

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY033125\
 Data File : VY021722.D
 Acq On : 31 Mar 2025 16:11
 Operator : SY/MD
 Sample : Q1675-08
 Misc : 14.26g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T2

Quant Time: Apr 01 05:38:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y032725S.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 28 02:30:29 2025
 Response via : Initial Calibration

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

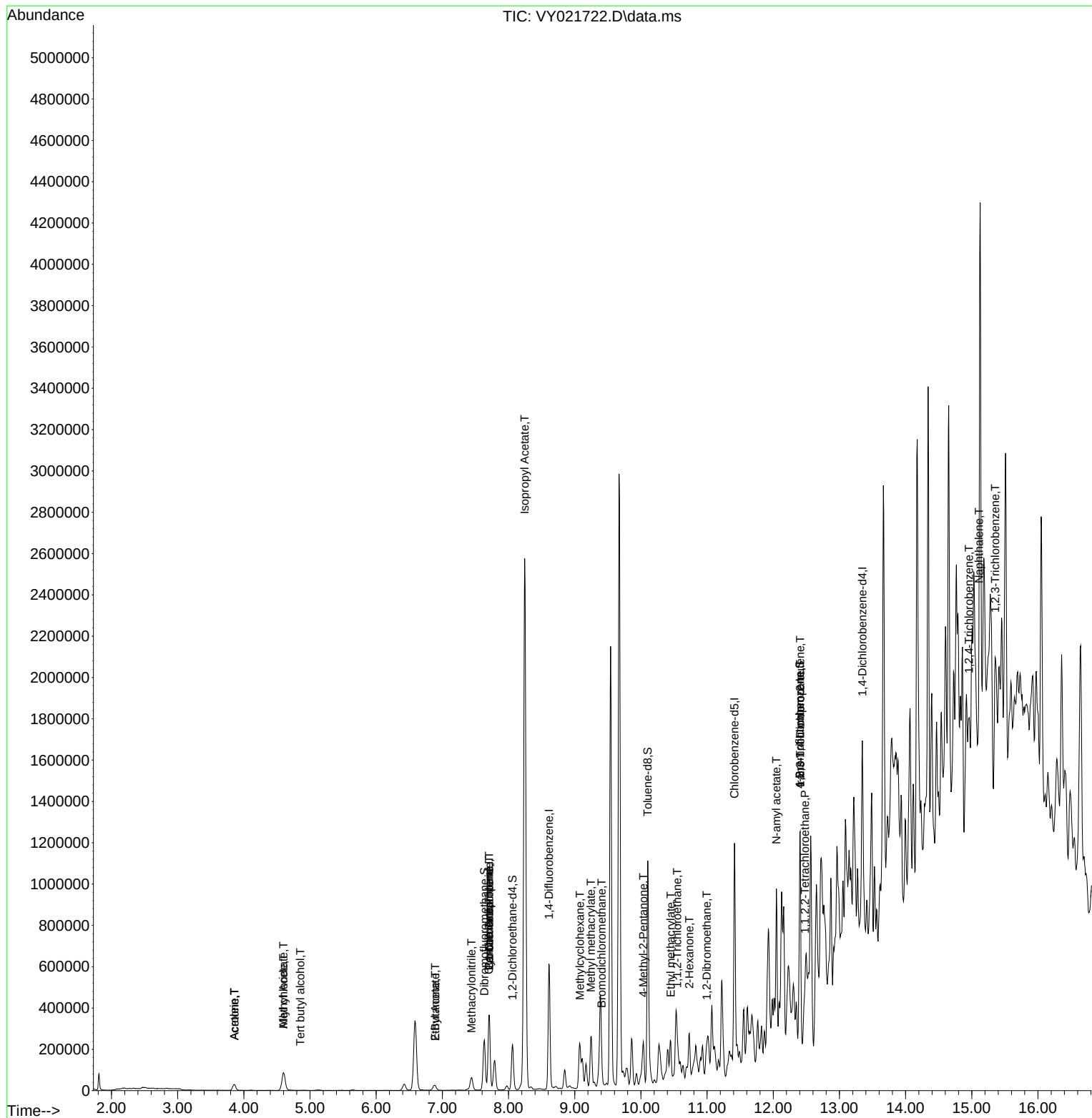
Internal Standards						
1) Pentafluorobenzene	7.707	168	278328	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.609	114	508216	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	512218	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	256507	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	173360	57.488	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 114.980%	
35) Dibromofluoromethane	7.634	113	170901	51.840	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 103.680%	
50) Toluene-d8	10.103	98	644253	51.369	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 102.740%	
62) 4-Bromofluorobenzene	12.402	95	275951	65.049	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 130.100%	
Target Compounds						Qvalue
11) Tert butyl alcohol	4.854	59	280	1.430	ug/l	97
13) Acrolein	3.854	56	5964	16.675	ug/l	92
14) Allyl chloride	4.598	41	37466	8.049	ug/l #	56
16) Acetone	3.860	43	22308	36.145	ug/l #	71
18) Methyl Acetate	4.598	43	77107	50.410	ug/l #	51
25) 2-Butanone	6.890	43	13589	15.415	ug/l #	58
31) Cyclohexane	7.701	56	6670	1.253	ug/l #	22
36) 1,1-Dichloropropene	7.707	75	21936	4.368	ug/l #	52
37) Ethyl Acetate	6.890	43	13589	5.734	ug/l #	74
38) Carbon Tetrachloride	7.707	117	28564	4.967	ug/l #	16
39) Methylcyclohexane	9.079	83	44222	7.372	ug/l #	28
41) Methacrylonitrile	7.439	41	16056	12.758	ug/l #	100
43) Isopropyl Acetate	8.244	43	511292	113.849	ug/l #	61
47) Bromodichloromethane	9.408	83	45283	8.519	ug/l #	26
48) Methyl methacrylate	9.244	41	63867	30.986	ug/l #	33
51) 4-Methyl-2-Pentanone	10.036	43	22302	9.543	ug/l #	72
55) 1,1,2-Trichloroethane	10.548	97	50611	19.171	ug/l #	23
56) Ethyl methacrylate	10.451	69	14418	4.277	ug/l #	1
59) 2-Hexanone	10.731	43	82861	53.237	ug/l #	30
61) 1,2-Dibromoethane	10.993	107	3167	1.279	ug/l #	1
74) N-amyl acetate	12.048	43	169945	38.008	ug/l #	59
75) 1,1,2,2-Tetrachloroethane	12.481	83	32381	9.453	ug/l #	26
76) 1,2,3-Trichloropropane	12.408	75	128242	50.436	ug/l #	100
81) trans-1,4-Dichloro-2-b...	12.408	75	128242	116.214	ug/l #	17
93) 1,2,4-Trichlorobenzene	14.956	180	9696	2.279	ug/l #	12
95) Naphthalene	15.108	128	14714	2.087	ug/l #	1
96) 1,2,3-Trichlorobenzene	15.352	180	14070	3.878	ug/l #	1

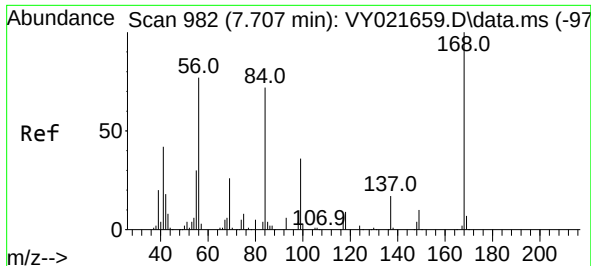
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY033125\
Data File : VY021722.D
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y032725S.M
Quant Title : SW846 8260
QLast Update : Fri Mar 28 02:30:29 2025
Response via : Initial Calibration

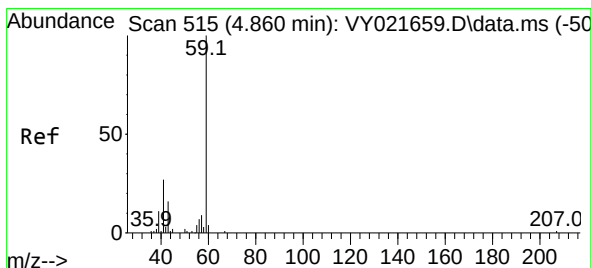
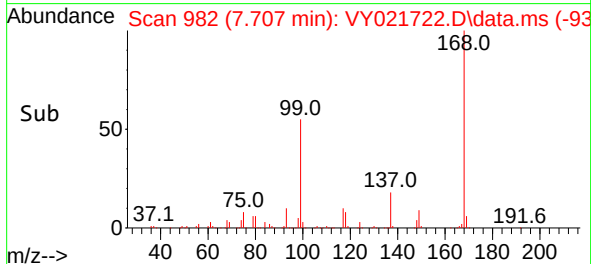
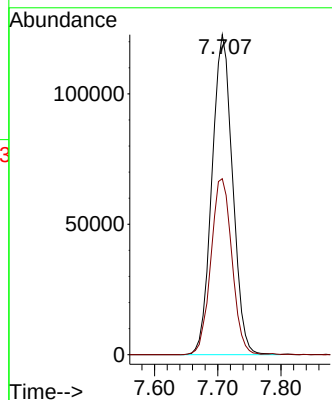
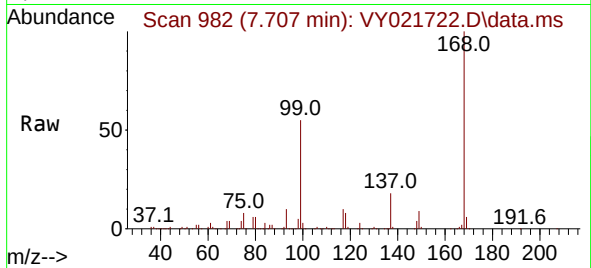




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. 0.000 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

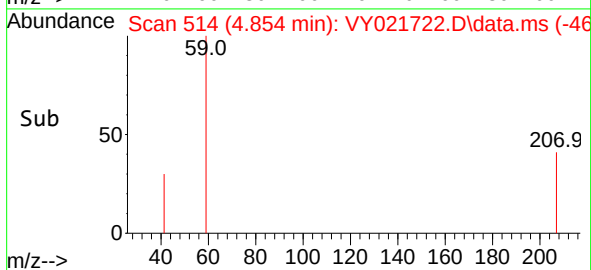
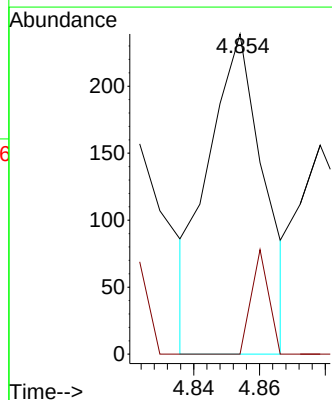
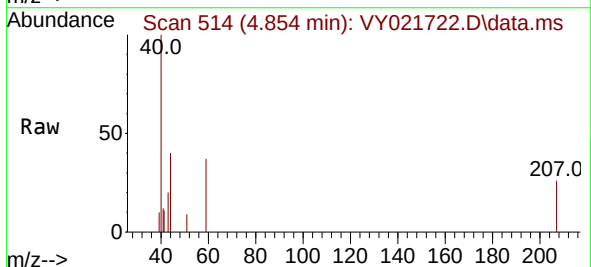
Instrument :
MSVOA_Y
ClientSampleId :
T2

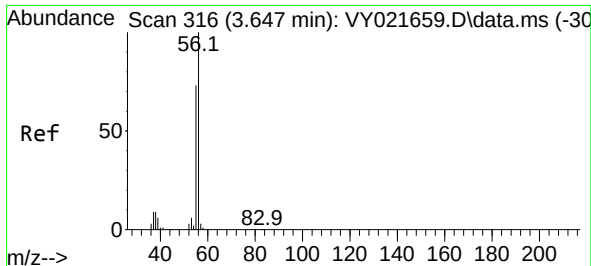
Tgt Ion:168 Resp: 278328
Ion Ratio Lower Upper
168 100
99 55.0 46.7 70.1



#11
Tert butyl alcohol
Concen: 1.430 ug/l
RT: 4.854 min Scan# 514
Delta R.T. -0.006 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 59 Resp: 280
Ion Ratio Lower Upper
59 100
57 10.4 9.2 13.8





#13

Acrolein

Concen: 16.675 ug/l

RT: 3.854 min Scan# 316

Delta R.T. 0.207 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

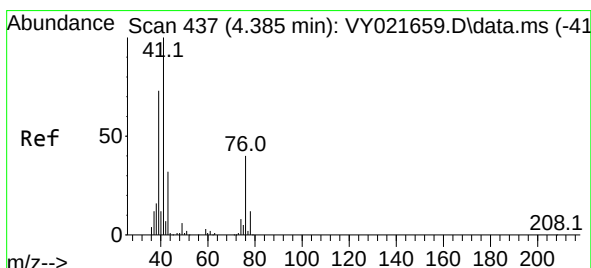
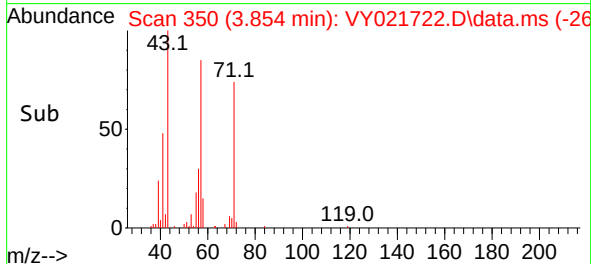
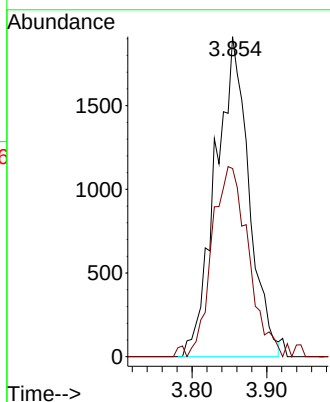
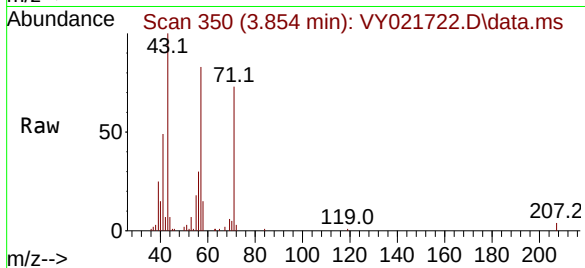
T2

Tgt Ion: 56 Resp: 5964

Ion Ratio Lower Upper

56 100

55 64.1 56.6 85.0



#14

Allyl chloride

Concen: 8.049 ug/l

RT: 4.598 min Scan# 472

Delta R.T. 0.214 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

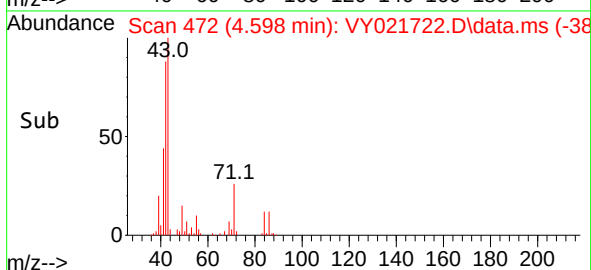
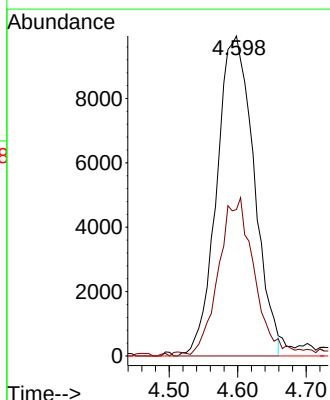
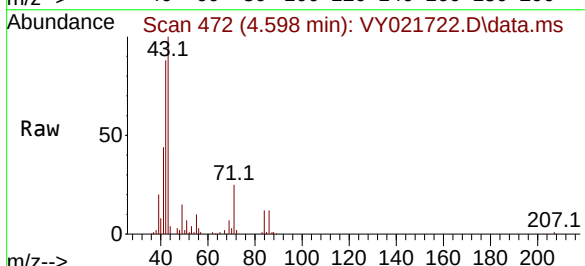
Tgt Ion: 41 Resp: 37466

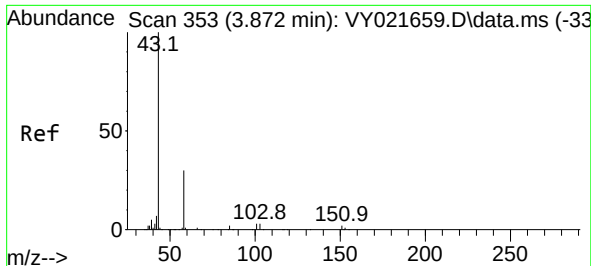
Ion Ratio Lower Upper

41 100

39 44.6 58.6 88.0#

76 0.0 30.3 45.5#

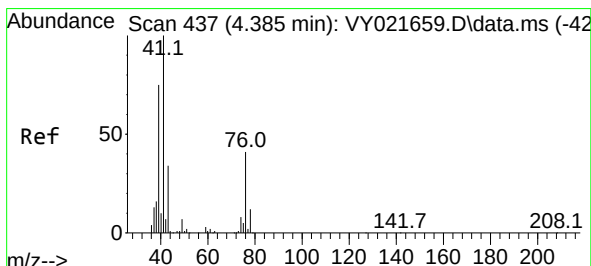
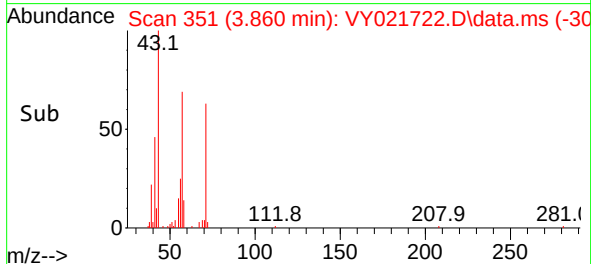
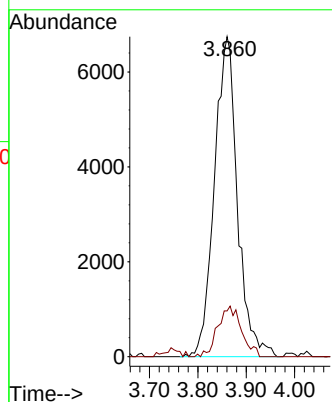
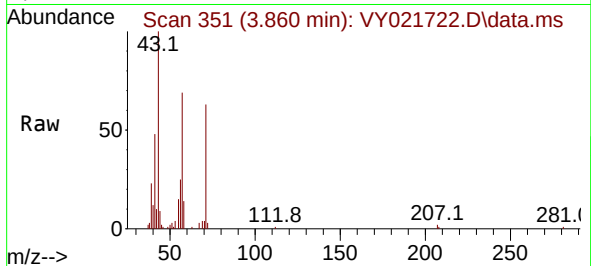




#16
Acetone
Concen: 36.145 ug/l
RT: 3.860 min Scan# 31
Delta R.T. -0.012 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

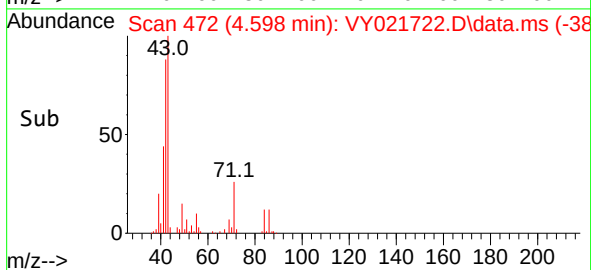
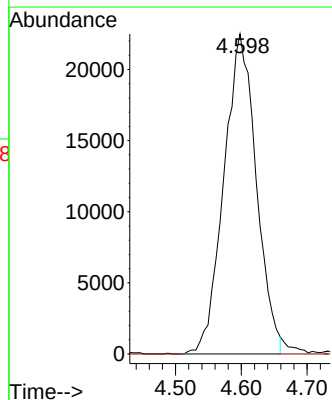
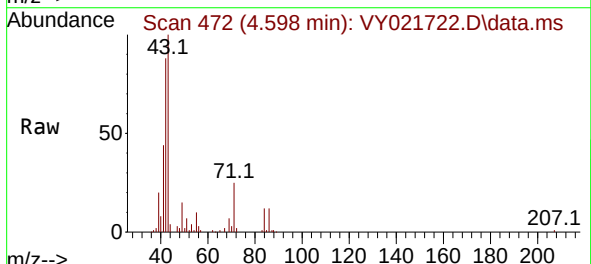
Instrument :
MSVOA_Y
ClientSampleId :
T2

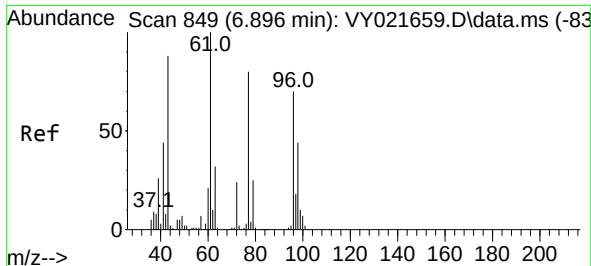
Tgt Ion: 43 Resp: 22308
Ion Ratio Lower Upper
43 100
58 14.3 24.2 36.4#



#18
Methyl Acetate
Concen: 50.410 ug/l
RT: 4.598 min Scan# 472
Delta R.T. 0.214 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 43 Resp: 77107
Ion Ratio Lower Upper
43 100
74 0.0 19.1 28.7#

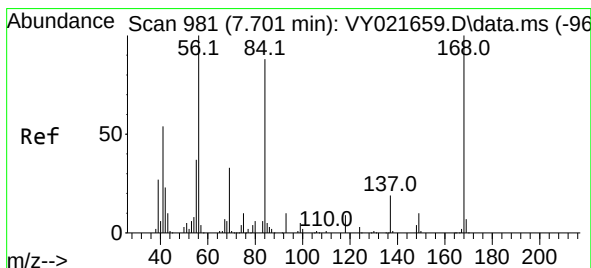
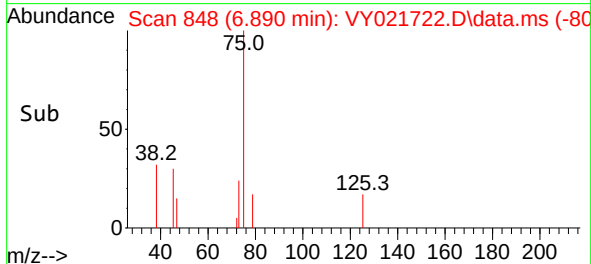
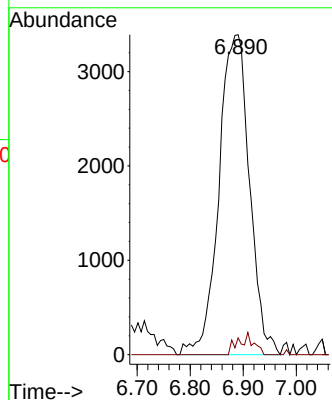
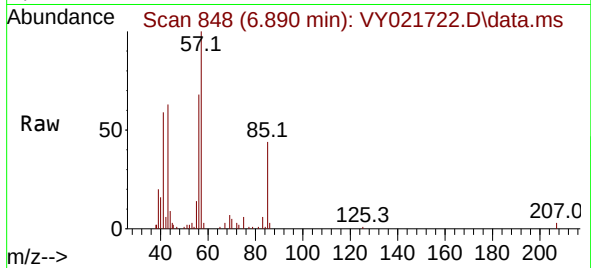




#25
2-Butanone
Concen: 15.415 ug/l
RT: 6.890 min Scan# 849
Delta R.T. -0.006 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

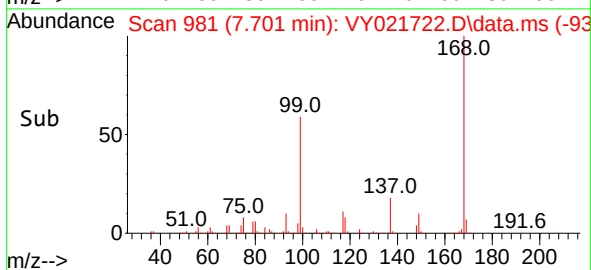
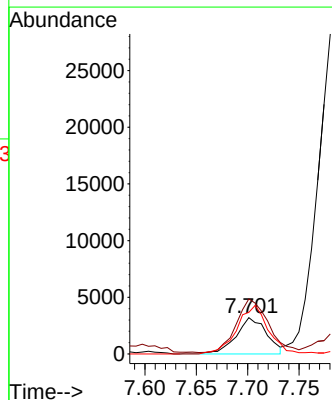
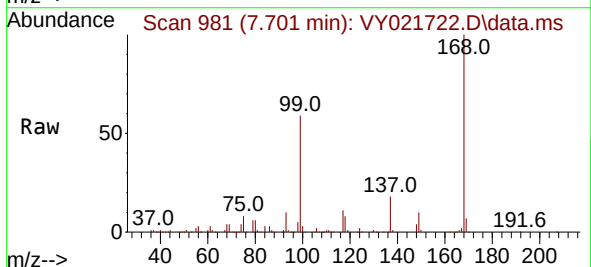
Instrument :
MSVOA_Y
ClientSampleId :
T2

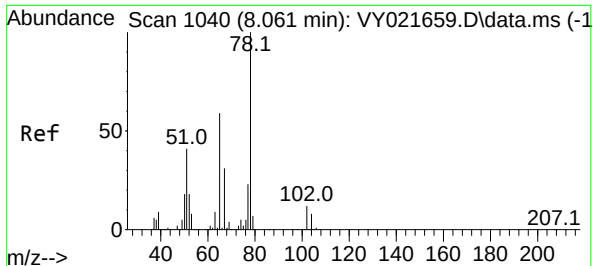
Tgt Ion: 43 Resp: 13589
Ion Ratio Lower Upper
43 100
72 5.2 21.4 32.2#



#31
Cyclohexane
Concen: 1.253 ug/l
RT: 7.701 min Scan# 981
Delta R.T. 0.000 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 56 Resp: 6670
Ion Ratio Lower Upper
56 100
69 146.5 26.6 40.0#
84 114.5 69.0 103.4#





#33

1,2-Dichloroethane-d4

Concen: 57.488 ug/l

RT: 8.061 min Scan# 1

Delta R.T. 0.000 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

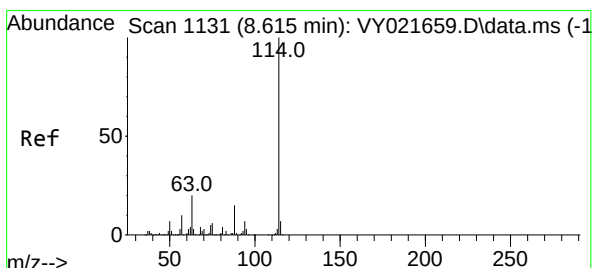
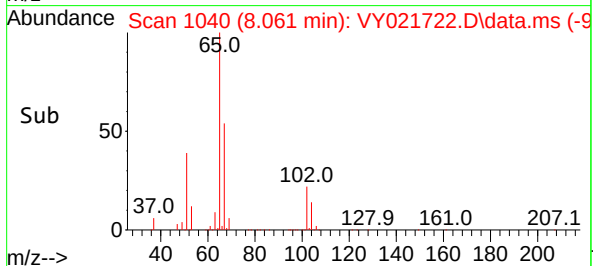
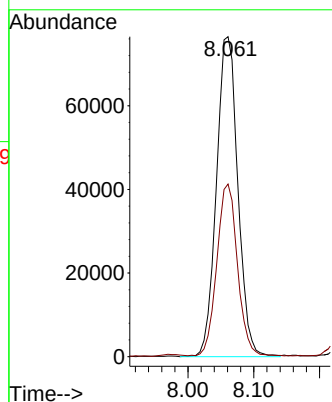
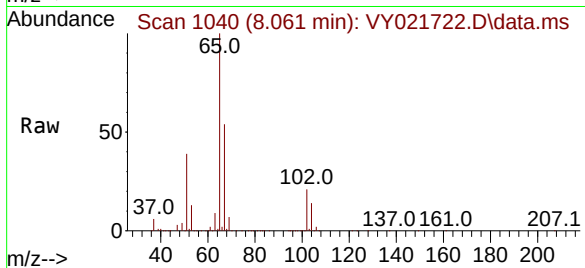
T2

Tgt Ion: 65 Resp: 173360

Ion Ratio Lower Upper

65 100

67 51.7 0.0 104.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.609 min Scan# 1130

Delta R.T. -0.006 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

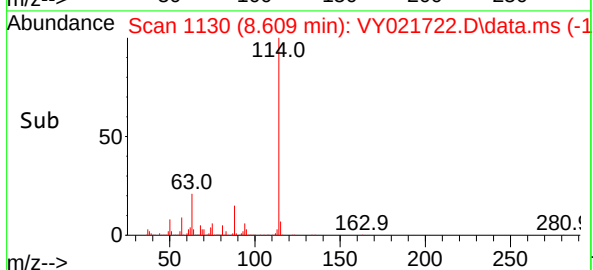
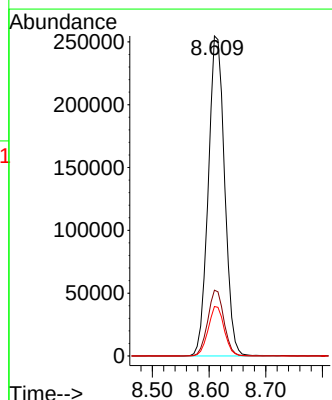
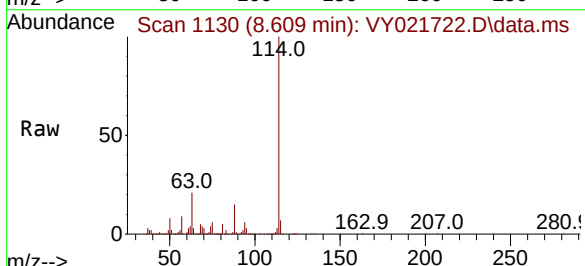
Tgt Ion: 114 Resp: 508216

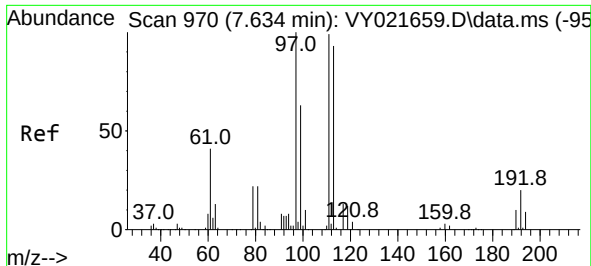
Ion Ratio Lower Upper

114 100

63 20.6 0.0 40.2

88 15.4 0.0 29.8

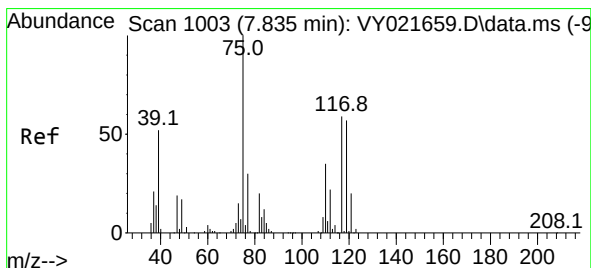
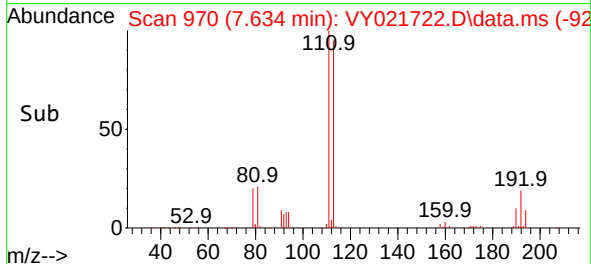
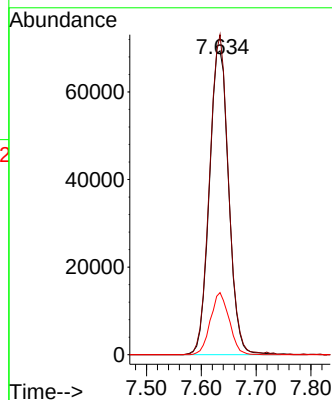
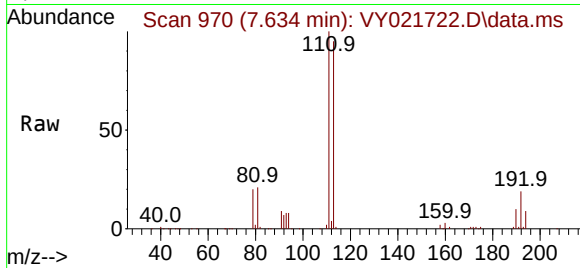




#35
Dibromofluoromethane
Concen: 51.840 ug/l
RT: 7.634 min Scan# 91
Delta R.T. 0.000 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

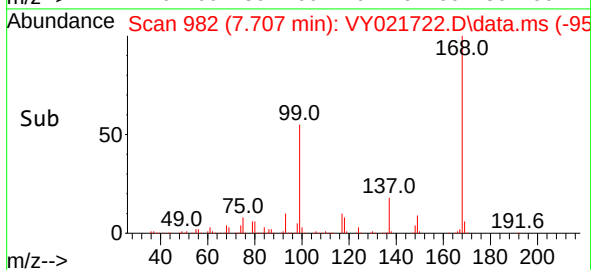
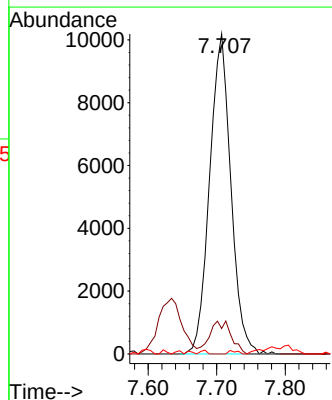
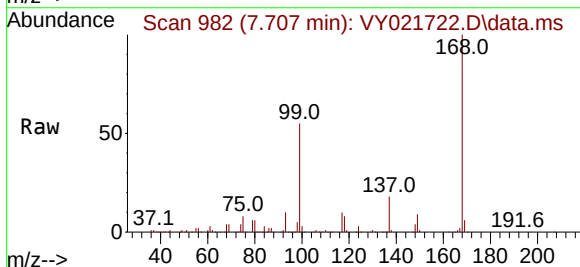
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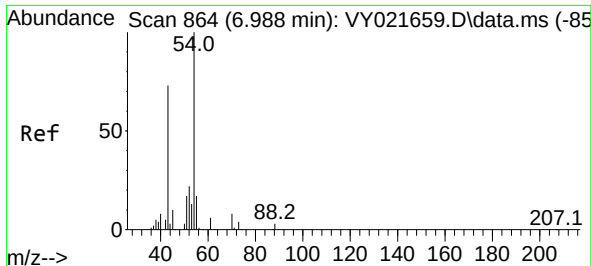
Tgt Ion:113 Resp: 170901
Ion Ratio Lower Upper
113 100
111 102.3 82.6 123.8
192 19.6 16.2 24.4



#36
1,1-Dichloropropene
Concen: 4.368 ug/l
RT: 7.707 min Scan# 982
Delta R.T. -0.128 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 75 Resp: 21936
Ion Ratio Lower Upper
75 100
110 10.5 17.0 50.9#
77 0.4 24.8 37.2#





#37

Ethyl Acetate

Concen: 5.734 ug/l

RT: 6.890 min Scan# 84

Delta R.T. -0.097 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

T2

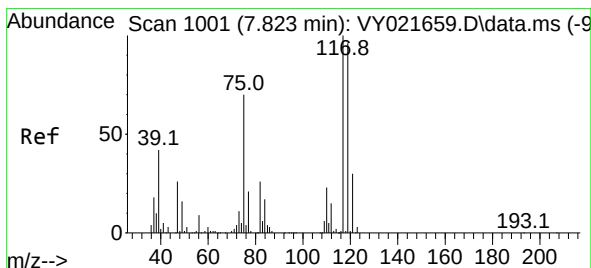
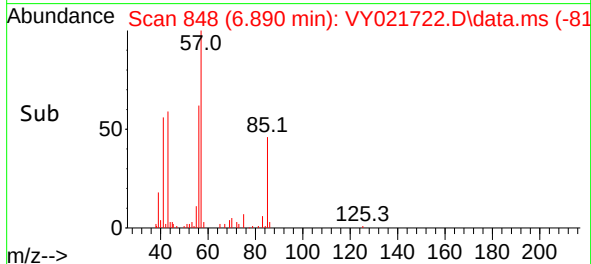
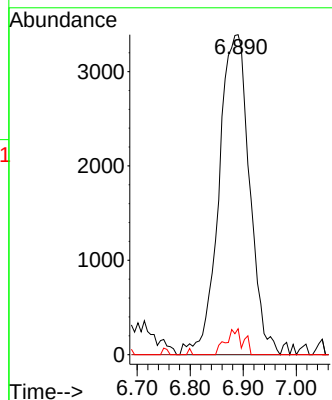
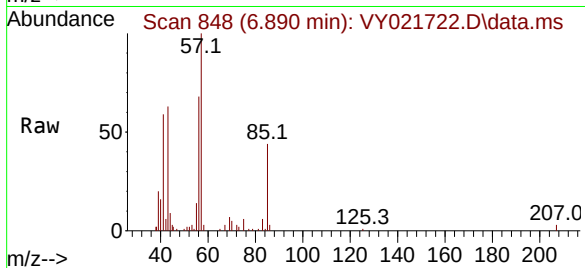
Tgt Ion: 43 Resp: 13589

Ion Ratio Lower Upper

43 100

61 0.0 11.0 16.6#

70 4.5 8.1 12.1#



#38

Carbon Tetrachloride

Concen: 4.967 ug/l

RT: 7.707 min Scan# 982

Delta R.T. -0.116 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

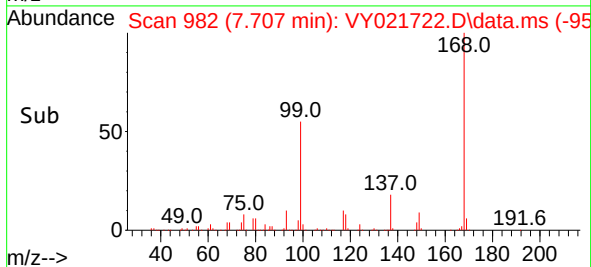
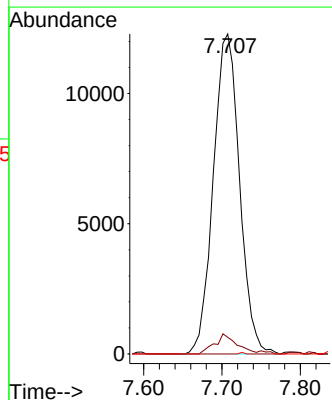
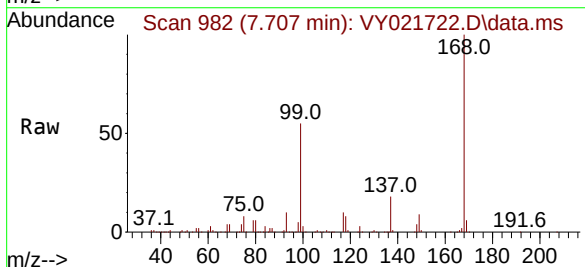
Tgt Ion: 117 Resp: 28564

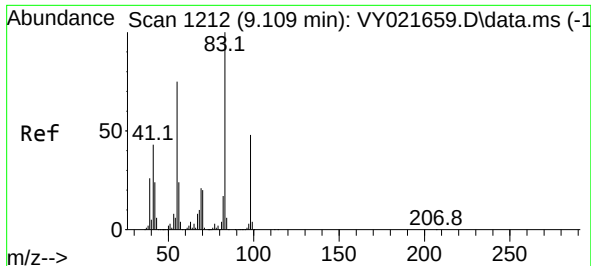
Ion Ratio Lower Upper

117 100

119 5.2 76.2 114.4#

121 0.0 24.2 36.4#





#39

Methylcyclohexane

Concen: 7.372 ug/l

RT: 9.079 min Scan# 11

Delta R.T. -0.030 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

T2

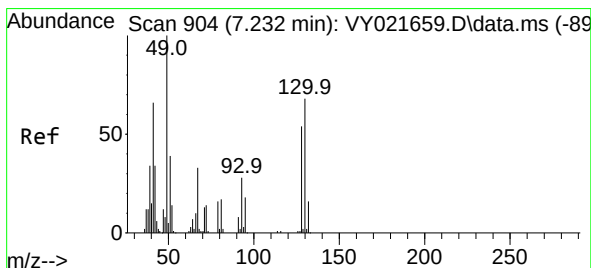
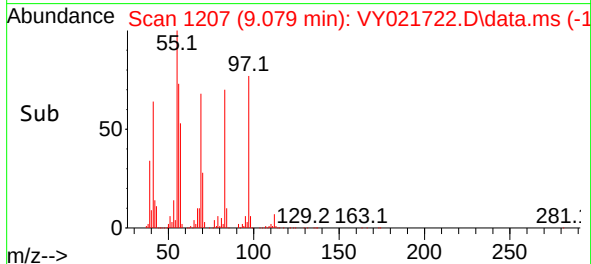
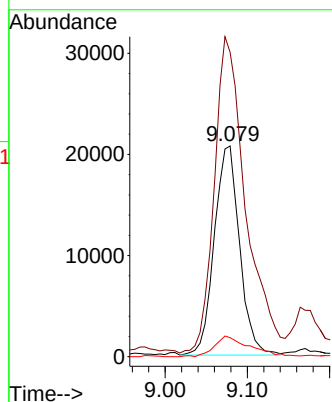
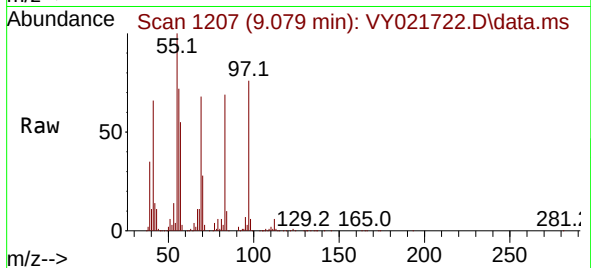
Tgt Ion: 83 Resp: 44222

Ion Ratio Lower Upper

83 100

55 143.8 59.7 89.5#

98 9.1 38.3 57.5#



#41

Methacrylonitrile

Concen: 12.758 ug/l

RT: 7.439 min Scan# 938

Delta R.T. 0.207 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Tgt Ion: 41 Resp: 16056

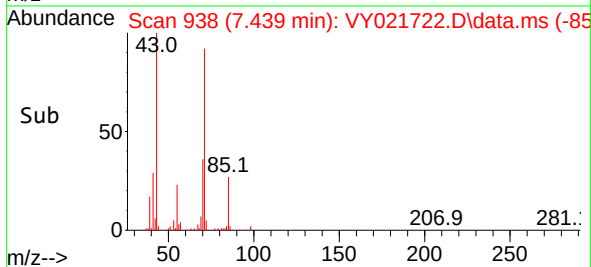
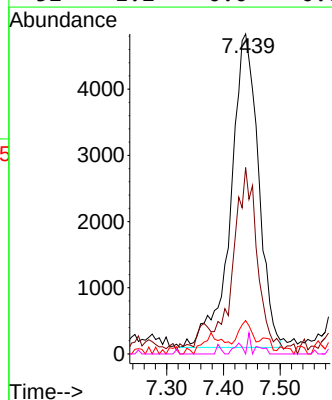
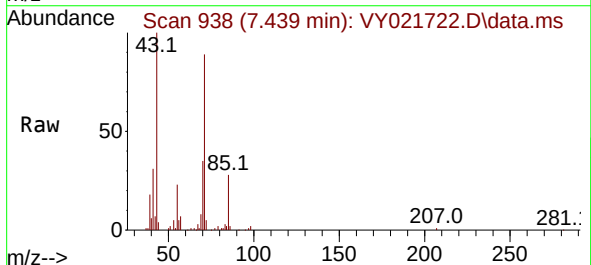
Ion Ratio Lower Upper

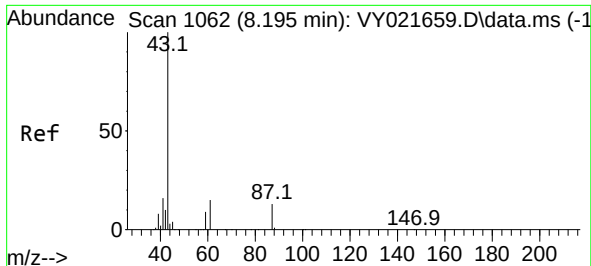
41 100

39 45.3 0.0 0.0#

67 5.1 0.0 0.0#

52 1.2 0.0 0.0#

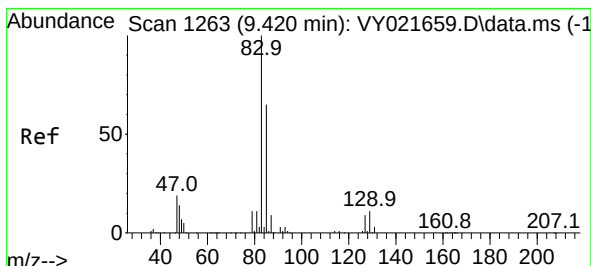
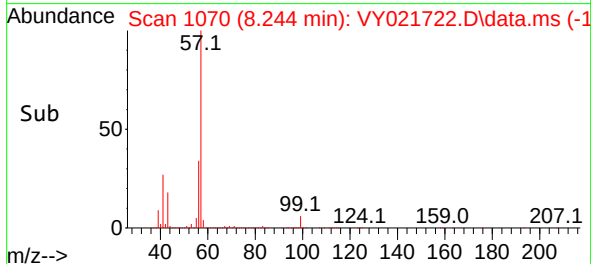
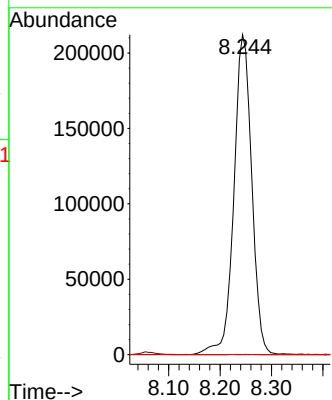
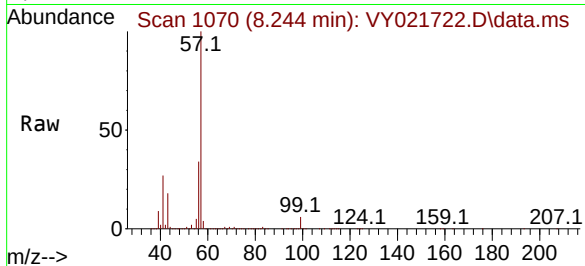




#43
Isopropyl Acetate
Concen: 113.849 ug/l
RT: 8.244 min Scan# 1070
Delta R.T. 0.049 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

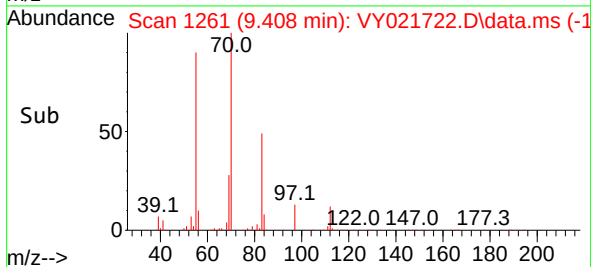
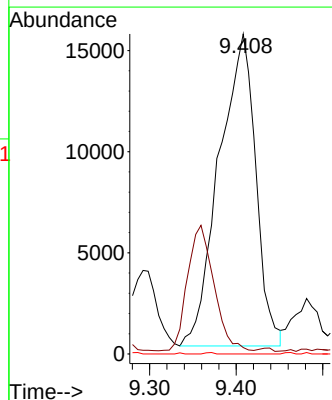
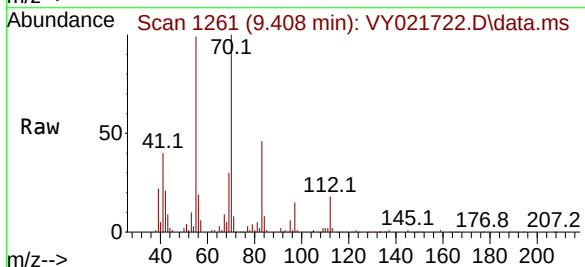
Instrument :
MSVOA_Y
ClientSampleId :
T2

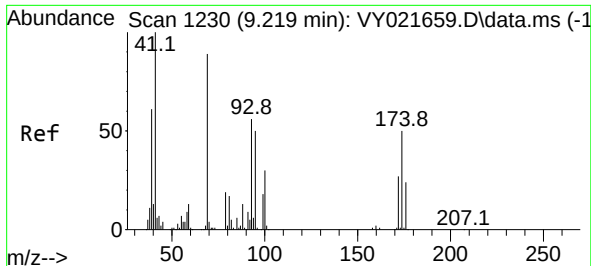
Tgt Ion: 43 Resp: 511292
Ion Ratio Lower Upper
43 100
61 0.0 15.9 23.9#
87 0.0 10.4 15.6#



#47
Bromodichloromethane
Concen: 8.519 ug/l
RT: 9.408 min Scan# 1261
Delta R.T. -0.012 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 83 Resp: 45283
Ion Ratio Lower Upper
83 100
85 1.1 51.8 77.6#
127 0.0 6.8 10.2#

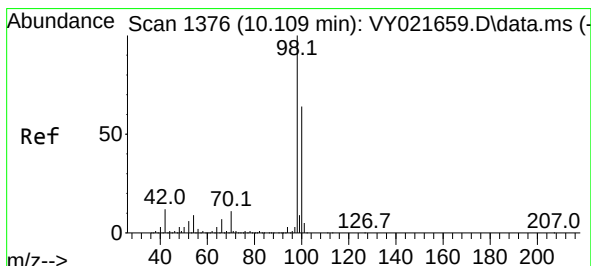
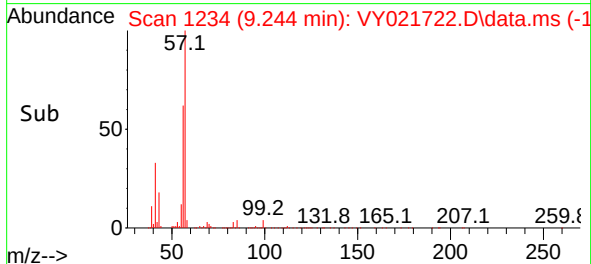
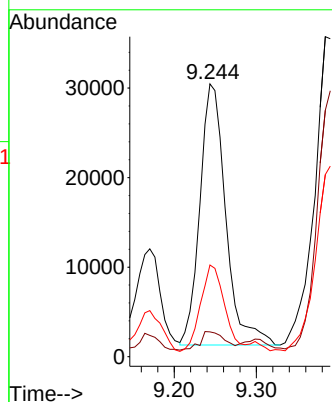
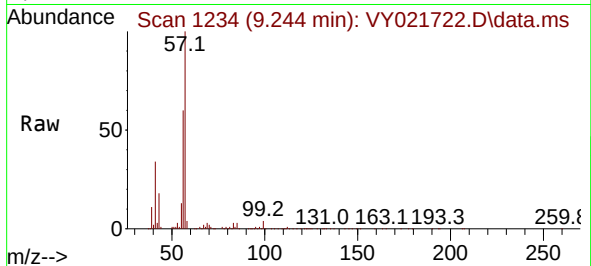




#48
Methyl methacrylate
Concen: 30.986 ug/l
RT: 9.244 min Scan# 11
Delta R.T. 0.025 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

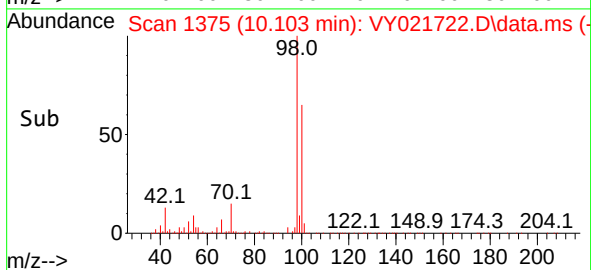
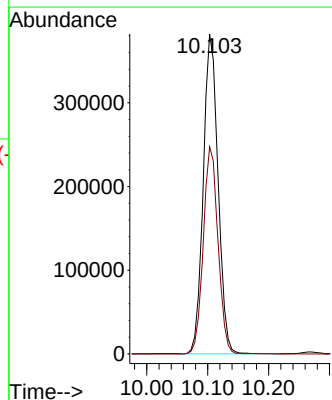
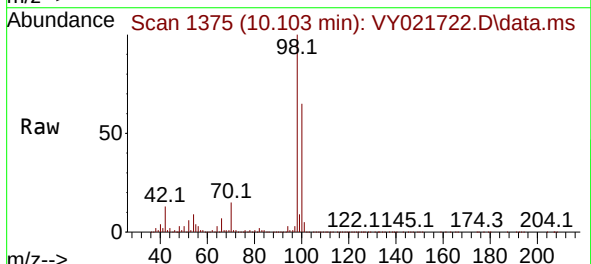
Instrument :
MSVOA_Y
ClientSampleId :
T2

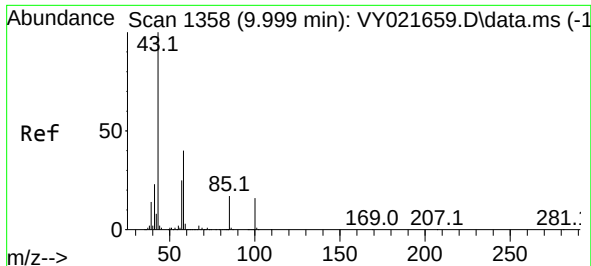
Tgt Ion: 41 Resp: 63867
Ion Ratio Lower Upper
41 100
69 6.6 69.8 104.8#
39 30.6 47.2 70.8#



#50
Toluene-d8
Concen: 51.369 ug/l
RT: 10.103 min Scan# 1375
Delta R.T. -0.006 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 98 Resp: 644253
Ion Ratio Lower Upper
98 100
100 64.5 52.1 78.1





#51

4-Methyl-2-Pentanone

Concen: 9.543 ug/l

RT: 10.036 min Scan# 11

Delta R.T. 0.037 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

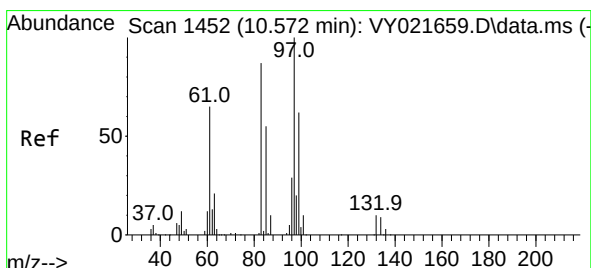
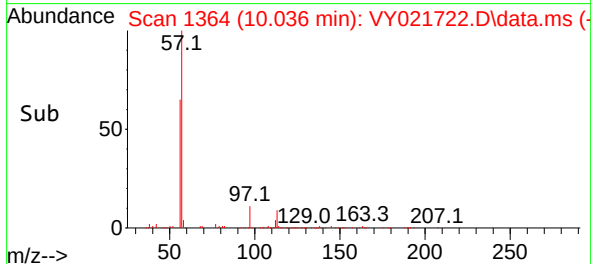
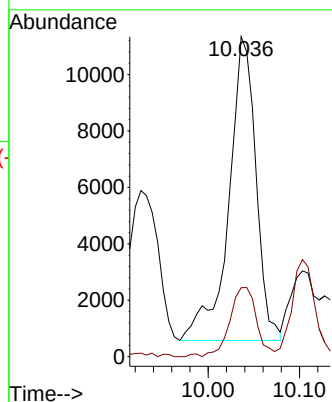
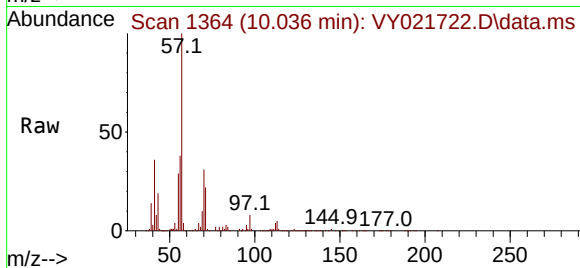
T2

Tgt Ion: 43 Resp: 22302

Ion Ratio Lower Upper

43 100

58 22.2 31.5 47.3#



#55

1,1,2-Trichloroethane

Concen: 19.171 ug/l

RT: 10.548 min Scan# 1448

Delta R.T. -0.024 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Tgt Ion: 97 Resp: 50611

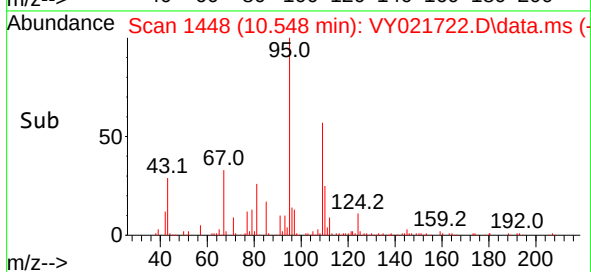
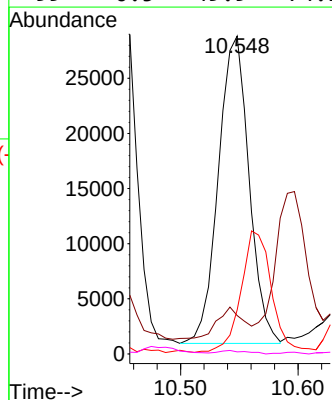
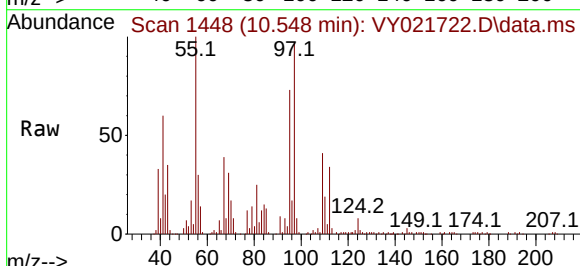
Ion Ratio Lower Upper

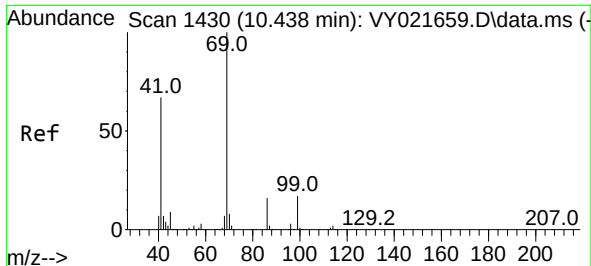
97 100

83 7.4 69.5 104.3#

85 13.1 43.9 65.9#

99 0.5 49.9 74.9#

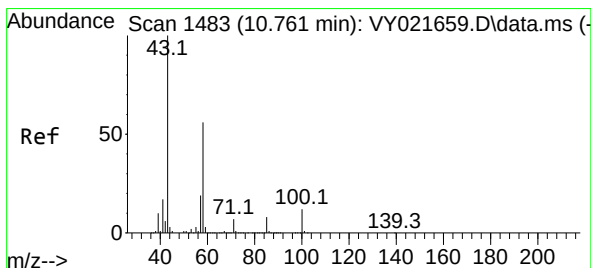
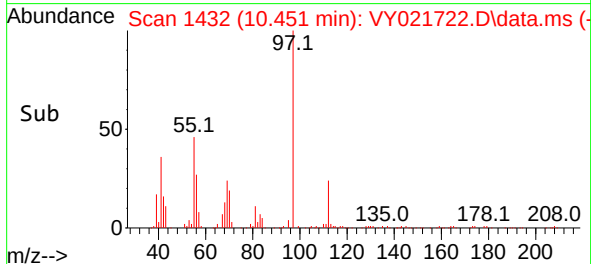
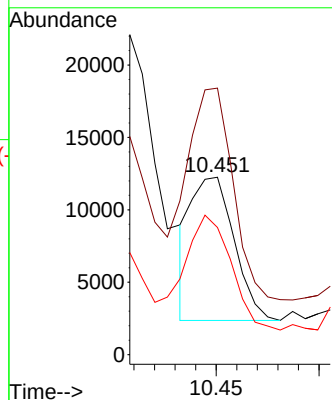
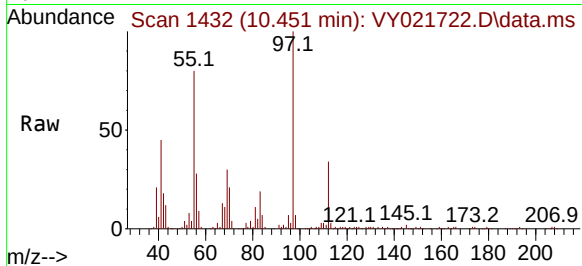




#56
Ethyl methacrylate
Concen: 4.277 ug/l
RT: 10.451 min Scan# 14418
Delta R.T. 0.012 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

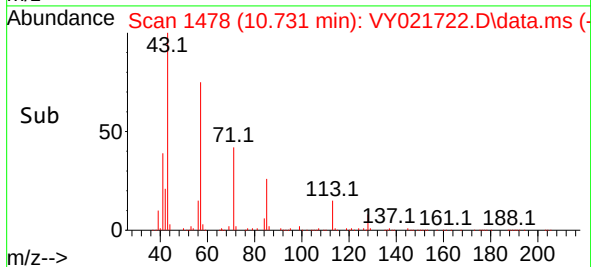
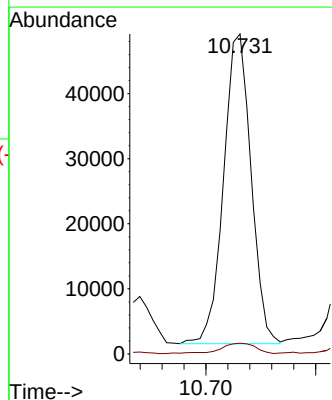
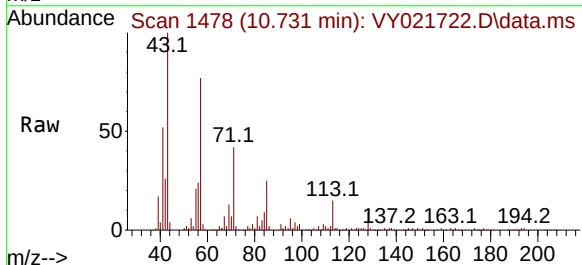
Instrument :
MSVOA_Y
ClientSampleId :
T2

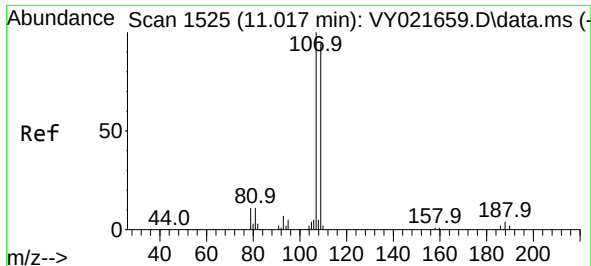
Tgt Ion: 69 Resp: 14418
Ion Ratio Lower Upper
69 100
41 157.3 53.8 80.6#
39 88.4 29.6 44.4#



#59
2-Hexanone
Concen: 53.237 ug/l
RT: 10.731 min Scan# 1478
Delta R.T. -0.030 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 43 Resp: 82861
Ion Ratio Lower Upper
43 100
58 4.2 27.2 81.5#

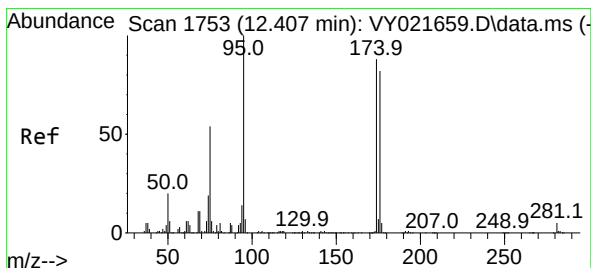
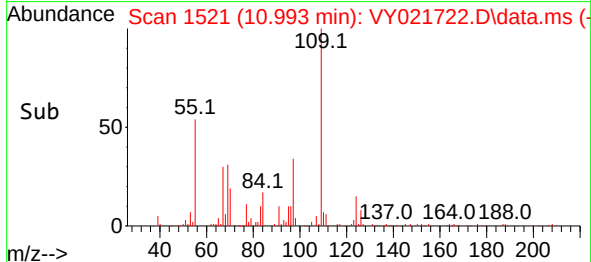
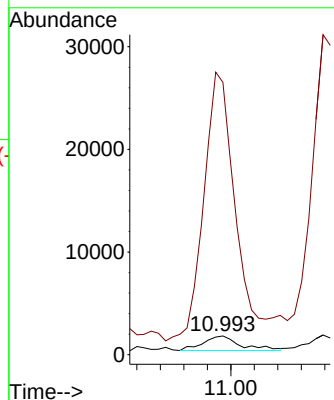
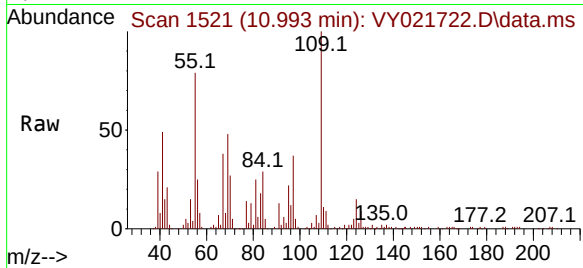




#61
1,2-Dibromoethane
Concen: 1.279 ug/l
RT: 10.993 min Scan# 1521
Delta R.T. -0.024 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

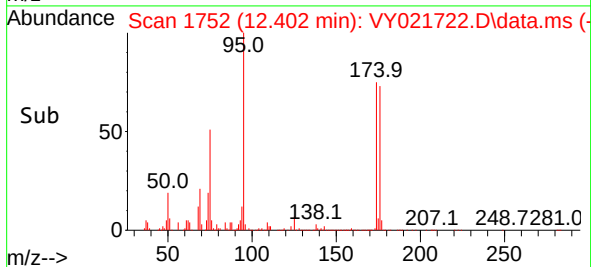
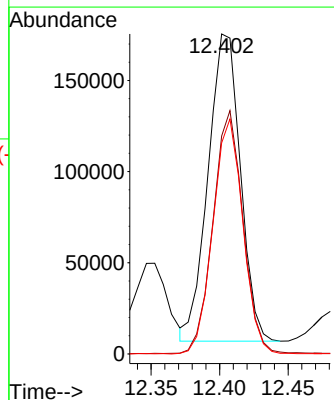
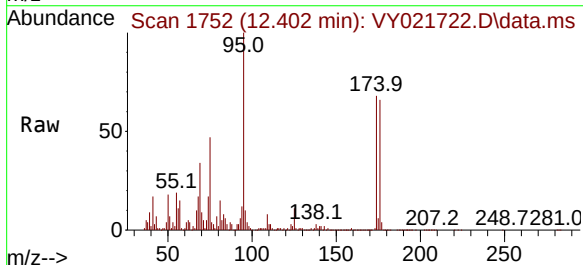
Instrument :
MSVOA_Y
ClientSampleId :
T2

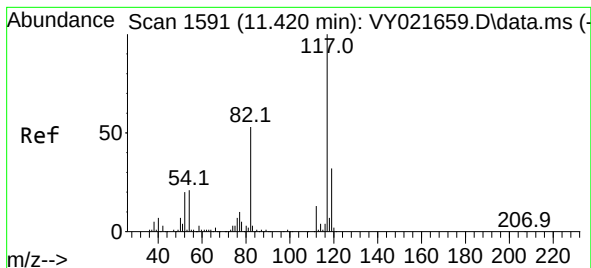
Tgt Ion:107 Resp: 3167
Ion Ratio Lower Upper
107 100
109 1521.7 74.4 111.6#



#62
4-Bromofluorobenzene
Concen: 65.049 ug/l
RT: 12.402 min Scan# 1752
Delta R.T. -0.006 min
Lab File: VY021722.D
Acq: 31 Mar 2025 16:11

Tgt Ion: 95 Resp: 275951
Ion Ratio Lower Upper
95 100
174 74.2 0.0 170.8
176 71.0 0.0 162.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

T2

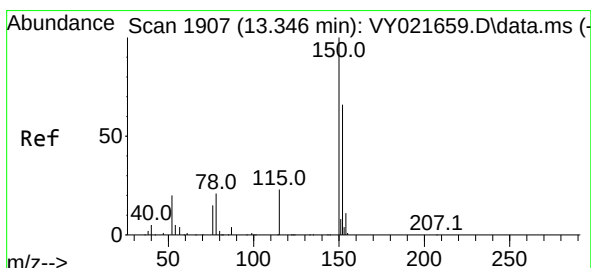
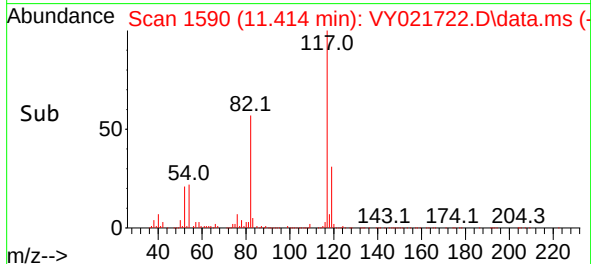
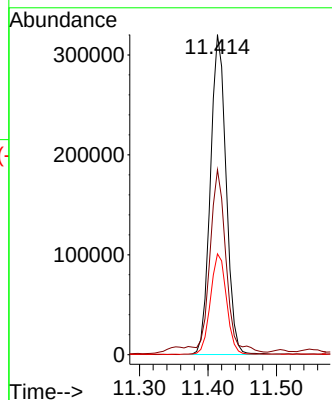
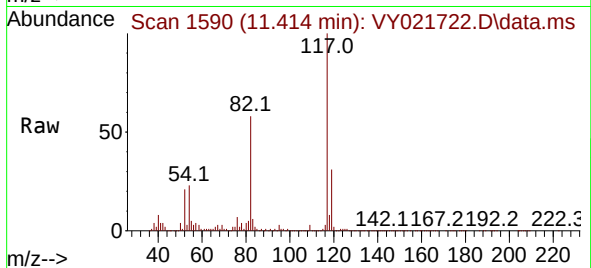
Tgt Ion:117 Resp: 512218

Ion Ratio Lower Upper

117 100

82 56.3 42.8 64.2

119 31.4 25.7 38.5



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. 0.000 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

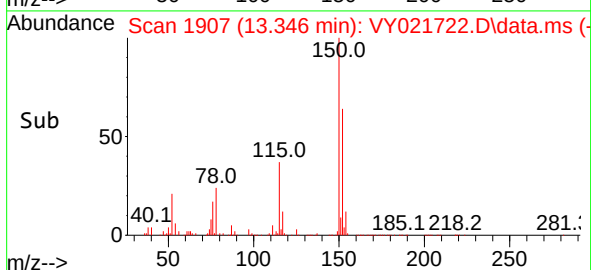
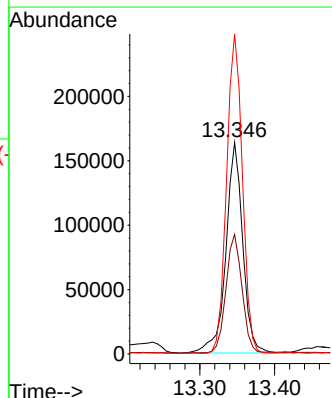
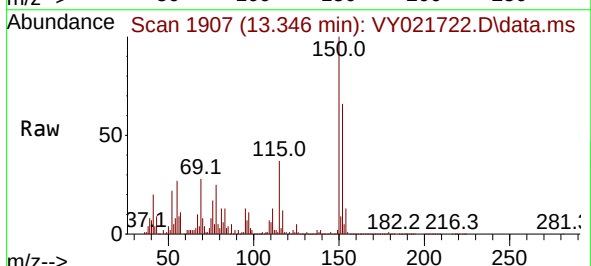
Tgt Ion:152 Resp: 256507

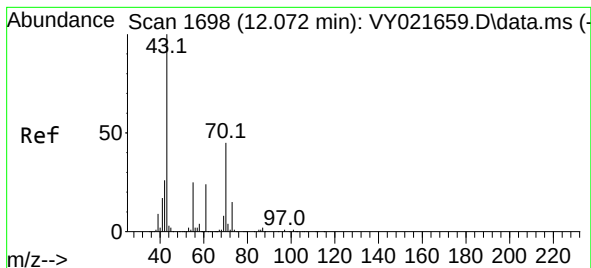
Ion Ratio Lower Upper

152 100

115 53.3 28.8 86.5

150 142.2 0.0 348.4





#74

N-amy1 acetate

Concen: 38.008 ug/l

RT: 12.048 min Scan# 1

Delta R.T. -0.024 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

T2

Tgt Ion: 43 Resp: 169945

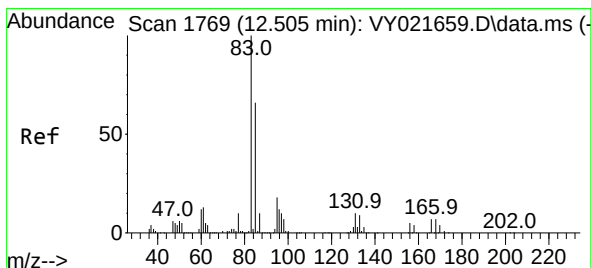
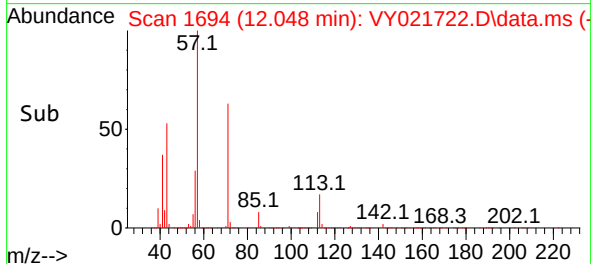
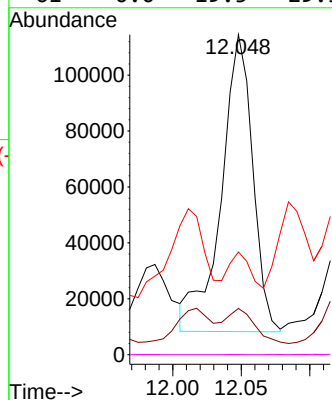
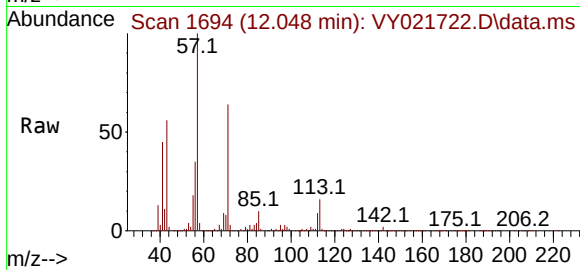
Ion Ratio Lower Upper

43 100

70 11.2 34.7 52.1#

55 16.7 21.2 31.8#

61 0.0 19.5 29.3#



#75

1,1,2,2-Tetrachloroethane

Concen: 9.453 ug/l

RT: 12.481 min Scan# 1765

Delta R.T. -0.024 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

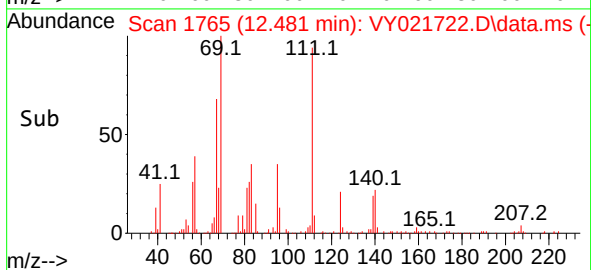
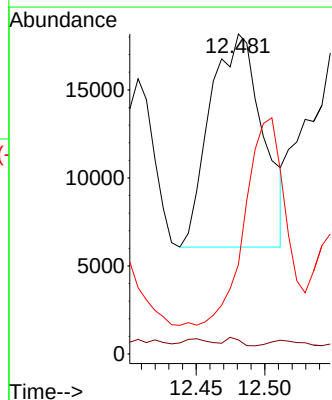
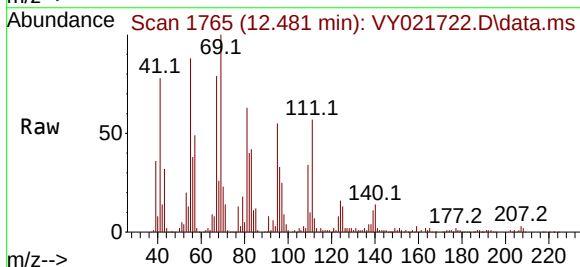
Tgt Ion: 83 Resp: 32381

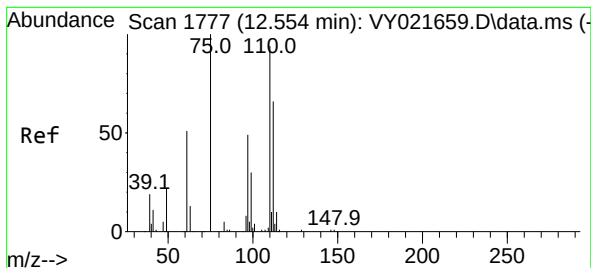
Ion Ratio Lower Upper

83 100

131 0.9 5.1 15.3#

85 0.0 32.3 96.8#





#76

1,2,3-Trichloropropane

Concen: 50.436 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. -0.146 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

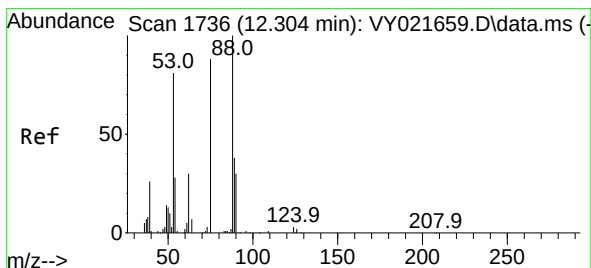
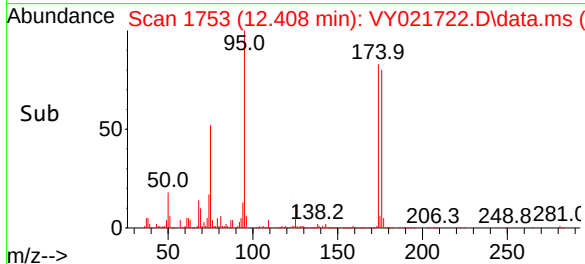
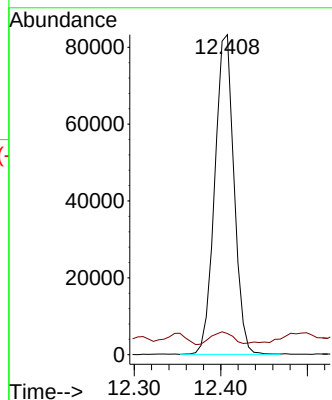
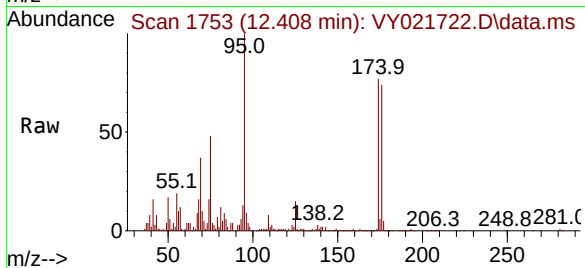
T2

Tgt Ion: 75 Resp: 128242

Ion Ratio Lower Upper

75 100

77 4.5 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 116.214 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.104 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

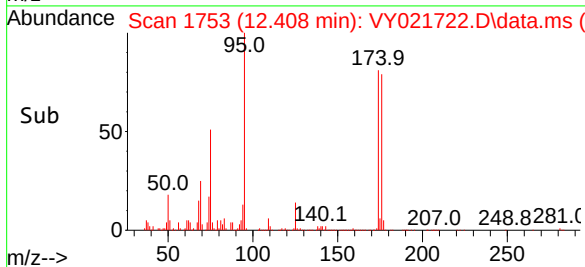
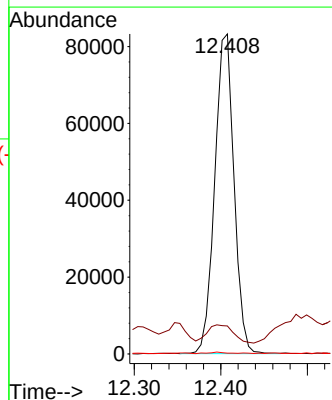
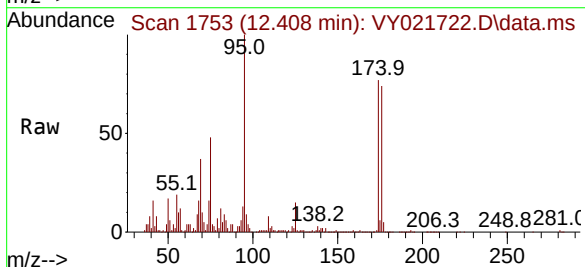
Tgt Ion: 75 Resp: 128242

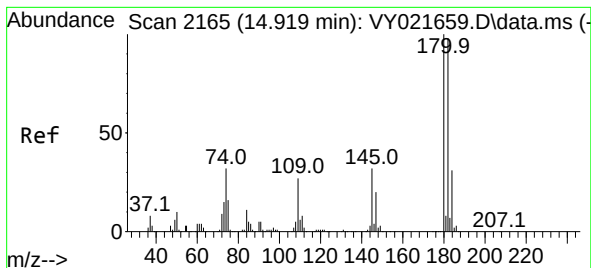
Ion Ratio Lower Upper

75 100

53 7.6 76.1 114.1#

89 0.4 36.2 54.4#





#93

1,2,4-Trichlorobenzene

Concen: 2.279 ug/l

RT: 14.956 min Scan# 2171

Delta R.T. 0.037 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

Instrument :

MSVOA_Y

ClientSampleId :

T2

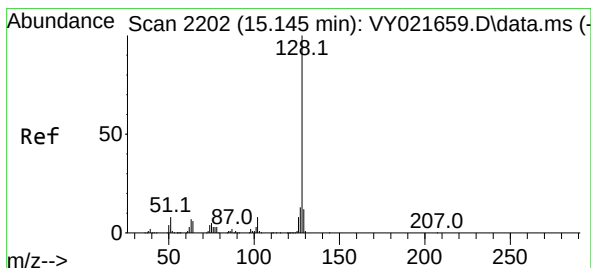
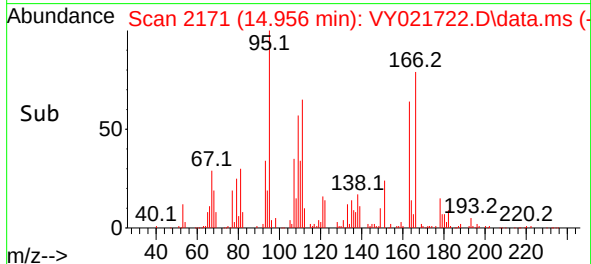
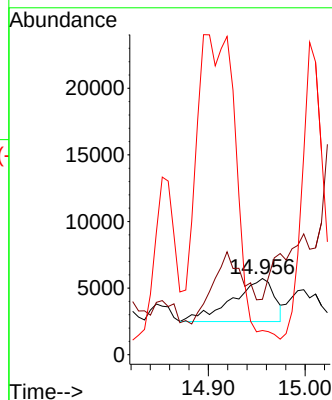
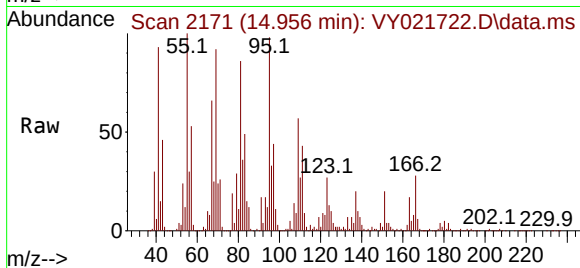
Tgt Ion:180 Resp: 9696

Ion Ratio Lower Upper

180 100

182 0.0 47.5 142.6#

145 0.0 14.9 44.9#



#95

Naphthalene

Concen: 2.087 ug/l

RT: 15.108 min Scan# 2196

Delta R.T. -0.036 min

Lab File: VY021722.D

Acq: 31 Mar 2025 16:11

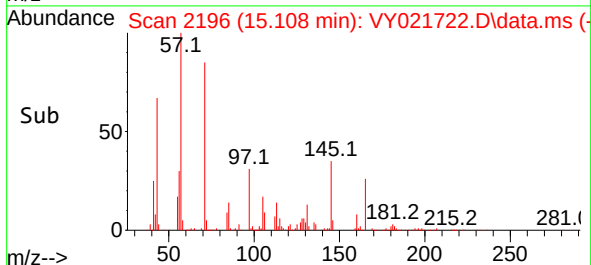
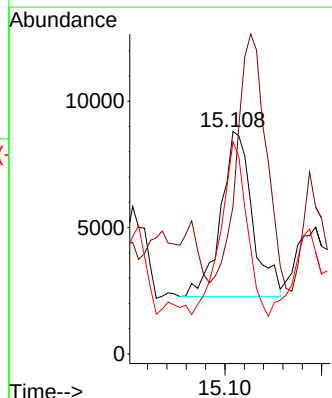
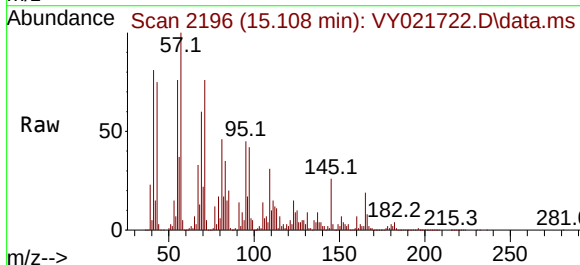
Tgt Ion:128 Resp: 14714

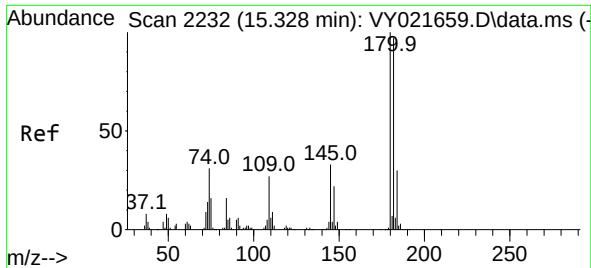
Ion Ratio Lower Upper

128 100

127 149.2 10.8 16.2#

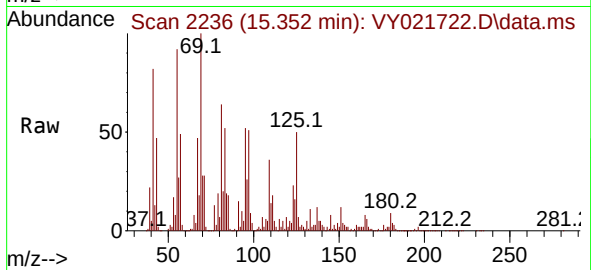
129 87.8 8.8 13.2#





#96
 1,2,3-Trichlorobenzene
 Concen: 3.878 ug/l
 RT: 15.352 min Scan# 21
 Delta R.T. 0.025 min
 Lab File: VY021722.D
 Acq: 31 Mar 2025 16:11

Instrument :
 MSVOA_Y
 ClientSampleId :
 T2



Tgt Ion:180 Resp: 14070
 Ion Ratio Lower Upper
 180 100
 182 0.0 47.5 142.5#
 145 108.7 15.9 47.7#

