

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN032622\
 Data File : VN071581.D
 Acq On : 26 Mar 2022 18:38
 Operator : JC\MD
 Sample : N2131-05
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MW-12

Quant Time: Mar 28 02:20:12 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N032522W.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 25 09:52:40 2022
 Response via : Initial Calibration

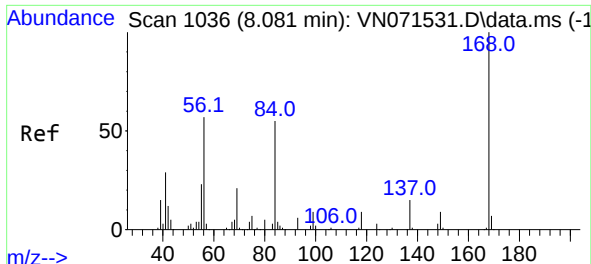
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	8.081	168	815093	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.963	114	1337408	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.739	117	1306880	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.669	152	537573	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.434	65	457795	45.207	ug/l	0.00
Spiked Amount	50.000	Range	61 - 141	Recovery	=	90.420%
35) Dibromofluoromethane	8.016	113	375873	44.719	ug/l	0.00
Spiked Amount	50.000	Range	69 - 133	Recovery	=	89.440%
50) Toluene-d8	10.439	98	1639971	48.373	ug/l	0.00
Spiked Amount	50.000	Range	65 - 126	Recovery	=	96.740%
62) 4-Bromofluorobenzene	12.727	95	578363	52.064	ug/l	0.00
Spiked Amount	50.000	Range	58 - 135	Recovery	=	104.120%
Target Compounds						
					Qvalue	
3) Chloromethane	2.299	50	3001	Below Cal		98
5) Bromomethane	2.863	94	2118	0.350 ug/l	#	72
16) Acetone	4.293	43	17562	4.231 ug/l	#	83
18) Methyl Acetate	4.857	43	6676	Below Cal	#	72
25) 2-Butanone	7.334	43	2348	0.353 ug/l	#	45
31) Cyclohexane	8.087	56	36824	2.541 ug/l	#	69
36) 1,1-Dichloropropene	8.081	75	55177	4.553 ug/l	#	50
38) Carbon Tetrachloride	8.081	117	73024	6.182 ug/l	#	18
39) Methylcyclohexane	9.457	83	8983	0.604 ug/l		91
43) Isopropyl Acetate	8.616	43	35650	1.291 ug/l	#	53
51) 4-Methyl-2-Pentanone	10.328	43	5329	0.403 ug/l	#	81
52) Toluene	10.498	92	23180	0.982 ug/l		98
58) 2-Chloroethyl Vinyl ether	10.081	63	64	18.697 ug/l	#	44
67) Ethyl Benzene	11.839	91	535523	11.250 ug/l		97
68) m/p-Xylenes	11.951	106	226434	12.432 ug/l		97
69) o-Xylene	12.275	106	10141	0.560 ug/l		93
73) Isopropylbenzene	12.575	105	58895	1.243 ug/l		99
75) 1,1,2,2-Tetrachloroethane	12.845	83	56	Below Cal	#	1
76) 1,2,3-Trichloropropane	12.727	75	288032	24.028 ug/l	#	1
78) n-propylbenzene	12.916	91	135479	2.687 ug/l		98
79) 2-Chlorotoluene	13.010	91	13144	0.404 ug/l	#	42
80) 1,3,5-Trimethylbenzene	13.057	105	33237	0.888 ug/l		91
81) trans-1,4-Dichloro-2-b...	12.727	75	288032	64.331 ug/l	#	10
82) 4-Chlorotoluene	13.010	91	13144	0.439 ug/l	#	42
83) tert-Butylbenzene	13.363	119	96920	2.870 ug/l	#	65
84) 1,2,4-Trimethylbenzene	13.363	105	784259	21.724 ug/l		99
85) sec-Butylbenzene	13.498	105	27577	0.616 ug/l	#	74
89) n-Butylbenzene	13.939	91	11051	0.404 ug/l	#	80
90) Hexachloroethane	14.216	117	8302	1.192 ug/l	#	9
95) Naphthalene	15.504	128	326106	14.367 ug/l		99

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

Quant Time: Mar 28 02:20:12 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N032522W.M
Quant Title : SW846 8260
QLast Update : Fri Mar 25 09:52:40 2022
Response via : Initial Calibration

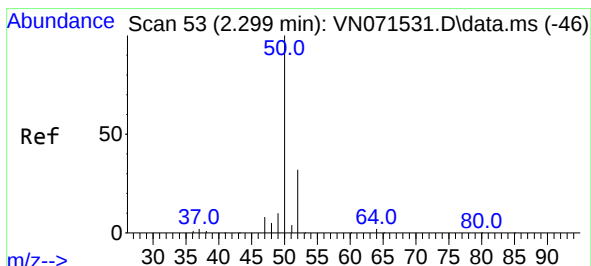
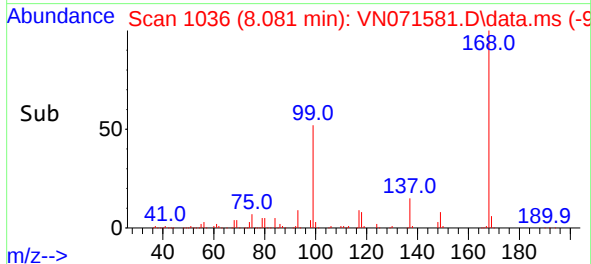
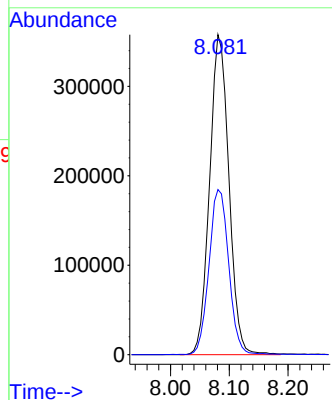
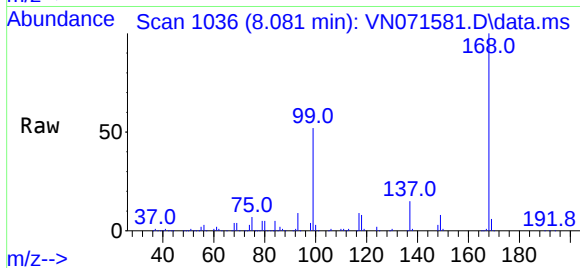




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.081 min Scan# 1036
Delta R.T. -0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

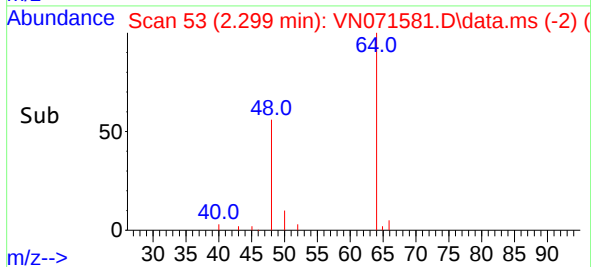
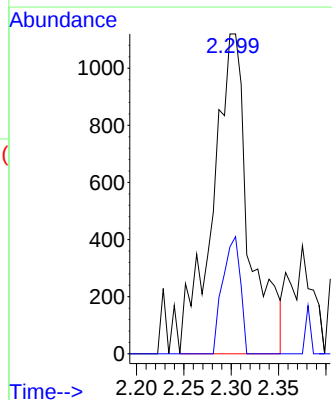
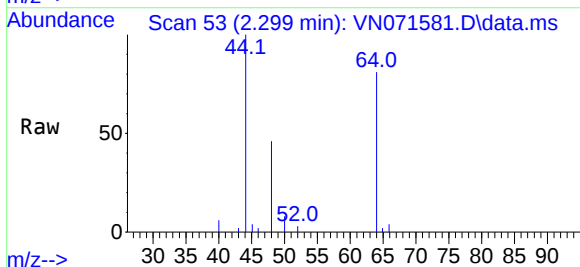
Instrument :
MSVOA_N
ClientSampleId :
MW-12

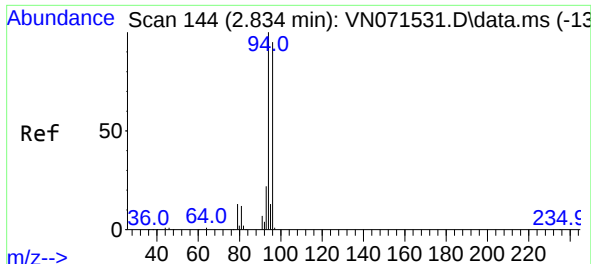
Tgt Ion:168 Resp: 815093
Ion Ratio Lower Upper
168 100
99 51.5 42.3 63.5



#3
Chloromethane
Concen: Below Cal
RT: 2.299 min Scan# 53
Delta R.T. -0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 50 Resp: 3001
Ion Ratio Lower Upper
50 100
52 33.5 25.7 38.5

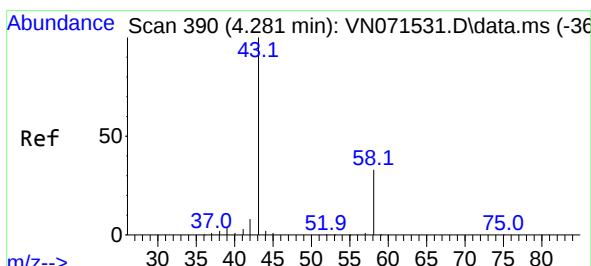
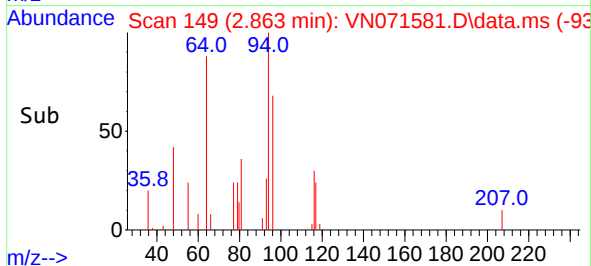
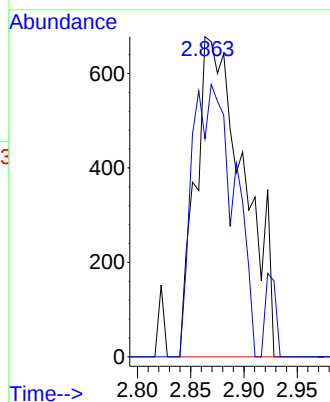
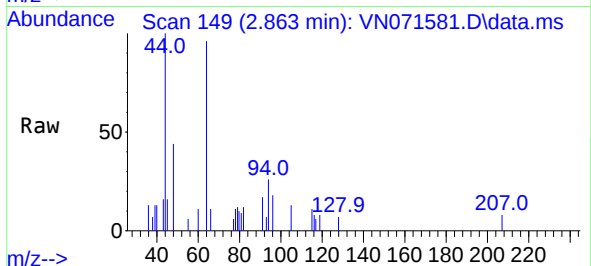




#5
Bromomethane
Concen: 0.350 ug/l
RT: 2.863 min Scan# 144
Delta R.T. 0.029 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

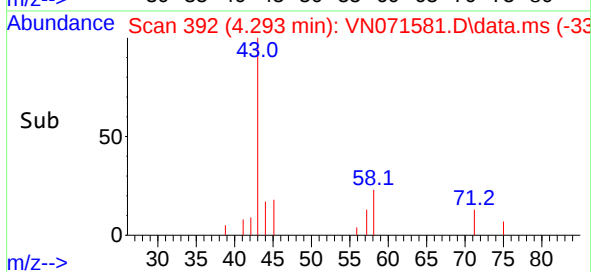
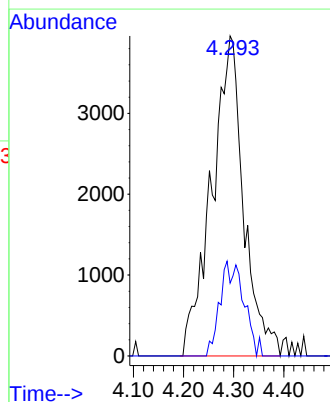
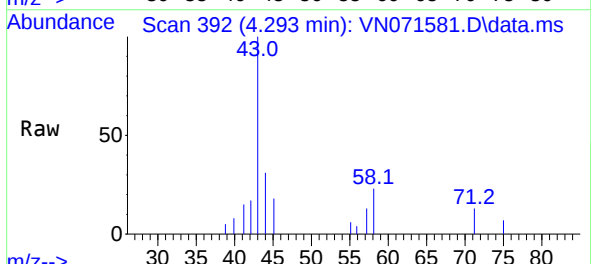
Instrument :
MSVOA_N
ClientSampleId :
MW-12

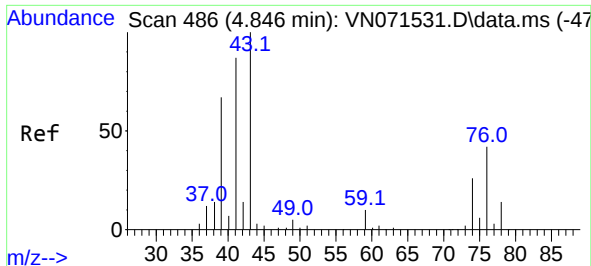
Tgt Ion: 94 Resp: 2118
Ion Ratio Lower Upper
94 100
96 68.1 76.0 114.0#



#16
Acetone
Concen: 4.231 ug/l
RT: 4.293 min Scan# 392
Delta R.T. 0.012 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 43 Resp: 17562
Ion Ratio Lower Upper
43 100
58 22.7 26.0 39.0#

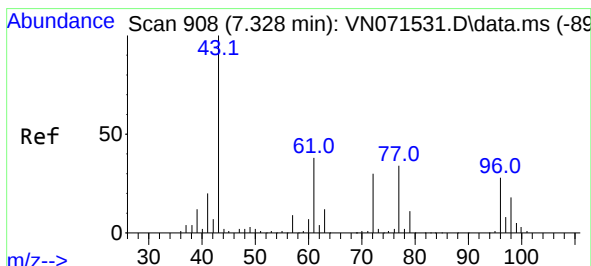
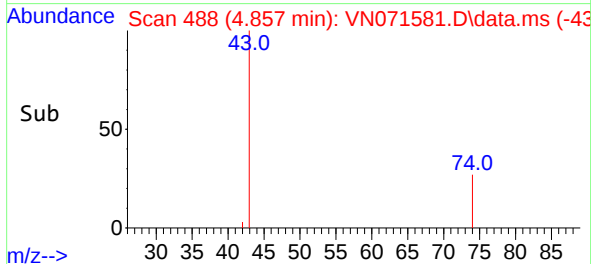
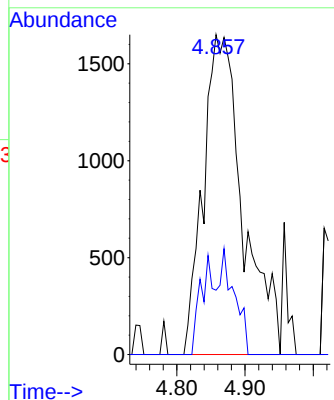
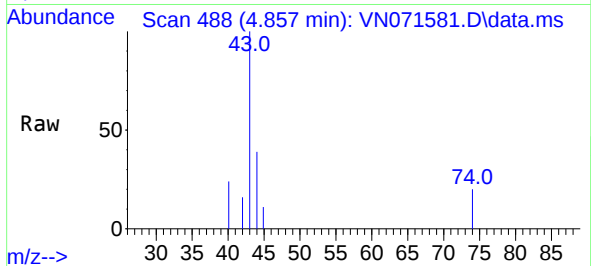




#18
Methyl Acetate
Concen: Below Cal
RT: 4.857 min Scan# 41
Delta R.T. 0.011 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

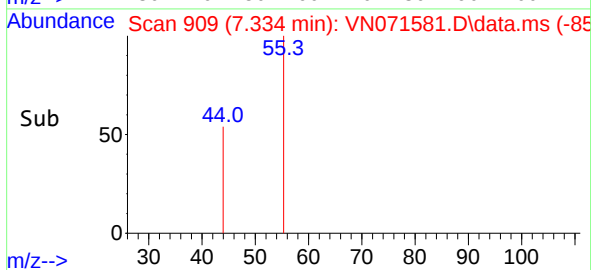
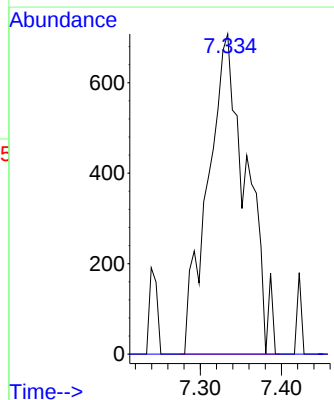
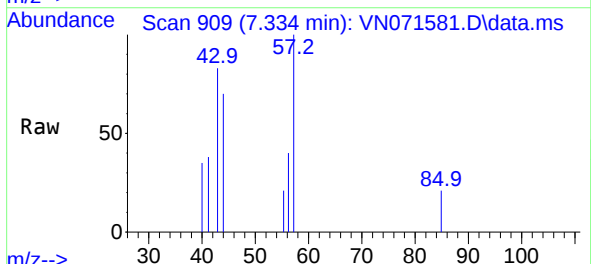
Instrument :
MSVOA_N
ClientSampleId :
MW-12

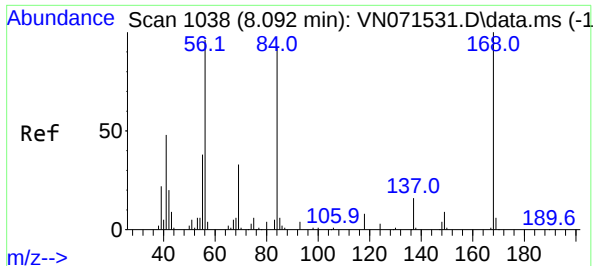
Tgt Ion: 43 Resp: 6676
Ion Ratio Lower Upper
43 100
74 12.3 21.6 32.4#



#25
2-Butanone
Concen: 0.353 ug/l
RT: 7.334 min Scan# 909
Delta R.T. 0.006 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 43 Resp: 2348
Ion Ratio Lower Upper
43 100
72 0.0 23.7 35.5#

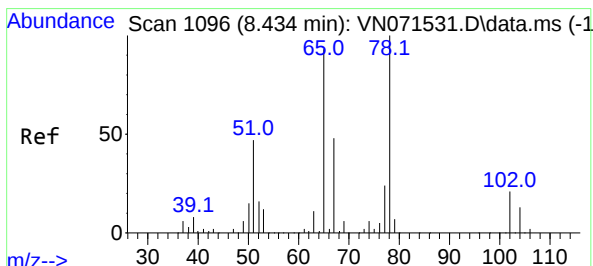
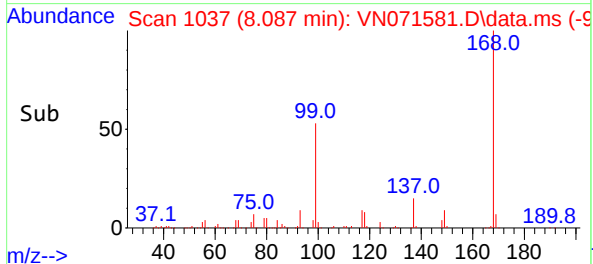
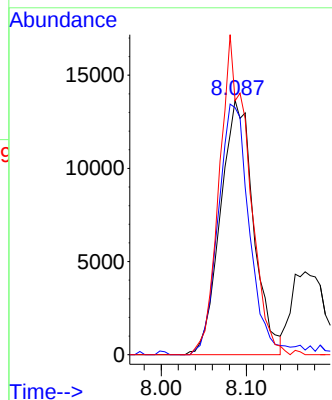
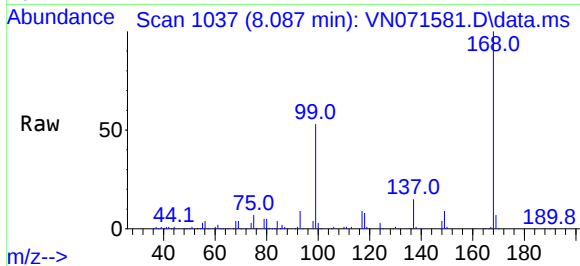




#31
Cyclohexane
Concen: 2.541 ug/l
RT: 8.087 min Scan# 1037
Delta R.T. -0.006 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

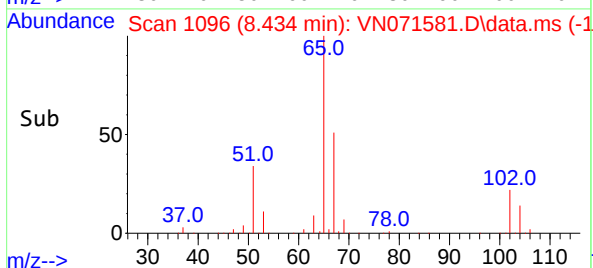
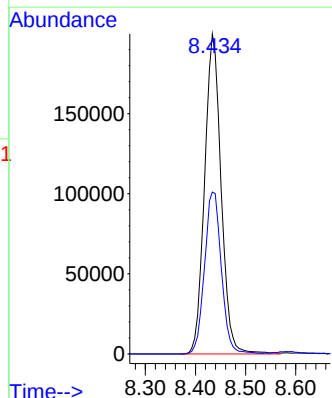
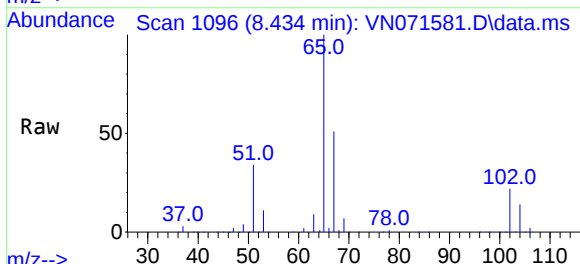
Instrument :
MSVOA_N
ClientSampleId :
MW-12

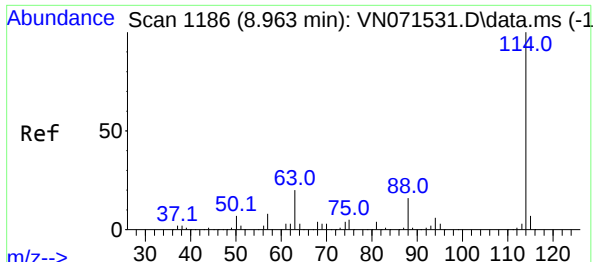
Tgt Ion: 56 Resp: 36824
Ion Ratio Lower Upper
56 100
69 97.1 27.8 41.8#
84 99.8 76.9 115.3



#33
1,2-Dichloroethane-d4
Concen: 45.207 ug/l
RT: 8.434 min Scan# 1096
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 65 Resp: 457795
Ion Ratio Lower Upper
65 100
67 51.5 0.0 104.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.963 min Scan# 1186

Delta R.T. 0.000 min

Lab File: VN071581.D

Acq: 26 Mar 2022 18:38

Instrument :

MSVOA_N

ClientSampleId :

MW-12

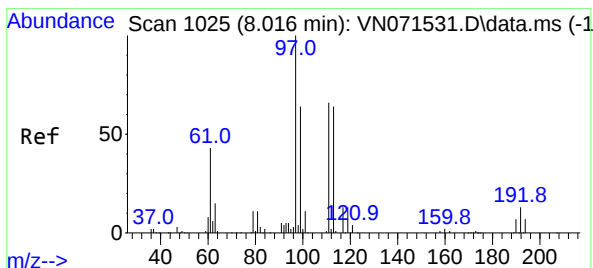
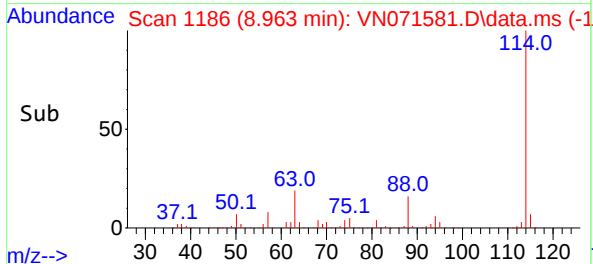
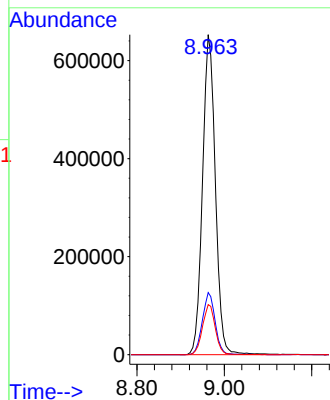
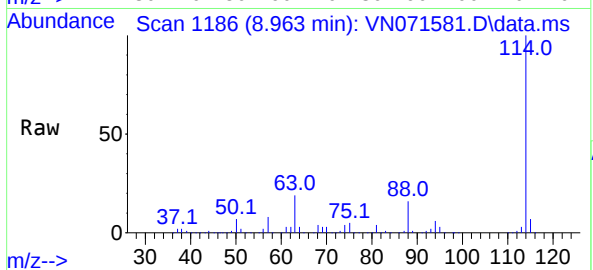
Tgt Ion:114 Resp: 1337408

Ion Ratio Lower Upper

114 100

63 19.4 0.0 40.0

88 15.6 0.0 32.6



#35

Dibromofluoromethane

Concen: 44.719 ug/l

RT: 8.016 min Scan# 1025

Delta R.T. 0.000 min

Lab File: VN071581.D

Acq: 26 Mar 2022 18:38

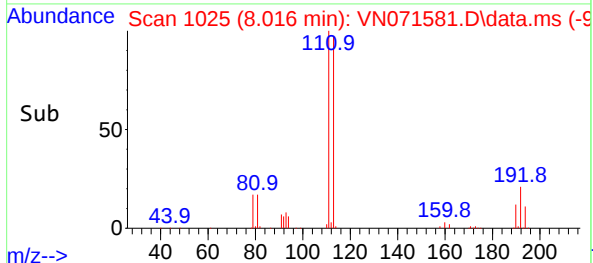
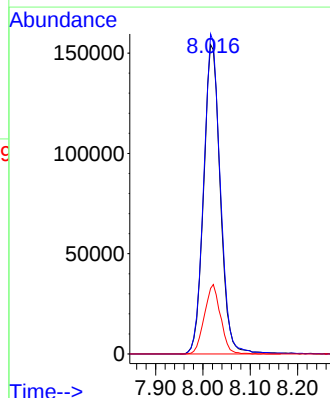
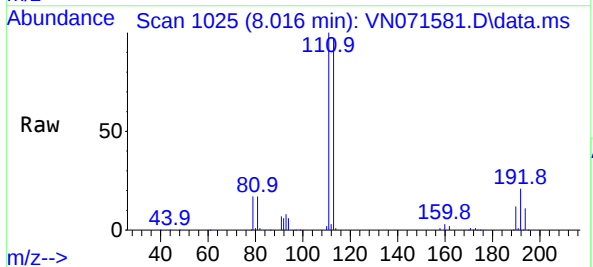
Tgt Ion:113 Resp: 375873

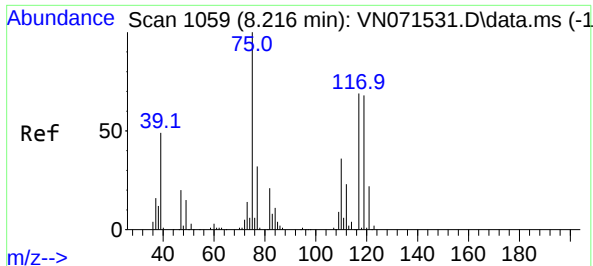
Ion Ratio Lower Upper

113 100

111 102.6 81.4 122.0

192 21.8 17.0 25.6





#36

1,1-Dichloropropene

Concen: 4.553 ug/l

RT: 8.081 min Scan# 1036

Delta R.T. -0.135 min

Lab File: VN071581.D

Acq: 26 Mar 2022 18:38

Instrument :

MSVOA_N

ClientSampleId :

MW-12

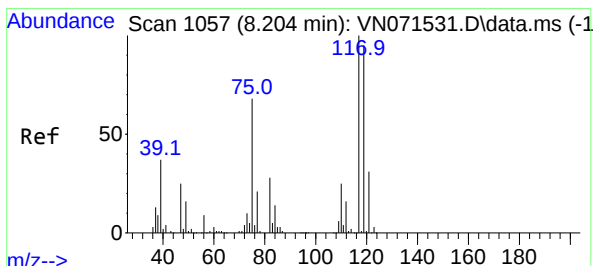
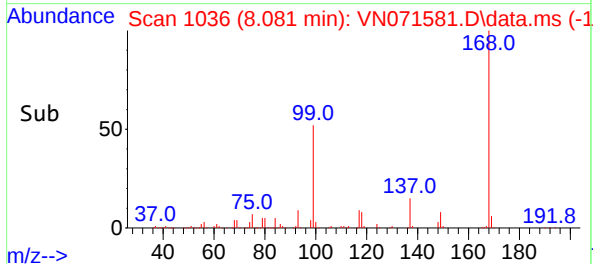
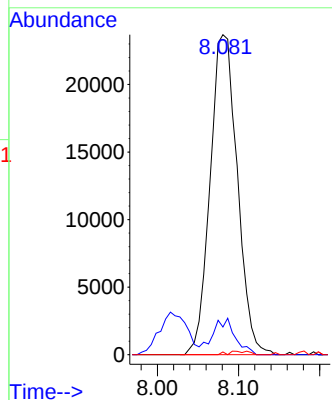
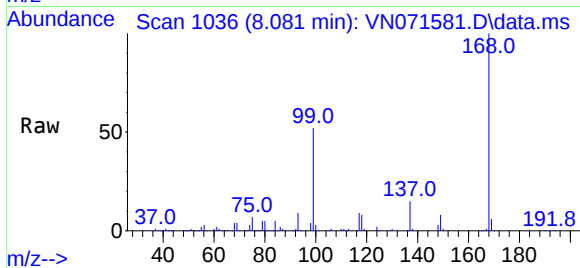
Tgt Ion: 75 Resp: 55177

Ion Ratio Lower Upper

75 100

110 9.4 18.3 54.8#

77 0.8 25.1 37.7#



#38

Carbon Tetrachloride

Concen: 6.182 ug/l

RT: 8.081 min Scan# 1036

Delta R.T. -0.124 min

Lab File: VN071581.D

Acq: 26 Mar 2022 18:38

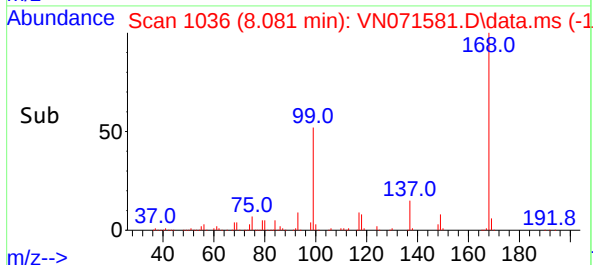
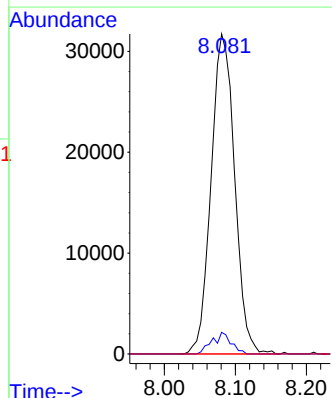
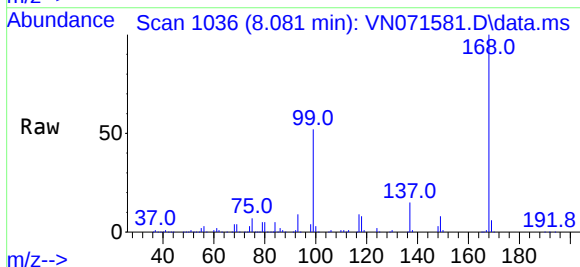
Tgt Ion: 117 Resp: 73024

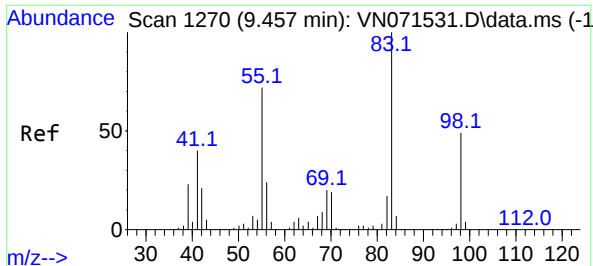
Ion Ratio Lower Upper

117 100

119 6.8 75.8 113.8#

121 0.0 24.6 37.0#

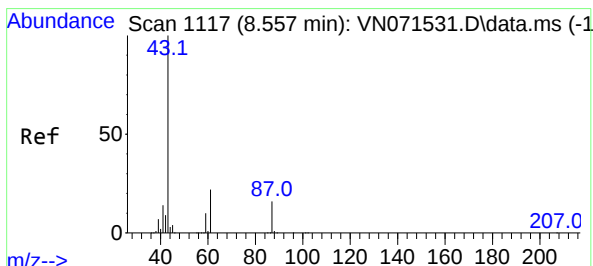
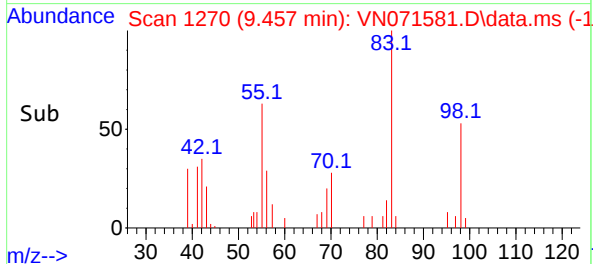
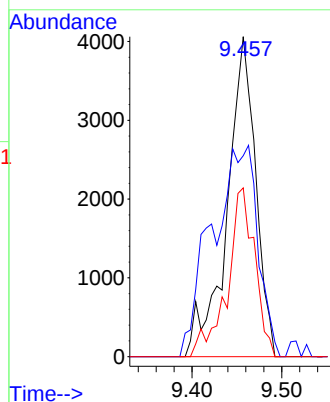
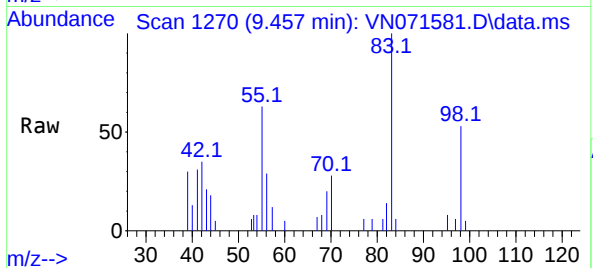




#39
Methylcyclohexane
Concen: 0.604 ug/l
RT: 9.457 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

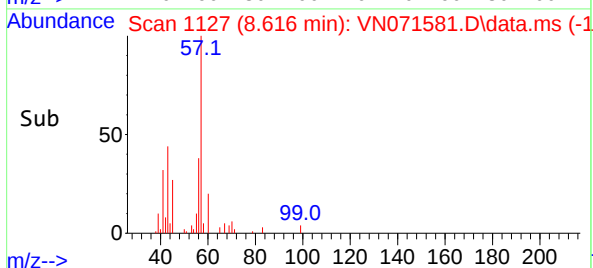
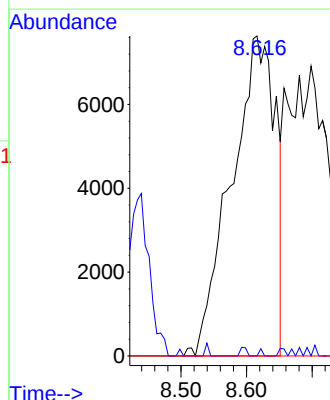
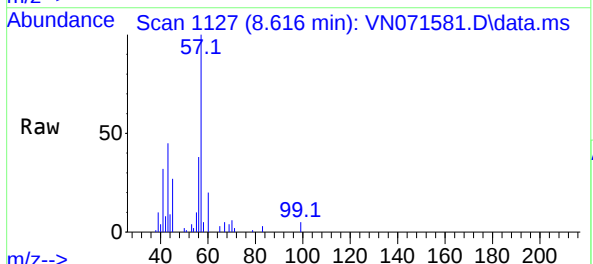
Instrument :
MSVOA_N
ClientSampleId :
MW-12

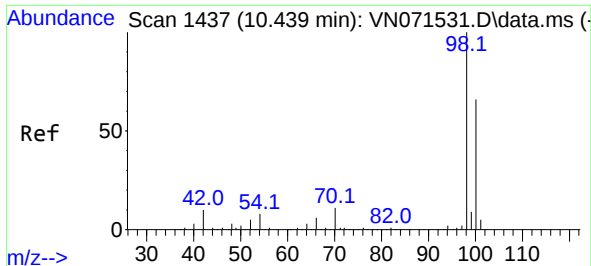
Tgt Ion: 83 Resp: 8983
Ion Ratio Lower Upper
83 100
55 62.8 57.8 86.8
98 52.8 39.4 59.2



#43
Isopropyl Acetate
Concen: 1.291 ug/l
RT: 8.616 min Scan# 1127
Delta R.T. 0.059 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 43 Resp: 35650
Ion Ratio Lower Upper
43 100
61 0.0 21.9 32.9#
87 0.0 12.0 18.0#

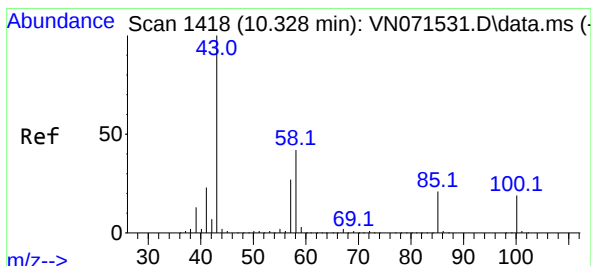
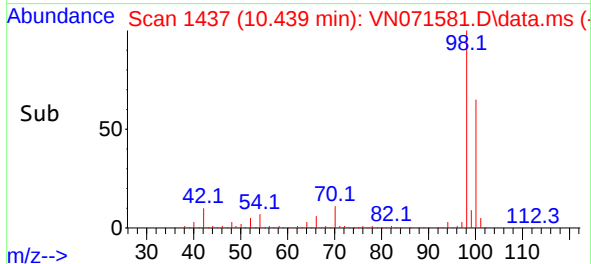
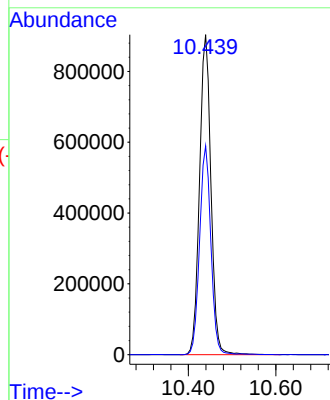
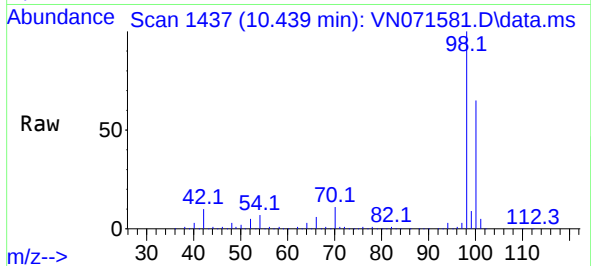




#50
Toluene-d8
Concen: 48.373 ug/l
RT: 10.439 min Scan# 1437
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

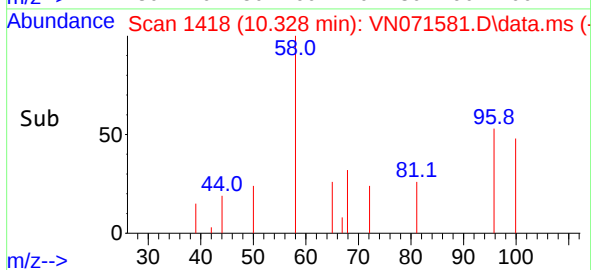
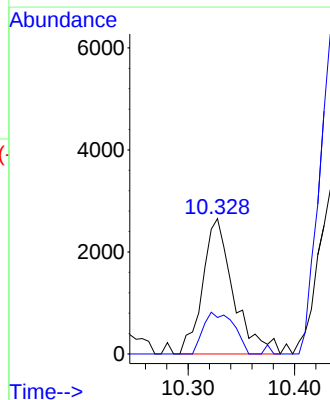
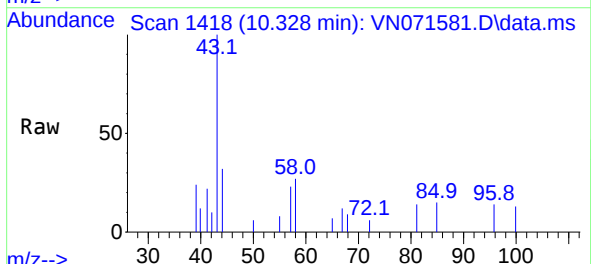
Instrument :
MSVOA_N
ClientSampleId :
MW-12

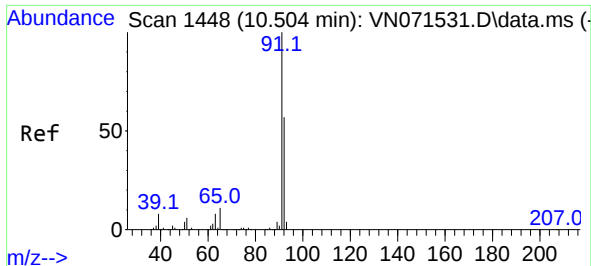
Tgt Ion: 98 Resp: 1639971
Ion Ratio Lower Upper
98 100
100 64.8 52.6 78.8



#51
4-Methyl-2-Pentanone
Concen: 0.403 ug/l
RT: 10.328 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 43 Resp: 5329
Ion Ratio Lower Upper
43 100
58 30.6 34.1 51.1#

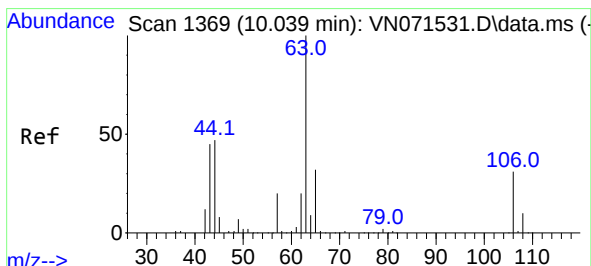
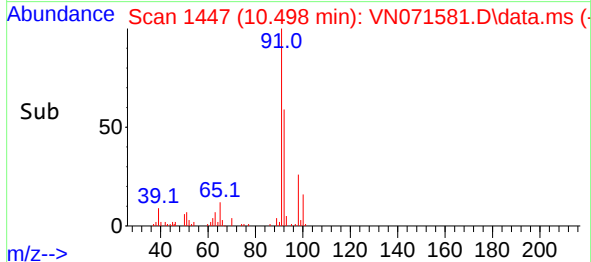
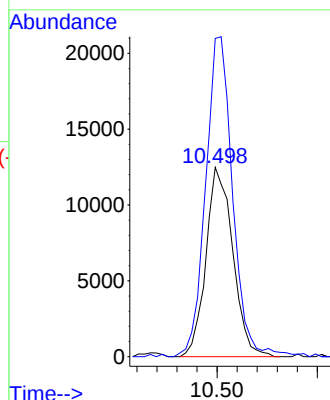
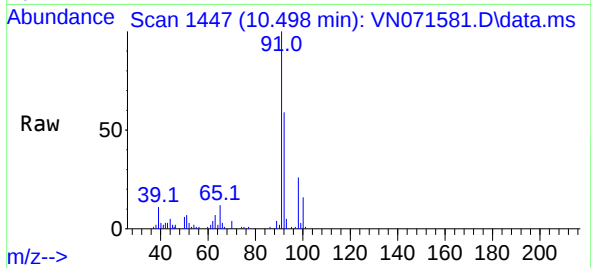




#52
Toluene
Concen: 0.982 ug/l
RT: 10.498 min Scan# 1448
Delta R.T. -0.006 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

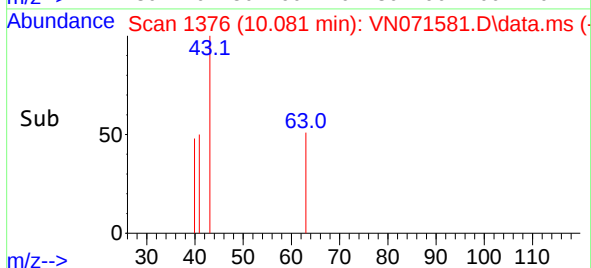
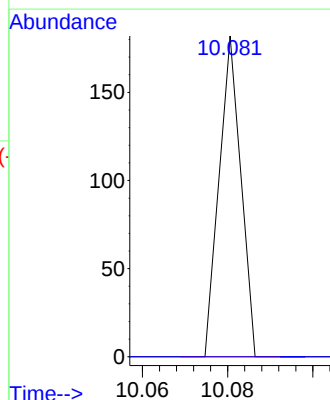
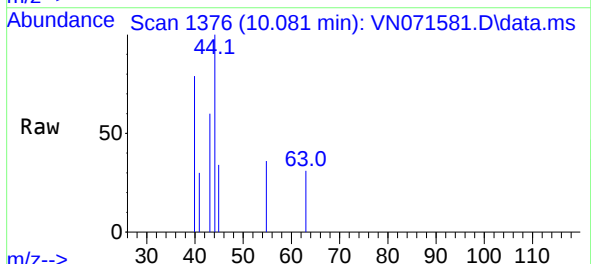
Instrument :
MSVOA_N
ClientSampleId :
MW-12

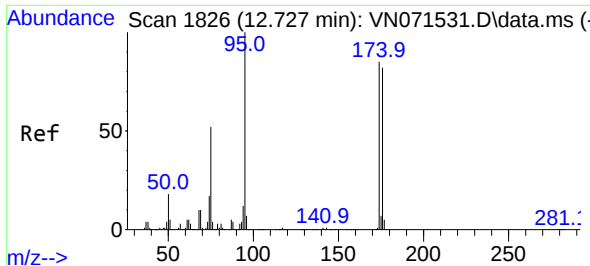
Tgt Ion: 92 Resp: 23180
Ion Ratio Lower Upper
92 100
91 170.6 138.6 207.8



#58
2-Chloroethyl Vinyl ether
Concen: 18.697 ug/l
RT: 10.081 min Scan# 1376
Delta R.T. 0.042 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 63 Resp: 64
Ion Ratio Lower Upper
63 100
106 0.0 24.6 36.8#

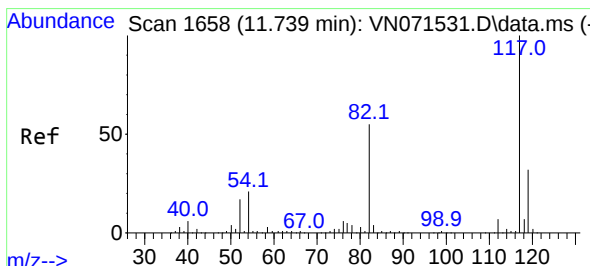
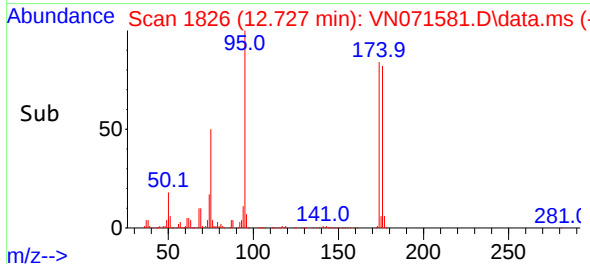
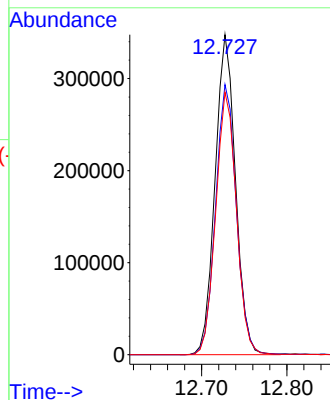
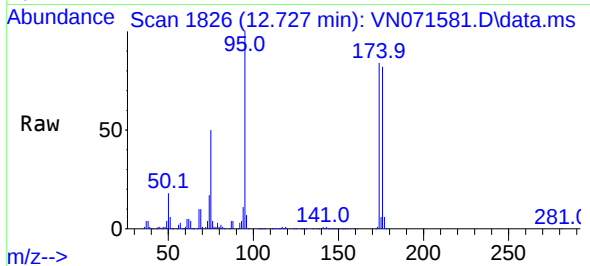




#62
4-Bromofluorobenzene
Concen: 52.064 ug/l
RT: 12.727 min Scan# 1826
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

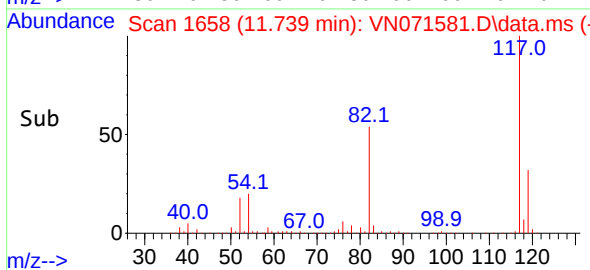
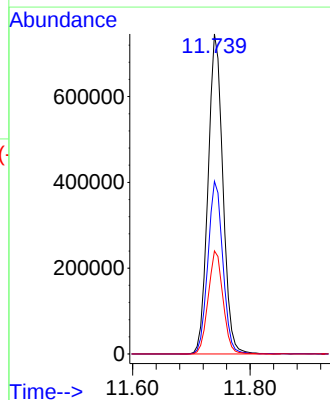
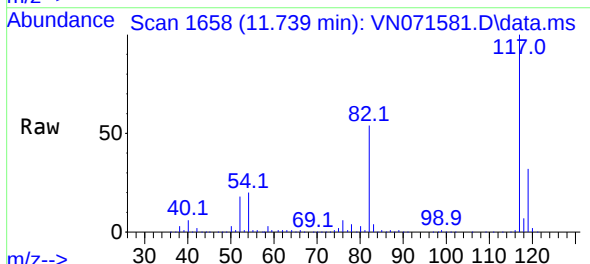
Instrument : MSVOA_N
ClientSampleId : MW-12

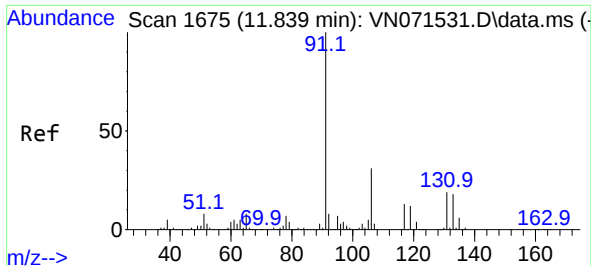
Tgt Ion: 95 Resp: 578363
Ion Ratio Lower Upper
95 100
174 85.9 0.0 167.6
176 83.2 0.0 163.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.739 min Scan# 1658
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 117 Resp: 1306880
Ion Ratio Lower Upper
117 100
82 54.0 44.2 66.2
119 32.2 25.4 38.0

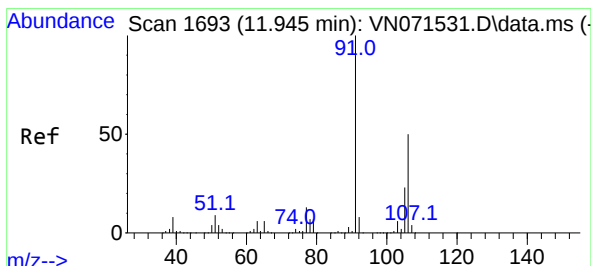
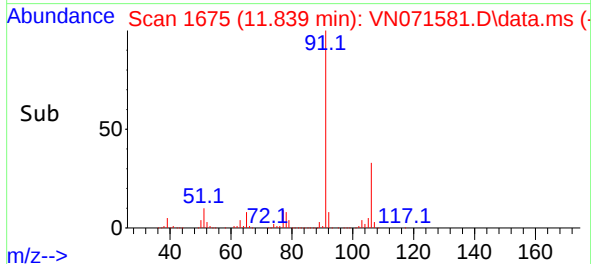
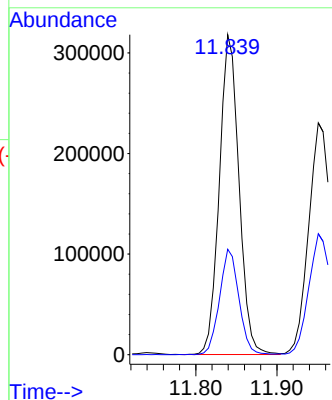
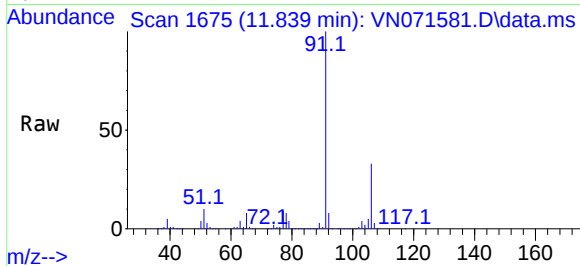




#67
Ethyl Benzene
Concen: 11.250 ug/l
RT: 11.839 min Scan# 1675
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

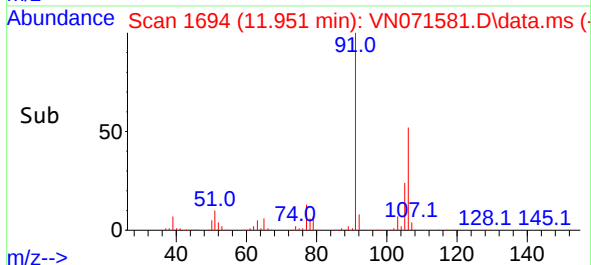
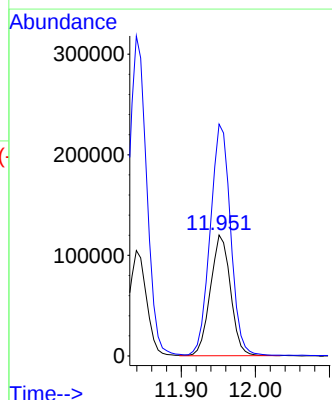
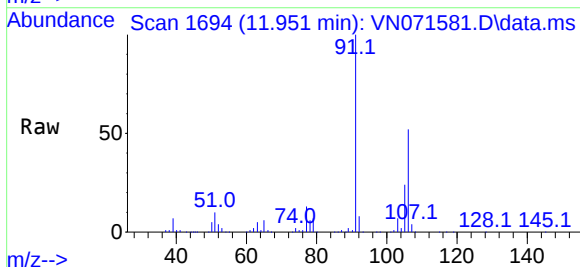
Instrument :
MSVOA_N
ClientSampleId :
MW-12

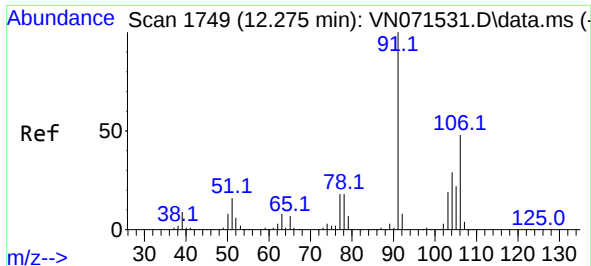
Tgt Ion: 91 Resp: 535523
Ion Ratio Lower Upper
91 100
106 32.9 24.9 37.3



#68
m/p-Xylenes
Concen: 12.432 ug/l
RT: 11.951 min Scan# 1694
Delta R.T. 0.006 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion:106 Resp: 226434
Ion Ratio Lower Upper
106 100
91 193.9 158.9 238.3

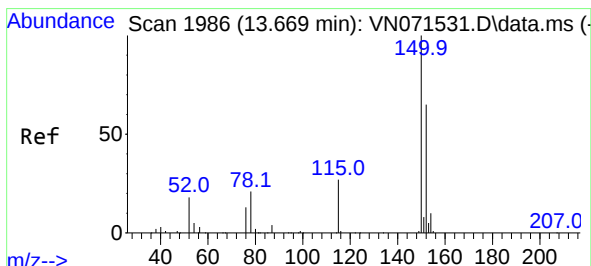
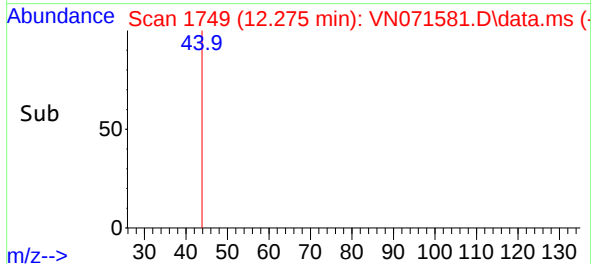
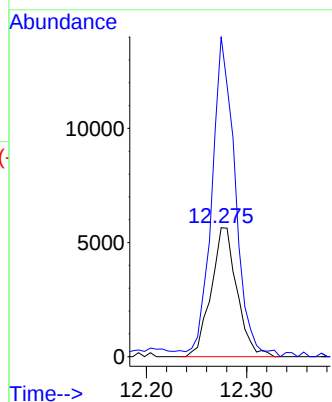
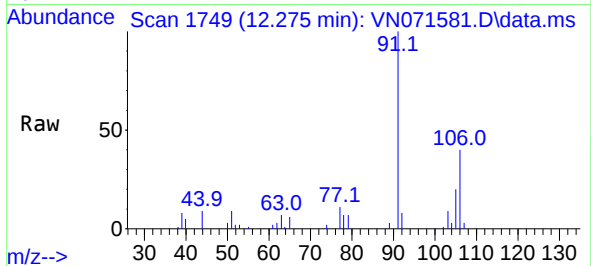




#69
o-Xylene
Concen: 0.560 ug/l
RT: 12.275 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

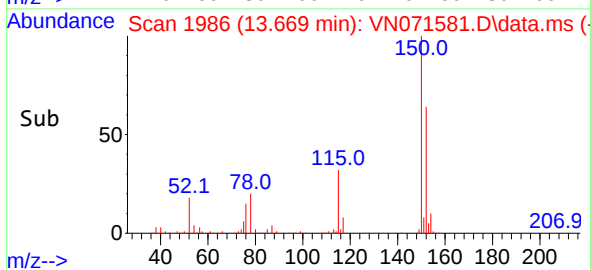
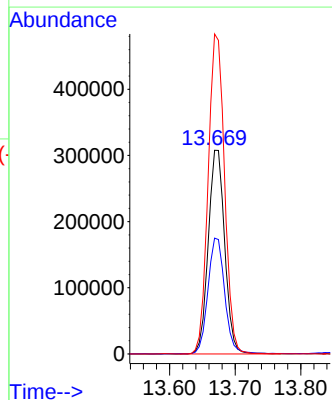
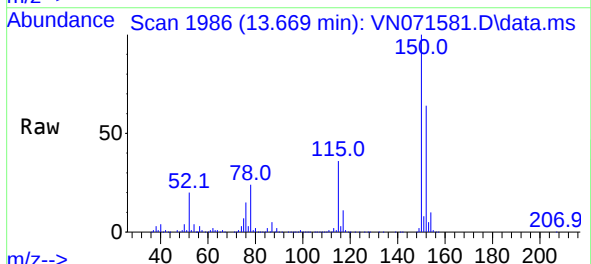
Instrument :
MSVOA_N
ClientSampleId :
MW-12

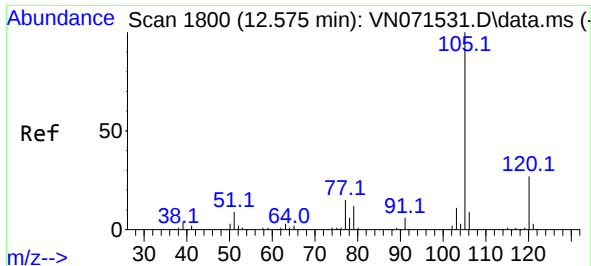
Tgt Ion:106 Resp: 10141
Ion Ratio Lower Upper
106 100
91 223.3 106.0 318.0



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.669 min Scan# 1986
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion:152 Resp: 537573
Ion Ratio Lower Upper
152 100
115 58.8 28.9 86.7
150 156.7 0.0 356.2

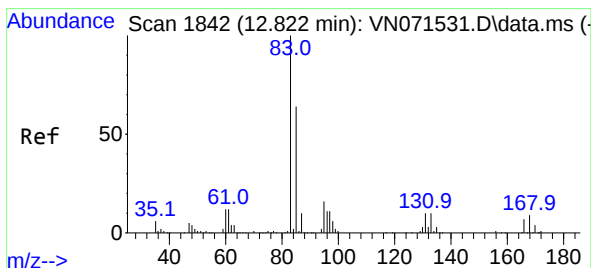
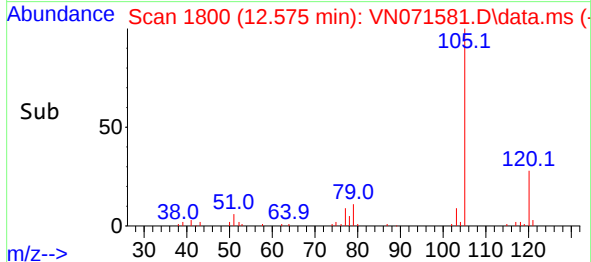
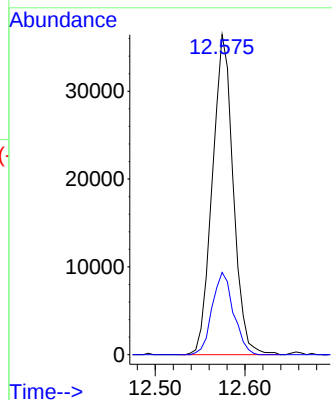
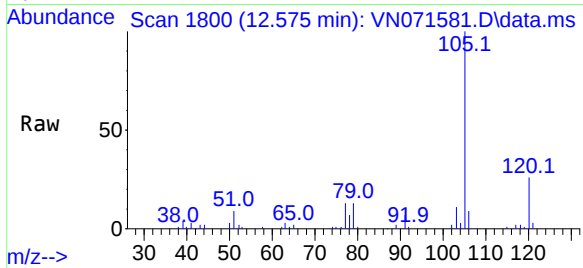




#73
Isopropylbenzene
Concen: 1.243 ug/l
RT: 12.575 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

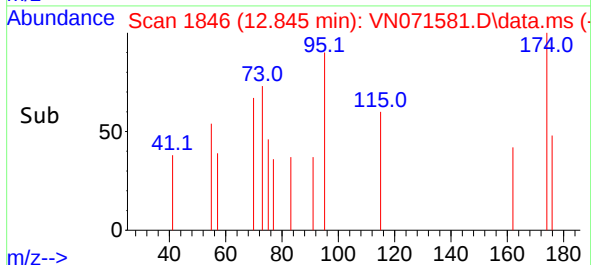
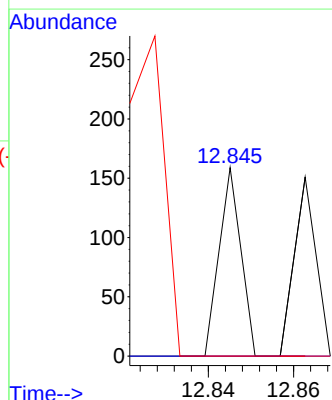
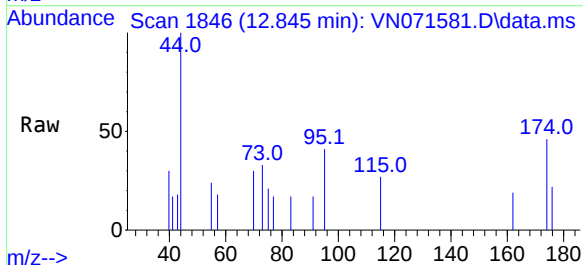
Instrument :
MSVOA_N
ClientSampleId :
MW-12

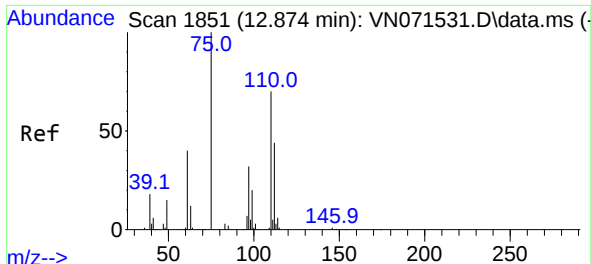
Tgt Ion:105 Resp: 58895
Ion Ratio Lower Upper
105 100
120 26.3 13.5 40.4



#75
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 12.845 min Scan# 1846
Delta R.T. 0.023 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 83 Resp: 56
Ion Ratio Lower Upper
83 100
131 0.0 5.3 15.9#
85 303.6 32.3 96.9#

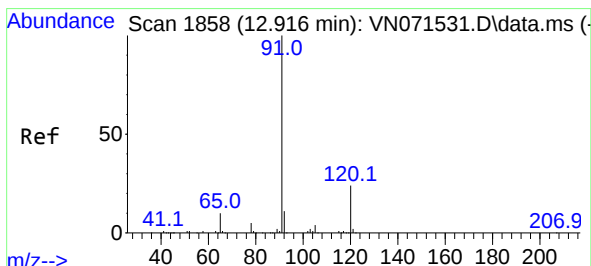
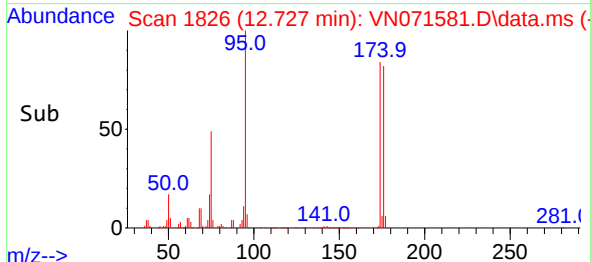
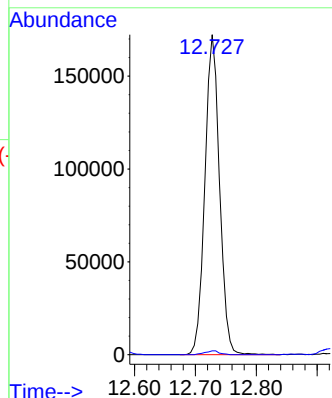
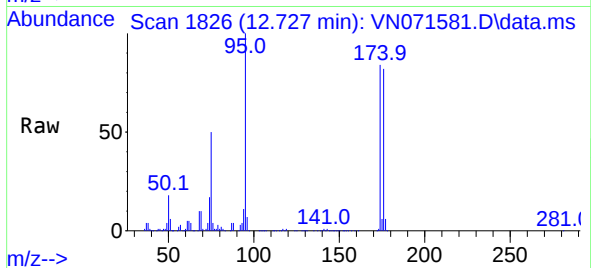




#76
1,2,3-Trichloropropane
Concen: 24.028 ug/l
RT: 12.727 min Scan# 1826
Delta R.T. -0.147 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

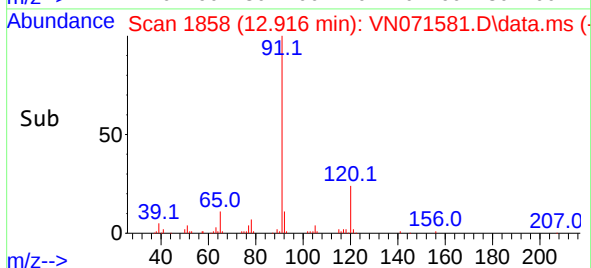
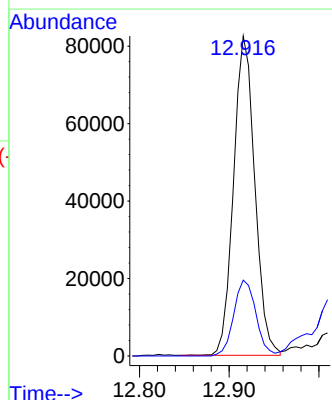
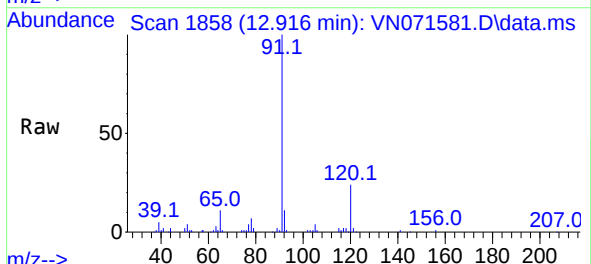
Instrument :
MSVOA_N
ClientSampleId :
MW-12

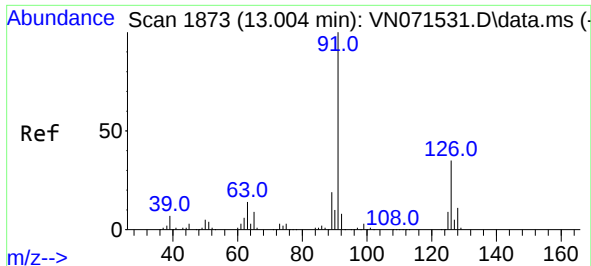
Tgt Ion: 75 Resp: 288032
Ion Ratio Lower Upper
75 100
77 1.2 98.5 295.5#



#78
n-propylbenzene
Concen: 2.687 ug/l
RT: 12.916 min Scan# 1858
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 91 Resp: 135479
Ion Ratio Lower Upper
91 100
120 24.7 11.9 35.5





#79

2-Chlorotoluene

Concen: 0.404 ug/l

RT: 13.010 min Scan# 1873

Delta R.T. 0.006 min

Lab File: VN071581.D

Acq: 26 Mar 2022 18:38

Instrument :

MSVOA_N

ClientSampleId :

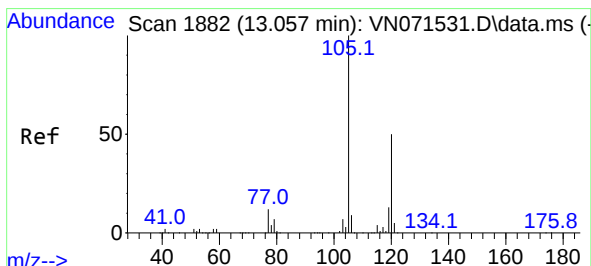
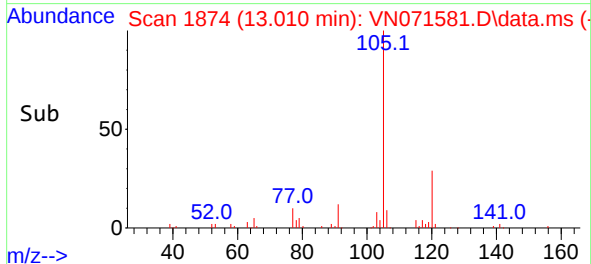
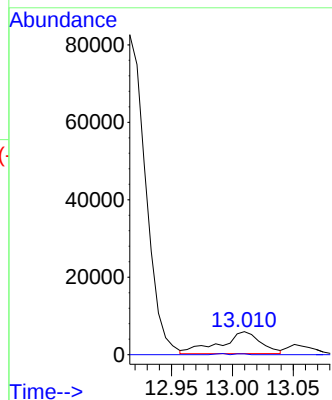
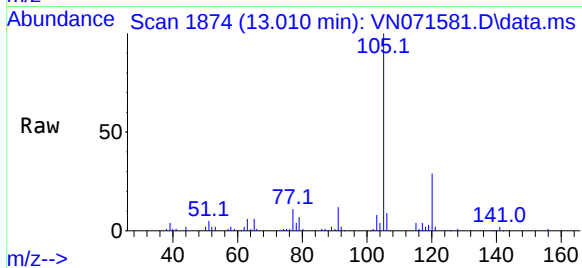
MW-12

Tgt Ion: 91 Resp: 13144

Ion Ratio Lower Upper

91 100

126 1.1 17.3 51.9#



#80

1,3,5-Trimethylbenzene

Concen: 0.888 ug/l

RT: 13.057 min Scan# 1882

Delta R.T. 0.000 min

Lab File: VN071581.D

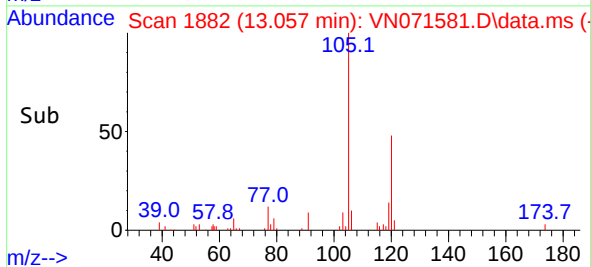
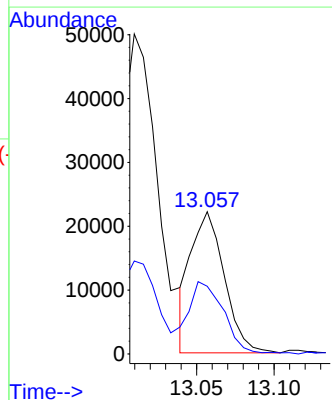
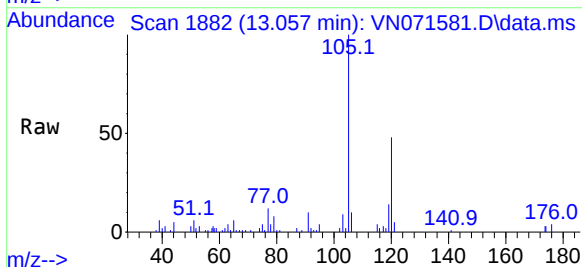
Acq: 26 Mar 2022 18:38

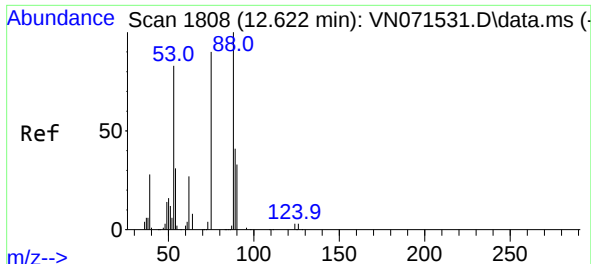
Tgt Ion: 105 Resp: 33237

Ion Ratio Lower Upper

105 100

120 55.9 24.9 74.7

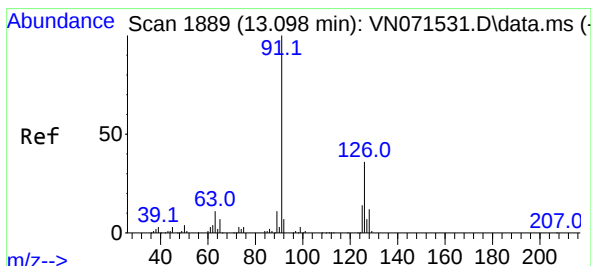
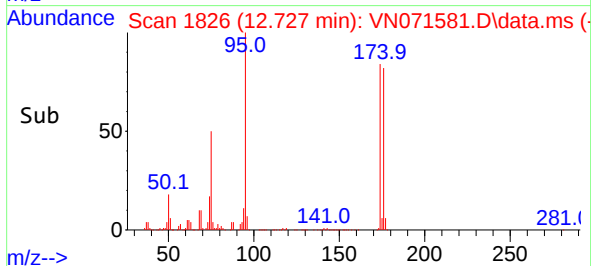
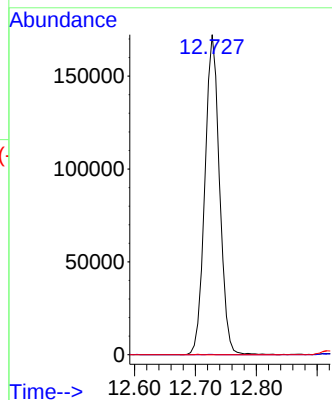
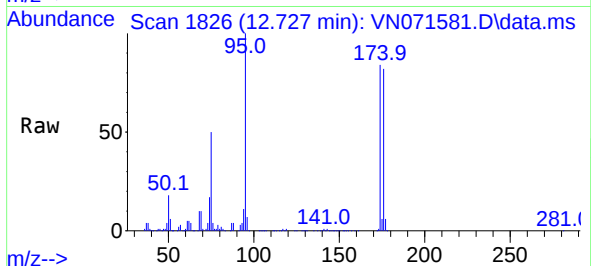




#81
trans-1,4-Dichloro-2-butene
Concen: 64.331 ug/l
RT: 12.727 min Scan# 1826
Delta R.T. 0.106 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

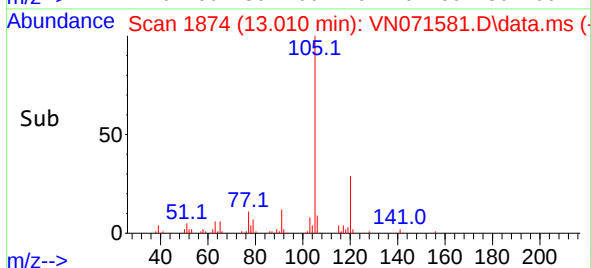
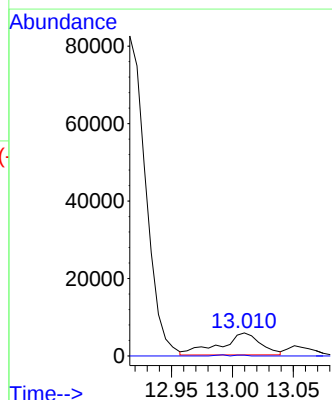
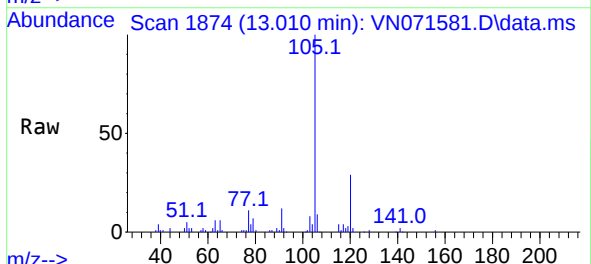
Instrument :
MSVOA_N
ClientSampleId :
MW-12

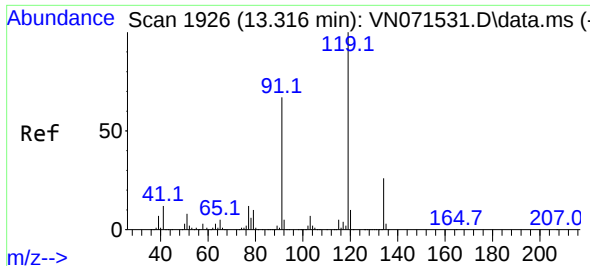
Tgt Ion: 75 Resp: 288032
Ion Ratio Lower Upper
75 100
53 0.0 78.0 117.0#
89 0.0 37.2 55.8#



#82
4-Chlorotoluene
Concen: 0.439 ug/l
RT: 13.010 min Scan# 1874
Delta R.T. -0.088 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion: 91 Resp: 13144
Ion Ratio Lower Upper
91 100
126 1.1 17.2 51.6#

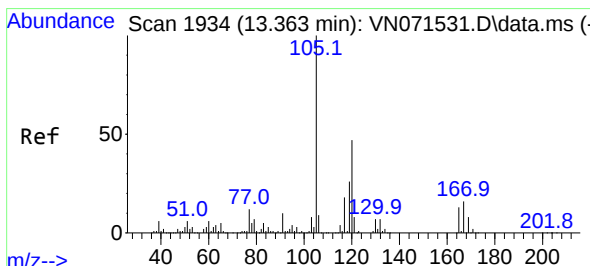
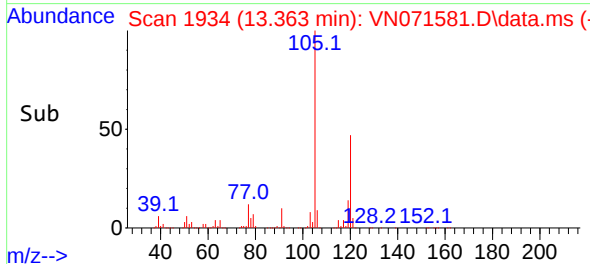
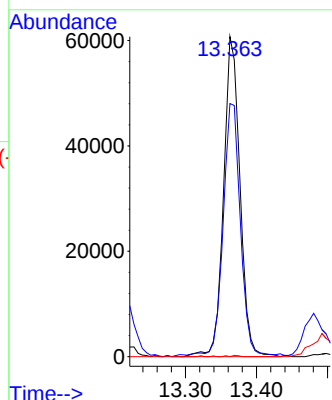
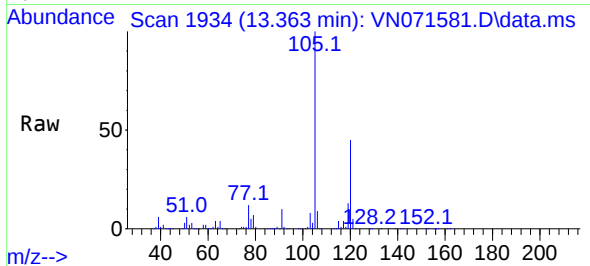




#83
tert-Butylbenzene
Concen: 2.870 ug/l
RT: 13.363 min Scan# 1934
Delta R.T. 0.047 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

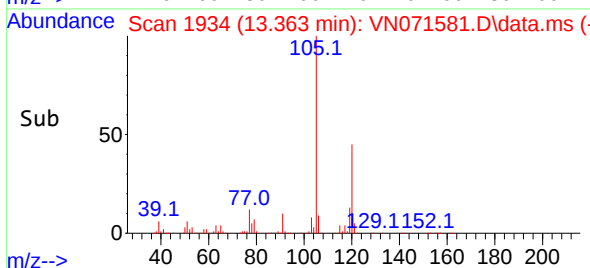
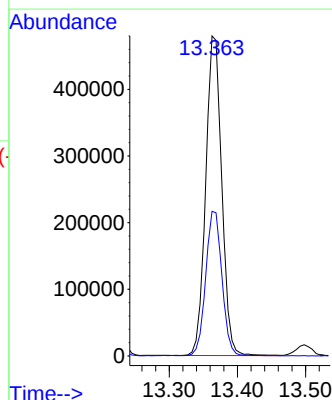
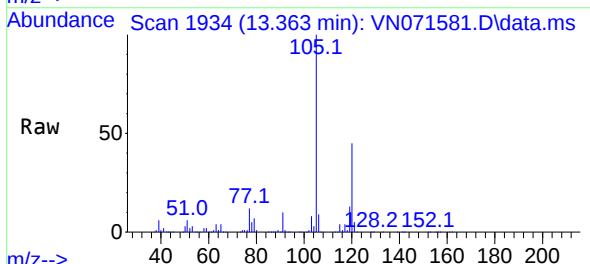
Instrument :
MSVOA_N
ClientSampleId :
MW-12

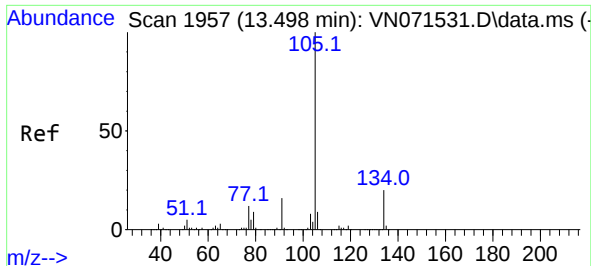
Tgt Ion:119 Resp: 96920
Ion Ratio Lower Upper
119 100
91 84.4 31.6 94.8
134 0.0 13.7 41.1#



#84
1,2,4-Trimethylbenzene
Concen: 21.724 ug/l
RT: 13.363 min Scan# 1934
Delta R.T. 0.000 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion:105 Resp: 784259
Ion Ratio Lower Upper
105 100
120 45.9 23.3 69.8

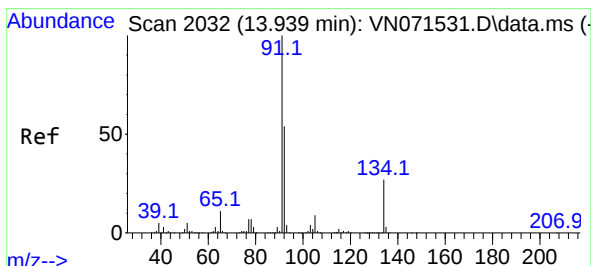
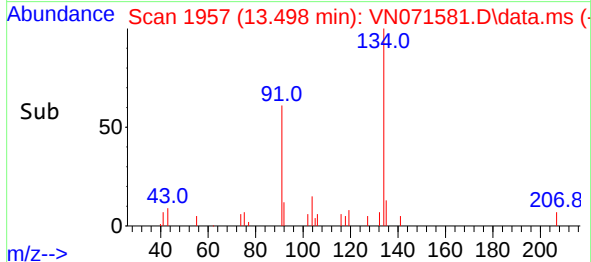
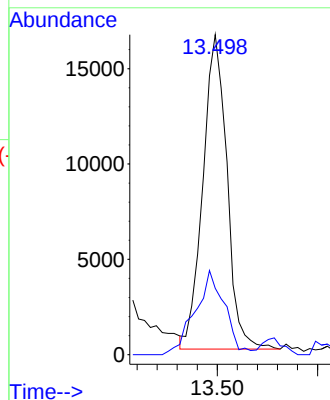
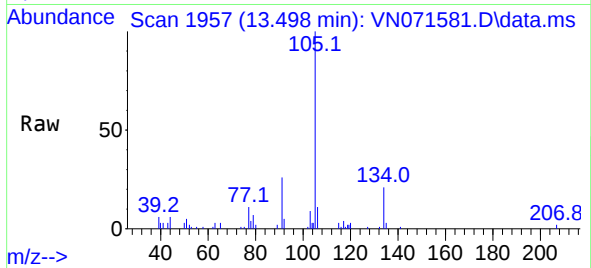




#85
 sec-Butylbenzene
 Concen: 0.616 ug/l
 RT: 13.498 min Scan# 1957
 Delta R.T. 0.000 min
 Lab File: VN071581.D
 Acq: 26 Mar 2022 18:38

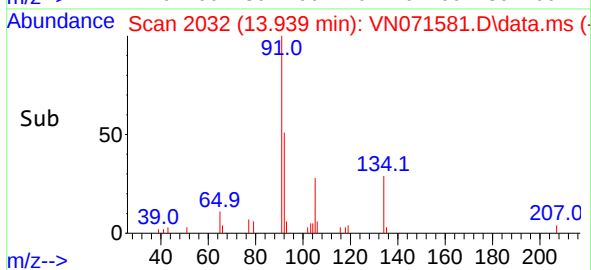
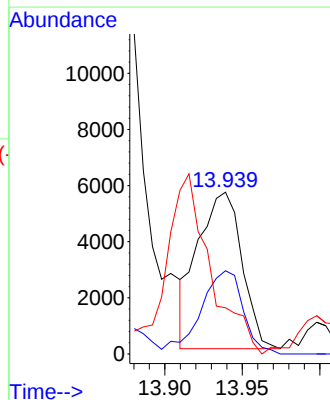
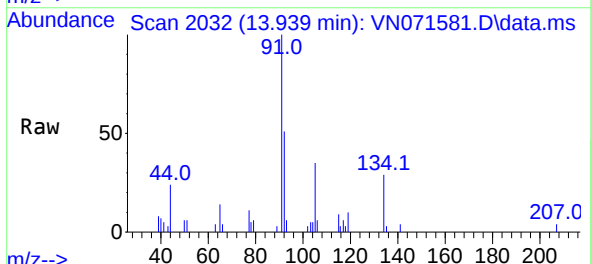
Instrument :
 MSVOA_N
 ClientSampleId :
 MW-12

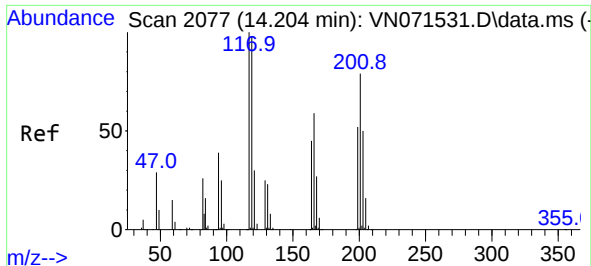
Tgt Ion:105 Resp: 27577
 Ion Ratio Lower Upper
 105 100
 134 32.7 10.4 31.1#



#89
 n-Butylbenzene
 Concen: 0.404 ug/l
 RT: 13.939 min Scan# 2032
 Delta R.T. 0.000 min
 Lab File: VN071581.D
 Acq: 26 Mar 2022 18:38

Tgt Ion: 91 Resp: 11051
 Ion Ratio Lower Upper
 91 100
 92 50.9 26.9 80.7
 134 0.0 13.6 40.8#

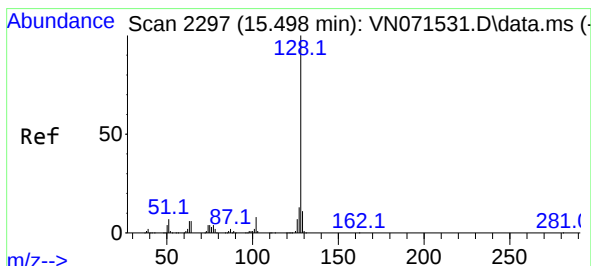
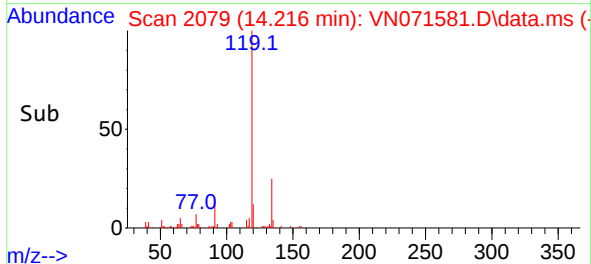
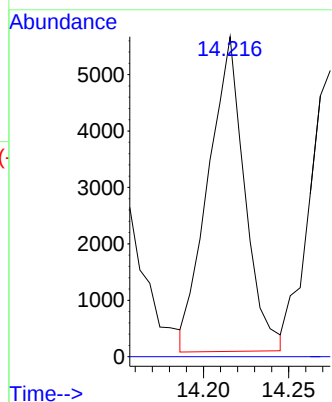
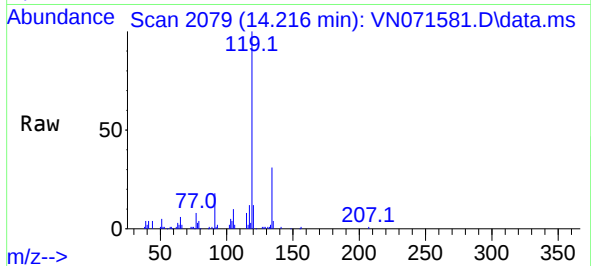




#90
Hexachloroethane
Concen: 1.192 ug/l
RT: 14.216 min Scan# 2077
Delta R.T. 0.012 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Instrument :
MSVOA_N
ClientSampleId :
MW-12

Tgt Ion:117 Resp: 8302
Ion Ratio Lower Upper
117 100
201 0.0 40.6 122.0#



#95
Naphthalene
Concen: 14.367 ug/l
RT: 15.504 min Scan# 2298
Delta R.T. 0.006 min
Lab File: VN071581.D
Acq: 26 Mar 2022 18:38

Tgt Ion:128 Resp: 326106
Ion Ratio Lower Upper
128 100
127 12.5 10.3 15.5
129 11.0 8.6 13.0

