

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY060525\
 Data File : VY022570.D
 Acq On : 05 Jun 2025 13:33
 Operator : SY/MD
 Sample : Q2214-01
 Misc : 5.06g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 RBR251425

Quant Time: Jun 06 01:24:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y060225S.M
 Quant Title : SW846 8260
 QLast Update : Tue Jun 03 03:22:04 2025
 Response via : Initial Calibration

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

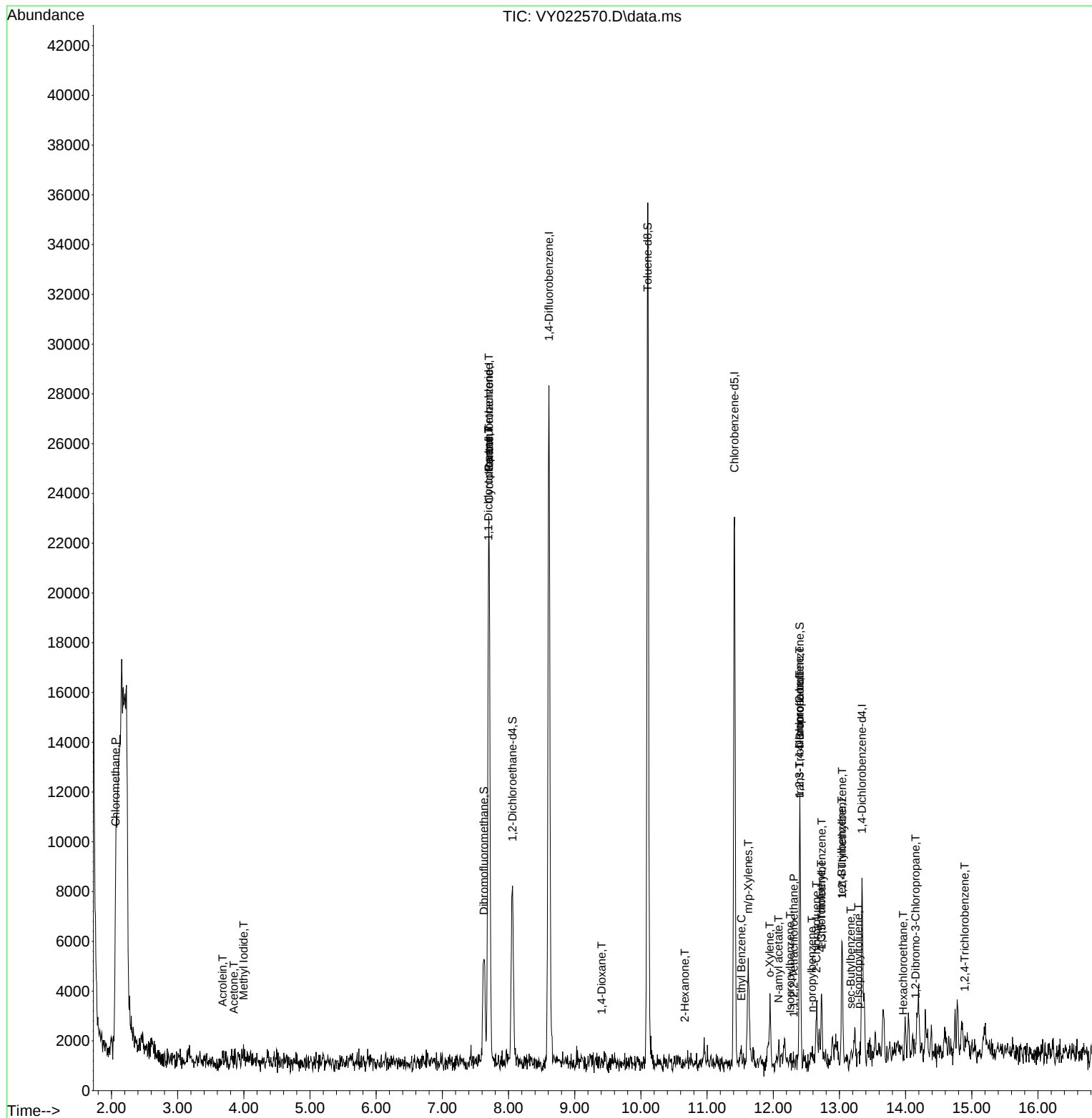
Internal Standards						
1) Pentafluorobenzene	7.701	168	15907	50.000	ug/l	-0.01
34) 1,4-Difluorobenzene	8.610	114	21867	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	11169	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.340	152	1731	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	5351	30.077	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	60.160%
35) Dibromofluoromethane	7.628	113	3698	28.333	ug/l	-0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	56.660%
50) Toluene-d8	10.103	98	22051	41.812	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	83.620%
62) 4-Bromofluorobenzene	12.402	95	2932	18.659	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	37.320%
Target Compounds						Qvalue
3) Chloromethane	2.062	50	609	1.447	ug/l #	64
10) Methyl Iodide	3.995	142	214	1.133	ug/l #	58
13) Acrolein	3.678	56	60	3.789	ug/l #	14
16) Acetone	3.848	43	497	13.755	ug/l #	45
31) Cyclohexane	7.707	56	705	2.062	ug/l #	50
36) 1,1-Dichloropropene	7.695	75	1551	7.322	ug/l #	47
38) Carbon Tetrachloride	7.701	117	1722	7.924	ug/l #	13
49) 1,4-Dioxane	9.408	88	26	26.382	ug/l #	24
59) 2-Hexanone	10.664	43	70	1.029	ug/l #	24
67) Ethyl Benzene	11.518	91	531	1.158	ug/l #	83
68) m/p-Xylenes	11.621	106	1196	6.882	ug/l	100
69) o-Xylene	11.944	106	729	4.474	ug/l	81
73) Isopropylbenzene	12.255	105	295	2.076	ug/l #	49
74) N-amyl acetate	12.079	43	78	2.175	ug/l #	1
75) 1,1,2,2-Tetrachloroethane	12.310	83	25	1.072	ug/l #	25
76) 1,2,3-Trichloropropane	12.396	75	1980	99.983	ug/l #	100
78) n-propylbenzene	12.585	91	476	2.742	ug/l #	54
79) 2-Chlorotoluene	12.652	91	229	2.489	ug/l #	41
80) 1,3,5-Trimethylbenzene	12.731	105	964	8.640	ug/l	91
81) trans-1,4-Dichloro-2-b...	12.396	75	1980	241.454	ug/l #	11
82) 4-Chlorotoluene	12.725	91	122	1.286	ug/l #	41
83) tert-Butylbenzene	13.036	119	241	2.407	ug/l #	6
84) 1,2,4-Trimethylbenzene	13.042	105	2818	25.253	ug/l	88
85) sec-Butylbenzene	13.170	105	271	1.767	ug/l #	57
86) p-Isopropyltoluene	13.286	119	196	1.550	ug/l #	60
90) Hexachloroethane	13.962	117	119	4.835	ug/l #	16
92) 1,2-Dibromo-3-Chloropr...	14.151	75	22	6.478	ug/l #	2
93) 1,2,4-Trichlorobenzene	14.895	180	49	1.742	ug/l #	12

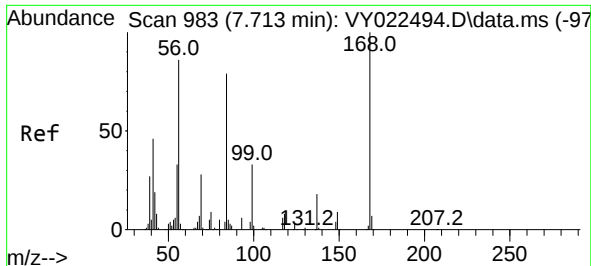
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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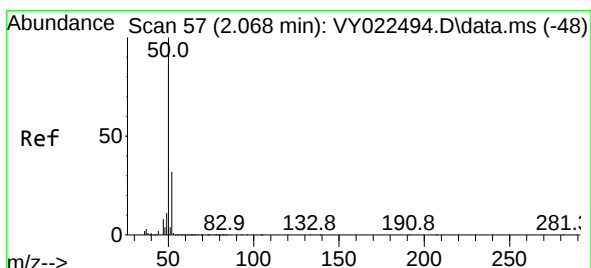
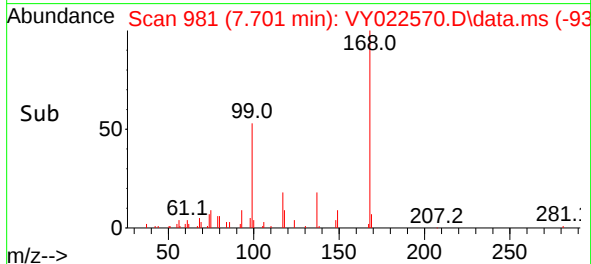
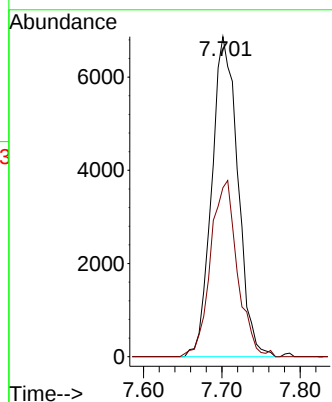
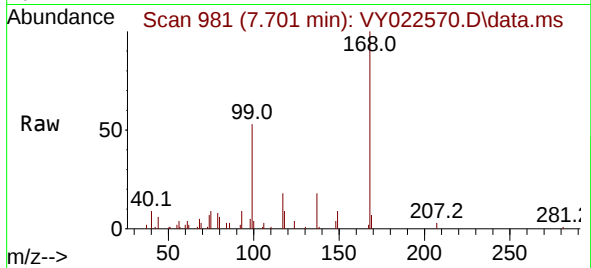




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.701 min Scan# 91
Delta R.T. -0.012 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

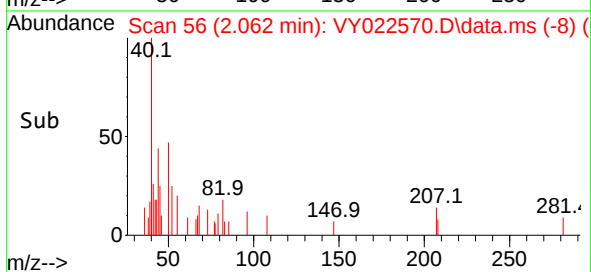
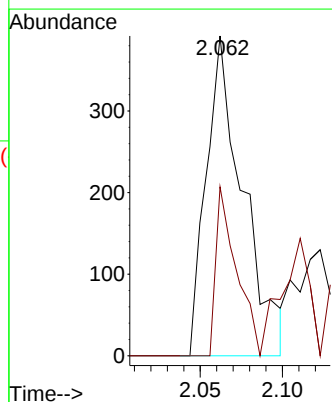
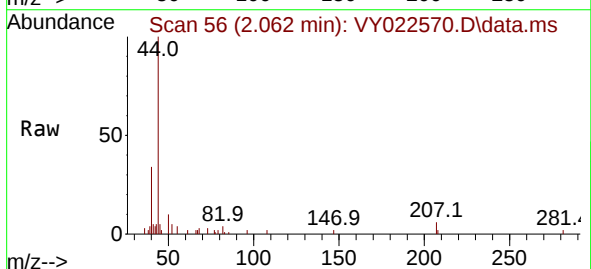
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

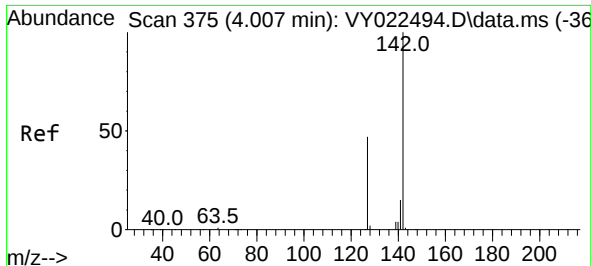
Tgt Ion:168 Resp: 15907
Ion Ratio Lower Upper
168 100
99 52.8 44.3 66.5



#3
Chloromethane
Concen: 1.447 ug/l
RT: 2.062 min Scan# 56
Delta R.T. -0.006 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 50 Resp: 609
Ion Ratio Lower Upper
50 100
52 52.8 26.0 39.0#

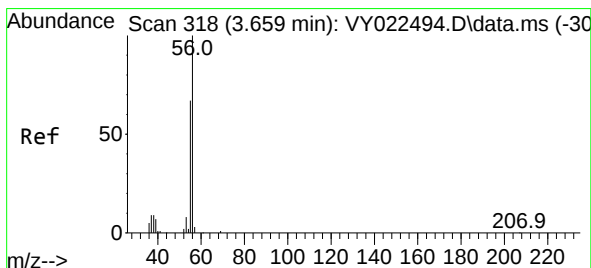
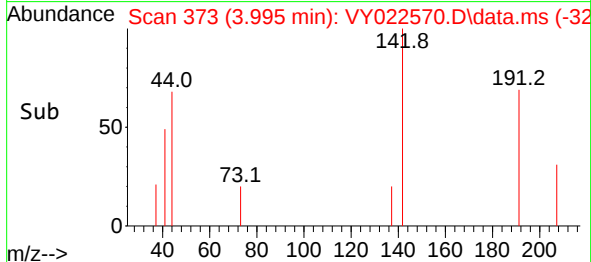
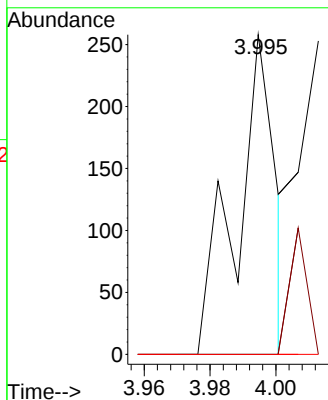
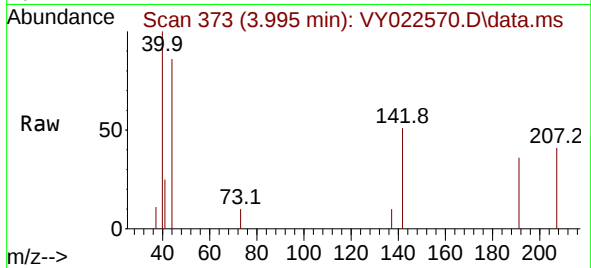




#10
Methyl Iodide
Concen: 1.133 ug/l
RT: 3.995 min Scan# 31
Delta R.T. -0.012 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

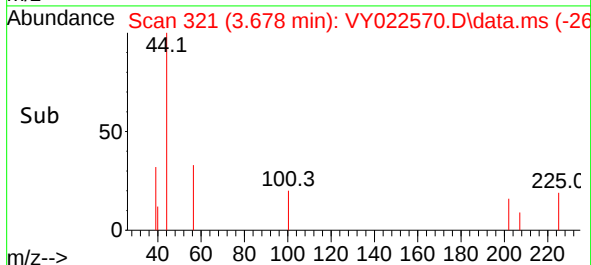
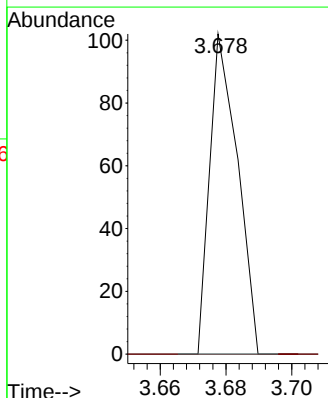
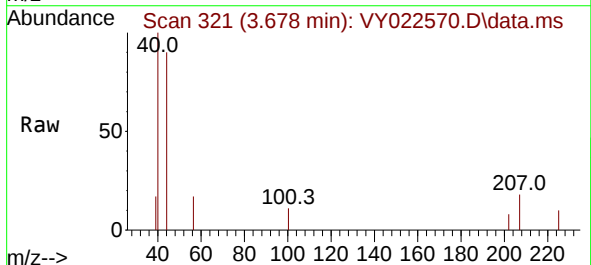
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

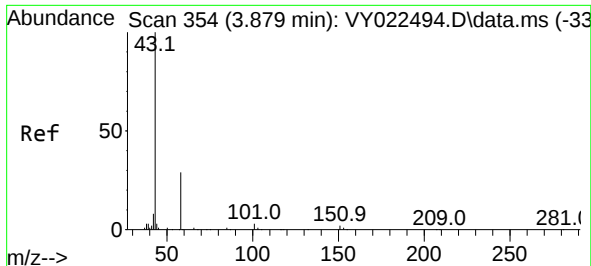
Tgt Ion:142 Resp: 214
Ion Ratio Lower Upper
142 100
127 17.3 37.1 55.7#
141 0.0 11.4 17.2#



#13
Acrolein
Concen: 3.789 ug/l
RT: 3.678 min Scan# 321
Delta R.T. 0.018 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 56 Resp: 60
Ion Ratio Lower Upper
56 100
55 0.0 57.0 85.6#

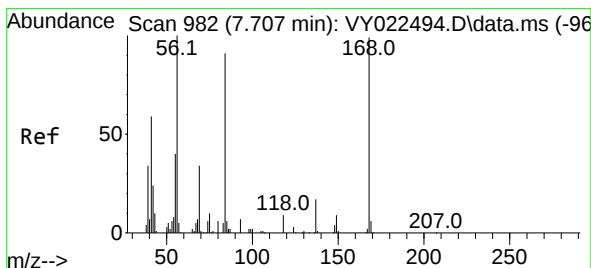
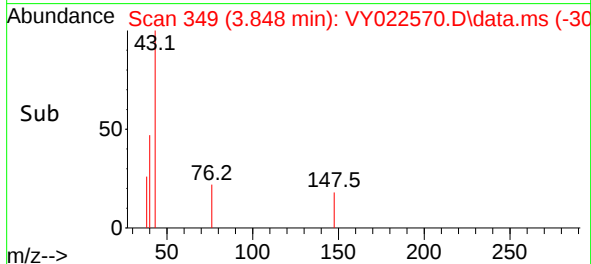
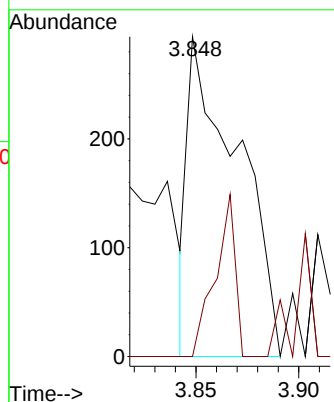
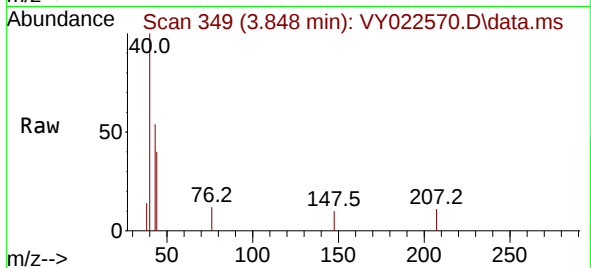




#16
Acetone
Concen: 13.755 ug/l
RT: 3.848 min Scan# 349
Delta R.T. -0.030 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

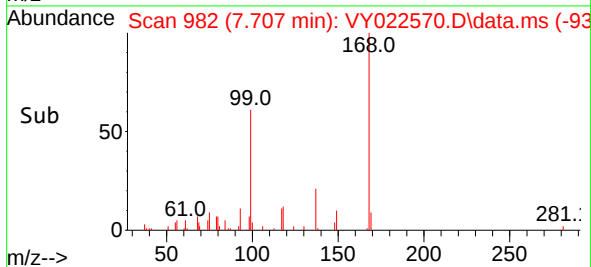
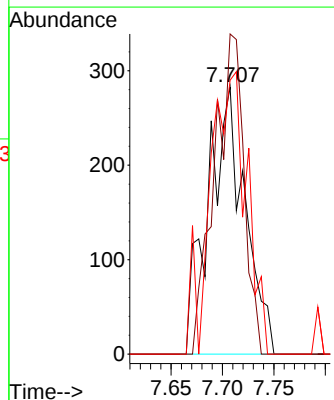
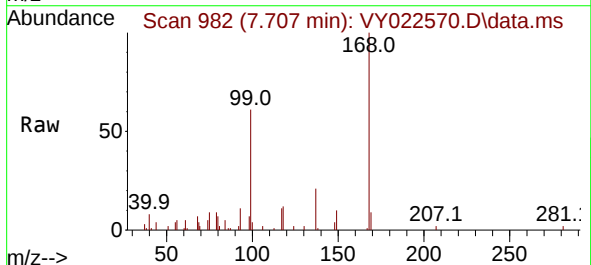
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

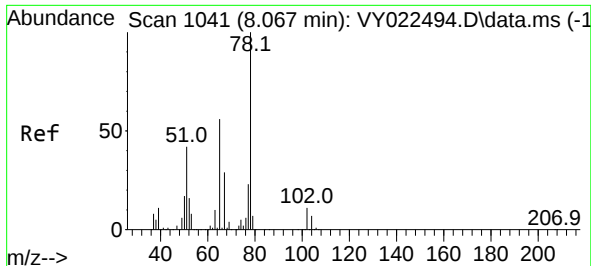
Tgt Ion: 43 Resp: 497
Ion Ratio Lower Upper
43 100
58 0.0 24.0 36.0#



#31
Cyclohexane
Concen: 2.062 ug/l
RT: 7.707 min Scan# 982
Delta R.T. 0.000 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 56 Resp: 705
Ion Ratio Lower Upper
56 100
69 119.8 27.0 40.6#
84 102.5 72.6 109.0





#33

1,2-Dichloroethane-d4

Concen: 30.077 ug/l

RT: 8.061 min Scan# 110

Delta R.T. -0.006 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Instrument :

MSVOA_Y

ClientSampleId :

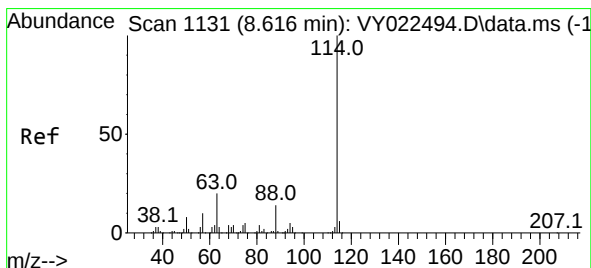
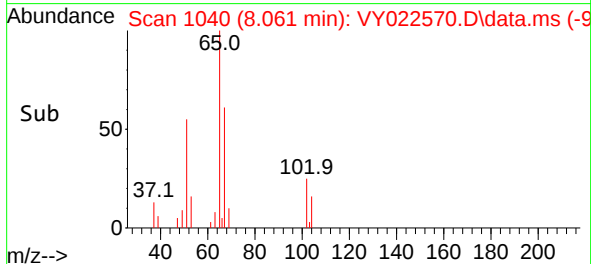
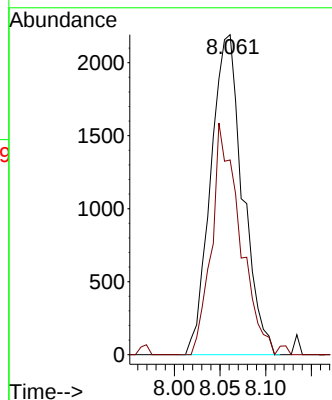
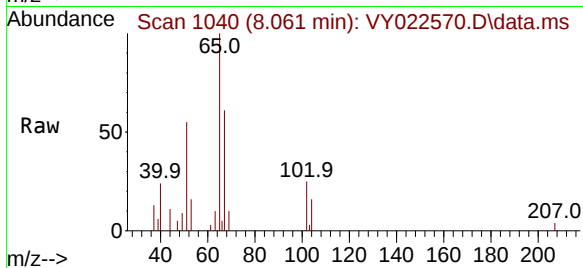
RBR251425

Tgt Ion: 65 Resp: 5351

Ion Ratio Lower Upper

65 100

67 64.5 0.0 103.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.610 min Scan# 1130

Delta R.T. -0.006 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

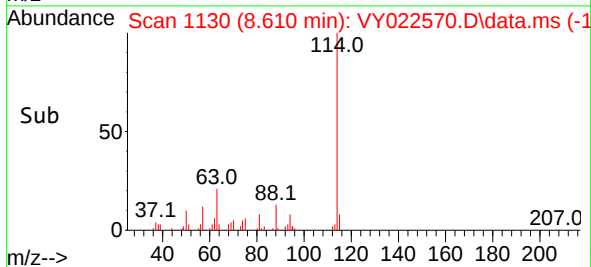
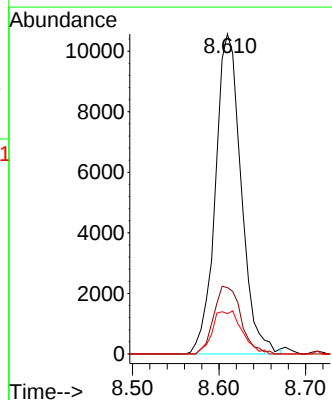
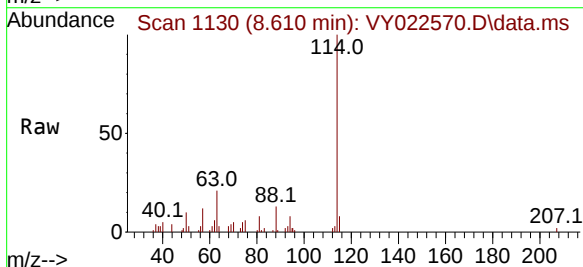
Tgt Ion: 114 Resp: 21867

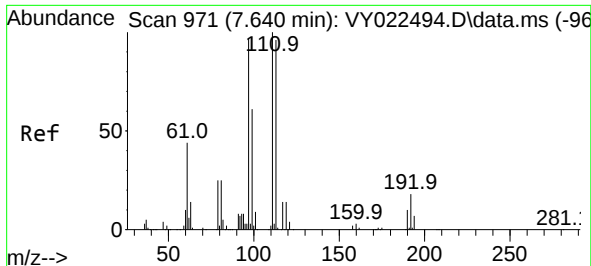
Ion Ratio Lower Upper

114 100

63 20.8 0.0 40.8

88 12.6 0.0 27.8

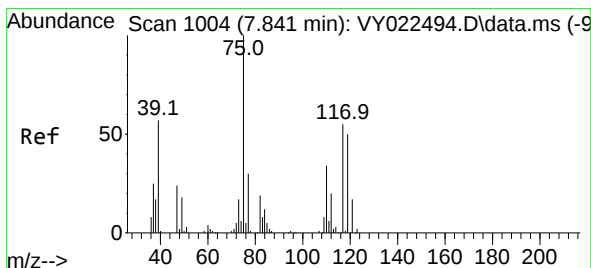
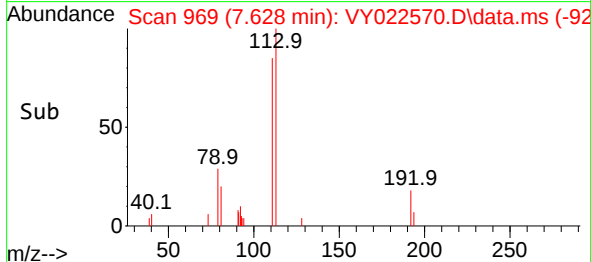
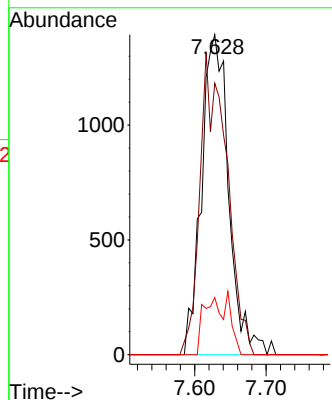
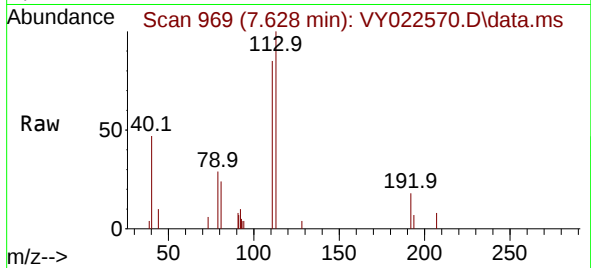




#35
Dibromofluoromethane
Concen: 28.333 ug/l
RT: 7.628 min Scan# 91
Delta R.T. -0.012 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

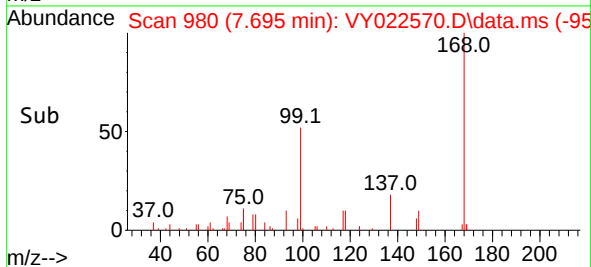
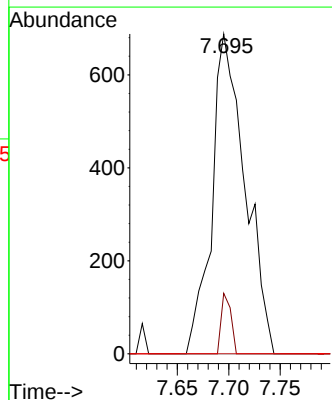
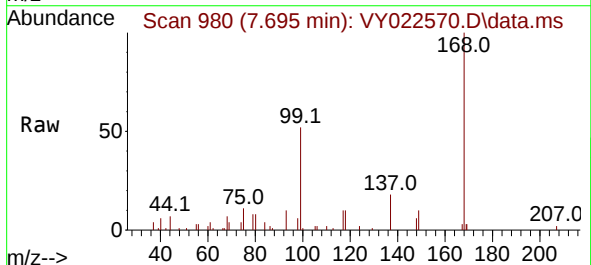
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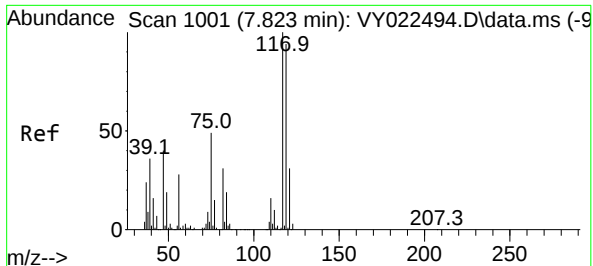
Tgt Ion:113 Resp: 3698
Ion Ratio Lower Upper
113 100
111 92.8 81.1 121.7
192 12.0 14.2 21.2#



#36
1,1-Dichloropropene
Concen: 7.322 ug/l
RT: 7.695 min Scan# 980
Delta R.T. -0.146 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 75 Resp: 1551
Ion Ratio Lower Upper
75 100
110 5.4 16.9 50.7#
77 0.0 24.8 37.2#

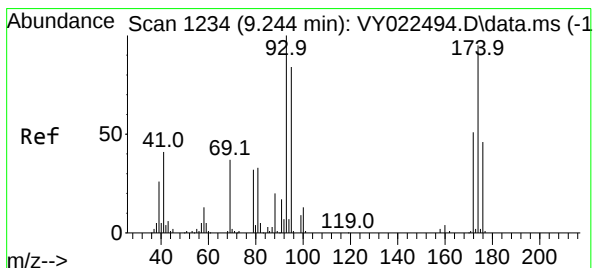
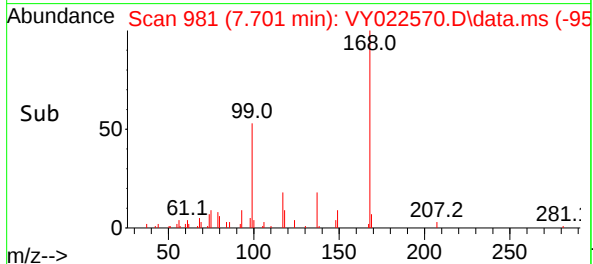
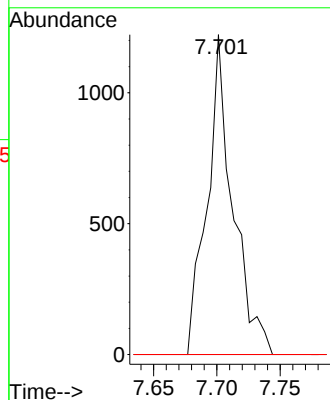
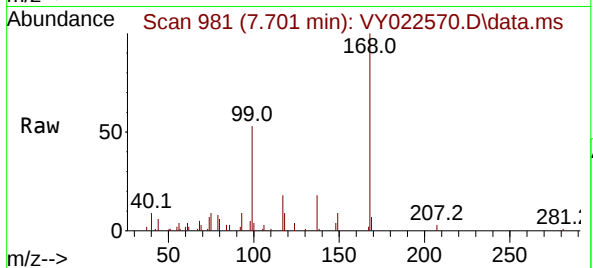




#38
Carbon Tetrachloride
Concen: 7.924 ug/l
RT: 7.701 min Scan# 91
Delta R.T. -0.122 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

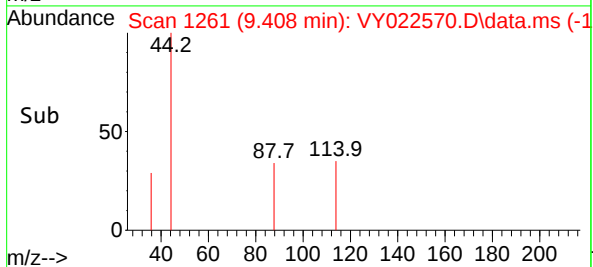
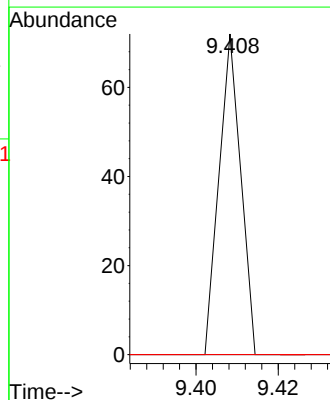
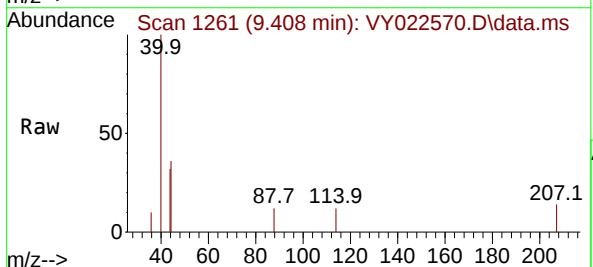
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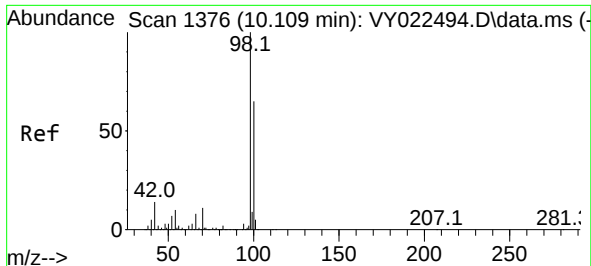
Tgt Ion:117 Resp: 1722
Ion Ratio Lower Upper
117 100
119 0.0 75.0 112.6#
121 0.0 25.0 37.4#



#49
1,4-Dioxane
Concen: 26.382 ug/l
RT: 9.408 min Scan# 1261
Delta R.T. 0.165 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 88 Resp: 26
Ion Ratio Lower Upper
88 100
43 0.0 25.4 38.2#
58 0.0 54.9 82.3#

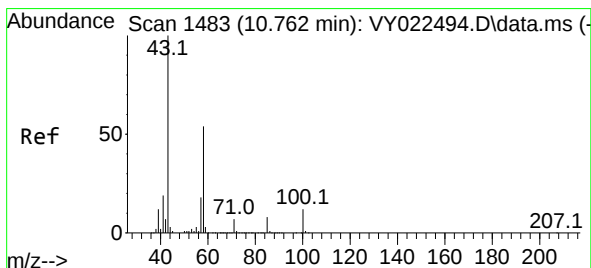
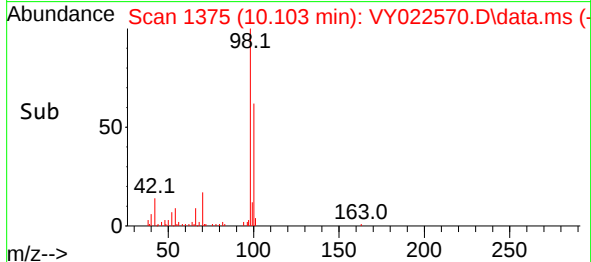
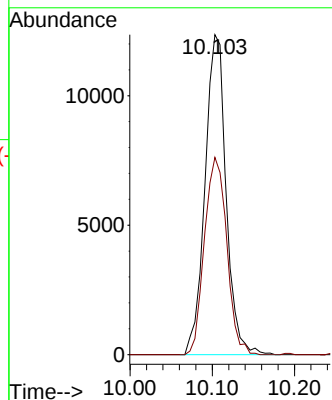
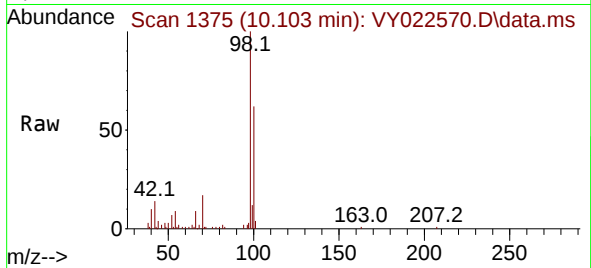




#50
Toluene-d8
Concen: 41.812 ug/l
RT: 10.103 min Scan# 11
Delta R.T. -0.006 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

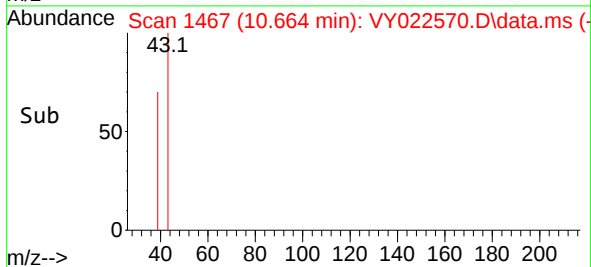
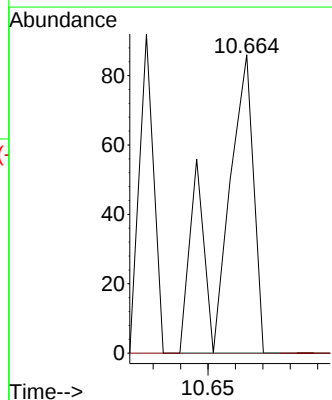
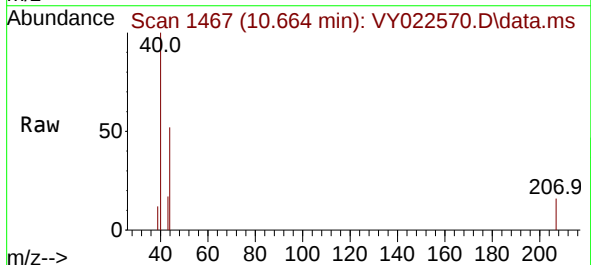
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

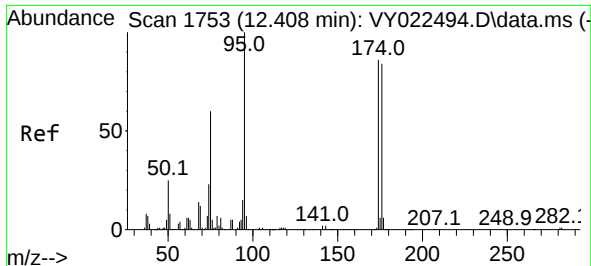
Tgt Ion: 98 Resp: 22051
Ion Ratio Lower Upper
98 100
100 65.1 51.4 77.0



#59
2-Hexanone
Concen: 1.029 ug/l
RT: 10.664 min Scan# 1467
Delta R.T. -0.098 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 43 Resp: 70
Ion Ratio Lower Upper
43 100
58 0.0 27.3 81.8#





#62

4-Bromofluorobenzene

Concen: 18.659 ug/l

RT: 12.402 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

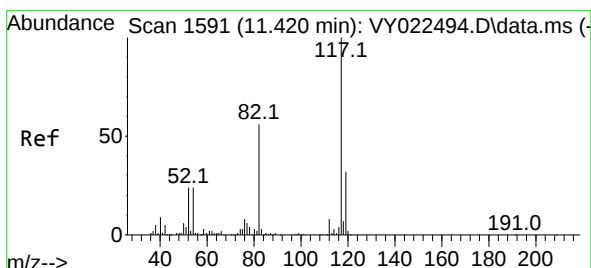
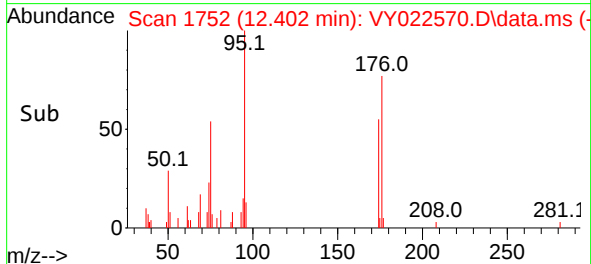
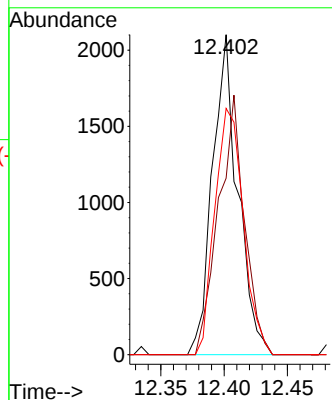
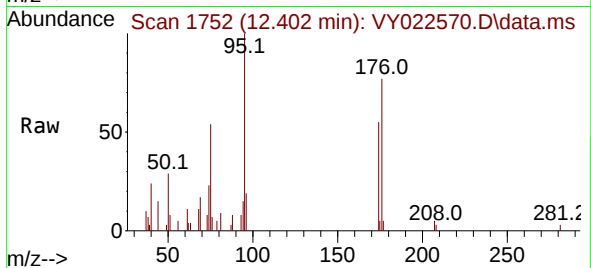
Instrument :

MSVOA_Y

ClientSampleId :

RBR251425

Tgt Ion:	95	Resp:	2932
Ion Ratio	Lower	Upper	
95	100		
174	82.7	0.0	170.0
176	86.7	0.0	166.2



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

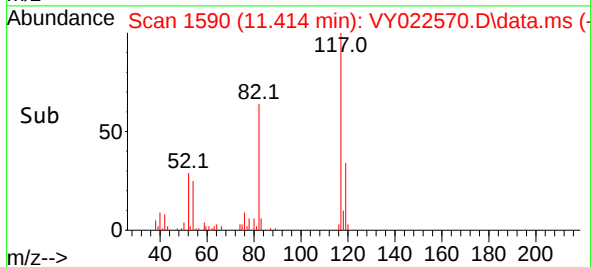
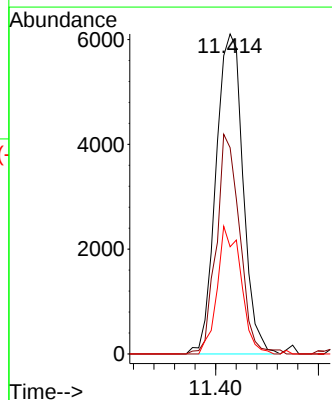
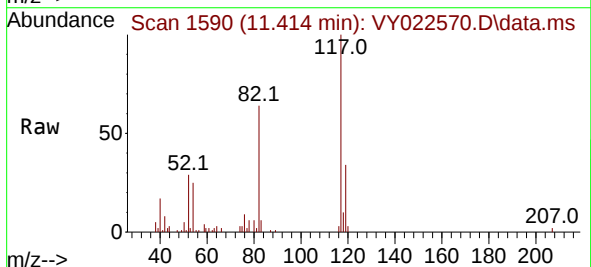
RT: 11.414 min Scan# 1590

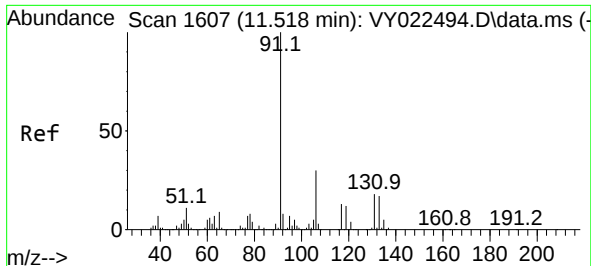
Delta R.T. -0.006 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Tgt Ion:	117	Resp:	11169
Ion Ratio	Lower	Upper	
117	100		
82	64.5	44.6	66.8
119	33.5	25.4	38.0

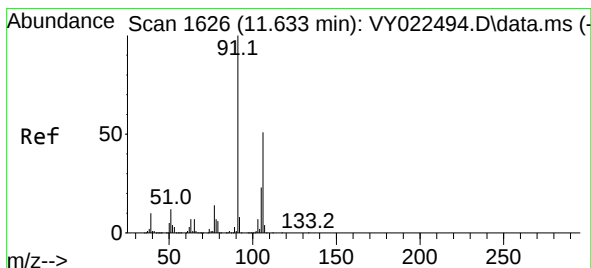
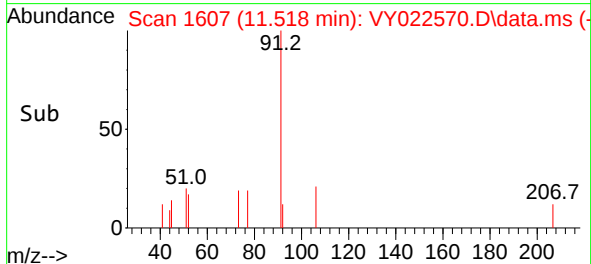
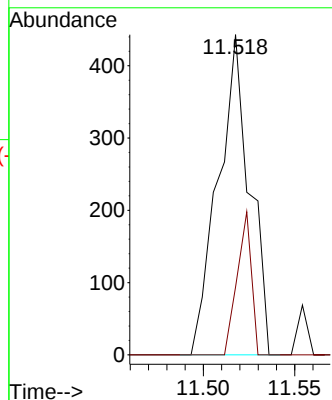
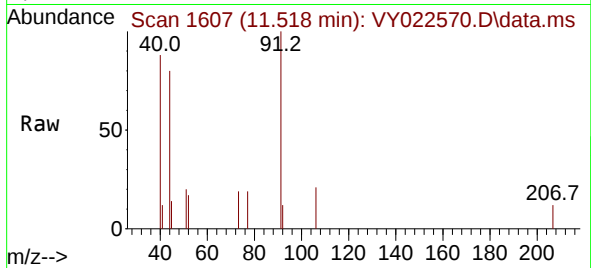




#67
Ethyl Benzene
Concen: 1.158 ug/l
RT: 11.518 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

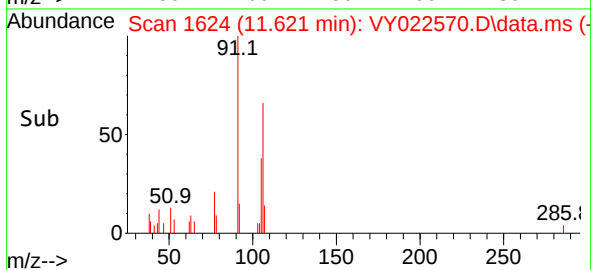
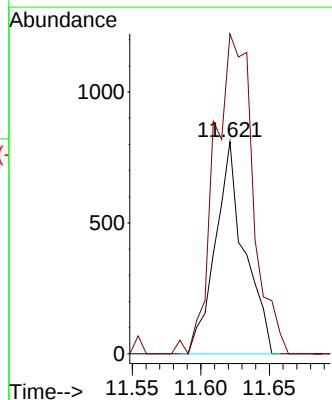
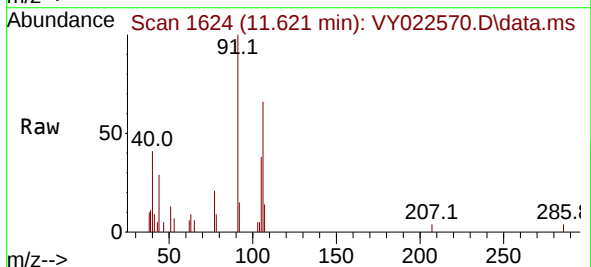
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

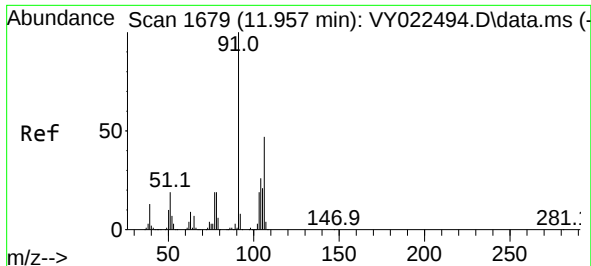
Tgt Ion: 91 Resp: 531
Ion Ratio Lower Upper
91 100
106 21.2 24.2 36.4#



#68
m/p-Xylenes
Concen: 6.882 ug/l
RT: 11.621 min Scan# 1624
Delta R.T. -0.012 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 106 Resp: 1196
Ion Ratio Lower Upper
106 100
91 199.7 159.4 239.0

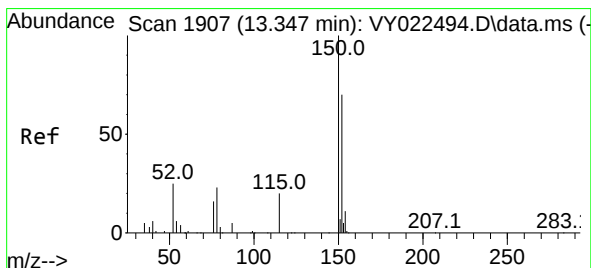
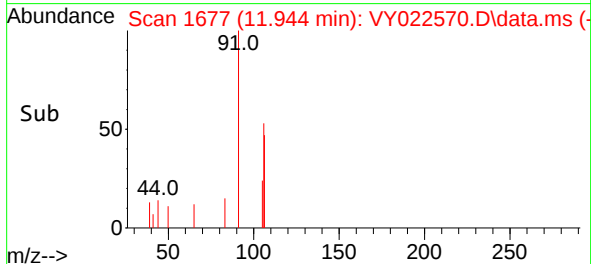
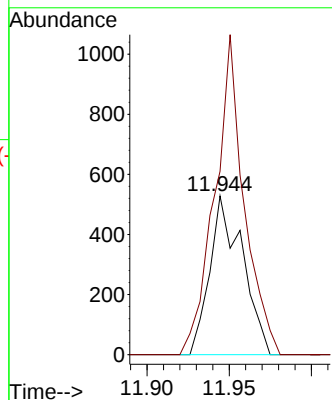
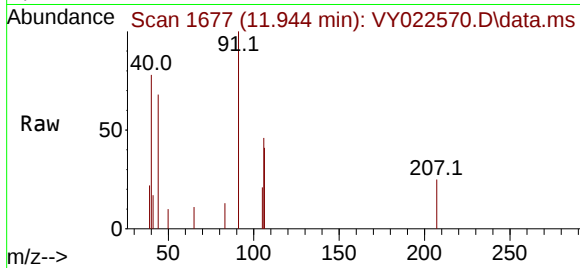




#69
o-Xylene
Concen: 4.474 ug/l
RT: 11.944 min Scan# 11
Delta R.T. -0.012 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

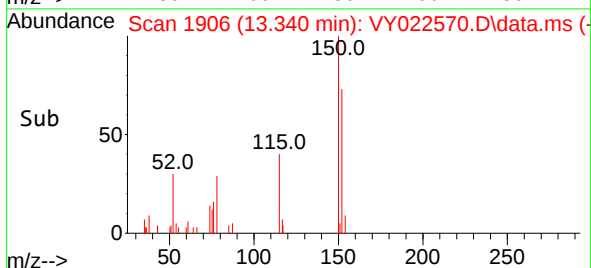
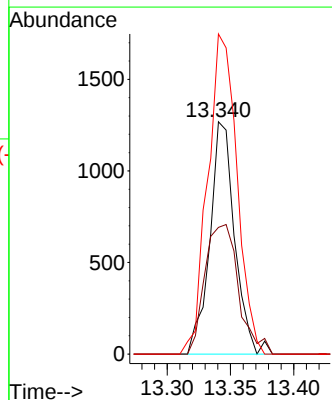
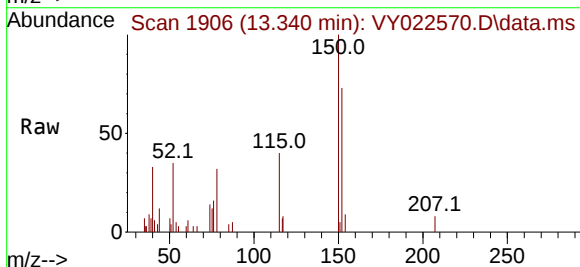
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

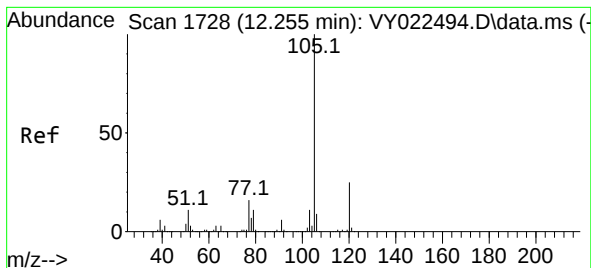
Tgt Ion:106 Resp: 729
Ion Ratio Lower Upper
106 100
91 181.3 105.8 317.3



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.340 min Scan# 1906
Delta R.T. -0.006 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion:152 Resp: 1731
Ion Ratio Lower Upper
152 100
115 75.5 28.9 86.7
150 162.3 0.0 349.6





#73

Isopropylbenzene

Concen: 2.076 ug/l

RT: 12.255 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Instrument :

MSVOA_Y

ClientSampleId :

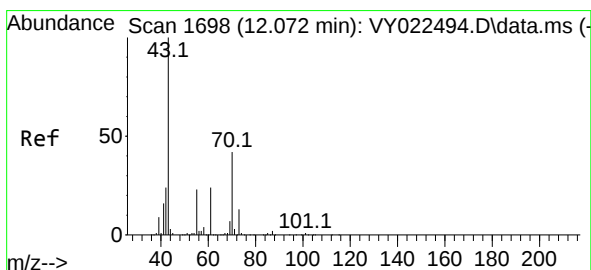
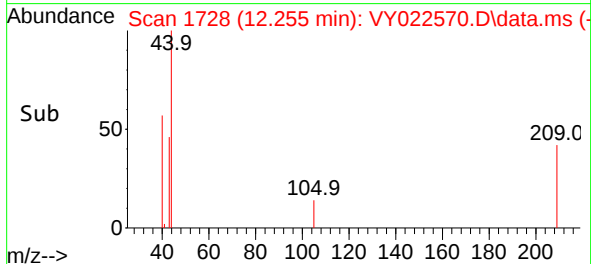
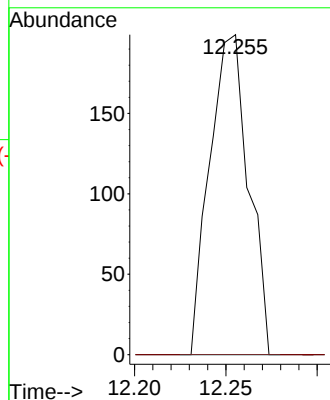
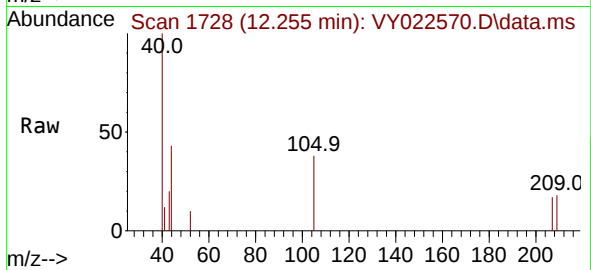
RBR251425

Tgt Ion:105 Resp: 295

Ion Ratio Lower Upper

105 100

120 0.0 13.0 38.9#



#74

N-ethyl acetate

Concen: 2.175 ug/l

RT: 12.079 min Scan# 1699

Delta R.T. 0.006 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Tgt Ion: 43 Resp: 78

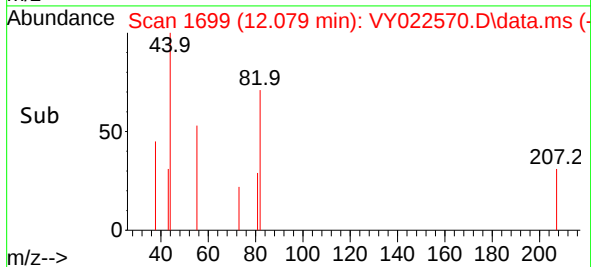
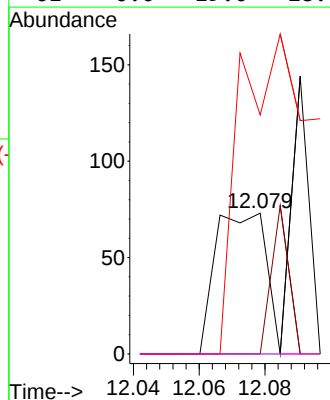
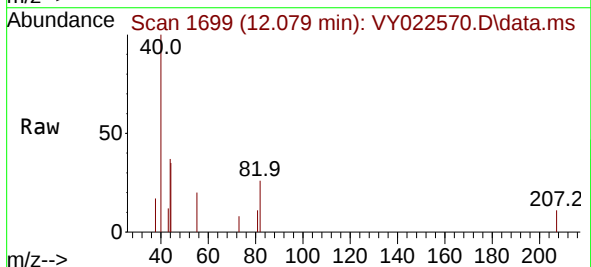
Ion Ratio Lower Upper

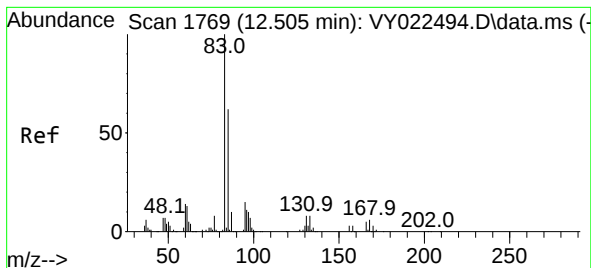
43 100

70 35.9 34.2 51.2

55 347.4 18.2 27.4#

61 0.0 19.0 28.6#





#75

1,1,2-Tetrachloroethane

Concen: 1.072 ug/l

RT: 12.310 min Scan# 1751

Delta R.T. -0.195 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Instrument :

MSVOA_Y

ClientSampleId :

RBR251425

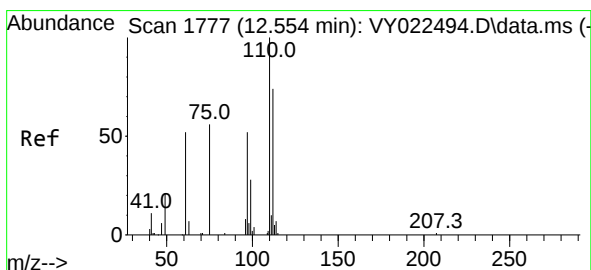
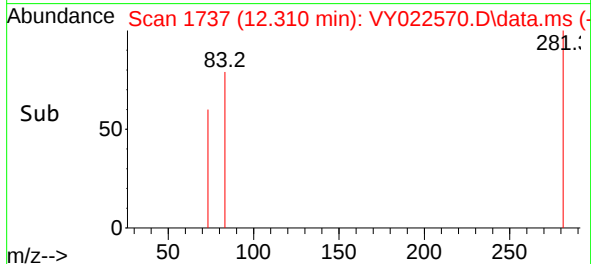
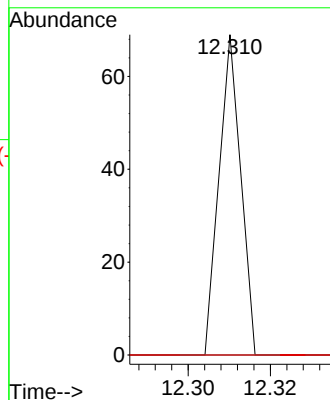
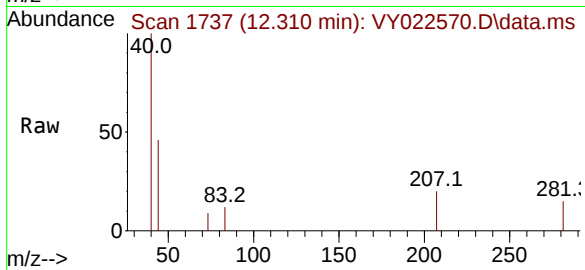
Tgt Ion: 83 Resp: 25

Ion Ratio Lower Upper

83 100

131 0.0 4.9 14.7#

85 0.0 32.6 97.8#



#76

1,2,3-Trichloropropane

Concen: 99.983 ug/l

RT: 12.396 min Scan# 1751

Delta R.T. -0.159 min

Lab File: VY022570.D

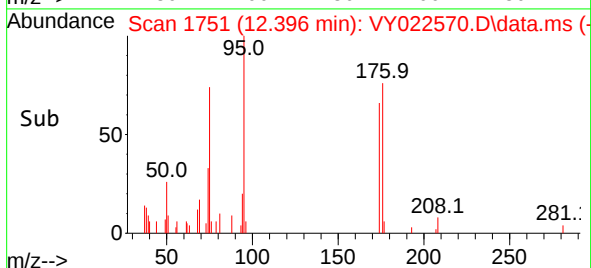
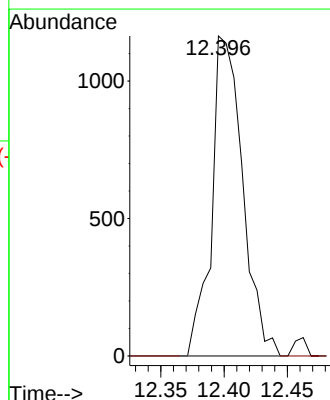
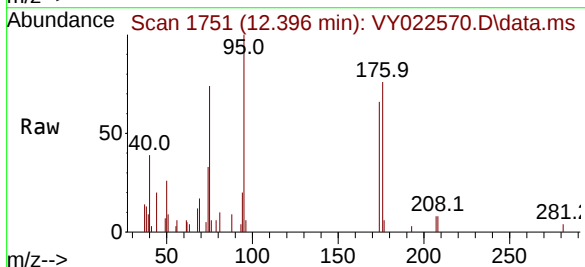
Acq: 05 Jun 2025 13:33

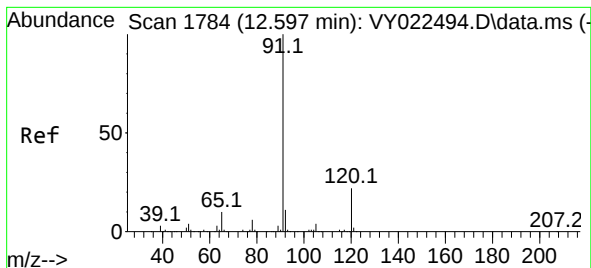
Tgt Ion: 75 Resp: 1980

Ion Ratio Lower Upper

75 100

77 0.0 0.0 0.0





#78

n-propylbenzene

Concen: 2.742 ug/l

RT: 12.585 min Scan# 1782

Delta R.T. -0.012 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Instrument :

MSVOA_Y

ClientSampleId :

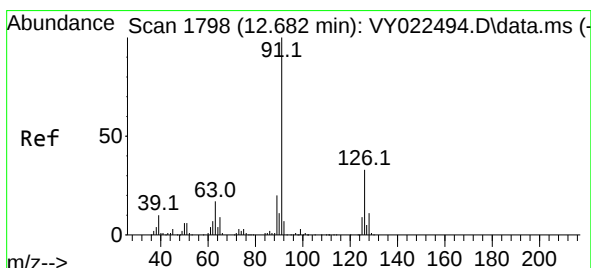
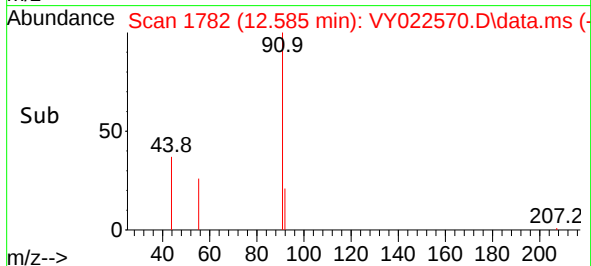
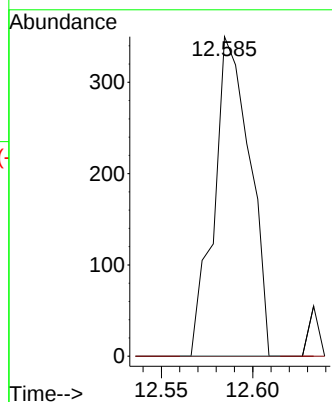
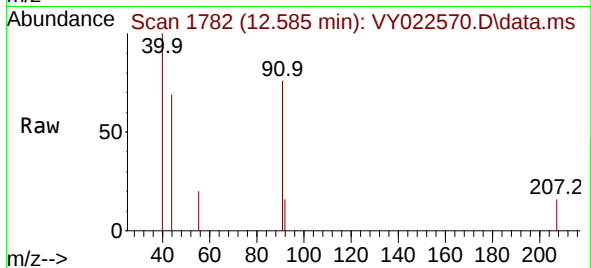
RBR251425

Tgt Ion: 91 Resp: 476

Ion Ratio Lower Upper

91 100

120 0.0 10.8 32.4#



#79

2-Chlorotoluene

Concen: 2.489 ug/l

RT: 12.652 min Scan# 1793

Delta R.T. -0.030 min

Lab File: VY022570.D

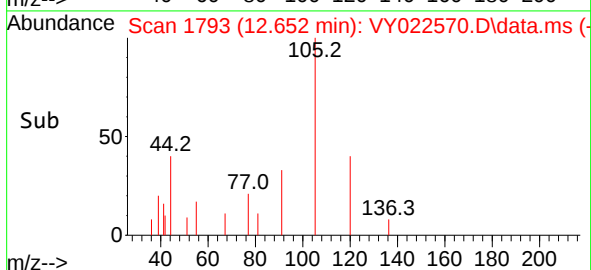
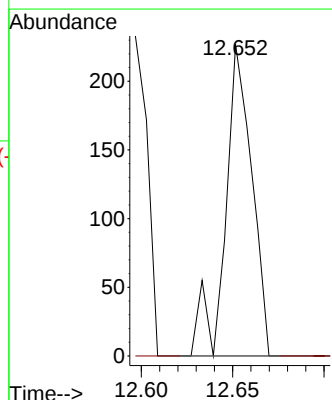
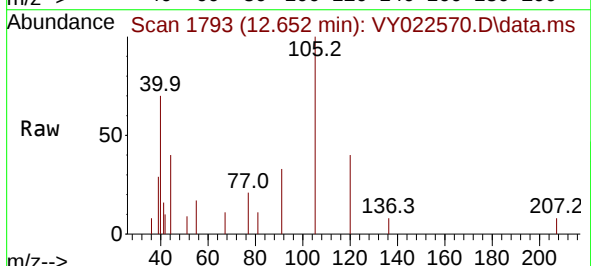
Acq: 05 Jun 2025 13:33

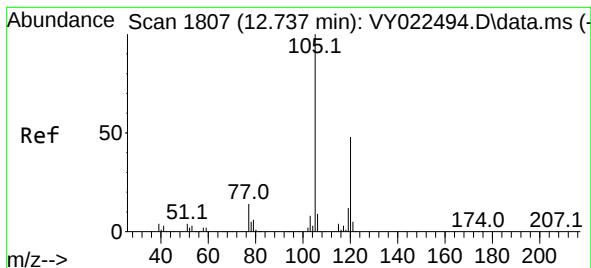
Tgt Ion: 91 Resp: 229

Ion Ratio Lower Upper

91 100

126 0.0 17.0 51.0#

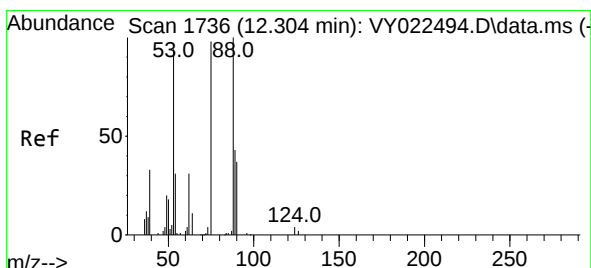
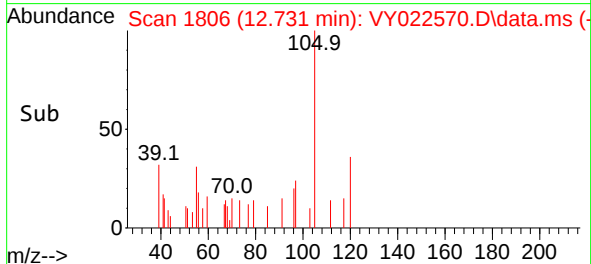
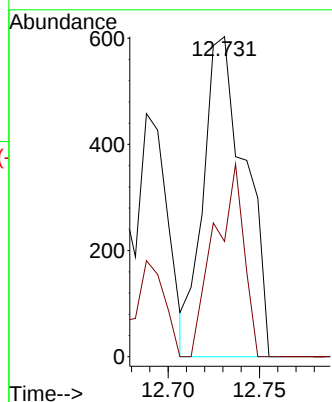
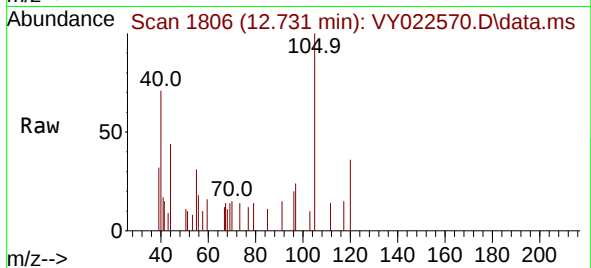




#80
 1,3,5-Trimethylbenzene
 Concen: 8.640 ug/l
 RT: 12.731 min Scan# 11
 Delta R.T. -0.006 min
 Lab File: VY022570.D
 Acq: 05 Jun 2025 13:33

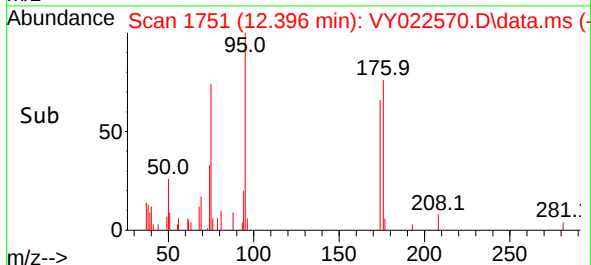
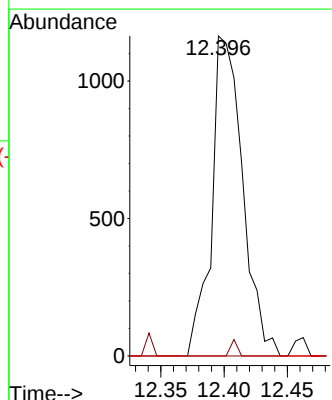
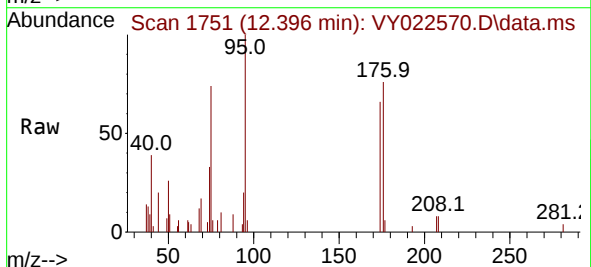
Instrument :
 MSVOA_Y
 ClientSampleId :
 RBR251425

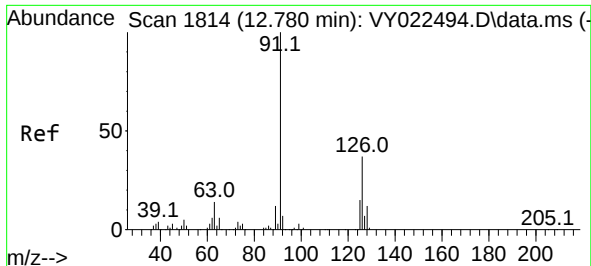
Tgt Ion:105 Resp: 964
 Ion Ratio Lower Upper
 105 100
 120 42.3 24.1 72.4



#81
 trans-1,4-Dichloro-2-butene
 Concen: 241.454 ug/l
 RT: 12.396 min Scan# 1751
 Delta R.T. 0.091 min
 Lab File: VY022570.D
 Acq: 05 Jun 2025 13:33

Tgt Ion: 75 Resp: 1980
 Ion Ratio Lower Upper
 75 100
 53 1.1 78.5 117.7#
 89 0.0 35.7 53.5#

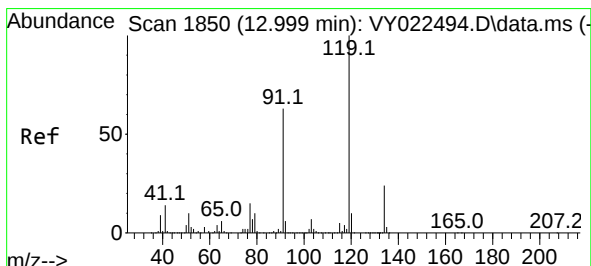
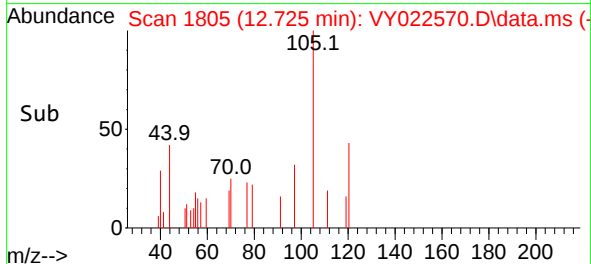
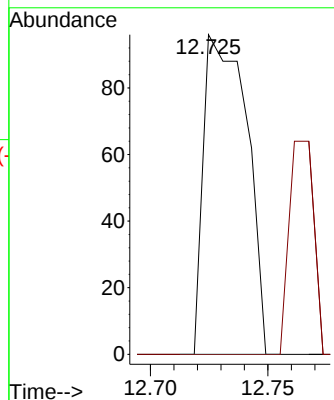
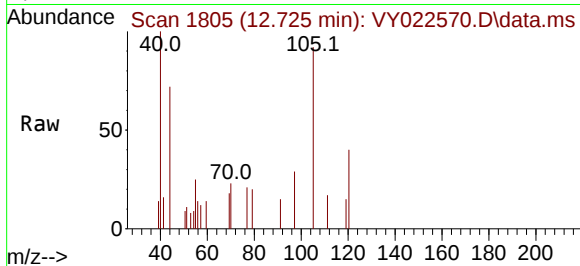




#82
4-Chlorotoluene
Concen: 1.286 ug/l
RT: 12.725 min Scan# 1805
Delta R.T. -0.055 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

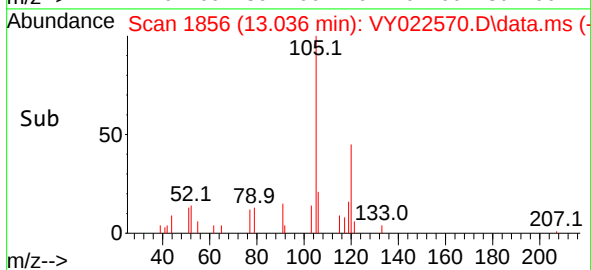
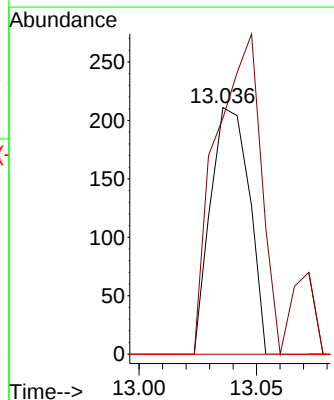
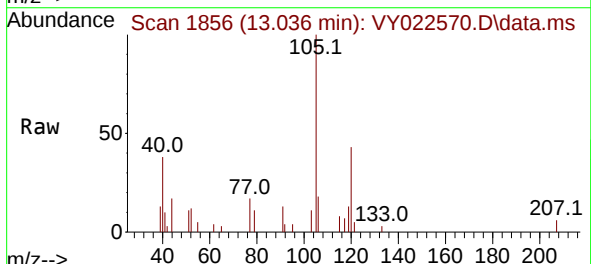
Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

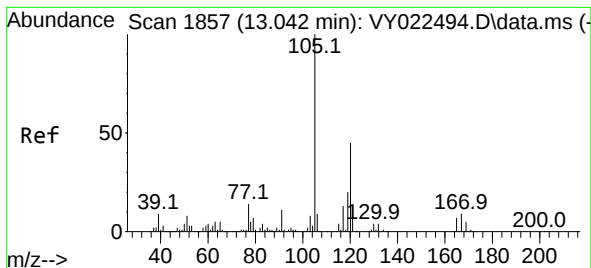
Tgt Ion: 91 Resp: 122
Ion Ratio Lower Upper
91 100
126 0.0 17.0 50.9#



#83
tert-Butylbenzene
Concen: 2.407 ug/l
RT: 13.036 min Scan# 1856
Delta R.T. 0.037 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion: 119 Resp: 241
Ion Ratio Lower Upper
119 100
91 151.0 32.1 96.3#
134 0.0 13.0 38.9#





#84

1,2,4-Trimethylbenzene

Concen: 25.253 ug/l

RT: 13.042 min Scan# 1857

Delta R.T. 0.000 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Instrument :

MSVOA_Y

ClientSampleId :

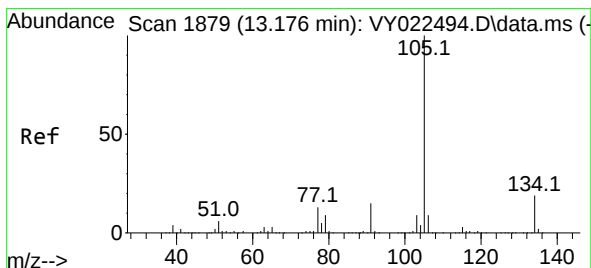
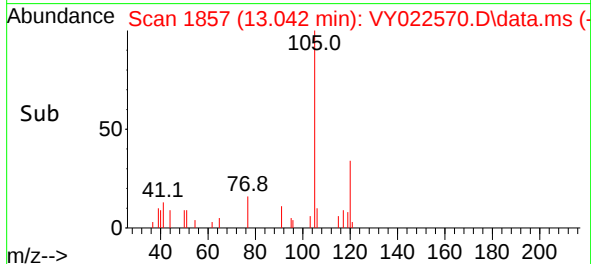
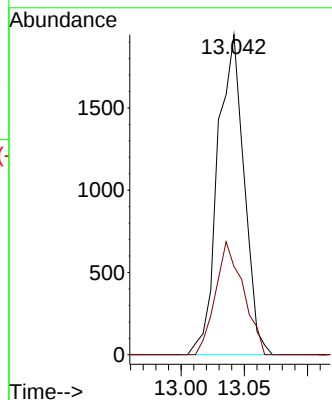
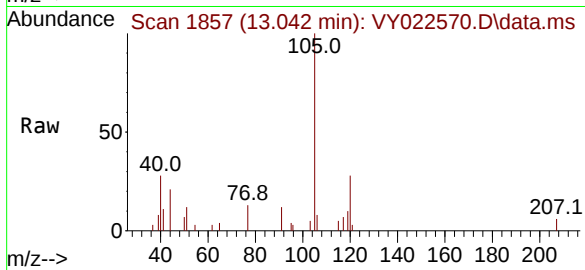
RBR251425

Tgt Ion:105 Resp: 2818

Ion Ratio Lower Upper

105 100

120 37.4 22.7 68.1



#85

sec-Butylbenzene

Concen: 1.767 ug/l

RT: 13.170 min Scan# 1878

Delta R.T. -0.006 min

Lab File: VY022570.D

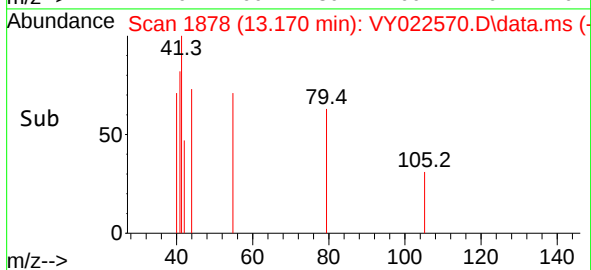
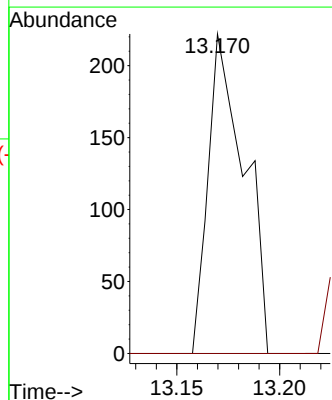
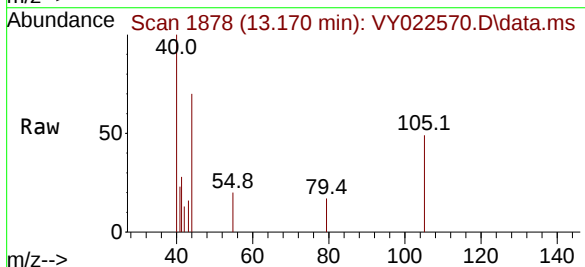
Acq: 05 Jun 2025 13:33

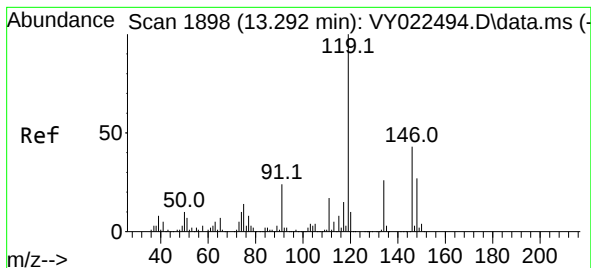
Tgt Ion:105 Resp: 271

Ion Ratio Lower Upper

105 100

134 0.0 9.7 28.9#





#86

p-Isopropyltoluene

Concen: 1.550 ug/l

RT: 13.286 min Scan# 119

Delta R.T. -0.006 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

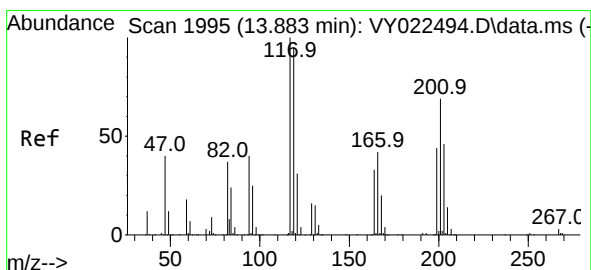
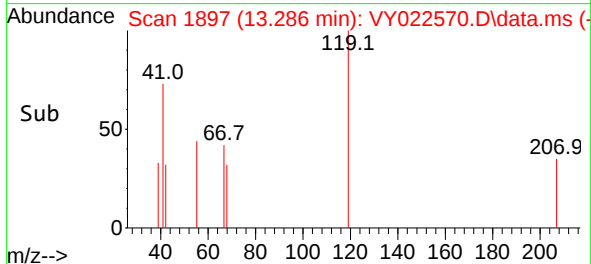
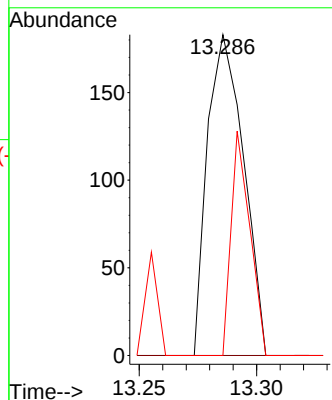
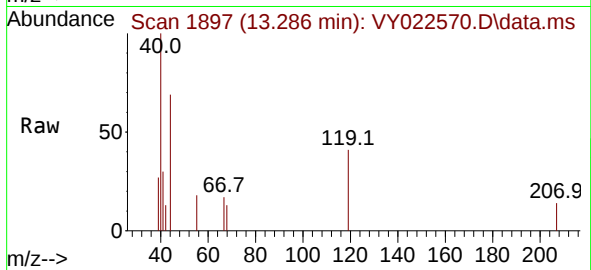
Instrument :

MSVOA_Y

ClientSampleId :

RBR251425

Tgt Ion:	119	Resp:	196
Ion	Ratio	Lower	Upper
119	100		
134	0.0	13.1	39.1#
91	36.2	11.6	34.8#



#90

Hexachloroethane

Concen: 4.835 ug/l

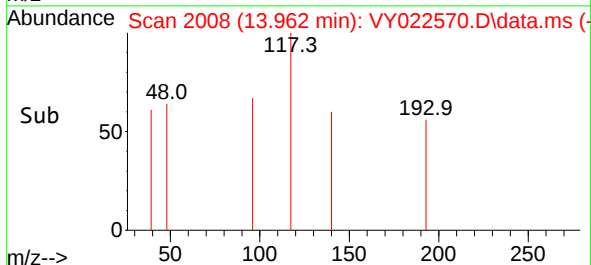
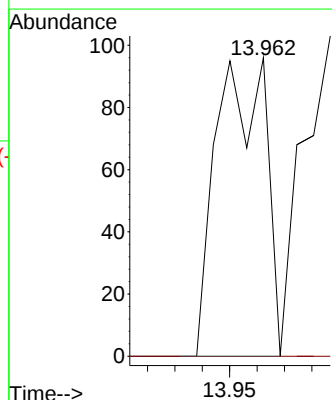
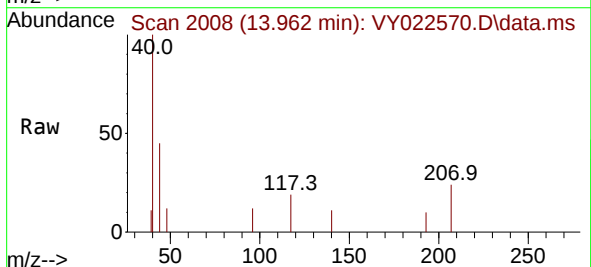
RT: 13.962 min Scan# 2008

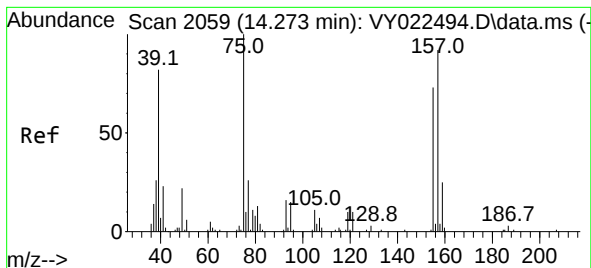
Delta R.T. 0.079 min

Lab File: VY022570.D

Acq: 05 Jun 2025 13:33

Tgt Ion:	117	Resp:	119
Ion	Ratio	Lower	Upper
117	100		
201	0.0	34.0	102.0#

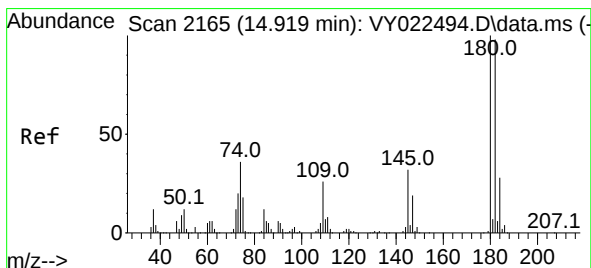
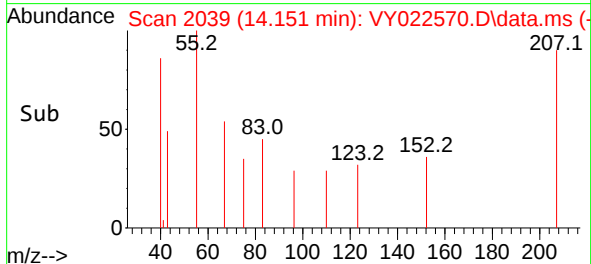
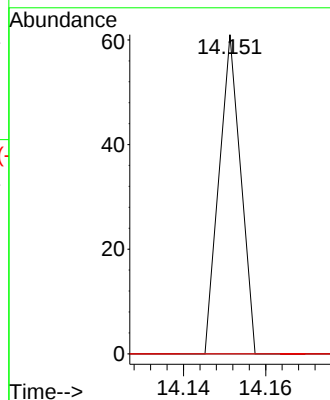
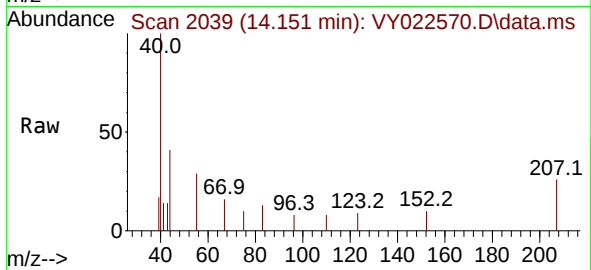




#92
1,2-Dibromo-3-Chloropropane
Concen: 6.478 ug/l
RT: 14.151 min Scan# 2059
Delta R.T. -0.122 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Instrument :
MSVOA_Y
ClientSampleId :
RBR251425

Tgt Ion: 75 Resp: 22
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: 1.742 ug/l
RT: 14.895 min Scan# 2161
Delta R.T. -0.024 min
Lab File: VY022570.D
Acq: 05 Jun 2025 13:33

Tgt Ion:180 Resp: 49
Ion Ratio Lower Upper
180 100
182 0.0 48.4 145.3#
145 0.0 15.5 46.5#

