

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN030923\
 Data File : VN076894.D
 Acq On : 09 Mar 2023 11:23
 Operator : JC\MD
 Sample : VN0309WBL01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 VN0309WBL01

Quant Time: Mar 10 01:29:58 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N030823W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Mar 09 04:16:54 2023
 Response via : Initial Calibration

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

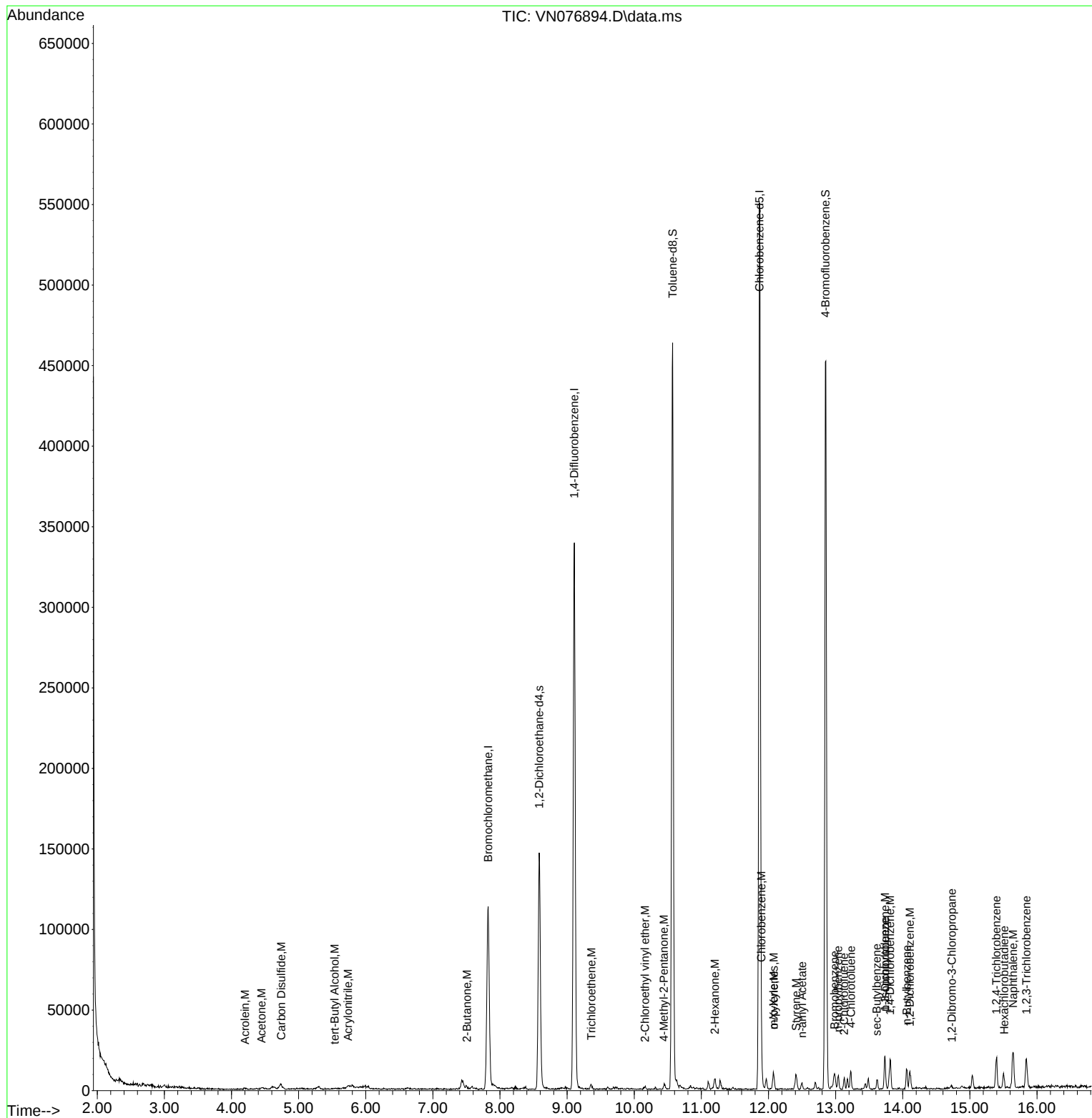
Internal Standards						
1) Bromochloromethane	7.825	128	42078	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.107	114	288059	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.866	117	321660	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.583	65	120709	31.210	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	104.033%
60) 4-Bromofluorobenzene	12.848	95	172741	28.375	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	94.567%
63) Toluene-d8	10.572	98	327566	28.953	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	96.500%
Target Compounds						
					Qvalue	
13) Acrolein	4.201	56	796	0.710	ug/l #	35
14) Acrylonitrile	5.737	53	1271	0.509	ug/l #	72
15) Acetone	4.448	58	226	0.332	ug/l #	1
16) Carbon Disulfide	4.743	76	5714	0.447	ug/l	100
23) tert-Butyl Alcohol	5.537	59	239	0.329	ug/l #	100
30) 2-Butanone	7.507	43	1219	0.394	ug/l #	92
37) Trichloroethene	9.360	130	1145	0.223	ug/l #	73
47) n-amyl Acetate	12.501	43	2097	0.254	ug/l #	78
55) 2-Chloroethyl vinyl ether	10.160	63	679	0.263	ug/l #	54
58) 4-Methyl-2-Pentanone	10.442	43	2485	0.382	ug/l #	69
59) 2-Hexanone	11.201	43	5393	1.168	ug/l #	90
64) Chlorobenzene	11.895	112	4062	0.311	ug/l	97
67) m/p-Xylenes	12.077	106	3558	0.390	ug/l	99
68) o-Xylene	12.077	106	3558	0.400	ug/l	88
69) Styrene	12.413	104	3960	0.274	ug/l	94
73) Bromobenzene	12.983	156	2479	0.474	ug/l	87
74) n-propylbenzene	13.036	91	7772	0.284	ug/l	96
75) 2-Chlorotoluene	13.124	91	4499	0.266	ug/l	99
78) 4-Chlorotoluene	13.230	91	7509	0.461	ug/l	89
81) sec-Butylbenzene	13.613	105	4870	0.203	ug/l	93
82) p-Isopropyltoluene	13.736	119	4253	0.219	ug/l	92
83) 1,3-Dichlorobenzene	13.736	146	6245	0.646	ug/l	95
84) 1,4-Dichlorobenzene	13.813	146	6642	0.707	ug/l	79
85) n-Butylbenzene	14.060	91	7200	0.438	ug/l	88
87) 1,2-Dichlorobenzene	14.107	146	5413	0.561	ug/l	78
88) 1,2-Dibromo-3-Chloropr...	14.730	75	822	0.604	ug/l #	63
89) 1,2,4-Trichlorobenzene	15.395	180	6882	1.338	ug/l	95
90) Hexachlorobutadiene	15.512	225	766	0.283	ug/l	75
91) Naphthalene	15.642	128	21538	1.320	ug/l #	79
92) 1,2,3-Trichlorobenzene	15.842	180	6494	1.260	ug/l	98

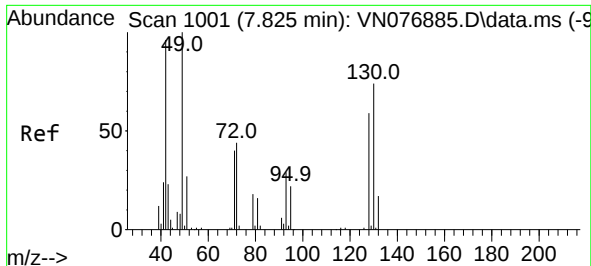
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN030923\
Data File : VN076894.D
Acq On : 09 Mar 2023 11:23
Operator : JC\MD
Sample : VN0309WBL01
Misc : 5.0mL/MSVOA_N/WATER
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

Quant Time: Mar 10 01:29:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N030823W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Mar 09 04:16:54 2023
Response via : Initial Calibration

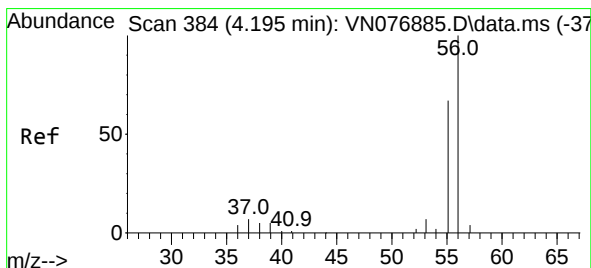
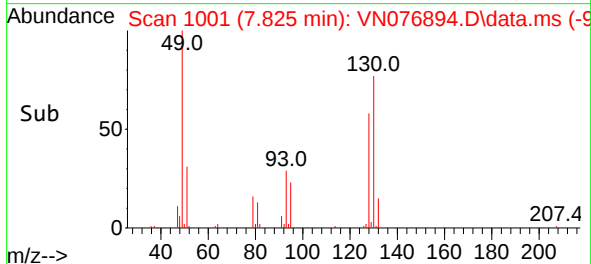
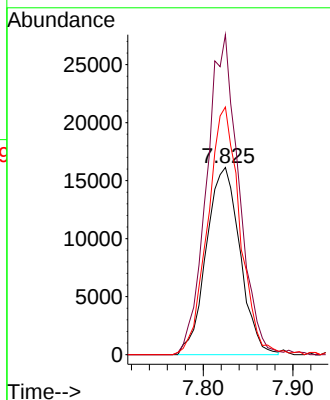
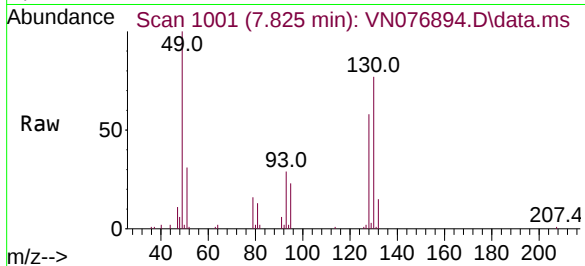




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.825 min Scan# 1
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

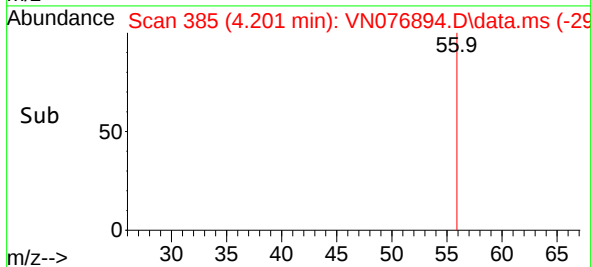
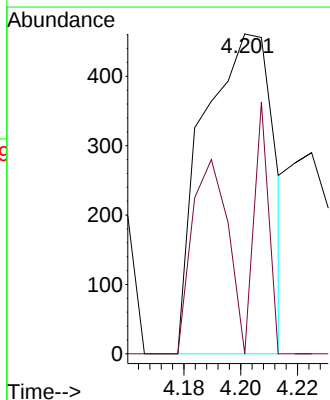
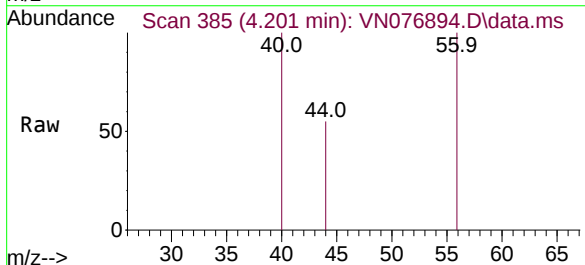
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

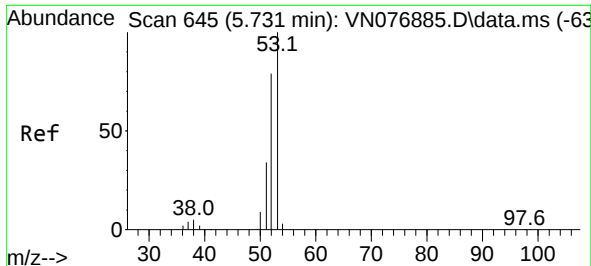
Tgt Ion:128 Resp: 42078
Ion Ratio Lower Upper
128 100
49 162.9 0.0 461.8
130 126.1 0.0 295.3



#13
Acrolein
Concen: 0.710 ug/l
RT: 4.201 min Scan# 385
Delta R.T. 0.011 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 56 Resp: 796
Ion Ratio Lower Upper
56 100
55 16.1 55.0 82.4#

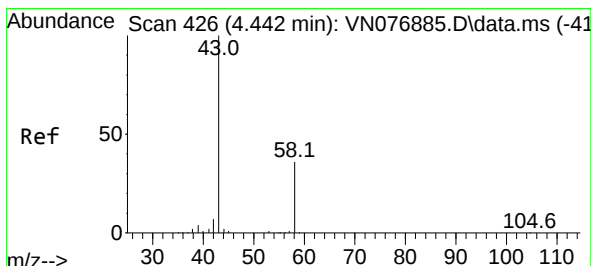
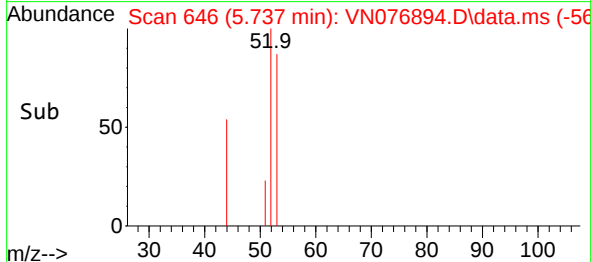
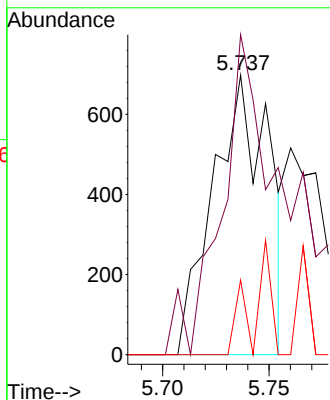
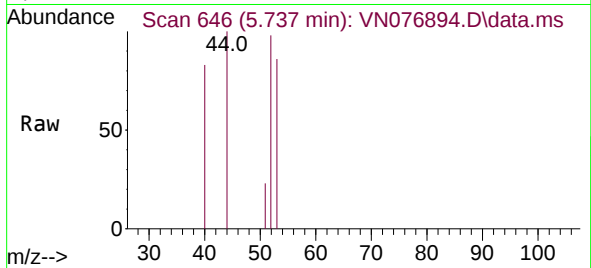




#14
Acrylonitrile
Concen: 0.509 ug/l
RT: 5.737 min Scan# 645
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

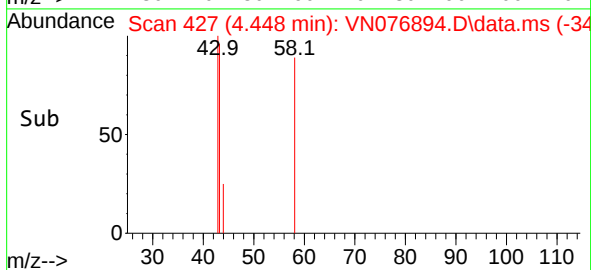
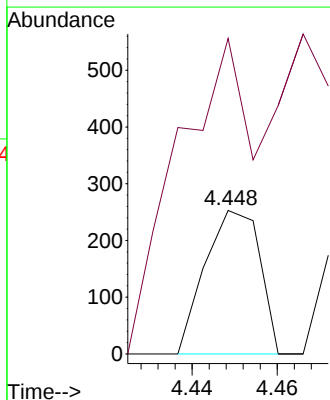
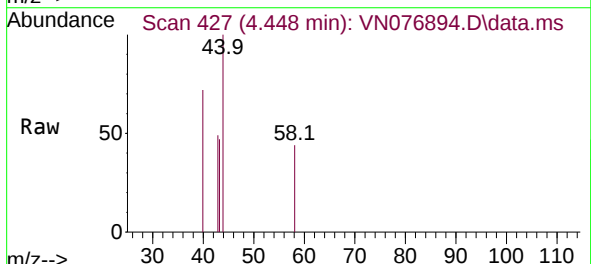
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

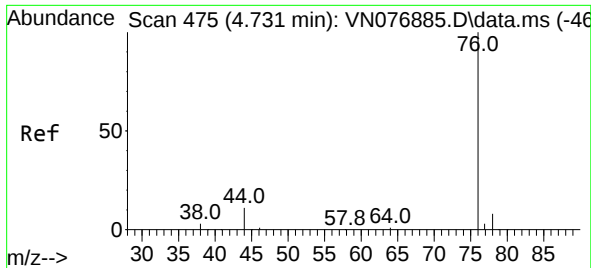
Tgt Ion: 53 Resp: 1271
Ion Ratio Lower Upper
53 100
52 99.1 41.5 124.6
51 5.2 17.6 52.8#



#15
Acetone
Concen: 0.332 ug/l
RT: 4.448 min Scan# 427
Delta R.T. 0.011 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 58 Resp: 226
Ion Ratio Lower Upper
58 100
43 62.1 255.4 383.0#

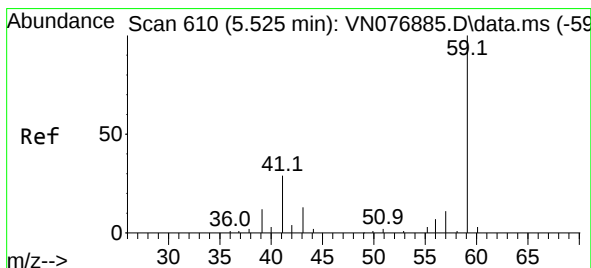
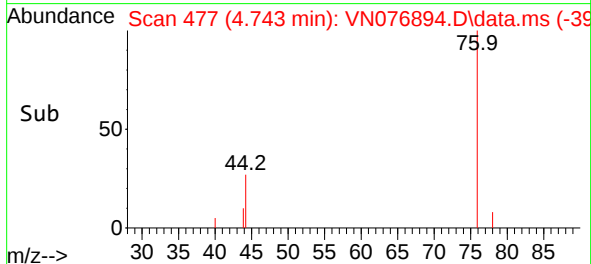
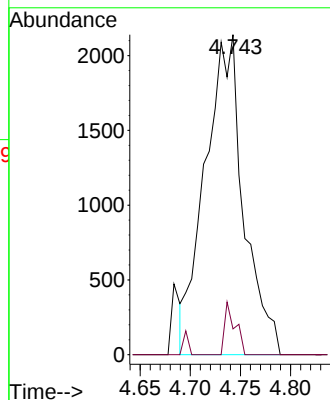
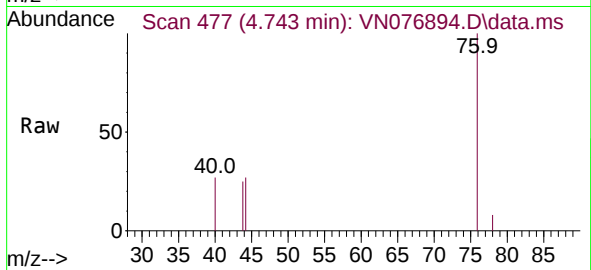




#16
Carbon Disulfide
Concen: 0.447 ug/l
RT: 4.743 min Scan# 41
Delta R.T. 0.012 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

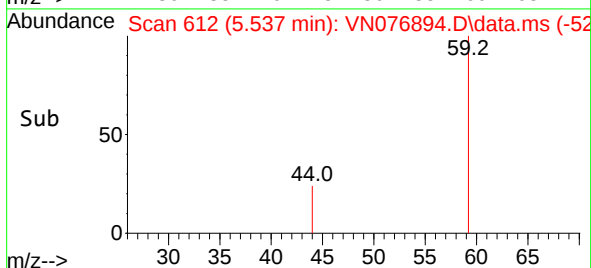
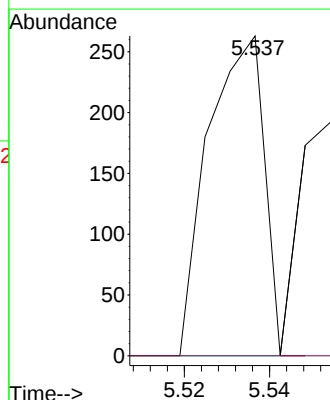
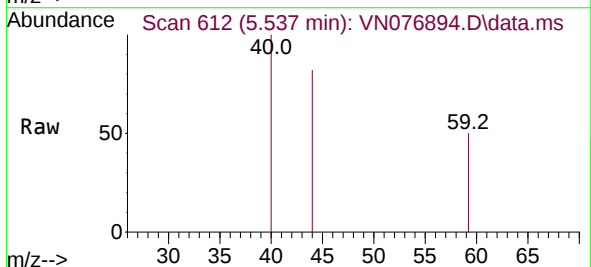
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

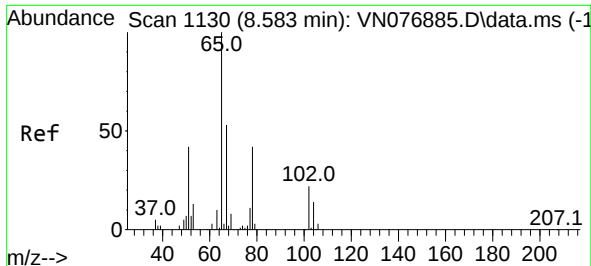
Tgt Ion: 76 Resp: 5714
Ion Ratio Lower Upper
76 100
78 8.1 6.6 9.8



#23
tert-Butyl Alcohol
Concen: 0.329 ug/l
RT: 5.537 min Scan# 612
Delta R.T. 0.006 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 59 Resp: 239
Ion Ratio Lower Upper
59 100
52 0.0 0.2 0.2#

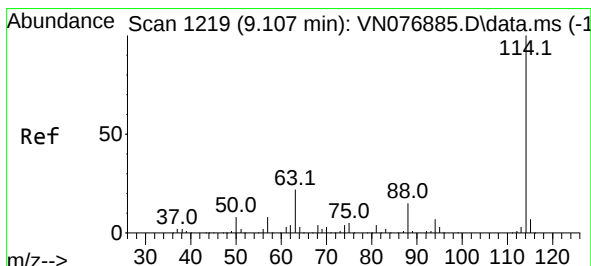
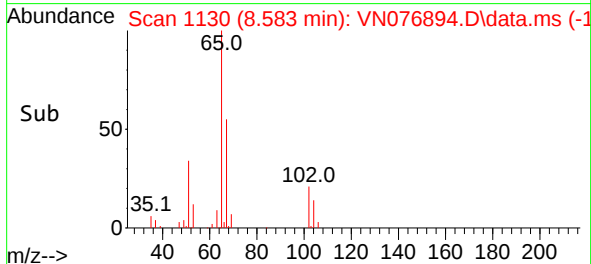
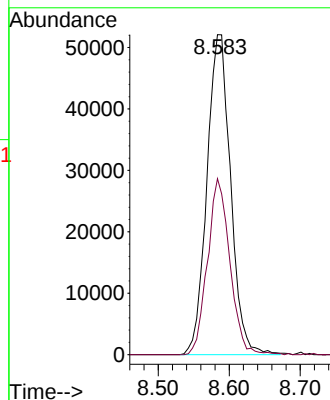
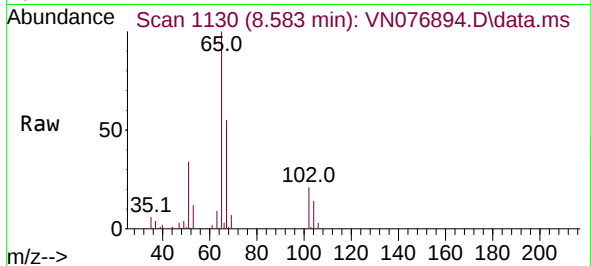




#27
1,2-Dichloroethane-d4
Concen: 31.210 ug/l
RT: 8.583 min Scan# 1130
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

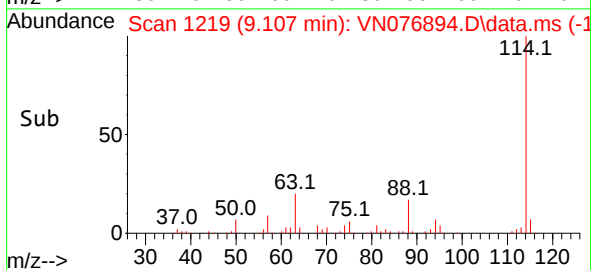
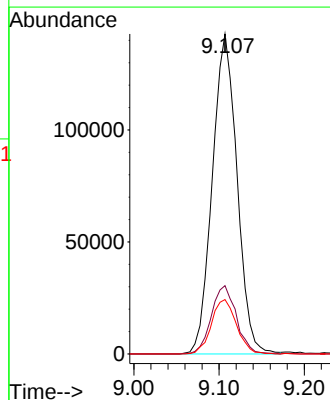
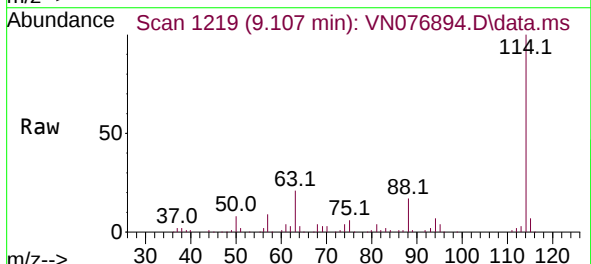
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

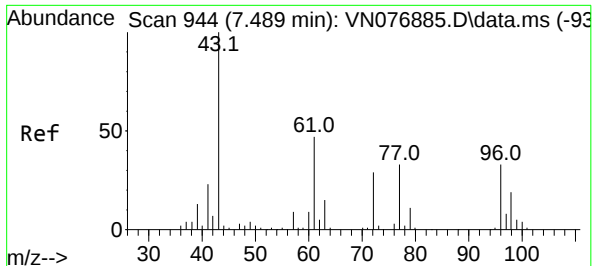
Tgt Ion: 65 Resp: 120709
Ion Ratio Lower Upper
65 100
67 51.7 40.9 61.3



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.107 min Scan# 1219
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 114 Resp: 288059
Ion Ratio Lower Upper
114 100
63 21.7 17.0 25.4
88 17.2 11.6 17.4





#30

2-Butanone

Concen: 0.394 ug/l

RT: 7.507 min Scan# 944

Delta R.T. 0.018 min

Lab File: VN076894.D

Acq: 09 Mar 2023 11:23

Instrument :

MSVOA_N

ClientSampleId :

VN0309WBL01

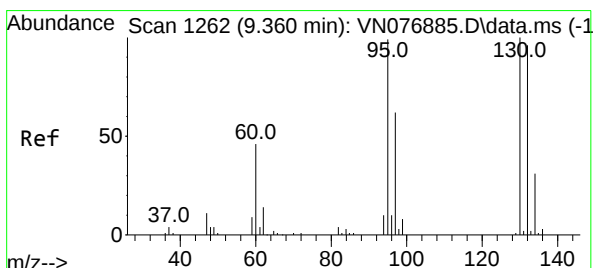
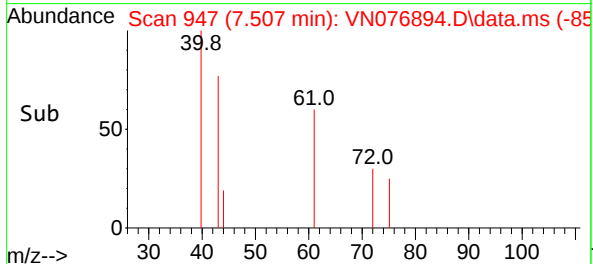
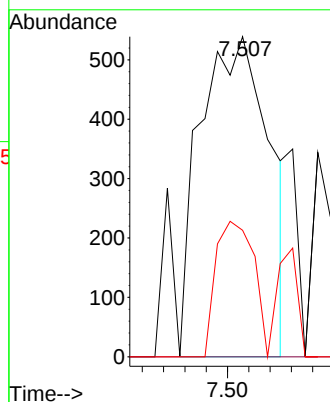
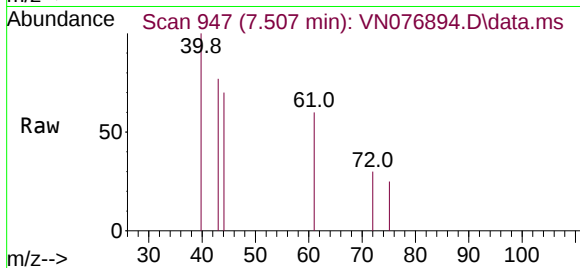
Tgt Ion: 43 Resp: 1219

Ion Ratio Lower Upper

43 100

57 0.0 6.1 9.1#

72 23.1 20.2 30.4



#37

Trichloroethene

Concen: 0.223 ug/l

RT: 9.360 min Scan# 1262

Delta R.T. 0.006 min

Lab File: VN076894.D

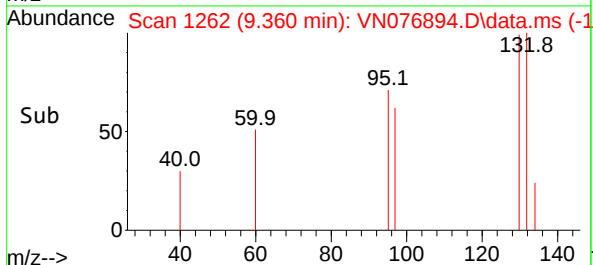
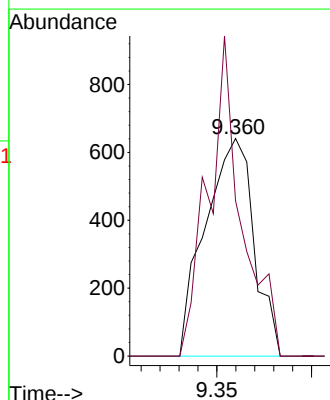
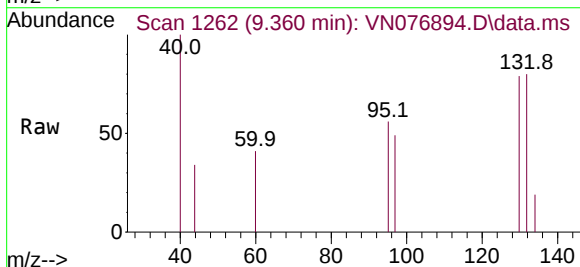
Acq: 09 Mar 2023 11:23

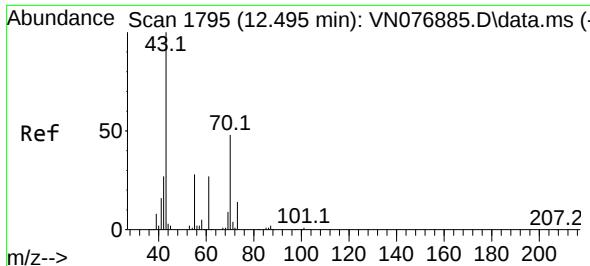
Tgt Ion:130 Resp: 1145

Ion Ratio Lower Upper

130 100

95 71.3 78.7 118.1#

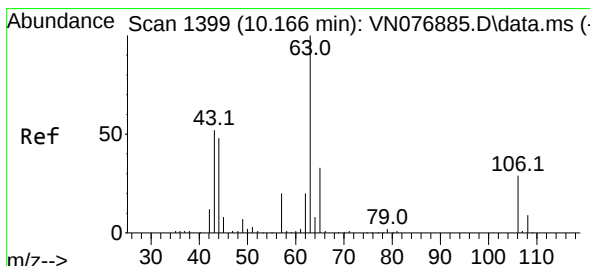
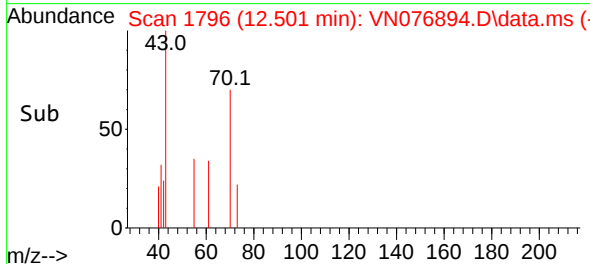
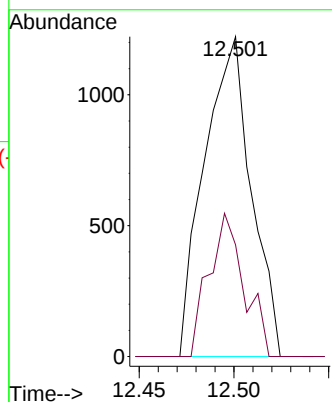
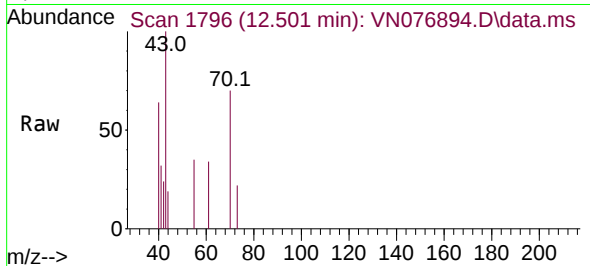




#47
n-amy1 Acetate
Concen: 0.254 ug/l
RT: 12.501 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

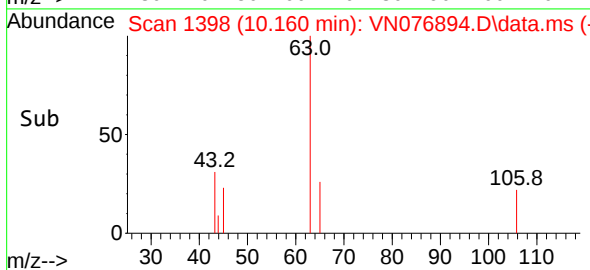
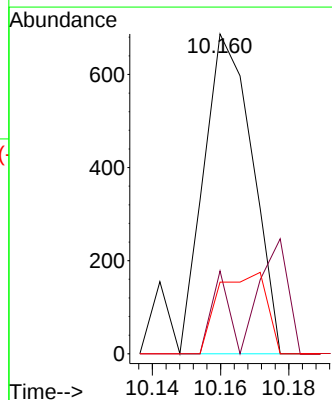
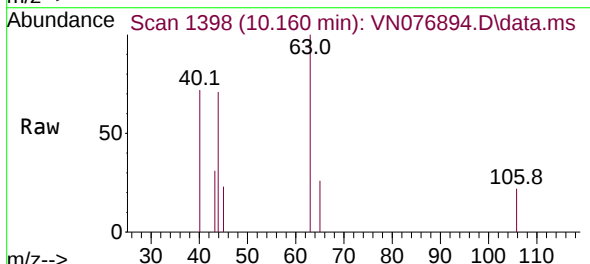
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

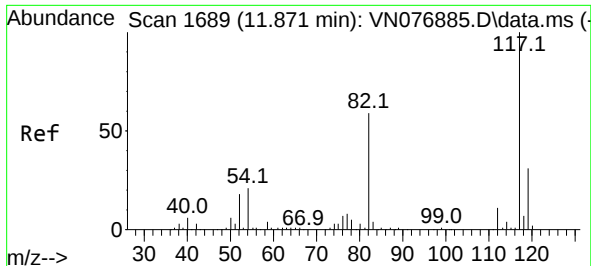
Tgt Ion: 43 Resp: 2097
Ion Ratio Lower Upper
43 100
55 33.8 18.3 27.5#



#55
2-Chloroethyl vinyl ether
Concen: 0.263 ug/l
RT: 10.160 min Scan# 1398
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 63 Resp: 679
Ion Ratio Lower Upper
63 100
65 9.3 26.3 39.5#
106 0.0 21.6 32.4#





#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 11.866 min Scan# 1

Delta R.T. 0.000 min

Lab File: VN076894.D

Acq: 09 Mar 2023 11:23

Instrument :

MSVOA_N

ClientSampleId :

VN0309WBL01

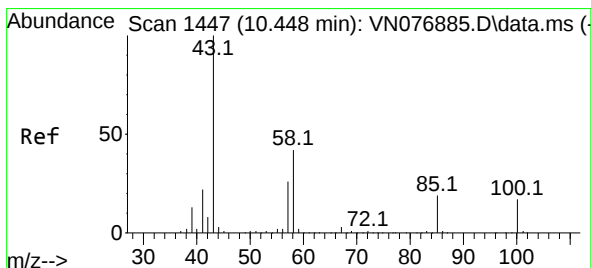
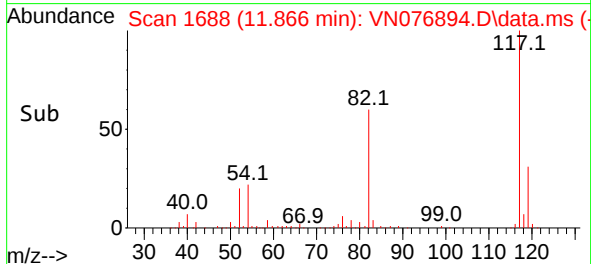
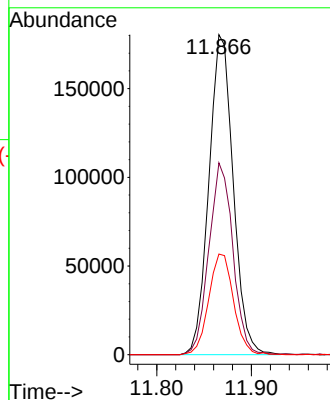
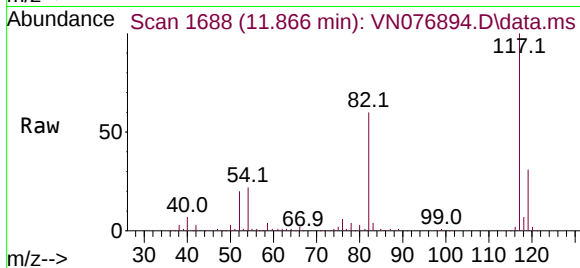
Tgt Ion:117 Resp: 321660

Ion Ratio Lower Upper

117 100

82 59.1 45.4 68.0

119 32.1 26.8 40.2



#58

4-Methyl-2-Pentanone

Concen: 0.382 ug/l

RT: 10.442 min Scan# 1446

Delta R.T. -0.006 min

Lab File: VN076894.D

Acq: 09 Mar 2023 11:23

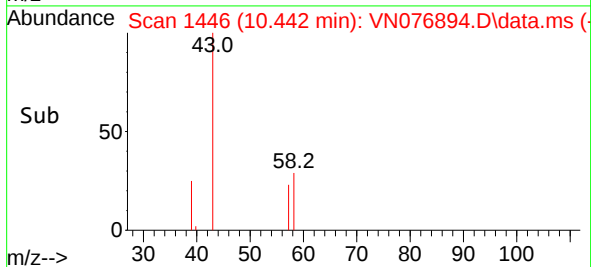
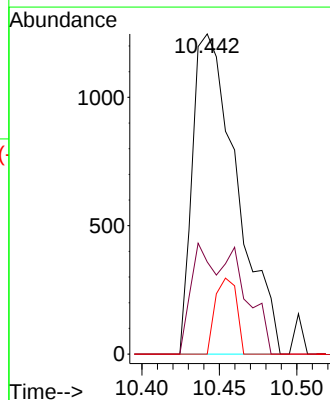
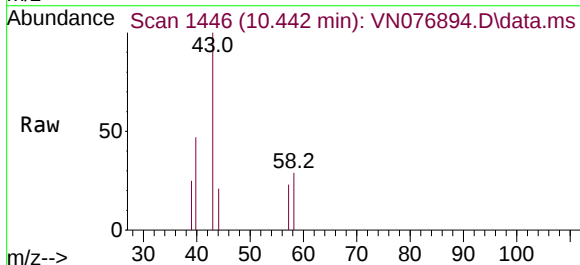
Tgt Ion: 43 Resp: 2485

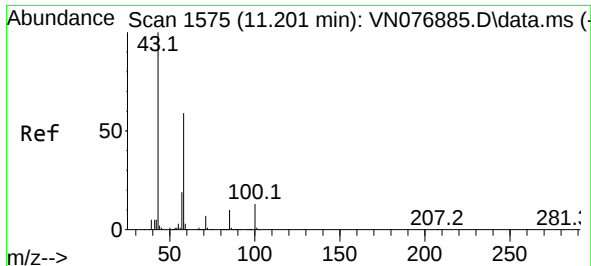
Ion Ratio Lower Upper

43 100

58 18.8 28.6 42.8#

85 0.0 11.8 17.8#

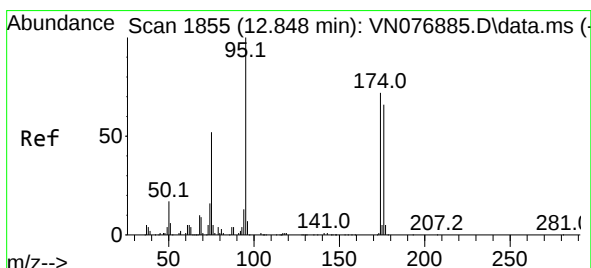
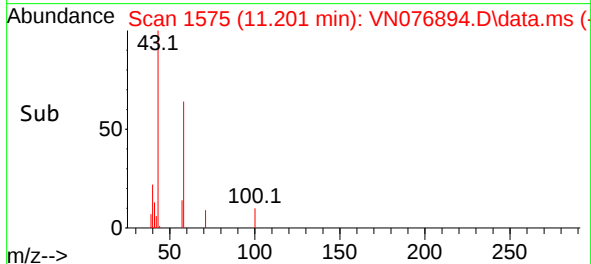
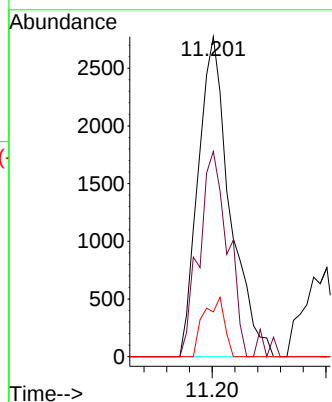
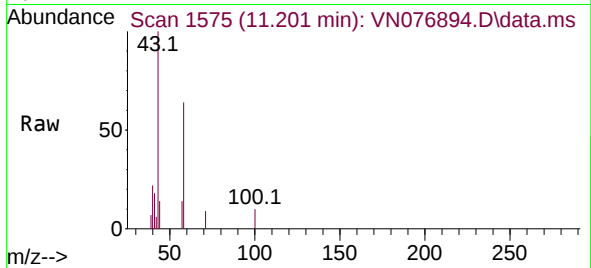




#59
2-Hexanone
Concen: 1.168 ug/l
RT: 11.201 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

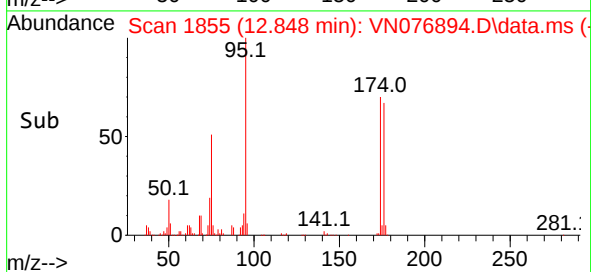
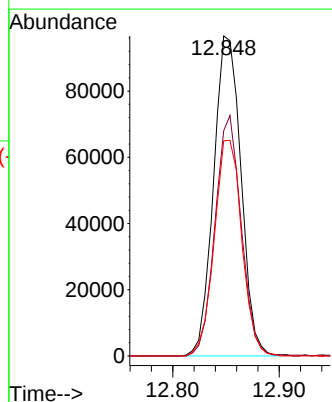
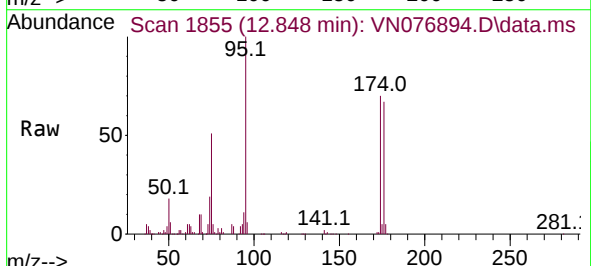
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

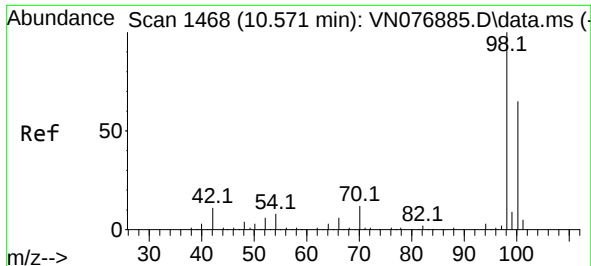
Tgt Ion: 43 Resp: 5393
Ion Ratio Lower Upper
43 100
58 57.8 40.6 60.8
57 12.1 13.1 19.7#



#60
4-Bromofluorobenzene
Concen: 28.375 ug/l
RT: 12.848 min Scan# 1855
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 95 Resp: 172741
Ion Ratio Lower Upper
95 100
174 71.5 64.2 96.4
176 67.7 61.4 92.0

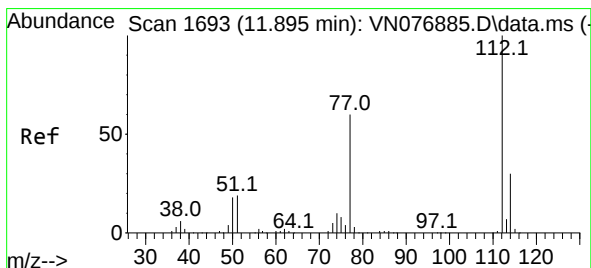
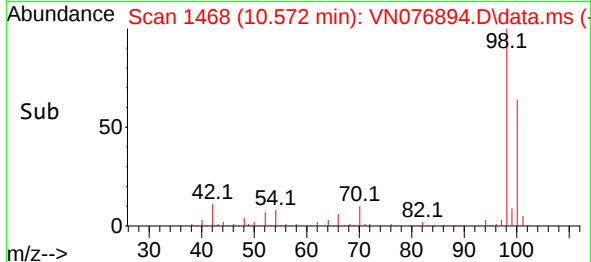
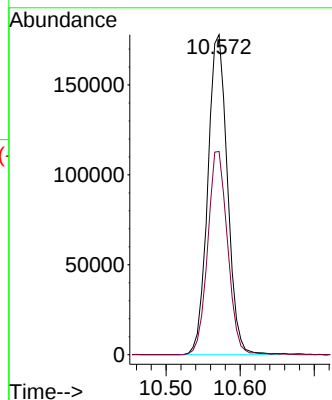
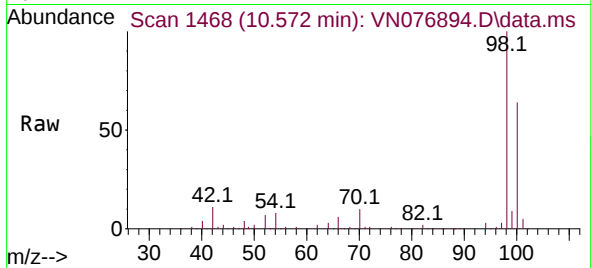




#63
Toluene-d8
Concen: 28.953 ug/l
RT: 10.572 min Scan# 1468
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

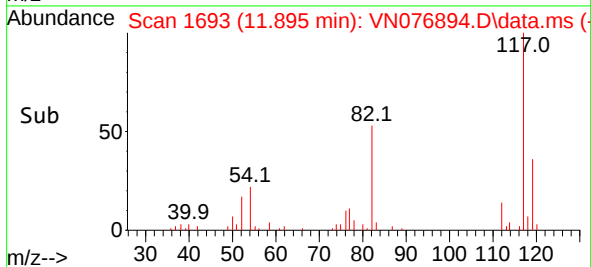
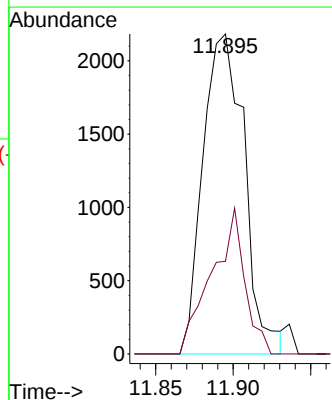
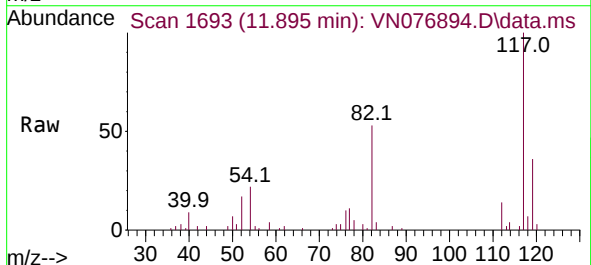
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

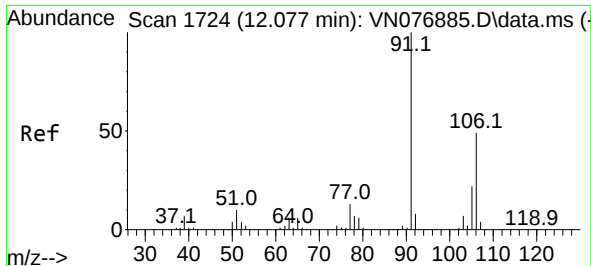
Tgt Ion: 98 Resp: 327566
Ion Ratio Lower Upper
98 100
100 64.3 53.8 80.6



#64
Chlorobenzene
Concen: 0.311 ug/l
RT: 11.895 min Scan# 1693
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 112 Resp: 4062
Ion Ratio Lower Upper
112 100
114 29.0 24.5 36.7

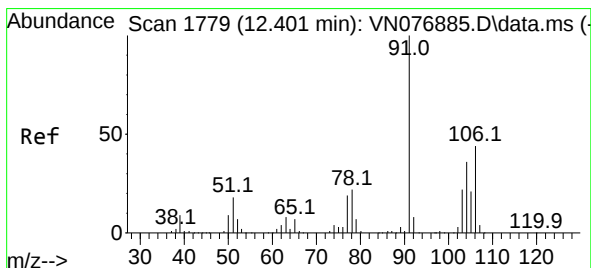
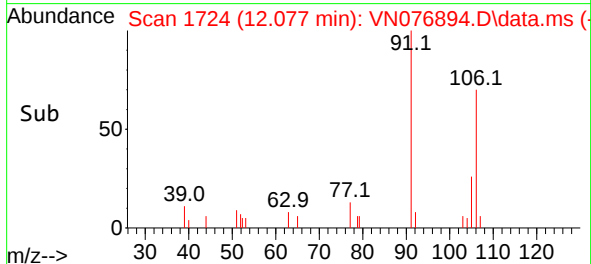
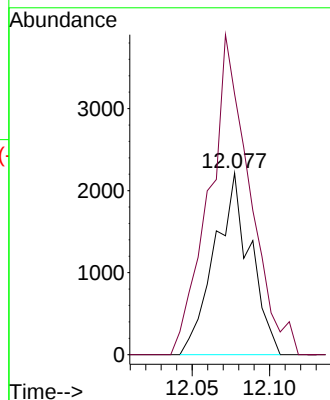
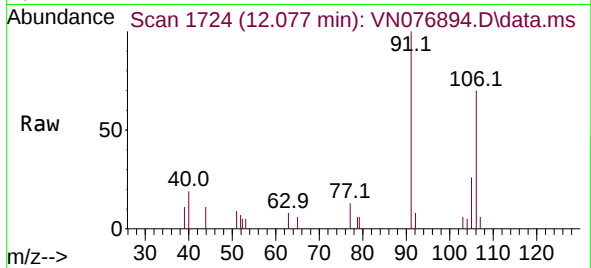




#67
m/p-Xylenes
Concen: 0.390 ug/l
RT: 12.077 min Scan# 1724
Delta R.T. 0.006 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

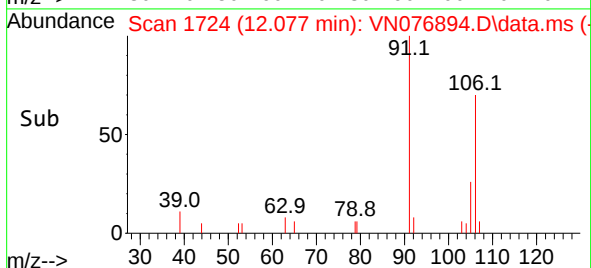
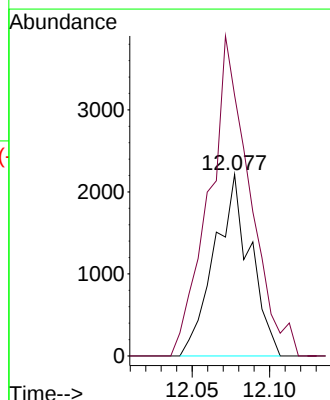
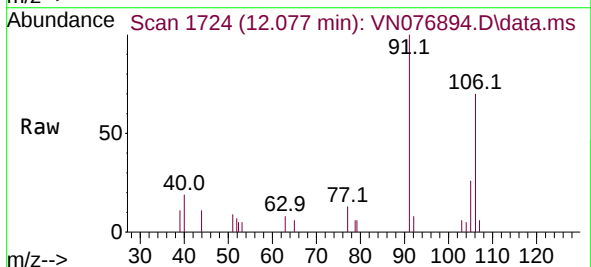
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

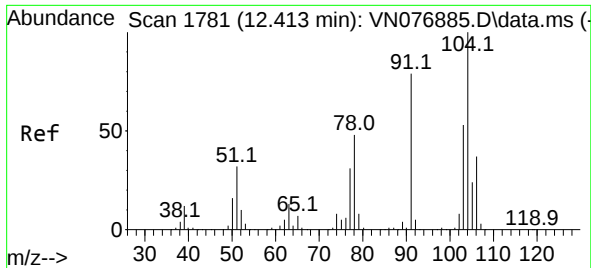
Tgt Ion:106 Resp: 3558
Ion Ratio Lower Upper
106 100
91 195.5 157.4 236.2



#68
o-Xylene
Concen: 0.400 ug/l
RT: 12.077 min Scan# 1724
Delta R.T. -0.324 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion:106 Resp: 3558
Ion Ratio Lower Upper
106 100
91 195.5 107.2 321.6

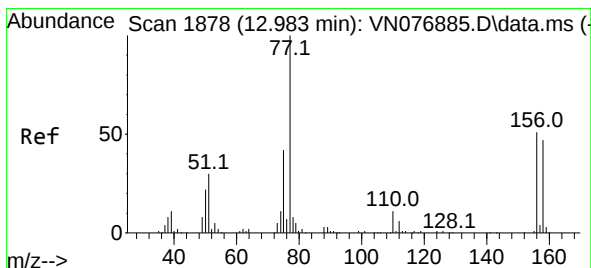
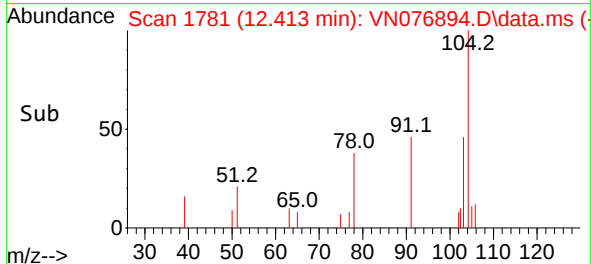
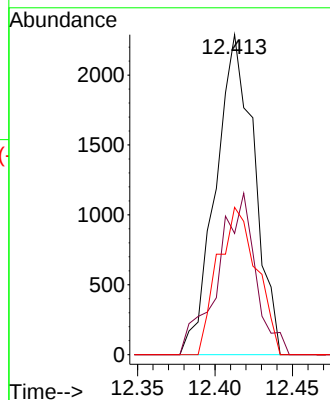
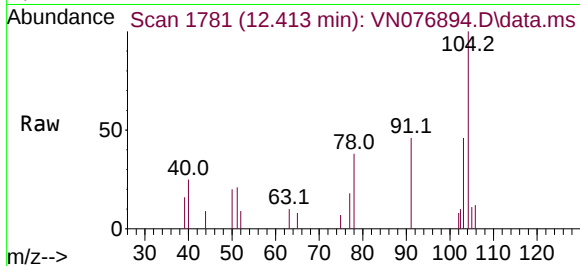




#69
Styrene
Concen: 0.274 ug/l
RT: 12.413 min Scan# 1781
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

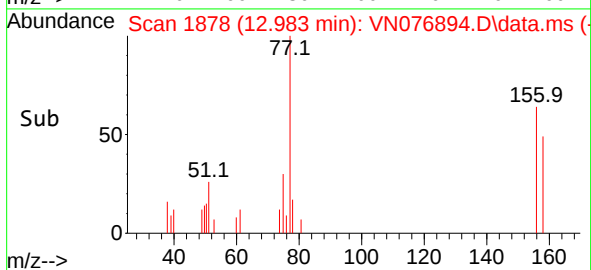
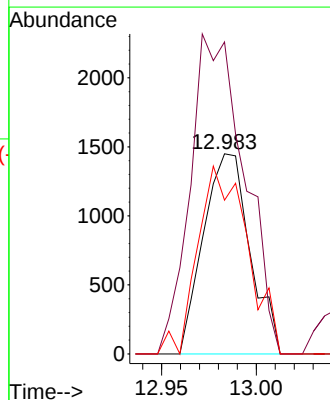
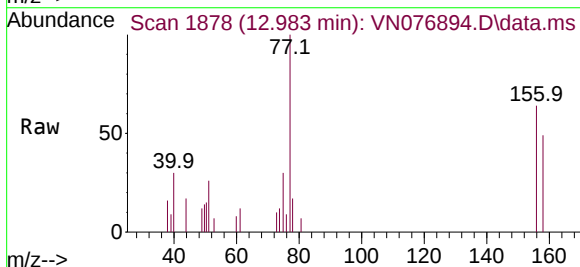
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

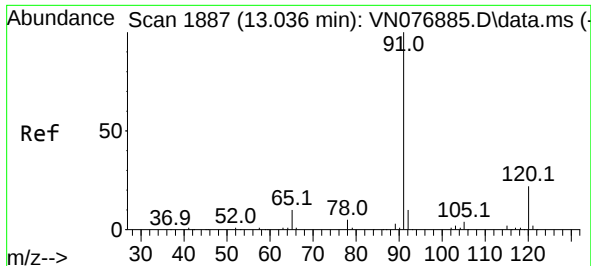
Tgt Ion:104	Resp:	3960
Ion Ratio	Lower	Upper
104	100	
78	49.4	39.6 59.4
103	46.4	43.9 65.9



#73
Bromobenzene
Concen: 0.474 ug/l
RT: 12.983 min Scan# 1878
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion:156	Resp:	2479
Ion Ratio	Lower	Upper
156	100	
77	185.5	0.0 423.0
158	97.8	0.0 188.6

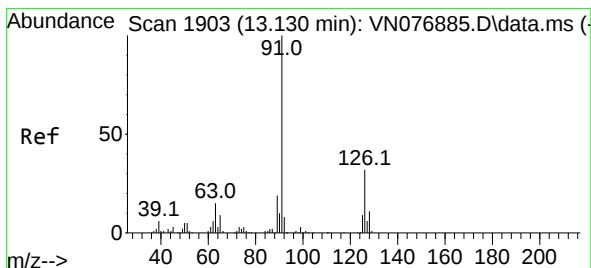
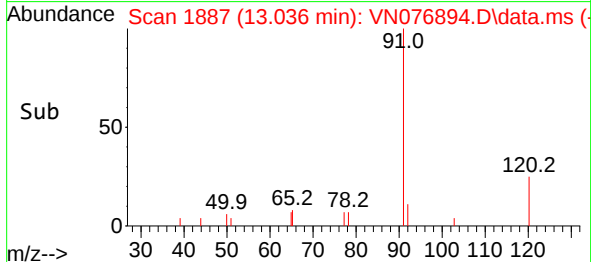
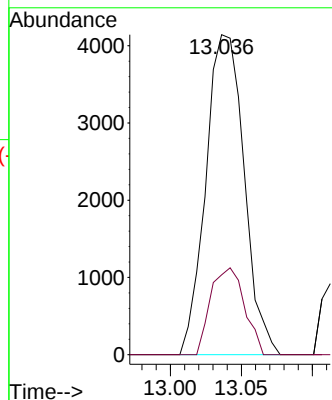
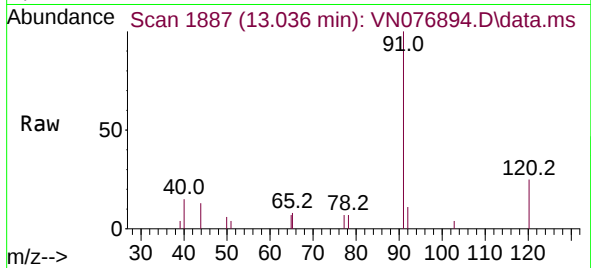




#74
n-propylbenzene
Concen: 0.284 ug/l
RT: 13.036 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

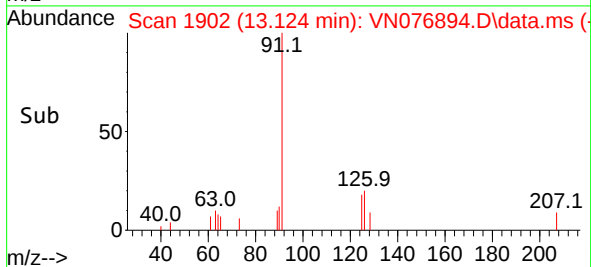
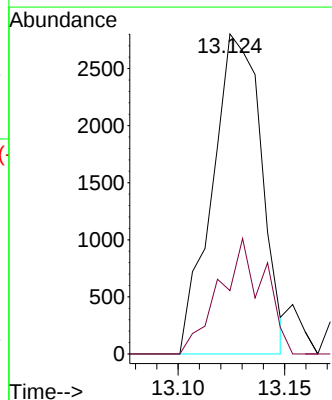
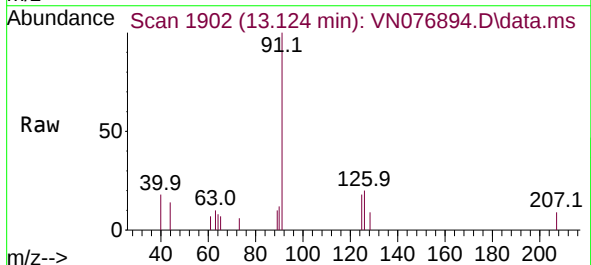
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

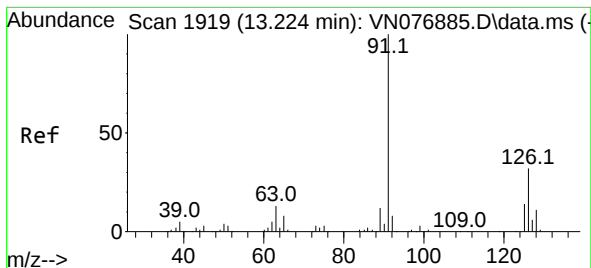
Tgt Ion: 91 Resp: 7772
Ion Ratio Lower Upper
91 100
120 23.9 0.0 44.0



#75
2-Chlorotoluene
Concen: 0.266 ug/l
RT: 13.124 min Scan# 1902
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 91 Resp: 4499
Ion Ratio Lower Upper
91 100
126 32.7 0.0 66.4

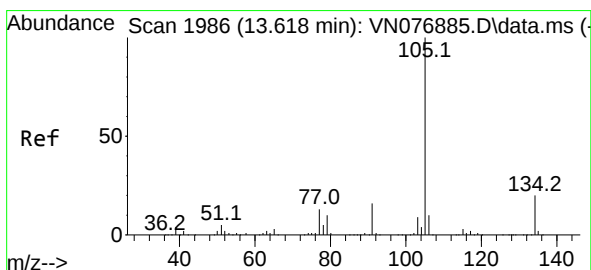
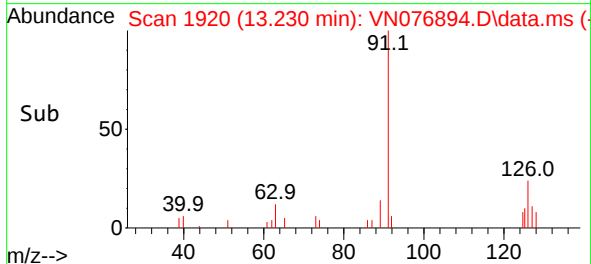
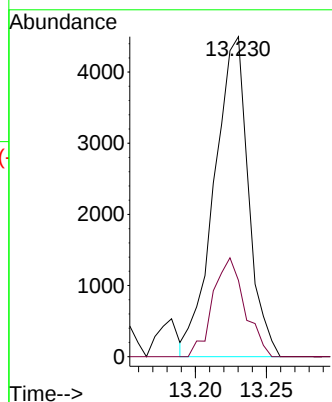
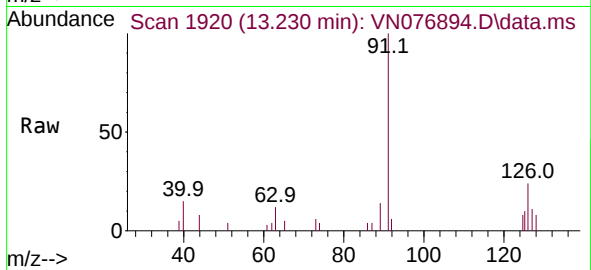




#78
4-Chlorotoluene
Concen: 0.461 ug/l
RT: 13.230 min Scan# 1919
Delta R.T. 0.006 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

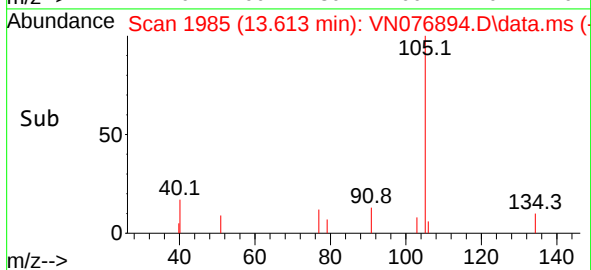
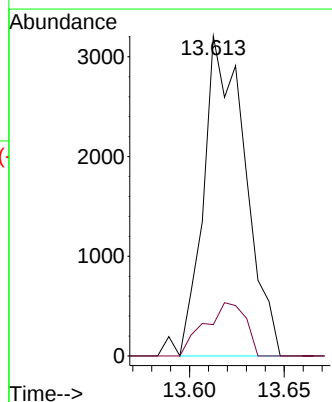
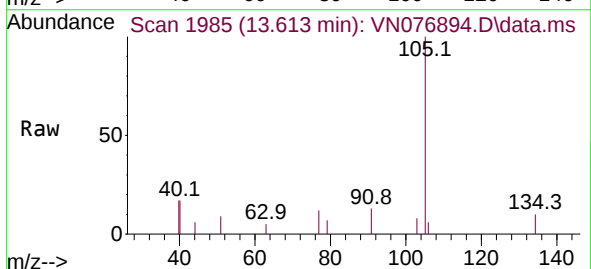
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

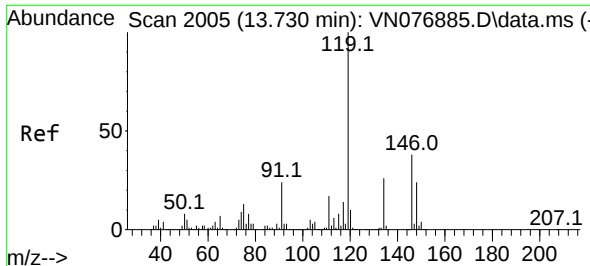
Tgt Ion: 91 Resp: 7509
Ion Ratio Lower Upper
91 100
126 28.9 0.0 70.6



#81
sec-Butylbenzene
Concen: 0.203 ug/l
RT: 13.613 min Scan# 1985
Delta R.T. -0.005 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 105 Resp: 4870
Ion Ratio Lower Upper
105 100
134 16.4 0.0 39.4

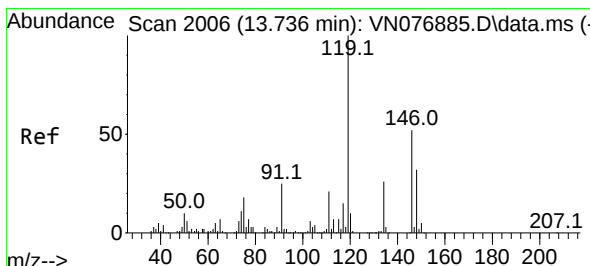
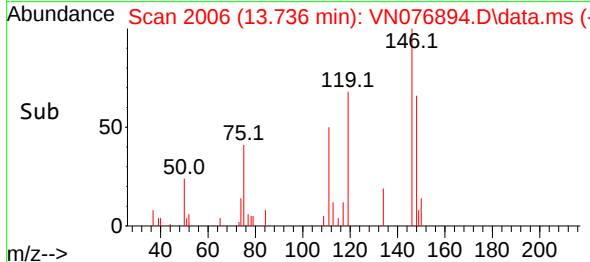
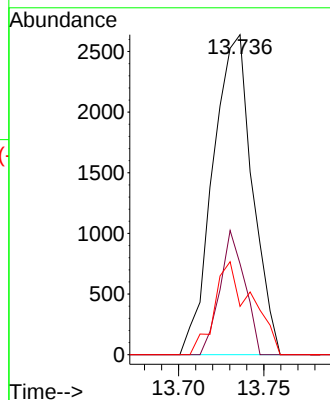
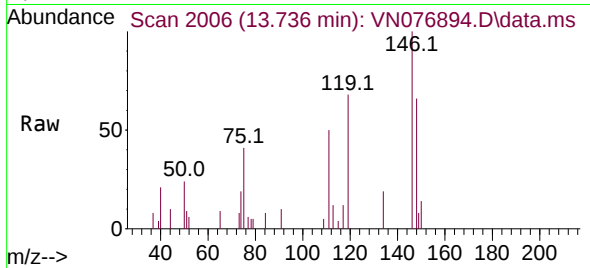




#82
p-Isopropyltoluene
Concen: 0.219 ug/l
RT: 13.736 min Scan# 2006
Delta R.T. 0.006 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

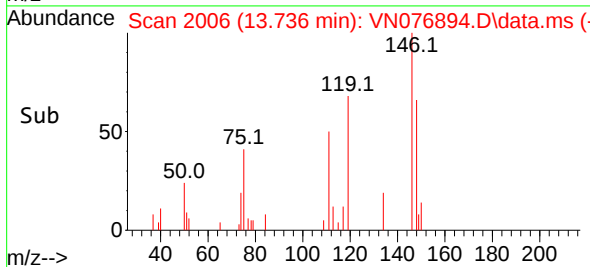
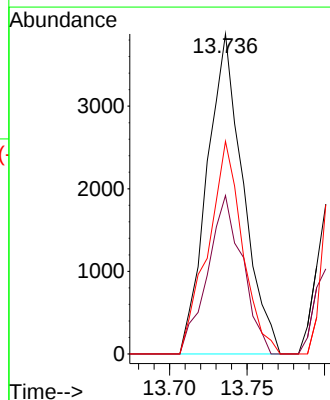
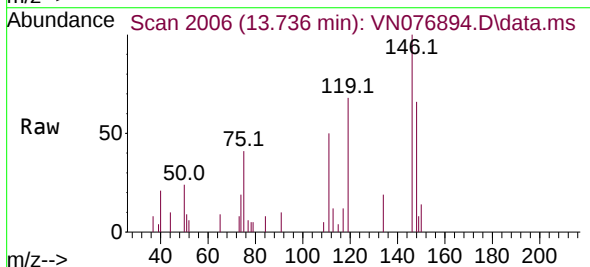
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

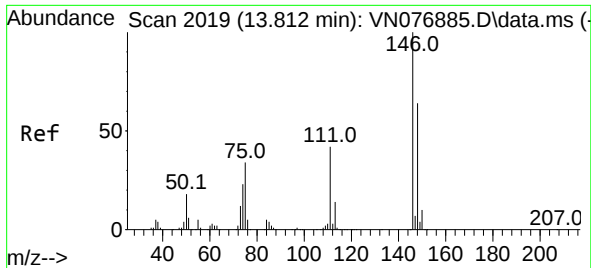
Tgt Ion:119 Resp: 4253
Ion Ratio Lower Upper
119 100
134 24.3 0.0 53.4
91 17.9 0.0 47.2



#83
1,3-Dichlorobenzene
Concen: 0.646 ug/l
RT: 13.736 min Scan# 2006
Delta R.T. 0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion:146 Resp: 6245
Ion Ratio Lower Upper
146 100
111 48.1 20.3 60.8
148 63.6 31.9 95.5

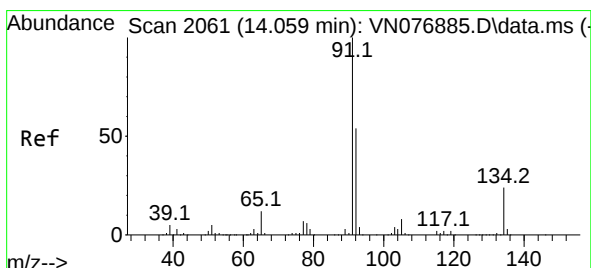
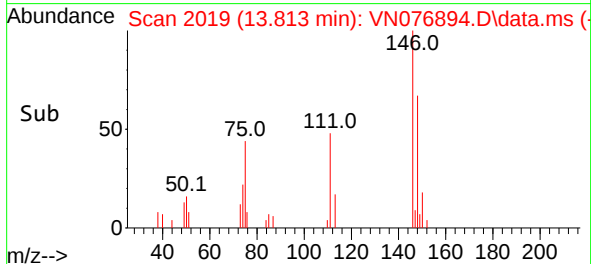
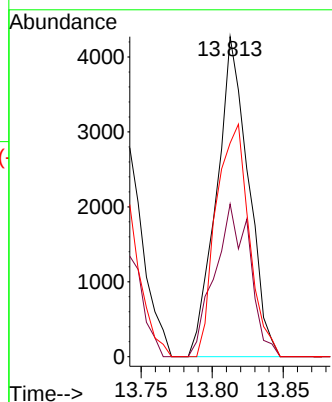
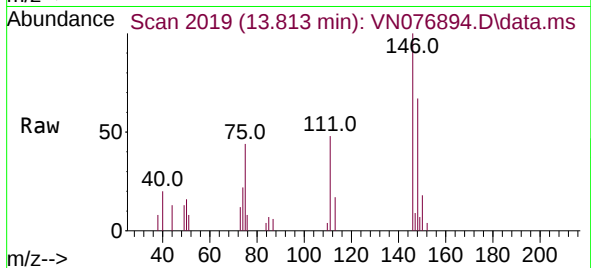




#84
1,4-Dichlorobenzene
Concen: 0.707 ug/l
RT: 13.813 min Scan# 2019
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

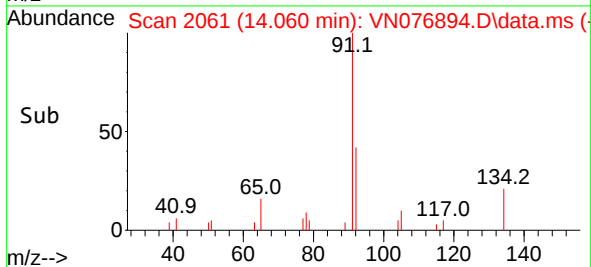
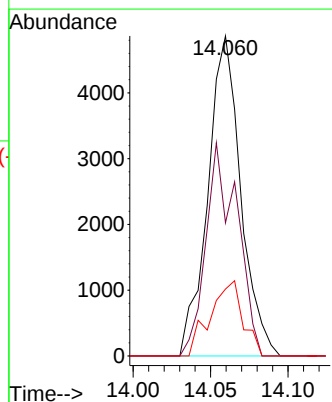
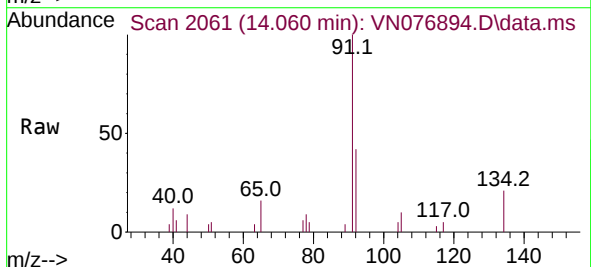
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

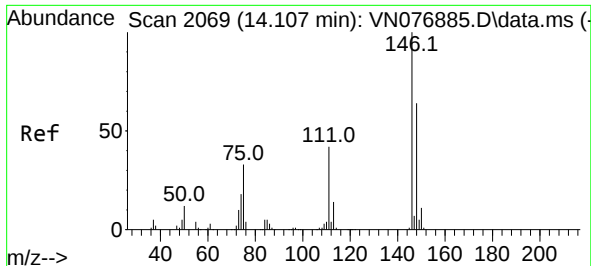
Tgt Ion:146 Resp: 6642
Ion Ratio Lower Upper
146 100
111 52.7 18.2 54.6
148 75.4 31.1 93.2



#85
n-Butylbenzene
Concen: 0.438 ug/l
RT: 14.060 min Scan# 2061
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion: 91 Resp: 7200
Ion Ratio Lower Upper
91 100
92 63.0 0.0 103.2
134 23.2 0.0 50.0





#87

1,2-Dichlorobenzene

Concen: 0.561 ug/l

RT: 14.107 min Scan# 2069

Delta R.T. -0.000 min

Lab File: VN076894.D

Acq: 09 Mar 2023 11:23

Instrument :

MSVOA_N

ClientSampleId :

VN0309WBL01

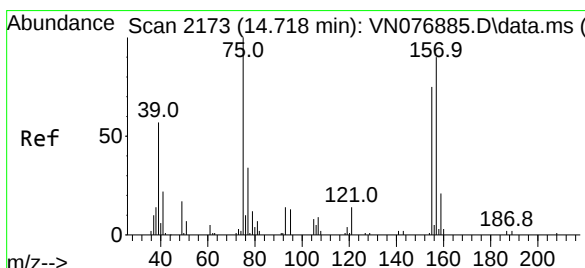
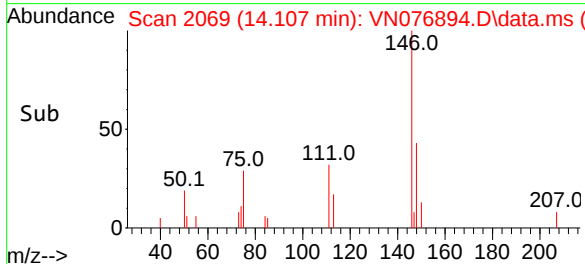
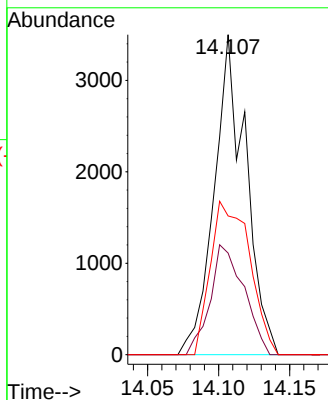
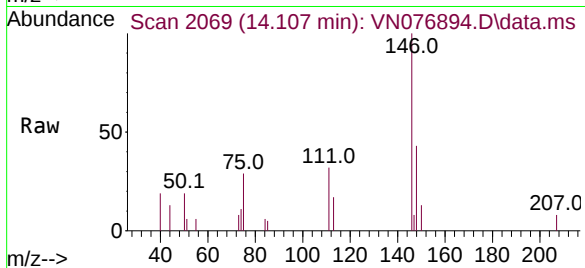
Tgt Ion:146 Resp: 5413

Ion Ratio Lower Upper

146 100

111 36.6 20.5 61.6

148 40.5 32.5 97.5



#88

1,2-Dibromo-3-Chloropropane

Concen: 0.604 ug/l

RT: 14.730 min Scan# 2175

Delta R.T. 0.006 min

Lab File: VN076894.D

Acq: 09 Mar 2023 11:23

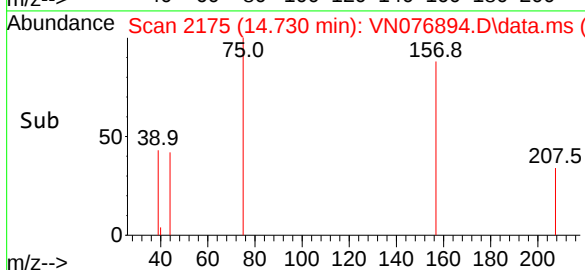
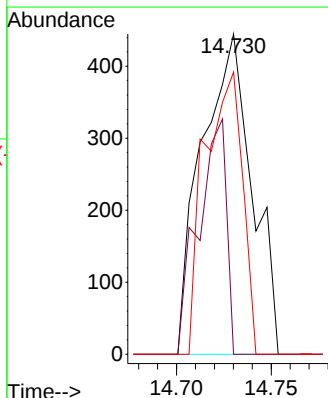
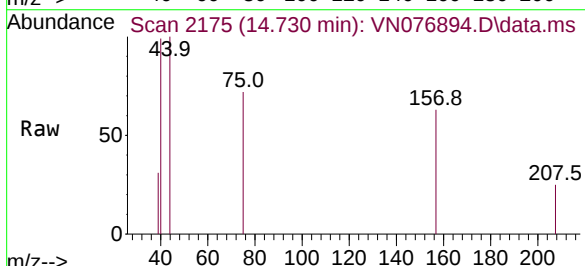
Tgt Ion: 75 Resp: 822

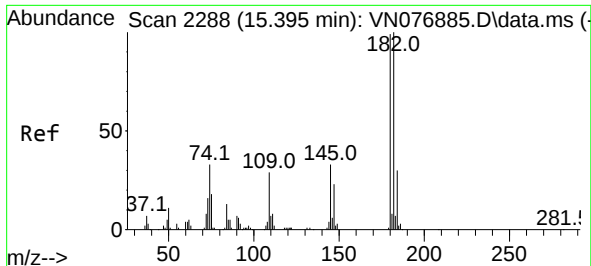
Ion Ratio Lower Upper

75 100

155 40.9 62.5 93.7#

157 65.9 77.5 116.3#

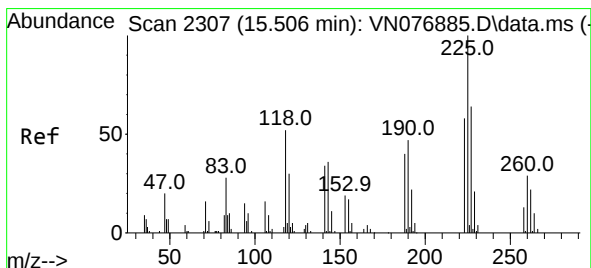
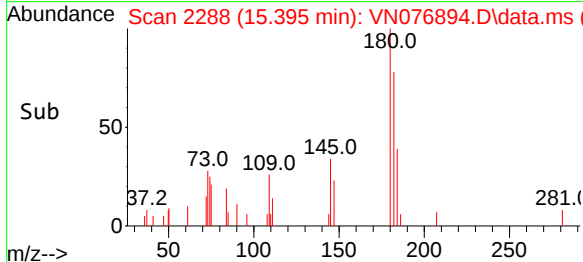
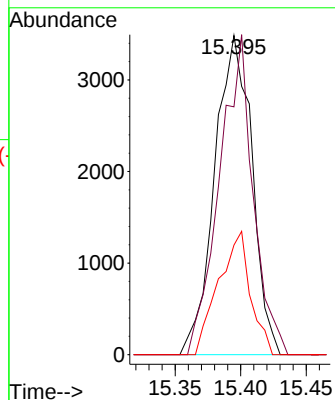
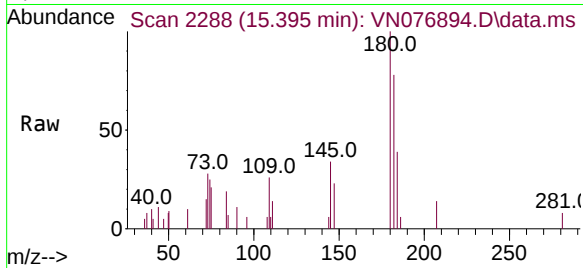




#89
1,2,4-Trichlorobenzene
Concen: 1.338 ug/l
RT: 15.395 min Scan# 21
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

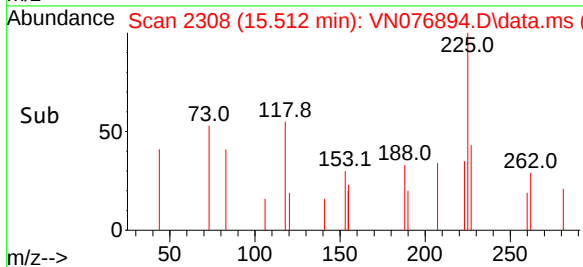
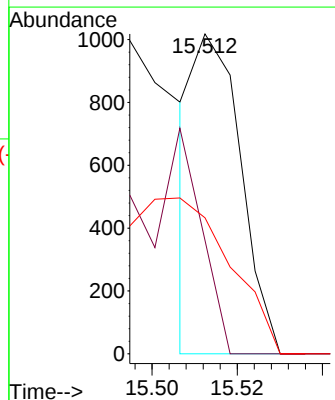
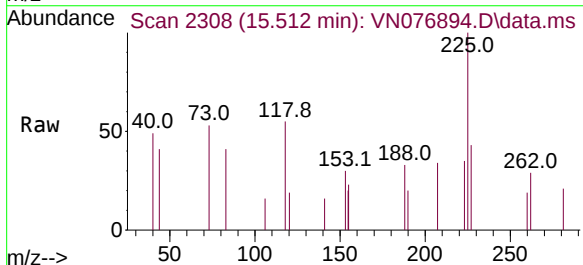
Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

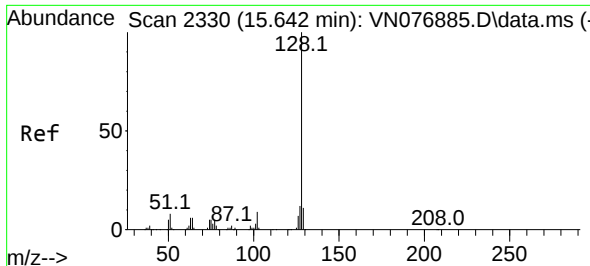
Tgt Ion	Ratio	Lower	Upper
180	100		
182	90.3	76.6	115.0
145	33.1	24.6	36.8



#90
Hexachlorobutadiene
Concen: 0.283 ug/l
RT: 15.512 min Scan# 2308
Delta R.T. 0.011 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion	Ratio	Lower	Upper
225	100		
223	49.7	0.0	135.4
227	87.2	0.0	129.4

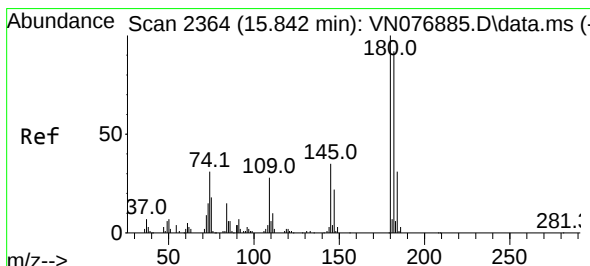
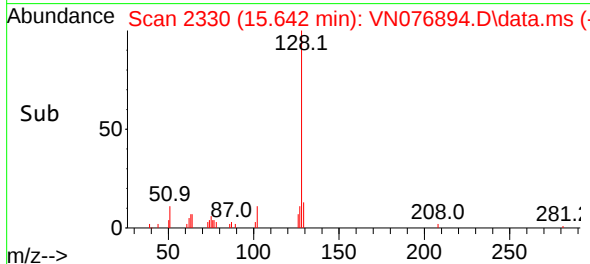
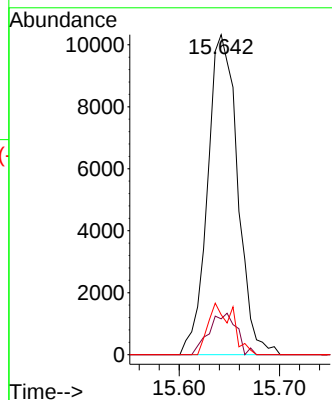
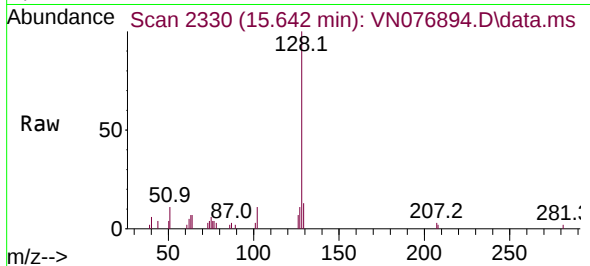




#91
Naphthalene
Concen: 1.320 ug/l
RT: 15.642 min Scan# 21
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Instrument :
MSVOA_N
ClientSampleId :
VN0309WBL01

Tgt Ion:128 Resp: 21538
Ion Ratio Lower Upper
128 100
127 0.0 11.0 16.6#
129 9.2 8.9 13.3



#92
1,2,3-Trichlorobenzene
Concen: 1.260 ug/l
RT: 15.842 min Scan# 2364
Delta R.T. -0.000 min
Lab File: VN076894.D
Acq: 09 Mar 2023 11:23

Tgt Ion:180 Resp: 6494
Ion Ratio Lower Upper
180 100
182 95.4 0.0 190.8
145 28.2 0.0 65.0

