

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN100325\
 Data File : VN088023.D
 Acq On : 03 Oct 2025 14:59
 Operator : JC\MD
 Sample : Q3224-02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

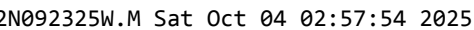
Instrument :
 MSVOA_N
 ClientSampleId :
 60490

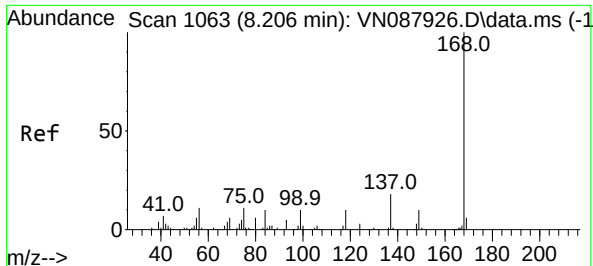
Quant Time: Oct 04 02:57:42 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N092325W.M
 Quant Title : SW846 8260
 QLast Update : Wed Sep 24 05:05:30 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	8.206	168	341674	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.082	114	735230	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.841	117	710180	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.770	152	360740	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.559	65	279437	48.597	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	=	97.200%
35) Dibromofluoromethane	8.147	113	229660	43.022	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	=	86.040%
50) Toluene-d8	10.547	98	853981	45.492	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	=	90.980%
62) 4-Bromofluorobenzene	12.829	95	325825	48.558	ug/l	0.00
Spiked Amount	50.000	Range	77 - 121	Recovery	=	97.120%
Target Compounds						
					Qvalue	
11) Tert butyl alcohol	5.518	59	87673	105.858	ug/l	100
13) Acrolein	4.183	56	1331	1.252	ug/l	85
16) Acetone	4.430	43	24689	10.436	ug/l	94
17) Carbon Disulfide	4.718	76	11986	1.069	ug/l #	94
18) Methyl Acetate	5.024	43	1298	0.219	ug/l #	59
20) Methylene Chloride	5.253	84	1122	0.234	ug/l #	79
25) 2-Butanone	7.477	43	106421	29.430	ug/l	92
29) Tetrahydrofuran	7.847	42	3409	1.472	ug/l #	51
31) Cyclohexane	8.212	56	11278	1.749	ug/l #	29
36) 1,1-Dichloropropene	8.206	75	31340	4.882	ug/l #	43
37) Ethyl Acetate	7.477	43	106421	12.626	ug/l #	70
38) Carbon Tetrachloride	8.200	117	38321	5.203	ug/l #	18
39) Methylcyclohexane	9.576	83	4469	0.631	ug/l #	75
40) Benzene	8.588	78	4914	0.231	ug/l	97
41) Methacrylonitrile	7.788	41	4578	1.051	ug/l #	32
49) 1,4-Dioxane	9.676	88	15431	170.003	ug/l	98
51) 4-Methyl-2-Pentanone	10.429	43	44590	5.386	ug/l	100
56) Ethyl methacrylate	10.776	69	95220	12.152	ug/l #	71
59) 2-Hexanone	11.047	43	2810	0.513	ug/l	70
74) N-amyl acetate	12.476	43	1486	0.202	ug/l #	48
76) 1,2,3-Trichloropropane	12.829	75	176557	24.829	ug/l #	1
81) trans-1,4-Dichloro-2-b...	12.829	75	176557	68.946	ug/l #	9
90) Hexachloroethane	14.311	117	2268	0.534	ug/l #	16

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

Quant Time: Oct 04 02:57:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N092325W.M
Quant Title : SW846 8260
QLast Update : Wed Sep 24 05:05:30 2025
Response via : Initial Calibration

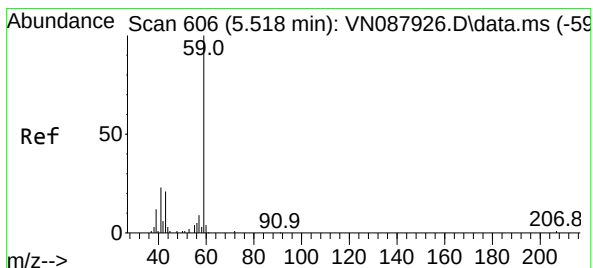
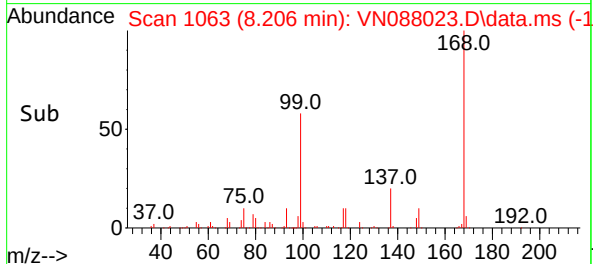
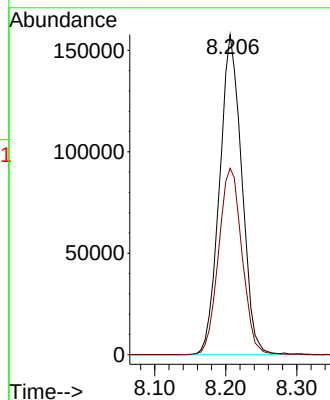
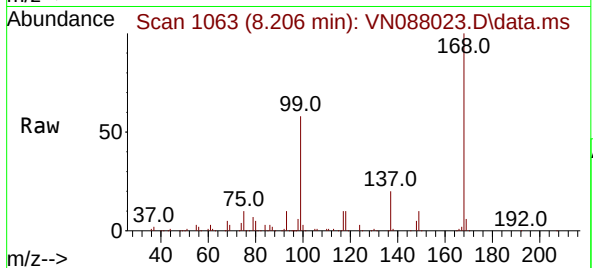




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.206 min Scan# 1063
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

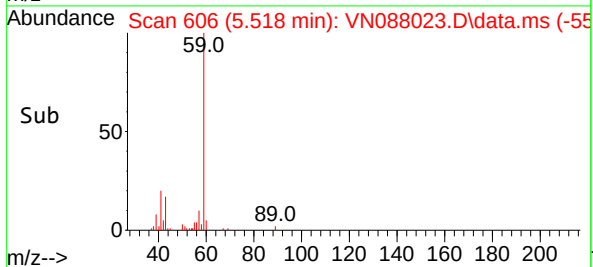
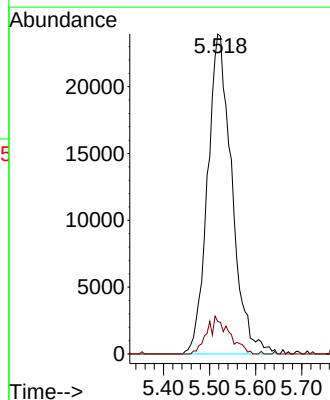
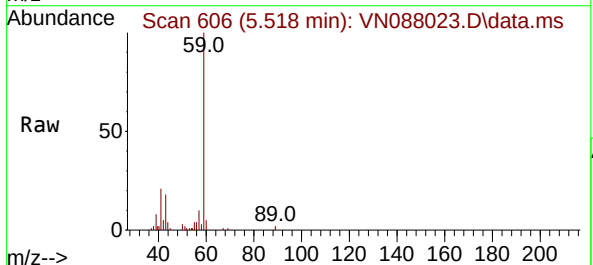
Instrument :
MSVOA_N
ClientSampleId :
60490

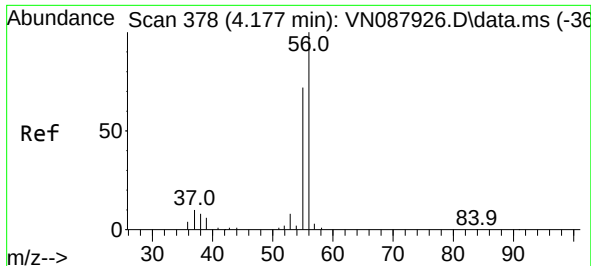
Tgt Ion:168 Resp: 341674
Ion Ratio Lower Upper
168 100
99 58.3 52.2 78.2



#11
Tert butyl alcohol
Concen: 105.858 ug/l
RT: 5.518 min Scan# 606
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 59 Resp: 87673
Ion Ratio Lower Upper
59 100
57 10.9 8.8 13.2

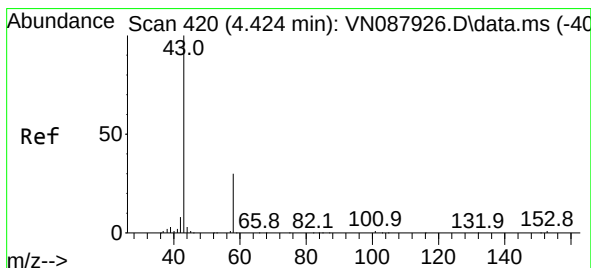
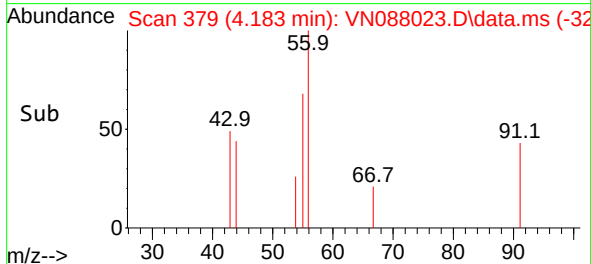
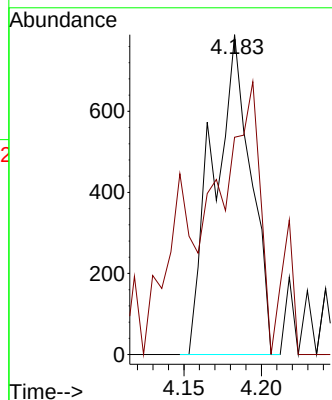
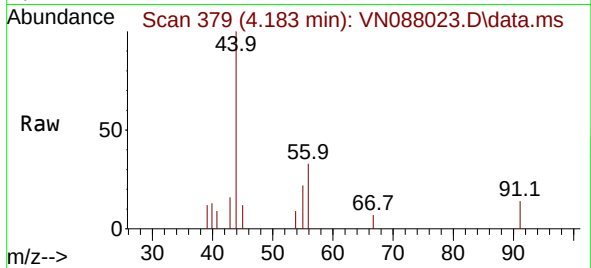




#13
Acrolein
Concen: 1.252 ug/l
RT: 4.183 min Scan# 31
Delta R.T. 0.006 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

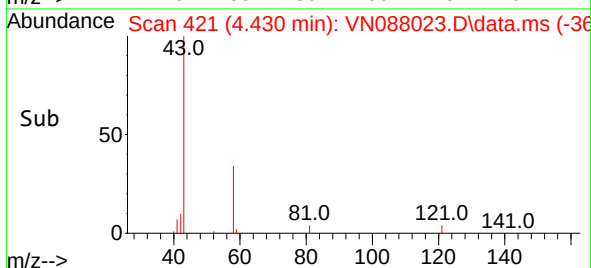
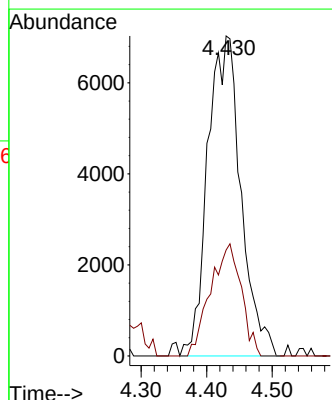
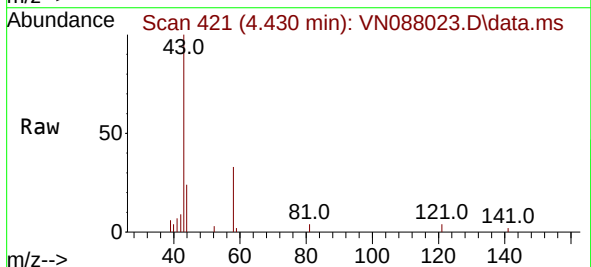
Instrument :
MSVOA_N
ClientSampleId :
60490

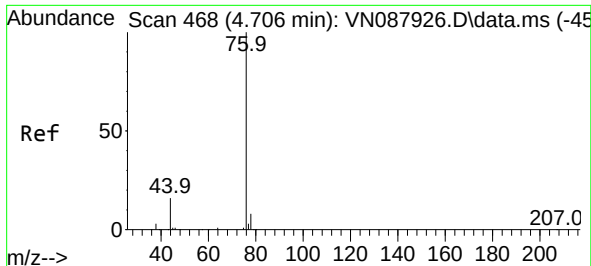
Tgt Ion: 56 Resp: 1331
Ion Ratio Lower Upper
56 100
55 87.1 59.3 88.9



#16
Acetone
Concen: 10.436 ug/l
RT: 4.430 min Scan# 421
Delta R.T. 0.006 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 43 Resp: 24689
Ion Ratio Lower Upper
43 100
58 33.1 24.1 36.1

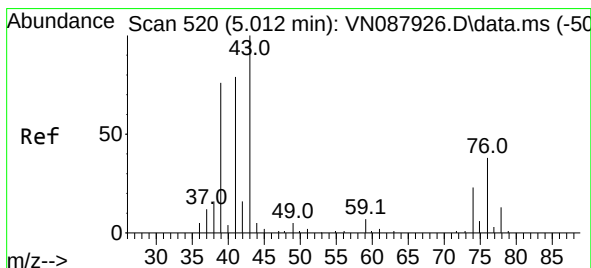
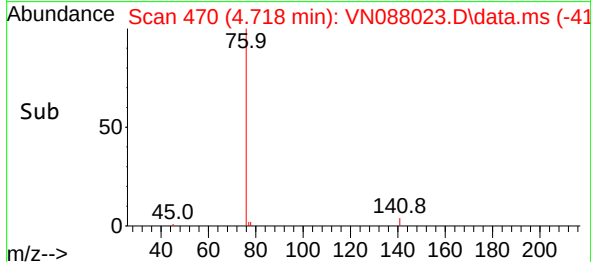
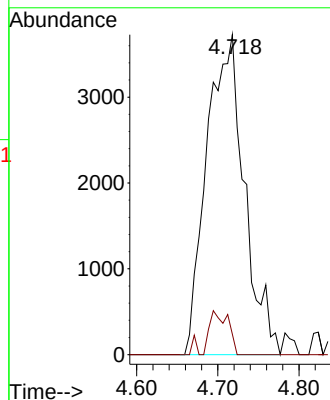
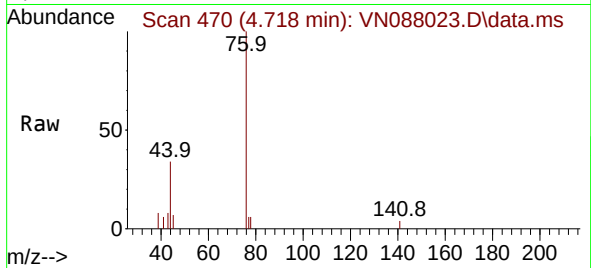




#17
Carbon Disulfide
Concen: 1.069 ug/l
RT: 4.718 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

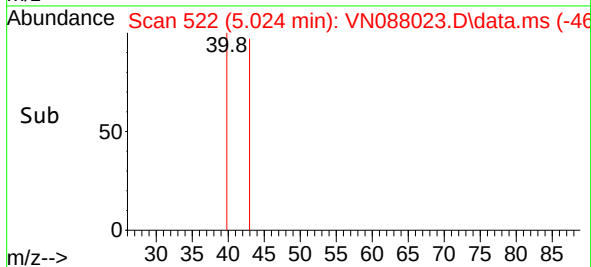
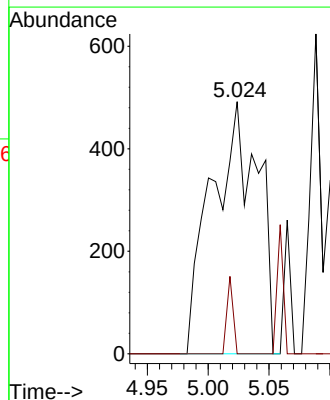
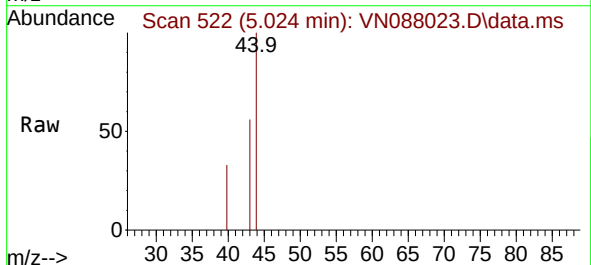
Instrument :
MSVOA_N
ClientSampleId :
60490

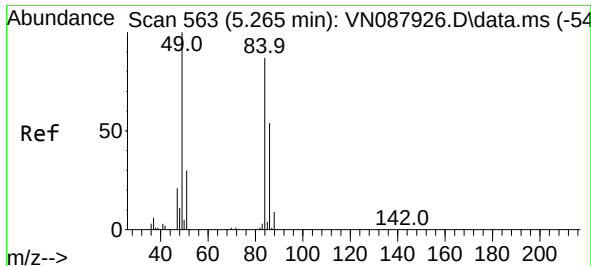
Tgt Ion: 76 Resp: 11986
Ion Ratio Lower Upper
76 100
78 6.4 6.7 10.1#



#18
Methyl Acetate
Concen: 0.219 ug/l
RT: 5.024 min Scan# 522
Delta R.T. 0.012 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 43 Resp: 1298
Ion Ratio Lower Upper
43 100
74 4.1 19.7 29.5#

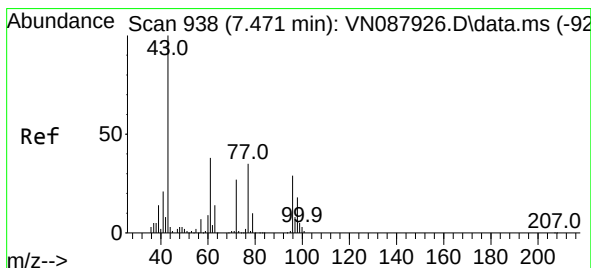
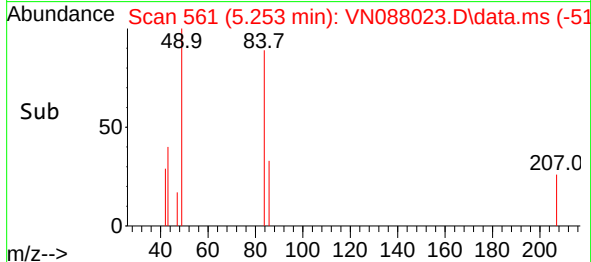
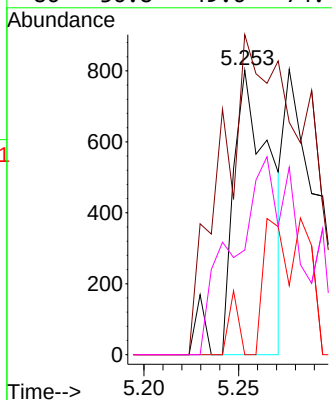
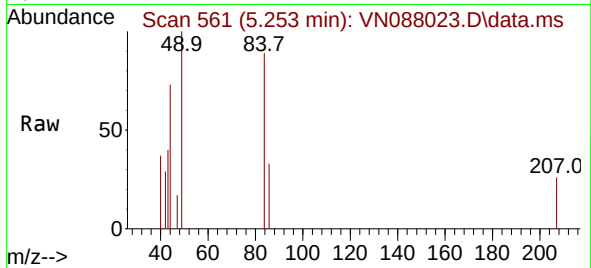




#20
Methylene Chloride
Concen: 0.234 ug/l
RT: 5.253 min Scan# 51
Delta R.T. -0.012 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

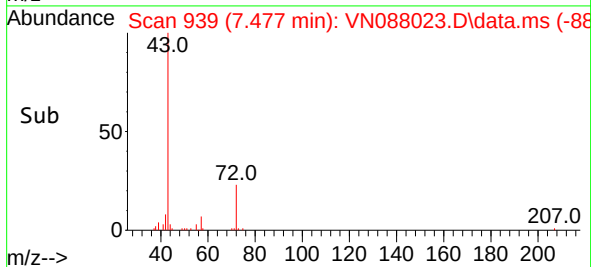
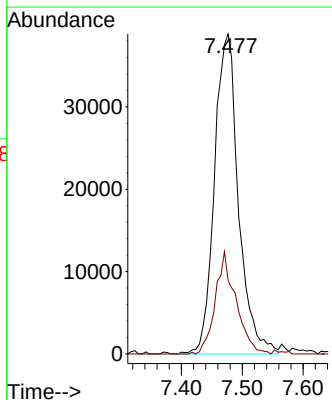
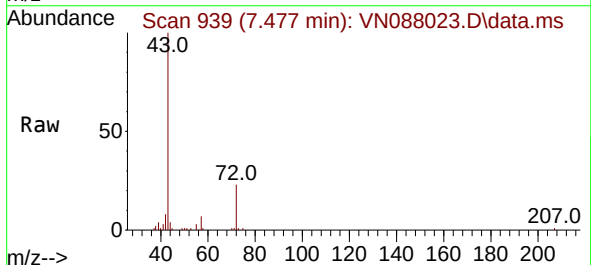
Instrument :
MSVOA_N
ClientSampleId :
60490

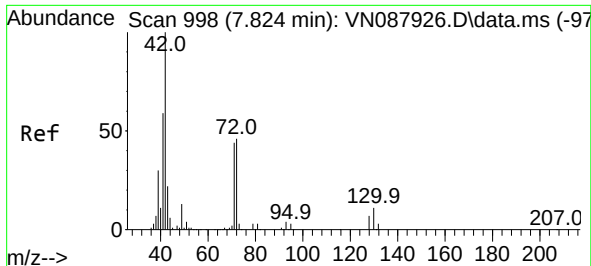
Tgt Ion:	84	Resp:	1122
Ion	Ratio	Lower	Upper
84	100		
49	112.5	92.1	138.1
51	0.0	27.7	41.5#
86	36.8	49.6	74.4#



#25
2-Butanone
Concen: 29.430 ug/l
RT: 7.477 min Scan# 939
Delta R.T. 0.006 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion:	43	Resp:	106421
Ion	Ratio	Lower	Upper
43	100		
72	23.0	21.5	32.3





#29

Tetrahydrofuran

Concen: 1.472 ug/l

RT: 7.847 min Scan# 1002

Delta R.T. 0.023 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

Instrument :

MSVOA_N

ClientSampleId :

60490

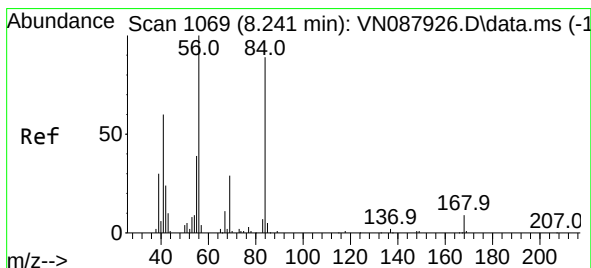
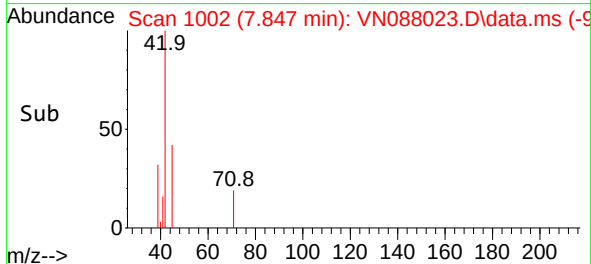
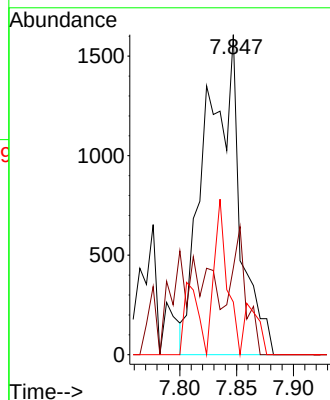
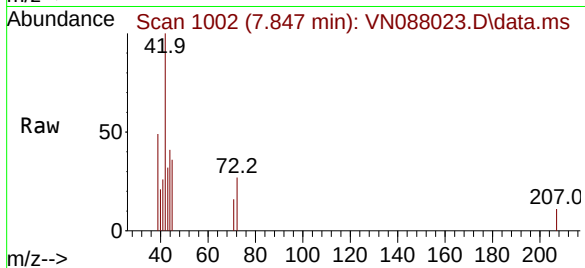
Tgt Ion: 42 Resp: 3409

Ion Ratio Lower Upper

42 100

72 18.2 36.5 54.7#

71 6.6 33.8 50.8#



#31

Cyclohexane

Concen: 1.749 ug/l

RT: 8.212 min Scan# 1064

Delta R.T. -0.030 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

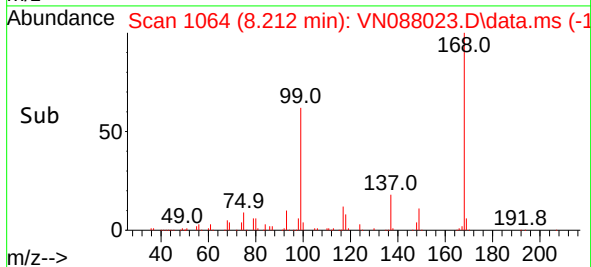
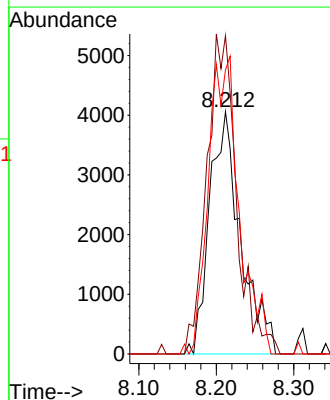
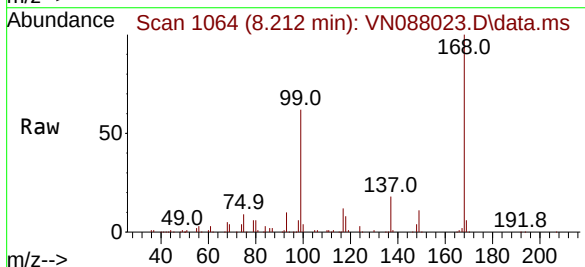
Tgt Ion: 56 Resp: 11278

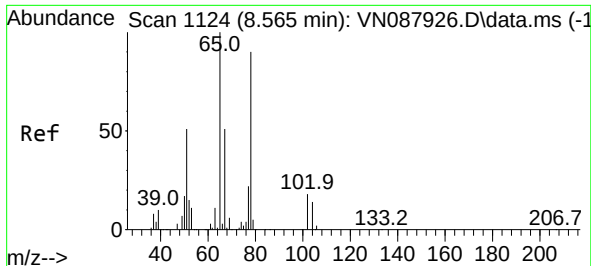
Ion Ratio Lower Upper

56 100

69 131.4 23.4 35.0#

84 117.3 70.8 106.2#





#33

1,2-Dichloroethane-d4

Concen: 48.597 ug/l

RT: 8.559 min Scan# 1123

Delta R.T. -0.006 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

Instrument :

MSVOA_N

ClientSampleId :

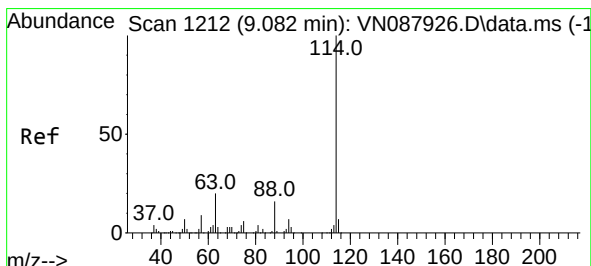
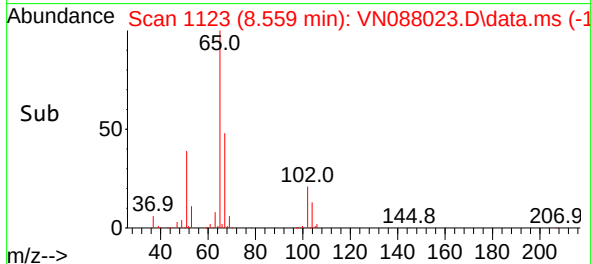
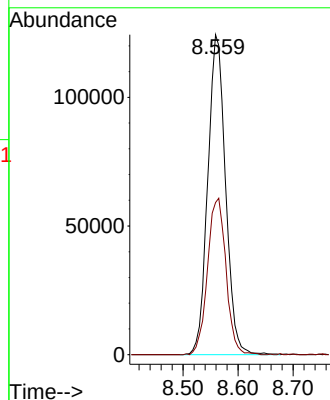
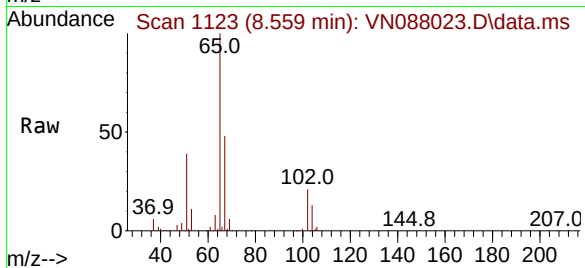
60490

Tgt Ion: 65 Resp: 279437

Ion Ratio Lower Upper

65 100

67 50.9 0.0 103.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.082 min Scan# 1212

Delta R.T. -0.000 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

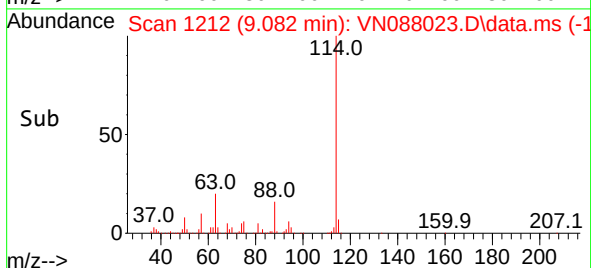
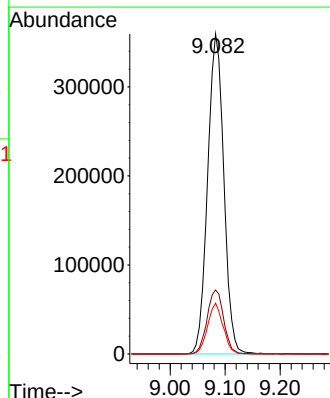
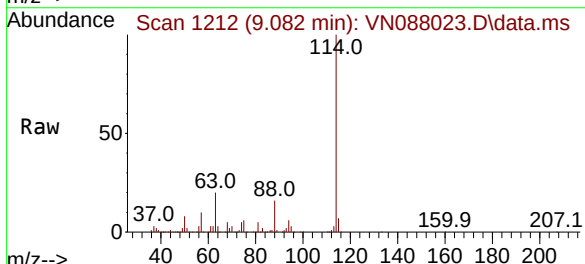
Tgt Ion: 114 Resp: 735230

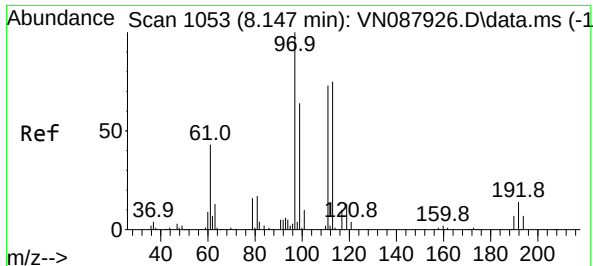
Ion Ratio Lower Upper

114 100

63 20.0 0.0 40.0

88 15.9 0.0 31.8





#35

Dibromofluoromethane

Concen: 43.022 ug/l

RT: 8.147 min Scan# 1053

Delta R.T. -0.000 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

Instrument :

MSVOA_N

ClientSampleId :

60490

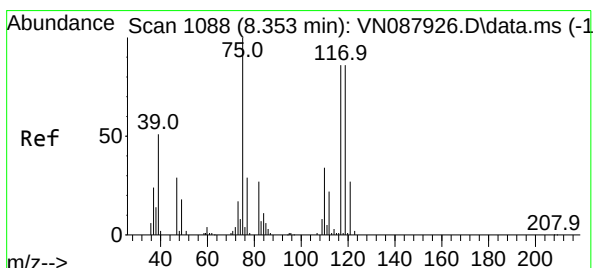
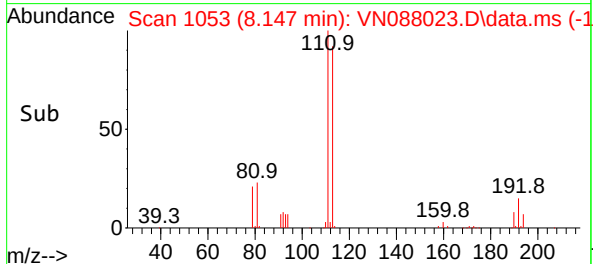
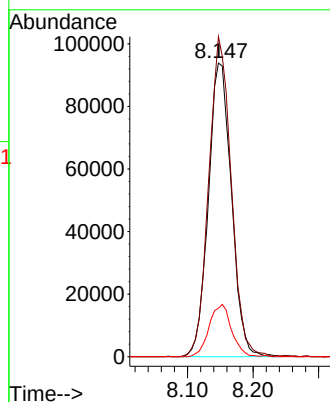
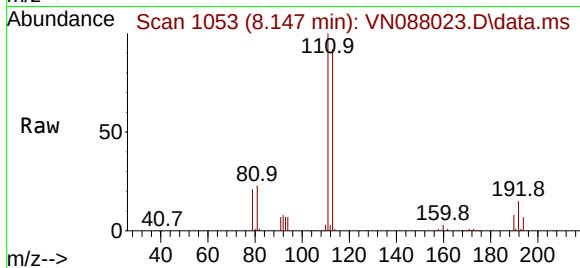
Tgt Ion:113 Resp: 229660

Ion Ratio Lower Upper

113 100

111 105.8 82.2 123.2

192 17.3 14.2 21.2



#36

1,1-Dichloropropene

Concen: 4.882 ug/l

RT: 8.206 min Scan# 1063

Delta R.T. -0.147 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

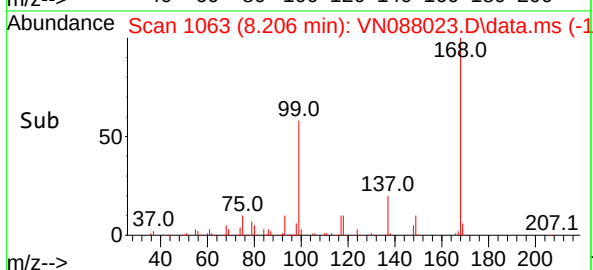
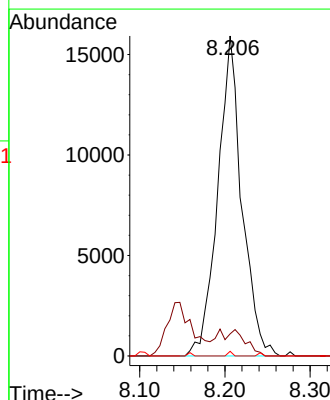
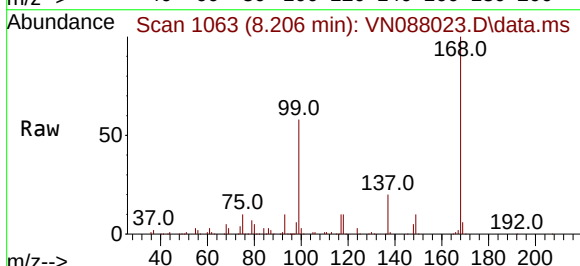
Tgt Ion: 75 Resp: 31340

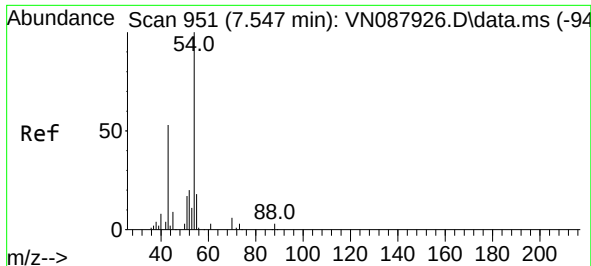
Ion Ratio Lower Upper

75 100

110 1.1 17.1 51.3#

77 0.3 24.8 37.2#





#37

Ethyl Acetate

Concen: 12.626 ug/l

RT: 7.477 min Scan# 91

Delta R.T. -0.071 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

Instrument :

MSVOA_N

ClientSampleId :

60490

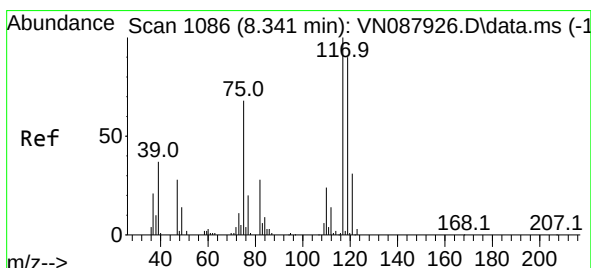
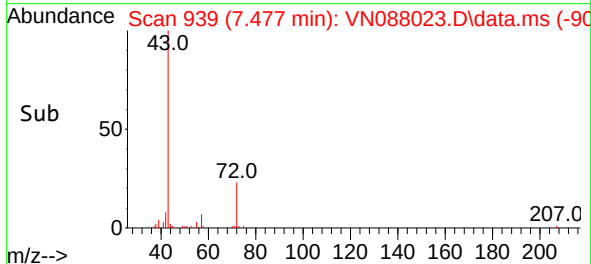
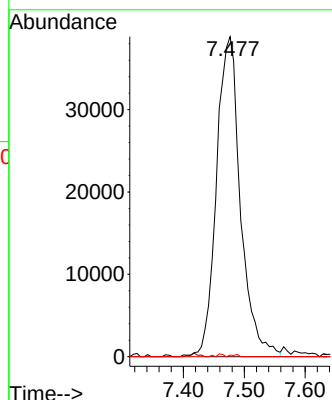
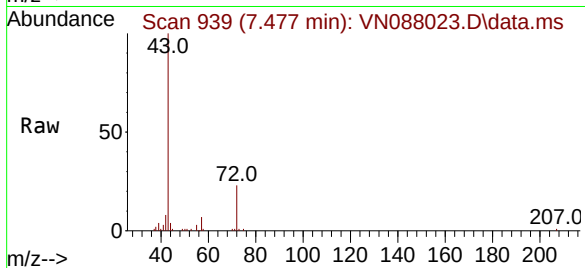
Tgt Ion: 43 Resp: 106421

Ion Ratio Lower Upper

43 100

61 0.0 10.7 16.1#

70 0.2 7.8 11.8#



#38

Carbon Tetrachloride

Concen: 5.203 ug/l

RT: 8.200 min Scan# 1062

Delta R.T. -0.141 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

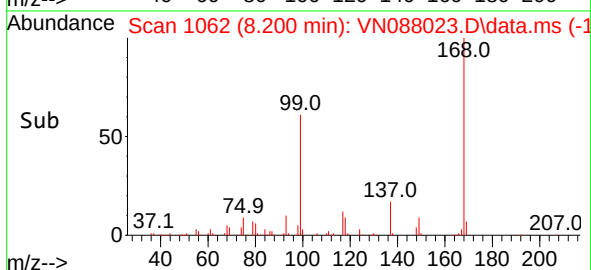
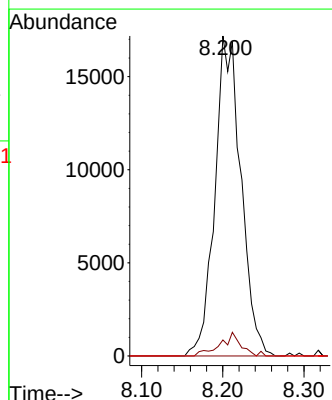
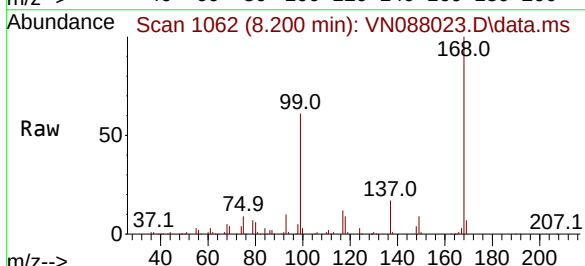
Tgt Ion: 117 Resp: 38321

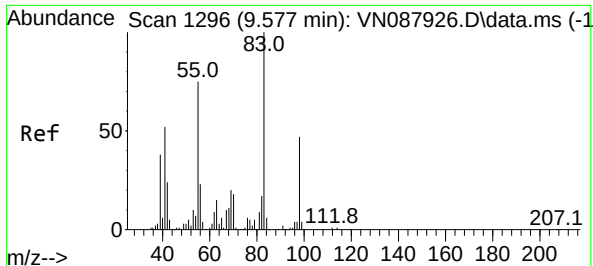
Ion Ratio Lower Upper

117 100

119 5.0 72.1 108.1#

121 0.0 24.6 36.8#





#39

Methylcyclohexane

Concen: 0.631 ug/l

RT: 9.576 min Scan# 1129

Delta R.T. -0.000 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

Instrument :

MSVOA_N

ClientSampleId :

60490

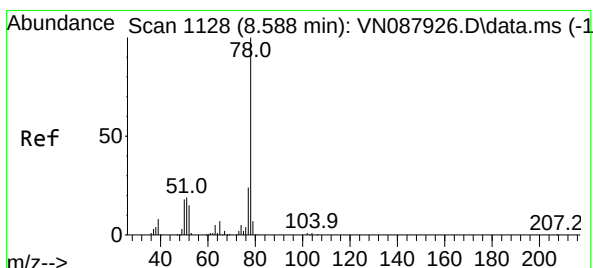
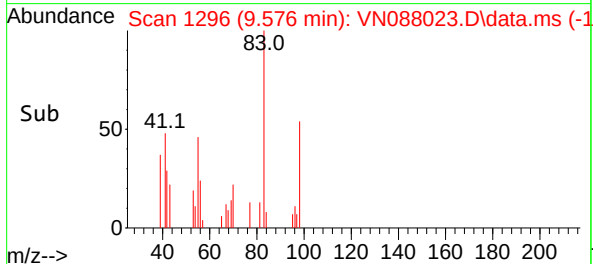
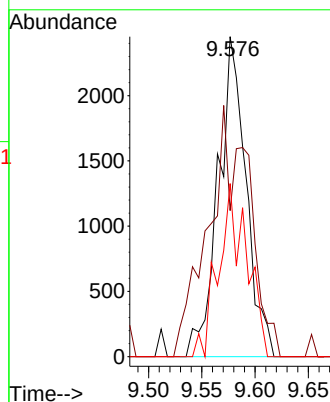
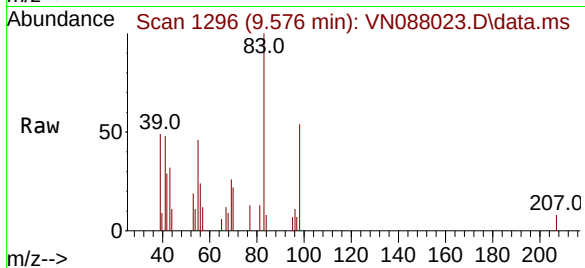
Tgt Ion: 83 Resp: 4469

Ion Ratio Lower Upper

83 100

55 45.6 59.9 89.9#

98 54.1 37.4 56.2



#40

Benzene

Concen: 0.231 ug/l

RT: 8.588 min Scan# 1128

Delta R.T. -0.000 min

Lab File: VN088023.D

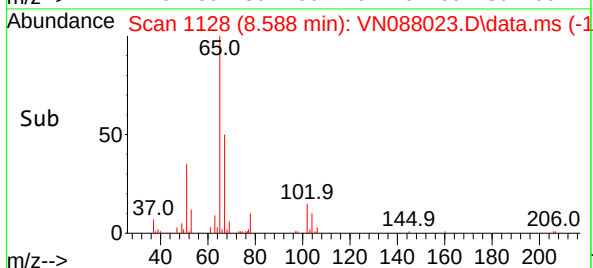
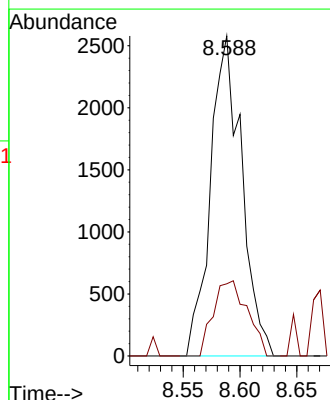
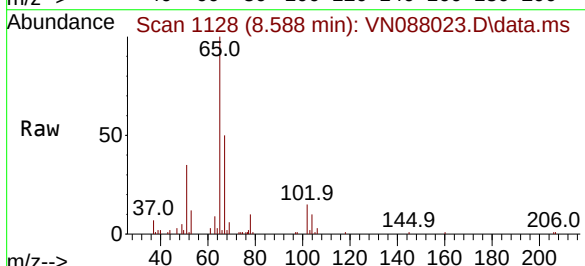
Acq: 03 Oct 2025 14:59

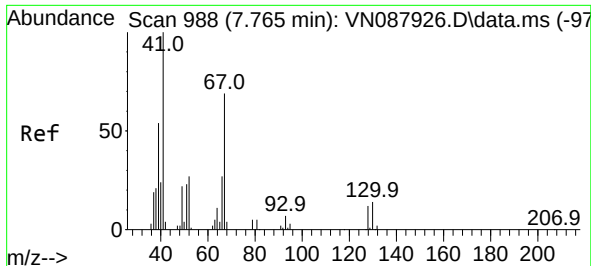
Tgt Ion: 78 Resp: 4914

Ion Ratio Lower Upper

78 100

77 22.6 19.0 28.6

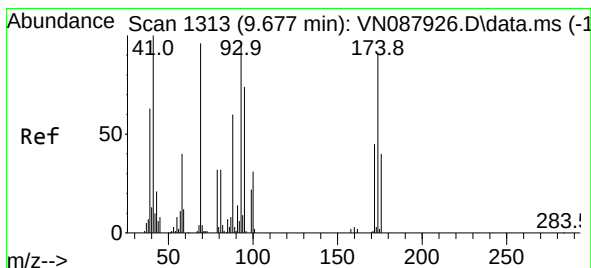
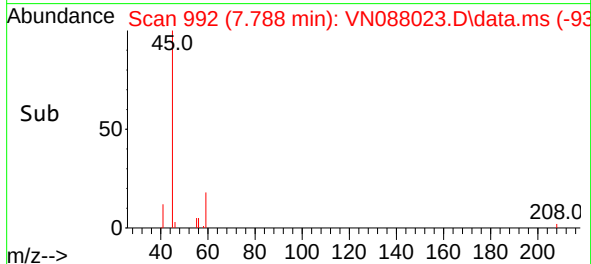
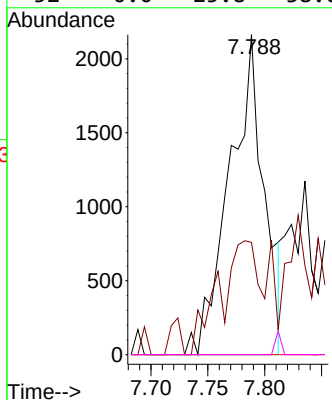
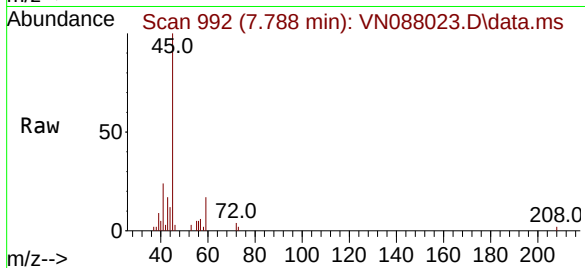




#41
Methacrylonitrile
Concen: 1.051 ug/l
RT: 7.788 min Scan# 91
Delta R.T. 0.023 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

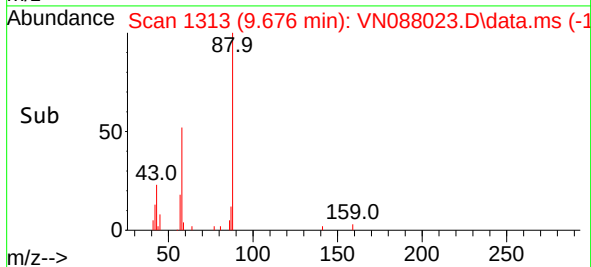
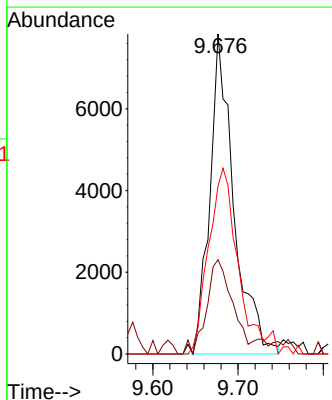
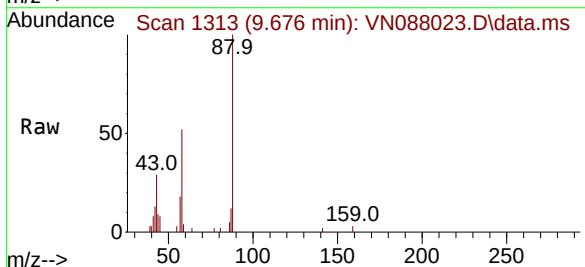
Instrument :
MSVOA_N
ClientSampleId :
60490

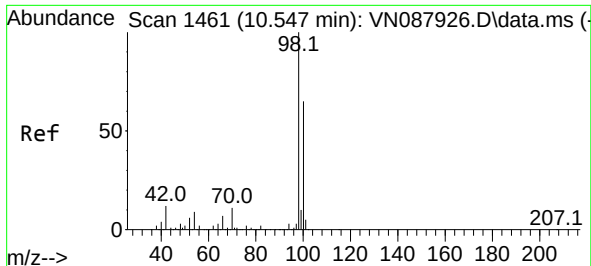
Tgt Ion:	41	Resp:	4578
Ion	Ratio	Lower	Upper
41	100		
39	18.7	43.5	65.3#
67	0.0	57.6	86.4#
52	0.0	25.8	38.6#



#49
1,4-Dioxane
Concen: 170.003 ug/l
RT: 9.676 min Scan# 1313
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion:	88	Resp:	15431
Ion	Ratio	Lower	Upper
88	100		
43	32.0	22.6	33.8
58	71.5	57.4	86.2

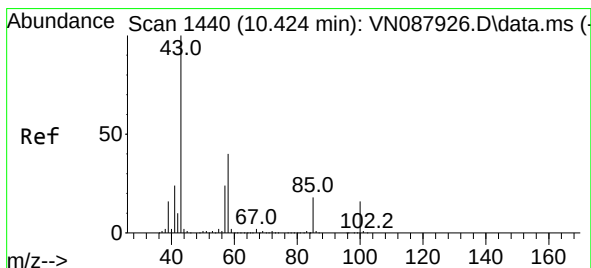
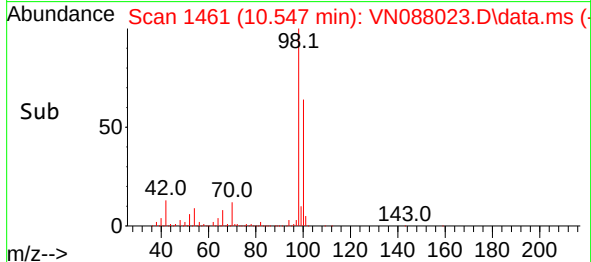
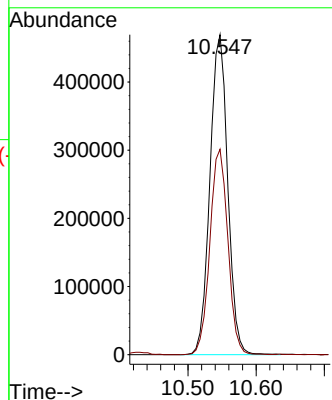
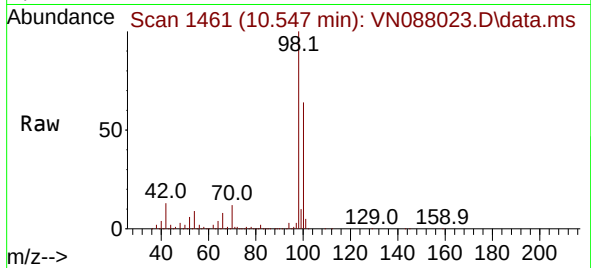




#50
Toluene-d8
Concen: 45.492 ug/l
RT: 10.547 min Scan# 1461
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

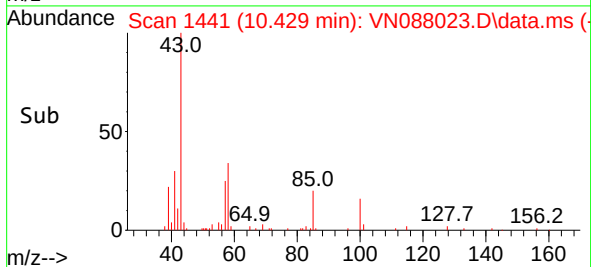
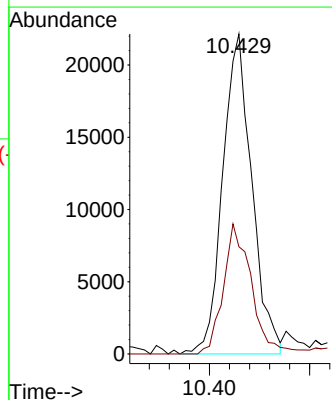
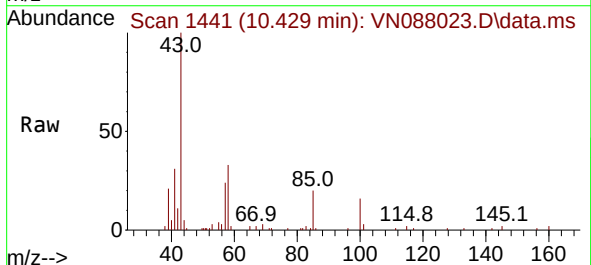
Instrument :
MSVOA_N
ClientSampleId :
60490

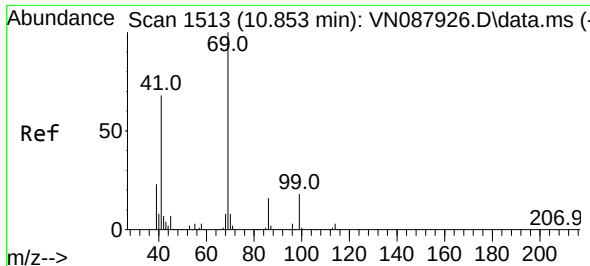
Tgt Ion: 98 Resp: 853981
Ion Ratio Lower Upper
98 100
100 64.8 51.7 77.5



#51
4-Methyl-2-Pentanone
Concen: 5.386 ug/l
RT: 10.429 min Scan# 1441
Delta R.T. 0.006 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 43 Resp: 44590
Ion Ratio Lower Upper
43 100
58 39.0 31.0 46.6

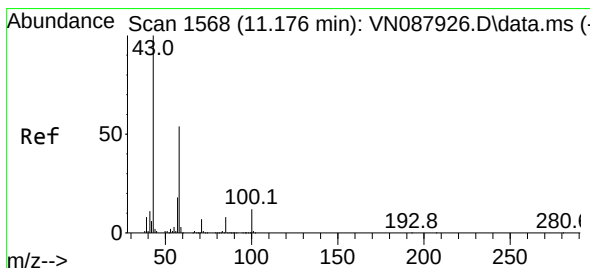
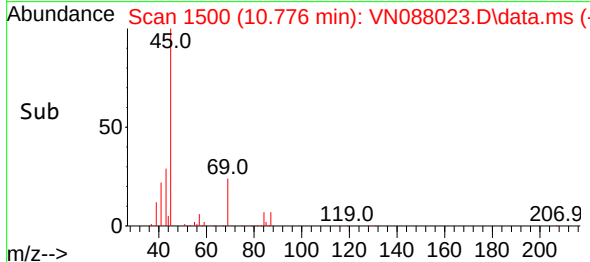
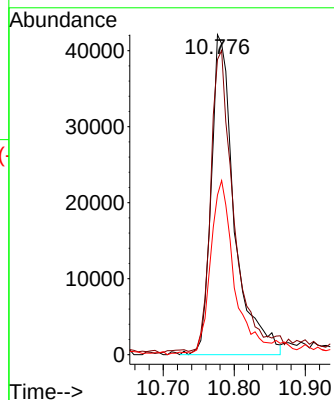
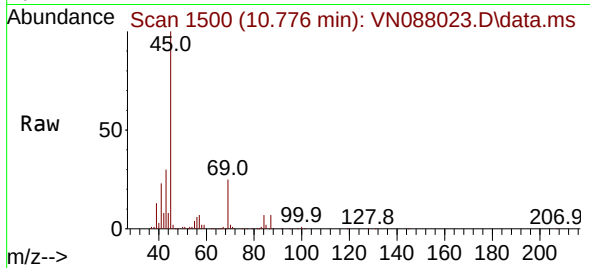




#56
Ethyl methacrylate
Concen: 12.152 ug/l
RT: 10.776 min Scan# 11
Delta R.T. -0.077 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

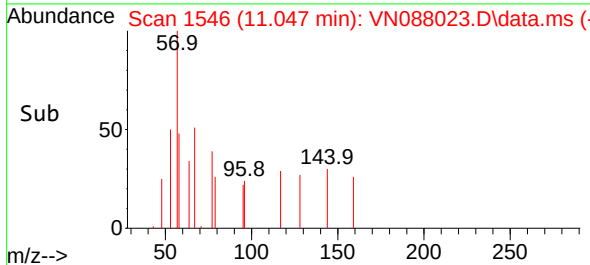
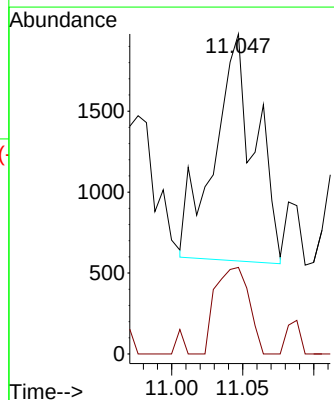
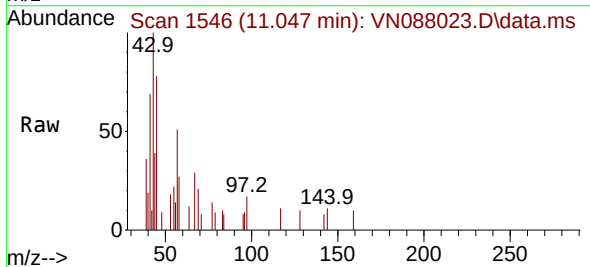
Instrument :
MSVOA_N
ClientSampleId :
60490

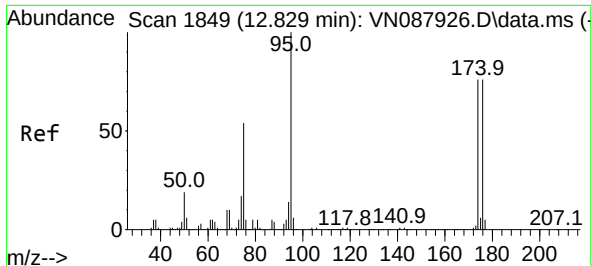
Tgt Ion: 69 Resp: 95220
Ion Ratio Lower Upper
69 100
41 95.1 53.8 80.6#
39 56.7 34.7 52.1#



#59
2-Hexanone
Concen: 0.513 ug/l
RT: 11.047 min Scan# 1546
Delta R.T. -0.130 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 43 Resp: 2810
Ion Ratio Lower Upper
43 100
58 31.4 26.4 79.2

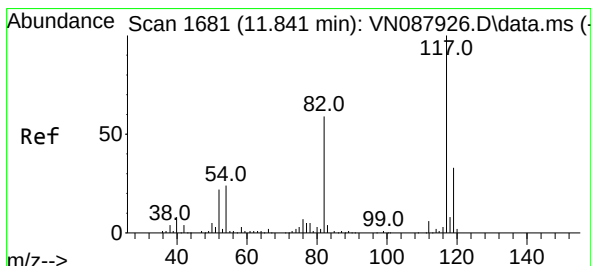
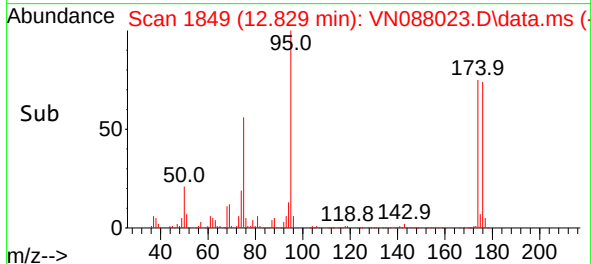
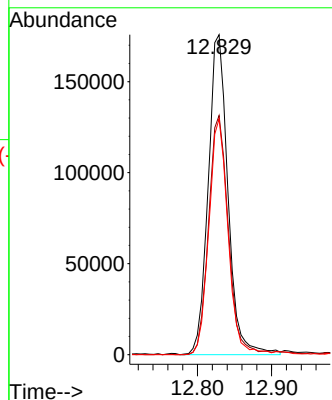
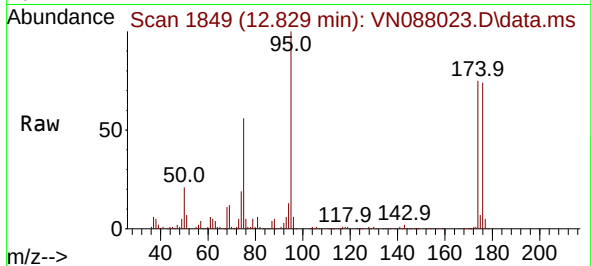




#62
4-Bromofluorobenzene
Concen: 48.558 ug/l
RT: 12.829 min Scan# 1849
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

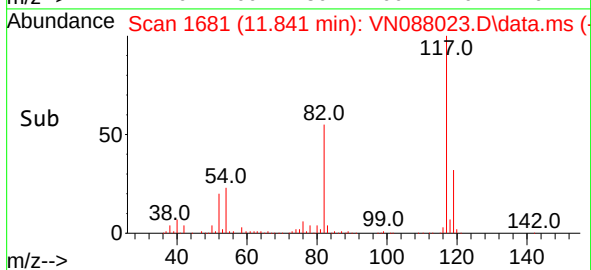
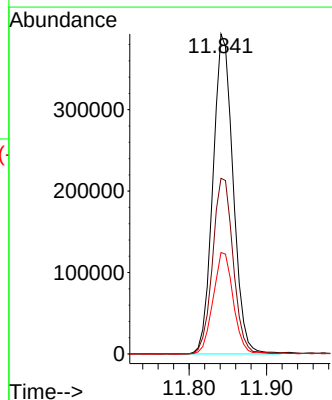
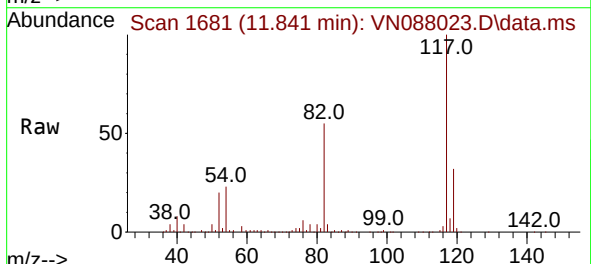
Instrument :
MSVOA_N
ClientSampleId :
60490

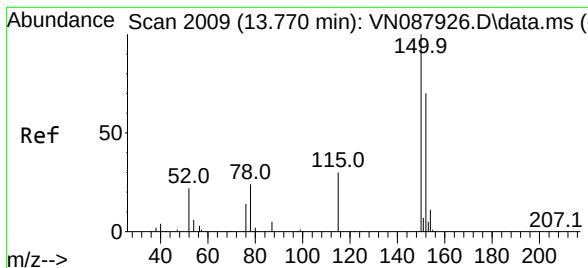
Tgt Ion: 95 Resp: 325825
Ion Ratio Lower Upper
95 100
174 75.7 0.0 159.2
176 71.3 0.0 152.6



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.841 min Scan# 1681
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 117 Resp: 710180
Ion Ratio Lower Upper
117 100
82 54.9 47.0 70.4
119 31.7 26.1 39.1

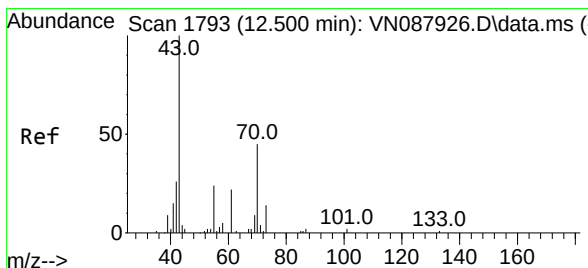
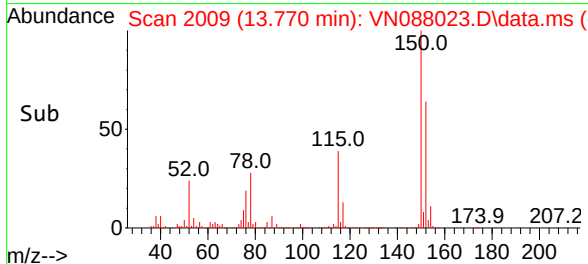
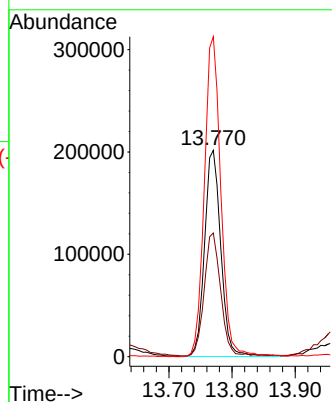
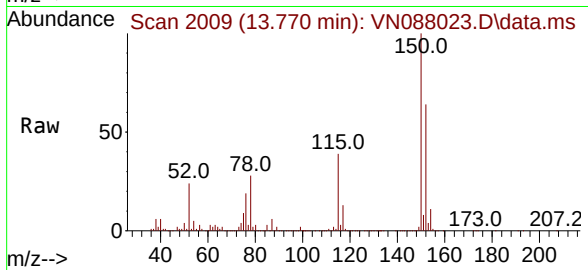




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.770 min Scan# 2009
Delta R.T. -0.000 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

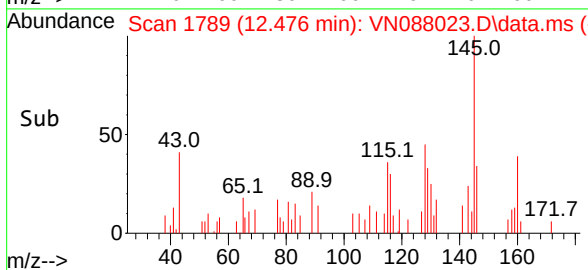
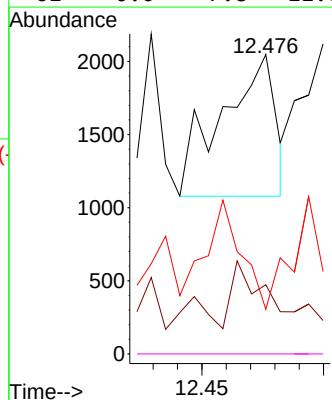
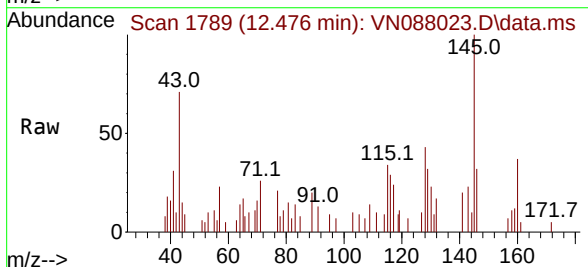
Instrument :
MSVOA_N
ClientSampleId :
60490

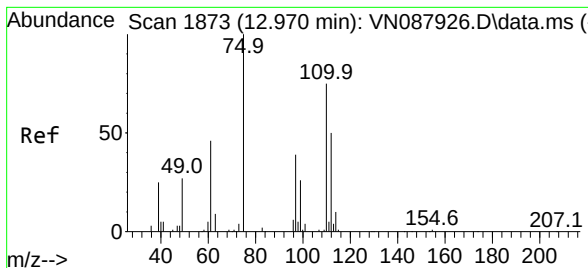
Tgt Ion:152 Resp: 360740
Ion Ratio Lower Upper
152 100
115 60.1 29.9 89.7
150 157.4 0.0 335.0



#74
N-ethyl acetate
Concen: 0.202 ug/l
RT: 12.476 min Scan# 1789
Delta R.T. -0.024 min
Lab File: VN088023.D
Acq: 03 Oct 2025 14:59

Tgt Ion: 43 Resp: 1486
Ion Ratio Lower Upper
43 100
70 0.0 19.8 29.8#
55 42.0 9.6 14.4#
61 0.0 7.8 11.6#





#76

1,2,3-Trichloropropane

Concen: 24.829 ug/l

RT: 12.829 min Scan# 1849

Delta R.T. -0.141 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

Instrument :

MSVOA_N

ClientSampleId :

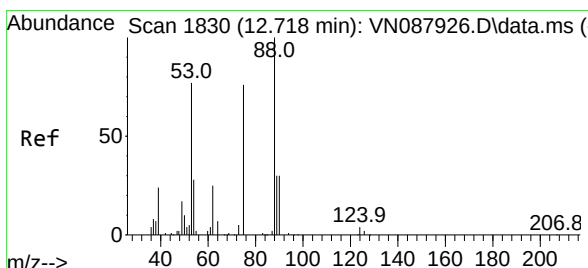
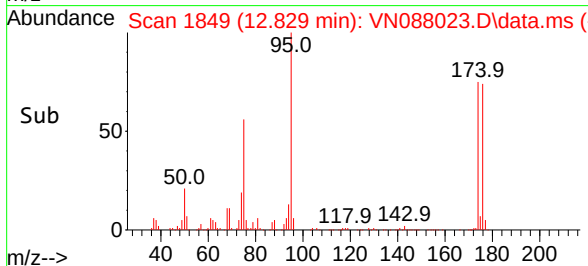
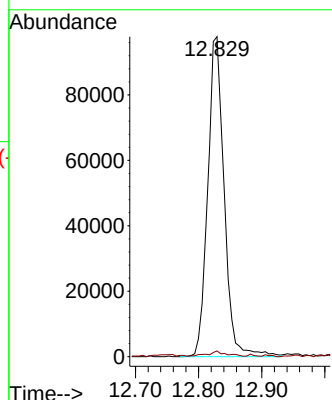
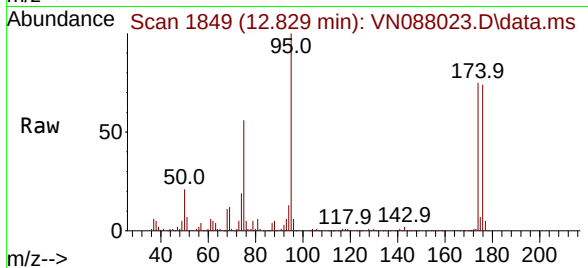
60490

Tgt Ion: 75 Resp: 176557

Ion Ratio Lower Upper

75 100

77 1.9 89.5 268.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 68.946 ug/l

RT: 12.829 min Scan# 1849

Delta R.T. 0.112 min

Lab File: VN088023.D

Acq: 03 Oct 2025 14:59

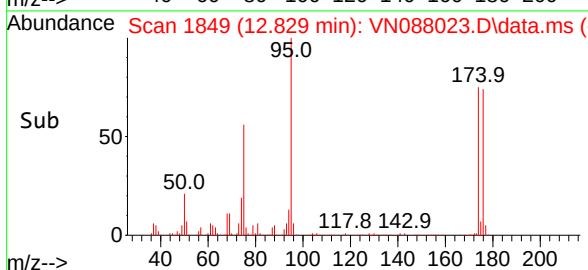
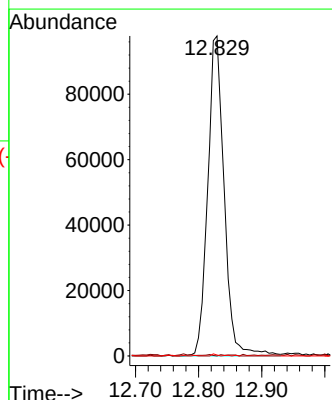
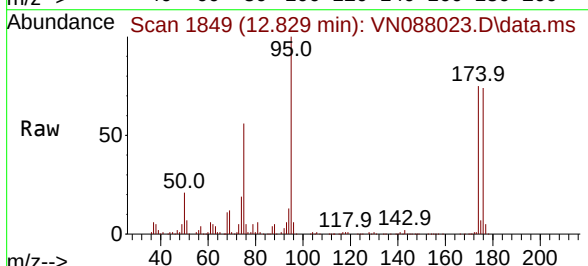
Tgt Ion: 75 Resp: 176557

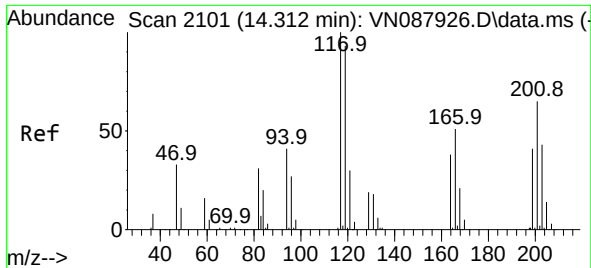
Ion Ratio Lower Upper

75 100

53 0.3 82.0 123.0#

89 0.2 36.1 54.1#





#90
 Hexachloroethane
 Concen: 0.534 ug/l
 RT: 14.311 min Scan# 21
 Delta R.T. -0.000 min
 Lab File: VN088023.D
 Acq: 03 Oct 2025 14:59

Instrument :
 MSVOA_N
 ClientSampleId :
 60490

Tgt Ion:117 Resp: 2268
 Ion Ratio Lower Upper
 117 100
 201 0.0 33.6 100.6#

