

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY062425\
 Data File : VY022791.D
 Acq On : 24 Jun 2025 12:45
 Operator : SY/MD
 Sample : Q2384-01
 Misc : 5.11g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 OK-01-6202025RE

Quant Time: Jun 25 01:24:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y062325S.M
 Quant Title : SW846 8260
 QLast Update : Tue Jun 24 08:29:52 2025
 Response via : Initial Calibration

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

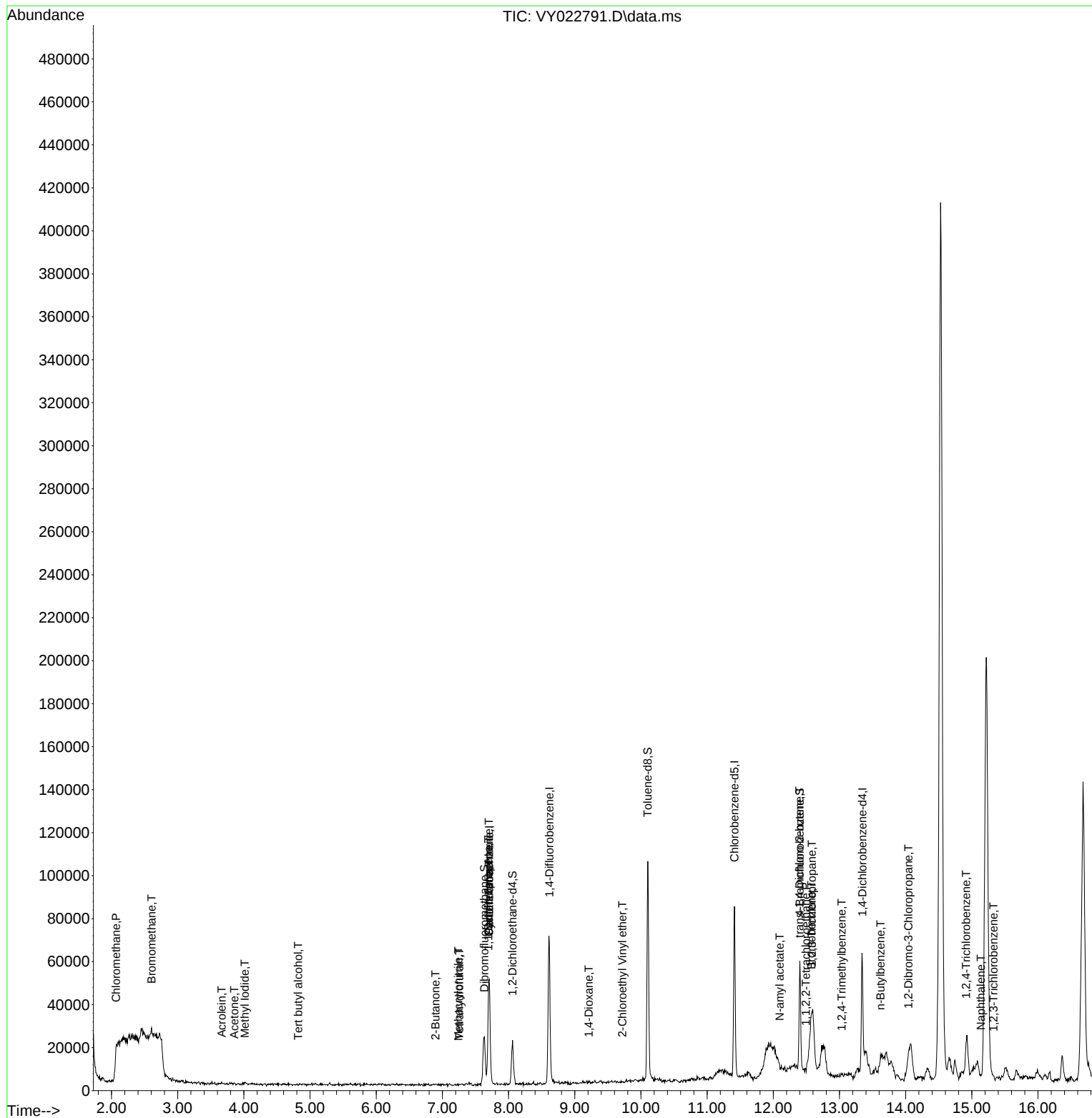
Internal Standards						
1) Pentafluorobenzene	7.707	168	37924	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	58561	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	39584	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	13190	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	15865	37.482	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	74.960%		
35) Dibromofluoromethane	7.634	113	16446	46.179	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	92.360%		
50) Toluene-d8	10.103	98	66394	46.981	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	93.960%		
62) 4-Bromofluorobenzene	12.401	95	14655	32.258	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	64.520%		
Target Compounds						Qvalue
3) Chloromethane	2.068	50	1295	2.091	ug/l #	86
5) Bromomethane	2.604	94	1821	2.994	ug/l	93
10) Methyl Iodide	4.012	142	788	1.849	ug/l #	65
11) Tert butyl alcohol	4.823	59	174	6.182	ug/l #	82
13) Acrolein	3.665	56	112	2.935	ug/l #	35
16) Acetone	3.854	43	846	10.575	ug/l	95
25) 2-Butanone	6.896	43	278	2.388	ug/l #	46
29) Tetrahydrofuran	7.256	42	102	1.387	ug/l #	31
31) Cyclohexane	7.701	56	964	1.326	ug/l #	56
36) 1,1-Dichloropropene	7.695	75	3472	6.432	ug/l #	44
38) Carbon Tetrachloride	7.701	117	4059	7.126	ug/l #	24
41) Methacrylonitrile	7.244	41	236	1.646	ug/l #	28
49) 1,4-Dioxane	9.213	88	20	7.677	ug/l #	1
58) 2-Chloroethyl Vinyl ether	9.719	63	23	15.762	ug/l #	48
74) N-amyl acetate	12.096	43	487	2.224	ug/l #	68
75) 1,1,2,2-Tetrachloroethane	12.493	83	158	1.005	ug/l #	25
76) 1,2,3-Trichloropropane	12.584	75	1441	10.701	ug/l #	100
77) Bromobenzene	12.578	156	20949	94.745	ug/l #	1
81) trans-1,4-Dichloro-2-b...	12.395	75	9298	174.444	ug/l #	10
84) 1,2,4-Trimethylbenzene	13.035	105	1019	1.292	ug/l	80
89) n-Butylbenzene	13.621	91	890	1.088	ug/l	81
92) 1,2-Dibromo-3-Chloropr...	14.041	75	1051	39.421	ug/l #	2
93) 1,2,4-Trichlorobenzene	14.913	180	380	1.720	ug/l	72
95) Naphthalene	15.139	128	952	2.383	ug/l #	72
96) 1,2,3-Trichlorobenzene	15.328	180	267	1.398	ug/l #	38

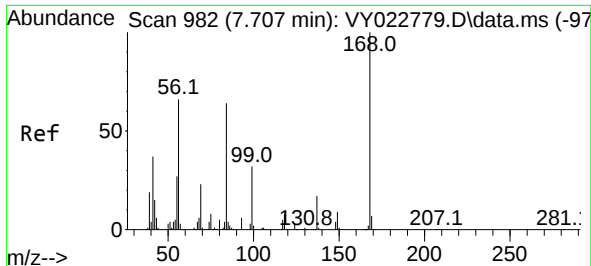
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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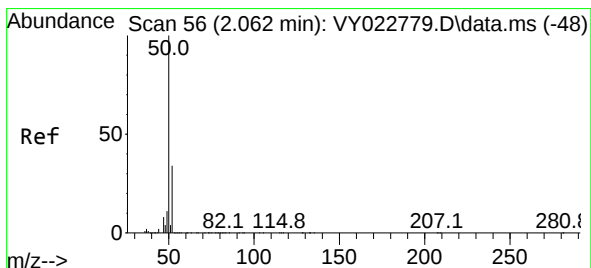
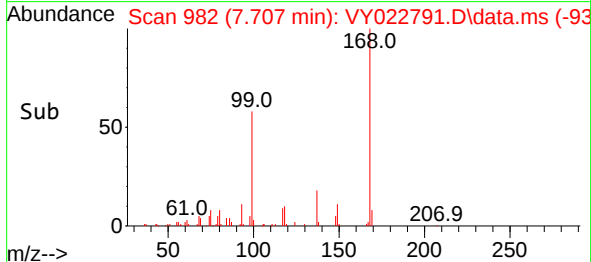
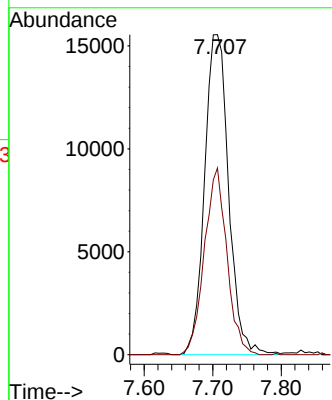
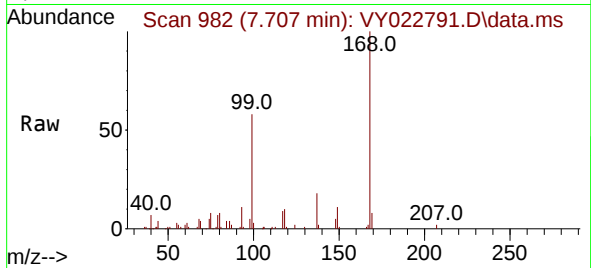




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

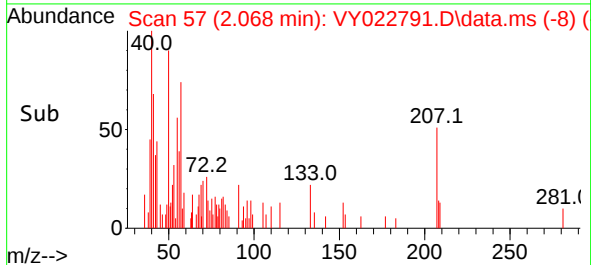
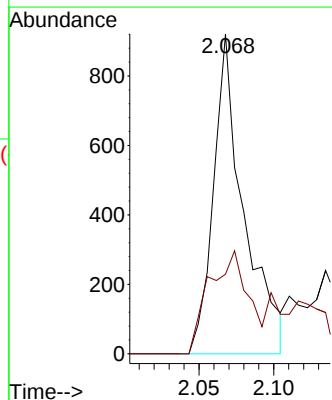
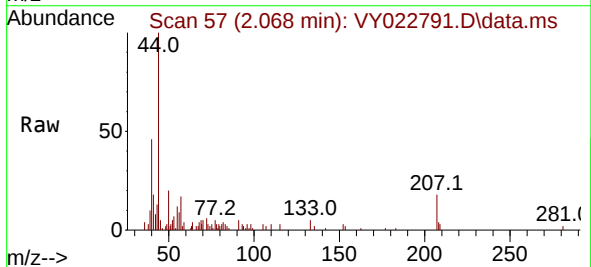
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

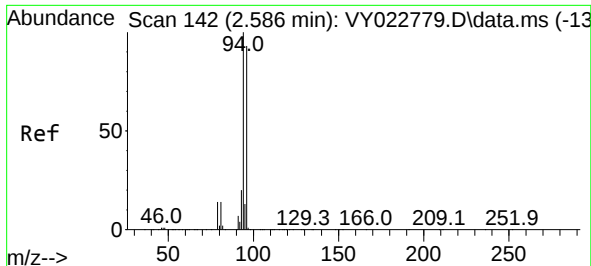
Tgt Ion:168 Resp: 37924
Ion Ratio Lower Upper
168 100
99 58.3 44.3 66.5



#3
Chloromethane
Concen: 2.091 ug/l
RT: 2.068 min Scan# 57
Delta R.T. -0.000 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 50 Resp: 1295
Ion Ratio Lower Upper
50 100
52 24.9 26.0 39.0#

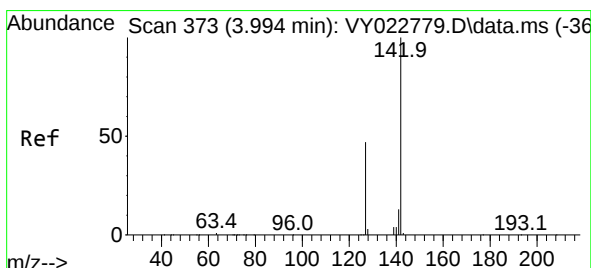
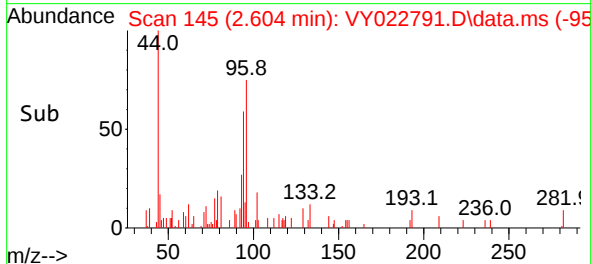
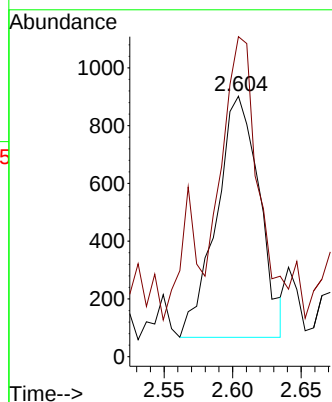
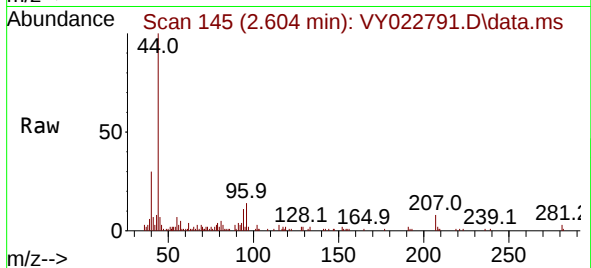




#5
Bromomethane
Concen: 2.994 ug/l
RT: 2.604 min Scan# 142
Delta R.T. 0.006 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

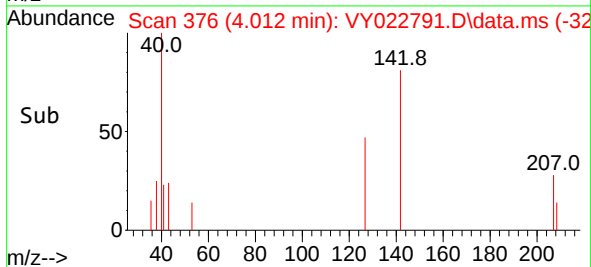
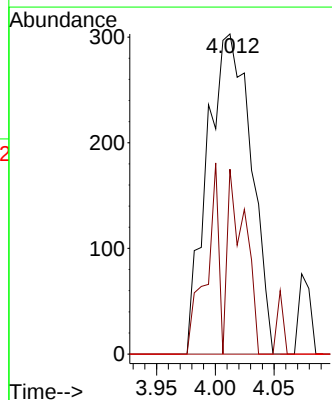
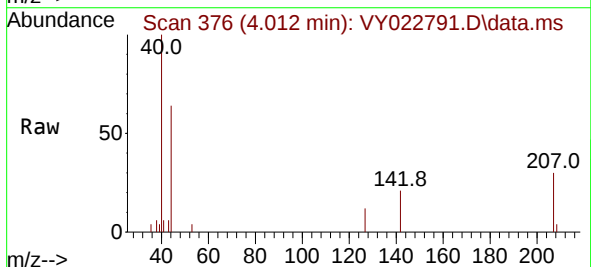
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

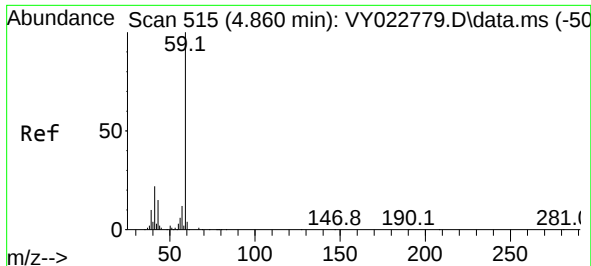
Tgt Ion: 94 Resp: 1821
Ion Ratio Lower Upper
94 100
96 99.3 74.0 111.0



#10
Methyl Iodide
Concen: 1.849 ug/l
RT: 4.012 min Scan# 376
Delta R.T. 0.006 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 142 Resp: 788
Ion Ratio Lower Upper
142 100
127 23.4 37.1 55.7#
141 0.0 11.4 17.2#





#11

Tert butyl alcohol

Concen: 6.182 ug/l

RT: 4.823 min Scan# 509

Delta R.T. -0.061 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

Instrument :

MSVOA_Y

ClientSampleId :

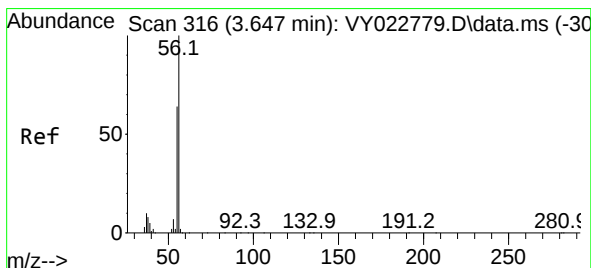
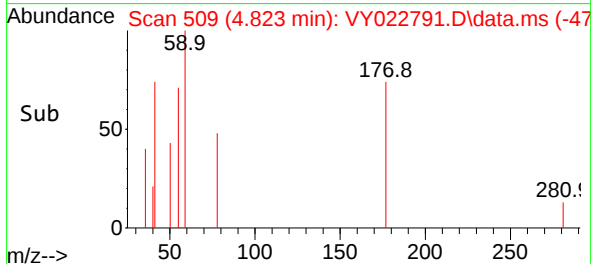
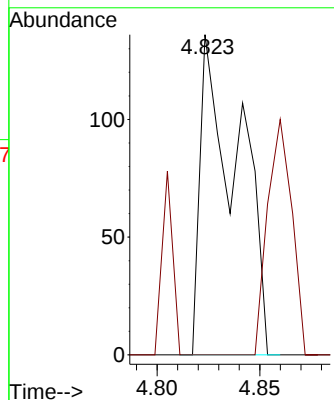
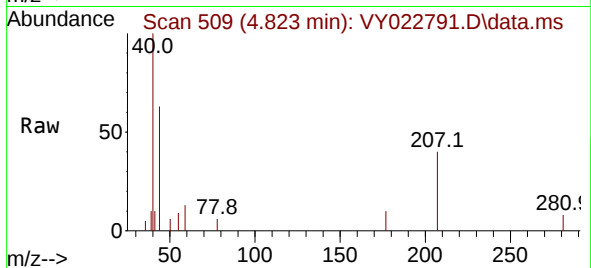
OK-01-6202025RE

Tgt Ion: 59 Resp: 174

Ion Ratio Lower Upper

59 100

57 16.7 8.0 12.0#



#13

Acrolein

Concen: 2.935 ug/l

RT: 3.665 min Scan# 319

Delta R.T. 0.006 min

Lab File: VY022791.D

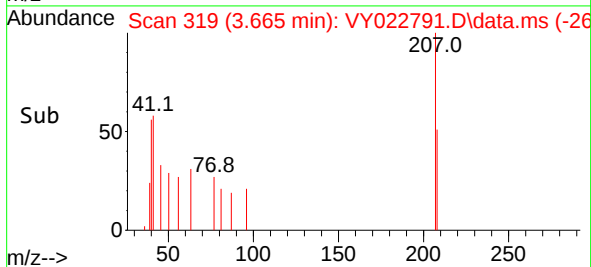
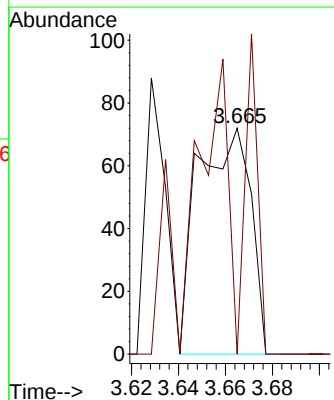
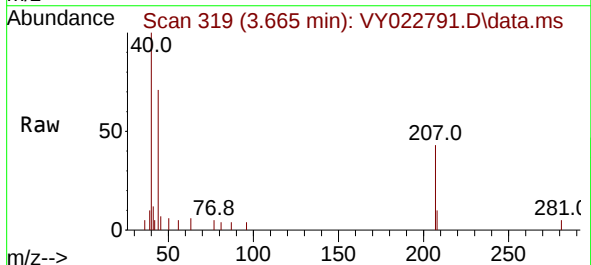
Acq: 24 Jun 2025 12:45

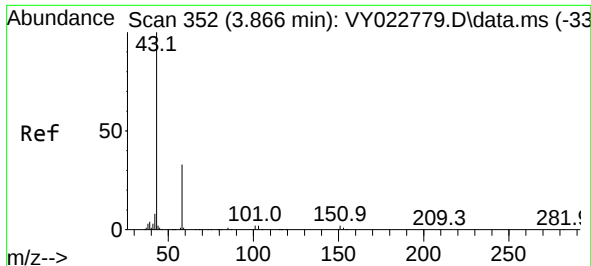
Tgt Ion: 56 Resp: 112

Ion Ratio Lower Upper

56 100

55 125.0 57.0 85.6#

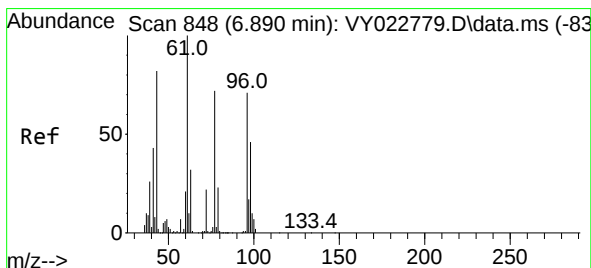
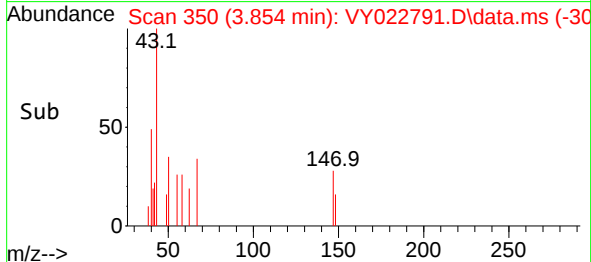
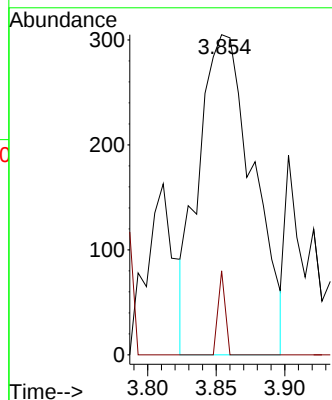
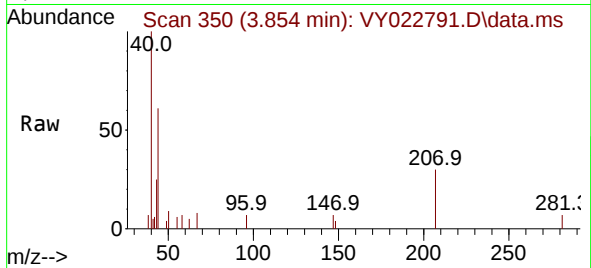




#16
Acetone
Concen: 10.575 ug/l
RT: 3.854 min Scan# 31
Delta R.T. -0.025 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

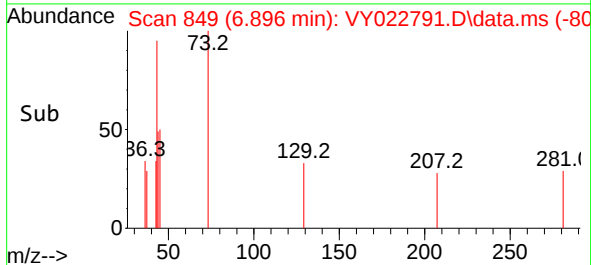
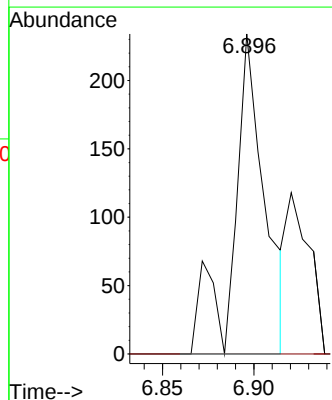
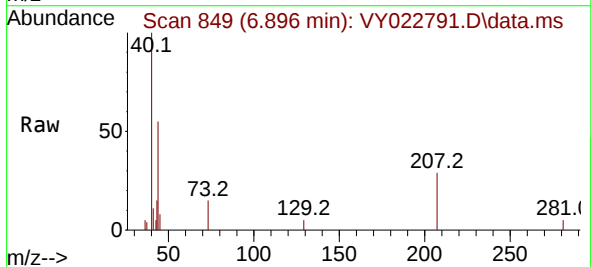
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

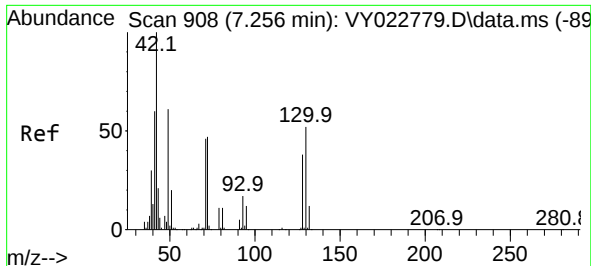
Tgt Ion: 43 Resp: 846
Ion Ratio Lower Upper
43 100
58 32.8 24.0 36.0



#25
2-Butanone
Concen: 2.388 ug/l
RT: 6.896 min Scan# 849
Delta R.T. -0.006 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 43 Resp: 278
Ion Ratio Lower Upper
43 100
72 0.0 22.9 34.3#





#29

Tetrahydrofuran

Concen: 1.387 ug/l

RT: 7.256 min Scan# 908

Delta R.T. -0.013 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

Instrument :

MSVOA_Y

ClientSampleId :

OK-01-6202025RE

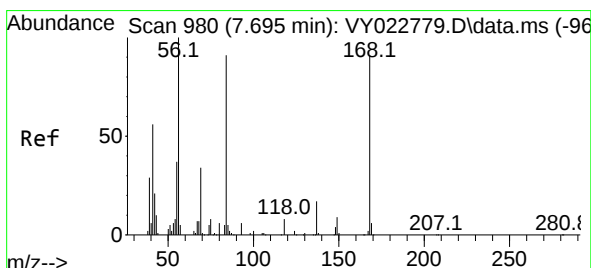
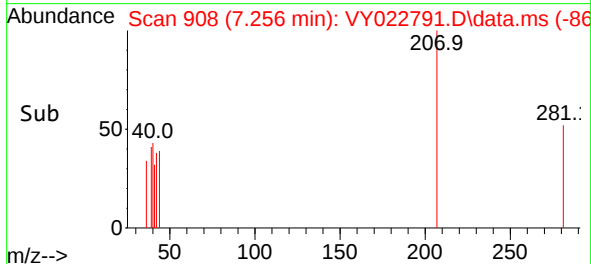
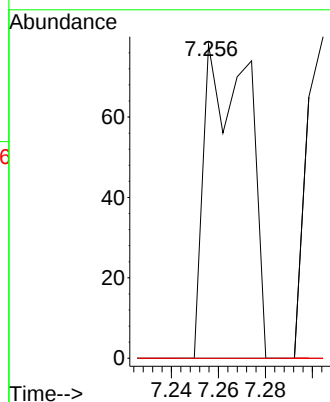
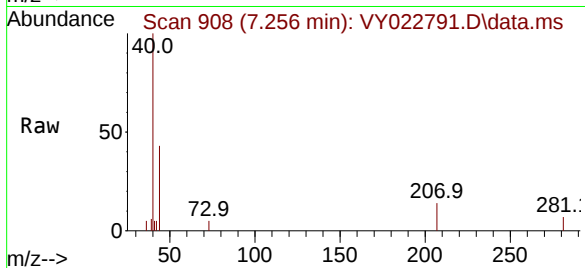
Tgt Ion: 42 Resp: 102

Ion Ratio Lower Upper

42 100

72 0.0 37.4 56.2#

71 0.0 34.2 51.2#



#31

Cyclohexane

Concen: 1.326 ug/l

RT: 7.701 min Scan# 981

Delta R.T. -0.006 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

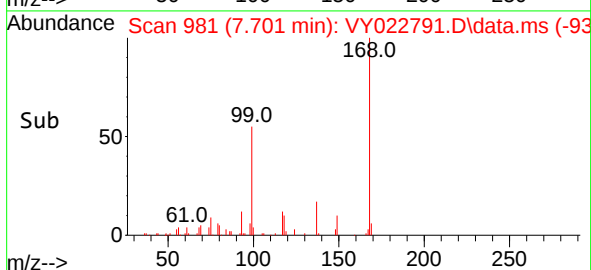
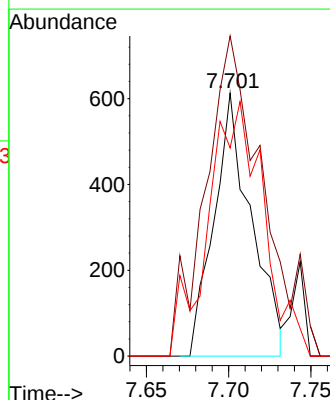
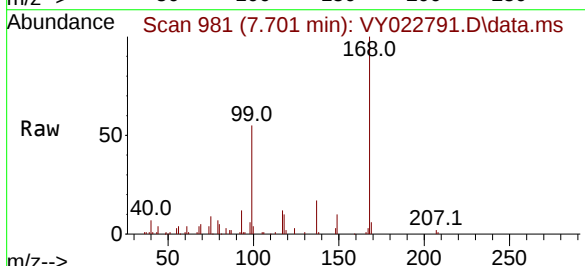
Tgt Ion: 56 Resp: 964

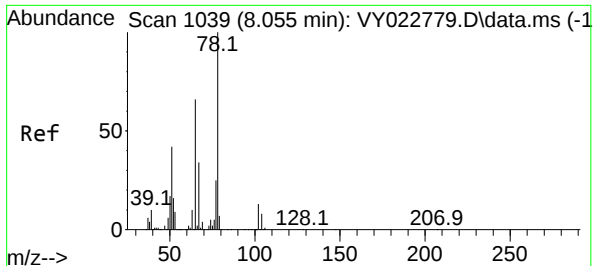
Ion Ratio Lower Upper

56 100

69 85.8 27.0 40.6#

84 65.6 72.6 109.0#





#33

1,2-Dichloroethane-d4

Concen: 37.482 ug/l

RT: 8.061 min Scan# 1

Delta R.T. -0.007 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

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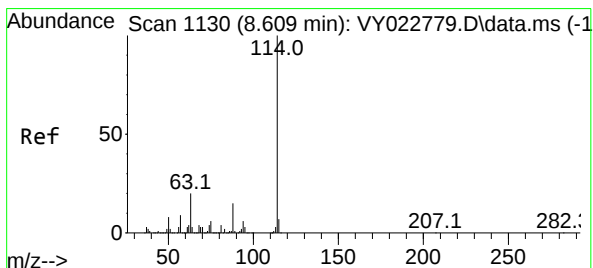
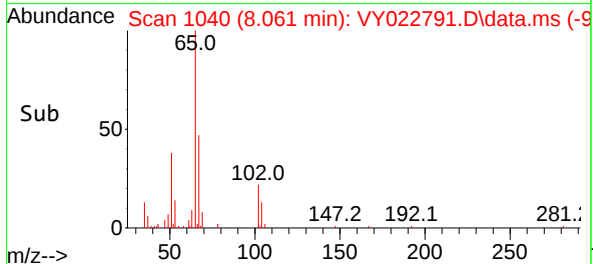
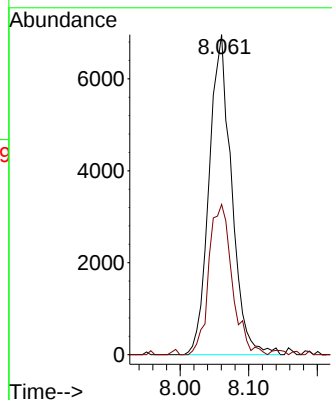
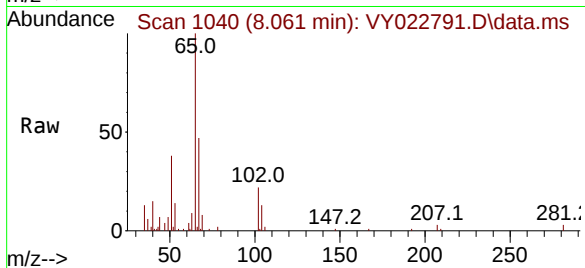
OK-01-6202025RE

Tgt Ion: 65 Resp: 15865

Ion Ratio Lower Upper

65 100

67 48.6 0.0 103.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.615 min Scan# 1131

Delta R.T. -0.000 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

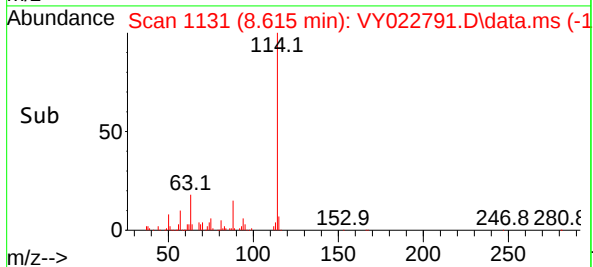
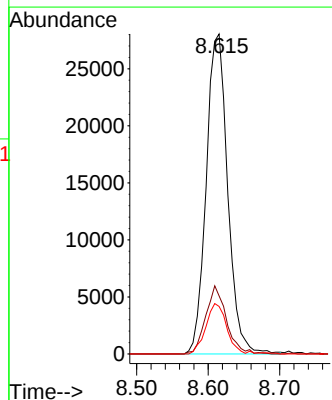
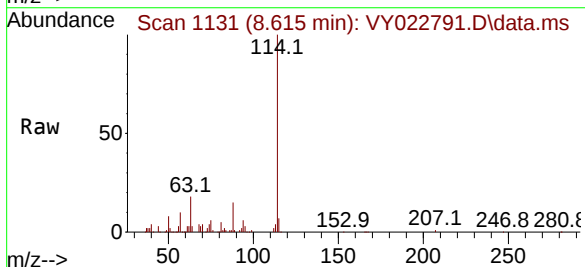
Tgt Ion: 114 Resp: 58561

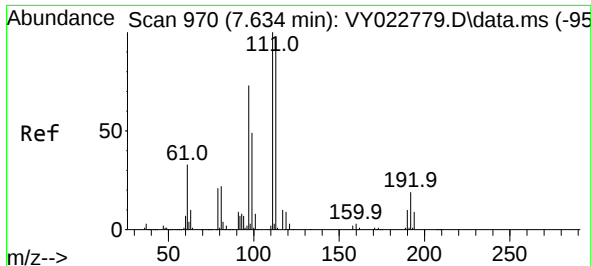
Ion Ratio Lower Upper

114 100

63 18.2 0.0 40.8

88 14.9 0.0 27.8

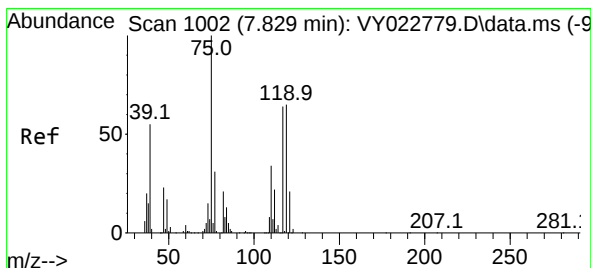
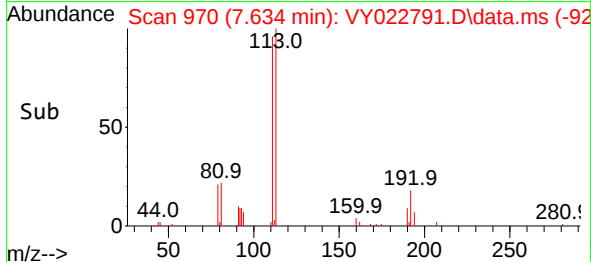
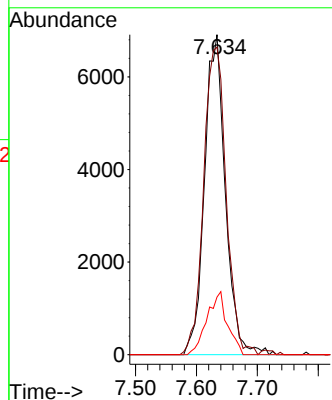
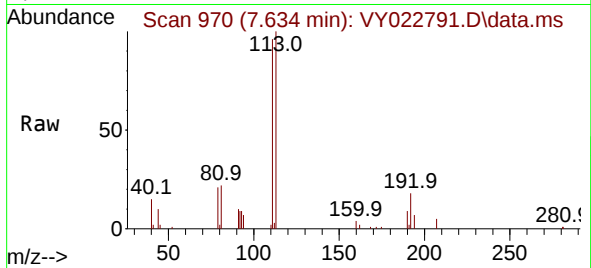




#35
Dibromofluoromethane
Concen: 46.179 ug/l
RT: 7.634 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

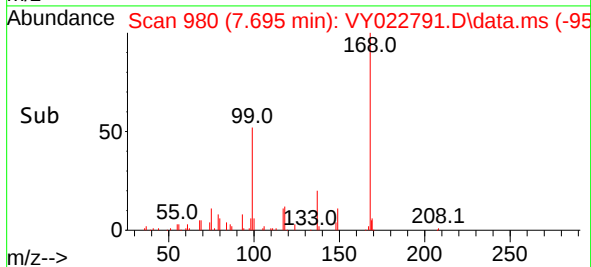
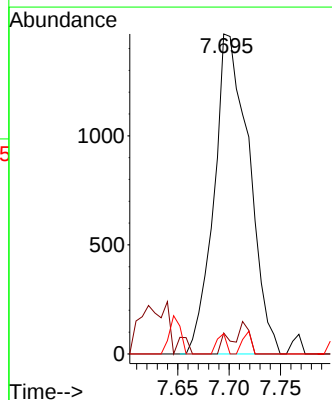
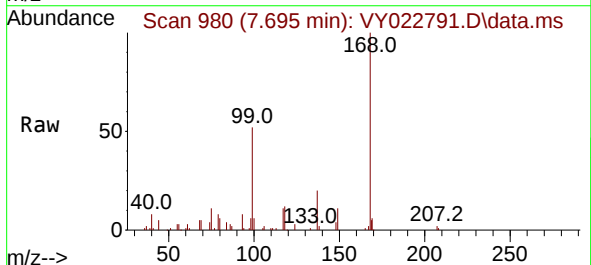
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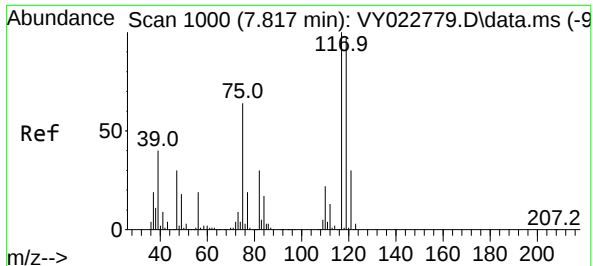
Tgt Ion:113 Resp: 16446
Ion Ratio Lower Upper
113 100
111 103.9 81.1 121.7
192 19.3 14.2 21.2



#36
1,1-Dichloropropene
Concen: 6.432 ug/l
RT: 7.695 min Scan# 980
Delta R.T. -0.147 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 75 Resp: 3472
Ion Ratio Lower Upper
75 100
110 0.0 16.9 50.7#
77 1.7 24.8 37.2#

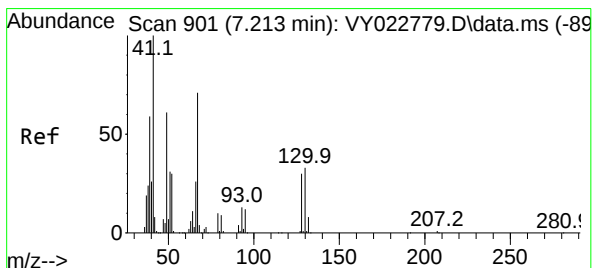
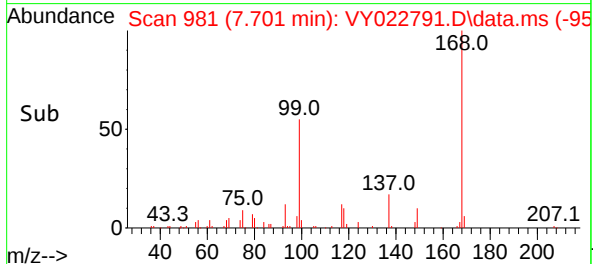
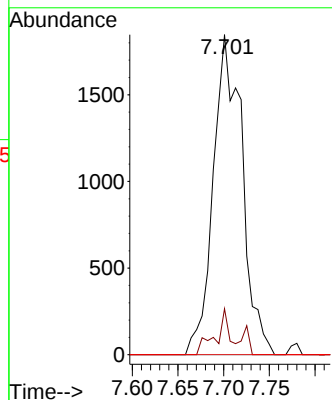
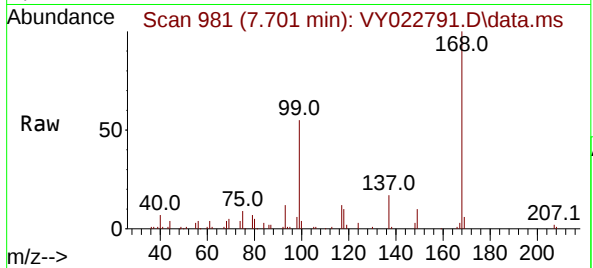




#38
Carbon Tetrachloride
Concen: 7.126 ug/l
RT: 7.701 min Scan# 901
Delta R.T. -0.122 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

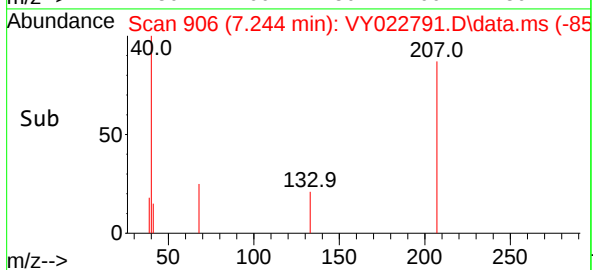
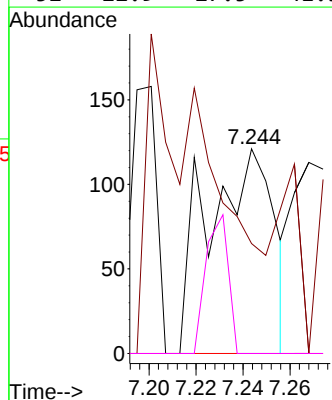
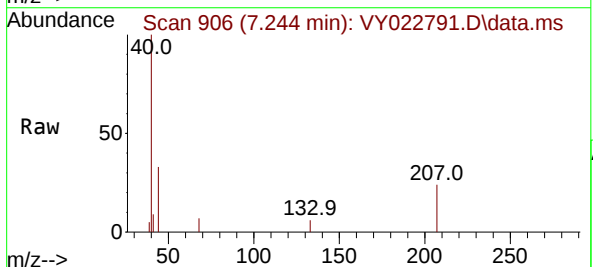
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

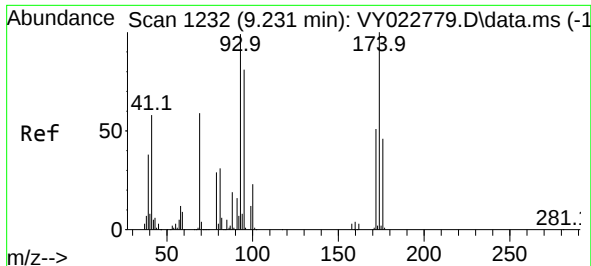
Tgt Ion:117 Resp: 4059
Ion Ratio Lower Upper
117 100
119 14.3 75.0 112.6#
121 0.0 25.0 37.4#



#41
Methacrylonitrile
Concen: 1.646 ug/l
RT: 7.244 min Scan# 906
Delta R.T. 0.012 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 41 Resp: 236
Ion Ratio Lower Upper
41 100
39 0.0 46.6 69.8#
67 0.0 63.3 94.9#
52 22.9 27.5 41.3#





#49

1,4-Dioxane

Concen: 7.677 ug/l

RT: 9.213 min Scan# 11

Delta R.T. -0.031 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

Instrument :

MSVOA_Y

ClientSampleId :

OK-01-6202025RE

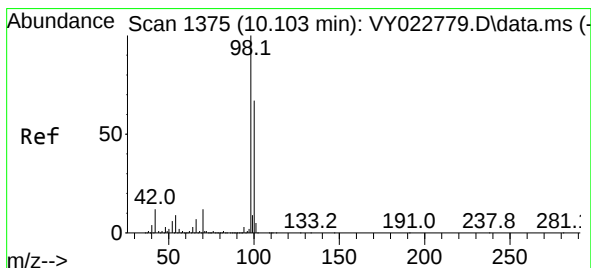
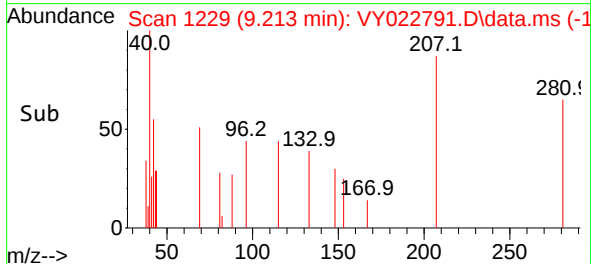
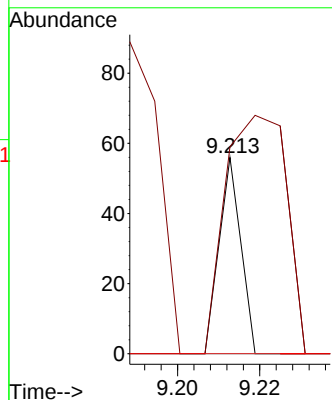
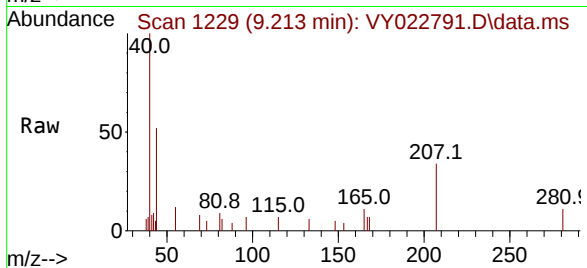
Tgt Ion: 88 Resp: 20

Ion Ratio Lower Upper

88 100

43 350.0 25.4 38.2#

58 0.0 54.9 82.3#



#50

Toluene-d8

Concen: 46.981 ug/l

RT: 10.103 min Scan# 1375

Delta R.T. -0.007 min

Lab File: VY022791.D

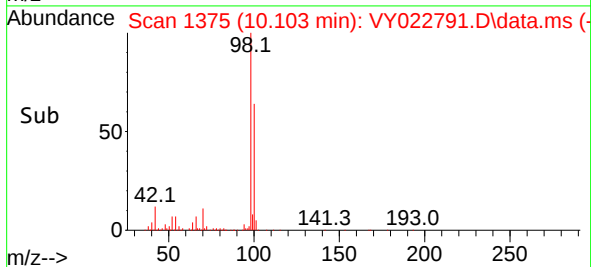
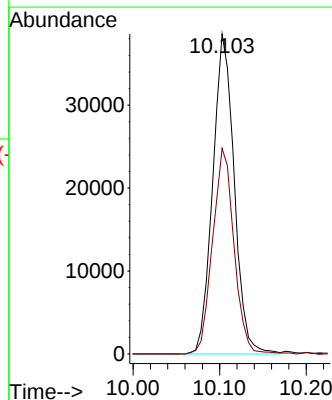
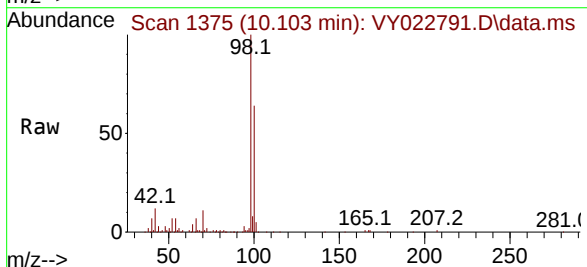
Acq: 24 Jun 2025 12:45

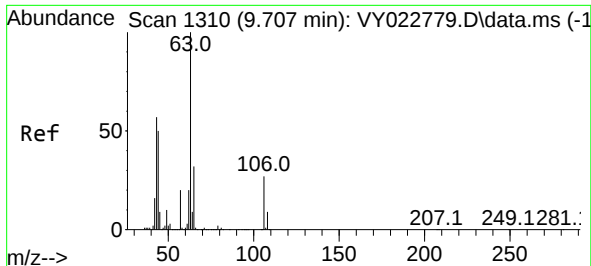
Tgt Ion: 98 Resp: 66394

Ion Ratio Lower Upper

98 100

100 64.1 51.4 77.0

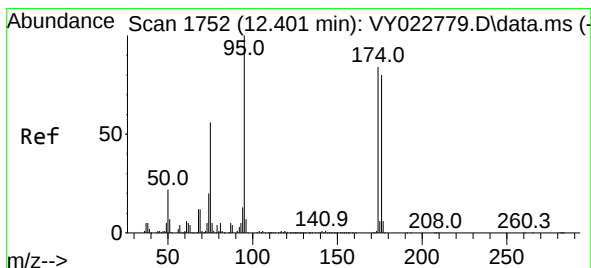
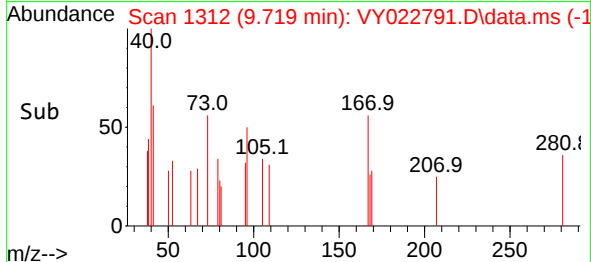
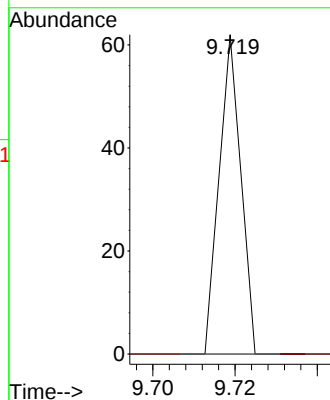
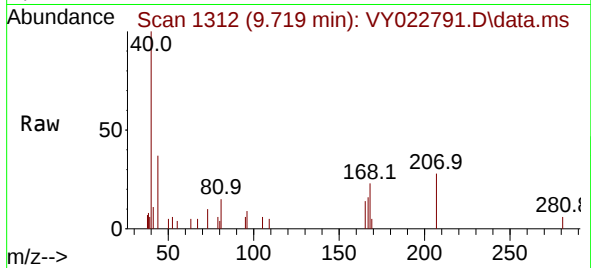




#58
2-Chloroethyl Vinyl ether
Concen: 15.762 ug/l
RT: 9.719 min Scan# 1312
Delta R.T. 0.006 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

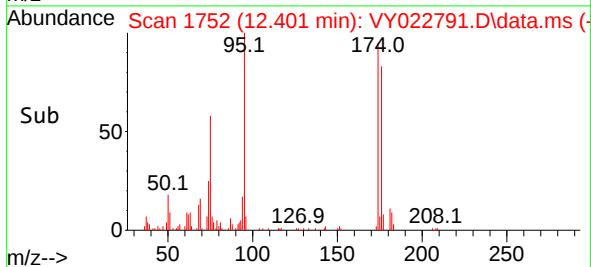
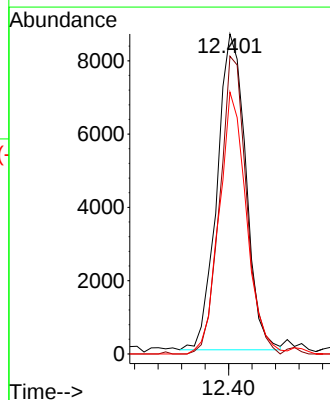
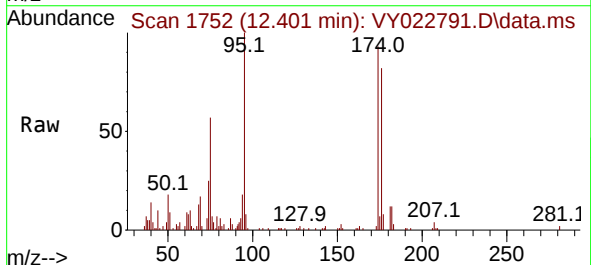
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

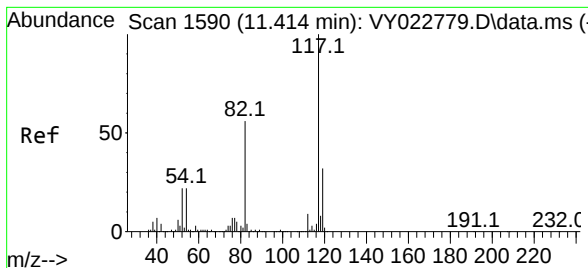
Tgt Ion: 63 Resp: 23
Ion Ratio Lower Upper
63 100
106 0.0 21.6 32.4#



#62
4-Bromofluorobenzene
Concen: 32.258 ug/l
RT: 12.401 min Scan# 1752
Delta R.T. -0.007 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 95 Resp: 14655
Ion Ratio Lower Upper
95 100
174 87.2 0.0 170.0
176 79.0 0.0 166.2





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

Instrument :

MSVOA_Y

ClientSampleId :

OK-01-6202025RE

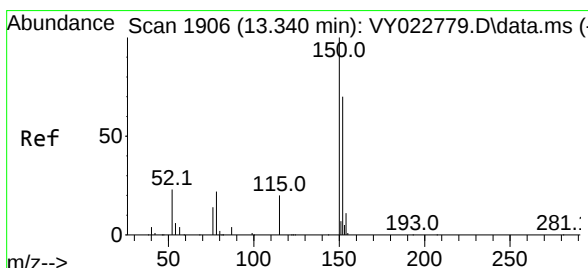
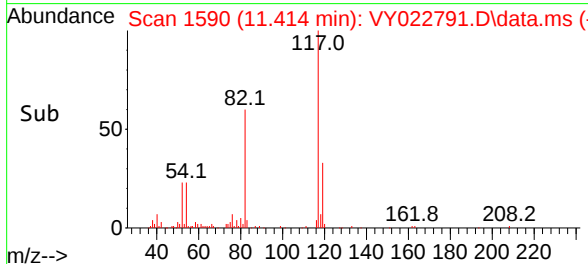
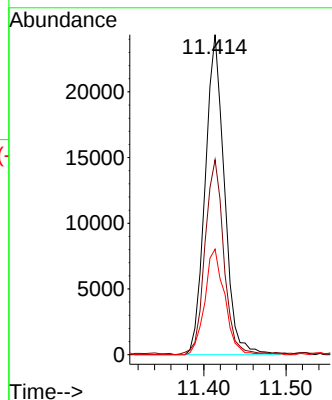
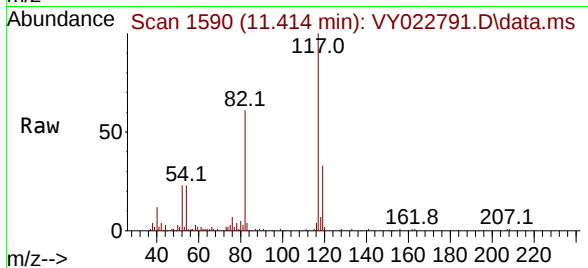
Tgt Ion:117 Resp: 39584

Ion Ratio Lower Upper

117 100

82 60.7 44.6 66.8

119 33.0 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.000 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

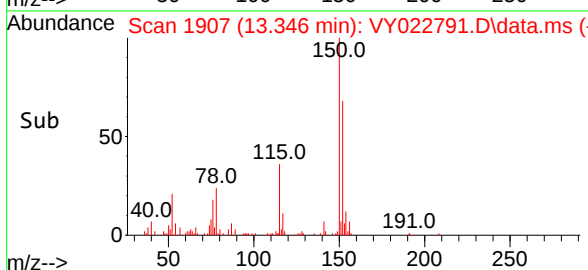
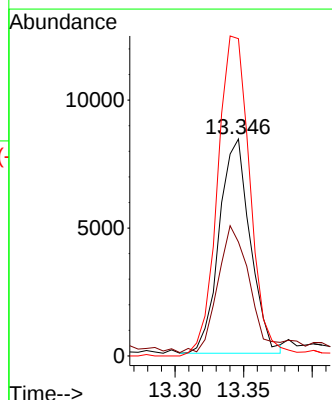
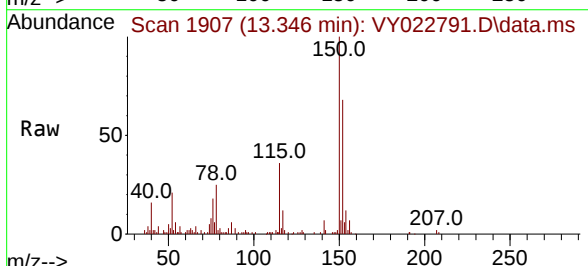
Tgt Ion:152 Resp: 13190

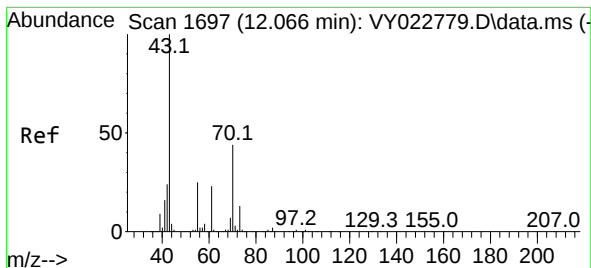
Ion Ratio Lower Upper

152 100

115 60.5 28.9 86.7

150 156.7 0.0 349.6





#74

N-amy1 acetate

Concen: 2.224 ug/l

RT: 12.096 min Scan# 1

Delta R.T. 0.024 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

Instrument :

MSVOA_Y

ClientSampleId :

OK-01-6202025RE

Tgt Ion: 43 Resp: 487

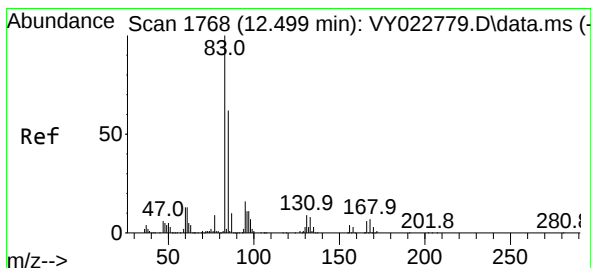
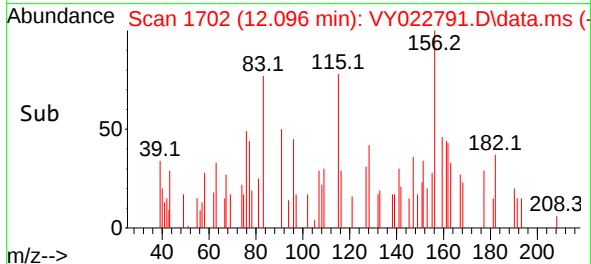
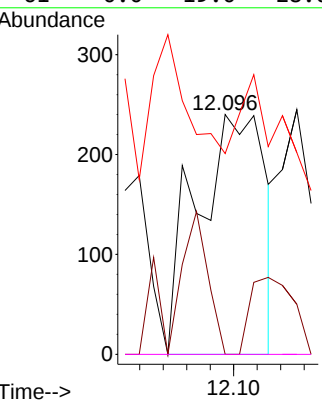
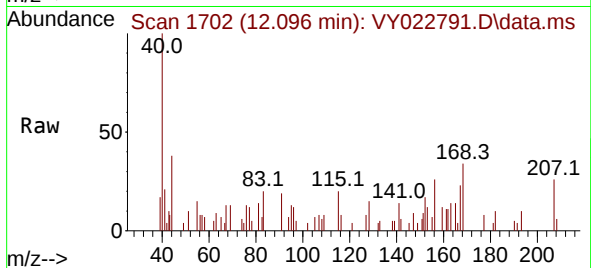
Ion Ratio Lower Upper

43 100

70 20.1 34.2 51.2#

55 26.3 18.2 27.4

61 0.0 19.0 28.6#



#75

1,1,2,2-Tetrachloroethane

Concen: 1.005 ug/l

RT: 12.493 min Scan# 1767

Delta R.T. -0.013 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

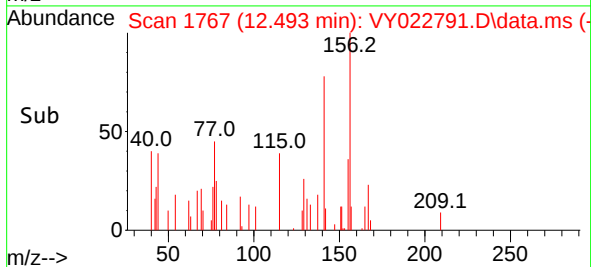
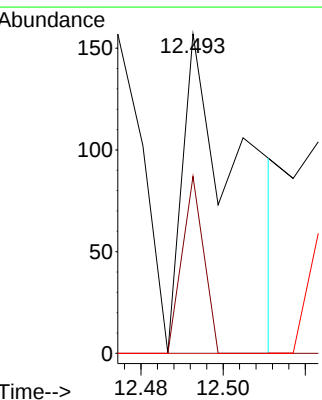
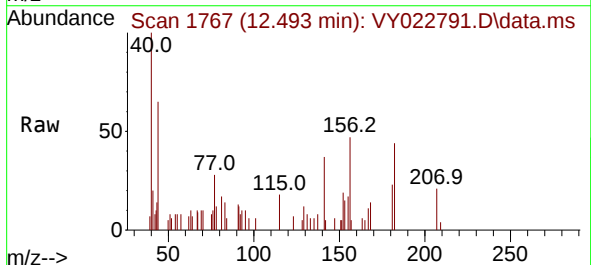
Tgt Ion: 83 Resp: 158

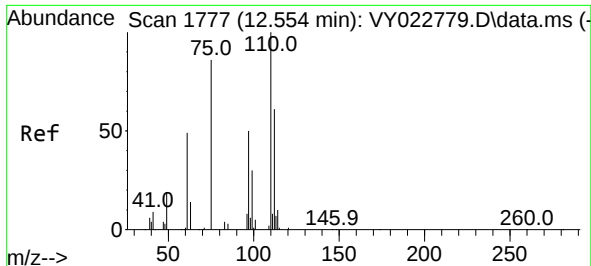
Ion Ratio Lower Upper

83 100

131 20.3 4.9 14.7#

85 0.0 32.6 97.8#

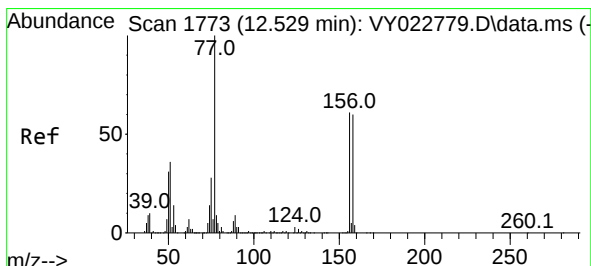
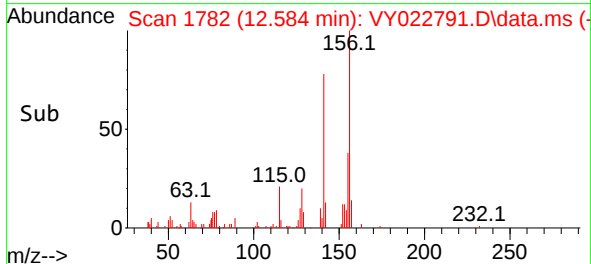
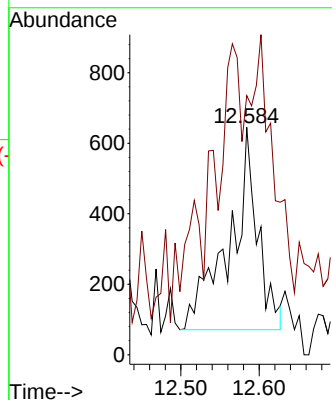
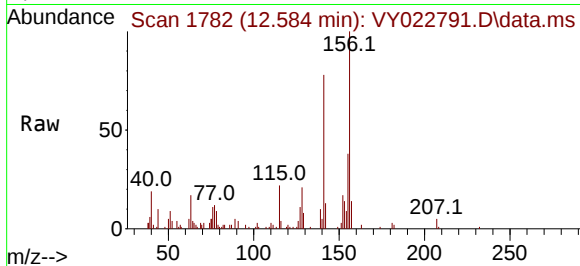




#76
1,2,3-Trichloropropane
Concen: 10.701 ug/l
RT: 12.584 min Scan# 1781
Delta R.T. 0.030 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

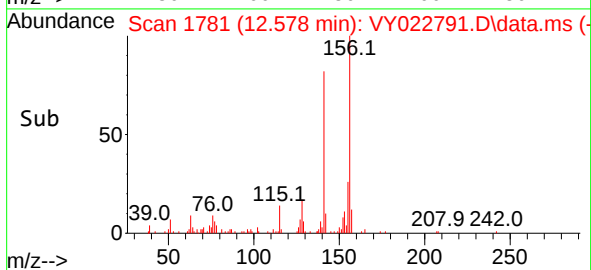
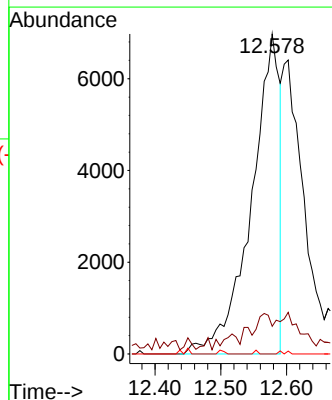
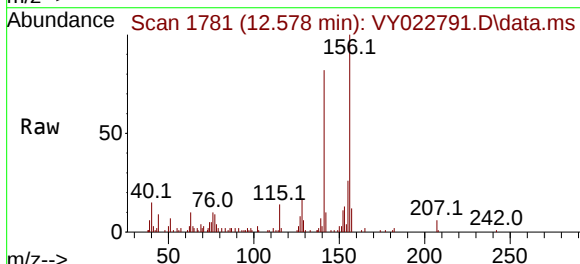
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

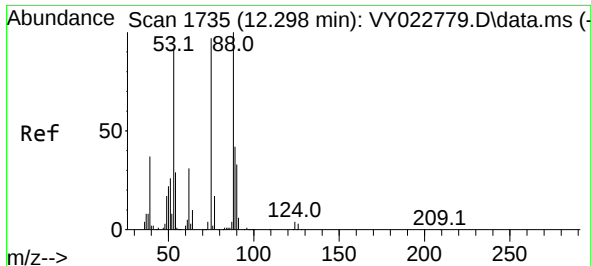
Tgt Ion: 75 Resp: 1441
Ion Ratio Lower Upper
75 100
77 41.5 0.0 0.0#



#77
Bromobenzene
Concen: 94.745 ug/l
RT: 12.578 min Scan# 1781
Delta R.T. 0.042 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 156 Resp: 20949
Ion Ratio Lower Upper
156 100
77 2.9 94.0 282.1#
158 0.0 48.2 144.6#

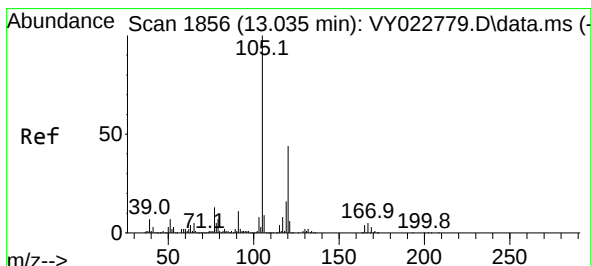
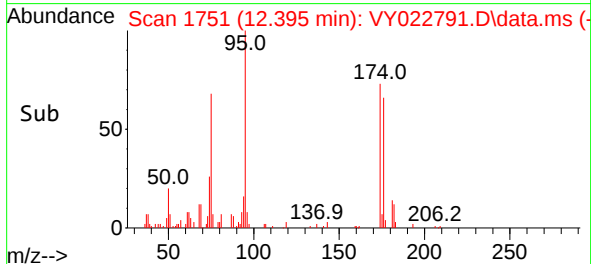
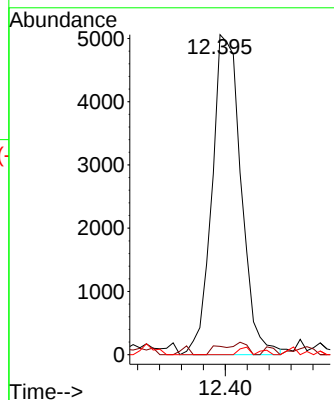
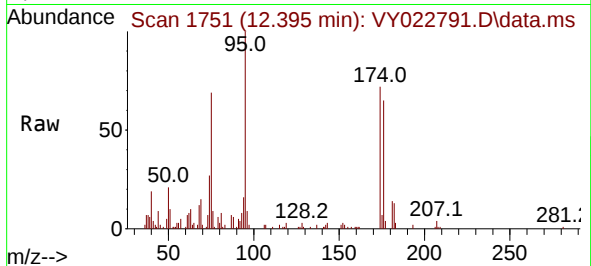




#81
 trans-1,4-Dichloro-2-butene
 Concen: 174.444 ug/l
 RT: 12.395 min Scan# 1751
 Delta R.T. 0.091 min
 Lab File: VY022791.D
 Acq: 24 Jun 2025 12:45

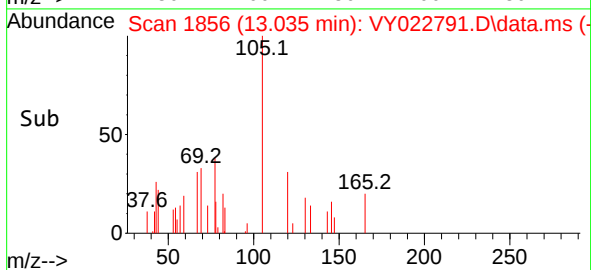
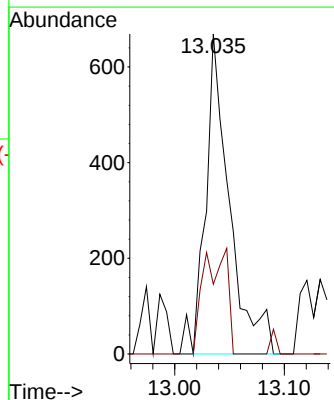
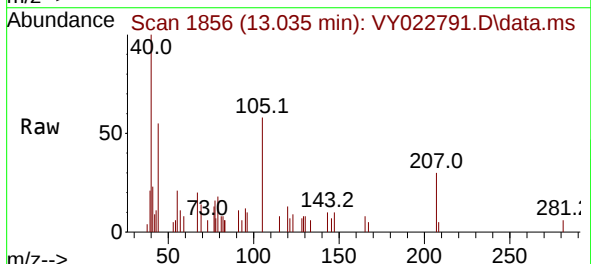
Instrument :
 MSVOA_Y
 ClientSampleId :
 OK-01-6202025RE

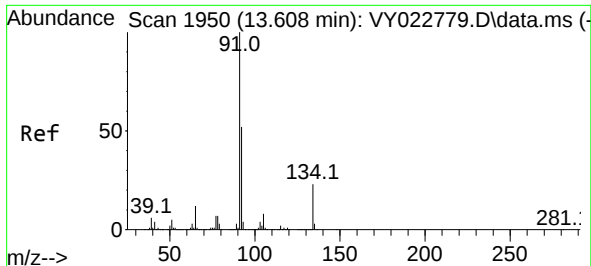
Tgt Ion: 75 Resp: 9298
 Ion Ratio Lower Upper
 75 100
 53 0.0 78.5 117.7#
 89 0.0 35.7 53.5#



#84
 1,2,4-Trimethylbenzene
 Concen: 1.292 ug/l
 RT: 13.035 min Scan# 1856
 Delta R.T. -0.006 min
 Lab File: VY022791.D
 Acq: 24 Jun 2025 12:45

Tgt Ion: 105 Resp: 1019
 Ion Ratio Lower Upper
 105 100
 120 32.3 22.7 68.1

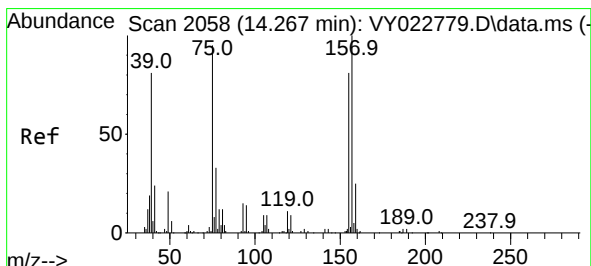
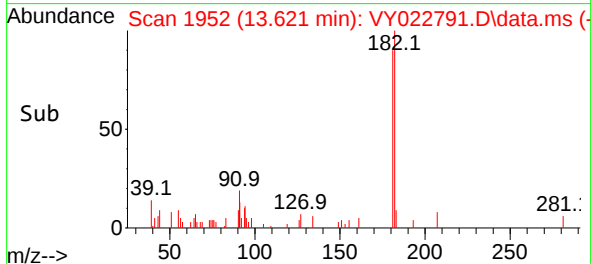
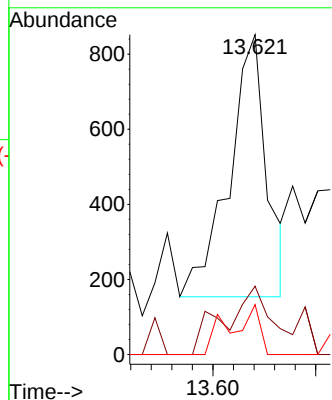
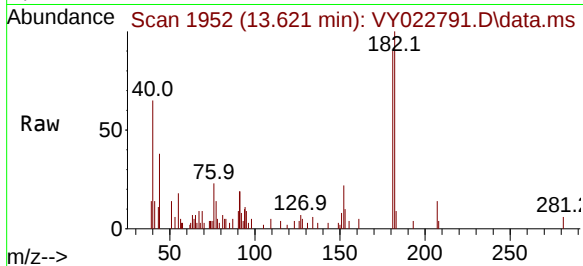




#89
n-Butylbenzene
Concen: 1.088 ug/l
RT: 13.621 min Scan# 1952
Delta R.T. -0.000 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

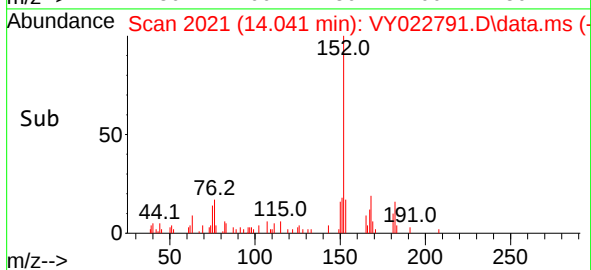
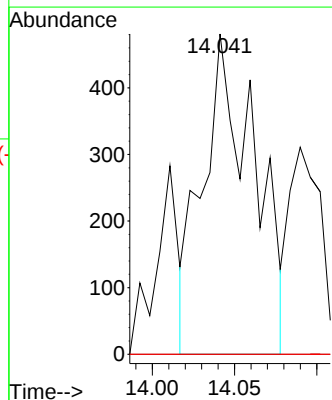
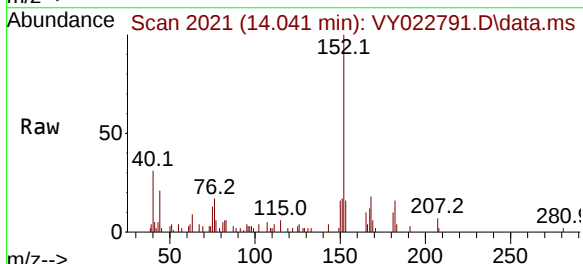
Instrument :
MSVOA_Y
ClientSampleId :
OK-01-6202025RE

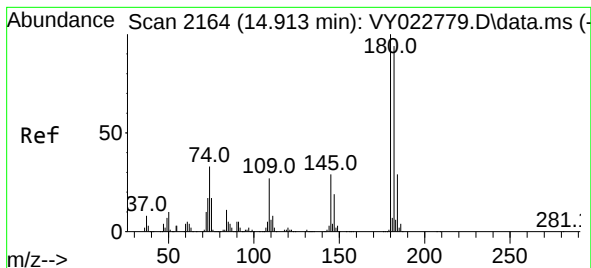
Tgt Ion: 91	Resp:	890
Ion	Ratio	Lower Upper
91	100	
92	38.8	25.9 77.8
134	14.8	12.0 36.1



#92
1,2-Dibromo-3-Chloropropane
Concen: 39.421 ug/l
RT: 14.041 min Scan# 2021
Delta R.T. -0.232 min
Lab File: VY022791.D
Acq: 24 Jun 2025 12:45

Tgt Ion: 75	Resp:	1051
Ion	Ratio	Lower Upper
75	100	
155	0.0	39.9 119.6#
157	0.0	54.0 162.0#





#93

1,2,4-Trichlorobenzene

Concen: 1.720 ug/l

RT: 14.913 min Scan# 2164

Delta R.T. -0.006 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

Instrument :

MSVOA_Y

ClientSampleId :

OK-01-6202025RE

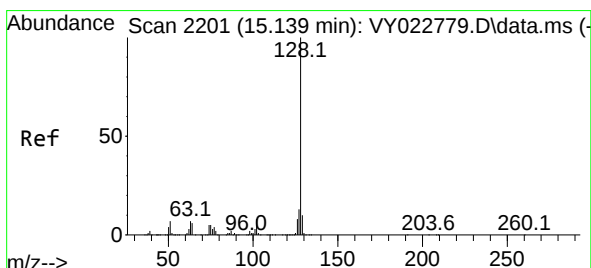
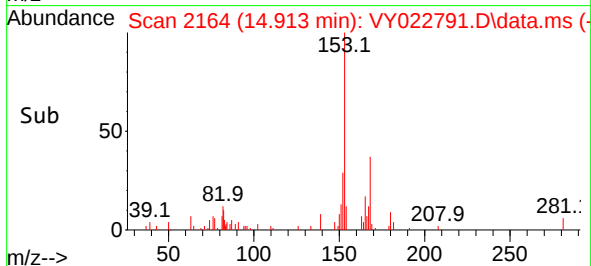
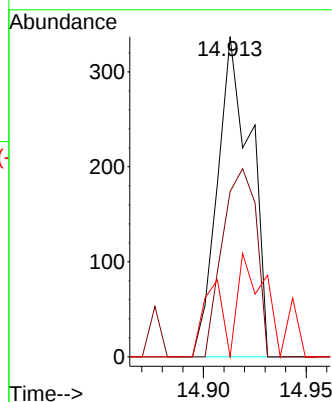
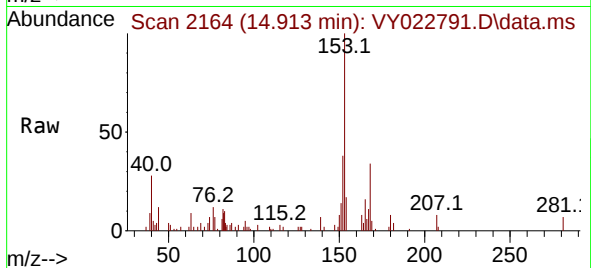
Tgt Ion:180 Resp: 380

Ion Ratio Lower Upper

180 100

182 60.0 48.4 145.3

145 31.1 15.5 46.5



#95

Naphthalene

Concen: 2.383 ug/l

RT: 15.139 min Scan# 2201

Delta R.T. -0.007 min

Lab File: VY022791.D

Acq: 24 Jun 2025 12:45

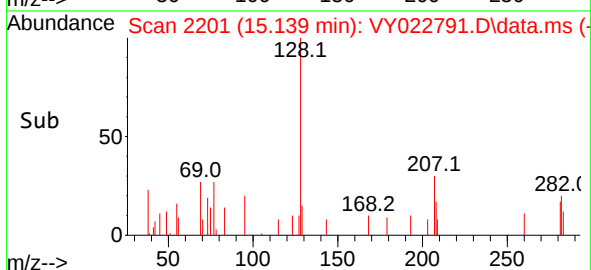
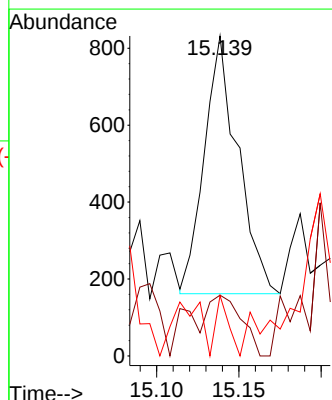
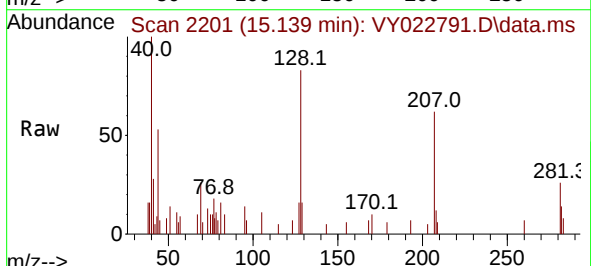
Tgt Ion:128 Resp: 952

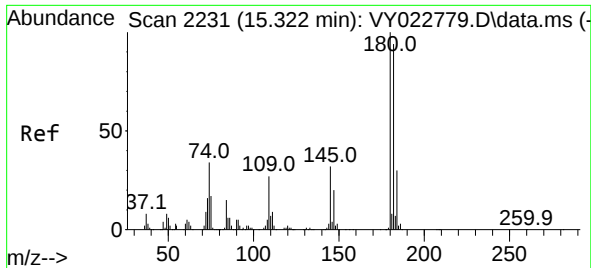
Ion Ratio Lower Upper

128 100

127 23.4 10.4 15.6#

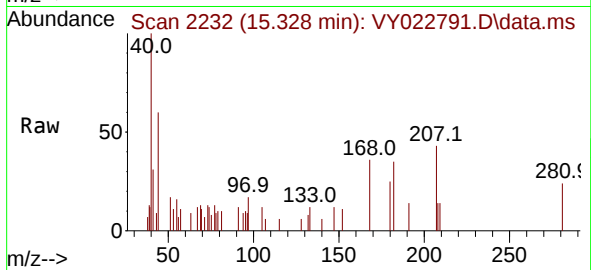
129 0.0 8.9 13.3#





#96
 1,2,3-Trichlorobenzene
 Concen: 1.398 ug/l
 RT: 15.328 min Scan# 21
 Delta R.T. -0.000 min
 Lab File: VY022791.D
 Acq: 24 Jun 2025 12:45

Instrument :
 MSVOA_Y
 ClientSampleId :
 OK-01-6202025RE



Tgt Ion:180 Resp: 267
 Ion Ratio Lower Upper
 180 100
 182 156.6 47.1 141.3#
 145 0.0 15.2 45.6#

