

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN021523\
 Data File : VN076687.D
 Acq On : 15 Feb 2023 16:04
 Operator : JC\MD
 Sample : 01500-02RE
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Feb 16 04:32:45 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N021523W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Feb 16 01:08:46 2023
 Response via : Initial Calibration

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

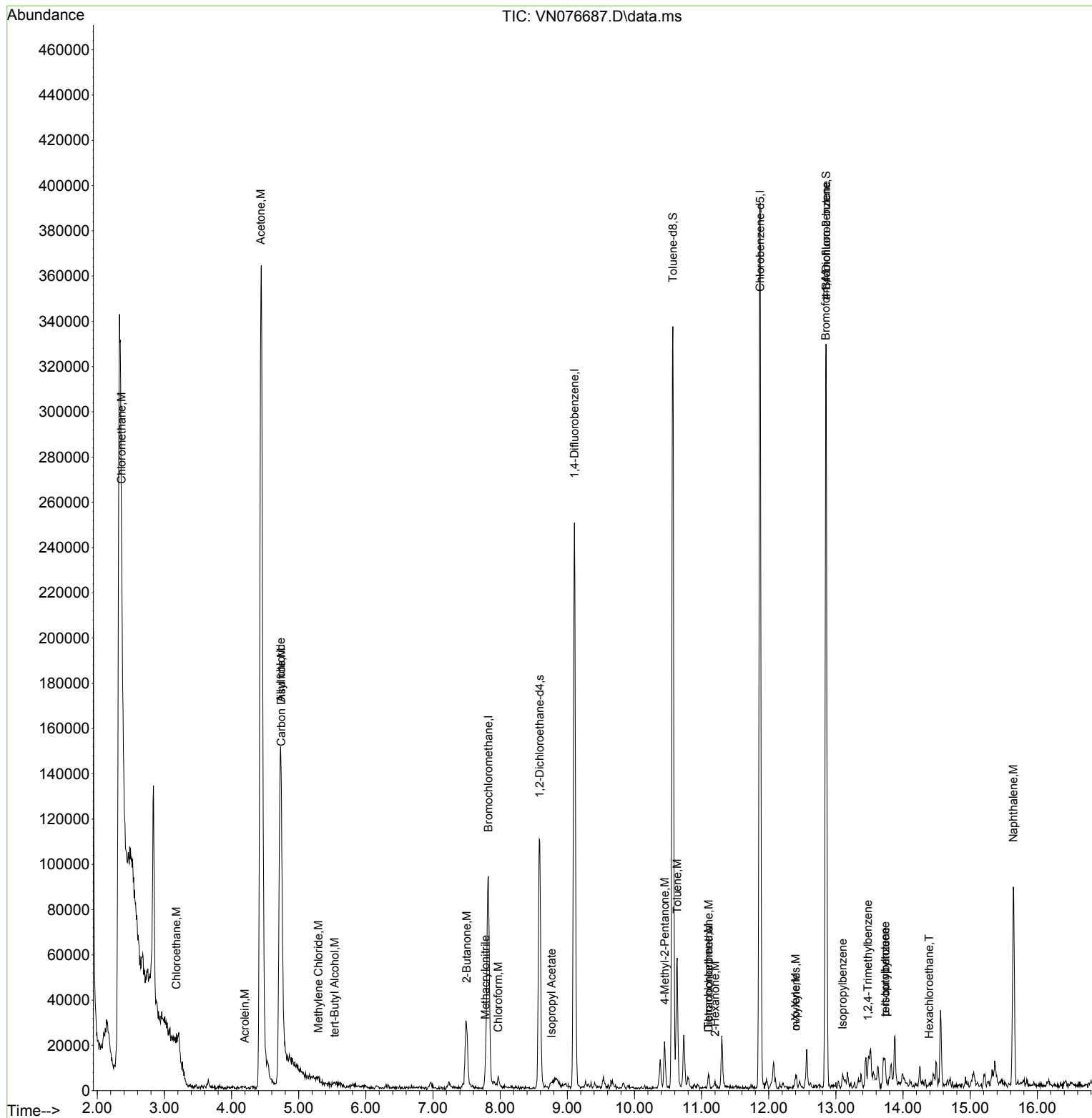
Internal Standards						
1) Bromochloromethane	7.825	128	28190	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.107	114	202699	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.871	117	221268	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.589	65	88911	34.484	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	114.933%#
60) 4-Bromofluorobenzene	12.854	95	105650	26.995	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	89.967%
63) Toluene-d8	10.572	98	231122	29.821	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	99.400%
Target Compounds						
					Qvalue	
3) Chloromethane	2.360	50	5009	1.367	ug/l #	43
6) Chloroethane	3.178	64	1951	0.769	ug/l #	88
13) Acrolein	4.196	56	216	0.319	ug/l #	18
15) Acetone	4.437	58	214812	379.056	ug/l	96
16) Carbon Disulfide	4.743	76	12839	1.645	ug/l #	89
17) Allyl chloride	4.731	41	16140	3.241	ug/l	81
18) Methylene Chloride	5.295	84	1458	0.415	ug/l #	42
23) tert-Butyl Alcohol	5.537	59	666	1.317	ug/l #	100
25) Chloroform	7.972	83	3456	0.572	ug/l #	72
30) 2-Butanone	7.501	43	52585	19.498	ug/l #	72
35) Methacrylonitrile	7.778	41	1061	0.361	ug/l #	44
44) Isopropyl Acetate	8.766	43	2647	0.313	ug/l #	56
53) Dibromochloromethane	11.107	129	1004	0.275	ug/l #	10
56) Bromoform	12.848	173	2217	0.881	ug/l #	1
58) 4-Methyl-2-Pentanone	10.454	43	13734	2.610	ug/l	99
59) 2-Hexanone	11.201	43	1162	0.297	ug/l #	77
61) Tetrachloroethene	11.101	164	743	0.266	ug/l #	59
62) Toluene	10.636	91	40170	2.598	ug/l	98
67) m/p-Xylenes	12.401	106	1288	0.200	ug/l	92
68) o-Xylene	12.401	106	1288	0.203	ug/l	96
70) Isopropylbenzene	13.101	105	4477	0.277	ug/l	87
77) t-1,4-Dichloro-2-butene	12.854	75	58308	38.963	ug/l #	9
79) tert-butylbenzene	13.736	119	5710	0.478	ug/l	48
80) 1,2,4-Trimethylbenzene	13.477	105	7079	0.529	ug/l	98
82) p-Isopropyltoluene	13.736	119	5710	0.411	ug/l	80
86) Hexachloroethane	14.389	117	556	0.207	ug/l #	18
91) Naphthalene	15.642	128	77903	6.592	ug/l	100

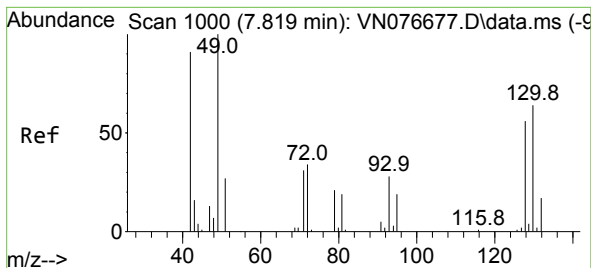
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Feb 16 04:32:45 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N021523W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Feb 16 01:08:46 2023
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.825 min Scan# 10

Delta R.T. 0.006 min

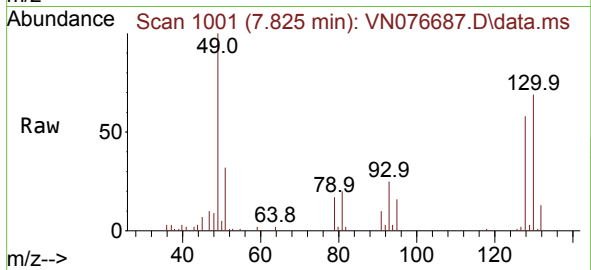
Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

Instrument :

MSVOA_N

ClientSampleId :



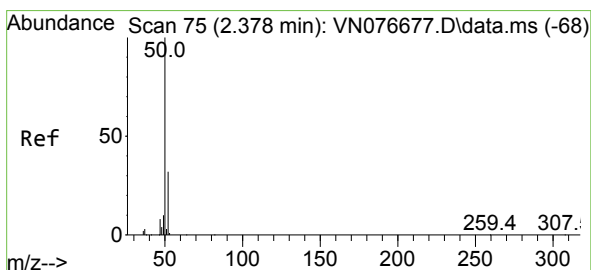
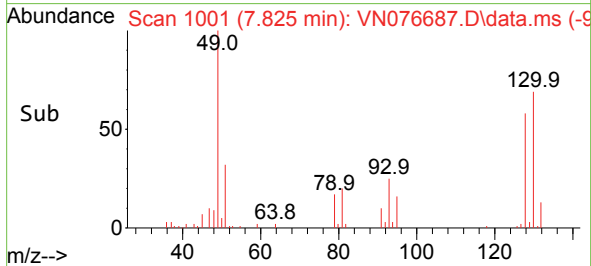
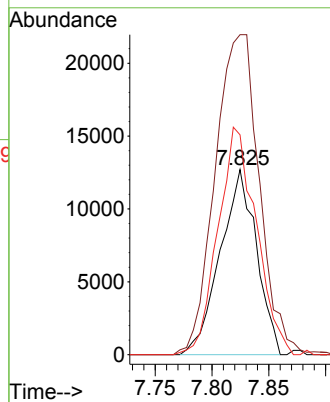
Tgt Ion:128 Resp: 28190

Ion Ratio Lower Upper

128 100

49 210.6 0.0 461.8

130 130.0 0.0 295.3



#3

Chloromethane

Concen: 1.367 ug/l

RT: 2.360 min Scan# 72

Delta R.T. -0.018 min

Lab File: VN076687.D

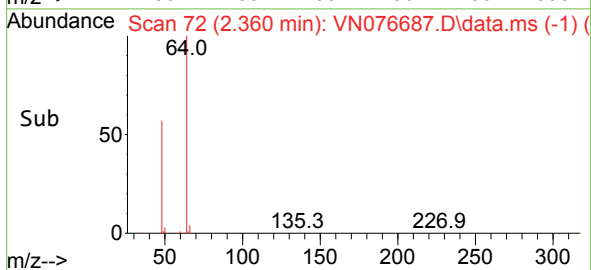
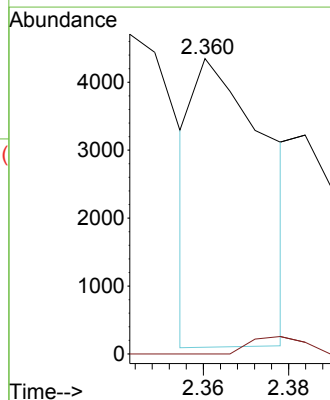
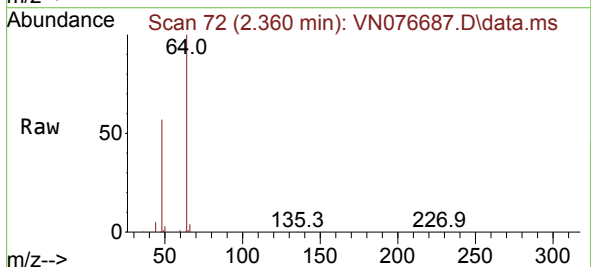
Acq: 15 Feb 2023 16:04

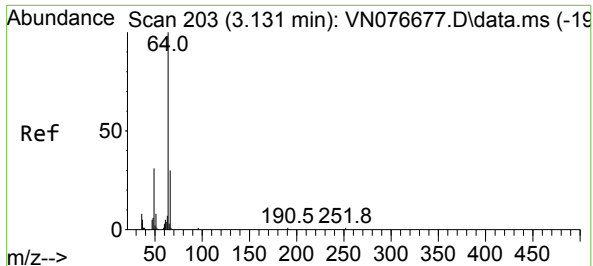
Tgt Ion: 50 Resp: 5009

Ion Ratio Lower Upper

50 100

52 0.0 25.3 37.9#

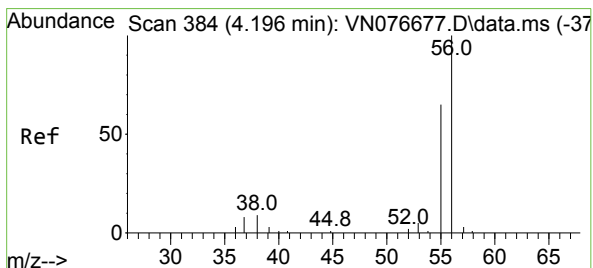
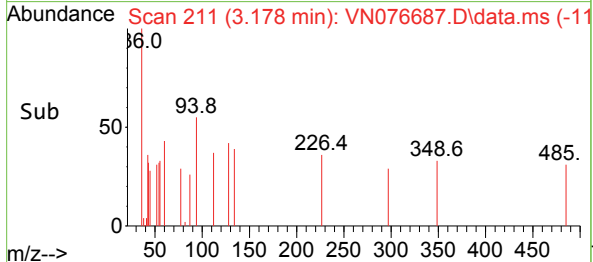
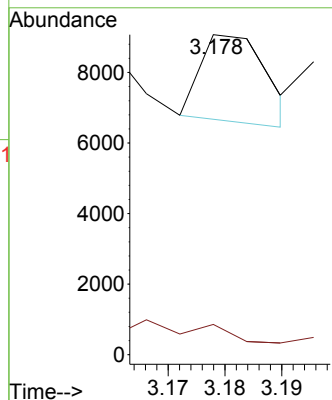
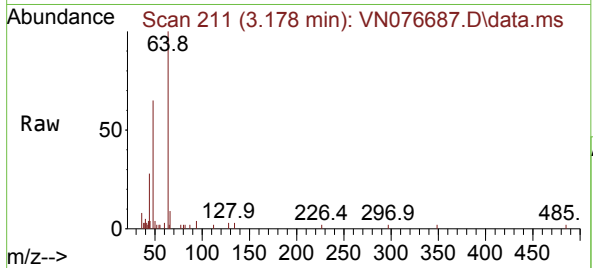




#6
Chloroethane
Concen: 0.769 ug/l
RT: 3.178 min Scan# 21
Delta R.T. 0.047 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

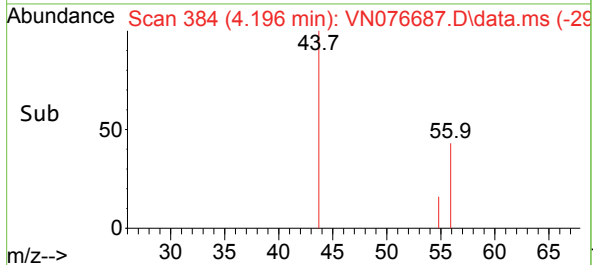
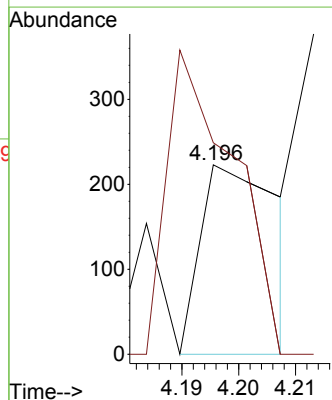
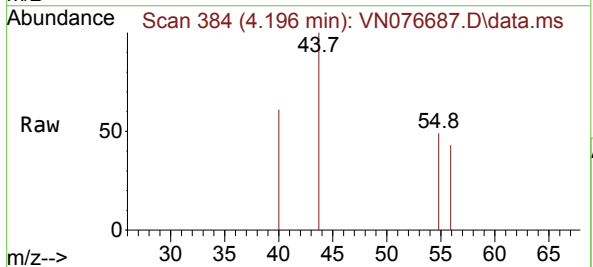
Instrument :
MSVOA_N
ClientSampleId :

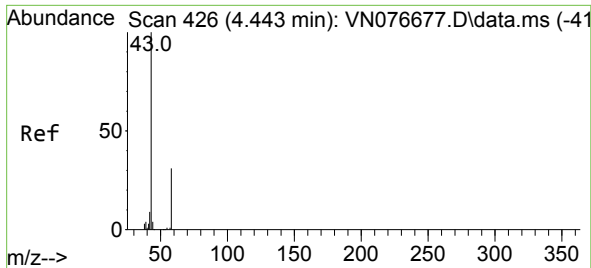
Tgt Ion: 64 Resp: 1951
Ion Ratio Lower Upper
64 100
66 23.0 23.8 35.6#



#13
Acrolein
Concen: 0.319 ug/l
RT: 4.196 min Scan# 384
Delta R.T. 0.000 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Tgt Ion: 56 Resp: 216
Ion Ratio Lower Upper
56 100
55 135.6 55.0 82.4#





#15

Acetone

Concen: 379.056 ug/l

RT: 4.437 min Scan# 41

Delta R.T. -0.006 min

Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

Instrument :

MSVOA_N

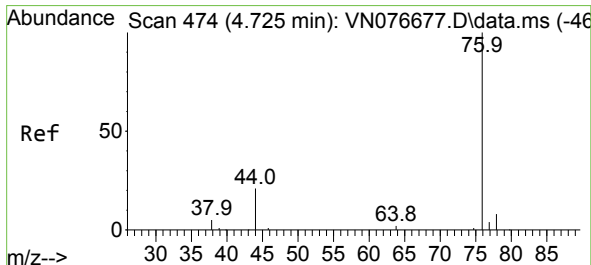
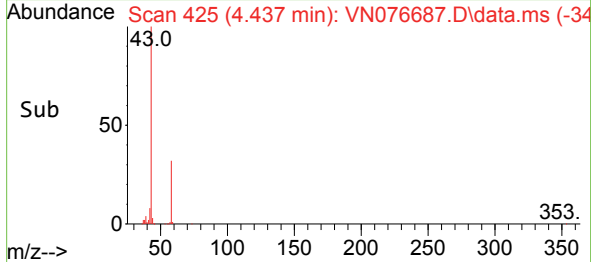
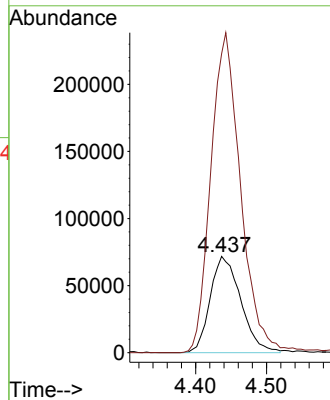
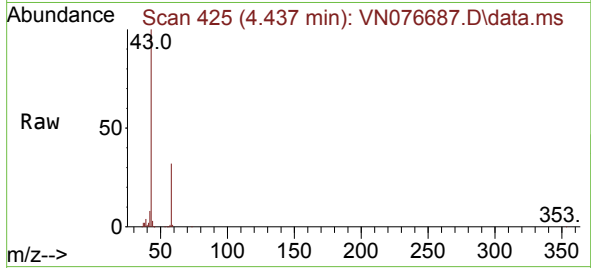
ClientSampleId :

Tgt Ion: 58 Resp: 214812

Ion Ratio Lower Upper

58 100

43 310.7 255.4 383.0



#16

Carbon Disulfide

Concen: 1.645 ug/l

RT: 4.743 min Scan# 477

Delta R.T. 0.018 min

Lab File: VN076687.D

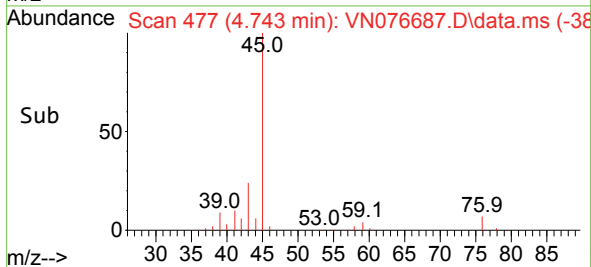
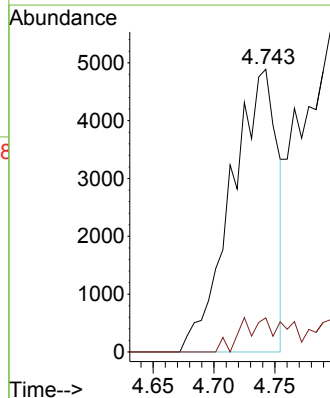
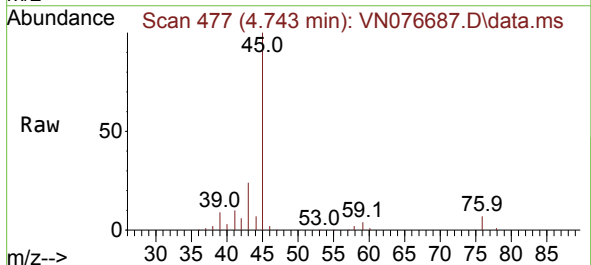
Acq: 15 Feb 2023 16:04

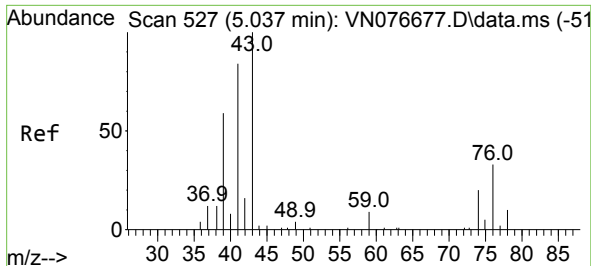
Tgt Ion: 76 Resp: 12839

Ion Ratio Lower Upper

76 100

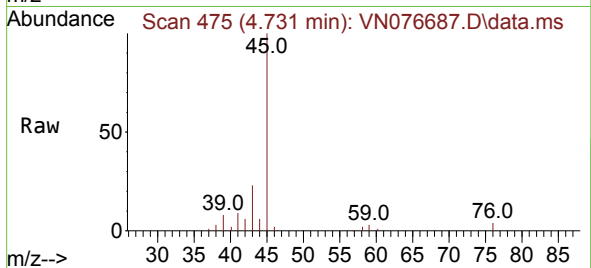
78 12.1 6.6 9.8#



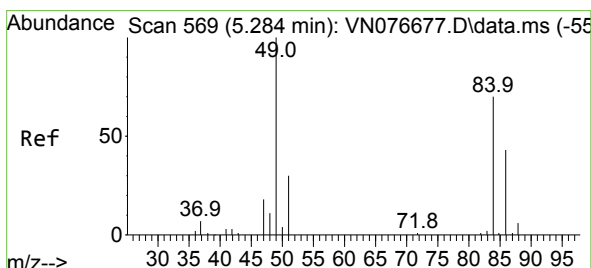
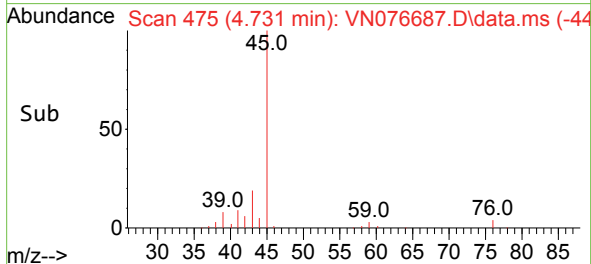
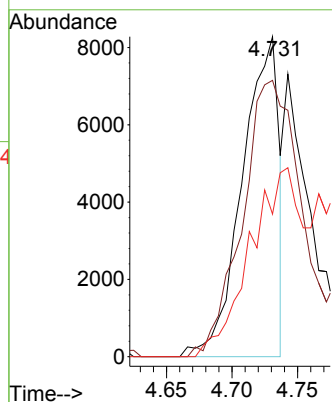


#17
 Allyl chloride
 Concen: 3.241 ug/l
 RT: 4.731 min Scan# 41
 Delta R.T. -0.306 min
 Lab File: VN076687.D
 Acq: 15 Feb 2023 16:04

Instrument :
 MSVOA_N
 ClientSampleId :

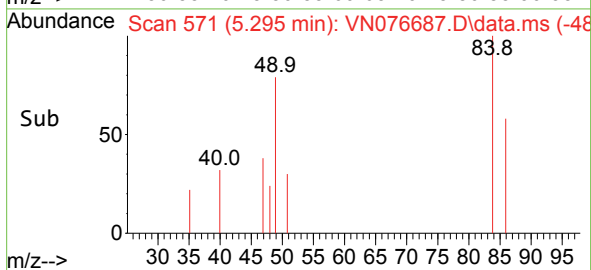
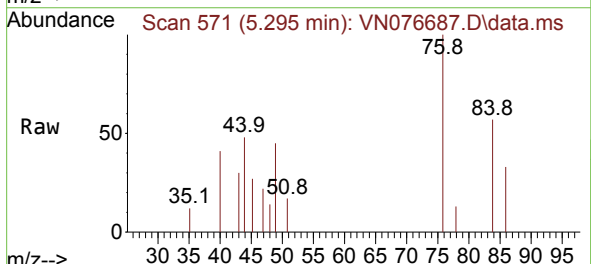
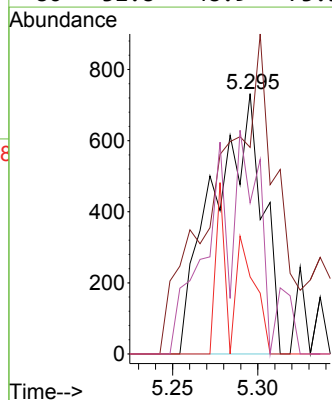


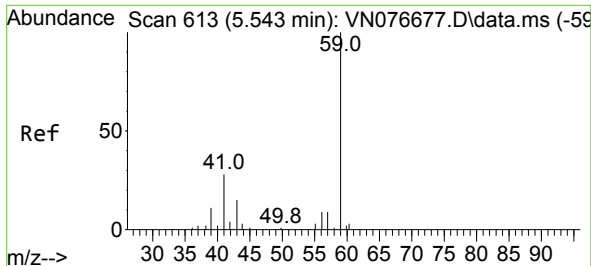
Tgt Ion: 41 Resp: 16140
 Ion Ratio Lower Upper
 41 100
 39 86.4 34.8 104.3
 76 44.6 17.5 52.5



#18
 Methylene Chloride
 Concen: 0.415 ug/l
 RT: 5.295 min Scan# 571
 Delta R.T. 0.012 min
 Lab File: VN076687.D
 Acq: 15 Feb 2023 16:04

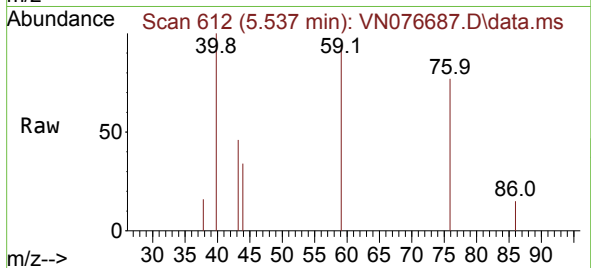
Tgt Ion: 84 Resp: 1458
 Ion Ratio Lower Upper
 84 100
 49 45.6 113.8 170.6#
 51 29.6 34.2 51.4#
 86 32.8 48.9 73.3#



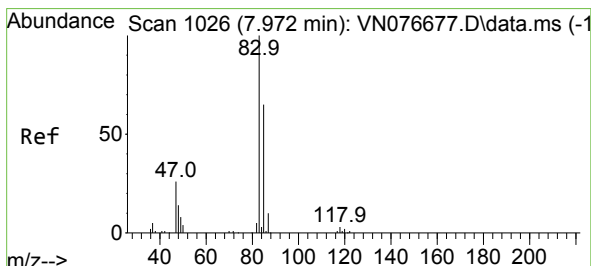
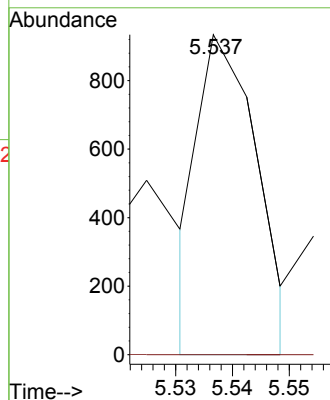
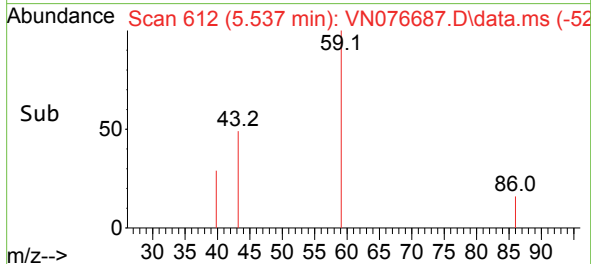


#23
tert-Butyl Alcohol
Concen: 1.317 ug/l
RT: 5.537 min Scan# 613
Delta R.T. -0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Instrument :
MSVOA_N
ClientSampleId :

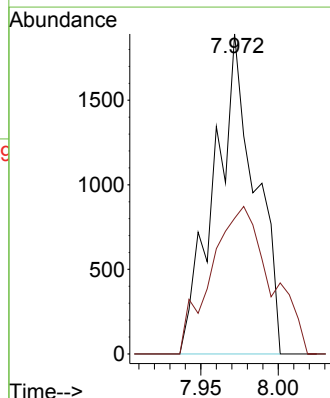
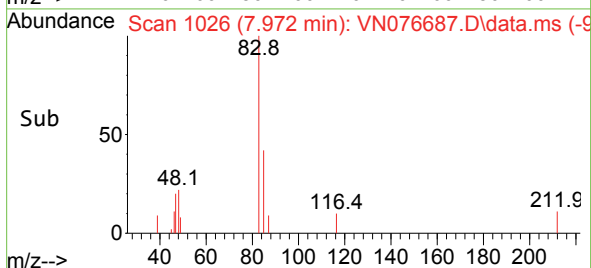
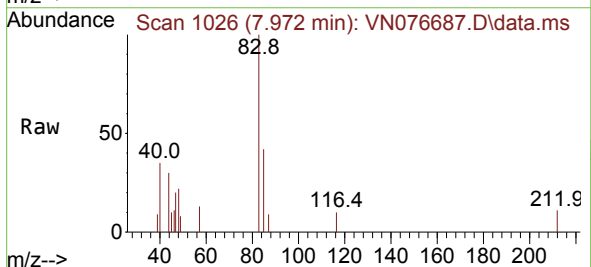


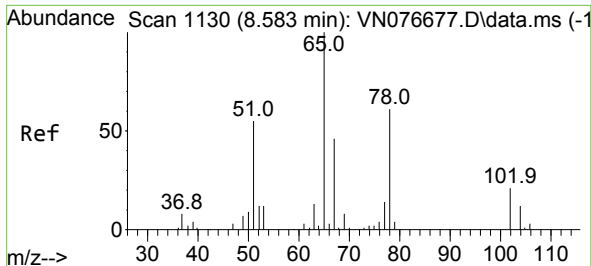
Tgt Ion: 59 Resp: 666
Ion Ratio Lower Upper
59 100
52 0.0 0.2 0.2#



#25
Chloroform
Concen: 0.572 ug/l
RT: 7.972 min Scan# 1026
Delta R.T. 0.000 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Tgt Ion: 83 Resp: 3456
Ion Ratio Lower Upper
83 100
85 42.4 51.8 77.6#





#27

1,2-Dichloroethane-d4

Concen: 34.484 ug/l

RT: 8.589 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

Instrument :

MSVOA_N

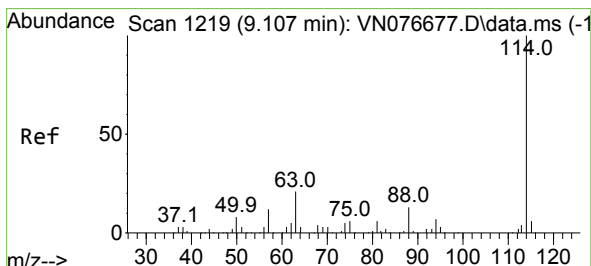
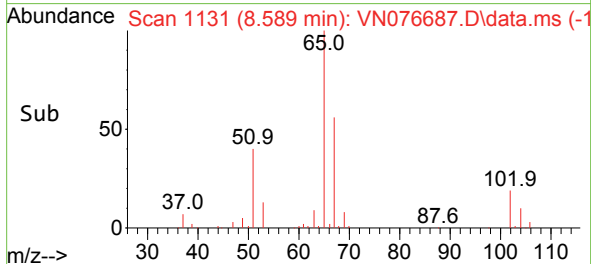
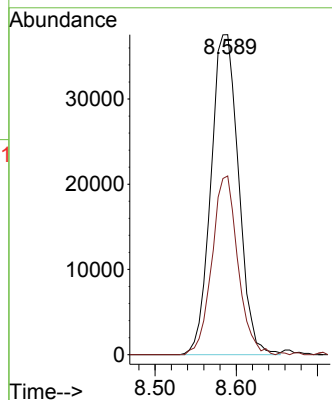
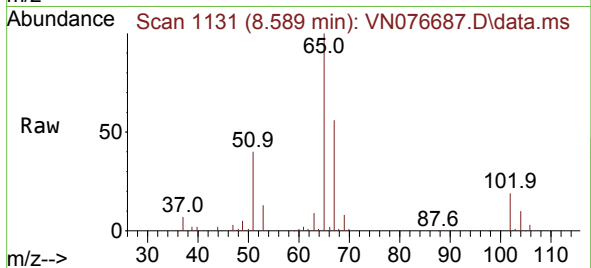
ClientSampleId :

Tgt Ion: 65 Resp: 88911

Ion Ratio Lower Upper

65 100

67 52.3 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: VN076687.D

Acq: 15 Feb 2023 16:04

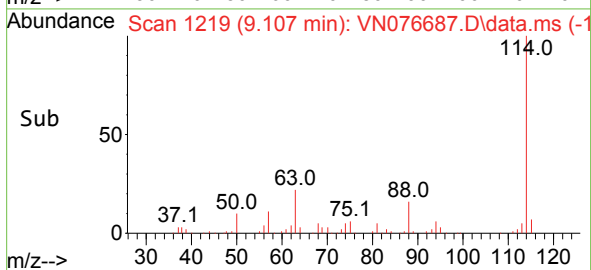
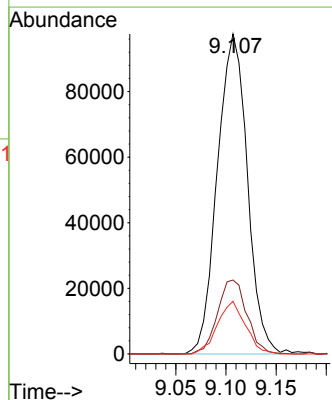
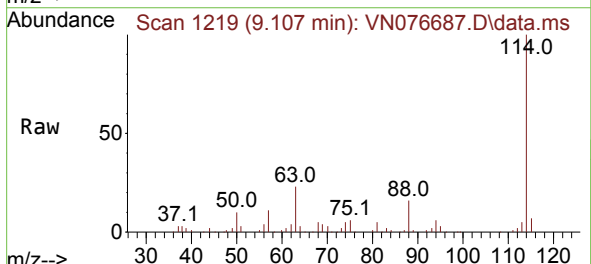
Tgt Ion: 114 Resp: 202699

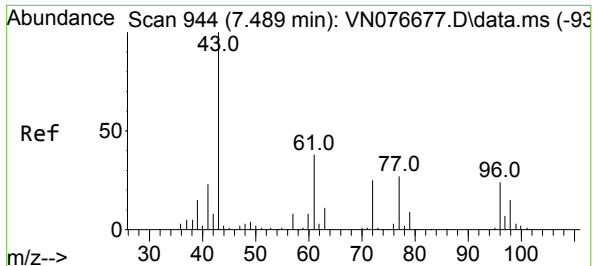
Ion Ratio Lower Upper

114 100

63 22.6 17.0 25.4

88 15.4 11.6 17.4





#30

2-Butanone

Concen: 19.498 ug/l

RT: 7.501 min Scan# 946

Delta R.T. 0.012 min

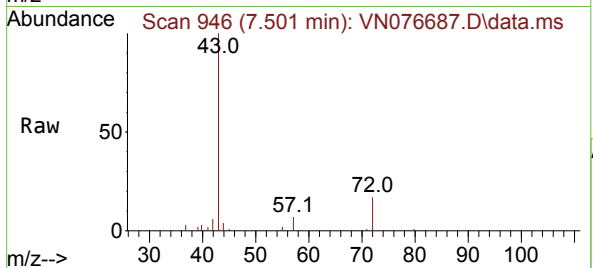
Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

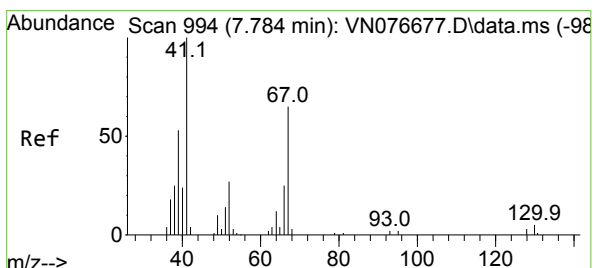
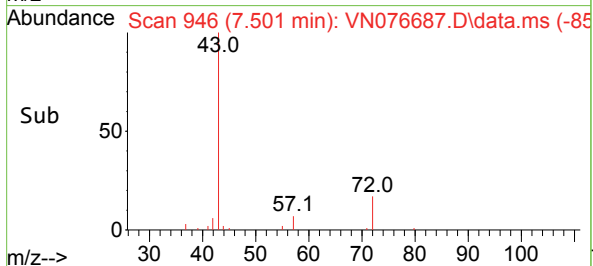
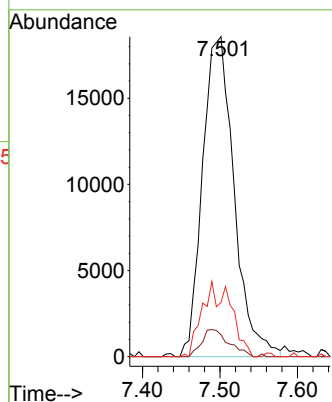
Instrument :

MSVOA_N

ClientSampleId :



Tgt Ion: 43	Resp: 52585
Ion Ratio	Lower Upper
43	100
57	0.0 6.1 9.1#
72	10.3 20.2 30.4#



#35

Methacrylonitrile

Concen: 0.361 ug/l

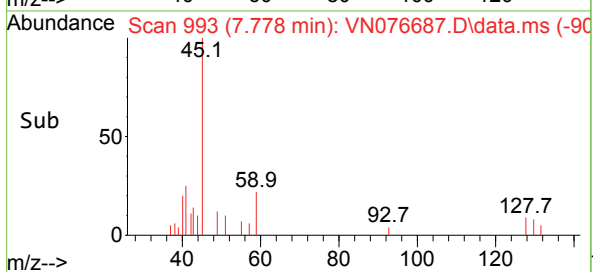
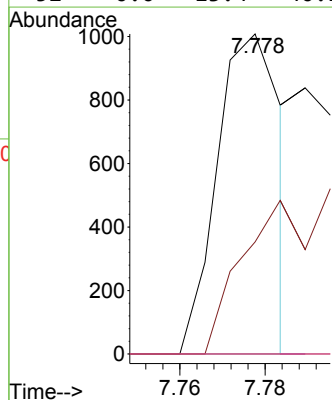
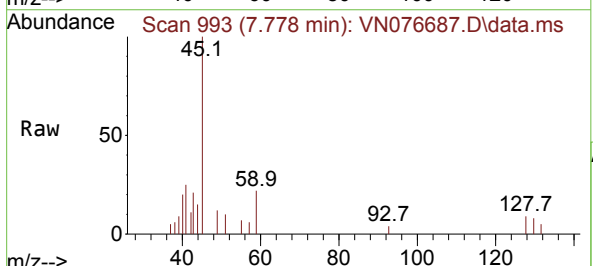
RT: 7.778 min Scan# 993

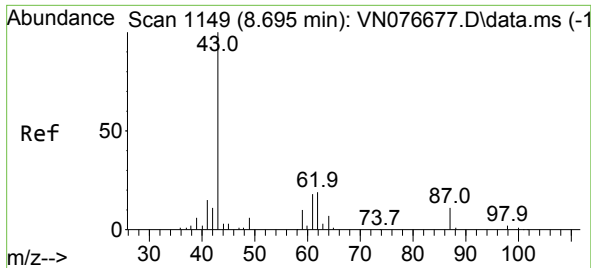
Delta R.T. -0.006 min

Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

Tgt Ion: 41	Resp: 1061
Ion Ratio	Lower Upper
41	100
39	35.0 26.6 79.7
67	0.0 32.3 96.9#
52	0.0 13.4 40.1#

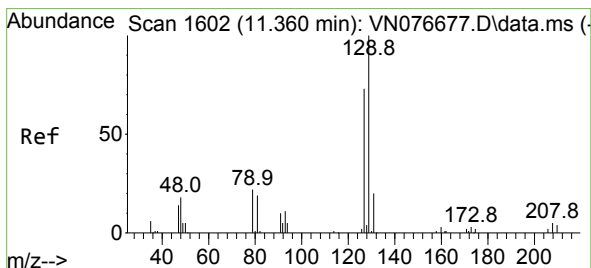
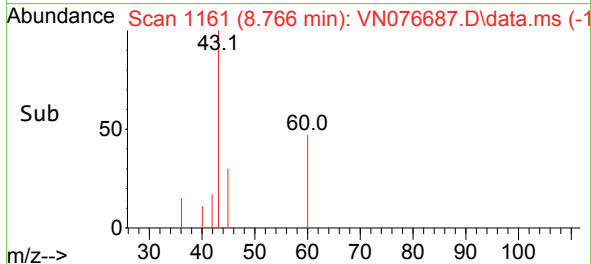
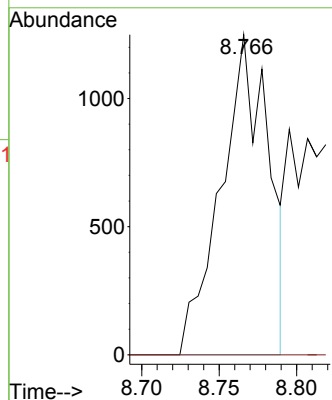
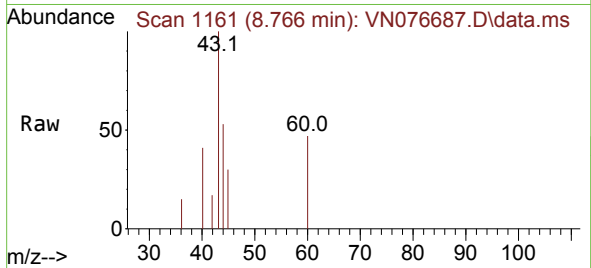




#44
Isopropyl Acetate
Concen: 0.313 ug/l
RT: 8.766 min Scan# 1161
Delta R.T. 0.071 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

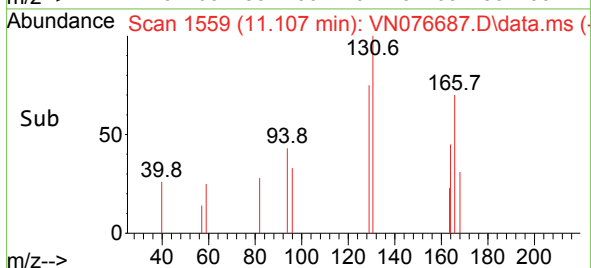
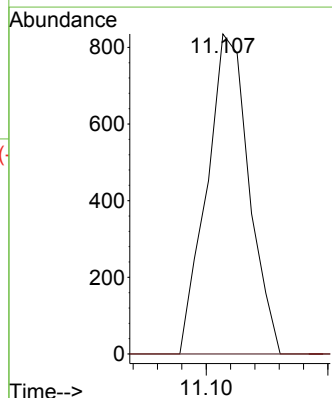
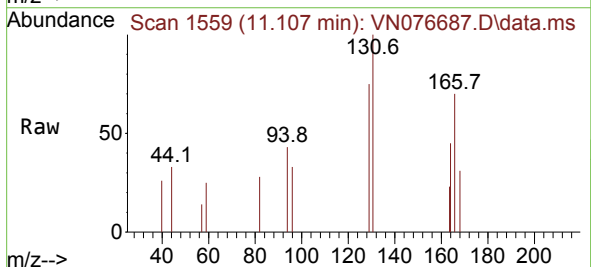
Instrument :
MSVOA_N
ClientSampleId :

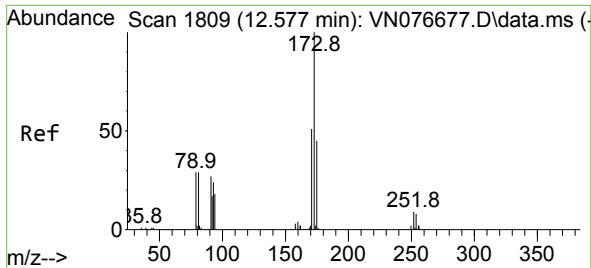
Tgt Ion: 43 Resp: 2647
Ion Ratio Lower Upper
43 100
61 2.4 19.5 29.3#



#53
Dibromochloromethane
Concen: 0.275 ug/l
RT: 11.107 min Scan# 1559
Delta R.T. -0.253 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Tgt Ion: 129 Resp: 1004
Ion Ratio Lower Upper
129 100
127 0.0 39.4 118.1#

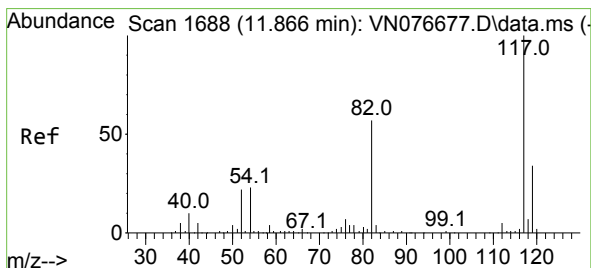
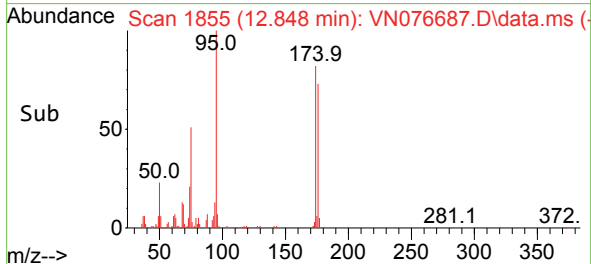
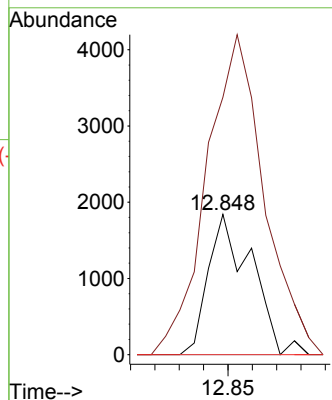
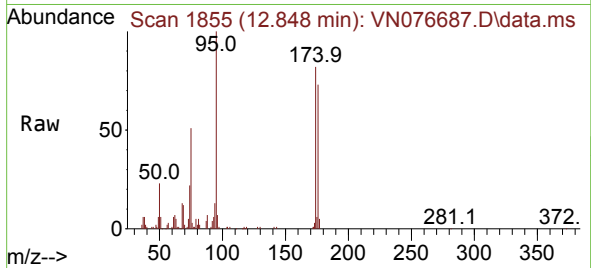




#56
Bromoform
Concen: 0.881 ug/l
RT: 12.848 min Scan# 11
Delta R.T. 0.271 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

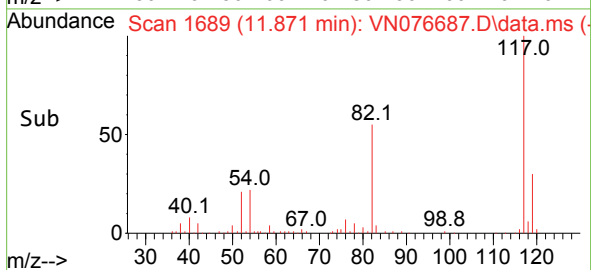
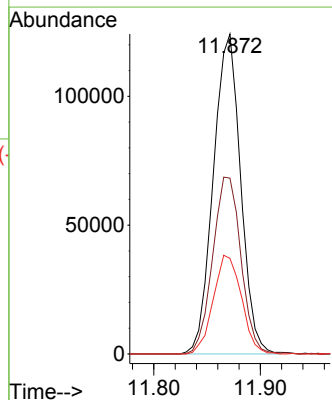
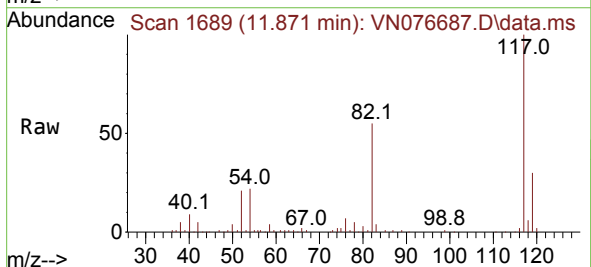
Instrument :
MSVOA_N
ClientSampleId :

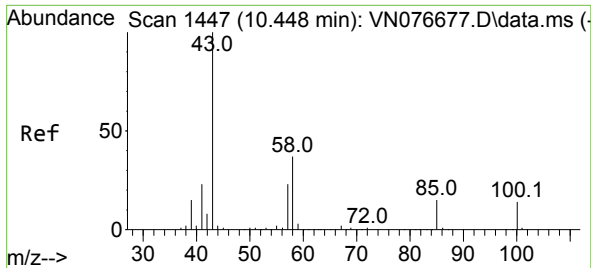
Tgt Ion:173 Resp: 2217
Ion Ratio Lower Upper
173 100
175 310.8 37.8 56.6#
254 0.0 7.3 10.9#



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.871 min Scan# 1689
Delta R.T. 0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Tgt Ion:117 Resp: 221268
Ion Ratio Lower Upper
117 100
82 57.2 45.4 68.0
119 31.8 26.8 40.2

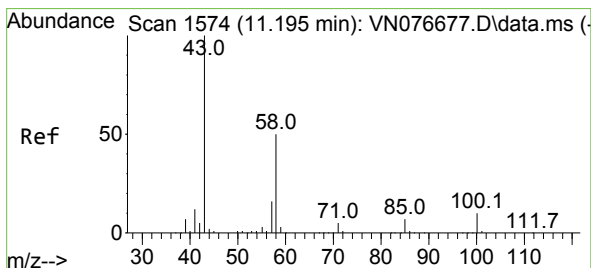
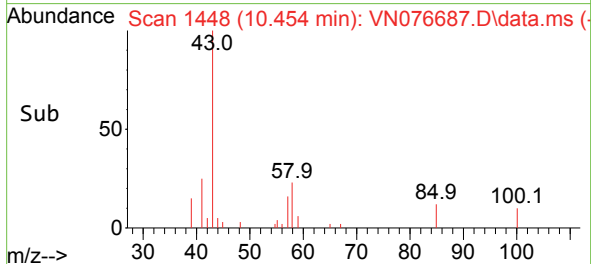
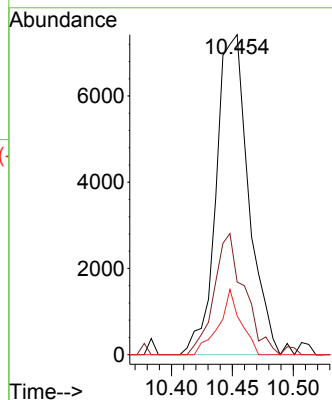
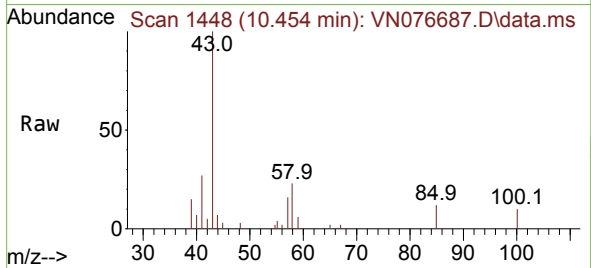




#58
4-Methyl-2-Pentanone
Concen: 2.610 ug/l
RT: 10.454 min Scan# 1448
Delta R.T. 0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

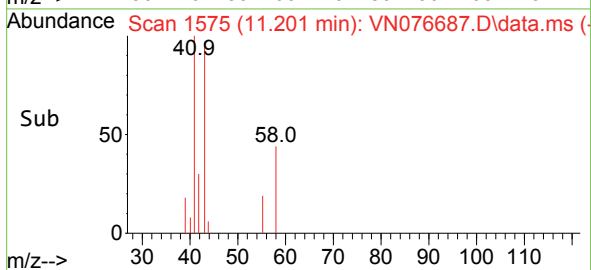
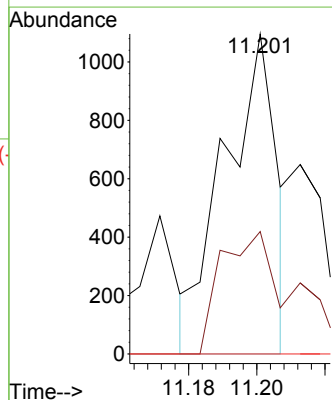
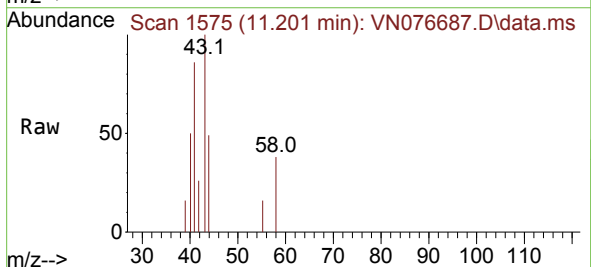
Instrument :
MSVOA_N
ClientSampleId :

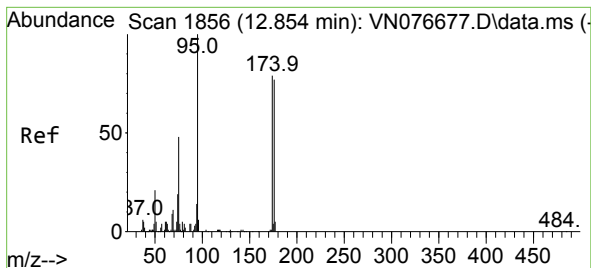
Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.6	28.6	42.8
85	13.9	11.8	17.8



#59
2-Hexanone
Concen: 0.297 ug/l
RT: 11.201 min Scan# 1575
Delta R.T. 0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

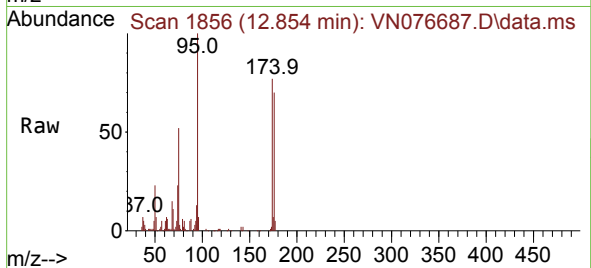
Tgt Ion	Ratio	Lower	Upper
43	100		
58	38.6	40.6	60.8#
57	0.0	13.1	19.7#



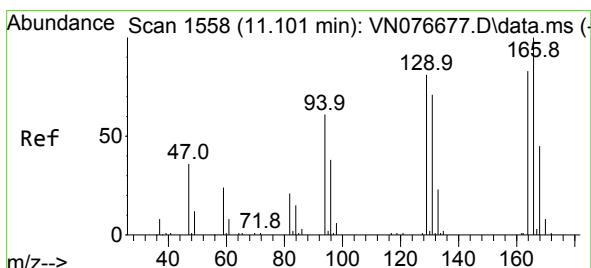
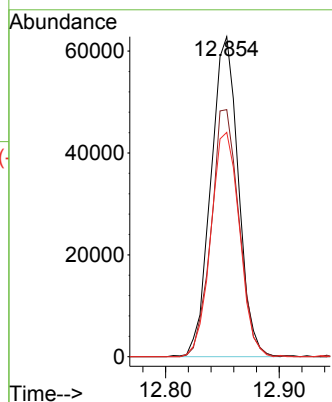
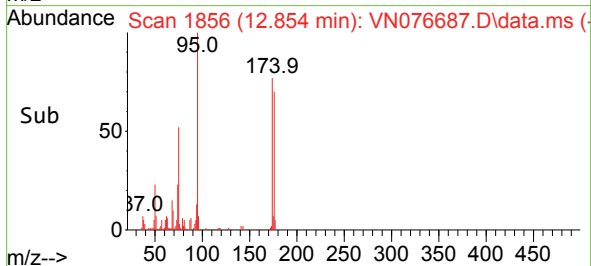


#60
4-Bromofluorobenzene
Concen: 26.995 ug/l
RT: 12.854 min Scan# 1856
Delta R.T. 0.000 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

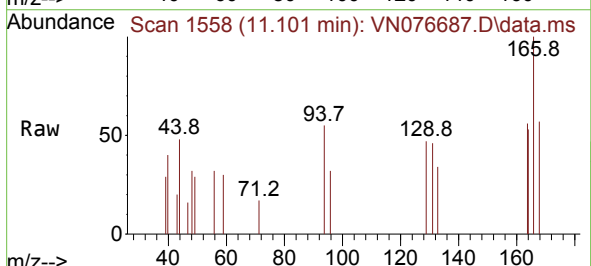
Instrument :
MSVOA_N
ClientSampleId :



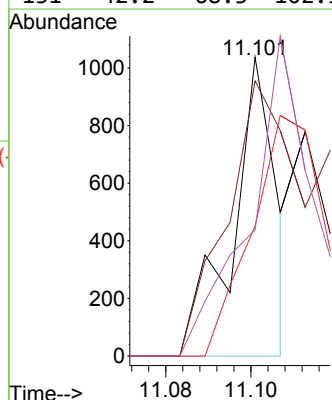
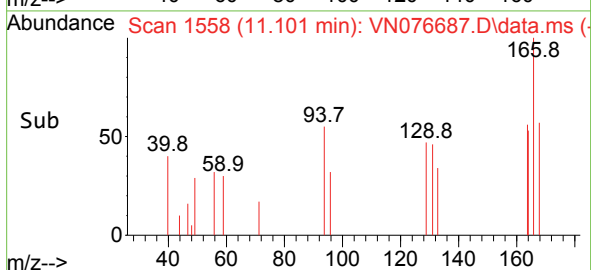
Tgt Ion: 95 Resp: 105650
Ion Ratio Lower Upper
95 100
174 78.3 64.2 96.4
176 73.1 61.4 92.0

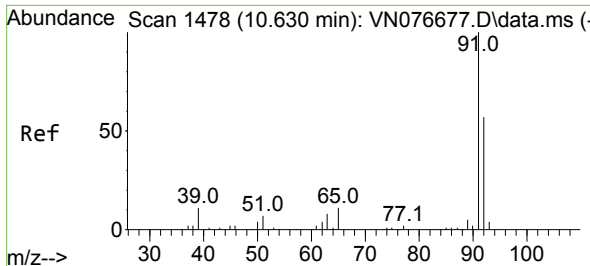


#61
Tetrachloroethene
Concen: 0.266 ug/l
RT: 11.101 min Scan# 1558
Delta R.T. 0.000 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04



Tgt Ion: 164 Resp: 743
Ion Ratio Lower Upper
164 100
166 92.1 96.2 144.2#
129 43.6 78.2 117.4#
131 42.2 68.3 102.5#

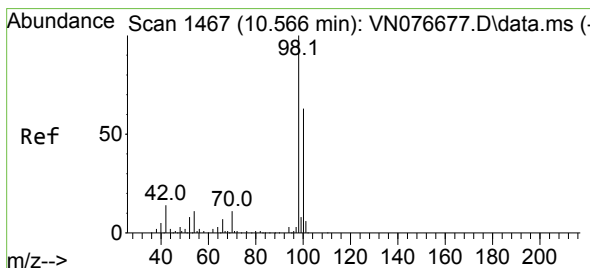
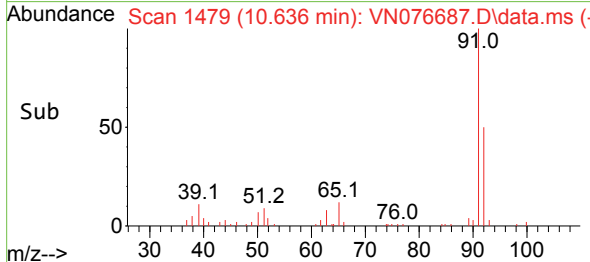
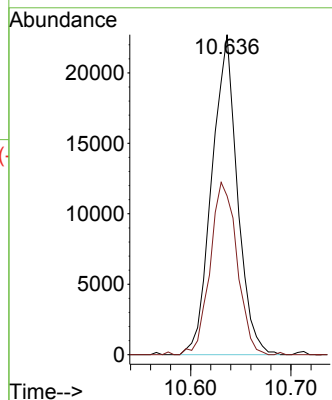
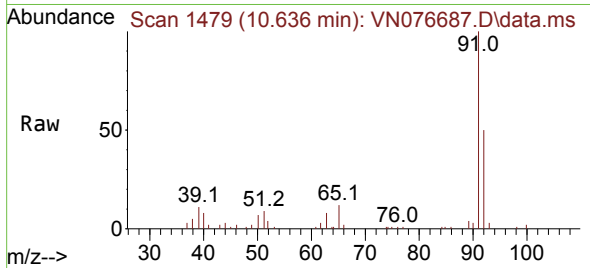




#62
Toluene
Concen: 2.598 ug/l
RT: 10.636 min Scan# 1478
Delta R.T. 0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

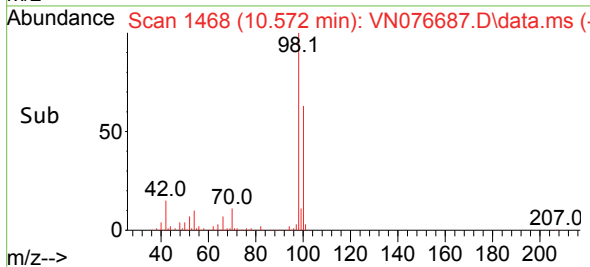
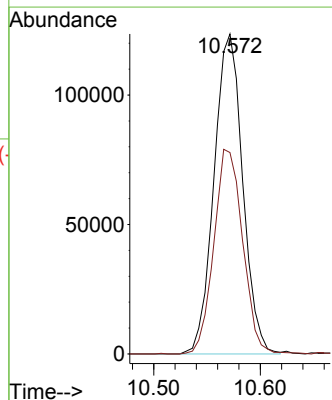
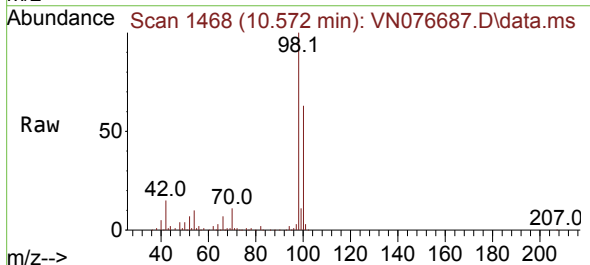
Instrument :
MSVOA_N
ClientSampleId :

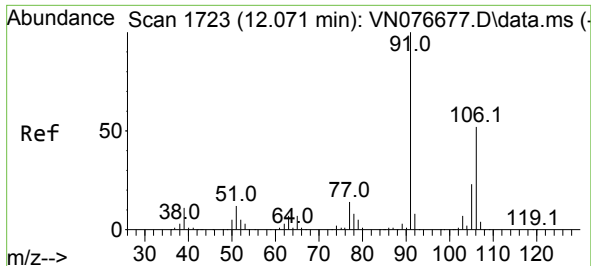
Tgt Ion: 91 Resp: 40170
Ion Ratio Lower Upper
91 100
92 56.7 46.3 69.5



#63
Toluene-d8
Concen: 29.821 ug/l
RT: 10.572 min Scan# 1468
Delta R.T. 0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Tgt Ion: 98 Resp: 231122
Ion Ratio Lower Upper
98 100
100 64.1 53.8 80.6





#67

m/p-Xylenes

Concen: 0.200 ug/l

RT: 12.401 min Scan# 1779

Delta R.T. 0.329 min

Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

Instrument :

MSVOA_N

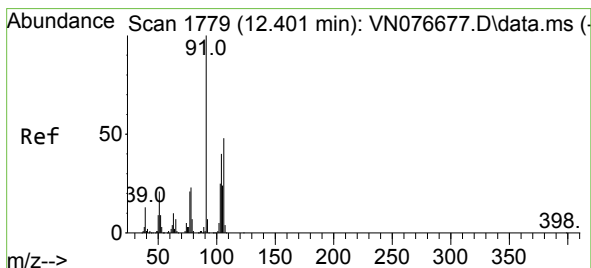
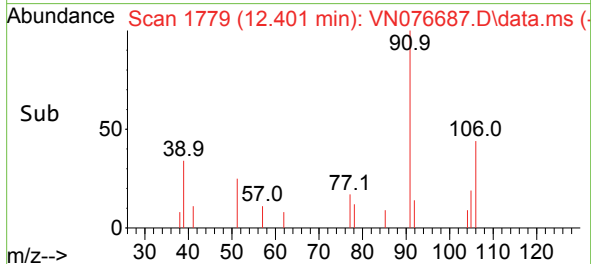
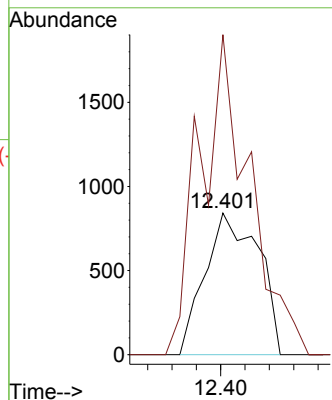
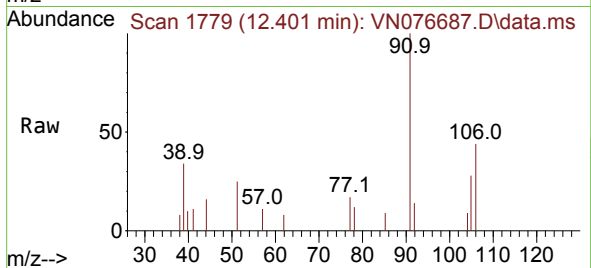
ClientSampleId :

Tgt Ion:106 Resp: 1288

Ion Ratio Lower Upper

106 100

91 208.5 157.4 236.2



#68

o-Xylene

Concen: 0.203 ug/l

RT: 12.401 min Scan# 1779

Delta R.T. 0.000 min

Lab File: VN076687.D

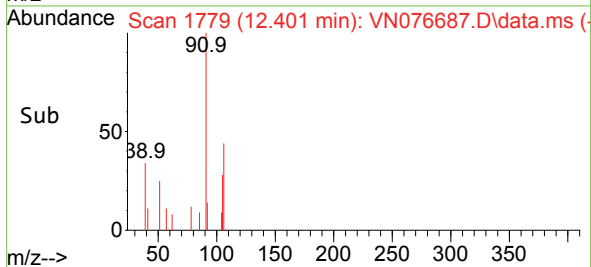
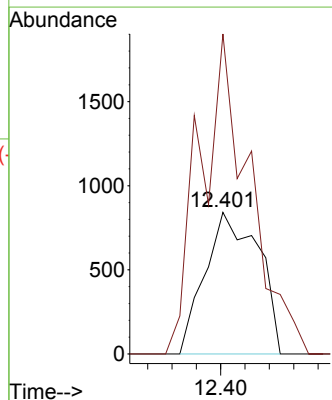
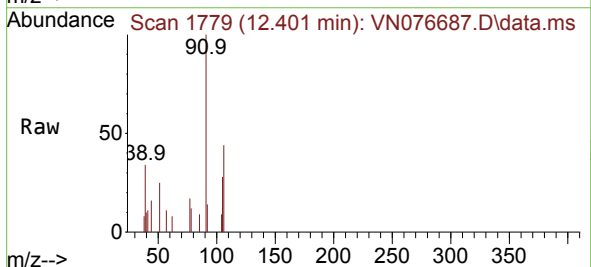
Acq: 15 Feb 2023 16:04

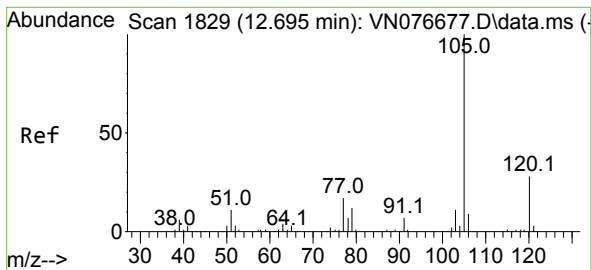
Tgt Ion:106 Resp: 1288

Ion Ratio Lower Upper

106 100

91 208.5 107.2 321.6





#70

Isopropylbenzene

Concen: 0.277 ug/l

RT: 13.101 min Scan# 11

Delta R.T. 0.406 min

Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

Instrument :

MSVOA_N

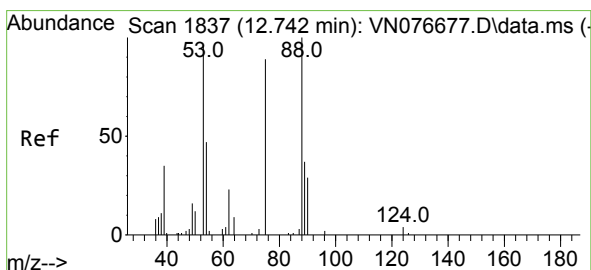
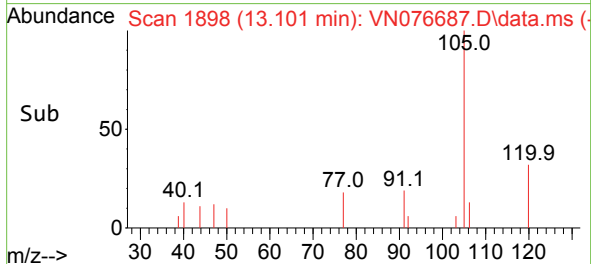
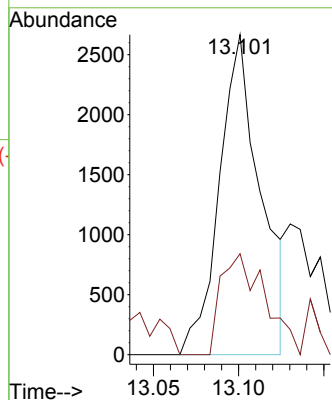
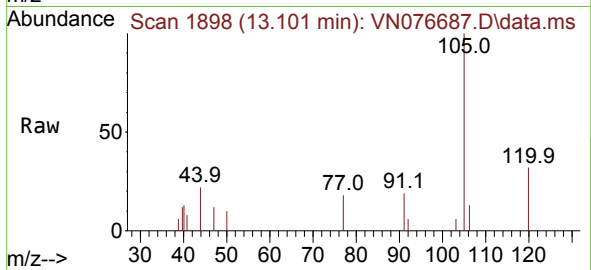
ClientSampleId :

Tgt Ion:105 Resp: 4477

Ion Ratio Lower Upper

105 100

120 33.8 19.0 35.2



#77

t-1,4-Dichloro-2-butene

Concen: 38.963 ug/l

RT: 12.854 min Scan# 1856

Delta R.T. 0.112 min

Lab File: VN076687.D

Acq: 15 Feb 2023 16:04

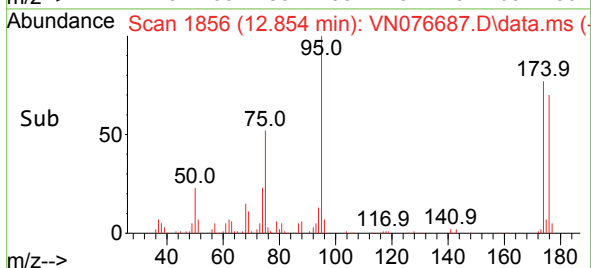
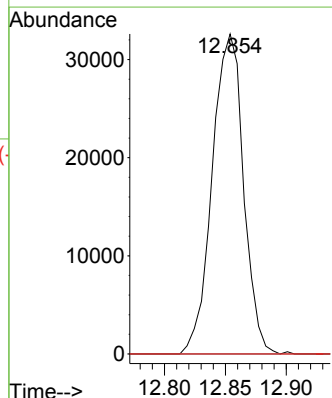
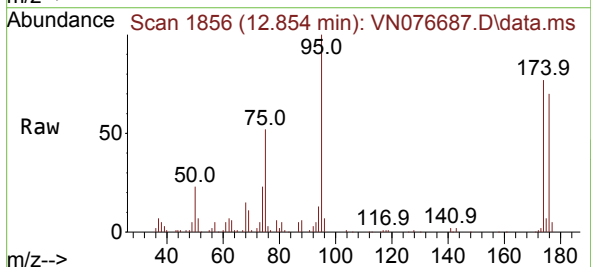
Tgt Ion: 75 Resp: 58308

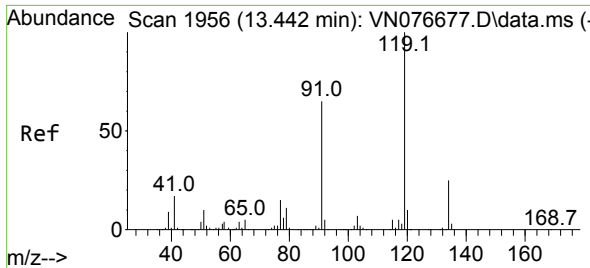
Ion Ratio Lower Upper

75 100

53 0.0 50.4 151.3#

89 0.0 22.1 66.5#

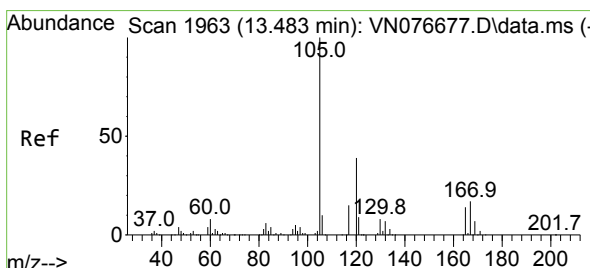
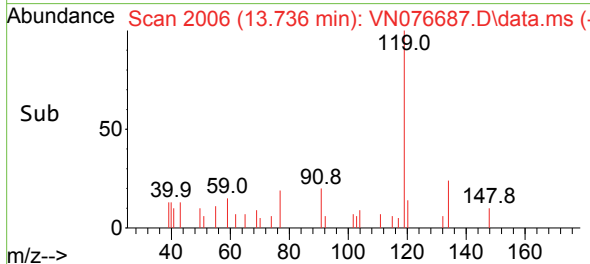
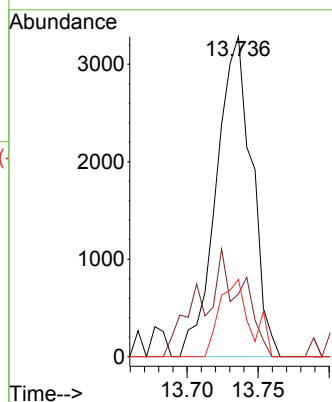
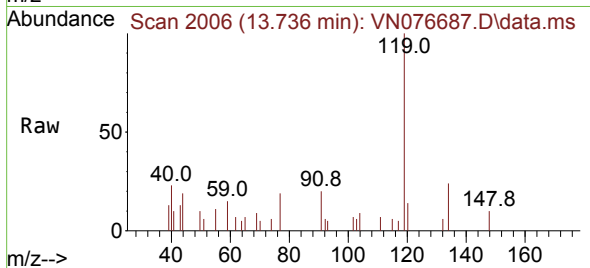




#79
tert-butylbenzene
Concen: 0.478 ug/l
RT: 13.736 min Scan# 20
Delta R.T. 0.294 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

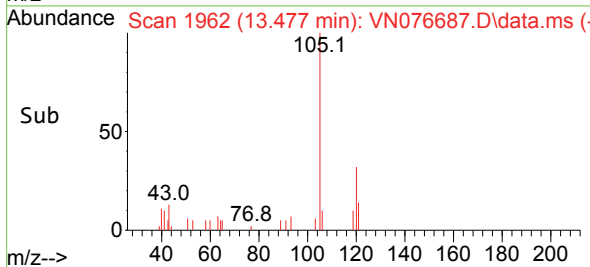
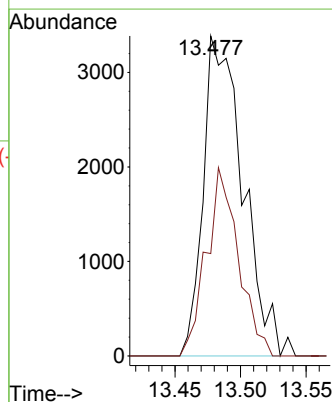
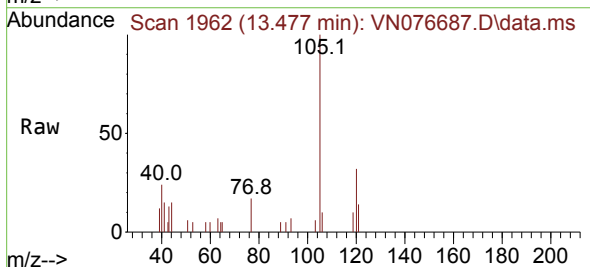
Instrument :
MSVOA_N
ClientSampleId :

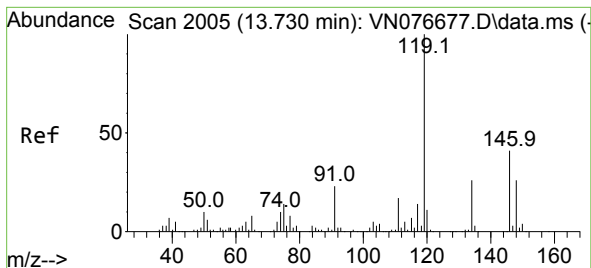
Tgt Ion:119 Resp: 5710
Ion Ratio Lower Upper
119 100
91 12.4 0.0 129.6
134 18.0 0.0 47.8



#80
1,2,4-Trimethylbenzene
Concen: 0.529 ug/l
RT: 13.477 min Scan# 1962
Delta R.T. -0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

Tgt Ion:105 Resp: 7079
Ion Ratio Lower Upper
105 100
120 47.9 0.0 93.2

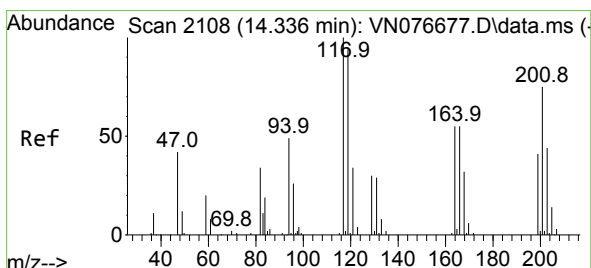
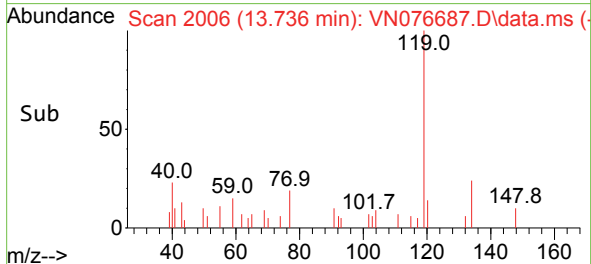
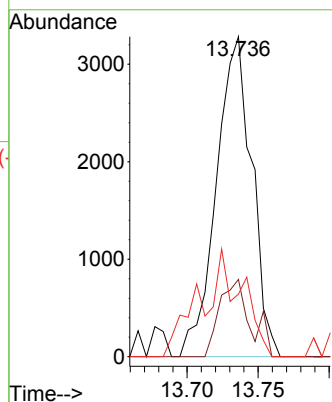
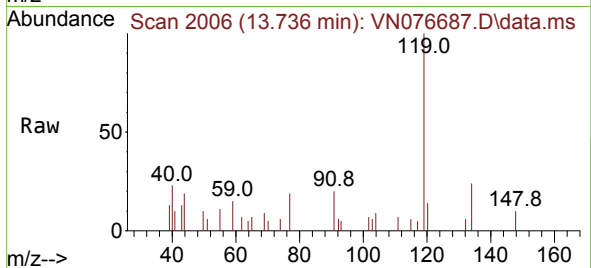




#82
p-Isopropyltoluene
Concen: 0.411 ug/l
RT: 13.736 min Scan# 20
Delta R.T. 0.006 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

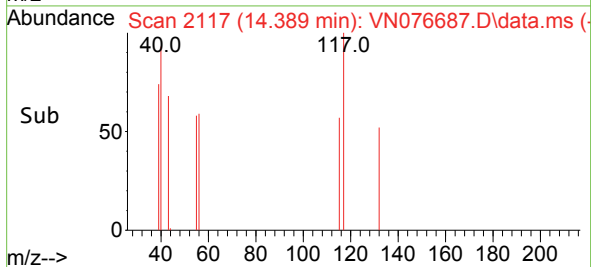
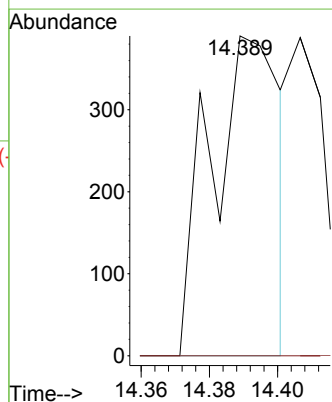
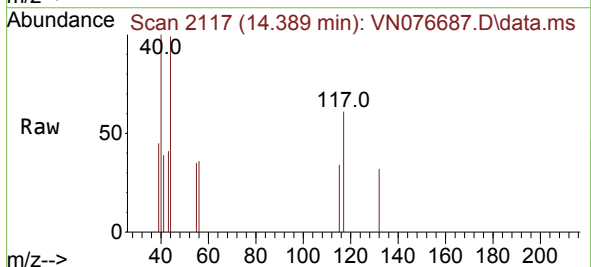
Instrument :
MSVOA_N
ClientSampleId :

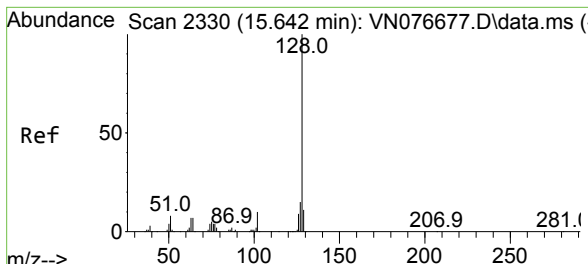
Tgt Ion:119 Resp: 5710
Ion Ratio Lower Upper
119 100
134 18.0 0.0 53.4
91 12.4 0.0 47.2



#86
Hexachloroethane
Concen: 0.207 ug/l
RT: 14.389 min Scan# 2117
Delta R.T. 0.053 min
Lab File: VN076687.D
Acq: 15 Feb 2023 16:04

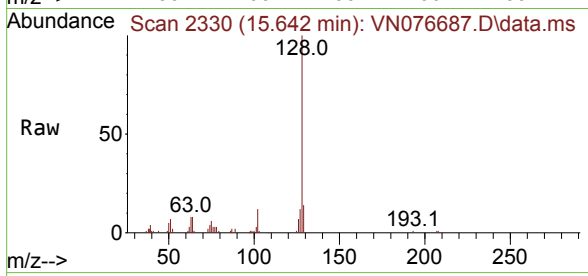
Tgt Ion:117 Resp: 556
Ion Ratio Lower Upper
117 100
201 0.0 32.2 96.6#





#91
 Naphthalene
 Concen: 6.592 ug/l
 RT: 15.642 min Scan# 21
 Delta R.T. 0.000 min
 Lab File: VN076687.D
 Acq: 15 Feb 2023 16:04

Instrument :
 MSVOA_N
 ClientSampleId :



Tgt Ion:128 Resp: 77903

Ion	Ratio	Lower	Upper
128	100		
127	13.9	11.0	16.6
129	11.2	8.9	13.3

