

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN090321\
 Data File : VN068409.D
 Acq On : 3 Sep 2021 16:01
 Operator : JC/MD
 Sample : M3644-02
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Sep 04 03:12:02 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090321W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 03 13:24:01 2021
 Response via : Initial Calibration

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

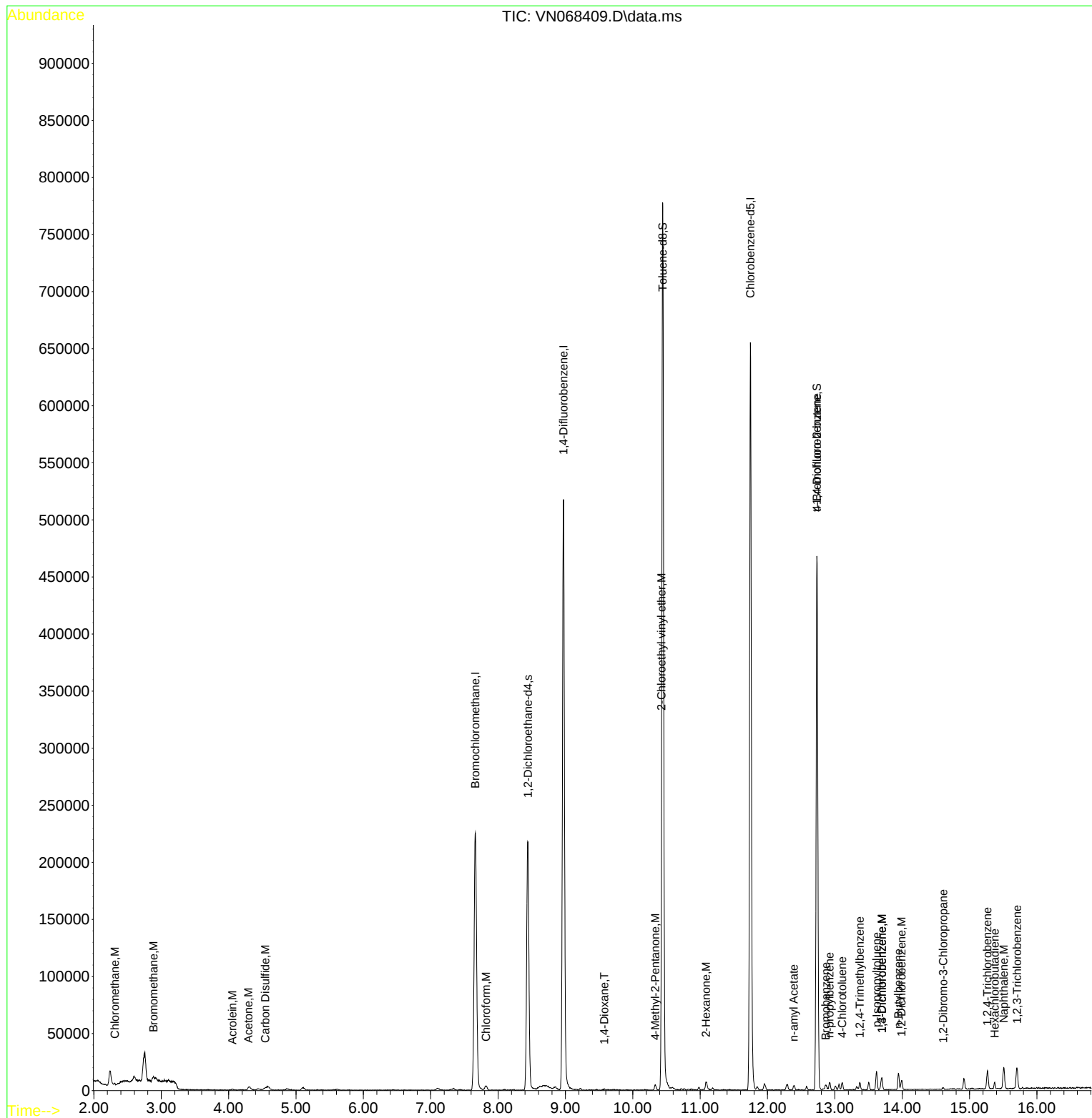
Internal Standards						
1) Bromochloromethane	7.662	128	94924	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	8.971	114	505042	30.000	ug/l	# 0.00
57) Chlorobenzene-d5	11.746	117	417685	30.000	ug/l	# 0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.442	65	186880	33.207	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	110.700%#
60) 4-Bromofluorobenzene	12.733	95	162239	27.429	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	91.433%
63) Toluene-d8	10.443	98	589460	31.690	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	105.633%
Target Compounds						
					Qvalue	
3) Chloromethane	2.311	50	1798	0.413	ug/l	# 88
5) Bromomethane	2.883	94	1900	0.320	ug/l	# 88
13) Acrolein	4.057	56	610	1.428	ug/l	# 65
15) Acetone	4.293	58	509	0.896	ug/l	# 21
16) Carbon Disulfide	4.545	76	4462	0.361	ug/l	# 87
25) Chloroform	7.820	83	2532	0.257	ug/l	# 90
45) 1,4-Dioxane	9.577	88	60	0.717	ug/l	# 1
47) n-amyl Acetate	12.390	43	2559	0.399	ug/l	# 78
55) 2-Chloroethyl vinyl ether	10.427	63	57	46.307	ug/l	# 46
58) 4-Methyl-2-Pentanone	10.333	43	3044	0.626	ug/l	# 93
59) 2-Hexanone	11.087	43	2773	0.822	ug/l	# 36
73) Bromobenzene	12.865	156	1485	0.213	ug/l	# 34
74) n-propylbenzene	12.921	91	6180	0.227	ug/l	# 92
77) t-1,4-Dichloro-2-butene	12.733	75	80460	50.163	ug/l	# 6
78) 4-Chlorotoluene	13.109	91	4604	0.290	ug/l	# 80
80) 1,2,4-Trimethylbenzene	13.372	105	4491	0.221	ug/l	# 67
82) p-Isopropyltoluene	13.621	119	5353	0.243	ug/l	# 73
83) 1,3-Dichlorobenzene	13.699	146	5435	0.441	ug/l	# 92
84) 1,4-Dichlorobenzene	13.699	146	5435	0.457	ug/l	# 95
85) n-Butylbenzene	13.943	91	8978	0.546	ug/l	# 75
87) 1,2-Dichlorobenzene	13.991	146	4711	0.402	ug/l	# 87
88) 1,2-Dibromo-3-Chloropr...	14.608	75	233	0.209	ug/l	# 1
89) 1,2,4-Trichlorobenzene	15.265	180	6046	0.960	ug/l	# 91
90) Hexachlorobutadiene	15.372	225	1274	0.344	ug/l	# 72
91) Naphthalene	15.507	128	18140	1.363	ug/l	# 96
92) 1,2,3-Trichlorobenzene	15.705	180	7590	1.267	ug/l	# 92

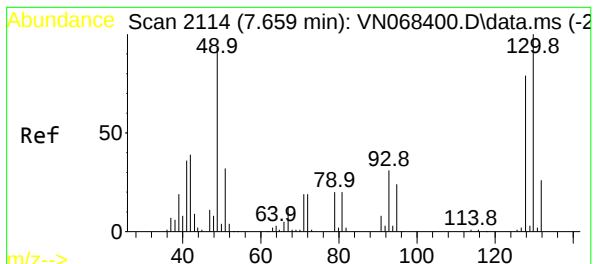
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :
MSVOA_N
ClientSampleId :

Quant Time: Sep 04 03:12:02 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N090321W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Sep 03 13:24:01 2021
Response via : Initial Calibration

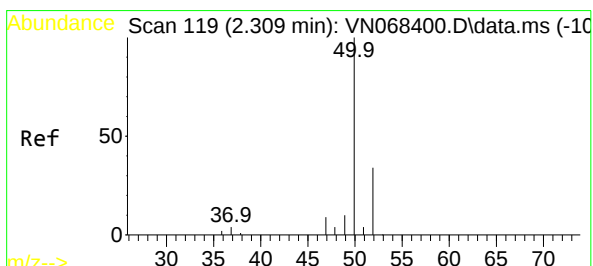
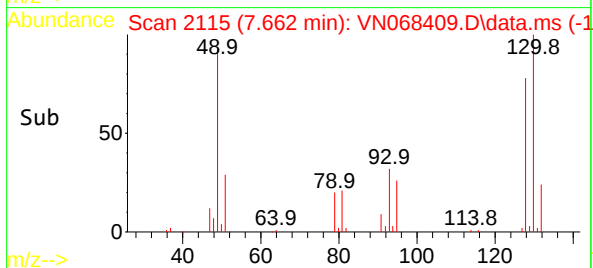
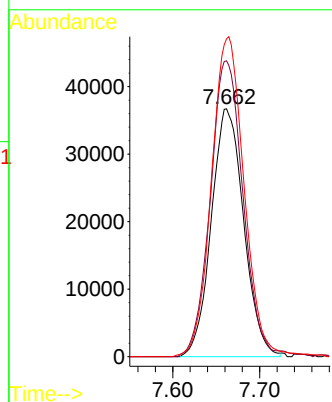
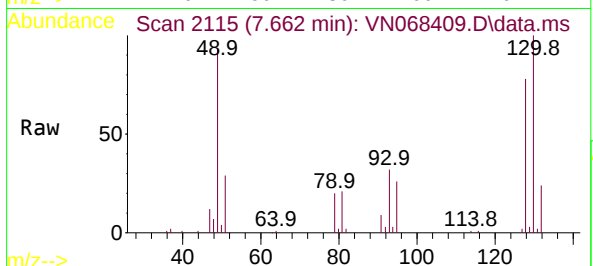




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.662 min Scan# 2115
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

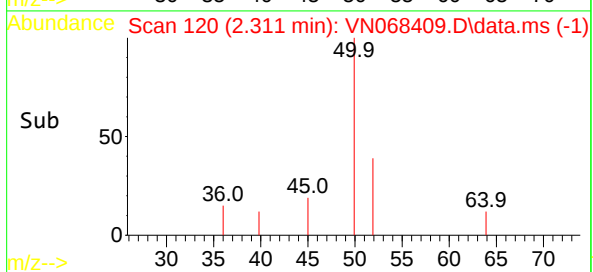
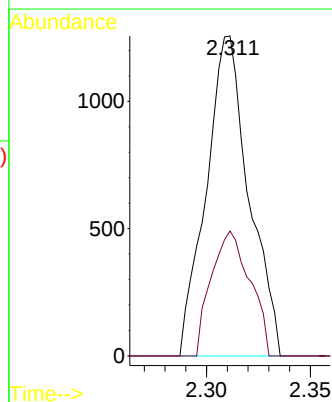
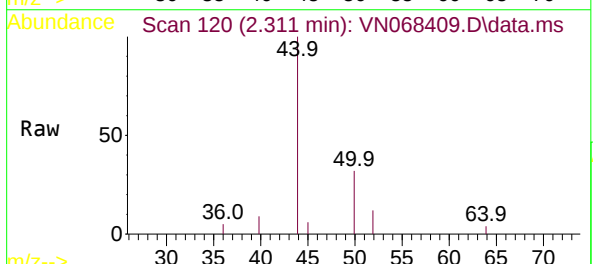
Instrument :
MSVOA_N
ClientSampled :

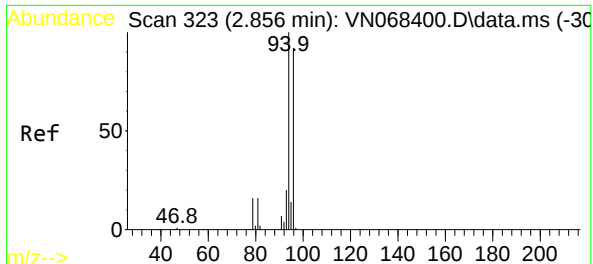
Tgt Ion:128 Resp: 94924
Ion Ratio Lower Upper
128 100
49 120.3 0.0 517.5
130 130.0 0.0 325.8



#3
Chloromethane
Concen: 0.413 ug/l
RT: 2.311 min Scan# 120
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

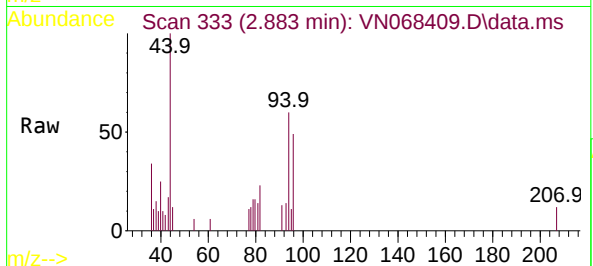
Tgt Ion: 50 Resp: 1798
Ion Ratio Lower Upper
50 100
52 39.1 26.0 39.0#



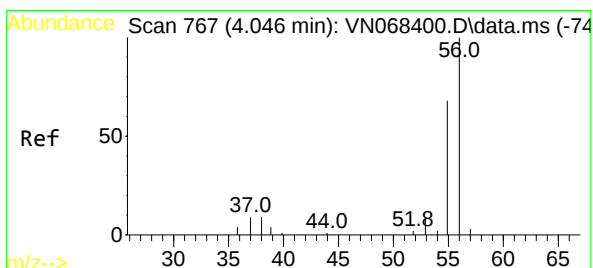
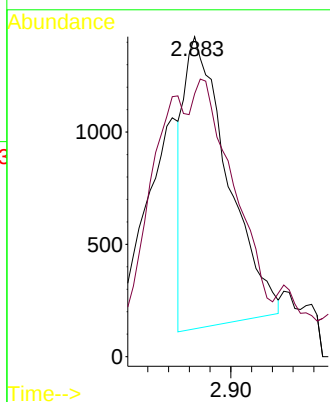
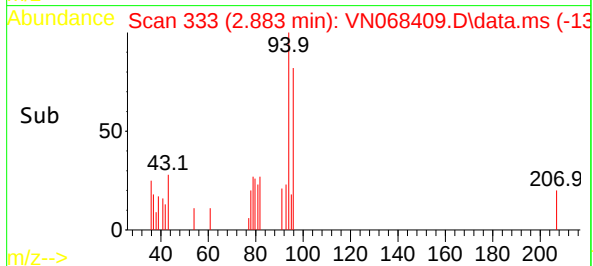


#5
Bromomethane
Concen: 0.320 ug/l
RT: 2.883 min Scan# 333
Delta R.T. 0.027 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

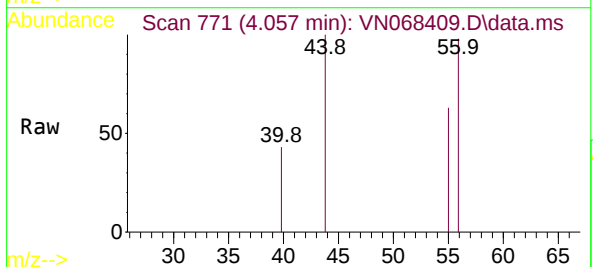
Instrument :
MSVOA_N
ClientSampled :



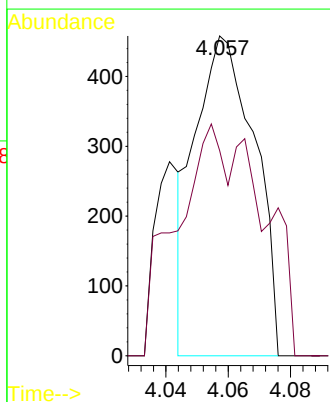
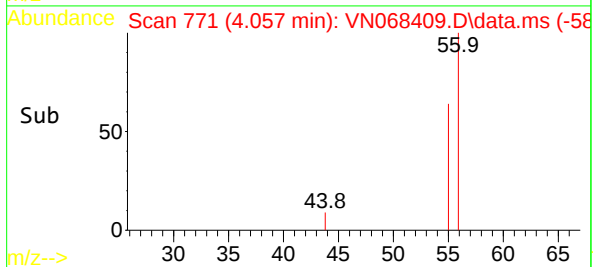
Tgt Ion: 94 Resp: 1900
Ion Ratio Lower Upper
94 100
96 75.7 69.4 104.2

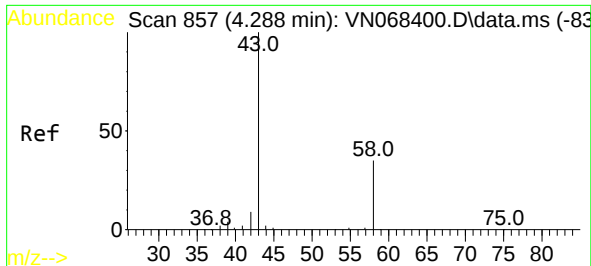


#13
Acrolein
Concen: 1.428 ug/l
RT: 4.057 min Scan# 771
Delta R.T. 0.011 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01



Tgt Ion: 56 Resp: 610
Ion Ratio Lower Upper
56 100
55 42.8 57.5 86.3#

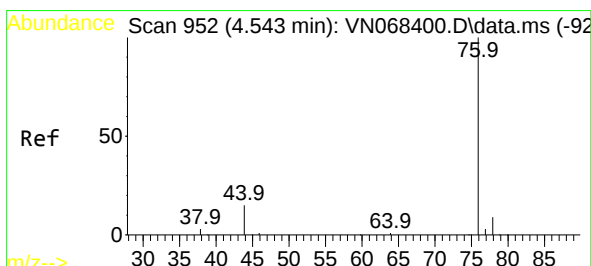
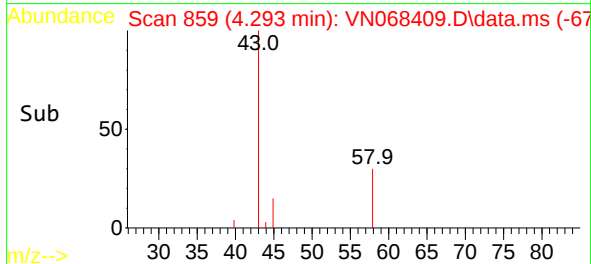
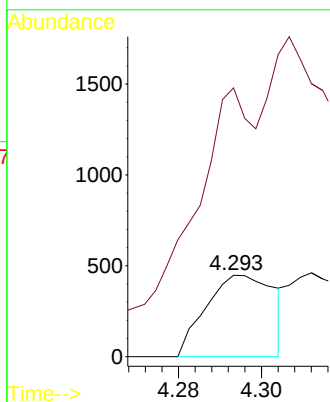
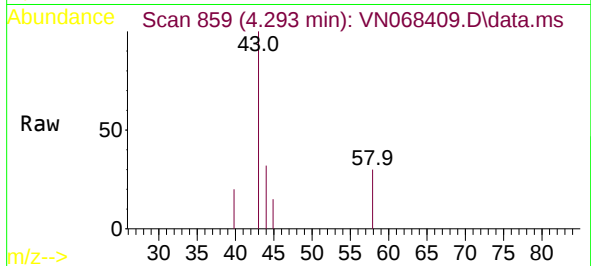




#15
Acetone
Concen: 0.896 ug/l
RT: 4.293 min Scan# 859
Delta R.T. 0.005 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

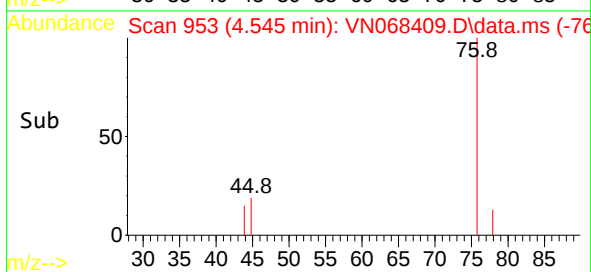
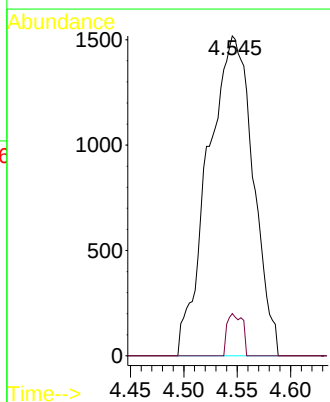
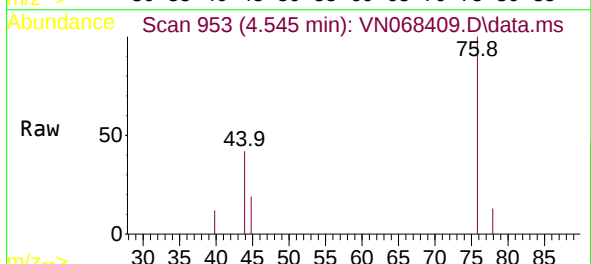
Instrument :
MSVOA_N
ClientSampled :

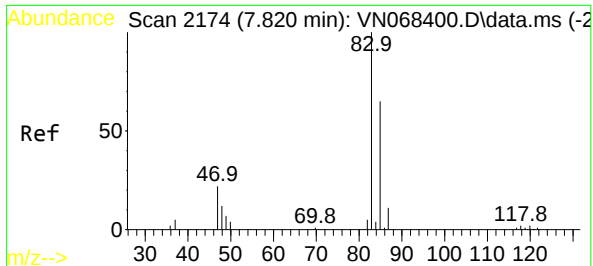
Tgt Ion: 58 Resp: 509
Ion Ratio Lower Upper
58 100
43 186.4 289.6 434.4#



#16
Carbon Disulfide
Concen: 0.361 ug/l
RT: 4.545 min Scan# 953
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 76 Resp: 4462
Ion Ratio Lower Upper
76 100
78 13.2 7.0 10.4#

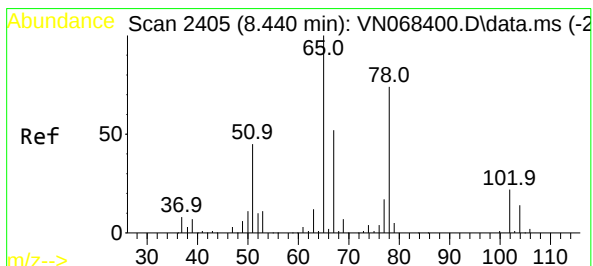
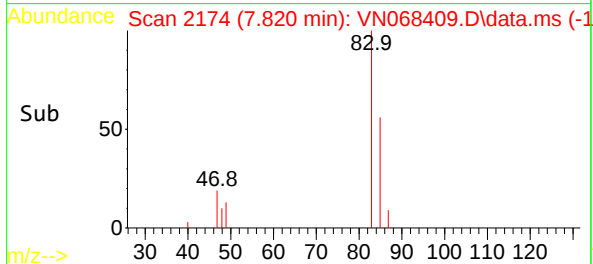
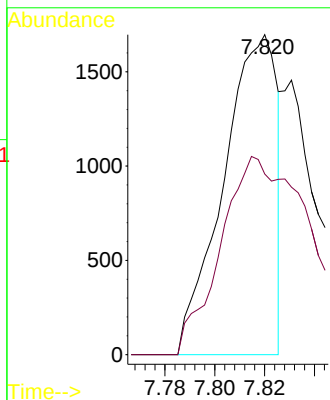
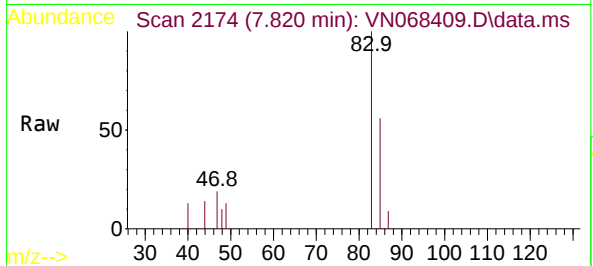




#25
Chloroform
Concen: 0.257 ug/l
RT: 7.820 min Scan# 2174
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

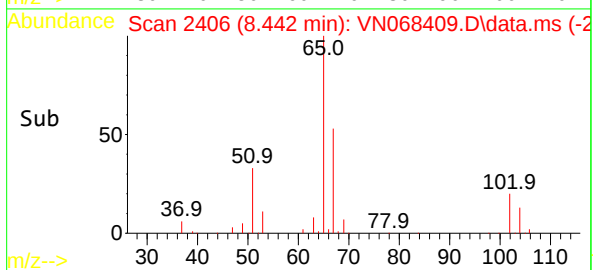
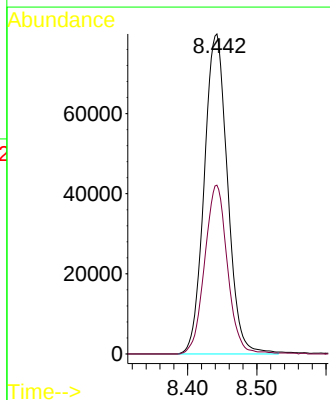
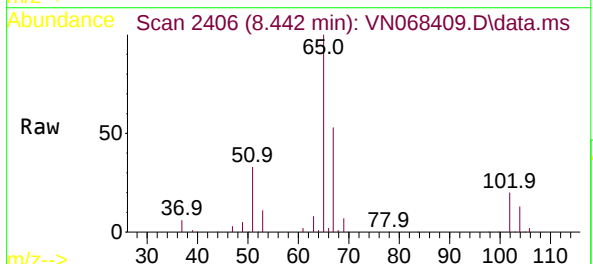
Instrument :
MSVOA_N
ClientSampled :

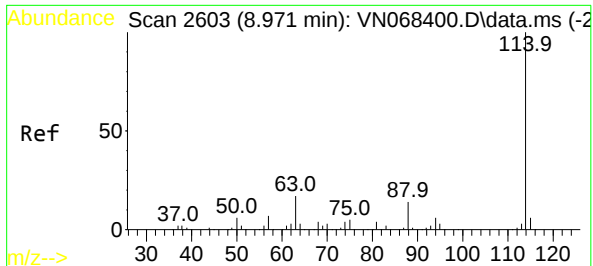
Tgt Ion: 83 Resp: 2532
Ion Ratio Lower Upper
83 100
85 56.5 51.5 77.3



#27
1,2-Dichloroethane-d4
Concen: 33.207 ug/l
RT: 8.442 min Scan# 2406
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 65 Resp: 186880
Ion Ratio Lower Upper
65 100
67 51.3 39.8 59.8

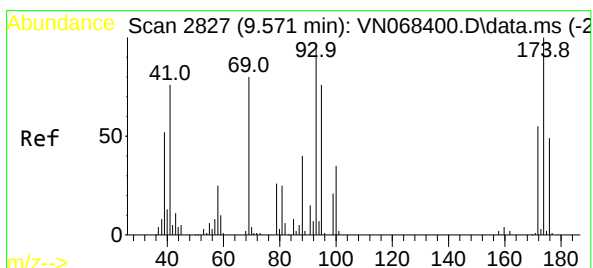
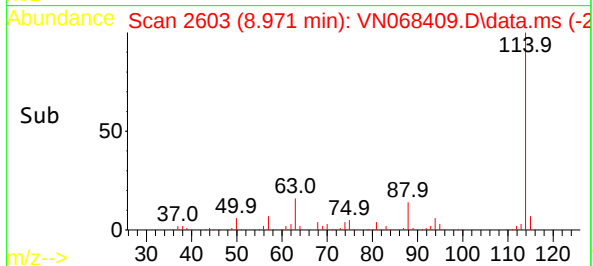
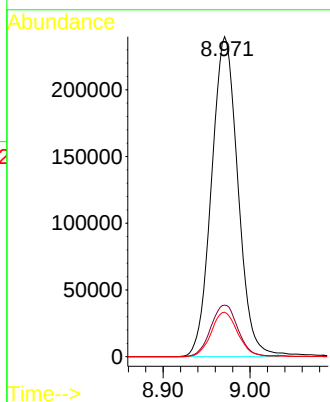
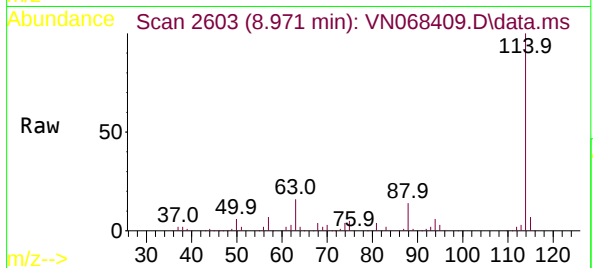




#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 8.971 min Scan# 2603
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

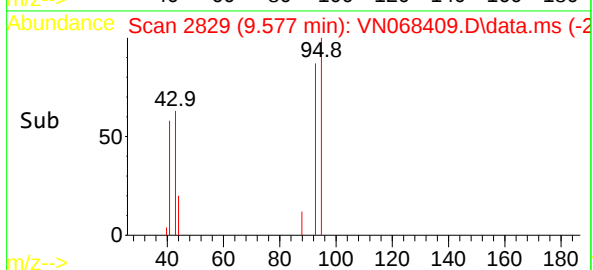
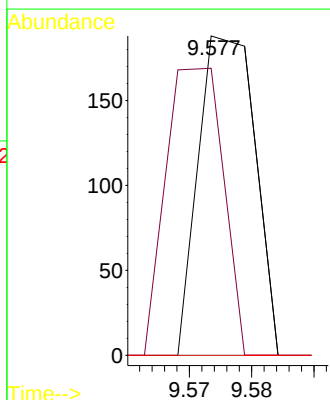
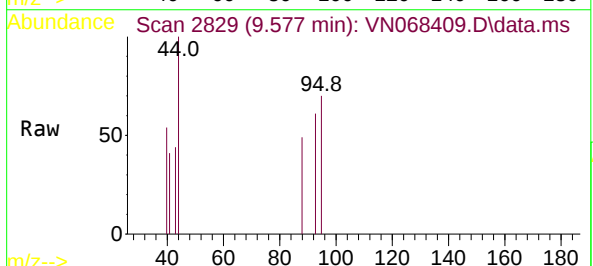
Instrument :
MSVOA_N
ClientSampled :

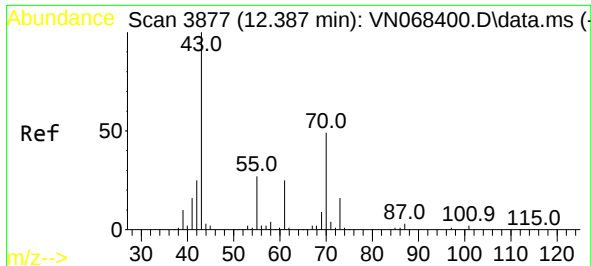
Tgt Ion:114 Resp: 505042
Ion Ratio Lower Upper
114 100
63 16.7 20.3 30.5#
88 14.0 14.6 22.0#



#45
1,4-Dioxane
Concen: 0.717 ug/l
RT: 9.577 min Scan# 2829
Delta R.T. 0.005 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 88 Resp: 60
Ion Ratio Lower Upper
88 100
43 90.0 18.0 27.0#
58 0.0 57.7 86.5#

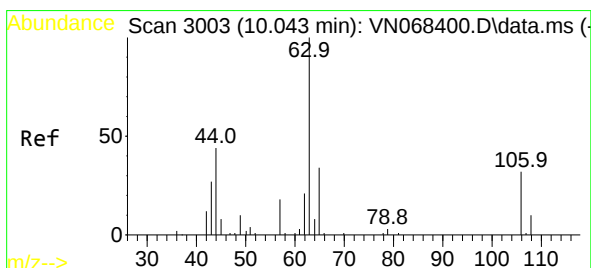
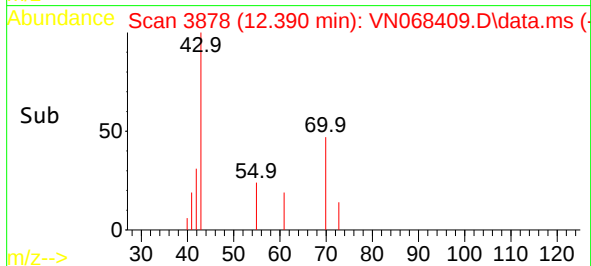
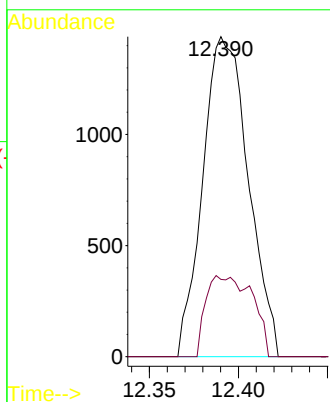
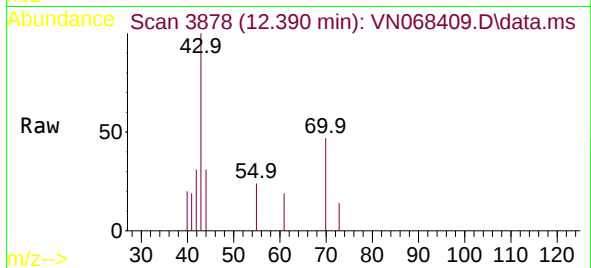




#47
n-amy1 Acetate
Concen: 0.399 ug/l
RT: 12.390 min Scan# 3878
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

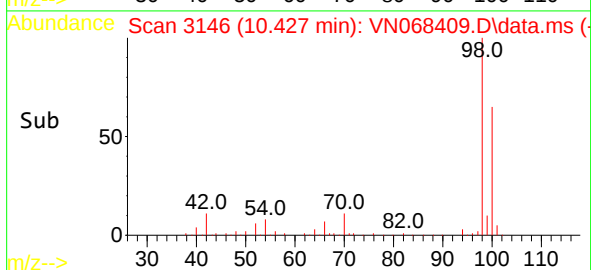
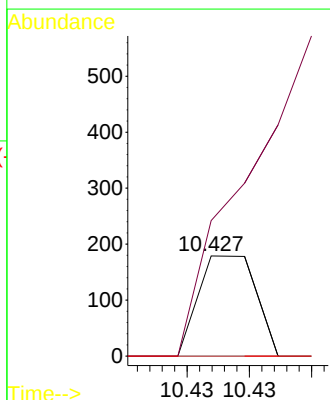
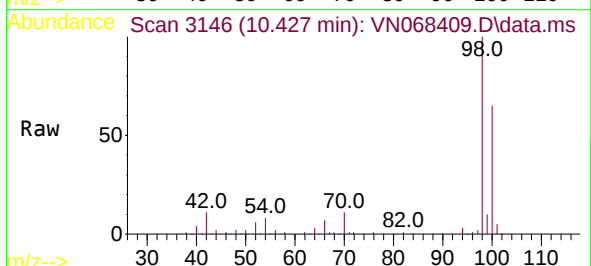
Instrument :
MSVOA_N
ClientSampled :

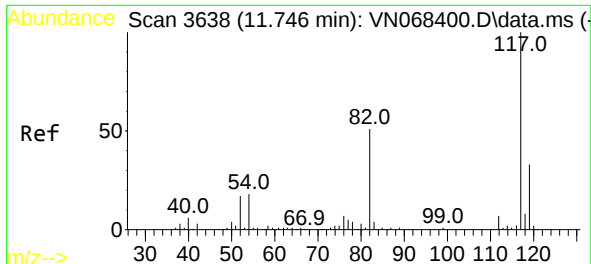
Tgt Ion: 43 Resp: 2559
Ion Ratio Lower Upper
43 100
55 11.6 17.6 26.4#



#55
2-Chloroethyl vinyl ether
Concen: 46.307 ug/l
RT: 10.427 min Scan# 3146
Delta R.T. 0.384 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 63 Resp: 57
Ion Ratio Lower Upper
63 100
65 0.0 25.6 38.4#
106 0.0 20.0 30.0#

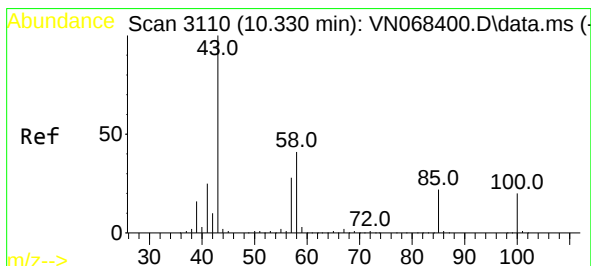
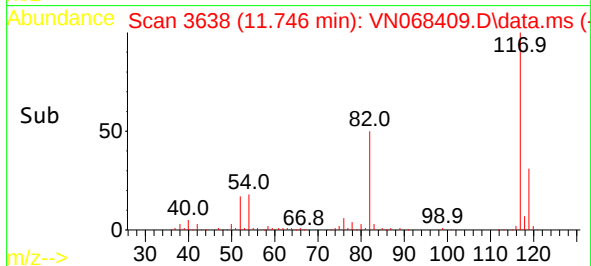
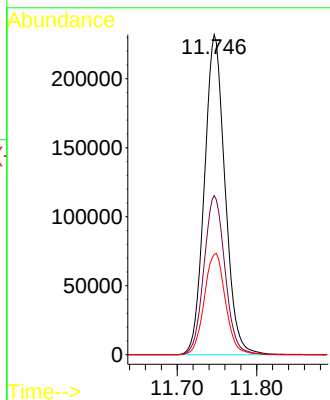
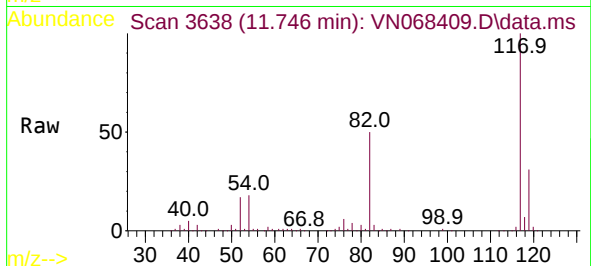




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.746 min Scan# 3638
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

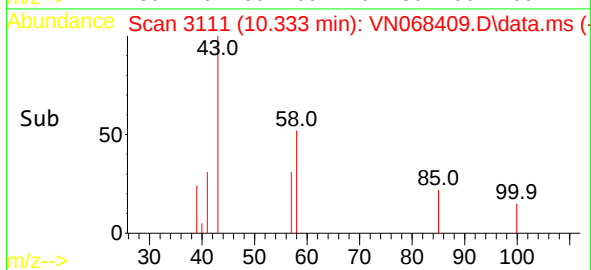
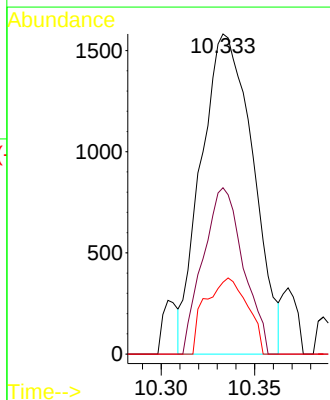
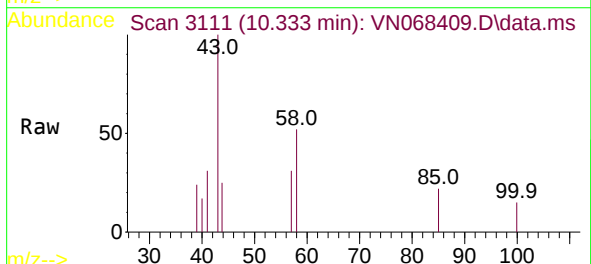
Instrument :
MSVOA_N
ClientSampled :

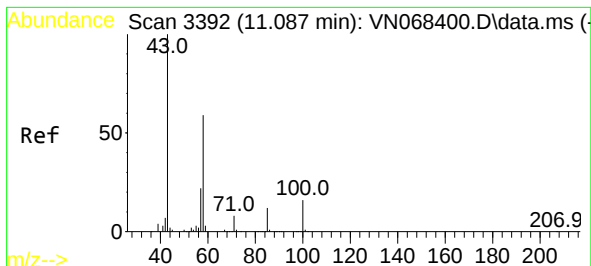
Tgt Ion:117 Resp: 417685
Ion Ratio Lower Upper
117 100
82 50.9 52.5 78.7#
119 32.6 25.8 38.8



#58
4-Methyl-2-Pentanone
Concen: 0.626 ug/l
RT: 10.333 min Scan# 3111
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

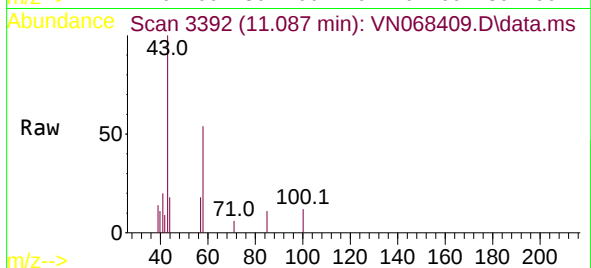
Tgt Ion: 43 Resp: 3044
Ion Ratio Lower Upper
43 100
58 40.4 29.0 43.4
85 13.7 13.2 19.8



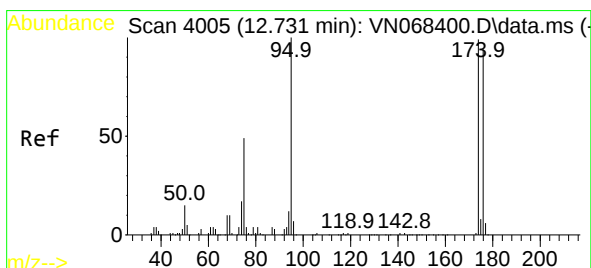
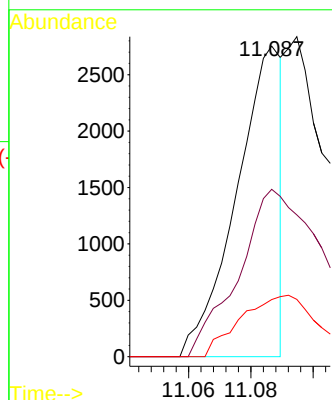
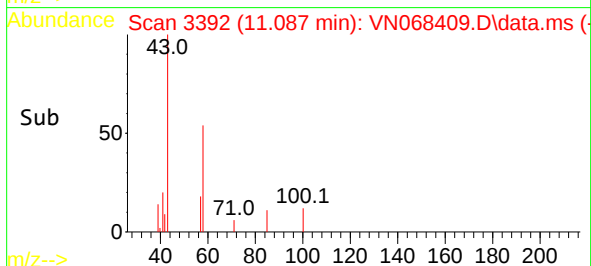


#59
2-Hexanone
Concen: 0.822 ug/l
RT: 11.087 min Scan# 3392
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

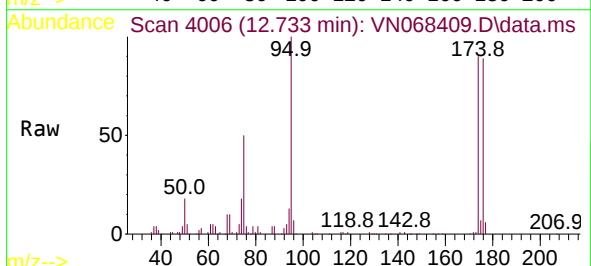
Instrument :
MSVOA_N
ClientSampled :



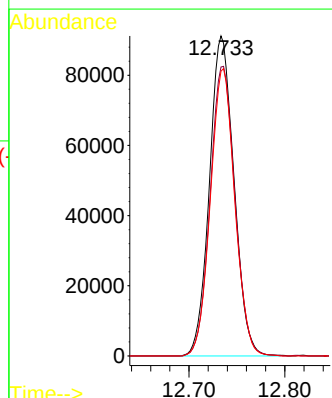
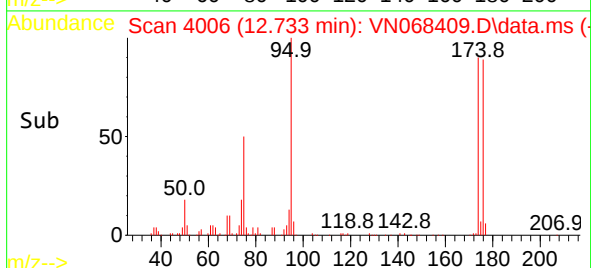
Tgt Ion: 43 Resp: 2773
Ion Ratio Lower Upper
43 100
58 101.2 39.4 59.0#
57 31.7 14.4 21.6#

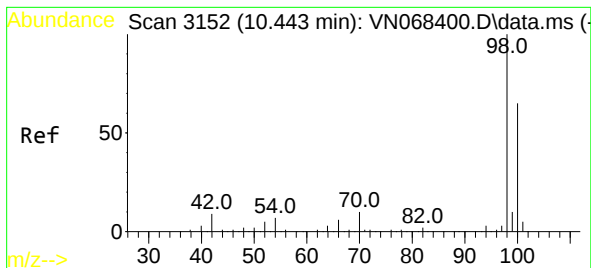


#60
4-Bromofluorobenzene
Concen: 27.429 ug/l
RT: 12.733 min Scan# 4006
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01



Tgt Ion: 95 Resp: 162239
Ion Ratio Lower Upper
95 100
174 91.5 47.7 71.5#
176 89.3 45.7 68.5#

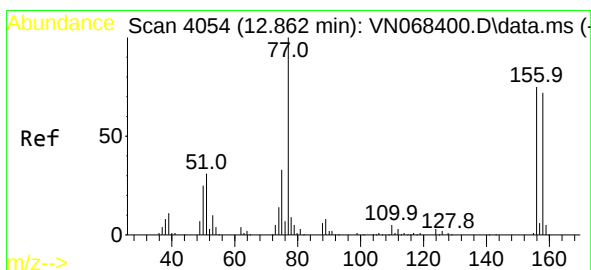
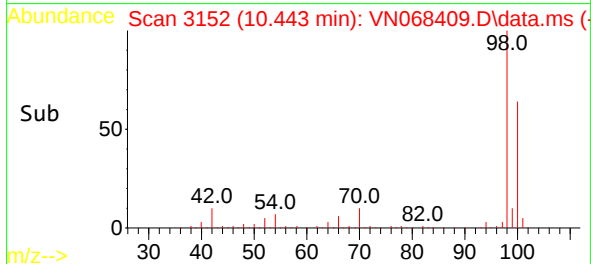
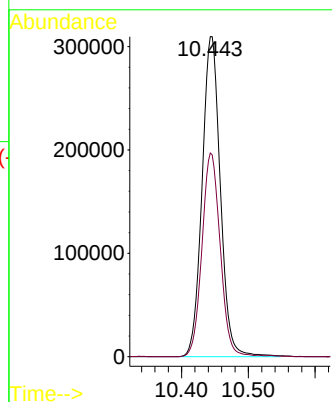
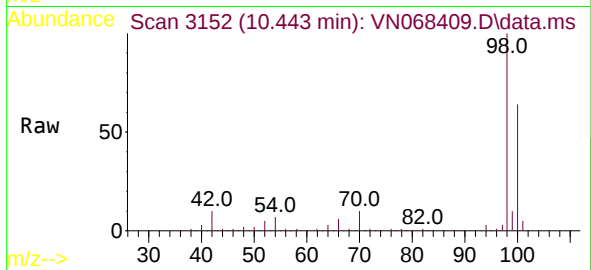




#63
Toluene-d8
Concen: 31.690 ug/l
RT: 10.443 min Scan# 3152
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

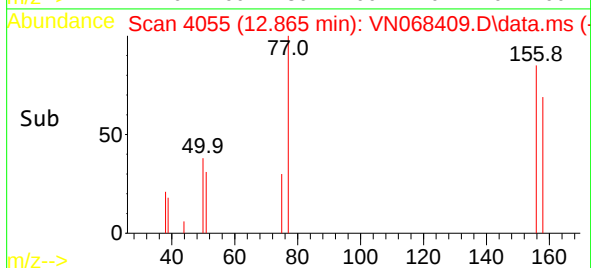
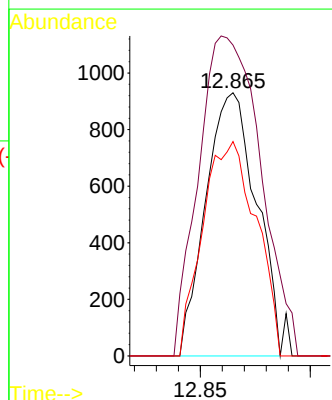
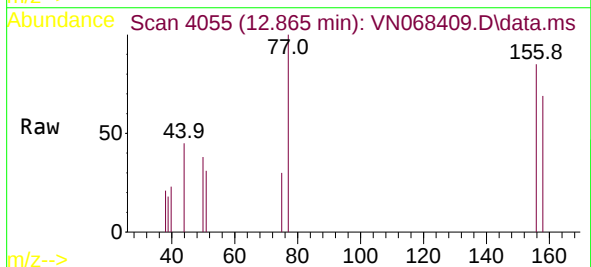
Instrument :
MSVOA_N
ClientSampled :

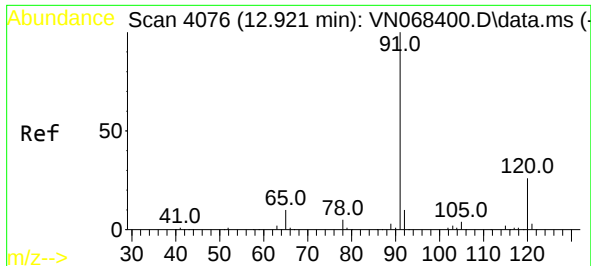
Tgt Ion: 98 Resp: 589460
Ion Ratio Lower Upper
98 100
100 63.2 51.2 76.8



#73
Bromobenzene
Concen: 0.213 ug/l
RT: 12.865 min Scan# 4055
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 156 Resp: 1485
Ion Ratio Lower Upper
156 100
77 149.8 0.0 548.0
158 35.5 0.0 194.0

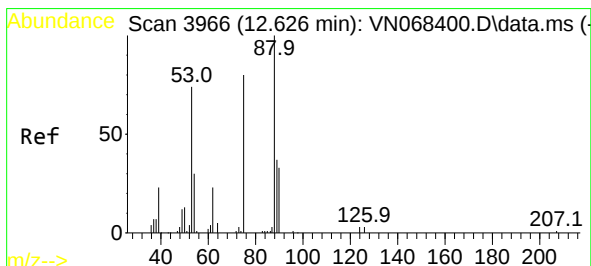
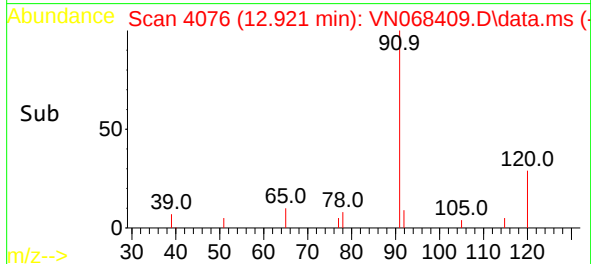
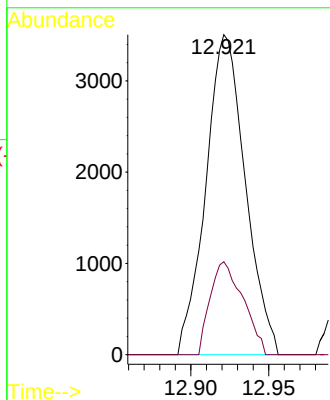
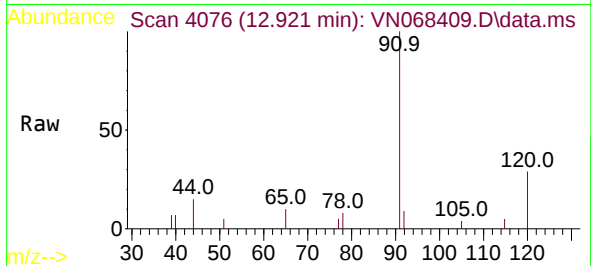




#74
n-propylbenzene
Concen: 0.227 ug/l
RT: 12.921 min Scan# 4076
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

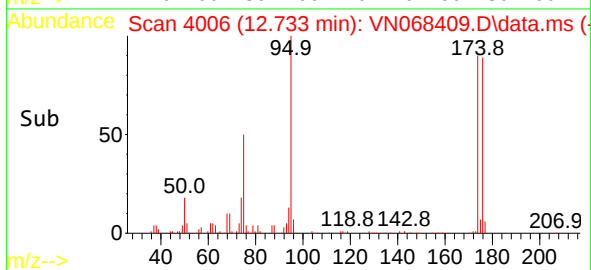
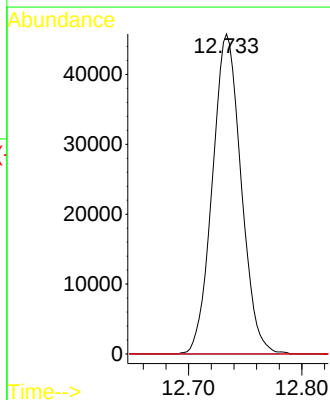
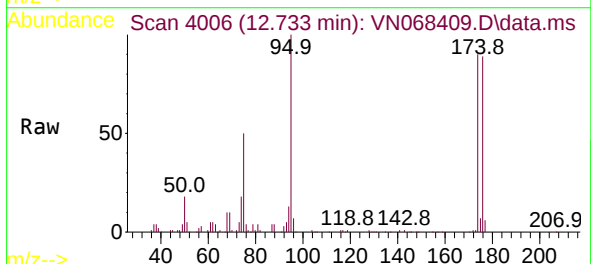
Instrument :
MSVOA_N
ClientSampled :

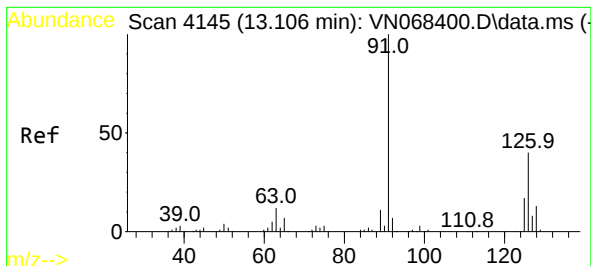
Tgt Ion: 91 Resp: 6180
Ion Ratio Lower Upper
91 100
120 24.2 0.0 41.0



#77
t-1,4-Dichloro-2-butene
Concen: 50.163 ug/l
RT: 12.733 min Scan# 4006
Delta R.T. 0.107 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 75 Resp: 80460
Ion Ratio Lower Upper
75 100
53 0.0 55.2 165.6#
89 0.0 24.5 73.5#

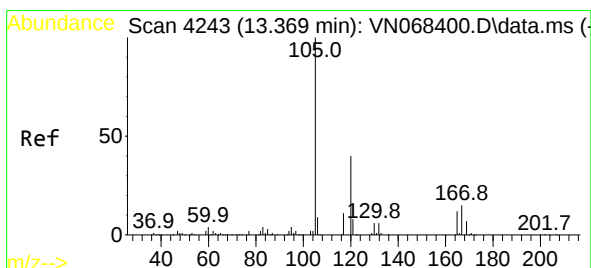
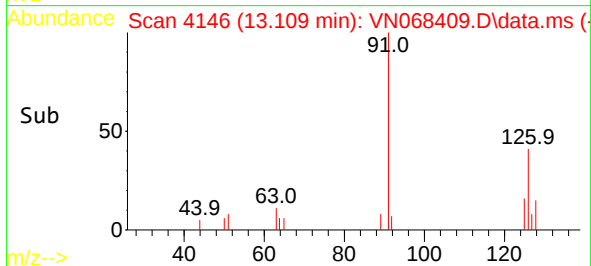
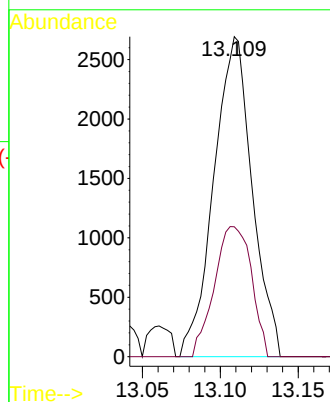
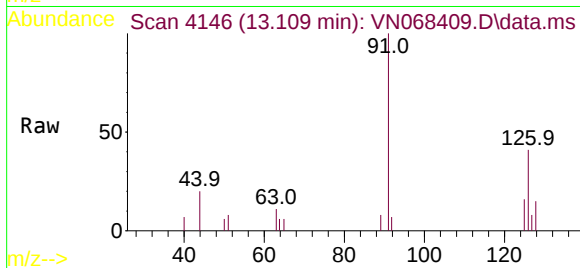




#78
4-Chlorotoluene
Concen: 0.290 ug/l
RT: 13.109 min Scan# 4146
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

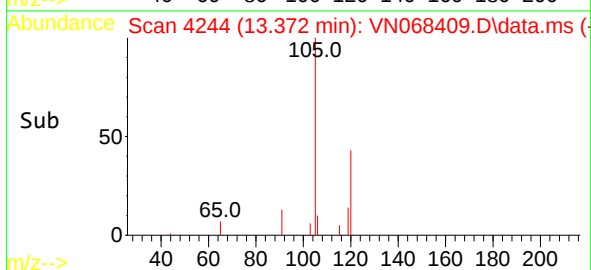
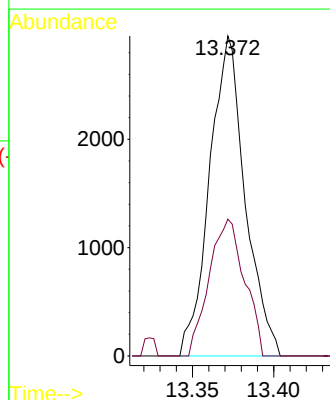
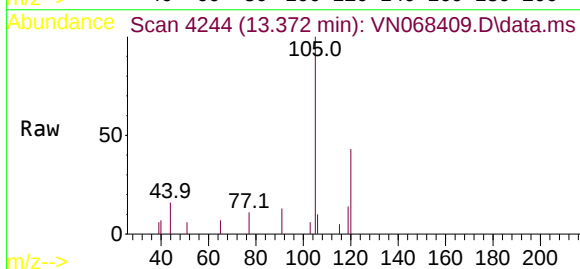
Instrument :
MSVOA_N
ClientSampled :

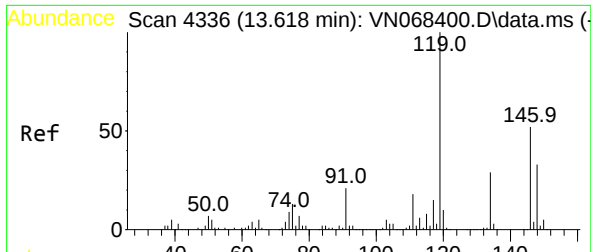
Tgt Ion: 91 Resp: 4604
Ion Ratio Lower Upper
91 100
126 39.3 0.0 57.6



#80
1,2,4-Trimethylbenzene
Concen: 0.221 ug/l
RT: 13.372 min Scan# 4244
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 105 Resp: 4491
Ion Ratio Lower Upper
105 100
120 42.4 0.0 0.4#

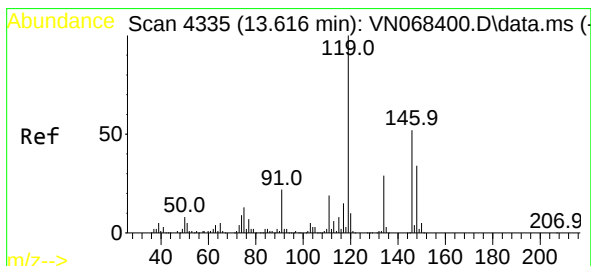
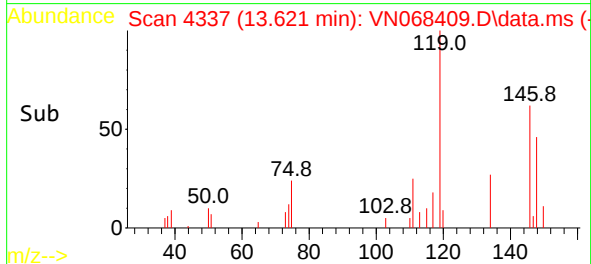
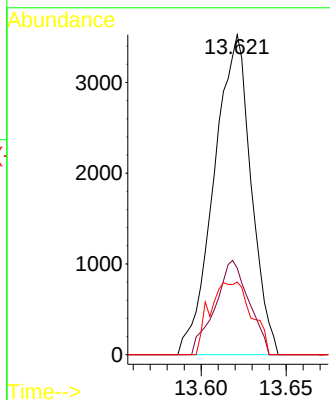
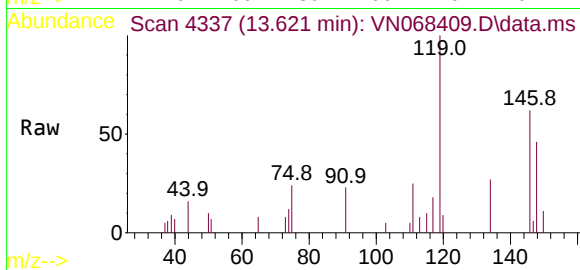




#82
p-Isopropyltoluene
Concen: 0.243 ug/l
RT: 13.621 min Scan# 4337
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

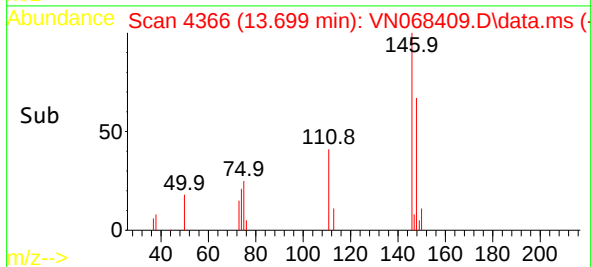
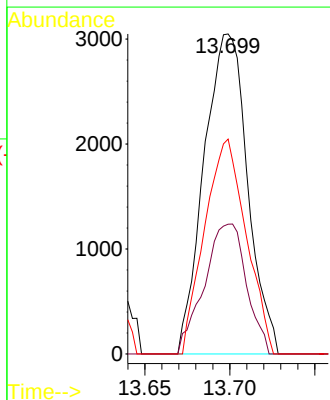
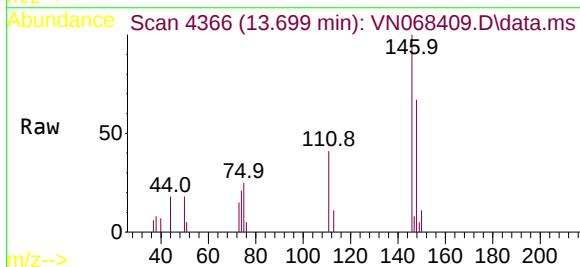
Instrument :
MSVOA_N
ClientSampled :

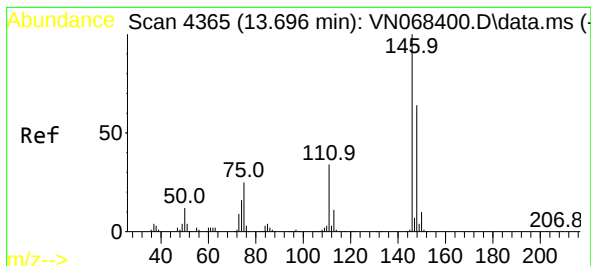
Tgt Ion:119 Resp: 5353
Ion Ratio Lower Upper
119 100
134 27.0 0.0 49.0
91 5.6 0.0 59.6



#83
1,3-Dichlorobenzene
Concen: 0.441 ug/l
RT: 13.699 min Scan# 4366
Delta R.T. 0.083 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion:146 Resp: 5435
Ion Ratio Lower Upper
146 100
111 39.3 25.0 75.0
148 64.0 32.6 97.7

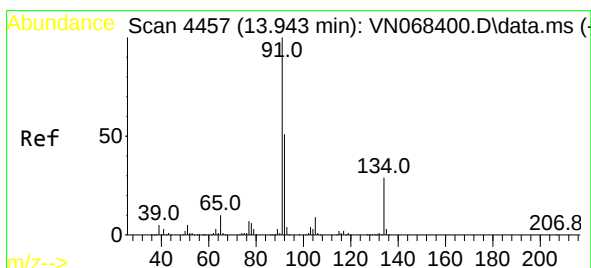
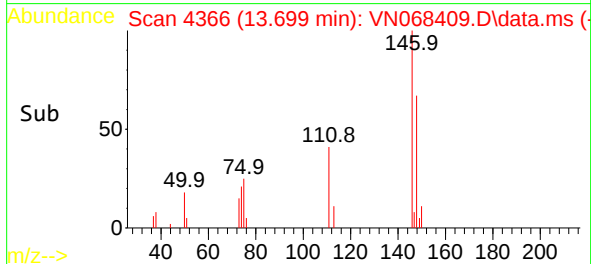
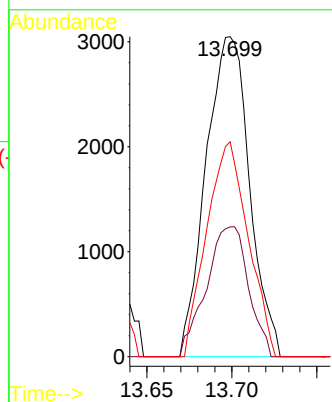
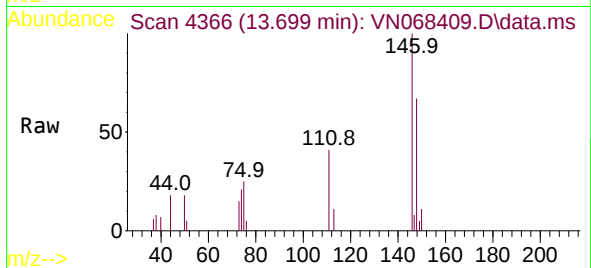




#84
1,4-Dichlorobenzene
Concen: 0.457 ug/l
RT: 13.699 min Scan# 4366
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

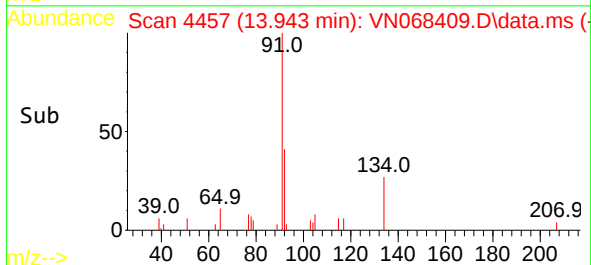
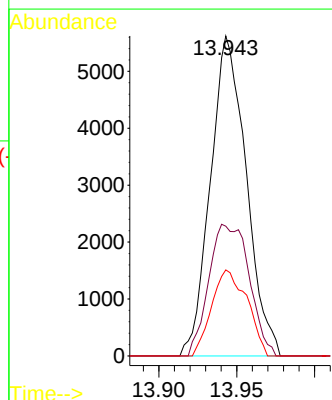
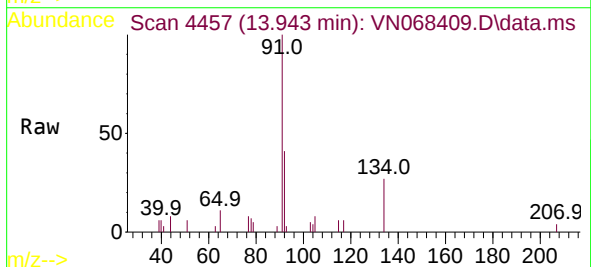
Instrument :
MSVOA_N
ClientSampled :

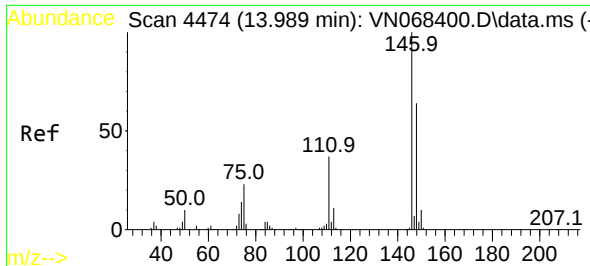
Tgt Ion:146 Resp: 5435
Ion Ratio Lower Upper
146 100
111 39.3 23.6 71.0
148 64.0 31.8 95.3



#85
n-Butylbenzene
Concen: 0.546 ug/l
RT: 13.943 min Scan# 4457
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 91 Resp: 8978
Ion Ratio Lower Upper
91 100
92 29.5 0.0 103.0
134 26.6 0.0 43.6

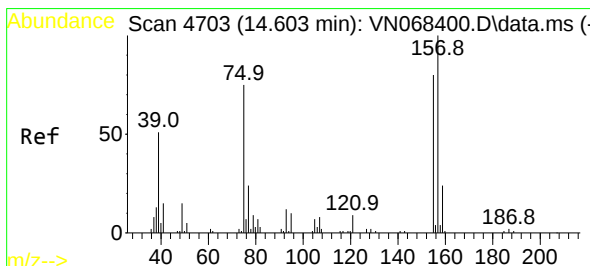
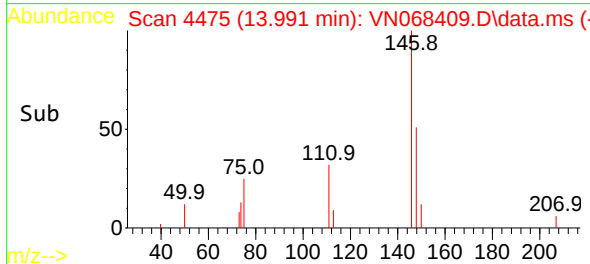
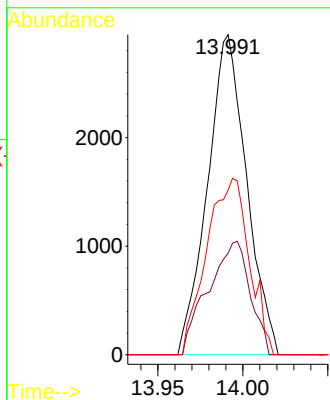
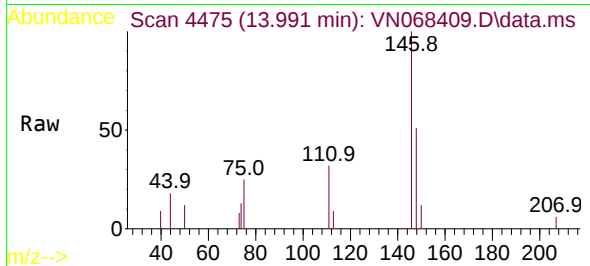




#87
1,2-Dichlorobenzene
Concen: 0.402 ug/l
RT: 13.991 min Scan# 4475
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

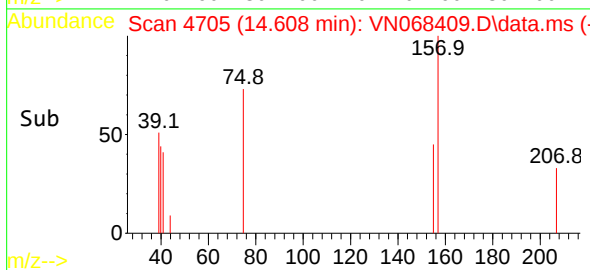
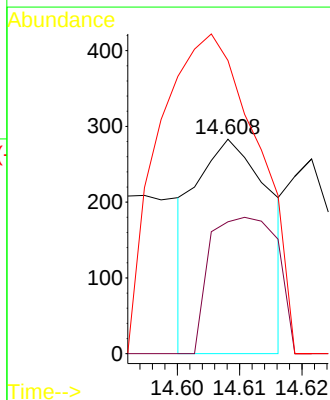
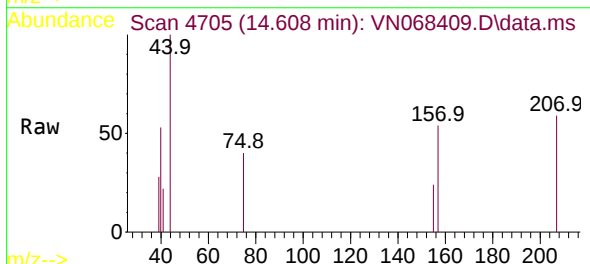
Instrument :
MSVOA_N
ClientSampled :

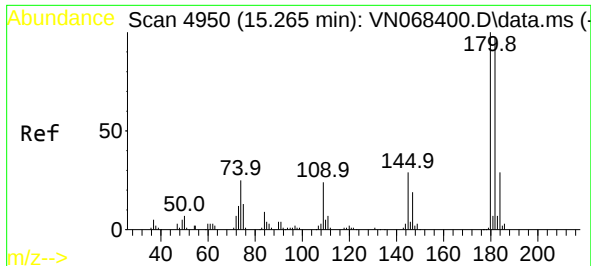
Tgt Ion:146 Resp: 4711
Ion Ratio Lower Upper
146 100
111 38.1 25.0 75.0
148 56.5 32.0 96.0



#88
1,2-Dibromo-3-Chloropropane
Concen: 0.209 ug/l
RT: 14.608 min Scan# 4705
Delta R.T. 0.005 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion: 75 Resp: 233
Ion Ratio Lower Upper
75 100
155 0.0 45.3 67.9#
157 200.0 58.6 87.8#

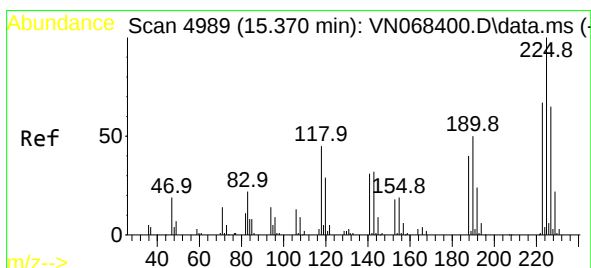
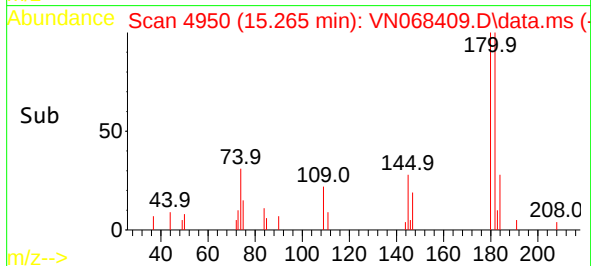
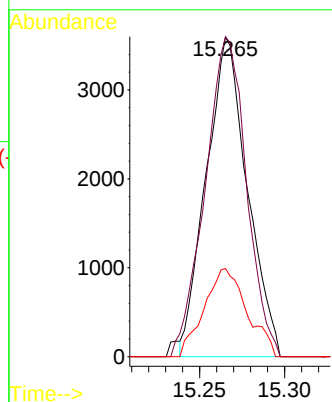
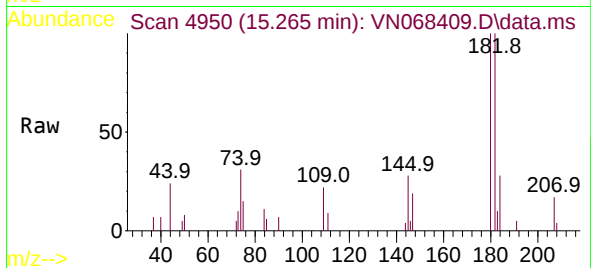




#89
1,2,4-Trichlorobenzene
Concen: 0.960 ug/l
RT: 15.265 min Scan# 4950
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

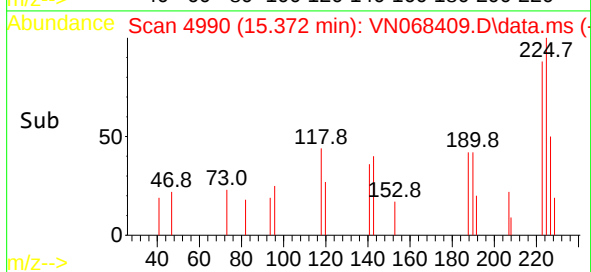
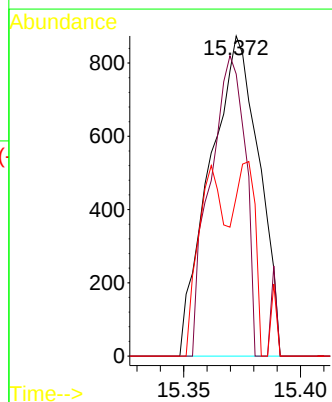
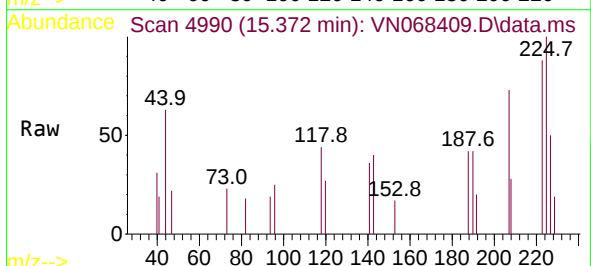
Instrument :
MSVOA_N
ClientSampled :

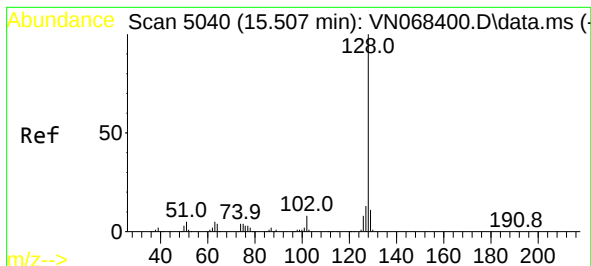
Tgt Ion:180 Resp: 6046
Ion Ratio Lower Upper
180 100
182 100.4 75.9 113.9
145 25.8 28.8 43.2#



#90
Hexachlorobutadiene
Concen: 0.344 ug/l
RT: 15.372 min Scan# 4990
Delta R.T. 0.003 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion:225 Resp: 1274
Ion Ratio Lower Upper
225 100
223 66.9 0.0 129.6
227 24.1 0.0 131.2

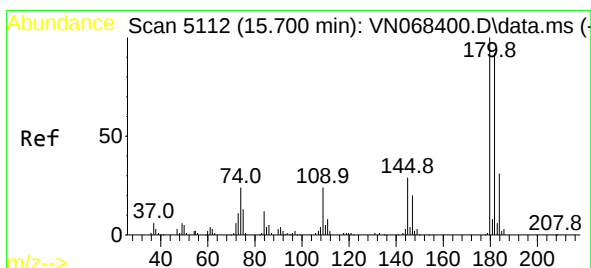
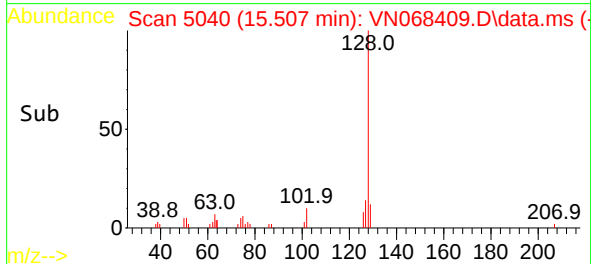
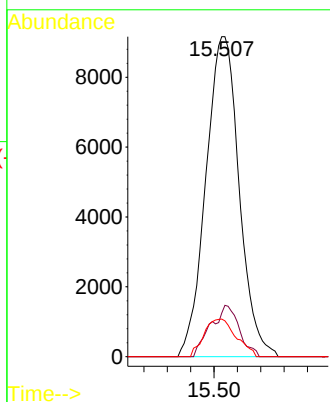
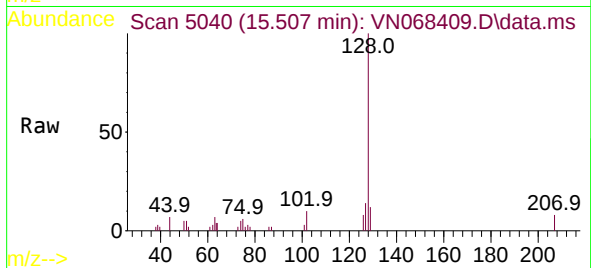




#91
Naphthalene
Concen: 1.363 ug/l
RT: 15.507 min Scan# 5040
Delta R.T. 0.000 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Instrument :
MSVOA_N
ClientSampled :

Tgt Ion:128 Resp: 18140
Ion Ratio Lower Upper
128 100
127 9.5 10.1 15.1#
129 11.3 8.9 13.3



#92
1,2,3-Trichlorobenzene
Concen: 1.267 ug/l
RT: 15.705 min Scan# 5114
Delta R.T. 0.005 min
Lab File: VN068409.D
Acq: 3 Sep 2021 16:01

Tgt Ion:180 Resp: 7590
Ion Ratio Lower Upper
180 100
182 97.4 0.0 184.6
145 28.5 0.0 76.0

