

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN041422\
 Data File : VN071998.D
 Acq On : 14 Apr 2022 15:31
 Operator : JC\MD
 Sample : N2406-02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 220413003-02-VOA

Quant Time: Apr 15 01:38:15 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N032422W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Mar 24 12:03:44 2022
 Response via : Initial Calibration

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

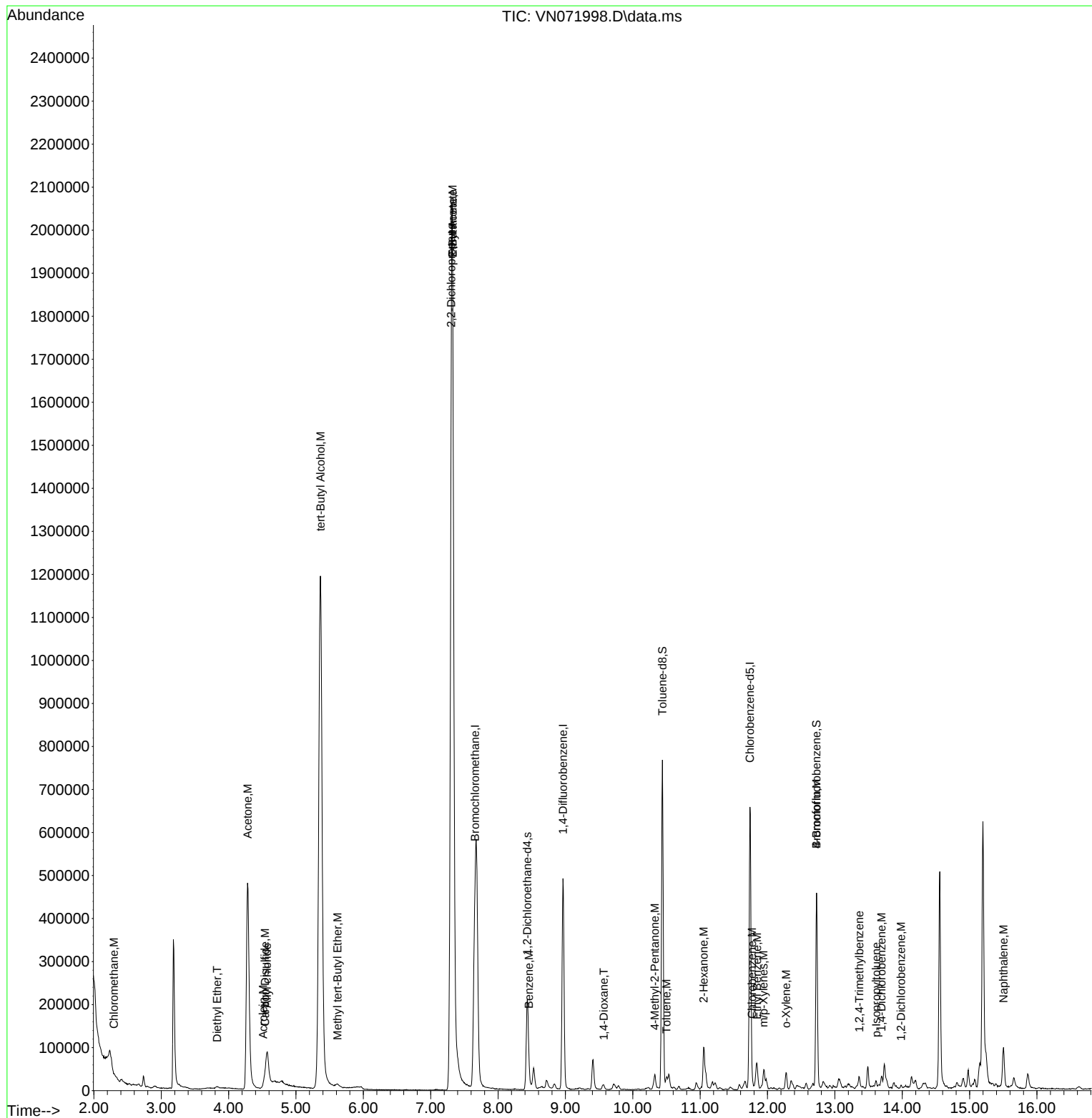
Internal Standards						
1) Bromochloromethane	7.657	128	82481	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	8.963	114	453516	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.739	117	412450	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.434	65	169135	29.105	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	97.000%		
60) 4-Bromofluorobenzene	12.727	95	160528	26.249	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	87.500%		
63) Toluene-d8	10.439	98	541127	28.902	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	96.333%		
Target Compounds						
					Qvalue	
3) Chloromethane	2.299	50	2084	0.344	ug/l #	85
8) Diethyl Ether	3.828	74	1911	0.562	ug/l	43
13) Acrolein	4.510	56	149	0.208	ug/l #	81
15) Acetone	4.281	58	315014	358.892	ug/l	73
16) Carbon Disulfide	4.540	76	59652	4.795	ug/l	100
17) Allyl chloride	4.569	41	6974	0.900	ug/l	90
23) tert-Butyl Alcohol	5.363	59	2421654	2225.095	ug/l #	100
24) Methyl tert-Butyl Ether	5.616	73	6455	0.374	ug/l #	73
30) 2-Butanone	7.328	43	1592783	389.807	ug/l	96
31) 2,2-Dichloropropane	7.304	77	105005	12.557	ug/l #	53
34) Benzene	8.457	78	15175	0.665	ug/l #	1
43) Ethyl Acetate	7.328	43	1592783	201.023	ug/l #	77
45) 1,4-Dioxane	9.569	88	5523	43.076	ug/l #	76
56) Bromoform	12.727	173	975	0.212	ug/l #	1
58) 4-Methyl-2-Pentanone	10.328	43	23618	3.017	ug/l	99
59) 2-Hexanone	11.051	43	96427	16.868	ug/l #	34
62) Toluene	10.498	91	17885	0.715	ug/l	94
64) Chlorobenzene	11.769	112	5599	0.363	ug/l	94
66) Ethyl Benzene	11.845	91	39994	1.472	ug/l	100
67) m/p-Xylenes	11.939	106	15419	1.458	ug/l	98
68) o-Xylene	12.275	106	9758	0.929	ug/l	96
80) 1,2,4-Trimethylbenzene	13.363	105	10621	0.517	ug/l #	78
82) p-Isopropyltoluene	13.616	119	7546	0.362	ug/l	95
84) 1,4-Dichlorobenzene	13.692	146	9029	0.898	ug/l	100
87) 1,2-Dichlorobenzene	13.980	146	2050	0.201	ug/l	93
91) Naphthalene	15.504	128	94948	12.117	ug/l	99

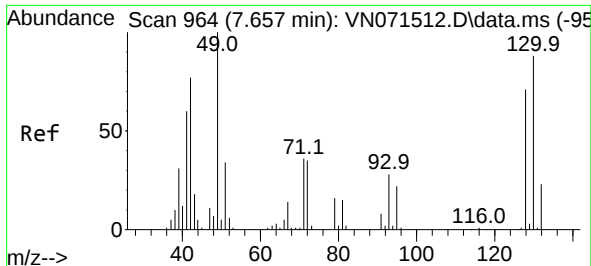
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :
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ClientSampleId :
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QLast Update : Thu Mar 24 12:03:44 2022
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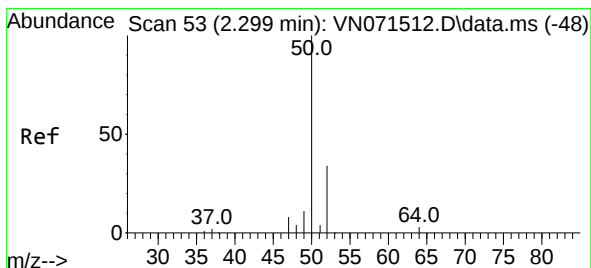
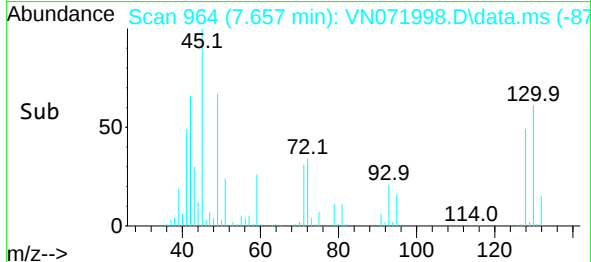
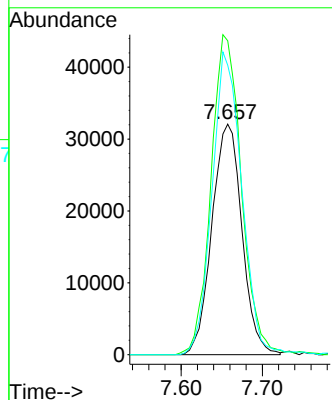
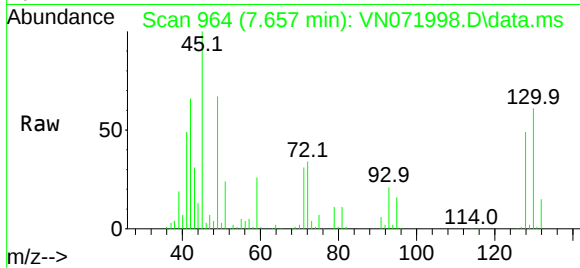




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.657 min Scan# 90
Delta R.T. 0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

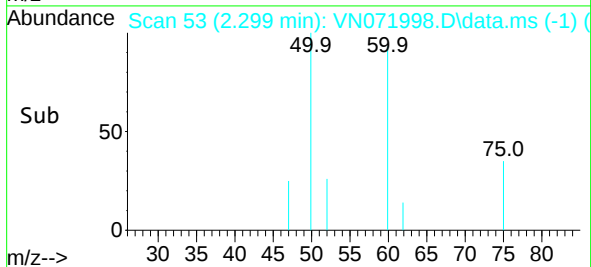
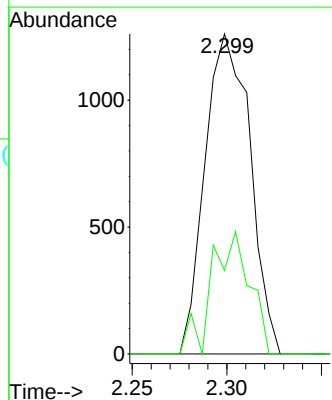
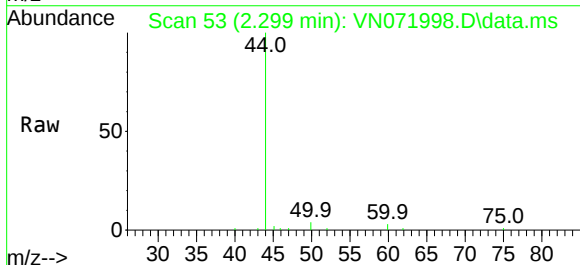
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

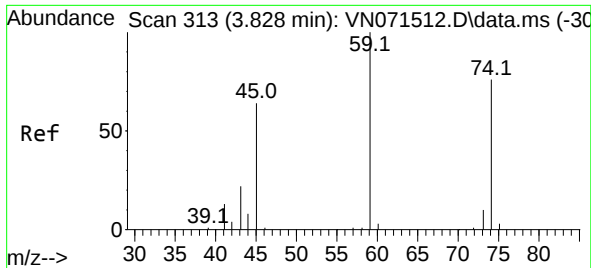
Tgt Ion:128 Resp: 82481
Ion Ratio Lower Upper
128 100
49 140.3 0.0 392.3
130 129.9 0.0 320.2



#3
Chloromethane
Concen: 0.344 ug/l
RT: 2.299 min Scan# 53
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion: 50 Resp: 2084
Ion Ratio Lower Upper
50 100
52 26.1 27.8 41.6#

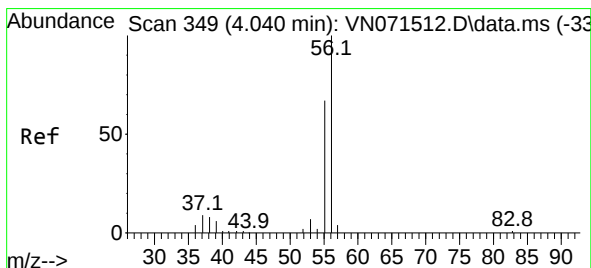
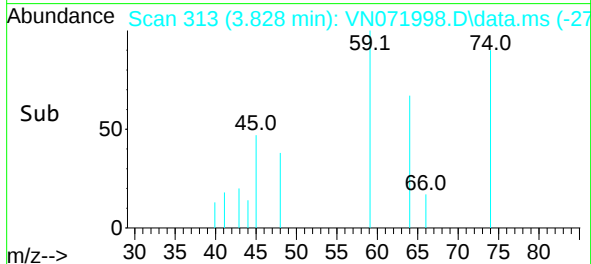
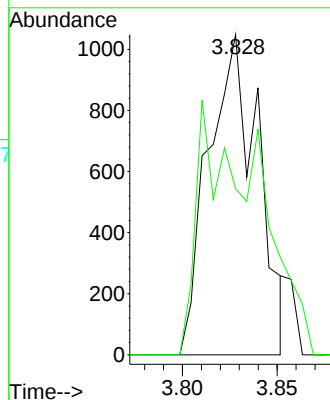
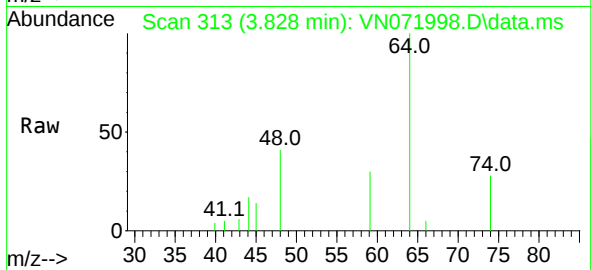




#8
Diethyl Ether
Concen: 0.562 ug/l
RT: 3.828 min Scan# 313
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

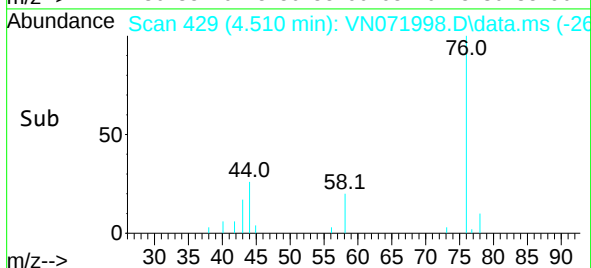
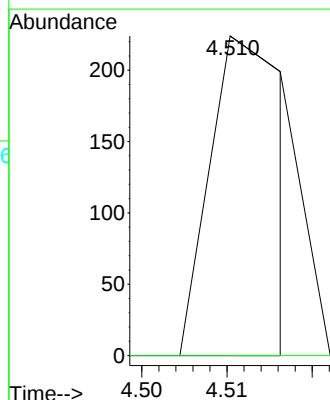
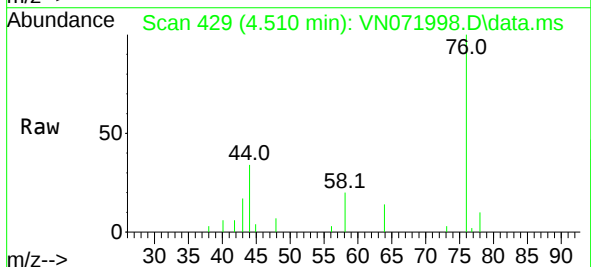
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

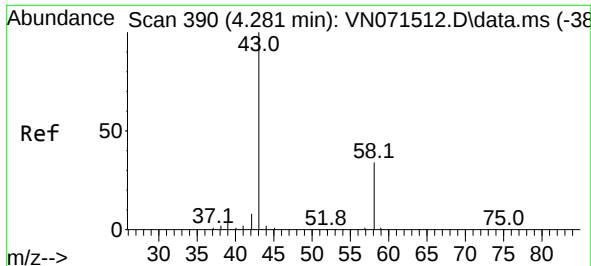
Tgt Ion: 74 Resp: 1911
Ion Ratio Lower Upper
74 100
45 34.7 17.6 158.8



#13
Acrolein
Concen: 0.208 ug/l
RT: 4.510 min Scan# 429
Delta R.T. 0.471 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion: 56 Resp: 149
Ion Ratio Lower Upper
56 100
55 56.4 57.6 86.4#





#15

Acetone

Concen: 358.892 ug/l

RT: 4.281 min Scan# 390

Delta R.T. 0.000 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

Instrument :

MSVOA_N

ClientSampleId :

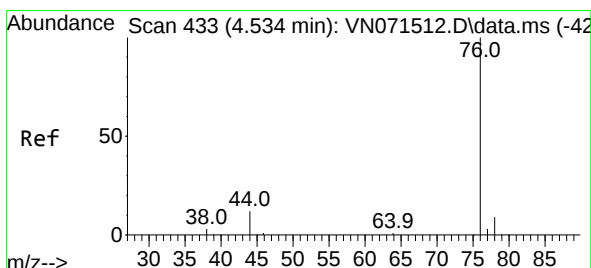
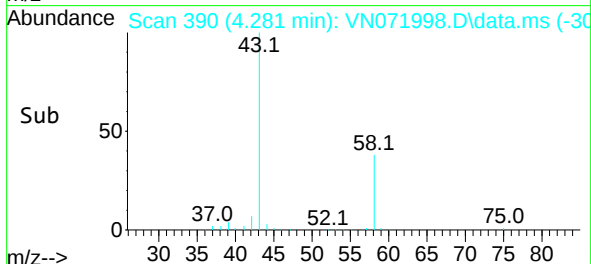
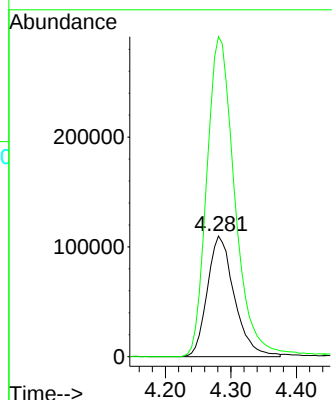
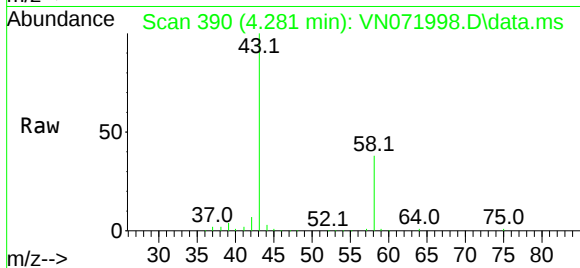
220413003-02-VOA

Tgt Ion: 58 Resp: 315014

Ion Ratio Lower Upper

58 100

43 265.3 256.6 384.8



#16

Carbon Disulfide

Concen: 4.795 ug/l

RT: 4.540 min Scan# 434

Delta R.T. 0.006 min

Lab File: VN071998.D

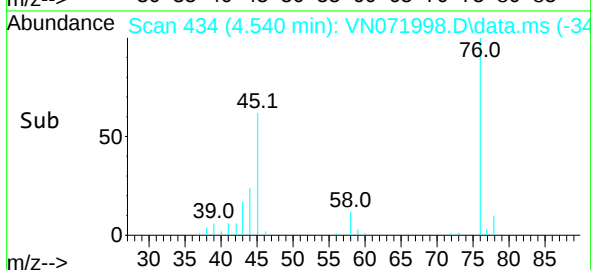
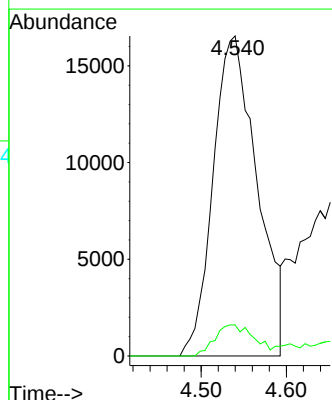
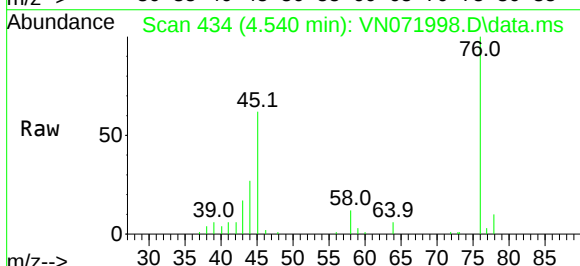
Acq: 14 Apr 2022 15:31

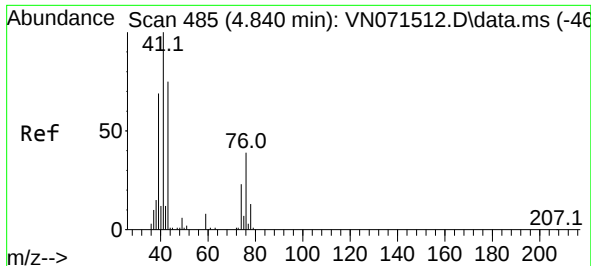
Tgt Ion: 76 Resp: 59652

Ion Ratio Lower Upper

76 100

78 9.7 7.8 11.8





#17

Allyl chloride

Concen: 0.900 ug/l

RT: 4.569 min Scan# 41

Delta R.T. -0.271 min

Lab File: VN071998.D

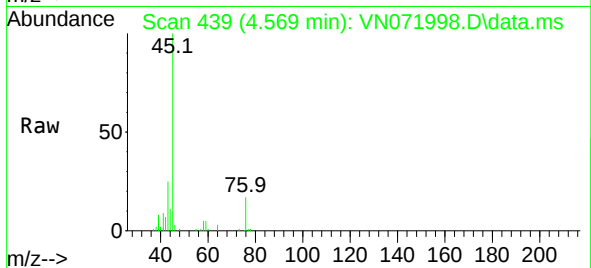
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Instrument :

MSVOA_N

ClientSampleId :

220413003-02-VOA



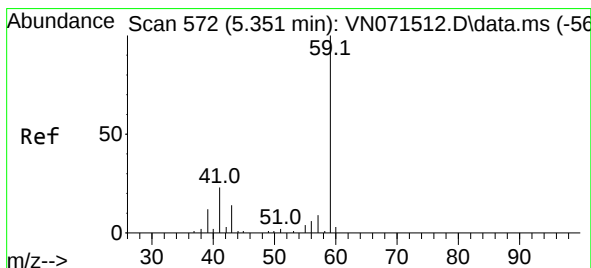
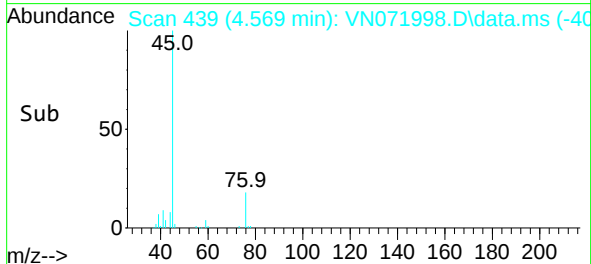
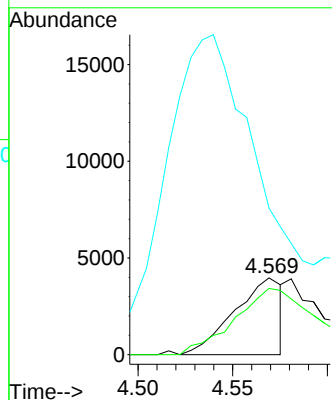
Tgt Ion: 41 Resp: 6974

Ion Ratio Lower Upper

41 100

39 86.3 44.6 134.0

76 24.0 19.6 58.7



#23

tert-Butyl Alcohol

Concen: 2225.095 ug/l

RT: 5.363 min Scan# 574

Delta R.T. 0.012 min

Lab File: VN071998.D

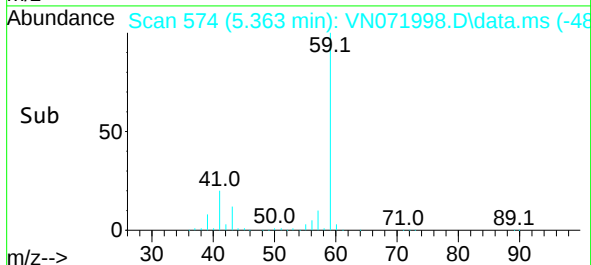
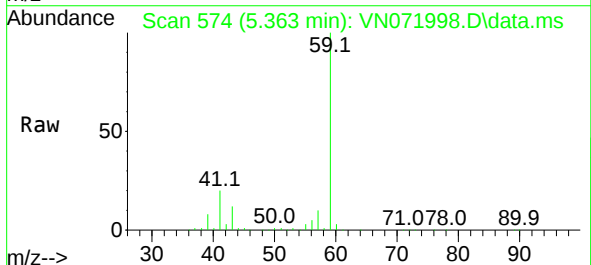
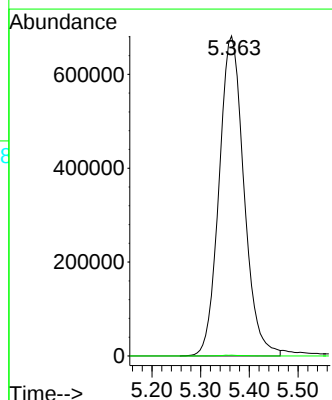
Acq: 14 Apr 2022 15:31

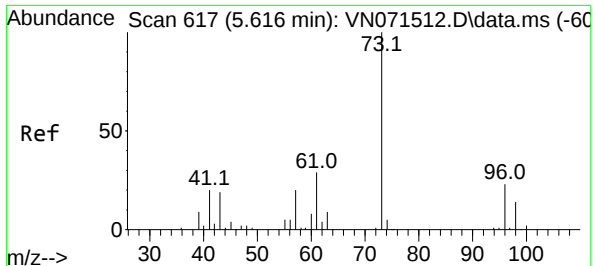
Tgt Ion: 59 Resp: 2421654

Ion Ratio Lower Upper

59 100

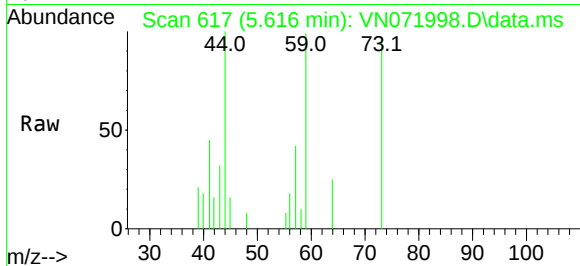
52 0.1 0.0 0.0#



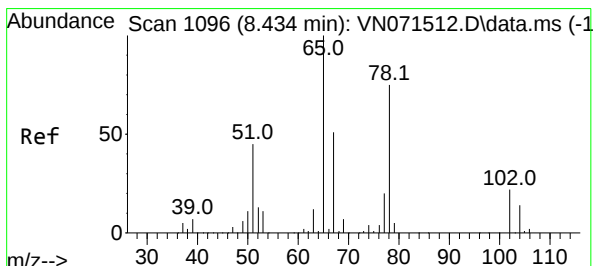
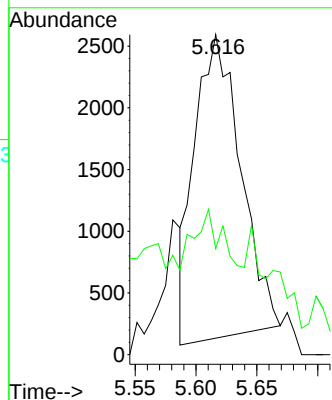
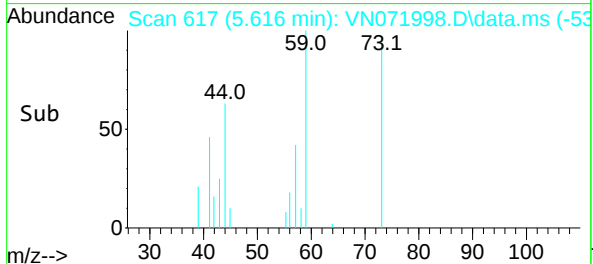


#24
Methyl tert-Butyl Ether
Concen: 0.374 ug/l
RT: 5.616 min Scan# 617
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

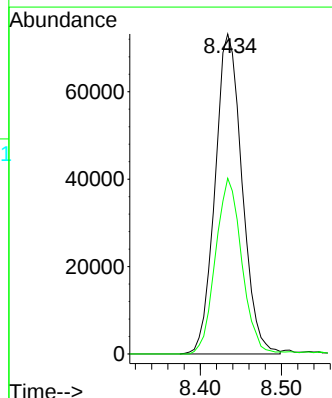
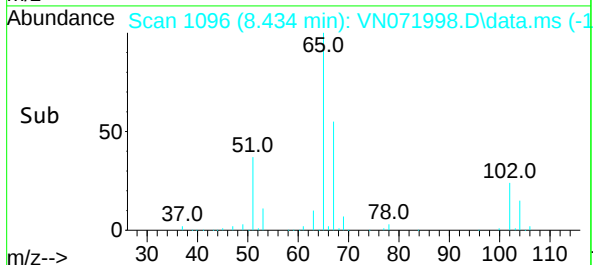
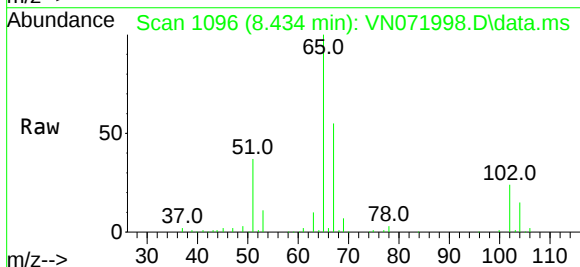


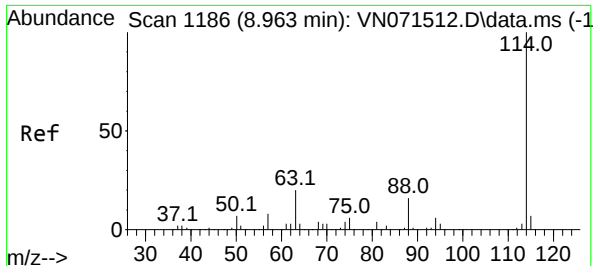
Tgt Ion: 73 Resp: 6455
Ion Ratio Lower Upper
73 100
43 9.5 18.1 27.1#



#27
1,2-Dichloroethane-d4
Concen: 29.105 ug/l
RT: 8.434 min Scan# 1096
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion: 65 Resp: 169135
Ion Ratio Lower Upper
65 100
67 53.4 40.2 60.2





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.963 min Scan# 1186

Delta R.T. 0.000 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

Instrument :

MSVOA_N

ClientSampleId :

220413003-02-VOA

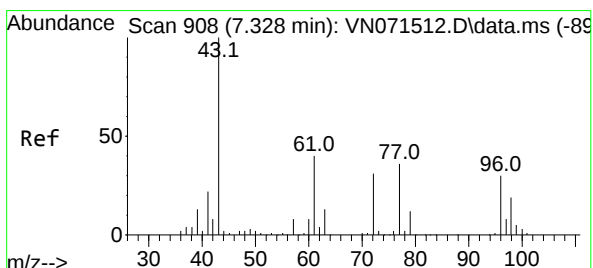
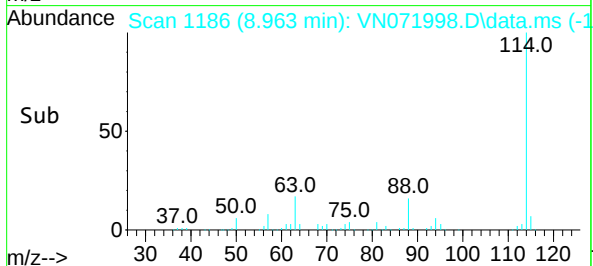
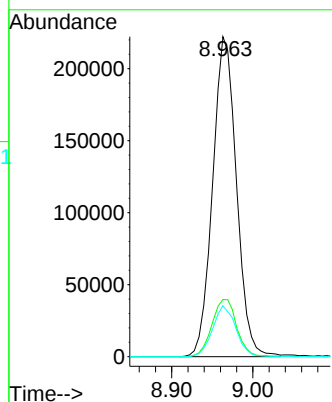
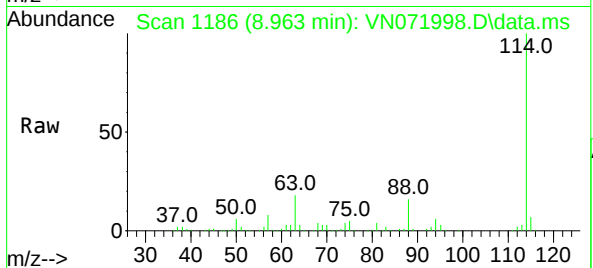
Tgt Ion:114 Resp: 453516

Ion Ratio Lower Upper

114 100

63 18.6 15.8 23.6

88 15.6 11.6 17.4



#30

2-Butanone

Concen: 389.807 ug/l

RT: 7.328 min Scan# 908

Delta R.T. -0.000 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

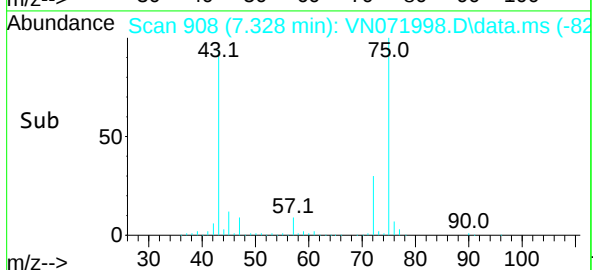
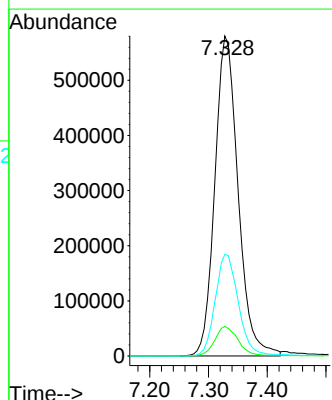
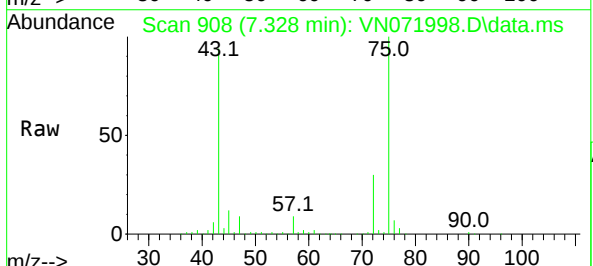
Tgt Ion: 43 Resp: 1592783

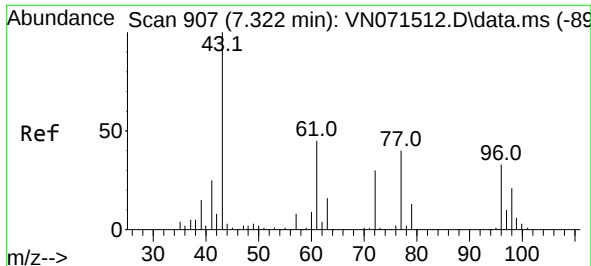
Ion Ratio Lower Upper

43 100

57 9.3 6.7 10.1

72 31.6 23.2 34.8

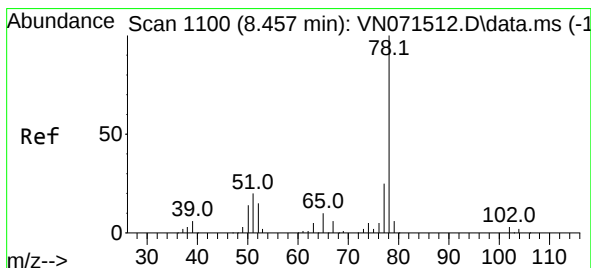
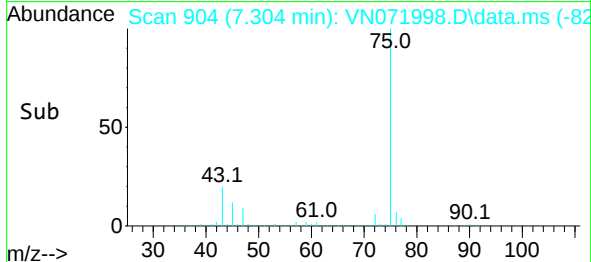
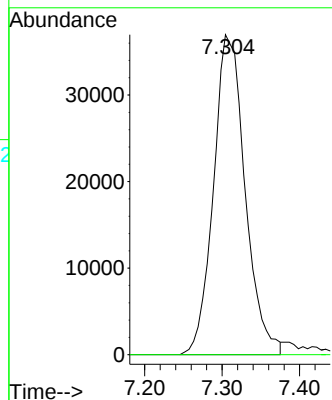
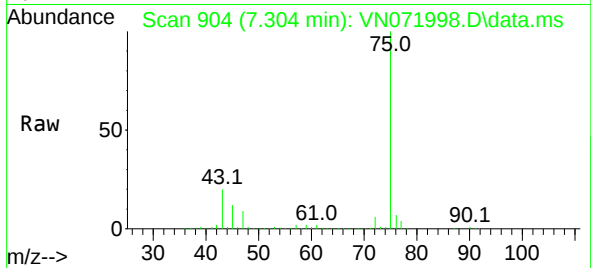




#31
2,2-Dichloropropane
Concen: 12.557 ug/l
RT: 7.304 min Scan# 907
Delta R.T. -0.018 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

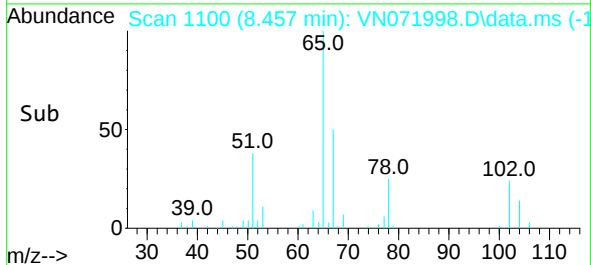
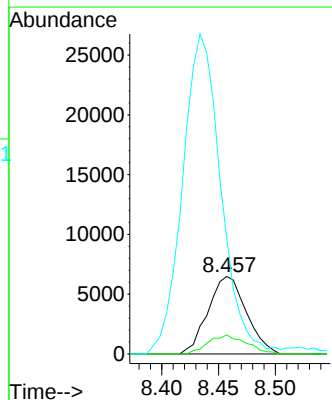
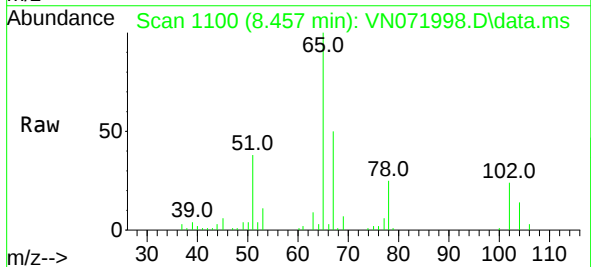
Instrument :
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220413003-02-VOA

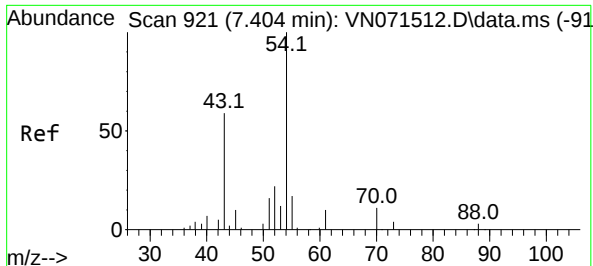
Tgt Ion: 77 Resp: 105005
Ion Ratio Lower Upper
77 100
97 0.0 18.3 27.5#



#34
Benzene
Concen: 0.665 ug/l
RT: 8.457 min Scan# 1100
Delta R.T. 0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion: 78 Resp: 15175
Ion Ratio Lower Upper
78 100
77 24.5 19.1 28.7
51 144.0 16.0 24.0#





#43

Ethyl Acetate

Concen: 201.023 ug/l

RT: 7.328 min Scan# 90

Delta R.T. -0.076 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

Instrument :

MSVOA_N

ClientSampleId :

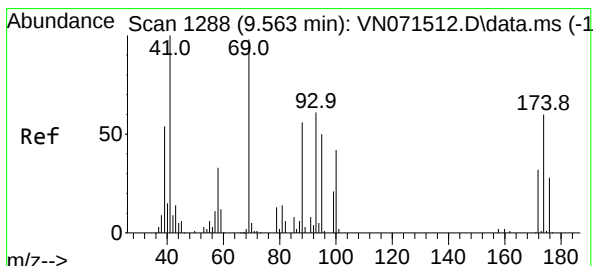
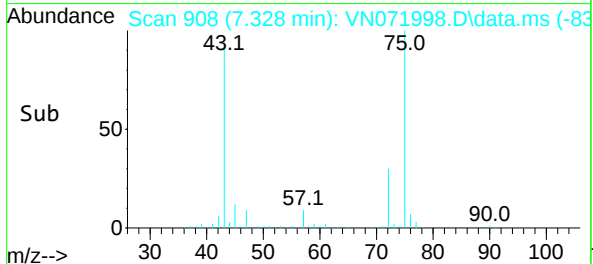
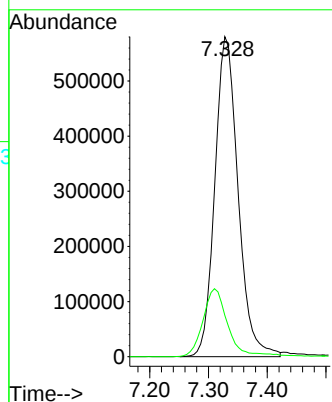
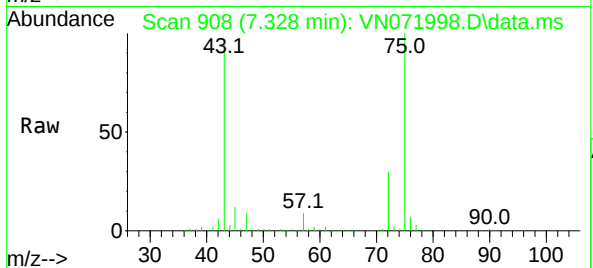
220413003-02-VOA

Tgt Ion: 43 Resp: 1592783

Ion Ratio Lower Upper

43 100

45 22.7 10.6 16.0#



#45

1,4-Dioxane

Concen: 43.076 ug/l

RT: 9.569 min Scan# 1289

Delta R.T. 0.006 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

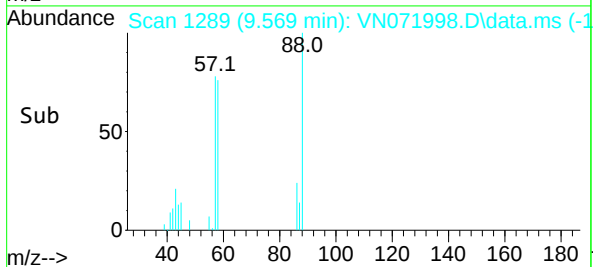
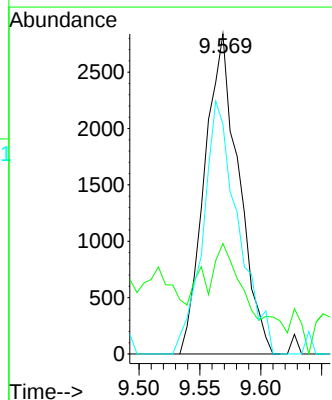
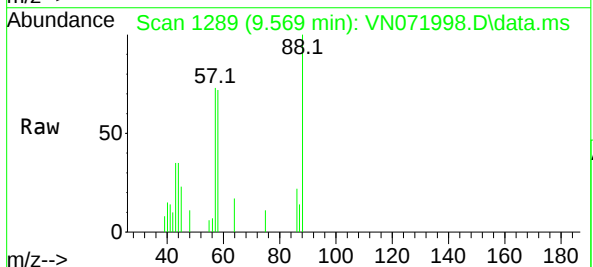
Tgt Ion: 88 Resp: 5523

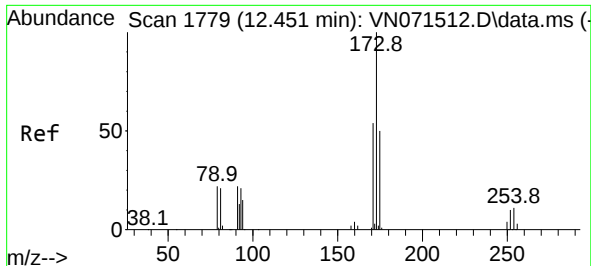
Ion Ratio Lower Upper

88 100

43 20.0 25.0 37.6#

58 81.6 49.4 74.2#

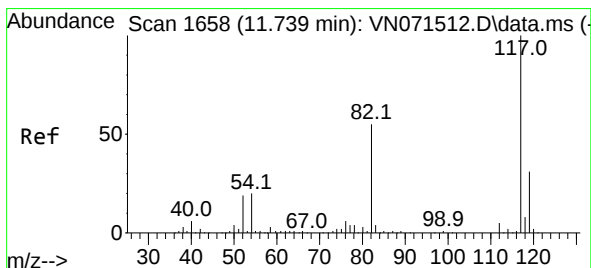
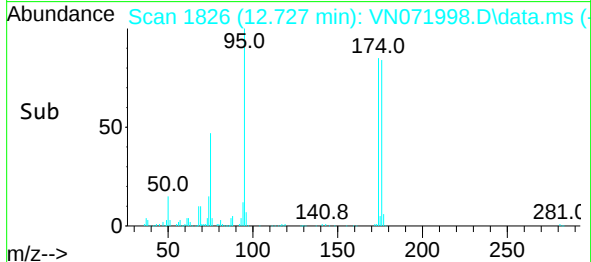
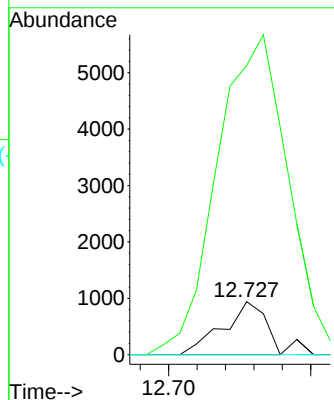
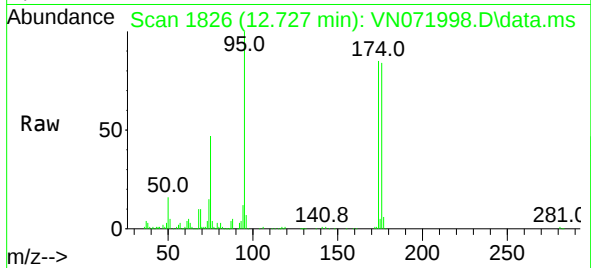




#56
Bromoform
Concen: 0.212 ug/l
RT: 12.727 min Scan# 11
Delta R.T. 0.276 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

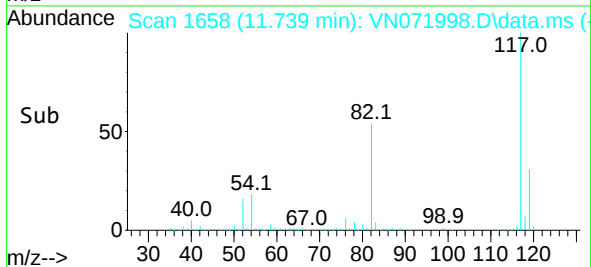
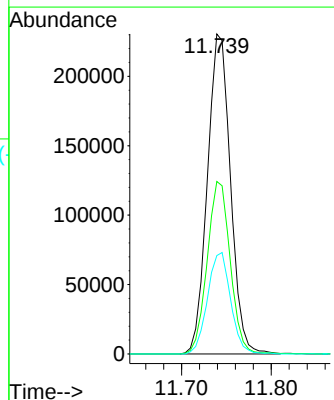
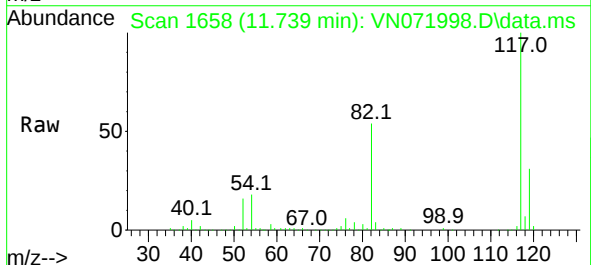
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

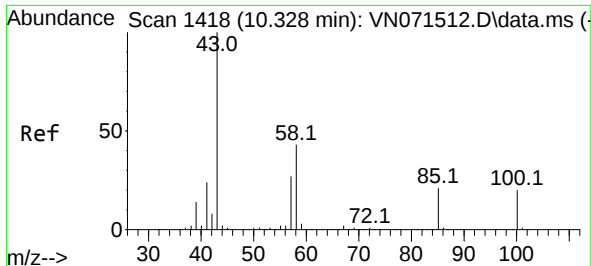
Tgt Ion:173 Resp: 975
Ion Ratio Lower Upper
173 100
175 1010.8 38.6 58.0#
254 0.0 0.0 0.0



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.739 min Scan# 1658
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion:117 Resp: 412450
Ion Ratio Lower Upper
117 100
82 53.8 43.6 65.4
119 31.7 25.8 38.6

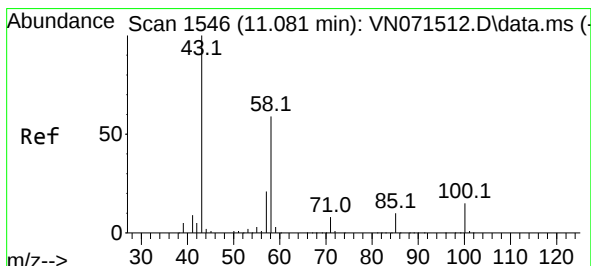
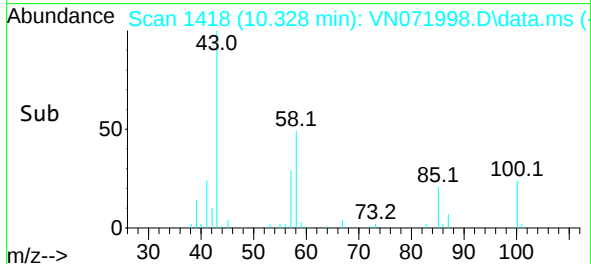
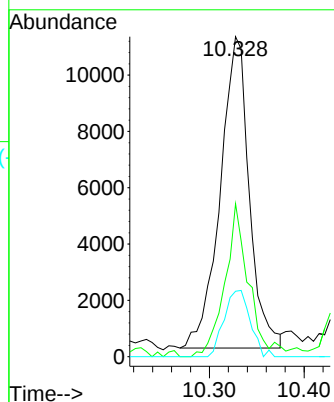
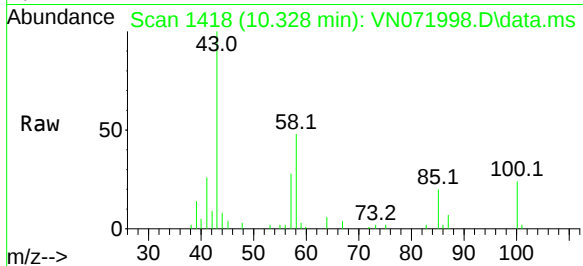




#58
4-Methyl-2-Pentanone
Concen: 3.017 ug/l
RT: 10.328 min Scan# 1418
Delta R.T. 0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

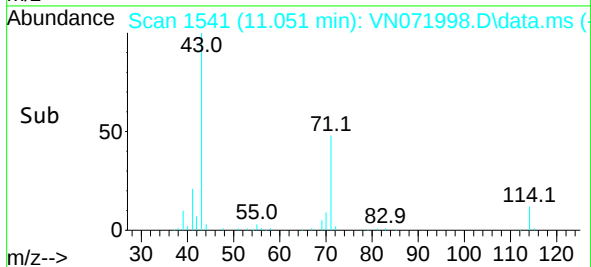
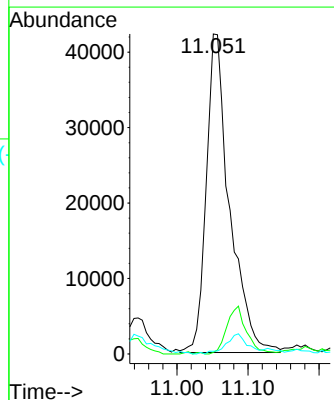
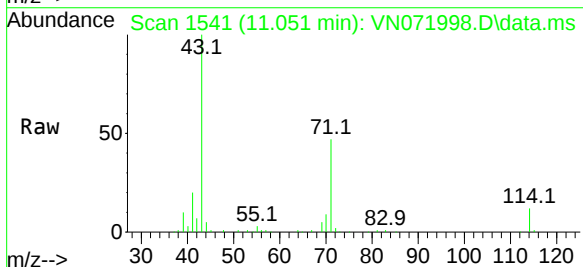
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

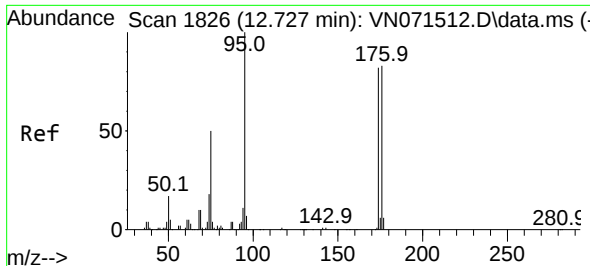
Tgt Ion:	43	Resp:	23618
Ion	Ratio	Lower	Upper
43	100		
58	38.7	30.0	45.0
85	18.7	15.0	22.6



#59
2-Hexanone
Concen: 16.868 ug/l
RT: 11.051 min Scan# 1541
Delta R.T. -0.029 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion:	43	Resp:	96427
Ion	Ratio	Lower	Upper
43	100		
58	0.0	42.2	63.2#
57	0.3	15.0	22.4#

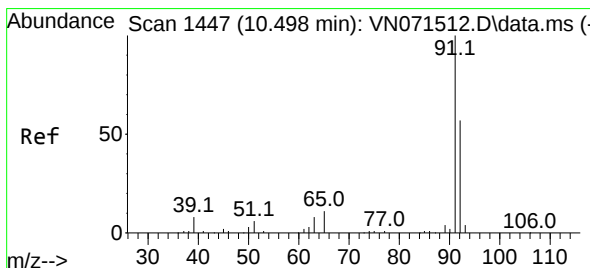
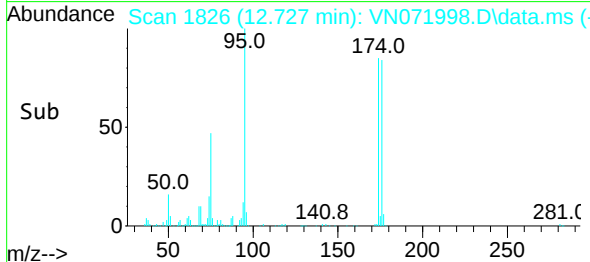
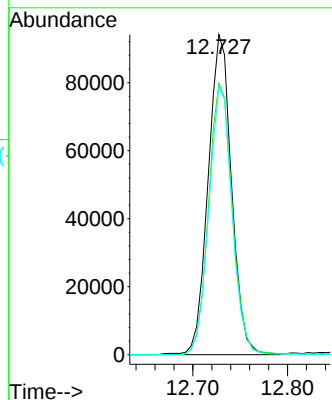
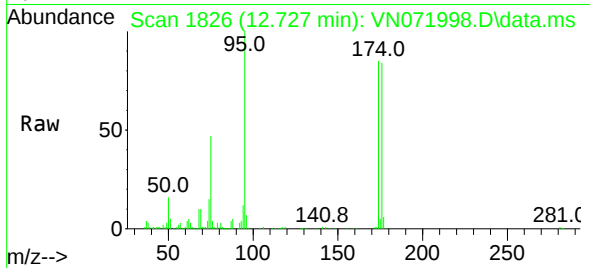




#60
4-Bromofluorobenzene
Concen: 26.249 ug/l
RT: 12.727 min Scan# 1826
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

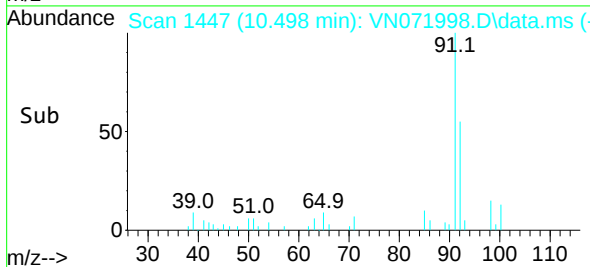
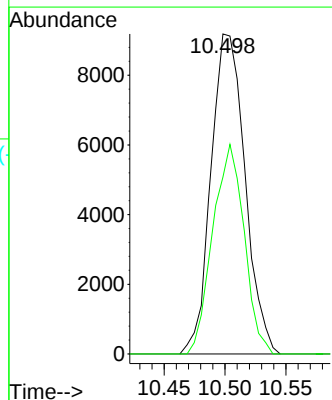
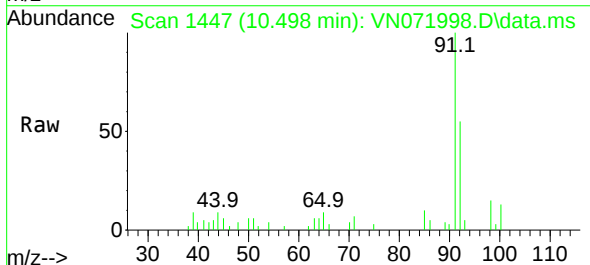
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

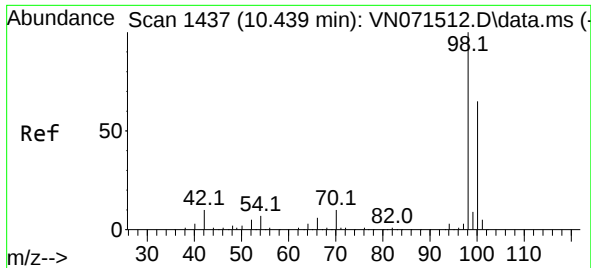
Tgt Ion: 95 Resp: 160528
Ion Ratio Lower Upper
95 100
174 86.2 62.9 94.3
176 83.2 61.0 91.4



#62
Toluene
Concen: 0.715 ug/l
RT: 10.498 min Scan# 1447
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion: 91 Resp: 17885
Ion Ratio Lower Upper
91 100
92 60.2 44.6 67.0

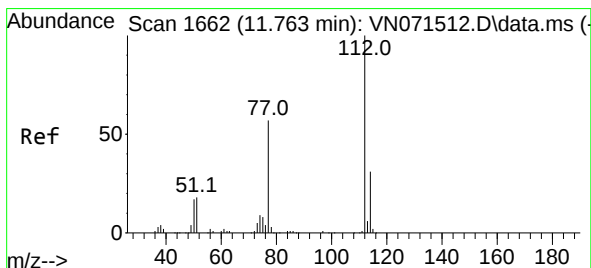
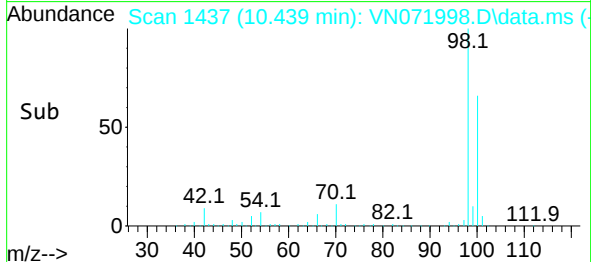
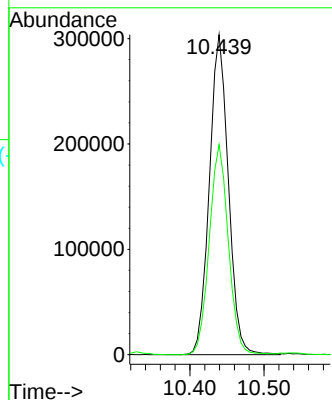
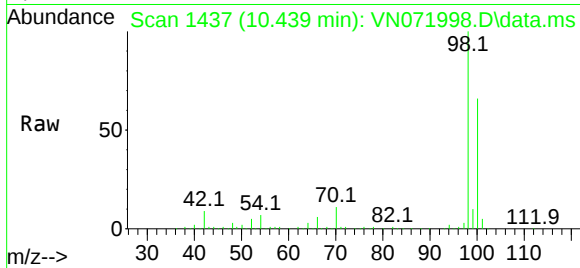




#63
Toluene-d8
Concen: 28.902 ug/l
RT: 10.439 min Scan# 1437
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

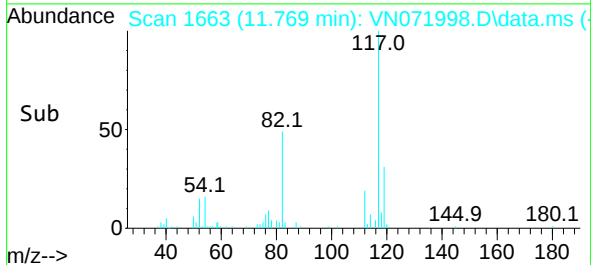
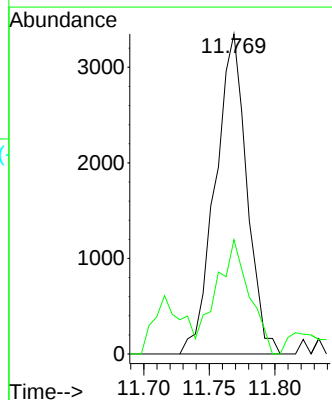
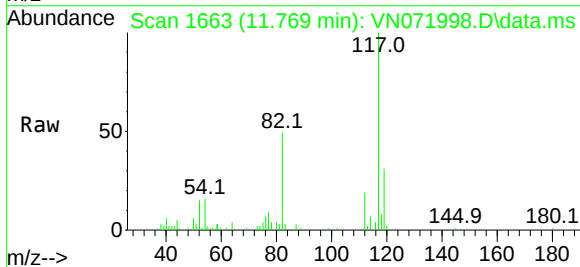
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

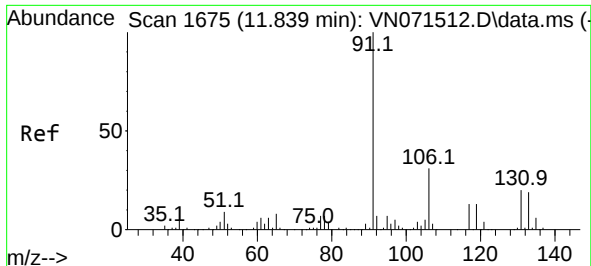
Tgt Ion: 98 Resp: 541127
Ion Ratio Lower Upper
98 100
100 65.8 50.6 76.0



#64
Chlorobenzene
Concen: 0.363 ug/l
RT: 11.769 min Scan# 1663
Delta R.T. 0.006 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion:112 Resp: 5599
Ion Ratio Lower Upper
112 100
114 35.7 25.8 38.6

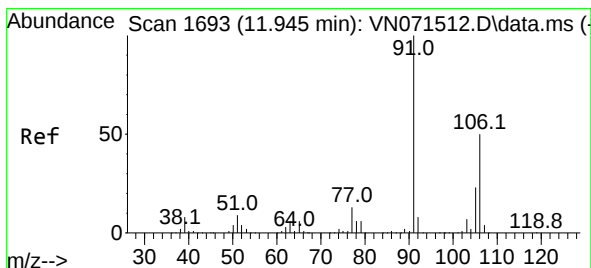
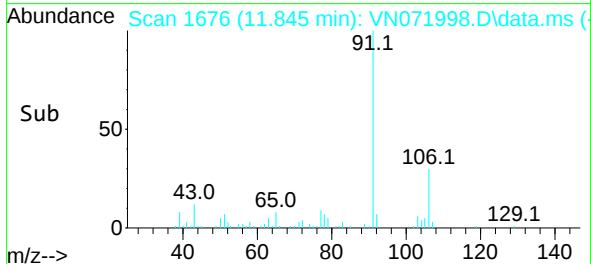
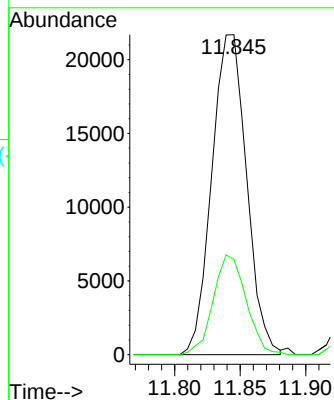
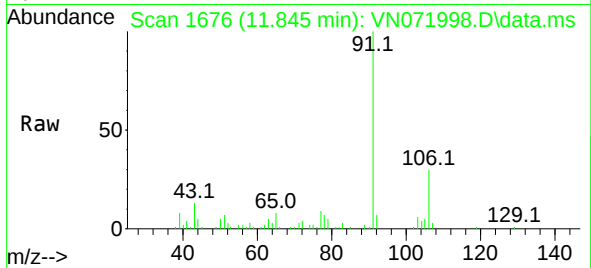




#66
Ethyl Benzene
Concen: 1.472 ug/l
RT: 11.845 min Scan# 1676
Delta R.T. 0.006 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

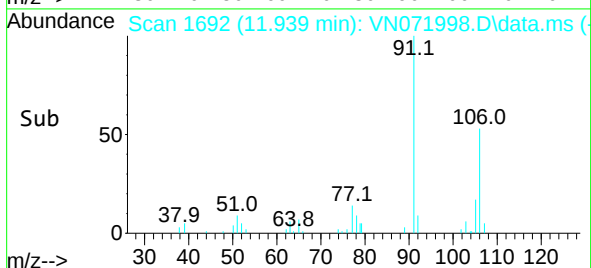
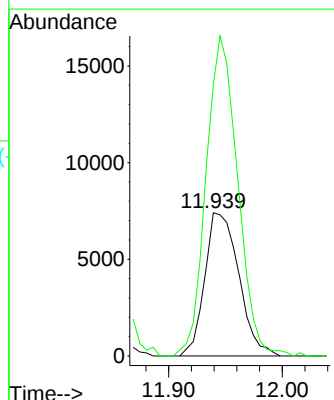
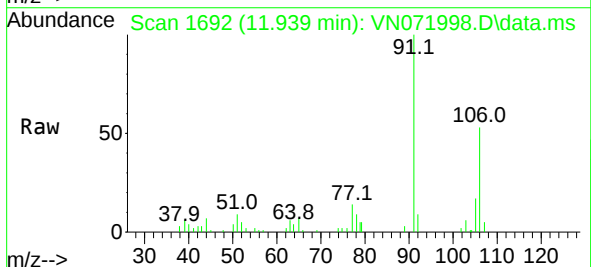
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA

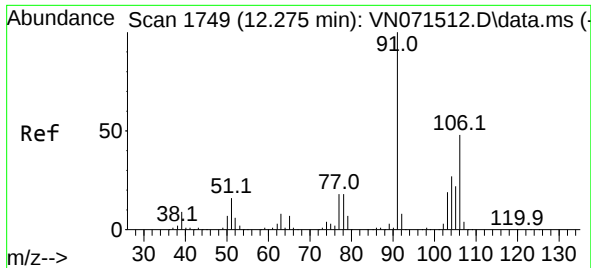
Tgt Ion: 91 Resp: 39994
Ion Ratio Lower Upper
91 100
106 29.8 24.0 36.0



#67
m/p-Xylenes
Concen: 1.458 ug/l
RT: 11.939 min Scan# 1692
Delta R.T. -0.006 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion: 106 Resp: 15419
Ion Ratio Lower Upper
106 100
91 206.9 162.9 244.3

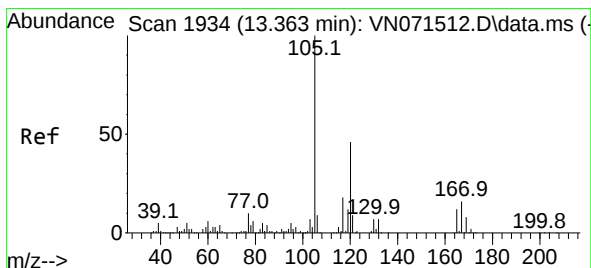
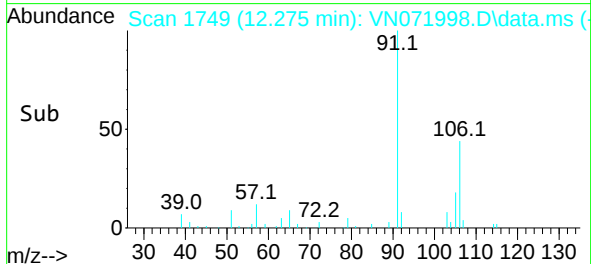
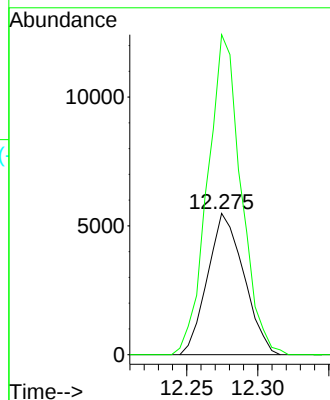
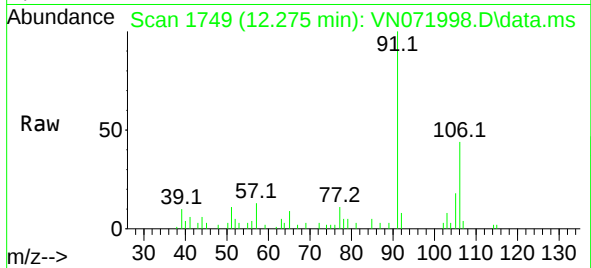




#68
o-Xylene
Concen: 0.929 ug/l
RT: 12.275 min Scan# 11
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

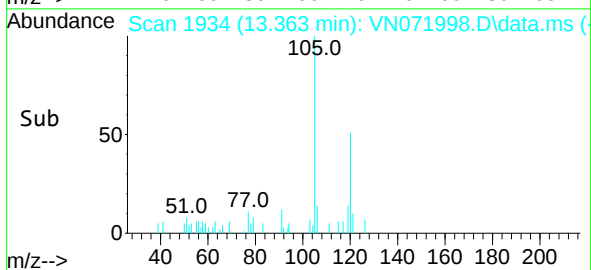
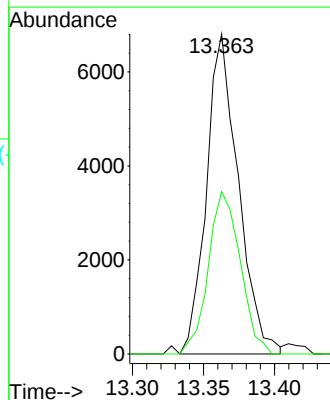
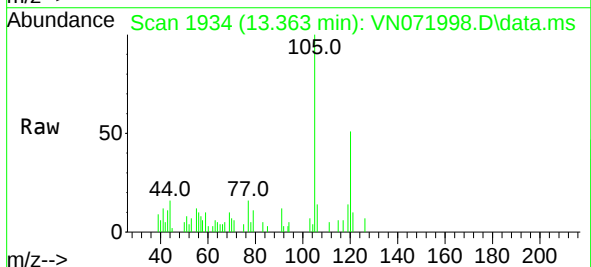
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ClientSampleId :
220413003-02-VOA

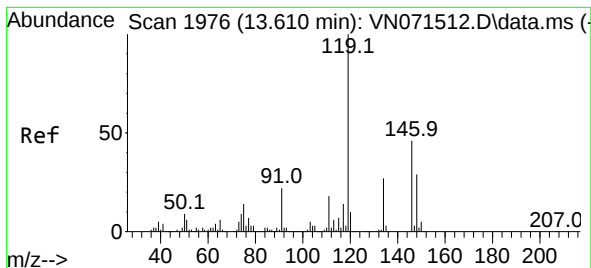
Tgt Ion:106 Resp: 9758
Ion Ratio Lower Upper
106 100
91 209.1 107.7 323.1



#80
1,2,4-Trimethylbenzene
Concen: 0.517 ug/l
RT: 13.363 min Scan# 1934
Delta R.T. -0.000 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

Tgt Ion:105 Resp: 10621
Ion Ratio Lower Upper
105 100
120 50.9 0.0 0.2#





#82

p-Isopropyltoluene

Concen: 0.362 ug/l

RT: 13.616 min Scan# 1976

Delta R.T. 0.006 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

Instrument :

MSVOA_N

ClientSampleId :

220413003-02-VOA

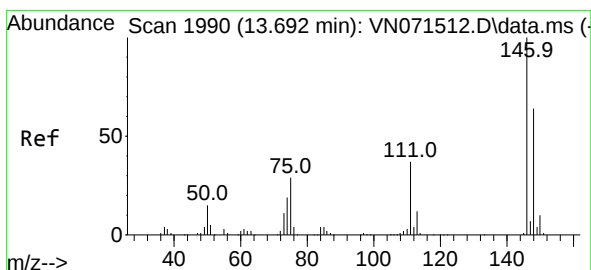
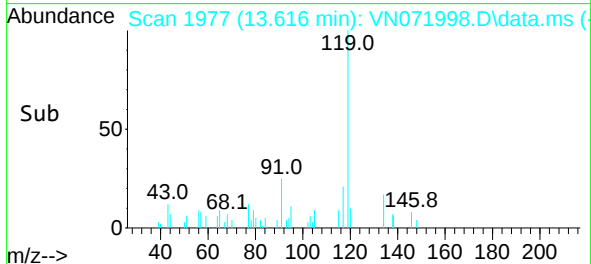
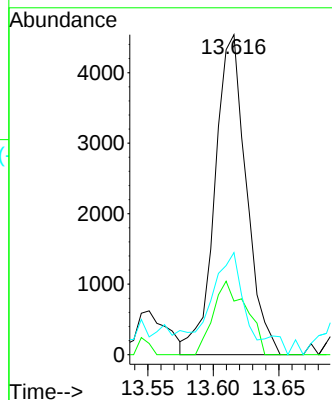
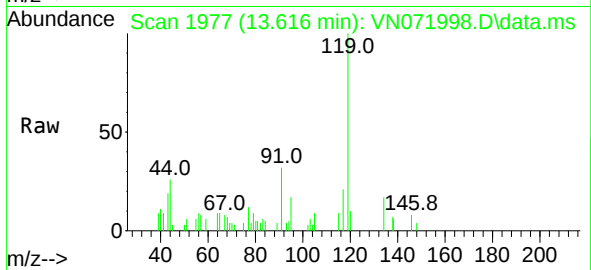
Tgt Ion:119 Resp: 7546

Ion Ratio Lower Upper

119 100

134 24.1 0.0 51.8

91 28.9 0.0 50.4



#84

1,4-Dichlorobenzene

Concen: 0.898 ug/l

RT: 13.692 min Scan# 1990

Delta R.T. -0.000 min

Lab File: VN071998.D

Acq: 14 Apr 2022 15:31

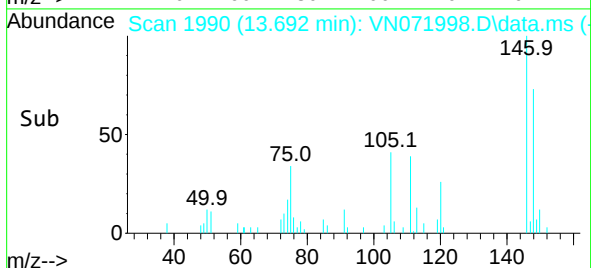
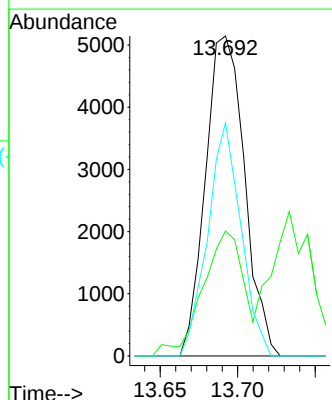
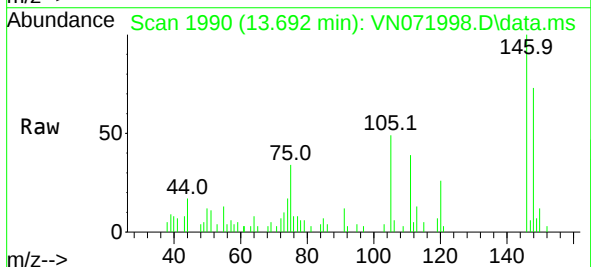
Tgt Ion:146 Resp: 9029

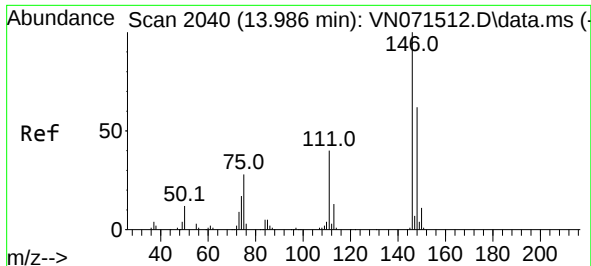
Ion Ratio Lower Upper

146 100

111 38.9 19.5 58.5

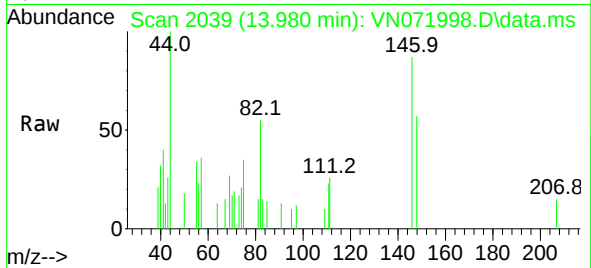
148 62.0 31.1 93.5



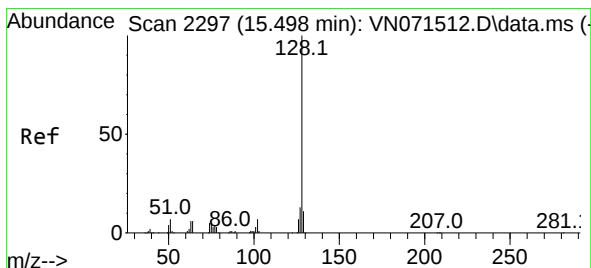
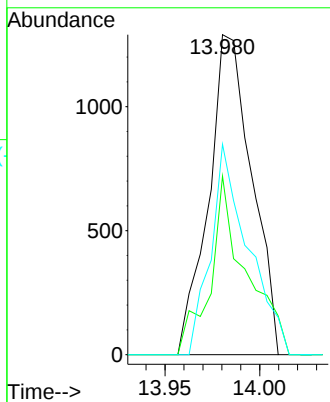
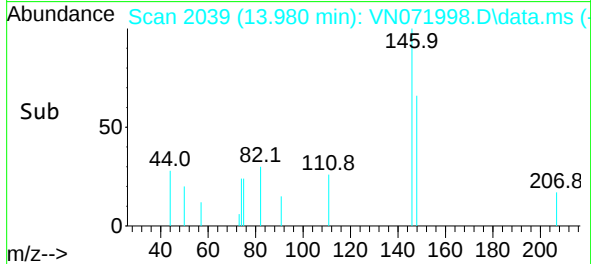


#87
1,2-Dichlorobenzene
Concen: 0.201 ug/l
RT: 13.980 min Scan# 2040
Delta R.T. -0.006 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31

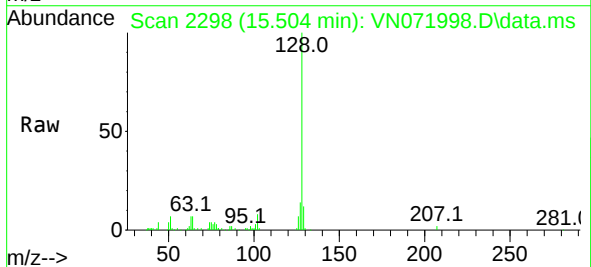
Instrument :
MSVOA_N
ClientSampleId :
220413003-02-VOA



Tgt Ion:146 Resp: 2050
Ion Ratio Lower Upper
146 100
111 40.5 21.4 64.2
148 57.0 32.5 97.4



#91
Naphthalene
Concen: 12.117 ug/l
RT: 15.504 min Scan# 2298
Delta R.T. 0.006 min
Lab File: VN071998.D
Acq: 14 Apr 2022 15:31



Tgt Ion:128 Resp: 94948
Ion Ratio Lower Upper
128 100
127 13.1 10.7 16.1
129 10.9 9.0 13.6

