

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN071823\
 Data File : VN078563.D
 Acq On : 18 Jul 2023 16:03
 Operator : JC\MD
 Sample : 03654-02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 72-12016

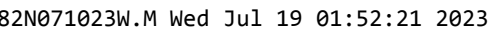
Quant Time: Jul 19 01:52:05 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071023W.M
 Quant Title : SW846 8260
 QLast Update : Mon Jul 10 16:13:53 2023
 Response via : Initial Calibration

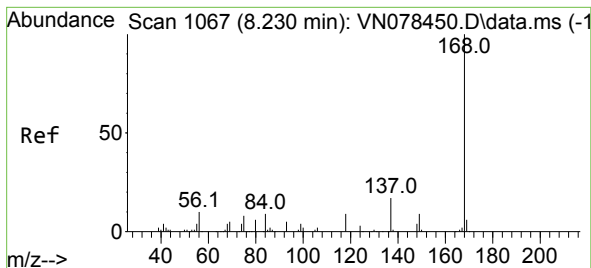
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	8.236	168	494971	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.106	114	901922	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.871	117	896139	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.800	152	312554	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.588	65	308422	46.480	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery =	92.960%		
35) Dibromofluoromethane	8.171	113	333904	54.537	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	109.080%		
50) Toluene-d8	10.577	98	982032	42.459	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery =	84.920%#		
62) 4-Bromofluorobenzene	12.853	95	362668	50.906	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	101.820%		
Target Compounds						Qvalue
3) Chloromethane	2.371	50	1462	0.222	ug/l	97
5) Bromomethane	2.948	94	865	Below Cal	#	41
6) Chloroethane	3.124	64	755	Below Cal	#	53
11) Tert butyl alcohol	5.536	59	451	0.441	ug/l #	72
16) Acetone	4.442	43	66599	32.220	ug/l #	85
18) Methyl Acetate	5.048	43	6818	0.779	ug/l #	66
20) Methylene Chloride	5.289	84	19475	2.114	ug/l	91
25) 2-Butanone	7.500	43	50150	15.413	ug/l	99
29) Tetrahydrofuran	7.853	42	520	0.244	ug/l #	58
31) Cyclohexane	8.230	56	10799	1.204	ug/l #	32
36) 1,1-Dichloropropene	8.236	75	39172	4.431	ug/l #	48
37) Ethyl Acetate	7.577	43	15119	2.052	ug/l #	91
38) Carbon Tetrachloride	8.236	117	49475	5.149	ug/l #	16
42) 1,2-Dichloroethane	8.688	62	2400	0.269	ug/l #	73
43) Isopropyl Acetate	8.700	43	545290	44.943	ug/l #	74
48) Methyl methacrylate	9.671	41	9205	1.638	ug/l #	33
49) 1,4-Dioxane	9.694	88	70	0.571	ug/l #	1
51) 4-Methyl-2-Pentanone	10.453	43	160936	22.300	ug/l	90
54) cis-1,3-Dichloropropene	10.365	75	118710	11.615	ug/l #	68
57) 1,3-Dichloropropane	11.206	76	15310	1.408	ug/l #	43
59) 2-Hexanone	11.206	43	169317	33.011	ug/l #	50
74) N-amyl acetate	12.488	43	2807	0.277	ug/l #	46
75) 1,1,2,2-Tetrachloroethane	12.924	83	97	Below Cal	#	26
76) 1,2,3-Trichloropropane	12.853	75	188897	25.004	ug/l #	1
77) Bromobenzene	12.982	156	123	Below Cal	#	83
81) trans-1,4-Dichloro-2-b...	12.853	75	188897	65.705	ug/l #	15
90) Hexachloroethane	14.335	117	211	Below Cal	#	58
92) 1,2-Dibromo-3-Chloropr...	14.923	75	55	Below Cal	#	4

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

Quant Time: Jul 19 01:52:05 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N071023W.M
Quant Title : SW846 8260
QLast Update : Mon Jul 10 16:13:53 2023
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 8.236 min Scan# 10

Delta R.T. 0.006 min

Lab File: VN078563.D

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MSVOA_N

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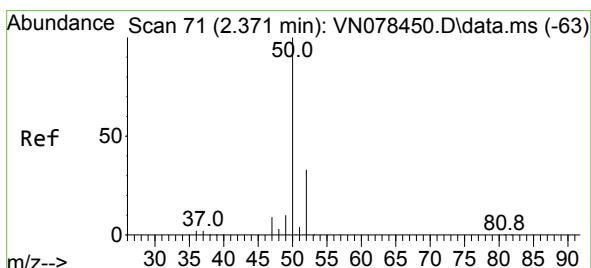
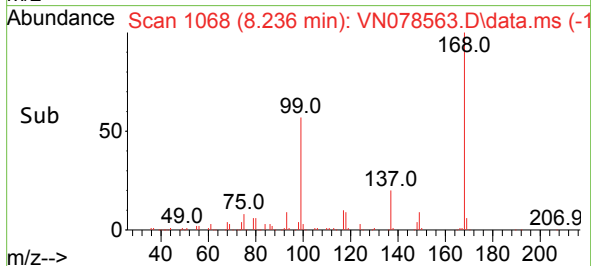
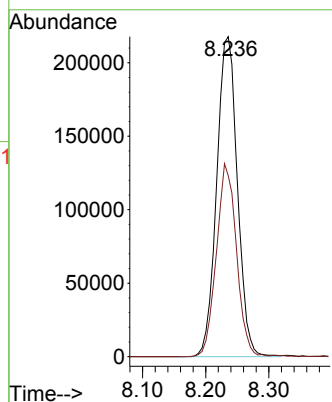
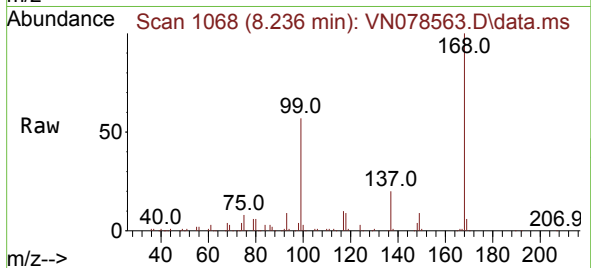
72-12016

Tgt Ion:168 Resp: 494971

Ion Ratio Lower Upper

168 100

99 56.6 53.0 79.6



#3

Chloromethane

Concen: 0.222 ug/l

RT: 2.371 min Scan# 71

Delta R.T. 0.000 min

Lab File: VN078563.D

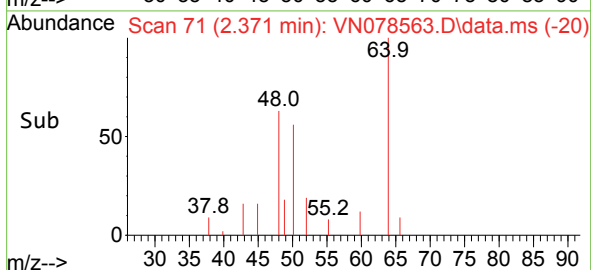
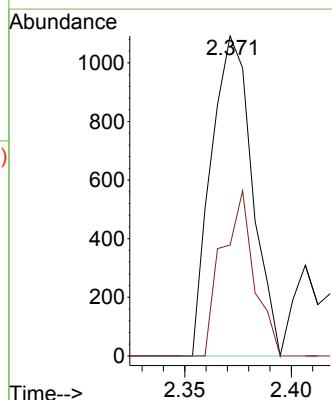
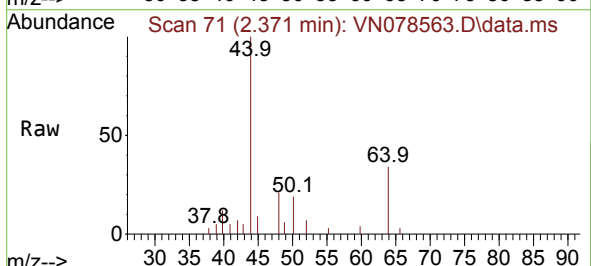
Acq: 18 Jul 2023 16:03

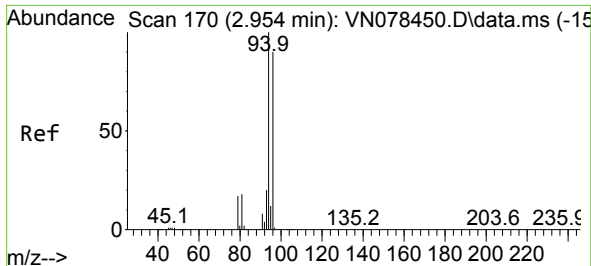
Tgt Ion: 50 Resp: 1462

Ion Ratio Lower Upper

50 100

52 34.6 26.5 39.7

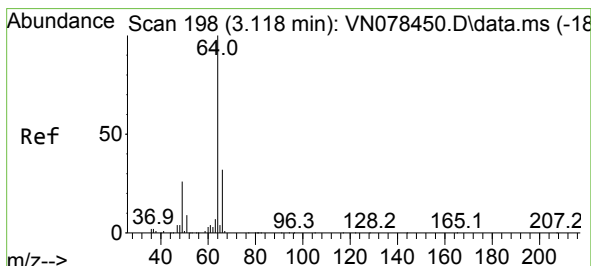
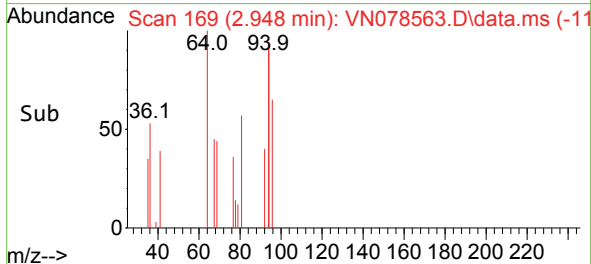
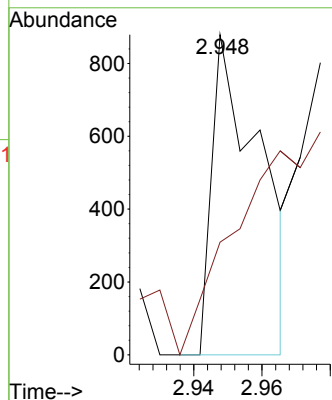
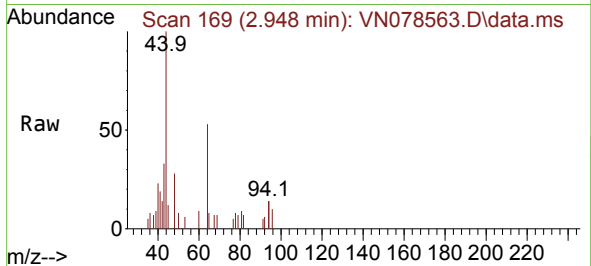




#5
Bromomethane
Concen: Below Cal
RT: 2.948 min Scan# 1
Delta R.T. -0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

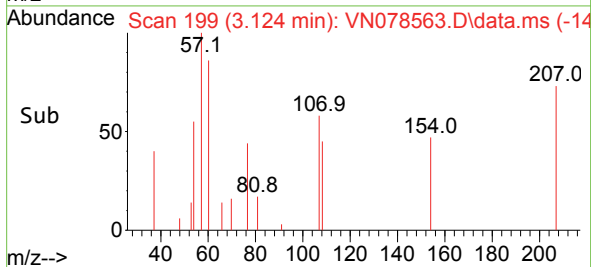
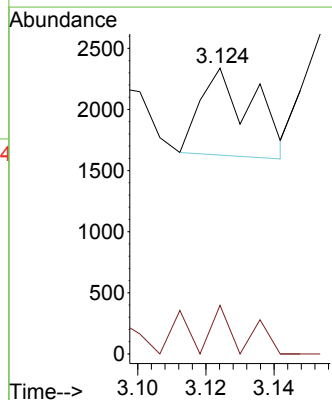
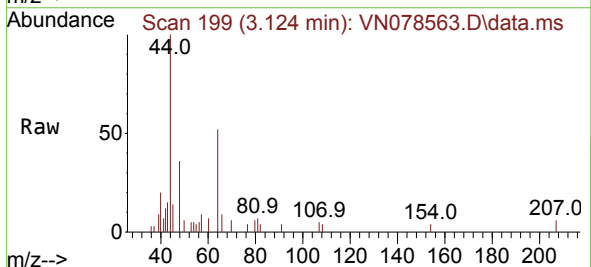
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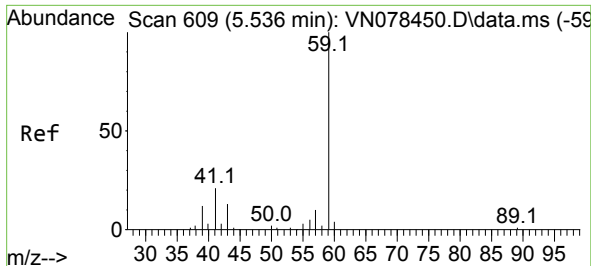
Tgt Ion: 94 Resp: 865
Ion Ratio Lower Upper
94 100
96 35.2 73.1 109.7#



#6
Chloroethane
Concen: Below Cal
RT: 3.124 min Scan# 199
Delta R.T. 0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 64 Resp: 755
Ion Ratio Lower Upper
64 100
66 57.7 25.4 38.2#

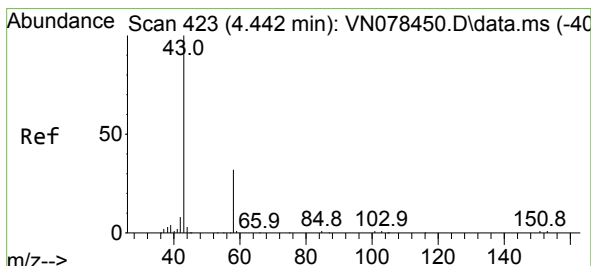
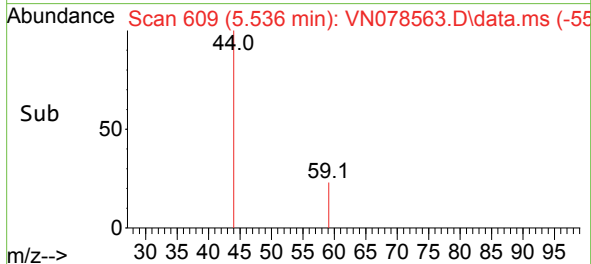
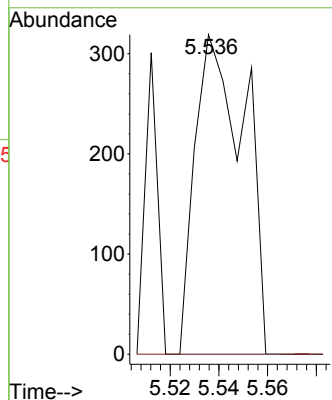
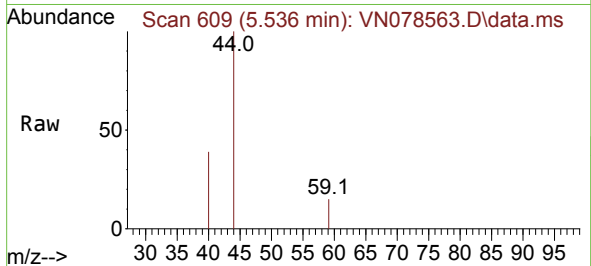




#11
Tert butyl alcohol
Concen: 0.441 ug/l
RT: 5.536 min Scan# 609
Delta R.T. -0.000 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

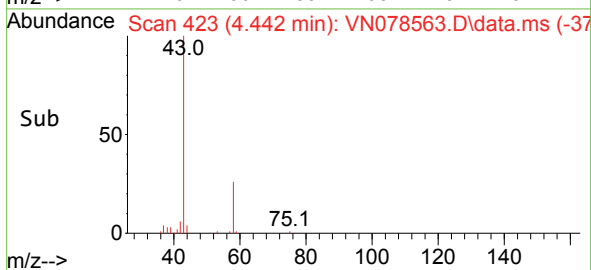
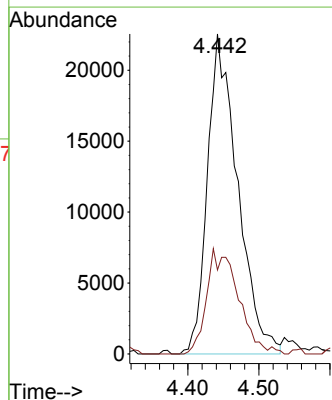
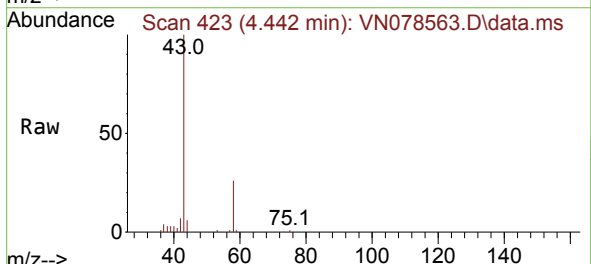
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ClientSampleId :
72-12016

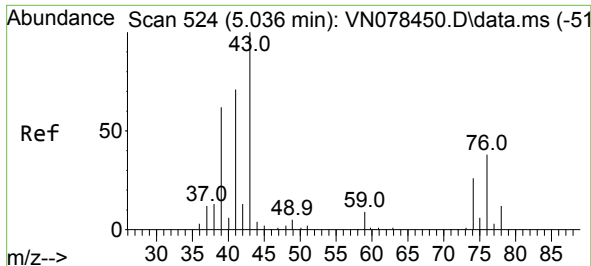
Tgt Ion: 59 Resp: 451
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.4#



#16
Acetone
Concen: 32.220 ug/l
RT: 4.442 min Scan# 423
Delta R.T. -0.000 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 43 Resp: 66599
Ion Ratio Lower Upper
43 100
58 26.3 28.0 42.0#

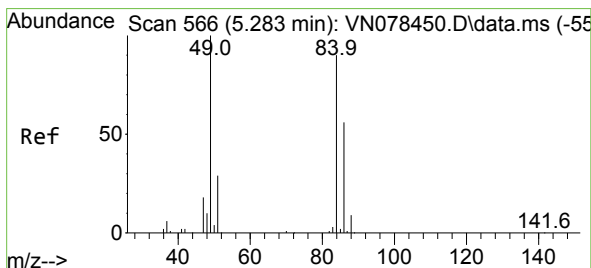
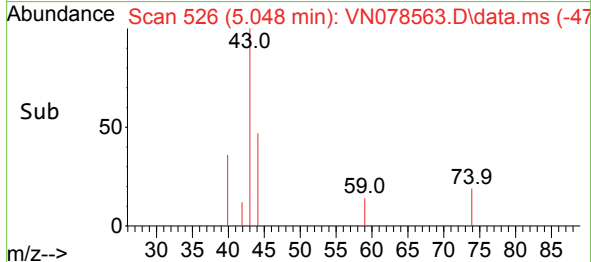
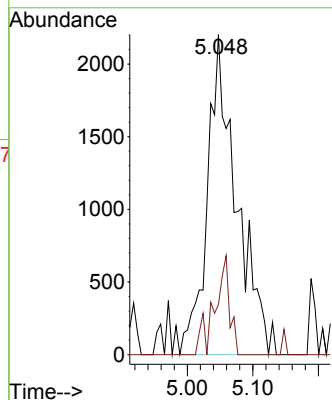
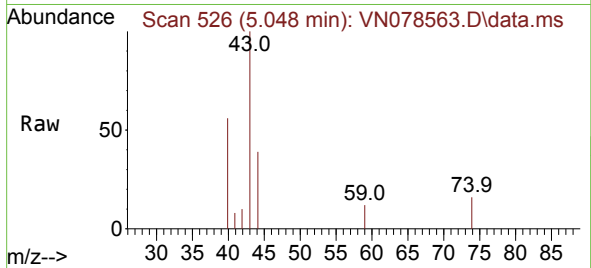




#18
Methyl Acetate
Concen: 0.779 ug/l
RT: 5.048 min Scan# 51
Delta R.T. 0.012 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

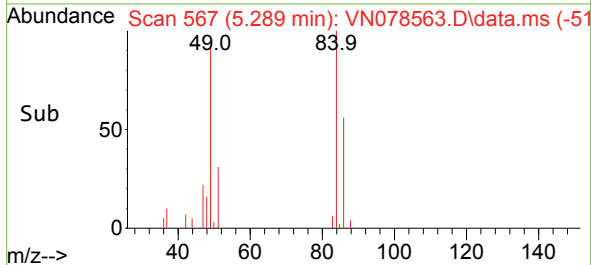
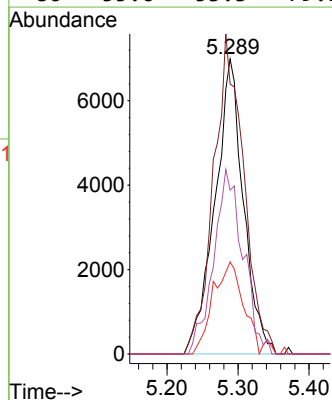
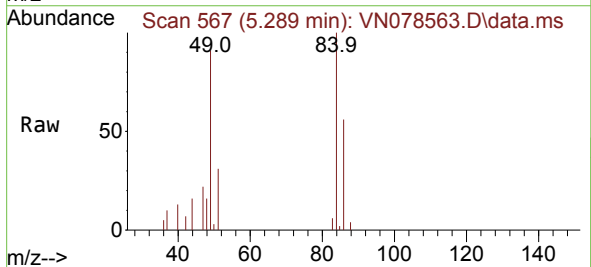
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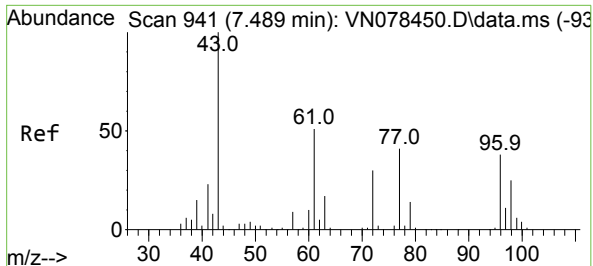
Tgt Ion: 43 Resp: 6818
Ion Ratio Lower Upper
43 100
74 13.8 26.2 39.4#



#20
Methylene Chloride
Concen: 2.114 ug/l
RT: 5.289 min Scan# 567
Delta R.T. 0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 84 Resp: 19475
Ion Ratio Lower Upper
84 100
49 91.5 79.7 119.5
51 31.2 25.2 37.8
86 55.6 53.3 79.9

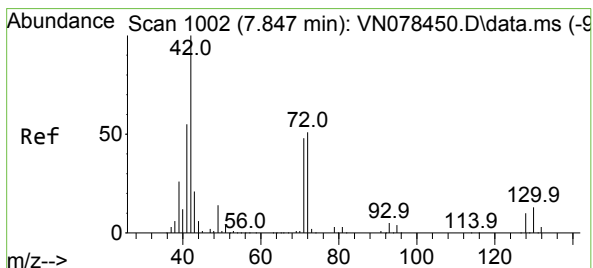
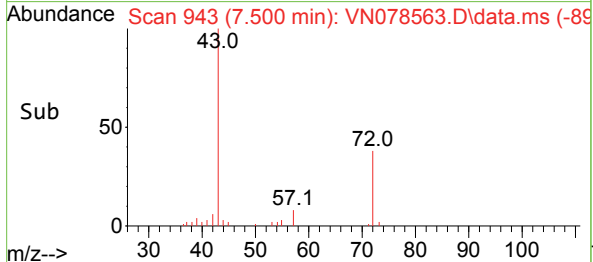
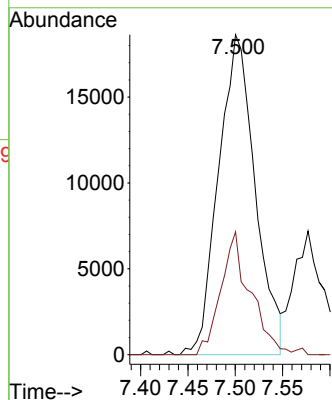
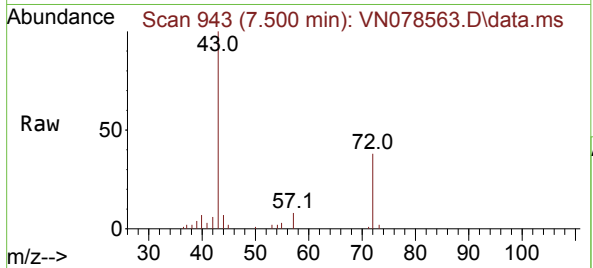




#25
2-Butanone
Concen: 15.413 ug/l
RT: 7.500 min Scan# 941
Delta R.T. 0.011 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

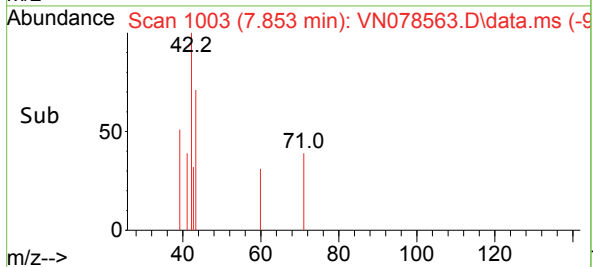
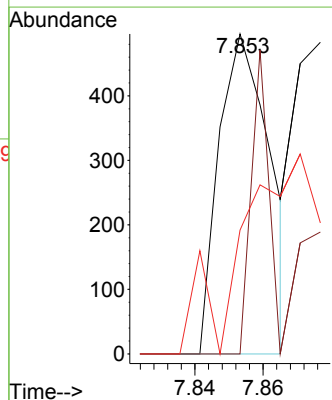
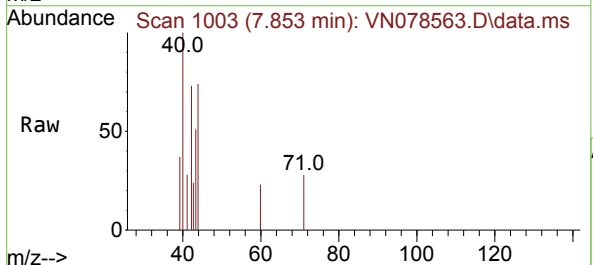
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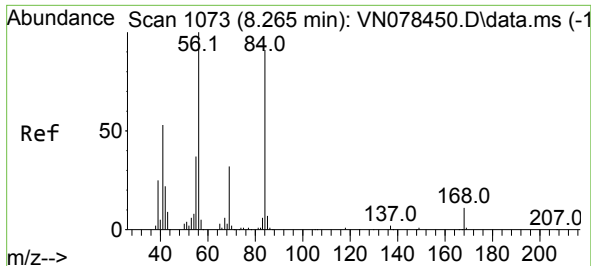
Tgt Ion: 43 Resp: 50150
Ion Ratio Lower Upper
43 100
72 38.4 30.2 45.2



#29
Tetrahydrofuran
Concen: 0.244 ug/l
RT: 7.853 min Scan# 1003
Delta R.T. 0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 42 Resp: 520
Ion Ratio Lower Upper
42 100
72 56.5 49.8 74.6
71 0.0 47.4 71.2#

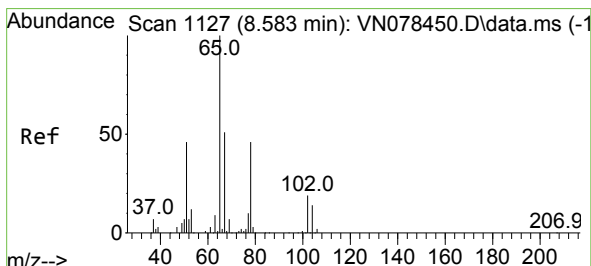
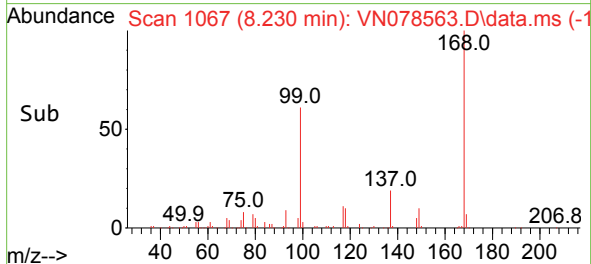
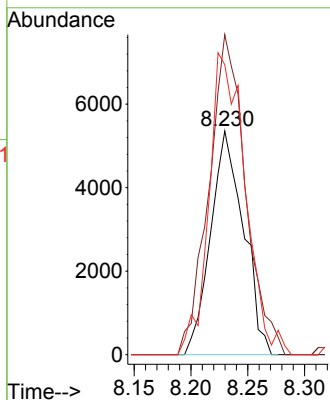
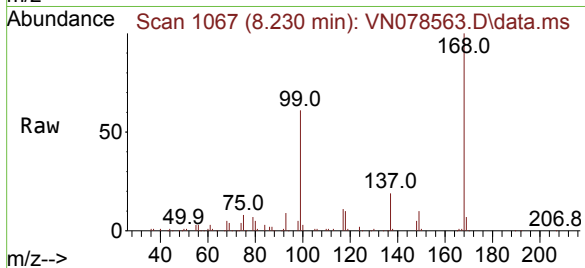




#31
Cyclohexane
Concen: 1.204 ug/l
RT: 8.230 min Scan# 1073
Delta R.T. -0.035 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

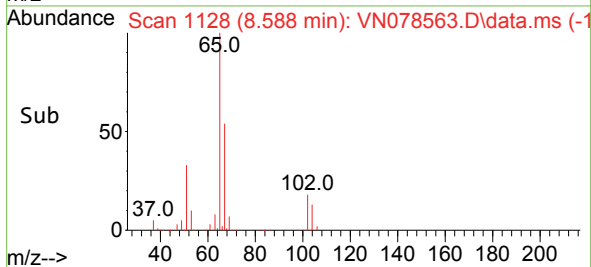
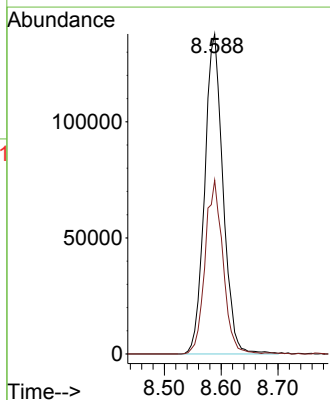
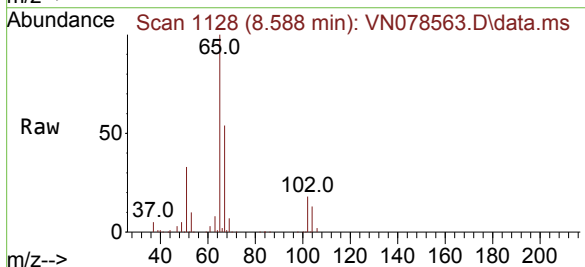
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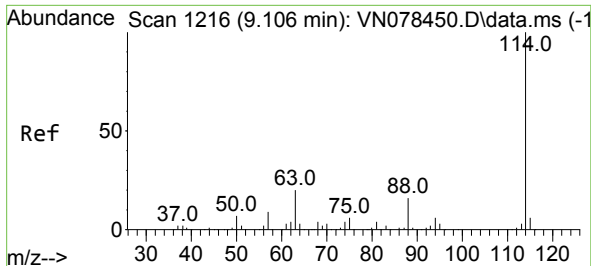
Tgt Ion: 56 Resp: 10799
Ion Ratio Lower Upper
56 100
69 143.1 26.8 40.2#
84 129.7 81.8 122.6#



#33
1,2-Dichloroethane-d4
Concen: 46.480 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. 0.005 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 65 Resp: 308422
Ion Ratio Lower Upper
65 100
67 52.8 0.0 106.6

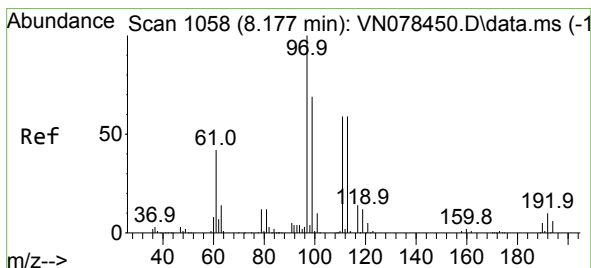
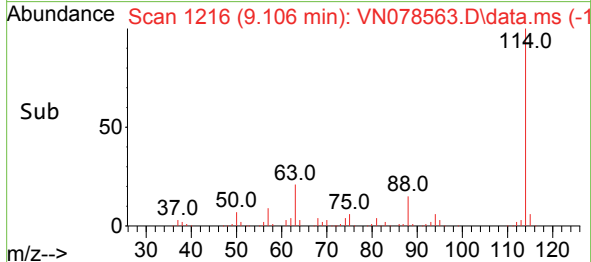
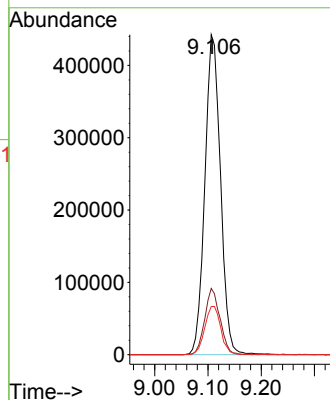
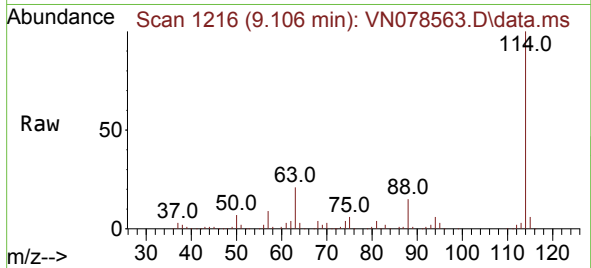




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.106 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

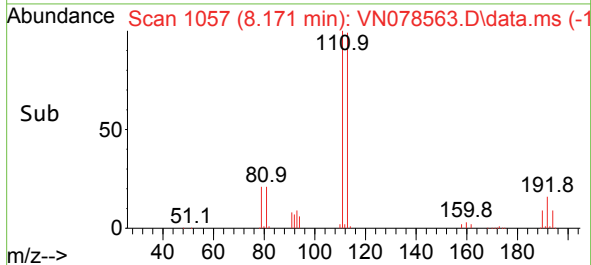
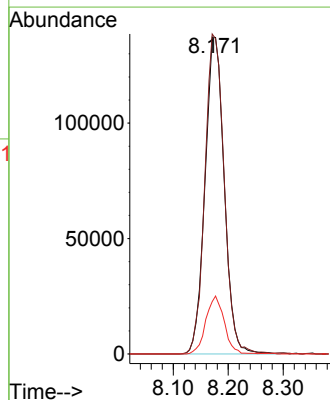
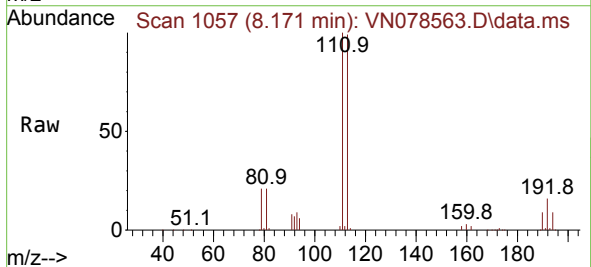
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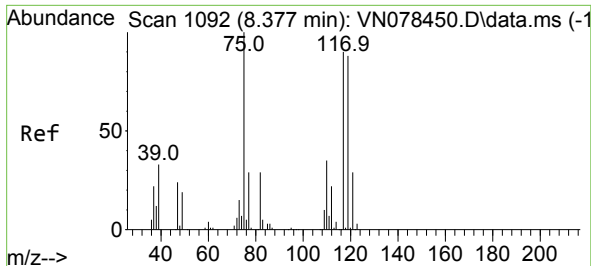
Tgt Ion:114 Resp: 901922
Ion Ratio Lower Upper
114 100
63 20.7 0.0 36.4
88 15.0 0.0 30.6



#35
Dibromofluoromethane
Concen: 54.537 ug/l
RT: 8.171 min Scan# 1057
Delta R.T. -0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion:113 Resp: 333904
Ion Ratio Lower Upper
113 100
111 101.3 82.6 123.8
192 17.5 12.7 19.1

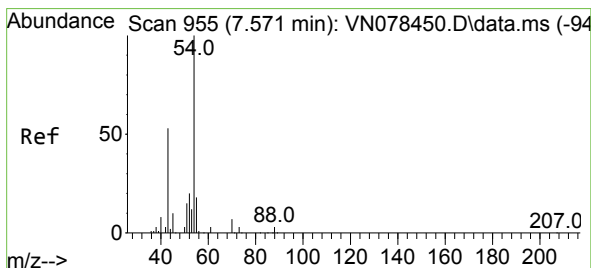
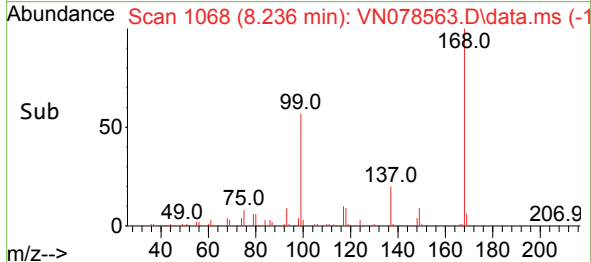
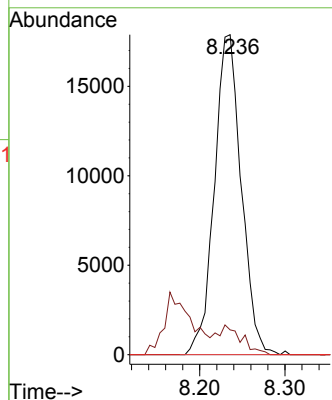
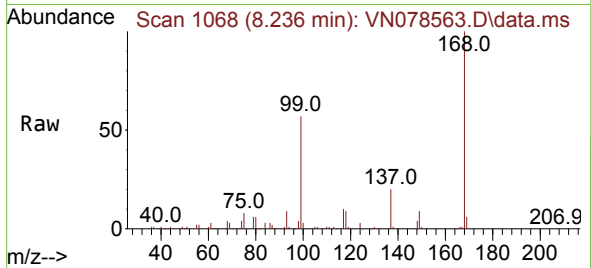




#36
1,1-Dichloropropene
Concen: 4.431 ug/l
RT: 8.236 min Scan# 1068
Delta R.T. -0.141 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

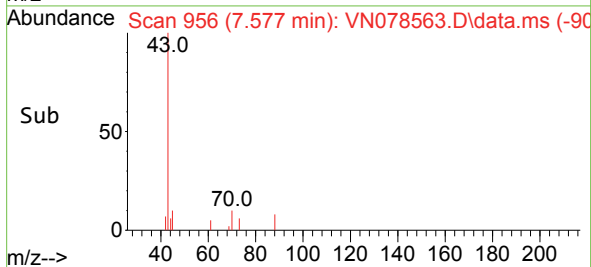
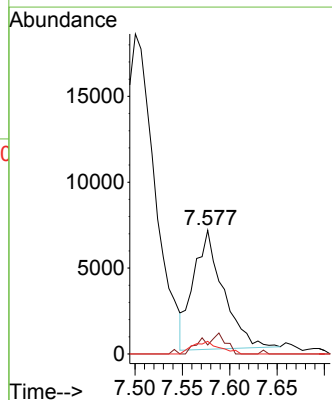
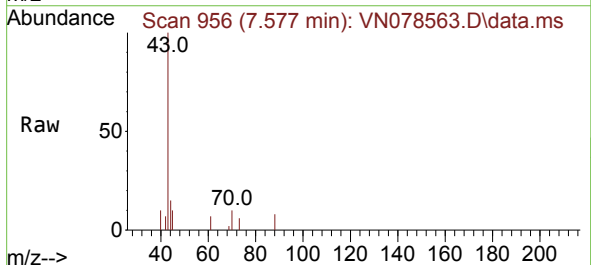
Instrument :
MSVOA_N
ClientSampleId :
72-12016

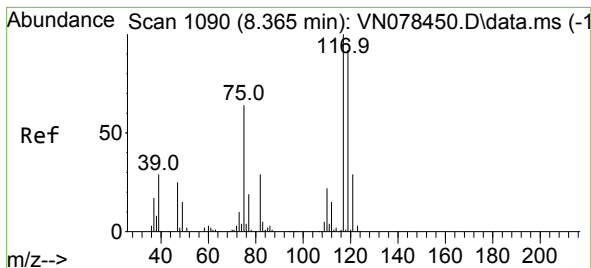
Tgt Ion: 75 Resp: 39172
Ion Ratio Lower Upper
75 100
110 8.5 19.1 57.3#
77 0.0 25.0 37.4#



#37
Ethyl Acetate
Concen: 2.052 ug/l
RT: 7.577 min Scan# 956
Delta R.T. 0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 43 Resp: 15119
Ion Ratio Lower Upper
43 100
61 13.5 13.2 19.8
70 9.6 11.3 16.9#





#38

Carbon Tetrachloride

Concen: 5.149 ug/l

RT: 8.236 min Scan# 1106

Delta R.T. -0.129 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

72-12016

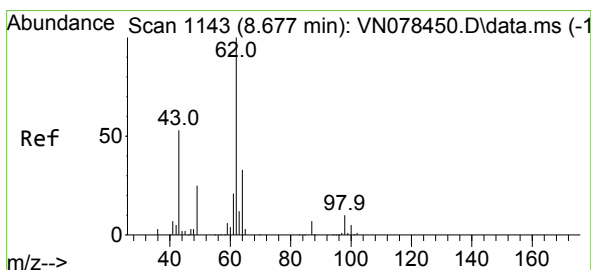
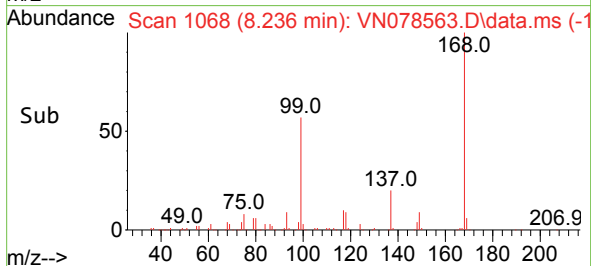
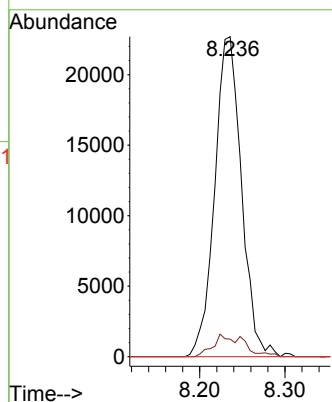
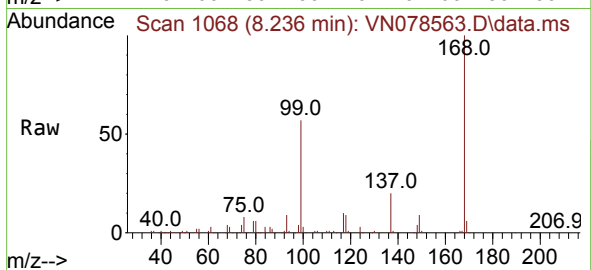
Tgt Ion:117 Resp: 49475

Ion Ratio Lower Upper

117 100

119 5.5 77.3 115.9#

121 0.0 23.3 34.9#



#42

1,2-Dichloroethane

Concen: 0.269 ug/l

RT: 8.688 min Scan# 1145

Delta R.T. 0.011 min

Lab File: VN078563.D

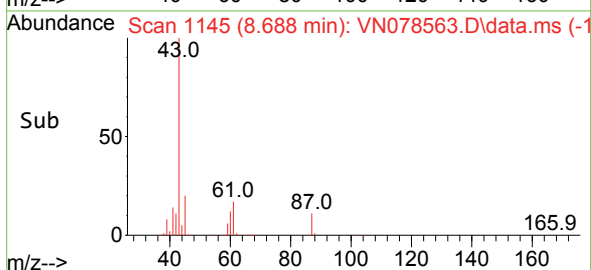
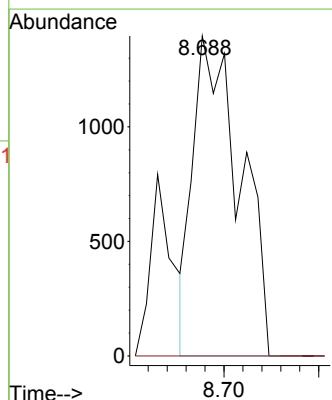
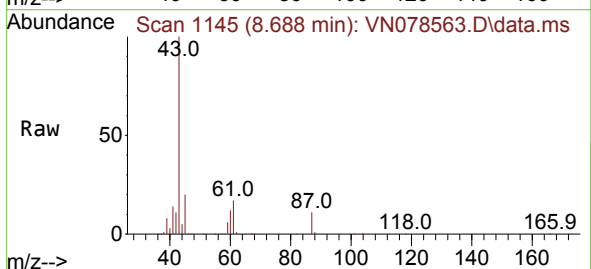
Acq: 18 Jul 2023 16:03

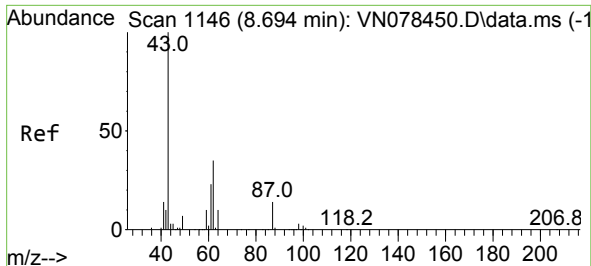
Tgt Ion: 62 Resp: 2400

Ion Ratio Lower Upper

62 100

98 0.0 0.0 19.8

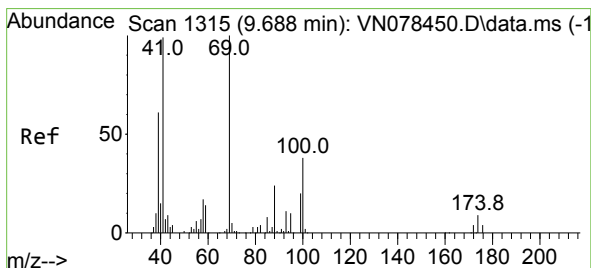
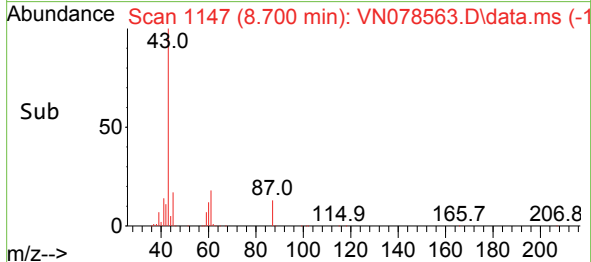
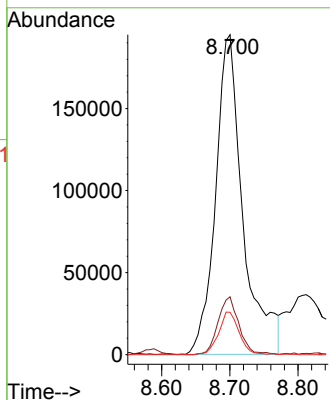
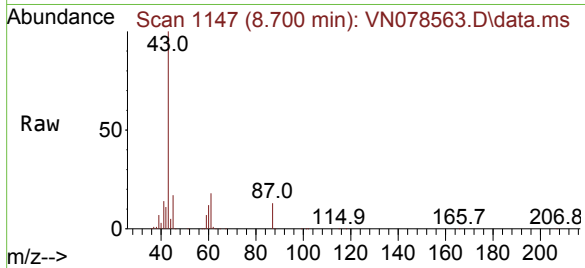




#43
Isopropyl Acetate
Concen: 44.943 ug/l
RT: 8.700 min Scan# 1147
Delta R.T. 0.006 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

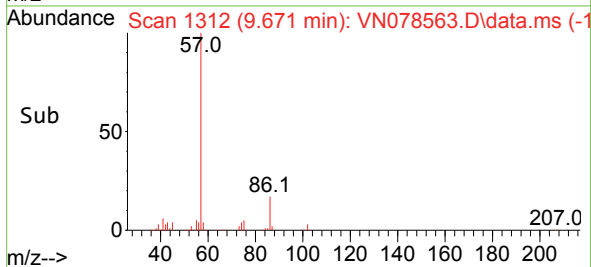
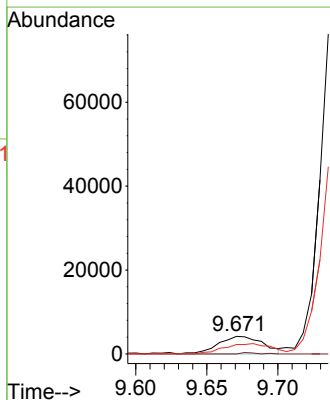
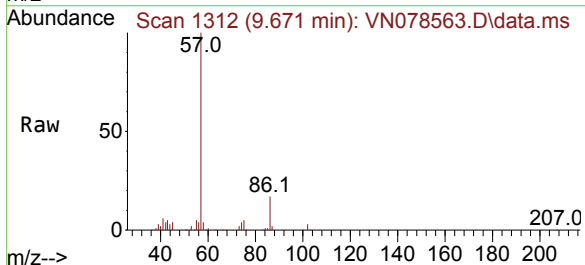
Instrument :
MSVOA_N
ClientSampleId :
72-12016

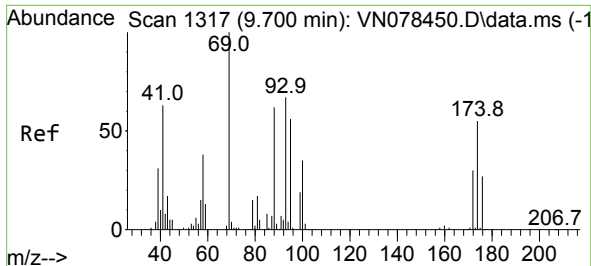
Tgt Ion: 43 Resp: 545290
Ion Ratio Lower Upper
43 100
61 13.9 24.7 37.1#
87 10.0 14.6 21.8#



#48
Methyl methacrylate
Concen: 1.638 ug/l
RT: 9.671 min Scan# 1312
Delta R.T. -0.017 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion: 41 Resp: 9205
Ion Ratio Lower Upper
41 100
69 2.8 90.4 135.6#
39 62.6 54.6 81.8





#49

1,4-Dioxane

Concen: 0.571 ug/l

RT: 9.694 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN078563.D

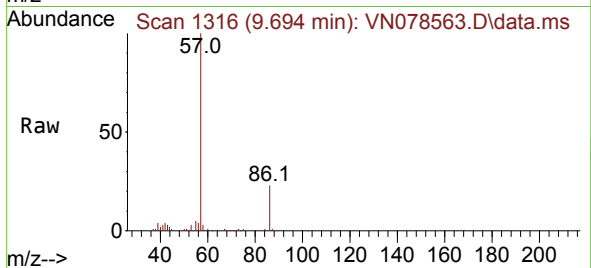
Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

72-12016



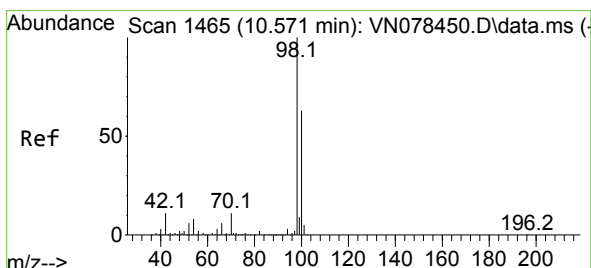
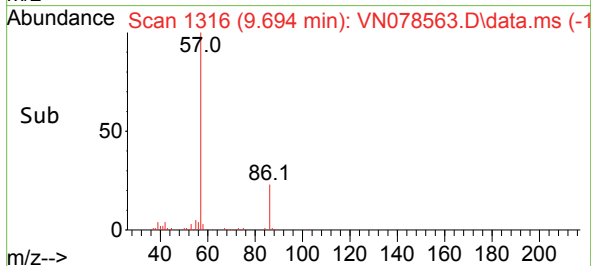
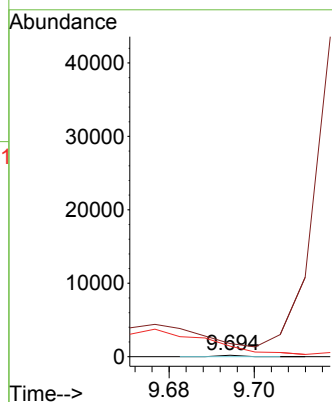
Tgt Ion: 88 Resp: 70

Ion Ratio Lower Upper

88 100

43 0.0 17.0 25.6#

58 10767.1 47.0 70.4#



#50

Toluene-d8

Concen: 42.459 ug/l

RT: 10.577 min Scan# 1466

Delta R.T. 0.006 min

Lab File: VN078563.D

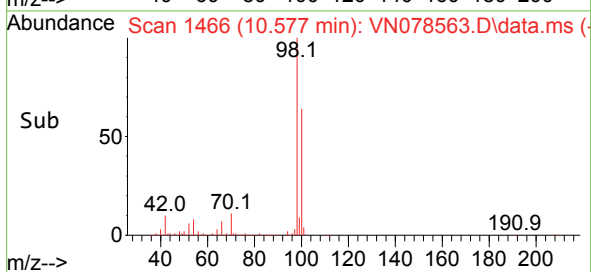
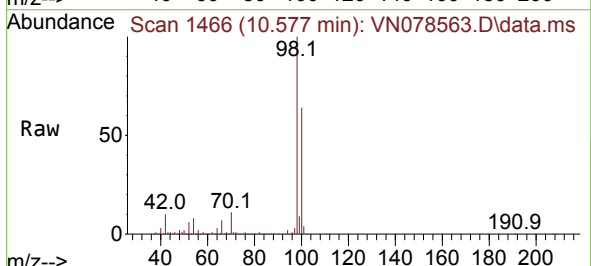
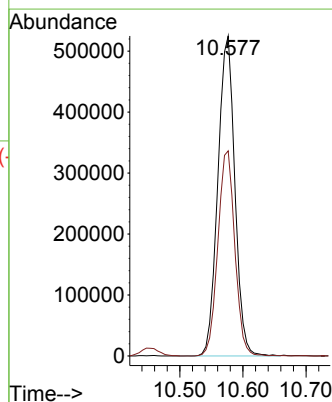
Acq: 18 Jul 2023 16:03

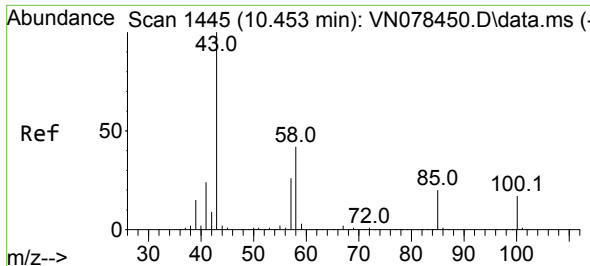
Tgt Ion: 98 Resp: 982032

Ion Ratio Lower Upper

98 100

100 64.0 52.0 78.0





#51

4-Methyl-2-Pentanone

Concen: 22.300 ug/l

RT: 10.453 min Scan# 1445

Delta R.T. 0.000 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

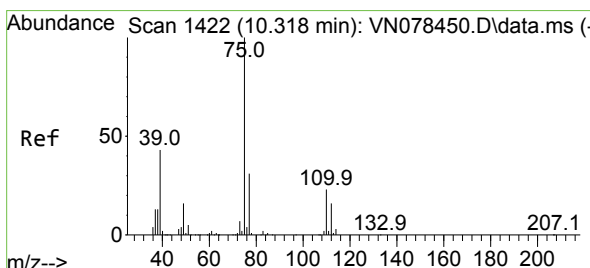
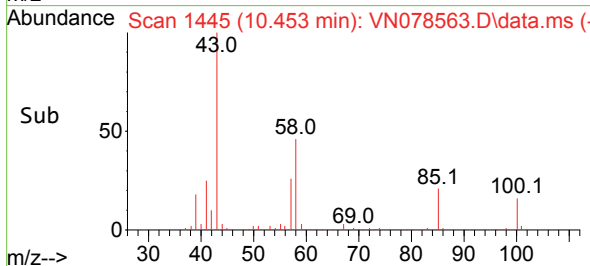
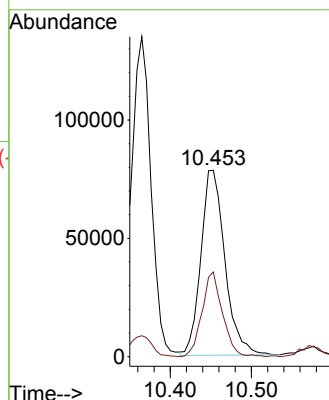
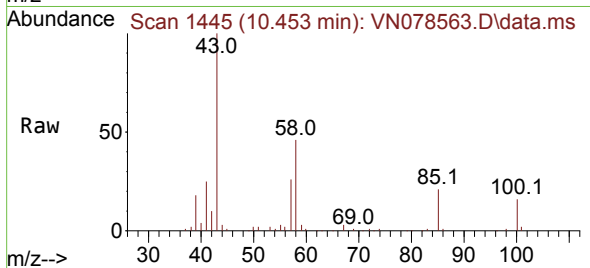
72-12016

Tgt Ion: 43 Resp: 160936

Ion Ratio Lower Upper

43 100

58 38.9 36.6 54.8



#54

cis-1,3-Dichloropropene

Concen: 11.615 ug/l

RT: 10.365 min Scan# 1430

Delta R.T. 0.047 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

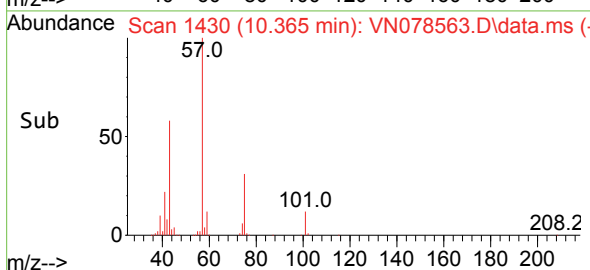
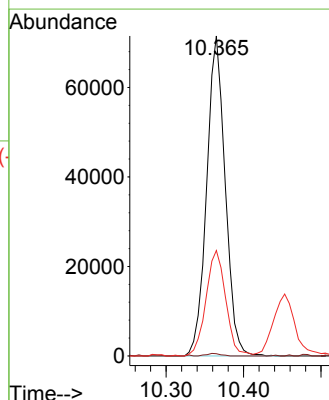
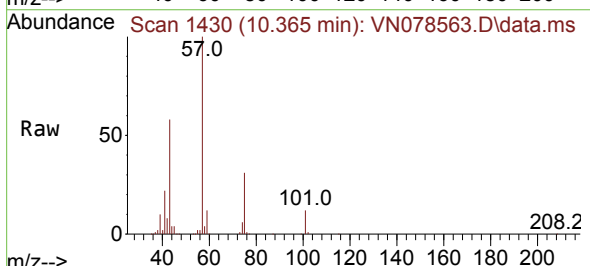
Tgt Ion: 75 Resp: 118710

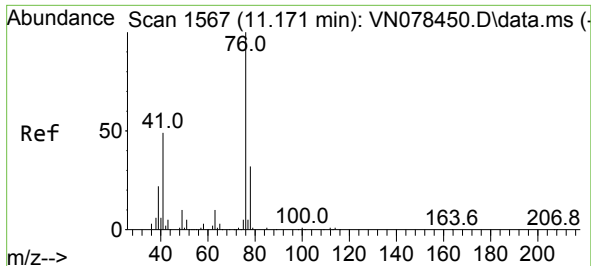
Ion Ratio Lower Upper

75 100

77 0.7 26.1 39.1#

39 32.9 31.6 47.4





#57

1,3-Dichloropropane

Concen: 1.408 ug/l

RT: 11.206 min Scan# 1573

Delta R.T. 0.035 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

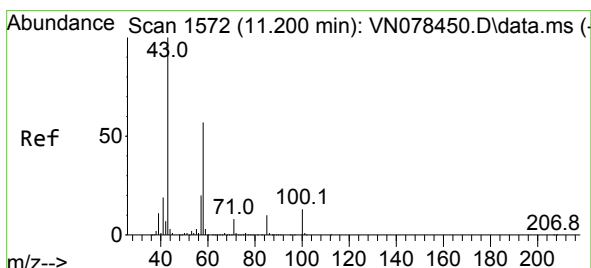
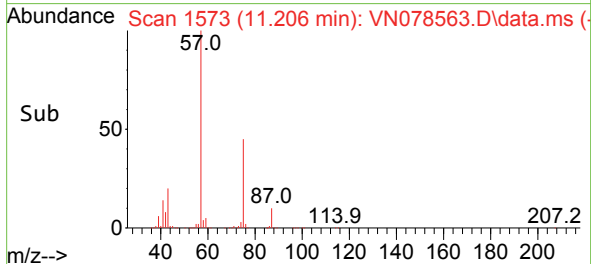
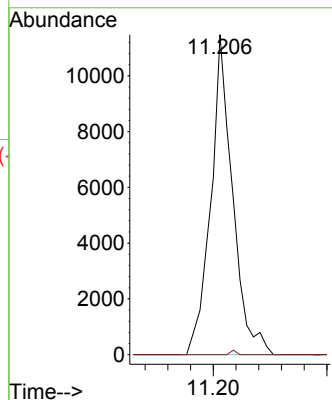
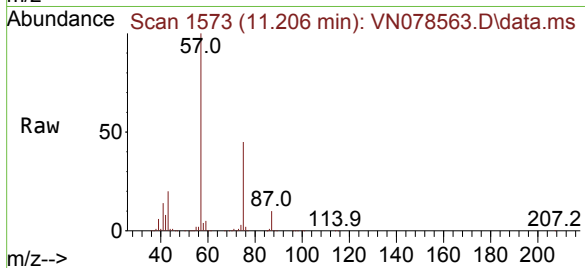
72-12016

Tgt Ion: 76 Resp: 15310

Ion Ratio Lower Upper

76 100

78 0.4 26.1 39.1#



#59

2-Hexanone

Concen: 33.011 ug/l

RT: 11.206 min Scan# 1573

Delta R.T. 0.006 min

Lab File: VN078563.D

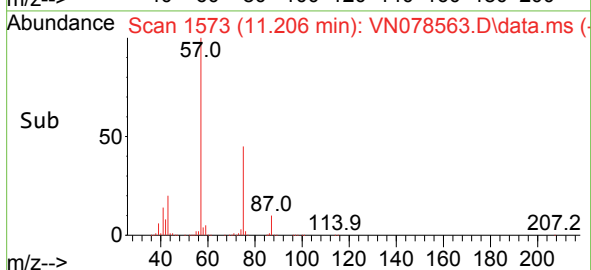
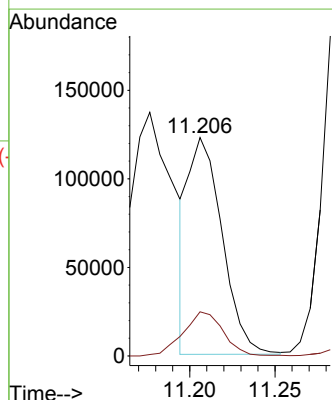
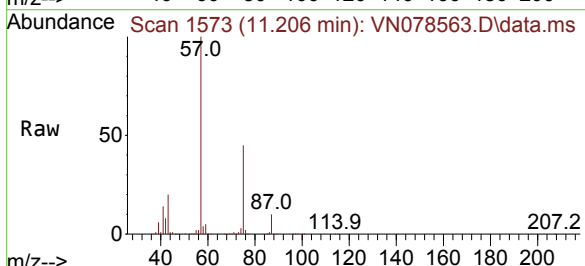
Acq: 18 Jul 2023 16:03

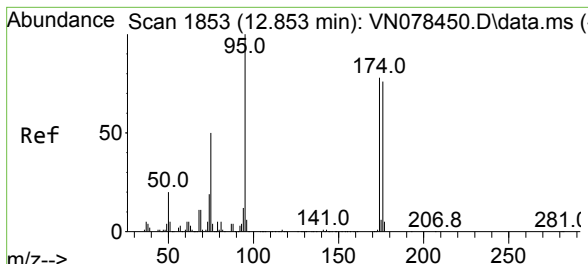
Tgt Ion: 43 Resp: 169317

Ion Ratio Lower Upper

43 100

58 24.3 31.7 95.1#

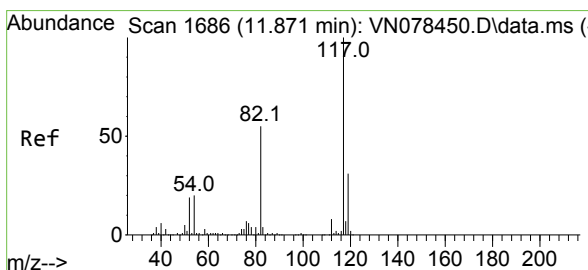
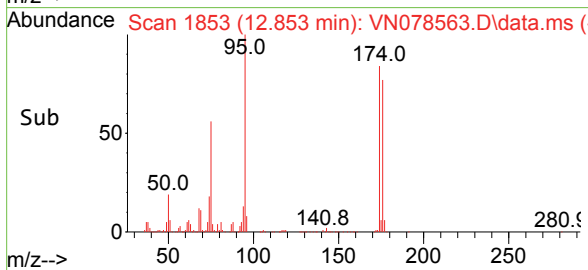
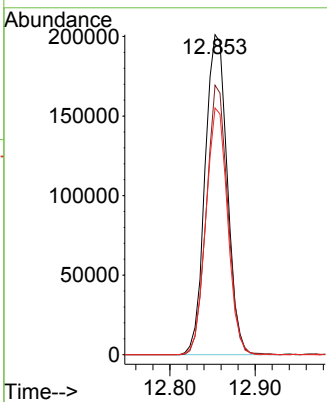
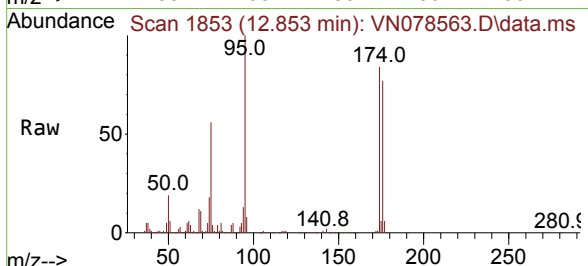




#62
4-Bromofluorobenzene
Concen: 50.906 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. -0.000 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

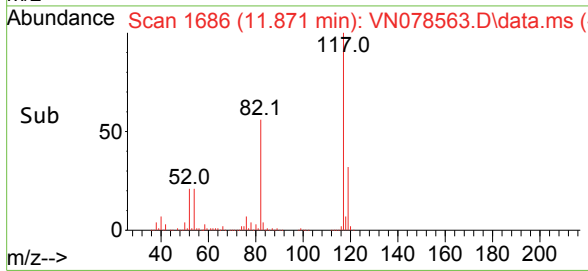
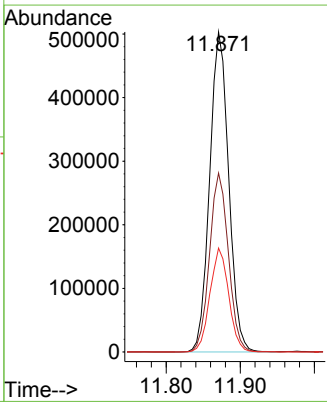
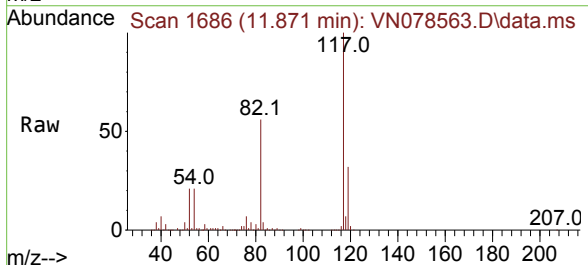
Instrument :
MSVOA_N
ClientSampleId :
72-12016

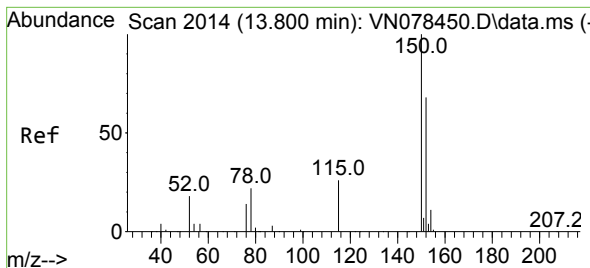
Tgt Ion:	95	Resp:	362668
Ion	Ratio	Lower	Upper
95	100		
174	81.3	0.0	143.8
176	75.7	0.0	135.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.871 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN078563.D
Acq: 18 Jul 2023 16:03

Tgt Ion:	117	Resp:	896139
Ion	Ratio	Lower	Upper
117	100		
82	55.9	44.0	66.0
119	32.5	25.6	38.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.800 min Scan# 2014

Delta R.T. -0.000 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

72-12016

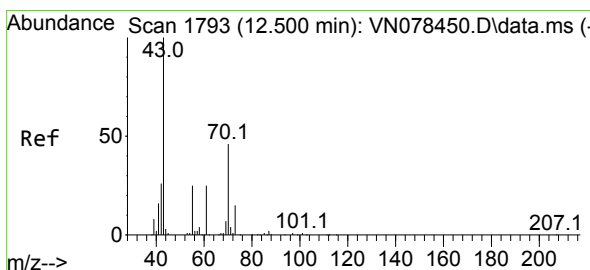
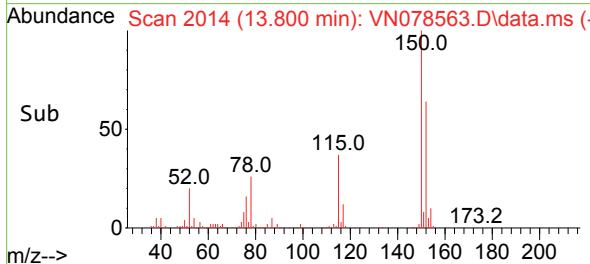
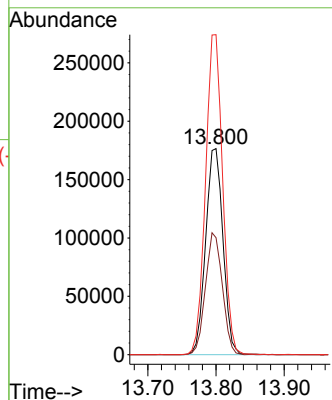
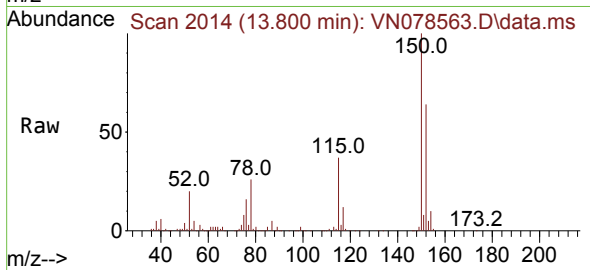
Tgt Ion:152 Resp: 312554

Ion Ratio Lower Upper

152 100

115 57.7 32.3 96.8

150 153.0 0.0 355.8



#74

N-ethyl acetate

Concen: 0.277 ug/l

RT: 12.488 min Scan# 1791

Delta R.T. -0.012 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Tgt Ion: 43 Resp: 2807

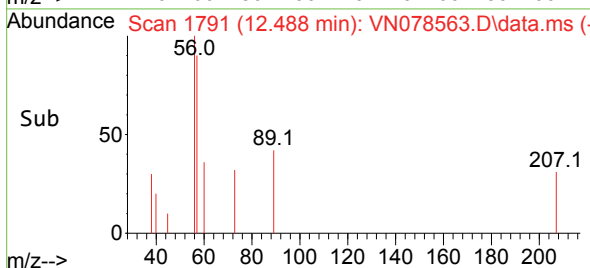
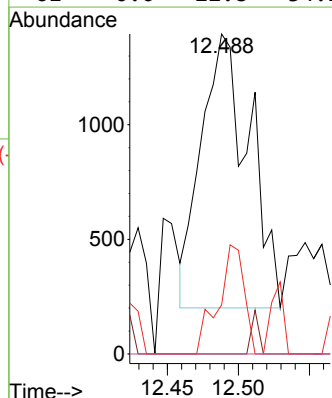
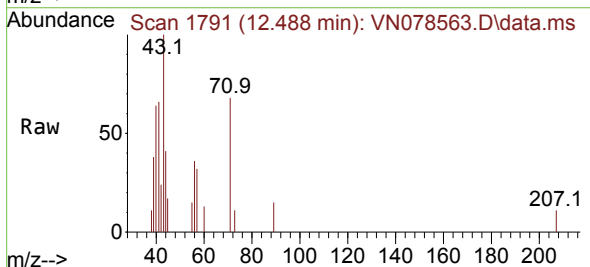
Ion Ratio Lower Upper

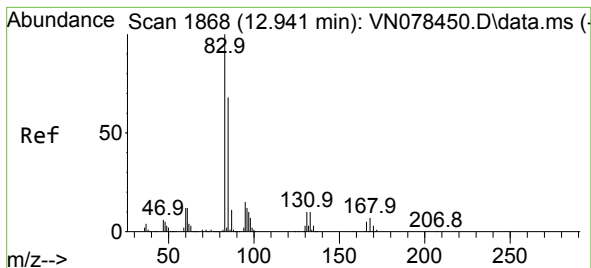
43 100

70 0.0 43.4 65.2#

55 21.5 21.4 32.0

61 0.0 22.8 34.2#





#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.924 min Scan# 1865

Delta R.T. -0.018 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

72-12016

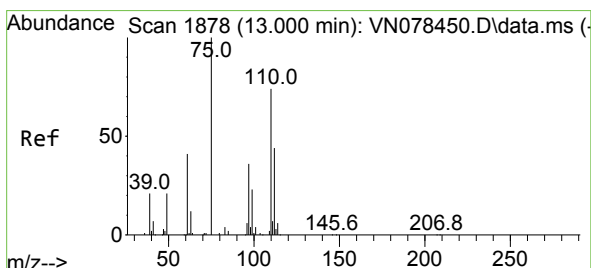
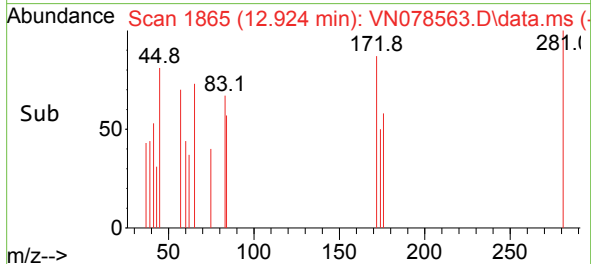
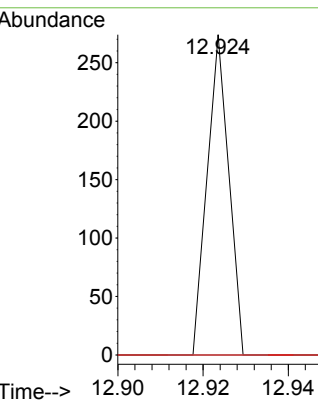
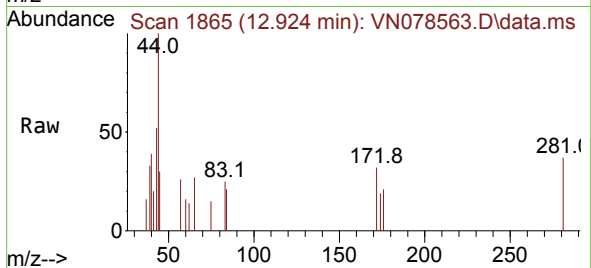
Tgt Ion: 83 Resp: 97

Ion Ratio Lower Upper

83 100

131 0.0 5.0 15.0#

85 0.0 31.9 95.7#



#76

1,2,3-Trichloropropane

Concen: 25.004 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. -0.147 min

Lab File: VN078563.D

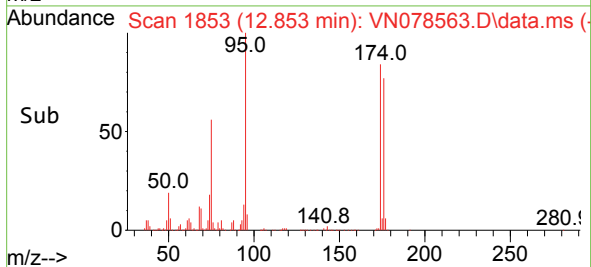
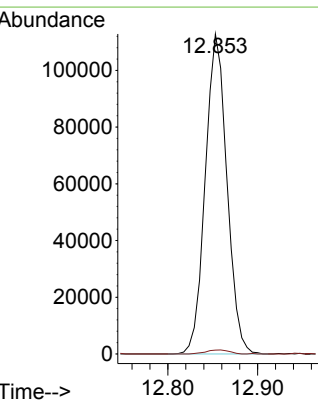
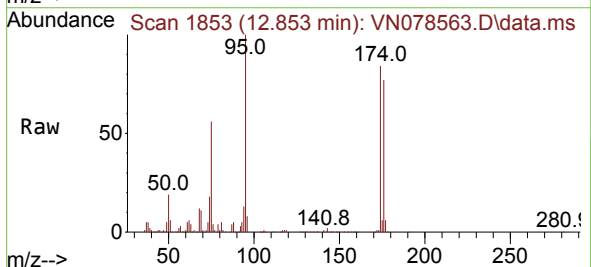
Acq: 18 Jul 2023 16:03

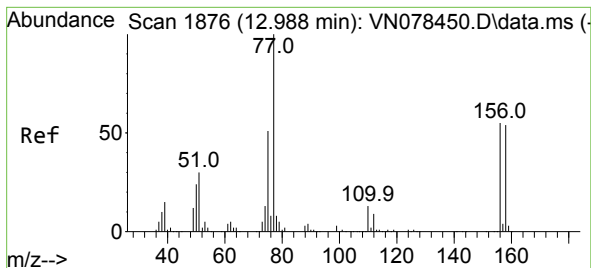
Tgt Ion: 75 Resp: 188897

Ion Ratio Lower Upper

75 100

77 1.4 84.5 253.5#





#77

Bromobenzene

Concen: Below Cal

RT: 12.982 min Scan# 11

Delta R.T. -0.006 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

72-12016

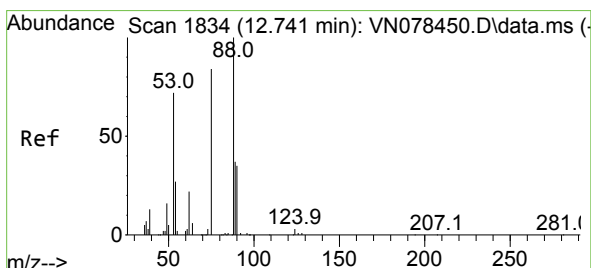
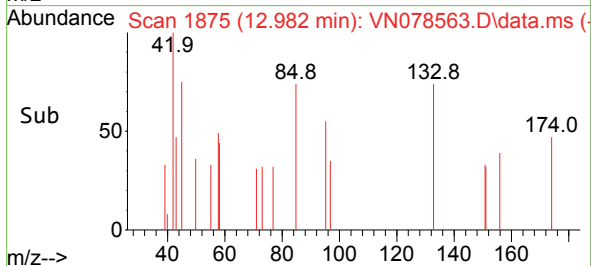
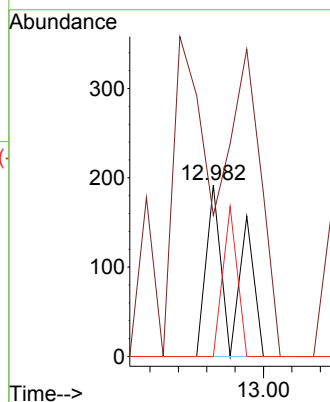
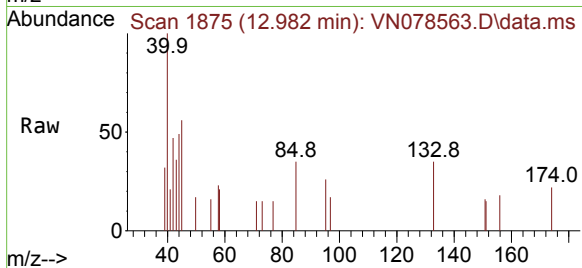
Tgt Ion:156 Resp: 123

Ion Ratio Lower Upper

156 100

77 219.5 107.7 323.3

158 48.0 48.4 145.3#



#81

trans-1,4-Dichloro-2-butene

Concen: 65.705 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. 0.112 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

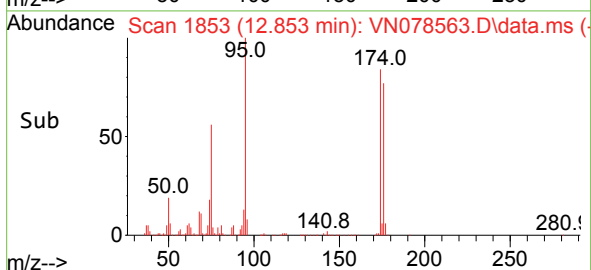
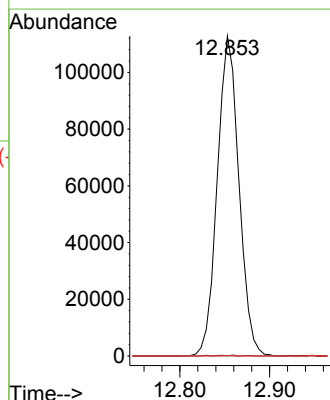
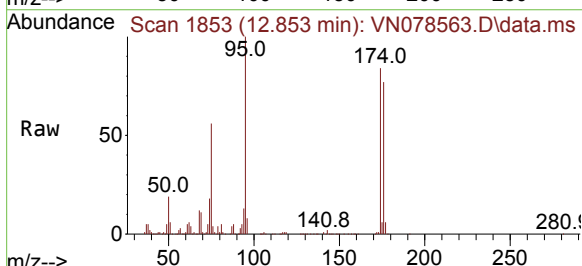
Tgt Ion: 75 Resp: 188897

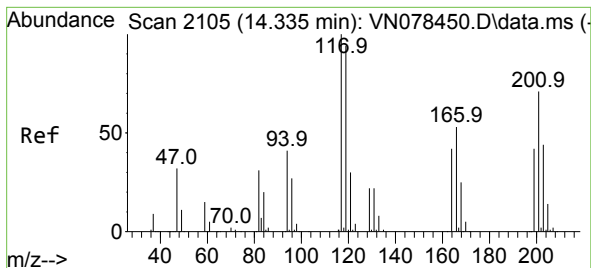
Ion Ratio Lower Upper

75 100

53 0.1 67.4 101.2#

89 0.0 38.8 58.2#





#90

Hexachloroethane

Concen: Below Cal

RT: 14.335 min Scan# 2105

Delta R.T. 0.000 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Instrument :

MSVOA_N

ClientSampleId :

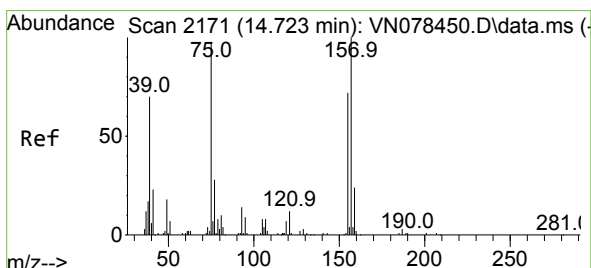
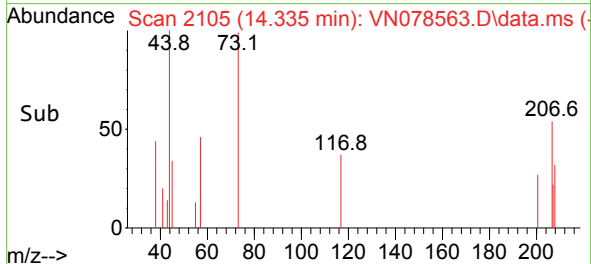
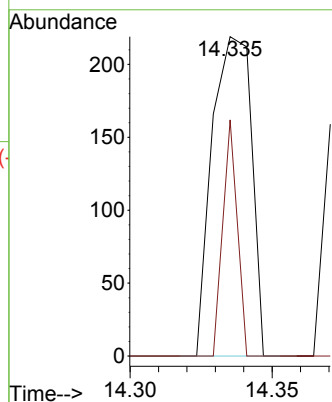
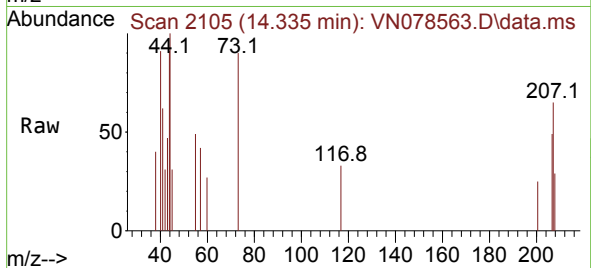
72-12016

Tgt Ion:117 Resp: 211

Ion Ratio Lower Upper

117 100

201 27.0 29.3 88.0#



#92

1,2-Dibromo-3-Chloropropane

Concen: Below Cal

RT: 14.923 min Scan# 2205

Delta R.T. 0.200 min

Lab File: VN078563.D

Acq: 18 Jul 2023 16:03

Tgt Ion: 75 Resp: 55

Ion Ratio Lower Upper

75 100

155 0.0 39.1 117.2#

157 0.0 50.3 150.9#

