

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN020924\
 Data File : VN080990.D
 Acq On : 09 Feb 2024 15:33
 Operator : JC\MD
 Sample : P1415-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Feb 10 02:03:25 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N020924W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Feb 10 01:52:21 2024
 Response via : Initial Calibration

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

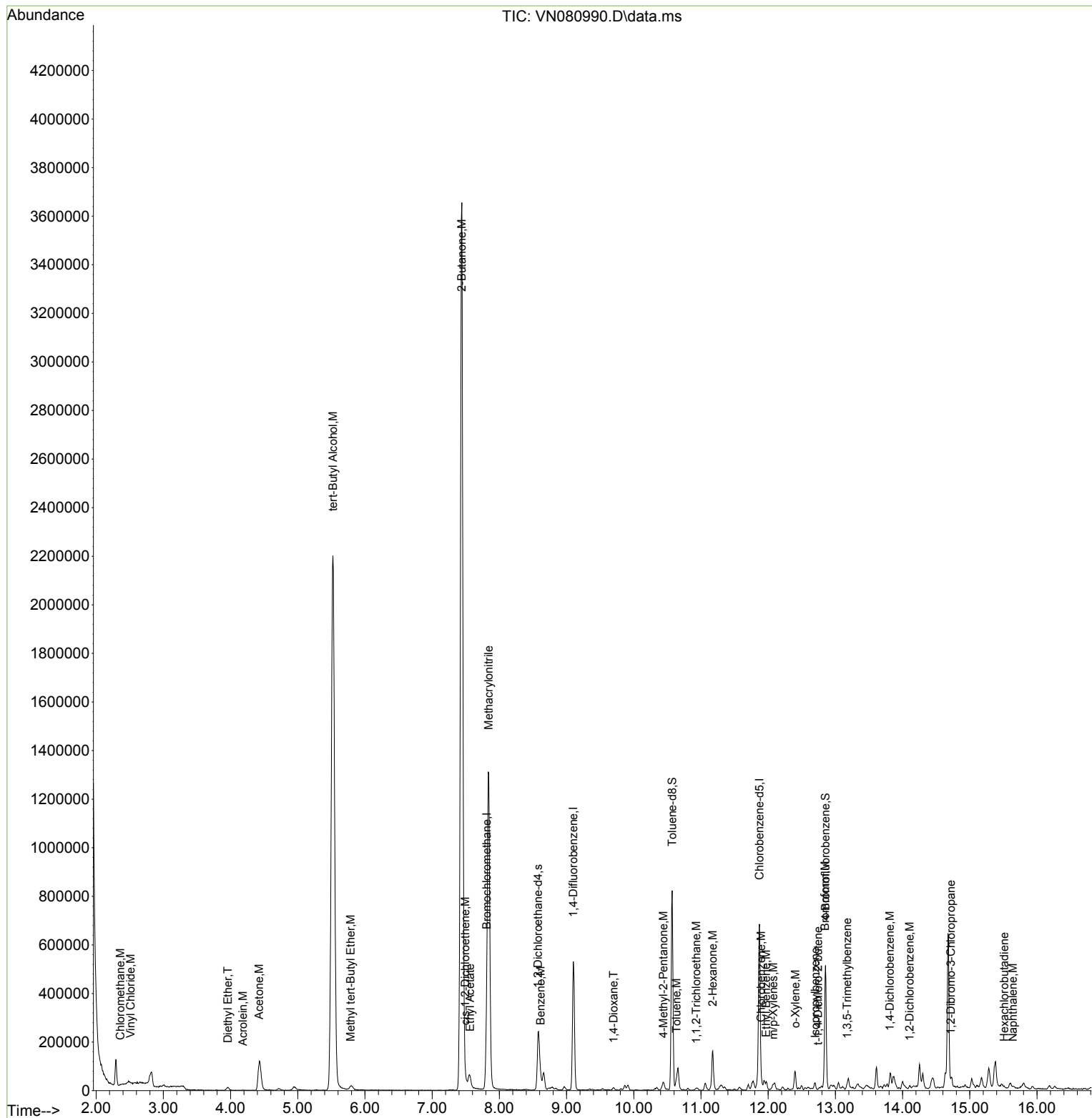
Internal Standards						
1) Bromochloromethane	7.812	128	85996	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	469026	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.871	117	408149	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	187020	28.942	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	96.467%		
60) 4-Bromofluorobenzene	12.853	95	174841	28.021	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	93.400%		
63) Toluene-d8	10.571	98	552637	30.172	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	100.567%		
Target Compounds					Qvalue	
3) Chloromethane	2.359	50	2711	0.461	ug/l	97
4) Vinyl Chloride	2.512	62	1705	0.243	ug/l #	78
8) Diethyl Ether	3.959	74	5875	1.812	ug/l	89
13) Acrolein	4.183	56	472	0.487	ug/l #	32
15) Acetone	4.424	58	60975	120.029	ug/l	96
22) cis-1,2-Dichloroethene	7.494	96	1311	0.203	ug/l #	15
23) tert-Butyl Alcohol	5.524	59	4313644	5362.209	ug/l #	100
24) Methyl tert-Butyl Ether	5.789	73	16132	0.992	ug/l #	67
30) 2-Butanone	7.441	43	143875	56.129	ug/l #	75
34) Benzene	8.612	78	45927	2.151	ug/l #	81
35) Methacrylonitrile	7.841	41	514252	170.686	ug/l #	46
43) Ethyl Acetate	7.565	43	11512	2.156	ug/l #	1
45) 1,4-Dioxane	9.700	88	7420	81.556	ug/l	88
50) 1,1,2-Trichloroethane	10.929	97	2605	0.489	ug/l #	22
56) Bromoform	12.847	173	1931	0.522	ug/l #	1
58) 4-Methyl-2-Pentanone	10.441	43	24754	4.672	ug/l #	69
59) 2-Hexanone	11.176	43	122285	31.376	ug/l #	28
62) Toluene	10.635	91	24975	1.117	ug/l	93
64) Chlorobenzene	11.894	112	9787	0.715	ug/l	92
66) Ethyl Benzene	11.970	91	9490	0.404	ug/l #	88
67) m/p-Xylenes	12.076	106	7337	0.795	ug/l	98
68) o-Xylene	12.406	106	20274	2.241	ug/l	92
70) Isopropylbenzene	12.700	105	11229	0.509	ug/l	96
76) 1,3,5-Trimethylbenzene	13.176	105	8060	0.447	ug/l	98
77) t-1,4-Dichloro-2-butene	12.741	75	426	0.212	ug/l #	12
84) 1,4-Dichlorobenzene	13.812	146	16346	1.651	ug/l	98
87) 1,2-Dichlorobenzene	14.106	146	2039	0.212	ug/l	78
88) 1,2-Dibromo-3-Chloropr...	14.717	75	280	0.228	ug/l #	4
90) Hexachlorobutadiene	15.511	225	718	0.348	ug/l #	29
91) Naphthalene	15.641	128	4409	0.264	ug/l #	84

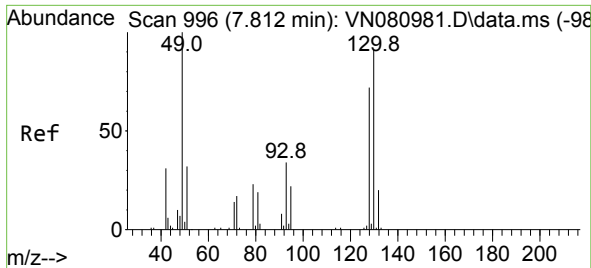
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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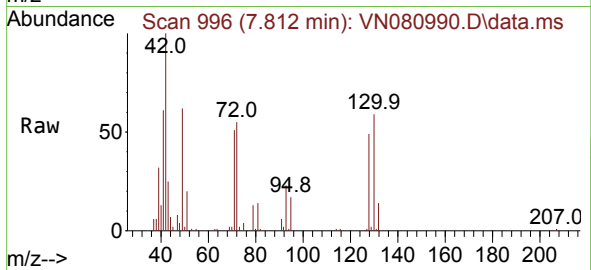
Quant Time: Feb 10 02:03:25 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N020924W.M
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QLast Update : Sat Feb 10 01:52:21 2024
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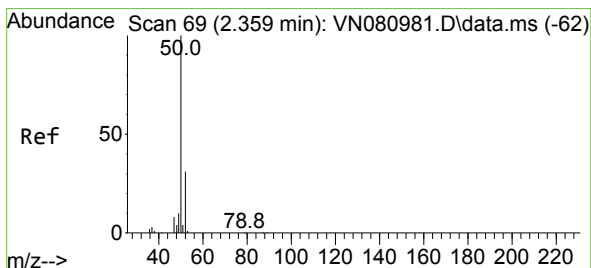
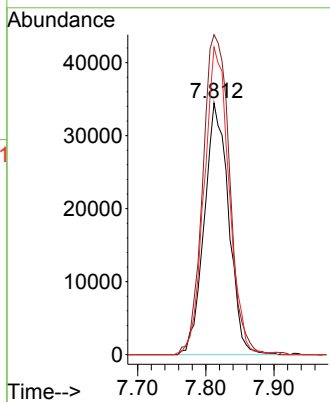
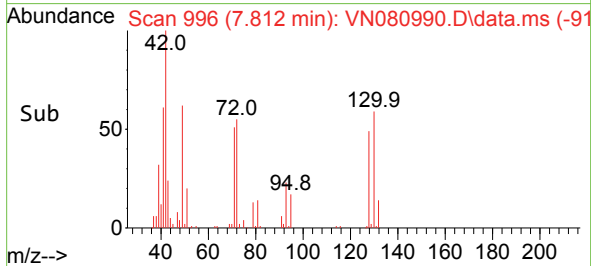


#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Instrument :
MSVOA_N
ClientSampleId :

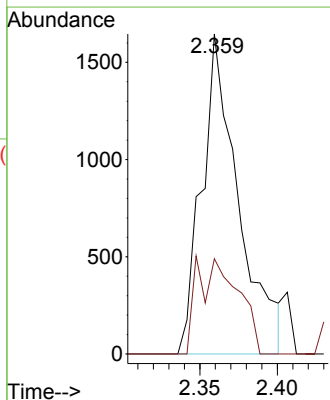
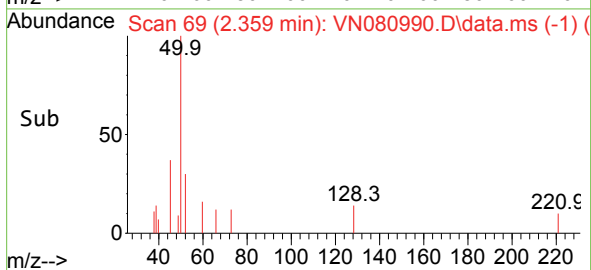
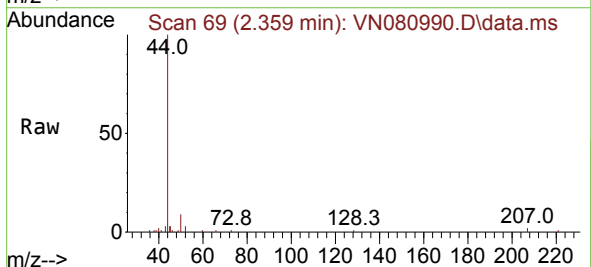


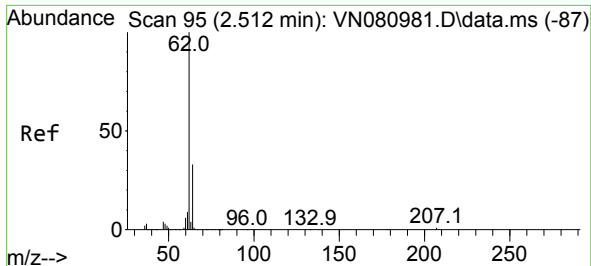
Tgt Ion:128 Resp: 85996
Ion Ratio Lower Upper
128 100
49 138.8 0.0 403.7
130 124.4 0.0 323.3



#3
Chloromethane
Concen: 0.461 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Tgt Ion: 50 Resp: 2711
Ion Ratio Lower Upper
50 100
52 29.8 25.4 38.0

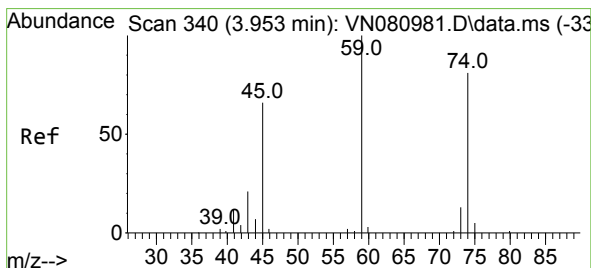
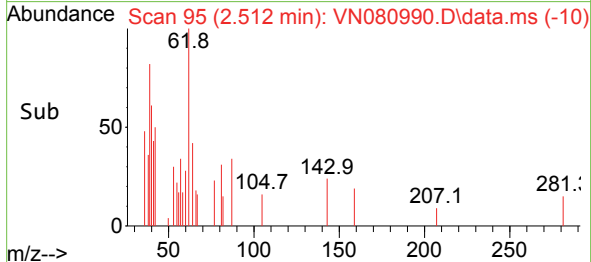
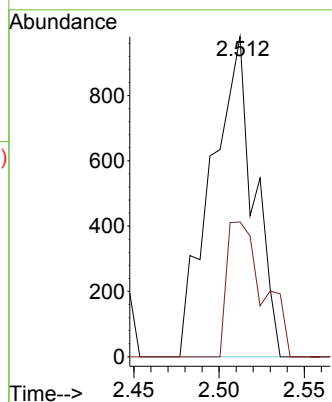
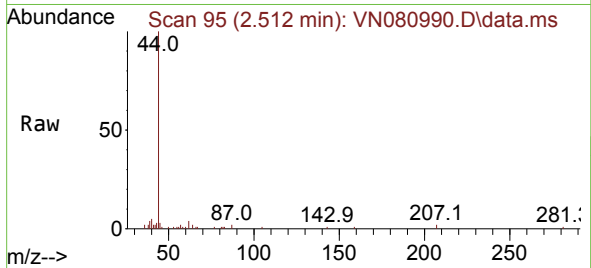




#4
 Vinyl Chloride
 Concen: 0.243 ug/l
 RT: 2.512 min Scan# 91
 Delta R.T. -0.000 min
 Lab File: VN080990.D
 Acq: 09 Feb 2024 15:33

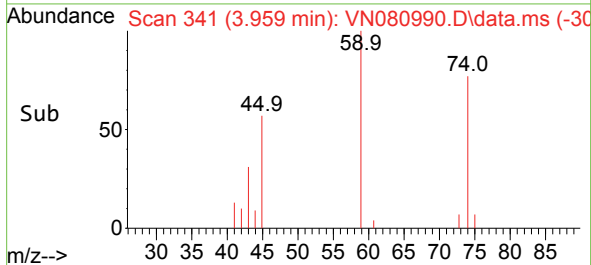
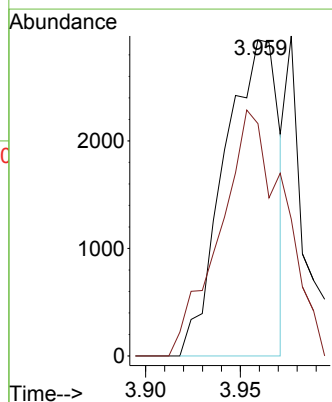
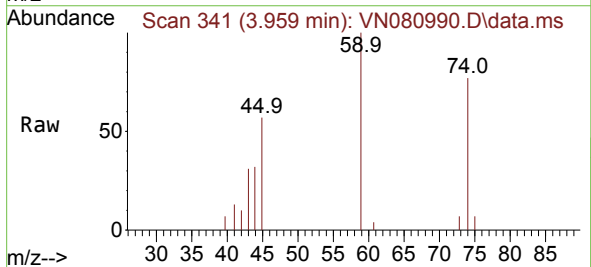
Instrument :
 MSVOA_N
 ClientSampleId :

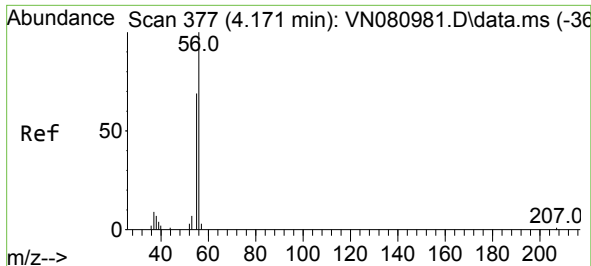
Tgt Ion: 62 Resp: 1705
 Ion Ratio Lower Upper
 62 100
 64 42.1 24.1 36.1#



#8
 Diethyl Ether
 Concen: 1.812 ug/l
 RT: 3.959 min Scan# 341
 Delta R.T. 0.006 min
 Lab File: VN080990.D
 Acq: 09 Feb 2024 15:33

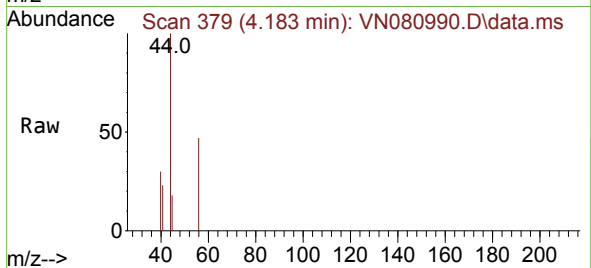
Tgt Ion: 74 Resp: 5875
 Ion Ratio Lower Upper
 74 100
 45 92.2 16.4 147.4



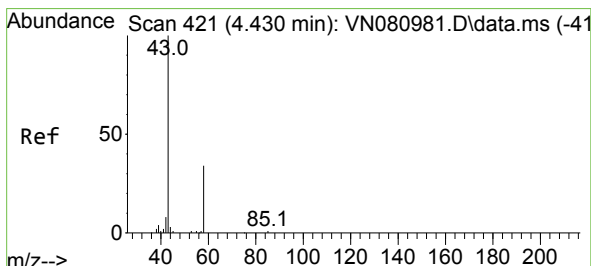
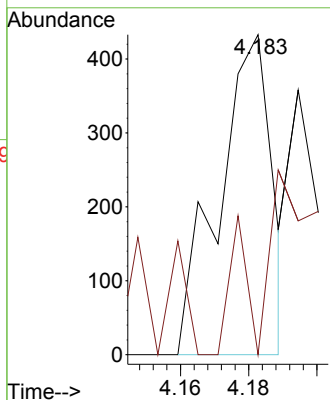
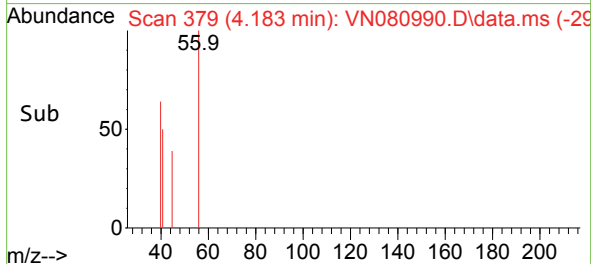


#13
Acrolein
Concen: 0.487 ug/l
RT: 4.183 min Scan# 31
Delta R.T. 0.012 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

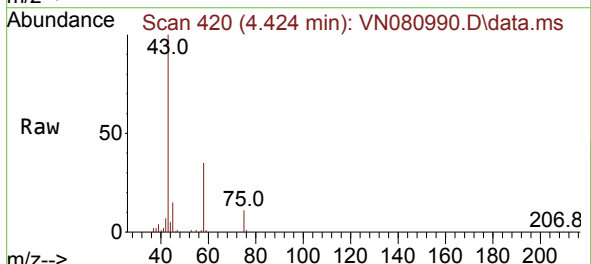
Instrument :
MSVOA_N
ClientSampleId :



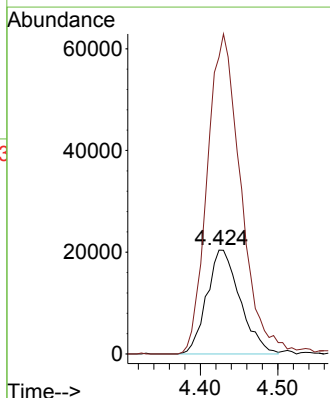
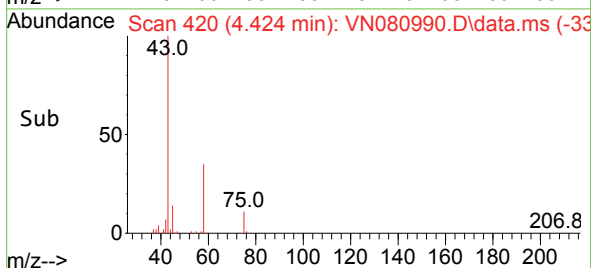
Tgt Ion: 56 Resp: 472
Ion Ratio Lower Upper
56 100
55 14.0 55.5 83.3#

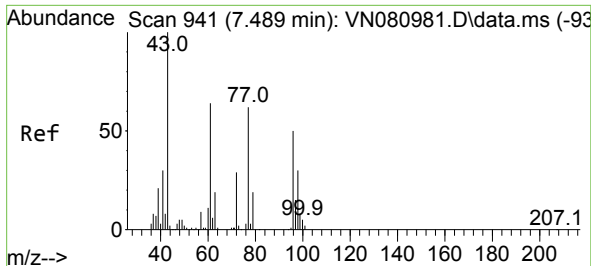


#15
Acetone
Concen: 120.029 ug/l
RT: 4.424 min Scan# 420
Delta R.T. -0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33



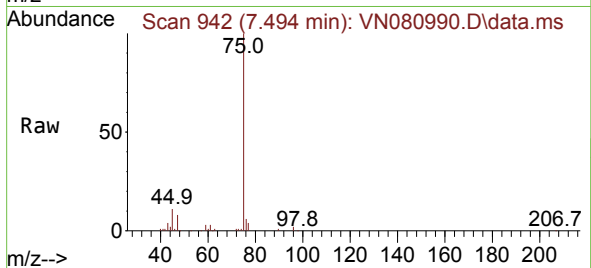
Tgt Ion: 58 Resp: 60975
Ion Ratio Lower Upper
58 100
43 285.6 223.1 334.7



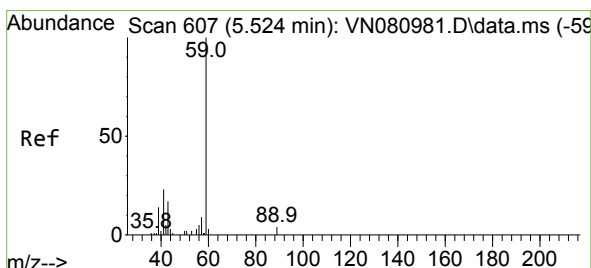
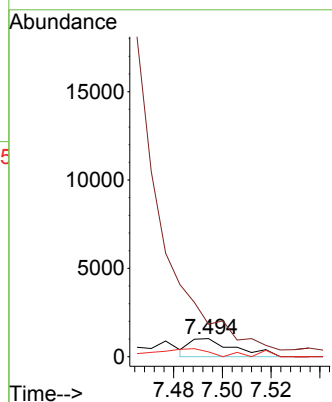
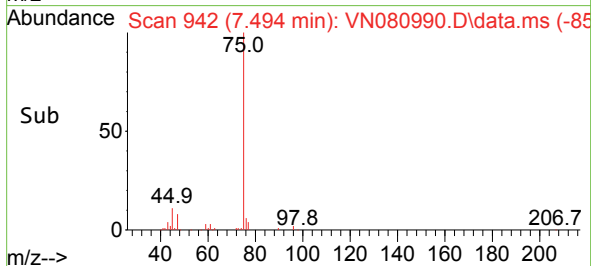


#22
 cis-1,2-Dichloroethene
 Concen: 0.203 ug/l
 RT: 7.494 min Scan# 941
 Delta R.T. 0.006 min
 Lab File: VN080990.D
 Acq: 09 Feb 2024 15:33

Instrument :
 MSVOA_N
 ClientSampleId :

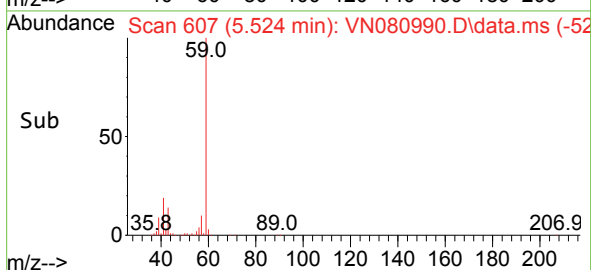
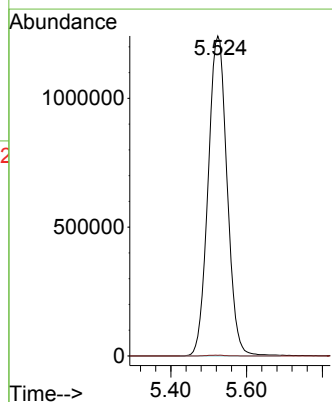
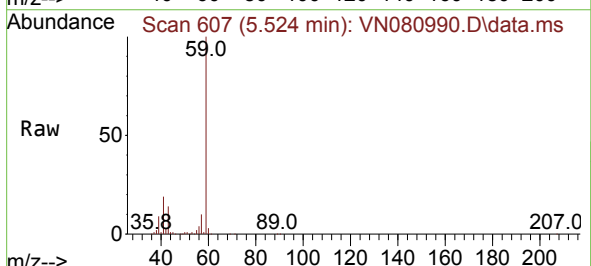


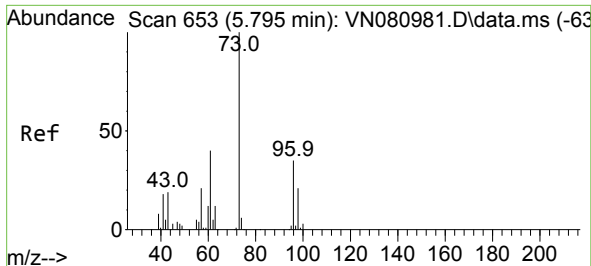
Tgt Ion: 96 Resp: 1311
 Ion Ratio Lower Upper
 96 100
 61 0.0 113.5 170.3#
 98 50.3 52.0 78.0#



#23
 tert-Butyl Alcohol
 Concen: 5362.209 ug/l
 RT: 5.524 min Scan# 607
 Delta R.T. -0.000 min
 Lab File: VN080990.D
 Acq: 09 Feb 2024 15:33

Tgt Ion: 59 Resp: 4313644
 Ion Ratio Lower Upper
 59 100
 52 0.1 0.0 0.0#

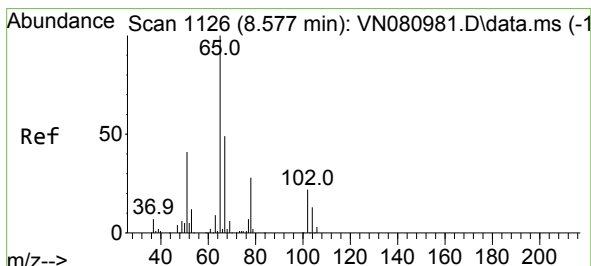
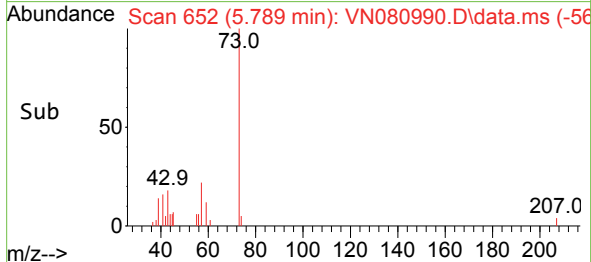
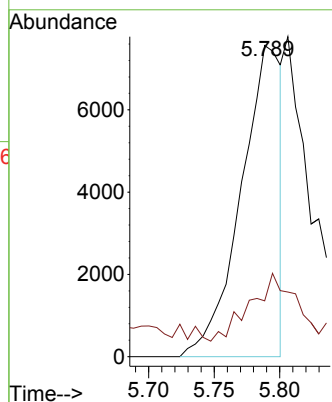
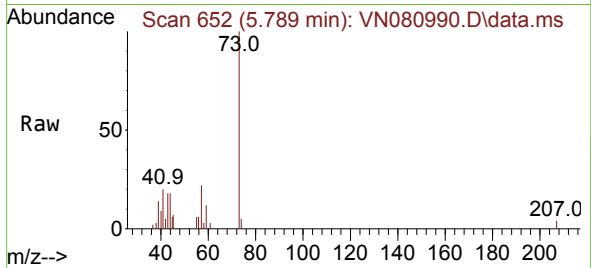




#24
Methyl tert-Butyl Ether
Concen: 0.992 ug/l
RT: 5.789 min Scan# 613
Delta R.T. -0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

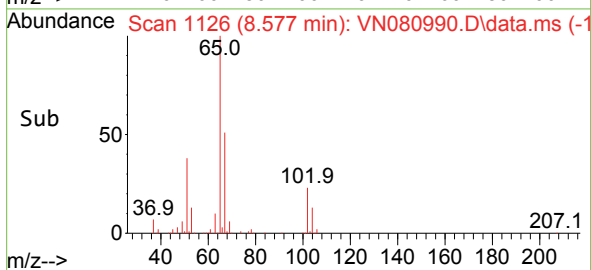
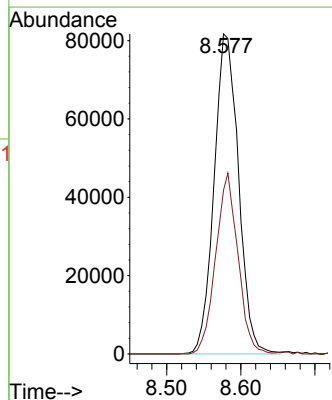
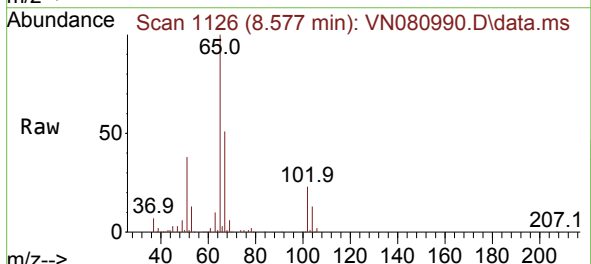
Instrument :
MSVOA_N
ClientSampleId :

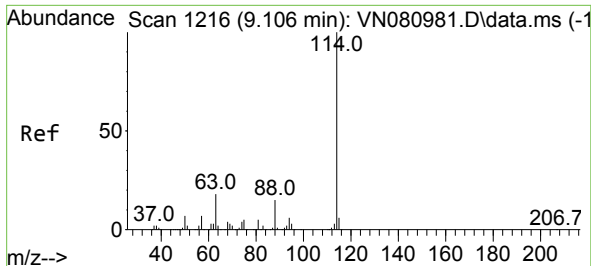
Tgt Ion: 73 Resp: 16132
Ion Ratio Lower Upper
73 100
43 2.5 13.4 20.2#



#27
1,2-Dichloroethane-d4
Concen: 28.942 ug/l
RT: 8.577 min Scan# 1126
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Tgt Ion: 65 Resp: 187020
Ion Ratio Lower Upper
65 100
67 51.5 43.2 64.8





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 114

Delta R.T. -0.006 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

Instrument :

MSVOA_N

ClientSampleId :

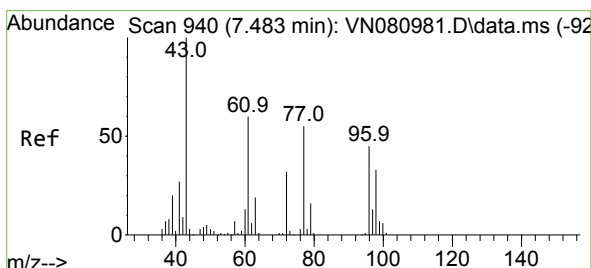
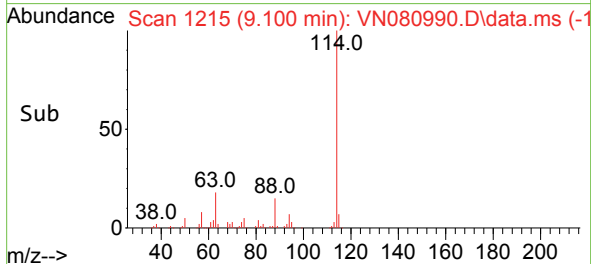
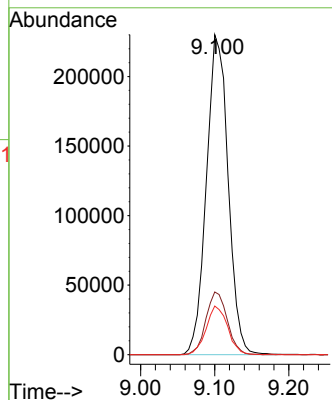
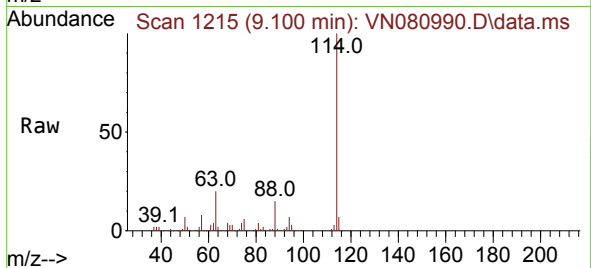
Tgt Ion:114 Resp: 469026

Ion Ratio Lower Upper

114 100

63 19.2 15.9 23.9

88 15.1 12.7 19.1



#30

2-Butanone

Concen: 56.129 ug/l

RT: 7.441 min Scan# 933

Delta R.T. -0.041 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

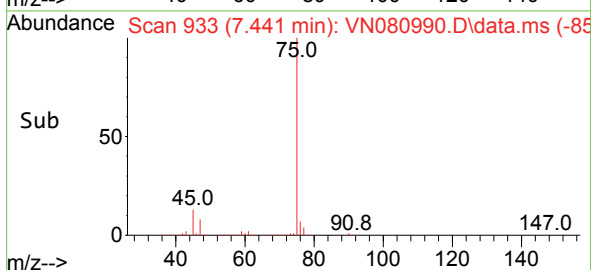
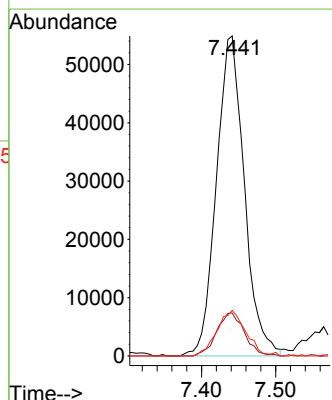
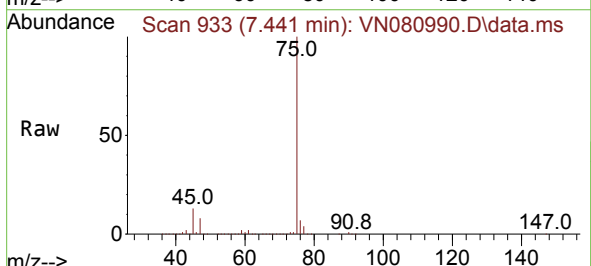
Tgt Ion: 43 Resp: 143875

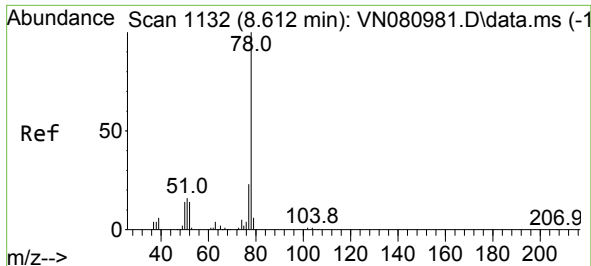
Ion Ratio Lower Upper

43 100

57 13.3 6.7 10.1#

72 14.6 24.0 36.0#

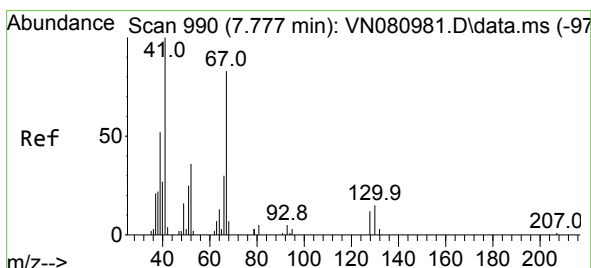
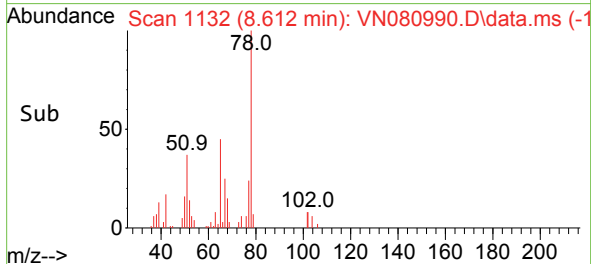
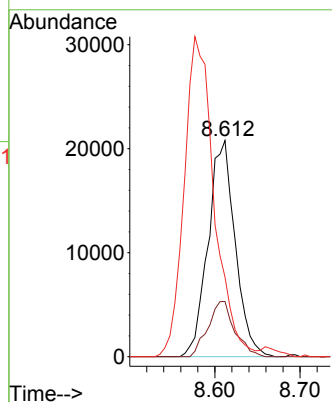
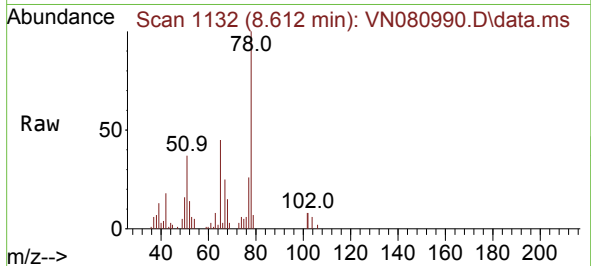




#34
Benzene
Concen: 2.151 ug/l
RT: 8.612 min Scan# 1132
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

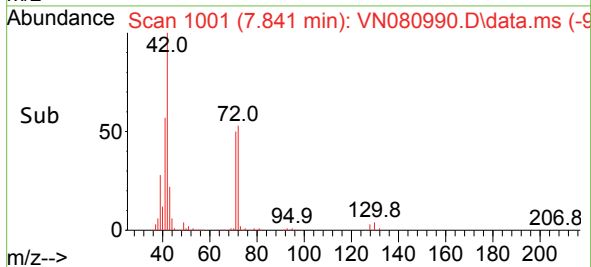
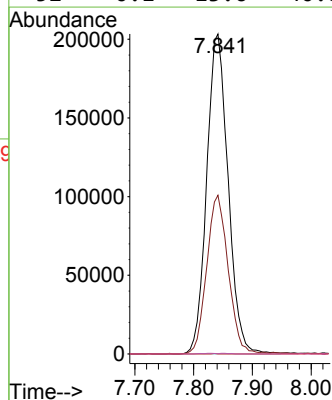
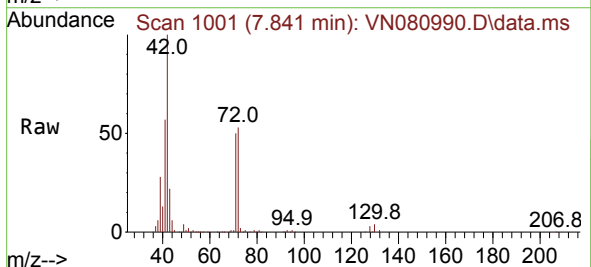
Instrument :
MSVOA_N
ClientSampleId :

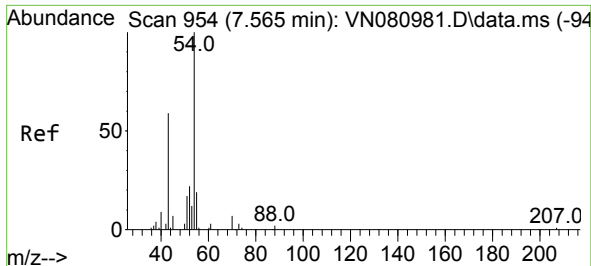
Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.5	19.2	28.8
51	34.7	13.3	19.9



#35
Methacrylonitrile
Concen: 170.686 ug/l
RT: 7.841 min Scan# 1001
Delta R.T. 0.065 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

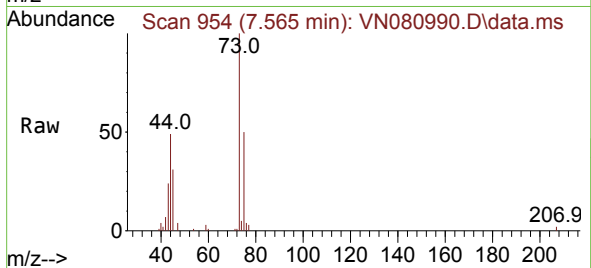
Tgt Ion	Ratio	Lower	Upper
41	100		
39	49.6	25.3	75.9
67	0.0	38.7	116.1
52	0.1	13.6	40.8



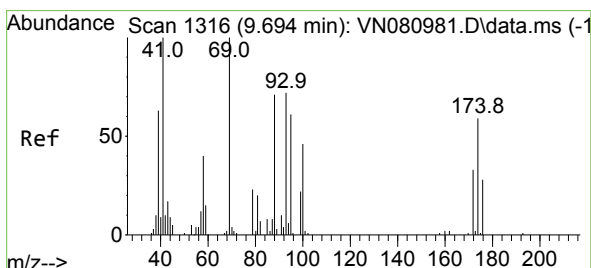
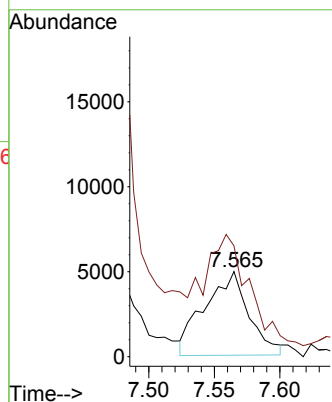
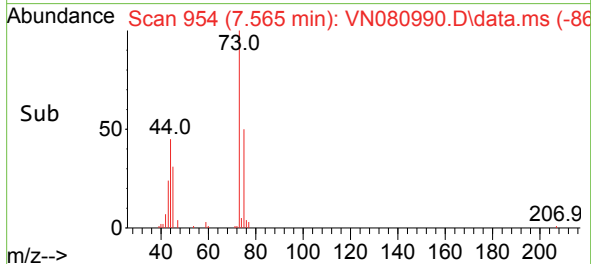


#43
Ethyl Acetate
Concen: 2.156 ug/l
RT: 7.565 min Scan# 91
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Instrument :
MSVOA_N
ClientSampleId :

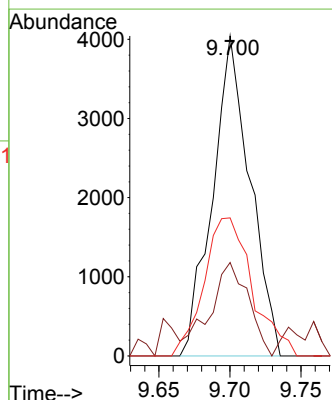
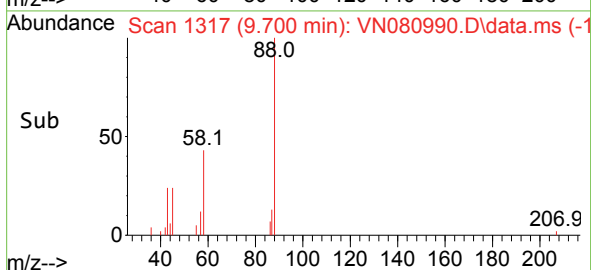
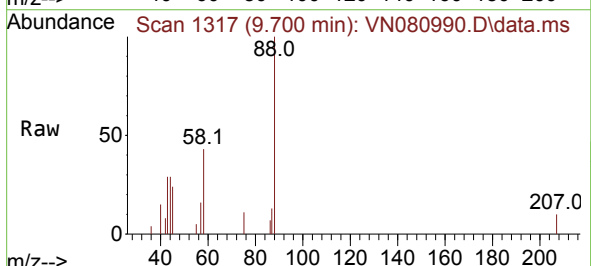


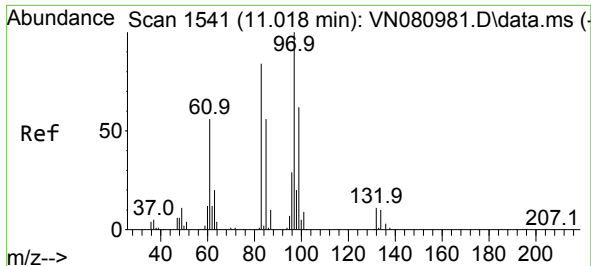
Tgt Ion: 43 Resp: 11512
Ion Ratio Lower Upper
43 100
45 115.9 10.6 15.8#



#45
1,4-Dioxane
Concen: 81.556 ug/l
RT: 9.700 min Scan# 1317
Delta R.T. 0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

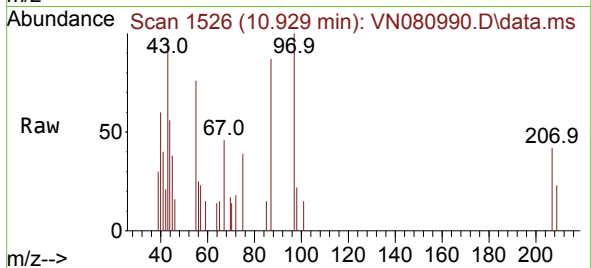
Tgt Ion: 88 Resp: 7420
Ion Ratio Lower Upper
88 100
43 24.7 19.8 29.6
58 55.7 55.4 83.0



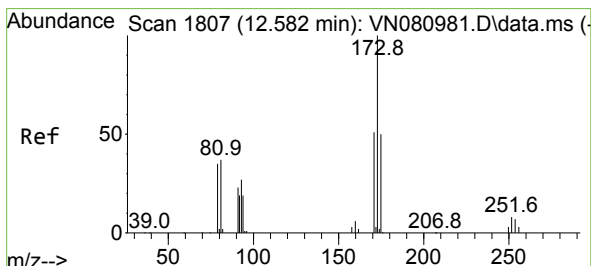
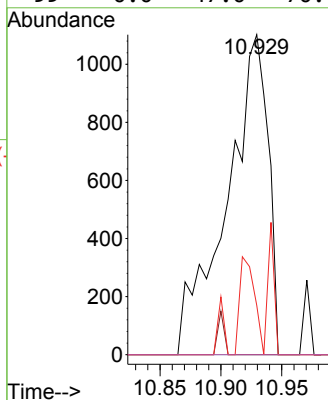
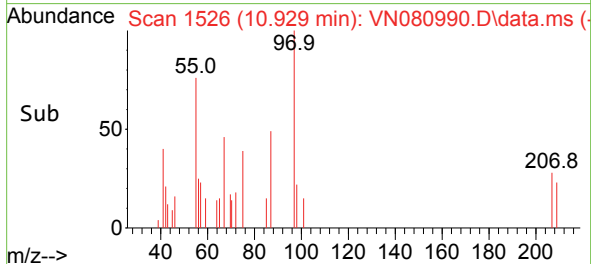


#50
1,1,2-Trichloroethane
Concen: 0.489 ug/l
RT: 10.929 min Scan# 11
Delta R.T. -0.088 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Instrument :
MSVOA_N
ClientSampleId :

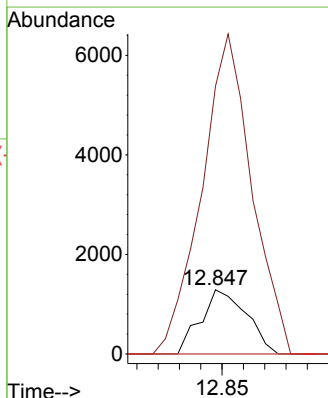
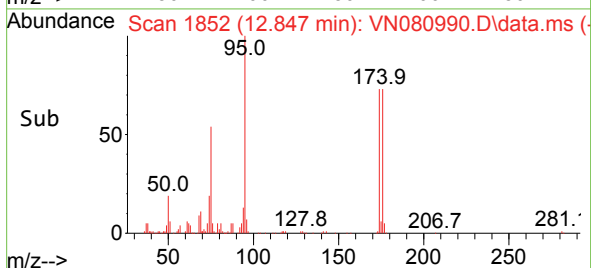
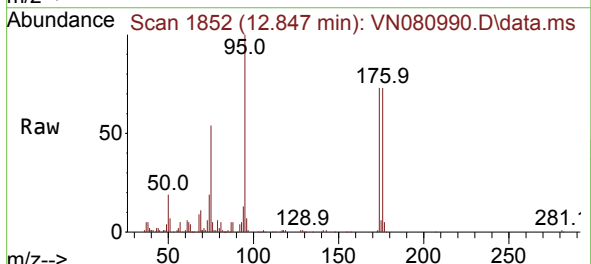


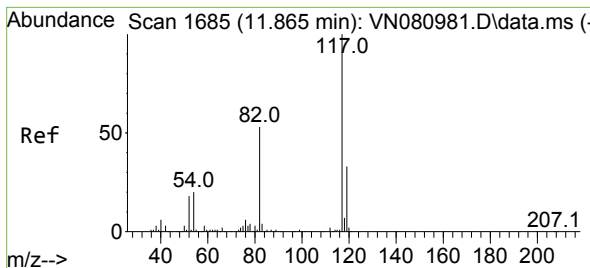
Tgt Ion: 97 Resp: 2605
Ion Ratio Lower Upper
97 100
83 0.0 68.1 102.1#
85 15.4 41.8 62.6#
99 0.0 47.0 70.4#



#56
Bromoform
Concen: 0.522 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.265 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

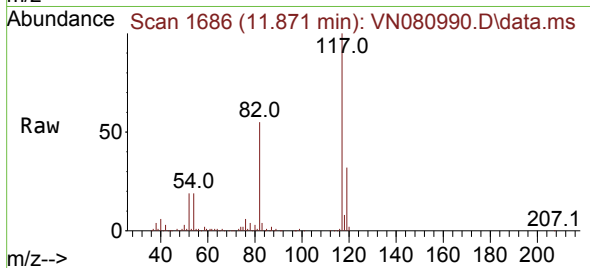
Tgt Ion: 173 Resp: 1931
Ion Ratio Lower Upper
173 100
175 545.2 40.0 60.0#
254 0.0 8.3 12.5#



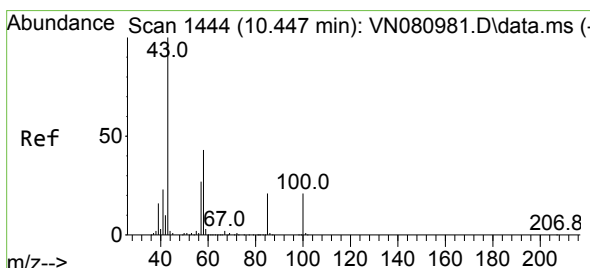
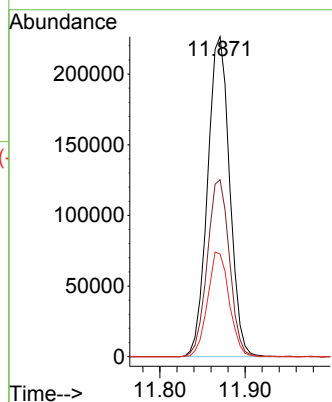
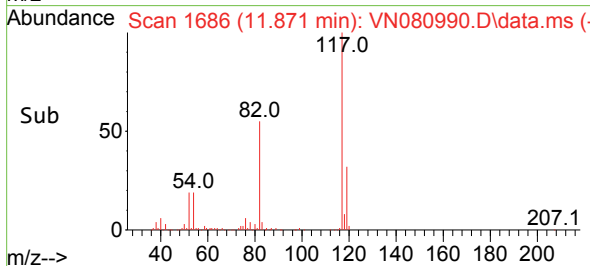


#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.871 min Scan# 1186
Delta R.T. 0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Instrument :
MSVOA_N
ClientSampleId :

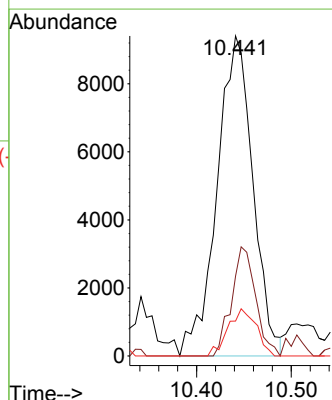
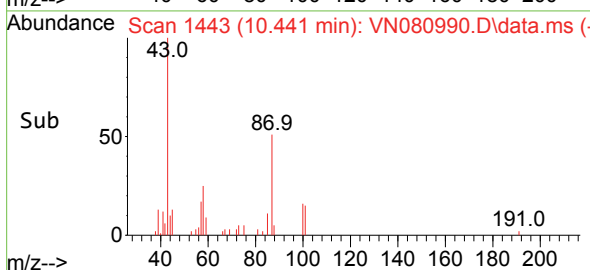
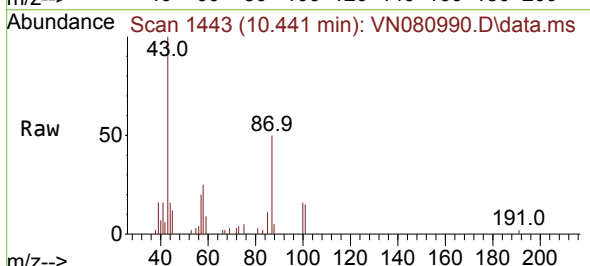


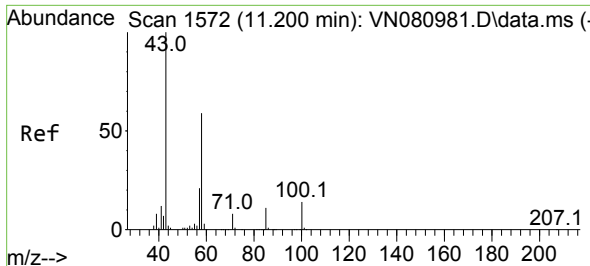
Tgt Ion:117 Resp: 408149
Ion Ratio Lower Upper
117 100
82 55.6 46.6 69.8
119 32.1 25.4 38.2



#58
4-Methyl-2-Pentanone
Concen: 4.672 ug/l
RT: 10.441 min Scan# 1443
Delta R.T. -0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

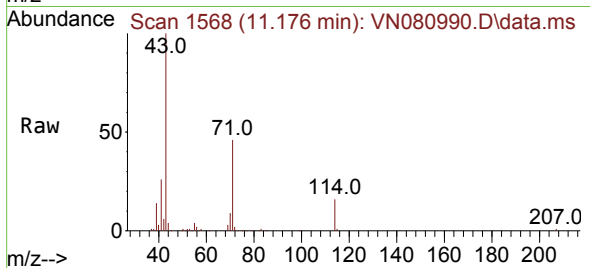
Tgt Ion: 43 Resp: 24754
Ion Ratio Lower Upper
43 100
58 23.0 36.5 54.7#
85 11.6 19.5 29.3#



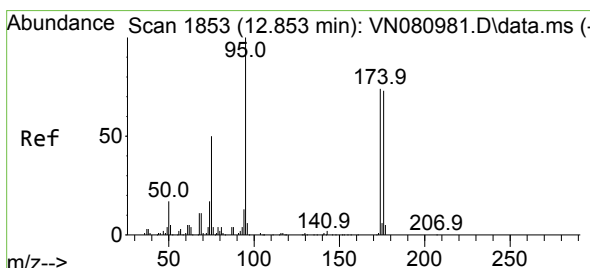
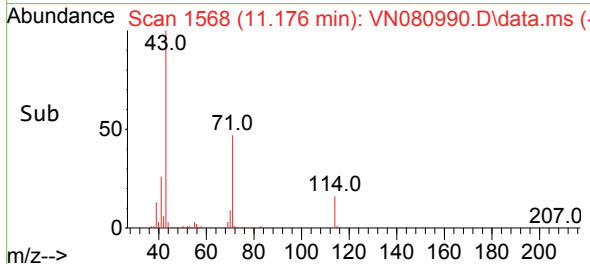
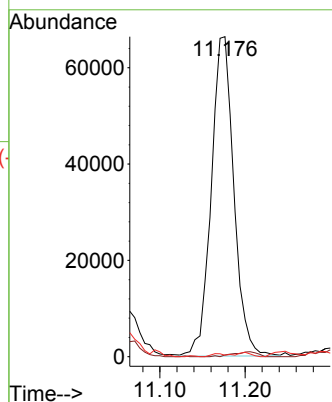


#59
2-Hexanone
Concen: 31.376 ug/l
RT: 11.176 min Scan# 11
Delta R.T. -0.024 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Instrument :
MSVOA_N
ClientSampleId :

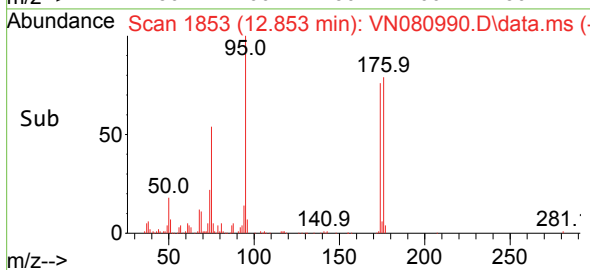
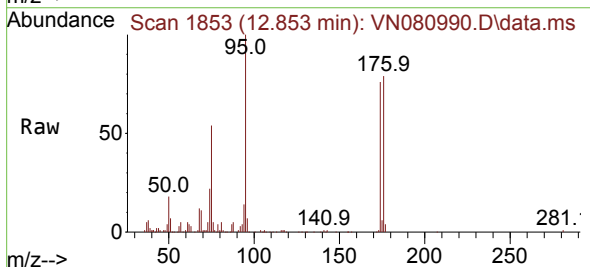
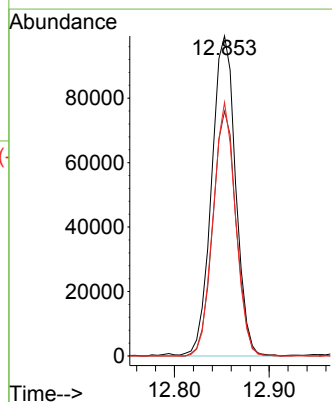


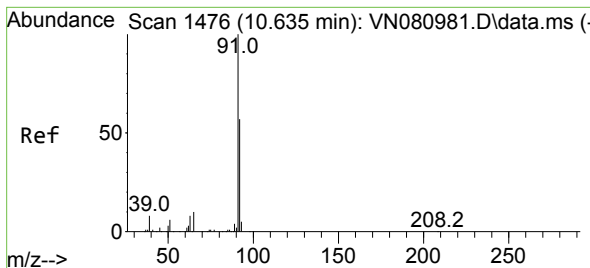
Tgt Ion: 43 Resp: 122285
Ion Ratio Lower Upper
43 100
58 0.1 50.4 75.6#
57 0.5 18.6 27.8#



#60
4-Bromofluorobenzene
Concen: 28.021 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Tgt Ion: 95 Resp: 174841
Ion Ratio Lower Upper
95 100
174 74.1 60.5 90.7
176 73.9 57.8 86.6





#62

Toluene

Concen: 1.117 ug/l

RT: 10.635 min Scan# 1476

Delta R.T. -0.000 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

Instrument :

MSVOA_N

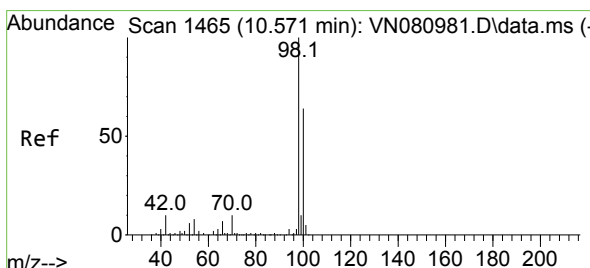
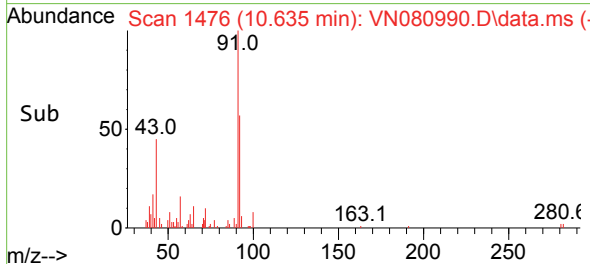
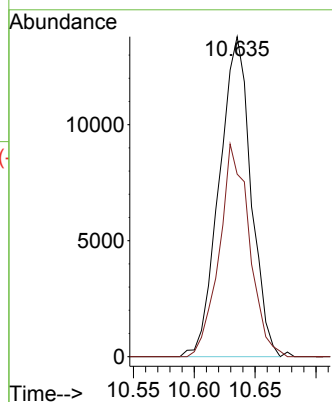
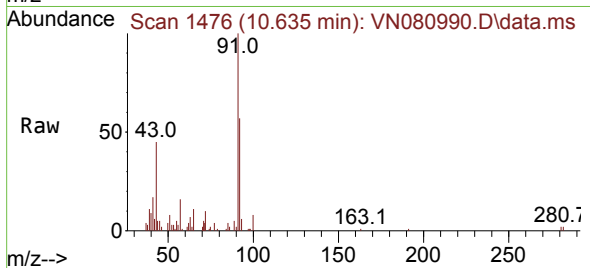
ClientSampleId :

Tgt Ion: 91 Resp: 24975

Ion Ratio Lower Upper

91 100

92 63.0 46.5 69.7



#63

Toluene-d8

Concen: 30.172 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. -0.000 min

Lab File: VN080990.D

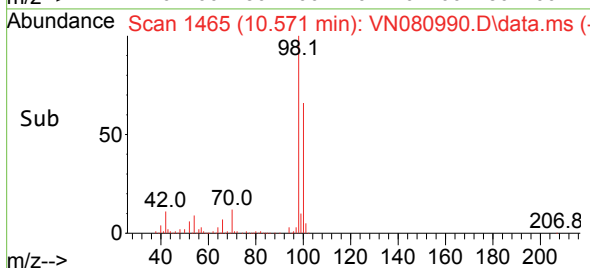
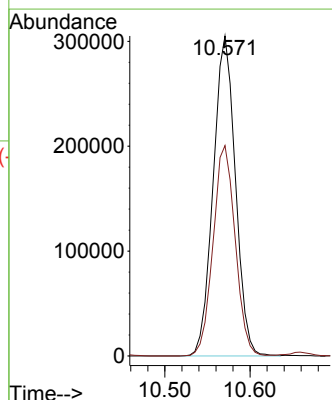
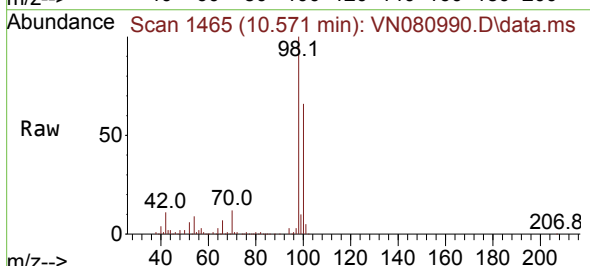
Acq: 09 Feb 2024 15:33

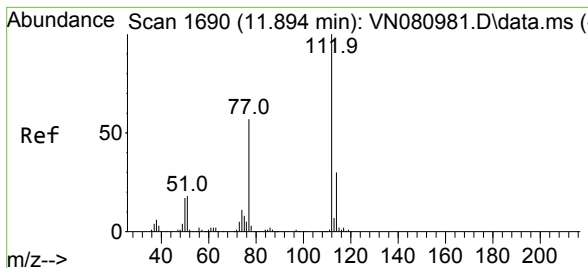
Tgt Ion: 98 Resp: 552637

Ion Ratio Lower Upper

98 100

100 65.6 52.7 79.1





#64

Chlorobenzene

Concen: 0.715 ug/l

RT: 11.894 min Scan# 1

Delta R.T. -0.000 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

Instrument :

MSVOA_N

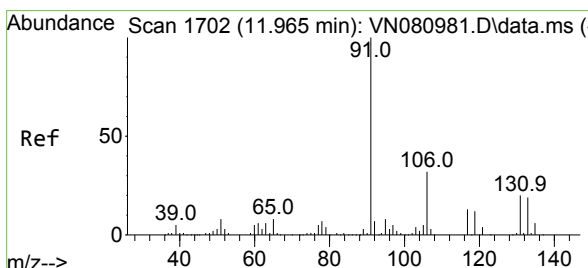
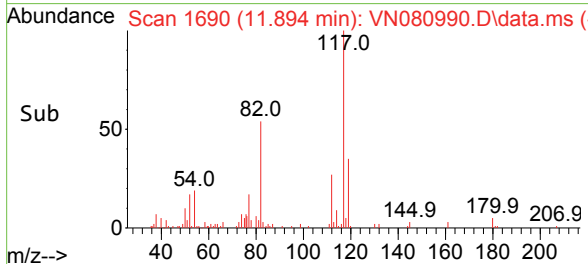
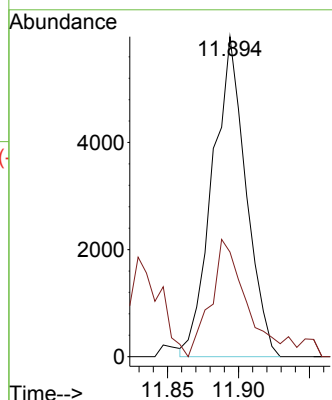
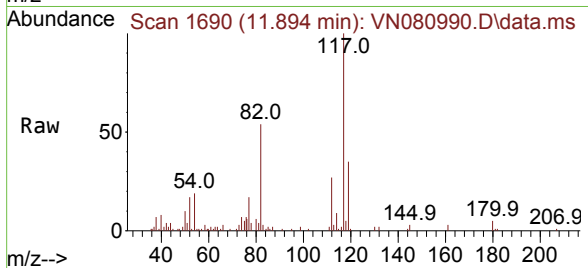
ClientSampleId :

Tgt Ion:112 Resp: 9787

Ion Ratio Lower Upper

112 100

114 28.8 26.6 39.8



#66

Ethyl Benzene

Concen: 0.404 ug/l

RT: 11.970 min Scan# 1703

Delta R.T. 0.006 min

Lab File: VN080990.D

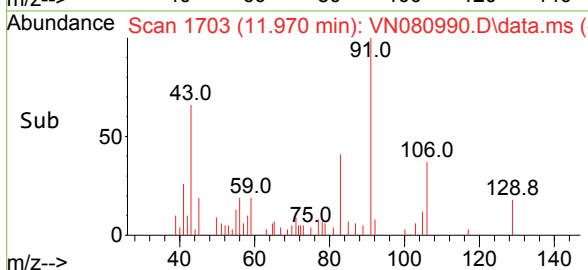
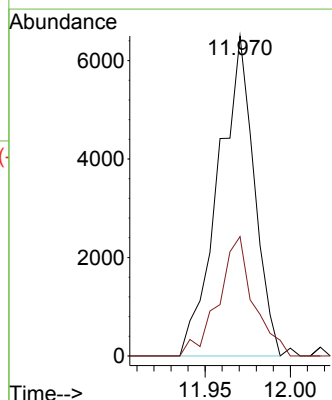
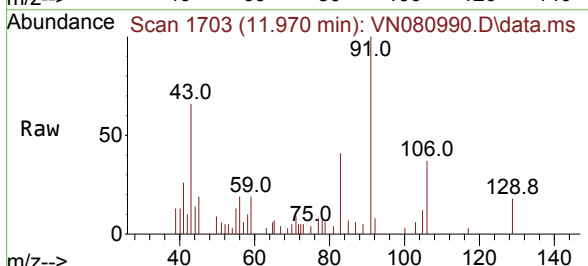
Acq: 09 Feb 2024 15:33

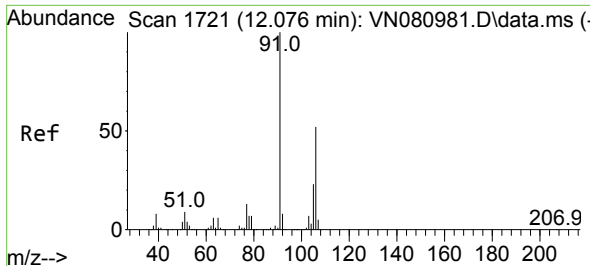
Tgt Ion: 91 Resp: 9490

Ion Ratio Lower Upper

91 100

106 37.3 24.4 36.6#

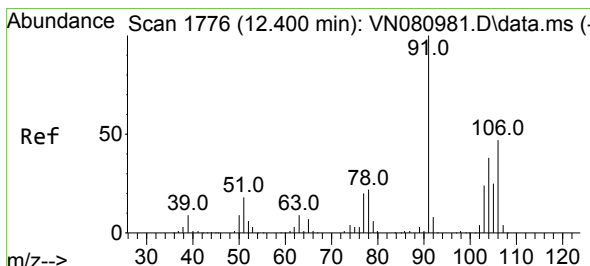
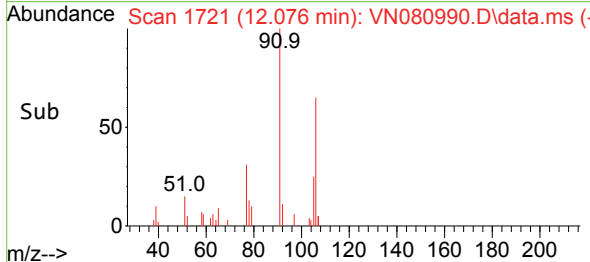
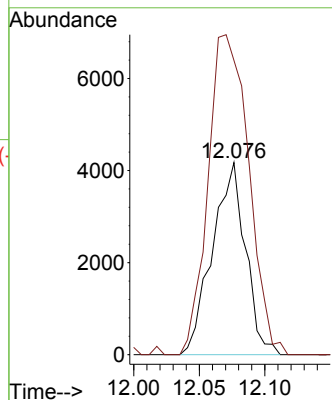
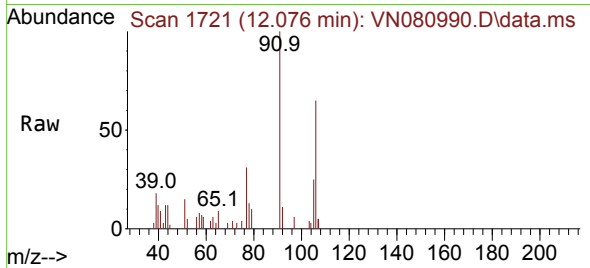




#67
m/p-Xylenes
Concen: 0.795 ug/l
RT: 12.076 min Scan# 1721
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

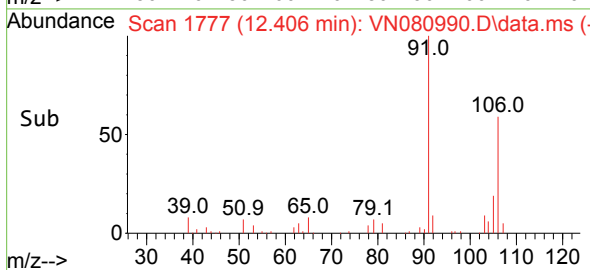
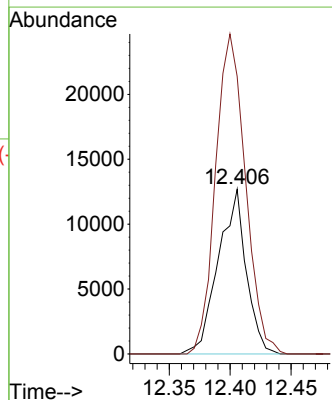
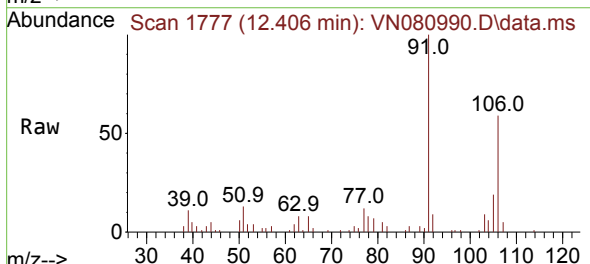
Instrument :
MSVOA_N
ClientSampleId :

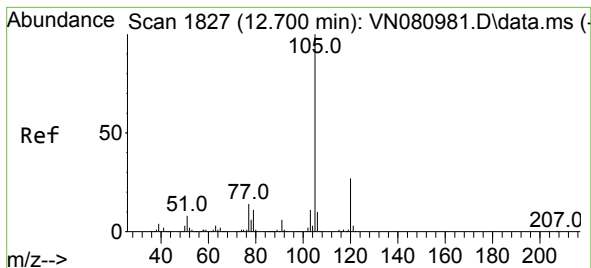
Tgt Ion:106 Resp: 7337
Ion Ratio Lower Upper
106 100
91 204.5 166.6 249.8



#68
o-Xylene
Concen: 2.241 ug/l
RT: 12.406 min Scan# 1777
Delta R.T. 0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

Tgt Ion:106 Resp: 20274
Ion Ratio Lower Upper
106 100
91 207.6 110.0 330.0





#70

Isopropylbenzene

Concen: 0.509 ug/l

RT: 12.700 min Scan# 11

Delta R.T. -0.000 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

Instrument :

MSVOA_N

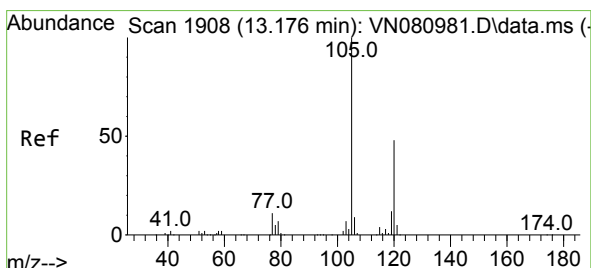
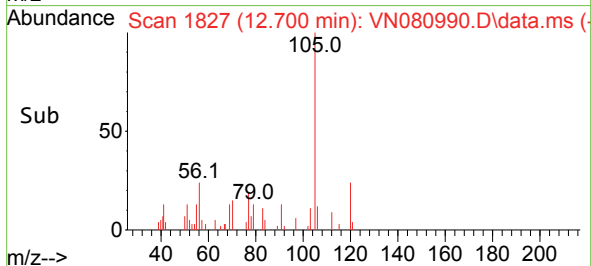
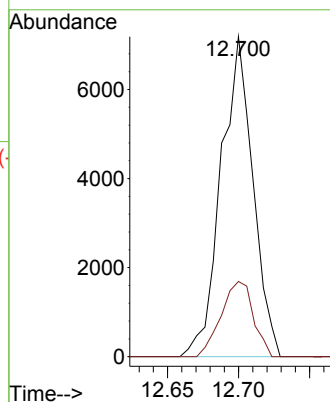
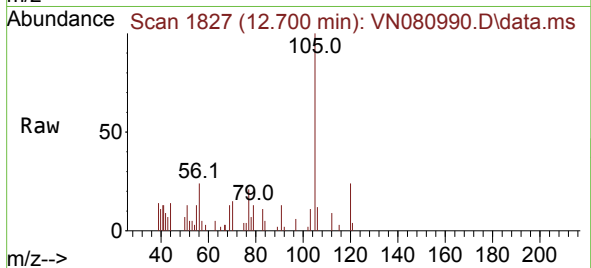
ClientSampleId :

Tgt Ion:105 Resp: 11229

Ion Ratio Lower Upper

105 100

120 23.7 17.8 33.1



#76

1,3,5-Trimethylbenzene

Concen: 0.447 ug/l

RT: 13.176 min Scan# 1908

Delta R.T. -0.000 min

Lab File: VN080990.D

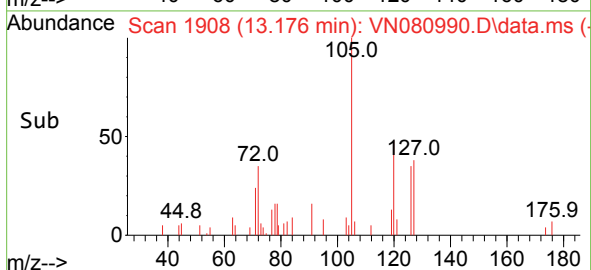
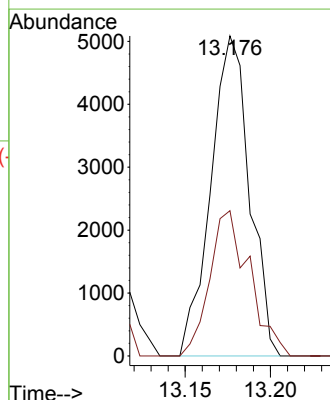
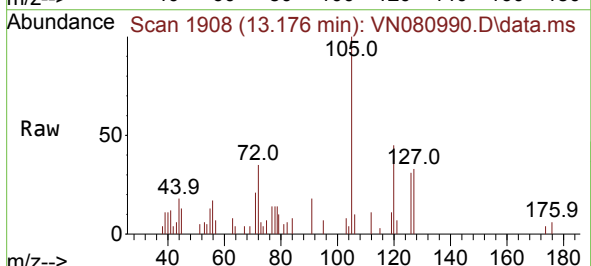
Acq: 09 Feb 2024 15:33

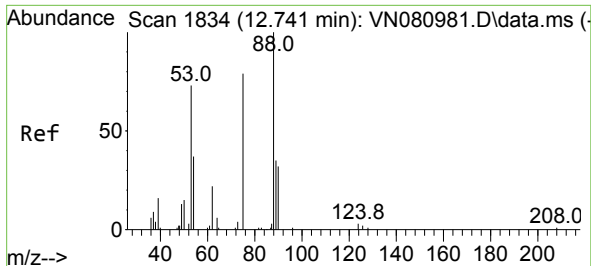
Tgt Ion:105 Resp: 8060

Ion Ratio Lower Upper

105 100

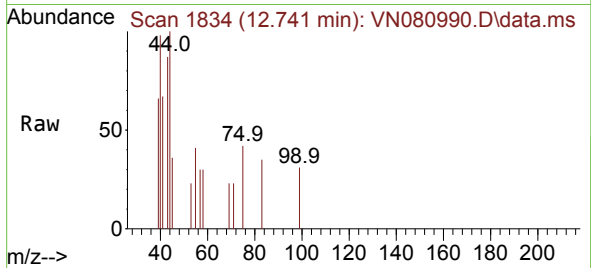
120 46.4 0.0 95.8



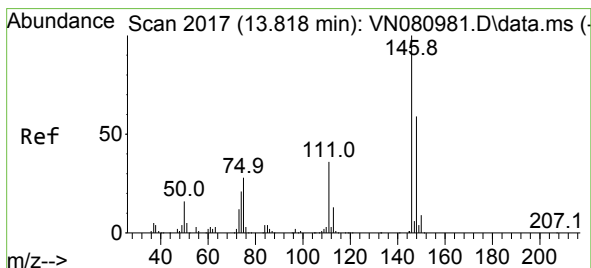
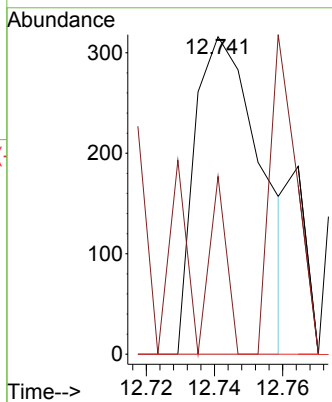
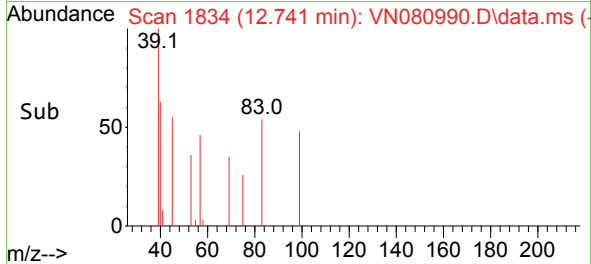


#77
t-1,4-Dichloro-2-butene
Concen: 0.212 ug/l
RT: 12.741 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

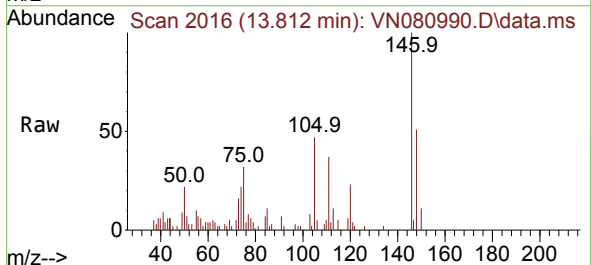
Instrument :
MSVOA_N
ClientSampleId :



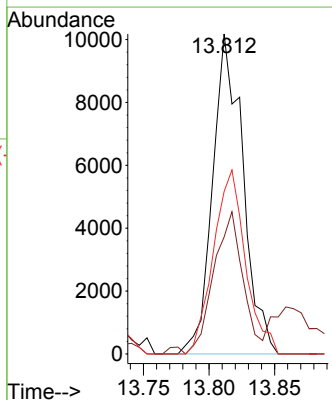
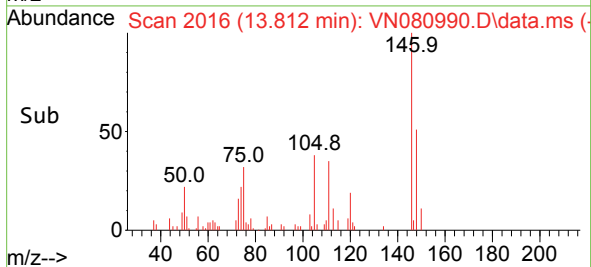
Tgt Ion: 75 Resp: 426
Ion Ratio Lower Upper
75 100
53 0.0 45.9 137.7#
89 0.0 25.9 77.7#

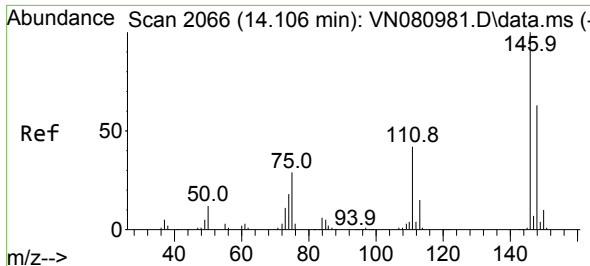


#84
1,4-Dichlorobenzene
Concen: 1.651 ug/l
RT: 13.812 min Scan# 2016
Delta R.T. -0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33



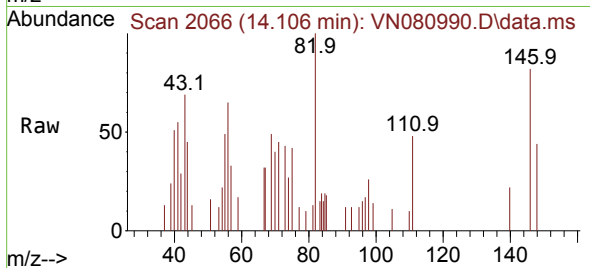
Tgt Ion: 146 Resp: 16346
Ion Ratio Lower Upper
146 100
111 42.8 21.3 63.9
148 60.8 31.9 95.5



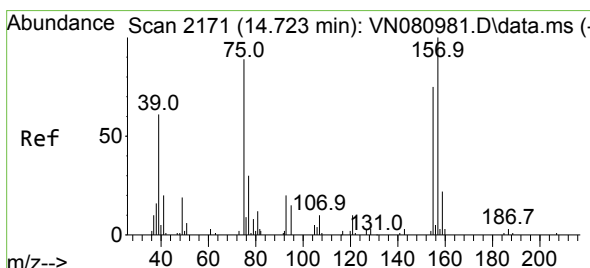
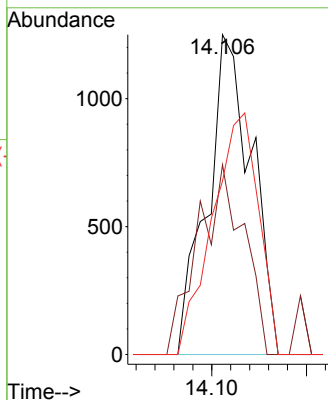
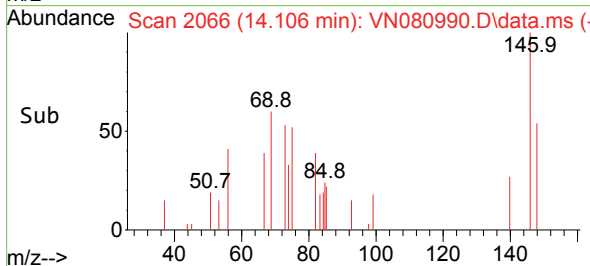


#87
1,2-Dichlorobenzene
Concen: 0.212 ug/l
RT: 14.106 min Scan# 2066
Delta R.T. -0.000 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33

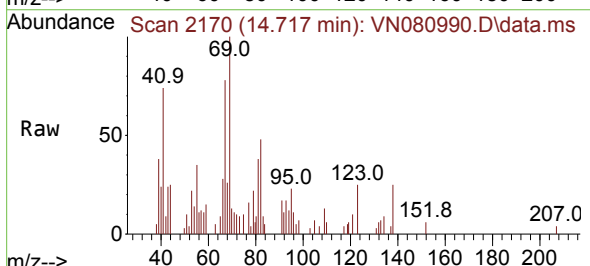
Instrument :
MSVOA_N
ClientSampleId :



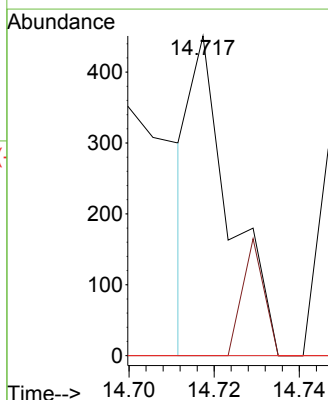
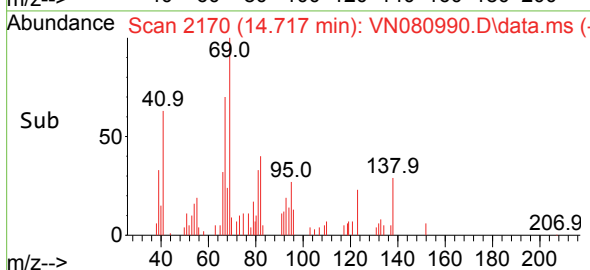
Tgt Ion:146 Resp: 2039
Ion Ratio Lower Upper
146 100
111 61.5 22.6 67.8
148 78.2 31.3 93.8

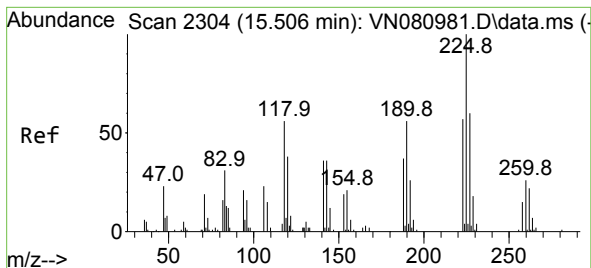


#88
1,2-Dibromo-3-Chloropropane
Concen: 0.228 ug/l
RT: 14.717 min Scan# 2170
Delta R.T. -0.006 min
Lab File: VN080990.D
Acq: 09 Feb 2024 15:33



Tgt Ion: 75 Resp: 280
Ion Ratio Lower Upper
75 100
155 0.0 61.7 92.5#
157 0.0 83.6 125.4#





#90

Hexachlorobutadiene

Concen: 0.348 ug/l

RT: 15.511 min Scan# 21

Delta R.T. 0.006 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

Instrument :

MSVOA_N

ClientSampleId :

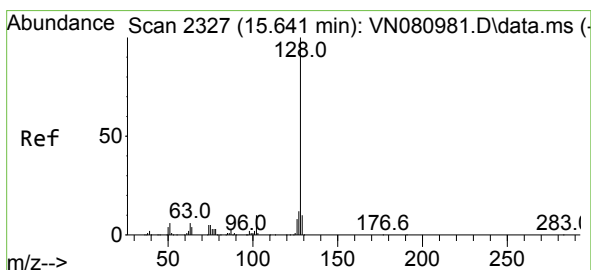
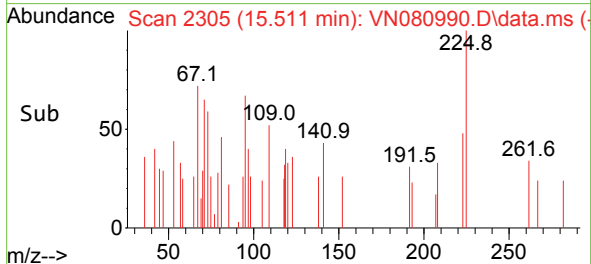
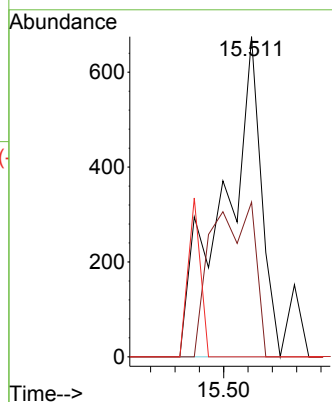
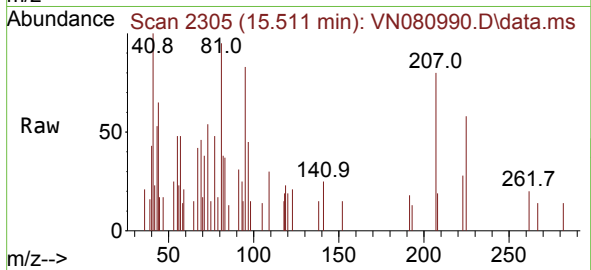
Tgt Ion:225 Resp: 718

Ion Ratio Lower Upper

225 100

223 16.0 0.0 126.6

227 0.0 0.0 126.6



#91

Naphthalene

Concen: 0.264 ug/l

RT: 15.641 min Scan# 2327

Delta R.T. -0.000 min

Lab File: VN080990.D

Acq: 09 Feb 2024 15:33

Tgt Ion:128 Resp: 4409

Ion Ratio Lower Upper

128 100

127 9.3 10.6 16.0#

129 19.6 8.6 13.0#

