

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN110823\
 Data File : VN080018.D
 Acq On : 09 Nov 2023 02:17
 Operator : JC\MD
 Sample : 05249-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 37 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Nov 09 04:33:44 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N110823W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Nov 09 04:02:05 2023
 Response via : Initial Calibration

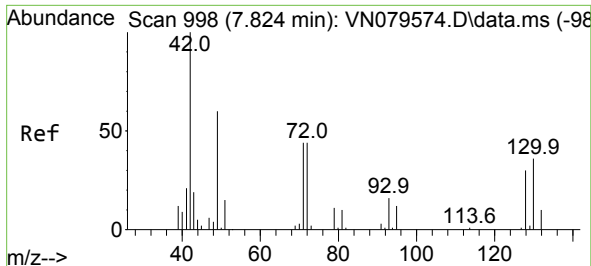
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.818	128	67876	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	316902	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.871	117	306403	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.583	65	168172	29.516	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.400%		
60) 4-Bromofluorobenzene	12.853	95	126485	25.814	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	86.033%		
63) Toluene-d8	10.571	98	411085	28.316	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	94.400%		
Target Compounds						Qvalue
3) Chloromethane	2.324	50	14651	2.628	ug/l #	43
6) Chloroethane	3.201	64	1748	0.646	ug/l #	46
12) Methyl Acetate	5.030	43	2569	0.284	ug/l	97
13) Acrolein	4.195	56	160	0.209	ug/l	92
15) Acetone	4.424	58	366011	503.704	ug/l	82
23) tert-Butyl Alcohol	5.518	59	5460	9.400	ug/l #	100
25) Chloroform	7.965	83	5690	0.647	ug/l	86
30) 2-Butanone	7.494	43	63667	24.511	ug/l	98
35) Methacrylonitrile	7.789	41	1098	0.403	ug/l #	42
43) Ethyl Acetate	7.583	43	1218	0.250	ug/l #	64
48) t-1,3-Dichloropropene	10.635	75	4089	0.699	ug/l #	1
49) cis-1,3-Dichloropropene	10.635	75	4089	0.633	ug/l #	1
56) Bromoform	12.853	173	1249	0.473	ug/l #	1
58) 4-Methyl-2-Pentanone	10.447	43	10262	2.005	ug/l	96
59) 2-Hexanone	11.206	43	1157	0.297	ug/l #	44
62) Toluene	10.635	91	512349	28.911	ug/l	99
69) Styrene	12.412	104	9372	0.852	ug/l	91
72) 1,2,3-Trichloropropane	12.853	75	66037	12.589	ug/l	1
77) t-1,4-Dichloro-2-butene	12.853	75	66037	38.445	ug/l #	7
79) tert-butylbenzene	13.729	119	9112	0.849	ug/l	66
80) 1,2,4-Trimethylbenzene	13.488	105	2728	0.203	ug/l	72
82) p-Isopropyltoluene	13.729	119	9112	0.740	ug/l	88

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

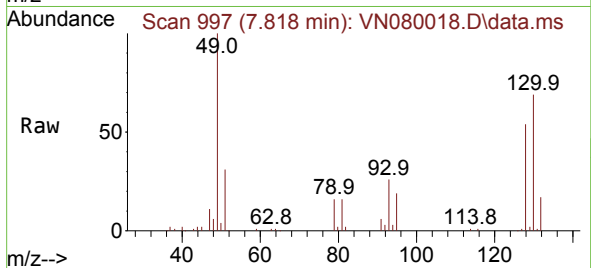
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Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Nov 09 04:02:05 2023
Response via : Initial Calibration



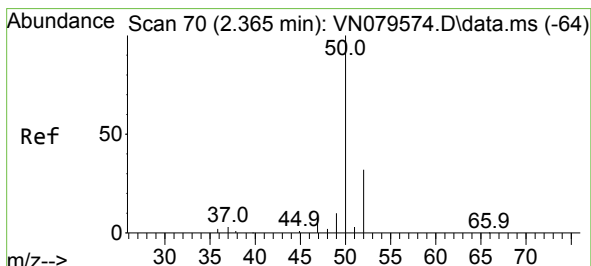
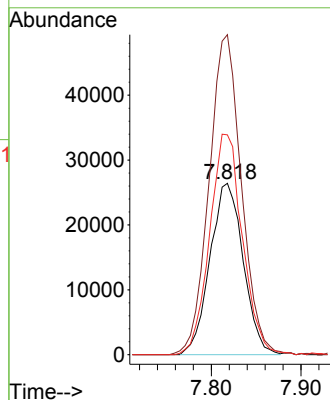
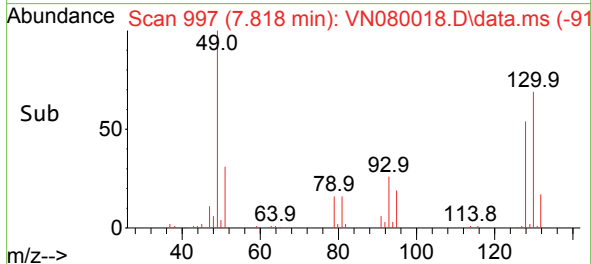


#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.818 min Scan# 91
Delta R.T. -0.006 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Instrument :
MSVOA_N
ClientSampleId :

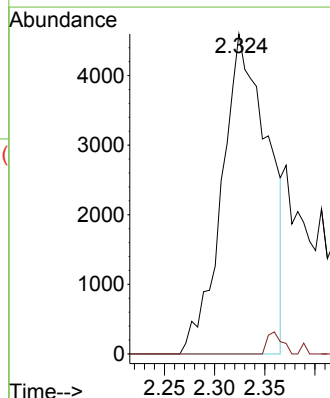
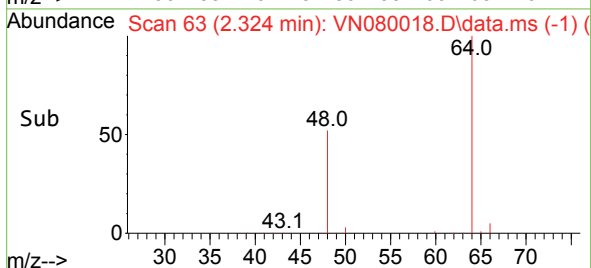
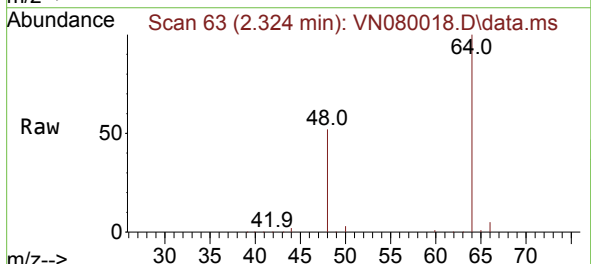


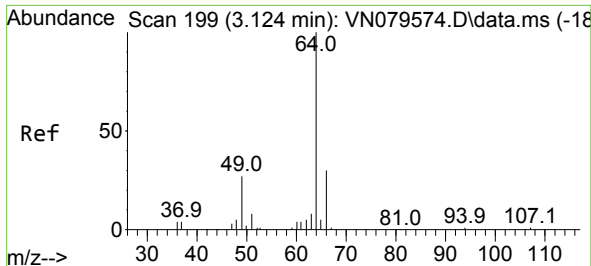
Tgt Ion:128 Resp: 67876
Ion Ratio Lower Upper
128 100
49 181.7 0.0 468.5
130 127.1 0.0 320.7



#3
Chloromethane
Concen: 2.628 ug/l
RT: 2.324 min Scan# 63
Delta R.T. -0.041 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Tgt Ion: 50 Resp: 14651
Ion Ratio Lower Upper
50 100
52 0.0 25.6 38.4#

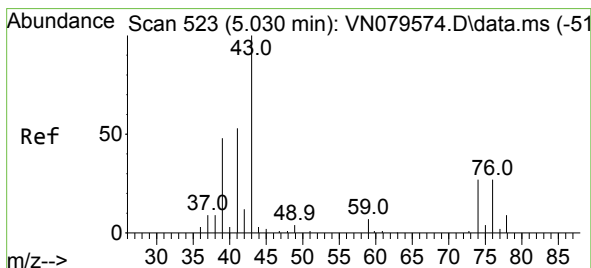
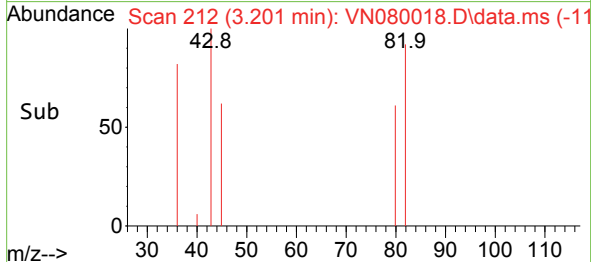
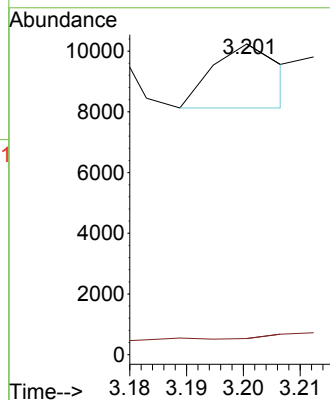
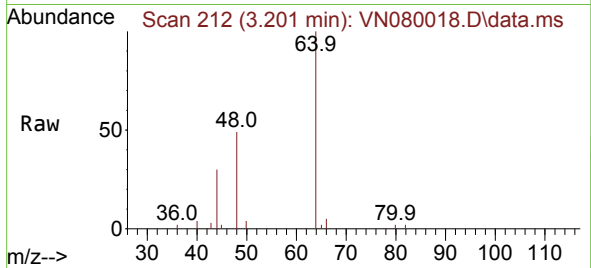




#6
Chloroethane
Concen: 0.646 ug/l
RT: 3.201 min Scan# 21
Delta R.T. 0.077 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

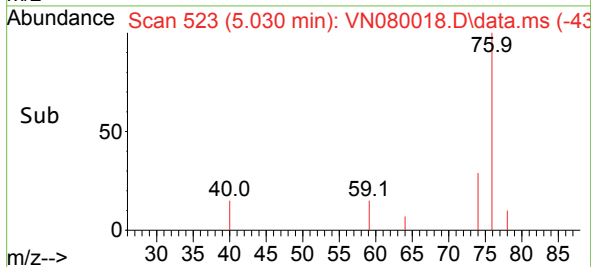
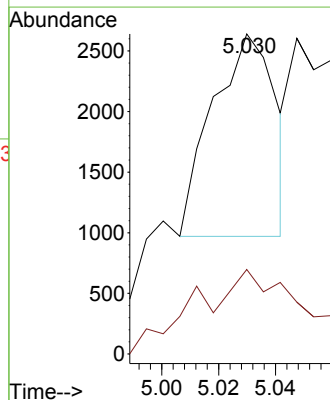
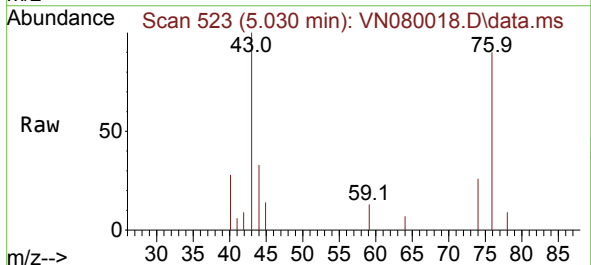
Instrument :
MSVOA_N
ClientSampleId :

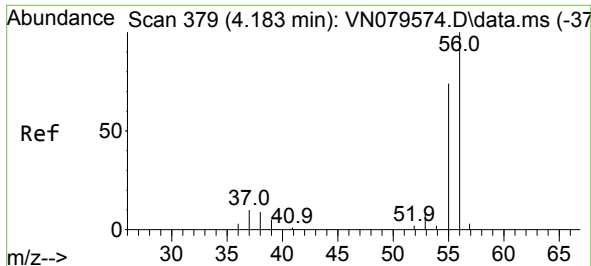
Tgt Ion: 64 Resp: 1748
Ion Ratio Lower Upper
64 100
66 0.0 23.3 34.9#



#12
Methyl Acetate
Concen: 0.284 ug/l
RT: 5.030 min Scan# 523
Delta R.T. -0.000 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Tgt Ion: 43 Resp: 2569
Ion Ratio Lower Upper
43 100
74 21.2 18.1 27.1

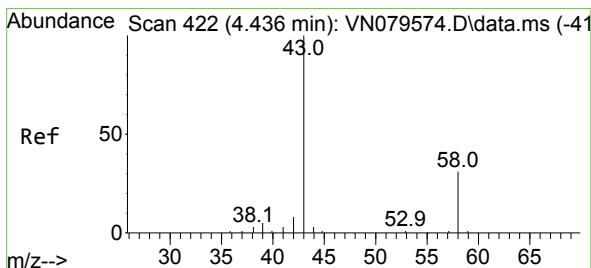
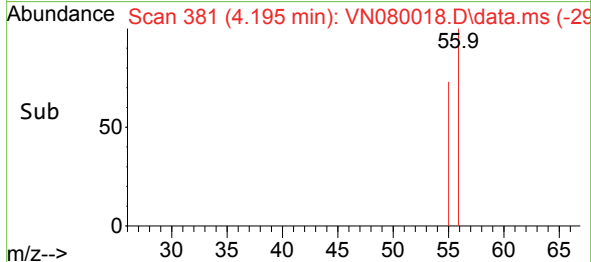
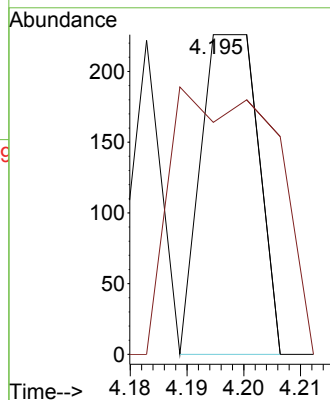
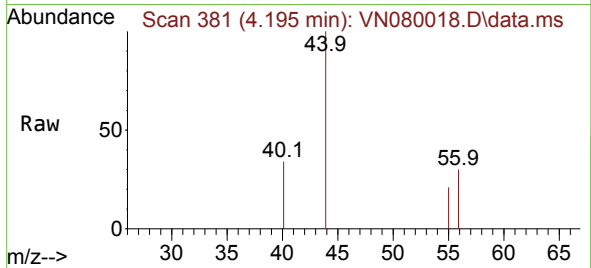




#13
Acrolein
Concen: 0.209 ug/l
RT: 4.195 min Scan# 31
Delta R.T. 0.012 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

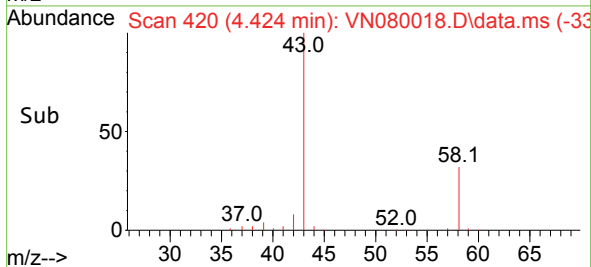
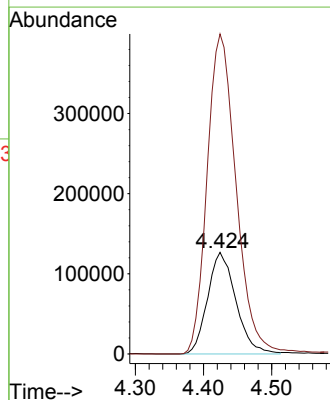
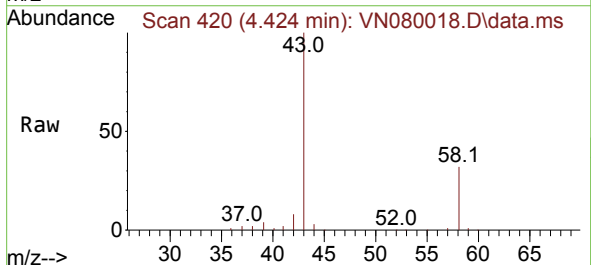
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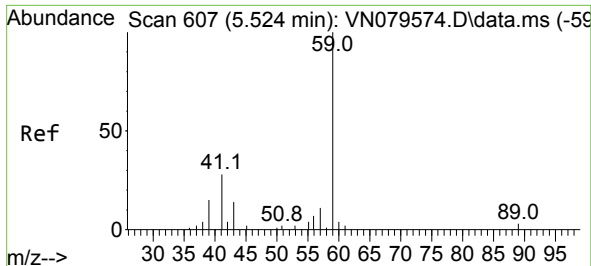
Tgt Ion: 56 Resp: 160
Ion Ratio Lower Upper
56 100
55 78.1 57.1 85.7



#15
Acetone
Concen: 503.704 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.012 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

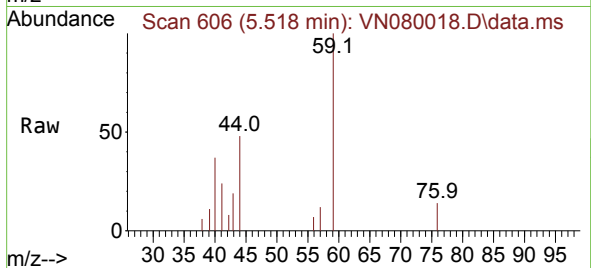
Tgt Ion: 58 Resp: 366011
Ion Ratio Lower Upper
58 100
43 315.2 225.2 337.8



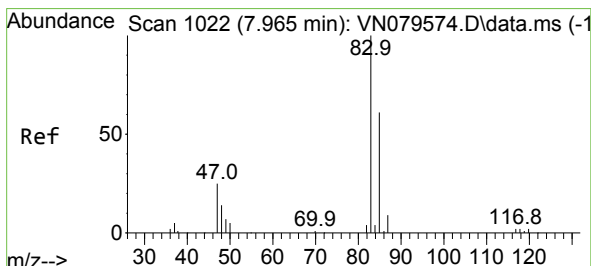
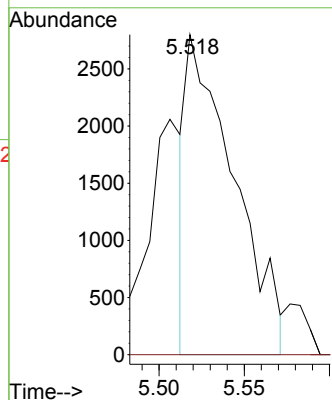
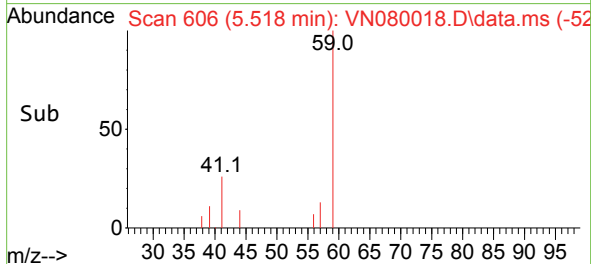


#23
tert-Butyl Alcohol
Concen: 9.400 ug/l
RT: 5.518 min Scan# 607
Delta R.T. -0.006 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Instrument :
MSVOA_N
ClientSampleId :

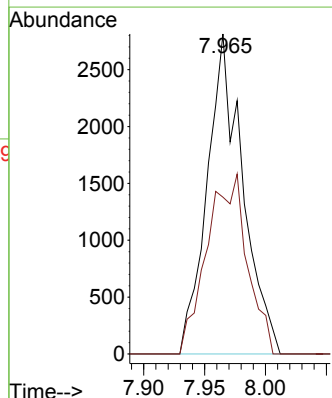
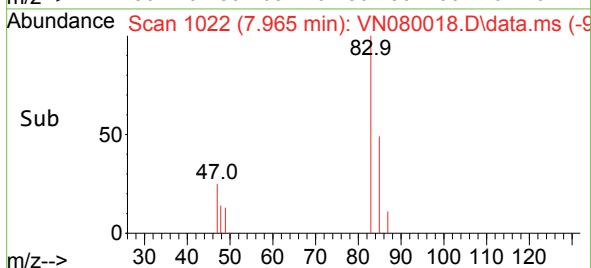
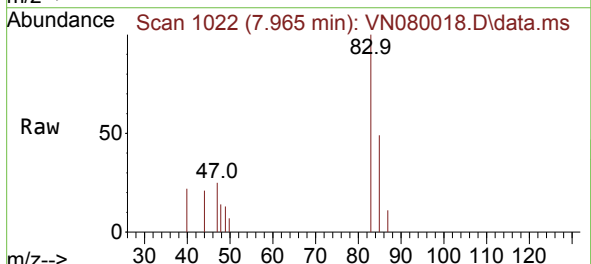


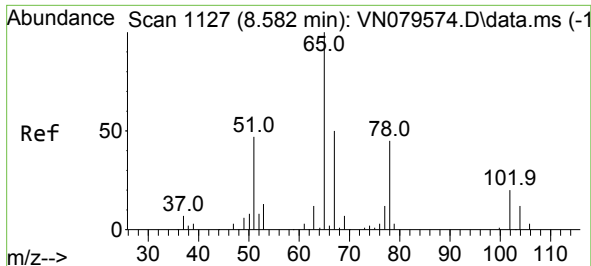
Tgt Ion: 59 Resp: 5460
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0



#25
Chloroform
Concen: 0.647 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Tgt Ion: 83 Resp: 5690
Ion Ratio Lower Upper
83 100
85 49.0 47.4 71.2





#27

1,2-Dichloroethane-d4

Concen: 29.516 ug/l

RT: 8.583 min Scan# 1127

Delta R.T. 0.001 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

Instrument :

MSVOA_N

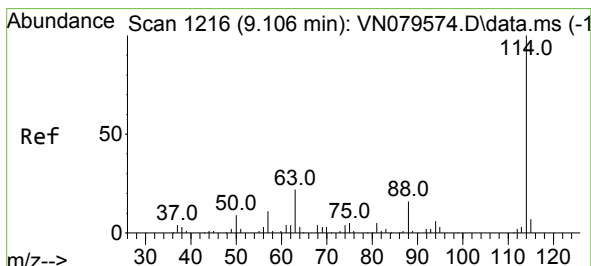
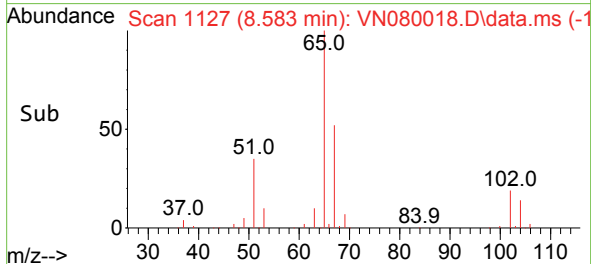
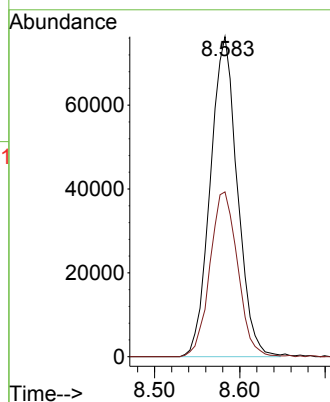
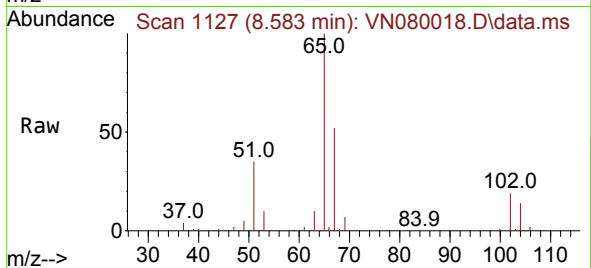
ClientSampleId :

Tgt Ion: 65 Resp: 168172

Ion Ratio Lower Upper

65 100

67 52.7 42.1 63.1



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.106 min Scan# 1216

Delta R.T. 0.000 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

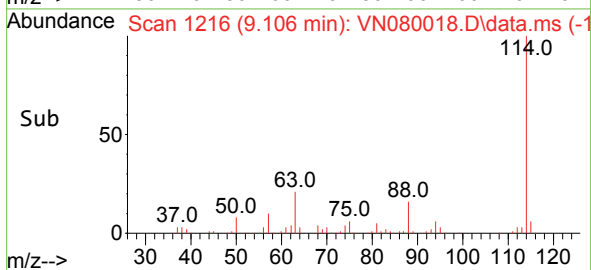
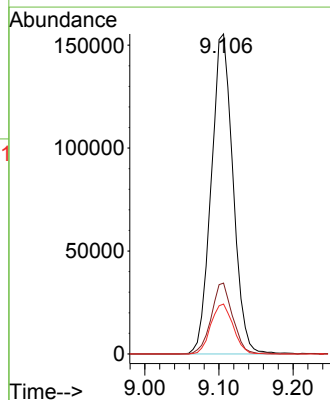
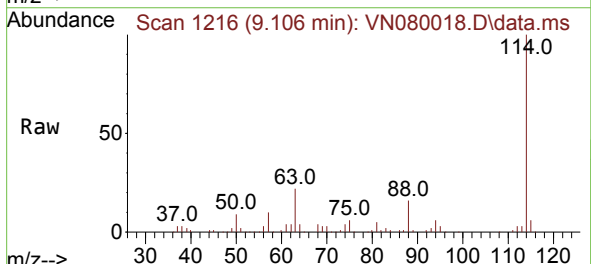
Tgt Ion: 114 Resp: 316902

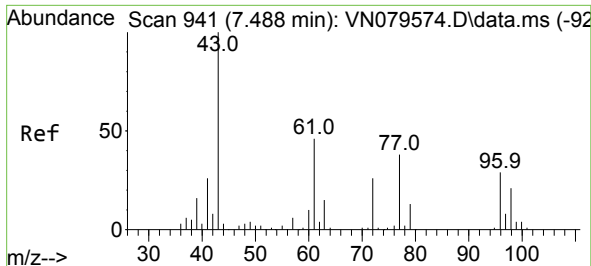
Ion Ratio Lower Upper

114 100

63 21.6 18.1 27.1

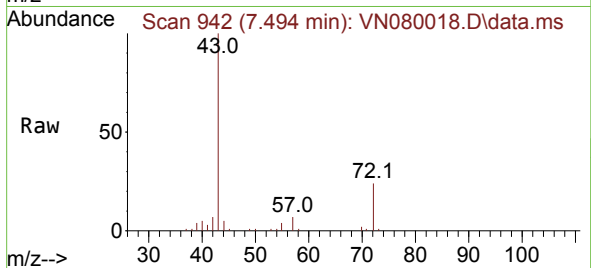
88 16.0 12.2 18.2



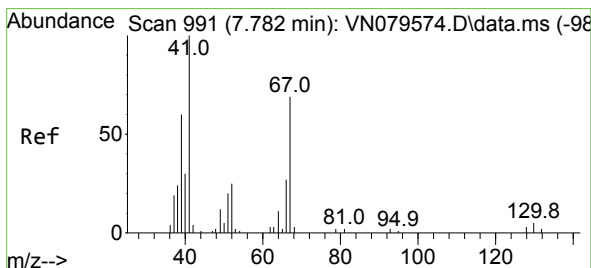
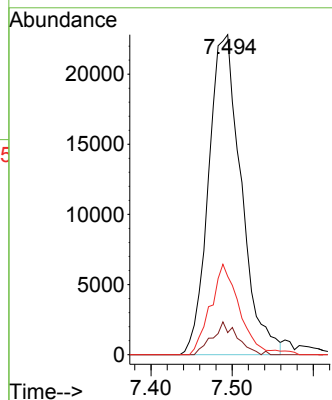
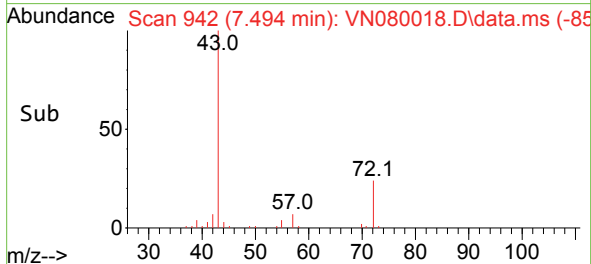


#30
2-Butanone
Concen: 24.511 ug/l
RT: 7.494 min Scan# 941
Delta R.T. 0.006 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Instrument :
MSVOA_N
ClientSampleId :

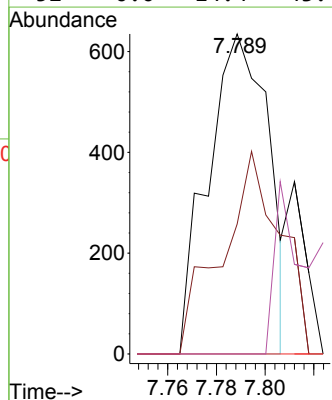
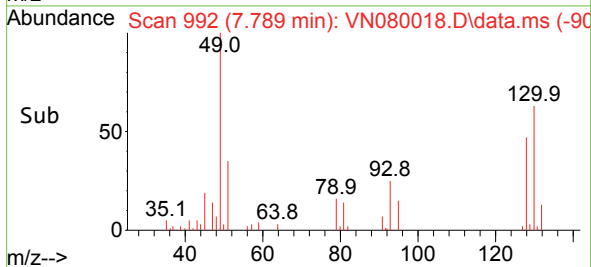
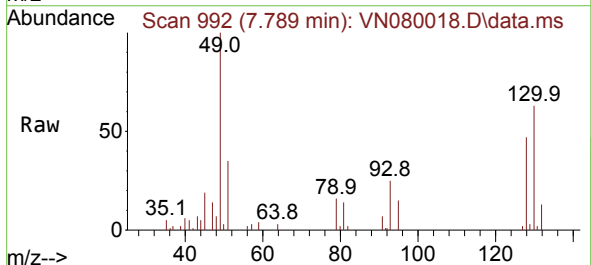


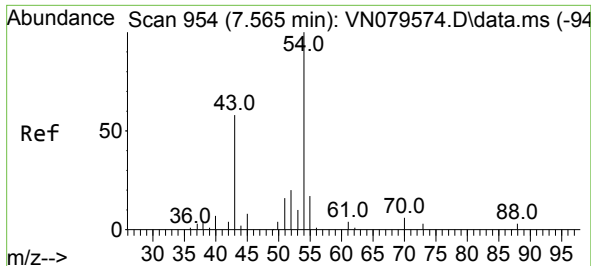
Tgt Ion: 43 Resp: 63667
Ion Ratio Lower Upper
43 100
57 7.8 6.4 9.6
72 24.8 20.7 31.1



#35
Methacrylonitrile
Concen: 0.403 ug/l
RT: 7.789 min Scan# 992
Delta R.T. 0.007 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Tgt Ion: 41 Resp: 1098
Ion Ratio Lower Upper
41 100
39 40.6 26.3 78.8
67 0.0 37.5 112.3#
52 0.0 14.4 43.4#





#43

Ethyl Acetate

Concen: 0.250 ug/l

RT: 7.583 min Scan# 91

Delta R.T. 0.018 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

Instrument :

MSVOA_N

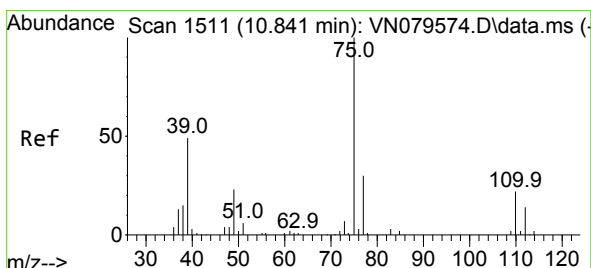
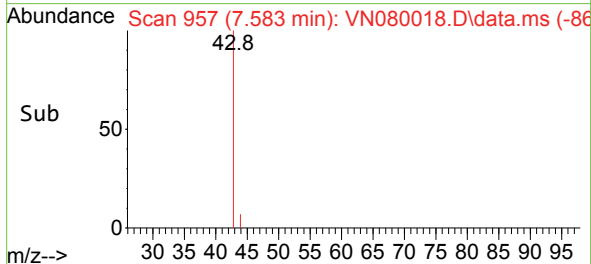
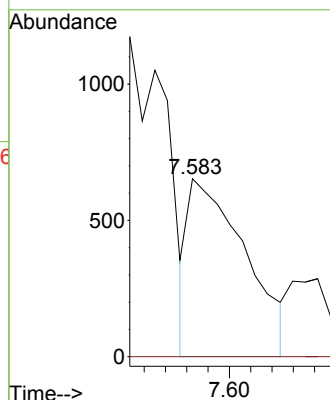
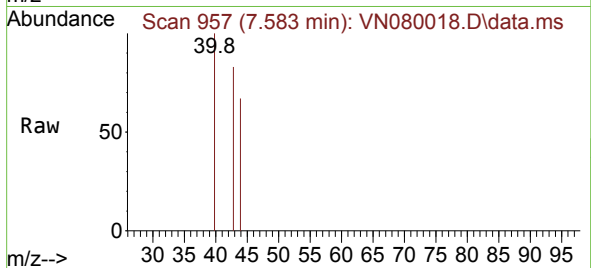
ClientSampleId :

Tgt Ion: 43 Resp: 1218

Ion Ratio Lower Upper

43 100

45 0.0 11.8 17.8#



#48

t-1,3-Dichloropropene

Concen: 0.699 ug/l

RT: 10.635 min Scan# 1476

Delta R.T. -0.206 min

Lab File: VN080018.D

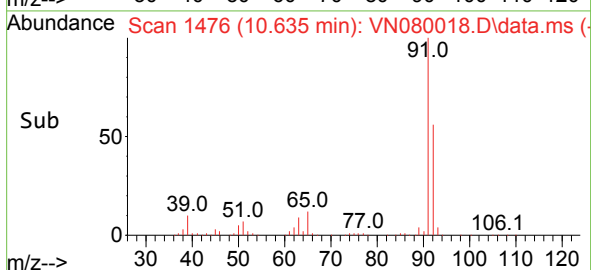
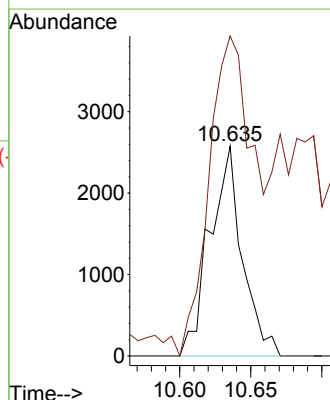
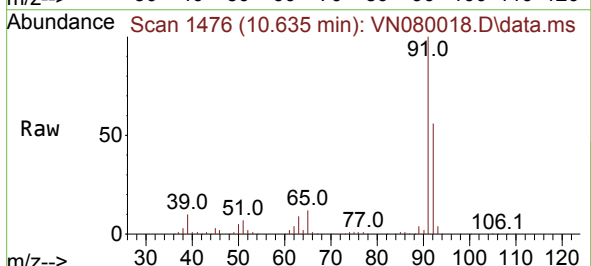
Acq: 09 Nov 2023 02:17

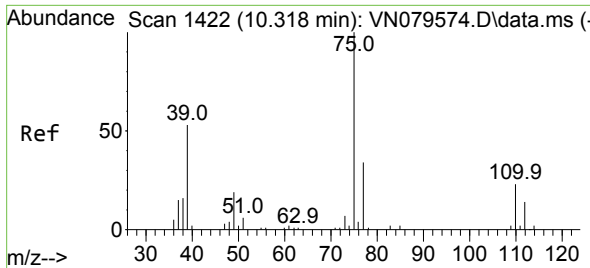
Tgt Ion: 75 Resp: 4089

Ion Ratio Lower Upper

75 100

77 152.6 25.6 38.4#

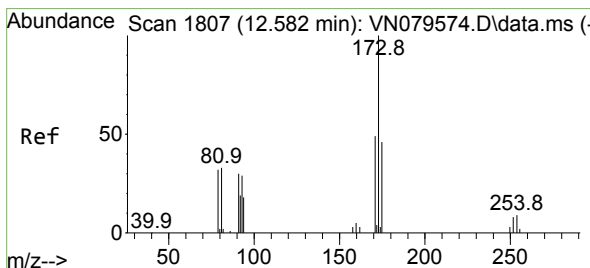
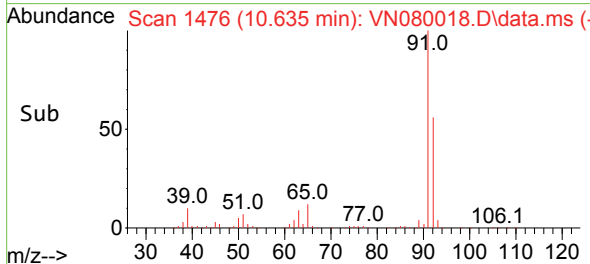
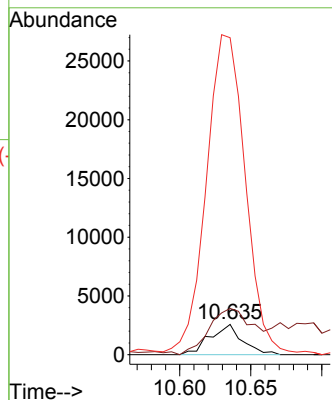
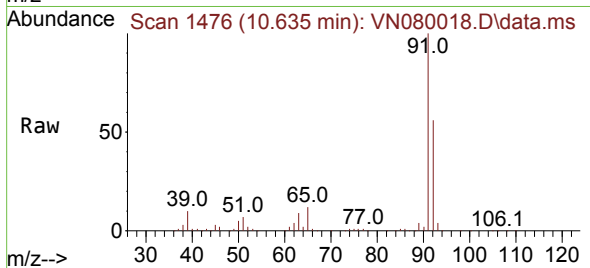




#49
 cis-1,3-Dichloropropene
 Concen: 0.633 ug/l
 RT: 10.635 min Scan# 1422
 Delta R.T. 0.317 min
 Lab File: VN080018.D
 Acq: 09 Nov 2023 02:17

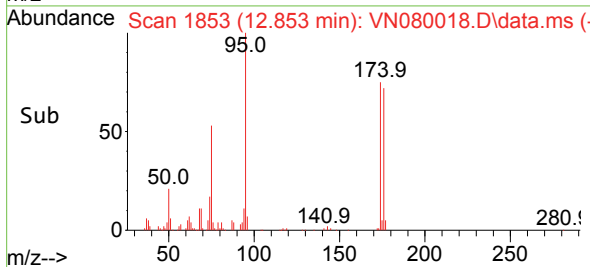
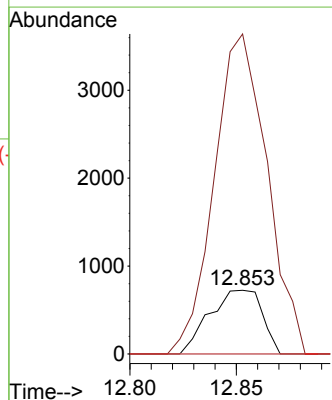
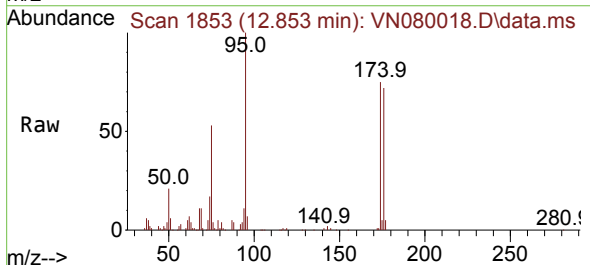
Instrument :
 MSVOA_N
 ClientSampleId :

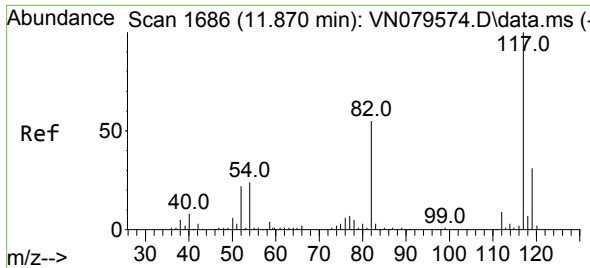
Tgt Ion: 75 Resp: 4089
 Ion Ratio Lower Upper
 75 100
 77 152.6 25.8 38.6#
 39 1026.9 42.4 63.6#



#56
 Bromoform
 Concen: 0.473 ug/l
 RT: 12.853 min Scan# 1853
 Delta R.T. 0.271 min
 Lab File: VN080018.D
 Acq: 09 Nov 2023 02:17

Tgt Ion:173 Resp: 1249
 Ion Ratio Lower Upper
 173 100
 175 503.0 37.9 56.9#
 254 0.0 7.3 10.9#

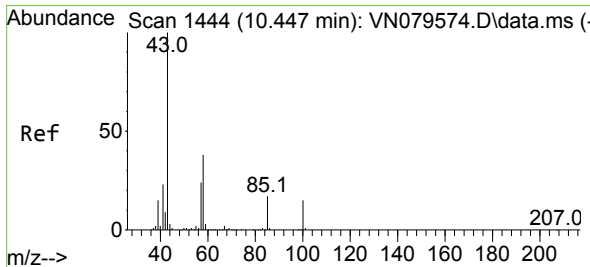
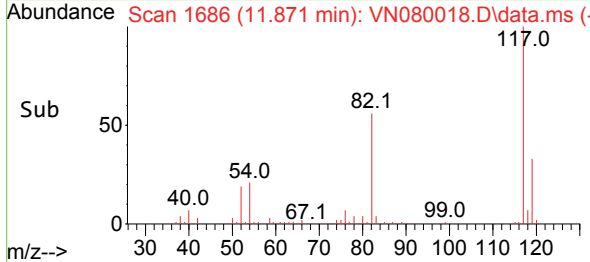
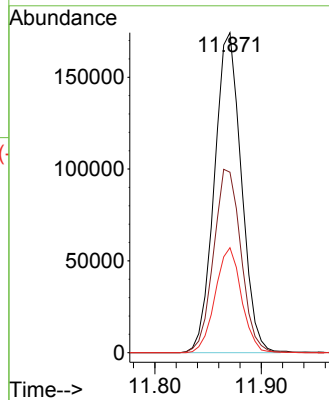
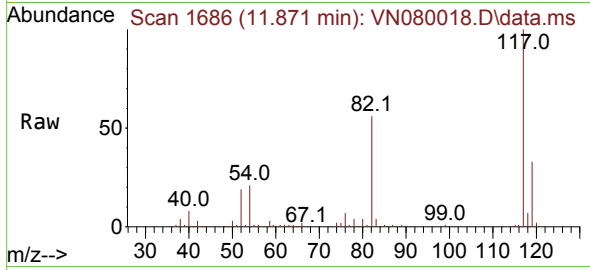




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.871 min Scan# 1187
Delta R.T. 0.001 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

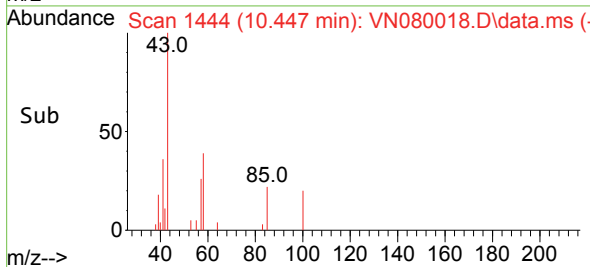
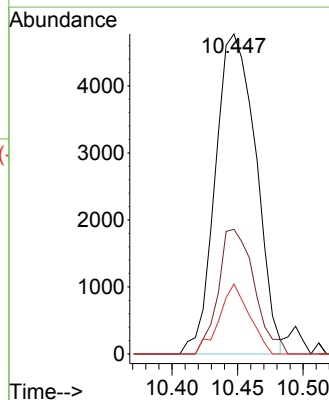
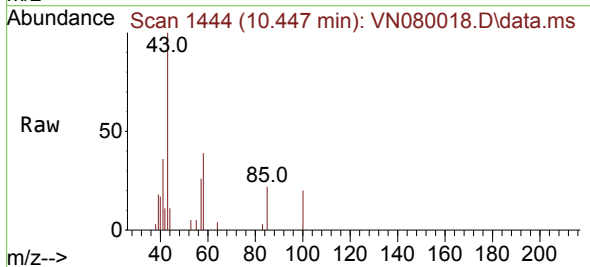
Instrument :
MSVOA_N
ClientSampleId :

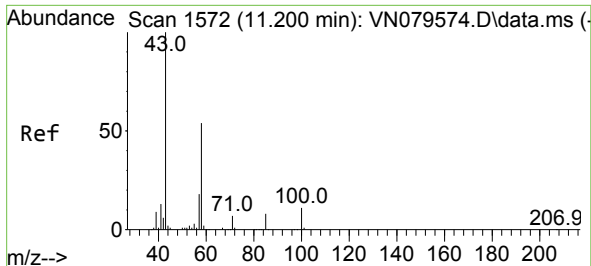
Tgt Ion:117 Resp: 306403
Ion Ratio Lower Upper
117 100
82 58.3 46.2 69.2
119 32.1 25.2 37.8



#58
4-Methyl-2-Pentanone
Concen: 2.005 ug/l
RT: 10.447 min Scan# 1444
Delta R.T. 0.000 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

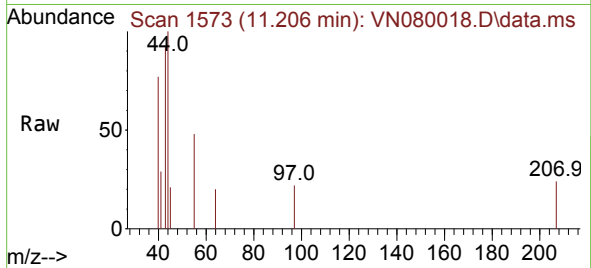
Tgt Ion: 43 Resp: 10262
Ion Ratio Lower Upper
43 100
58 34.6 30.4 45.6
85 16.3 13.2 19.8



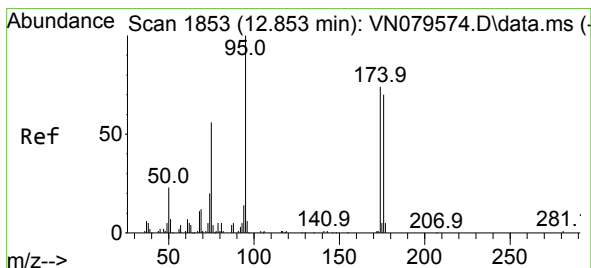
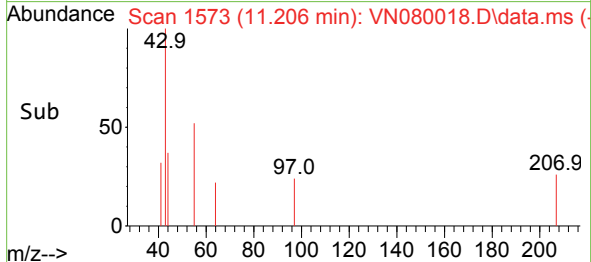
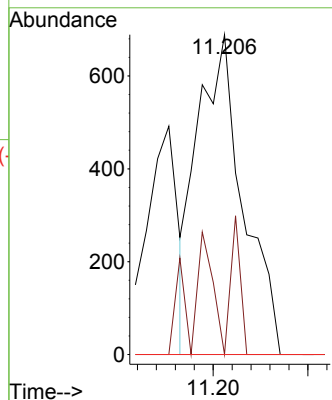


#59
2-Hexanone
Concen: 0.297 ug/l
RT: 11.206 min Scan# 1157
Delta R.T. 0.006 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Instrument :
MSVOA_N
ClientSampleId :

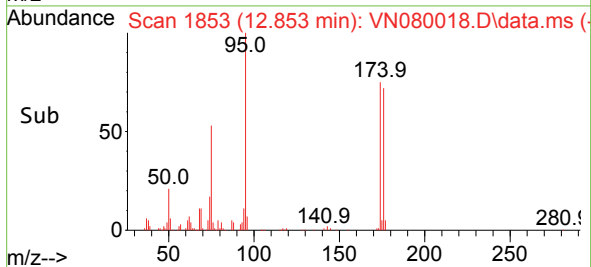
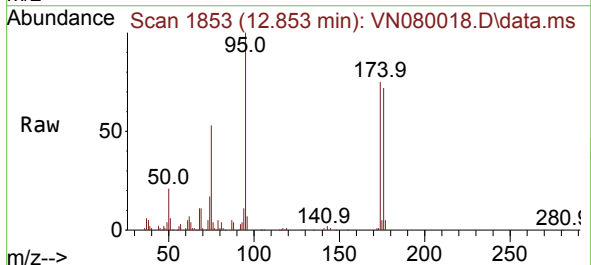
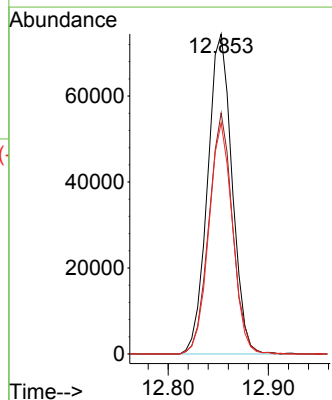


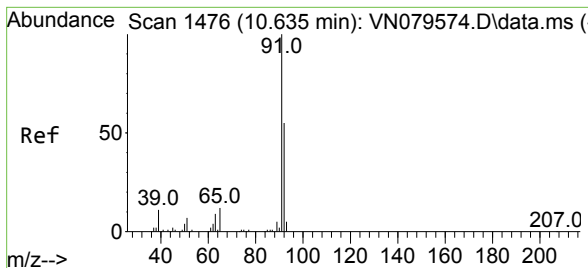
Tgt Ion: 43 Resp: 1157
Ion Ratio Lower Upper
43 100
58 9.2 42.3 63.5#
57 0.0 13.9 20.9#



#60
4-Bromofluorobenzene
Concen: 25.814 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. -0.000 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Tgt Ion: 95 Resp: 126485
Ion Ratio Lower Upper
95 100
174 72.6 60.5 90.7
176 69.6 57.2 85.8





#62

Toluene

Concen: 28.911 ug/l

RT: 10.635 min Scan# 1476

Delta R.T. 0.000 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

Instrument :

MSVOA_N

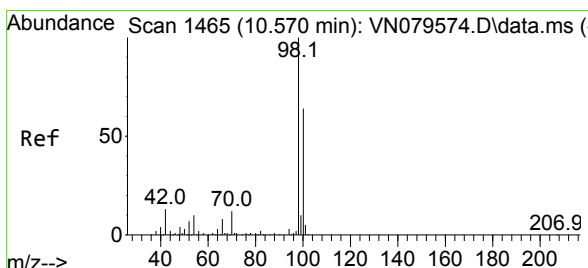
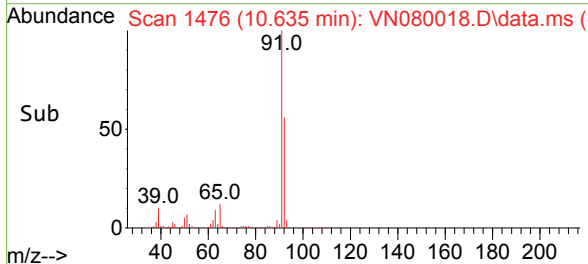
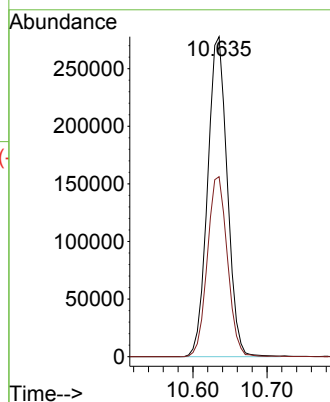
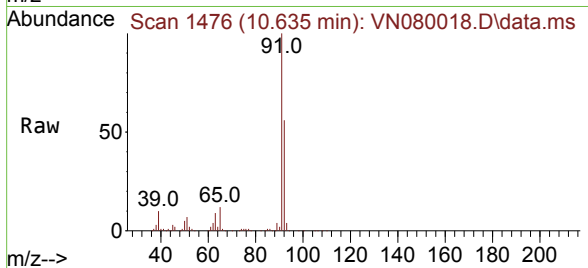
ClientSampleId :

Tgt Ion: 91 Resp: 512349

Ion Ratio Lower Upper

91 100

92 57.3 45.3 67.9



#63

Toluene-d8

Concen: 28.316 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. 0.001 min

Lab File: VN080018.D

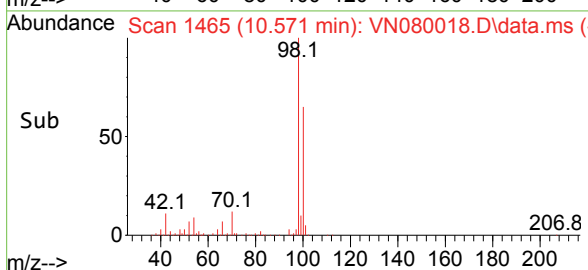
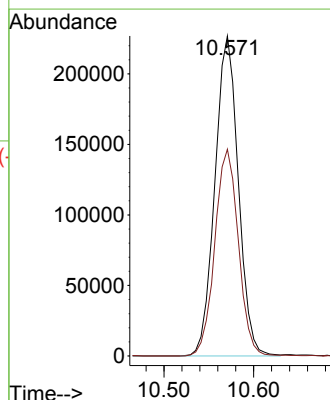
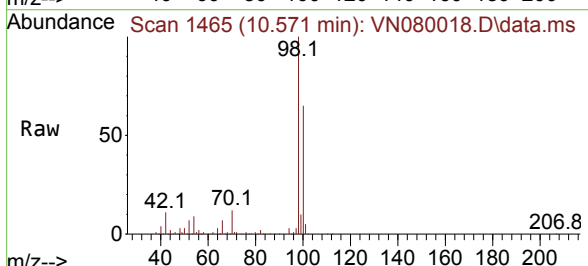
Acq: 09 Nov 2023 02:17

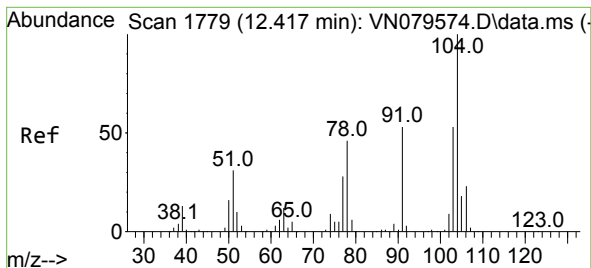
Tgt Ion: 98 Resp: 411085

Ion Ratio Lower Upper

98 100

100 64.9 51.6 77.4





#69

Styrene

Concen: 0.852 ug/l

RT: 12.412 min Scan# 11

Delta R.T. -0.005 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

Instrument :

MSVOA_N

ClientSampleId :

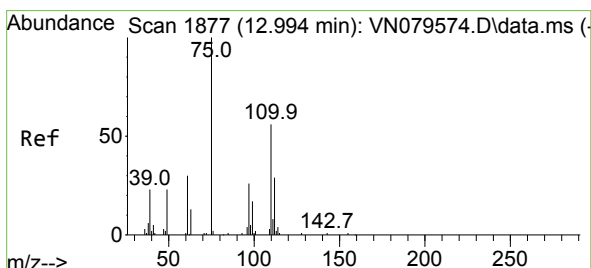
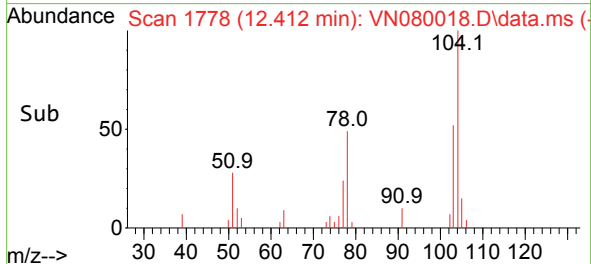
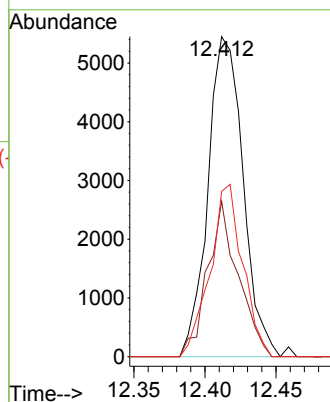
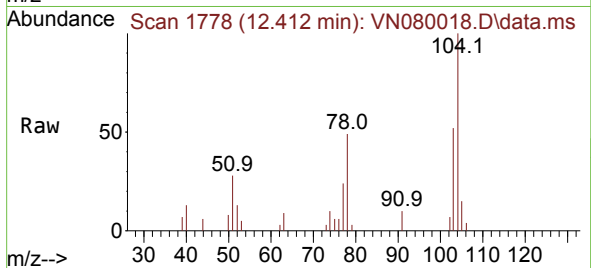
Tgt Ion:104 Resp: 9372

Ion Ratio Lower Upper

104 100

78 42.3 41.2 61.8

103 50.0 43.1 64.7



#72

1,2,3-Trichloropropane

Concen: 12.589 ug/l

RT: 12.853 min Scan# 1853

Delta R.T. -0.141 min

Lab File: VN080018.D

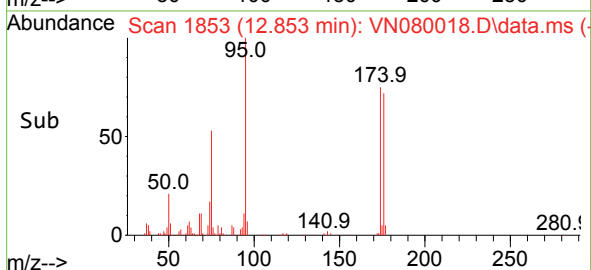
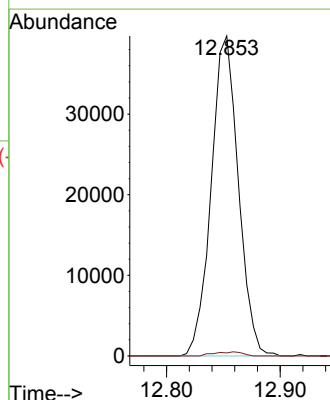
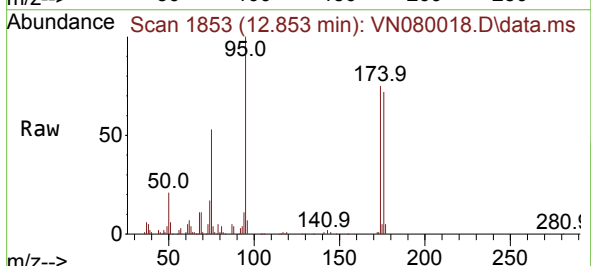
Acq: 09 Nov 2023 02:17

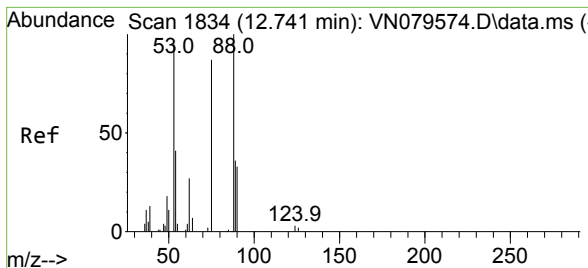
Tgt Ion: 75 Resp: 66037

Ion Ratio Lower Upper

75 100

77 1.3 0.0 338.2

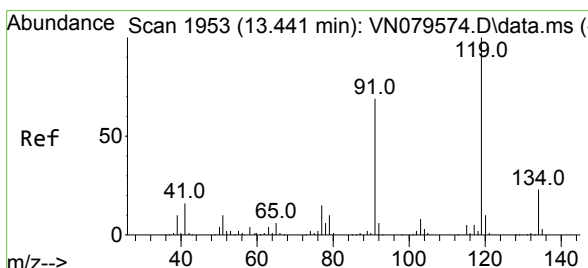
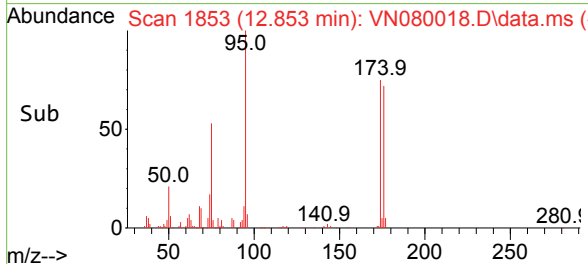
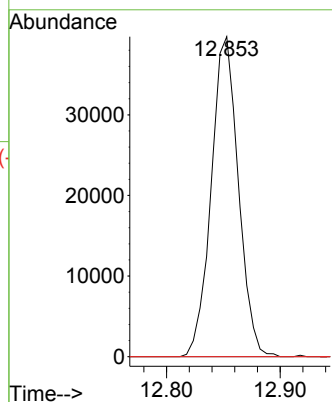
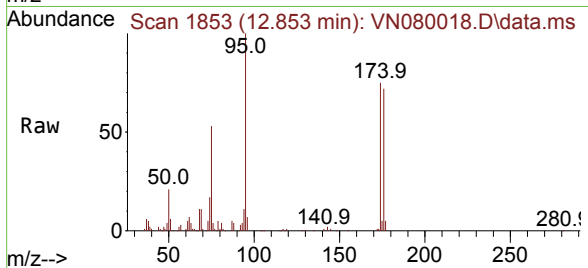




#77
t-1,4-Dichloro-2-butene
Concen: 38.445 ug/l
RT: 12.853 min Scan# 11
Delta R.T. 0.112 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

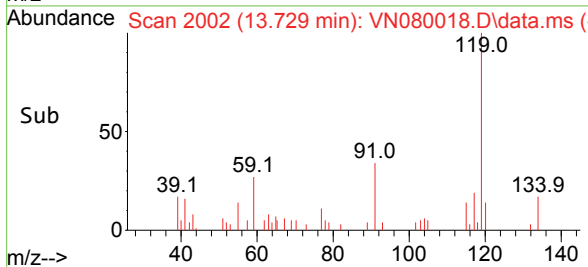
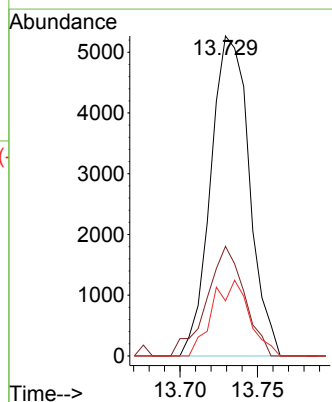
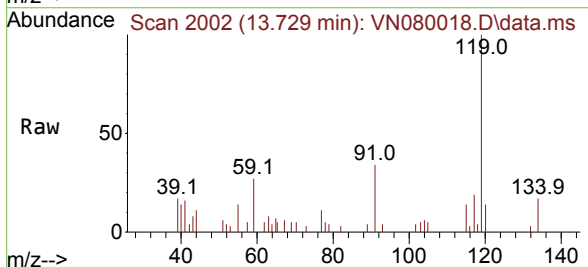
Instrument :
MSVOA_N
ClientSampleId :

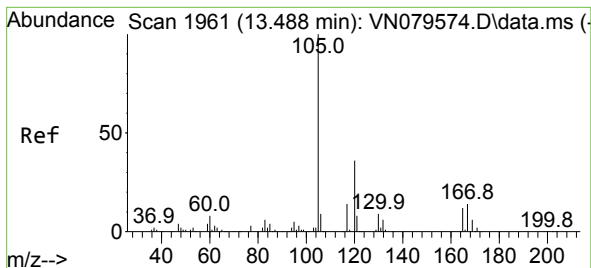
Tgt Ion: 75 Resp: 66037
Ion Ratio Lower Upper
75 100
53 0.0 53.0 159.1#
89 0.0 22.6 67.7#



#79
tert-butylbenzene
Concen: 0.849 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.288 min
Lab File: VN080018.D
Acq: 09 Nov 2023 02:17

Tgt Ion: 119 Resp: 9112
Ion Ratio Lower Upper
119 100
91 33.5 0.0 140.6
134 22.8 0.0 49.8





#80

1,2,4-Trimethylbenzene

Concen: 0.203 ug/l

RT: 13.488 min Scan# 1961

Delta R.T. 0.000 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

Instrument :

MSVOA_N

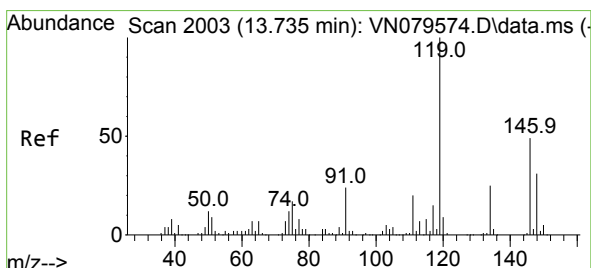
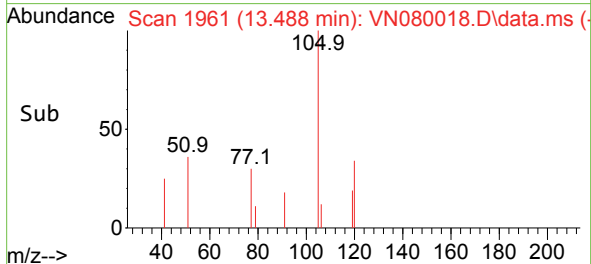
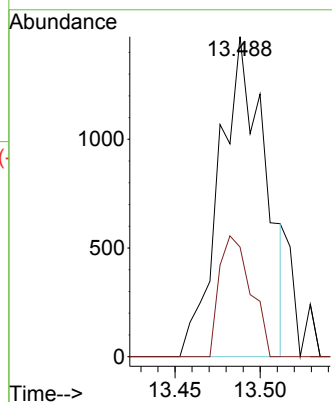
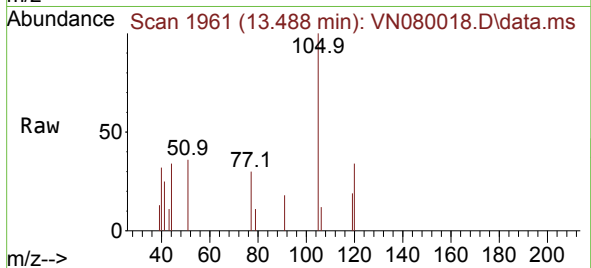
ClientSampleId :

Tgt Ion:105 Resp: 2728

Ion Ratio Lower Upper

105 100

120 26.2 0.0 88.6



#82

p-Isopropyltoluene

Concen: 0.740 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.006 min

Lab File: VN080018.D

Acq: 09 Nov 2023 02:17

Tgt Ion:119 Resp: 9112

Ion Ratio Lower Upper

119 100

134 22.8 0.0 52.2

91 33.5 0.0 50.0

