

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121824\
 Data File : VL041798.D
 Acq On : 18 Dec 2024 17:43
 Operator : SY/MD
 Sample : P5293-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0AB9DUP

Quant Time: Dec 19 07:56:45 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

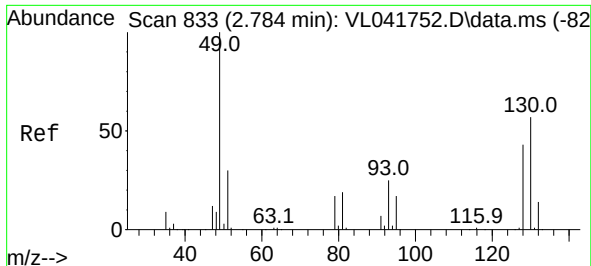
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.797	49	72121	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	3.975	114	176581	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.894	117	152305	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	128237	10.104	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.000%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.502	85	5460	0.425	ppbv	96
3) Chlorodifluoromethane	1.851	51	853	0.073	ppbv	92
4) Chloromethane	1.538	50	2031	0.404	ppbv	97
6) Bromomethane	1.673	94	73	0.031	ppbv #	3
9) Propene	1.563	41	9017	1.769	ppbv	97
11) Trichlorofluoromethane	1.884	101	2724	0.200	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.149	101	700	0.068	ppbv	87
13) Ethanol	1.725	45	54872	129.993	ppbv	94
15) Acetone	1.842	43	46424	3.308	ppbv #	83
16) 1,3-Butadiene	1.625	39	11173	2.022	ppbv #	20
17) tert-Butyl alcohol	2.052	59	505	0.036	ppbv #	71
19) Isopropyl Alcohol	1.894	45	5895	0.700	ppbv #	1
20) Methylene Chloride	2.068	84	42585	10.643	ppbv	96
21) Allyl Chloride	2.068	41	1384	0.182	ppbv #	60
23) Vinyl Acetate	2.483	43	6321	0.970	ppbv #	25
25) Ethyl Acetate	2.839	43	12575	0.482	ppbv #	85
26) Hexane	2.839	57	14701	1.484	ppbv #	31
29) Chloroform	2.858	83	39051	2.587	ppbv	94
30) Cyclohexane	3.868	84	538	0.064	ppbv #	59
34) 2-Butanone	2.570	43	3039	0.214	ppbv	100
35) Carbon Tetrachloride	3.774	117	613	0.049	ppbv #	80
36) Benzene	3.667	78	4108	0.225	ppbv	96
39) 1,2-Dichloropropane	3.971	63	50412	7.631	ppbv #	18
41) Tetrahydrofuran	3.085	42	302	0.038	ppbv #	71
44) 2,2,4-Trimethylpentane	4.654	57	2158	0.069	ppbv #	11
53) Toluene	6.952	91	6783	0.328	ppbv	99
60) o-Xylene	9.979	91	1265	0.057	ppbv	83
74) 1,2,4-Trimethylbenzene	11.548	105	1109	0.048	ppbv #	51

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

Quant Time: Dec 19 07:56:45 2024
Quant Method : Z:\voasrv\HPCHEM1\MSV0A_L\methods\VL121624AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSV0A_LFri Aug 26 06:05:16 2022
QLast Update : Thu Dec 19 07:32:09 2024
Response via : Initial Calibration

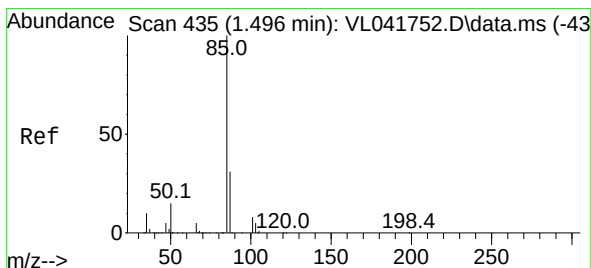
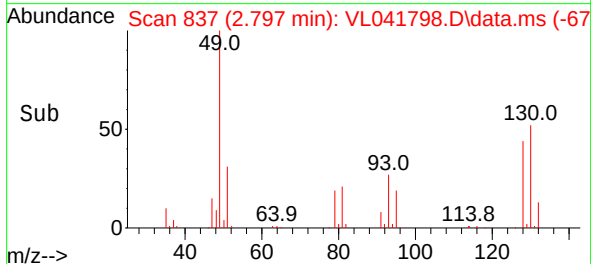
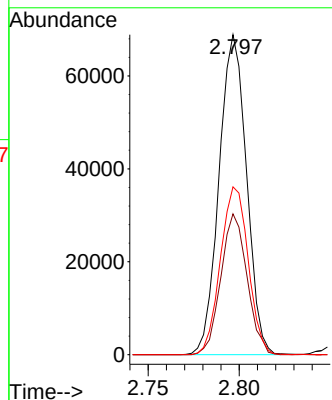
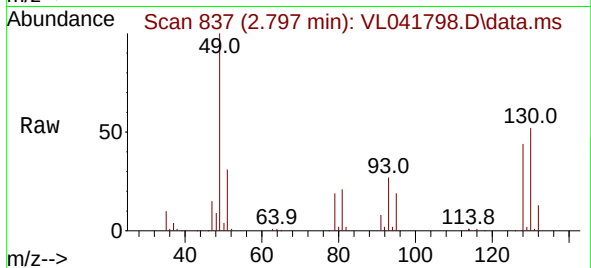




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 841
Delta R.T. 0.013 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

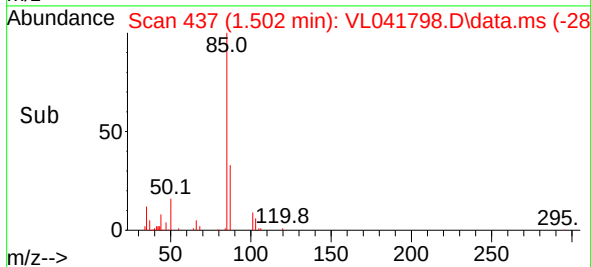
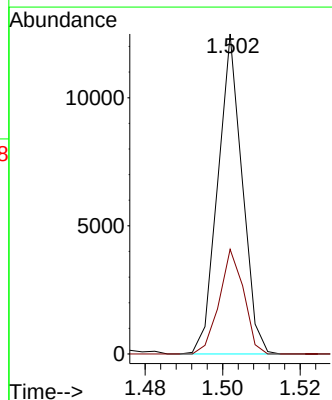
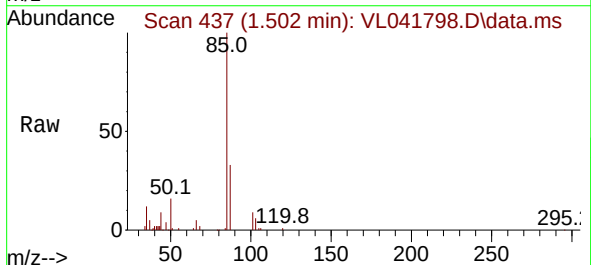
Instrument :
MSVOA_L
ClientSampleId :
C0AB9DUP

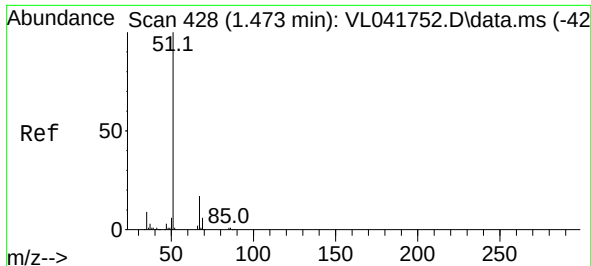
Tgt Ion: 49 Resp: 72121
Ion Ratio Lower Upper
49 100
128 42.1 21.6 64.6
130 53.2 28.3 85.0



#2
Dichlorodifluoromethane
Concen: 0.425 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.006 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

Tgt Ion: 85 Resp: 5460
Ion Ratio Lower Upper
85 100
87 32.7 24.5 36.7

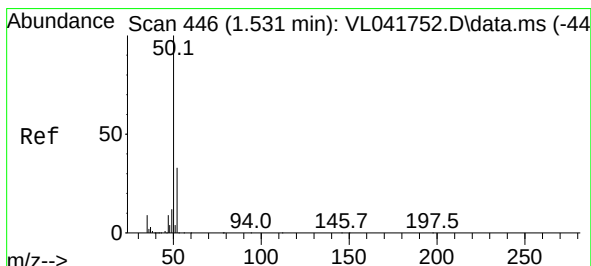
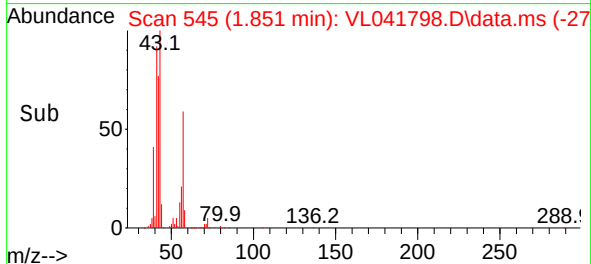
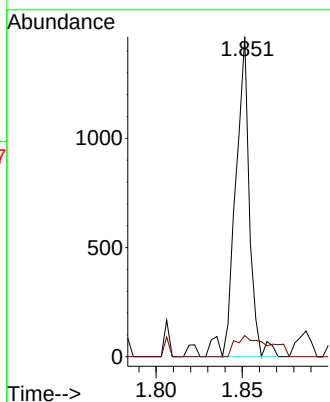
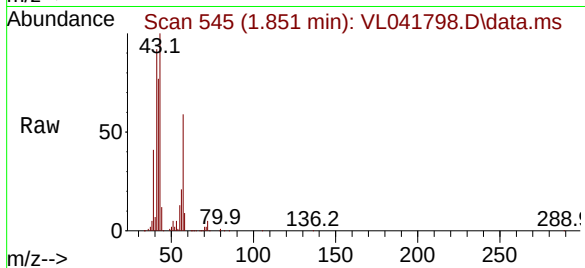




#3
Chlorodifluoromethane
Concen: 0.073 ppbv
RT: 1.851 min Scan# 54
Delta R.T. 0.378 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

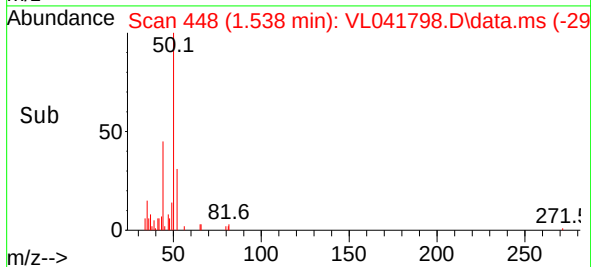
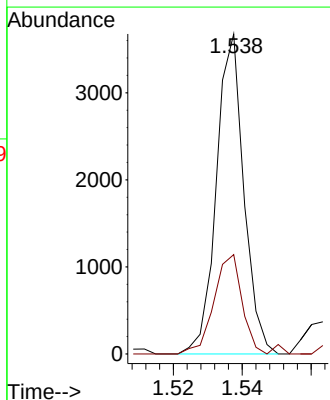
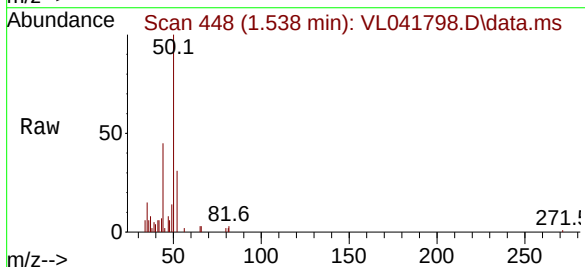
Instrument :
MSVOA_L
ClientSampleId :
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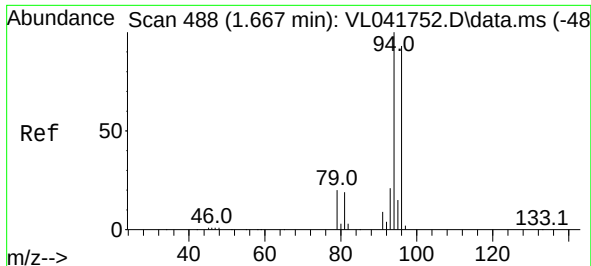
Tgt Ion: 51 Resp: 853
Ion Ratio Lower Upper
51 100
67 15.2 15.0 22.4



#4
Chloromethane
Concen: 0.404 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

Tgt Ion: 50 Resp: 2031
Ion Ratio Lower Upper
50 100
52 31.0 26.2 39.2

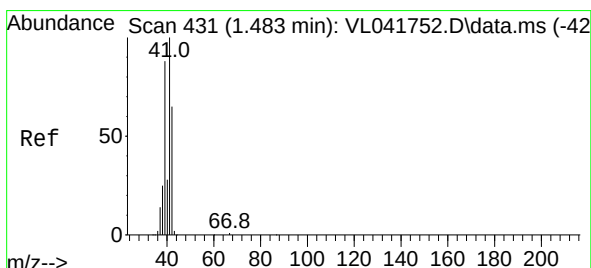
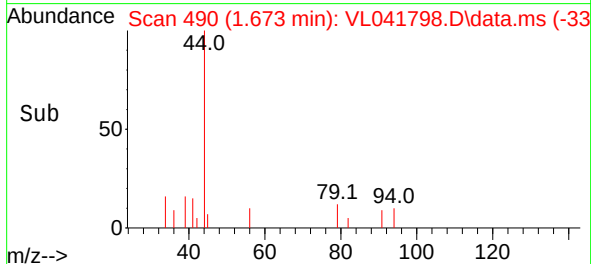
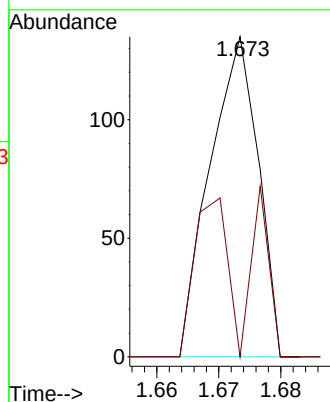
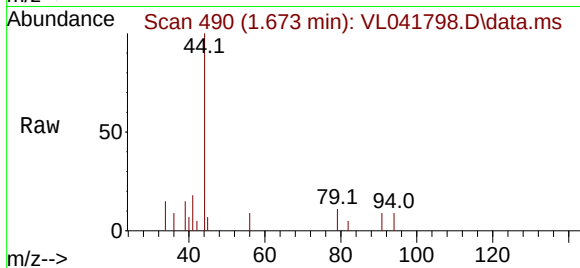




#6
Bromomethane
Concen: 0.031 ppbv
RT: 1.673 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

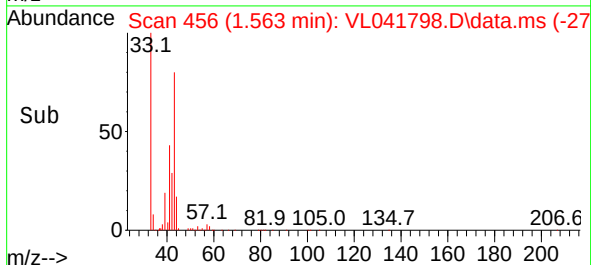
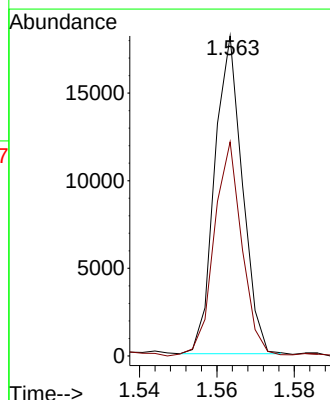
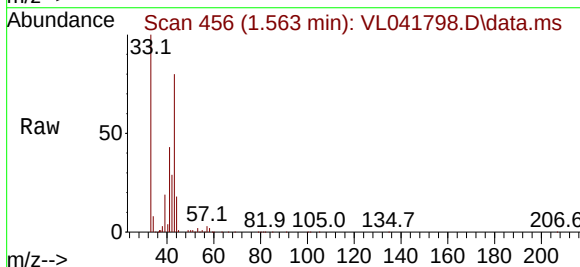
Instrument :
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ClientSampleId :
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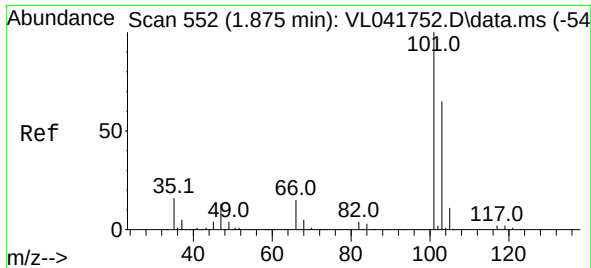
Tgt Ion: 94 Resp: 73
Ion Ratio Lower Upper
94 100
96 0.0 74.7 112.1#



#9
Propene
Concen: 1.769 ppbv
RT: 1.563 min Scan# 456
Delta R.T. 0.080 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

Tgt Ion: 41 Resp: 9017
Ion Ratio Lower Upper
41 100
42 68.1 52.4 78.6

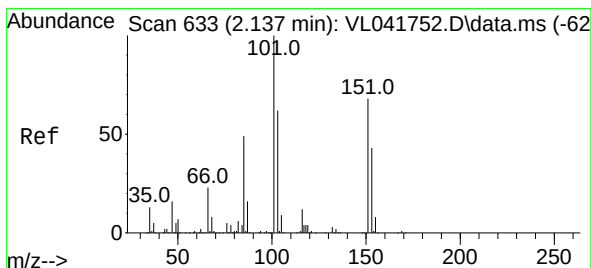
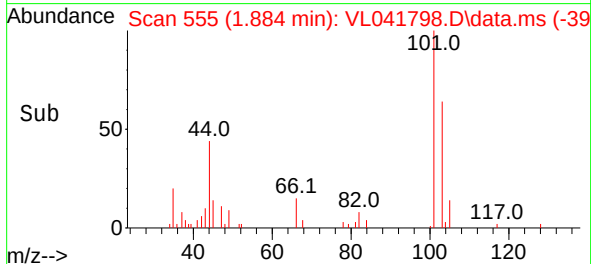
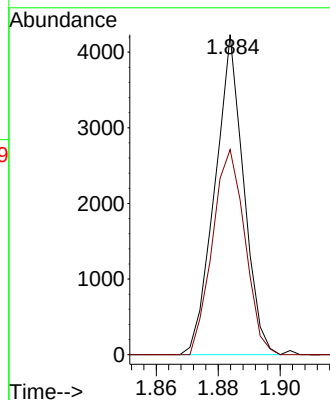
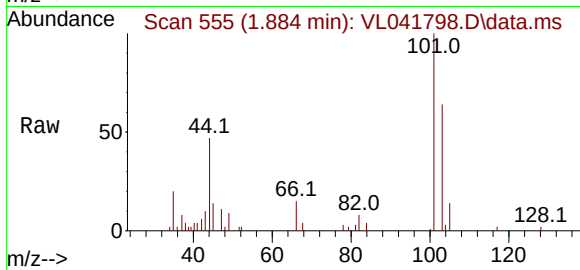




#11
 Trichlorofluoromethane
 Concen: 0.200 ppbv
 RT: 1.884 min Scan# 511
 Delta R.T. 0.009 min
 Lab File: VL041798.D
 Acq: 18 Dec 2024 17:43

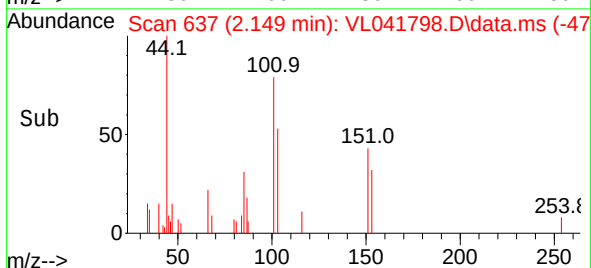
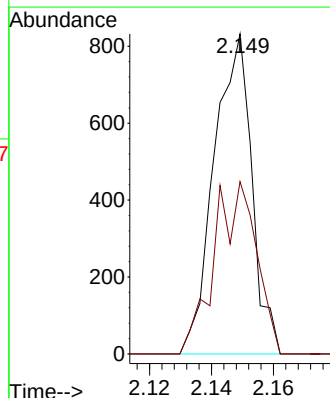
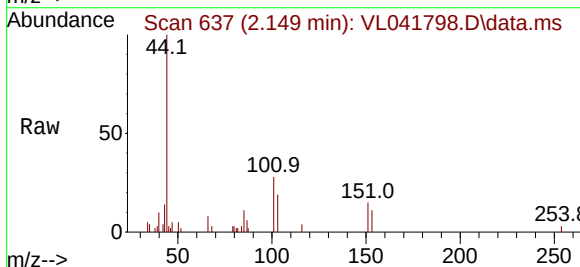
Instrument :
 MSVOA_L
 ClientSampleId :
 C0AB9DUP

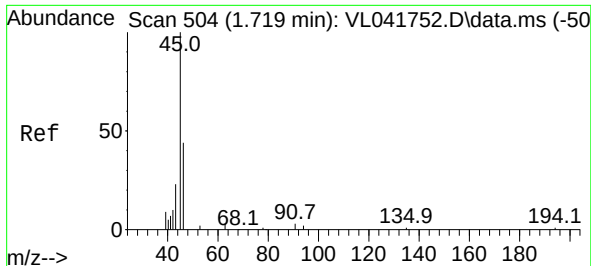
Tgt Ion:101 Resp: 2724
 Ion Ratio Lower Upper
 101 100
 103 64.1 51.8 77.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.068 ppbv
 RT: 2.149 min Scan# 637
 Delta R.T. 0.012 min
 Lab File: VL041798.D
 Acq: 18 Dec 2024 17:43

Tgt Ion:101 Resp: 700
 Ion Ratio Lower Upper
 101 100
 151 60.6 56.8 85.2





#13

Ethanol

Concen: 129.993 ppbv

RT: 1.725 min Scan# 504

Delta R.T. 0.006 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

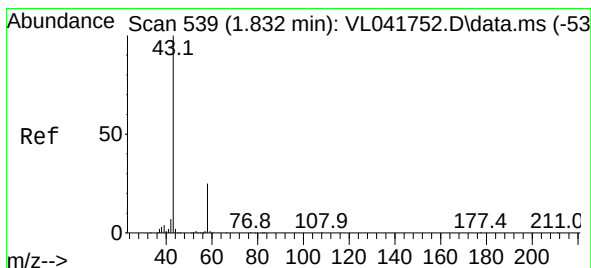
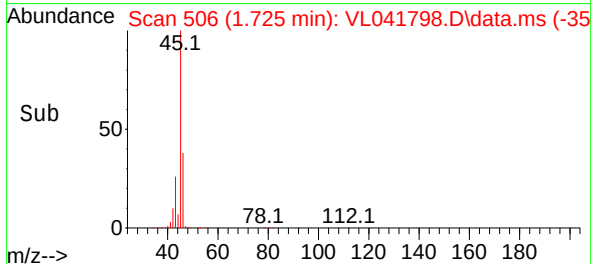
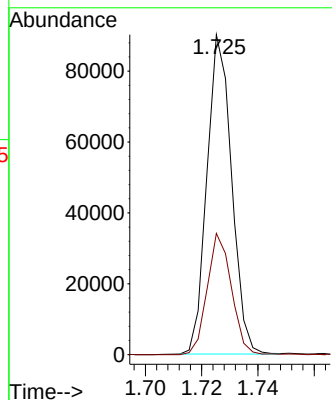
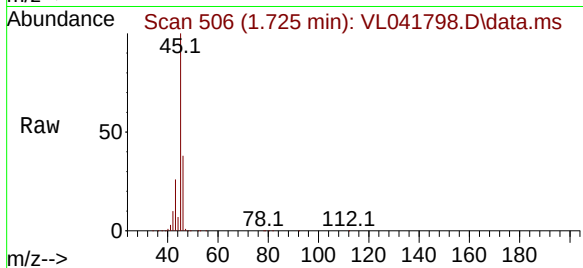
C0AB9DUP

Tgt Ion: 45 Resp: 54872

Ion Ratio Lower Upper

45 100

46 37.3 16.4 65.8



#15

Acetone

Concen: 3.308 ppbv

RT: 1.842 min Scan# 542

Delta R.T. 0.009 min

Lab File: VL041798.D

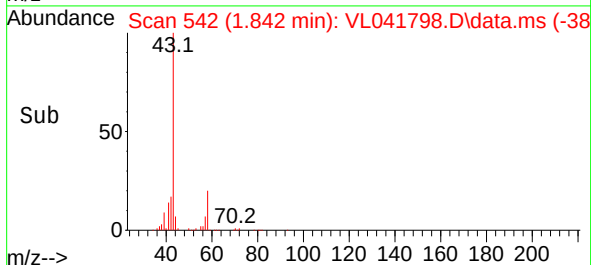
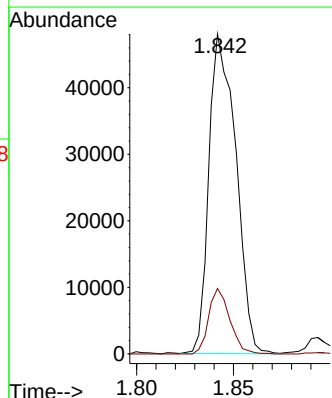
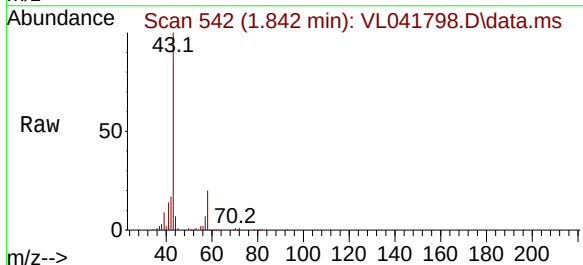
Acq: 18 Dec 2024 17:43

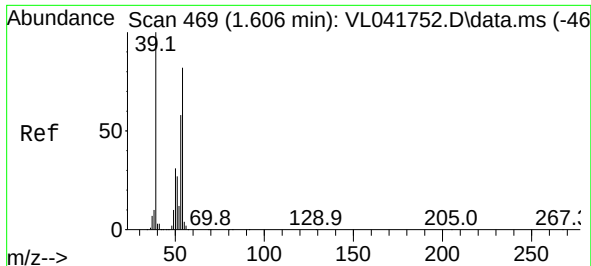
Tgt Ion: 43 Resp: 46424

Ion Ratio Lower Upper

43 100

58 16.1 19.7 29.5#





#16

1,3-Butadiene

Concen: 2.022 ppbv

RT: 1.625 min Scan# 41

Delta R.T. 0.019 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

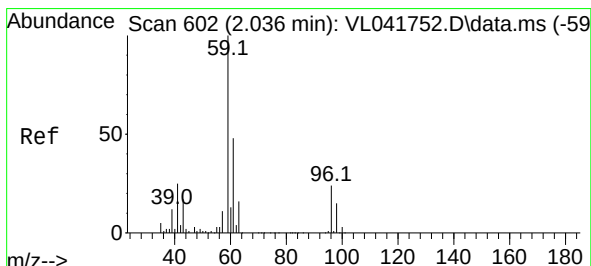
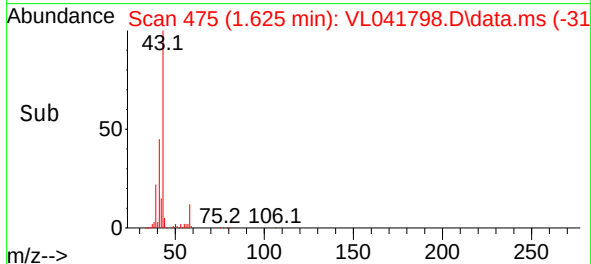
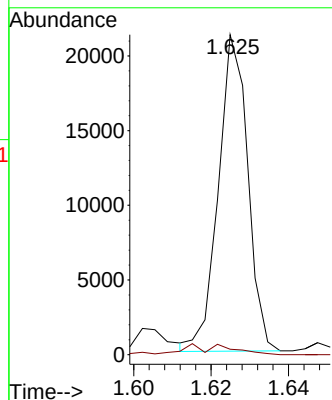
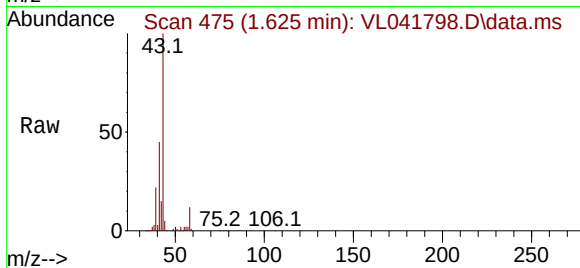
C0AB9DUP

Tgt Ion: 39 Resp: 11173

Ion Ratio Lower Upper

39 100

54 5.5 58.4 87.6#



#17

tert-Butyl alcohol

Concen: 0.036 ppbv

RT: 2.052 min Scan# 607

Delta R.T. 0.016 min

Lab File: VL041798.D

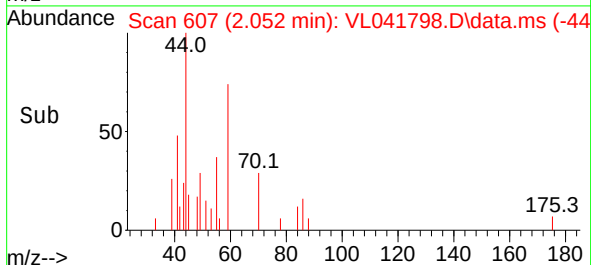
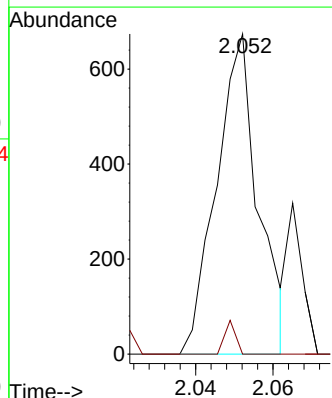
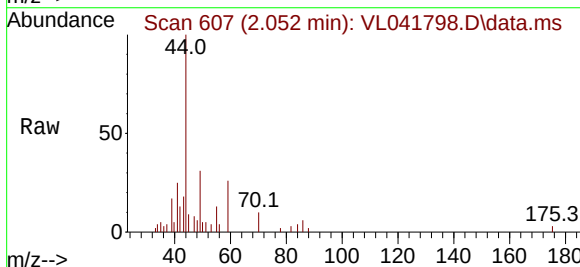
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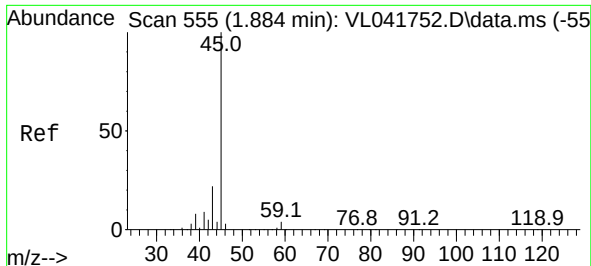
Tgt Ion: 59 Resp: 505

Ion Ratio Lower Upper

59 100

57 0.0 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 0.700 ppbv

RT: 1.894 min Scan# 51

Delta R.T. 0.009 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

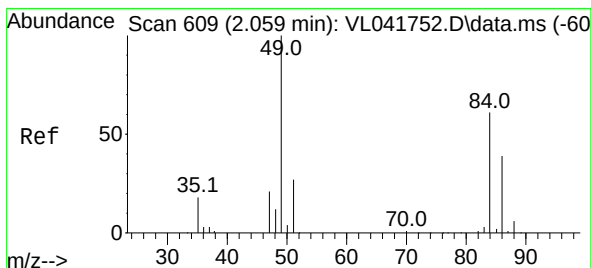
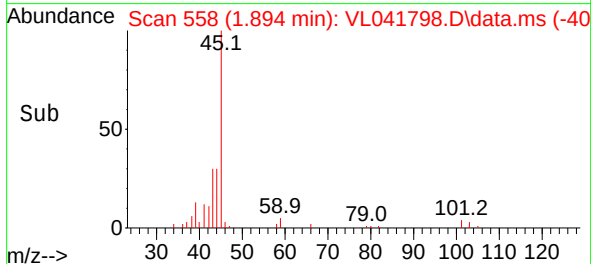
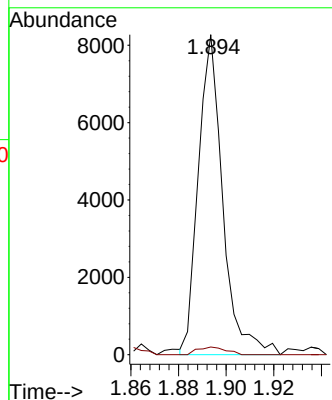
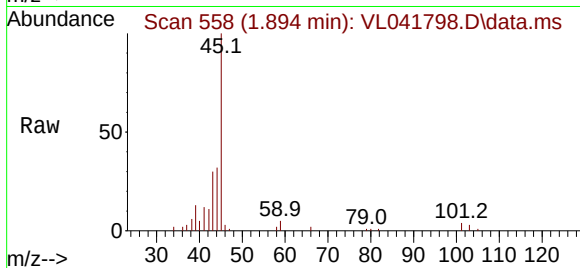
C0AB9DUP

Tgt Ion: 45 Resp: 5895

Ion Ratio Lower Upper

45 100

58 126.6 33.3 49.9#



#20

Methylene Chloride

Concen: 10.643 ppbv

RT: 2.068 min Scan# 612

Delta R.T. 0.009 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Tgt Ion: 84 Resp: 42585

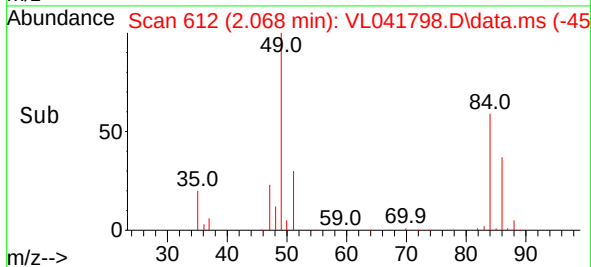
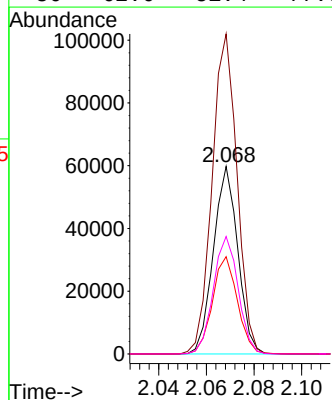
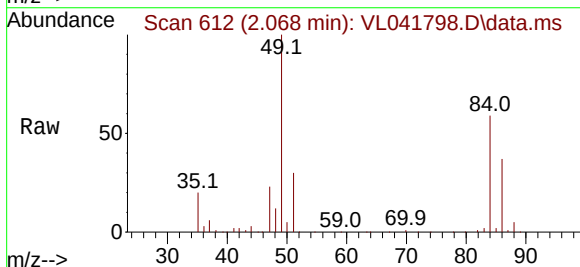
Ion Ratio Lower Upper

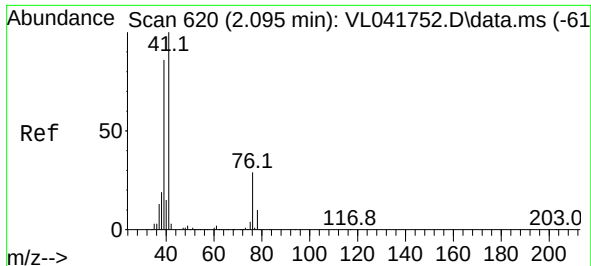
84 100

49 170.7 132.6 198.8

51 51.8 37.6 56.4

86 62.6 51.4 77.0





#21

Allyl Chloride

Concen: 0.182 ppbv

RT: 2.068 min Scan# 61

Delta R.T. -0.026 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_1

ClientSampleId :

C0AB9DUP

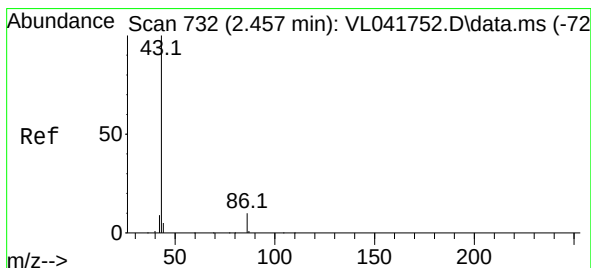
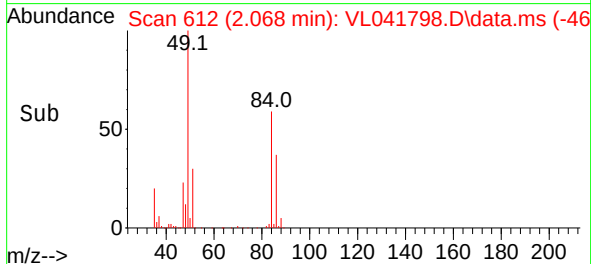
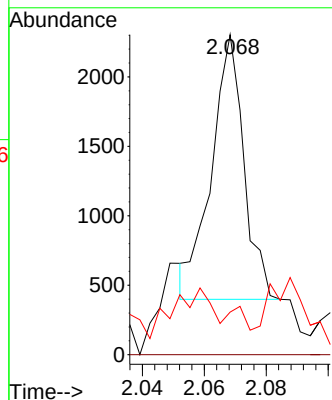
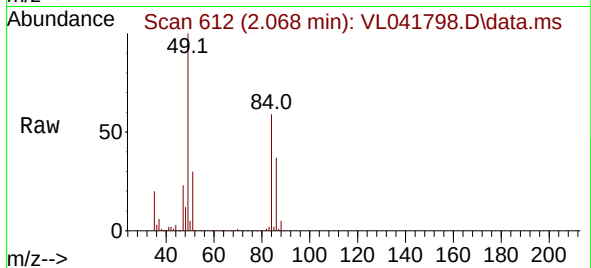
Tgt Ion: 41 Resp: 1384

Ion Ratio Lower Upper

41 100

76 0.0 22.3 33.5#

39 53.8 69.2 103.8#



#23

Vinyl Acetate

Concen: 0.970 ppbv

RT: 2.483 min Scan# 740

Delta R.T. 0.025 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Tgt Ion: 43 Resp: 6321

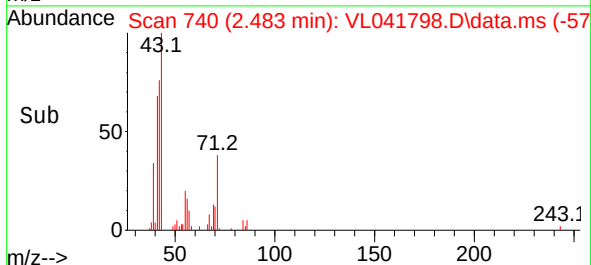
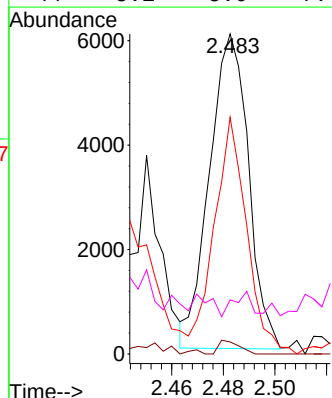
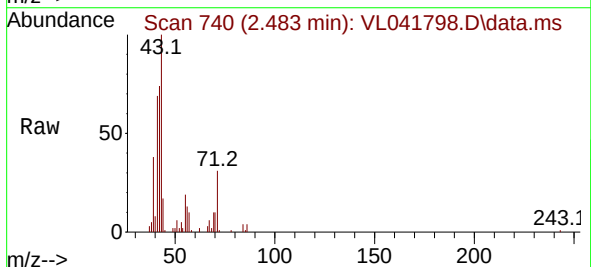
Ion Ratio Lower Upper

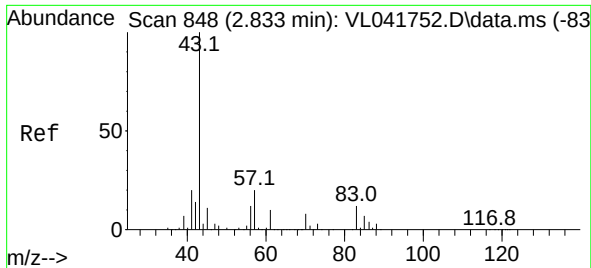
43 100

86 3.8 6.6 10.0#

42 73.2 8.2 12.2#

44 5.1 5.0 7.4





#25

Ethyl Acetate

Concen: 0.482 ppbv

RT: 2.839 min Scan# 848

Delta R.T. 0.006 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_1

ClientSampleId :

C0AB9DUP

Tgt Ion: 43 Resp: 12575

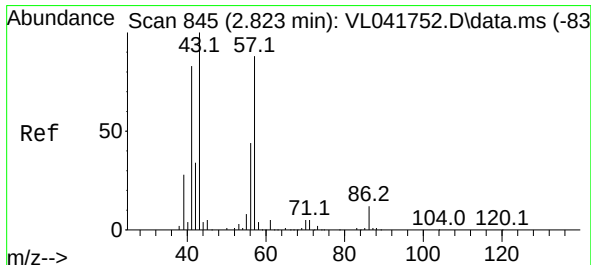
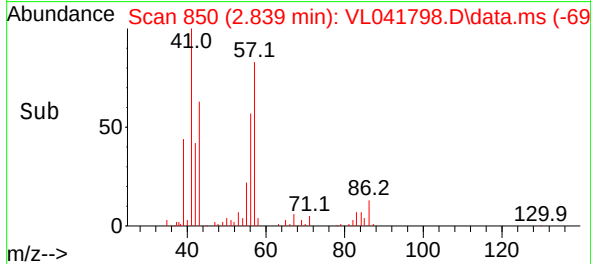
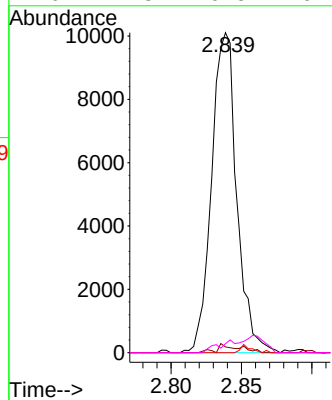
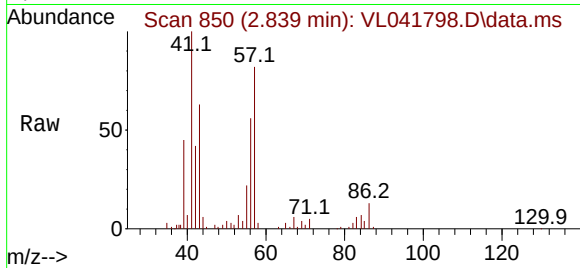
Ion Ratio Lower Upper

43 100

45 2.4 8.1 12.1#

61 1.1 7.0 10.6#

70 7.3 6.5 9.7



#26

Hexane

Concen: 1.484 ppbv

RT: 2.839 min Scan# 850

Delta R.T. 0.016 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Tgt Ion: 57 Resp: 14701

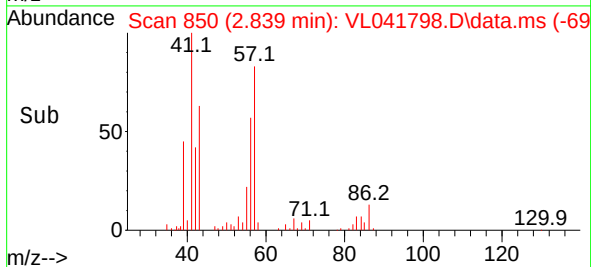
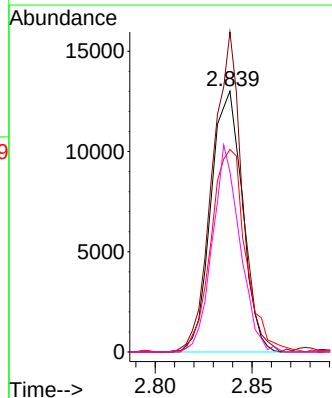
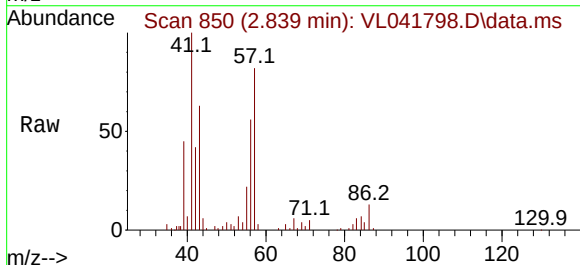
Ion Ratio Lower Upper

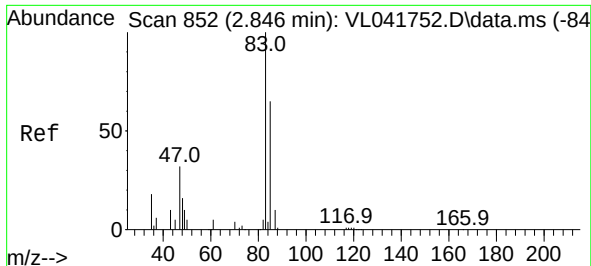
57 100

41 116.7 79.6 119.4

43 86.3 211.0 316.6#

56 69.8 42.6 63.8#





#29

Chloroform

Concen: 2.587 ppbv

RT: 2.858 min Scan# 85

Delta R.T. 0.013 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

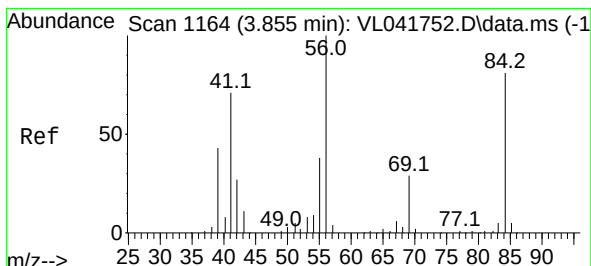
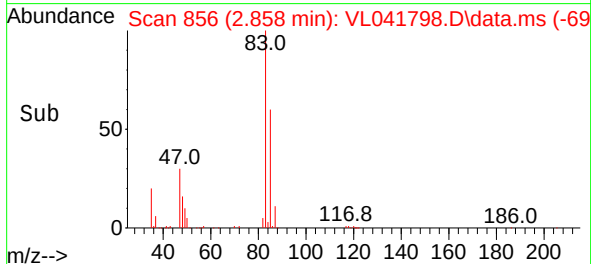
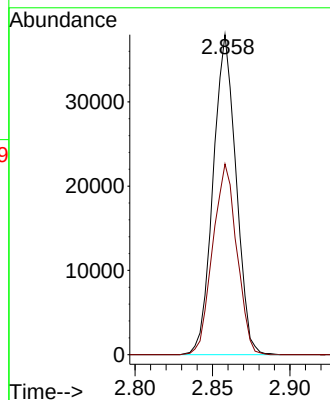
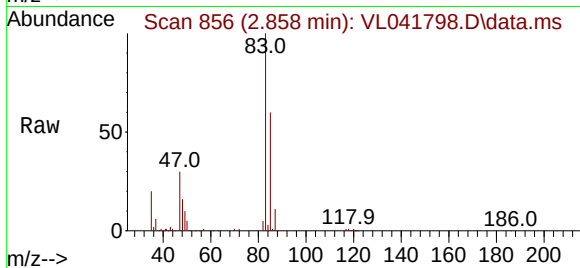
C0AB9DUP

Tgt Ion: 83 Resp: 39051

Ion Ratio Lower Upper

83 100

85 59.6 51.8 77.6



#30

Cyclohexane

Concen: 0.064 ppbv

RT: 3.868 min Scan# 1168

Delta R.T. 0.012 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

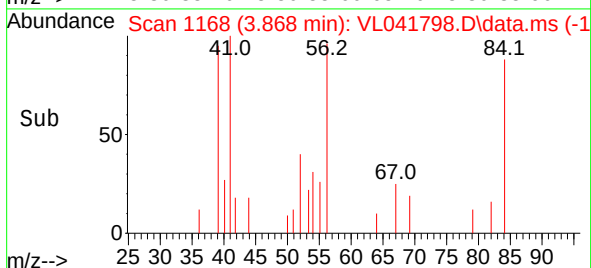
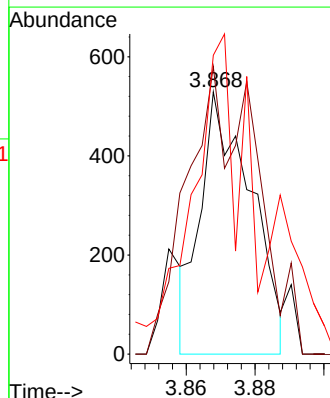
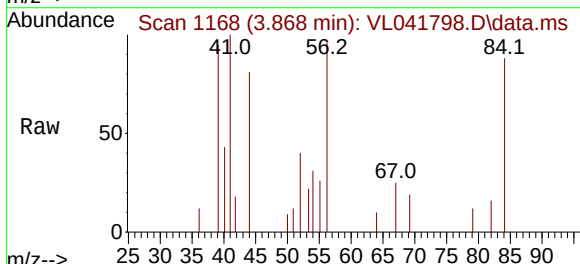
Tgt Ion: 84 Resp: 538

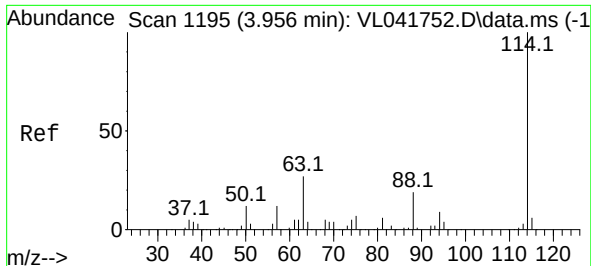
Ion Ratio Lower Upper

84 100

56 150.4 102.3 153.5

41 161.2 74.0 111.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.975 min Scan# 1195

Delta R.T. 0.019 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

C0AB9DUP

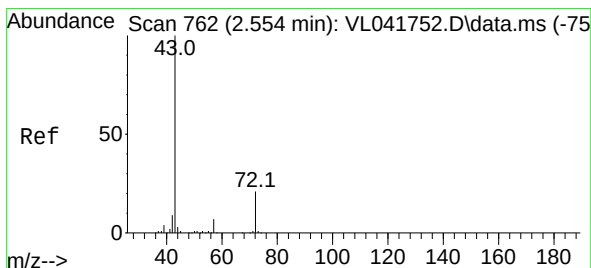
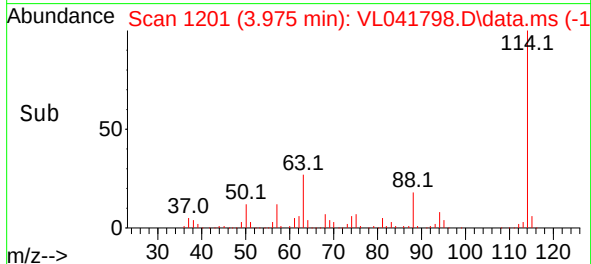
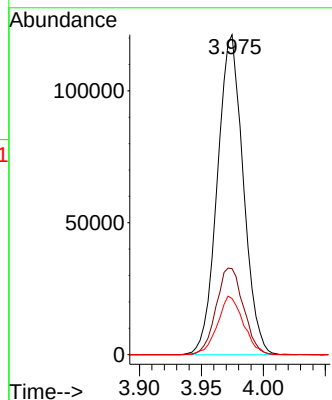
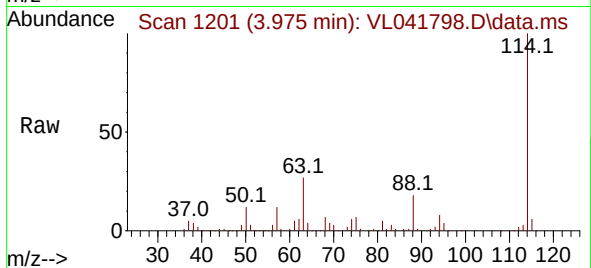
Tgt Ion:114 Resp: 176581

Ion Ratio Lower Upper

114 100

63 28.6 21.8 32.8

88 18.3 14.8 22.2



#34

2-Butanone

Concen: 0.214 ppbv

RT: 2.570 min Scan# 767

Delta R.T. 0.016 min

Lab File: VL041798.D

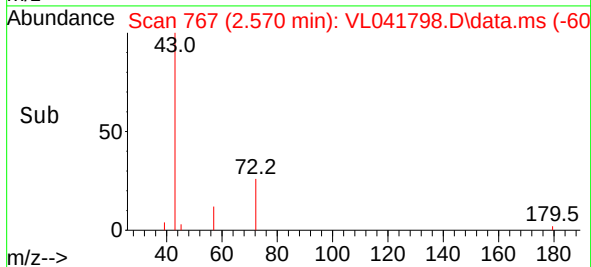
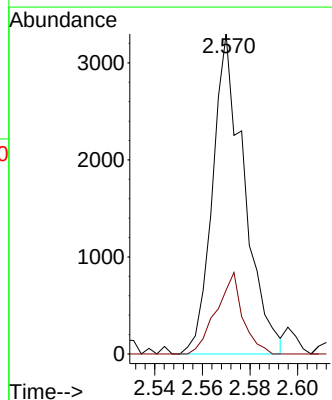
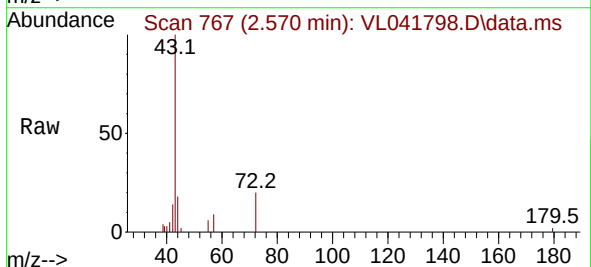
Acq: 18 Dec 2024 17:43

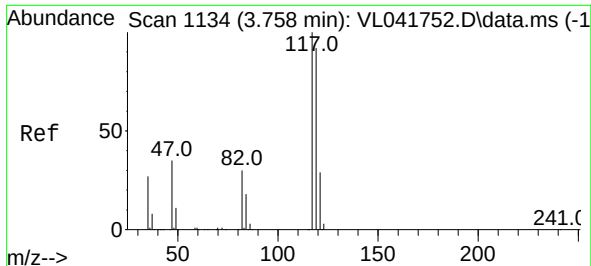
Tgt Ion: 43 Resp: 3039

Ion Ratio Lower Upper

43 100

72 21.2 16.8 25.2

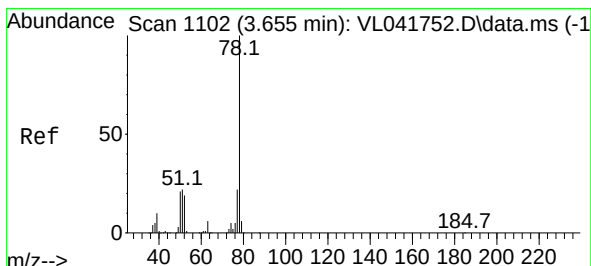
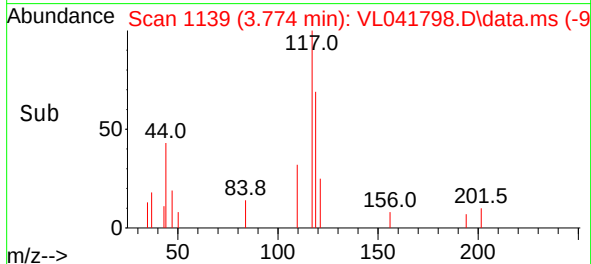
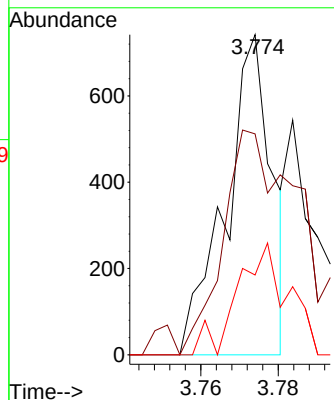
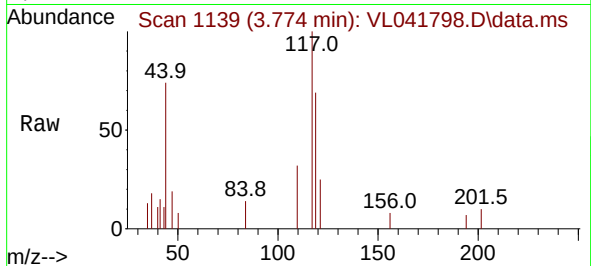




#35
Carbon Tetrachloride
Concen: 0.049 ppbv
RT: 3.774 min Scan# 1139
Delta R.T. 0.016 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

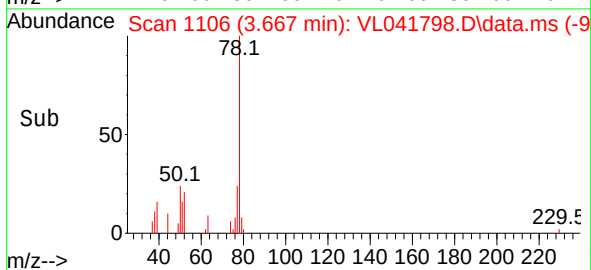
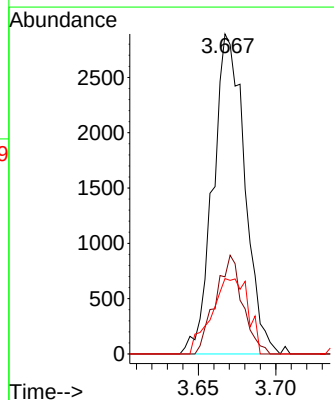
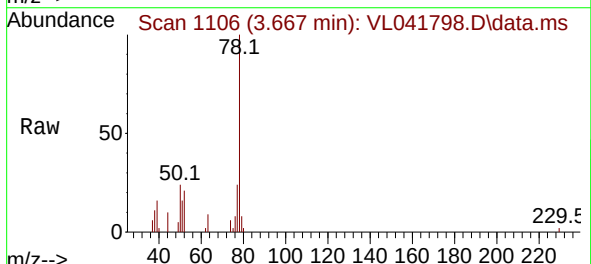
Instrument :
MSVOA_L
ClientSampleId :
C0AB9DUP

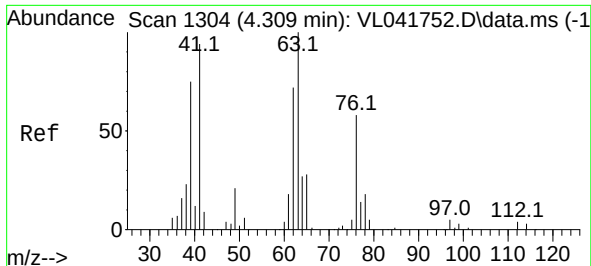
Tgt Ion:117 Resp: 613
Ion Ratio Lower Upper
117 100
119 69.0 73.7 110.5#
121 24.9 23.0 34.4



#36
Benzene
Concen: 0.225 ppbv
RT: 3.667 min Scan# 1106
Delta R.T. 0.012 min
Lab File: VL041798.D
Acq: 18 Dec 2024 17:43

Tgt Ion: 78 Resp: 4108
Ion Ratio Lower Upper
78 100
77 24.1 17.8 26.6
50 23.5 17.2 25.8





#39

1,2-Dichloropropane

Concen: 7.631 ppbv

RT: 3.971 min Scan# 11

Delta R.T. -0.337 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

C0AB9DUP

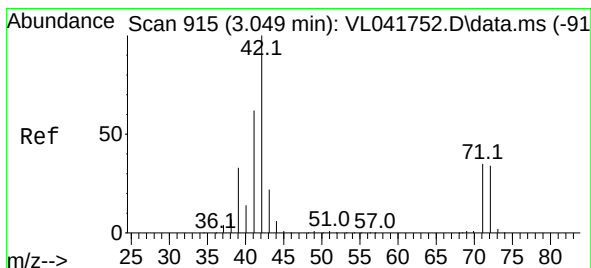
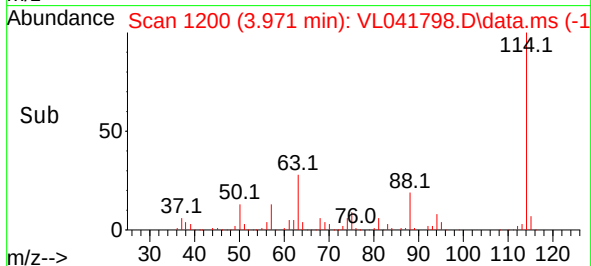
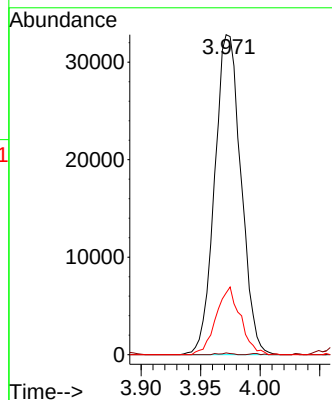
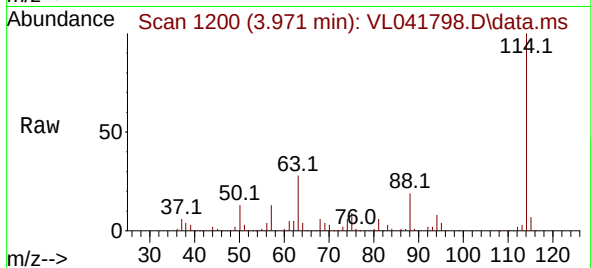
Tgt Ion: 63 Resp: 50412

Ion Ratio Lower Upper

63 100

41 0.5 75.3 112.9#

62 19.3 57.3 85.9#



#41

Tetrahydrofuran

Concen: 0.038 ppbv

RT: 3.085 min Scan# 926

Delta R.T. 0.035 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

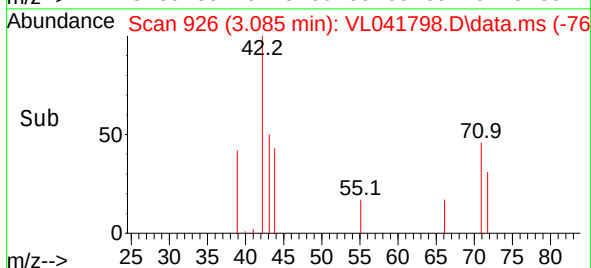
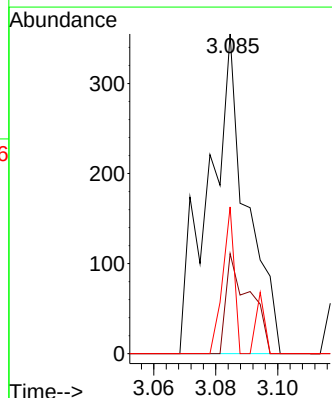
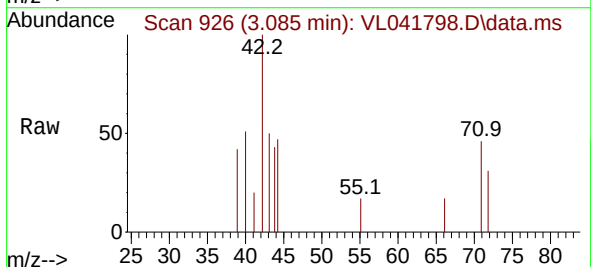
Tgt Ion: 42 Resp: 302

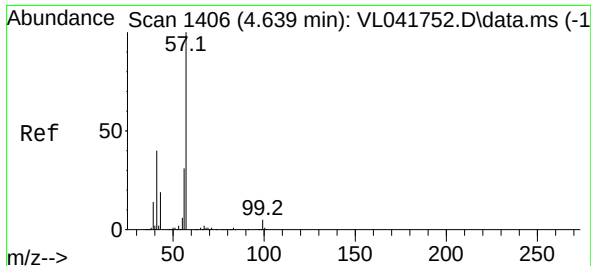
Ion Ratio Lower Upper

42 100

72 19.2 29.1 43.7#

71 18.5 28.4 42.6#





#44

2,2,4-Trimethylpentane

Concen: 0.069 ppbv

RT: 4.654 min Scan# 1406

Delta R.T. 0.016 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_1

ClientSampleId :

C0AB9DUP

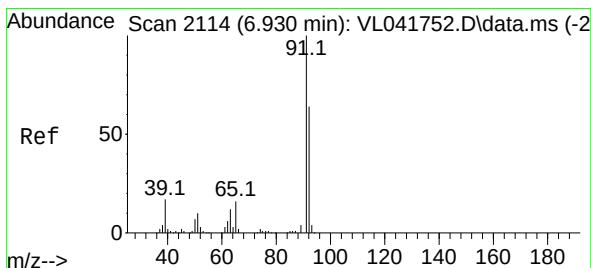
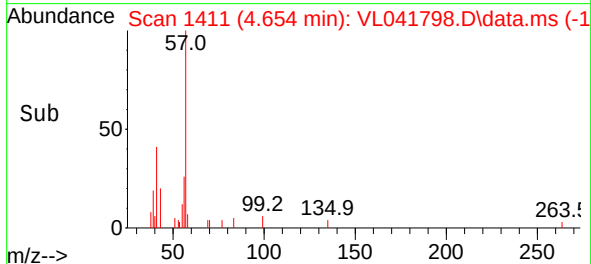
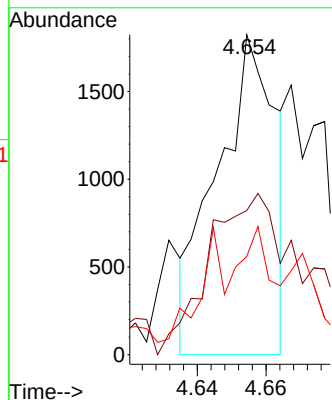
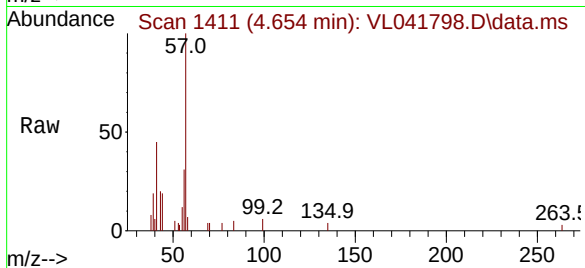
Tgt Ion: 57 Resp: 2158

Ion Ratio Lower Upper

57 100

41 99.7 30.7 46.1#

56 72.8 25.4 38.0#



#53

Toluene

Concen: 0.328 ppbv

RT: 6.952 min Scan# 2121

Delta R.T. 0.022 min

Lab File: VL041798.D

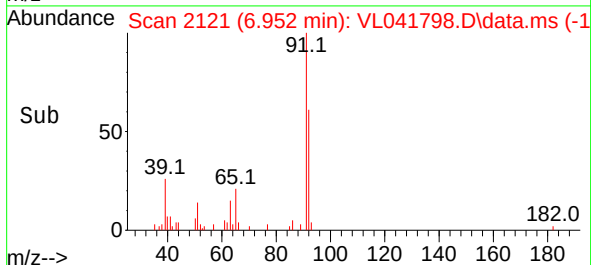
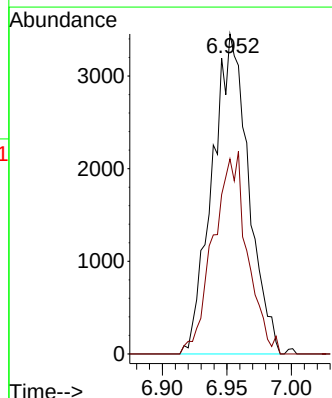
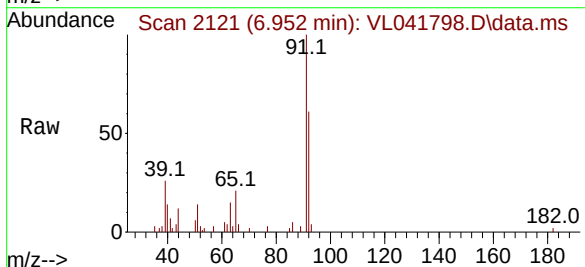
Acq: 18 Dec 2024 17:43

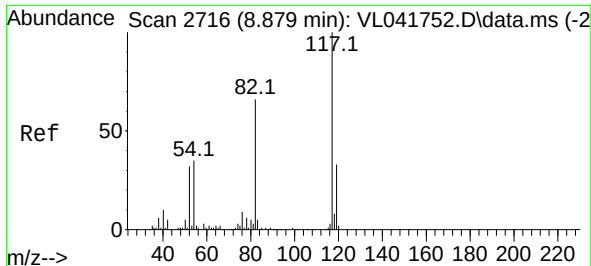
Tgt Ion: 91 Resp: 6783

Ion Ratio Lower Upper

91 100

92 58.9 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: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

C0AB9DUP

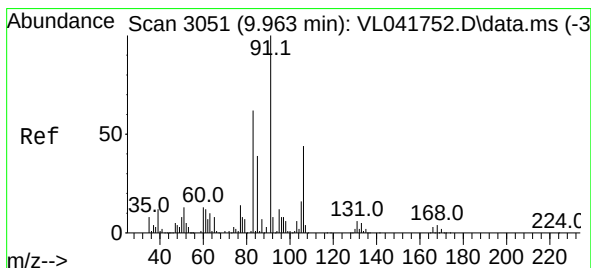
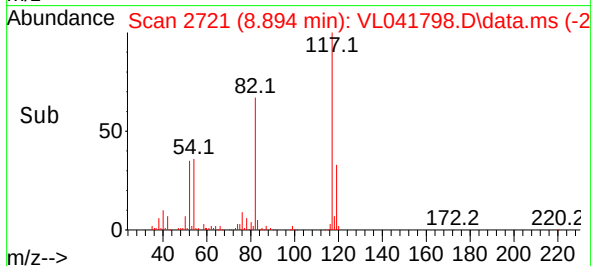
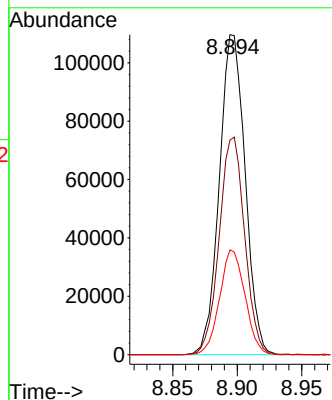
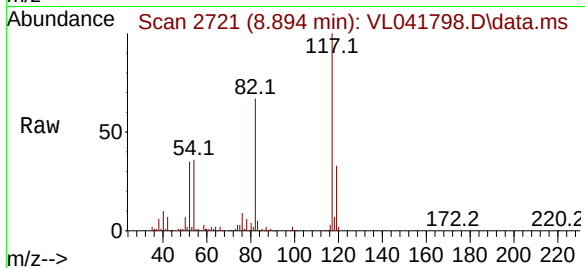
Tgt Ion:117 Resp: 152305

Ion Ratio Lower Upper

117 100

82 67.1 53.8 80.8

119 32.2 26.7 40.1



#60

o-Xylene

Concen: 0.057 ppbv

RT: 9.979 min Scan# 3056

Delta R.T. 0.016 min

Lab File: VL041798.D

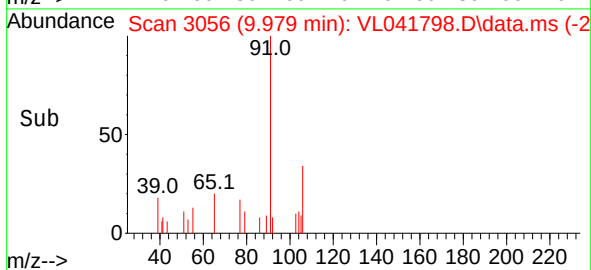
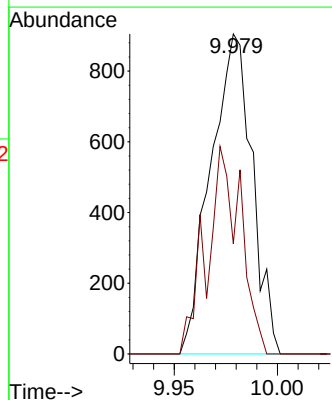
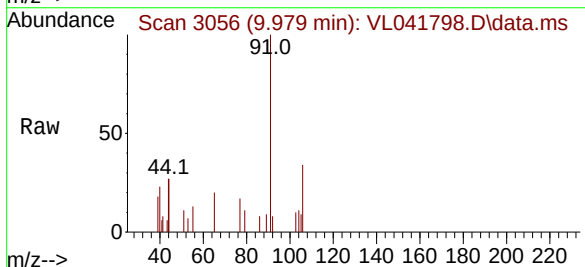
Acq: 18 Dec 2024 17:43

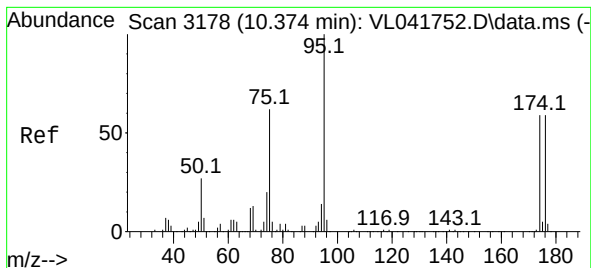
Tgt Ion: 91 Resp: 1265

Ion Ratio Lower Upper

91 100

106 53.0 21.1 63.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.104 ppbv

RT: 10.390 min Scan# 3183

Delta R.T. 0.016 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Instrument :

MSVOA_L

ClientSampleId :

C0AB9DUP

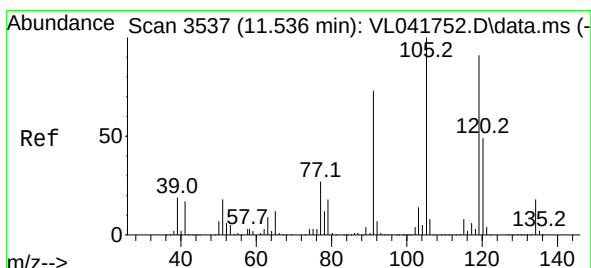
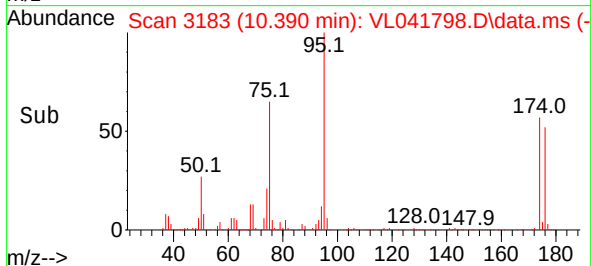
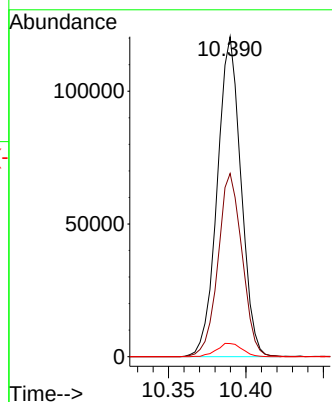
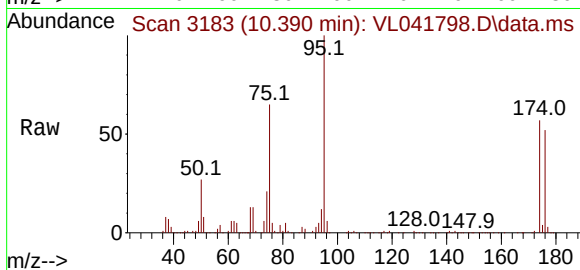
Tgt Ion: 95 Resp: 128237

Ion Ratio Lower Upper

95 100

174 58.1 47.6 71.4

175 4.5 3.7 5.5



#74

1,2,4-Trimethylbenzene

Concen: 0.048 ppbv

RT: 11.548 min Scan# 3541

Delta R.T. 0.012 min

Lab File: VL041798.D

Acq: 18 Dec 2024 17:43

Tgt Ion: 105 Resp: 1109

Ion Ratio Lower Upper

105 100

120 35.1 39.0 58.4#

91 8.9 58.1 87.1#

77 11.3 21.8 32.8#

