

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121824\
 Data File : VL041808.D
 Acq On : 18 Dec 2024 23:08
 Operator : SY/MD
 Sample : P5295-02 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0AC9DL

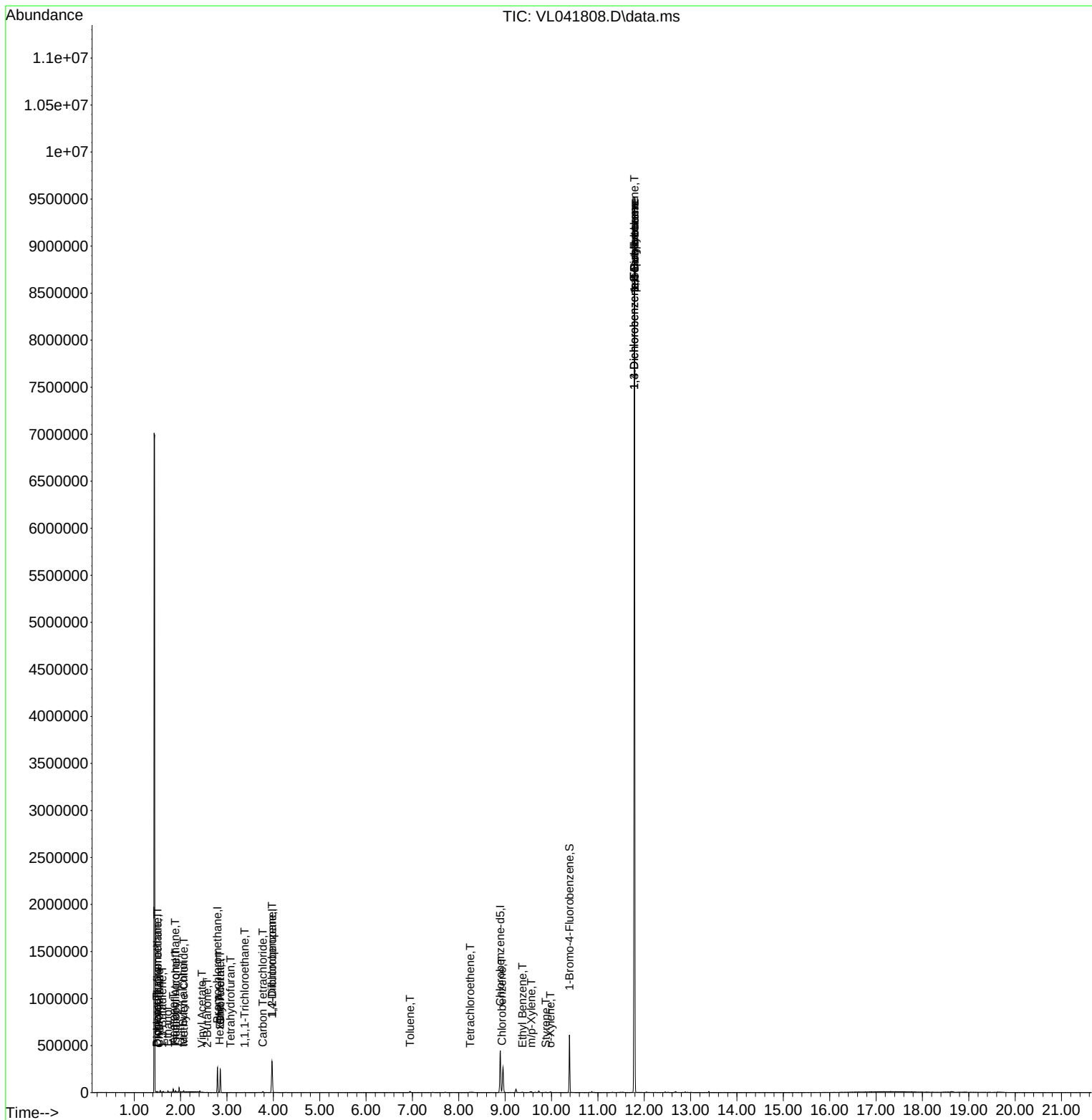
Quant Time: Dec 19 08:01:14 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121624AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Dec 19 07:32:09 2024
 Response via : Initial Calibration

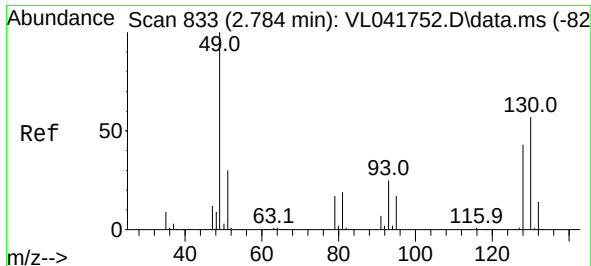
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards							
1) Bromochloromethane		2.797	49	71123	10.000	ppbv	0.01
33) 1,4-Difluorobenzene		3.975	114	168368	10.000	ppbv	0.02
55) Chlorobenzene-d5		8.894	117	158378	10.000	ppbv	0.02
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene		10.387	95	132533	10.042	ppbv	0.01
Spiked Amount		10.000	Range	65 - 135	Recovery	= 100.400%	
Target Compounds							
							Qvalue
2) Dichlorodifluoromethane		1.502	85	1642	0.130	ppbv #	71
4) Chloromethane		1.534	50	528	0.107	ppbv #	75
8) Dichlorotetrafluoroethane		1.502	85	1642	0.145	ppbv #	20
9) Propene		1.489	41	993	0.198	ppbv	98
11) Trichlorofluoromethane		1.881	101	922	0.069	ppbv	99
13) Ethanol		1.725	45	5417	13.013	ppbv #	34
15) Acetone		1.842	43	14582	1.054	ppbv	97
16) 1,3-Butadiene		1.606	39	511	0.094	ppbv #	36
17) tert-Butyl alcohol		2.052	59	808	0.059	ppbv #	93
19) Isopropyl Alcohol		1.894	45	5356	0.645	ppbv #	39
20) Methylene Chloride		2.068	84	1852	0.469	ppbv	94
23) Vinyl Acetate		2.460	43	2407	0.375	ppbv #	91
25) Ethyl Acetate		2.852	43	1628	0.063	ppbv #	18
26) Hexane		2.842	57	309	0.032	ppbv #	1
29) Chloroform		2.855	83	92098	6.186	ppbv	100
32) 1,1,1-Trichloroethane		3.382	97	663	0.044	ppbv #	61
34) 2-Butanone		2.570	43	2200	0.162	ppbv	93
35) Carbon Tetrachloride		3.774	117	4129	0.345	ppbv	88
39) 1,2-Dichloropropane		3.972	63	47676	7.569	ppbv #	18
41) Tetrahydrofuran		3.075	42	232	0.031	ppbv #	39
52) Tetrachloroethene		8.247	164	259	0.040	ppbv #	71
53) Toluene		6.949	91	4465	0.226	ppbv #	44
57) Chlorobenzene		8.930	112	503	0.031	ppbv #	38
58) Ethyl Benzene		9.370	91	2117	0.074	ppbv	98
59) m/p-Xylene		9.561	91	1606	0.070	ppbv #	100
60) o-Xylene		9.975	91	2603	0.113	ppbv	97
61) Styrene		9.878	104	521	0.052	ppbv #	80
65) tert-Butylbenzene		11.788	119	55082	1.767	ppbv #	23
67) sec-Butylbenzene		11.788	105	14568	0.338	ppbv #	76
69) p-Isopropyltoluene		11.788	119	55048	1.549	ppbv #	57
75) 1,3-Dichlorobenzene		11.782	146	1016	0.066	ppbv #	23
76) 1,4-Dichlorobenzene		11.782	146	1016	0.067	ppbv #	24
77) 1,2-Dichlorobenzene		11.788	146	1635	0.110	ppbv #	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quant Time: Dec 19 08:01:14 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121624AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Dec 19 07:32:09 2024
Response via : Initial Calibration

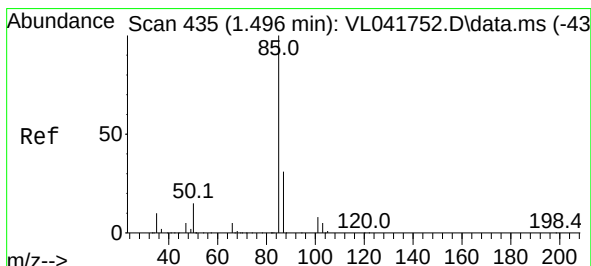
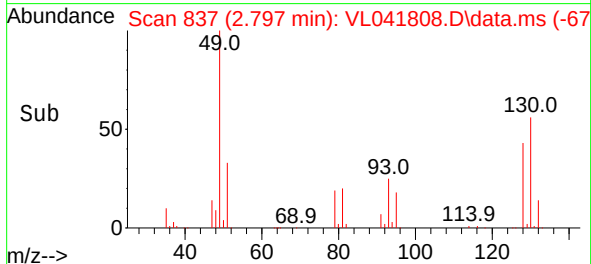
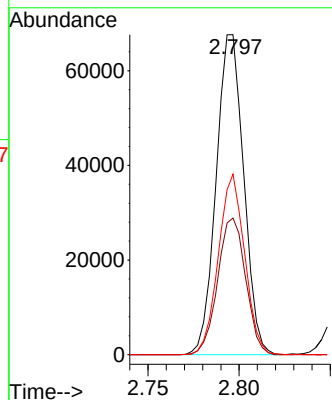
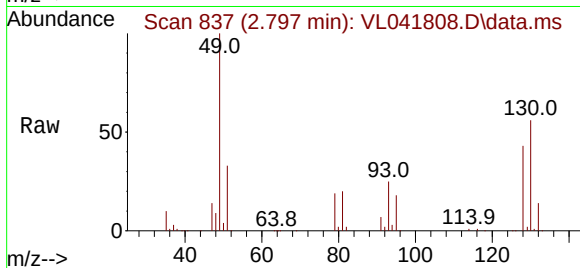




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.797 min Scan# 841
 Delta R.T. 0.013 min
 Lab File: VL041808.D
 Acq: 18 Dec 2024 23:08

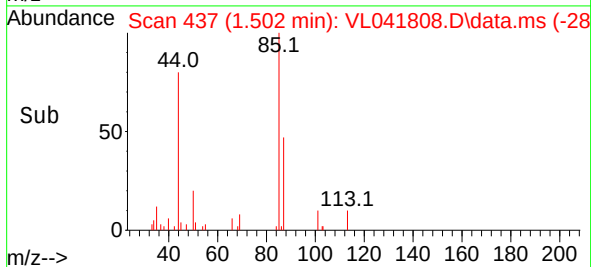
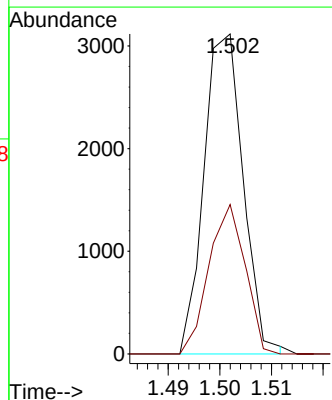
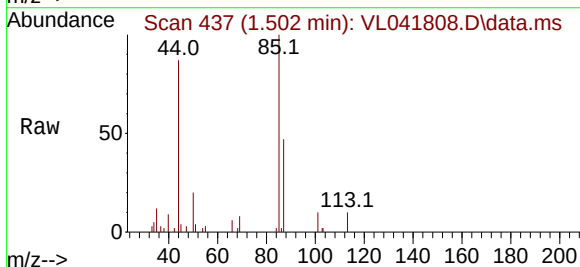
Instrument :
 MSVOA_1
 ClientSampleId :
 C0AC9DL

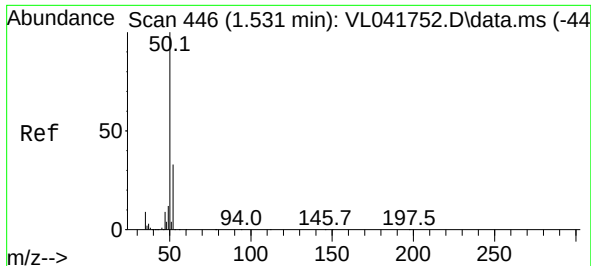
Tgt Ion: 49 Resp: 71123
 Ion Ratio Lower Upper
 49 100
 128 43.3 21.6 64.6
 130 53.8 28.3 85.0



#2
 Dichlorodifluoromethane
 Concen: 0.130 ppbv
 RT: 1.502 min Scan# 437
 Delta R.T. 0.006 min
 Lab File: VL041808.D
 Acq: 18 Dec 2024 23:08

Tgt Ion: 85 Resp: 1642
 Ion Ratio Lower Upper
 85 100
 87 46.7 24.5 36.7#

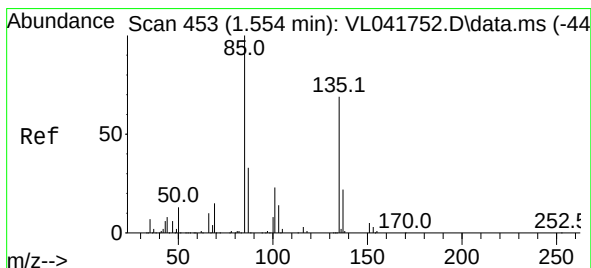
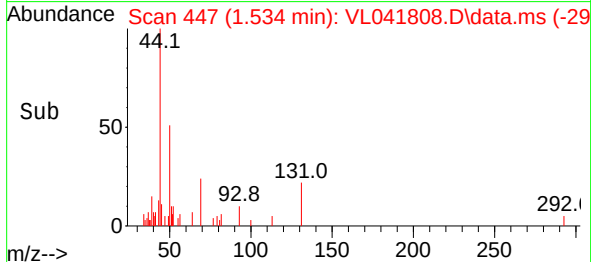
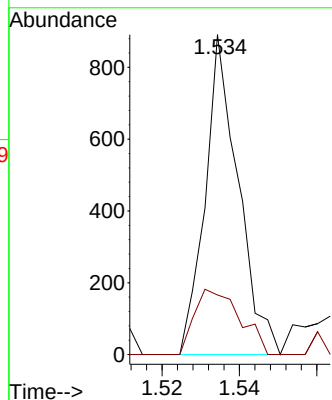
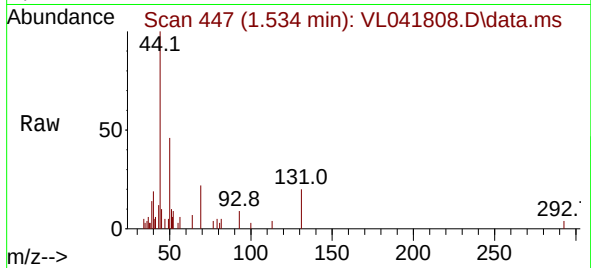




#4
Chloromethane
Concen: 0.107 ppbv
RT: 1.534 min Scan# 446
Delta R.T. 0.003 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

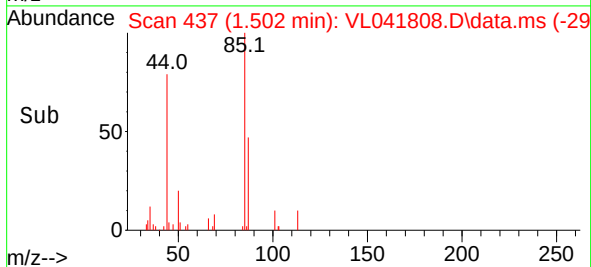
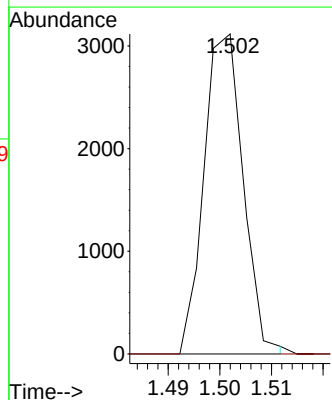
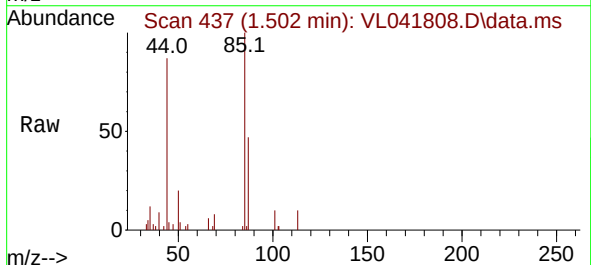
Instrument :
MSVOA_L
ClientSampleId :
C0AC9DL

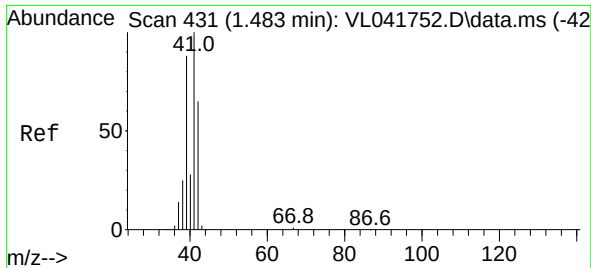
Tgt Ion: 50 Resp: 528
Ion Ratio Lower Upper
50 100
52 18.6 26.2 39.2#



#8
Dichlorotetrafluoroethane
Concen: 0.145 ppbv
RT: 1.502 min Scan# 437
Delta R.T. -0.052 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion: 85 Resp: 1642
Ion Ratio Lower Upper
85 100
135 1.5 51.9 77.9#





#9

Propene

Concen: 0.198 ppbv

RT: 1.489 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

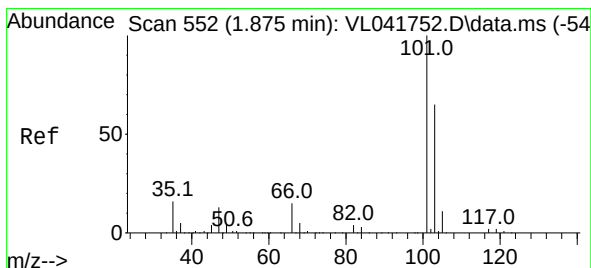
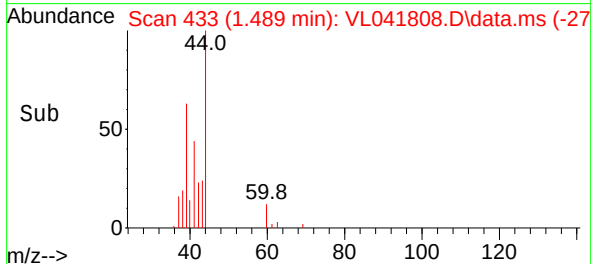
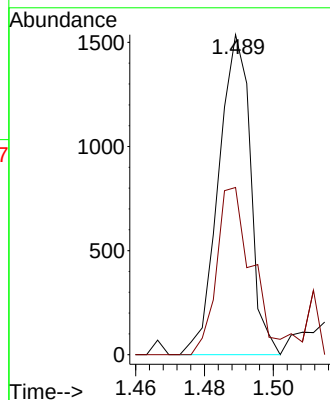
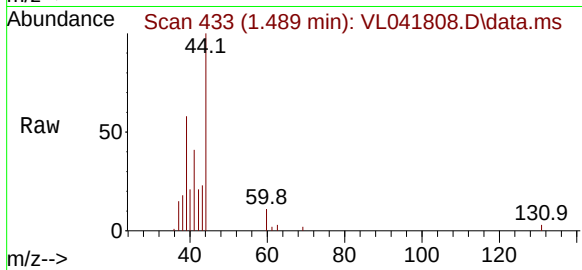
C0AC9DL

Tgt Ion: 41 Resp: 993

Ion Ratio Lower Upper

41 100

42 66.8 52.4 78.6



#11

Trichlorofluoromethane

Concen: 0.069 ppbv

RT: 1.881 min Scan# 554

Delta R.T. 0.006 min

Lab File: VL041808.D

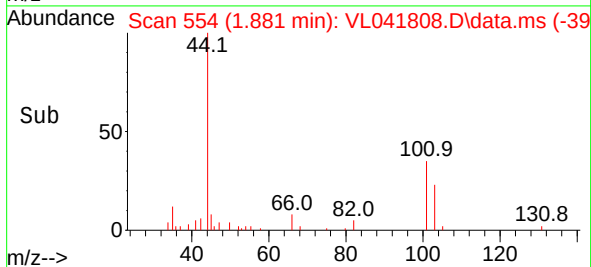
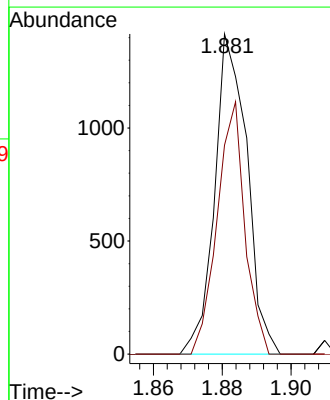
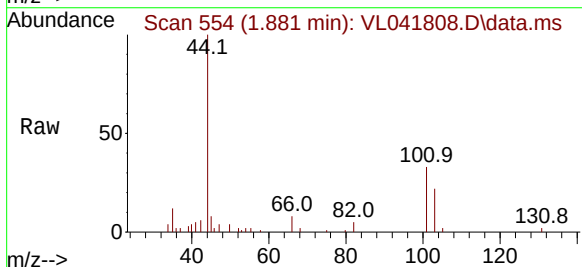
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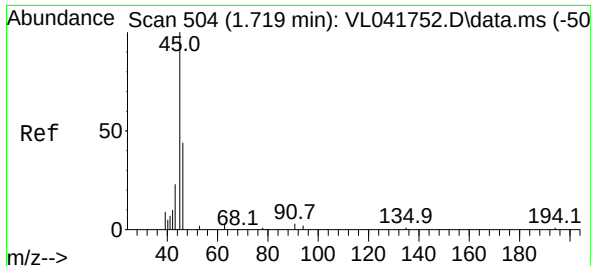
Tgt Ion:101 Resp: 922

Ion Ratio Lower Upper

101 100

103 65.3 51.8 77.8





#13

Ethanol

Concen: 13.013 ppbv

RT: 1.725 min Scan# 50

Delta R.T. 0.006 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

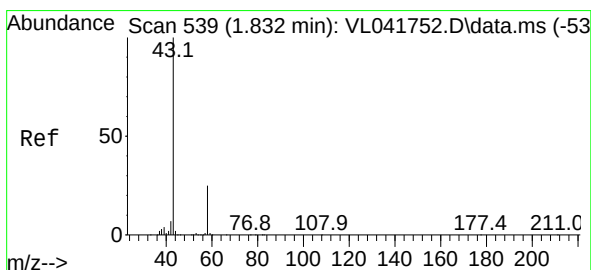
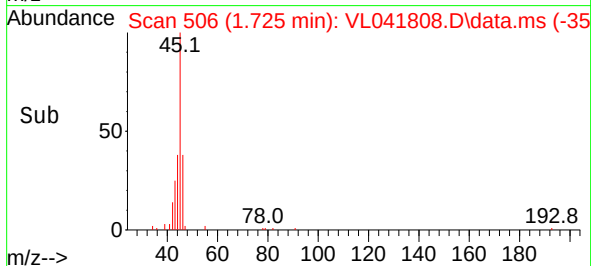
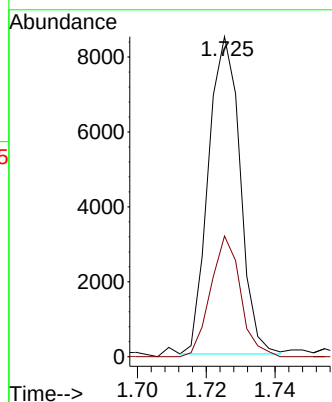
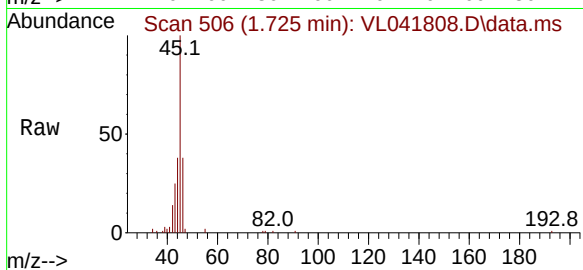
C0AC9DL

Tgt Ion: 45 Resp: 5417

Ion Ratio Lower Upper

45 100

46 0.0 16.4 65.8#



#15

Acetone

Concen: 1.054 ppbv

RT: 1.842 min Scan# 542

Delta R.T. 0.009 min

Lab File: VL041808.D

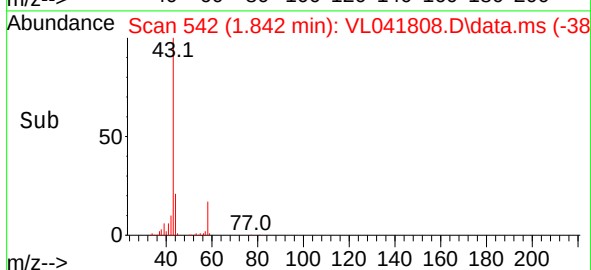
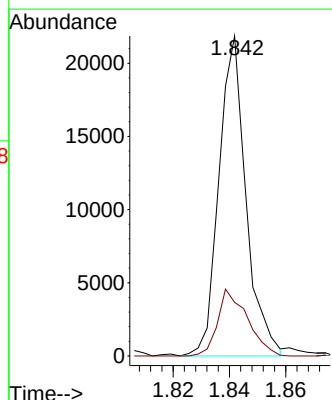
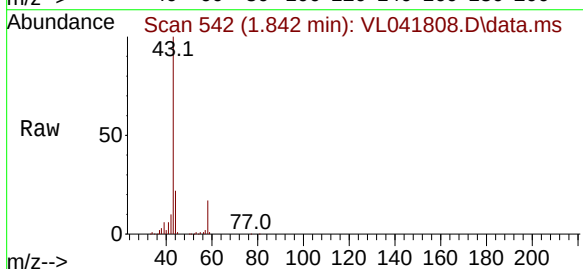
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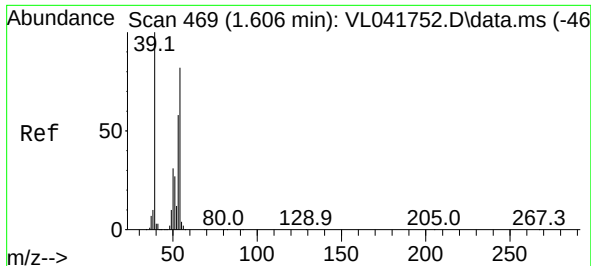
Tgt Ion: 43 Resp: 14582

Ion Ratio Lower Upper

43 100

58 23.2 19.7 29.5

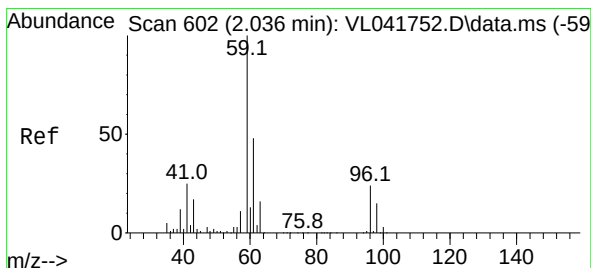
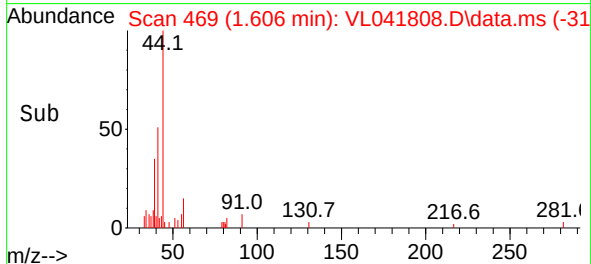
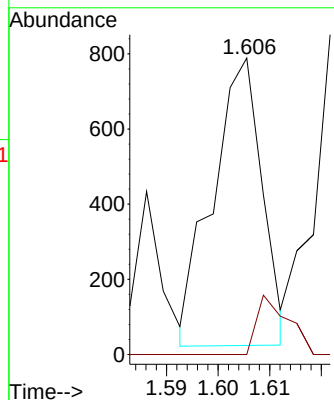
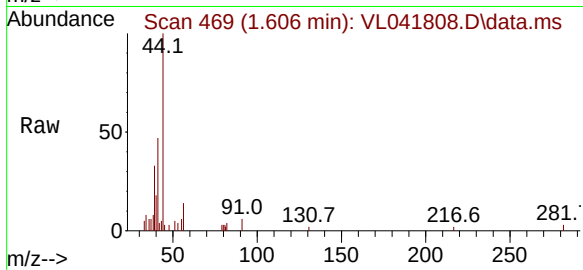




#16
1,3-Butadiene
Concen: 0.094 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

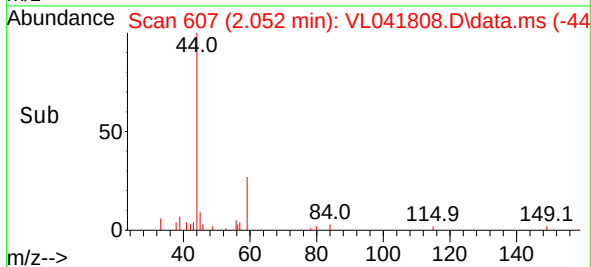
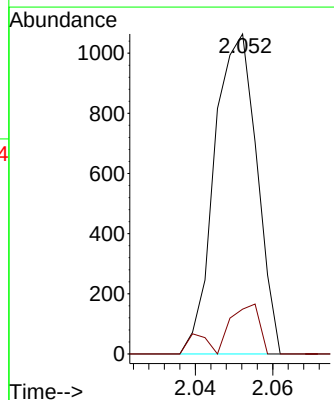
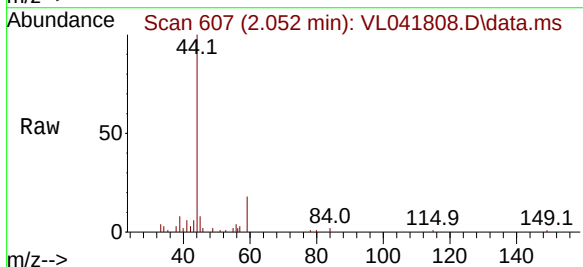
Instrument :
MSVOA_L
ClientSampleId :
C0AC9DL

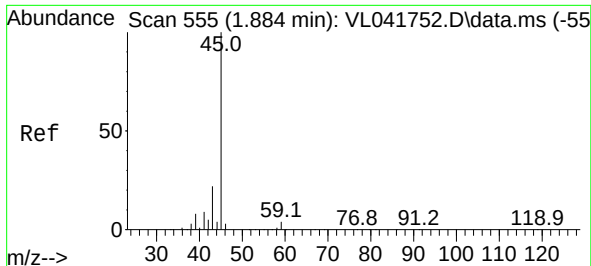
Tgt Ion: 39 Resp: 511
Ion Ratio Lower Upper
39 100
54 19.6 58.4 87.6#



#17
tert-Butyl alcohol
Concen: 0.059 ppbv
RT: 2.052 min Scan# 607
Delta R.T. 0.016 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion: 59 Resp: 808
Ion Ratio Lower Upper
59 100
57 13.4 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 0.645 ppbv

RT: 1.894 min Scan# 51

Delta R.T. 0.009 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_1

ClientSampleId :

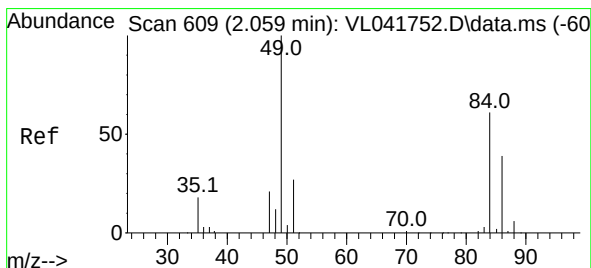
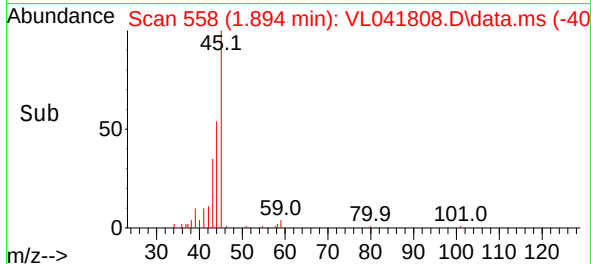
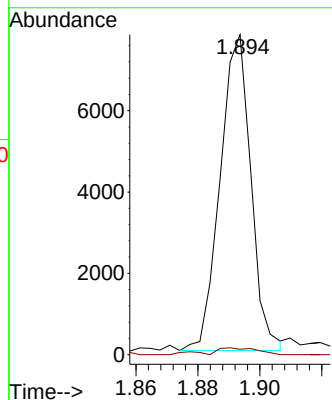
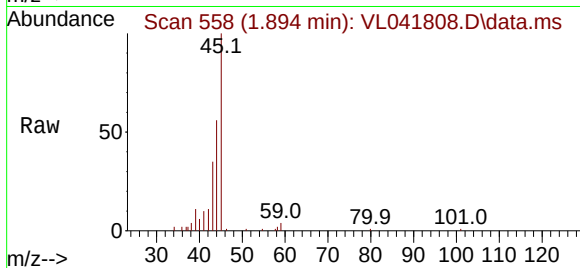
C0AC9DL

Tgt Ion: 45 Resp: 5356

Ion Ratio Lower Upper

45 100

58 3.4 33.3 49.9#



#20

Methylene Chloride

Concen: 0.469 ppbv

RT: 2.068 min Scan# 612

Delta R.T. 0.009 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Tgt Ion: 84 Resp: 1852

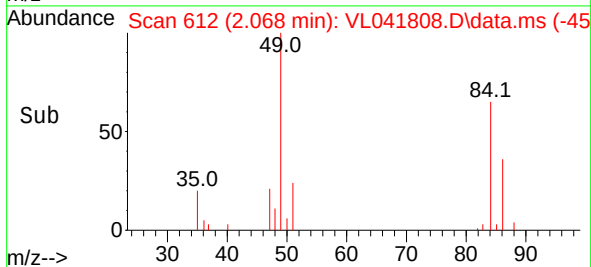
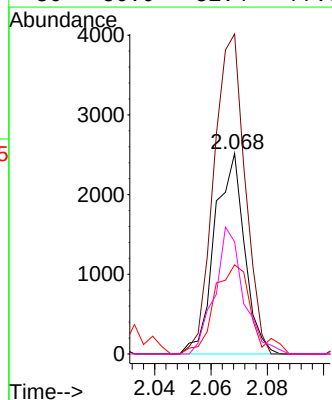
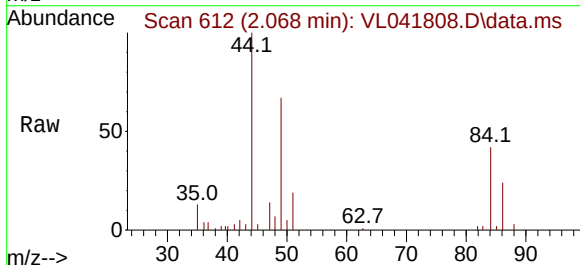
Ion Ratio Lower Upper

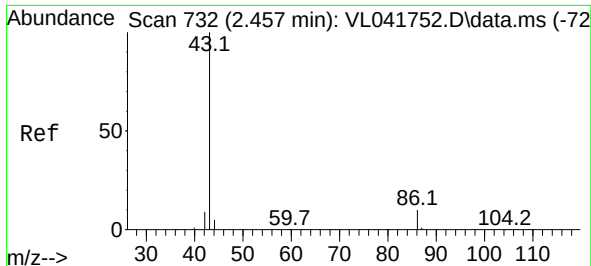
84 100

49 159.6 132.6 198.8

51 44.5 37.6 56.4

86 56.0 51.4 77.0

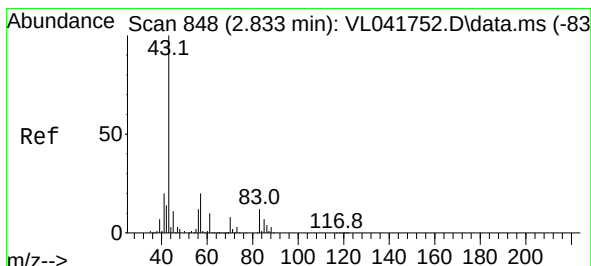
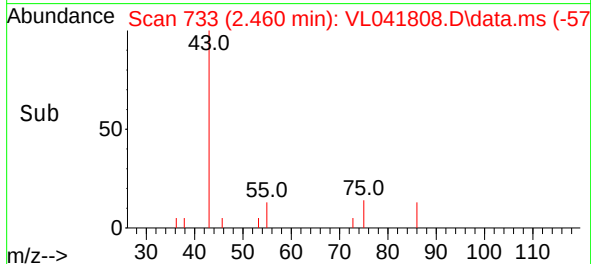
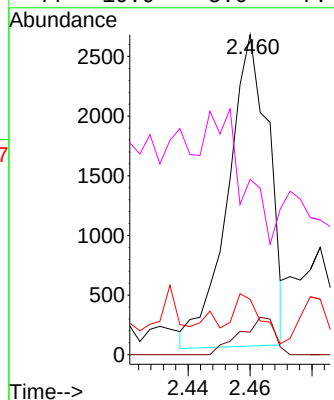
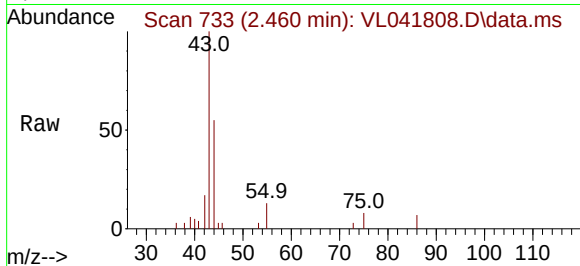




#23
 Vinyl Acetate
 Concen: 0.375 ppbv
 RT: 2.460 min Scan# 741
 Delta R.T. 0.003 min
 Lab File: VL041808.D
 Acq: 18 Dec 2024 23:08

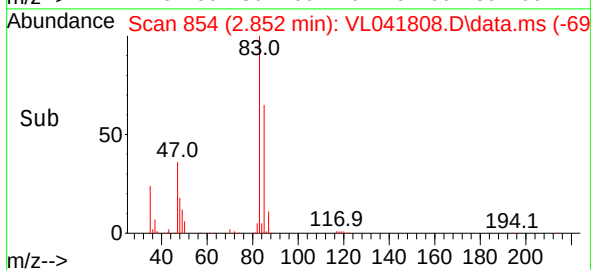
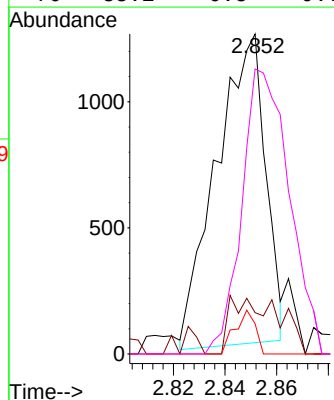
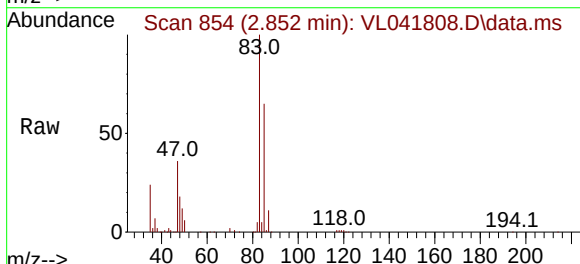
Instrument :
 MSVOA_L
 ClientSampleId :
 C0AC9DL

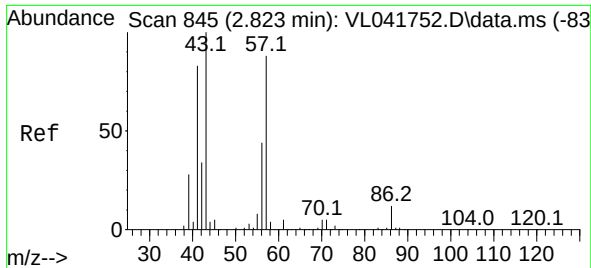
Tgt Ion:	43	Resp:	2407
Ion	Ratio	Lower	Upper
43	100		
86	7.6	6.6	10.0
42	15.0	8.2	12.2#
44	10.0	5.0	7.4#



#25
 Ethyl Acetate
 Concen: 0.063 ppbv
 RT: 2.852 min Scan# 854
 Delta R.T. 0.019 min
 Lab File: VL041808.D
 Acq: 18 Dec 2024 23:08

Tgt Ion:	43	Resp:	1628
Ion	Ratio	Lower	Upper
43	100		
45	21.3	8.1	12.1#
61	5.8	7.0	10.6#
70	88.2	6.5	9.7#





#26

Hexane

Concen: 0.032 ppbv

RT: 2.842 min Scan# 845

Delta R.T. 0.019 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

C0AC9DL

Tgt Ion: 57 Resp: 309

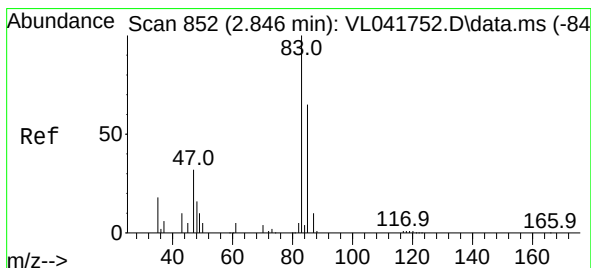
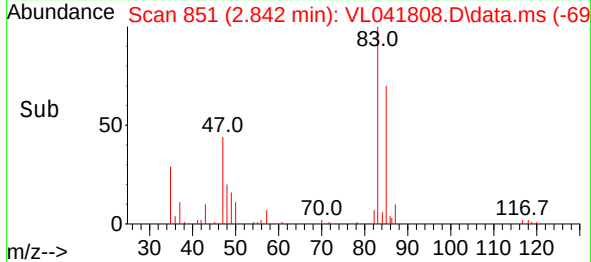
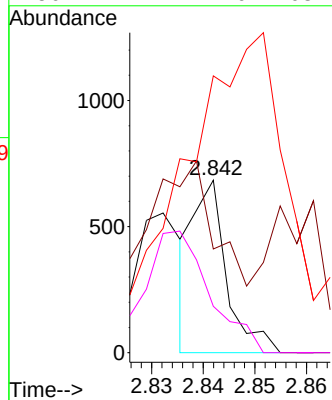
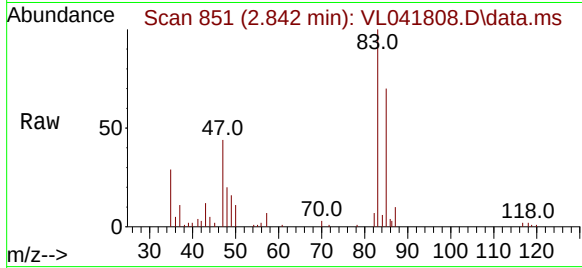
Ion Ratio Lower Upper

57 100

41 430.1 79.6 119.4#

43 623.9 211.0 316.6#

56 144.7 42.6 63.8#



#29

Chloroform

Concen: 6.186 ppbv

RT: 2.855 min Scan# 855

Delta R.T. 0.009 min

Lab File: VL041808.D

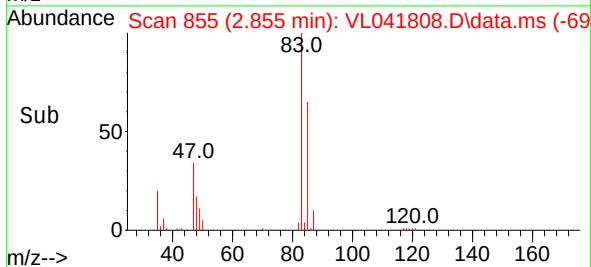
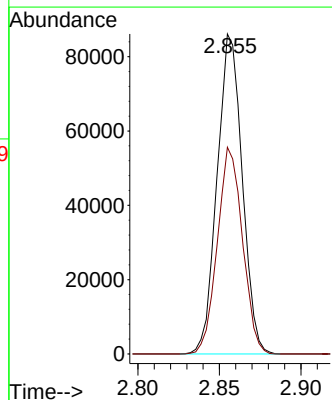
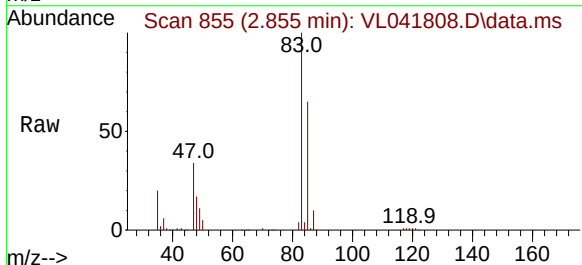
Acq: 18 Dec 2024 23:08

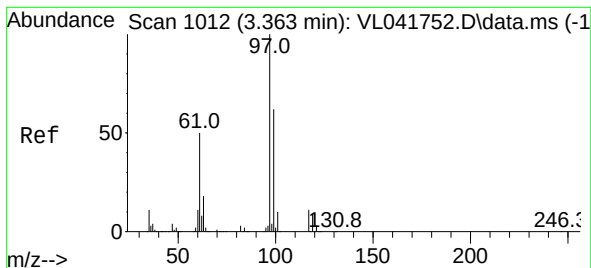
Tgt Ion: 83 Resp: 92098

Ion Ratio Lower Upper

83 100

85 64.6 51.8 77.6

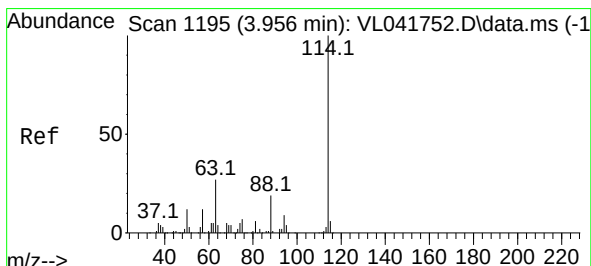
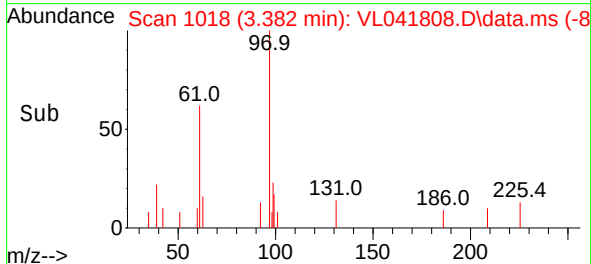
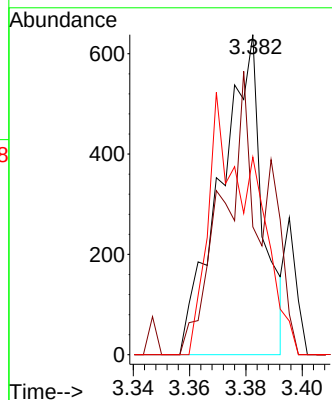
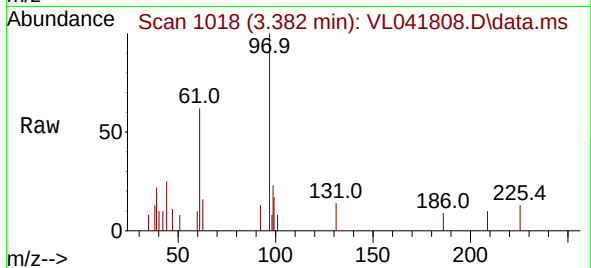




#32
1,1,1-Trichloroethane
Concen: 0.044 ppbv
RT: 3.382 min Scan# 1018
Delta R.T. 0.019 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

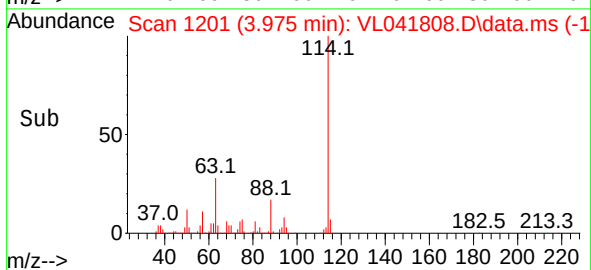
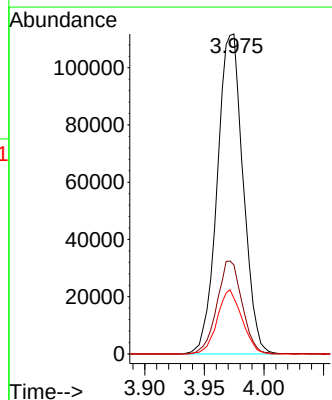
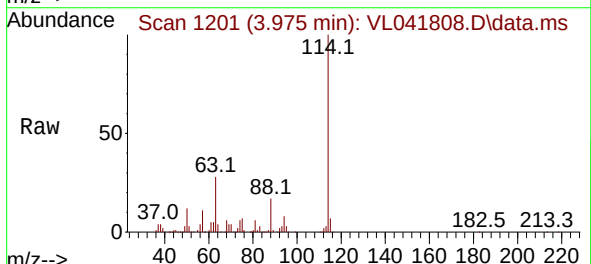
Instrument :
MSVOA_1
ClientSampleId :
C0AC9DL

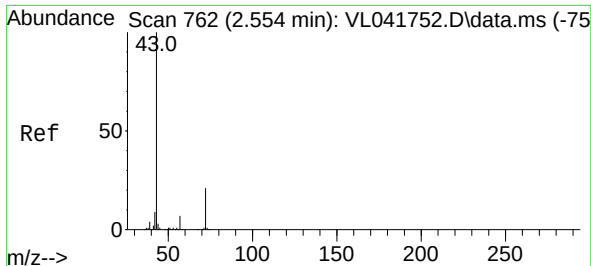
Tgt Ion: 97 Resp: 663
Ion Ratio Lower Upper
97 100
99 89.6 51.0 76.4#
61 85.8 42.2 63.2#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.975 min Scan# 1201
Delta R.T. 0.019 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion: 114 Resp: 168368
Ion Ratio Lower Upper
114 100
63 28.3 21.8 32.8
88 19.1 14.8 22.2

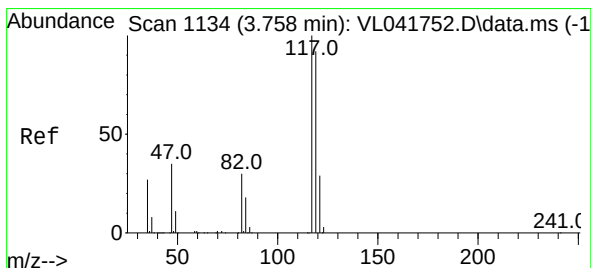
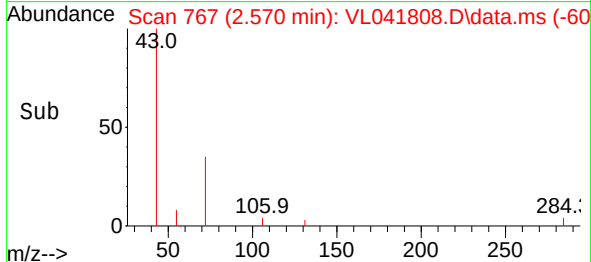
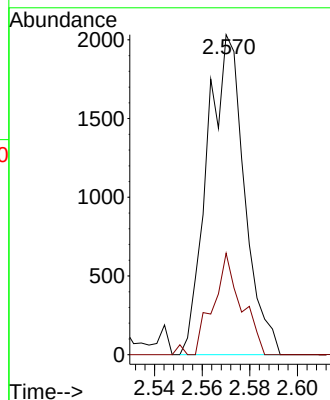
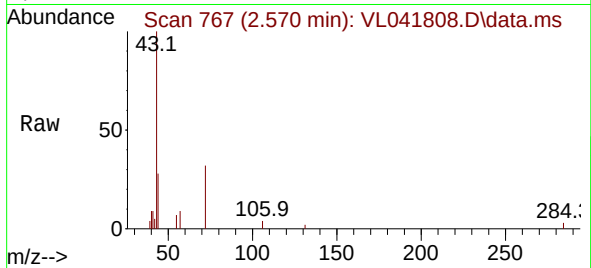




#34
2-Butanone
Concen: 0.162 ppbv
RT: 2.570 min Scan# 762
Delta R.T. 0.016 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

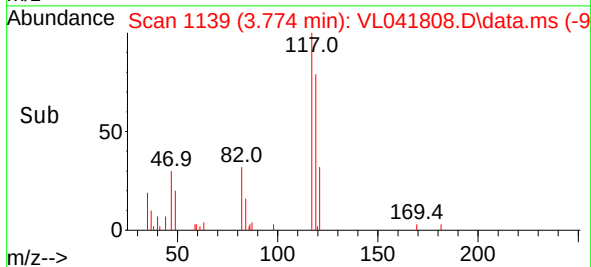
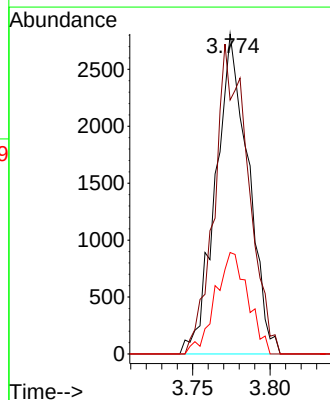
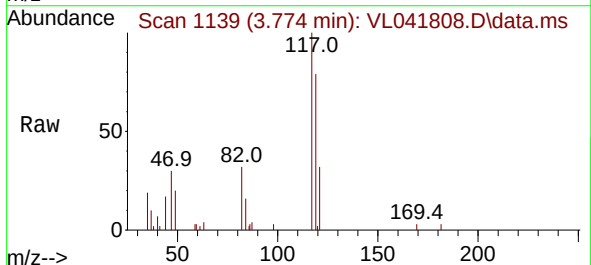
Instrument :
MSVOA_L
ClientSampleId :
C0AC9DL

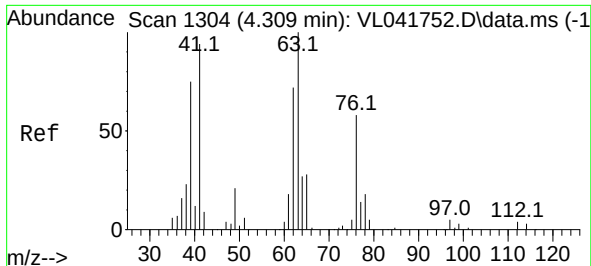
Tgt Ion: 43 Resp: 2200
Ion Ratio Lower Upper
43 100
72 24.4 16.8 25.2



#35
Carbon Tetrachloride
Concen: 0.345 ppbv
RT: 3.774 min Scan# 1139
Delta R.T. 0.016 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion: 117 Resp: 4129
Ion Ratio Lower Upper
117 100
119 79.3 73.7 110.5
121 31.7 23.0 34.4





#39

1,2-Dichloropropane

Concen: 7.569 ppbv

RT: 3.972 min Scan# 11

Delta R.T. -0.337 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

C0AC9DL

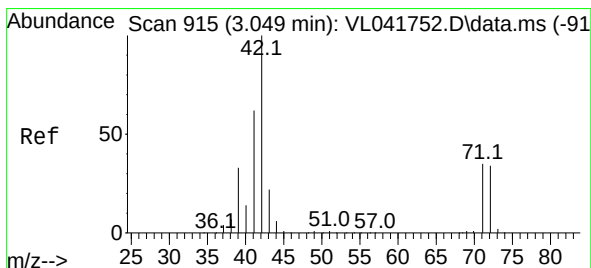
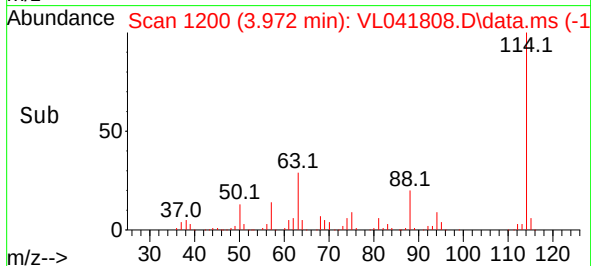
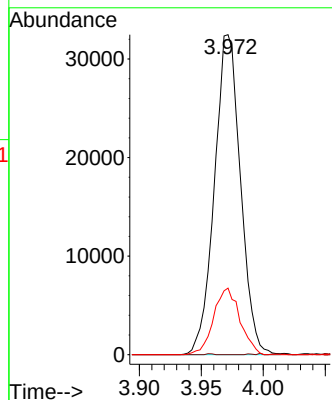
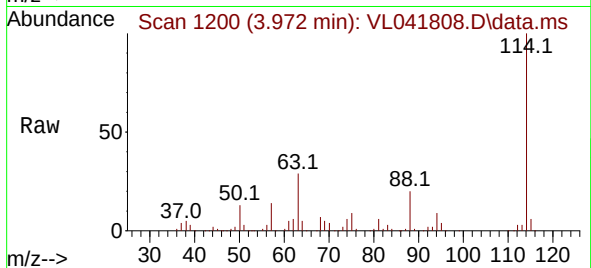
Tgt Ion: 63 Resp: 47676

Ion Ratio Lower Upper

63 100

41 0.0 75.3 112.9#

62 20.8 57.3 85.9#



#41

Tetrahydrofuran

Concen: 0.031 ppbv

RT: 3.075 min Scan# 923

Delta R.T. 0.026 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

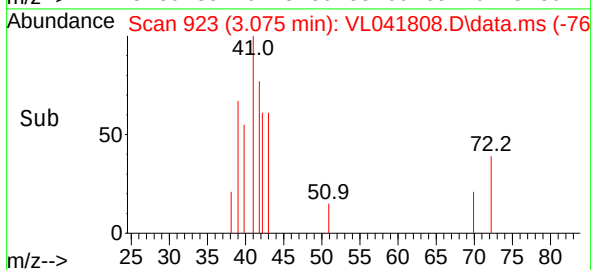
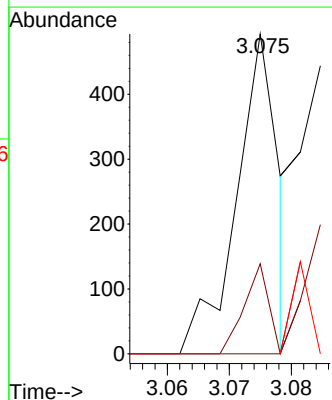
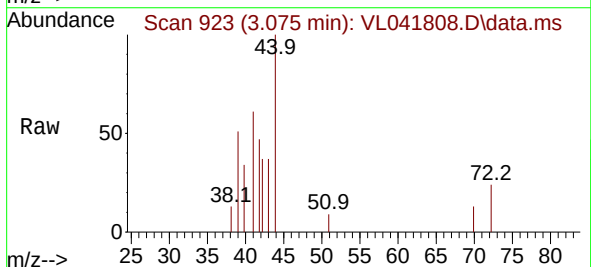
Tgt Ion: 42 Resp: 232

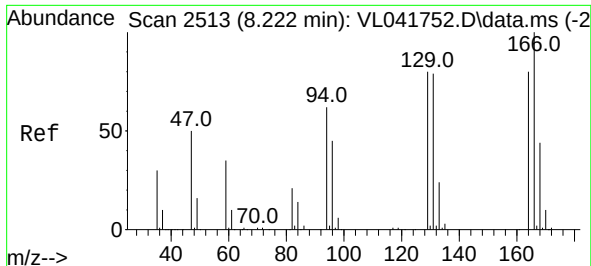
Ion Ratio Lower Upper

42 100

72 0.0 29.1 43.7#

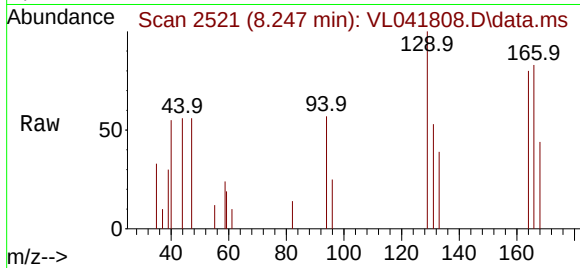
71 0.0 28.4 42.6#



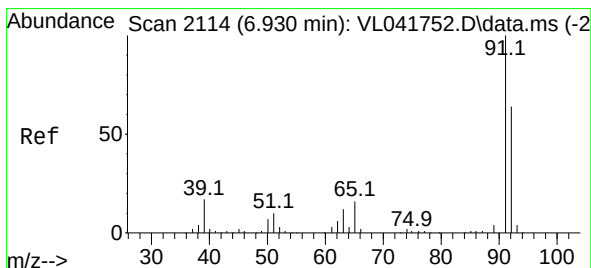
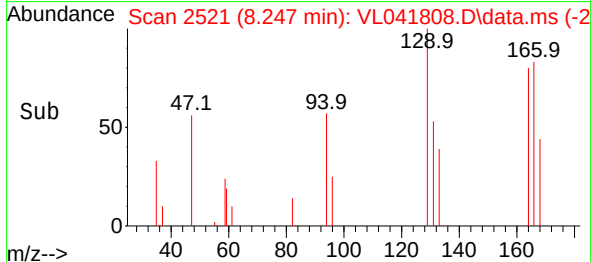
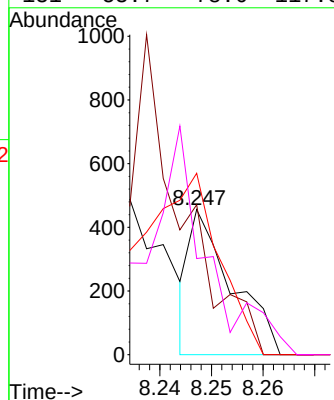


#52
Tetrachloroethene
Concen: 0.040 ppbv
RT: 8.247 min Scan# 2120
Delta R.T. 0.026 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Instrument :
MSVOA_1
ClientSampleId :
C0AC9DL

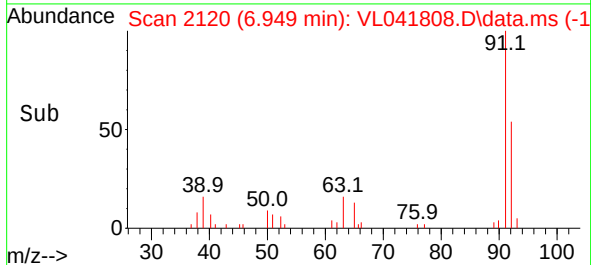
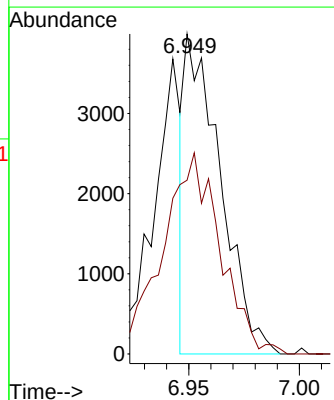
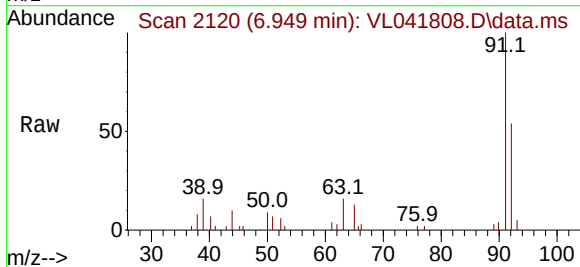


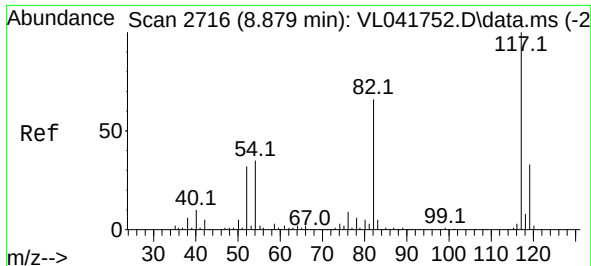
Tgt Ion:164 Resp: 259
Ion Ratio Lower Upper
164 100
166 103.3 99.8 149.6
129 125.0 79.6 119.4#
131 53.7 78.6 117.8#



#53
Toluene
Concen: 0.226 ppbv
RT: 6.949 min Scan# 2120
Delta R.T. 0.019 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion: 91 Resp: 4465
Ion Ratio Lower Upper
91 100
92 102.0 47.9 71.9#

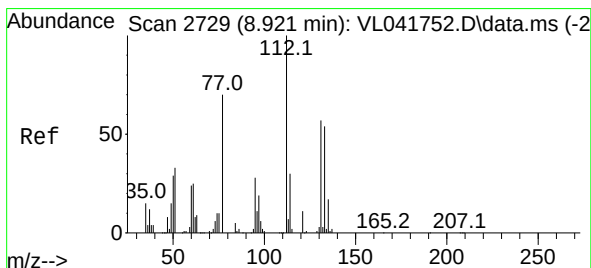
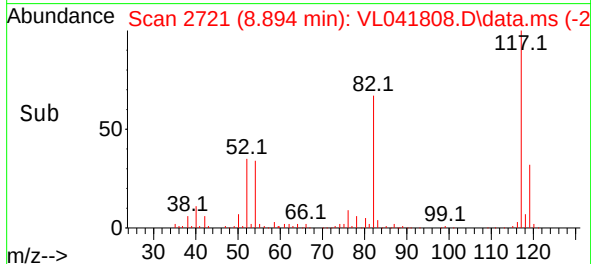
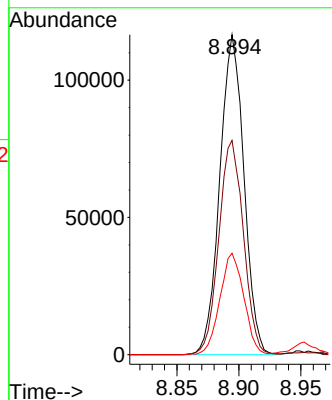
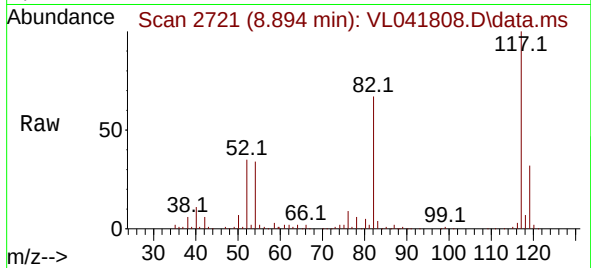




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.894 min Scan# 21
Delta R.T. 0.016 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

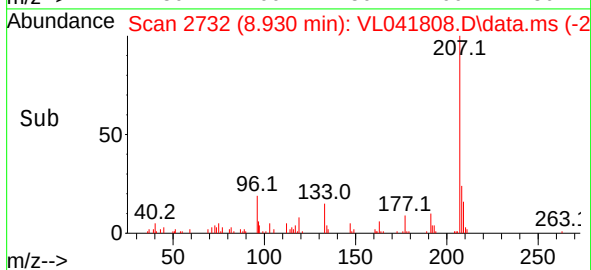
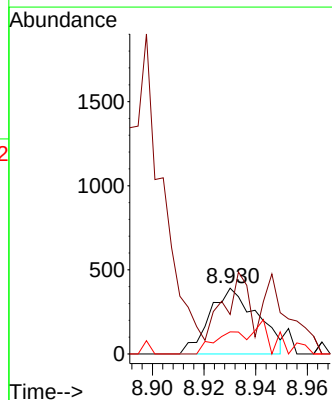
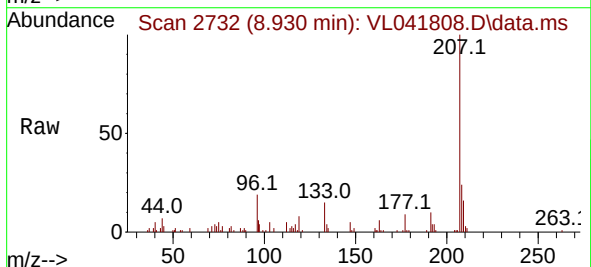
Instrument :
MSVOA_1
ClientSampleId :
C0AC9DL

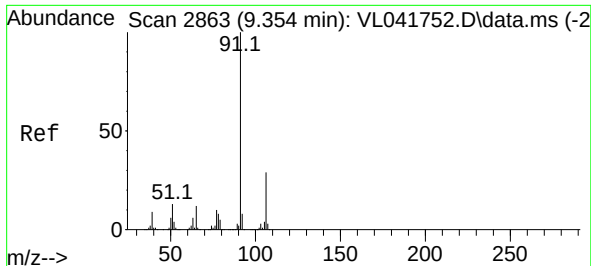
Tgt Ion:117 Resp: 158378
Ion Ratio Lower Upper
117 100
82 68.2 53.8 80.8
119 31.5 26.7 40.1



#57
Chlorobenzene
Concen: 0.031 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.009 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion:112 Resp: 503
Ion Ratio Lower Upper
112 100
77 0.0 57.4 86.0#
114 33.5 27.4 33.4#





#58

Ethyl Benzene

Concen: 0.074 ppbv

RT: 9.370 min Scan# 2117

Delta R.T. 0.016 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

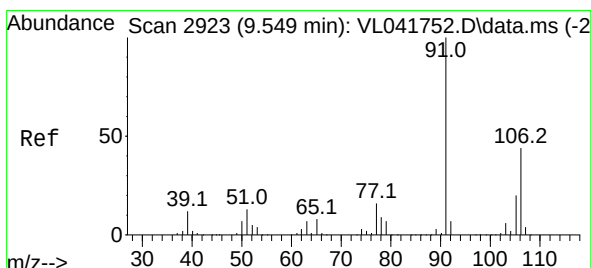
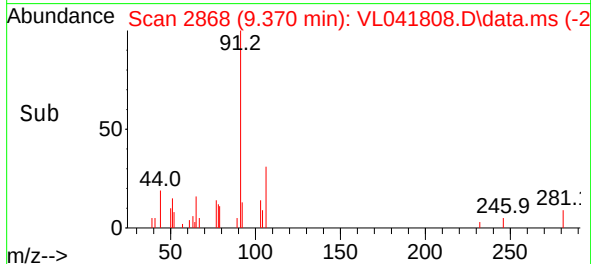
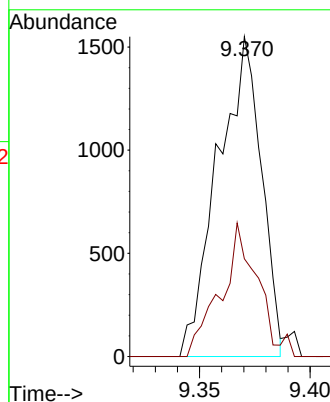
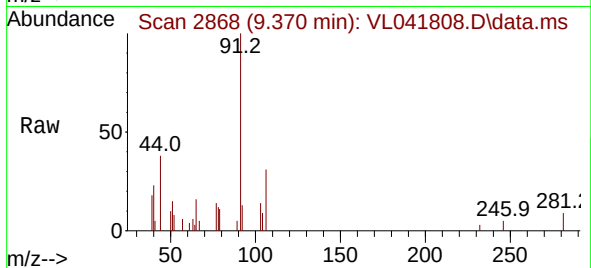
C0AC9DL

Tgt Ion: 91 Resp: 2117

Ion Ratio Lower Upper

91 100

106 30.6 23.5 35.3



#59

m/p-Xylene

Concen: 0.070 ppbv

RT: 9.561 min Scan# 2927

Delta R.T. 0.013 min

Lab File: VL041808.D

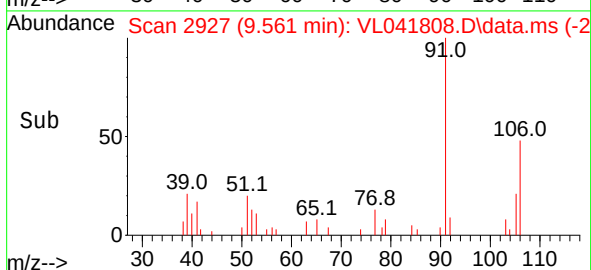
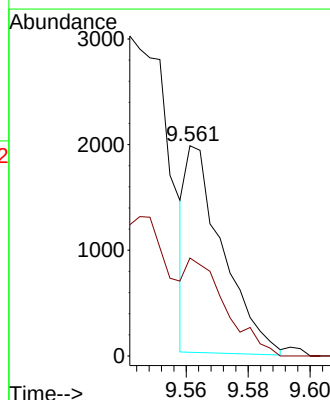
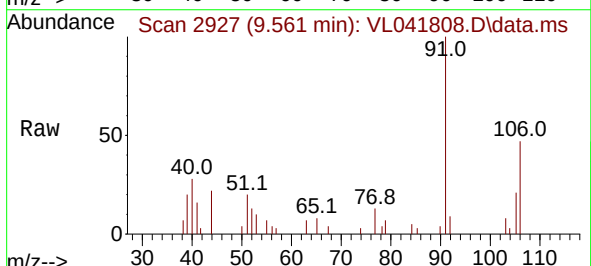
Acq: 18 Dec 2024 23:08

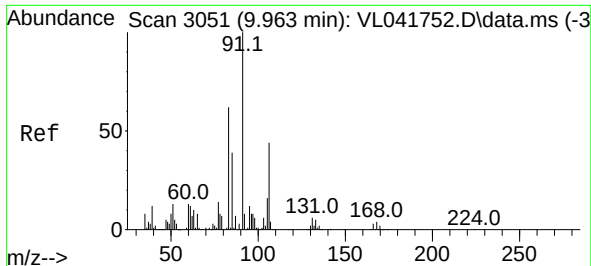
Tgt Ion: 91 Resp: 1606

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0





#60

o-Xylene

Concen: 0.113 ppbv

RT: 9.975 min Scan# 3051

Delta R.T. 0.013 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_1

ClientSampleId :

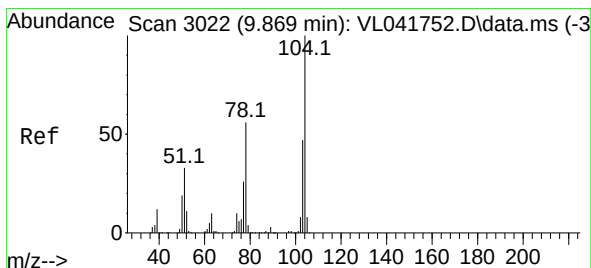
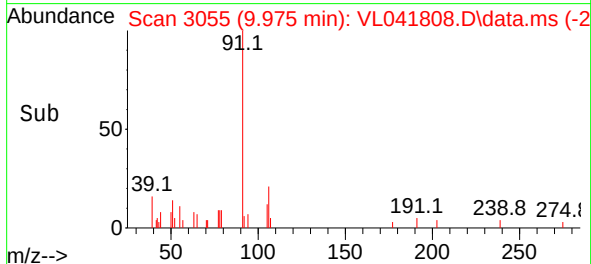
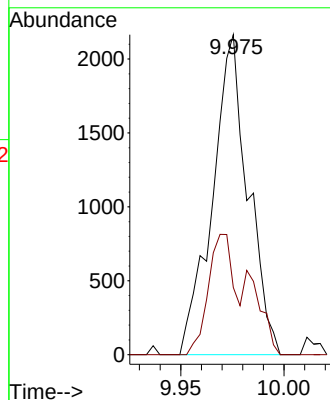
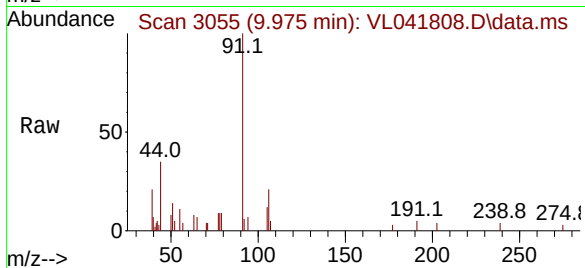
C0AC9DL

Tgt Ion: 91 Resp: 2603

Ion Ratio Lower Upper

91 100

106 40.3 21.1 63.4



#61

Styrene

Concen: 0.052 ppbv

RT: 9.878 min Scan# 3025

Delta R.T. 0.009 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

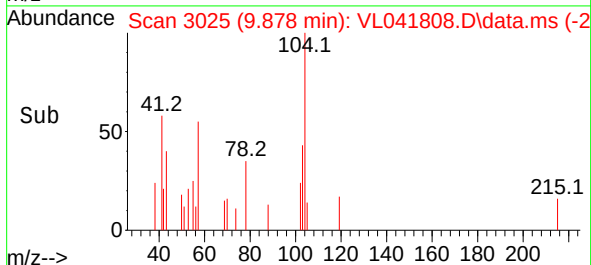
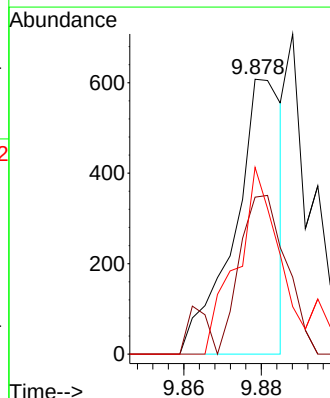
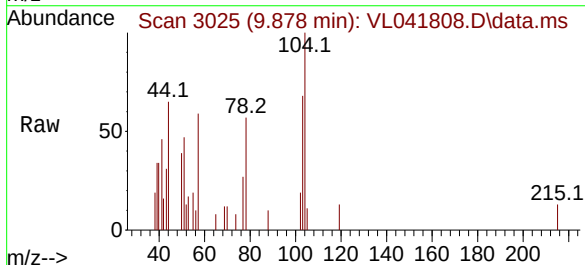
Tgt Ion: 104 Resp: 521

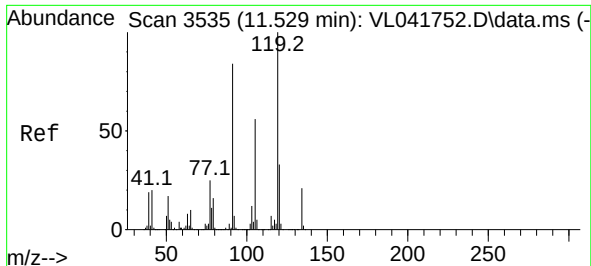
Ion Ratio Lower Upper

104 100

78 63.3 43.8 65.6

103 67.4 37.8 56.6#





#65

tert-Butylbenzene

Concen: 1.767 ppbv

RT: 11.788 min Scan# 3615

Delta R.T. 0.259 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_1

ClientSampleId :

C0AC9DL

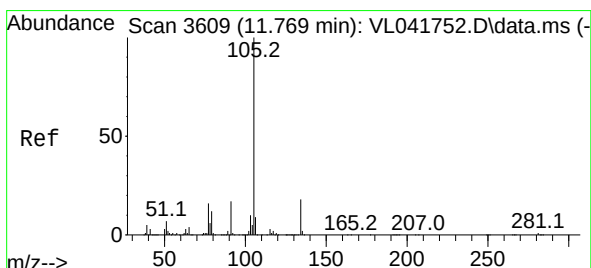
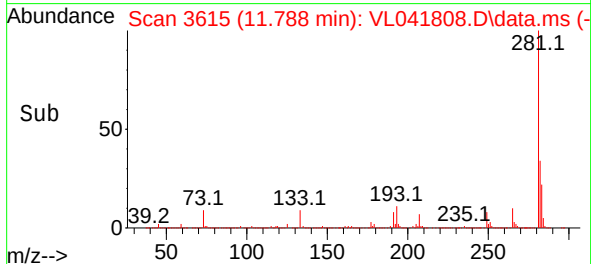
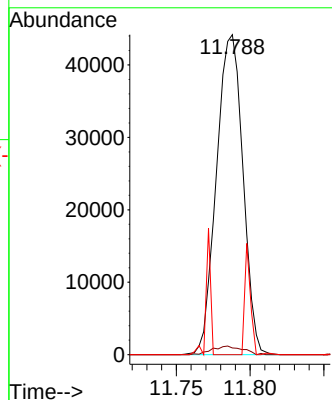
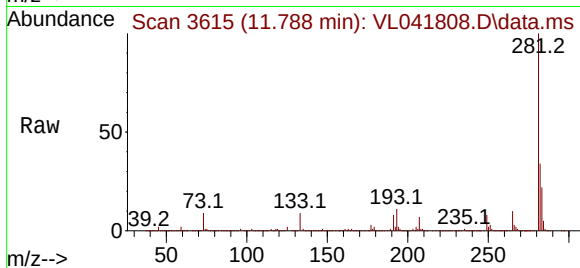
Tgt Ion:119 Resp: 55082

Ion Ratio Lower Upper

119 100

91 3.1 67.0 100.4#

134 7.6 16.5 24.7#



#67

sec-Butylbenzene

Concen: 0.338 ppbv

RT: 11.788 min Scan# 3615

Delta R.T. 0.019 min

Lab File: VL041808.D

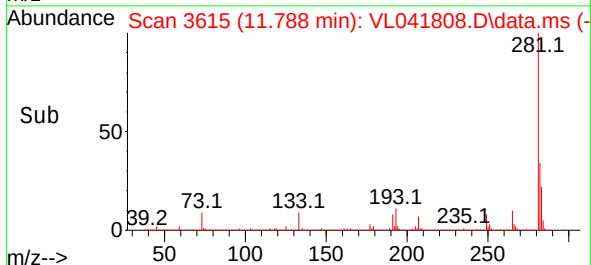
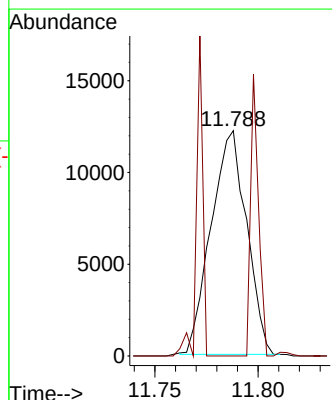
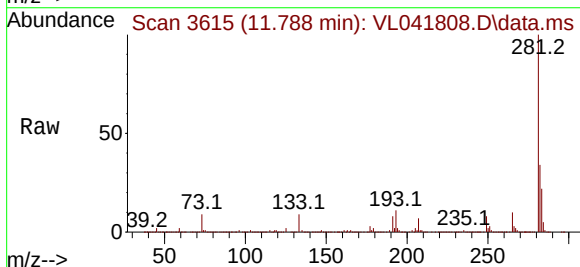
Acq: 18 Dec 2024 23:08

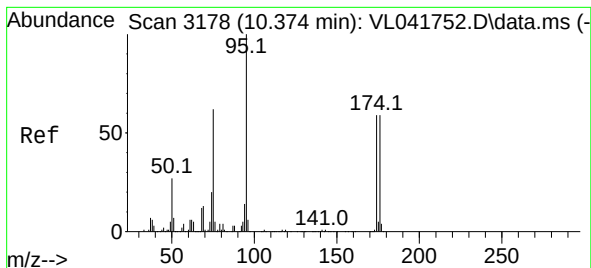
Tgt Ion:105 Resp: 14568

Ion Ratio Lower Upper

105 100

134 28.8 14.5 21.7#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.042 ppbv

RT: 10.387 min Scan# 3178

Delta R.T. 0.013 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

C0AC9DL

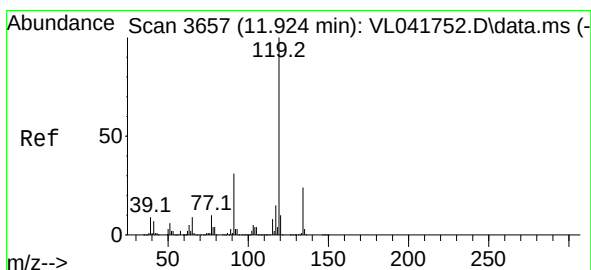
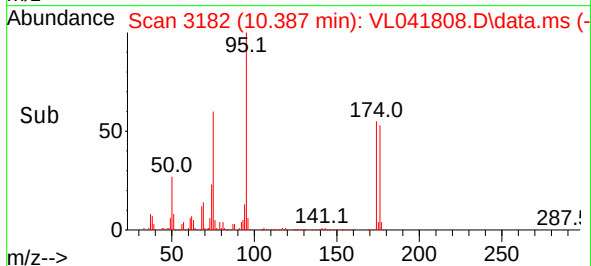
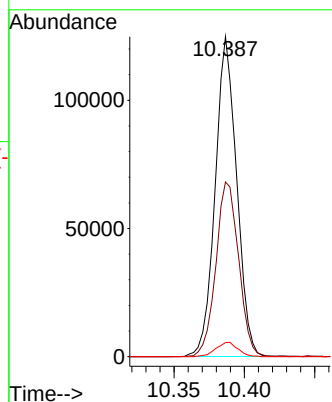
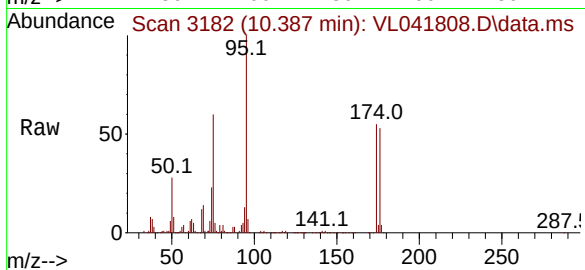
Tgt Ion: 95 Resp: 132533

Ion Ratio Lower Upper

95 100

174 58.0 47.6 71.4

175 4.6 3.7 5.5



#69

p-Isopropyltoluene

Concen: 1.549 ppbv

RT: 11.788 min Scan# 3615

Delta R.T. -0.136 min

Lab File: VL041808.D

Acq: 18 Dec 2024 23:08

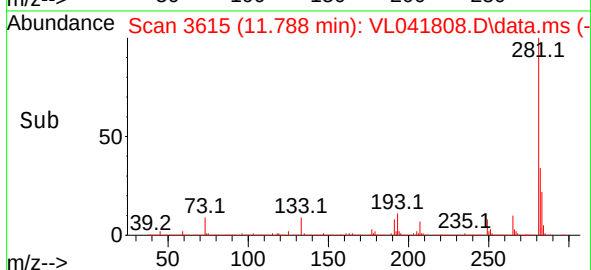
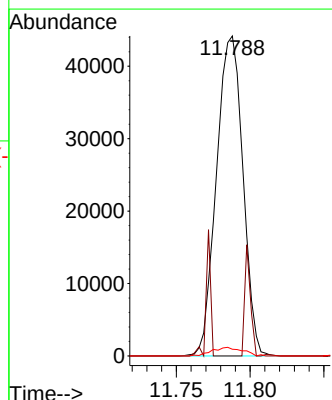
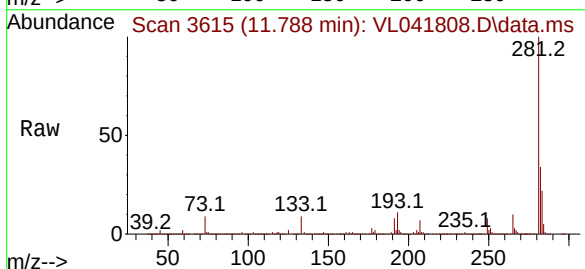
Tgt Ion: 119 Resp: 55048

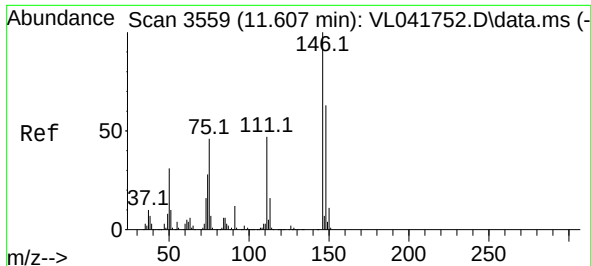
Ion Ratio Lower Upper

119 100

134 7.6 19.6 29.4#

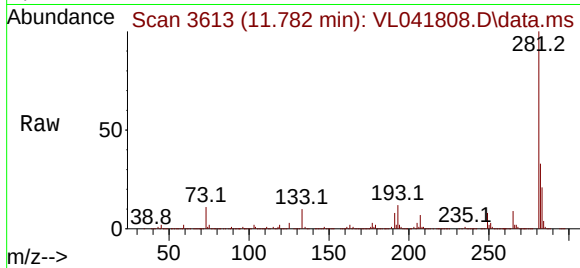
91 3.1 24.4 36.6#



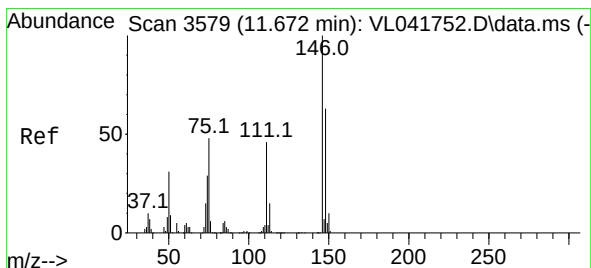
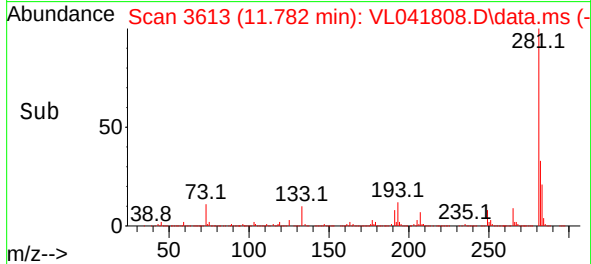
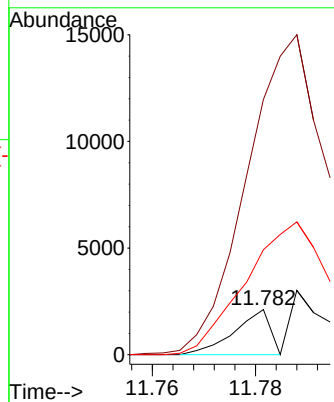


#75
1,3-Dichlorobenzene
Concen: 0.066 ppbv
RT: 11.782 min Scan# 3613
Delta R.T. 0.174 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Instrument :
MSVOA_1
ClientSampleId :
C0AC9DL

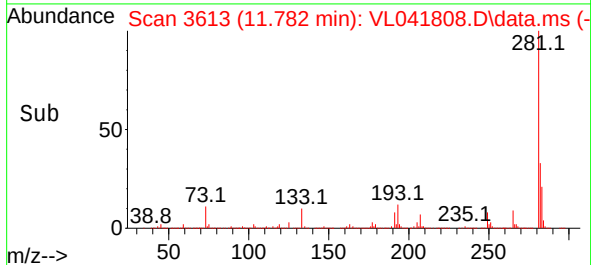
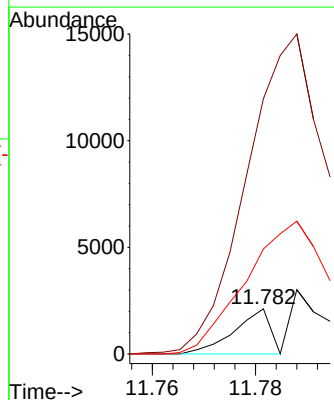
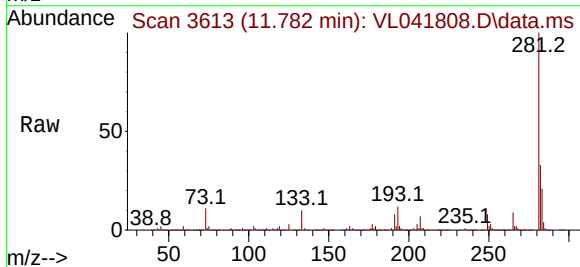


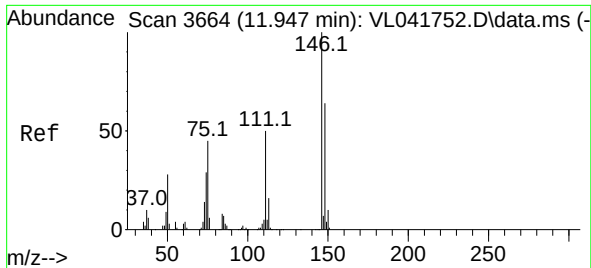
Tgt Ion:146 Resp: 1016
Ion Ratio Lower Upper
146 100
111 0.0 23.4 70.3#
148 0.0 31.6 95.0#



#76
1,4-Dichlorobenzene
Concen: 0.067 ppbv
RT: 11.782 min Scan# 3613
Delta R.T. 0.110 min
Lab File: VL041808.D
Acq: 18 Dec 2024 23:08

Tgt Ion:146 Resp: 1016
Ion Ratio Lower Upper
146 100
111 0.0 22.7 68.1#
148 0.0 31.4 94.0#





#77

1,2-Dichlorobenzene

Concen: 0.110 ppbv

RT: 11.788 min Scan# 3

Delta R.T. -0.159 min

Lab File: VL041808.D

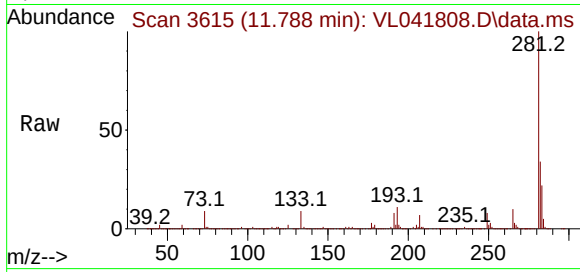
Acq: 18 Dec 2024 23:08

Instrument :

MSVOA_L

ClientSampleId :

C0AC9DL



Tgt Ion:146 Resp: 1635

Ion Ratio Lower Upper

146 100

111 1002.1 24.8 74.3#

148 433.0 31.8 95.4#

