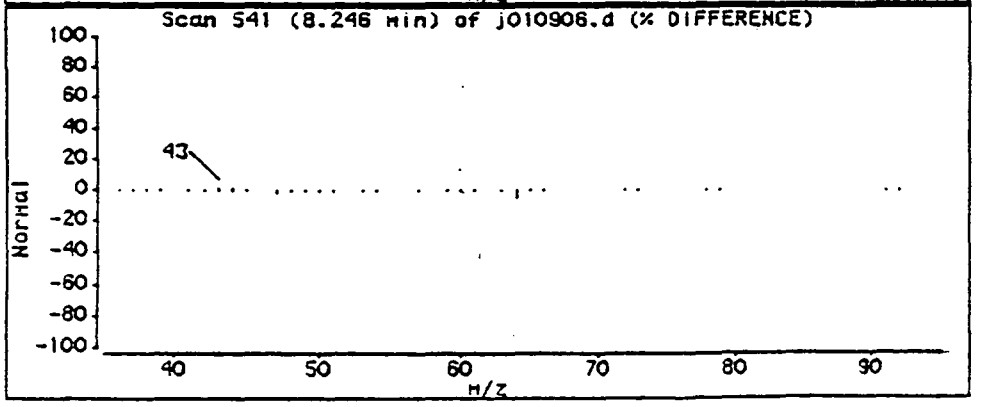
Column diameter: 0.58

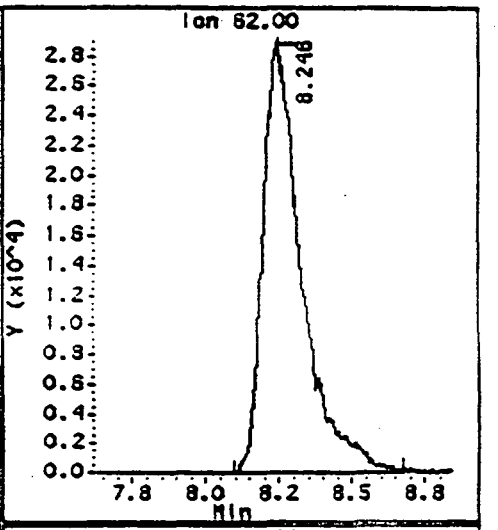
9 Vinyl Chloride

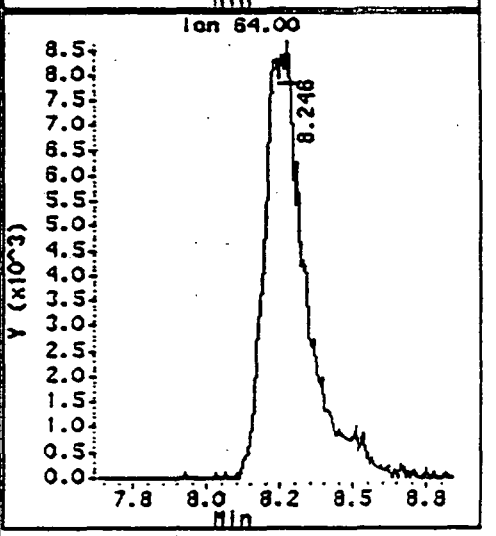












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

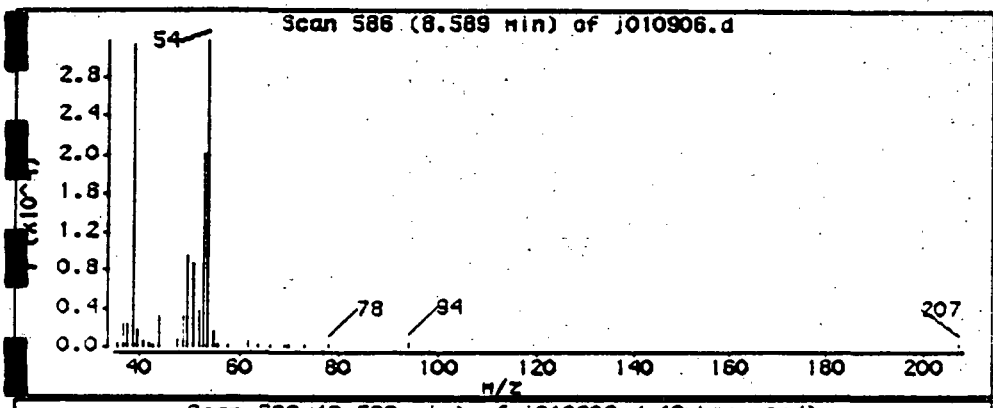
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

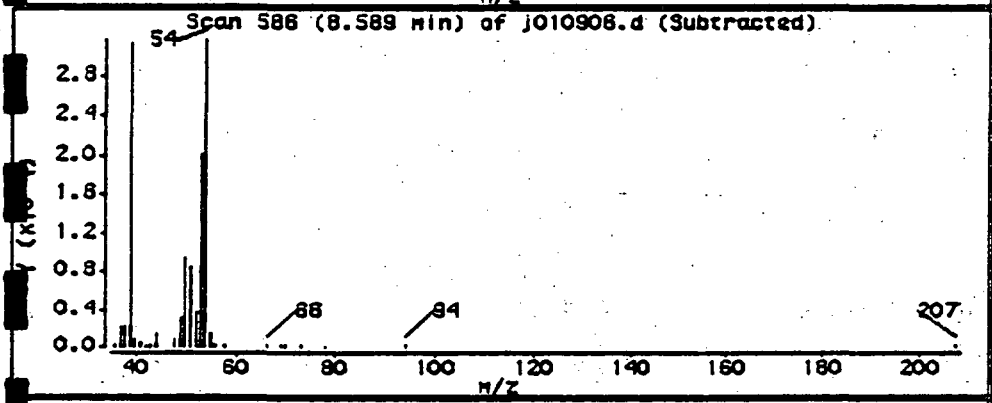
Operator: FA

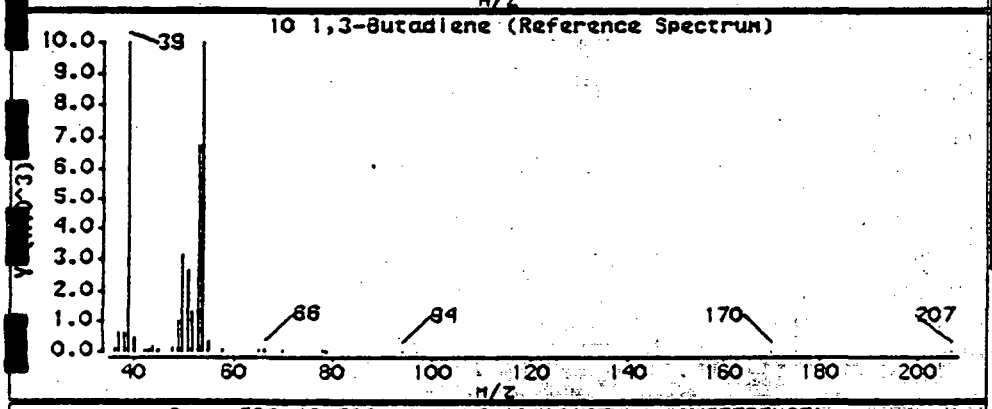
Column phase: RTx-624

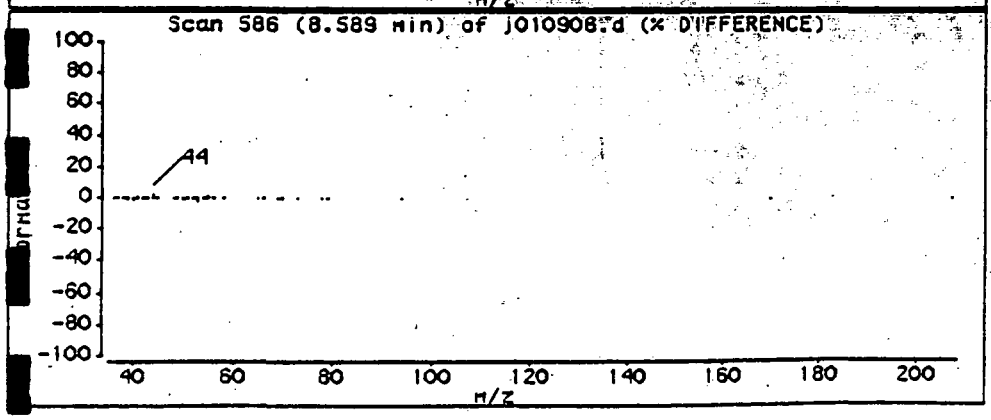
Column diameter: 0.58

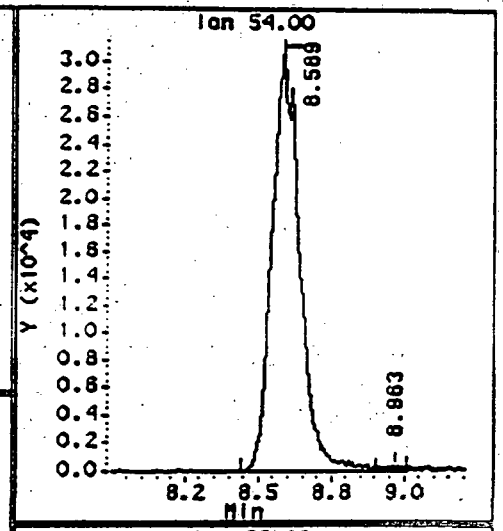
10 1,3-Butadiene

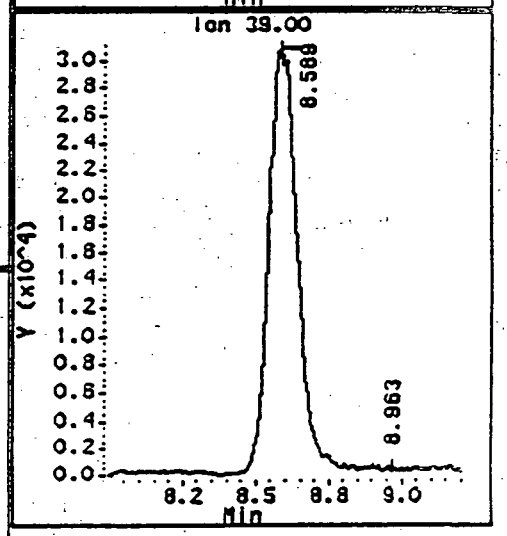












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

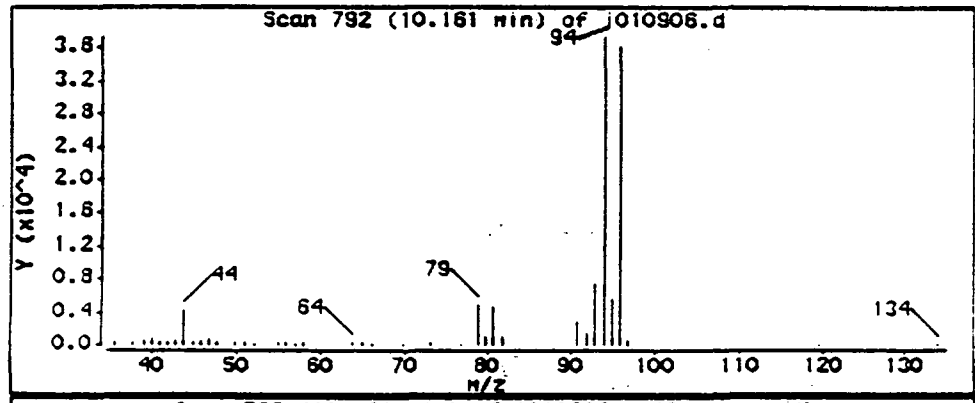
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

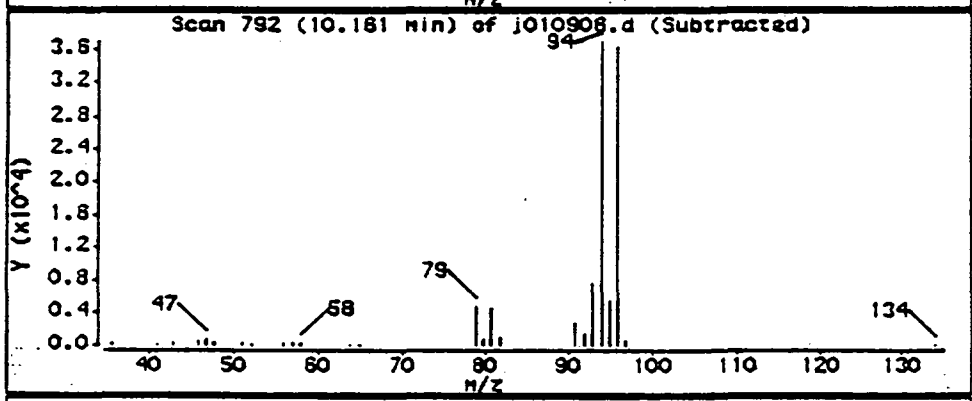
Operator: FA

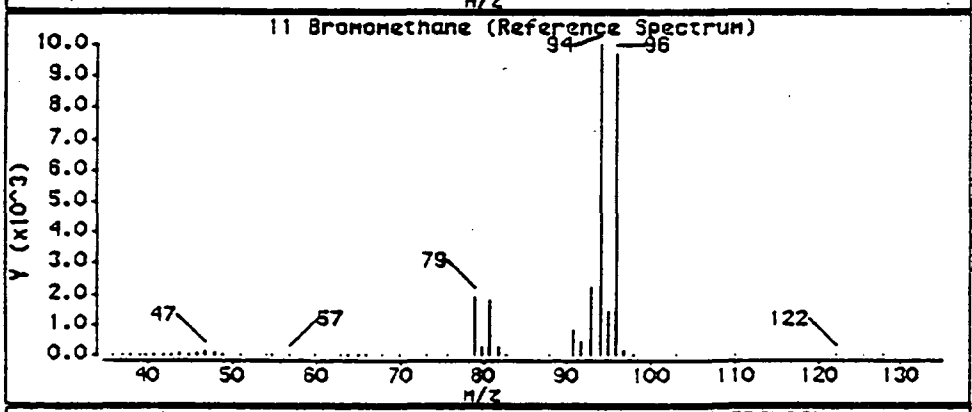
Column phase: RTx-624

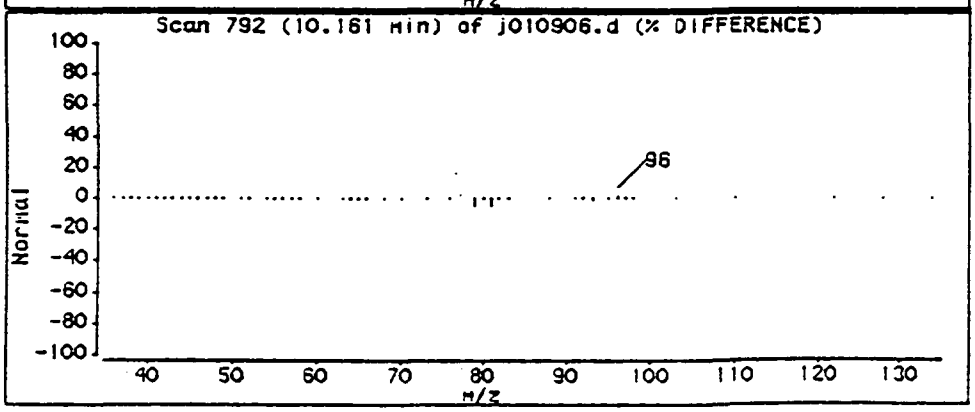
Column diameter: 0.58

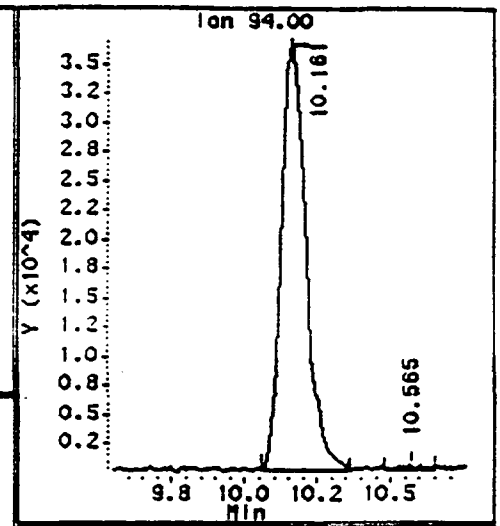
11 Bromomethane

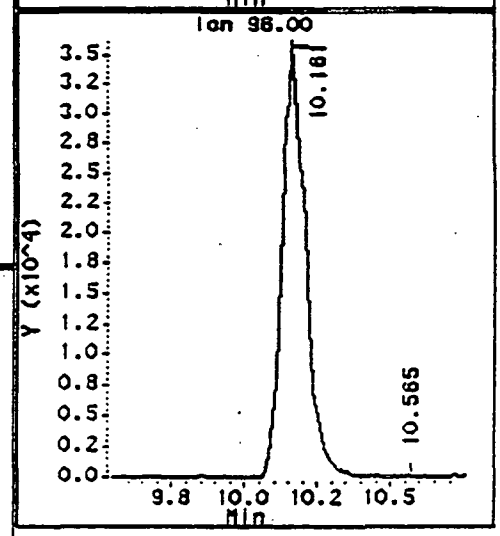












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

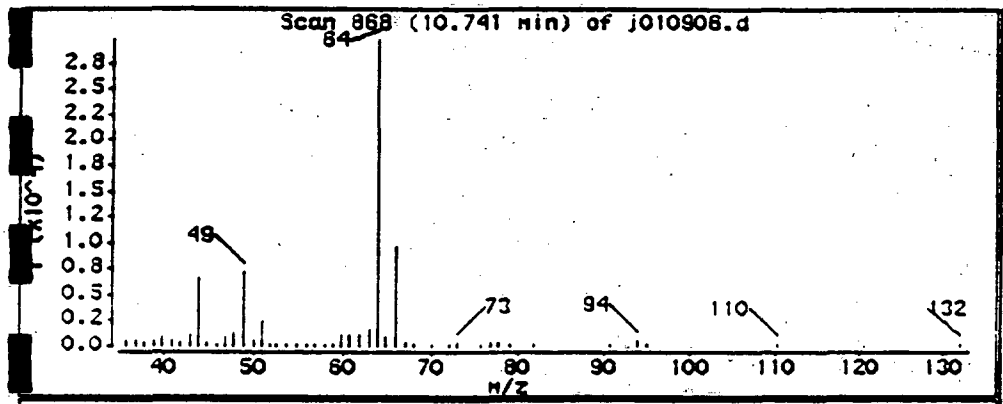
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

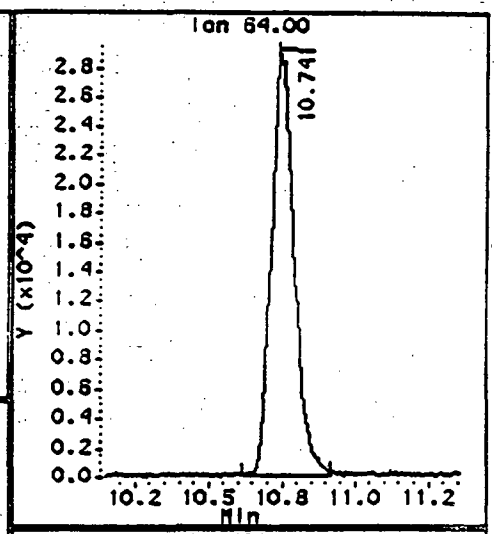
Operator: FA

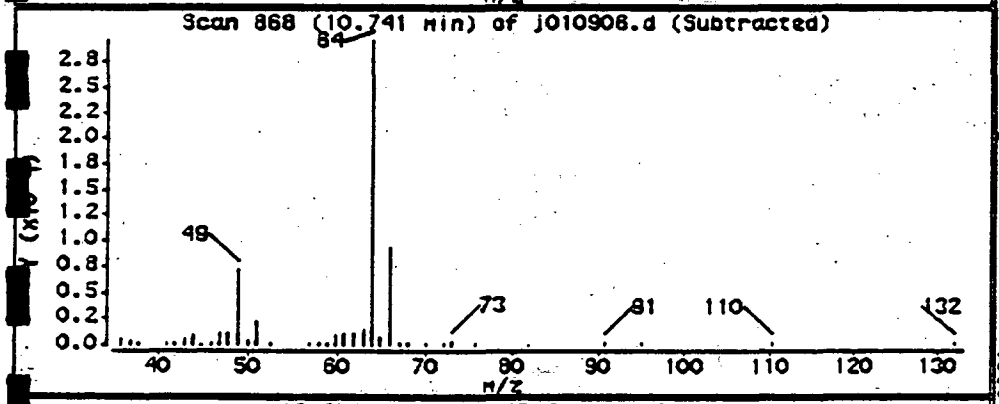
Column phase: RTx-624

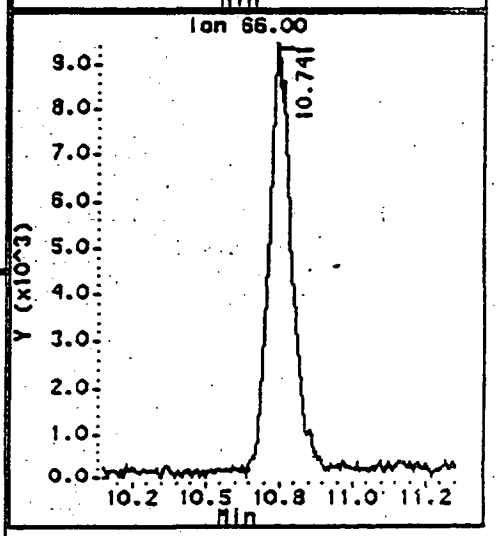
Column diameter: 0.58

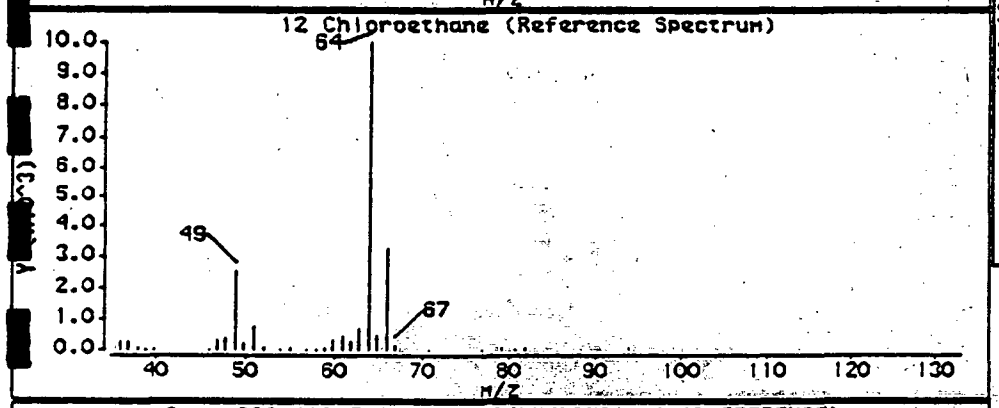
12 Chloroethane

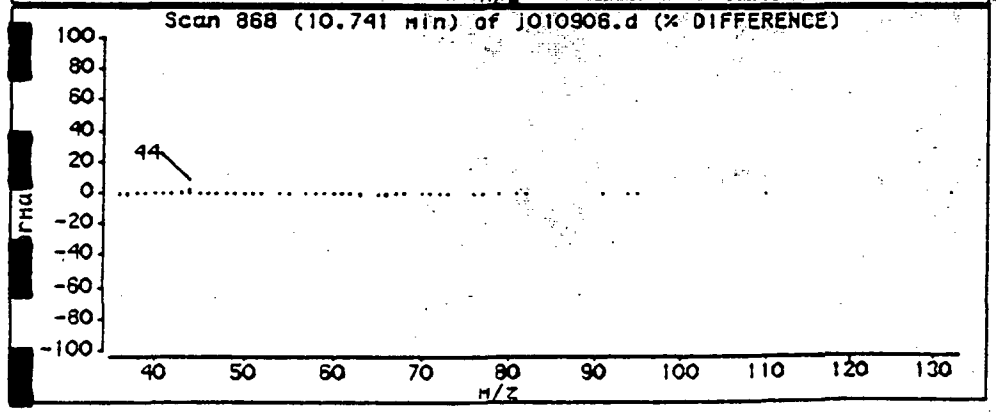












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

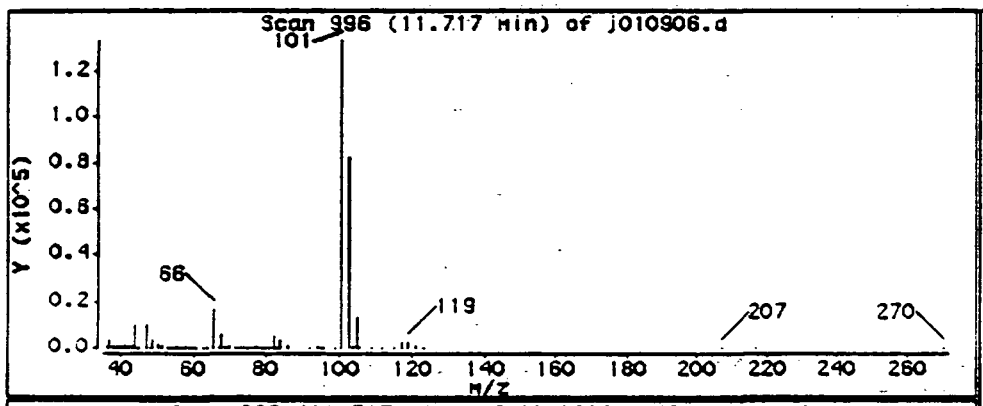
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

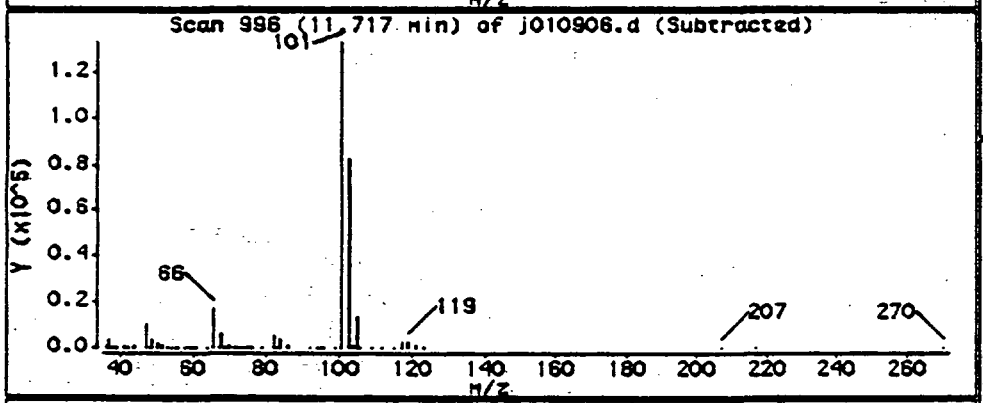
Operator: FR

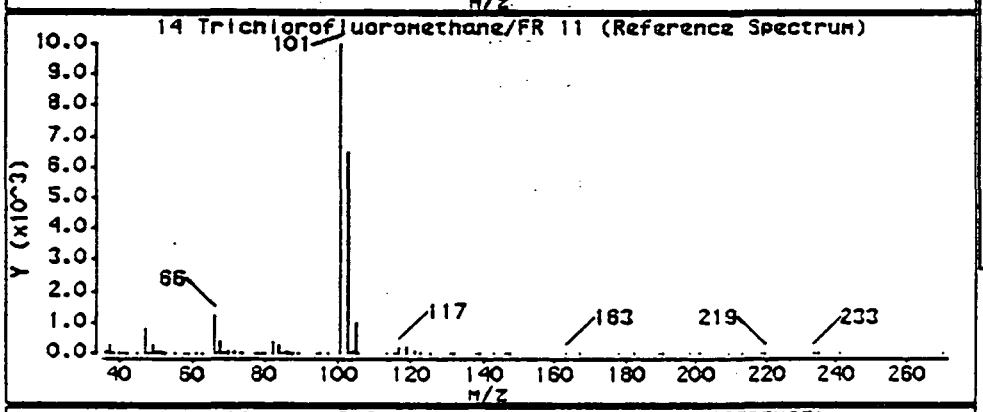
Column phase: RTx-624

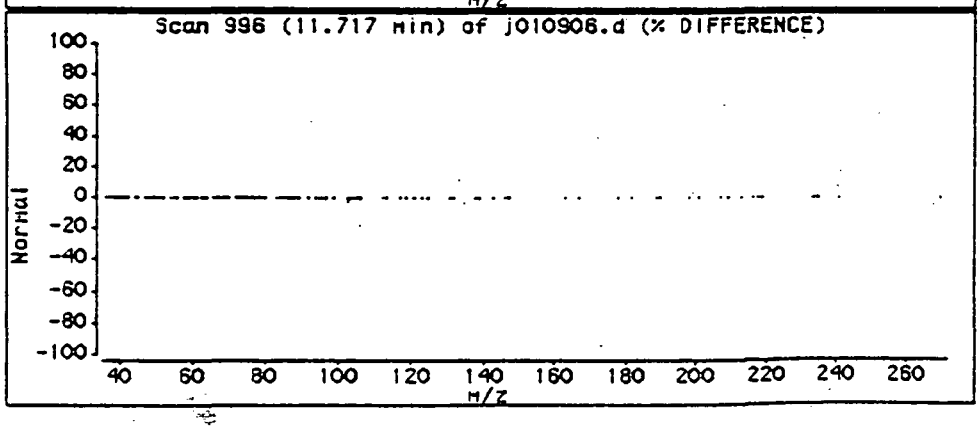
Column diameter: 0.58

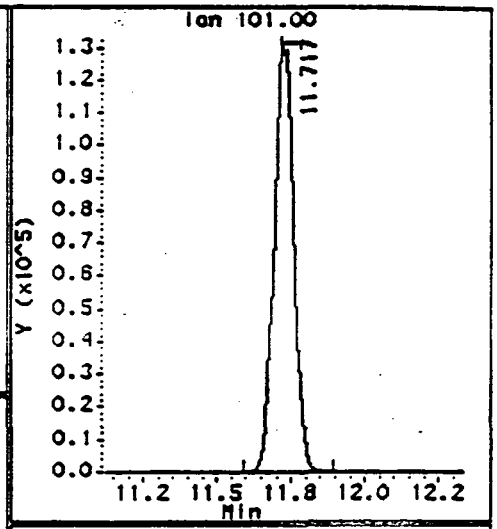
14 Trichlorofluoromethane/FR 11

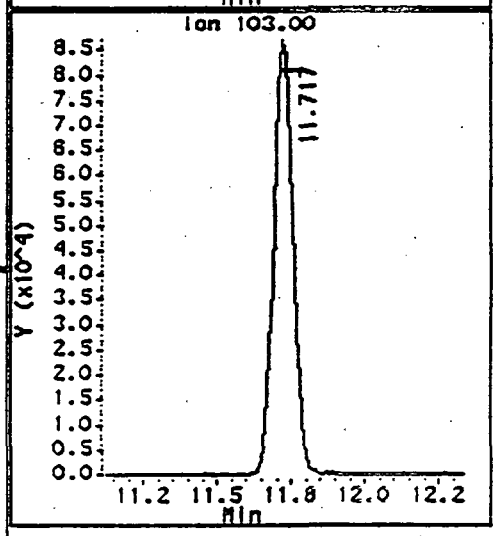












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

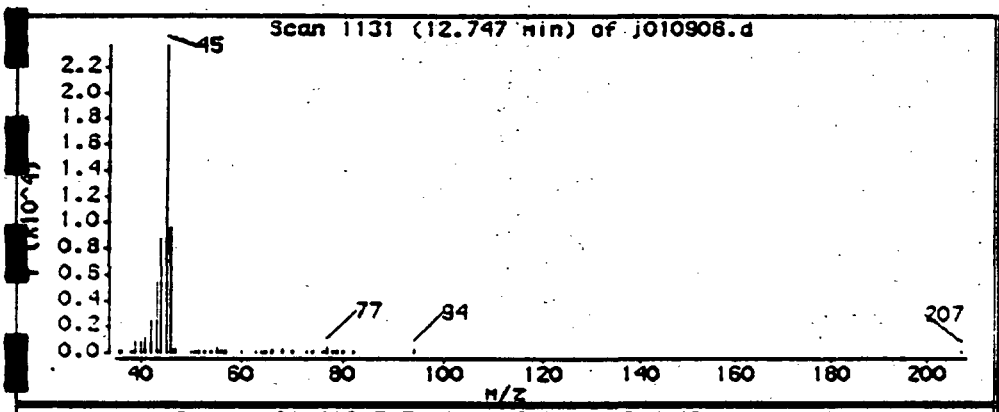
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

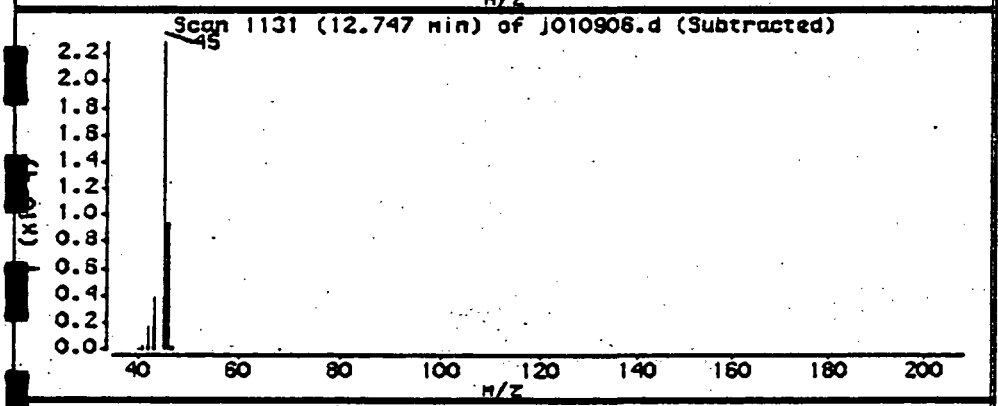
Operator: FA

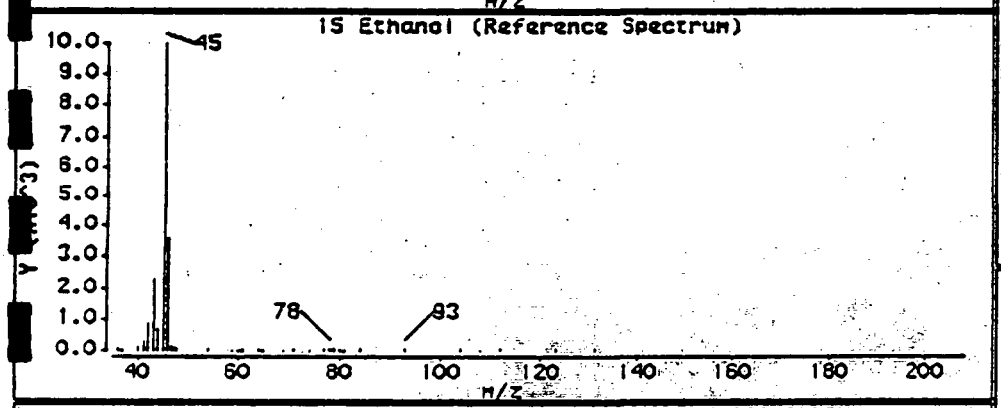
Column phase: RTx-624

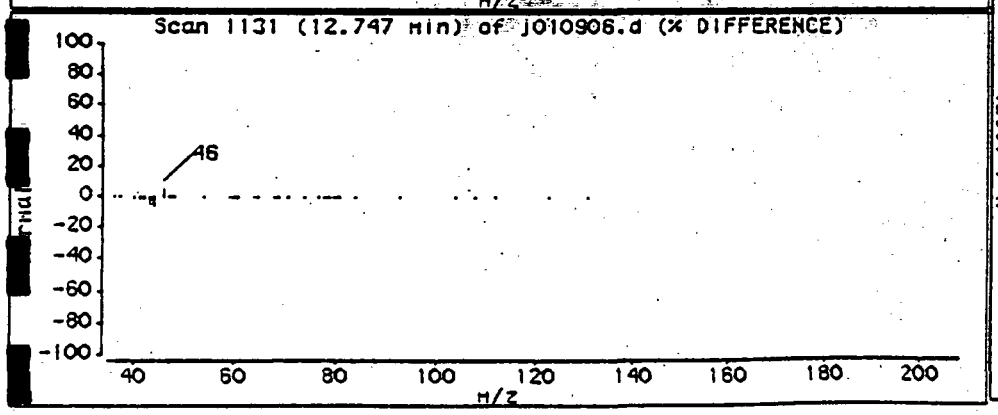
Column diameter: 0.58

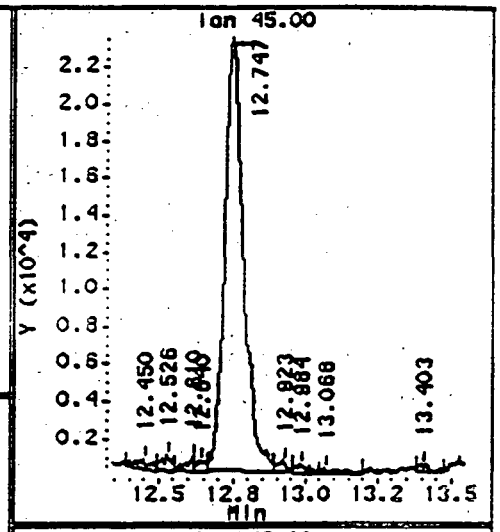
1S Ethanol

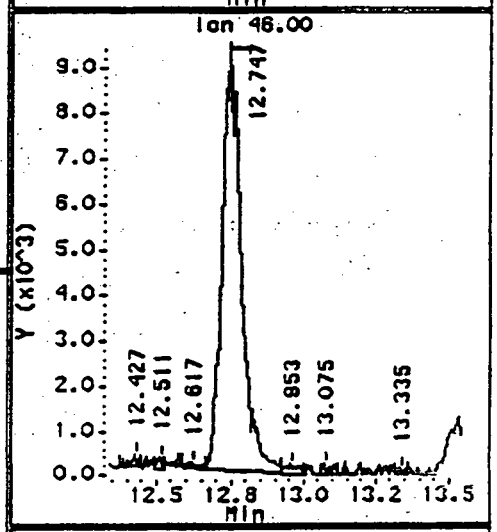


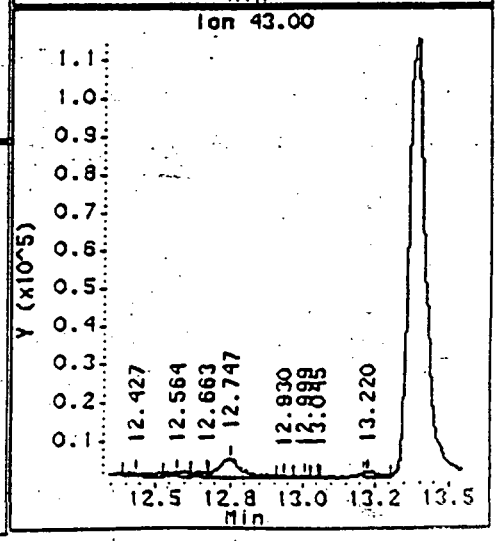












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

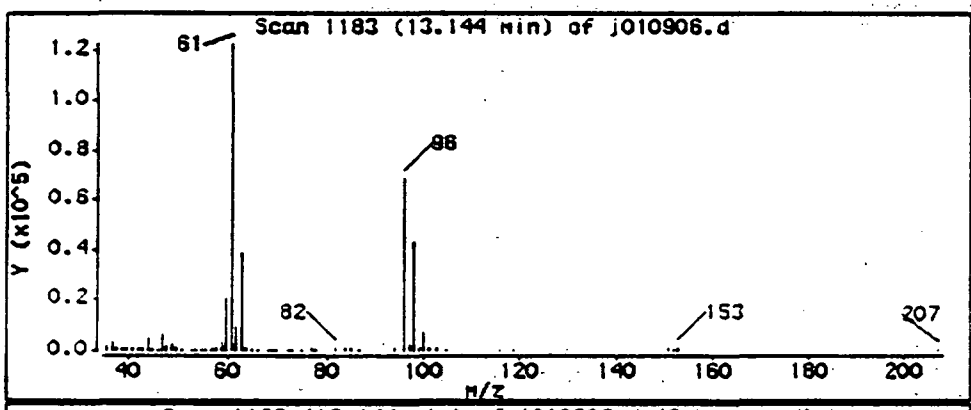
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

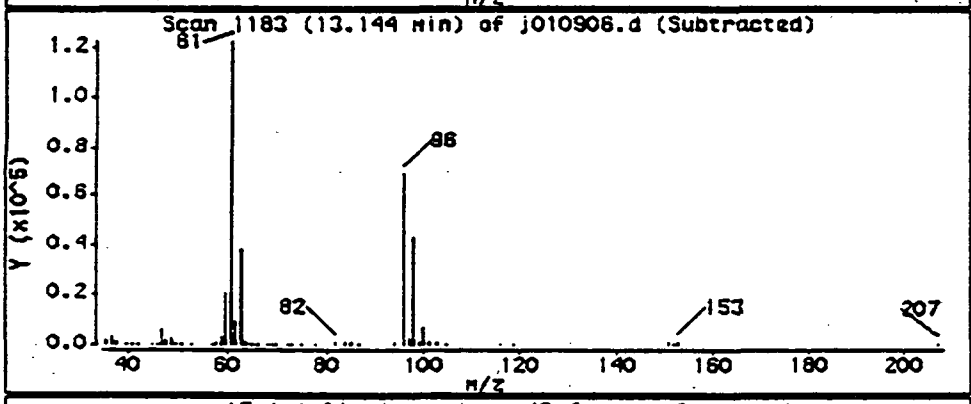
Operator: FR

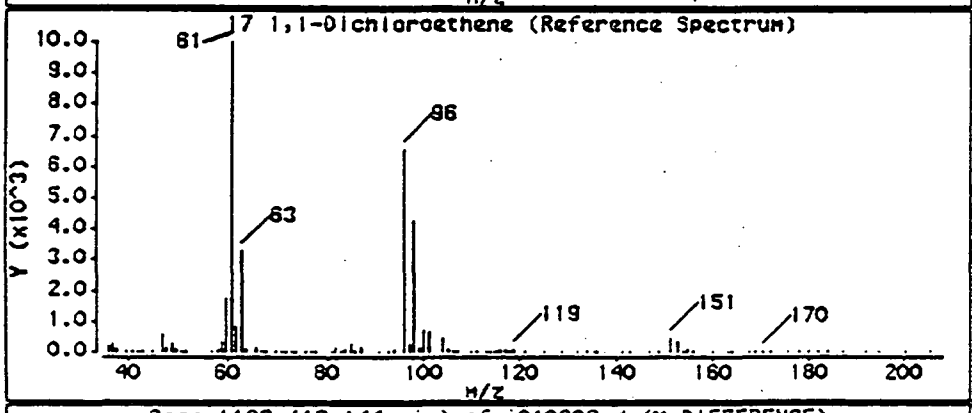
Column phase: RTx-624

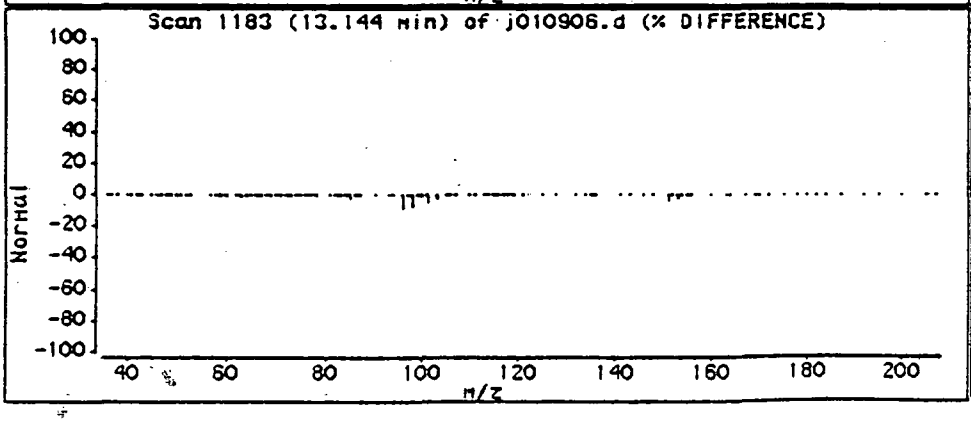
Column diameter: 0.58

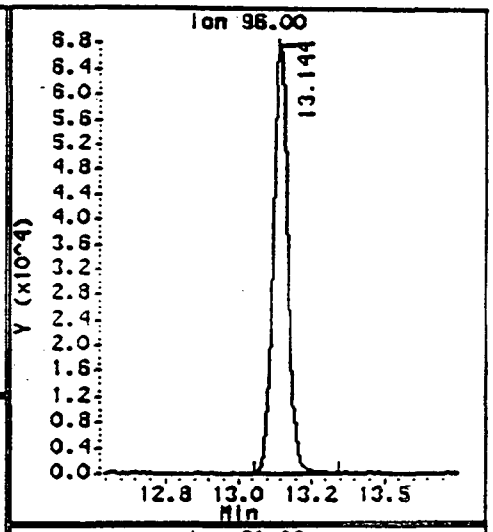
17 1,1-Dichloroethene

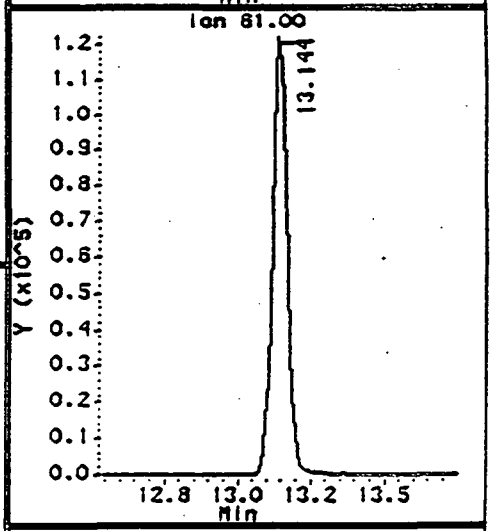


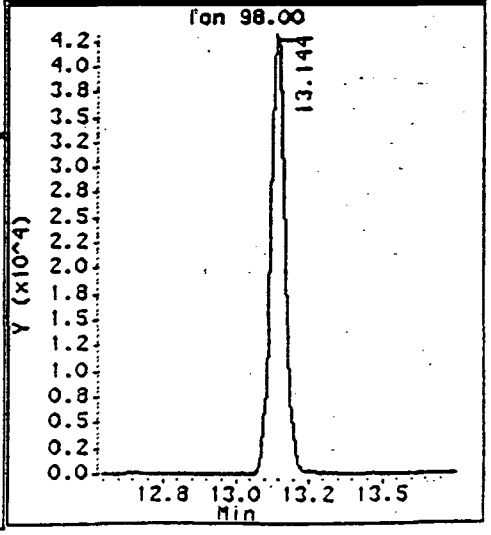












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

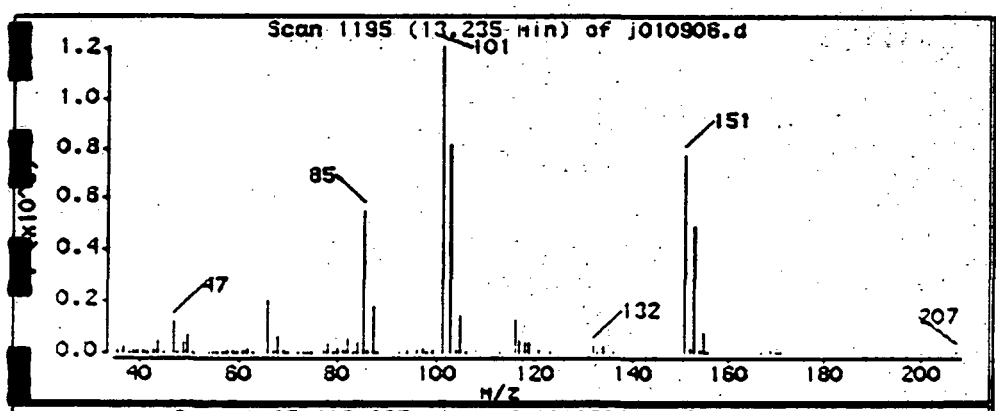
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

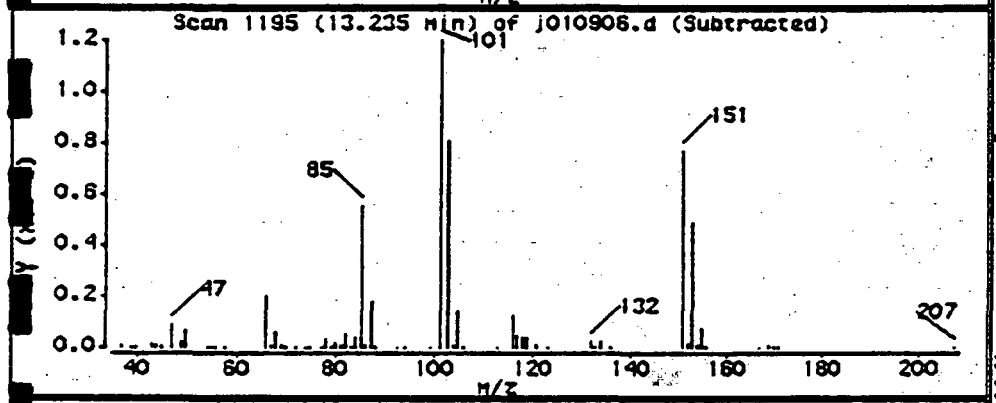
Operator: FA

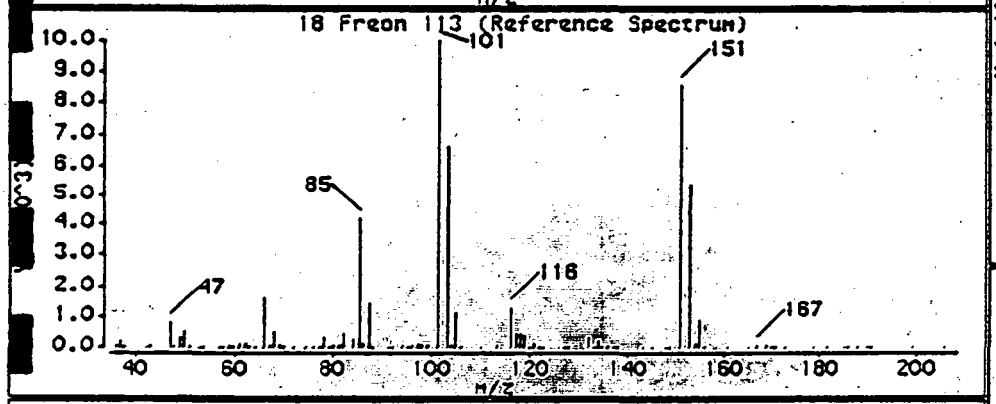
Column phase: RTx-624

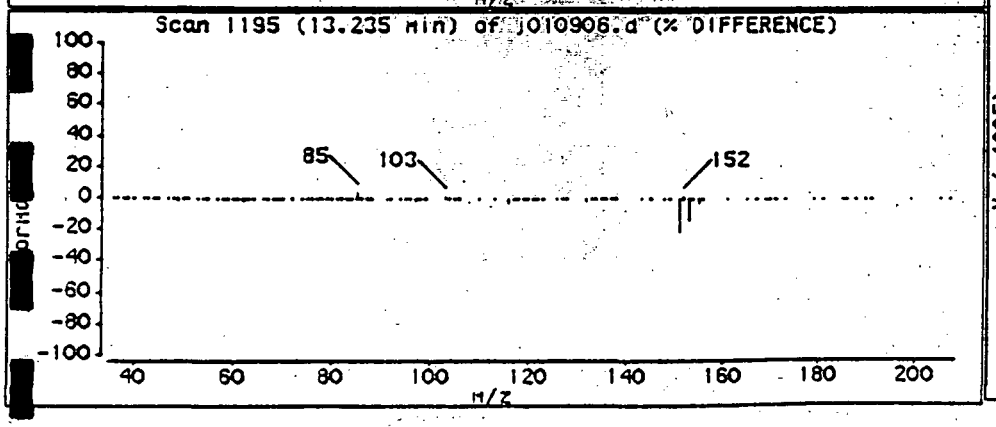
Column diameter: 0.58

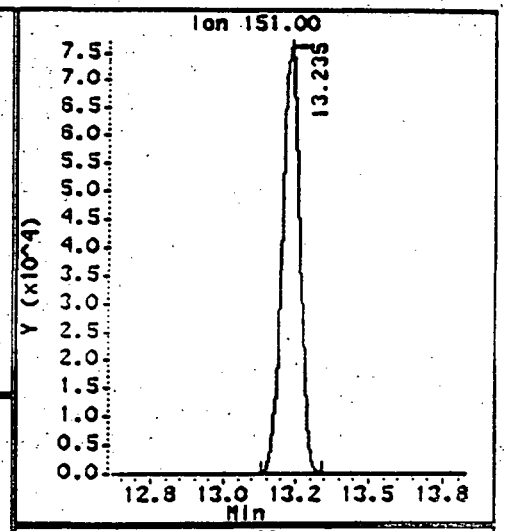
18 Freon 113

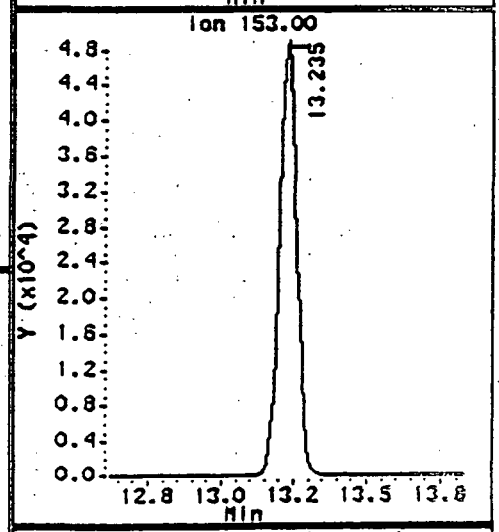


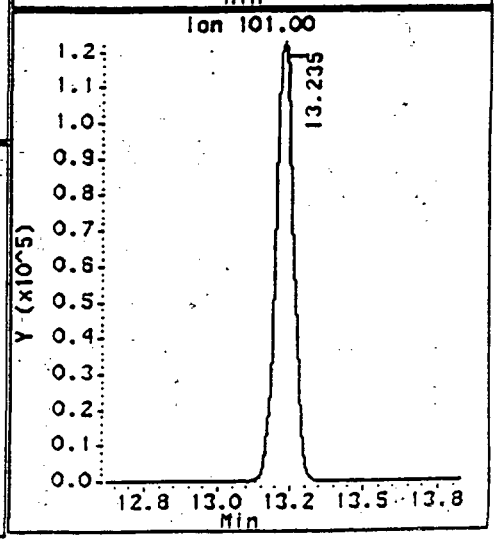












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

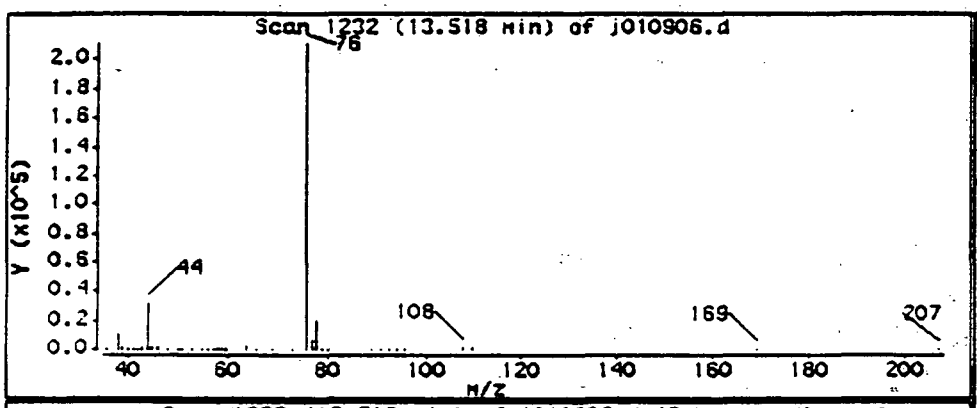
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

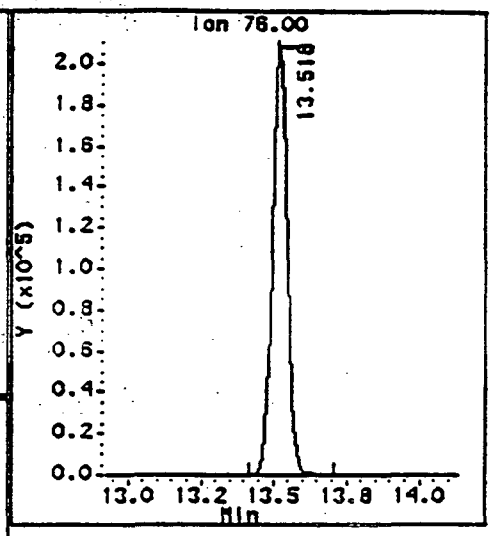
Operator: FR

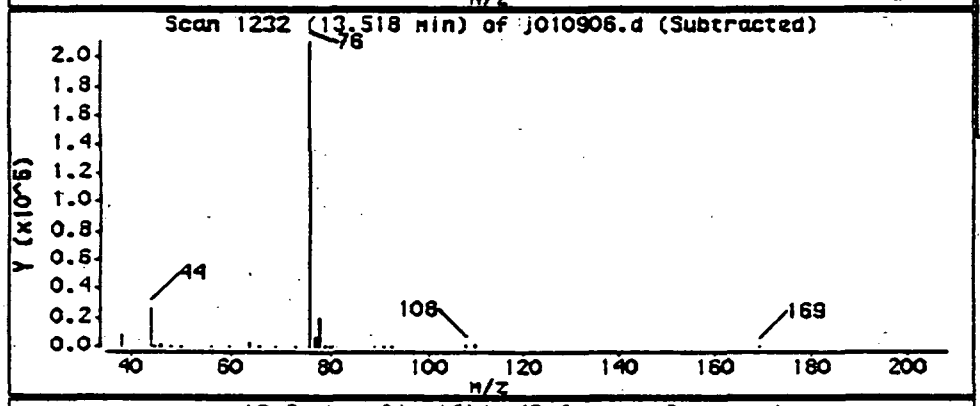
Column phase: RTx-624

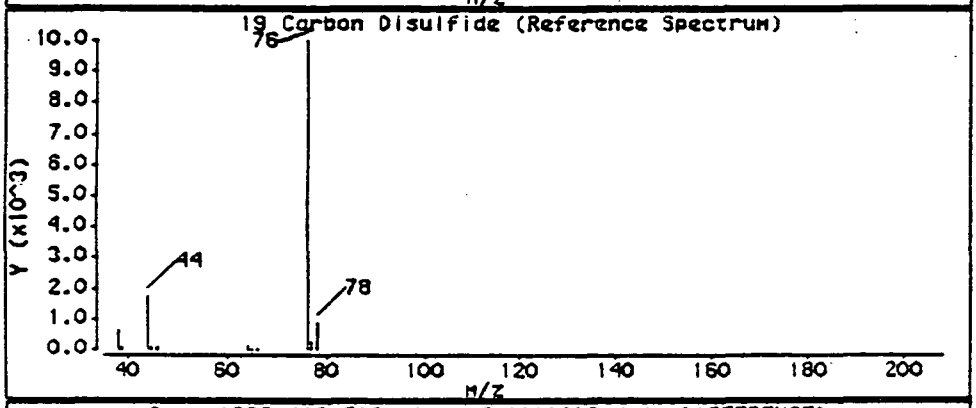
Column diameter: 0.58

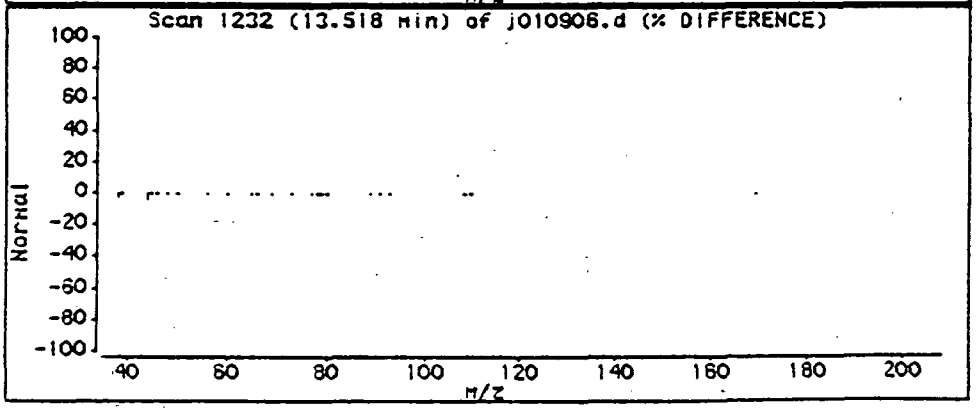
19 Carbon Disulfide











Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

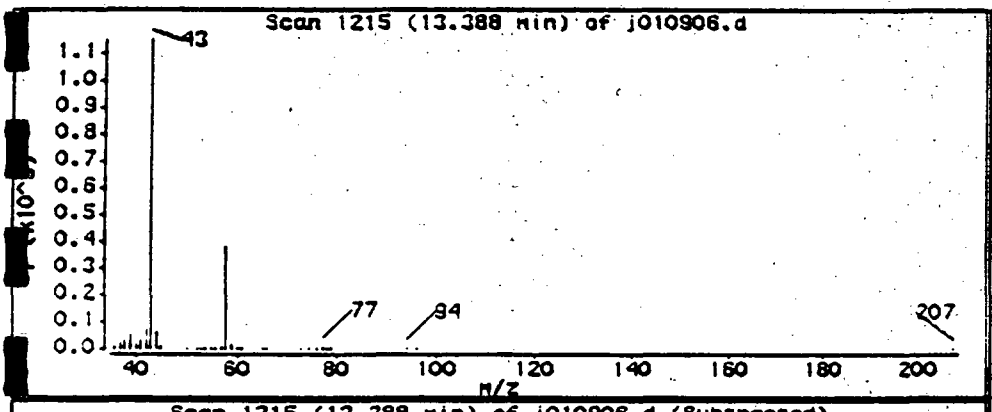
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

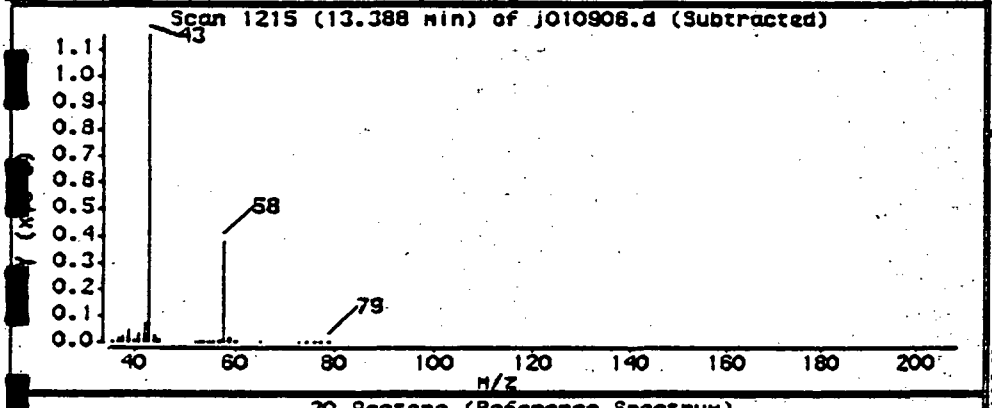
Operator: FA

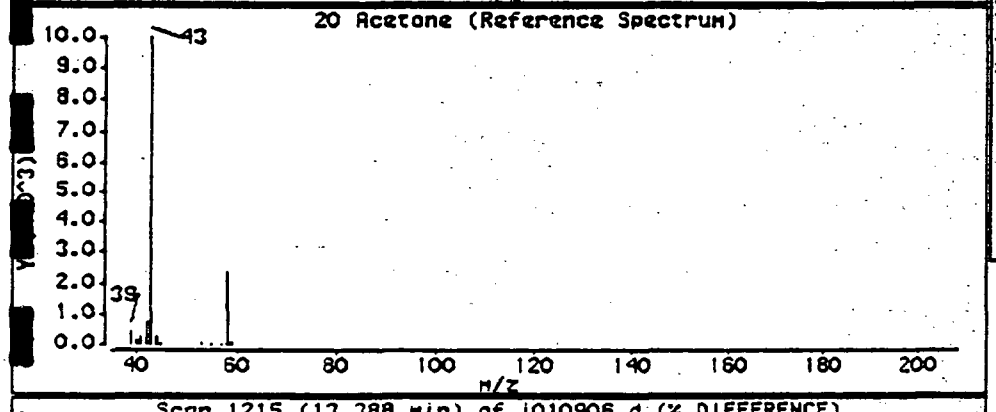
Column phase: RTx-624

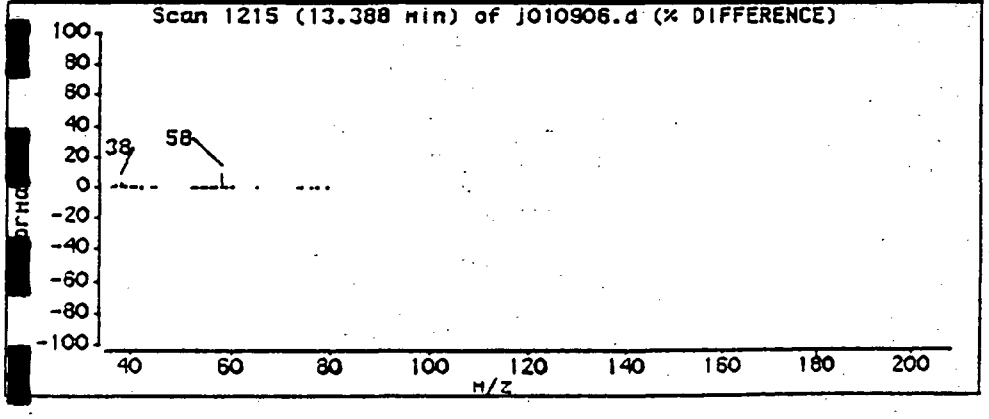
Column diameter: 0.58

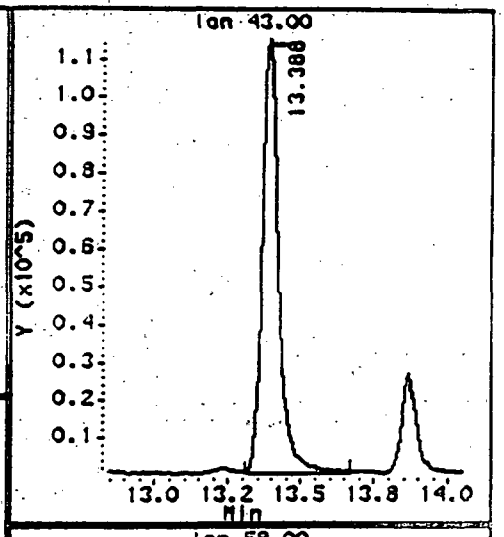
20 Acetone

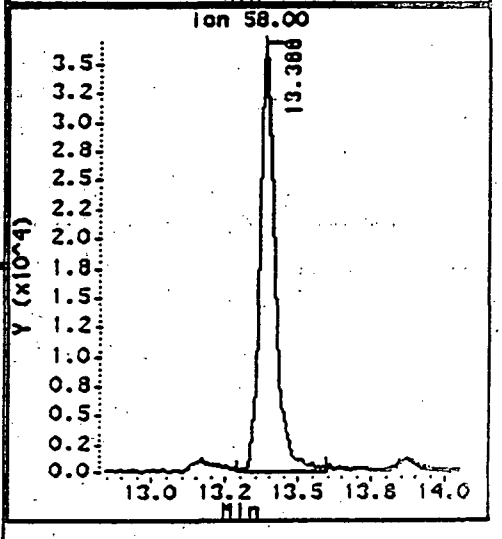












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

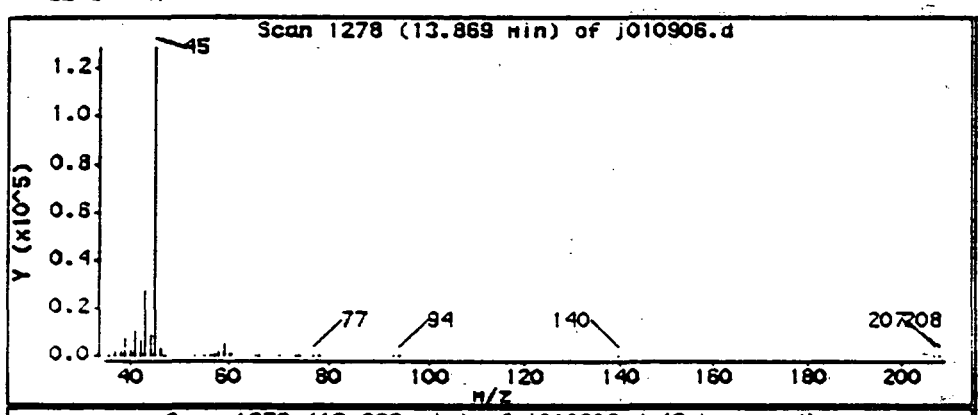
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

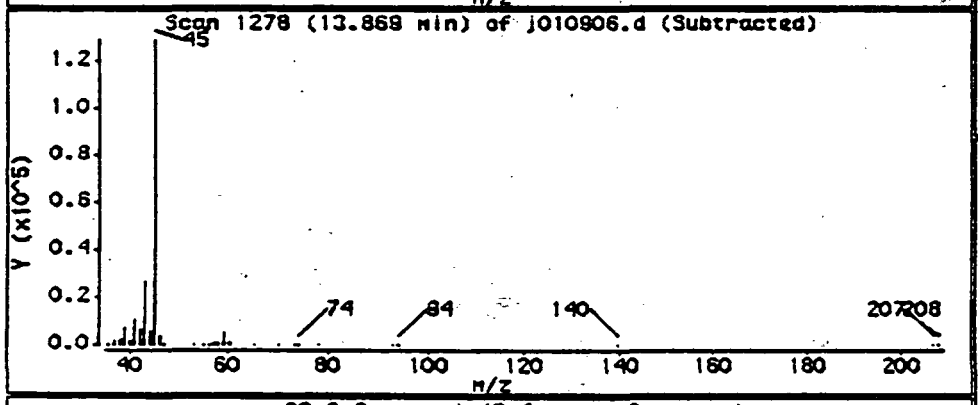
Operator: FR

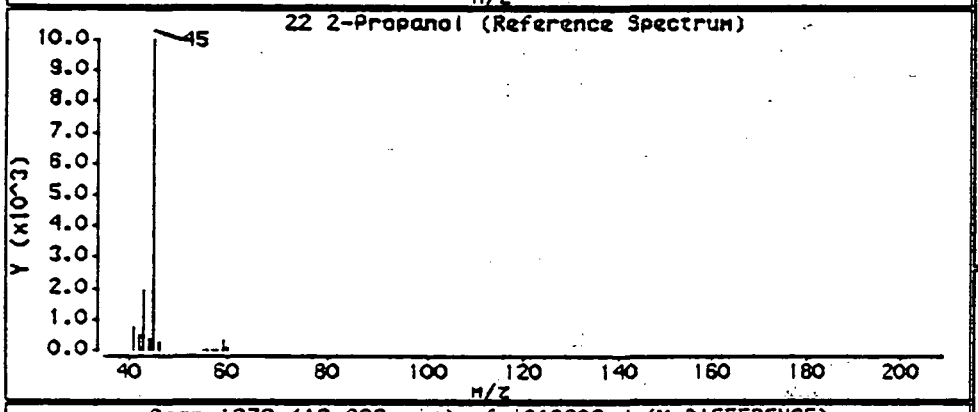
Column phase: RTx-624

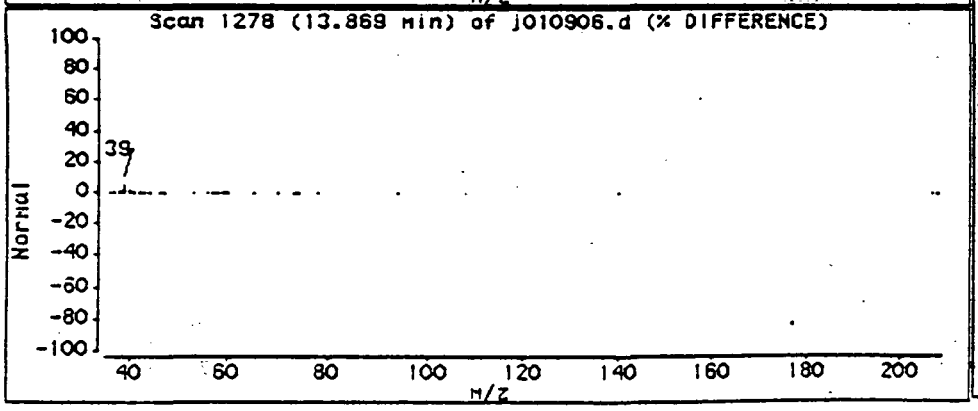
Column diameter: 0.58

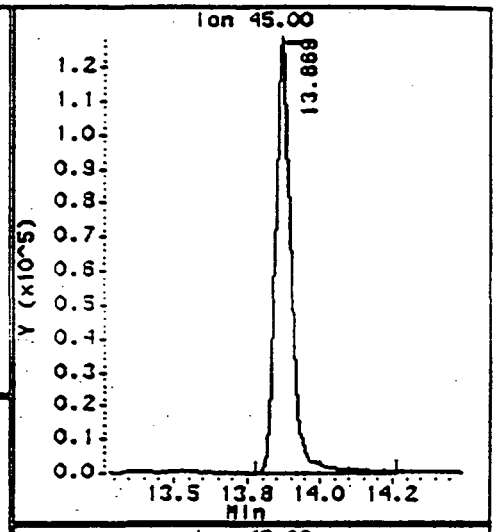
22 2-Propanol

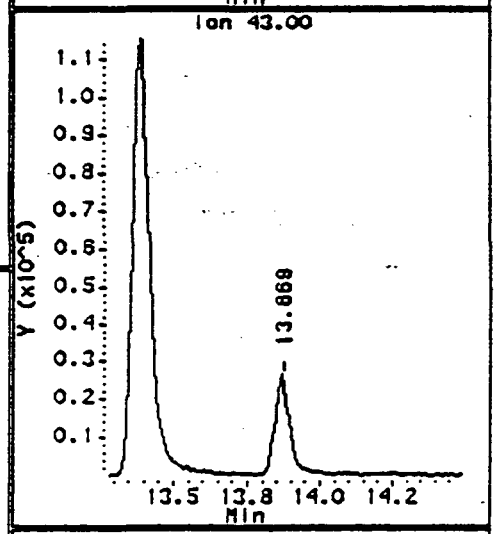


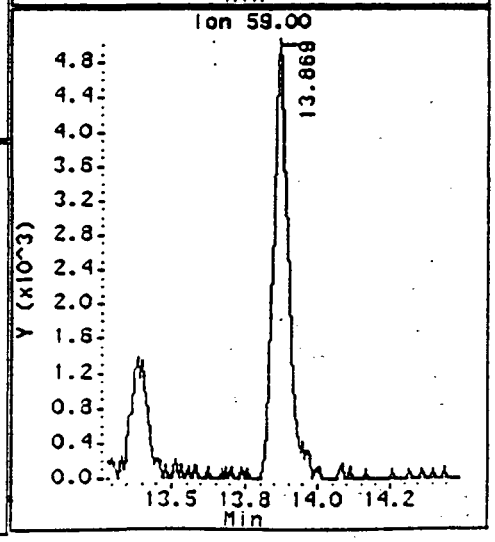












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

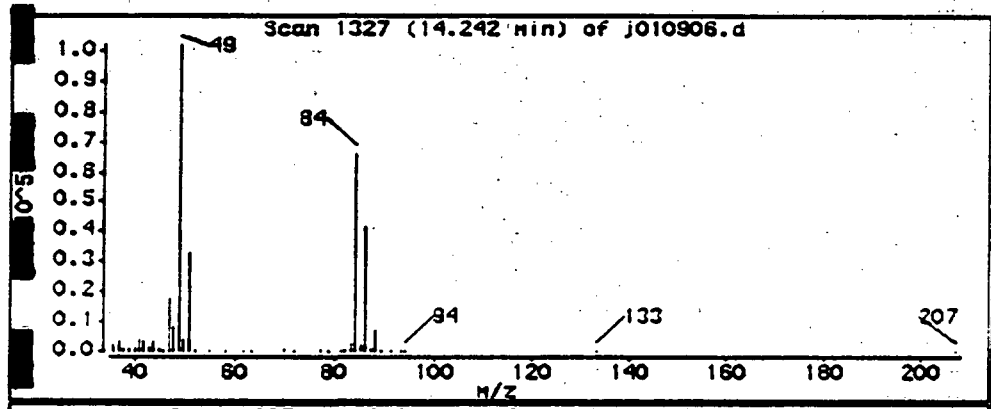
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

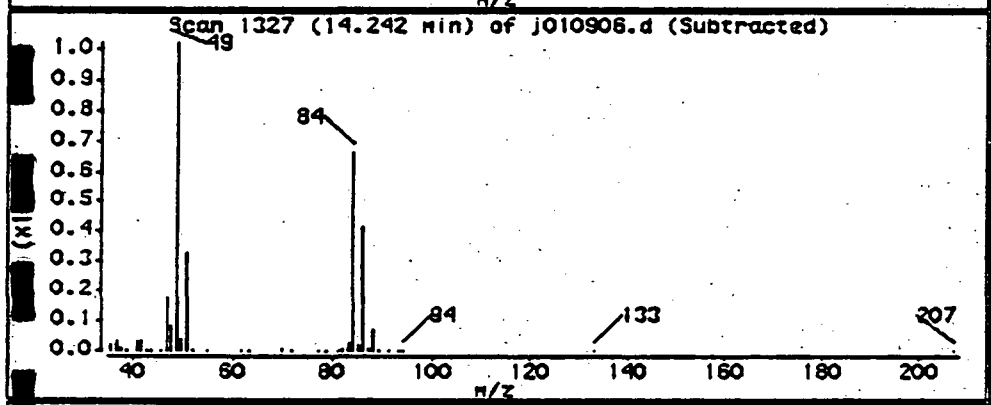
Operator: FA

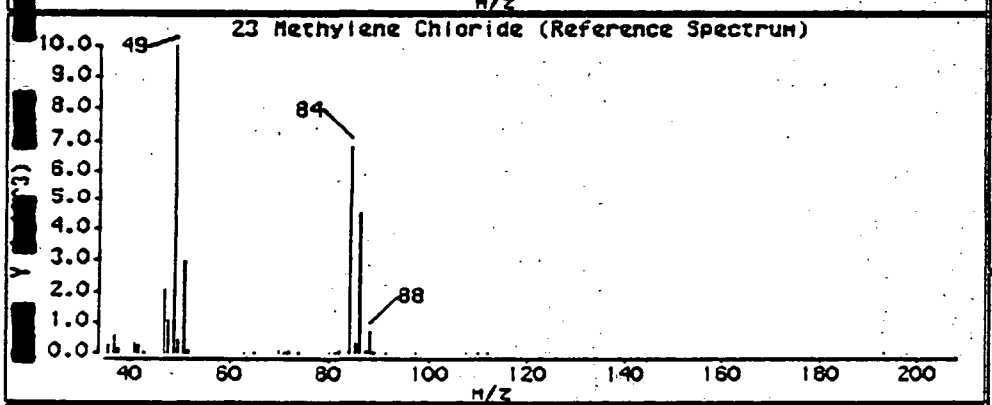
Column phase: RTx-624

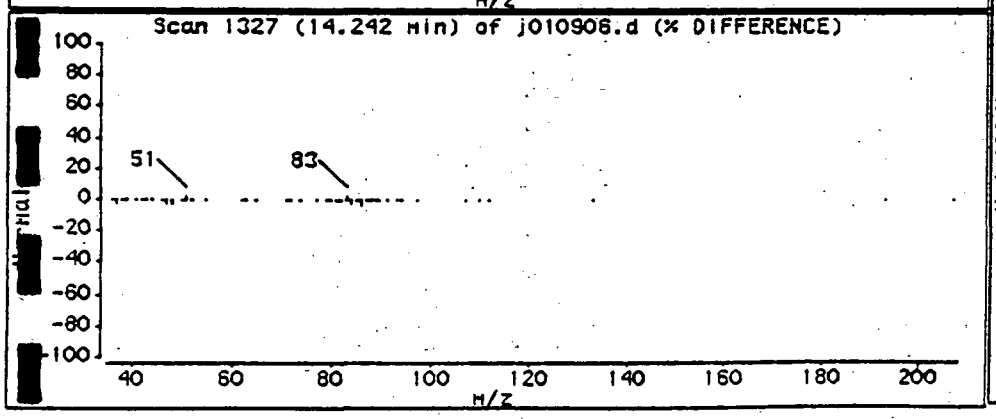
Column diameter: 0.58

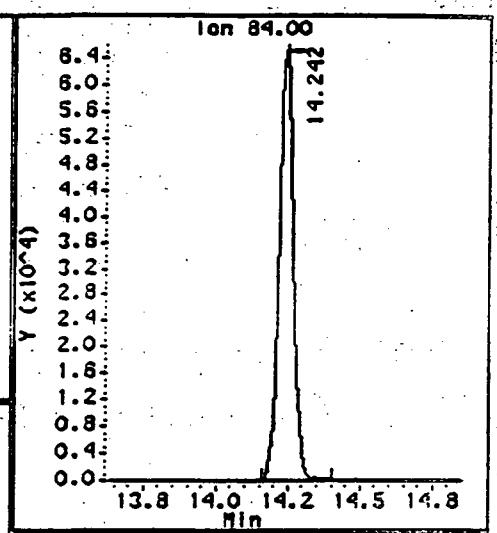
23 Methylene Chloride

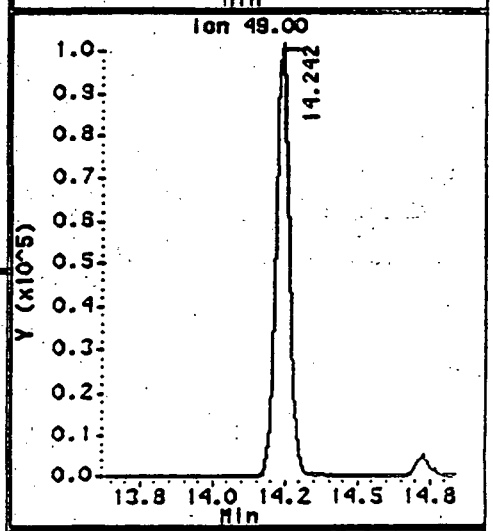


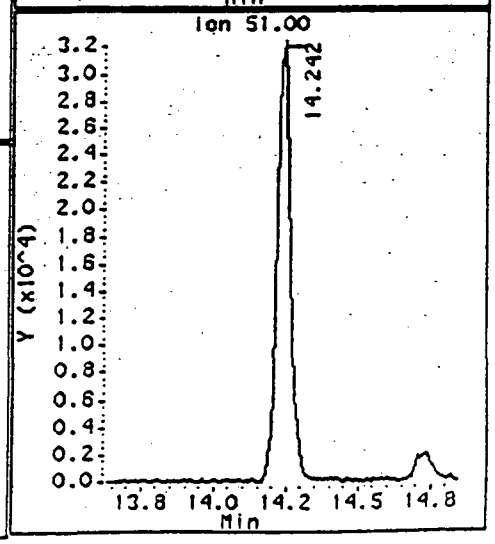












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

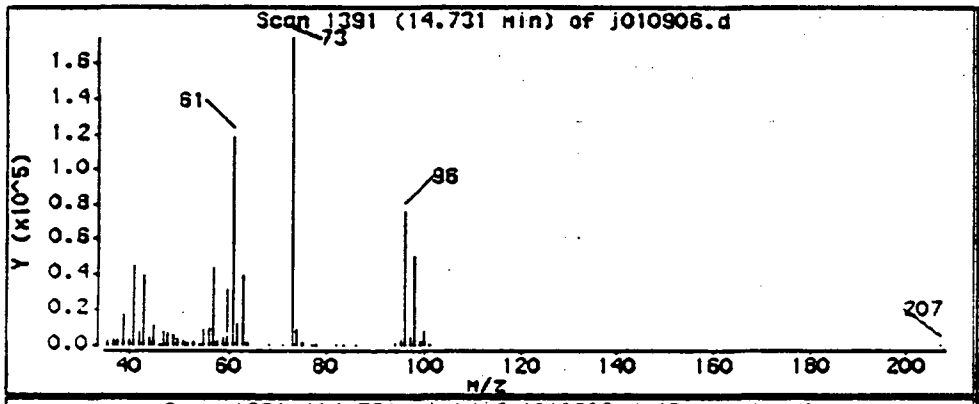
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

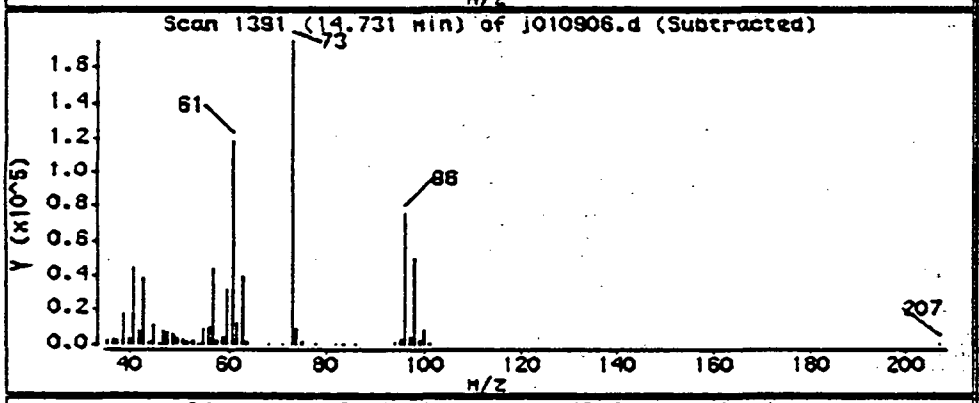
Operator: FA

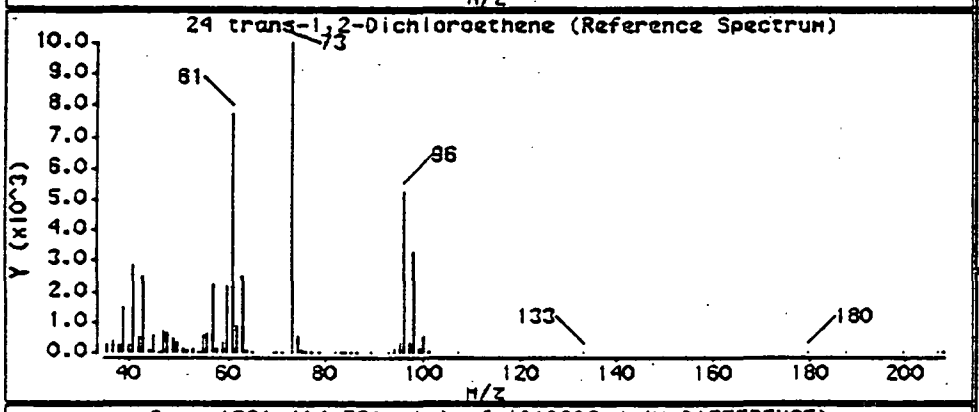
Column phase: RTx-624

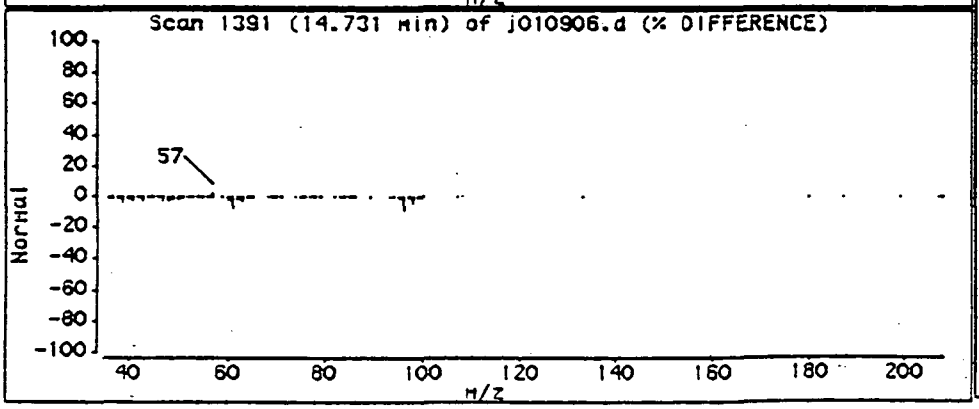
Column diameter: 0.58

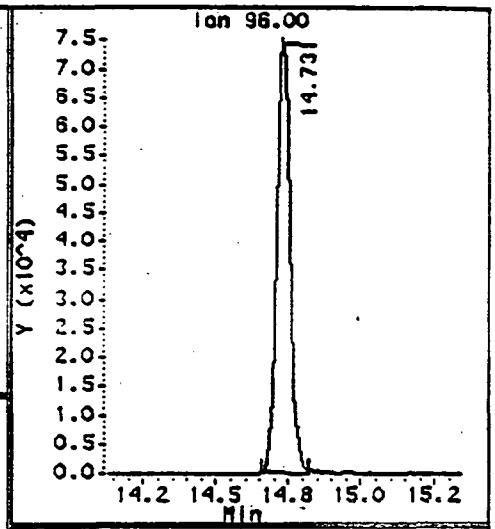
24 trans-1,2-Dichloroethene

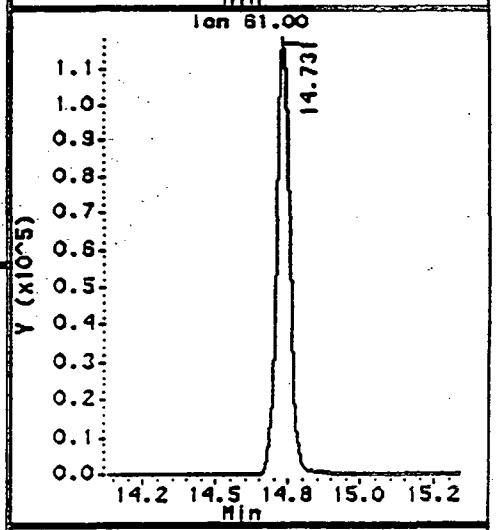


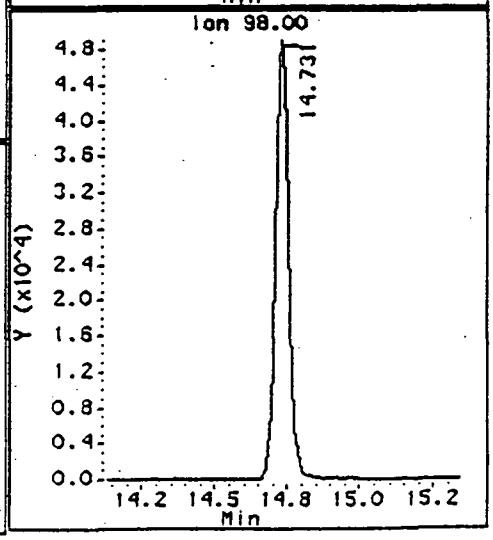












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

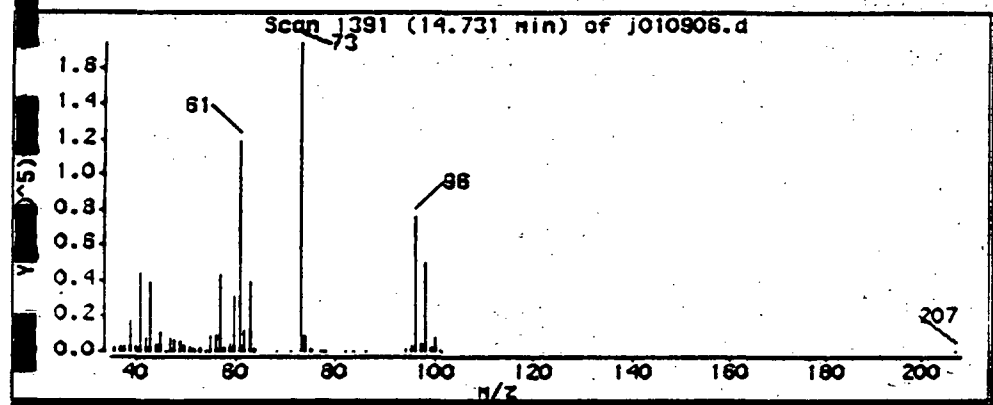
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

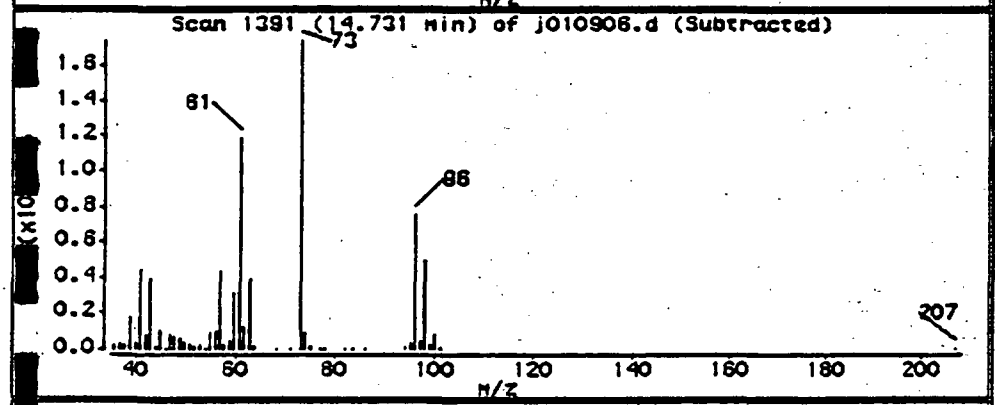
Operator: FA

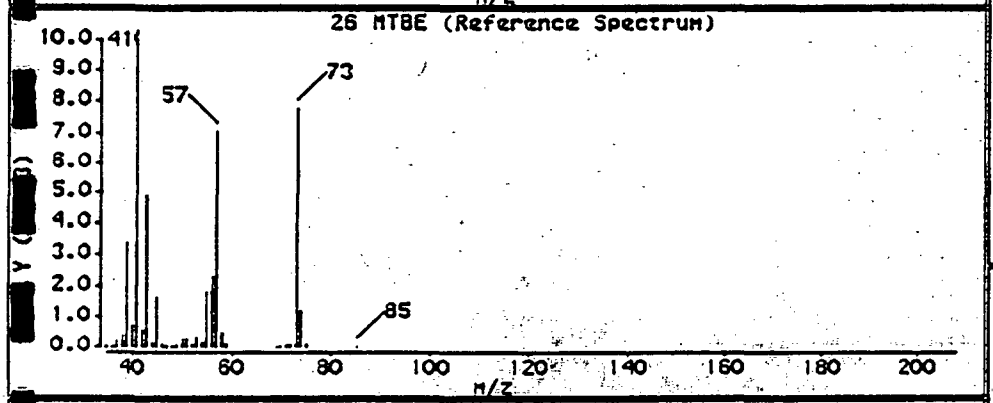
Column phase: RTX-624

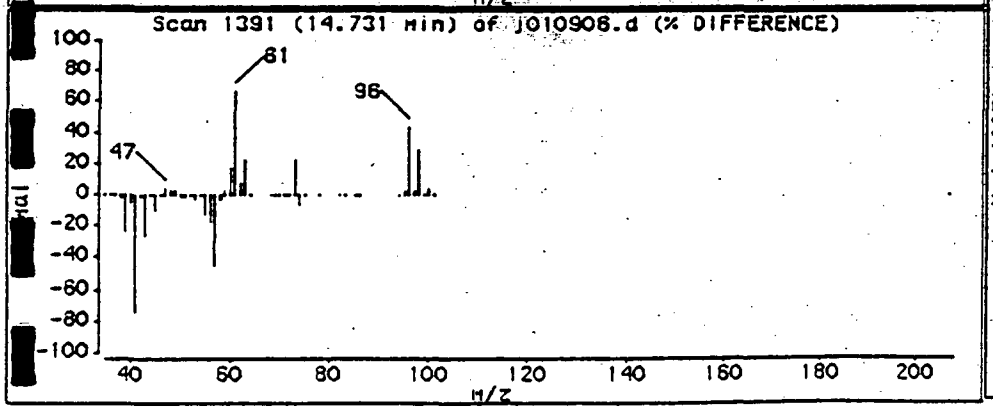
Column diameter: 0.58

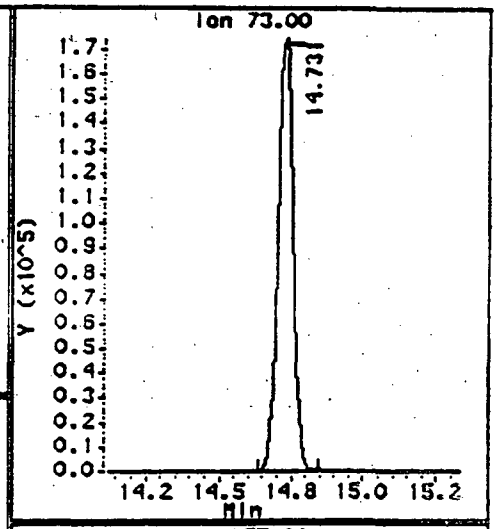
26 MTBE

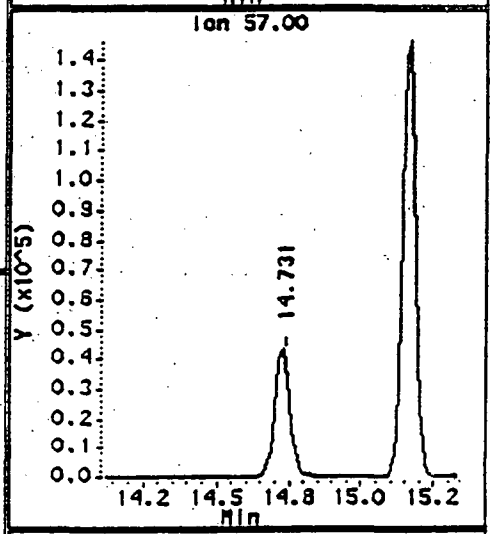


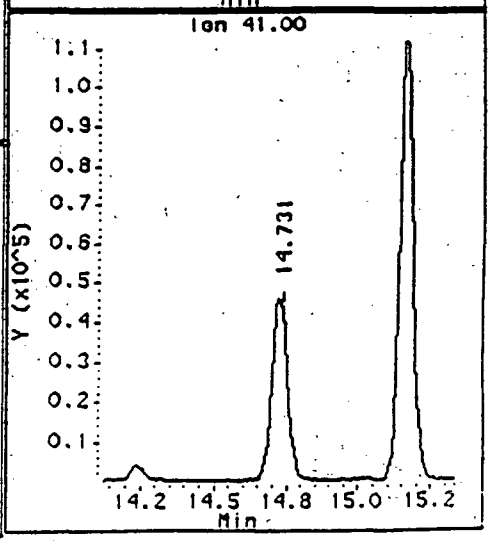












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

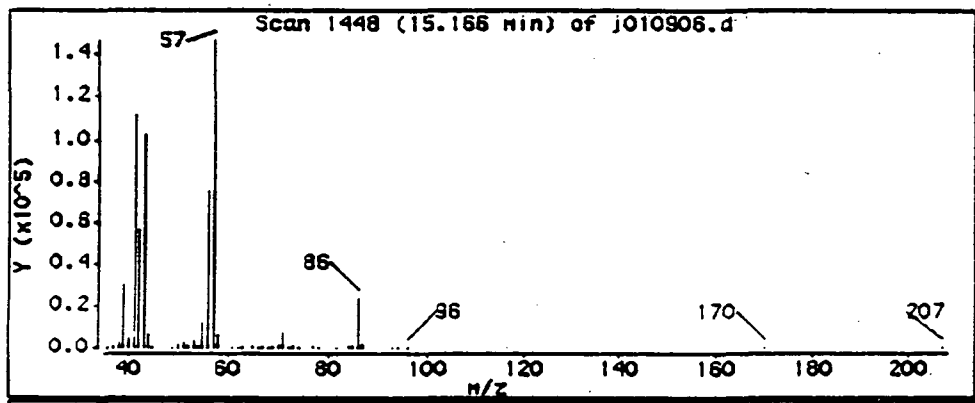
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

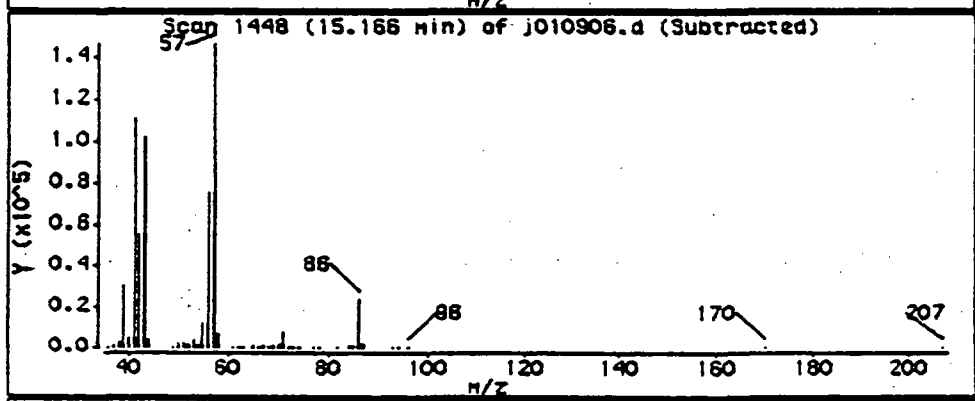
Operator: FA

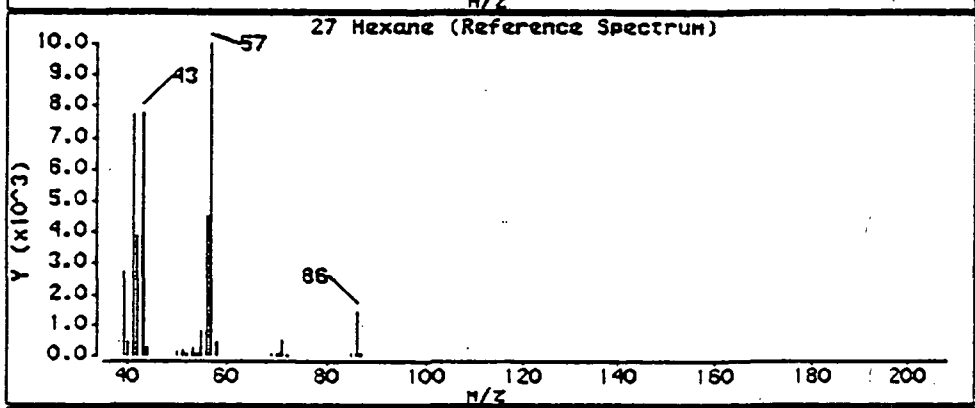
Column phase: RTx-624

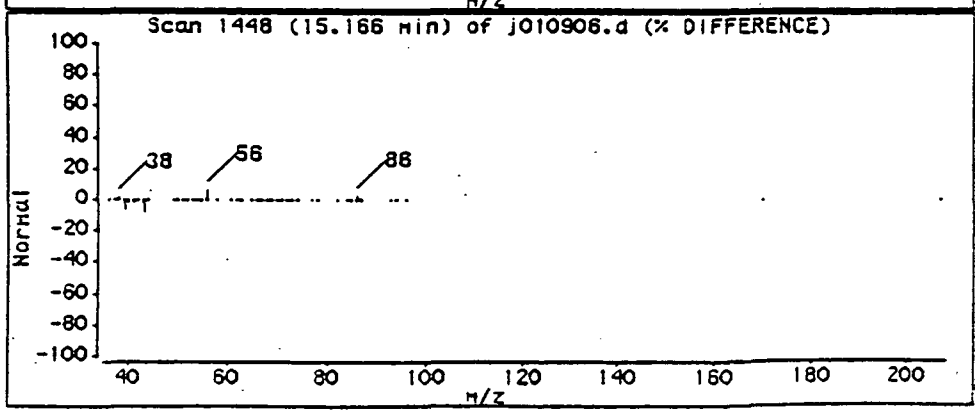
Column diameter: 0.58

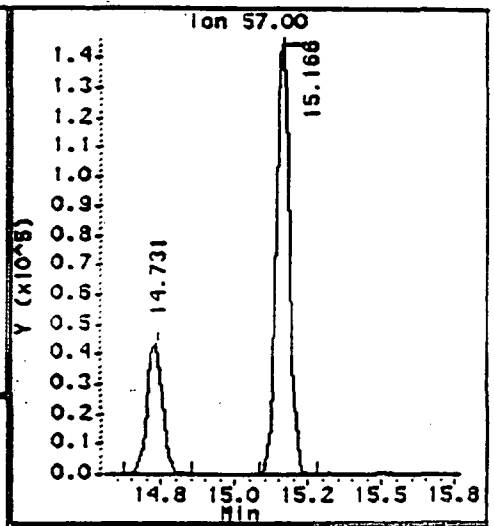
27 Hexane

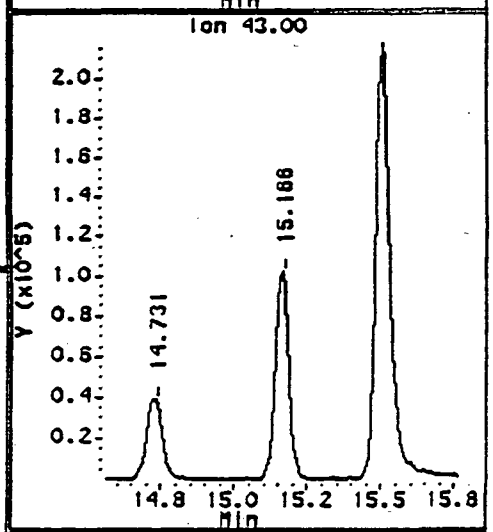


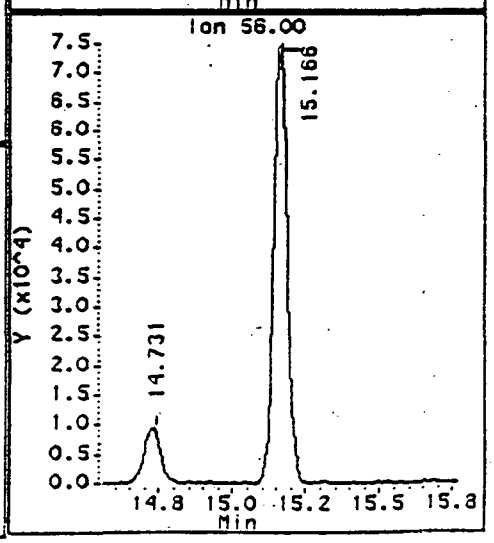












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

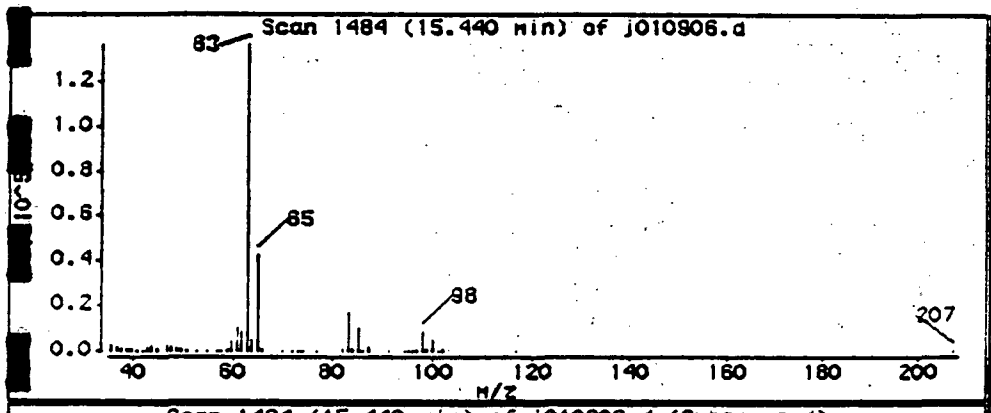
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

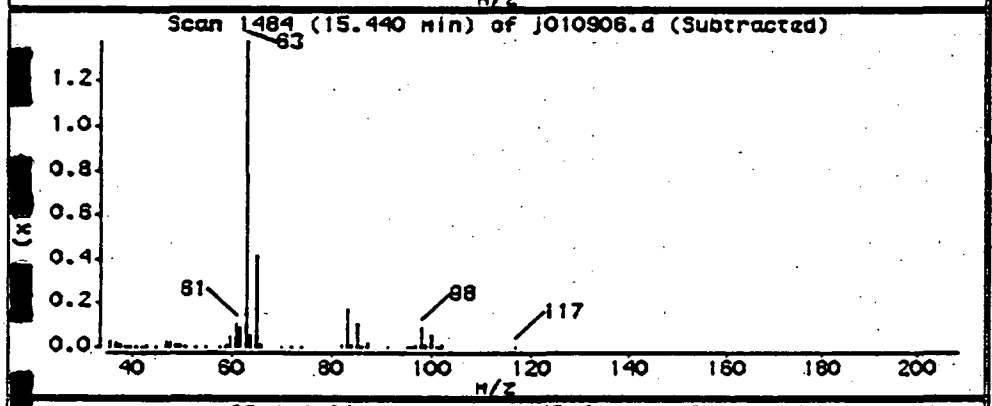
Operator: FA

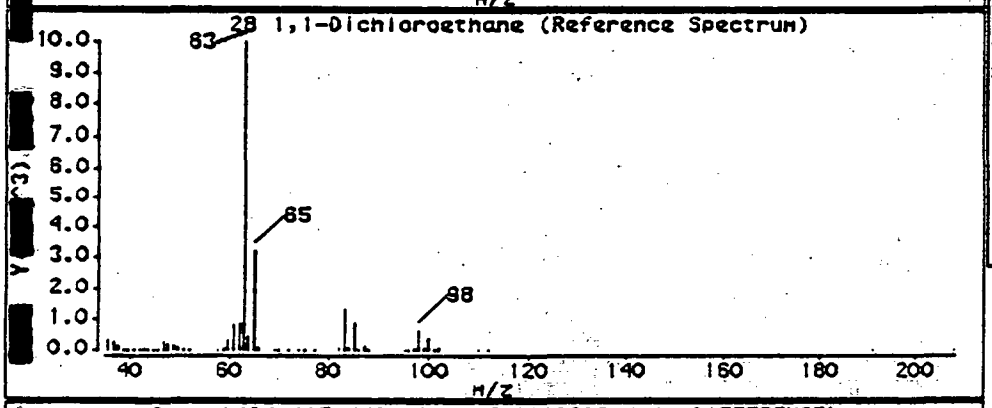
Column phase: RTx-624

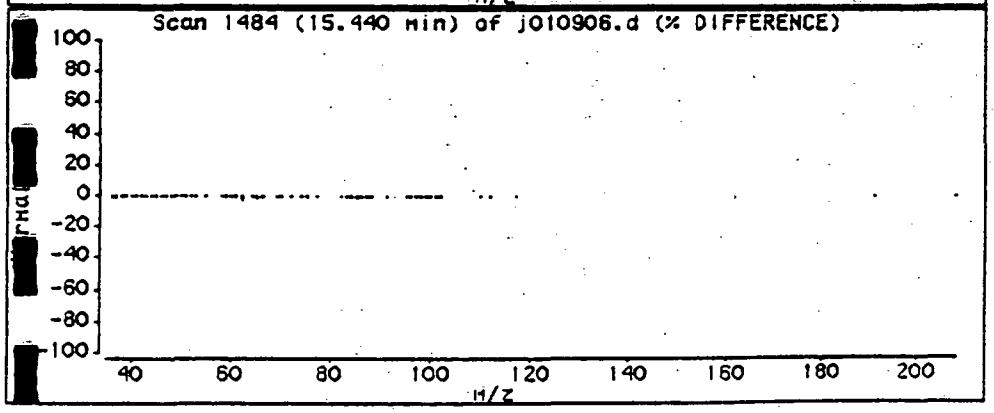
Column diameter: 0.58

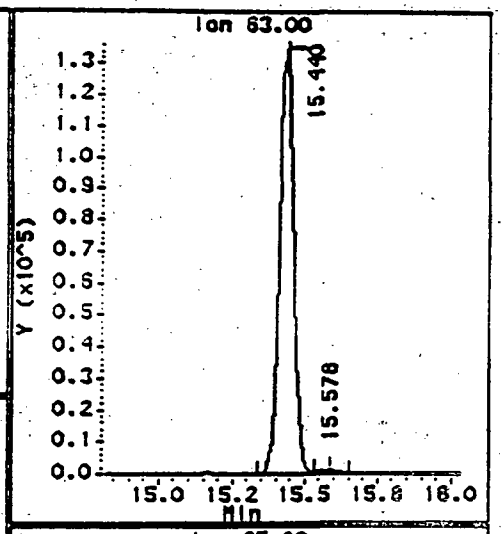
28 1,1-Dichloroethane

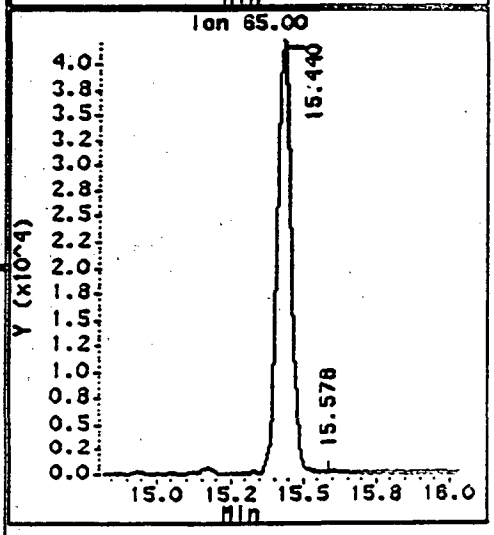












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

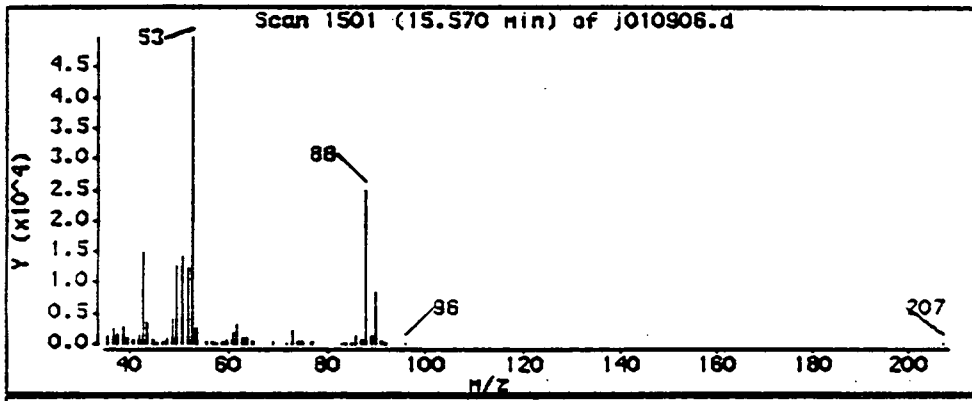
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

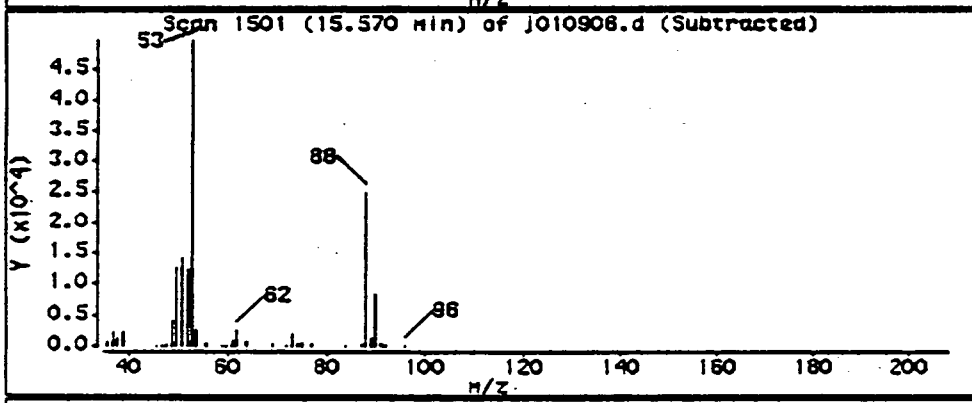
Operator: FA

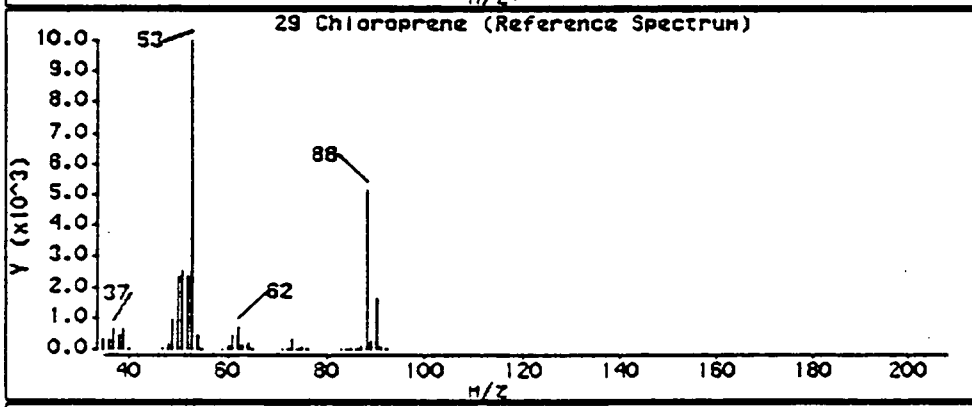
Column phase: RTx-624

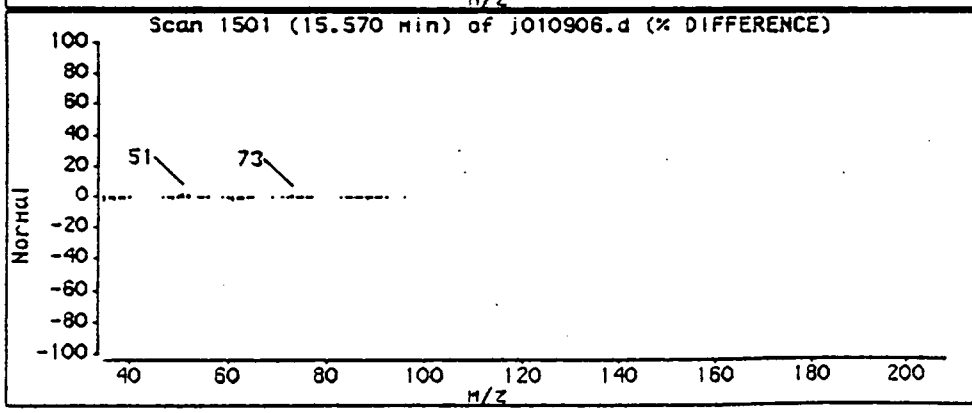
Column diameter: 0.58

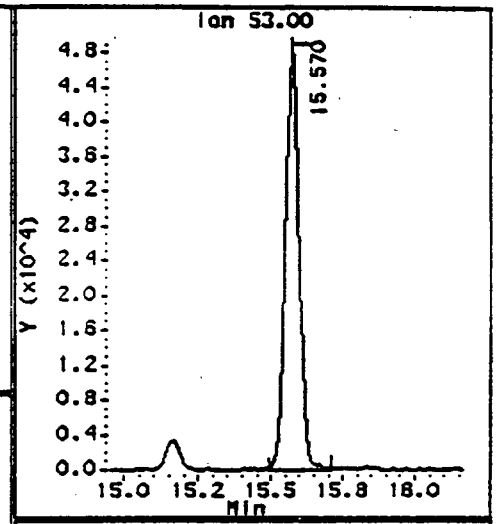
29 Chloroprene

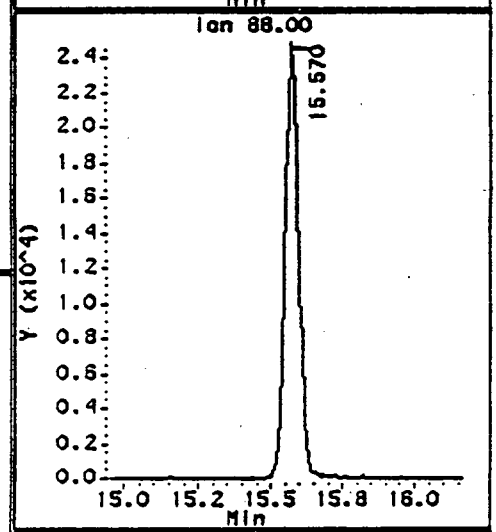


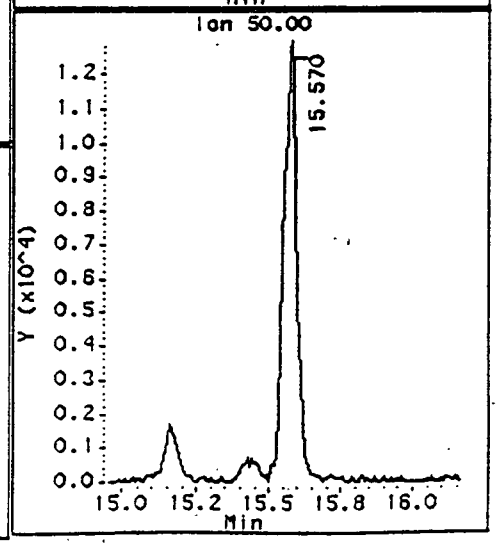












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

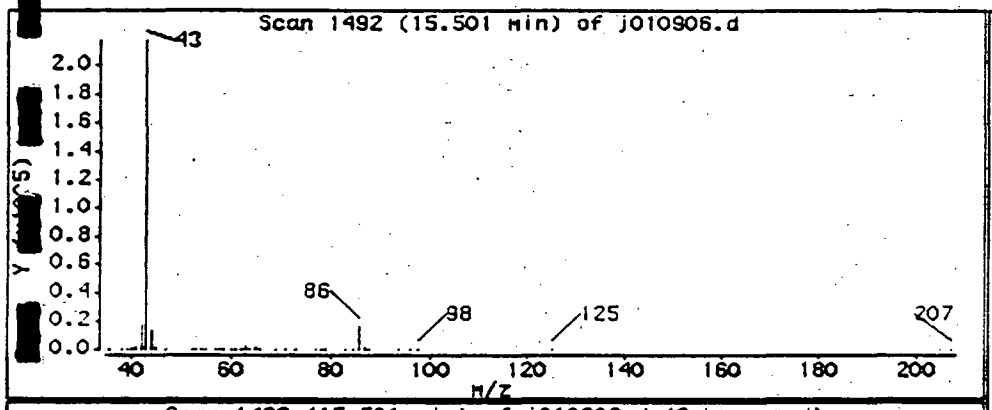
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

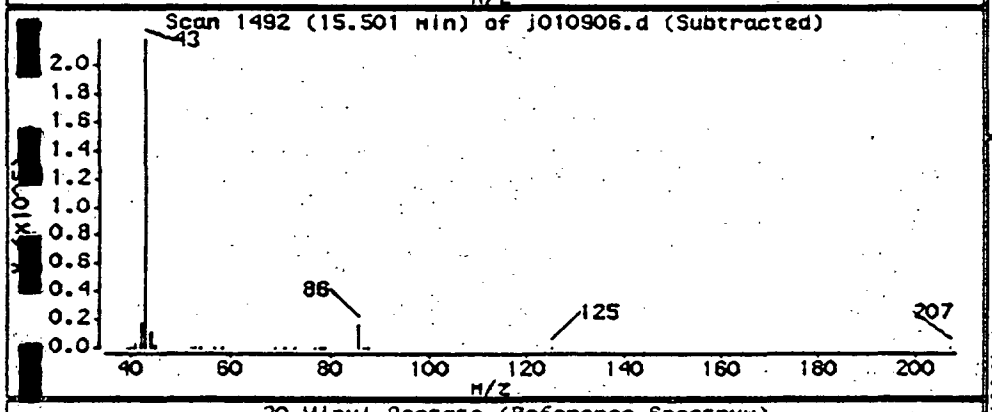
Operator: FA

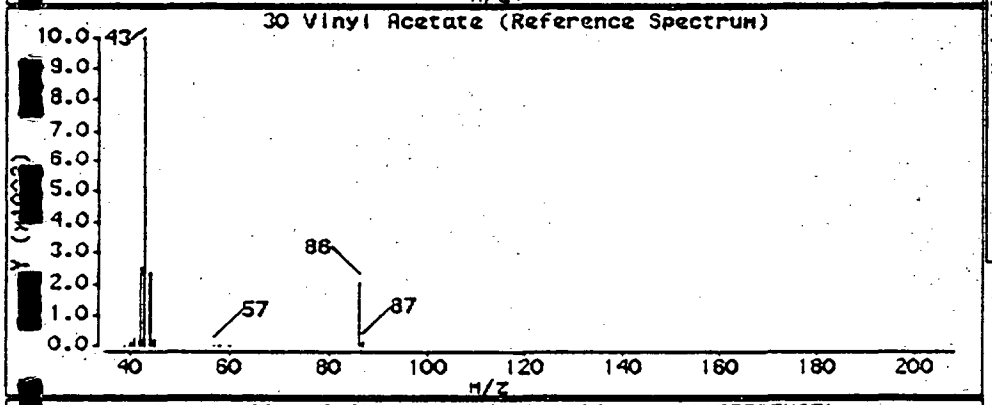
Column phase: RTx-624

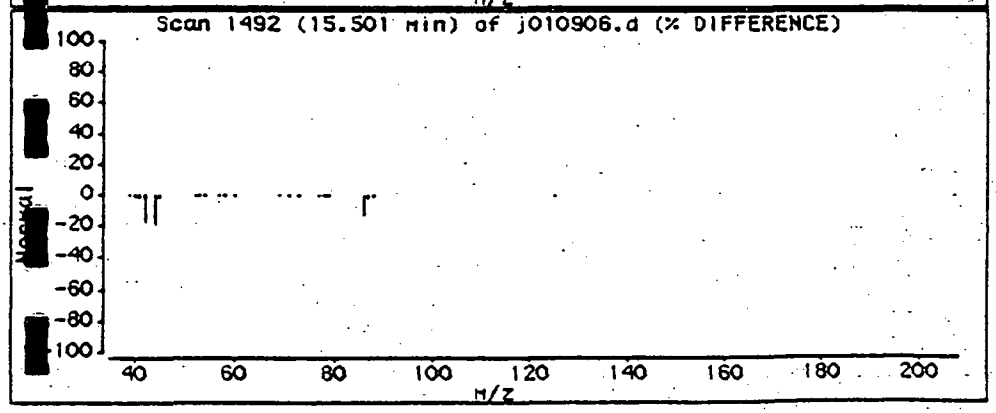
Column diameter: 0.58

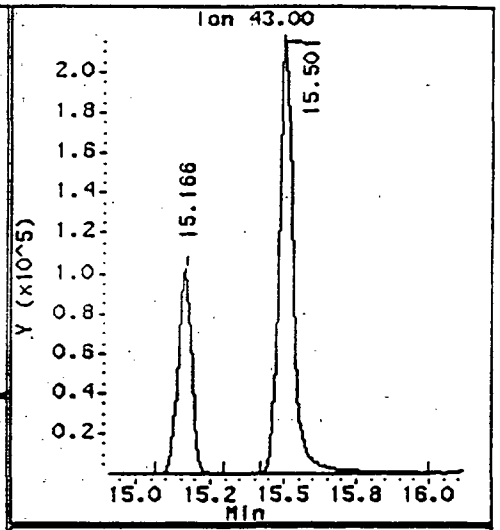
30 Vinyl Acetate

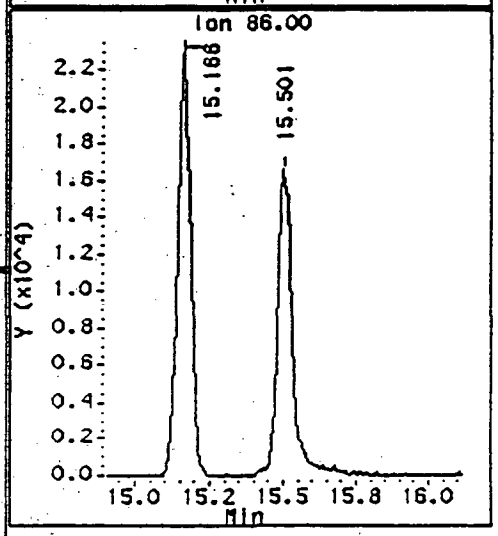












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

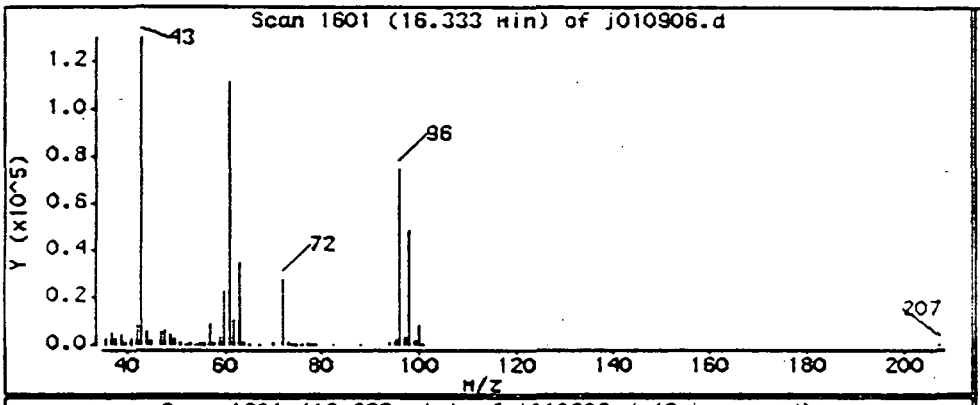
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

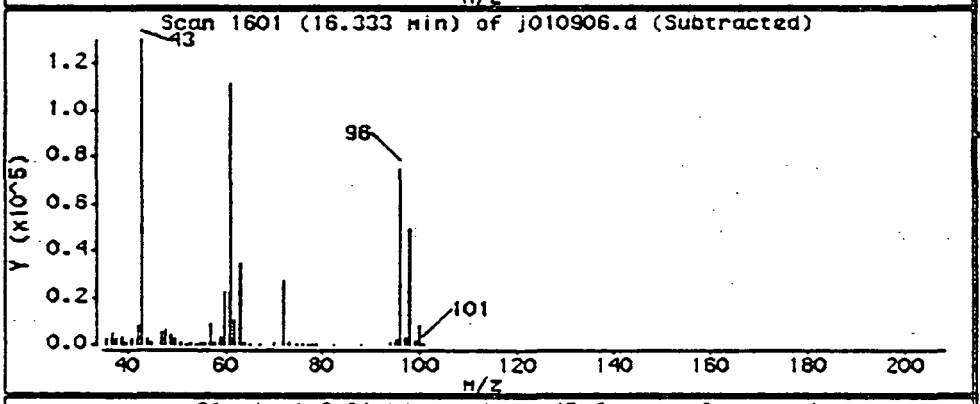
Operator: FA

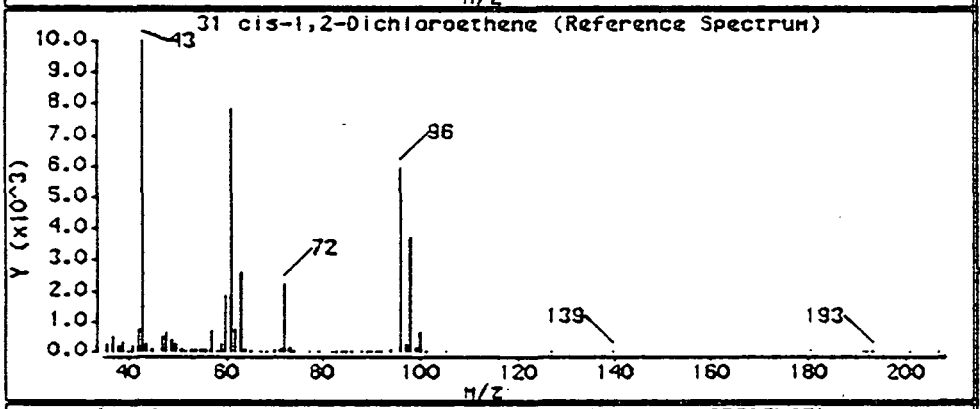
Column phase: RTx-624

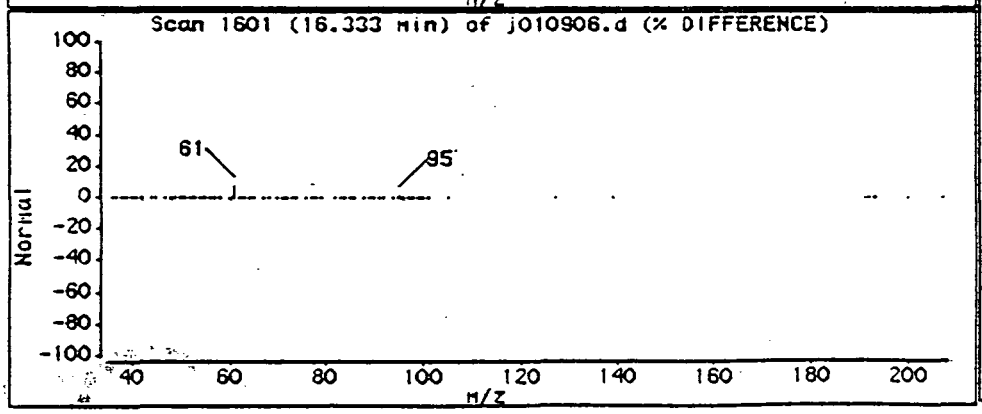
Column diameter: 0.58

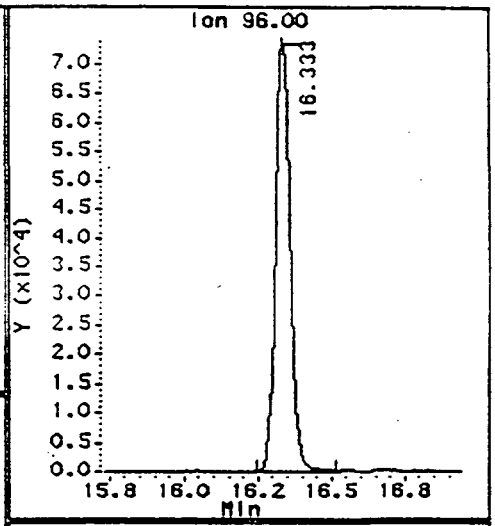
31 cis-1,2-Dichloroethene

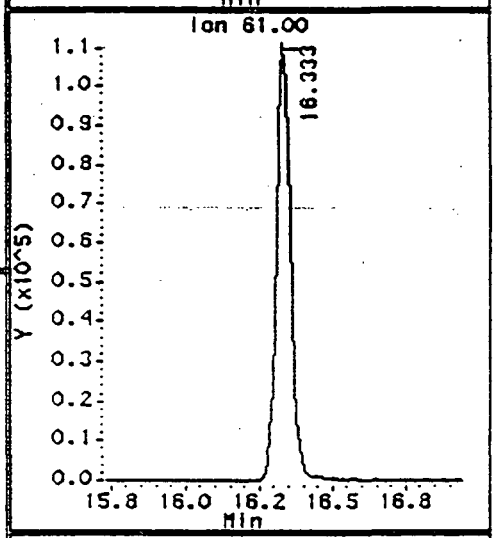


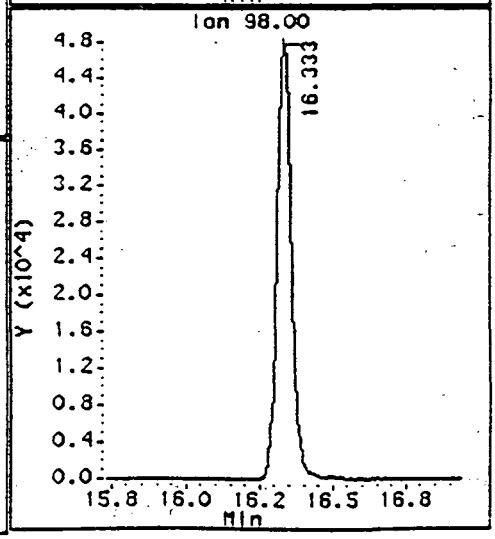












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

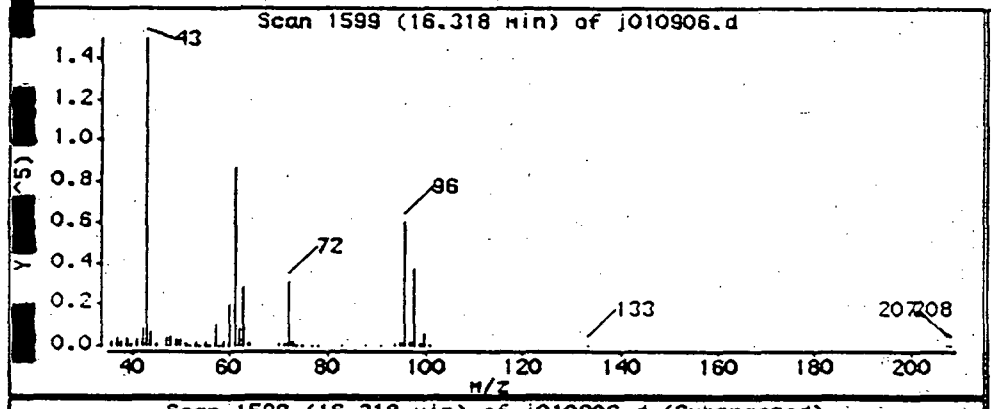
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

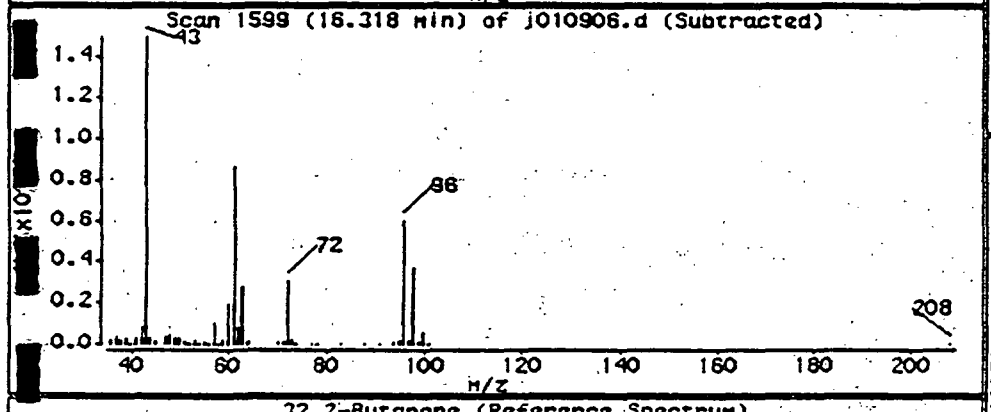
Operator: FA

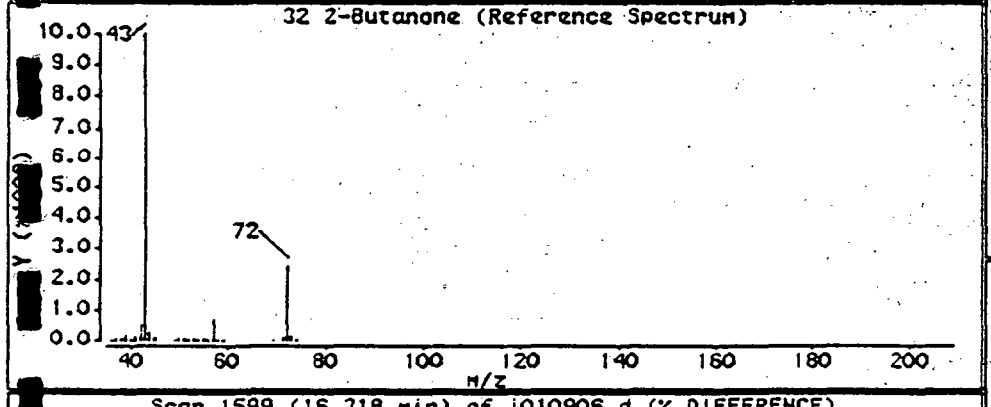
Column phase: RTx-624

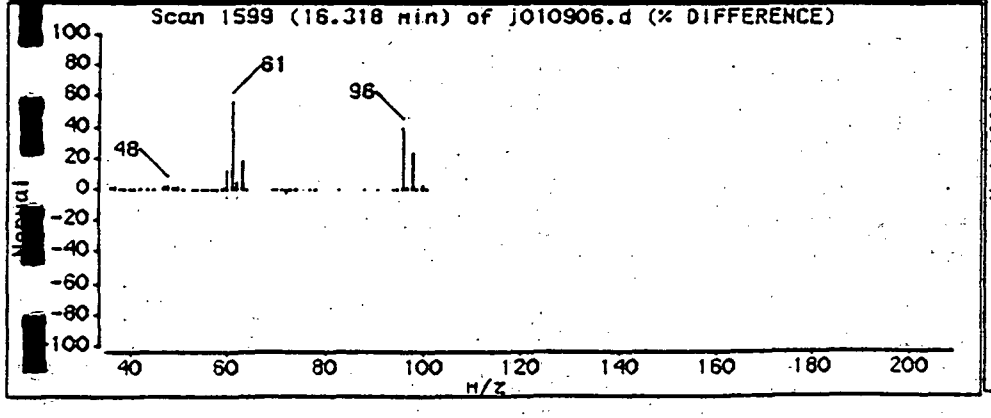
Column diameter: 0.58

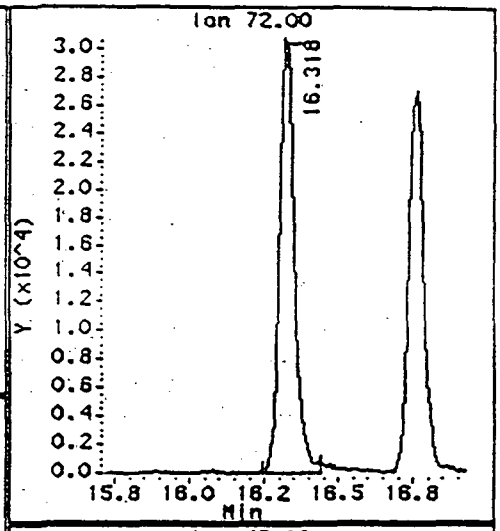
32 2-Butanone

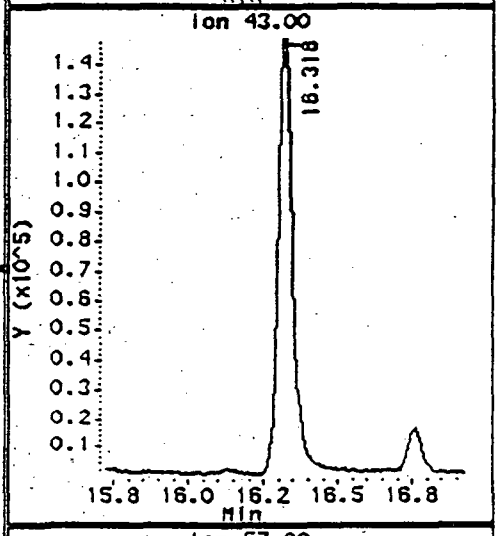


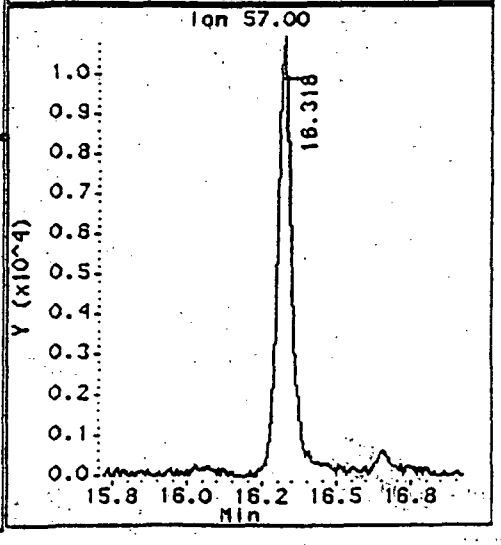












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

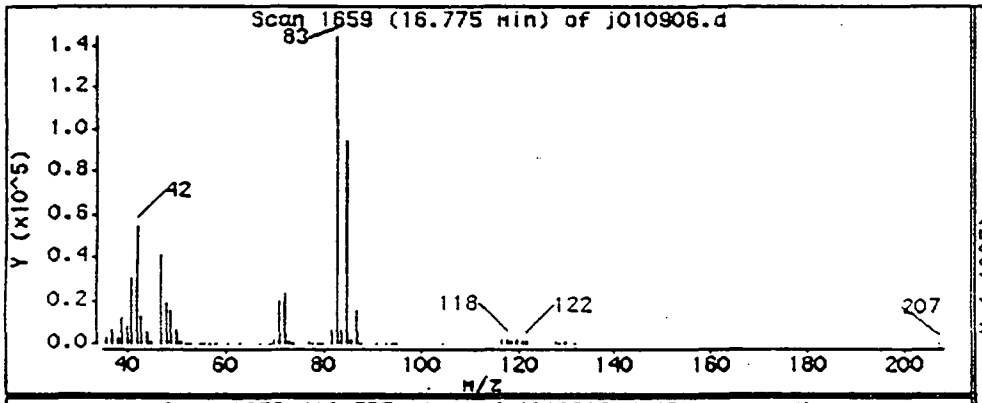
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

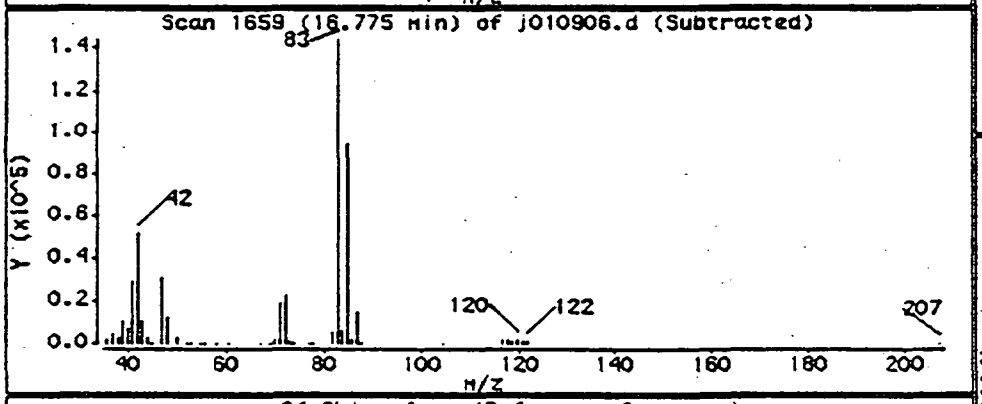
Operator: FA

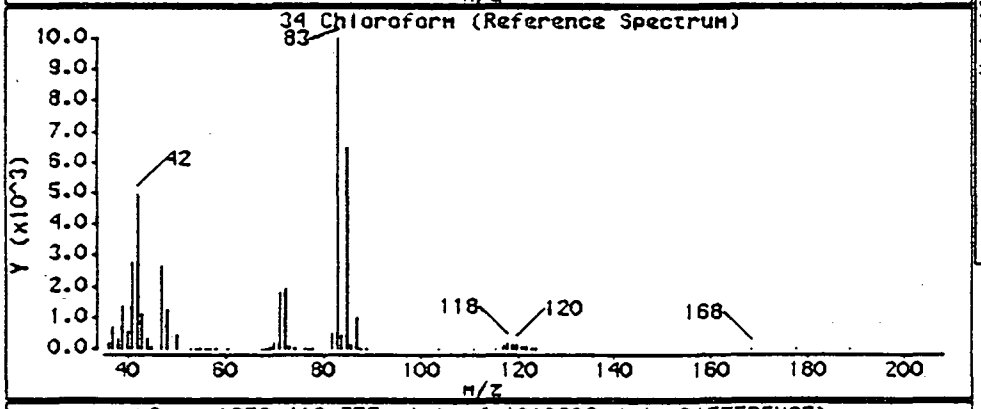
Column phase: RTx-624

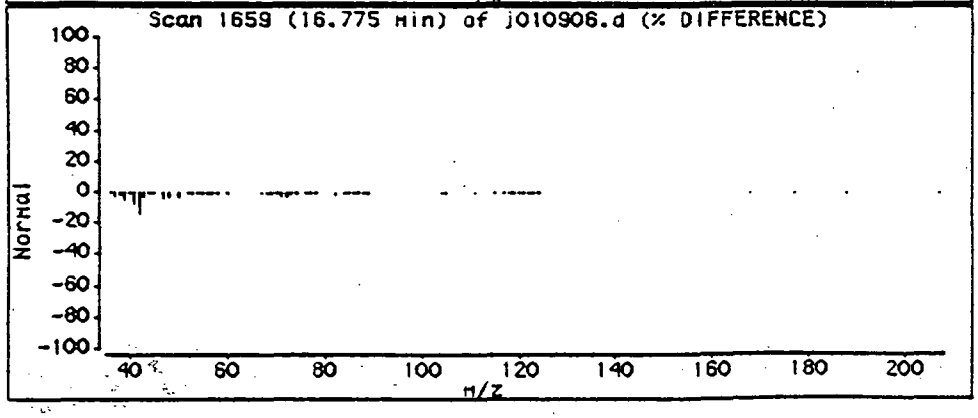
Column diameter: 0.58

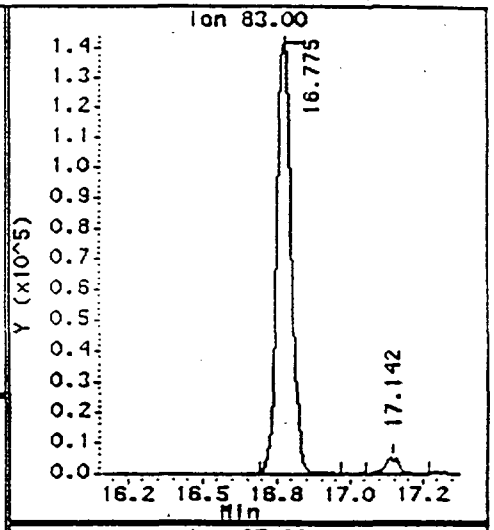
34 Chloroform

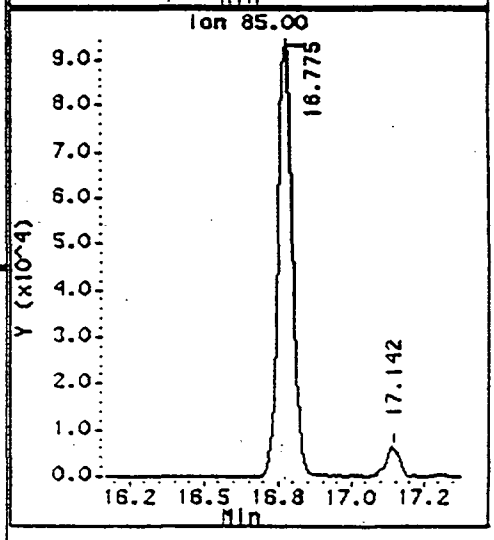












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

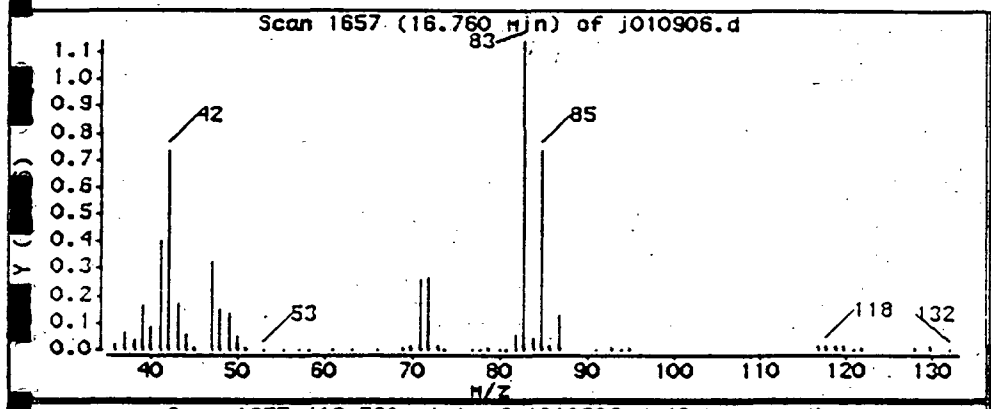
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

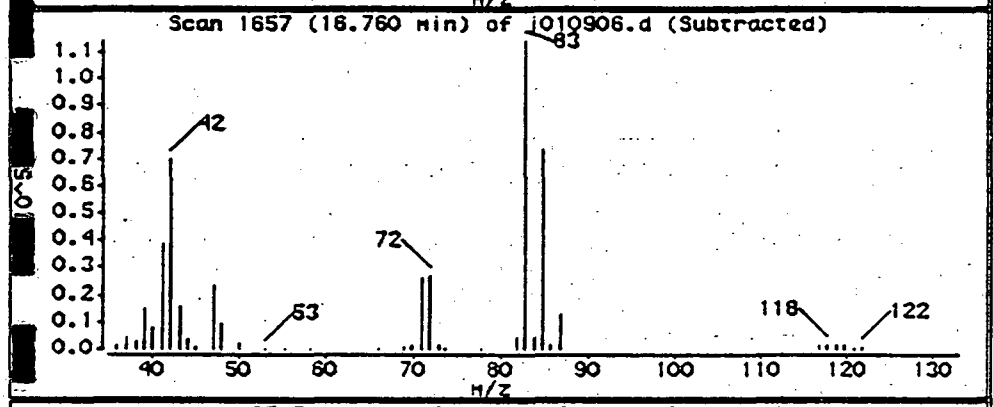
Operator: FA

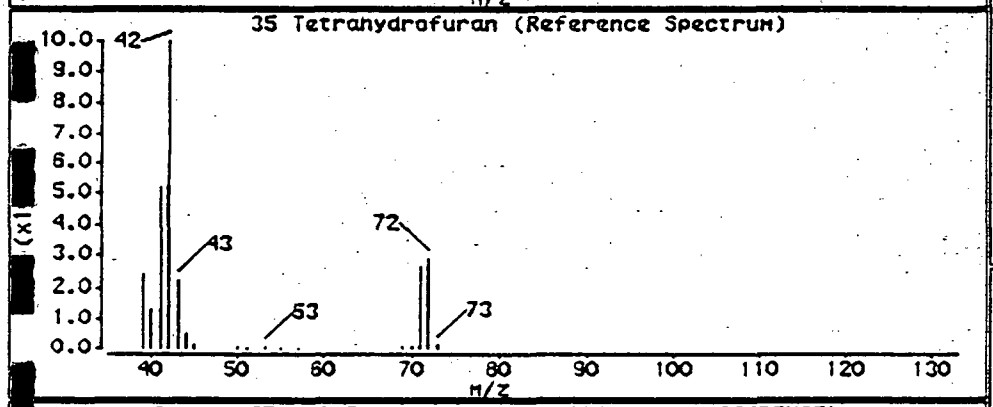
Column phase: RTx-624

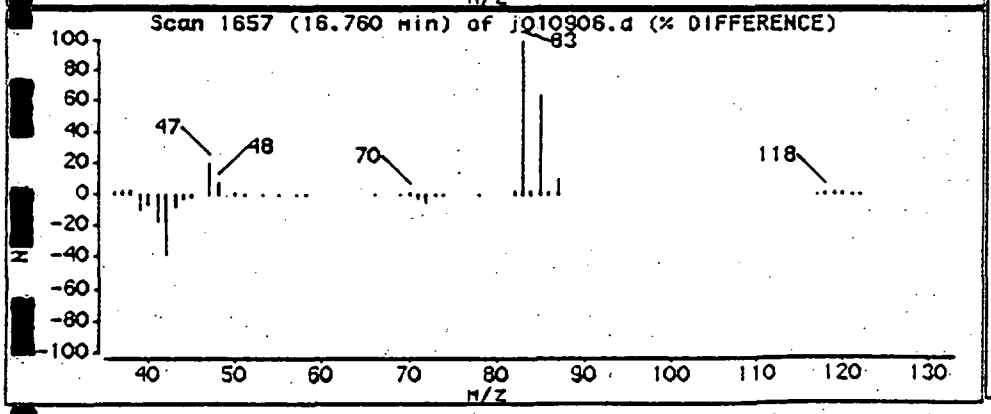
Column diameter: 0.58

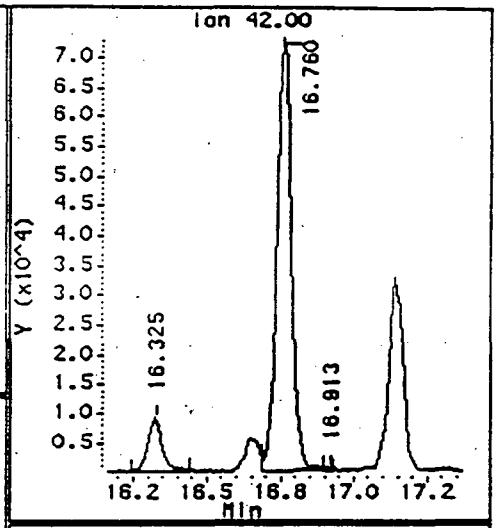
35 Tetrahydrofuran

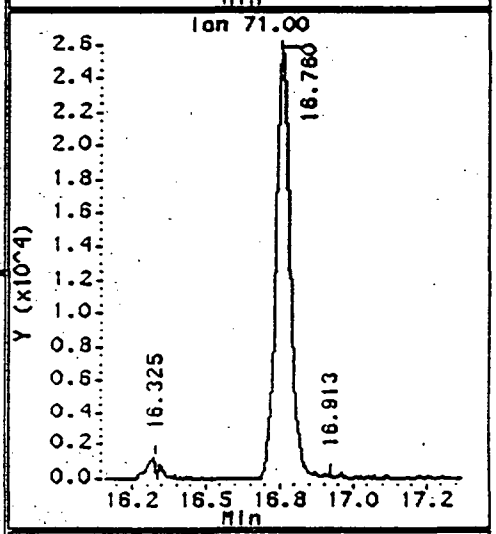


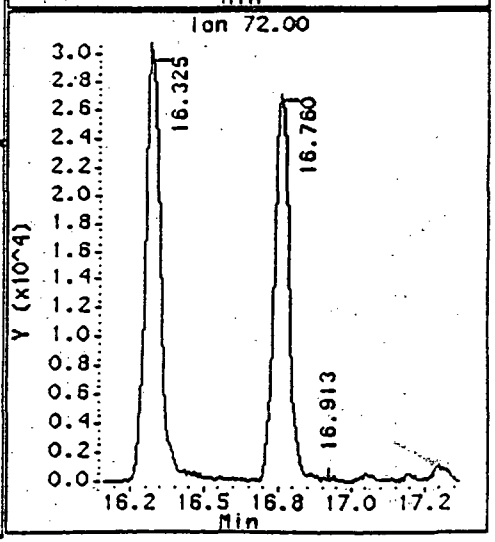












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

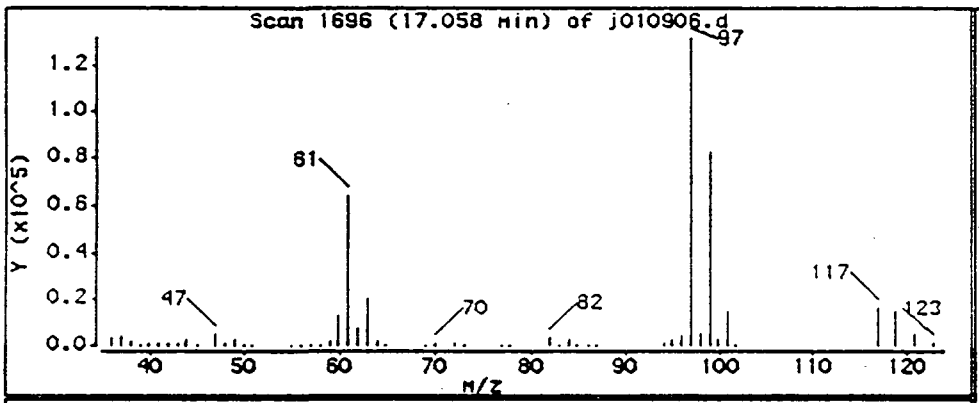
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

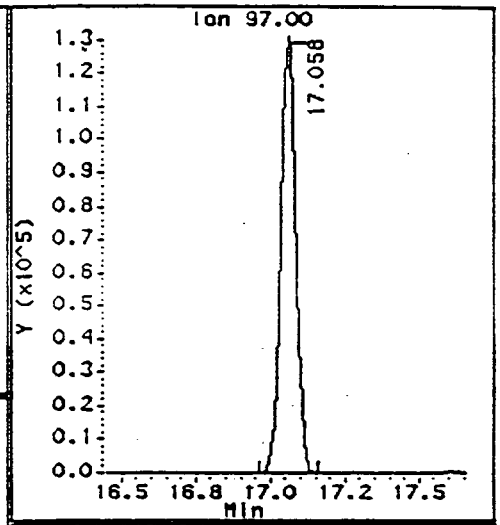
Operator: FA

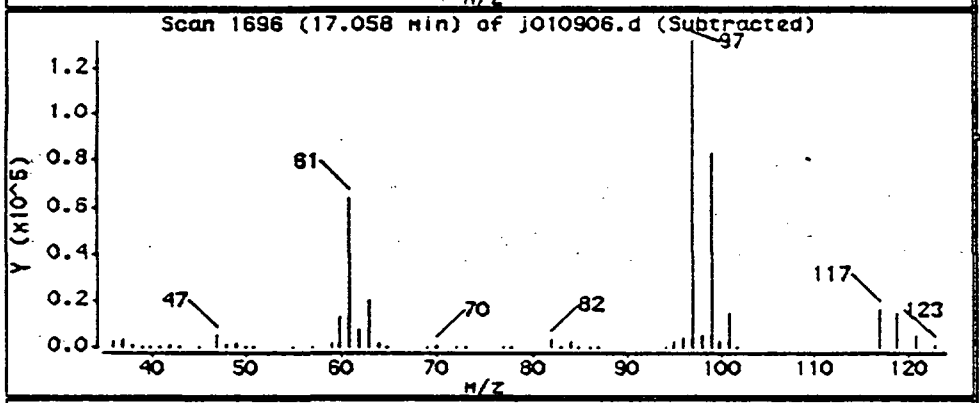
Column phase: RTx-624

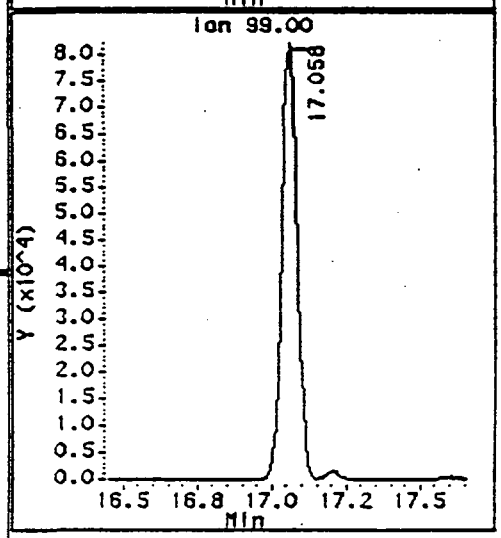
Column diameter: 0.58

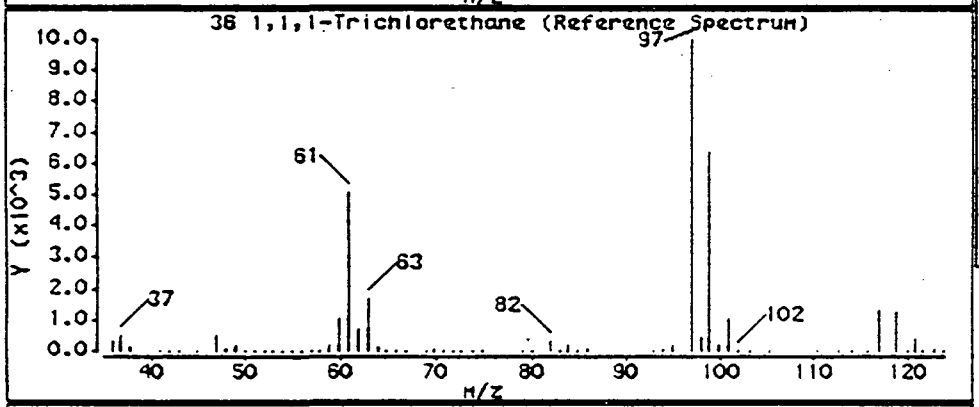
36 1,1,1-Trichlorethane

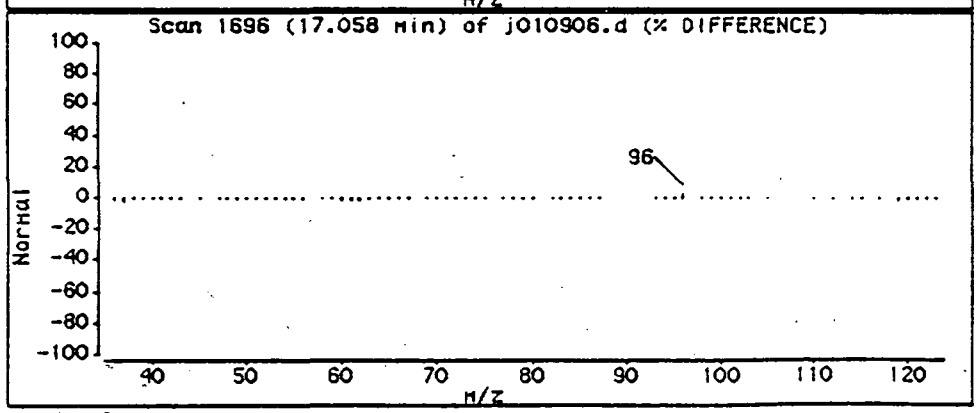












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

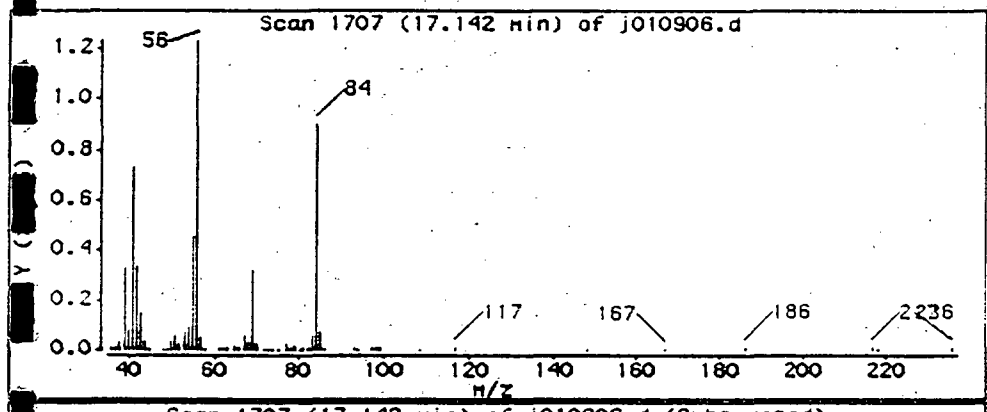
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

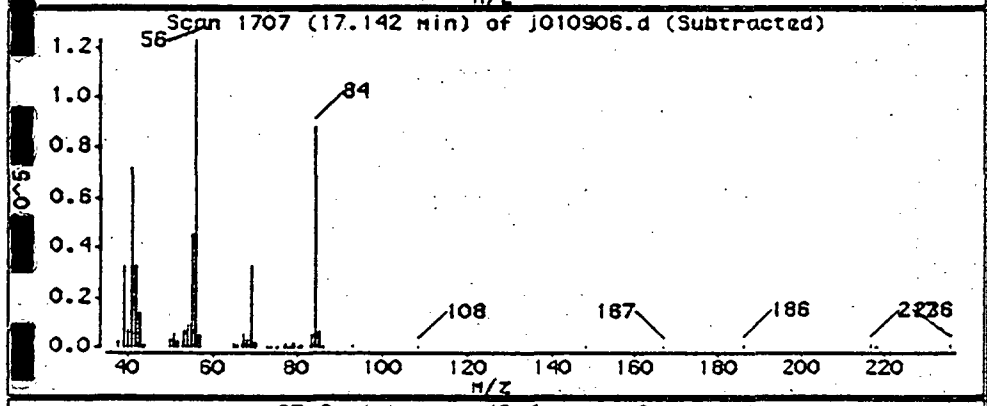
Operator: FA

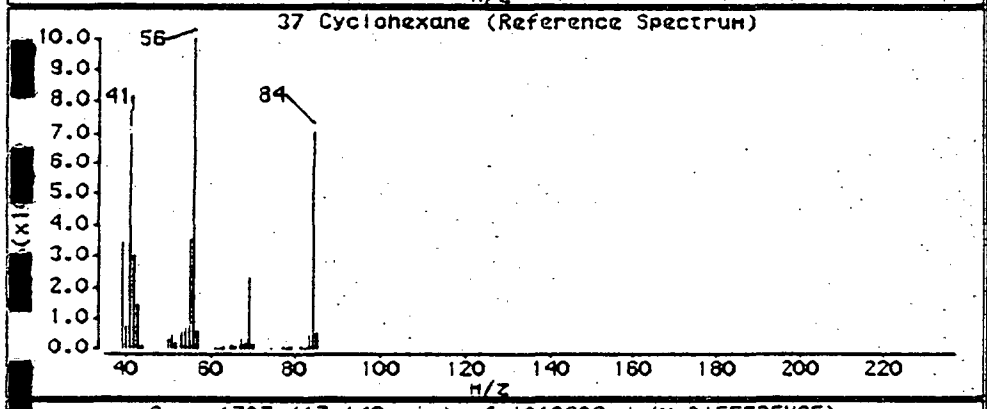
Column phase: RTx-624

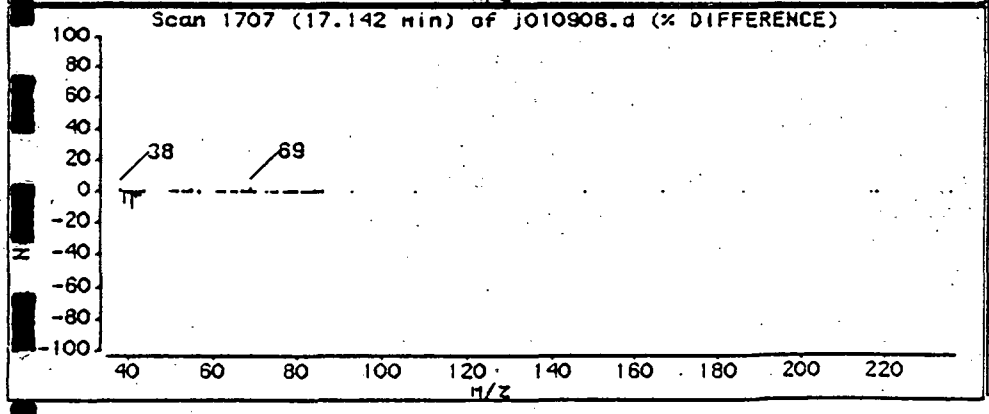
Column diameter: 0.58

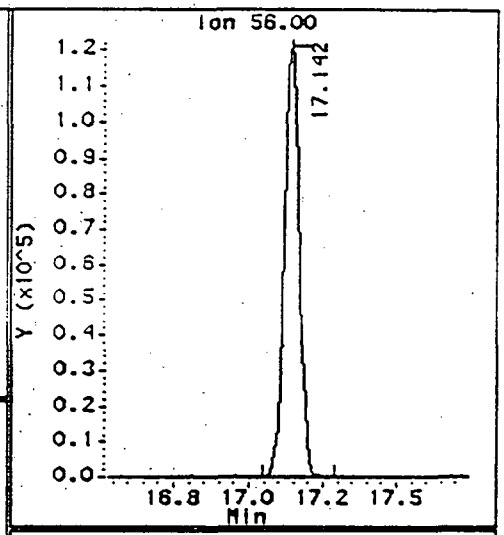
37 Cyclohexane

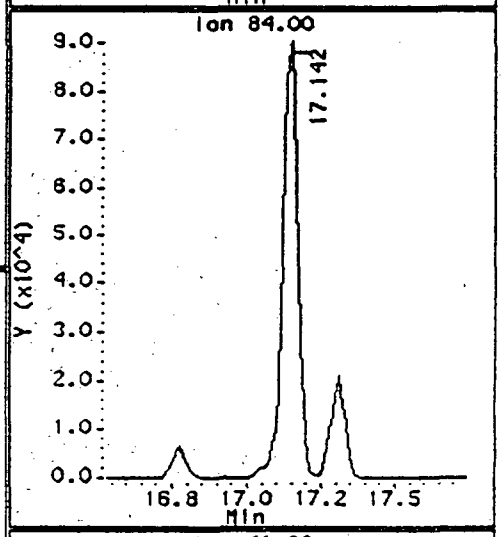


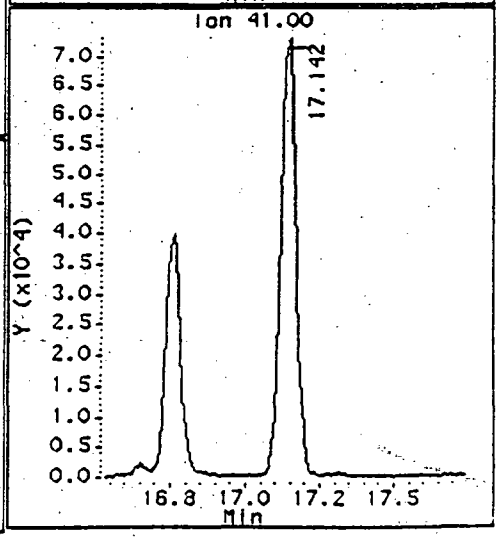












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

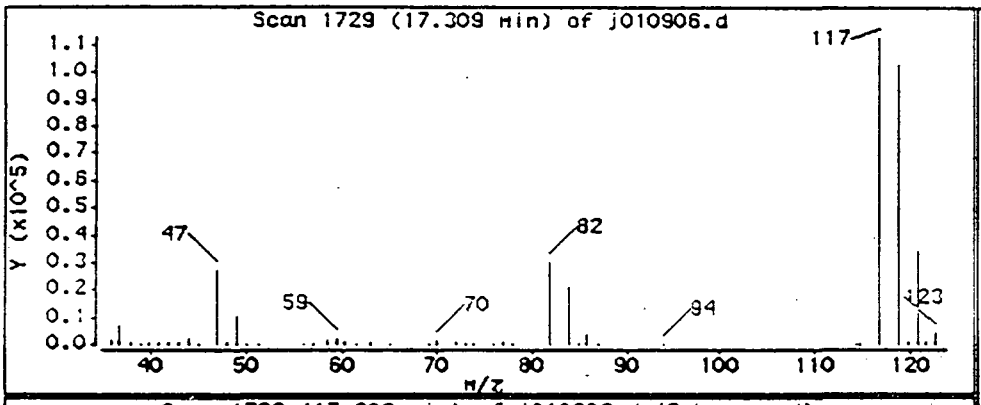
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

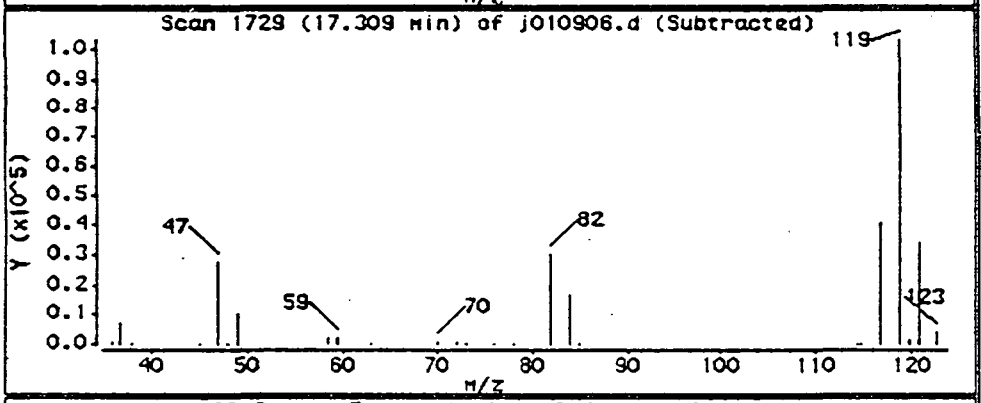
Operator: FA

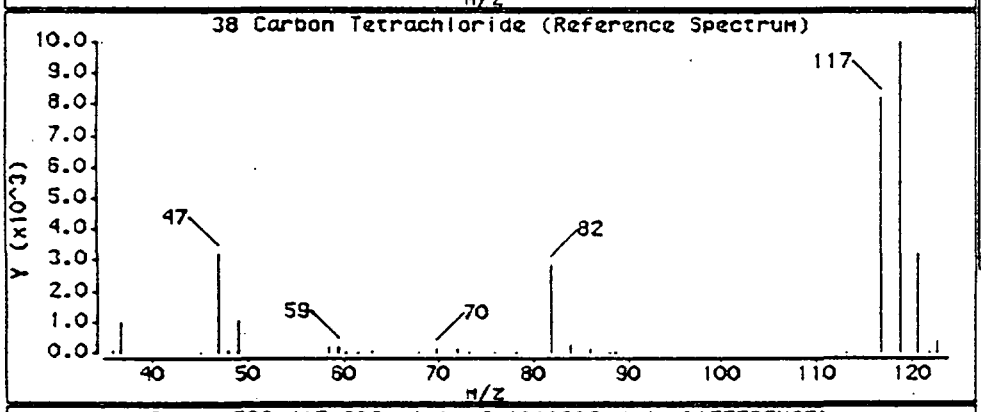
Column phase: RTx-624

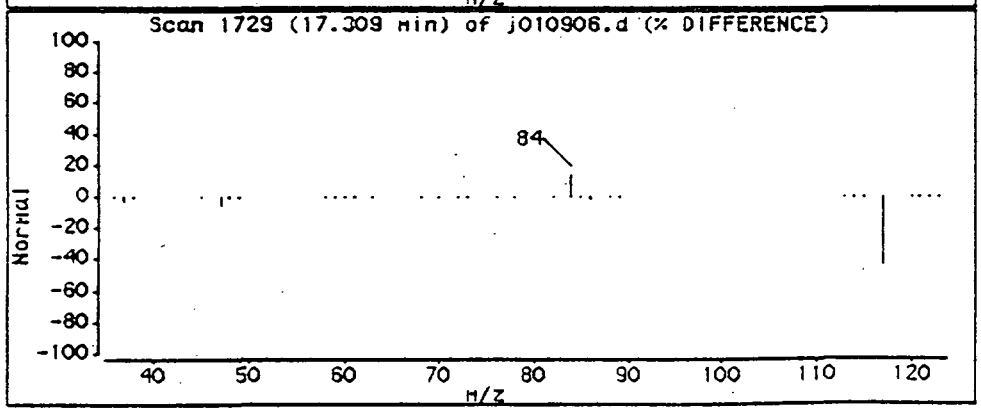
Column diameter: 0.58

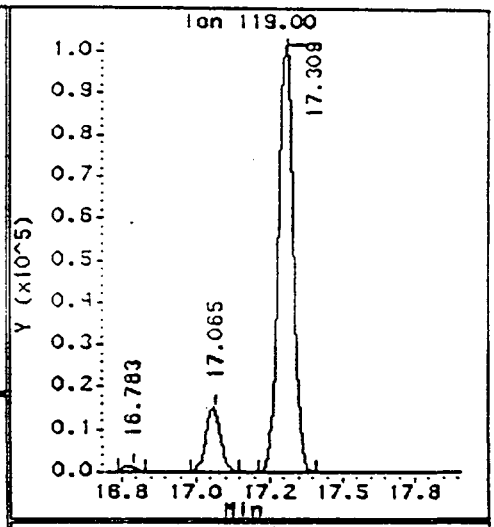
38 Carbon Tetrachloride

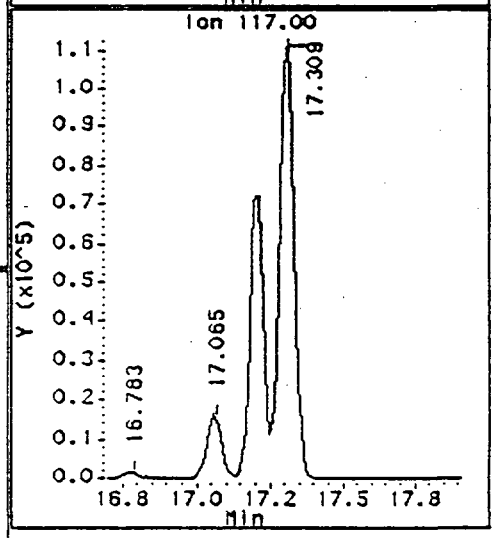












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

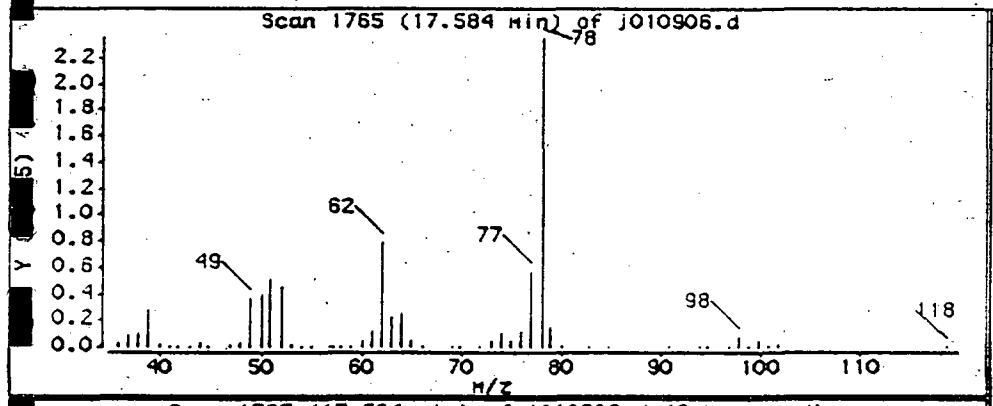
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

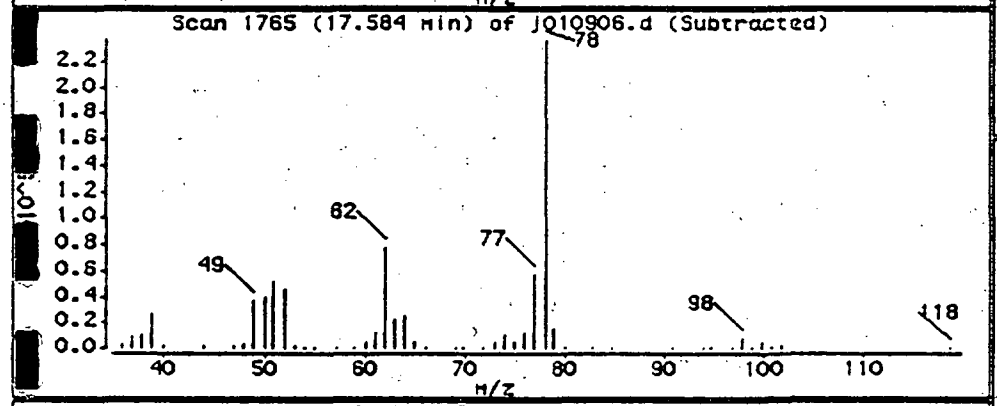
Operator: FA

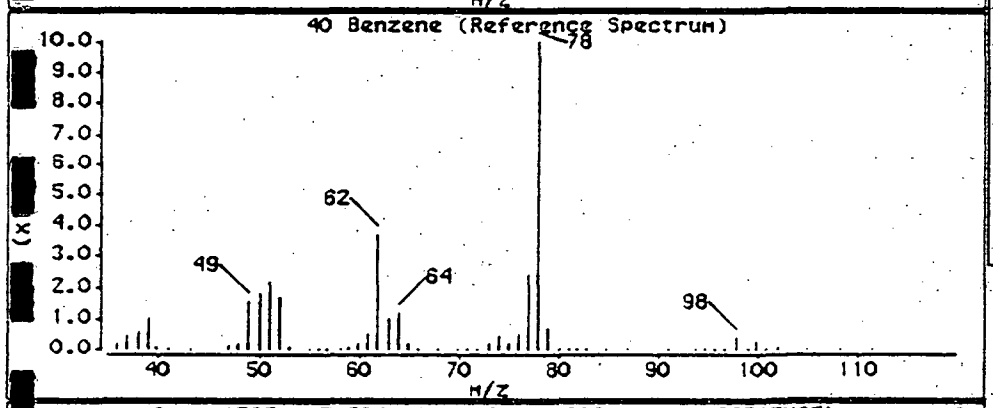
Column phase: RTx-624

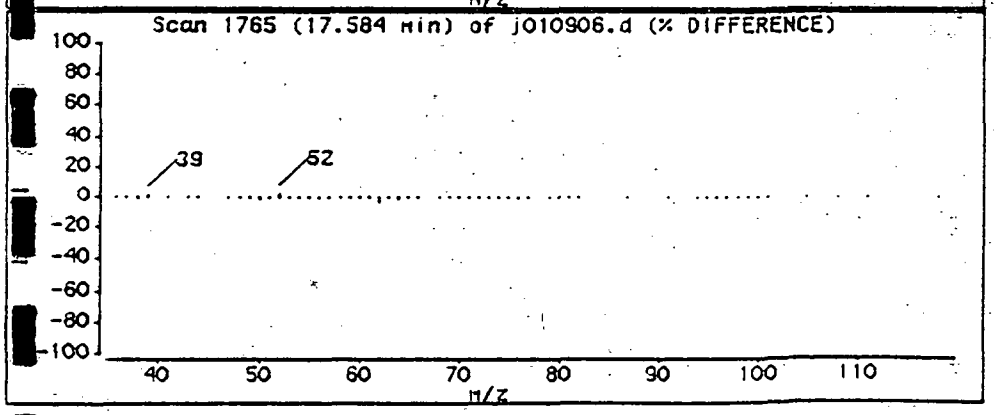
Column diameter: 0.58

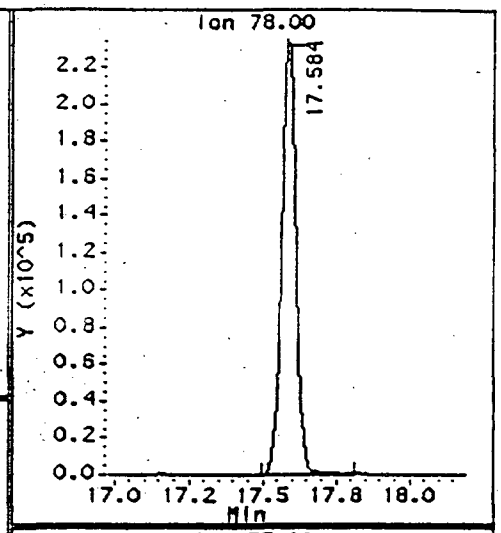
40 Benzene

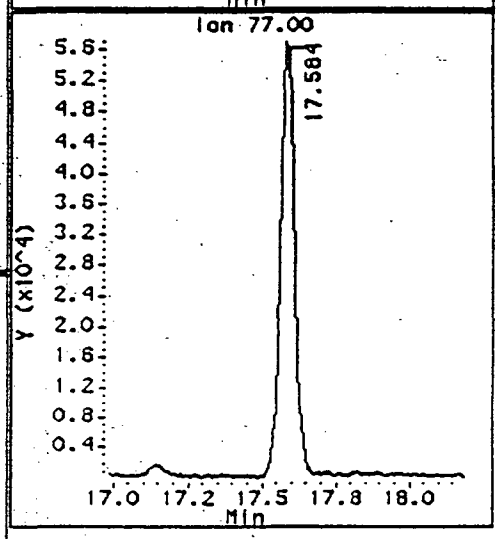












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

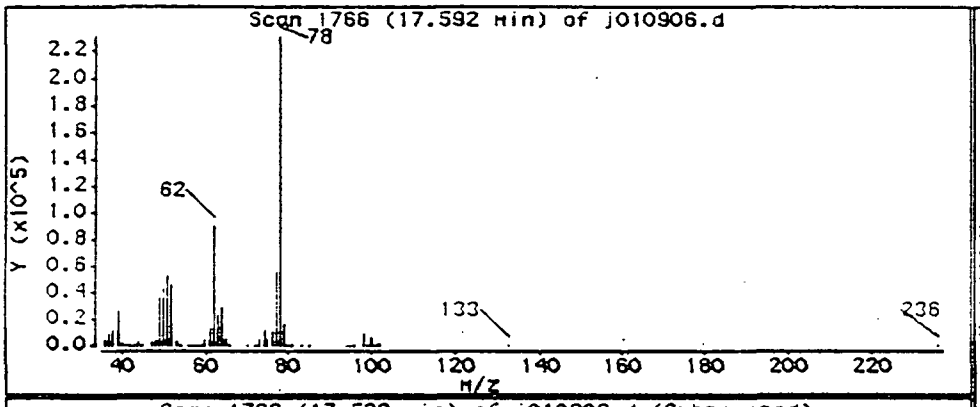
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

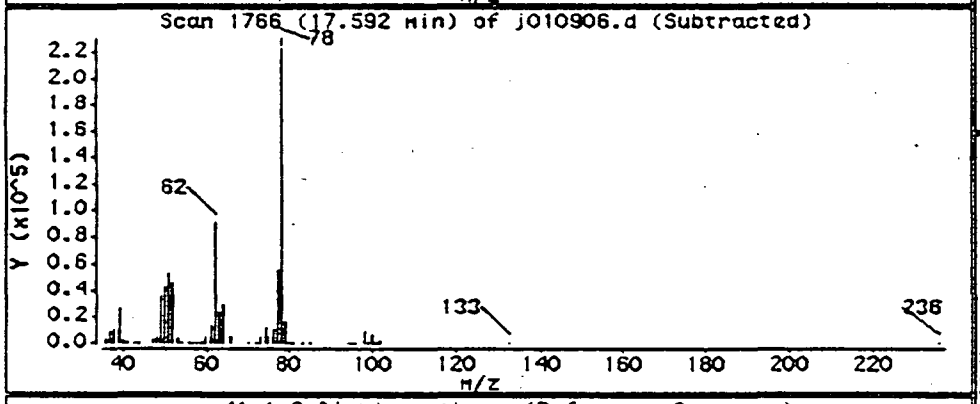
Operator: FA

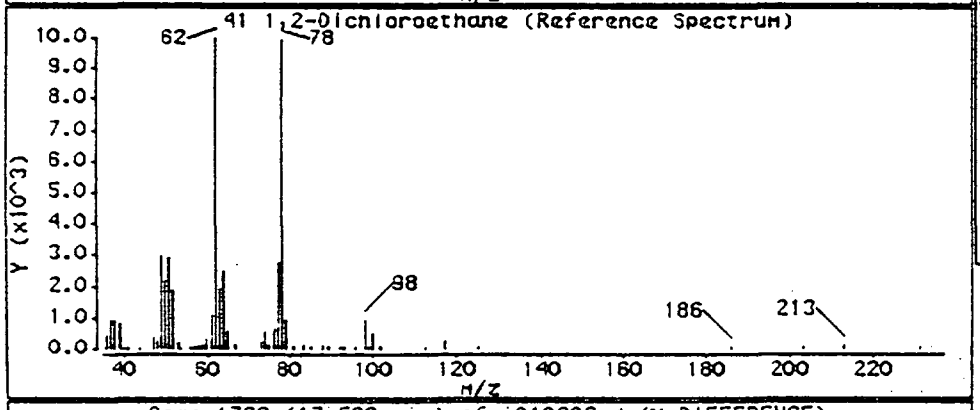
Column phase: RTx-624

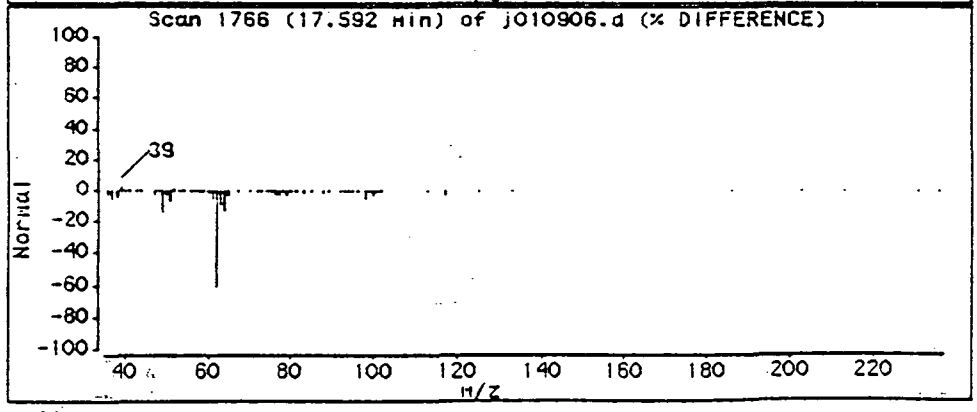
Column diameter: 0.58

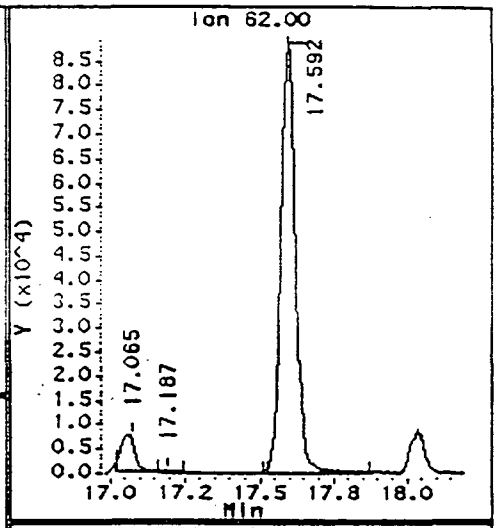
41 1,2-Dichloroethane

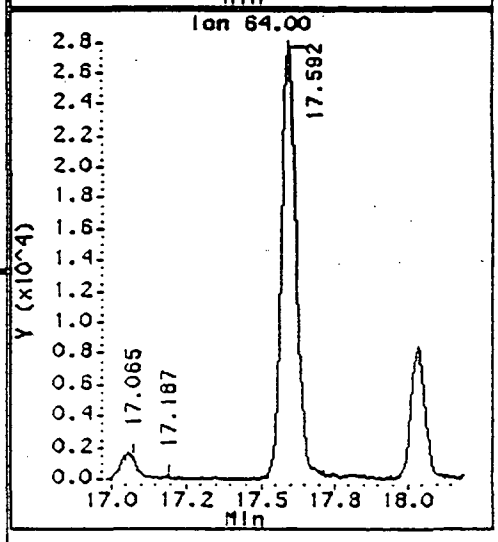












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

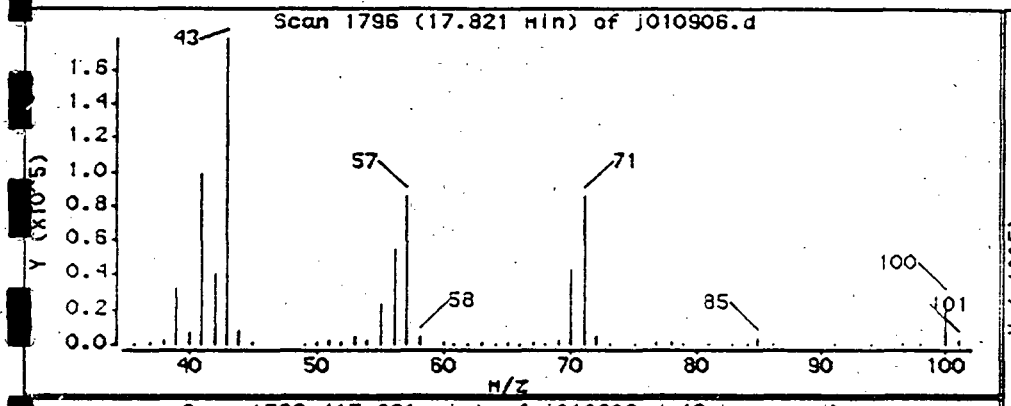
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

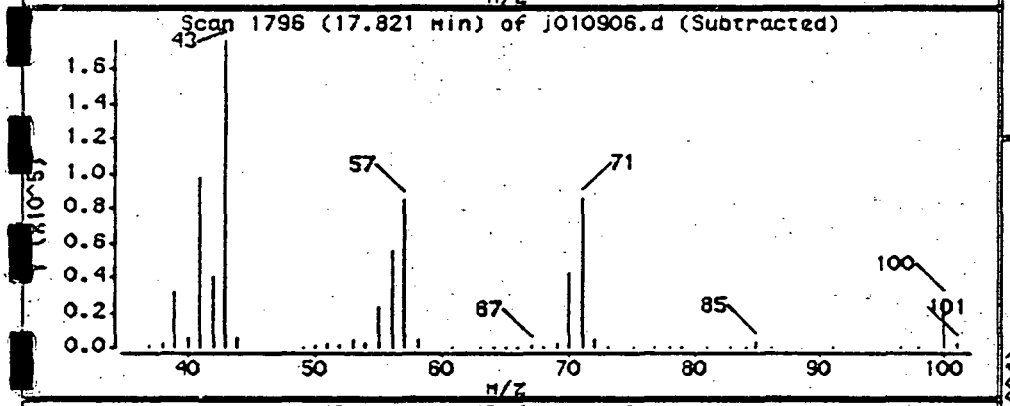
Operator: FA

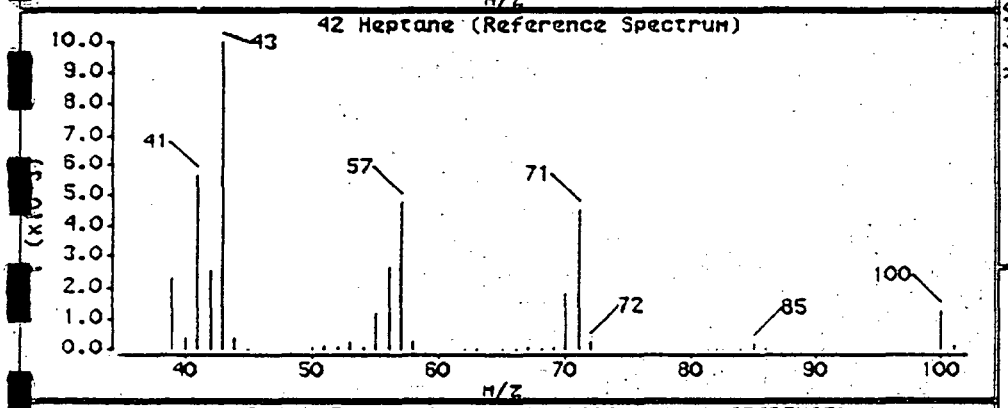
Column phase: RTx-624

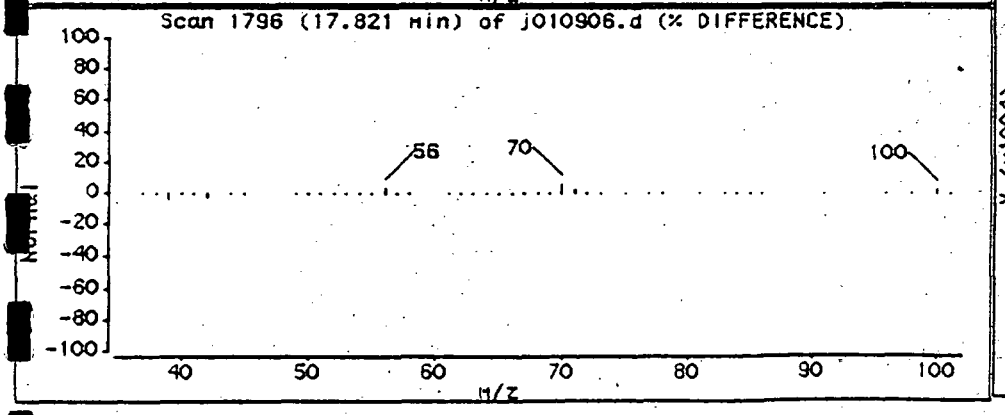
Column diameter: 0.58

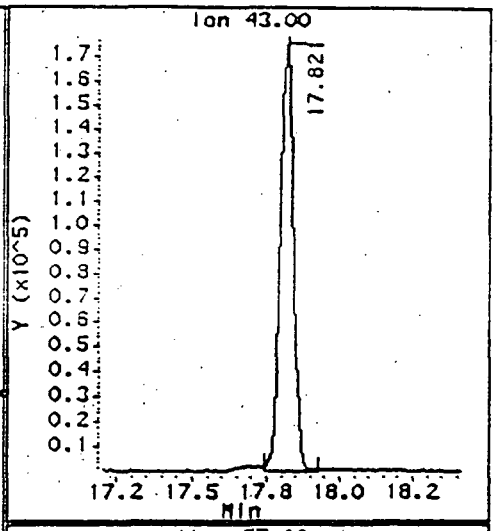
42 Heptane

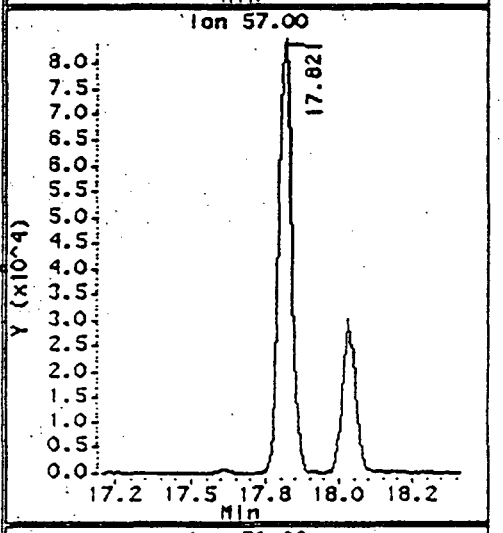


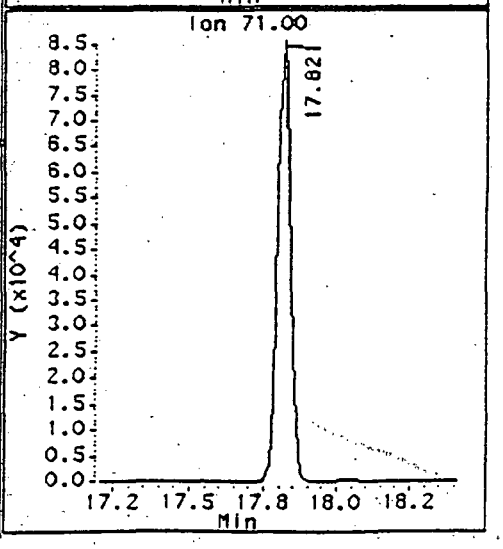












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

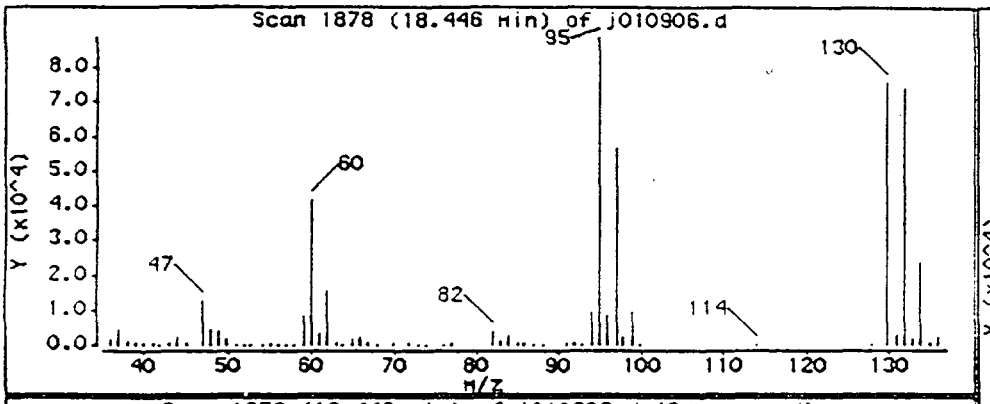
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

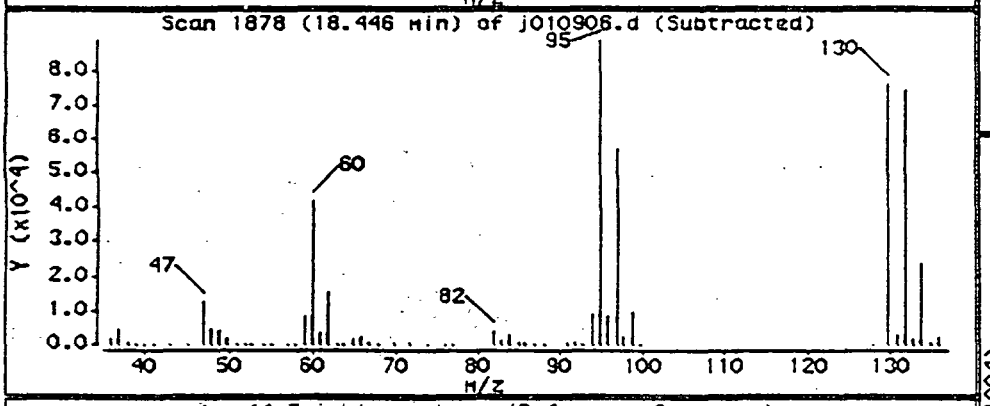
Operator: FA

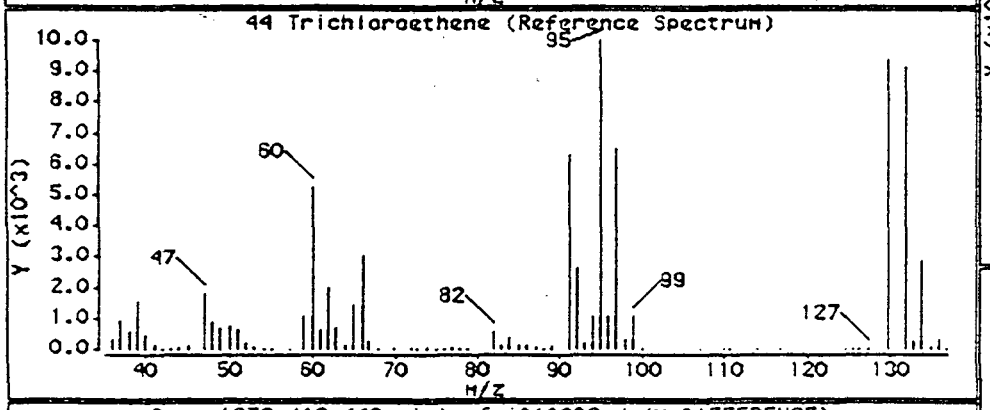
Column phase: RTx-624

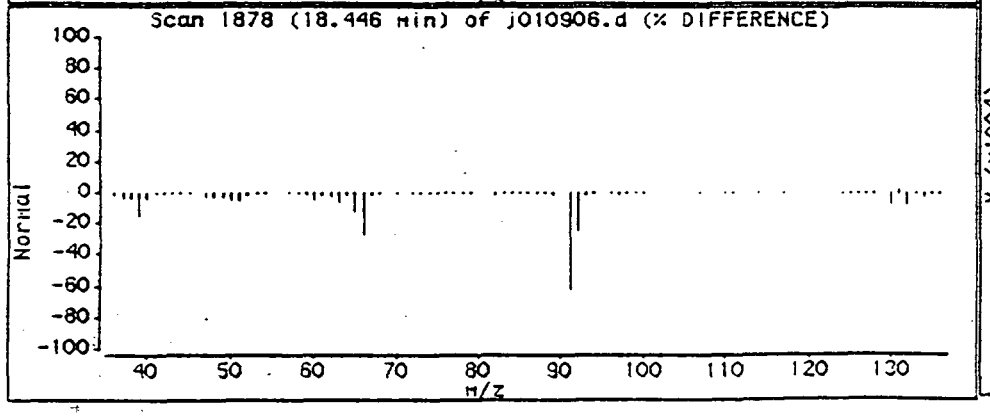
Column diameter: 0.58

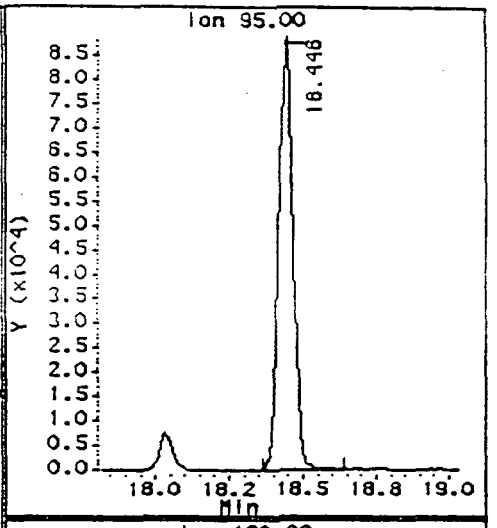
44 Trichloroethene

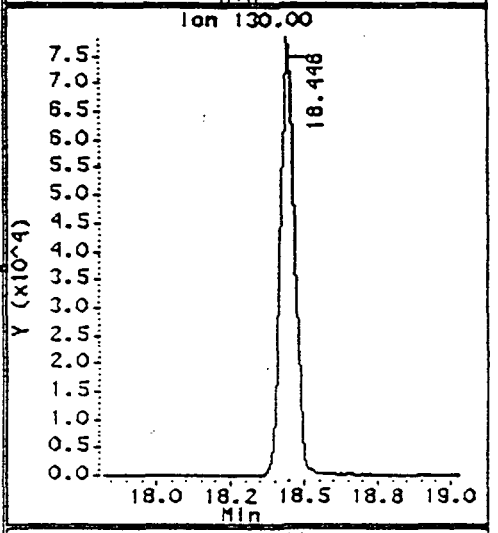


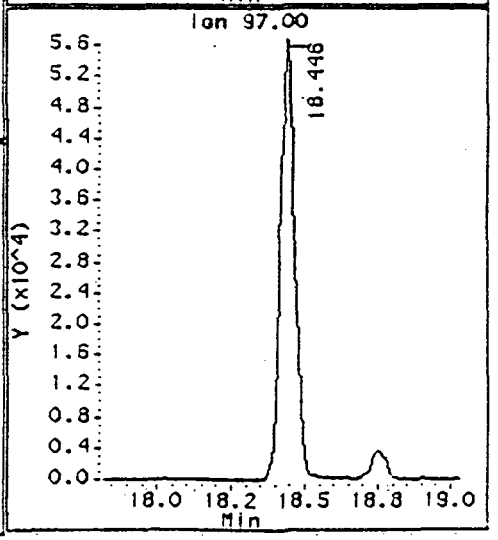












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

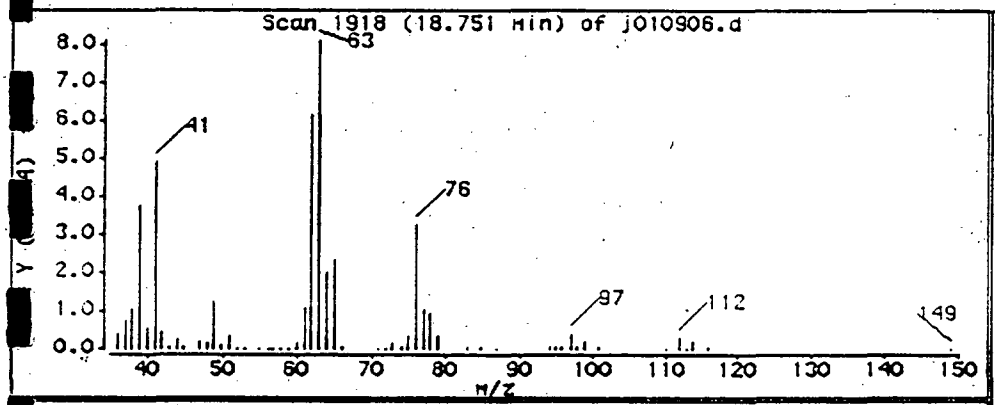
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

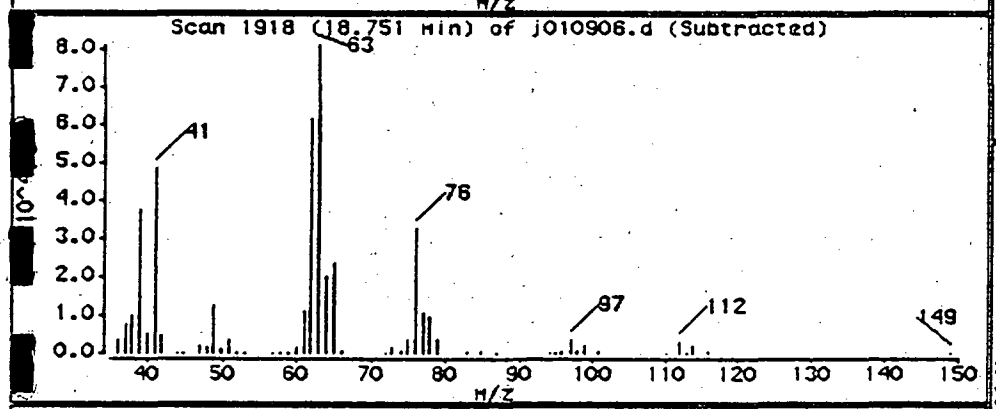
Operator: FA

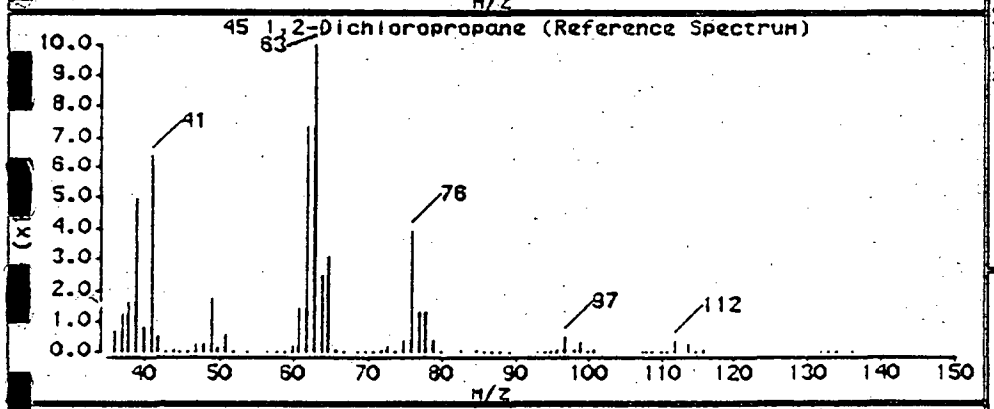
Column phase: RTx-624

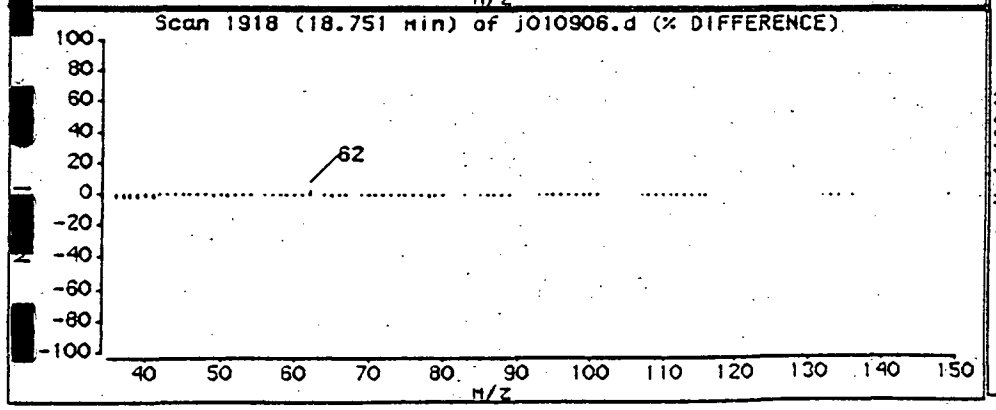
Column diameter: 0.58

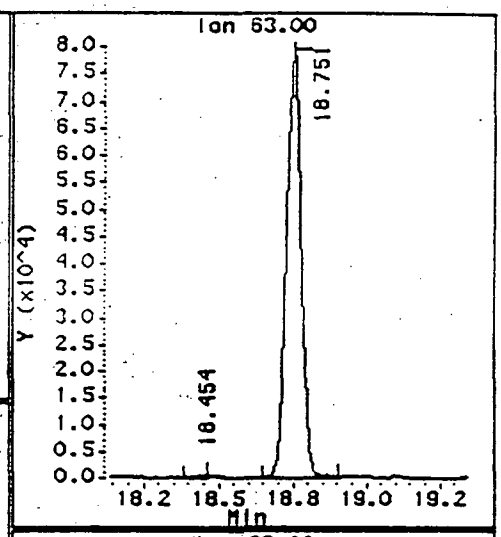
45 1,2-Dichloropropane

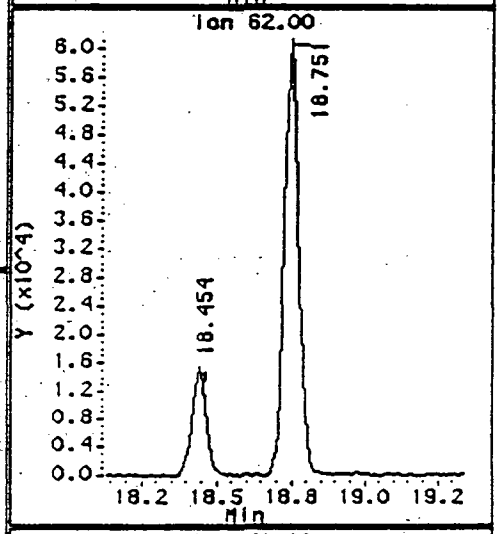


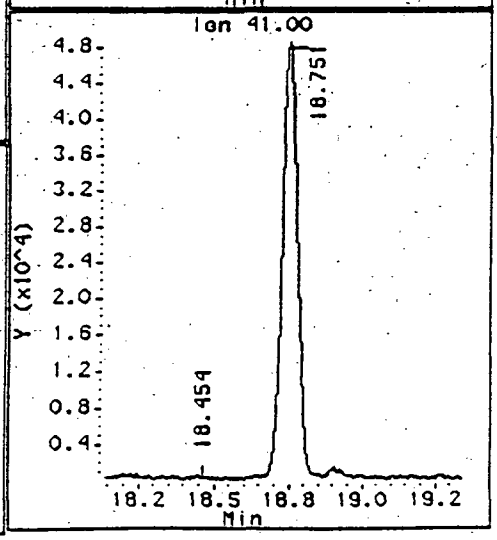












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

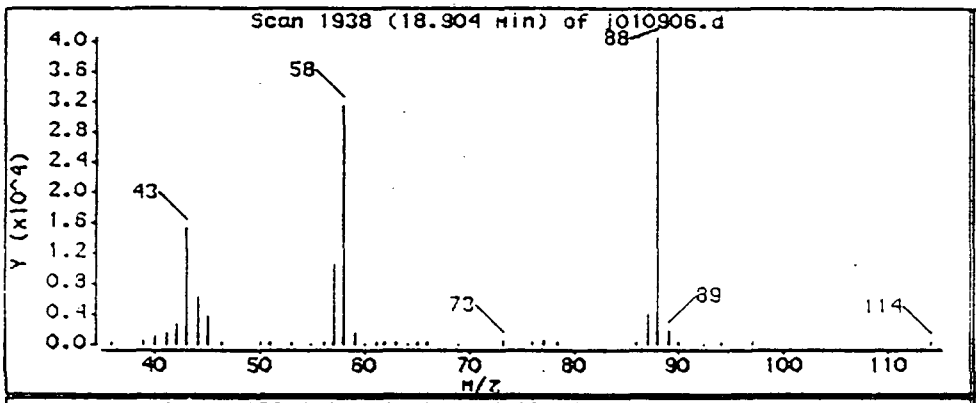
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

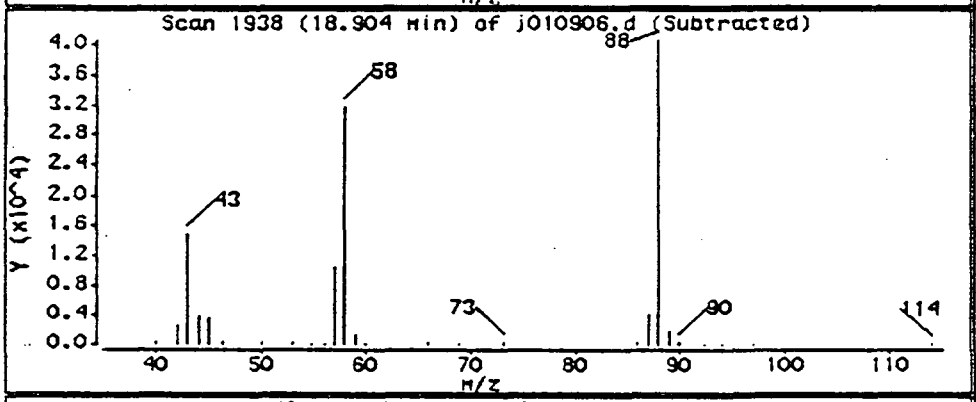
Operator: FA

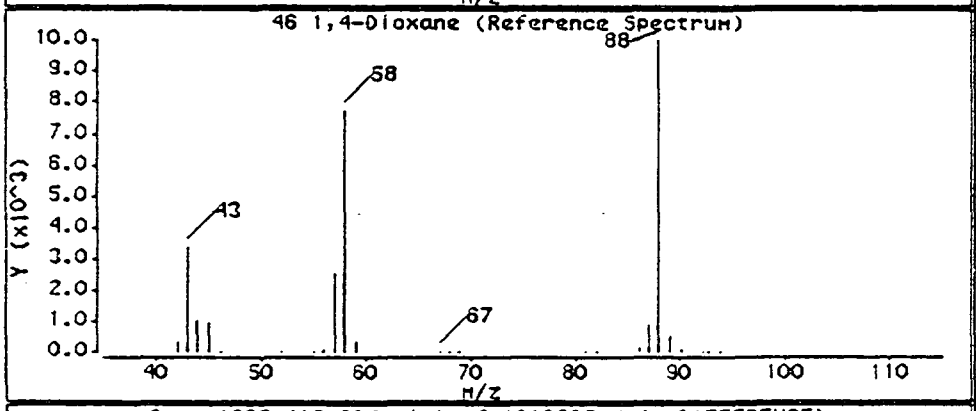
Column phase: RTx-624

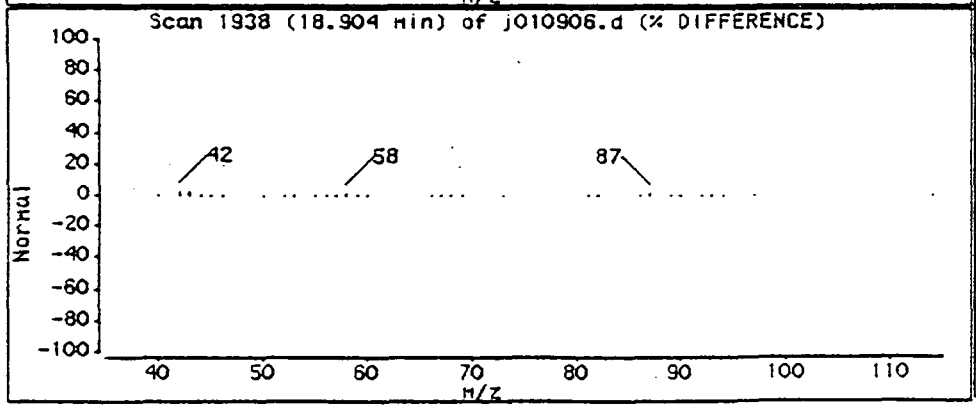
Column diameter: 0.58

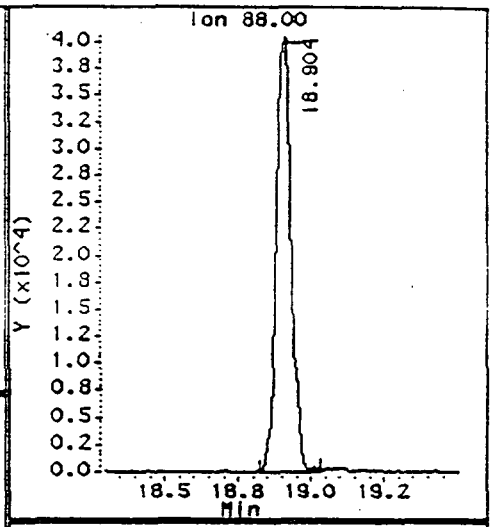
46 1,4-Dioxane

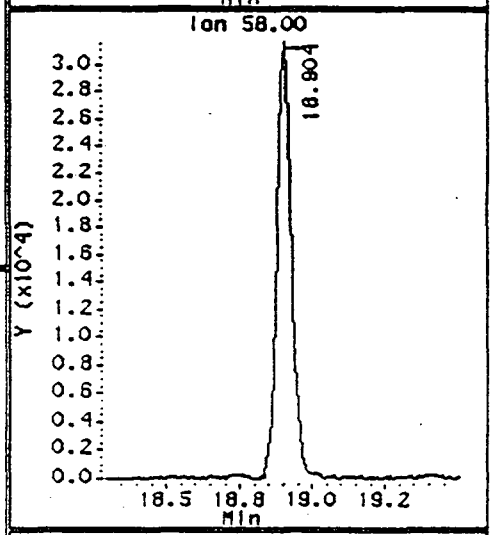


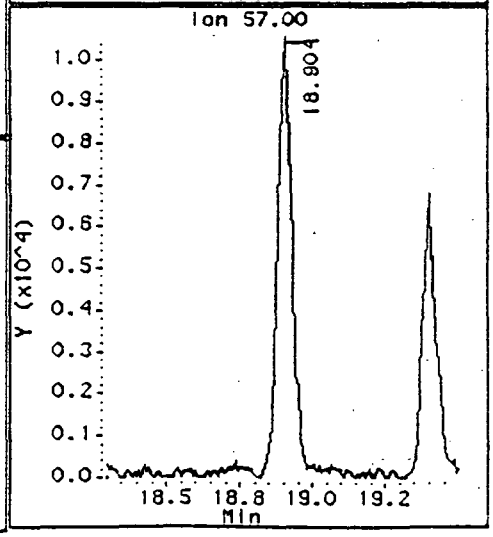












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

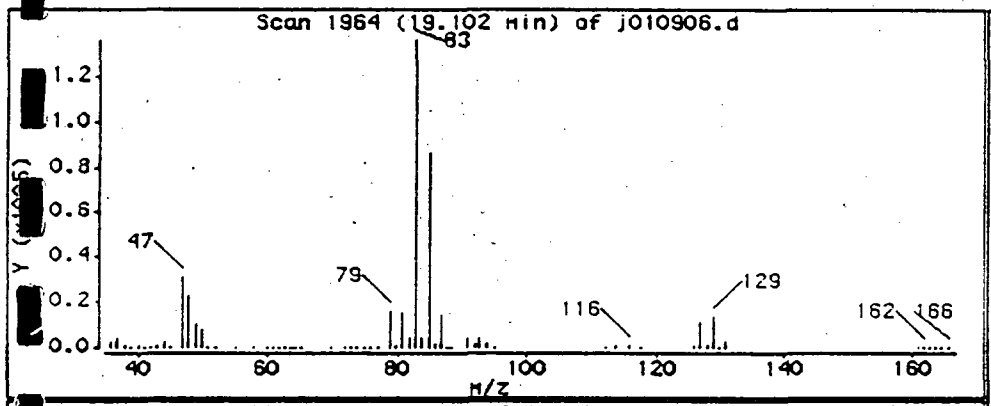
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

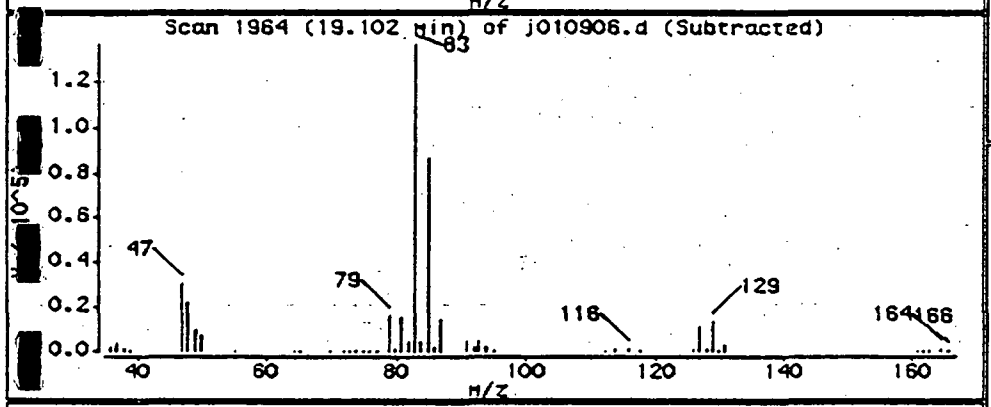
Operator: FA

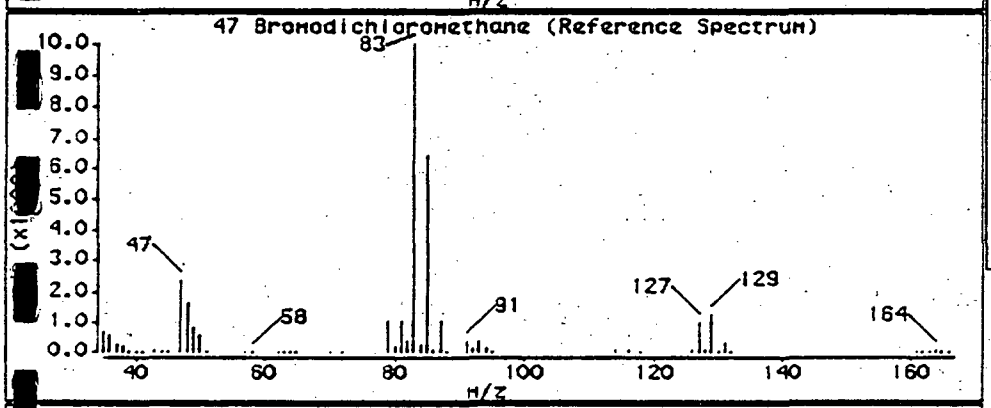
Column phase: RTx-624

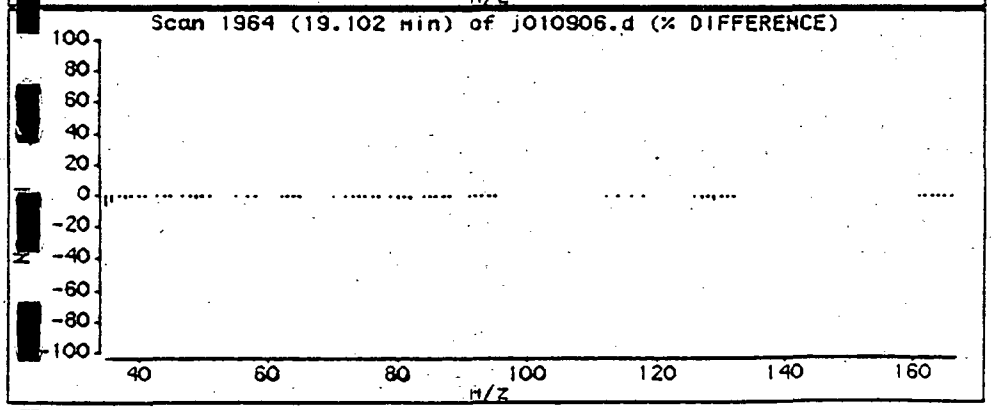
Column diameter: 0.58

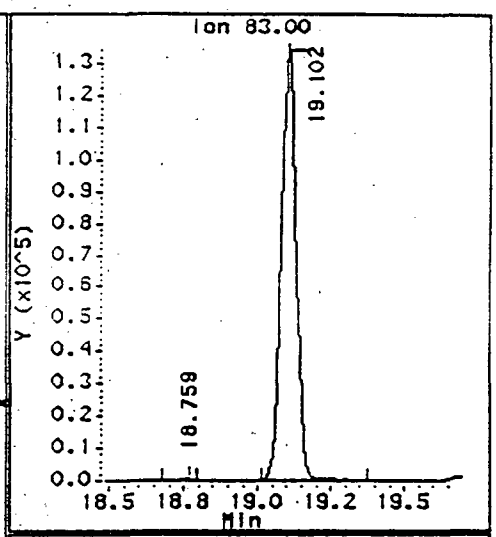
47 Bromodichloromethane

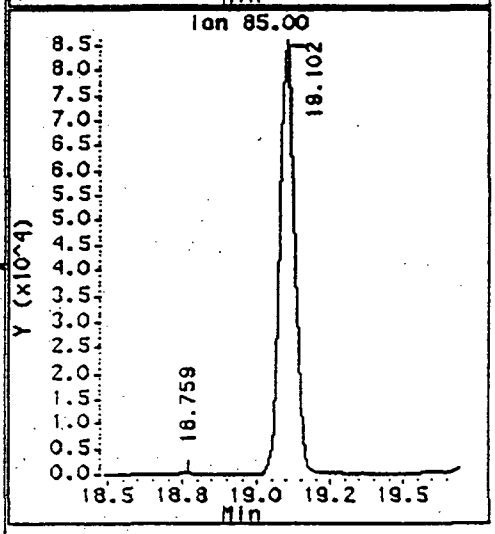












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

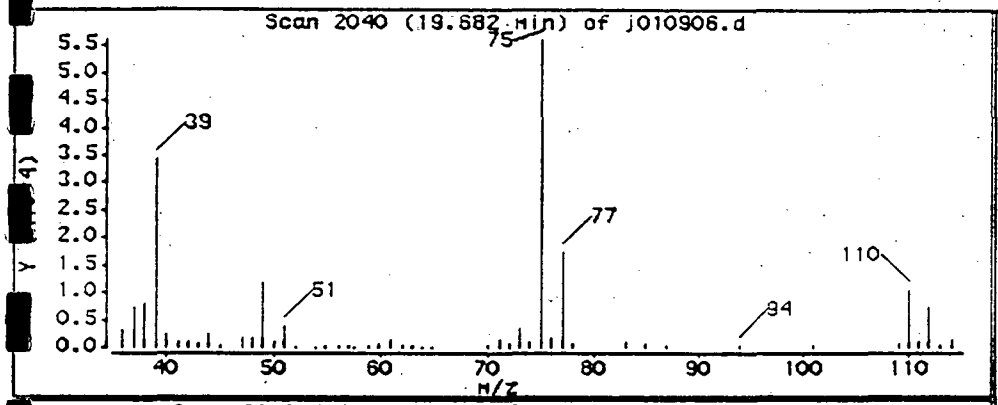
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

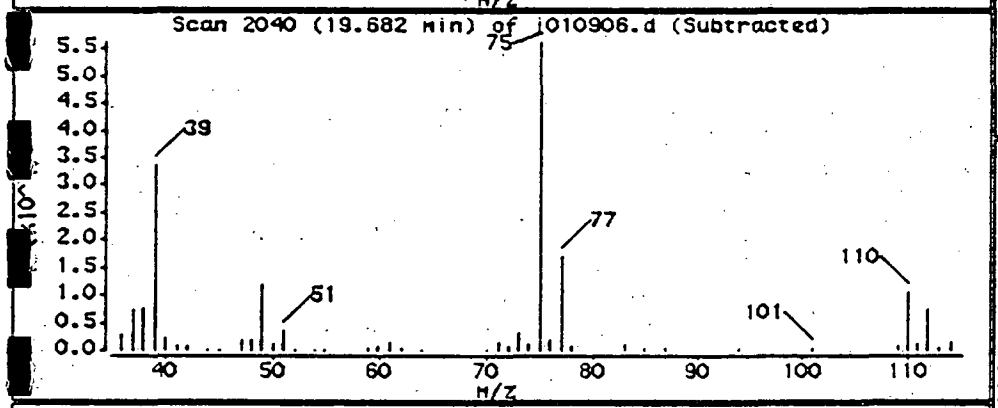
Operator: FA

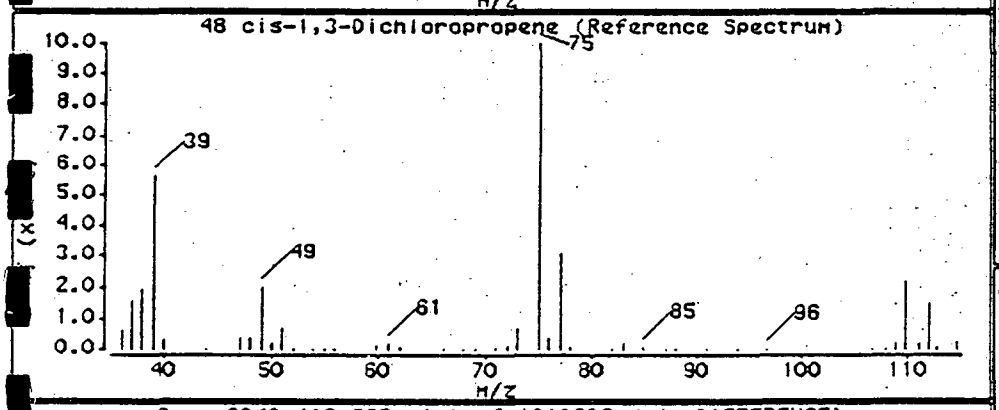
Column phase: RTx-624

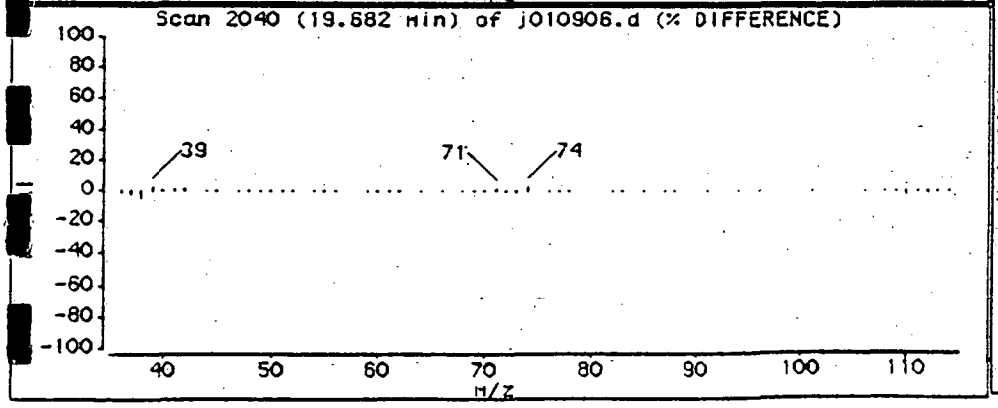
Column diameter: 0.58

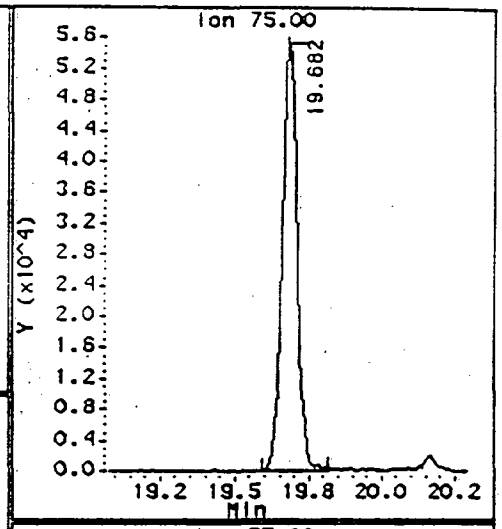
48 cis-1,3-Dichloropropene

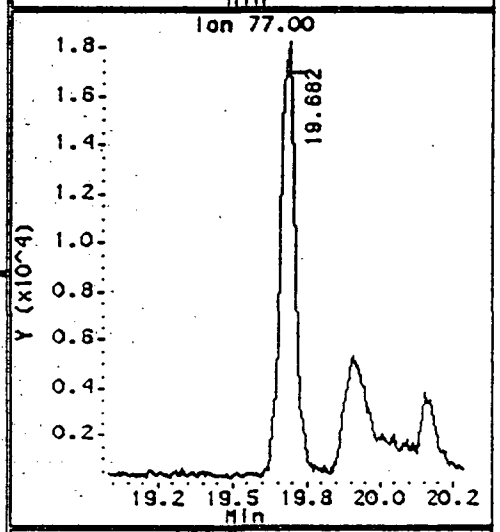


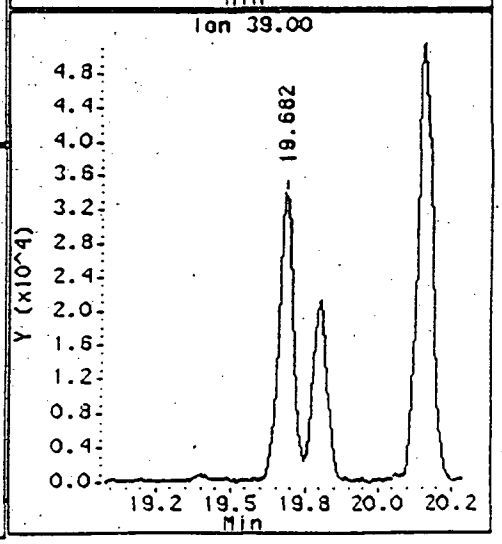












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

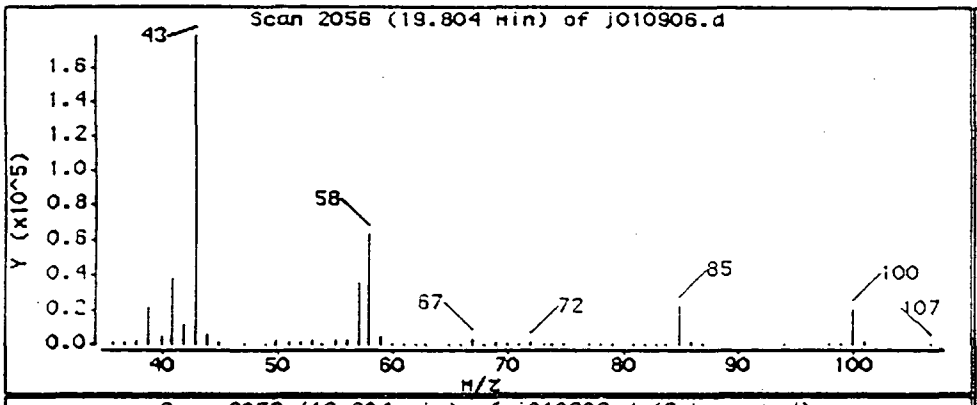
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

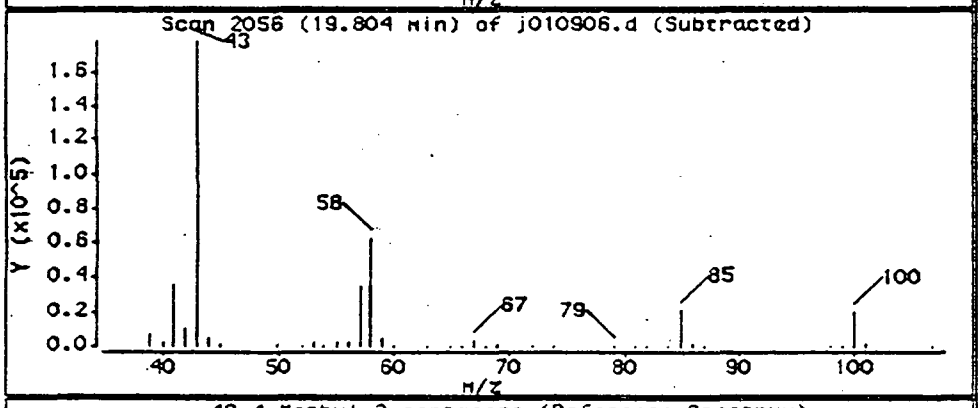
Operator: FA

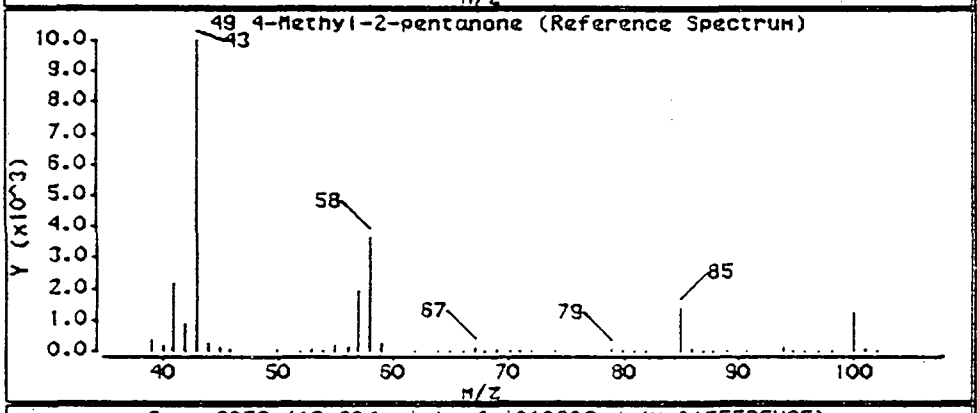
Column phase: RTx-624

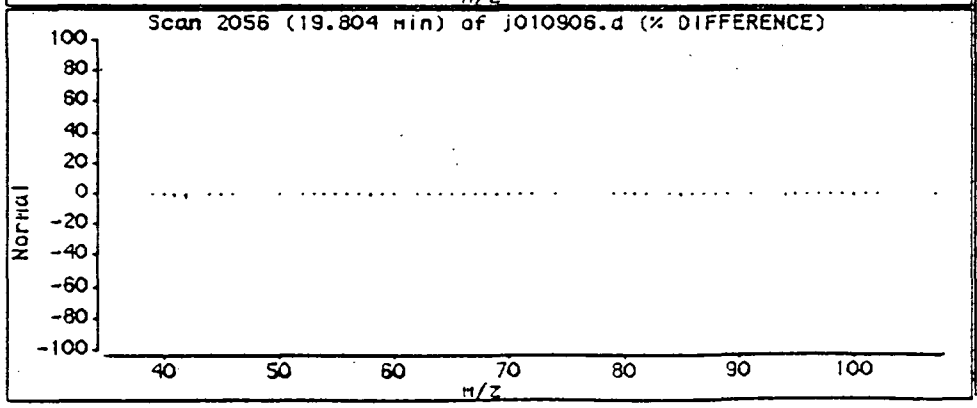
Column diameter: 0.58

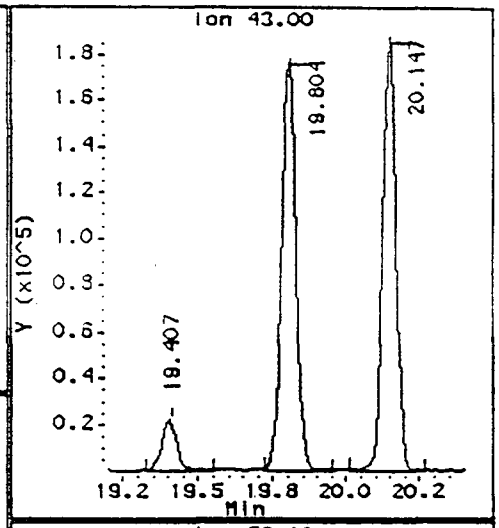
49 4-Methyl-2-pentanone

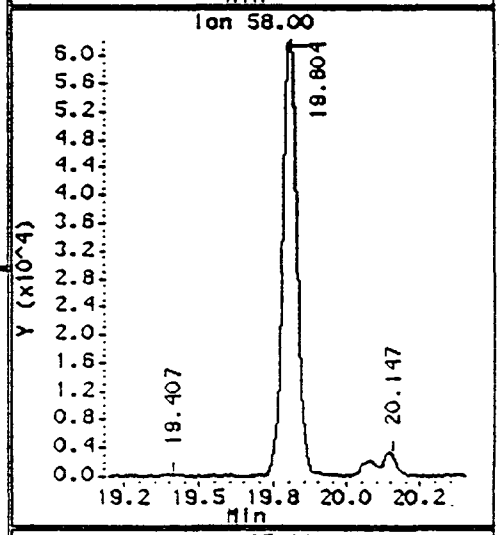


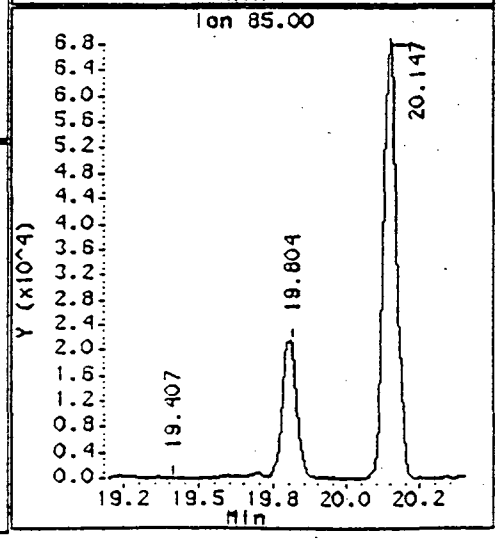












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

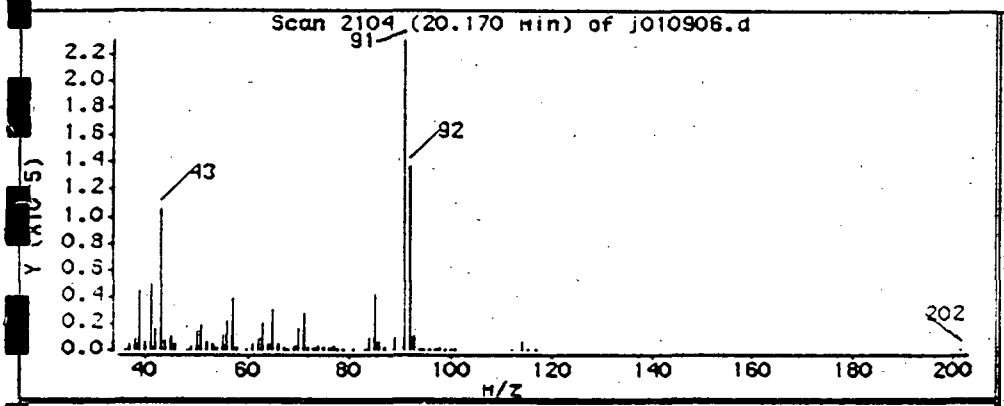
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

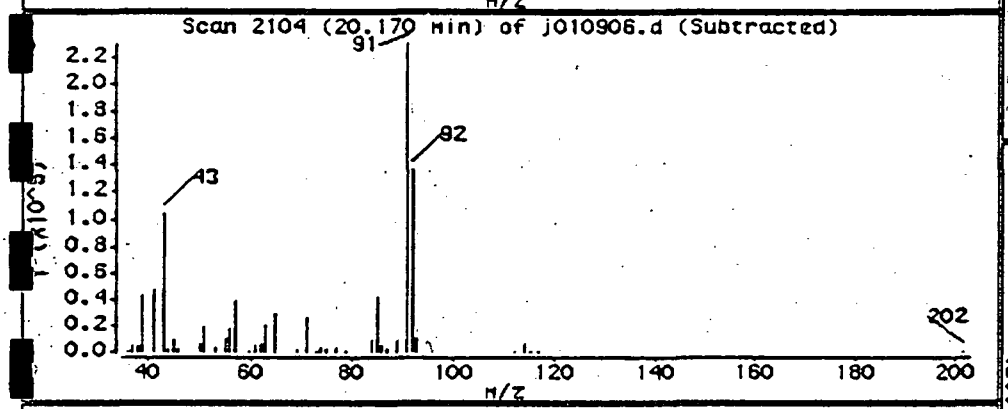
Operator: FA

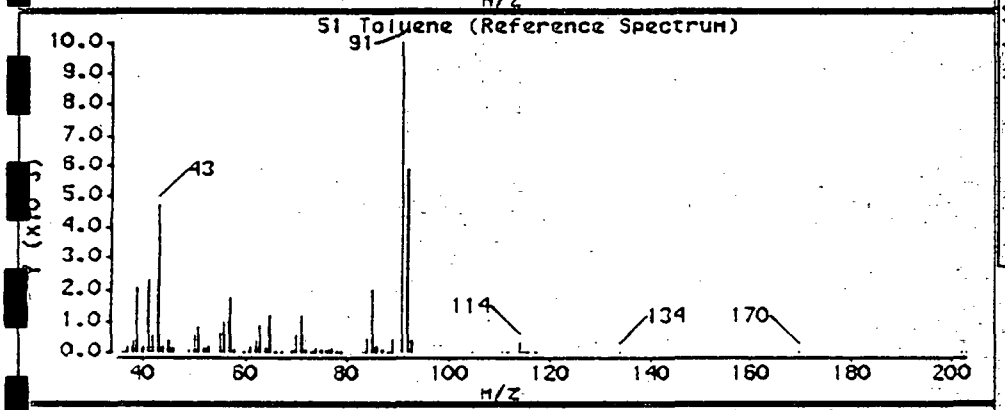
Column phase: RTx-624

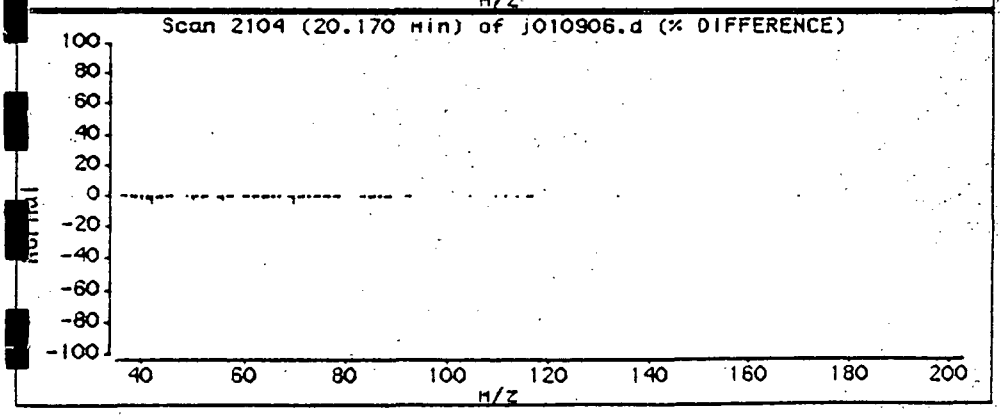
Column diameter: 0.58

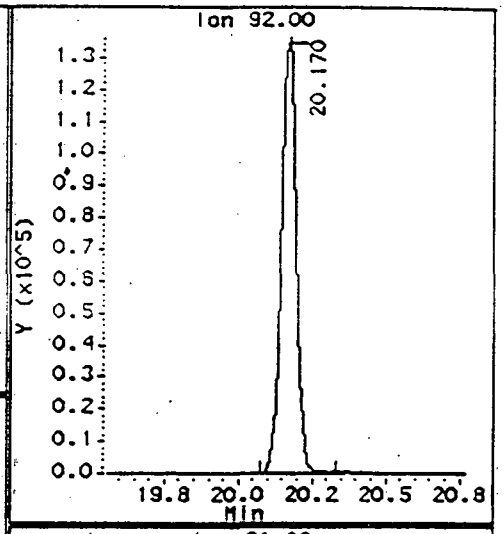
51 Toluene

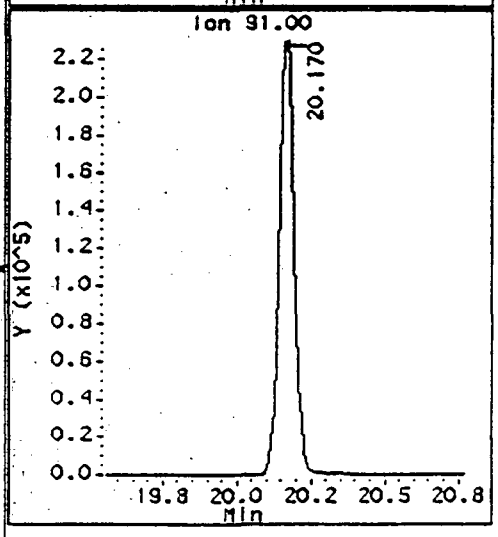












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

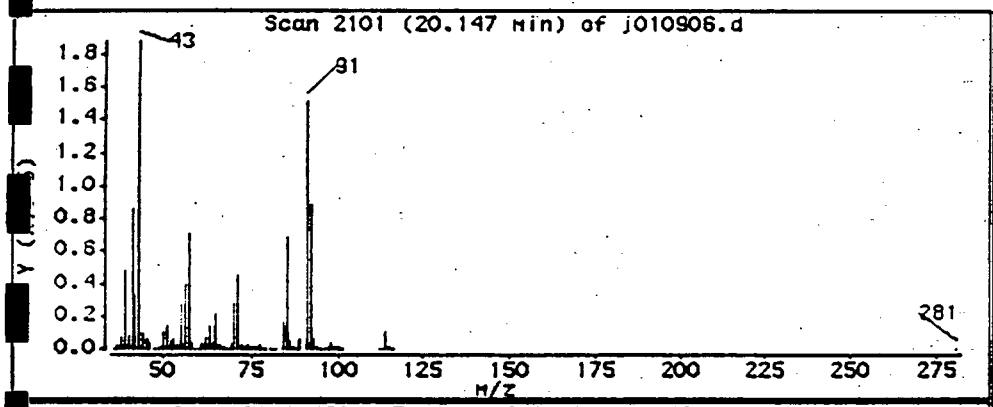
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

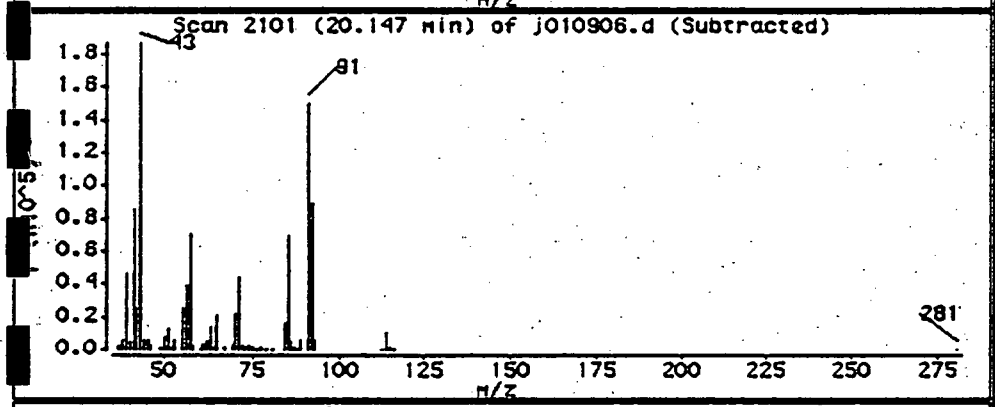
Operator: FA

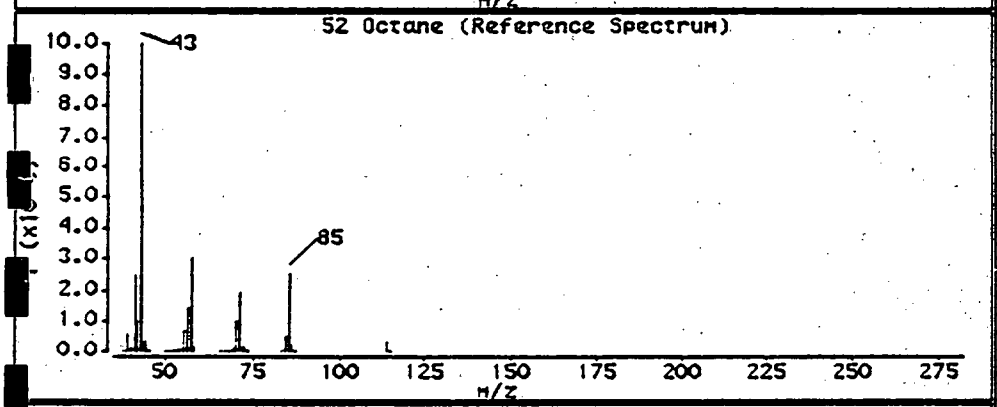
Column phase: RTx-624

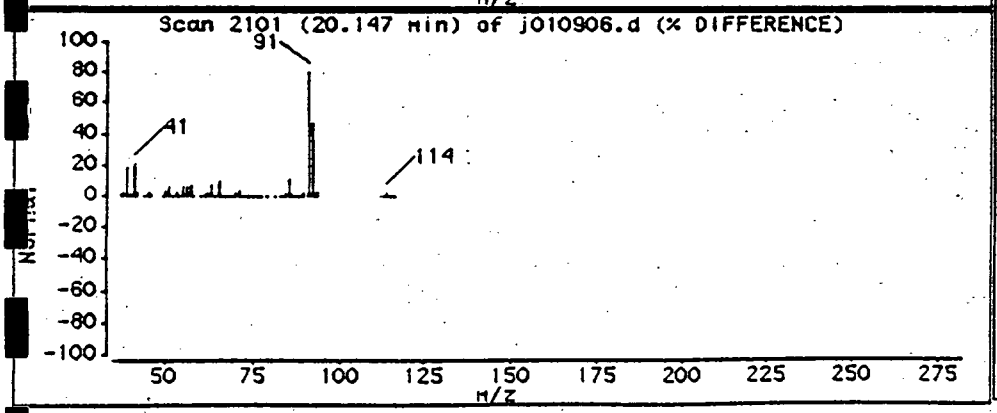
Column diameter: 0.58

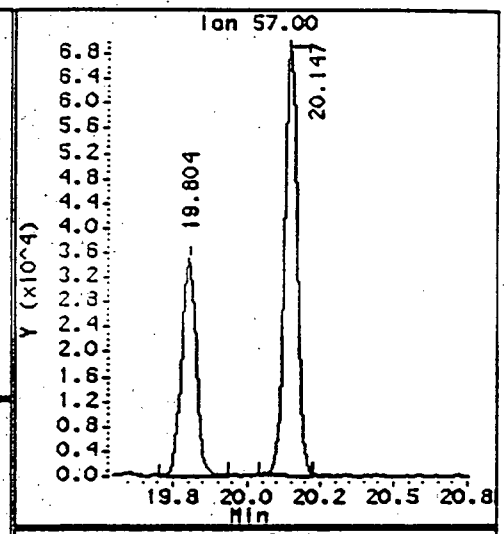
52 Octane

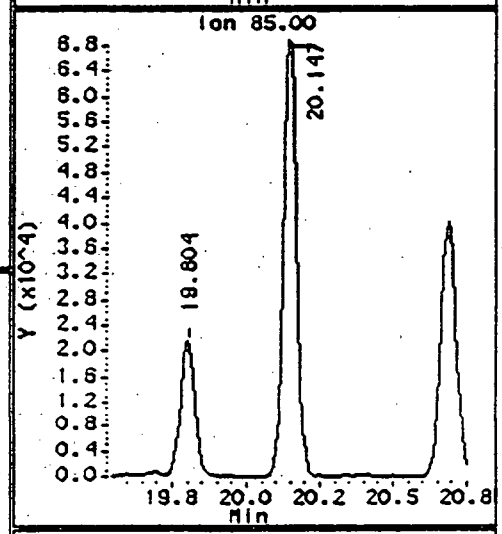


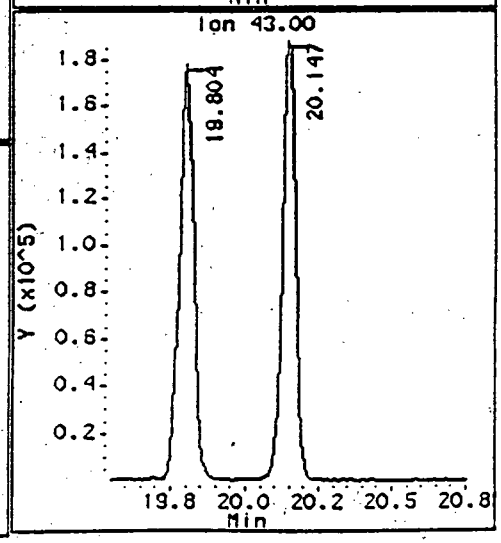












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

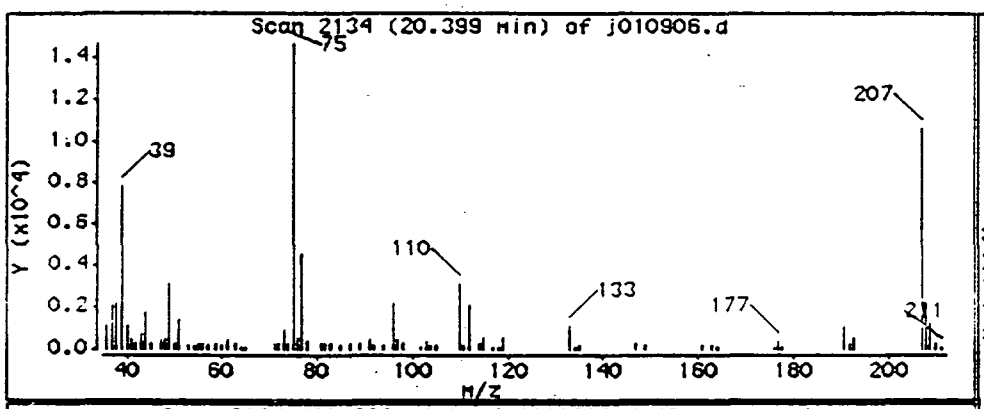
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

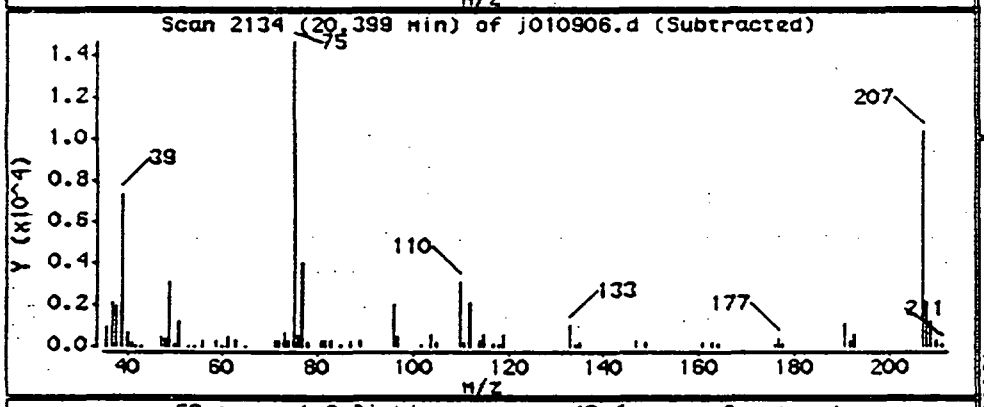
Operator: FA

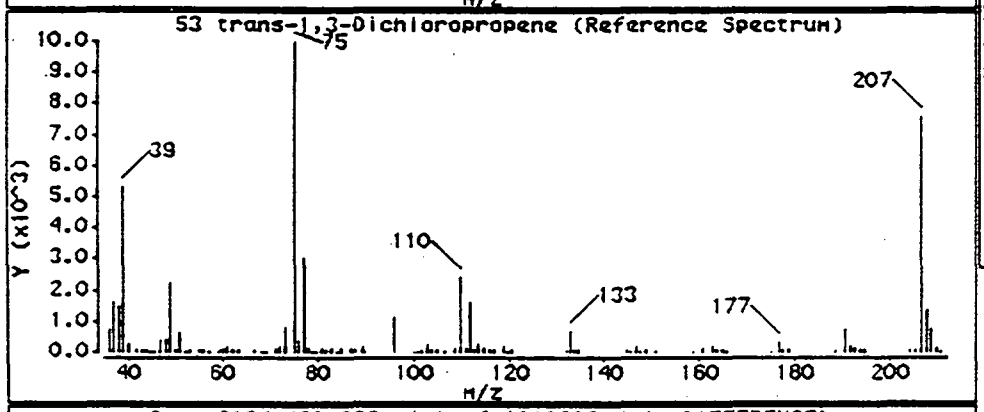
Column phase: RTx-624

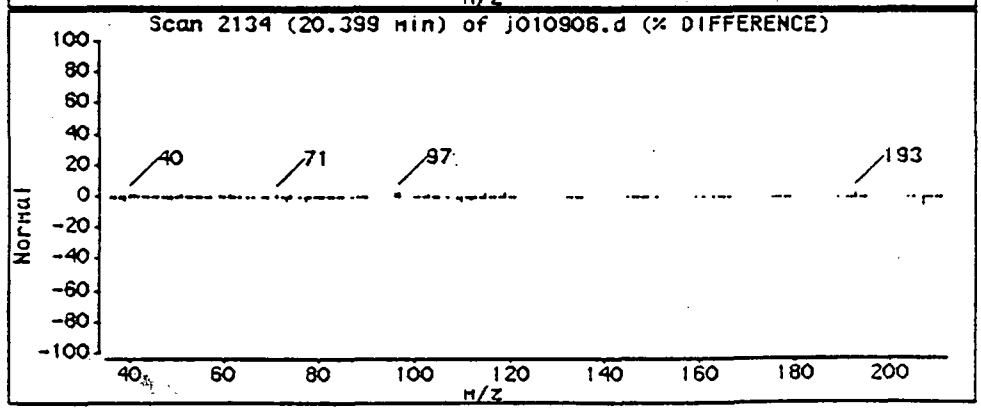
Column diameter: 0.58

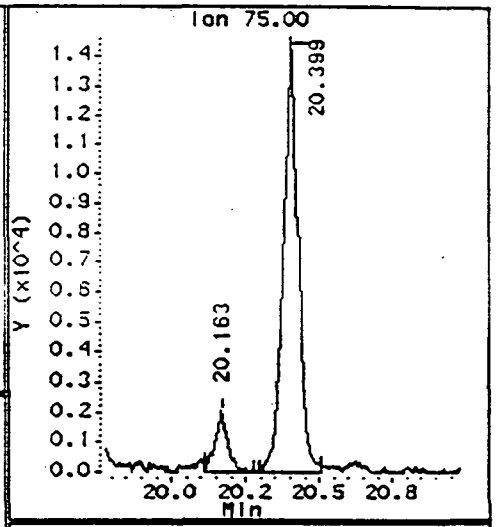
53 trans-1,3-Dichloropropene

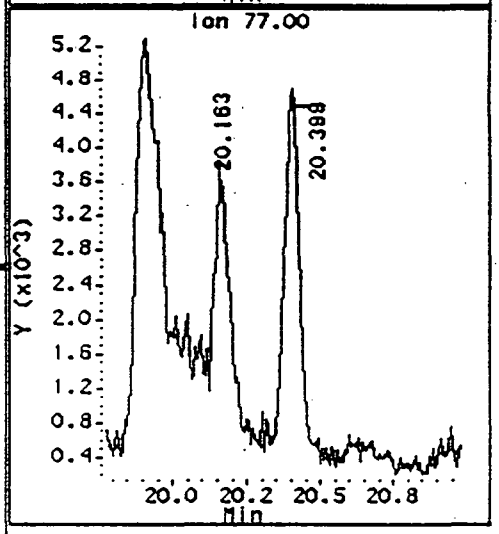












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

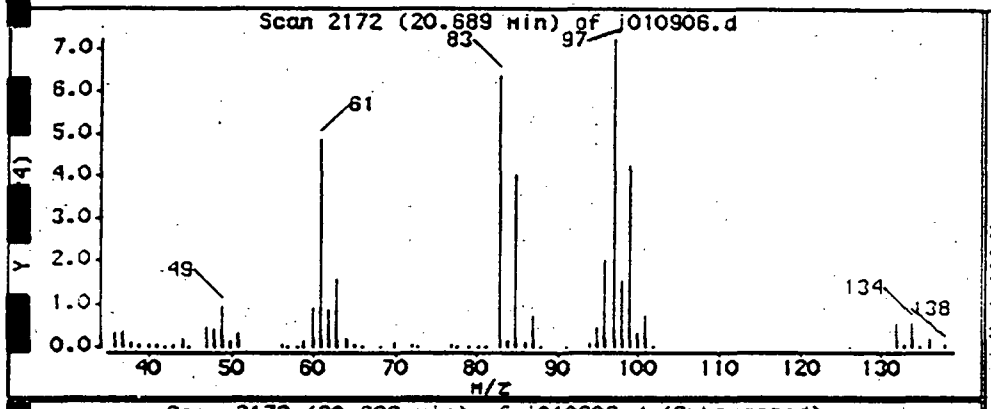
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

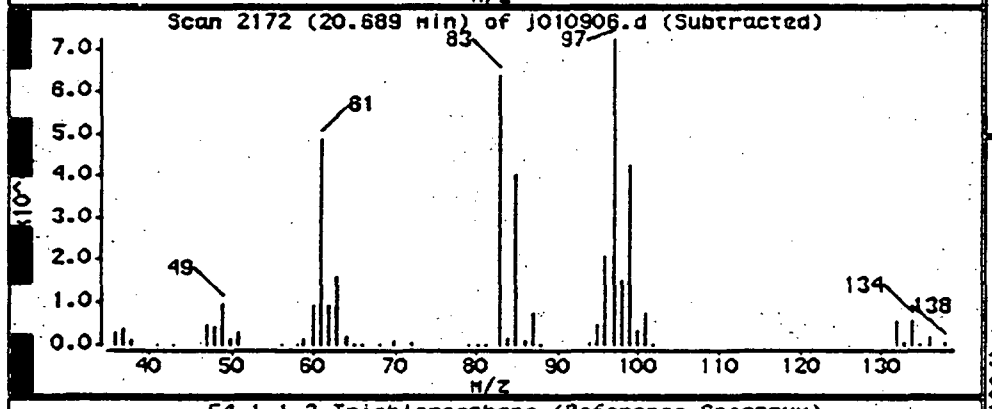
Operator: FA

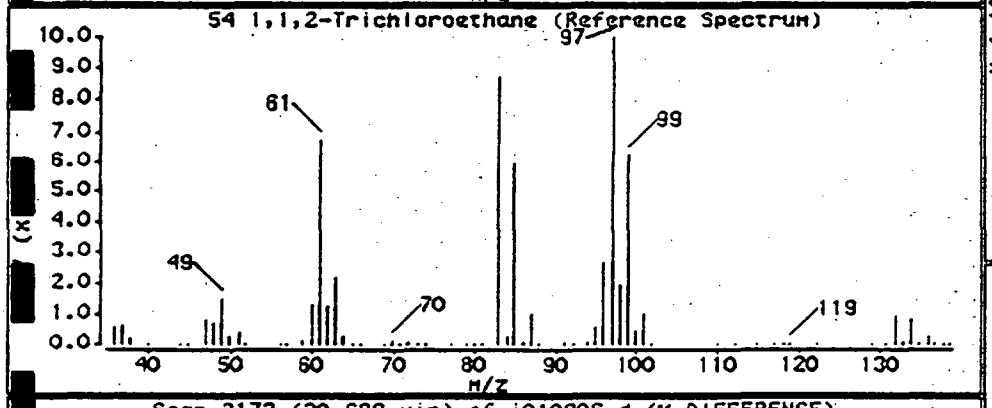
Column phase: RTx-624

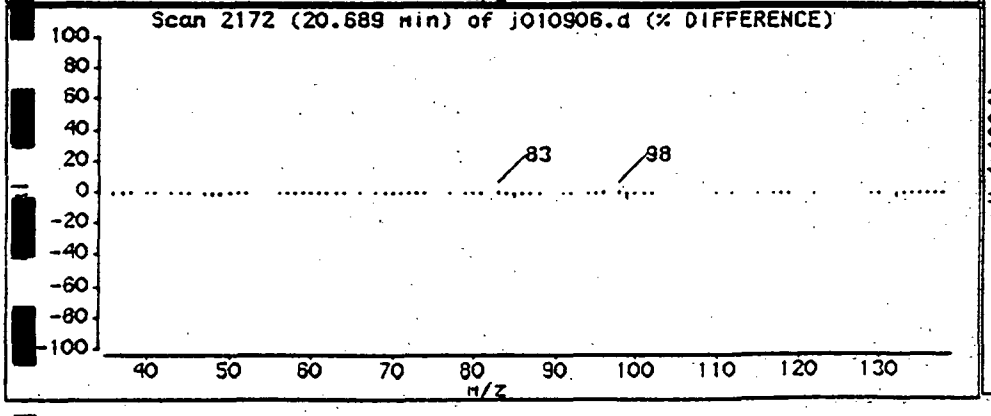
Column diameter: 0.58

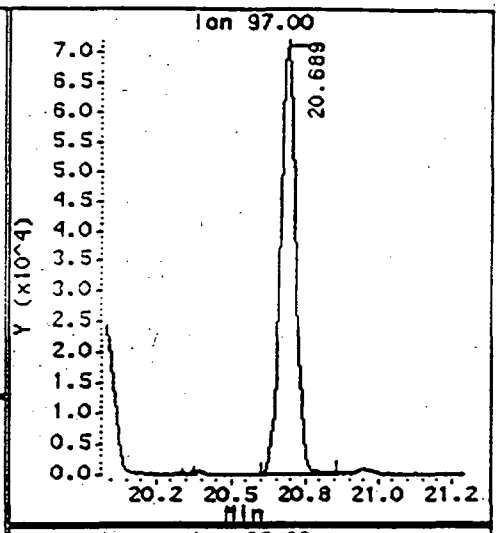
54 1,1,2-Trichloroethane

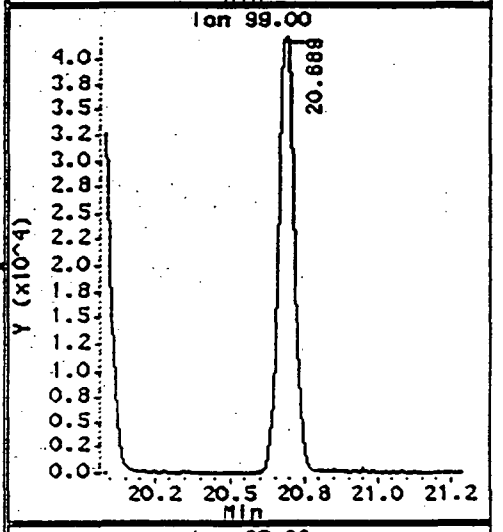


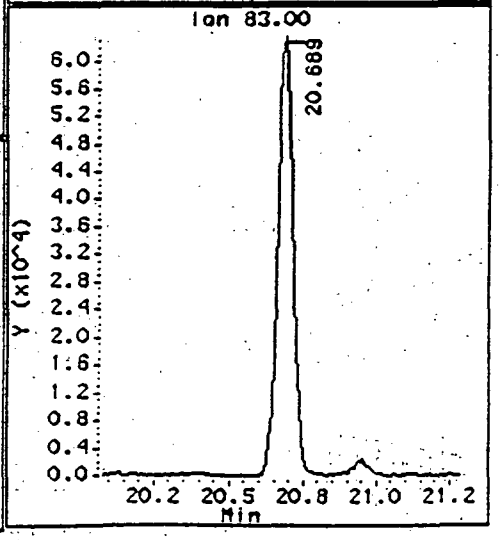












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

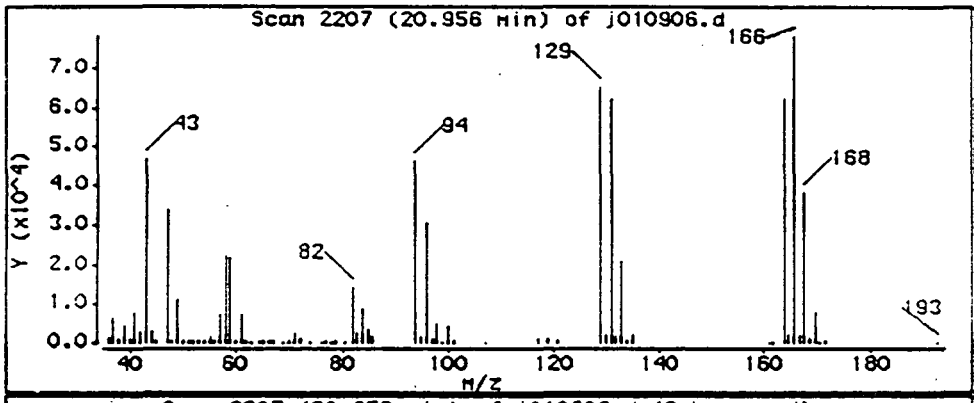
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

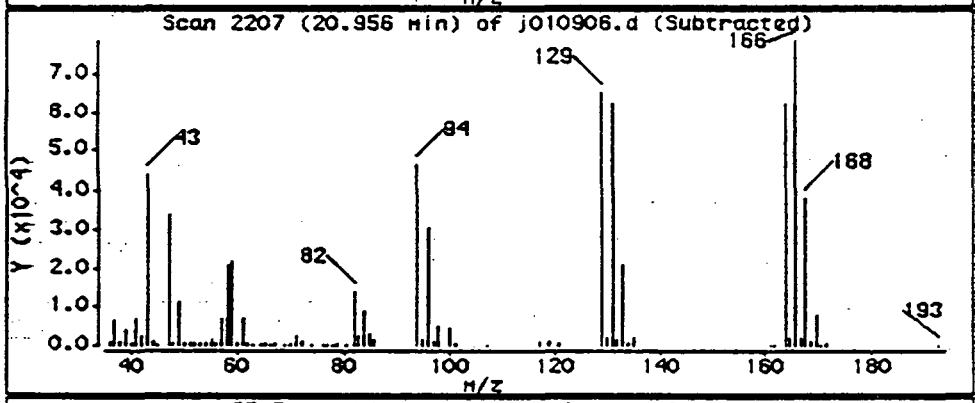
Operator: FA

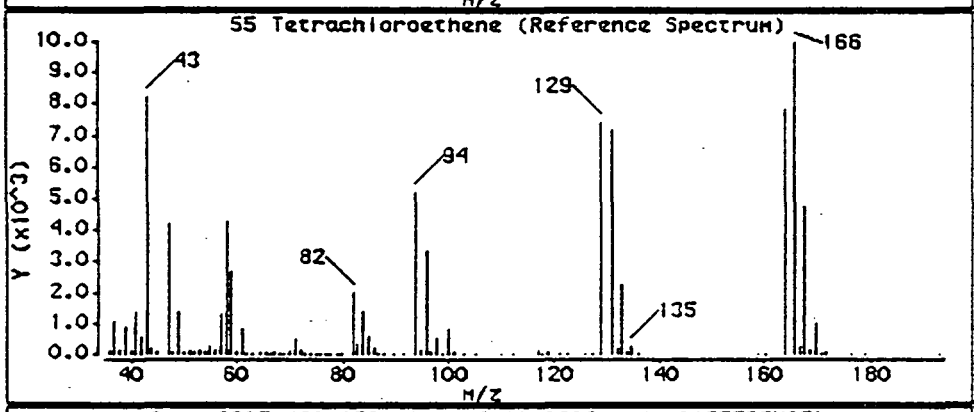
Column phase: RTx-624

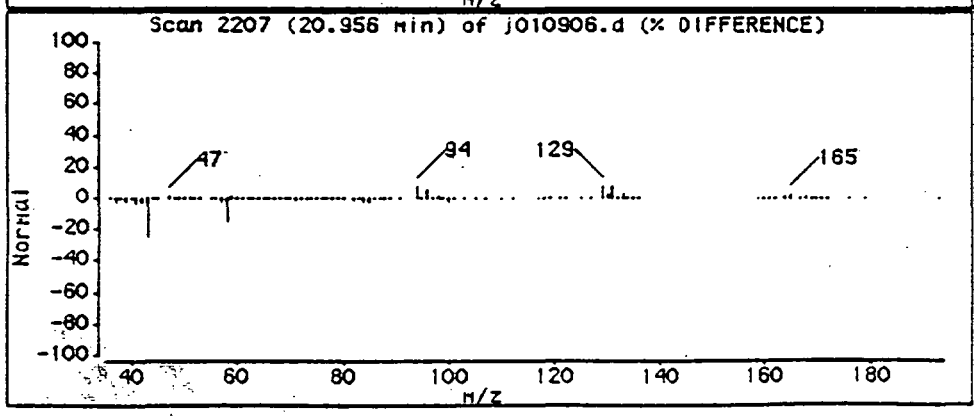
Column diameter: 0.58

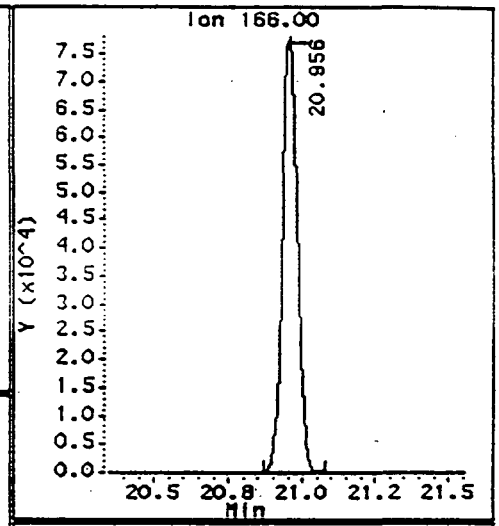
55 Tetrachloroethene

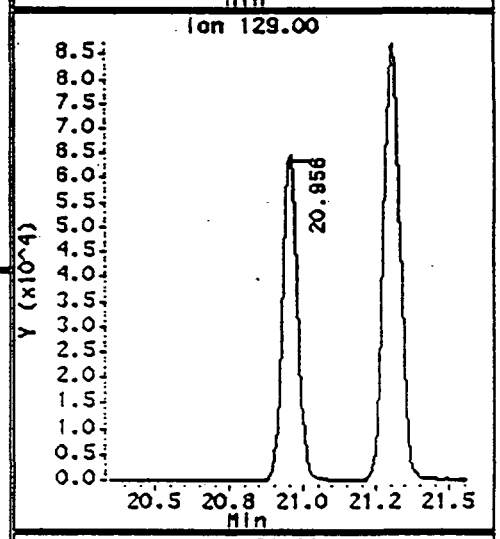


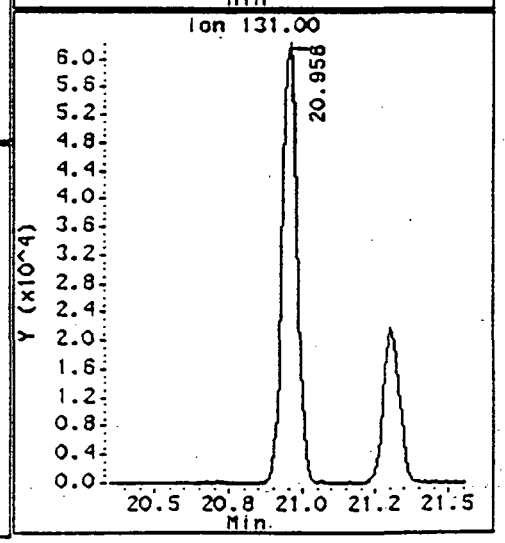












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

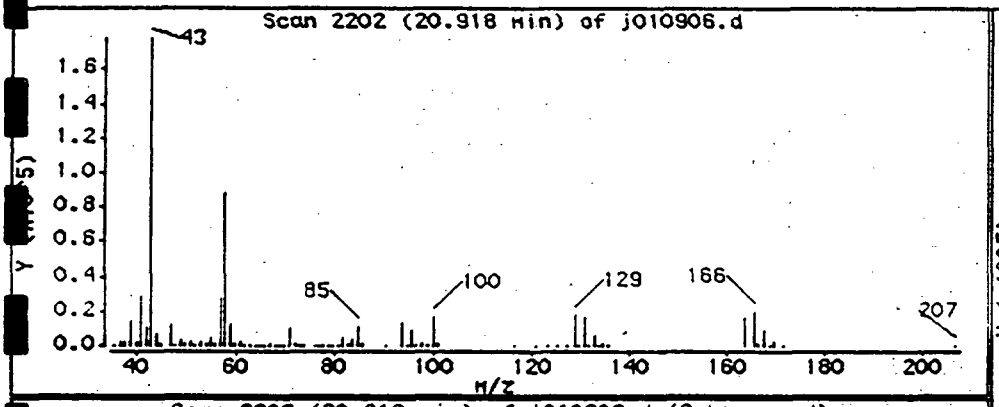
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

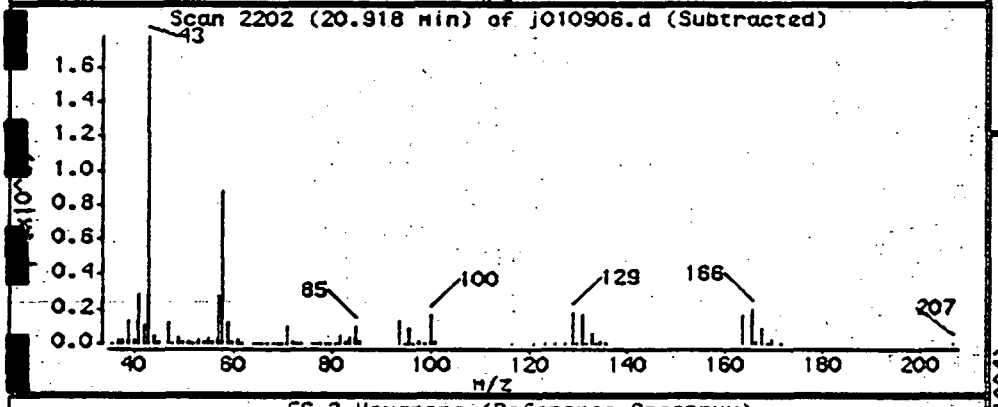
Operator: FR

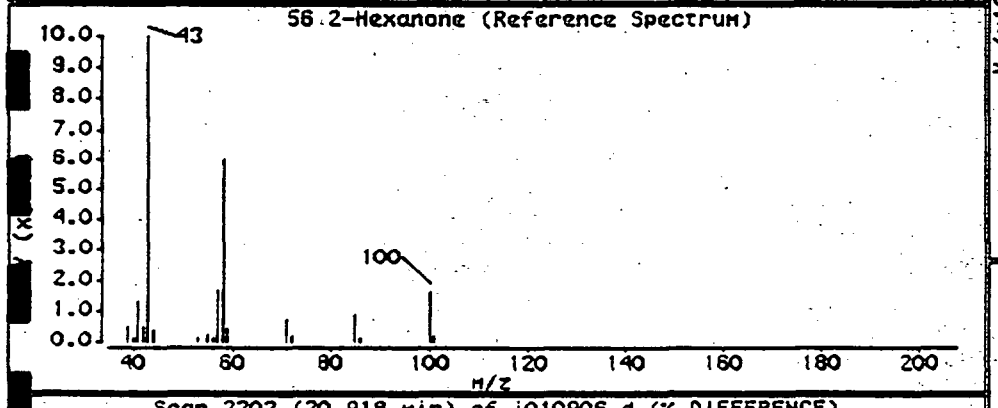
Column phase: RTx-624

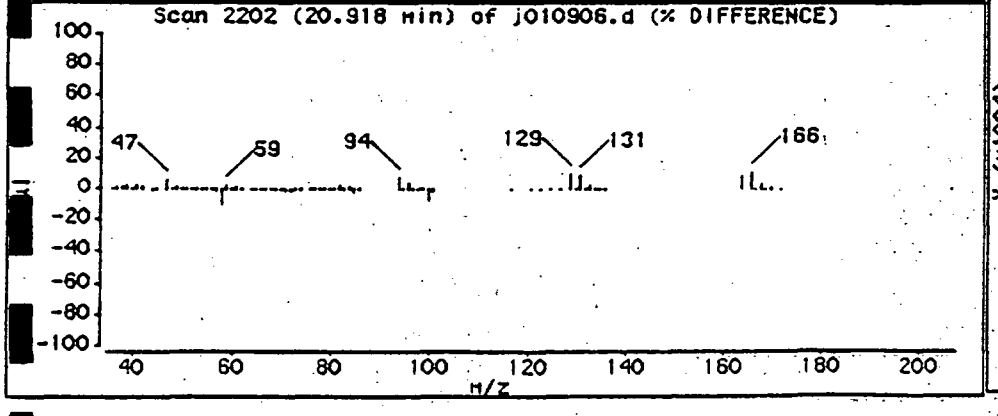
Column diameter: 0.58

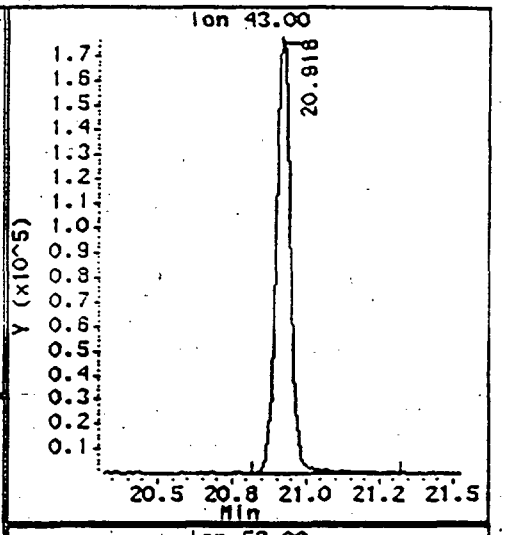
56 2-Hexanone

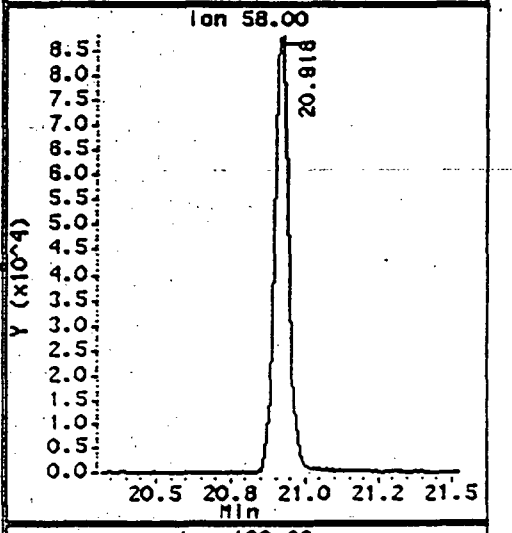


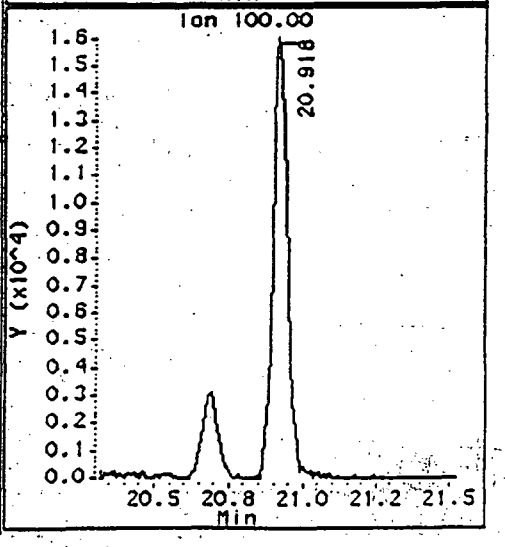












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

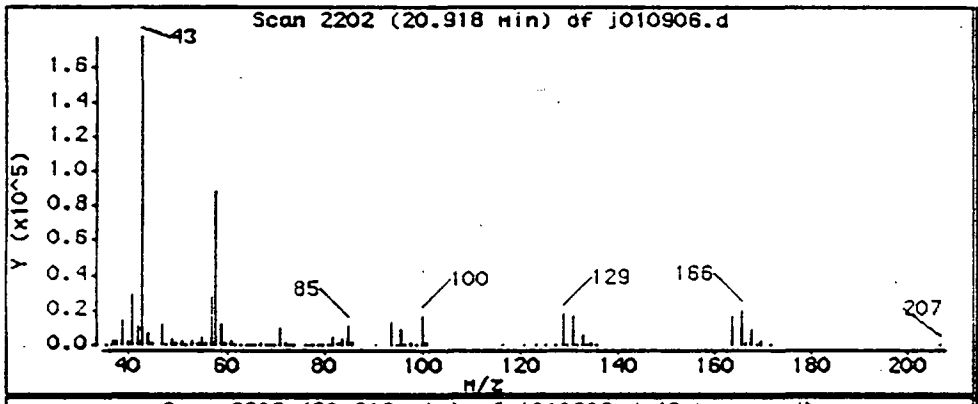
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

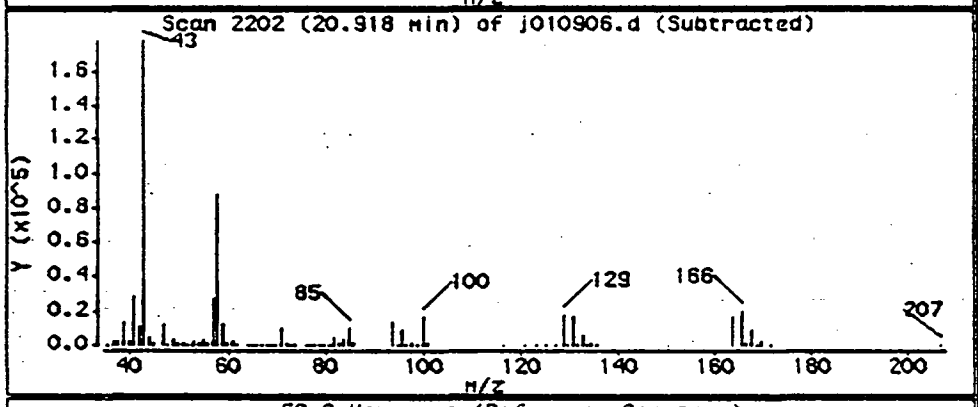
Operator: FA

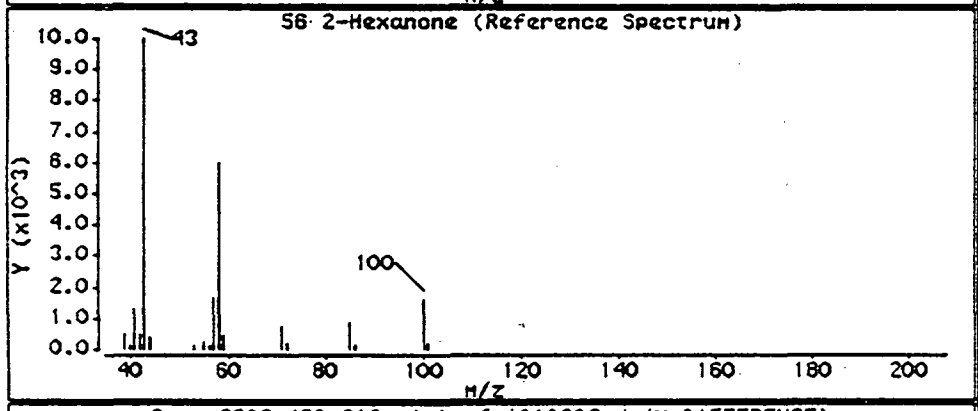
Column phase: RTx-624

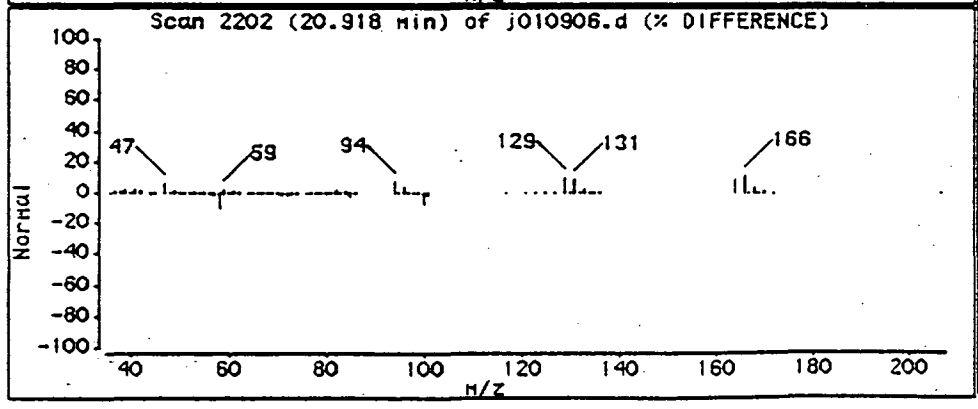
Column diameter: 0.58

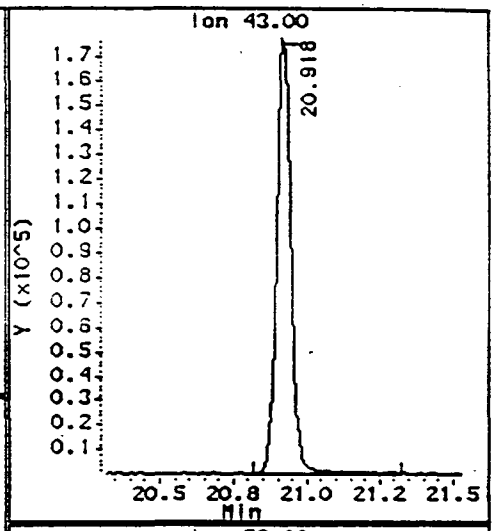
56 2-Hexanone

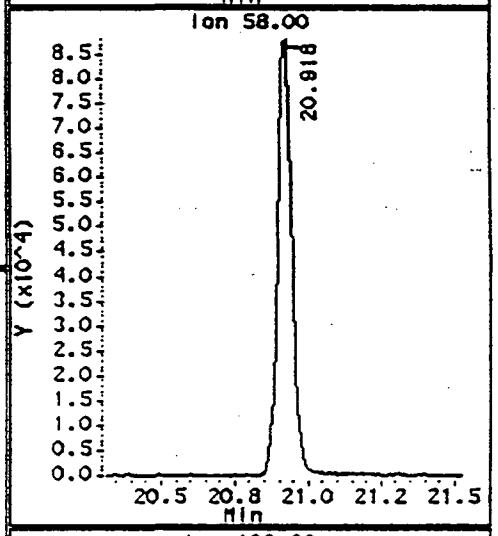


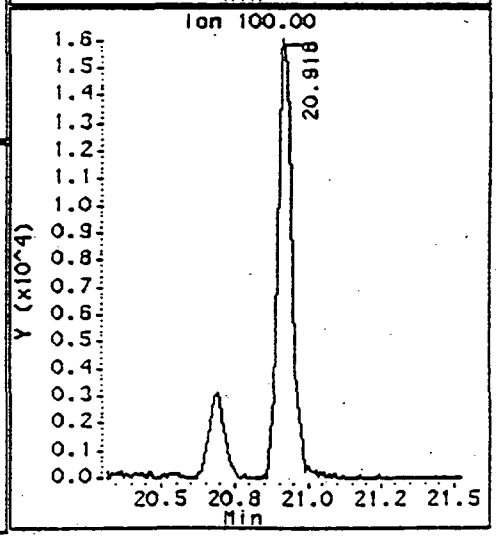












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

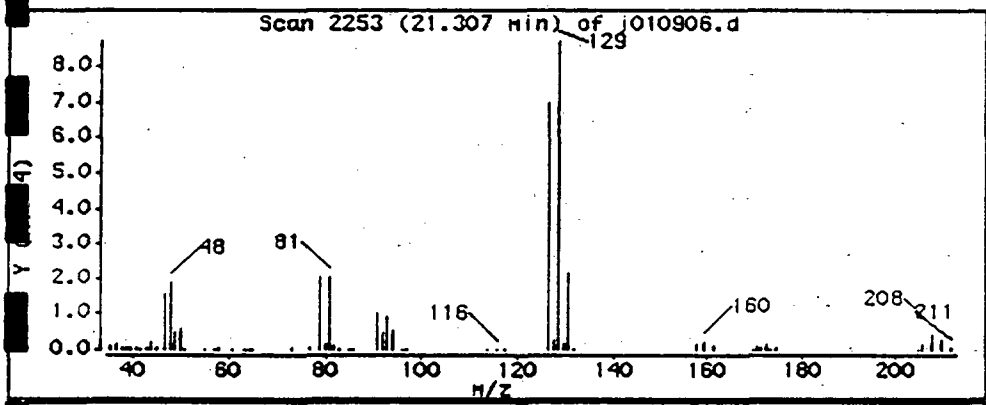
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

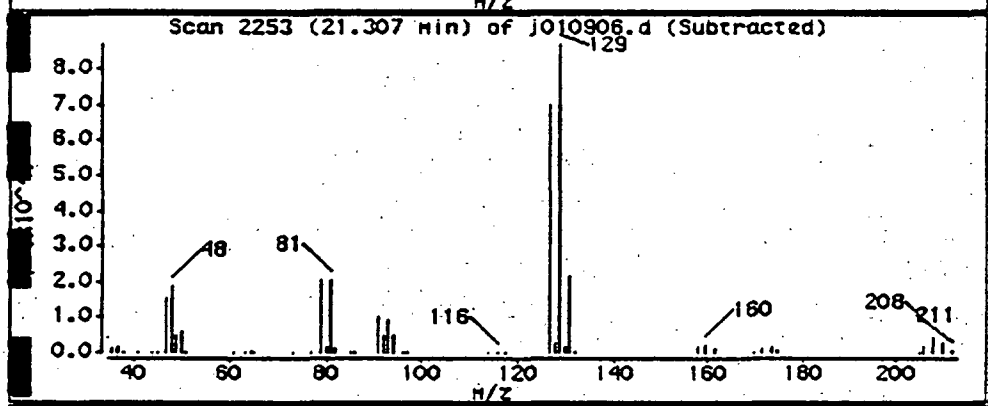
Operator: FA

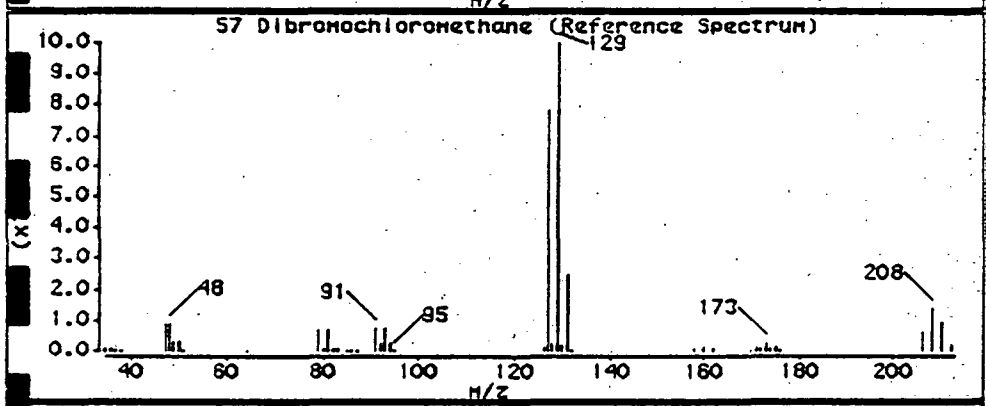
Column phase: RTx-624

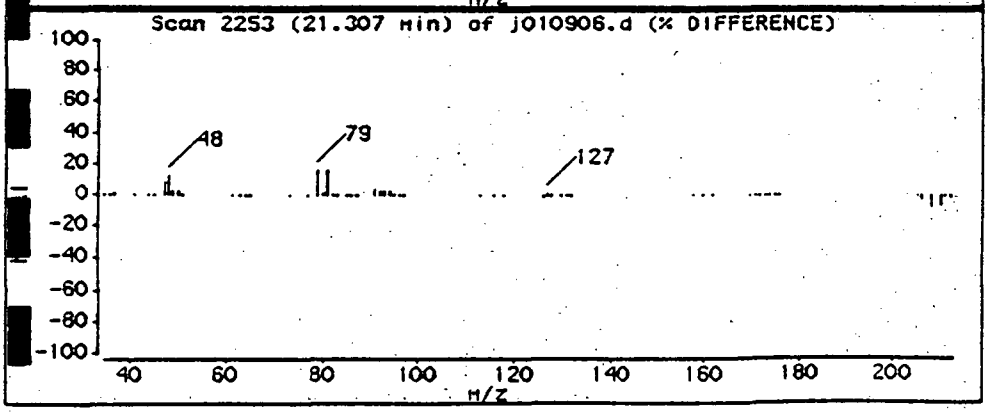
Column diameter: 0.58

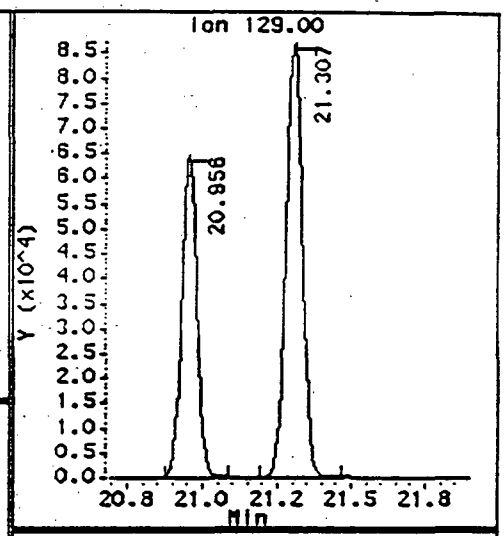
57 Dibromochloromethane

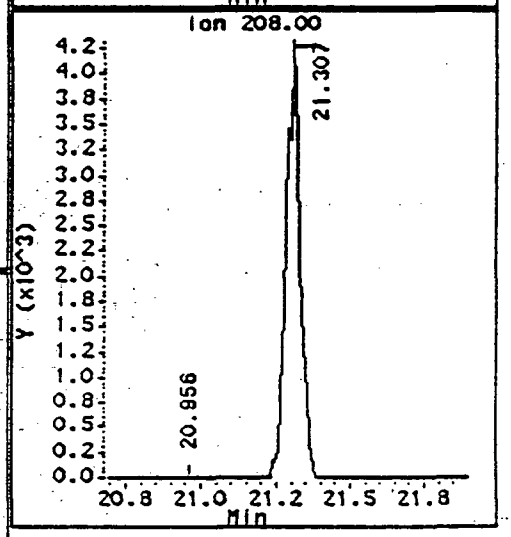












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

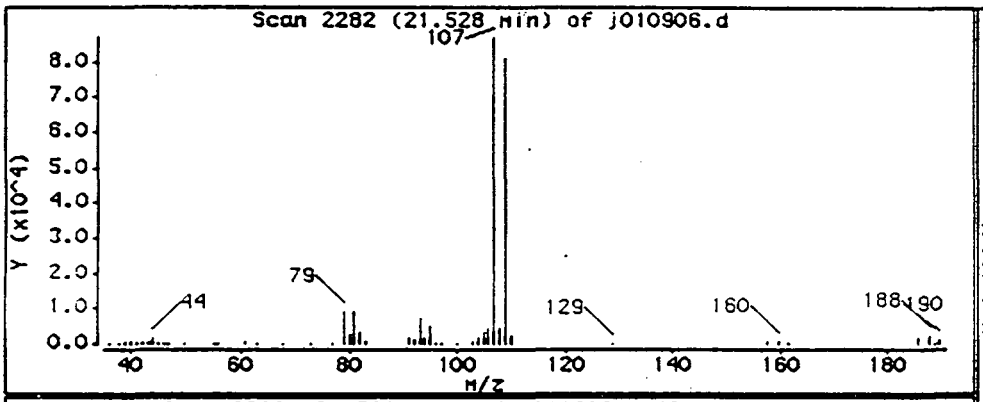
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

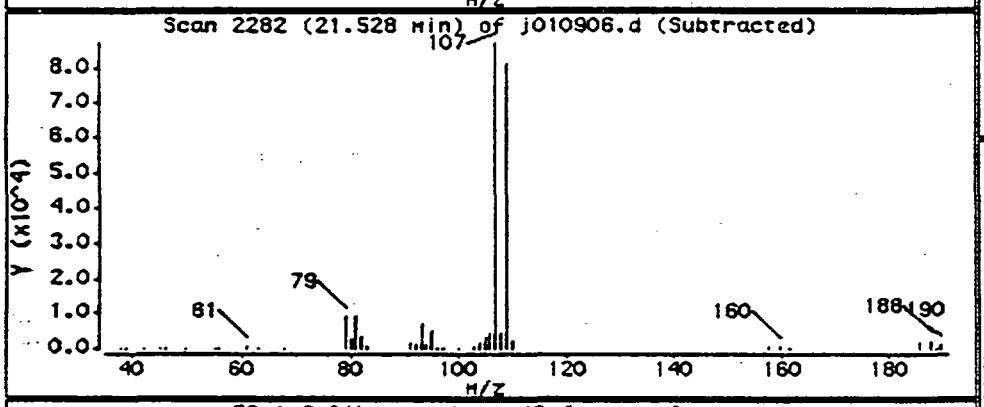
Operator: FA

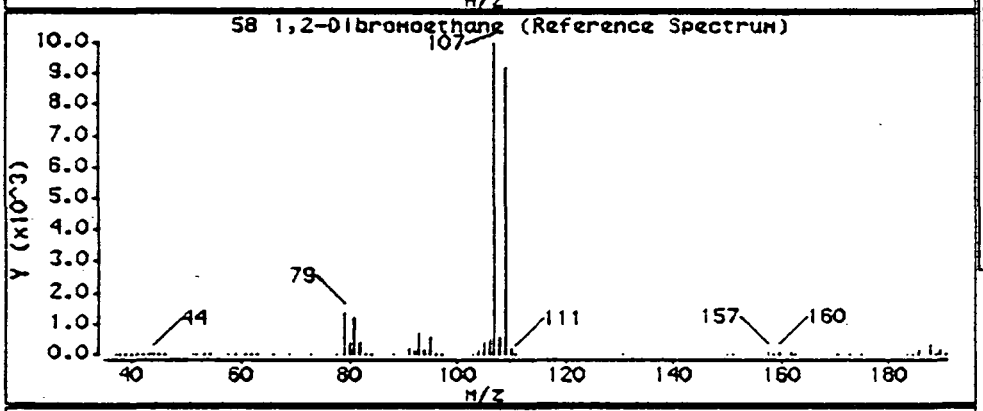
Column phase: RTx-624

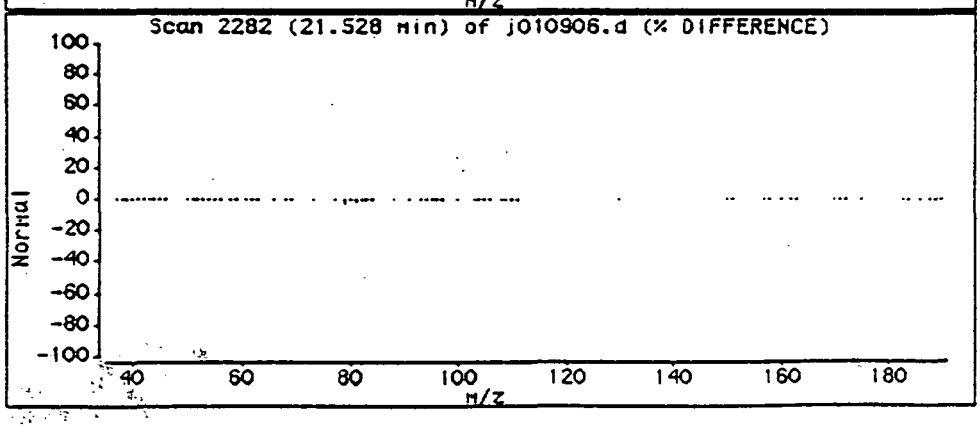
Column diameter: 0.58

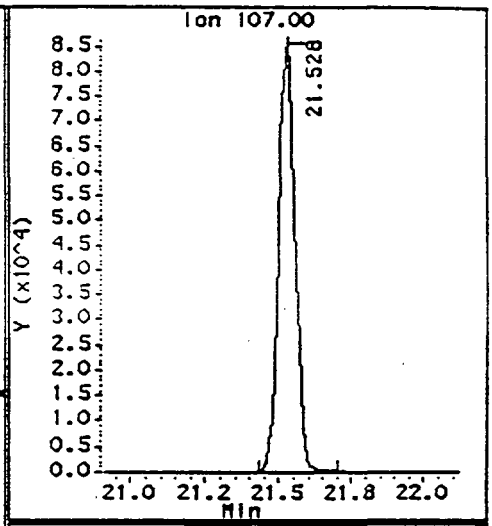
58 1,2-Dibromoethane

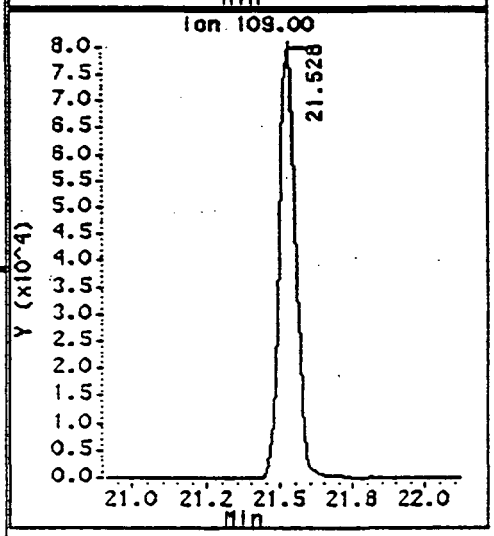












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

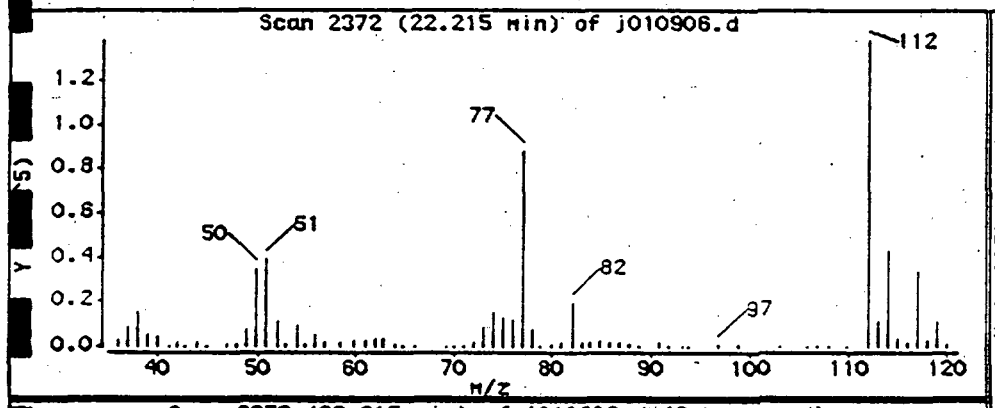
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

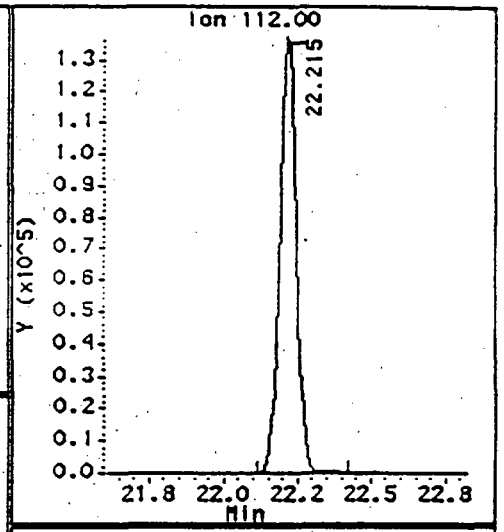
Operator: FA

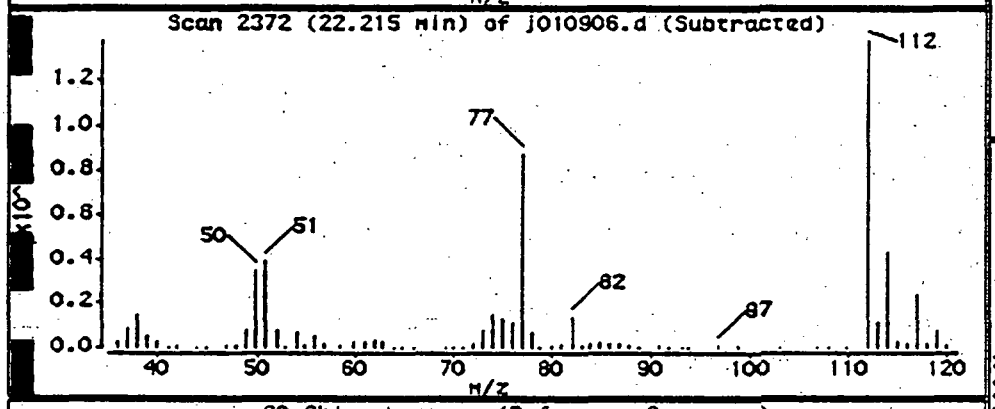
Column phase: RTx-624

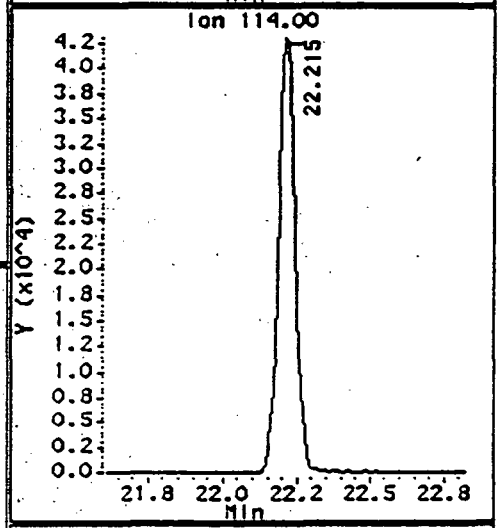
Column diameter: 0.58

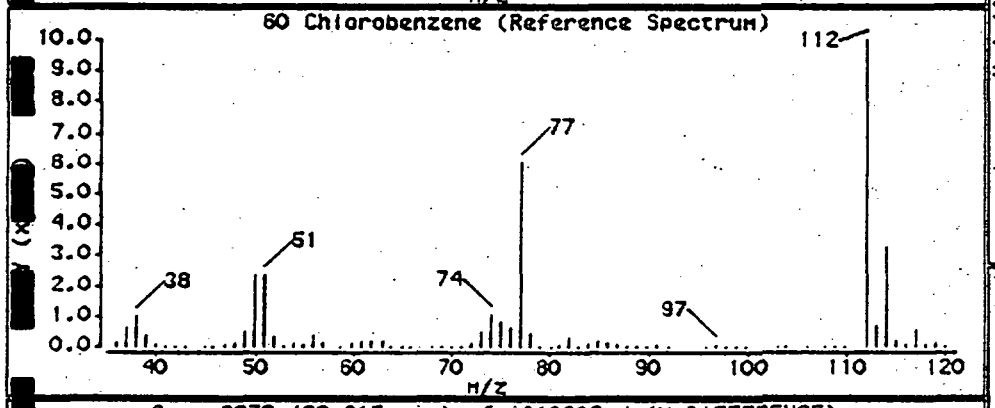
60 Chlorobenzene

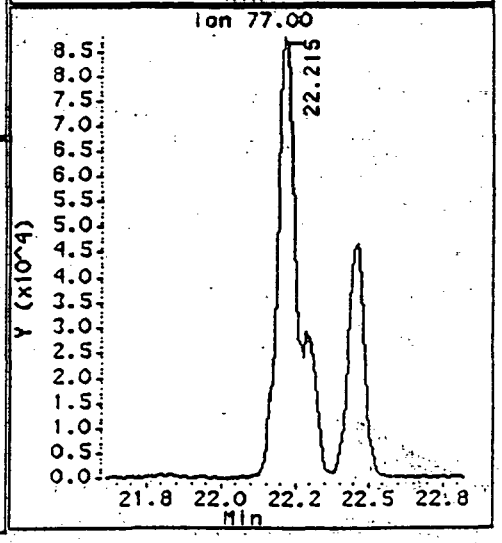


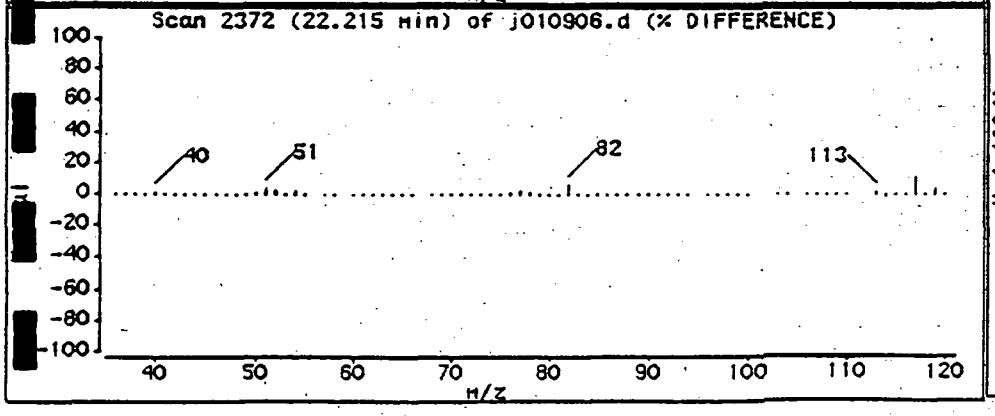












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

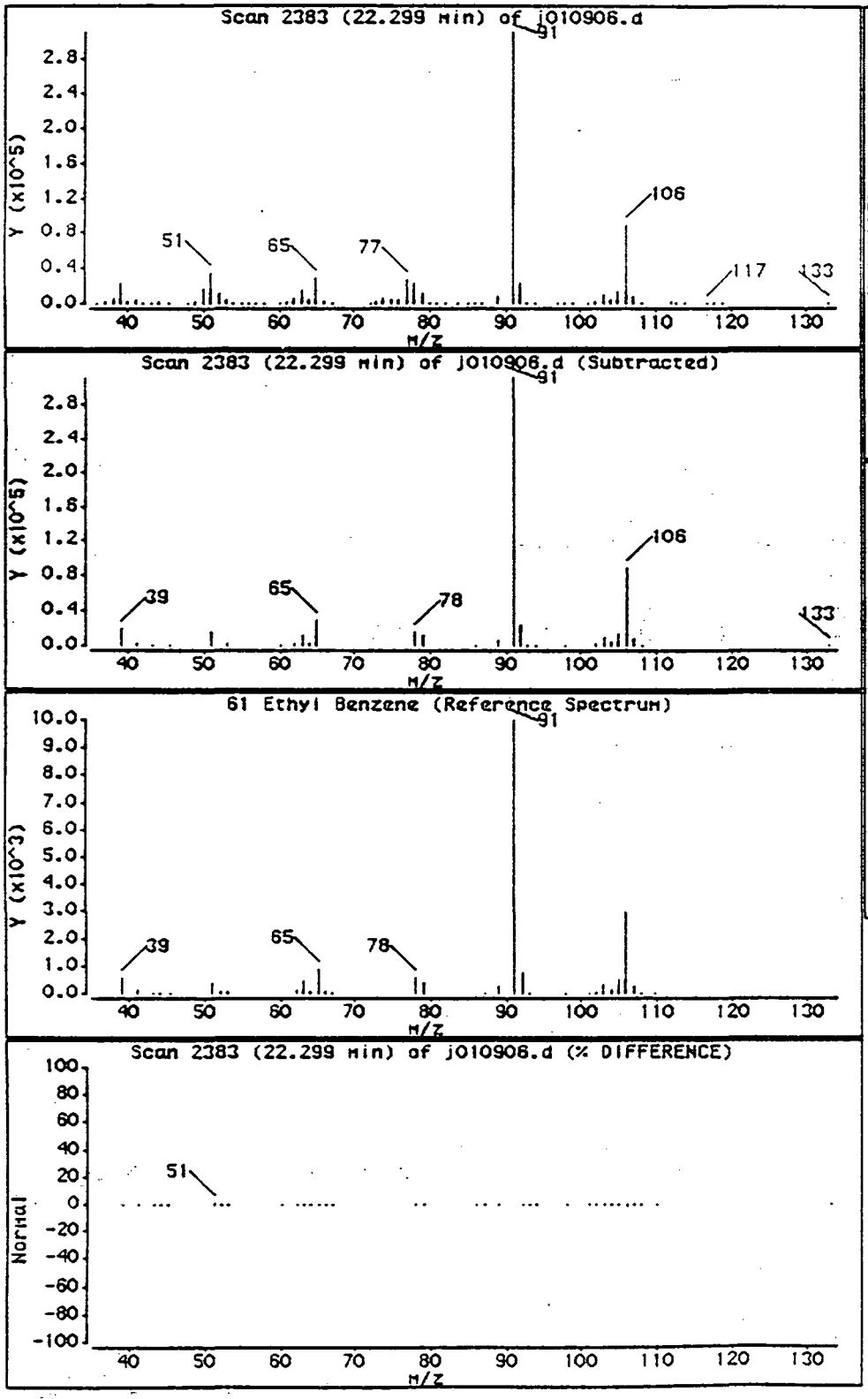
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

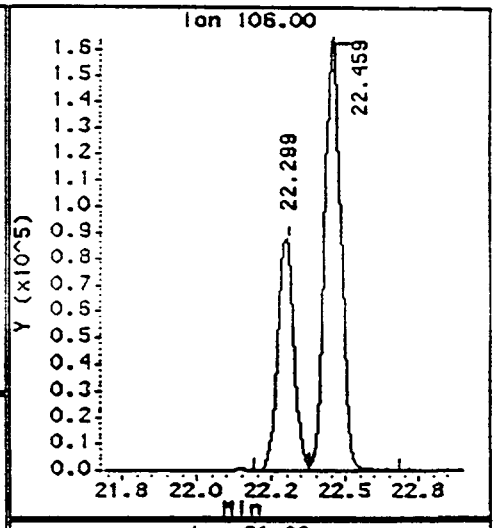
Operator: FA

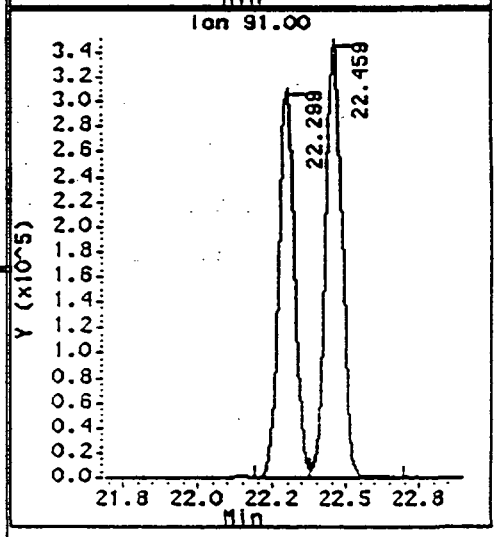
Column phase: RTx-624

Column diameter: 0.58

61 Ethyl Benzene







Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

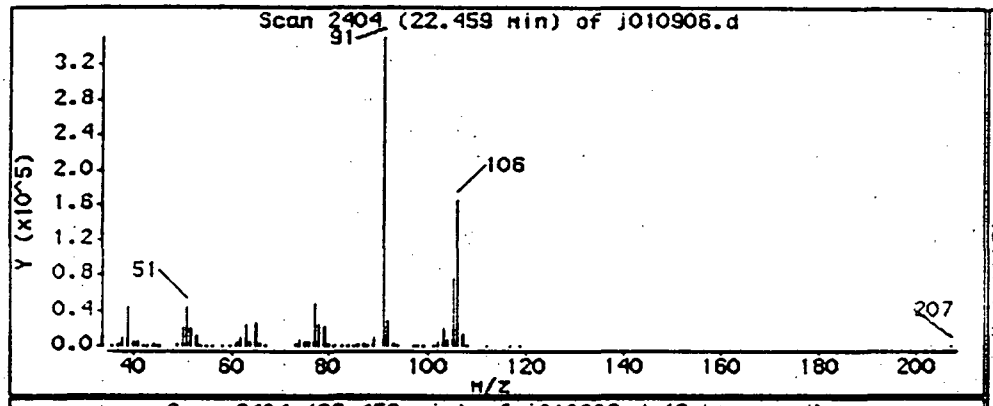
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

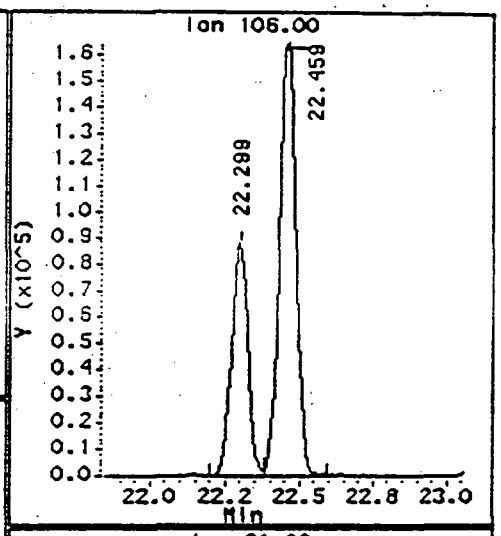
Operator: FA

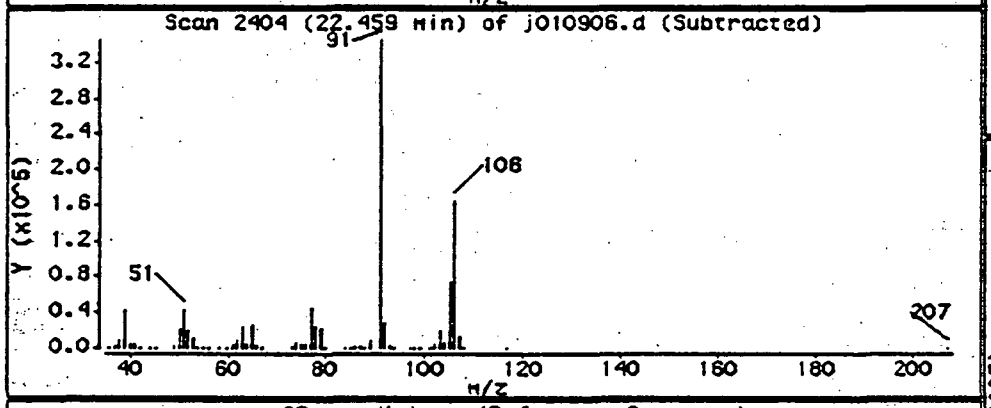
Column phase: RTx-624

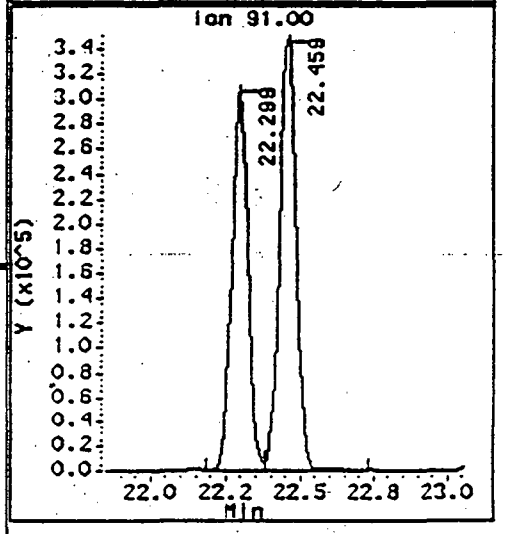
Column diameter: 0.58

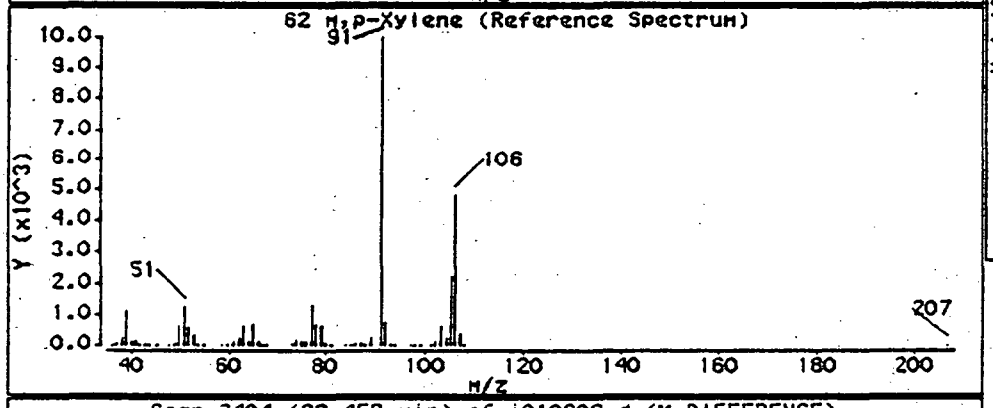
62 m,p-Xylene

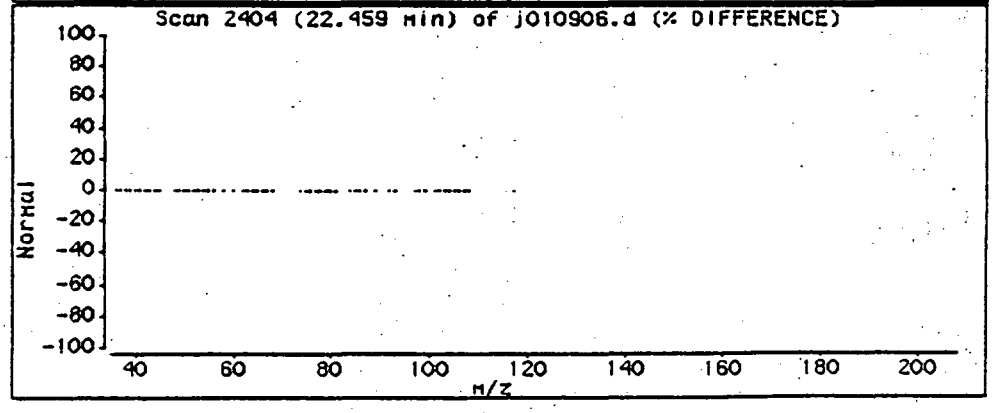












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

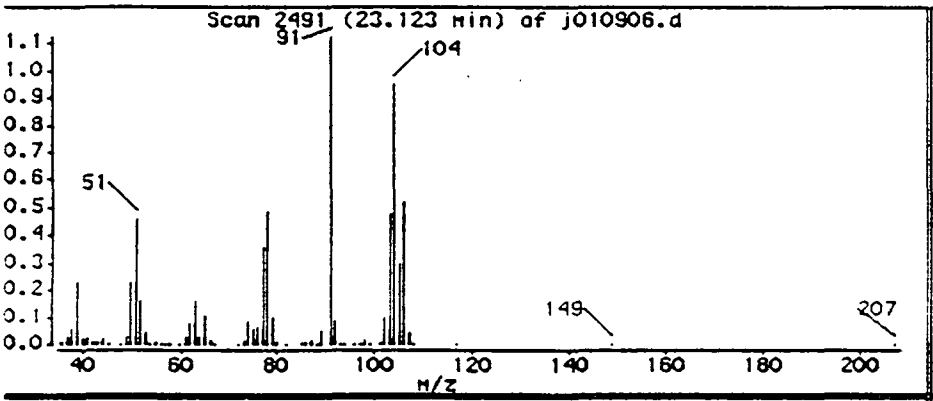
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

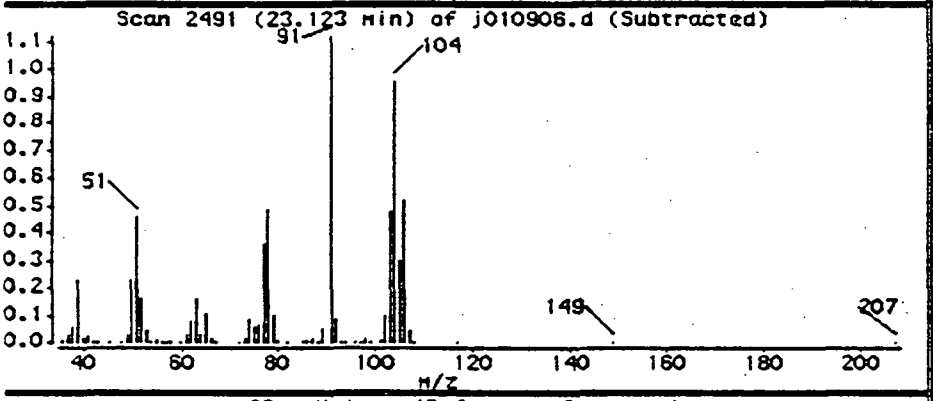
Operator: FA

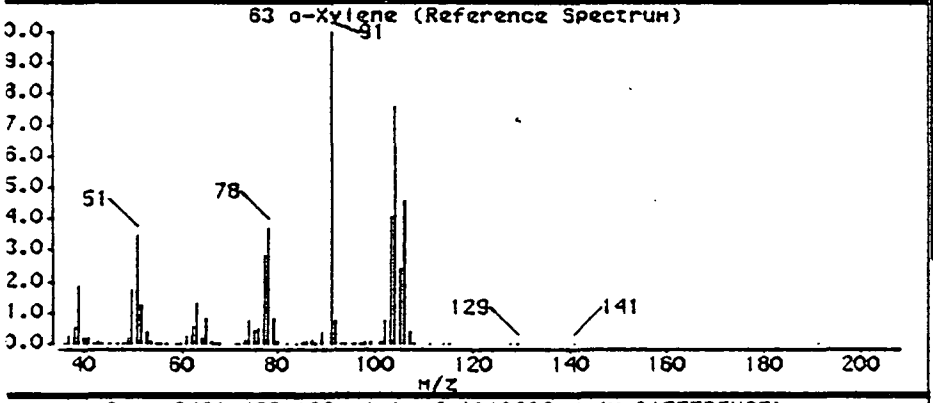
Column phase: RTx-624

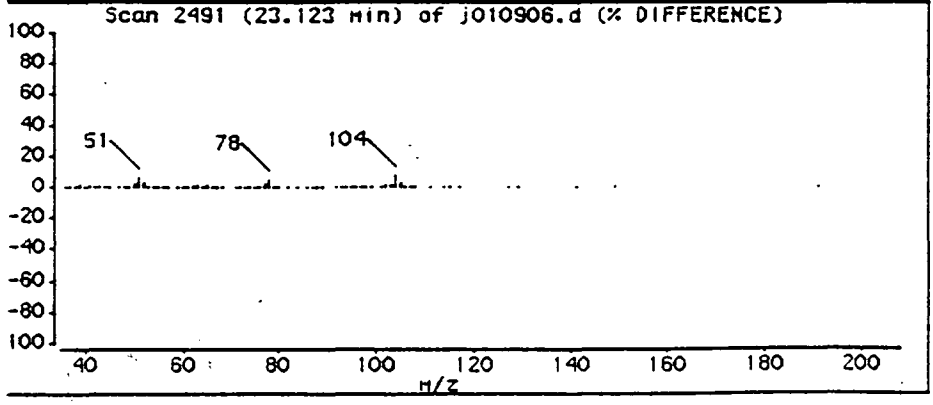
Column diameter: 0.58

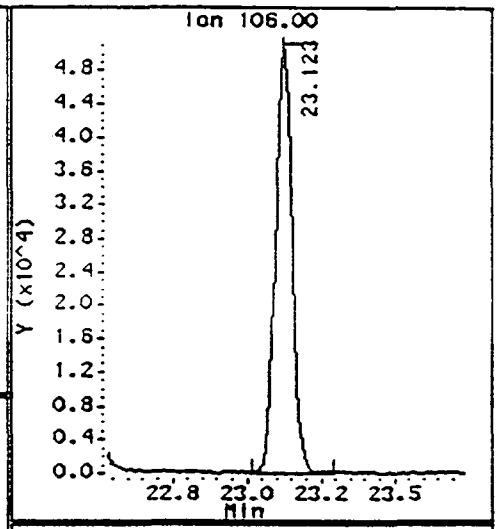
63 o-Xylene

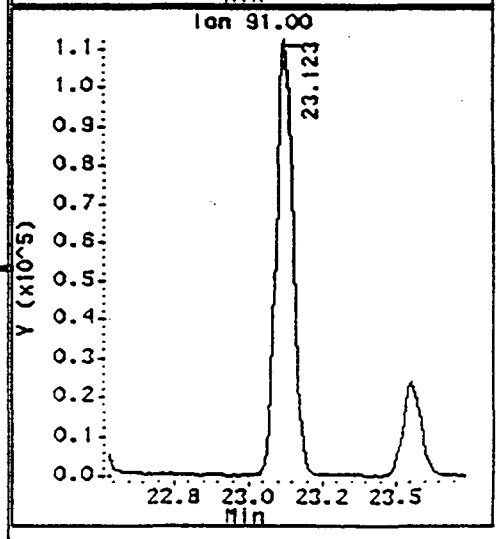












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

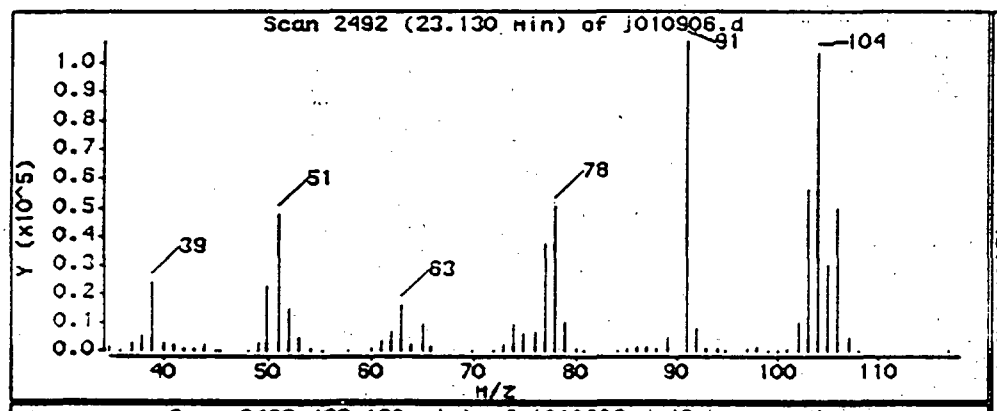
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

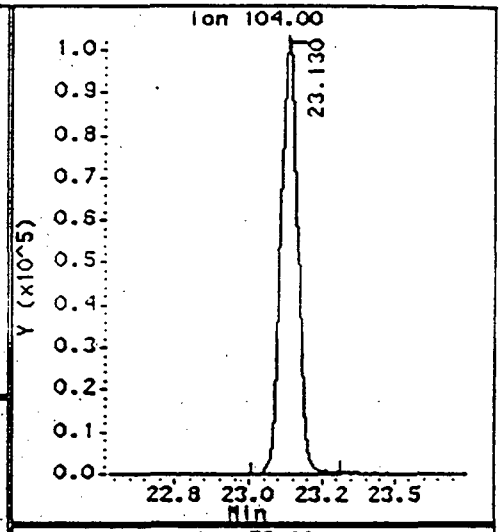
Operator: FA

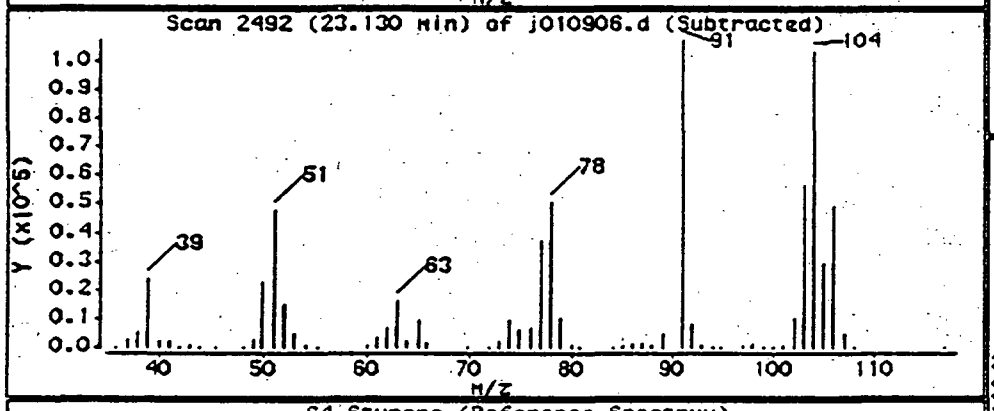
Column phase: RTx-624

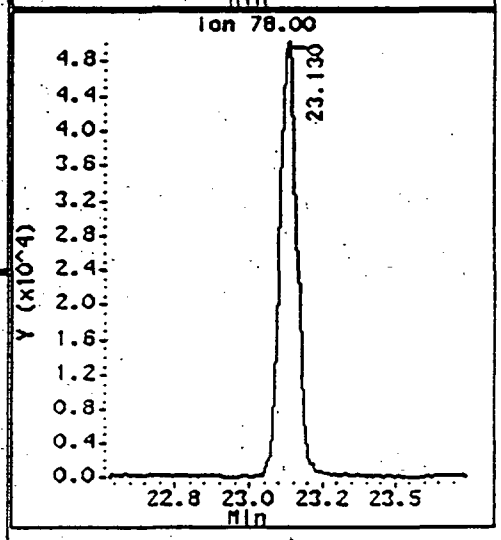
Column diameter: 0.58

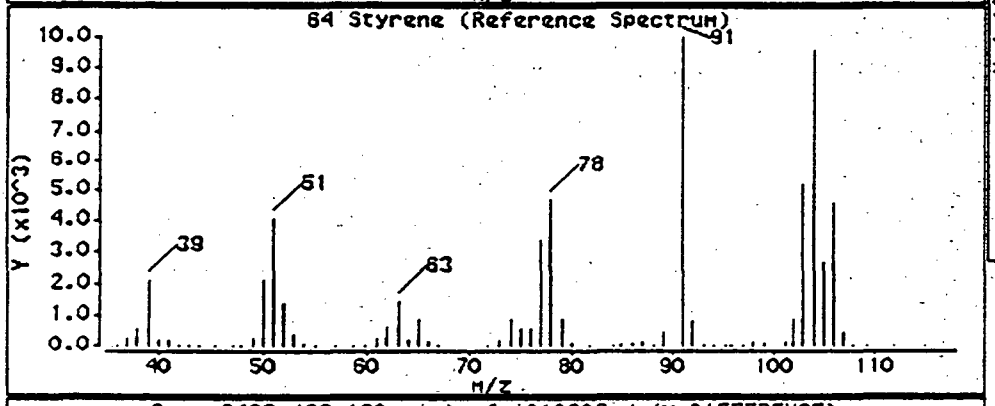
64 Styrene

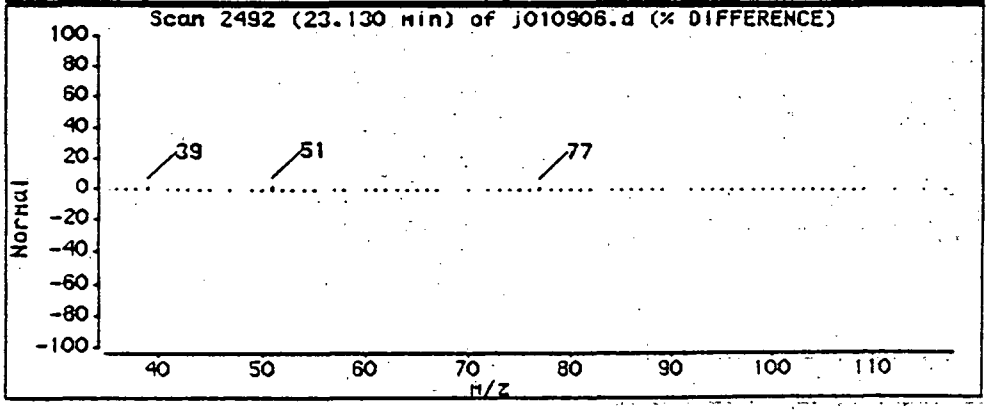












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

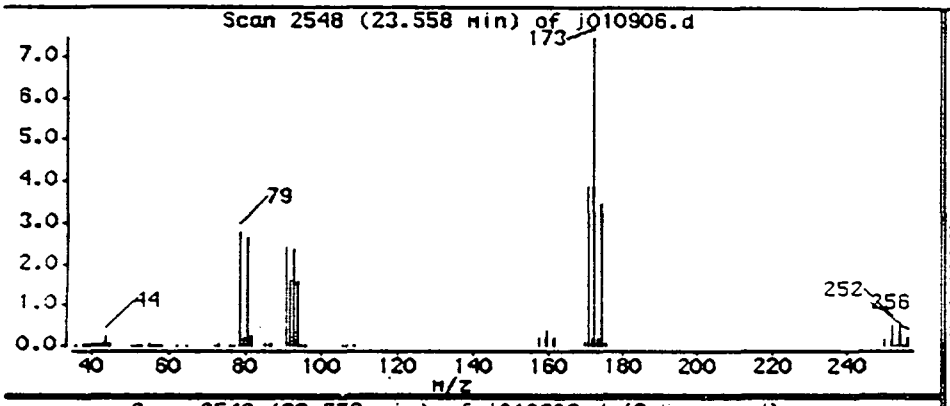
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

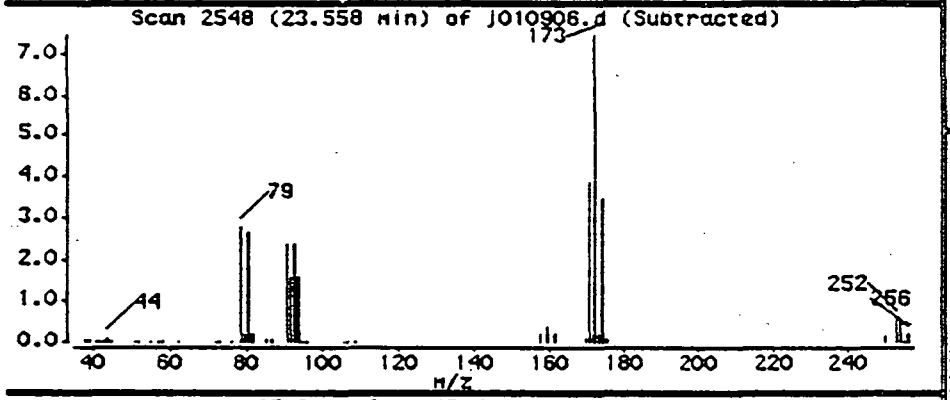
Operator: FA

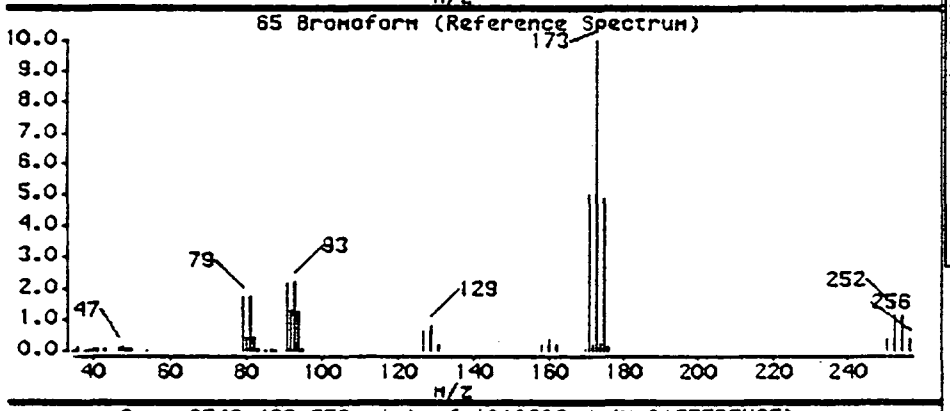
Column phase: RTx-624

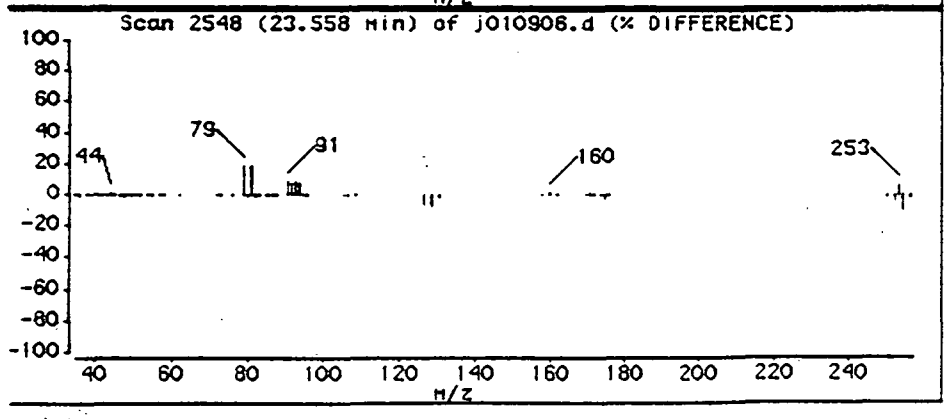
Column diameter: 0.58

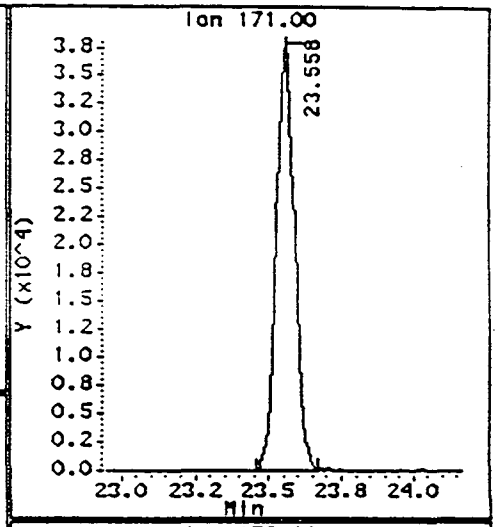
65 Bromoform

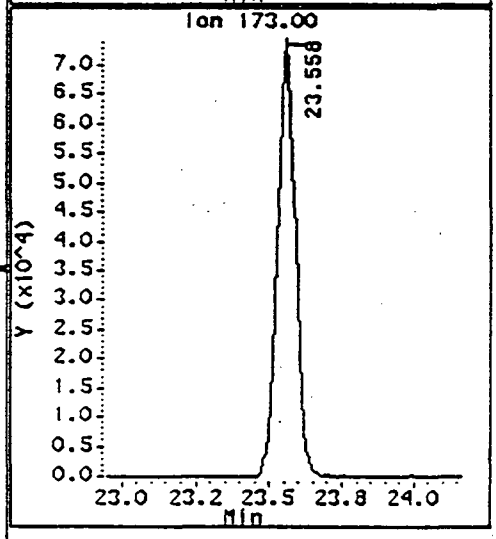












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

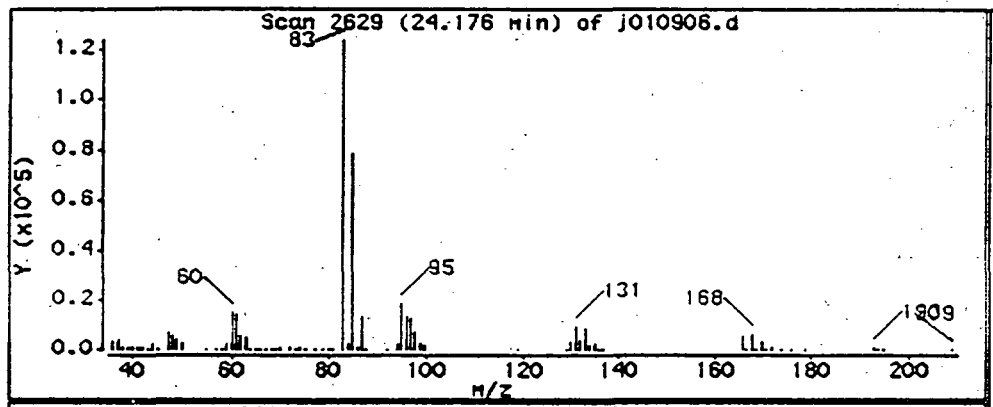
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

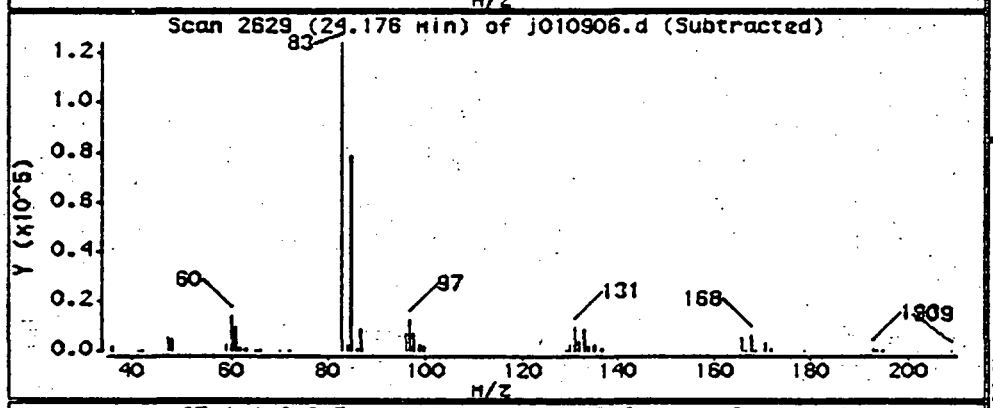
Operator: FA

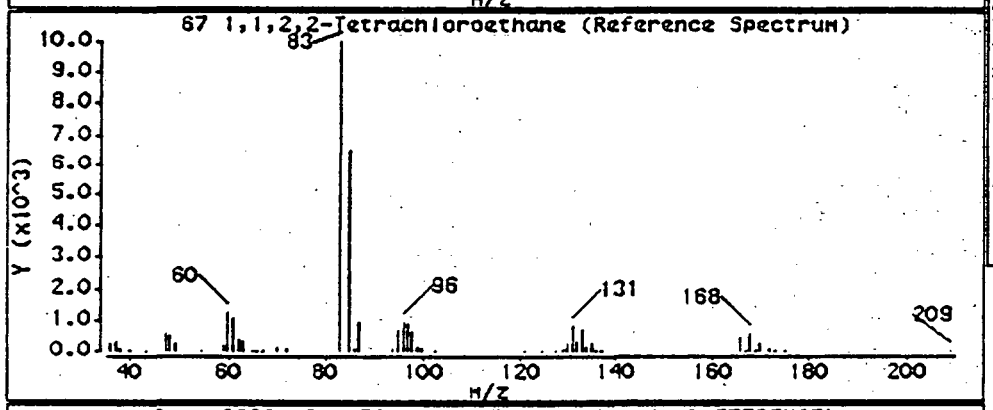
Column phase: RTx-624

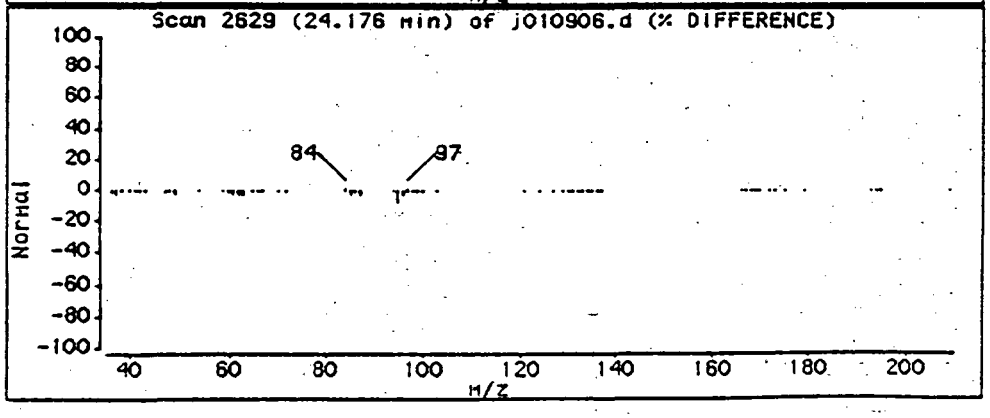
Column diameter: 0.58

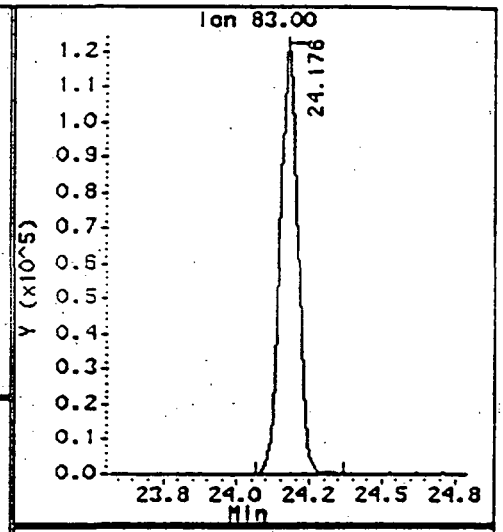
67 1,1,2,2-Tetrachloroethane

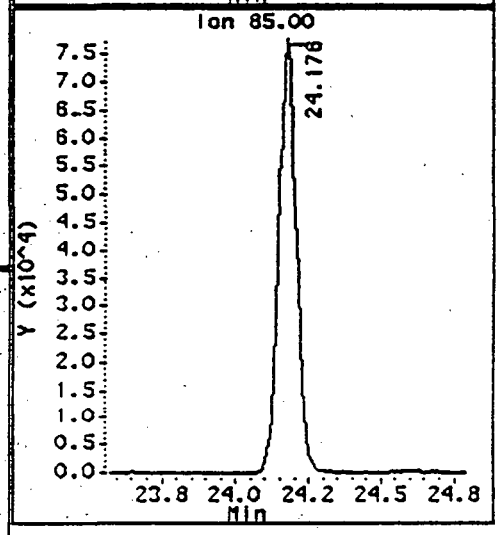












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

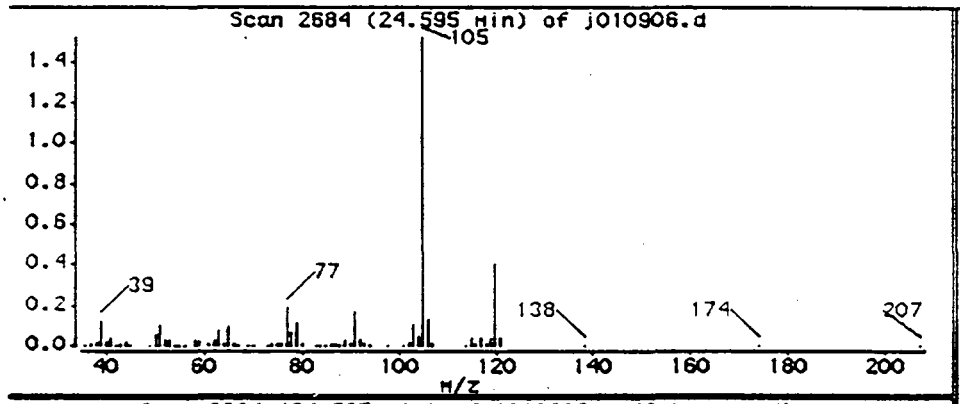
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

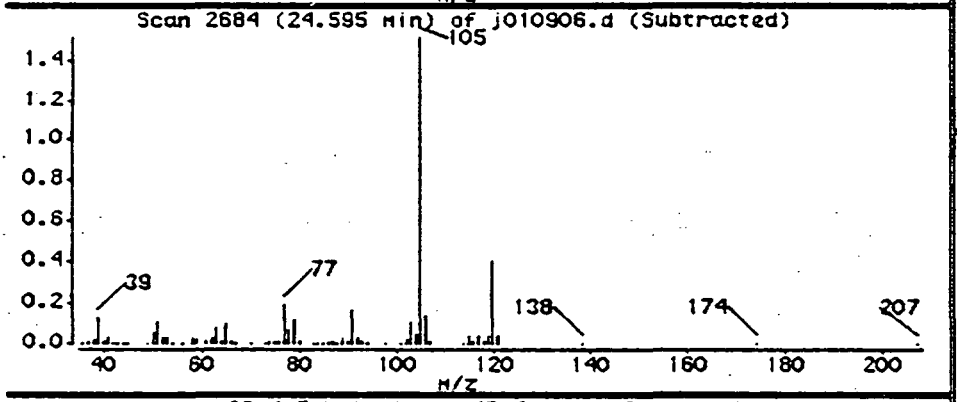
Operator: FA

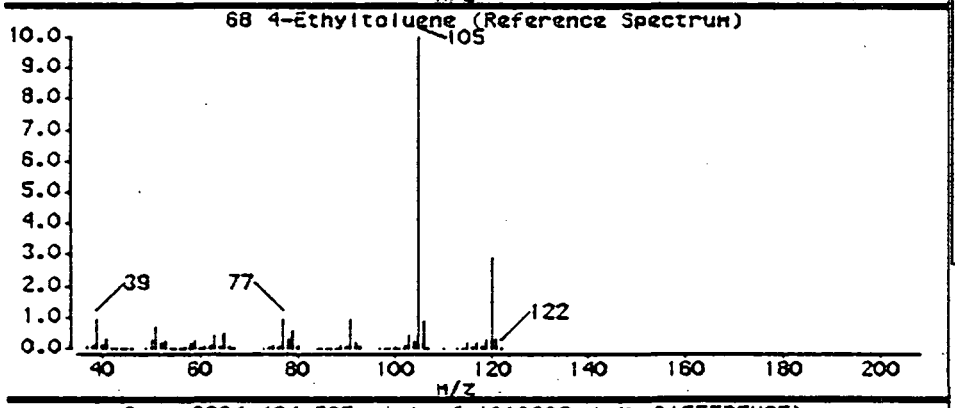
Column phase: RTx-624

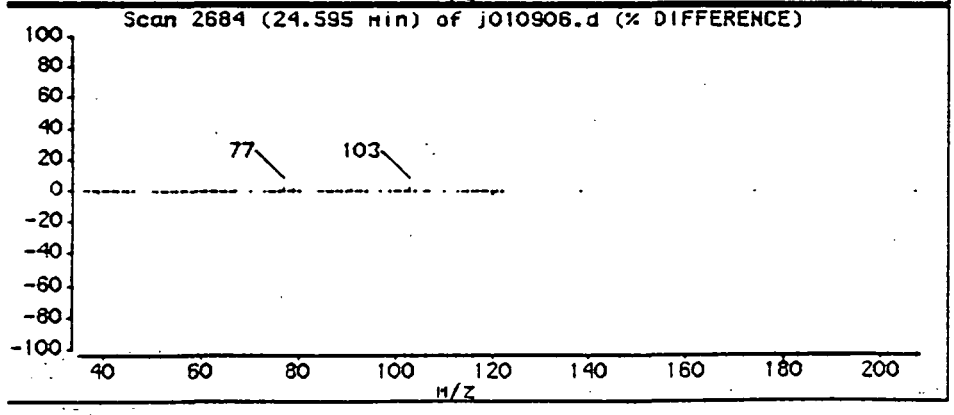
Column diameter: 0.58

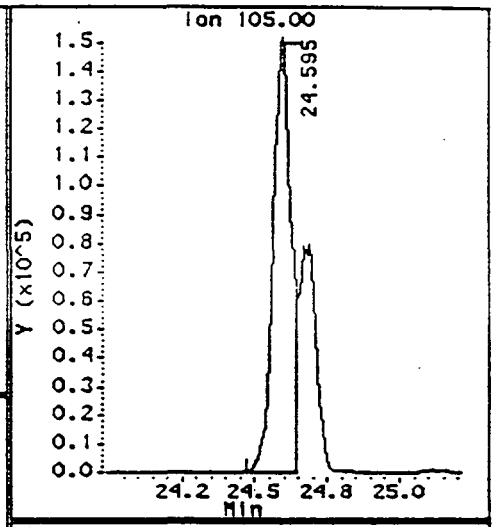
68 4-Ethyltoluene

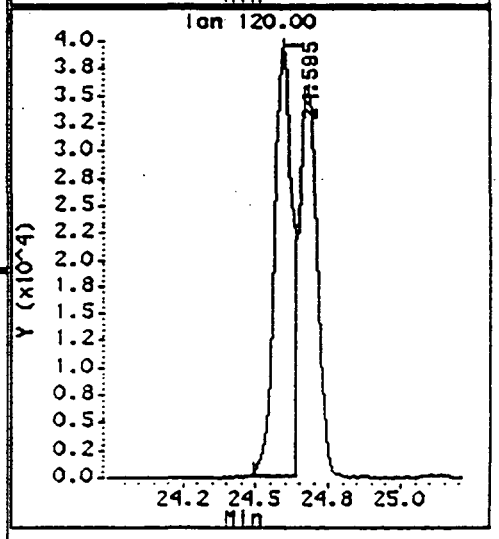












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

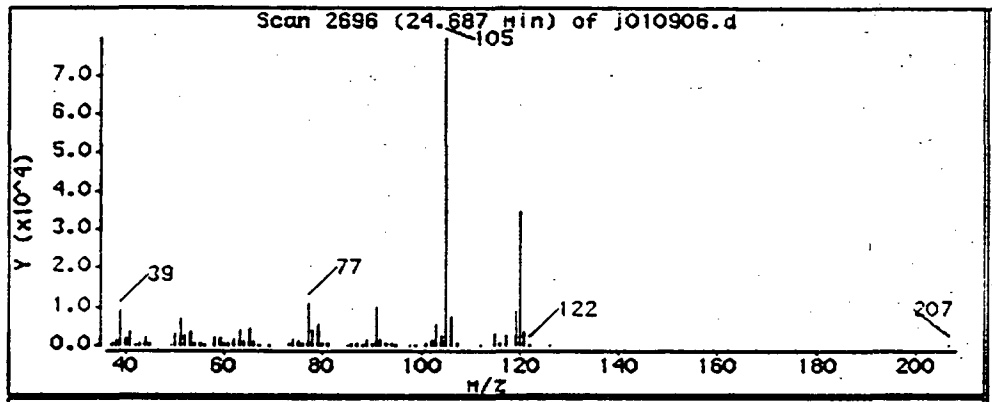
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

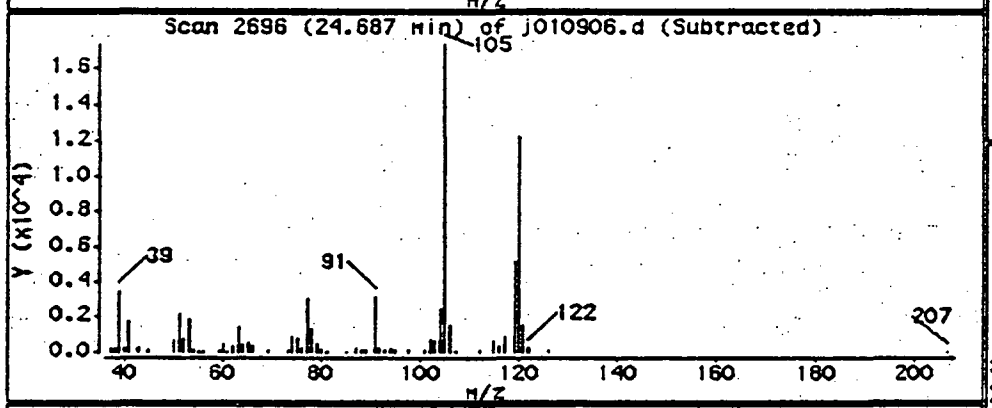
Operator: FA

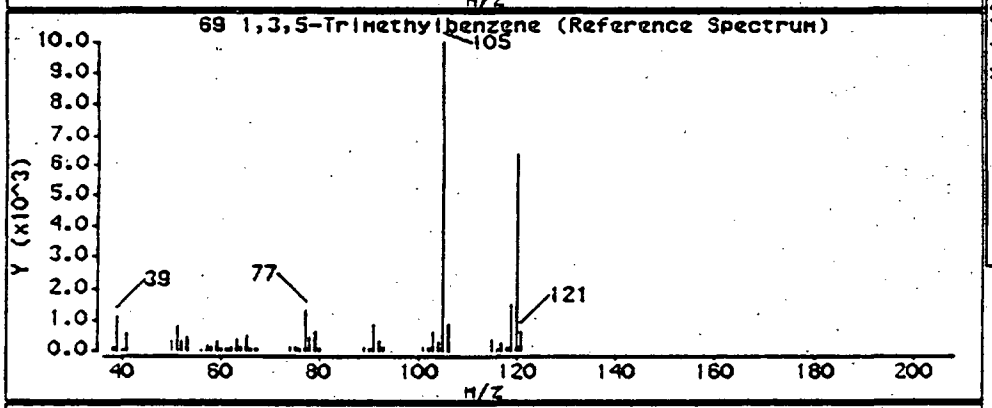
Column phase: RTx-624

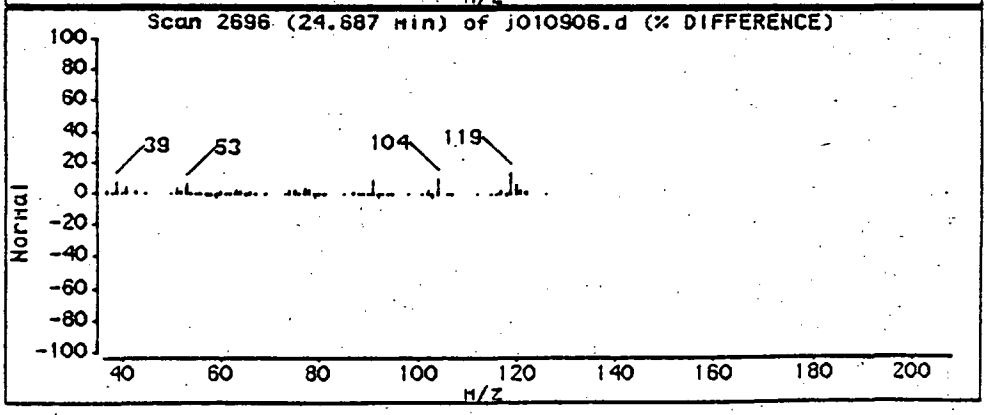
Column diameter: 0.58

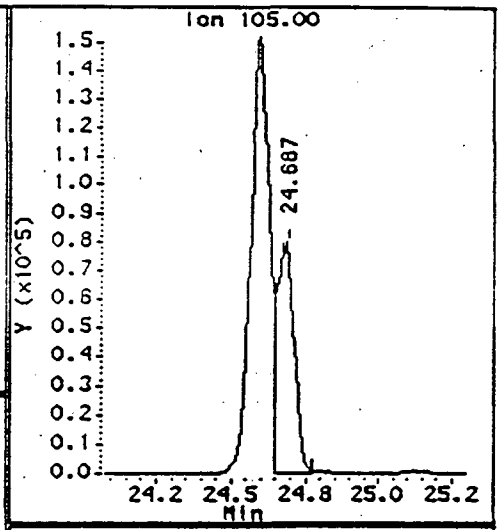
69 1,3,5-Trimethylbenzene

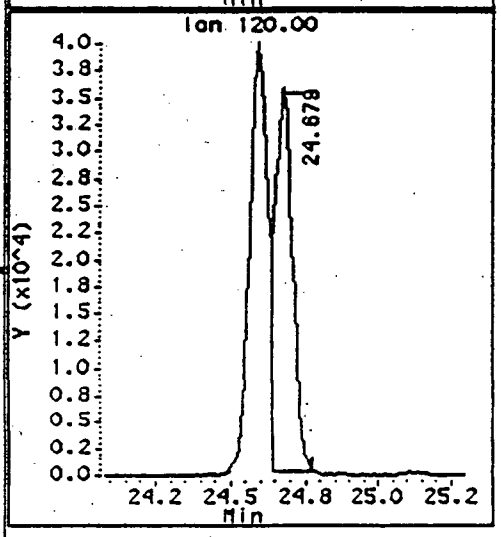












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

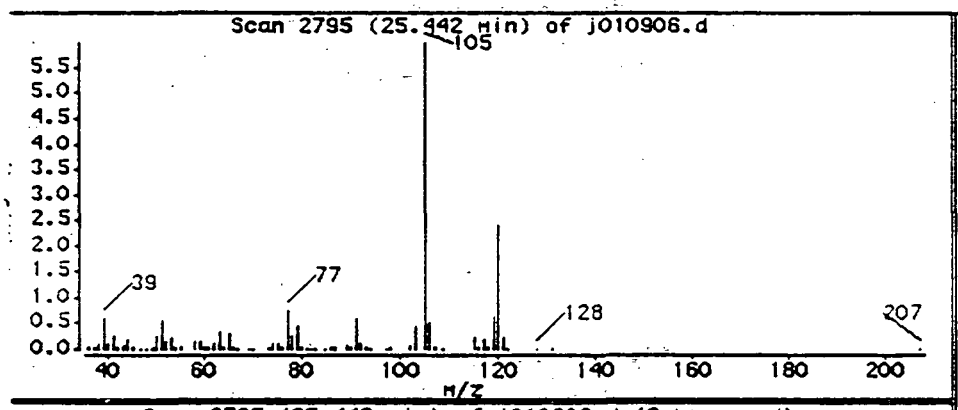
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

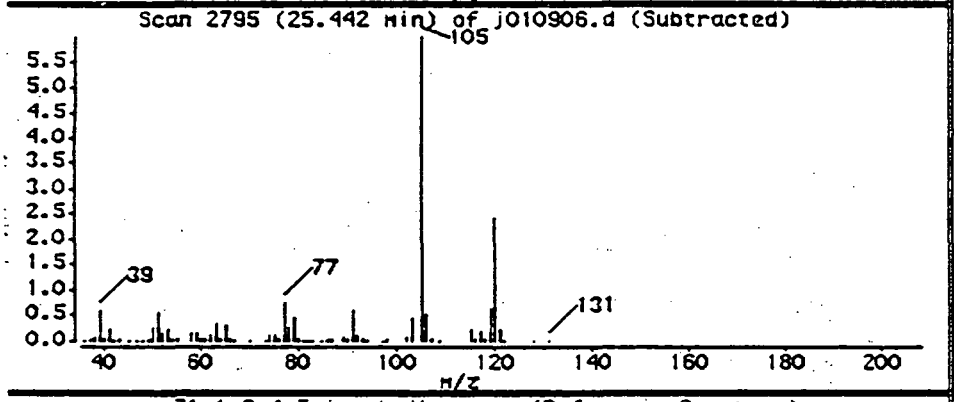
Operator: FA

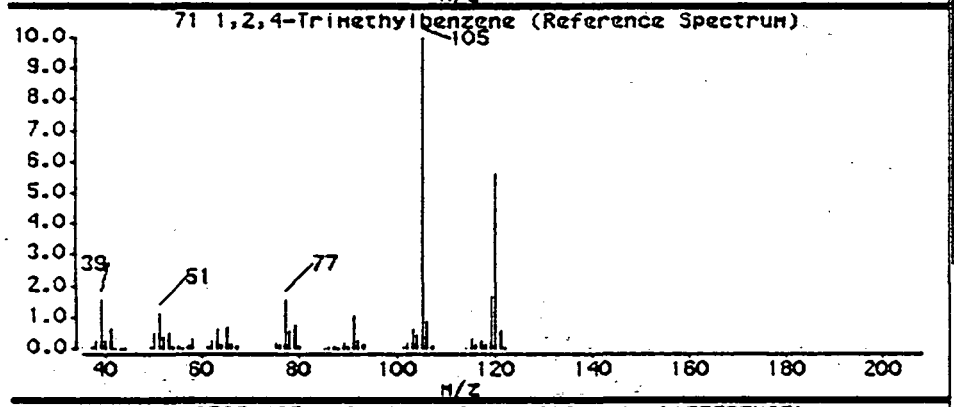
Column phase: RTx-624

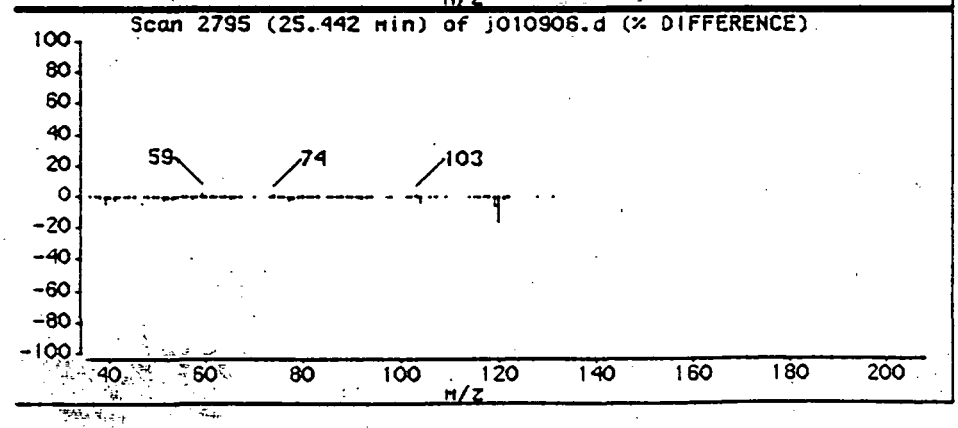
Column diameter: 0.58

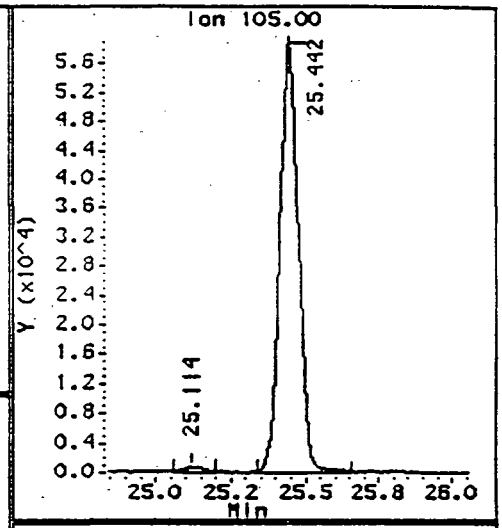
71 1,2,4-Trimethylbenzene

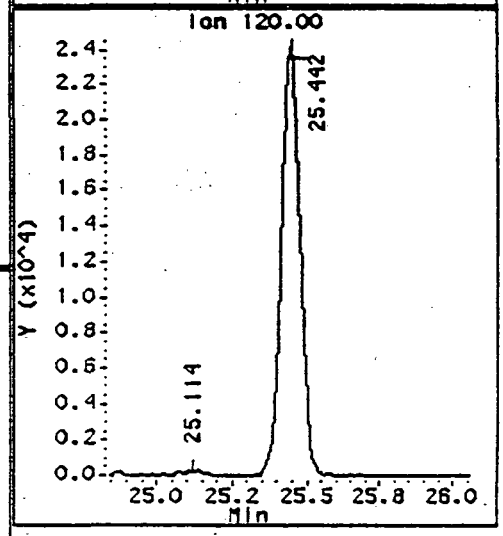












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

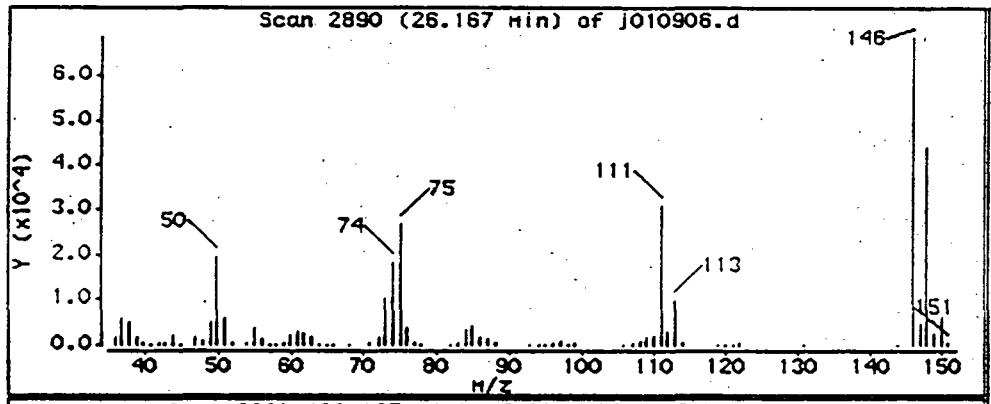
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

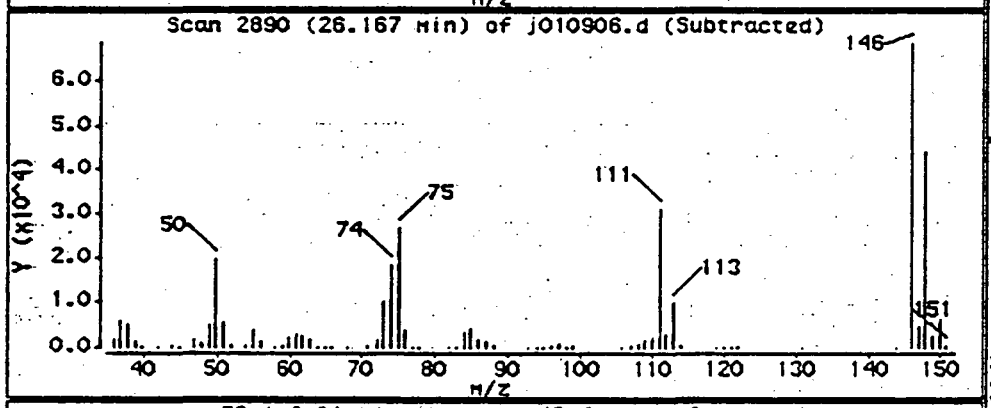
Operator: FA

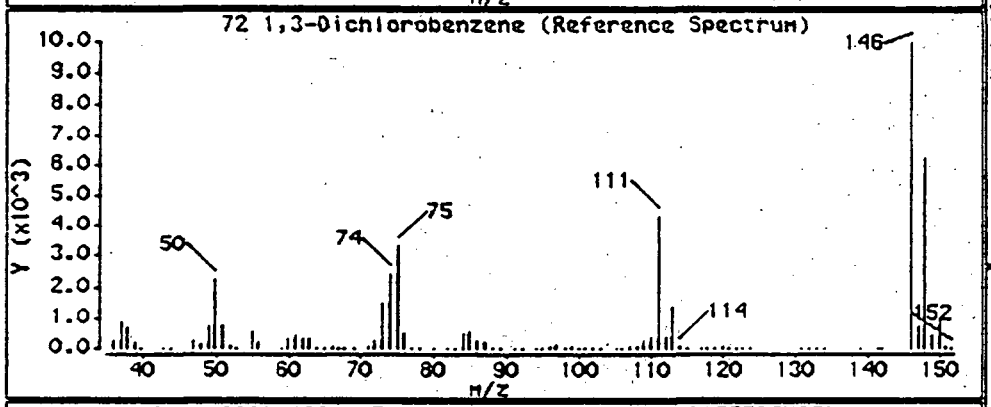
Column phase: RTx-624

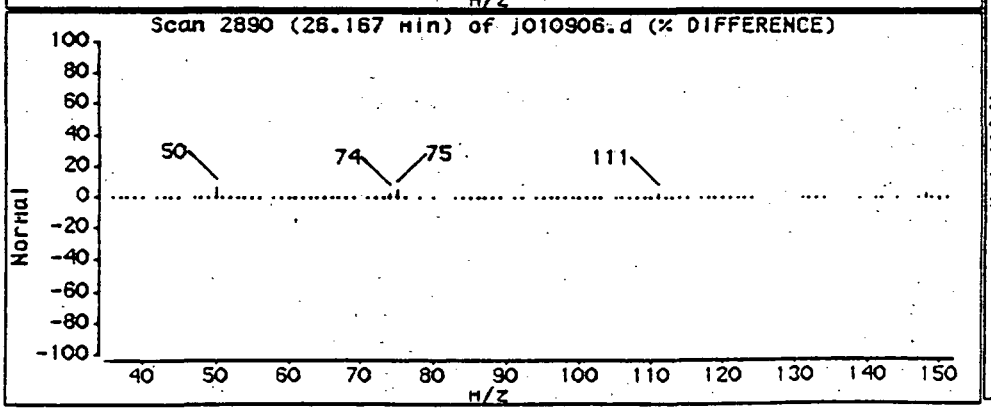
Column diameter: 0.58

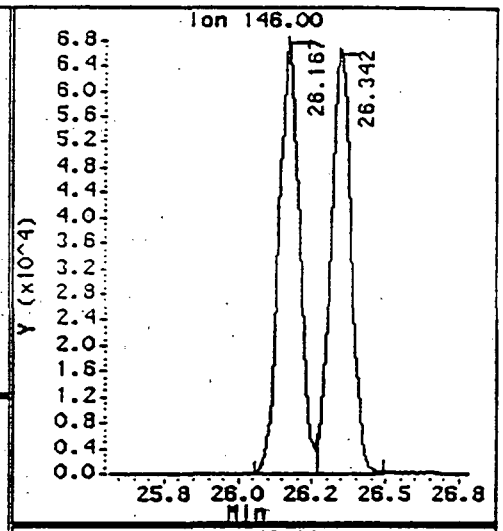
72 1,3-Dichlorobenzene

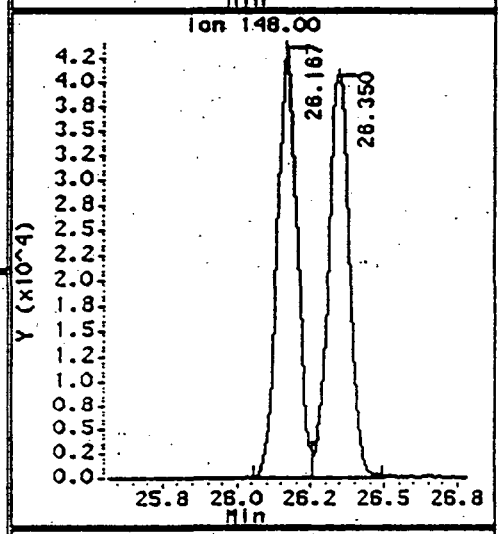


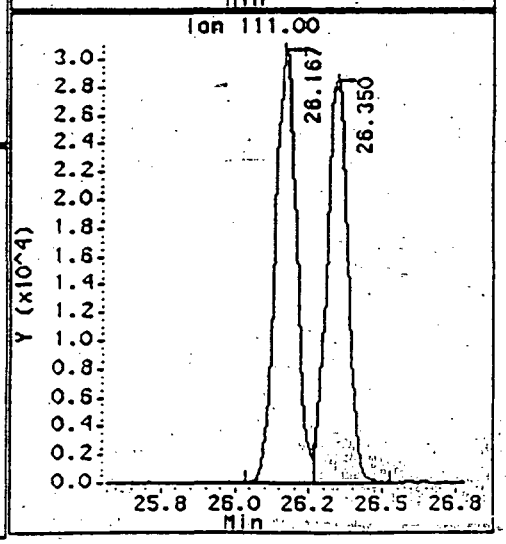












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

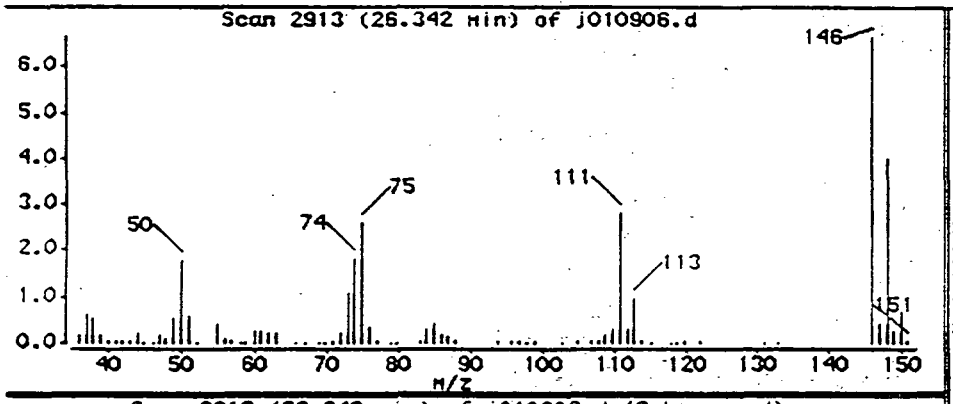
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

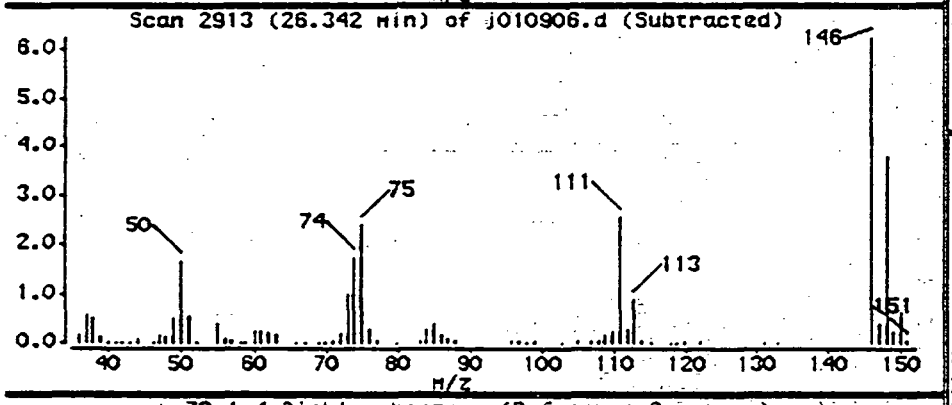
Operator: FA

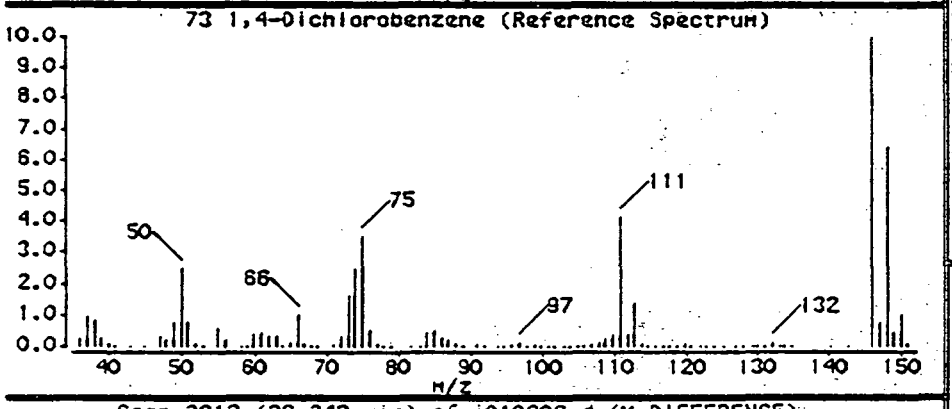
Column phase: RTx-624

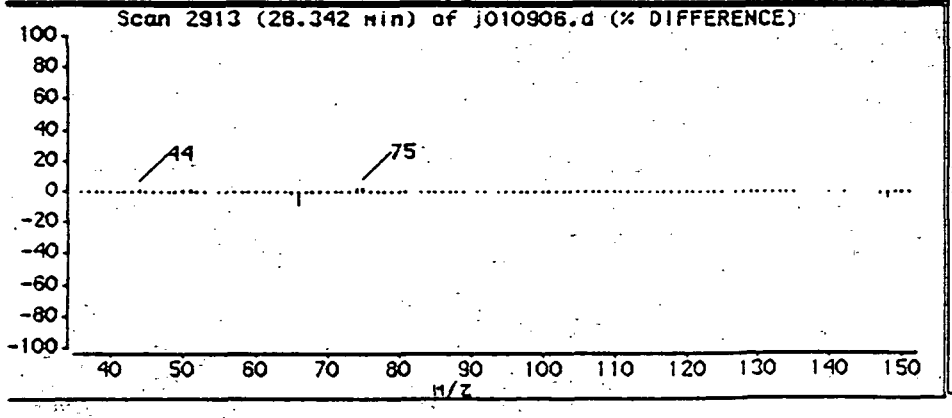
Column diameter: 0.58

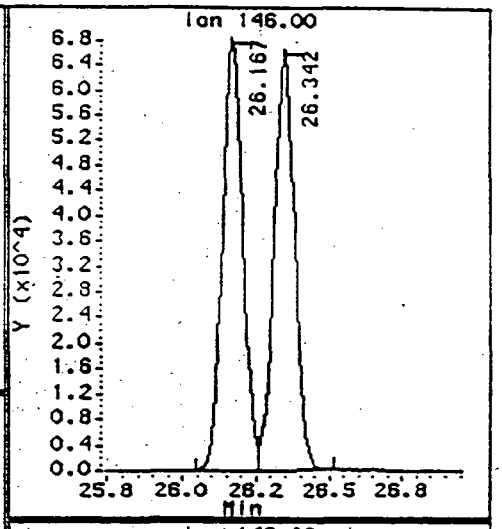
73 1,4-Dichlorobenzene

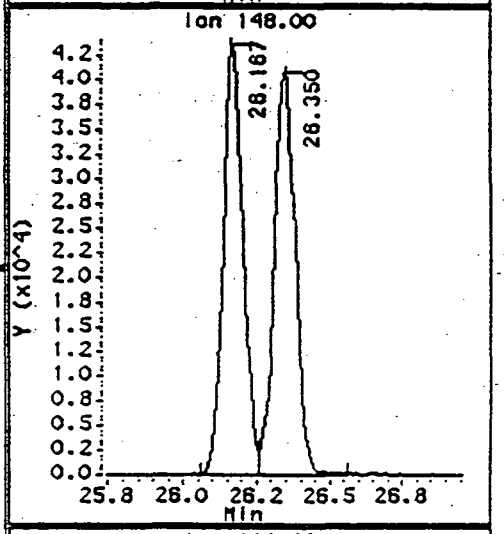


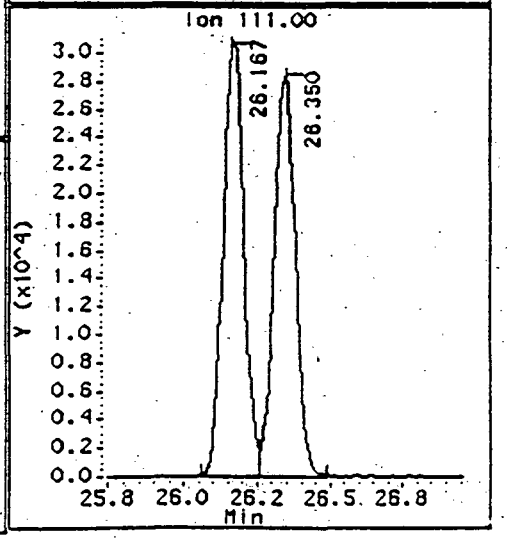












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

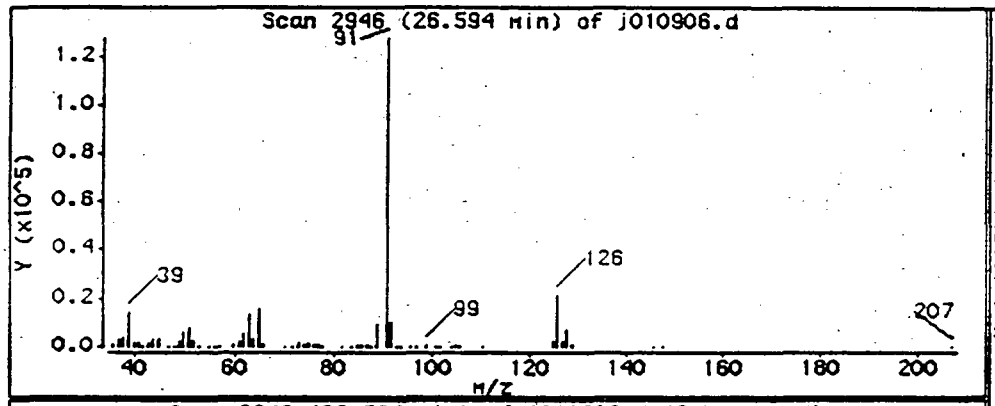
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

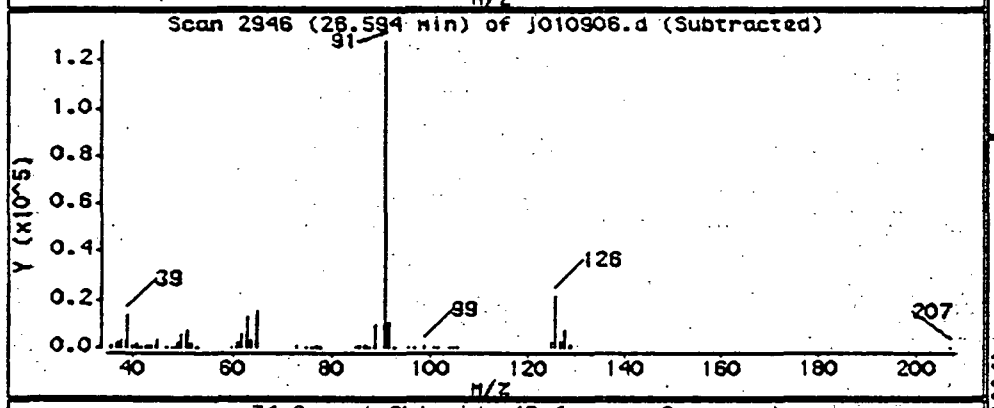
Operator: FA

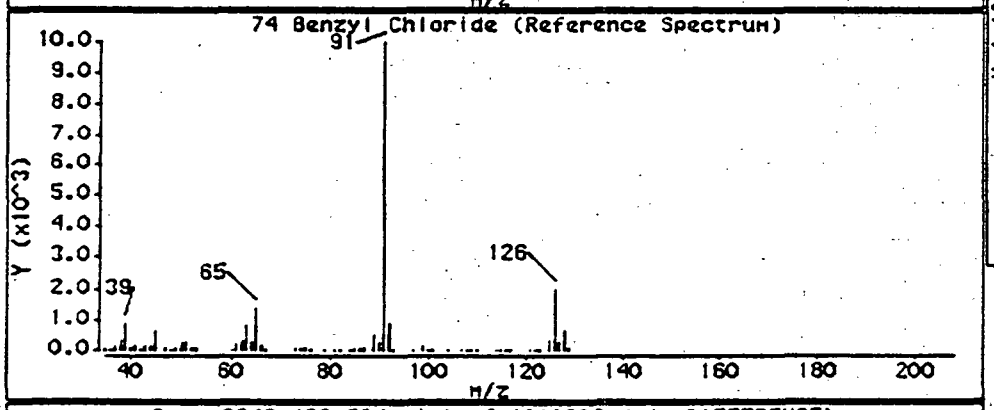
Column phase: RTx-624

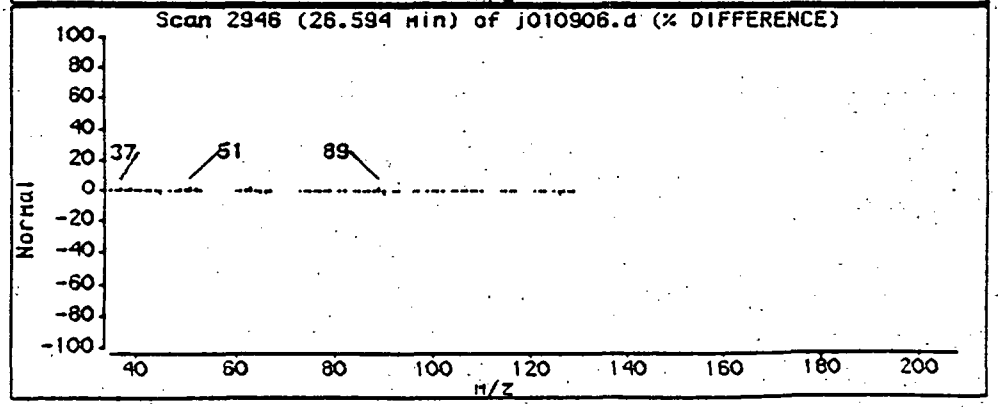
Column diameter: 0.58

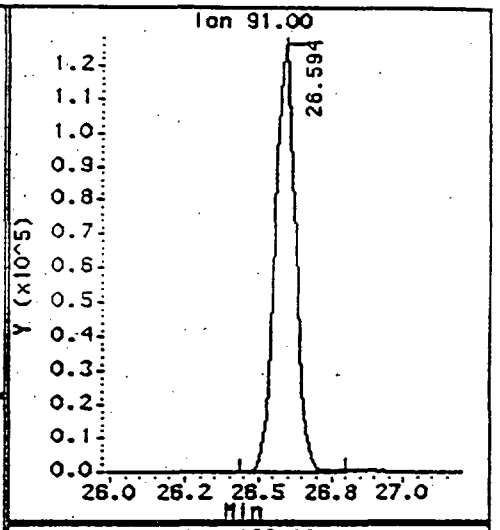
74 Benzyl Chloride

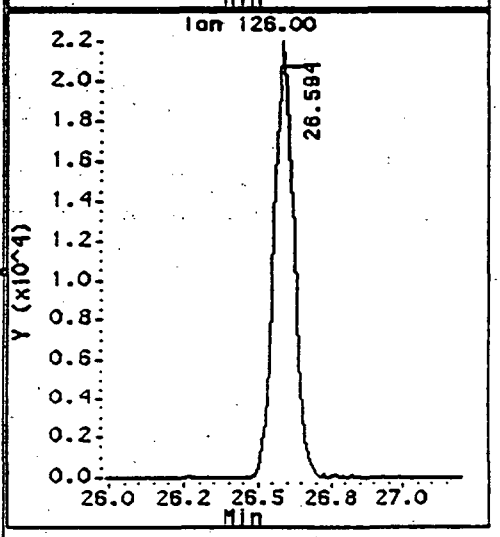












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

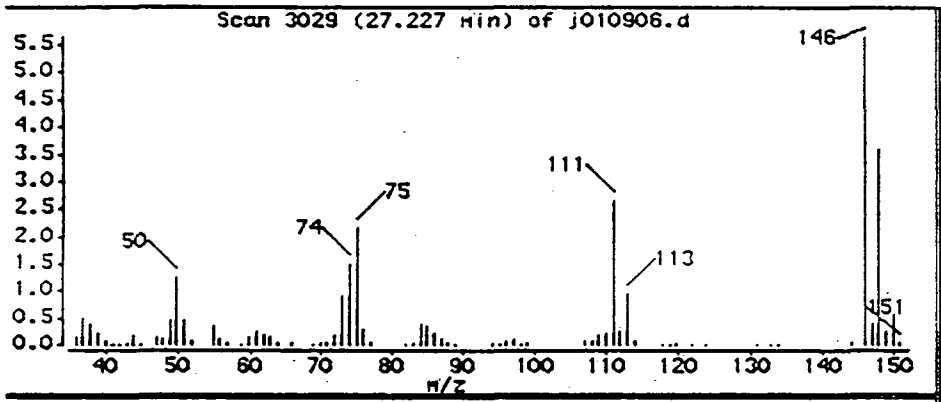
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

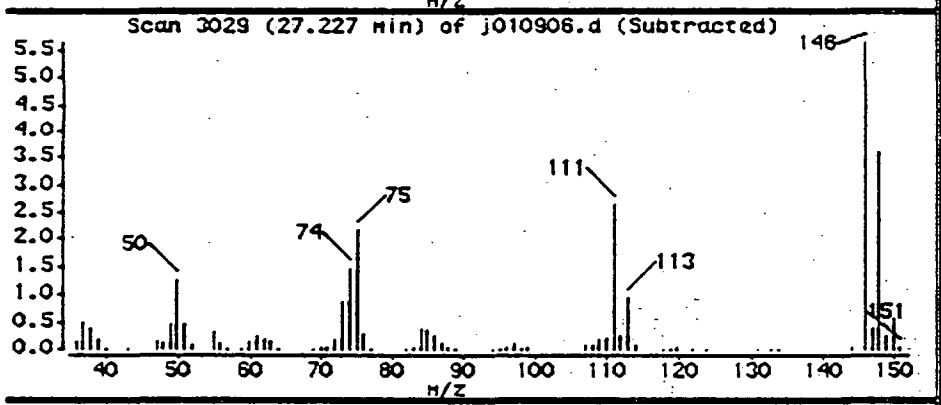
Operator: FR

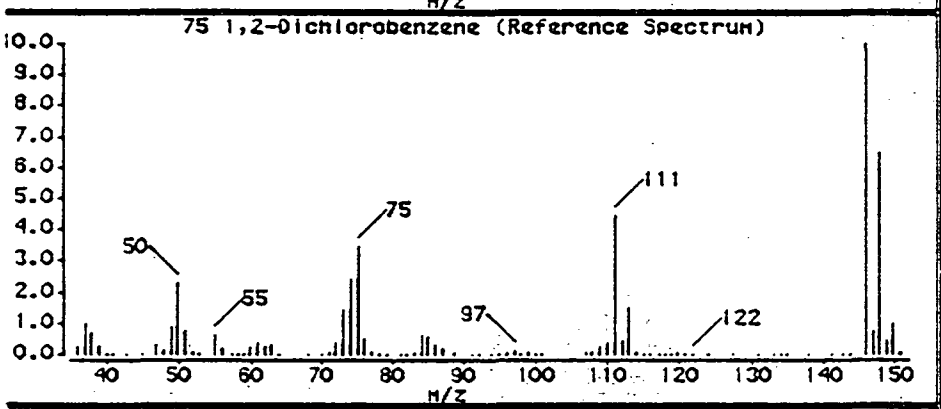
Column phase: RTx-624

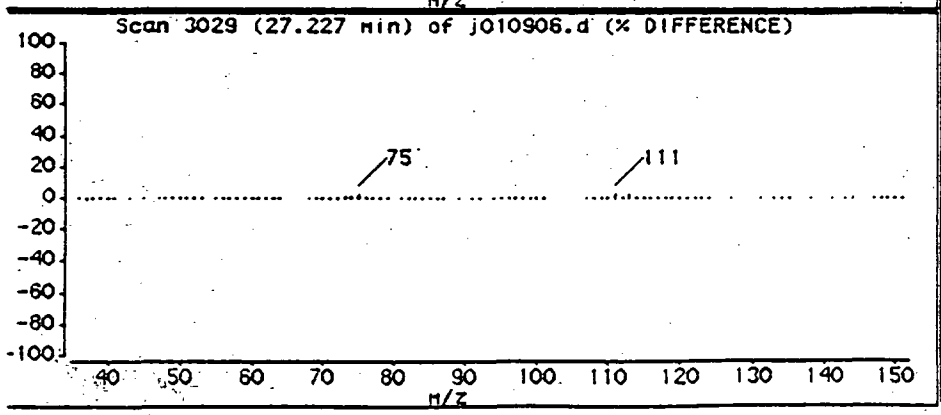
Column diameter: 0.58

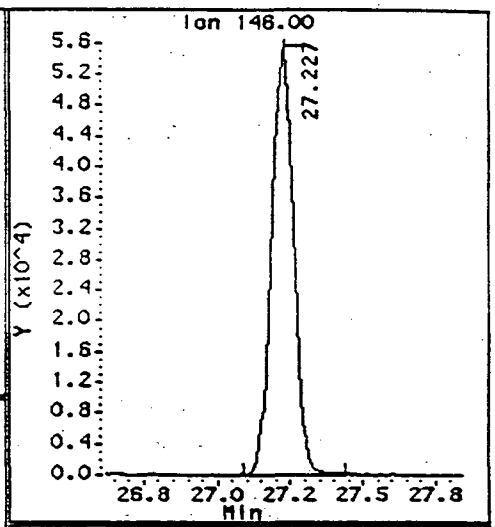
75 1,2-Dichlorobenzene

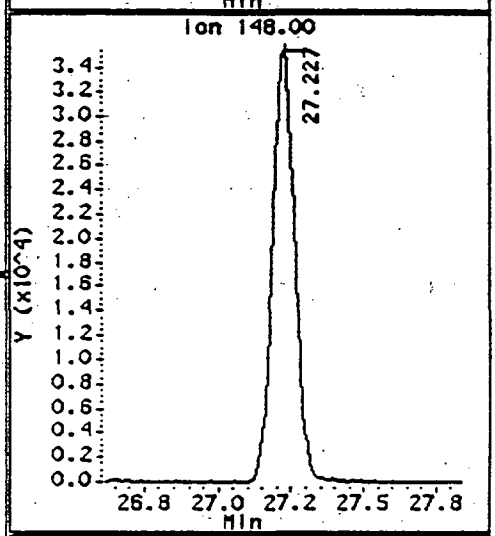


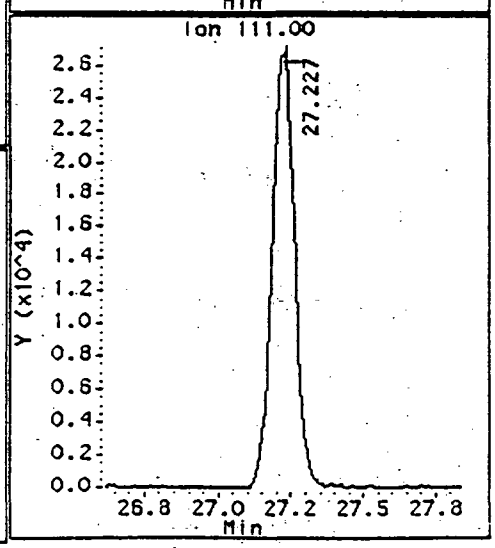












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

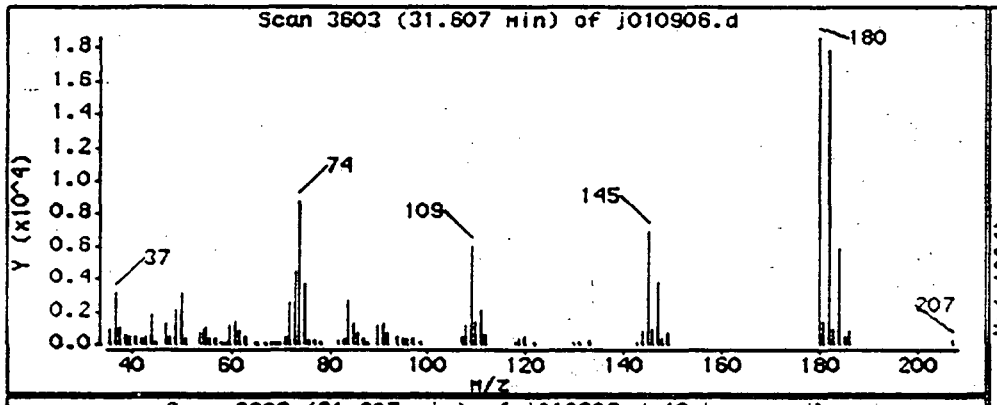
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

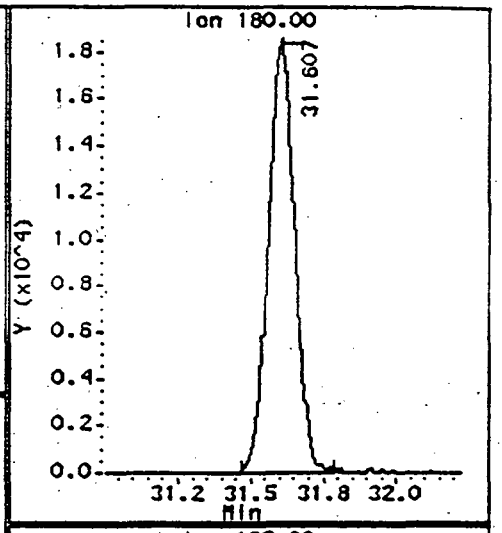
Operator: FA

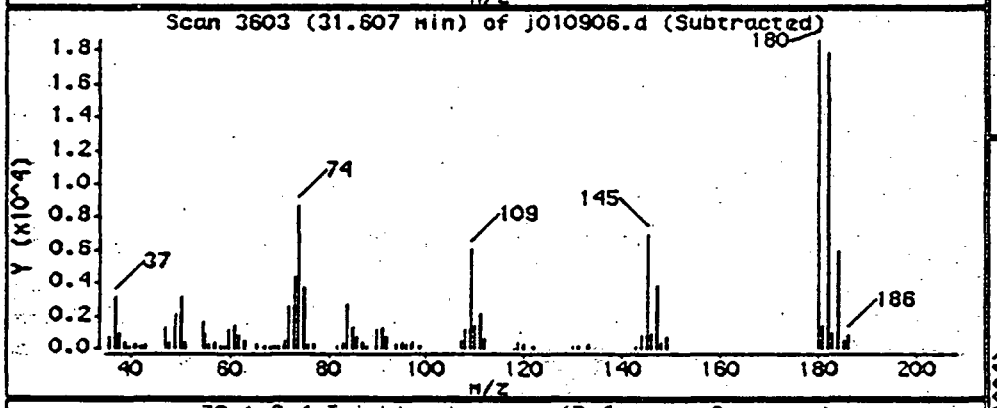
Column phase: RTx-624

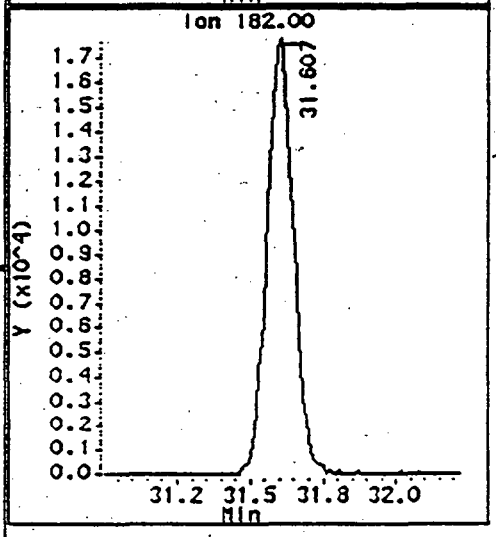
Column diameter: 0.58

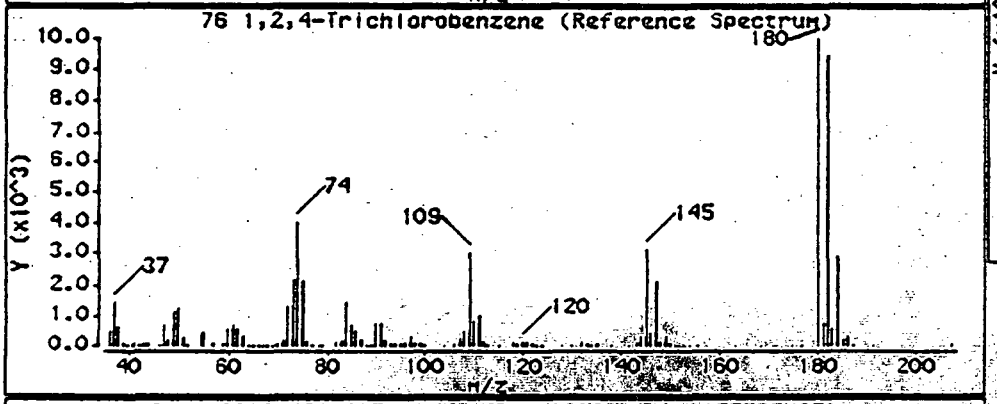
76 1,2,4-Trichlorobenzene

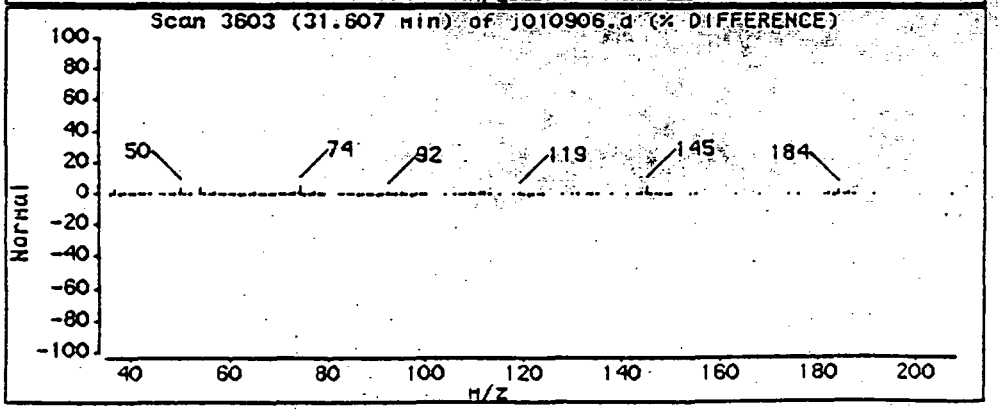












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

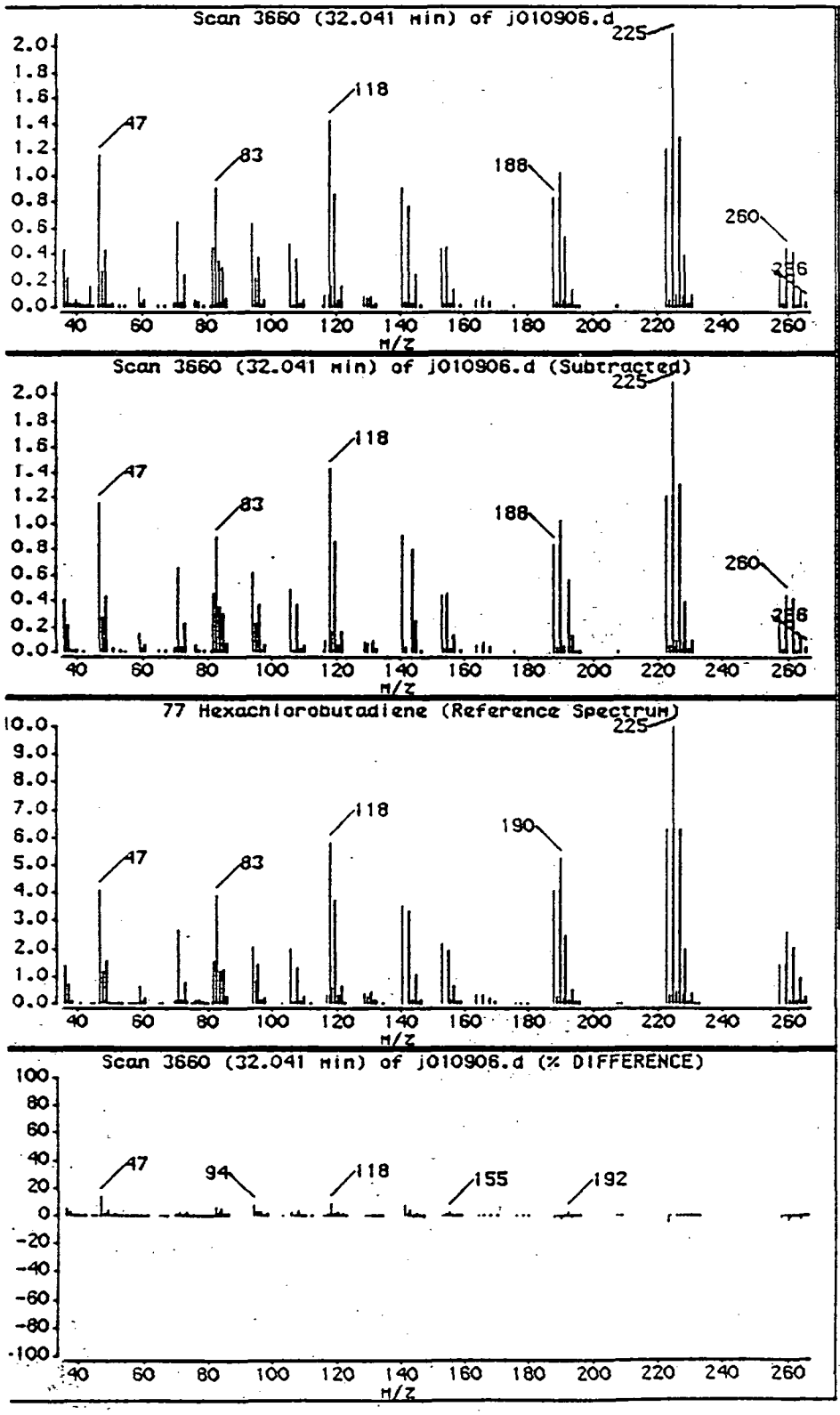
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

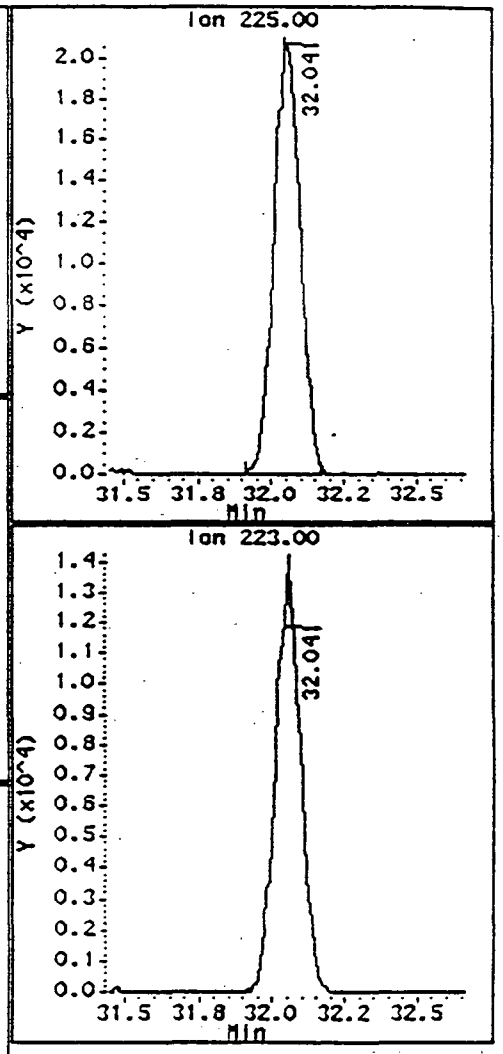
Operator: FA

Column phase: RTx-624

Column diameter: 0.58

77 Hexachlorobutadiene





Data File: /chem/msdj.i/j-09jan.b/j010907.d
Report Date: 09-Jan-1997 14:23

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010907.d
Lab Smp Id: VSTD010 Client Smp ID: VSTD010
Inj Date : 09-JAN-1997 11:27
Operator : FA Inst ID: msdj.i
Smp Info : 50.0ml #296-25 100ppbv (10.0ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:23 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.692	16.692 (1.000)	130	194531	5.0			100.00	9585(Q)
16.692	16.692 (0.000)	128	46640			28.83- 128.83	23.98	
16.692	16.692 (0.000)	49	105128			127.68- 227.68	54.04	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.035	18.035 (1.000)	114	829384	5.0			100.00	9727
18.035	18.035 (0.000)	88	42960			0.00- 67.19	5.18	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.177	22.177 (1.000)	117	656545	5.0			100.00	9779
22.177	22.177 (0.000)	82	97501			8.55- 108.55	14.85	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.211	17.211 (1.031)	217	432836	5.0	4.8		100.00	9817
17.211	17.211 (0.000)	186	88920			15.29- 115.29	20.54	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.072	20.072 (1.113)	98	741386	5.0	4.9		100.00	9806
20.072	20.072 (0.000)	70	26760			0.00- 62.48	3.61	
20.072	20.072 (0.000)	100	141504			15.98- 115.98	19.09	

:T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
6 Bromofluorobenzene					CAS #: 460-00-4			
.039	24.039 (1.084)	95	502078	5.0	4.9		100.00	9719
.039	24.039 (0.000)	174	70424			8.48- 108.48	14.03	
.039	24.039 (0.000)	176	69328			7.57- 107.57	13.81	
1 Propylene					CAS #: 115-07-1			
.699	4.699 (0.281)	41	258056	10.0	7.9		100.00	7686(Q)
.699	4.699 (0.000)	42	12169			14.10- 114.10	4.72	
.699	4.699 (0.000)	39	13451			20.85- 120.85	5.21	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
.256	5.256 (0.315)	85	1149323	10.0	9.5		100.00	0(M)
.263	5.263 (0.315)	87	0			0.00- 50.00	0.00	
7 Freon 114					CAS #: 76-14-2			
.003	7.003 (0.420)	135	856913	10.0	9.8		100.00	9810
.003	7.003 (0.000)	137	24496			0.00- 80.98	2.86	
8 Chloromethane					CAS #: 74-87-3			
.117	7.117 (0.426)	50	477700	10.0	9.4		100.00	9127(M)
.117	7.117 (0.426)	52	12892			0.00- 79.23	2.70	
9 Vinyl Chloride					CAS #: 75-01-4			
.231	8.231 (0.493)	62	526994	10.0	9.7		100.00	9634
.231	8.231 (0.000)	64	17504			0.00- 80.10	3.32	
10 1,3-Butadiene					CAS #: 106-99-0			
.582	8.582 (0.514)	54	398402	10.0	9.7		100.00	9690(Q)
.582	8.582 (0.000)	39	66407			56.78- 156.78	16.67	
11 Bromomethane					CAS #: 74-83-9			
.161	10.161 (0.609)	94	429983	10.0	9.6		100.00	9504(Q)
.161	10.161 (0.000)	96	72432			45.14- 145.14	16.85	
12 Chloroethane					CAS #: 75-00-3			
.741	10.741 (0.643)	64	306321	10.0	9.8		100.00	9641
.741	10.741 (0.000)	66	19056			0.00- 82.76	6.22	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
.725	11.725 (0.702)	101	1211530	10.0	10.1		100.00	9872
.725	11.725 (0.000)	103	171338			13.13- 113.13	14.14	
15 Ethanol					CAS #: 64-17-5			
.740	12.740 (0.763)	45	209536	10.0	13.1		100.00	
.740	12.740 (0.763)	46	86610			0.00- 91.33	41.33	
.747	12.747 (0.764)	43	55261			0.00- 76.37	26.37	
17 1,1-Dichloroethene					CAS #: 75-35-4			
.144	13.144 (0.787)	96	483721	10.0	11.6		100.00	9350(Q)

Data File: /chem/msdj.i/j-09jan.b/j010907.d
Report Date: 09-Jan-1997 14:23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
13.144	13.144 (0.000)	61	240960			125.93- 225.93	49.81	
13.144	13.144 (0.000)	98	87784			14.09- 114.09	18.15	
18 Freon 113					CAS #: 76-13-1			
13.236	13.236 (0.793)	151	654914	10.0	10.0		100.00	9310(Q)
13.236	13.236 (0.000)	153	100016			14.05- 114.05	15.27	
13.236	13.236 (0.000)	101	243927			106.20- 206.20	37.25	
19 Carbon Disulfide					CAS #: 75-15-0			
13.518	13.518 (0.810)	76	1480262	10.0	10.1		100.00	8114
20 Acetone					CAS #: 67-64-1			
13.381	13.381 (0.802)	43	918530	10.0	11.9		100.00	
13.381	13.381 (0.802)	58	271567			0.00- 79.57	29.57	
22 2-Propanol					CAS #: 67-63-0			
13.861	13.861 (0.830)	45	1005549	10.0	10.5		100.00	7544
13.861	13.861 (0.000)	43	52124			0.00- 69.13	5.18	
13.861	13.861 (0.000)	59	9763			0.00- 53.58	0.97	
23 Methylene Chloride					CAS #: 75-09-2			
14.243	14.243 (0.853)	84	447204	10.0	10.0		100.00	9680(Q)
14.243	14.243 (0.000)	49	199296			98.64- 198.64	44.56	
14.243	14.243 (0.000)	51	62830			0.00- 96.86	14.05	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.731	14.731 (0.883)	96	495935	10.0	10		100.00	9554(Q)
14.731	14.731 (0.000)	61	242688			104.97- 204.97	48.94	
14.731	14.731 (0.000)	98	99576			13.58- 113.58	20.08	
26 MTBE					CAS #: 1634-04-4			
14.731	14.731 (0.883)	73	1319582	10.0	10.1		100.00	6461
14.731	14.731 (0.000)	57	88400			0.00- 74.03	6.70	
14.731	14.731 (0.000)	41	92845			0.00- 75.24	7.04	
27 Hexane					CAS #: 110-54-3			
15.158	15.158 (0.908)	57	911208	10.0	10.0		100.00	7287
15.158	15.158 (0.000)	43	197960			20.00- 120.00	21.73	
15.158	15.158 (0.000)	56	149251			2.77- 102.77	16.38	
28 1,1-Dichloroethane					CAS #: 75-34-3			
15.433	15.433 (0.925)	63	918113	10.0	10		100.00	9642
15.433	15.433 (0.000)	65	86120			0.00- 81.51	9.38	
29 Chloroprene					CAS #: 126-99-8			
15.570	15.570 (0.933)	53	317266	10.0	10.1		100.00	7811
15.570	15.570 (0.000)	88	48808			1.16- 101.16	15.38	

ta File: /chem/msdj.i/j-09jan.b/j010907.d
port Date: 09-Jan-1997 14:23

:T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
:9 Chloroprene (continued)								
.570	15.570 (0.000)	50	24414			0.00- 75.59	7.70	
:0 Vinyl Acetate					CAS #: 108-05-4			
.502	15.502 (0.929)	43	1534361	10.0	10.4		100.00	5917
.502	15.502 (0.000)	86	35081			0.00- 57.73	2.29	
:1 cis-1,2-Dichloroethene					CAS #: 156-59-2			
.333	16.333 (0.979)	96	532049	10.0	10.1		100.00	9734(Q)
.333	16.333 (0.000)	61	219520			87.25- 187.25	41.26	
.333	16.333 (0.000)	98	99024			11.91- 111.91	18.61	
:2 2-Butanone					CAS #: 78-93-3			
.318	16.318 (0.978)	72	218074	10.0	10.2		100.00	7901(Q)
.318	16.318 (0.000)	43	310225			447.09- 547.09	142.26	
.318	16.318 (0.000)	57	21626			0.00- 84.65	9.92	
:4 Chloroform					CAS #: 67-66-3			
.776	16.776 (1.005)	83	977840	10.0	10.1		100.00	9186
.776	16.776 (0.000)	85	192128			14.95- 114.95	19.65	
:5 Tetrahydrofuran					CAS #: 109-99-9			
.760	16.760 (1.004)	42	520480	10.0	10.2		100.00	7505
.760	16.760 (0.000)	71	52207			0.00- 86.02	10.03	
.760	16.760 (0.000)	72	57134			0.00- 89.42	10.98	
:6 1,1,1-Trichlorethane					CAS #: 71-55-6			
.058	17.058 (1.022)	97	902963	10.0	10		100.00	9734
.058	17.058 (0.000)	99	170240			17.27- 117.27	18.85	
:7 Cyclohexane					CAS #: 110-82-7			
.142	17.142 (1.027)	56	848215	10.0	10		100.00	8271(Q)
.142	17.142 (0.000)	84	183295			24.74- 124.74	21.61	
.142	17.142 (0.000)	41	148601			10.59- 110.59	17.52	
:8 Carbon Tetrachloride					CAS #: 56-23-5			
.310	17.310 (1.037)	119	734580	10.0	10.2		100.00	9451(Q)
.310	17.310 (0.000)	117	166768			27.68- 127.68	22.70	
:0 Benzene					CAS #: 71-43-2			
.584	17.584 (0.975)	78	1568102	10.0	9.9		100.00	9737
.584	17.584 (0.000)	77	112752			0.00- 74.19	7.19	
:1 1,2-Dichloroethane					CAS #: 107-06-2			
.600	17.600 (0.976)	62	618858	10.0	10		100.00	8448
.600	17.600 (0.000)	64	57624			0.00- 82.18	9.31	
:2 Heptane					CAS #: 142-82-5			
.821	17.821 (0.988)	43	1084527	10.0	9.9		100.00	7674

Data File: /chem/msdj.i/j-09jan.b/j010907.d
Report Date: 09-Jan-1997 14:23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.821	17.821 (0.000)	57	168994			0.00- 98.18	15.58	
17.821	17.821 (0.000)	71	172928			0.00- 99.30	15.95	
44 Trichloroethene					CAS #: 79-01-6			
18.446	18.446 (1.023)	95	601904	10.0	9.9		100.00	7790(Q)
18.446	18.446 (0.000)	130	159808			38.73- 138.73	26.55	
18.446	18.446 (0.000)	97	114616			13.64- 113.64	19.04	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.752	18.752 (1.040)	63	549958	10.0	10.1		100.00	9737(Q)
18.752	18.752 (0.000)	62	120608			25.56- 125.56	21.93	
18.752	18.752 (0.000)	41	98518			11.72- 111.72	17.91	
46 1,4-Dioxane					CAS #: 123-91-1			
18.904	18.904 (1.048)	88	299209	10.0	10.1		100.00	9787(Q)
18.904	18.904 (0.000)	58	64336			25.46- 125.46	21.50	
18.904	18.904 (0.000)	57	21249			0.00- 74.92	7.10	
47 Bromodichloromethane					CAS #: 75-27-4			
19.110	19.110 (1.060)	83	965243	10.0	10.0		100.00	9372
19.110	19.110 (0.000)	85	170112			11.51- 111.51	17.62	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.682	19.682 (1.091)	75	393646	14.4	14.6		100.00	9657
19.682	19.682 (0.000)	77	35827			0.00- 81.77	9.10	
19.682	19.682 (0.000)	39	64781			7.45- 107.45	16.46	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.805	19.805 (1.098)	43	1205412	10.0	10.2		100.00	9604
19.805	19.805 (0.000)	58	124570			0.00- 84.95	10.33	
19.805	19.805 (0.000)	85	41828			0.00- 61.74	3.47	
51 Toluene					CAS #: 108-88-3			
20.171	20.171 (1.118)	92	940562	10.0	9.8		100.00	9732(Q)
20.171	20.171 (0.000)	91	465216			118.81- 218.81	49.46	
52 Octane					CAS #: 111-65-9			
20.148	20.148 (1.117)	57	429505	10.0	9.6		100.00	8414(Q)
20.148	20.148 (0.000)	85	140416			50.22- 150.22	32.69	
20.148	20.148 (0.000)	43	382805			223.22- 323.22	89.13	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.400	20.400 (0.920)	75	101902	2.0	1.8		100.00	9245
20.400	20.400 (0.000)	77	8316			0.00- 79.62	8.16	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.689	20.689 (0.933)	97	510323	10.0	10.0		100.00	9792(Q)

T =	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
4 1,1,2-Trichloroethane (continued)									
689	20.689	(0.000)	99	89288			12.79- 112.79	17.50	
689	20.689	(0.000)	83	126712			39.10- 139.10	24.83	
5 Tetrachloroethene						CAS #: 127-18-4			
956	20.956	(0.945)	166	565139	10.0	9.8		100.00	9457(Q)
956	20.956	(0.000)	129	132608			32.85- 132.85	23.46	
956	20.956	(0.000)	131	125792			28.59- 128.59	22.26	
6 2-Hexanone						CAS #: 591-78-6			
918	20.918	(0.943)	43	1250843	10.0	10.4		100.00	8563
918	20.918	(0.000)	58	181333			0.00- 98.87	14.50	
918	20.918	(0.000)	100	32360			0.00- 58.72	2.59	
7 Dibromochloromethane						CAS #: 124-48-1			
307	21.307	(0.961)	129	702778	10.0	10.1		100.00	8302
307	21.307	(0.000)	208	7833			0.00- 54.22	1.11	
8 1,2-Dibromoethane						CAS #: 106-93-4			
529	21.529	(0.971)	107	670643	10.0	10		100.00	9740(Q)
529	21.529	(0.000)	109	167872			46.40- 146.40	25.03	
0 Chlorobenzene						CAS #: 108-90-7			
215	22.215	(1.002)	112	1096315	10.0	9.8		100.00	9652
215	22.215	(0.000)	114	89592			0.00- 81.98	8.17	
215	22.215	(0.000)	77	170703			10.92- 110.92	15.57	
1 Ethyl Benzene						CAS #: 100-41-4			
299	22.299	(1.006)	106	670810	10.0	9.6		100.00	(H)
299	22.299	(1.006)	91	2322710			296.25- 396.25	346.25	
2 m,p-Xylene						CAS #: 108-38-3			
459	22.459	(1.013)	106	1286569	20.0	18.9		100.00	(H)
459	22.459	(1.013)	91	2765569			164.96- 264.96	214.96	
3 o-Xylene						CAS #: 95-47-6			
131	23.131	(1.043)	106	404830	10.0	9.6		100.00	9569(Q)
131	23.131	(0.000)	91	224221			166.39- 266.39	55.39	
4 Styrene						CAS #: 100-42-5			
138	23.138	(1.043)	104	872225	10.0	9.9		100.00	9757
138	23.138	(0.000)	78	104280			0.00- 98.09	11.96	
5 Bromoform						CAS #: 75-25-2			
558	23.558	(1.062)	171	338006	10.0	10.0		100.00	8405(Q)
558	23.558	(0.000)	173	150656			141.89- 241.89	44.57	
7 1,1,2,2-Tetrachloroethane						CAS #: 79-34-5			
176	24.176	(1.090)	83	1018077	10.0	9.8		100.00	9435

Data File: /chem/msdj.i/j-09jan.b/j010907.d
Report Date: 09-Jan-1997 14:23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
24.176	24.176 (0.000)	85	144384			11.12- 111.12	14.18	
68 4-Ethyltoluene					CAS #: 622-96-8			
24.596	24.596 (1.109)	105	1387130	10.0	9.8		100.00	9331(M)
24.596	24.596 (1.109)	120	352472	10.0	9.7	0.00- 76.11	25.41	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
24.687	24.687 (1.113)	105	671249	10.0	9.9		100.00	7955(M)
24.680	24.680 (1.113)	120	314188	10.0	10.0	0.00- 93.88	46.81	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
25.442	25.442 (1.147)	105	538762	10.0	9.8		100.00	8886
25.442	25.442 (0.000)	120	51321			0.00- 92.53	9.53	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
26.175	26.175 (1.180)	146	660635	10.0	9.5		100.00	
26.167	26.167 (1.180)	148	422142			13.90- 113.90	63.90	
26.167	26.167 (1.180)	111	308151			0.00- 96.64	46.64	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
26.350	26.350 (1.188)	146	655856	10.0	9.6		100.00	(H)
26.350	26.350 (1.188)	148	416047			13.44- 113.44	63.44	
26.343	26.343 (1.188)	111	292687			0.00- 94.63	44.63	
74 Benzyl Chloride					CAS #: 100-44-7			
26.595	26.595 (1.199)	91	1284507	10.0	9.8		100.00	9391
26.595	26.595 (0.000)	126	43440			0.00- 66.70	3.38	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
27.228	27.228 (1.228)	146	600206	10.0	9.6		100.00	9763
27.228	27.228 (0.000)	148	70847			11.02- 111.02	11.80	
27.228	27.228 (0.000)	111	55444			0.00- 97.75	9.24	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
31.607	31.607 (1.425)	180	223116	10.0	8.5		100.00	9749(Q)
31.607	31.607 (0.000)	182	33584			43.33- 143.33	15.05	
77 Hexachlorobutadiene					CAS #: 87-68-3			
32.049	32.049 (1.445)	225	251747	10.0	9.1		100.00	9575
32.049	32.049 (0.000)	223	25049			9.71- 109.71	9.95	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ta File: /chem/msdj.i/j-09jan.b/j010907.d
port Date: 09-Jan-1997 12:08

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

strument ID: msdj.i
b File ID: j010907.d
b Smp Id: VSTD010
alysis Type: VOA
ant Type: ISTD
erator: FA
thod File: /chem/msdj.i/j-09jan.b/TO140109.m
sc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD010
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	194531	1.26
43 1,4-Difluorobenzene	832855	499713	1165997	829384	-0.42
59 Chlorobenzene-d5	625059	375035	875083	656545	5.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.69	0.00
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.03	0.00
59 Chlorobenzene-d5	22.16	21.66	22.66	22.18	0.07

EA UPPER LIMIT = + 40% of internal standard area.
EA LOWER LIMIT = - 40% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

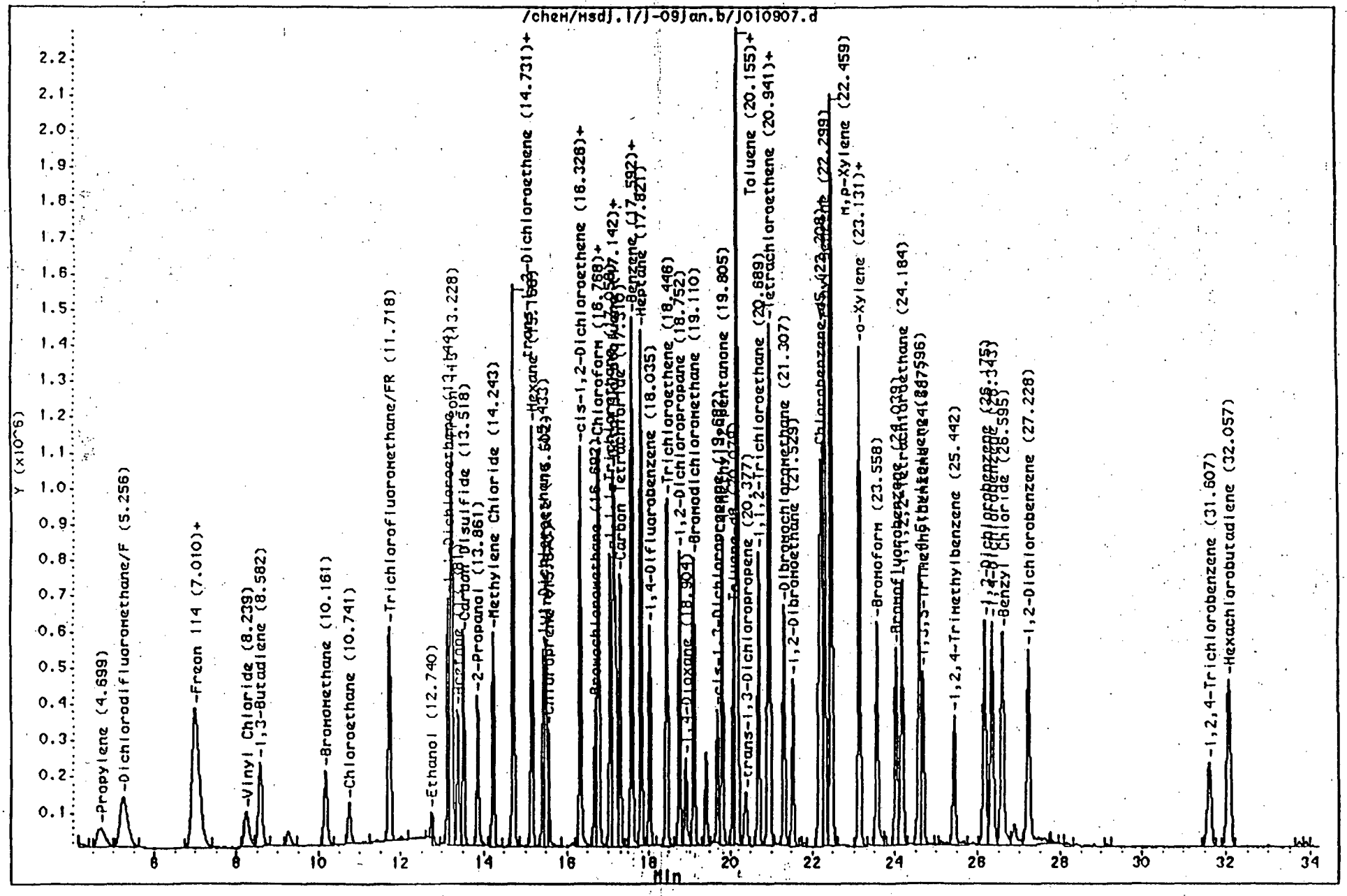
Data File: /chem/msdj.i/j-09jan.b/j010907.d
Date : 09-JAN-97 11:27
Client ID: VSTD010
Sample Info: 50.0ml #296-25 100ppbv (10.0ppbv)

Instrument: msdj.i

Operator: FA

Column phase: RTx-624

Column diameter: 0.58



:a File: /chem/msdj.i/j-09jan.b/j010908.d
port Date: 09-Jan-1997 14:18

Air Toxics Limited

AMBIENT AIR METHOD TO14

:a file : /chem/msdj.i/j-09jan.b/j010908.d
Smp Id: VSTD025 Client Smp ID: VSTD025
j Date : 09-JAN-1997 12:08
erator : FA Inst ID: msdj.i
Info : 125.0ml #296-25 100ppbv (25.0ppbv)
sc Info :
nment :
thod : /chem/msdj.i/j-09jan.b/to140109.m
th Date : 09-Jan-1997 14:18 fayala Quant Type: ISTD
l Date : 09-JAN-1997 12:08 Cal File: j010908.d
s bottle: 1 Calibration Sample, Level: 5
l Factor: 1.000
tegrator: HP RTE Compound Sublist: AT.sub
rget Version: 3.12 Sample Matrix: AIR
ncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
3 Bromochloromethane					CAS #: 74-97-5			
722	16.722 (1.000)	130	182238	5.0			100.00	9511(Q)
722	16.722 (0.000)	128	38656			25.11- 125.11	21.21	
722	16.722 (0.000)	49	96856			138.20- 238.20	53.15	
3 1,4-Difluorobenzene					CAS #: 540-36-3			
050	18.050 (1.000)	114	762215	5.0			100.00	9760
050	18.050 (0.000)	88	38576			0.00- 66.51	5.06	
9 Chlorobenzene-d5					CAS #: 3114-55-4			
170	22.170 (1.000)	117	613020	5.0			100.00	9350
170	22.170 (0.000)	82	91570			7.48- 107.48	14.94	
9 Octafluorotoluene					CAS #: 434-64-0			
211	17.211 (1.029)	217	440297	5.0	5.2		100.00	8770
211	17.211 (0.000)	186	88536			14.67- 114.67	20.11	
0 Toluene-d8					CAS #: 2037-26-5			
079	20.079 (1.112)	98	704821	5.0	5.1		100.00	9726
079	20.079 (0.000)	70	24609			0.00- 62.35	3.49	
079	20.079 (0.000)	100	133263			16.89- 116.89	18.91	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene					CAS #: 460-00-4			
24.039	24.039 (1.084)	95	473245	5.0	5.0		100.00	9686
24.039	24.039 (0.000)	174	67544			10.59- 110.59	14.27	
24.039	24.039 (0.000)	176	63448			6.91- 106.91	13.41	
1 Propylene					CAS #: 115-07-1			
7.384	7.384 (0.442)	41	979263	25.0	32.1		100.00	6803(M)
7.392	7.392 (0.442)	42	643311			15.19- 115.19	65.69	
7.384	7.384 (0.442)	39	672872			18.12- 118.12	68.71	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
7.705	7.705 (0.461)	85	3130681	25.0	27.6		100.00	0(M)
7.705	7.705 (0.461)	87	1020297			0.00- 83.23	32.59	
7 Freon 114					CAS #: 76-14-2			
8.704	8.704 (0.520)	135	2125504	25.0	25.9		100.00	0(M)
8.712	8.712 (0.521)	137	672576			0.00- 81.78	31.64	
8 Chloromethane					CAS #: 74-87-3			
8.841	8.841 (0.529)	50	1324485	25.0	27.7		100.00	5718(M)
8.834	8.834 (0.528)	52	406010			0.00- 83.32	30.65	
9 Vinyl Chloride					CAS #: 75-01-4			
9.520	9.520 (0.569)	62	1329600	25.0	26.2		100.00	2401(M)
9.520	9.520 (0.569)	64	413288			0.00- 82.12	31.08	
10 1,3-Butadiene					CAS #: 106-99-0			
9.734	9.734 (0.582)	54	1038221	25.0	27.0		100.00	1680(M)
9.742	9.742 (0.583)	39	1084508			52.88- 152.88	104.46	
11 Bromomethane					CAS #: 74-83-9			
10.909	10.909 (0.652)	94	1050581	25.0	25.0		100.00	3462(M)
10.916	10.916 (0.653)	96	993010			43.56- 143.56	94.52	
12 Chloroethane					CAS #: 75-00-3			
11.336	11.336 (0.678)	64	699484	25.0	23.9		100.00	4574(M)
11.336	11.336 (0.678)	66	218115			0.00- 82.26	31.18	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
12.122	12.122 (0.725)	101	2847720	25.0	25.4		100.00	9906(Q)
12.122	12.122 (0.000)	103	361152			15.80- 115.80	12.68	
15 Ethanol					CAS #: 64-17-5			
12.870	12.870 (0.770)	45	282656	25.0	18.9		100.00	(H)
12.870	12.870 (0.770)	46	121233			0.00- 92.89	42.89	
12.877	12.877 (0.770)	43	66313			0.00- 73.46	23.46	
17 1,1-Dichloroethene					CAS #: 75-35-4			
13.365	13.365 (0.799)	96	774956	25.0	19.8		100.00	6280(QH)

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
13.365	13.365 (0.000)	61	332314			119.48- 219.48	42.88	
13.365	13.365 (0.000)	98	126971			14.76- 114.76	16.38	
18 Freon 113					CAS #: 76-13-1			
13.396	13.396 (0.801)	151	1553260	25.0	25.4		100.00	9870(Q)
13.396	13.396 (0.000)	153	206912			15.75- 115.75	13.32	
13.396	13.396 (0.000)	101	383232			71.78- 171.78	24.67	
19 Carbon Disulfide					CAS #: 75-15-0			
13.762	13.762 (0.823)	76	3468988	25.0	25.2		100.00	8164
20 Acetone					CAS #: 67-64-1			
13.533	13.533 (0.809)	43	1161913	25.0	16.1		100.00	
13.533	13.533 (0.809)	58	315384			0.00- 77.14	27.14	
22 2-Propanol					CAS #: 67-63-0			
13.922	13.922 (0.833)	45	2456307	25.0	27.4		100.00	7496
13.922	13.922 (0.000)	43	109251			0.00- 67.90	4.45	
13.922	13.922 (0.000)	59	20920			0.00- 53.43	0.85	
23 Methylene Chloride					CAS #: 75-09-2			
14.350	14.350 (0.858)	84	1043363	25.0	25.0		100.00	9749(Q)
14.350	14.350 (0.000)	49	436416			96.55- 196.55	41.83	
14.350	14.350 (0.000)	51	135286			0.00- 95.43	12.97	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.815	14.815 (0.886)	96	1193282	25.0	25.7		100.00	9628(Q)
14.815	14.815 (0.000)	61	553408			102.72- 202.72	46.38	
14.815	14.815 (0.000)	98	226752			12.58- 112.58	19.00	
26 MTBE					CAS #: 1634-04-4			
14.807	14.807 (0.885)	73	3132204	25.0	25.6		100.00	6432
14.807	14.807 (0.000)	57	191552			0.00- 74.41	6.12	
14.807	14.807 (0.000)	41	197973			0.00- 75.22	6.32	
27 Hexane					CAS #: 110-54-3			
15.227	15.227 (0.911)	57	2152232	25.0	25.3		100.00	7287
15.227	15.227 (0.000)	43	438993			19.09- 119.09	20.40	
15.227	15.227 (0.000)	56	328570			1.71- 101.71	15.27	
28 1,1-Dichloroethane					CAS #: 75-34-3			
15.494	15.494 (0.927)	63	2208134	25.0	25.6		100.00	9527
15.494	15.494 (0.000)	65	190976			0.00- 81.16	8.65	
29 Chloroprene					CAS #: 126-99-8			
15.631	15.631 (0.935)	53	762852	25.0	25.9		100.00	7611
15.631	15.631 (0.000)	88	115369			3.15- 103.15	15.12	

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T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
9 Chloroprene (continued)								
631	15.631 (0.000)	50	52633			0.00- 74.25	6.90	
0 Vinyl Acetate					CAS #: 108-05-4			
547	15.547 (0.930)	43	3750938	25.0	27.0		100.00	5957
547	15.547 (0.000)	86	89940			0.00- 58.06	2.40	
1 cis-1,2-Dichloroethene					CAS #: 156-59-2			
371	16.371 (0.979)	96	1261689	25.0	25.6		100.00	9754(Q)
371	16.371 (0.000)	61	518336			90.65- 190.65	41.08	
371	16.371 (0.000)	98	235328			13.86- 113.86	18.65	
2 2-Butanone					CAS #: 78-93-3			
356	16.356 (0.978)	72	534047	25.0	26.6		100.00	7913(Q)
356	16.356 (0.000)	43	754119			449.07- 549.07	141.21	
356	16.356 (0.000)	57	48451			0.00- 82.06	9.07	
4 Chloroform					CAS #: 67-66-3			
806	16.806 (1.005)	83	2309788	25.0	25.5		100.00	9660
806	16.806 (0.000)	85	439808			14.36- 114.36	19.04	
5 Tetrahydrofuran					CAS #: 109-99-9			
799	16.799 (1.005)	42	1228018	25.0	25.7		100.00	7501
799	16.799 (0.000)	71	119344			0.00- 84.41	9.72	
799	16.799 (0.000)	72	132486			0.00- 88.20	10.79	
6 1,1,1-Trichlorethane					CAS #: 71-55-6			
096	17.096 (1.022)	97	2150766	25.0	25.3		100.00	9710
096	17.096 (0.000)	99	388032			14.13- 114.13	18.04	
7 Cyclohexane					CAS #: 110-82-7			
180	17.180 (1.027)	56	1990630	25.0	25.0		100.00	8278(Q)
180	17.180 (0.000)	84	413685			25.14- 125.14	20.78	
180	17.180 (0.000)	41	332918			10.47- 110.47	16.72	
8 Carbon Tetrachloride					CAS #: 56-23-5			
340	17.340 (1.037)	119	1771700	25.0	26.4		100.00	9489(Q)
340	17.340 (0.000)	117	476560			44.11- 144.11	26.90	
0 Benzene					CAS #: 71-43-2			
615	17.615 (0.976)	78	3717472	25.0	25.5		100.00	9809
615	17.615 (0.000)	77	262289			0.00- 74.19	7.06	
1 1,2-Dichloroethane					CAS #: 107-06-2			
615	17.615 (0.976)	62	1462842	25.0	25.7		100.00	8249
615	17.615 (0.000)	64	133824			0.00- 80.95	9.15	
2 Heptane					CAS #: 142-82-5			
829	17.829 (0.988)	43	2642976	25.0	26.3		100.00	7668

Data File: /chem/msdj.i/j-09jan.b/j010908.d
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.829	17.829 (0.000)	57	406516			0.00- 98.90	15.38	
17.829	17.829 (0.000)	71	409385			0.00- 99.25	15.49	
44 Trichloroethene					CAS #: 79-01-6			
18.454	18.454 (1.022)	95	1428786	25.0	25.7		100.00	7783(Q)
18.454	18.454 (0.000)	130	371712			37.30- 137.30	26.02	
18.454	18.454 (0.000)	97	277696			15.22- 115.22	19.44	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.767	18.767 (1.040)	63	1297182	25.0	25.8		100.00	9698(Q)
18.767	18.767 (0.000)	62	277955			23.89- 123.89	21.43	
18.767	18.767 (0.000)	41	223954			9.53- 109.53	17.26	
46 1,4-Dioxane					CAS #: 123-91-1			
18.958	18.958 (1.050)	88	726209	25.0	26.7		100.00	9775(Q)
18.958	18.958 (0.000)	58	107237			25.68- 125.68	14.77	
18.958	18.958 (0.000)	57	37210			0.00- 76.26	5.12	
47 Bromodichloromethane					CAS #: 75-27-4			
19.110	19.110 (1.059)	83	2329137	25.0	26.4		100.00	9379
19.110	19.110 (0.000)	85	421696			13.23- 113.23	18.11	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.690	19.690 (1.091)	75	943827	36.0	38.1		100.00	9669
19.690	19.690 (0.000)	77	84747			0.00- 81.01	8.98	
19.690	19.690 (0.000)	39	157389			7.59- 107.59	16.68	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.805	19.805 (1.097)	43	2839593	25.0	26.1		100.00	9632
19.805	19.805 (0.000)	58	286454			0.00- 85.65	10.09	
19.805	19.805 (0.000)	85	102076			0.00- 62.70	3.59	
51 Toluene					CAS #: 108-88-3			
20.171	20.171 (1.117)	92	2296632	25.0	26.1		100.00	9697(Q)
20.171	20.171 (0.000)	91	1154437			120.64- 220.64	50.27	
52 Octane					CAS #: 111-65-9			
20.155	20.155 (1.117)	57	1098040	25.0	26.6		100.00	8353(Q)
20.155	20.155 (0.000)	85	375675			55.20- 155.20	34.21	
20.155	20.155 (0.000)	43	989788			227.17- 327.17	90.14	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.407	20.407 (0.920)	75	243825	5.0	4.6		100.00	8412
20.407	20.407 (0.000)	77	19653			0.00- 79.54	8.06	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.697	20.697 (0.934)	97	1223037	25.0	25.7		100.00	9801(Q)

T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
4 1,1,2-Trichloroethane (continued)								
.697	20.697 (0.000)	99	206400			10.30- 110.30	16.88	
.697	20.697 (0.000)	83	297349			36.88- 136.88	24.31	
5 Tetrachloroethene					CAS #: 127-18-4			
.964	20.964 (0.946)	166	1382892	25.0	25.8		100.00	8935(Q)
.964	20.964 (0.000)	129	316928			29.90- 129.90	22.92	
.964	20.964 (0.000)	131	303296			26.46- 126.46	21.93	
6 2-Hexanone					CAS #: 591-78-6			
918	20.918 (0.944)	43	3040070	25.0	27.0		100.00	8575
918	20.918 (0.000)	58	429257			0.01- 100.01	14.12	
918	20.918 (0.000)	100	78992			0.00- 59.20	2.60	
7 Dibromochloromethane					CAS #: 124-48-1			
307	21.307 (0.961)	129	1723049	25.0	26.5		100.00	8310
307	21.307 (0.000)	208	19648			0.00- 54.28	1.14	
8 1,2-Dibromoethane					CAS #: 106-93-4			
.529	21.529 (0.971)	107	1622479	25.0	25.8		100.00	9737(Q)
.529	21.529 (0.000)	109	401024			45.05- 145.05	24.72	
0 Chlorobenzene					CAS #: 108-90-7			
.223	22.223 (1.002)	112	2736877	25.0	26.1		100.00	9788
.223	22.223 (0.000)	114	221504			0.00- 81.34	8.09	
.223	22.223 (0.000)	77	439739			12.21- 112.21	16.07	
1 Ethyl Benzene					CAS #: 100-41-4			
299	22.299 (1.006)	106	1763511	25.0	27.0		100.00	(H)
299	22.299 (1.006)	91	6057297			293.48- 393.48	343.48	
2 m,p-Xylene					CAS #: 108-38-3			
467	22.467 (1.013)	106	3453692	50.0	54.4		100.00	(MH)
459	22.459 (1.013)	91	7216317			158.95- 258.95	208.95	
3 o-Xylene					CAS #: 95-47-6			
.131	23.131 (1.043)	106	1076261	25.0	27.4		100.00	9610(Q)
.131	23.131 (0.000)	91	618139			174.86- 274.86	57.43	
4 Styrene					CAS #: 100-42-5			
.138	23.138 (1.044)	104	2322016	25.0	28.2		100.00	9828
138	23.138 (0.000)	78	285175			0.00- 98.00	12.28	
5 Bromoform					CAS #: 75-25-2			
558	23.558 (1.063)	171	854930	25.0	27.2		100.00	8454(Q)
558	23.558 (0.000)	173	382848			138.77- 238.77	44.78	
7 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
184	24.184 (1.091)	83	2442920	25.0	25.3		100.00	9714

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
24.184	24.184 (0.000)	85	353404			12.67- 112.67	14.47	
68 4-Ethyltoluene					CAS #: 622-96-8			
24.603	24.603 (1.110)	105	3749039	25.0	28.4		100.00	9351(M)
24.603	24.603 (1.110)	120	987376	25.0	29.1	0.00- 76.55	26.34	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
24.687	24.687 (1.114)	105	1860375	25.0	29.4		100.00	8123(QM)
24.687	24.687 (1.114)	120	799446	25.0	27.4	245.81- 345.81	42.97	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
25.450	25.450 (1.148)	105	1477726	25.0	28.7		100.00	8854
25.450	25.450 (0.000)	120	138301			0.00- 91.34	9.36	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
26.175	26.175 (1.181)	146	1828402	25.0	28.1		100.00	
26.175	26.175 (1.181)	148	1157841			13.33- 113.33	63.33	
26.175	26.175 (1.181)	111	830611			0.00- 95.43	45.43	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
26.350	26.350 (1.189)	146	1777182	25.0	28.0		100.00	(H)
26.350	26.350 (1.189)	148	1127631			13.45- 113.45	63.45	
26.350	26.350 (1.189)	111	787076			0.00- 94.29	44.29	
74 Benzyl Chloride					CAS #: 100-44-7			
26.595	26.595 (1.200)	91	3622570	25.0	29.6		100.00	9300
26.595	26.595 (0.000)	126	129472			0.00- 67.72	3.57	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
27.228	27.228 (1.228)	146	1631883	25.0	28.0		100.00	9767(Q)
27.228	27.228 (0.000)	148	200896			14.57- 114.57	12.31	
27.228	27.228 (0.000)	111	149669			0.00- 98.10	9.17	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
31.615	31.615 (1.426)	180	723811	25.0	29.4		100.00	9759(Q)
31.615	31.615 (0.000)	182	108864			44.99- 144.99	15.04	
77 Hexachlorobutadiene					CAS #: 87-68-3			
32.057	32.057 (1.446)	225	714173	25.0	27.5		100.00	9693(Q)
32.057	32.057 (0.000)	223	71027			11.50- 111.50	9.95	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ta File: /chem/msdj.i/j-09jan.b/j010908.d
port Date: 09-Jan-1997 12:42

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

strument ID: msdj.i
b File ID: j010908.d
b Smp Id: VSTD025
alysis Type: VOA
ant Type: ISTD
erator: FA
thod File: /chem/msdj.i/j-09jan.b/TO140109.m
sc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD025
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	182238	-5.14
43 1,4-Difluorobenzene	832855	499713	1165997	762215	-8.48
59 Chlorobenzene-d5	625059	375035	875083	613020	-1.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.72	0.19
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.05	0.09
59 Chlorobenzene-d5	22.16	21.66	22.66	22.17	0.04

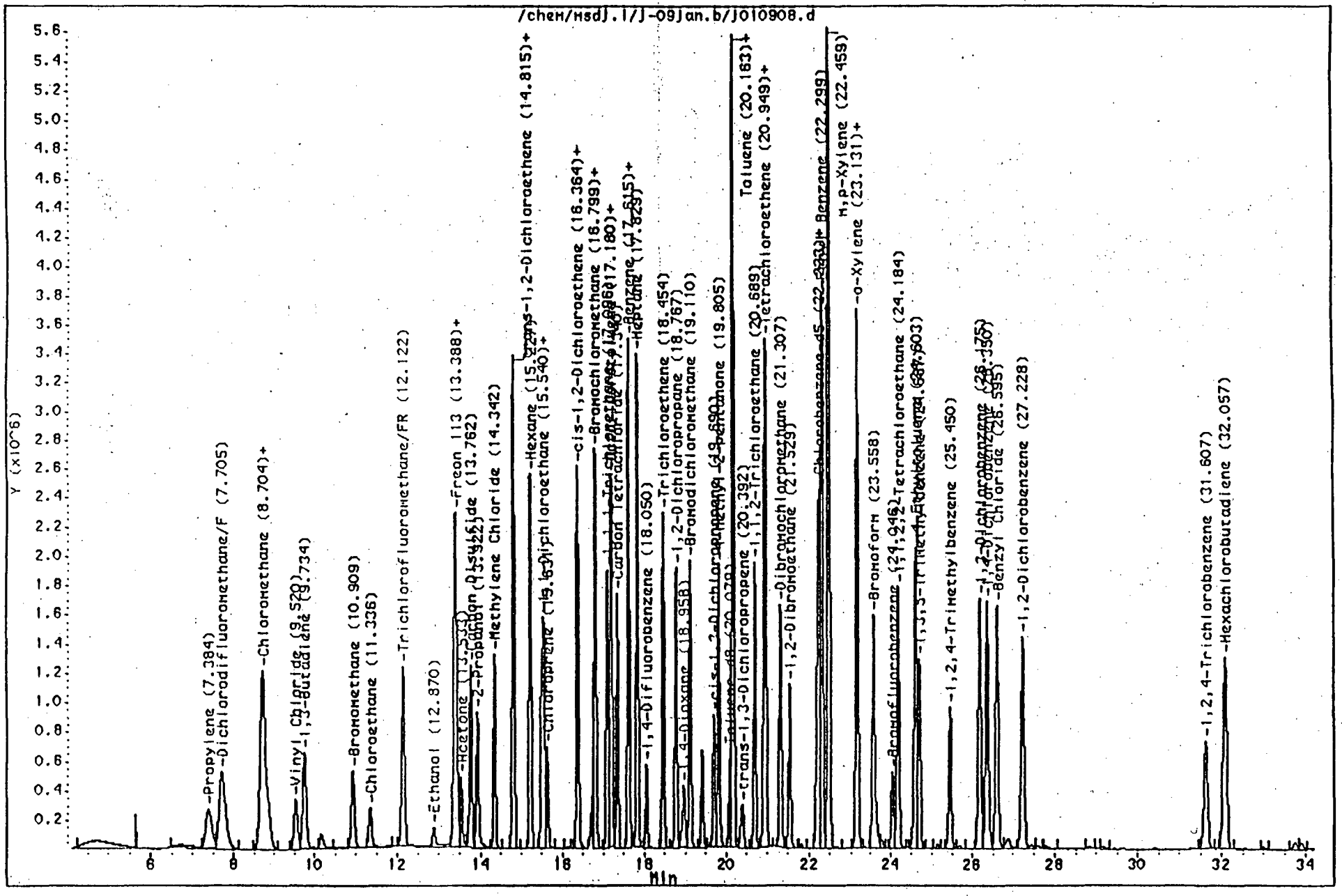
EA UPPER LIMIT = + 40% of internal standard area.
EA LOWER LIMIT = - 40% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-09jan.b/j010908.d
Date : 09-JAN-97 12:08
Client ID: VSTD025
Sample Info: 1250.0ml #296-25 100ppbv (25.0ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: FA
Column diameter: 0.58



ta File: /chem/msdj.i/j-09jan.b/j010909.d
port Date: 09-Jan-1997 14:21

Air Toxics Limited

AMBIENT AIR METHOD TO14

ta file : /chem/msdj.i/j-09jan.b/j010909.d
o Smp Id: VSTD050 Client Smp ID: VSTD050
j Date : 09-JAN-1997 12:48
erator : FA Inst ID: msdj.i
p Info : 250.0ml #296-25 100ppbv (50.0ppbv)
sc Info :
nment :
thod : /chem/msdj.i/j-09jan.b/to140109.m
th Date : 09-Jan-1997 14:19 fayala Quant Type: ISTD
l Date : 09-JAN-1997 12:48 Cal File: j010909.d
s bottle: 1 Calibration Sample, Level: 6
l Factor: 1.000
tegrator: HP RTE Compound Sublist: AT.sub
rget Version: 3.12 Sample Matrix: AIR
ncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

T.	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
3 Bromochloromethane					CAS #: 74-97-5			
730	16.730 (1.000)	130	178952	5.0			100.00	9569(Q)
730	16.730 (0.000)	128	40760			28.96- 128.96	22.78	
730	16.730 (0.000)	49	94160			132.40- 232.40	52.62	
3 1,4-Difluorobenzene					CAS #: 540-36-3			
050	18.050 (1.000)	114	733906	5.0			100.00	9778
050	18.050 (0.000)	88	39048			0.00- 67.60	5.32	
9 Chlorobenzene-d5					CAS #: 3114-55-4			
177	22.177 (1.000)	117	614884	5.0			100.00	7200
177	22.177 (0.000)	82	94596			11.03- 111.03	15.38	
9 Octafluorotoluene					CAS #: 434-64-0			
211	17.211 (1.029)	217	452389	5.0	5.4		100.00	7856
211	17.211 (0.000)	186	90416			15.56- 115.56	19.99	
0 Toluene-d8					CAS #: 2037-26-5			
079	20.079 (1.112)	98	680769	5.0	5.1		100.00	9856
079	20.079 (0.000)	70	21580			0.00- 61.21	3.17	
079	20.079 (0.000)	100	125027			14.97- 114.97	18.37	

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene					CAS #: 460-00-4			
24.047	24.047 (1.084)	95	465684	5.0	4.9		100.00	9785
24.047	24.047 (0.000)	174	69062			14.31- 114.31	14.83	
24.047	24.047 (0.000)	176	65832			11.30- 111.30	14.14	
1 Propylene					CAS #: 115-07-1			
7.667	7.667 (0.458)	41	1736727	50.0	57.9		100.00	7686(AQ)
7.667	7.667 (0.000)	42	110114			14.09- 114.09	6.34	
7.667	7.667 (0.000)	39	117041			18.12- 118.12	6.74	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
7.949	7.949 (0.475)	85	5790517	50.0	51.9		100.00	9503
7.949	7.949 (0.000)	87	189952			0.00- 82.25	3.28	
7 Freon 114					CAS #: 76-14-2			
8.849	8.849 (0.529)	135	4061565	50.0	50.4		100.00	9792
8.849	8.849 (0.000)	137	150016			0.00- 81.00	3.69	
8 Chloromethane					CAS #: 74-87-3			
8.994	8.994 (0.538)	50	2442063	50.0	52.0		100.00	9655
8.994	8.994 (0.000)	52	97187			0.00- 89.97	3.98	
9 Vinyl Chloride					CAS #: 75-01-4			
9.635	9.635 (0.576)	62	2491144	50.0	50.1		100.00	9647
9.635	9.635 (0.000)	64	127312			0.00- 82.04	5.11	
10 1,3-Butadiene					CAS #: 106-99-0			
9.849	9.849 (0.589)	54	1905093	50.0	50.4		100.00	9736(Q)
9.849	9.849 (0.000)	39	329019			50.51- 150.51	17.27	
11 Bromomethane					CAS #: 74-83-9			
10.985	10.985 (0.657)	94	2223659	50.0	53.8		100.00	9576(Q)
10.985	10.985 (0.000)	96	403904			44.51- 144.51	18.16	
12 Chloroethane					CAS #: 75-00-3			
11.382	11.382 (0.680)	64	1345581	50.0	46.9		100.00	9675
11.382	11.382 (0.000)	66	81693			0.00- 81.19	6.07	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
12.168	12.168 (0.727)	101	5505499	50.0	50.0		100.00	9888(Q)
12.168	12.168 (0.000)	103	710783			15.55- 115.55	12.91	
15 Ethanol					CAS #: 64-17-5			
12.885	12.885 (0.770)	45	581024	50.0	39.6		100.00	
12.893	12.893 (0.771)	46	231436			0.00- 89.83	39.83	
12.893	12.893 (0.771)	43	137187			0.00- 73.61	23.61	
17 1,1-Dichloroethene					CAS #: 75-35-4			
13.389	13.389 (0.800)	96	1485052	50.0	38.7		100.00	6330(Q)

T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
7 1,1-Dichloroethene (continued)								
389	13.389 (0.000)	61	641768			119.93- 219.93	43.22	
389	13.389 (0.000)	98	247808			15.62- 115.62	16.69	
8 Freon 113					CAS #: 76-13-1			
427	13.427 (0.803)	151	2992908	50.0	50.0		100.00	9883(Q)
427	13.427 (0.000)	153	411904			16.40- 116.40	13.76	
427	13.427 (0.000)	101	742603			69.71- 169.71	24.81	
9 Carbon Disulfide					CAS #: 75-15-0			
793	13.793 (0.824)	76	6732230	50.0	49.8		100.00	8154
0 Acetone					CAS #: 67-64-1			
556	13.556 (0.810)	43	3232939	50.0	45.6		100.00	
556	13.556 (0.810)	58	1019775			0.00- 81.54	31.54	
2 2-Propanol					CAS #: 67-63-0			
938	13.938 (0.833)	45	4749237	50.0	53.9		100.00	7370
938	13.938 (0.000)	43	217285			0.00- 67.16	4.58	
938	13.938 (0.000)	59	44712			0.00- 53.53	0.94	
3 Methylene Chloride					CAS #: 75-09-2			
365	14.365 (0.859)	84	1998488	50.0	48.7		100.00	9744(Q)
365	14.365 (0.000)	49	855744			98.40- 198.40	42.82	
365	14.365 (0.000)	51	264727			0.00- 95.91	13.25	
4 trans-1,2-Dichloroethene					CAS #: 156-60-5			
330	14.830 (0.886)	96	2330112	50.0	51.0		100.00	9592(Q)
330	14.830 (0.000)	61	1110016			102.43- 202.43	47.64	
330	14.830 (0.000)	98	457792			12.87- 112.87	19.65	
5 MTBE					CAS #: 1634-04-4			
323	14.823 (0.886)	73	6159874	50.0	51.3		100.00	6400
323	14.823 (0.000)	57	382656			0.00- 74.33	6.21	
323	14.823 (0.000)	41	374920			0.00- 73.83	6.09	
7 Hexane					CAS #: 110-54-3			
235	15.235 (0.911)	57	4170251	50.0	50.0		100.00	7287
235	15.235 (0.000)	43	870435			19.23- 119.23	20.87	
235	15.235 (0.000)	56	660100			2.50- 102.50	15.83	
8 1,1-Dichloroethane					CAS #: 75-34-3			
509	15.509 (0.927)	63	4190073	50.0	49.5		100.00	9043
509	15.509 (0.000)	65	378866			0.00- 81.56	9.04	
9 Chloroprene					CAS #: 126-99-8			
539	15.639 (0.935)	53	1472418	50.0	50.9		100.00	7667
539	15.639 (0.000)	88	221581			1.47- 101.47	15.05	

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
15.639	15.639 (0.000)	50	108321			0.00- 75.16	7.36	
30 Vinyl Acetate					CAS #: 108-05-4			
15.555	15.555 (0.930)	43	7473687	50.0	54.8		100.00	5928
15.555	15.555 (0.000)	86	182242			0.00- 57.92	2.44	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.372	16.372 (0.979)	96	2477142	50.0	51.2		100.00	9681(Q)
16.372	16.372 (0.000)	61	1024192			87.23- 187.23	41.35	
16.372	16.372 (0.000)	98	458368			11.42- 111.42	18.50	
32 2-Butanone					CAS #: 78-93-3			
16.356	16.356 (0.978)	72	1055539	50.0	53.4		100.00	7908(Q)
16.356	16.356 (0.000)	43	1511495			429.93- 529.93	143.20	
16.356	16.356 (0.000)	57	102023			0.00- 82.39	9.67	
34 Chloroform					CAS #: 67-66-3			
16.806	16.806 (1.005)	83	4500190	50.0	50.5		100.00	9616
16.806	16.806 (0.000)	85	875200			14.83- 114.83	19.45	
35 Tetrahydrofuran					CAS #: 109-99-9			
16.799	16.799 (1.004)	42	2405545	50.0	51.3		100.00	7504
16.799	16.799 (0.000)	71	241958			0.00- 85.98	10.06	
16.799	16.799 (0.000)	72	261748			0.00- 88.92	10.88	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.096	17.096 (1.022)	97	4196466	50.0	50.3		100.00	9686
17.096	17.096 (0.000)	99	756288			13.21- 113.21	18.02	
37 Cyclohexane					CAS #: 110-82-7			
17.180	17.180 (1.027)	56	3841835	50.0	49.2		100.00	8272(Q)
17.180	17.180 (0.000)	84	788710			23.18- 123.18	20.53	
17.180	17.180 (0.000)	41	641134			9.49- 109.49	16.69	
38 Carbon Tetrachloride					CAS #: 56-23-5			
17.340	17.340 (1.036)	119	3578246	50.0	54.2		100.00	9392(Q)
17.340	17.340 (0.000)	117	1033272			50.73- 150.73	28.88	
40 Benzene					CAS #: 71-43-2			
17.615	17.615 (0.976)	78	7324878	50.0	52.1		100.00	9839
17.615	17.615 (0.000)	77	516399			0.00- 73.77	7.05	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.615	17.615 (0.976)	62	2868937	50.0	52.3		100.00	8224
17.615	17.615 (0.000)	64	271484			0.00- 82.15	9.46	
42 Heptane					CAS #: 142-82-5			
17.829	17.829 (0.988)	43	5134373	50.0	53.0		100.00	7655

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
.829	17.829 (0.000)	57	801284			0.00- 98.73	15.61	
.829	17.829 (0.000)	71	817856			0.00- 99.74	15.93	
44 Trichloroethene					CAS #: 79-01-6			
.454	18.454 (1.022)	95	2840362	50.0	53.0		100.00	7785(Q)
.454	18.454 (0.000)	130	741440			37.45- 137.45	26.10	
.454	18.454 (0.000)	97	547904			14.62- 114.62	19.29	
45 1,2-Dichloropropane					CAS #: 78-87-5			
.767	18.767 (1.040)	63	2517696	50.0	52.0		100.00	9708(Q)
.767	18.767 (0.000)	62	548396			25.27- 125.27	21.78	
.767	18.767 (0.000)	41	449275			11.67- 111.67	17.84	
46 1,4-Dioxane					CAS #: 123-91-1			
.920	18.920 (1.048)	88	1461387	50.0	55.8		100.00	9858(AQ)
.920	18.920 (0.000)	58	223968			24.84- 124.84	15.33	
.920	18.920 (0.000)	57	71566			0.00- 73.91	4.90	
47 Bromodichloromethane					CAS #: 75-27-4			
.110	19.110 (1.059)	83	4565385	50.0	53.7		100.00	9366
.110	19.110 (0.000)	85	824145			12.86- 112.86	18.05	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
.690	19.690 (1.091)	75	1859281	72.0	77.9		100.00	9626(A)
.690	19.690 (0.000)	77	173332			0.00- 81.81	9.32	
.690	19.690 (0.000)	39	311599			7.19- 107.19	16.76	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
.812	19.812 (1.098)	43	5506136	50.0	52.6		100.00	9510
.812	19.812 (0.000)	58	587107			0.00- 86.07	10.66	
.812	19.812 (0.000)	85	201239			0.00- 62.36	3.65	
51 Toluene					CAS #: 108-88-3			
.179	20.179 (1.118)	92	4680118	50.0	55.3		100.00	9841(AQ)
.179	20.179 (0.000)	91	2398449			119.81- 219.81	51.25	
52 Octane					CAS #: 111-65-9			
.156	20.156 (1.117)	57	2293983	50.0	57.7		100.00	8394(AQ)
.156	20.156 (0.000)	85	799539			55.06- 155.06	34.85	
.156	20.156 (0.000)	43	2093293			225.06- 325.06	91.25	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
.407	20.407 (0.920)	75	470830	10.0	8.9		100.00	8420
.407	20.407 (0.000)	77	40884			0.00- 81.39	8.68	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
.697	20.697 (0.933)	97	2393999	50.0	50.1		100.00	9777(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
54 1,1,2-Trichloroethane (continued)								
20.697	20.697 (0.000)	99	427328			12.62- 112.62	17.85	
20.697	20.697 (0.000)	83	593421			36.96- 136.96	24.79	
55 Tetrachloroethene					CAS #: 127-18-4			
20.964	20.964 (0.945)	166	2898508	50.0	53.8		100.00	9113(Q)
20.964	20.964 (0.000)	129	676928			27.81- 127.81	23.35	
20.964	20.964 (0.000)	131	653304			25.09- 125.09	22.54	
56 2-Hexanone					CAS #: 591-78-6			
20.926	20.926 (0.944)	43	6043587	50.0	53.5		100.00	8587
20.926	20.926 (0.000)	58	905243			0.23- 100.23	14.98	
20.926	20.926 (0.000)	100	165777			0.00- 59.20	2.74	
57 Dibromochloromethane					CAS #: 124-48-1			
21.315	21.315 (0.961)	129	3471869	50.0	53.2		100.00	8383
21.315	21.315 (0.000)	208	42200			0.00- 54.50	1.22	
58 1,2-Dibromoethane					CAS #: 106-93-4			
21.537	21.537 (0.971)	107	3220692	50.0	51.1		100.00	9715(Q)
21.537	21.537 (0.000)	109	811328			44.77- 144.77	25.19	
60 Chlorobenzene					CAS #: 108-90-7			
22.223	22.223 (1.002)	112	5538471	50.0	52.7		100.00	9732
22.223	22.223 (0.000)	114	454016			0.00- 81.49	8.20	
22.223	22.223 (0.000)	77	894267			12.02- 112.02	16.15	
61 Ethyl Benzene					CAS #: 100-41-4			
22.307	22.307 (1.006)	106	3615296	50.0	55.3		100.00	(AH)
22.307	22.307 (1.006)	91	12466061			294.81- 394.81	344.81	
62 m,p-Xylene					CAS #: 108-38-3			
22.467	22.467 (1.013)	106	7426675	100	117		100.00	(AMH)
22.467	22.467 (1.013)	91	15592489			159.95- 259.95	209.95	
63 o-Xylene					CAS #: 95-47-6			
23.131	23.131 (1.043)	106	2164951	50.0	55.0		100.00	9648(Q)
23.131	23.131 (0.000)	91	1273533			172.76- 272.76	58.83	
64 Styrene					CAS #: 100-42-5			
23.139	23.139 (1.043)	104	4732013	50.0	57.3		100.00	9848(A)
23.139	23.139 (0.000)	78	611411			0.00- 99.15	12.92	
65 Bromoform					CAS #: 75-25-2			
23.566	23.566 (1.063)	171	1780432	50.0	56.5		100.00	8671(AQ)
23.566	23.566 (0.000)	173	834752			140.99- 240.99	46.88	
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
24.184	24.184 (1.090)	83	4761453	50.0	49.1		100.00	9854

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
.184	24.184 (0.000)	85	711269			14.86- 114.86	14.94	
68 4-Ethyltoluene					CAS #: 622-96-8			
.603	24.603 (1.109)	105	7219379	50.0	54.5		100.00	9317(M)
.603	24.603 (1.109)	120	1852134	50.0	54.4	0.00- 75.68	25.66	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
.687	24.687 (1.113)	105	3468244	50.0	54.6		100.00	8878(QM)
.687	24.687 (1.113)	120	1601173	50.0	54.7	151.38- 251.38	46.17	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
.450	25.450 (1.148)	105	2848745	50.0	55.2		100.00	8855(A)
.450	25.450 (0.000)	120	273320			0.00- 91.92	9.59	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
.183	26.183 (1.181)	146	3646376	50.0	55.8		100.00	(A)
.183	26.183 (1.181)	148	2319944			13.62- 113.62	63.62	
.183	26.183 (1.181)	111	1641694			0.00- 95.02	45.02	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
.358	26.358 (1.189)	146	3547527	50.0	55.7		100.00	(A)
.358	26.358 (1.189)	148	2261358			13.74- 113.74	63.74	
.358	26.358 (1.189)	111	1541648			0.00- 93.46	43.46	
74 Benzyl Chloride					CAS #: 100-44-7			
.602	26.602 (1.200)	91	7064075	50.0	57.5		100.00	9318(A)
.602	26.602 (0.000)	126	248896			0.00- 67.08	3.52	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
.236	27.236 (1.228)	146	3170440	50.0	54.3		100.00	9825(Q)
.236	27.236 (0.000)	148	396619			13.87- 113.87	12.51	
.236	27.236 (0.000)	111	287881			0.00- 96.36	9.08	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
.622	31.622 (1.426)	180	1509428	50.0	61.1		100.00	9804(AQ)
.622	31.622 (0.000)	182	225280			43.82- 143.82	14.92	
77 Hexachlorobutadiene					CAS #: 87-68-3			
.065	32.065 (1.446)	225	1426605	50.0	54.8		100.00	9721(Q)
.065	32.065 (0.000)	223	152102			13.56- 113.56	10.66	

: Flag Legend

- Target compound detected but, quantitated amount exceeded maximum amount.
- Qualifier signal failed the ratio test.

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ıta File: /chem/msdj.i/j-09jan.b/j010909.d
ɜport Date: 09-Jan-1997 13:20

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: msdj.i
ıb File ID: j010909.d
ıb Smp Id: VSTD050
ıalysis Type: VOA
ıant Type: ISTD
ɔerator: FA
ɜthod File: /chem/msdj.i/j-09jan.b/TO140109.m
isc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD050
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	178952	-6.85
43 1,4-Difluorobenzene	832855	499713	1165997	733906	-11.88
59 Chlorobenzene-d5	625059	375035	875083	614884	-1.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.73	0.23
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.05	0.09
59 Chlorobenzene-d5	22.16	21.66	22.66	22.18	0.07

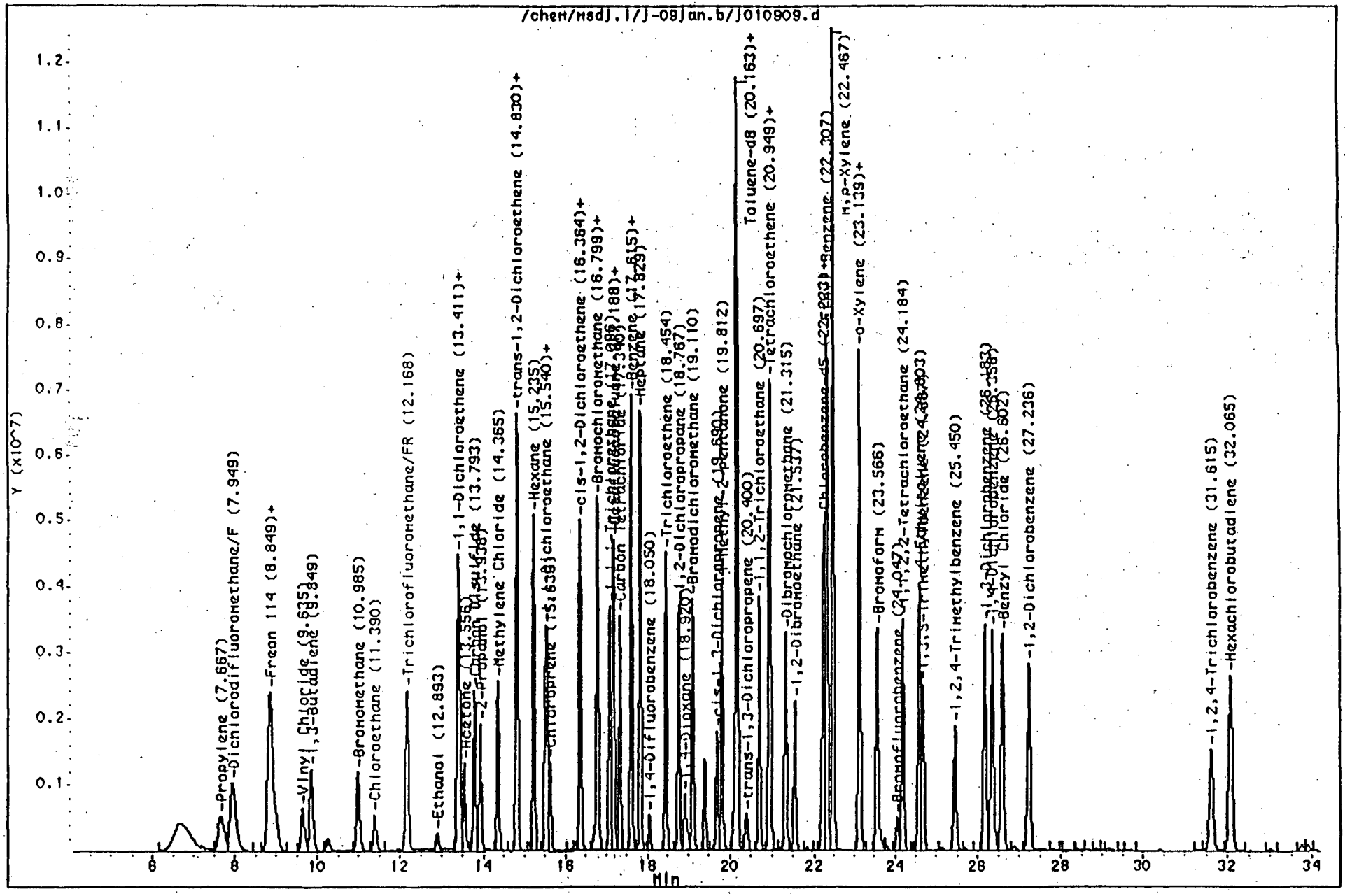
ɜEA UPPER LIMIT = + 40% of internal standard area.
ɜEA LOWER LIMIT = - 40% of internal standard area.
? UPPER LIMIT = + 0.50 minutes of internal standard RT.
? LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.1/j-09jan.b/j010909.d
Date : 09-JAN-97 12:48
Client ID: VSTD050
Sample Info: 250.0ml #296-25 100ppbv (50.0ppbv)

Column phase: RTx-624

Instrument: msdj.1

Operator: FA
Column diameter: 0.58



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ata File: /chem/msdj.i/j-29jan.b/j012902.d
eport Date: 29-Jan-1997 09:06

0216

Air Toxics Limited

CONTINUING CALIBRATION COMPOUNDS

nstrument ID: msdj.i
ab File ID: j012902.d
nalysis Type: AIR
ab Sample ID:
ethod File: /chem/msdj.i/j-29jan.b/to140109.m

Injection Date: 29-JAN-1997 08:34
Init. Calibration Date(s): JAN/09/97 JAN/09/97
Init. Calibration Times: 10:44 12:48
Quant Type: ISTD

COMPOUND	RRF	RF5	MIN RRF	%D	MAX %D
$ 39 Octafluorotoluene	2.317	2.168	0.010	6.4	30.0
$ 50 Toluene-d8	0.905	0.895	0.010	1.1	30.0
$ 66 Bromofluorobenzene	0.774	0.730	0.010	5.7	30.0
1 Propylene	0.838	0.508	0.010	39.3	40.0
6 Dichlorodifluoromethane/FR 1	3.117	2.708	0.010	13.1	30.0
7 Freon 114	2.249	2.051	0.010	8.8	30.0
8 Chloromethane	1.311	1.342	0.010	2.4	30.0
9 Vinyl Chloride	1.390	1.273	0.010	8.4	30.0
10 1,3-Butadiene	1.056	0.965	0.010	8.6	40.0
11 Bromomethane	1.155	1.138	0.010	1.5	30.0
12 Chloroethane	0.802	0.779	0.010	2.8	30.0
14 Trichlorofluoromethane/FR 11	3.074	3.062	0.010	0.4	30.0
15 Ethanol	0.410	0.292	0.010	28.7	40.0
17 1,1-Dichloroethene	1.073	1.283	0.010	19.6	30.0
18 Freon 113	1.674	1.727	0.010	3.1	30.0
19 Carbon Disulfide	3.780	4.067	0.010	7.6	40.0
20 Acetone	1.980	2.578	0.010	30.2	40.0
22 2-Propanol	2.463	2.763	0.010	12.2	40.0
23 Methylene Chloride	1.147	1.300	0.010	13.3	30.0
24 trans-1,2-Dichloroethene	1.275	1.373	0.010	7.7	40.0
26 MTBE	3.352	3.548	0.010	5.8	40.0
27 Hexane	2.331	2.580	0.010	10.7	40.0
28 1,1-Dichloroethane	2.364	2.556	0.010	8.1	30.0
29 Chloroprene	0.807	0.862	0.010	6.8	40.0
30 Vinyl Acetate	3.808	4.157	0.010	9.2	40.0
31 cis-1,2-Dichloroethene	1.350	1.492	0.010	10.5	30.0
32 2-Butanone	0.552	0.684	0.010	24.1	40.0
34 Chloroform	2.489	2.718	0.010	9.2	30.0
35 Tetrahydrofuran	1.311	1.425	0.010	8.7	40.0
36 1,1,1-Trichlorethane	2.330	2.450	0.010	5.1	30.0
37 Cyclohexane	2.181	2.435	0.010	11.7	40.0
38 Carbon Tetrachloride	1.844	1.948	0.010	5.6	30.0
40 Benzene	0.957	1.036	0.010	8.3	30.0
41 1,2-Dichloroethane	0.374	0.386	0.010	3.2	30.0
42 Heptane	0.659	0.741	0.010	12.3	40.0
44 Trichloroethene	0.365	0.385	0.010	5.5	30.0
45 1,2-Dichloropropane	0.330	0.358	0.010	8.8	30.0
46 1,4-Dioxane	0.179	0.197	0.010	10.4	40.0
47 Bromodichloromethane	0.579	0.626	0.010	8.1	40.0

Data File: /chem/msdj.i/j-29jan.b/j012902.d
Report Date: 29-Jan-1997 09:06

Air Toxics Limited

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdj.i
Lab File ID: j012902.d
Analysis Type: AIR
Lab Sample ID:
Method File: /chem/msdj.i/j-29jan.b/to140109.m

Injection Date: 29-JAN-1997 08:34
Init. Calibration Date(s): JAN/09/97 JAN/09/97
Init. Calibration Times: 10:44 12:48
Quant Type: ISTD

COMPOUND	$\overline{RRF}$	RF5	MIN RRF	%D	MAX %D
48 cis-1,3-Dichloropropene	0.163	0.178	0.010	9.5	30.0
49 4-Methyl-2-pentanone	0.713	0.777	0.010	9.1	40.0
51 Toluene	0.577	0.678	0.010	17.6	30.0
52 Octane	0.271	0.289	0.010	6.8	40.0
53 trans-1,3-Dichloropropene	0.428	0.483	0.010	12.9	30.0
54 1,1,2-Trichloroethane	0.388	0.430	0.010	10.7	30.0
55 Tetrachloroethene	0.438	0.472	0.010	7.9	30.0
56 2-Hexanone	0.918	1.014	0.010	10.4	40.0
57 Dibromochloromethane	0.530	0.584	0.010	10.1	40.0
58 1,2-Dibromoethane	0.513	0.574	0.010	12.0	30.0
60 Chlorobenzene	0.854	0.944	0.010	10.6	30.0
61 Ethyl Benzene	0.532	0.579	0.010	9.0	30.0
62 m,p-Xylene	0.518	0.558	0.010	7.8	30.0
63 o-Xylene	0.320	0.351	0.010	9.5	30.0
64 Styrene	0.671	0.731	0.010	9.0	30.0
65 Bromoform	0.256	0.281	0.010	9.5	40.0
67 1,1,2,2-Tetrachloroethane	0.789	0.876	0.010	11.1	30.0
68 4-Ethyltoluene	1.077	1.205	0.010	11.9	40.0
	0.277	0.313	0.010	13.2	40.0
69 1,3,5-Trimethylbenzene	0.516	0.560	0.010	8.5	30.0
	0.238	0.269	0.010	12.8	30.0
71 1,2,4-Trimethylbenzene	0.420	0.448	0.010	6.8	30.0
72 1,3-Dichlorobenzene	0.531	0.545	0.010	2.7	30.0
73 1,4-Dichlorobenzene	0.518	0.543	0.010	4.8	30.0
74 Benzyl Chloride	1.000	0.961	0.010	3.8	30.0
75 1,2-Dichlorobenzene	0.475	0.483	0.010	1.6	30.0
76 1,2,4-Trichlorobenzene	0.201	0.154	0.010	23.4	30.0
77 Hexachlorobutadiene	0.212	0.190	0.010	10.3	30.0

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Air Toxics Limited

AMBIENT AIR METHOD TO14

ata file : /chem/msdj.i/j-29jan.b/j012902.d
ab Smp Id: Client Smp ID: Method Spike
nj Date : 29-JAN-1997 08:34
perator : MH Inst ID: msdj.i
mp Info : 25mL #296-25 TO14 Std. 100ppbv
isc Info :
omment :
ethod : /chem/msdj.i/j-29jan.b/to140109.m
eth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
al Date : 09-JAN-1997 12:48 Cal File: j010909.d
ls bottle: 1 Continuing Calibration Sample
il Factor: 1.000
ntegrator: HP RTE Compound Sublist: AT.sub
arget Version: 3.12 Sample Matrix: AIR
oncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
33 Bromochloromethane					CAS #: 74-97-5			
6.703	16.724 (1.000)	130	203762	5.0			100.00	9316(Q)
6.703	16.724 (0.000)	128	44936			23.09- 123.09	22.05	
6.703	16.724 (0.000)	49	106408			123.08- 223.08	52.22	
43 1,4-Difluorobenzene					CAS #: 540-36-3			
8.046	18.067 (1.000)	114	881244	5.0			100.00	9474
8.046	18.067 (0.000)	88	47416			0.00- 67.67	5.38	
59 Chlorobenzene-d5					CAS #: 3114-55-4			
2.181	22.209 (1.000)	117	706651	5.0			100.00	9919
2.181	22.209 (0.000)	82	109504			11.09- 111.09	15.50	
39 Octafluorotoluene					CAS #: 434-64-0			
7.214	17.235 (1.031)	217	441832	5.0	4.7		100.00	7977
7.214	17.235 (0.000)	186	89264			14.13- 114.13	20.20	
50 Toluene-d8					CAS #: 2037-26-5			
0.083	20.111 (1.113)	98	788659	5.0	4.9		100.00	9962
0.083	20.111 (0.000)	70	27584			0.00- 62.02	3.50	
0.083	20.111 (0.000)	100	146752			13.96- 113.96	18.61	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene					CAS #: 460-00-4			
24.050	24.086 (1.084)	95	515859	5.0	4.7		100.00	8189
24.050	24.086 (0.000)	174	75768			13.48- 113.48	14.69	
24.050	24.086 (0.000)	176	69584			7.57- 107.57	13.49	
1 Propylene					CAS #: 115-07-1			
4.786	4.754 (0.287)	41	103561	5.0	3.0		100.00	7459(QM)
4.748	4.754 (0.284)	42	2664			14.10- 114.10	2.57	
4.748	4.754 (0.284)	39	3518			20.85- 120.85	3.40	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
5.351	5.311 (0.320)	85	551740	5.0	4.3		100.00	0(M)
5.311	5.311 (0.318)	87	0			0.00- 50.00	0.00	
7 Freon 114					CAS #: 76-14-2			
7.090	7.035 (0.424)	135	417877	5.0	4.6		100.00	9047
7.090	7.035 (0.000)	137	9494			0.00- 80.98	2.27	
8 Chloromethane					CAS #: 74-87-3			
7.189	7.165 (0.430)	50	273413	5.0	5.1		100.00	6163
7.189	7.165 (0.000)	52	4461			0.00- 79.23	1.63	
9 Vinyl Chloride					CAS #: 75-01-4			
8.303	8.263 (0.497)	62	259336	5.0	4.6		100.00	4486
8.303	8.263 (0.000)	64	7354			0.00- 80.10	2.84	
10 1,3-Butadiene					CAS #: 106-99-0			
8.631	8.622 (0.517)	54	196661	5.0	4.6		100.00	6554(Q)
8.631	8.622 (0.000)	39	24351			56.78- 156.78	12.38	
11 Bromomethane					CAS #: 74-83-9			
10.195	10.178 (0.610)	94	231780	5.0	4.9		100.00	6618(Q)
10.195	10.178 (0.000)	96	29064			39.92- 139.92	12.54	
12 Chloroethane					CAS #: 75-00-3			
10.783	10.781 (0.646)	64	158832	5.0	4.9		100.00	4019
10.783	10.781 (0.000)	66	7949			0.00- 81.34	5.00	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
11.752	11.750 (0.704)	101	623990	5.0	5.0		100.00	9029(Q)
11.752	11.750 (0.000)	103	79200			14.58- 114.58	12.69	
15 Ethanol					CAS #: 64-17-5			
12.774	12.765 (0.765)	45	59546	5.0	3.6		100.00	
12.774	12.765 (0.765)	46	26095			0.00- 91.33	43.82	
12.759	12.765 (0.764)	43	21711			0.00- 76.37	36.46	
17 1,1-Dichloroethene					CAS #: 75-35-4			
13.163	13.169 (0.788)	96	261487	5.0	6.0		100.00	8954(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
3.163	13.169 (0.000)	61	112606			125.93- 225.93	43.06	
3.163	13.169 (0.000)	98	41192			14.09- 114.09	15.75	
18 Freon 113					CAS #: 76-13-1			
3.247	13.253 (0.793)	151	351806	5.0	5.2		100.00	8345(Q)
3.247	13.253 (0.000)	153	54488			18.25- 118.25	15.49	
3.247	13.253 (0.000)	101	131342			114.51- 214.51	37.33	
19 Carbon Disulfide					CAS #: 75-15-0			
3.537	13.550 (0.810)	76	828694	5.0	5.4		100.00	8087
20 Acetone					CAS #: 67-64-1			
3.400	13.413 (0.802)	43	525245	5.0	6.5		100.00	
3.407	13.413 (0.803)	58	165434			0.00- 79.57	31.50	
22 2-Propanol					CAS #: 67-63-0			
3.888	13.894 (0.831)	45	563042	5.0	5.6		100.00	7535
3.888	13.894 (0.000)	43	25990			0.00- 68.22	4.62	
3.888	13.894 (0.000)	59	5403			0.00- 53.58	0.96	
23 Methylene Chloride					CAS #: 75-09-2			
4.254	14.267 (0.853)	84	264849	5.0	5.7		100.00	9463(Q)
4.254	14.267 (0.000)	49	108592			90.13- 190.13	41.00	
4.254	14.267 (0.000)	51	32848			0.00- 96.86	12.40	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
4.742	14.756 (0.883)	96	279810	5.0	5.4		100.00	8258(Q)
4.742	14.756 (0.000)	61	130440			101.65- 201.65	46.62	
4.742	14.756 (0.000)	98	51600			13.58- 113.58	18.44	
26 MTBE					CAS #: 1634-04-4			
4.742	14.756 (0.883)	73	722922	5.0	5.3		100.00	6463
4.742	14.756 (0.000)	57	46160			0.00- 73.80	6.39	
4.742	14.756 (0.000)	41	48643			0.00- 75.24	6.73	
27 Hexane					CAS #: 110-54-3			
5.177	15.191 (0.909)	57	525633	5.0	5.5		100.00	7287
5.177	15.191 (0.000)	43	115926			21.59- 121.59	22.05	
5.177	15.191 (0.000)	56	86429			2.77- 102.77	16.44	
28 1,1-Dichloroethane					CAS #: 75-34-3			
5.452	15.465 (0.925)	63	520859	5.0	5.4		100.00	6402
5.452	15.465 (0.000)	65	48224			0.00- 81.51	9.26	
29 Chloroprene					CAS #: 126-99-8			
5.582	15.603 (0.933)	53	175660	5.0	5.3		100.00	7834
5.582	15.603 (0.000)	88	26521			2.32- 102.32	15.10	

Data File: /chem/msdj.i/j-29jan.b/j012902.d
Report Date: 29-Jan-1997 09:06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
15.582	15.603 (0.000)	50	13306			0.00- 76.25	7.57	
30 Vinyl Acetate					CAS #: 108-05-4			
15.521	15.534 (0.929)	43	847102	5.0	5.4		100.00	5993
15.521	15.534 (0.000)	86	20105			0.00- 57.73	2.37	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.345	16.366 (0.979)	96	303983	5.0	5.5		100.00	8235(Q)
16.345	16.366 (0.000)	61	122102			88.69- 188.69	40.17	
16.345	16.366 (0.000)	98	58056			15.94- 115.94	19.10	
32 2-Butanone					CAS #: 78-93-3			
16.337	16.358 (0.978)	72	139472	5.0	6.2		100.00	7888(Q)
16.337	16.358 (0.000)	43	191454			429.69- 529.69	137.27	
16.337	16.358 (0.000)	57	12915			0.00- 82.36	9.26	
34 Chloroform					CAS #: 67-66-3			
16.787	16.808 (1.005)	83	553784	5.0	5.4		100.00	8218
16.787	16.808 (0.000)	85	104280			13.70- 113.70	18.83	
35 Tetrahydrofuran					CAS #: 109-99-9			
16.772	16.793 (1.004)	42	290385	5.0	5.4		100.00	7480
16.772	16.793 (0.000)	71	29424			0.00- 85.83	10.13	
16.772	16.793 (0.000)	72	31616			0.00- 89.42	10.89	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.069	17.090 (1.022)	97	499227	5.0	5.2		100.00	7505
17.069	17.090 (0.000)	99	90072			14.53- 114.53	18.04	
37 Cyclohexane					CAS #: 110-82-7			
17.153	17.174 (1.027)	56	496091	5.0	5.6		100.00	8264(Q)
17.153	17.174 (0.000)	84	102374			22.38- 122.38	20.64	
17.153	17.174 (0.000)	41	82515			10.59- 110.59	16.63	
38 Carbon Tetrachloride					CAS #: 56-23-5			
17.321	17.342 (1.037)	119	396981	5.0	5.3		100.00	7538(QH)
17.321	17.342 (0.000)	117	44648			27.68- 127.68	11.25	
40 Benzene					CAS #: 71-43-2			
17.596	17.617 (0.975)	78	913326	5.0	5.4		100.00	8157
17.596	17.617 (0.000)	77	64620			0.00- 74.19	7.08	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.611	17.624 (0.976)	62	339829	5.0	5.2		100.00	6321
17.611	17.624 (0.000)	64	31424			0.00- 82.07	9.25	
42 Heptane					CAS #: 142-82-5			
17.832	17.846 (0.988)	43	652853	5.0	5.6		100.00	7650

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
'.832	17.846 (0.000)	57	97950			0.00- 98.89	15.00	
'.832	17.846 (0.000)	71	99584			0.00- 99.30	15.25	
44 Trichloroethene					CAS #: 79-01-6			
3.450	18.479 (1.022)	95	339286	5.0	5.3		100.00	8745(Q)
3.450	18.479 (0.000)	130	87544			38.05- 138.05	25.80	
3.450	18.479 (0.000)	97	63151			13.52- 113.52	18.61	
45 1,2-Dichloropropane					CAS #: 78-87-5			
3.771	18.792 (1.040)	63	315800	5.0	5.4		100.00	8641(Q)
3.771	18.792 (0.000)	62	64884			23.81- 123.81	20.55	
3.771	18.792 (0.000)	41	51230			11.72- 111.72	16.22	
46 1,4-Dioxane					CAS #: 123-91-1			
3.916	18.937 (1.048)	88	173649	5.0	5.5		100.00	2827(Q)
3.916	18.937 (0.000)	58	37138			24.11- 124.11	21.39	
3.916	18.937 (0.000)	57	11482			0.00- 74.92	6.61	
47 Bromodichloromethane					CAS #: 75-27-4			
).122	19.143 (1.060)	83	551746	5.0	5.4		100.00	9312
).122	19.143 (0.000)	85	93376			10.29- 110.29	16.92	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
).694	19.715 (1.091)	75	225896	7.2	7.9		100.00	9019
).694	19.715 (0.000)	77	20214			0.00- 82.61	8.95	
).694	19.715 (0.000)	39	34667			5.93- 105.93	15.35	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
).816	19.837 (1.098)	43	684985	5.0	5.4		100.00	6862
).816	19.837 (0.000)	58	71701			0.00- 85.54	10.47	
).816	19.837 (0.000)	85	26695			0.00- 61.74	3.90	
51 Toluene					CAS #: 108-88-3			
).182	20.203 (1.118)	92	597661	5.0	5.9		100.00	8747(Q)
).182	20.203 (0.000)	91	286016			118.56- 218.56	47.86	
52 Octane					CAS #: 111-65-9			
).159	20.180 (1.117)	57	255062	5.0	5.3		100.00	8368(Q)
).159	20.180 (0.000)	85	84697			52.40- 152.40	33.21	
).159	20.180 (0.000)	43	229061			226.95- 326.95	89.81	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
).403	20.432 (0.920)	75	68245	1.0	1.1		100.00	8685(M)
).403	20.432 (0.920)	77	4261			0.00- 74.06	6.24	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
).701	20.729 (0.933)	97	303892	5.0	5.5		100.00	8994(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
54 1,1,2-Trichloroethane (continued)								
20.701	20.729 (0.000)	99	52416			12.48- 112.48	17.25	
20.701	20.729 (0.000)	83	76800			41.55- 141.55	25.27	
55 Tetrachloroethene					CAS #: 127-18-4			
20.968	20.996 (0.945)	166	333757	5.0	5.4		100.00	9054(Q)
20.968	20.996 (0.000)	129	77320			32.05- 132.05	23.17	
20.968	20.996 (0.000)	131	74154			28.69- 128.69	22.22	
56 2-Hexanone					CAS #: 591-78-6			
20.930	20.951 (0.944)	43	716252	5.0	5.5		100.00	8577
20.930	20.951 (0.000)	58	105070			0.00- 98.87	14.67	
20.930	20.951 (0.000)	100	18640			0.00- 59.06	2.60	
57 Dibromochloromethane					CAS #: 124-48-1			
21.319	21.340 (0.961)	129	412481	5.0	5.5		100.00	8313
21.319	21.340 (0.000)	208	4490			0.00- 54.22	1.09	
58 1,2-Dibromoethane					CAS #: 106-93-4			
21.540	21.561 (0.971)	107	405857	5.0	5.6		100.00	5533(Q)
21.540	21.561 (0.000)	109	98968			45.11- 145.11	24.38	
60 Chlorobenzene					CAS #: 108-90-7			
22.227	22.255 (1.002)	112	667328	5.0	5.5		100.00	9112
22.227	22.255 (0.000)	114	51424			0.00- 81.98	7.71	
22.227	22.255 (0.000)	77	105790			12.21- 112.21	15.85	
61 Ethyl Benzene					CAS #: 100-41-4			
22.311	22.339 (1.006)	106	409457	5.0	5.4		100.00	
22.311	22.339 (1.006)	91	1403745			296.25- 396.25	342.83	
62 m,p-Xylene					CAS #: 108-38-3			
22.471	22.499 (1.013)	106	789220	10.0	10.8		100.00	
22.471	22.499 (1.013)	91	1673889			164.96- 264.96	212.09	
63 o-Xylene					CAS #: 95-47-6			
23.135	23.171 (1.043)	106	247718	5.0	5.5		100.00	7674(Q)
23.135	23.171 (0.000)	91	136662			170.08- 270.08	55.17	
64 Styrene					CAS #: 100-42-5			
23.150	23.178 (1.044)	104	516883	5.0	5.4		100.00	8813
23.150	23.178 (0.000)	78	61289			0.00- 98.26	11.86	
65 Bromoform					CAS #: 75-25-2			
23.577	23.606 (1.063)	171	198410	5.0	5.5		100.00	8591(Q)
23.577	23.606 (0.000)	173	86216			136.97- 236.97	43.45	
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
24.195	24.231 (1.091)	83	618850	5.0	5.6		100.00	8777

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
;.195	24.231 (0.000)	85	88982			11.77- 111.77	14.38	
68 4-Ethyltoluene					CAS #: 622-96-8			
;.615	24.643 (1.110)	105	851610	5.0	5.6		100.00	9262(M)
;.615	24.643 (1.110)	120	221512	5.0	5.6	0.00- 76.02	26.01	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
;.706	24.735 (1.114)	105	395526	5.0	5.4		100.00	7972(M)
;.706	24.735 (1.114)	120	189741	5.0	5.6	0.00- 94.94	47.97	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
;.469	25.505 (1.148)	105	316804	5.0	5.3		100.00	8901
;.469	25.505 (0.000)	120	28776			0.00- 91.71	9.08	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
5.186	26.230 (1.181)	146	385391	5.0	5.1		100.00	
5.194	26.230 (1.181)	148	245344			13.66- 113.66	63.66	
5.186	26.230 (1.181)	111	175628			0.00- 96.64	45.57	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
5.362	26.406 (1.188)	146	383550	5.0	5.2		100.00	
5.377	26.406 (1.189)	148	242272			13.17- 113.17	63.17	
5.369	26.406 (1.189)	111	169202			0.00- 94.63	44.11	
74 Benzyl Chloride					CAS #: 100-44-7			
5.613	26.650 (1.200)	91	679374	5.0	4.8		100.00	9355
5.613	26.650 (0.000)	126	23648			0.00- 67.20	3.48	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
7.247	27.291 (1.228)	146	341200	5.0	5.1		100.00	8803(Q)
7.247	27.291 (0.000)	148	41480			14.12- 114.12	12.16	
7.247	27.291 (0.000)	111	30304			0.00- 97.75	8.88	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
1.633	31.685 (1.426)	180	108667	5.0	3.8		100.00	8451(Q)
1.633	31.685 (0.000)	182	14447			38.55- 138.55	13.29	
77 Hexachlorobutadiene					CAS #: 87-68-3			
2.091	32.127 (1.447)	225	134127	5.0	4.5		100.00	8498(Q)
2.091	32.127 (0.000)	223	14106			12.64- 112.64	10.52	

: Flag Legend

- Qualifier signal failed the ratio test.
- Compound response manually integrated.
- Operator selected an alternate compound hit.

Audit History For: /chem/msdj.i/j-29jan.b/j012902.d

MH 1/29/97

Change Date: 29-Jan-97 08:54
Change Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

Change Date: 29-Jan-97 08:54
Change Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Complete Target Compound Processing

Change Date: 29-Jan-97 08:57
Change Made by: mhe

Parameter: date
Old Value: 29-JAN-97 08:34
New Value: 29-JAN-1997 08:34
Reason For Change: N/A

Change Date: 29-Jan-97 08:57
Change Made by: mhe

Parameter: Sample Info
Old Value: 25mL #296-25 TO14 Std. 100ppbv
New Value: 25mL #296-25 TO14 Std. 100ppbv
Reason For Change: N/A

Change Date: 29-Jan-97 08:57
Change Made by: mhe

Parameter: Sample Type
Old Value: Non-Calibration Sample
New Value: Continuining Calibration
Reason For Change: N/A

Change Date: 29-Jan-97 08:57
Change Made by: mhe

Parameter: QC Sample Type
Old Value: BLANK
New Value: METHSPIKE
Reason For Change: N/A

Change Date: 29-Jan-97 08:57
Change Made by: mhe

Parameter: Spike Sample
Old Value: Off
New Value: On
Reason For Change: N/A

Change Date: 29-Jan-97 08:57
Change Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: Method Spike
Reason For Change: N/A

hange Date: 29-Jan-97 08:57
hange Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Quantitation

hange Date: 29-Jan-97 08:57
hange Made by: mhe

Parameter: Manual reintegration of Propylene (Signal 1)
Old Value: Old Area/Time: 25931 / 4.75
New Value: New Area/Time: 101476 / 4.79
Reason For Change: N/A

hange Date: 29-Jan-97 08:58
hange Made by: mhe

Parameter: Manual reintegration of Propylene (Signal 1)
Old Value: Old Area/Time: 101476 / 4.79
New Value: New Area/Time: 105298 / 4.79
Reason For Change: N/A

hange Date: 29-Jan-97 08:58
hange Made by: mhe

Parameter: Manual reintegration of Propylene (Signal 1)
Old Value: Old Area/Time: 105298 / 4.79
New Value: New Area/Time: 103562 / 4.79
Reason For Change: N/A

hange Date: 29-Jan-97 08:58
hange Made by: mhe

Parameter: Best Hit for Dichlorodifluoromethane/FR 12 changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

hange Date: 29-Jan-97 08:58
hange Made by: mhe

Parameter: Manual reintegration of Dichlorodifluoromethane/FR 12 (Signal 1)
Old Value: No previous peak at 5.351
New Value: New Area/Time: 551741 / 5.35
Reason For Change: N/A

hange Date: 29-Jan-97 08:58
hange Made by: mhe

Parameter: Best Hit for Carbon Tetrachloride changed
Old Value: Old Hit #2
New Value: New Hit #3

Reason For Change: N/A

Change Date: 29-Jan-97 08:58
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 08:58
Change Made by: mhe

Parameter: Manual reintegration of trans-1,3-Dichloropropene (Signal 1)
Old Value: Old Area/Time: 86937 / 20.40
New Value: New Area/Time: 20773 / 20.37
Reason For Change: N/A

Change Date: 29-Jan-97 08:59
Change Made by: mhe

Parameter: Manual reintegration of trans-1,3-Dichloropropene (Signal 1)
Old Value: Old Area/Time: 20773 / 20.37
New Value: New Area/Time: 71119 / 20.40
Reason For Change: N/A

Change Date: 29-Jan-97 08:59
Change Made by: mhe

Parameter: Manual reintegration of trans-1,3-Dichloropropene (Signal 1)
Old Value: Old Area/Time: 71119 / 20.40
New Value: New Area/Time: 68783 / 20.40
Reason For Change: N/A

Change Date: 29-Jan-97 08:59
Change Made by: mhe

Parameter: Manual reintegration of trans-1,3-Dichloropropene (Signal 1)
Old Value: Old Area/Time: 68783 / 20.40
New Value: New Area/Time: 68246 / 20.40
Reason For Change: N/A

Change Date: 29-Jan-97 09:00
Change Made by: mhe

Parameter: Manual reintegration of 4-Ethyltoluene (Signal 1)
Old Value: Old Area/Time: 1211626 / 24.61
New Value: New Area/Time: 817319 / 24.61
Reason For Change: N/A

Change Date: 29-Jan-97 09:00
Change Made by: mhe

Parameter: Manual reintegration of 4-Ethyltoluene (Signal 2)
Old Value: Old Area/Time: 49945 / 24.61
New Value: New Area/Time: 221512 / 24.61
Reason For Change: N/A

Change Date: 29-Jan-97 09:00
Change Made by: mhe

Parameter: Manual reintegration of 4-Ethyltoluene (Signal 1)
Old Value: Old Area/Time: 817319 / 24.61
New Value: New Area/Time: 851610 / 24.61
Reason For Change: N/A

ıange Date: 29-Jan-97 09:00
ıange Made by: mhe

Parameter: Manual reintegration of 1,3,5-Trimethylbenzene (Signal 1)
Old Value: Old Area/Time: 1211626 / 24.61
New Value: New Area/Time: 395527 / 24.71
Reason For Change: N/A

ıange Date: 29-Jan-97 09:00
ıange Made by: mhe

Parameter: Manual reintegration of 1,3,5-Trimethylbenzene (Signal 2)
Old Value: Old Area/Time: 49945 / 24.61
New Value: New Area/Time: 178476 / 24.71
Reason For Change: N/A

ıange Date: 29-Jan-97 09:00
ıange Made by: mhe

Parameter: Manual reintegration of 1,3,5-Trimethylbenzene (Signal 2)
Old Value: Old Area/Time: 178476 / 24.71
New Value: New Area/Time: 199105 / 24.71
Reason For Change: N/A

ıange Date: 29-Jan-97 09:00
ıange Made by: mhe

Parameter: Manual reintegration of 1,3,5-Trimethylbenzene (Signal 2)
Old Value: Old Area/Time: 199105 / 24.71
New Value: New Area/Time: 178302 / 24.71
Reason For Change: N/A

ıange Date: 29-Jan-97 09:01
ıange Made by: mhe

Parameter: Manual reintegration of 1,3,5-Trimethylbenzene (Signal 2)
Old Value: Old Area/Time: 178302 / 24.71
New Value: New Area/Time: 189741 / 24.71
Reason For Change: N/A

ıange Date: 29-Jan-97 09:01
ıange Made by: mhe

Parameter: Best Match for Unknown compound at 4.191 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

ıange Date: 29-Jan-97 09:01
ıange Made by: mhe

Parameter: Best Match for Unknown compound at 5.366 min. changed.
Old Value: Old match: Methane, dichlorodifluoro-
New Value: New match: Unknown Compound Deleted

Reason For Change: N/A

Change Date: 29-Jan-97 09:01
Change Made by: mhe

Parameter: Best Match for Unknown compound at 11.454 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 09:01
Change Made by: mhe

Parameter: Best Match for Unknown compound at 17.321 min. changed.
Old Value: Old match: Methane, tetrachloro-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 09:02
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.661 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 09:06
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.783 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 09:06
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.911 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 29-Jan-97 09:06
Change Made by: mhe

Parameter: Best Match for Unknown compound at 27.613 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

ata File: /chem/msdj.i/j-29jan.b/j012902.d
eport Date: 29-Jan-1997 09:06

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

nstrument ID: msdj.i
ab File ID: j012902.d
ab Smp Id:
nalysis Type: VOA
uant Type: ISTD
perator: MH
ethod File: /chem/msdj.i/j-29jan.b/to140109.m
isc Info:

Calibration Date: JAN/29/97
Calibration Time: 0834
Client Smp ID: Method Spike
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	203762	122257	285267	203762	0.00
43 1,4-Difluorobenzene	881244	528746	1233742	881244	0.00
59 Chlorobenzene-d5	706651	423991	989311	706651	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.70	16.20	17.20	16.70	0.00
43 1,4-Difluorobenzene	18.05	17.55	18.55	18.05	0.00
59 Chlorobenzene-d5	22.18	21.68	22.68	22.18	0.00

REA UPPER LIMIT = + 40% of internal standard area.
REA LOWER LIMIT = - 40% of internal standard area.
T UPPER LIMIT = + 0.50 minutes of internal standard RT.
T LOWER LIMIT = - 0.50 minutes of internal standard RT.

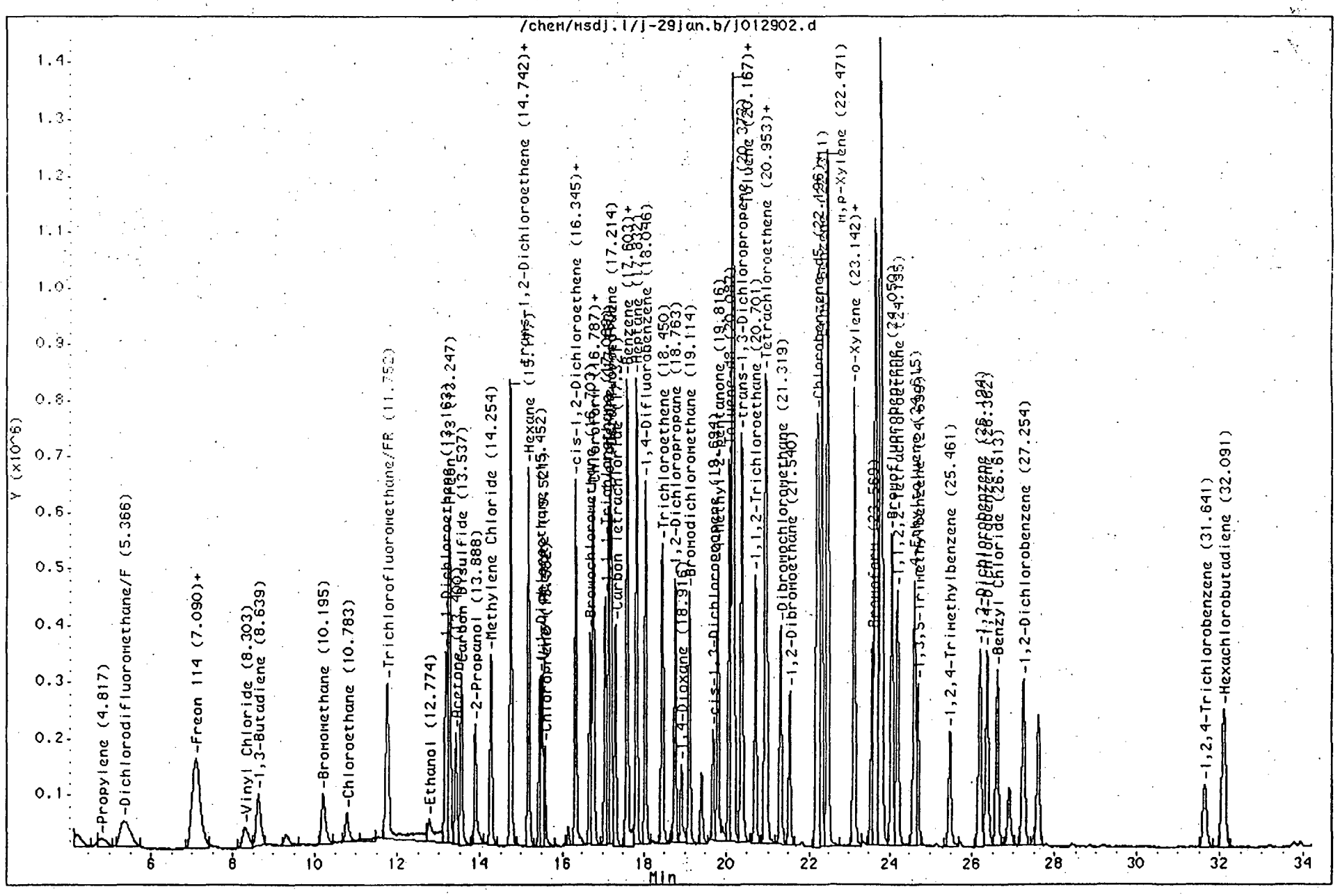
C231

Data File: /chem/msdj.i/j-29jan.b/j012902.d
Date : 29-JAN-1997 08:34
Client ID: Method Spike
Sample Info: 25mL #296-25 T014 Std. 100ppbv

Column phase: RTx-624

Instrument: msdj.i

Operator: MH
Column diameter: 0.58



Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

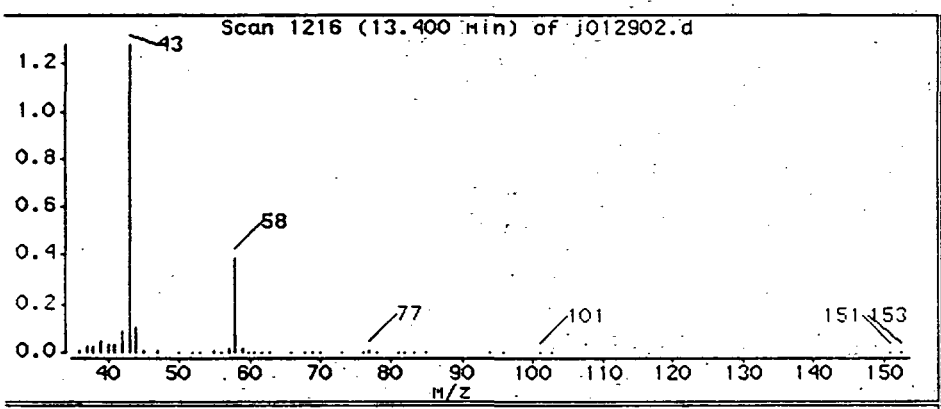
Sample Info: 25mL #296-25 TO14 Std. 100ppbv

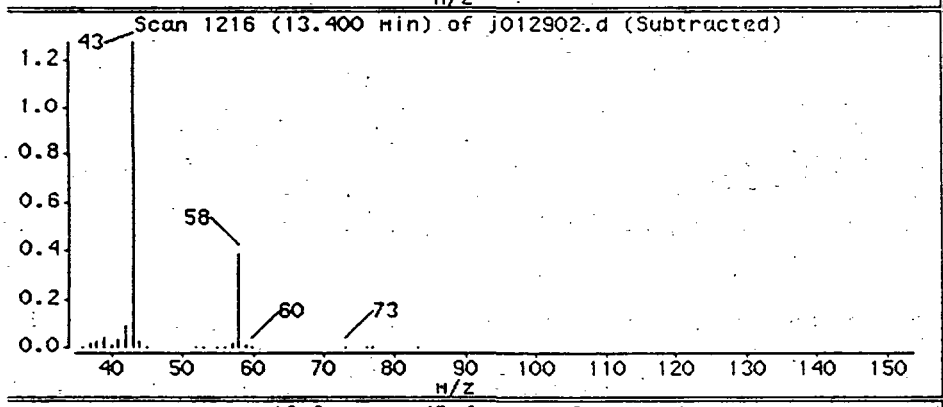
Operator: MH

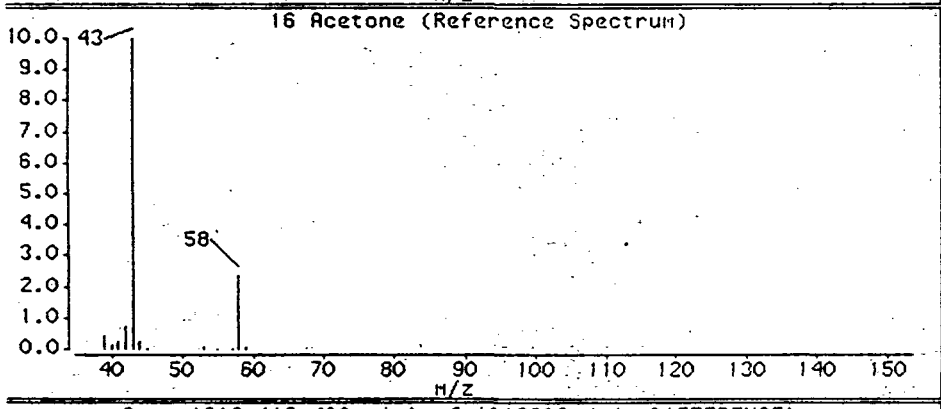
Column phase: RTx-624

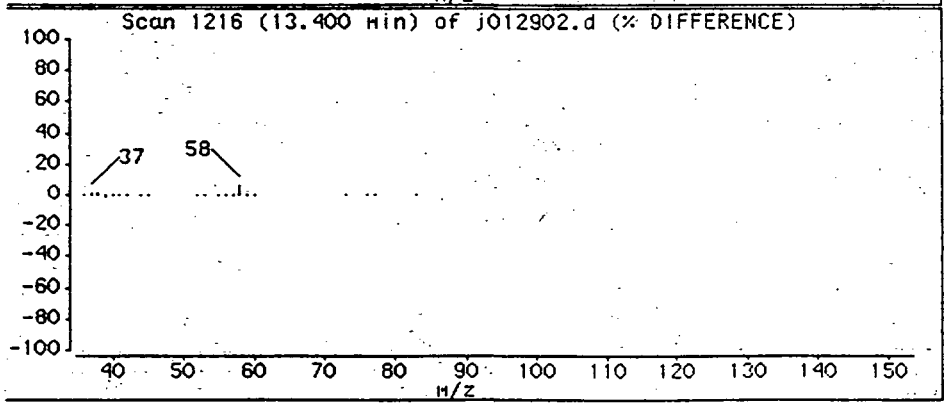
Column diameter: 0.58

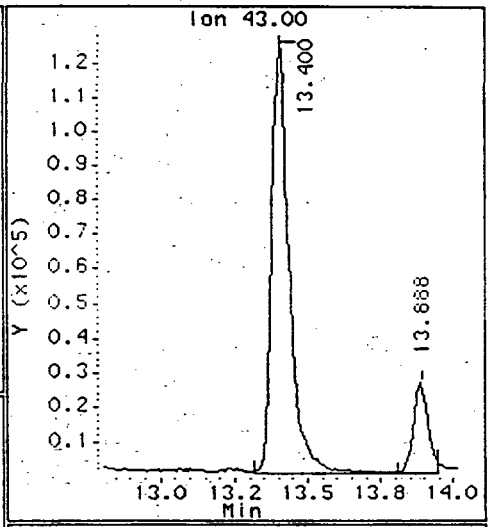
16 Acetone

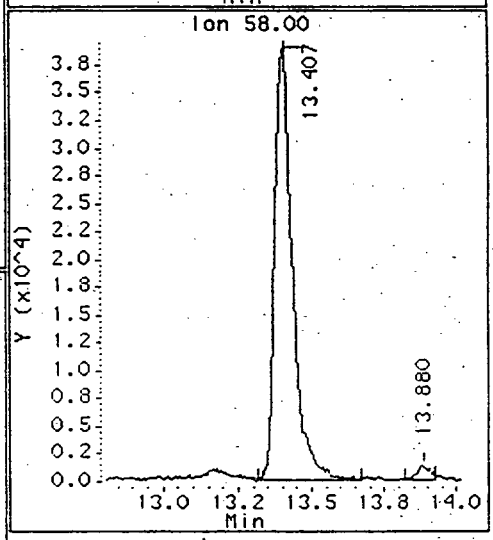












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

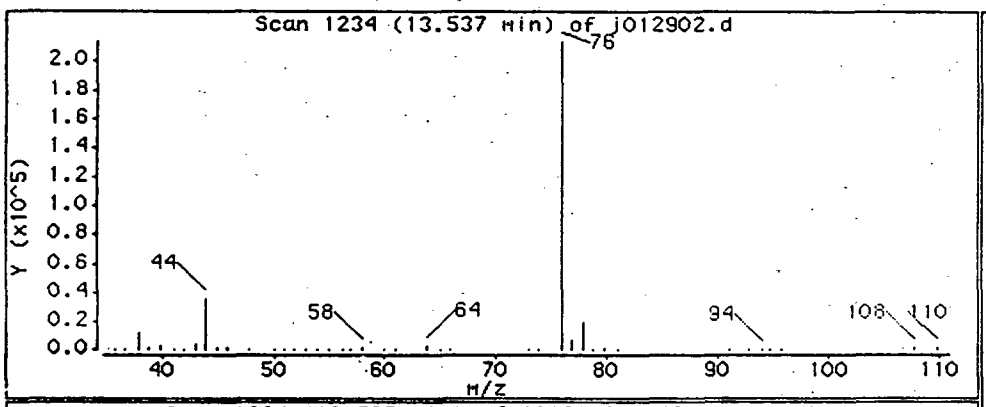
Sample Info: 25mL #296-25 T014 Std. 100ppbv

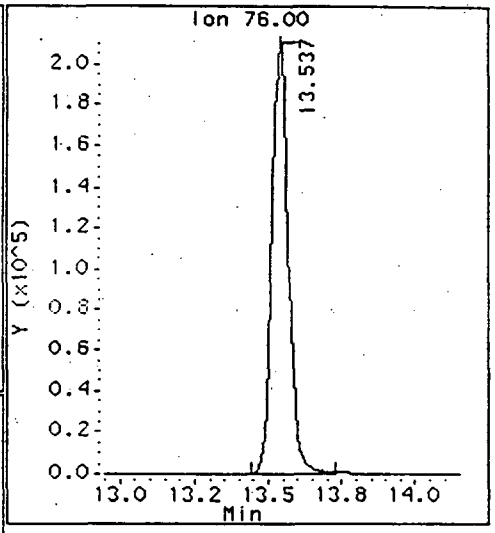
Operator: MH

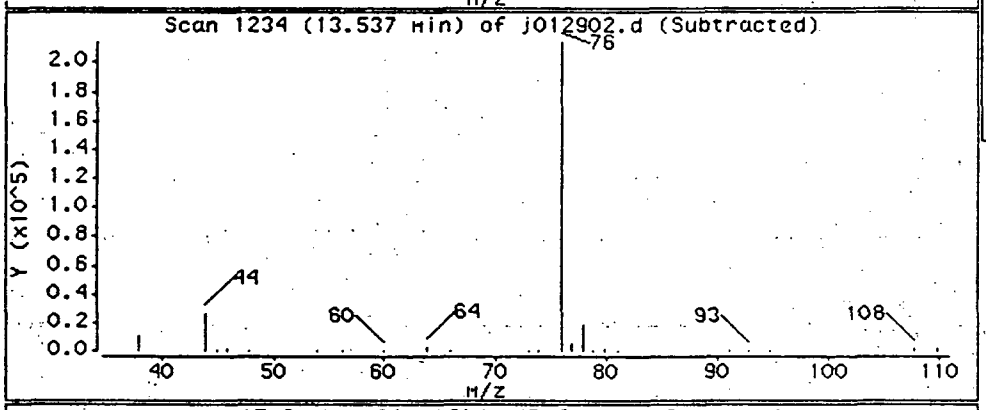
Column phase: RTx-624

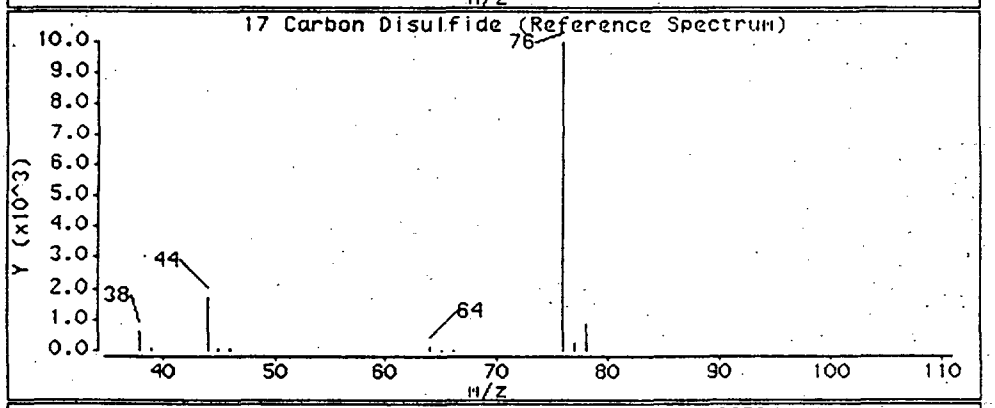
Column diameter: 0.58

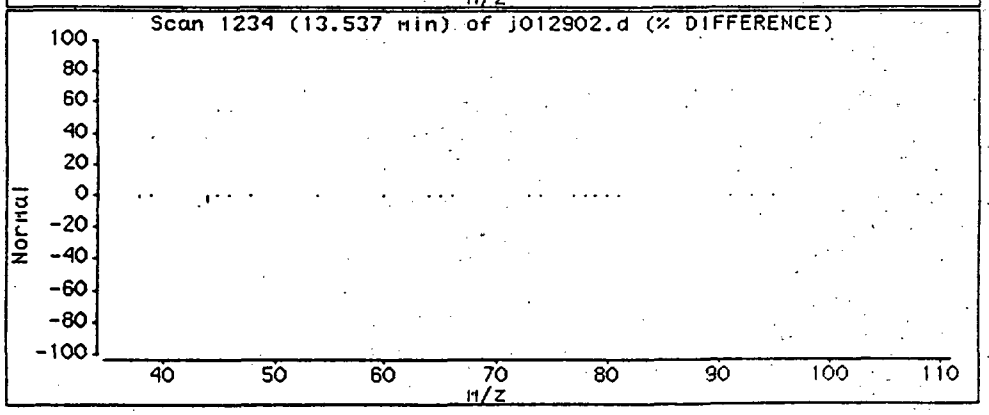
17 Carbon Disulfide











Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

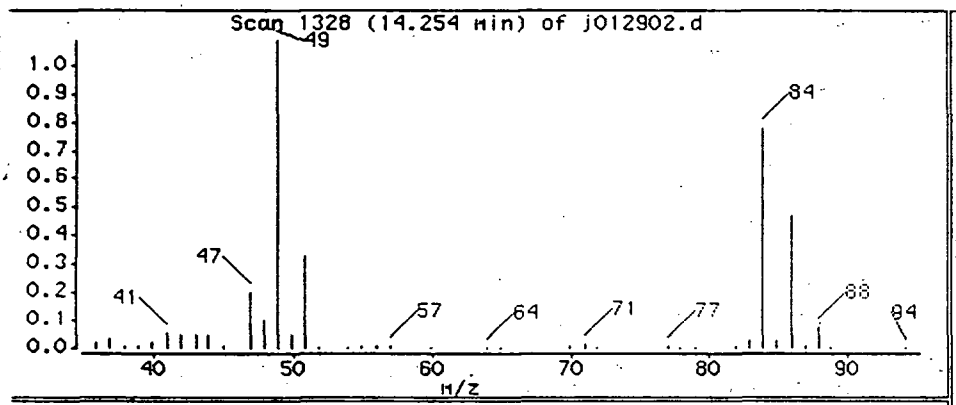
Sample Info: 25mL #296-25 T014 Std. 100ppbv

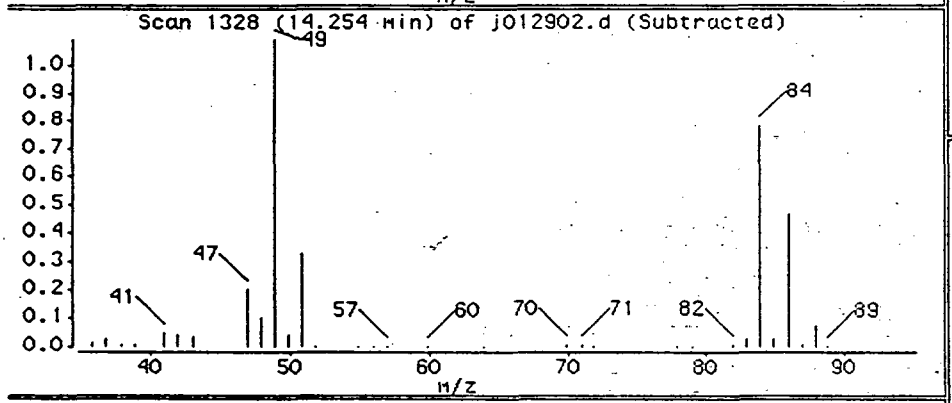
Operator: MH

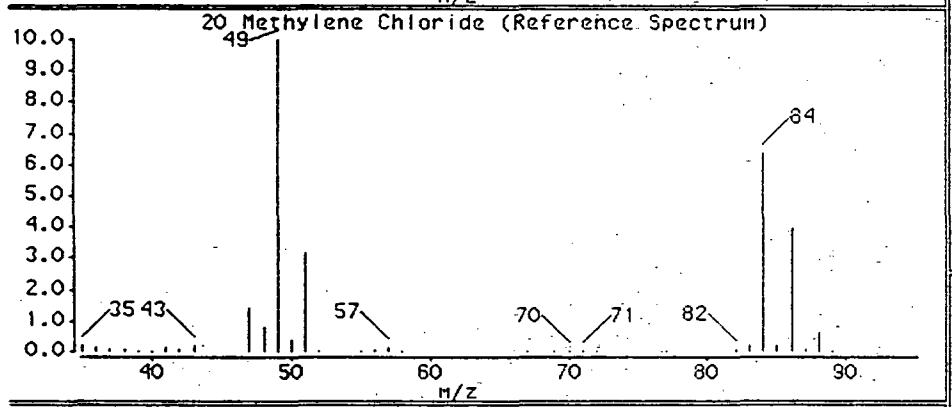
Column phase: RTx-624

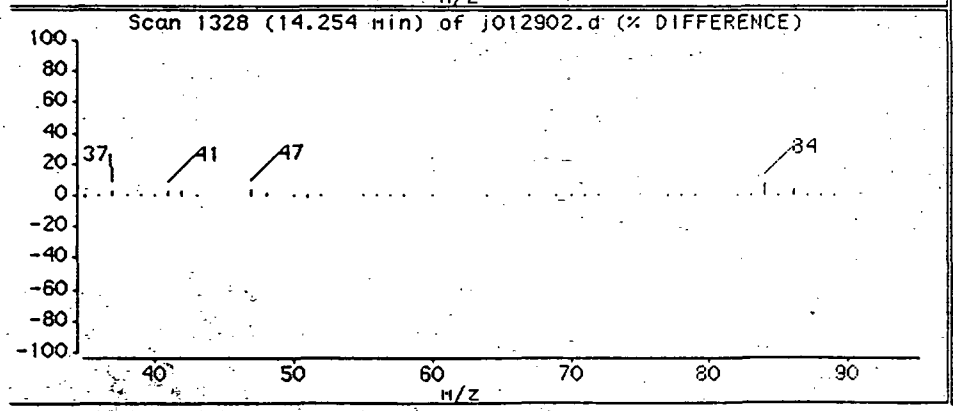
Column diameter: 0.58

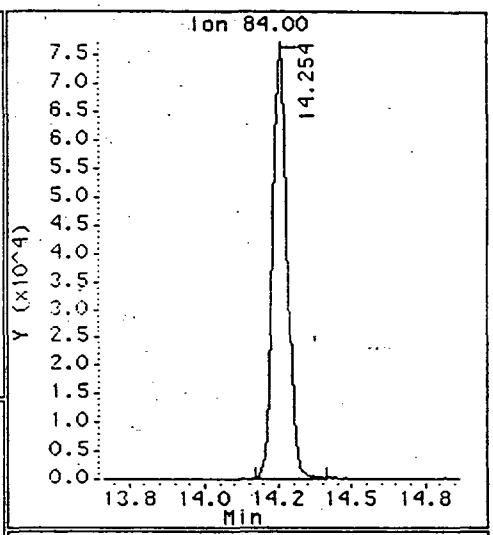
20 Methylene Chloride

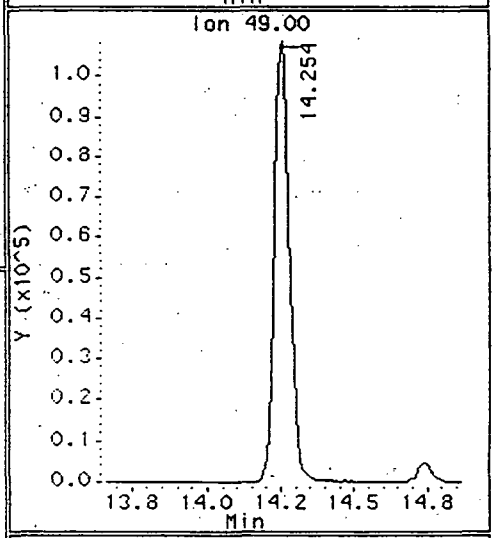


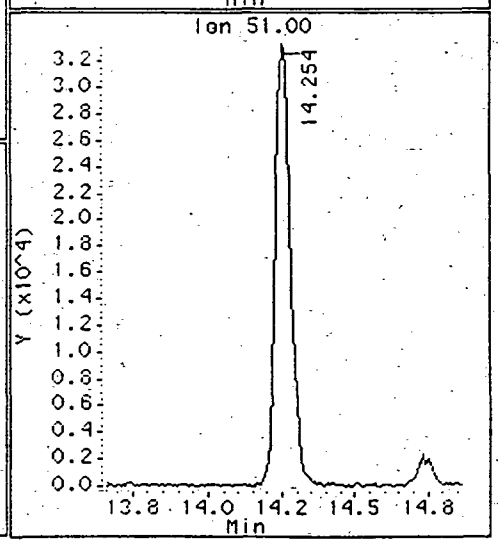












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

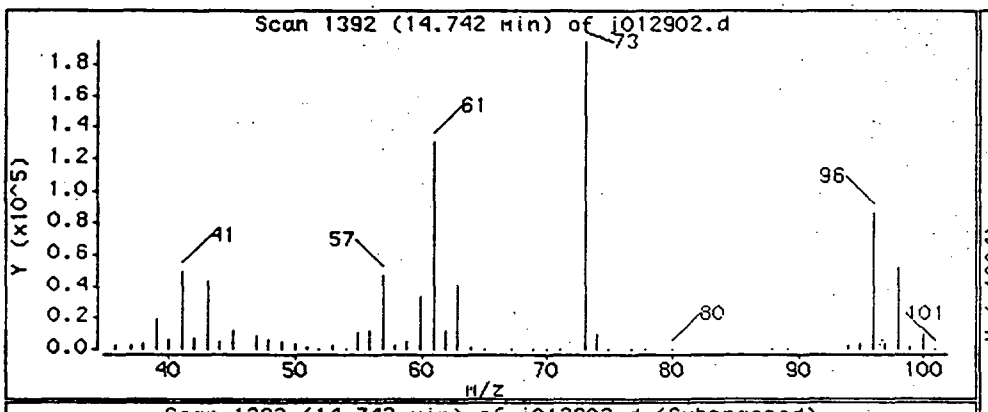
Sample Info: 25mL #296-25 T014 Std. 100ppbv

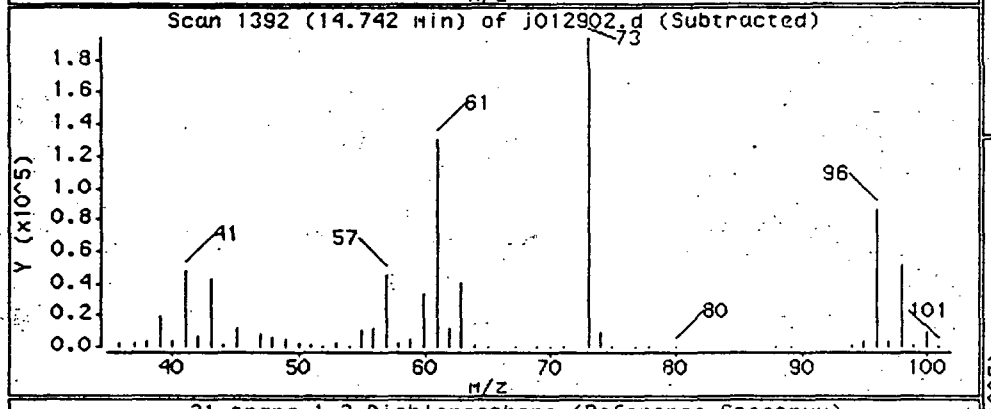
Operator: MH

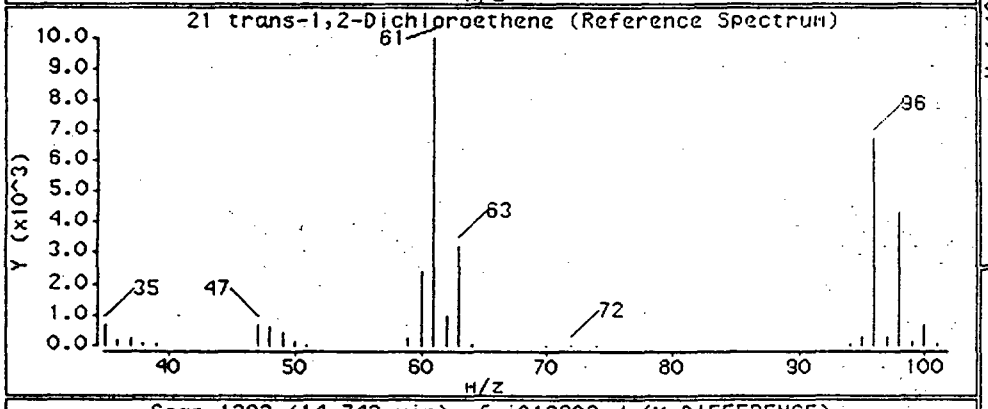
Column phase: RTx-624

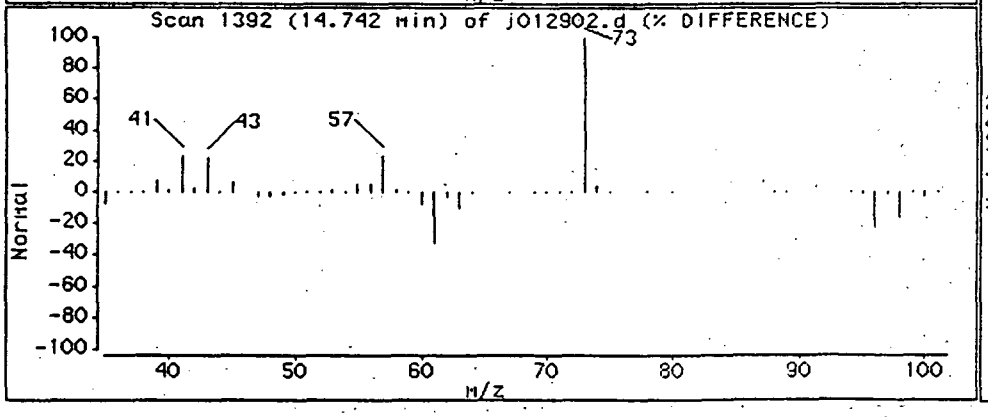
Column diameter: 0.58

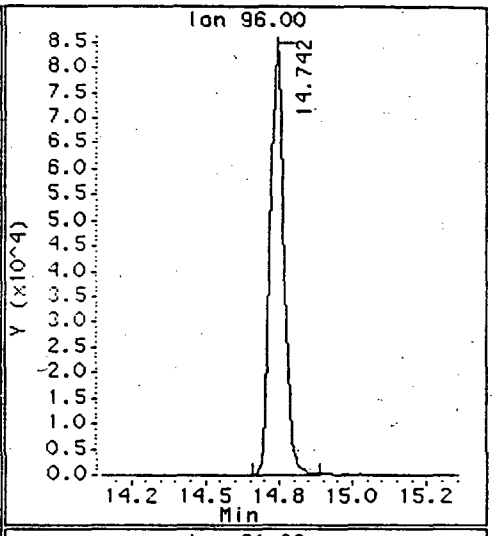
21 trans-1,2-Dichloroethene

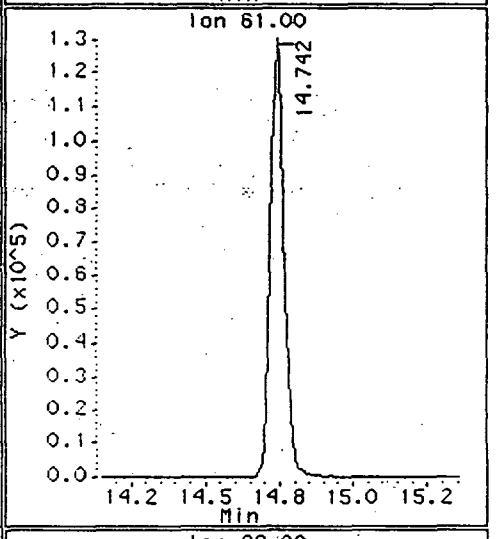


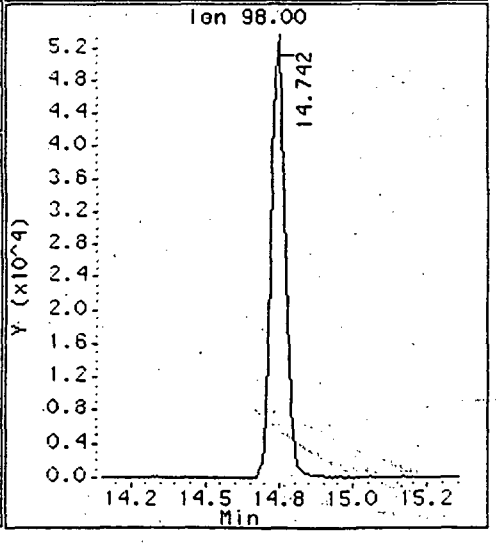












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

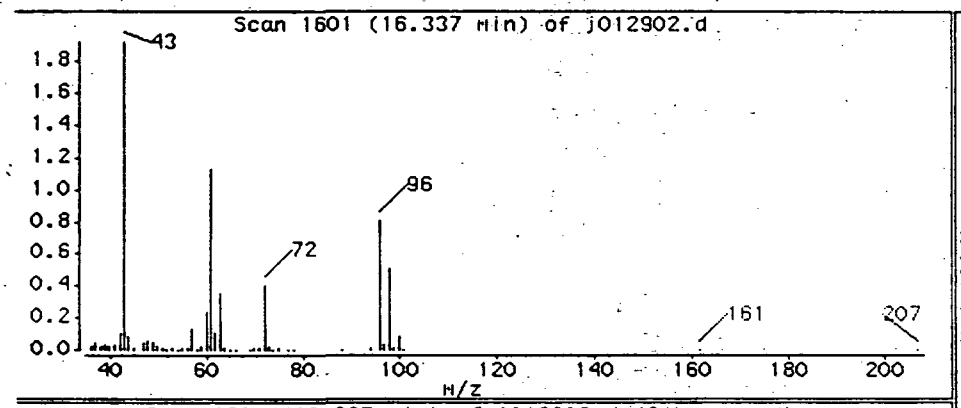
Sample Info: 25mL #296-25 T014 Std. 100ppbv

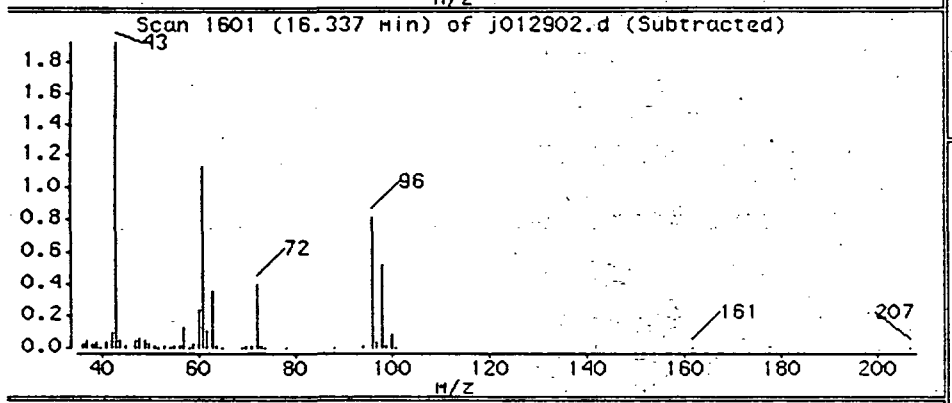
Operator: MH

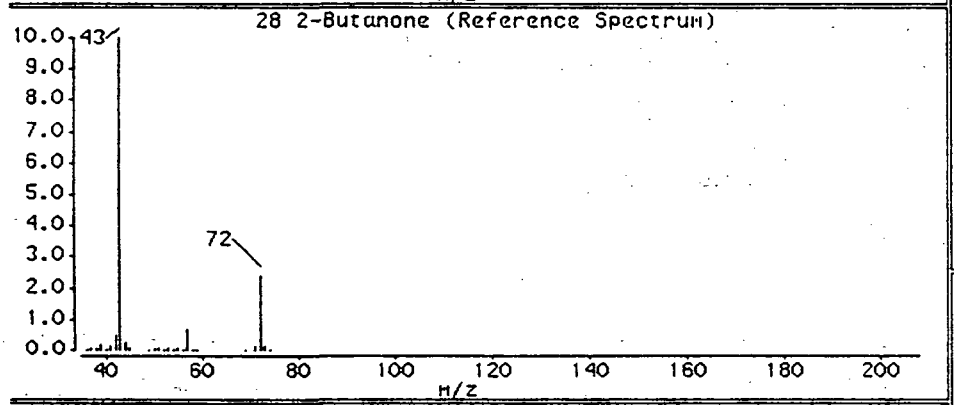
Column phase: RTx-624

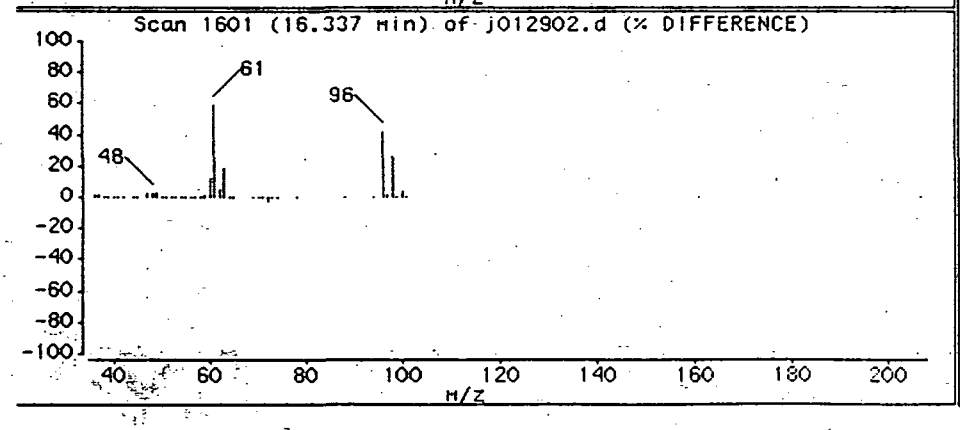
Column diameter: 0.58

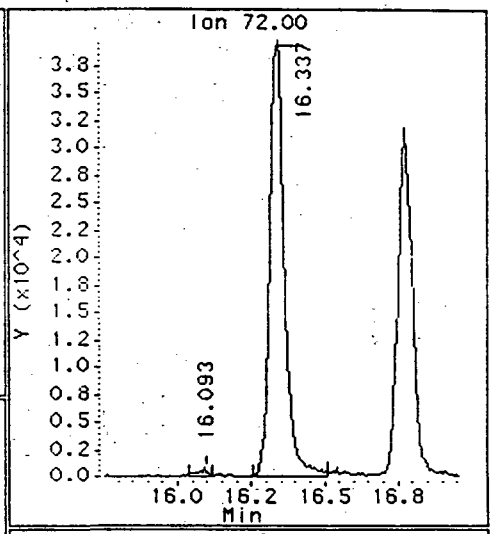
28 2-Butanone

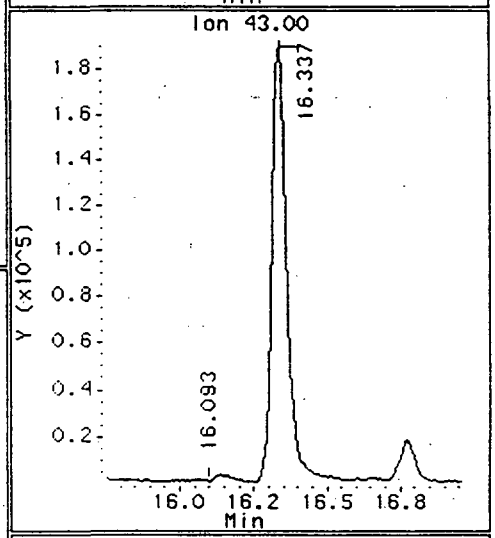


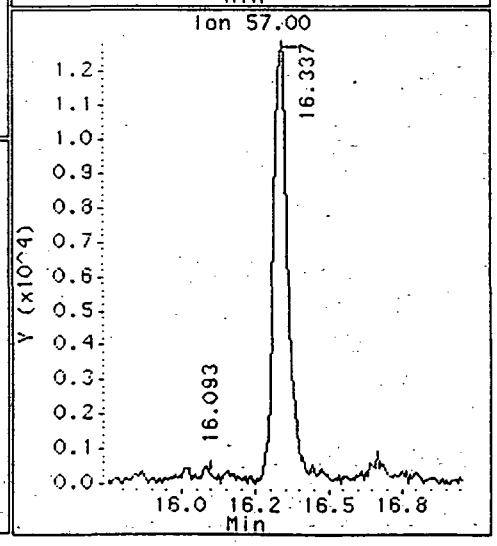












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

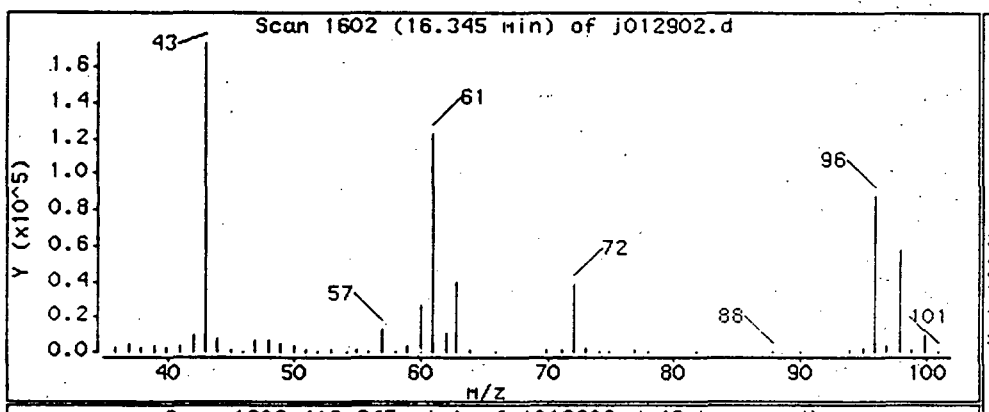
Sample Info: 25mL #296-25 T014 Std. 100ppbv

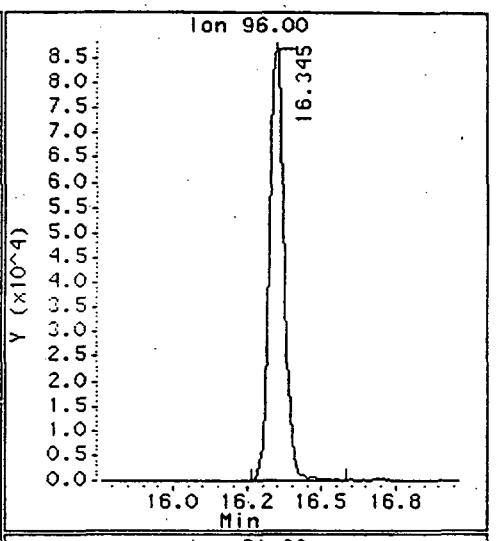
Operator: MH

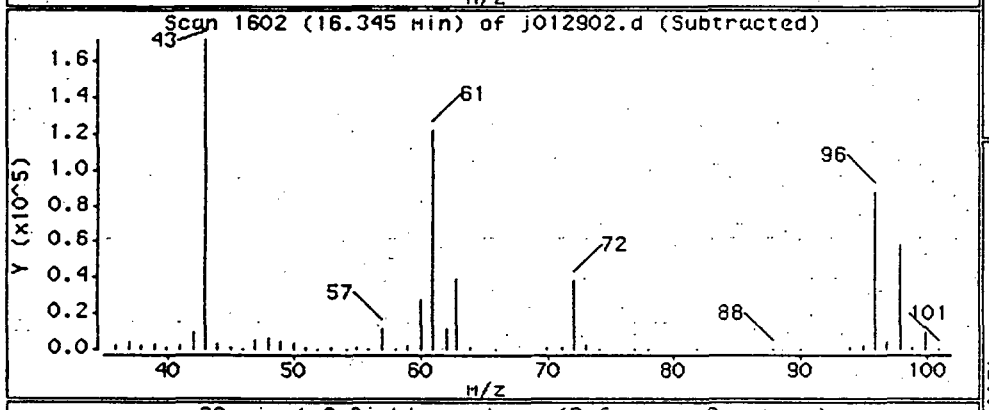
Column phase: RTx-624

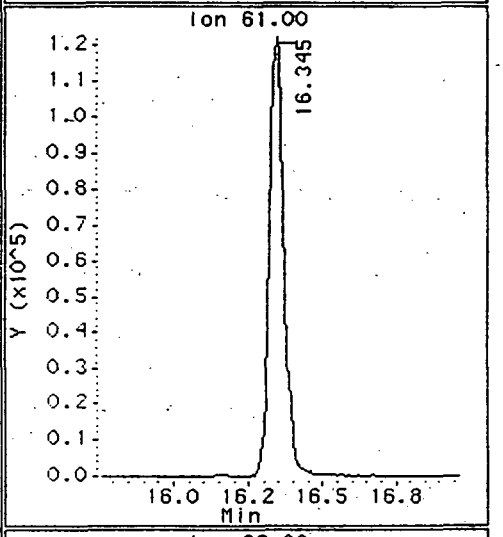
Column diameter: 0.58

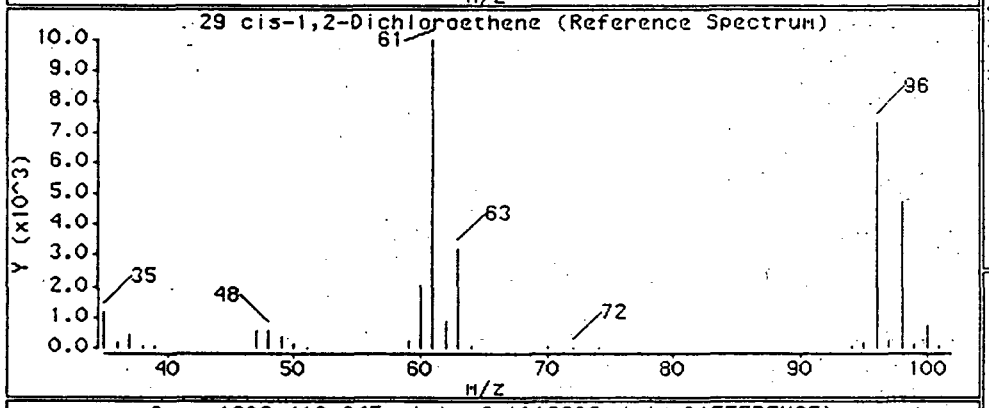
29 cis-1,2-Dichloroethene

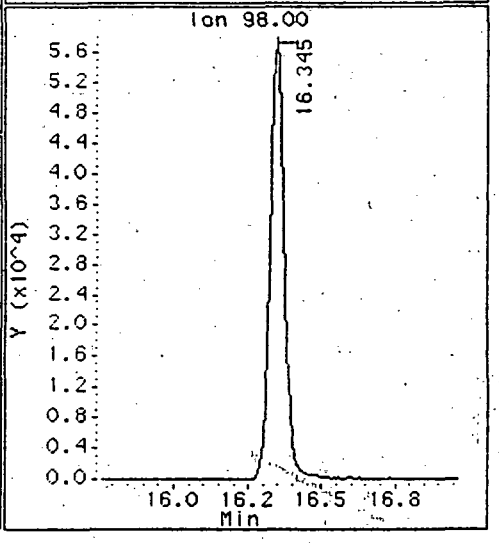


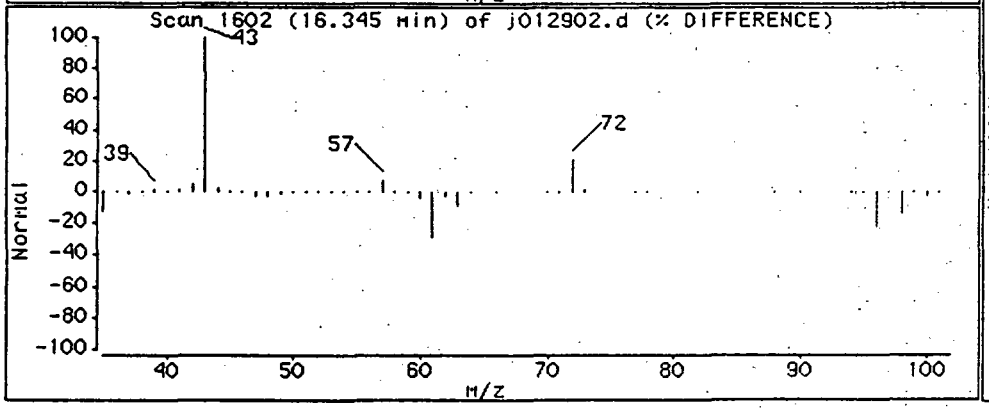












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

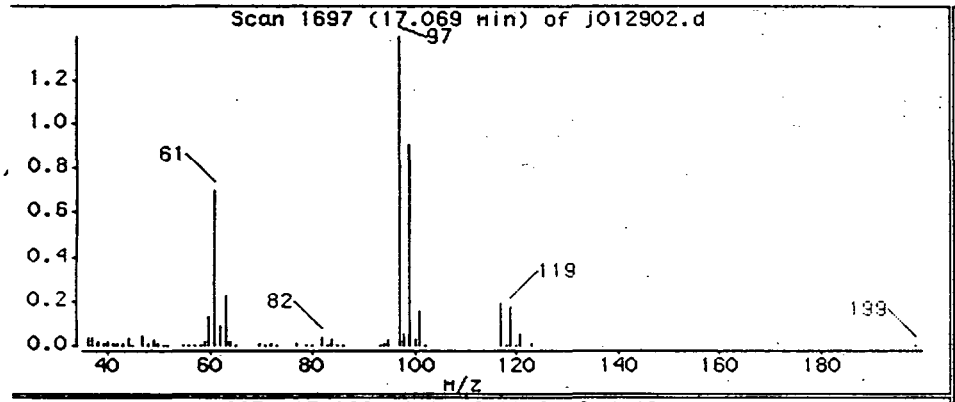
Sample Info: 25mL #296-25 T014 Std. 100ppbv

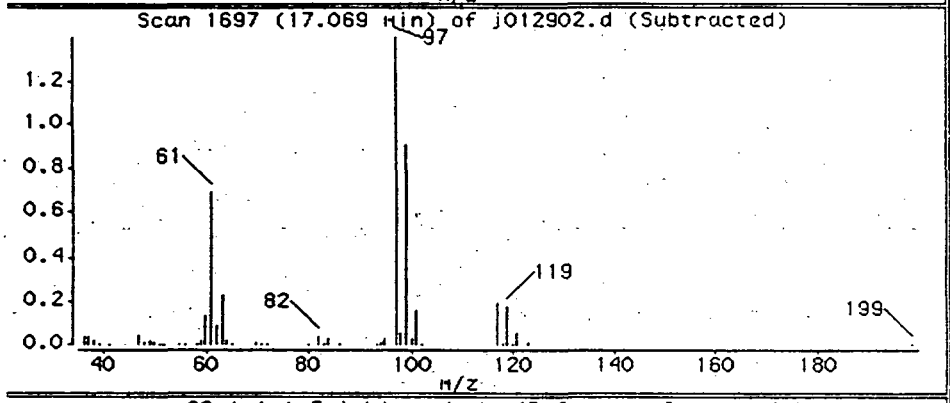
Operator: MH

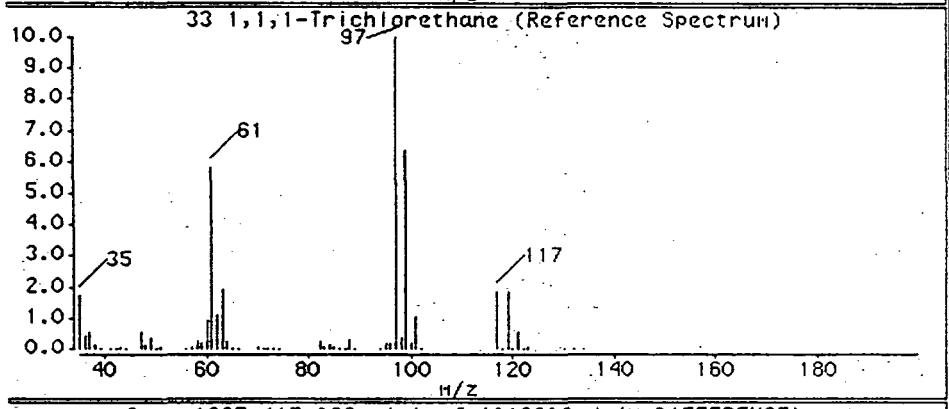
Column phase: RTx-624

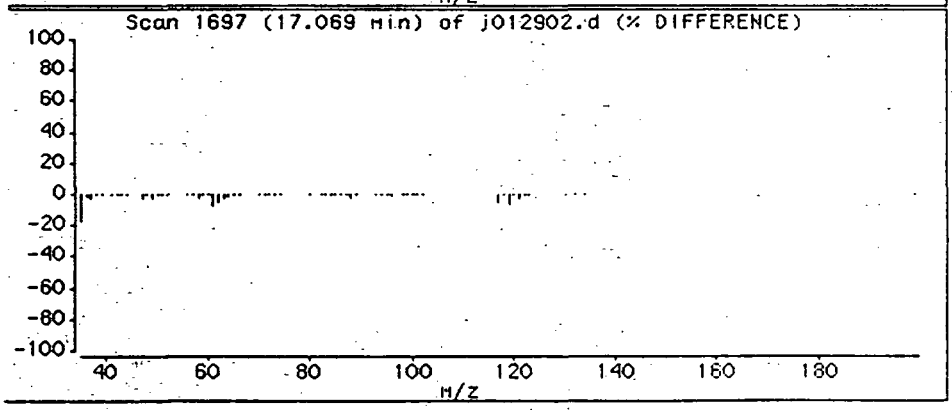
Column diameter: 0.58

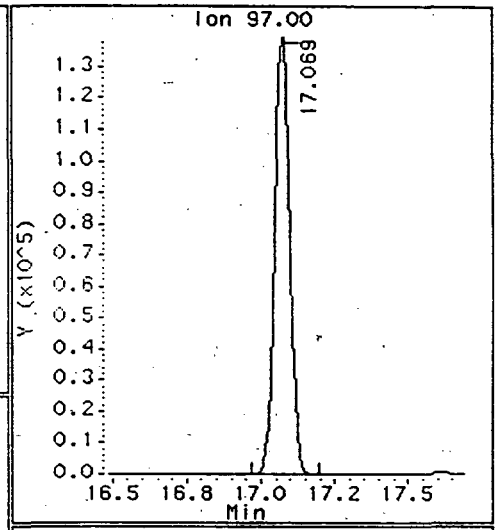
33 1,1,1-Trichlorethane

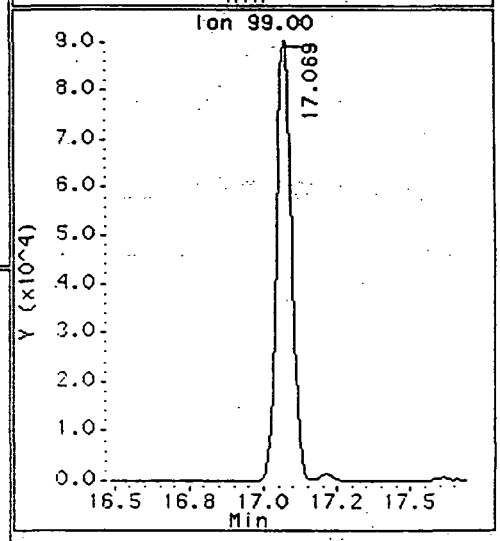












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

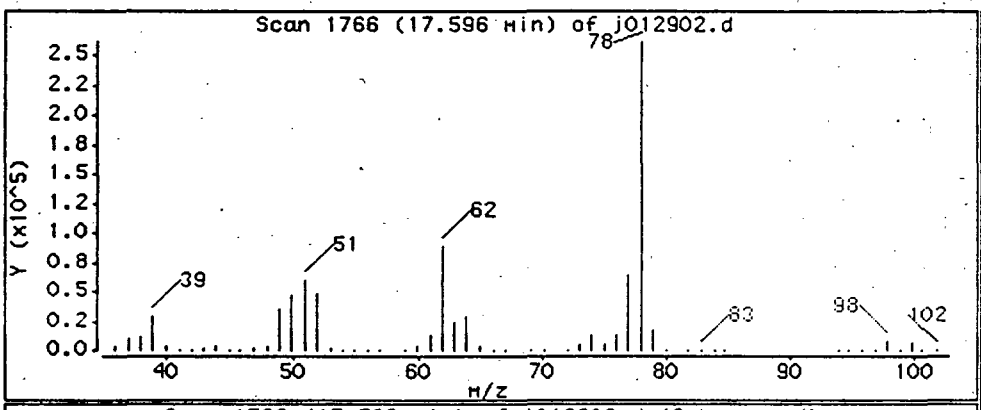
Sample Info: 25mL #296-25 T014 Std. 100ppbv

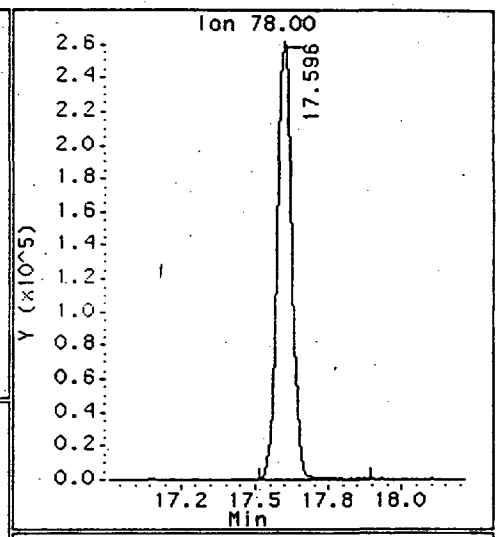
Operator: MH

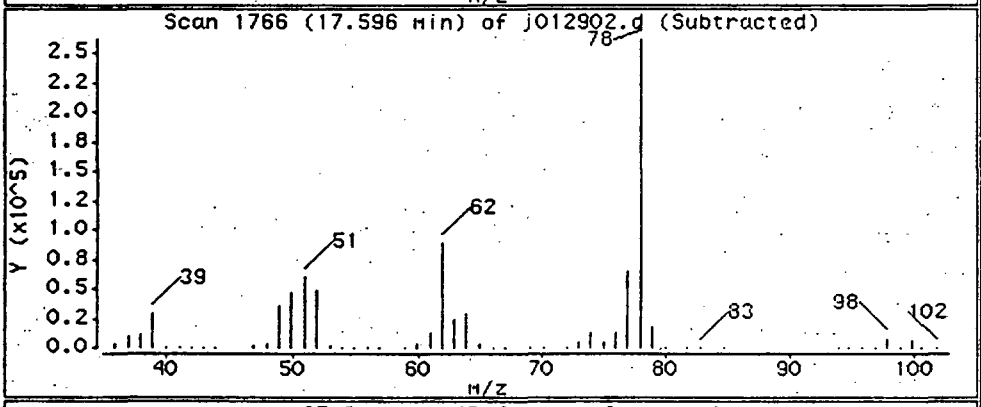
Column phase: RTx-624

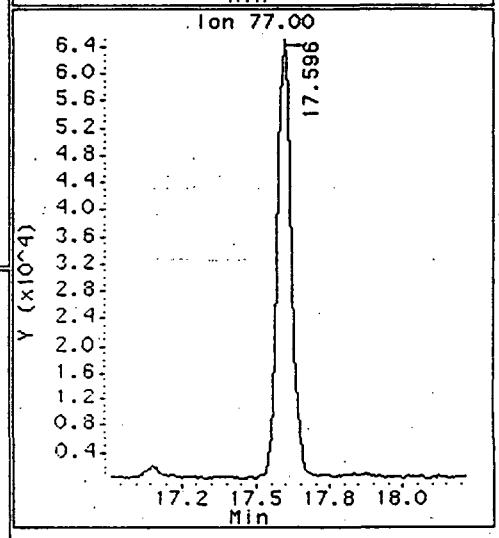
Column diameter: 0.58

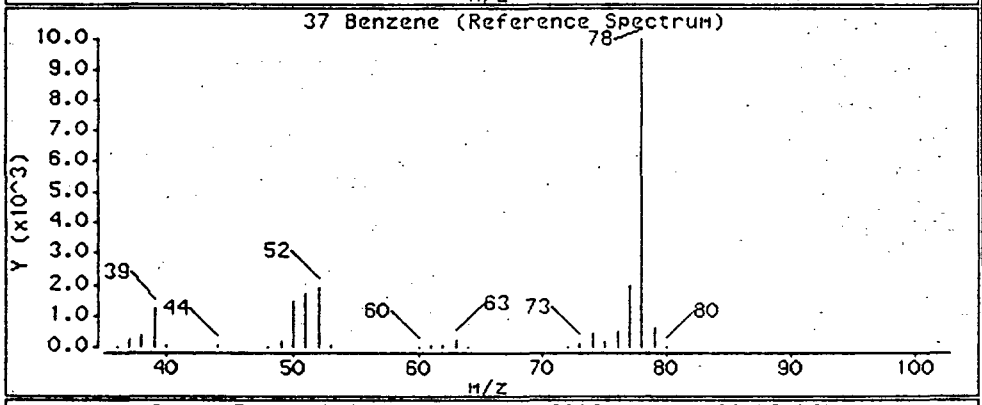
37 Benzene

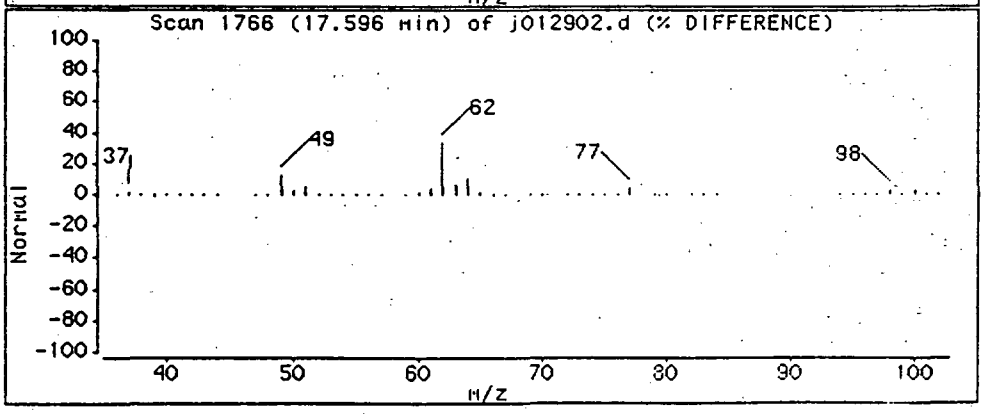












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

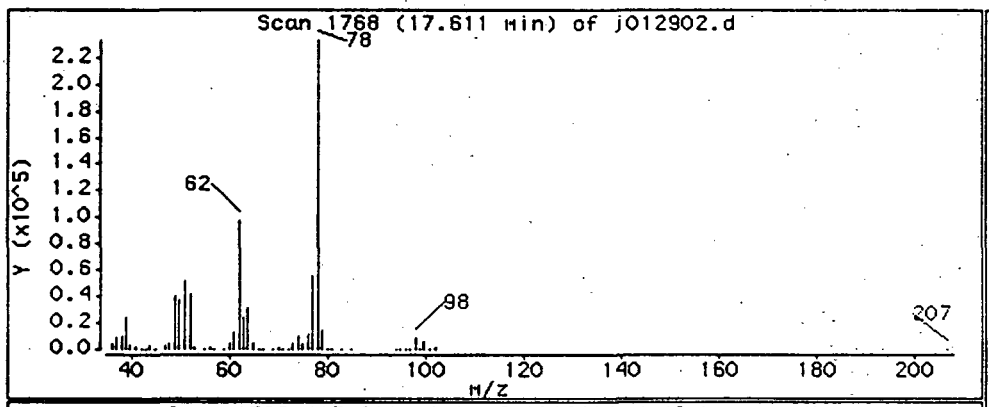
Sample Info: 25mL #296-25 T014 Std. 100ppbv

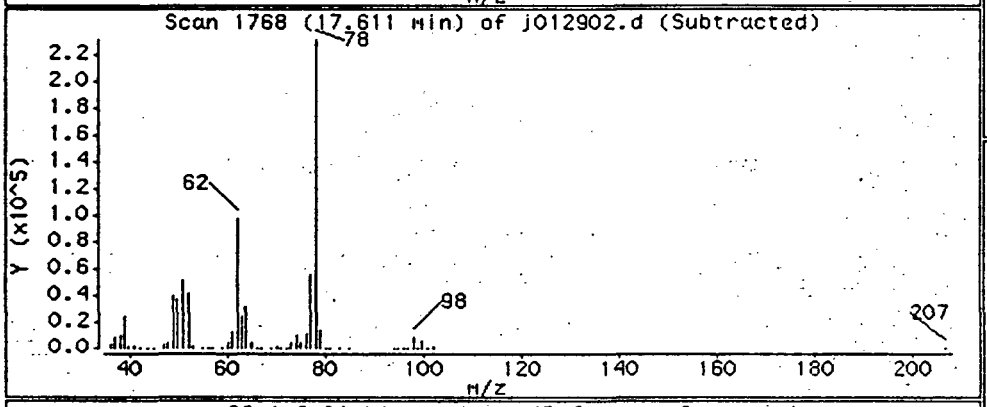
Operator: MH

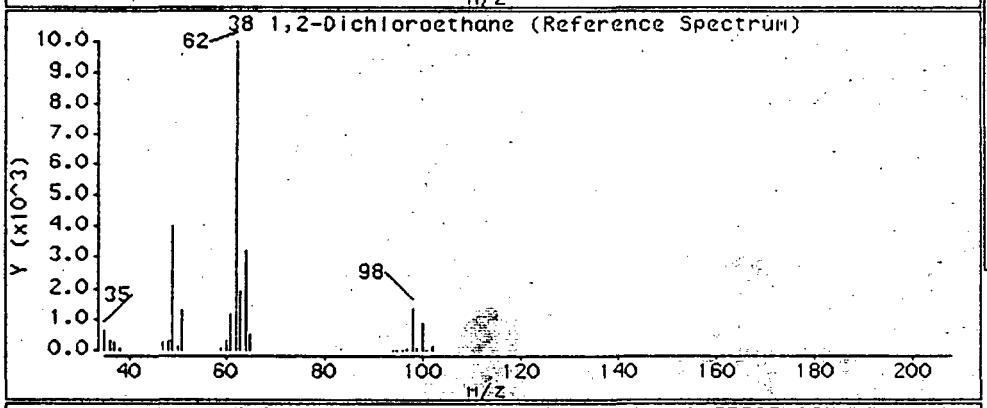
Column phase: RTx-624

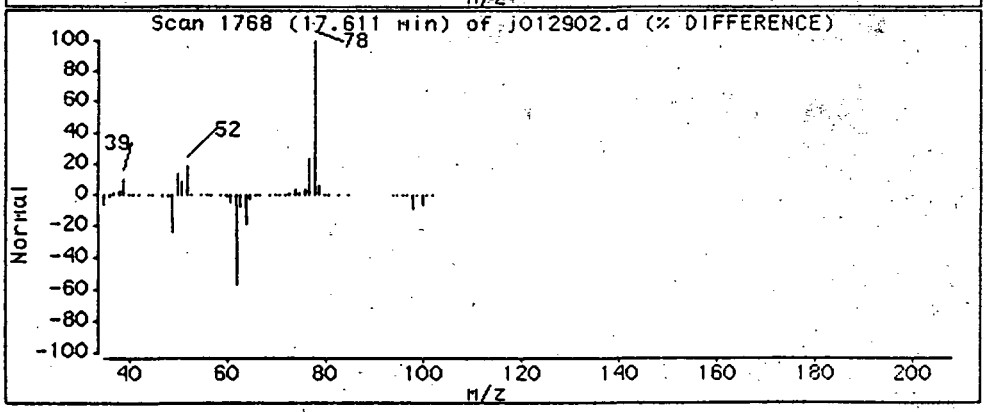
Column diameter: 0.58

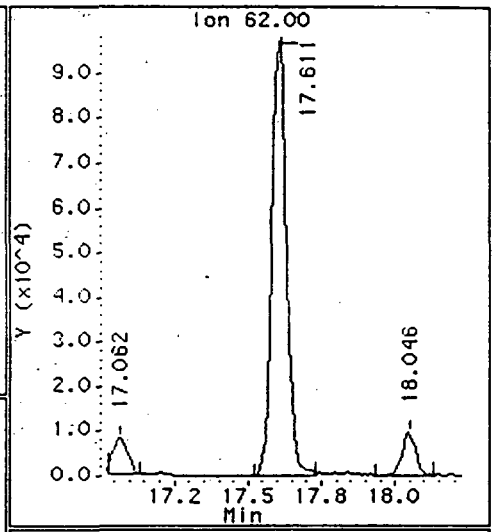
38 1,2-Dichloroethane

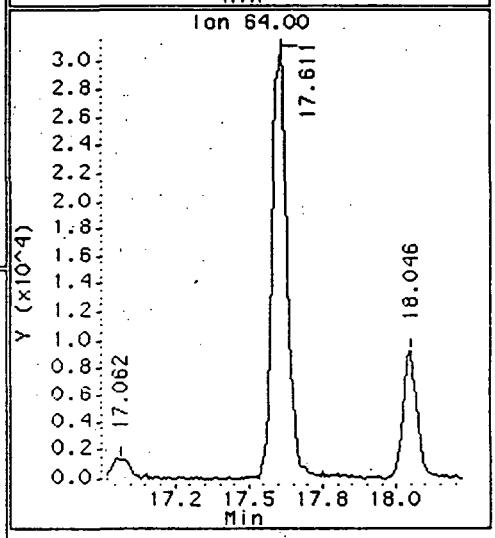












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

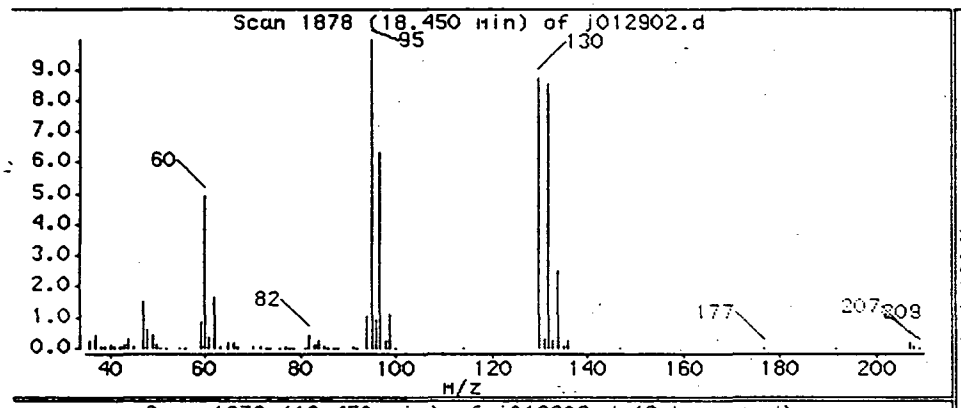
Sample Info: 25mL #296-25 T014 Std. 100ppbv

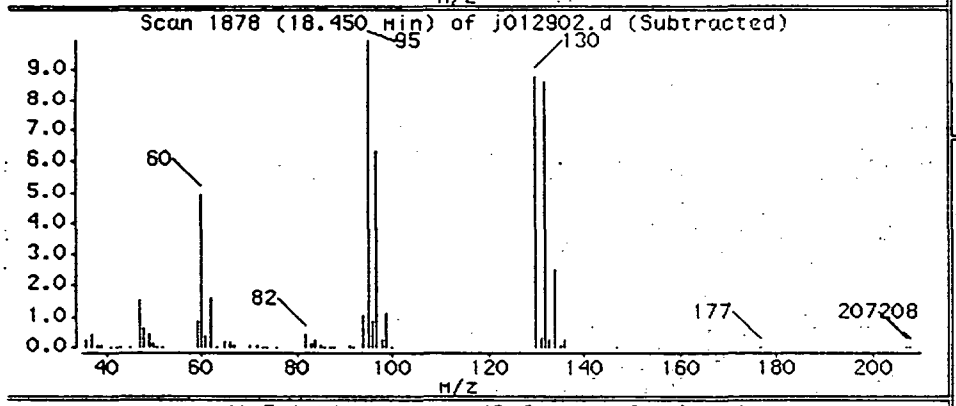
Operator: MH

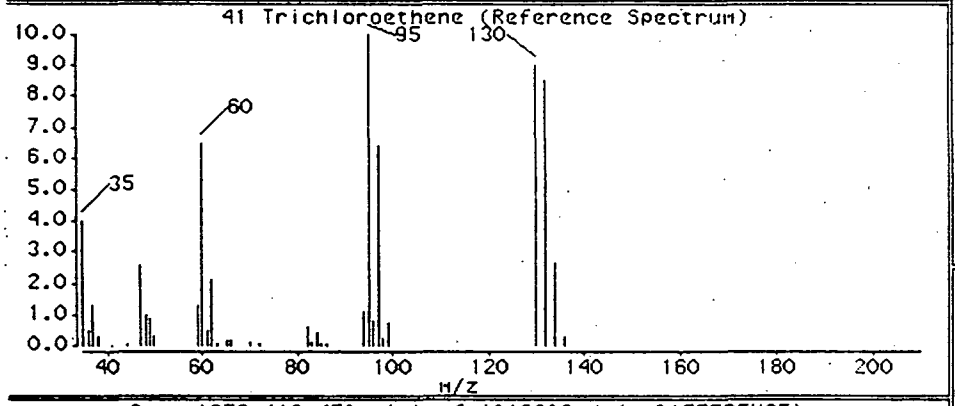
Column phase: RTx-624

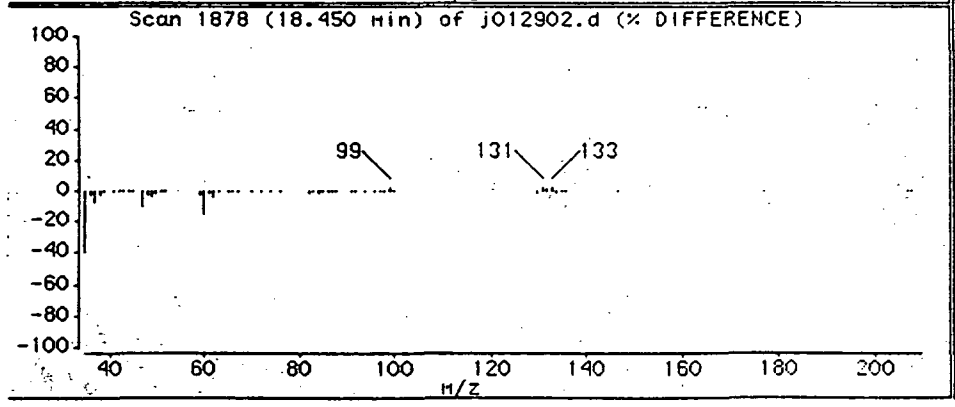
Column diameter: 0.58

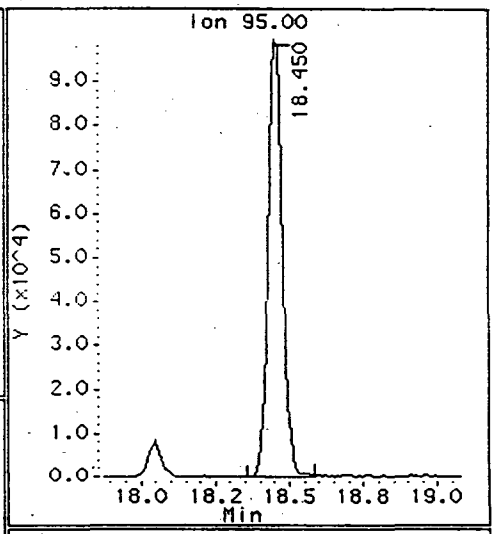
41 Trichloroethene

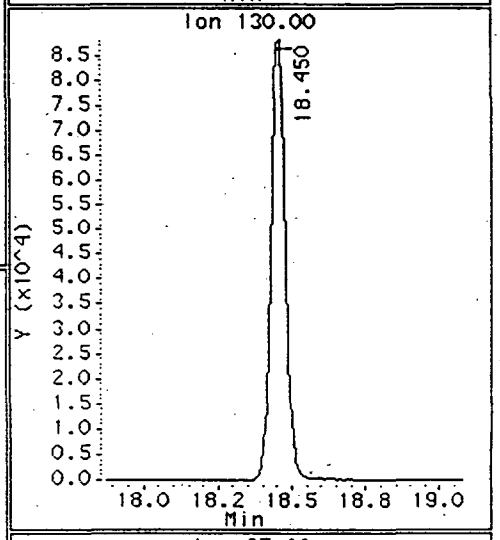


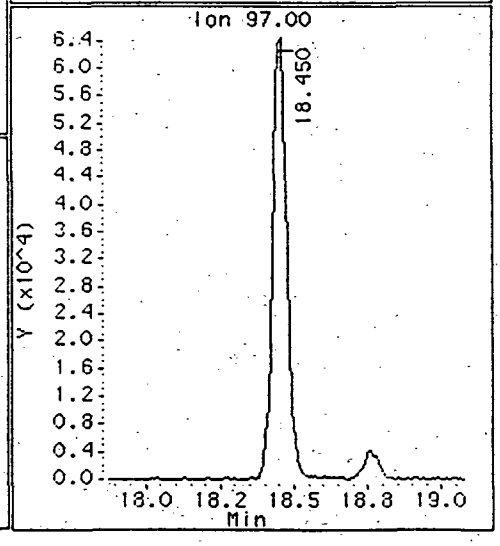












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

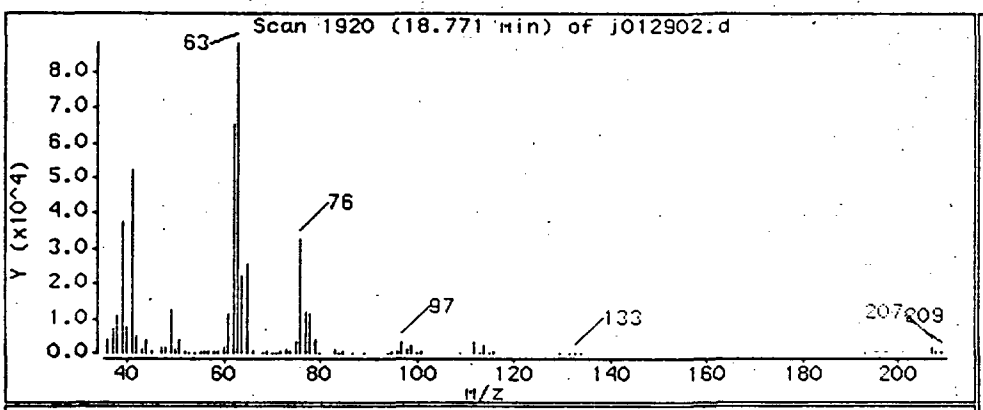
Sample Info: 25mL #296-25 T014 Std. 100ppbv

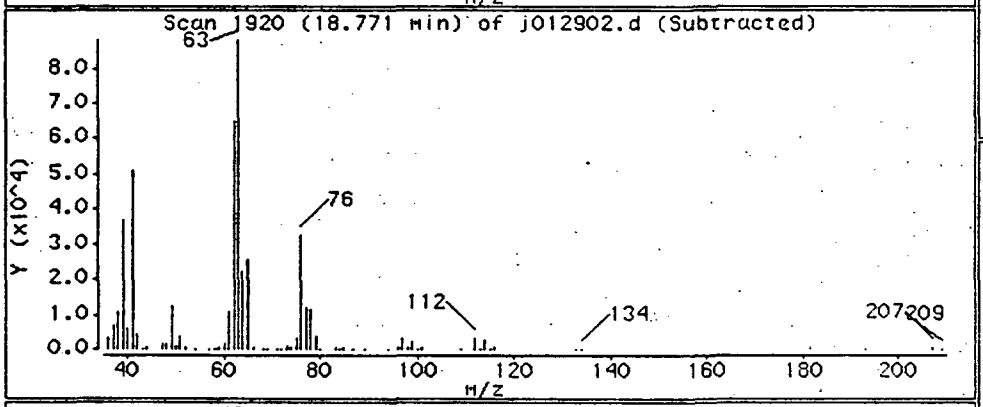
Operator: MH

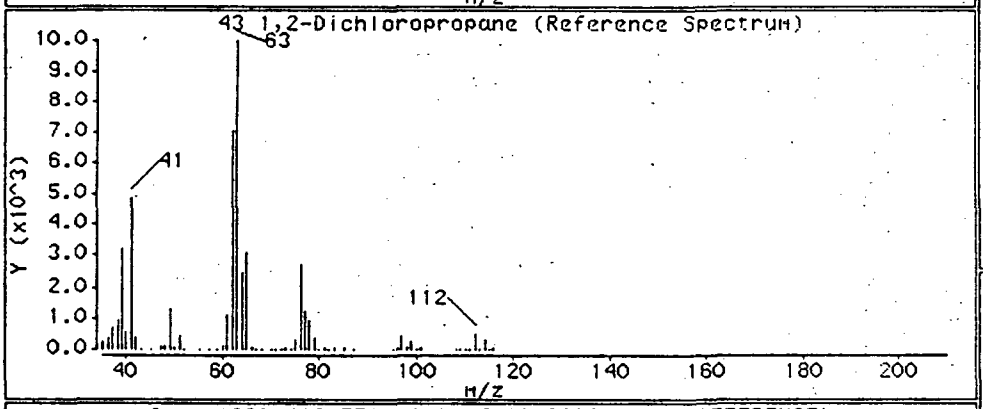
Column phase: RTx-624

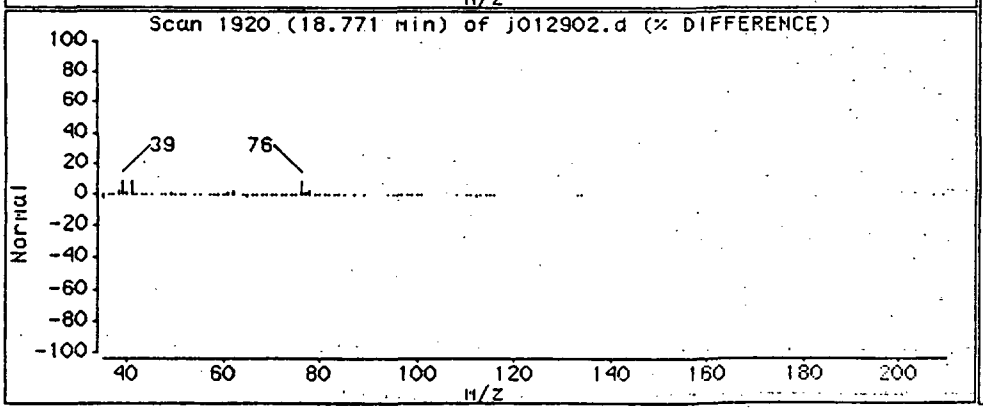
Column diameter: 0.58

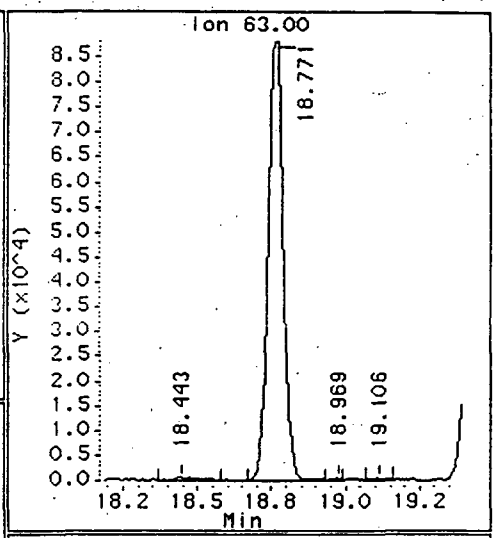
43 1,2-Dichloropropane

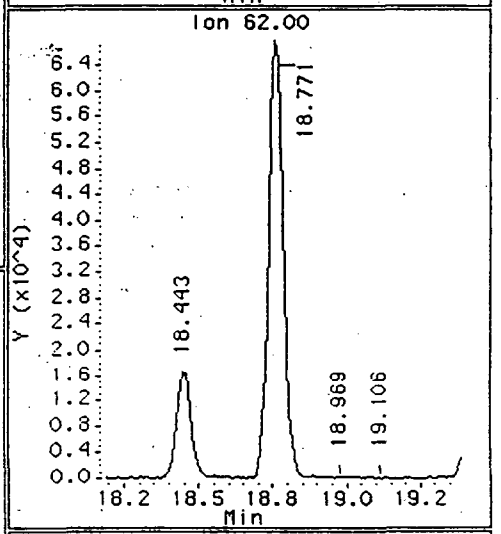


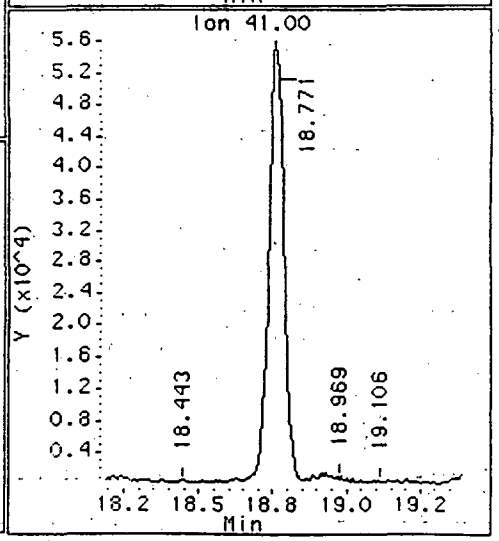












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

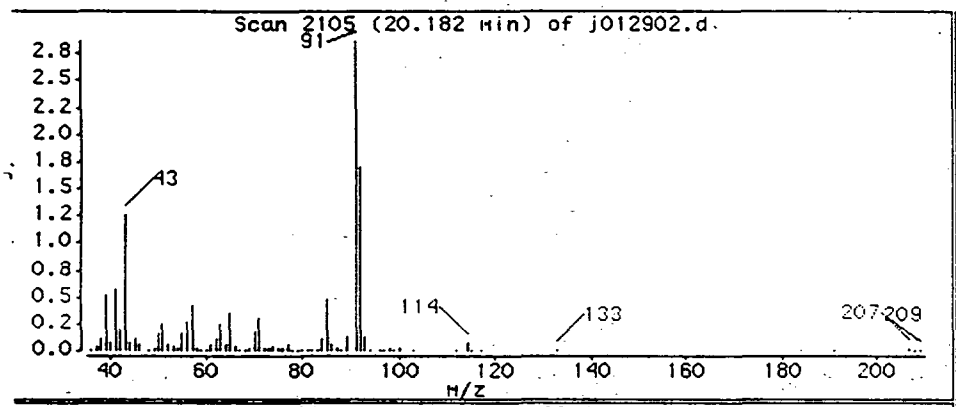
Sample Info: 25mL #296-25 T014 Std. 100ppbv

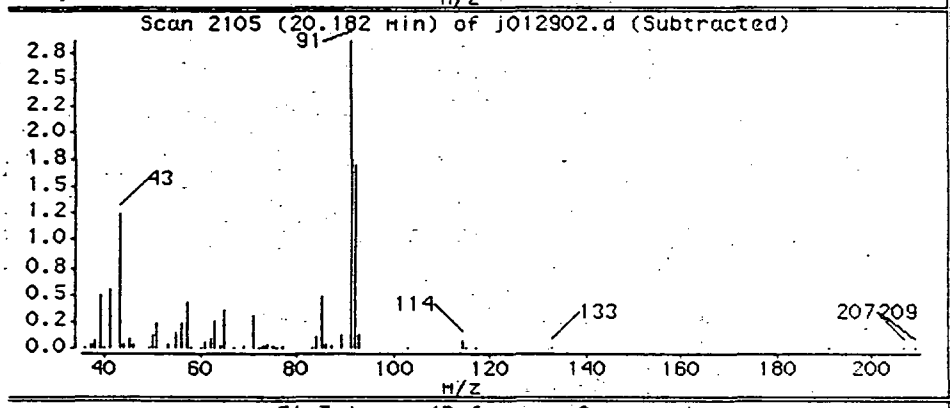
Operator: MH

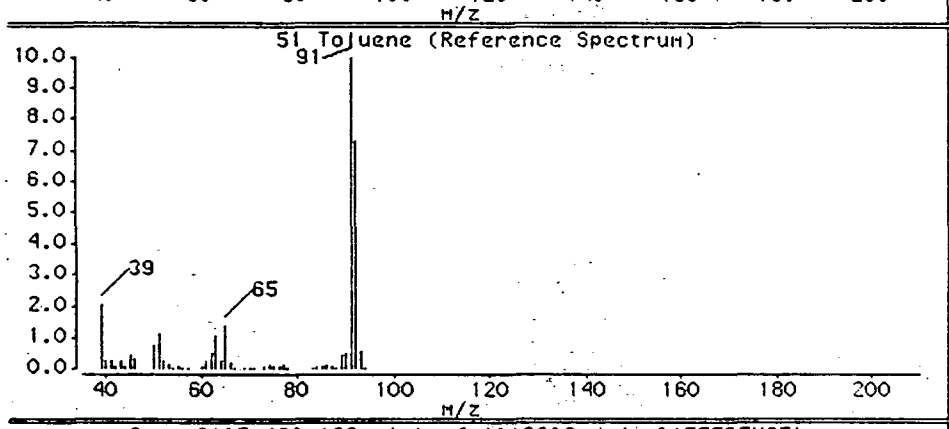
Column phase: RTx-624

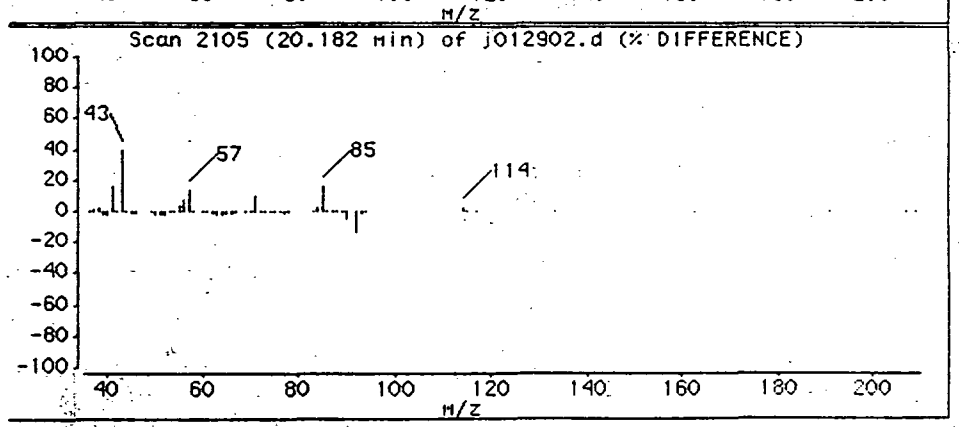
Column diameter: 0.58

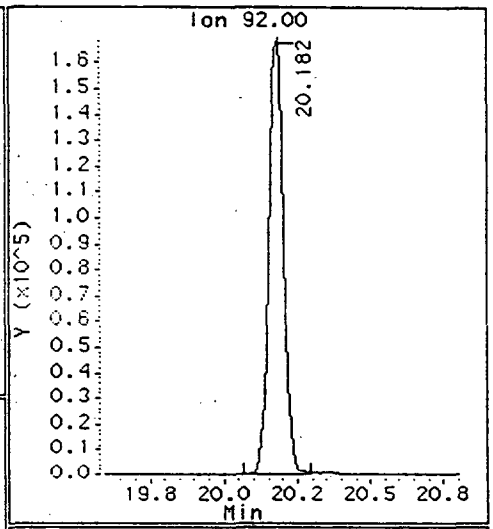
51 Toluene

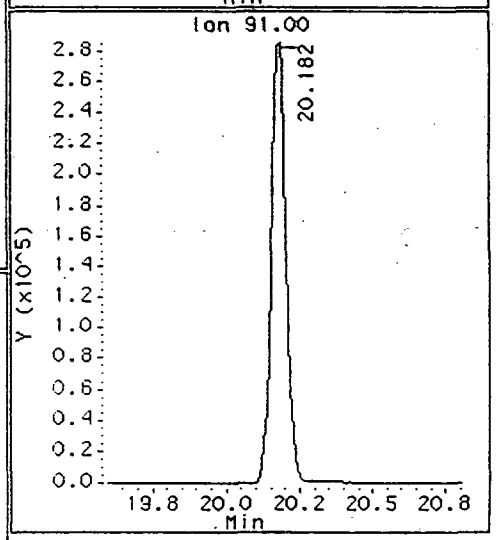












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

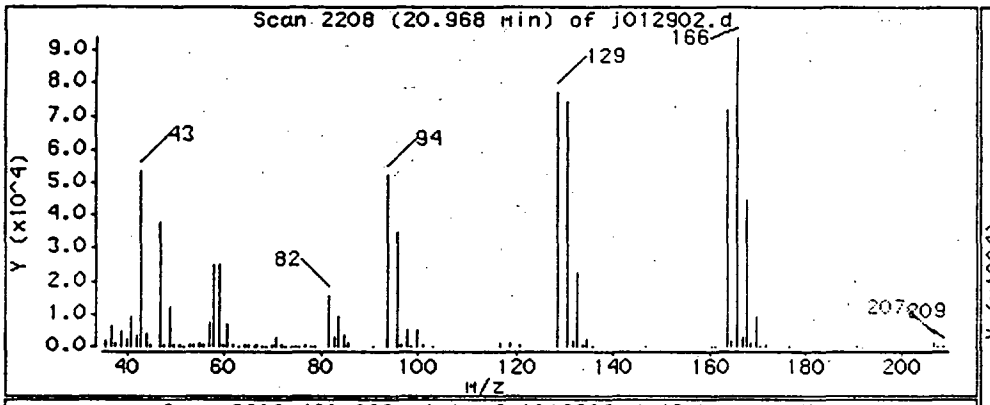
Sample Info: 25mL #296-25 T014 Std. 100ppbv

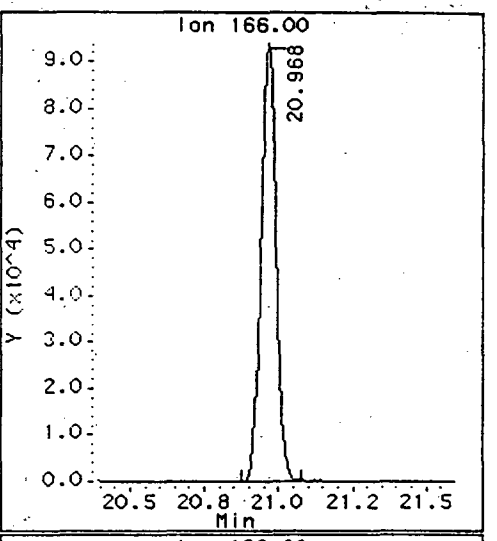
Operator: MH

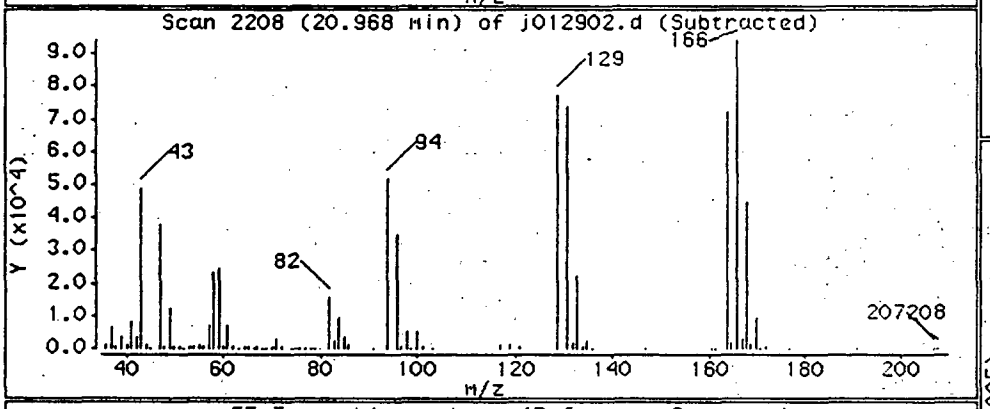
Column phase: RTx-624

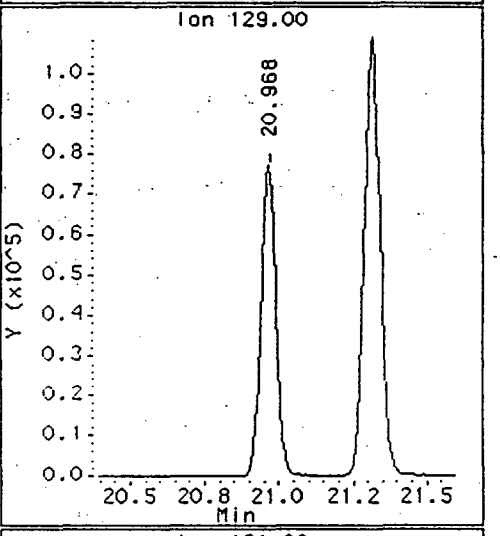
Column diameter: 0.58

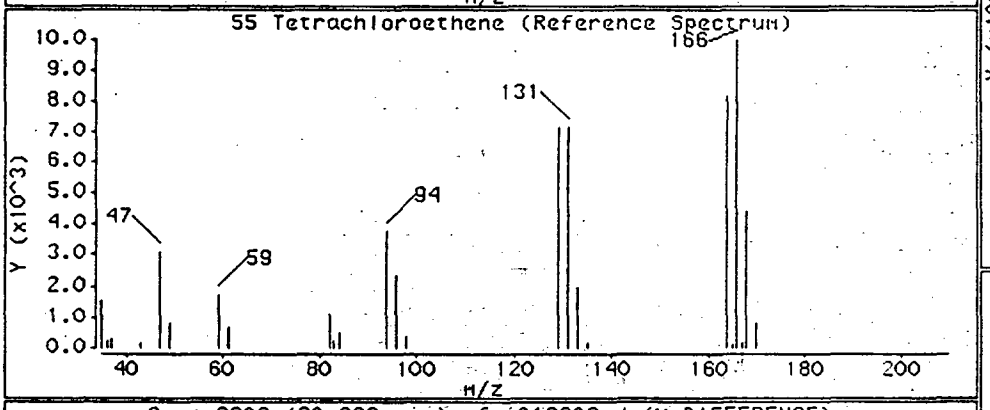
55 Tetrachloroethene

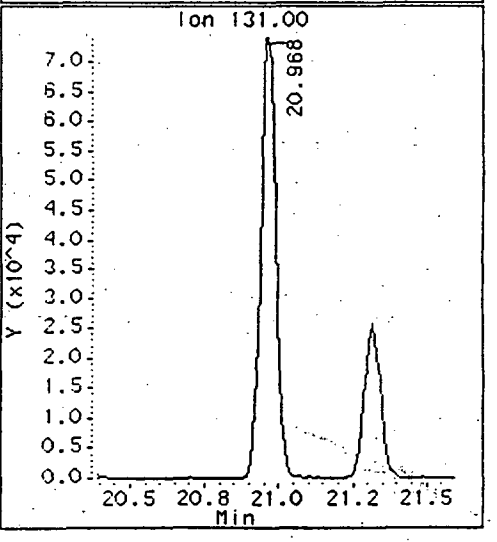


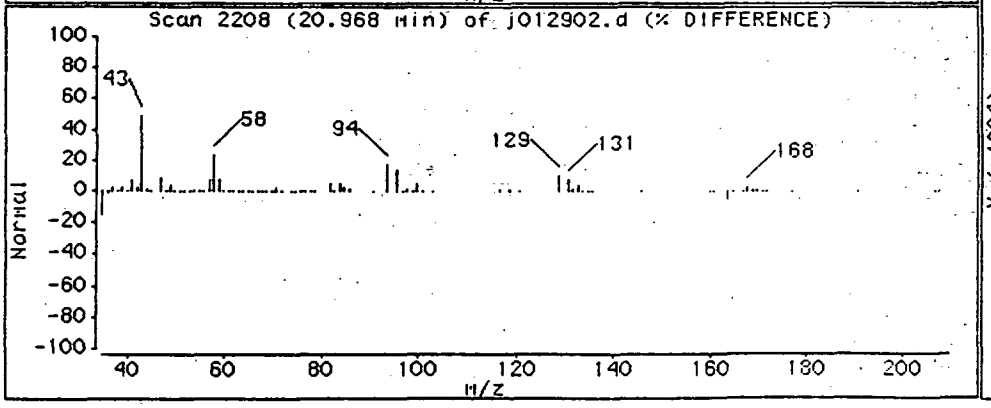












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

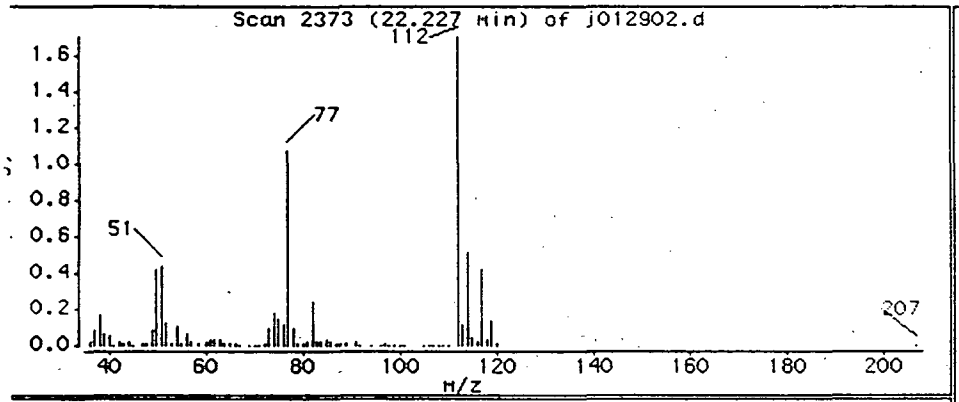
Sample Info: 25mL #296-25 T014 Std. 100ppbv

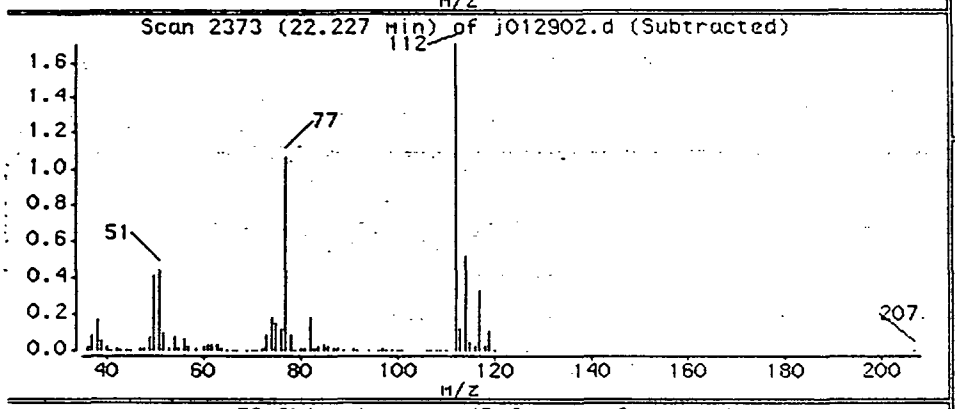
Operator: MH

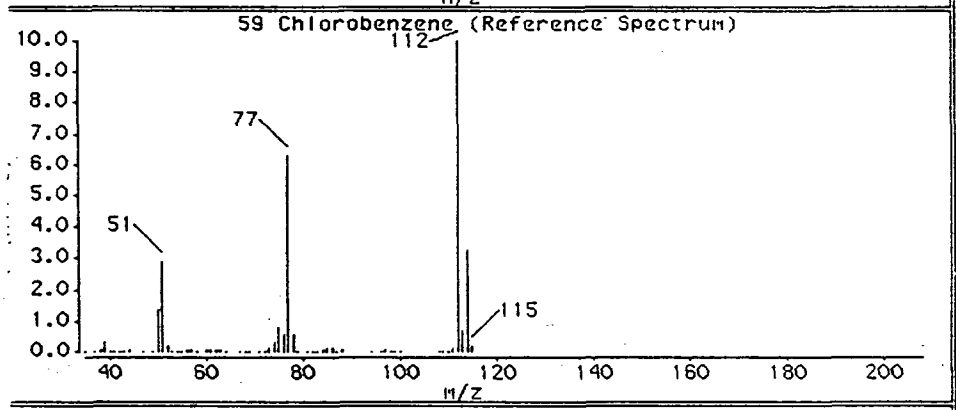
Column phase: RTx-624

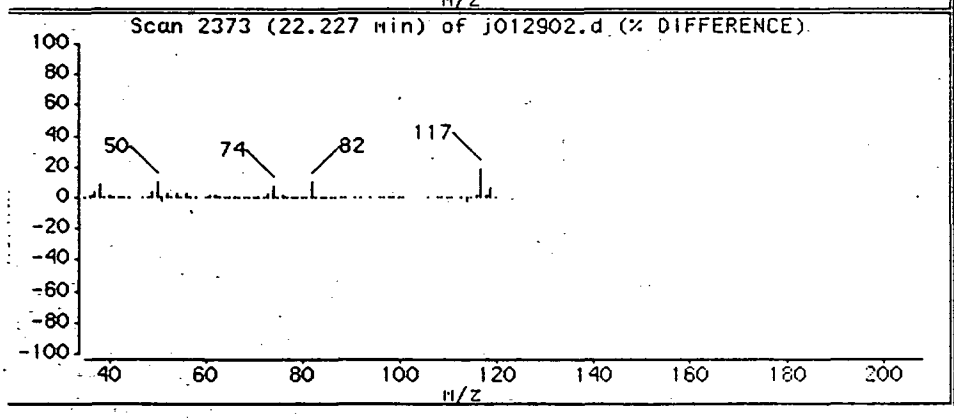
Column diameter: 0.58

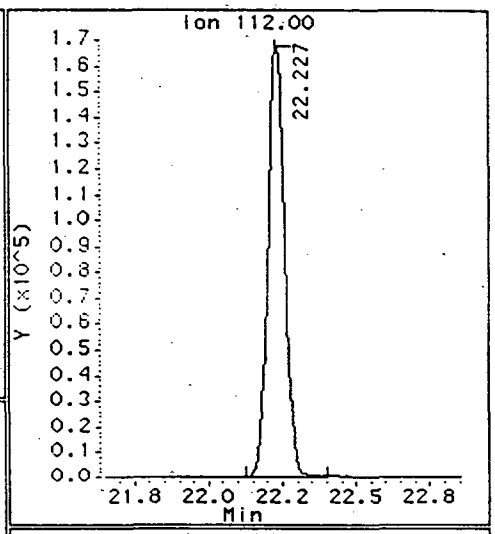
59 Chlorobenzene

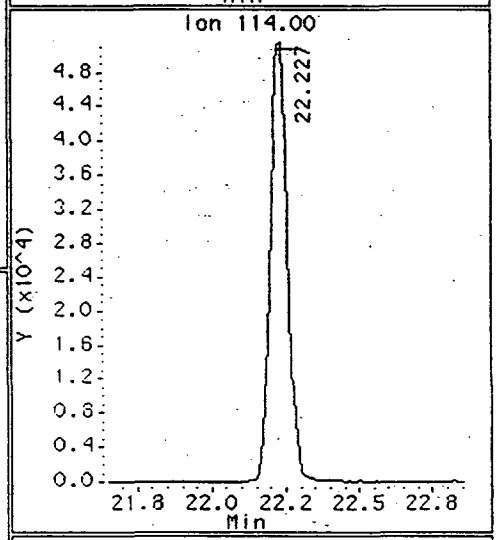


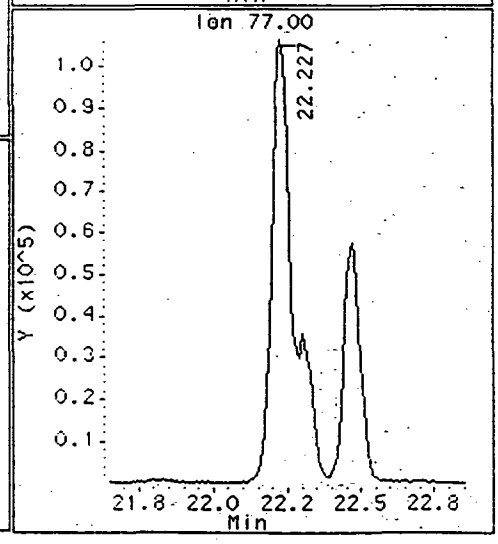












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

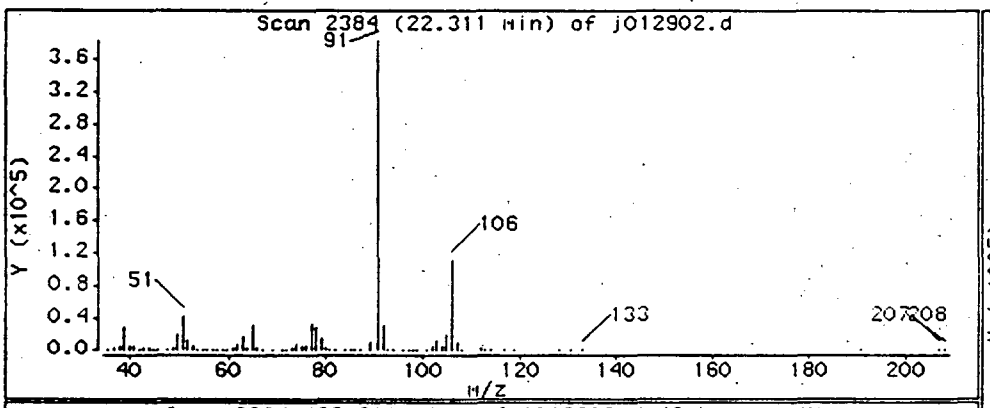
Sample Info: 25mL #296-25 T014 Std. 100ppbv

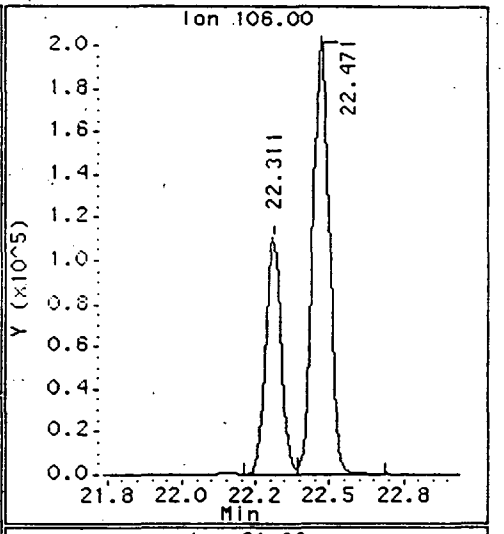
Operator: MH

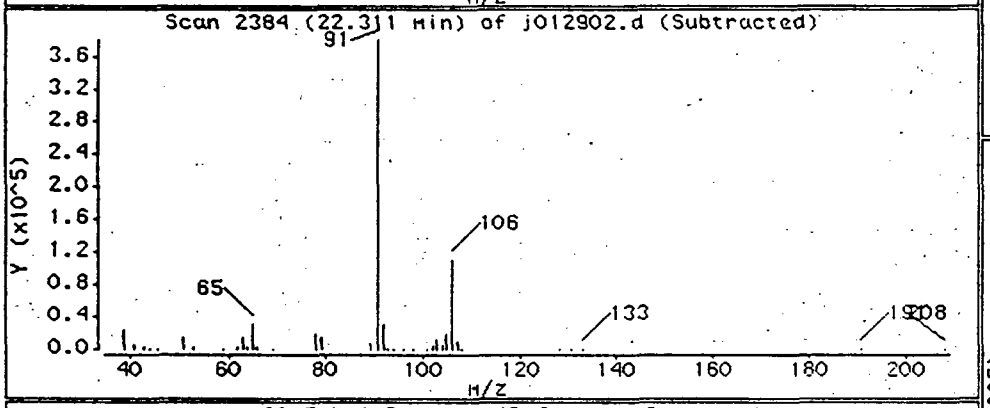
Column phase: RTx-624

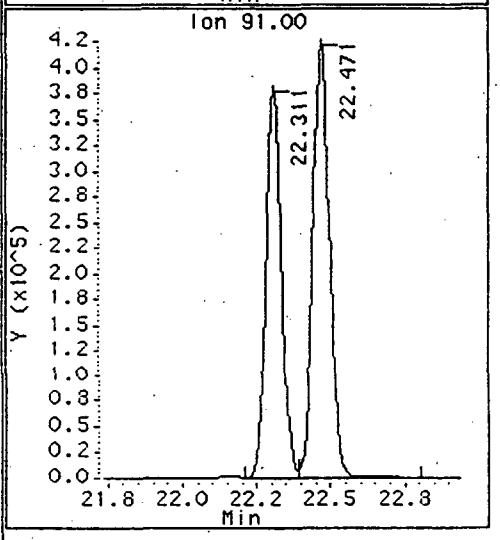
Column diameter: 0.58

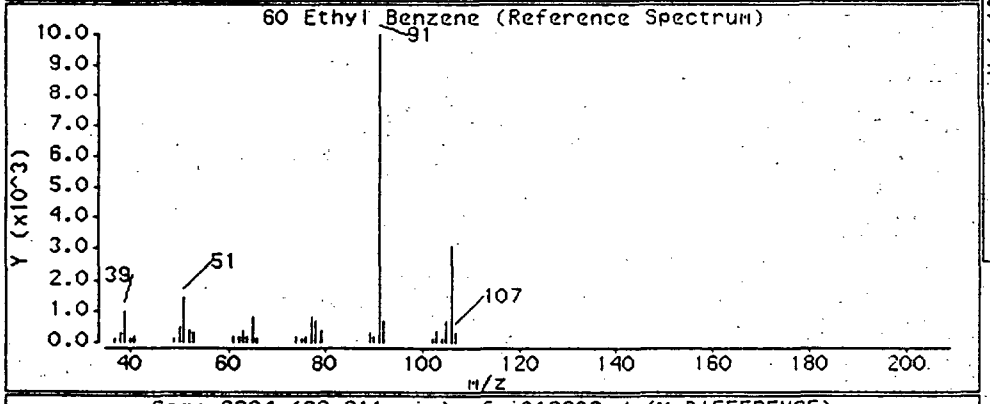
60 Ethyl Benzene

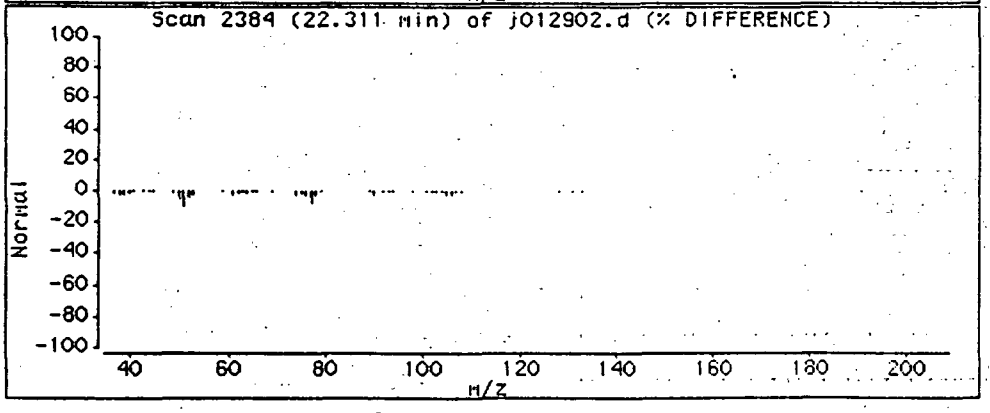












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

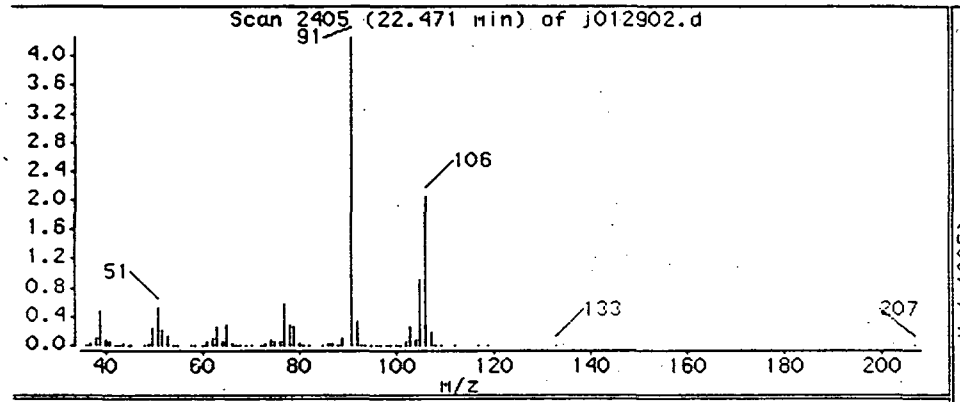
Sample Info: 25mL #296-25 T014 Std. 100ppbv

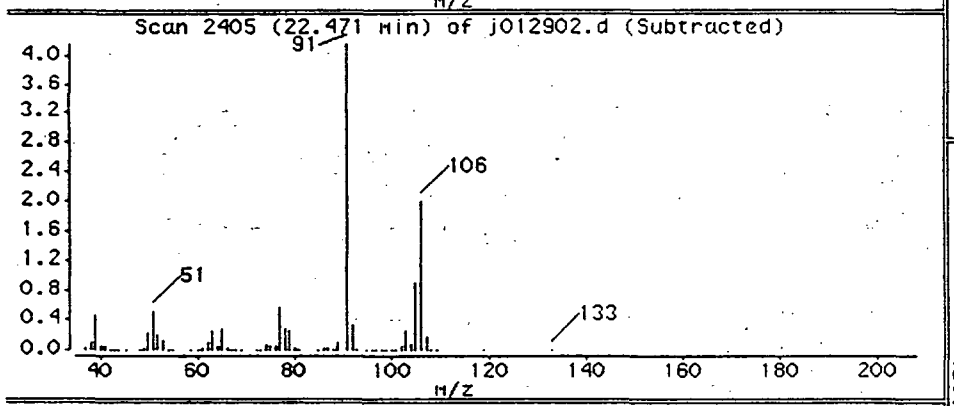
Operator: MH

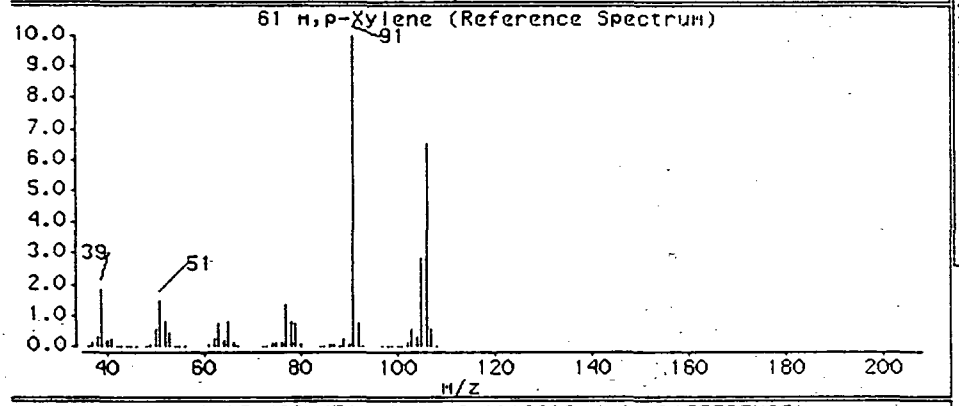
Column phase: RTx-624

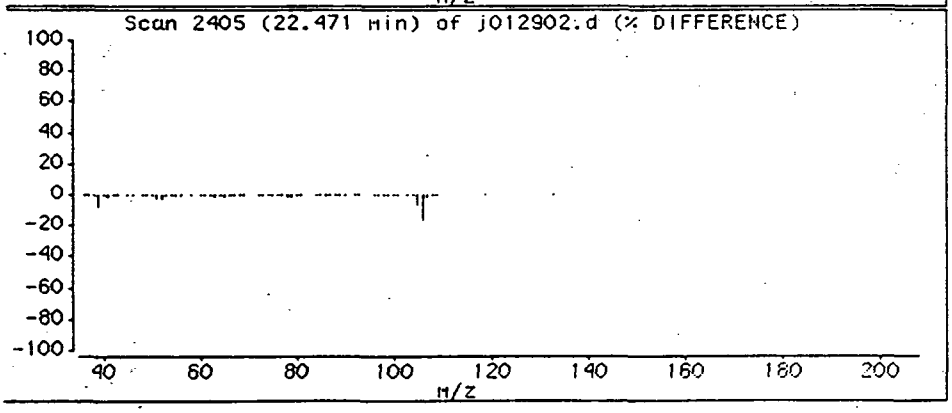
Column diameter: 0.58

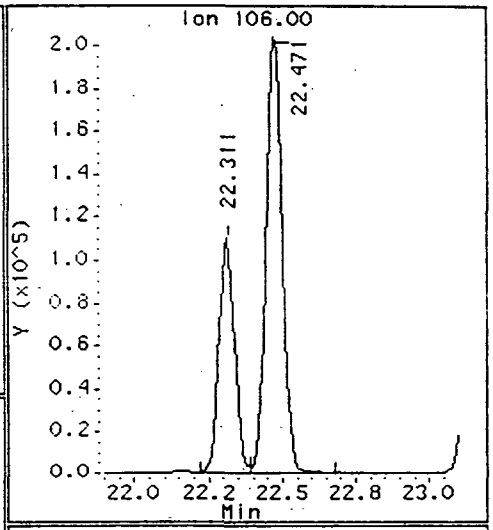
61 m,p-Xylene

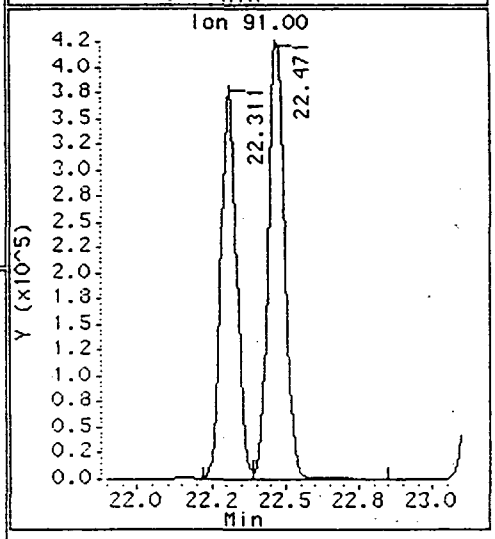












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

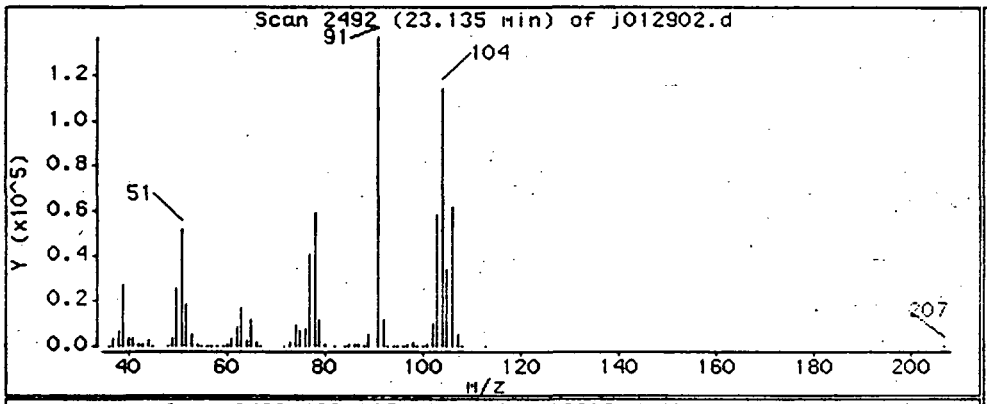
Sample Info: 25mL #296-25 T014 Std. 100ppbv

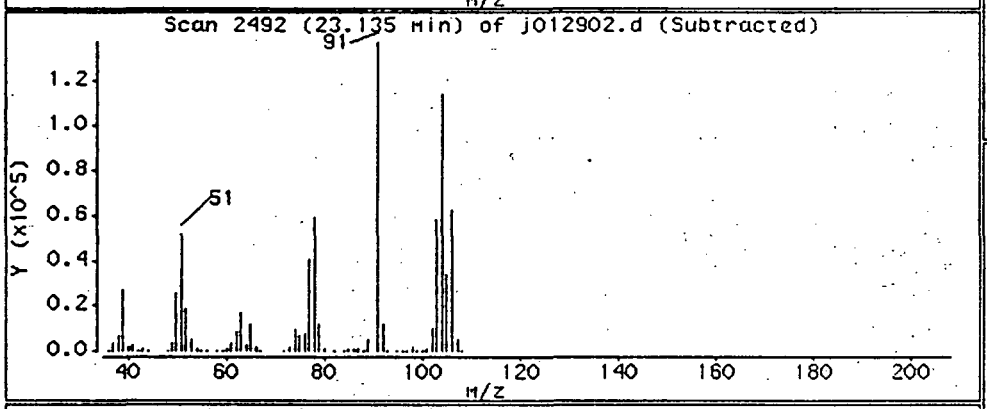
Operator: MH

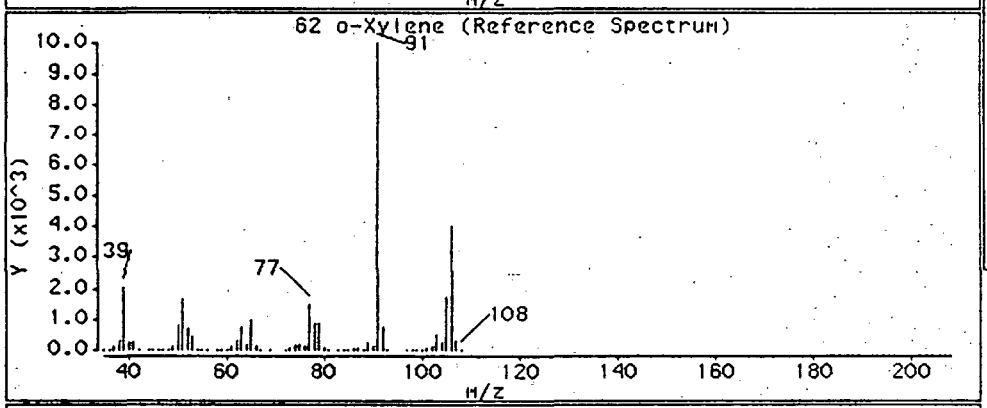
Column phase: RTx-624

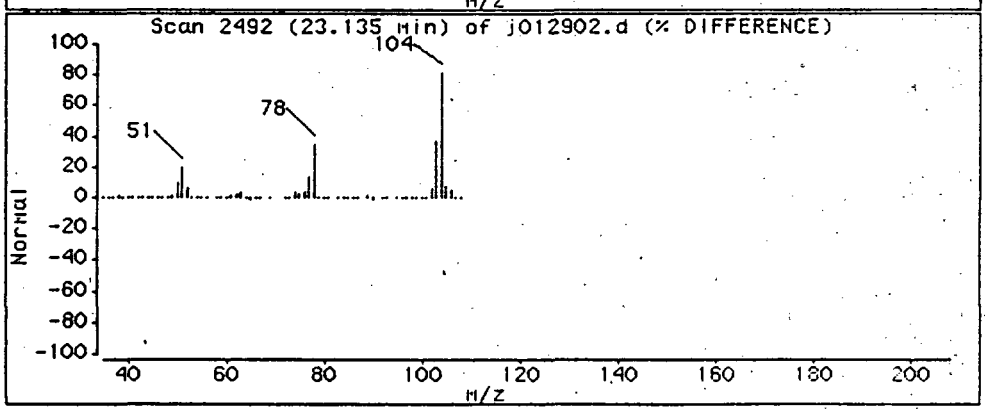
Column diameter: 0.58

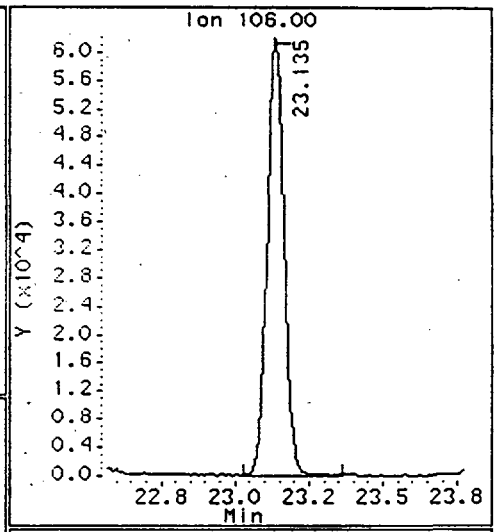
62 o-Xylene

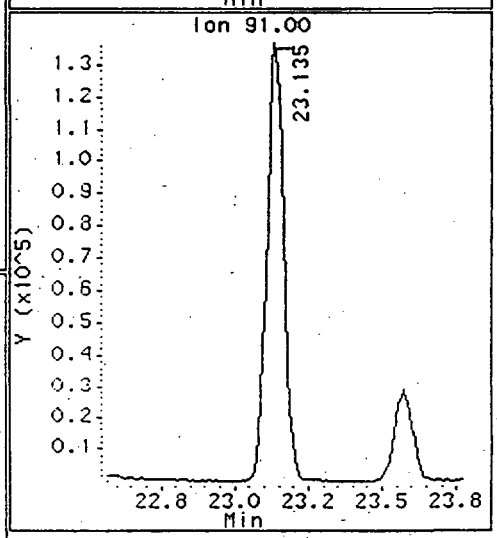












Data File: /chem/msdj.i/j-29jan.b/j012902.d

Date : 29-JAN-1997 08:34

Client ID: Method Spike

Instrument: msdj.i

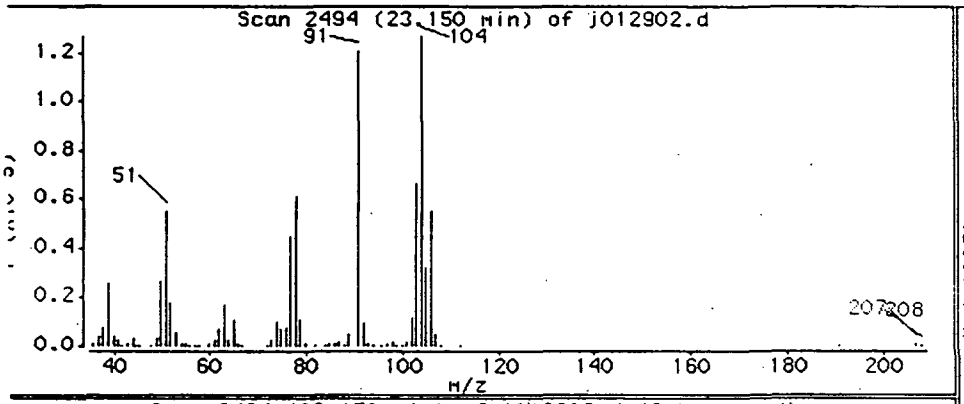
Sample Info: 25mL #296-25 T014 Std. 100ppbv

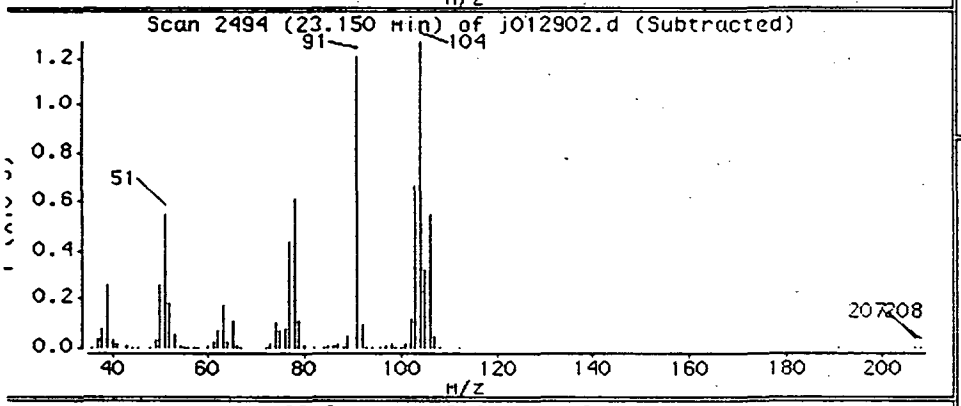
Operator: MH

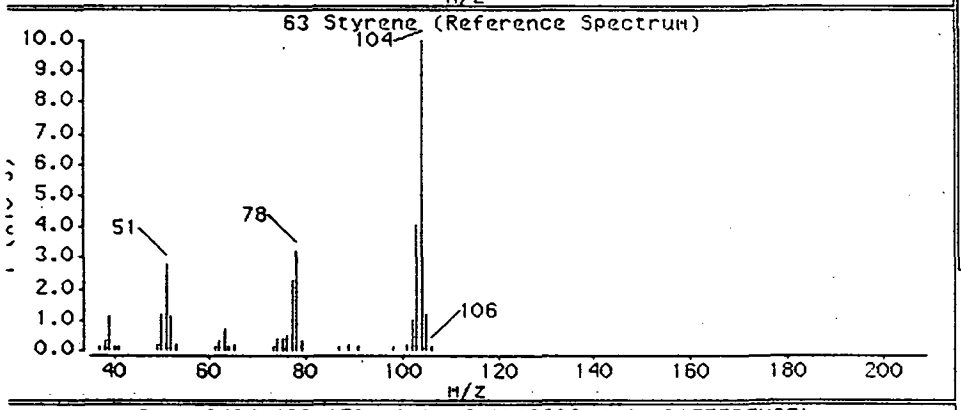
Column phase: RTx-624

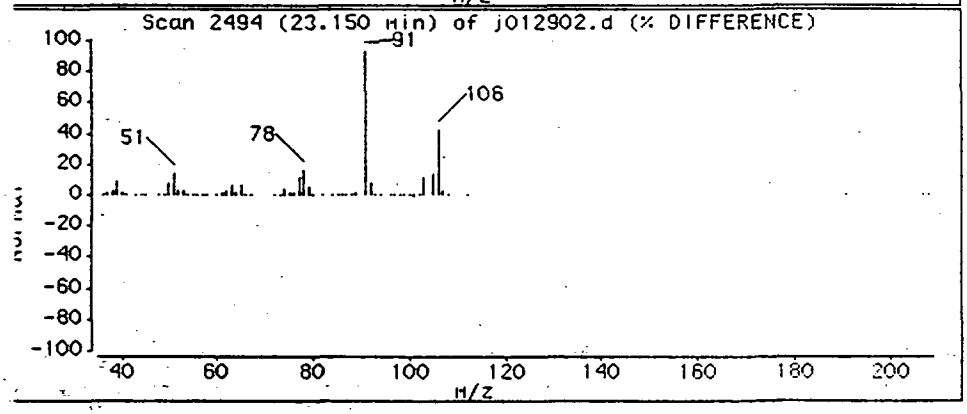
Column diameter: 0.58

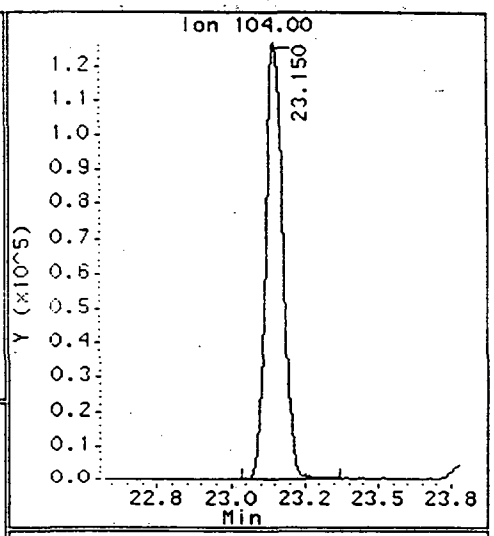
63 Styrene

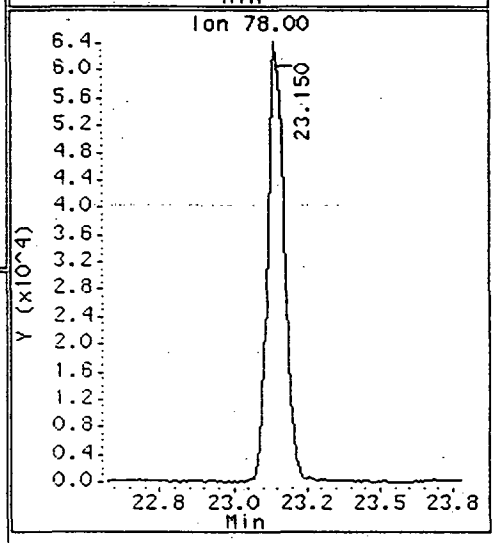






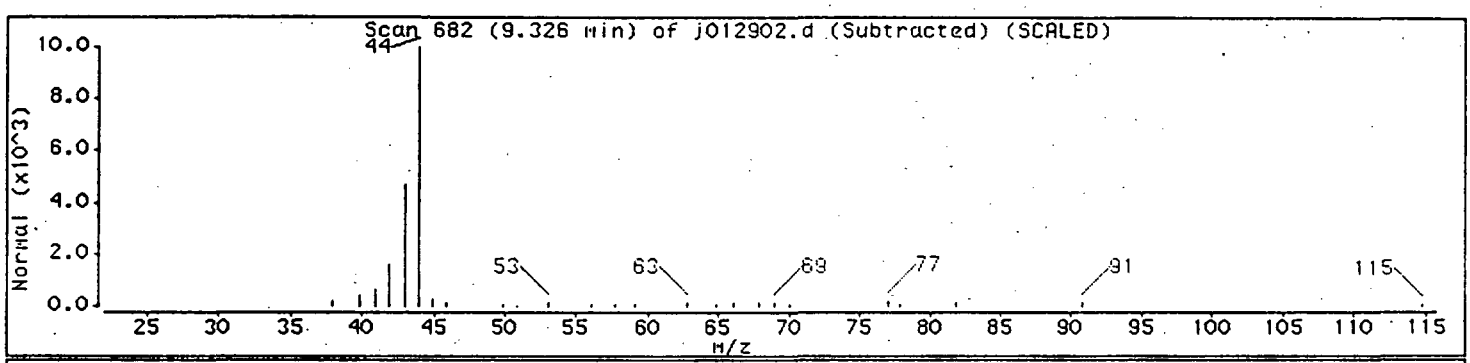


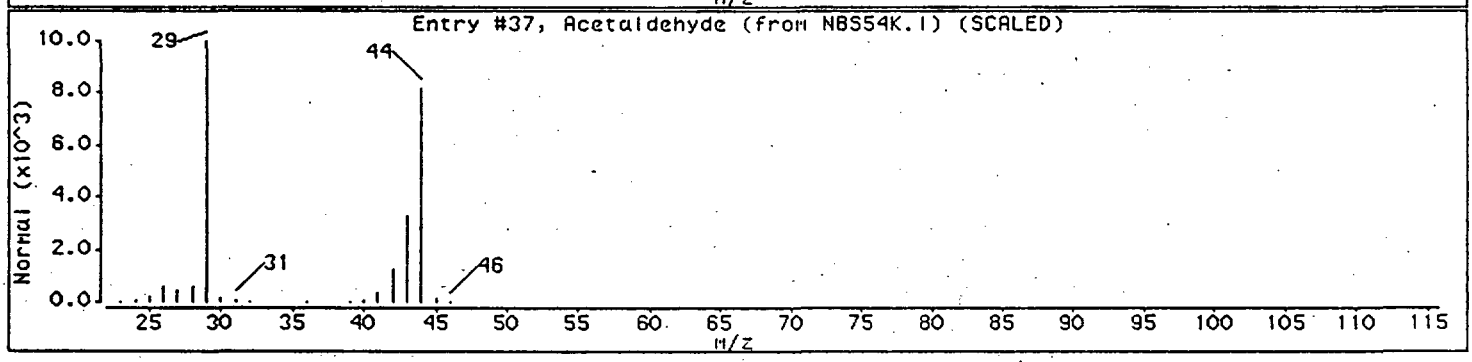




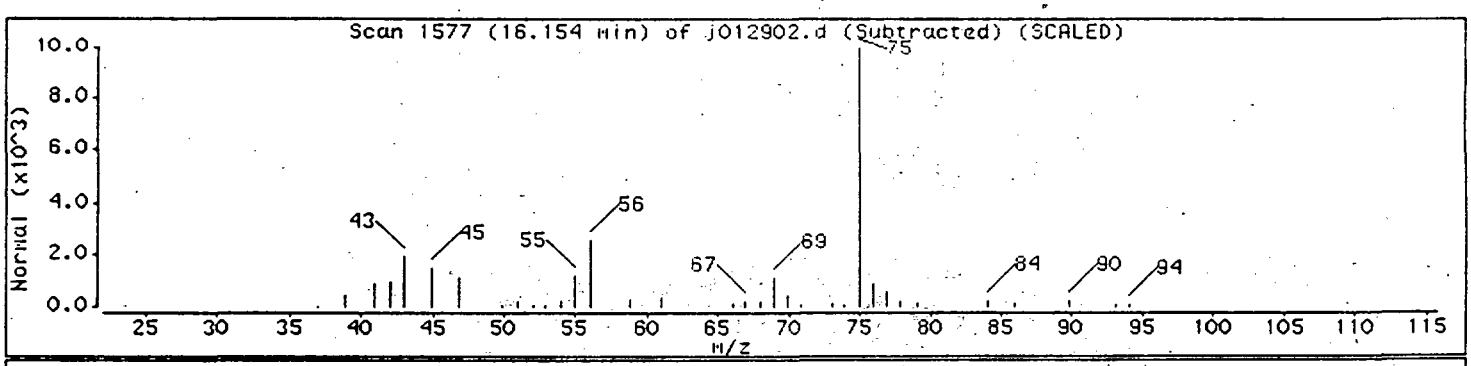
Data File: /chem/msdj.i/j-29jan.b/j012902.d
Date : 29-JAN-1997 08:34
Instrument: msdj.i
Client ID: Method Spike
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetaldehyde	75-07-0	NBS54K.l	37	56





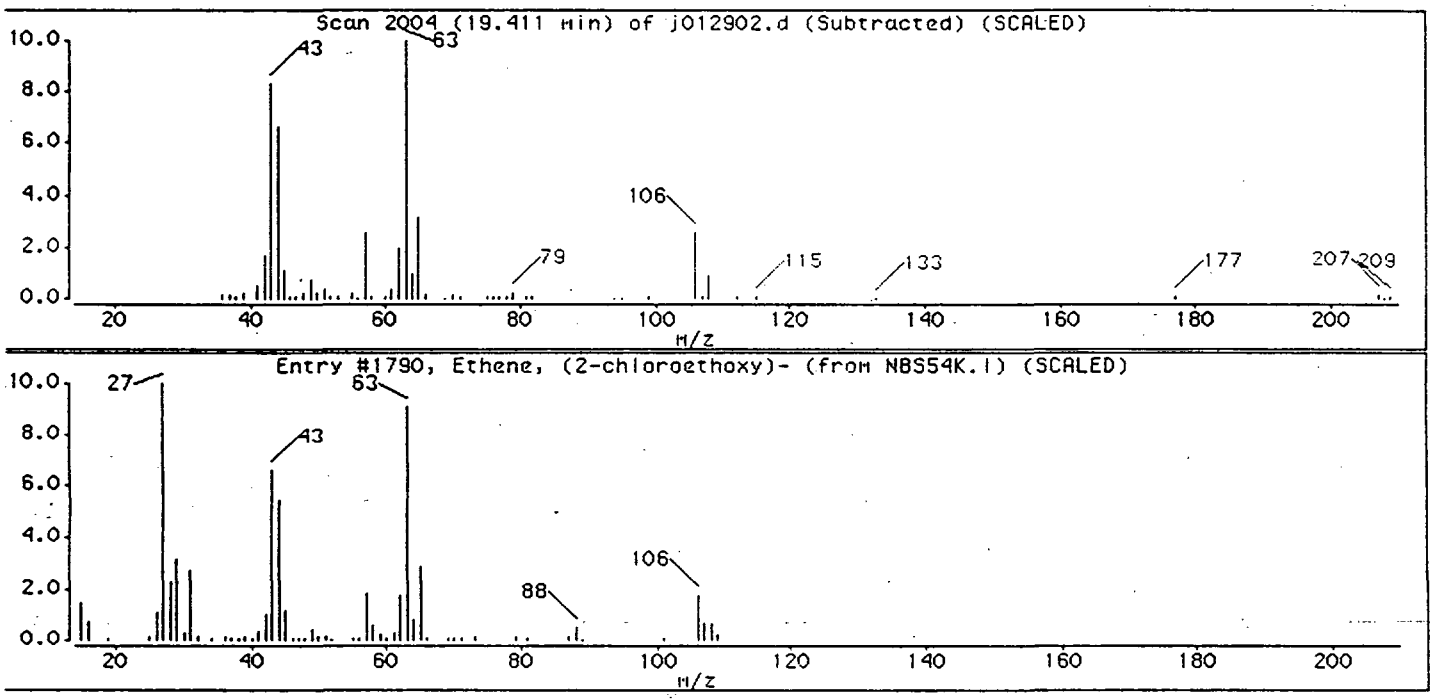
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Unknown			0	0



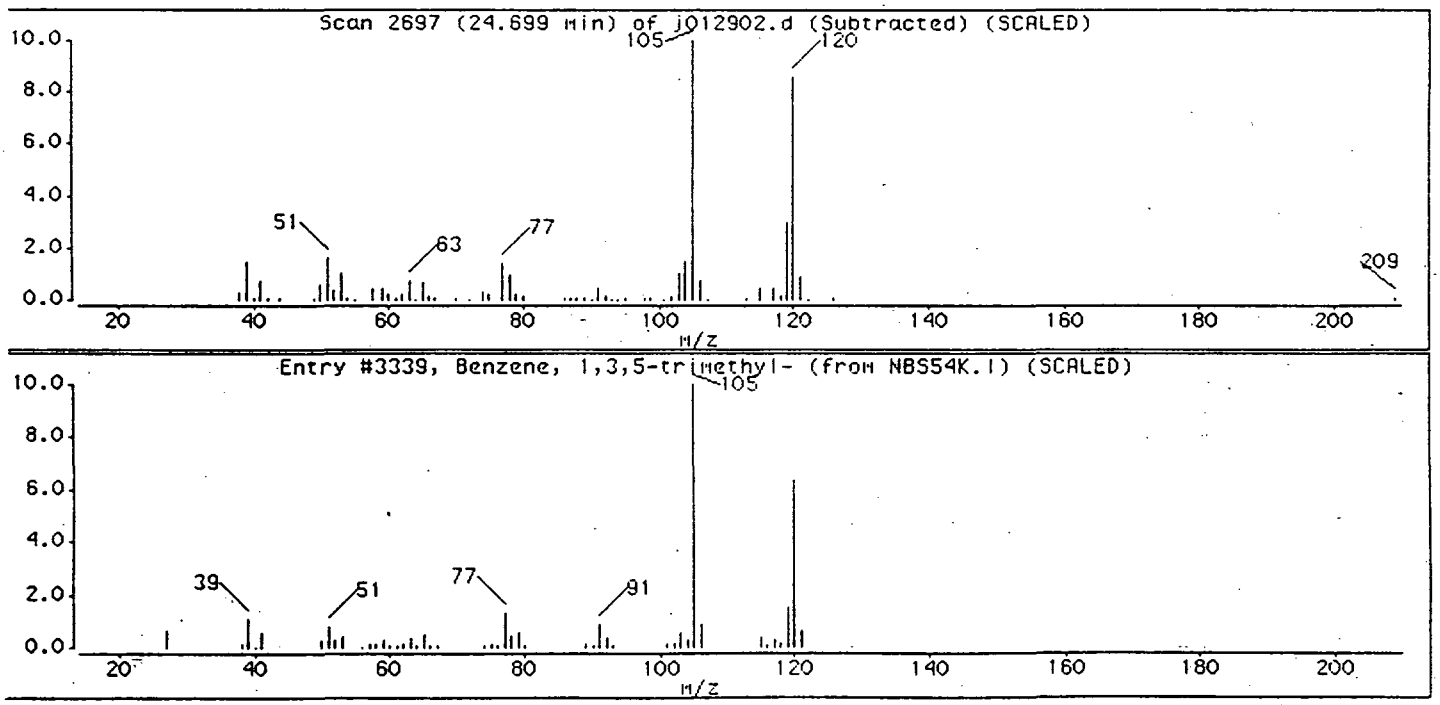
Data File: /chem/msdj.i/j-29jan.b/j012902.d
Date : 29-JAN-1997 08:34
Instrument: msdj.i
Client ID: Method Spike
Column phase: RTx-624

Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Ethene, (2-chloroethoxy)-	110-75-8	NBS54K.I	1790	91



Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1,3,5-trimethyl-	108-67-8	NBS54K.I	3339	72



Air Toxics Limited

Data file : /chem/msdj.i/j-09jan.b/j010903.d
Lab Smp Id:
Inj Date : 09-JAN-1997 09:07
Operator : FA Inst ID: msdj.i
Smp Info : BFB Tune Check #275-8-25 2.0ul
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/bfb.m
Meth Date : 09-Jan-1997 09:13 fayala Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12 Sample Matrix: WATER
Concentration Formula: Uf * Vf * Vi

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.019	8.019	0.000	95	65480				100.00
8.019	8.019	0.000	50	11913			15.00- 40.00	18.19
8.019	8.019	0.000	75	29837			30.00- 60.00	45.57
8.019	8.019	0.000	96	4304			5.00- 9.00	6.57
8.019	8.019	0.000	173	0			0.00- 2.00	0.00
8.019	8.019	0.000	174	46610			50.00- 100.00	71.18
8.019	8.019	0.000	175	3256			5.00- 9.00	6.99
8.019	8.019	0.000	176	45104			95.00- 101.00	96.77
8.019	8.019	0.000	177	3143			5.00- 9.00	6.97

Air Toxics Limited

TARGET COMPOUNDS

Client Name:
Lab Smp Id:
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: bfb
Data Type: MS DATA
Misc Info:

Client SDG: j-09jan
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: FA

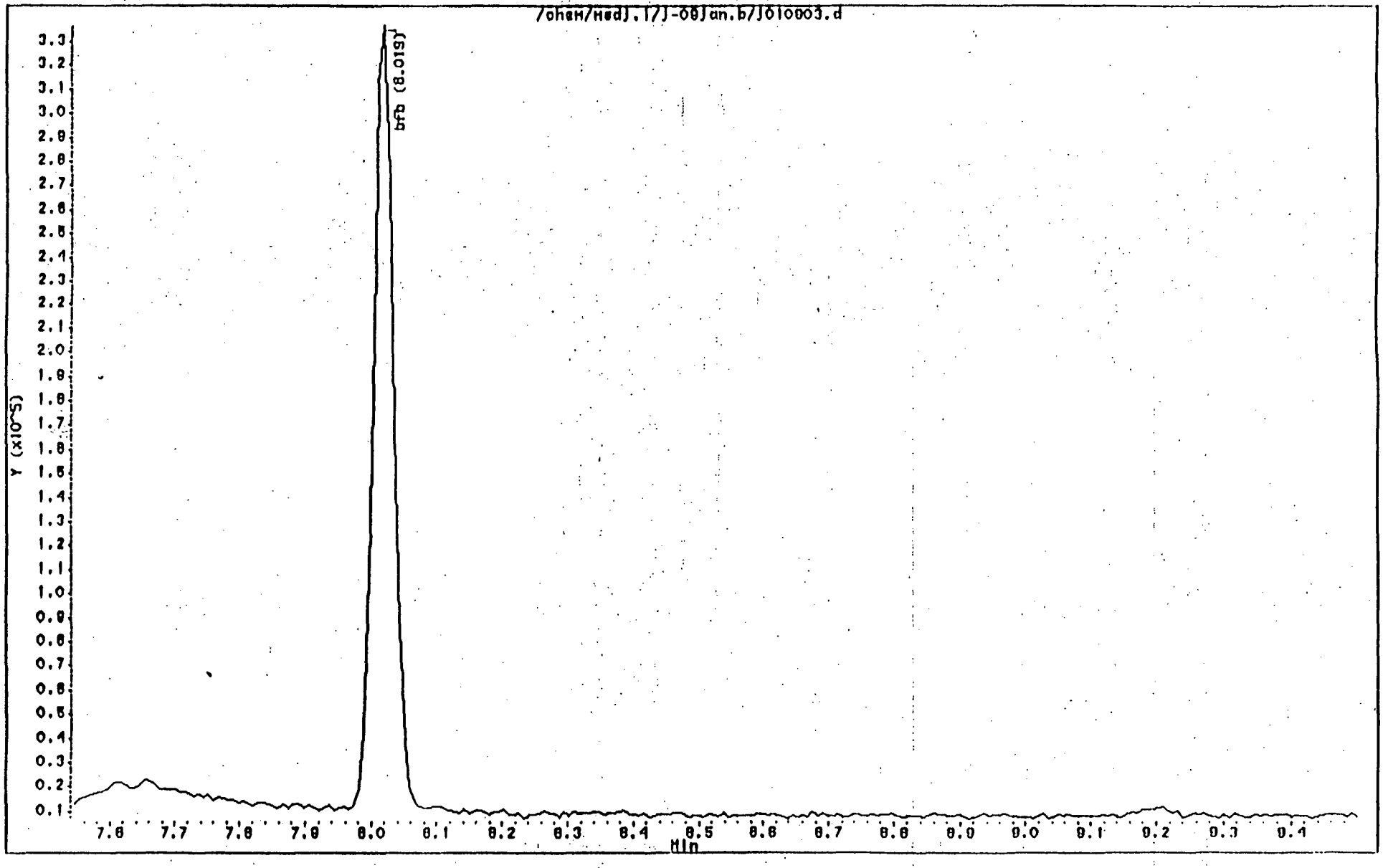
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
460-00-4	bfb	0.0	

C25

Data File: /ohem/msdj.1/j-08jan.b/j010003.d
Date : 08-JAN-1997 09:07
Client ID:
Sample Info: BFB Tune Check M275-8-25 2.0ul
Volume Injected (uL): 1.0
Column phase:

Instrument: msdj.1

Operator: FM
Column diameter: 2.00



Data File: /chem/msdj.i/j-09jan.b/j010903.d

Date : 09-JAN-1997 09:07

Client ID:

Instrument: msdj.i

Sample Info: BFB Tune Check #275-8-25 2.0ul

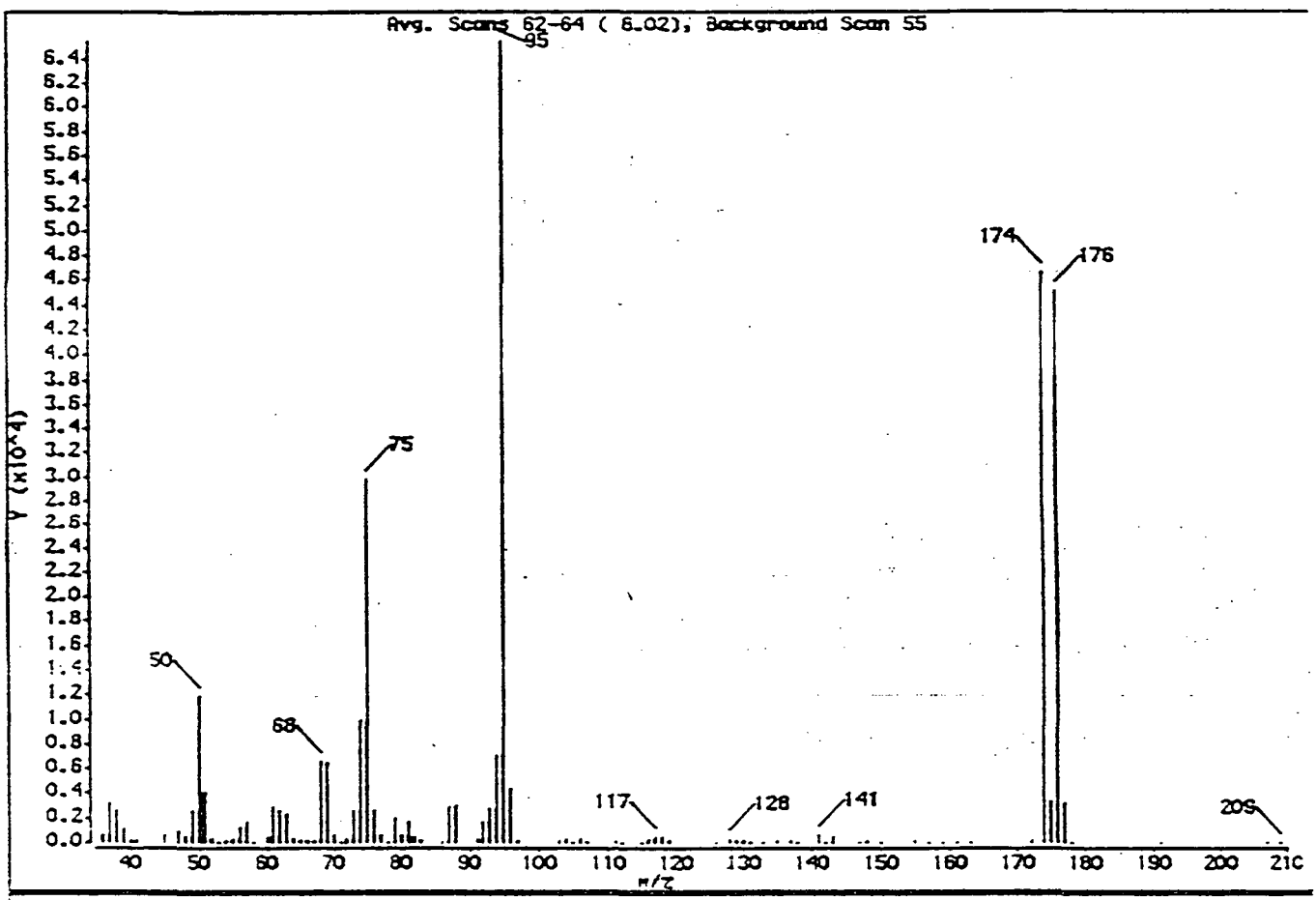
Volume Injected (uL): 1.0

Operator: FA

Column phase:

Column diameter: 2.00

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	18.19
75	30.00 - 60.00% of mass 95	45.57
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	71.18
175	5.00 - 9.00% of mass 174	4.97 (6.99)
176	95.00 - 101.00% of mass 174	68.88 (96.77)
177	5.00 - 9.00% of mass 176	4.80 (6.97)

Data File: /chem/msdj.i/j-09jan.b/j010903.d

Date : 09-JAN-1997 09:07

Client ID: Instrument: msdj.i

Sample Info: BFB Tune Check #275-8-25 2.0ul

Volume Injected (uL): 1.0 Operator: FR

Column phase: Column diameter: 2.00

Data File: j010903.d

Spectrum : Avg. Scans 62-64 (8.02), Background Scan 55

Largest m/z: 95.00

Number of peaks: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	611	65.00	120	93.00	2642	137.00	117
37.00	3142	66.00	195	94.00	7026	138.00	34
38.00	2627	67.00	154	95.00	65480	141.00	553
39.00	1089	68.00	6622	96.00	4304	142.00	56
40.00	94	69.00	6539	97.00	219	143.00	460
41.00	85	70.00	581	103.00	136	147.00	36
45.00	626	71.00	67	104.00	280	148.00	119
47.00	977	72.00	345	105.00	70	150.00	39
48.00	523	73.00	2521	106.00	230	155.00	121
49.00	2623	74.00	9552	107.00	34	157.00	59
50.00	11913	75.00	29832	111.00	152	159.00	55
51.00	4039	76.00	2633	112.00	43	161.00	36
52.00	279	77.00	551	115.00	43	163.00	35
53.00	50	78.00	64	116.00	263	172.00	218
54.00	83	79.00	1308	117.00	396	174.00	46608
55.00	250	80.00	551	118.00	382	175.00	3256
56.00	1167	81.00	1716	119.00	90	176.00	45104
57.00	1592	82.00	421	126.00	73	177.00	3143
58.00	2	83.00	159	128.00	261	178.00	45
60.00	477	86.00	52	129.00	108	191.00	75
61.00	2823	87.00	2934	130.00	201	207.00	37
62.00	2598	88.00	3029	131.00	45	208.00	46
63.00	2211	91.00	371	132.00	36		
64.00	255	92.00	1582	133.00	123		

.ta File: /chem/msdj.i/j-29jan.b/j012901.d
:port Date: 29-Jan-1997 07:57

Air Toxics Limited

:ta file : /chem/msdj.i/j-29jan.b/j012901.d
:b Smp Id: BFB Client Smp ID: BFB
ıj Date : 29-JAN-97 08:03
›erator : FA Inst ID: msdj.i
ıp Info : #275-8-25 BFB Tune Check 2uL
.sc Info :
›mment :
›thod : /chem/msdj.i/j-29jan.b/bfb.m
:th Date : 29-Jan-1997 07:57 Quant Type: ESTD
ıl Date : Cal File:
.s bottle: 1 QC Sample: BFB
.l Factor: 1.000
ıtegrator: HP RTE Compound Sublist: all.sub
ırget Version: 3.12 Sample Matrix: WATER
›ncentration Formula: Uf * Vf * Vi

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
:.019	8.019	0.000	95	38541				100.00
:.019	8.019	0.000	50	7084			15.00- 40.00	18.38
:.019	8.019	0.000	75	16995			30.00- 60.00	44.10
:.019	8.019	0.000	96	2508			5.00- 9.00	6.51
:.019	8.019	0.000	173	0			0.00- 2.00	0.00
:.019	8.019	0.000	174	28941			50.00- 100.00	75.09
:.019	8.019	0.000	175	1965			5.00- 9.00	6.79
:.019	8.019	0.000	176	28157			95.00- 101.00	97.29
:.019	8.019	0.000	177	1712			5.00- 9.00	6.08

Data File: /chem/msdj.i/j-29jan.b/j012901.d
Report Date: 29-Jan-1997 07:57

Air Toxics Limited

TARGET COMPOUNDS

Client Name:
Lab Smp Id: BFB
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: bfb
Data Type: MS DATA
Misc Info:

Client SDG: j-29jan
Client Smp ID: BFB
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: FA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
460-00-4	--------bfb	0.0	

Data File: /chem/msdj.i/j-29jan.b/j012901.d

Date : 29-JAN-97 08:03

Client ID: BFB

Sample Info: M275-8-25 BFB Tune Check 2uL

Volume Injected (uL): 1.0

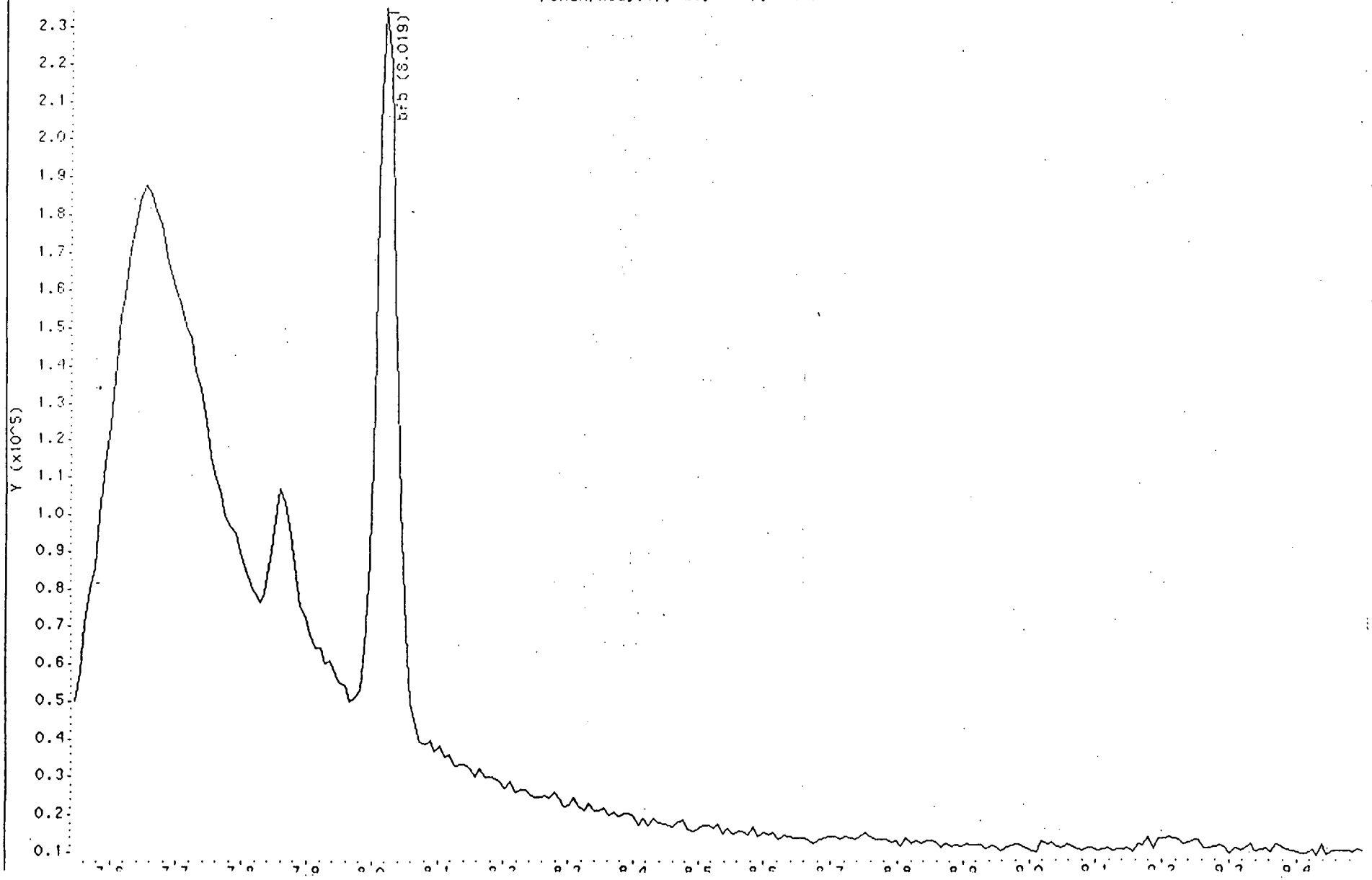
Column phase:

Instrument: msdj.i

Operator: FA

Column diameter: 2.00

/chem/msdj.i/j-29jan.b/j012901.d



Data File: /chem/msdj.i/j-29jan.b/j012901.d

Date : 29-JAN-97 08:03

Client ID: BFB

Instrument: msdj.i

Sample Info: #275-8-25 BFB Tune Check 2uL

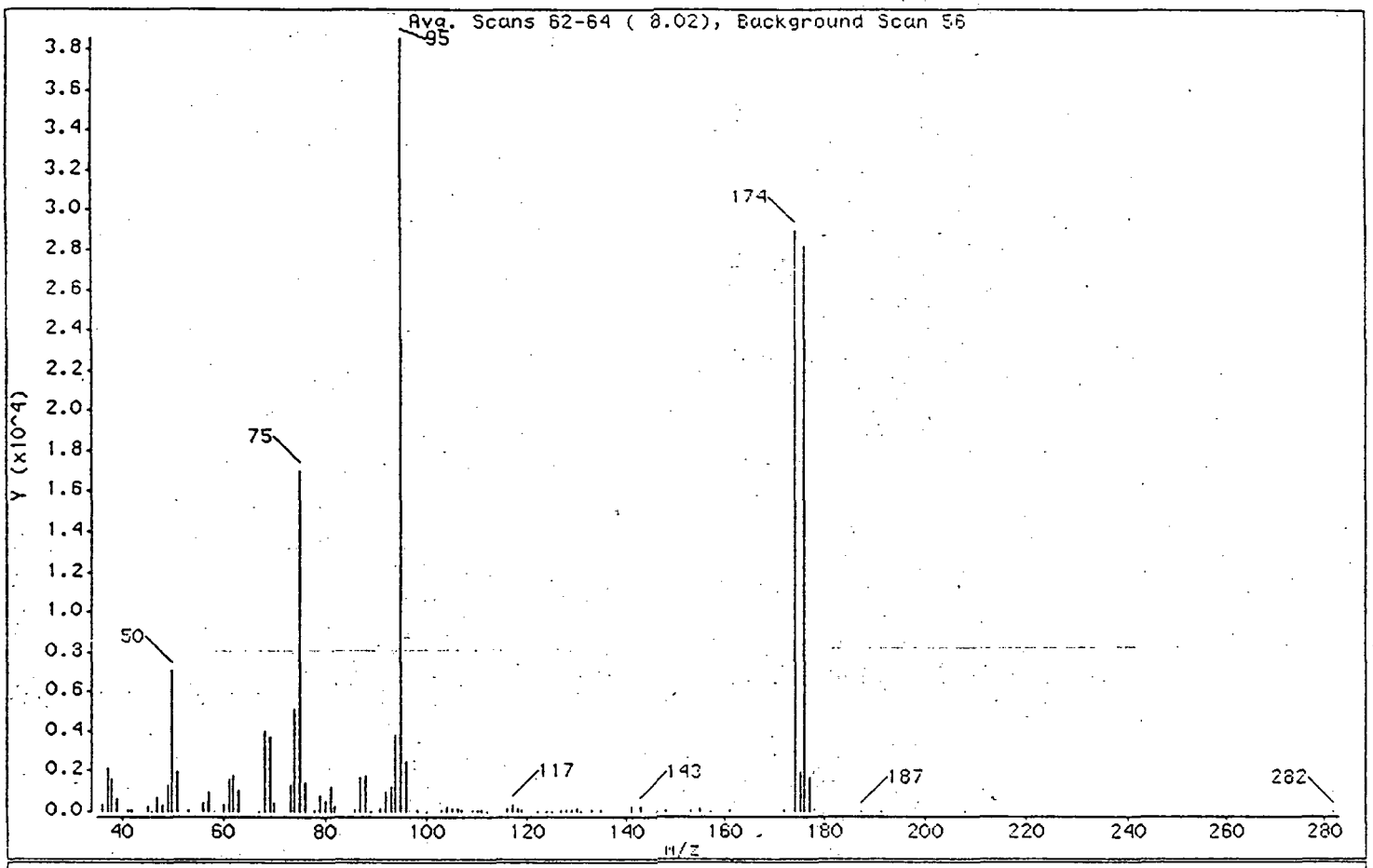
Volume Injected (uL): 1.0

Operator: FR

Column phase:

Column diameter: 2.00

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	18.38
75	30.00 - 60.00% of mass 95	44.10
96	5.00 - 9.00% of mass 95	6.51
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	75.09
175	5.00 - 9.00% of mass 174	5.10 (6.79)
176	95.00 - 101.00% of mass 174	73.06 (97.29)
177	5.00 - 9.00% of mass 176	4.44 (6.08)

Data File: /chem/msdj.i/j-29jan.b/j012901.d

Date : 29-JAN-97 08:03

Client ID: BFB Instrument: msdj.i

Sample Info: #275-8-25 BFB Tune Check 2uL

Volume Injected (uL): 1.0 Operator: FA

Column phase: Column diameter: 2.00

Data File: j012901.d
Spectrum : Avg. Scans 62-64 (8.02), Background Scan 56
Largest m/z: 95.00
Number of peaks: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	383	69.00	3763	100.00	37	133.00	111
37.00	2113	70.00	437	103.00	112	135.00	98
38.00	1587	73.00	1298	104.00	294	141.00	233
39.00	602	74.00	5161	105.00	170	143.00	299
41.00	71	75.00	16992	106.00	182	146.00	44
42.00	109	76.00	1395	107.00	73	148.00	62
45.00	270	78.00	63	109.00	46	153.00	85
46.00	18	79.00	788	110.00	132	155.00	186
47.00	686	80.00	505	111.00	101	157.00	41
48.00	312	81.00	1210	112.00	17	161.00	80
49.00	1370	82.00	237	116.00	155	172.00	56
50.00	7084	86.00	51	117.00	317	174.00	28936
51.00	1937	87.00	1705	118.00	192	175.00	1965
53.00	61	88.00	1758	119.00	123	176.00	28152
56.00	439	89.00	39	122.00	44	177.00	1712
57.00	1002	91.00	152	124.00	37	187.00	37
60.00	397	92.00	931	125.00	44	191.00	34
61.00	1553	93.00	1257	127.00	45	208.00	10
62.00	1783	94.00	3769	128.00	57	282.00	41
63.00	1055	95.00	38536	129.00	46		
67.00	5	96.00	2506	130.00	146		
68.00	3945	98.00	46	131.00	39		

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 9701221-04A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**j012904**	**Date of Collection:**	**NA**
Dil. Factor:	**1.00**	**Date of Analysis:**	**1/29/97**

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.50	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected
Benzene	0.10	Not Detected
1,2-Dichloroethane	0.10	Not Detected
Trichloroethene	0.10	Not Detected
1,2-Dichloropropane	0.10	Not Detected
Toluene	0.10	Not Detected
Tetrachloroethene	0.10	Not Detected
Chlorobenzene	0.10	Not Detected
Ethyl Benzene	0.10	Not Detected
m,p-Xylene	0.10	Not Detected
o-Xylene	0.10	Not Detected
Styrene	0.10	Not Detected
Acetone	0.50	Not Detected
Carbon Disulfide	0.50	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Octafluorotoluene	**96**	**70-130**
Toluene-d8	**98**	**70-130**
4-Bromofluorobenzene	**92**	**70-130**

MH
1/29/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

ıta file : /chem/msdj.i/j-29jan.b/j012904.d
ıb Smp Id: Client Smp ID: Lab Blank
ıj Date : 29-JAN-97 10:32
ɔerator : MH Inst ID: msdj.i
ıp Info : 500mL Can#94300
ısc Info : Lab Blank
ɔmment :
ethod : /chem/msdj.i/j-29jan.b/to140109.m
eth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
ıl Date : 09-JAN-1997 12:48 Cal File: j010909.d
ls bottle: 1
ıl Factor: 1.000
ıtegrator: HP RTE Compound Sublist: AT.sub
ırget Version: 3.12 Sample Matrix: AIR
ɔncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
33 Bromochloromethane					CAS #: 74-97-5			
5.692	16.724 (1.000)	130	183693	5.0			100.00	9325
5.692	16.724 (0.000)	128	39512			23.09- 123.09	78.05	
5.692	16.724 (0.000)	49	92944			123.08- 223.08	183.60	
43 1,4-Difluorobenzene					CAS #: 540-36-3			
3.035	18.067 (1.000)	114	816383	5.0			100.00	9453
3.035	18.067 (0.000)	88	44512			0.00- 67.67	17.89	
59 Chlorobenzene-d5					CAS #: 3114-55-4			
2.170	22.209 (1.000)	117	631470	5.0			100.00	9999
2.170	22.209 (0.000)	82	98496			11.09- 111.09	61.02	
39 Octafluorotoluene					CAS #: 434-64-0			
7.204	17.235 (1.031)	217	412836	4.8	4.8		100.00	8081
7.204	17.235 (0.000)	186	87696			14.13- 114.13	66.78	
50 Toluene-d8					CAS #: 2037-26-5			
0.072	20.111 (1.113)	98	728813	4.9	4.9		100.00	9931
0.072	20.111 (0.000)	70	26336			0.00- 62.02	12.48	
0.072	20.111 (0.000)	100	136384			13.96- 113.96	64.65	

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene						CAS #: 460-00-4			
24.039	24.086	(1.084)	95	451553	4.6	4.6		100.00	8101
24.039	24.086	(0.000)	174	62032			13.48- 113.48	59.24	
24.039	24.086	(0.000)	176	59992			7.57- 107.57	57.29	

MM 1/29/97

ıdit History For: /chem/msdj.i/j-29jan.b/j012904.d

ıange Date: 29-Jan-97 10:51
ıange Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

ıange Date: 29-Jan-97 10:52
ıange Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Complete Target Compound Processing

ıange Date: 29-Jan-97 10:52
ıange Made by: mhe

Parameter: Best Hit for Propylene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

ıange Date: 29-Jan-97 10:52
ıange Made by: mhe

Parameter: Manual reintegration of Propylene (Signal 1)
Old Value: No previous peak at 4.188
New Value: New Area/Time: 7646 / 4.19
Reason For Change: N/A

ıange Date: 29-Jan-97 11:05
ıange Made by: mhe

Parameter: date
Old Value: 29-JAN-97 10:32
New Value: 29-JAN-1997 10:32
Reason For Change: N/A

ıange Date: 29-Jan-97 11:05
ıange Made by: mhe

Parameter: Misc Information
Old Value:
New Value: Lab Blank
Reason For Change: N/A

ıange Date: 29-Jan-97 11:05
ıange Made by: mhe

Parameter: Sample Info
Old Value: Lab Blank 500mL Can#94300
New Value: 500mL Can#94300
Reason For Change: N/A

ıange Date: 29-Jan-97 11:05
ıange Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: Lab Blank
Reason For Change: N/A

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-29jan.b/to140109.m
Reason For Change: Complete Target Compound Processing

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Best Hit for 4-Methyl-2-pentanone changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Best Hit for Octane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 29-Jan-97 11:05
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

ange Date: 29-Jan-97 11:05
ange Made by: mhe

Parameter: Best Match for Unknown compound at 4.203 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

ange Date: 29-Jan-97 11:05
ange Made by: mhe

Parameter: Best Match for Unknown compound at 20.355 min. changed.
Old Value: Old match: Cyclotrisiloxane, hexamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

ange Date: 29-Jan-97 11:05
ange Made by: mhe

Parameter: Best Match for Unknown compound at 23.635 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Data File: /chem/msdj.i/j-29jan.b/j012904.d
Report Date: 29-Jan-1997 11:05

MH 1/29/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-29jan.b/j012904.d
Lab Smp Id: Client Smp ID: Lab Blank
Inj Date : 29-JAN-97 10:32
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#94300
Misc Info : Lab Blank
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.692	16.724 (1.000)	130	183693	5.0			100.00	9325
16.692	16.724 (0.000)	128	39512			23.09- 123.09	78.05	
16.692	16.724 (0.000)	49	92944			123.08- 223.08	183.60	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.035	18.067 (1.000)	114	816383	5.0			100.00	9453
18.035	18.067 (0.000)	88	44512			0.00- 67.67	17.89	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.170	22.209 (1.000)	117	631470	5.0			100.00	9999
22.170	22.209 (0.000)	82	98496			11.09- 111.09	61.02	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.204	17.235 (1.031)	217	412836	4.8	4.8		100.00	8081
17.204	17.235 (0.000)	186	87696			14.13- 114.13	66.78	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.072	20.111 (1.113)	98	728813	4.9	4.9		100.00	9931
20.072	20.111 (0.000)	70	26336			0.00- 62.02	12.48	
20.072	20.111 (0.000)	100	136384			13.96- 113.96	64.65	

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
66 Bromofluorobenzene					CAS #: 460-00-4			
.039	24.086 (1.084)	95	451553	4.6	4.6		100.00	8101
.039	24.086 (0.000)	174	62032			13.48- 113.48	59.24	
.039	24.086 (0.000)	176	59992			7.57- 107.57	57.29	
41 1,2-Dichloroethane					CAS #: 107-06-2			
.043	17.624 (1.000)	62	28687	0.47	0.47		100.00	3400
.043	17.624 (0.000)	64	6178			0.00- 82.07	72.66	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
.065	19.837 (1.113)	43	7148	0.061	0.061		100.00	1204(aQ)
.065	19.837 (0.000)	58	1805			0.00- 85.54	96.32	
.065	19.837 (0.000)	85	138			0.00- 61.74	7.36	
52 Octane					CAS #: 111-65-9			
.088	20.180 (1.114)	57	2649	0.060	0.060		100.00	2220(aQ)
.088	20.180 (0.000)	85	123			52.40- 152.40	22.91	
.088	20.180 (0.000)	43	947			226.95- 326.95	176.35	

: Flag Legend

- Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-29jan.b/j012904.d
Lab Smp Id: Client Smp ID: Lab Blank
Inj Date : 29-JAN-97 10:32
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#94300
Misc Info : Lab Blank
Comment :
Method : /chem/msdj.i/j-29jan.b/to140109.m
Meth Date : 29-Jan-1997 08:57 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: AT.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

ISTD	RT	AREA	AMOUNT
* 33 Bromochloromethane	16.692	1177842	5.000
* 59 Chlorobenzene-d5	22.170	2085878	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(PPBV)	FINAL(PPBV)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
4.203	116505	0.49	0.49	0		0	33
Cyclotrisiloxane, hexamethyl-					CAS #: 541-05-9		
20.355	130791	0.31	0.31	64	NBS54K.l	23660	59
Acetamide, N,N-dimethyl-					CAS #: 127-19-5		
23.635	712429	1.7	1.7	86	NBS54K.l	707	59

ıta File: /chem/msdj.i/j-29jan.b/j012904.d
ɜport Date: 29-Jan-1997 11:05

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: msdj.i
ıb File ID: j012904.d
ıb Smp Id:
ıalysis Type: VOA
ıant Type: ISTD
ɔerator: MH
ɜthod File: /chem/msdj.i/j-29jan.b/to140109.m
.sc Info: Lab Blank

Calibration Date: JAN/29/97
Calibration Time: 0834
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	203762	122257	285267	183693	-9.85
43 1,4-Difluorobenzene	881244	528746	1233742	816383	-7.36
59 Chlorobenzene-d5	706651	423991	989311	631470	-10.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.70	16.20	17.20	16.69	-0.06
43 1,4-Difluorobenzene	18.05	17.55	18.55	18.04	-0.06
59 Chlorobenzene-d5	22.18	21.68	22.68	22.17	-0.05

MM 1/29/97

ɜEA UPPER LIMIT = + 40% of internal standard area.
ɜEA LOWER LIMIT = - 40% of internal standard area.
ɜ UPPER LIMIT = + 0.50 minutes of internal standard RT.
ɜ LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-29jan.b/j012904.d
Report Date: 29-Jan-1997 11:05

Air Toxics Limited

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id:
Level: LOW
Data Type: MS DATA
SpikeList File:
Method File: /chem/msdj.i/j-29jan.b/to140109.m
Misc Info: Lab Blank

Client SDG: j-29jan
Fraction: VOA
Client Smp ID: Lab Blank
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 39 Octafluorotoluene	5.0	4.8	97.00	60-140
$ 50 Toluene-d8	5.0	4.9	98.67	60-140
$ 66 Bromofluorobenzene	5.0	4.6	92.35	60-140

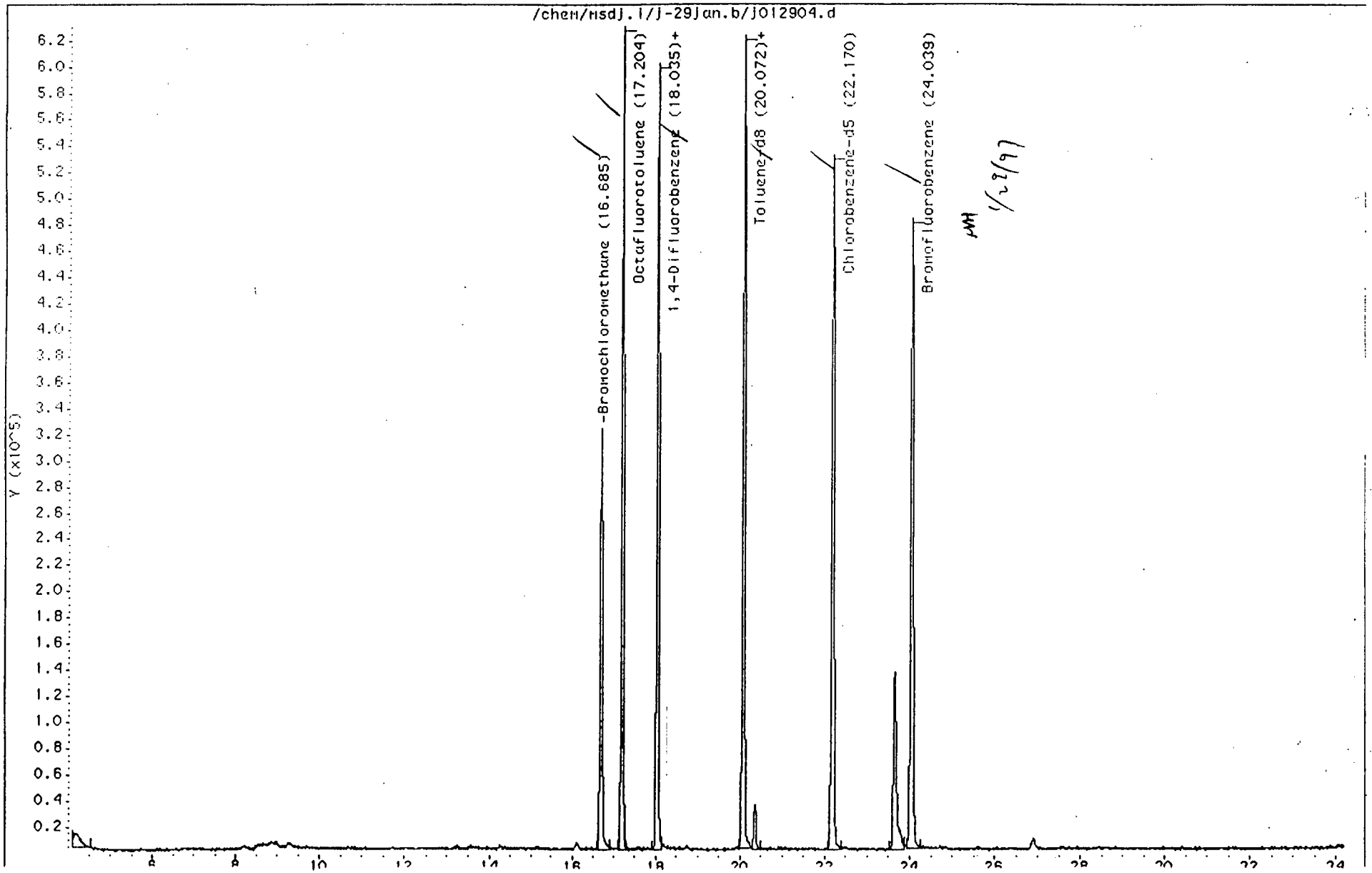
MH
1/29/97

Data File: /chem/msdj.i/j-29jan.b/j012904.d
Date : 29-JAN-97 10:32
Client ID: Lab Blank
Sample Info: 500mL Can#94300

Column phase: RTx-624

Instrument: msdj.i

Operator: MH
Column diameter: 0.58



Data File: /chem/msdj.i/j-29jan.b/j012904.d

Date : 29-JAN-97 10:32

Client ID: Lab Blank

Instrument: msdj.i

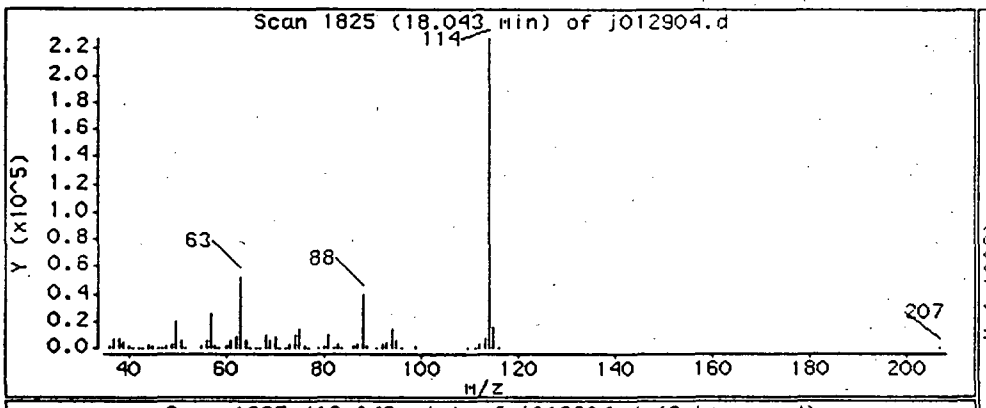
Sample Info: 500mL Can#94300

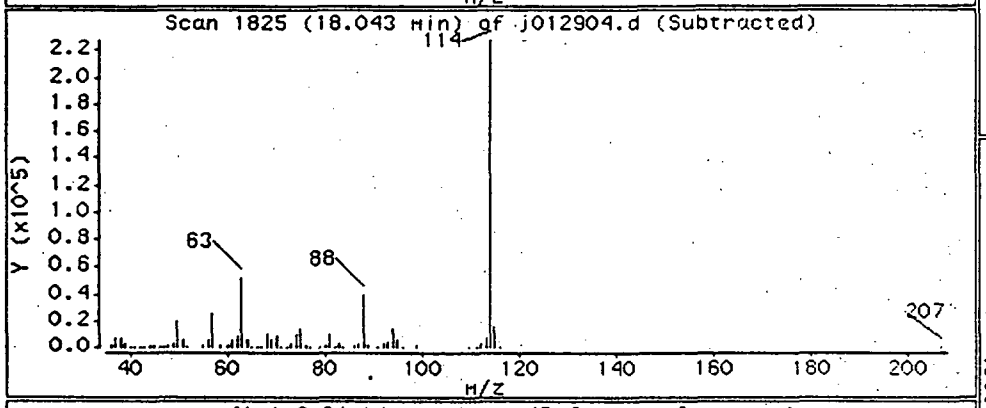
Operator: MH

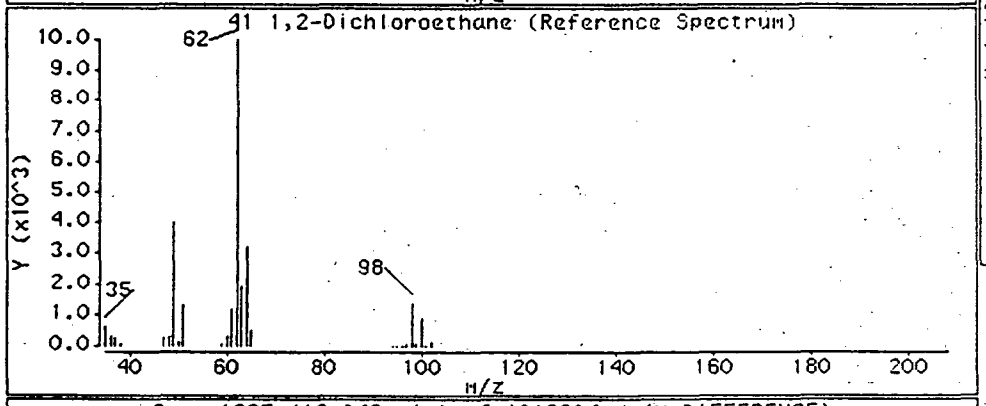
Column phase: RTx-624

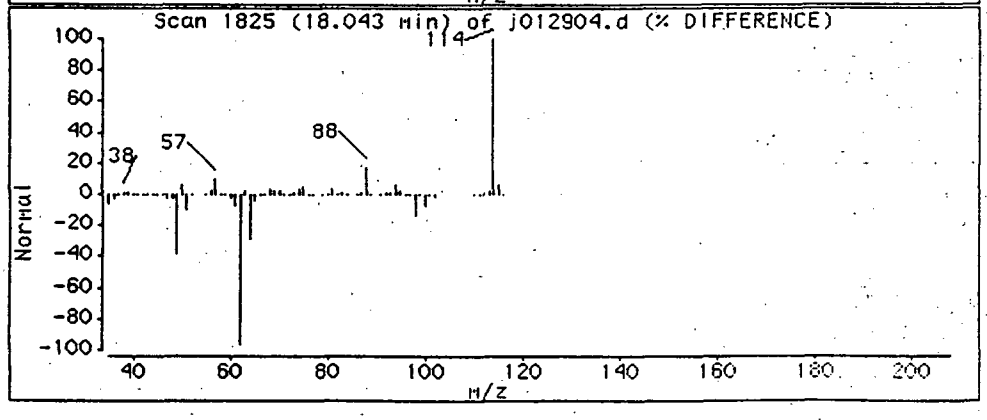
Column diameter: 0.58

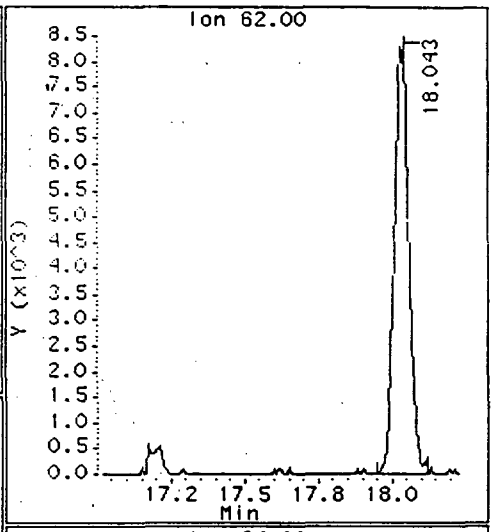
41 1,2-Dichloroethane

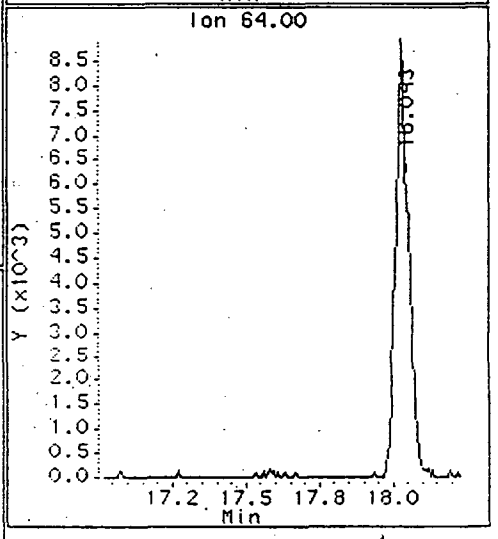












Data File: /chem/msdj.i/j-29jan.b/j012904.d

Date : 29-JAN-97 10:32

Client ID: Lab Blank

Instrument: msdj.i

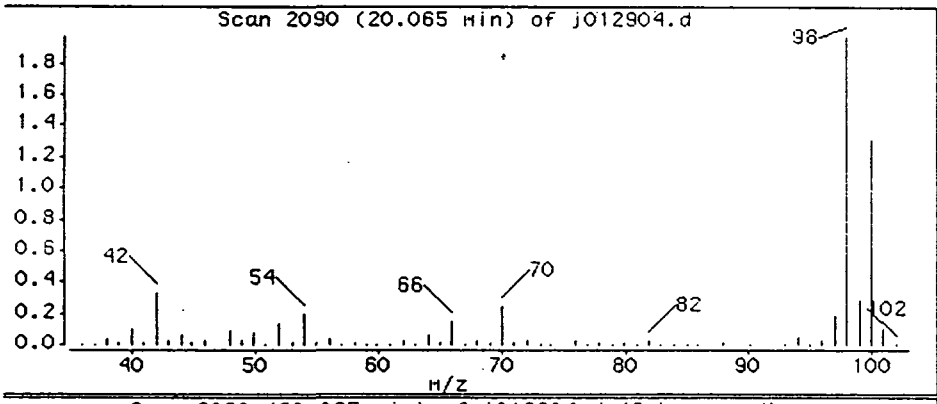
Sample Info: 500mL Can#94300

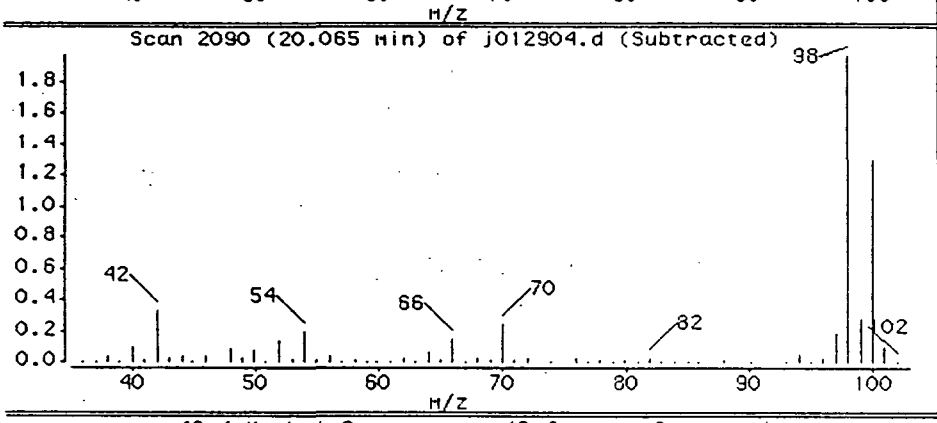
Operator: MH

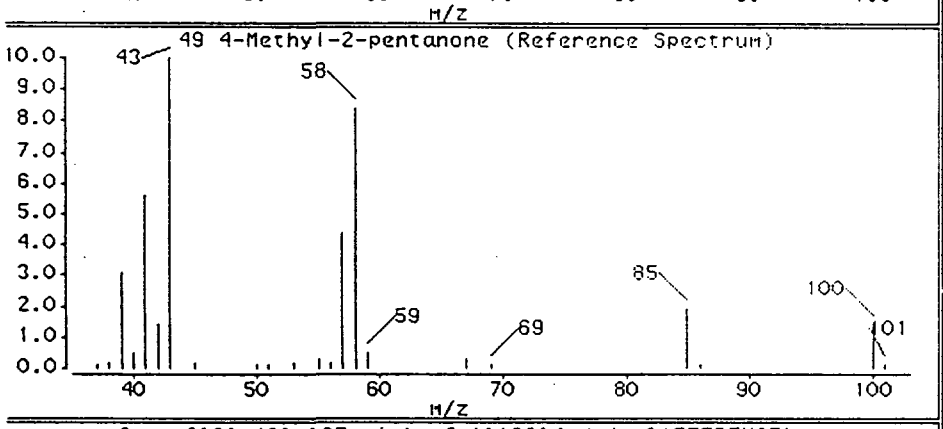
Column phase: RTx-624

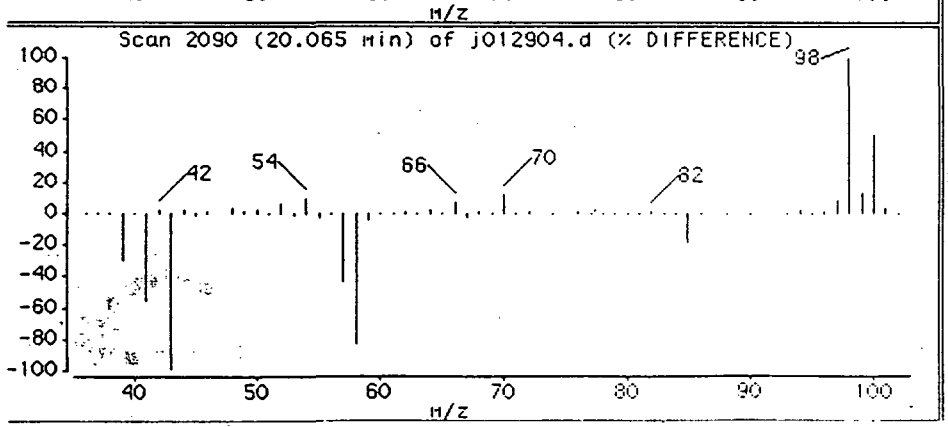
Column diameter: 0.58

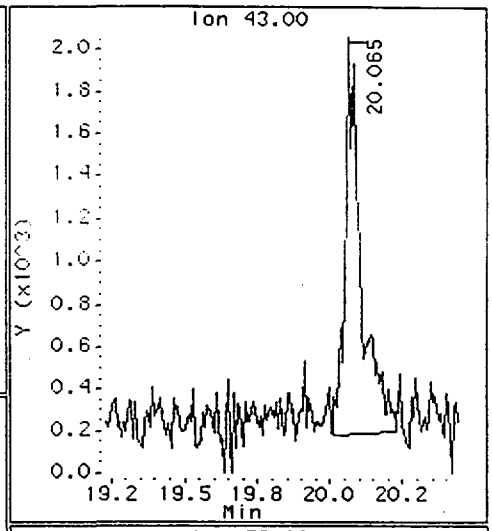
49 4-Methyl-2-pentanone

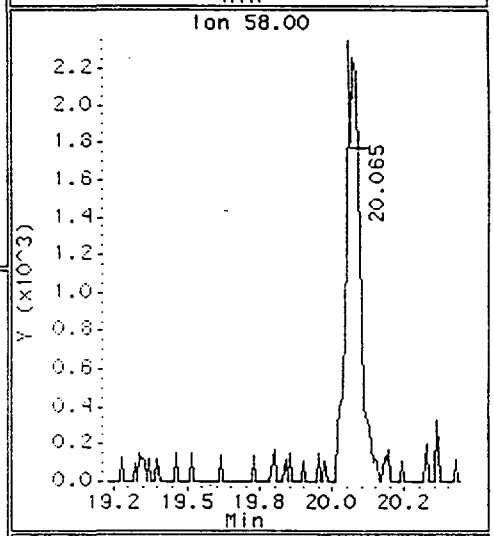


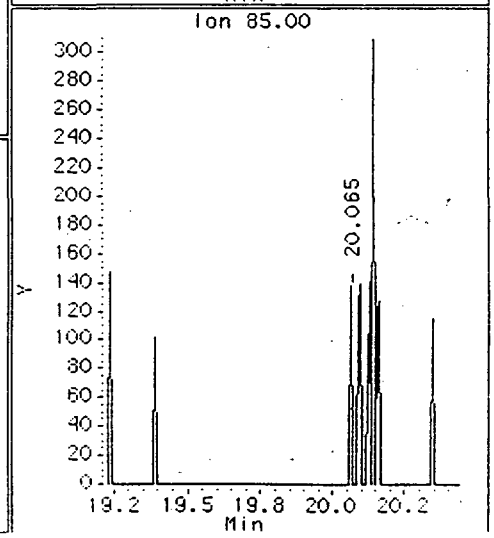












Data File: /chem/msdj.i/j-29jan.b/j012904.d

Date : 29-JAN-97 10:32

Client ID: Lab Blank

Instrument: msdj.i

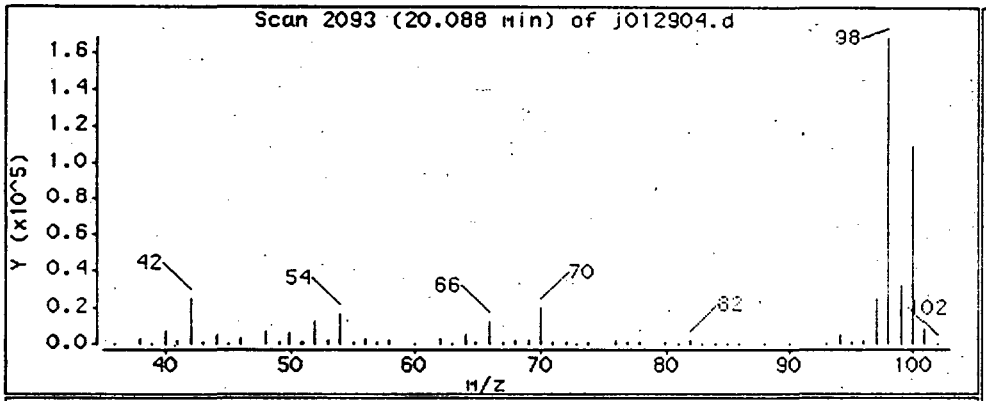
Sample Info: 500mL Can#94300

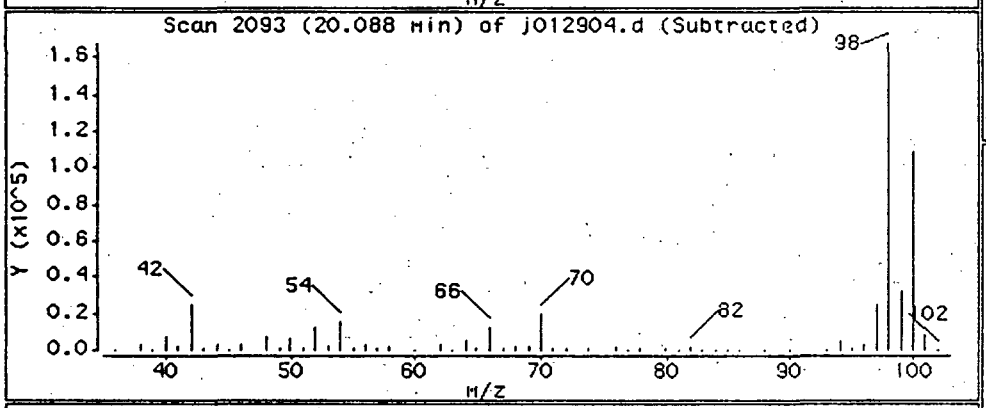
Operator: MH

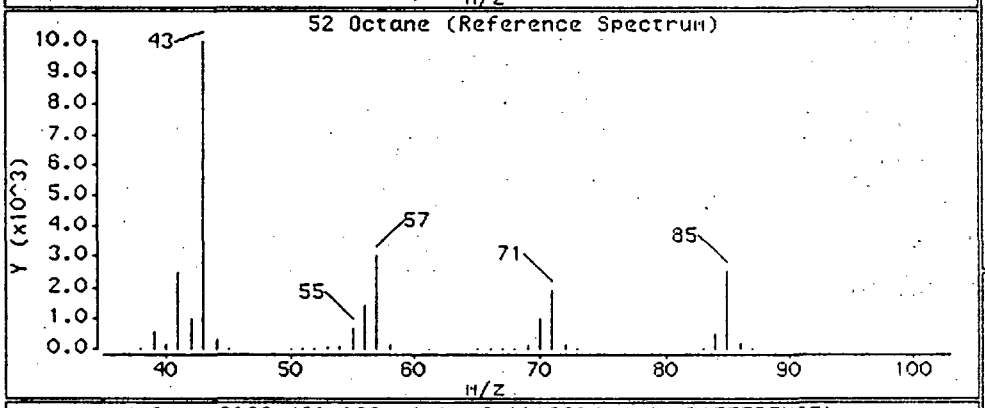
Column phase: RTx-624

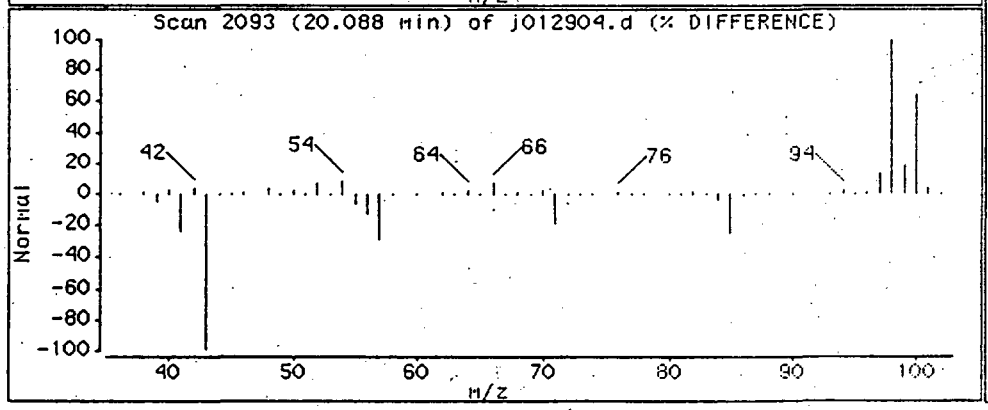
Column diameter: 0.58

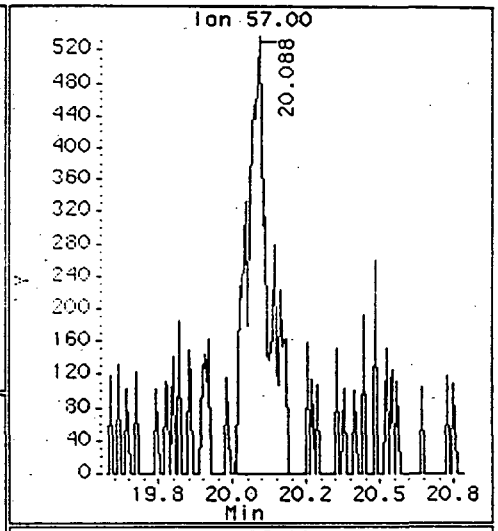
52 Octane

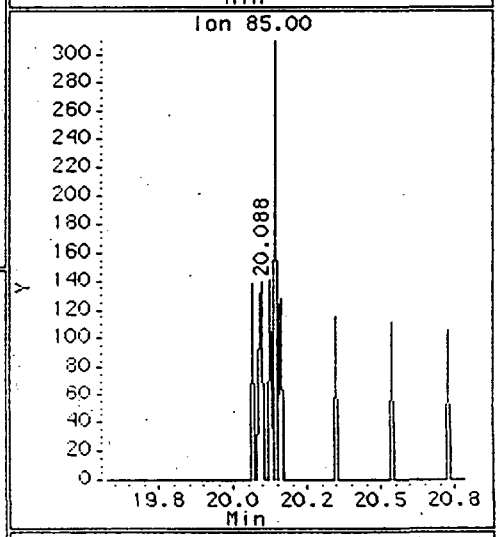


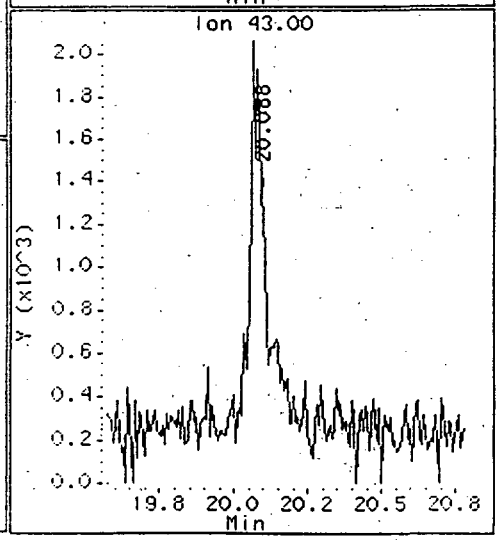








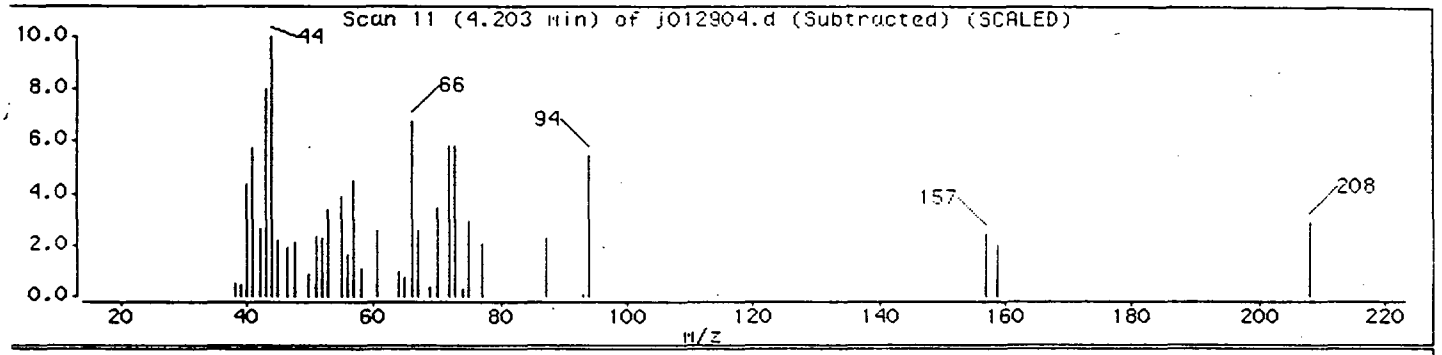




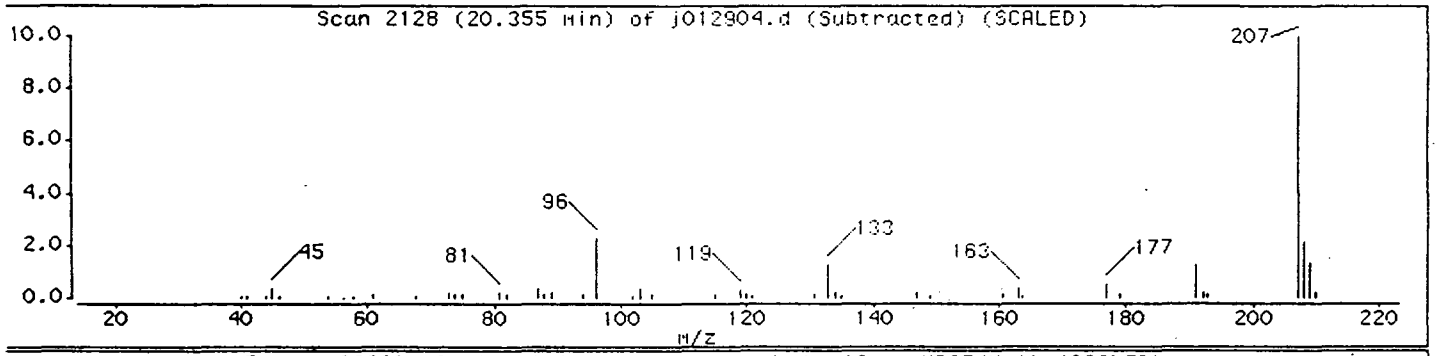
Data File: /chem/msdj.i/j-29jan.b/j012904.d

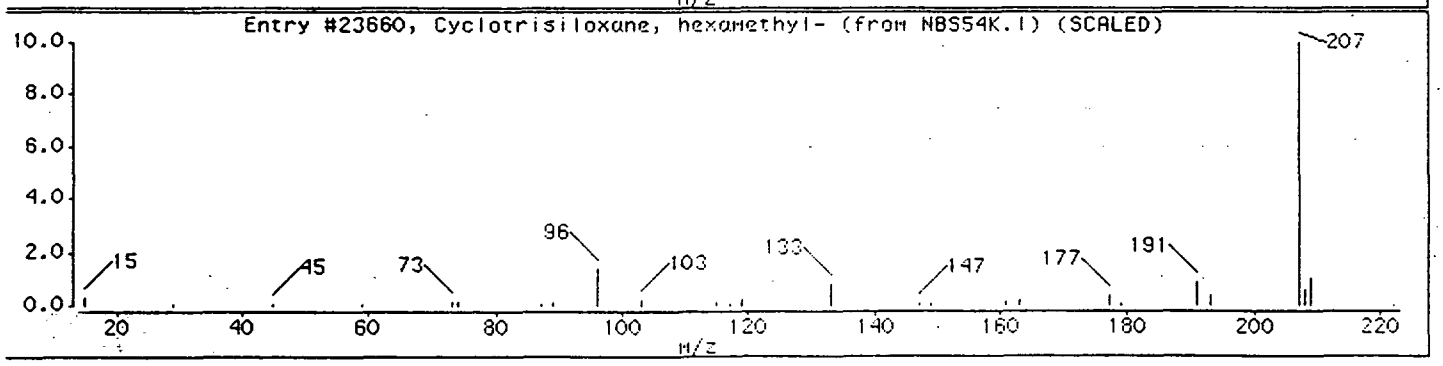
Date : 29-JAN-97 10:32
Instrument: msdj.i
Client ID: Lab Blank
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotrisiloxane, hexamethyl-	541-05-9	NBS54K.I	23660	64

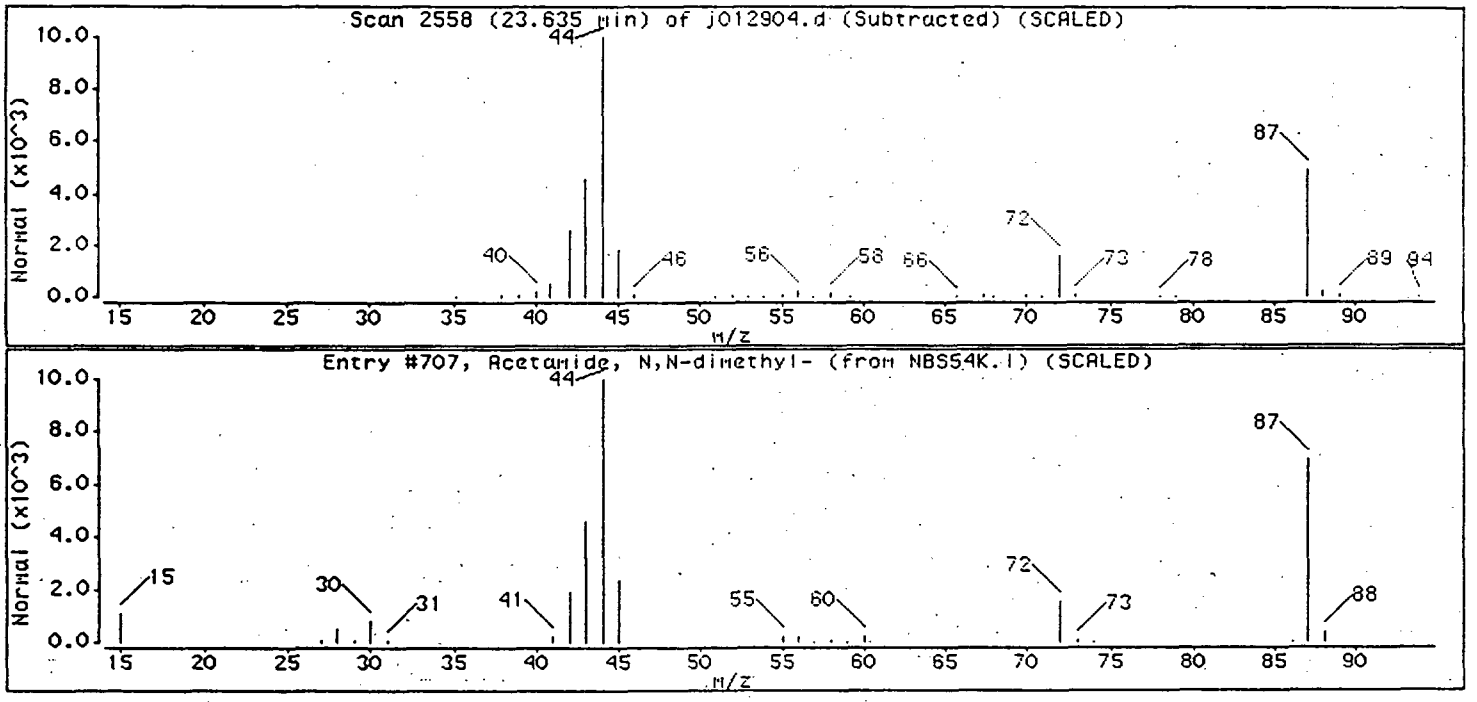




Data File: /chem/msdj.i/j-29jan.b/j012904.d

Date : 29-JAN-97 10:32
Instrument: msdj.i
Client ID: Lab Blank
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.I	707	86



AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

№ 009931

Page 1 of 1

Contact Person: Barbara Dye
Company: Parsons E.S.
Address: 9406 Gulf Freeway City: Houston State: TX Zip: 77034
Phone: (713) 943-5432 FAX: (713) 943-5427
Collected By: Signature: [signature]

Project Info:
P.O. #: 727731-3004-00
Project #: 727931
Project Name: Bailey

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	012597D1 MHM	01-25-97 8HRS	TO-14 see Att list	-30	-8	8.0"Hg
02A	012597D1 MHM	01-25-97 8HRS	TO-14 See ATT list	-30	-8.5	8.5"Hg
03A	012597D1A MHM	01-25-97 8HRS	TO-14 See ATT list	-30	-8	8.5"Hg

THE FOLLOWING EQUIPMENT IS BEING RETURNED:
1. 3EA - CONTROLLERS
2. 3EA - PRESSURE GAUGES
3. 4EA - FILTERS

Relinquished By: (Signature) Date/Time: Mark Murphy 1/25/97 17:00 Print Name
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time: [signature] ATL 1/25/97 1450

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FED EX	0349535524	[signature]	1/25/97 1450	AMBIENT	GOOD	(Yes) No None N/A	9701221

0280

LOGIN INFORMATION

WORKORDER 9701221

Invoice #:
Date Completed:
Date Received: 1/28/97
PO#: 727931-11000
Project#: 727931 Bailey Superfund
Total $: $705.00
Logged By: JF

Client
Ms. Barbara Dye
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

Phone
713-943-5432
FAX
713-943-5427

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	012597D1	TO-14-S	1/25/97	8.0 "Hg	$235.00
02A	012597U1	TO-14-S	1/25/97	8.5 "Hg	$235.00
03A	012597U1A	TO-14-S	1/25/97	8.5 "Hg	$235.00
04A	Lab Blank	TO-14-S	NA	NA	NC

BILL TO: Ms. Mary E. Miller
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

Are there any receiving nonconformities? no
REMARKS

COPY FROM ATL

Notebook No. 293 C281

PROJECT MSD-J

Continued From Page —

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File #	Sample Name/Client	Can #	Pressure	Amount	Dil. F.	Initial
✓ J012401	#275-8-25 BFB Tune Check			2ml	1.0	MH
✓ J012402	#276-25 100ppbv of 8014 Std.	12019		25ml	1.0	MH
J012403	System Blank	Bag		250ml	1.0	MH
✓ J012404	Lab Blank	94300		500ml	1.0	MH
✓ J012405	961205-1 #276-22 10ppbv	1071	(5ppbv)	25ml	20.0	MH
✓ J012406	961205-1 #276-23 10ppbv	1068	(5ppbv)	25ml	20.0	MH
J012407	Lab Blank	94300		500ml	1.0	MH
			Mike Hu	1/27/97		
✓ J012701	#275-8-25 BFB Tune Check			2ml	1.0	MH
✓ J012702	#276-25 100ppbv of 8014 Std.	12019		25ml	1.0	MH
✓ J012703	System Blank	Bag		250ml	1.0	MH
✓ J012704	Lab Blank	94300		500ml	1.0	MH
			Mike Hu	1/28/97		
✓ J012801	#275-8-25 BFB Tune Check			2ml	1.0	MH
✓ J012802	#276-25 100ppbv of 8014 Std	12019		25ml	1.0	MH
J012803	System Blank	Bag		250ml	1.0	MH
✓ J012804	Lab Blank	94300		500ml	1.0	MH
✓ J012805	#276-51 75ppbv of V.C. Std	21007		25ml	1.0	MH
			Mike Hu	1/29/97		
✓ J012901	#275-8-25 BFB Tune Check			2ml	1.0	MH
✓ J012902	#276-25 100ppbv of 8014 Std 100ppbv	12019	(5ppbv)	25ml	1.0	MH
J012903	System Blank	Bag		250ml	1.0	MH
✓ J012904	Lab Blank	94300		500ml	1.0	MH
✓ J012905	970122-1A/Perma	7542	8" → 5psi	500ml	1.83	MH
✓ J012906	970122-2A	419	8.5" → 5psi	500ml	1.67	MH
✓ J012907	970122-3A	431	8.5" → 5psi	500ml	1.67	MH
J012908	System Blank	Bag		250ml	1.0	MH
MH 1/29/97 J012909	#275-35 10ppbv + #276-52 10ppbv	943 + Bag		50ml + 25ml	1.0	MH
J012910	Lab Blank	94300		500ml	1.0	MH
			Mike Hu	1/30/97		
✓ J013001	#275-8-25 BFB Tune Check			2ml	1.0	MH
J013002	#276-53 10ppbv (Mike Hu) + #276-54 10ppbv (Jerdine)			12.5ml + 12.5ml	1.0	MH
✓ J013003	#276-53 + #276-54 (5ppbv)			25ml + 25ml	1.0	MH
✓ J013004	#276-53 + #276-54 (25ppbv)			125ml + 125ml	1.0	MH
✓ J013005	#276-53 + #276-54 (50ppbv)			250ml + 250ml	1.0	MH

Continued On Page

Read and Understood By

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10
PROJECT MSD-J

Notebook No. 299
Continued From Page —

#296-29 IS	Area (cts)
BCM:	202990
1,4-DFB:	882385
CB-d5:	712772

#296-29 IS	Area (cts)
BCM:	199478
1,4-DFB:	877260
CB-d5:	710410

#296-29 IS	Area (cts)
BCM:	196439
1,4-DFB:	848254
CB-d5:	674789

#296-29 IS	Area (cts)
BCM:	203762
1,4-DFB:	881244
CB-d5:	706651

#296-29 IS	Area (cts)
BCM:	179422
1,4-DFB:	771521
CB-d5:	607259

Continued on Page

Read and Understood By

OJECT [illegible] COPY FROM ATL Notebook No. [illegible]

Continued From Page —

Cl#	Sample Name/Client	Can#	Pressure	Amount	D.F.	Int.
J010601	Lab Blank	94300		500.0 ml	1.0	FA
J010602	Lab Blank	94300		500.0 ml	1.0	FA
J010603	#296-25 100 ppbv	(5.0 ppbv)		25.0 ml	20.0	FA
J010604	#296-25 100 ppbv			50.0 ml	1.0	FA
J010605	Lab Blank	94300		500.0 ml	1.0	FA
				FA	1-7-97	
J010701	System Blank	Bag		250.0 ml	1.0	FA
J010702	BFB Tune Check #275-8-25			2.0 ul	1.0	FA
J010703	Can Cert.	10766		1.0L	1.0	FA
J010704	Can Cert.	05365		1.0L	1.0	FA
J010705	Can Cert.	12708		1.0L	1.0	FA
J010706	Can Cert.	14111		1.0L	1.0	FA
J010707	Can Cert.	10763		1.0L	1.0	FA
J010708	Can Cert.	05711		1.0L	1.0	FA
J010709	Can Cert.	22478		1.0L	1.0	FA
				FA	1-9-97	
J010901	Lab Blank	94300		500.0 ml	1.0	FA
J010902	Lab Blank	94300		500.0 ml	1.0	FA
J010903	BFB Tune Check #275-8-25			2.0 ul	1.0	FA
J010904	#296-25 100 ppbv	(0.1 ppbv)		0.5 ml	1.0	FA
J010905	#296-25 100 ppbv	(0.5 ppbv)		2.5 ml	1.0	FA
J010906	#296-25 100 ppbv	(5.0 ppbv)		25.0 ml	1.0	FA
J010907	#296-25 100 ppbv	(10.0 ppbv)		50.0 ml	1.0	FA
J010908	#296-25 100 ppbv	(25.0 ppbv)		125.0 ml	1.0	FA
J010909	#296-25 100 ppbv	(50.0 ppbv)		250.0 ml	1.0	FA
J010910	#296-25 100 ppbv	(75.0 ppbv)		375.0 ml	1.0	FA
J010911	System Blank	Bag		250.0 ml	1.0	FA
J010912	T014-0001 1.0 ppmv	(25.0 ppbv)		12.5 ml	4.0	FA
J010913	System Blank	Bag		250.0 ml	1.0	FA
J010914	T014-0001 1.0 ppmv	(25.0 ppbv)		12.5 ml	4.0	FA
				FA	1-10-97	
J011001	BFB Tune Check #275-8-25			2.0 ul	1.0	FA
J011002	#296-25 100 ppbv	(5.0 ppbv)		25.0 ml	20	FA
J011003	System Blank	Bag		200.0 ml	1.0	FA

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
[signature]	1-10-97	[signature]	1/10/97

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} - [(\text{Initial Pressure (''Hg)})\ (14.7\ \text{psi} / 30\ \text{''Hg}}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.46	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.65	1.98
0.4	1.30	1.63	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 9702019

Work Order Summary

CLIENT: Ms. Barbara Dye
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

BILL TO: Ms. Mary E. Miller
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

PHONE: 713-943-5432
FAX: 713-943-5427
DATE RECEIVED: 2/4/97
DATE COMPLETED: 2/19/97

INVOICE # 13350
P.O. # 727931-3004-00
PROJECT # 727931 Bailey

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	013197U1	TO-14-S	10 "Hg
02A	013197D1	TO-14-S	8.5 "Hg
03A	Lab Blank	TO-14-S	NA

CERTIFIED BY: Linda L. Freeman
Laboratory Director

DATE: 2/20/97

Certification numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217

180 BLUE RAVINE ROAD, SUITE B • FOLSOM, CA 95630
(916) 985-1000 • FAX (916) 985-1020

AIR TOXICS LTD.

SAMPLE NAME: 013197U1

ID#: 9702019-01A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j021307	**Date of Collection:**	1/31/97
Dil. Factor:	2.01	**Date of Analysis:**	2/13/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	1.0	Not Detected
cis-1,2-Dichloroethene	0.20	Not Detected
1,1,1-Trichloroethane	0.20	Not Detected
Benzene	0.20	0.84
1,2-Dichloroethane	0.20	Not Detected
Trichloroethene	0.20	Not Detected
1,2-Dichloropropane	0.20	Not Detected
Toluene	0.20	0.66
Tetrachloroethene	0.20	Not Detected
Chlorobenzene	0.20	Not Detected
Ethyl Benzene	0.20	Not Detected
m,p-Xylene	0.20	Not Detected
o-Xylene	0.20	Not Detected
Styrene	0.20	Not Detected
Acetone	1.0	11
Carbon Disulfide	1.0	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.0	3.4

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	122	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: 013197D1

ID#: 9702019-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**j021308**	**Date of Collection:**	**1/31/97**
Dil. Factor:	**1.87**	**Date of Analysis:**	**2/13/97**

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.94	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected
Benzene	0.19	0.73
1,2-Dichloroethane	0.19	Not Detected
Trichloroethene	0.19	Not Detected
1,2-Dichloropropane	0.19	Not Detected
Toluene	0.19	0.64
Tetrachloroethene	0.19	Not Detected
Chlorobenzene	0.19	Not Detected
Ethyl Benzene	0.19	Not Detected
m,p-Xylene	0.19	Not Detected
o-Xylene	0.19	Not Detected
Styrene	0.19	Not Detected
Acetone	0.94	4.1
Carbon Disulfide	0.94	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	1.3

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	122	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 9702019-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**j021306**	**Date of Collection:**	**NA**
Dil. Factor:	**1.00**	**Date of Analysis:**	**2/13/97**

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.50	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected
Benzene	0.10	Not Detected
1,2-Dichloroethane	0.10	Not Detected
Trichloroethene	0.10	Not Detected
1,2-Dichloropropane	0.10	Not Detected
Toluene	0.10	Not Detected
Tetrachloroethene	0.10	Not Detected
Chlorobenzene	0.10	Not Detected
Ethyl Benzene	0.10	Not Detected
m,p-Xylene	0.10	Not Detected
o-Xylene	0.10	Not Detected
Styrene	0.10	Not Detected
Acetone	0.50	Not Detected
Carbon Disulfide	0.50	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Octafluorotoluene	118	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

№ 009950

Page 1 of 1

Contact Person: Barbara Dye
Company: Parsons E.S.
Address: 9906 Gulf Freeway City: Houston State: TX Zip: 77034
Phone: 713-943-5437 FAX:
Collected By: Signature:

Project info:
P.O. #: 727931-3004:00
Project #: 727931
Project Name: Bailey

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	013197U1	1-31-97 0818 1618	TO-14 See NTT	-29.5	-8	10.4
02A	013197D1	1-31-97 0815 1618	TO-14 See NTT	-29.5	-8	8.5

Relinquished By: (Signature) Date/Time 0800 2-3-97 Print Name: Michael Stewart

Relinquished By: (Signature) Date/Time Received By: (Signature) Date/Time

Relinquished By: (Signature) Date/Time Received By: (Signature) Date/Time Scott Anderson ATL 2/4/97 937

Notes:

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FED EX	014 646 5141		2/4/97 937	AMBIENT	GOOD	Yes No (None) N/A	9702019

Form 1293 rev. 06

LEVEL-IV VALIDATABLE

Volatile Organics Analysis
EPA Method TO-14

COMPLETE SDG FILE (CSF) DOCUMENT
INVENTORY SHEET

Lab Name: Air Toxics Ltd.
City/State: Folsom, CA
Lab Code:

Contract:
SDG:
Work Order: 9702019

	Page Nos. From	Page Nos. To	(Please Check:) Lab	(Please Check:) Region
1. Inventory Sheet (ATL-2) (Do Not Number)			√	
2. Cover Page & Laboratory Narrative (Do Not Number)			√	
3. QC Summary				
a. Surrogate Recovery (FORM II-ATL)	–	–	–	
b. Sample Results/Sample Results Duplicate (FORM III-DUP-ATL)	–	–	–	
c. Method Blank Summary (FORM IV-ATL)	–	–	–	
d. GC/MS Instrument Performance Check (BFB Tune) (FORM V-ATL) + Run Logs	1A	2B	√	
e. Internal Standard Area and Retention Time Summary (FORM VIII-ATL)	–	–	–	
4. Sample Results (FORM I-ATL/FORM I-TIC-ATL + Raw Data)	3	74	√	
5. Standards & Raw QC Data				
a. Initial Calibration Data (Summary Sheet + Raw Data)	75	194	√	
b. Continuing Calibration Data (Summary Sheet + Raw Data)	195	221	√	
c. BFB Tune (Raw Data)	222A	226	√	
d. Blank Data (FORM I-ATL + Raw Data)	227	245	√	
6. Canister Certification (FORM ATL-3 + Raw Data)	–	–	–	
7. Shipping/Receiving Documents:				
a. Airbill (No. of Shipments ____)	–	–	–	
b. Chain-of-Custody Records	246	246	√	
c. Sample Tags	–	–	–	
d. Sample Log-In Sheet	247	247	√	
Misc. Shipping/Receiving Records (list individual records)				
_____	–	–	–	
_____	–	–	–	
8. Internal Lab Sample Transfer Records & Tracking Sheets	–	–	–	
9. Internal Original Sample Preparation & Analysis Records (describe or list):				
a. Preparation Records _____	–	–	–	
b. Analysis Records _____	–	–	–	
10. Other Records (decribe or list)				
a. Telephone Communication Log	–	–	–	
b. Dilution Factors	248	248	√	
_____	–	–	–	

Comments:

Completed by:

Julie R. Bellendir (Signature)	Julie R. Bellendir / Document Control (Print Name & Title)	2/24/97 (Date)

FORM ATL-2

LABORATORY NARRATIVE
Analysis of VOLATILE ORGANICS by EPA Method TO-14
Work Order #9702019

Two 6L Summa™ Canister samples were received on February 4, 1997. The laboratory performed analysis via EPA Method TO-14 using a capillary direct quadrupole GC/MS in the full scan mode. The method involves cryofocusing up to 0.5 L of air at liquid argon temperatures. The cryofocused aliquot is then flash vaporized to 225°C and swept through a hydrophobic drier to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. Please see the data sheets for the analytical detection limit. Library searching of the top ten tentatively identified compounds was not performed per the client's request.

The concentrations present in the samples were calculated using the technique of internal standards. Three internal standards (Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5) were spiked at 5 ppbv into every standard, blank and sample. Three surrogates (Octafluorotoluene, Toluene-d8 and 4-Bromofluorobenzene) were also spiked at 5 ppbv.

The analytical dilution factor reported on the data sheet is derived from a combination of canister receipt vacuum and laboratory dilution. All canisters are pressurized to 5 psi (unless they are received at a pressure greater than 5psi) prior to analysis. This results in an effective dilution factor governed by the equation:

$$DF_1 = \frac{14.7\text{ psi} + 5\text{ psi}}{14.7\text{ psi} - ((\text{Receipt Pressure})(14.7)/30)}$$

A table of canister pressure dilution factors appears at the end of this deliverable. Should additional dilution be required to ensure that all compounds are within the analytical curve, the additional dilution factor (DF_2) would be multiplied by the pressurization dilution factor. This would result in the dilution factor shown on the report.

$$DF_1 \times DF_2 = DF\ Total$$

Laboratory duplicates, when performed, are noted by the suffix - Duplicate.

EPA Method TO-14 does not specify Initial Calibration and Continuing Calibration Check (CCC) criteria. The laboratory established criteria is that all compounds must be less than or equal to 30% RSD in the Initial Calibration Curve prior to analysis of samples. The average relative response factors from the initial calibration curve are used to calculate results. The Laboratory Standard Operating Procedure requires that 90% of the standard TO-14 target analytes must be within 70% to 130% Recovery in the CCC. For the non-standard TO-14 compounds (Acetone, Carbon Disulfide, trans-1,2-Dichloroethene and 2-Butanone), 80% must be within 60% to 140% Recovery in the CCC. A new analytical curve is analyzed if these criteria are not met.

The laboratory used automated data transfer to create the forms found in the package. The first set of quantitation pages for each sample are the reduced data. Next, an audit history has been included to show all changes made to the unreduced data and the analyst performing the change. Finally, the unreduced quantitation pages are included.

GC/MS Calculations:

$$RRF = \frac{A_x}{A_{is}} \times \frac{C_{is}}{C_x}$$

Where: RRF - Relative Response Factor
A_x - Area of Characteristic Ion of Compound
A_{is} - Area of Characteristic Ion of Internal Standard
C_{is} - Concentration of Internal Standard
C_x - Concentration of Compound

Calculations continued on next page.

$$C_{sample} = \frac{A_{sample}}{A_{is}} \times \frac{C_{is}}{RRF} \times DF$$

Where: C_{sample} - Conc. of Compound in Sample
A_{sample} - Area of Cmpd's Ion in Sample
A_{is} - Area of Ion of Internal Std.
C_{is} - Conc. of Internal Standard
RRF - Relative Response Factor (the average RRF from the Initial Calibration Curve)
DF - Dilution Factor

All internal standard areas and retention times were within the allowed windows. All surrogate recoveries were within the allowed windows.

There were no out of the ordinary circumstances to report.

Five qualifiers may have been used on the data analysis sheets and indicate as follows:

- E - Exceeds instrument calibration range, but within linear range.
- S - Saturated Peak
- J - Reported below the detection limit, but supported by mass spectra.
- B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
- Q - Exceeds Quality Control Limits of 70% to 130%

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

0001P

Lab Name: AIR TOXICS LIMITED
Lab Code:
Lab File ID: J021301
Instrument ID: MSD-J
Matrix: Ambient Air

SDG No:
Contract:
BFB Injection Date: 2-13-97
BFB Injection Time: 8:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.37
75	30.0 - 60.0% of mass 95	46.22
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.35
173	< 2.0% of mass 174	(0.33) 1
174	> 50.0% of mass 95	88.38
175	5.0 - 9.0% of mass 174	(7.84) 1
176	> 95.0%, but < 101.0% of mass 174	(99.58) 1
177	5.0 - 9.0% of mass 176	(6.85) 2

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

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

EPA SAMPLE ID.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED
	#51177 500 mL inject to Tekmar	J021302	2-13-97	8:53
	System Blank	J021303	2-13-97	9:50
	#296-67 TO14 std	J021304	2-13-97	10:47
	System Blank	J021305	2-13-97	11:32
	Lab Blank	J021306	2-13-97	12:19
	970219-01A	J021307	2-13-97	13:20
	970219-02A	J021308	2-13-97	14:01
	System Blank	J021309	2-13-97	14:43
	#296-67	J021310	2-13-97	15:30
	F296-67 5 min dilution	J021311	2-13-97	17:32
	#296-67 10 min dilution	J021312	2-13-97	18:26
	System Blank	J021313	2-13-97	19:10
	Lab Blank	J021314	2-13-97	19:53

COPY FROM ATL Notebook No. 211 0018 25

ECT MSD-J

Continued From Page

ile #	Sample Name / Client	Can #	Pressure	Amount	Dil	Initial
21301	#275-8-25 BFB Tune Check			2 ml	1.0	MH
21302	#5177 5ppm inject to Tekmar			0.5 ml	1.0	MH
21303	System Blank	Bag		250 ml	1.0	MH
21304	#296-67 Toluene std			25 ml	1.0	MH
21305	System Blank	Bag		250 ml	1.0	MH
21306	Lab Blank	14300		500 ml	1.0	MH
21307	9702019-01A/Pierons	21015	10" → 5 psi	500 ml	2.01	MH
21308	9702019-02A	12703	8.5" → 5 psi	500 ml	1.87	MH
21309	System Blank	Bag		250 ml	1.0	MH
21310	#296-67			100 ml	1.0	MH
21311	#296-67			25 ml	1.0	MH
21312	#296-67 10 minute desorb			25 ML	1.0	JP
21313	SYSTEM BLANK			250 ML	1.0	JP
21314	Lab Blank			500 ML	1.0	JP

[signature] 2/14/97

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Read and Understood By

Signed Date Signed Date

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

0002A

Lab Name: AIR TOXICS LIMITED
Lab Code:
Lab File ID: J010903
Instrument ID: MSDJ
Matrix: Ambient Air

SDG No:
Comment:
BFB Injection Date: 1-9-97
BFB Injection Time: 09:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.19
75	30.0 - 60.0% of mass 95	45.57
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.57
173	< 2.0% of mass 174	(0.00
174	> 50.0% of mass 95	71.18
175	5.0 - 9.0% of mass 174	(6.99
176	> 95.0%, but < 101.0% of mass 174	(96.77
177	5.0 - 9.0% of mass 176	(6.97

1 - %value is % mass 174 *2 - %value is % mass 176*

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

	EPA SAMPLE ID.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED
01		≠ 296-25 (0.1 ppbv)	J010904	1-9-97	09:24
02		≠ 296-25 (0.5 ppbv)	J010905	1-9-97	10:04
03		≠ 296-25 (5.0 ppbv)	J010906	1-9-97	10:44
04		≠ 296-25 (100 ppbv)	J010907	1-9-97	11:27
05		≠ 296-25 (25.0 ppbv)	J010908	1-9-97	12:08
06		≠ 296-25 (50.0 ppbv)	J010909	1-9-97	12:48
07		≠ 296-25 (75.0 ppbv)	J010910	1-9-97	13:31
08		System Blank	J010911	1-9-97	14:11
09		TO14-0001 (25.0 ppbv)	J010912	1-9-97	14:51
10		System Blank	J010913	1-9-97	15:41
11		TO14-0001 (25.0 ppbv)	J010914	1-9-97	16:21
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

OJECT [illegible]

Notebook No. 299 0002B

Continued From Page

File #	Sample Name/Client	Can #	Pressure	Amount	D.F.	Int.
J010601	Lab Blank	94300		500.0 ml	1.0	FA
J010602	Lab Blank	94300		500.0 ml	1.0	FA
J010603	#296-25 100 ppbv	(5.0 ppbv)		25.0 ml	20.0	FA
J010604	#296-25 100 ppbv			50.0 ml	1.0	FA
J010605	Lab Blank	94300		500.0 ml	1.0	FA
					FA	1-7-97
J010701	System Blank	Bag		250.0 ml	1.0	FA
J010702	BFB Tune Check #275-3-25			2.0 ul	1.0	FA
J010703	Can Cert.	10766		1.0L	1.0	FA
J010704	Can Cert.	05365		1.0L	1.0	FA
J010705	Can Cert.	12708		1.0L	1.0	FA
J010706	Can Cert.	14111		1.0L	1.0	FA
J010707	Can Cert.	10768		1.0L	1.0	FA
J010708	Can Cert.	05711		1.0L	1.0	FA
J010709	Can Cert.	22678		1.0L	1.0	FA
					FA	1-9-97
J010901	Lab Blank	94300		500.0 ml	1.0	FA
J010902	Lab Blank	94300		500.0 ml	1.0	FA
J010903	BFB Tune Check #275-3-25			2.0 ul	1.0	FA
J010904	#296-25 100 ppbv	(0.1 ppbv)		0.5 ml	1.0	FA
J010905	#296-25 100 ppbv	(0.5 ppbv)		2.5 ml	1.0	FA
J010906	#296-25 100 ppbv	(5.0 ppbv)		25.0 ml	1.0	FA
J010907	#296-25 100 ppbv	(10.0 ppbv)		50.0 ml	1.0	FA
J010908	#296-25 100 ppbv	(25.0 ppbv)		125.0 ml	1.0	FA
J010909	#296-25 100 ppbv	(50.0 ppbv)		250.0 ml	1.0	FA
J010910	#296-25 100 ppbv	(75.0 ppbv)		375.0 ml	1.0	FA
J010911	System Blank	Bag		250.0 ml	1.0	FA
J010912	T014-0001 1.0 ppmv	(25.0 ppbv)		12.5 ml	4.0	FA

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Read and Understood By

Signed Date Signed Date

AIR TOXICS LTD.

SAMPLE NAME: 013197U1

ID#: 9702019-01A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**j021307**	**Date of Collection:**	**1/31/97**
Dil. Factor:	**2.01**	**Date of Analysis:**	**2/13/97**

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	1.0	Not Detected
cis-1,2-Dichloroethene	0.20	Not Detected
1,1,1-Trichloroethane	0.20	Not Detected
Benzene	0.20	0.84
1,2-Dichloroethane	0.20	Not Detected
Trichloroethene	0.20	Not Detected
1,2-Dichloropropane	0.20	Not Detected
Toluene	0.20	0.66
Tetrachloroethene	0.20	Not Detected
Chlorobenzene	0.20	Not Detected
Ethyl Benzene	0.20	Not Detected
m,p-Xylene	0.20	Not Detected
o-Xylene	0.20	Not Detected
Styrene	0.20	Not Detected
Acetone	1.0	11
Carbon Disulfide	1.0	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.0	3.4

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	122	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	100	70-130

MH 2/13/97

0004

Air Toxics Limited

AMBIENT AIR METHOD TO14

ata file : /chem/msdj.i/j-13feb.b/j021307.d
ab Smp Id: 9702019-01A Client Smp ID: 013197U1
aj Date : 13-FEB-1997 13:20
perator : MH Inst ID: msdj.i
mp Info : 500mL Can#21015
isc Info : 10"Hg-5.0psi Parsons
omment :
ethod : /chem/msdj.i/j-13feb.b/to140109.m
eth Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
al Date : 09-JAN-1997 12:48 Cal File: j010909.d
ls bottle: 1
il Factor: 2.010
ntegrator: HP RTE Compound Sublist: Parsons.sub
arget Version: 3.12 Sample Matrix: AIR
oncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
30 Bromochloromethane					CAS #: 74-97-5			
5.631	16.724 (1.000)	130	201951	5.0			100.00	9410
5.631	16.724 (0.000)	128	45544			23.40- 123.40	22.55	
5.631	16.724 (0.000)	49	87648			91.58- 191.58	43.40	
35 Octafluorotoluene					CAS #: 434-64-0			
7.120	17.235 (1.029)	217	568145	6.1	6.1		100.00	7634
7.120	17.235 (0.000)	186	110184			8.63- 108.63	19.39	
40 1,4-Difluorobenzene					CAS #: 540-36-3			
7.951	18.067 (1.000)	114	897763	5.0			100.00	9641
7.951	18.067 (0.000)	88	46896			0.00- 67.00	5.22	
49 Toluene-d8					CAS #: 2037-26-5			
9.973	20.111 (1.113)	98	894969	5.5	5.5		100.00	9950
9.973	20.111 (0.000)	70	30739			0.00- 62.67	3.43	
9.973	20.111 (0.000)	100	173568			16.83- 116.83	19.39	
58 Chlorobenzene-d5					CAS #: 3114-55-4			
2.063	22.209 (1.000)	117	889965	5.0			100.00	9934
2.063	22.209 (0.000)	82	133568			9.45- 109.45	15.01	

Data File: /chem/msdj.i/j-13feb.b/j021307.d
Report Date: 13-Feb-1997 13:49

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 65 Bromofluorobenzene					CAS #: 460-00-4			
23.917	24.086 (1.084)	95	683065	5.0	5.0		100.00	8409
23.917	24.086 (0.000)	174	104264			13.34- 113.34	15.26	
23.917	24.086 (0.000)	176	98672			7.57- 107.57	14.45	
16 Acetone					CAS #: 67-64-1			
13.450	13.413 (0.809)	43	454901	5.7	11.4		100.00	
13.450	13.413 (0.809)	58	158180			0.00- 79.57	34.77	
28 2-Butanone					CAS #: 78-93-3			
16.273	16.358 (0.978)	72	37541	1.7	3.4		100.00	7789
16.273	16.358 (0.000)	43	37130			372.08- 472.08	98.91	
16.273	16.358 (0.000)	57	2665			0.00- 83.73	7.10	
37 Benzene					CAS #: 71-43-2			
17.524	17.617 (0.976)	78	71795	0.42	0.84		100.00	9525
17.524	17.617 (0.000)	77	4306			0.00- 74.19	6.00	
51 Toluene					CAS #: 108-88-3			
20.064	20.203 (1.118)	92	34295	0.33	0.66		100.00	7348
20.064	20.203 (0.000)	91	16312			116.14- 216.14	47.56	

NTH
2/13/97

ıdit History For: /chem/msdj.i/j-13feb.b/j021307.d

ıange Date: 13-Feb-97 13:37
ıange Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

ıange Date: 13-Feb-97 13:37
ıange Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-13feb.b/to140109.m
Reason For Change: Complete Target Compound Processing

ıange Date: 13-Feb-97 13:41
ıange Made by: mhe

Parameter: date
Old Value: 13-FEB-97 13:20
New Value: 13-FEB-1997 13:20
Reason For Change: N/A

ıange Date: 13-Feb-97 13:41
ıange Made by: mhe

Parameter: Misc Information
Old Value:
New Value: 10"Hg-5.0psi Parsons
Reason For Change: N/A

ıange Date: 13-Feb-97 13:41
ıange Made by: mhe

Parameter: Compound Sublist
Old Value: AT.sub
New Value: Parsons.sub
Reason For Change: N/A

ıange Date: 13-Feb-97 13:41
ıange Made by: mhe

Parameter: Sample Info
Old Value: 9702019-01A 500mL Can#21015 10"-5psi 013197U1 Parsons
New Value: 500mL Can#21015
Reason For Change: N/A

ıange Date: 13-Feb-97 13:41
ıange Made by: mhe

Parameter: Lab ID
Old Value:
New Value: 9702019-01A
Reason For Change: N/A

ıange Date: 13-Feb-97 13:41
ıange Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: 013197U1
Reason For Change: N/A

Change Date: 13-Feb-97 13:41
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-13feb.b/to140109.m
Reason For Change: Quantitation

Change Date: 13-Feb-97 13:47
Change Made by: mhe

Parameter: Best Hit for Carbon Disulfide changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:47
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Best Hit for Methylene Chloride changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Best Hit for 1,1,1-Trichlorethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Manual reintegration of Trichloroethene (Signal 1)
Old Value: No previous peak at 18.340
New Value: New Area/Time: 903 / 18.34
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Manual reintegration of Tetrachloroethene (Signal 1)
Old Value: No previous peak at 20.850
New Value: New Area/Time: 1627 / 20.85
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Manual reintegration of Chlorobenzene (Signal 1)
Old Value: No previous peak at 22.117
New Value: New Area/Time: 1956 / 22.12
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:48
Change Made by: mhe

Parameter: Best Hit for Ethyl Benzene changed
Old Value: Old Hit #1
New Value: Compound Undetected

Reason For Change: N/A

ange Date: 13-Feb-97 13:48
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Best Hit for m,p-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Best Hit for o-Xylene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Best Hit for Styrene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Manual reintegration of Styrene (Signal 1)
Old Value: No previous peak at 22.986
New Value: New Area/Time: 802 / 22.99
Reason For Change: N/A

ange Date: 13-Feb-97 13:49
ange Made by: mhe

Parameter: Best Hit for Styrene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:49
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:49
Change Made by: mhe

Parameter: Best Match for Unknown compound at 6.545 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 13:49
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.498 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 13:49
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.665 min. changed.
Old Value: Old match: Cyclotetrasiloxane, octamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 13:49
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.748 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

ata File: /chem/msdj.i/j-13feb.b/j021307.d
eport Date: 13-Feb-1997 13:41

MH 2/13/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

ata file : /chem/msdj.i/j-13feb.b/j021307.d
ab Smp Id: 9702019-01A Client Smp ID: 013197U1
nj Date : 13-FEB-1997 13:20
perator : MH Inst ID: msdj.i
mp Info : 500mL Can#21015
isc Info : 10"Hg-5.0psi Parsons
omment :
ethod : /chem/msdj.i/j-13feb.b/to140109.m
eth Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
al Date : 09-JAN-1997 12:48 Cal File: j010909.d
ls bottle: 1
il Factor: 2.010
ntegrator: HP RTE Compound Sublist: Parsons.sub
arget Version: 3.12 Sample Matrix: AIR
oncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
30 Bromochloromethane					CAS #: 74-97-5			
6.631	16.724 (1.000)	130	201951	5.0			100.00	9410
6.631	16.724 (0.000)	128	45544			23.40- 123.40	22.55	
6.631	16.724 (0.000)	49	87648			91.58- 191.58	43.40	
35 Octafluorotoluene					CAS #: 434-64-0			
7.120	17.235 (1.029)	217	568145	6.1	6.1		100.00	7634
7.120	17.235 (0.000)	186	110184			8.63- 108.63	19.39	
40 1,4-Difluorobenzene					CAS #: 540-36-3			
7.951	18.067 (1.000)	114	897763	5.0			100.00	9641
7.951	18.067 (0.000)	88	46896			0.00- 67.00	5.22	
49 Toluene-d8					CAS #: 2037-26-5			
9.973	20.111 (1.113)	98	894969	5.5	5.5		100.00	9950
9.973	20.111 (0.000)	70	30739			0.00- 62.67	3.43	
9.973	20.111 (0.000)	100	173568			16.83- 116.83	19.39	
58 Chlorobenzene-d5					CAS #: 3114-55-4			
2.063	22.209 (1.000)	117	889965	5.0			100.00	9934
2.063	22.209 (0.000)	82	133568			9.45- 109.45	15.01	

Data File: /chem/msdj.i/j-13feb.b/j021307.d
Report Date: 13-Feb-1997 13:41

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 65 Bromofluorobenzene					CAS #: 460-00-4			
23.917	24.086 (1.084)	95	683065	5.0	5.0		100.00	8409
23.917	24.086 (0.000)	174	104264			13.34- 113.34	15.26	
23.917	24.086 (0.000)	176	98672			7.57- 107.57	14.45	
16 Acetone					CAS #: 67-64-1			
13.450	13.413 (0.809)	43	454901	5.7	11.4		100.00	
13.450	13.413 (0.809)	58	158180			0.00- 79.57	34.77	
17 Carbon Disulfide					CAS #: 75-15-0			
13.686	13.550 (0.823)	76	44103	0.29	0.58		100.00	8030
20 Methylene Chloride					CAS #: 75-09-2			
14.266	14.267 (0.858)	84	3955	0.085	0.17		100.00	3821(a)
14.266	14.267 (0.000)	49	1414			76.12- 176.12	35.75	
14.266	14.267 (0.000)	51	392			0.00- 96.86	9.91	
28 2-Butanone					CAS #: 78-93-3			
16.273	16.358 (0.978)	72	37541	1.7	3.4		100.00	7789
16.273	16.358 (0.000)	43	37130			372.08- 472.08	98.91	
16.273	16.358 (0.000)	57	2665			0.00- 83.73	7.10	
33 1,1,1-Trichlorethane					CAS #: 71-55-6			
16.997	17.090 (1.022)	97	5586	0.059	0.12		100.00	7122(a)
16.997	17.090 (0.000)	99	1036			13.51- 113.51	18.55	
37 Benzene					CAS #: 71-43-2			
17.524	17.617 (0.976)	78	71795	0.42	0.84		100.00	9525
17.524	17.617 (0.000)	77	4306			0.00- 74.19	6.00	
38 1,2-Dichloroethane					CAS #: 107-06-2			
17.524	17.624 (0.976)	62	2237	0.033	0.067		100.00	3979(a)
17.524	17.624 (0.000)	64	118			0.00- 81.76	5.27	
51 Toluene					CAS #: 108-88-3			
20.064	20.203 (1.118)	92	34295	0.33	0.66		100.00	7348
20.064	20.203 (0.000)	91	16312			116.14- 216.14	47.56	
60 Ethyl Benzene					CAS #: 100-41-4			
22.346	22.339 (1.013)	106	8643	0.091	0.18		100.00	(aq)
22.338	22.339 (1.012)	91	18769			296.25- 396.25	217.16	
61 m,p-Xylene					CAS #: 108-38-3			
22.346	22.499 (1.013)	106	8643	0.094	0.19		100.00	(a)
22.338	22.499 (1.012)	91	19060			164.96- 264.96	220.53	
62 o-Xylene					CAS #: 95-47-6			
23.002	23.171 (1.043)	106	3292	0.058	0.12		100.00	7922(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
62 o-Xylene (continued)								
.002	23.171 (0.000)	91	1842			167.28- 267.28	55.95	

: Flag Legend

- Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-13feb.b/j021307.d
Lab Smp Id: 9702019-01A Client Smp ID: 013197U1
Inj Date : 13-FEB-1997 13:20
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#21015
Misc Info : 10"Hg-5.0psi Parsons
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 2.010 Target Version: 3.12
Integrator: HP RTE Compound Sublist: Parsons.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

ISTD	RT	AREA	AMOUNT
* 30 Bromochloromethane	16.631	1184727	5.000
* 40 1,4-Difluorobenzene	17.951	2037194	5.000
* 58 Chlorobenzene-d5	22.063	2782159	5.000

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
6.545	4.039e+08	1700	3430	0		0	30
Unknown				CAS #:			
8.704	153543	0.65	1.3	0		0	30
Butane				CAS #: 106-97-8			
9.521	269171	1.1	2.3	72	NBS54K.l	98	30

ıta File: /chem/msdj.i/j-13feb.b/j021307.d
ɜport Date: 13-Feb-1997 13:41

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
:nown					CAS #:		
1.139	312468	1.3	2.6	0		0	30
:ane, 2-methyl-					CAS #: 78-78-4		
1.527	166928	0.70	1.4	80	NBS54K.l	272	30
:anal					CAS #: 123-72-8		
5.006	554958	2.3	4.7	90	NBS54K.l	257	30
ran, 2-propyl-					CAS #: 4229-91-8		
3.096	463957	1.1	2.3	64	NBS54K.l	2076	40
ıtanal					CAS #: 110-62-3		
3.645	234951	0.58	1.2	64	NBS54K.l	647	40
:ulfide, dimethyl					CAS #: 624-92-0		
7.774	218138	0.54	1.1	95	NBS54K.l	913	40
:tamide, N,N-dimethyl-					CAS #: 127-19-5		
5.498	5484013	9.8	19.8	86	NBS54K.l	707	58
:lotetrasiloxane, octamethyl-					CAS #: 556-67-2		
5.665	795268	1.4	2.9	64	NBS54K.l	35637	58
:nol					CAS #: 108-95-2		
5.748	1448506	2.6	5.2	91	NBS54K.l	933	58
:lopropane, pentyl-					CAS #: 2511-91-3		
7.312	389997	0.70	1.4	90	NBS54K.l	2382	58

Data File: /chem/msdj.i/j-13feb.b/j021307.d
Report Date: 13-Feb-1997 13:41

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j021307.d
Lab Smp Id: 9702019-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem/msdj.i/j-13feb.b/to140109.m
Misc Info: 10"Hg-5.0psi Parsons

Calibration Date: 02/13/97
Calibration Time: 1047
Client Smp ID: 013197U1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	234378	140627	328129	201951	-13.84
40 1,4-Difluorobenzene	1049127	629476	1468778	897763	-14.43
58 Chlorobenzene-d5	964277	578566	1349988	889965	-7.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	16.59	16.09	17.09	16.63	0.27
40 1,4-Difluorobenzene	17.93	17.43	18.43	17.95	0.13
58 Chlorobenzene-d5	22.05	21.55	22.55	22.06	0.07

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

MH
2/13/97

ıta File: /chem/msdj.i/j-13feb.b/j021307.d
:port Date: 13-Feb-1997 13:41

Air Toxics Limited

RECOVERY REPORT

.ient Name:
ımple Matrix: GAS
ıb Smp Id: 9702019-01A
:vel: LOW
ıta Type: MS DATA
›ikeList File:
:thod File: /chem/msdj.i/j-13feb.b/to140109.m
.sc Info: 10"Hg-5.0psi Parsons

Client SDG: j-13feb
Fraction: VOA
Client Smp ID: 013197U1
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 35 Octafluorotoluene	5.0	6.1	121.42	60-140
$ 49 Toluene-d8	5.0	5.5	110.18	60-140
$ 65 Bromofluorobenzene	5.0	5.0	99.12	60-140

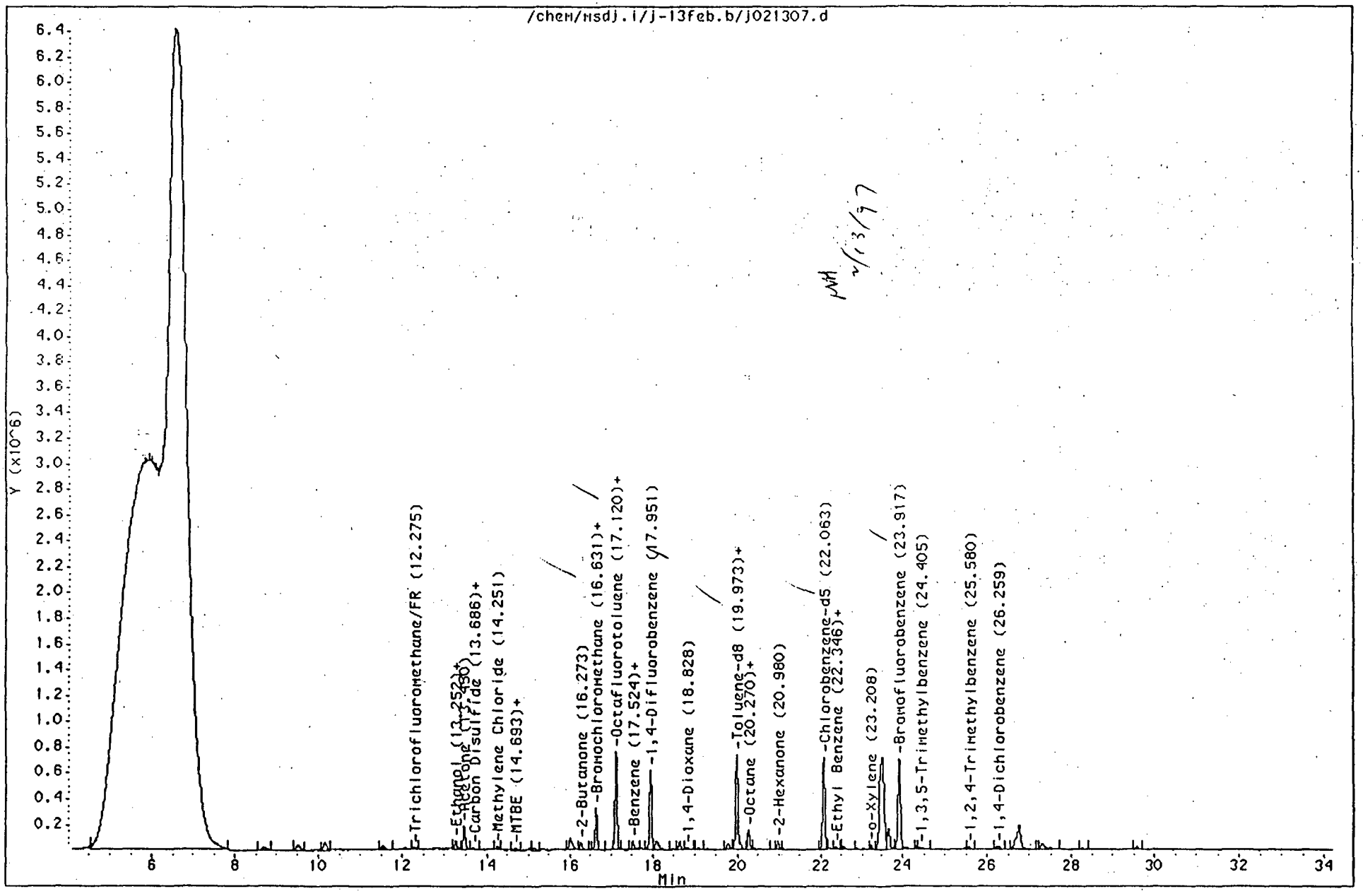
MH
2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Client ID: 013197U1
Sample Info: 500mL Can#21015

Instrument: msdj.i

Operator: MH
Column diameter: 0.58

Column phase: RTx-624



MH 2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

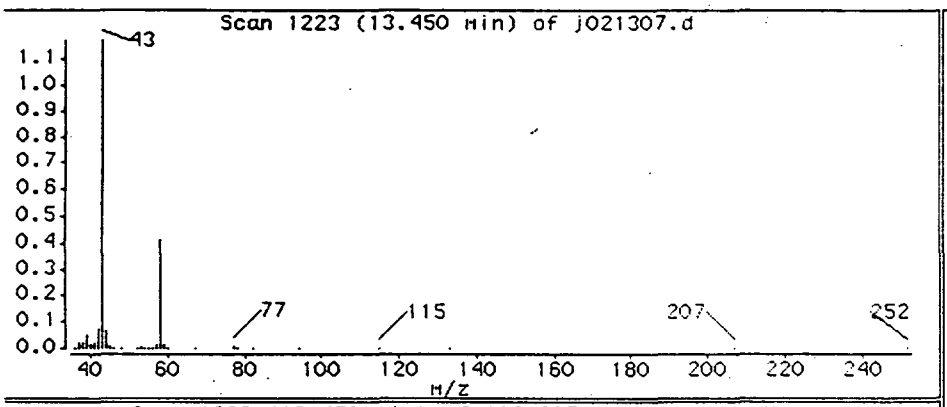
Sample Info: 500mL Can#21015

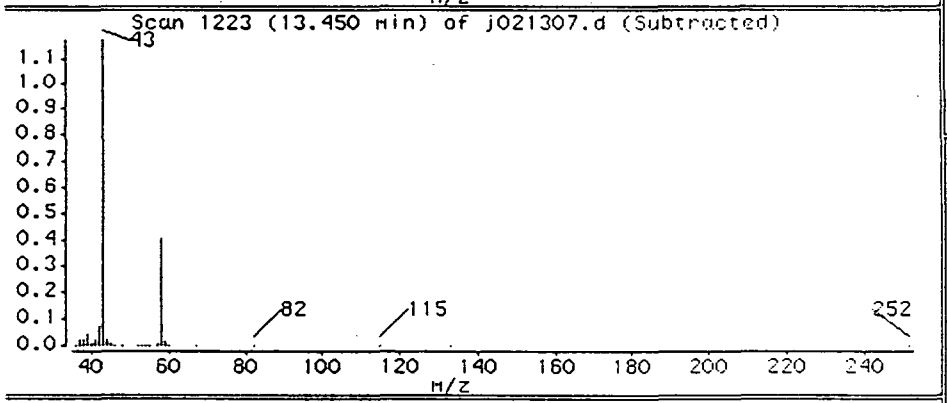
Operator: MH

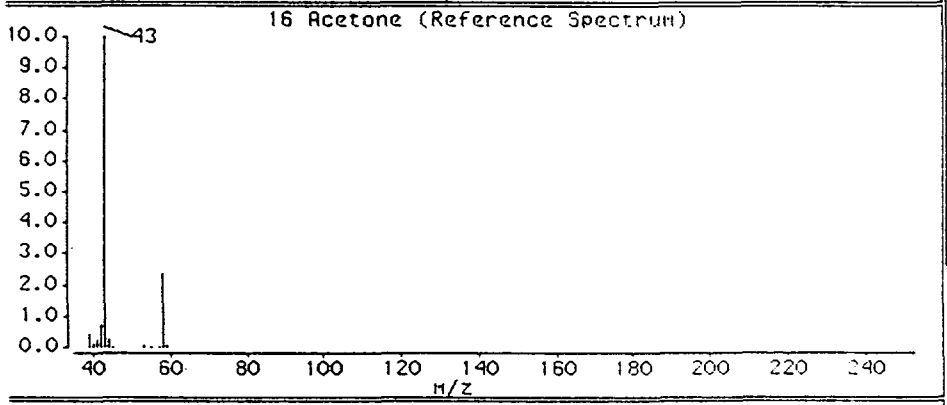
Column phase: RTx-624

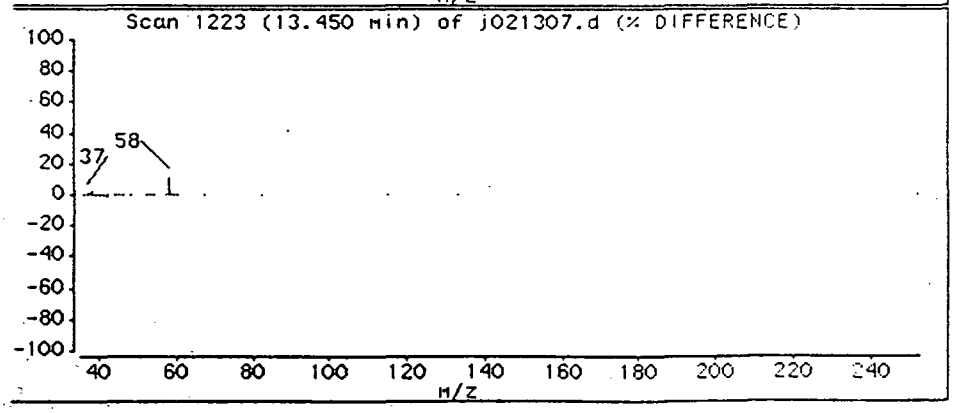
Column diameter: 0.58

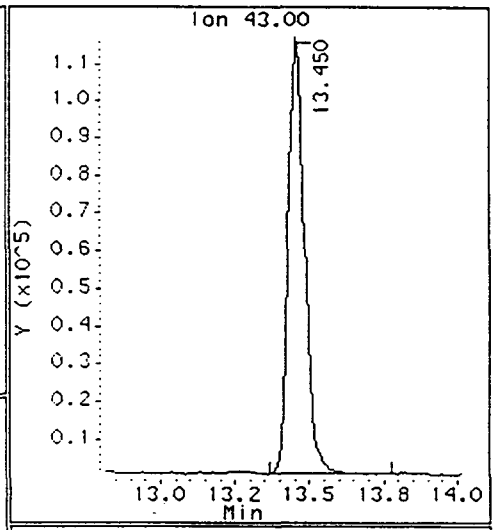
16 Acetone

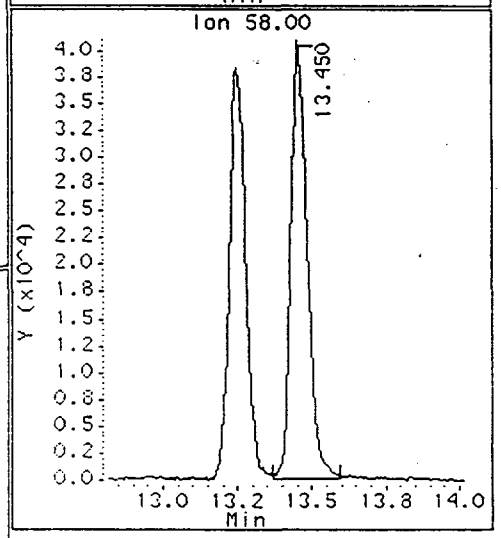












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

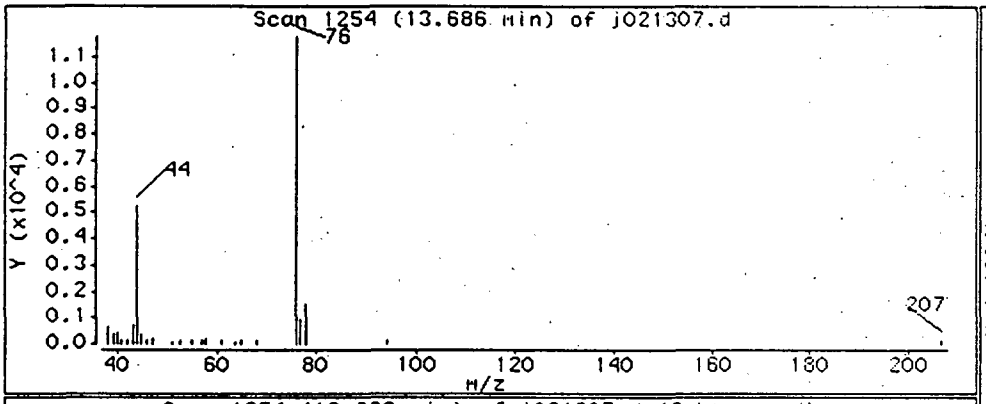
Sample Info: 500mL Can#21015

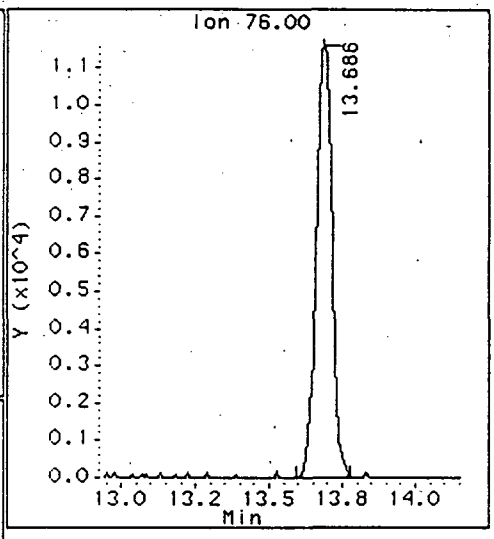
Operator: MH

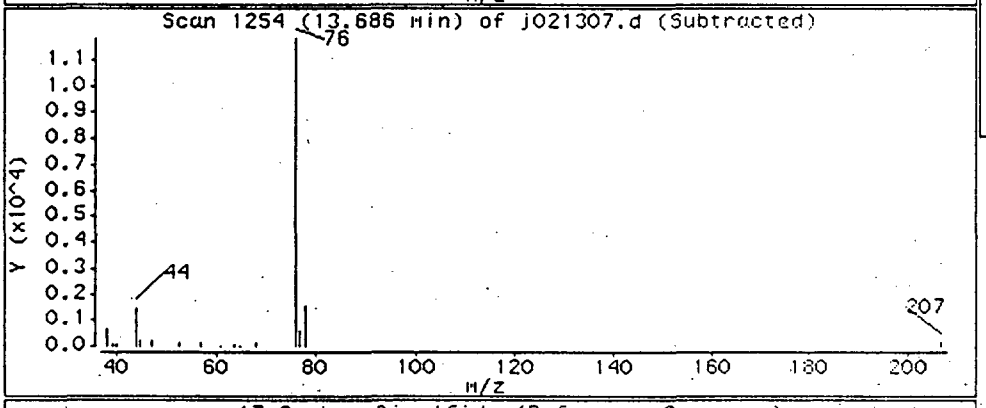
Column phase: RTx-624

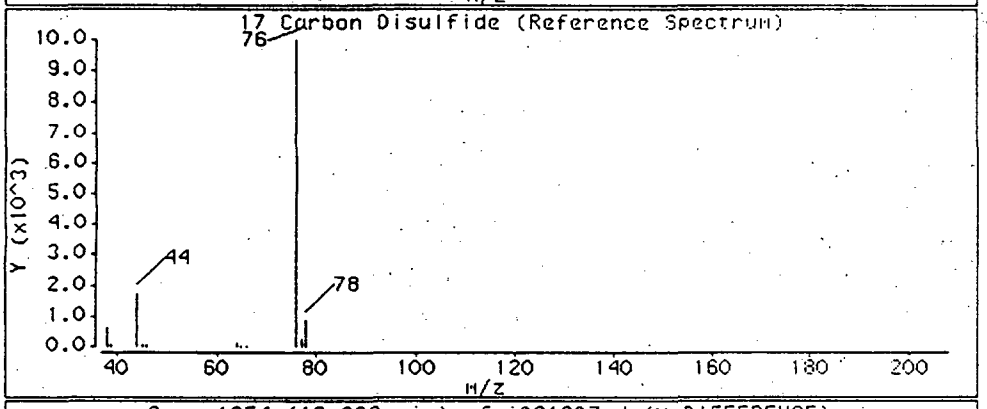
Column diameter: 0.58

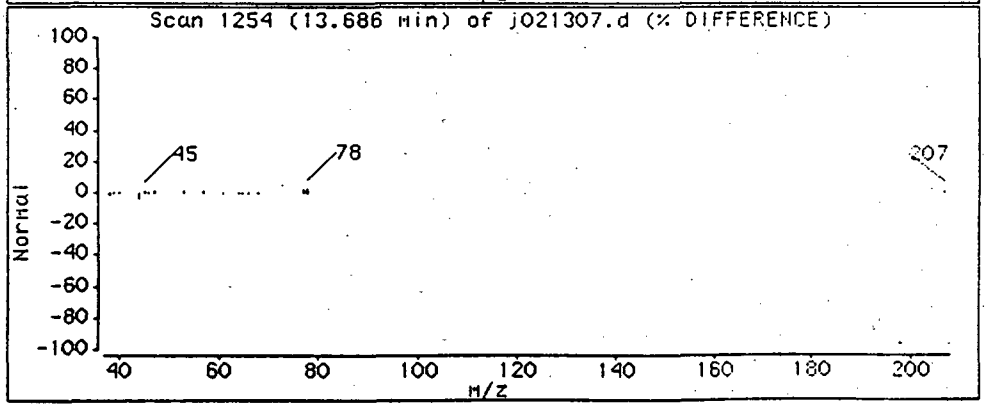
17 Carbon Disulfide











Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

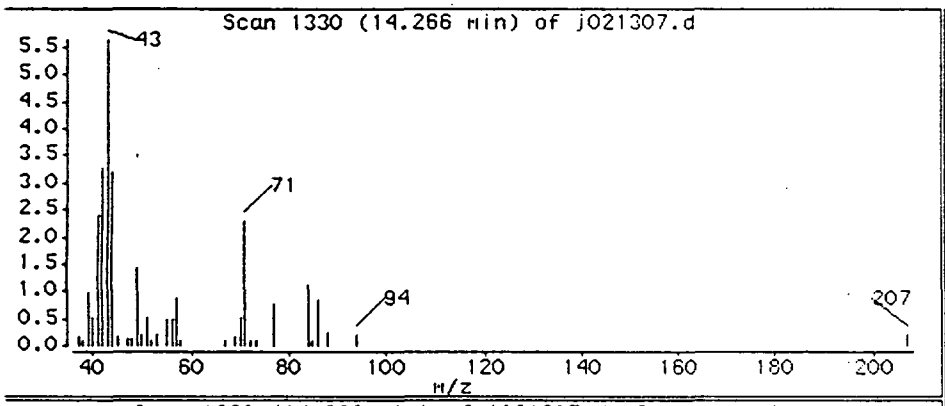
Sample Info: 500mL Can#21015

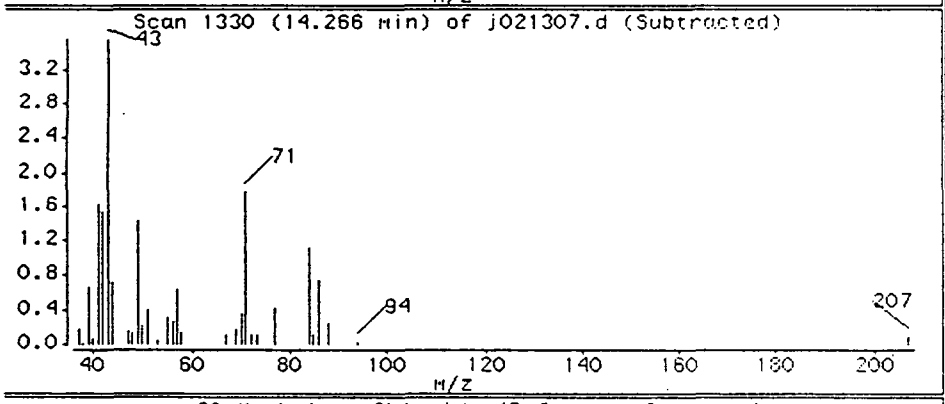
Operator: MH

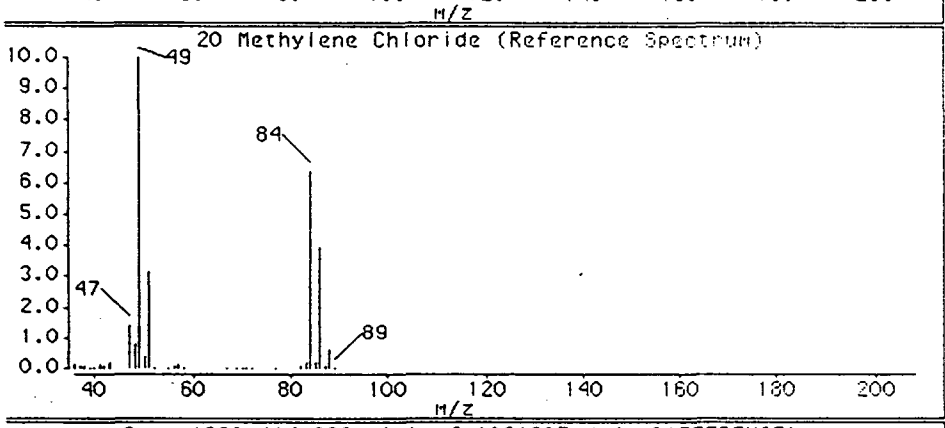
Column phase: RTx-624

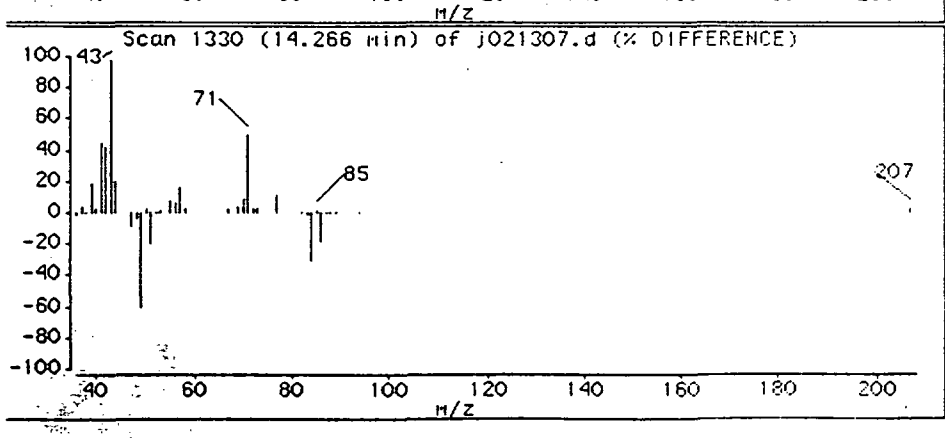
Column diameter: 0.58

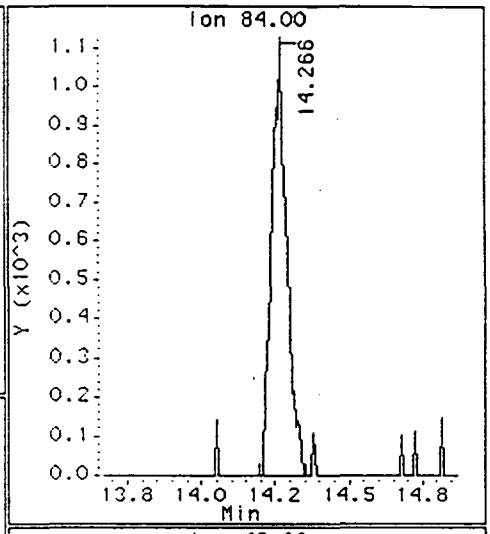
20 Methylene Chloride

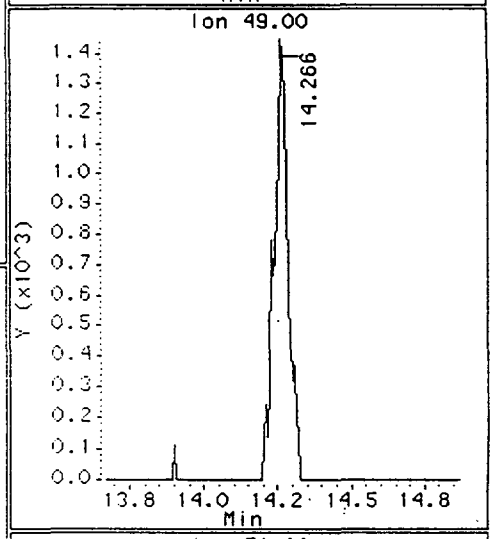


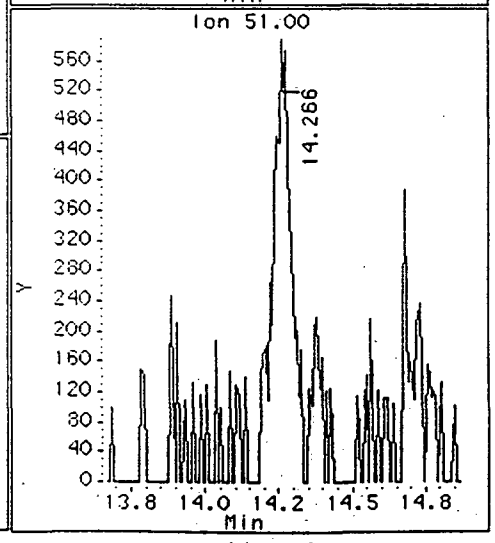












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

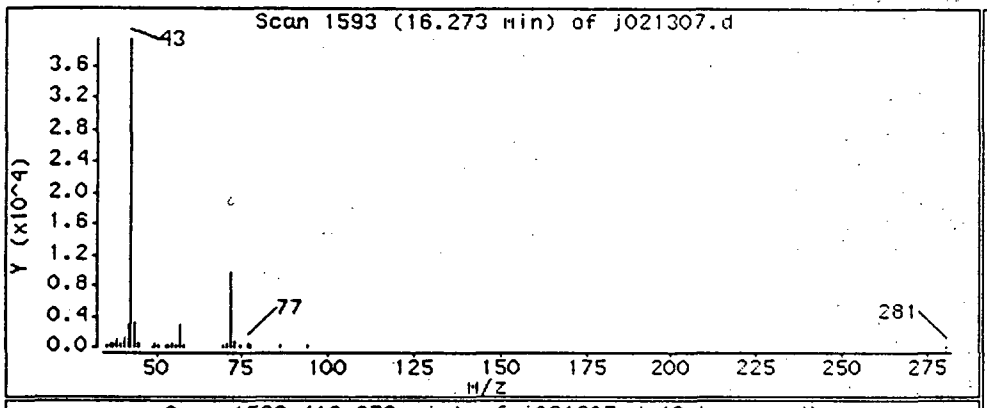
Sample Info: 500mL Can#21015

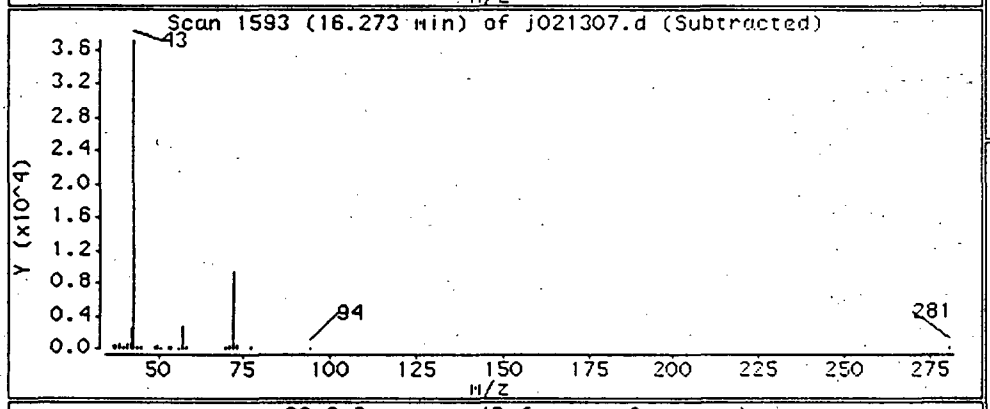
Operator: MH

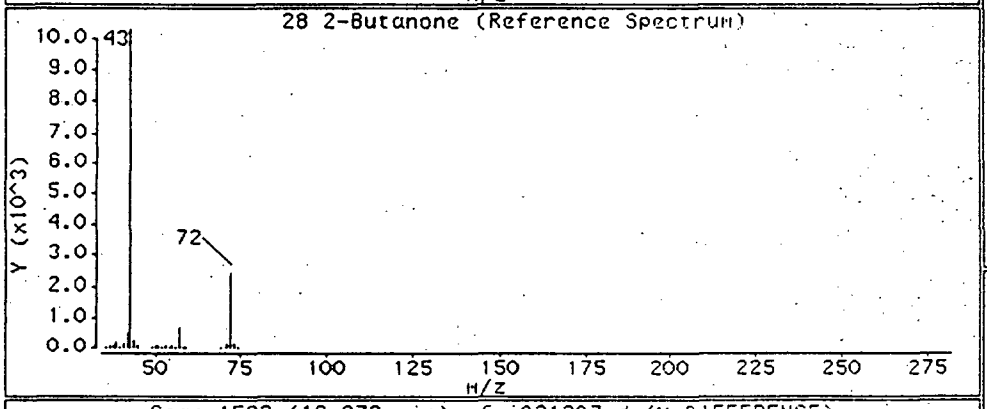
Column phase: RTx-624

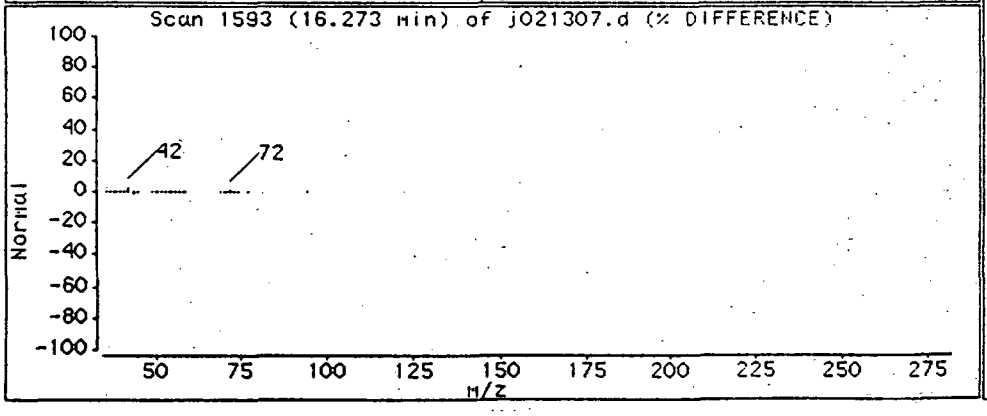
Column diameter: 0.58

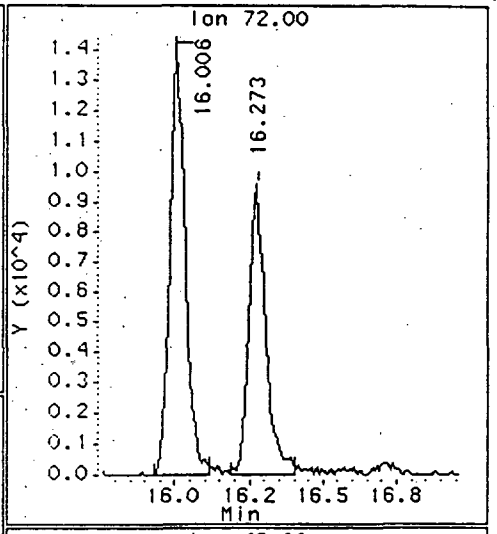
28 2-Butanone

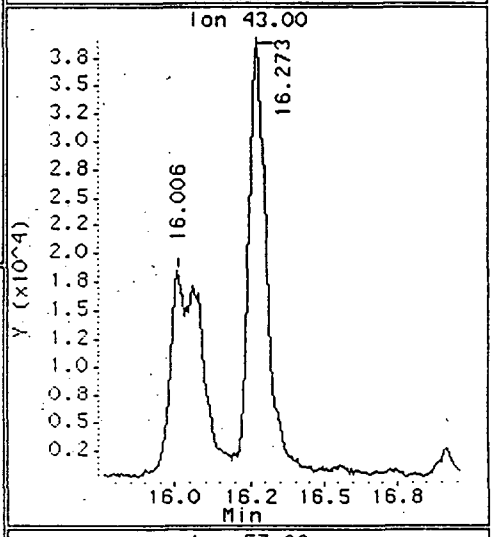


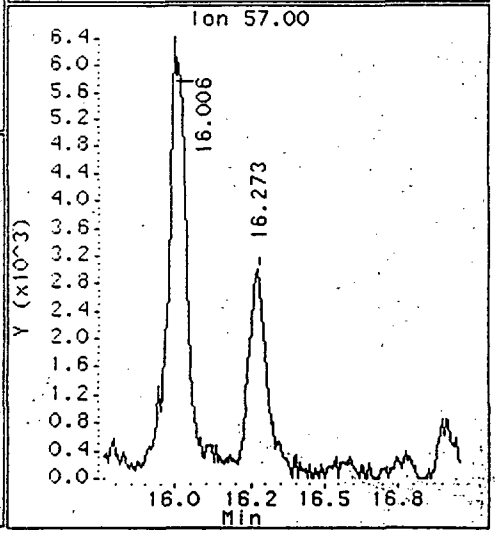












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

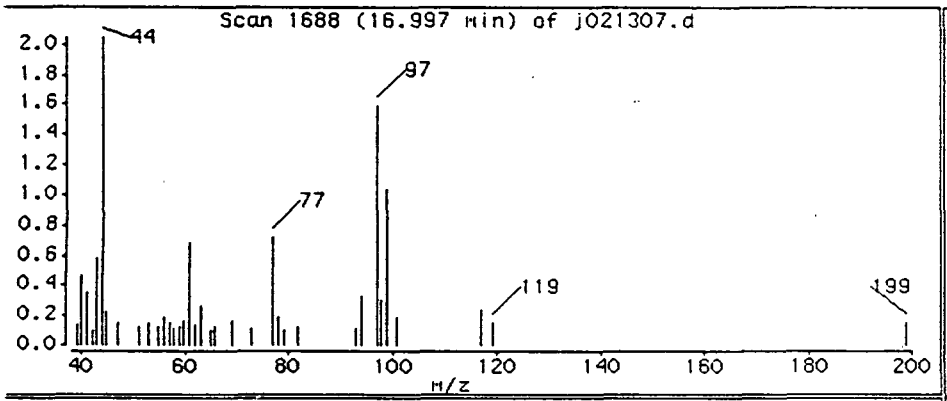
Sample Info: 500mL Can#21015

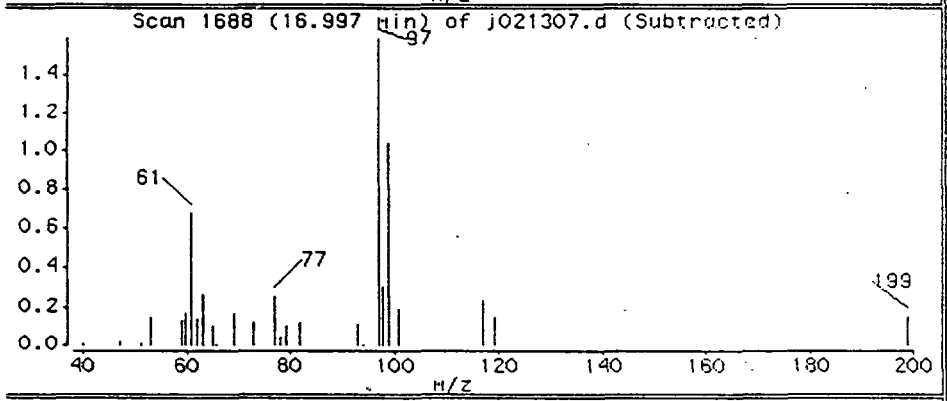
Operator: MH

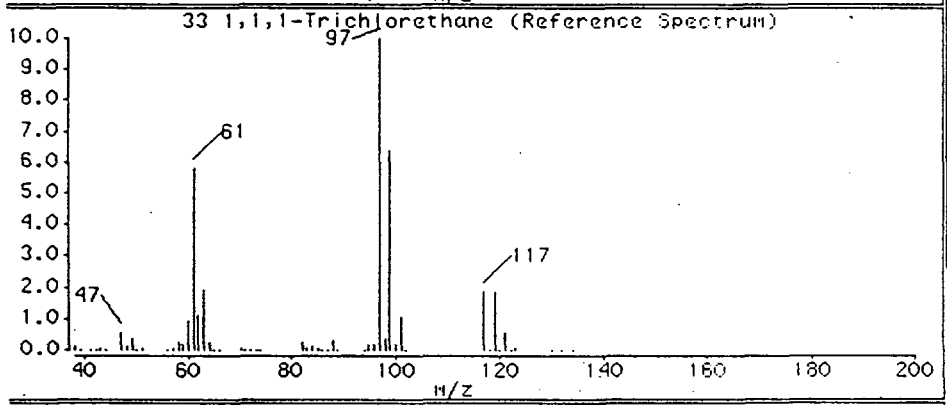
Column phase: RTx-624

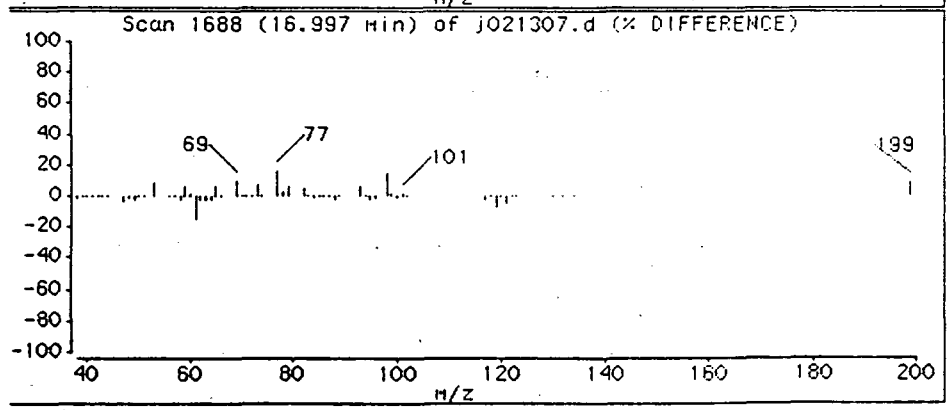
Column diameter: 0.58

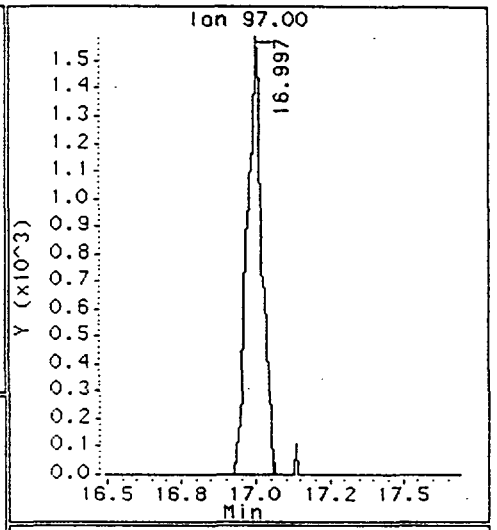
33 1,1,1-Trichlorethane

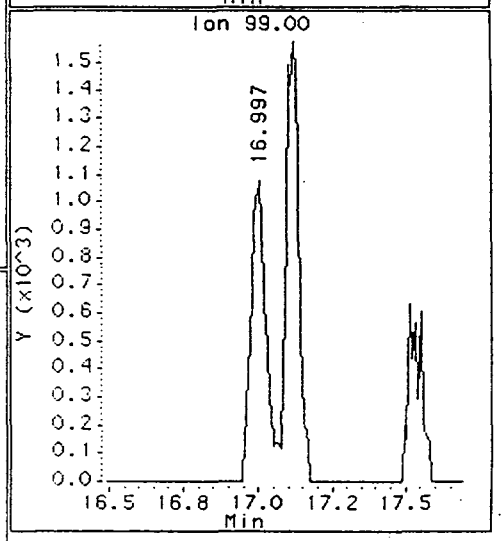






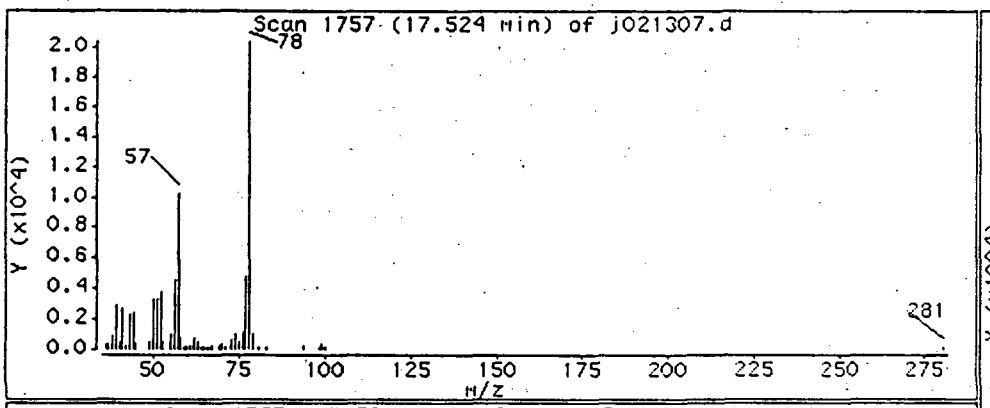


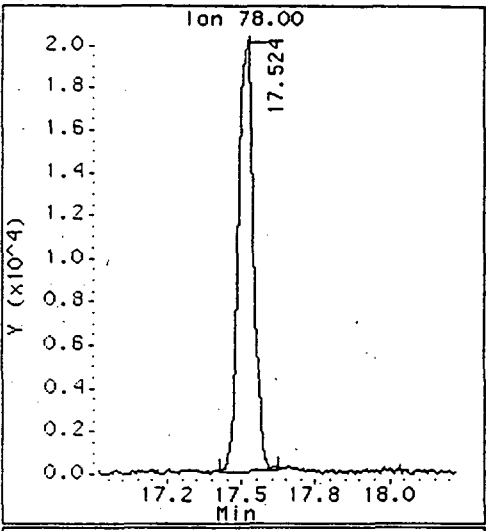


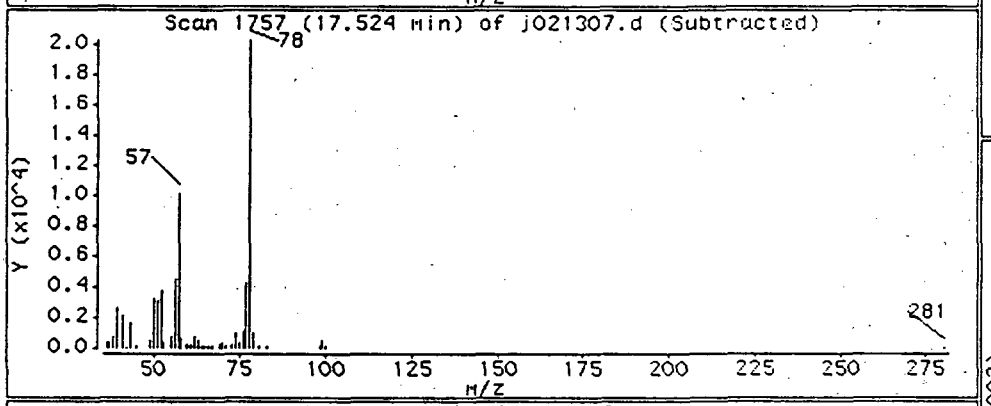


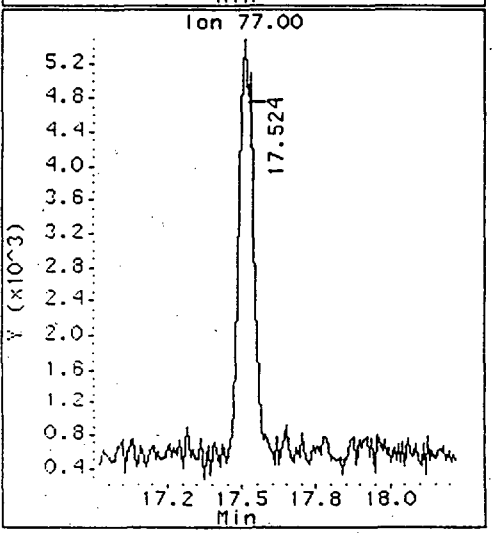
Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Client ID: 013197U1
Instrument: msdj.i
Sample Info: 500mL Can#21015
Operator: MH
Column phase: RTx-624
Column diameter: 0.58

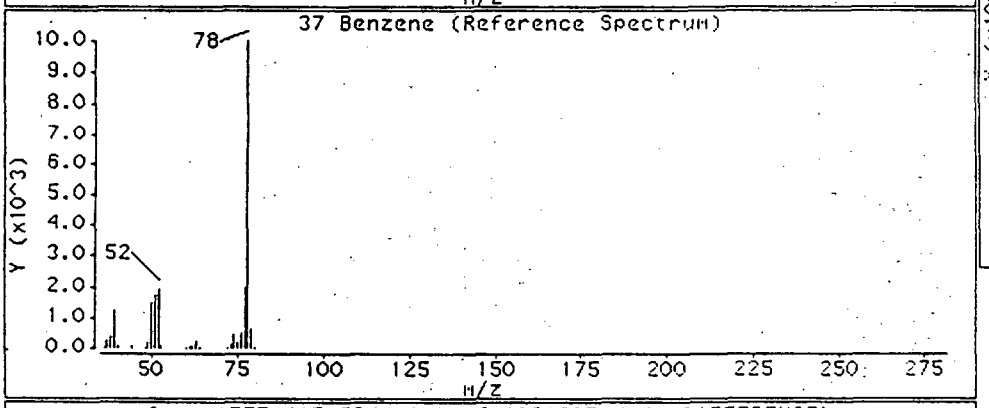
37 Benzene

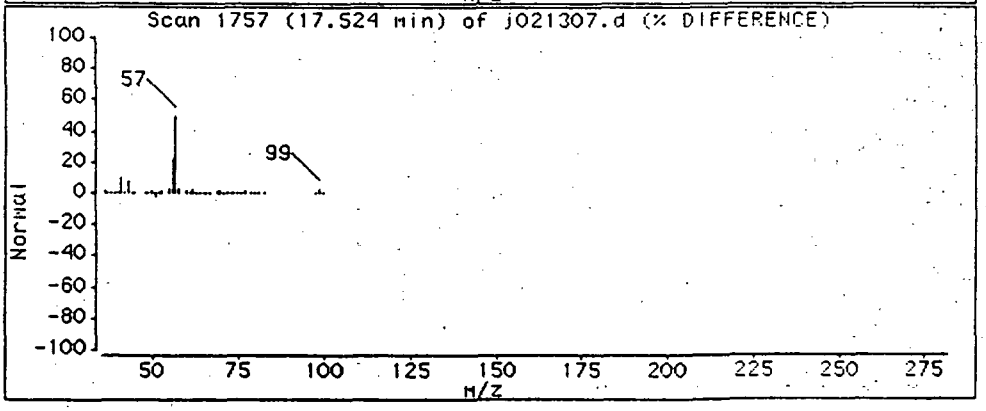












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

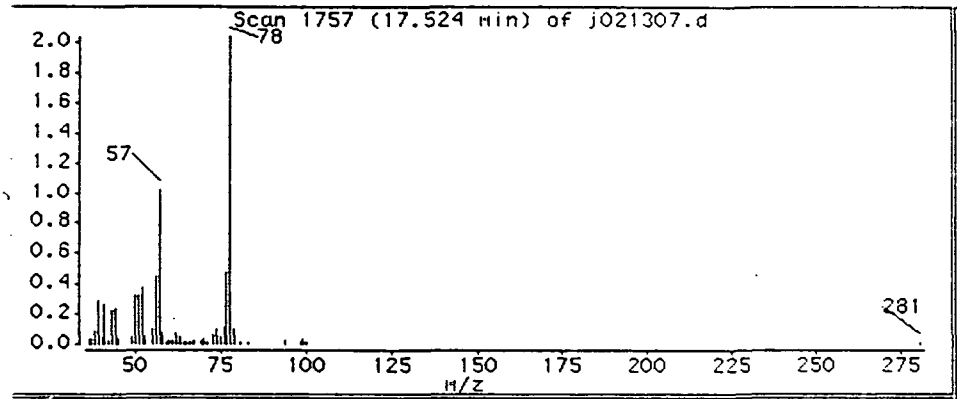
Sample Info: 500mL Can#21015

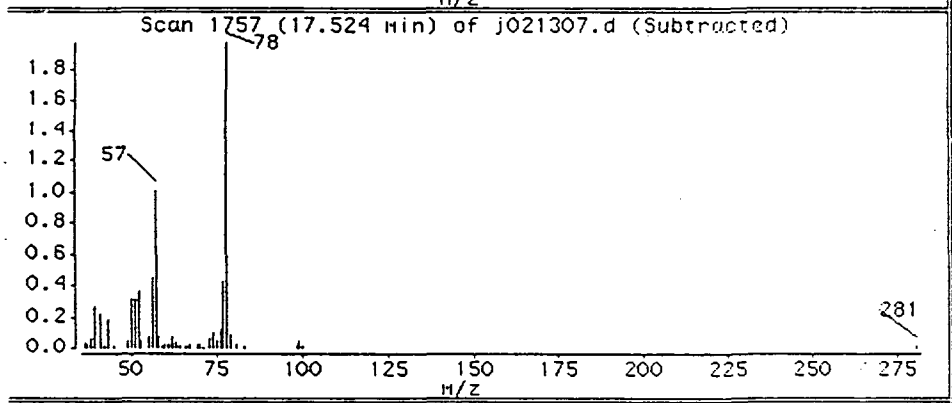
Operator: MH

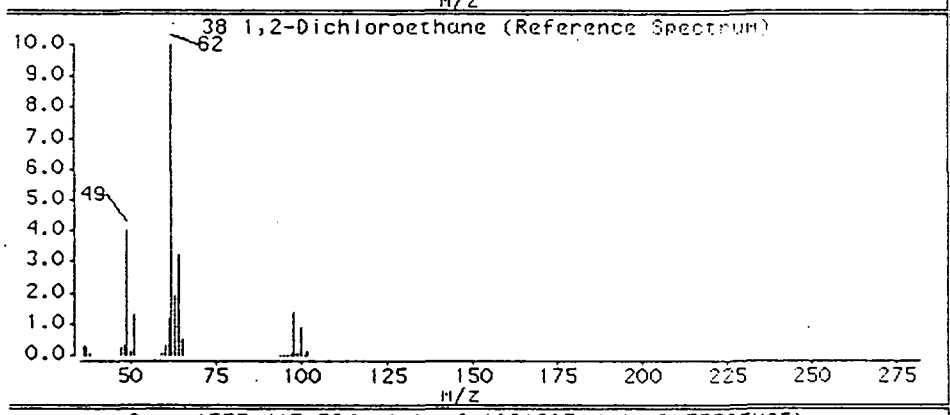
Column phase: RTx-624

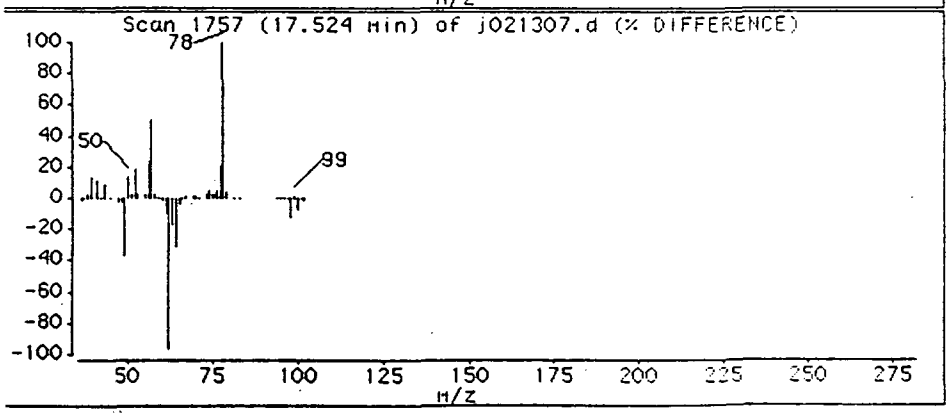
Column diameter: 0.58

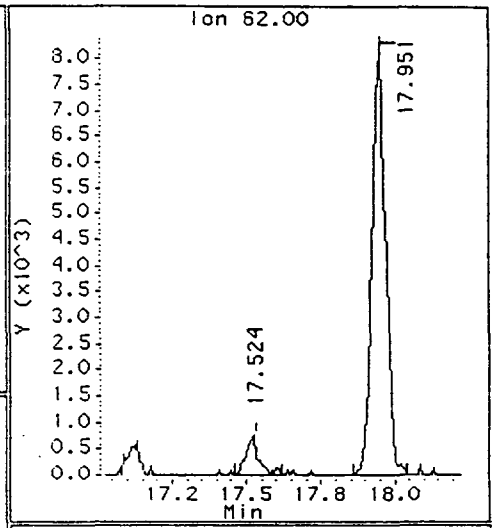
38 1,2-Dichloroethane

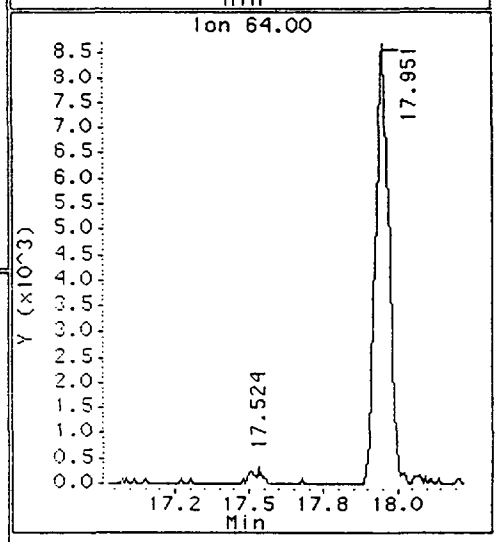












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

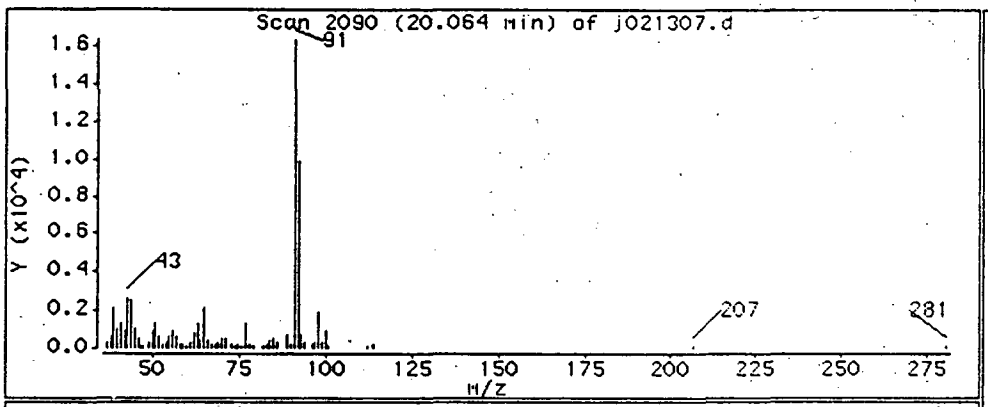
Sample Info: 500mL Can#21015

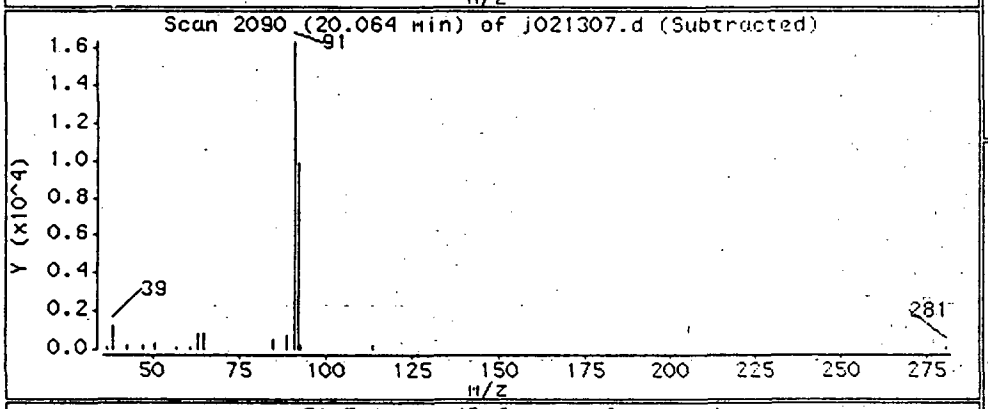
Operator: MH

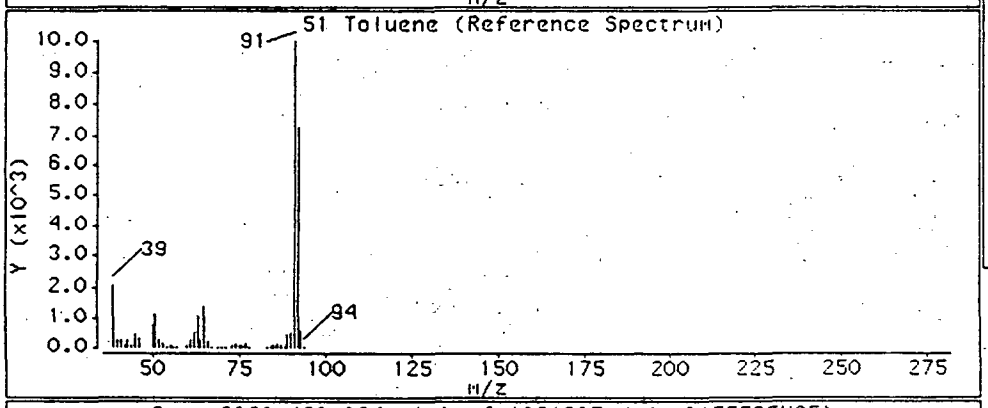
Column phase: RTx-624

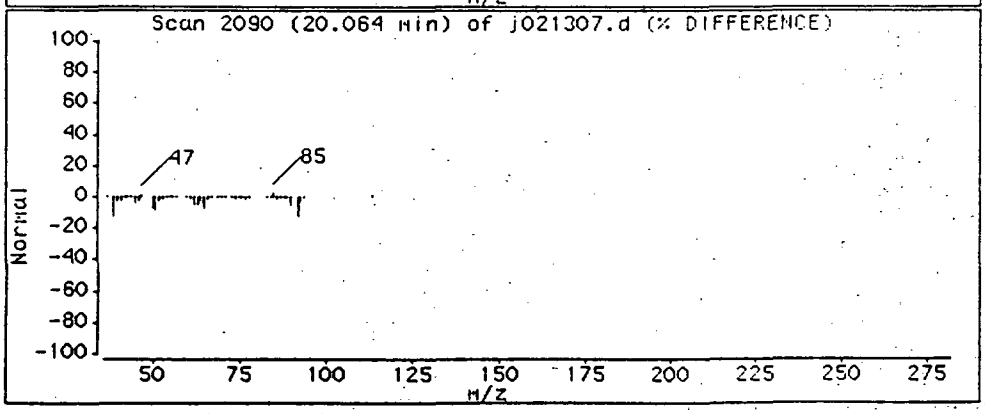
Column diameter: 0.58

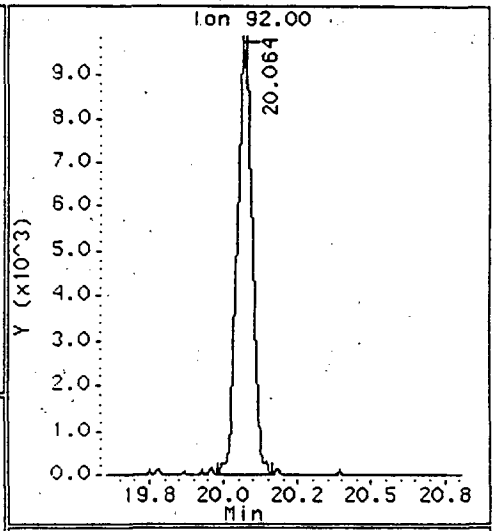
51 Toluene

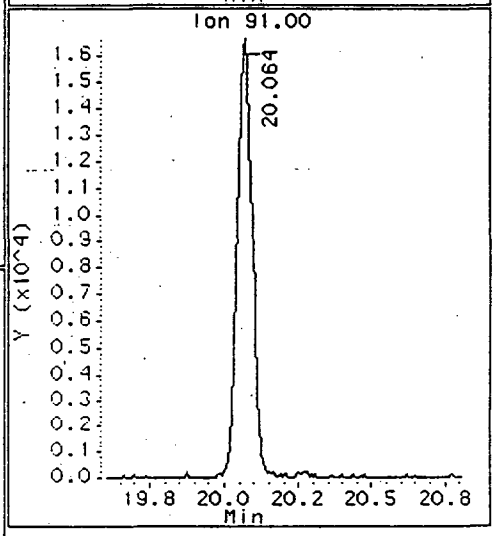












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

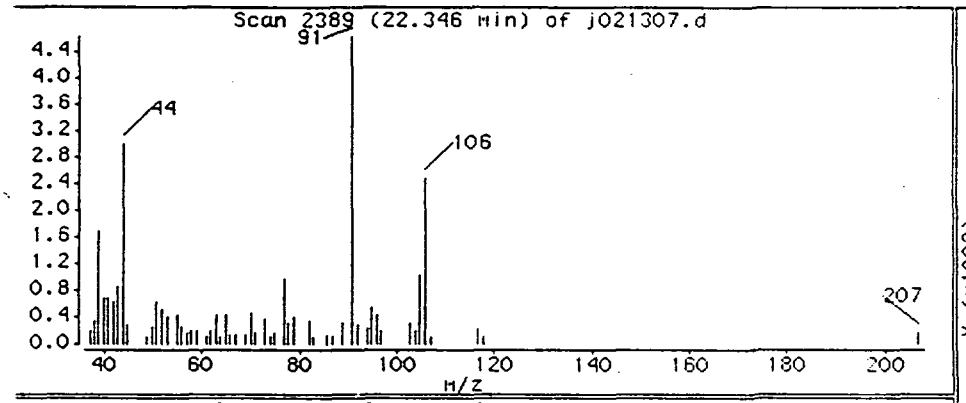
Sample Info: 500mL Can#21015

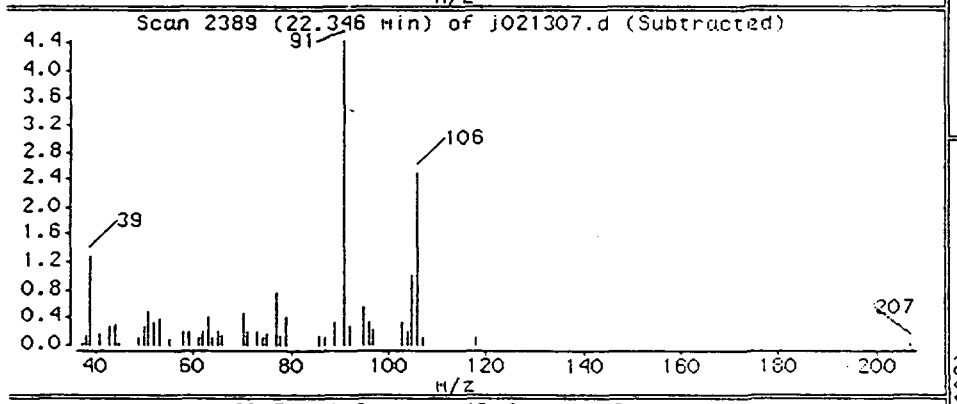
Operator: MH

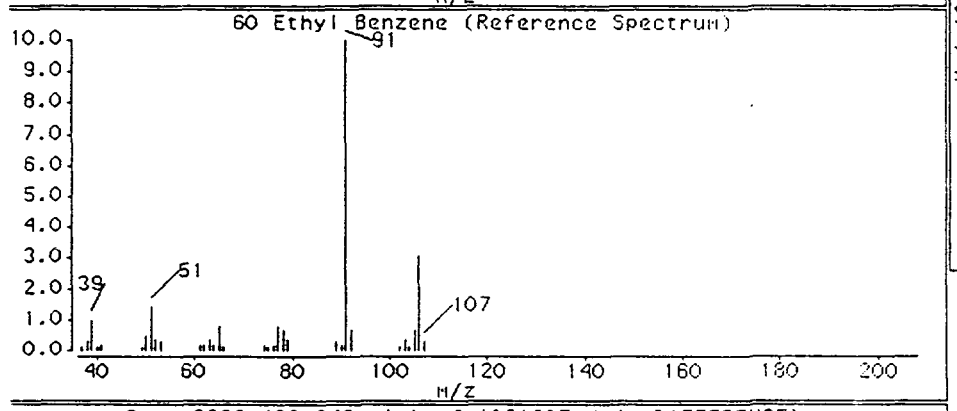
Column phase: RTx-624

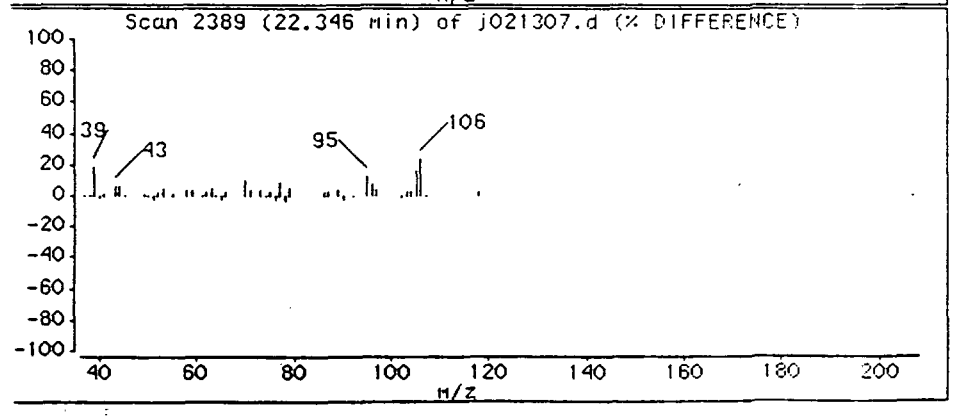
Column diameter: 0.58

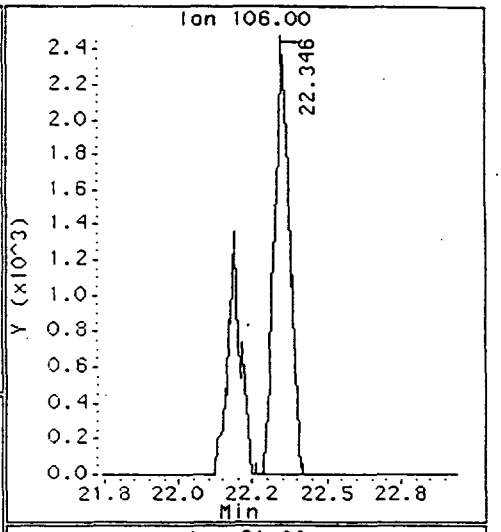
60 Ethyl Benzene

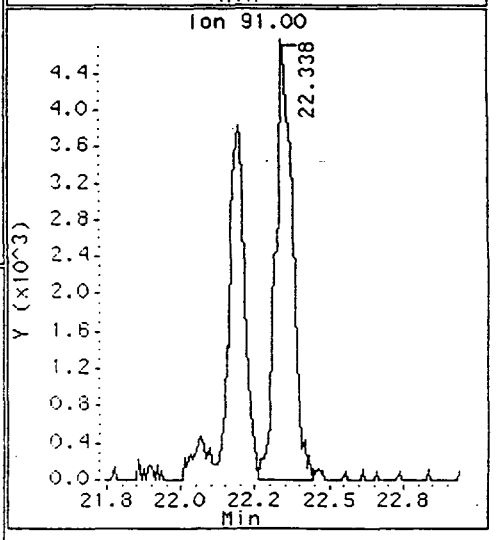












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

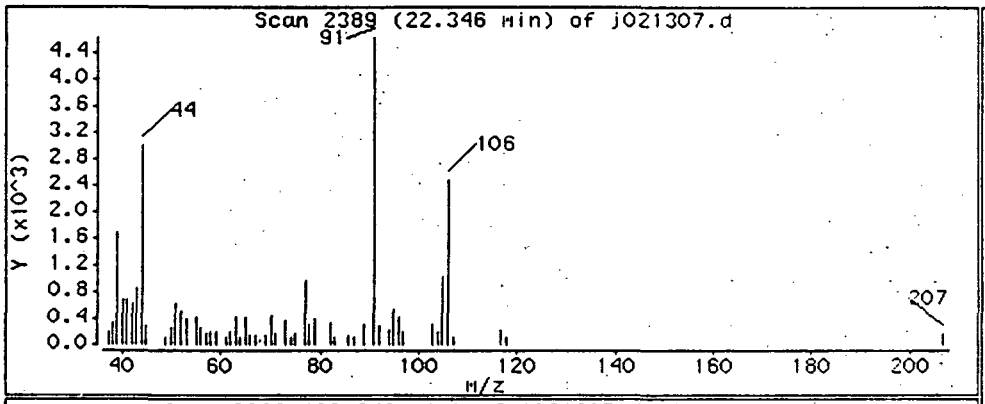
Sample Info: 500mL Can#21015

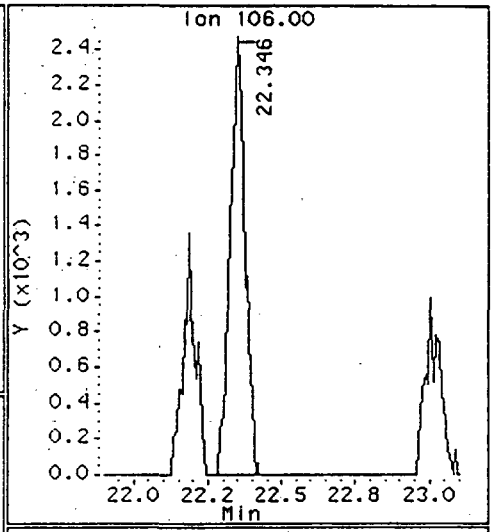
Operator: MH

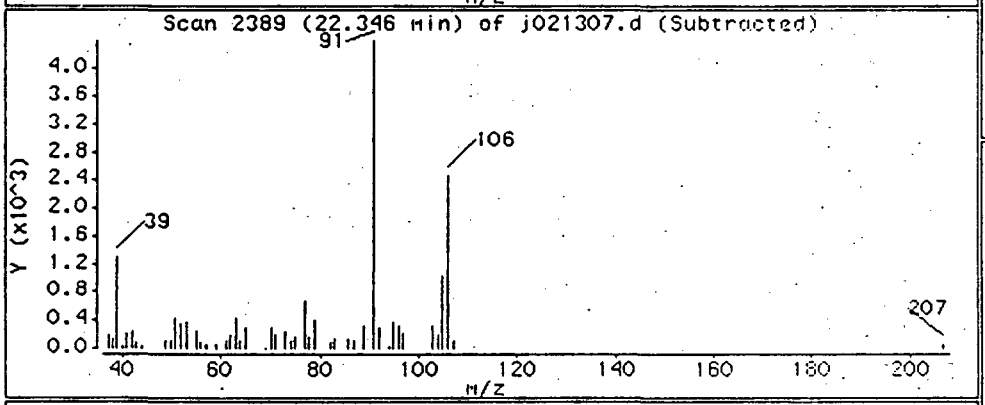
Column phase: RTx-624

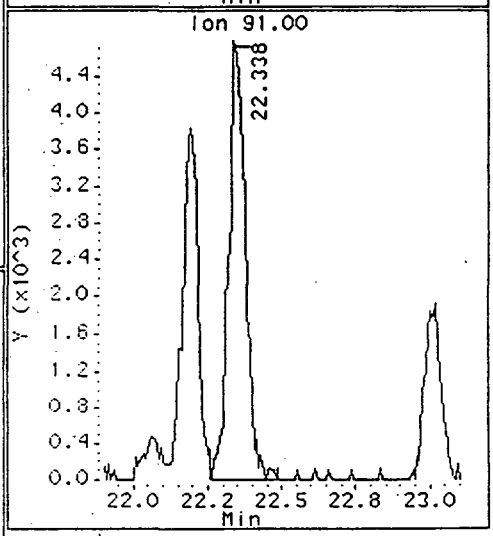
Column diameter: 0.58

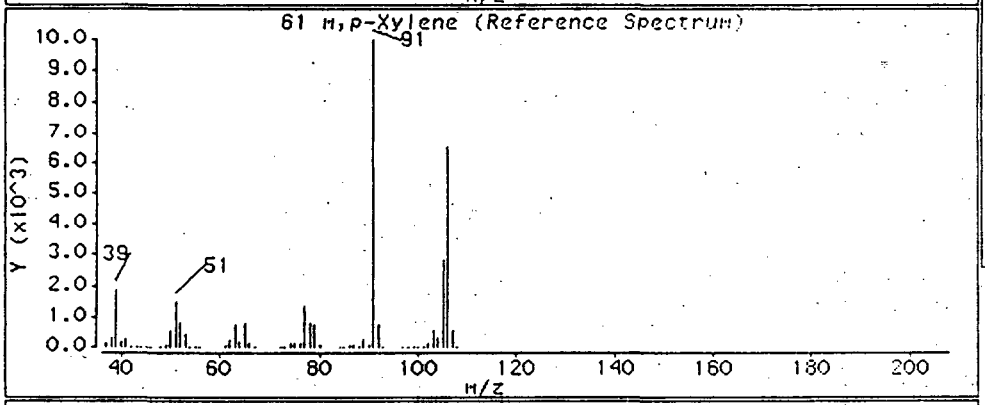
61 m,p-Xylene

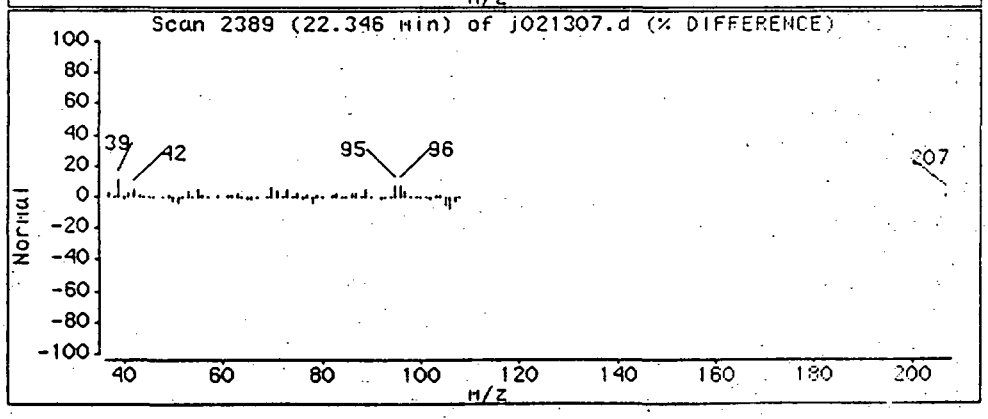












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Date : 13-FEB-1997 13:20

Client ID: 013197U1

Instrument: msdj.i

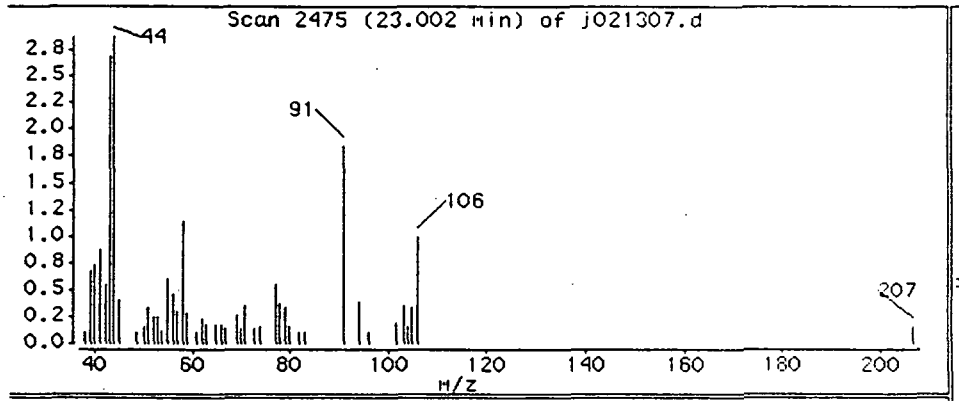
Sample Info: 500mL Can#21015

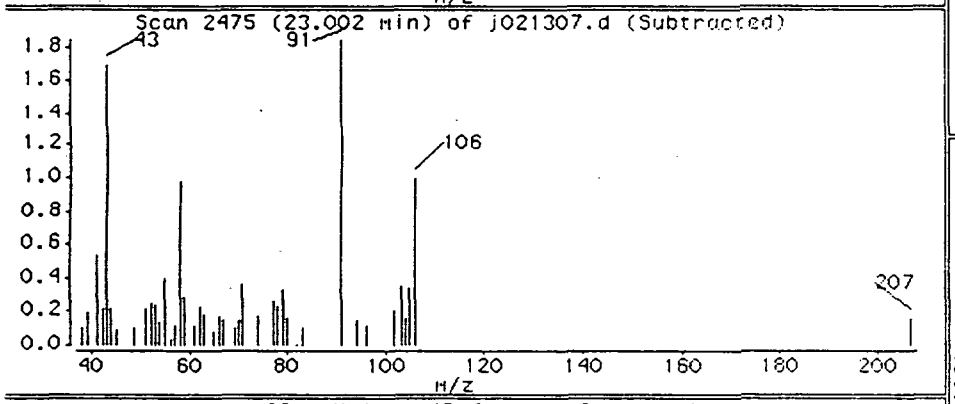
Operator: MH

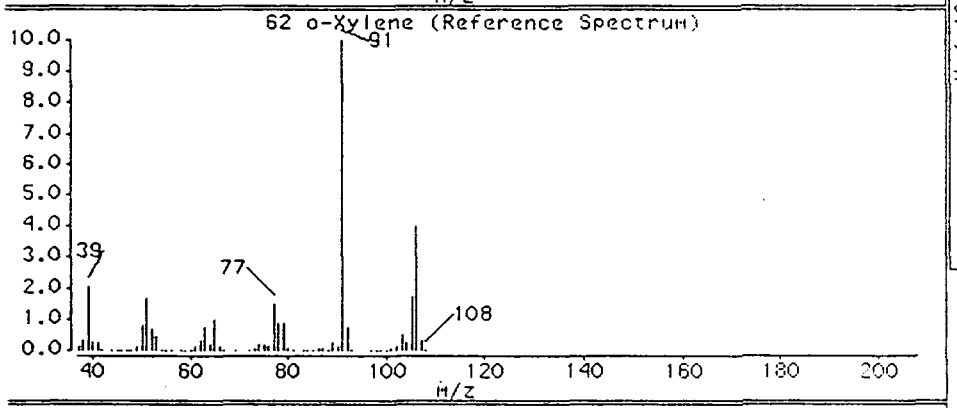
Column phase: RTx-624

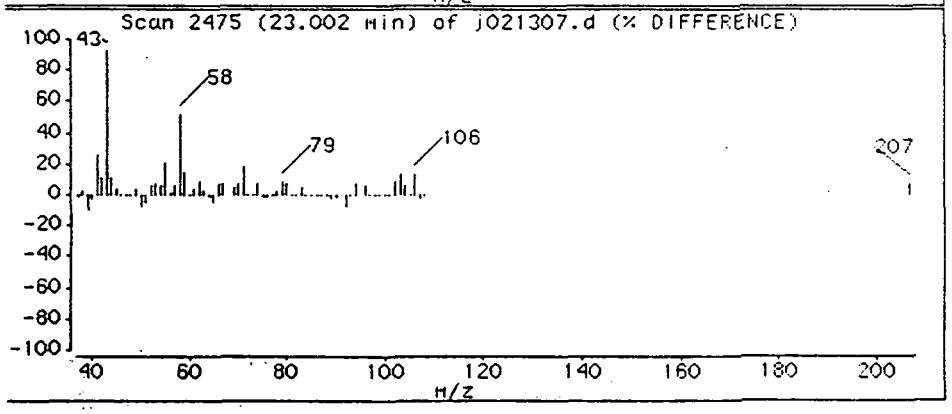
Column diameter: 0.58

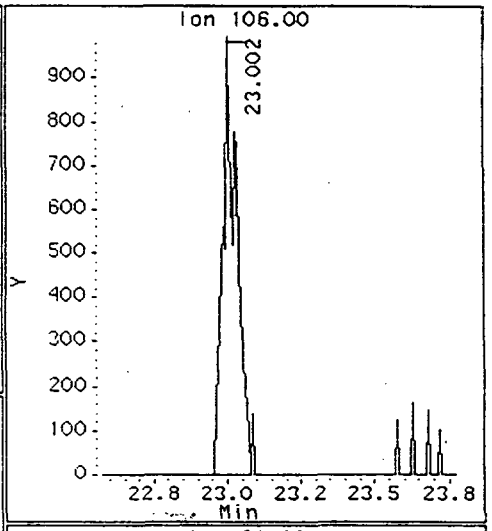
62 o-Xylene

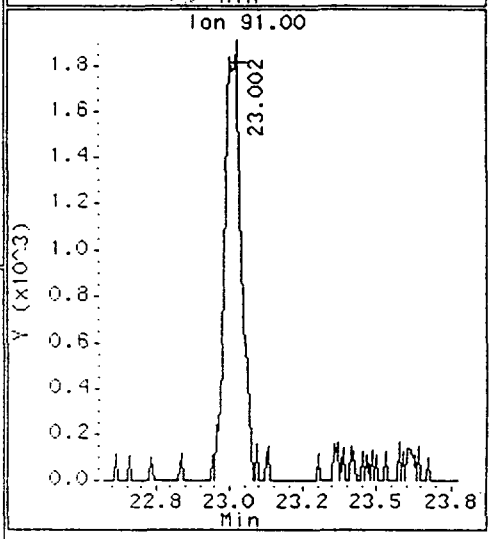












Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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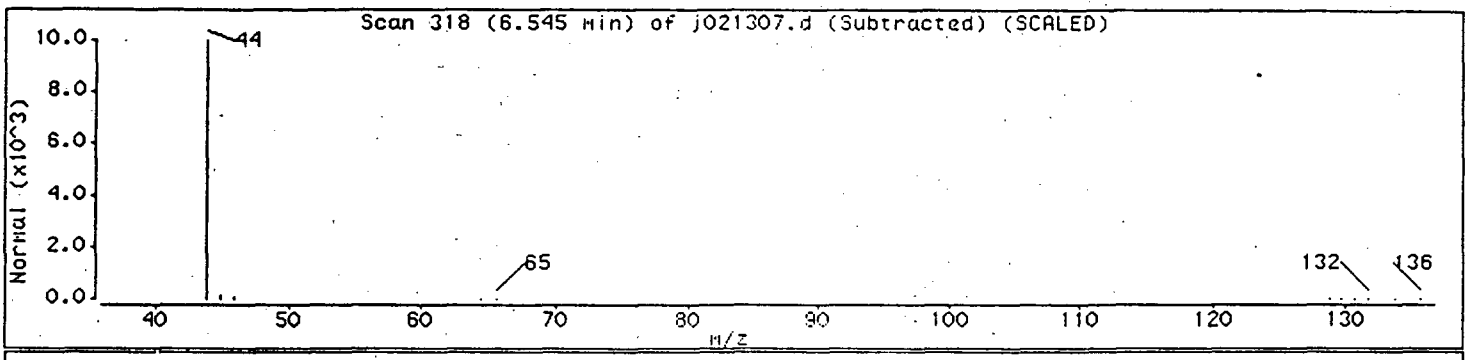

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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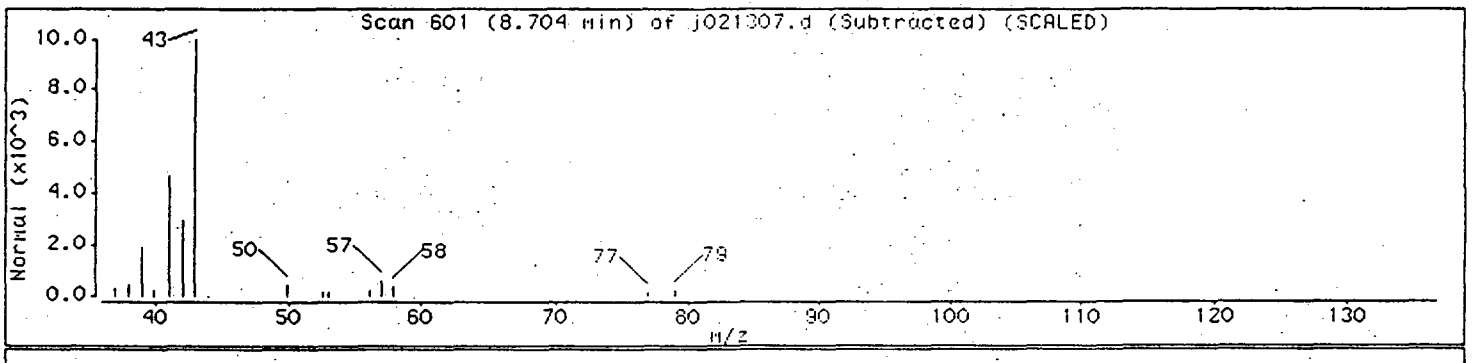
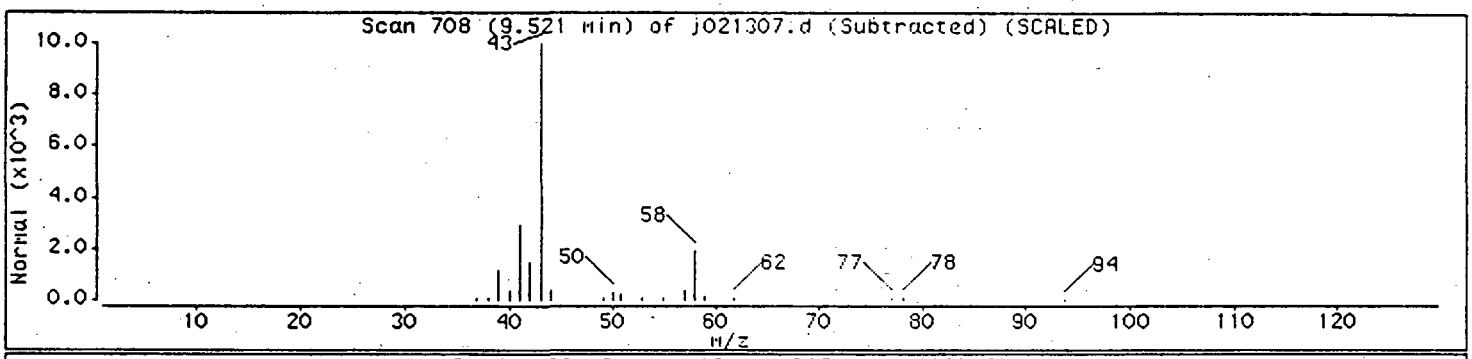
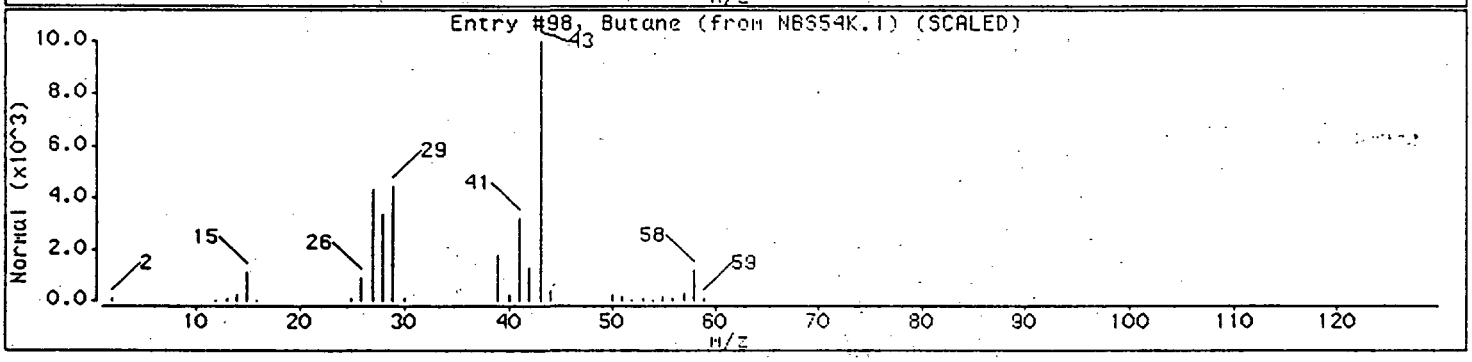


Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624

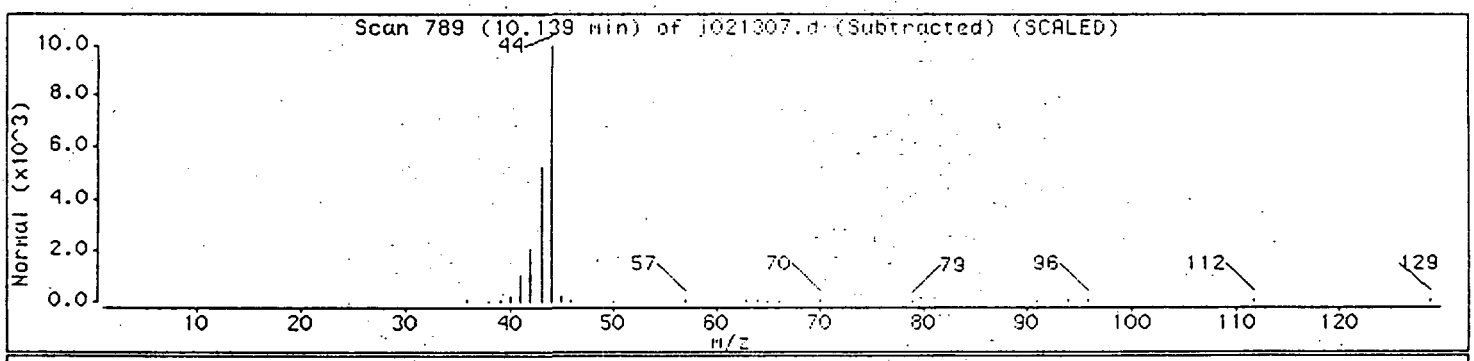
Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane	106-97-8	NBS54K.I	98	72





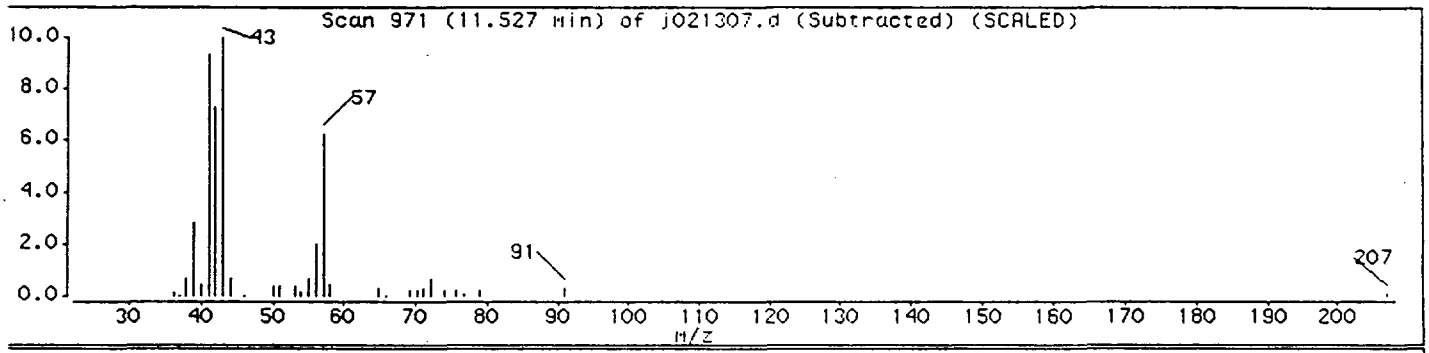
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				

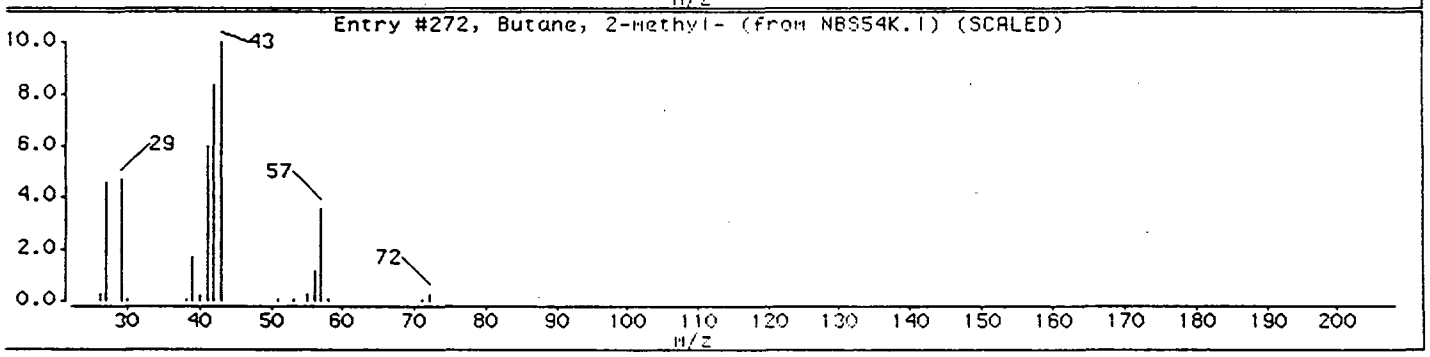


Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624

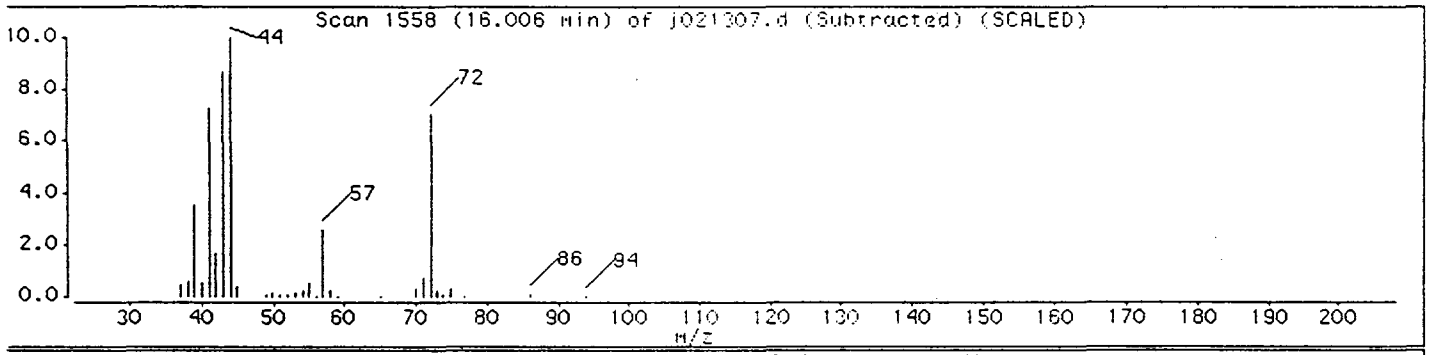
Column diameter: 0.58

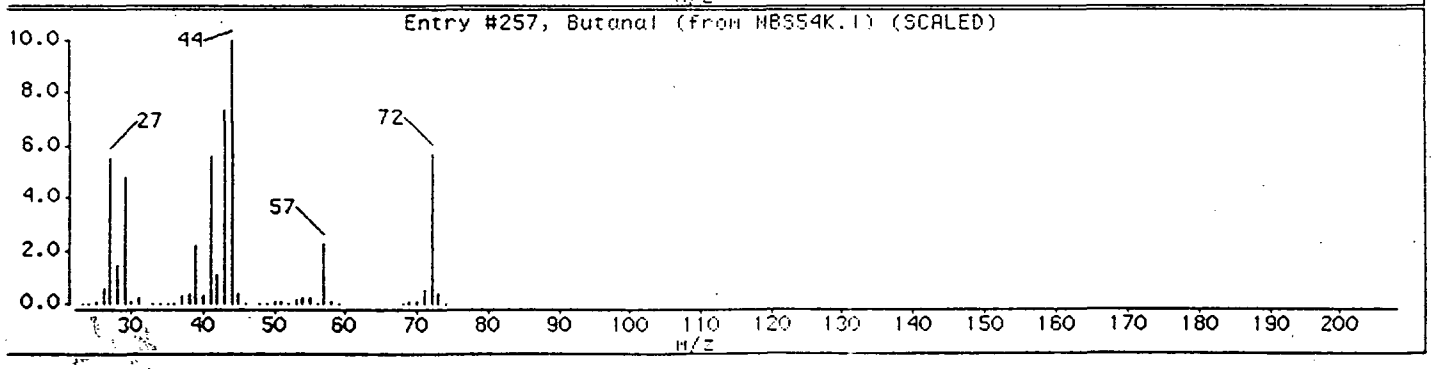
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 2-methyl-	78-78-4	NBS54K.l	272	80





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butanal	123-72-8	NBS54K.l	257	90

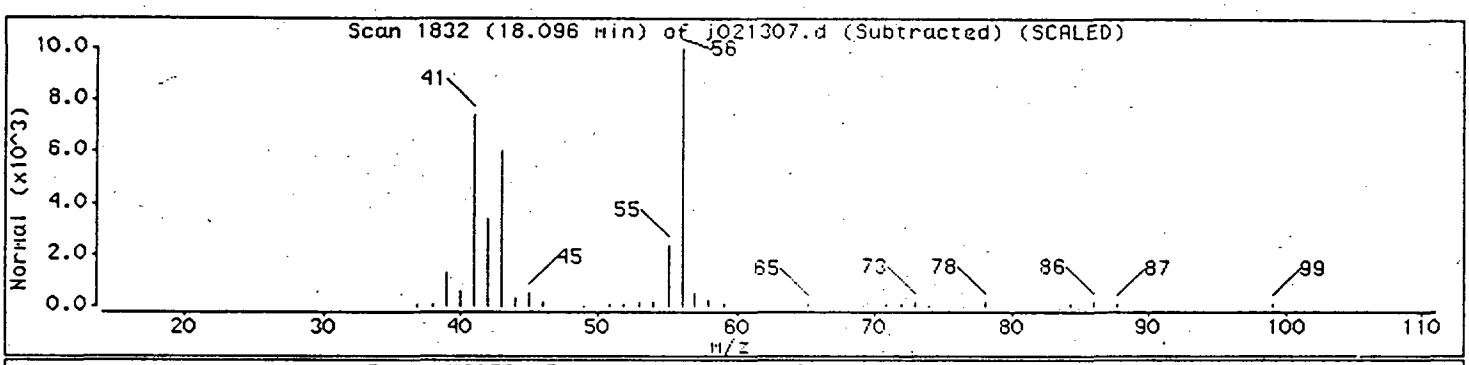


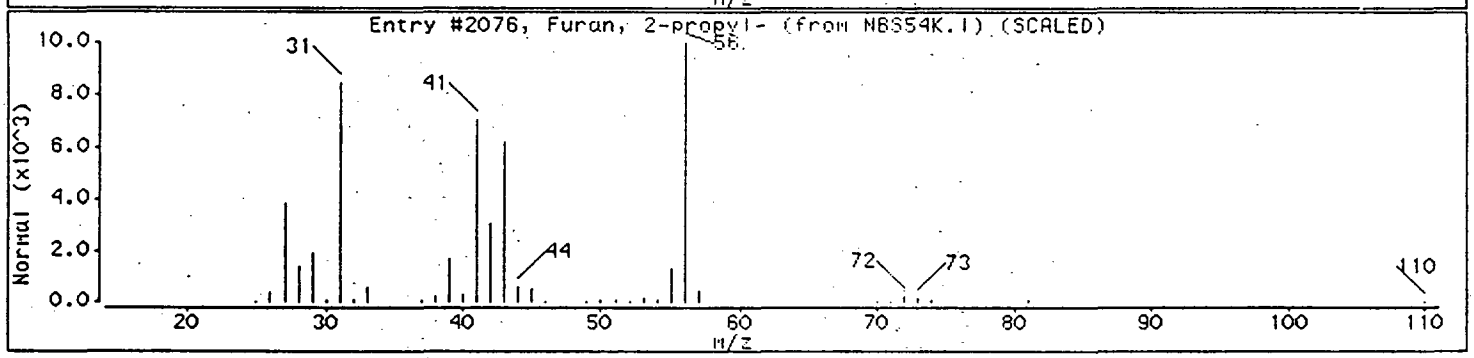


Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624

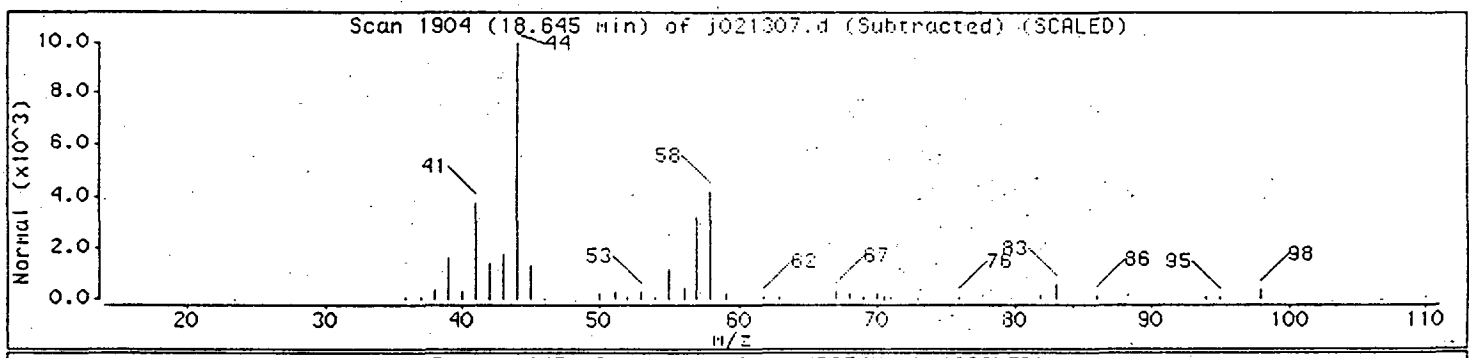
Column diameter: 0.58

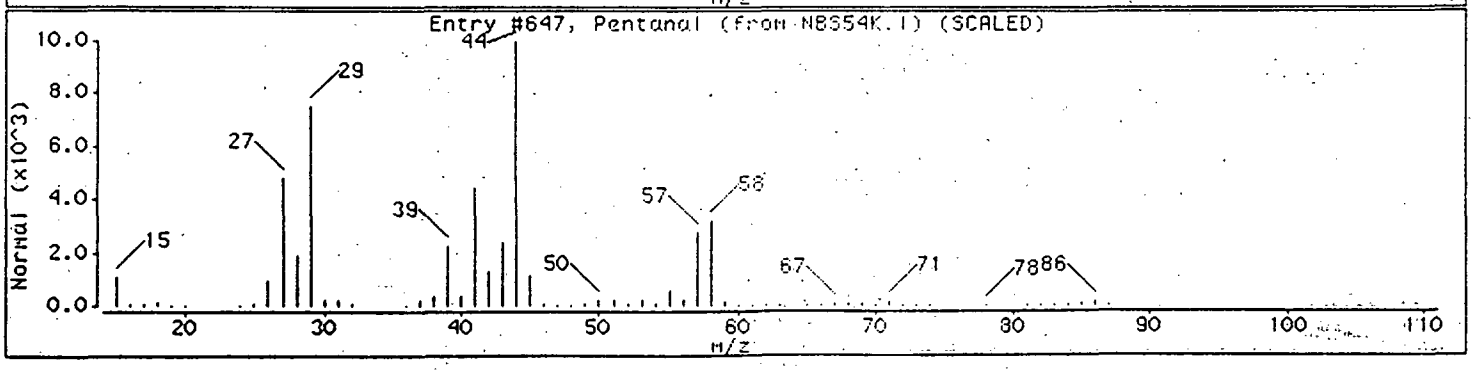
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Furan, 2-propyl-	4229-91-8	NBS54K.I	2076	64





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentanal	110-62-3	NBS54K.I	647	64

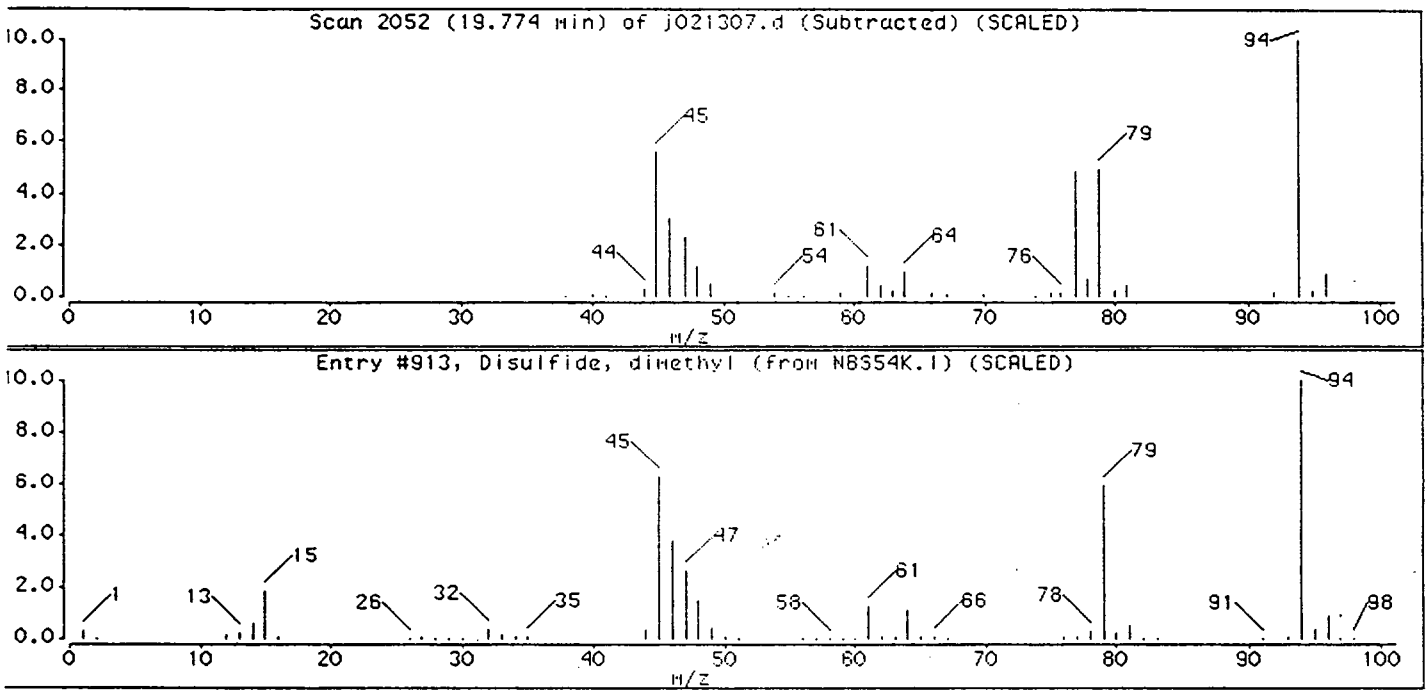




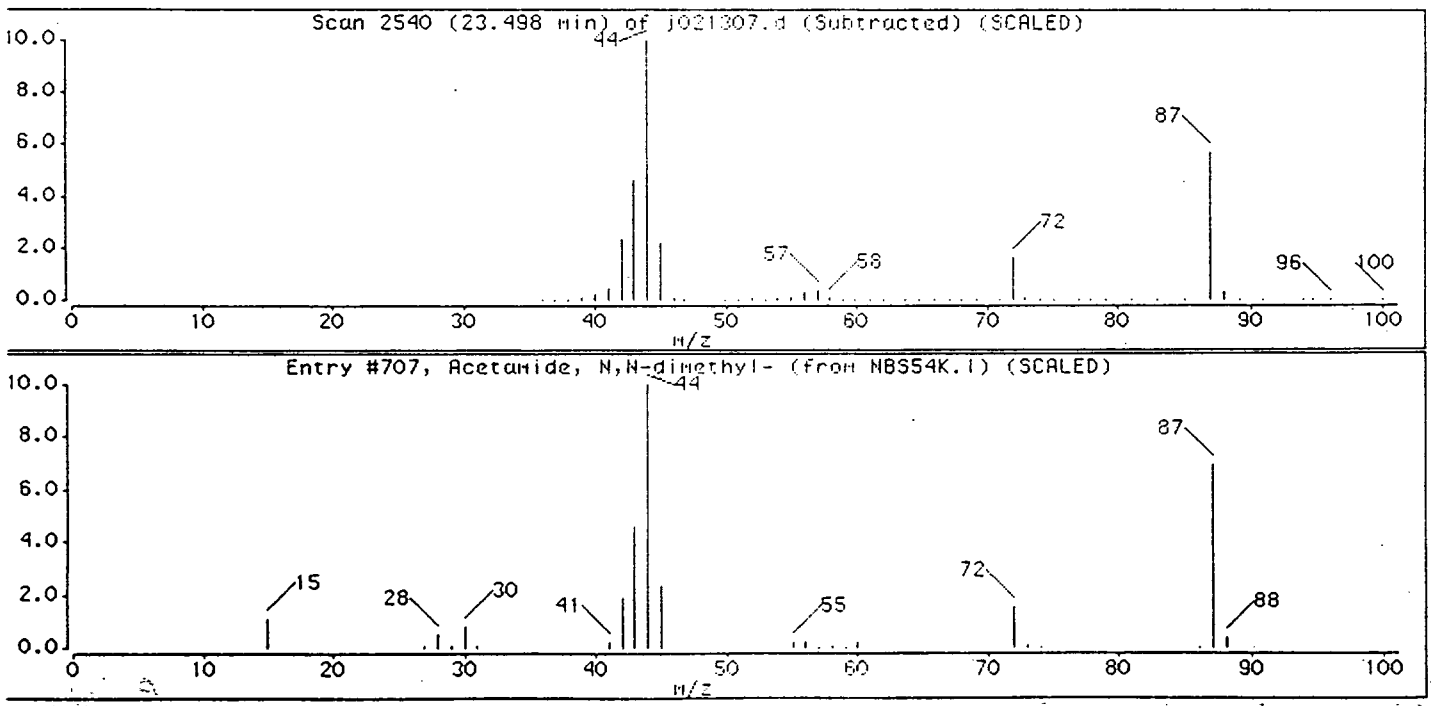
Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624

Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Disulfide, dimethyl	624-92-0	NBS54K.I	913	95



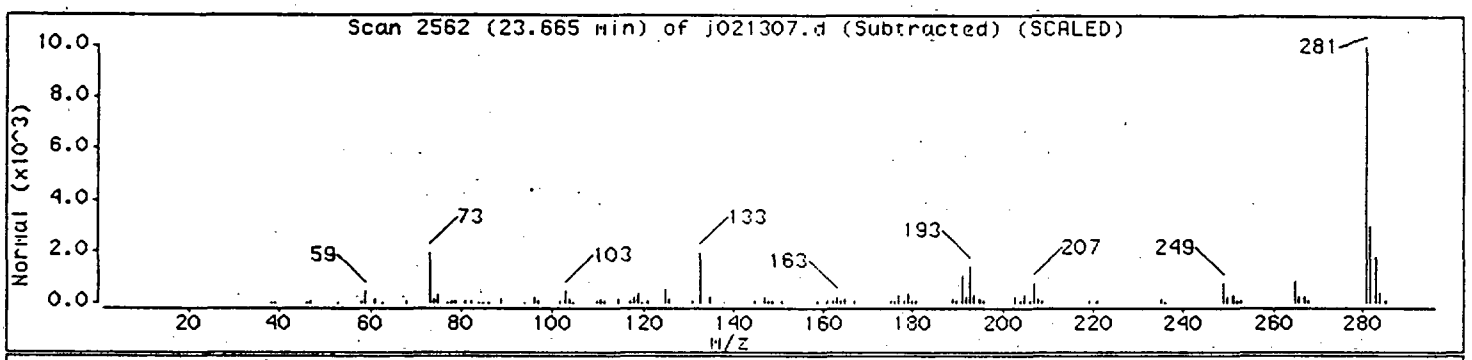
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.I	707	86

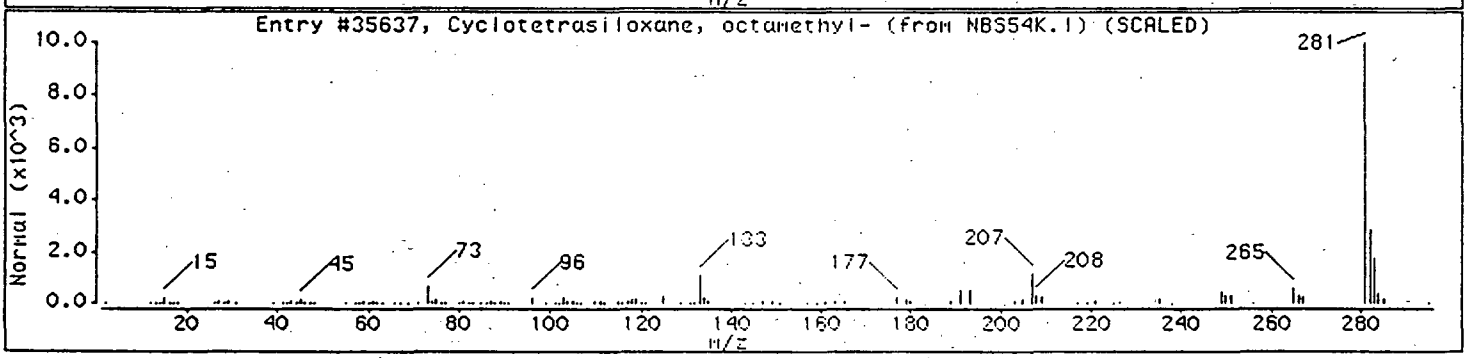


Data File: /chem/msdj.i/j-13feb.b/j021307.d
Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624

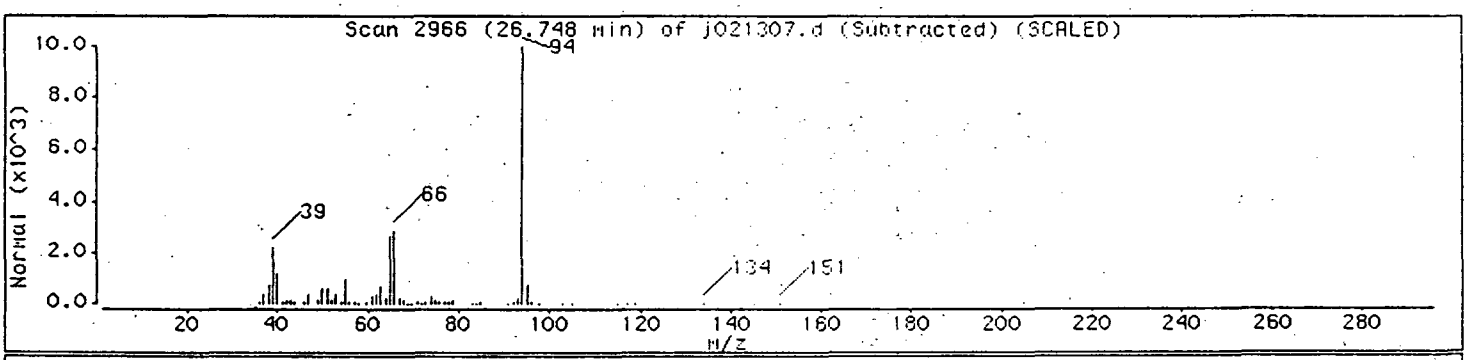
Column diameter: 0.58

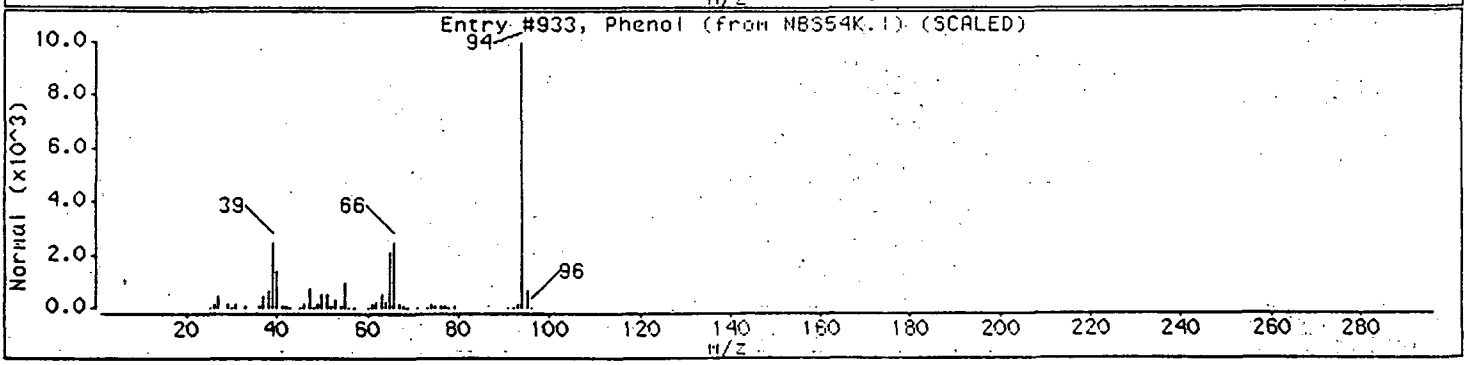
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotetrasiloxane, octamethyl-	556-67-2	NBS54K.I	35637	64





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	91

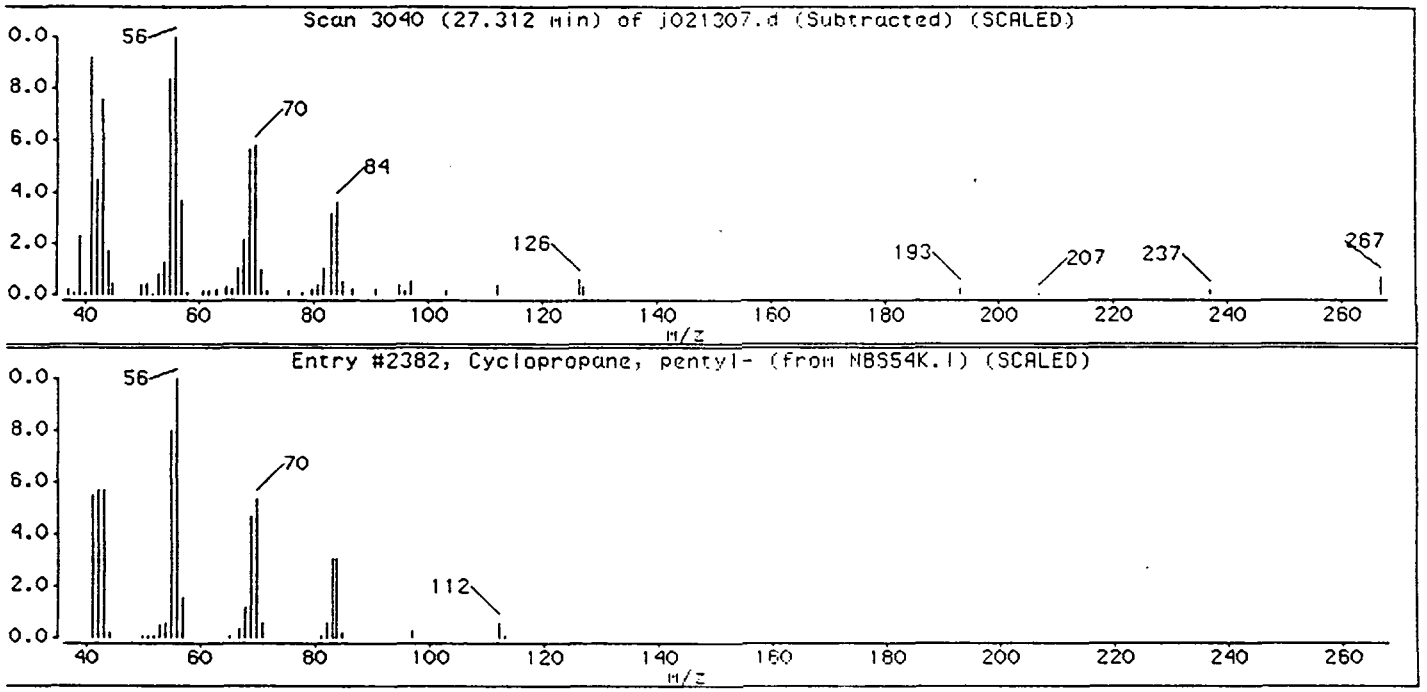




Data File: /chem/msdj.i/j-13feb.b/j021307.d

Date : 13-FEB-1997 13:20
Instrument: msdj.i
Client ID: 013197U1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclopropane, pentyl-	2511-91-3	NBS54K.I	2382	90



AIR TOXICS LTD.

SAMPLE NAME: 013197D1

ID#: 9702019-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	j021308	Date of Collection:	1/31/97
Dil. Factor:	1.87	Date of Analysis:	2/13/97

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.94	Not Detected
cis-1,2-Dichloroethene	0.19	Not Detected
1,1,1-Trichloroethane	0.19	Not Detected
Benzene	0.19	0.73
1,2-Dichloroethane	0.19	Not Detected
Trichloroethene	0.19	Not Detected
1,2-Dichloropropane	0.19	Not Detected
Toluene	0.19	0.64
Tetrachloroethene	0.19	Not Detected
Chlorobenzene	0.19	Not Detected
Ethyl Benzene	0.19	Not Detected
m,p-Xylene	0.19	Not Detected
o-Xylene	0.19	Not Detected
Styrene	0.19	Not Detected
Acetone	0.94	4.1
Carbon Disulfide	0.94	Not Detected
trans-1,2-Dichloroethene	0.94	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.94	1.3

Container Type: 6 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	122	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	96	70-130

ta File: /chem/msdj.i/j-13feb.b/j021308.d
port Date: 13-Feb-1997 14:36

NH 2/13/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

ta file : /chem/msdj.i/j-13feb.b/j021308.d
p Smp Id: 9702019-02A Client Smp ID: 013197D1
j Date : 13-FEB-1997 14:01
erator : MH Inst ID: msdj.i
p Info : 500mL Can#12703
sc Info : 8.5"Hg-5.0psi Parsons
mment :
thod : /chem/msdj.i/j-13feb.b/to140109.m
th Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
l Date : 09-JAN-1997 12:48 Cal File: j010909.d
s bottle: 1
l Factor: 1.870
tegrator: HP RTE Compound Sublist: Parsons.sub
rget Version: 3.12 Sample Matrix: AIR
ncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
0 Bromochloromethane					CAS #: 74-97-5			
.624	16.724 (1.000)	130	196274	5.0			100.00	9466
.624	16.724 (0.000)	128	43232			23.40- 123.40	22.03	
624	16.724 (0.000)	49	77808			91.58- 191.58	39.64	
5 Octafluorotoluene					CAS #: 434-64-0			
.127	17.235 (1.030)	217	555922	6.1	6.1		100.00	7618
.127	17.235 (0.000)	186	105656			8.63- 108.63	19.01	
0 1,4-Difluorobenzene					CAS #: 540-36-3			
.951	18.067 (1.000)	114	858204	5.0			100.00	9688
.951	18.067 (0.000)	88	42952			0.00- 67.00	5.00	
9 Toluene-d8					CAS #: 2037-26-5			
.980	20.111 (1.113)	98	853275	5.5	5.5		100.00	9920
.980	20.111 (0.000)	70	29199			0.00- 62.67	3.42	
.980	20.111 (0.000)	100	167168			16.83- 116.83	19.59	
8 Chlorobenzene-d5					CAS #: 3114-55-4			
.063	22.209 (1.000)	117	861346	5.0			100.00	9928
.063	22.209 (0.000)	82	127560			9.45- 109.45	14.81	

Data File: /chem/msdj.i/j-13feb.b/j021308.d
Report Date: 13-Feb-1997 14:36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 65 Bromofluorobenzene					CAS #: 460-00-4			
23.925	24.086 (1.084)	95	638950	4.8	4.8		100.00	8493
23.925	24.086 (0.000)	174	97784			13.34- 113.34	15.30	
23.925	24.086 (0.000)	176	93680			7.57- 107.57	14.66	
16 Acetone					CAS #: 67-64-1			
13.465	13.413 (0.810)	43	172036	2.2	4.1		100.00	
13.473	13.413 (0.810)	58	62161			0.00- 79.57	36.13	
28 2-Butanone					CAS #: 78-93-3			
16.273	16.358 (0.979)	72	14875	0.69	1.3		100.00	7857(Q)
16.273	16.358 (0.000)	43	12686			372.08- 472.08	85.28	
16.273	16.358 (0.000)	57	705			0.00- 83.73	4.74	
37 Benzene					CAS #: 71-43-2			
17.509	17.617 (0.975)	78	64177	0.39	0.73		100.00	9277
17.509	17.617 (0.000)	77	3856			0.00- 74.19	6.01	
51 Toluene					CAS #: 108-88-3			
20.072	20.203 (1.118)	92	34180	0.34	0.64		100.00	7807
20.072	20.203 (0.000)	91	16090			116.14- 216.14	47.07	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

.it History For: /chem/msdj.i/j-13feb.b/j021308.d

MH 2/13/97

.nge Date: 13-Feb-97 14:18
.nge Made by: Automation

'arameter: ChemLan Data Transfer
'ld Value:
'ew Value:
:eason For Change: MS Data from Instrument: msdj.i

:nge Date: 13-Feb-97 14:18
.nge Made by: Automation

'arameter: Target Processing
'ld Value:
'ew Value: Method: /chem/msdj.i/j-13feb.b/to140109.m
:eason For Change: Complete Target Compound Processing

:nge Date: 13-Feb-97 14:34
:nge Made by: mhe

'arameter: date
'ld Value: 13-FEB-97 14:01
'ew Value: 13-FEB-1997 14:01
:eason For Change: N/A

.nge Date: 13-Feb-97 14:34
:nge Made by: mhe

'arameter: Misc Information
'ld Value:
'ew Value: 8.5"Hg-5.0psi Parsons
:eason For Change: N/A

:nge Date: 13-Feb-97 14:34
:nge Made by: mhe

'arameter: Compound Sublist
'ld Value: AT.sub
'ew Value: Parsons.sub
:eason For Change: N/A

.nge Date: 13-Feb-97 14:34
.nge Made by: mhe

'arameter: Sample Info
'ld Value: 9702019-02A 500mL Can#12703 8.5"-5psi 013197D1 Parsons
'ew Value: 500mL Can#12703
:eason For Change: N/A

:nge Date: 13-Feb-97 14:34
:nge Made by: mhe

'arameter: Lab ID
'ld Value:
'ew Value: 9702019-02A
:eason For Change: N/A

.nge Date: 13-Feb-97 14:34
:nge Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: 013197D1
Reason For Change: N/A

Change Date: 13-Feb-97 14:34
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-13feb.b/to140109.m
Reason For Change: Quantitation

Change Date: 13-Feb-97 14:34
Change Made by: mhe

Parameter: Best Hit for Carbon Disulfide changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 14:34
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 14:34
Change Made by: mhe

Parameter: Best Hit for Methylene Chloride changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 14:34
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Best Hit for 1,1,1-Trichlorethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Manual reintegration of Trichloroethene (Signal 1)
Old Value: No previous peak at 18.363
New Value: New Area/Time: 1059 / 18.36
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Best Hit for Trichloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

ange Date: 13-Feb-97 14:35
ange Made by: mhe

Parameter: Manual reintegration of Tetrachloroethene (Signal 1)
Old Value: No previous peak at 20.850
New Value: New Area/Time: 970 / 20.85
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Best Hit for Tetrachloroethene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Compound Manually Identified
New Value: New Hit #1
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Manual reintegration of Chlorobenzene (Signal 1)
Old Value: No previous peak at 22.117
New Value: New Area/Time: 902 / 22.12
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Best Hit for Chlorobenzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 14:35
Change Made by: mhe

Parameter: Best Hit for Ethyl Benzene changed
Old Value: Old Hit #1
New Value: Compound Undetected

eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Requantitate all compounds
ld Value:
ew Value:
eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Best Hit for m,p-Xylene changed
ld Value: Old Hit #2
ew Value: Compound Undetected
eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Requantitate all compounds
ld Value:
ew Value:
eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Best Hit for o-Xylene changed
ld Value: Old Hit #1
ew Value: Compound Undetected
eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Requantitate all compounds
ld Value:
ew Value:
eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Best Hit for Styrene changed
ld Value: Compound Manually Identified
ew Value: New Hit #1
eason For Change: N/A

nge Date: 13-Feb-97 14:35
nge Made by: mhe

arameter: Manual reintegration of Styrene (Signal 1)
ld Value: No previous peak at 23.032
ew Value: New Area/Time: 1445 / 23.03
eason For Change: N/A

nge Date: 13-Feb-97 14:36
nge Made by: mhe

Parameter: Best Hit for Styrene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Best Match for Unknown compound at 5.058 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Best Match for Unknown compound at 6.973 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Best Match for Unknown compound at 20.263 min. changed.
Old Value: Old match: Cyclotrisiloxane, hexamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.513 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.665 min. changed.
Old Value: Old match: Cyclotetrasiloxane, octamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 14:36
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.755 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted

Reason For Change: N/A

MH 2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021308.d
Report Date: 13-Feb-1997 14:34

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-13feb.b/j021308.d
Lab Smp Id: 9702019-02A Client Smp ID: 013197D1
Inj Date : 13-FEB-1997 14:01
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#12703
Misc Info : 8.5"Hg-5.0psi Parsons
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.870
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 30 Bromochloromethane					CAS #: 74-97-5			
16.624	16.724 (1.000)	130	196274	5.0			100.00	9466
16.624	16.724 (0.000)	128	43232			23.40- 123.40	22.03	
16.624	16.724 (0.000)	49	77808			91.58- 191.58	39.64	
$ 35 Octafluorotoluene					CAS #: 434-64-0			
17.127	17.235 (1.030)	217	555922	6.1	6.1		100.00	7618
17.127	17.235 (0.000)	186	105656			8.63- 108.63	19.01	
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.951	18.067 (1.000)	114	858204	5.0			100.00	9688
17.951	18.067 (0.000)	88	42952			0.00- 67.00	5.00	
$ 49 Toluene-d8					CAS #: 2037-26-5			
19.980	20.111 (1.113)	98	853275	5.5	5.5		100.00	9920
19.980	20.111 (0.000)	70	29199			0.00- 62.67	3.42	
19.980	20.111 (0.000)	100	167168			16.83- 116.83	19.59	
* 58 Chlorobenzene-d5					CAS #: 3114-55-4			
22.063	22.209 (1.000)	117	861346	5.0			100.00	9928
22.063	22.209 (0.000)	82	127560			9.45- 109.45	14.81	

ta File: /chem/msdj.i/j-13feb.b/j021308.d
port Date: 13-Feb-1997 14:34

:T	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
5 Bromofluorobenzene					CAS #: 460-00-4			
.925	24.086 (1.084)	95	638950	4.8	4.8		100.00	8493
.925	24.086 (0.000)	174	97784			13.34- 113.34	15.30	
.925	24.086 (0.000)	176	93680			7.57- 107.57	14.66	
16 Acetone					CAS #: 67-64-1			
.465	13.413 (0.810)	43	172036	2.2	4.1		100.00	
.473	13.413 (0.810)	58	62161			0.00- 79.57	36.13	
17 Carbon Disulfide					CAS #: 75-15-0			
.679	13.550 (0.823)	76	33430	0.22	0.42		100.00	7412
20 Methylene Chloride					CAS #: 75-09-2			
.274	14.267 (0.859)	84	5682	0.13	0.24		100.00	3978
.274	14.267 (0.000)	49	1837			76.12- 176.12	32.33	
.274	14.267 (0.000)	51	770			0.00- 96.86	13.55	
28 2-Butanone					CAS #: 78-93-3			
.273	16.358 (0.979)	72	14875	0.69	1.3		100.00	7857(Q)
.273	16.358 (0.000)	43	12686			372.08- 472.08	85.28	
.273	16.358 (0.000)	57	705			0.00- 83.73	4.74	
33 1,1,1-Trichlorethane					CAS #: 71-55-6			
.990	17.090 (1.022)	97	5613	0.061	0.11		100.00	5992(a)
.990	17.090 (0.000)	99	1085			13.51- 113.51	19.33	
37 Benzene					CAS #: 71-43-2			
.509	17.617 (0.975)	78	64177	0.39	0.73		100.00	9277
.509	17.617 (0.000)	77	3856			0.00- 74.19	6.01	
38 1,2-Dichloroethane					CAS #: 107-06-2			
.516	17.624 (0.976)	62	2387	0.037	0.070		100.00	3959(a)
.516	17.624 (0.000)	64	200			0.00- 81.76	8.38	
51 Toluene					CAS #: 108-88-3			
.072	20.203 (1.118)	92	34180	0.34	0.64		100.00	7807
.072	20.203 (0.000)	91	16090			116.14- 216.14	47.07	
50 Ethyl Benzene					CAS #: 100-41-4			
.185	22.339 (1.006)	106	5685	0.062	0.12		100.00	(a)
.201	22.339 (1.006)	91	18099			296.25- 396.25	318.36	
51 m,p-Xylene					CAS #: 108-38-3			
.346	22.499 (1.013)	106	8055	0.090	0.17		100.00	(a)
.353	22.499 (1.013)	91	18055			164.96- 264.96	224.15	
52 o-Xylene					CAS #: 95-47-6			
.002	23.171 (1.043)	106	3399	0.062	0.12		100.00	7730(aQ)

Data File: /chem/msdj.i/j-13feb.b/j021308.d
Report Date: 13-Feb-1997 14:34

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
62 o-Xylene (continued)									
23.002	23.171	(0.000)	91	1559			167.28- 267.28	45.87	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

ta file : /chem/msdj.i/j-13feb.b/j021308.d
b Smp Id: 9702019-02A Client Smp ID: 013197D1
j Date : 13-FEB-1997 14:01
erator : MH Inst ID: msdj.i
p Info : 500mL Can#12703
sc Info : 8.5"Hg-5.0psi Parsons
mment :
thod : /chem/msdj.i/j-13feb.b/to140109.m
th Date : 13-Feb-1997 11:21 mhe
l Date : 09-JAN-1997 12:48 Cal File: j010909.d
s bottle: 1
l Factor: 1.870 Target Version: 3.12
tegrator: HP RTE Compound Sublist: Parsons.sub
mple Matrix: AIR
antitative Mode : Use RF of Nearest Std
ncentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

STD		RT	AREA	AMOUNT
30	Bromochloromethane	16.624	1128244	5.000
40	1,4-Difluorobenzene	17.951	1925684	5.000
58	Chlorobenzene-d5	22.063	2773942	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(PPBV)	FINAL(PPBV)	QUAL	LIBRARY	LIB ENTRY	CPND #
nown				CAS #:			
.058	4.306e+08	1910	3570	0		0	30
nown				CAS #:			
.973	2826966	12.5	23.4	0		0	30
pane, 2-methyl-				CAS #: 75-28-5			
.582	147629	0.65	1.2	50	NBS54K.l	97	30

Data File: /chem/msdj.i/j-13feb.b/j021308.d
Report Date: 13-Feb-1997 14:34

RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
9.445	253439	1.1	2.1	0		0	30
Acetaldehyde					CAS #: 75-07-0		
10.093	251462	1.1	2.1	86	NBS54K.l	37	30
Unknown					CAS #:		
11.131	197357	0.87	1.6	0		0	30
Unknown					CAS #:		
11.504	163422	0.72	1.4	0		0	30
Butanal					CAS #: 123-72-8		
16.021	176310	0.78	1.5	53	NBS54K.l	257	30
1,4-Dioxin, 2,3-dihydro-					CAS #: 543-75-9		
18.119	294552	0.76	1.4	90	NBS54K.l	608	40
Cyclotrisiloxane, hexamethyl-					CAS #: 541-05-9		
20.263	1144183	2.1	3.8	80	NBS54K.l	23660	58
Acetamide, N,N-dimethyl-					CAS #: 127-19-5		
23.513	5826667	10.5	19.6	86	NBS54K.l	707	58
Cyclotetrasiloxane, octamethyl-					CAS #: 556-67-2		
23.665	832364	1.5	2.8	80	NBS54K.l	35637	58
1-Hexanol, 2-ethyl-					CAS #: 104-76-7		
26.259	178080	0.32	0.60	56	NBS54K.l	4822	58
Phenol					CAS #: 108-95-2		
26.755	598838	1.1	2.0	95	NBS54K.l	933	58
Nonanal					CAS #: 124-19-6		
28.266	227938	0.41	0.77	64	NBS54K.l	6942	58

:ta File: /chem/msdj.i/j-13feb.b/j021308.d
:port Date: 13-Feb-1997 14:34

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

ıstrument ID: msdj.i
ıb File ID: j021308.d
ıb Smp Id: 9702019-02A
ıalysis Type: VOA
ıant Type: ISTD
›erator: MH
:thod File: /chem/msdj.i/j-13feb.b/to140109.m
.sc Info: 8.5"Hg-5.0psi Parsons

Calibration Date: 02/13/97
Calibration Time: 1047
Client Smp ID: 013197D1
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	234378	140627	328129	196274	-16.26
40 1,4-Difluorobenzene	1049127	629476	1468778	858204	-18.20
58 Chlorobenzene-d5	964277	578566	1349988	861346	-10.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	16.59	16.09	17.09	16.62	0.23
40 1,4-Difluorobenzene	17.93	17.43	18.43	17.95	0.13
58 Chlorobenzene-d5	22.05	21.55	22.55	22.06	0.07

ꞓEA UPPER LIMIT = + 40% of internal standard area.
ꞓEA LOWER LIMIT = - 40% of internal standard area.
: UPPER LIMIT = + 0.50 minutes of internal standard RT.
: LOWER LIMIT = - 0.50 minutes of internal standard RT.

Air Toxics Limited

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id: 9702019-02A
Level: LOW
Data Type: MS DATA
SpikeList File:
Method File: /chem/msdj.i/j-13feb.b/to140109.m
Misc Info: 8.5"Hg-5.0psi Parsons

Client SDG: j-13feb
Fraction: VOA
Client Smp ID: 013197D1
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 35 Octafluorotoluene	5.0	6.1	122.24	60-140
$ 49 Toluene-d8	5.0	5.5	109.89	60-140
$ 65 Bromofluorobenzene	5.0	4.8	95.80	60-140

Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

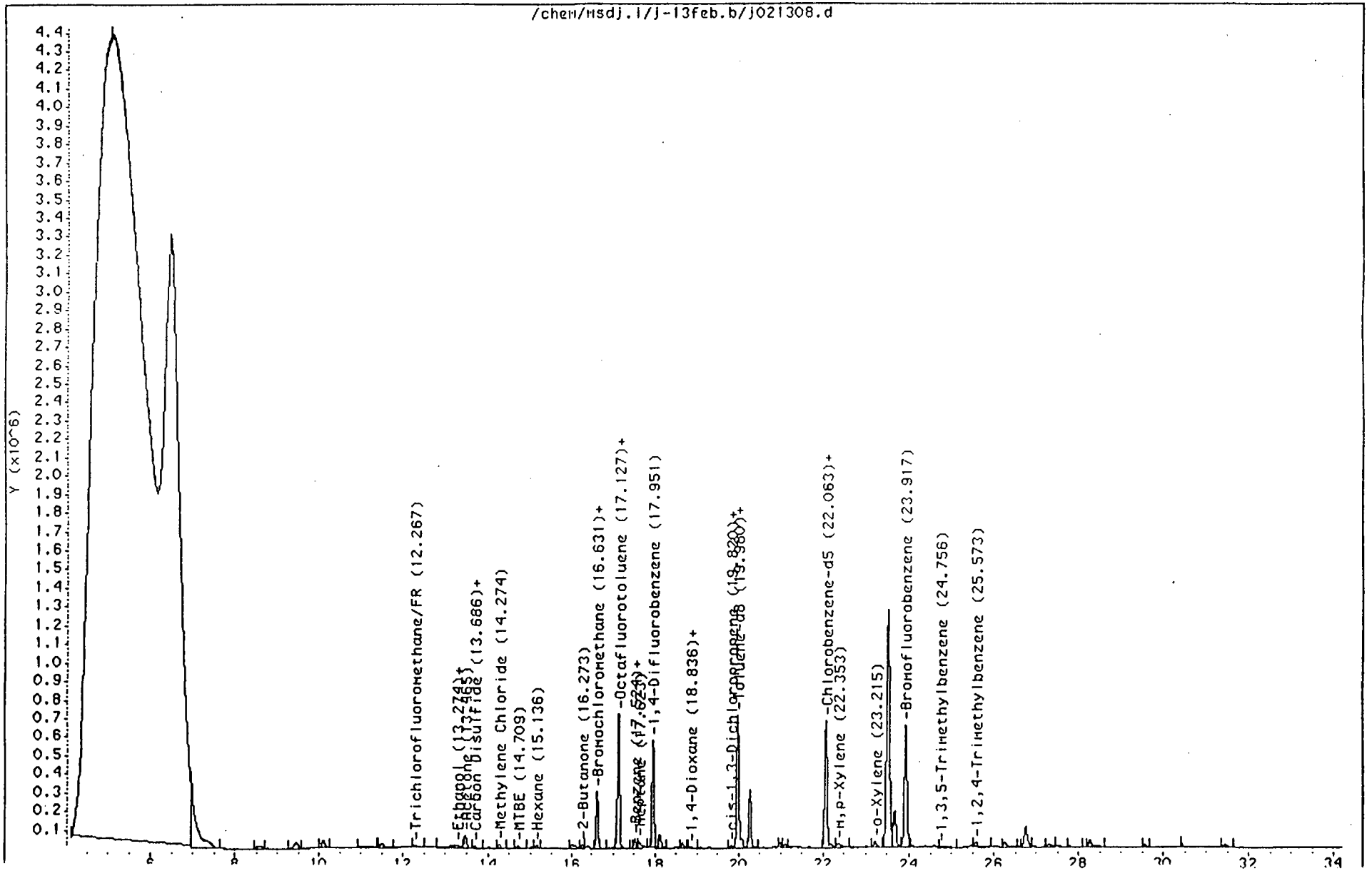
Sample Info: 500mL Can#12703

Column phase: RTx-624

Instrument: msdj.i

Operator: MH

Column diameter: 0.58



Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

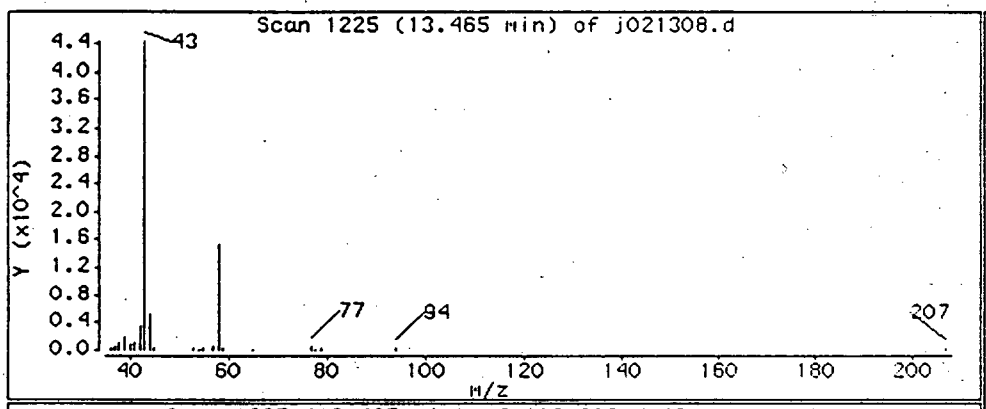
Sample Info: 500ML Can#12703

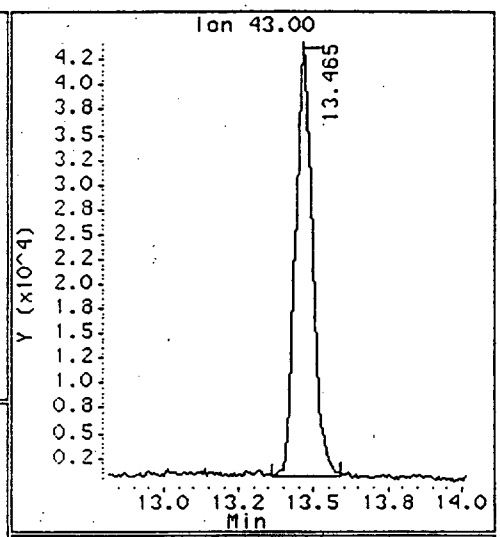
Operator: MH

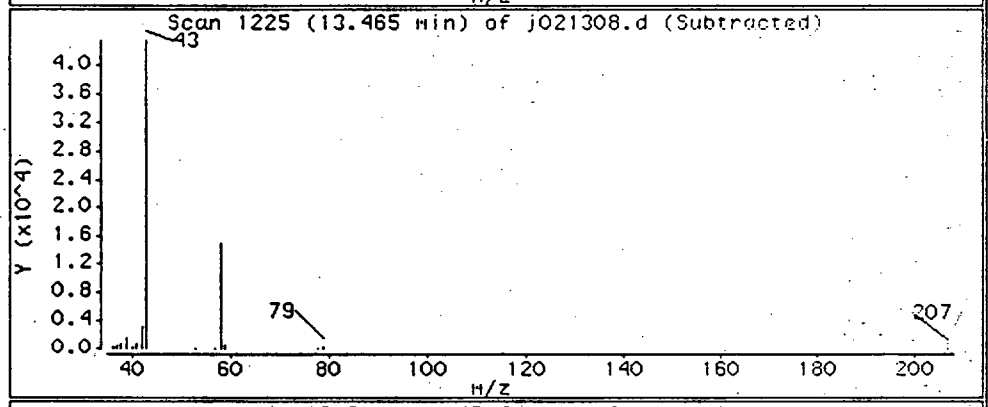
Column phase: RTx-624

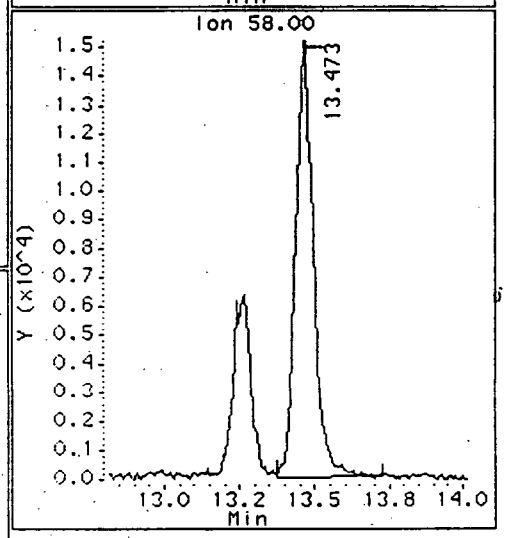
Column diameter: 0.58

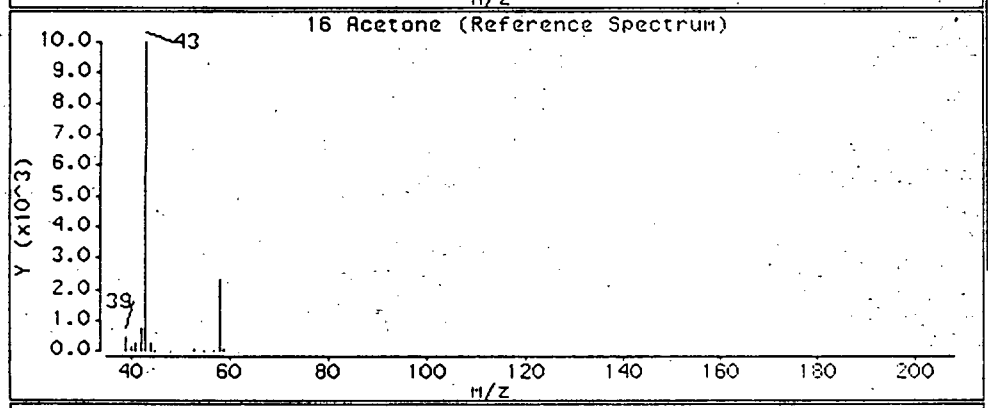
16 Acetone

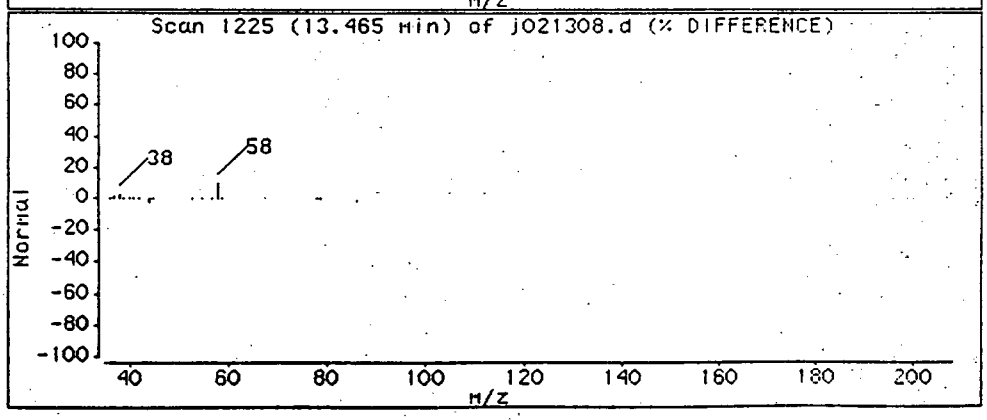












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

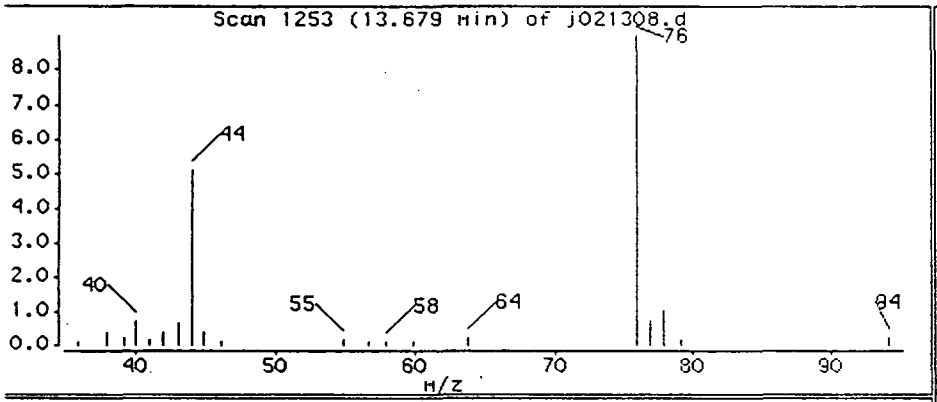
Sample Info: 500mL Can#12703

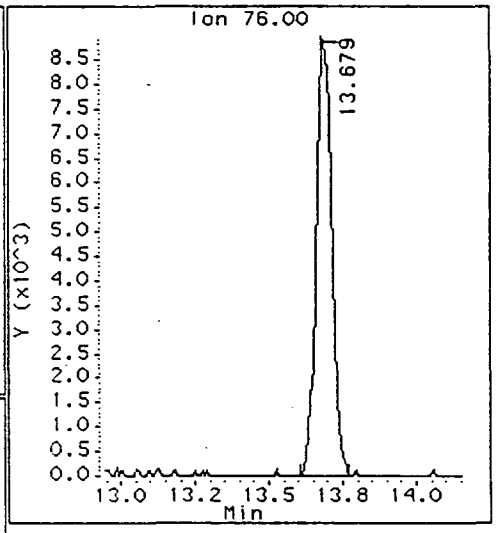
Operator: MH

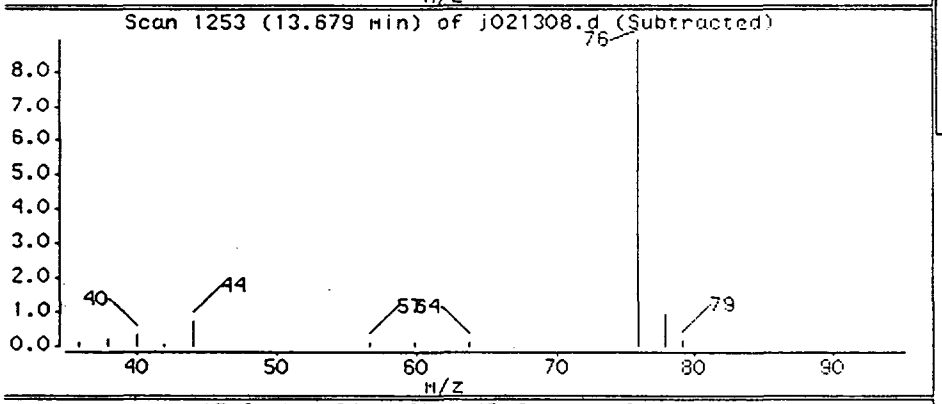
Column phase: RTx-624

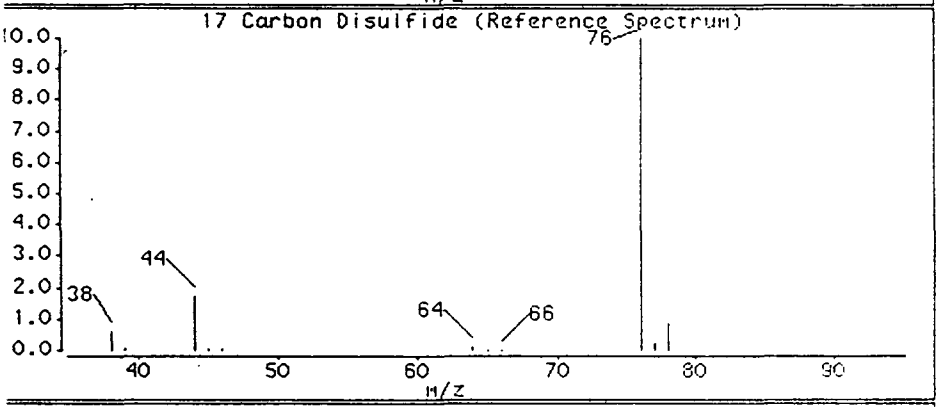
Column diameter: 0.58

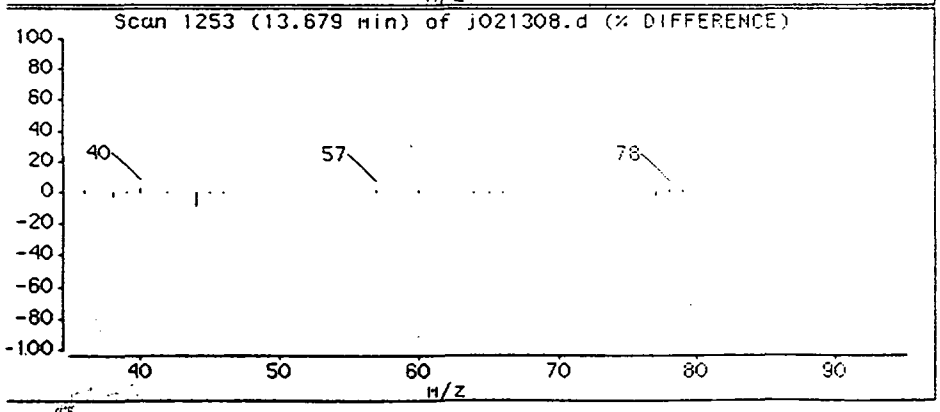
17 Carbon Disulfide











Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

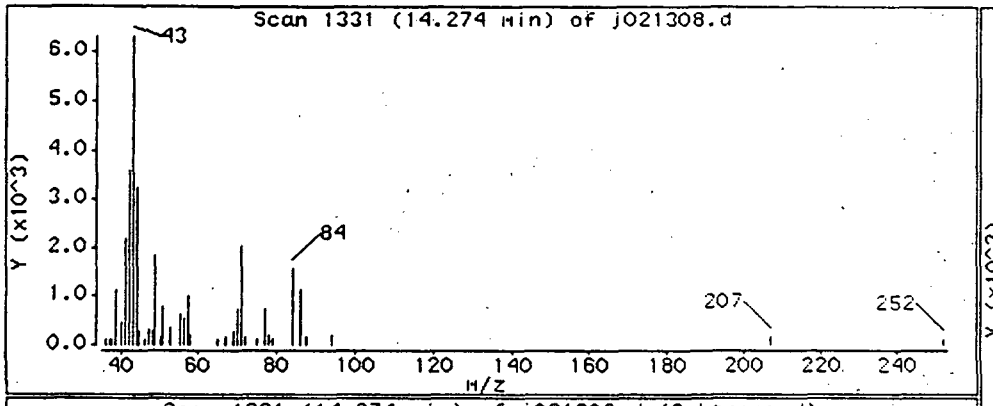
Sample Info: 500mL Can#12703

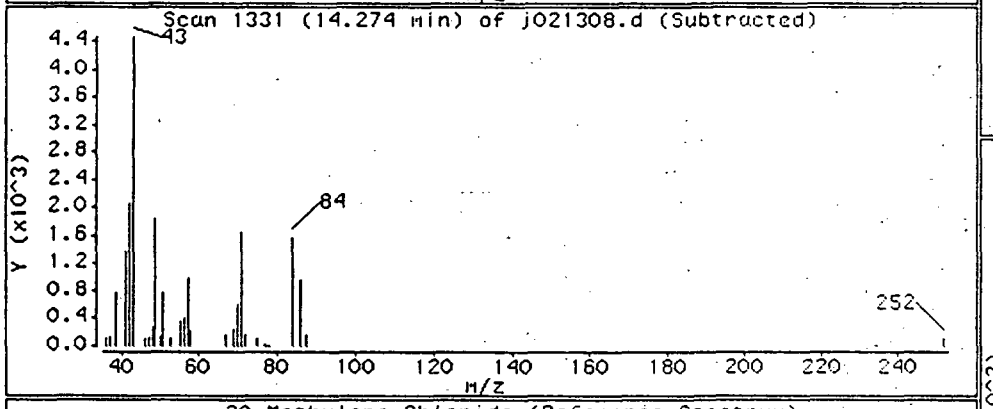
Operator: MH

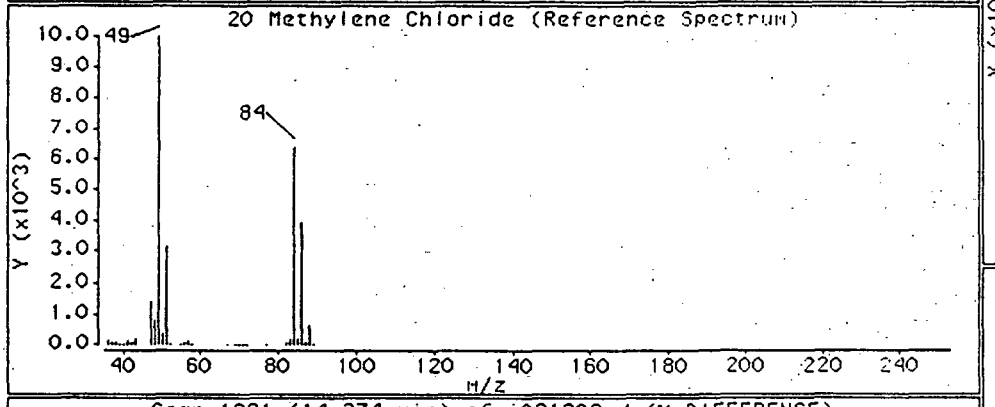
Column phase: RTx-624

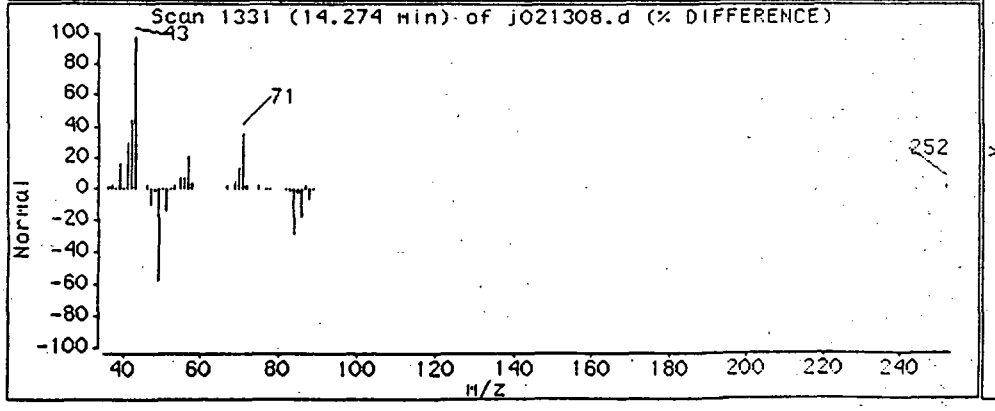
Column diameter: 0.58

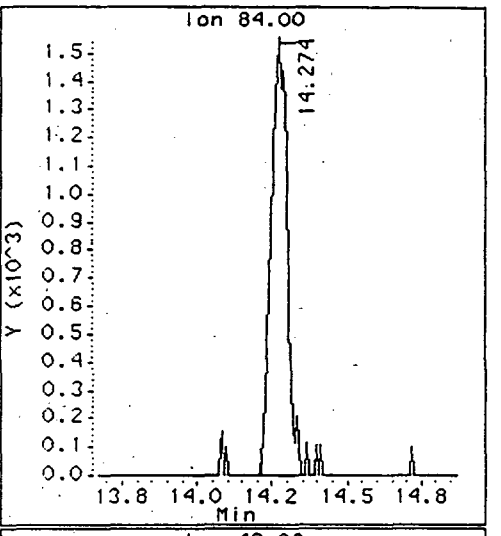
20 Methylene Chloride

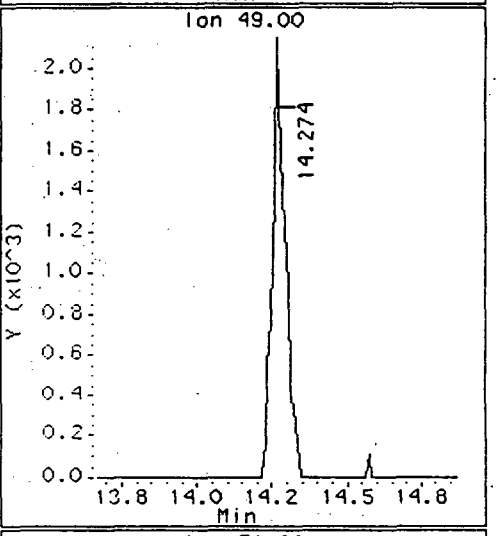


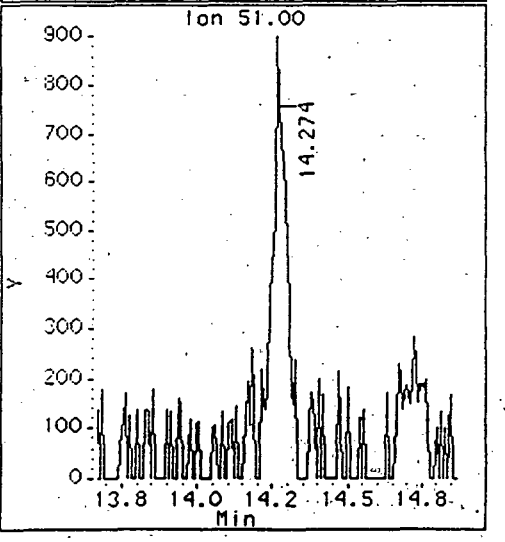












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

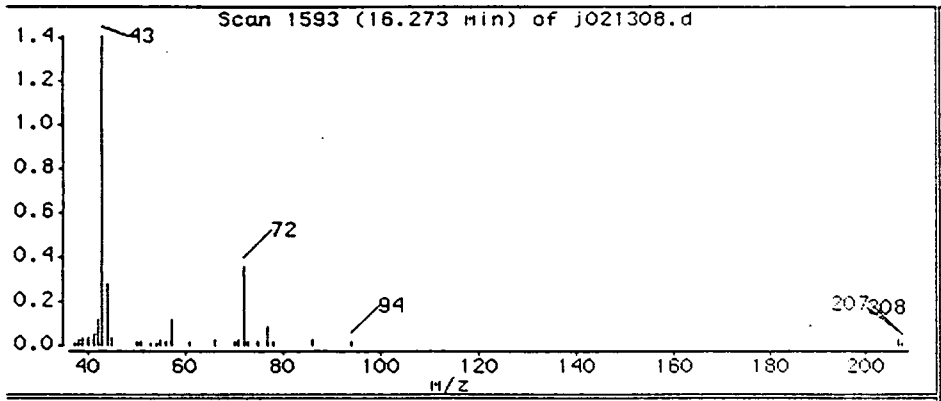
Sample Info: 500mL Can#12703

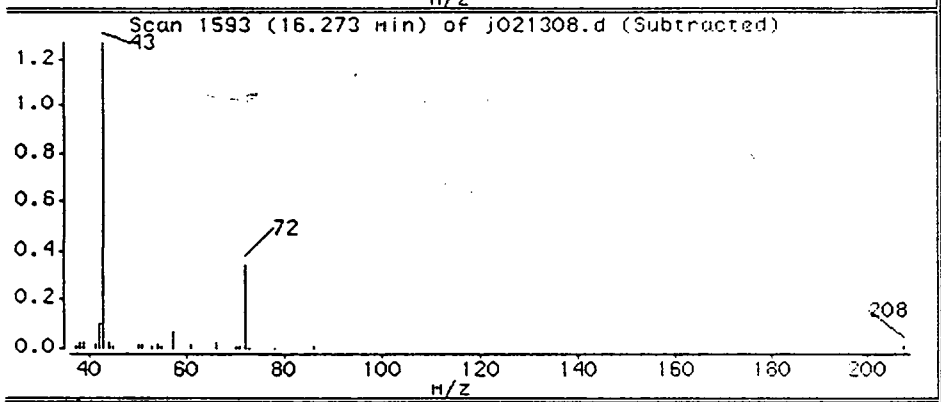
Operator: MH

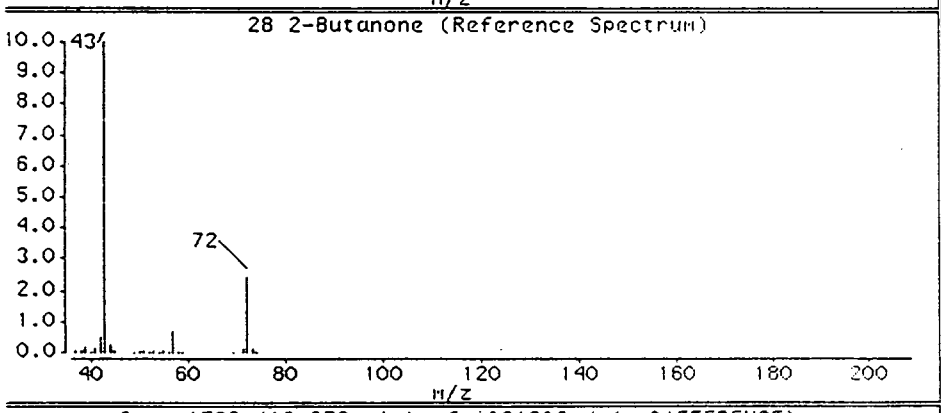
Column phase: RTx-624

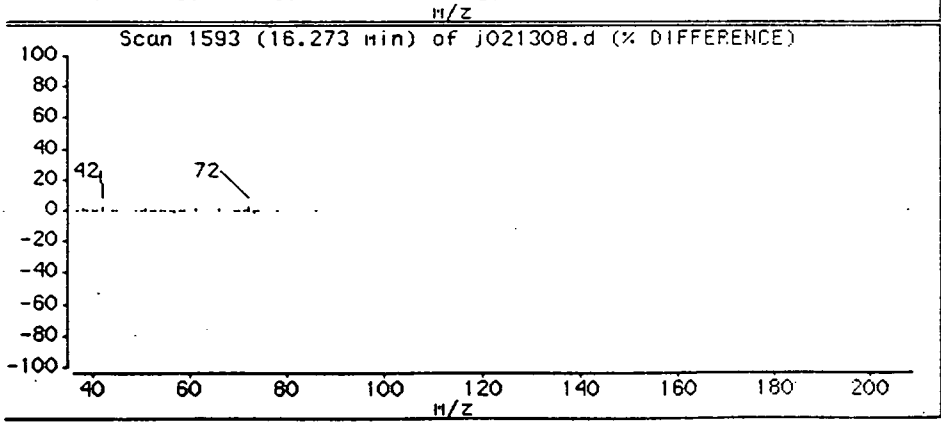
Column diameter: 0.58

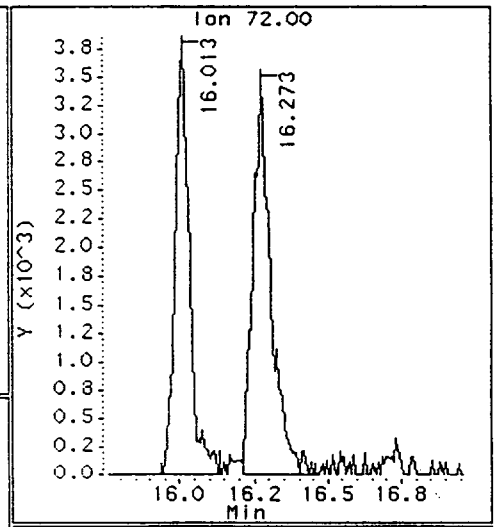
28 2-Butanone

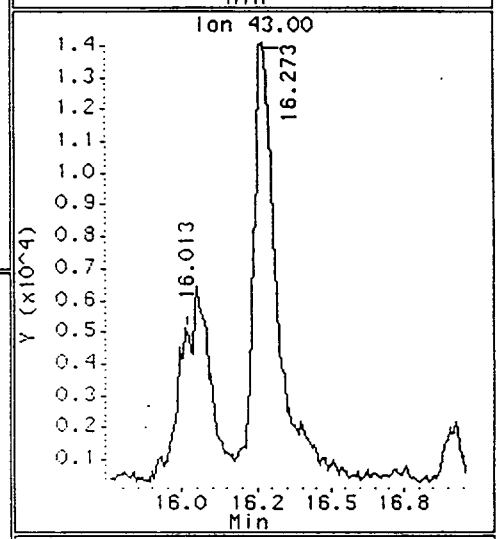


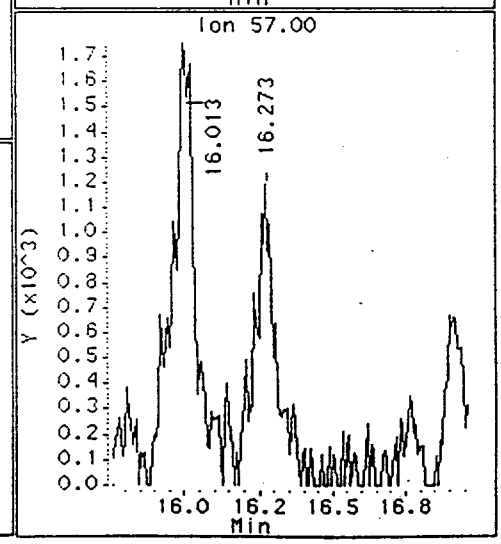












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

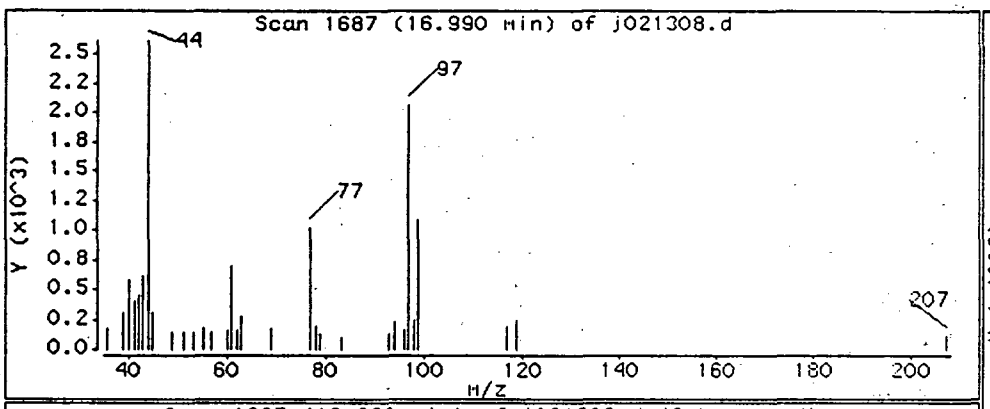
Sample Info: 500mL Can#12703

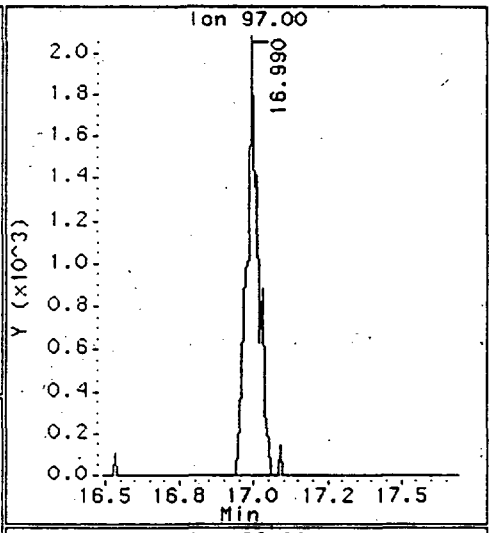
Operator: MH

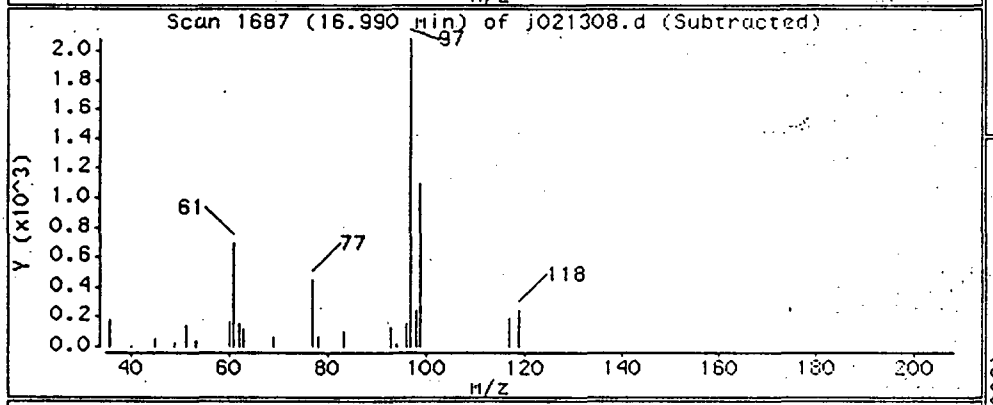
Column phase: RTx-624

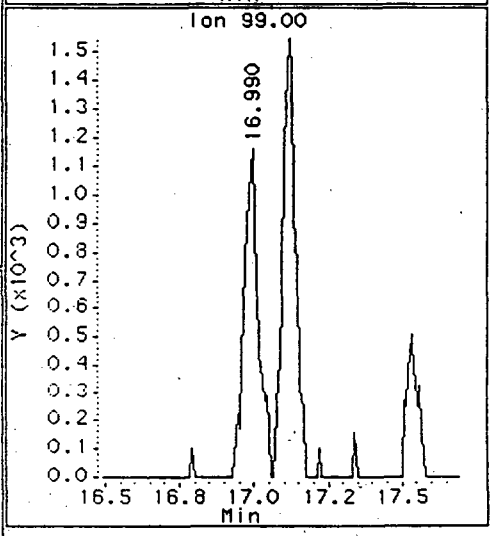
Column diameter: 0.58

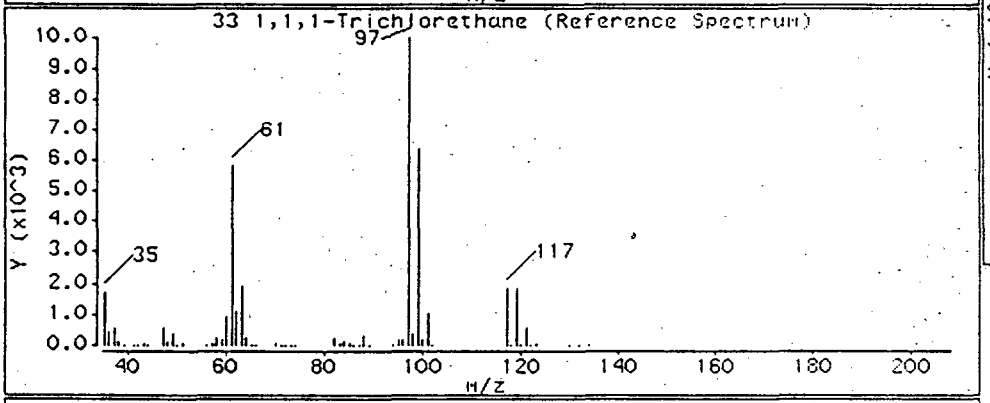
33 1,1,1-Trichlorethane

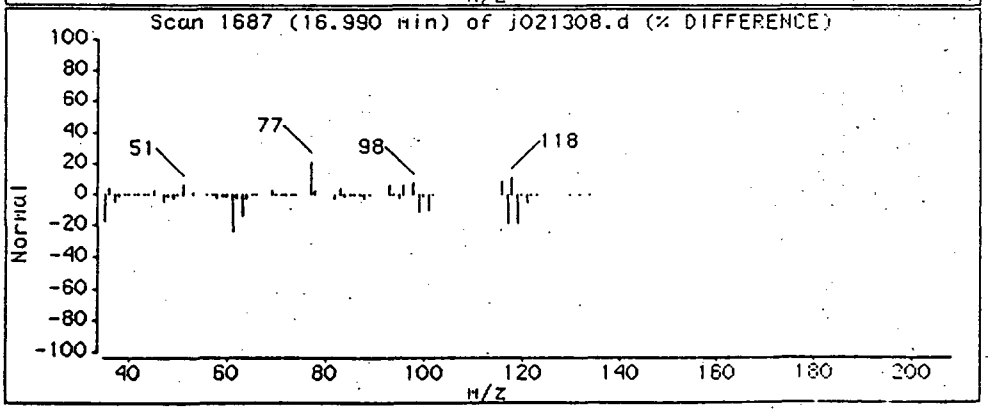












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

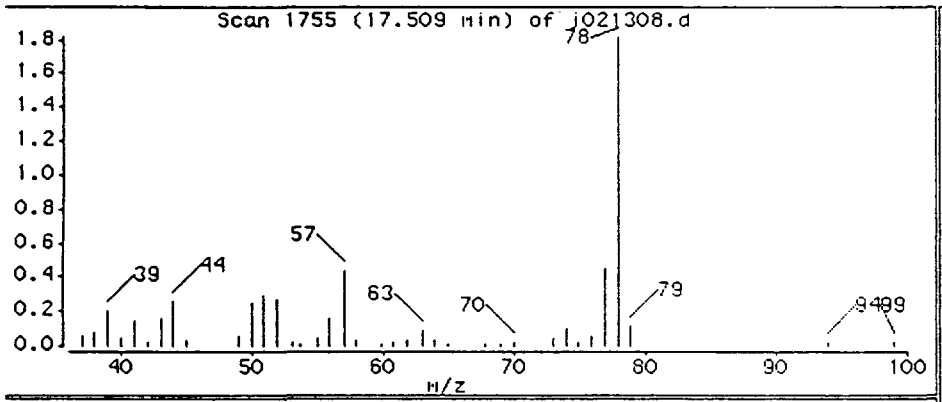
Sample Info: 500mL Can#12703

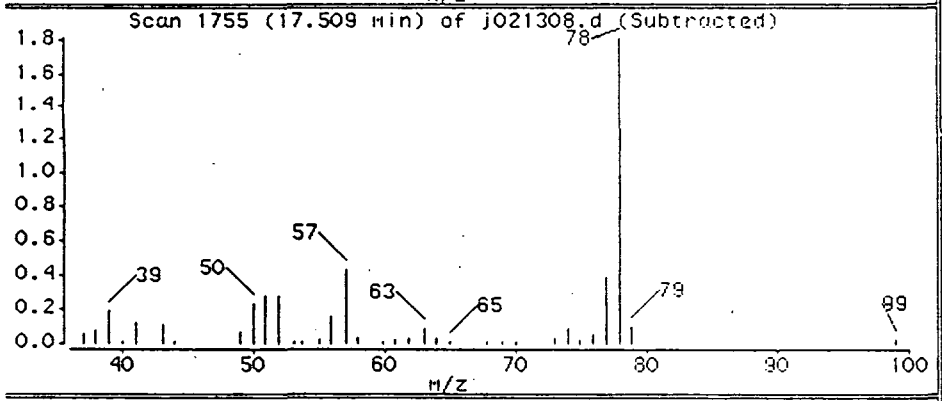
Operator: MH

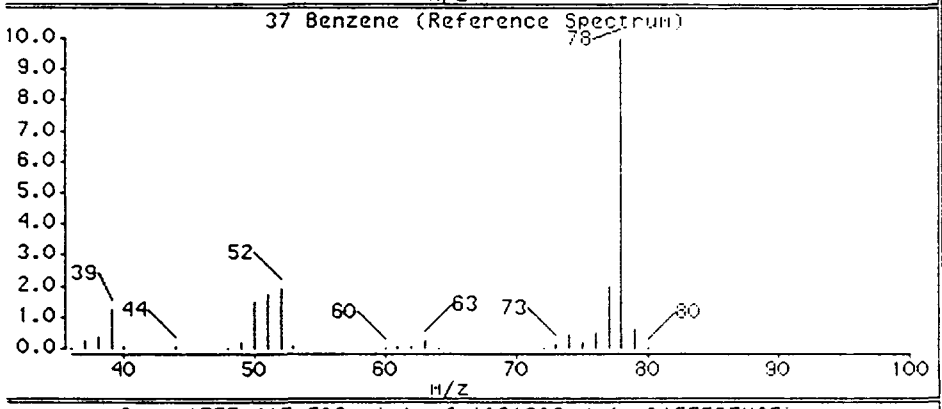
Column phase: RTx-624

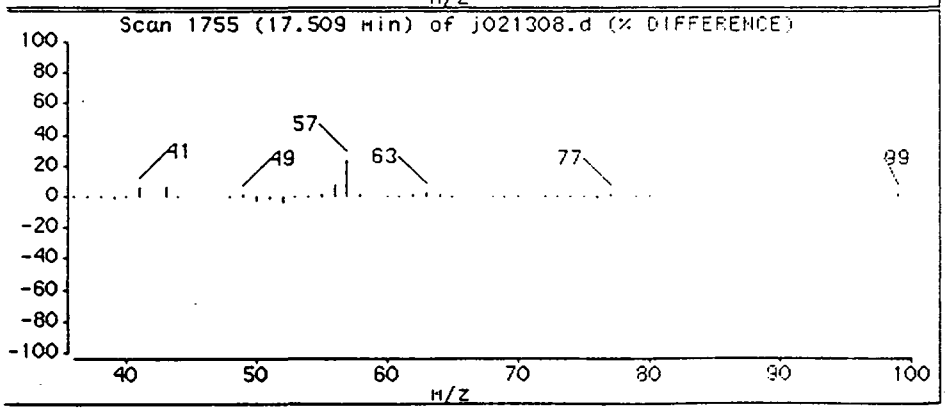
Column diameter: 0.58

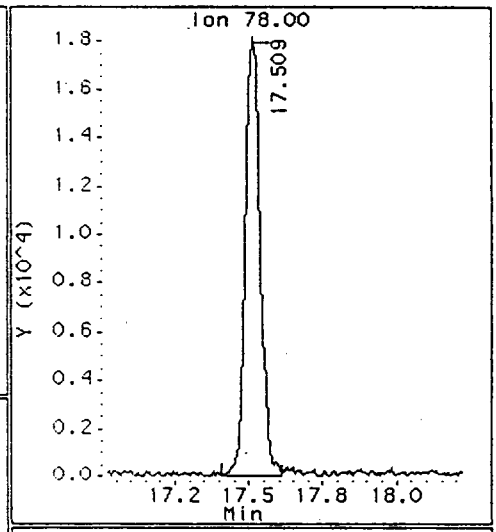
37 Benzene

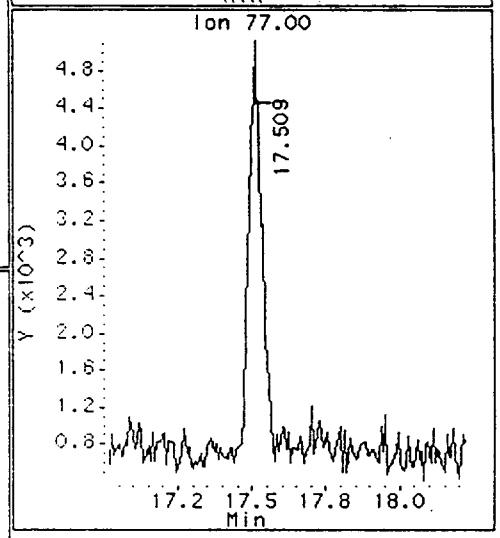












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

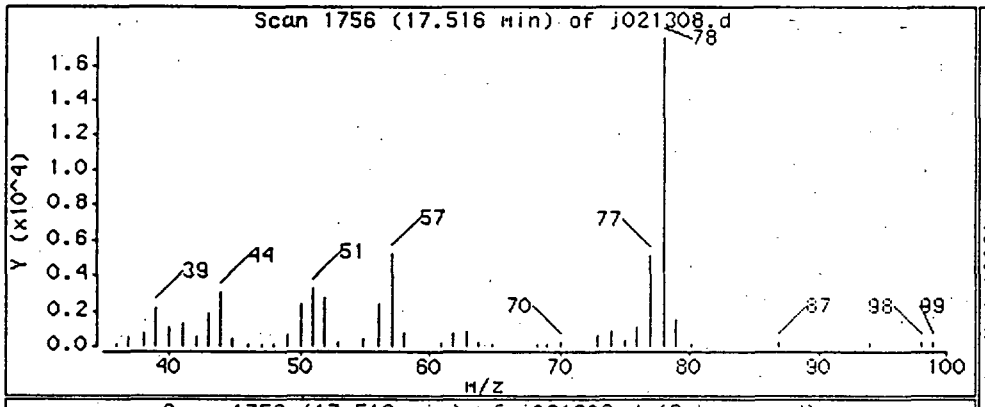
Sample Info: 500mL Can#12703

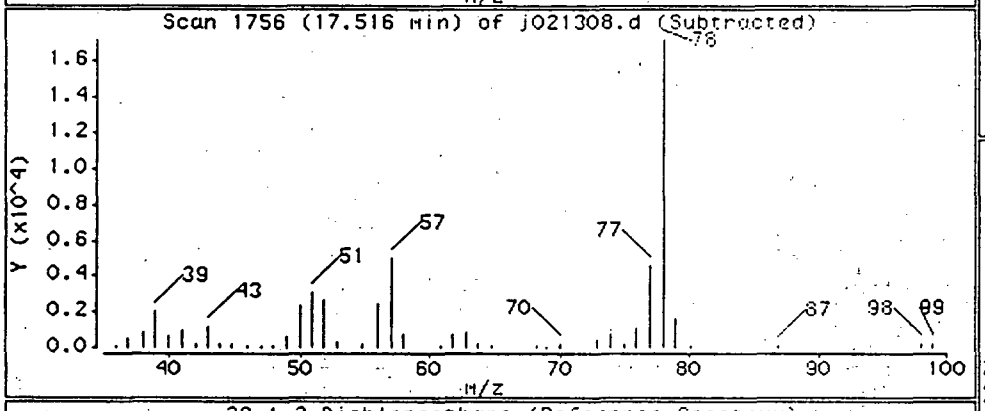
Operator: MH

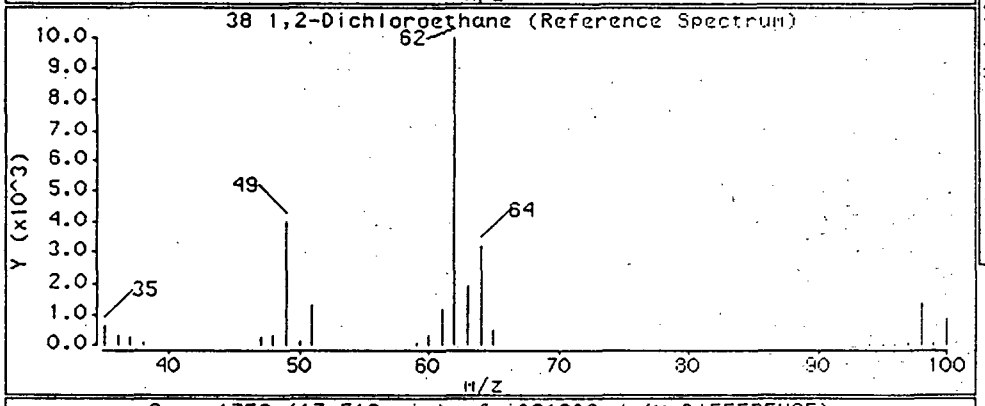
Column phase: RTx-624

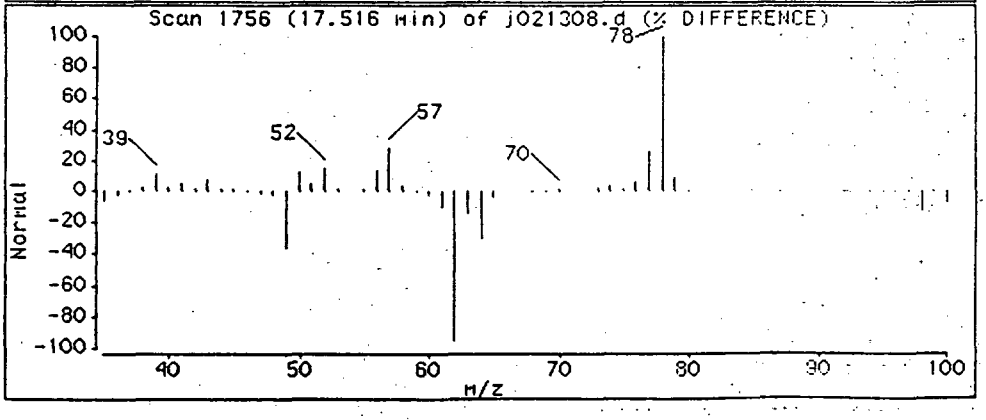
Column diameter: 0.58

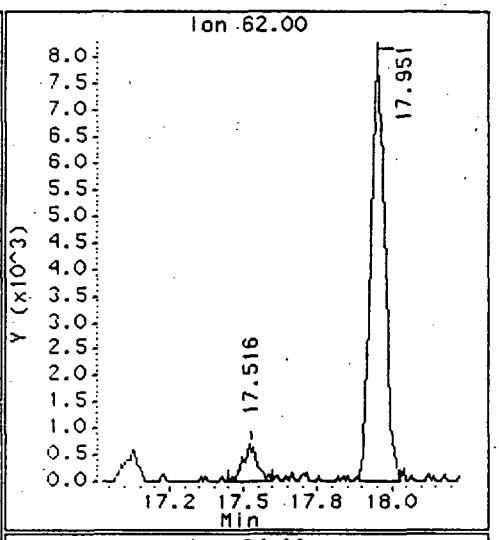
38 1,2-Dichloroethane

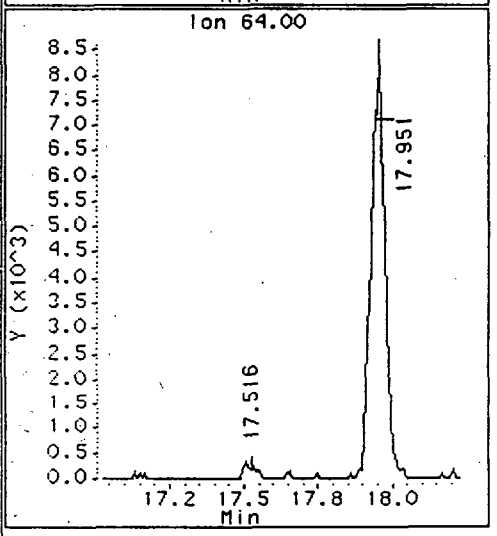












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

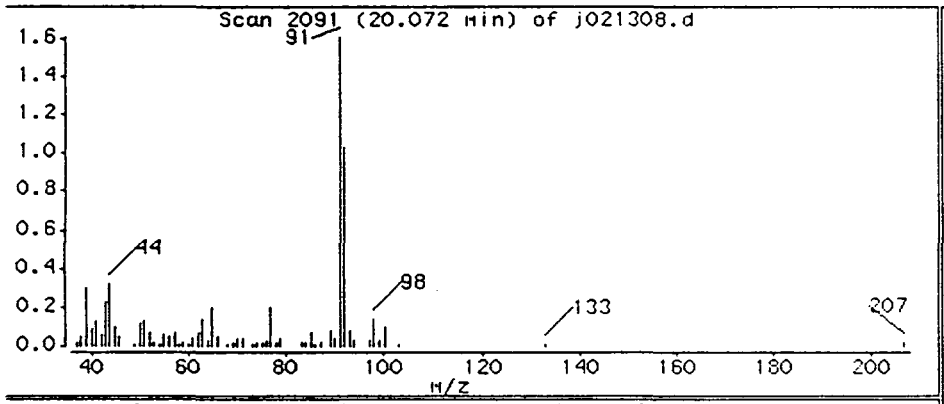
Sample Info: 500mL Can#12703

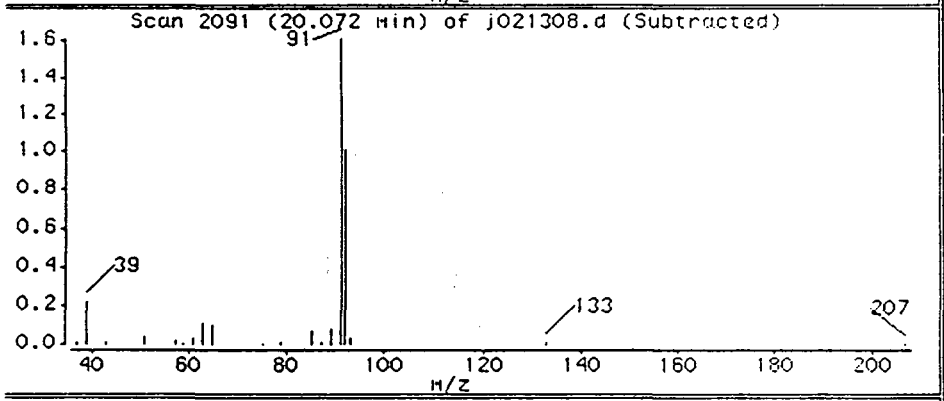
Operator: MH

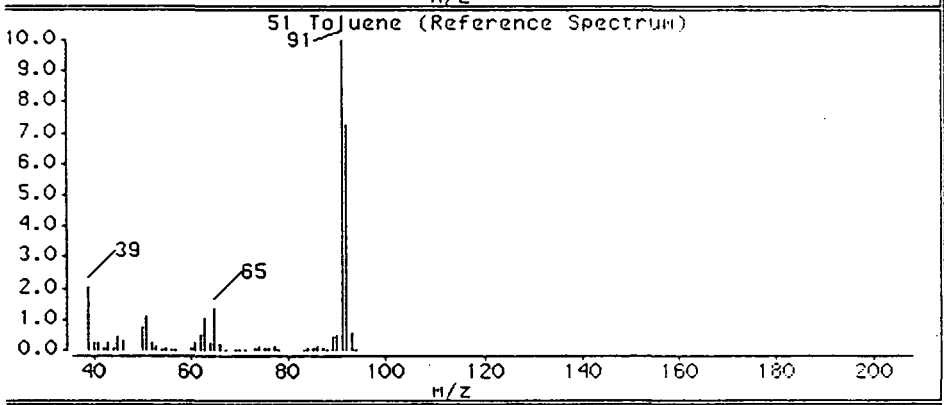
Column phase: RTx-624

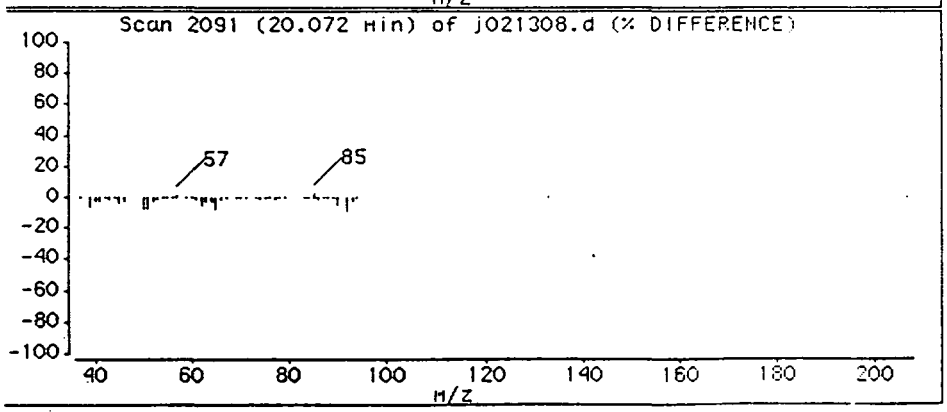
Column diameter: 0.58

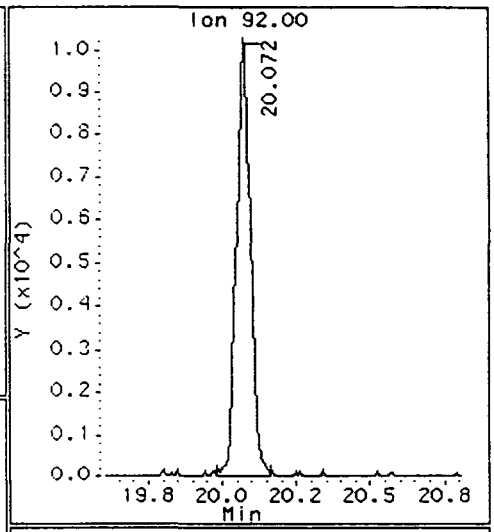
51 Toluene

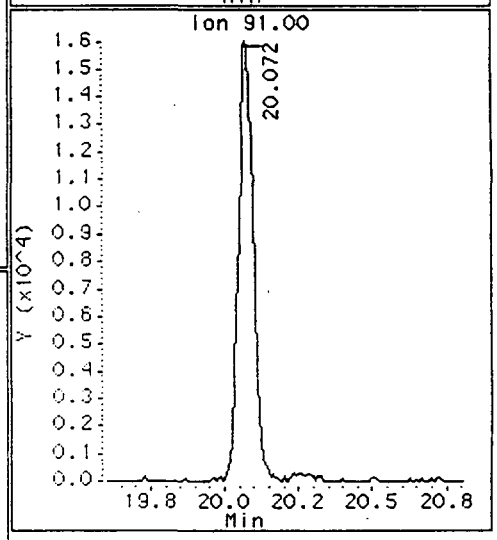












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

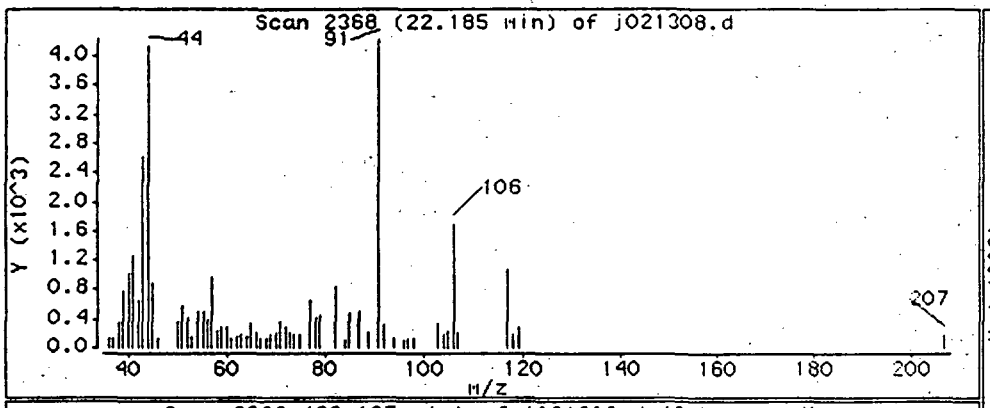
Sample Info: 500mL Can#12703

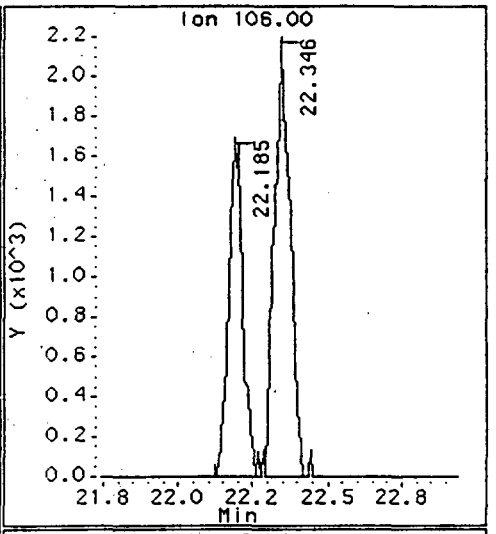
Operator: MH

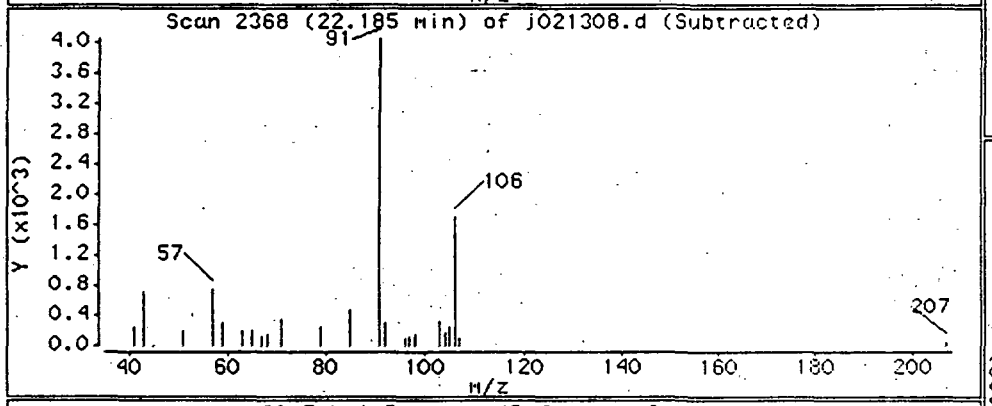
Column phase: RTx-624

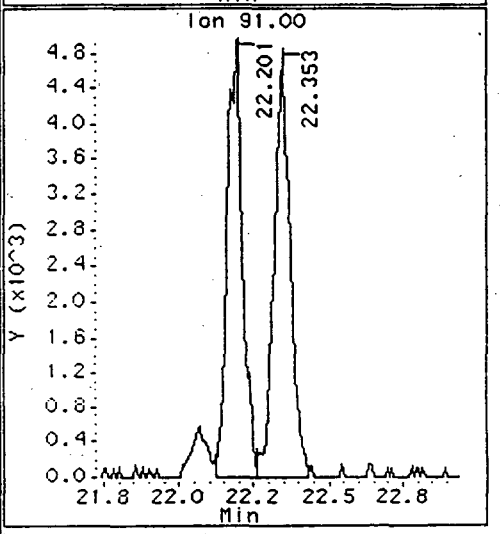
Column diameter: 0.58

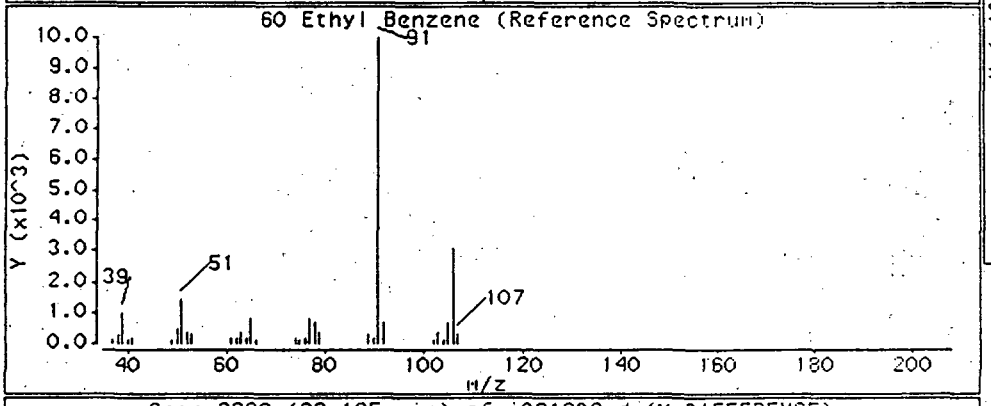
60 Ethyl Benzene

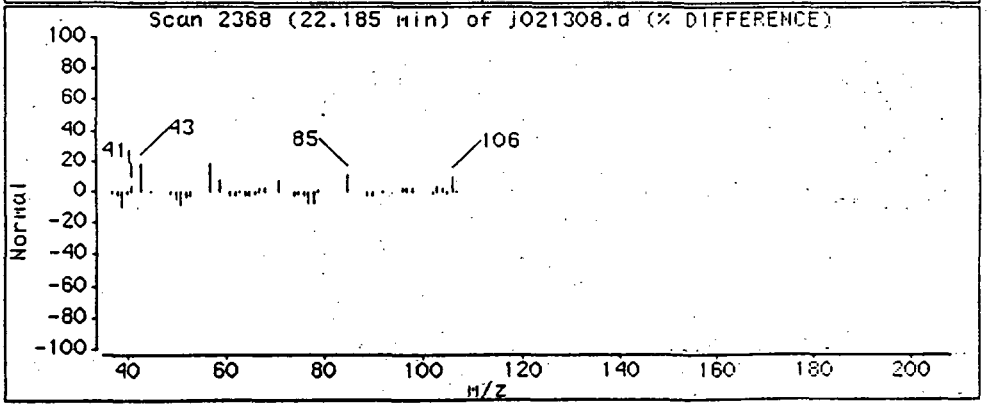












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

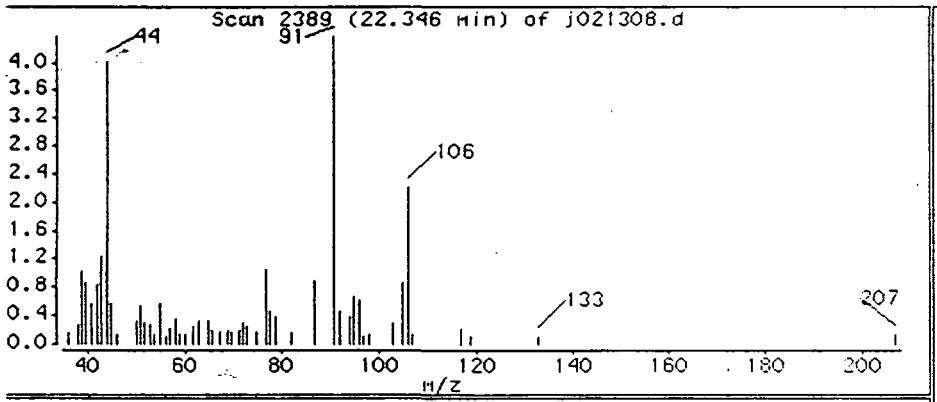
Sample Info: 500mL Can#12703

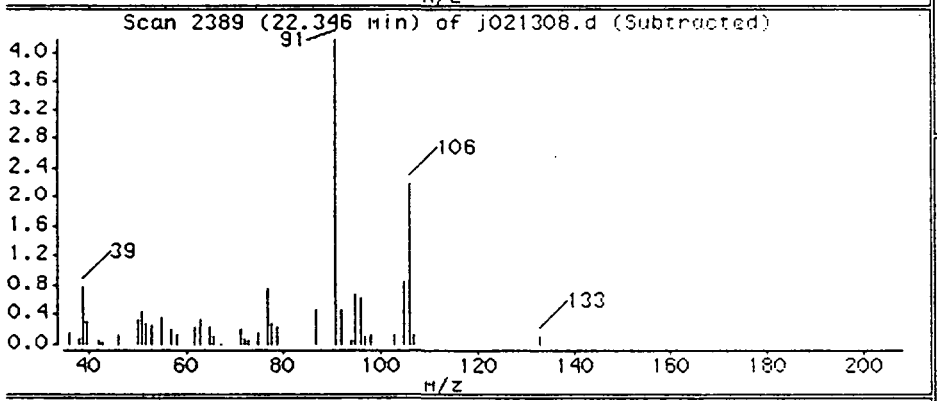
Operator: MH

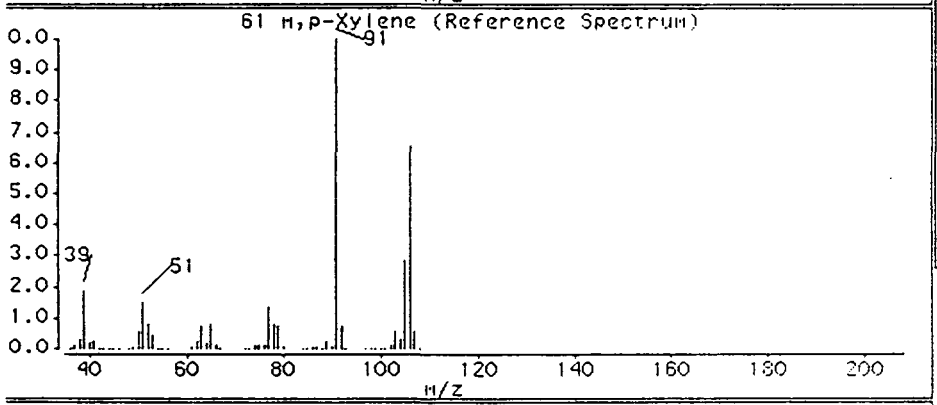
Column phase: RTx-624

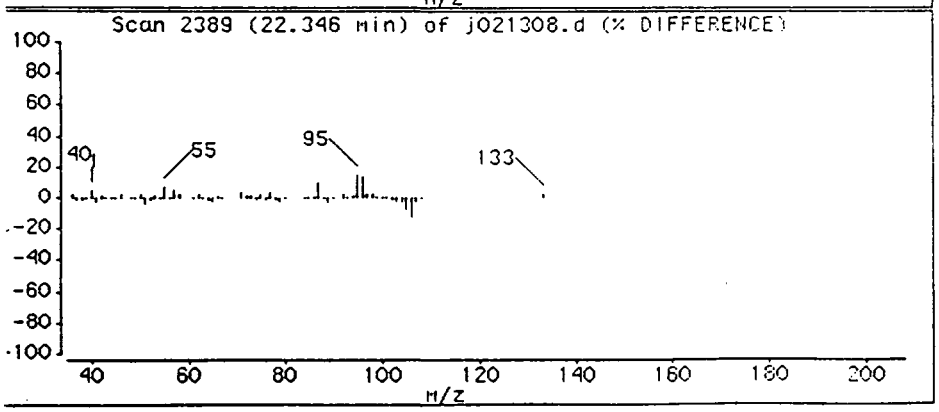
Column diameter: 0.58

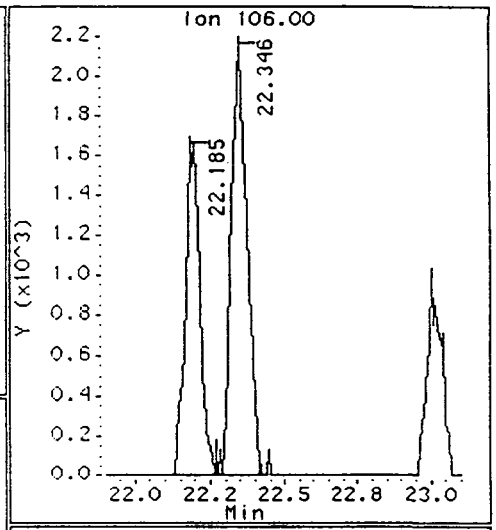
61 m,p-Xylene

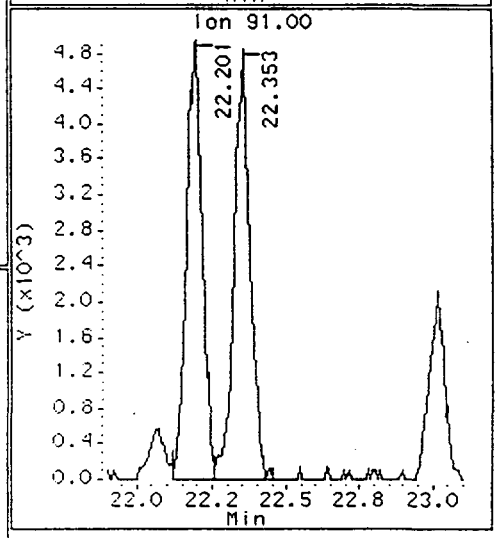












Data File: /chem/msdj.i/j-13feb.b/j021308.d

Date : 13-FEB-1997 14:01

Client ID: 013197D1

Instrument: msdj.i

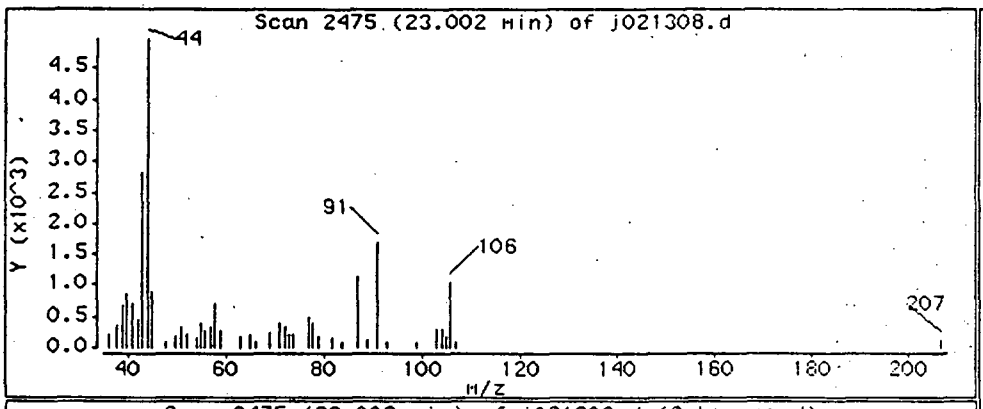
Sample Info: 500ML Can#12703

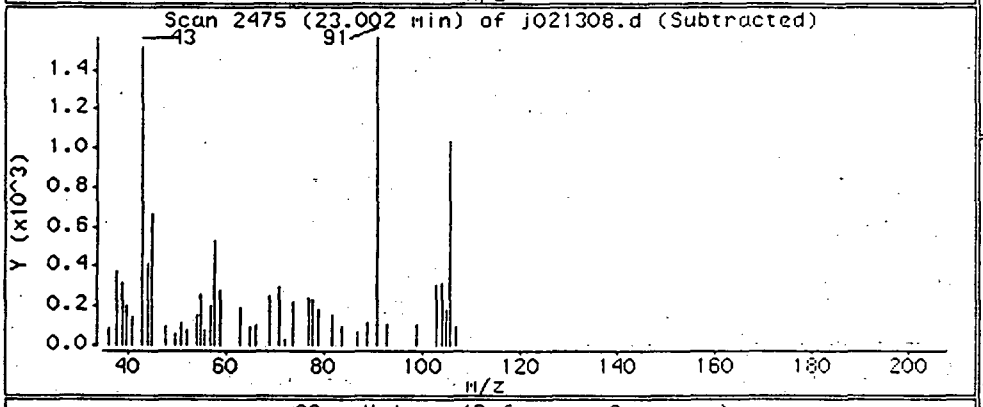
Operator: MH

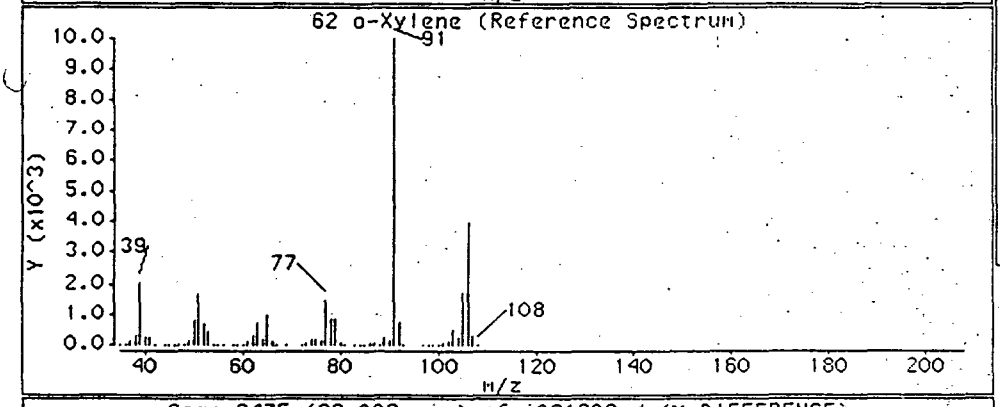
Column phase: RTx-624

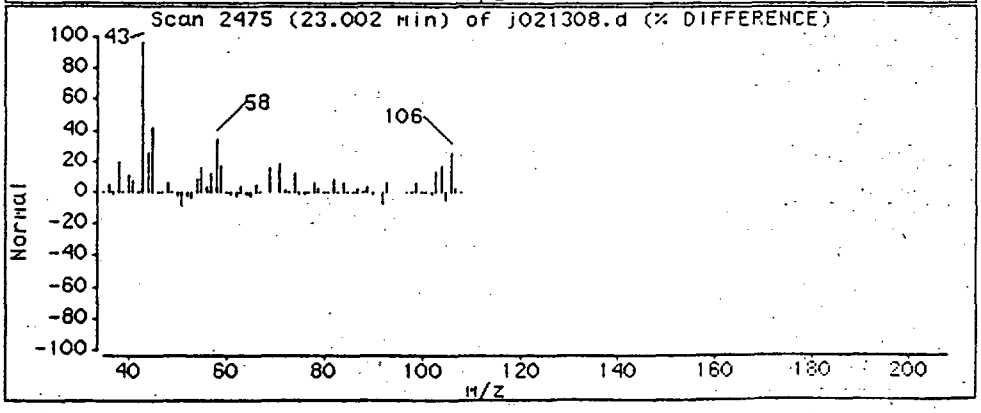
Column diameter: 0.58

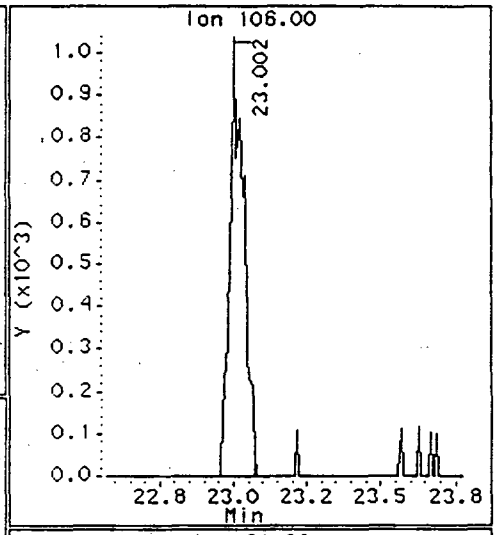
62 o-Xylene

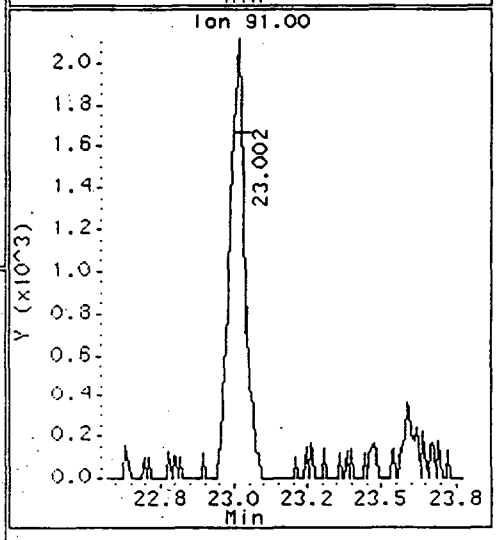








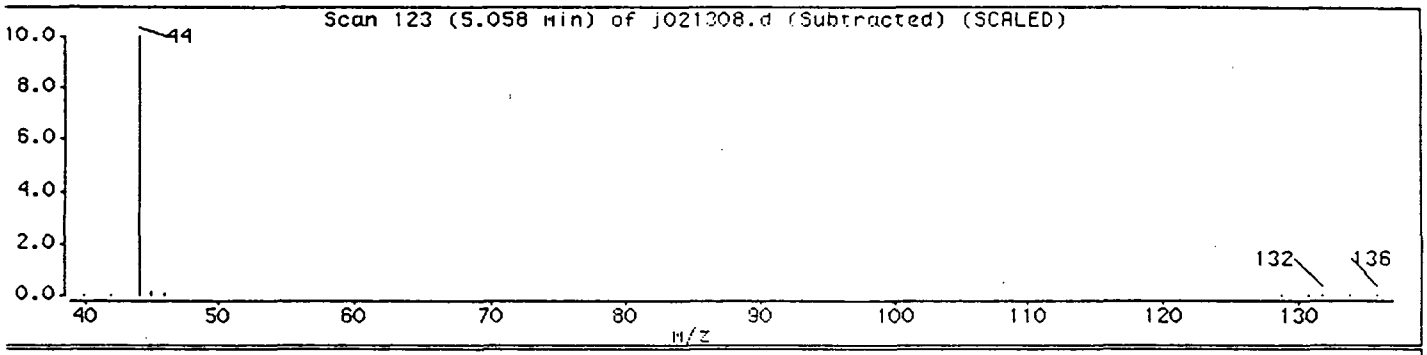




Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624

Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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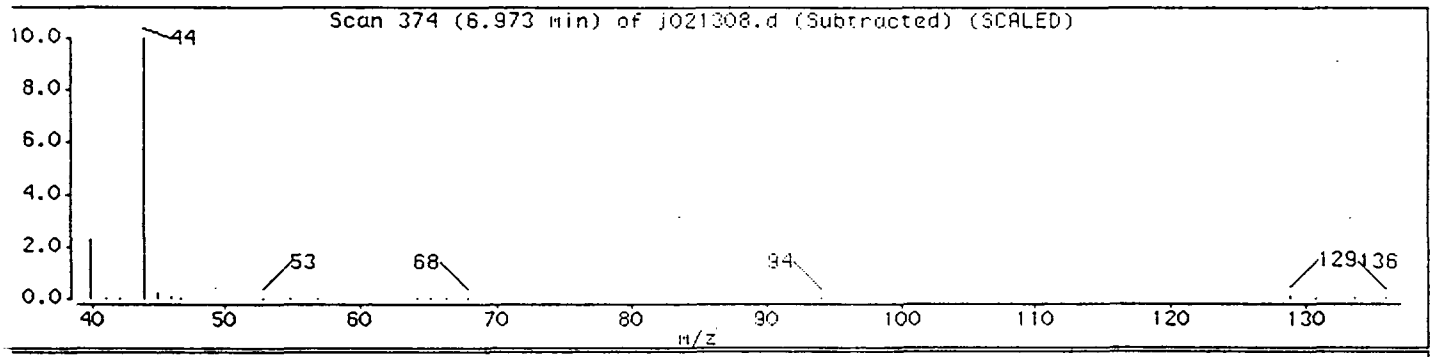

Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624

Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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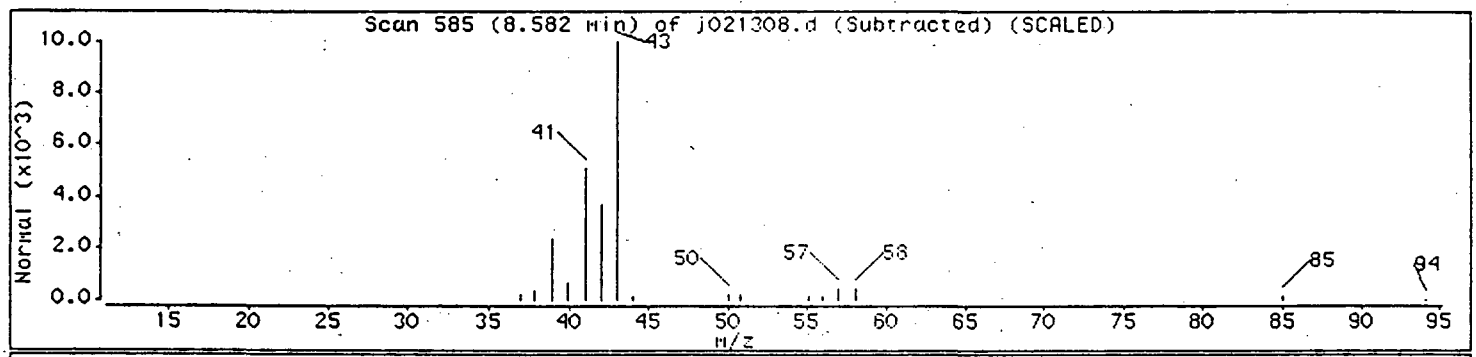

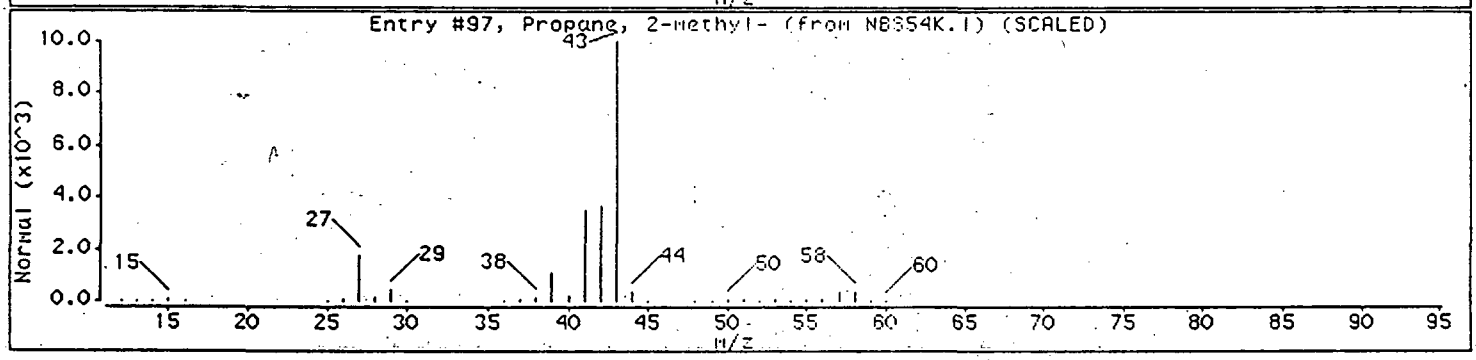

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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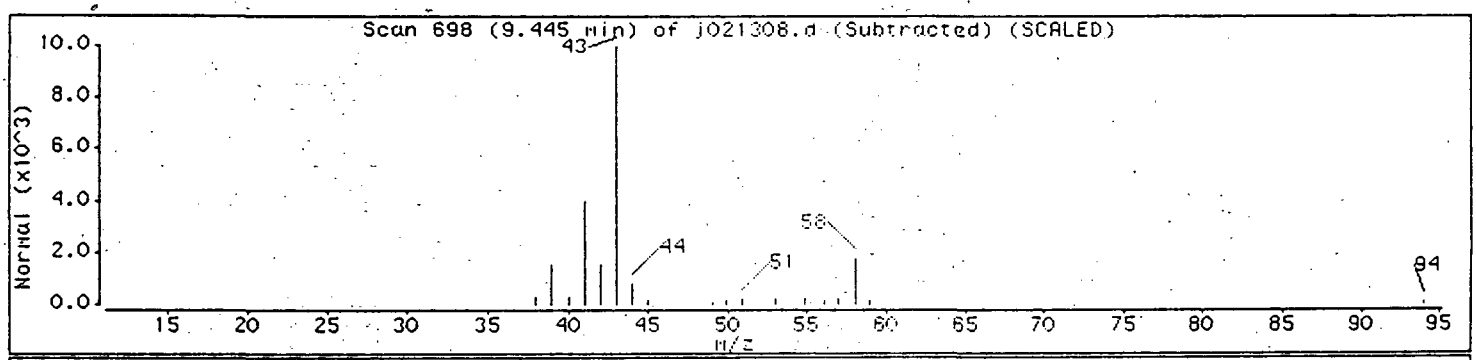

Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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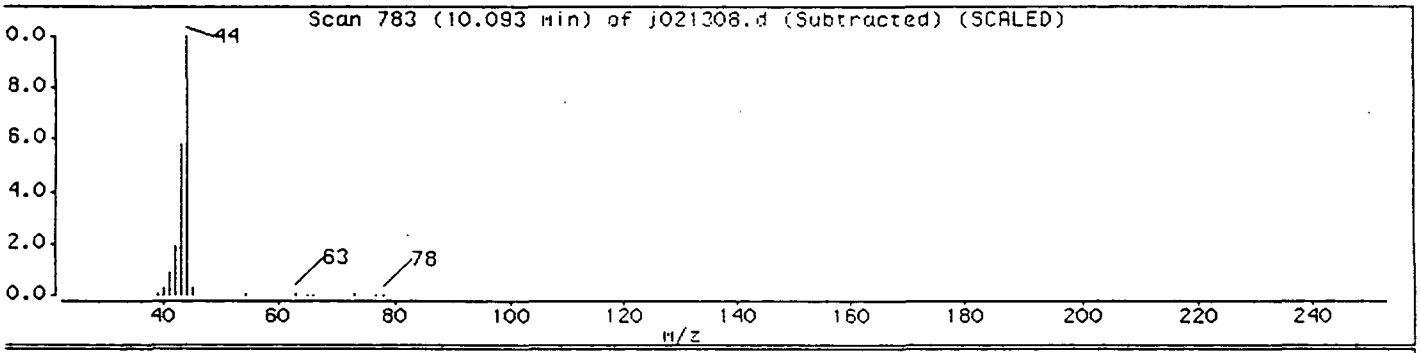
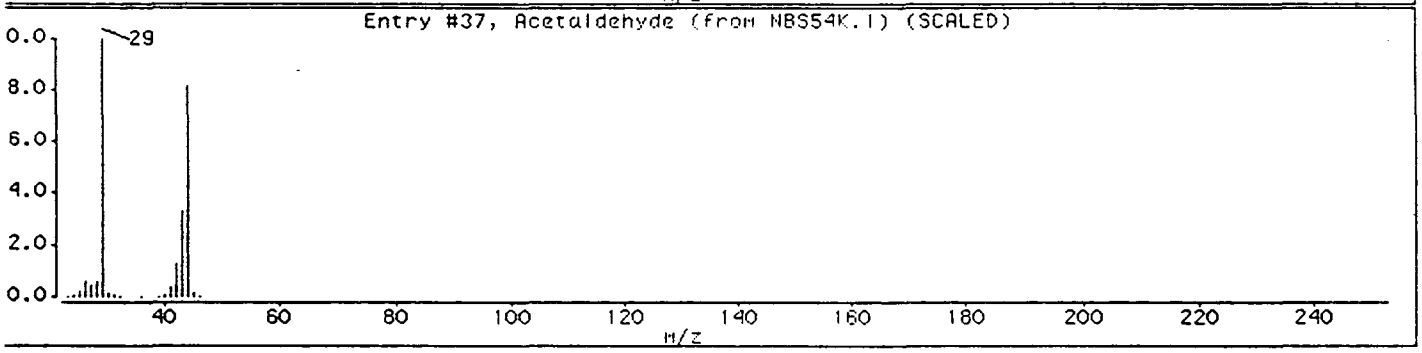
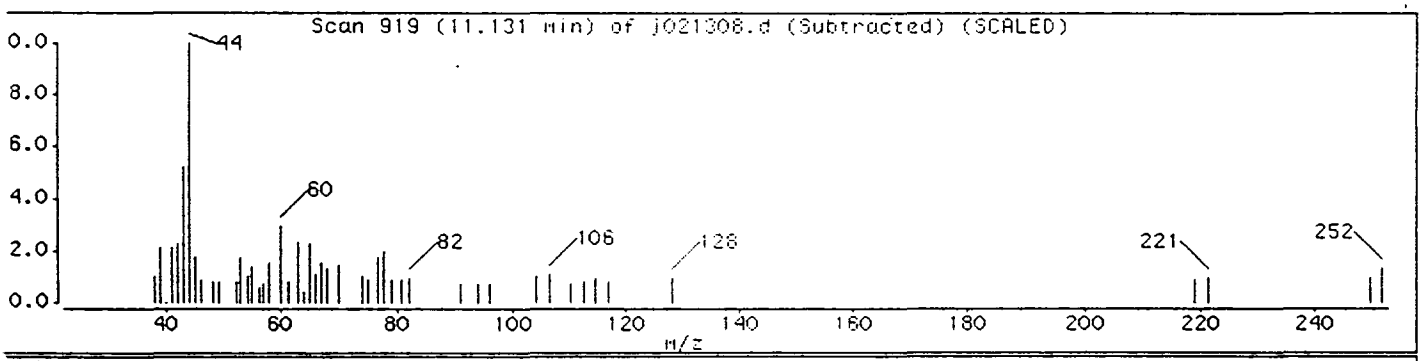




Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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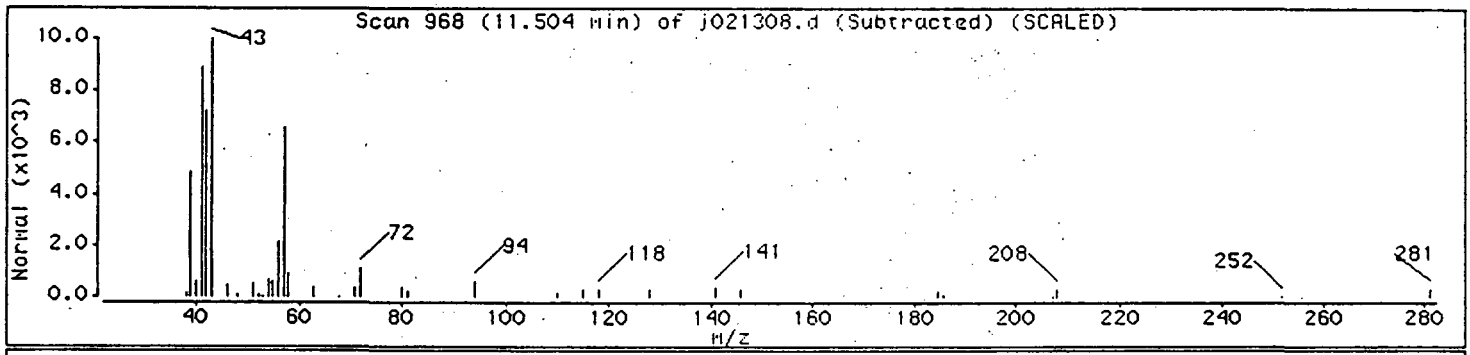

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
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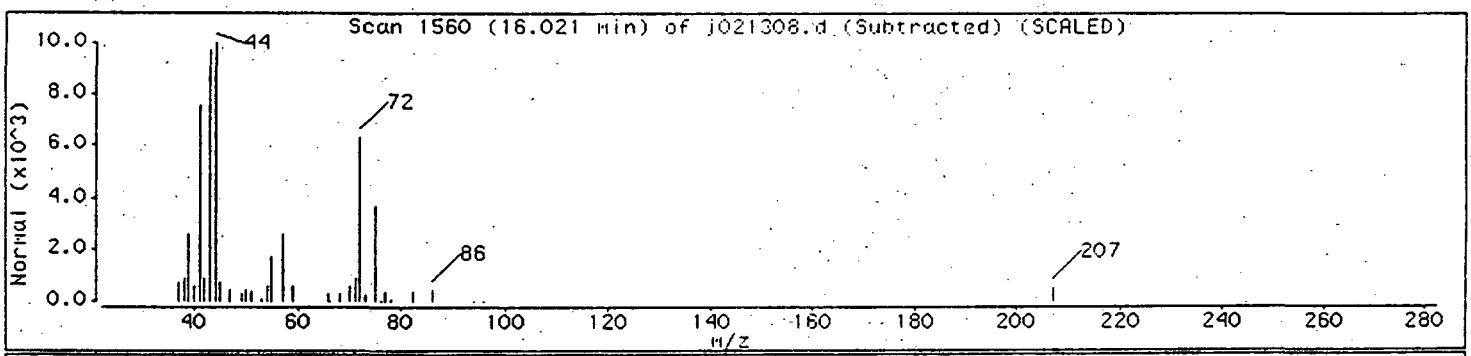
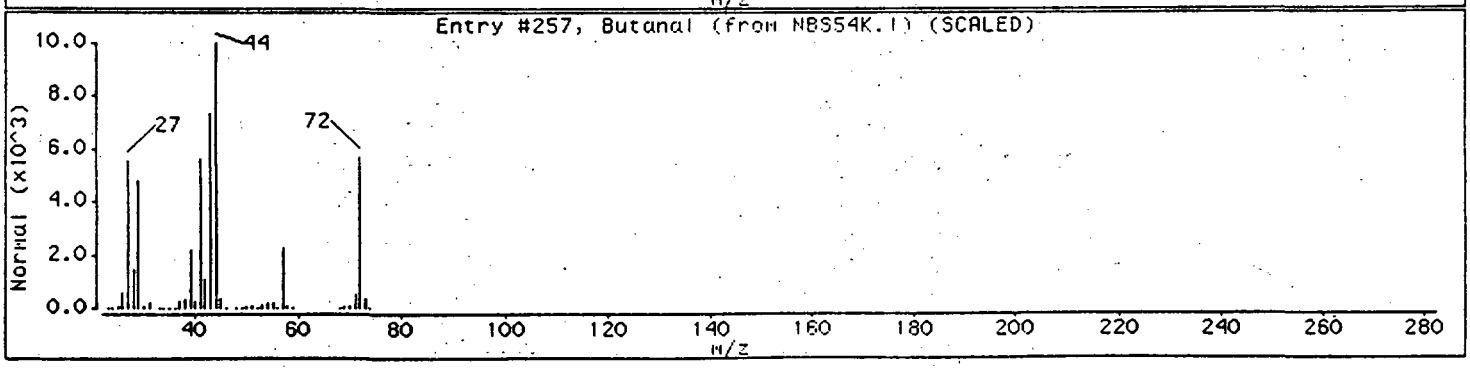
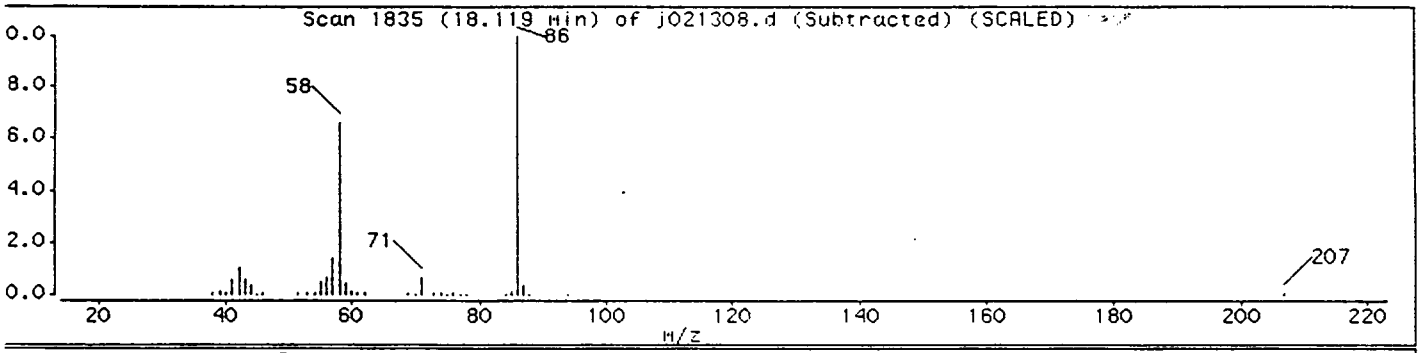


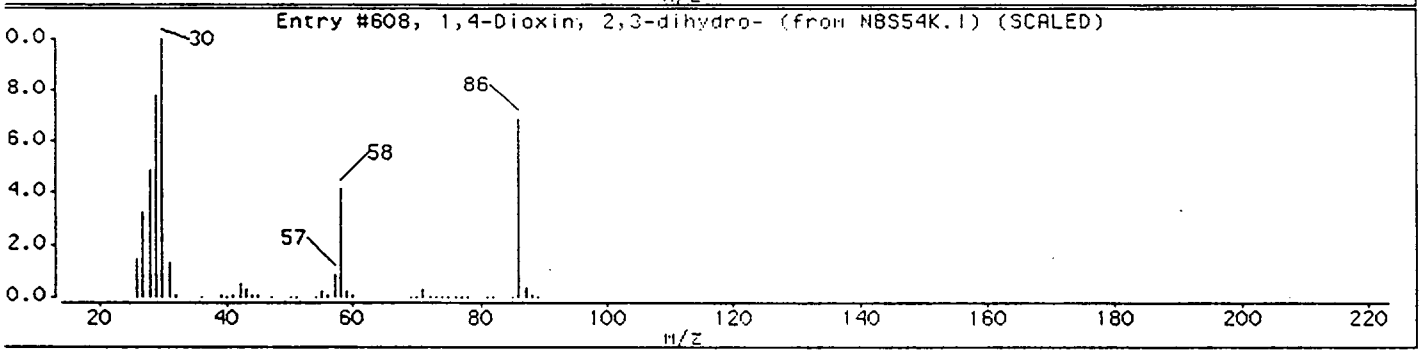


Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624

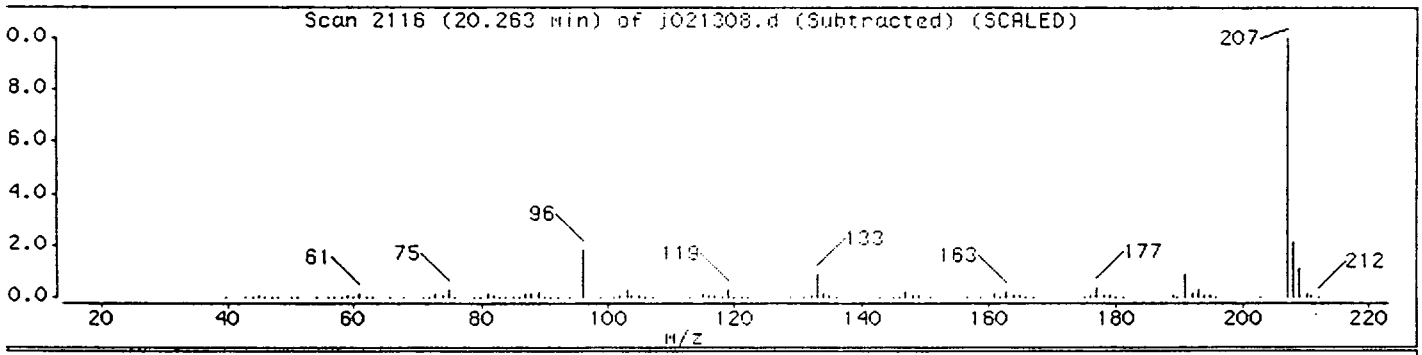
Column diameter: 0.58

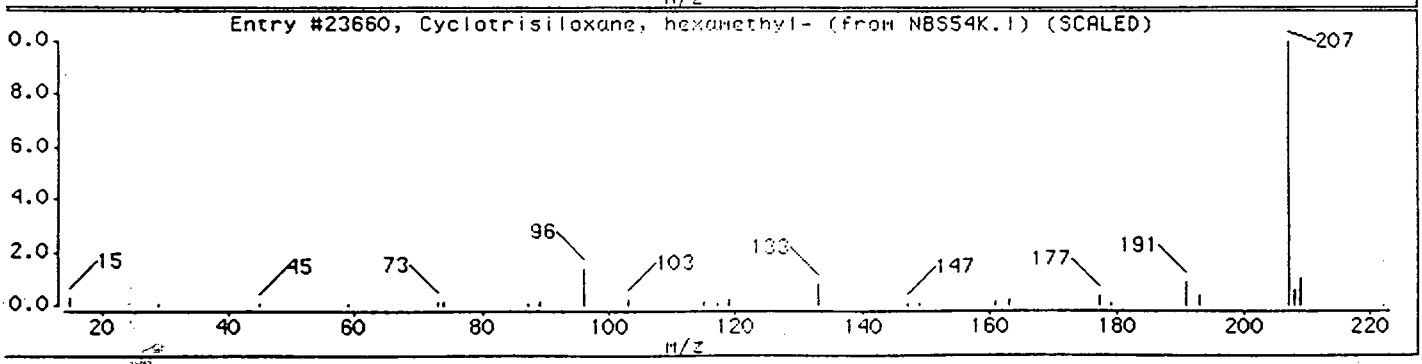
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1,4-Dioxin, 2,3-dihydro-	543-75-9	NBS54K.I	608	90





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotrisiloxane, hexamethyl-	541-05-9	NBS54K.I	23660	80

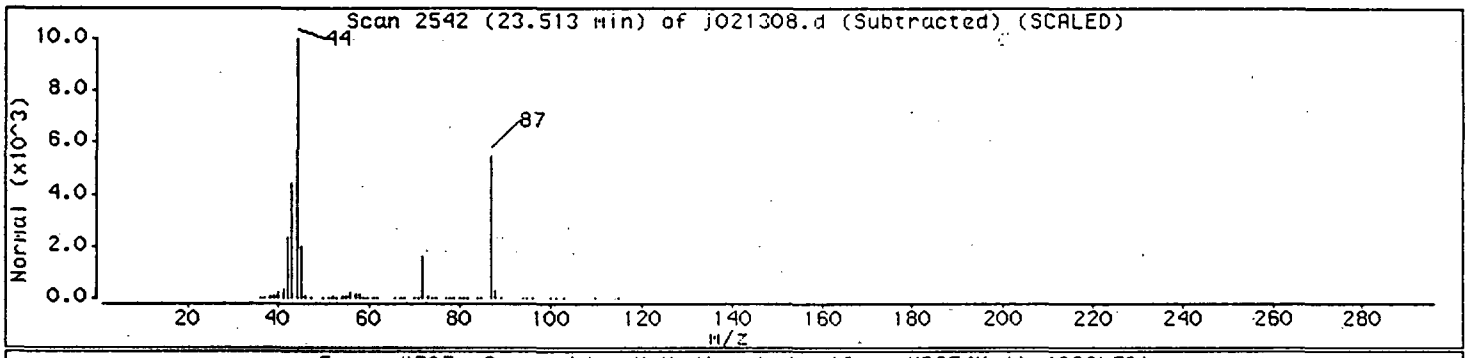


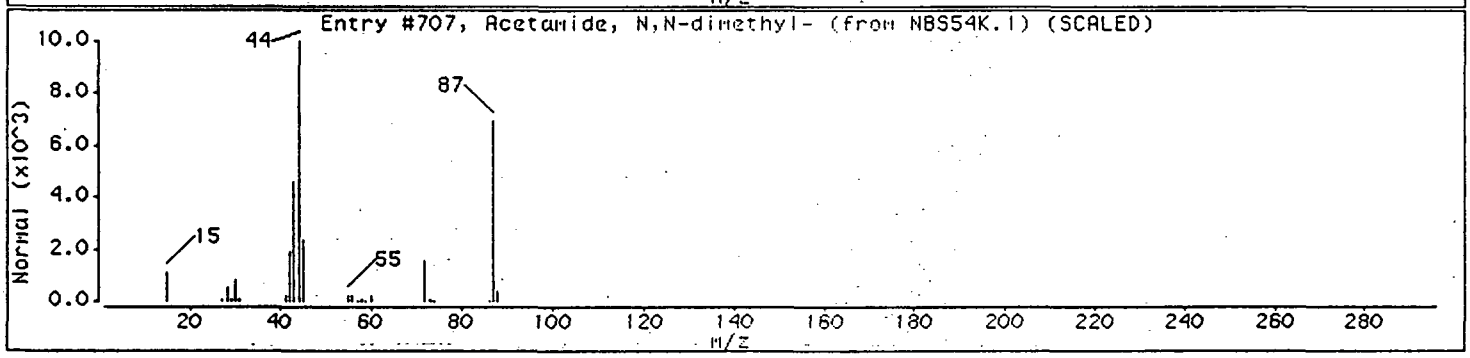


Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624

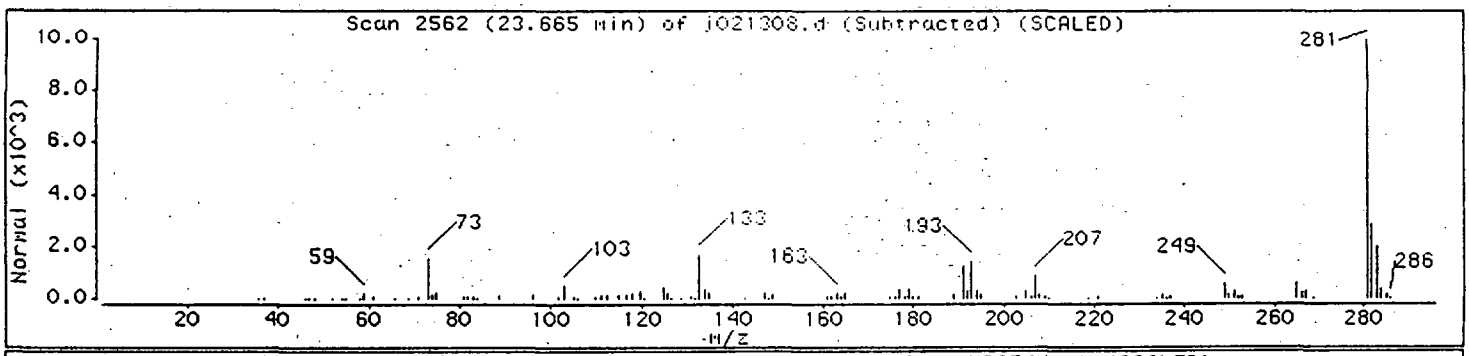
Column diameter: 0.58

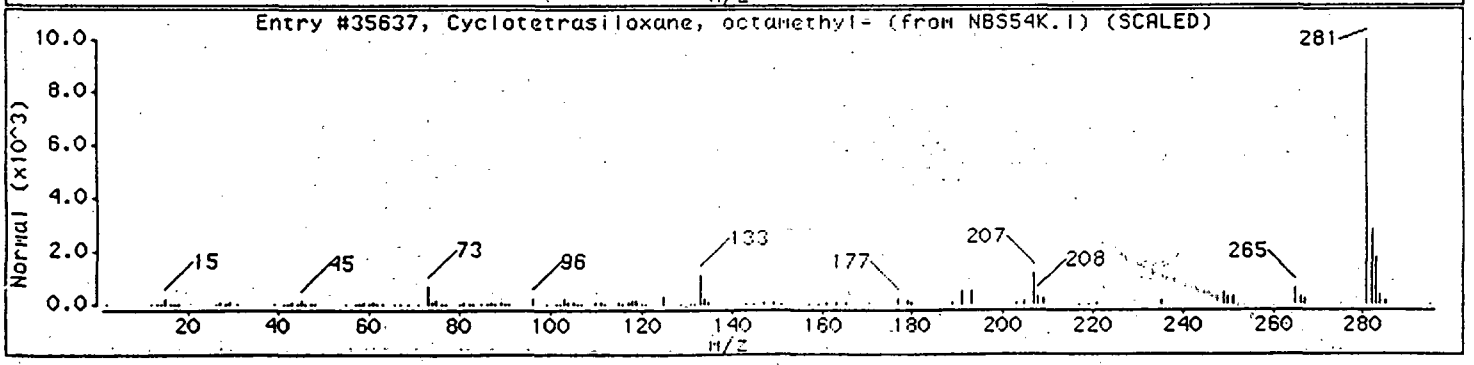
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.l	707	86





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotetrasiloxane, octamethyl-	556-67-2	NBS54K.l	35637	80

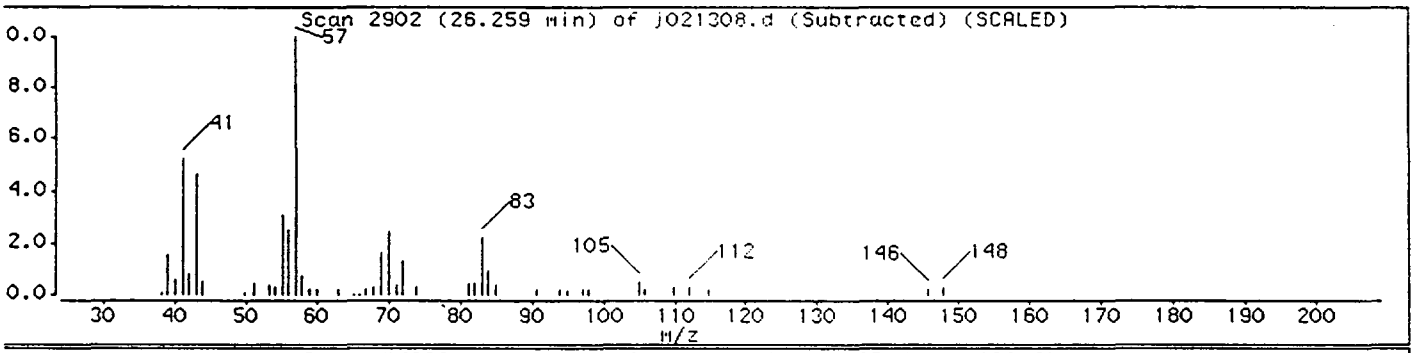


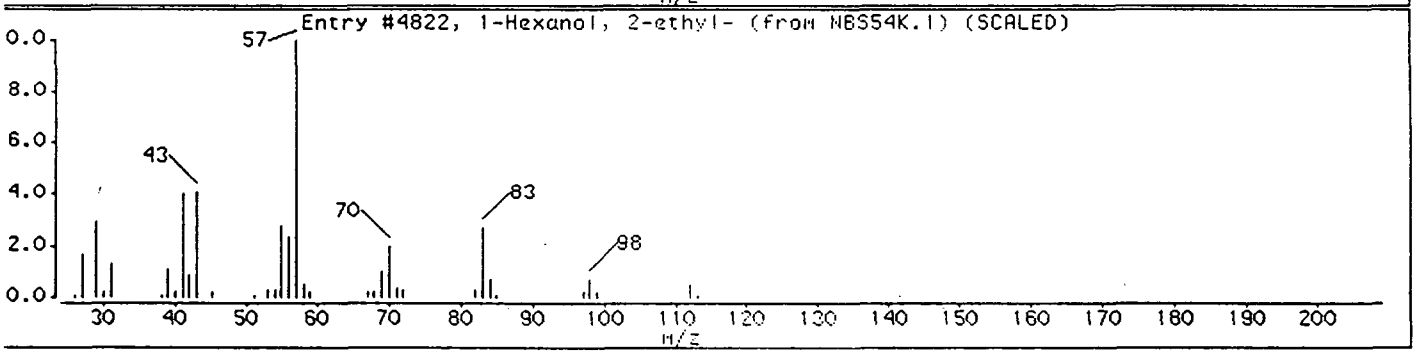


Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624

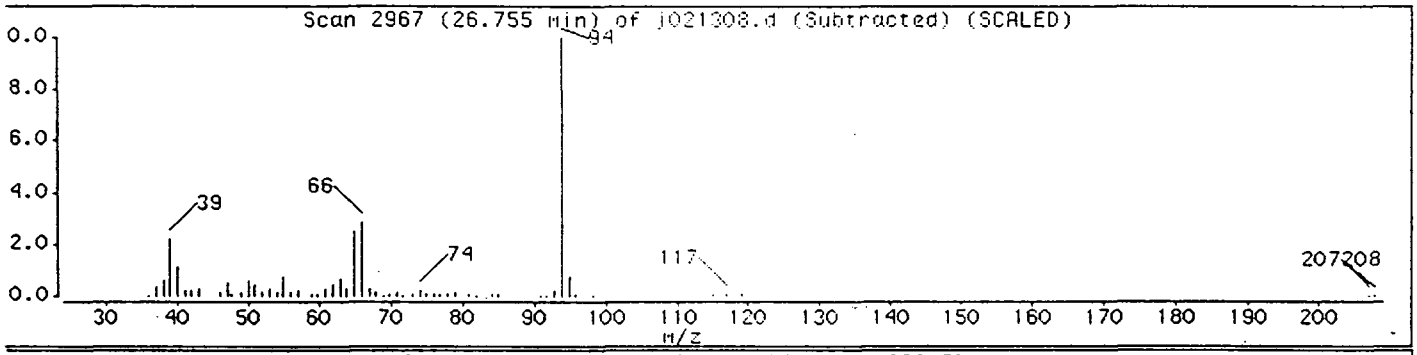
Column diameter: 0.58

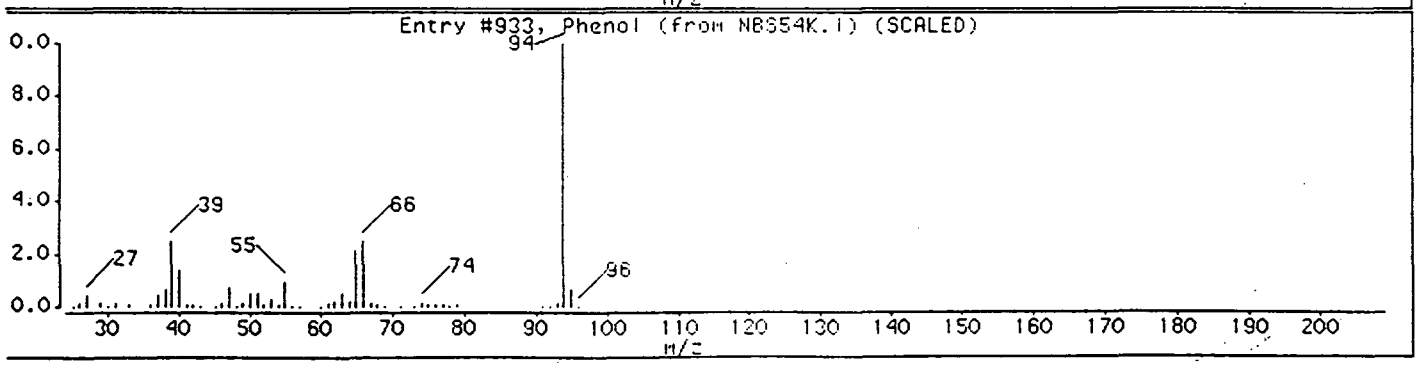
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1-Hexanol, 2-ethyl-	104-76-7	NBS54K.I	4822	56





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	95

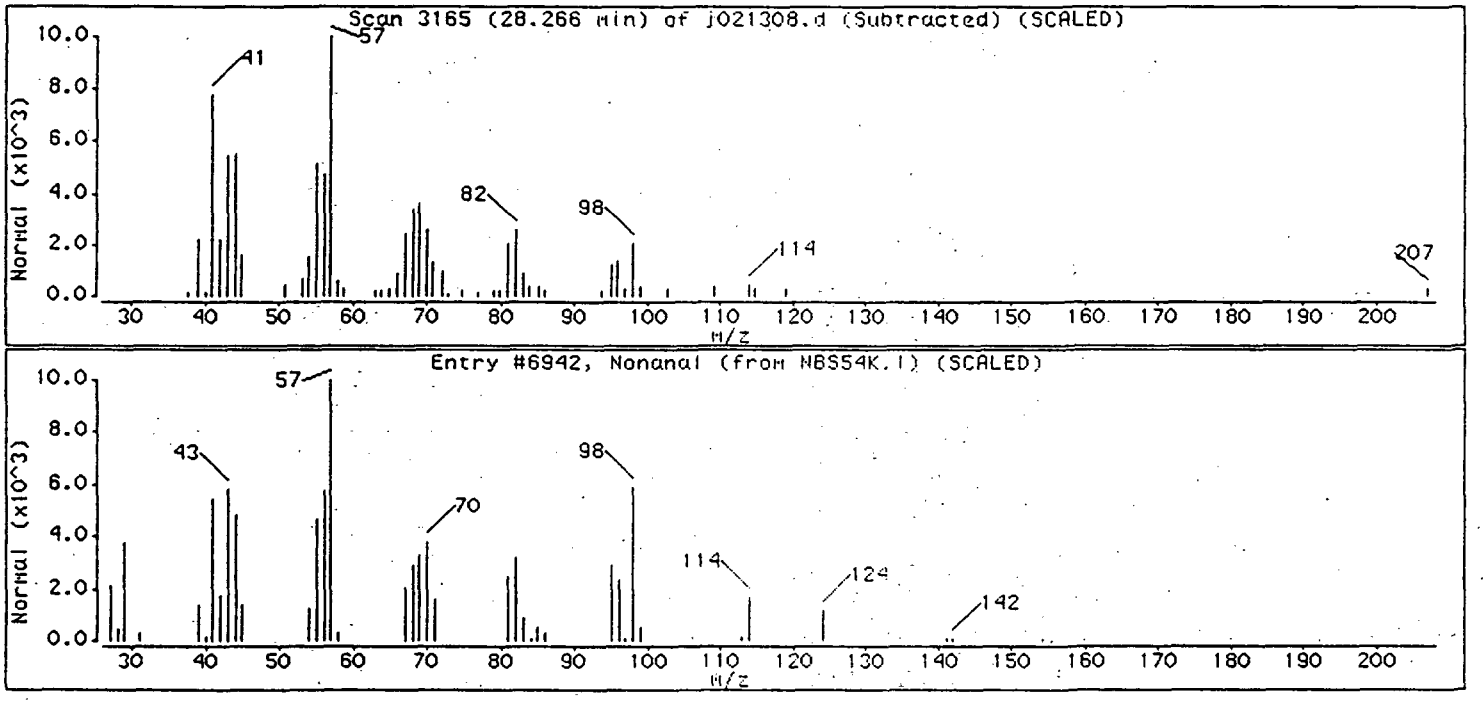




Data File: /chem/msdj.i/j-13feb.b/j021308.d
Date : 13-FEB-1997 14:01
Instrument: msdj.i
Client ID: 013197D1
Column phase: RTx-624

Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonanal	124-19-6	NBS54K.I	6942	64



ort Date : 09-Jan-1997 14:25

Air Toxics Limited

INITIAL CALIBRATION DATA

rt Cal Date : 09-JAN-97 10:44
Cal Date : 09-JAN-1997 12:48
nt Method : ISTD
gin : Force
get Version : 3.12
egrator : HP RTE
hod file : /chem/msdj.i/j-09jan.b/to140109.m
Date : 09-Jan-1997 14:23 fayala
ve Type : Average

ibration File Names:
el 2: /chem/msdj.i/j-09jan.b/j010905.d
el 3: /chem/msdj.i/j-09jan.b/j010906.d
el 4: /chem/msdj.i/j-09jan.b/j010907.d
el 5: /chem/msdj.i/j-09jan.b/j010908.d
el 6: /chem/msdj.i/j-09jan.b/j010909.d

ompound	0.5000 Level 2	5 Level 3	10 Level 4	25 Level 5	50 Level 6	RRF	% RSD	
1 Propylene	0.79308	0.68716	0.66328	1.07471	0.97050	0.83775	21.427	
6 Dichlorodifluoromethane/FR 12	2.93315	3.02482	2.95409	3.43582	3.23579	3.11673	6.893	
7 Freon 114	2.22430	2.21634	2.20251	2.33267	2.26964	2.24909	2.360	
8 Chloromethane	1.21097	1.29756	1.22782	1.45358	1.36465	1.31092	7.658	
9 Vinyl Chloride	1.35849	1.38630	1.35452	1.45919	1.39207	1.39012	3.021	
0 1,3-Butadiene	1.00120	1.05160	1.02401	1.13941	1.06458	1.05616	4.983	
1 Bromomethane	1.15310	1.12122	1.10518	1.15298	1.24260	1.15502	4.603	
2 Chloroethane	0.89087	0.81099	0.78733	0.76766	0.75192	0.80175	6.798	
3 Vinyl Bromide	-----	-----	-----	-----	-----	-----	-----	<-
4 Trichlorofluoromethane/FR 11	2.92572	3.12915	3.11398	3.12528	3.07652	3.07413	2.782	
5 Ethanol	0.34398	0.53100	0.53857	0.31021	0.32468	0.40969	28.035	
6 Acrolein	-----	-----	-----	-----	-----	-----	-----	<-
7 1,1-Dichloroethene	1.19957	1.24020	1.24330	0.35049	0.82986	1.07269	19.864	
8 Freon 113	1.61922	1.69085	1.68332	1.70465	1.67246	1.67410	1.961	
0 Acetone	2.04650	2.40857	2.36088	1.27516	1.80660	1.97954	23.424	
9 Carbon Disulfide	3.70910	3.81804	3.80469	3.80710	3.76203	3.78019	1.193	
2 2-Propanol	1.83843	2.54131	2.58455	2.69571	2.65392	2.46278	14.379	
1 Acetonitrile	-----	-----	-----	-----	-----	-----	-----	<-
3 Methylene Chloride	1.15640	1.16629	1.14944	1.14506	1.11677	1.14679	1.622	
5 Acrylonitrile	-----	-----	-----	-----	-----	-----	-----	<-
4 trans-1,2-Dichloroethene	1.23119	1.25799	1.27469	1.30959	1.30209	1.27511	2.523	
6 MTBE	3.12518	3.36269	3.39170	3.43749	3.44219	3.35185	3.907	
7 Hexane	2.24699	2.37345	2.34206	2.36200	2.33037	2.33098	2.139	
8 1,1-Dichloroethane	2.31033	2.38615	2.35981	2.42335	2.34145	2.36422	1.822	
0 Vinyl Acetate	2.90308	3.90195	3.94374	4.11653	4.17636	3.80833	13.625	
9 Chloroprene	0.72169	0.84026	0.81546	0.83720	0.82280	0.80749	6.072	
2 2-Butanone	0.45941	0.56283	0.56051	0.58610	0.58984	0.55174	9.657	

FA 1-9-97

mkl 1-10-97

Air Toxics Limited

INITIAL CALIBRATION DATA

Start Cal Date : 09-JAN-97 10:44
End Cal Date : 09-JAN-1997 12:48
Quant Method : ISTD
Origin : Force
Target Version : 3.12
Integrator : HP RTE
Method file : /chem/msdj.i/j-09jan.b/to140109.m
Cal Date : 09-Jan-1997 14:23 fayala
Curve Type : Average

Compound	0.5000 Level 2	5 Level 3	10 Level 4	25 Level 5	50 Level 6	$\overline{RRF}$	% RSD	
31 cis-1,2-Dichloroethene	1.27313	1.34242	1.36752	1.38466	1.38425	1.35039	3.443	
35 Tetrahydrofuran	1.22139	1.30452	1.33778	1.34771	1.34424	1.31113	4.043	
34 Chloroform	2.37578	2.50641	2.51333	2.53491	2.51475	2.48904	2.579	
36 1,1,1-Trichloroethane	2.27582	2.35007	2.32087	2.36039	2.34502	2.33044	1.450	
37 Cyclohexane	2.16405	2.22698	2.18015	2.18465	2.14685	2.18054	1.372	
38 Carbon Tetrachloride	1.52623	1.86312	1.88808	1.94438	1.99956	1.84427	10.055	
40 Benzene	0.91745	0.94993	0.94534	0.97544	0.99807	0.95724	3.210	
41 1,2-Dichloroethane	0.34857	0.37226	0.37308	0.38384	0.39091	0.37373	4.300	
42 Heptane	0.59400	0.65634	0.65381	0.69350	0.69960	0.65945	6.387	
4 Dicyclopentadiene	*****	*****	*****	*****	*****	*****	*****	<-
2 Bicycloheptadiene	*****	*****	*****	*****	*****	*****	*****	<-
44 Trichloroethene	0.33974	0.36019	0.36286	0.37490	0.38702	0.36494	4.841	
45 1,2-Dichloropropane	0.30095	0.33158	0.33155	0.34037	0.34305	0.32950	5.091	
46 1,4-Dioxane	0.14842	0.17420	0.18038	0.19055	0.19912	0.17854	10.837	
47 Bromodichloromethane	0.50922	0.57100	0.58190	0.61115	0.62207	0.57907	7.640	
48 cis-1,3-Dichloropropene	0.13899	0.16138	0.16480	0.17198	0.17593	0.16262	8.856	
3 DMDS	*****	*****	*****	*****	*****	*****	*****	<-
49 4-Methyl-2-pentanone	0.63157	0.70911	0.72669	0.74509	0.75025	0.71254	6.749	
52 Octane	0.24123	0.25360	0.25893	0.28812	0.31257	0.27089	10.692	
51 Toluene	0.50929	0.56803	0.56702	0.60262	0.63770	0.57693	8.270	
53 trans-1,3-Dichloropropene	0.56209	0.40863	0.38802	0.39774	0.38286	0.42787	17.686	
54 1,1,2-Trichloroethane	0.35843	0.40656	0.38864	0.39902	0.38934	0.38840	4.716	
56 2-Hexanone	0.69137	0.97265	0.95260	0.99183	0.98288	0.91827	13.904	
55 Tetrachloroethene	0.39373	0.44280	0.43039	0.45117	0.47139	0.43790	6.589	
57 Dibromochloromethane	0.44537	0.54450	0.53521	0.56215	0.56464	0.53037	9.252	
58 1,2-Dibromoethane	0.46390	0.53634	0.51074	0.52934	0.52379	0.51282	5.638	
60 Chlorobenzene	0.79078	0.84965	0.83491	0.89292	0.90073	0.85380	5.264	
61 Ethyl Benzene	0.45419	0.53001	0.51086	0.57535	0.58796	0.53168	10.092	
62 m,p-Xylene	0.42424	0.50760	0.48990	0.56339	0.60391	0.51781	13.355	
63 o-Xylene	0.26877	0.32072	0.30830	0.35113	0.35209	0.32020	10.774	
64 Styrene	0.49831	0.66665	0.66425	0.75757	0.76958	0.67127	16.165	
65 Bromoform	0.19251	0.26325	0.25741	0.27892	0.28956	0.25633	14.774	
67 1,1,2,2-Tetrachloroethane	0.74745	0.84858	0.77533	0.79701	0.77437	0.78855	4.804	
68 4-Ethyltoluene(1)	0.89314	1.03981	1.05639	1.22314	1.17410	1.07732	11.959	
(2)	0.23154	0.26187	0.26843	0.32214	0.30122	0.27704	12.753	

Air Toxics Limited

INITIAL CALIBRATION DATA

ırt Cal Date : 09-JAN-97 10:44
ı Cal Date : 09-JAN-1997 12:48
ınt Method : ISTD
:gin : Force
:get Version : 3.12
:egrator : HP RTE
:hod file : /chem/msdj.i/j-09jan.b/to140109.m
l Date : 09-Jan-1997 14:23 fayala
:ve Type : Average

Compound	0.5000 Level 2	5 Level 3	10 Level 4	25 Level 5	50 Level 6	RRF	% RSD	
69 1,3,5-Trimethylbenzene(1)	0.37581	0.52191	0.51120	0.60695	0.56405	0.51598	16.866	
(2)	0.18938	0.24078	0.23927	0.26082	0.26040	0.23813	12.235	
70 alpha-Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
71 1,2,4-Trimethylbenzene	0.32796	0.41617	0.41030	0.48211	0.46330	0.41997	14.244	
72 1,3-Dichlorobenzene	0.43526	0.52652	0.50311	0.59652	0.59302	0.53089	12.672	
73 1,4-Dichlorobenzene	0.41464	0.51777	0.49948	0.57981	0.57694	0.51773	13.072	
74 Benzyl Chloride	0.70147	0.98722	0.97823	1.18188	1.14885	0.99953	19.048	
75 1,2-Dichlorobenzene	0.39804	0.47189	0.45709	0.53241	0.51562	0.47501	11.139	
5 1,2-Dibromo-3-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
76 1,2,4-Trichlorobenzene	0.16627	0.18587	0.16992	0.23615	0.24548	0.20074	18.664	
77 Hexachlorobutadiene	0.19126	0.20969	0.19172	0.23300	0.23201	0.21154	9.709	
59 Octafluorotoluene	2.20966	2.20467	2.22502	2.41605	2.52799	2.31668	6.363	
60 Toluene-d8	0.88011	0.89757	0.89390	0.92470	0.92760	0.90477	2.276	
66 Bromofluorobenzene	0.78490	0.79243	0.76473	0.77199	0.75735	0.77428	1.855	

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Report Date: 09-Jan-1997 14:21

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010905.d
Lab Smp Id: VSTD0005 Client Smp ID: VSTD0005
Inj Date : 09-JAN-1997 10:04
Operator : FA Inst ID: msdj.i
Smp Info : 2.5ml #296-25 100ppbv (0.5ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:21 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.689	16.689 (1.000)	130	193877	5.0			100.00	9624(Q)
16.689	16.689 (0.000)	128	43688			27.42- 127.42	22.53	
16.689	16.689 (0.000)	49	99136			125.67- 225.67	51.13	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.032	18.032 (1.000)	114	850139	5.0			100.00	9792
18.032	18.032 (0.000)	88	47264			0.00- 67.86	5.56	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.167	22.167 (1.000)	117	656394	5.0			100.00	7253
22.167	22.167 (0.000)	82	103704			10.92- 110.92	15.80	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.200	17.200 (1.031)	217	428402	5.0	4.8		100.00	9710
17.200	17.200 (0.000)	186	89248			17.99- 117.99	20.83	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.069	20.069 (1.113)	98	748213	5.0	4.9		100.00	9787
20.069	20.069 (0.000)	70	25808			0.00- 61.99	3.45	
20.069	20.069 (0.000)	100	145664			17.70- 117.70	19.47	

T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
6 Bromofluorobenzene					CAS #: 460-00-4			
036	24.036 (1.084)	95	515201	5.0	5.1		100.00	9673
036	24.036 (0.000)	174	71136			9.51- 109.51	13.81	
036	24.036 (0.000)	176	70920			9.33- 109.33	13.77	
1 Propylene					CAS #: 115-07-1			
.719	4.719 (0.283)	41	15376	0.50	0.47		100.00	7464(M)
.680	4.680 (0.280)	42	293			0.00- 69.90	1.91	
680	4.680 (0.280)	39	566			0.00- 88.45	3.68	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
276	5.276 (0.316)	85	56867	0.50	0.47		100.00	8543(M)
.276	5.276 (0.316)	87	1280			0.00- 81.43	2.25	
7 Freon 114					CAS #: 76-14-2			
015	7.015 (0.420)	135	43124	0.50	0.49		100.00	9511
.015	7.015 (0.000)	137	1213			0.00- 77.56	2.81	
8 Chloromethane					CAS #: 74-87-3			
.129	7.129 (0.427)	50	23478	0.50	0.46		100.00	8802(Q)
.129	7.129 (0.000)	52	891			8.12- 108.12	3.80	
9 Vinyl Chloride					CAS #: 75-01-4			
.236	8.236 (0.493)	62	26338	0.50	0.49		100.00	8364
.236	8.236 (0.000)	64	745			0.00- 74.69	2.83	
0 1,3-Butadiene					CAS #: 106-99-0			
.602	8.602 (0.515)	54	19411	0.50	0.47		100.00	9055(Q)
.602	8.602 (0.000)	39	2676			54.41- 154.41	13.79	
1 Bromomethane					CAS #: 74-83-9			
.151	10.151 (0.608)	94	22356	0.50	0.50		100.00	9050(Q)
151	10.151 (0.000)	96	2707			30.09- 130.09	12.11	
2 Chloroethane					CAS #: 75-00-3			
.753	10.753 (0.644)	64	17272	0.50	0.56		100.00	8945
.753	10.753 (0.000)	66	1021			0.00- 82.41	5.91	
4 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
.730	11.730 (0.703)	101	56723	0.50	0.48		100.00	9577
.730	11.730 (0.000)	103	8089			13.40- 113.40	14.26	
5 Ethanol					CAS #: 64-17-5			
.943	12.943 (0.776)	45	6669	0.50	0.42		100.00	(M)
.897	12.897 (0.773)	46	664			0.00- 59.96	9.96	
.714	12.714 (0.762)	43	507			0.00- 57.60	7.60	
7 1,1-Dichloroethene					CAS #: 75-35-4			
.149	13.149 (0.788)	96	23257	0.50	0.56		100.00	9392(Q)

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)									
13.149	13.149	(0.000)	61	10406			115.70- 215.70	44.74	
13.149	13.149	(0.000)	98	4000			13.69- 113.69	17.20	
18 Freon 113						CAS #: 76-13-1			
13.225	13.225	(0.792)	151	31393	0.50	0.48		100.00	9203(Q)
13.225	13.225	(0.000)	153	4874			16.69- 116.69	15.53	
13.225	13.225	(0.000)	101	12289			118.16- 218.16	39.15	
19 Carbon Disulfide						CAS #: 75-15-0			
13.530	13.530	(0.811)	76	71911	0.50	0.49		100.00	8000
20 Acetone						CAS #: 67-64-1			
13.446	13.446	(0.806)	43	39677	0.50	0.52		100.00	
13.446	13.446	(0.806)	58	13203			0.00- 83.28	33.28	
22 2-Propanol						CAS #: 67-63-0			
13.889	13.889	(0.832)	45	35643	0.50	0.37		100.00	7225
13.889	13.889	(0.000)	43	1230			0.00- 68.22	3.45	
13.889	13.889	(0.000)	59	329			0.00- 54.87	0.92	
23 Methylene Chloride						CAS #: 75-09-2			
14.240	14.240	(0.853)	84	22420	0.50	0.50		100.00	9691(Q)
14.240	14.240	(0.000)	49	8120			92.41- 192.41	36.22	
14.240	14.240	(0.000)	51	2590			0.00- 95.42	11.55	
24 trans-1,2-Dichloroethene						CAS #: 156-60-5			
14.736	14.736	(0.883)	96	23870	0.50	0.48		100.00	9422(Q)
14.736	14.736	(0.000)	61	8906			75.67- 175.67	37.31	
14.736	14.736	(0.000)	98	3813			3.80- 103.80	15.97	
26 MTBE						CAS #: 1634-04-4			
14.728	14.728	(0.882)	73	60590	0.50	0.47		100.00	6412
14.728	14.728	(0.000)	57	3341			0.00- 71.27	5.51	
14.728	14.728	(0.000)	41	4569			0.00- 79.08	7.54	
27 Hexane						CAS #: 110-54-3			
15.163	15.163	(0.909)	57	43564	0.50	0.48		100.00	7239(aQ)
15.163	15.163	(0.000)	43	9334			22.17- 122.17	21.43	
15.163	15.163	(0.000)	56	7065			4.62- 104.62	16.22	
28 1,1-Dichloroethane						CAS #: 75-34-3			
15.430	15.430	(0.925)	63	44792	0.50	0.49		100.00	9576
15.430	15.430	(0.000)	65	4252			0.00- 82.86	9.49	
29 Chloroprene						CAS #: 126-99-8			
15.560	15.560	(0.932)	53	13992	0.50	0.45		100.00	7903
15.560	15.560	(0.000)	88	1618			0.00- 92.08	11.56	

T	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
9 Chloroprene (continued)									
560	15.560	(0.000)	50	1070			0.00- 77.83	7.65	
0 Vinyl Acetate						CAS #: 108-05-4			
514	15.514	(0.930)	43	56284	0.50	0.38		100.00	5917(a)
514	15.514	(0.000)	86	992			0.00- 57.95	1.76	
1 cis-1,2-Dichloroethene						CAS #: 156-59-2			
338	16.338	(0.979)	96	24683	0.50	0.47		100.00	9101(Q)
338	16.338	(0.000)	61	8551			70.56- 170.56	34.64	
338	16.338	(0.000)	98	4091			7.68- 107.68	16.57	
2 2-Butanone						CAS #: 78-93-3			
323	16.323	(0.978)	72	8907	0.50	0.42		100.00	7766(Q)
323	16.323	(0.000)	43	9821			345.05- 445.05	110.26	
323	16.323	(0.000)	57	618			0.00- 74.86	6.94	
4 Chloroform						CAS #: 67-66-3			
773	16.773	(1.005)	83	46061	0.50	0.48		100.00	8125
773	16.773	(0.000)	85	8585			10.95- 110.95	18.64	
5 Tetrahydrofuran						CAS #: 109-99-9			
765	16.765	(1.005)	42	23680	0.50	0.46		100.00	7333
765	16.765	(0.000)	71	1794			0.00- 80.76	7.58	
765	16.765	(0.000)	72	2198			0.00- 87.69	9.28	
6 1,1,1-Trichlorethane						CAS #: 71-55-6			
055	17.055	(1.022)	97	44123	0.50	0.49		100.00	9537
055	17.055	(0.000)	99	8065			13.75- 113.75	18.28	
7 Cyclohexane						CAS #: 110-82-7			
139	17.139	(1.027)	56	41956	0.50	0.50		100.00	8184(Q)
139	17.139	(0.000)	84	8572			23.41- 123.41	20.43	
139	17.139	(0.000)	41	7796			16.76- 116.76	18.58	
8 Carbon Tetrachloride						CAS #: 56-23-5			
307	17.307	(1.037)	119	29590	0.50	0.41		100.00	6991
307	17.307	(0.000)	117	0			0.00- 50.00	0.00	
0 Benzene						CAS #: 71-43-2			
589	17.589	(0.975)	78	77996	0.50	0.48		100.00	9700
589	17.589	(0.000)	77	5151			0.00- 73.23	6.60	
1 1,2-Dichloroethane						CAS #: 107-06-2			
589	17.589	(0.975)	62	29633	0.50	0.47		100.00	8187
589	17.589	(0.000)	64	2769			0.00- 82.52	9.34	
2 Heptane						CAS #: 142-82-5			
810	17.810	(0.988)	43	50498	0.50	0.45		100.00	7604

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.810	17.810 (0.000)	57	8398			2.54- 102.54	16.63	
17.810	17.810 (0.000)	71	7675			0.00- 98.02	15.20	
44 Trichloroethene					CAS #: 79-01-6			
18.428	18.428 (1.022)	95	28883	0.50	0.46		100.00	7831(Q)
18.428	18.428 (0.000)	130	6035			24.68- 124.68	20.89	
18.428	18.428 (0.000)	97	4905			10.70- 110.70	16.98	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.741	18.741 (1.039)	63	25585	0.50	0.46		100.00	9515(Q)
18.741	18.741 (0.000)	62	4967			20.77- 120.77	19.41	
18.741	18.741 (0.000)	41	4996			21.18- 121.18	19.53	
46 1,4-Dioxane					CAS #: 123-91-1			
18.901	18.901 (1.048)	88	12618	0.50	0.42		100.00	8935
18.901	18.901 (0.000)	58	2294			15.56- 115.56	18.18	
18.901	18.901 (0.000)	57	975			0.00- 77.87	7.73	
47 Bromodichloromethane					CAS #: 75-27-4			
19.092	19.092 (1.059)	83	43291	0.50	0.44		100.00	9237
19.092	19.092 (0.000)	85	7151			9.04- 109.04	16.52	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.687	19.687 (1.092)	75	17015	0.72	0.62		100.00	9191
19.687	19.687 (0.000)	77	1764			0.00- 91.71	10.37	
19.687	19.687 (0.000)	39	2217			2.42- 102.42	13.03	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.802	19.802 (1.098)	43	53692	0.50	0.44		100.00	9481
19.802	19.802 (0.000)	58	5680			0.00- 87.30	10.58	
19.802	19.802 (0.000)	85	1907			0.00- 62.52	3.55	
51 Toluene					CAS #: 108-88-3			
20.168	20.168 (1.118)	92	43297	0.50	0.44		100.00	8444(Q)
20.168	20.168 (0.000)	91	22089			132.99- 232.99	51.02	
52 Octane					CAS #: 111-65-9			
20.152	20.152 (1.118)	57	20508	0.50	0.44		100.00	7415(Q)
20.152	20.152 (0.000)	85	6379			45.68- 145.68	31.10	
20.152	20.152 (0.000)	43	15346			180.18- 280.18	74.83	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.381	20.381 (0.919)	75	7379	0.10	0.13		100.00	4065
20.381	20.381 (0.000)	77	171			0.00- 60.23	2.32	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.687	20.687 (0.933)	97	23527	0.50	0.46		100.00	9685(Q)

T	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
4 1,1,2-Trichloroethane (continued)								
687	20.687 (0.000)	99	3870			8.34- 108.34	16.45	
687	20.687 (0.000)	83	5623			34.77- 134.77	23.90	
5 Tetrachloroethene					CAS #: 127-18-4			
954	20.954 (0.945)	166	25844	0.50	0.45		100.00	8606(Q)
954	20.954 (0.000)	129	5624			25.01- 125.01	21.76	
954	20.954 (0.000)	131	5443			22.59- 122.59	21.06	
6 2-Hexanone					CAS #: 591-78-6			
923	20.923 (0.944)	43	45381	0.50	0.38		100.00	8349
923	20.923 (0.000)	58	6457			5.10- 105.10	14.23	
923	20.923 (0.000)	100	1108			0.00- 59.45	2.44	
7 Dibromochloromethane					CAS #: 124-48-1			
297	21.297 (0.961)	129	29234	0.50	0.42		100.00	8135
297	21.297 (0.000)	208	191			0.00- 52.39	0.65	
8 1,2-Dibromoethane					CAS #: 106-93-4			
518	21.518 (0.971)	107	30450	0.50	0.45		100.00	9568(Q)
518	21.518 (0.000)	109	6565			34.81- 134.81	21.56	
0 Chlorobenzene					CAS #: 108-90-7			
220	22.220 (1.002)	112	51906	0.50	0.46		100.00	8814
220	22.220 (0.000)	114	4471			0.00- 82.51	8.61	
220	22.220 (0.000)	77	7504			4.56- 104.56	14.46	
1 Ethyl Benzene					CAS #: 100-41-4			
296	22.296 (1.006)	106	29813	0.50	0.43		100.00	
296	22.296 (1.006)	91	103451			297.00- 397.00	347.00	
2 m,p-Xylene					CAS #: 108-38-3			
457	22.457 (1.013)	106	55694	1.0	0.82		100.00	
457	22.457 (1.013)	91	120203			165.83- 265.83	215.83	
3 o-Xylene					CAS #: 95-47-6			
136	23.136 (1.044)	106	17642	0.50	0.42		100.00	9410(Q)
136	23.136 (0.000)	91	8283			134.56- 234.56	46.95	
4 Styrene					CAS #: 100-42-5			
143	23.143 (1.044)	104	32709	0.50	0.37		100.00	9444
143	23.143 (0.000)	78	3633			0.00- 95.19	11.11	
5 Bromoform					CAS #: 75-25-2			
563	23.563 (1.063)	171	12636	0.50	0.38		100.00	8554(Q)
563	23.563 (0.000)	173	5870			146.98- 246.98	46.45	
7 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
181	24.181 (1.091)	83	49062	0.50	0.47		100.00	8028

RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)									
24.181	24.181	(0.000)	85	6781			12.99- 112.99	13.82	
68 4-Ethyltoluene						CAS #: 622-96-8			
24.585	24.585	(1.109)	105	58625	0.50	0.41		100.00	9412(M)
24.593	24.593	(1.109)	120	15198	0.50	0.42	0.00- 77.10	25.92	
69 1,3,5-Trimethylbenzene						CAS #: 108-67-8			
24.684	24.684	(1.114)	105	24668	0.50	0.36		100.00	7605(QMH)
24.684	24.684	(1.114)	120	12431	0.50	0.40	106.21- 206.21	50.39	
71 1,2,4-Trimethylbenzene						CAS #: 95-63-6			
25.440	25.440	(1.148)	105	21527	0.50	0.39		100.00	8355
25.440	25.440	(0.000)	120	2059			0.00- 91.22	9.56	
72 1,3-Dichlorobenzene						CAS #: 541-73-1			
26.172	26.172	(1.181)	146	28570	0.50	0.41		100.00	
26.164	26.164	(1.180)	148	18554			14.94- 114.94	64.94	
26.172	26.172	(1.181)	111	14543			0.90- 100.90	50.90	
73 1,4-Dichlorobenzene						CAS #: 106-46-7			
26.332	26.332	(1.188)	146	27217	0.50	0.40		100.00	
26.355	26.355	(1.189)	148	16966			12.34- 112.34	62.34	
26.340	26.340	(1.188)	111	13202			0.00- 98.51	48.51	
74 Benzyl Chloride						CAS #: 100-44-7			
26.584	26.584	(1.199)	91	46044	0.50	0.35		100.00	8814
26.584	26.584	(0.000)	126	1452			0.00- 66.13	3.15	
75 1,2-Dichlorobenzene						CAS #: 95-50-1			
27.225	27.225	(1.228)	146	26127	0.50	0.42		100.00	9213
27.225	27.225	(0.000)	148	3024			10.67- 110.67	11.57	
27.225	27.225	(0.000)	111	1788			0.00- 85.87	6.84	
76 1,2,4-Trichlorobenzene						CAS #: 120-82-1			
31.619	31.619	(1.426)	180	10914	0.50	0.41		100.00	9082(Q)
31.619	31.619	(0.000)	182	1603			32.25- 132.25	14.69	
77 Hexachlorobutadiene						CAS #: 87-68-3			
32.031	32.031	(1.445)	225	12554	0.50	0.45		100.00	8791
32.031	32.031	(0.000)	223	1306			8.04- 108.04	10.40	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Flag Legend

· Compound response manually integrated.
· Operator selected an alternate compound hit.

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Report Date: 09-Jan-1997 12:09

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j010905.d
Lab Smp Id: VSTD0005
Analysis Type: VOA
Quant Type: ISTD
Operator: FA
Method File: /chem/msdj.i/j-09jan.b/TO140109.m
Misc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD0005
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	193877	0.92
43 1,4-Difluorobenzene	832855	499713	1165997	850139	2.08
59 Chlorobenzene-d5	625059	375035	875083	656394	5.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.69	-0.02
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.03	-0.01
59 Chlorobenzene-d5	22.16	21.66	22.66	22.17	0.02

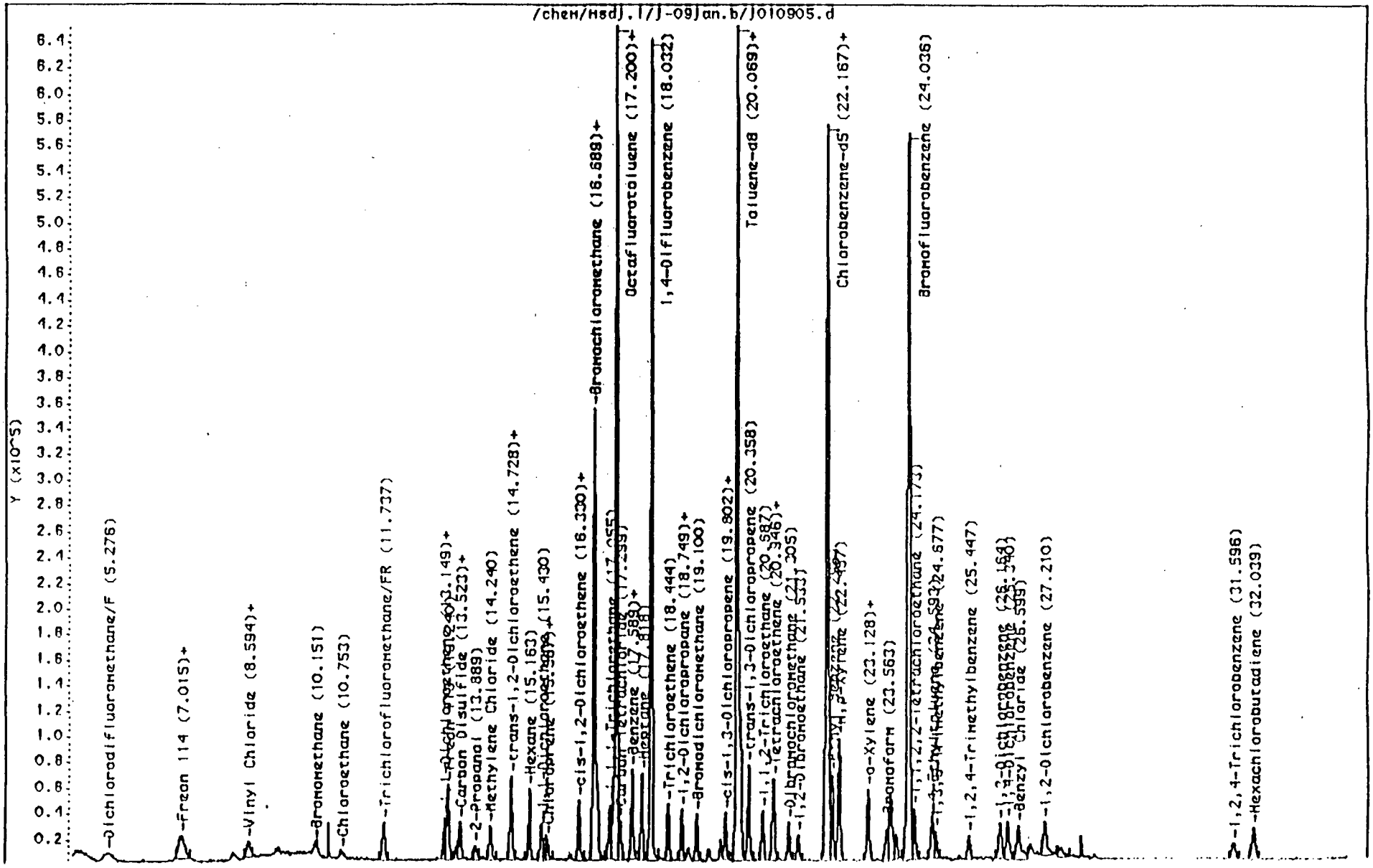
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-09jan.b/j010905.d
Date : 09-JAN-1997 10:04
Client ID: VSTD0005
Sample Info: 2.5ml M296-25 100ppbv (0.5ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: FA
Column diameter: 0.58



Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010906.d
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 09-JAN-1997 10:44
Operator : FA Inst ID: msdj.i
Smp Info : 25.0ml #296-25 100ppbv (5.0ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:16 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:08 Cal File: j010908.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.691	16.691 (1.000)	130	192118	5.0			100.00	9568(Q)
16.691	16.691 (0.000)	128	44008			27.84- 127.84	22.91	
16.691	16.691 (0.000)	49	104608			135.03- 235.03	54.45	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.034	18.034 (1.000)	114	832855	5.0			100.00	9727
18.034	18.034 (0.000)	88	44176			0.00- 67.42	5.30	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.162	22.162 (1.000)	117	625059	5.0			100.00	7743
22.162	22.162 (0.000)	82	147072			23.02- 123.02	23.53	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.210	17.210 (1.031)	217	423557	5.0	4.8		100.00	9824
17.210	17.210 (0.000)	186	85760			14.15- 114.15	20.25	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.071	20.071 (1.113)	98	747546	5.0	5.0		100.00	9758
20.071	20.071 (0.000)	70	27300			0.00- 62.71	3.65	
20.071	20.071 (0.000)	100	139904			15.16- 115.16	18.72	

:a File: /chem/msdj.i/j-09jan.b/j010906.d
ort Date: 09-Jan-1997 14:16

	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
, Bromofluorobenzene					CAS #: 460-00-4			
38	24.038 (1.085)	95	495314	5.0	5.1		100.00	9690
38	24.038 (0.000)	174	71272			10.63- 110.63	14.39	
38	24.038 (0.000)	176	66416			6.50- 106.50	13.41	
Propylene					CAS #: 115-07-1			
83	4.683 (0.281)	41	132016	5.0	4.1		100.00	7657(Q)
83	4.683 (0.000)	42	6001			10.63- 110.63	4.55	
83	4.683 (0.000)	39	6312			13.77- 113.77	4.78	
Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
63	5.263 (0.315)	85	581123	5.0	4.8		100.00	9571
63	5.263 (0.000)	87	12882			0.00- 81.97	2.22	
Freon 114					CAS #: 76-14-2			
18	7.018 (0.420)	135	425798	5.0	4.9		100.00	9745
18	7.018 (0.000)	137	13045			0.00- 82.14	3.06	
Chloromethane					CAS #: 74-87-3			
40	7.140 (0.428)	50	249285	5.0	4.9		100.00	9498
40	7.140 (0.000)	52	5860			0.00- 87.12	2.35	
Vinyl Chloride					CAS #: 75-01-4			
46	8.246 (0.494)	62	266334	5.0	5.0		100.00	9534
46	8.246 (0.000)	64	7965			0.00- 77.24	2.99	
1,3-Butadiene					CAS #: 106-99-0			
89	8.589 (0.515)	54	202031	5.0	5.0		100.00	9778(Q)
89	8.589 (0.000)	39	31153			48.46- 148.46	15.42	
Bromomethane					CAS #: 74-83-9			
51	10.161 (0.609)	94	215407	5.0	4.8		100.00	9526(Q)
51	10.161 (0.000)	96	36192			48.31- 148.31	16.80	
Chloroethane					CAS #: 75-00-3			
41	10.741 (0.643)	64	155805	5.0	5.0		100.00	9645
41	10.741 (0.000)	66	9294			0.00- 81.47	5.97	
Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
17	11.717 (0.702)	101	601167	5.0	5.1		100.00	9840
17	11.717 (0.000)	103	82176			11.64- 111.64	13.67	
Ethanol					CAS #: 64-17-5			
47	12.747 (0.764)	45	102015	5.0	6.5		100.00	(H)
47	12.747 (0.764)	46	42245			0.00- 91.41	41.41	
47	12.747 (0.764)	43	23904			0.00- 73.43	23.43	
1,1-Dichloroethene					CAS #: 75-35-4			
4	13.144 (0.787)	96	238265	5.0	5.8		100.00	9305(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
13.144	13.144 (0.000)	61	122000			127.49- 227.49	51.20	
13.144	13.144 (0.000)	98	43168			12.80- 112.80	18.12	
18 Freon 113					CAS #: 76-13-1			
13.235	13.235 (0.793)	151	324843	5.0	5.0		100.00	9290(Q)
13.235	13.235 (0.000)	153	48984			13.46- 113.46	15.08	
13.235	13.235 (0.000)	101	120300			105.85- 205.85	37.03	
19 Carbon Disulfide					CAS #: 75-15-0			
13.518	13.518 (0.810)	76	733514	5.0	5.0		100.00	8027
20 Acetone					CAS #: 67-64-1			
13.388	13.388 (0.802)	43	462729	5.0	6.1		100.00	
13.388	13.388 (0.802)	58	138984			0.00- 80.04	30.04	
22 2-Propanol					CAS #: 67-63-0			
13.869	13.869 (0.831)	45	488232	5.0	5.2		100.00	7544
13.869	13.869 (0.000)	43	26146			0.00- 70.31	5.36	
13.869	13.869 (0.000)	59	5069			0.00- 53.94	1.04	
23 Methylene Chloride					CAS #: 75-09-2			
14.242	14.242 (0.853)	84	224066	5.0	5.1		100.00	9651(Q)
14.242	14.242 (0.000)	49	101848			104.22- 204.22	45.45	
14.242	14.242 (0.000)	51	32472			0.00- 99.17	14.49	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.731	14.731 (0.883)	96	241682	5.0	4.9		100.00	9589(Q)
14.731	14.731 (0.000)	61	118536			107.35- 207.35	49.05	
14.731	14.731 (0.000)	98	49080			15.15- 115.15	20.31	
26 MTBE					CAS #: 1634-04-4			
14.731	14.731 (0.883)	73	646033	5.0	5.0		100.00	6447
14.731	14.731 (0.000)	57	43376			0.00- 74.88	6.71	
14.731	14.731 (0.000)	41	43978			0.00- 75.22	6.81	
27 Hexane					CAS #: 110-54-3			
15.166	15.166 (0.909)	57	455982	5.0	5.1		100.00	7284
15.166	15.166 (0.000)	43	101843			19.51- 119.51	22.33	
15.166	15.166 (0.000)	56	75048			1.22- 101.22	16.46	
28 1,1-Dichloroethane					CAS #: 75-34-3			
15.440	15.440 (0.925)	63	458422	5.0	5.0		100.00	9634
15.440	15.440 (0.000)	65	41836			0.00- 80.49	9.13	
29 Chloroprene					CAS #: 126-99-8			
15.570	15.570 (0.933)	53	161430	5.0	5.2		100.00	7889
15.570	15.570 (0.000)	88	24764			0.00- 99.91	15.34	

ta File: /chem/msdj.i/j-09jan.b/j010906.d
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
.570	15.570 (0.000)	50	12487			0.00- 75.17	7.74	
30 Vinyl Acetate					CAS #: 108-05-4			
.501	15.501 (0.929)	43	749635	5.0	5.1		100.00	5945
.501	15.501 (0.000)	86	16469			0.00- 57.56	2.20	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
.333	16.333 (0.979)	96	257903	5.0	5.0		100.00	9750(Q)
.333	16.333 (0.000)	61	111071			98.98- 198.98	43.07	
.333	16.333 (0.000)	98	48344			14.35- 114.35	18.75	
32 2-Butanone					CAS #: 78-93-3			
.318	16.318 (0.978)	72	108129	5.0	5.1		100.00	7902(Q)
318	16.318 (0.000)	43	148791			434.74- 534.74	137.61	
318	16.318 (0.000)	57	9883			0.00- 82.20	9.14	
34 Chloroform					CAS #: 67-66-3			
.775	16.775 (1.005)	83	481526	5.0	5.0		100.00	9184
.775	16.775 (0.000)	85	94335			15.56- 115.56	19.59	
35 Tetrahydrofuran					CAS #: 109-99-9			
.760	16.760 (1.004)	42	250622	5.0	5.0		100.00	7488
.760	16.760 (0.000)	71	26184			0.00- 87.36	10.45	
.760	16.760 (0.000)	72	26934			0.00- 88.43	10.75	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
058	17.058 (1.022)	97	451490	5.0	5.0		100.00	9740
058	17.058 (0.000)	99	82088			12.67- 112.67	18.18	
37 Cyclohexane					CAS #: 110-82-7			
142	17.142 (1.027)	56	427842	5.0	5.1		100.00	8284(Q)
142	17.142 (0.000)	84	88251			21.88- 121.88	20.63	
142	17.142 (0.000)	41	72107			8.73- 108.73	16.85	
38 Carbon Tetrachloride					CAS #: 56-23-5			
309	17.309 (1.037)	119	357938	5.0	5.0		100.00	8578
309	17.309 (0.000)	117	40536			0.00- 89.33	11.32	
40 Benzene					CAS #: 71-43-2			
584	17.584 (0.975)	78	791151	5.0	5.0		100.00	9696
584	17.584 (0.000)	77	56750			0.00- 74.08	7.17	
41 1,2-Dichloroethane					CAS #: 107-06-2			
592	17.592 (0.975)	62	310040	5.0	5.0		100.00	8186
592	17.592 (0.000)	64	27950			0.00- 81.12	9.01	
42 Heptane					CAS #: 142-82-5			
321	17.321 (0.988)	43	546632	5.0	5.0		100.00	7677

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.821	17.821 (0.000)	57	84824			0.00- 98.34	15.52	
17.821	17.821 (0.000)	71	85616			0.00- 98.79	15.66	
44 Trichloroethene					CAS #: 79-01-6			
18.446	18.446 (1.023)	95	299983	5.0	4.9		100.00	7806(Q)
18.446	18.446 (0.000)	130	76000			35.60- 135.60	25.33	
18.446	18.446 (0.000)	97	56528			13.67- 113.67	18.84	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.751	18.751 (1.040)	63	276157	5.0	5.0		100.00	9705(Q)
18.751	18.751 (0.000)	62	61215			25.30- 125.30	22.17	
18.751	18.751 (0.000)	41	48193			9.67- 109.67	17.45	
46 1,4-Dioxane					CAS #: 123-91-1			
18.904	18.904 (1.048)	88	145083	5.0	4.9		100.00	9791(Q)
18.904	18.904 (0.000)	58	31616			28.21- 128.21	21.79	
18.904	18.904 (0.000)	57	10561			0.00- 76.12	7.28	
47 Bromodichloromethane					CAS #: 75-27-4			
19.102	19.102 (1.059)	83	475564	5.0	4.9		100.00	9379
19.102	19.102 (0.000)	85	86136			13.39- 113.39	18.11	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.682	19.682 (1.091)	75	193547	7.2	7.1		100.00	9557
19.682	19.682 (0.000)	77	16863			0.00- 80.06	8.71	
19.682	19.682 (0.000)	39	33537			9.78- 109.78	17.33	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.804	19.804 (1.098)	43	590585	5.0	5.0		100.00	9640
19.804	19.804 (0.000)	58	62135			0.00- 85.05	10.52	
19.804	19.804 (0.000)	85	21217			0.00- 61.97	3.59	
51 Toluene					CAS #: 108-88-3			
20.170	20.170 (1.118)	92	473090	5.0	4.9		100.00	9459(Q)
20.170	20.170 (0.000)	91	229824			118.43- 218.43	48.58	
52 Octane					CAS #: 111-65-9			
20.147	20.147 (1.117)	57	211213	5.0	4.7		100.00	8365(Q)
20.147	20.147 (0.000)	85	68920			48.51- 148.51	32.63	
20.147	20.147 (0.000)	43	186907			217.16- 317.16	88.49	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.399	20.399 (0.920)	75	51084	1.0	0.96		100.00	9676
20.399	20.399 (0.000)	77	3997			0.00- 77.26	7.82	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.689	20.689 (0.934)	97	254127	5.0	5.2		100.00	9745(Q)

	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
; 1,1,2-Trichloroethane (continued)								
689	20.689 (0.000)	99	42120			8.45- 108.45	16.57	
689	20.689 (0.000)	83	63523			38.16- 138.16	25.00	
i Tetrachloroethene					CAS #: 127-18-4			
956	20.956 (0.946)	166	276775	5.0	5.0		100.00	9270(Q)
956	20.956 (0.000)	129	64904			33.09- 133.09	23.45	
956	20.956 (0.000)	131	62344			29.81- 129.81	22.53	
; 2-Hexanone					CAS #: 591-78-6			
918	20.918 (0.944)	43	607966	5.0	5.3		100.00	8560
918	20.918 (0.000)	58	87648			0.00- 99.38	14.42	
918	20.918 (0.000)	100	16046			0.00- 59.04	2.64	
' Dibromochloromethane					CAS #: 124-48-1			
307	21.307 (0.961)	129	340343	5.0	5.1		100.00	8205
307	21.307 (0.000)	208	4327			0.00- 54.97	1.27	
1,2-Dibromoethane					CAS #: 106-93-4			
528	21.528 (0.971)	107	335245	5.0	5.2		100.00	9790(Q)
528	21.528 (0.000)	109	80849			43.25- 143.25	24.12	
Chlorobenzene					CAS #: 108-90-7			
215	22.215 (1.002)	112	531080	5.0	5.0		100.00	9327
215	22.215 (0.000)	114	43088			0.00- 81.47	8.11	
215	22.215 (0.000)	77	87313			13.78- 113.78	16.44	
Ethyl Benzene					CAS #: 100-41-4			
99	22.299 (1.006)	106	331290	5.0	5.0		100.00	(H)
99	22.299 (1.006)	91	1148684			296.73- 396.73	346.73	
m,p-Xylene					CAS #: 108-38-3			
59	22.459 (1.013)	106	634566	10.0	9.8		100.00	(H)
59	22.459 (1.013)	91	1362372			164.69- 264.69	214.69	
o-Xylene					CAS #: 95-47-6			
23	23.123 (1.043)	106	200467	5.0	5.0		100.00	9728(Q)
23	23.123 (0.000)	91	112061			165.83- 265.83	55.90	
Styrene					CAS #: 100-42-5			
30	23.130 (1.044)	104	416695	5.0	5.0		100.00	9894
30	23.130 (0.000)	78	50240			0.00- 98.72	12.06	
Bromoform					CAS #: 75-25-2			
58	23.558 (1.063)	171	164546	5.0	5.1		100.00	8420(Q)
58	23.558 (0.000)	173	74536			143.98- 243.98	45.30	
1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
76	24.176 (1.091)	83	530413	5.0	5.4		100.00	9128

Data File: /chem/msdj.i/j-09jan.b/j010906.d
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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
24.176	24.176 (0.000)	85	77792			12.69- 112.69	14.67	
68 4-Ethyltoluene					CAS #: 622-96-8			
24.595	24.595 (1.110)	105	649945	5.0	4.8		100.00	9362(M)
24.595	24.595 (1.110)	120	163682	5.0	4.7	0.00- 76.35	25.18	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
24.687	24.687 (1.114)	105	326222	5.0	5.0		100.00	7991(M)
24.679	24.679 (1.114)	120	150504	5.0	5.0	0.00- 94.84	46.14	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
25.442	25.442 (1.148)	105	260129	5.0	5.0		100.00	8825
25.442	25.442 (0.000)	120	23798			0.00- 89.84	9.15	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
26.167	26.167 (1.181)	146	329109	5.0	5.0		100.00	
26.167	26.167 (1.181)	148	203666			11.88- 111.88	61.88	
26.167	26.167 (1.181)	111	153610			0.00- 96.67	46.67	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
26.342	26.342 (1.189)	146	323634	5.0	5.0		100.00	(H)
26.350	26.350 (1.189)	148	206187			13.71- 113.71	63.71	
26.350	26.350 (1.189)	111	144826			0.00- 94.75	44.75	
74 Benzyl Chloride					CAS #: 100-44-7			
26.594	26.594 (1.200)	91	617072	5.0	4.9		100.00	9278
26.594	26.594 (0.000)	126	21120			0.00- 66.49	3.42	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
27.227	27.227 (1.229)	146	294962	5.0	5.0		100.00	9764(Q)
27.227	27.227 (0.000)	148	35896			13.77- 113.77	12.17	
27.227	27.227 (0.000)	111	26496			0.00- 97.07	8.98	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
31.607	31.607 (1.426)	180	116181	5.0	4.6		100.00	9678(Q)
31.607	31.607 (0.000)	182	17792			45.53- 145.53	15.31	
77 Hexachlorobutadiene					CAS #: 87-68-3			
32.041	32.041 (1.446)	225	131070	5.0	5.0		100.00	9470
32.041	32.041 (0.000)	223	12093			7.67- 107.67	9.23	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

a File: /chem/msdj.i/j-09jan.b/j010906.d
ort Date: 09-Jan-1997 12:02

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

trument ID: msdj.i
File ID: j010906.d
Smp Id: VSTD005
lysis Type: VOA
nt Type: ISTD
rator: FA
hod File: /chem/msdj.i/j-09jan.b/TO140109.m
c Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD005
Level: LOW
Sample Type: AIR

OMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
3 Bromochloromethane	192118	115271	268965	192118	0.00
3 1,4-Difluorobenzene	832855	499713	1165997	832855	0.00
9 Chlorobenzene-d5	625059	375035	875083	625059	0.00

OMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
3 Bromochloromethane	16.69	16.19	17.19	16.69	0.00
3 1,4-Difluorobenzene	18.03	17.53	18.53	18.03	0.00
9 Chlorobenzene-d5	22.16	21.66	22.66	22.16	0.00

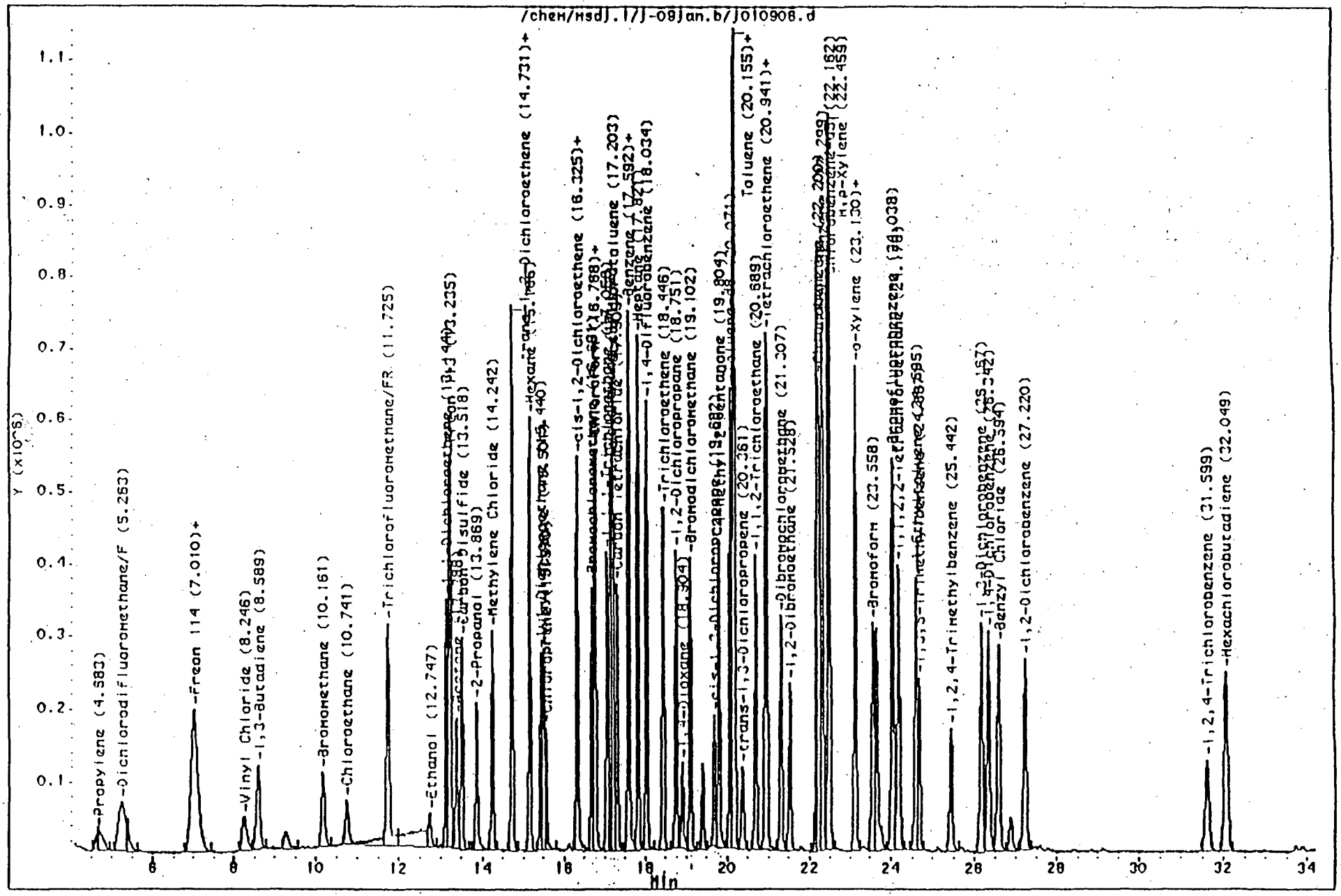
A UPPER LIMIT = + 40% of internal standard area.
A LOWER LIMIT = - 40% of internal standard area.
UPPER LIMIT = + 0.50 minutes of internal standard RT.
LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-09jan.b/j010908.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Sample Info: 25.0ml M296-25 100ppbv (5.0ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: FM
Column diameter: 0.58



Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

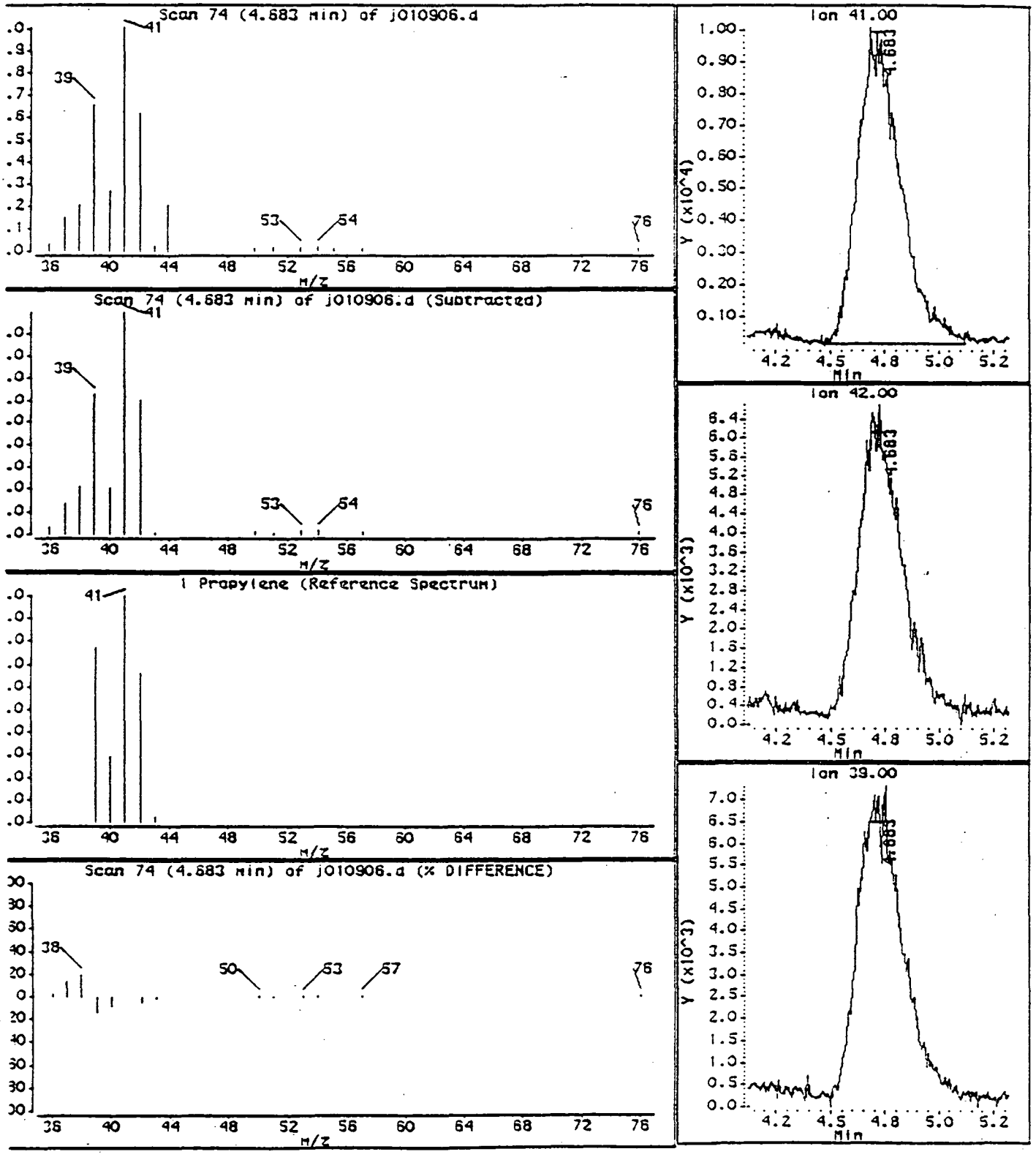
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

Operator: FA

Column phase: RTx-624

Column diameter: 0.58

1 Propylene



Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

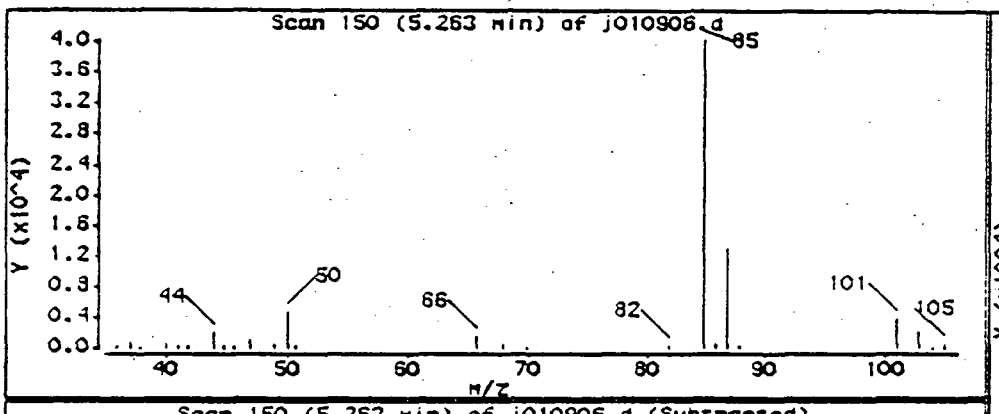
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

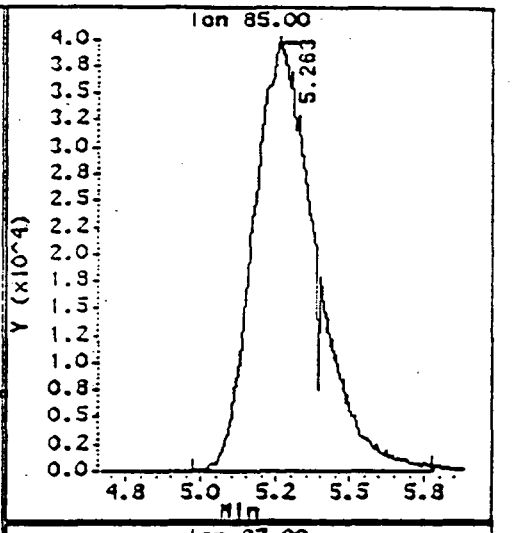
Operator: FR

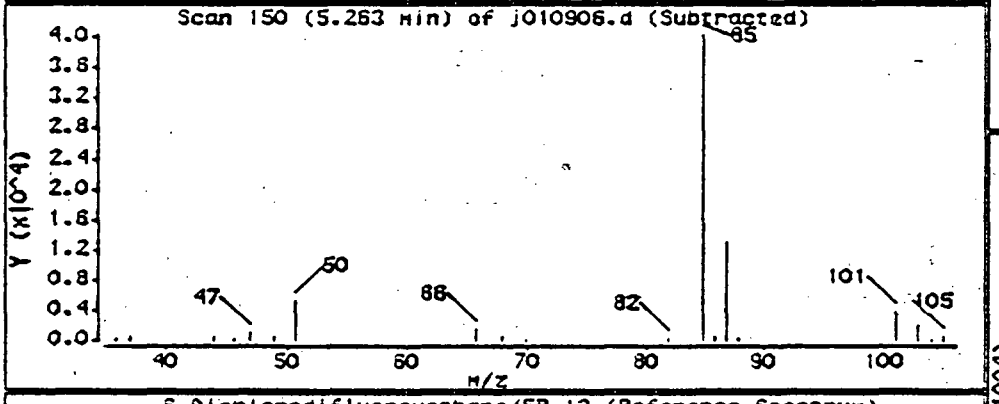
Column phase: RTx-624

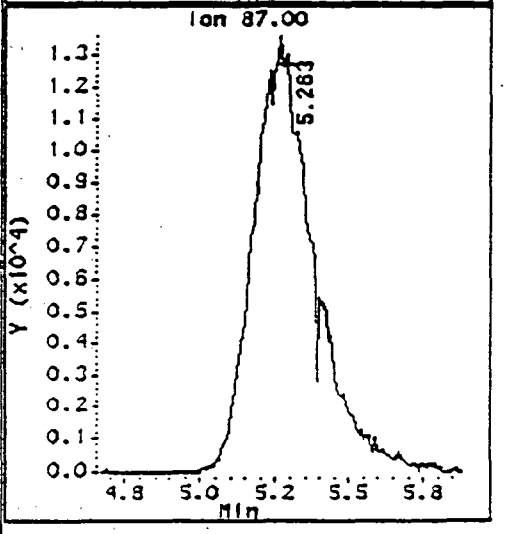
Column diameter: 0.58

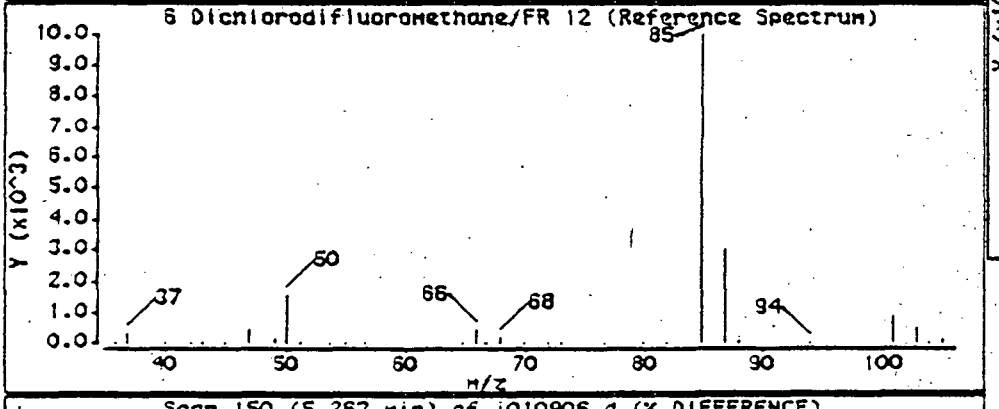
6 Dichlorodifluoromethane/FR 12

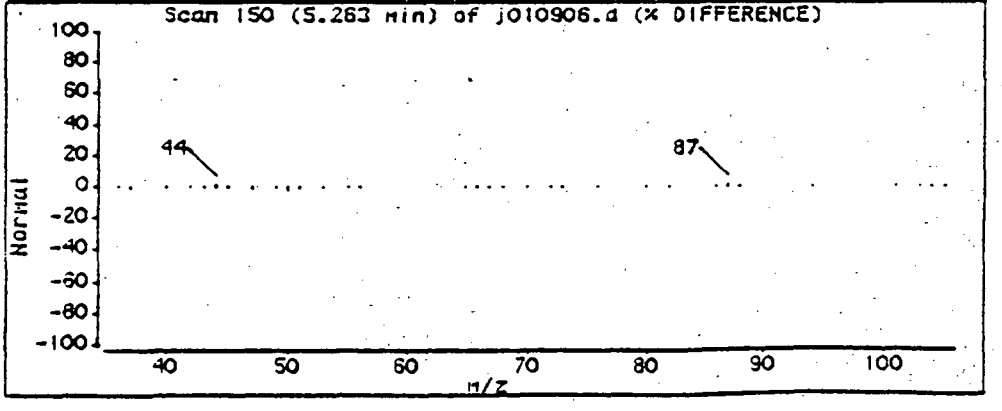












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

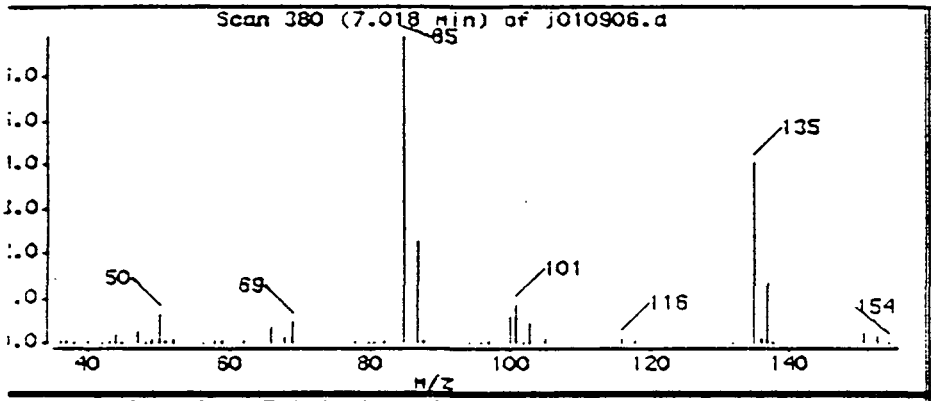
Client ID: VSTD005 Instrument: msdj.i

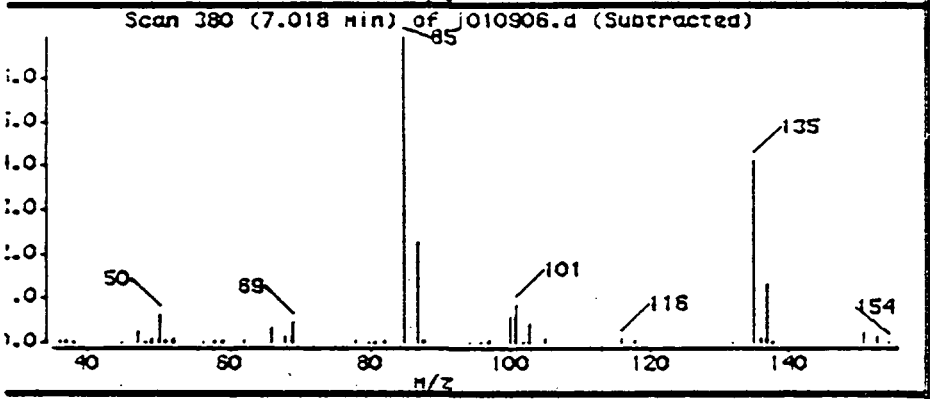
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

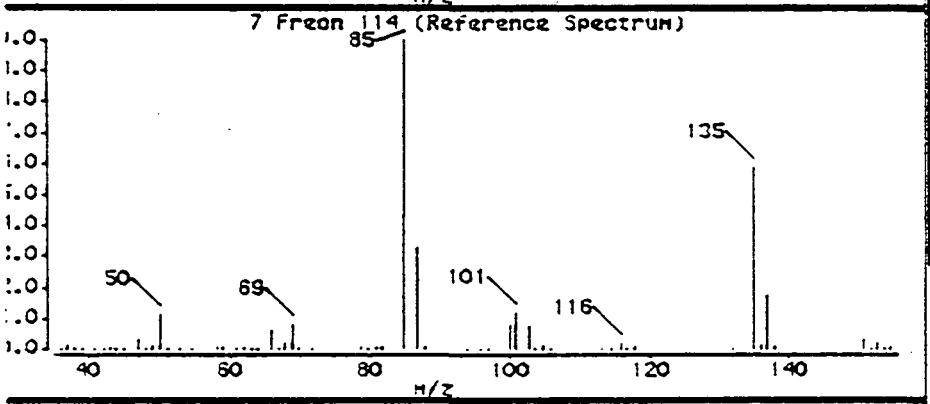
Operator: FR

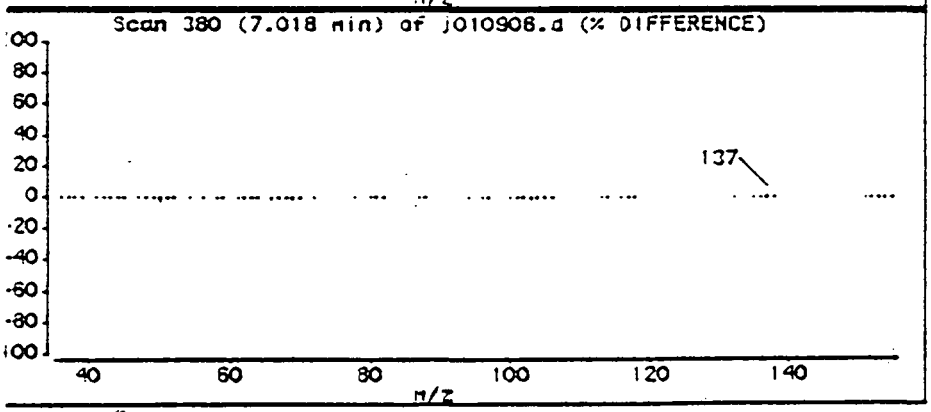
Column phase: RTx-624 Column diameter: 0.58

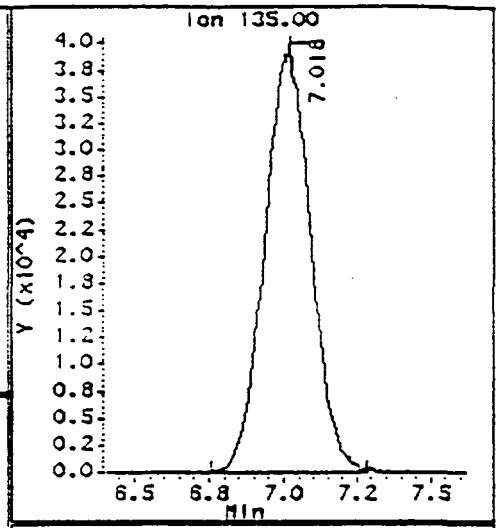
7 Freon 114

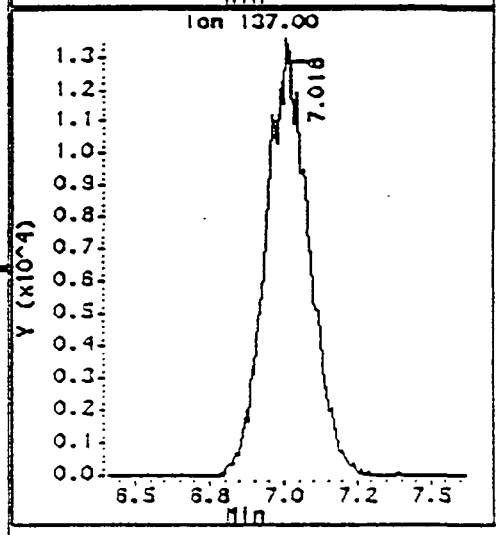












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Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

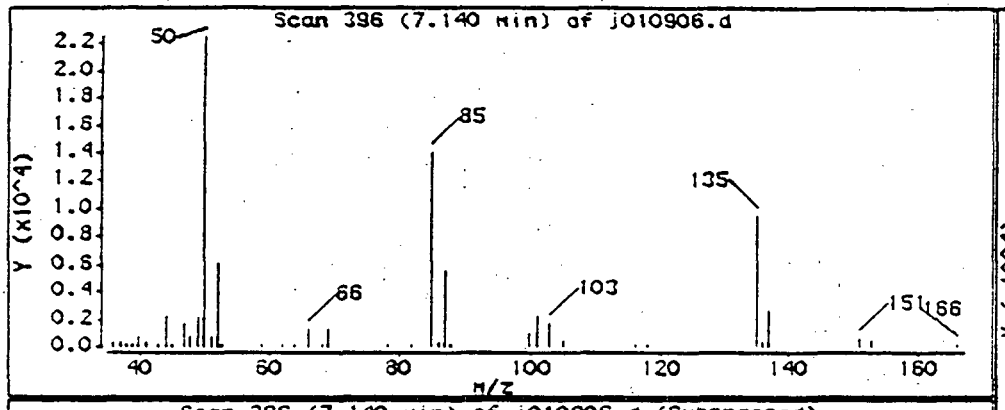
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

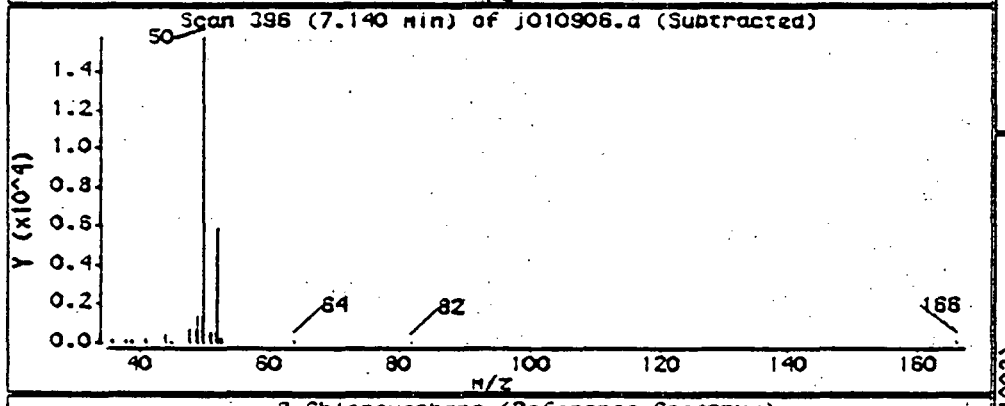
Operator: FA

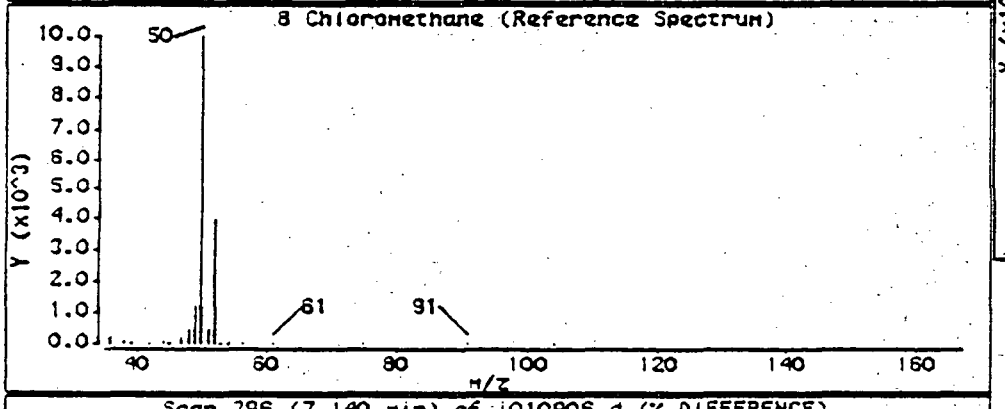
Column phase: RTx-624

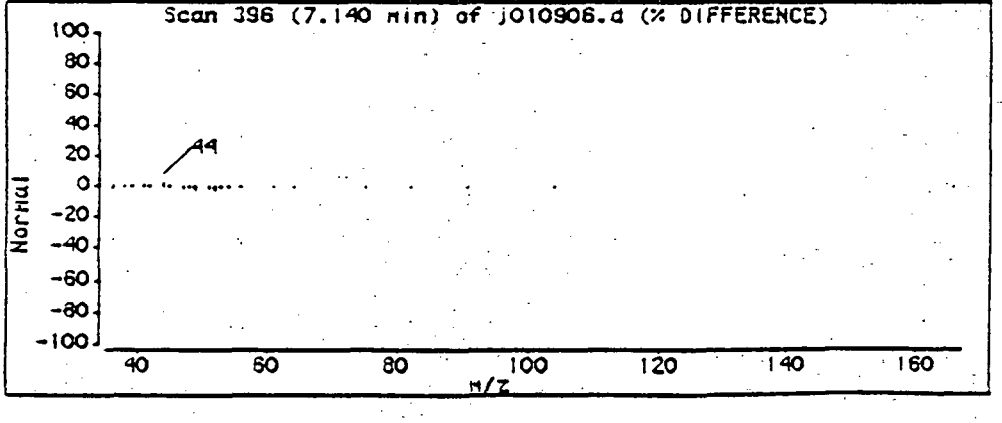
Column diameter: 0.58

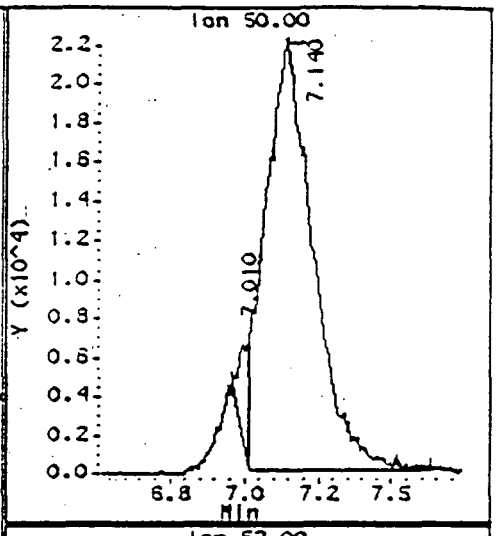
8 Chloromethane

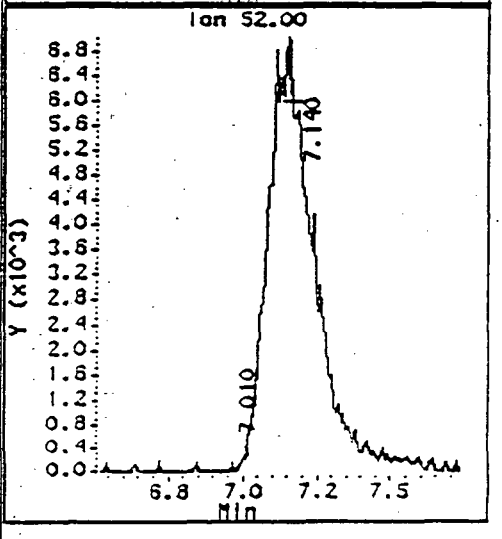












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

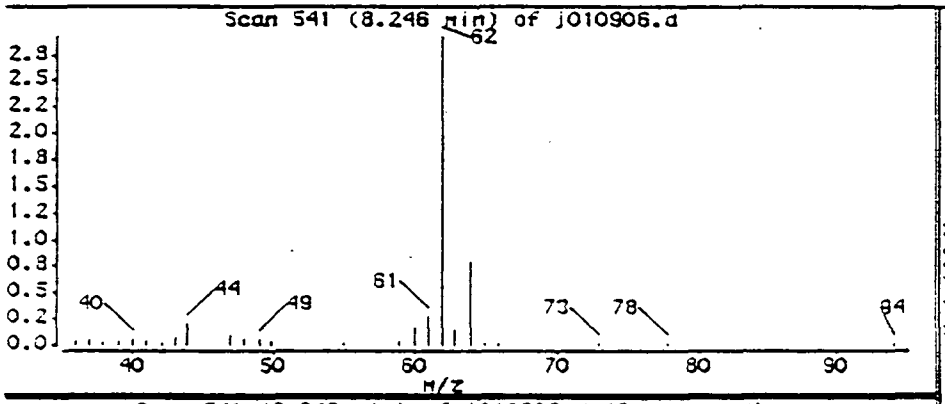
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

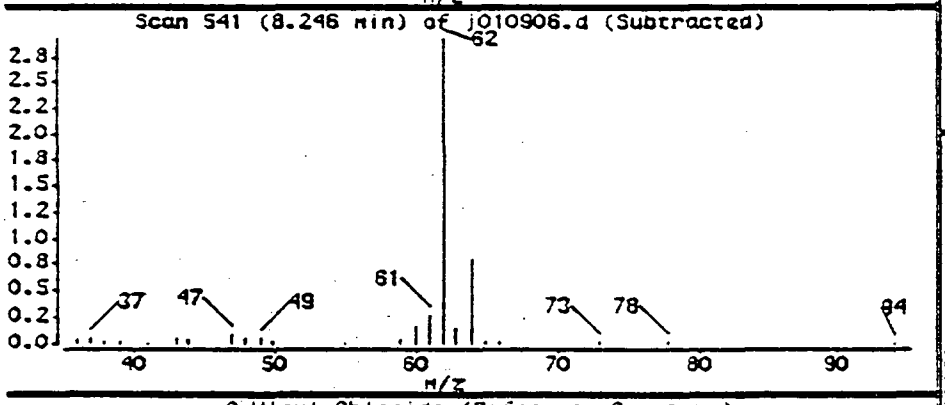
Operator: FA

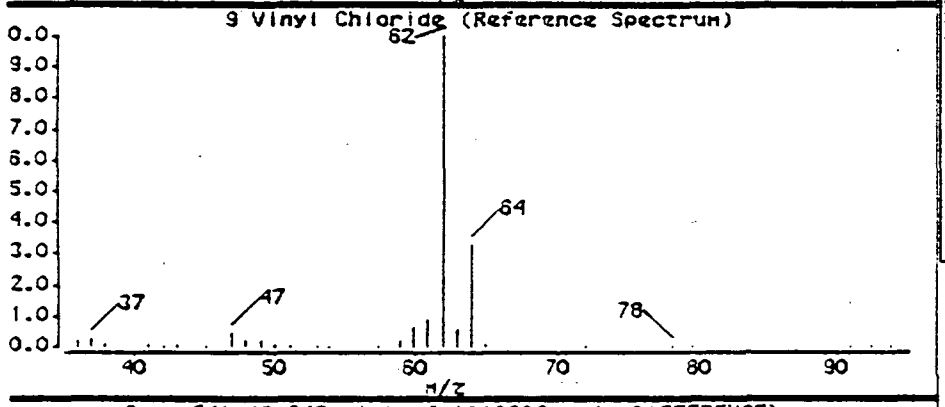
Column phase: RTx-624

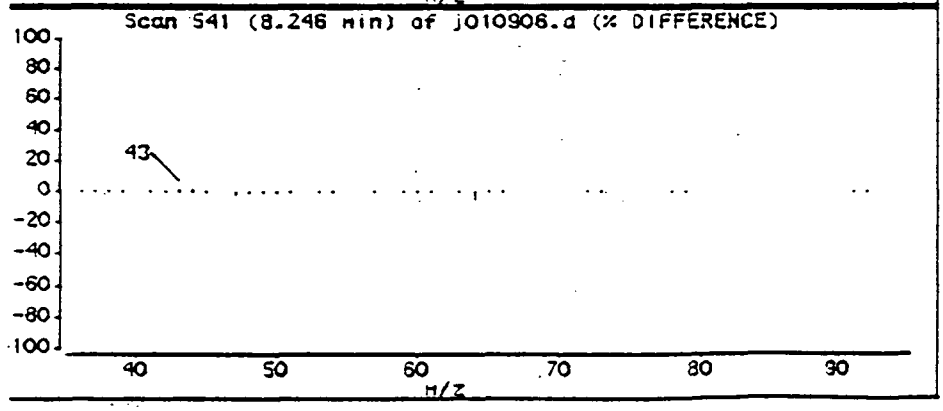
Column diameter: 0.58

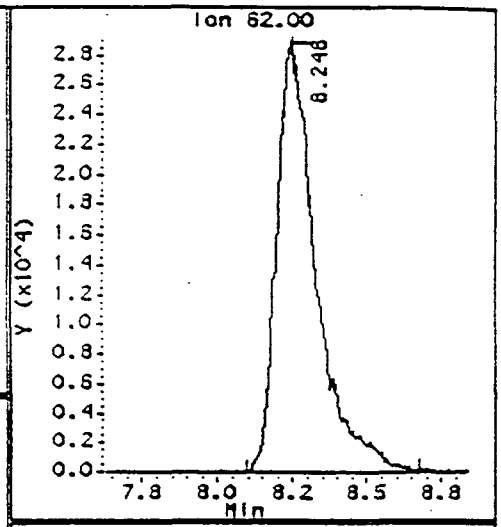
9 Vinyl Chloride

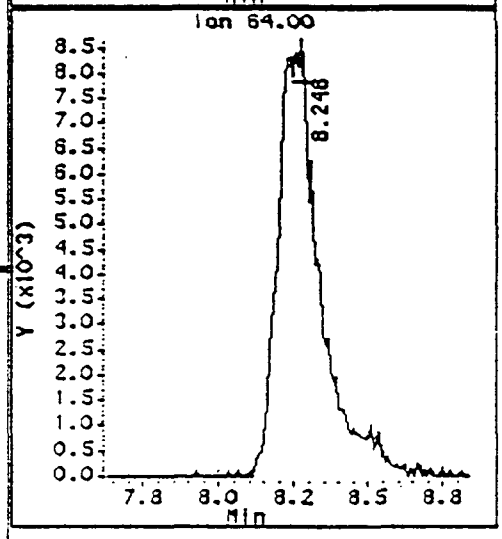






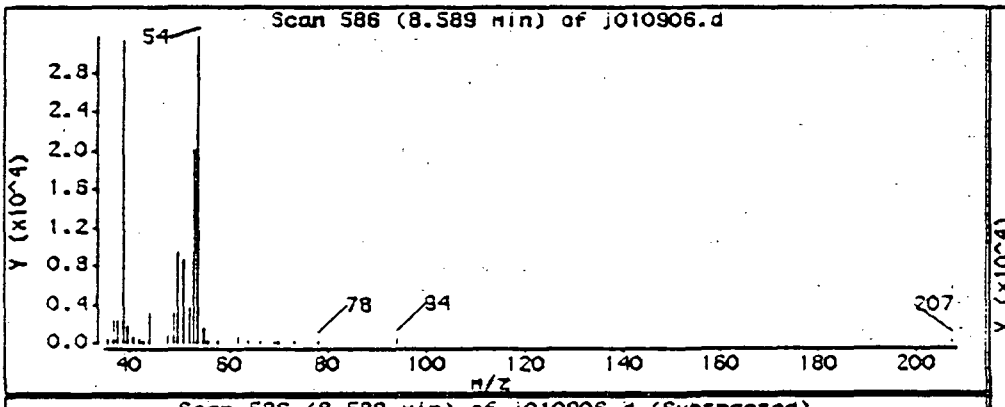


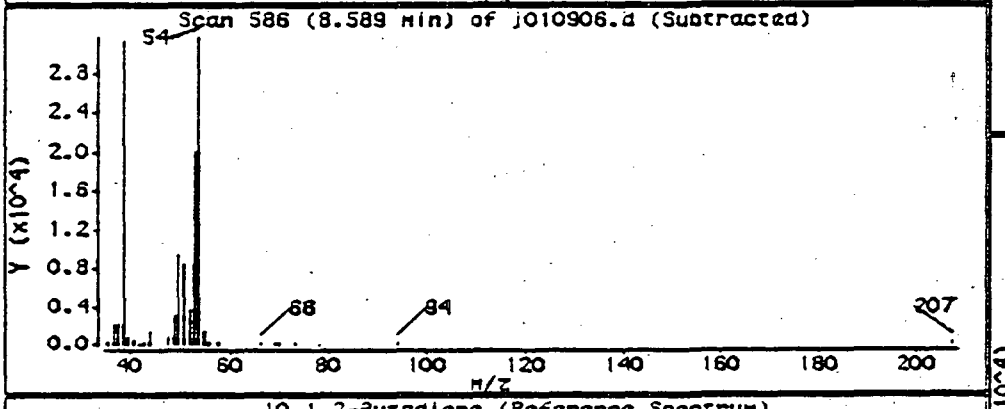


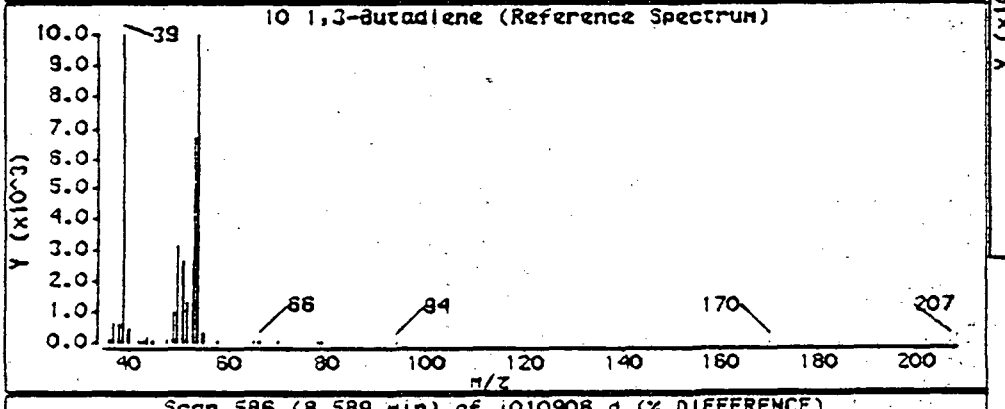


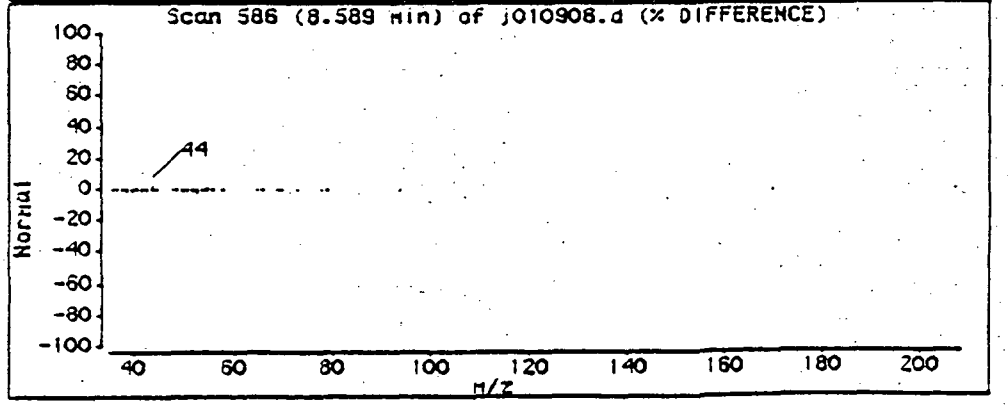
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005 Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
Column phase: RTx-624 Column diameter: 0.58

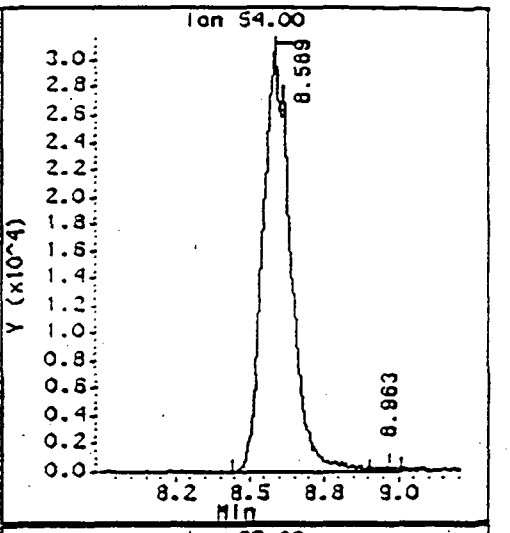
10 1,3-Butadiene

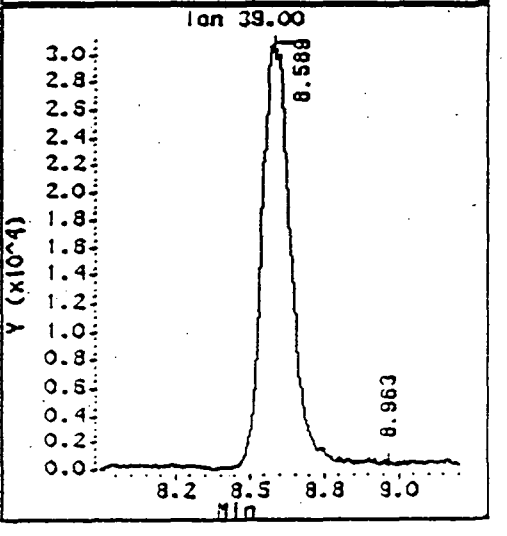






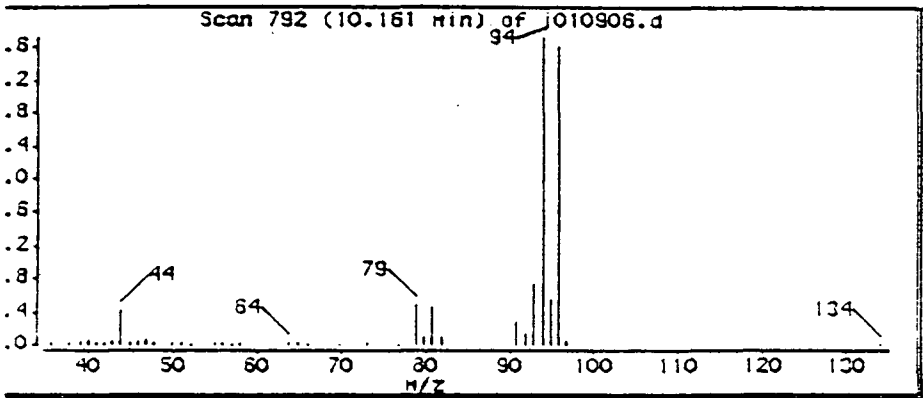


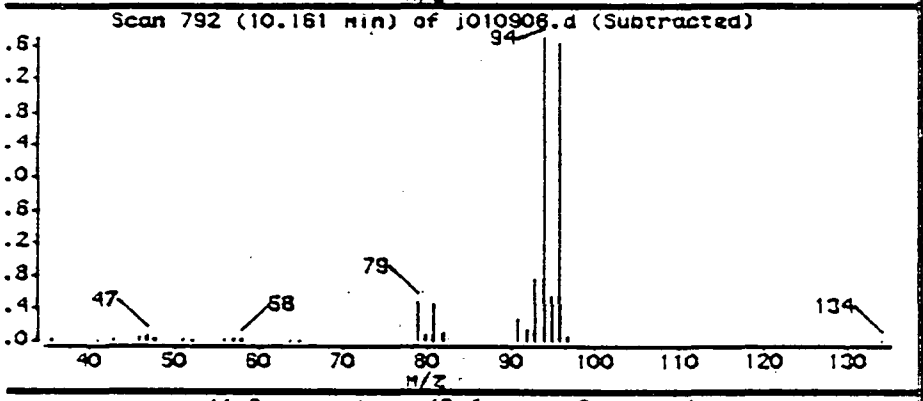


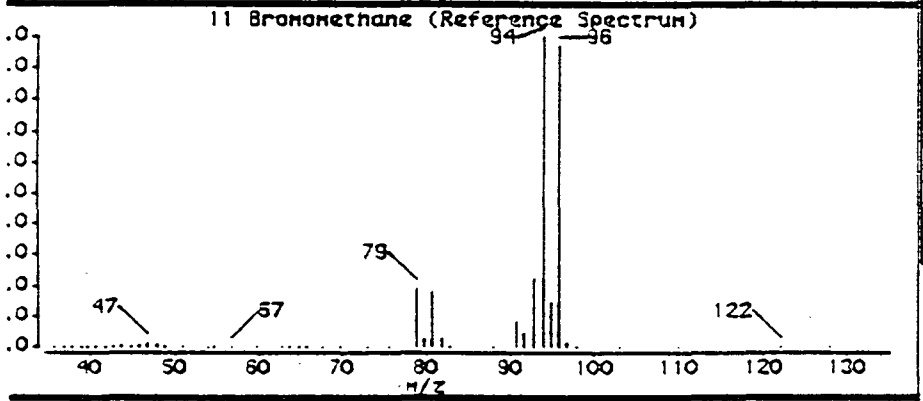


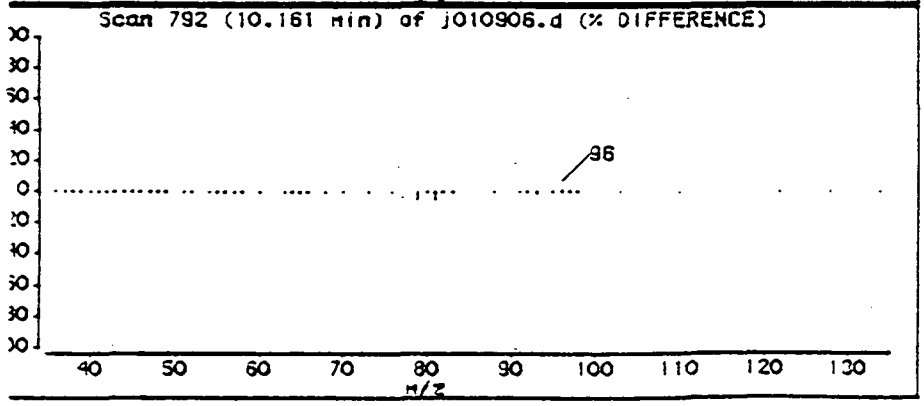
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005 Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FR
Column phase: RTx-624 Column diameter: 0.58

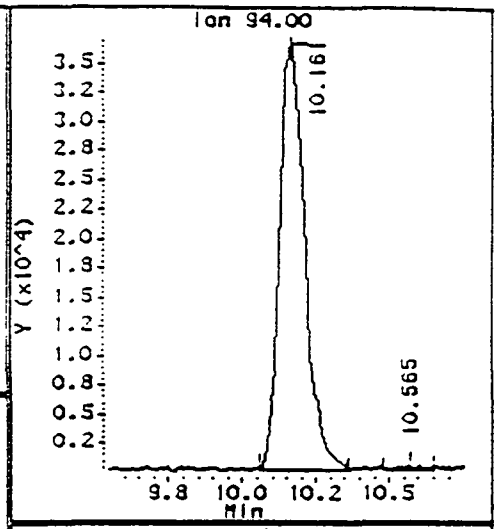
1 Bromomethane

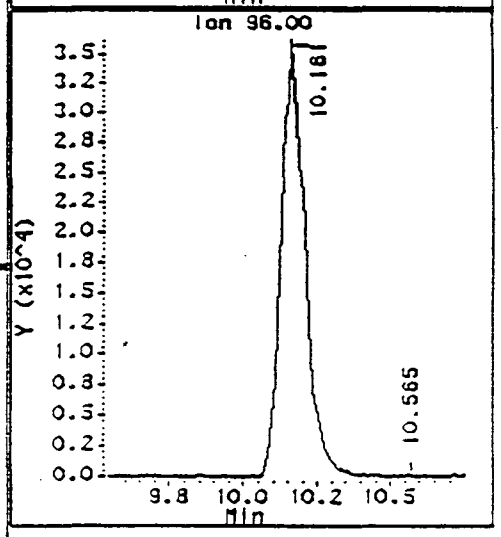












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

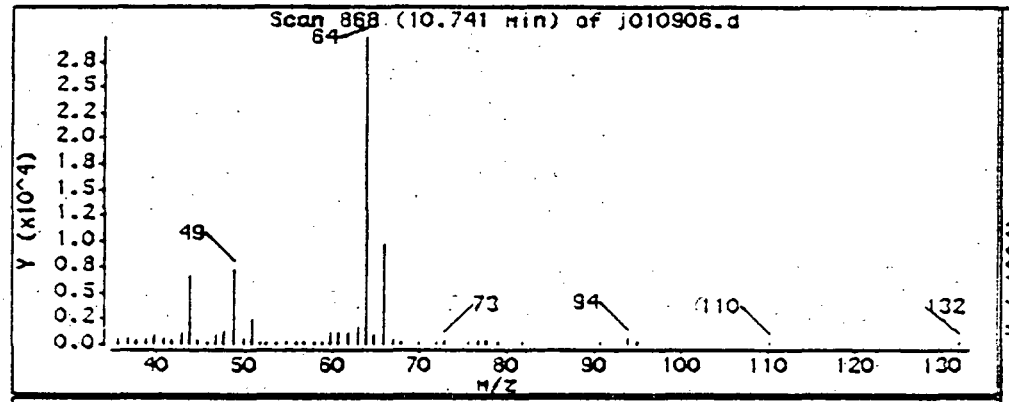
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

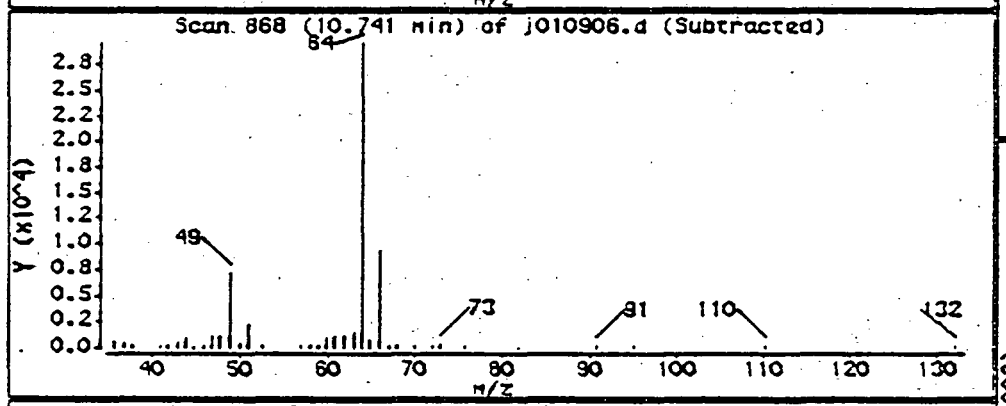
Operator: FA

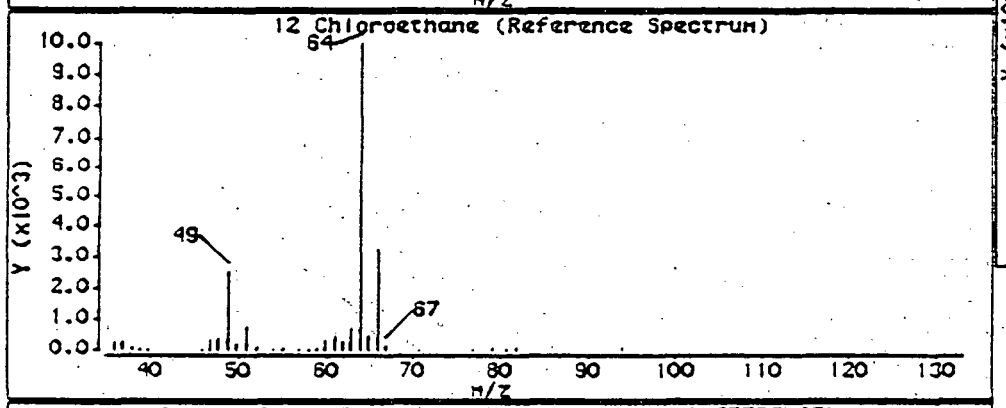
Column phase: RTx-624

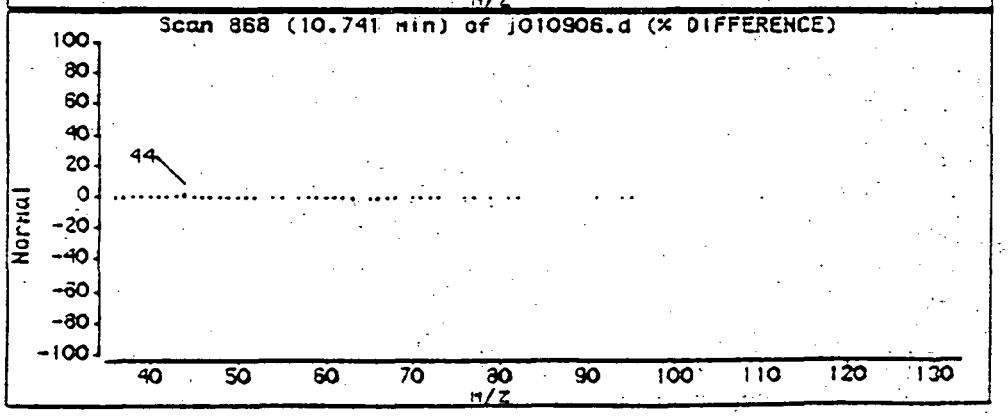
Column diameter: 0.58

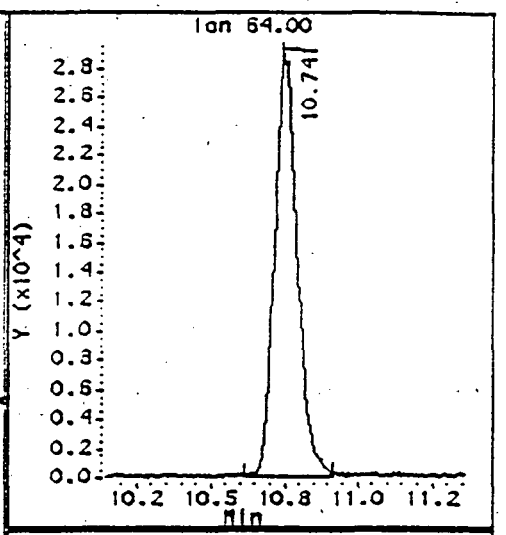
12 Chloroethane

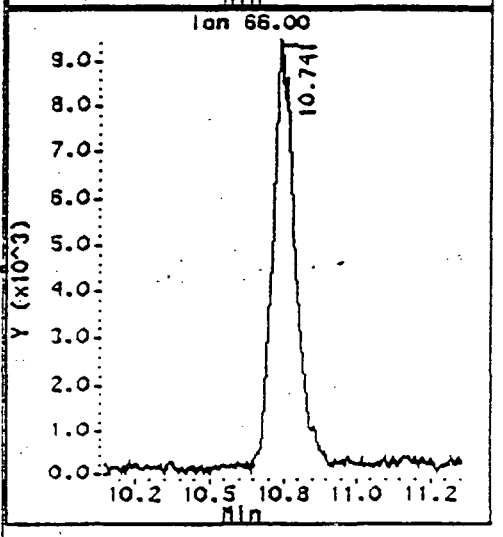












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

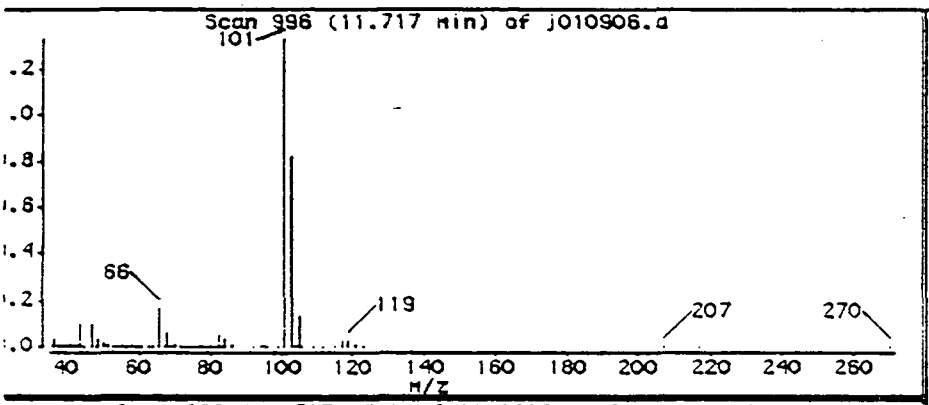
Client ID: VSTD005 Instrument: msdj.i

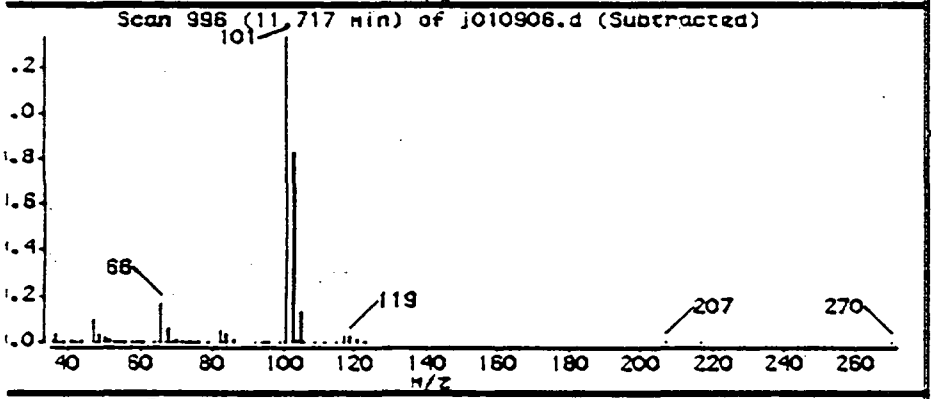
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

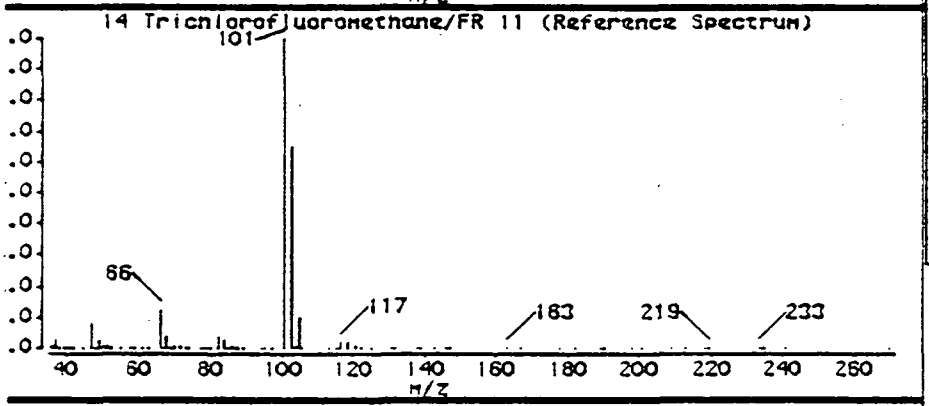
Operator: FR

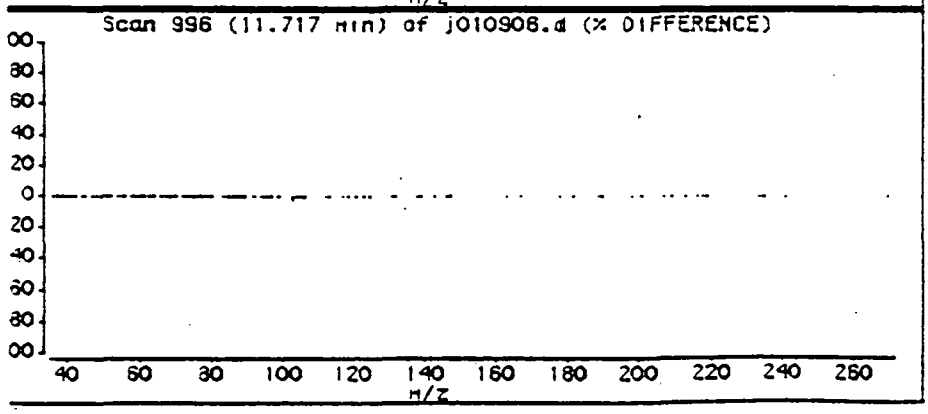
Column phase: RTx-624 Column diameter: 0.58

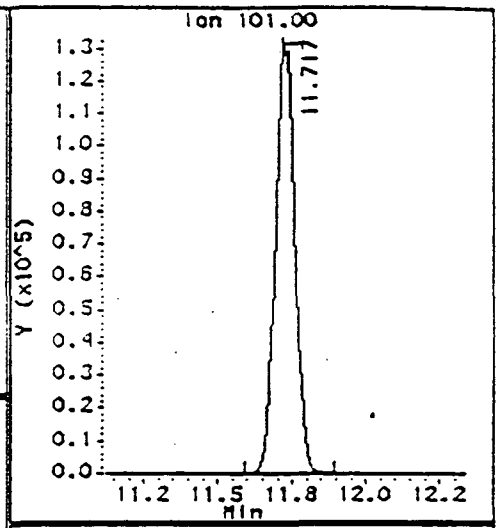
4 Trichlorofluoromethane/FR 11

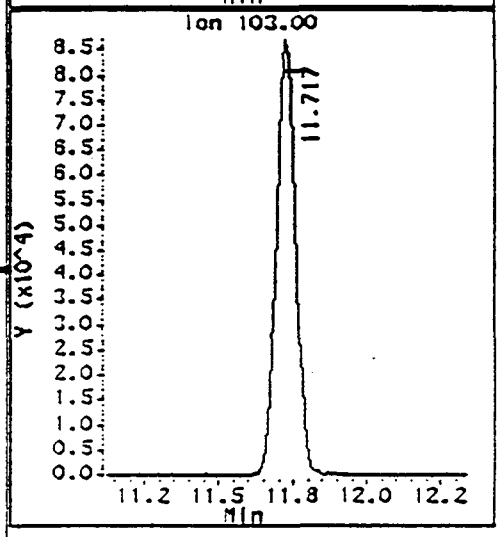












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

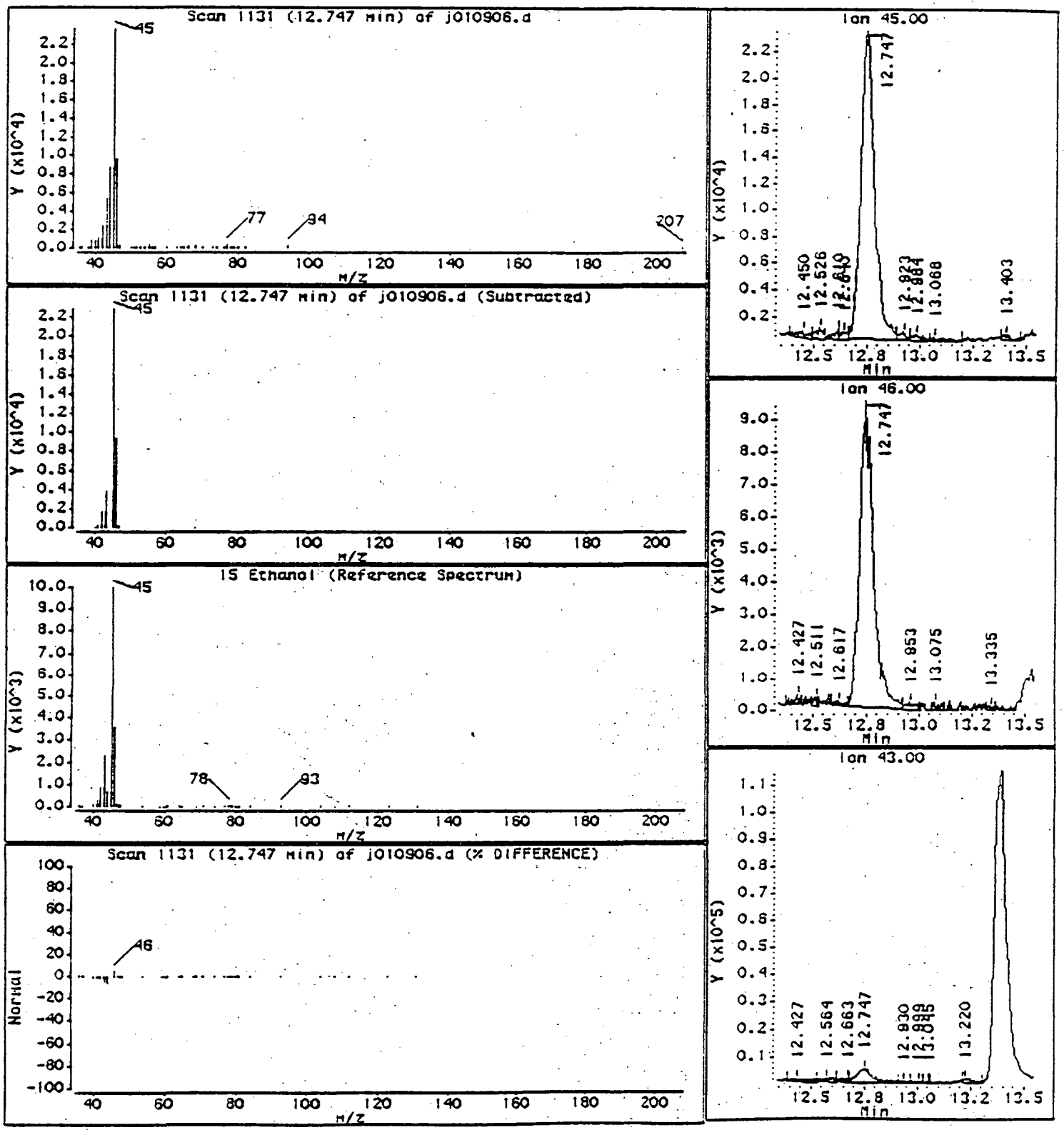
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

Operator: FA

Column phase: RTx-624

Column diameter: 0.58

IS Ethanol



Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

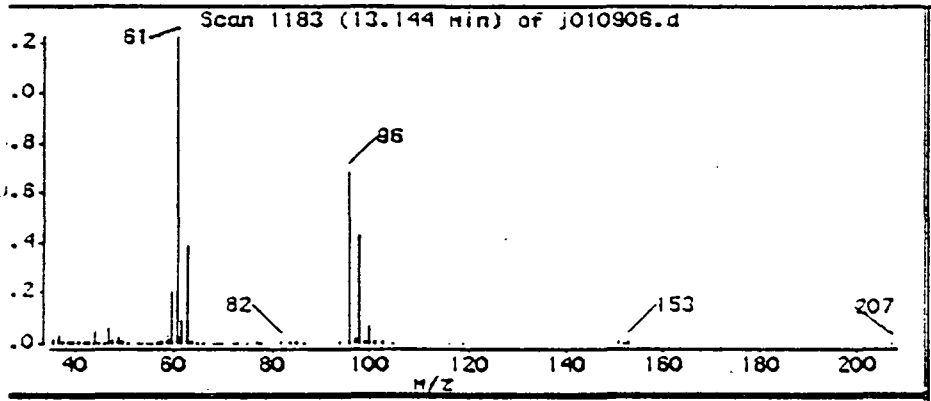
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

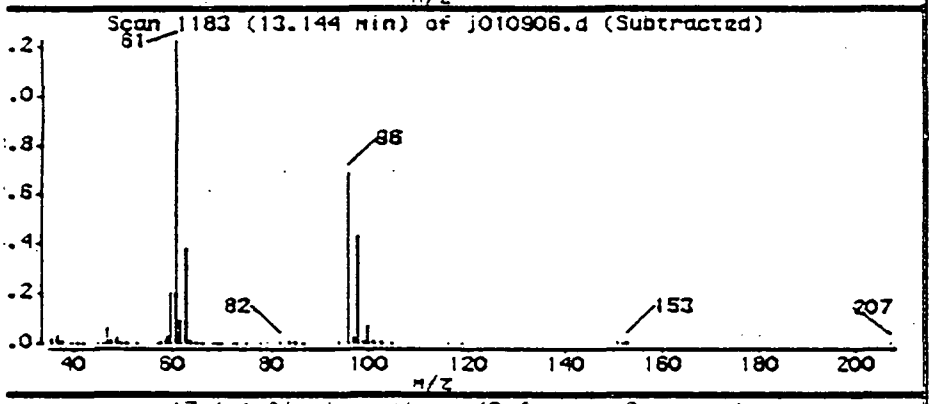
Operator: FA

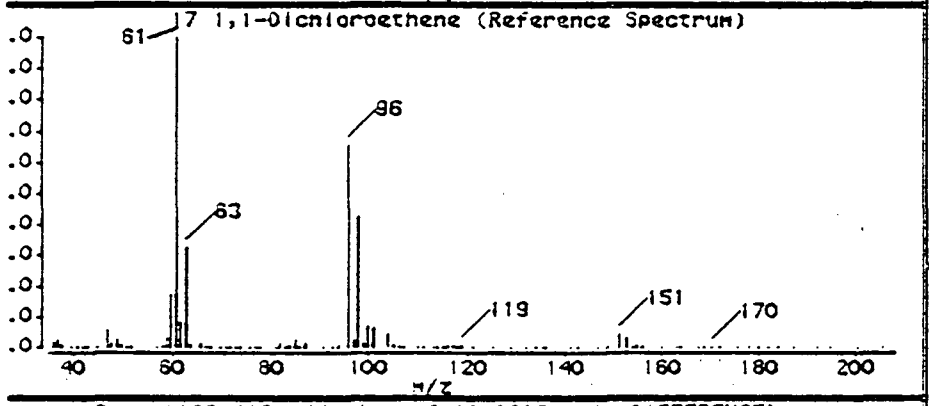
Column phase: RTx-624

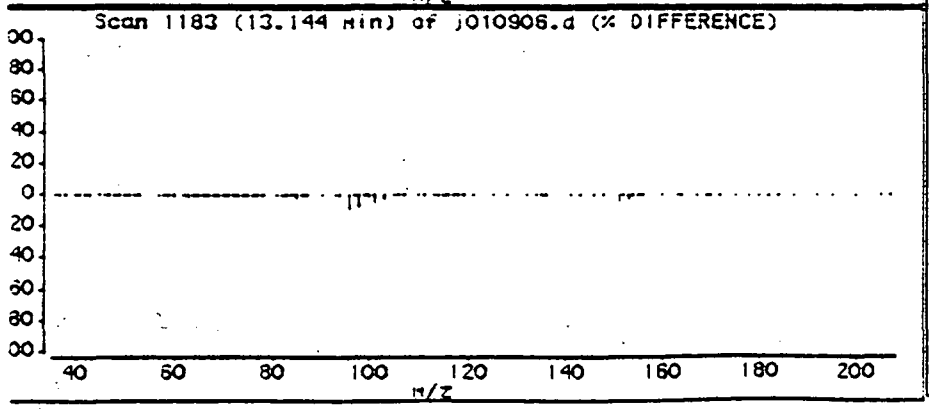
Column diameter: 0.58

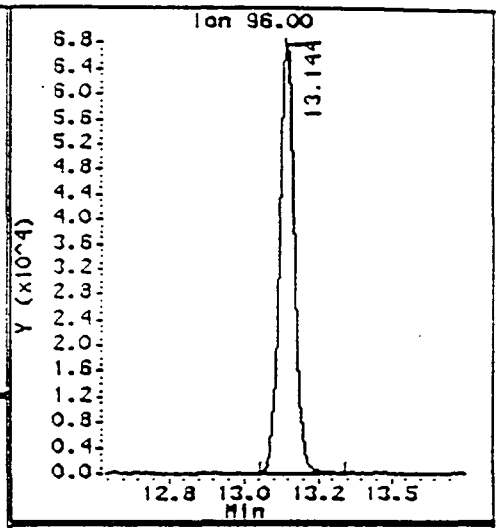
7 1,1-Dichloroethene

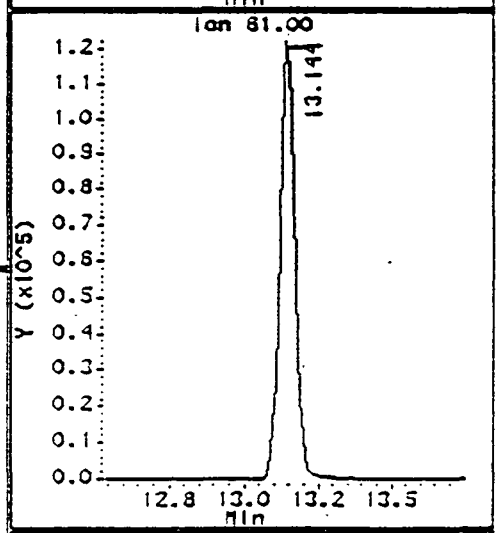


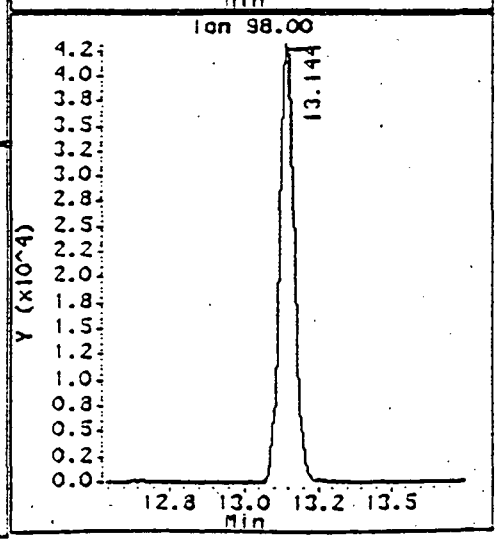












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

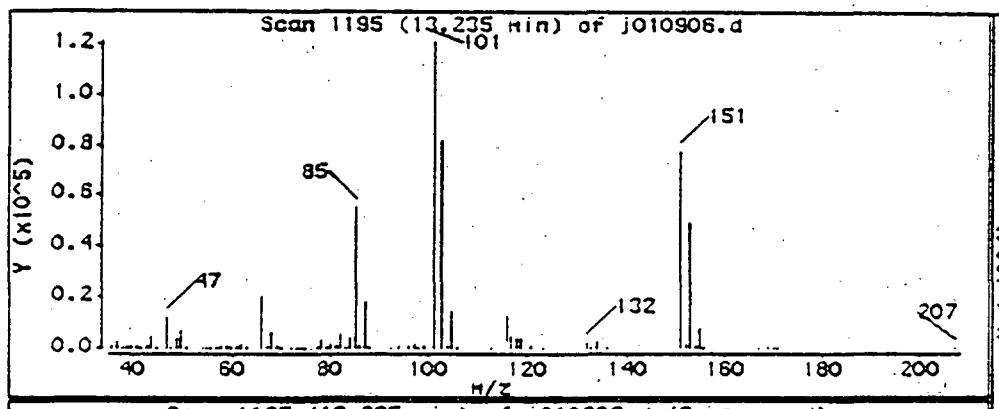
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

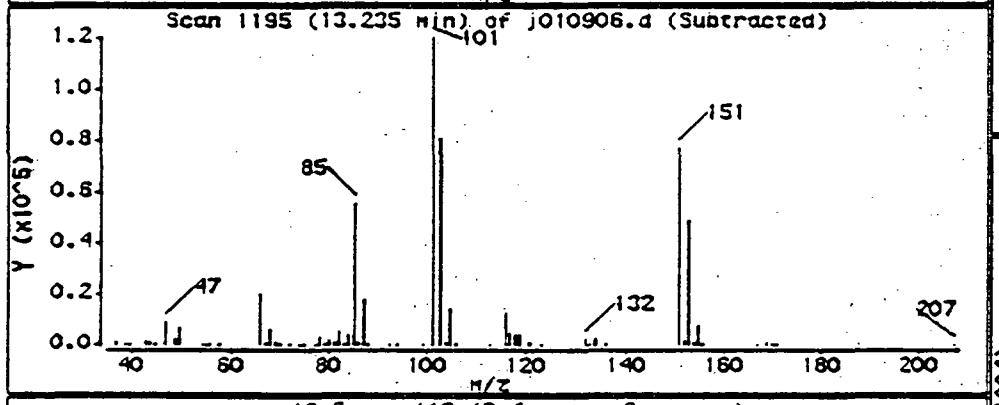
Operator: FA

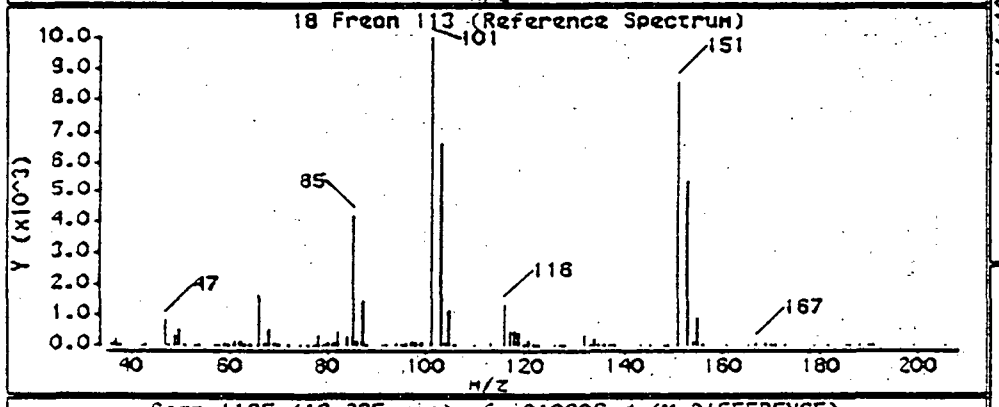
Column phase: RTx-624

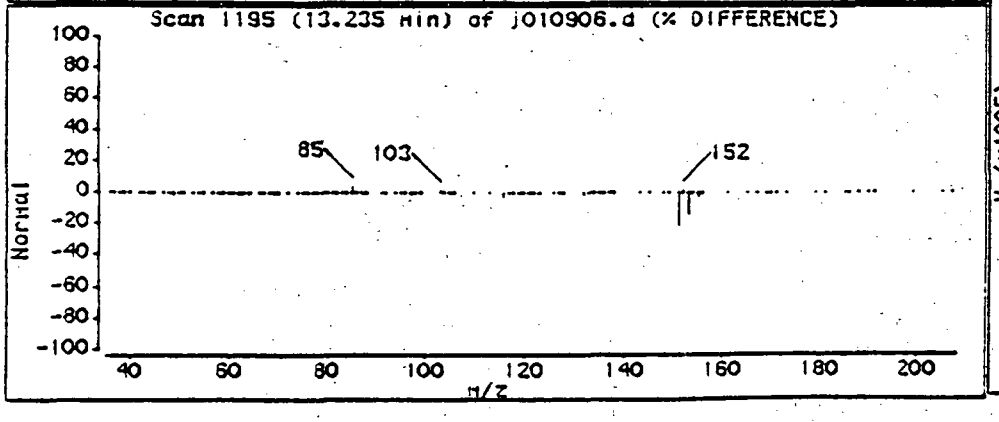
Column diameter: 0.58

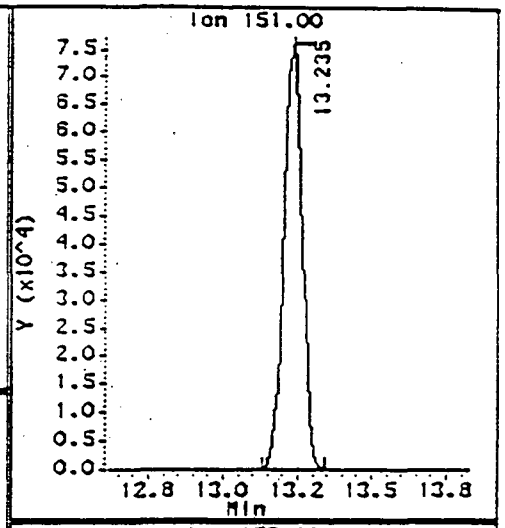
18 Freon 113

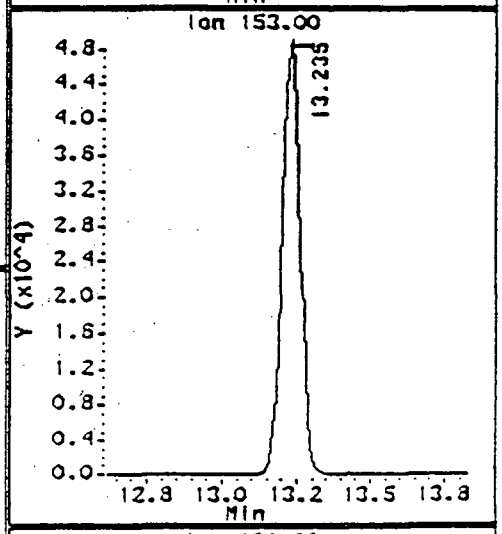


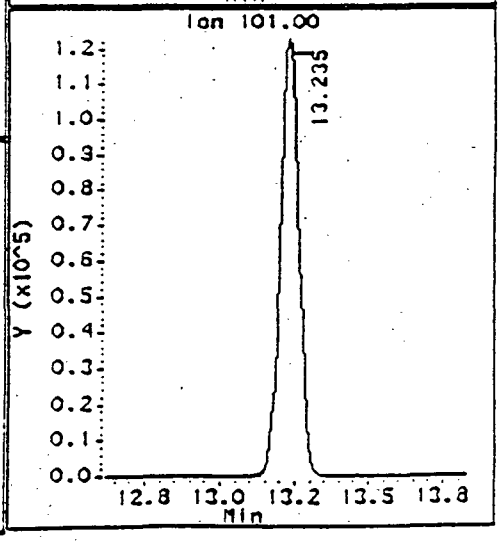












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

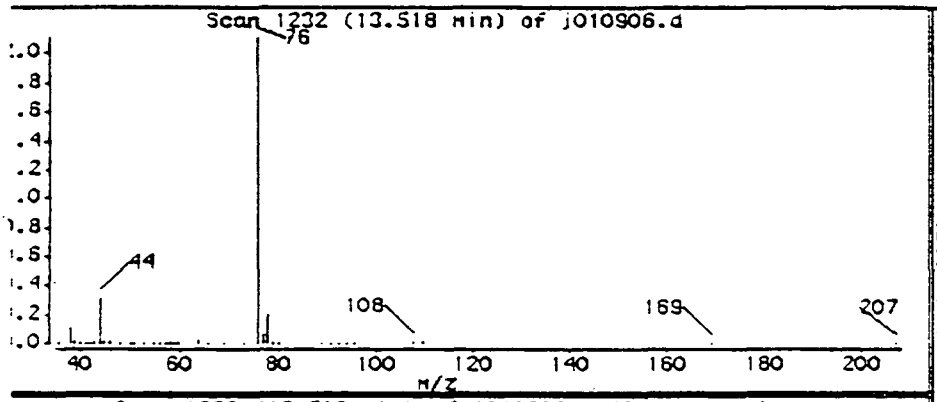
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

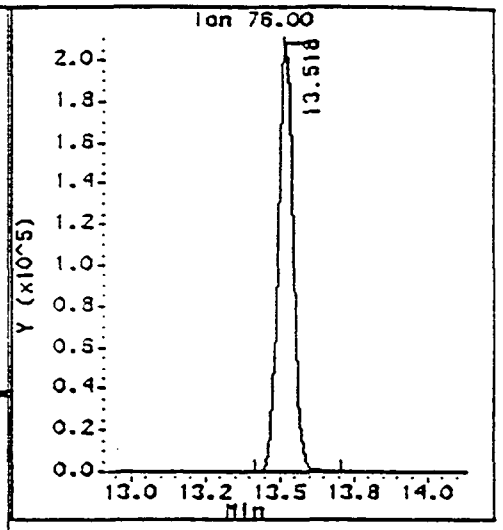
Operator: FR

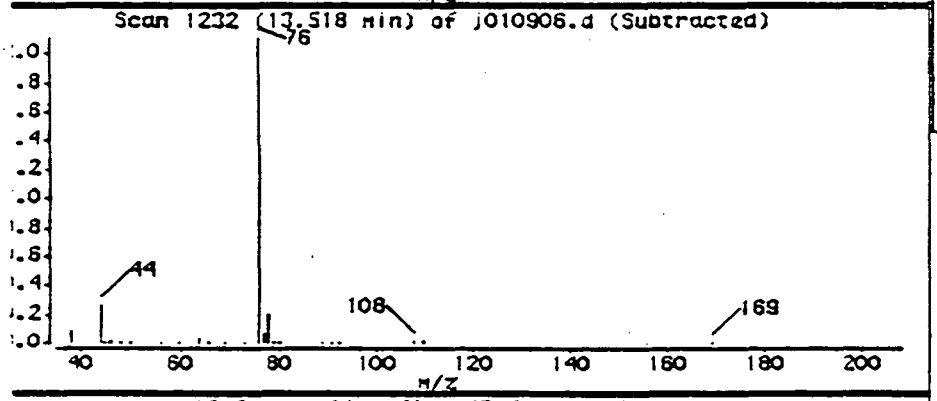
Column phase: RTx-624

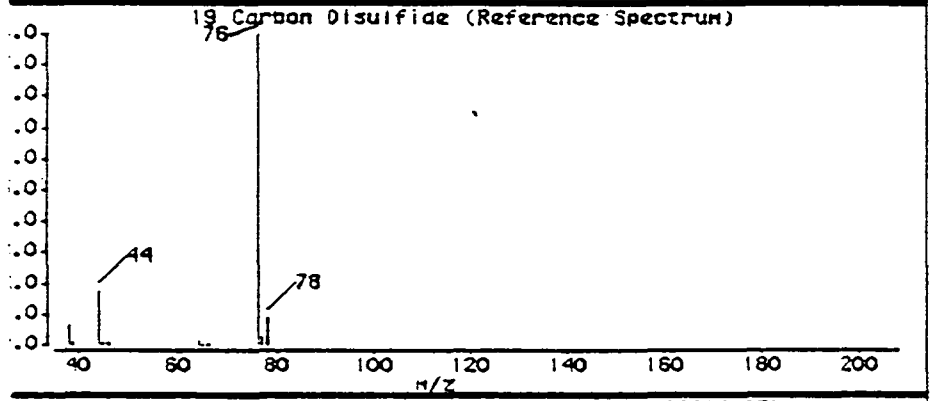
Column diameter: 0.58

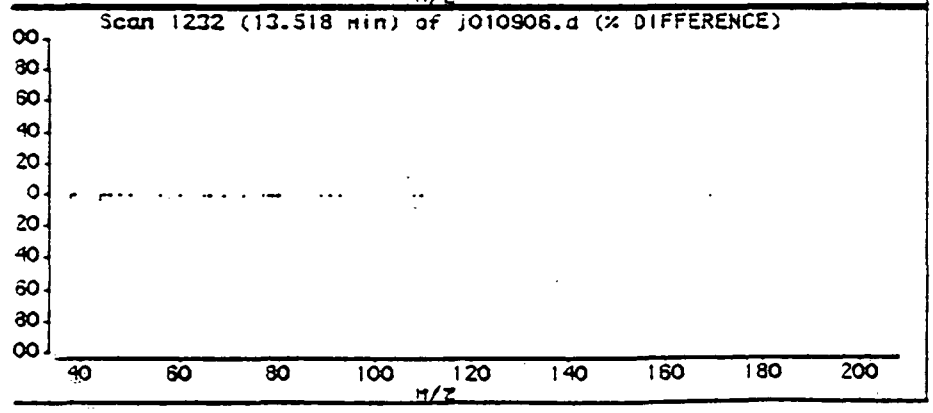
9 Carbon Disulfide











Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

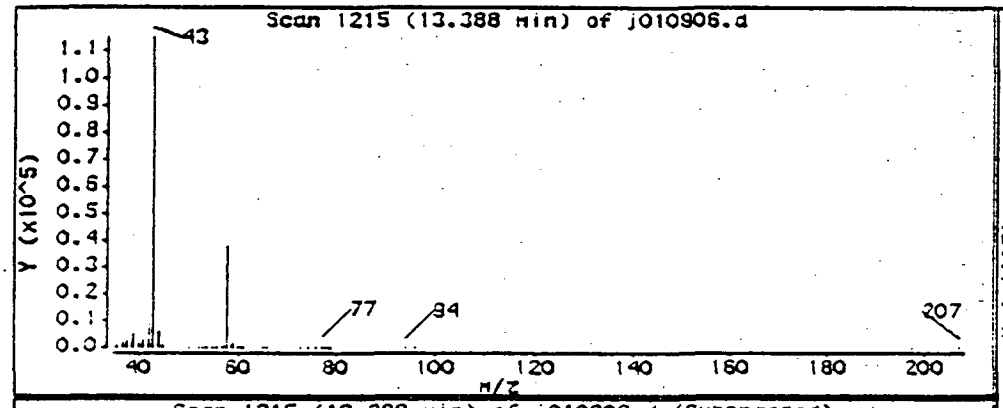
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

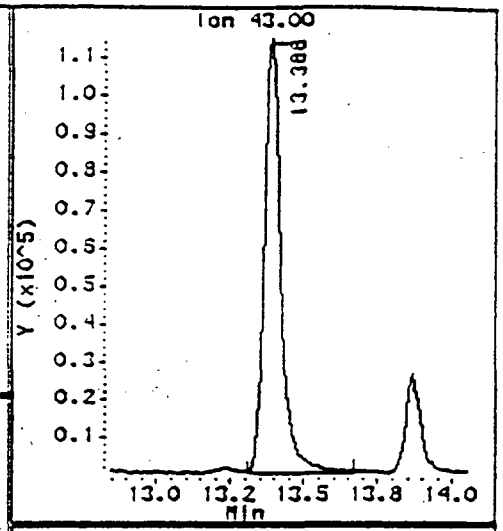
Operator: FA

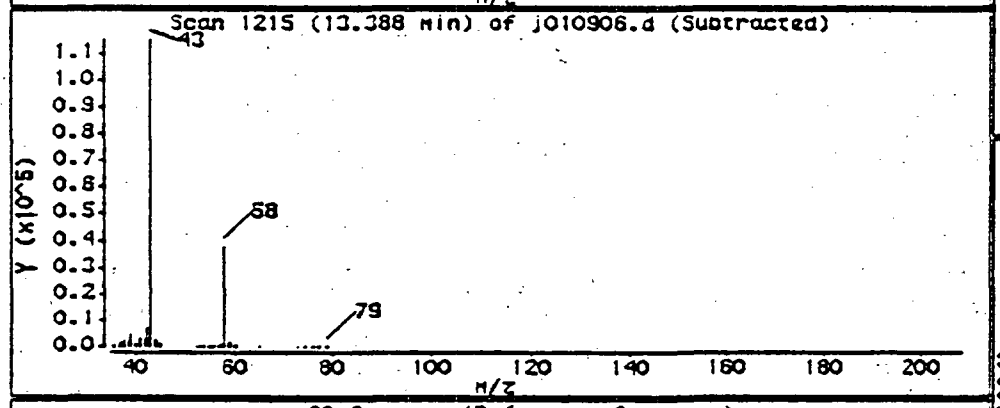
Column phase: RTx-624

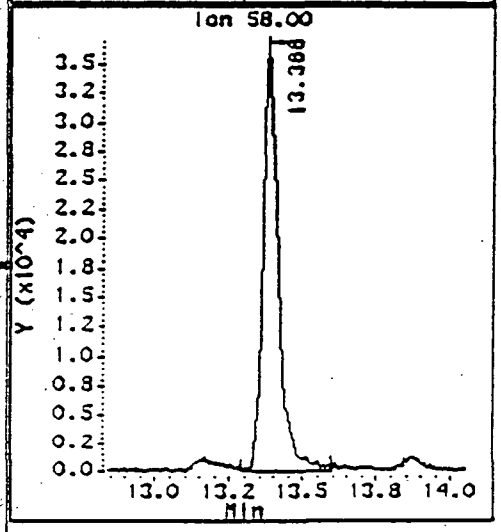
Column diameter: 0.58

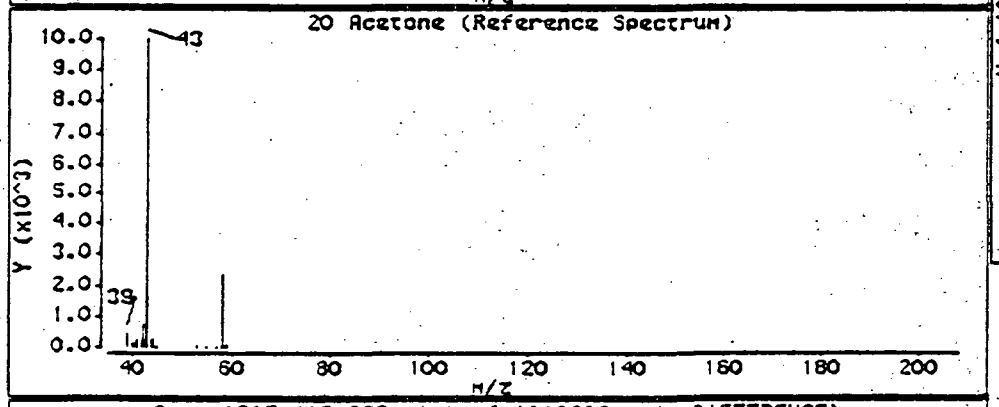
20 Acetone

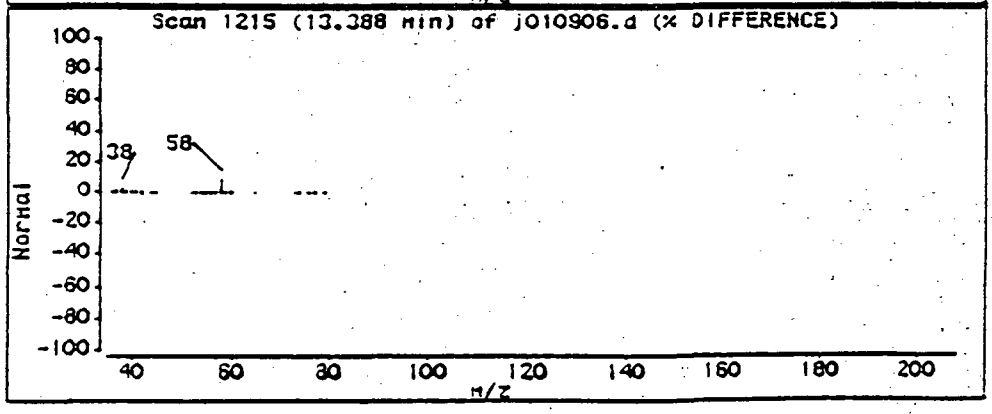












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

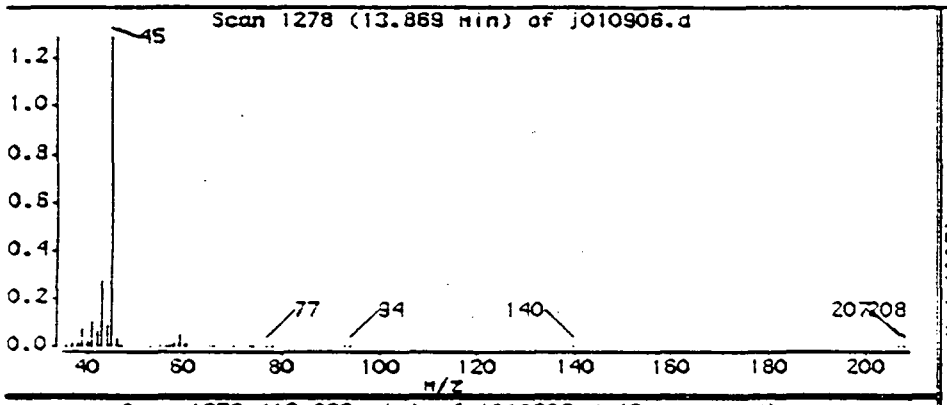
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

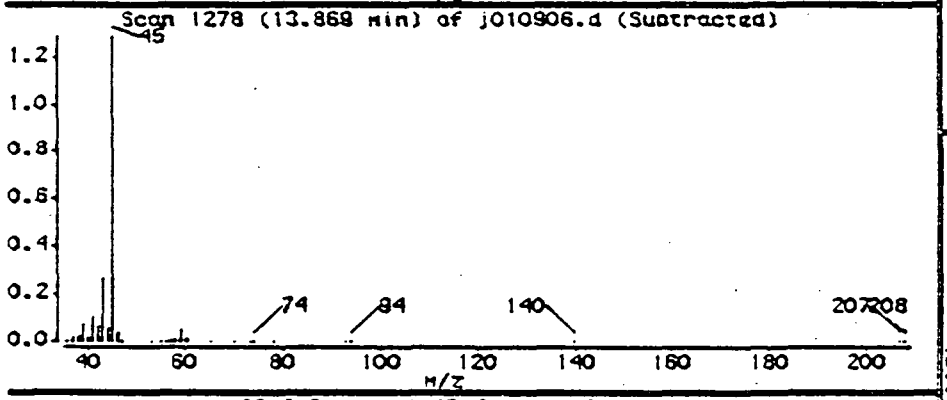
Operator: FA

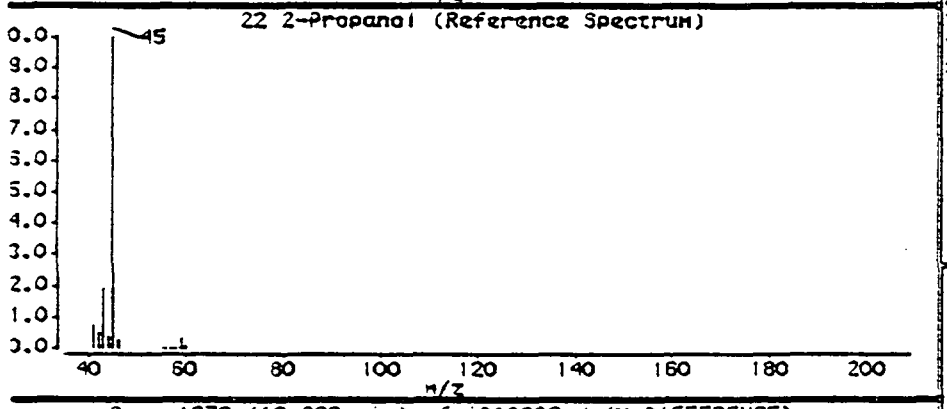
Column phase: RTx-624

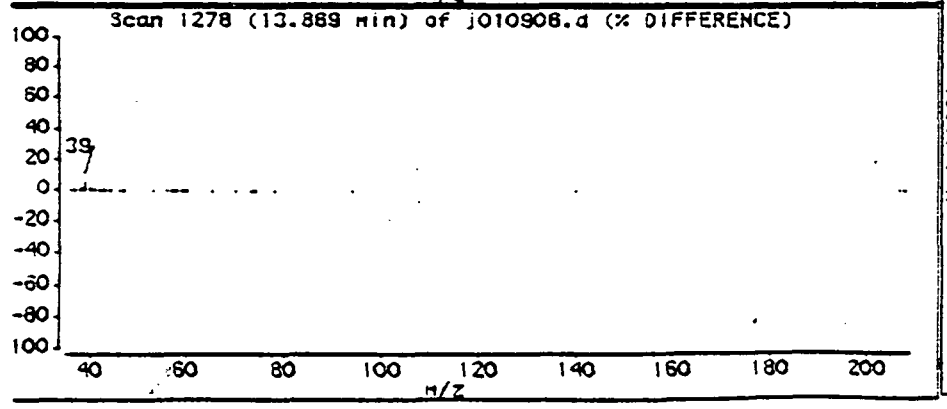
Column diameter: 0.58

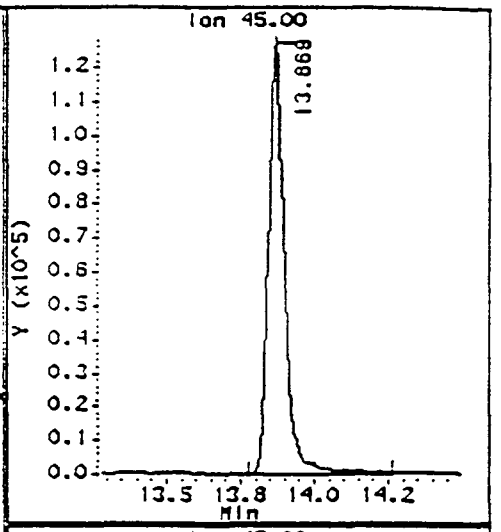
22 2-Propanol

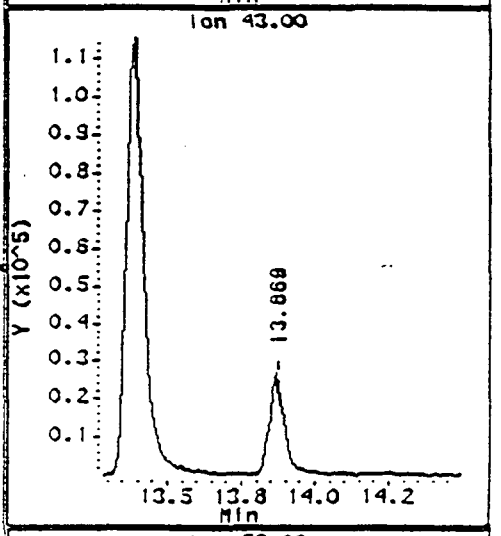


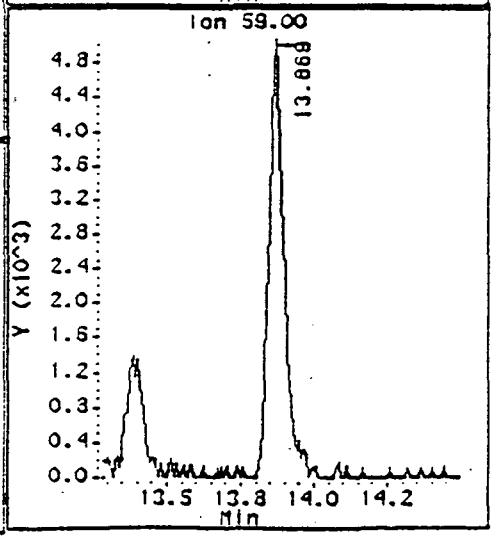












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

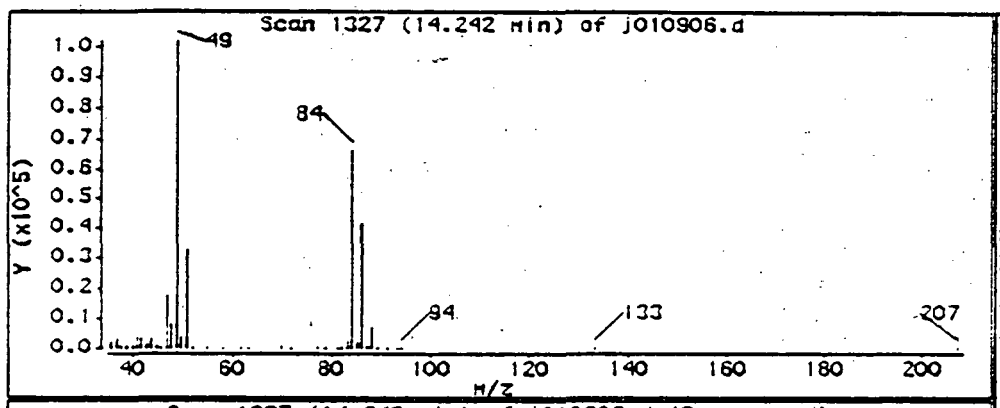
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

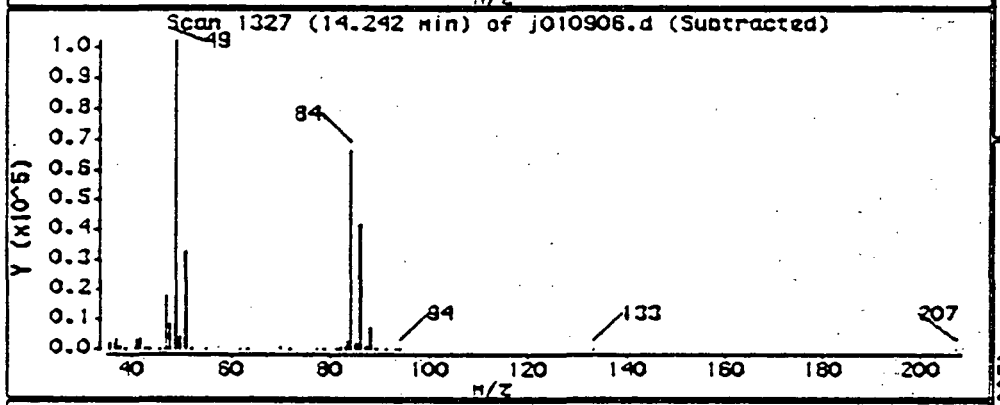
Operator: FA

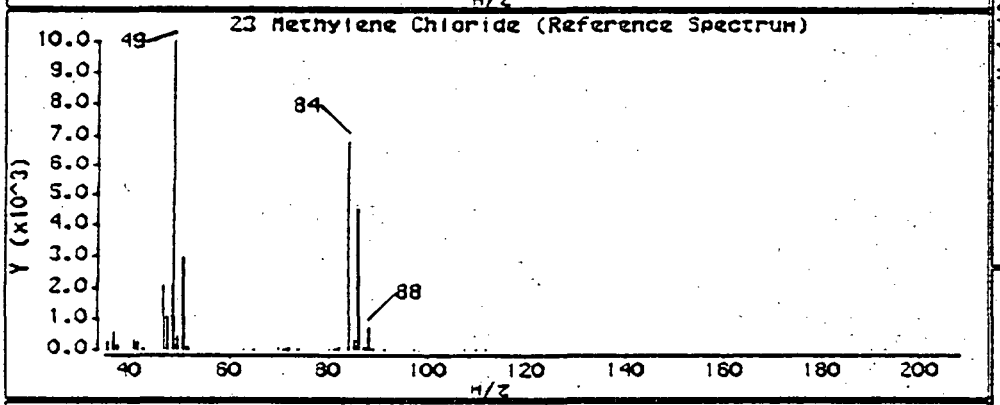
Column phase: RTx-624

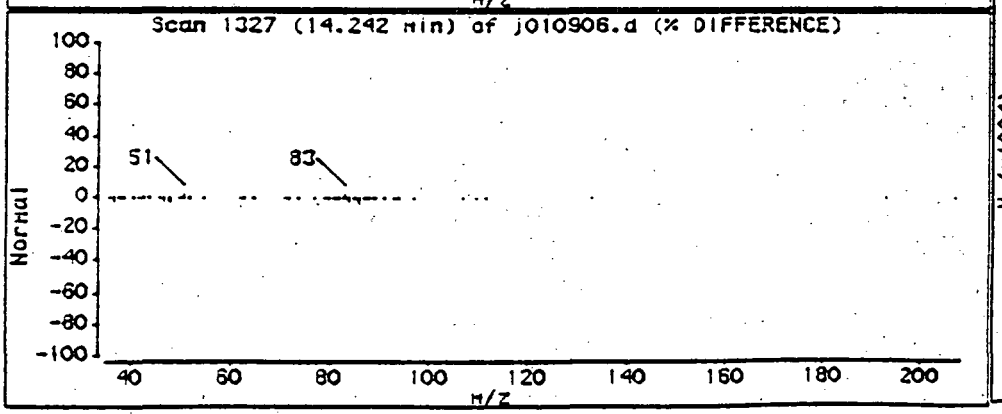
Column diameter: 0.58

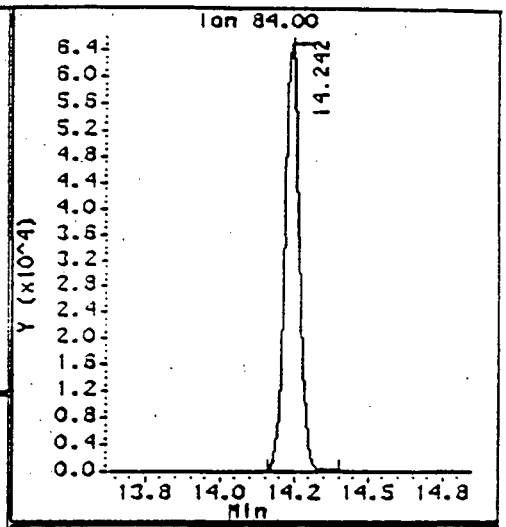
23 Methylene Chloride

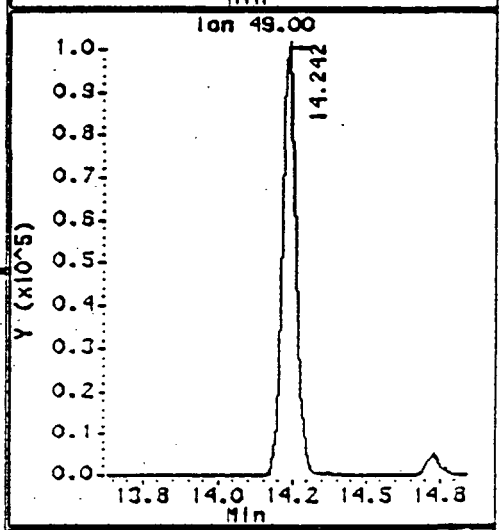


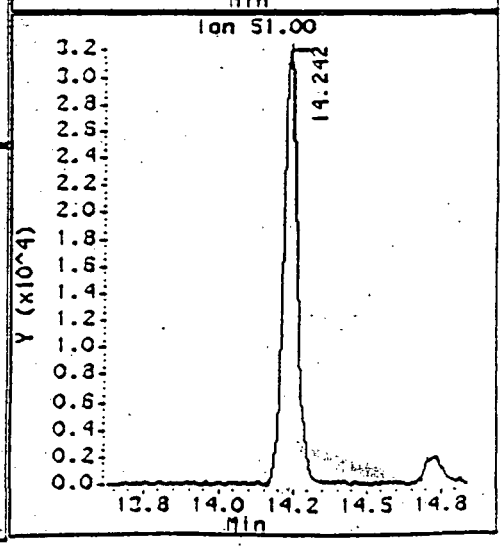












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

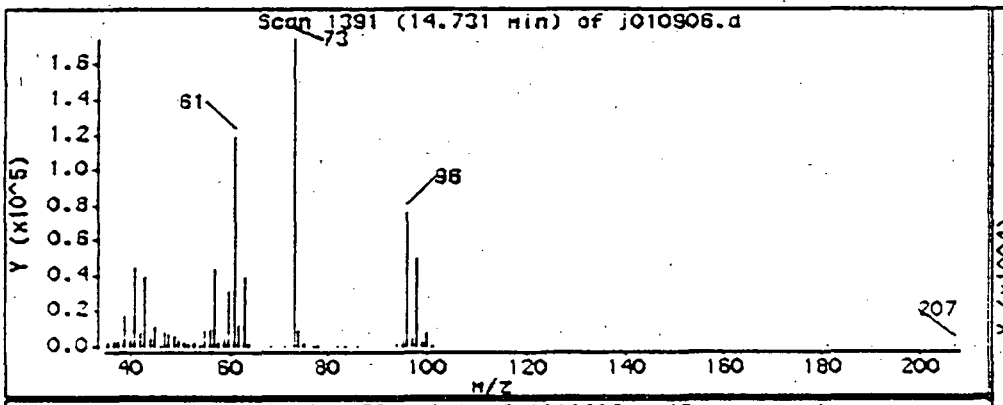
Client ID: VSTD005 Instrument: msdj.i

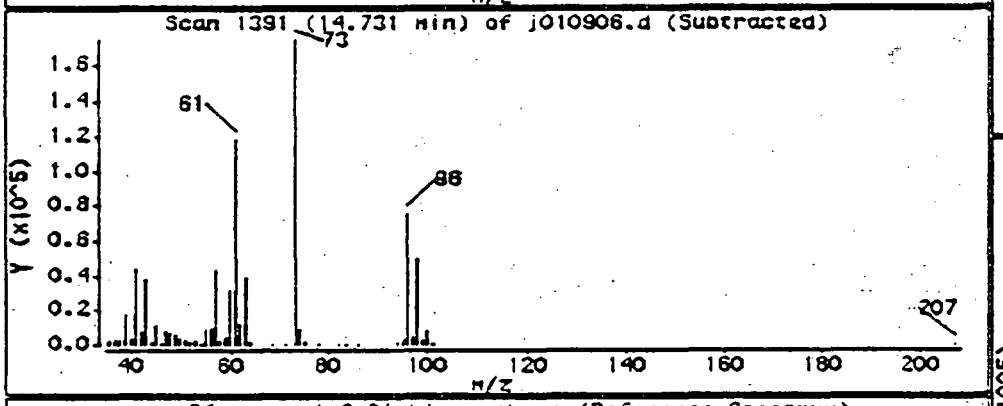
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

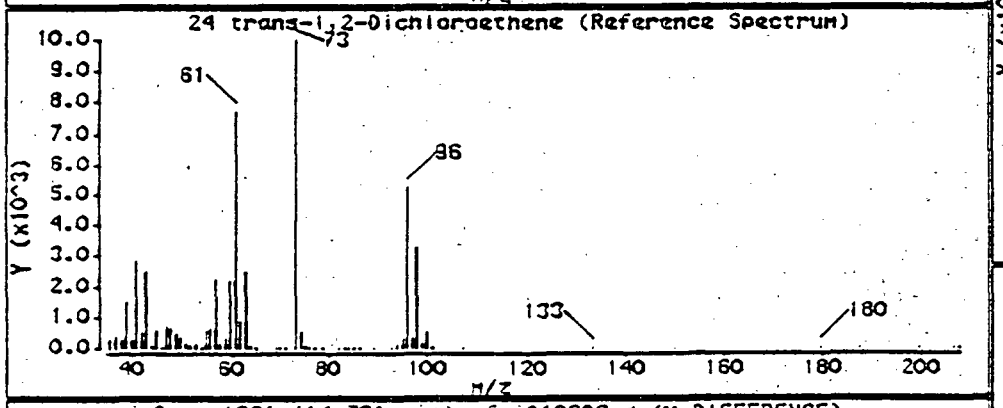
Operator: FA

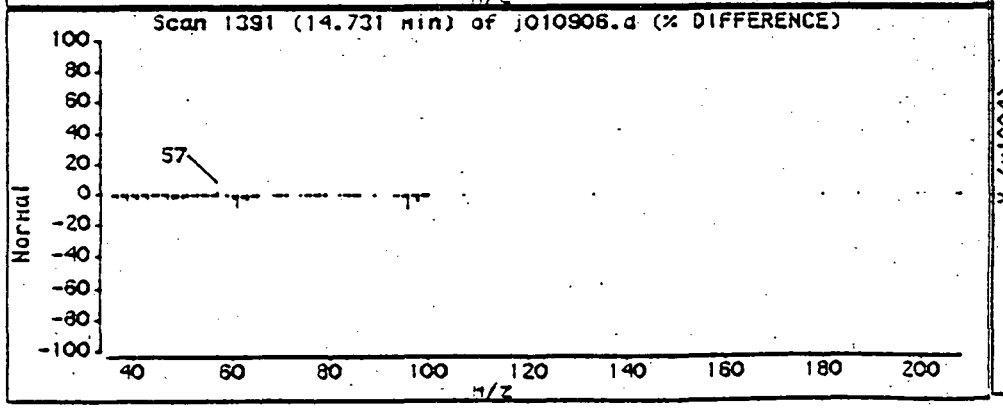
Column phase: RTx-624 Column diameter: 0.58

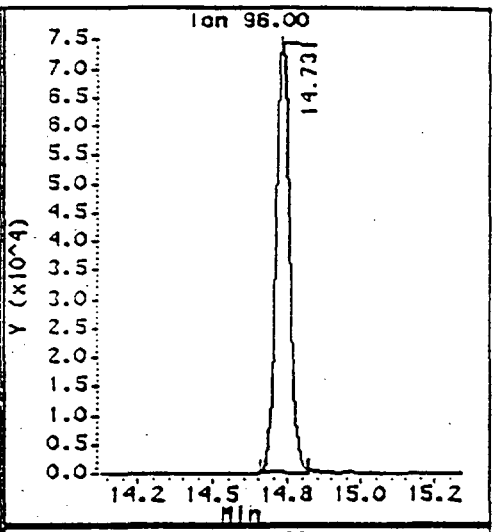
24 trans-1,2-Dichloroethene

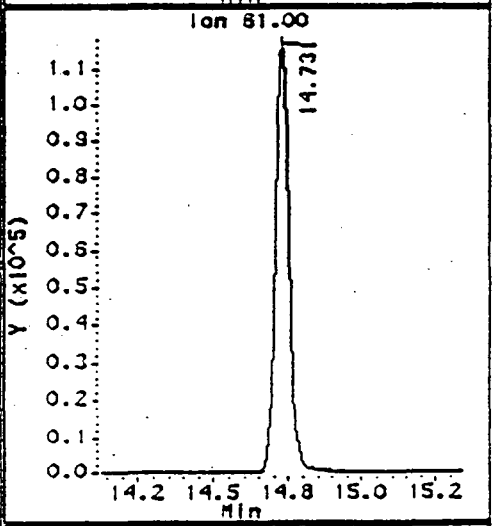


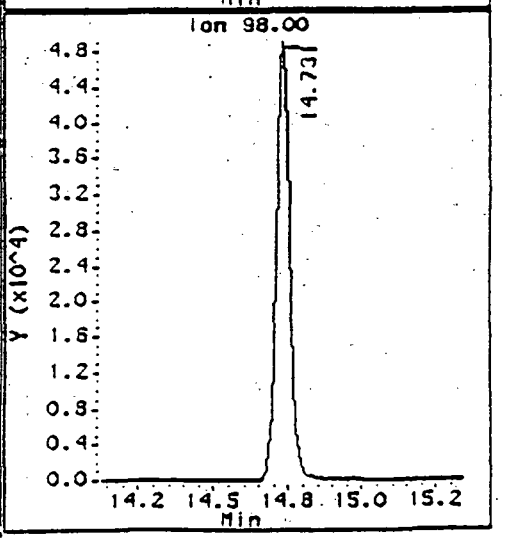












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

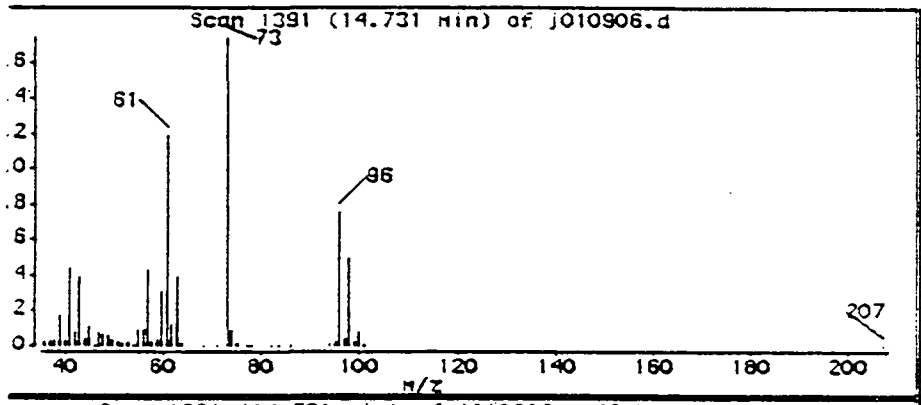
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

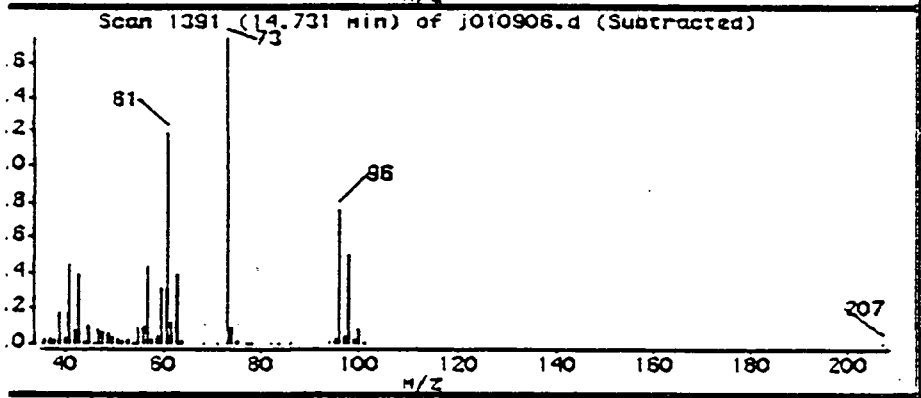
Operator: FA

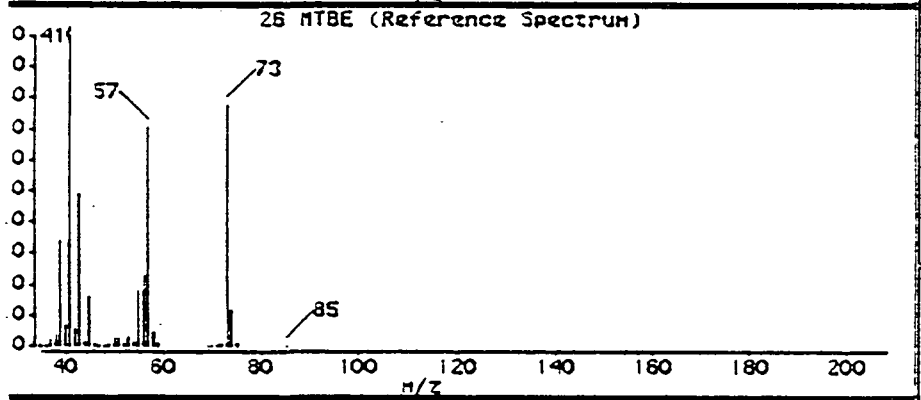
olumn phase: RTx-624

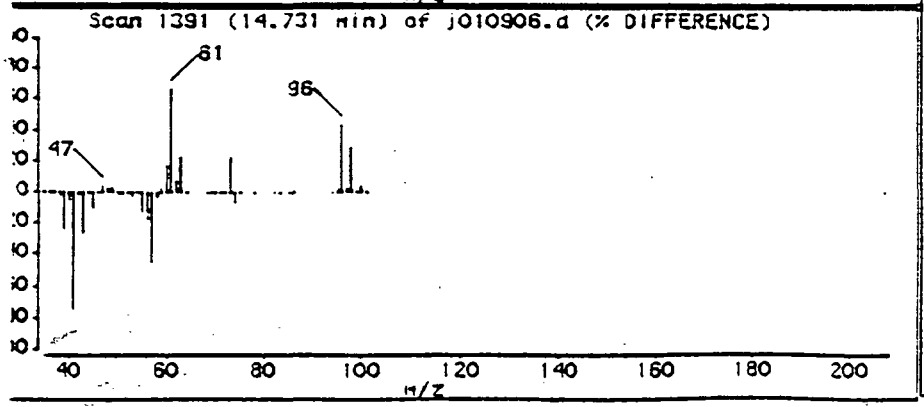
Column diameter: 0.58

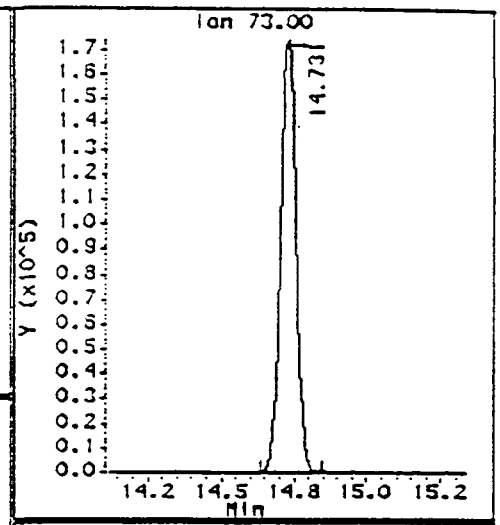
MTBE

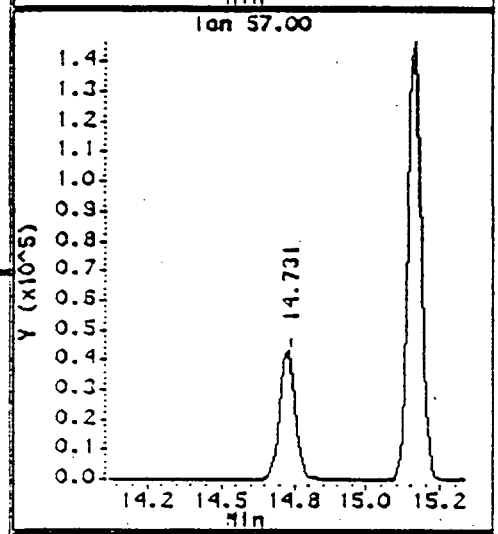


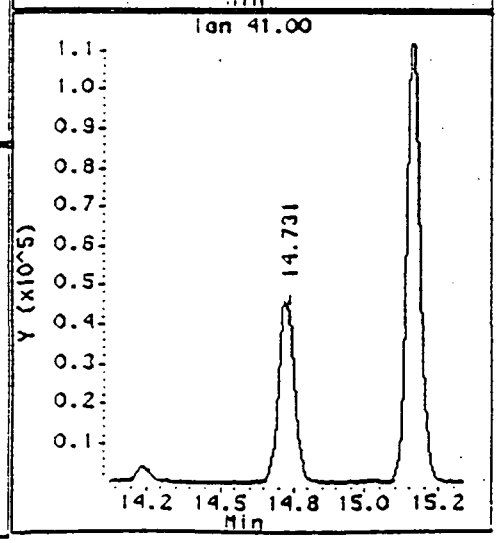












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

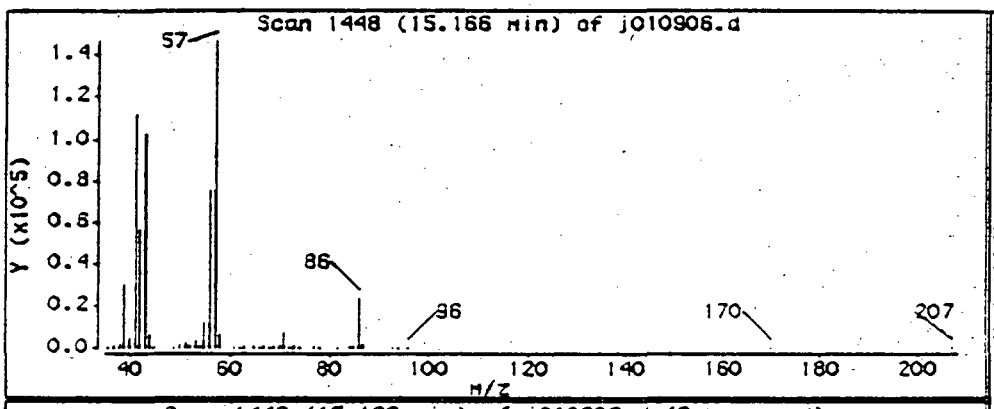
Sample Info: 25.0ml #298-25 100ppbv (5.0ppbv)

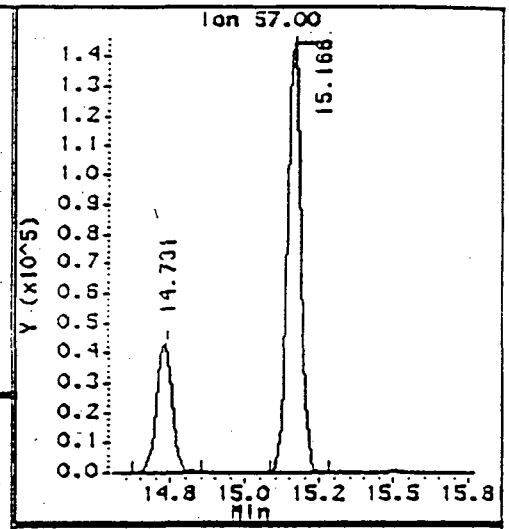
Operator: FA

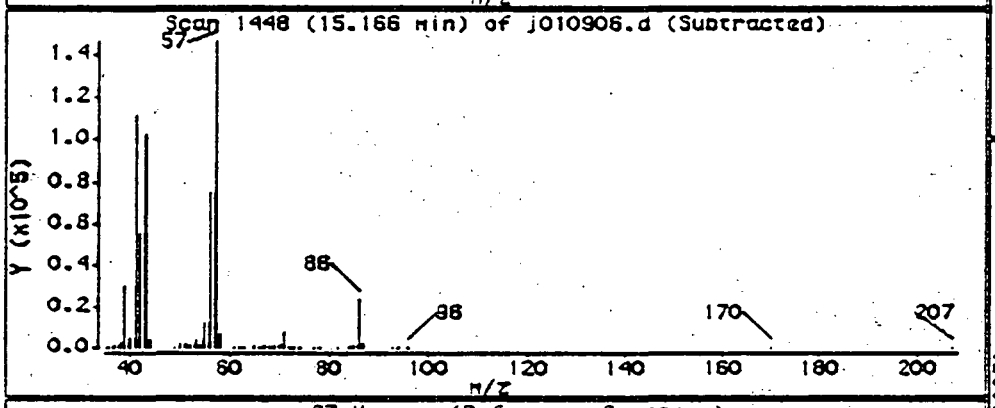
Column phase: RTx-624

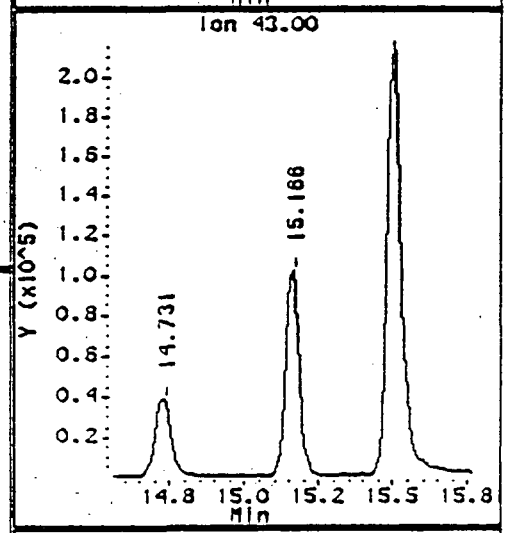
Column diameter: 0.58

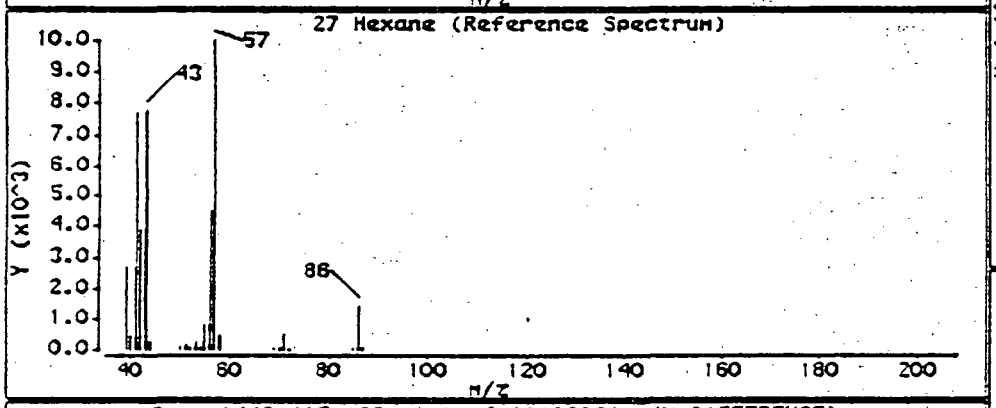
27 Hexane

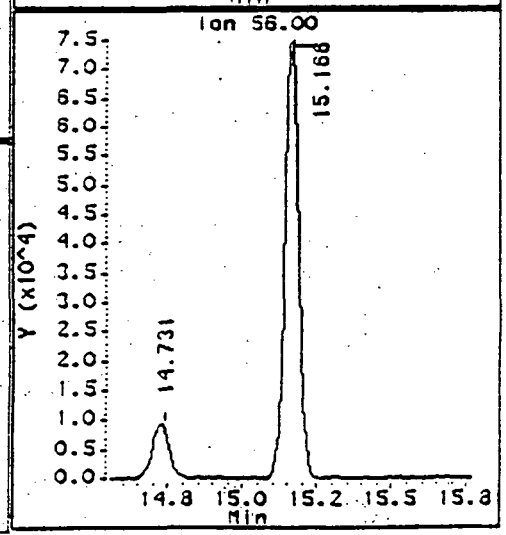


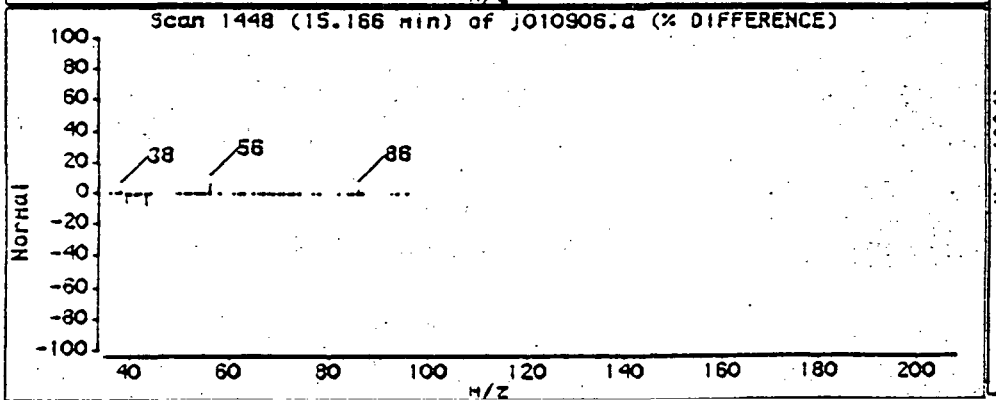












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

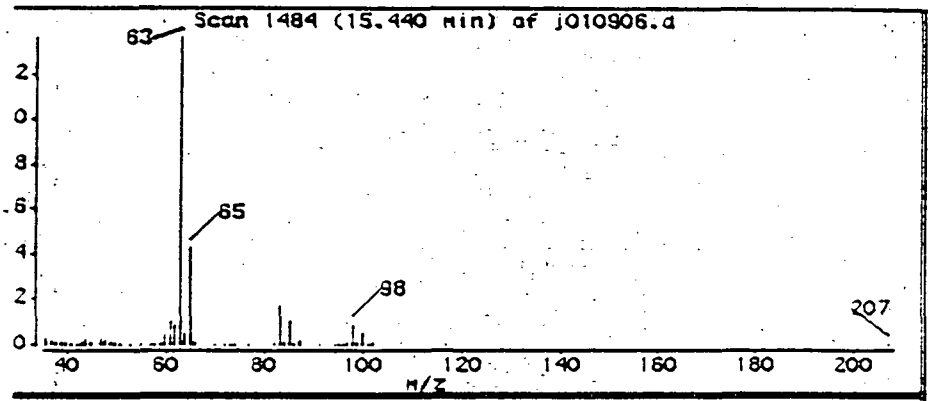
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

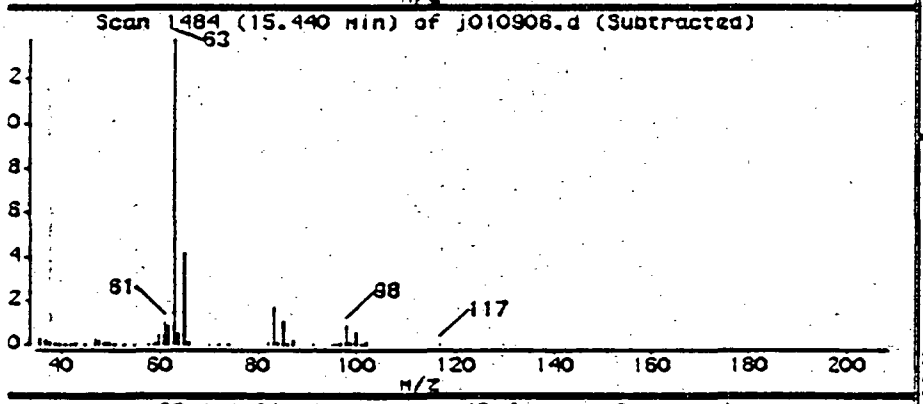
Operator: FA

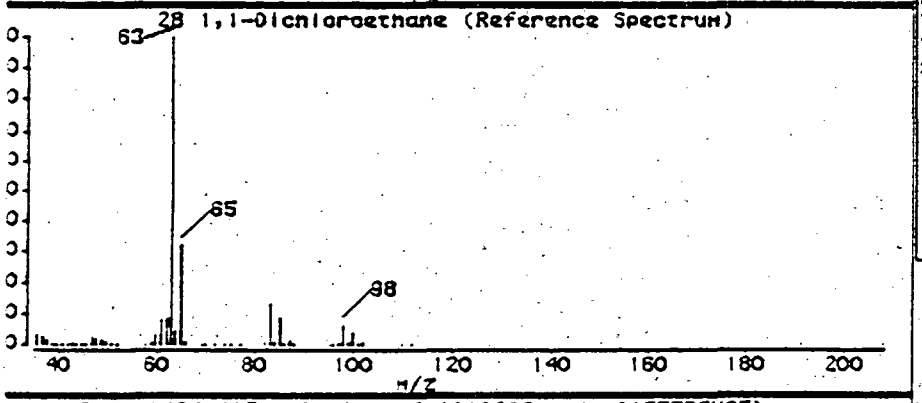
olumn phase: RTx-624

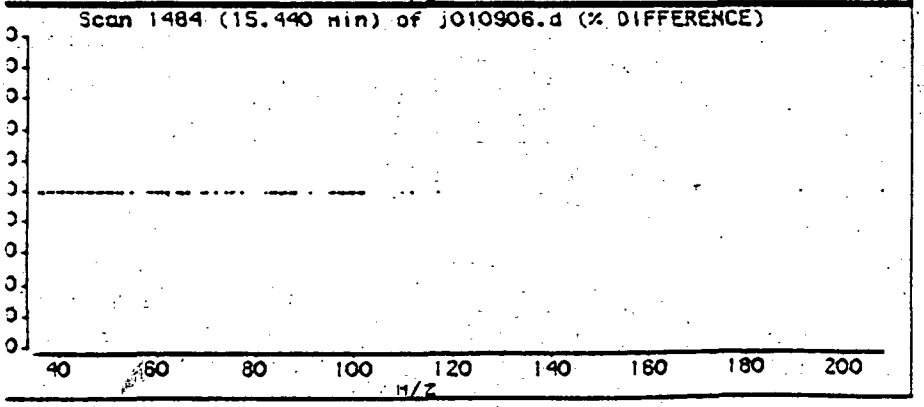
Column diameter: 0.58

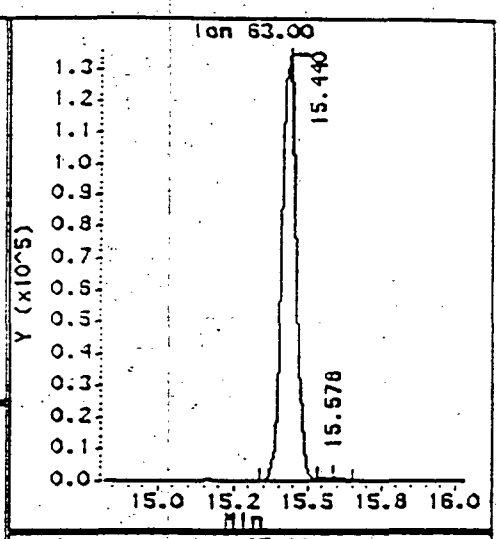
1,1-Dichloroethane

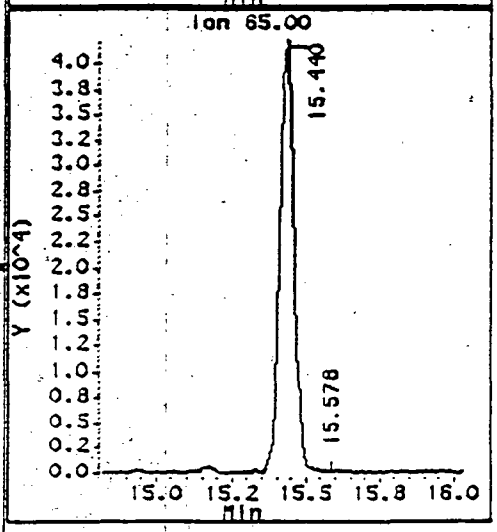












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

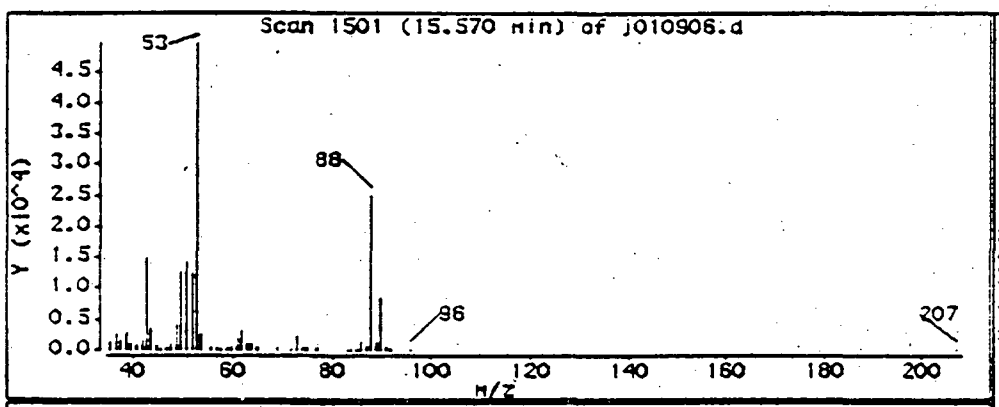
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

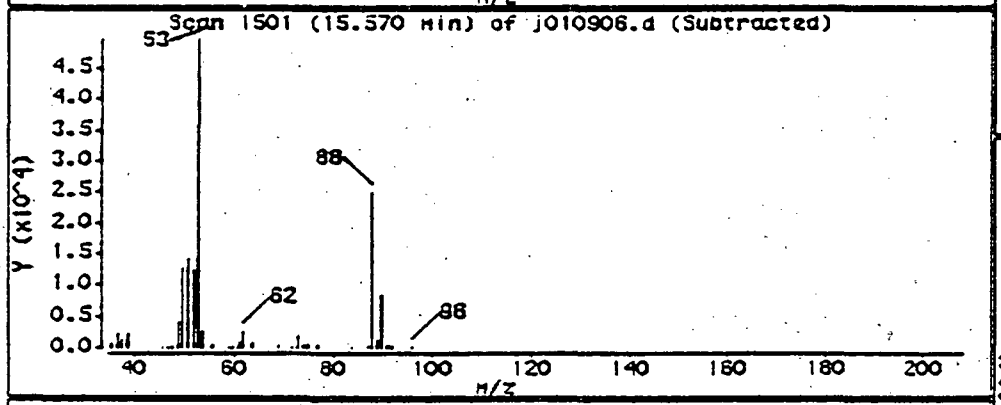
Operator: FA

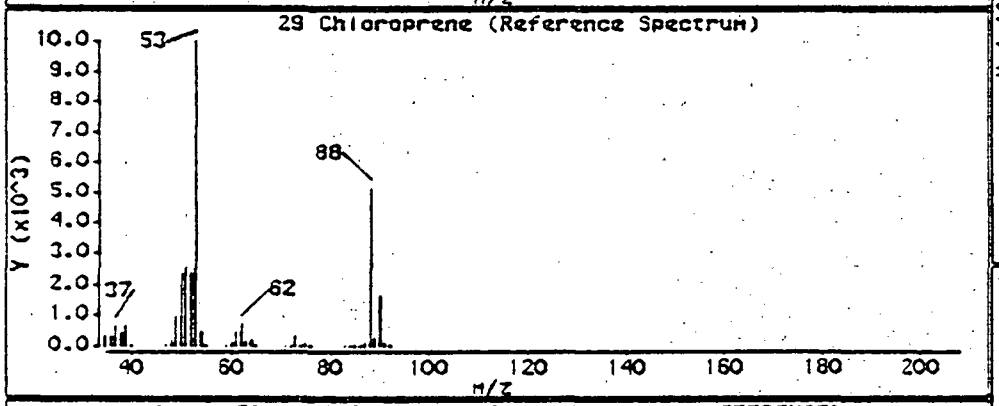
Column phase: RTx-624

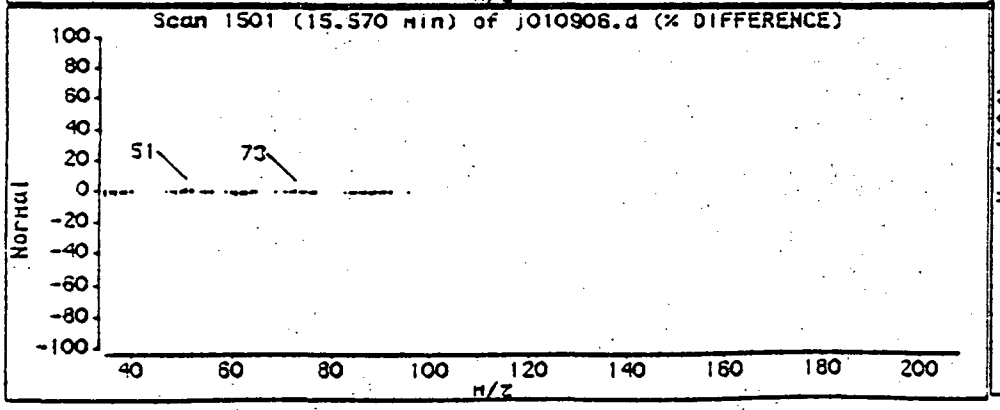
Column diameter: 0.58

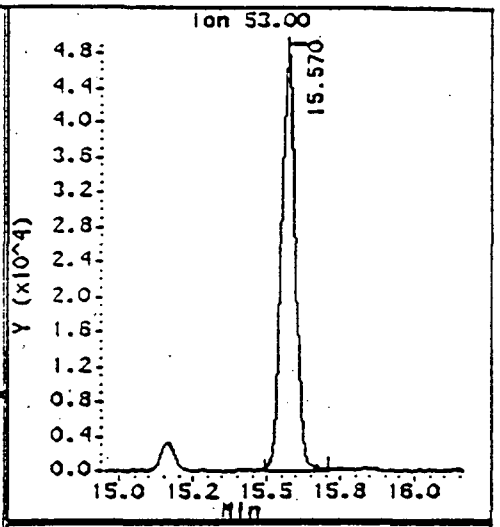
29 Chloroprene

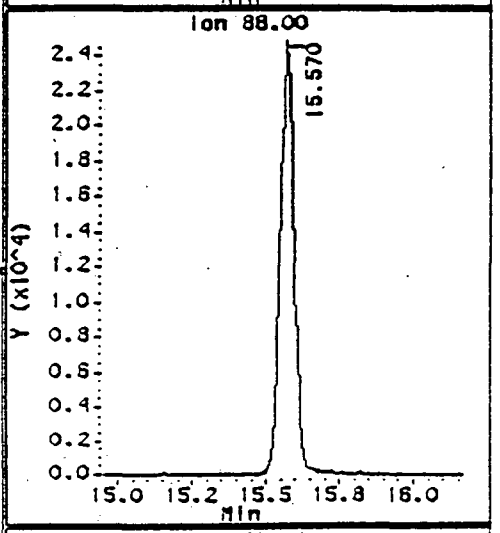


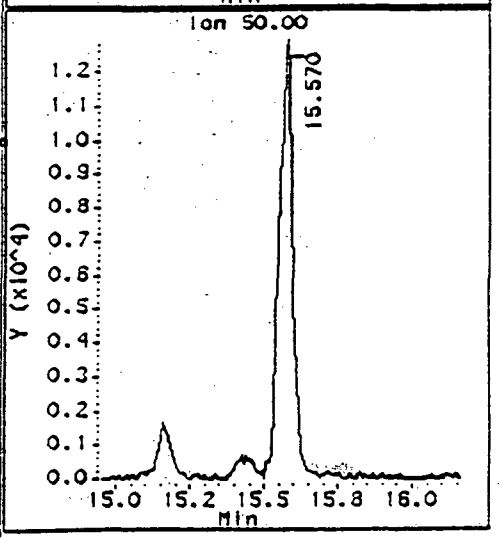












ıta File: /chem/msdj.i/j-09jan.b/j010906.d

ıte : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

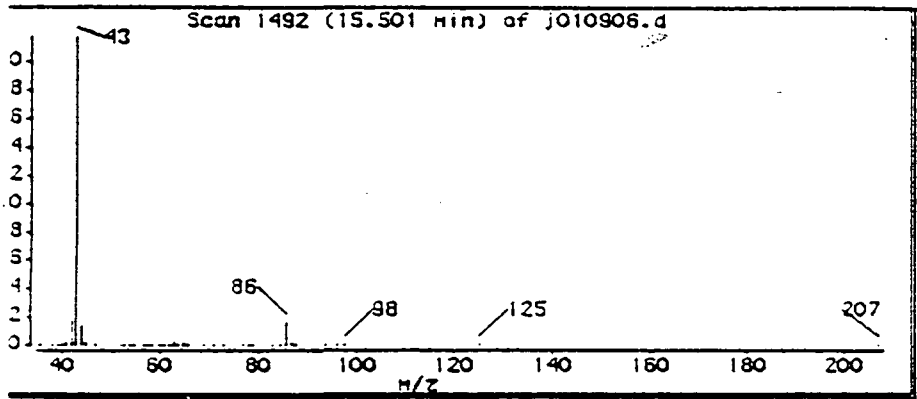
ımple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

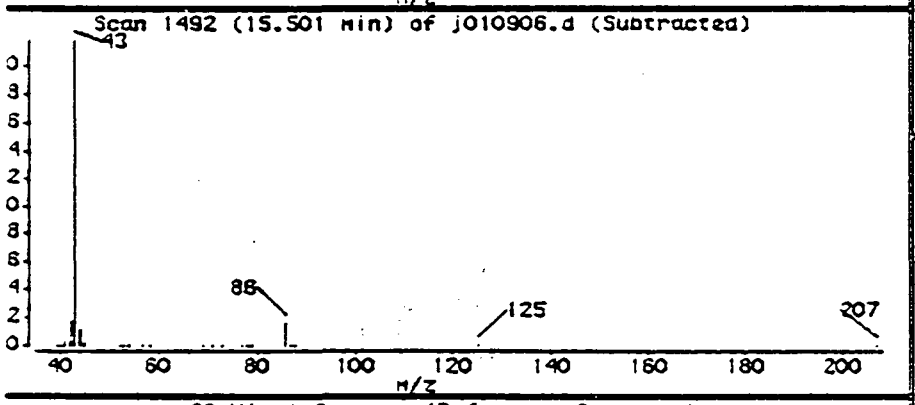
Operator: FA

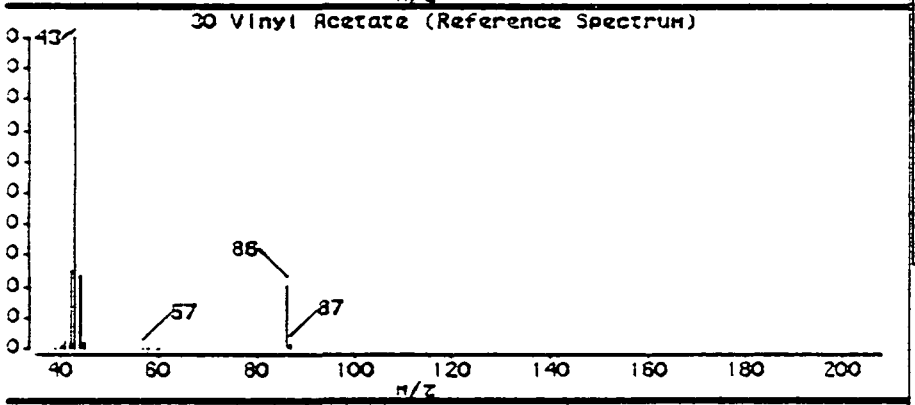
olumn phase: RTx-624

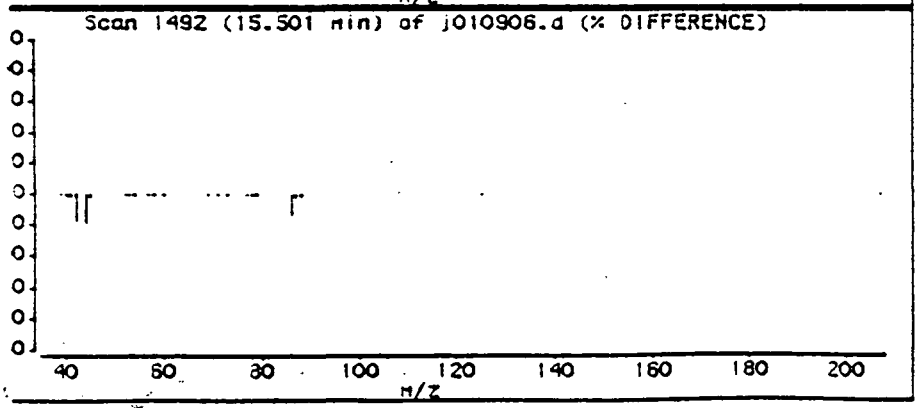
Column diameter: 0.58

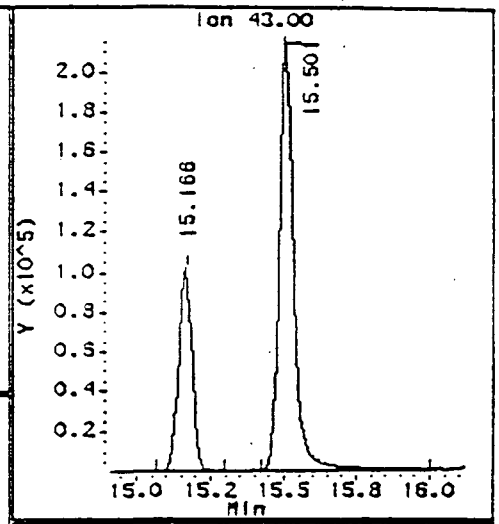
Vinyl Acetate

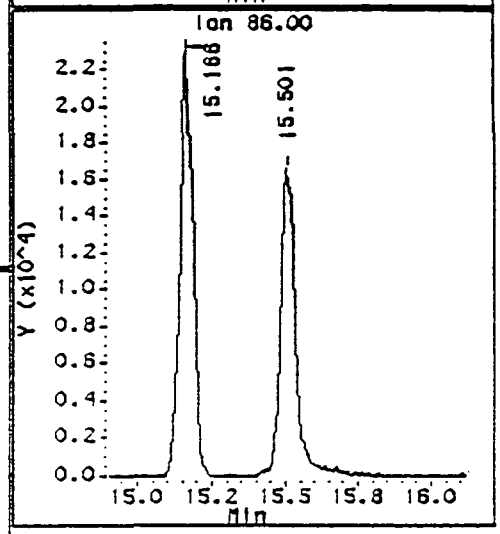






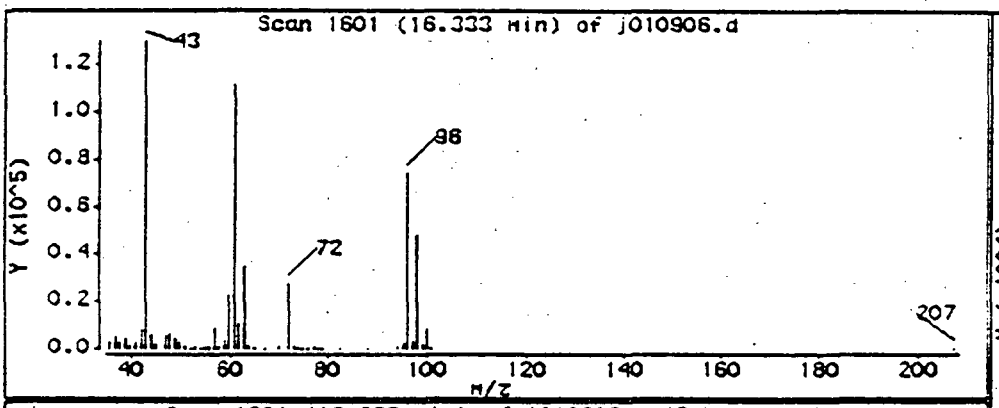


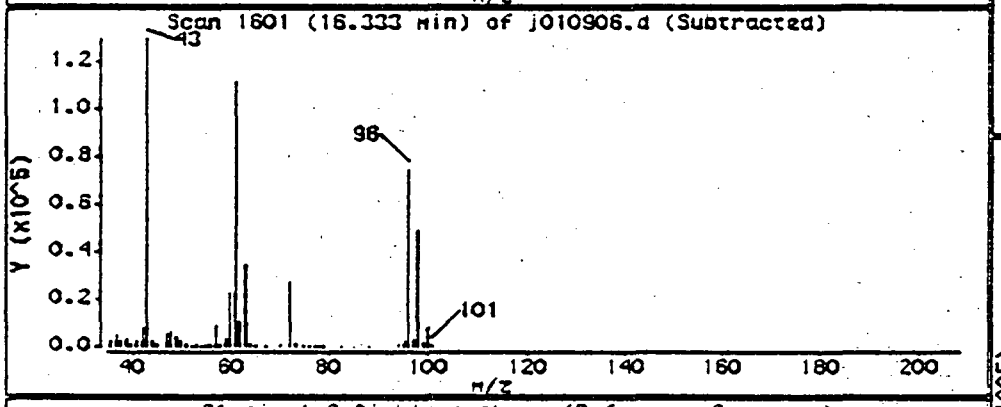


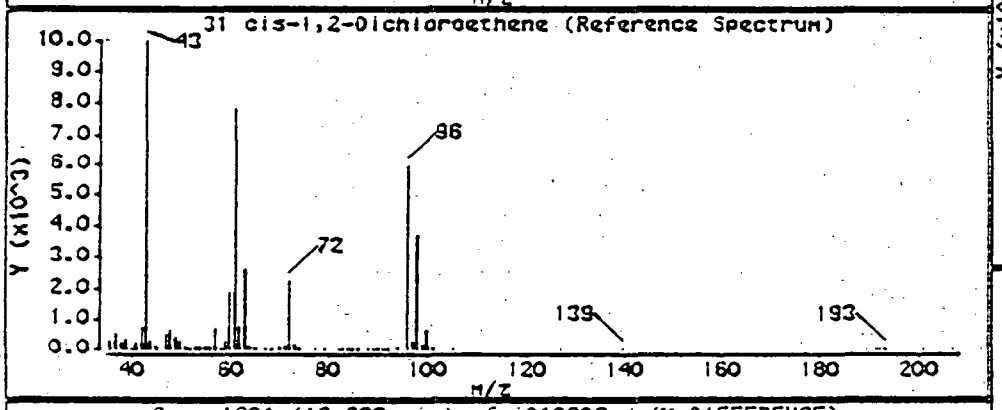


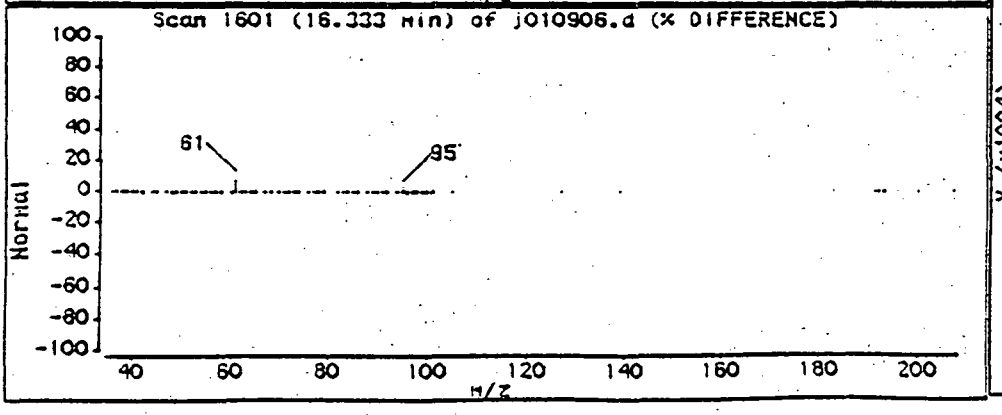
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
Column phase: RTx-624
Column diameter: 0.58

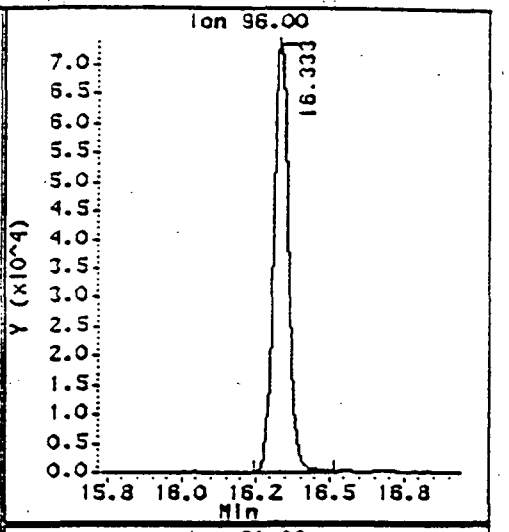
31 cis-1,2-Dichloroethene

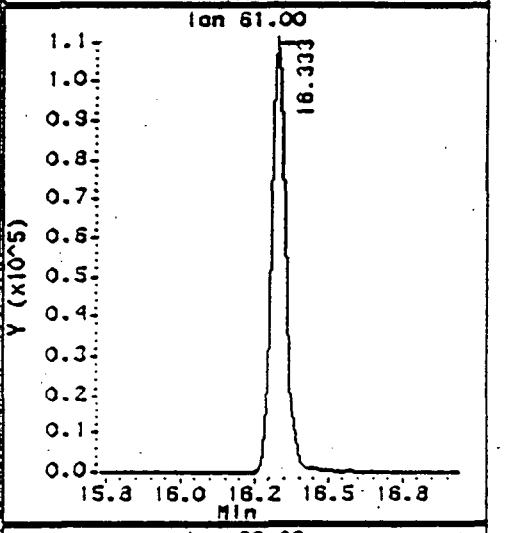


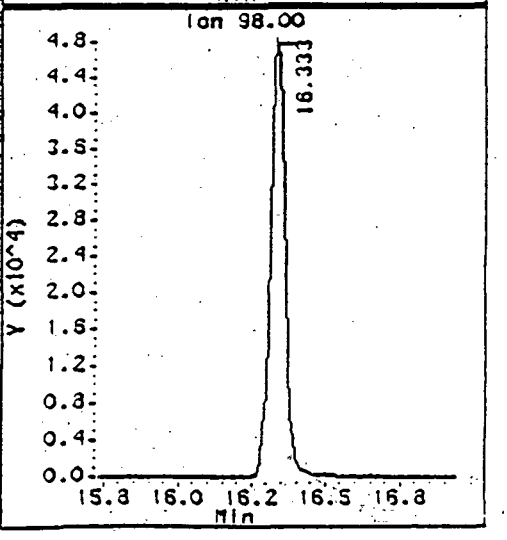












ıta File: /chem/msdj.i/j-09jan.b/j010906.d

ıte : 09-JAN-97 10:44

ient ID: VSTD005

Instrument: msdj.i

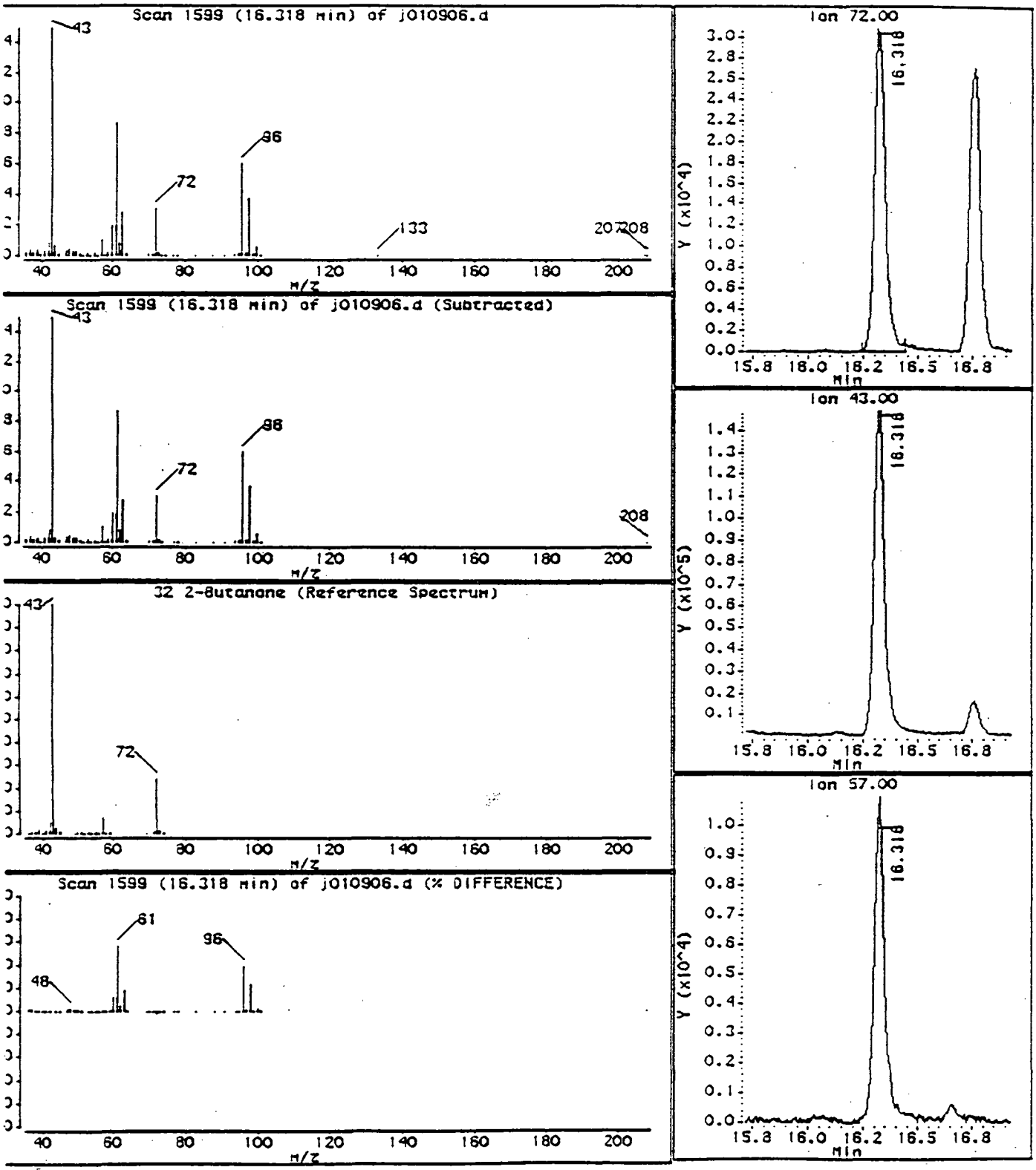
ımple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

Operator: FR

ılumn phase: RTx-624

Column diameter: 0.58

2-Butanone



Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

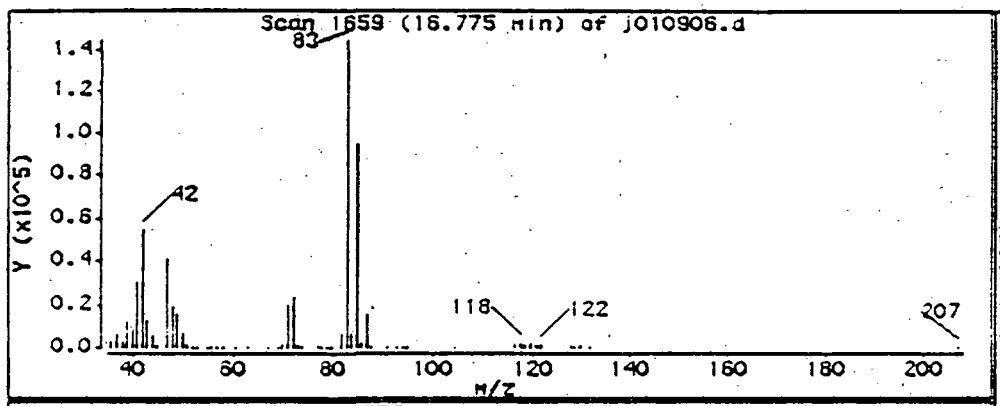
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

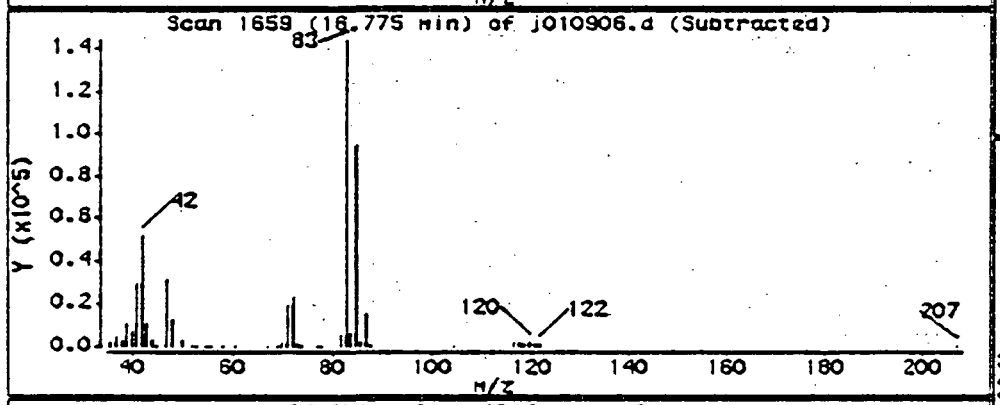
Operator: FA

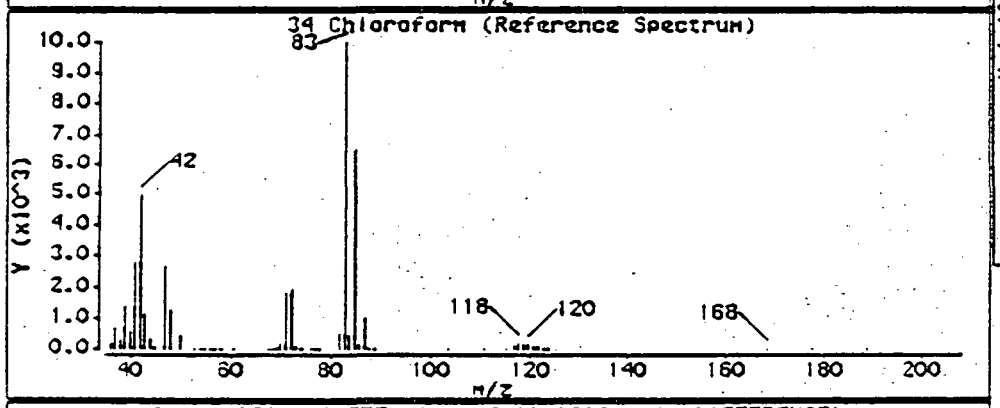
Column phase: RTx-624

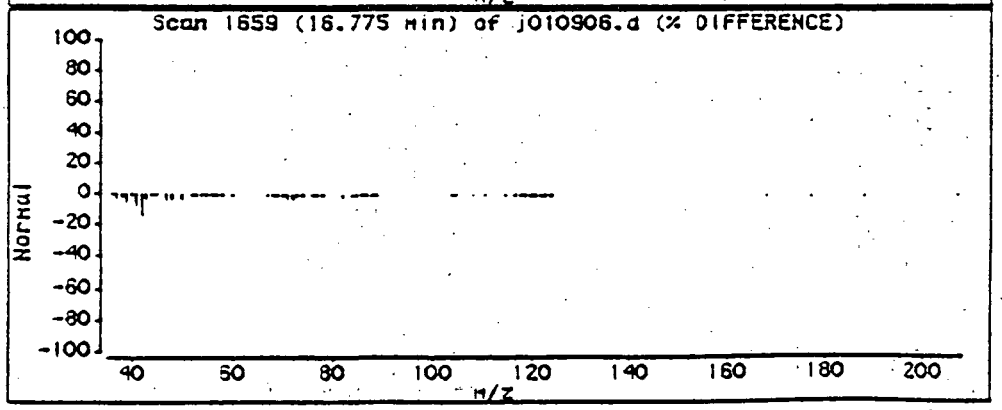
Column diameter: 0.58

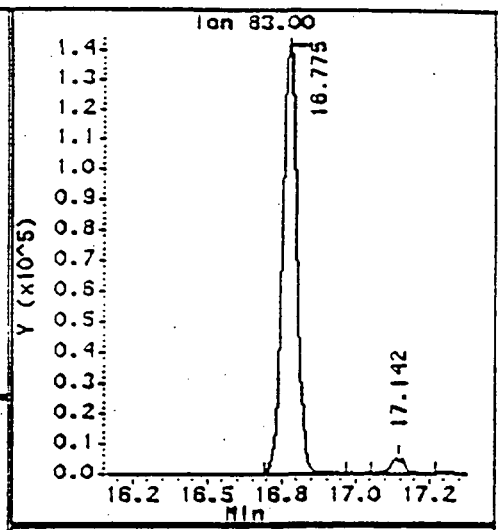
34 Chloroform

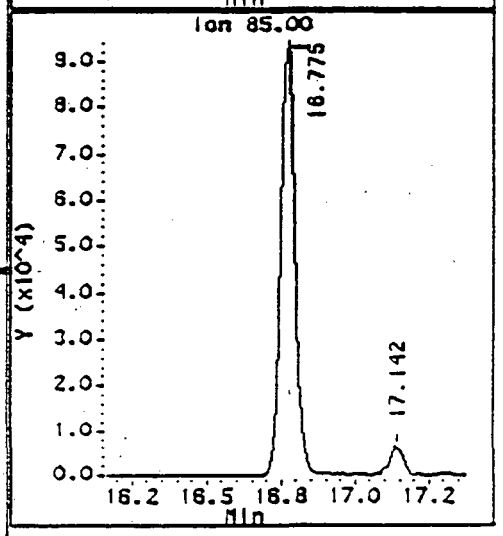












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

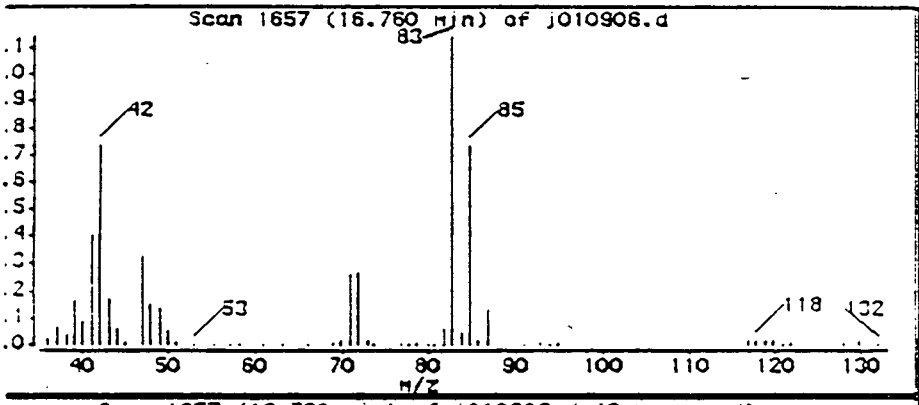
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

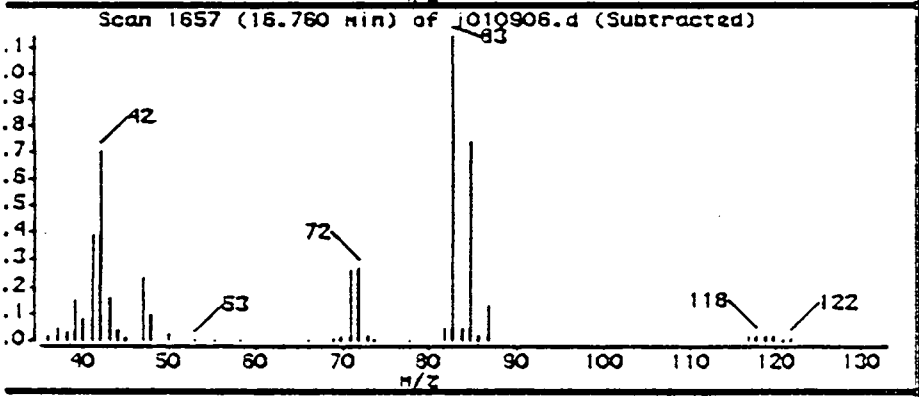
Operator: FA

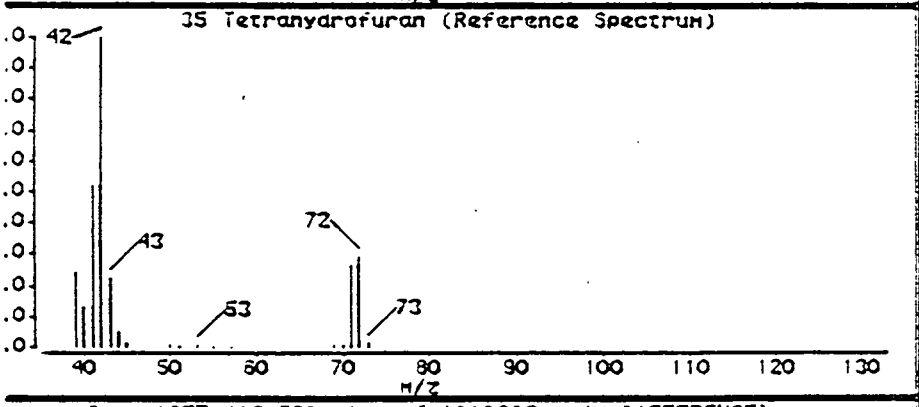
olumn phase: RTx-624

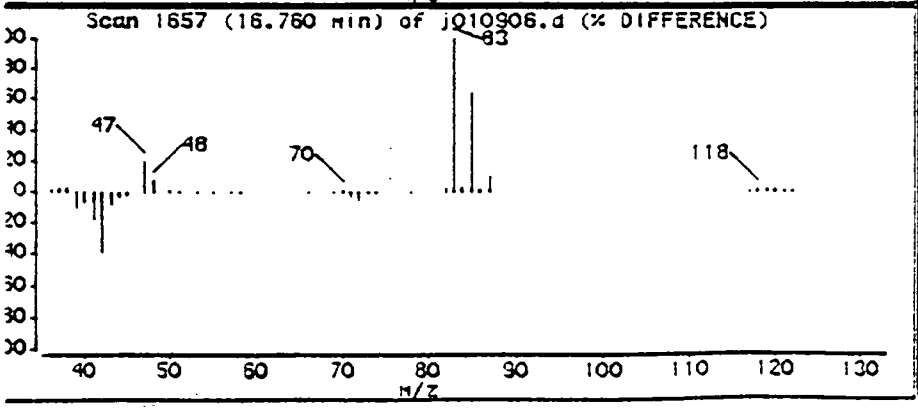
Column diameter: 0.58

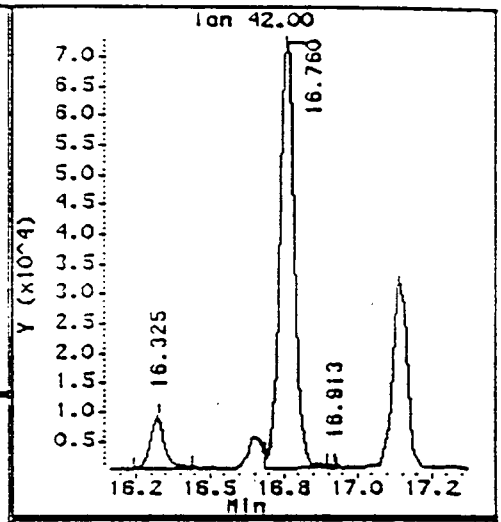
: Tetrahydrofuran

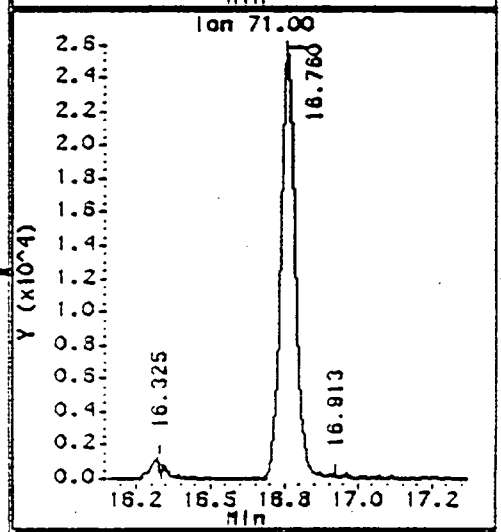


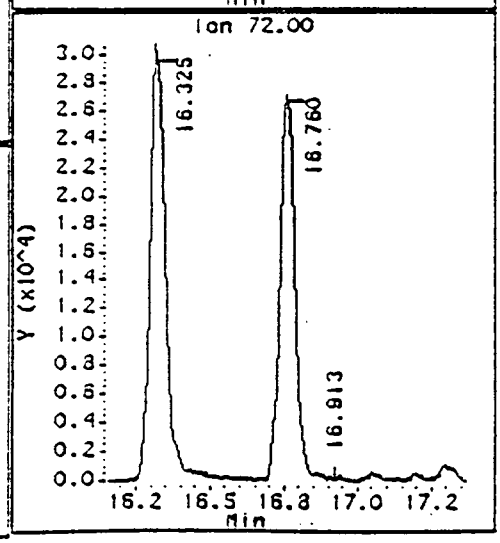












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

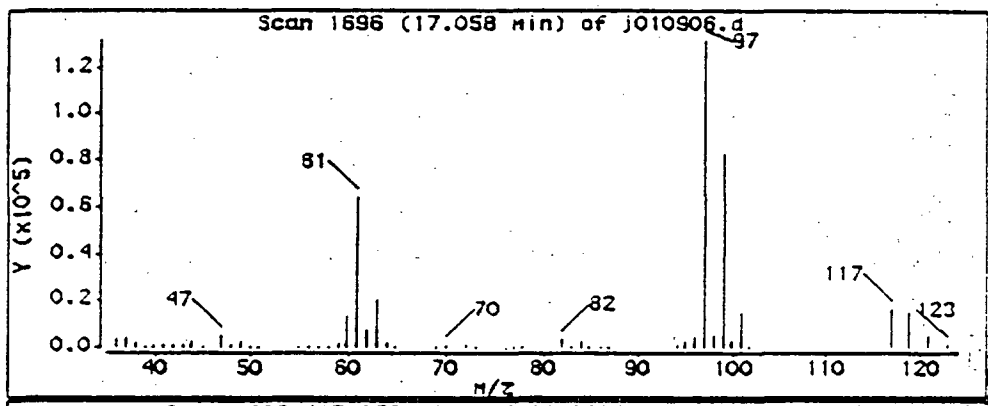
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

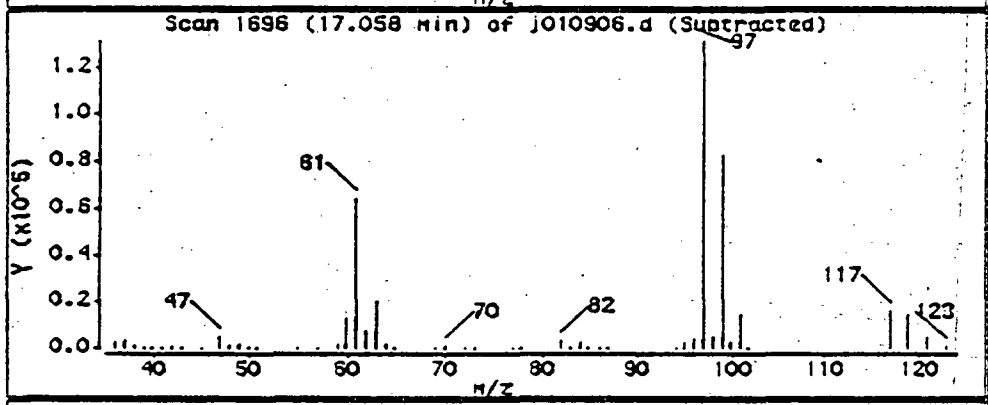
Operator: FA

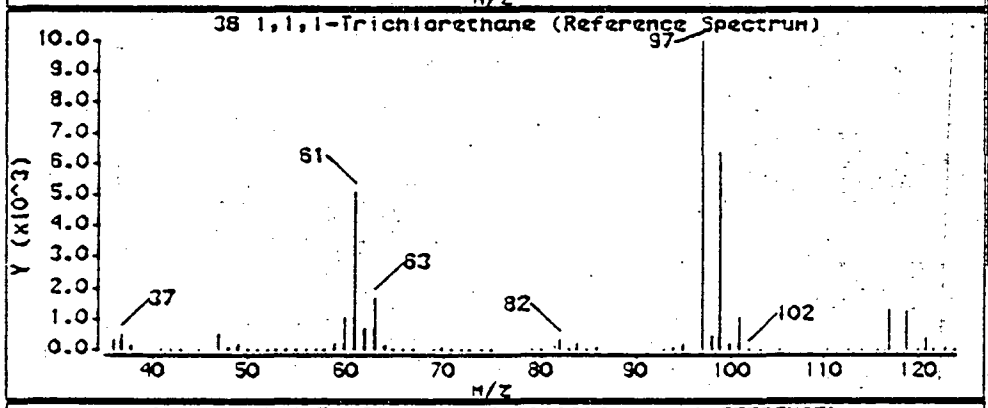
Column phase: RTx-624

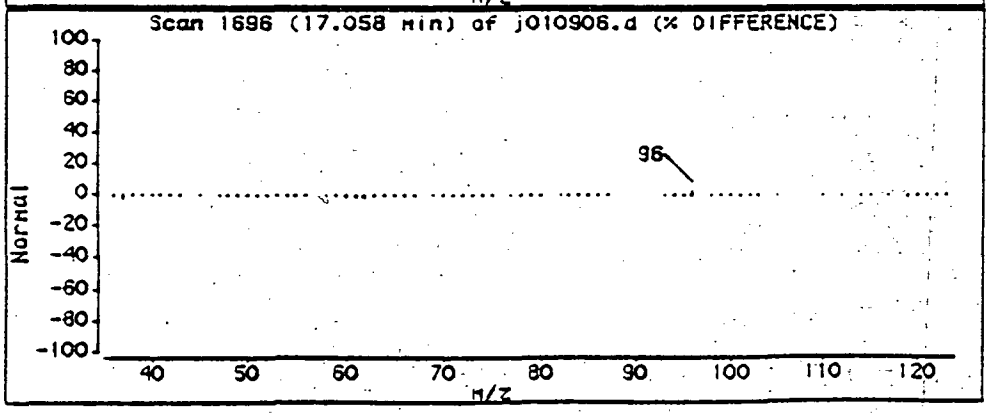
Column diameter: 0.58

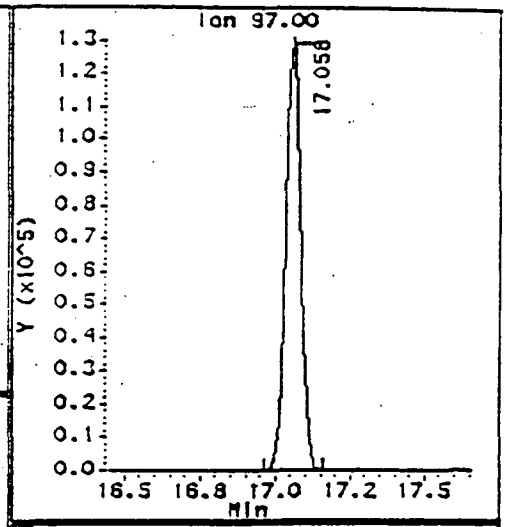
36 1,1,1-Trichlorethane

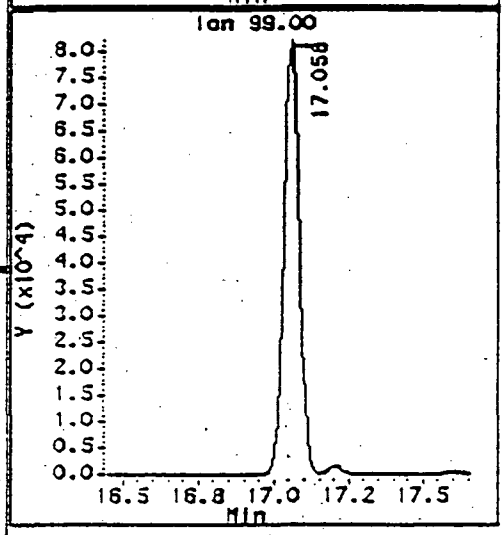












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

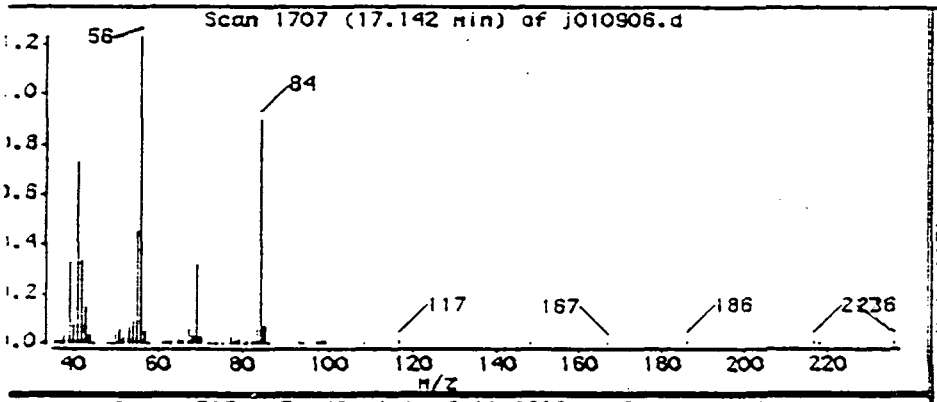
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

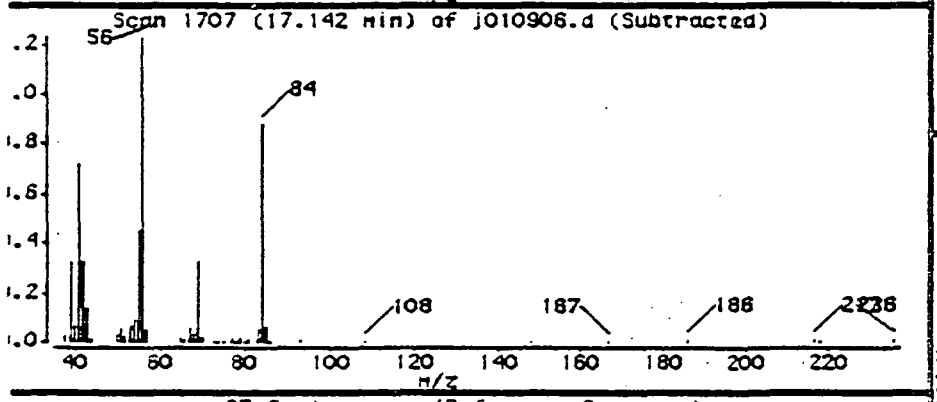
Operator: FA

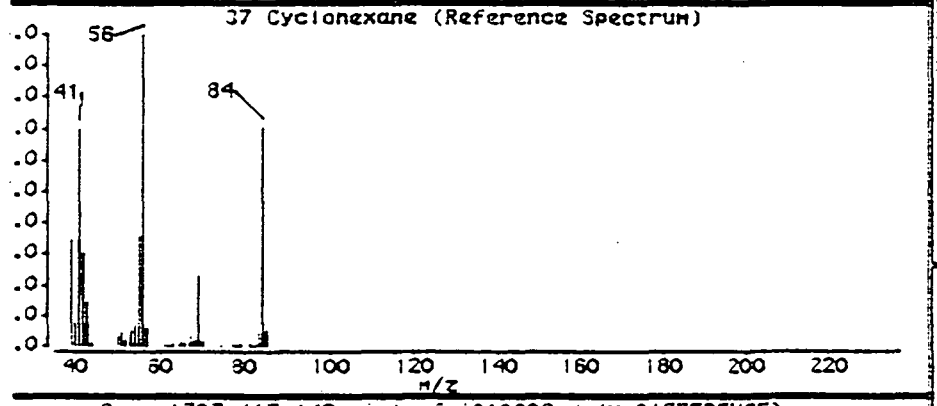
Column phase: RTx-624

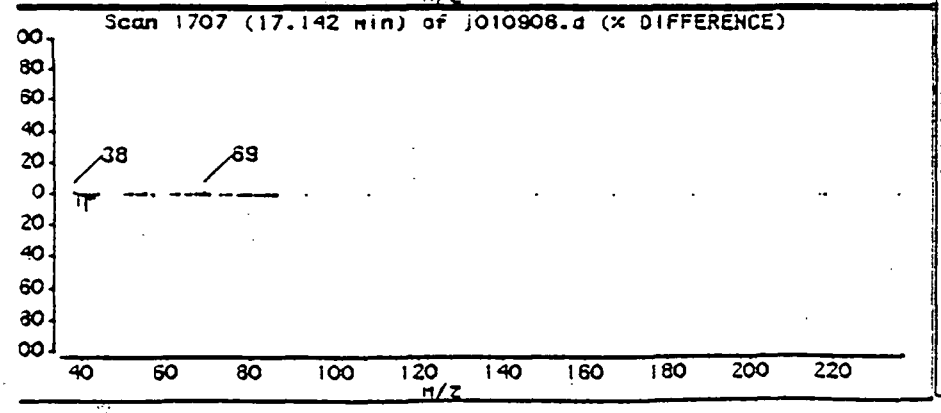
Column diameter: 0.58

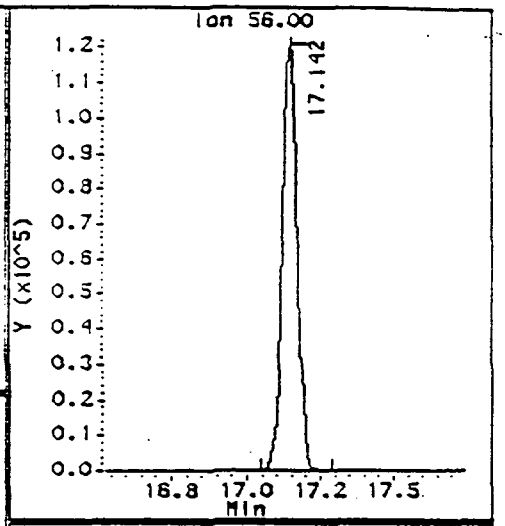
37 Cyclohexane

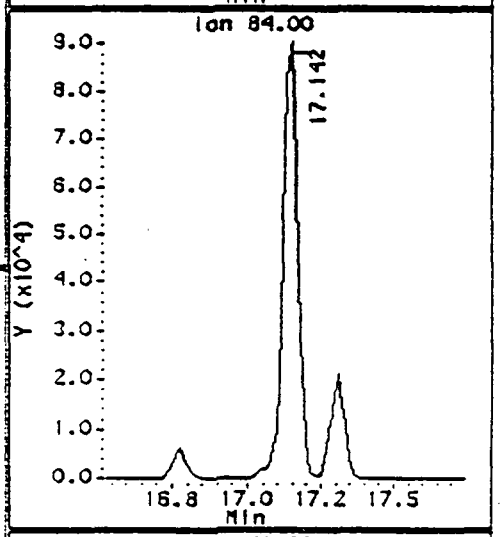


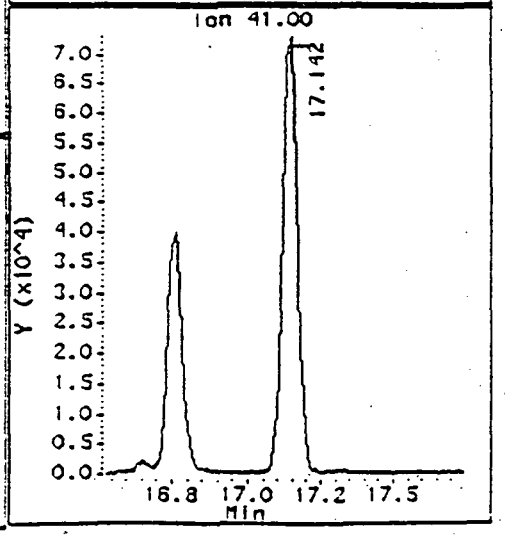






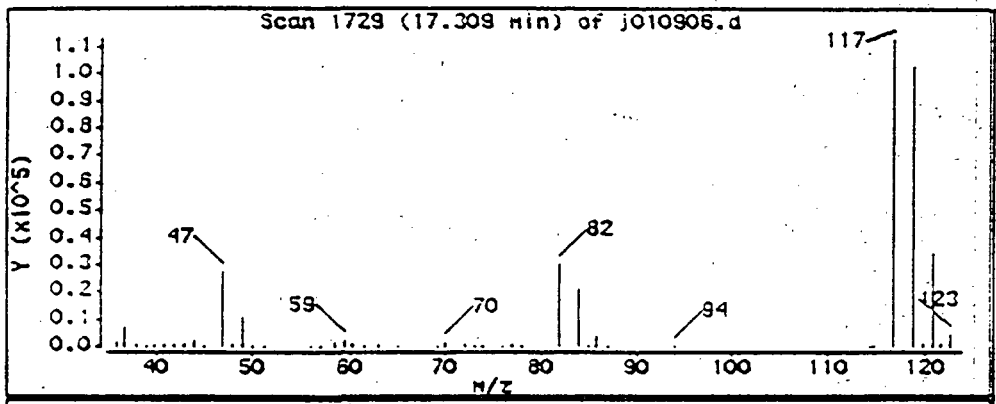


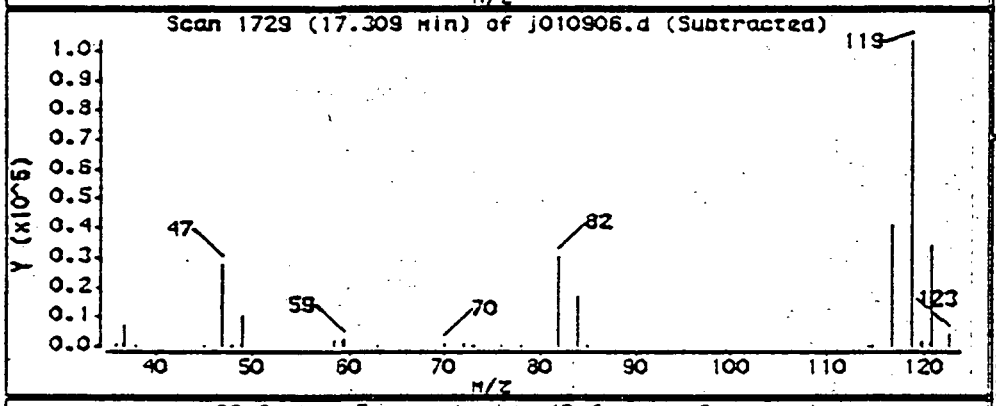


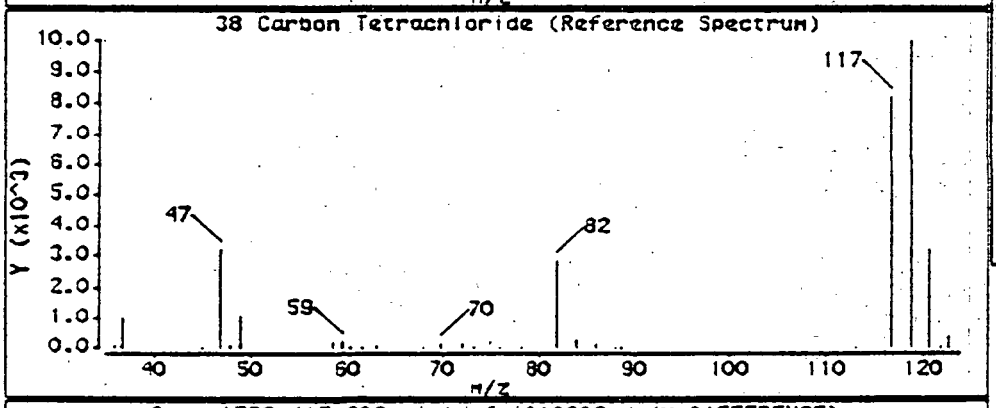


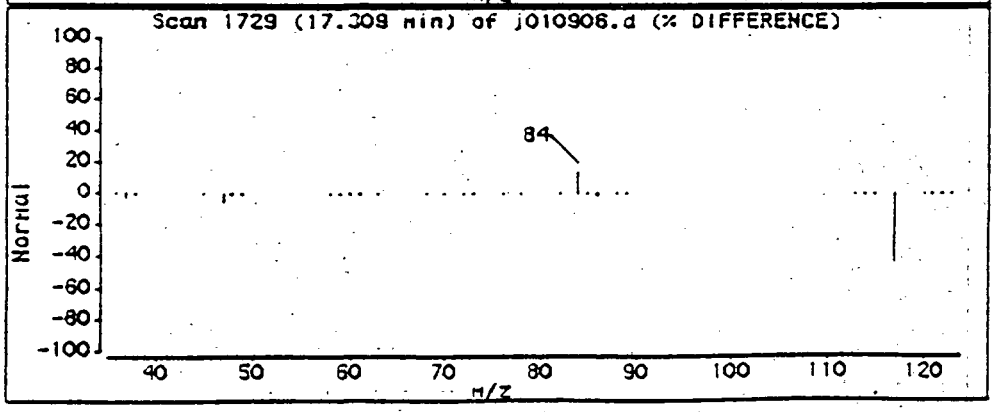
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
Column phase: RTx-624
Column diameter: 0.58

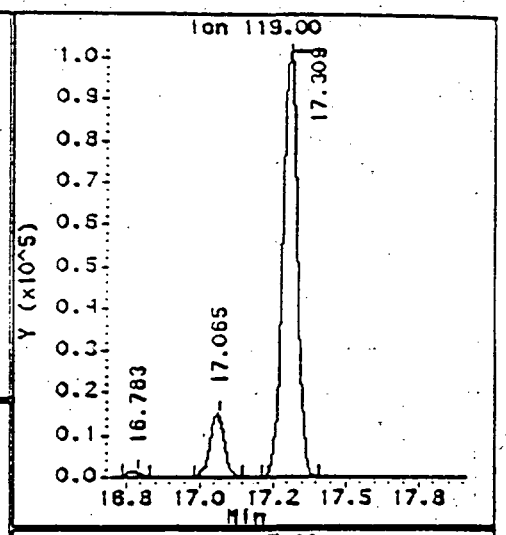
38 Carbon Tetrachloride

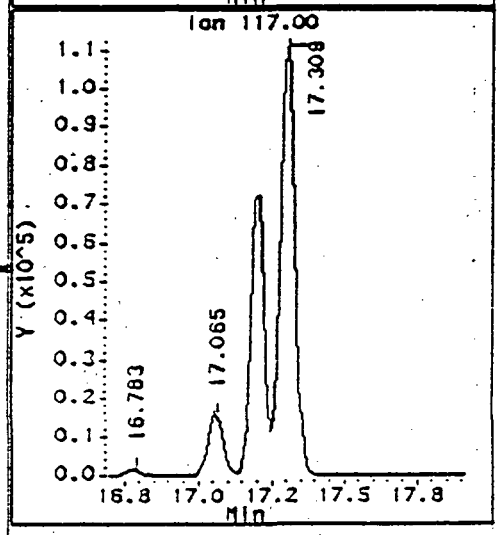












ta File: /chem/msdj.i/j-09jan.b/j010906.d

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te : 09-JAN-97 10:44

ient ID: VSTD005

Instrument: msdj.i

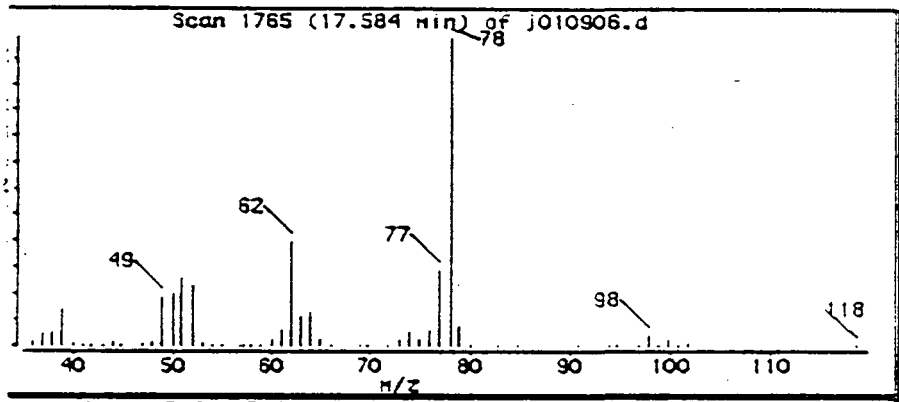
mple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

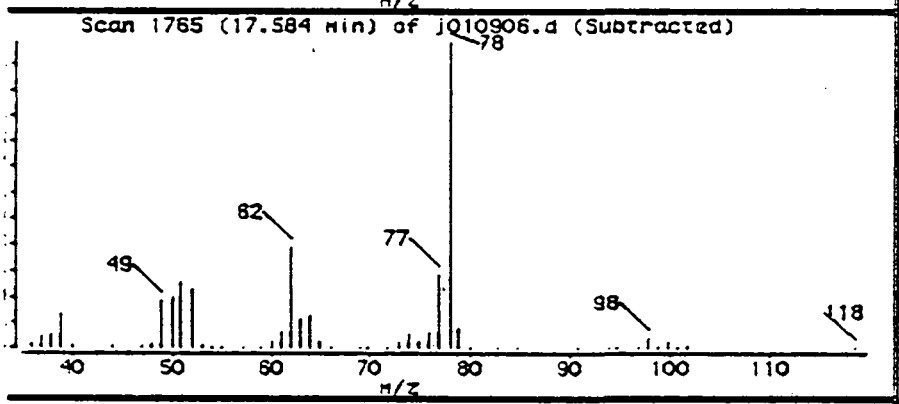
Operator: FA

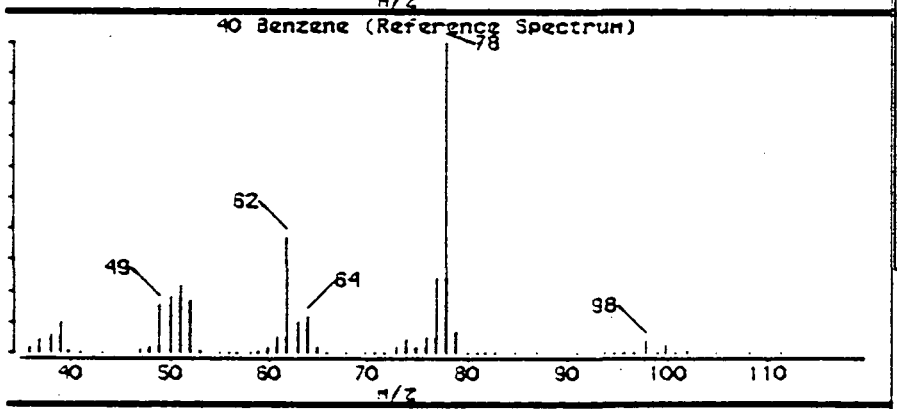
lumn phase: RTx-624

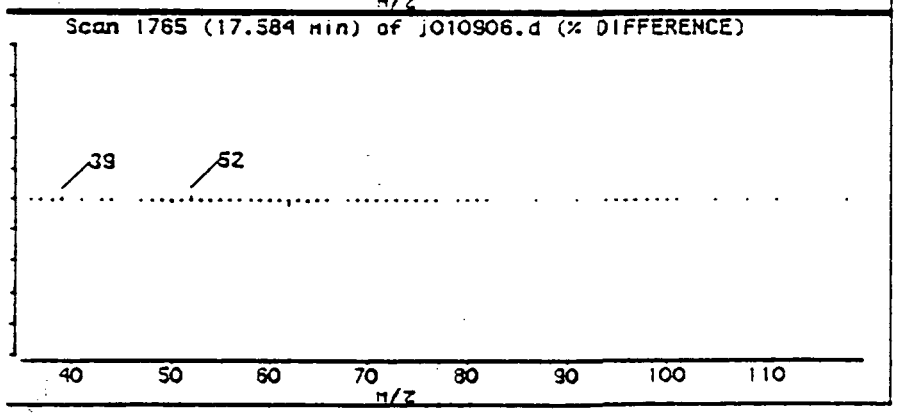
Column diameter: 0.58

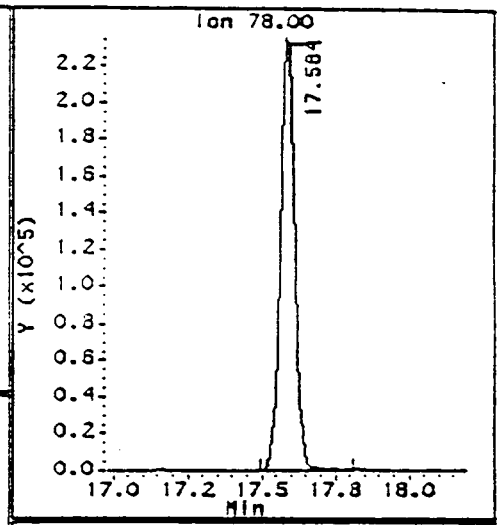
Benzene

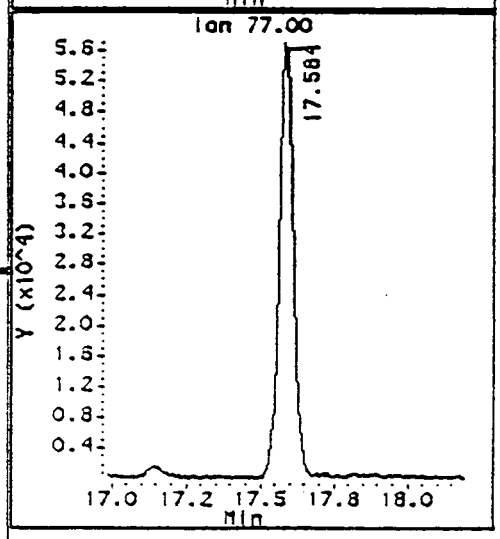












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

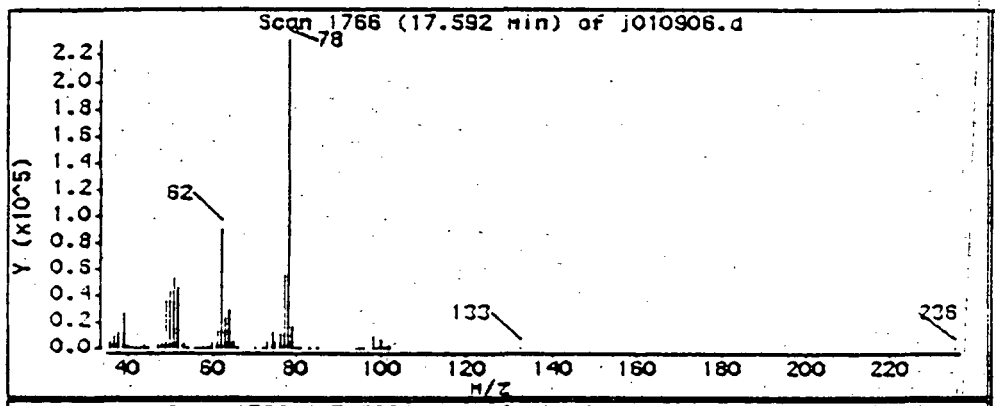
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

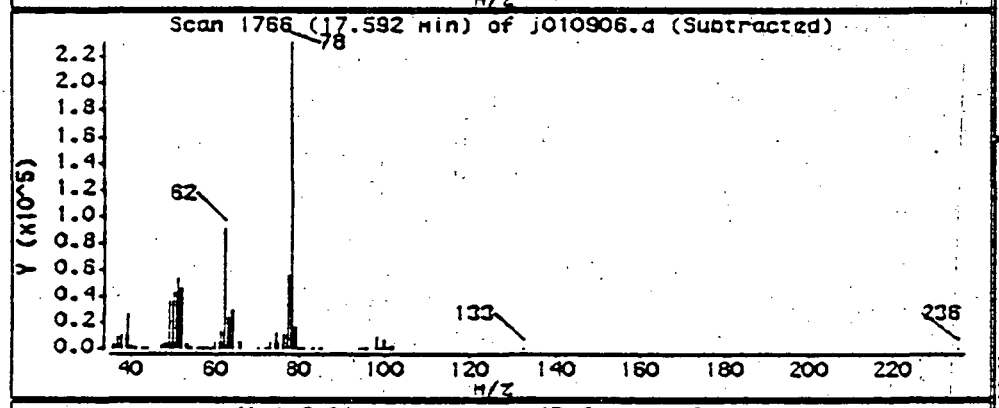
Operator: FA

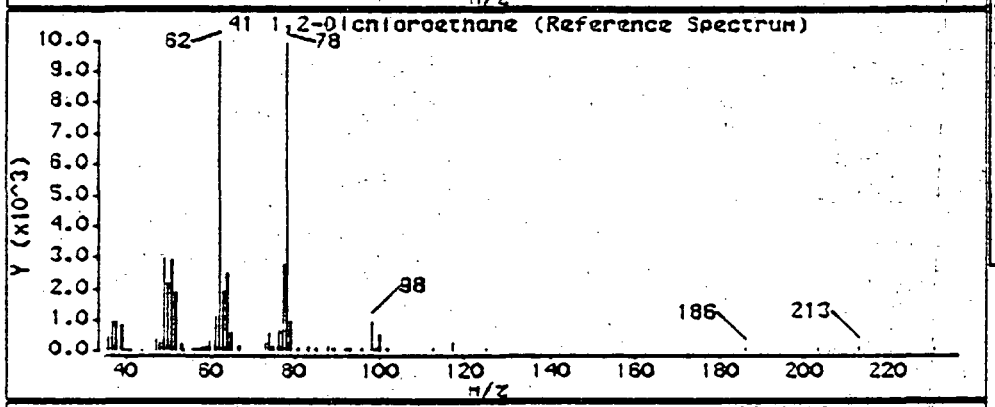
Column phase: RTx-624

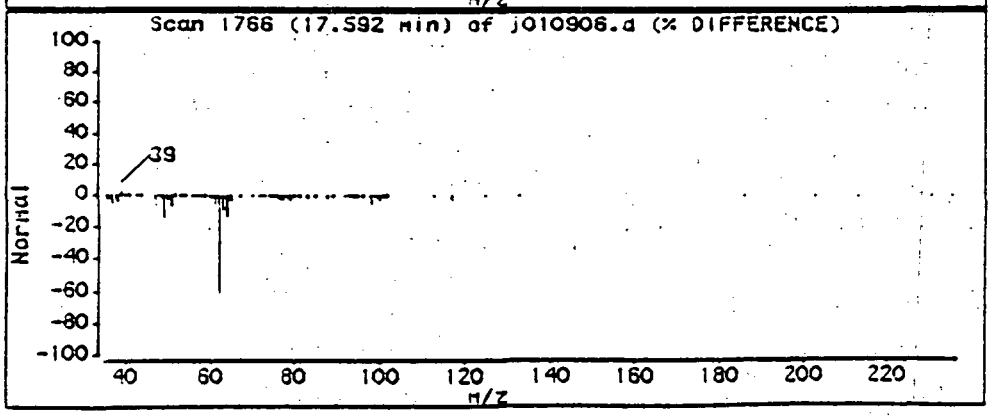
Column diameter: 0.58

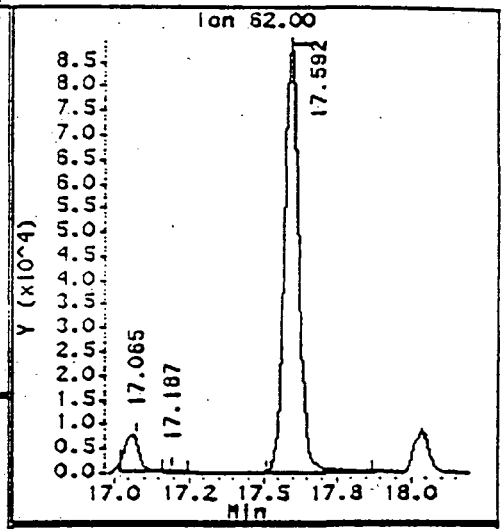
41 1,2-Dichloroethane

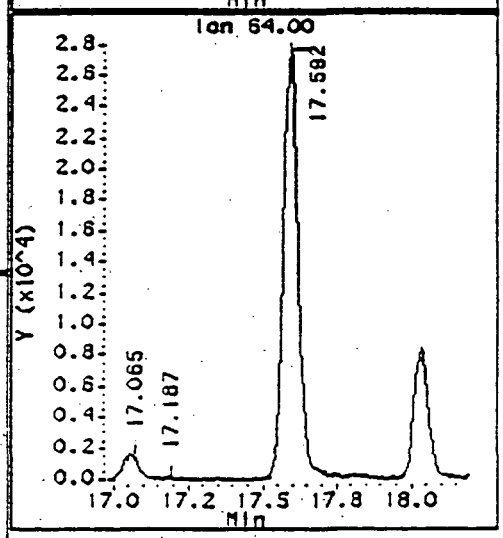












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

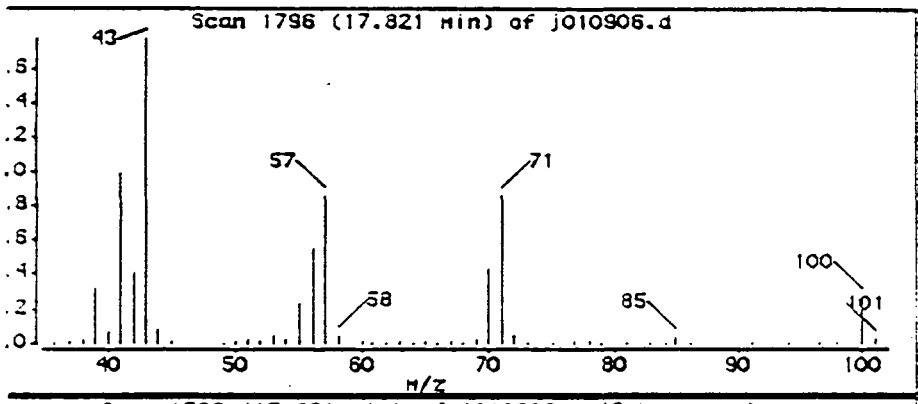
lient ID: VSTD005 Instrument: msdj.i

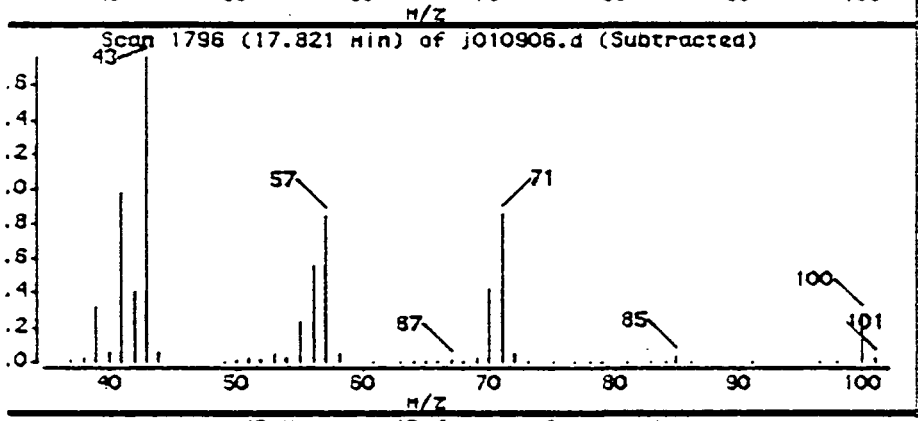
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

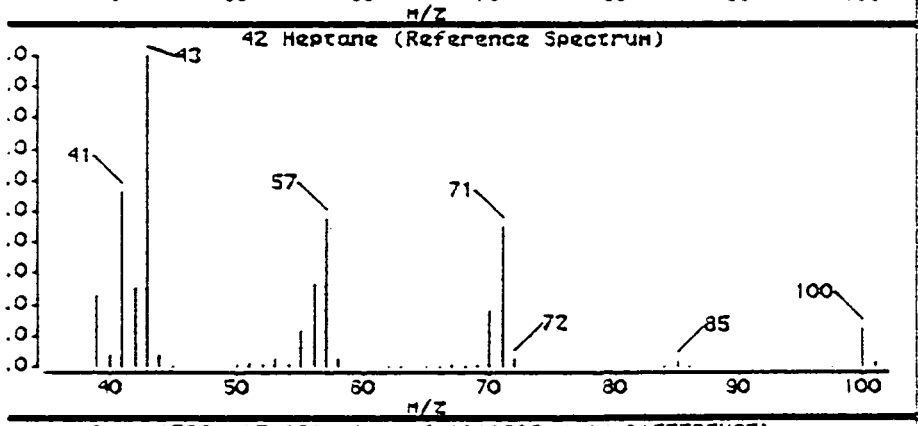
Operator: FA

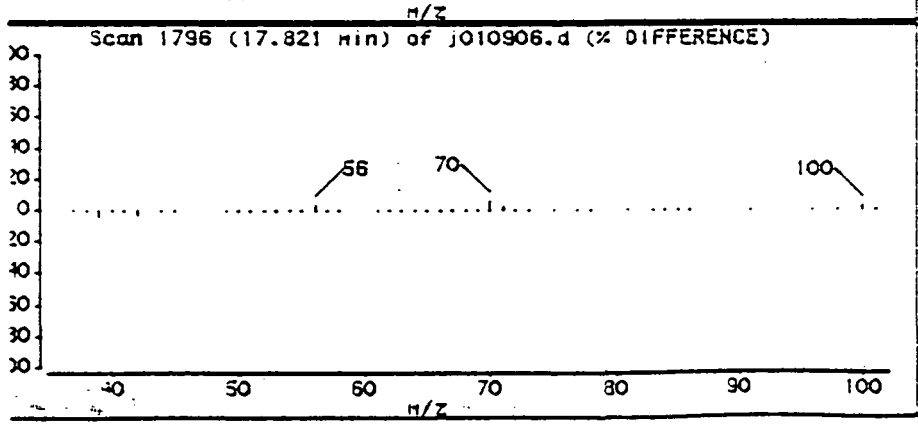
olumn phase: RTx-624 Column diameter: 0.58

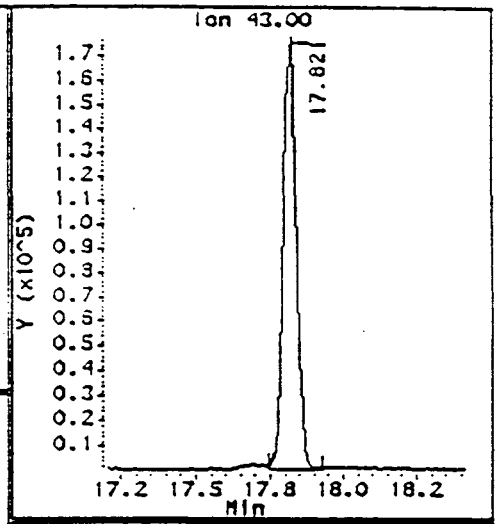
: Heptane

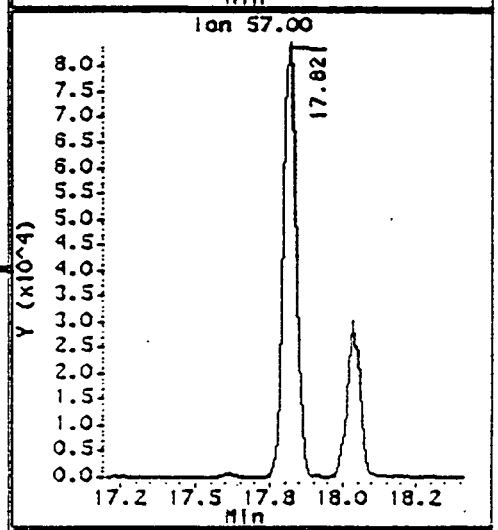


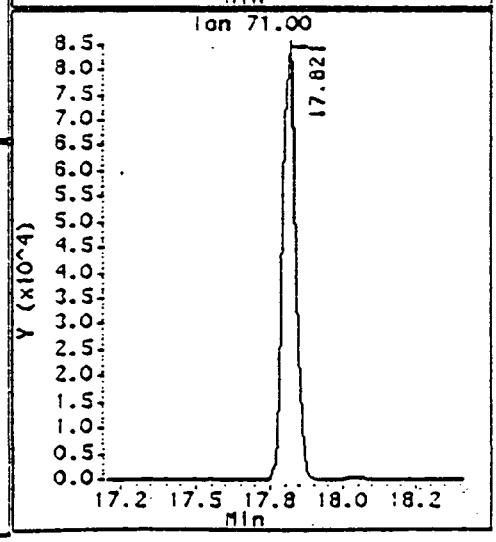












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

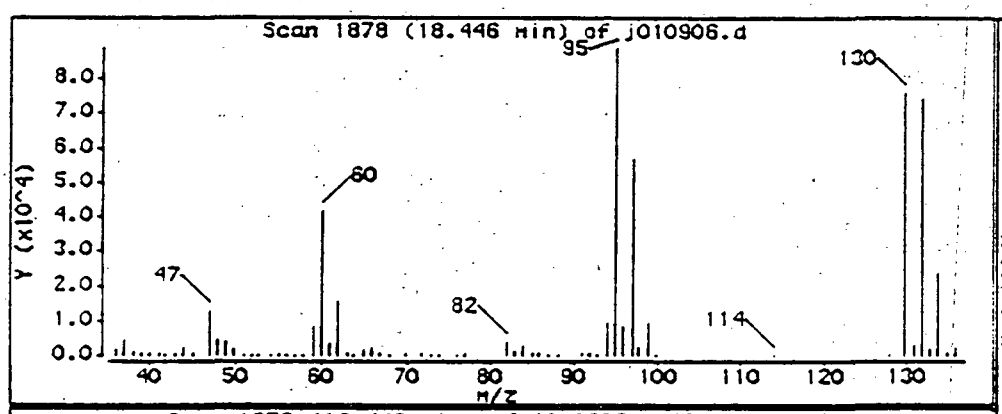
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

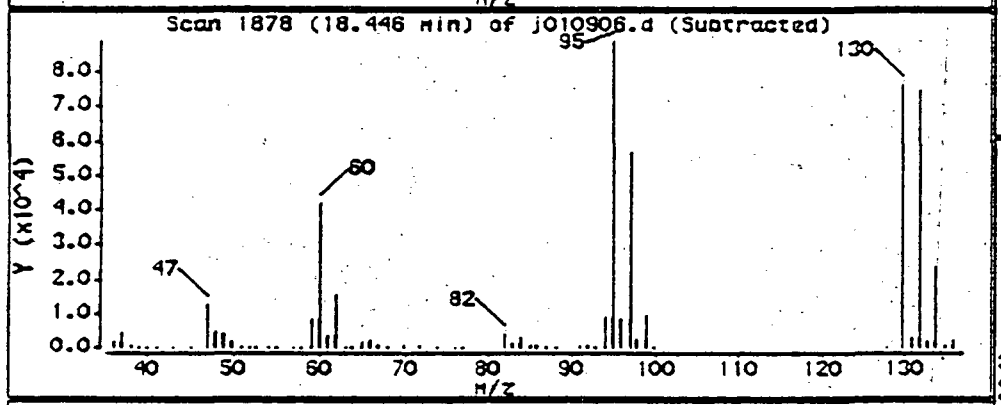
Operator: FR

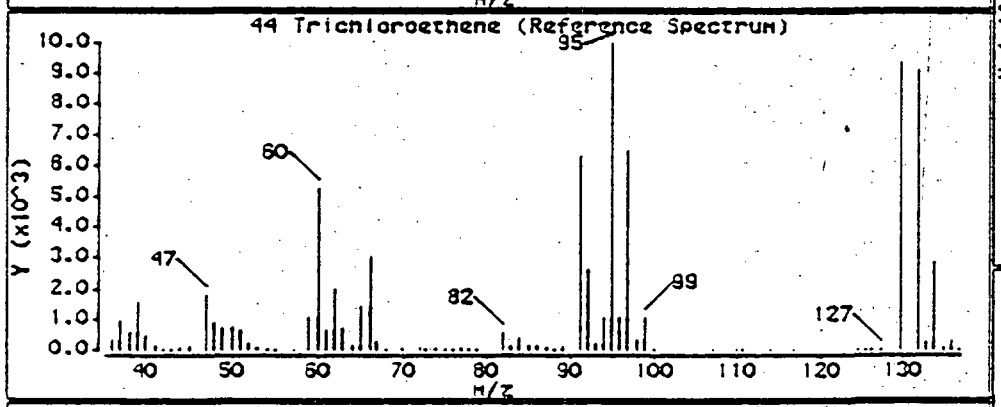
Column phase: RTx-624

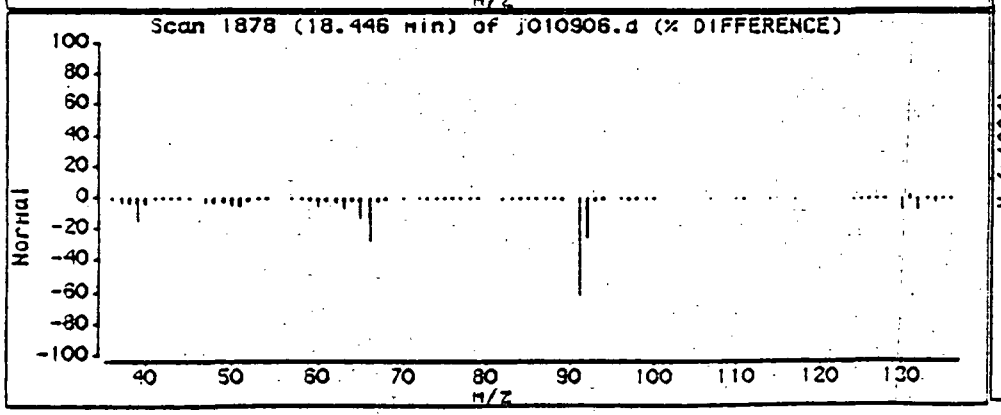
Column diameter: 0.58

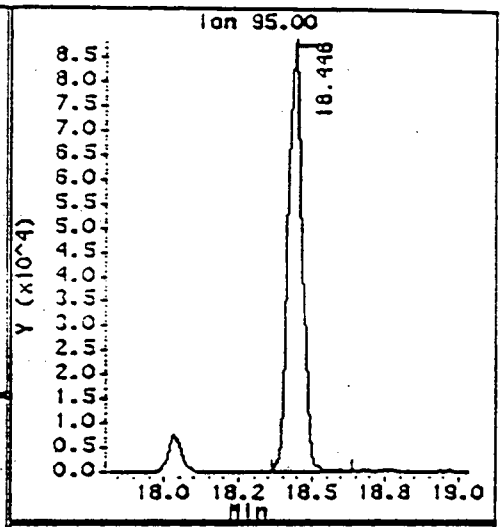
44 Trichloroethene

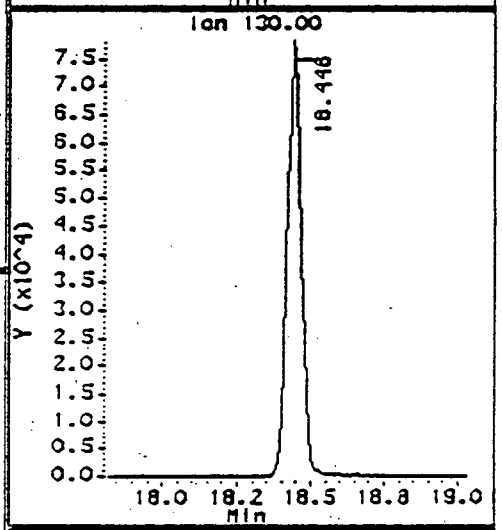


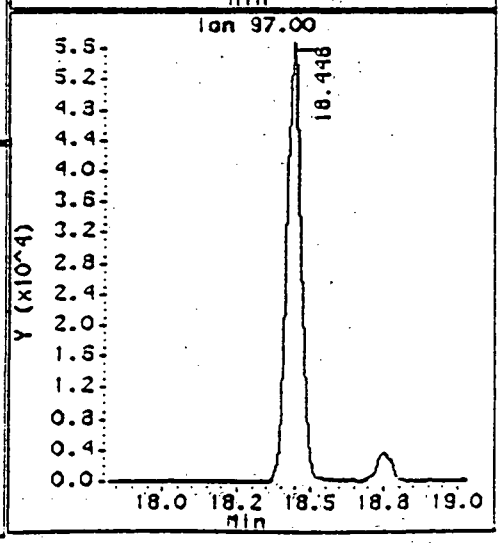












ta File: /chem/msdj.i/j-09jan.b/j010906.d

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te : 09-JAN-97 10:44

ient ID: VSTD005

Instrument: msdj.i

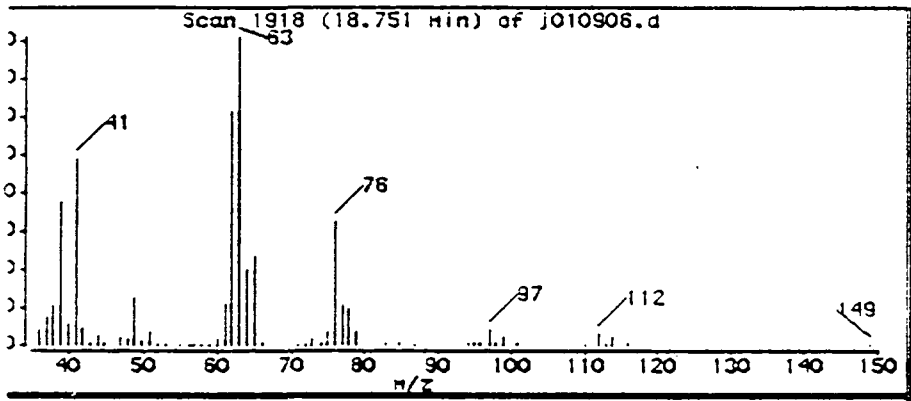
mple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

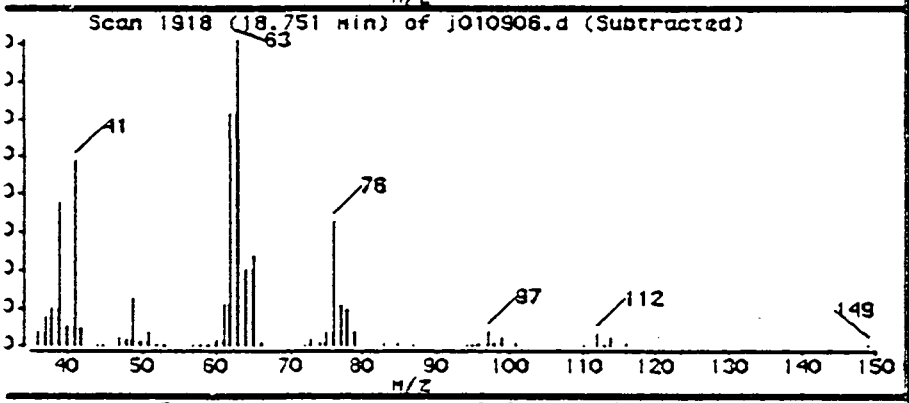
Operator: FA

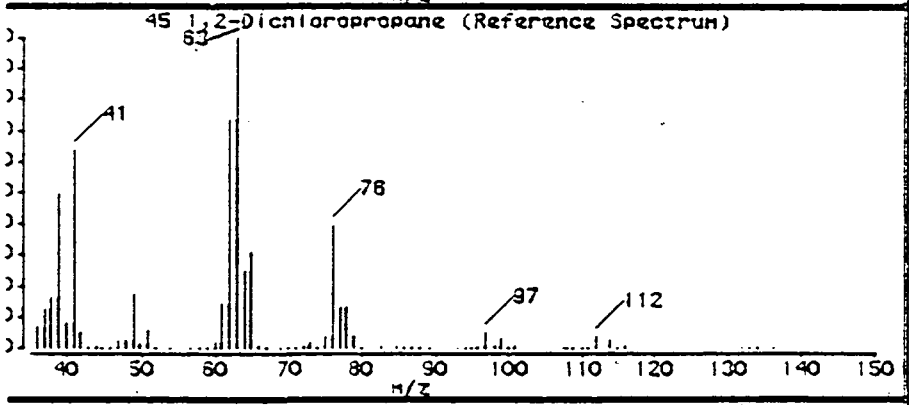
lumn phase: RTx-624

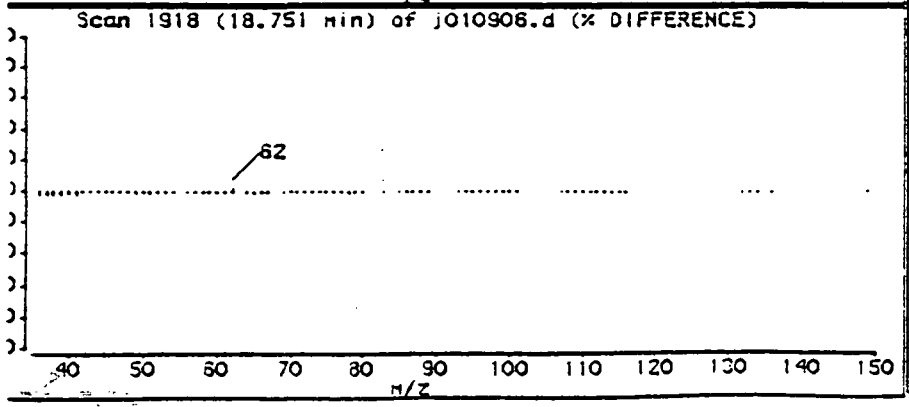
Column diameter: 0.58

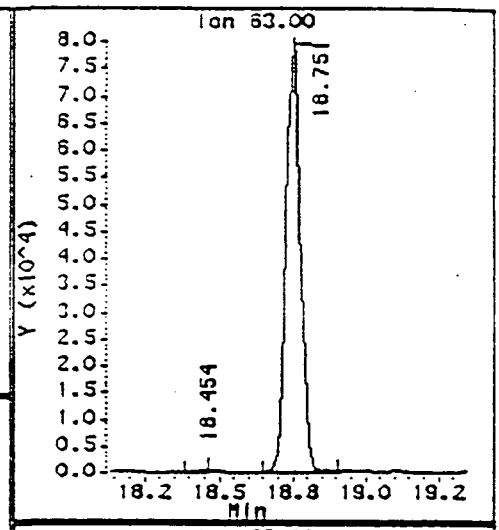
1,2-Dichloropropane

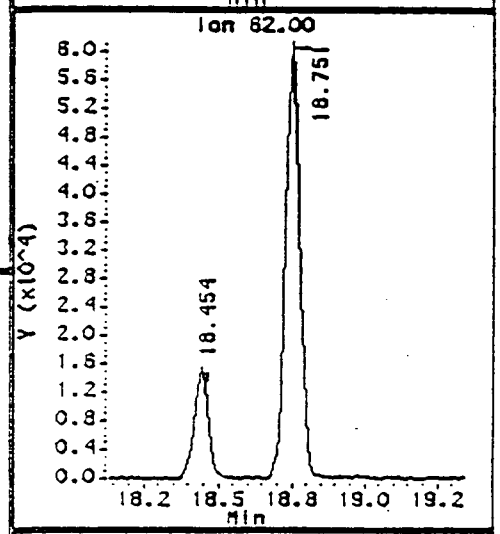


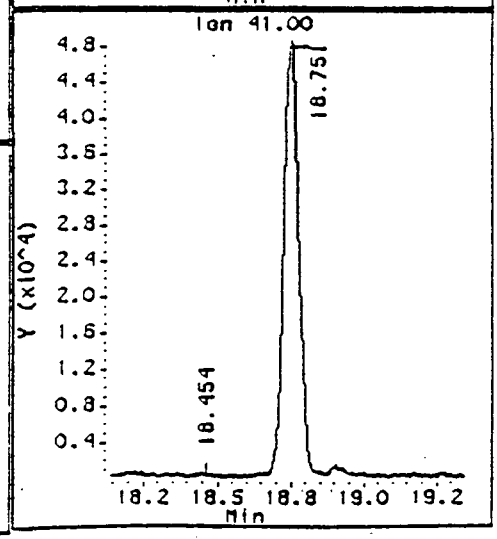






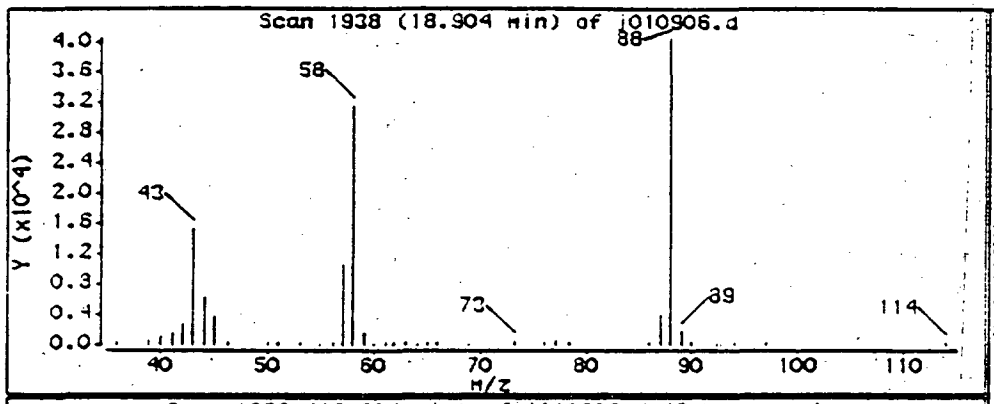


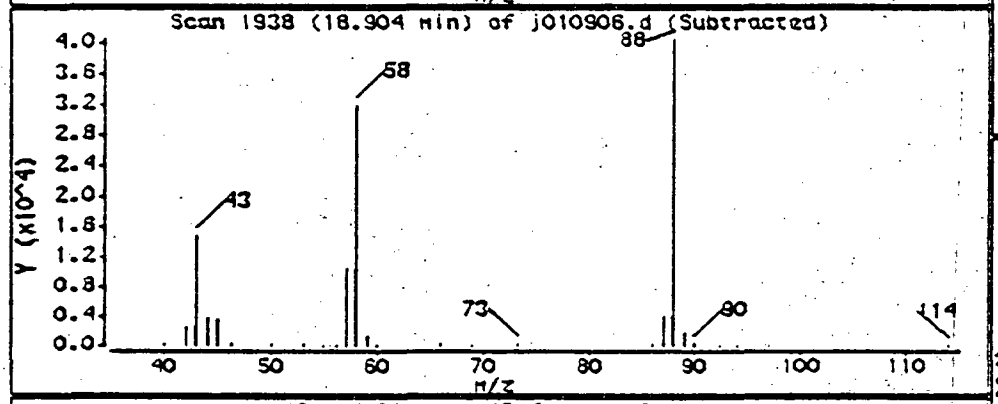


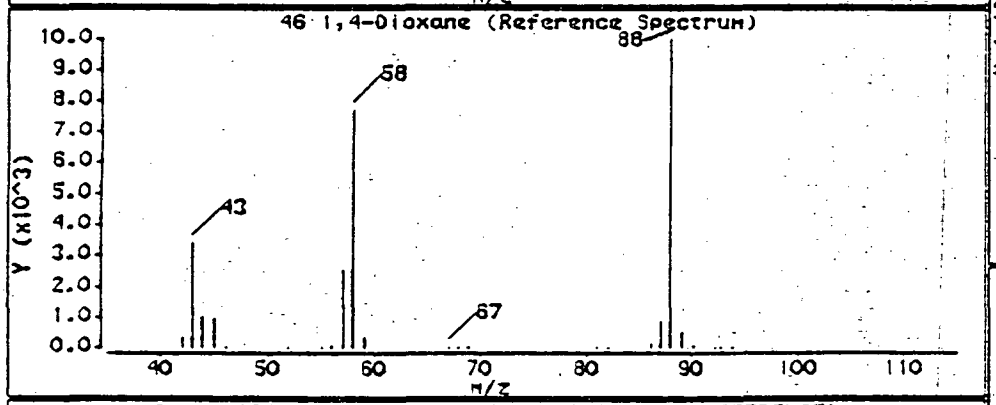


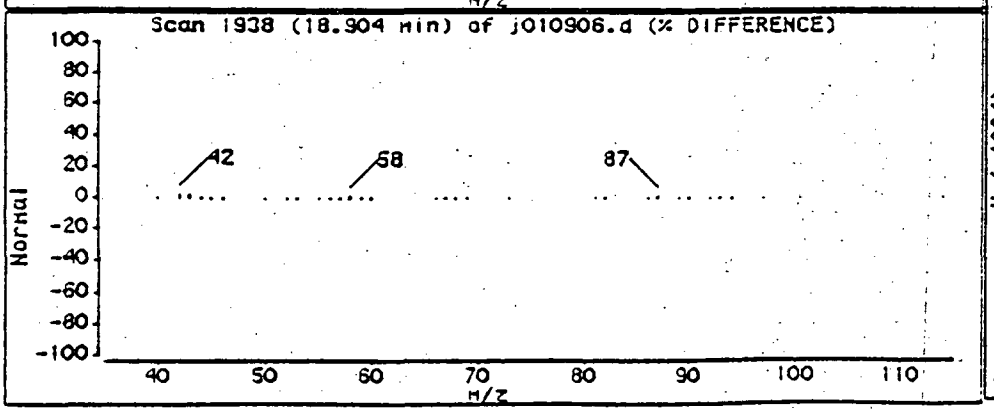
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Instrument: msdj.i
Operator: FA
Column phase: RTx-624
Column diameter: 0.58

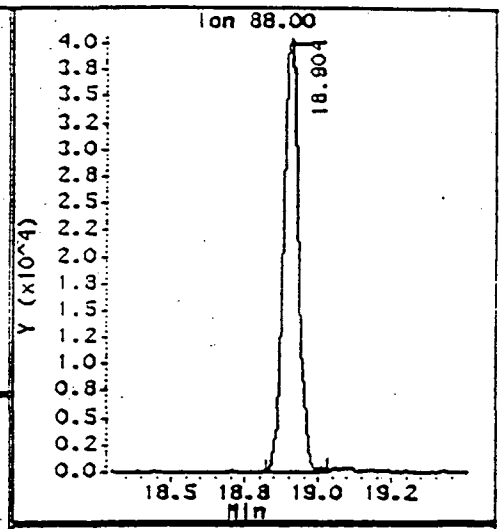
46 1,4-Dioxane

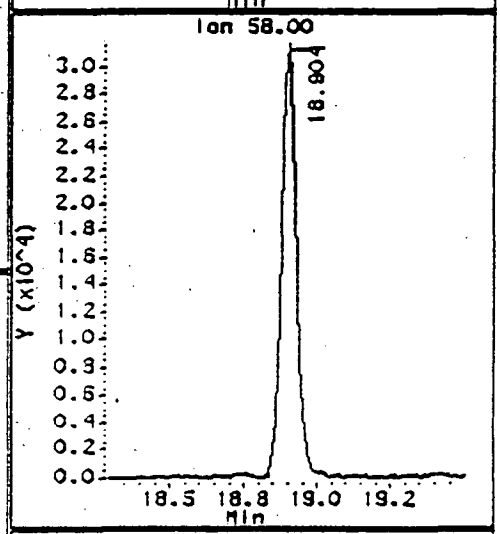


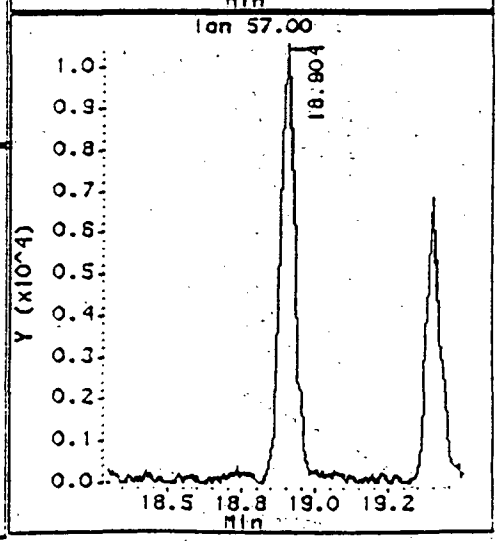












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

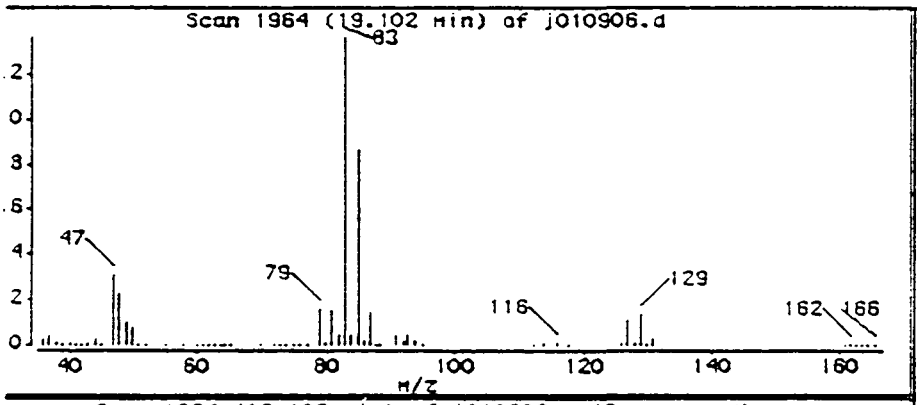
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

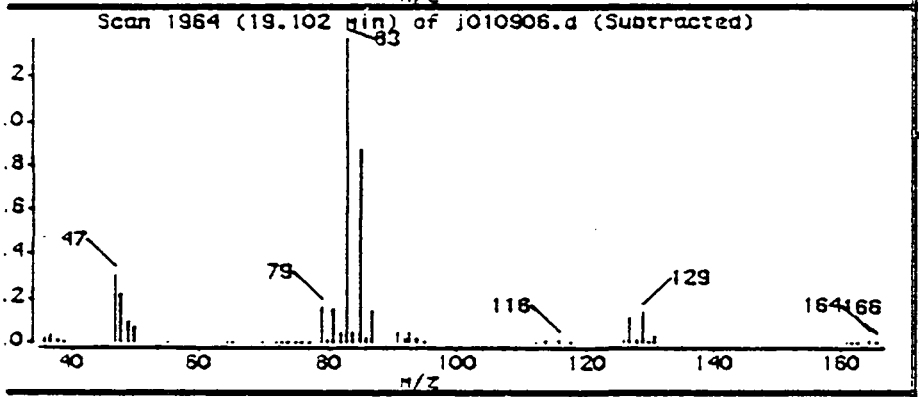
Operator: FA

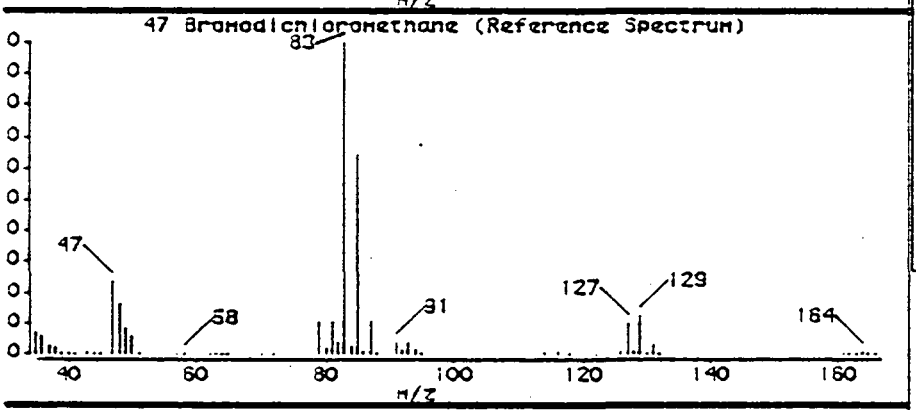
olumn phase: RTx-624

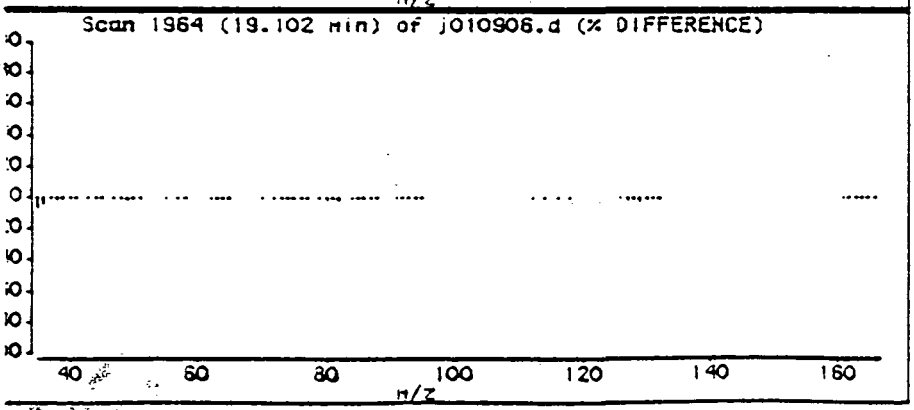
Column diameter: 0.58

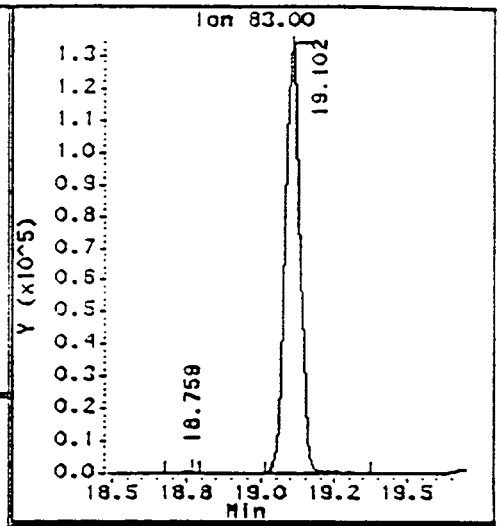
Bromodichloromethane

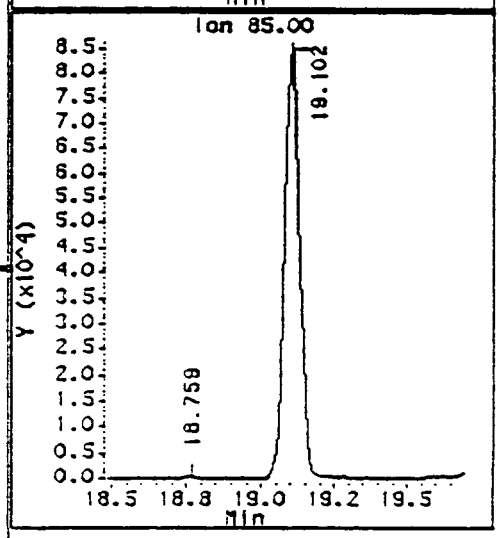












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

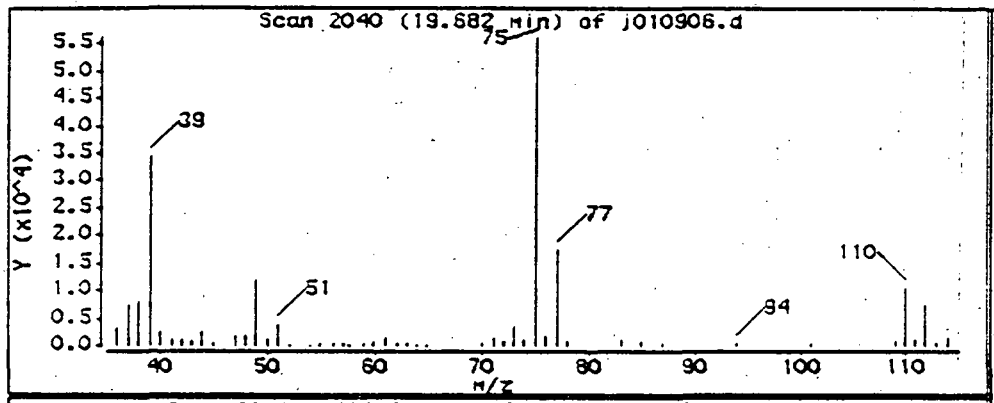
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

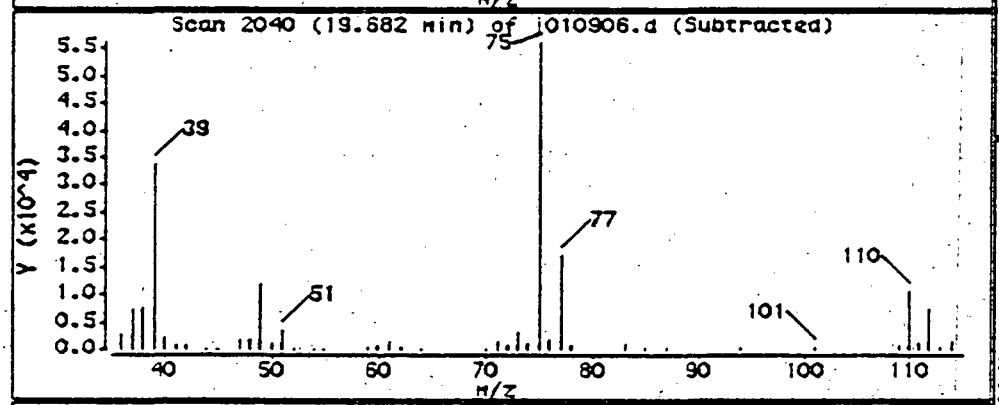
Operator: FA

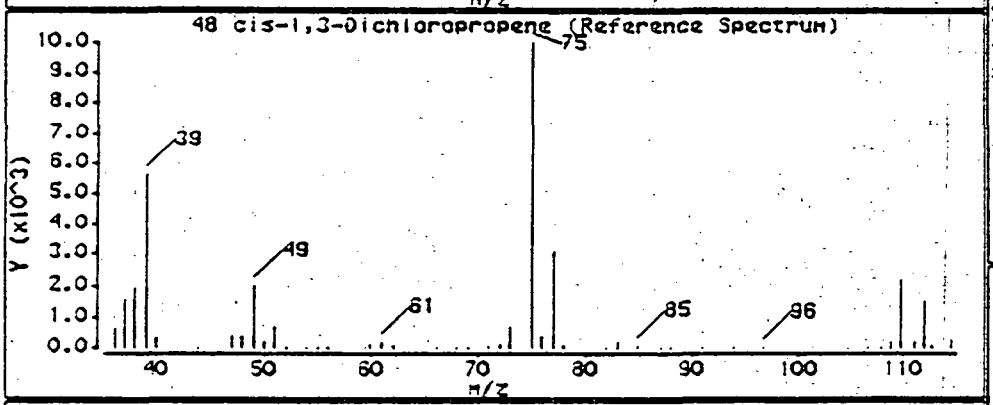
Column phase: RTx-624

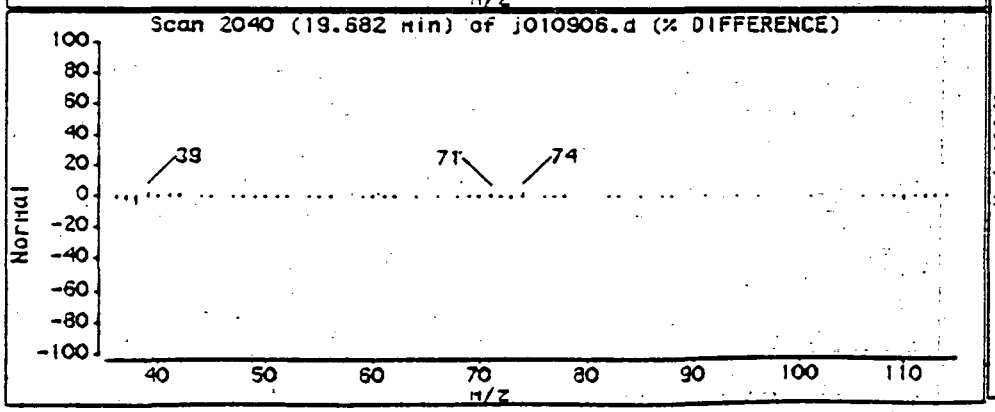
Column diameter: 0.58

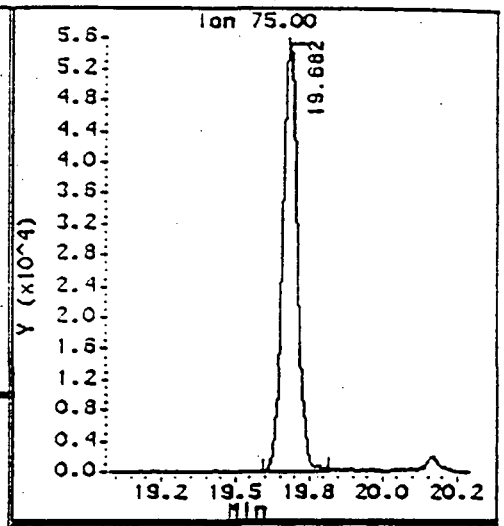
48 cis-1,3-Dichloropropene

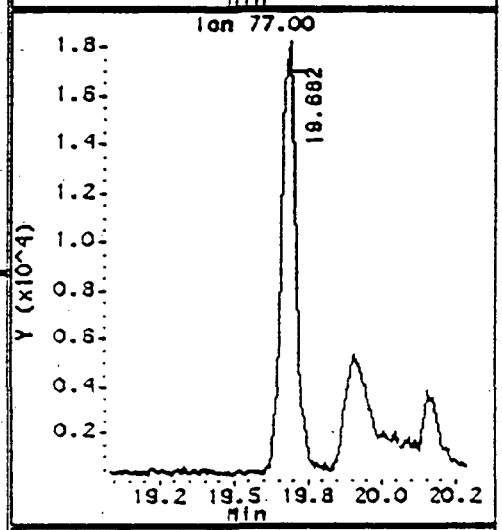


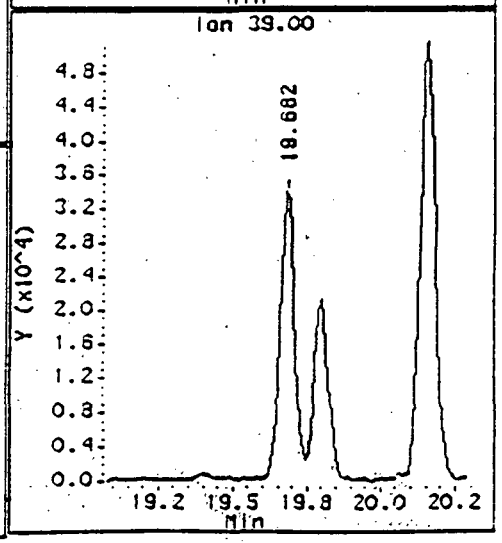












ıta File: /chem/msdj.i/j-09jan.b/j010906.d

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ıte : 09-JAN-97 10:44

:ient ID: VSTD005

Instrument: msdj.i

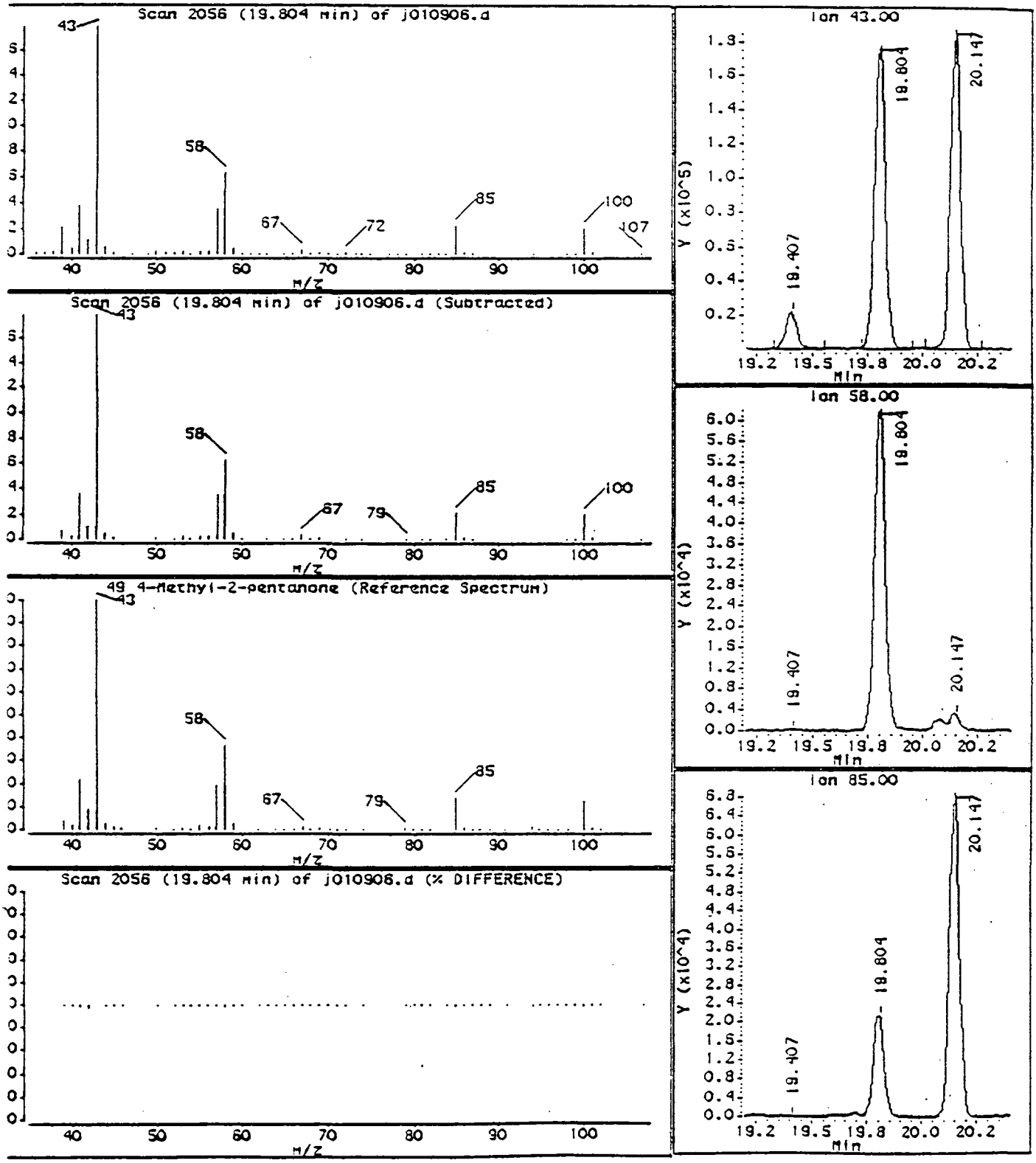
ımple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

Operator: FA

ıluma phase: RTx-624

Column diameter: 0.58

4-Methyl-2-pentanone



Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

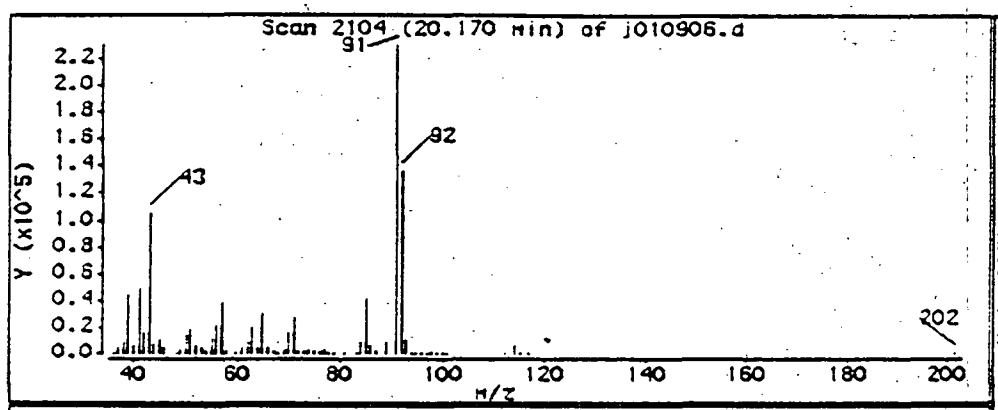
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

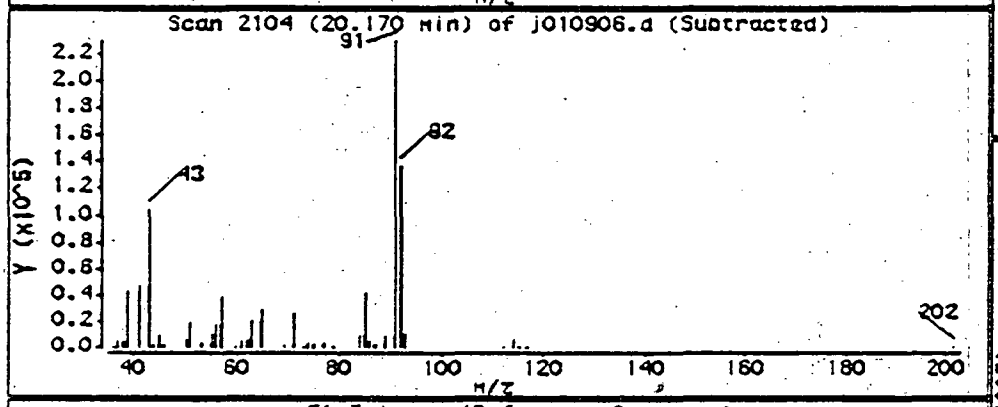
Operator: FA

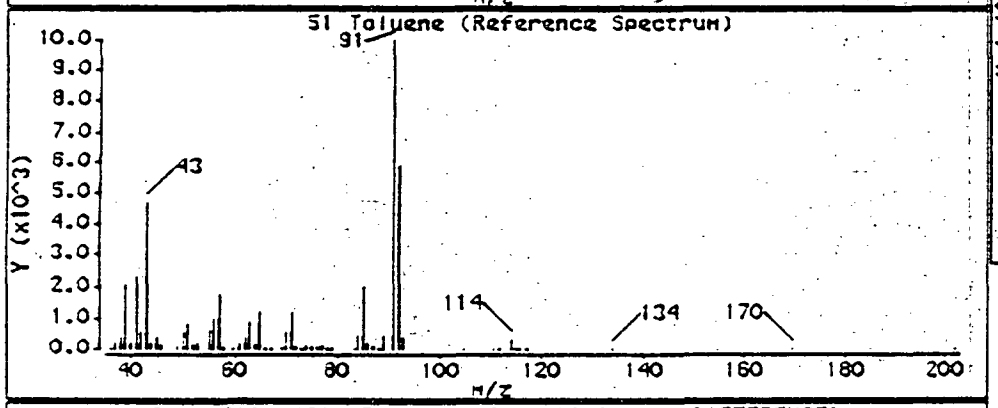
Column phase: RTx-624

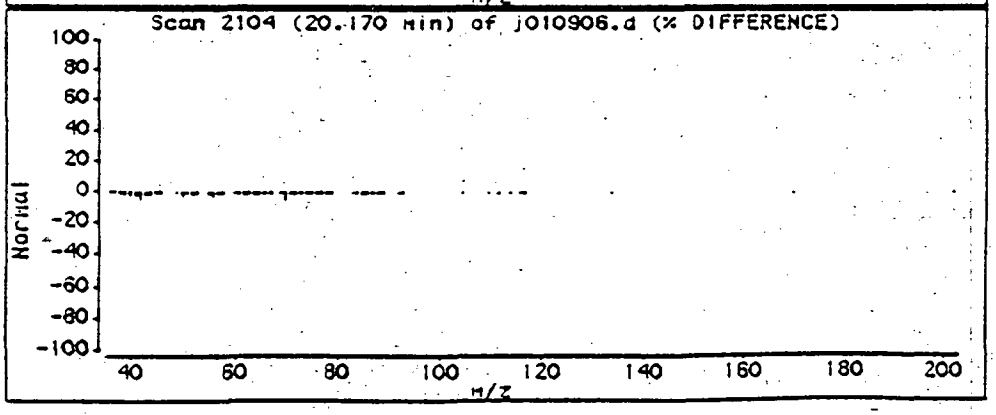
Column diameter: 0.58

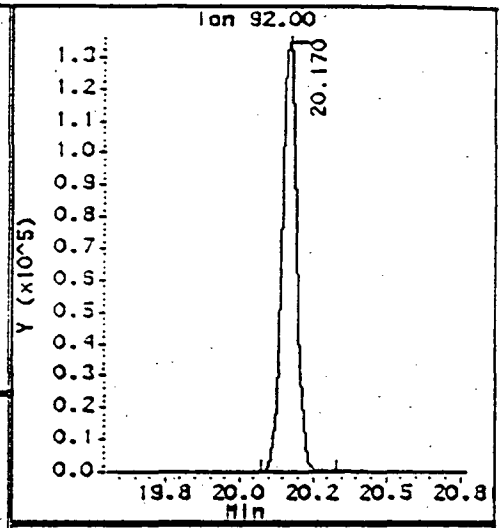
51 Toluene

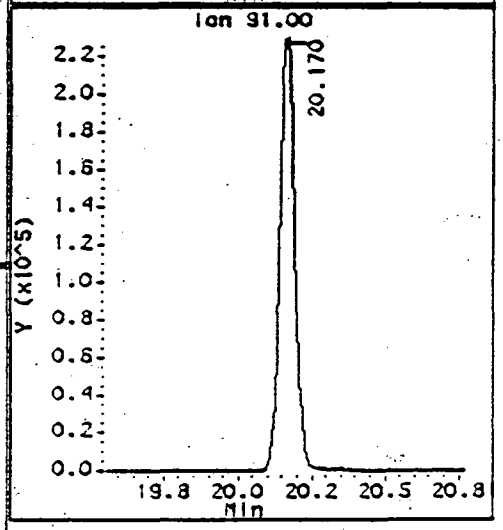












ıta File: /chem/msdj.i/j-09jan.b/j010906.d

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ıte : 09-JAN-97 10:44

ient ID: VSTD005

Instrument: msdj.i

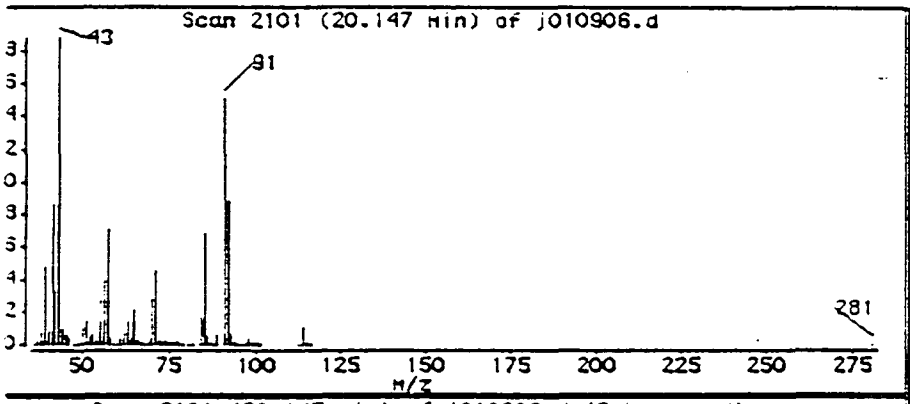
ımple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

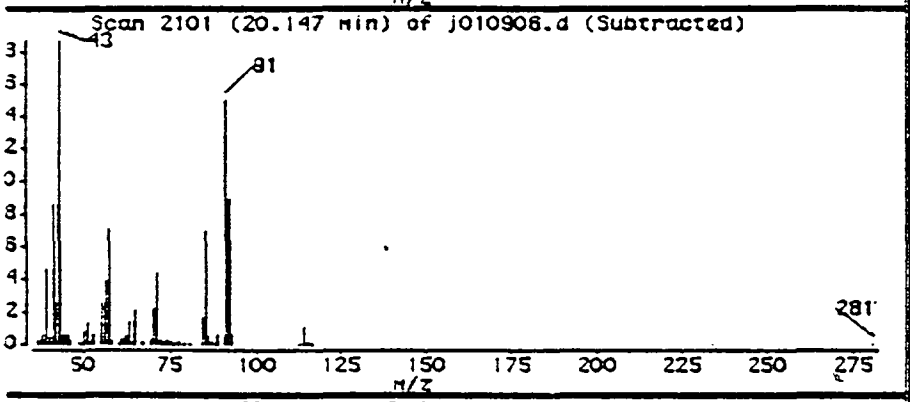
Operator: FA

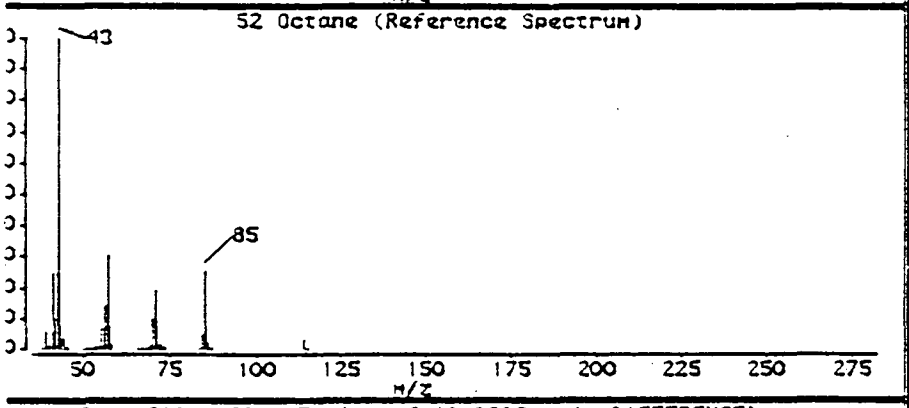
ılumn phase: RTx-624

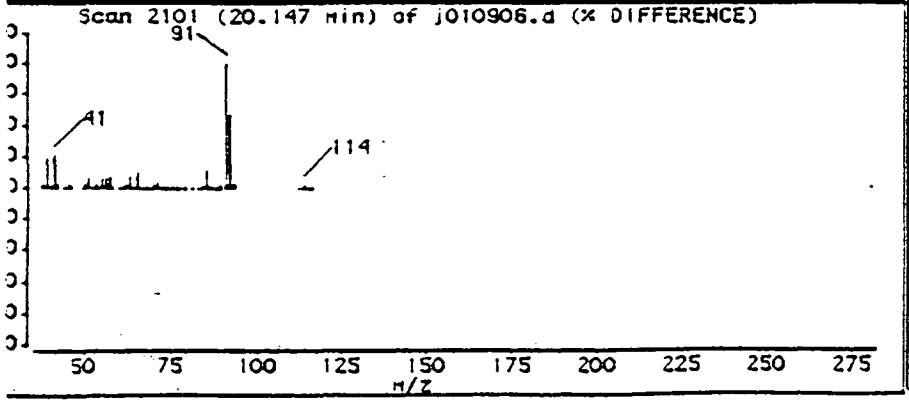
Column diameter: 0.58

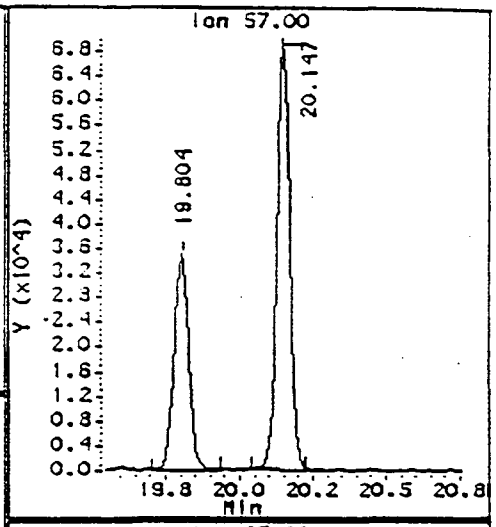
Octane

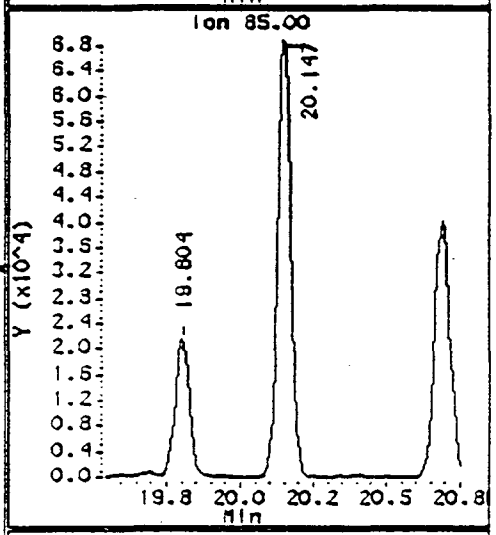


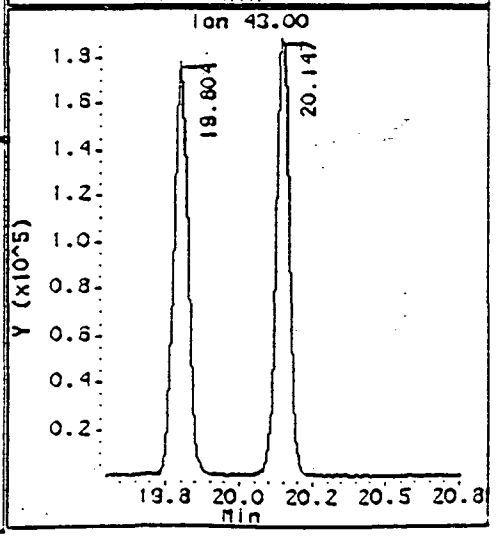












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

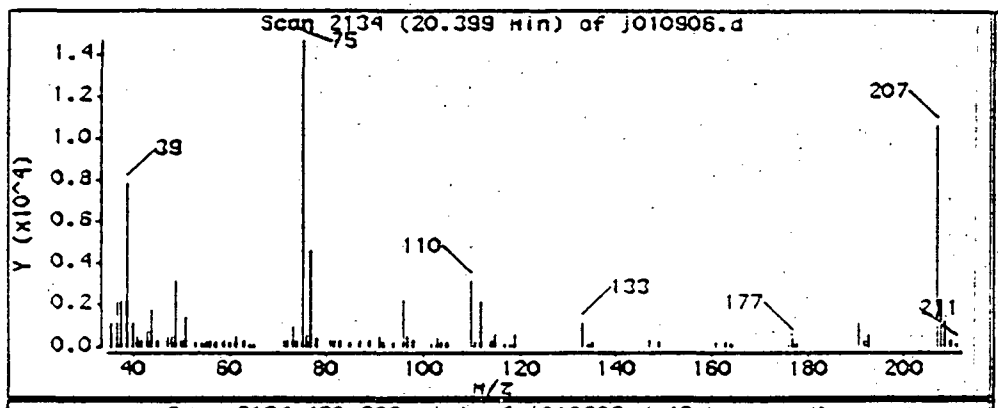
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

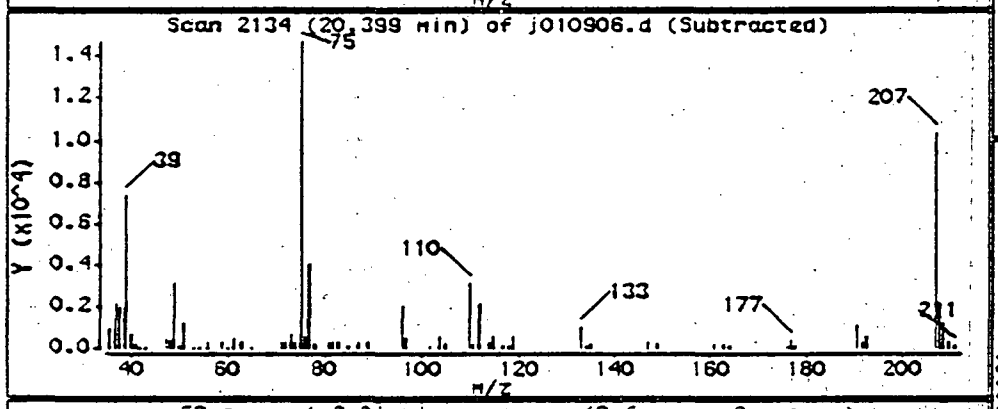
Operator: FA

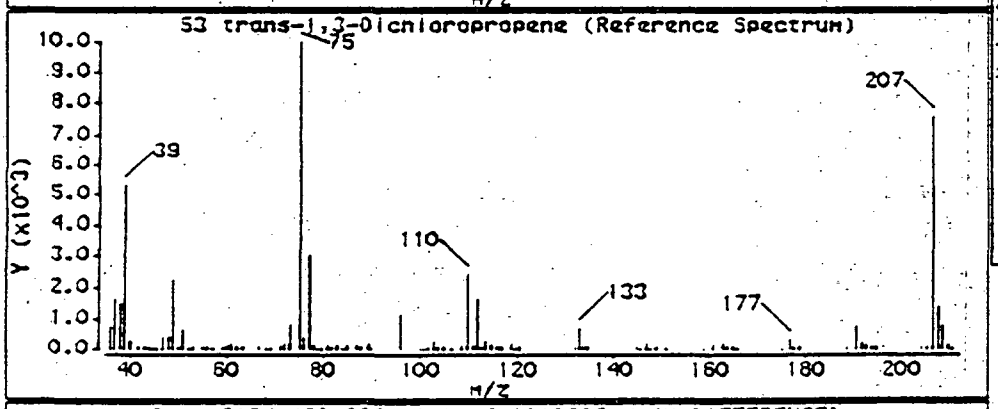
Column phase: RTx-624

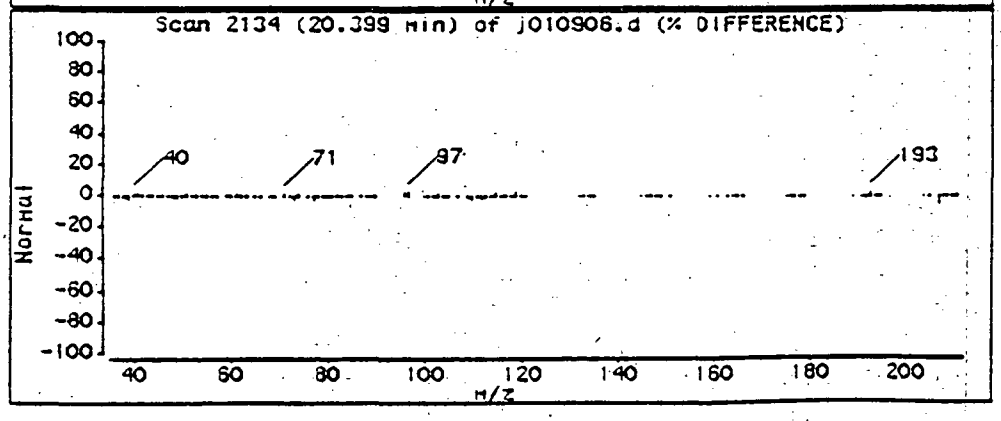
Column diameter: 0.58

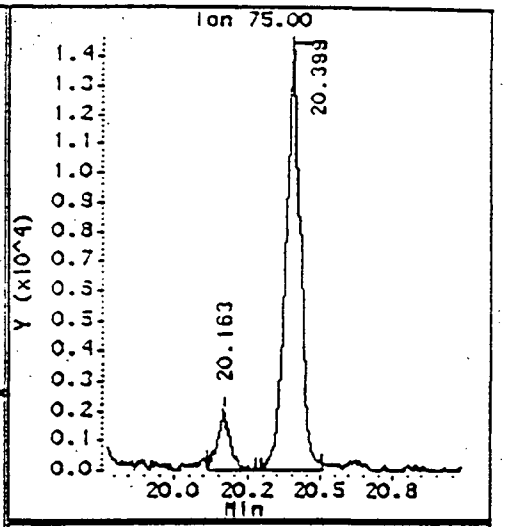
53 trans-1,3-Dichloropropene

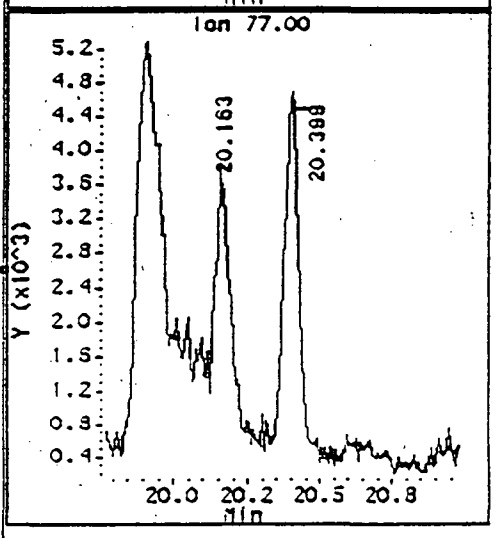












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

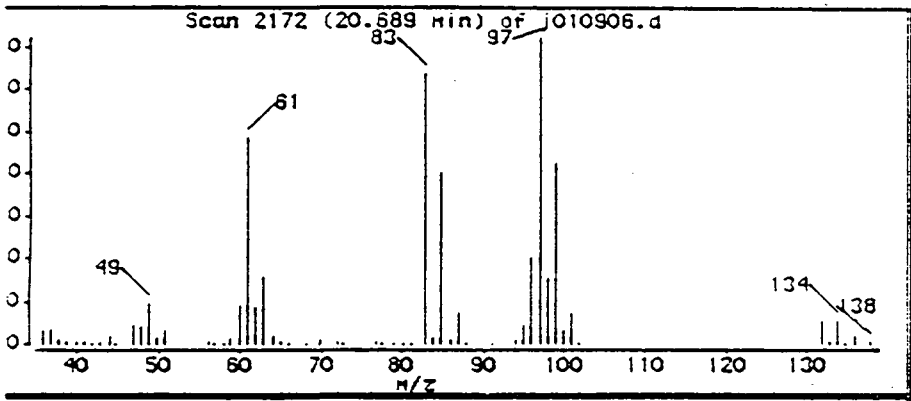
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

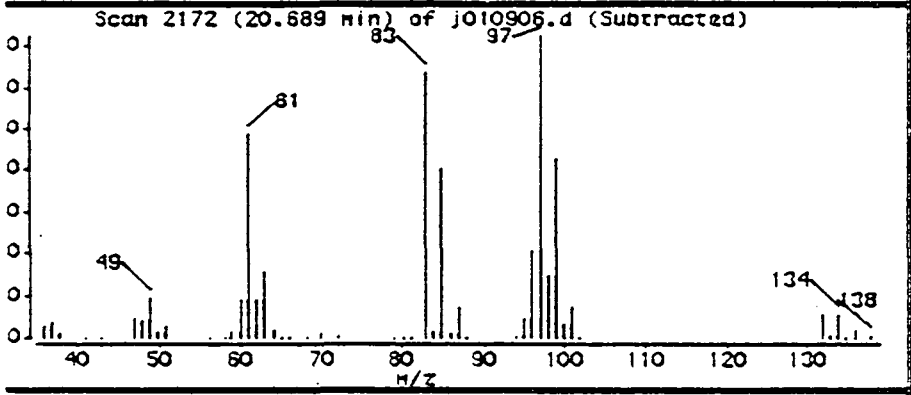
Operator: FA

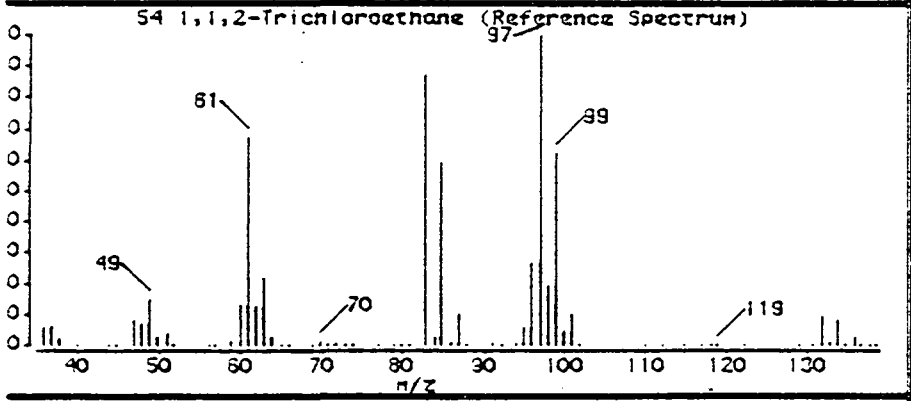
olumn phase: RTx-624

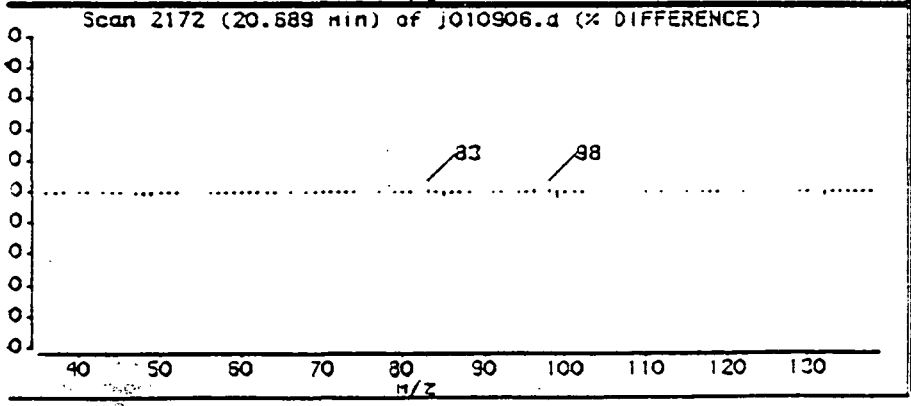
Column diameter: 0.58

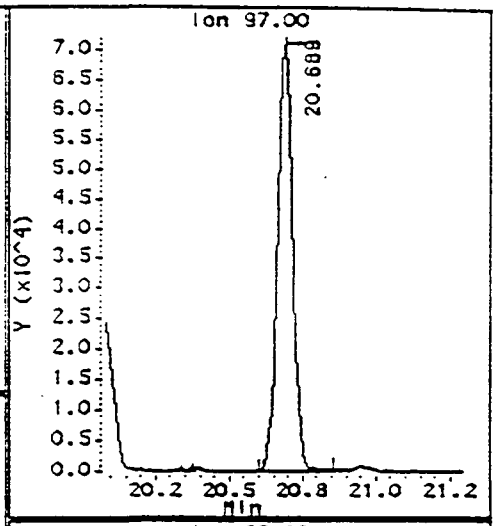
1,1,2-Trichloroethane

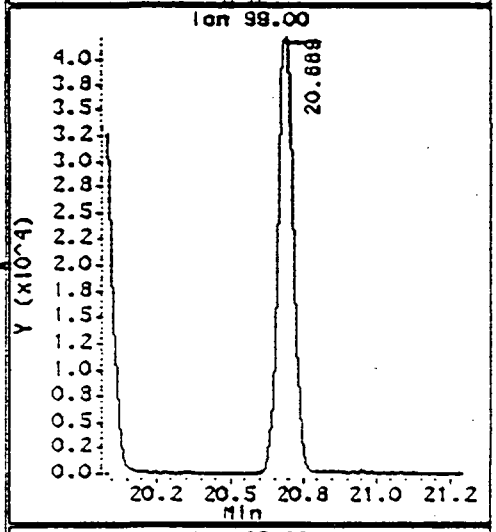


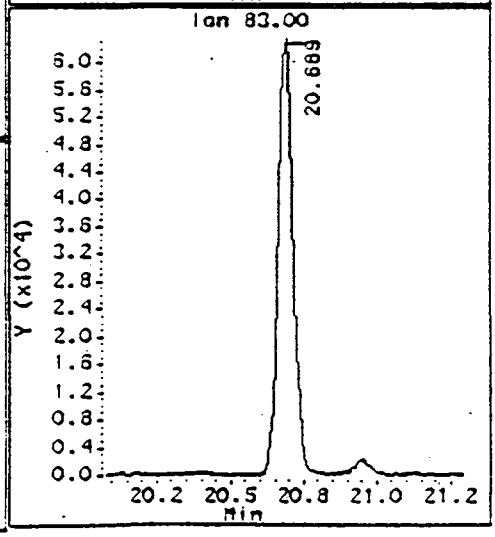












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

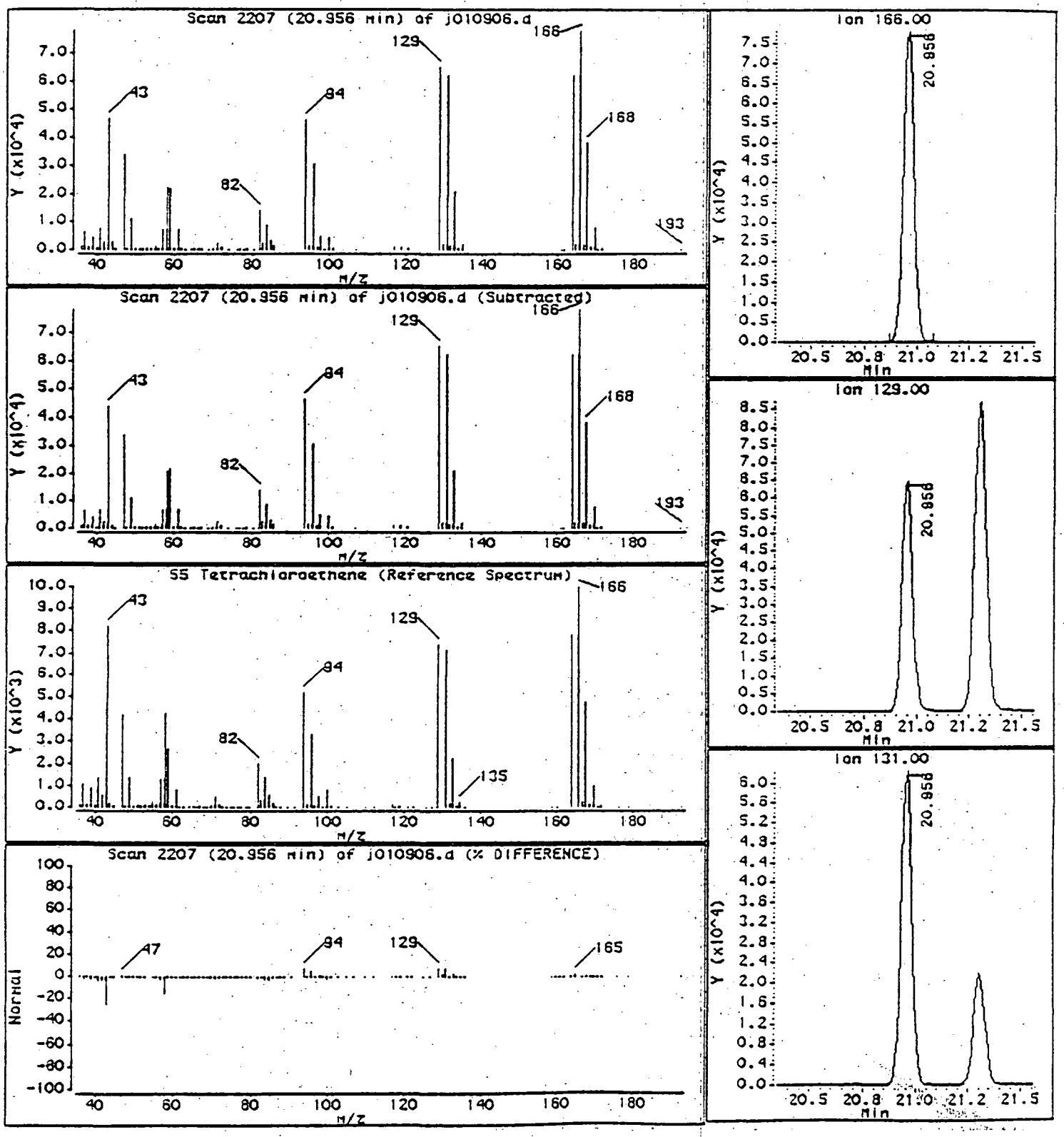
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

Operator: FA

Column phase: RTx-624

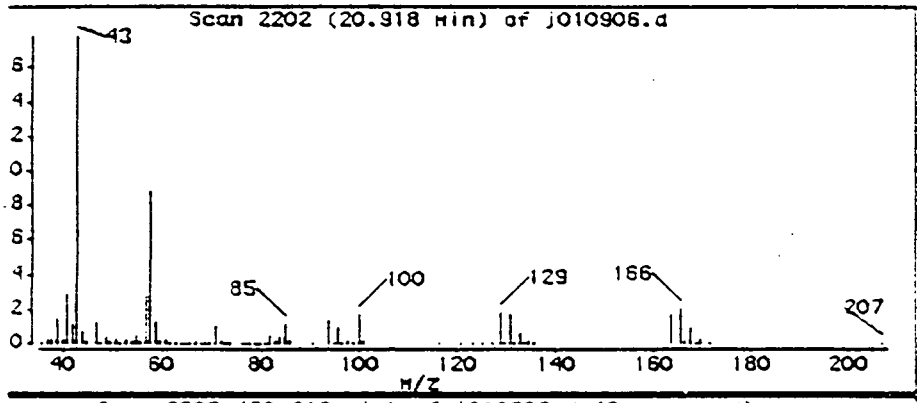
Column diameter: 0.58

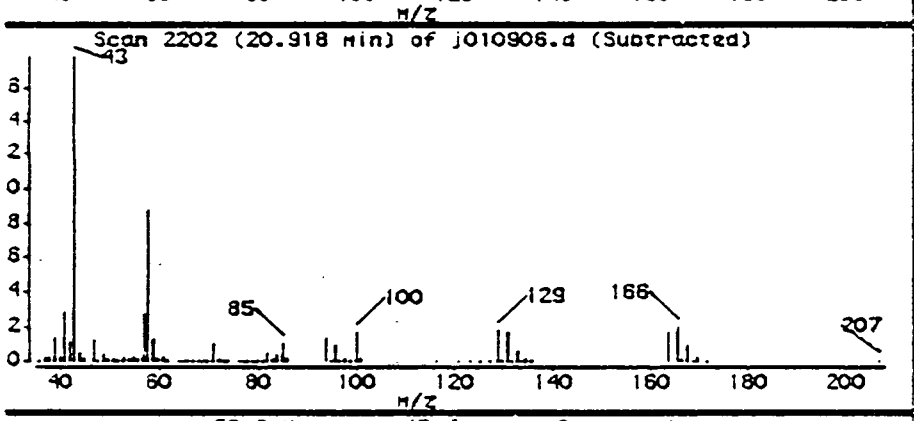
55 Tetrachloroethene

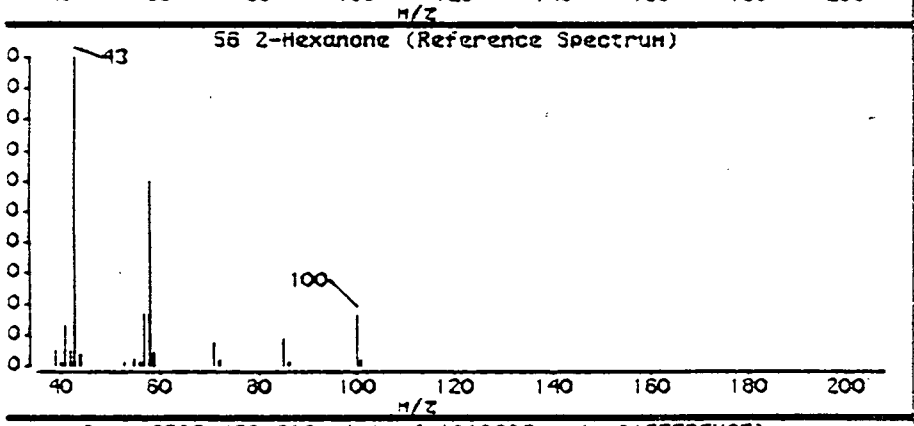


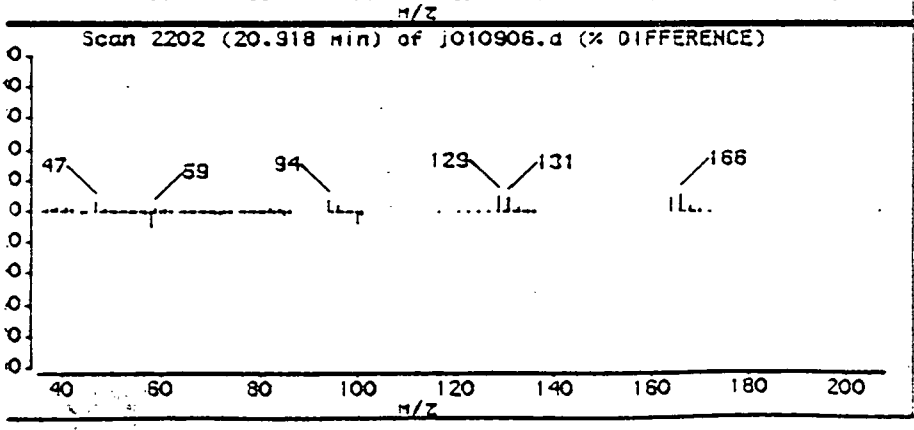
ata File: /chem/msdj.i/j-09jan.b/j010906.d
ate : 09-JAN-97 10:44
lient ID: VSTD005 Instrument: msdj.i
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
olumn phase: RTx-624 Column diameter: 0.58

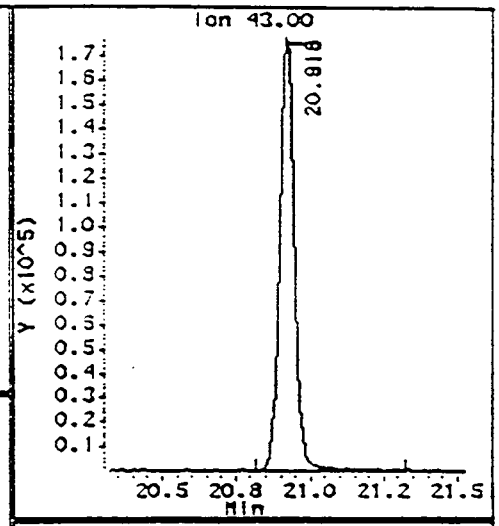
2-Hexanone

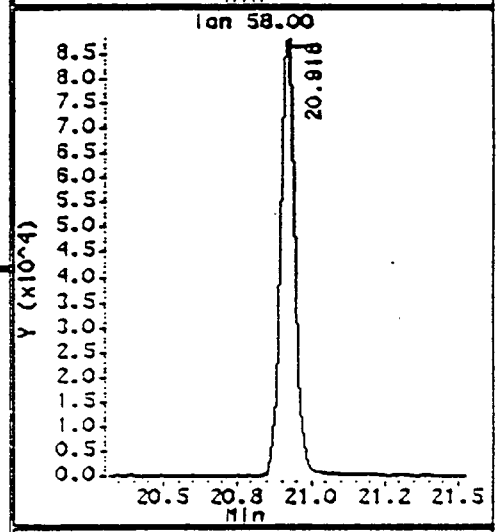


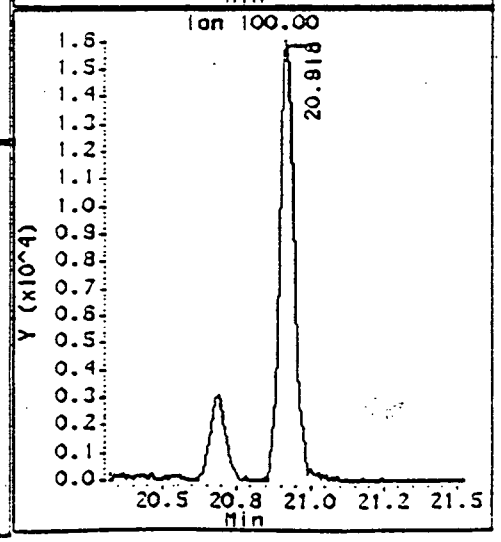






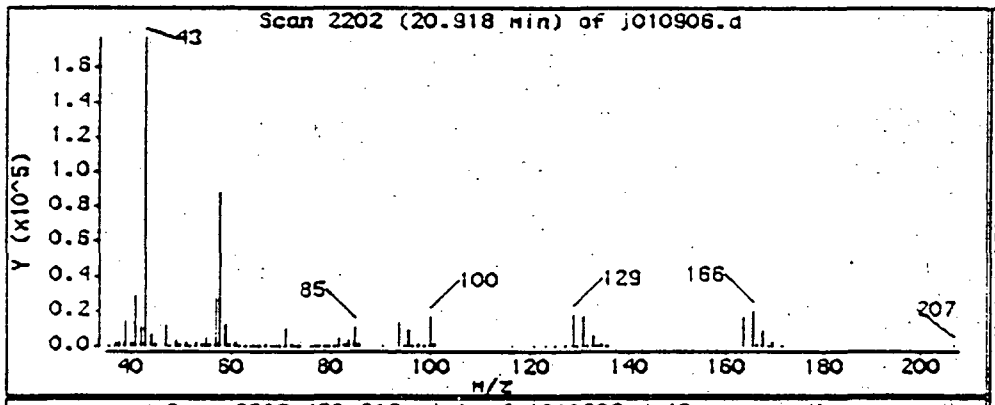


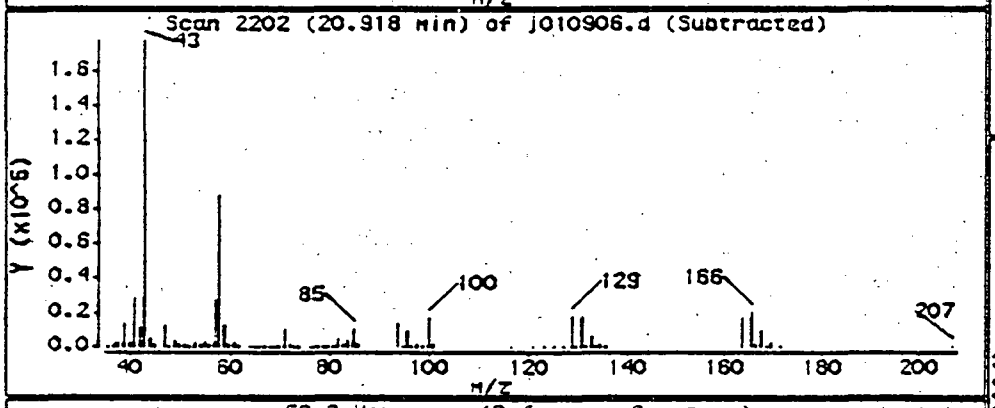


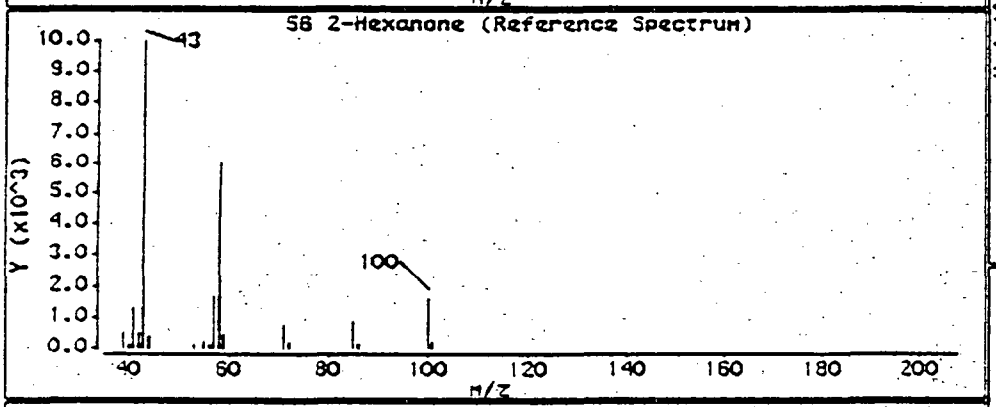


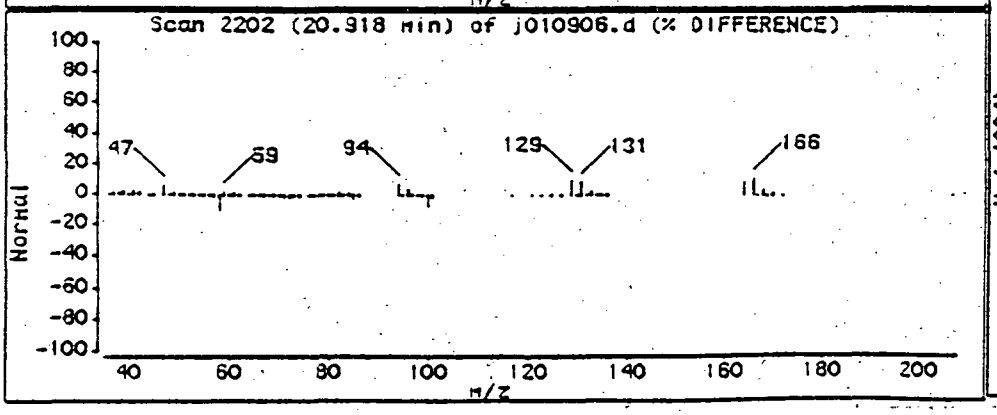
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
Column phase: RTx-624
Column diameter: 0.58

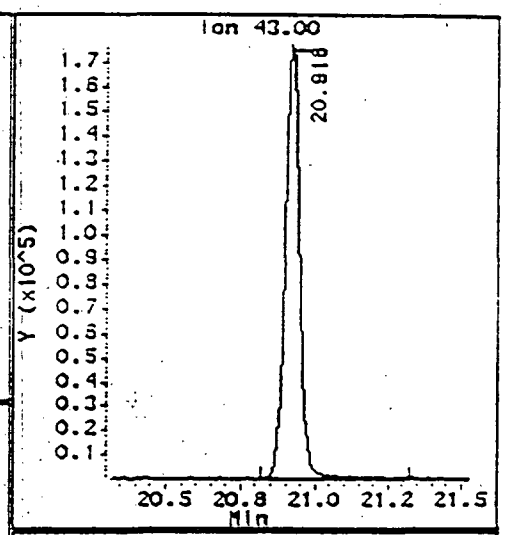
56 2-Hexanone

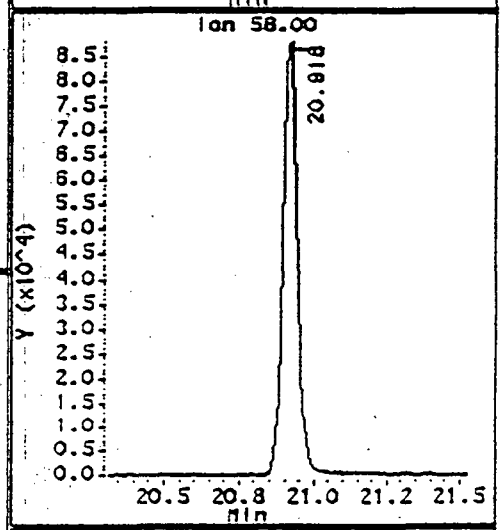


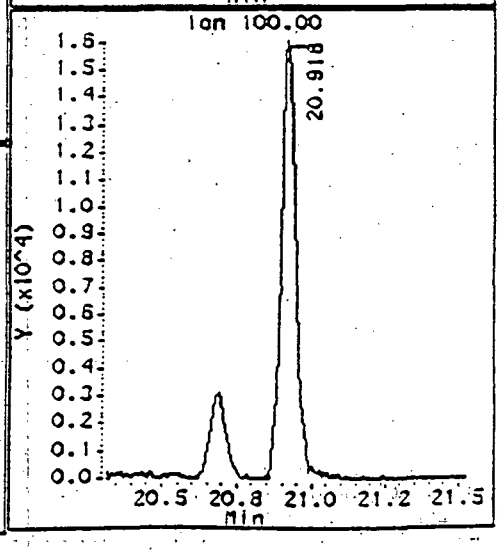












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

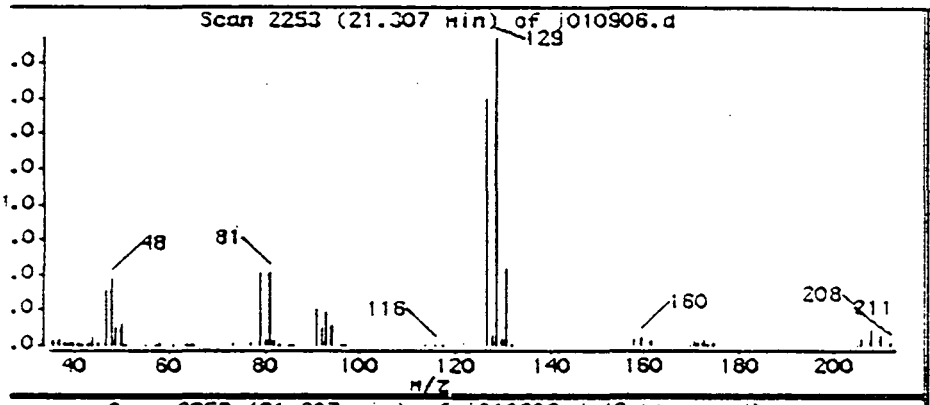
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

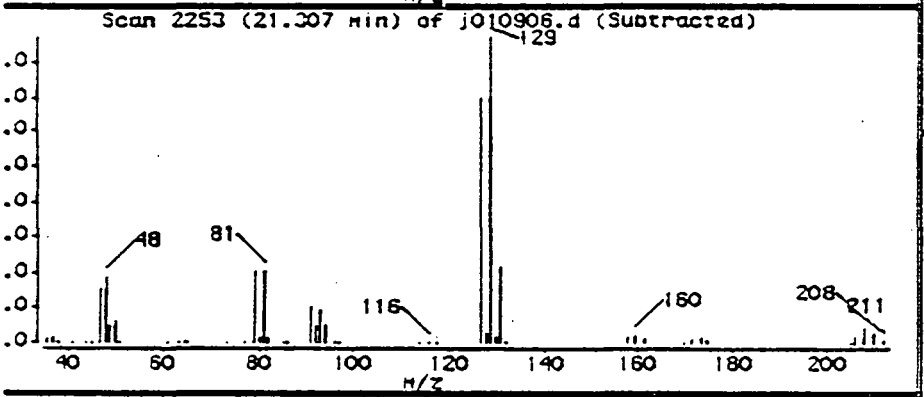
Operator: FA

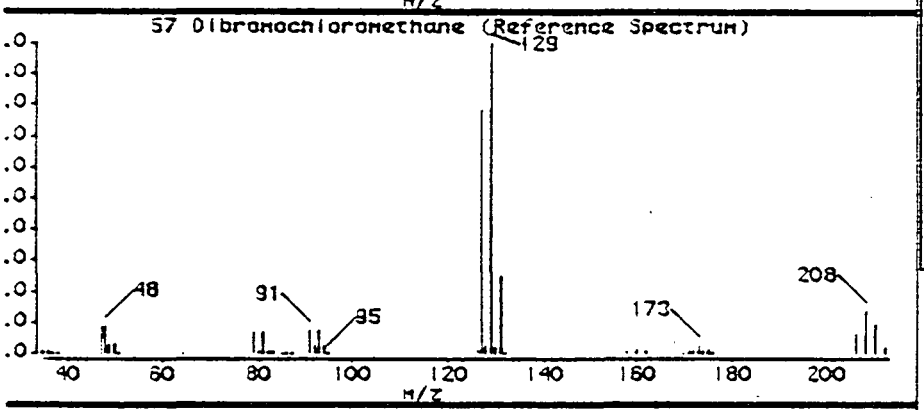
Column phase: RTx-624

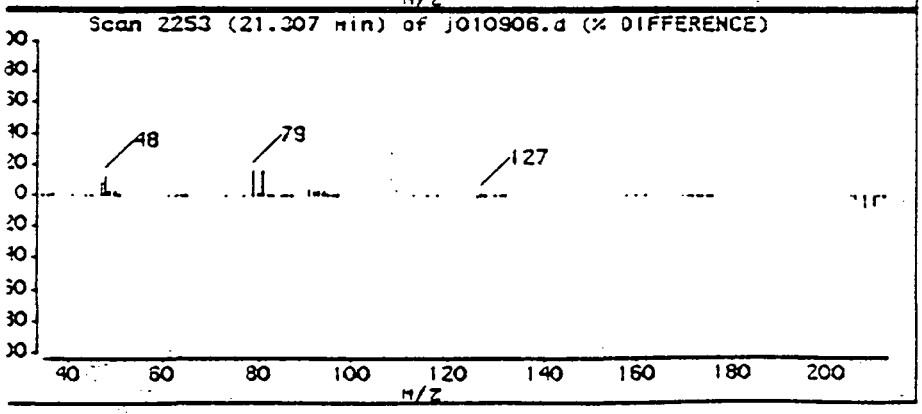
Column diameter: 0.58

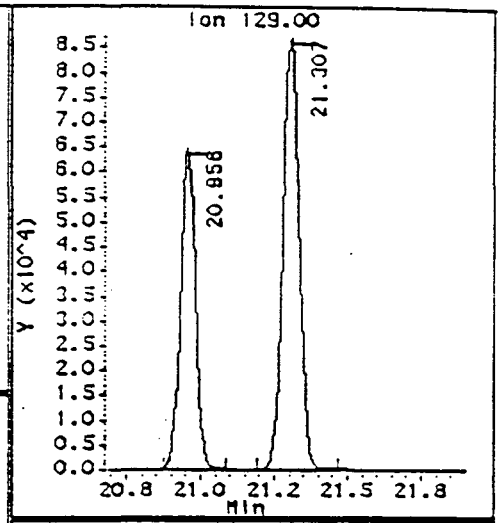
7 Dibromochloromethane

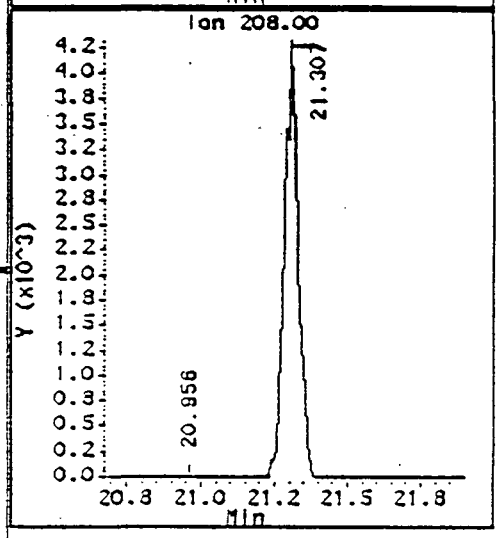












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

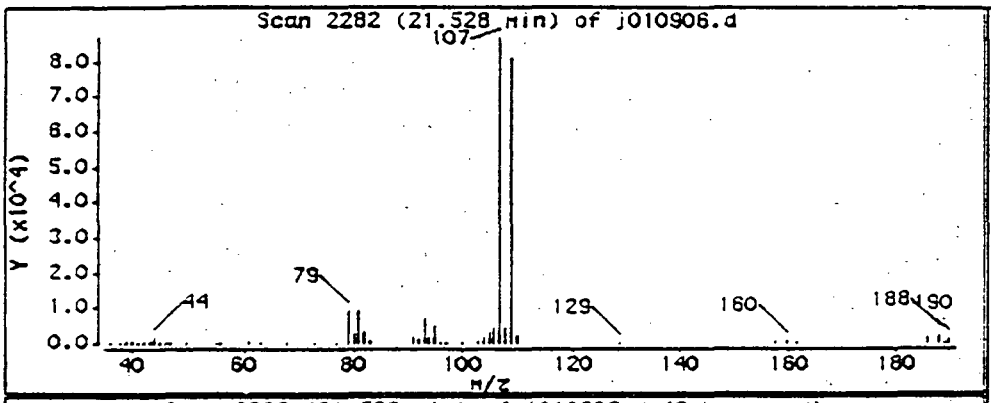
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

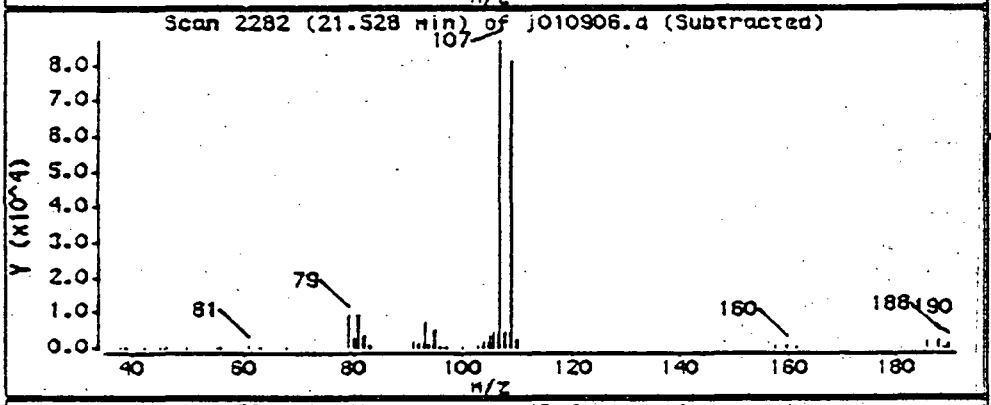
Operator: FA

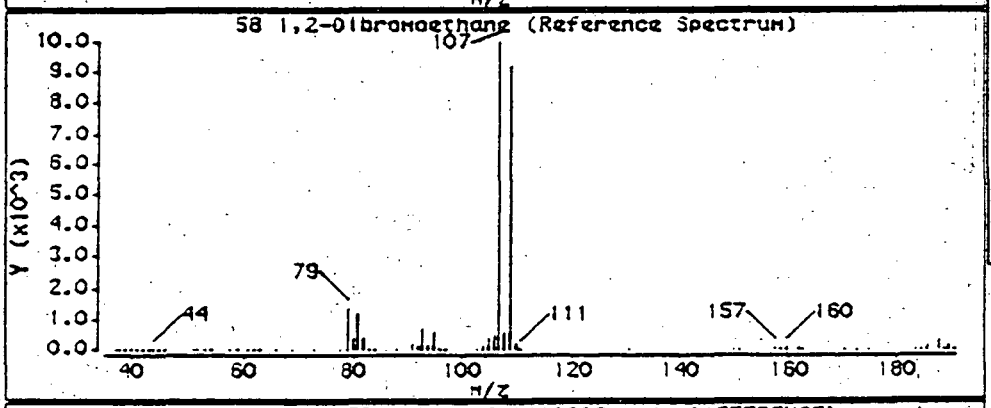
Column phase: RTx-624

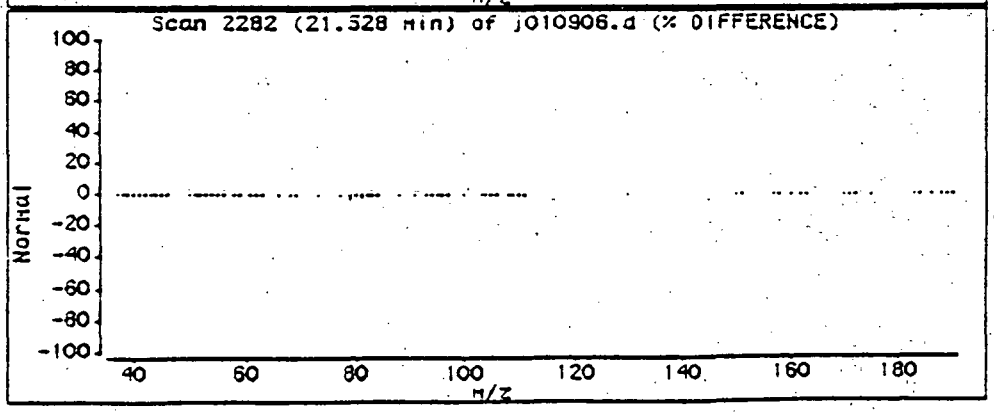
Column diameter: 0.58

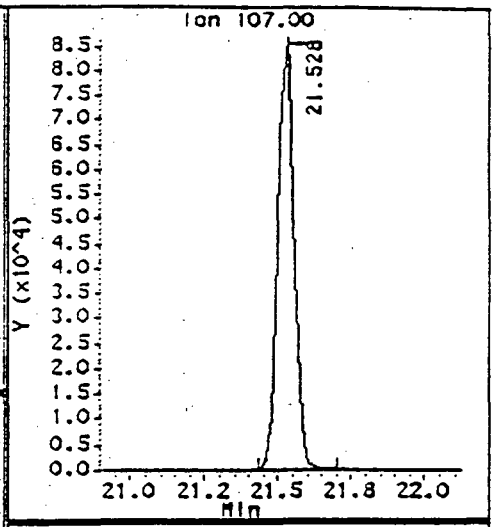
58 1,2-Dibromoethane

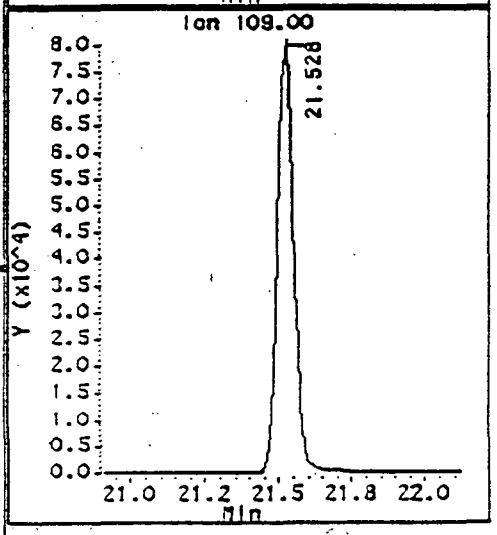












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

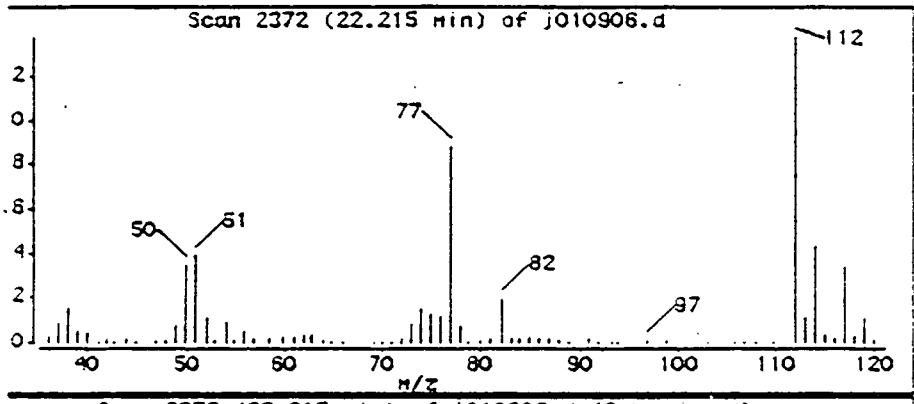
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

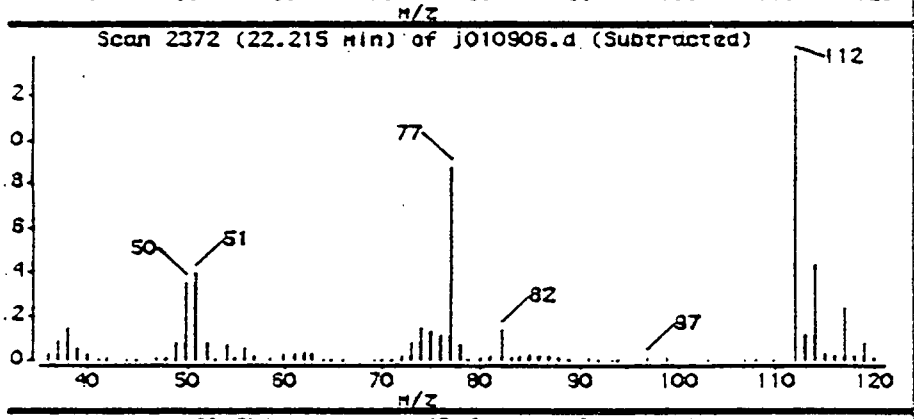
Operator: FA

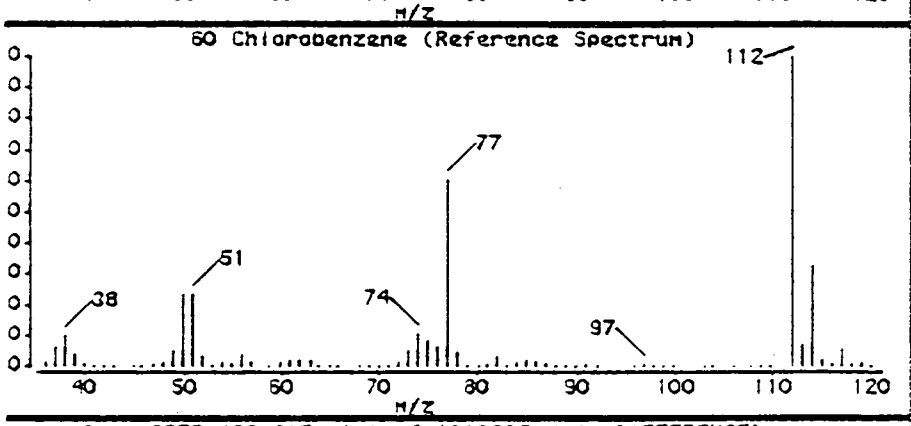
olumn phase: RTx-624

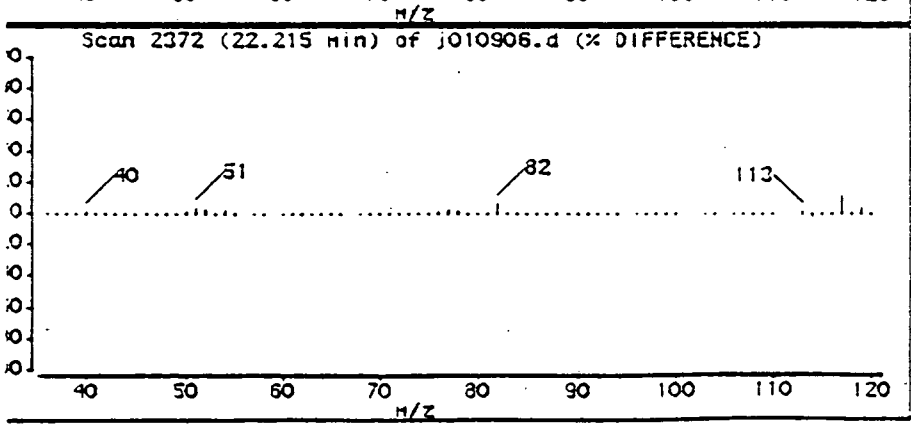
Column diameter: 0.58

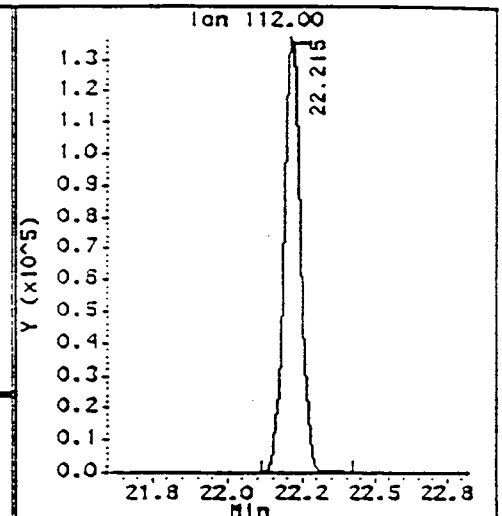
Chlorobenzene

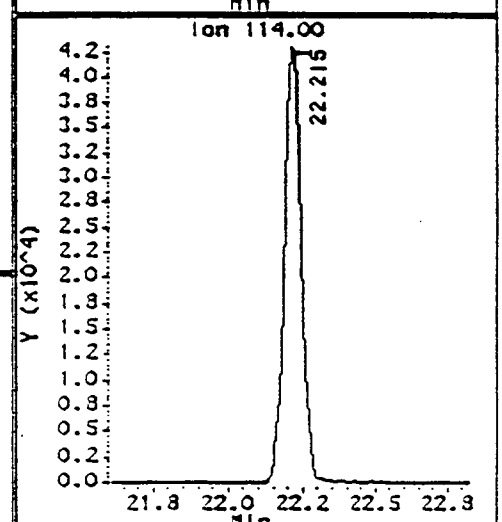


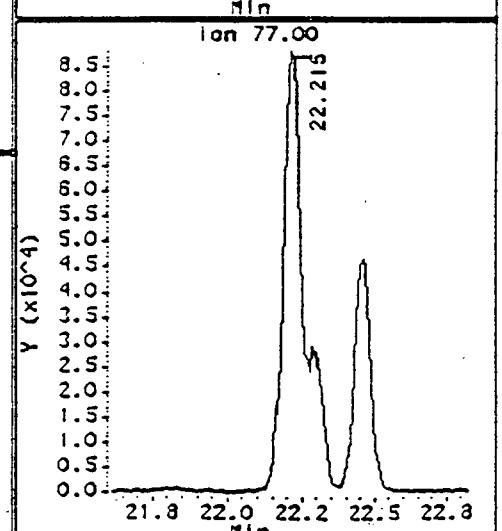












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

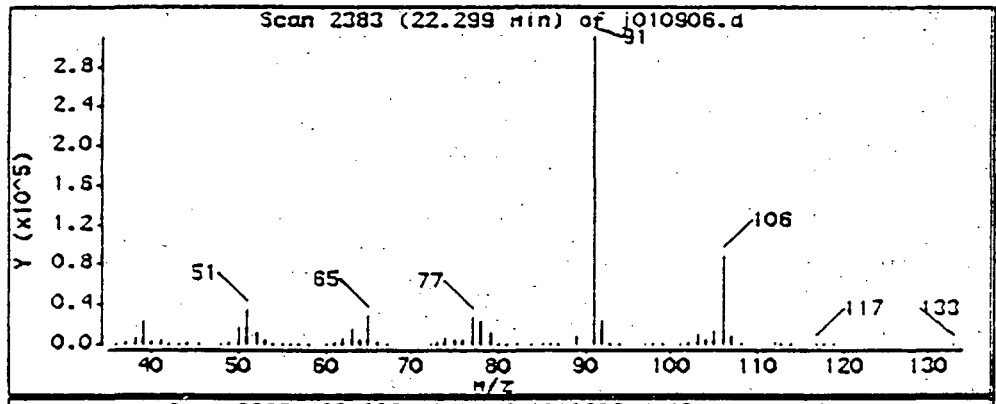
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

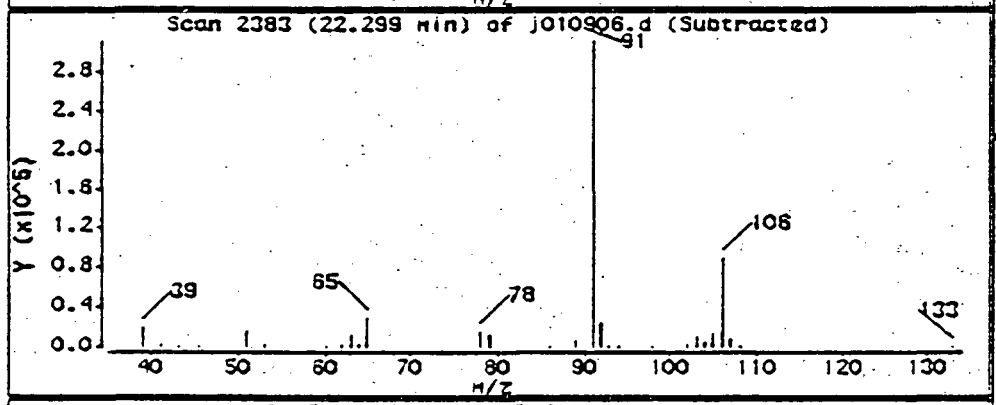
Operator: FA

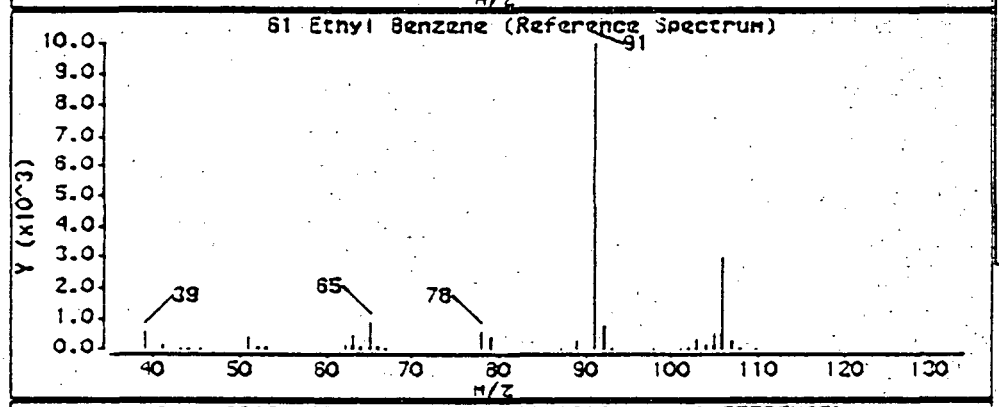
Column phase: RTx-624

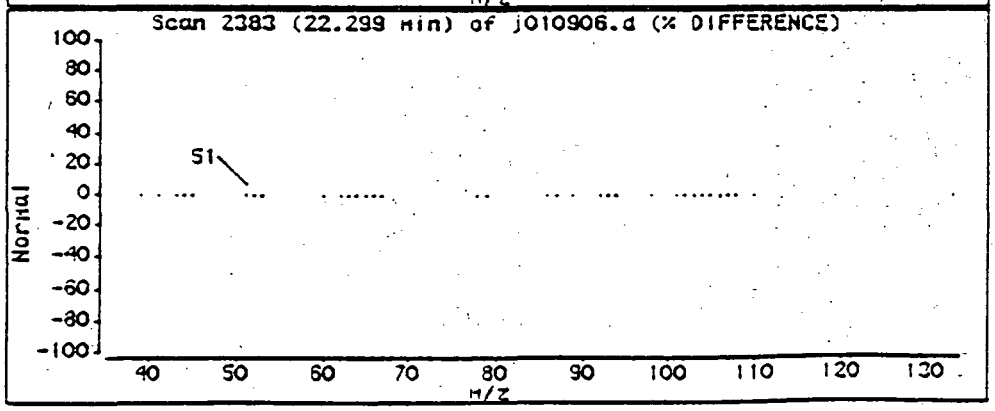
Column diameter: 0.58

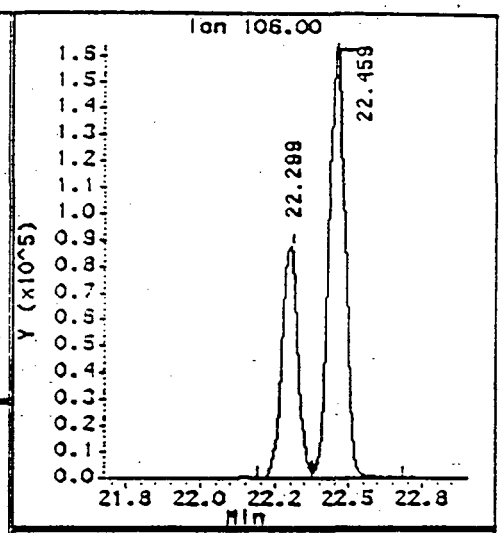
61 Ethyl Benzene

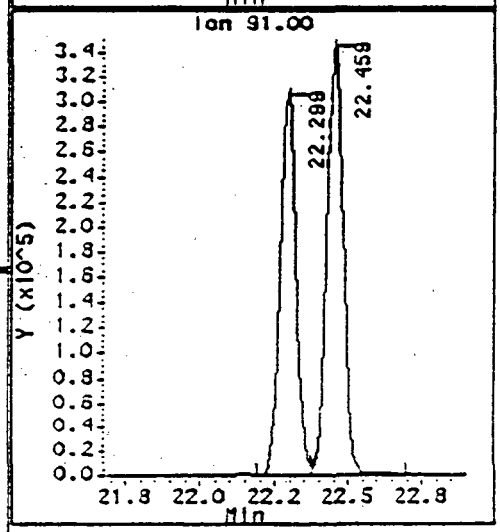












ita File: /chem/msdj.i/j-09jan.b/j010906.d

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ite : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

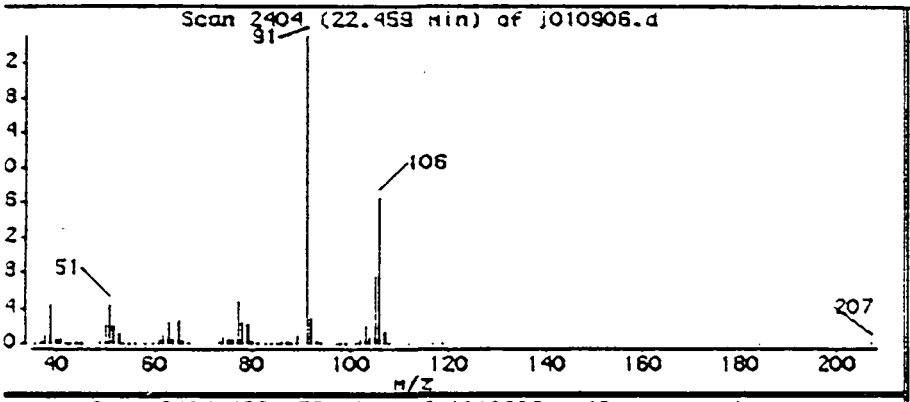
mple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

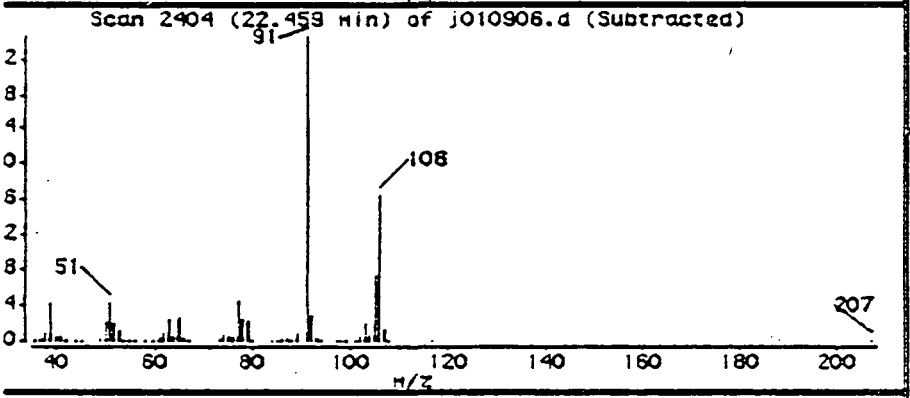
Operator: FA

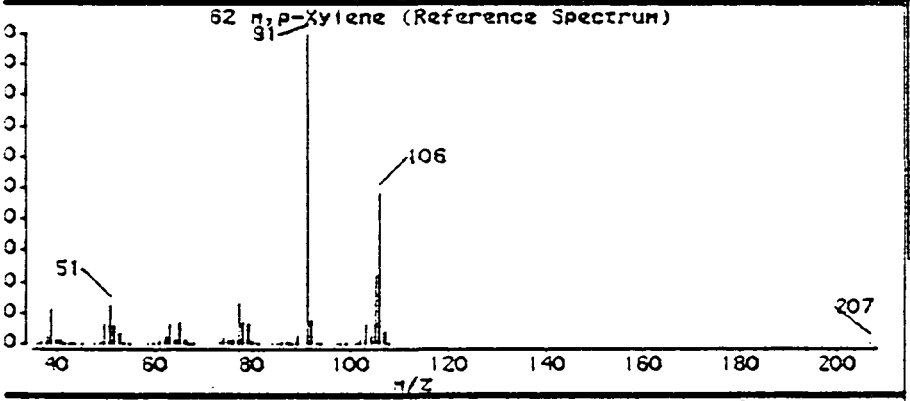
olumn phase: RTx-624

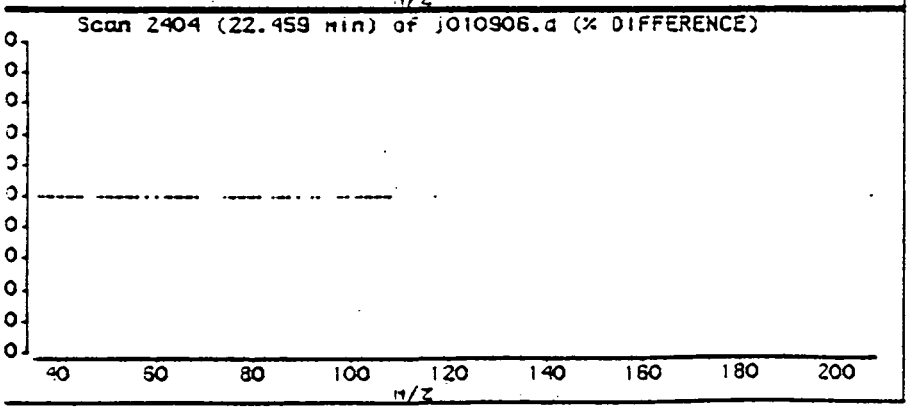
Column diameter: 0.58

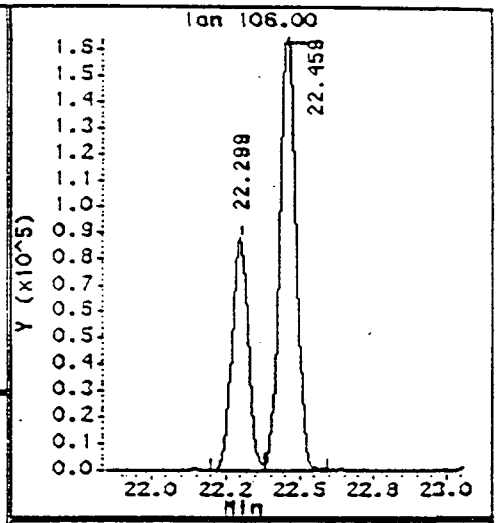
m,p-Xylene

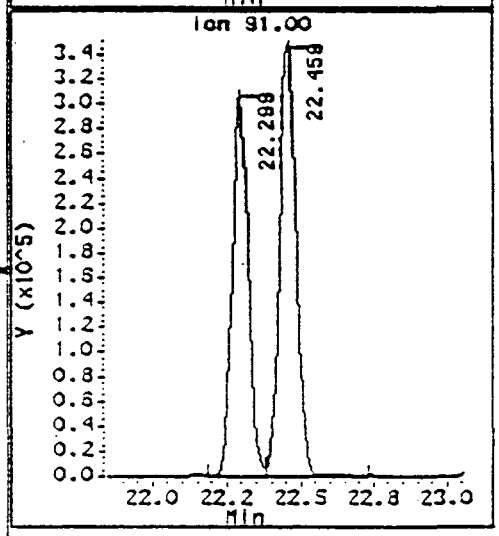












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Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

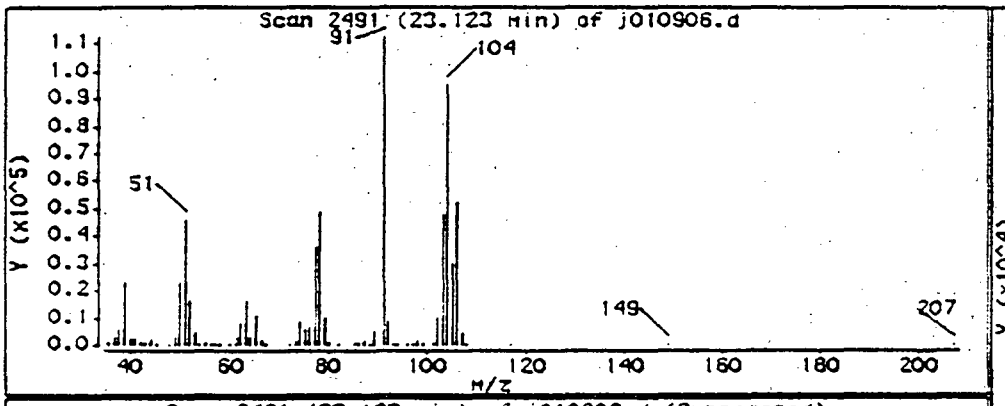
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

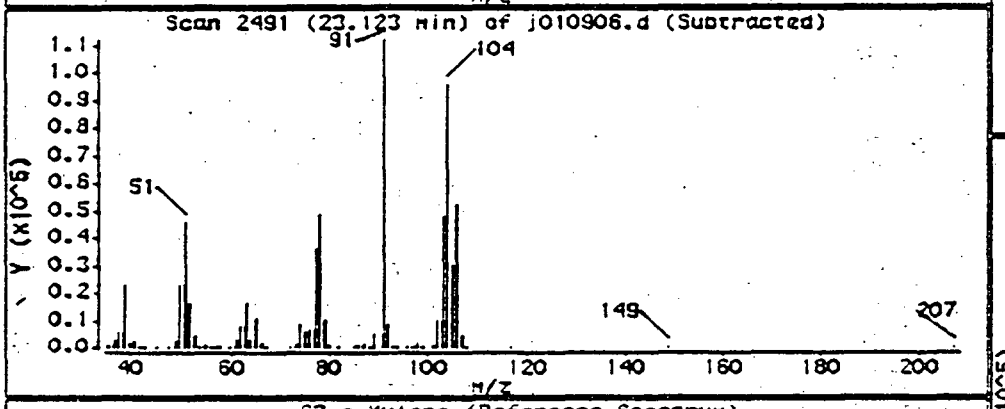
Operator: FA

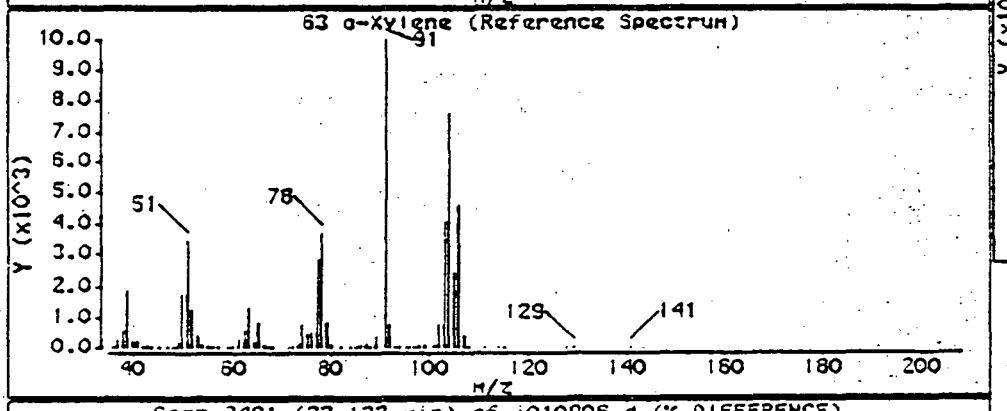
Column phase: RTx-624

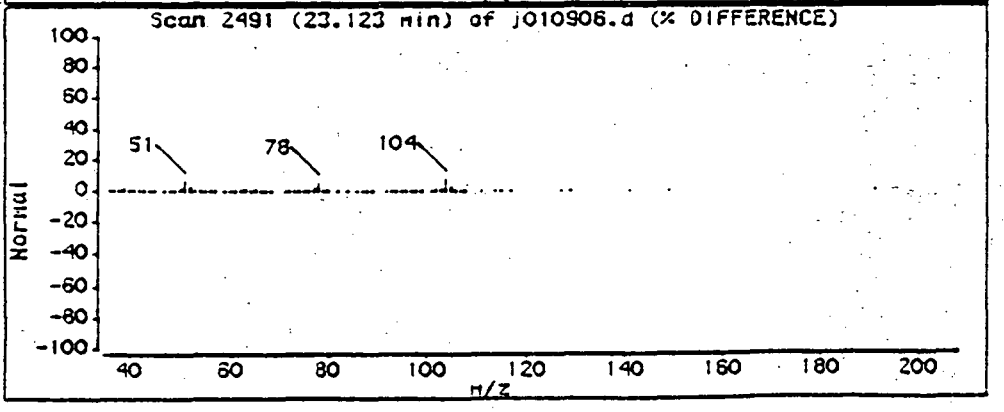
Column diameter: 0.58

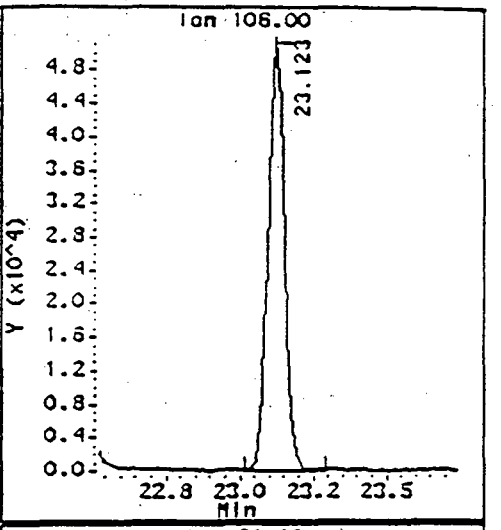
63 o-Xylene

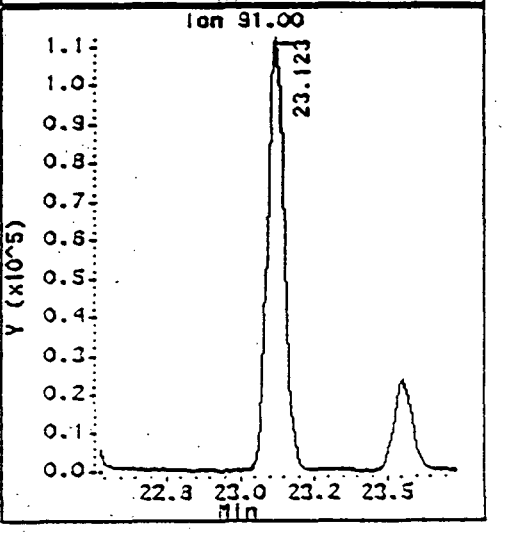












ta File: /chem/msdj.i/j-09jan.b/j010906.d

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te : 09-JAN-97 10:44

ient ID: VSTD005

Instrument: msdj.i

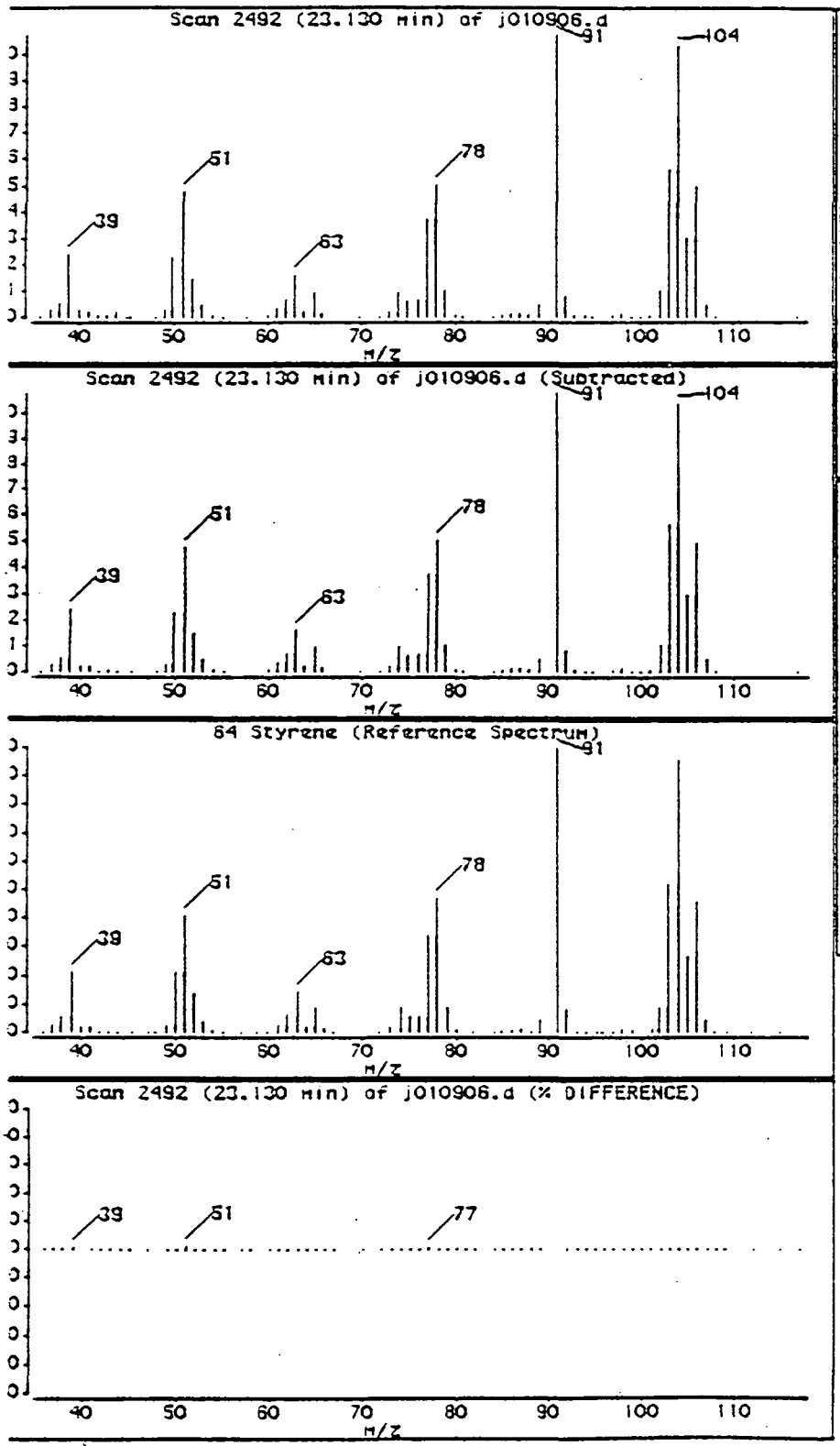
mple Info: 25.0ml #296-25 100ppbv (5.0ppbv)

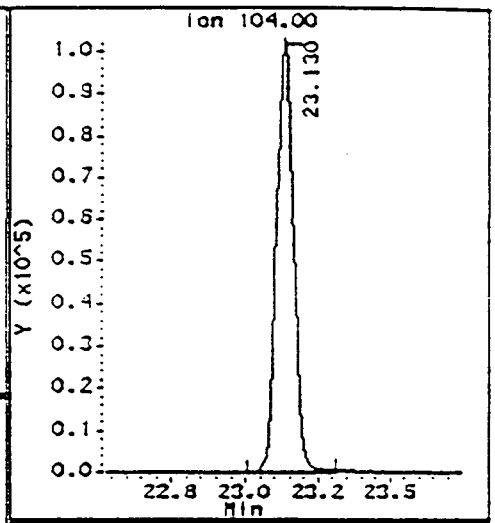
Operator: FA

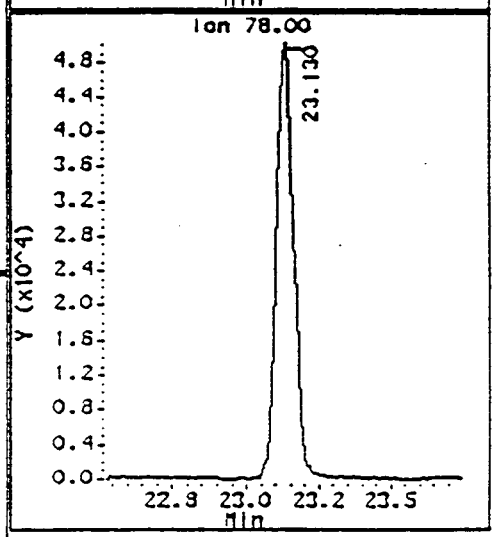
lumn phase: RTx-624

Column diameter: 0.58

Styrene

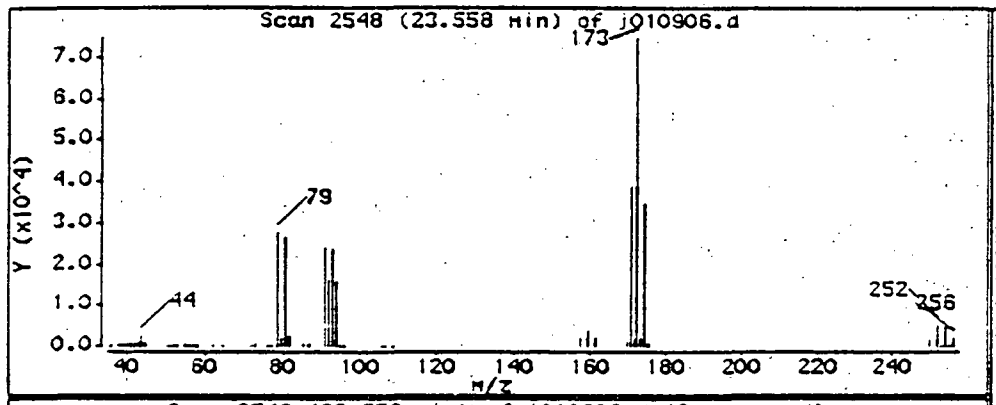


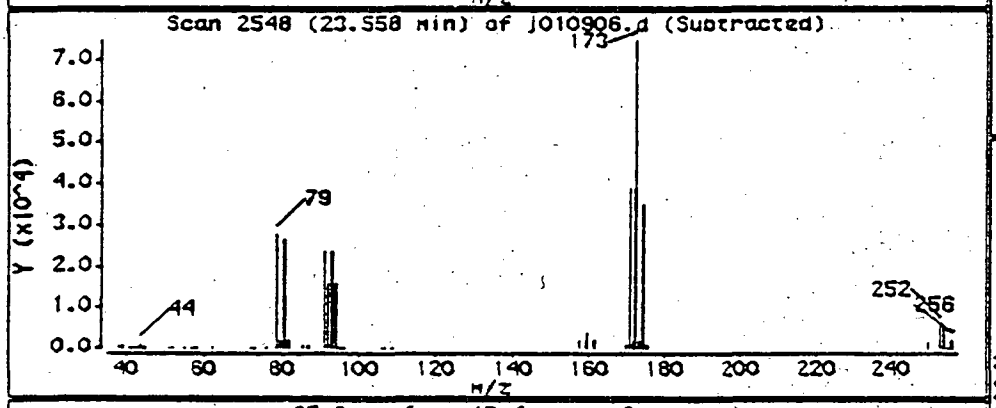


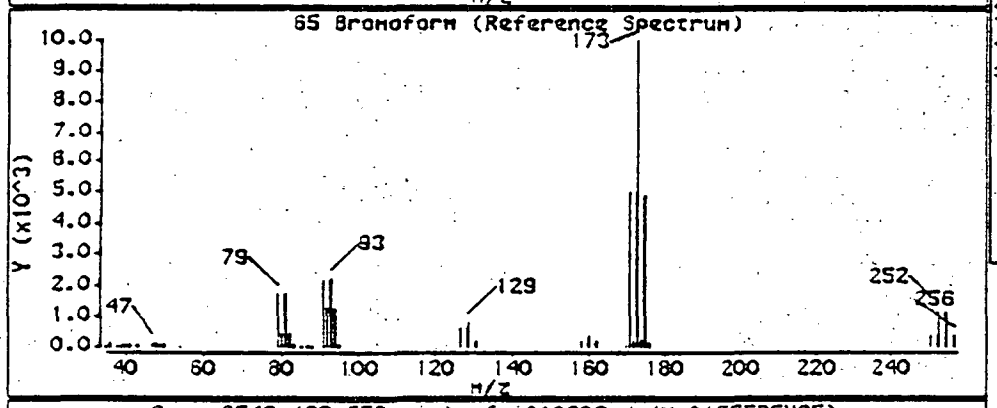


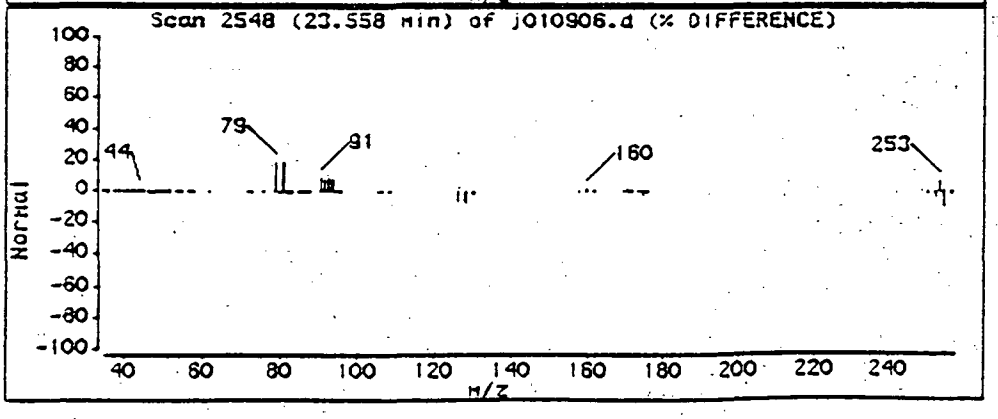
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
Column phase: RTx-624
Column diameter: 0.58

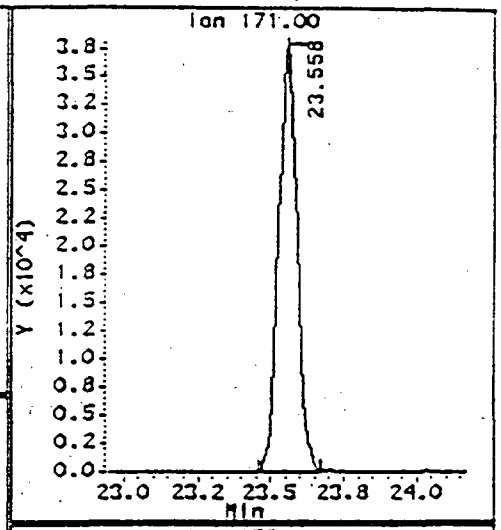
65 Bromoform

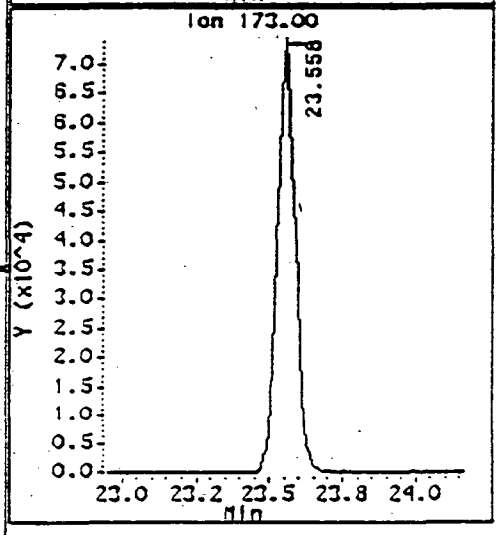












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

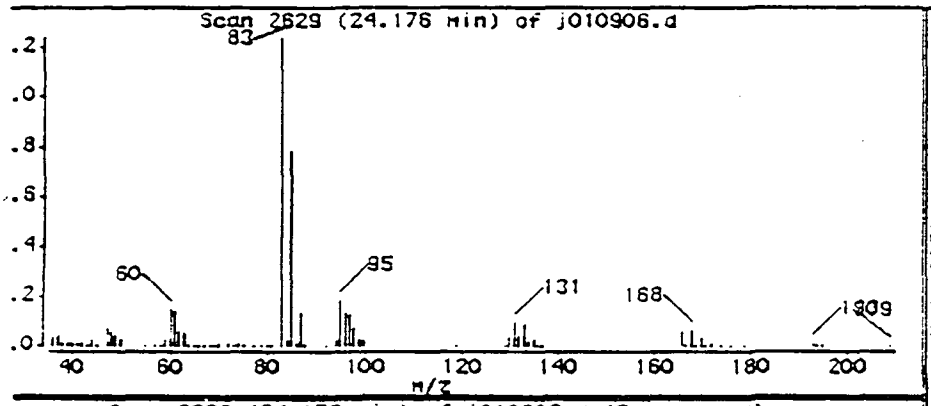
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

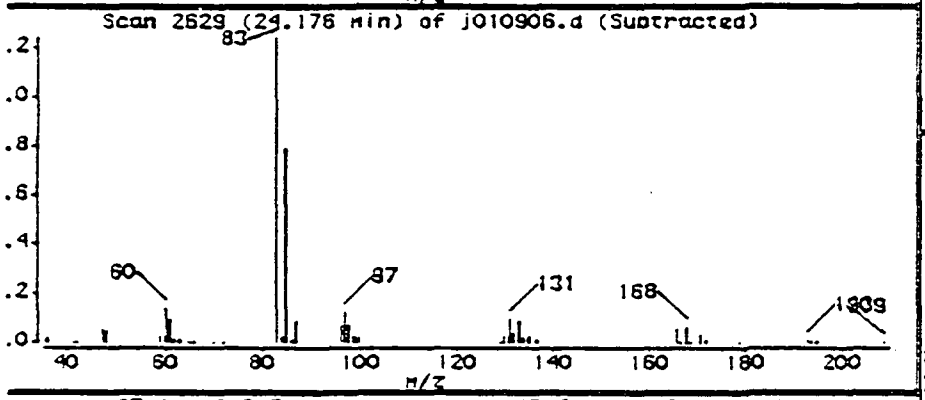
Operator: FA

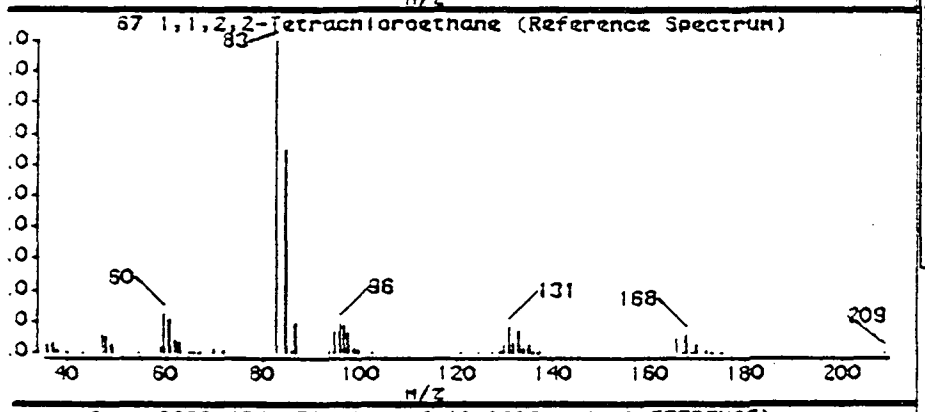
Column phase: RTx-624

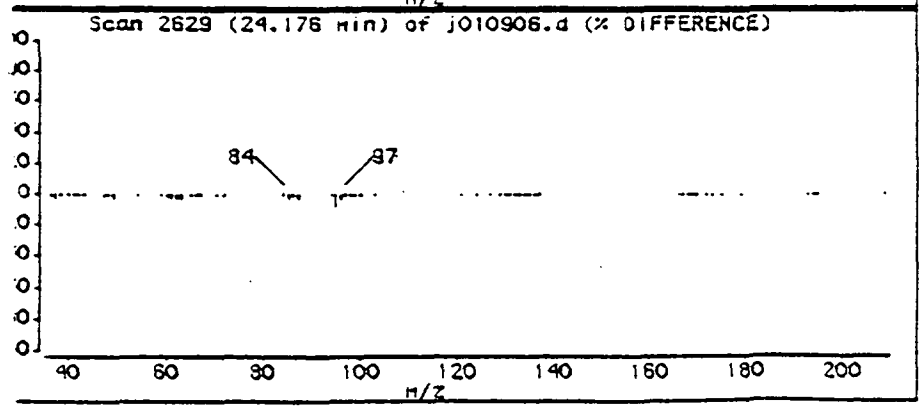
Column diameter: 0.58

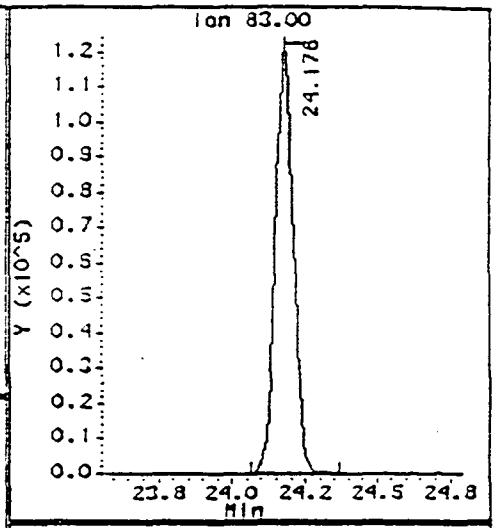
7 1,1,2,2-Tetrachloroethane

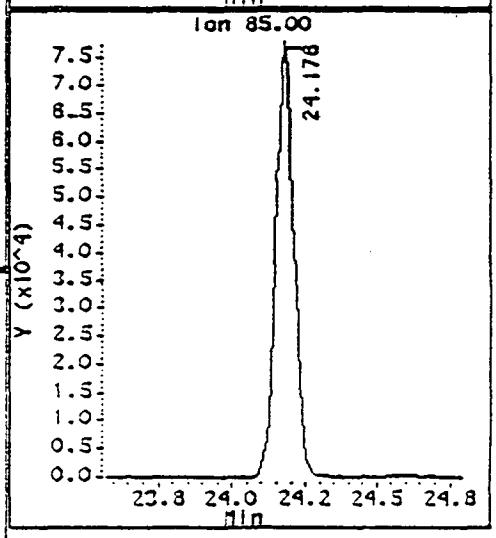












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

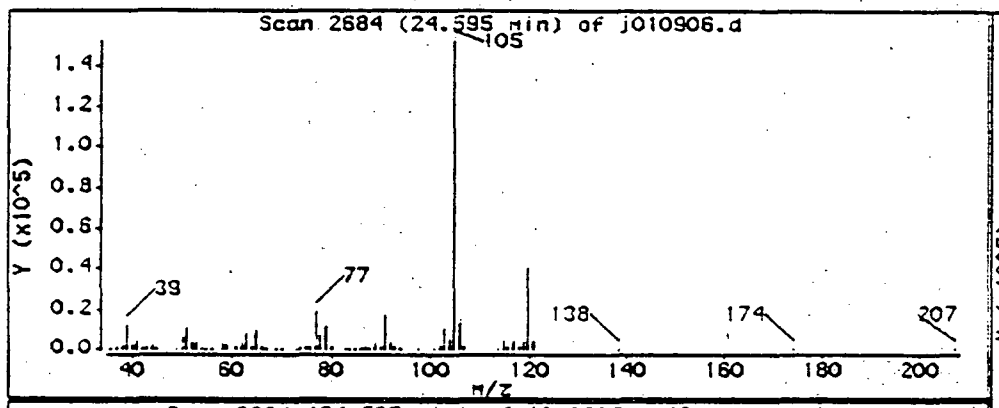
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

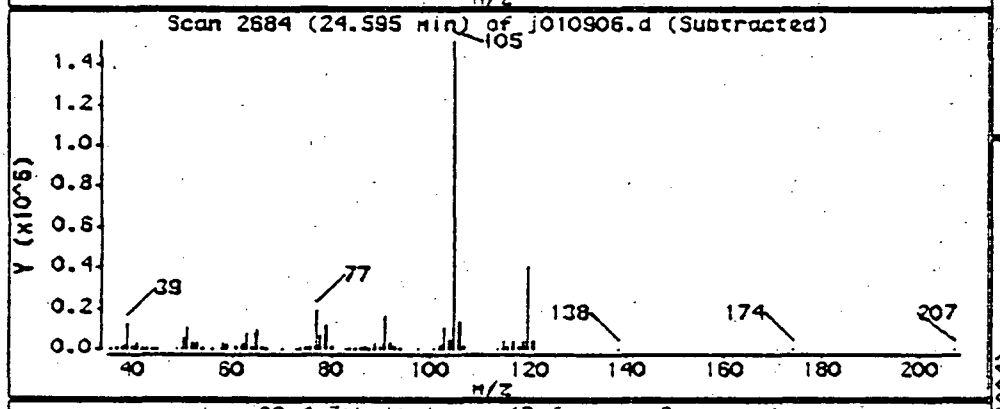
Operator: FA

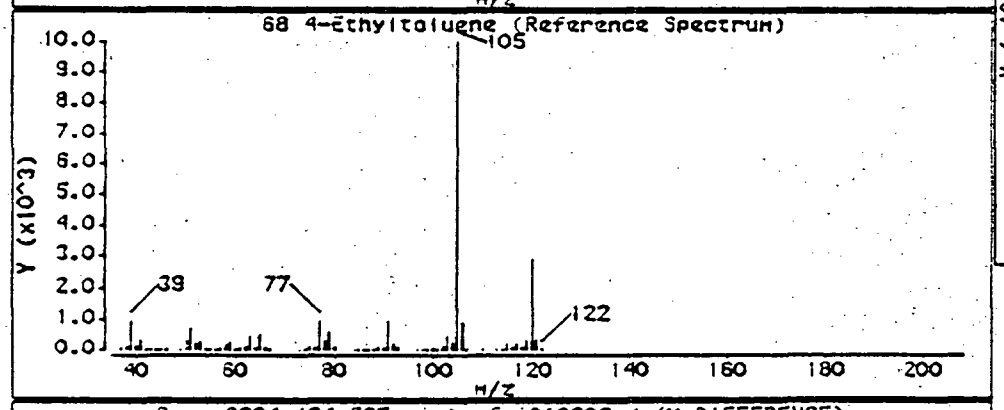
Column phase: RTx-624

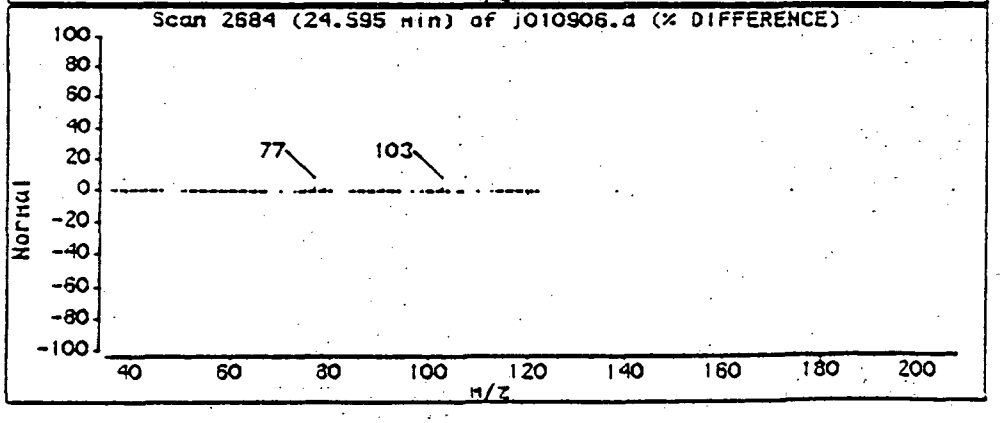
Column diameter: 0.58

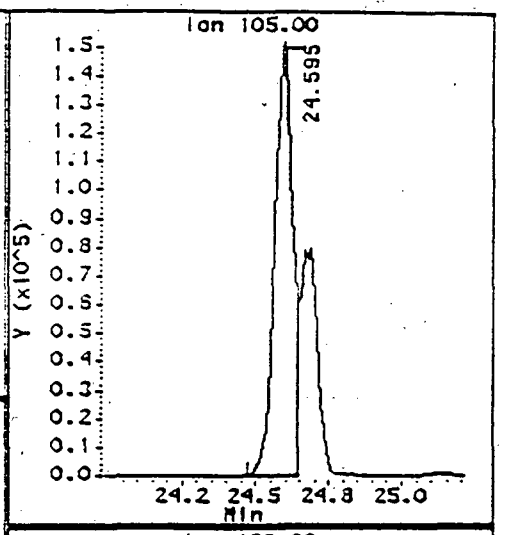
68 4-Ethyltoluene

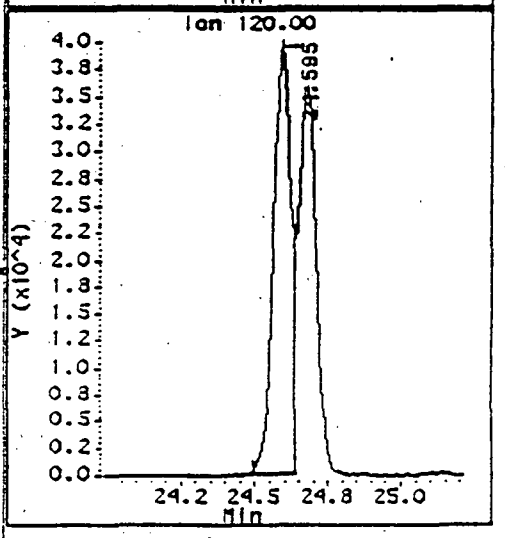












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

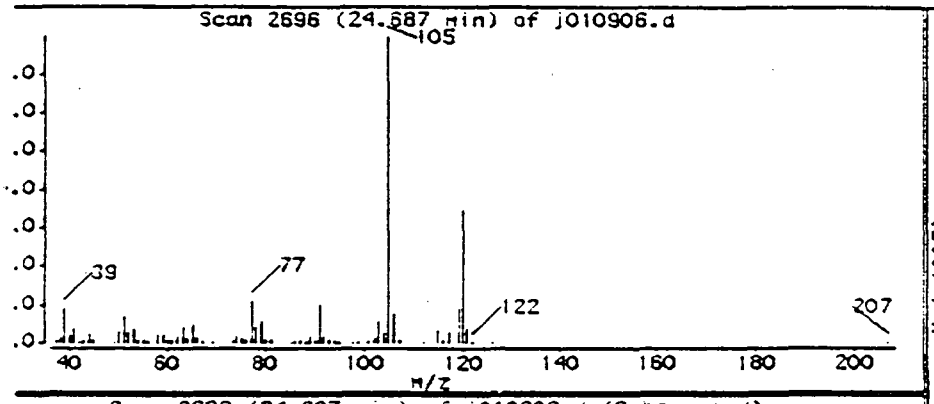
lient ID: VSTD005 Instrument: msdj.i

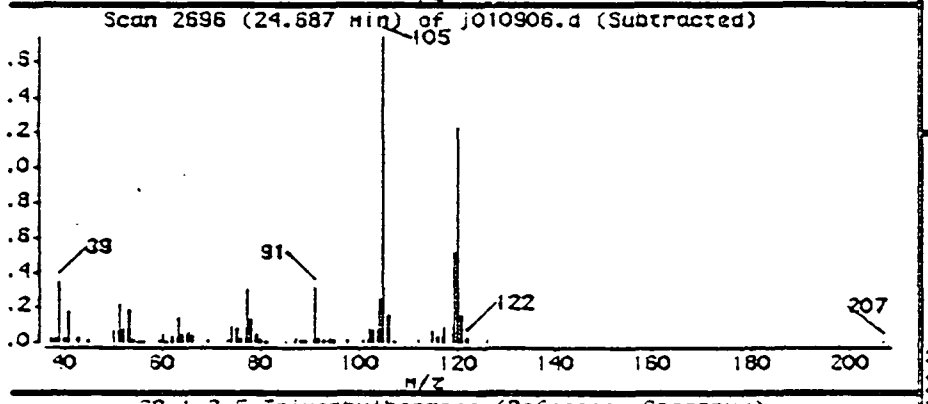
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

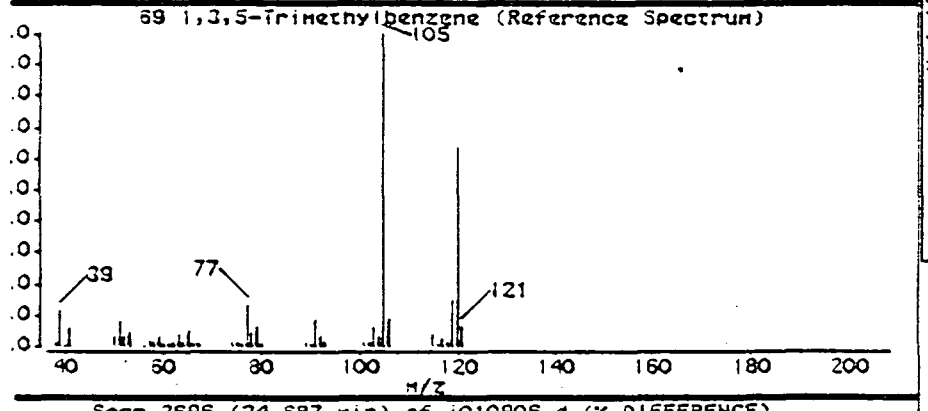
Operator: FR

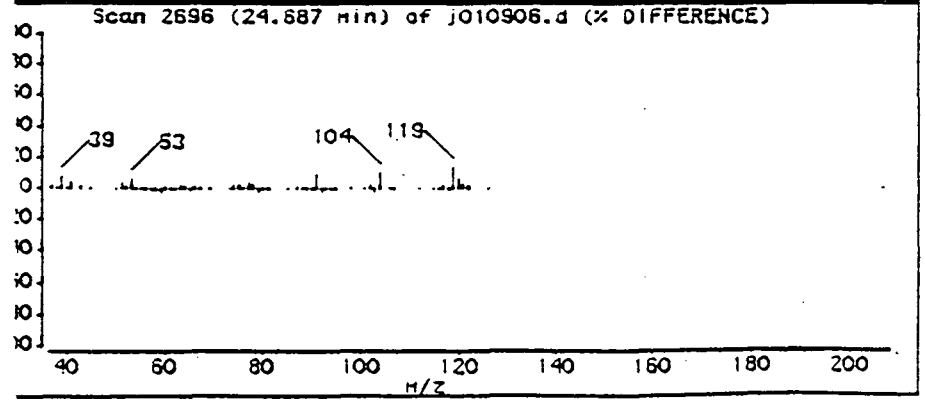
olumn phase: RTx-624 Column diameter: 0.58

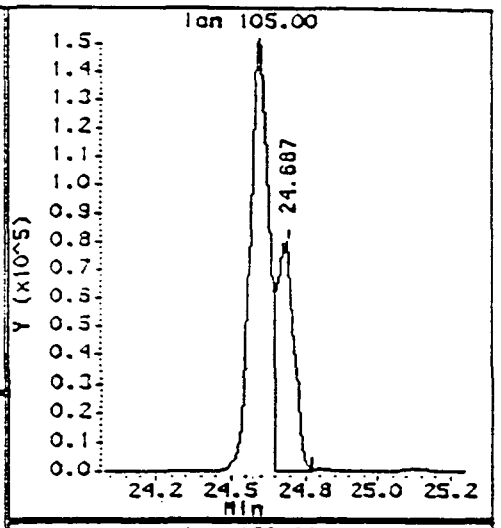
1 1,3,5-Trimethylbenzene

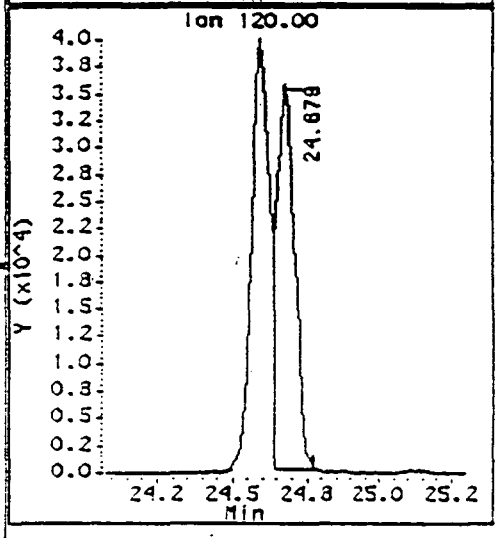












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

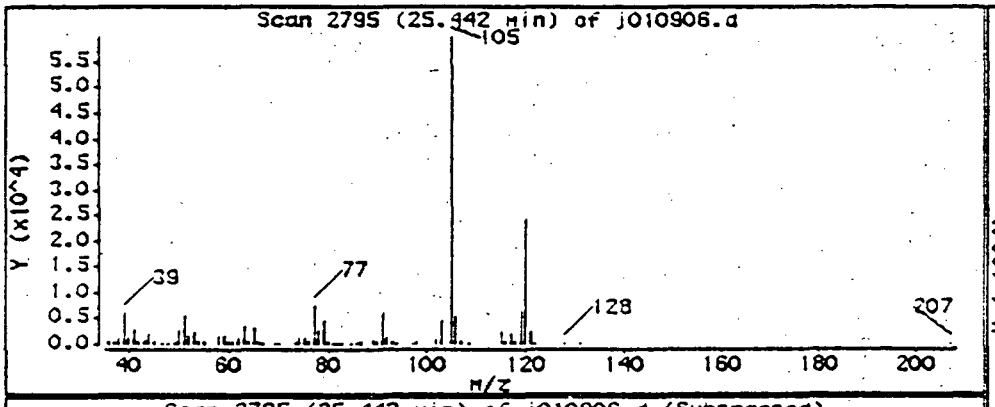
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

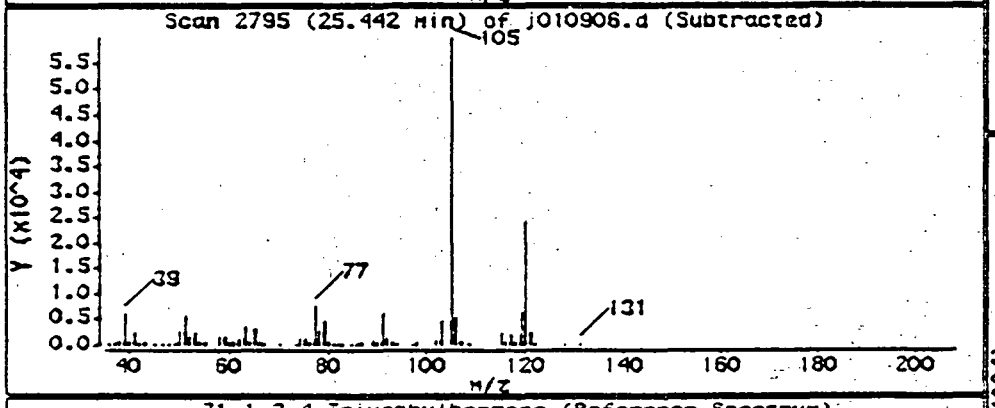
Operator: FA

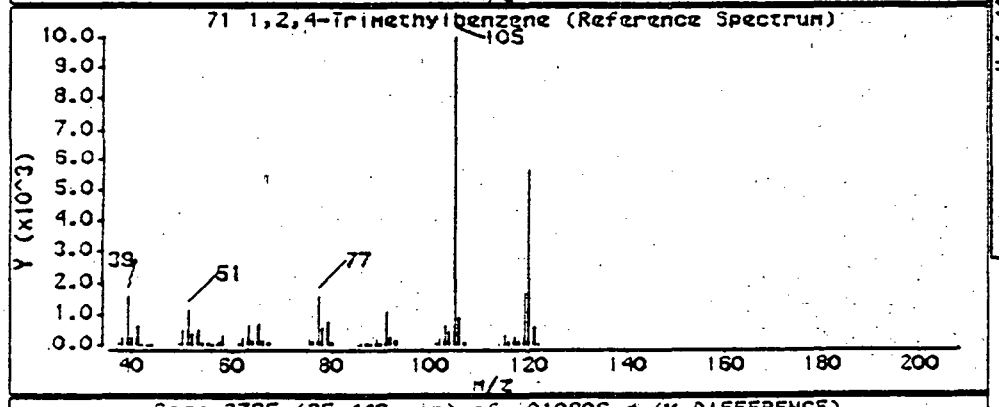
Column phase: RTx-624

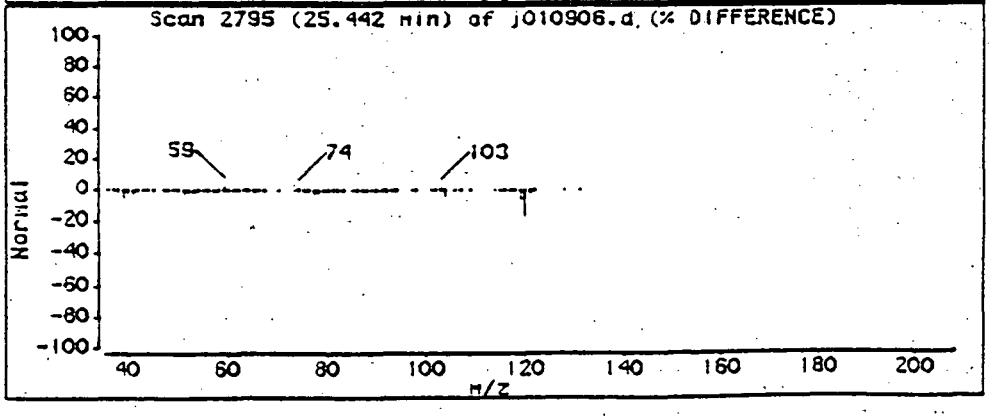
Column diameter: 0.58

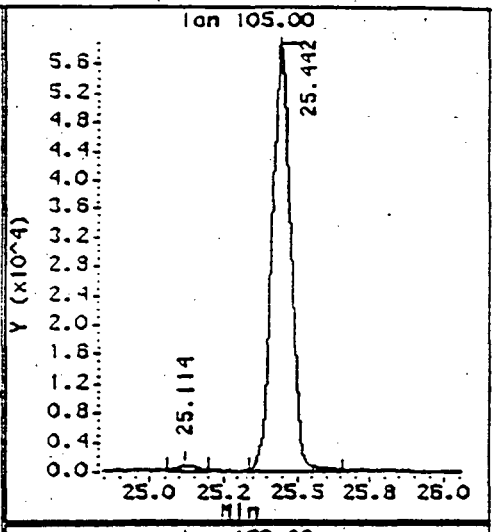
71 1,2,4-Trimethylbenzene

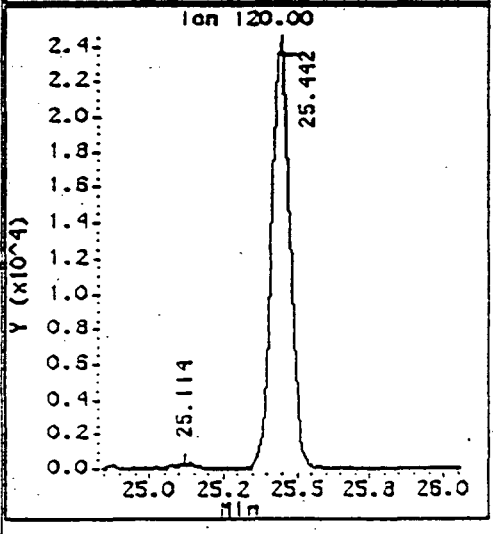












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

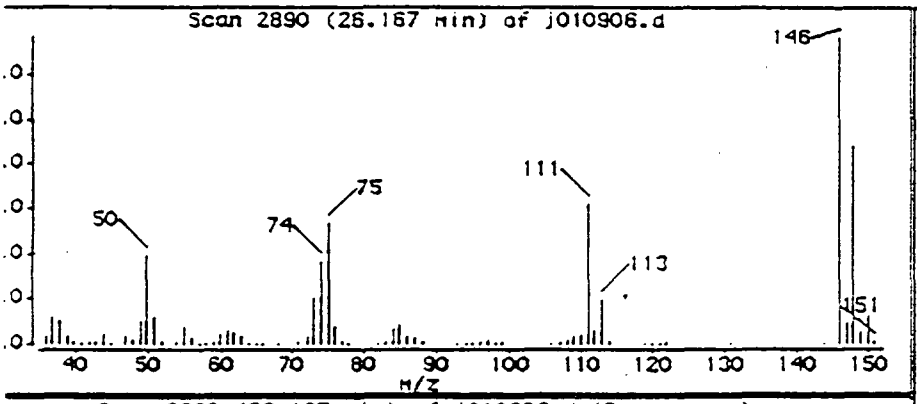
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

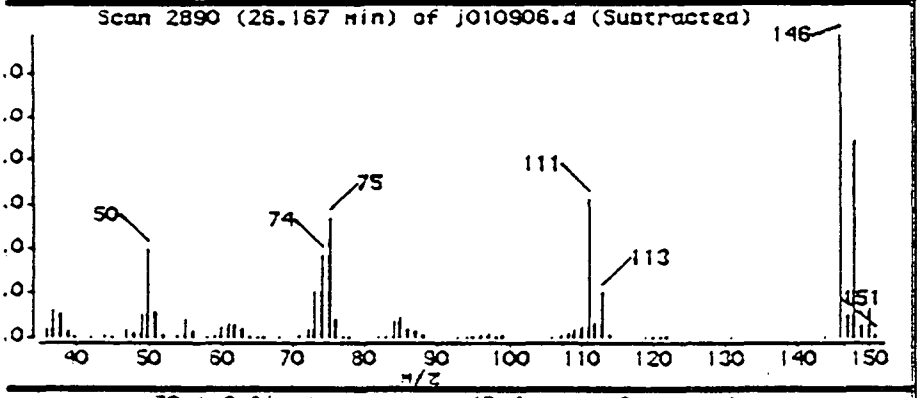
Operator: FA

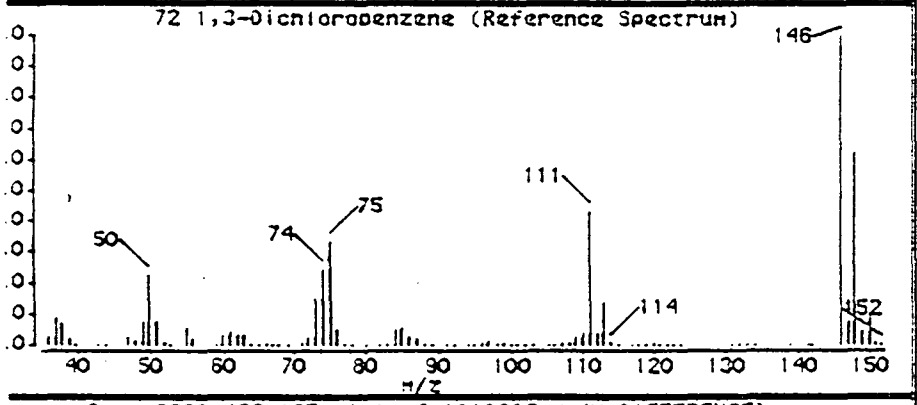
olumn phase: RTx-624

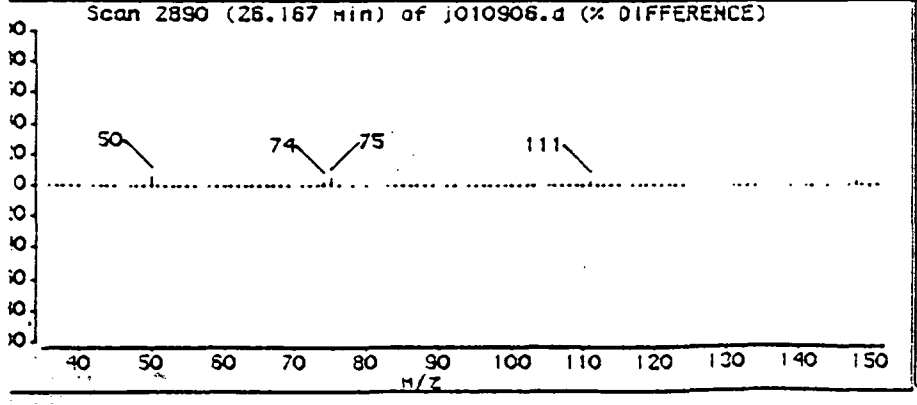
Column diameter: 0.58

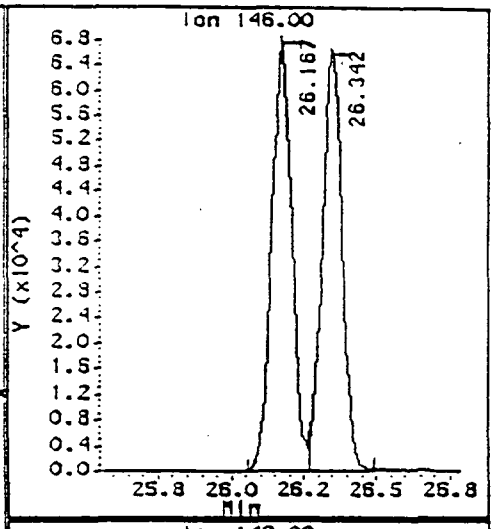
: 1,3-Dichlorobenzene

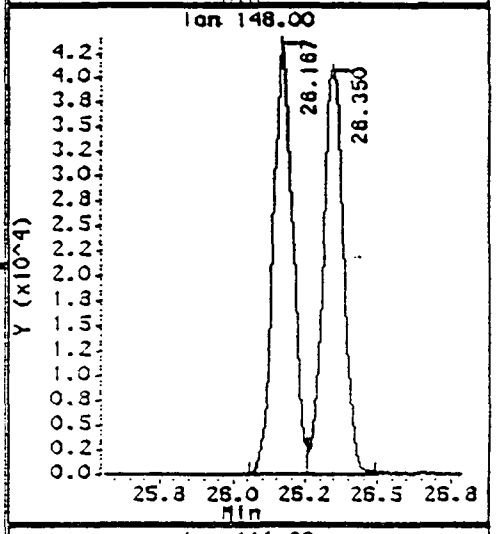


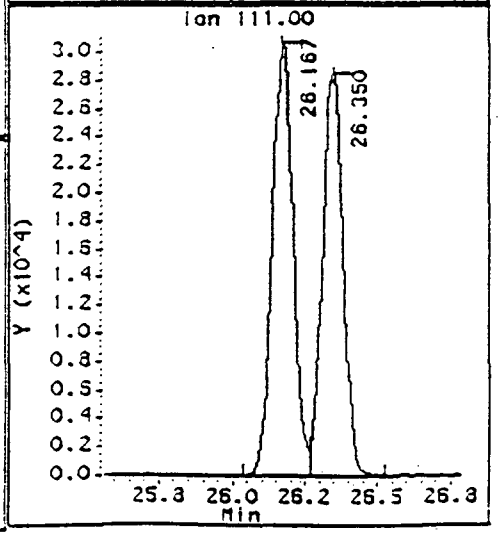






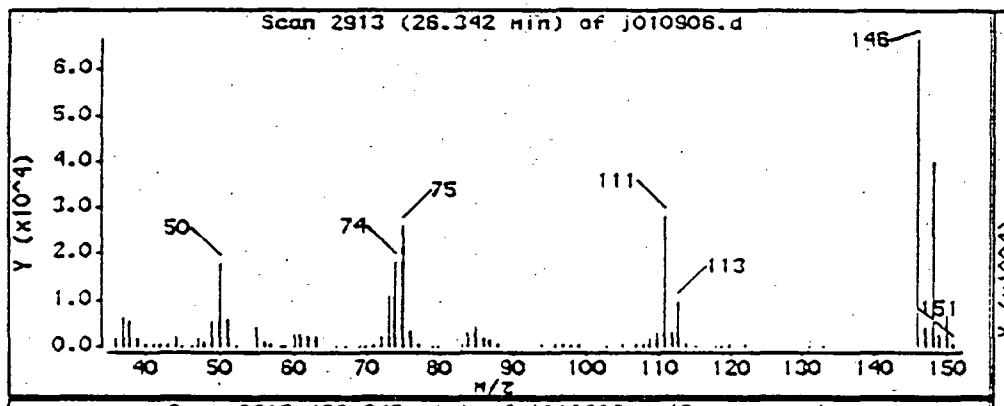


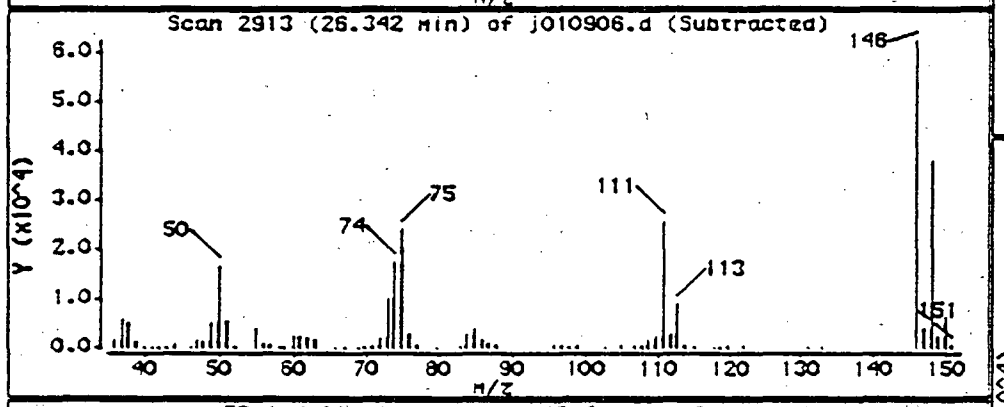


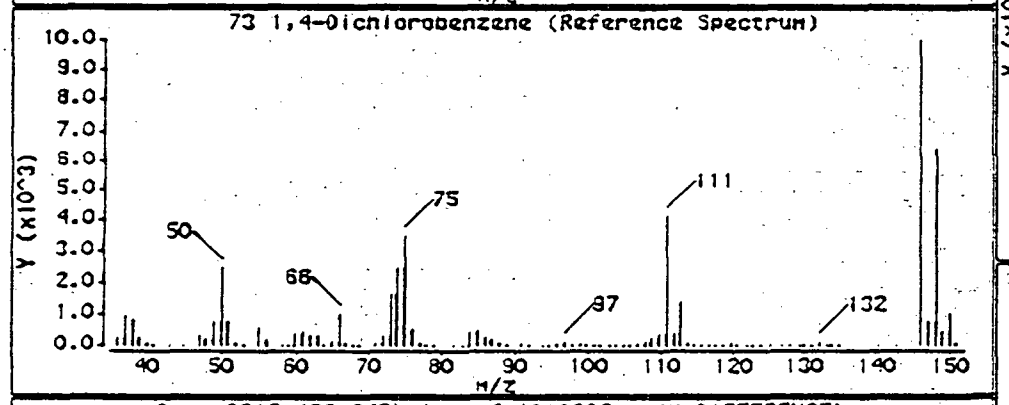


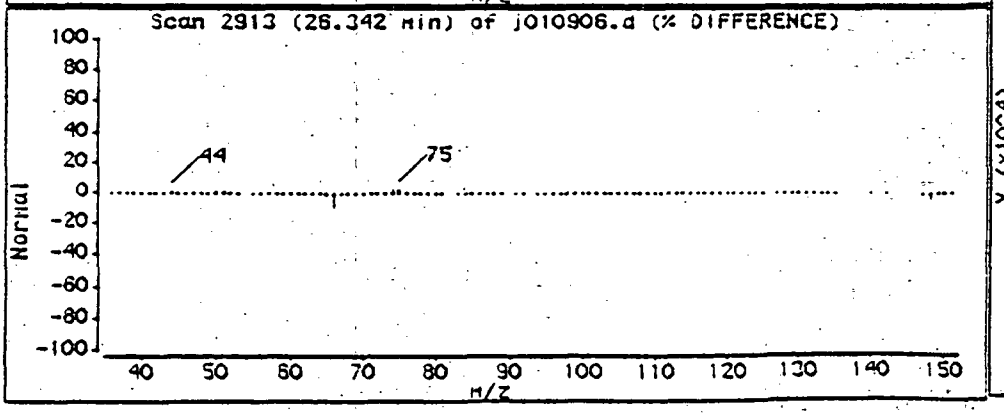
Data File: /chem/msdj.i/j-09jan.b/j010906.d
Date : 09-JAN-97 10:44
Client ID: VSTD005
Instrument: msdj.i
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)
Operator: FA
Column phase: RTx-624
Column diameter: 0.58

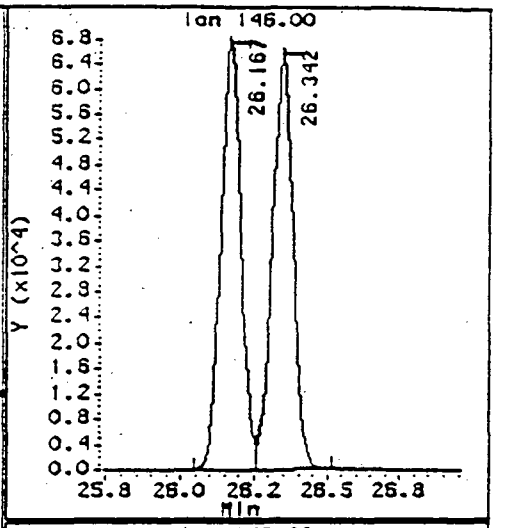
73 1,4-Dichlorobenzene

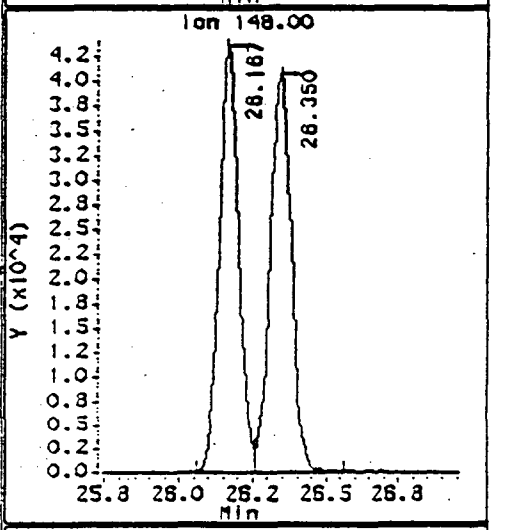


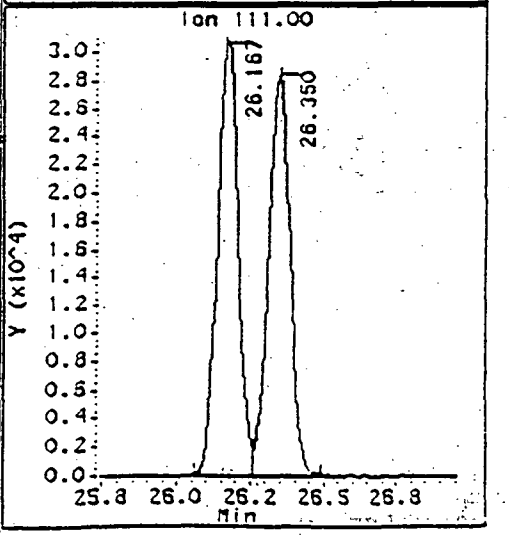












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

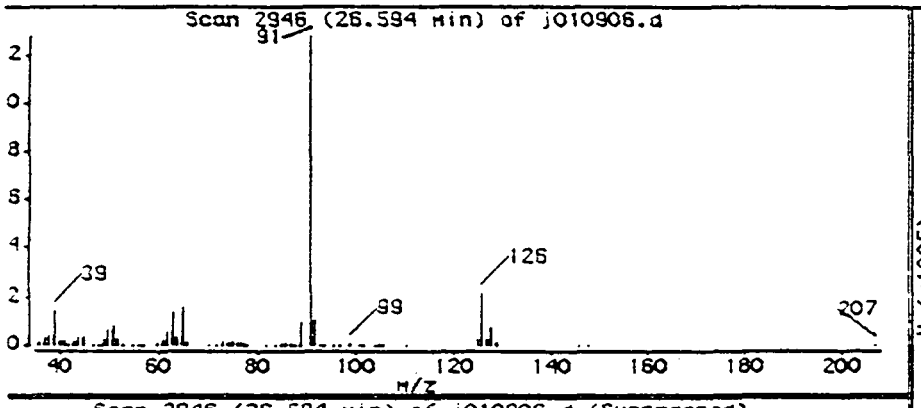
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

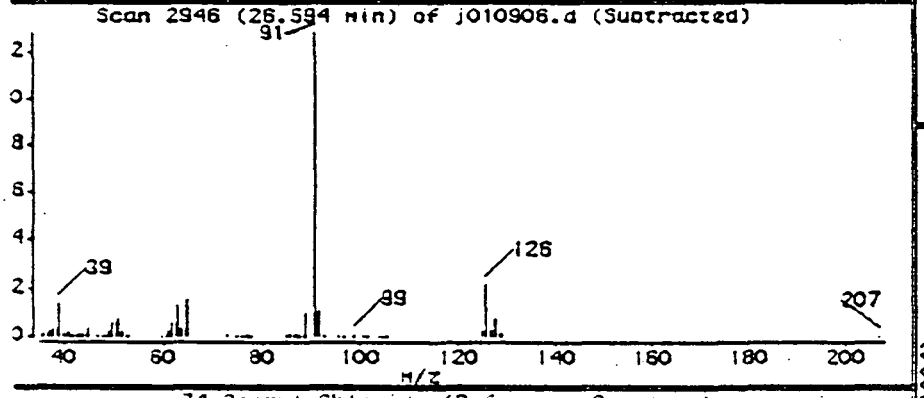
Operator: FA

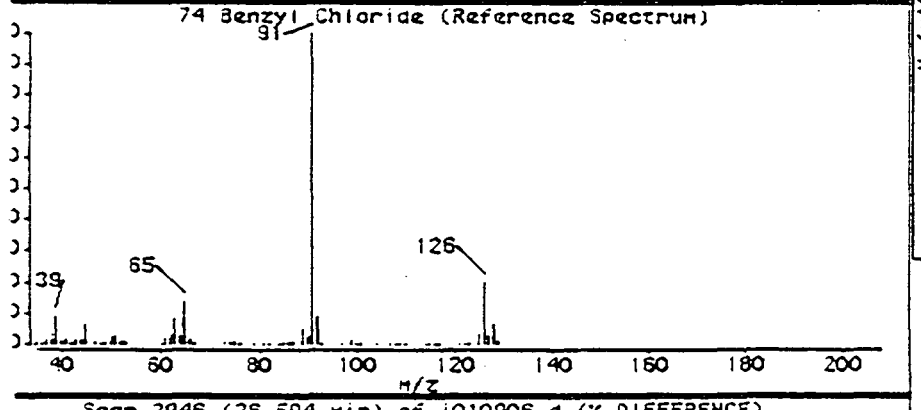
olumn phase: RTx-624

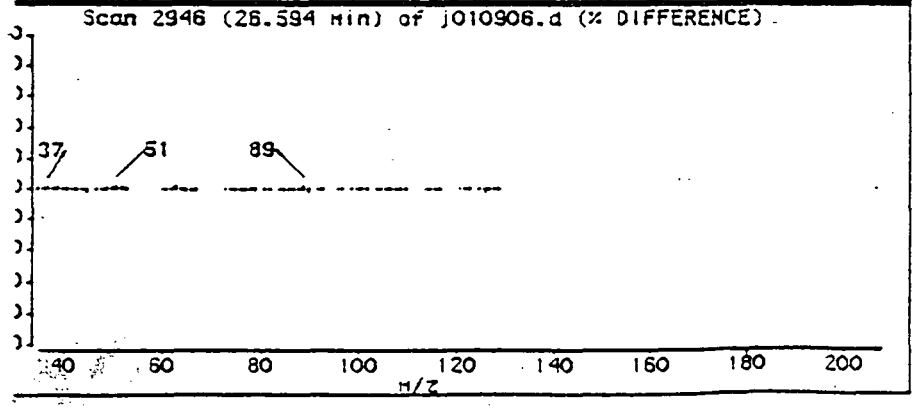
Column diameter: 0.58

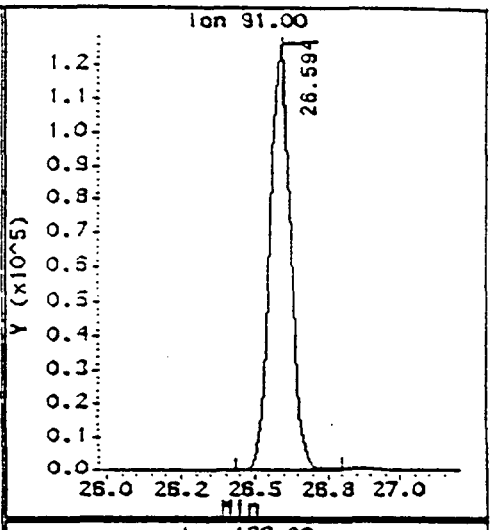
Benzyl Chloride

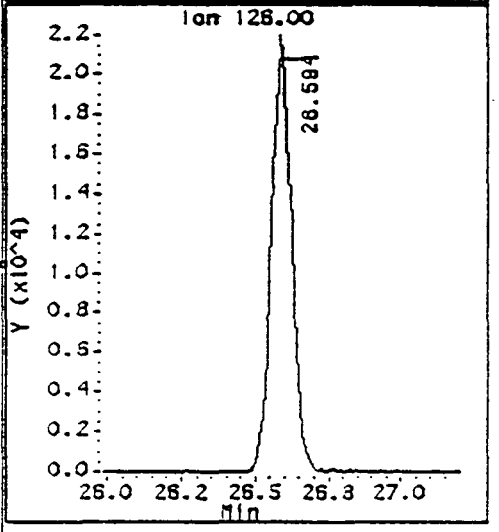












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

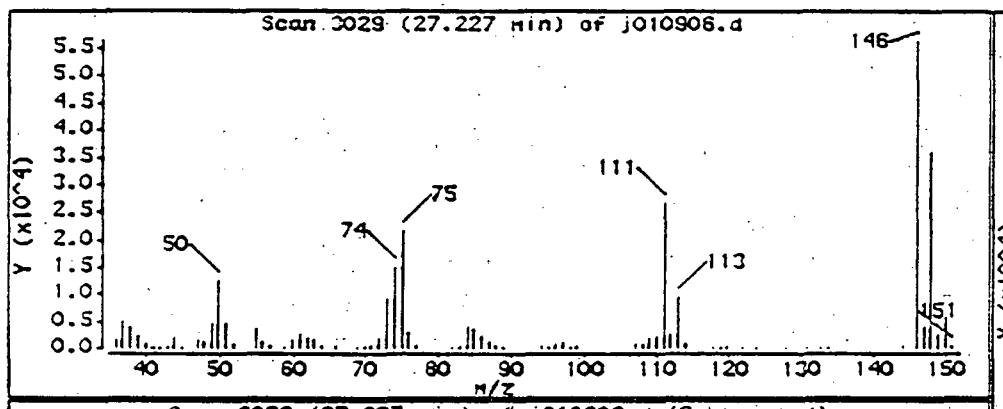
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

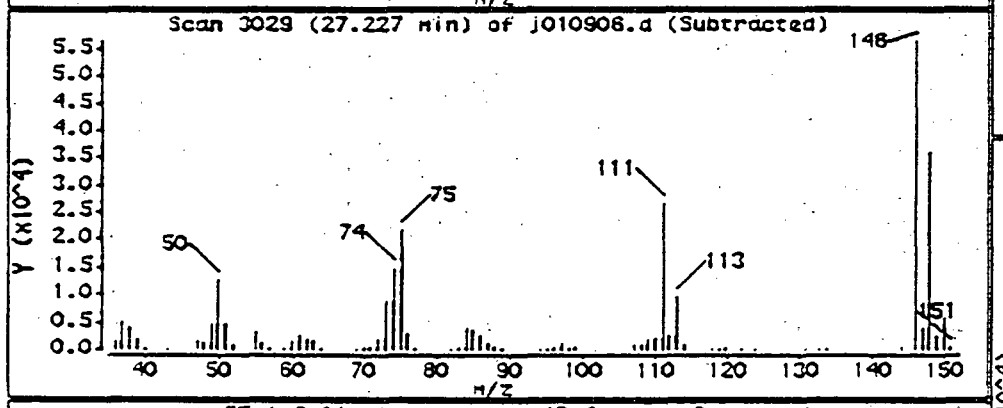
Operator: FA

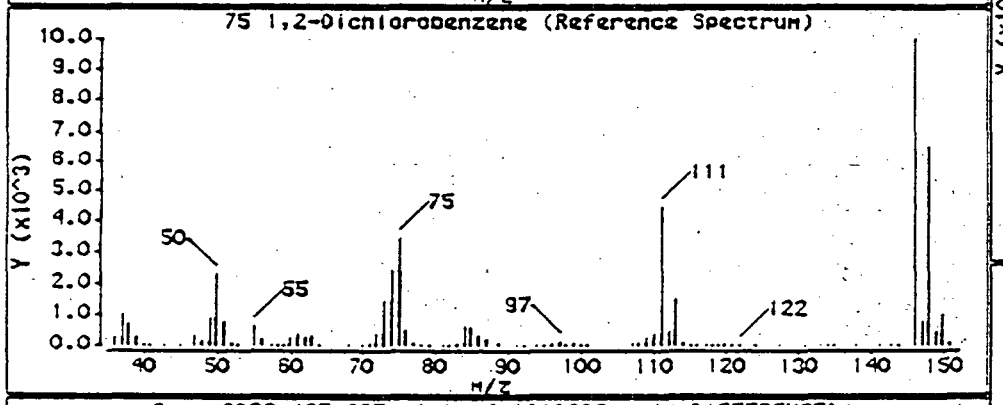
Column phase: RTx-624

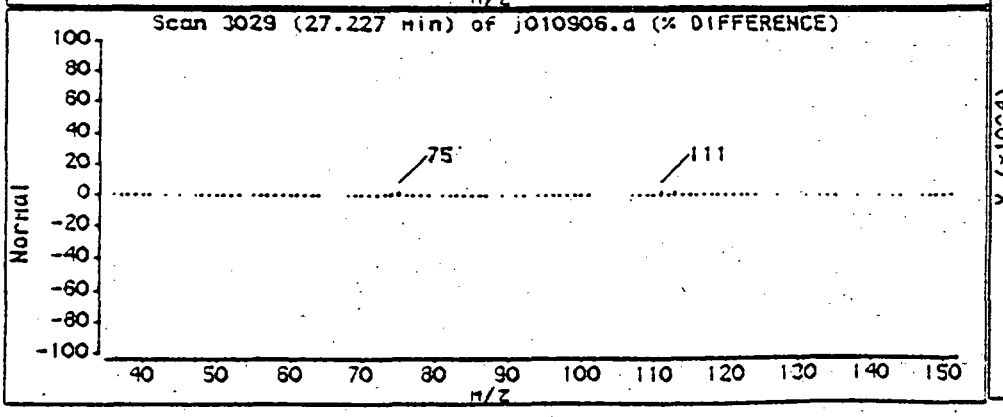
Column diameter: 0.58

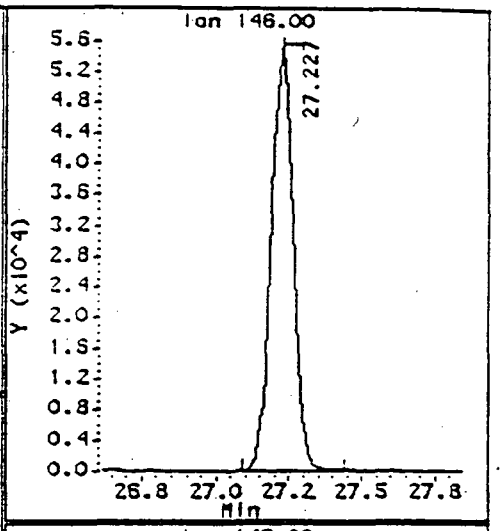
75 1,2-Dichlorobenzene

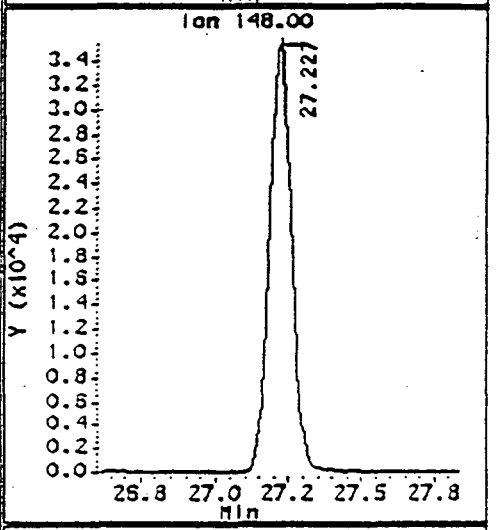


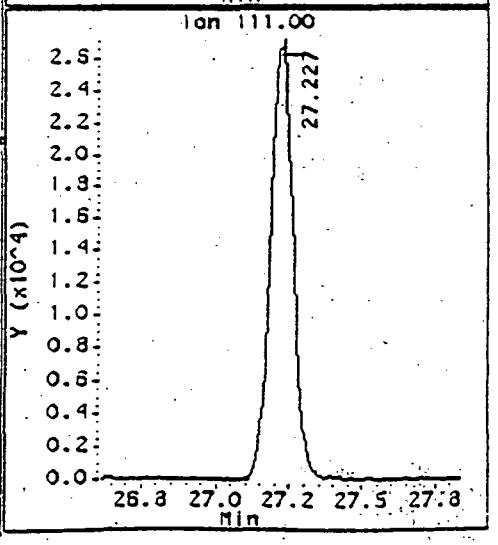












ata File: /chem/msdj.i/j-09jan.b/j010906.d

ate : 09-JAN-97 10:44

lient ID: VSTD005

Instrument: msdj.i

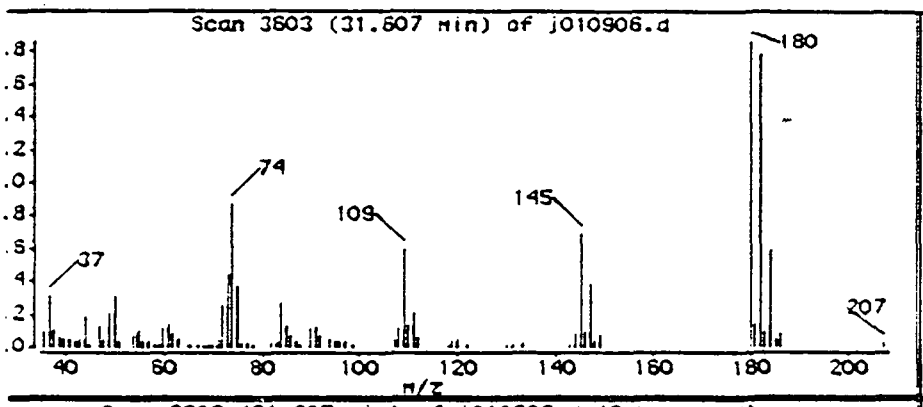
ample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

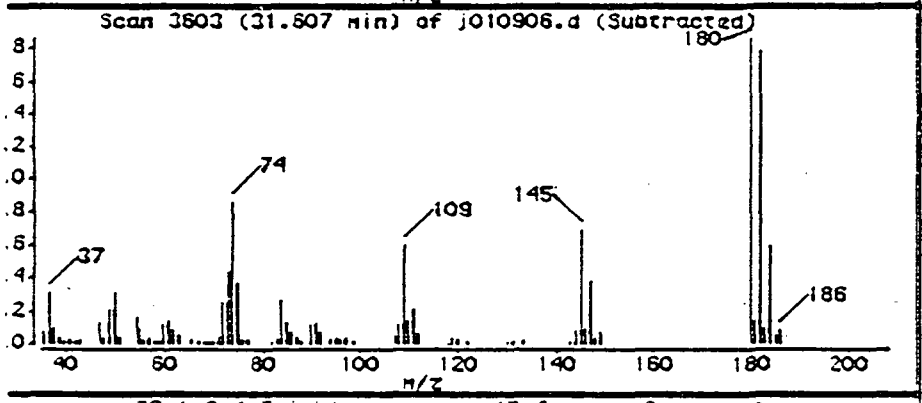
Operator: FR

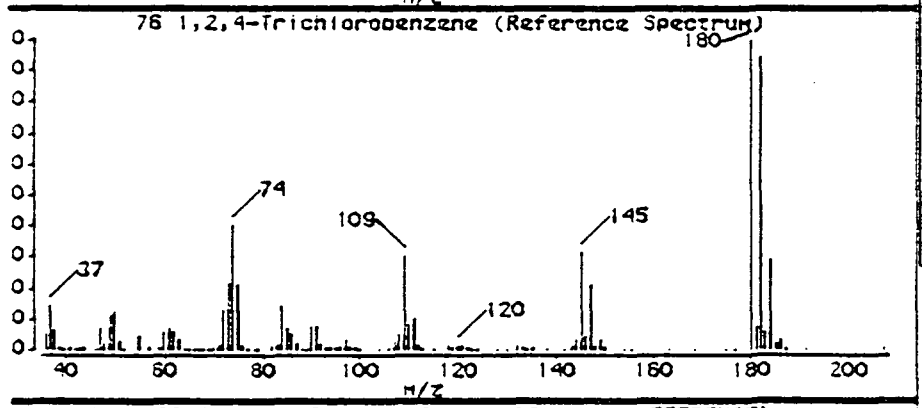
olumn phase: RTx-624

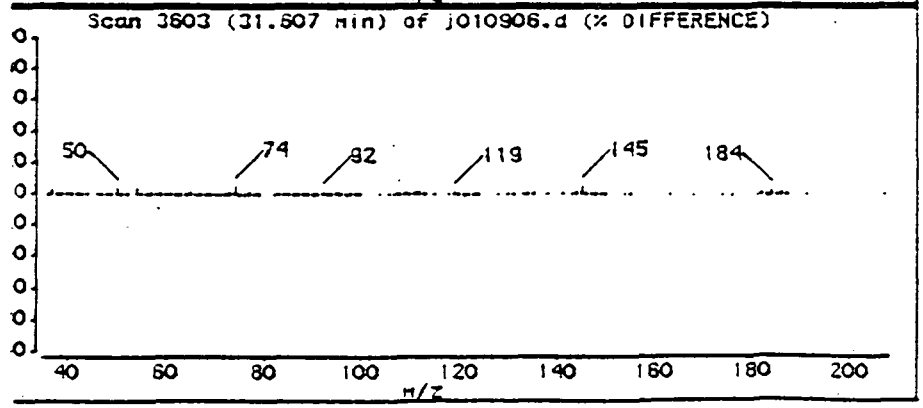
Column diameter: 0.58

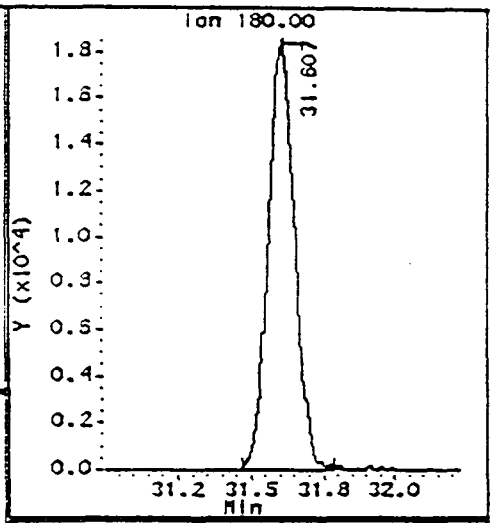
; 1,2,4-Trichlorobenzene

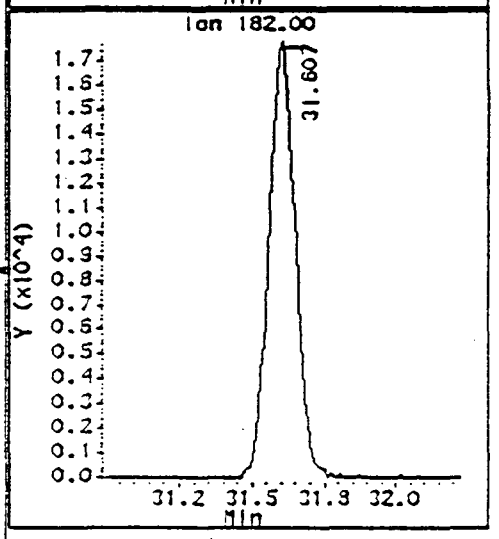












Data File: /chem/msdj.i/j-09jan.b/j010906.d

Date : 09-JAN-97 10:44

Client ID: VSTD005

Instrument: msdj.i

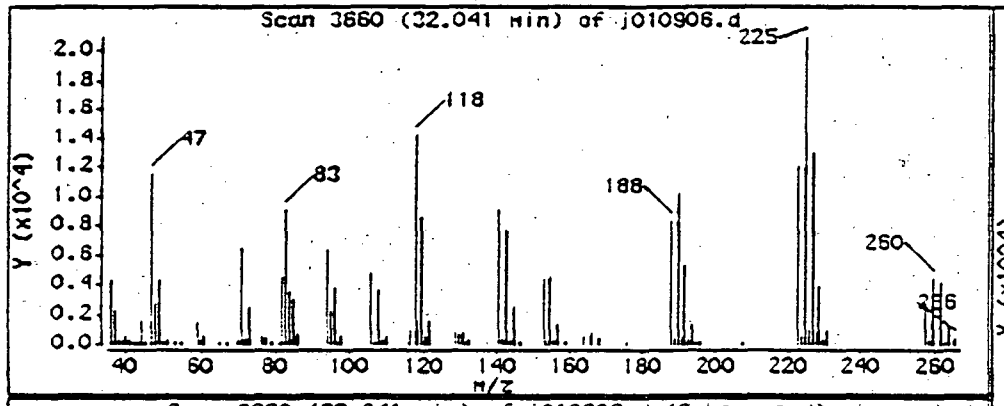
Sample Info: 25.0ml #296-25 100ppbv (5.0ppbv)

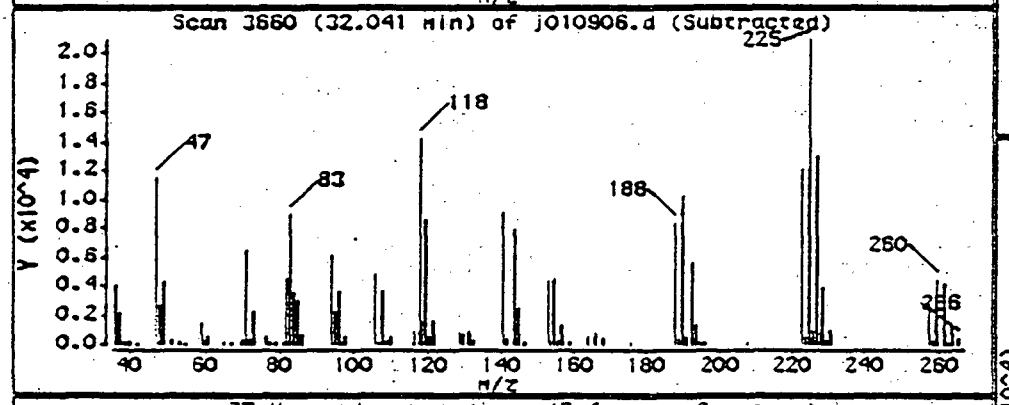
Operator: FA

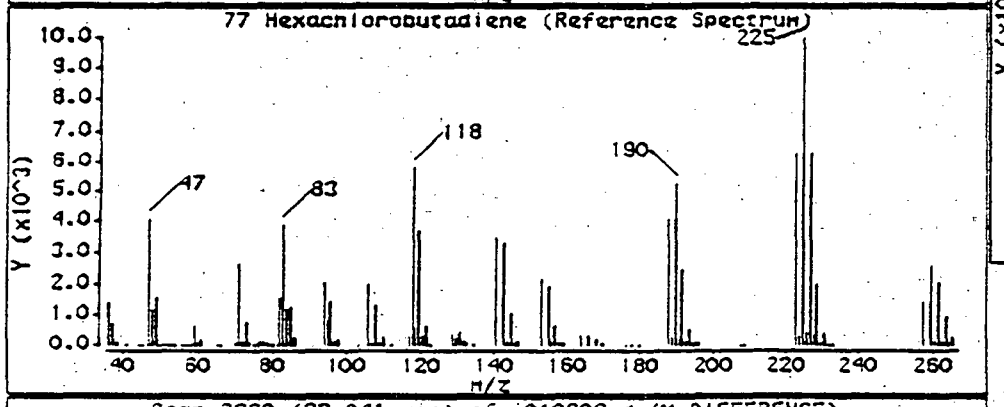
Column phase: RTx-624

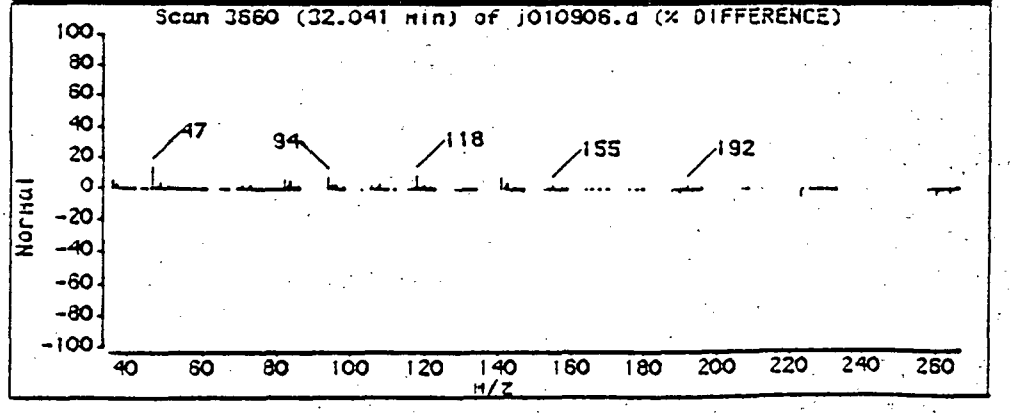
Column diameter: 0.58

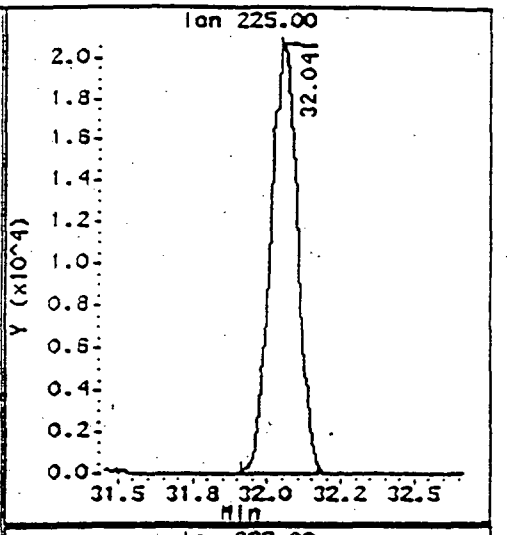
77 Hexachlorobutadiene

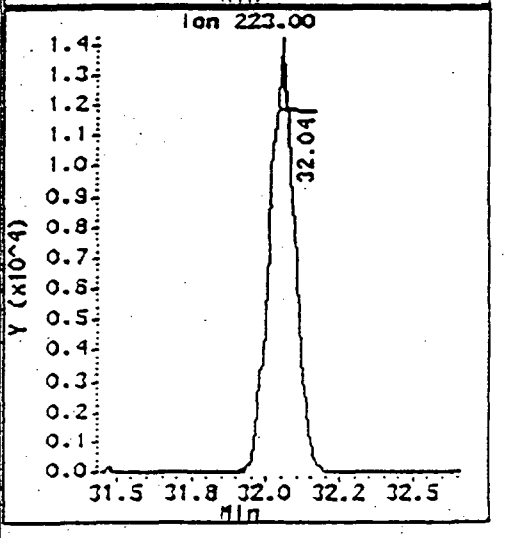












a File: /chem/msdj.i/j-09jan.b/j010907.d
ort Date: 09-Jan-1997 14:23

Air Toxics Limited

AMBIENT AIR METHOD TO14

a file : /chem/msdj.i/j-09jan.b/j010907.d
Smp Id: VSTD010 Client Smp ID: VSTD010
Date : 09-JAN-1997 11:27
rator : FA Inst ID: msdj.i
Info : 50.0ml #296-25 100ppbv (10.0ppbv)
c Info :
ment :
hod : /chem/msdj.i/j-09jan.b/to140109.m
h Date : 09-Jan-1997 14:23 fayala Quant Type: ISTD
Date : 09-JAN-1997 12:48 Cal File: j010909.d
bottle: 1 Calibration Sample, Level: 4
Factor: 1.000
egrator: HP RTE Compound Sublist: AT.sub
get Version: 3.12 Sample Matrix: AIR
centration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
Bromochloromethane					CAS #: 74-97-5			
92	16.692 (1.000)	130	194531	5.0			100.00	9585(q)
92	16.692 (0.000)	128	46640			28.83- 128.83	23.98	
92	16.692 (0.000)	49	105128			127.68- 227.68	54.04	
1,4-Difluorobenzene					CAS #: 540-36-3			
35	18.035 (1.000)	114	829384	5.0			100.00	9727
35	18.035 (0.000)	88	42960			0.00- 67.19	5.18	
Chlorobenzene-d5					CAS #: 3114-55-4			
77	22.177 (1.000)	117	656545	5.0			100.00	9779
77	22.177 (0.000)	82	97501			8.55- 108.55	14.85	
Octafluorotoluene					CAS #: 434-64-0			
11	17.211 (1.031)	217	432836	5.0	4.8		100.00	9817
11	17.211 (0.000)	186	88920			15.29- 115.29	20.54	
Toluene-d8					CAS #: 2037-26-5			
72	20.072 (1.113)	98	741386	5.0	4.9		100.00	9806
72	20.072 (0.000)	70	26760			0.00- 62.48	3.61	
72	20.072 (0.000)	100	141504			15.98- 115.98	19.09	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
$ 66 Bromofluorobenzene					CAS #: 460-00-4			
24.039	24.039 (1.084)	95	502078	5.0	4.9		100.00	9719
24.039	24.039 (0.000)	174	70424			8.48- 108.48	14.03	
24.039	24.039 (0.000)	176	69328			7.57- 107.57	13.81	
1 Propylene					CAS #: 115-07-1			
4.699	4.699 (0.281)	41	258056	10.0	7.9		100.00	7686(Q)
4.699	4.699 (0.000)	42	12169			14.10- 114.10	4.72	
4.699	4.699 (0.000)	39	13451			20.85- 120.85	5.21	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
5.256	5.256 (0.315)	85	1149323	10.0	9.5		100.00	0(M)
5.263	5.263 (0.315)	87	0			0.00- 50.00	0.00	
7 Freon 114					CAS #: 76-14-2			
7.003	7.003 (0.420)	135	856913	10.0	9.8		100.00	9810
7.003	7.003 (0.000)	137	24496			0.00- 80.98	2.86	
8 Chloromethane					CAS #: 74-87-3			
7.117	7.117 (0.426)	50	477700	10.0	9.4		100.00	9127(M)
7.117	7.117 (0.426)	52	12892			0.00- 79.23	2.70	
9 Vinyl Chloride					CAS #: 75-01-4			
8.231	8.231 (0.493)	62	526994	10.0	9.7		100.00	9634
8.231	8.231 (0.000)	64	17504			0.00- 80.10	3.32	
10 1,3-Butadiene					CAS #: 106-99-0			
8.582	8.582 (0.514)	54	398402	10.0	9.7		100.00	9690(Q)
8.582	8.582 (0.000)	39	66407			56.78- 156.78	16.67	
11 Bromomethane					CAS #: 74-83-9			
10.161	10.161 (0.609)	94	429983	10.0	9.6		100.00	9504(Q)
10.161	10.161 (0.000)	96	72432			45.14- 145.14	16.85	
12 Chloroethane					CAS #: 75-00-3			
10.741	10.741 (0.643)	64	306321	10.0	9.8		100.00	9641
10.741	10.741 (0.000)	66	19056			0.00- 82.76	6.22	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
11.725	11.725 (0.702)	101	1211530	10.0	10.1		100.00	9872
11.725	11.725 (0.000)	103	171338			13.13- 113.13	14.14	
15 Ethanol					CAS #: 64-17-5			
12.740	12.740 (0.763)	45	209536	10.0	13.1		100.00	
12.740	12.740 (0.763)	46	86610			0.00- 91.33	41.33	
12.747	12.747 (0.764)	43	55261			0.00- 76.37	26.37	
17 1,1-Dichloroethene					CAS #: 75-35-4			
13.144	13.144 (0.787)	96	483721	10.0	11.6		100.00	9350(Q)

EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
1,1-Dichloroethene (continued)							
4 13.144 (0.000)	61	240960			125.93- 225.93	49.81	
4 13.144 (0.000)	98	87784			14.09- 114.09	18.15	
Freon 113				CAS #: 76-13-1			
6 13.236 (0.793)	151	654914	10.0	10.0		100.00	9310(Q)
6 13.236 (0.000)	153	100016			14.05- 114.05	15.27	
6 13.236 (0.000)	101	243927			106.20- 206.20	37.25	
Carbon Disulfide				CAS #: 75-15-0			
8 13.518 (0.810)	76	1480262	10.0	10.1		100.00	8114
Acetone				CAS #: 67-64-1			
1 13.381 (0.802)	43	918530	10.0	11.9		100.00	
1 13.381 (0.802)	58	271567			0.00- 79.57	29.57	
2-Propanol				CAS #: 67-63-0			
1 13.861 (0.830)	45	1005549	10.0	10.5		100.00	7544
1 13.861 (0.000)	43	52124			0.00- 69.13	5.18	
1 13.861 (0.000)	59	9763			0.00- 53.58	0.97	
Methylene Chloride				CAS #: 75-09-2			
3 14.243 (0.853)	84	447204	10.0	10.0		100.00	9680(Q)
3 14.243 (0.000)	49	199296			98.64- 198.64	44.56	
3 14.243 (0.000)	51	62830			0.00- 96.86	14.05	
trans-1,2-Dichloroethene				CAS #: 156-60-5			
1 14.731 (0.883)	96	495935	10.0	10		100.00	9554(Q)
1 14.731 (0.000)	61	242688			104.97- 204.97	48.94	
1 14.731 (0.000)	98	99576			13.58- 113.58	20.08	
MTBE				CAS #: 1634-04-4			
1 14.731 (0.883)	73	1319582	10.0	10.1		100.00	6461
1 14.731 (0.000)	57	88400			0.00- 74.03	6.70	
1 14.731 (0.000)	41	92845			0.00- 75.24	7.04	
Hexane				CAS #: 110-54-3			
8 15.158 (0.908)	57	911208	10.0	10.0		100.00	7287
8 15.158 (0.000)	43	197960			20.00- 120.00	21.73	
8 15.158 (0.000)	56	149251			2.77- 102.77	16.38	
1,1-Dichloroethane				CAS #: 75-34-3			
3 15.433 (0.925)	63	918113	10.0	10		100.00	9642
3 15.433 (0.000)	65	86120			0.00- 81.51	9.38	
Chloroprene				CAS #: 126-99-8			
0 15.570 (0.933)	53	317266	10.0	10.1		100.00	7811
0 15.570 (0.000)	88	48808			1.16- 101.16	15.38	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
15.570	15.570 (0.000)	50	24414			0.00- 75.59	7.70	
30 Vinyl Acetate					CAS #: 108-05-4			
15.502	15.502 (0.929)	43	1534361	10.0	10.4		100.00	5917
15.502	15.502 (0.000)	86	35081			0.00- 57.73	2.29	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.333	16.333 (0.979)	96	532049	10.0	10.1		100.00	9734(Q)
16.333	16.333 (0.000)	61	219520			87.25- 187.25	41.26	
16.333	16.333 (0.000)	98	99024			11.91- 111.91	18.61	
32 2-Butanone					CAS #: 78-93-3			
16.318	16.318 (0.978)	72	218074	10.0	10.2		100.00	7901(Q)
16.318	16.318 (0.000)	43	310225			447.09- 547.09	142.26	
16.318	16.318 (0.000)	57	21626			0.00- 84.65	9.92	
34 Chloroform					CAS #: 67-66-3			
16.776	16.776 (1.005)	83	977840	10.0	10.1		100.00	9186
16.776	16.776 (0.000)	85	192128			14.95- 114.95	19.65	
35 Tetrahydrofuran					CAS #: 109-99-9			
16.760	16.760 (1.004)	42	520480	10.0	10.2		100.00	7505
16.760	16.760 (0.000)	71	52207			0.00- 86.02	10.03	
16.760	16.760 (0.000)	72	57134			0.00- 89.42	10.98	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.058	17.058 (1.022)	97	902963	10.0	10		100.00	9734
17.058	17.058 (0.000)	99	170240			17.27- 117.27	18.85	
37 Cyclohexane					CAS #: 110-82-7			
17.142	17.142 (1.027)	56	848215	10.0	10		100.00	8271(Q)
17.142	17.142 (0.000)	84	183295			24.74- 124.74	21.61	
17.142	17.142 (0.000)	41	148601			10.59- 110.59	17.52	
38 Carbon Tetrachloride					CAS #: 56-23-5			
17.310	17.310 (1.037)	119	734580	10.0	10.2		100.00	9451(Q)
17.310	17.310 (0.000)	117	166768			27.68- 127.68	22.70	
40 Benzene					CAS #: 71-43-2			
17.584	17.584 (0.975)	78	1568102	10.0	9.9		100.00	9737
17.584	17.584 (0.000)	77	112752			0.00- 74.19	7.19	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.600	17.600 (0.976)	62	618858	10.0	10		100.00	8448
17.600	17.600 (0.000)	64	57624			0.00- 82.18	9.31	
42 Heptane					CAS #: 142-82-5			
17.821	17.821 (0.988)	43	1084527	10.0	9.9		100.00	7674

EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
Heptane (continued)							
21 17.821 (0.000)	57	168994			0.00- 98.18	15.58	
21 17.821 (0.000)	71	172928			0.00- 99.30	15.95	
Trichloroethene				CAS #: 79-01-6			
16 18.446 (1.023)	95	601904	10.0	9.9		100.00	7790(Q)
16 18.446 (0.000)	130	159808			38.73- 138.73	26.55	
16 18.446 (0.000)	97	114616			13.64- 113.64	19.04	
1,2-Dichloropropane				CAS #: 78-87-5			
32 18.752 (1.040)	63	549958	10.0	10.1		100.00	9737(Q)
32 18.752 (0.000)	62	120608			25.56- 125.56	21.93	
32 18.752 (0.000)	41	98518			11.72- 111.72	17.91	
1,4-Dioxane				CAS #: 123-91-1			
14 18.904 (1.048)	88	299209	10.0	10.1		100.00	9787(Q)
14 18.904 (0.000)	58	64336			25.46- 125.46	21.50	
14 18.904 (0.000)	57	21249			0.00- 74.92	7.10	
Bromodichloromethane				CAS #: 75-27-4			
10 19.110 (1.060)	83	965243	10.0	10.0		100.00	9372
10 19.110 (0.000)	85	170112			11.51- 111.51	17.62	
cis-1,3-Dichloropropene				CAS #: 542-75-6			
12 19.682 (1.091)	75	393646	14.4	14.6		100.00	9657
12 19.682 (0.000)	77	35827			0.00- 81.77	9.10	
12 19.682 (0.000)	39	64781			7.45- 107.45	16.46	
4-Methyl-2-pentanone				CAS #: 108-10-1			
15 19.805 (1.098)	43	1205412	10.0	10.2		100.00	9604
15 19.805 (0.000)	58	124570			0.00- 84.95	10.33	
15 19.805 (0.000)	85	41828			0.00- 61.74	3.47	
Toluene				CAS #: 108-88-3			
1 20.171 (1.118)	92	940562	10.0	9.8		100.00	9732(Q)
1 20.171 (0.000)	91	465216			118.81- 218.81	49.46	
Octane				CAS #: 111-65-9			
8 20.148 (1.117)	57	429505	10.0	9.6		100.00	8414(Q)
8 20.148 (0.000)	85	140416			50.22- 150.22	32.69	
8 20.148 (0.000)	43	382805			223.22- 323.22	89.13	
trans-1,3-Dichloropropene				CAS #: 542-75-6			
10 20.400 (0.920)	75	101902	2.0	1.8		100.00	9245
10 20.400 (0.000)	77	8316			0.00- 79.62	8.16	
1,1,2-Trichloroethane				CAS #: 79-00-5			
9 20.689 (0.933)	97	510323	10.0	10.0		100.00	9792(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
54 1,1,2-Trichloroethane (continued)								
20.689	20.689 (0.000)	99	89288			12.79- 112.79	17.50	
20.689	20.689 (0.000)	83	126712			39.10- 139.10	24.83	
55 Tetrachloroethene					CAS #: 127-18-4			
20.956	20.956 (0.945)	166	565139	10.0	9.8		100.00	9457(Q)
20.956	20.956 (0.000)	129	132608			32.85- 132.85	23.46	
20.956	20.956 (0.000)	131	125792			28.59- 128.59	22.26	
56 2-Hexanone					CAS #: 591-78-6			
20.918	20.918 (0.943)	43	1250843	10.0	10.4		100.00	8563
20.918	20.918 (0.000)	58	181333			0.00- 98.87	14.50	
20.918	20.918 (0.000)	100	32360			0.00- 58.72	2.59	
57 Dibromochloromethane					CAS #: 124-48-1			
21.307	21.307 (0.961)	129	702778	10.0	10.1		100.00	8302
21.307	21.307 (0.000)	208	7833			0.00- 54.22	1.11	
58 1,2-Dibromoethane					CAS #: 106-93-4			
21.529	21.529 (0.971)	107	670643	10.0	10		100.00	9740(Q)
21.529	21.529 (0.000)	109	167872			46.40- 146.40	25.03	
60 Chlorobenzene					CAS #: 108-90-7			
22.215	22.215 (1.002)	112	1096315	10.0	9.8		100.00	9652
22.215	22.215 (0.000)	114	89592			0.00- 81.98	8.17	
22.215	22.215 (0.000)	77	170703			10.92- 110.92	15.57	
61 Ethyl Benzene					CAS #: 100-41-4			
22.299	22.299 (1.006)	106	670810	10.0	9.6		100.00	(H)
22.299	22.299 (1.006)	91	2322710			296.25- 396.25	346.25	
62 m,p-Xylene					CAS #: 108-38-3			
22.459	22.459 (1.013)	106	1286569	20.0	18.9		100.00	(H)
22.459	22.459 (1.013)	91	2765569			164.96- 264.96	214.96	
63 o-Xylene					CAS #: 95-47-6			
23.131	23.131 (1.043)	106	404830	10.0	9.6		100.00	9569(Q)
23.131	23.131 (0.000)	91	224221			166.39- 266.39	55.39	
64 Styrene					CAS #: 100-42-5			
23.138	23.138 (1.043)	104	872225	10.0	9.9		100.00	9757
23.138	23.138 (0.000)	78	104280			0.00- 98.09	11.96	
65 Bromoform					CAS #: 75-25-2			
23.558	23.558 (1.062)	171	338006	10.0	10.0		100.00	8405(Q)
23.558	23.558 (0.000)	173	150656			141.89- 241.89	44.57	
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
24.176	24.176 (1.090)	83	1018077	10.0	9.8		100.00	9435

EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
1,1,2,2-Tetrachloroethane (continued)							
5 24.176 (0.000)	85	144384			11.12- 111.12	14.18	
4-Ethyltoluene				CAS #: 622-96-8			
6 24.596 (1.109)	105	1387130	10.0	9.8		100.00	9331(M)
6 24.596 (1.109)	120	352472	10.0	9.7	0.00- 76.11	25.41	
1,3,5-Trimethylbenzene				CAS #: 108-67-8			
7 24.687 (1.113)	105	671249	10.0	9.9		100.00	7955(M)
0 24.680 (1.113)	120	314188	10.0	10.0	0.00- 93.88	46.81	
1,2,4-Trimethylbenzene				CAS #: 95-63-6			
2 25.442 (1.147)	105	538762	10.0	9.8		100.00	8886
2 25.442 (0.000)	120	51321			0.00- 92.53	9.53	
1,3-Dichlorobenzene				CAS #: 541-73-1			
5 26.175 (1.180)	146	660635	10.0	9.5		100.00	
7 26.167 (1.180)	148	422142			13.90- 113.90	63.90	
7 26.167 (1.180)	111	308151			0.00- 96.64	46.64	
1,4-Dichlorobenzene				CAS #: 106-46-7			
0 26.350 (1.188)	146	655856	10.0	9.6		100.00	(M)
0 26.350 (1.188)	148	416047			13.44- 113.44	63.44	
3 26.343 (1.188)	111	292687			0.00- 94.63	44.63	
Benzyl Chloride				CAS #: 100-44-7			
5 26.595 (1.199)	91	1284507	10.0	9.8		100.00	9391
5 26.595 (0.000)	126	43440			0.00- 66.70	3.38	
1,2-Dichlorobenzene				CAS #: 95-50-1			
3 27.228 (1.228)	146	600206	10.0	9.6		100.00	9763
3 27.228 (0.000)	148	70847			11.02- 111.02	11.80	
3 27.228 (0.000)	111	55444			0.00- 97.75	9.24	
1,2,4-Trichlorobenzene				CAS #: 120-82-1			
7 31.607 (1.425)	180	223116	10.0	8.5		100.00	9749(Q)
7 31.607 (0.000)	182	33584			43.33- 143.33	15.05	
Hexachlorobutadiene				CAS #: 87-68-3			
9 32.049 (1.445)	225	251747	10.0	9.1		100.00	9575
9 32.049 (0.000)	223	25049			9.71- 109.71	9.95	

'lag Legend

Qualifier signal failed the ratio test.
Compound response manually integrated.
Operator selected an alternate compound hit.

Data File: /chem/msdj.i/j-09jan.b/j010907.d
Report Date: 09-Jan-1997 12:08

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j010907.d
Lab Smp Id: VSTD010
Analysis Type: VOA
Quant Type: ISTD
Operator: FA
Method File: /chem/msdj.i/j-09jan.b/TO140109.m
Misc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD010
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	194531	1.26
43 1,4-Difluorobenzene	832855	499713	1165997	829384	-0.42
59 Chlorobenzene-d5	625059	375035	875083	656545	5.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.69	0.00
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.03	0.00
59 Chlorobenzene-d5	22.16	21.66	22.66	22.18	0.07

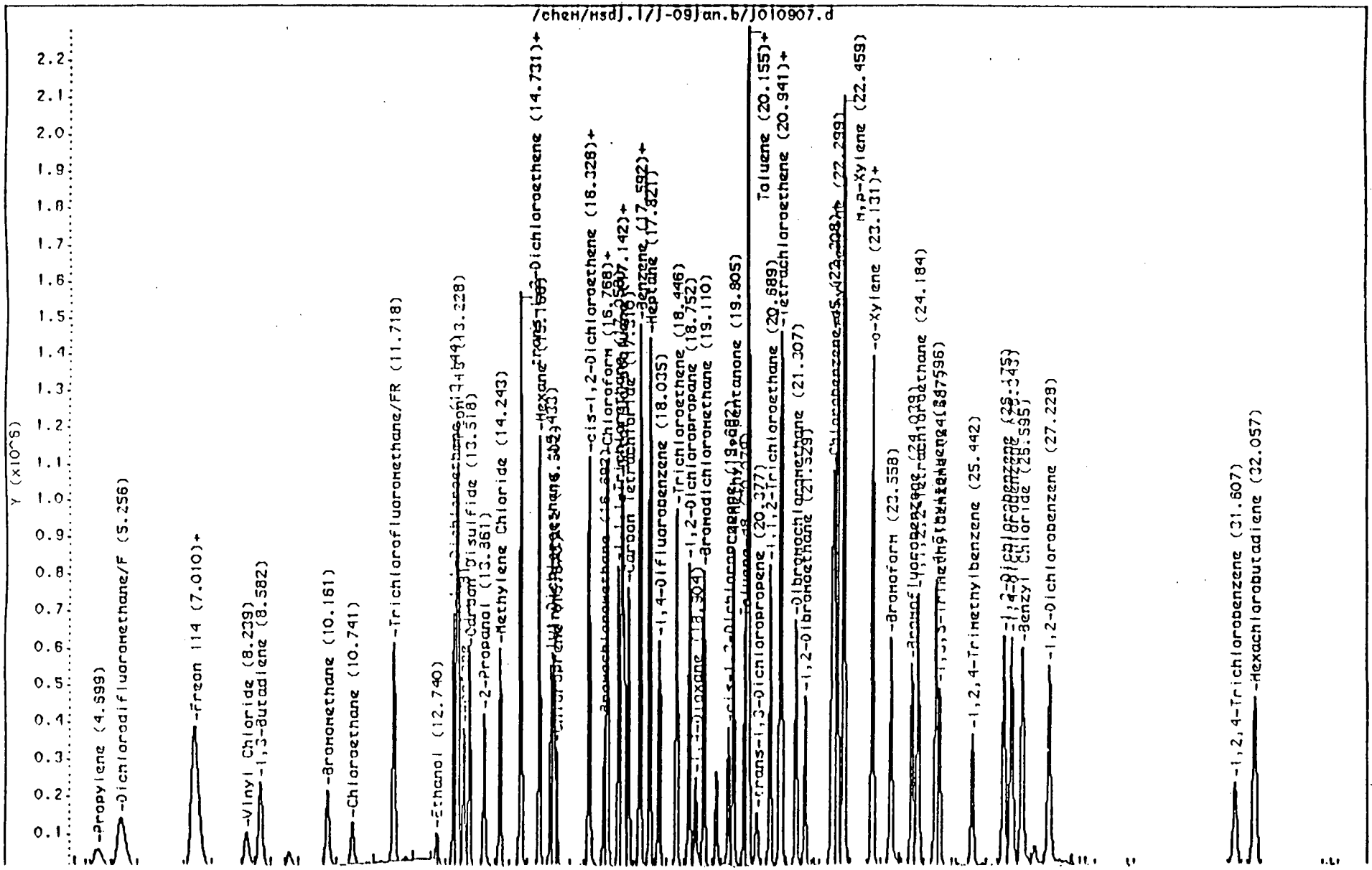
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.1/j-09jan.b/j010907.d
Date : 09-JAN-97 11:27
Client ID: VSTD010
Sample Info: 50.0ml #298-25 100ppbv (10.0ppbv)

Column phase: RTx-624

Instrument: msdj.1

Operator: FR
Column diameter: 0.58



Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010908.d
Lab Smp Id: VSTD025 Client Smp ID: VSTD025
Inj Date : 09-JAN-1997 12:08
Operator : FA Inst ID: msdj.i
Smp Info : 125.0ml #296-25 100ppbv (25.0ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:18 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:08 Cal File: j010908.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.722	16.722 (1.000)	130	182238	5.0			100.00	9511(Q)
16.722	16.722 (0.000)	128	38656			25.11- 125.11	21.21	
16.722	16.722 (0.000)	49	96856			138.20- 238.20	53.15	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.050	18.050 (1.000)	114	762215	5.0			100.00	9760
18.050	18.050 (0.000)	88	38576			0.00- 66.51	5.06	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.170	22.170 (1.000)	117	613020	5.0			100.00	9350
22.170	22.170 (0.000)	82	91570			7.48- 107.48	14.94	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.211	17.211 (1.029)	217	440297	5.0	5.2		100.00	8770
17.211	17.211 (0.000)	186	88536			14.67- 114.67	20.11	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.079	20.079 (1.112)	98	704821	5.0	5.1		100.00	9726
20.079	20.079 (0.000)	70	24609			0.00- 62.35	3.49	
20.079	20.079 (0.000)	100	133263			16.89- 116.89	18.91	

a File: /chem/msdj.i/j-09jan.b/j010908.d
ort Date: 09-Jan-1997 14:18

EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
Bromofluorobenzene					CAS #: 460-00-4			
59 24.039	(1.084)	95	473245	5.0	5.0		100.00	9686
59 24.039	(0.000)	174	67544			10.59- 110.59	14.27	
59 24.039	(0.000)	176	63448			6.91- 106.91	13.41	
Propylene					CAS #: 115-07-1			
34 7.384	(0.442)	41	979263	25.0	32.1		100.00	6803(M)
92 7.392	(0.442)	42	643311			15.19- 115.19	65.69	
34 7.384	(0.442)	39	672872			18.12- 118.12	68.71	
Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
15 7.705	(0.461)	85	3130681	25.0	27.6		100.00	0(M)
15 7.705	(0.461)	87	1020297			0.00- 83.23	32.59	
Freon 114					CAS #: 76-14-2			
14 8.704	(0.520)	135	2125504	25.0	25.9		100.00	0(M)
12 8.712	(0.521)	137	672576			0.00- 81.78	31.64	
Chloromethane					CAS #: 74-87-3			
41 8.841	(0.529)	50	1324485	25.0	27.7		100.00	5718(M)
54 8.834	(0.528)	52	406010			0.00- 83.32	30.65	
Vinyl Chloride					CAS #: 75-01-4			
30 9.520	(0.569)	62	1329600	25.0	26.2		100.00	2401(M)
20 9.520	(0.569)	64	413288			0.00- 82.12	31.08	
1,3-Butadiene					CAS #: 106-99-0			
54 9.734	(0.582)	54	1038221	25.0	27.0		100.00	1680(M)
2 9.742	(0.583)	39	1084508			52.88- 152.88	104.46	
Bromomethane					CAS #: 74-83-9			
9 10.909	(0.652)	94	1050581	25.0	25.0		100.00	3462(M)
6 10.916	(0.653)	96	993010			43.56- 143.56	94.52	
Chloroethane					CAS #: 75-00-3			
6 11.336	(0.678)	64	699484	25.0	23.9		100.00	4574(M)
6 11.336	(0.678)	66	218115			0.00- 82.26	31.18	
Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
2 12.122	(0.725)	101	2847720	25.0	25.4		100.00	9906(Q)
2 12.122	(0.000)	103	361152			15.80- 115.80	12.68	
Ethanol					CAS #: 64-17-5			
0 12.870	(0.770)	45	282656	25.0	18.9		100.00	(H)
0 12.870	(0.770)	46	121233			0.00- 92.89	42.89	
7 12.877	(0.770)	43	66313			0.00- 73.46	23.46	
1,1-Dichloroethene					CAS #: 75-35-4			
5 13.365	(0.799)	96	774956	25.0	19.8		100.00	6280(QH)

Data File: /chem/msdj.i/j-09jan.b/j010908.d
Report Date: 09-Jan-1997 14:18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
13.365	13.365 (0.000)	61	332314			119.48- 219.48	42.88	
13.365	13.365 (0.000)	98	126971			14.76- 114.76	16.38	
18 Freon 113					CAS #: 76-13-1			
13.396	13.396 (0.801)	151	1553260	25.0	25.4		100.00	9870(Q)
13.396	13.396 (0.000)	153	206912			15.75- 115.75	13.32	
13.396	13.396 (0.000)	101	383232			71.78- 171.78	24.67	
19 Carbon Disulfide					CAS #: 75-15-0			
13.762	13.762 (0.823)	76	3468988	25.0	25.2		100.00	8164
20 Acetone					CAS #: 67-64-1			
13.533	13.533 (0.809)	43	1161913	25.0	16.1		100.00	
13.533	13.533 (0.809)	58	315384			0.00- 77.14	27.14	
22 2-Propanol					CAS #: 67-63-0			
13.922	13.922 (0.833)	45	2456307	25.0	27.4		100.00	7496
13.922	13.922 (0.000)	43	109251			0.00- 67.90	4.45	
13.922	13.922 (0.000)	59	20920			0.00- 53.43	0.85	
23 Methylene Chloride					CAS #: 75-09-2			
14.350	14.350 (0.858)	84	1043363	25.0	25.0		100.00	9749(Q)
14.350	14.350 (0.000)	49	436416			96.55- 196.55	41.83	
14.350	14.350 (0.000)	51	135286			0.00- 95.43	12.97	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.815	14.815 (0.886)	96	1193282	25.0	25.7		100.00	9628(Q)
14.815	14.815 (0.000)	61	553408			102.72- 202.72	46.38	
14.815	14.815 (0.000)	98	226752			12.58- 112.58	19.00	
26 MTBE					CAS #: 1634-04-4			
14.807	14.807 (0.885)	73	3132204	25.0	25.6		100.00	6432
14.807	14.807 (0.000)	57	191552			0.00- 74.41	6.12	
14.807	14.807 (0.000)	41	197973			0.00- 75.22	6.32	
27 Hexane					CAS #: 110-54-3			
15.227	15.227 (0.911)	57	2152232	25.0	25.3		100.00	7287
15.227	15.227 (0.000)	43	438993			19.09- 119.09	20.40	
15.227	15.227 (0.000)	56	328570			1.71- 101.71	15.27	
28 1,1-Dichloroethane					CAS #: 75-34-3			
15.494	15.494 (0.927)	63	2208134	25.0	25.6		100.00	9527
15.494	15.494 (0.000)	65	190976			0.00- 81.16	8.65	
29 Chloroprene					CAS #: 126-99-8			
15.631	15.631 (0.935)	53	762852	25.0	25.9		100.00	7611
15.631	15.631 (0.000)	88	115369			3.15- 103.15	15.12	

EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
Chloroprene (continued)							
;1 15.631 (0.000)	50	52633			0.00- 74.25	6.90	
Vinyl Acetate				CAS #: 108-05-4			
.7 15.547 (0.930)	43	3750938	25.0	27.0		100.00	5957
.7 15.547 (0.000)	86	89940			0.00- 58.06	2.40	
cis-1,2-Dichloroethene				CAS #: 156-59-2			
'1 16.371 (0.979)	96	1261689	25.0	25.6		100.00	9754(Q)
'1 16.371 (0.000)	61	518336			90.65- 190.65	41.08	
'1 16.371 (0.000)	98	235328			13.86- 113.86	18.65	
2-Butanone				CAS #: 78-93-3			
6 16.356 (0.978)	72	534047	25.0	26.6		100.00	7913(Q)
6 16.356 (0.000)	43	754119			449.07- 549.07	141.21	
6 16.356 (0.000)	57	48451			0.00- 82.06	9.07	
Chloroform				CAS #: 67-66-3			
'6 16.806 (1.005)	83	2309788	25.0	25.5		100.00	9660
6 16.806 (0.000)	85	439808			14.36- 114.36	19.04	
Tetrahydrofuran				CAS #: 109-99-9			
9 16.799 (1.005)	42	1228018	25.0	25.7		100.00	7501
9 16.799 (0.000)	71	119344			0.00- 84.41	9.72	
9 16.799 (0.000)	72	132486			0.00- 88.20	10.79	
1,1,1-Trichlorethane				CAS #: 71-55-6			
6 17.096 (1.022)	97	2150766	25.0	25.3		100.00	9710
6 17.096 (0.000)	99	388032			14.13- 114.13	18.04	
Cyclohexane				CAS #: 110-82-7			
0 17.180 (1.027)	56	1990630	25.0	25.0		100.00	8278(Q)
0 17.180 (0.000)	84	413685			25.14- 125.14	20.78	
0 17.180 (0.000)	41	332918			10.47- 110.47	16.72	
Carbon Tetrachloride				CAS #: 56-23-5			
0 17.340 (1.037)	119	1771700	25.0	26.4		100.00	9489(Q)
0 17.340 (0.000)	117	476560			44.11- 144.11	26.90	
Benzene				CAS #: 71-43-2			
5 17.615 (0.976)	78	3717472	25.0	25.5		100.00	9809
5 17.615 (0.000)	77	262289			0.00- 74.19	7.06	
1,2-Dichloroethane				CAS #: 107-06-2			
5 17.615 (0.976)	62	1462842	25.0	25.7		100.00	8249
5 17.615 (0.000)	64	133824			0.00- 80.95	9.15	
Heptane				CAS #: 142-82-5			
9 17.829 (0.988)	43	2642976	25.0	26.3		100.00	7668

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.829	17.829 (0.000)	57	406516			0.00- 98.90	15.38	
17.829	17.829 (0.000)	71	409385			0.00- 99.25	15.49	
44 Trichloroethene					CAS #: 79-01-6			
18.454	18.454 (1.022)	95	1428786	25.0	25.7		100.00	7783(Q)
18.454	18.454 (0.000)	130	371712			37.30- 137.30	26.02	
18.454	18.454 (0.000)	97	277696			15.22- 115.22	19.44	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.767	18.767 (1.040)	63	1297182	25.0	25.8		100.00	9698(Q)
18.767	18.767 (0.000)	62	277955			23.89- 123.89	21.43	
18.767	18.767 (0.000)	41	223954			9.53- 109.53	17.26	
46 1,4-Dioxane					CAS #: 123-91-1			
18.958	18.958 (1.050)	88	726209	25.0	26.7		100.00	9775(Q)
18.958	18.958 (0.000)	58	107237			25.68- 125.68	14.77	
18.958	18.958 (0.000)	57	37210			0.00- 76.26	5.12	
47 Bromodichloromethane					CAS #: 75-27-4			
19.110	19.110 (1.059)	83	2329137	25.0	26.4		100.00	9379
19.110	19.110 (0.000)	85	421696			13.23- 113.23	18.11	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.690	19.690 (1.091)	75	943827	36.0	38.1		100.00	9669
19.690	19.690 (0.000)	77	84747			0.00- 81.01	8.98	
19.690	19.690 (0.000)	39	157389			7.59- 107.59	16.68	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.805	19.805 (1.097)	43	2839593	25.0	26.1		100.00	9632
19.805	19.805 (0.000)	58	286454			0.00- 85.65	10.09	
19.805	19.805 (0.000)	85	102076			0.00- 62.70	3.59	
51 Toluene					CAS #: 108-88-3			
20.171	20.171 (1.117)	92	2296632	25.0	26.1		100.00	9697(Q)
20.171	20.171 (0.000)	91	1154437			120.64- 220.64	50.27	
52 Octane					CAS #: 111-65-9			
20.155	20.155 (1.117)	57	1098040	25.0	26.6		100.00	8353(Q)
20.155	20.155 (0.000)	85	375675			55.20- 155.20	34.21	
20.155	20.155 (0.000)	43	989788			227.17- 327.17	90.14	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.407	20.407 (0.920)	75	243825	5.0	4.6		100.00	8412
20.407	20.407 (0.000)	77	19653			0.00- 79.54	8.06	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.697	20.697 (0.934)	97	1223037	25.0	25.7		100.00	9801(Q)

EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
,1,2-Trichloroethane (continued)							
20.697 (0.000)	99	206400			10.30- 110.30	16.88	
20.697 (0.000)	83	297349			36.88- 136.88	24.31	
etrachloroethene				CAS #: 127-18-4			
20.964 (0.946)	166	1382892	25.0	25.8		100.00	8935(Q)
20.964 (0.000)	129	316928			29.90- 129.90	22.92	
20.964 (0.000)	131	303296			26.46- 126.46	21.93	
'-Hexanone				CAS #: 591-78-6			
20.918 (0.944)	43	3040070	25.0	27.0		100.00	8575
20.918 (0.000)	58	429257			0.01- 100.01	14.12	
20.918 (0.000)	100	78992			0.00- 59.20	2.60	
ibromochloromethane				CAS #: 124-48-1			
21.307 (0.961)	129	1723049	25.0	26.5		100.00	8310
21.307 (0.000)	208	19648			0.00- 54.28	1.14	
,2-Dibromoethane				CAS #: 106-93-4			
21.529 (0.971)	107	1622479	25.0	25.8		100.00	9737(Q)
21.529 (0.000)	109	401024			45.05- 145.05	24.72	
hlorobenzene				CAS #: 108-90-7			
22.223 (1.002)	112	2736877	25.0	26.1		100.00	9788
22.223 (0.000)	114	221504			0.00- 81.34	8.09	
22.223 (0.000)	77	439739			12.21- 112.21	16.07	
thyl Benzene				CAS #: 100-41-4			
22.299 (1.006)	106	1763511	25.0	27.0		100.00	(H)
22.299 (1.006)	91	6057297			293.48- 393.48	343.48	
,p-Xylene				CAS #: 108-38-3			
22.467 (1.013)	106	3453692	50.0	54.4		100.00	(MH)
22.459 (1.013)	91	7216317			158.95- 258.95	208.95	
-Xylene				CAS #: 95-47-6			
23.131 (1.043)	106	1076261	25.0	27.4		100.00	9610(Q)
23.131 (0.000)	91	618139			174.86- 274.86	57.43	
tyrene				CAS #: 100-42-5			
23.138 (1.044)	104	2322016	25.0	28.2		100.00	9828
23.138 (0.000)	78	285175			0.00- 98.00	12.28	
romoform				CAS #: 75-25-2			
23.558 (1.063)	171	854930	25.0	27.2		100.00	8454(Q)
23.558 (0.000)	173	382848			138.77- 238.77	44.78	
,1,2,2-Tetrachloroethane				CAS #: 79-34-5			
24.184 (1.091)	83	2442920	25.0	25.3		100.00	9714

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)								
24.184	24.184 (0.000)	85	353404			12.67- 112.67	14.47	
68 4-Ethyltoluene					CAS #: 622-96-8			
24.603	24.603 (1.110)	105	3749039	25.0	28.4		100.00	9351(M)
24.603	24.603 (1.110)	120	987376	25.0	29.1	0.00- 76.55	26.34	
69 1,3,5-Trimethylbenzene					CAS #: 108-67-8			
24.687	24.687 (1.114)	105	1860375	25.0	29.4		100.00	8123(QM)
24.687	24.687 (1.114)	120	799446	25.0	27.4	245.81- 345.81	42.97	
71 1,2,4-Trimethylbenzene					CAS #: 95-63-6			
25.450	25.450 (1.148)	105	1477726	25.0	28.7		100.00	8854
25.450	25.450 (0.000)	120	138301			0.00- 91.34	9.36	
72 1,3-Dichlorobenzene					CAS #: 541-73-1			
26.175	26.175 (1.181)	146	1828402	25.0	28.1		100.00	
26.175	26.175 (1.181)	148	1157841			13.33- 113.33	63.33	
26.175	26.175 (1.181)	111	830611			0.00- 95.43	45.43	
73 1,4-Dichlorobenzene					CAS #: 106-46-7			
26.350	26.350 (1.189)	146	1777182	25.0	28.0		100.00	(H)
26.350	26.350 (1.189)	148	1127631			13.45- 113.45	63.45	
26.350	26.350 (1.189)	111	787076			0.00- 94.29	44.29	
74 Benzyl Chloride					CAS #: 100-44-7			
26.595	26.595 (1.200)	91	3622570	25.0	29.6		100.00	9300
26.595	26.595 (0.000)	126	129472			0.00- 67.72	3.57	
75 1,2-Dichlorobenzene					CAS #: 95-50-1			
27.228	27.228 (1.228)	146	1631883	25.0	28.0		100.00	9767(Q)
27.228	27.228 (0.000)	148	200896			14.57- 114.57	12.31	
27.228	27.228 (0.000)	111	149669			0.00- 98.10	9.17	
76 1,2,4-Trichlorobenzene					CAS #: 120-82-1			
31.615	31.615 (1.426)	180	723811	25.0	29.4		100.00	9759(Q)
31.615	31.615 (0.000)	182	108864			44.99- 144.99	15.04	
77 Hexachlorobutadiene					CAS #: 87-68-3			
32.057	32.057 (1.446)	225	714173	25.0	27.5		100.00	9693(Q)
32.057	32.057 (0.000)	223	71027			11.50- 111.50	9.95	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j010908.d
Lab Smp Id: VSTD025
Analysis Type: VOA
Quant Type: ISTD
Operator: FA
Method File: /chem/msdj.i/j-09jan.b/TO140109.m
Misc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD025
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	182238	-5.14
43 1,4-Difluorobenzene	832855	499713	1165997	762215	-8.48
59 Chlorobenzene-d5	625059	375035	875083	613020	-1.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.72	0.19
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.05	0.09
59 Chlorobenzene-d5	22.16	21.66	22.66	22.17	0.04

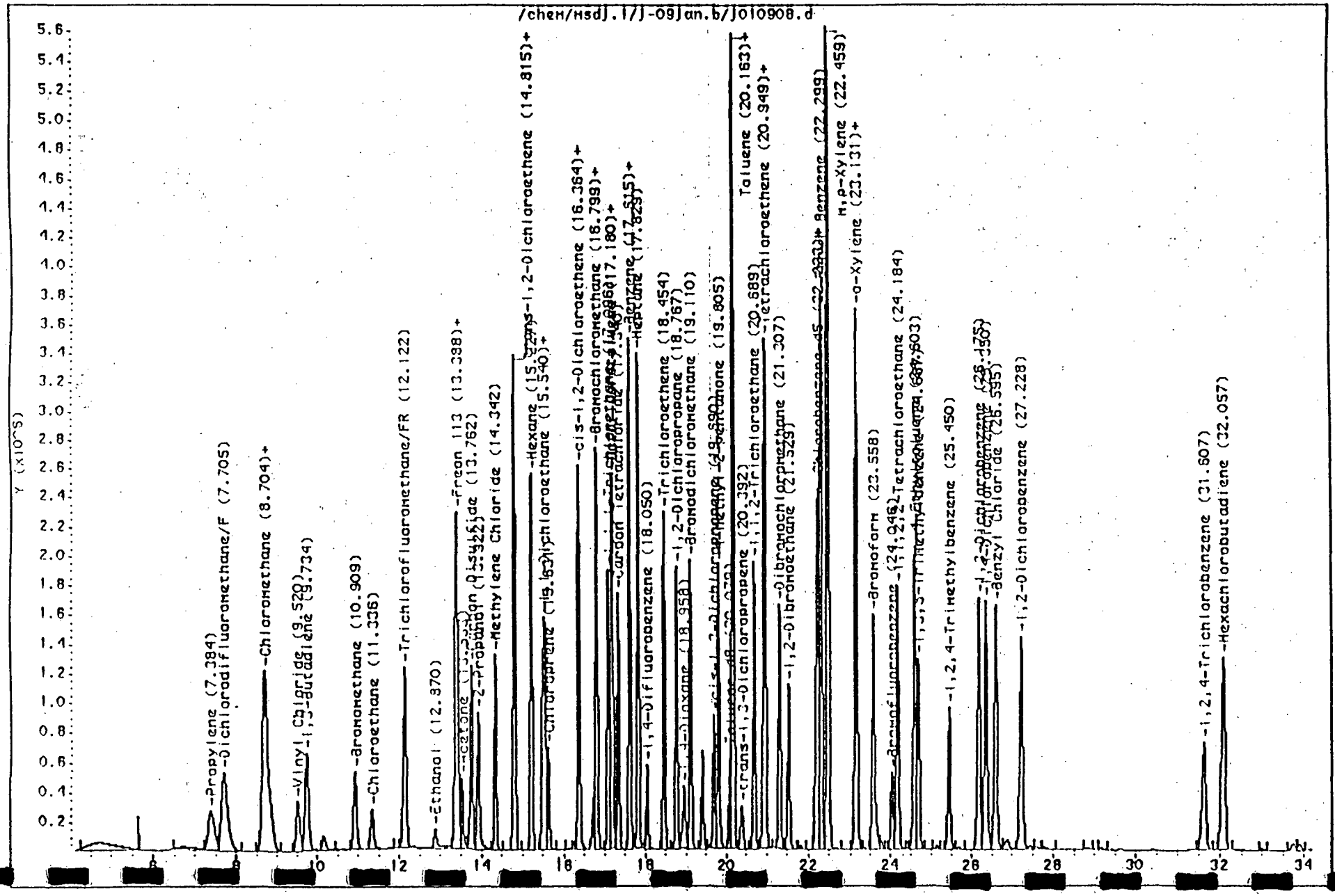
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/hsdj.l/j-09jan.b/j010908.d
Date : 09-JAN-97 12:08
Client ID: VSTD025
Sample Info: 1250.0ml #298-25 100ppbv (25.0ppbv)

Column phase: RTx-624

Instrument: hsdj.l

Operator: FA
Column diameter: 0.58



Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-09jan.b/j010909.d
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 09-JAN-1997 12:48
Operator : FA Inst ID: msdj.i
Smp Info : 250.0ml #296-25 100ppbv (50.0ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/to140109.m
Meth Date : 09-Jan-1997 14:19 fayala Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 33 Bromochloromethane					CAS #: 74-97-5			
16.730	16.730 (1.000)	130	178952	5.0			100.00	9569(Q)
16.730	16.730 (0.000)	128	40760			28.96- 128.96	22.78	
16.730	16.730 (0.000)	49	94160			132.40- 232.40	52.62	
* 43 1,4-Difluorobenzene					CAS #: 540-36-3			
18.050	18.050 (1.000)	114	733906	5.0			100.00	9778
18.050	18.050 (0.000)	88	39048			0.00- 67.60	5.32	
* 59 Chlorobenzene-d5					CAS #: 3114-55-4			
22.177	22.177 (1.000)	117	614884	5.0			100.00	7200
22.177	22.177 (0.000)	82	94596			11.03- 111.03	15.38	
$ 39 Octafluorotoluene					CAS #: 434-64-0			
17.211	17.211 (1.029)	217	452389	5.0	5.4		100.00	7856
17.211	17.211 (0.000)	186	90416			15.56- 115.56	19.99	
$ 50 Toluene-d8					CAS #: 2037-26-5			
20.079	20.079 (1.112)	98	680769	5.0	5.1		100.00	9856
20.079	20.079 (0.000)	70	21580			0.00- 61.21	3.17	
20.079	20.079 (0.000)	100	125027			14.97- 114.97	18.37	

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
66 Bromofluorobenzene					CAS #: 460-00-4			
24.047	24.047 (1.084)	95	465684	5.0	4.9		100.00	9785
24.047	24.047 (0.000)	174	69062			14.31- 114.31	14.83	
24.047	24.047 (0.000)	176	65832			11.30- 111.30	14.14	
1 Propylene					CAS #: 115-07-1			
7.667	7.667 (0.458)	41	1736727	50.0	57.9		100.00	7686(AQ)
7.667	7.667 (0.000)	42	110114			14.09- 114.09	6.34	
7.667	7.667 (0.000)	39	117041			18.12- 118.12	6.74	
6 Dichlorodifluoromethane/FR 12					CAS #: 75-71-8			
7.949	7.949 (0.475)	85	5790517	50.0	51.9		100.00	9503
7.949	7.949 (0.000)	87	189952			0.00- 82.25	3.28	
7 Freon 114					CAS #: 76-14-2			
8.849	8.849 (0.529)	135	4061565	50.0	50.4		100.00	9792
8.849	8.849 (0.000)	137	150016			0.00- 81.00	3.69	
8 Chloromethane					CAS #: 74-87-3			
8.994	8.994 (0.538)	50	2442063	50.0	52.0		100.00	9655
8.994	8.994 (0.000)	52	97187			0.00- 89.97	3.98	
9 Vinyl Chloride					CAS #: 75-01-4			
9.635	9.635 (0.576)	62	2491144	50.0	50.1		100.00	9647
9.635	9.635 (0.000)	64	127312			0.00- 82.04	5.11	
10 1,3-Butadiene					CAS #: 106-99-0			
9.849	9.849 (0.589)	54	1905093	50.0	50.4		100.00	9736(Q)
9.849	9.849 (0.000)	39	329019			50.51- 150.51	17.27	
11 Bromomethane					CAS #: 74-83-9			
10.985	10.985 (0.657)	94	2223659	50.0	53.8		100.00	9576(Q)
10.985	10.985 (0.000)	96	403904			44.51- 144.51	18.16	
12 Chloroethane					CAS #: 75-00-3			
11.382	11.382 (0.680)	64	1345581	50.0	46.9		100.00	9675
11.382	11.382 (0.000)	66	81693			0.00- 81.19	6.07	
14 Trichlorofluoromethane/FR 11					CAS #: 75-69-4			
12.168	12.168 (0.727)	101	5505499	50.0	50.0		100.00	9888(Q)
12.168	12.168 (0.000)	103	710783			15.55- 115.55	12.91	
15 Ethanol					CAS #: 64-17-5			
12.885	12.885 (0.770)	45	581024	50.0	39.6		100.00	
12.893	12.893 (0.771)	46	231436			0.00- 89.83	39.83	
12.893	12.893 (0.771)	43	137187			0.00- 73.61	23.61	
17 1,1-Dichloroethene					CAS #: 75-35-4			
13.389	13.389 (0.800)	96	1485052	50.0	38.7		100.00	6330(Q)

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RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
17 1,1-Dichloroethene (continued)								
13.389	13.389 (0.000)	61	641768			119.93- 219.93	43.22	
13.389	13.389 (0.000)	98	247808			15.62- 115.62	16.69	
18 Freon 113					CAS #: 76-13-1			
13.427	13.427 (0.803)	151	2992908	50.0	50.0		100.00	9883(Q)
13.427	13.427 (0.000)	153	411904			16.40- 116.40	13.76	
13.427	13.427 (0.000)	101	742603			69.71- 169.71	24.81	
19 Carbon Disulfide					CAS #: 75-15-0			
13.793	13.793 (0.824)	76	6732230	50.0	49.8		100.00	8154
20 Acetone					CAS #: 67-64-1			
13.556	13.556 (0.810)	43	3232939	50.0	45.6		100.00	
13.556	13.556 (0.810)	58	1019775			0.00- 81.54	31.54	
22 2-Propanol					CAS #: 67-63-0			
13.938	13.938 (0.833)	45	4749237	50.0	53.9		100.00	7370
13.938	13.938 (0.000)	43	217285			0.00- 67.16	4.58	
13.938	13.938 (0.000)	59	44712			0.00- 53.53	0.94	
23 Methylene Chloride					CAS #: 75-09-2			
14.365	14.365 (0.859)	84	1998488	50.0	48.7		100.00	9744(Q)
14.365	14.365 (0.000)	49	855744			98.40- 198.40	42.82	
14.365	14.365 (0.000)	51	264727			0.00- 95.91	13.25	
24 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.830	14.830 (0.886)	96	2330112	50.0	51.0		100.00	9592(Q)
14.830	14.830 (0.000)	61	1110016			102.43- 202.43	47.64	
14.830	14.830 (0.000)	98	457792			12.87- 112.87	19.65	
26 MTBE					CAS #: 1634-04-4			
14.823	14.823 (0.886)	73	6159874	50.0	51.3		100.00	6400
14.823	14.823 (0.000)	57	382656			0.00- 74.33	6.21	
14.823	14.823 (0.000)	41	374920			0.00- 73.83	6.09	
27 Hexane					CAS #: 110-54-3			
15.235	15.235 (0.911)	57	4170251	50.0	50.0		100.00	7287
15.235	15.235 (0.000)	43	870435			19.23- 119.23	20.87	
15.235	15.235 (0.000)	56	660100			2.50- 102.50	15.83	
28 1,1-Dichloroethane					CAS #: 75-34-3			
15.509	15.509 (0.927)	63	4190073	50.0	49.5		100.00	9043
15.509	15.509 (0.000)	65	378866			0.00- 81.56	9.04	
29 Chloroprene					CAS #: 126-99-8			
15.639	15.639 (0.935)	53	1472418	50.0	50.9		100.00	7667
15.639	15.639 (0.000)	88	221581			1.47- 101.47	15.05	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
29 Chloroprene (continued)								
15.639	15.639 (0.000)	50	108321			0.00- 75.16	7.36	
30 Vinyl Acetate					CAS #: 108-05-4			
15.555	15.555 (0.930)	43	7473687	50.0	54.8		100.00	5928
15.555	15.555 (0.000)	86	182242			0.00- 57.92	2.44	
31 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.372	16.372 (0.979)	96	2477142	50.0	51.2		100.00	9681(Q)
16.372	16.372 (0.000)	61	1024192			87.23- 187.23	41.35	
16.372	16.372 (0.000)	98	458368			11.42- 111.42	18.50	
32 2-Butanone					CAS #: 78-93-3			
16.356	16.356 (0.978)	72	1055539	50.0	53.4		100.00	7908(Q)
16.356	16.356 (0.000)	43	1511495			429.93- 529.93	143.20	
16.356	16.356 (0.000)	57	102023			0.00- 82.39	9.67	
34 Chloroform					CAS #: 67-66-3			
16.806	16.806 (1.005)	83	4500190	50.0	50.5		100.00	9616
16.806	16.806 (0.000)	85	875200			14.83- 114.83	19.45	
35 Tetrahydrofuran					CAS #: 109-99-9			
16.799	16.799 (1.004)	42	2405545	50.0	51.3		100.00	7504
16.799	16.799 (0.000)	71	241958			0.00- 85.98	10.06	
16.799	16.799 (0.000)	72	261748			0.00- 88.92	10.88	
36 1,1,1-Trichlorethane					CAS #: 71-55-6			
17.096	17.096 (1.022)	97	4196466	50.0	50.3		100.00	9686
17.096	17.096 (0.000)	99	756288			13.21- 113.21	18.02	
37 Cyclohexane					CAS #: 110-82-7			
17.180	17.180 (1.027)	56	3841835	50.0	49.2		100.00	8272(Q)
17.180	17.180 (0.000)	84	788710			23.18- 123.18	20.53	
17.180	17.180 (0.000)	41	641134			9.49- 109.49	16.69	
38 Carbon Tetrachloride					CAS #: 56-23-5			
17.340	17.340 (1.036)	119	3578246	50.0	54.2		100.00	9392(Q)
17.340	17.340 (0.000)	117	1033272			50.73- 150.73	28.88	
40 Benzene					CAS #: 71-43-2			
17.615	17.615 (0.976)	78	7324878	50.0	52.1		100.00	9839
17.615	17.615 (0.000)	77	516399			0.00- 73.77	7.05	
41 1,2-Dichloroethane					CAS #: 107-06-2			
17.615	17.615 (0.976)	62	2868937	50.0	52.3		100.00	8224
17.615	17.615 (0.000)	64	271484			0.00- 82.15	9.46	
42 Heptane					CAS #: 142-82-5			
17.829	17.829 (0.988)	43	5134373	50.0	53.0		100.00	7655

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
42 Heptane (continued)								
17.829	17.829 (0.000)	57	801284			0.00- 98.73	15.61	
17.829	17.829 (0.000)	71	817856			0.00- 99.74	15.93	
44 Trichloroethene					CAS #: 79-01-6			
18.454	18.454 (1.022)	95	2840362	50.0	53.0		100.00	7785(Q)
18.454	18.454 (0.000)	130	741440			37.45- 137.45	26.10	
18.454	18.454 (0.000)	97	547904			14.62- 114.62	19.29	
45 1,2-Dichloropropane					CAS #: 78-87-5			
18.767	18.767 (1.040)	63	2517696	50.0	52.0		100.00	9708(Q)
18.767	18.767 (0.000)	62	548396			25.27- 125.27	21.78	
18.767	18.767 (0.000)	41	449275			11.67- 111.67	17.34	
46 1,4-Dioxane					CAS #: 123-91-1			
18.920	18.920 (1.048)	88	1461387	50.0	55.8		100.00	9858(AQ)
18.920	18.920 (0.000)	58	223968			24.84- 124.84	15.33	
18.920	18.920 (0.000)	57	71566			0.00- 73.91	4.90	
47 Bromodichloromethane					CAS #: 75-27-4			
19.110	19.110 (1.059)	83	4565385	50.0	53.7		100.00	9366
19.110	19.110 (0.000)	85	824145			12.86- 112.86	18.05	
48 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.690	19.690 (1.091)	75	1859281	72.0	77.9		100.00	9626(A)
19.690	19.690 (0.000)	77	173332			0.00- 81.81	9.32	
19.690	19.690 (0.000)	39	311599			7.19- 107.19	16.76	
49 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.812	19.812 (1.098)	43	5506136	50.0	52.6		100.00	9510
19.812	19.812 (0.000)	58	587107			0.00- 86.07	10.66	
19.812	19.812 (0.000)	85	201239			0.00- 62.36	3.65	
51 Toluene					CAS #: 108-88-3			
20.179	20.179 (1.118)	92	4680118	50.0	55.3		100.00	9841(AQ)
20.179	20.179 (0.000)	91	2398449			119.81- 219.81	51.25	
52 Octane					CAS #: 111-65-9			
20.156	20.156 (1.117)	57	2293983	50.0	57.7		100.00	8394(AQ)
20.156	20.156 (0.000)	85	799539			55.06- 155.06	34.85	
20.156	20.156 (0.000)	43	2093293			225.06- 325.06	91.25	
53 trans-1,3-Dichloropropene					CAS #: 542-75-6			
20.407	20.407 (0.920)	75	470830	10.0	8.9		100.00	8420
20.407	20.407 (0.000)	77	40884			0.00- 81.39	8.68	
54 1,1,2-Trichloroethane					CAS #: 79-00-5			
20.697	20.697 (0.933)	97	2393999	50.0	50.1		100.00	9777(Q)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
54 1,1,2-Trichloroethane (continued)								
.697	20.697 (0.000)	99	427328			12.62- 112.62	17.85	
20.697	20.697 (0.000)	83	593421			36.96- 136.96	24.79	
55 Tetrachloroethene					CAS #: 127-18-4			
.964	20.964 (0.945)	166	2898508	50.0	53.8		100.00	9113(Q)
20.964	20.964 (0.000)	129	676928			27.81- 127.81	23.35	
20.964	20.964 (0.000)	131	653304			25.09- 125.09	22.54	
56 2-Hexanone					CAS #: 591-78-6			
20.926	20.926 (0.944)	43	6043587	50.0	53.5		100.00	8587
20.926	20.926 (0.000)	58	905243			0.23- 100.23	14.98	
.926	20.926 (0.000)	100	165777			0.00- 59.20	2.74	
57 Dibromochloromethane					CAS #: 124-48-1			
.315	21.315 (0.961)	129	3471869	50.0	53.2		100.00	8383
.315	21.315 (0.000)	208	42200			0.00- 54.50	1.22	
58 1,2-Dibromoethane					CAS #: 106-93-4			
.537	21.537 (0.971)	107	3220692	50.0	51.1		100.00	9715(Q)
.537	21.537 (0.000)	109	811328			44.77- 144.77	25.19	
60 Chlorobenzene					CAS #: 108-90-7			
.223	22.223 (1.002)	112	5538471	50.0	52.7		100.00	9732
.223	22.223 (0.000)	114	454016			0.00- 81.49	8.20	
22.223	22.223 (0.000)	77	894267			12.02- 112.02	16.15	
61 Ethyl Benzene					CAS #: 100-41-4			
.307	22.307 (1.006)	106	3615296	50.0	55.3		100.00	(AH)
22.307	22.307 (1.006)	91	12466061			294.81- 394.81	344.81	
62 m,p-Xylene					CAS #: 108-38-3			
.467	22.467 (1.013)	106	7426675	100	117		100.00	(AMH)
22.467	22.467 (1.013)	91	15592489			159.95- 259.95	209.95	
63 o-Xylene					CAS #: 95-47-6			
23.131	23.131 (1.043)	106	2164951	50.0	55.0		100.00	9648(Q)
23.131	23.131 (0.000)	91	1273533			172.76- 272.76	58.83	
64 Styrene					CAS #: 100-42-5			
23.139	23.139 (1.043)	104	4732013	50.0	57.3		100.00	9848(A)
23.139	23.139 (0.000)	78	611411			0.00- 99.15	12.92	
65 Bromoform					CAS #: 75-25-2			
23.566	23.566 (1.063)	171	1780432	50.0	56.5		100.00	8671(AQ)
.566	23.566 (0.000)	173	834752			140.99- 240.99	46.88	
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5			
24.184	24.184 (1.090)	83	4761453	50.0	49.1		100.00	9854

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RT	EXP RT	(REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
67 1,1,2,2-Tetrachloroethane (continued)									
24.184	24.184	(0.000)	85	711269			14.86- 114.86	14.94	
68 4-Ethyltoluene						CAS #: 622-96-8			
24.603	24.603	(1.109)	105	7219379	50.0	54.5		100.00	9317(M)
24.603	24.603	(1.109)	120	1852134	50.0	54.4	0.00- 75.68	25.66	
69 1,3,5-Trimethylbenzene						CAS #: 108-67-8			
24.687	24.687	(1.113)	105	3468244	50.0	54.6		100.00	8878(QM)
24.687	24.687	(1.113)	120	1601173	50.0	54.7	151.38- 251.38	46.17	
71 1,2,4-Trimethylbenzene						CAS #: 95-63-6			
25.450	25.450	(1.148)	105	2848745	50.0	55.2		100.00	8855(A)
25.450	25.450	(0.000)	120	273320			0.00- 91.92	9.59	
72 1,3-Dichlorobenzene						CAS #: 541-73-1			
26.183	26.183	(1.181)	146	3646376	50.0	55.8		100.00	(A)
26.183	26.183	(1.181)	148	2319944			13.62- 113.62	63.62	
26.183	26.183	(1.181)	111	1641694			0.00- 95.02	45.02	
73 1,4-Dichlorobenzene						CAS #: 106-46-7			
26.358	26.358	(1.189)	146	3547527	50.0	55.7		100.00	(A)
26.358	26.358	(1.189)	148	2261358			13.74- 113.74	63.74	
26.358	26.358	(1.189)	111	1541648			0.00- 93.46	43.46	
74 Benzyl Chloride						CAS #: 100-44-7			
26.602	26.602	(1.200)	91	7064075	50.0	57.5		100.00	9318(A)
26.602	26.602	(0.000)	126	248896			0.00- 67.08	3.52	
75 1,2-Dichlorobenzene						CAS #: 95-50-1			
27.236	27.236	(1.228)	146	3170440	50.0	54.3		100.00	9825(Q)
27.236	27.236	(0.000)	148	396619			13.87- 113.87	12.51	
27.236	27.236	(0.000)	111	287881			0.00- 96.36	9.08	
76 1,2,4-Trichlorobenzene						CAS #: 120-82-1			
31.622	31.622	(1.426)	180	1509428	50.0	61.1		100.00	9804(AQ)
31.622	31.622	(0.000)	182	225280			43.82- 143.82	14.92	
77 Hexachlorobutadiene						CAS #: 87-68-3			
32.065	32.065	(1.446)	225	1426605	50.0	54.8		100.00	9721(Q)
32.065	32.065	(0.000)	223	152102			13.56- 113.56	10.66	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

)C Flag Legend

f - Compound response manually integrated.
i - Operator selected an alternate compound hit.

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Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j010909.d
Lab Smp Id: VSTD050
Analysis Type: VOA
Quant Type: ISTD
Operator: FA
Method File: /chem/msdj.i/j-09jan.b/TO140109.m
Misc Info:

Calibration Date: JAN/09/97
Calibration Time: 1044
Client Smp ID: VSTD050
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	192118	115271	268965	178952	-6.85
43 1,4-Difluorobenzene	832855	499713	1165997	733906	-11.88
59 Chlorobenzene-d5	625059	375035	875083	614884	-1.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
33 Bromochloromethane	16.69	16.19	17.19	16.73	0.23
43 1,4-Difluorobenzene	18.03	17.53	18.53	18.05	0.09
59 Chlorobenzene-d5	22.16	21.66	22.66	22.18	0.07

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

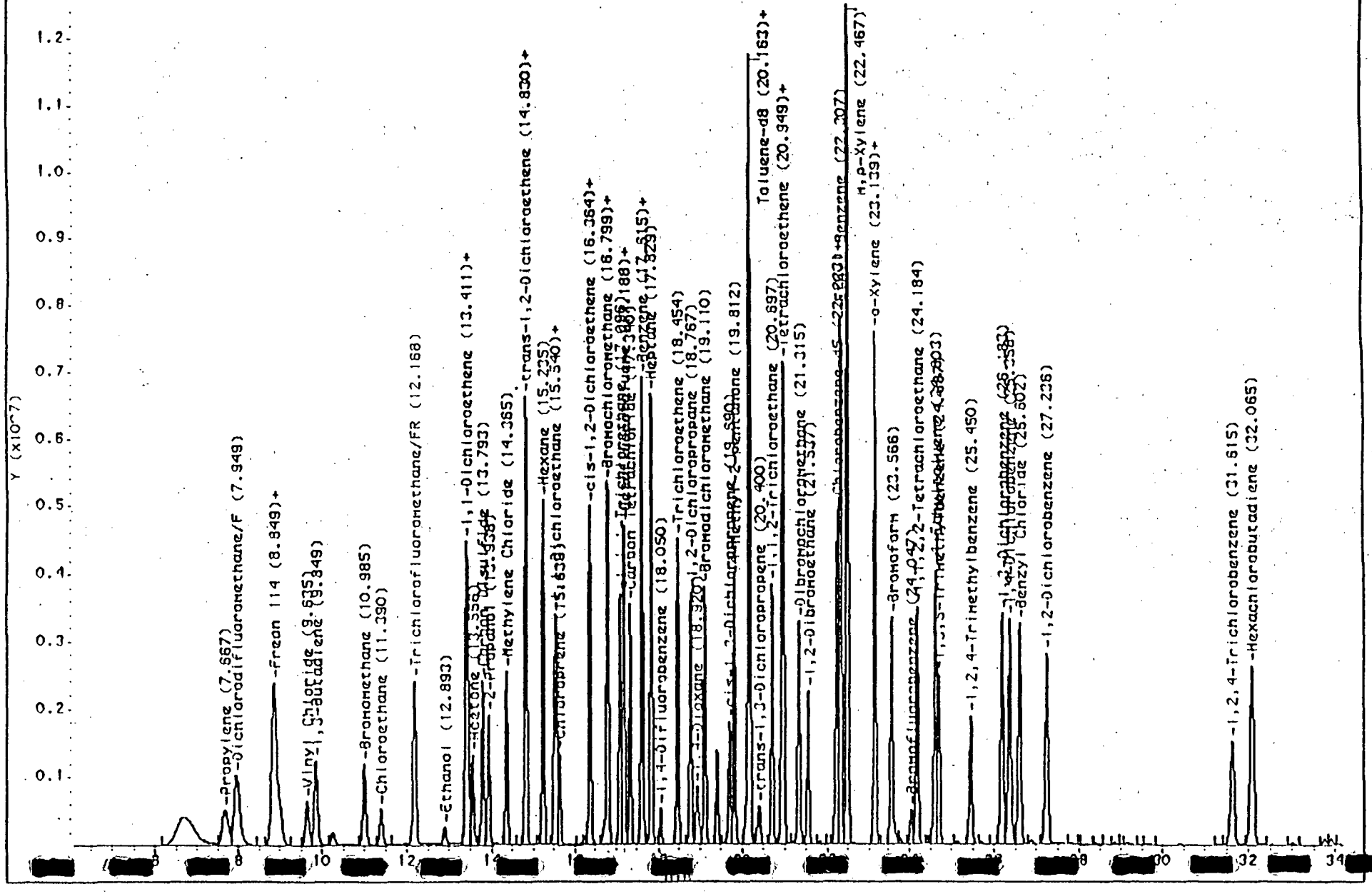
Data File: /chem/msdj.i/j-09jan.b/j010909.d
Date : 09-JAN-97 12:48
Client ID: VSTD050
Sample Info: 250.0ml #298-25 100ppbv (50.0ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: FA
Column diameter: 0.58

/chem/msdj.i/j-09jan.b/j010909.d



Pages 0188-0194 intentionally left blank.

0 out
MH 2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021304a.d
Report Date: 13-Feb-1997 11:21

Air Toxics Limited

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdj.i
Lab File ID: j021304a.d
Analysis Type: AIR
Lab Sample ID:
Method File: /chem/msdj.i/j-13feb.b/to140109.m

Injection Date: 13-FEB-1997 10:47
Init. Calibration Date(s): JAN/09/97 JAN/09/97
Init. Calibration Times: 10:44 12:48
Quant Type: ISTD

COMPOUND	RRF	RF5	MIN RRF	%D	MAX %D
$ 35 Octafluorotoluene	2.317	2.670	0.010	15.2	30.0
$ 49 Toluene-d8	0.905	0.959	0.010	6.0	30.0
$ 65 Bromofluorobenzene	0.774	0.770	0.010	0.6	30.0
16 Acetone	1.980	1.433	0.010	27.6	40.0
17 Carbon Disulfide	3.780	2.970	0.010	21.4	40.0
20 Methylene Chloride	1.147	1.032	0.010	10.0	30.0
21 trans-1,2-Dichloroethene	1.275	1.144	0.010	10.3	40.0
28 2-Butanone	0.552	0.537	0.010	2.8	40.0
29 cis-1,2-Dichloroethene	1.350	1.429	0.010	5.8	30.0
33 1,1,1-Trichlorethane	2.330	2.415	0.010	3.6	30.0
37 Benzene	0.957	1.021	0.010	6.7	30.0
38 1,2-Dichloroethane	0.374	0.355	0.010	5.0	30.0
41 Trichloroethene	0.365	0.403	0.010	10.3	30.0
43 1,2-Dichloropropane	0.330	0.377	0.010	14.4	30.0
51 Toluene	0.577	0.710	0.010	23.0	30.0
55 Tetrachloroethene	0.438	0.509	0.010	16.2	30.0
59 Chlorobenzene	0.854	1.002	0.010	17.4	30.0
60 Ethyl Benzene	0.532	0.619	0.010	16.5	30.0
61 m,p-Xylene	0.518	0.598	0.010	15.4	30.0
62 o-Xylene	0.320	0.385	0.010	20.1	30.0
63 Styrene	0.671	0.721	0.010	7.4	30.0

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-13feb.b/j021304a.d
Lab Smp Id: Client Smp ID: Method Spike
Inj Date : 13-FEB-1997 10:47
Operator : MH Inst ID: msdj.i
Smp Info : #296-67 25mL (5ppbv)
Misc Info :
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: Parsons.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 30 Bromochloromethane					CAS #: 74-97-5			
16.586	16.724 (1.000)	130	234378	5.0			100.00	9419(Q)
16.586	16.724 (0.000)	128	50256			23.40- 123.40	21.44	
16.586	16.724 (0.000)	49	96944			91.58- 191.58	41.36	
$ 35 Octafluorotoluene					CAS #: 434-64-0			
17.105	17.235 (1.031)	217	625810	5.0	5.8		100.00	7422
17.105	17.235 (0.000)	186	117296			8.63- 108.63	18.74	
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.928	18.067 (1.000)	114	1049127	5.0			100.00	9658
17.928	18.067 (0.000)	88	54408			0.00- 67.00	5.19	
$ 49 Toluene-d8					CAS #: 2037-26-5			
19.965	20.111 (1.114)	98	1006196	5.0	5.3		100.00	9953
19.965	20.111 (0.000)	70	37192			0.00- 62.67	3.70	
19.965	20.111 (0.000)	100	196103			16.83- 116.83	19.49	
* 58 Chlorobenzene-d5					CAS #: 3114-55-4			
22.048	22.209 (1.000)	117	964277	5.0			100.00	9982
22.048	22.209 (0.000)	82	145792			9.45- 109.45	15.12	

Data File: /chem/msdj.i/j-13feb.b/j021304a.d
Report Date: 13-Feb-1997 11:21

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
65 Bromofluorobenzene					CAS #: 460-00-4			
23.910	24.086 (1.084)	95	742431	5.0	5.0		100.00	8499
23.910	24.086 (0.000)	174	111200			13.34- 113.34	14.98	
23.910	24.086 (0.000)	176	114008			7.57- 107.57	15.36	
16 Acetone					CAS #: 67-64-1			
13.290	13.413 (0.801)	43	335825	5.0	3.6		100.00	
13.298	13.413 (0.802)	58	114335			0.00- 79.57	34.05	
17 Carbon Disulfide					CAS #: 75-15-0			
13.420	13.550 (0.809)	76	696180	5.0	3.9		100.00	7836
20 Methylene Chloride					CAS #: 75-09-2			
14.144	14.267 (0.853)	84	241900	5.0	4.5		100.00	9296(Q)
14.144	14.267 (0.000)	49	89200			76.12- 176.12	36.87	
14.144	14.267 (0.000)	51	27864			0.00- 96.86	11.52	
21 trans-1,2-Dichloroethene					CAS #: 156-60-5			
14.633	14.756 (0.882)	96	268096	5.0	4.5		100.00	8217(Q)
14.633	14.756 (0.000)	61	115344			93.63- 193.63	43.02	
14.633	14.756 (0.000)	98	50944			13.58- 113.58	19.00	
28 2-Butanone					CAS #: 78-93-3			
16.212	16.358 (0.977)	72	125751	5.0	4.9		100.00	7881(Q)
16.212	16.358 (0.000)	43	142427			372.08- 472.08	113.26	
16.212	16.358 (0.000)	57	11383			0.00- 83.73	9.05	
29 cis-1,2-Dichloroethene					CAS #: 156-59-2			
16.227	16.366 (0.978)	96	334837	5.0	5.3		100.00	8184(Q)
16.227	16.366 (0.000)	61	134720			87.71- 187.71	40.23	
16.227	16.366 (0.000)	98	62120			13.50- 113.50	18.55	
33 1,1,1-Trichlorethane					CAS #: 71-55-6			
16.952	17.090 (1.022)	97	566057	5.0	5.2		100.00	7463
16.952	17.090 (0.000)	99	104832			13.51- 113.51	18.52	
37 Benzene					CAS #: 71-43-2			
17.478	17.617 (0.975)	78	1071146	5.0	5.3		100.00	8177
17.478	17.617 (0.000)	77	74475			0.00- 74.19	6.95	
38 1,2-Dichloroethane					CAS #: 107-06-2			
17.486	17.624 (0.975)	62	372359	5.0	4.7		100.00	6400
17.486	17.624 (0.000)	64	33808			0.00- 81.76	9.08	
41 Trichloroethene					CAS #: 79-01-6			
18.333	18.479 (1.023)	95	422456	5.0	5.5		100.00	8330(Q)
18.333	18.479 (0.000)	130	116624			42.66- 142.66	27.61	
18.333	18.479 (0.000)	97	78920			12.70- 112.70	18.68	

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
43 1,2-Dichloropropane					CAS #: 78-87-5			
18.638	18.792 (1.040)	63	395471	5.0	5.7		100.00	8683(Q)
18.638	18.792 (0.000)	62	87384			25.83- 125.83	22.10	
18.638	18.792 (0.000)	41	54472			11.72- 111.72	13.77	
51 Toluene					CAS #: 108-88-3			
20.057	20.203 (1.119)	92	744465	5.0	6.1		100.00	8592(Q)
20.057	20.203 (0.000)	91	367936			116.14- 216.14	49.42	
55 Tetrachloroethene					CAS #: 127-18-4			
20.843	20.996 (0.945)	166	490767	5.0	5.8		100.00	9296(Q)
20.843	20.996 (0.000)	129	107952			27.27- 127.27	22.00	
20.843	20.996 (0.000)	131	106448			26.19- 126.19	21.69	
59 Chlorobenzene					CAS #: 108-90-7			
22.102	22.255 (1.002)	112	966315	5.0	5.9		100.00	9356
22.102	22.255 (0.000)	114	77473			0.00- 81.98	8.02	
22.102	22.255 (0.000)	77	152655			12.98- 112.98	15.80	
60 Ethyl Benzene					CAS #: 100-41-4			
22.178	22.339 (1.006)	106	597362	5.0	5.8		100.00	
22.178	22.339 (1.006)	91	2009408			296.25- 396.25	336.38	
61 m,p-Xylene					CAS #: 108-38-3			
22.338	22.499 (1.013)	106	1152898	10.0	11.5		100.00	
22.338	22.499 (1.013)	91	2436935			164.96- 264.96	211.37	
62 o-Xylene					CAS #: 95-47-6			
23.002	23.171 (1.043)	106	370919	5.0	6.0		100.00	7800(Q)
23.002	23.171 (0.000)	91	207265			167.28- 267.28	55.88	
63 Styrene					CAS #: 100-42-5			
23.017	23.178 (1.044)	104	695474	5.0	5.4		100.00	8965
23.017	23.178 (0.000)	78	86215			0.00- 97.52	12.40	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j021304a.d
Lab Smp Id:
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem/msdj.i/j-13feb.b/to140109.m
Misc Info:

Calibration Date: 02/13/97
Calibration Time: 1047
Client Smp ID: Method Spike
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	234378	140627	328129	234378	0.00
40 1,4-Difluorobenzene	1049127	629476	1468778	1049127	0.00
58 Chlorobenzene-d5	964277	578566	1349988	964277	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	16.59	16.09	17.09	16.59	0.00
40 1,4-Difluorobenzene	17.93	17.43	18.43	17.93	0.00
58 Chlorobenzene-d5	22.05	21.55	22.55	22.05	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

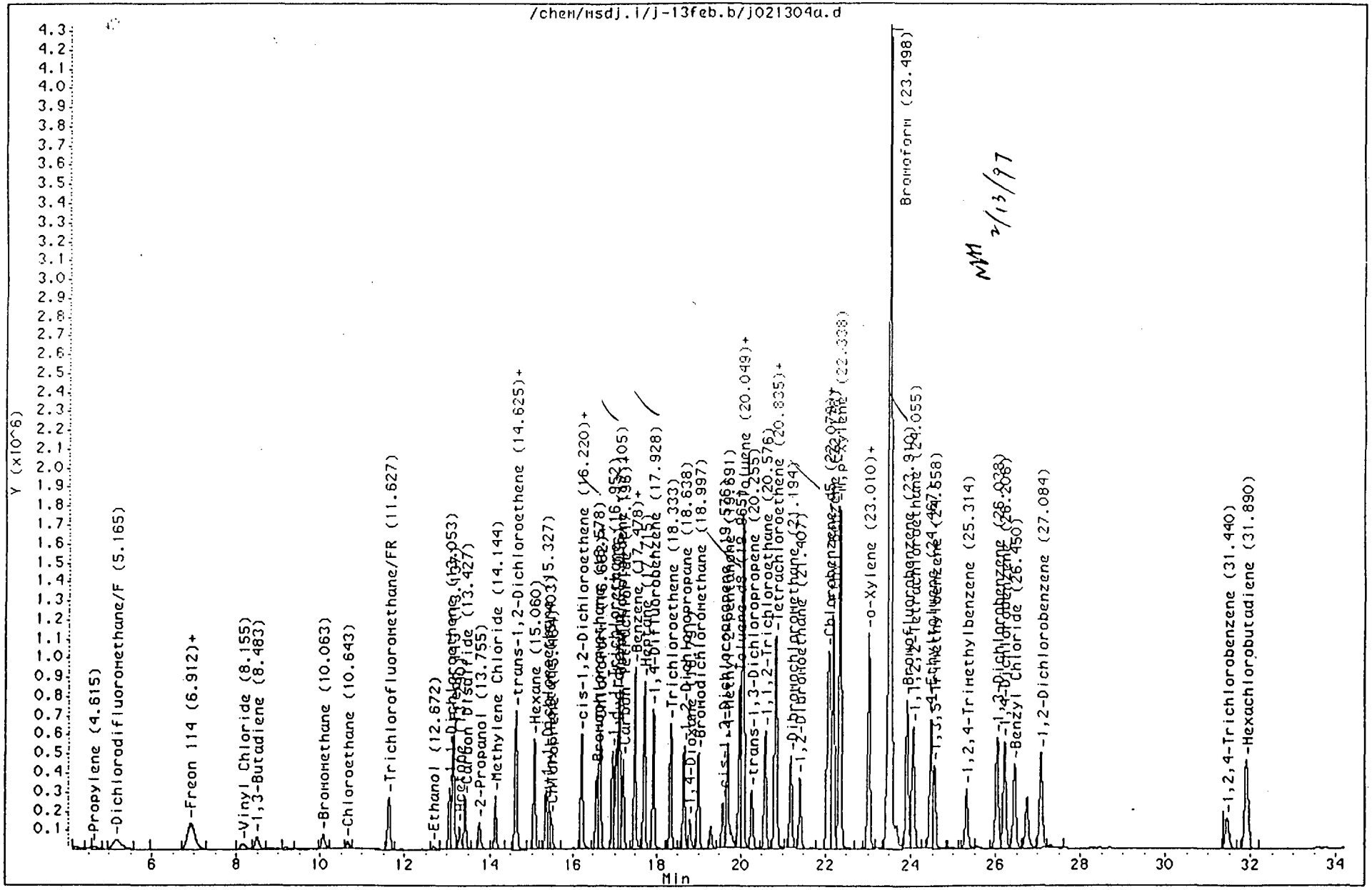
MH 2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021304a.d
Date : 13-FEB-1997 10:47
Client ID: Method Spike
Sample Info: #296-67 25mL (5ppbv)

Column phase: RTx-624

Instrument: msdj.i

Operator: MH
Column diameter: 0.58



MH 2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

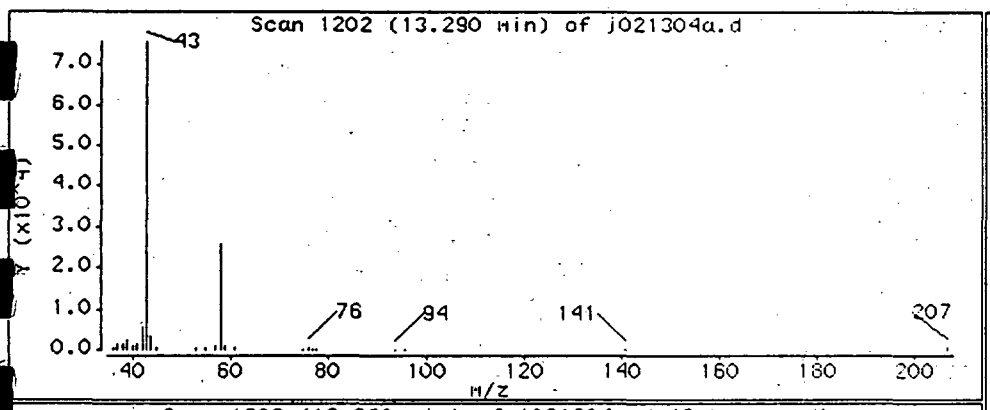
Sample Info: #296-67 25mL (5ppbv)

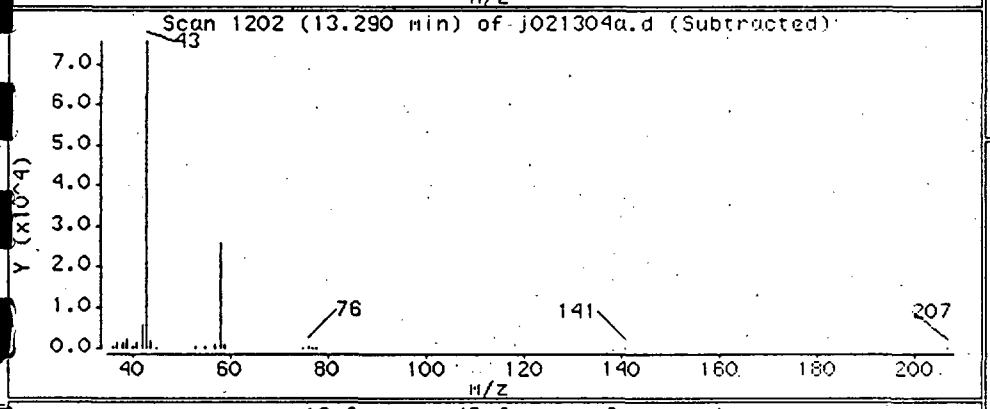
Operator: MH

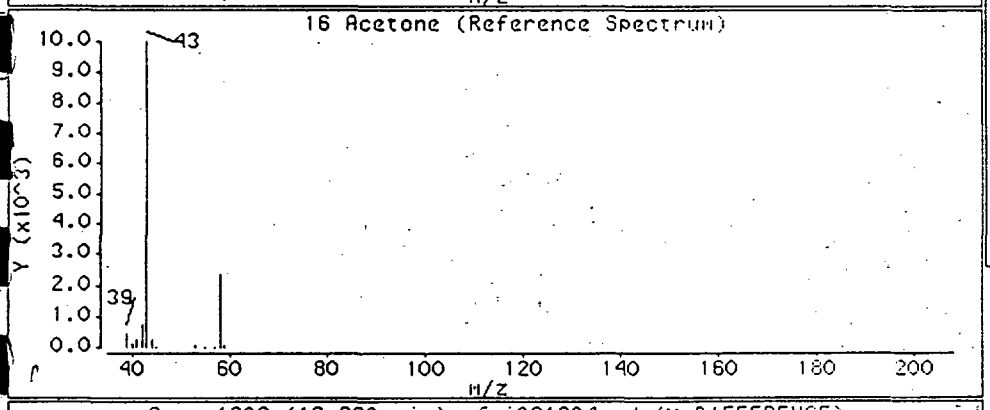
Column phase: RTx-624

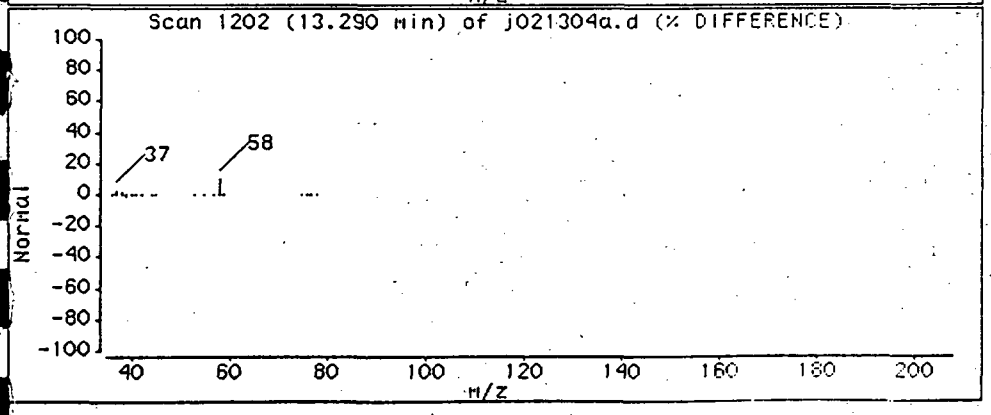
Column diameter: 0.58

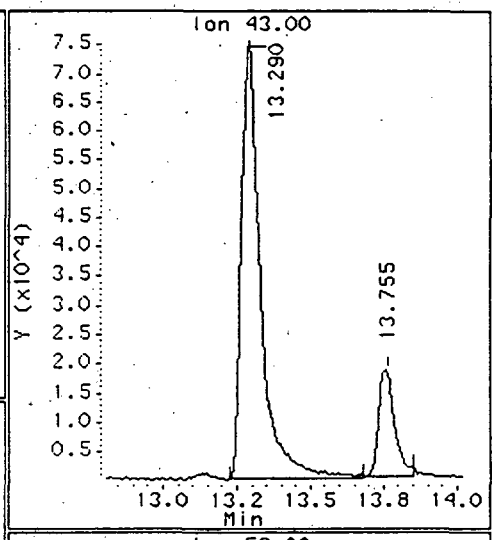
16 Acetone

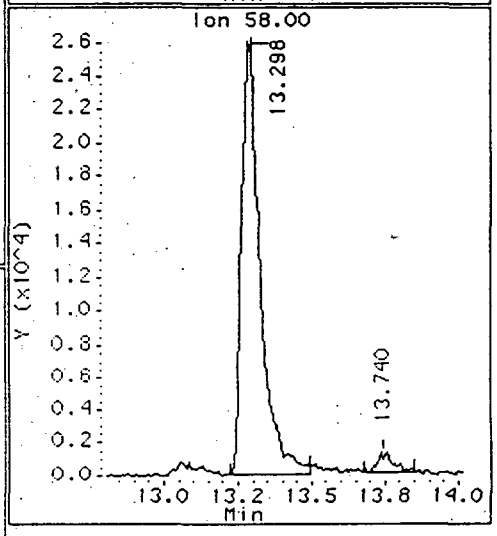












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

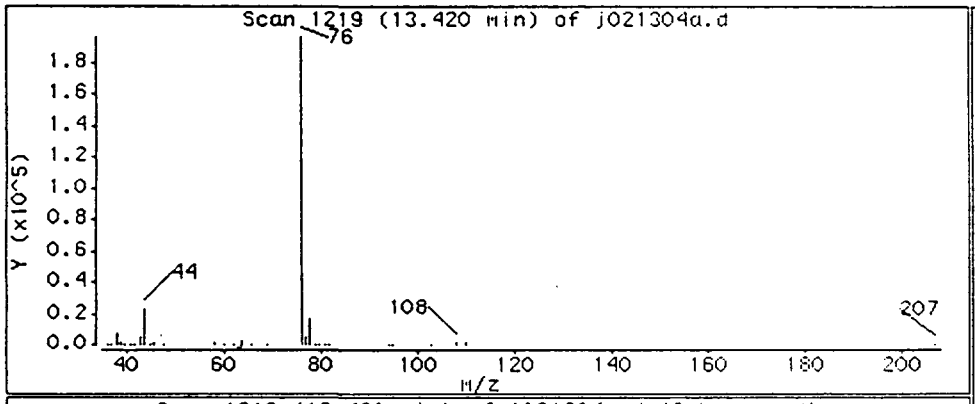
Sample Info: #296-67 25mL (5ppbv)

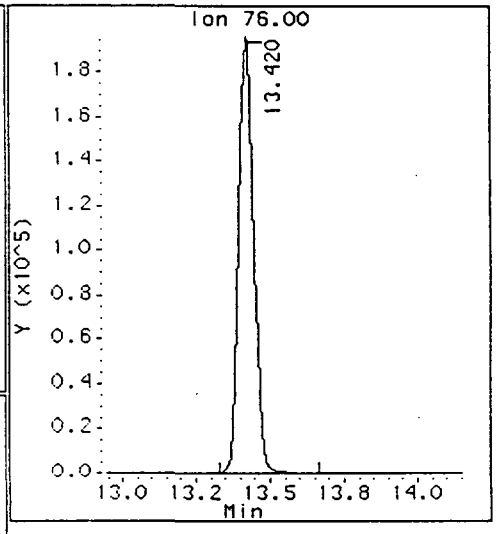
Operator: MH

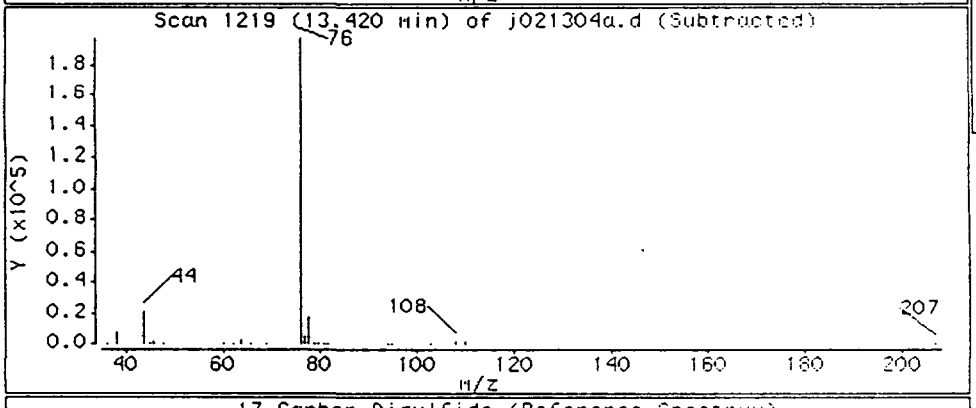
Column phase: RTx-624

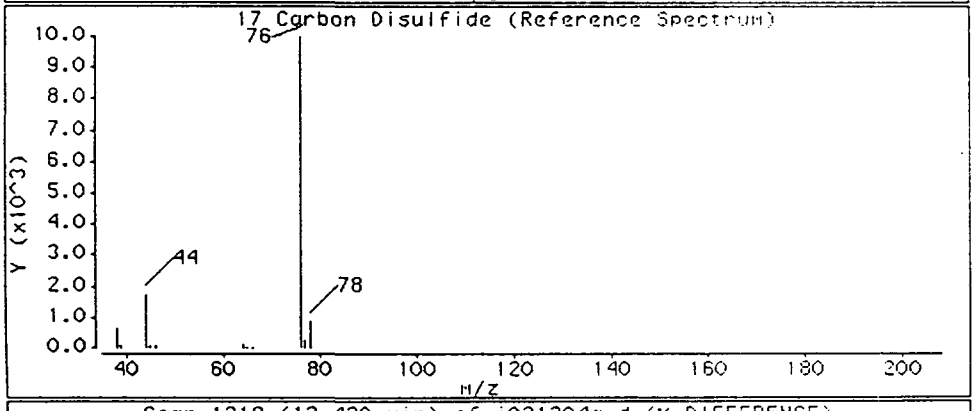
Column diameter: 0.58

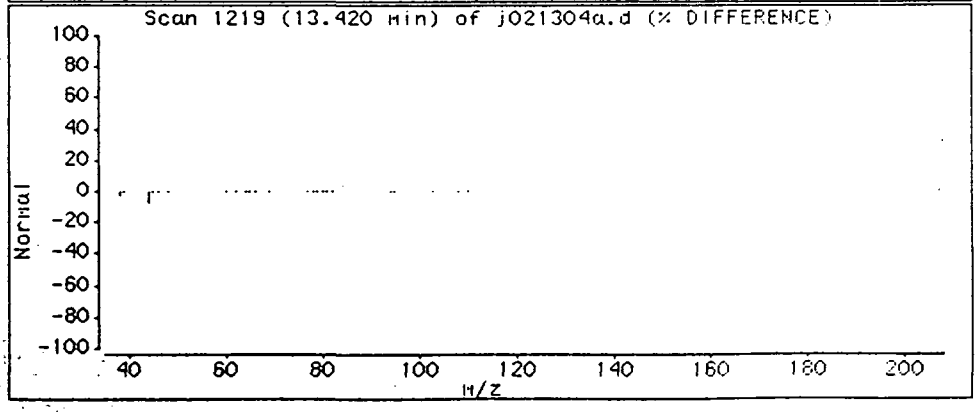
17 Carbon Disulfide











Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

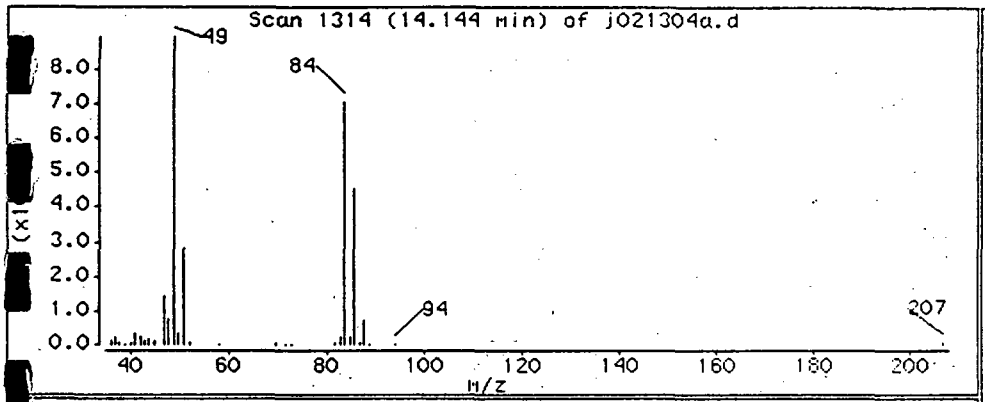
Sample Info: #296-67 25ML (5ppbv)

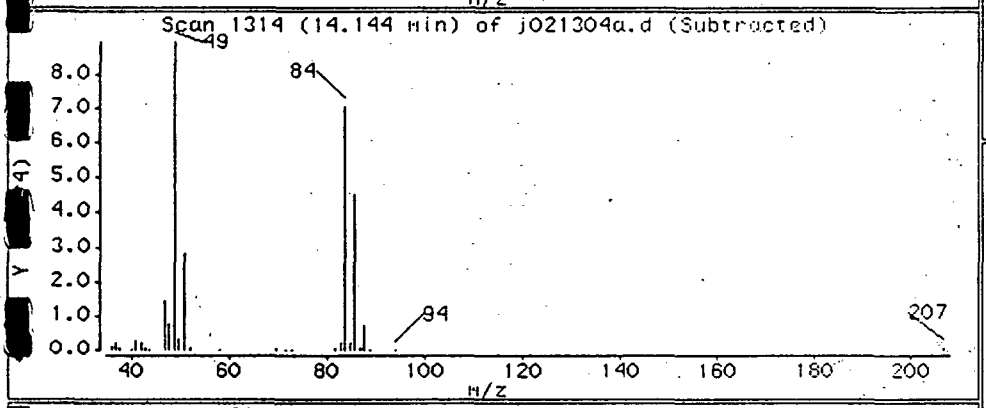
Operator: MH

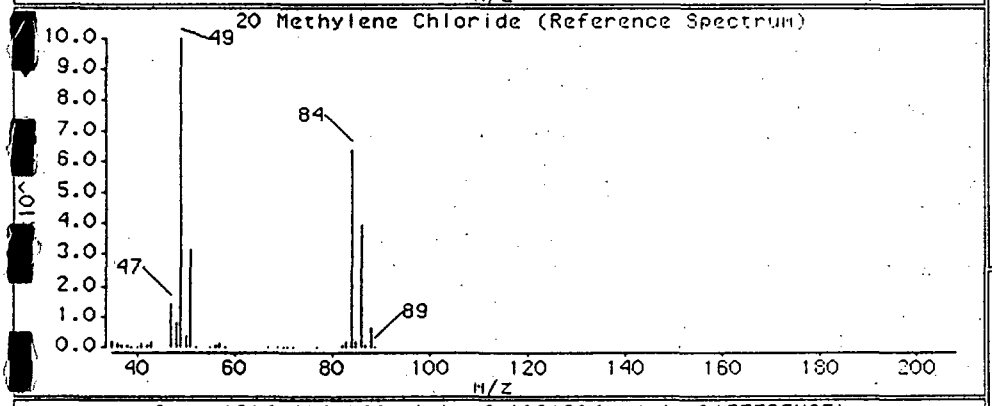
Column phase: RTx-624

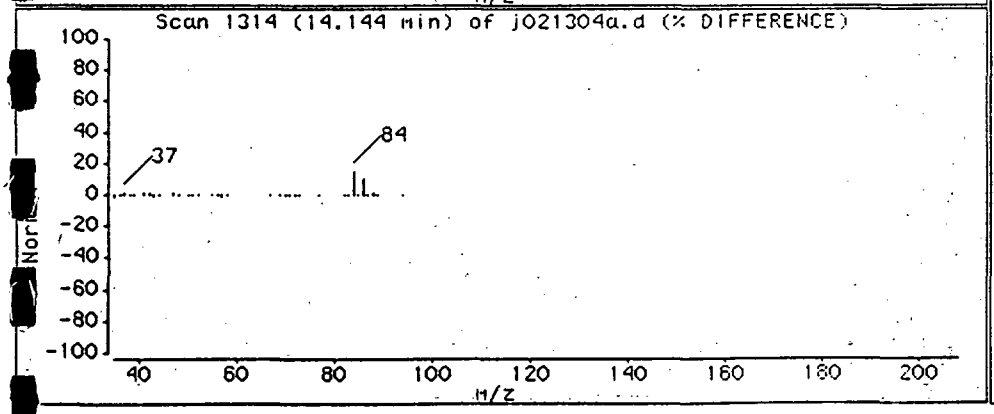
Column diameter: 0.58

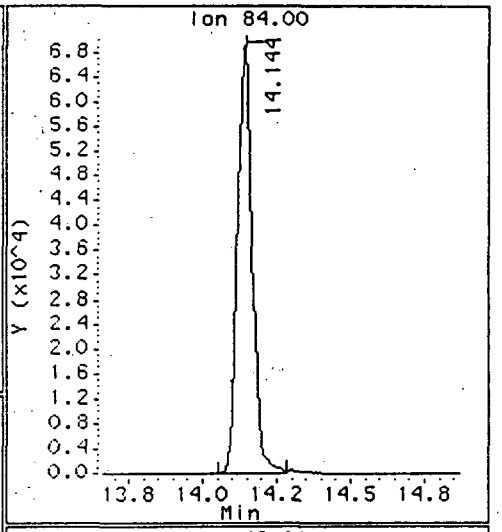
20 Methylene Chloride

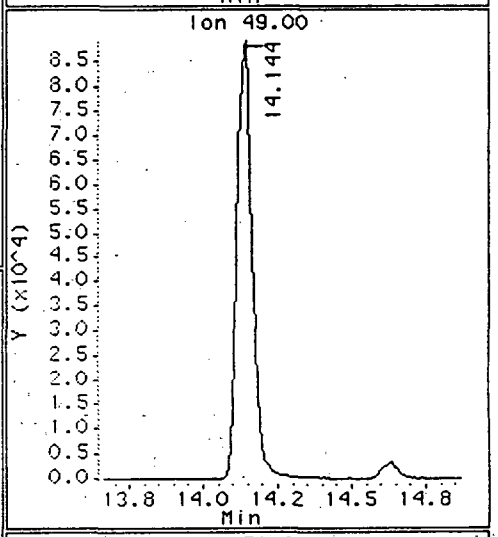


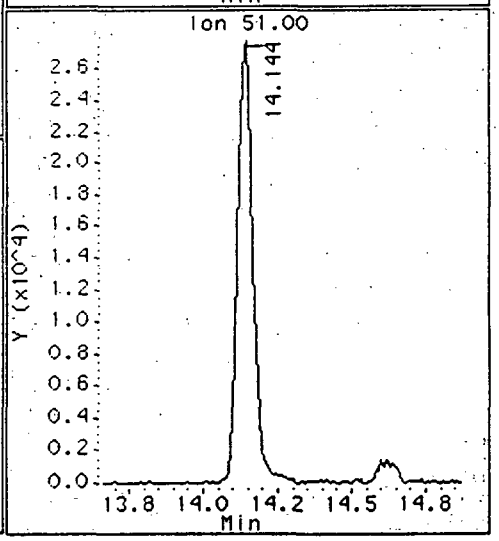












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

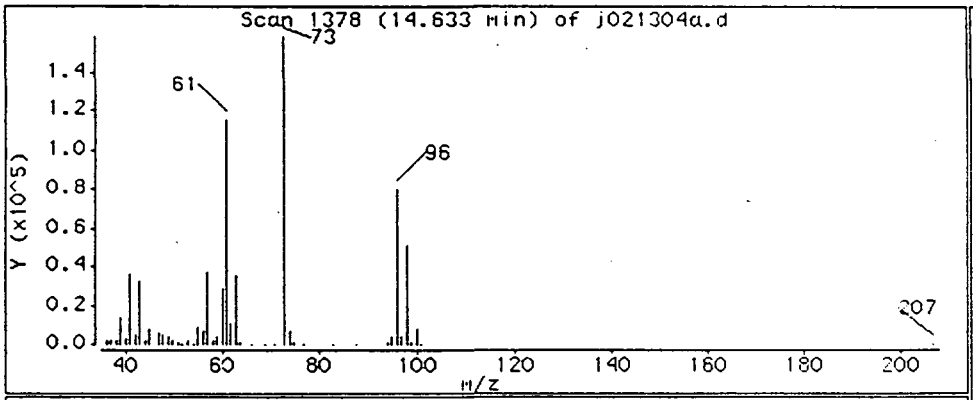
Sample Info: #296-67 25mL (5ppbv)

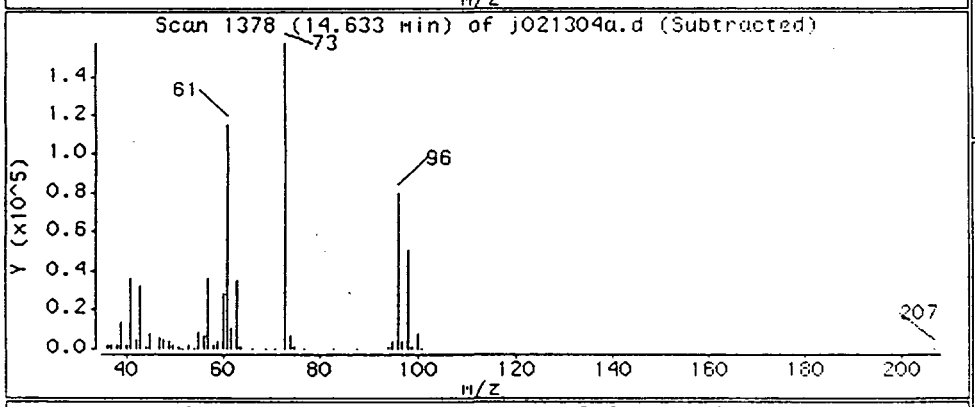
Operator: MH

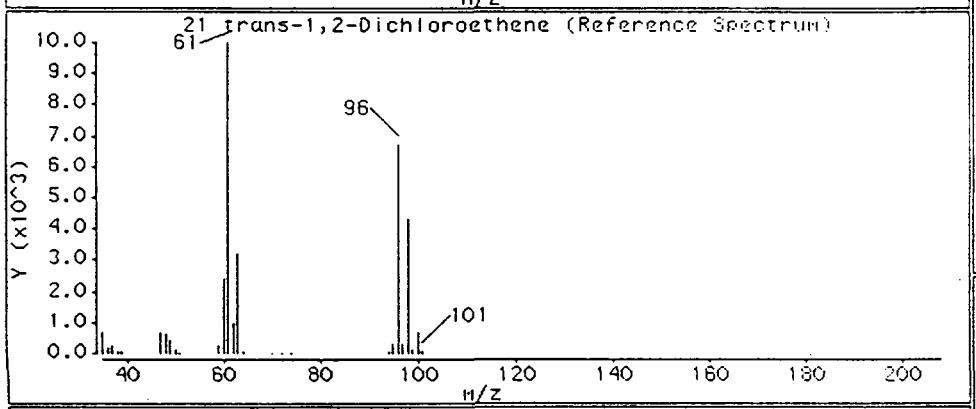
Column phase: RTx-624

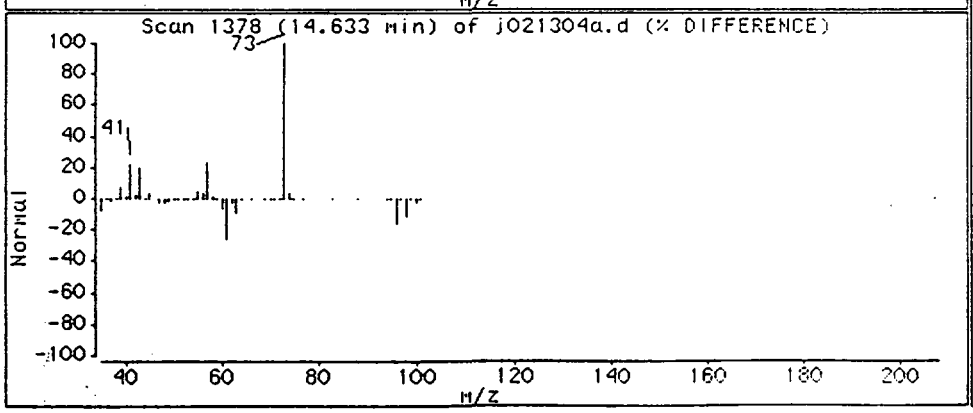
Column diameter: 0.58

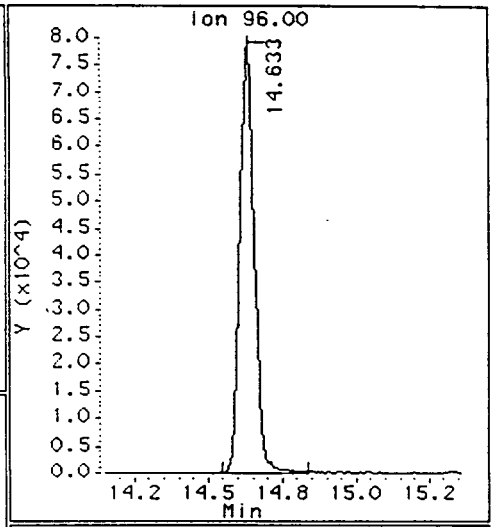
21 trans-1,2-Dichloroethene

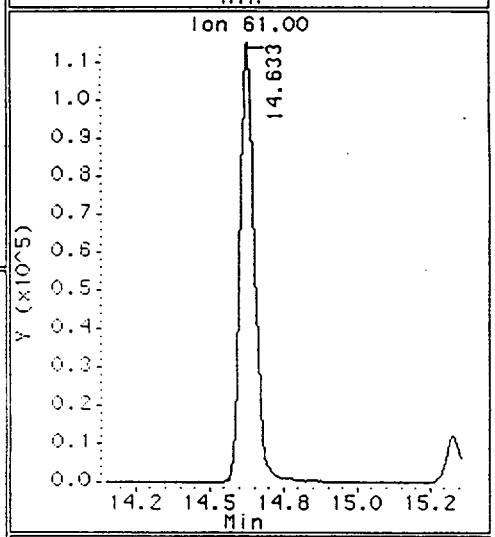


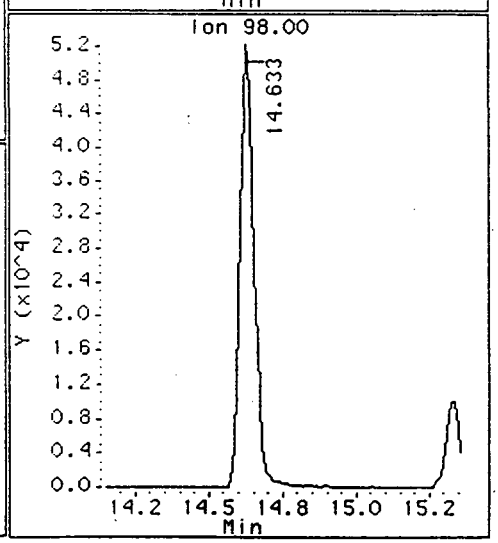












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

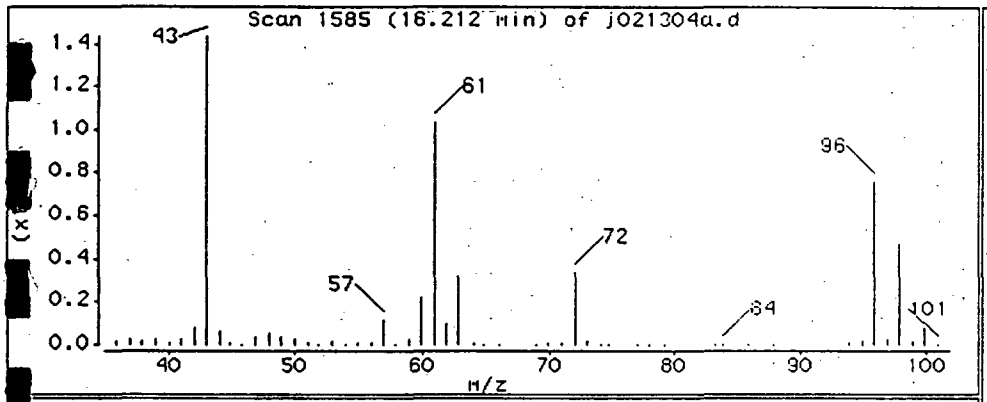
Sample Info: #296-67 25mL (5ppbv)

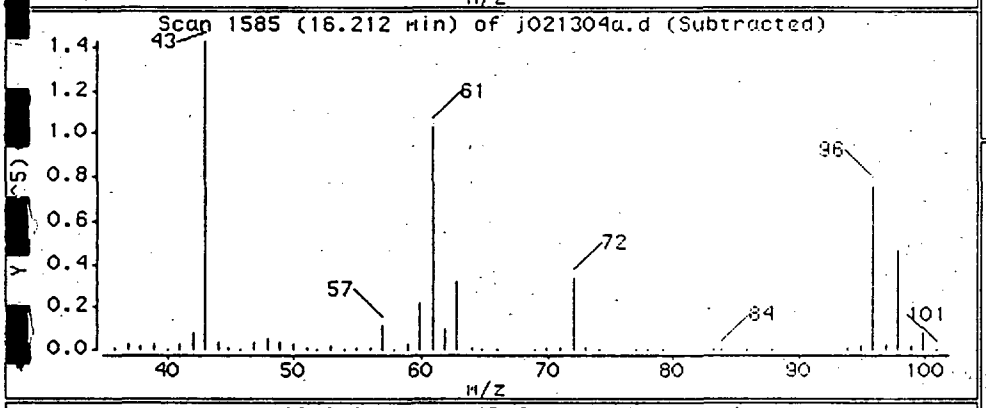
Operator: MH

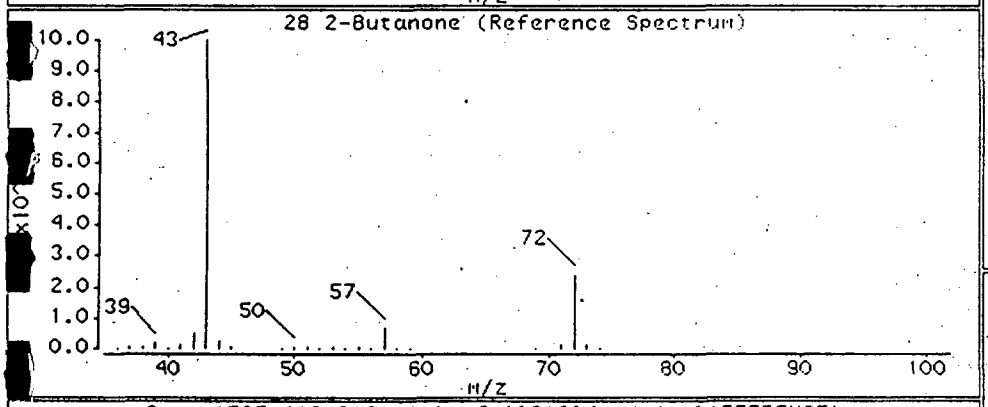
Column phase: RTx-624

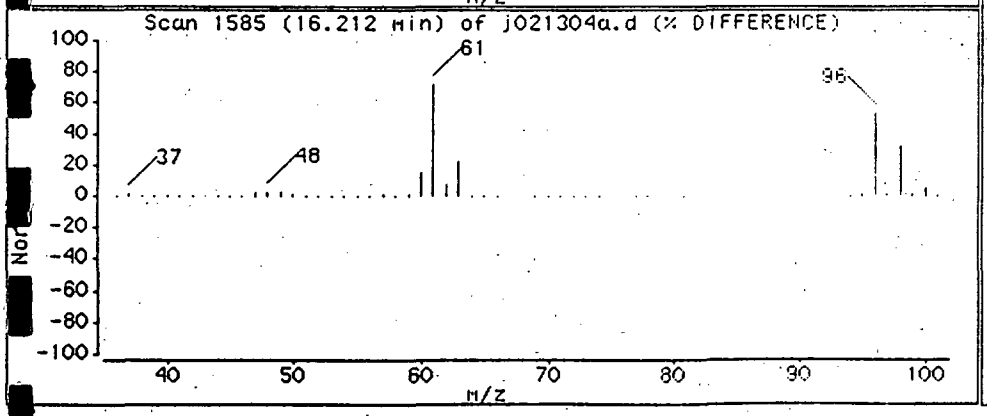
Column diameter: 0.58

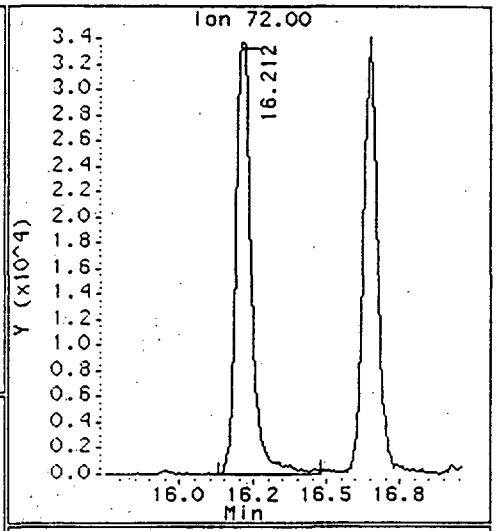
28 2-Butanone

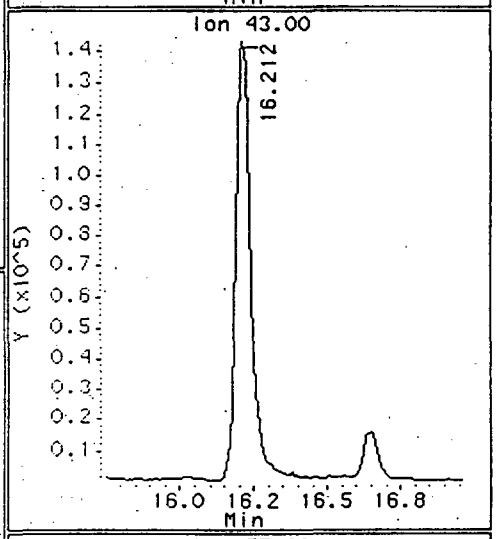


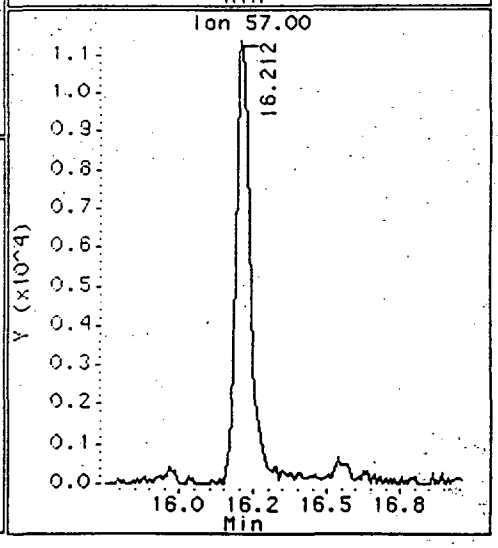












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

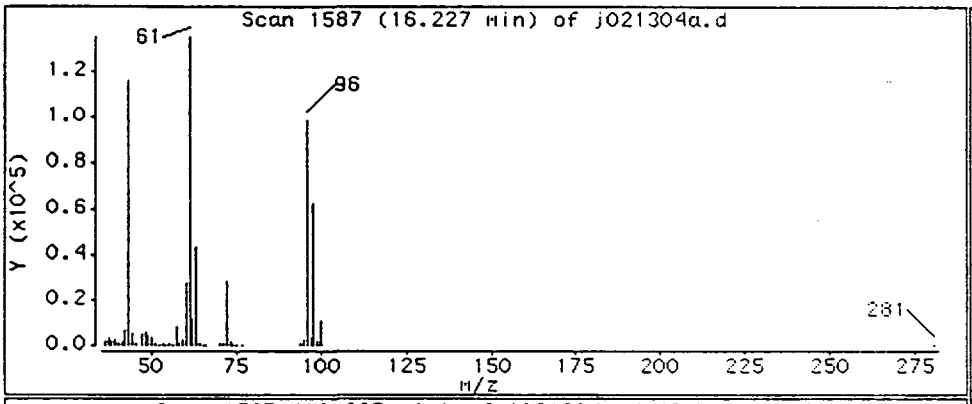
Sample Info: #296-67 25mL (5ppbv)

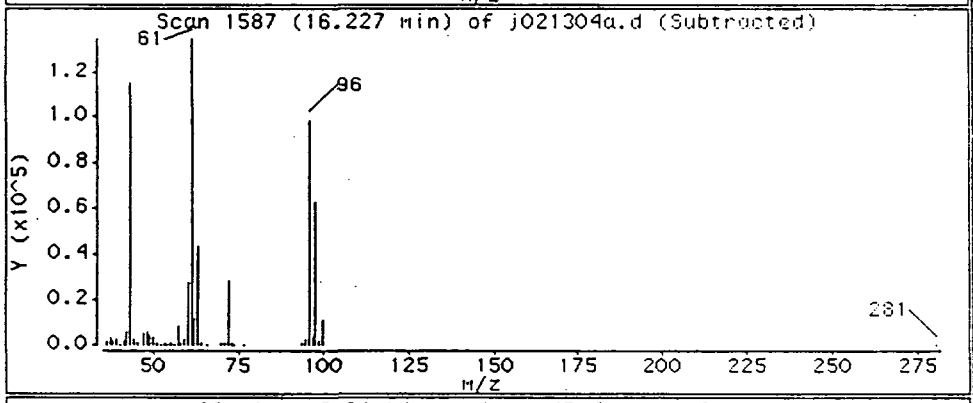
Operator: MH

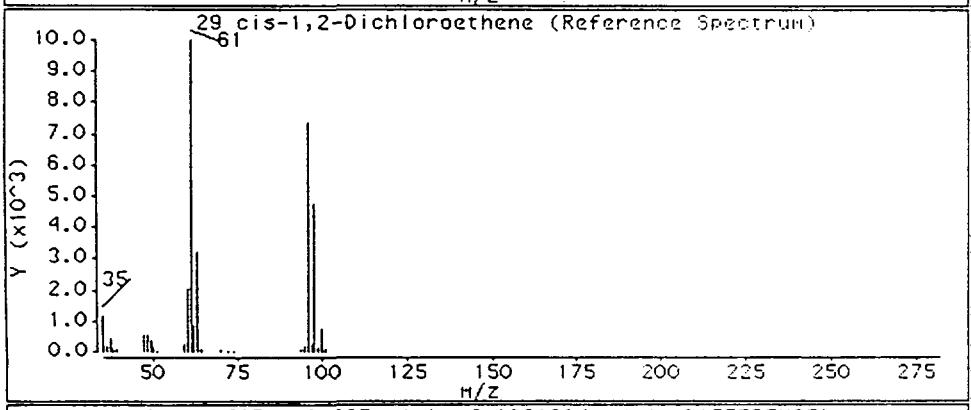
Column phase: RTx-624

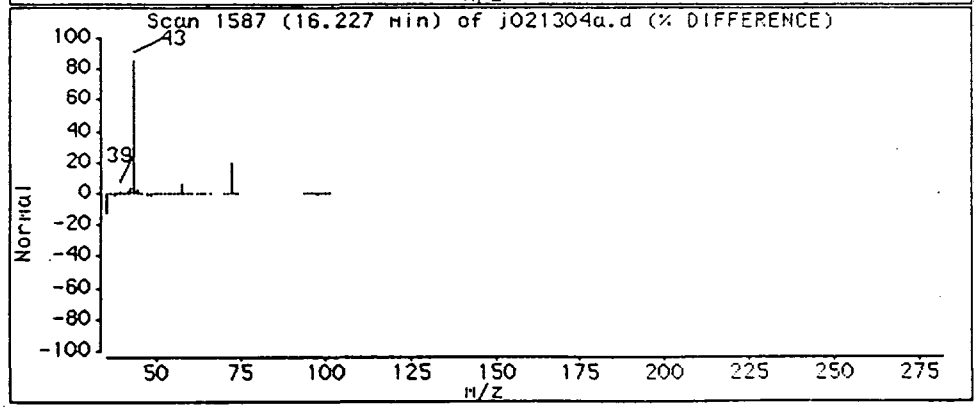
Column diameter: 0.58

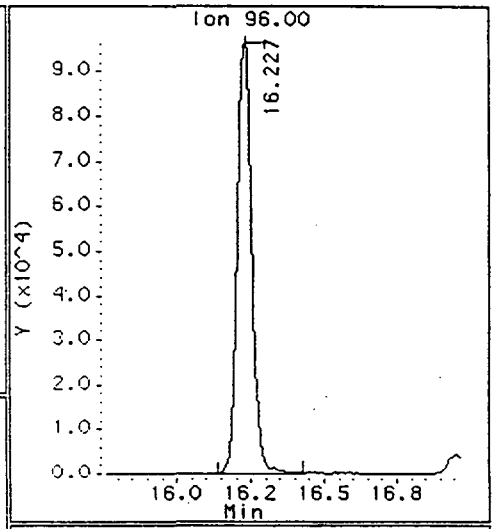
29 cis-1,2-Dichloroethene

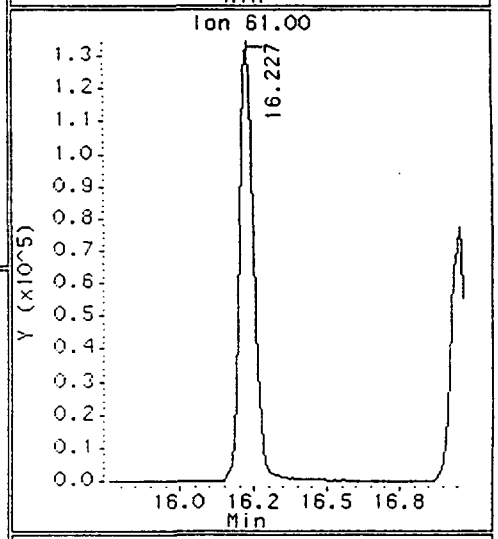


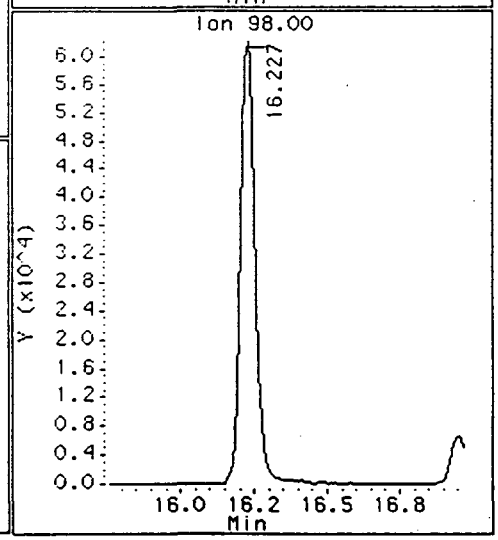












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

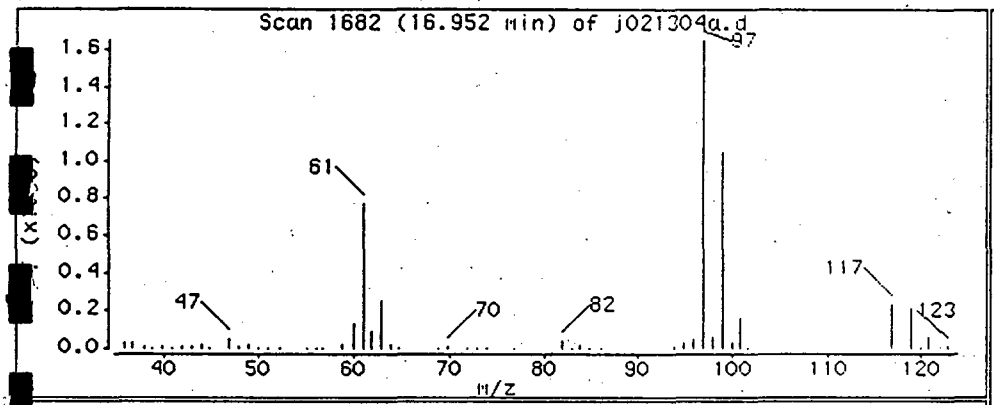
Sample Info: #296-67 25mL (5ppbv)

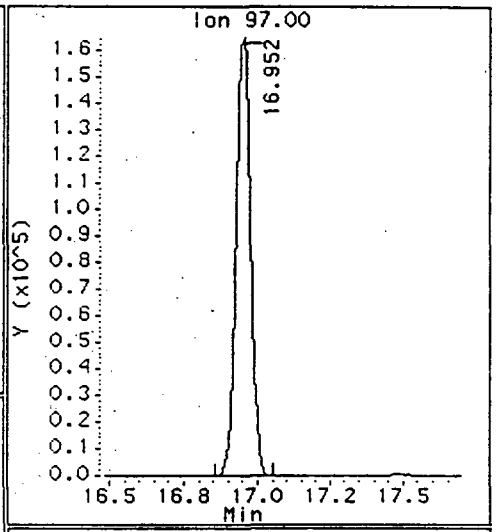
Operator: MH

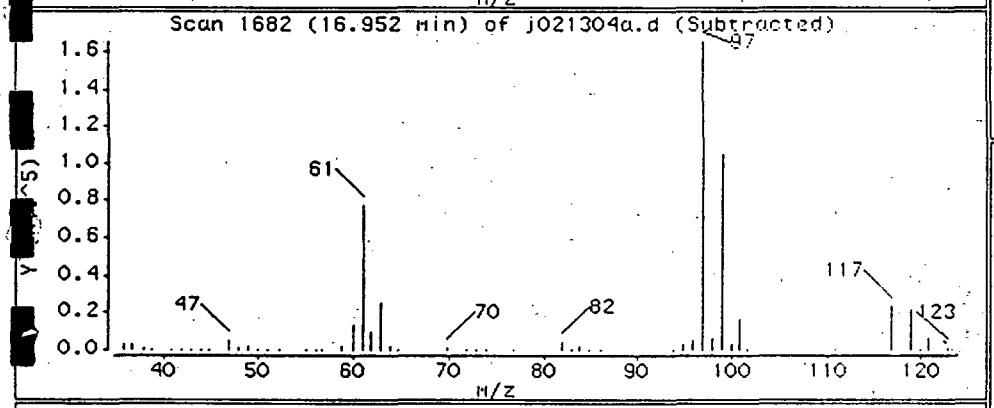
Column phase: RTx-624

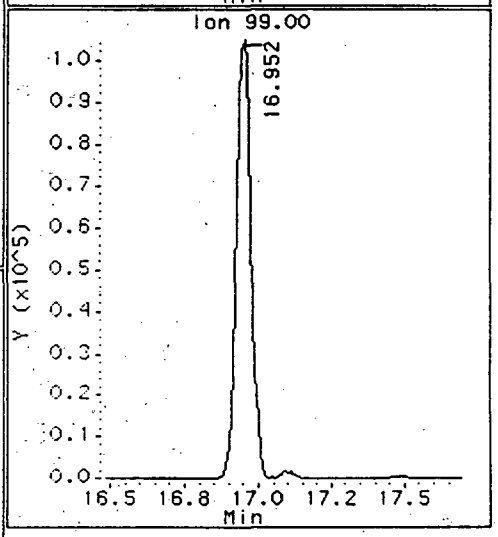
Column diameter: 0.58

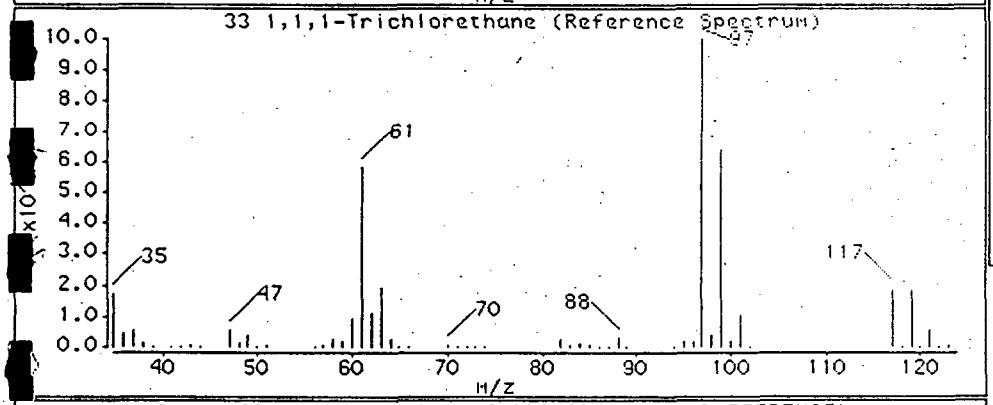
33 1,1,1-Trichlorethane

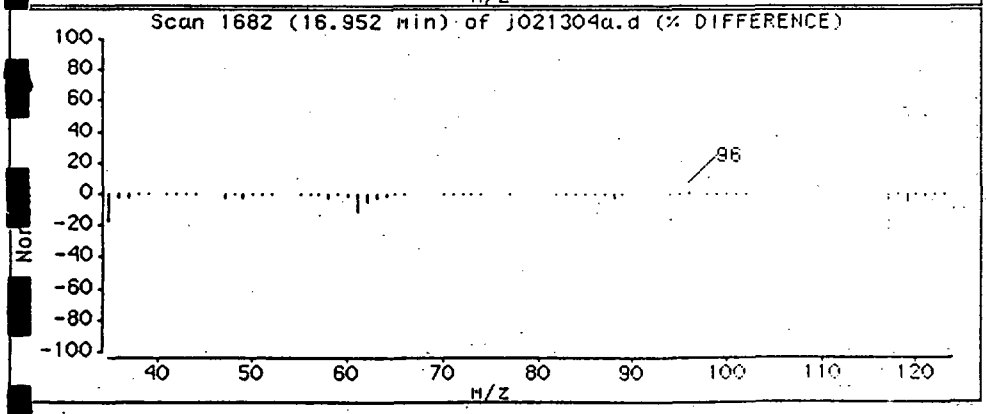








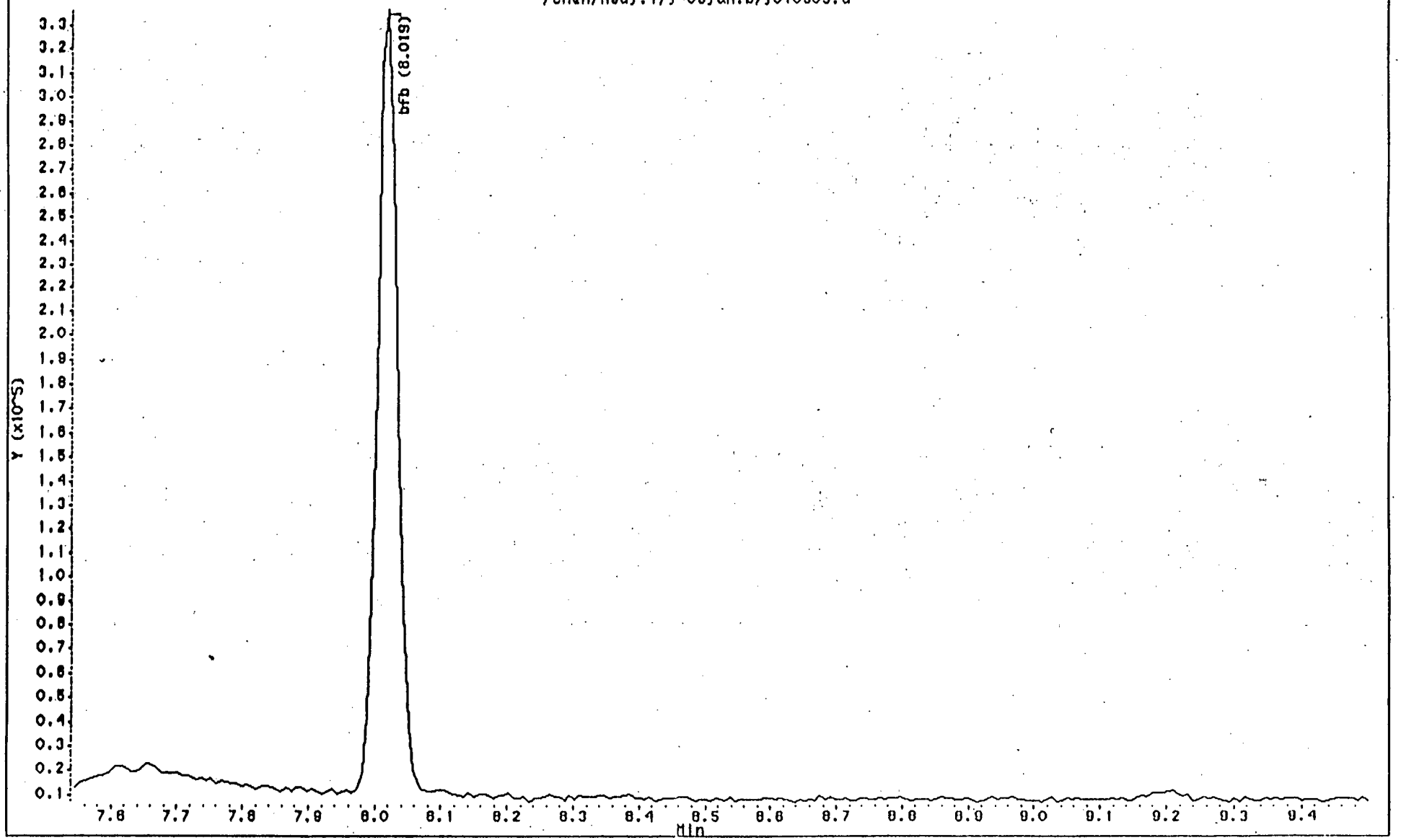




Data File: /chem/msdj.i/j-09jan.b/j010903.d
Date : 09-JAN-1997 09:07
Client ID:
Sample Info: BFB Tune Check #275-8-25 2.0ul
Volume Injected (uL): 1.0
Column phase:

Instrument: msdj.i
Operator: FA
Column diameter: 2.00

/chem/msdj.i/j-09jan.b/j010903.d



Data File: /chem/msdj.i/j-09jan.b/j010903.d

Date : 09-JAN-1997 09:07

Client ID:

Instrument: msdj.i

Sample Info: BFB Tune Check #275-8-25 2.0ul

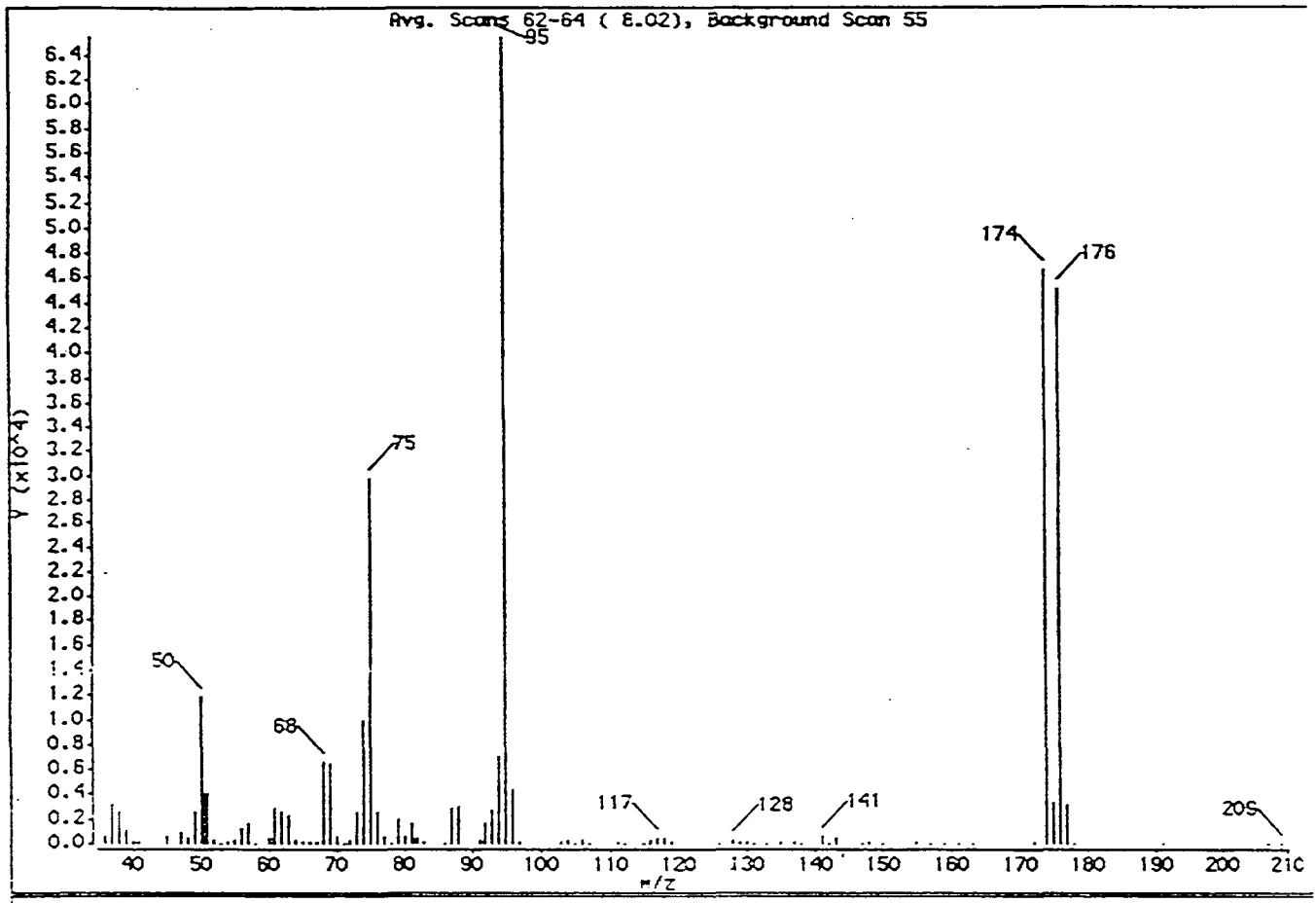
Volume Injected (uL): 1.0

Operator: FA

Column phase:

Column diameter: 2.00

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	18.19
75	30.00 - 60.00% of mass 95	45.57
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	71.18
175	5.00 - 9.00% of mass 174	4.97 (6.99)
176	95.00 - 101.00% of mass 174	68.88 (96.77)
177	5.00 - 9.00% of mass 176	4.80 (6.97)

Data File: /chem/msdj.i/j-09jan.b/j010903.d

Date : 09-JAN-1997 09:07

Client ID:

Instrument: msdj.i

Sample Info: BFB Tune Check #275-8-25 2.0ul

Volume Injected (uL): 1.0

Operator: FR

Column phase:

Column diameter: 2.00

Data File: j010903.d
Spectrum : Avg. Scans 62-64 (8.02), Background Scan 55
Largest m/z: 95.00
Number of peaks: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	611	65.00	120	93.00	2642	137.00	117
37.00	3142	66.00	195	94.00	7026	138.00	34
38.00	2627	67.00	154	95.00	65480	141.00	553
39.00	1089	68.00	6622	96.00	4304	142.00	56
40.00	94	69.00	6539	97.00	219	143.00	460
41.00	85	70.00	581	103.00	136	147.00	36
45.00	626	71.00	67	104.00	280	148.00	119
47.00	977	72.00	345	105.00	70	150.00	39
48.00	523	73.00	2521	106.00	230	155.00	121
49.00	2623	74.00	9552	107.00	34	157.00	59
50.00	11913	75.00	29832	111.00	152	159.00	55
51.00	4039	76.00	2633	112.00	43	161.00	36
52.00	279	77.00	551	115.00	43	163.00	35
53.00	50	78.00	64	116.00	263	172.00	218
54.00	83	79.00	1303	117.00	396	174.00	46608
55.00	250	80.00	551	118.00	382	175.00	3256
56.00	1167	81.00	1716	119.00	90	176.00	45104
57.00	1592	82.00	421	125.00	73	177.00	3143
58.00	2	83.00	159	126.00	261	178.00	45
60.00	477	86.00	52	129.00	108	191.00	75
61.00	2823	87.00	2934	130.00	201	207.00	37
62.00	2598	88.00	3028	131.00	45	209.00	46
63.00	2211	91.00	371	133.00	36		
64.00	255	92.00	1662	135.00	123		

0222E

Air Toxics Limited

file : /chem/msdj.i/j-13feb.b/j021301.d
Smp Id: BFB Client Smp ID: BFB
Date : 13-FEB-97 08:11
ator : FA Inst ID: msdj.i
Info : #275-8-25 BFB Tune Check 2uL
Info :
ent :
od : /chem/msdj.i/j-13feb.b/bfb.m
Date : 13-Feb-1997 08:04 Quant Type: ESTD
Date : Cal File:
bottle: 1 QC Sample: BFB
Factor: 1.000
grator: HP RTE Compound Sublist: all.sub
et Version: 3.12 Sample Matrix: WATER
entration Formula: Uf * Vf * Vi

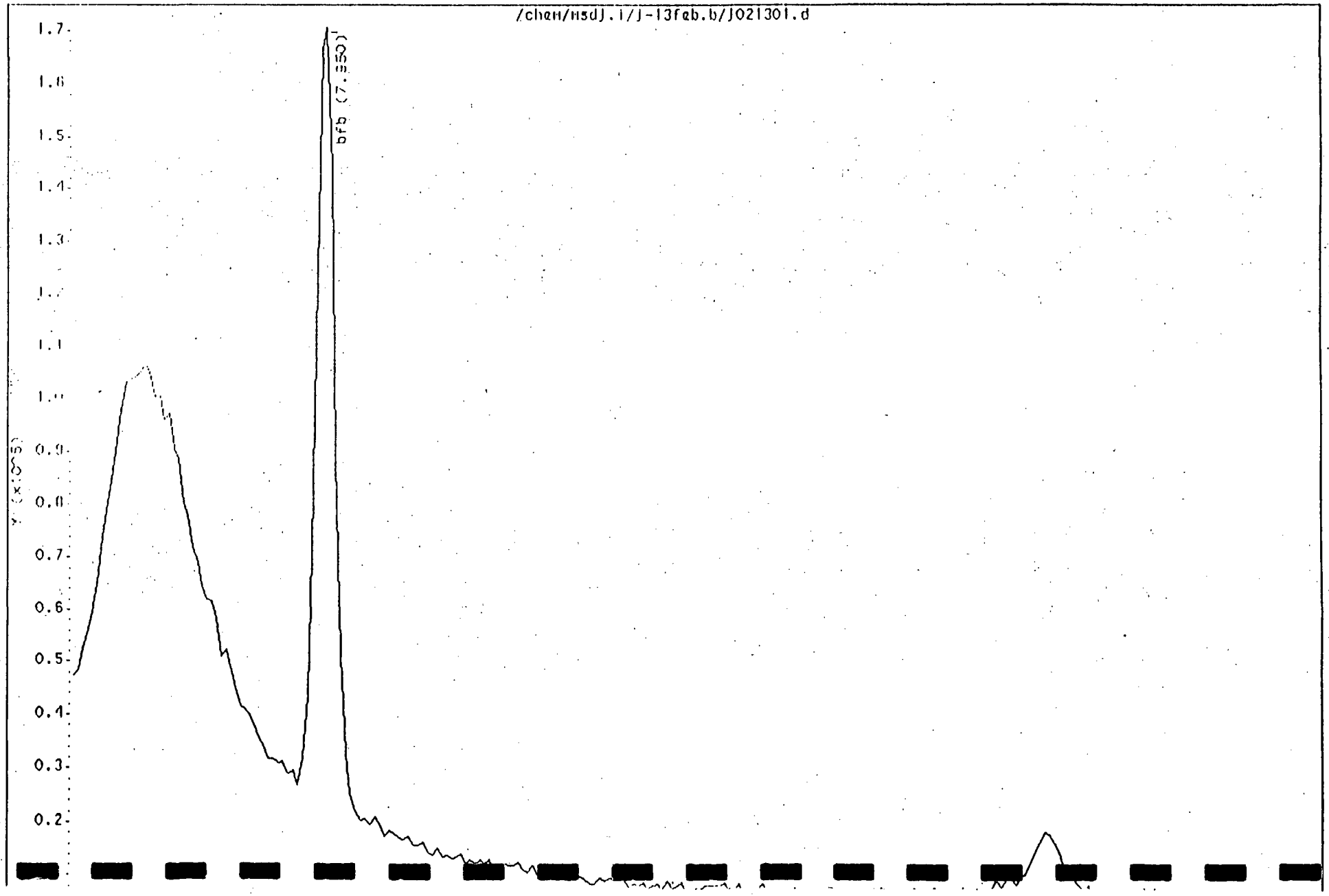
Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume

EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
fb					CAS #: 460-00-4		
8.019	-0.069	95	28169				100.00
8.019	-0.069	50	4617			15.00- 40.00	16.39
8.019	-0.069	75	13021			30.00- 60.00	46.22
8.019	-0.069	96	1788			5.00- 9.00	6.35
8.019	-0.069	173	83			0.00- 2.00	0.33
8.019	-0.069	174	25178			50.00- 100.00	89.38
8.019	-0.069	175	1973			5.00- 9.00	7.84
8.019	-0.069	176	25072			95.00- 101.00	99.58
8.019	-0.069	177	1717			5.00- 9.00	6.85

Data File: /chem/msdj.i/j-13feb.b/J021301.d
Date : 13-FEB-97 08:11
Client ID: DFB
Sample Info: W275-8-25 DFB Tune Check 2uL
Volume Injected (uL): 1.0
Column phase:

Instrument: msdj.i

Operator: FA
Column diameter: 2.00



Air Toxics Limited

TARGET COMPOUNDS

ent Name:
Smp Id: BFB
ple Location:
ple Date:
ple Matrix: WATER
lysis Type: bfb
a Type: MS DATA
c Info:

Client SDG: j-13feb
Client Smp ID: BFB
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: FA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
460-00-4	--------bfb	0.0	

Data File: /chem/msdj.i/j-13feb.b/j021001.d

Page 4

Date : 13-FEB-97 08:11

Client ID: BFB

Instrument: msdj.

Sample Info: #275-8-25 BFB Tune Check 2uL

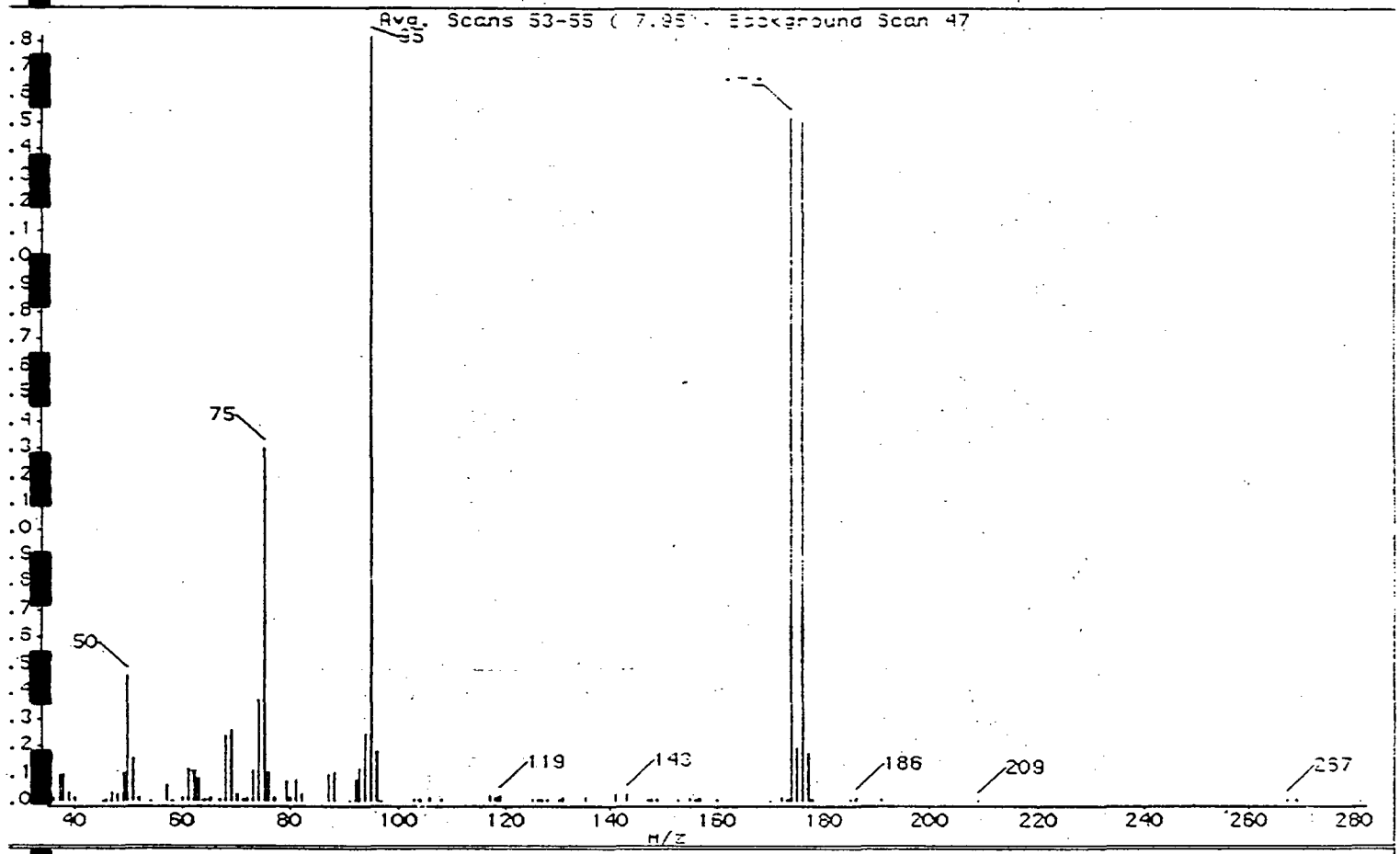
Volume Injected (uL): 1.0

Location: F8

Column phase:

Column diameter: 2.00

b



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.39
75	30.00 - 60.00% of mass 95	46.22
96	5.00 - 9.00% of mass 95	6.35
173	Less than 2.00% of mass 174	0.29 (0.33)
174	50.00 - 100.00% of mass 95	89.38
175	5.00 - 9.00% of mass 174	7.00 (7.84)
176	95.00 - 101.00% of mass 174	89.01 (99.58)
177	5.00 - 9.00% of mass 176	6.10 (6.85)

ta File: /chem/msdj.i/j-13feb.b/j021301.d Page 5

te : 13-FEB-97 08:11

ient ID: BFB Instrument: msdj.

mple Info: #275-8-25 BFB Tune Check [illegible]

lume Injected (uL): 1.0 Operator: FA

umn phase: Column diameter: 2.00

Data File: j021301.d
Spectrum : Avg. Scans 53-55 (7.95), Background Scan 47
Largest m/z: 95.00
Number of peaks: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	108	67.00	73	96.00	1788	155.00	119
37.00	988	68.00	2421	97.00	4	156.00	41
38.00	959	69.00	2586	103.00	85	157.00	118
39.00	293	70.00	275	104.00	70	160.00	41
40.00	153	71.00	88	106.00	117	170.00	6
45.00	16	72.00	132	108.00	35	172.00	98
46.00	62	73.00	1087	117.00	169	173.00	83
47.00	338	74.00	3718	118.00	140	174.00	25176
48.00	254	75.00	13021	119.00	196	175.00	1973
49.00	1038	76.00	1045	125.00	47	176.00	25072
50.00	4617	77.00	116	126.00	34	177.00	1717
51.00	1564	79.00	744	127.00	47	178.00	80
52.00	129	80.00	123	128.00	45	185.00	34
54.00	1	81.00	754	130.00	97	186.00	150
57.00	558	82.00	233	131.00	142	191.00	46
58.00	6	87.00	998	135.00	101	209.00	18
60.00	148	88.00	1063	141.00	245	267.00	48
61.00	1156	91.00	15	143.00	247	269.00	34
62.00	1101	92.00	797	147.00	36	281.00	30
63.00	863	93.00	1141	148.00	88		
64.00	51	94.00	2443	149.00	79		
65.00	129	95.00	28166	153.00	33		

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 9702019-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name:	**j021306**	**Date of Collection:**	**NA**
Dil. Factor:	**1.00**	**Date of Analysis:**	**2/13/97**

Compound	Det. Limit (ppbv)	Amount (ppbv)
Methylene Chloride	0.50	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected
Benzene	0.10	Not Detected
1,2-Dichloroethane	0.10	Not Detected
Trichloroethene	0.10	Not Detected
1,2-Dichloropropane	0.10	Not Detected
Toluene	0.10	Not Detected
Tetrachloroethene	0.10	Not Detected
Chlorobenzene	0.10	Not Detected
Ethyl Benzene	0.10	Not Detected
m,p-Xylene	0.10	Not Detected
o-Xylene	0.10	Not Detected
Styrene	0.10	Not Detected
Acetone	0.50	Not Detected
Carbon Disulfide	0.50	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Octafluorotoluene	**118**	**70-130**
Toluene-d8	**104**	**70-130**
4-Bromofluorobenzene	**98**	**70-130**

Data File: /chem/msdj.i/j-13feb.b/j021306.d
Report Date: 13-Feb-1997 13:29

MH 2/13/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-13feb.b/j021306.d
Lab Smp Id: Client Smp ID: Lab Blank
Inj Date : 13-FEB-1997 12:18
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#94300
Misc Info : Lab Blank
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 30 Bromochloromethane					CAS #: 74-97-5			
16.594	16.724 (1.000)	130	225599	5.0			100.00	9373
16.594	16.724 (0.000)	128	45048			23.40- 123.40	19.97	
16.594	16.724 (0.000)	49	85752			91.58- 191.58	38.01	
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.929	18.067 (1.000)	114	1015938	5.0			100.00	9709
17.929	18.067 (0.000)	88	52176			0.00- 67.00	5.14	
* 58 Chlorobenzene-d5					CAS #: 3114-55-4			
22.056	22.209 (1.000)	117	940737	5.0			100.00	9970
22.056	22.209 (0.000)	82	139904			9.45- 109.45	14.87	
$ 35 Octafluorotoluene					CAS #: 434-64-0			
17.105	17.235 (1.031)	217	618714	5.9	5.9		100.00	7622
17.105	17.235 (0.000)	186	123880			8.63- 108.63	20.02	
$ 49 Toluene-d8					CAS #: 2037-26-5			
19.966	20.111 (1.114)	98	963783	5.2	5.2		100.00	9928
19.966	20.111 (0.000)	70	33304			0.00- 62.67	3.46	
19.966	20.111 (0.000)	100	193600			16.83- 116.83	20.09	

Data File: /chem/msdj.i/j-13feb.b/j021306.d
Report Date: 13-Feb-1997 13:29

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
65 Bromofluorobenzene						CAS #: 460-00-4			
23.918	24.086	(1.084)	95	717683	4.9	4.9		100.00	8446
23.918	24.086	(0.000)	174	107752			13.34- 113.34	15.01	
23.918	24.086	(0.000)	176	102192			7.57- 107.57	14.24	

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-13feb.b/j021306.d
Lab Smp Id: Client Smp ID: Lab Blank
Inj Date : 13-FEB-1997 12:18
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#94300
Misc Info : Lab Blank
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: AT.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Audit History For: /chem/msdj.i/j-13feb.b/j021306.d

0231

2/13/97

Change Date: 13-Feb-97 12:35
Change Made by: Automation

Parameter: ChemLan Data Transfer
Old Value:
New Value:
Reason For Change: MS Data from Instrument: msdj.i

Change Date: 13-Feb-97 12:35
Change Made by: Automation

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-13feb.b/to140109.m
Reason For Change: Complete Target Compound Processing

Change Date: 13-Feb-97 13:26
Change Made by: mhe

Parameter: date
Old Value: 13-FEB-97 12:18
New Value: 13-FEB-1997 12:18
Reason For Change: N/A

Change Date: 13-Feb-97 13:26
Change Made by: mhe

Parameter: Misc Information
Old Value:
New Value: Lab Blank
Reason For Change: N/A

Change Date: 13-Feb-97 13:26
Change Made by: mhe

Parameter: Sample Info
Old Value: Lab Blank 500mL Can#94300
New Value: 500mL Can#94300
Reason For Change: N/A

Change Date: 13-Feb-97 13:26
Change Made by: mhe

Parameter: Client ID
Old Value: VSTD150
New Value: Lab Blank
Reason For Change: N/A

Change Date: 13-Feb-97 13:26
Change Made by: mhe

Parameter: Target Processing
Old Value:
New Value: Method: /chem/msdj.i/j-13feb.b/to140109.m
Reason For Change: Quantitation

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Hit for 1,2-Dichloroethane changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Hit for cis-1,3-Dichloropropene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Hit for 4-Methyl-2-pentanone changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Hit for 1,4-Dichlorobenzene changed
Old Value: Old Hit #1
New Value: Compound Undetected
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Requantitate all compounds
Old Value:
New Value:

Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Match for Unknown compound at 12.405 min. changed.
Old Value: Old match: Unknown
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Match for Unknown compound at 20.263 min. changed.
Old Value: Old match: Cyclotrisiloxane, hexamethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Match for Unknown compound at 23.506 min. changed.
Old Value: Old match: Acetamide, N,N-dimethyl-
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

Change Date: 13-Feb-97 13:28
Change Made by: mhe

Parameter: Best Match for Unknown compound at 26.756 min. changed.
Old Value: Old match: Phenol
New Value: New match: Unknown Compound Deleted
Reason For Change: N/A

MH 2/13/97

Air Toxics Limited

AMBIENT AIR METHOD TO14

Data file : /chem/msdj.i/j-13feb.b/j021306.d
Lab Smp Id: Client Smp ID: Lab Blank
Inj Date : 13-FEB-1997 12:18
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#94300
Misc Info : Lab Blank
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe Quant Type: ISTD
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: AT.sub
Target Version: 3.12 Sample Matrix: AIR
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
* 30 Bromochloromethane					CAS #: 74-97-5			
16.594	16.724 (1.000)	130	225599	5.0			100.00	9373
16.594	16.724 (0.000)	128	45048			23.40- 123.40	19.97	
16.594	16.724 (0.000)	49	85752			91.58- 191.58	38.01	
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.929	18.067 (1.000)	114	1015938	5.0			100.00	9709
17.929	18.067 (0.000)	88	52176			0.00- 67.00	5.14	
* 58 Chlorobenzene-d5					CAS #: 3114-55-4			
22.056	22.209 (1.000)	117	940737	5.0			100.00	9970
22.056	22.209 (0.000)	82	139904			9.45- 109.45	14.87	
$ 35 Octafluorotoluene					CAS #: 434-64-0			
17.105	17.235 (1.031)	217	618714	5.9	5.9		100.00	7622
17.105	17.235 (0.000)	186	123880			8.63- 108.63	20.02	
$ 49 Toluene-d8					CAS #: 2037-26-5			
19.966	20.111 (1.114)	98	963783	5.2	5.2		100.00	9928
19.966	20.111 (0.000)	70	33304			0.00- 62.67	3.46	
19.966	20.111 (0.000)	100	193600			16.83- 116.83	20.09	

Data File: /chem/msdj.i/j-13feb.b/j021306.d
Report Date: 13-Feb-1997 13:26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO	SIMILARITY
65 Bromofluorobenzene					CAS #: 460-00-4			
23.918	24.086 (1.084)	95	717683	4.9	4.9		100.00	8446
23.918	24.086 (0.000)	174	107752			13.34- 113.34	15.01	
23.918	24.086 (0.000)	176	102192			7.57- 107.57	14.24	
38 1,2-Dichloroethane					CAS #: 107-06-2			
17.936	17.624 (1.000)	62	29582	0.39	0.39		100.00	3471(Q)
17.936	17.624 (0.000)	64	9364			0.00- 81.76	31.65	
46 cis-1,3-Dichloropropene					CAS #: 542-75-6			
19.966	19.715 (1.114)	75	720	0.022	0.022		100.00	2276(aQ)
19.966	19.715 (0.000)	77	175			0.00- 79.54	24.31	
19.966	19.715 (0.000)	39	550			0.00- 97.40	76.39	
47 4-Methyl-2-pentanone					CAS #: 108-10-1			
19.958	19.837 (1.113)	43	7919	0.055	0.055		100.00	1171(aQ)
19.958	19.837 (0.000)	58	2419			0.00- 88.94	30.55	
19.958	19.837 (0.000)	85	0			0.00- 61.74	0.00	
72 1,4-Dichlorobenzene					CAS #: 106-46-7			
26.229	26.406 (1.189)	146	2097	0.022	0.022		100.00	(a)
26.229	26.406 (1.189)	148	928			13.88- 113.88	44.25	
26.229	26.406 (1.189)	111	514			0.00- 94.63	24.51	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Air Toxics Limited

Unknown Compounds Quantitation Report

Data file : /chem/msdj.i/j-13feb.b/j021306.d
Lab Smp Id: Client Smp ID: Lab Blank
Inj Date : 13-FEB-1997 12:18
Operator : MH Inst ID: msdj.i
Smp Info : 500mL Can#94300
Misc Info : Lab Blank
Comment :
Method : /chem/msdj.i/j-13feb.b/to140109.m
Meth Date : 13-Feb-1997 11:21 mhe
Cal Date : 09-JAN-1997 12:48 Cal File: j010909.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: AT.sub
Sample Matrix: AIR
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vf

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor

ISTD	RT	AREA	AMOUNT
* 30 Bromochloromethane	16.594	1254974	5.000
* 58 Chlorobenzene-d5	22.056	2924827	5.000

	RT	AREA	CONCENTRATIONS ON-COL(PPBV)	FINAL(PPBV)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown						CAS #:		
	12.405	64369	0.26	0.26	0		0	30
Cyclotrisiloxane, hexamethyl-						CAS #: 541-05-9		
	20.263	285357	0.49	0.49	64	NBS54K.l	23660	58
Acetamide, N,N-dimethyl-						CAS #: 127-19-5		
	23.506	5790060	9.9	9.9	86	NBS54K.l	707	58
Phenol						CAS #: 108-95-2		
	26.756	343597	0.59	0.59	94	NBS54K.l	933	58

Data File: /chem/msdj.i/j-13feb.b/j021306.d
Report Date: 13-Feb-1997 13:26

Air Toxics Limited

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdj.i
Lab File ID: j021306.d
Lab Smp Id:
Analysis Type: VOA
Quant Type: ISTD
Operator: MH
Method File: /chem/msdj.i/j-13feb.b/to140109.m
Misc Info: Lab Blank

Calibration Date: 02/13/97
Calibration Time: 1047
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	234378	140627	328129	225599	-3.75
40 1,4-Difluorobenzene	1049127	629476	1468778	1015938	-3.16
58 Chlorobenzene-d5	964277	578566	1349988	940737	-2.44

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
30 Bromochloromethane	16.59	16.09	17.09	16.59	0.05
40 1,4-Difluorobenzene	17.93	17.43	18.43	17.93	0.00
58 Chlorobenzene-d5	22.05	21.55	22.55	22.06	0.04

MH
2/13/97

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/msdj.i/j-13feb.b/j021306.d
Report Date: 13-Feb-1997 13:26

Air Toxics Limited

RECOVERY REPORT

Client Name:
Sample Matrix: GAS
Lab Smp Id:
Level: LOW
Data Type: MS DATA
SpikeList File:
Method File: /chem/msdj.i/j-13feb.b/to140109.m
Misc Info: Lab Blank

Client SDG: j-13feb
Fraction: VOA
Client Smp ID: Lab Blank
Operator: MH
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 35 Octafluorotoluene	5.0	5.9	118.37	60-140
$ 49 Toluene-d8	5.0	5.2	104.85	60-140
$ 65 Bromofluorobenzene	5.0	4.9	98.53	60-140

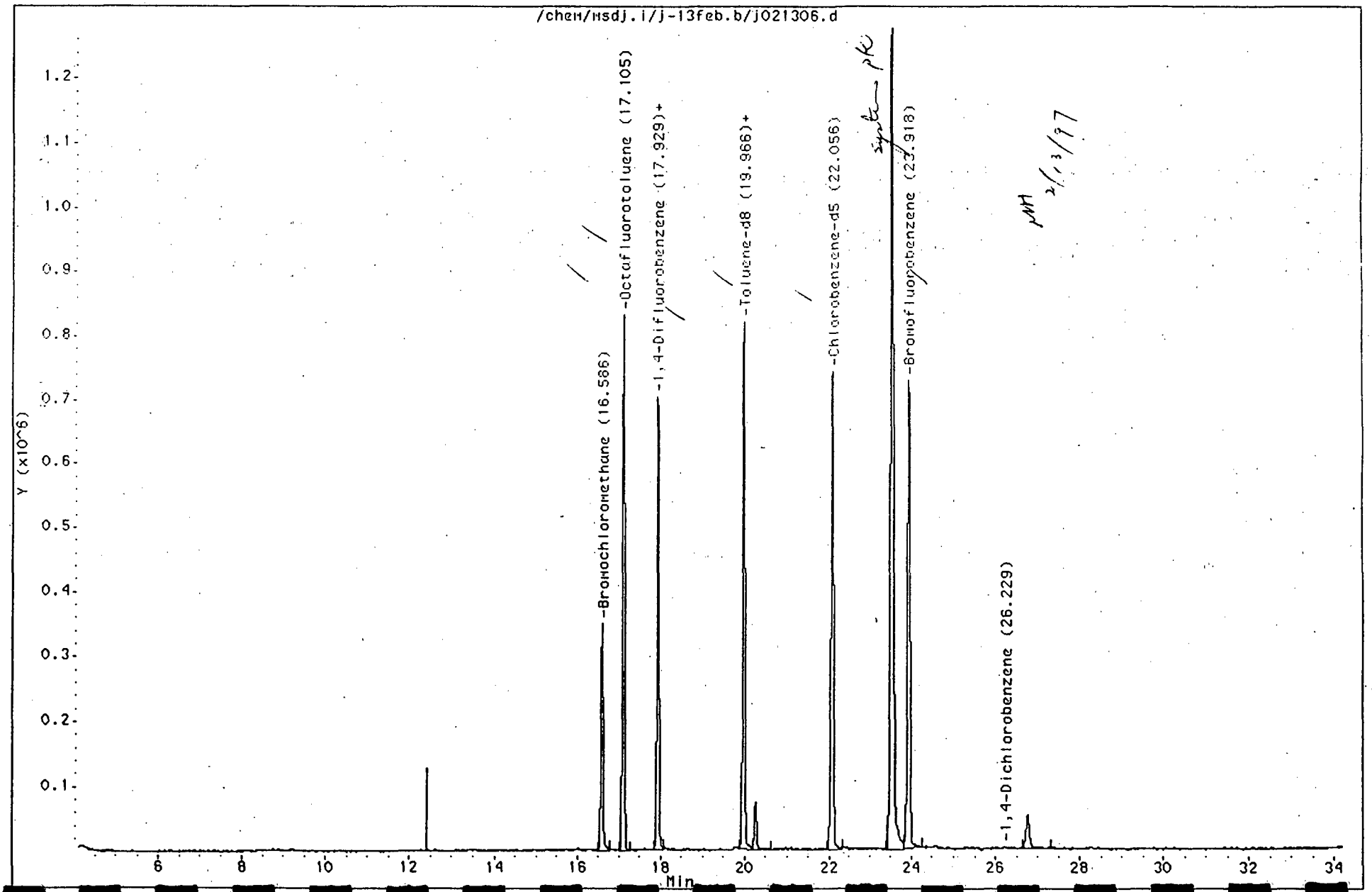
MH
2/13/97

Data File: /chem/msdj.i/j-13feb.b/j021306.d
Date : 13-FEB-1997 12:18
Client ID: Lab Blank
Sample Info: 500mL Can#94300

Column phase: RTx-624

Instrument: msdj.i

Operator: MH
Column diameter: 0.58



Data File: /chem/msdj.i/j-13feb.b/j021306.d

Date : 13-FEB-1997 12:18

Client ID: Lab Blank

Instrument: msdj.i

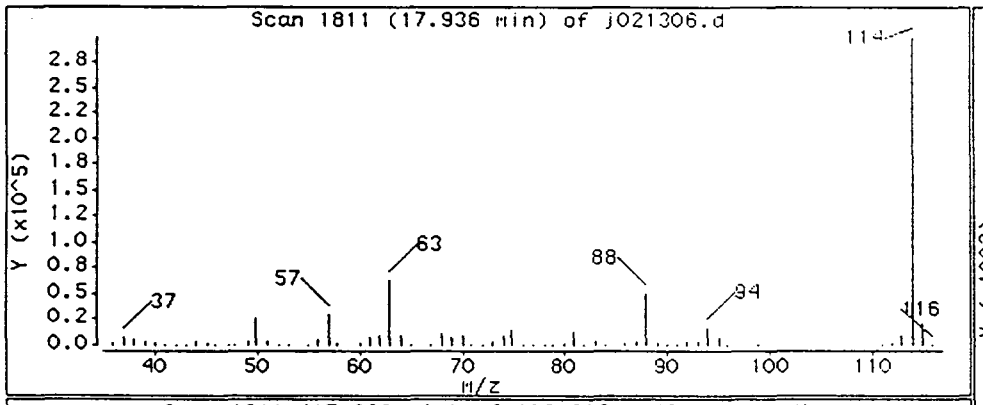
Sample Info: 500mL Can#94300

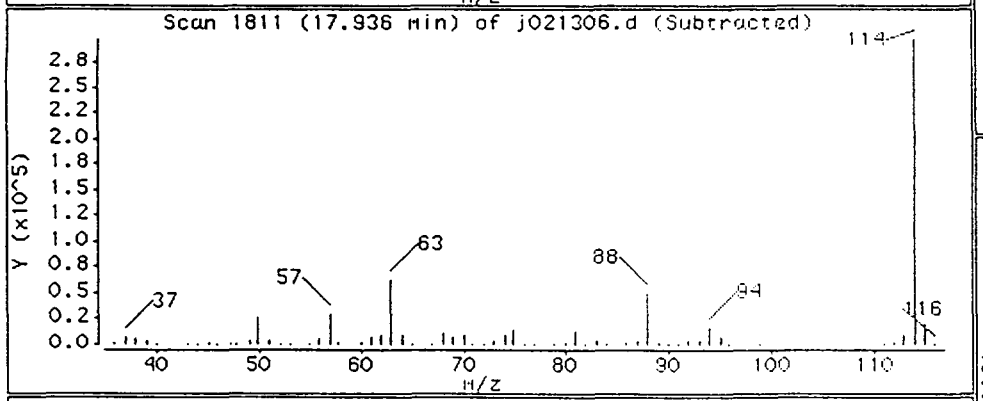
Operator: MH

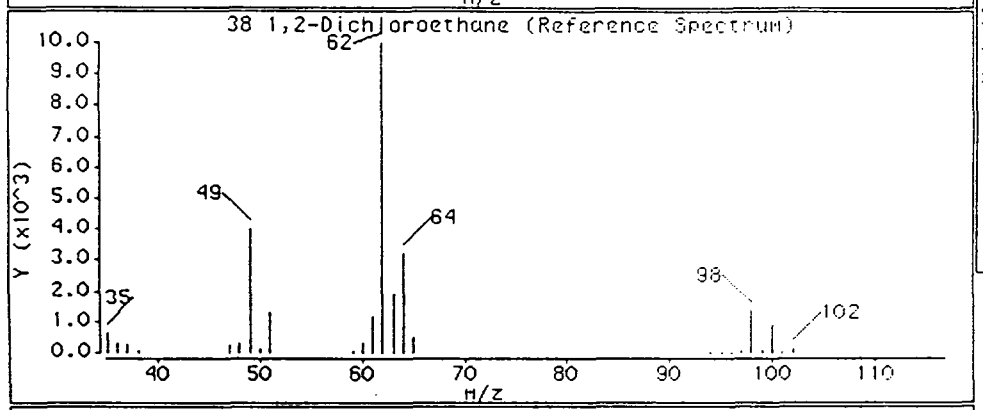
Column phase: RTx-624

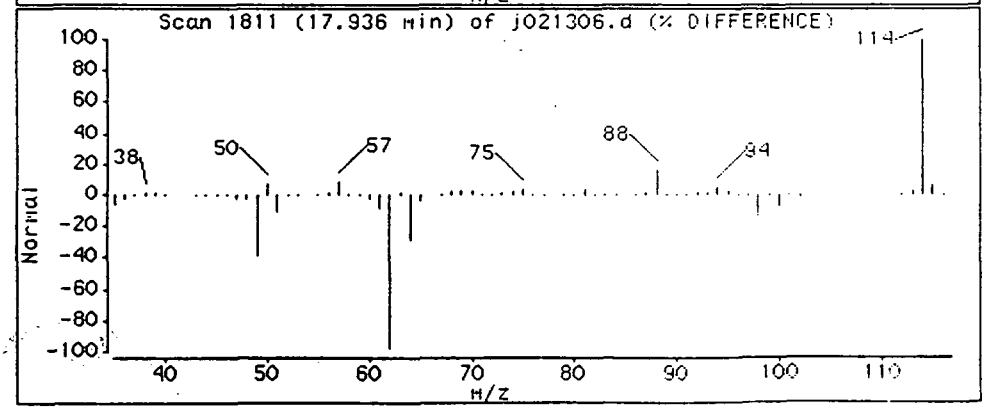
Column diameter: 0.58

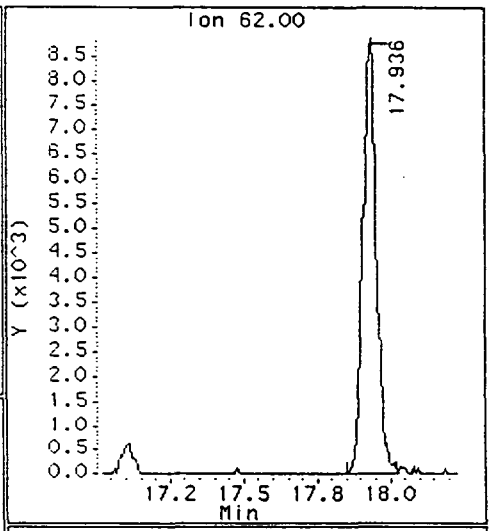
38 1,2-Dichloroethane

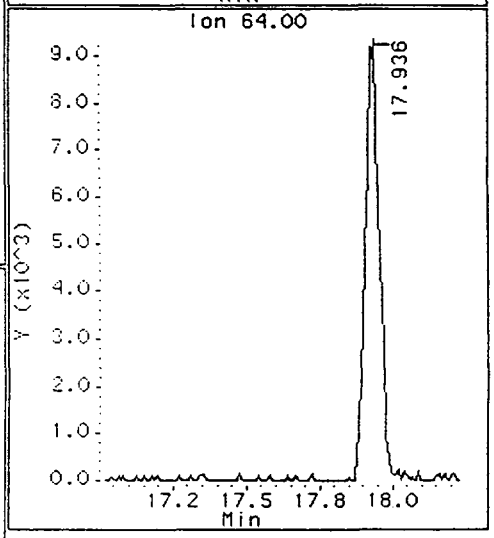












Data File: /chem/msdj.i/j-13feb.b/j021306.d

Date : 13-FEB-1997 12:18

Client ID: Lab Blank

Instrument: msdj.i

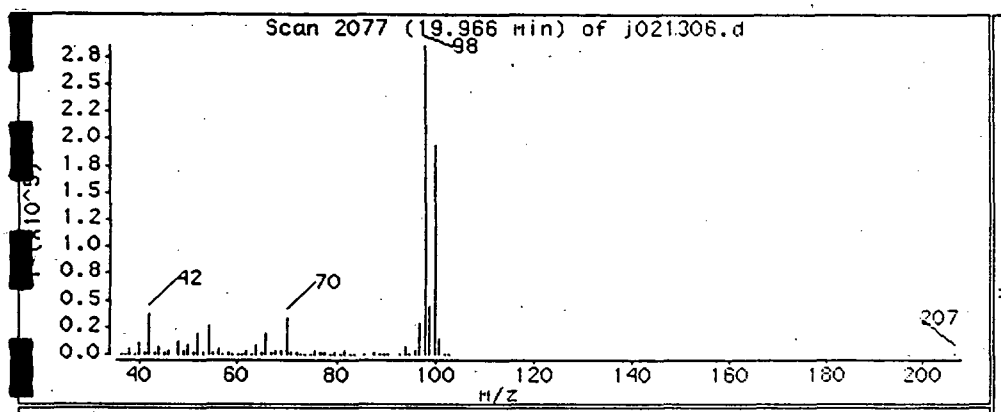
Sample Info: 500mL Can#94300

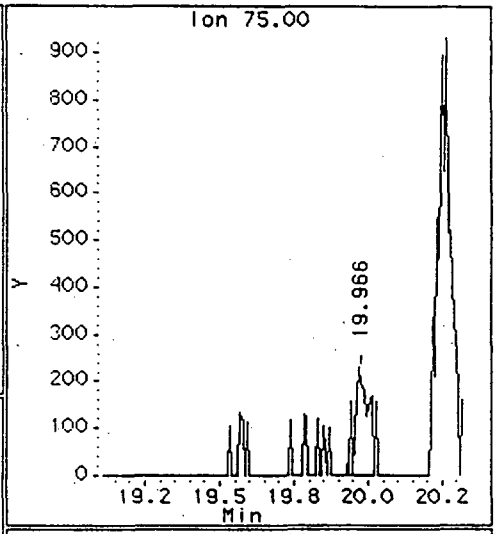
Operator: MH

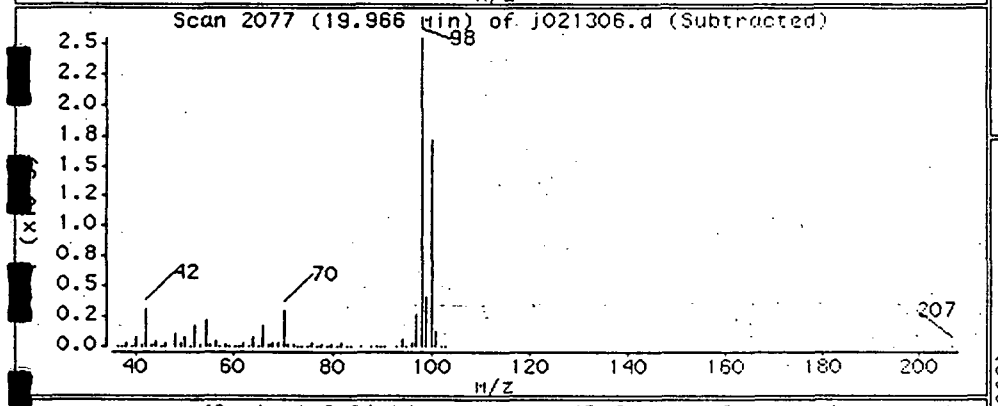
Column phase: RTx-624

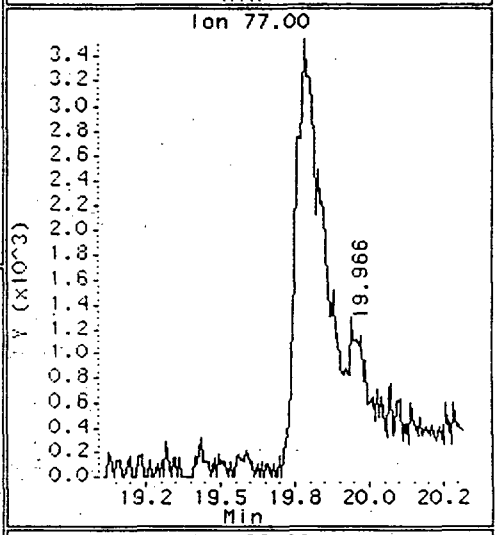
Column diameter: 0.58

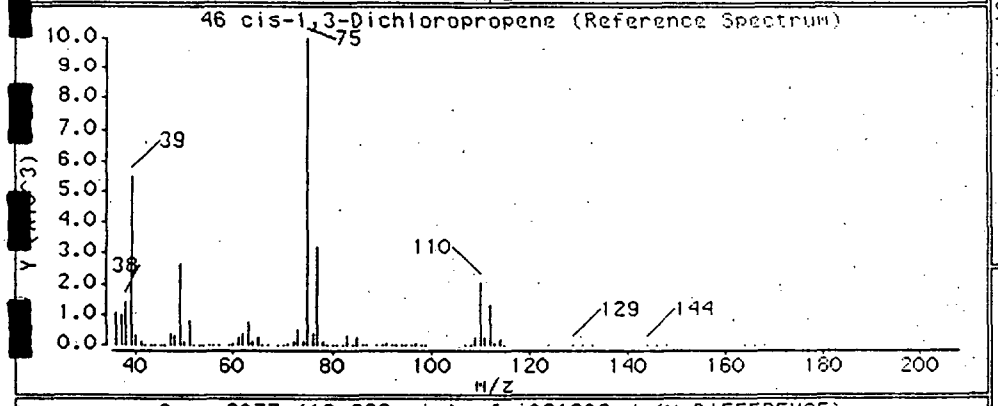
46 cis-1,3-Dichloropropene

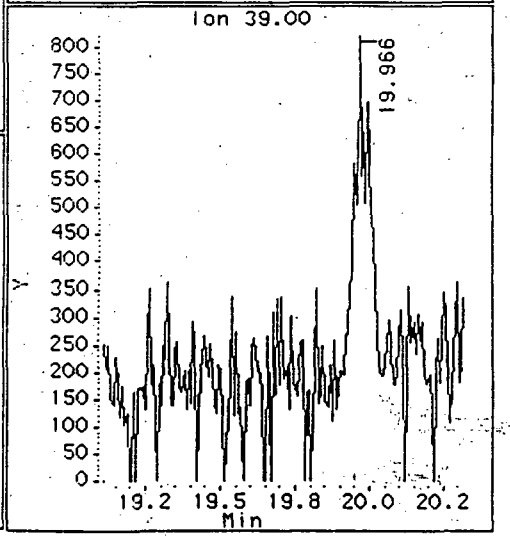


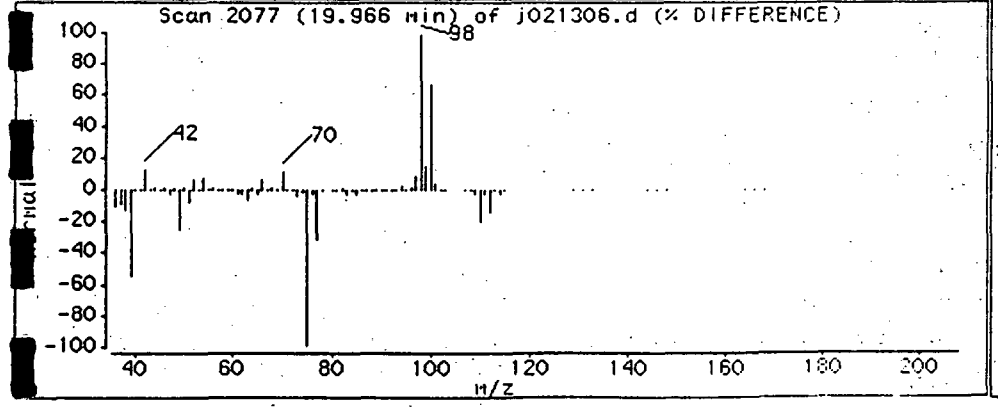












Data File: /chem/msdj.i/j-13feb.b/j021306.d

Date : 13-FEB-1997 12:18

Client ID: Lab Blank

Instrument: msdj.i

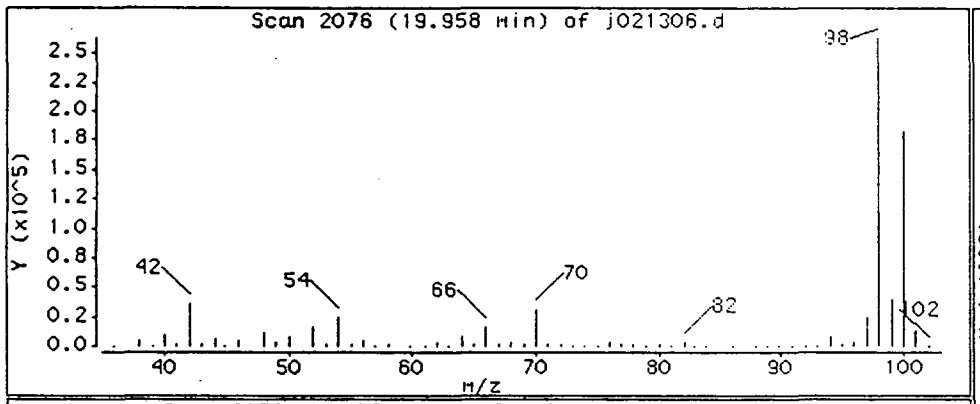
Sample Info: 500mL Can#94300

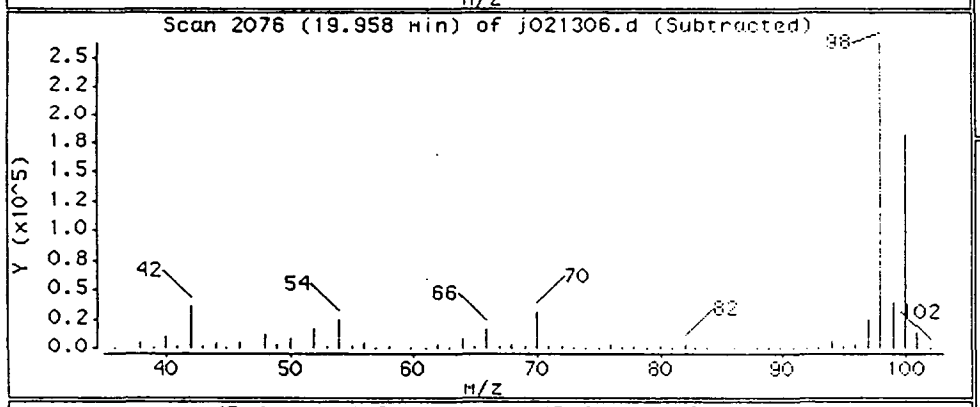
Operator: MH

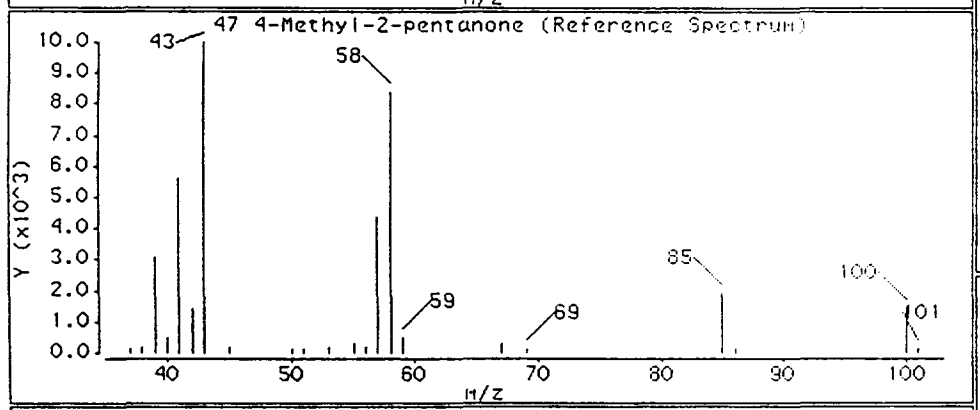
Column phase: RTx-624

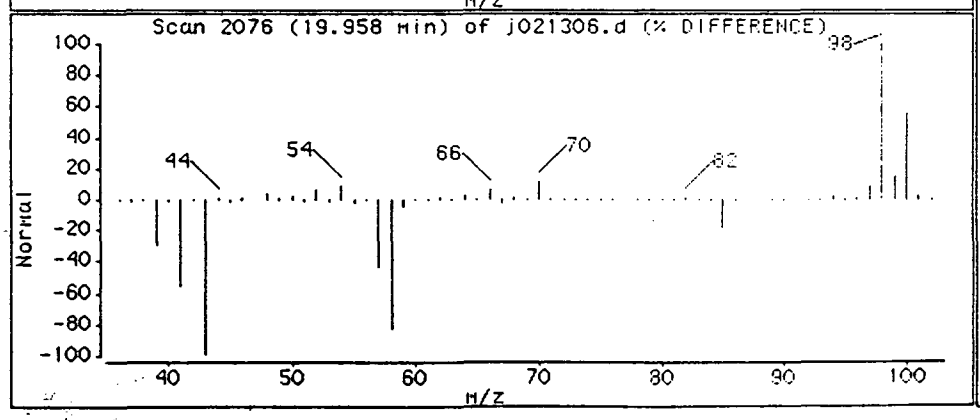
Column diameter: 0.58

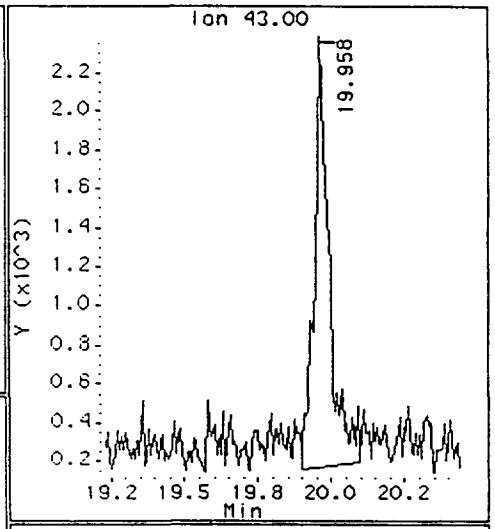
47 4-Methyl-2-pentanone

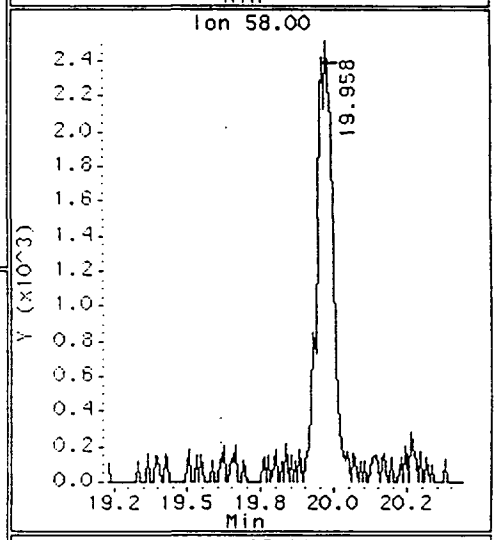


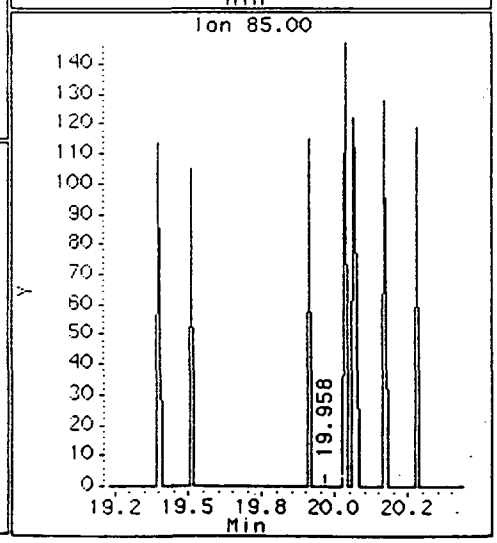












Data File: /chem/msdj.i/j-13feb.b/j021306.d

Date : 13-FEB-1997 12:18

Client ID: Lab Blank

Instrument: msdj.i

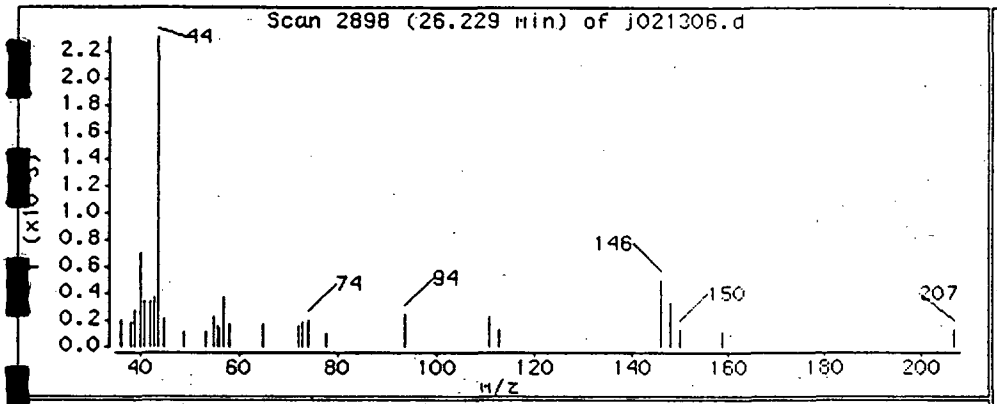
Sample Info: 500mL Can#94300

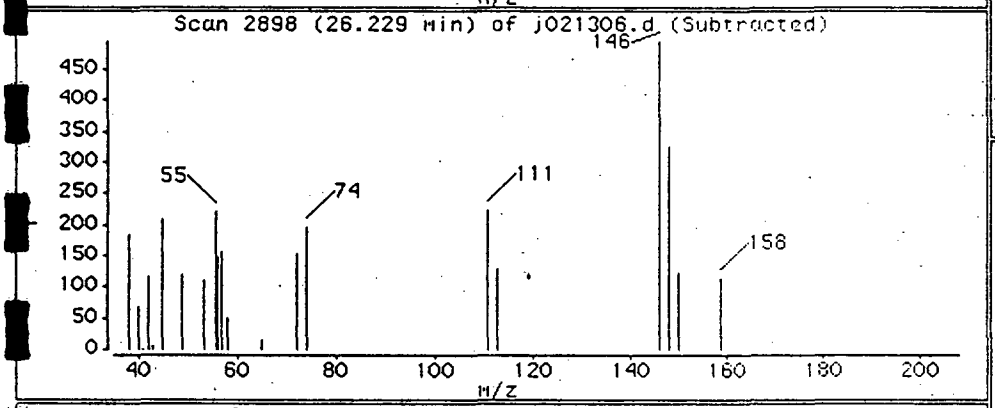
Operator: MH

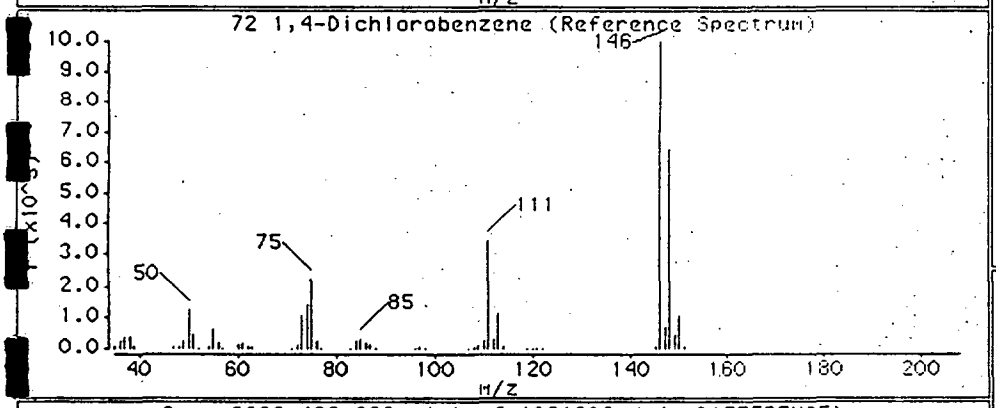
Column phase: RTx-624

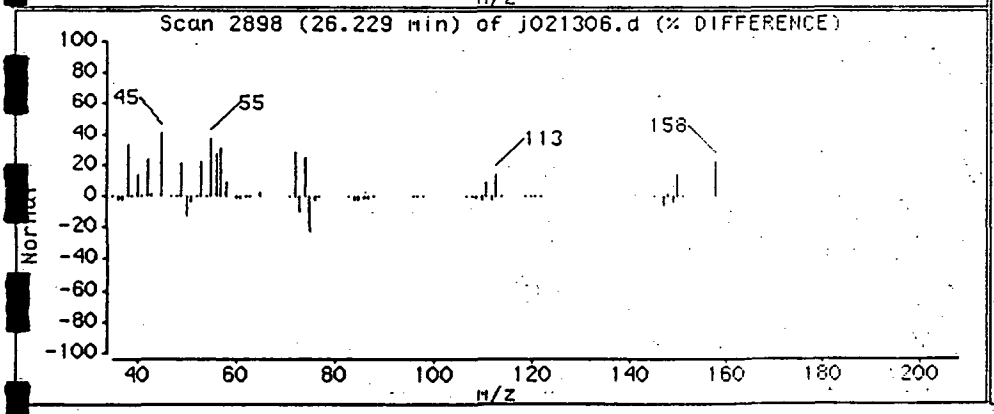
Column diameter: 0.58

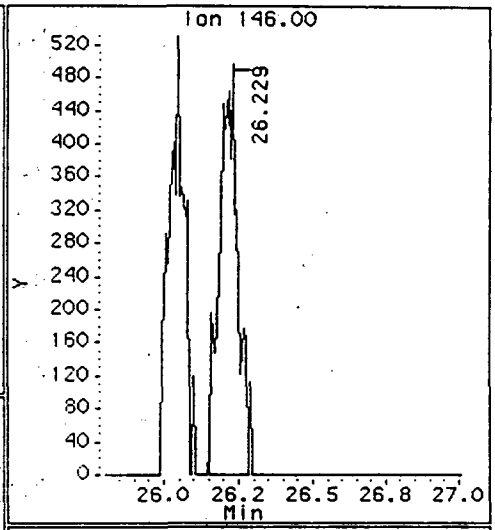
72 1,4-Dichlorobenzene

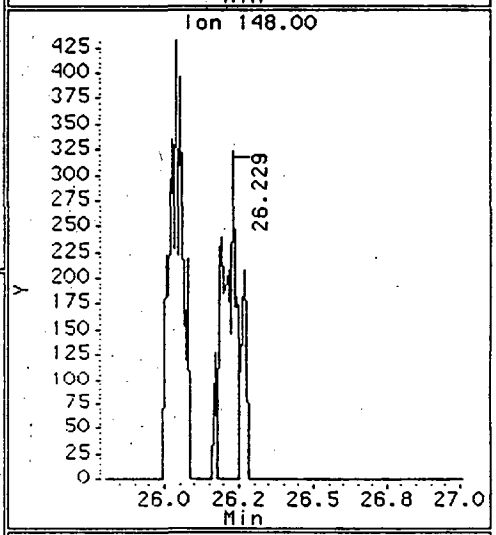


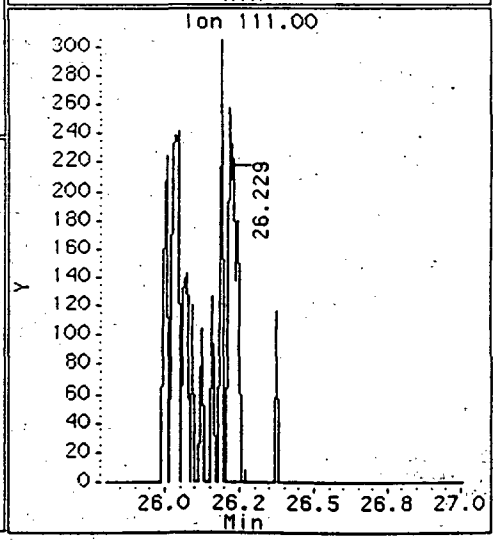










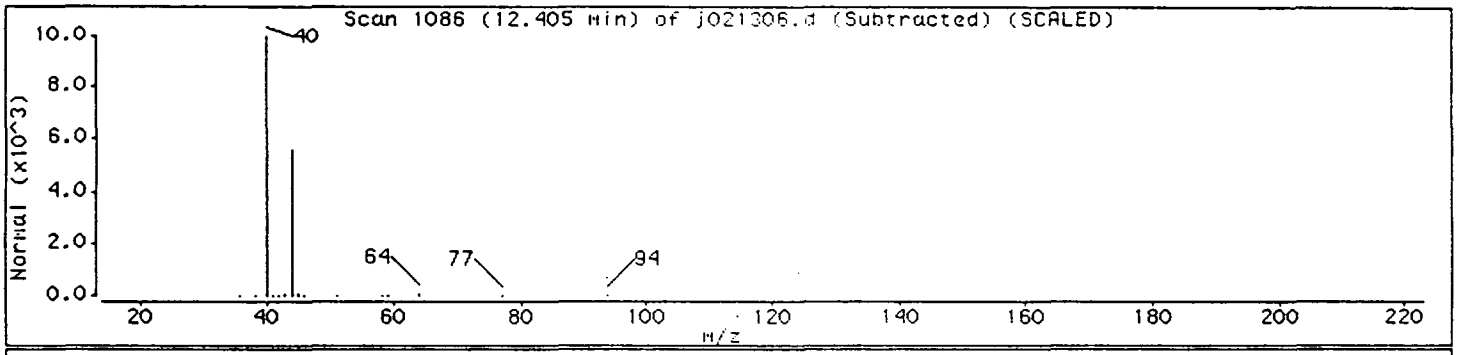


Data File: /chem/msdj.i/j-13feb.b/j021306.d

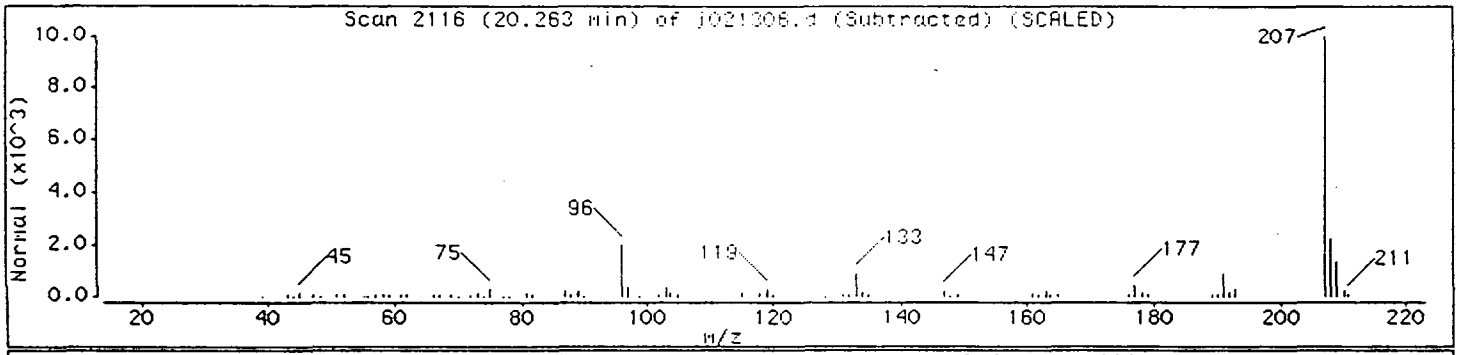
Date : 13-FEB-1997 12:18
Instrument: msdj.i
Client ID: Lab Blank
Column phase: RTx-624

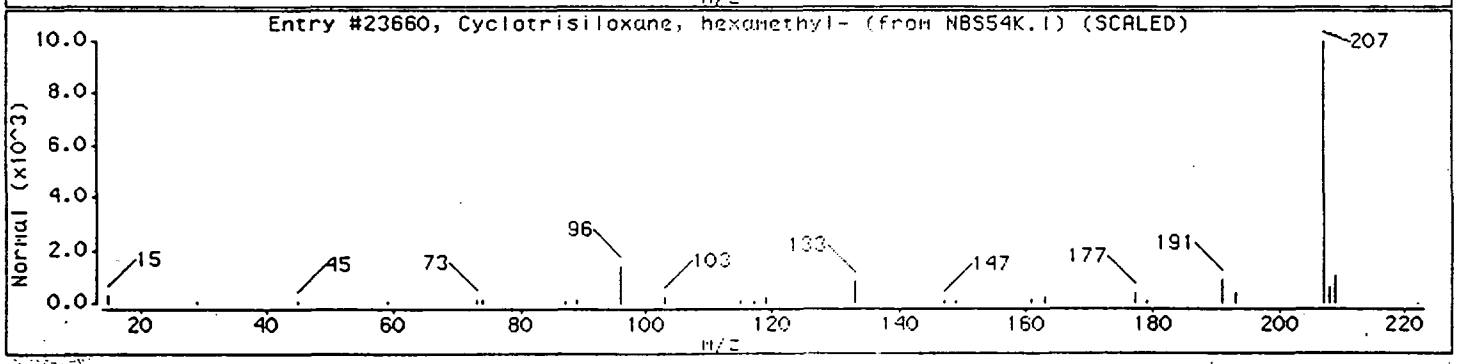
Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



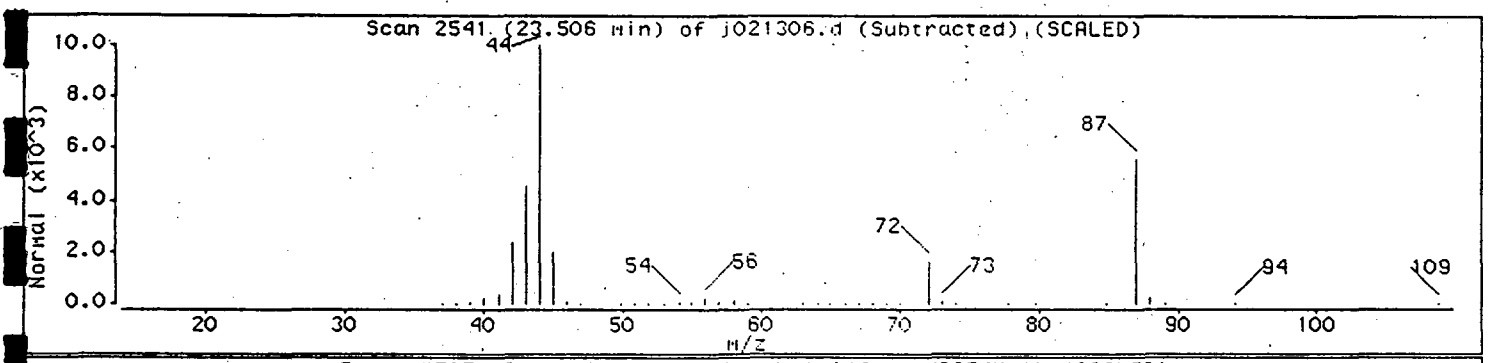
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclotrisiloxane, hexamethyl-	541-05-9	NBS54K.I	23660	64

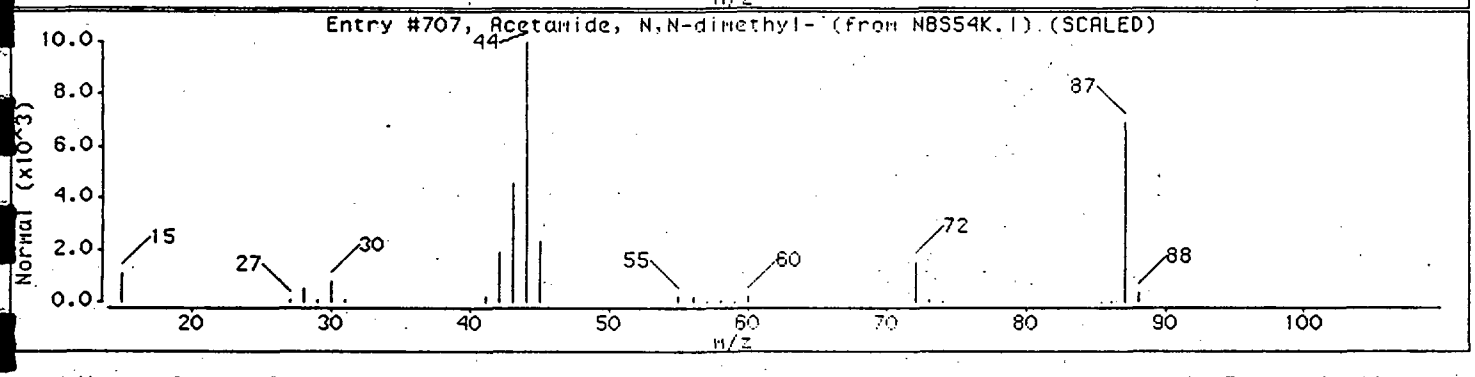




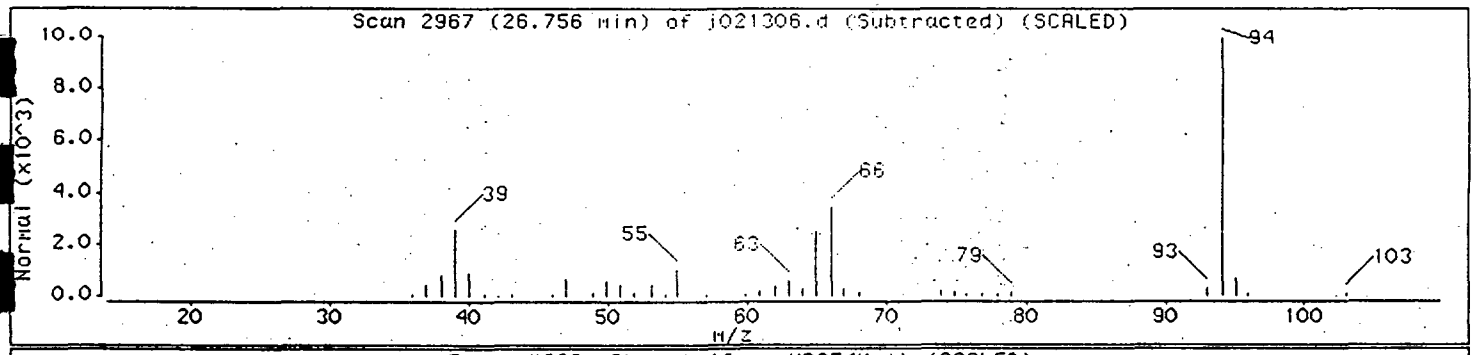
Data File: /chem/msdj.i/j-13feb.b/j021306.d
Date : 13-FEB-1997 12:18
Instrument: msdj.i
Client ID: Lab Blank
Column phase: RTx-624 Column diameter: 0.58

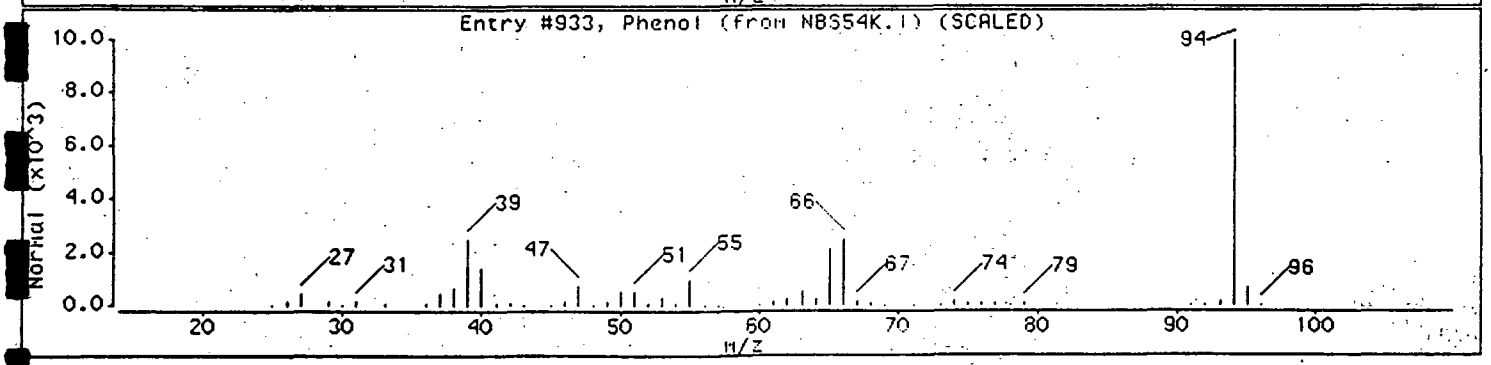
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Acetamide, N,N-dimethyl-	127-19-5	NBS54K.I	707	86





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	94





0346

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

№ 009950

Page 1 of 1

Contact Person: Barbara Dye
Company: Parsons E.S.
Address: 9906 Gulf Freeway City: Houston State: TX Zip: 77034
Phone: 713-943-5432 FAX:
Collected By: Signature:

Project info:
P.O. # 727931-3004-00
Project # 727931
Project Name: Bailey

Turn Around Time:
☒ Normal
☐ Rush _____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	013197U1	1-31-97 0818 1618	TO-14 See ATT	-29.5	-8	10"Hg
02A	013197D1	1-31-97 0815 1618	TO-14 See ATT	-29.5	-8	8.5"Hg

Relinquished By: (Signature) Date/Time 0800 2-3-97 Print Name: Michael Steiner
Relinquished By: (Signature) Date/Time Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time Received By: (Signature) Date/Time Scott Amerson ATL 2/4/97 937

Notes:

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
FED EX	014 6465 141	[illegible]	2/4/97 937	AMBIENT	Good	Yes No (None) N/A	9702019

Form 1293 rev. 06

LOGIN INFORMATION

WORKORDER 9702019

		Invoice #:	
Client		**Date Completed:**	
Ms. Barbara Dye	**Phone**	**Date Received:**	2/4/97
Parsons Engineering Science, Inc.	713-943-5432	**PO#:**	727931-3004-00
9906 Gulf Freeway, Suite 100	**FAX**	**Project#:**	727931 Bailey
Houston, TX 77034	713-943-5427	**Total $:**	$470.00
		Logged By:	SA

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	013197U1	TO-14-S	1/31/97	10 "Hg	$235.00
02A	013197D1	TO-14-S	1/31/97	8.5 "Hg	$235.00
03A	Lab Blank	TO-14-S	NA	NA	NC

BILL TO: Ms. Mary E. Miller
Parsons Engineering Science, Inc.
9906 Gulf Freeway, Suite 100
Houston, TX 77034

Are there any receiving nonconformities? no

REMARKS

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} - [(\text{Initial Pressure ("Hg)})\ (14.7\ \text{psi} / 30\ \text{"Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\ \text{psi} + \text{Final Pressure (psi)}}{14.7\ \text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	5 psi Final Press. Dil. Factor	10 psi Final Press. Dil. Factor	15 psi Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

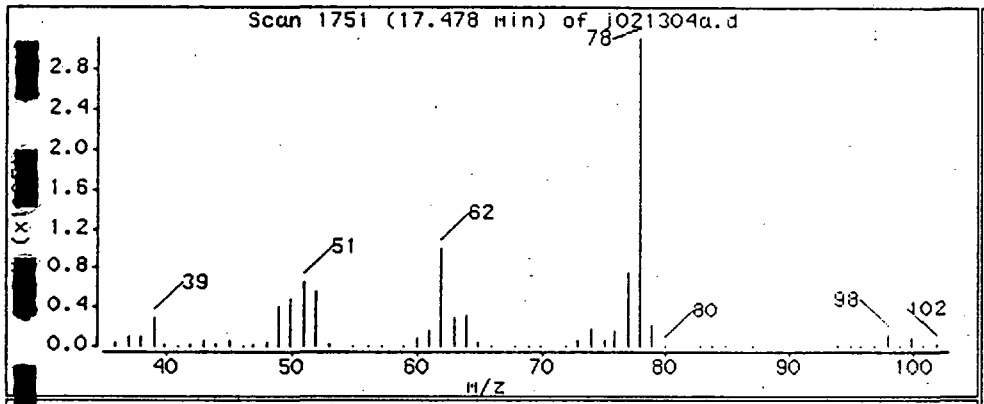
Sample Info: #296-67 25mL (5ppbv)

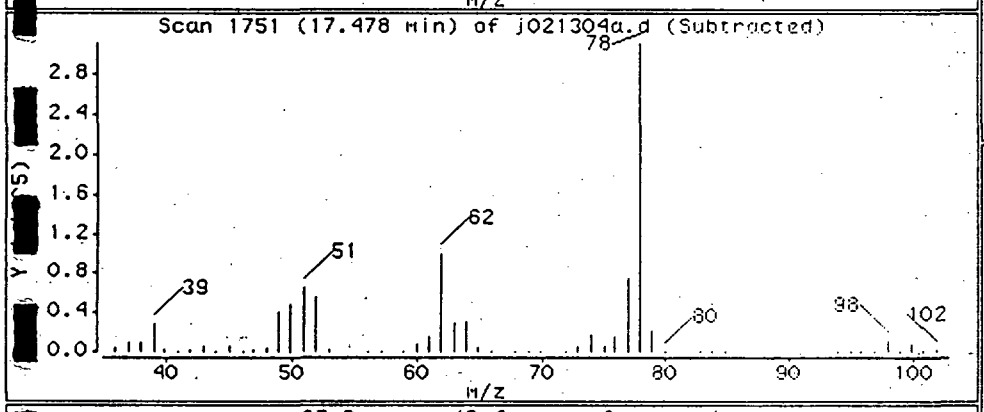
Operator: MH

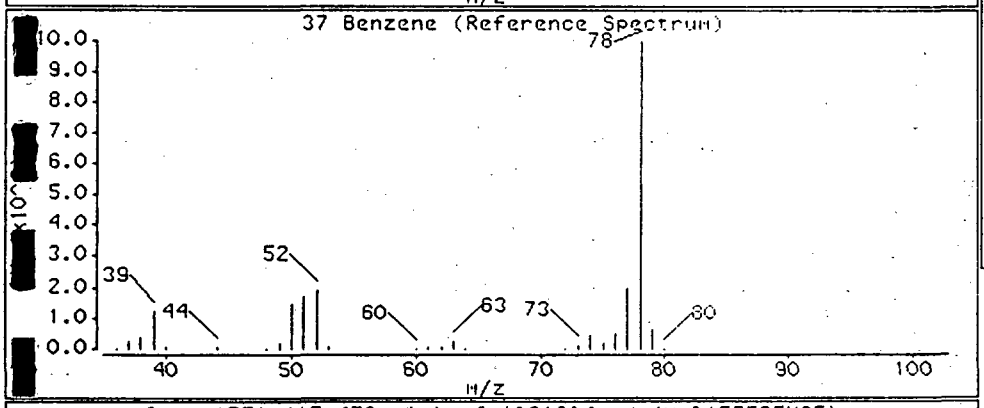
Column phase: RTx-624

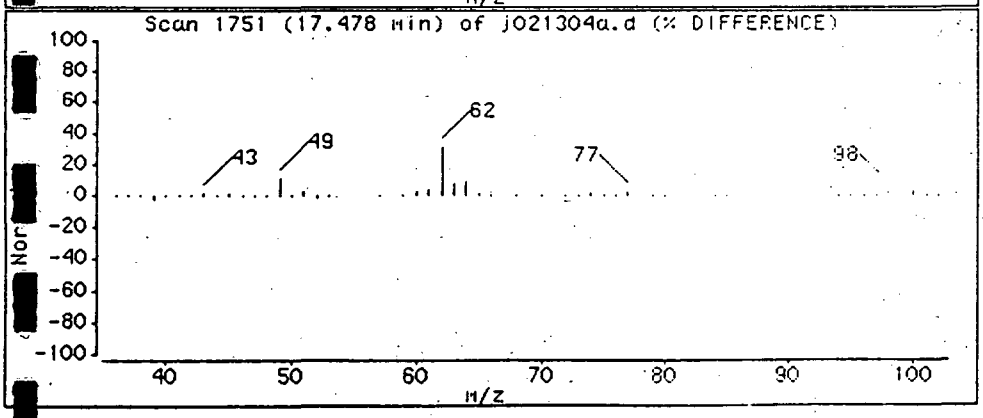
Column diameter: 0.58

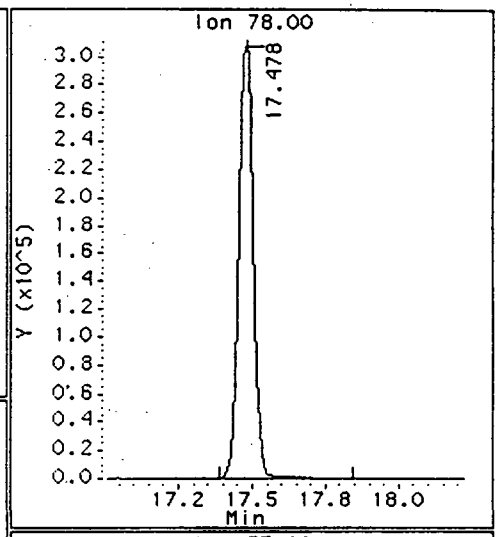
37 Benzene

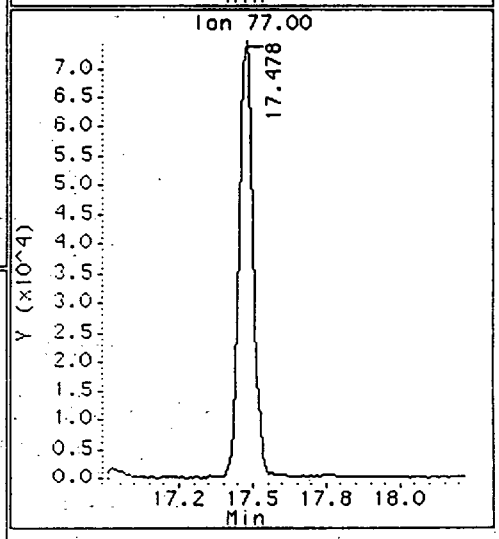












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

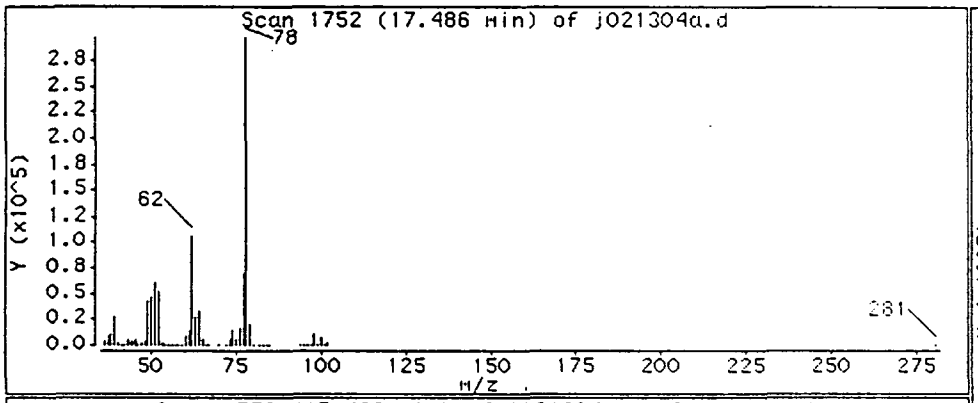
Sample Info: #296-67 25mL (5ppbv)

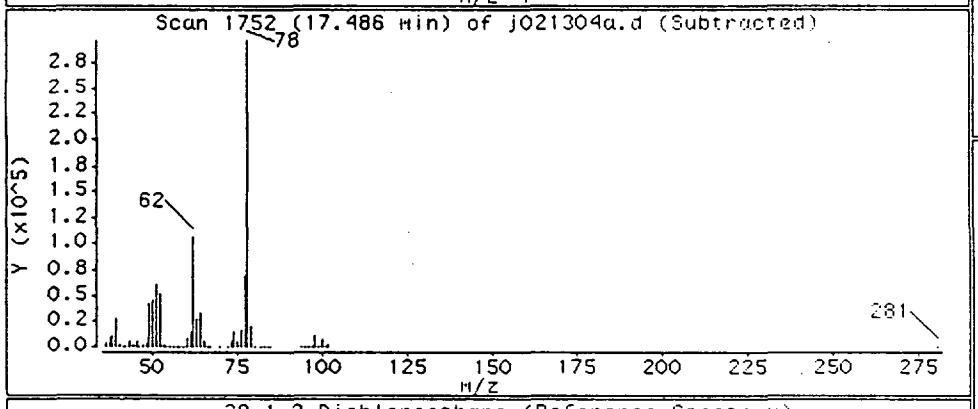
Operator: MH

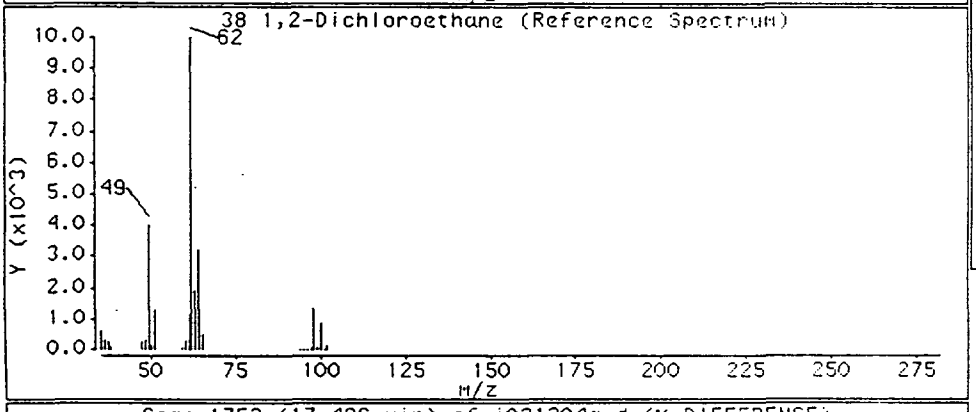
Column phase: RTx-624

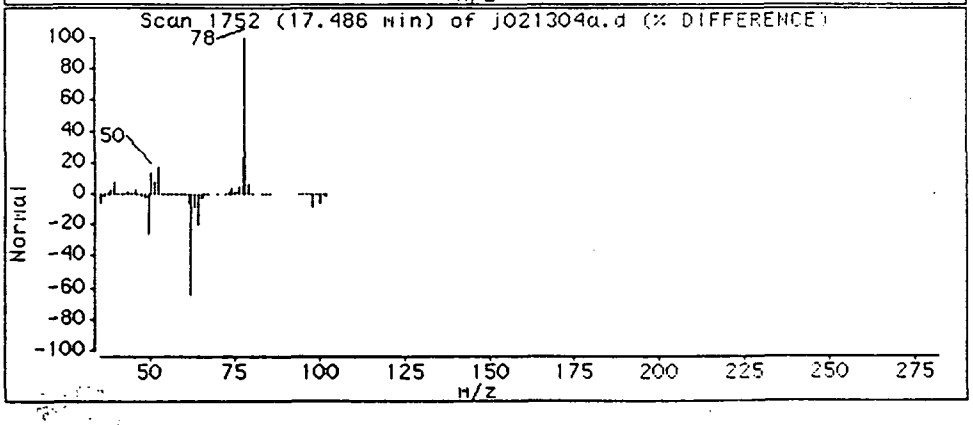
Column diameter: 0.58

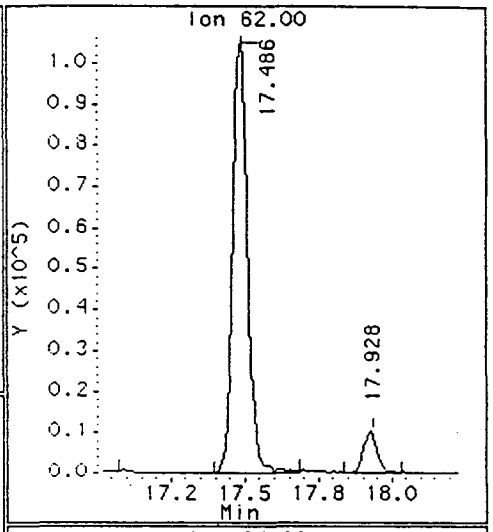
38 1,2-Dichloroethane

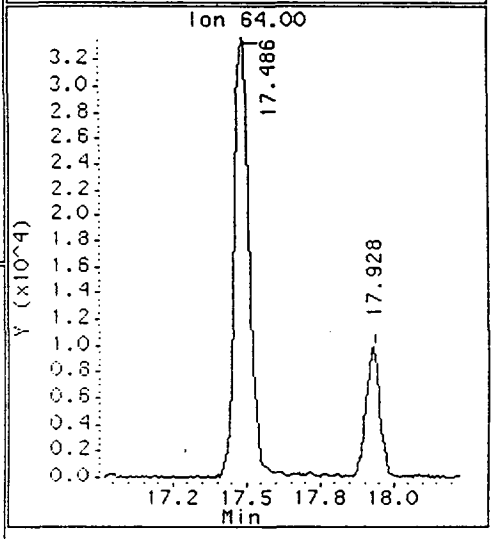












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

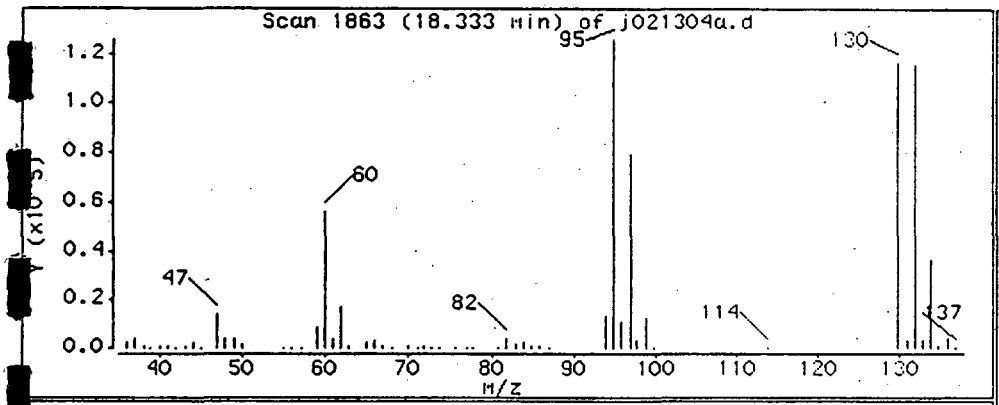
Sample Info: #296-67 25mL (5ppbv)

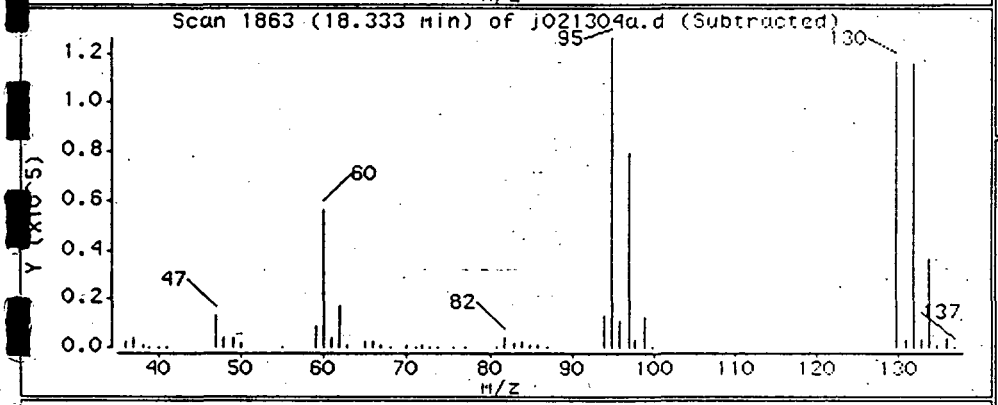
Operator: MH

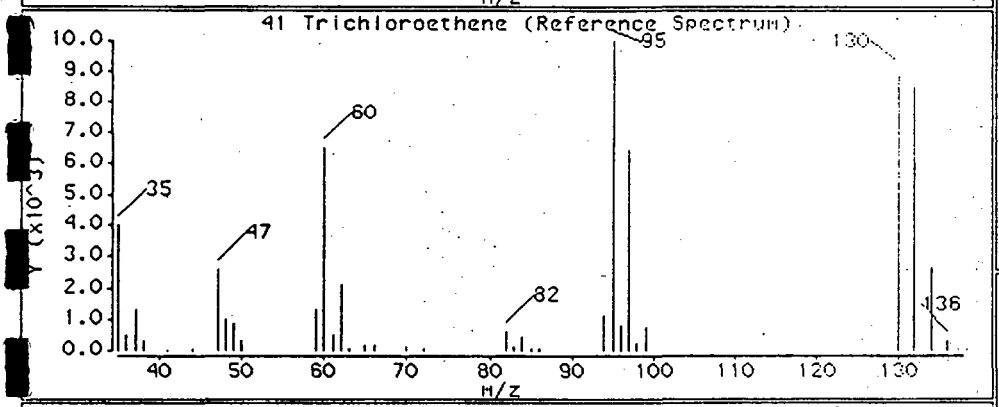
Column phase: RTx-624

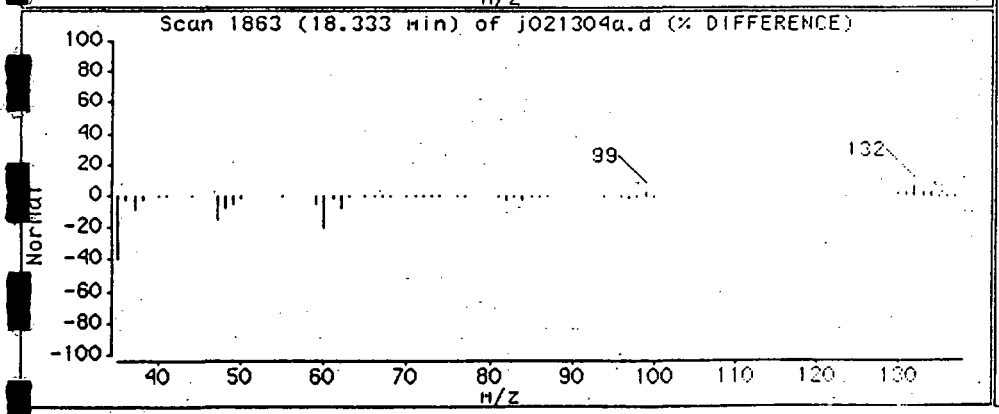
Column diameter: 0.58

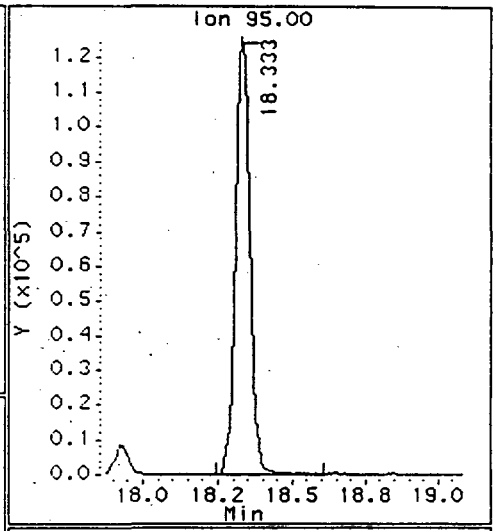
41 Trichloroethene

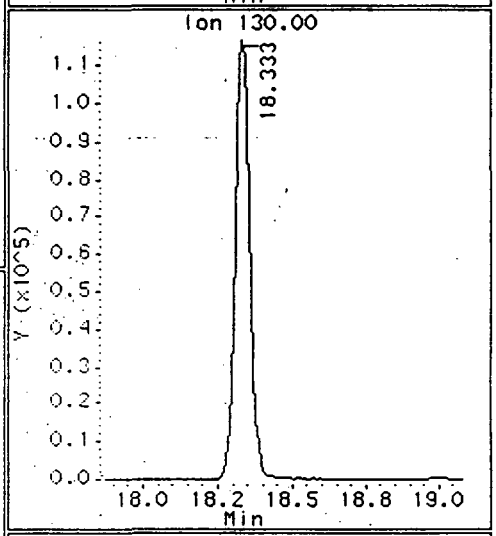


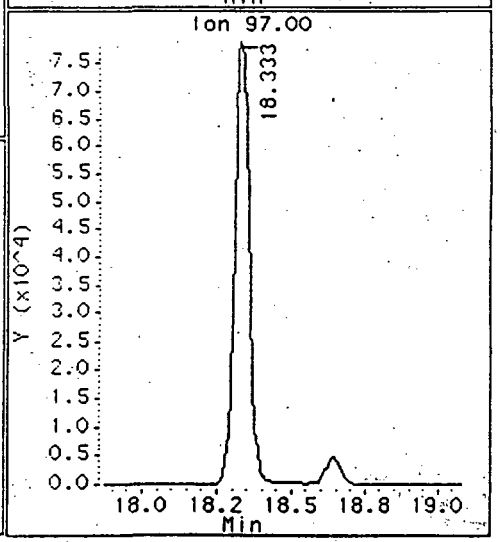












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

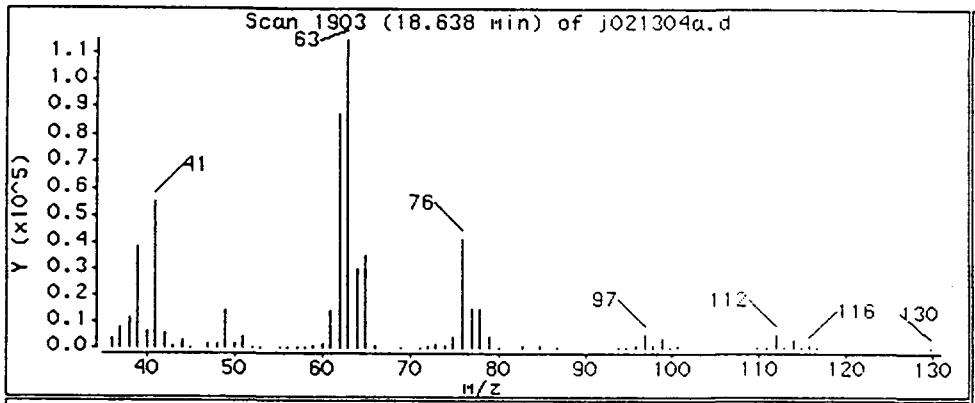
Sample Info: #296-67 25mL (5ppbv)

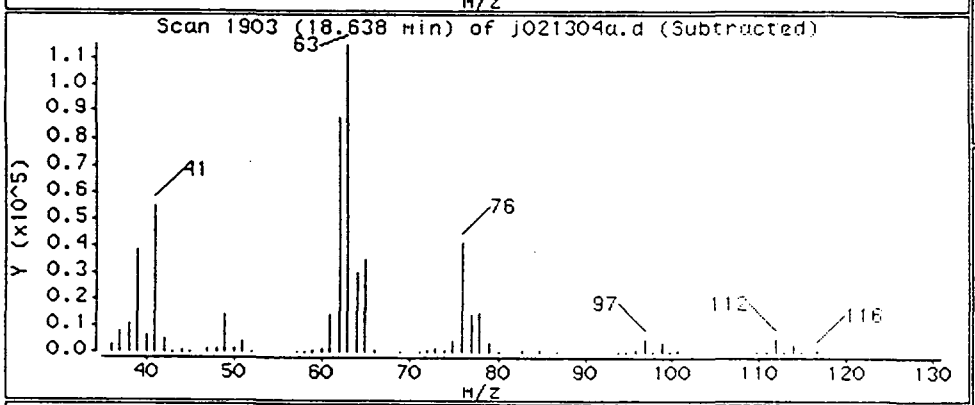
Operator: MH

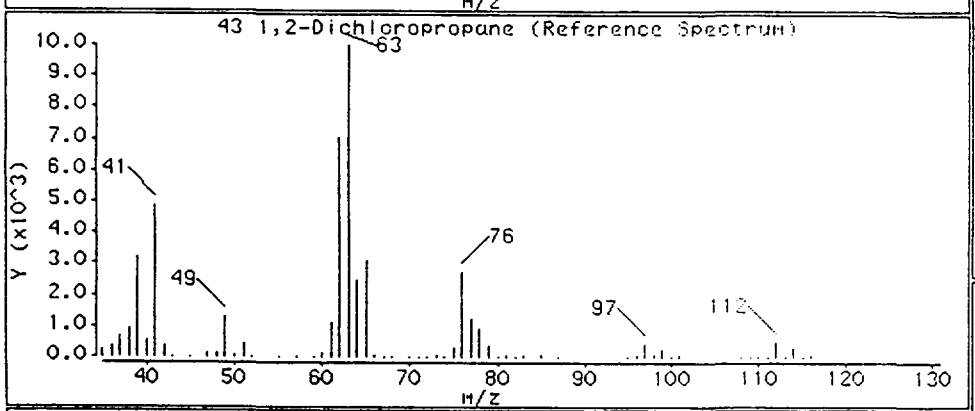
Column phase: RTx-624

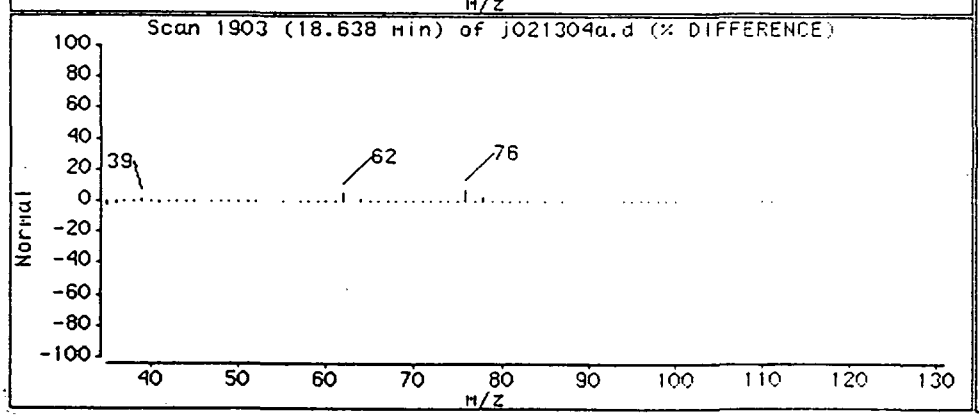
Column diameter: 0.58

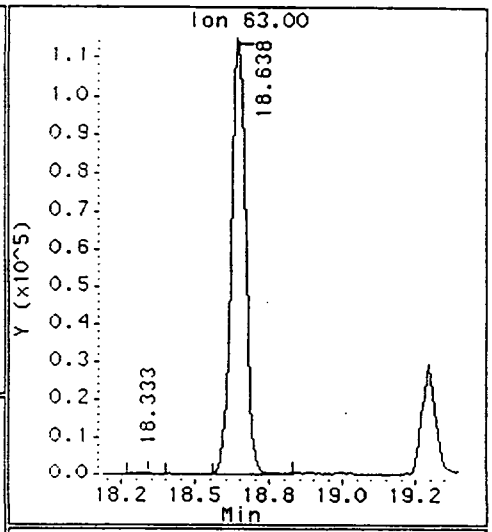
43 1,2-Dichloropropane

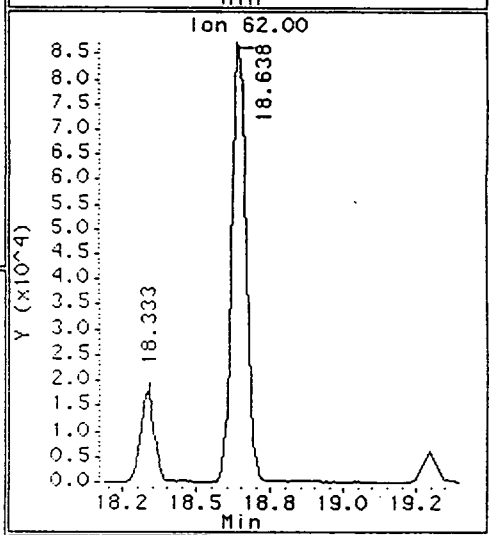


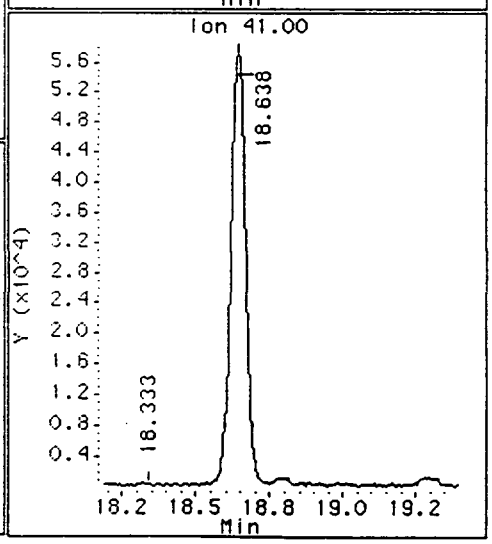






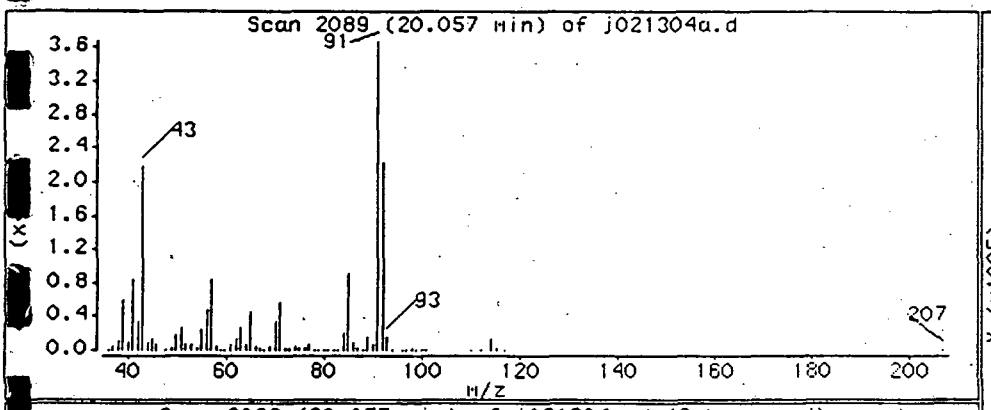


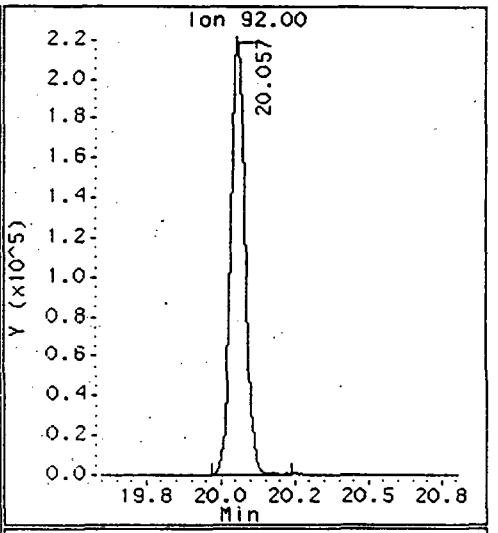


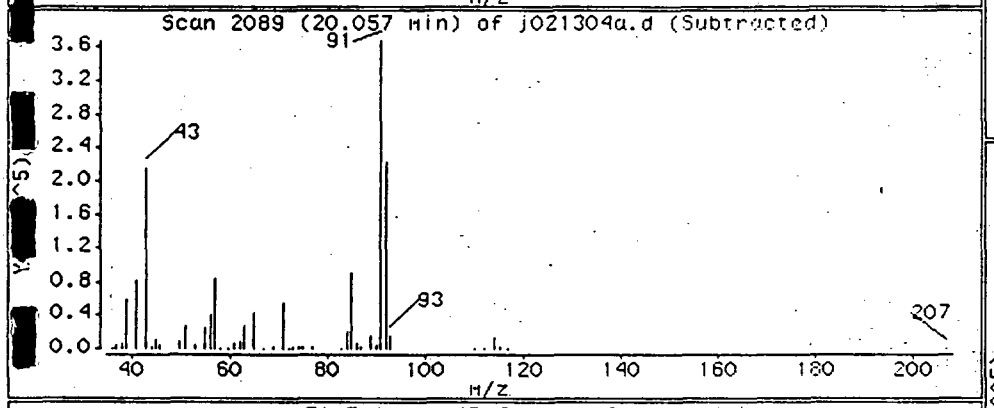


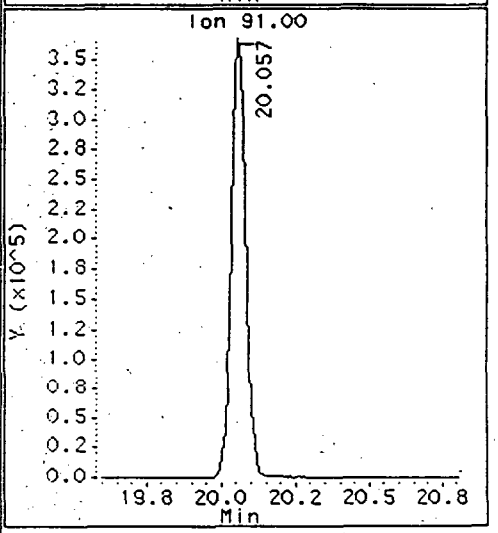
Data File: /chem/msdj.i/j-13feb.b/j021304a.d
Date : 13-FEB-1997 10:47
Client ID: Method Spike
Instrument: msdj.i
Sample Info: #296-67 25mL (5ppbv)
Operator: MH
Column phase: RTx-624
Column diameter: 0.58

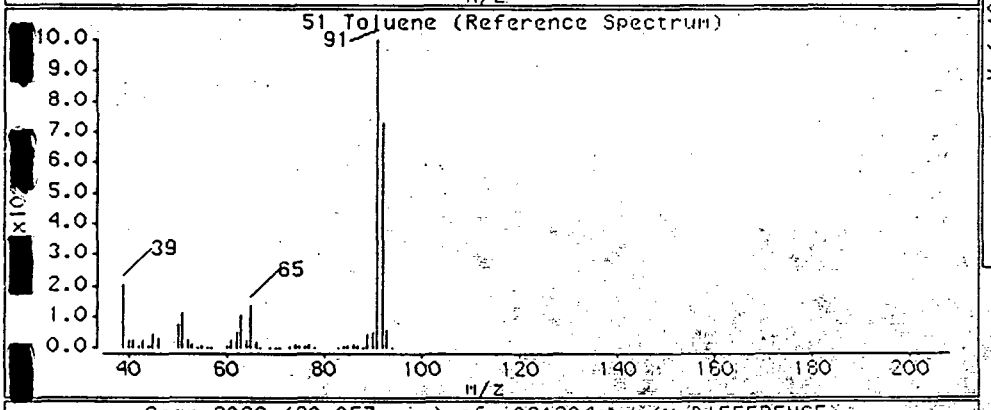
51 Toluene

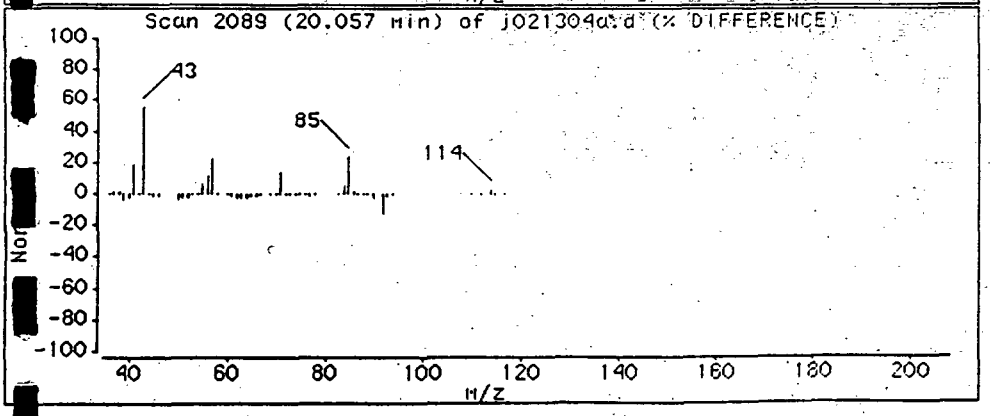












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

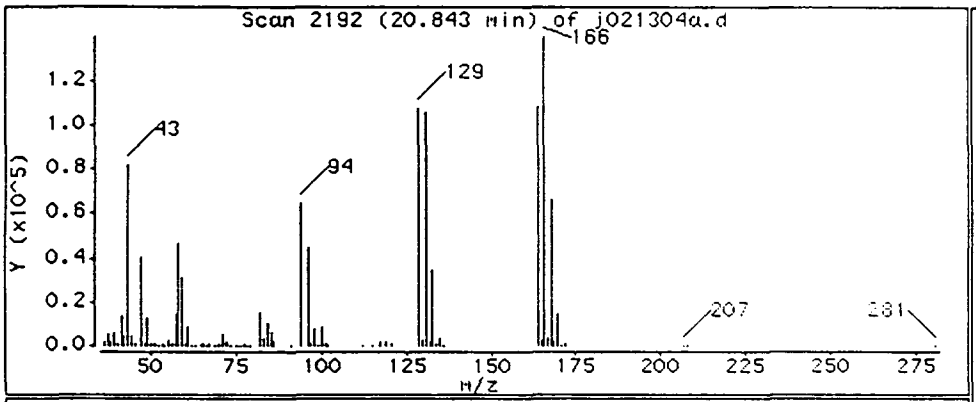
Sample Info: #296-67 25mL (5ppbv)

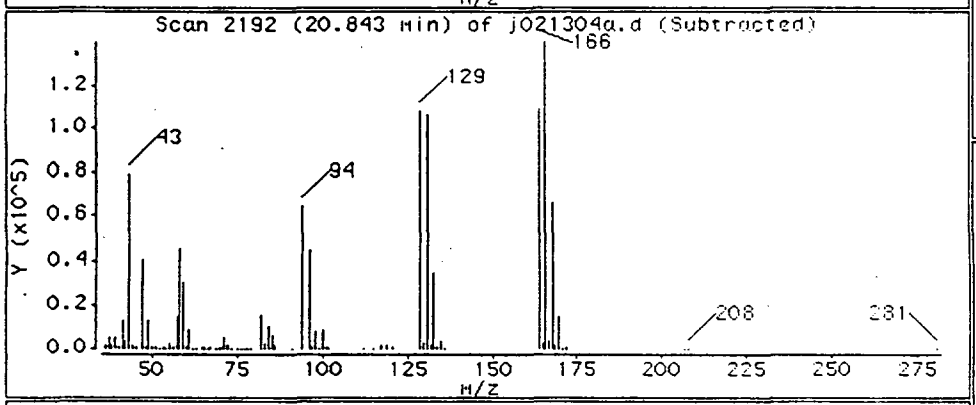
Operator: MH

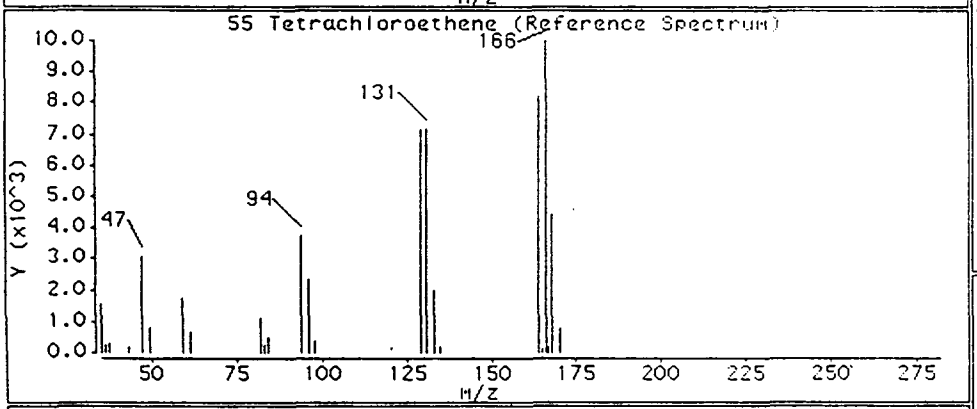
Column phase: RTx-624

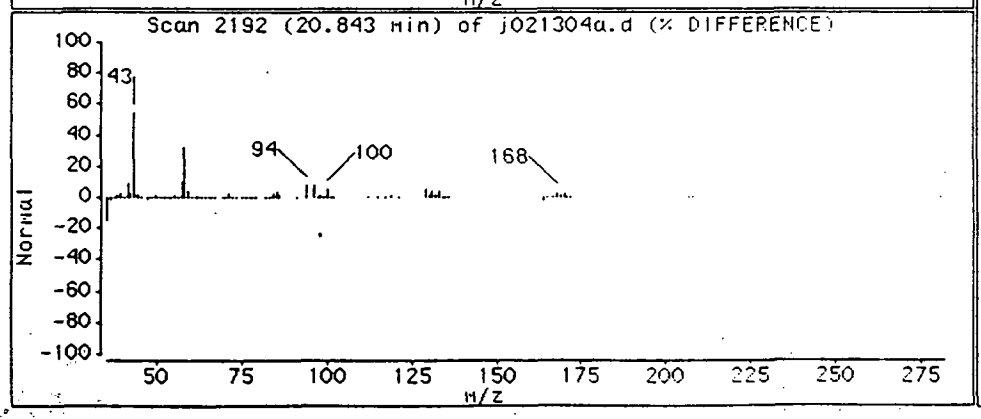
Column diameter: 0.58

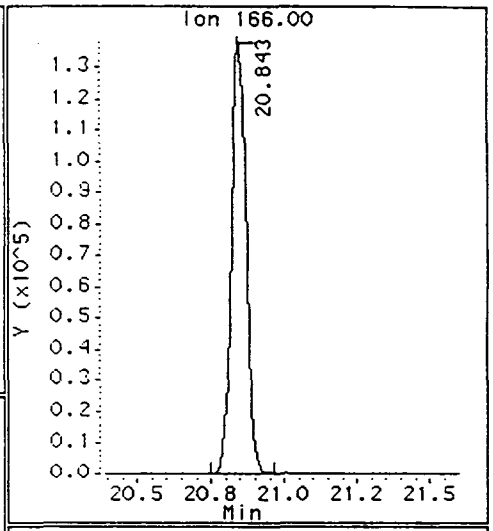
55 Tetrachloroethene

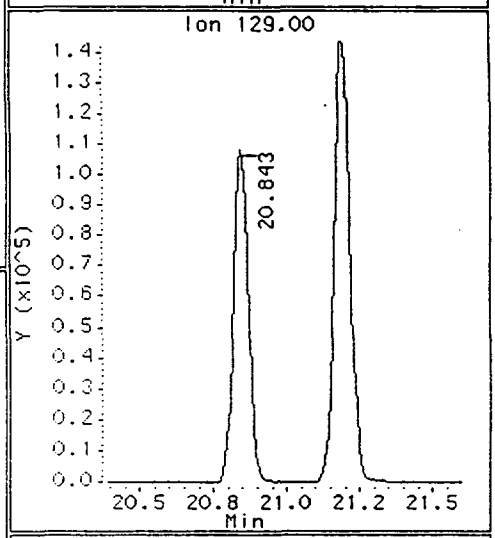


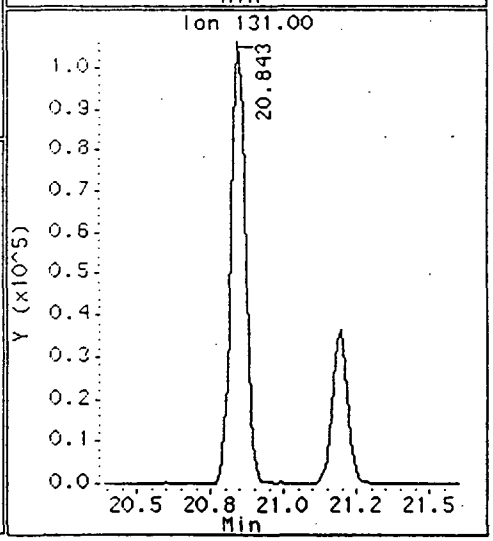












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

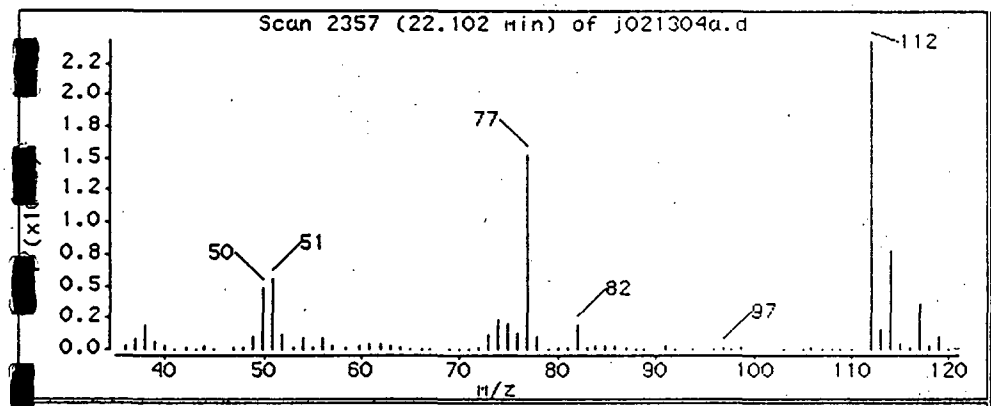
Sample Info: #296-67 25mL (5ppbv)

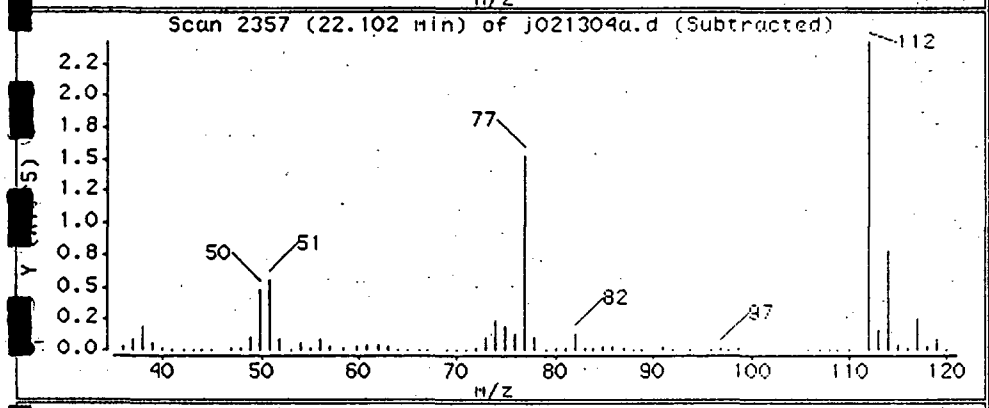
Operator: MH

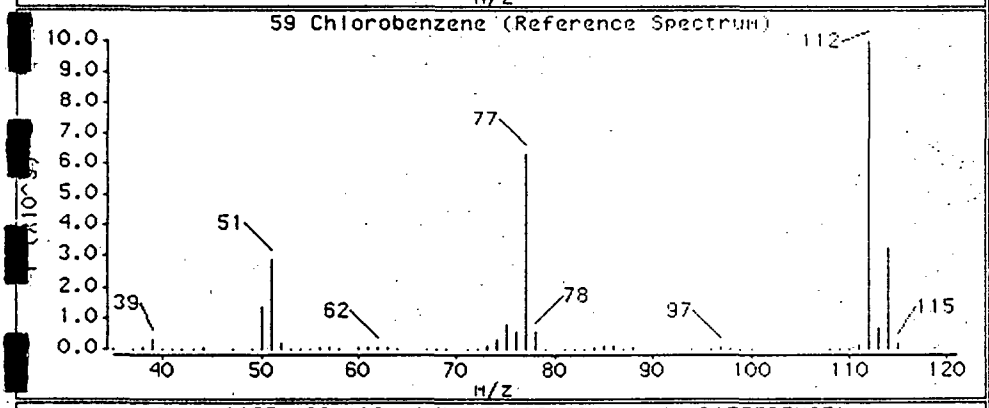
Column phase: RTx-624

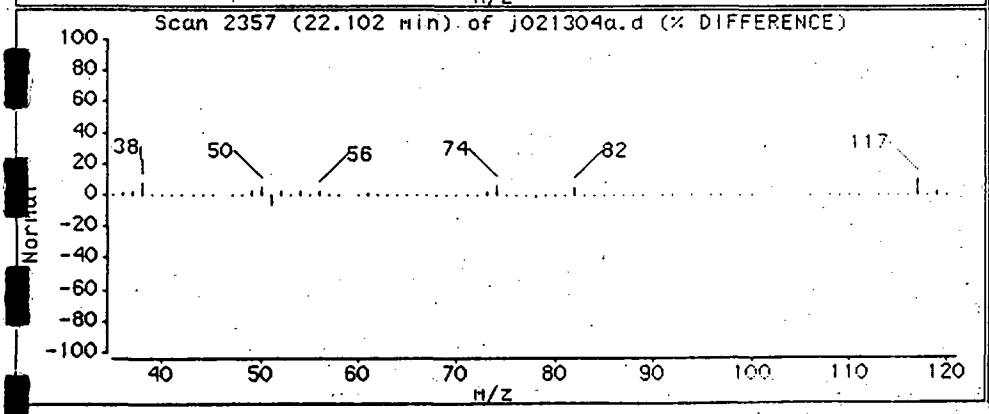
Column diameter: 0.58

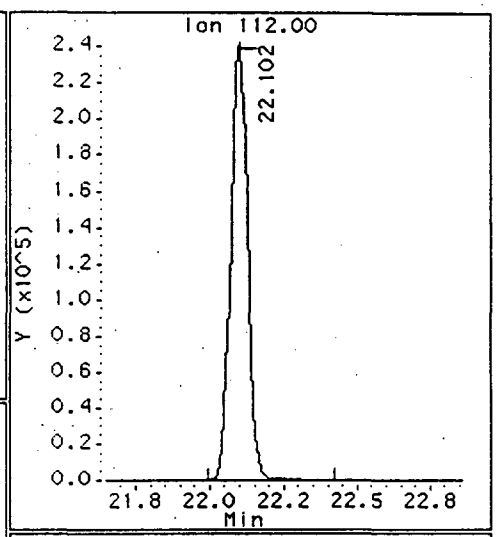
59 Chlorobenzene

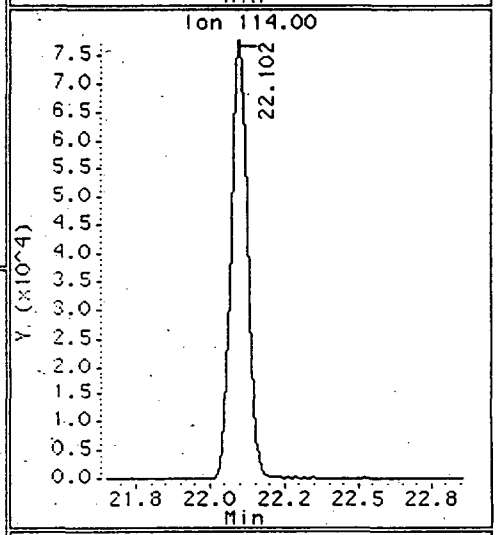


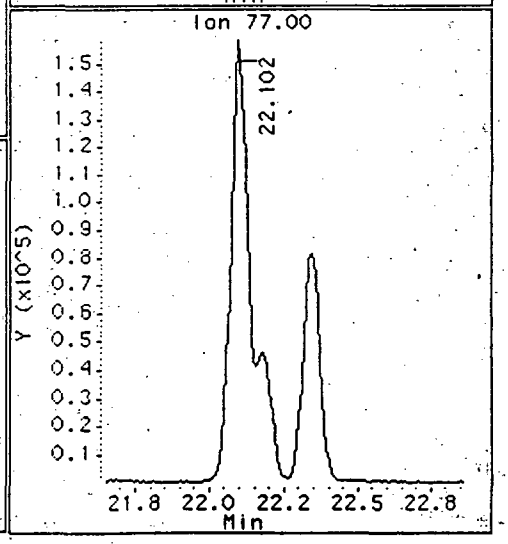












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

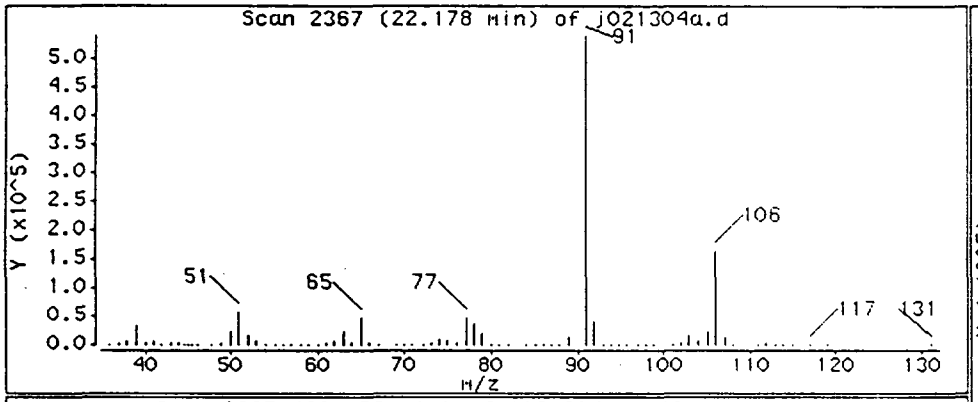
Sample Info: #296-67 25mL (5ppbv)

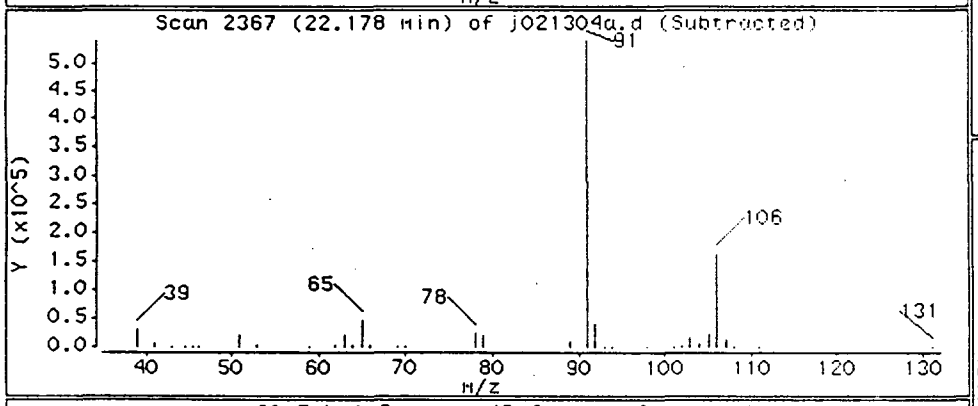
Operator: MH

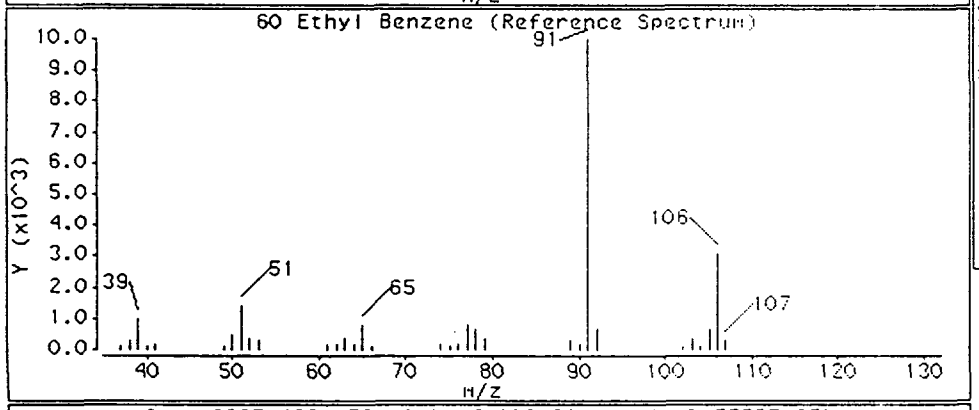
Column phase: RTx-624

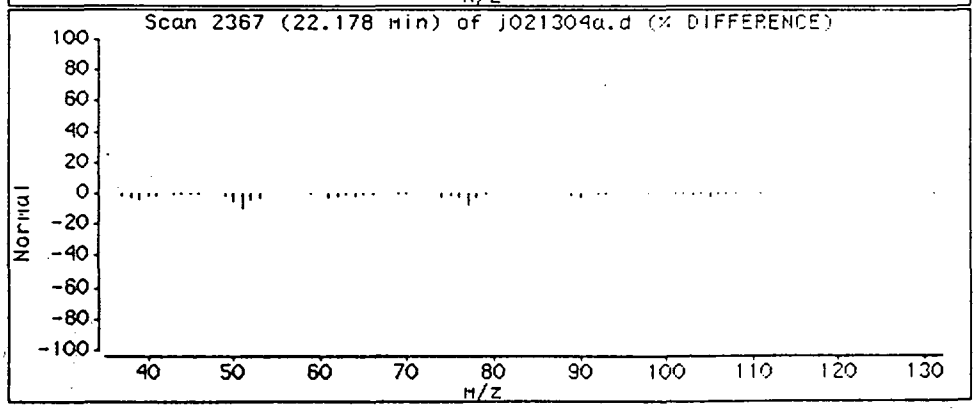
Column diameter: 0.58

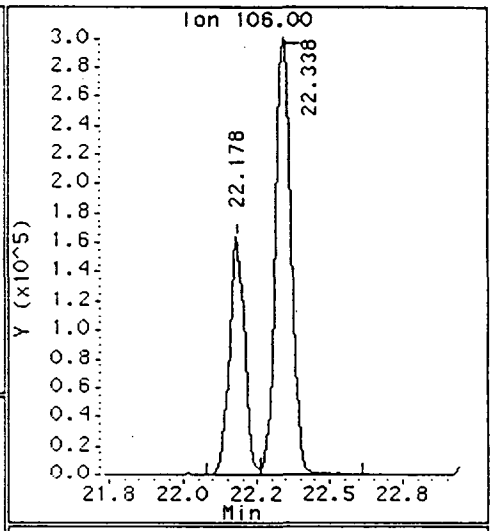
60 Ethyl Benzene

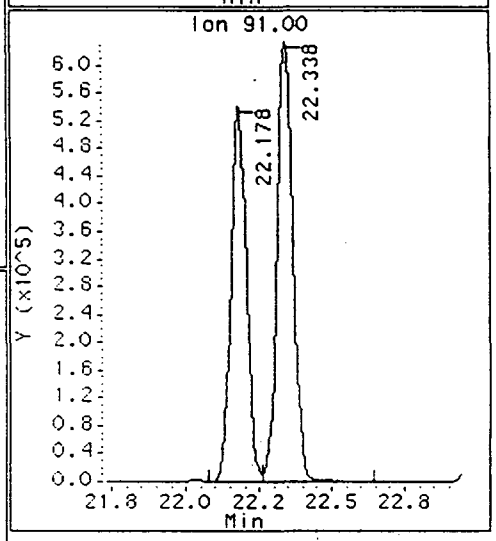












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

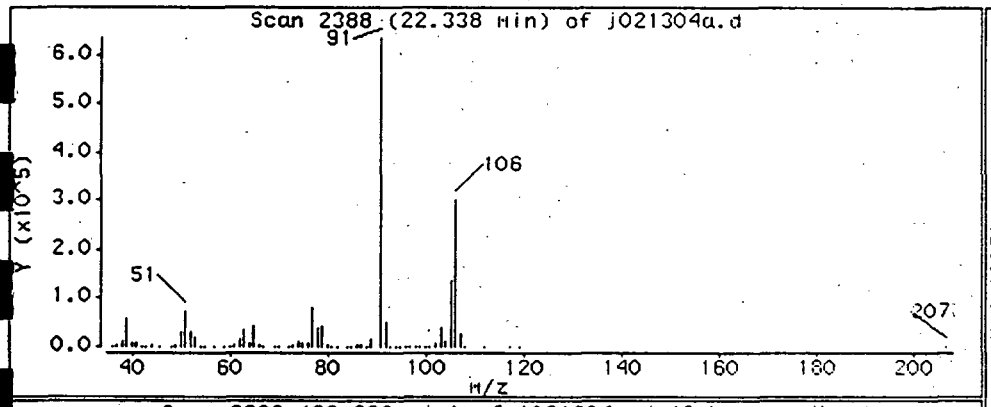
Sample Info: #296-67 25mL (5ppbv)

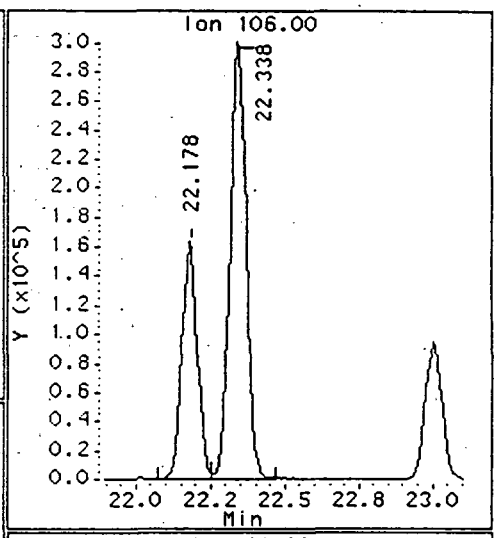
Operator: MH

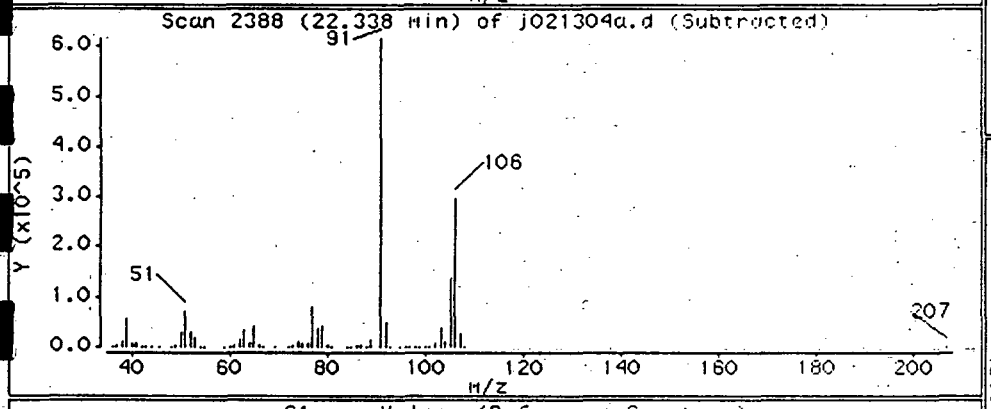
Column phase: RTx-624

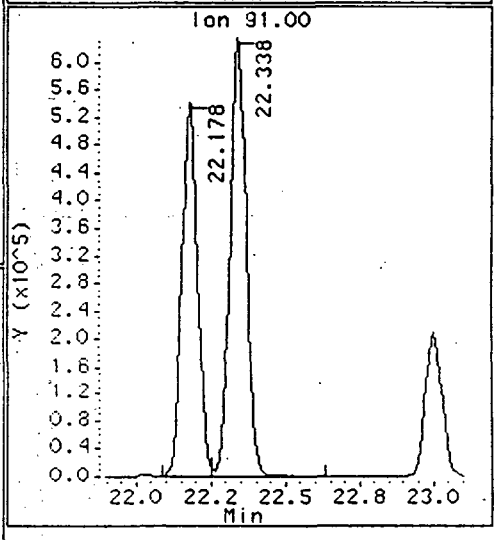
Column diameter: 0.58

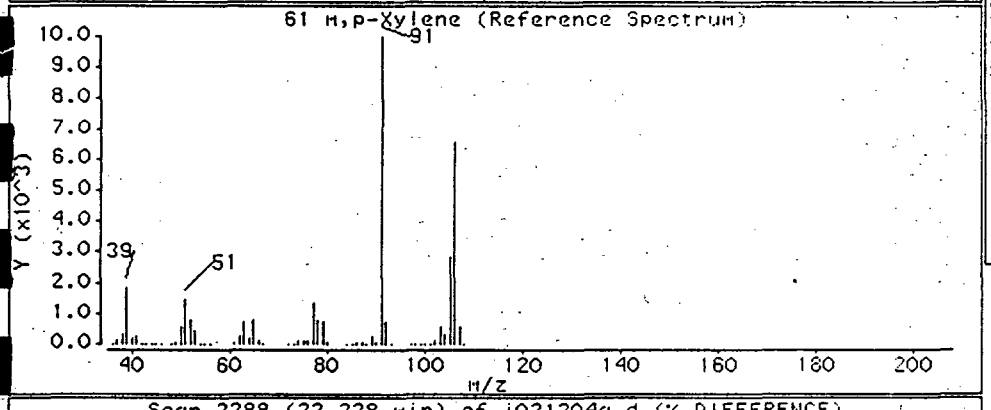
61 m,p-Xylene

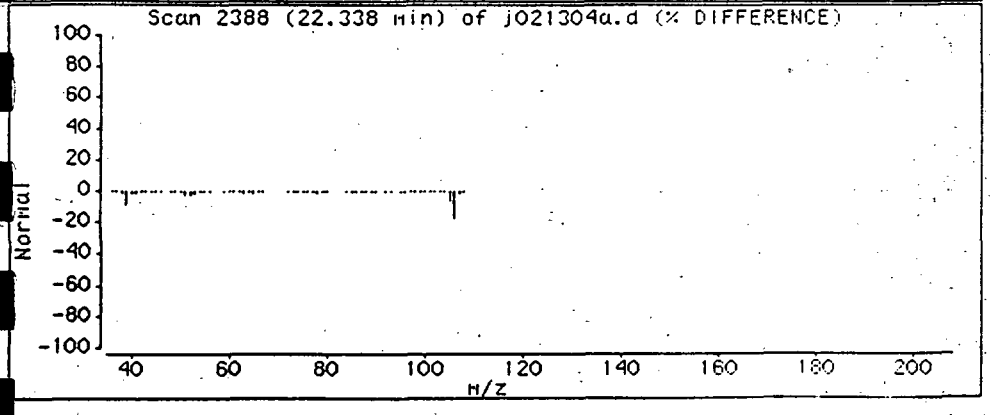












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

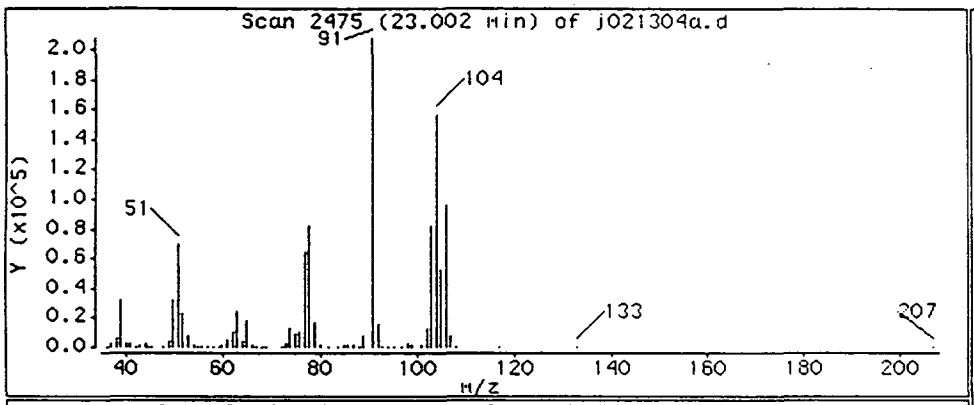
Sample Info: #296-67 25mL (5ppbv)

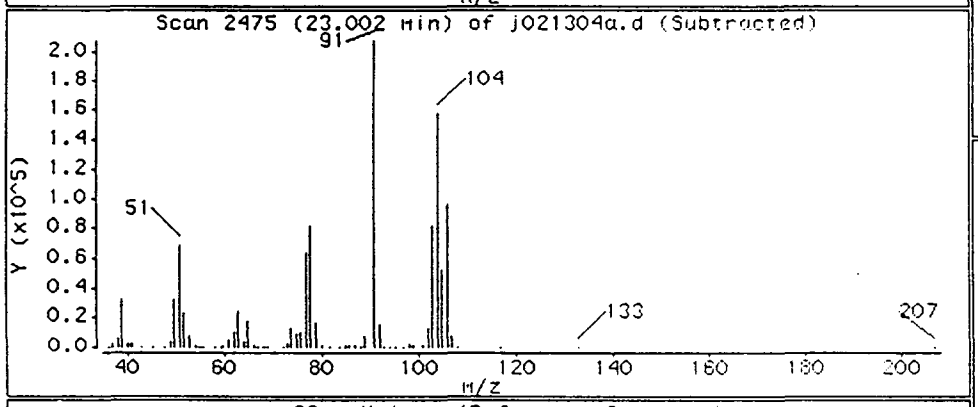
Operator: MH

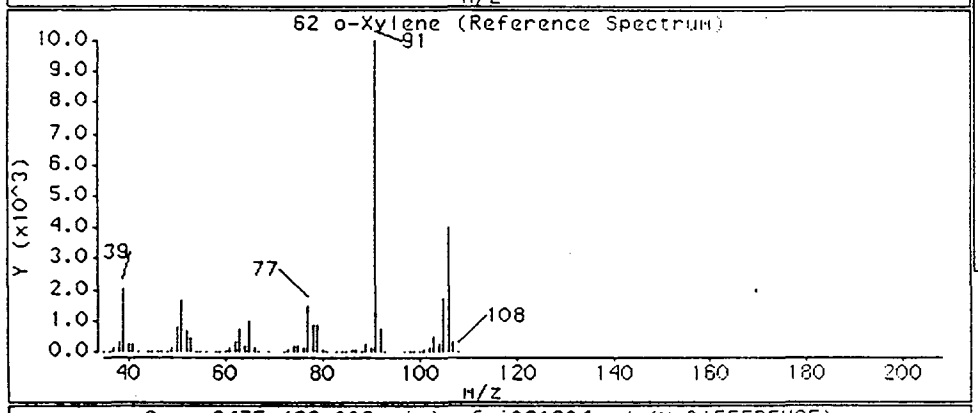
Column phase: RTx-624

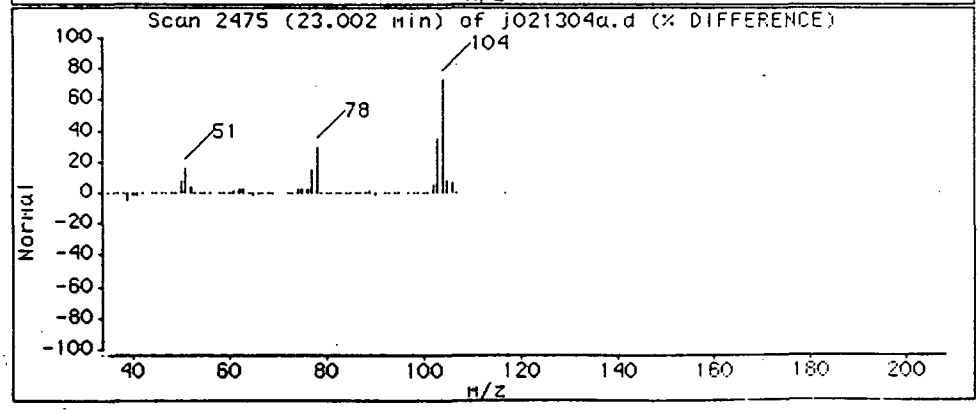
Column diameter: 0.58

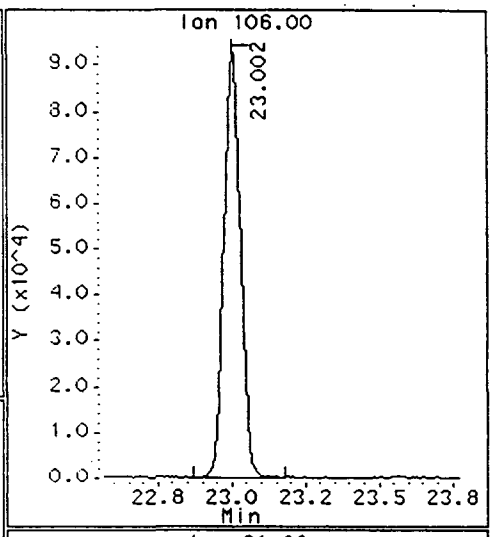
62 o-Xylene

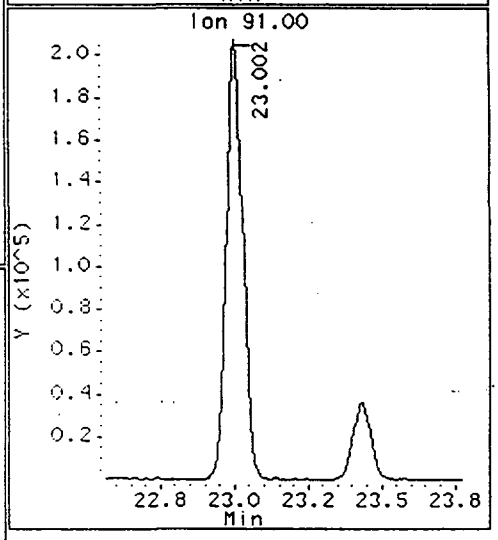












Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47

Client ID: Method Spike

Instrument: msdj.i

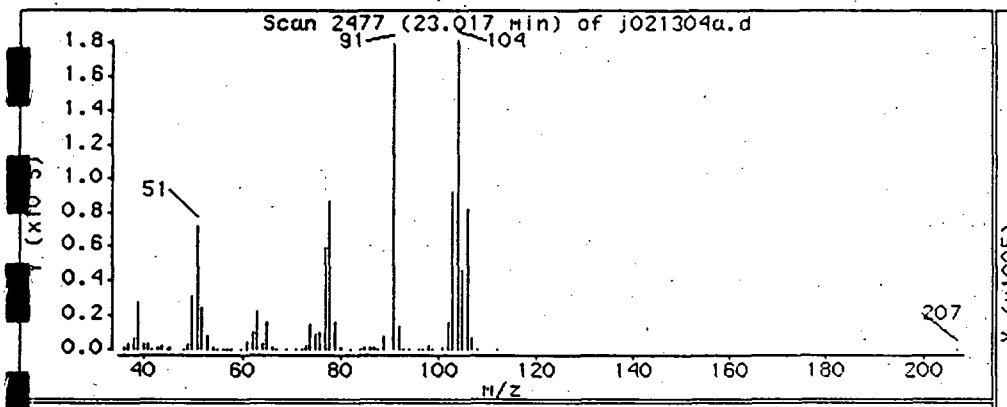
Sample Info: #296-67 25mL (5ppbv)

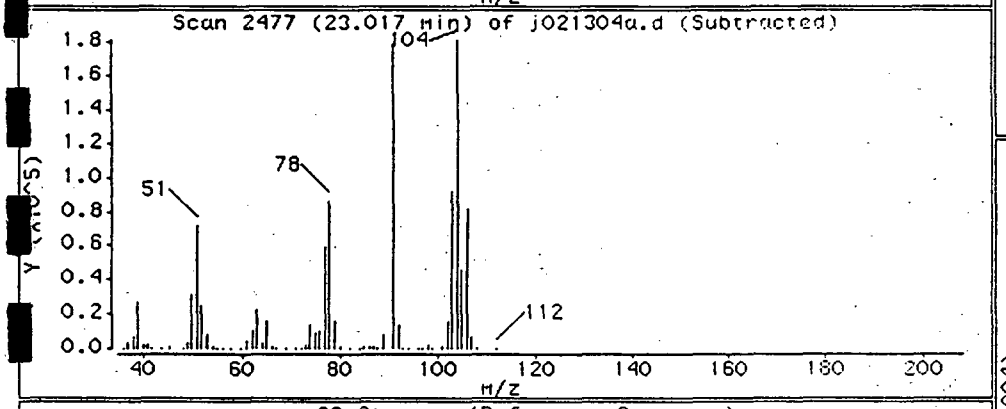
Operator: MH

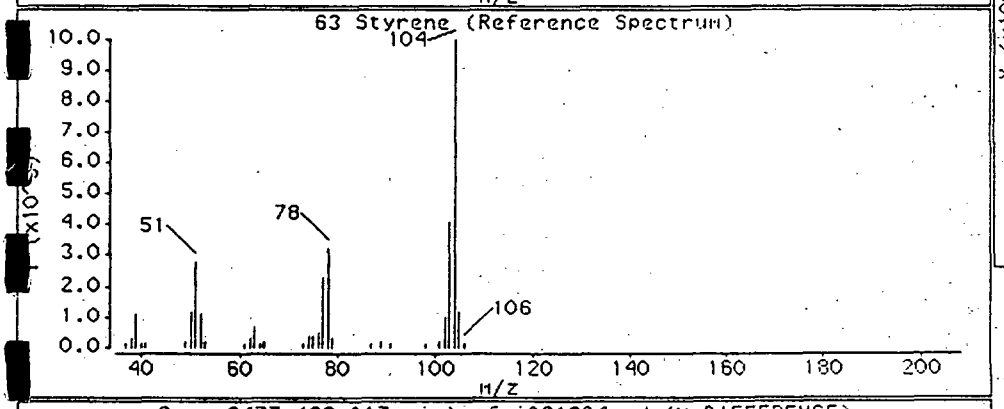
Column phase: RTx-624

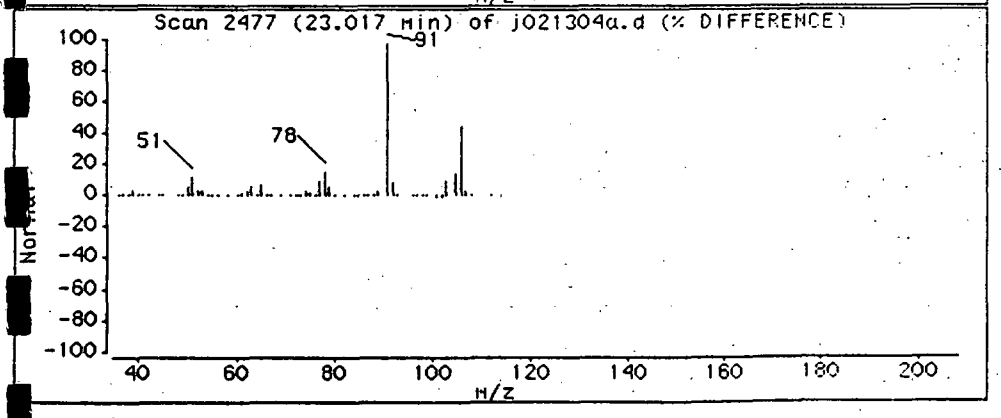
Column diameter: 0.58

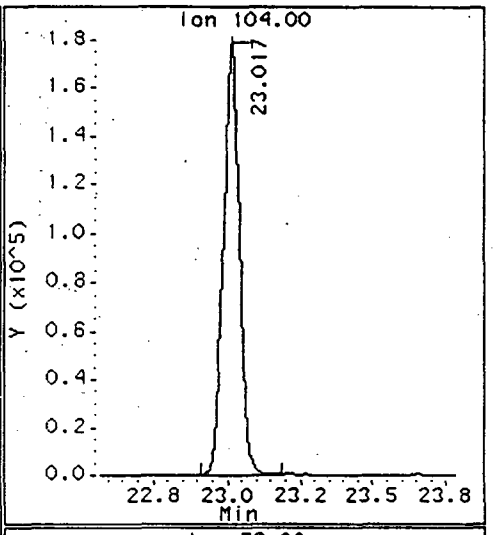
63 Styrene

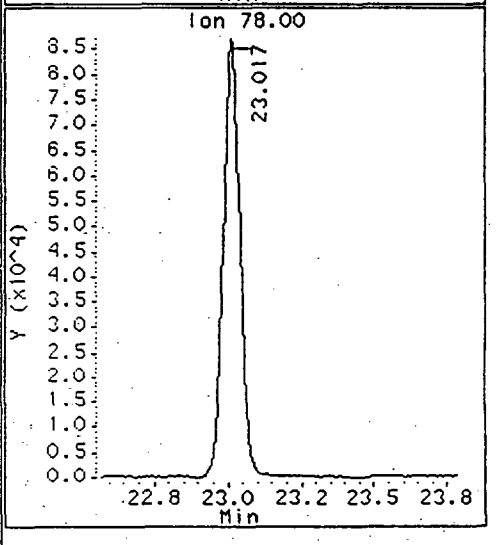








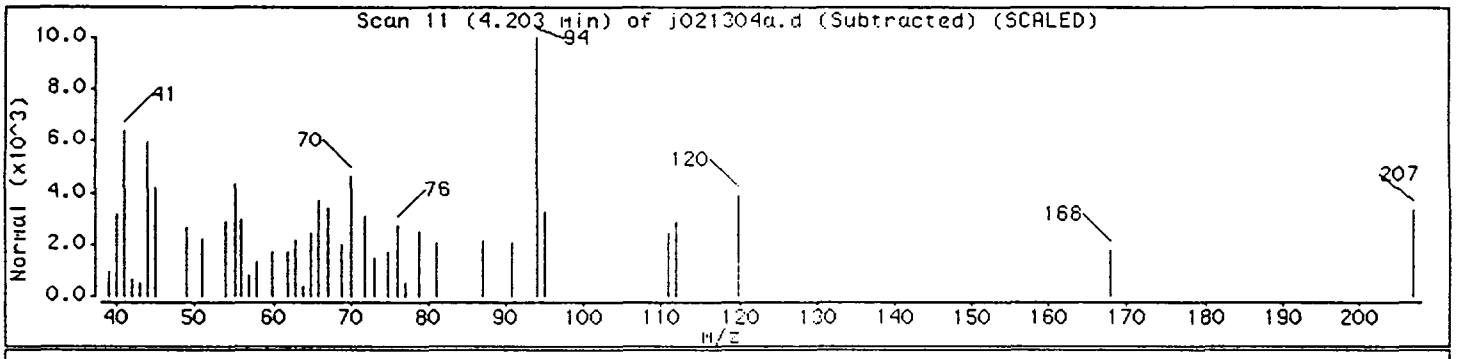




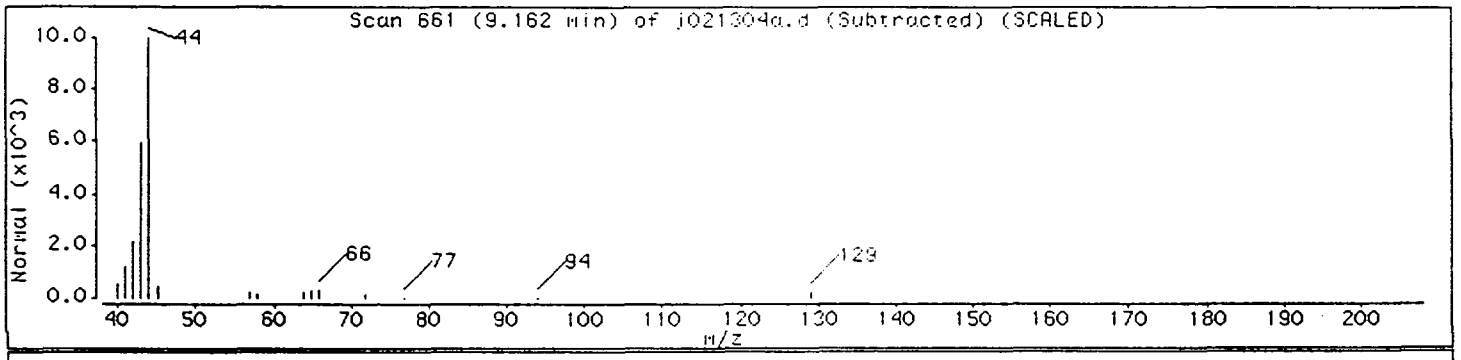
Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47
Instrument: msdj.i
Client ID: Method Spike
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Unknown			0	0



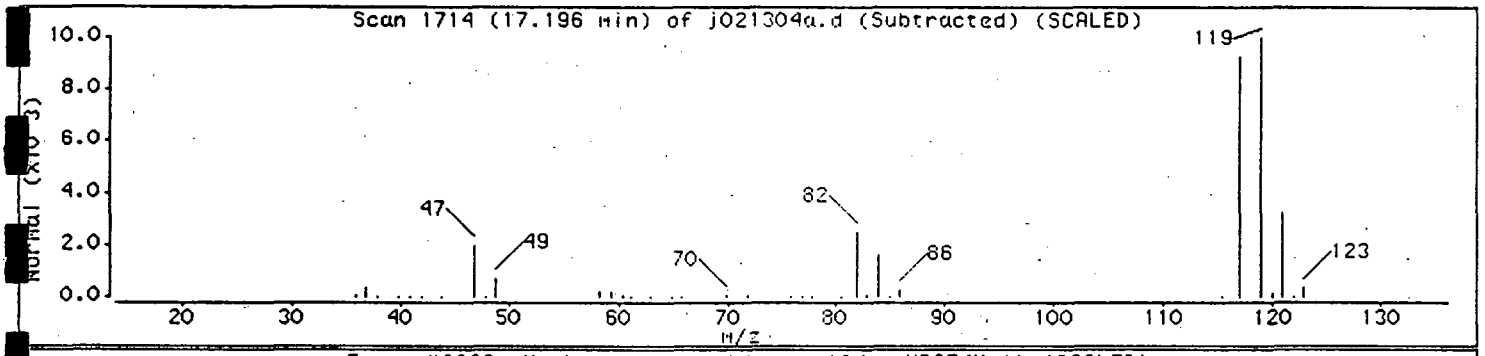
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Unknown			0	0

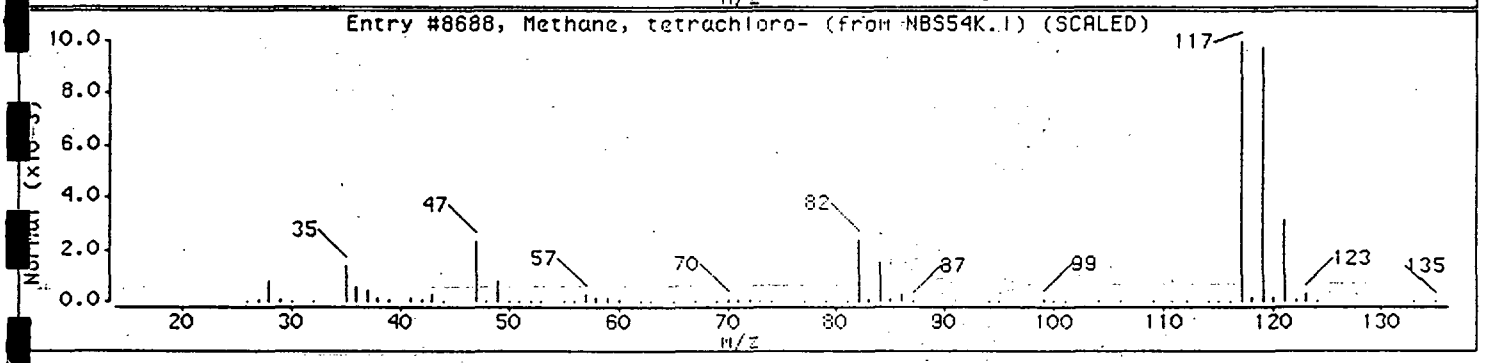


Data File: /chem/msdj.i/j-13feb.b/j021304a.d

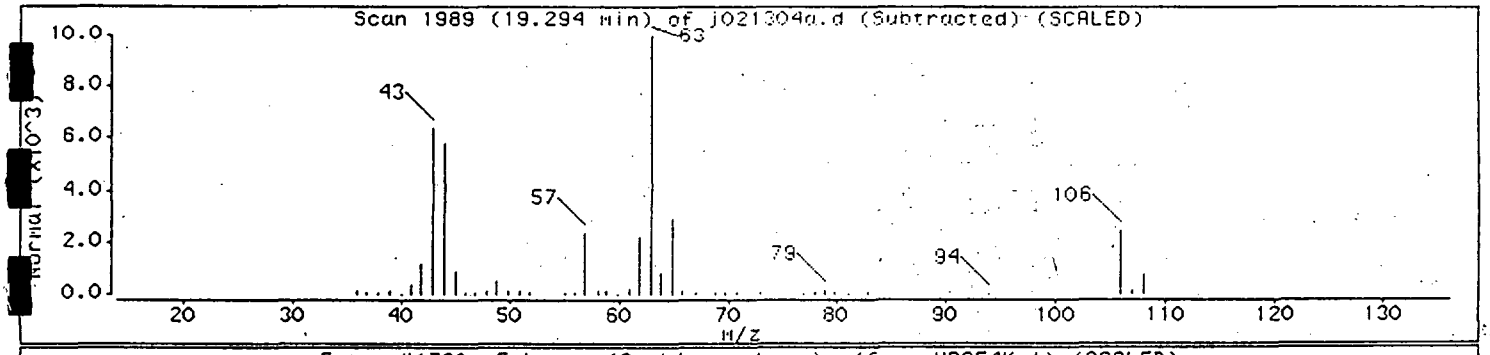
Date : 13-FEB-1997 10:47
Instrument: msdj.i
Client ID: Method Spike
Column phase: RTx-624 Column diameter: 0.58

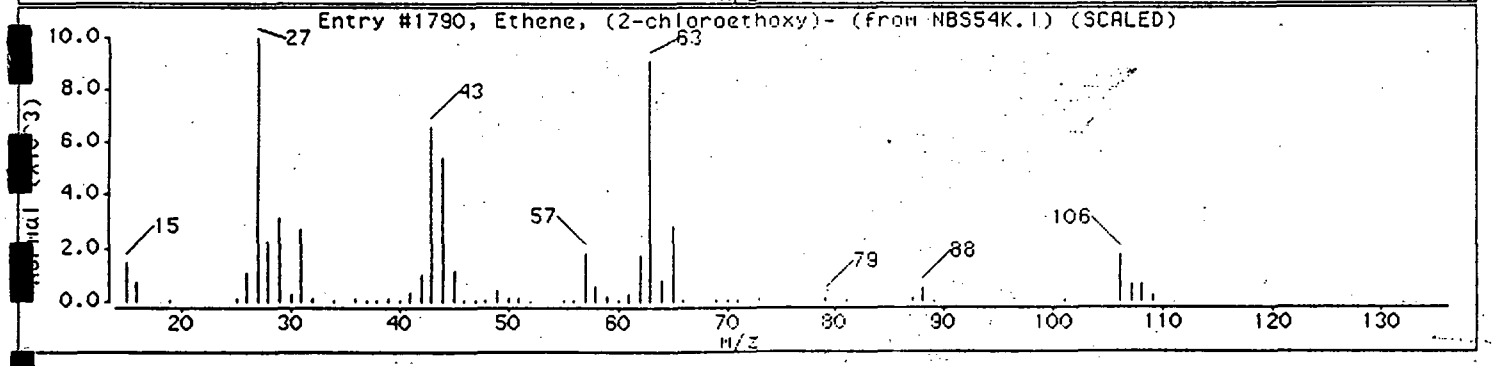
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Methane, tetrachloro-	56-23-5	NBS54K.I	8688	90





Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Ethene, (2-chloroethoxy)-	110-75-8	NBS54K.I	1790	91

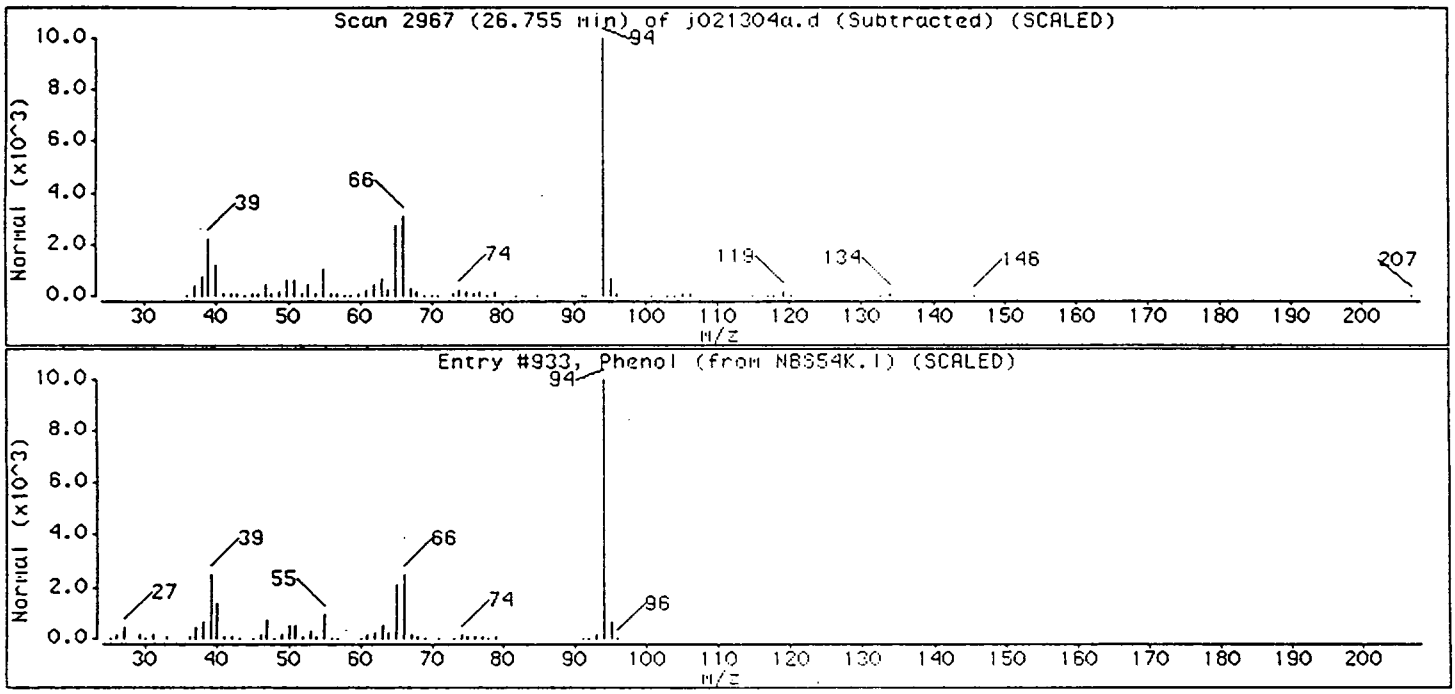




Data File: /chem/msdj.i/j-13feb.b/j021304a.d

Date : 13-FEB-1997 10:47
Instrument: msdj.i
Client ID: Method Spike
Column phase: RTx-624 Column diameter: 0.58

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Phenol	108-95-2	NBS54K.I	933	91



0222A

Air Toxics Limited

Data file : /chem/msdj.i/j-09jan.b/j010903.d
Lab Smp Id:
Inj Date : 09-JAN-1997 09:07
Operator : FA Inst ID: msdj.i
Smp Info : BFB Tune Check #275-8-25 2.0ul
Misc Info :
Comment :
Method : /chem/msdj.i/j-09jan.b/bfb.m
Meth Date : 09-Jan-1997 09:13 fayala Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.12 Sample Matrix: WATER
Concentration Formula: Uf * Vf * Vi

Name	Value	Description
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.019	8.019	0.000	95	65480				100.00
8.019	8.019	0.000	50	11913			15.00- 40.00	18.19
8.019	8.019	0.000	75	29837			30.00- 60.00	45.57
8.019	8.019	0.000	96	4304			5.00- 9.00	6.57
8.019	8.019	0.000	173	0			0.00- 2.00	0.00
8.019	8.019	0.000	174	46610			50.00- 100.00	71.18
8.019	8.019	0.000	175	3256			5.00- 9.00	6.99
8.019	8.019	0.000	176	45104			95.00- 101.00	96.77
8.019	8.019	0.000	177	3143			5.00- 9.00	6.97

0222B

Data File: /chem/msdj.i/j-09jan.b/j010903.d
Report Date: 09-Jan-1997 09:13

Air Toxics Limited

TARGET COMPOUNDS

Client Name:
Lab Smp Id:
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: bfb
Data Type: MS DATA
Misc Info:

Client SDG: j-09jan
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: FA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
460-00-4	bfb	0.0	