

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041425\
 Data File : VN086262.D
 Acq On : 14 Apr 2025 12:26
 Operator : JC\MD
 Sample : PB167573ZHE#02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 PB167573ZHE#02

Quant Time: Apr 15 03:07:52 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N041125W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Apr 12 01:21:52 2025
 Response via : Initial Calibration

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

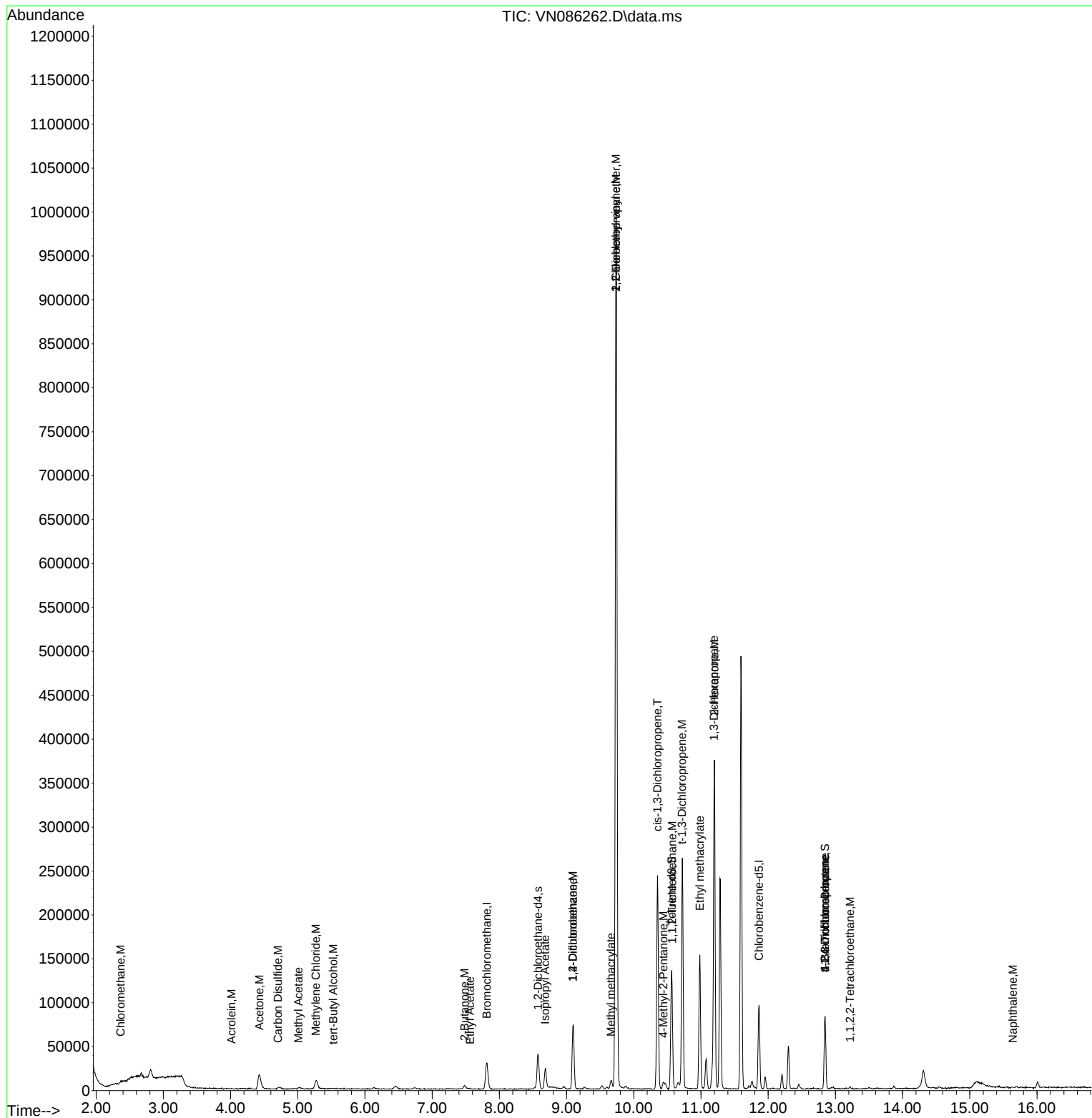
Internal Standards						
1) Bromochloromethane	7.812	128	11016	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.094	114	64391	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	56205	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	32337	30.096	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	100.333%
60) 4-Bromofluorobenzene	12.847	95	32122	28.705	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	95.700%
63) Toluene-d8	10.565	98	94663	29.833	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	99.433%
Target Compounds						
					Qvalue	
3) Chloromethane	2.365	50	908	0.744	ug/l	90
12) Methyl Acetate	5.012	43	905	0.764	ug/l	94
13) Acrolein	4.012	56	178	1.322	ug/l	92
15) Acetone	4.430	58	10645	83.954	ug/l #	68
16) Carbon Disulfide	4.706	76	880	0.366	ug/l #	74
18) Methylene Chloride	5.271	84	7542	7.886	ug/l	95
23) tert-Butyl Alcohol	5.530	59	191	0.922	ug/l #	100
30) 2-Butanone	7.482	43	6157	9.633	ug/l #	97
36) 1,2-Dichloroethane	9.094	62	2214	1.928	ug/l #	72
39) 1,2-Dichloropropane	9.735	63	1283	1.405	ug/l #	42
43) Ethyl Acetate	7.565	43	620	0.481	ug/l #	66
44) Isopropyl Acetate	8.682	43	27683	11.575	ug/l #	87
46) Methyl methacrylate	9.659	41	902	0.856	ug/l #	18
48) t-1,3-Dichloropropene	10.718	75	651	0.454	ug/l	92
49) cis-1,3-Dichloropropene	10.353	75	45691	30.140	ug/l #	59
50) 1,1,2-Trichloroethane	10.571	97	2876	3.477	ug/l #	1
51) Ethyl methacrylate	10.982	69	395	0.257	ug/l #	1
52) 1,3-Dichloropropane	11.194	76	3848	2.610	ug/l #	42
55) 2-Chloroethyl vinyl ether	9.735	63	1283	2.209	ug/l #	45
58) 4-Methyl-2-Pentanone	10.441	43	5516	4.325	ug/l	96
59) 2-Hexanone	11.200	43	55156	58.074	ug/l #	1
71) 1,1,2,2-Tetrachloroethane	13.217	83	362	0.337	ug/l #	65
72) 1,2,3-Trichloropropane	12.847	75	15716	14.069	ug/l	1
77) t-1,4-Dichloro-2-butene	12.847	75	15716	30.513	ug/l #	12
91) Naphthalene	15.641	128	1037	0.353	ug/l #	69

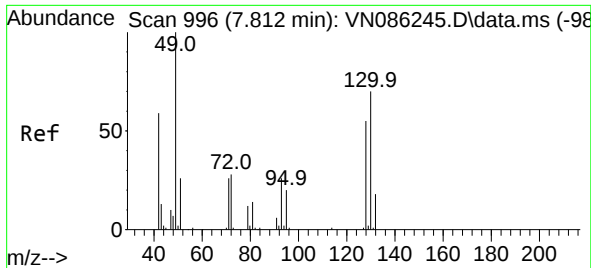
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Apr 15 03:07:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N041125W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Apr 12 01:21:52 2025
Response via : Initial Calibration

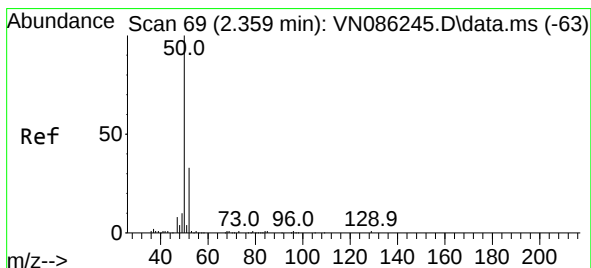
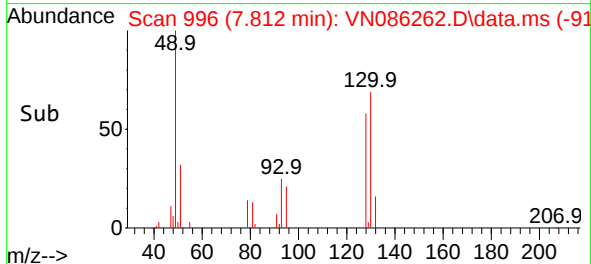
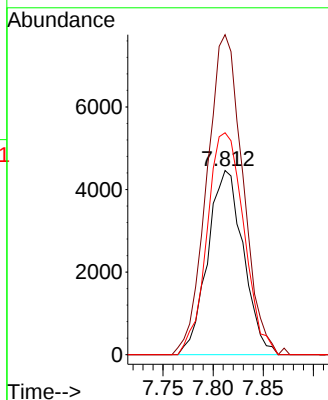
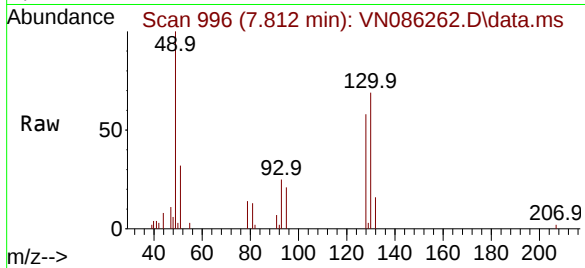




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

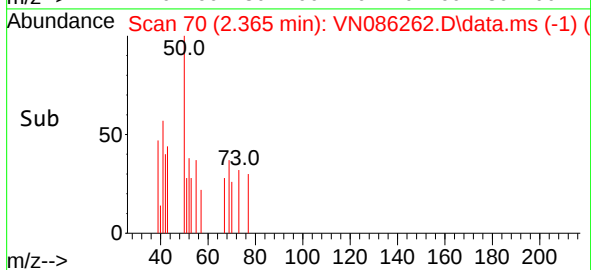
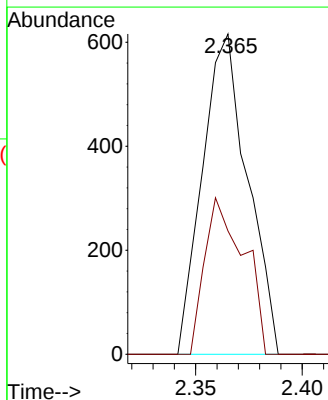
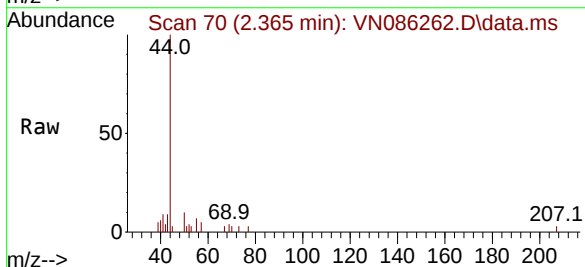
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

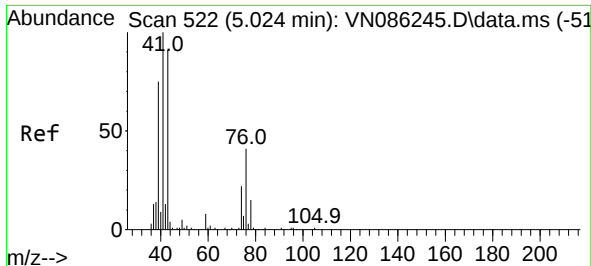
Tgt Ion:	128	Resp:	11016
Ion	Ratio	Lower	Upper
128	100		
49	175.4	0.0	452.5
130	125.0	0.0	315.0



#3
Chloromethane
Concen: 0.744 ug/l
RT: 2.365 min Scan# 70
Delta R.T. 0.006 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion:	50	Resp:	908
Ion	Ratio	Lower	Upper
50	100		
52	38.5	26.4	39.6

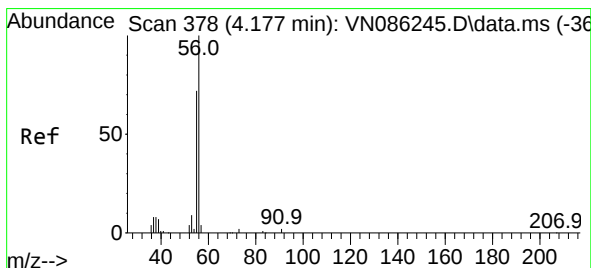
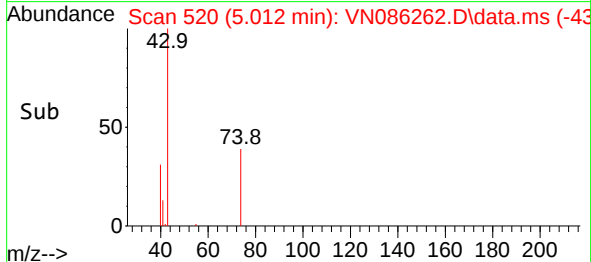
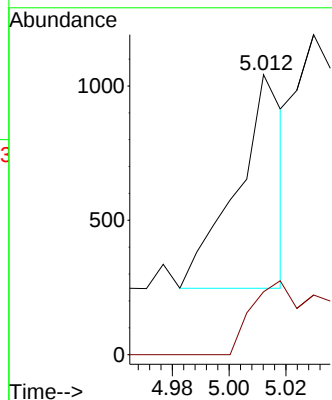
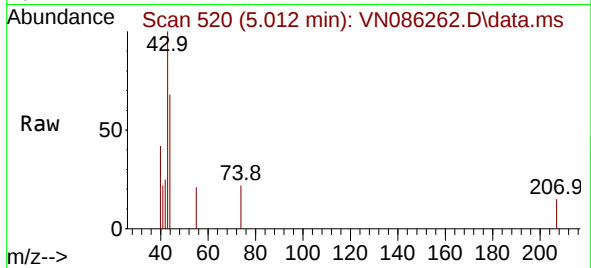




#12
Methyl Acetate
Concen: 0.764 ug/l
RT: 5.012 min Scan# 51
Delta R.T. -0.012 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

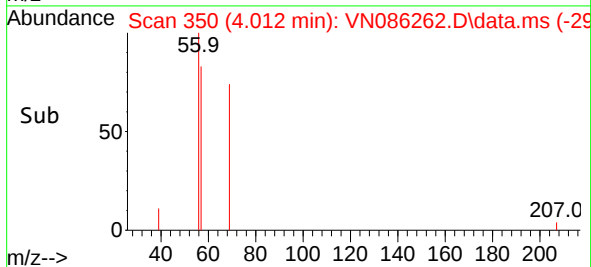
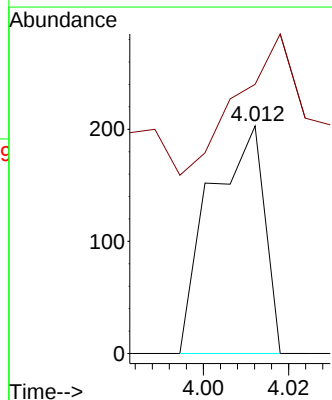
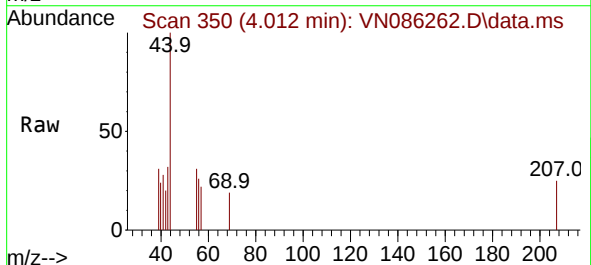
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

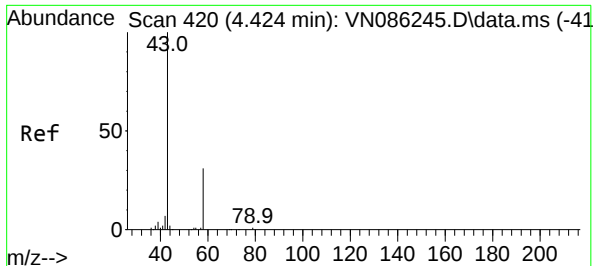
Tgt Ion: 43 Resp: 905
Ion Ratio Lower Upper
43 100
74 20.9 19.1 28.7



#13
Acrolein
Concen: 1.322 ug/l
RT: 4.012 min Scan# 350
Delta R.T. -0.165 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 56 Resp: 178
Ion Ratio Lower Upper
56 100
55 77.5 56.5 84.7





#15

Acetone

Concen: 83.954 ug/l

RT: 4.430 min Scan# 41

Delta R.T. 0.006 min

Lab File: VN086262.D

Acq: 14 Apr 2025 12:26

Instrument :

MSVOA_N

ClientSampleId :

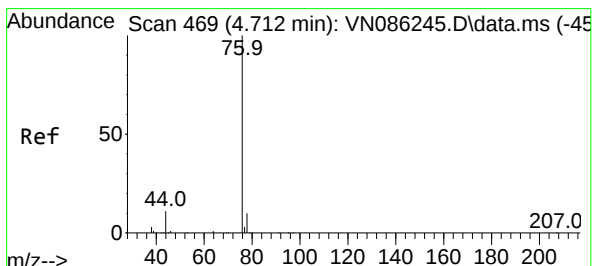
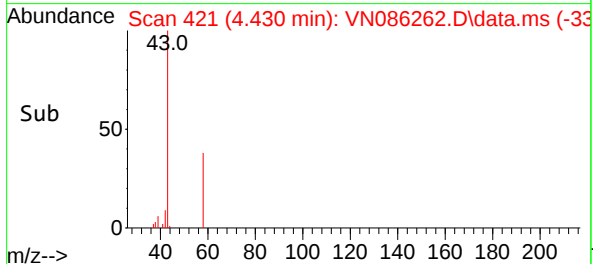
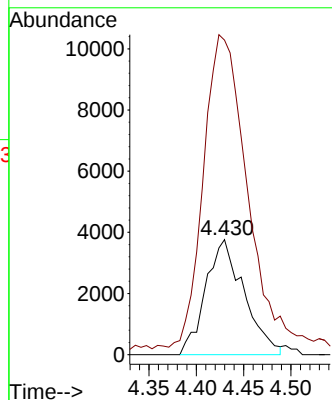
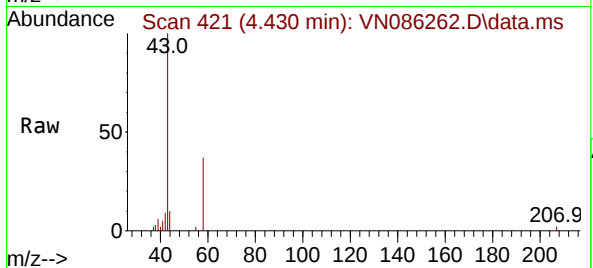
PB167573ZHE#02

Tgt Ion: 58 Resp: 10645

Ion Ratio Lower Upper

58 100

43 261.1 261.8 392.8#



#16

Carbon Disulfide

Concen: 0.366 ug/l

RT: 4.706 min Scan# 468

Delta R.T. -0.006 min

Lab File: VN086262.D

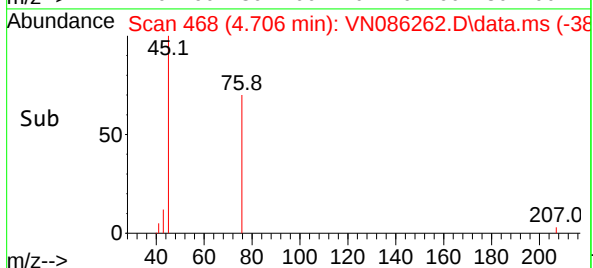
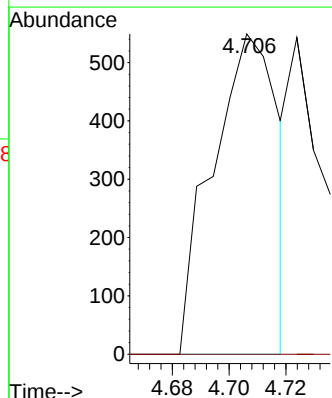
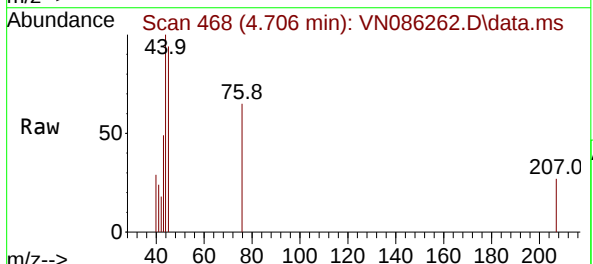
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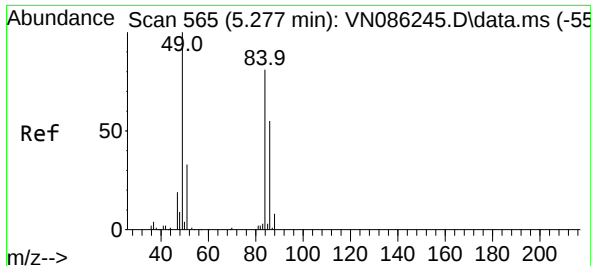
Tgt Ion: 76 Resp: 880

Ion Ratio Lower Upper

76 100

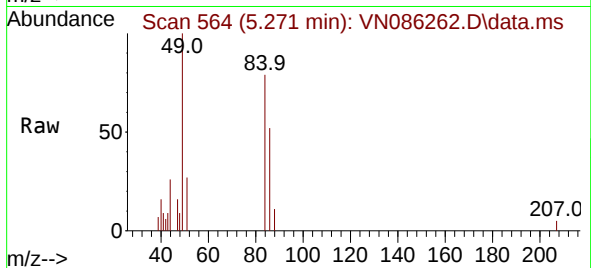
78 0.0 7.7 11.5#



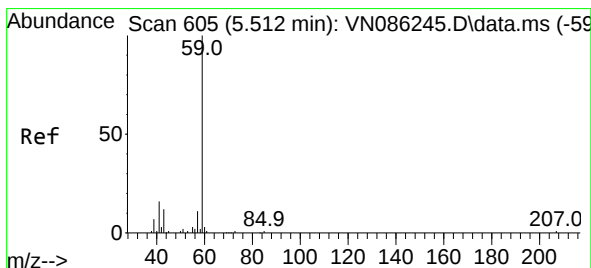
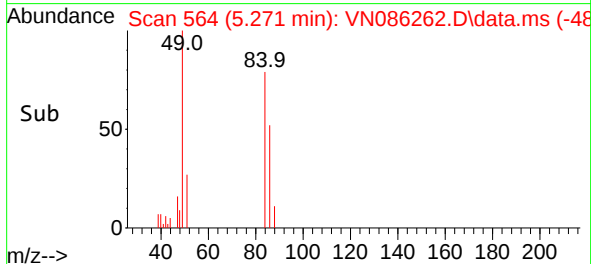
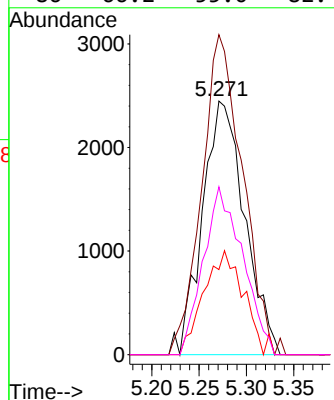


#18
Methylene Chloride
Concen: 7.886 ug/l
RT: 5.271 min Scan# 50
Delta R.T. -0.006 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

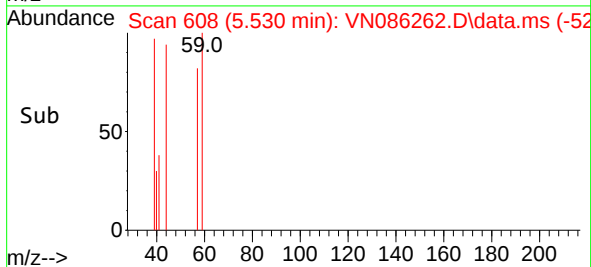
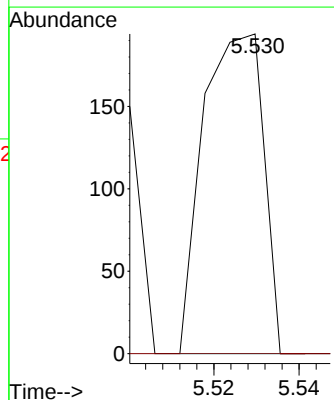
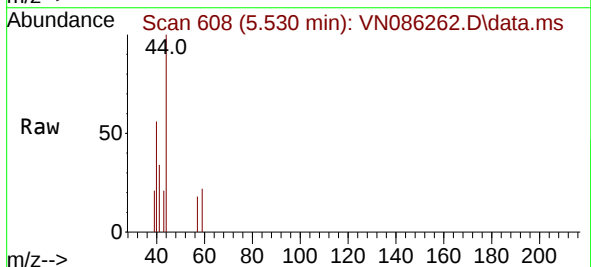


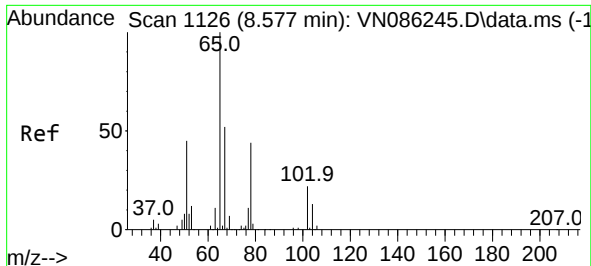
Tgt Ion:	84	Resp:	7542
Ion	Ratio	Lower	Upper
84	100		
49	119.7	99.1	148.7
51	33.5	32.3	48.5
86	66.2	55.0	82.4



#23
tert-Butyl Alcohol
Concen: 0.922 ug/l
RT: 5.530 min Scan# 608
Delta R.T. 0.018 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion:	59	Resp:	191
Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0





#27

1,2-Dichloroethane-d4

Concen: 30.096 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN086262.D

Acq: 14 Apr 2025 12:26

Instrument :

MSVOA_N

ClientSampleId :

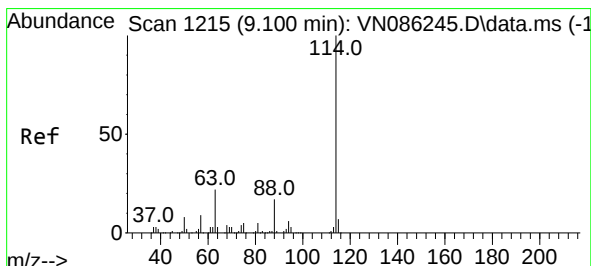
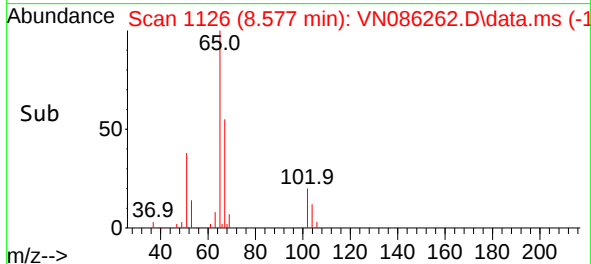
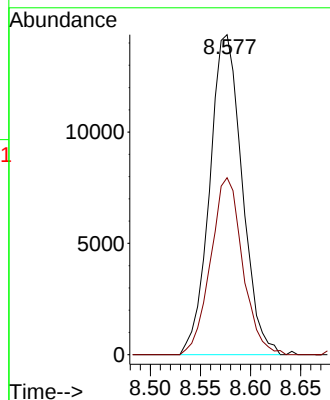
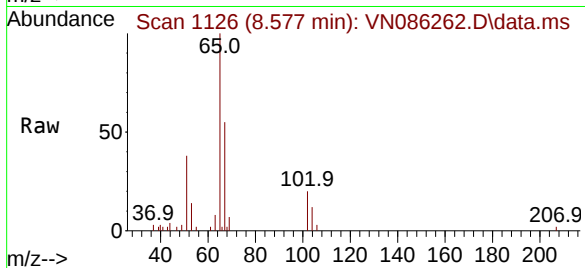
PB167573ZHE#02

Tgt Ion: 65 Resp: 32337

Ion Ratio Lower Upper

65 100

67 54.5 43.4 65.2



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.094 min Scan# 1214

Delta R.T. -0.006 min

Lab File: VN086262.D

Acq: 14 Apr 2025 12:26

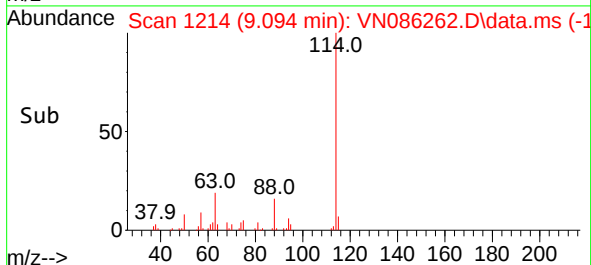
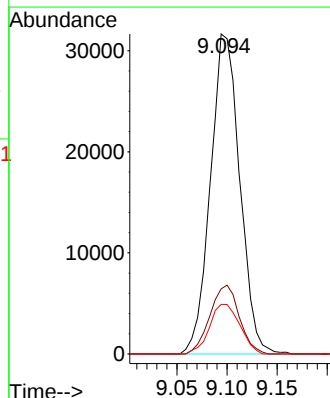
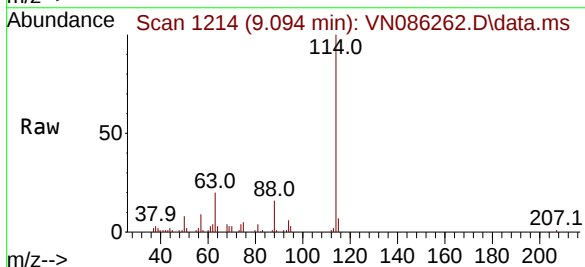
Tgt Ion: 114 Resp: 64391

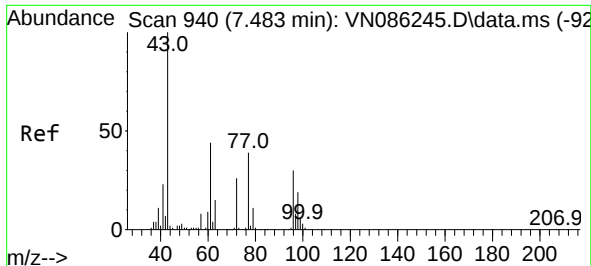
Ion Ratio Lower Upper

114 100

63 21.5 17.8 26.6

88 16.1 13.4 20.2

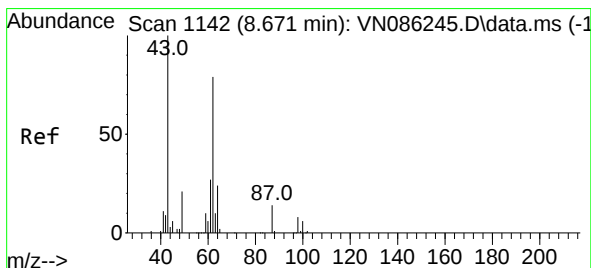
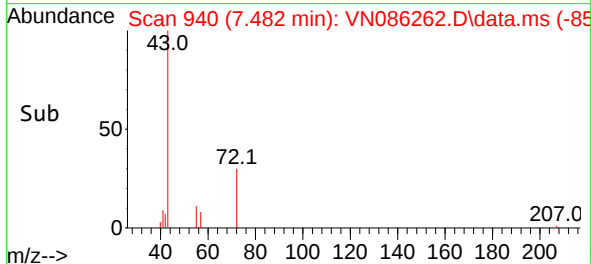
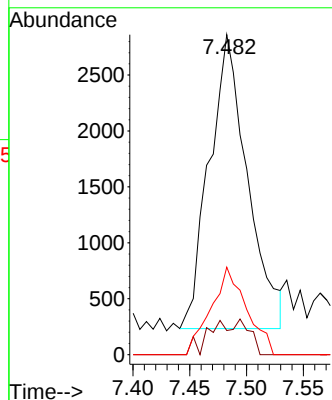
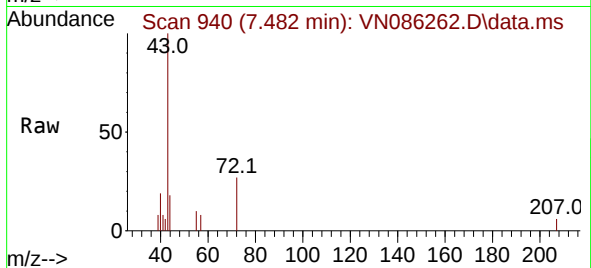




#30
2-Butanone
Concen: 9.633 ug/l
RT: 7.482 min Scan# 940
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

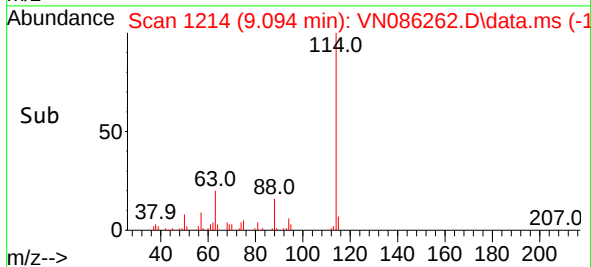
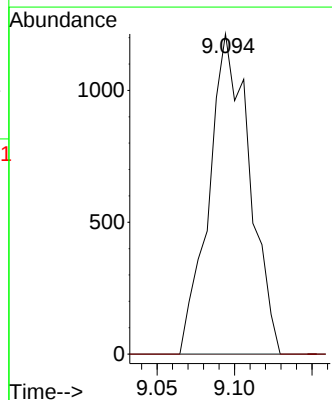
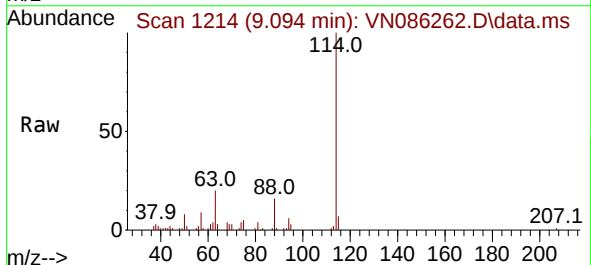
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

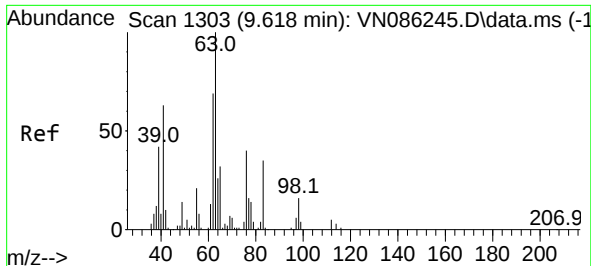
Tgt Ion: 43 Resp: 6157
Ion Ratio Lower Upper
43 100
57 5.5 6.4 9.6#
72 27.7 21.5 32.3



#36
1,2-Dichloroethane
Concen: 1.928 ug/l
RT: 9.094 min Scan# 1214
Delta R.T. 0.423 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 62 Resp: 2214
Ion Ratio Lower Upper
62 100
98 0.0 8.6 12.8#

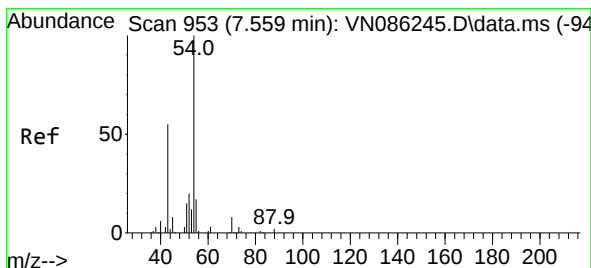
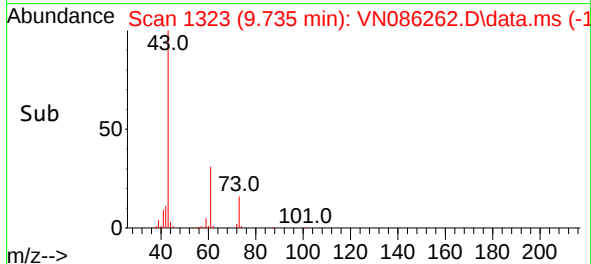
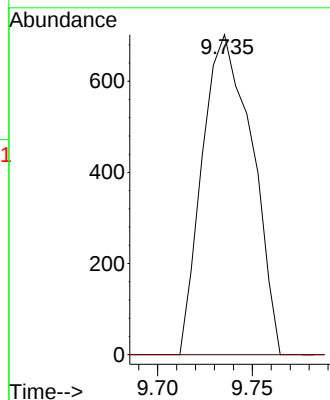
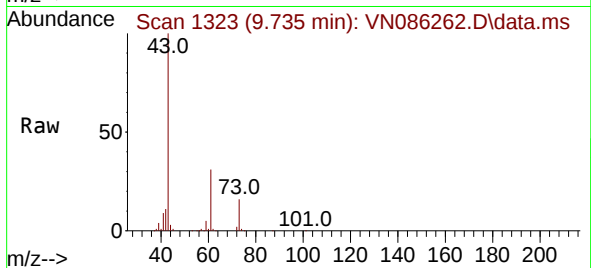




#39
1,2-Dichloropropane
Concen: 1.405 ug/l
RT: 9.735 min Scan# 11
Delta R.T. 0.117 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

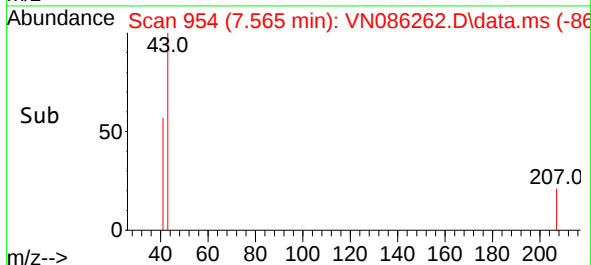
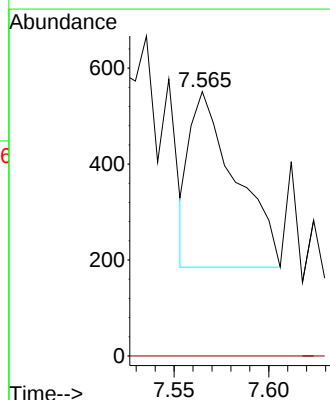
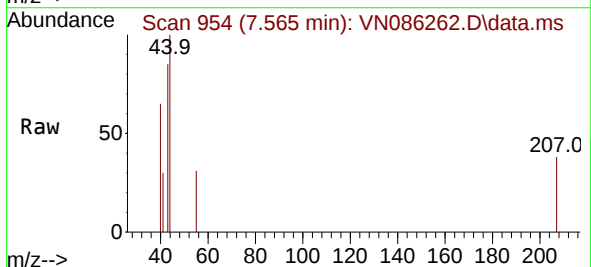
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

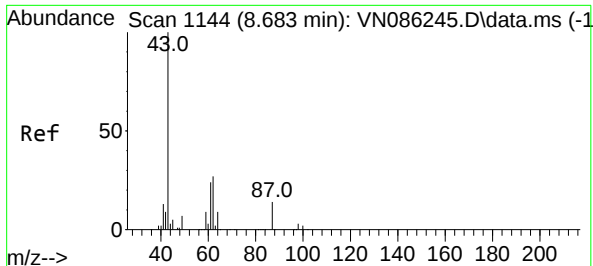
Tgt Ion: 63 Resp: 1283
Ion Ratio Lower Upper
63 100
65 0.0 26.0 39.0#



#43
Ethyl Acetate
Concen: 0.481 ug/l
RT: 7.565 min Scan# 954
Delta R.T. 0.006 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 43 Resp: 620
Ion Ratio Lower Upper
43 100
45 0.0 11.2 16.8#

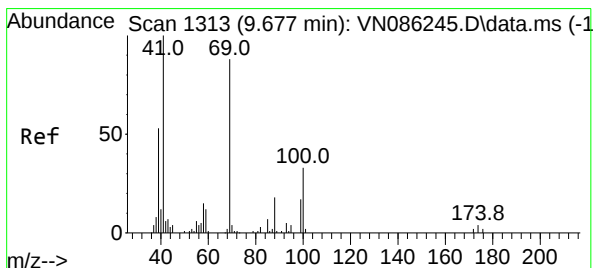
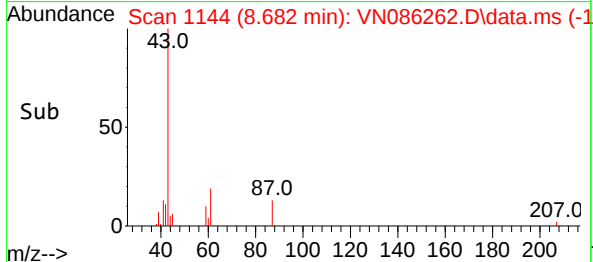
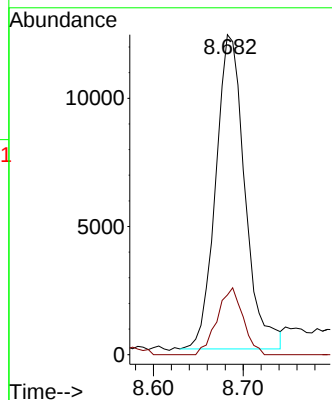
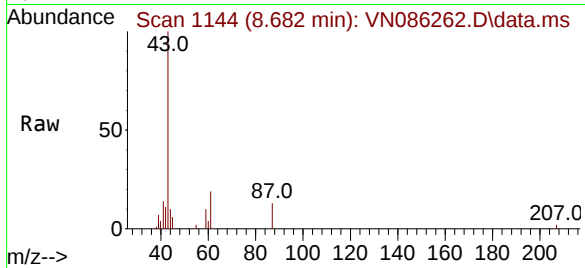




#44
Isopropyl Acetate
Concen: 11.575 ug/l
RT: 8.682 min Scan# 1144
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

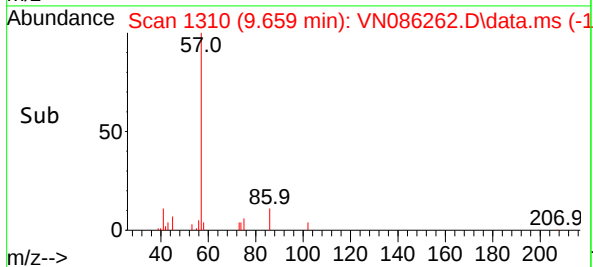
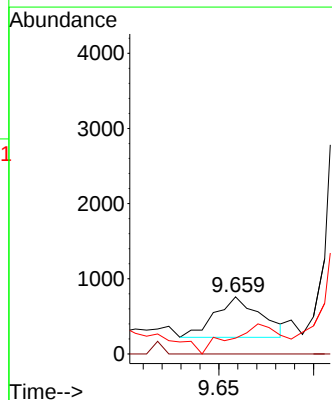
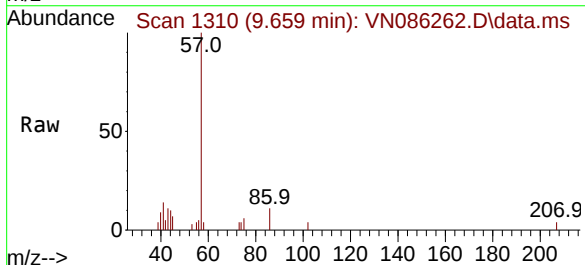
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

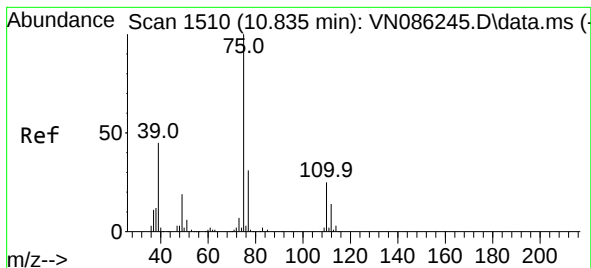
Tgt Ion: 43 Resp: 27683
Ion Ratio Lower Upper
43 100
61 18.9 20.5 30.7#



#46
Methyl methacrylate
Concen: 0.856 ug/l
RT: 9.659 min Scan# 1310
Delta R.T. -0.018 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 41 Resp: 902
Ion Ratio Lower Upper
41 100
69 0.0 43.2 129.6#
39 9.3 26.4 79.0#

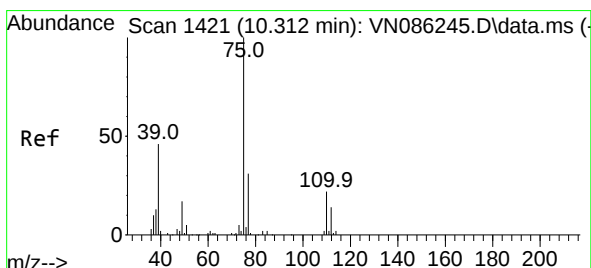
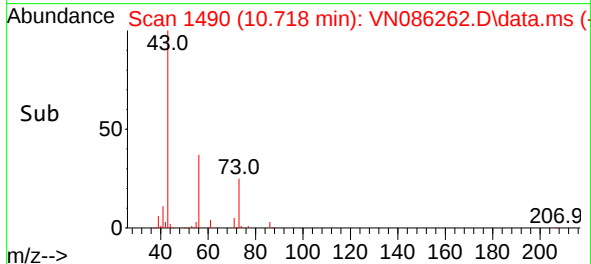
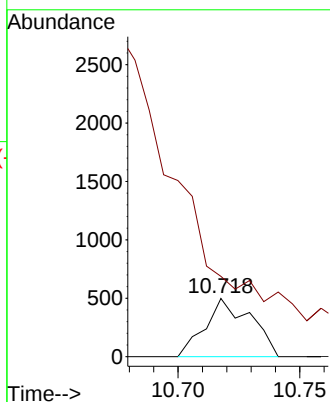
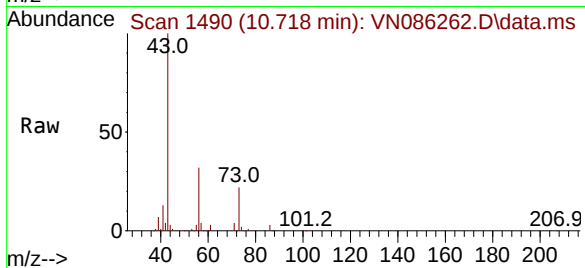




#48
t-1,3-Dichloropropene
Concen: 0.454 ug/l
RT: 10.718 min Scan# 1418
Delta R.T. -0.118 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

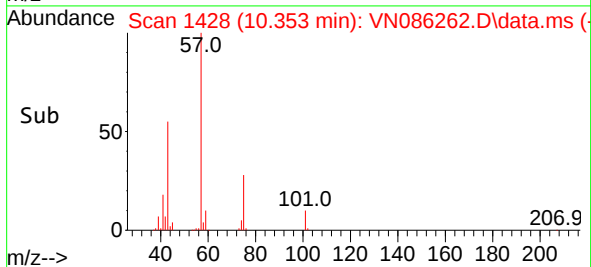
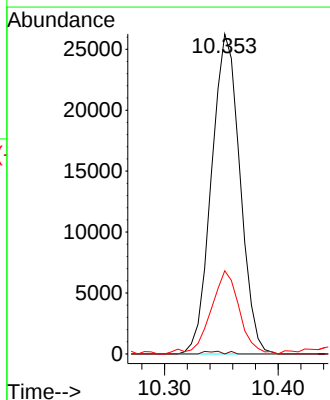
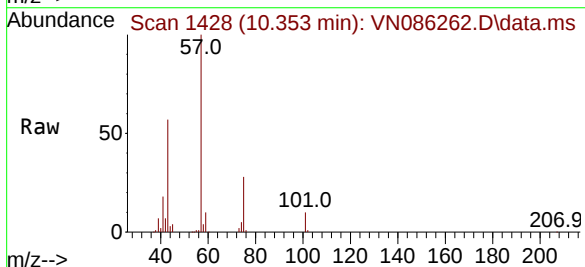
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

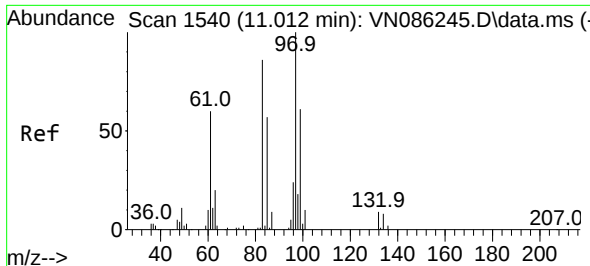
Tgt Ion: 75 Resp: 651
Ion Ratio Lower Upper
75 100
77 26.9 25.1 37.7



#49
cis-1,3-Dichloropropene
Concen: 30.140 ug/l
RT: 10.353 min Scan# 1428
Delta R.T. 0.041 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

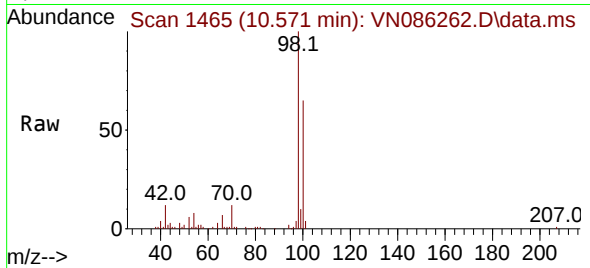
Tgt Ion: 75 Resp: 45691
Ion Ratio Lower Upper
75 100
77 0.0 25.0 37.4#
39 26.0 36.7 55.1#



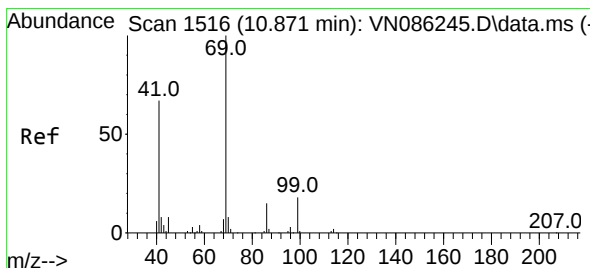
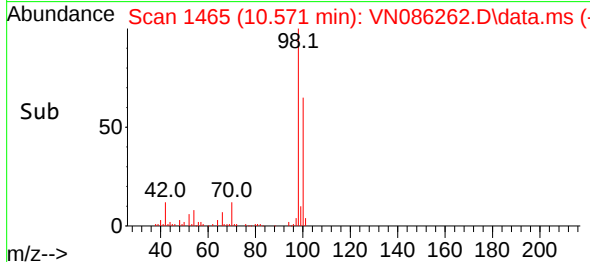
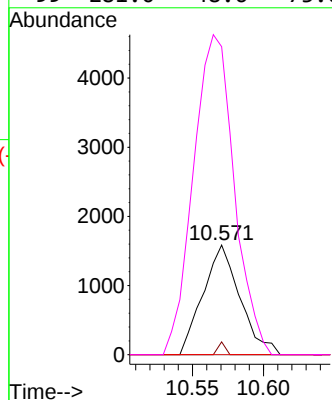


#50
 1,1,2-Trichloroethane
 Concen: 3.477 ug/l
 RT: 10.571 min Scan# 1465
 Delta R.T. -0.441 min
 Lab File: VN086262.D
 Acq: 14 Apr 2025 12:26

Instrument :
 MSVOA_N
 ClientSampleId :
 PB167573ZHE#02

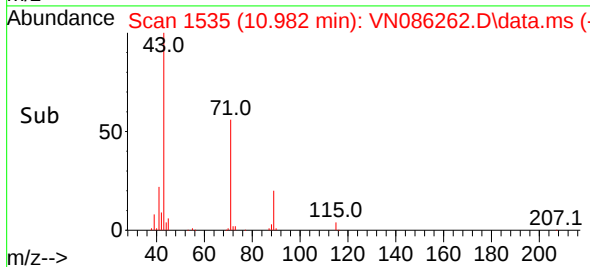
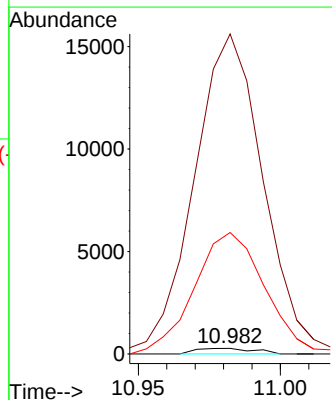
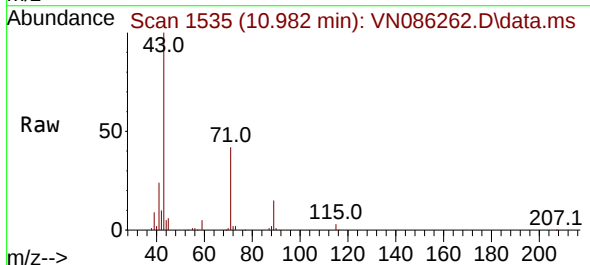


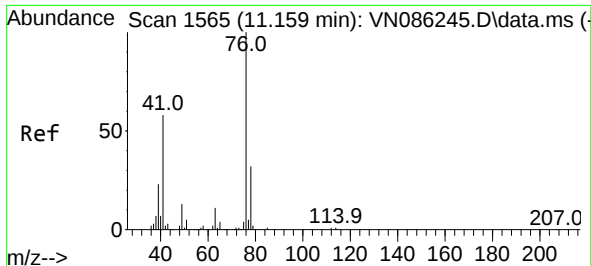
Tgt Ion:	97	Resp:	2876
Ion	Ratio	Lower	Upper
97	100		
83	11.6	68.6	103.0#
85	0.0	45.9	68.9#
99	281.0	48.6	73.0#



#51
 Ethyl methacrylate
 Concen: 0.257 ug/l
 RT: 10.982 min Scan# 1535
 Delta R.T. 0.112 min
 Lab File: VN086262.D
 Acq: 14 Apr 2025 12:26

Tgt Ion:	69	Resp:	395
Ion	Ratio	Lower	Upper
69	100		
41	4080.1	33.6	100.6#
39	1550.4	17.8	53.4#

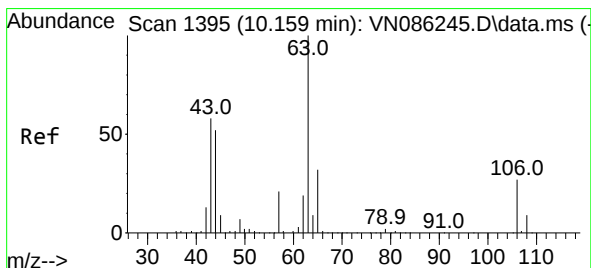
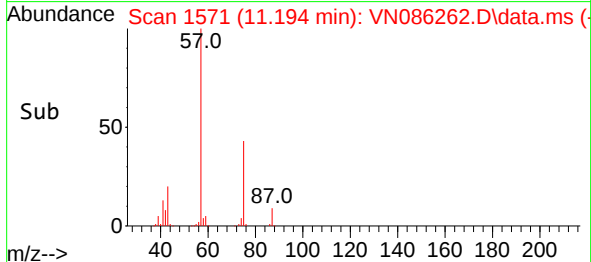
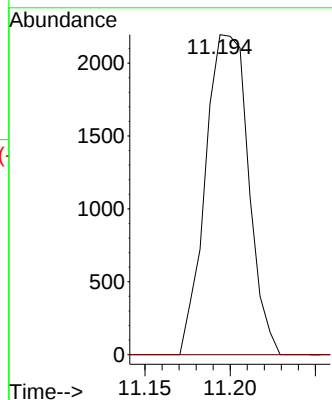
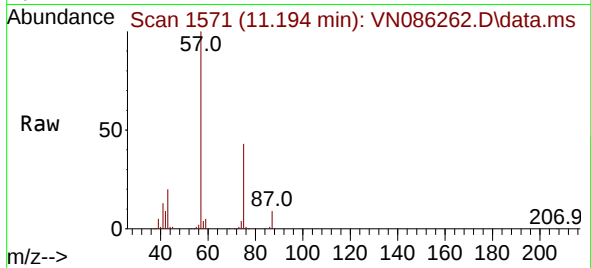




#52
1,3-Dichloropropane
Concen: 2.610 ug/l
RT: 11.194 min Scan# 1119
Delta R.T. 0.035 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

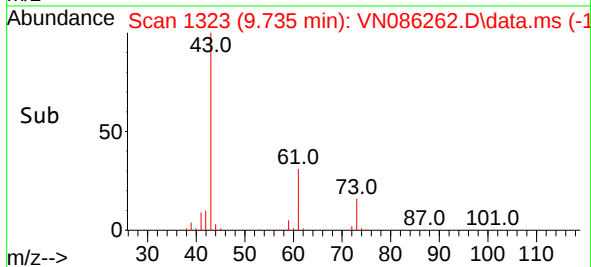
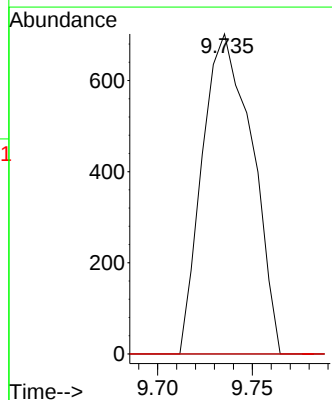
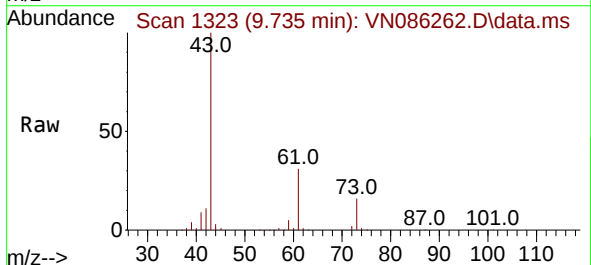
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

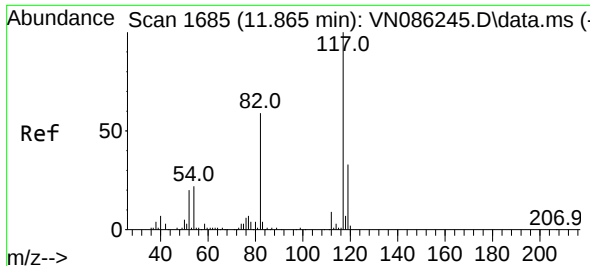
Tgt Ion: 76 Resp: 3848
Ion Ratio Lower Upper
76 100
78 0.0 0.0 64.6



#55
2-Chloroethyl vinyl ether
Concen: 2.209 ug/l
RT: 9.735 min Scan# 1323
Delta R.T. -0.424 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 63 Resp: 1283
Ion Ratio Lower Upper
63 100
65 0.0 25.8 38.8#
106 0.0 21.8 32.8#

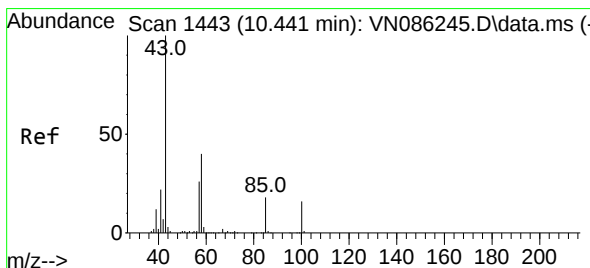
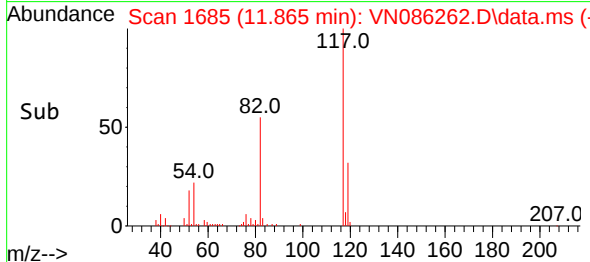
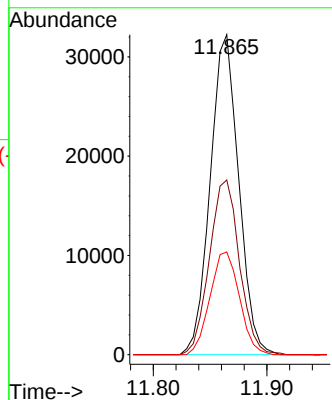
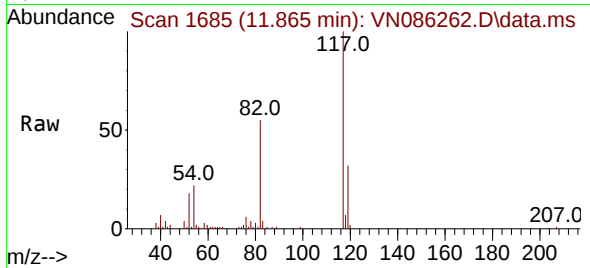




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 117
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

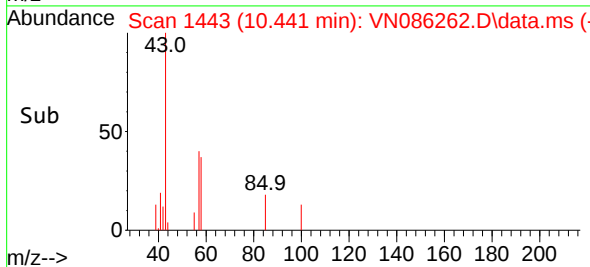
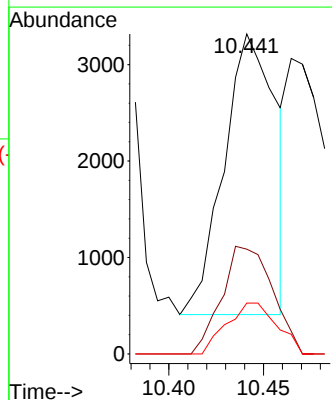
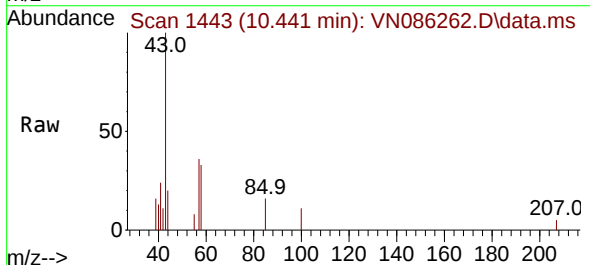
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

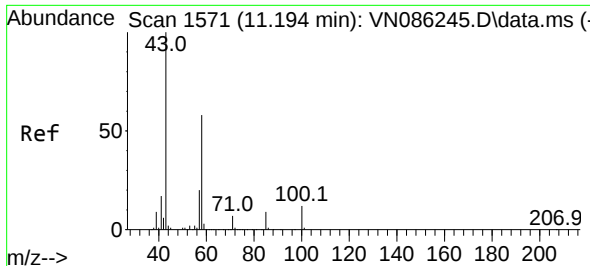
Tgt Ion:	117	Resp:	56205
Ion	Ratio	Lower	Upper
117	100		
82	57.6	47.3	70.9
119	33.2	25.9	38.9



#58
4-Methyl-2-Pentanone
Concen: 4.325 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion:	43	Resp:	5516
Ion	Ratio	Lower	Upper
43	100		
58	37.7	32.5	48.7
85	17.5	14.4	21.6

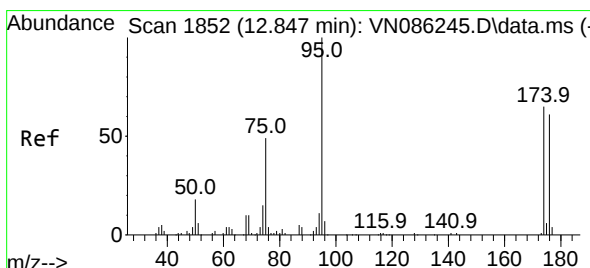
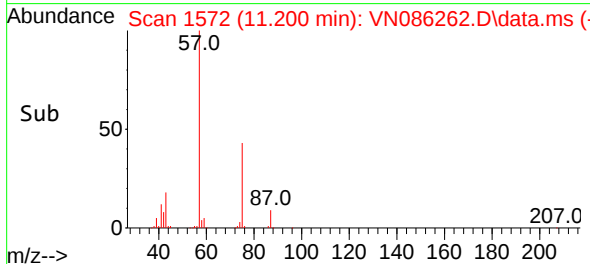
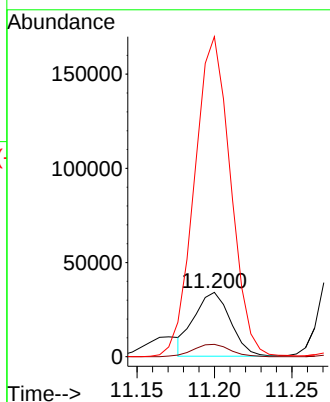
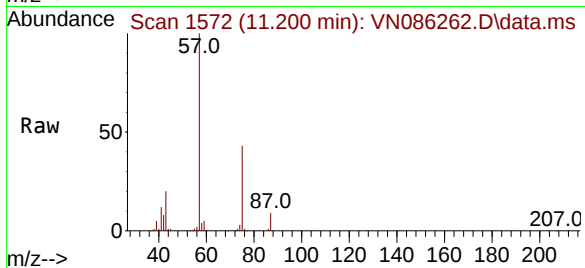




#59
2-Hexanone
Concen: 58.074 ug/l
RT: 11.200 min Scan# 1572
Delta R.T. 0.006 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

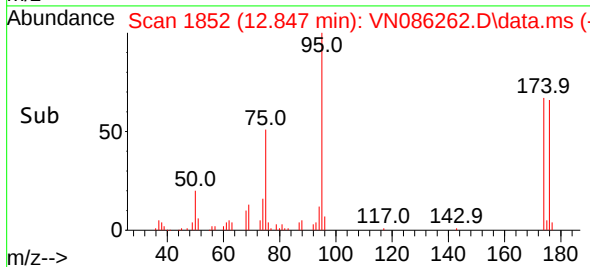
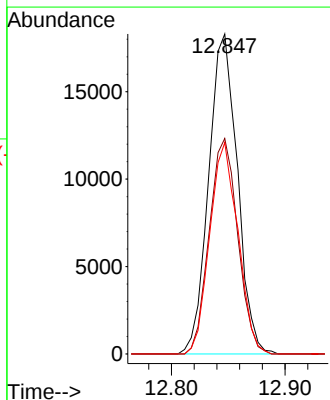
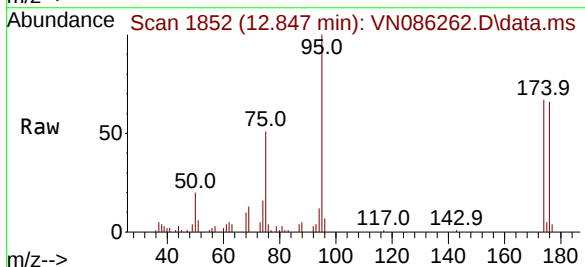
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

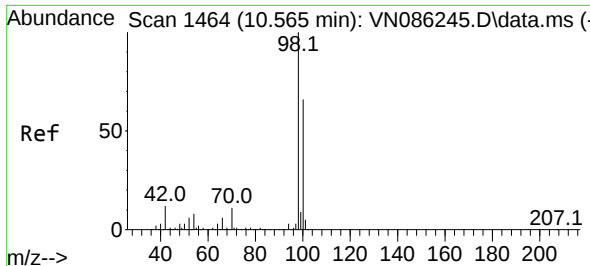
Tgt Ion: 43 Resp: 55156
Ion Ratio Lower Upper
43 100
58 19.8 45.3 67.9#
57 500.7 15.8 23.6#



#60
4-Bromofluorobenzene
Concen: 28.705 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 95 Resp: 32122
Ion Ratio Lower Upper
95 100
174 66.9 52.7 79.1
176 64.8 49.8 74.8

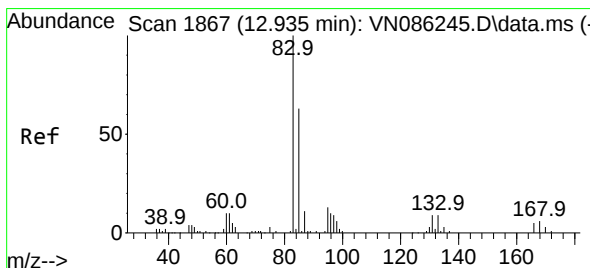
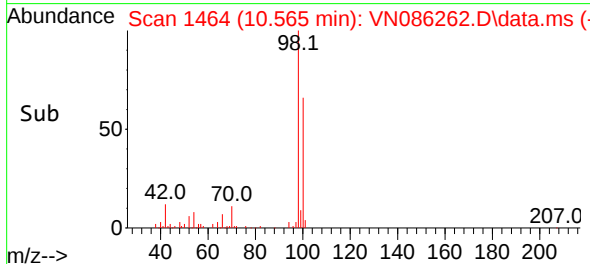
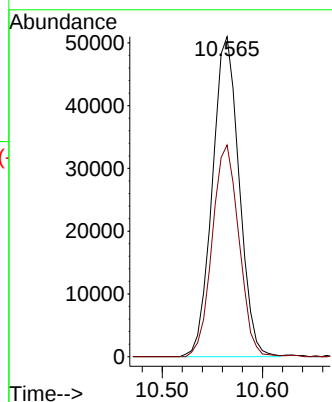
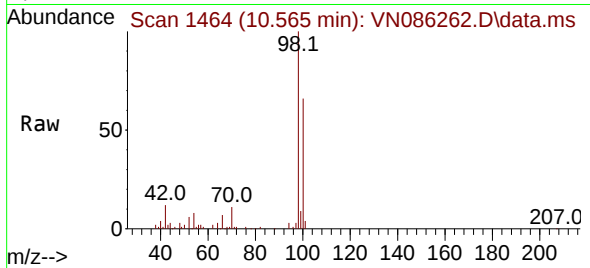




#63
Toluene-d8
Concen: 29.833 ug/l
RT: 10.565 min Scan# 1464
Delta R.T. -0.000 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

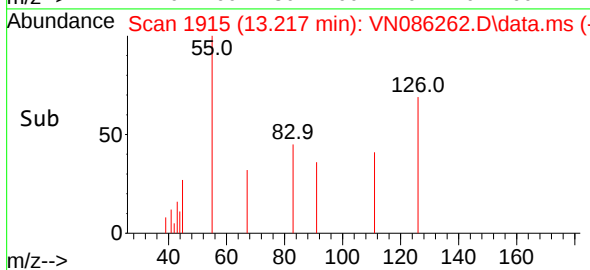
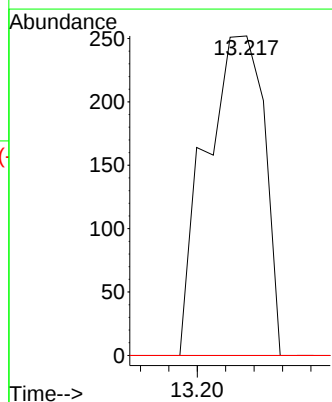
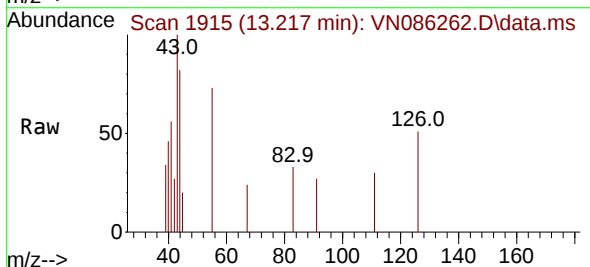
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

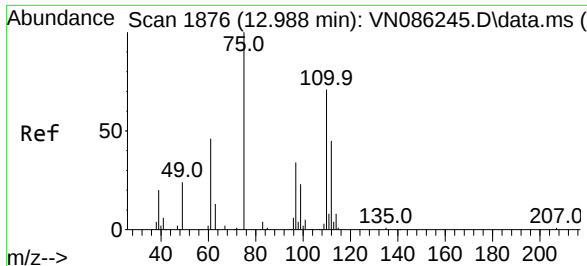
Tgt Ion: 98 Resp: 94663
Ion Ratio Lower Upper
98 100
100 65.8 52.3 78.5



#71
1,1,2,2-Tetrachloroethane
Concen: 0.337 ug/l
RT: 13.217 min Scan# 1915
Delta R.T. 0.282 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 83 Resp: 362
Ion Ratio Lower Upper
83 100
131 0.0 4.8 14.3#
85 35.6 32.3 96.8

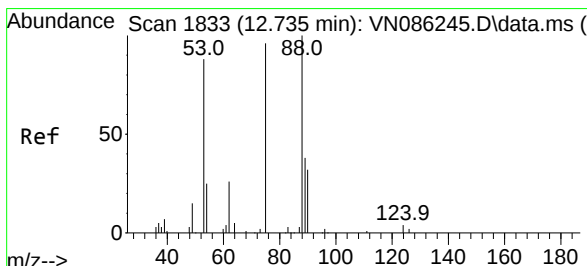
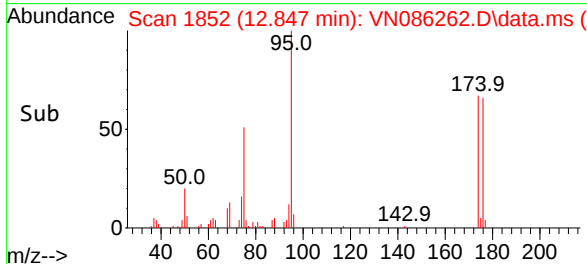
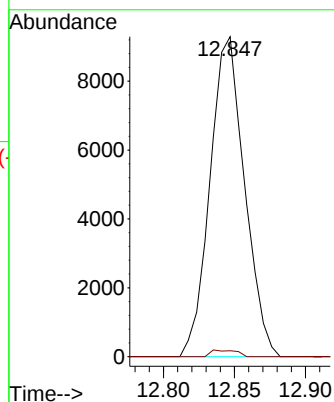
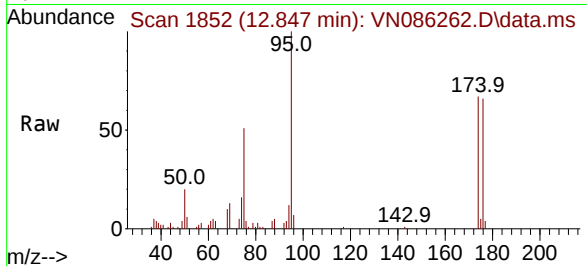




#72
1,2,3-Trichloropropane
Concen: 14.069 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.141 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

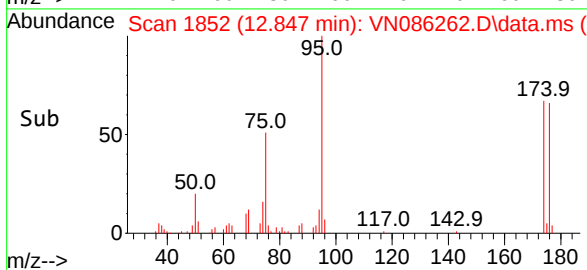
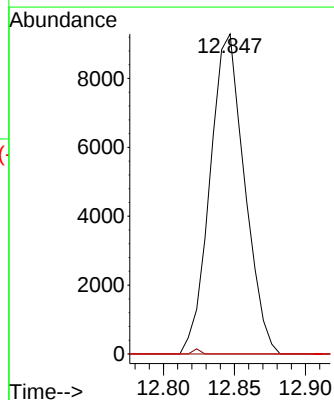
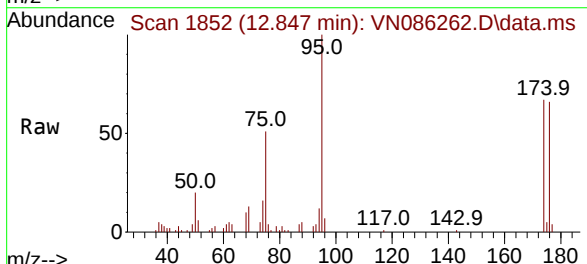
Instrument :
MSVOA_N
ClientSampleId :
PB167573ZHE#02

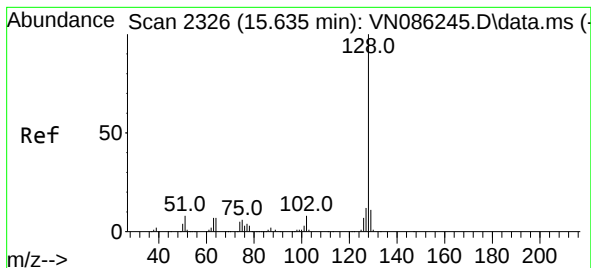
Tgt Ion: 75 Resp: 15716
Ion Ratio Lower Upper
75 100
77 0.8 0.0 380.0



#77
t-1,4-Dichloro-2-butene
Concen: 30.513 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.112 min
Lab File: VN086262.D
Acq: 14 Apr 2025 12:26

Tgt Ion: 75 Resp: 15716
Ion Ratio Lower Upper
75 100
53 0.0 46.4 139.2#
89 0.0 22.5 67.5#





#91

Naphthalene

Concen: 0.353 ug/l

RT: 15.641 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN086262.D

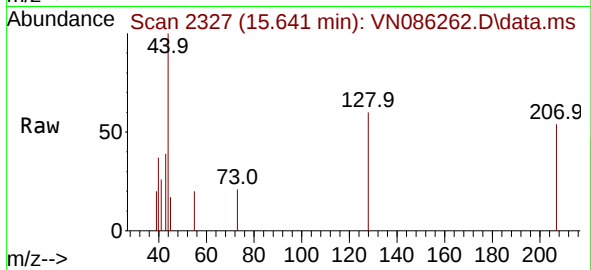
Acq: 14 Apr 2025 12:26

Instrument :

MSVOA_N

ClientSampleId :

PB167573ZHE#02



Tgt Ion:128 Resp: 1037

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.2#

129 0.0 8.8 13.2#

