

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY082225\
 Data File : VY023190.D
 Acq On : 22 Aug 2025 14:03
 Operator : SY/MD
 Sample : Q2916-01
 Misc : 5.22g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 EO-03-08202025

Quant Time: Aug 25 05:16:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y081225S.M
 Quant Title : SW846 8260
 QLast Update : Wed Aug 13 02:10:11 2025
 Response via : Initial Calibration

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

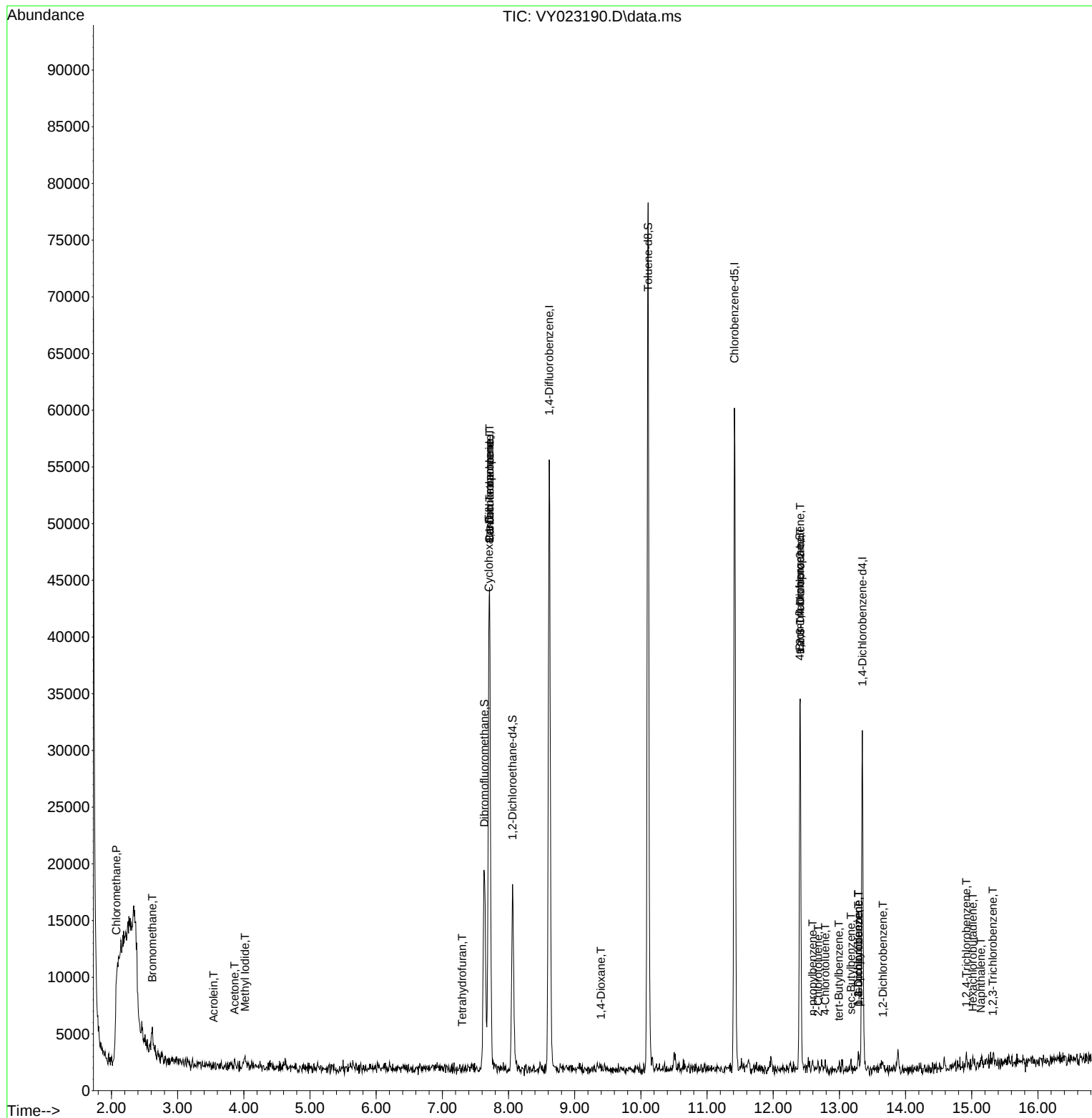
Internal Standards						
1) Pentafluorobenzene	7.713	168	35012	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	48344	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	32325	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	7632	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	12422	37.226	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	74.460%		
35) Dibromofluoromethane	7.634	113	12956	44.788	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	89.580%		
50) Toluene-d8	10.109	98	51199	45.306	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	90.620%		
62) 4-Bromofluorobenzene	12.402	95	9880	27.185	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	54.380%		
Target Compounds						Qvalue
3) Chloromethane	2.074	50	873	1.886	ug/l #	58
5) Bromomethane	2.617	94	1252	2.930	ug/l #	76
10) Methyl Iodide	4.019	142	1437	3.880	ug/l #	79
13) Acrolein	3.543	56	42	1.254	ug/l #	18
16) Acetone	3.860	43	162	2.241	ug/l #	41
20) Methylene Chloride	4.598	84	81	Below Cal	#	44
29) Tetrahydrofuran	7.299	42	70	1.149	ug/l #	29
31) Cyclohexane	7.701	56	830	1.335	ug/l #	40
36) 1,1-Dichloropropene	7.713	75	2838	6.601	ug/l #	49
38) Carbon Tetrachloride	7.713	117	3524	7.547	ug/l #	21
49) 1,4-Dioxane	9.396	88	34	16.571	ug/l #	24
76) 1,2,3-Trichloropropane	12.408	75	5180	70.326	ug/l #	100
78) n-propylbenzene	12.597	91	731	1.140	ug/l	84
79) 2-Chlorotoluene	12.676	91	535	1.456	ug/l	96
81) trans-1,4-Dichloro-2-b...	12.408	75	5180	170.237	ug/l #	14
82) 4-Chlorotoluene	12.786	91	482	1.265	ug/l	93
83) tert-Butylbenzene	12.993	119	399	1.015	ug/l #	72
85) sec-Butylbenzene	13.176	105	613	1.061	ug/l	99
86) p-Isopropyltoluene	13.286	119	522	1.089	ug/l	81
87) 1,3-Dichlorobenzene	13.286	146	454	1.791	ug/l	69
88) 1,4-Dichlorobenzene	13.286	146	454	1.806	ug/l	67
91) 1,2-Dichlorobenzene	13.657	146	352	1.584	ug/l	76
93) 1,2,4-Trichlorobenzene	14.919	180	369	2.808	ug/l	85
94) Hexachlorobutadiene	15.017	225	139	1.800	ug/l #	56
95) Naphthalene	15.139	128	922	4.114	ug/l #	78
96) 1,2,3-Trichlorobenzene	15.316	180	439	3.876	ug/l	77

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

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Quant Title : SW846 8260
QLast Update : Wed Aug 13 02:10:11 2025
Response via : Initial Calibration

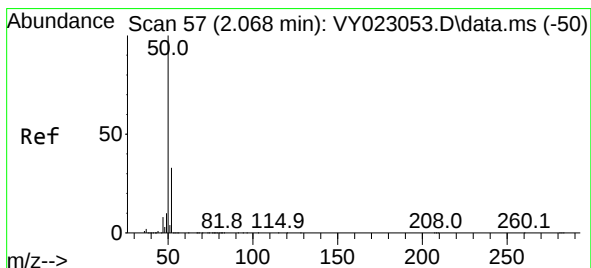
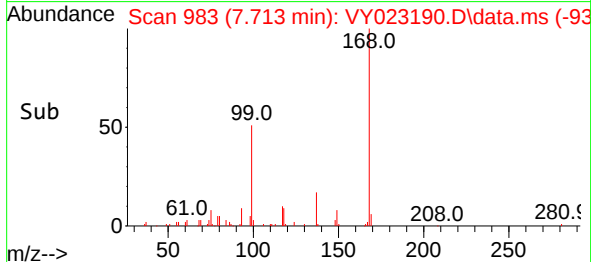
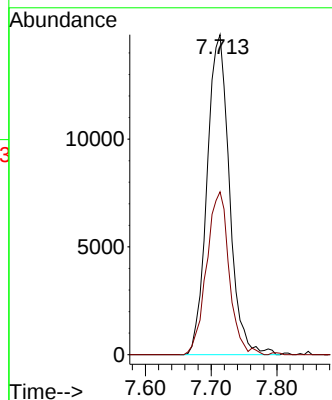
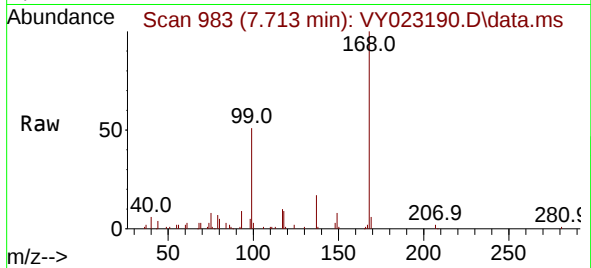




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.713 min Scan# 91
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

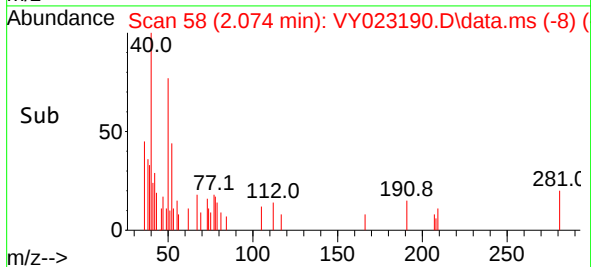
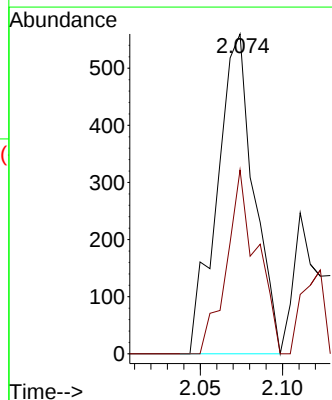
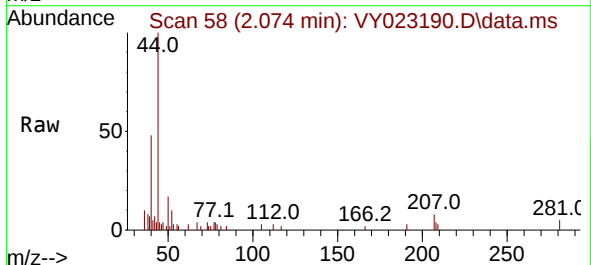
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

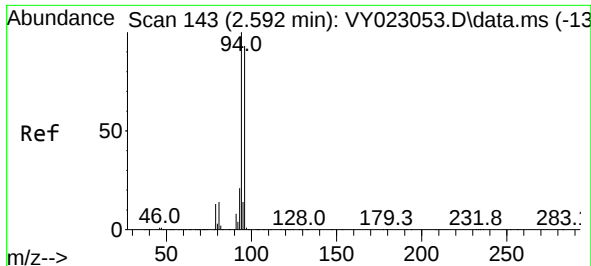
Tgt Ion:168 Resp: 35012
Ion Ratio Lower Upper
168 100
99 50.9 42.8 64.2



#3
Chloromethane
Concen: 1.886 ug/l
RT: 2.074 min Scan# 58
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion: 50 Resp: 873
Ion Ratio Lower Upper
50 100
52 57.5 26.7 40.1#

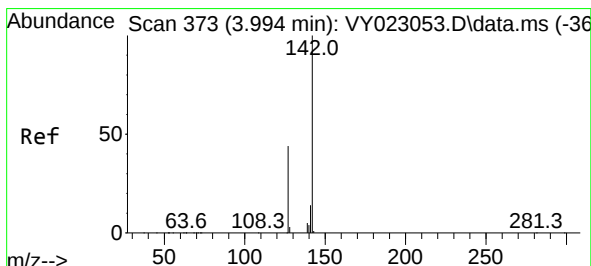
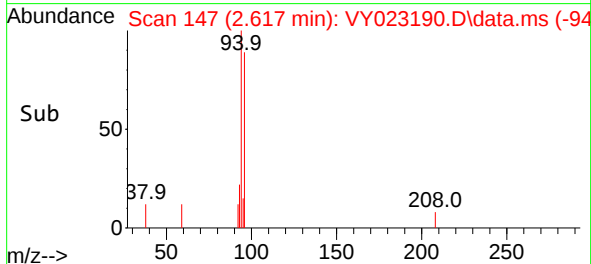
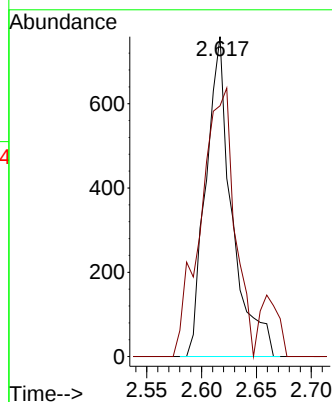
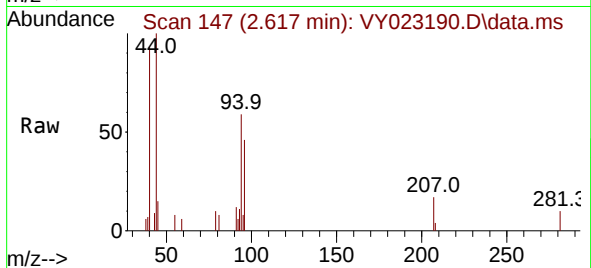




#5
Bromomethane
Concen: 2.930 ug/l
RT: 2.617 min Scan# 143
Delta R.T. 0.025 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

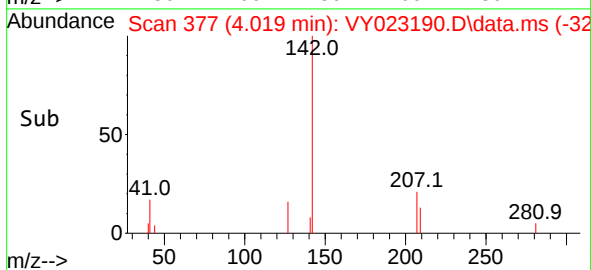
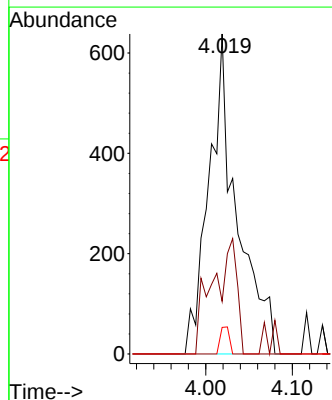
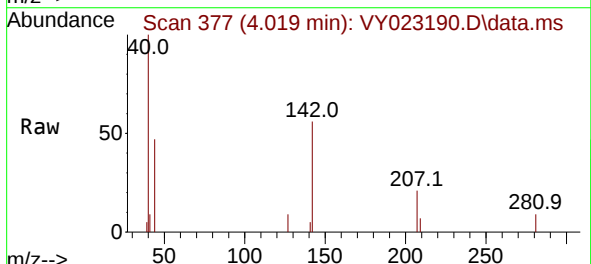
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

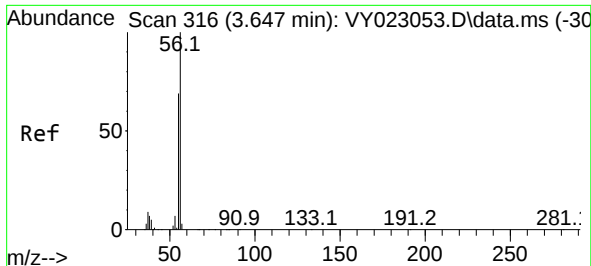
Tgt Ion: 94 Resp: 1252
Ion Ratio Lower Upper
94 100
96 70.2 74.6 112.0#



#10
Methyl Iodide
Concen: 3.880 ug/l
RT: 4.019 min Scan# 377
Delta R.T. 0.025 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion: 142 Resp: 1437
Ion Ratio Lower Upper
142 100
127 31.4 34.9 52.3#
141 2.7 11.3 16.9#

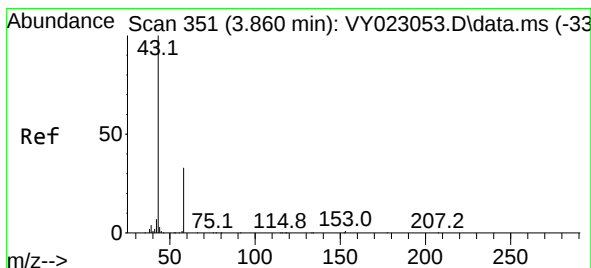
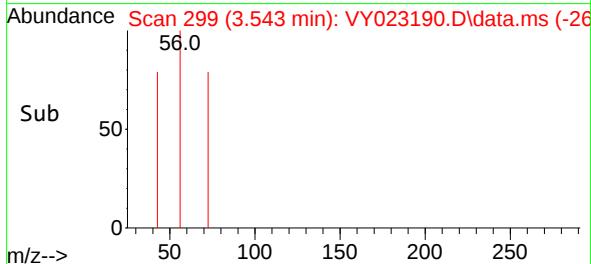
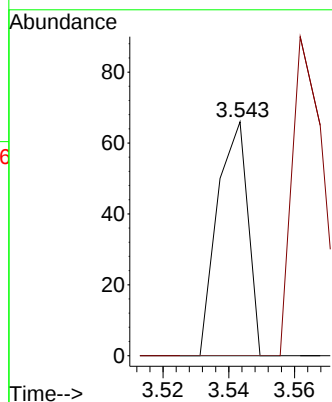
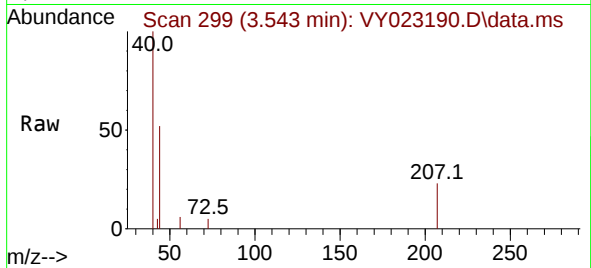




#13
Acrolein
Concen: 1.254 ug/l
RT: 3.543 min Scan# 299
Delta R.T. -0.103 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

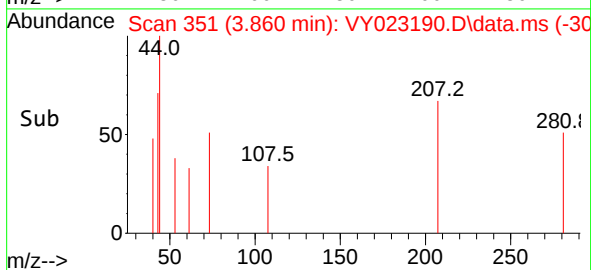
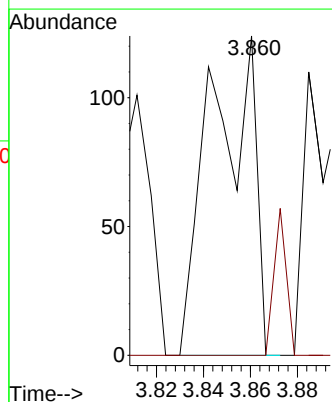
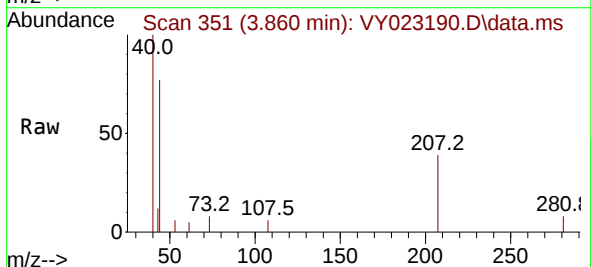
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

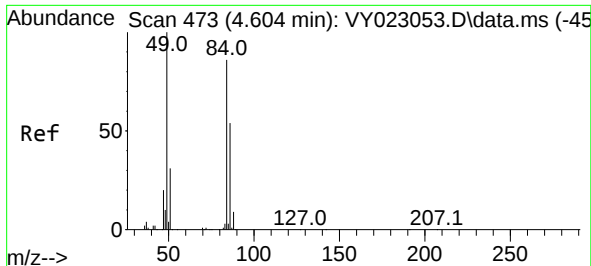
Tgt Ion: 56 Resp: 42
Ion Ratio Lower Upper
56 100
55 135.7 55.2 82.8#



#16
Acetone
Concen: 2.241 ug/l
RT: 3.860 min Scan# 351
Delta R.T. 0.000 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion: 43 Resp: 162
Ion Ratio Lower Upper
43 100
58 0.0 27.1 40.7#



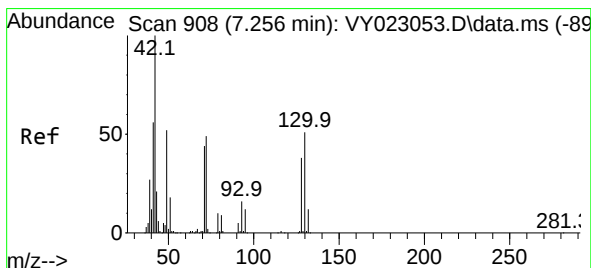
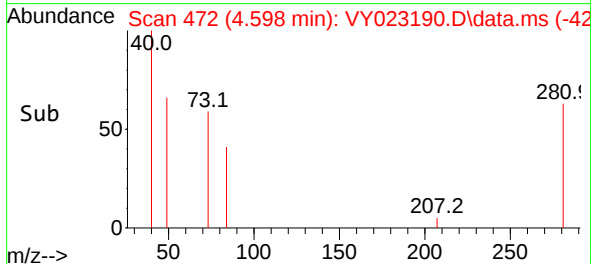
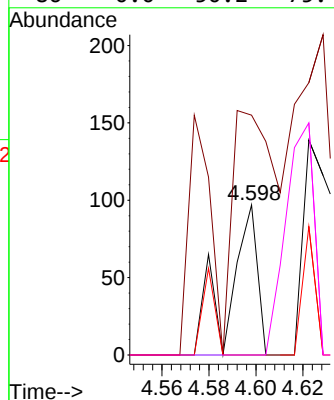
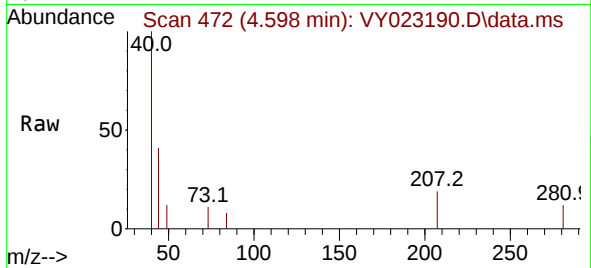


#20
Methylene Chloride
Concen: Below Cal
RT: 4.598 min Scan# 41
Delta R.T. -0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

Tgt Ion: 84 Resp: 81

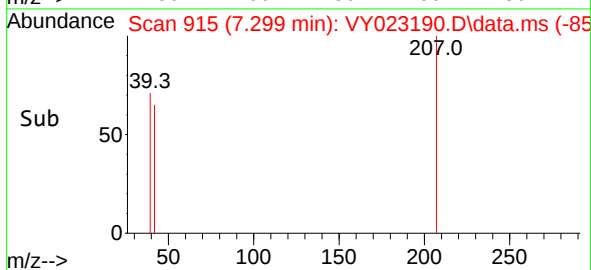
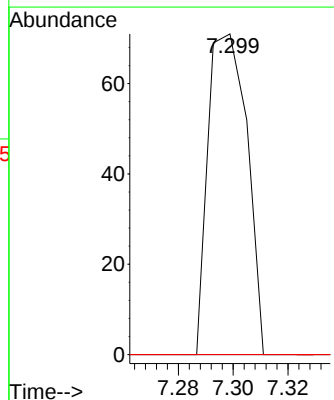
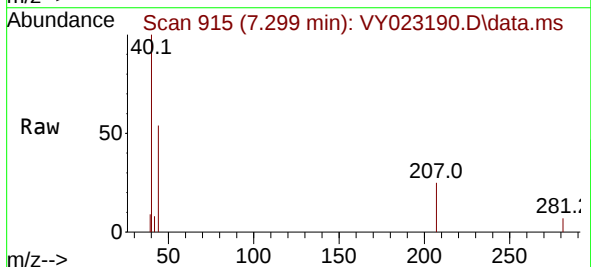
Ion	Ratio	Lower	Upper
84	100		
49	159.8	93.0	139.6#
51	0.0	29.0	43.4#
86	0.0	50.2	75.4#

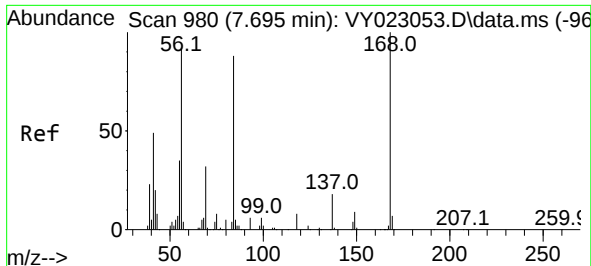


#29
Tetrahydrofuran
Concen: 1.149 ug/l
RT: 7.299 min Scan# 915
Delta R.T. 0.043 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion: 42 Resp: 70

Ion	Ratio	Lower	Upper
42	100		
72	0.0	39.4	59.2#
71	0.0	36.5	54.7#

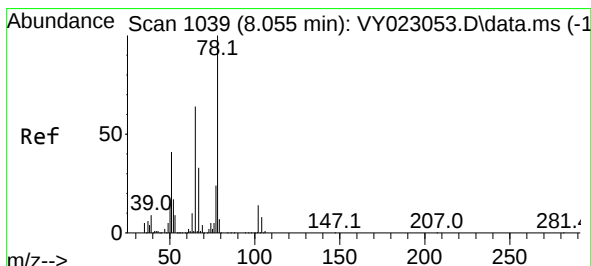
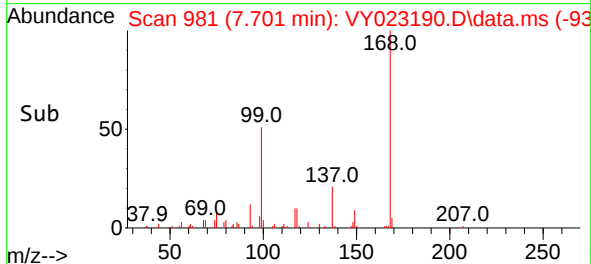
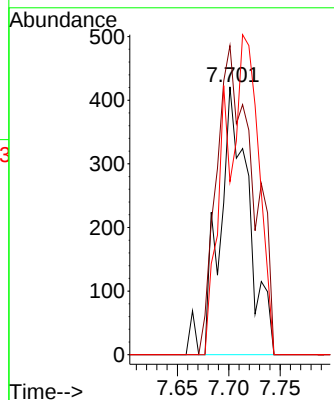
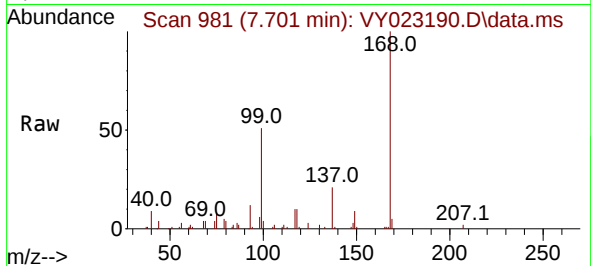




#31
Cyclohexane
Concen: 1.335 ug/l
RT: 7.701 min Scan# 91
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

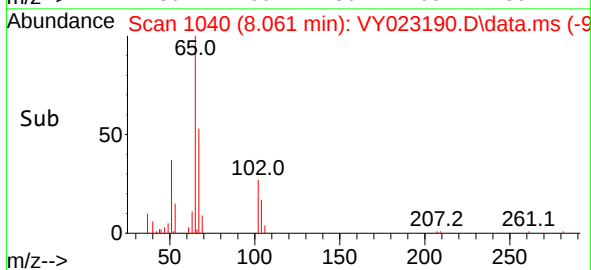
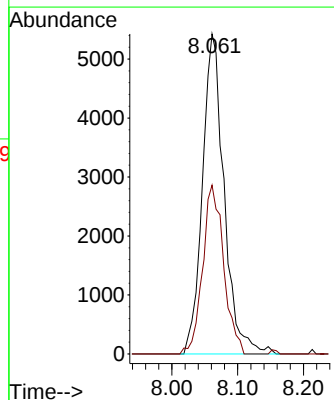
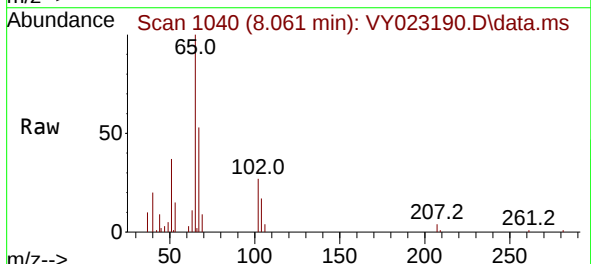
Instrument :
MSVOA_Y
ClientSampleId :
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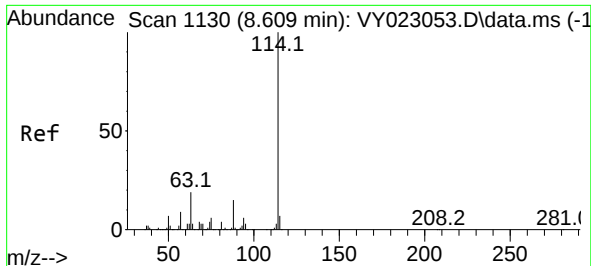
Tgt Ion: 56 Resp: 830
Ion Ratio Lower Upper
56 100
69 115.4 28.2 42.2#
84 64.6 76.6 114.8#



#33
1,2-Dichloroethane-d4
Concen: 37.226 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion: 65 Resp: 12422
Ion Ratio Lower Upper
65 100
67 51.0 0.0 106.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

Instrument :

MSVOA_Y

ClientSampleId :

EO-03-08202025

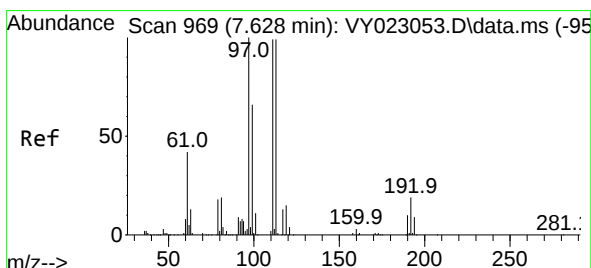
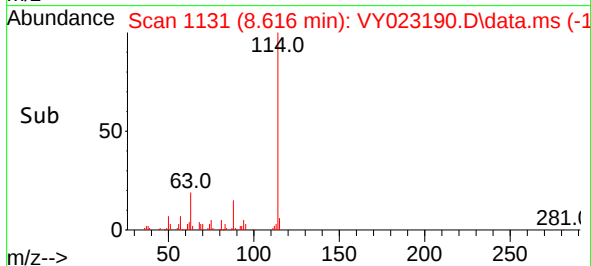
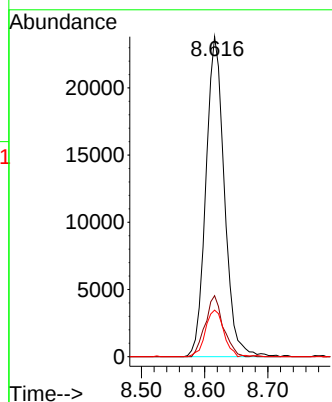
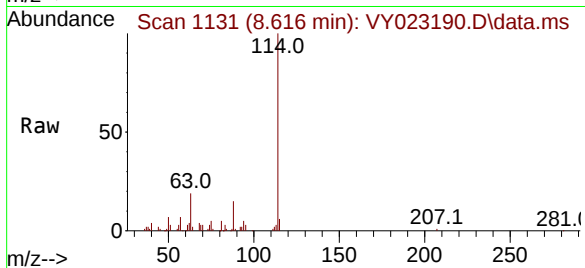
Tgt Ion:114 Resp: 48344

Ion Ratio Lower Upper

114 100

63 19.0 0.0 38.4

88 14.6 0.0 30.0



#35

Dibromofluoromethane

Concen: 44.788 ug/l

RT: 7.634 min Scan# 970

Delta R.T. 0.006 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

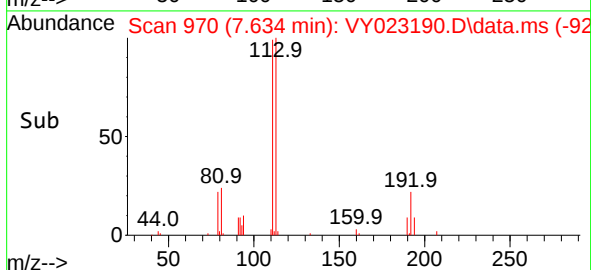
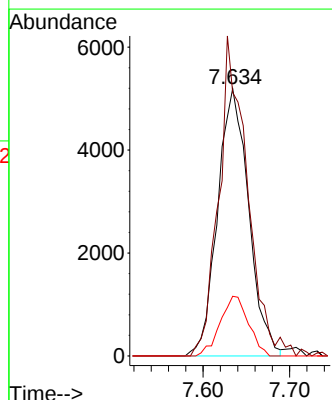
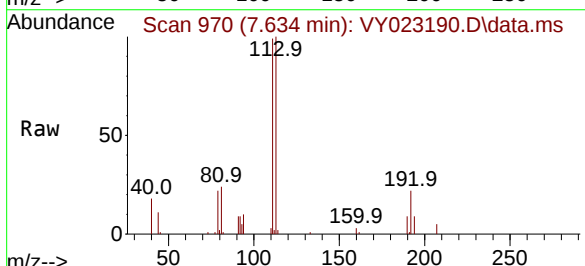
Tgt Ion:113 Resp: 12956

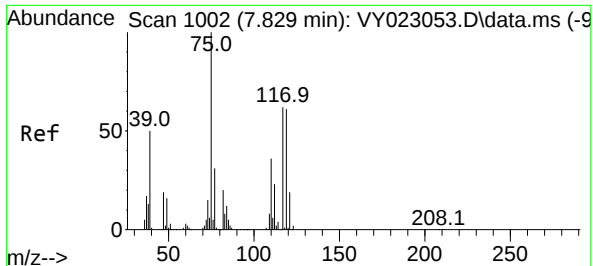
Ion Ratio Lower Upper

113 100

111 110.2 81.1 121.7

192 20.3 16.2 24.4

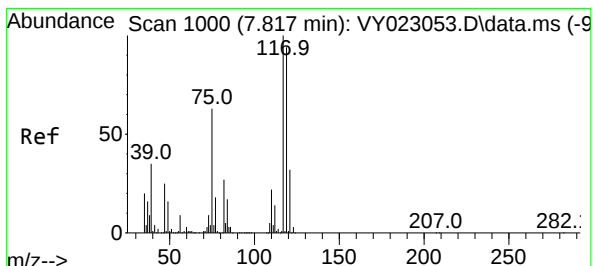
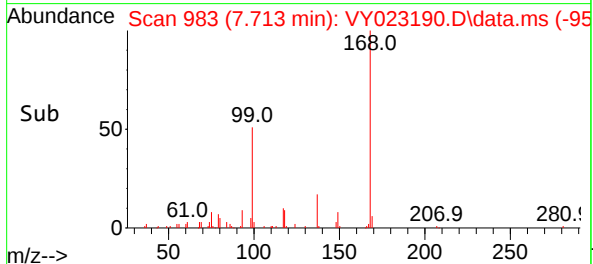
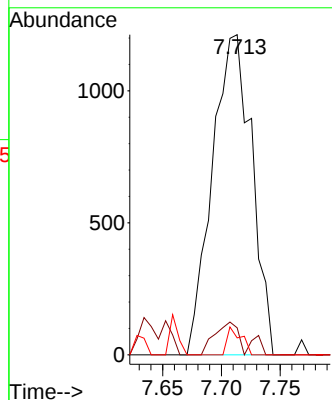
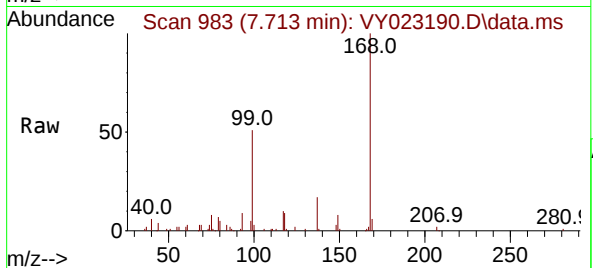




#36
 1,1-Dichloropropene
 Concen: 6.601 ug/l
 RT: 7.713 min Scan# 983
 Delta R.T. -0.116 min
 Lab File: VY023190.D
 Acq: 22 Aug 2025 14:03

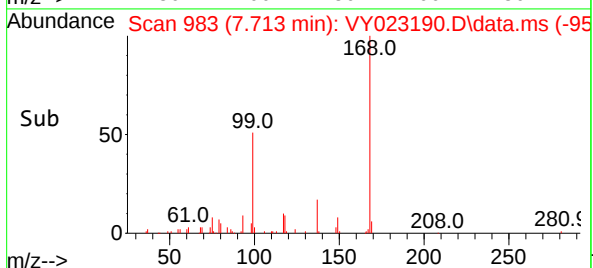
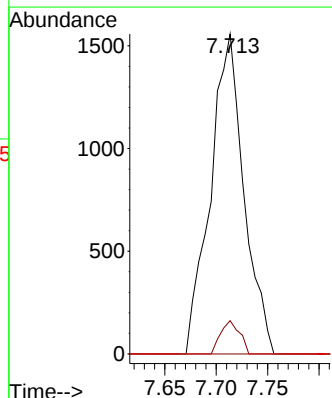
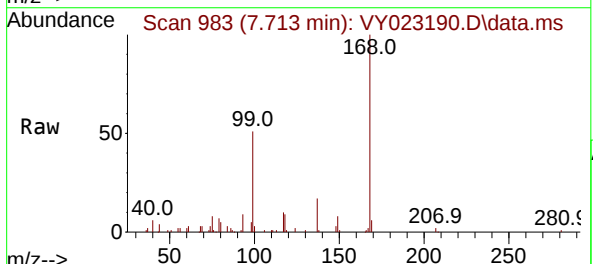
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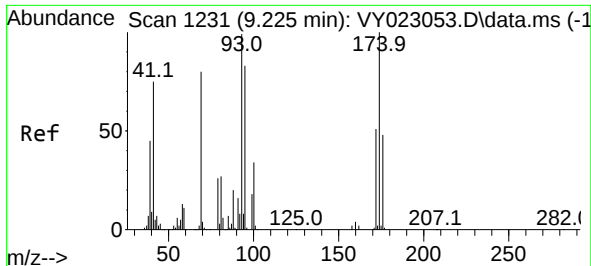
Tgt Ion: 75 Resp: 2838
 Ion Ratio Lower Upper
 75 100
 110 6.0 18.1 54.4#
 77 3.1 24.6 37.0#



#38
 Carbon Tetrachloride
 Concen: 7.547 ug/l
 RT: 7.713 min Scan# 983
 Delta R.T. -0.103 min
 Lab File: VY023190.D
 Acq: 22 Aug 2025 14:03

Tgt Ion: 117 Resp: 3524
 Ion Ratio Lower Upper
 117 100
 119 10.4 75.6 113.4#
 121 0.0 25.8 38.8#





#49

1,4-Dioxane

Concen: 16.571 ug/l

RT: 9.396 min Scan# 11

Delta R.T. 0.171 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

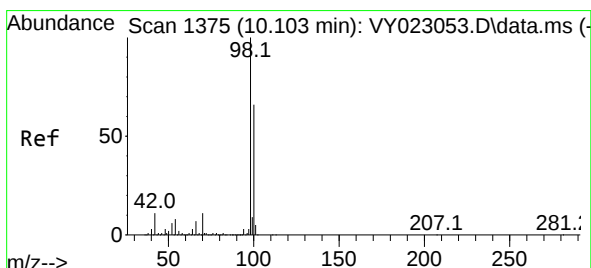
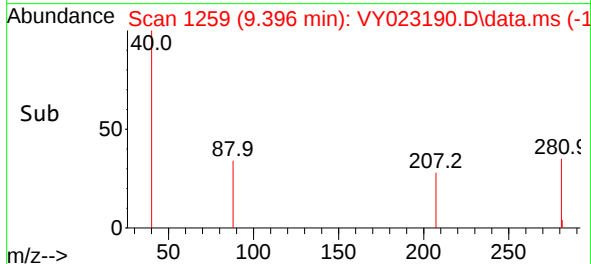
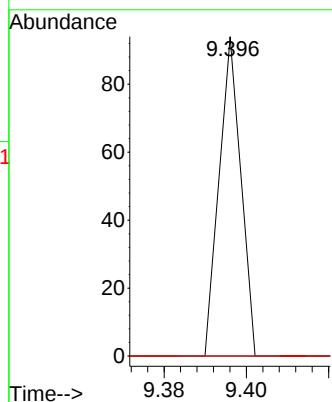
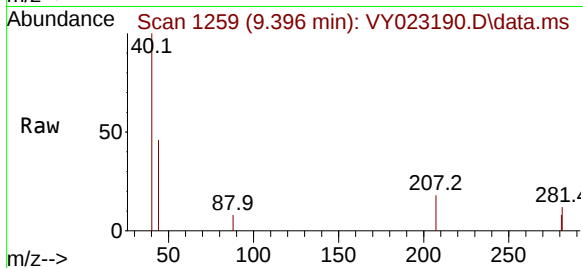
Instrument :

MSVOA_Y

ClientSampleId :

EO-03-08202025

Tgt Ion:	88	Resp:	34
Ion	Ratio	Lower	Upper
88	100		
43	0.0	24.3	36.5#
58	0.0	55.4	83.0#



#50

Toluene-d8

Concen: 45.306 ug/l

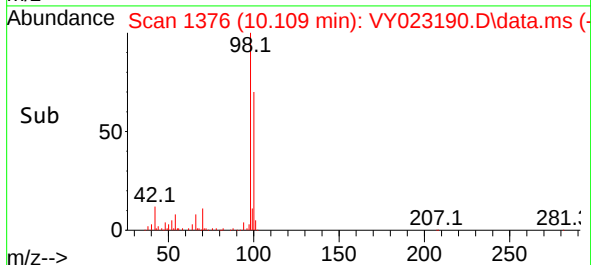
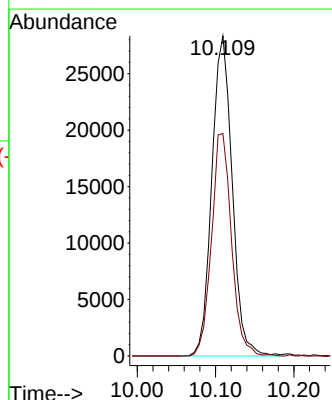
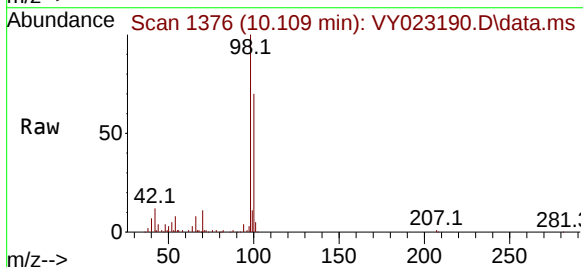
RT: 10.109 min Scan# 1376

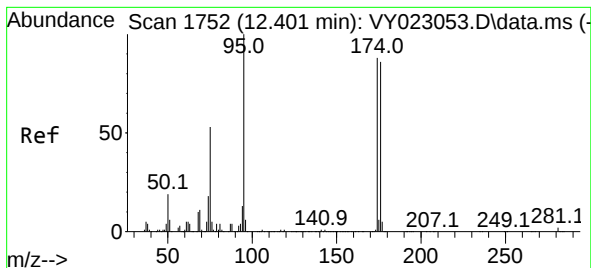
Delta R.T. 0.006 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

Tgt Ion:	98	Resp:	51199
Ion	Ratio	Lower	Upper
98	100		
100	68.2	52.3	78.5

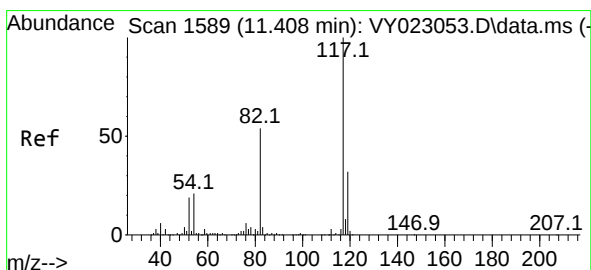
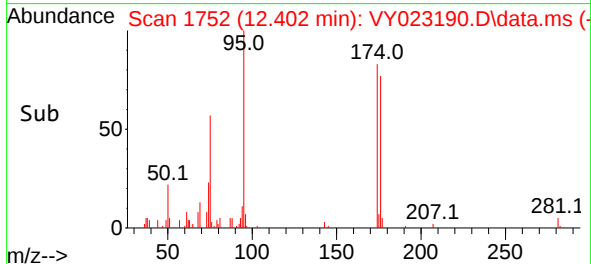
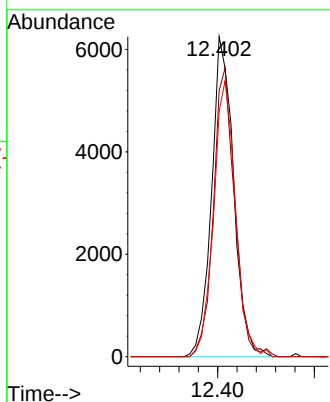
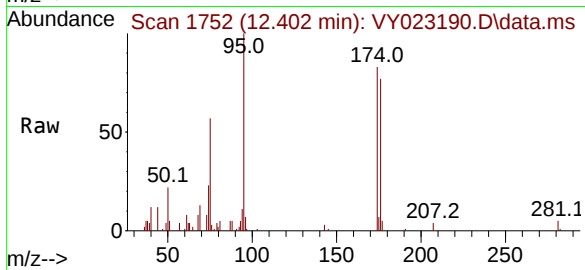




#62
4-Bromofluorobenzene
Concen: 27.185 ug/l
RT: 12.402 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

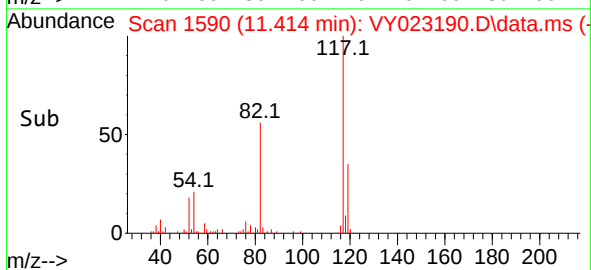
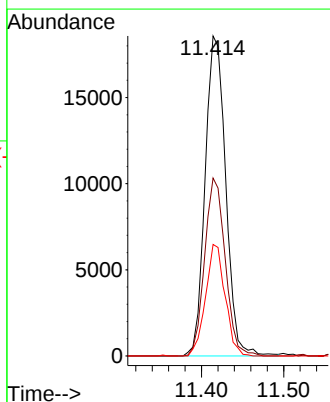
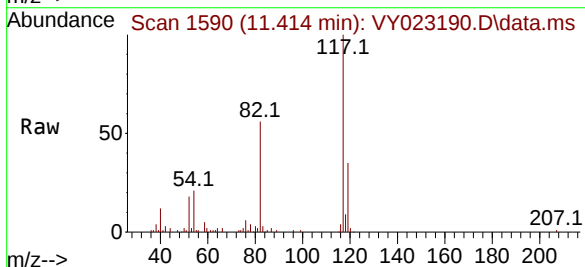
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

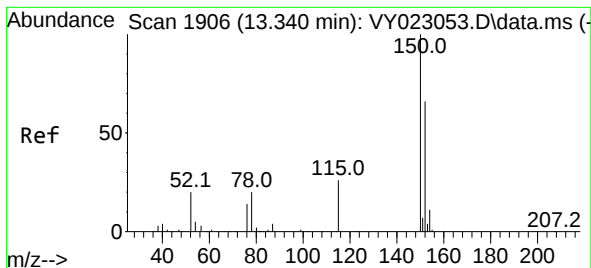
Tgt Ion:	95	Resp:	9880
Ion Ratio	Lower	Upper	
95	100		
174	86.9	0.0	171.6
176	85.6	0.0	167.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.414 min Scan# 1590
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion:	117	Resp:	32325
Ion Ratio	Lower	Upper	
117	100		
82	55.6	43.4	65.0
119	34.8	25.6	38.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.347 min Scan# 1906

Delta R.T. 0.006 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

Instrument :

MSVOA_Y

ClientSampleId :

EO-03-08202025

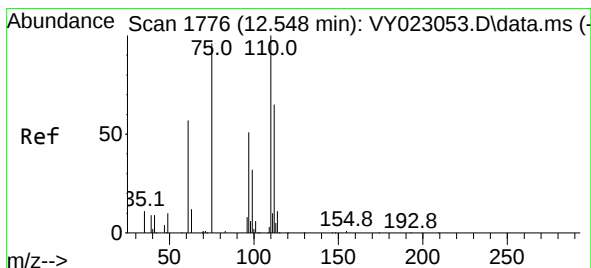
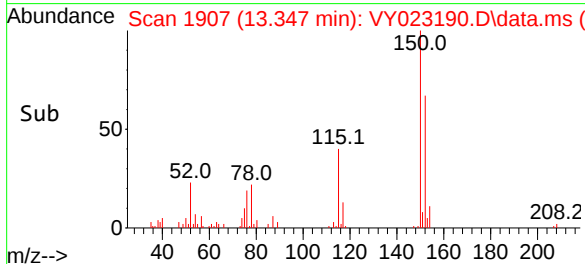
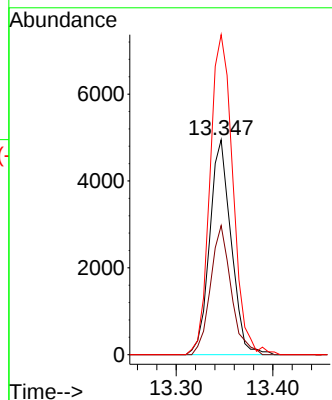
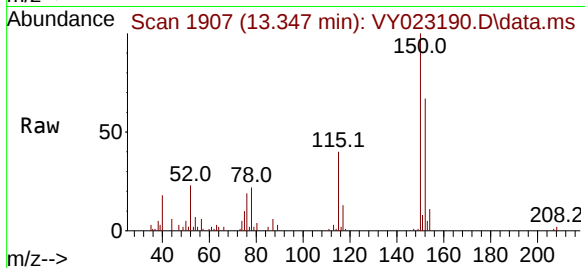
Tgt Ion:152 Resp: 7632

Ion Ratio Lower Upper

152 100

115 58.0 28.2 84.6

150 159.1 0.0 348.0



#76

1,2,3-Trichloropropane

Concen: 70.326 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. -0.140 min

Lab File: VY023190.D

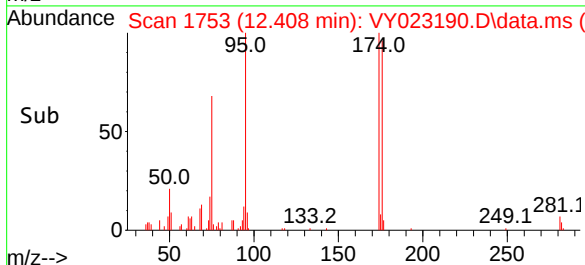
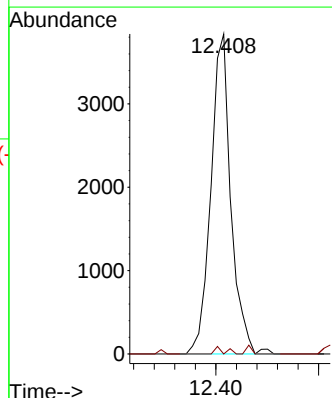
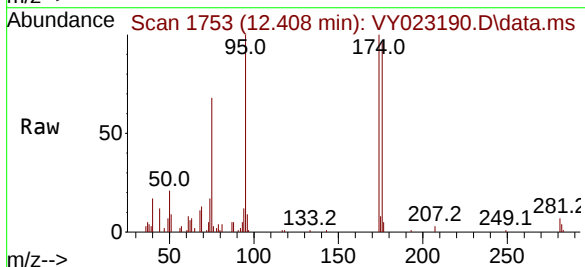
Acq: 22 Aug 2025 14:03

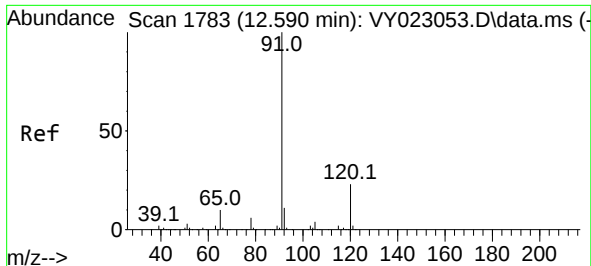
Tgt Ion: 75 Resp: 5180

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#

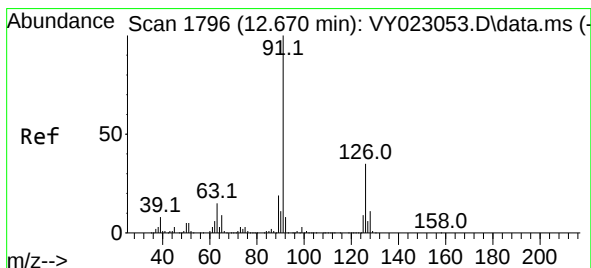
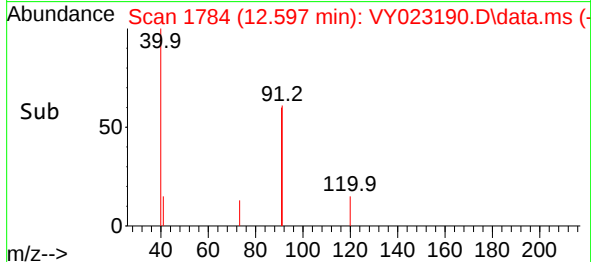
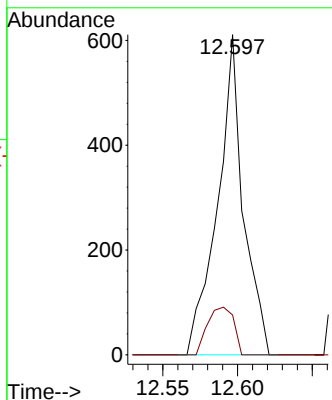
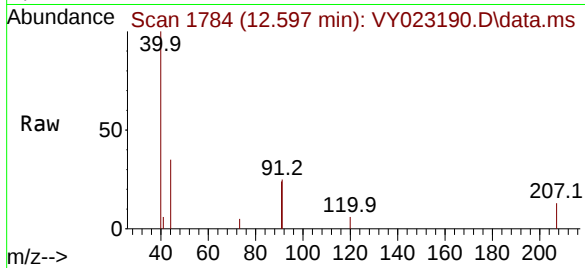




#78
n-propylbenzene
Concen: 1.140 ug/l
RT: 12.597 min Scan# 1783
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

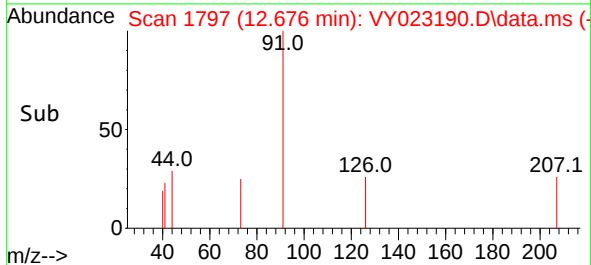
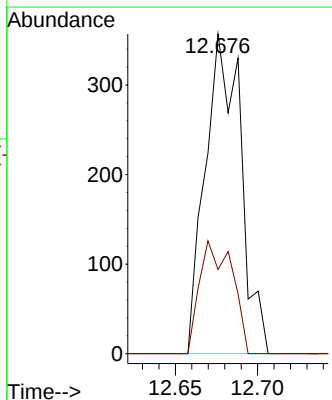
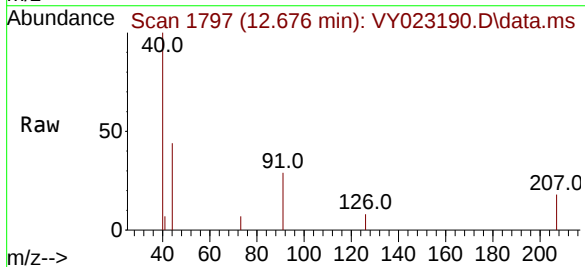
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

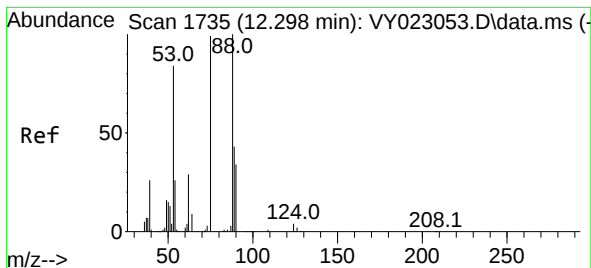
Tgt Ion: 91 Resp: 731
Ion Ratio Lower Upper
91 100
120 15.0 11.5 34.5



#79
2-Chlorotoluene
Concen: 1.456 ug/l
RT: 12.676 min Scan# 1797
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion: 91 Resp: 535
Ion Ratio Lower Upper
91 100
126 32.3 17.4 52.3

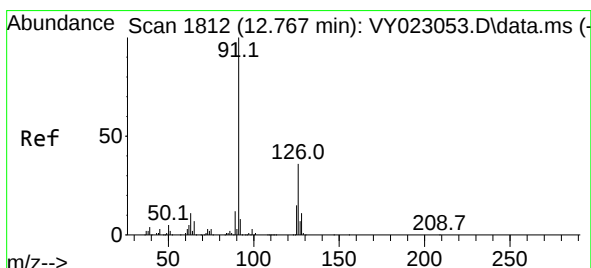
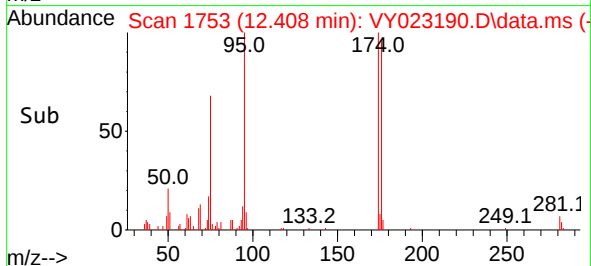
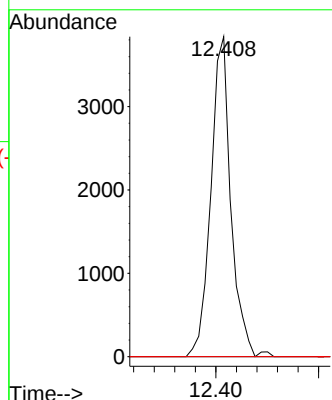
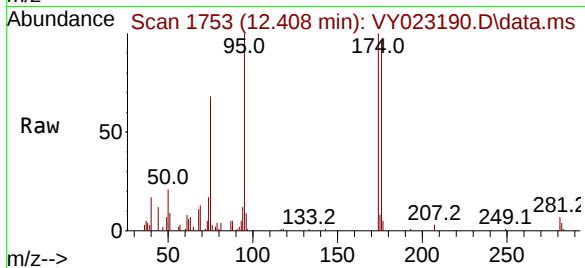




#81
 trans-1,4-Dichloro-2-butene
 Concen: 170.237 ug/l
 RT: 12.408 min Scan# 11
 Delta R.T. 0.110 min
 Lab File: VY023190.D
 Acq: 22 Aug 2025 14:03

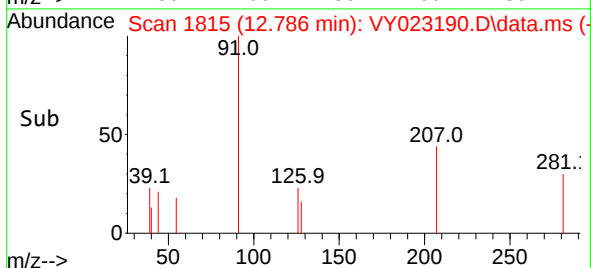
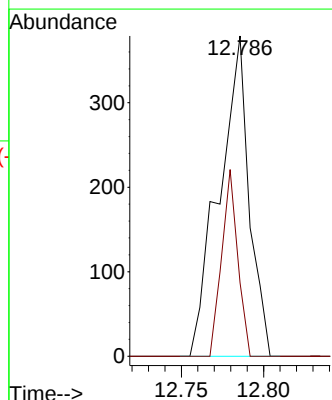
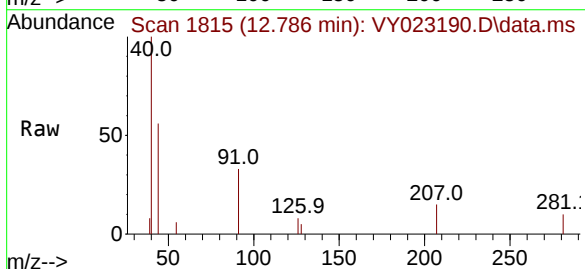
Instrument :
 MSVOA_Y
 ClientSampleId :
 EO-03-08202025

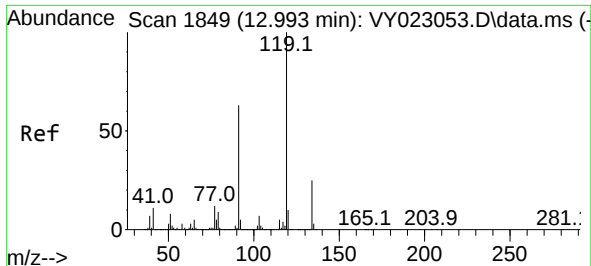
Tgt Ion: 75 Resp: 5180
 Ion Ratio Lower Upper
 75 100
 53 0.0 70.8 106.2#
 89 0.0 38.1 57.1#



#82
 4-Chlorotoluene
 Concen: 1.265 ug/l
 RT: 12.786 min Scan# 1815
 Delta R.T. 0.018 min
 Lab File: VY023190.D
 Acq: 22 Aug 2025 14:03

Tgt Ion: 91 Resp: 482
 Ion Ratio Lower Upper
 91 100
 126 30.9 17.3 52.0

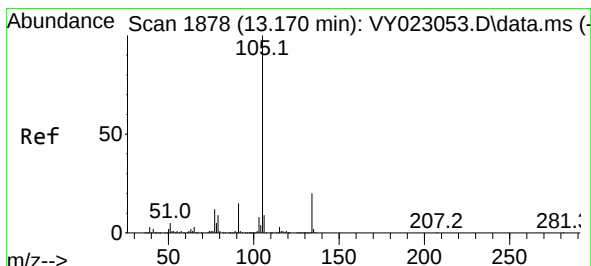
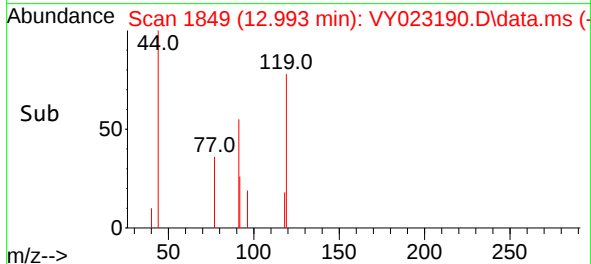
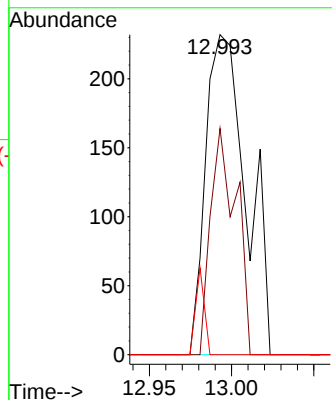
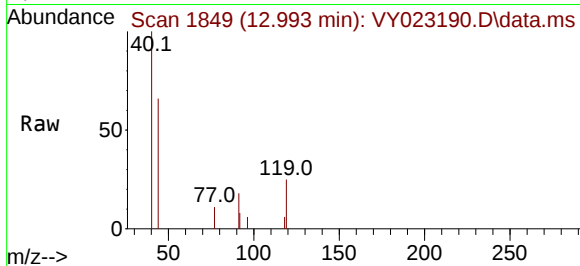




#83
tert-Butylbenzene
Concen: 1.015 ug/l
RT: 12.993 min Scan# 1849
Delta R.T. 0.000 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

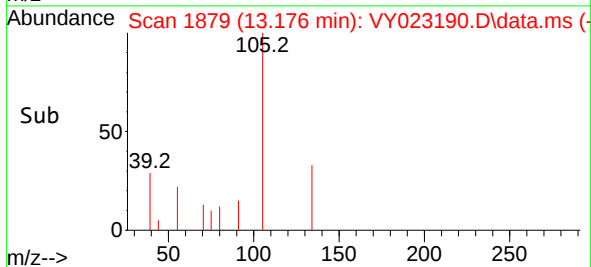
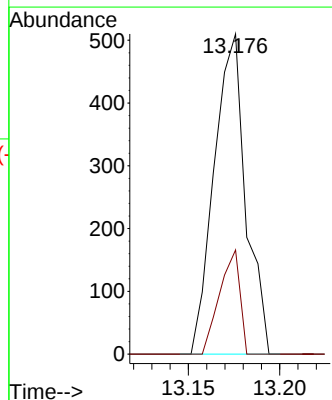
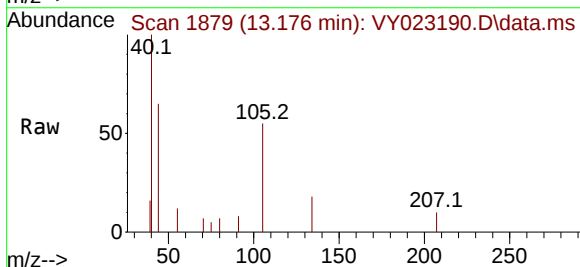
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

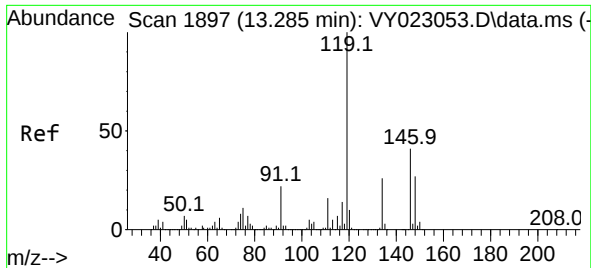
Tgt Ion:119 Resp: 399
Ion Ratio Lower Upper
119 100
91 44.9 31.6 94.8
134 5.8 12.9 38.7#



#85
sec-Butylbenzene
Concen: 1.061 ug/l
RT: 13.176 min Scan# 1879
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion:105 Resp: 613
Ion Ratio Lower Upper
105 100
134 20.9 10.2 30.4

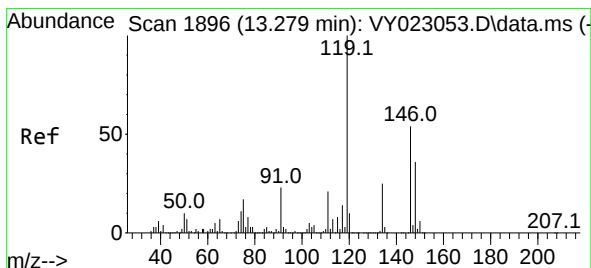
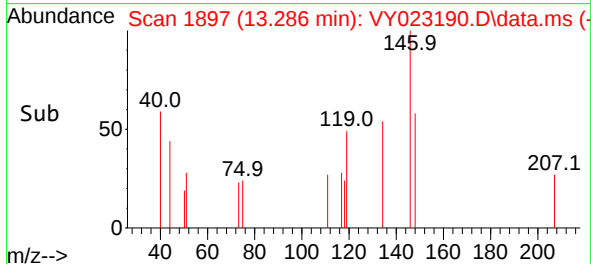
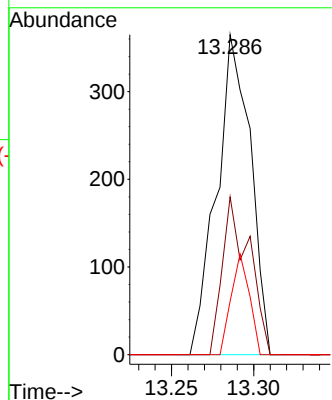
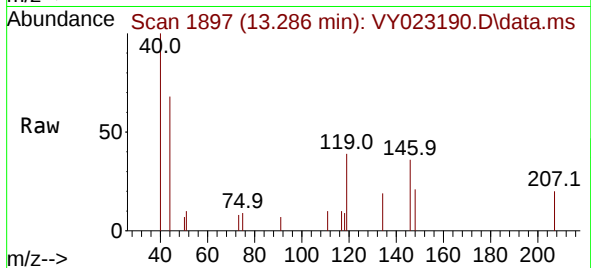




#86
p-Isopropyltoluene
Concen: 1.089 ug/l
RT: 13.286 min Scan# 1897
Delta R.T. 0.000 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

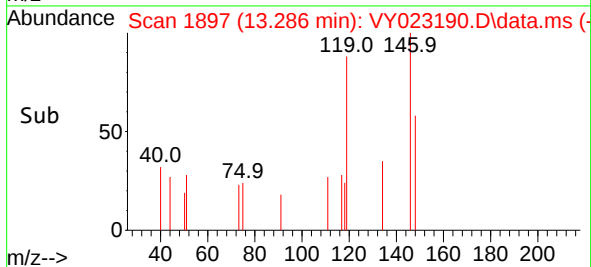
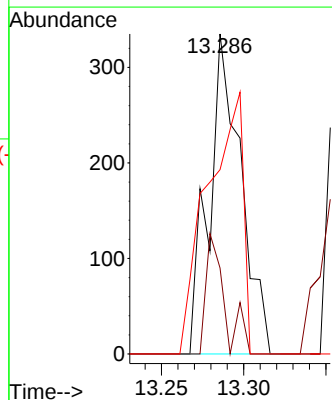
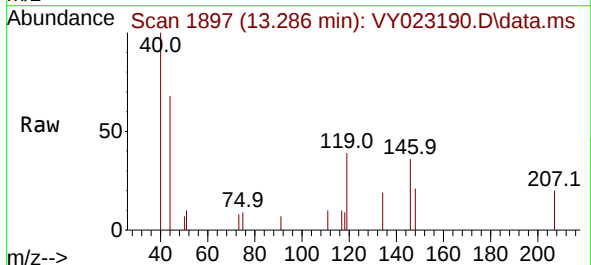
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

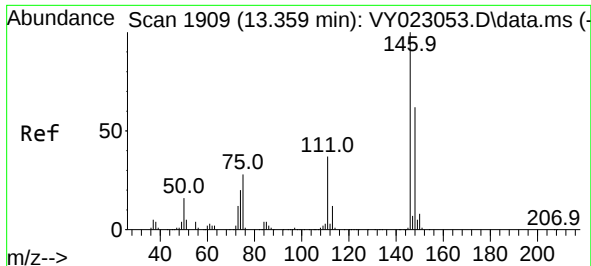
Tgt Ion:	119	Resp:	522
Ion	Ratio	Lower	Upper
119	100		
134	38.9	13.2	39.6
91	16.9	11.3	33.8



#87
1,3-Dichlorobenzene
Concen: 1.791 ug/l
RT: 13.286 min Scan# 1897
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion:	146	Resp:	454
Ion	Ratio	Lower	Upper
146	100		
111	21.8	19.6	58.7
148	91.0	32.5	97.5

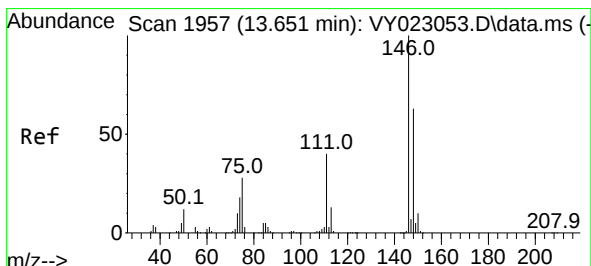
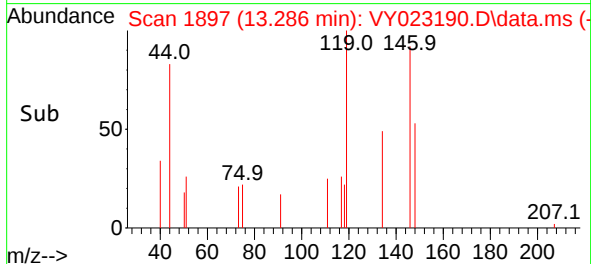
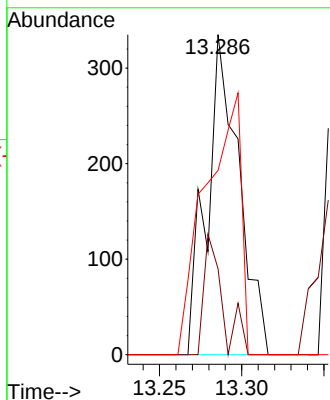
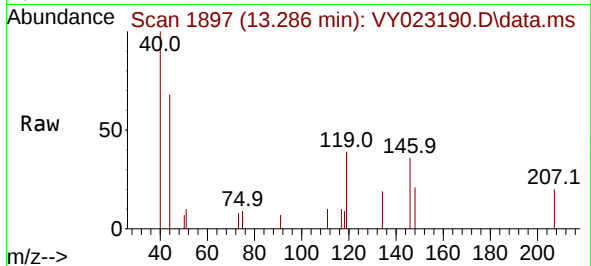




#88
1,4-Dichlorobenzene
Concen: 1.806 ug/l
RT: 13.286 min Scan# 11
Delta R.T. -0.073 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

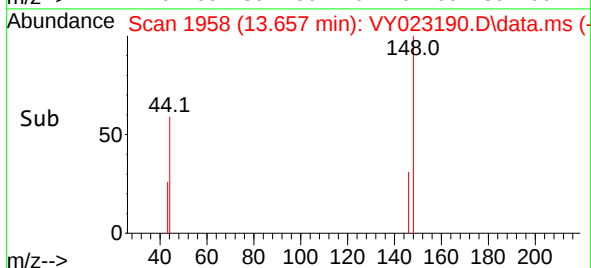
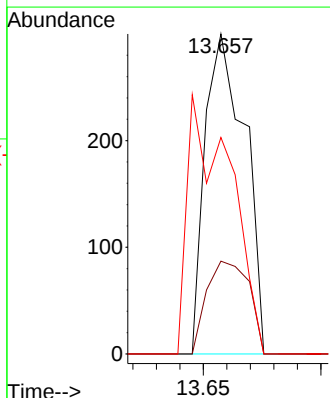
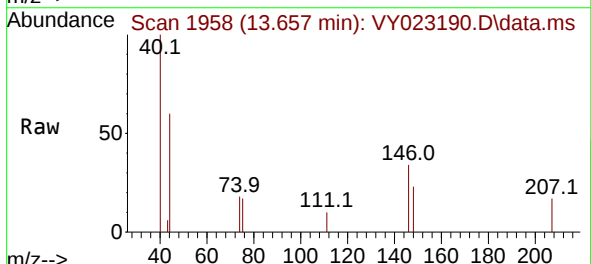
Instrument :
MSVOA_Y
ClientSampleId :
EO-03-08202025

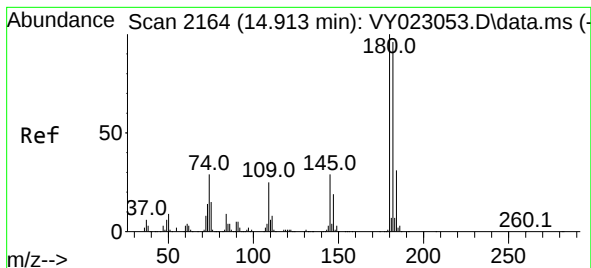
Tgt Ion:146 Resp: 454
Ion Ratio Lower Upper
146 100
111 21.8 19.1 57.1
148 91.0 31.6 94.7



#91
1,2-Dichlorobenzene
Concen: 1.584 ug/l
RT: 13.657 min Scan# 1958
Delta R.T. 0.006 min
Lab File: VY023190.D
Acq: 22 Aug 2025 14:03

Tgt Ion:146 Resp: 352
Ion Ratio Lower Upper
146 100
111 31.0 20.3 60.8
148 87.8 32.2 96.6





#93

1,2,4-Trichlorobenzene

Concen: 2.808 ug/l

RT: 14.919 min Scan# 2165

Delta R.T. 0.006 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

Instrument :

MSVOA_Y

ClientSampleId :

EO-03-08202025

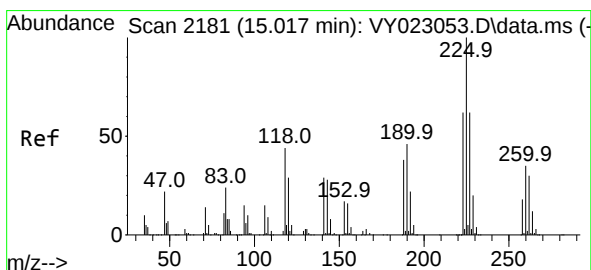
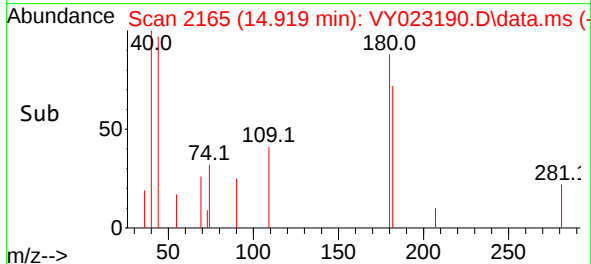
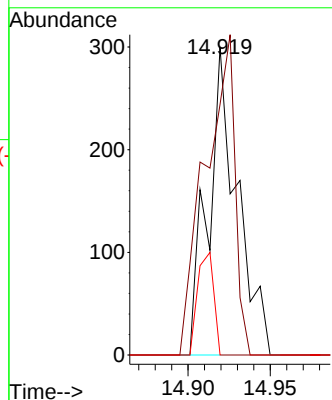
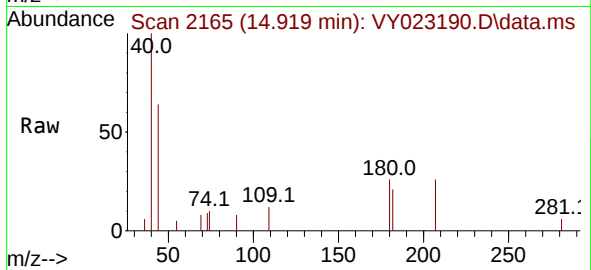
Tgt Ion:180 Resp: 369

Ion Ratio Lower Upper

180 100

182 106.2 46.8 140.4

145 18.4 14.4 43.4



#94

Hexachlorobutadiene

Concen: 1.800 ug/l

RT: 15.017 min Scan# 2181

Delta R.T. 0.000 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

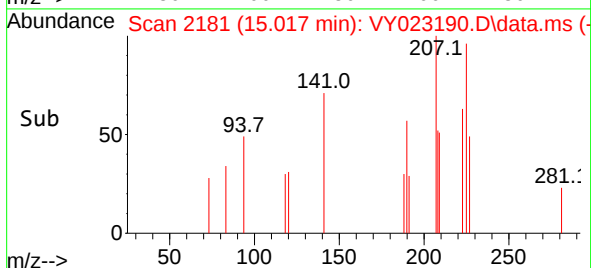
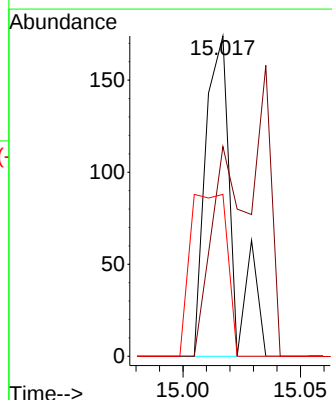
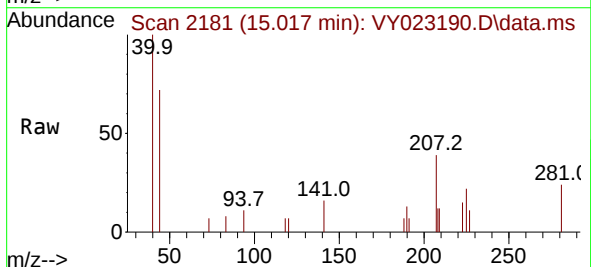
Tgt Ion:225 Resp: 139

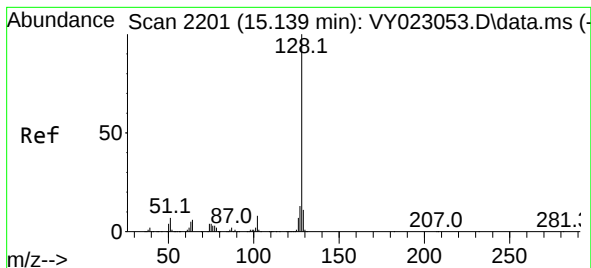
Ion Ratio Lower Upper

225 100

223 0.0 31.3 93.8#

227 69.1 31.5 94.5





#95

Naphthalene

Concen: 4.114 ug/l

RT: 15.139 min Scan# 21

Delta R.T. 0.000 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

Instrument :

MSVOA_Y

ClientSampleId :

EO-03-08202025

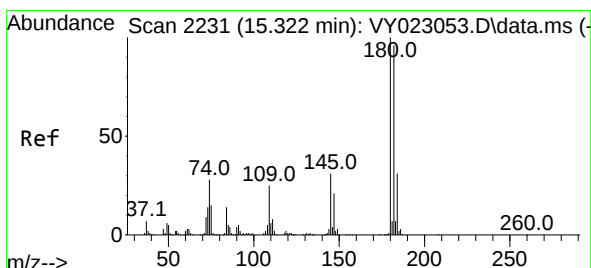
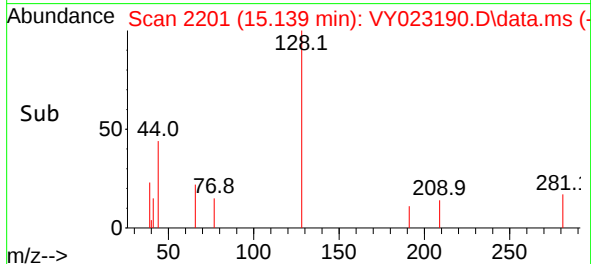
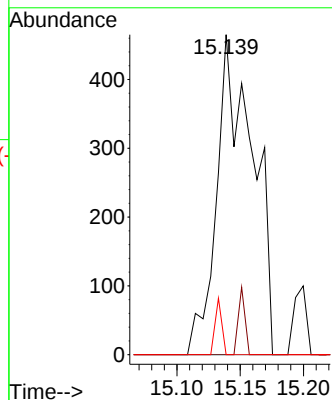
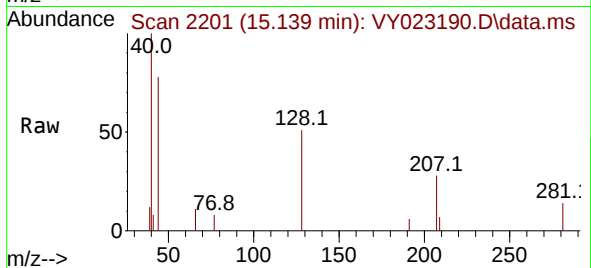
Tgt Ion:128 Resp: 922

Ion Ratio Lower Upper

128 100

127 3.9 10.4 15.6#

129 3.3 9.0 13.4#



#96

1,2,3-Trichlorobenzene

Concen: 3.876 ug/l

RT: 15.316 min Scan# 2230

Delta R.T. -0.006 min

Lab File: VY023190.D

Acq: 22 Aug 2025 14:03

Tgt Ion:180 Resp: 439

Ion Ratio Lower Upper

180 100

182 72.7 47.9 143.7

145 20.7 15.9 47.7

