

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121824\
 Data File : VL041807.D
 Acq On : 18 Dec 2024 22:37
 Operator : SY/MD
 Sample : P5295-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 15 Sample Multiplier: 1

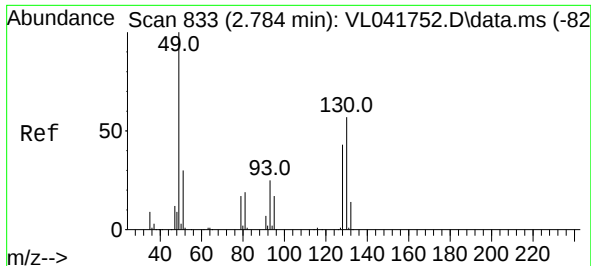
Instrument :
 MSVOA_L
 ClientSampleId :
 C0AC8

Quant Time: Dec 19 08:00:48 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	73010	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	3.972	114	173625	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.895	117	170332	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	135837	9.570	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	1539	0.118	ppbv	91
3) Chlorodifluoromethane	1.466	51	2506	0.210	ppbv #	65
4) Chloromethane	1.531	50	431	0.085	ppbv #	77
8) Dichlorotetrafluoroethane	1.499	85	1539	0.132	ppbv #	18
9) Propene	1.622	41	1914	0.371	ppbv	97
10) Heptane	5.004	43	452	0.034	ppbv	98
11) Trichlorofluoromethane	1.884	101	724	0.052	ppbv #	79
13) Ethanol	1.725	45	11589	27.120	ppbv #	34
15) Acetone	1.842	43	9724	0.685	ppbv	94
16) 1,3-Butadiene	1.609	39	643	0.115	ppbv #	13
17) tert-Butyl alcohol	2.049	59	1952	0.139	ppbv #	78
19) Isopropyl Alcohol	1.894	45	7976	0.936	ppbv #	39
20) Methylene Chloride	2.068	84	1631	0.403	ppbv	92
22) trans-1,2-Dichloroethene	2.797	96	174	0.035	ppbv #	1
23) Vinyl Acetate	2.470	43	551	0.084	ppbv #	1
25) Ethyl Acetate	2.849	43	3744	0.142	ppbv #	87
26) Hexane	2.842	57	1571	0.157	ppbv #	88
29) Chloroform	2.861	83	1319	0.086	ppbv	98
30) Cyclohexane	3.871	84	314	0.037	ppbv #	31
34) 2-Butanone	2.570	43	2830	0.203	ppbv	96
36) Benzene	3.674	78	945	0.053	ppbv #	81
38) Trichloroethene	4.564	130	929	0.122	ppbv #	38
39) 1,2-Dichloropropane	3.972	63	48675	7.494	ppbv #	18
41) Tetrahydrofuran	3.078	42	1030	0.132	ppbv	93
52) Tetrachloroethene	8.241	164	184475	27.596	ppbv	93
53) Toluene	6.949	91	17152	0.842	ppbv	100
57) Chlorobenzene	8.937	112	734	0.042	ppbv #	58
58) Ethyl Benzene	9.364	91	3771	0.123	ppbv	91
59) m/p-Xylene	9.548	91	1601	0.065	ppbv #	100
60) o-Xylene	9.972	91	3367	0.136	ppbv	100
61) Styrene	9.885	104	1059	0.099	ppbv	91

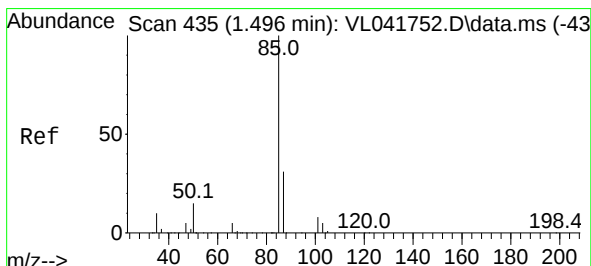
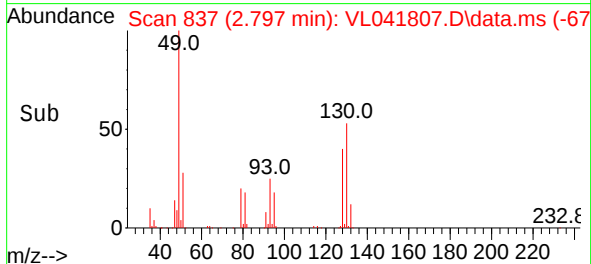
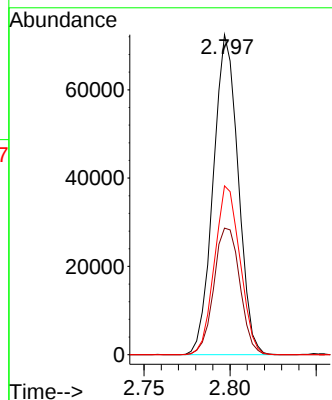
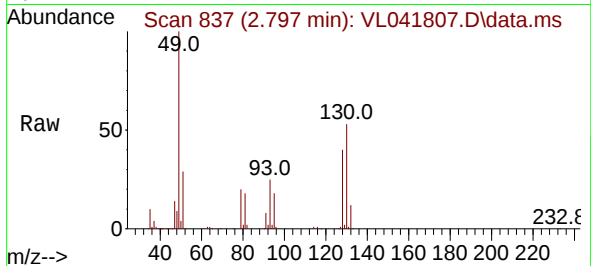
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 81
Delta R.T. 0.013 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

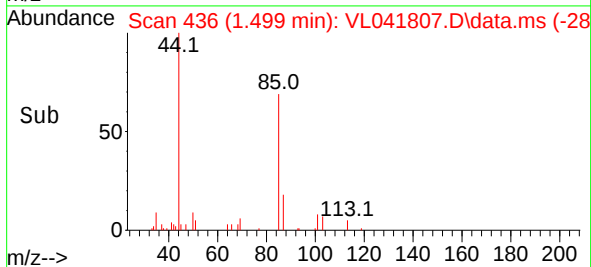
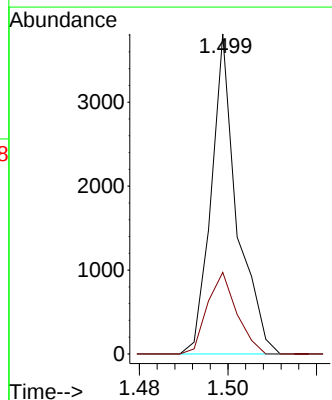
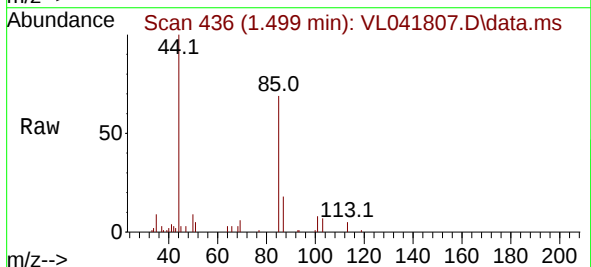
Instrument :
MSVOA_L
ClientSampleId :
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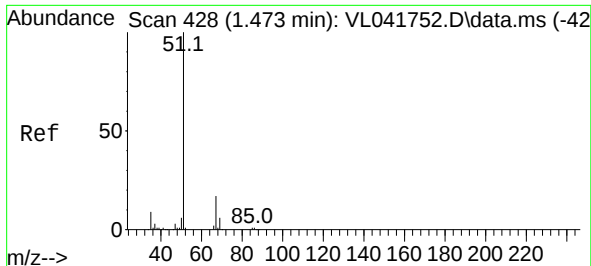
Tgt Ion: 49 Resp: 73010
Ion Ratio Lower Upper
49 100
128 41.4 21.6 64.6
130 53.9 28.3 85.0



#2
Dichlorodifluoromethane
Concen: 0.118 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

Tgt Ion: 85 Resp: 1539
Ion Ratio Lower Upper
85 100
87 25.5 24.5 36.7

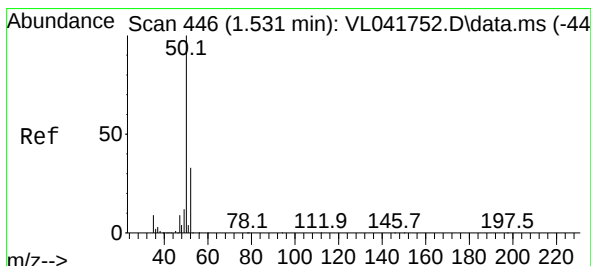
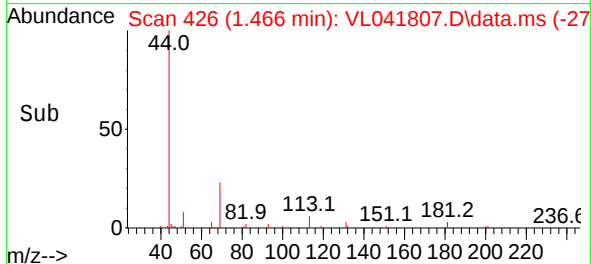
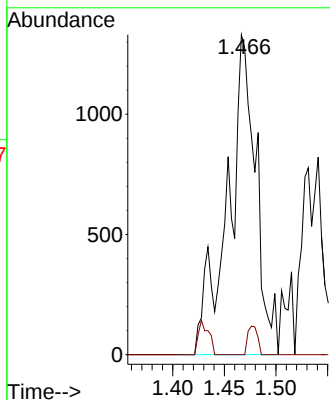
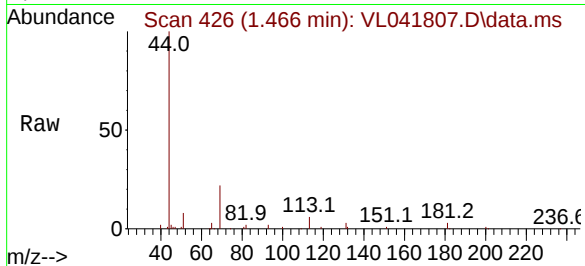




#3
Chlorodifluoromethane
Concen: 0.210 ppbv
RT: 1.466 min Scan# 41
Delta R.T. -0.007 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

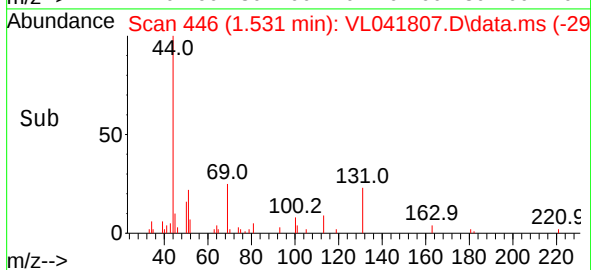
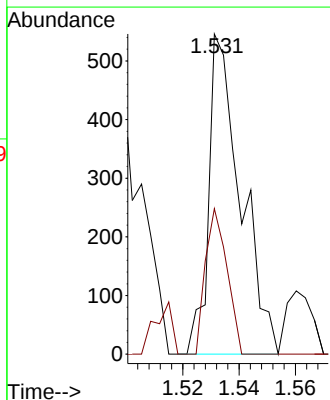
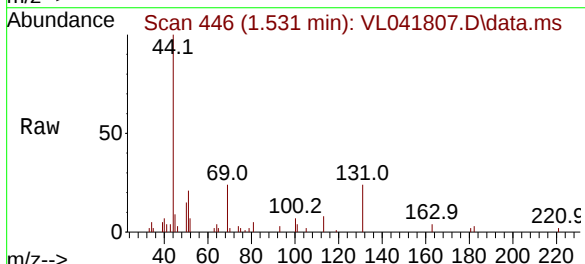
Instrument :
MSVOA_L
ClientSampleId :
C0AC8

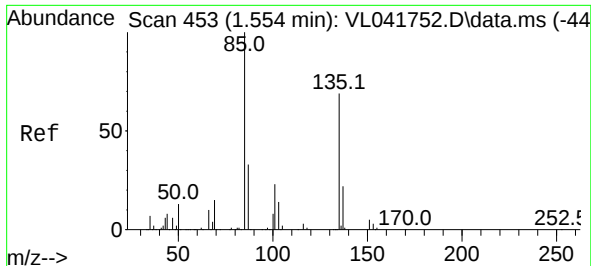
Tgt Ion: 51 Resp: 2506
Ion Ratio Lower Upper
51 100
67 3.1 15.0 22.4#



#4
Chloromethane
Concen: 0.085 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

Tgt Ion: 50 Resp: 431
Ion Ratio Lower Upper
50 100
52 45.4 26.2 39.2#

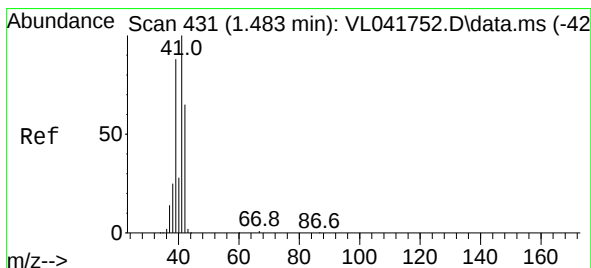
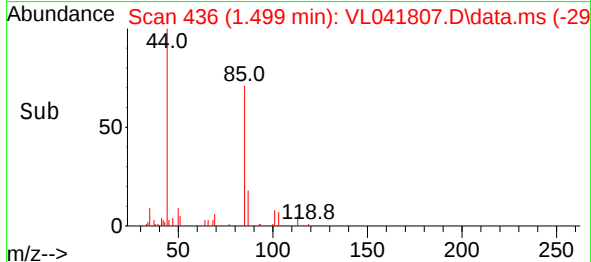
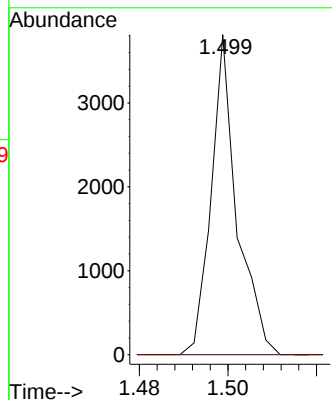
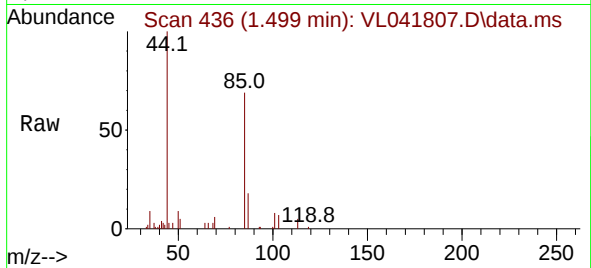




#8
Dichlorotetrafluoroethane
Concen: 0.132 ppbv
RT: 1.499 min Scan# 41
Delta R.T. -0.055 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

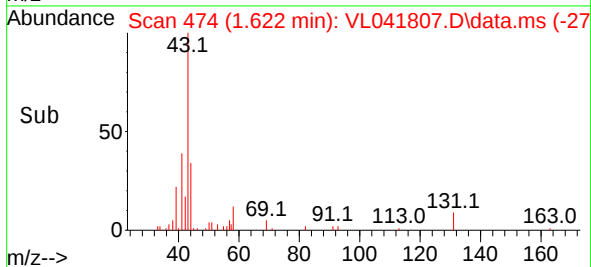
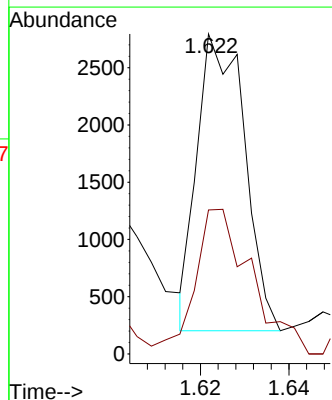
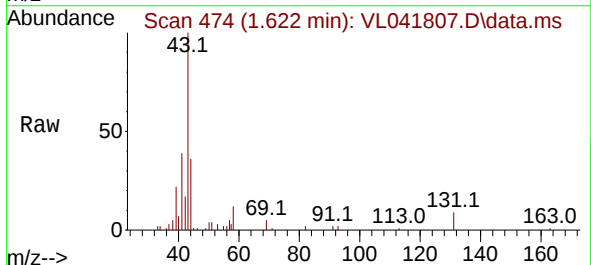
Instrument :
MSVOA_1
ClientSampleId :
C0AC8

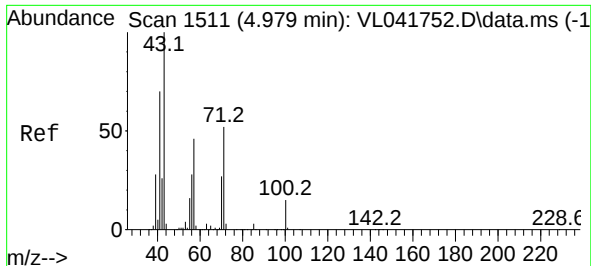
Tgt Ion: 85 Resp: 1539
Ion Ratio Lower Upper
85 100
135 0.0 51.9 77.9#



#9
Propene
Concen: 0.371 ppbv
RT: 1.622 min Scan# 474
Delta R.T. 0.139 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

Tgt Ion: 41 Resp: 1914
Ion Ratio Lower Upper
41 100
42 68.0 52.4 78.6





#10

Heptane

Concen: 0.034 ppbv

RT: 5.004 min Scan# 1519

Delta R.T. 0.026 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

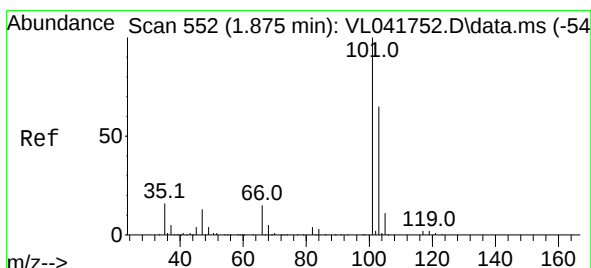
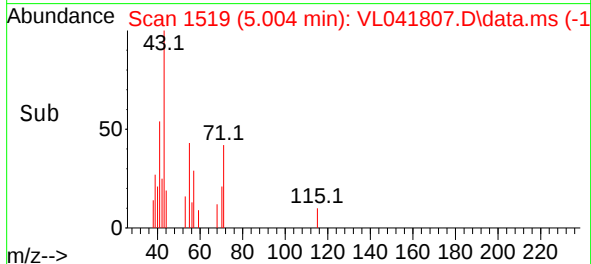
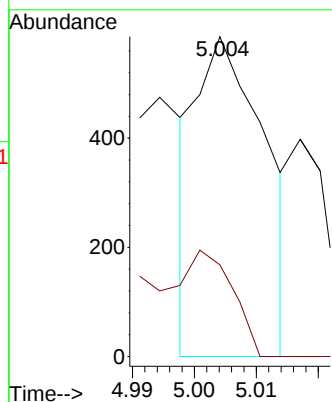
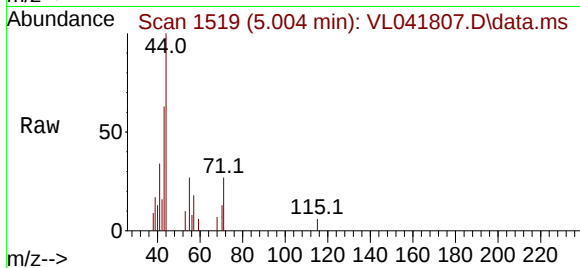
C0AC8

Tgt Ion: 43 Resp: 452

Ion Ratio Lower Upper

43 100

57 49.6 38.5 57.7



#11

Trichlorofluoromethane

Concen: 0.052 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.009 min

Lab File: VL041807.D

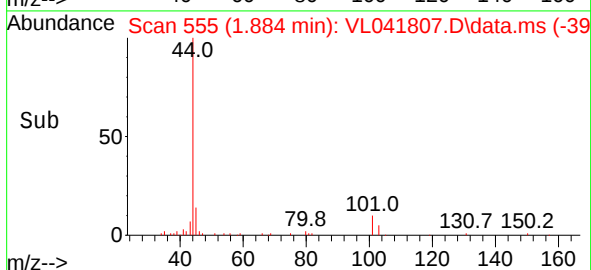
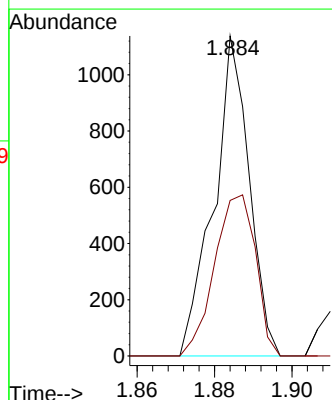
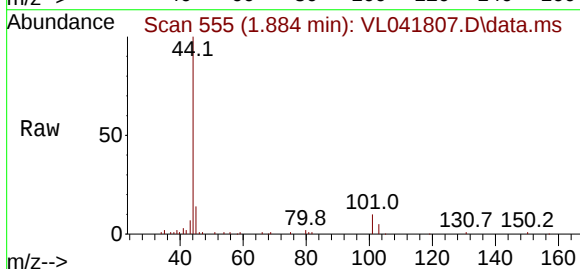
Acq: 18 Dec 2024 22:37

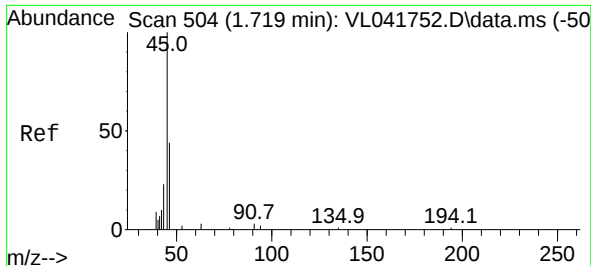
Tgt Ion:101 Resp: 724

Ion Ratio Lower Upper

101 100

103 48.6 51.8 77.8#





#13

Ethanol

Concen: 27.120 ppbv

RT: 1.725 min Scan# 506

Delta R.T. 0.006 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

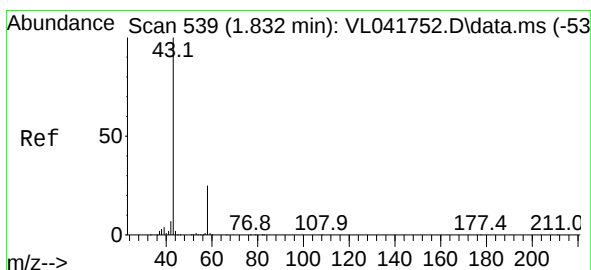
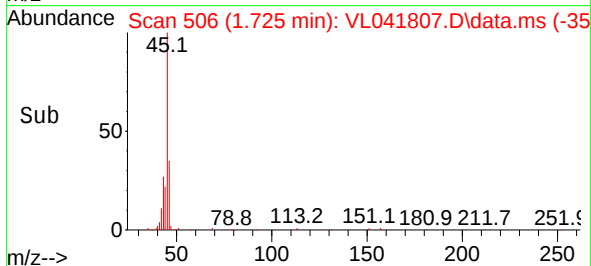
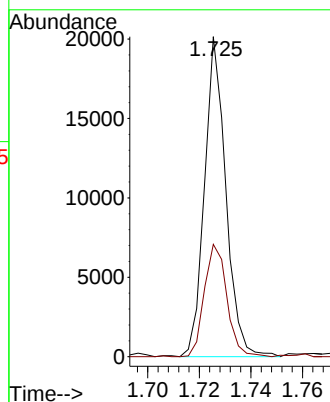
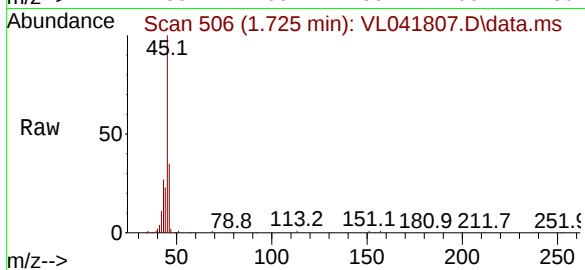
C0AC8

Tgt Ion: 45 Resp: 11589

Ion Ratio Lower Upper

45 100

46 0.0 16.4 65.8#



#15

Acetone

Concen: 0.685 ppbv

RT: 1.842 min Scan# 542

Delta R.T. 0.009 min

Lab File: VL041807.D

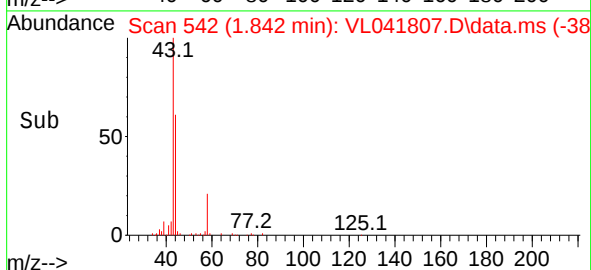
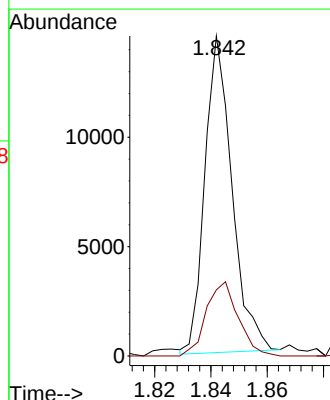
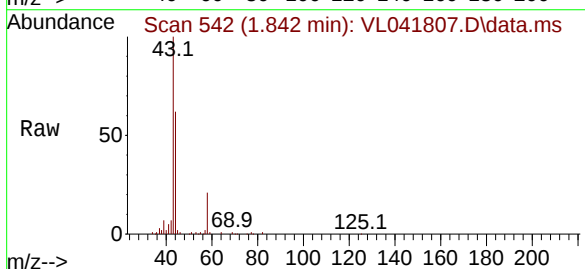
Acq: 18 Dec 2024 22:37

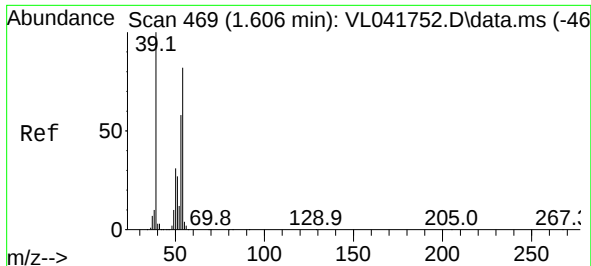
Tgt Ion: 43 Resp: 9724

Ion Ratio Lower Upper

43 100

58 27.5 19.7 29.5





#16

1,3-Butadiene

Concen: 0.115 ppbv

RT: 1.609 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

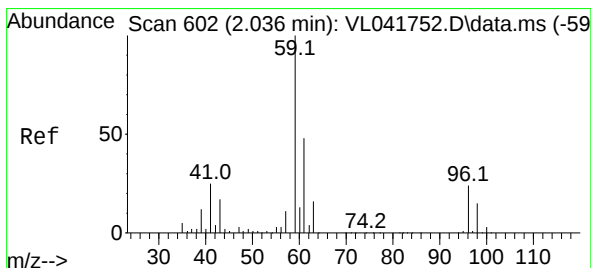
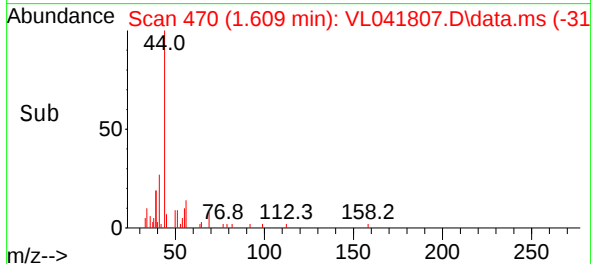
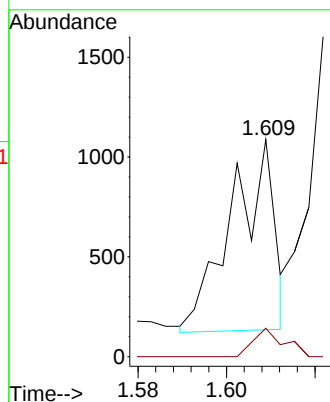
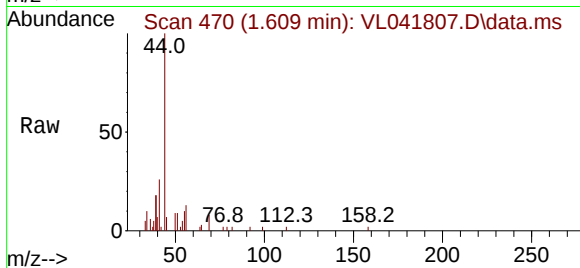
C0AC8

Tgt Ion: 39 Resp: 643

Ion Ratio Lower Upper

39 100

54 0.0 58.4 87.6#



#17

tert-Butyl alcohol

Concen: 0.139 ppbv

RT: 2.049 min Scan# 606

Delta R.T. 0.013 min

Lab File: VL041807.D

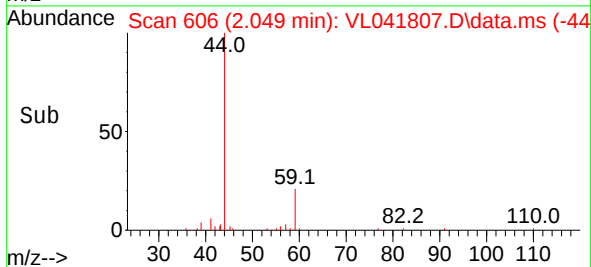
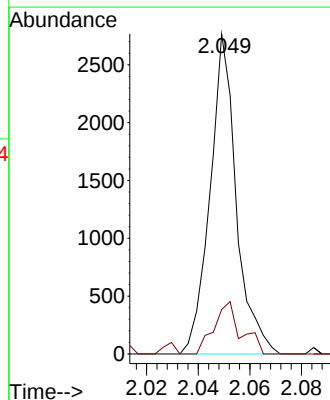
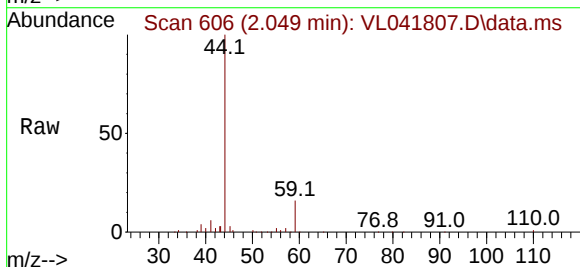
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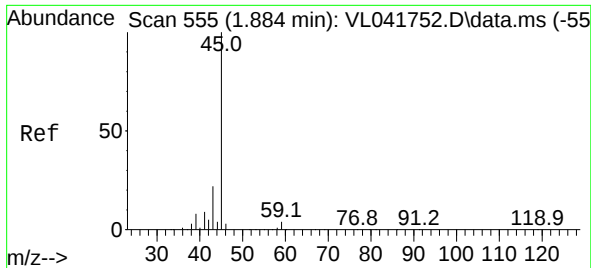
Tgt Ion: 59 Resp: 1952

Ion Ratio Lower Upper

59 100

57 19.0 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 0.936 ppbv

RT: 1.894 min Scan# 51

Delta R.T. 0.009 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

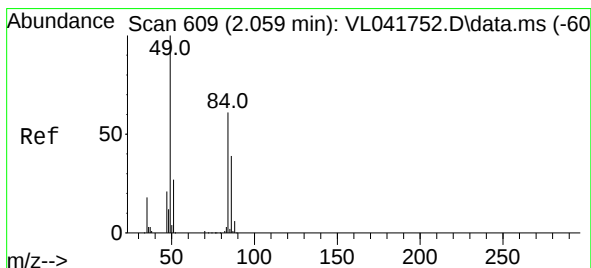
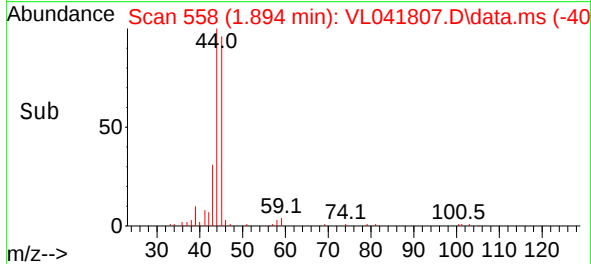
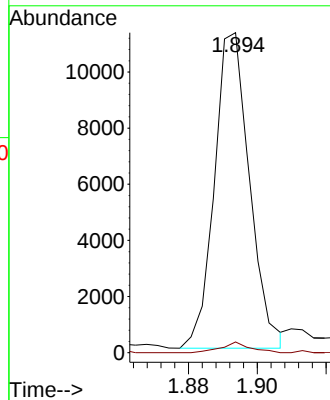
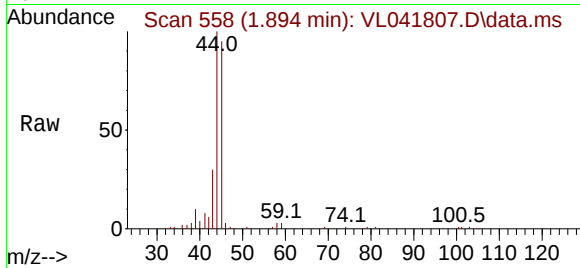
C0AC8

Tgt Ion: 45 Resp: 7976

Ion Ratio Lower Upper

45 100

58 2.9 33.3 49.9#



#20

Methylene Chloride

Concen: 0.403 ppbv

RT: 2.068 min Scan# 612

Delta R.T. 0.009 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Tgt Ion: 84 Resp: 1631

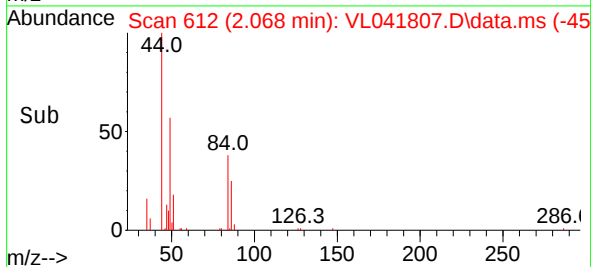
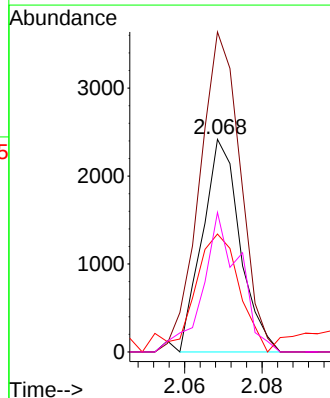
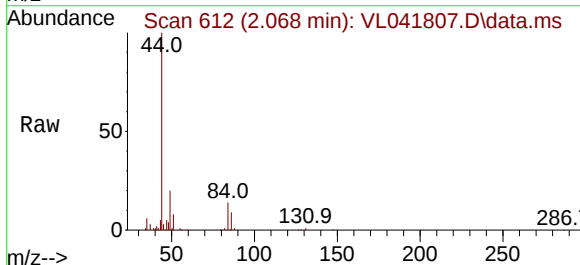
Ion Ratio Lower Upper

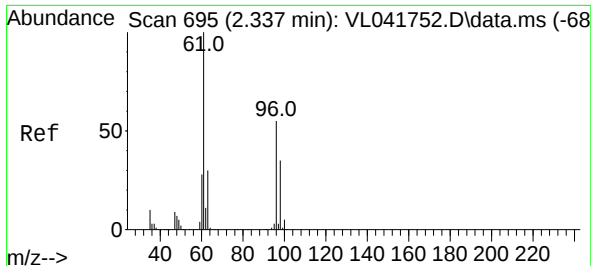
84 100

49 150.4 132.6 198.8

51 49.4 37.6 56.4

86 65.6 51.4 77.0





#22

trans-1,2-Dichloroethene

Concen: 0.035 ppbv

RT: 2.797 min Scan# 81

Delta R.T. 0.459 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

C0AC8

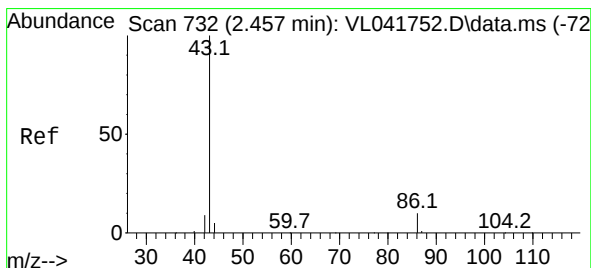
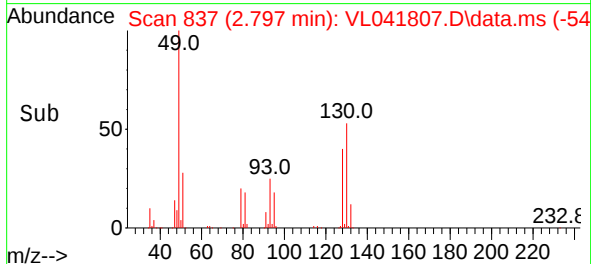
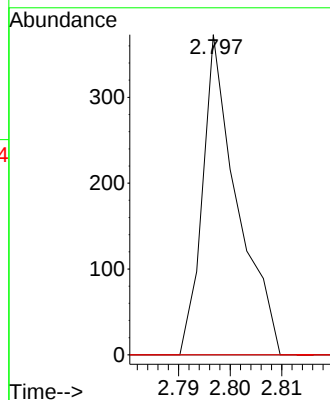
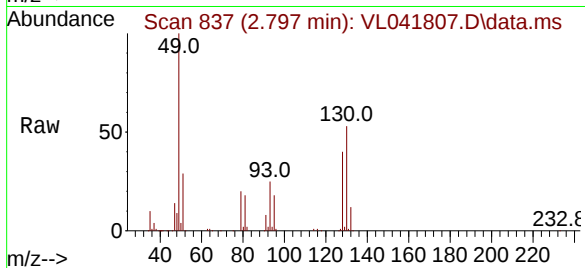
Tgt Ion: 96 Resp: 174

Ion Ratio Lower Upper

96 100

61 0.0 146.3 219.5#

98 0.0 50.8 76.2#



#23

Vinyl Acetate

Concen: 0.084 ppbv

RT: 2.470 min Scan# 736

Delta R.T. 0.013 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Tgt Ion: 43 Resp: 551

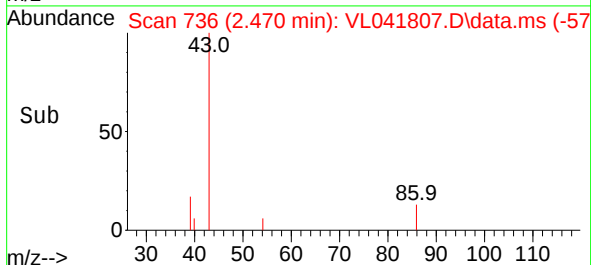
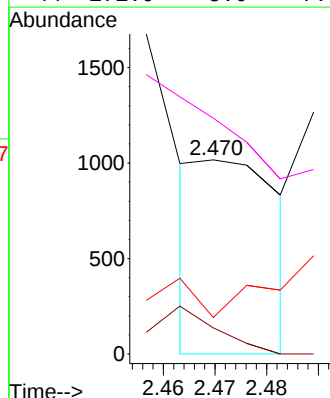
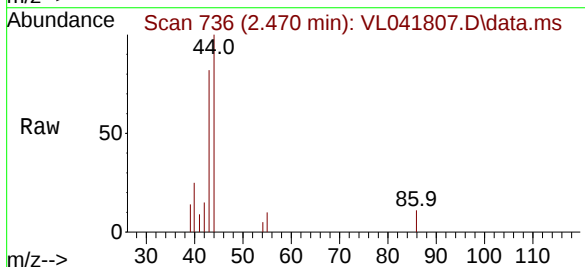
Ion Ratio Lower Upper

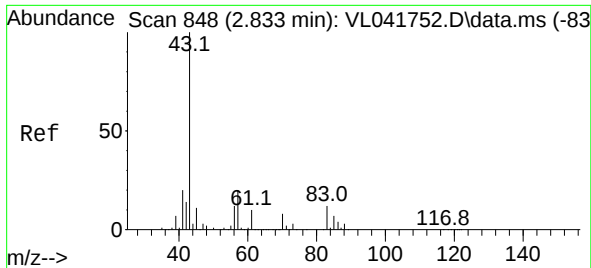
43 100

86 74.1 6.6 10.0#

42 0.0 8.2 12.2#

44 171.9 5.0 7.4#





#25

Ethyl Acetate

Concen: 0.142 ppbv

RT: 2.849 min Scan# 853

Delta R.T. 0.016 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

C0AC8

Tgt Ion: 43 Resp: 3744

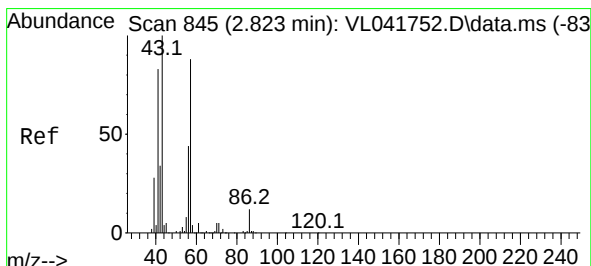
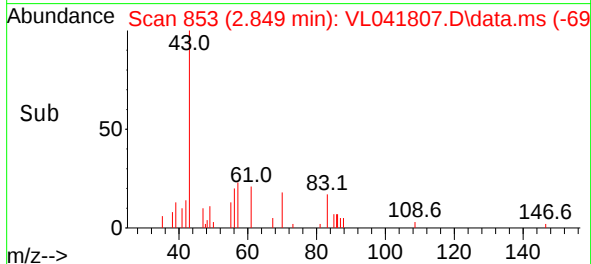
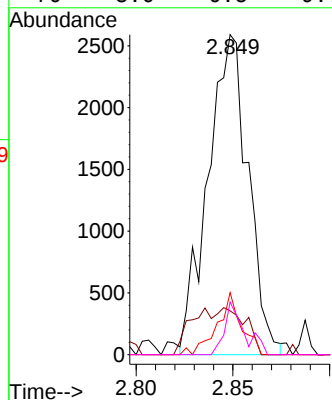
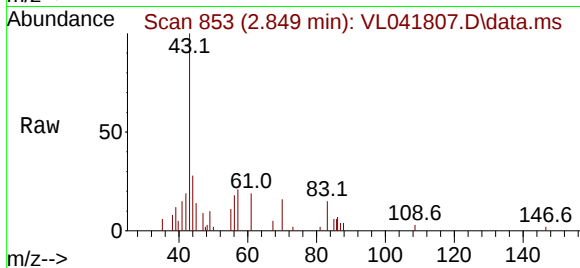
Ion Ratio Lower Upper

43 100

45 20.1 8.1 12.1#

61 11.6 7.0 10.6#

70 8.0 6.5 9.7



#26

Hexane

Concen: 0.157 ppbv

RT: 2.842 min Scan# 851

Delta R.T. 0.019 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Tgt Ion: 57 Resp: 1571

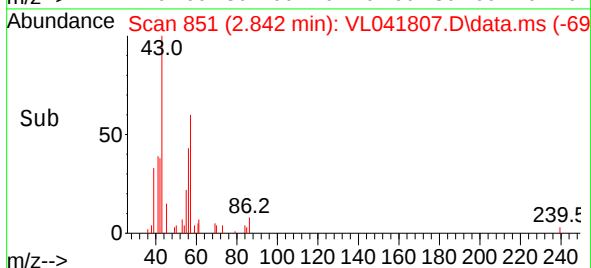
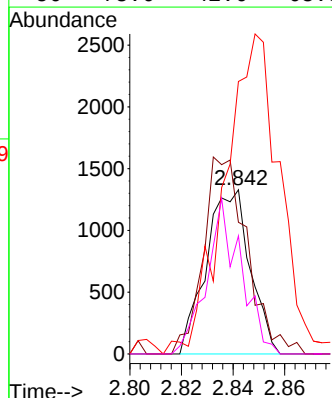
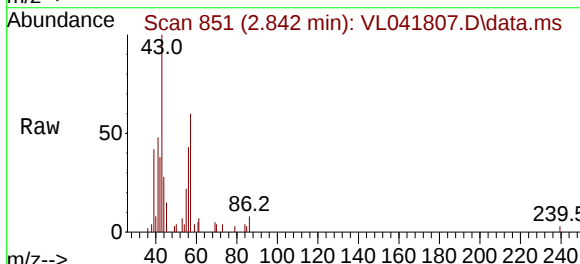
Ion Ratio Lower Upper

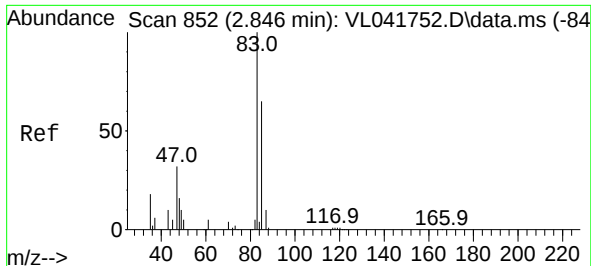
57 100

41 121.2 79.6 119.4#

43 253.7 211.0 316.6

56 73.6 42.6 63.8#





#29

Chloroform

Concen: 0.086 ppbv

RT: 2.861 min Scan# 85

Delta R.T. 0.016 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

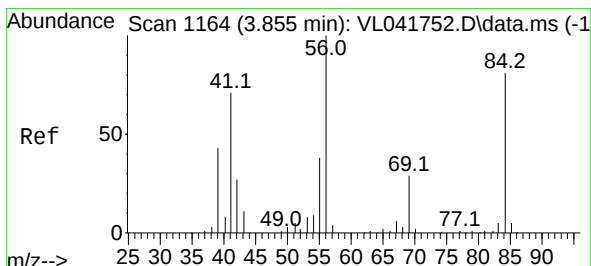
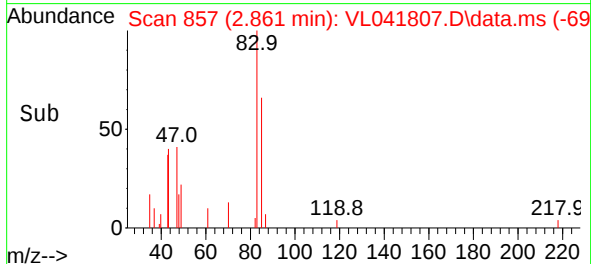
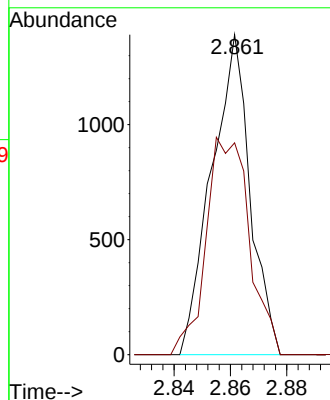
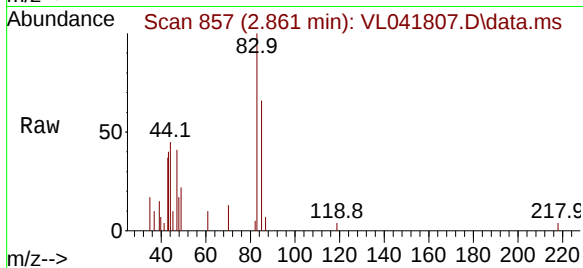
C0AC8

Tgt Ion: 83 Resp: 1319

Ion Ratio Lower Upper

83 100

85 66.2 51.8 77.6



#30

Cyclohexane

Concen: 0.037 ppbv

RT: 3.871 min Scan# 1169

Delta R.T. 0.016 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

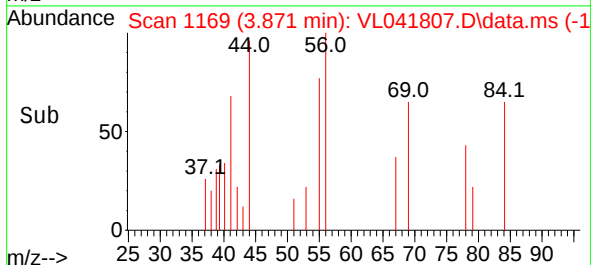
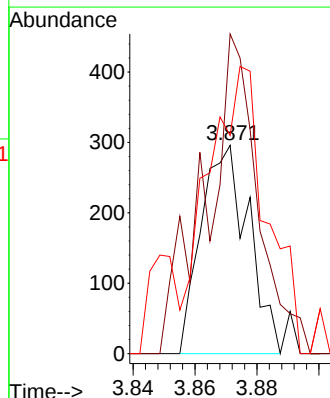
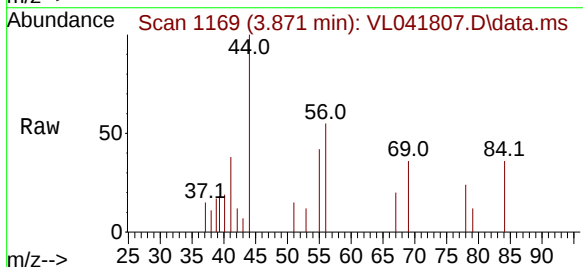
Tgt Ion: 84 Resp: 314

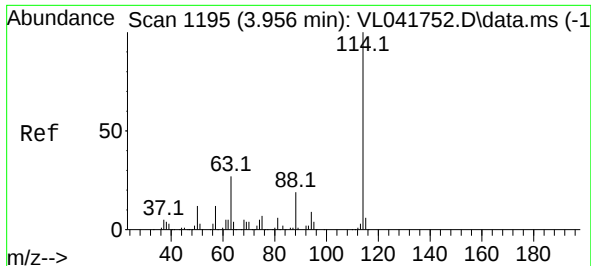
Ion Ratio Lower Upper

84 100

56 170.4 102.3 153.5#

41 201.9 74.0 111.0#

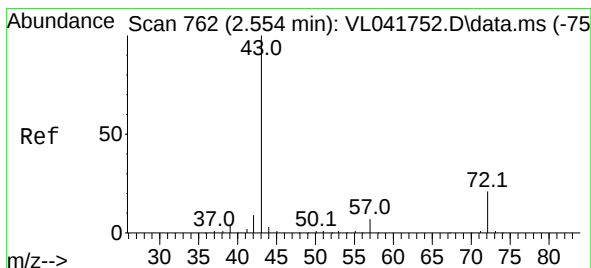
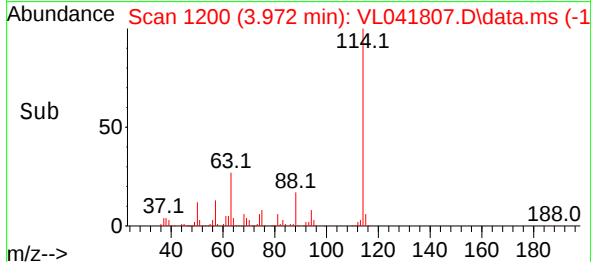
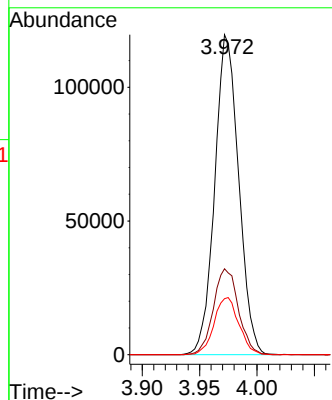
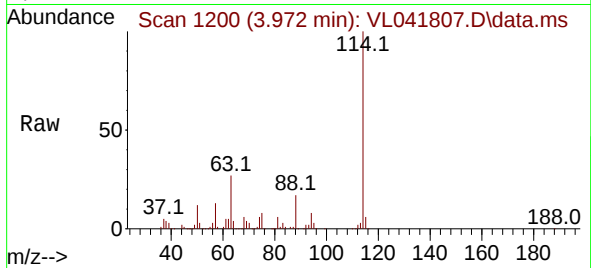




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.972 min Scan# 1195
 Delta R.T. 0.016 min
 Lab File: VL041807.D
 Acq: 18 Dec 2024 22:37

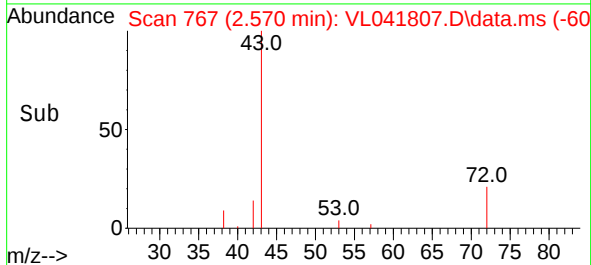
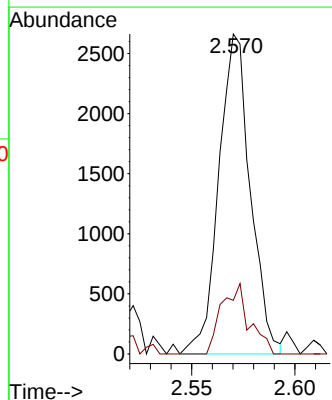
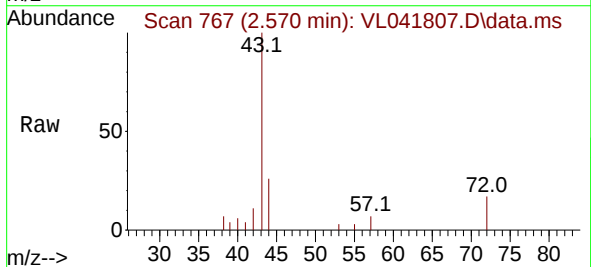
Instrument :
 MSVOA_L
 ClientSampleId :
 C0AC8

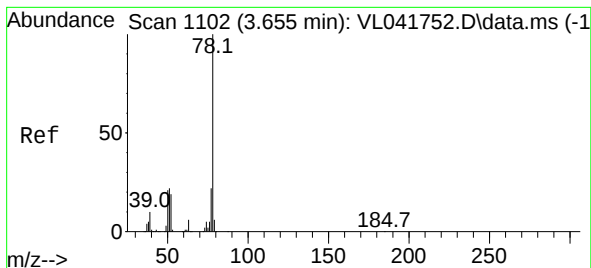
Tgt Ion:114 Resp: 173625
 Ion Ratio Lower Upper
 114 100
 63 28.1 21.8 32.8
 88 18.5 14.8 22.2



#34
 2-Butanone
 Concen: 0.203 ppbv
 RT: 2.570 min Scan# 767
 Delta R.T. 0.016 min
 Lab File: VL041807.D
 Acq: 18 Dec 2024 22:37

Tgt Ion: 43 Resp: 2830
 Ion Ratio Lower Upper
 43 100
 72 19.3 16.8 25.2





#36

Benzene

Concen: 0.053 ppbv

RT: 3.674 min Scan# 1108

Delta R.T. 0.019 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

C0AC8

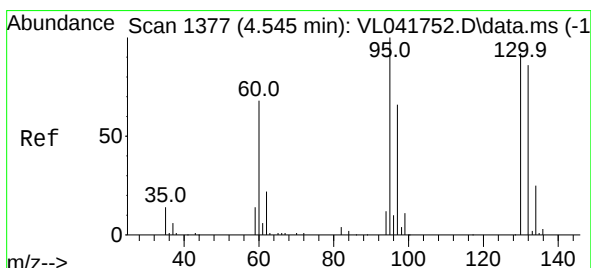
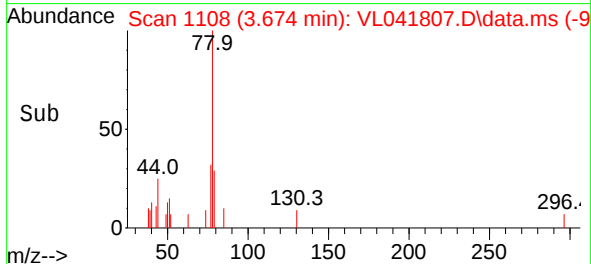
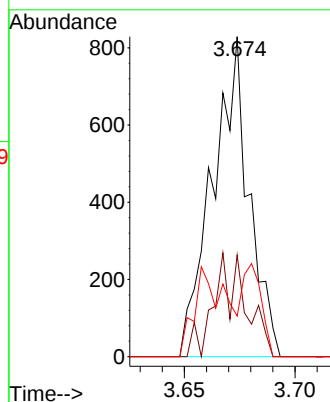
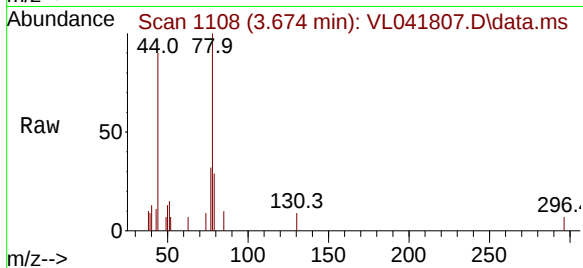
Tgt Ion: 78 Resp: 945

Ion Ratio Lower Upper

78 100

77 31.7 17.8 26.6#

50 12.7 17.2 25.8#



#38

Trichloroethene

Concen: 0.122 ppbv

RT: 4.564 min Scan# 1383

Delta R.T. 0.019 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Tgt Ion:130 Resp: 929

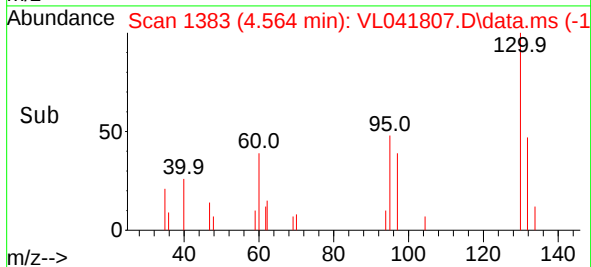
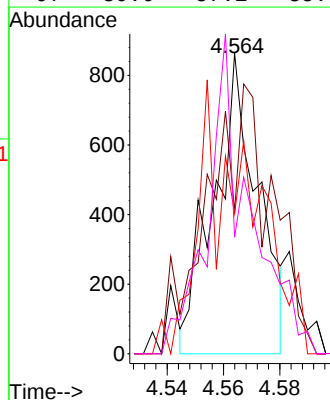
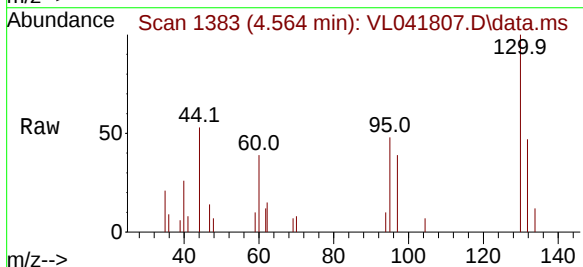
Ion Ratio Lower Upper

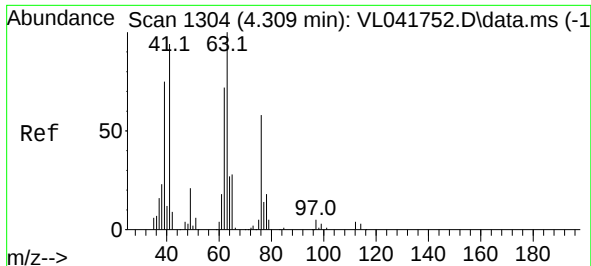
130 100

95 37.6 87.0 130.6#

132 31.3 75.0 112.6#

97 30.0 57.2 85.8#





#39

1,2-Dichloropropane

Concen: 7.494 ppbv

RT: 3.972 min Scan# 11

Delta R.T. -0.337 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

C0AC8

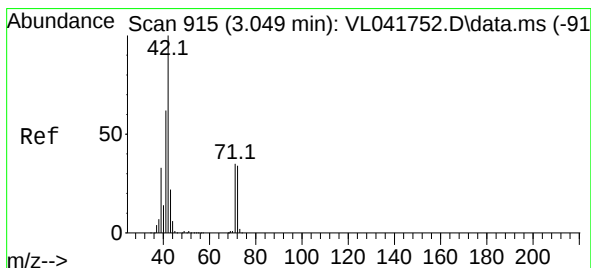
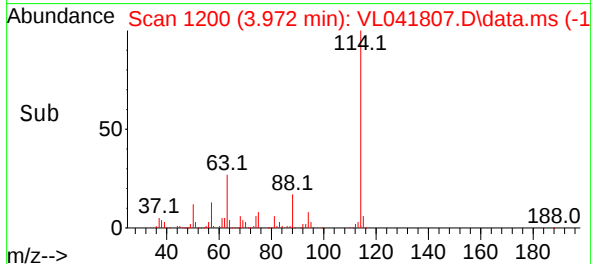
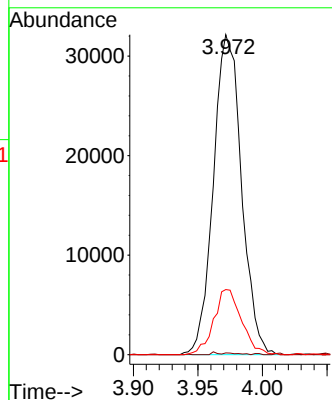
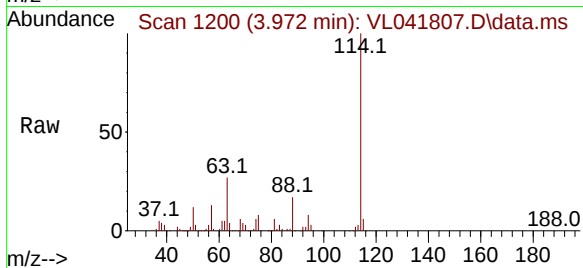
Tgt Ion: 63 Resp: 48675

Ion Ratio Lower Upper

63 100

41 0.6 75.3 112.9#

62 20.3 57.3 85.9#



#41

Tetrahydrofuran

Concen: 0.132 ppbv

RT: 3.078 min Scan# 924

Delta R.T. 0.029 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

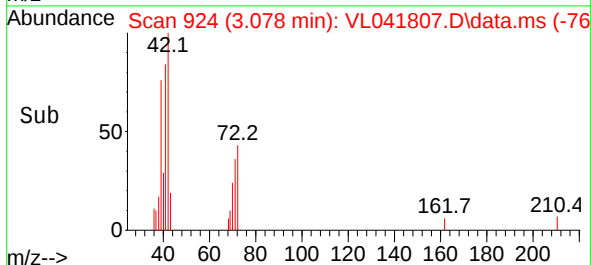
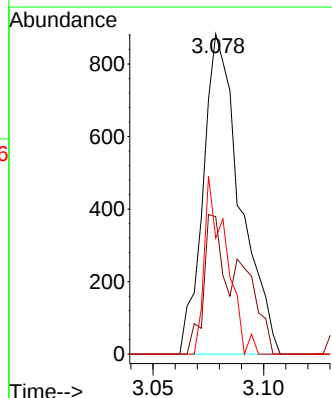
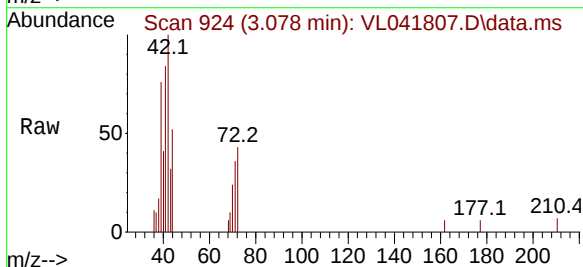
Tgt Ion: 42 Resp: 1030

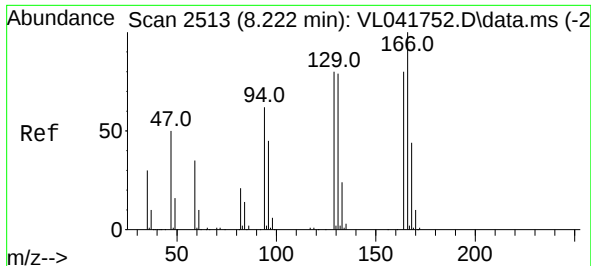
Ion Ratio Lower Upper

42 100

72 41.8 29.1 43.7

71 32.8 28.4 42.6





#52

Tetrachloroethene

Concen: 27.596 ppbv

RT: 8.241 min Scan# 2120

Delta R.T. 0.019 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

C0AC8

Tgt Ion:164 Resp: 184475

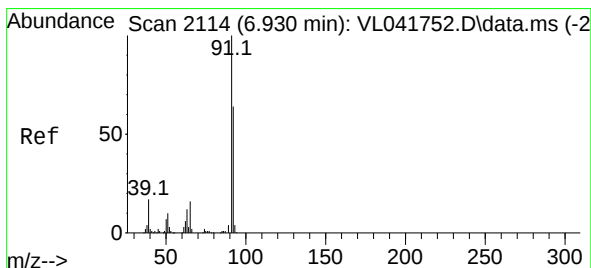
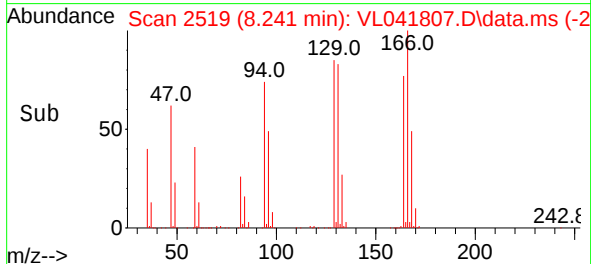
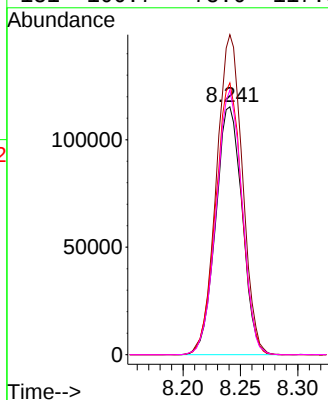
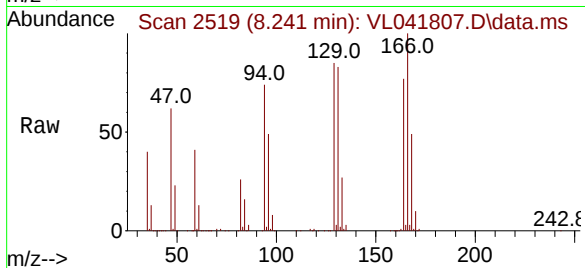
Ion Ratio Lower Upper

164 100

166 129.1 99.8 149.6

129 109.7 79.6 119.4

131 106.7 78.6 117.8



#53

Toluene

Concen: 0.842 ppbv

RT: 6.949 min Scan# 2120

Delta R.T. 0.019 min

Lab File: VL041807.D

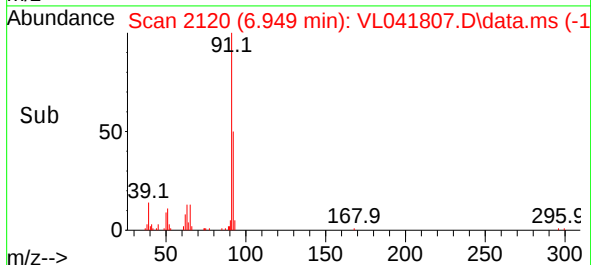
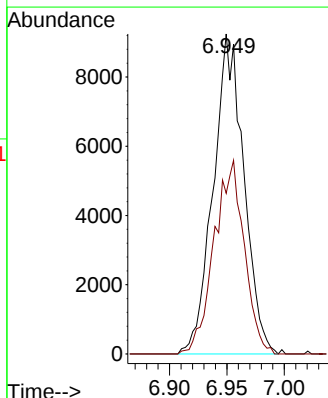
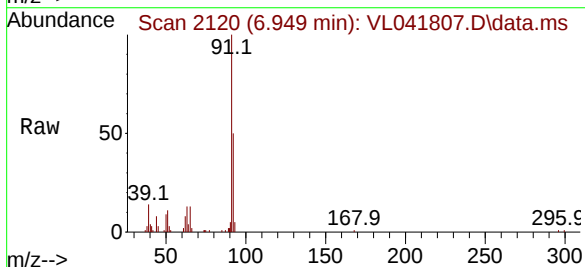
Acq: 18 Dec 2024 22:37

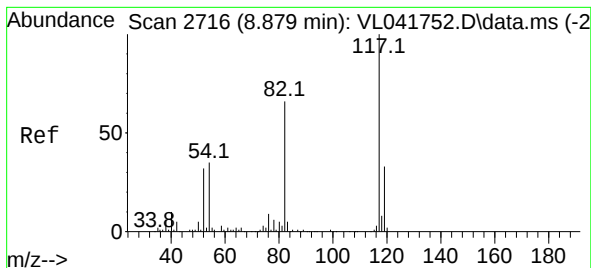
Tgt Ion: 91 Resp: 17152

Ion Ratio Lower Upper

91 100

92 59.6 47.9 71.9





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.895 min Scan# 21

Delta R.T. 0.016 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

C0AC8

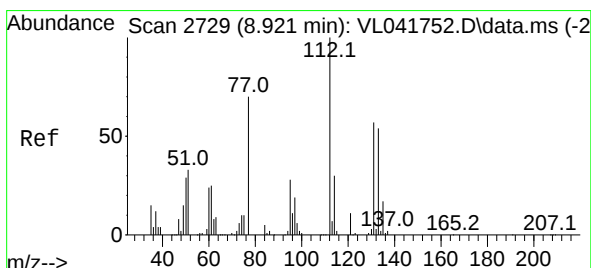
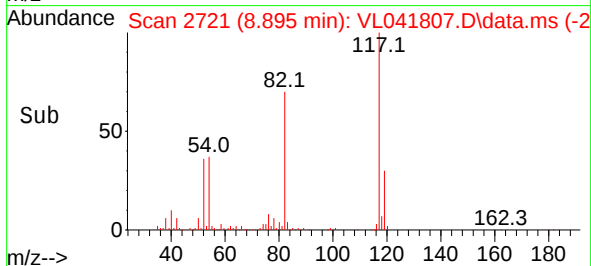
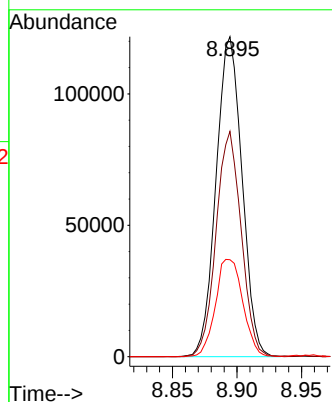
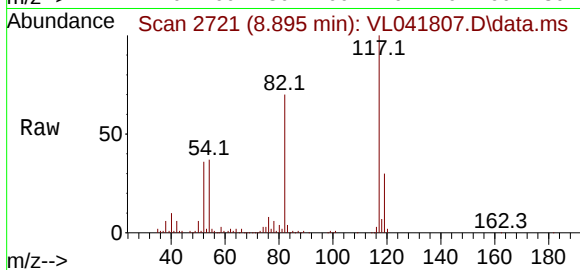
Tgt Ion:117 Resp: 170332

Ion Ratio Lower Upper

117 100

82 68.1 53.8 80.8

119 32.1 26.7 40.1



#57

Chlorobenzene

Concen: 0.042 ppbv

RT: 8.937 min Scan# 2734

Delta R.T. 0.016 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

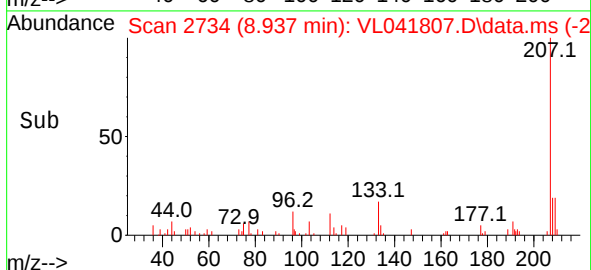
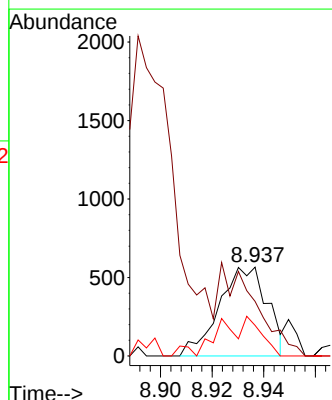
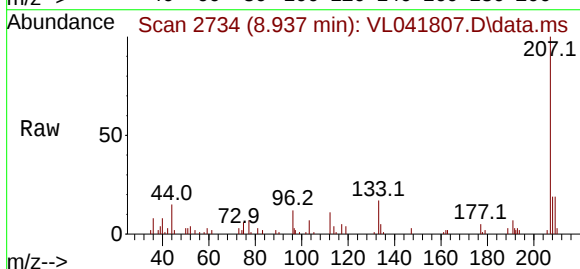
Tgt Ion:112 Resp: 734

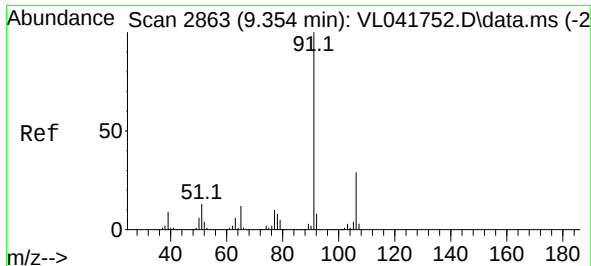
Ion Ratio Lower Upper

112 100

77 32.3 57.4 86.0#

114 46.1 27.4 33.4#





#58

Ethyl Benzene

Concen: 0.123 ppbv

RT: 9.364 min Scan# 2866

Delta R.T. 0.009 min

Lab File: VL041807.D

Acq: 18 Dec 2024 22:37

Instrument :

MSVOA_L

ClientSampleId :

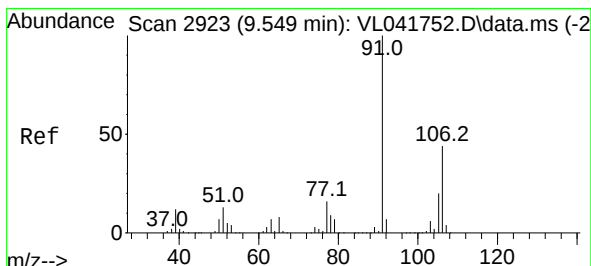
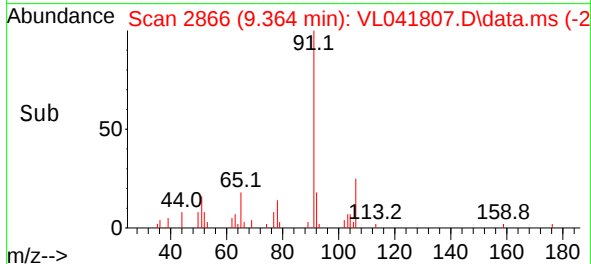
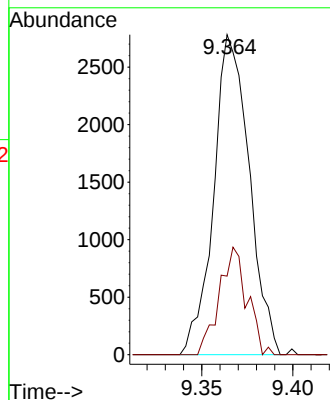
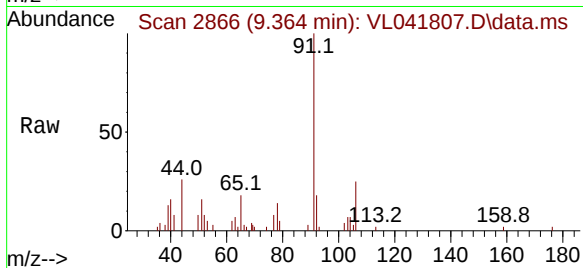
C0AC8

Tgt Ion: 91 Resp: 3771

Ion Ratio Lower Upper

91 100

106 24.6 23.5 35.3



#59

m/p-Xylene

Concen: 0.065 ppbv

RT: 9.548 min Scan# 2923

Delta R.T. -0.000 min

Lab File: VL041807.D

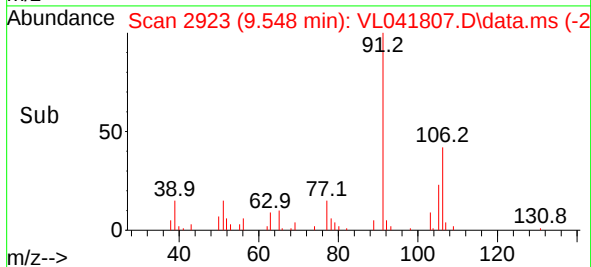
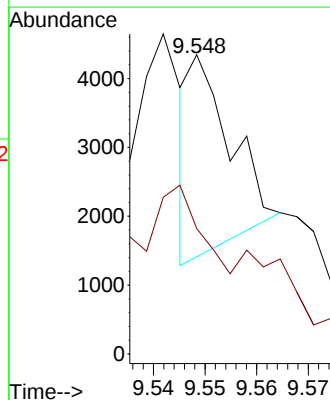
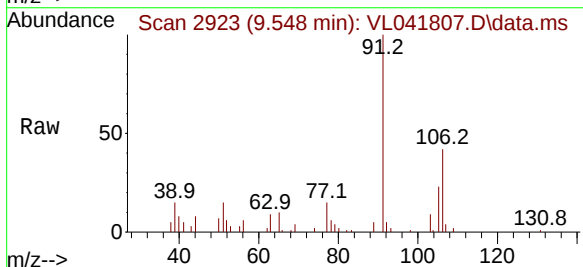
Acq: 18 Dec 2024 22:37

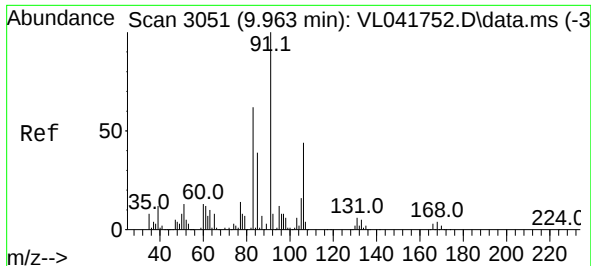
Tgt Ion: 91 Resp: 1601

Ion Ratio Lower Upper

91 100

106 262.5 0.0 0.0#

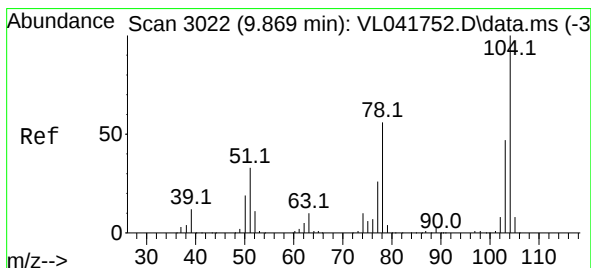
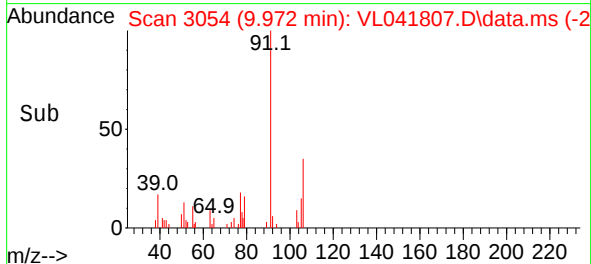
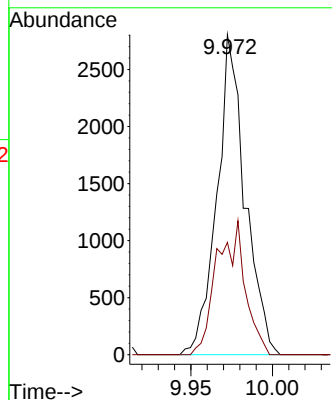
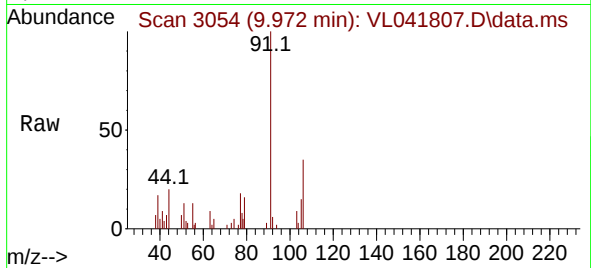




#60
o-Xylene
Concen: 0.136 ppbv
RT: 9.972 min Scan# 3051
Delta R.T. 0.009 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

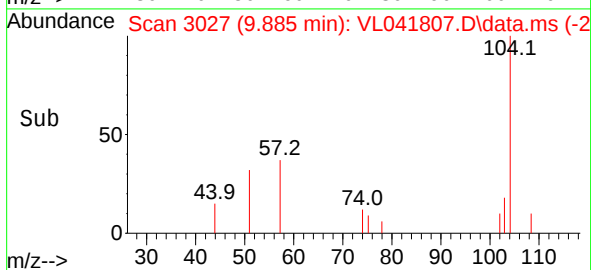
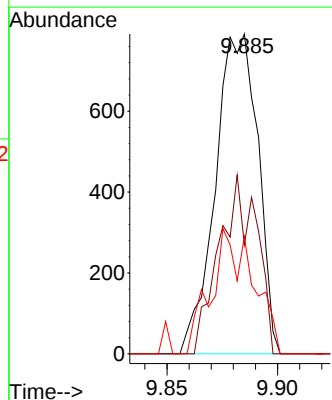
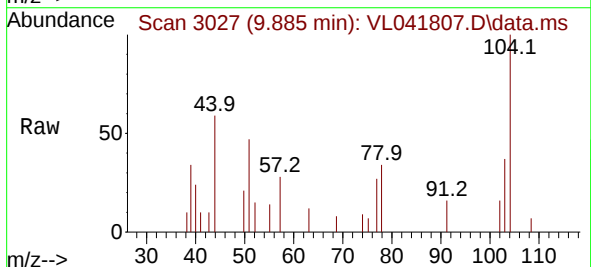
Instrument :
MSVOA_L
ClientSampleId :
C0AC8

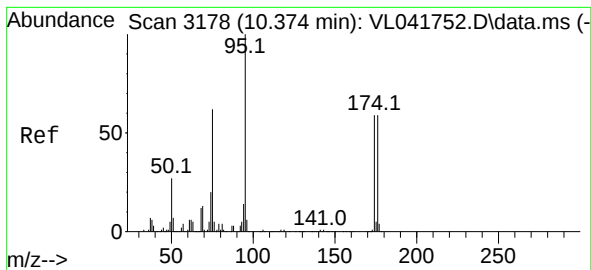
Tgt Ion: 91 Resp: 3367
Ion Ratio Lower Upper
91 100
106 42.3 21.1 63.4



#61
Styrene
Concen: 0.099 ppbv
RT: 9.885 min Scan# 3027
Delta R.T. 0.016 min
Lab File: VL041807.D
Acq: 18 Dec 2024 22:37

Tgt Ion: 104 Resp: 1059
Ion Ratio Lower Upper
104 100
78 49.2 43.8 65.6
103 40.2 37.8 56.6





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.570 ppbv
 RT: 10.387 min Scan# 3178
 Delta R.T. 0.013 min
 Lab File: VL041807.D
 Acq: 18 Dec 2024 22:37

Instrument :
 MSVOA_L
 ClientSampleId :
 C0AC8

Tgt Ion: 95 Resp: 135837
 Ion Ratio Lower Upper
 95 100
 174 57.3 47.6 71.4
 175 4.6 3.7 5.5

