

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121824\
 Data File : VL041794.D
 Acq On : 18 Dec 2024 15:03
 Operator : SY/MD
 Sample : MDL 0.03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL 0.03

Quant Time: Dec 19 07:54:47 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	2.790	49	69139	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	171284	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	146480	10.000	ppbv	0.00

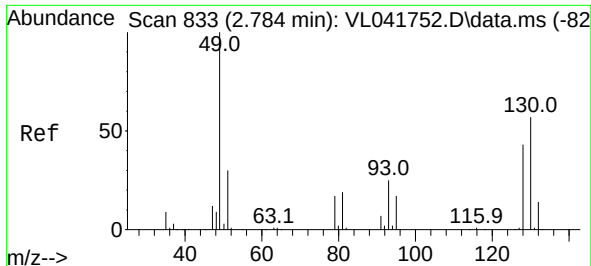
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	123367	10.107	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.100%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	381	0.031	ppbv #	59
3) Chlorodifluoromethane	1.479	51	383	0.034	ppbv	92
4) Chloromethane	1.538	50	323	0.067	ppbv #	42
5) Vinyl Chloride	1.580	62	252	0.052	ppbv #	72
8) Dichlorotetrafluoroethane	1.554	85	349	0.032	ppbv	87
9) Propene	1.486	41	401	0.082	ppbv	94
11) Trichlorofluoromethane	1.881	101	534	0.041	ppbv	89
12) 1,1,2-Trichlorotrifluo...	2.143	101	313	0.031	ppbv #	58
13) Ethanol	1.719	45	99	0.245	ppbv #	34
15) Acetone	1.839	43	1684	0.125	ppbv	95
16) 1,3-Butadiene	1.609	39	491	0.093	ppbv #	56
17) tert-Butyl alcohol	2.046	59	509	0.038	ppbv #	89
18) 1,1-Dichloroethene	2.033	96	142	0.034	ppbv #	65
19) Isopropyl Alcohol	1.890	45	1586	0.196	ppbv #	34
20) Methylene Chloride	2.065	84	575	0.150	ppbv #	67
21) Allyl Chloride	2.101	41	269	0.037	ppbv #	50
22) trans-1,2-Dichloroethene	2.340	96	167	0.035	ppbv #	79
28) Methyl tert-Butyl Ether	2.450	73	347	0.045	ppbv #	79
31) cis-1,2-Dichloroethene	2.719	61	300	0.031	ppbv #	26
37) 1,2-Dichloroethane	3.227	62	343	0.031	ppbv #	94
39) 1,2-Dichloropropane	3.965	63	48116	7.509	ppbv #	18
63) 1,1,2,2-Tetrachloroethane	9.972	83	401	0.030	ppbv #	89
66) Benzyl Chloride	11.536	91	393	0.155	ppbv #	66
81) 1,2,4-Trichlorobenzene	13.448	180	305	0.036	ppbv #	59

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

Quant Time: Dec 19 07:54:47 2024
Quant Method : Z:\voasrv\HPCHEM1\MSV0A_L\methods\VL121624AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSV0A_L Fri 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: 2.790 min Scan# 841

Delta R.T. 0.006 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

MDL 0.03

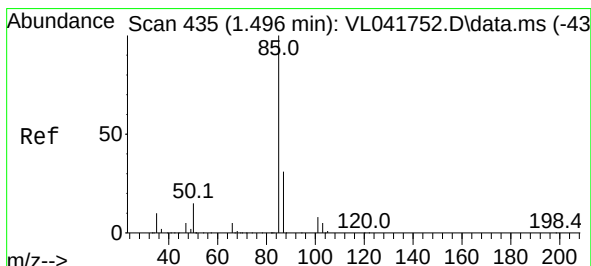
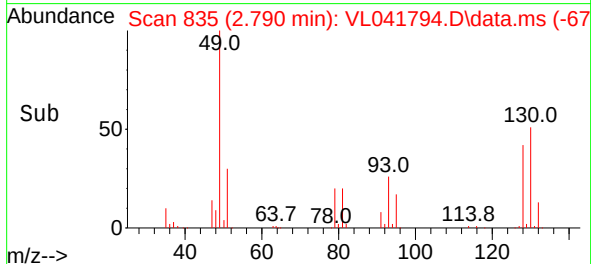
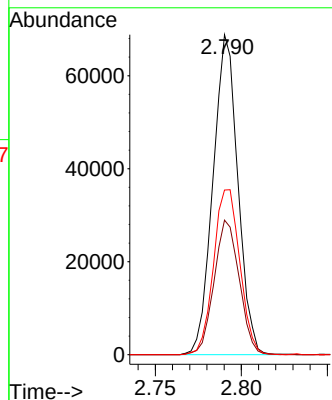
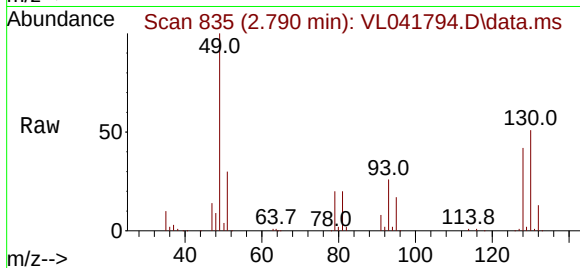
Tgt Ion: 49 Resp: 69139

Ion Ratio Lower Upper

49 100

128 42.6 21.6 64.6

130 54.6 28.3 85.0



#2

Dichlorodifluoromethane

Concen: 0.031 ppbv

RT: 1.499 min Scan# 436

Delta R.T. 0.003 min

Lab File: VL041794.D

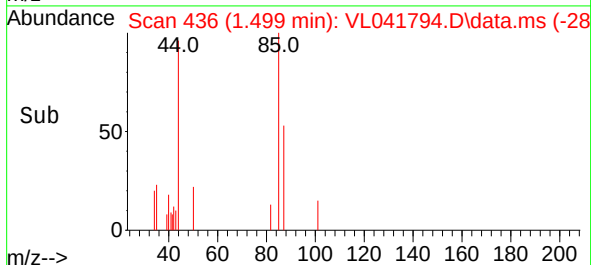
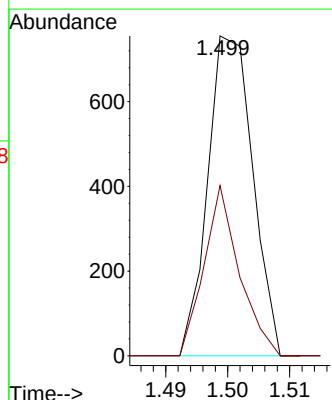
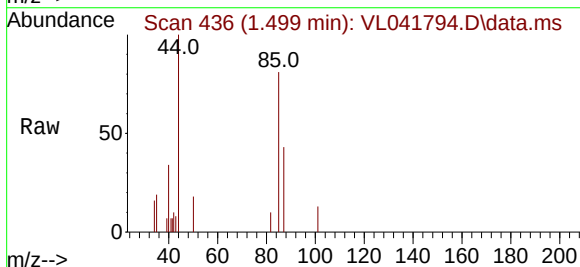
Acq: 18 Dec 2024 15:03

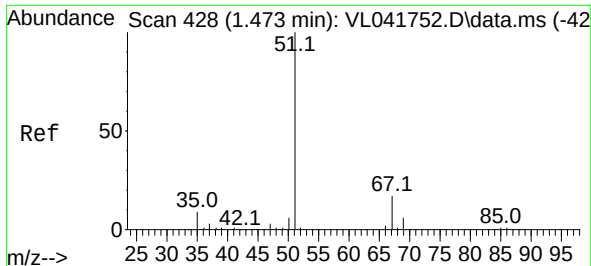
Tgt Ion: 85 Resp: 381

Ion Ratio Lower Upper

85 100

87 53.2 24.5 36.7#

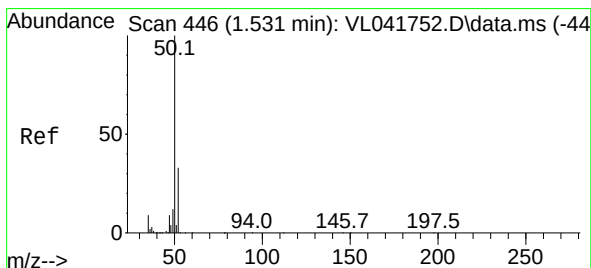
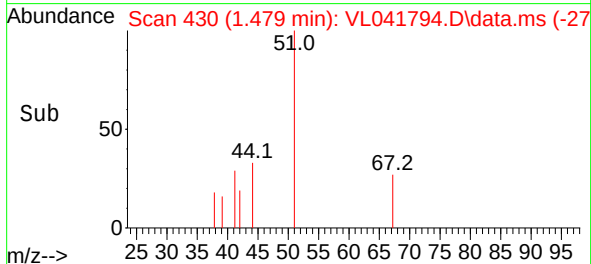
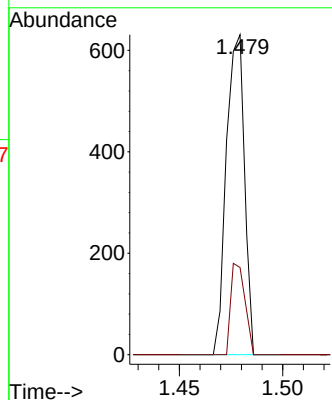
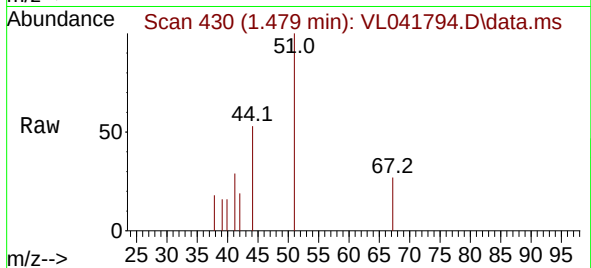




#3
Chlorodifluoromethane
Concen: 0.034 ppbv
RT: 1.479 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

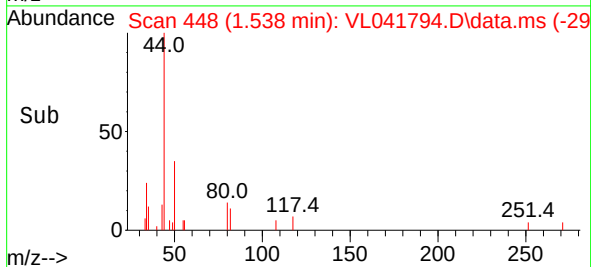
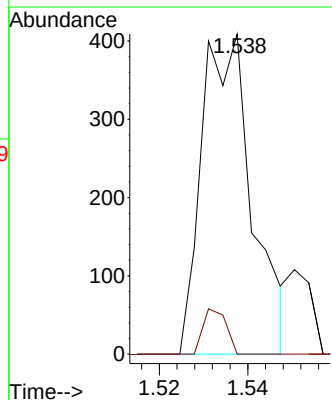
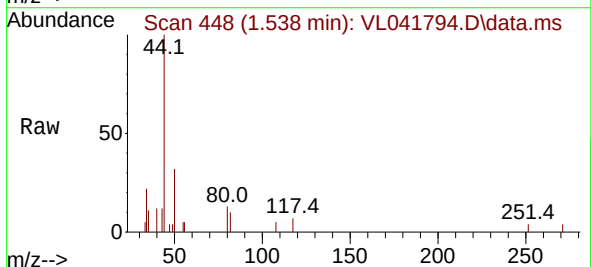
Instrument :
MSVOA_L
ClientSampleId :
MDL 0.03

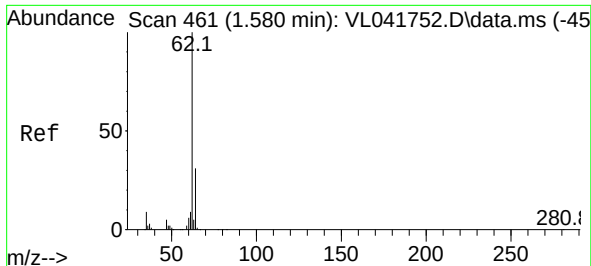
Tgt Ion: 51 Resp: 383
Ion Ratio Lower Upper
51 100
67 22.2 15.0 22.4



#4
Chloromethane
Concen: 0.067 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

Tgt Ion: 50 Resp: 323
Ion Ratio Lower Upper
50 100
52 0.0 26.2 39.2#

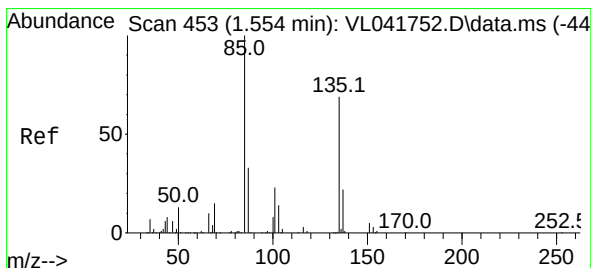
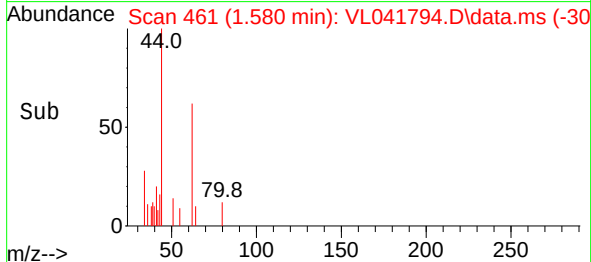
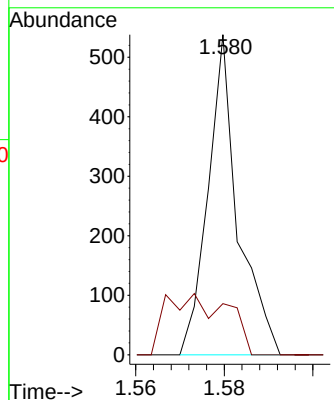
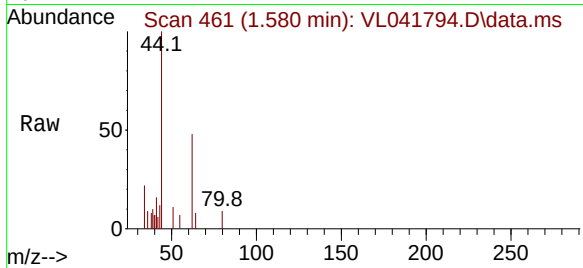




#5
 Vinyl Chloride
 Concen: 0.052 ppbv
 RT: 1.580 min Scan# 461
 Delta R.T. -0.000 min
 Lab File: VL041794.D
 Acq: 18 Dec 2024 15:03

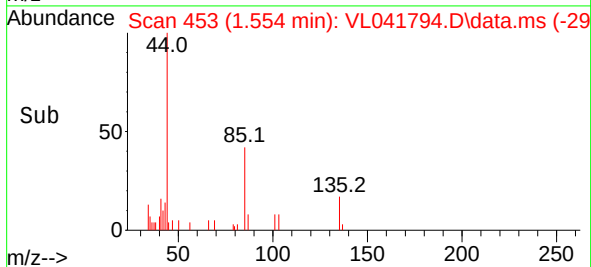
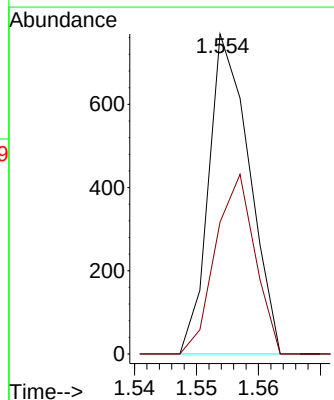
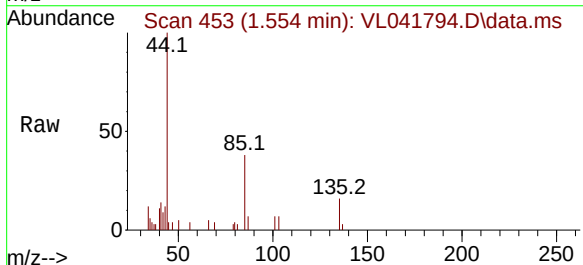
Instrument :
 MSVOA_1
 ClientSampleId :
 MDL 0.03

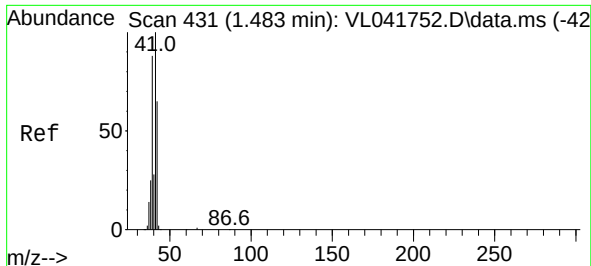
Tgt Ion: 62 Resp: 252
 Ion Ratio Lower Upper
 62 100
 64 16.0 25.1 37.7#



#8
 Dichlorotetrafluoroethane
 Concen: 0.032 ppbv
 RT: 1.554 min Scan# 453
 Delta R.T. -0.000 min
 Lab File: VL041794.D
 Acq: 18 Dec 2024 15:03

Tgt Ion: 85 Resp: 349
 Ion Ratio Lower Upper
 85 100
 135 54.7 51.9 77.9





#9

Propene

Concen: 0.082 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

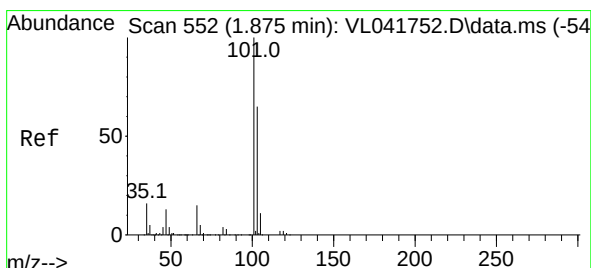
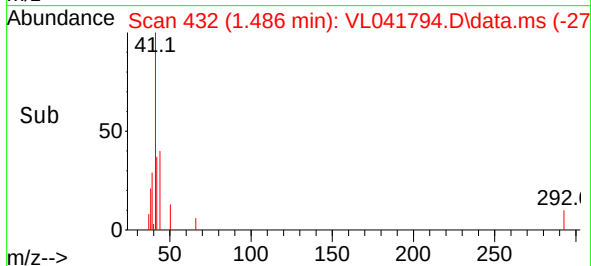
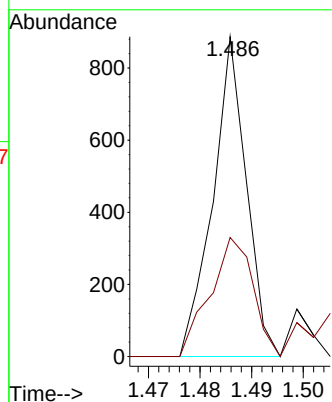
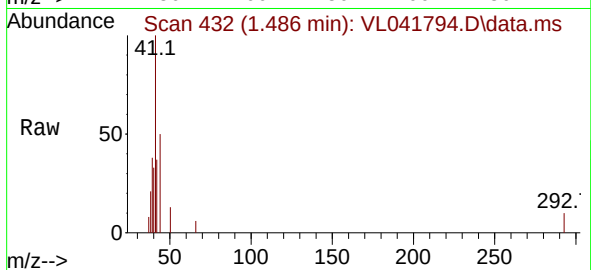
MDL 0.03

Tgt Ion: 41 Resp: 401

Ion Ratio Lower Upper

41 100

42 60.6 52.4 78.6



#11

Trichlorofluoromethane

Concen: 0.041 ppbv

RT: 1.881 min Scan# 554

Delta R.T. 0.006 min

Lab File: VL041794.D

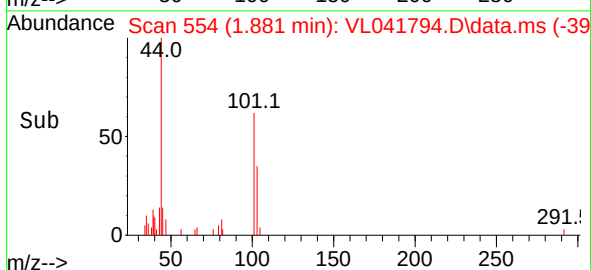
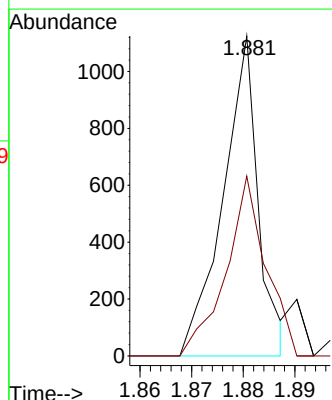
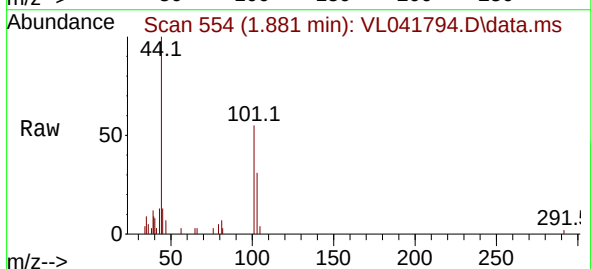
Acq: 18 Dec 2024 15:03

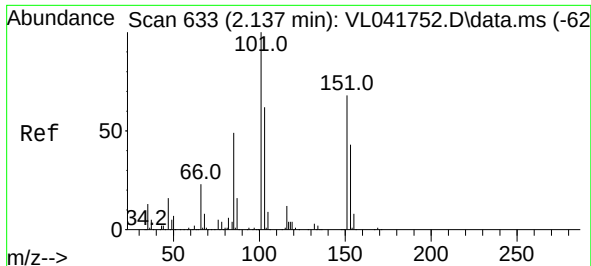
Tgt Ion:101 Resp: 534

Ion Ratio Lower Upper

101 100

103 56.2 51.8 77.8

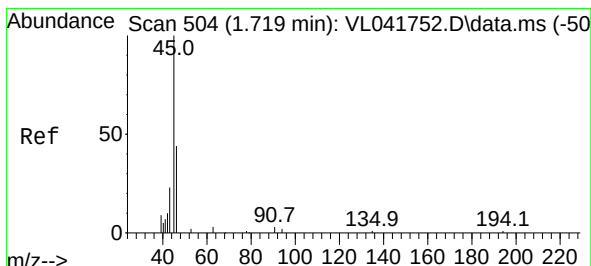
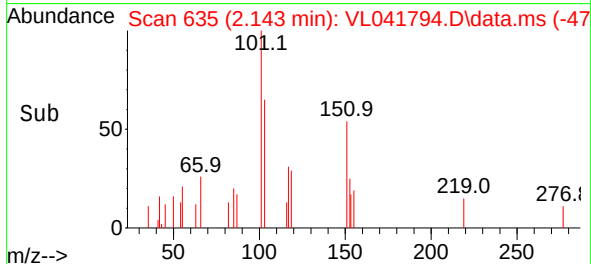
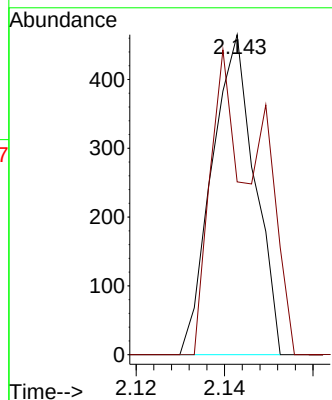
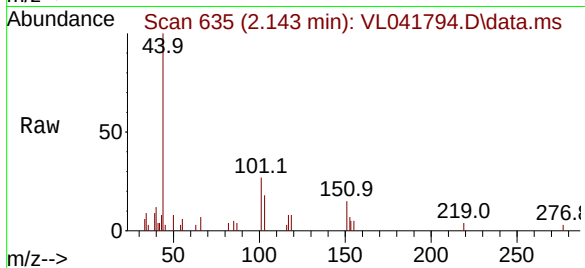




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.031 ppbv
RT: 2.143 min Scan# 61
Delta R.T. 0.006 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

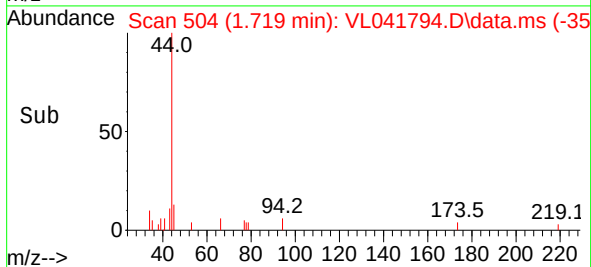
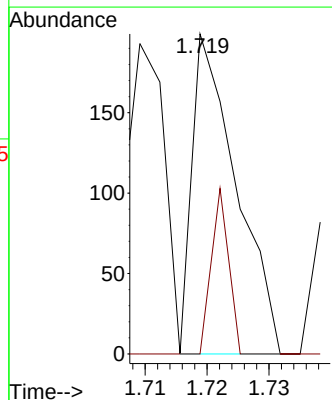
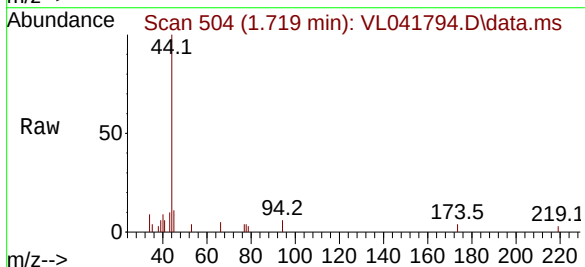
Instrument :
MSVOA_L
ClientSampleId :
MDL 0.03

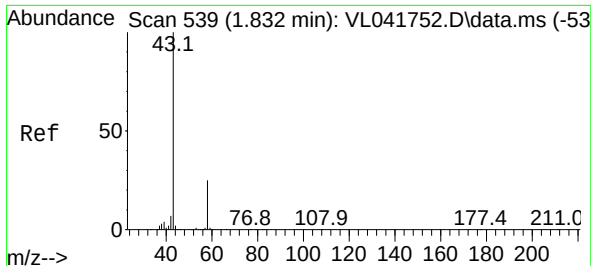
Tgt Ion:101 Resp: 313
Ion Ratio Lower Upper
101 100
151 105.8 56.8 85.2#



#13
Ethanol
Concen: 0.245 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

Tgt Ion: 45 Resp: 99
Ion Ratio Lower Upper
45 100
46 0.0 16.4 65.8#





#15

Acetone

Concen: 0.125 ppbv

RT: 1.839 min Scan# 541

Delta R.T. 0.006 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

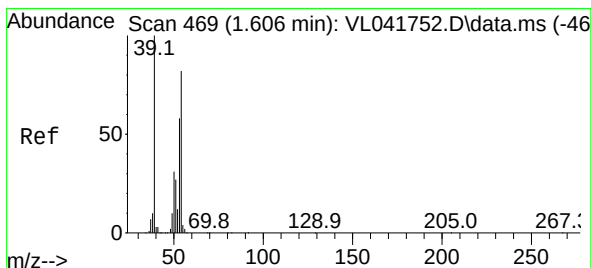
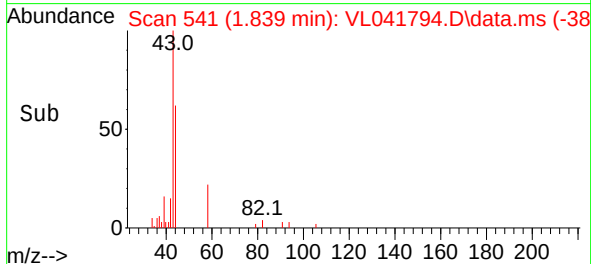
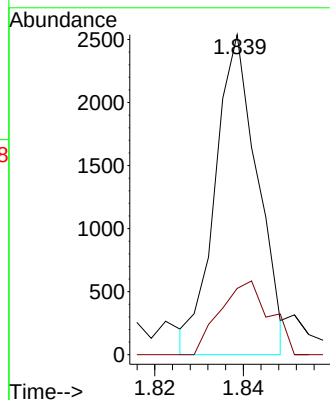
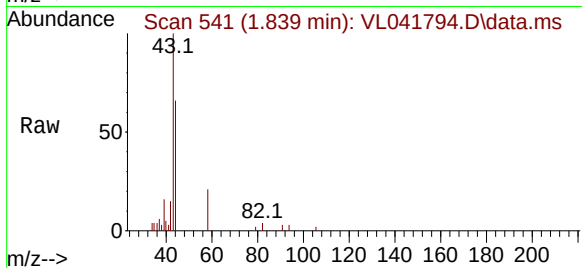
MDL 0.03

Tgt Ion: 43 Resp: 1684

Ion Ratio Lower Upper

43 100

58 27.0 19.7 29.5



#16

1,3-Butadiene

Concen: 0.093 ppbv

RT: 1.609 min Scan# 470

Delta R.T. 0.003 min

Lab File: VL041794.D

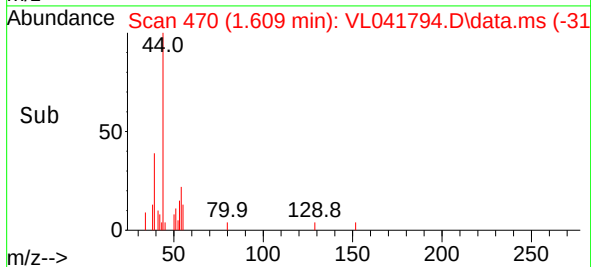
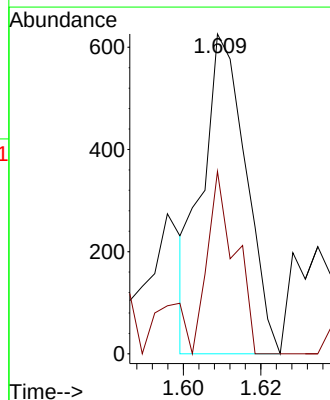
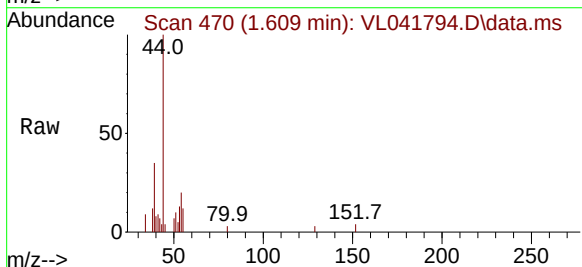
Acq: 18 Dec 2024 15:03

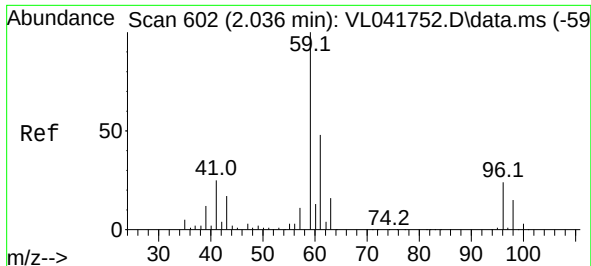
Tgt Ion: 39 Resp: 491

Ion Ratio Lower Upper

39 100

54 36.0 58.4 87.6#

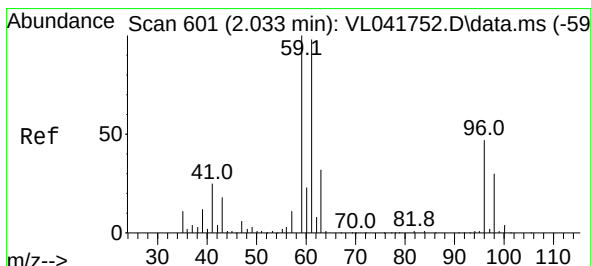
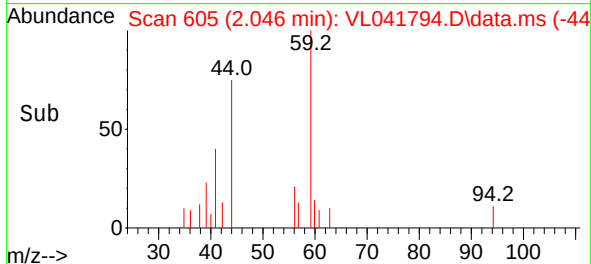
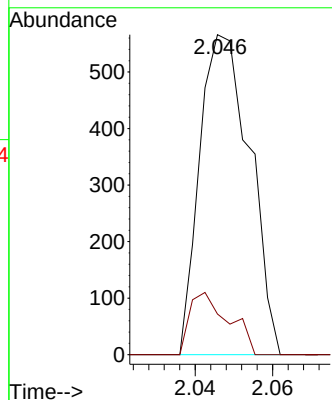
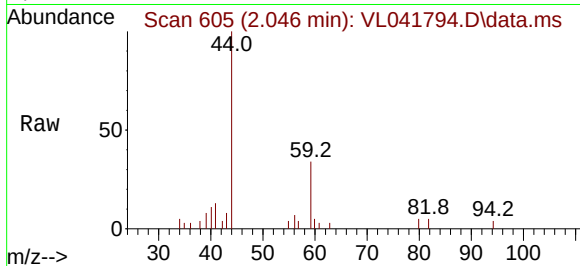




#17
tert-Butyl alcohol
Concen: 0.038 ppbv
RT: 2.046 min Scan# 602
Delta R.T. 0.009 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

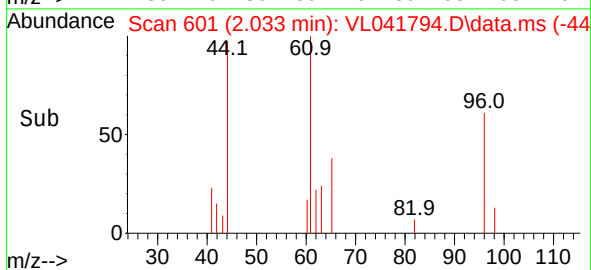
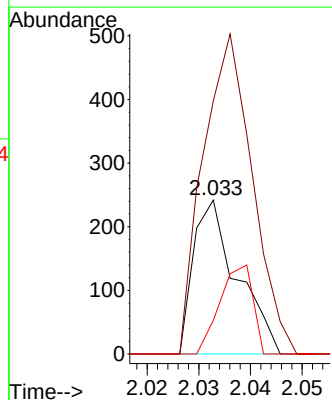
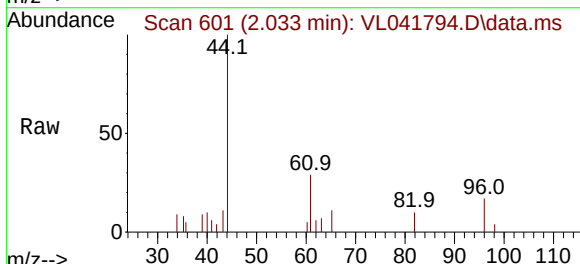
Instrument :
MSVOA_1
ClientSampleId :
MDL 0.03

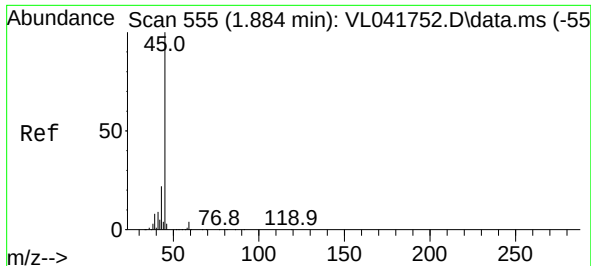
Tgt Ion: 59 Resp: 509
Ion Ratio Lower Upper
59 100
57 15.1 8.6 13.0#



#18
1,1-Dichloroethene
Concen: 0.034 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

Tgt Ion: 96 Resp: 142
Ion Ratio Lower Upper
96 100
61 164.5 167.7 251.5#
98 21.9 51.1 76.7#





#19

Isopropyl Alcohol

Concen: 0.196 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

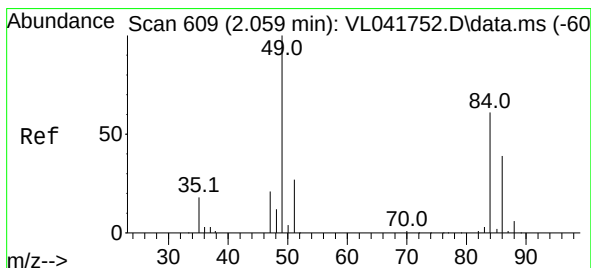
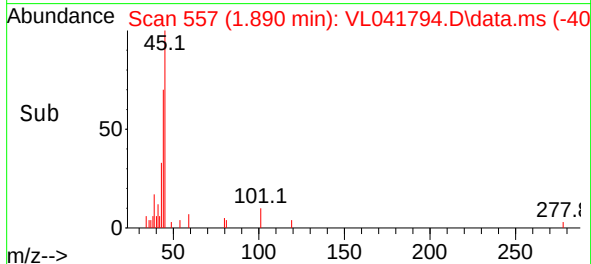
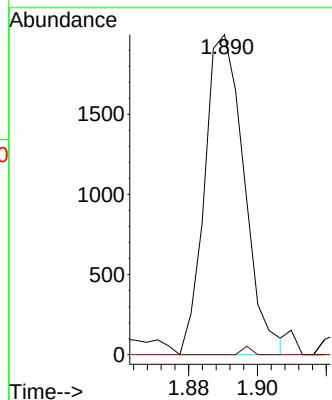
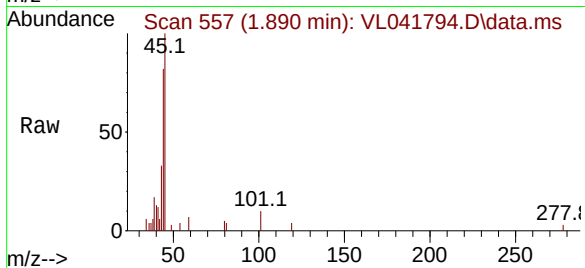
MDL 0.03

Tgt Ion: 45 Resp: 1586

Ion Ratio Lower Upper

45 100

58 0.0 33.3 49.9#



#20

Methylene Chloride

Concen: 0.150 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Tgt Ion: 84 Resp: 575

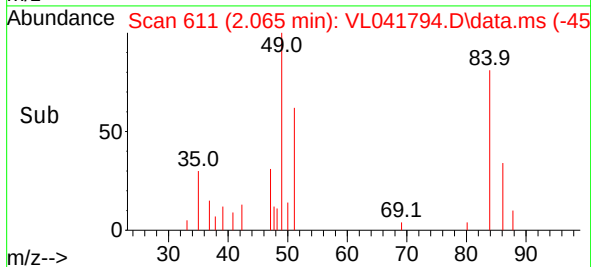
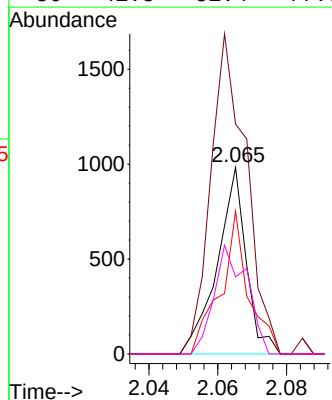
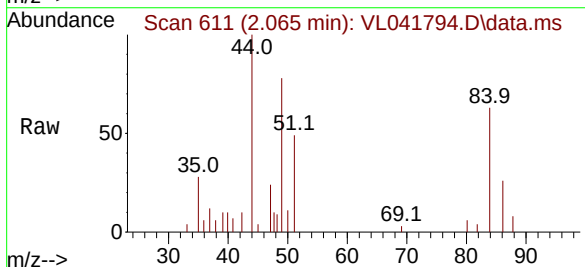
Ion Ratio Lower Upper

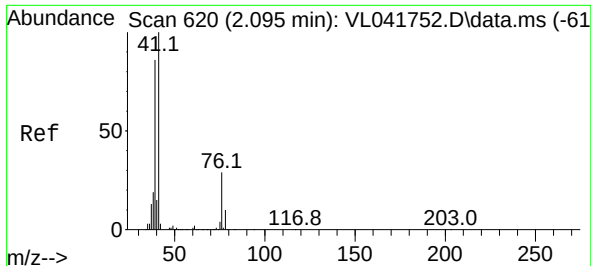
84 100

49 123.2 132.6 198.8#

51 76.5 37.6 56.4#

86 41.3 51.4 77.0#





#21

Allyl Chloride

Concen: 0.037 ppbv

RT: 2.101 min Scan# 61

Delta R.T. 0.006 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

MDL 0.03

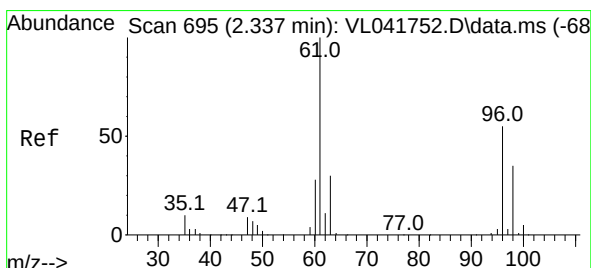
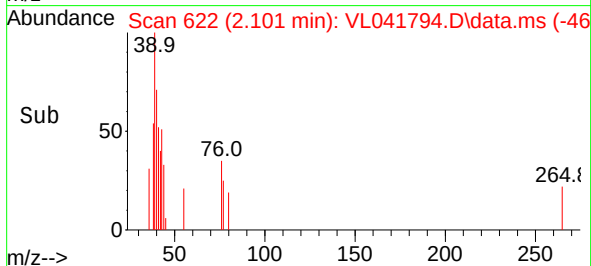
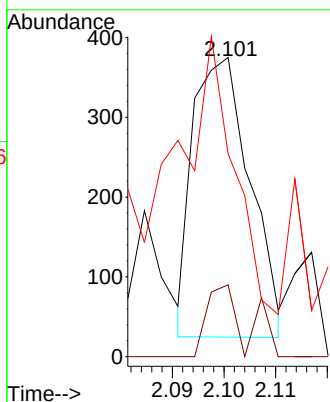
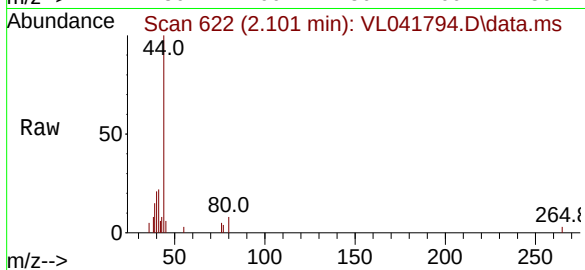
Tgt Ion: 41 Resp: 269

Ion Ratio Lower Upper

41 100

76 0.0 22.3 33.5#

39 132.0 69.2 103.8#



#22

trans-1,2-Dichloroethene

Concen: 0.035 ppbv

RT: 2.340 min Scan# 696

Delta R.T. 0.003 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

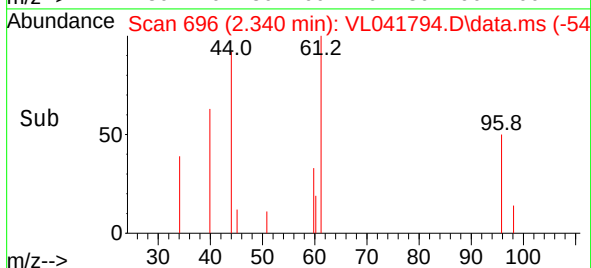
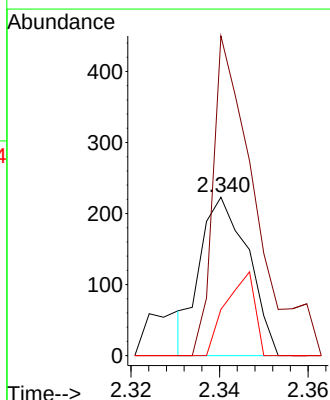
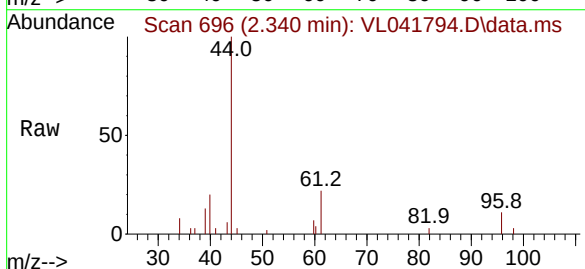
Tgt Ion: 96 Resp: 167

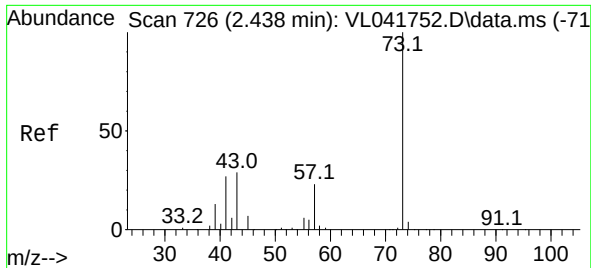
Ion Ratio Lower Upper

96 100

61 201.8 146.3 219.5

98 29.1 50.8 76.2#

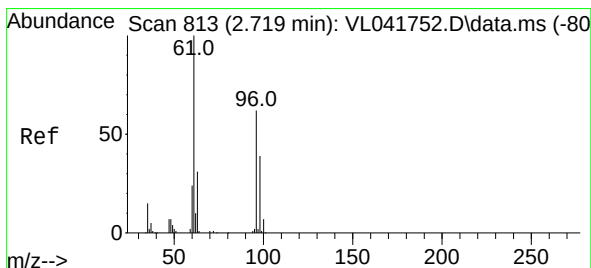
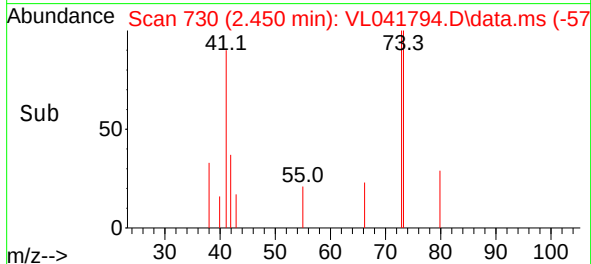
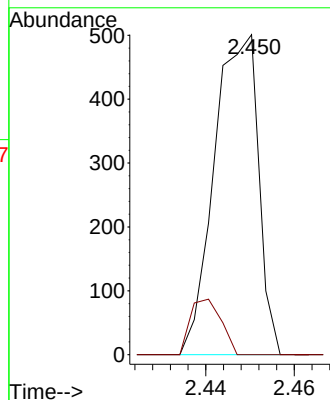
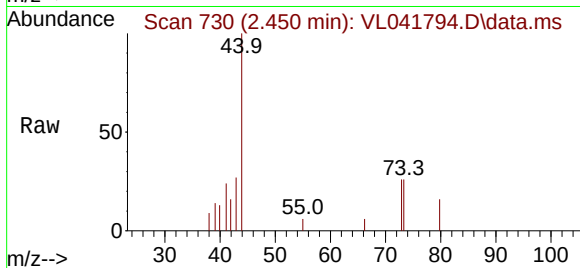




#28
Methyl tert-Butyl Ether
Concen: 0.045 ppbv
RT: 2.450 min Scan# 726
Delta R.T. 0.013 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

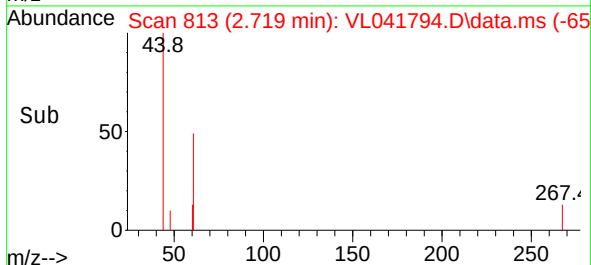
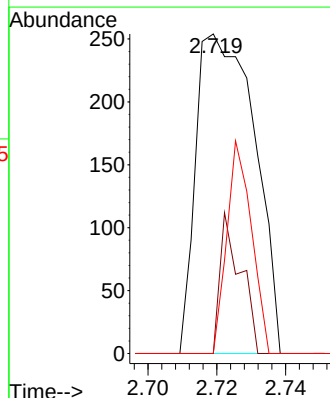
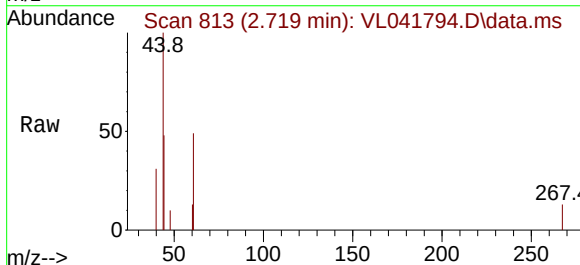
Instrument :
MSVOA_L
ClientSampleId :
MDL 0.03

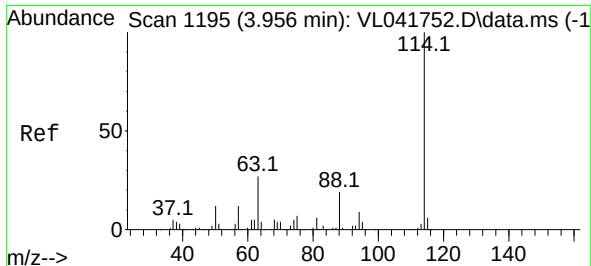
Tgt Ion: 73 Resp: 347
Ion Ratio Lower Upper
73 100
57 12.1 17.6 26.4#



#31
cis-1,2-Dichloroethene
Concen: 0.031 ppbv
RT: 2.719 min Scan# 813
Delta R.T. -0.000 min
Lab File: VL041794.D
Acq: 18 Dec 2024 15:03

Tgt Ion: 61 Resp: 300
Ion Ratio Lower Upper
61 100
96 0.0 49.7 74.5#
98 0.0 30.8 46.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.965 min Scan# 1195

Delta R.T. 0.009 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

MDL 0.03

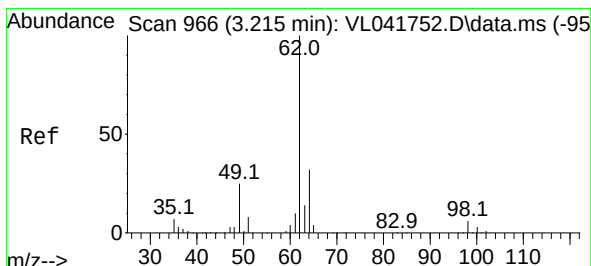
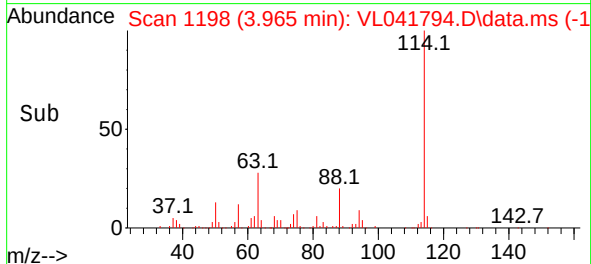
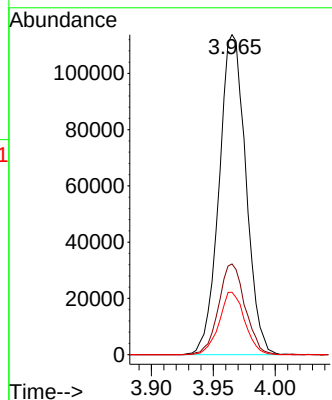
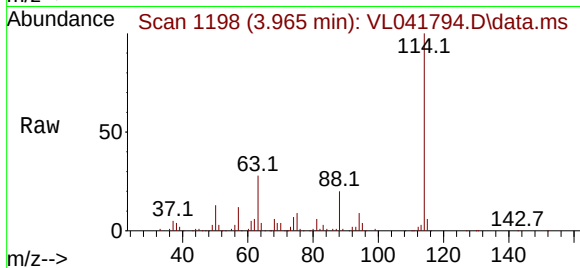
Tgt Ion:114 Resp: 171284

Ion Ratio Lower Upper

114 100

63 28.2 21.8 32.8

88 18.7 14.8 22.2



#37

1,2-Dichloroethane

Concen: 0.031 ppbv

RT: 3.227 min Scan# 970

Delta R.T. 0.013 min

Lab File: VL041794.D

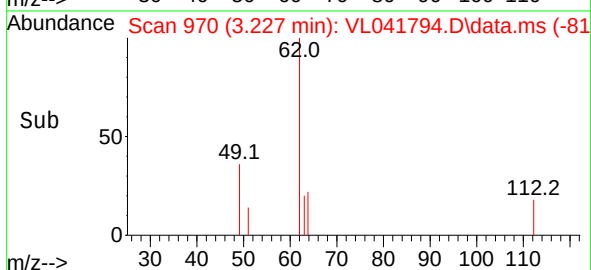
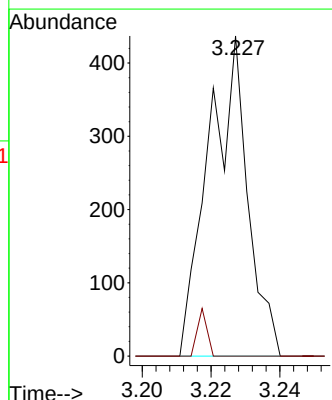
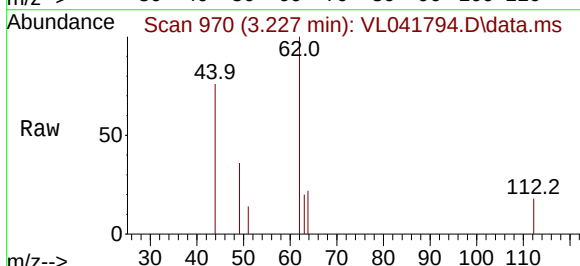
Acq: 18 Dec 2024 15:03

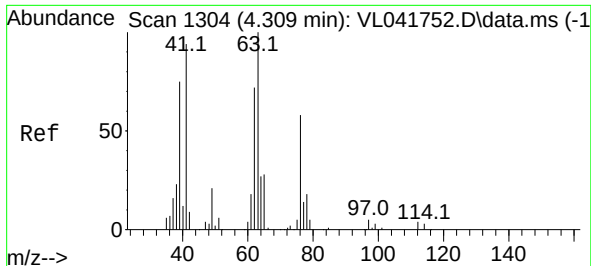
Tgt Ion: 62 Resp: 343

Ion Ratio Lower Upper

62 100

98 3.8 4.7 7.1#





#39

1,2-Dichloropropane

Concen: 7.509 ppbv

RT: 3.965 min Scan# 1198

Delta R.T. -0.343 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

MDL 0.03

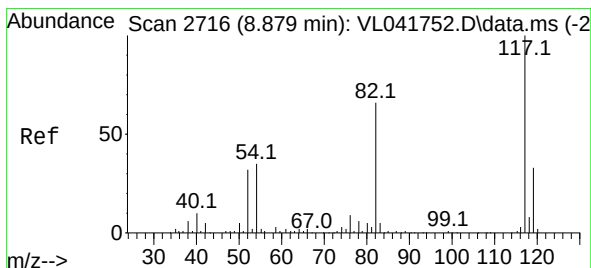
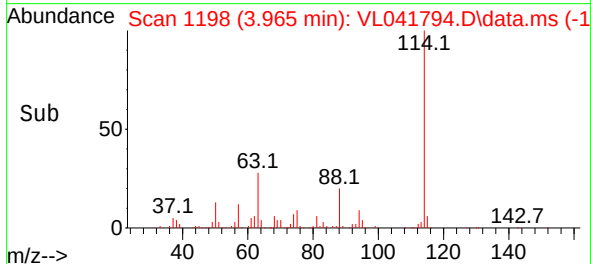
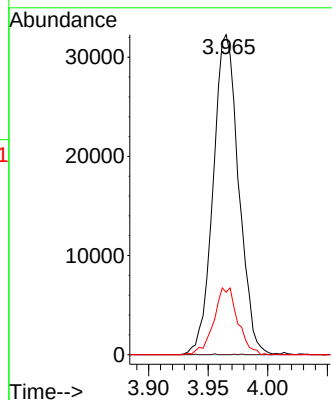
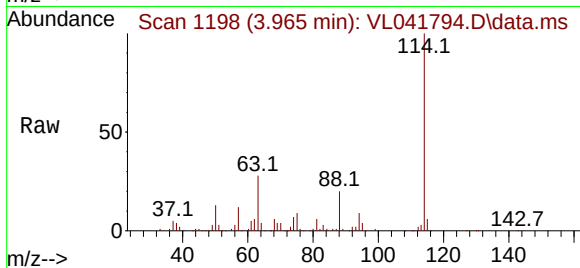
Tgt Ion: 63 Resp: 48116

Ion Ratio Lower Upper

63 100

41 0.0 75.3 112.9#

62 19.5 57.3 85.9#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.888 min Scan# 2719

Delta R.T. 0.009 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

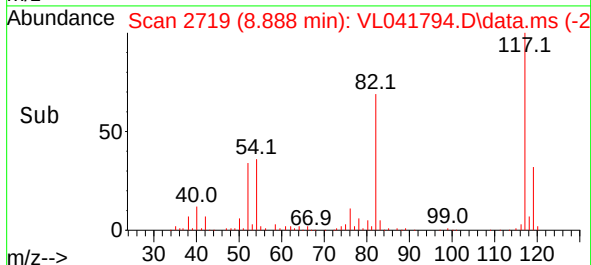
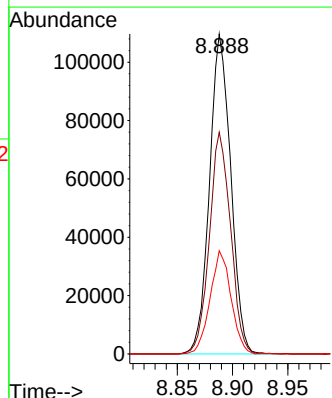
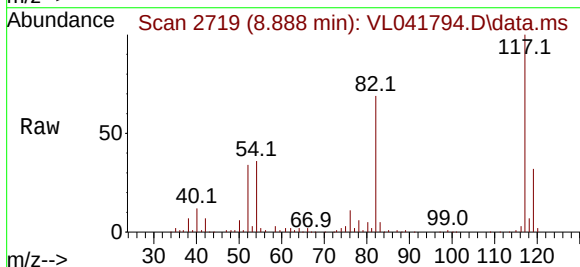
Tgt Ion: 117 Resp: 146480

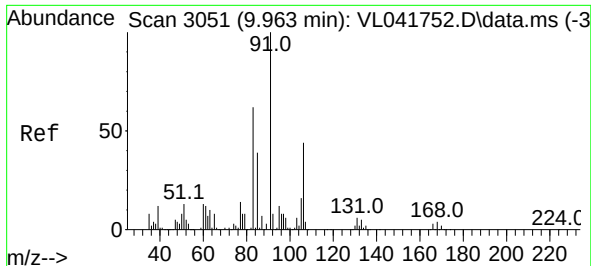
Ion Ratio Lower Upper

117 100

82 69.1 53.8 80.8

119 32.0 26.7 40.1





#63

1,1,2,2-Tetrachloroethane

Concen: 0.030 ppbv

RT: 9.972 min Scan# 3054

Delta R.T. 0.009 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_L

ClientSampleId :

MDL 0.03

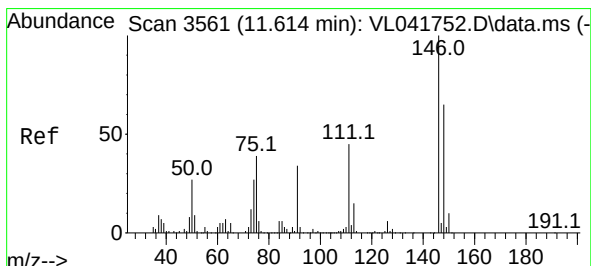
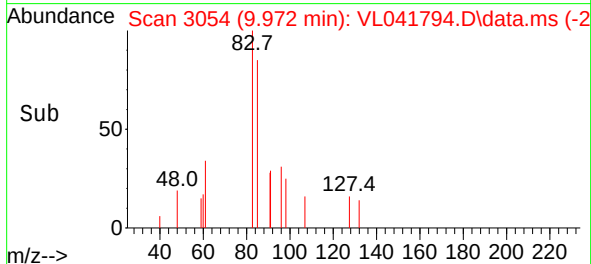
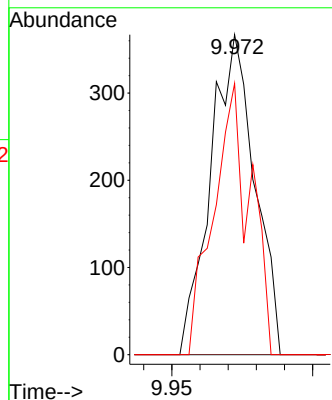
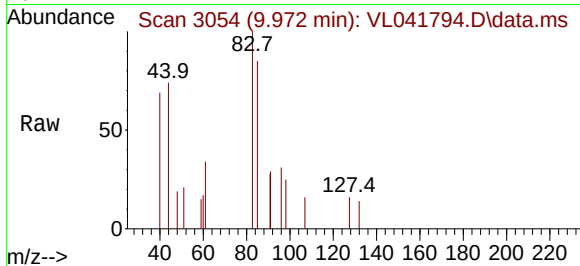
Tgt Ion: 83 Resp: 401

Ion Ratio Lower Upper

83 100

131 0.0 4.9 14.7#

85 70.8 32.0 96.2



#66

Benzyl Chloride

Concen: 0.155 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.078 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

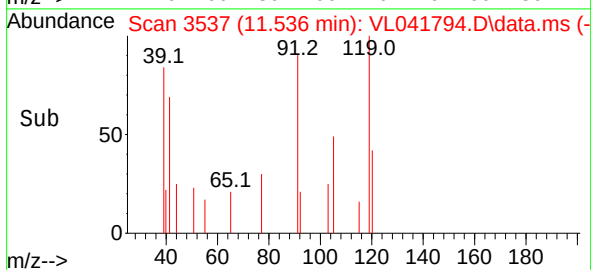
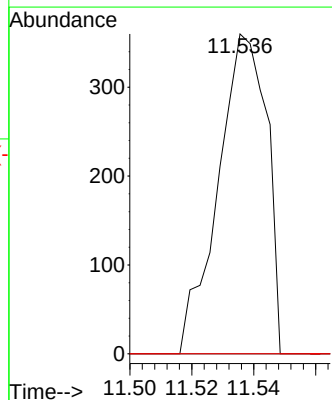
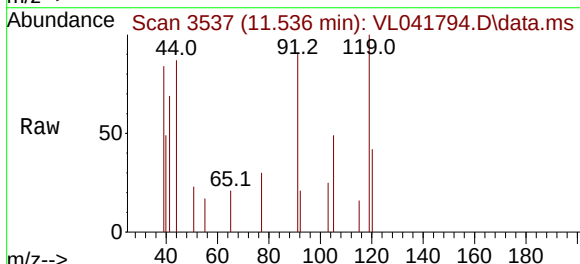
Tgt Ion: 91 Resp: 393

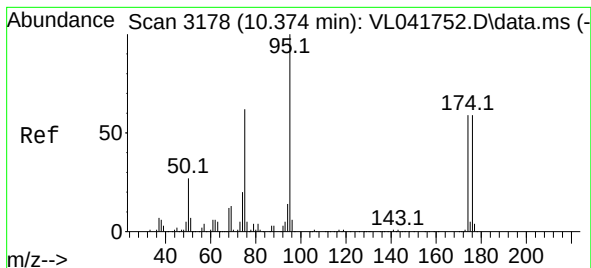
Ion Ratio Lower Upper

91 100

126 0.0 13.9 20.9#

128 0.0 4.4 6.6#





#68

1-Bromo-4-Fluorobenzene

Concen: 10.107 ppbv

RT: 10.383 min Scan# 3181

Delta R.T. 0.009 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Instrument :

MSVOA_1

ClientSampleId :

MDL 0.03

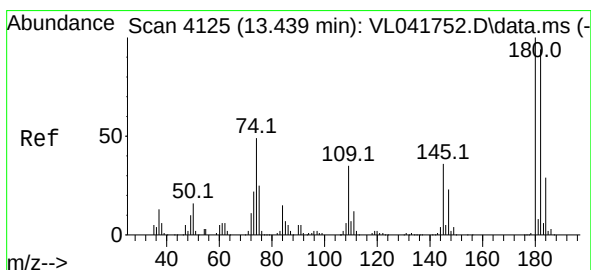
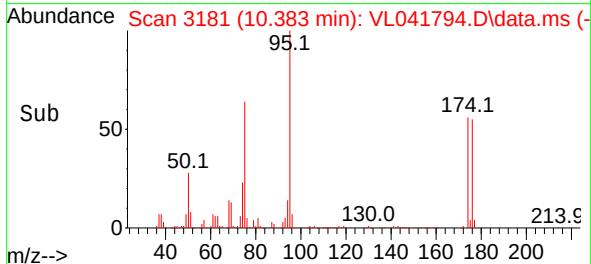
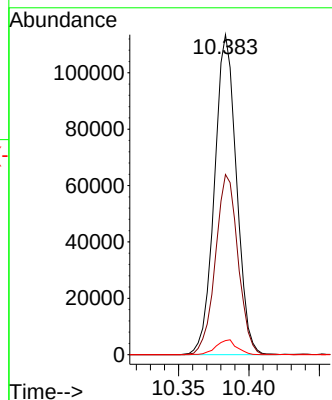
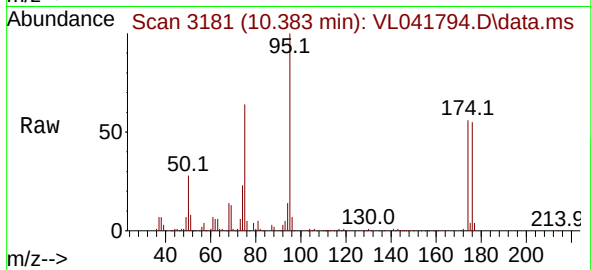
Tgt Ion: 95 Resp: 123367

Ion Ratio Lower Upper

95 100

174 57.9 47.6 71.4

175 4.4 3.7 5.5



#81

1,2,4-Trichlorobenzene

Concen: 0.036 ppbv

RT: 13.448 min Scan# 4128

Delta R.T. 0.009 min

Lab File: VL041794.D

Acq: 18 Dec 2024 15:03

Tgt Ion:180 Resp: 305

Ion Ratio Lower Upper

180 100

182 55.1 77.0 115.6#

184 10.5 23.8 35.8#

