

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN032425\
 Data File : VN086081.D
 Acq On : 24 Mar 2025 18:49
 Operator : JC\MD
 Sample : Q1619-12
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 TP-4

Quant Time: Mar 25 01:29:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N031825W.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 19 03:20:56 2025
 Response via : Initial Calibration

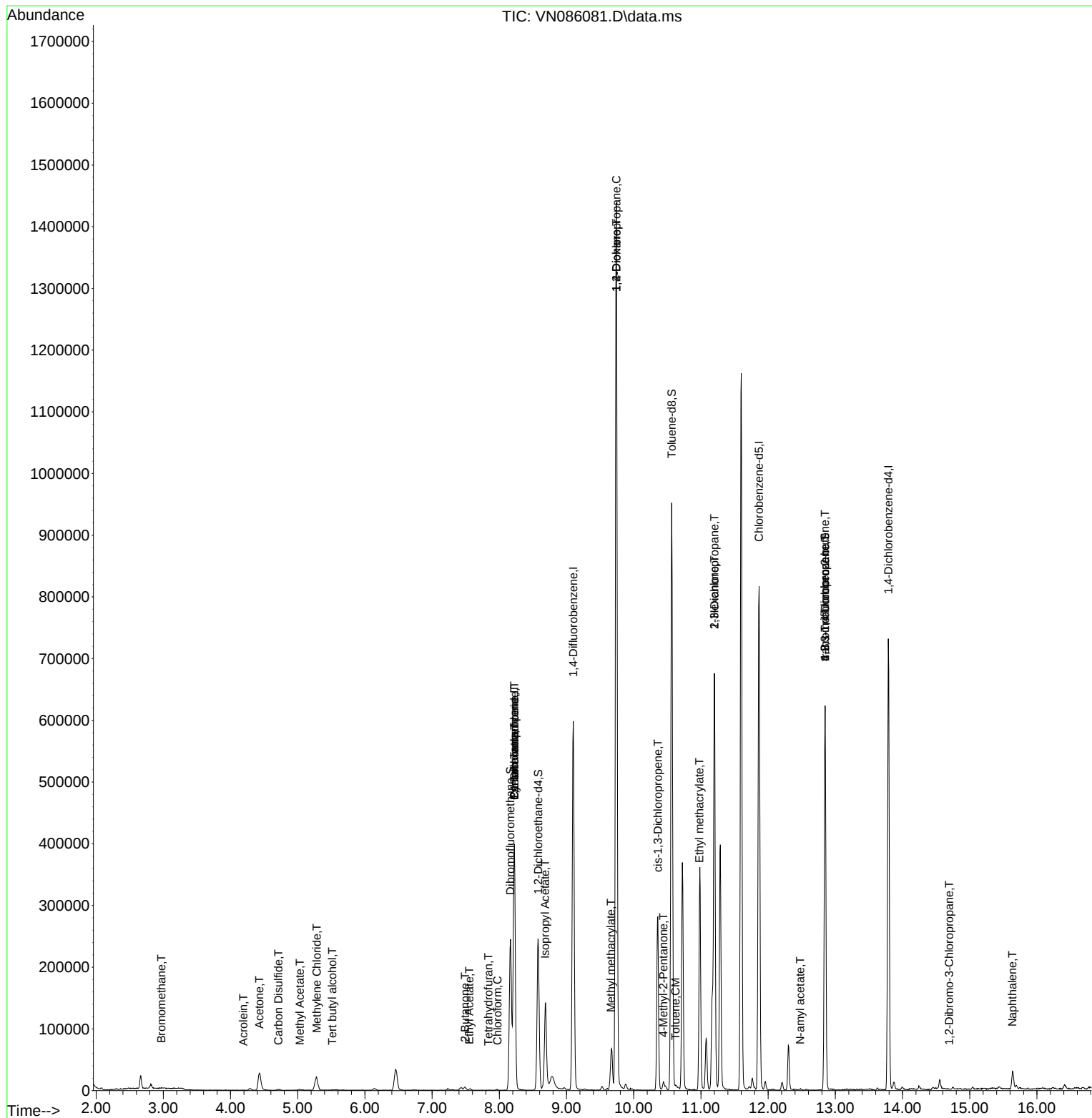
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

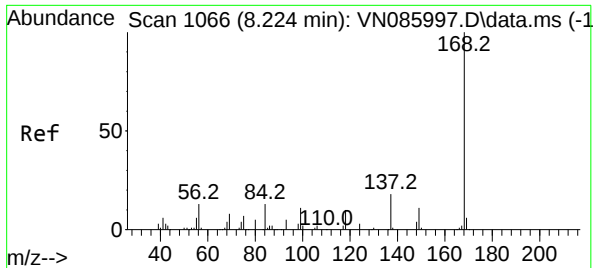
Internal Standards						
1) Pentafluorobenzene	8.224	168	294445	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.100	114	538010	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.865	117	503369	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.788	152	211240	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.577	65	202271	50.167	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 100.340%			
35) Dibromofluoromethane	8.165	113	177307	47.216	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 94.440%			
50) Toluene-d8	10.565	98	663293	48.668	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 97.340%			
62) 4-Bromofluorobenzene	12.847	95	220176	45.299	ug/l	0.00
Spiked Amount 50.000	Range 77 - 121		Recovery = 90.600%			
Target Compounds						Qvalue
5) Bromomethane	2.971	94	545	0.229	ug/l #	75
11) Tert butyl alcohol	5.512	59	471	0.825	ug/l #	73
13) Acrolein	4.189	56	355	0.583	ug/l #	60
16) Acetone	4.430	43	55174	44.791	ug/l	91
17) Carbon Disulfide	4.712	76	2062	0.208	ug/l #	74
18) Methyl Acetate	5.030	43	1639	0.538	ug/l	89
20) Methylene Chloride	5.283	84	17151	4.759	ug/l	96
25) 2-Butanone	7.489	43	8668	4.877	ug/l	92
29) Tetrahydrofuran	7.836	42	295	0.269	ug/l #	38
30) Chloroform	7.971	83	1483	0.228	ug/l	94
31) Cyclohexane	8.224	56	5742	1.143	ug/l #	1
36) 1,1-Dichloropropene	8.224	75	22709	4.593	ug/l #	49
37) Ethyl Acetate	7.553	43	4169	0.999	ug/l #	79
38) Carbon Tetrachloride	8.224	117	30034	4.620	ug/l #	18
43) Isopropyl Acetate	8.683	43	160363	17.740	ug/l #	84
45) 1,2-Dichloropropane	9.741	63	1923	0.545	ug/l #	44
48) Methyl methacrylate	9.659	41	4358	1.461	ug/l #	33
49) 1,4-Dioxane	9.741	88	237	3.361	ug/l #	1
51) 4-Methyl-2-Pentanone	10.441	43	13513	3.390	ug/l #	68
52) Toluene	10.624	92	2263	0.238	ug/l	94
54) cis-1,3-Dichloropropene	10.359	75	54350	9.141	ug/l #	66
56) Ethyl methacrylate	10.977	69	1960	0.615	ug/l #	1
57) 1,3-Dichloropropane	11.200	76	7510	1.216	ug/l #	42
59) 2-Hexanone	11.200	43	75947	26.150	ug/l #	49
74) N-amyl acetate	12.476	43	2165	0.449	ug/l #	38
76) 1,2,3-Trichloropropane	12.847	75	111271	23.528	ug/l #	1
81) trans-1,4-Dichloro-2-b...	12.847	75	111271	62.205	ug/l #	16
92) 1,2-Dibromo-3-Chloropr...	14.694	75	235	0.241	ug/l #	2
95) Naphthalene	15.635	128	27845	2.653	ug/l	99

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

Instrument :
MSVOA_N
ClientSampleId :
TP-4

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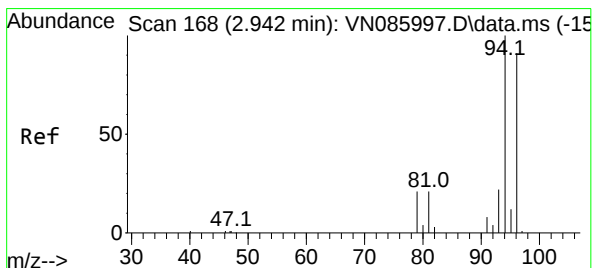
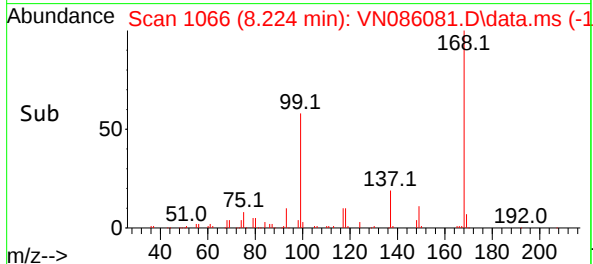
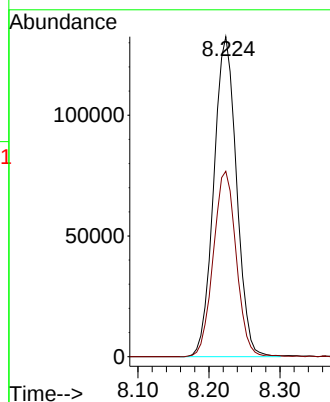
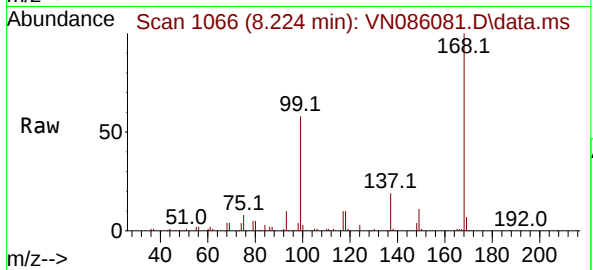




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.224 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

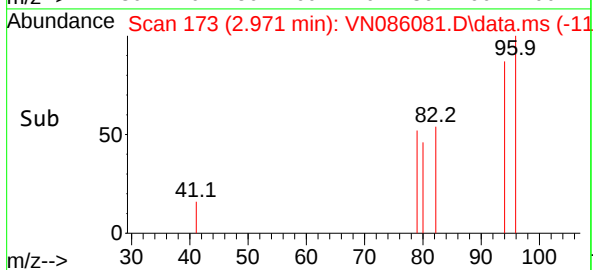
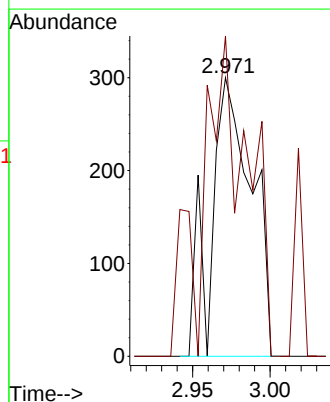
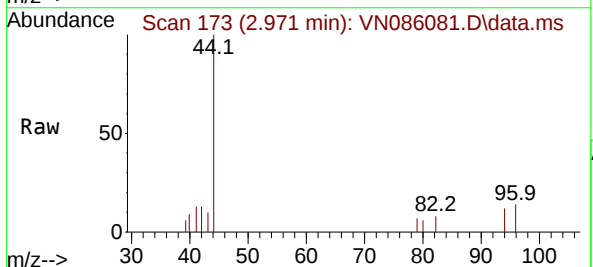
Instrument :
MSVOA_N
ClientSampleId :
TP-4

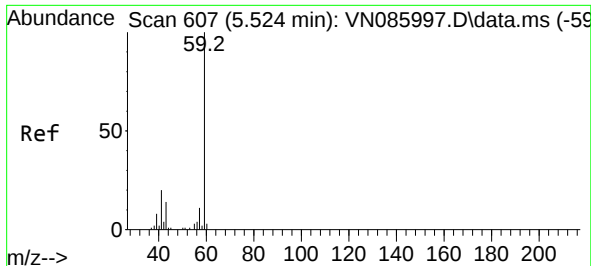
Tgt Ion:168 Resp: 294445
Ion Ratio Lower Upper
168 100
99 58.0 49.4 74.2



#5
Bromomethane
Concen: 0.229 ug/l
RT: 2.971 min Scan# 173
Delta R.T. 0.029 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 94 Resp: 545
Ion Ratio Lower Upper
94 100
96 115.0 72.8 109.2#





#11

Tert butyl alcohol

Concen: 0.825 ug/l

RT: 5.512 min Scan# 607

Delta R.T. -0.012 min

Lab File: VN086081.D

Acq: 24 Mar 2025 18:49

Instrument :

MSVOA_N

ClientSampleId :

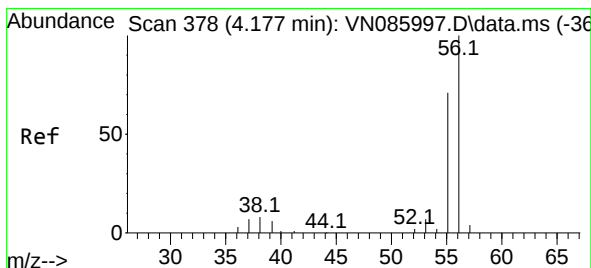
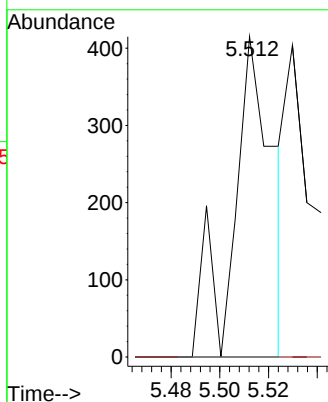
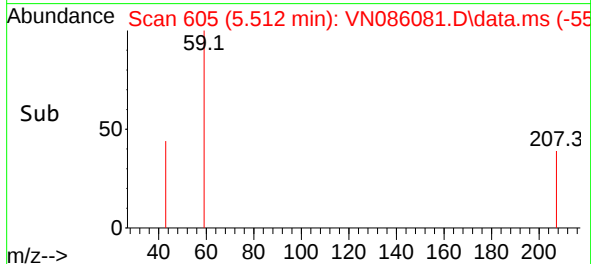
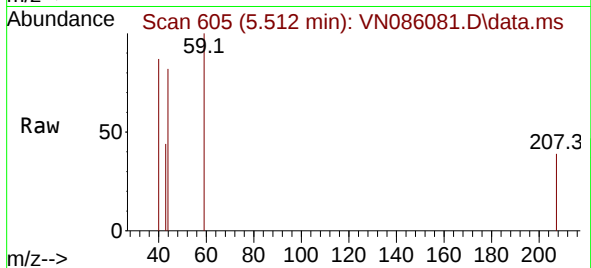
TP-4

Tgt Ion: 59 Resp: 471

Ion Ratio Lower Upper

59 100

57 0.0 7.9 11.9#



#13

Acrolein

Concen: 0.583 ug/l

RT: 4.189 min Scan# 380

Delta R.T. 0.012 min

Lab File: VN086081.D

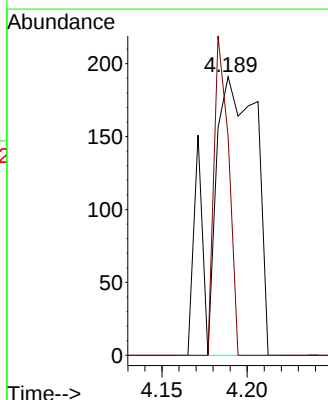
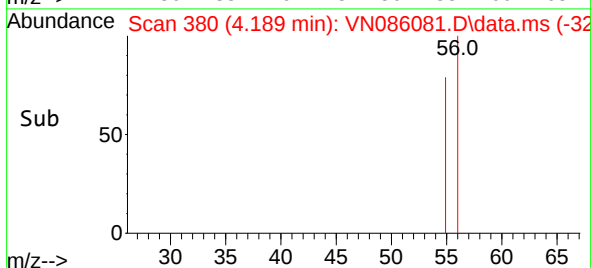
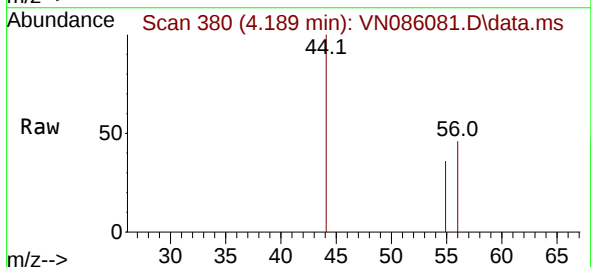
Acq: 24 Mar 2025 18:49

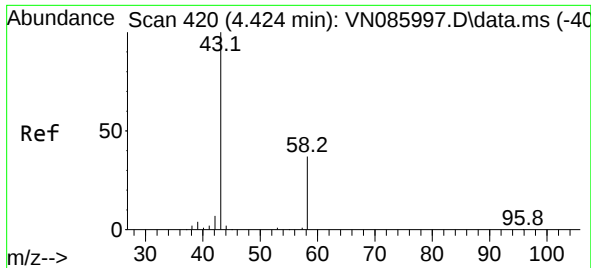
Tgt Ion: 56 Resp: 355

Ion Ratio Lower Upper

56 100

55 36.6 55.1 82.7#

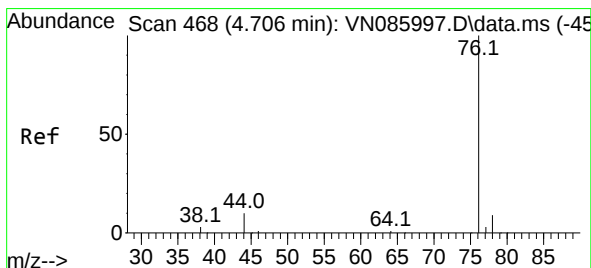
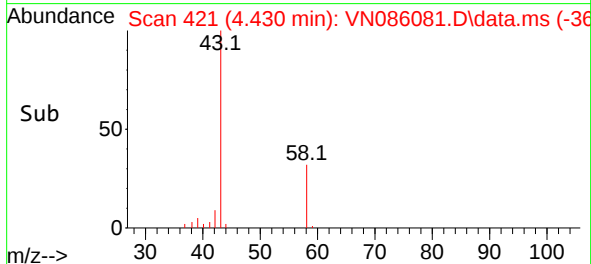
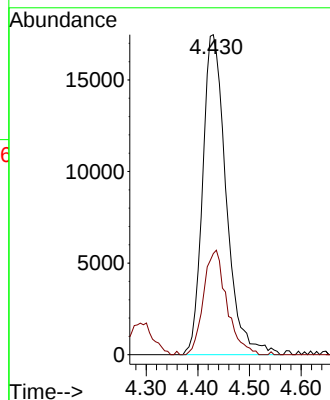
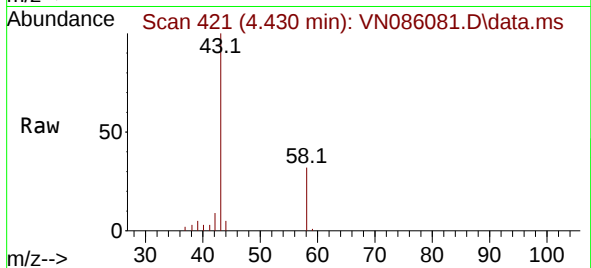




#16
Acetone
Concen: 44.791 ug/l
RT: 4.430 min Scan# 41
Delta R.T. 0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

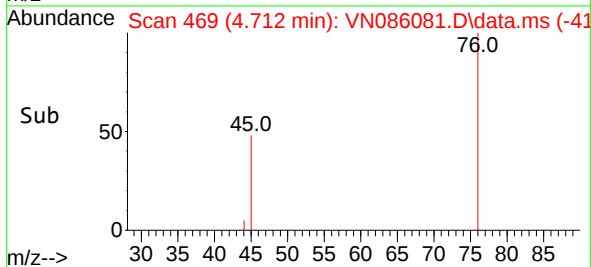
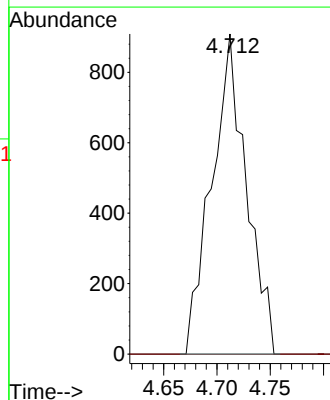
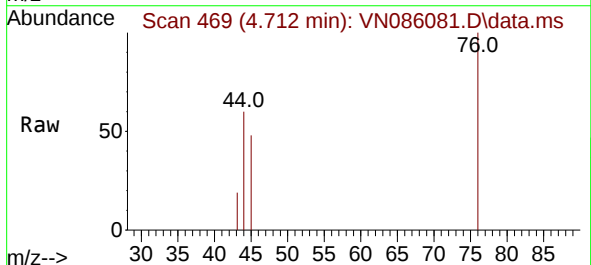
Instrument :
MSVOA_N
ClientSampleId :
TP-4

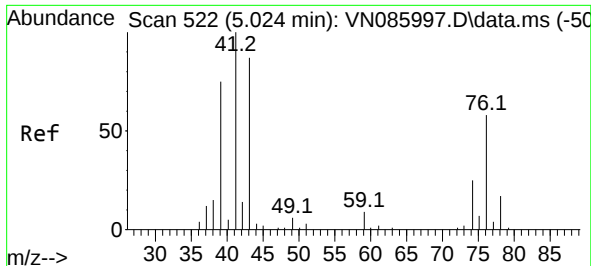
Tgt Ion: 43 Resp: 55174
Ion Ratio Lower Upper
43 100
58 31.6 29.4 44.2



#17
Carbon Disulfide
Concen: 0.208 ug/l
RT: 4.712 min Scan# 469
Delta R.T. 0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 76 Resp: 2062
Ion Ratio Lower Upper
76 100
78 0.0 7.4 11.2#

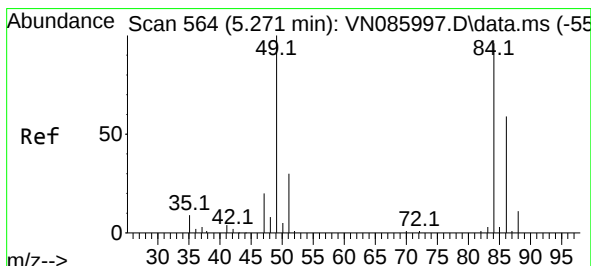
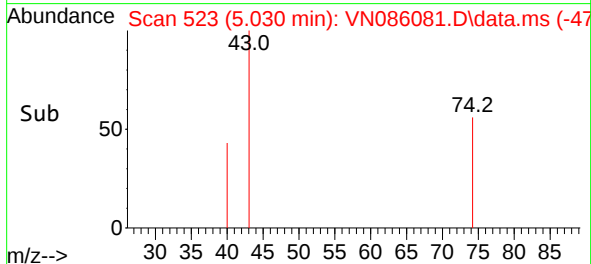
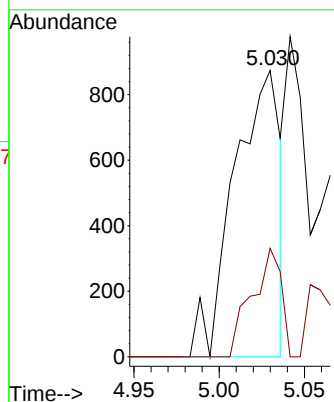
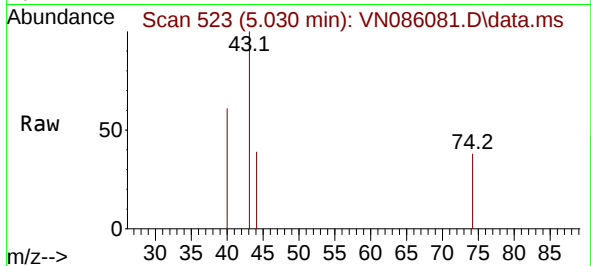




#18
Methyl Acetate
Concen: 0.538 ug/l
RT: 5.030 min Scan# 51
Delta R.T. 0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

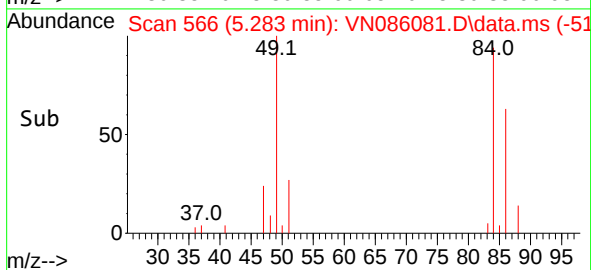
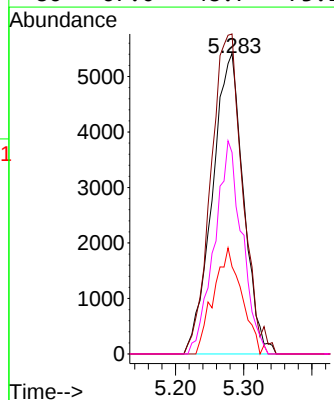
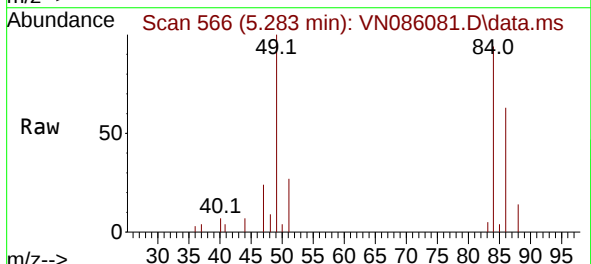
Instrument :
MSVOA_N
ClientSampleId :
TP-4

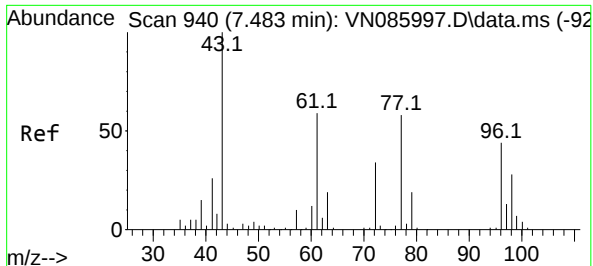
Tgt Ion: 43 Resp: 1639
Ion Ratio Lower Upper
43 100
74 24.1 23.9 35.9



#20
Methylene Chloride
Concen: 4.759 ug/l
RT: 5.283 min Scan# 566
Delta R.T. 0.012 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 84 Resp: 17151
Ion Ratio Lower Upper
84 100
49 106.5 83.3 124.9
51 29.1 24.8 37.2
86 67.0 48.7 73.1





#25

2-Butanone

Concen: 4.877 ug/l

RT: 7.489 min Scan# 940

Delta R.T. 0.006 min

Lab File: VN086081.D

Acq: 24 Mar 2025 18:49

Instrument :

MSVOA_N

ClientSampleId :

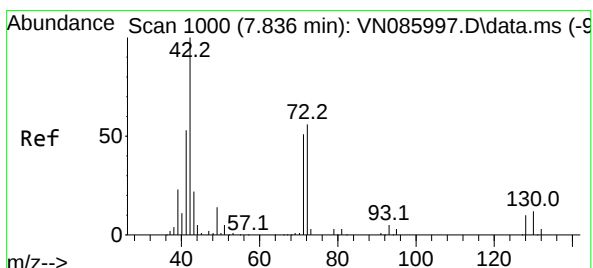
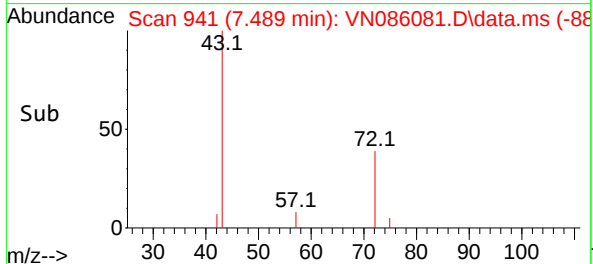
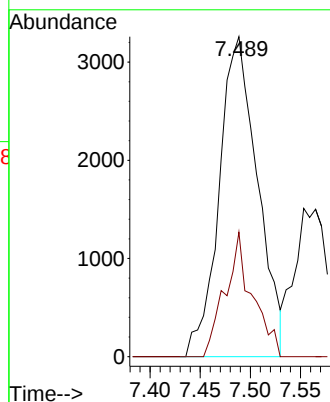
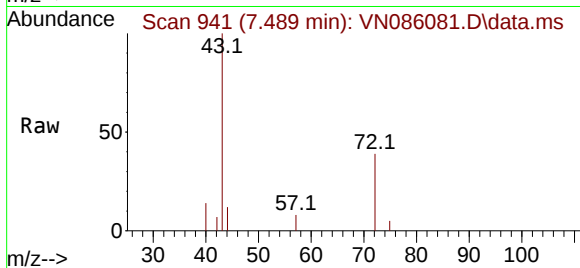
TP-4

Tgt Ion: 43 Resp: 8668

Ion Ratio Lower Upper

43 100

72 38.9 27.4 41.0



#29

Tetrahydrofuran

Concen: 0.269 ug/l

RT: 7.836 min Scan# 1000

Delta R.T. -0.000 min

Lab File: VN086081.D

Acq: 24 Mar 2025 18:49

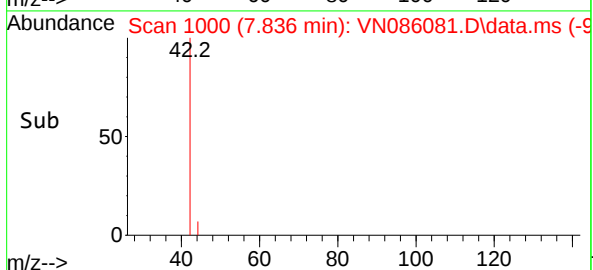
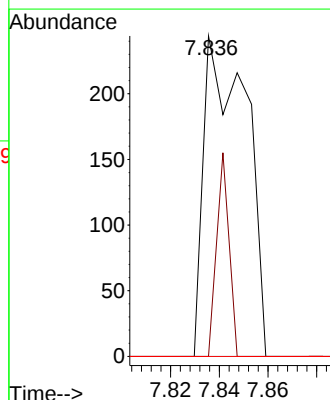
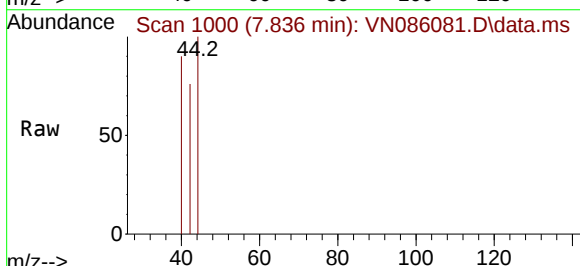
Tgt Ion: 42 Resp: 295

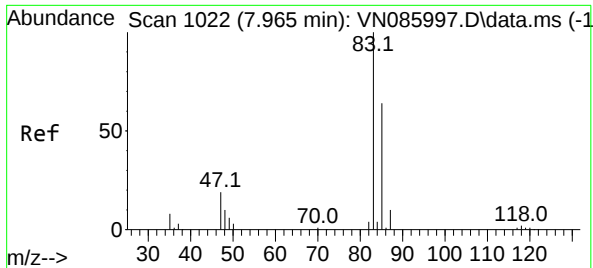
Ion Ratio Lower Upper

42 100

72 18.6 45.0 67.4#

71 0.0 41.9 62.9#

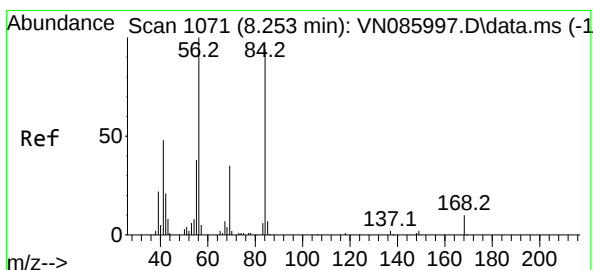
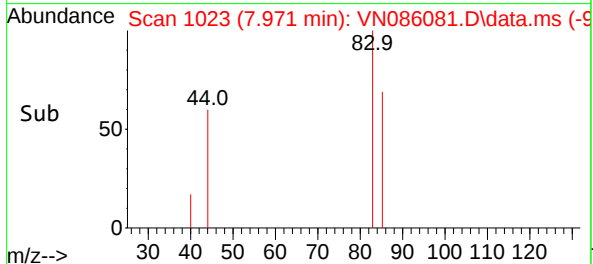
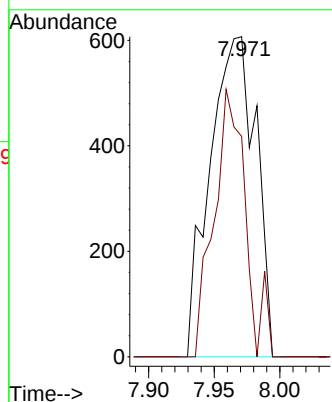
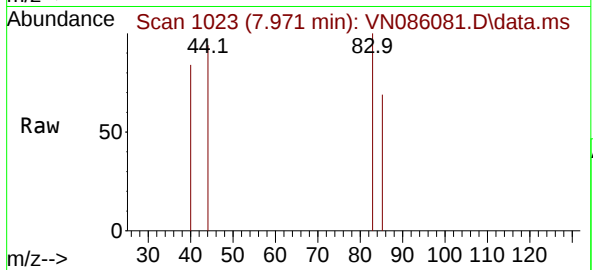




#30
Chloroform
Concen: 0.228 ug/l
RT: 7.971 min Scan# 1066
Delta R.T. 0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

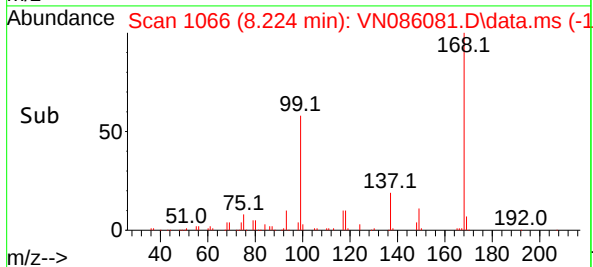
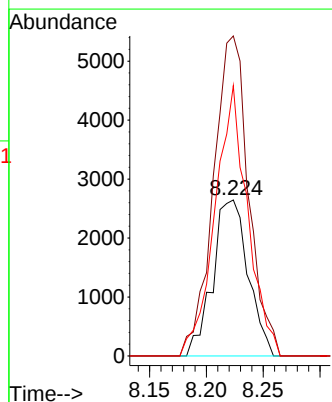
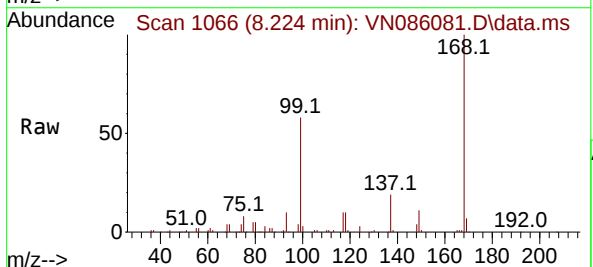
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MSVOA_N
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TP-4

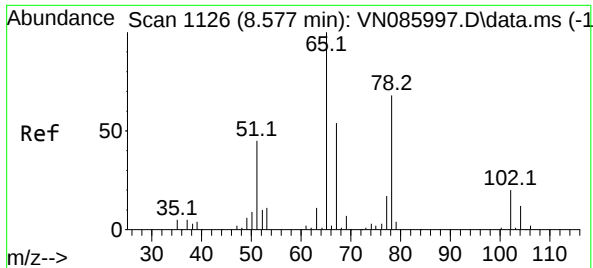
Tgt Ion: 83 Resp: 1483
Ion Ratio Lower Upper
83 100
85 68.9 51.5 77.3



#31
Cyclohexane
Concen: 1.143 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. -0.029 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 56 Resp: 5742
Ion Ratio Lower Upper
56 100
69 205.2 28.0 42.0#
84 173.3 75.0 112.6#

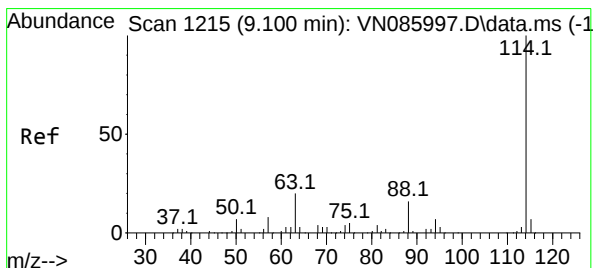
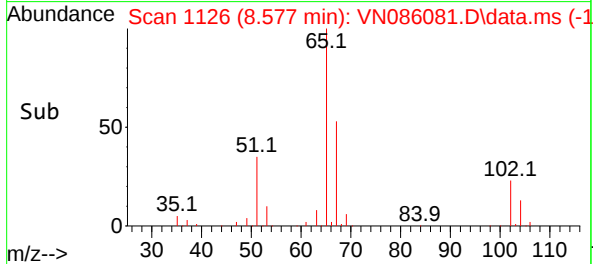
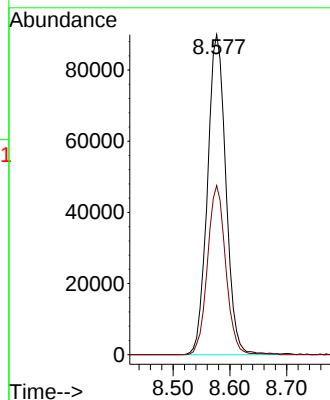
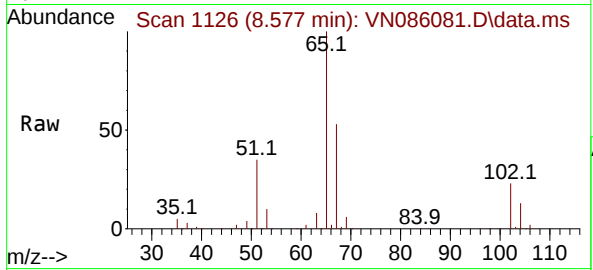




#33
 1,2-Dichloroethane-d4
 Concen: 50.167 ug/l
 RT: 8.577 min Scan# 1126
 Delta R.T. -0.000 min
 Lab File: VN086081.D
 Acq: 24 Mar 2025 18:49

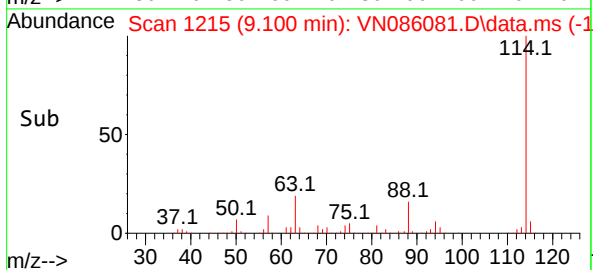
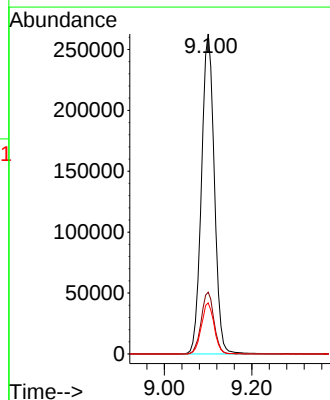
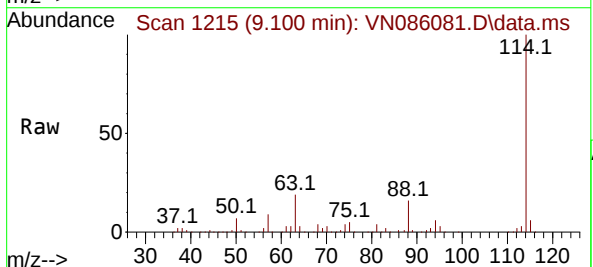
Instrument :
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 TP-4

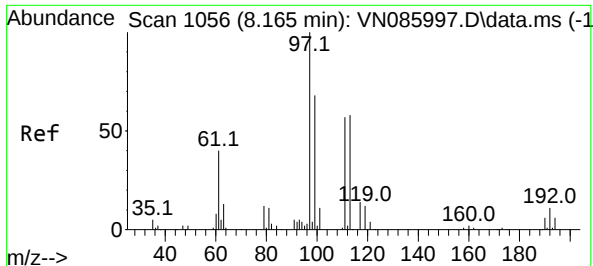
Tgt Ion: 65 Resp: 202271
 Ion Ratio Lower Upper
 65 100
 67 52.3 0.0 102.2



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 9.100 min Scan# 1215
 Delta R.T. -0.000 min
 Lab File: VN086081.D
 Acq: 24 Mar 2025 18:49

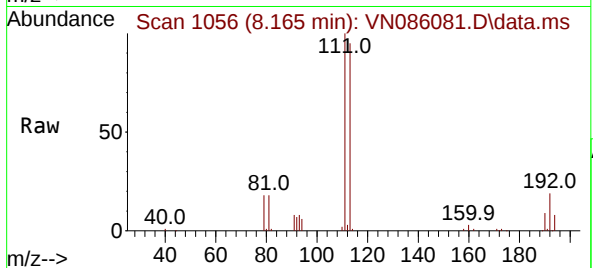
Tgt Ion: 114 Resp: 538010
 Ion Ratio Lower Upper
 114 100
 63 19.3 0.0 39.6
 88 16.0 0.0 32.6



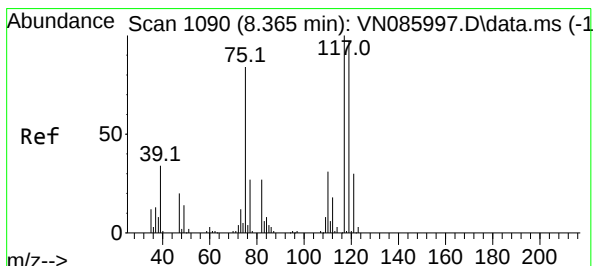
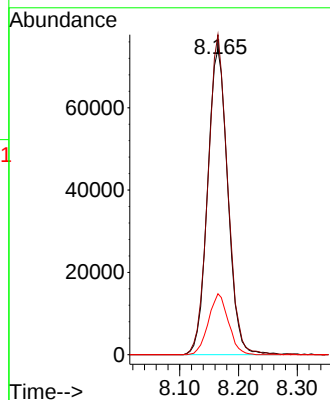
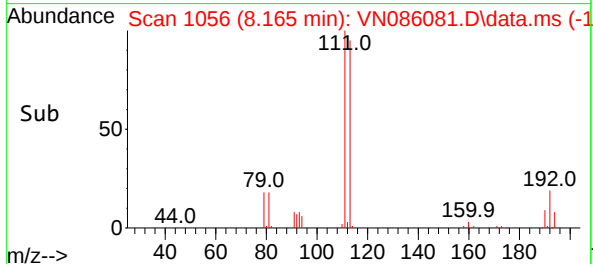


#35
Dibromofluoromethane
Concen: 47.216 ug/l
RT: 8.165 min Scan# 1056
Delta R.T. -0.000 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

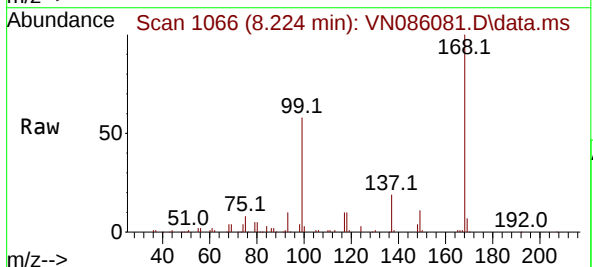
Instrument :
MSVOA_N
ClientSampleId :
TP-4



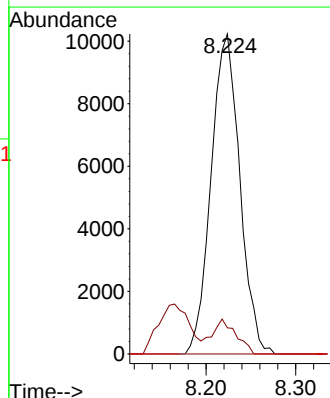
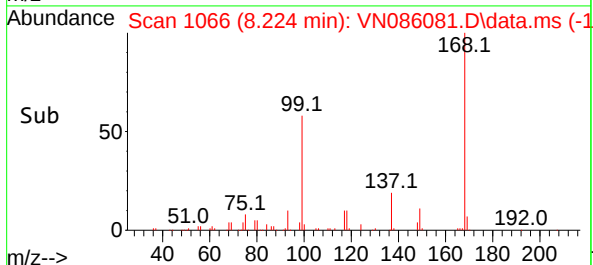
Tgt Ion:113 Resp: 177307
Ion Ratio Lower Upper
113 100
111 102.2 81.8 122.8
192 19.6 15.9 23.9

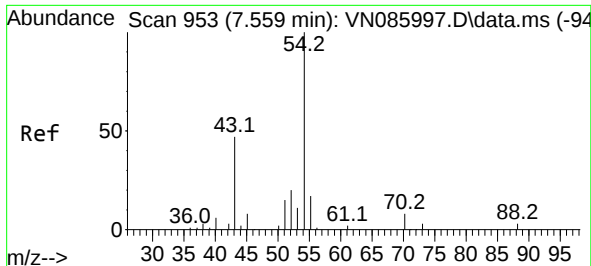


#36
1,1-Dichloropropene
Concen: 4.593 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. -0.141 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49



Tgt Ion: 75 Resp: 22709
Ion Ratio Lower Upper
75 100
110 9.1 17.8 53.3#
77 0.0 25.0 37.4#

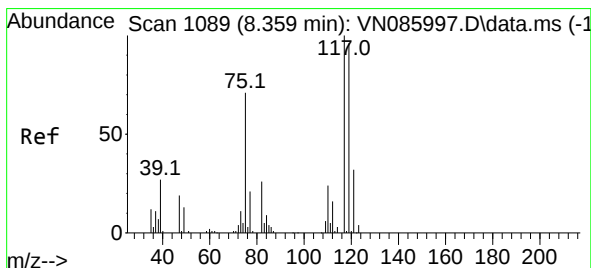
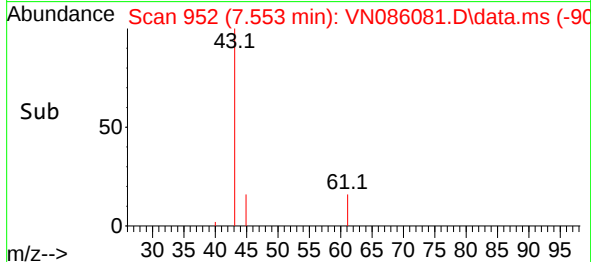
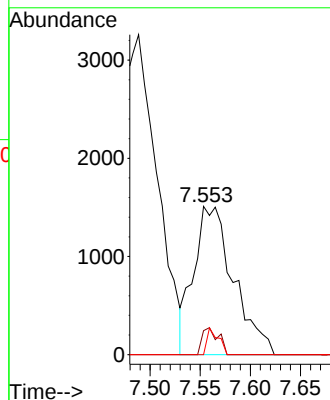
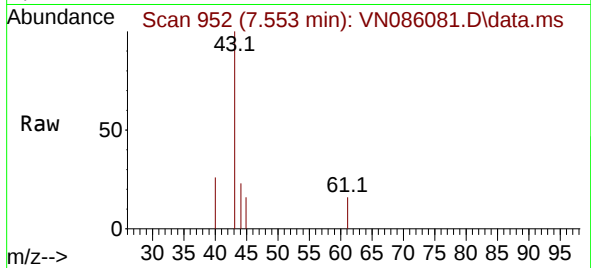




#37
Ethyl Acetate
Concen: 0.999 ug/l
RT: 7.553 min Scan# 91
Delta R.T. -0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

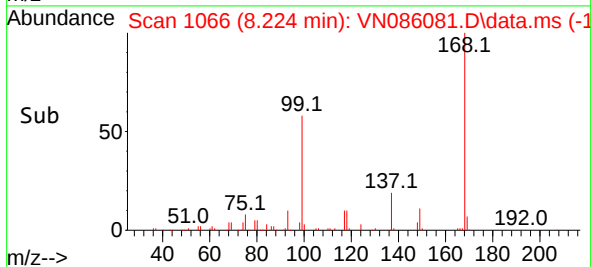
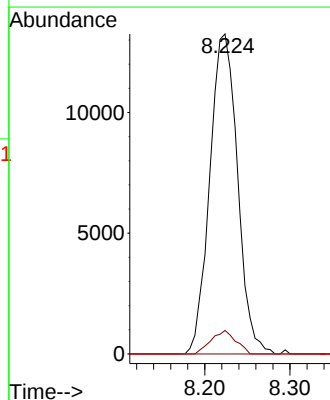
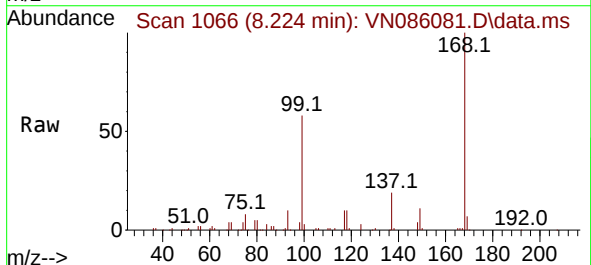
Instrument :
MSVOA_N
ClientSampleId :
TP-4

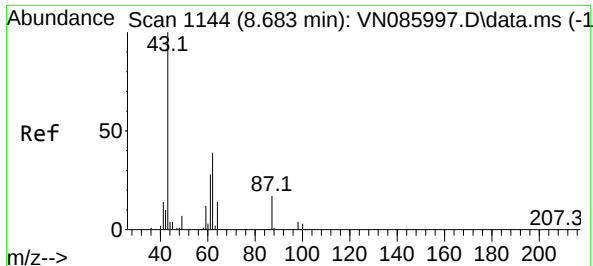
Tgt Ion: 43 Resp: 4169
Ion Ratio Lower Upper
43 100
61 7.5 13.0 19.4#
70 5.2 11.0 16.6#



#38
Carbon Tetrachloride
Concen: 4.620 ug/l
RT: 8.224 min Scan# 1066
Delta R.T. -0.135 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 117 Resp: 30034
Ion Ratio Lower Upper
117 100
119 7.4 77.0 115.4#
121 0.0 25.6 38.4#

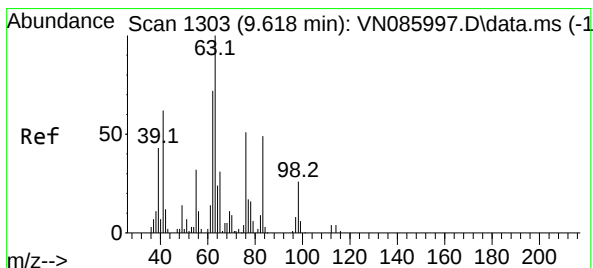
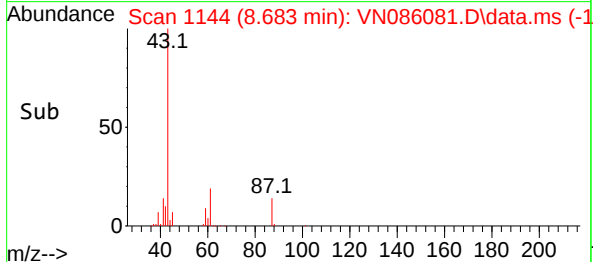
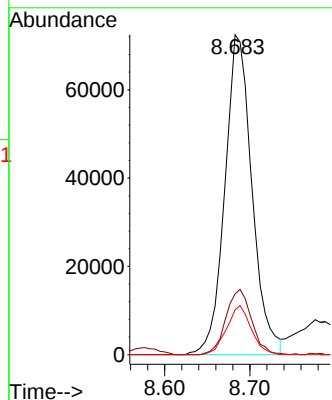
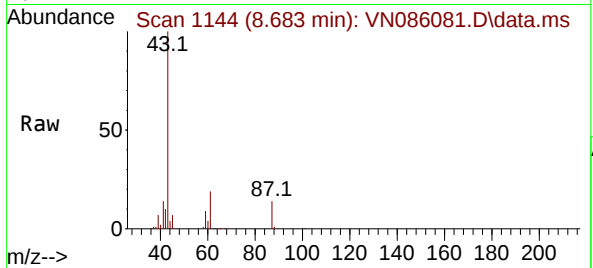




#43
Isopropyl Acetate
Concen: 17.740 ug/l
RT: 8.683 min Scan# 1144
Delta R.T. -0.000 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

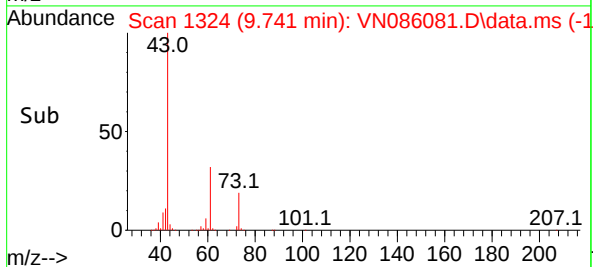
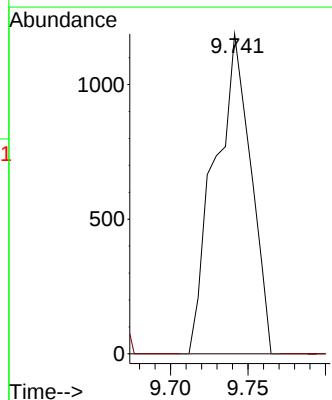
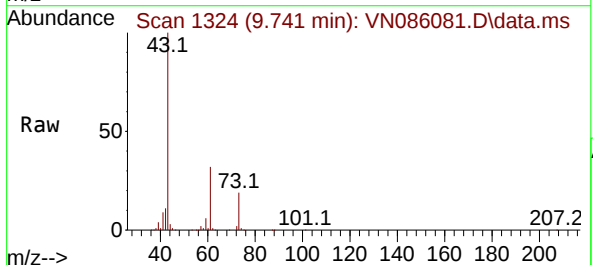
Instrument :
MSVOA_N
ClientSampleId :
TP-4

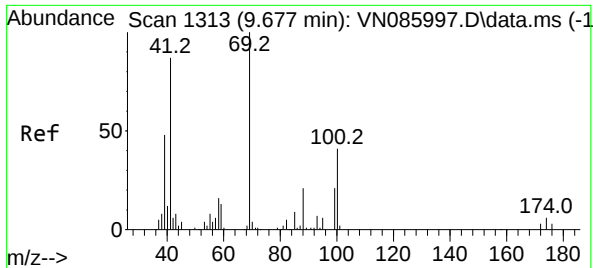
Tgt Ion: 43 Resp: 160363
Ion Ratio Lower Upper
43 100
61 19.2 25.0 37.6#
87 13.9 13.0 19.4



#45
1,2-Dichloropropane
Concen: 0.545 ug/l
RT: 9.741 min Scan# 1324
Delta R.T. 0.123 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 63 Resp: 1923
Ion Ratio Lower Upper
63 100
65 0.0 24.7 37.1#

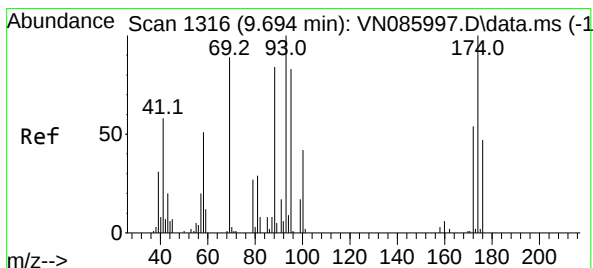
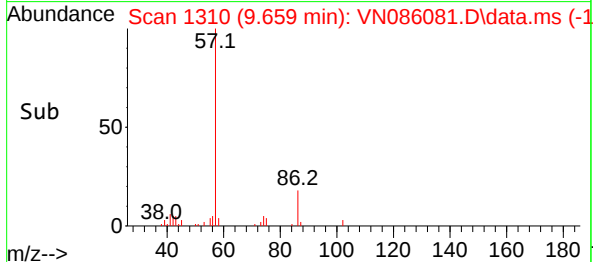
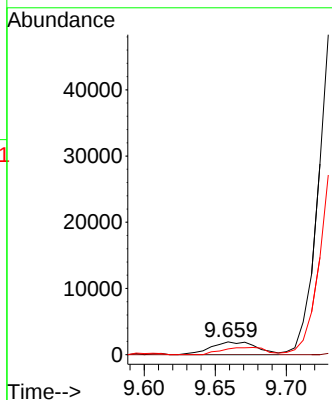
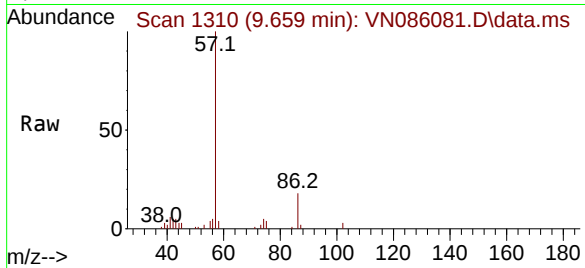




#48
Methyl methacrylate
Concen: 1.461 ug/l
RT: 9.659 min Scan# 11
Delta R.T. -0.018 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

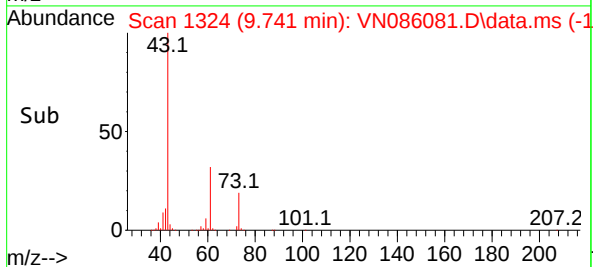
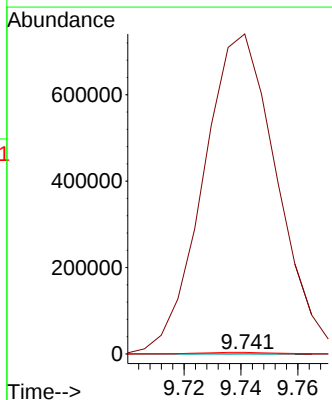
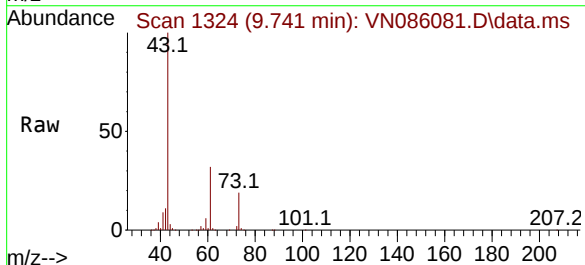
Instrument :
MSVOA_N
ClientSampleId :
TP-4

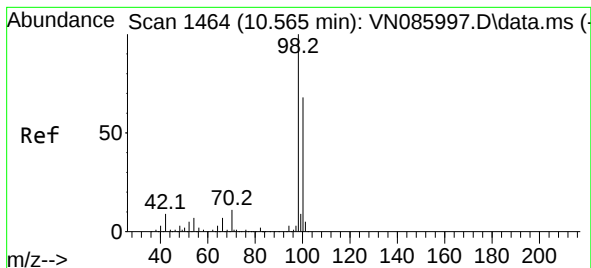
Tgt Ion: 41 Resp: 4358
Ion Ratio Lower Upper
41 100
69 0.0 83.1 124.7#
39 53.5 45.6 68.4



#49
1,4-Dioxane
Concen: 3.361 ug/l
RT: 9.741 min Scan# 1324
Delta R.T. 0.047 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 88 Resp: 237
Ion Ratio Lower Upper
88 100
43 568953.2 21.7 32.5#
58 2977.6 50.4 75.6#





#50

Toluene-d8

Concen: 48.668 ug/l

RT: 10.565 min Scan# 1464

Delta R.T. -0.000 min

Lab File: VN086081.D

Acq: 24 Mar 2025 18:49

Instrument :

MSVOA_N

ClientSampleId :

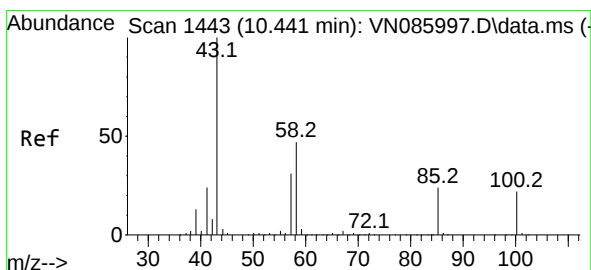
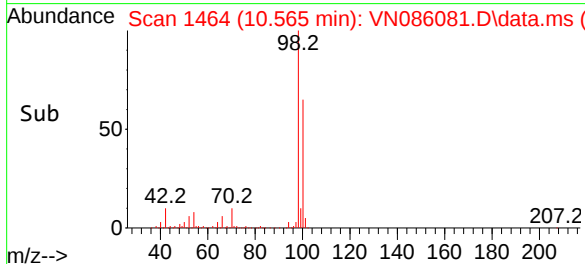
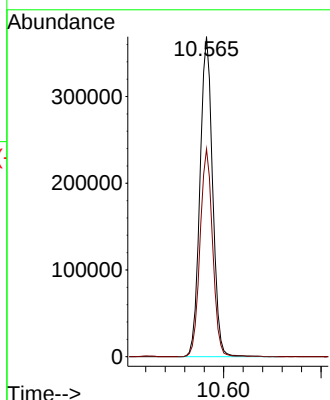
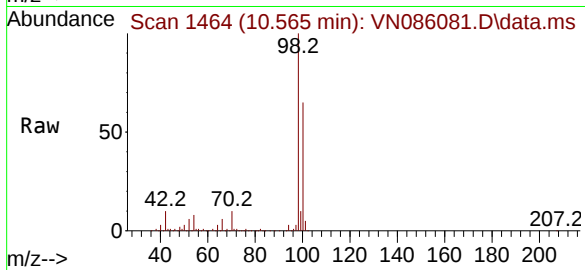
TP-4

Tgt Ion: 98 Resp: 663293

Ion Ratio Lower Upper

98 100

100 64.5 53.1 79.7



#51

4-Methyl-2-Pentanone

Concen: 3.390 ug/l

RT: 10.441 min Scan# 1443

Delta R.T. -0.000 min

Lab File: VN086081.D

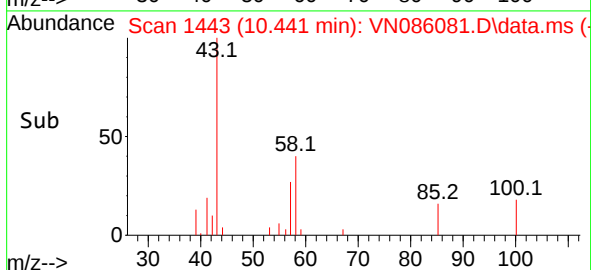
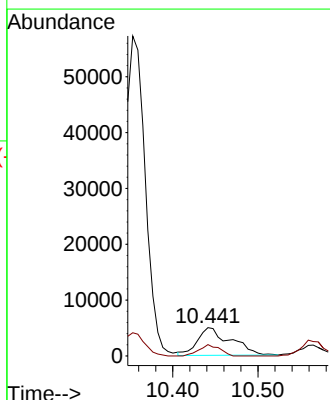
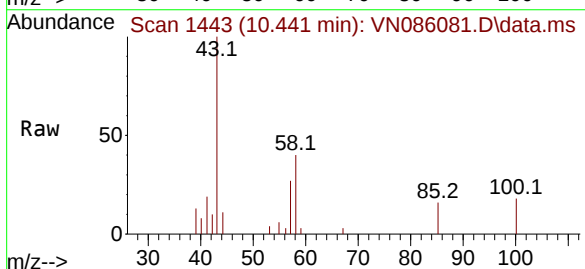
Acq: 24 Mar 2025 18:49

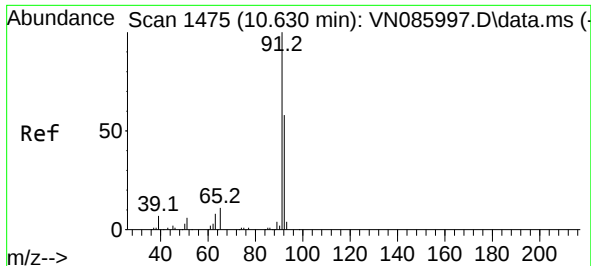
Tgt Ion: 43 Resp: 13513

Ion Ratio Lower Upper

43 100

58 25.4 37.4 56.0#

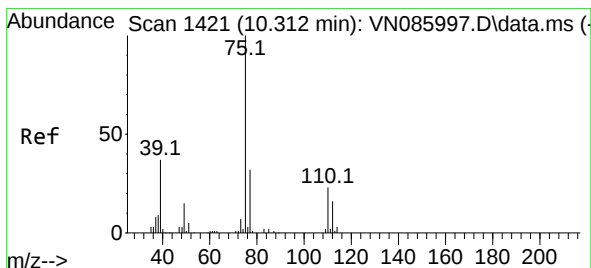
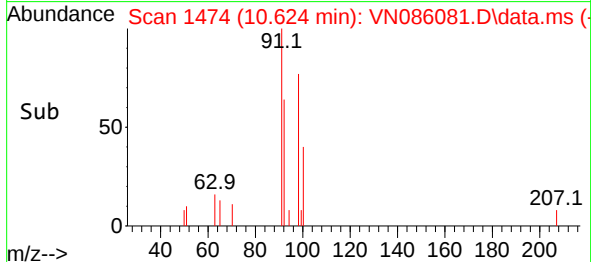
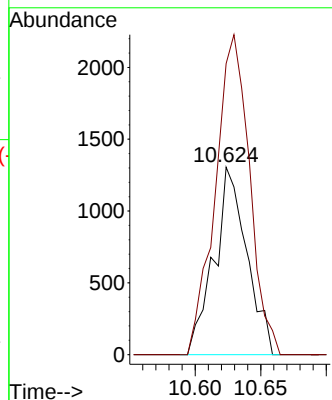
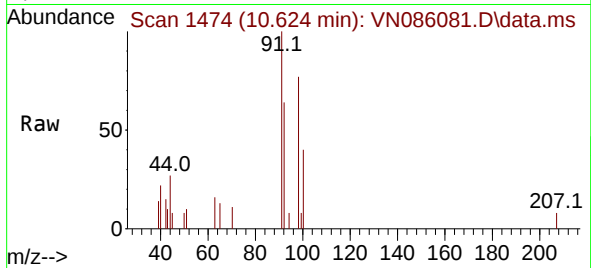




#52
Toluene
Concen: 0.238 ug/l
RT: 10.624 min Scan# 1475
Delta R.T. -0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

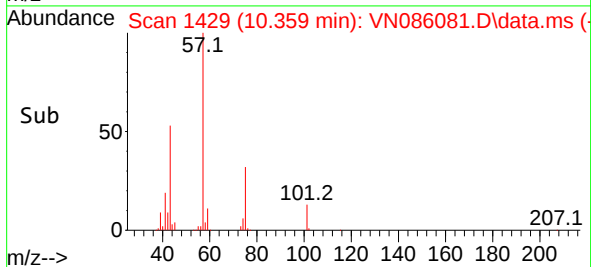
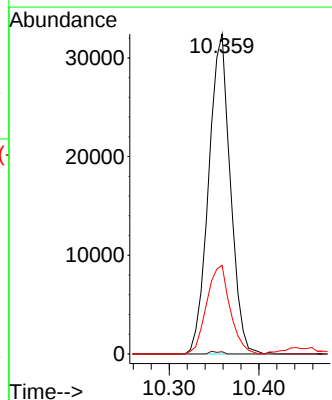
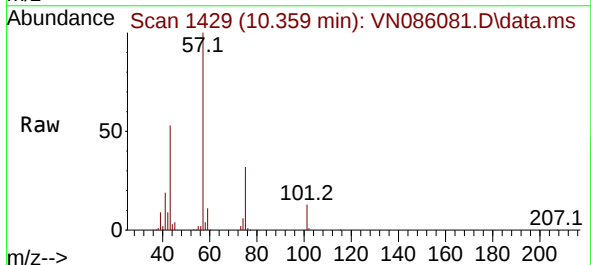
Instrument :
MSVOA_N
ClientSampleId :
TP-4

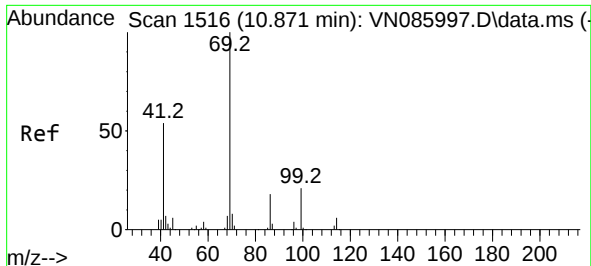
Tgt Ion: 92 Resp: 2263
Ion Ratio Lower Upper
92 100
91 178.8 136.2 204.4



#54
cis-1,3-Dichloropropene
Concen: 9.141 ug/l
RT: 10.359 min Scan# 1429
Delta R.T. 0.047 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 75 Resp: 54350
Ion Ratio Lower Upper
75 100
77 0.7 25.3 37.9#
39 27.7 29.6 44.4#

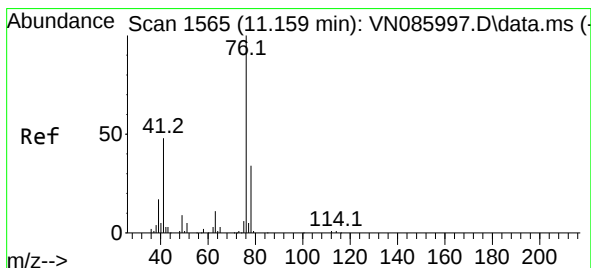
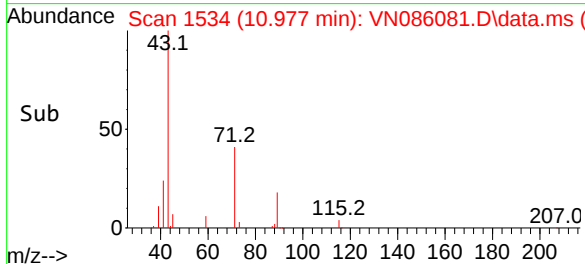
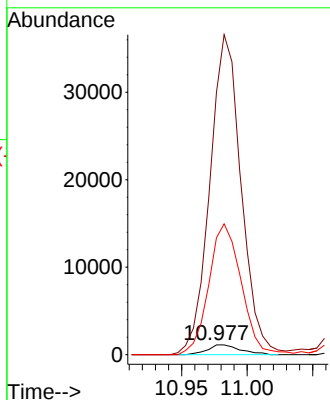
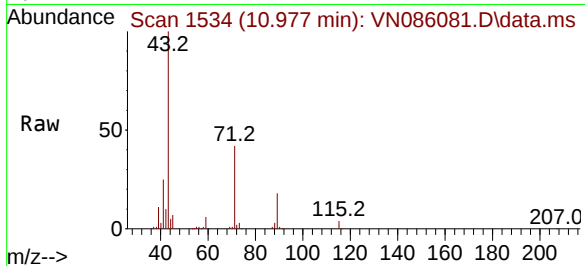




#56
Ethyl methacrylate
Concen: 0.615 ug/l
RT: 10.977 min Scan# 1534
Delta R.T. 0.106 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

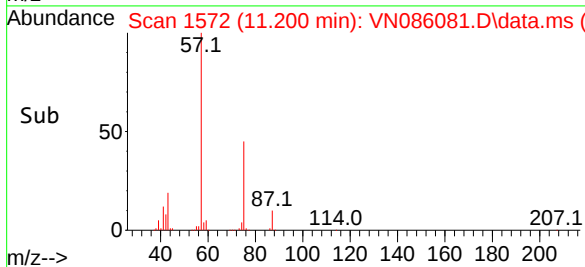
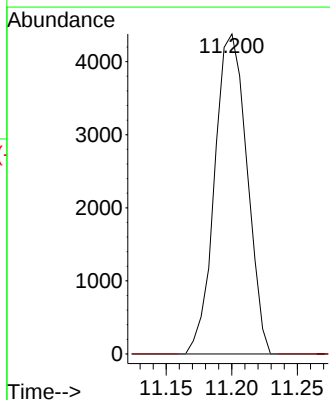
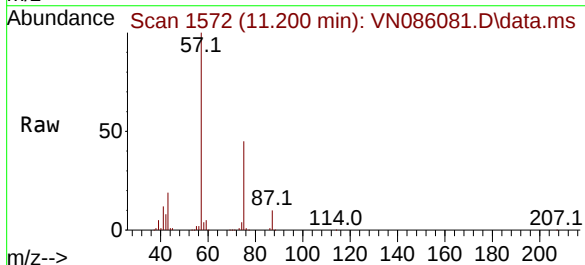
Instrument :
MSVOA_N
ClientSampleId :
TP-4

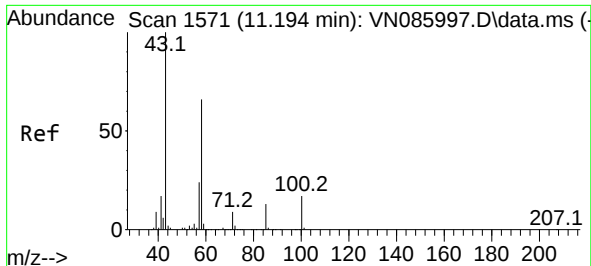
Tgt Ion: 69 Resp: 1960
Ion Ratio Lower Upper
69 100
41 3102.2 41.6 62.4#
39 1313.8 21.8 32.8#



#57
1,3-Dichloropropane
Concen: 1.216 ug/l
RT: 11.200 min Scan# 1572
Delta R.T. 0.041 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 76 Resp: 7510
Ion Ratio Lower Upper
76 100
78 0.0 25.8 38.6#

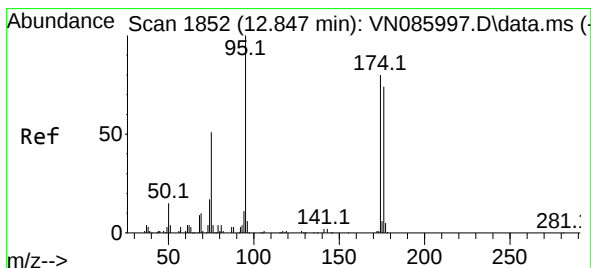
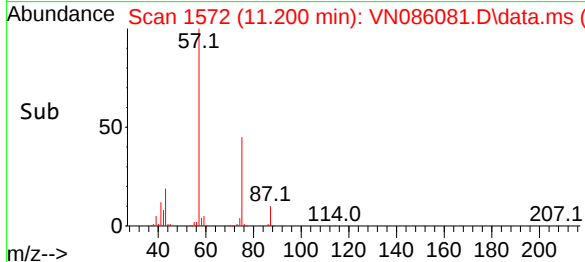
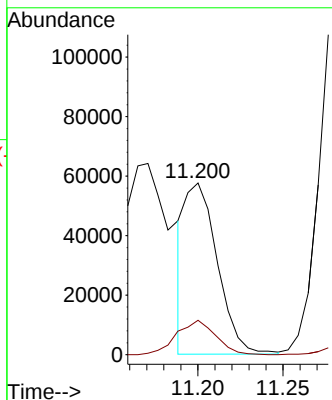
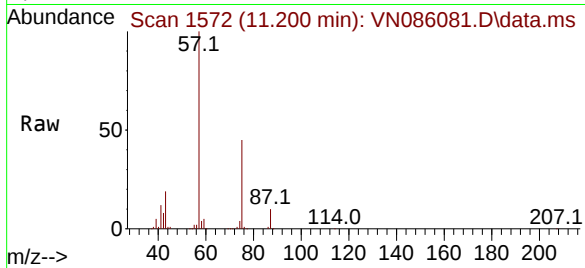




#59
2-Hexanone
Concen: 26.150 ug/l
RT: 11.200 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

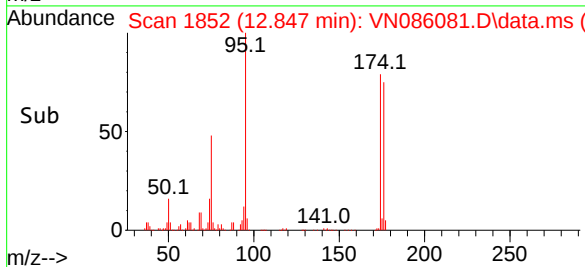
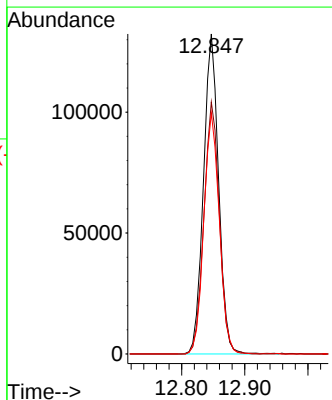
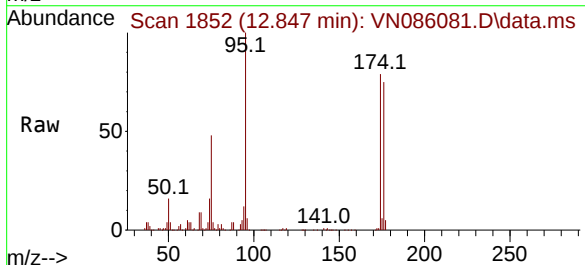
Instrument :
MSVOA_N
ClientSampleId :
TP-4

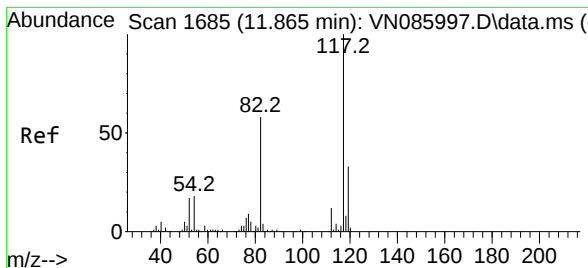
Tgt Ion: 43 Resp: 75947
Ion Ratio Lower Upper
43 100
58 24.4 32.4 97.2#



#62
4-Bromofluorobenzene
Concen: 45.299 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 95 Resp: 220176
Ion Ratio Lower Upper
95 100
174 80.2 0.0 156.8
176 77.1 0.0 152.2





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.865 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN086081.D

Acq: 24 Mar 2025 18:49

Instrument :

MSVOA_N

ClientSampleId :

TP-4

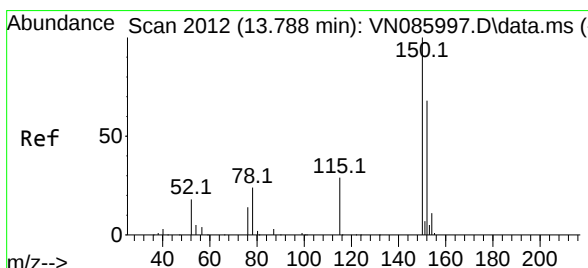
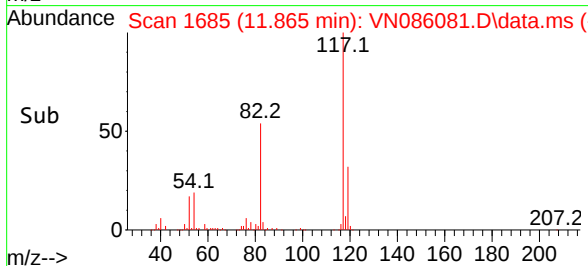
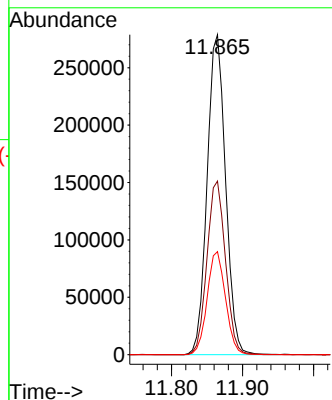
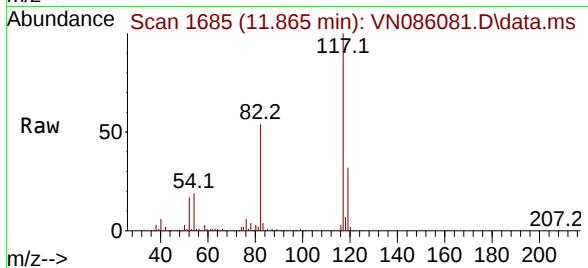
Tgt Ion:117 Resp: 503369

Ion Ratio Lower Upper

117 100

82 54.2 46.7 70.1

119 32.2 26.5 39.7



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.788 min Scan# 2012

Delta R.T. -0.000 min

Lab File: VN086081.D

Acq: 24 Mar 2025 18:49

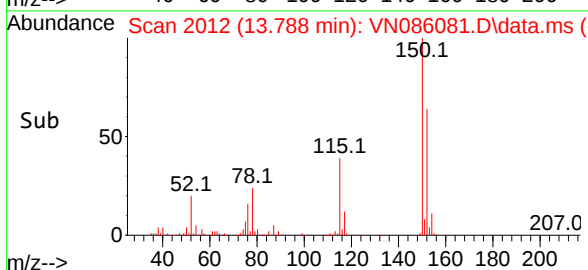
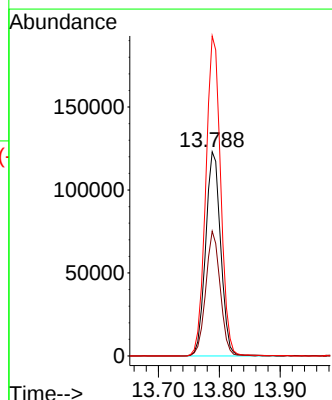
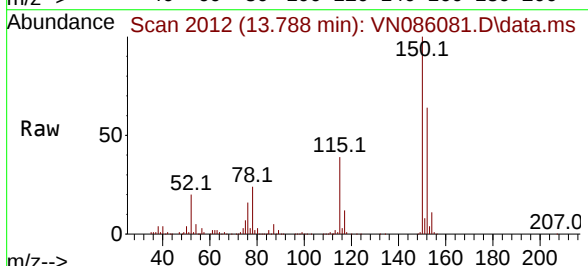
Tgt Ion:152 Resp: 211240

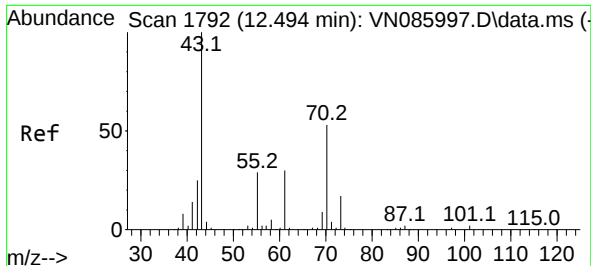
Ion Ratio Lower Upper

152 100

115 58.8 31.1 93.2

150 155.1 0.0 359.6

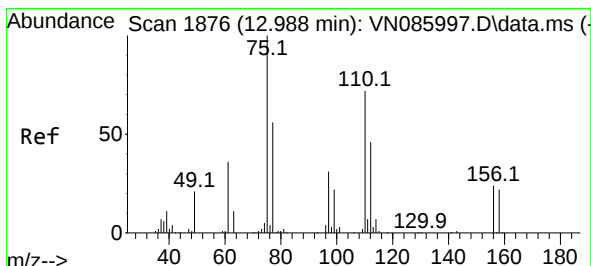
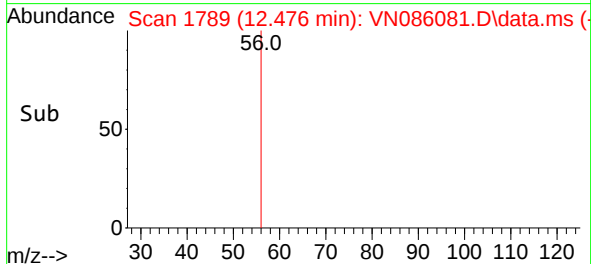
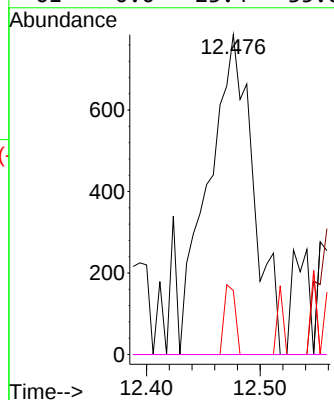
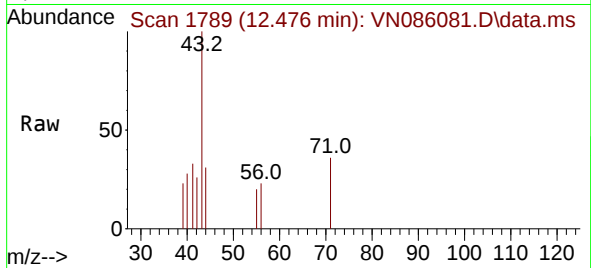




#74
N-amy1 acetate
Concen: 0.449 ug/l
RT: 12.476 min Scan# 1
Delta R.T. -0.018 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

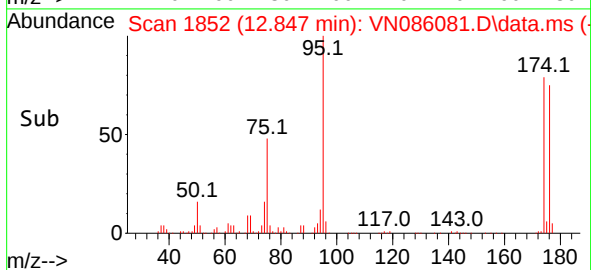
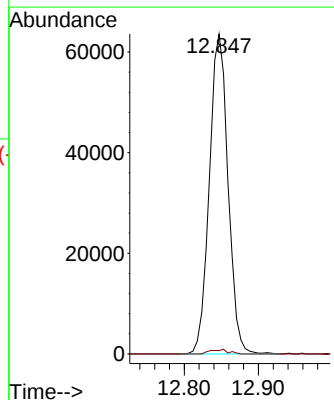
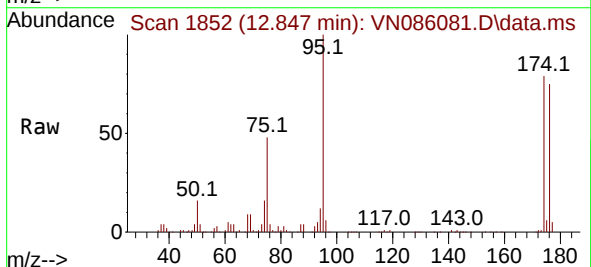
Instrument :
MSVOA_N
ClientSampleId :
TP-4

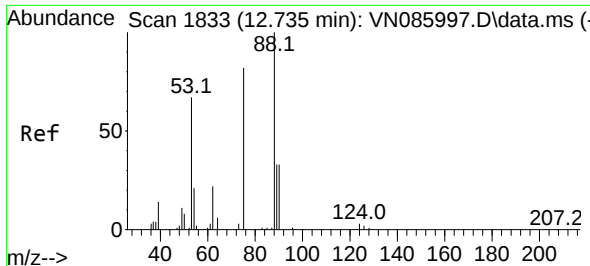
Tgt Ion: 43	Resp: 2165
Ion Ratio	Lower Upper
43 100	
70 0.0	43.0 64.4#
55 5.4	23.8 35.8#
61 0.0	23.4 35.0#



#76
1,2,3-Trichloropropane
Concen: 23.528 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.141 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 75	Resp:	111271	
Ion Ratio	Lower	Upper	
75 100			
77 1.4	83.7	251.0#	

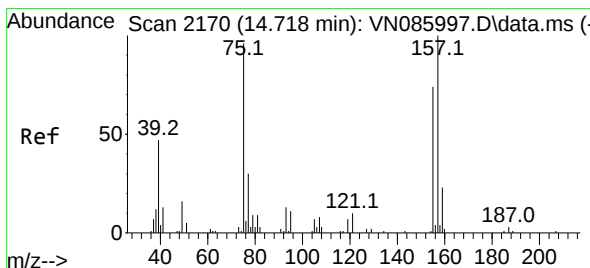
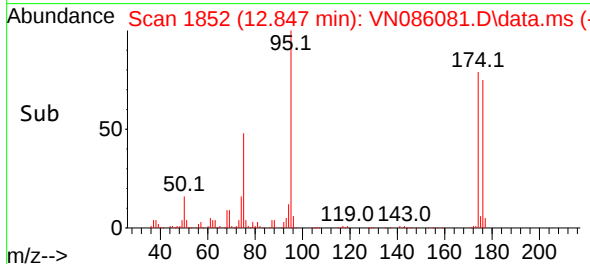
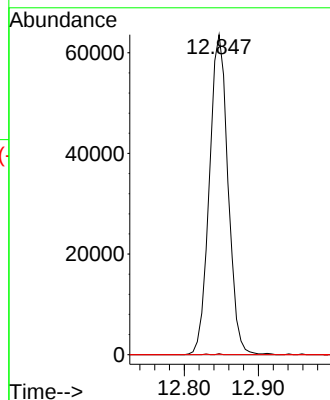
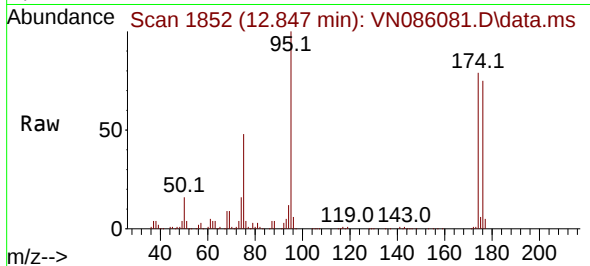




#81
trans-1,4-Dichloro-2-butene
Concen: 62.205 ug/l
RT: 12.847 min Scan# 111
Delta R.T. 0.112 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

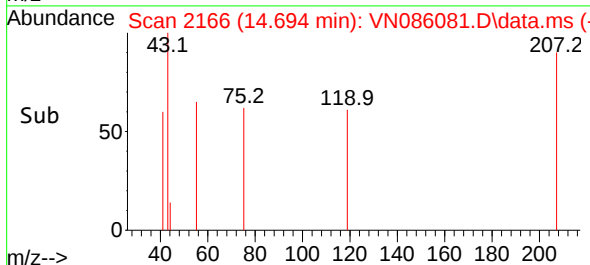
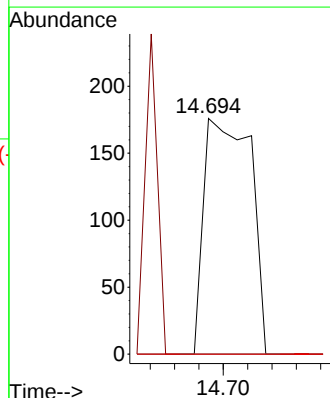
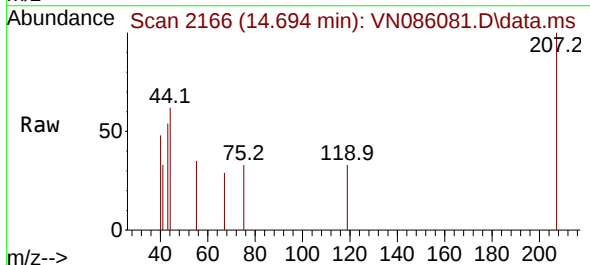
Instrument :
MSVOA_N
ClientSampleId :
TP-4

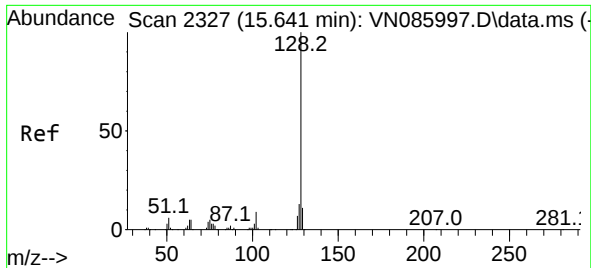
Tgt Ion: 75 Resp: 111271
Ion Ratio Lower Upper
75 100
53 0.1 66.0 99.0#
89 0.0 36.9 55.3#



#92
1,2-Dibromo-3-Chloropropane
Concen: 0.241 ug/l
RT: 14.694 min Scan# 2166
Delta R.T. -0.024 min
Lab File: VN086081.D
Acq: 24 Mar 2025 18:49

Tgt Ion: 75 Resp: 235
Ion Ratio Lower Upper
75 100
155 0.0 41.0 123.0#
157 0.0 53.7 161.1#





#95

Naphthalene

Concen: 2.653 ug/l

RT: 15.635 min Scan# 21

Delta R.T. -0.006 min

Lab File: VN086081.D

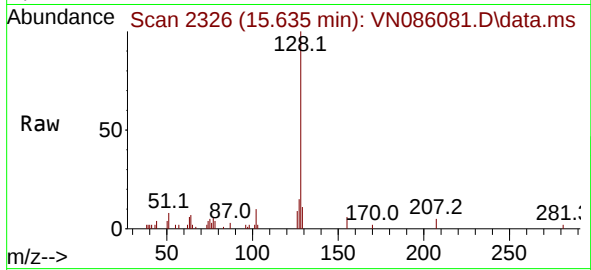
Acq: 24 Mar 2025 18:49

Instrument :

MSVOA_N

ClientSampleId :

TP-4



Tgt Ion:128 Resp: 27845

Ion Ratio Lower Upper

128 100

127 13.2 10.2 15.4

129 10.8 9.0 13.6

