

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN120820\
 Data File : VN065002.D
 Acq On : 9 Dec 2020 5:27
 Operator : JC/MD
 Sample : L4970-15
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 48 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 4S1-A-TOP

Quant Time: Dec 09 08:00:57 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N112320W.M
 Quant Title : SW846 8260
 QLast Update : Mon Nov 23 13:54:12 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.62	168	161972	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.55	114	309283	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.38	117	327405	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.32	152	137061	50.00	ug/l	0.00

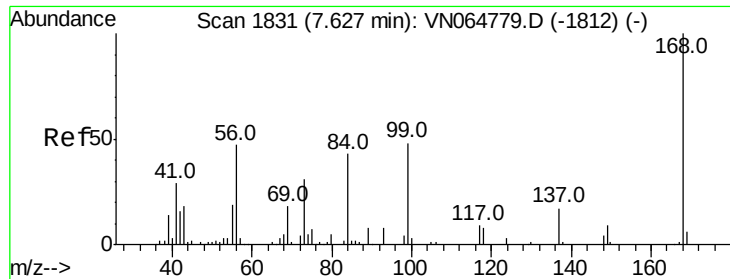
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	7.99	65	104575	55.54	ug/l	0.00
Spiked Amount	50.000	Range	61 - 141	Recovery	=	111.08%
35) Dibromofluoromethane	7.55	113	97216	52.53	ug/l	0.00
Spiked Amount	50.000	Range	69 - 133	Recovery	=	105.06%
50) Toluene-d8	10.06	98	390527	51.65	ug/l	0.00
Spiked Amount	50.000	Range	65 - 126	Recovery	=	103.30%
62) 4-Bromofluorobenzene	12.38	95	144827	53.52	ug/l	0.00
Spiked Amount	50.000	Range	58 - 135	Recovery	=	107.04%

Target Compounds

					Qvalue	
16) Acetone	3.78	43	6140	9.919	ug/l	92
18) Methyl Acetate	4.28	43	418	0.225	ug/l #	81
20) Methylene Chloride	4.50	84	7631	3.934	ug/l	92
25) 2-Butanone	6.79	43	2486	2.477	ug/l #	85
29) Tetrahydrofuran	7.17	42	921	1.330	ug/l #	44
31) Cyclohexane	7.62	56	2893	1.102	ug/l #	1
36) 1,1-Dichloropropene	7.63	75	10985	3.832	ug/l #	45
37) Ethyl Acetate	6.79	43	2486	0.900	ug/l #	66
38) Carbon Tetrachloride	7.62	117	15692	5.261	ug/l #	16
41) Methacrylonitrile	7.18	41	481	0.377	ug/l #	24
43) Isopropyl Acetate	8.13	43	16576	3.730	ug/l	95
45) 1,2-Dichloropropane	9.24	63	1204	0.529	ug/l #	43
48) Methyl methacrylate	9.14	41	4073	1.918	ug/l #	12
51) 4-Methyl-2-Pentanone	9.96	43	3540	1.327	ug/l	95
54) cis-1,3-Dichloropropene	9.87	75	26681	7.308	ug/l #	65
57) 1,3-Dichloropropane	10.73	76	17199	4.687	ug/l #	42
59) 2-Hexanone	10.73	43	214404	111.677	ug/l #	50
71) Bromoform	12.38	173	804	0.390	ug/l #	1
76) 1,2,3-Trichloropropane	12.37	75	68679	23.267	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.37	75	68679	63.770	ug/l #	15

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampleId :

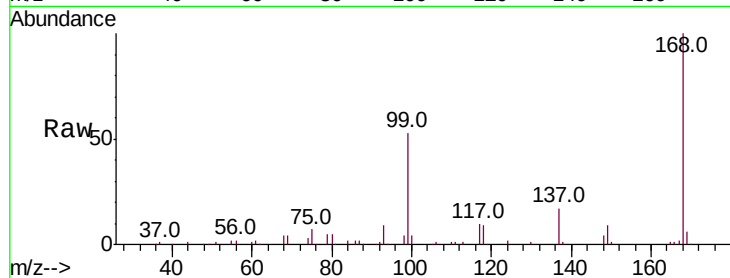
4S1-A-TOP

Tot Ion:168 Resp: 161972

Ion Ratio Lower Upper

168 100

99 52.9 43.0 64.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0

7.62

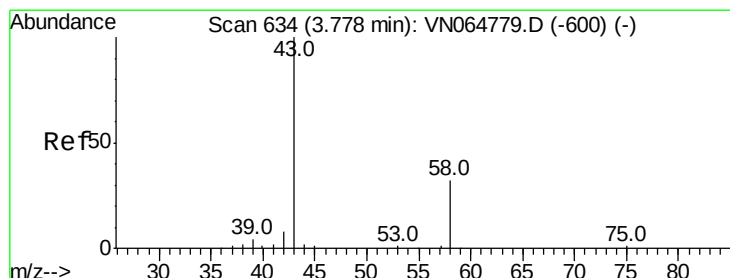
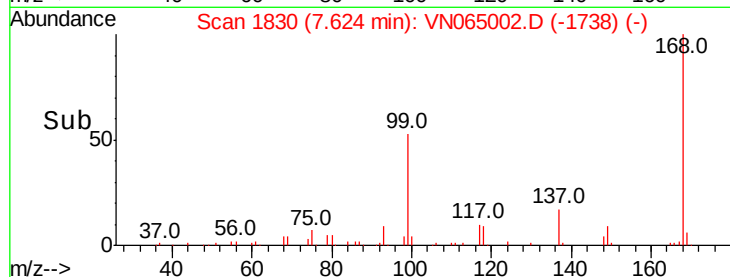
60000

40000

20000

0

Time--> 7.50 7.60 7.70



#16

Acetone

Concen: 9.919 ug/l

RT: 3.78 min Scan# 634

Delta R.T. 0.00 min

Lab File: VN065002.D

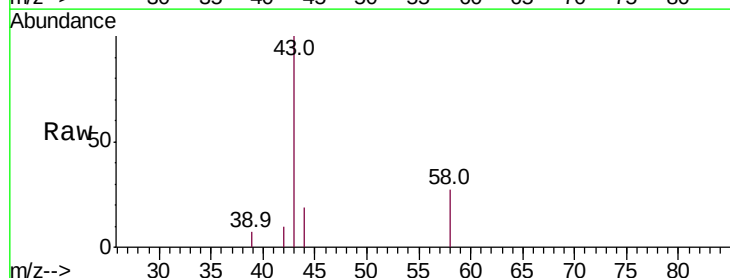
Acq: 9 Dec 2020 5:27

Tgt Ion: 43 Resp: 6140

Ion Ratio Lower Upper

43 100

58 27.4 25.7 38.5



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

2500

2000

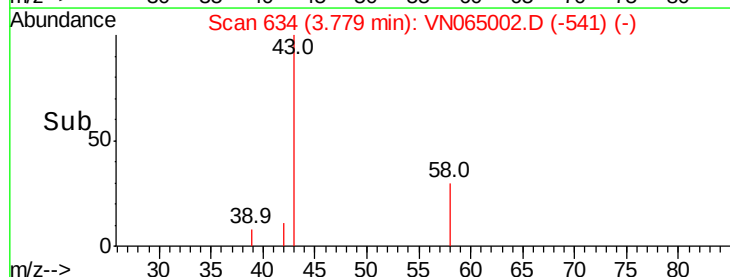
1500

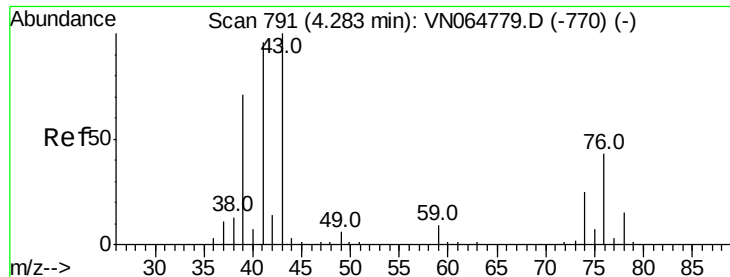
1000

500

0

Time--> 3.70 3.75 3.80 3.85





#18

Methyl Acetate

Concen: 0.225 ug/l

RT: 4.28 min Scan# 789

Delta R.T. -0.01 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampleId :

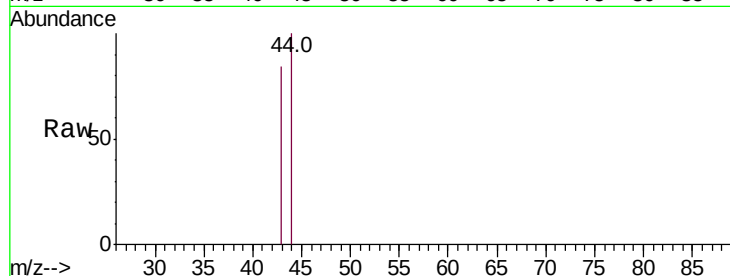
4S1-A-TOP

Tot Ion: 43 Resp: 418

Ion Ratio Lower Upper

43 100

74 15.8 20.2 30.2#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

4.28

300

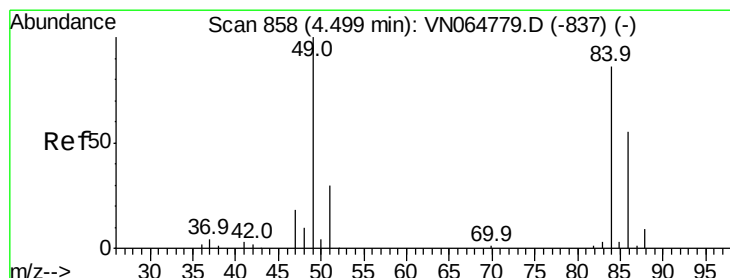
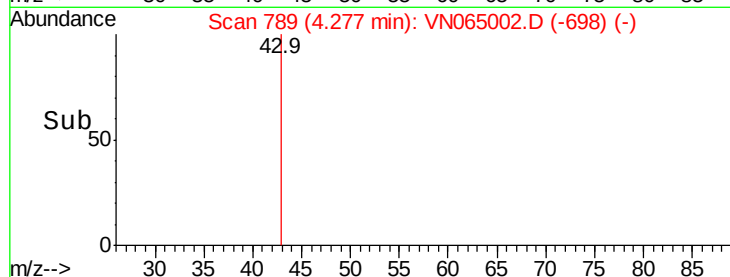
200

100

0

4.26 4.28 4.30

Time-->



#20

Methylene Chloride

Concen: 3.934 ug/l

RT: 4.50 min Scan# 859

Delta R.T. 0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Tgt Ion: 84 Resp: 7631

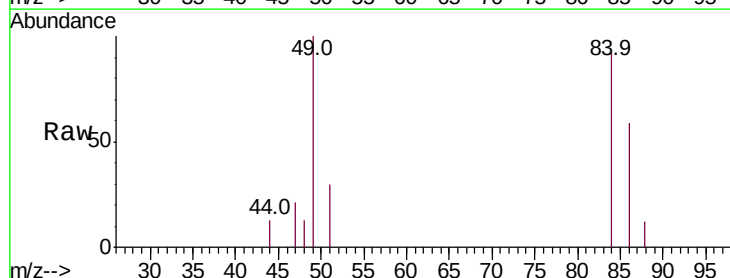
Ion Ratio Lower Upper

84 100

49 102.7 93.4 140.0

51 33.0 28.2 42.4

86 64.8 51.7 77.5



Abundance Ion 83.90 (83.60 to 84.60): VN0

Ion 48.90 (48.60 to 49.60): VN0

Ion 50.90 (50.60 to 51.60): VN0

Ion 85.90 (85.60 to 86.60): VN0

4000

3000

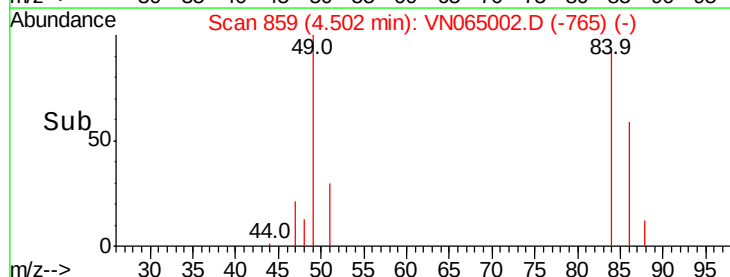
2000

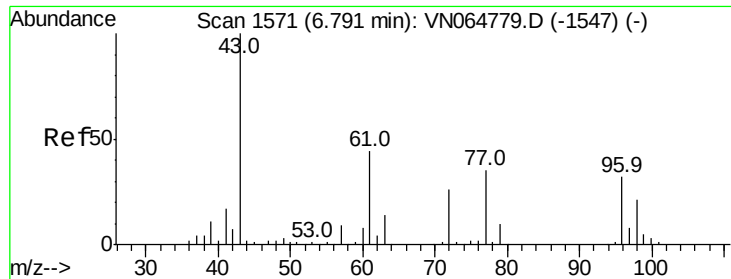
1000

0

4.45 4.50 4.55

Time-->

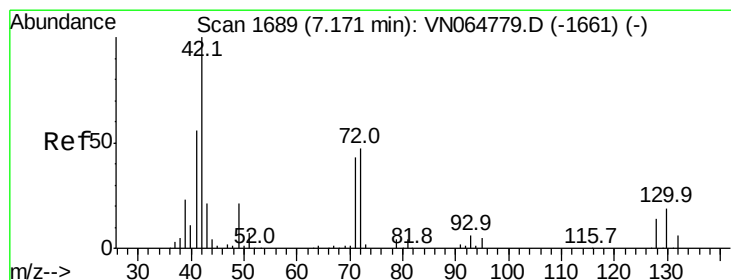
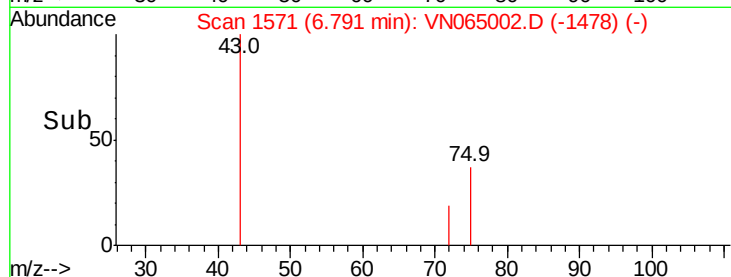
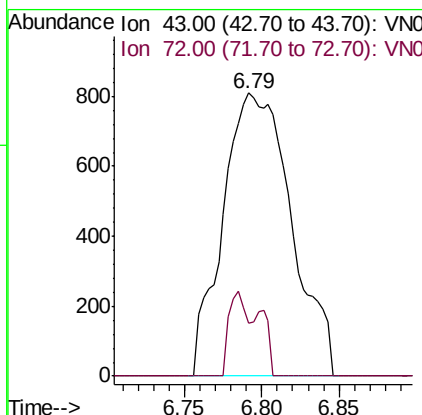
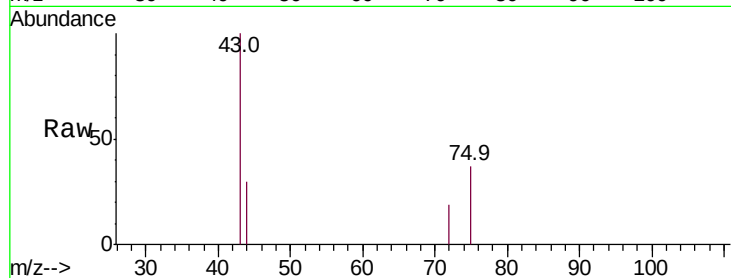




#25
2-Butanone
Concen: 2.477 ug/l
RT: 6.79 min Scan# 1571
Delta R.T. 0.00 min
Lab File: VN065002.D
Acq: 9 Dec 2020 5:27

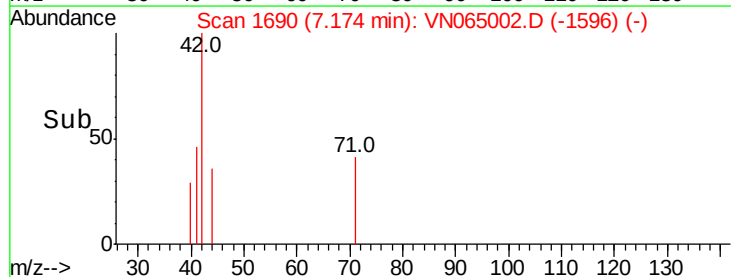
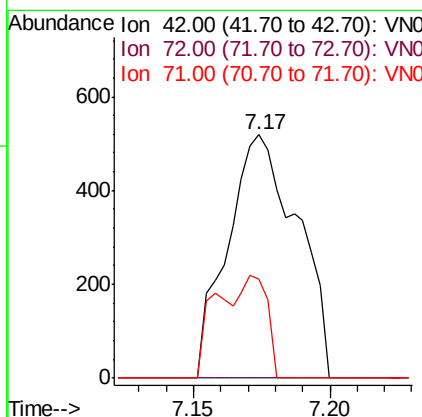
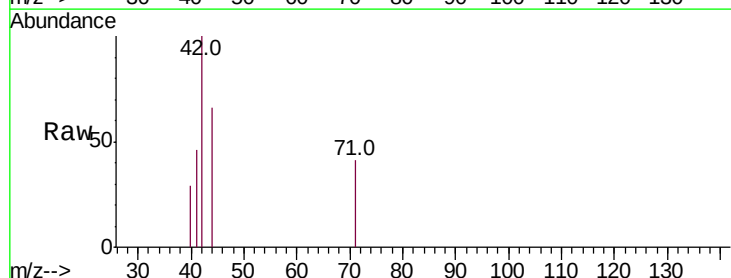
Instrument :
MSVOA_N
ClientSampled :
4S1-A-TOP

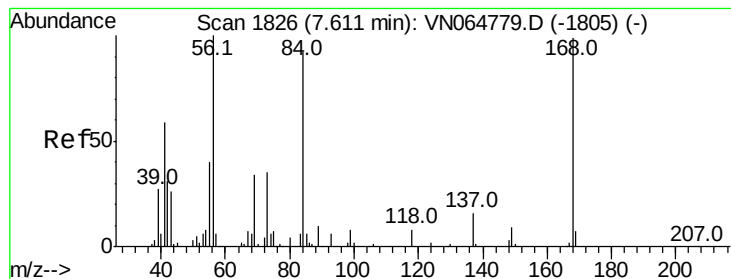
Tot Ion: 43 Resp: 2486
Ion Ratio Lower Upper
43 100
72 18.8 21.0 31.6#



#29
Tetrahydrofuran
Concen: 1.330 ug/l
RT: 7.17 min Scan# 1690
Delta R.T. 0.00 min
Lab File: VN065002.D
Acq: 9 Dec 2020 5:27

Tgt Ion: 42 Resp: 921
Ion Ratio Lower Upper
42 100
72 0.0 36.6 54.8#
71 16.4 33.6 50.4#





#31

Cyclohexane

Concen: 1.102 ug/l

RT: 7.62 min Scan# 1829

Delta R.T. 0.01 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampled :

4S1-A-TOP

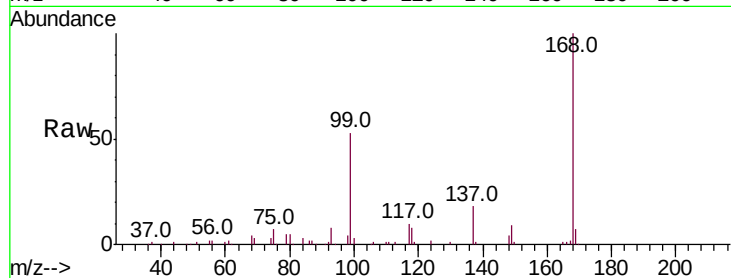
Tot Ion: 56 Resp: 2893

Ion Ratio Lower Upper

56 100

69 178.0 27.5 41.3#

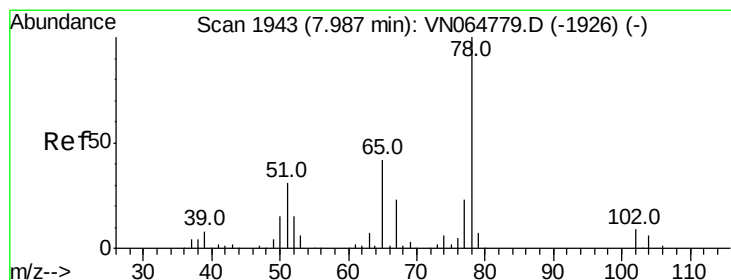
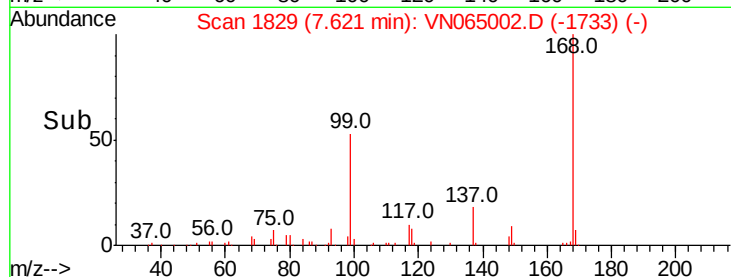
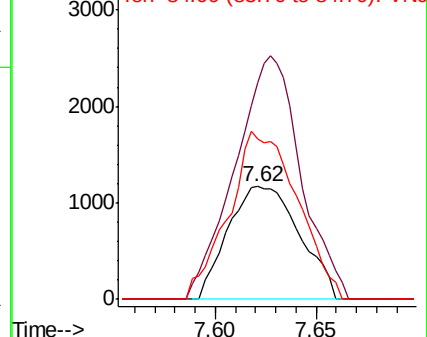
84 143.1 73.9 110.9#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0



#33

1,2-Dichloroethane-d4

Concen: 55.535 ug/l

RT: 7.99 min Scan# 1943

Delta R.T. 0.00 min

Lab File: VN065002.D

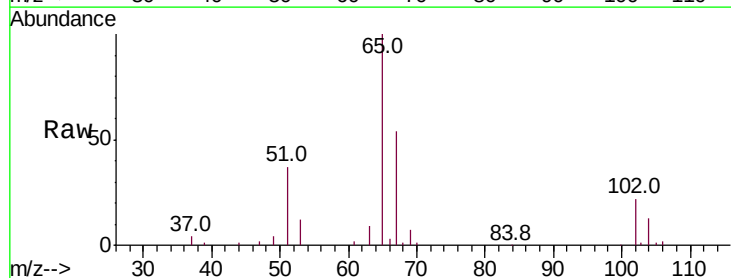
Acq: 9 Dec 2020 5:27

Tgt Ion: 65 Resp: 104575

Ion Ratio Lower Upper

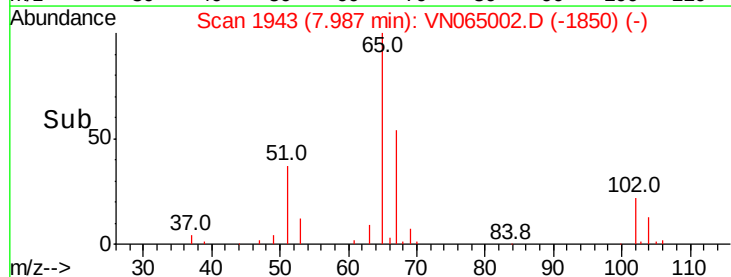
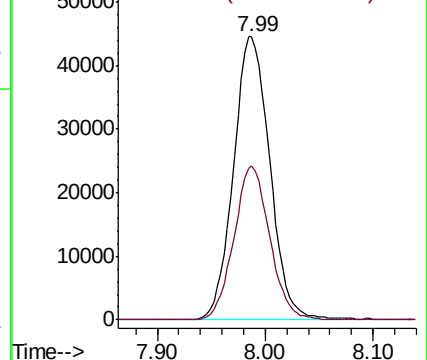
65 100

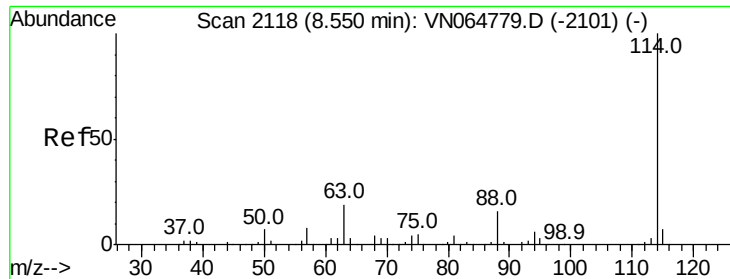
67 53.3 0.0 108.2



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

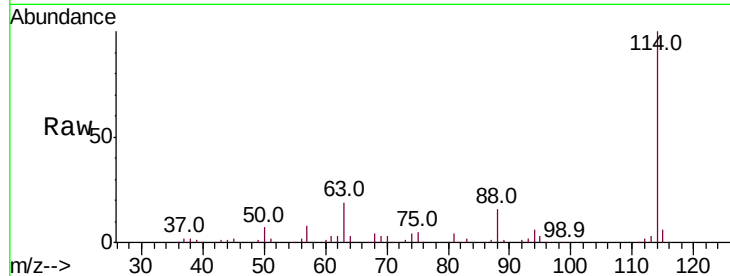




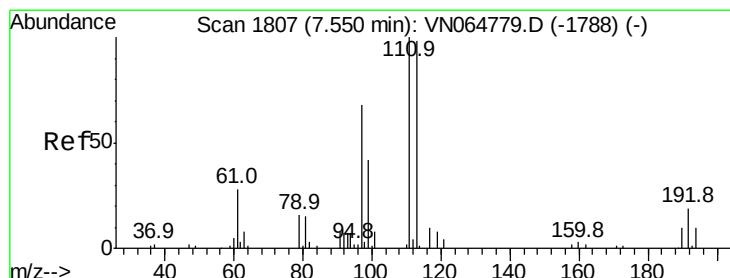
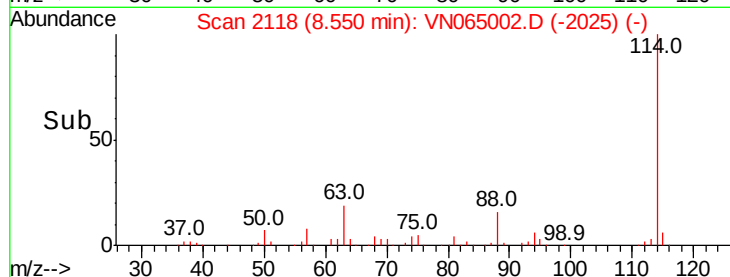
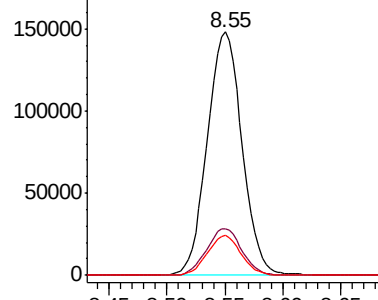
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.55 min Scan# 2118
Delta R.T. 0.00 min
Lab File: VN065002.D
Acq: 9 Dec 2020 5:27

Instrument :
MSVOA_N
ClientSampleId :
4S1-A-TOP

Tot Ion	Ratio	Lower	Upper
114	100		
63	19.1	0.0	38.6
88	16.3	0.0	32.6

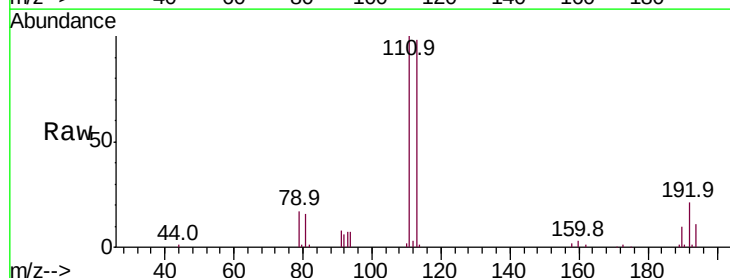


Abundance Ion 113.90 (113.60 to 114.60): V
Ion 63.00 (62.70 to 63.70): VN
Ion 87.90 (87.60 to 88.60): VN

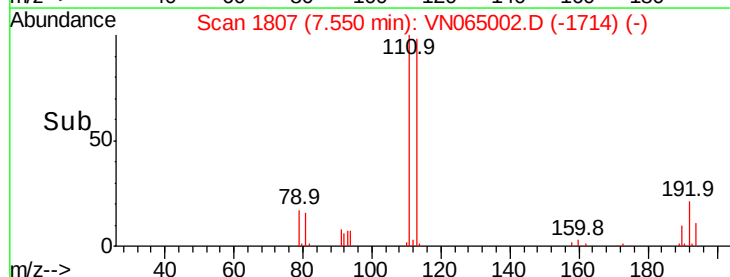
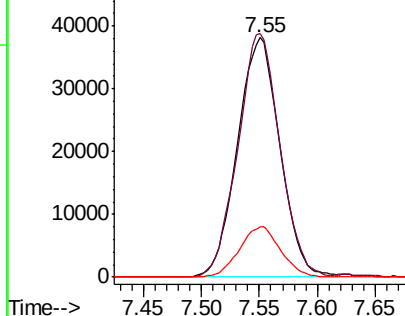


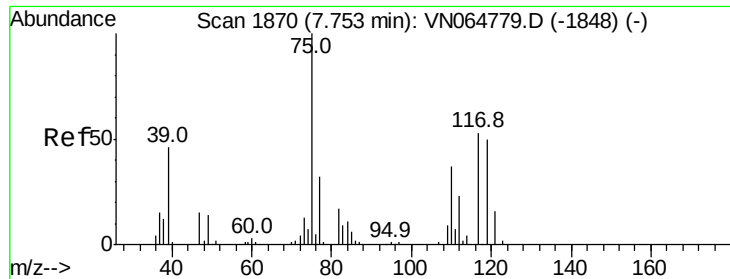
#35
Dibromofluoromethane
Concen: 52.531 ug/l
RT: 7.55 min Scan# 1807
Delta R.T. 0.00 min
Lab File: VN065002.D
Acq: 9 Dec 2020 5:27

Tgt Ion	Ratio	Lower	Upper
113	100		
111	100.6	81.6	122.4
192	20.3	16.2	24.2



Abundance Ion 112.80 (112.50 to 113.50): V
Ion 110.80 (110.50 to 111.50): V
Ion 191.70 (191.40 to 192.40): V

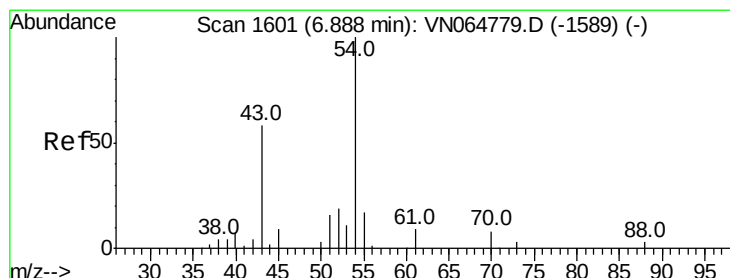
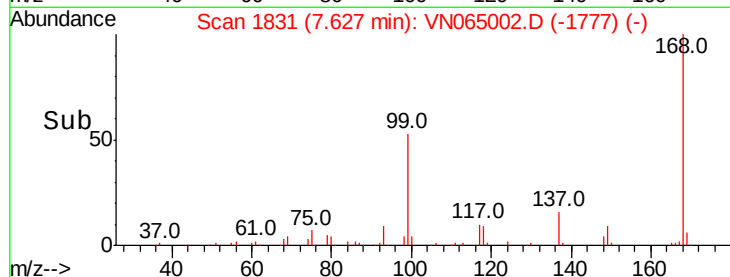
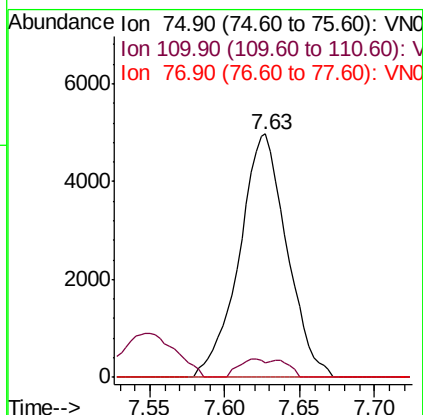
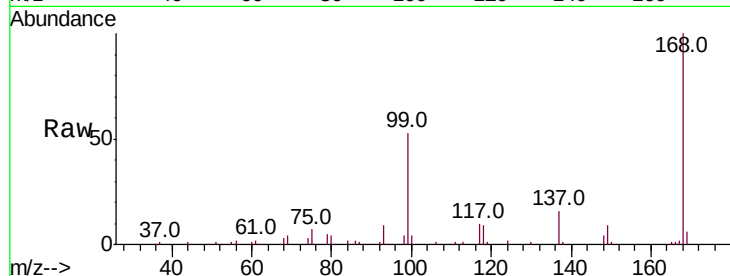




#36
 1,1-Dichloropropene
 Concen: 3.832 ug/l
 RT: 7.63 min Scan# 1831
 Delta R.T. -0.13 min
 Lab File: VN065002.D
 Acq: 9 Dec 2020 5:27

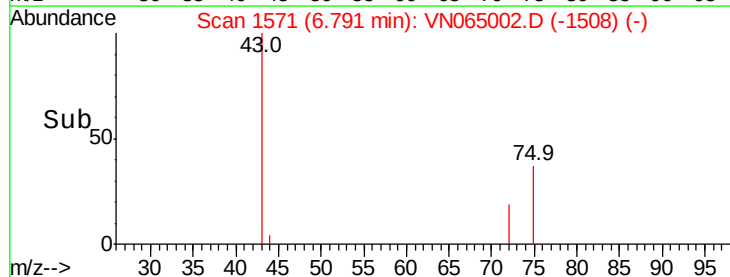
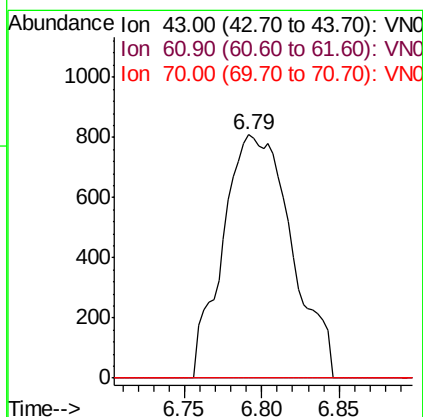
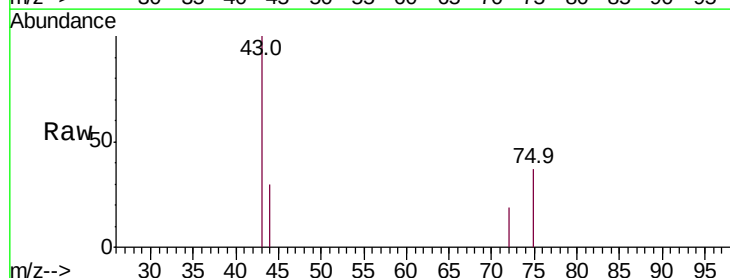
Instrument :
 MSVOA_N
 ClientSampled :
 4S1-A-TOP

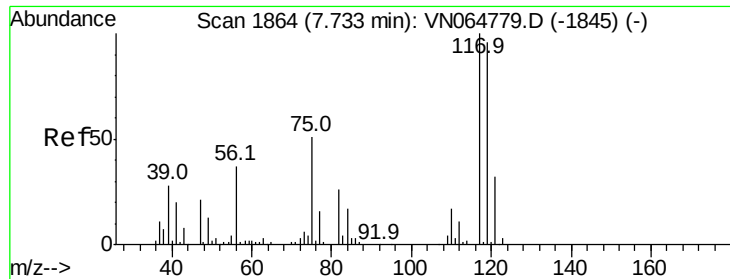
Tot Ion: 75 Resp: 10985
 Ion Ratio Lower Upper
 75 100
 110 4.2 17.8 53.3#
 77 0.0 25.0 37.4#



#37
 Ethyl Acetate
 Concen: 0.900 ug/l
 RT: 6.79 min Scan# 1571
 Delta R.T. -0.10 min
 Lab File: VN065002.D
 Acq: 9 Dec 2020 5:27

Tgt Ion: 43 Resp: 2486
 Ion Ratio Lower Upper
 43 100
 61 0.0 12.8 19.2#
 70 0.0 8.8 13.2#





#38

Carbon Tetrachloride

Concen: 5.261 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.11 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampleId :

4S1-A-TOP

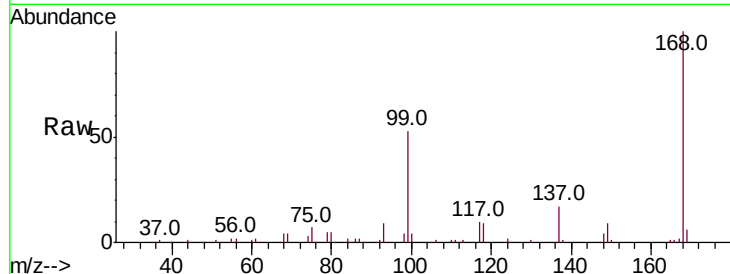
Tot Ion:117 Resp: 15692

Ion Ratio Lower Upper

117 100

119 5.0 76.7 115.1#

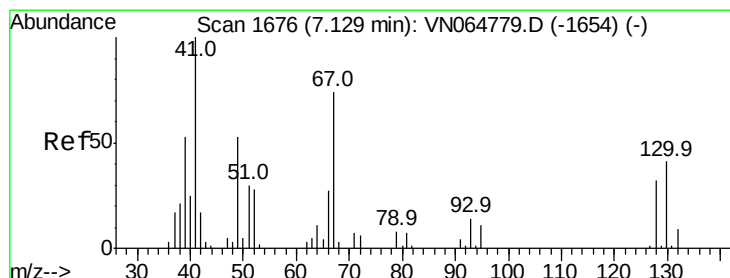
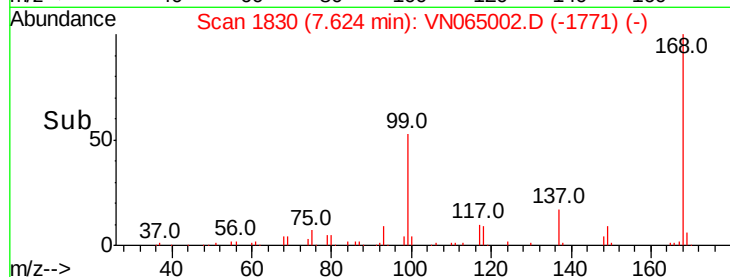
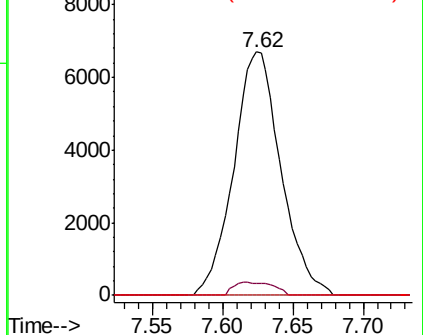
121 0.0 25.4 38.2#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 0.377 ug/l

RT: 7.18 min Scan# 1691

Delta R.T. 0.05 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Tgt Ion: 41 Resp: 481

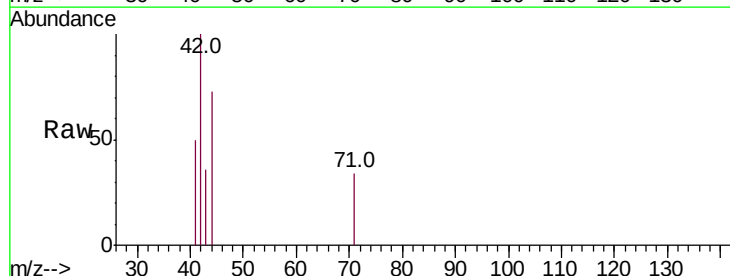
Ion Ratio Lower Upper

41 100

39 27.9 51.0 76.6#

67 0.0 79.8 119.8#

52 0.0 31.5 47.3#

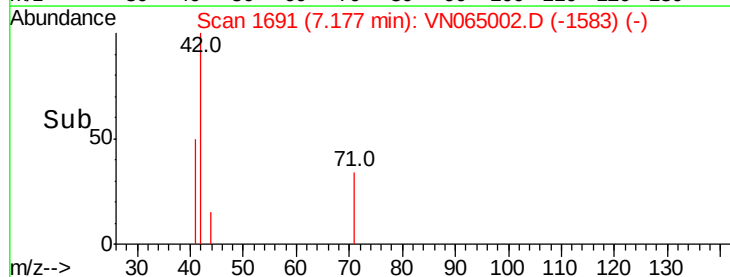
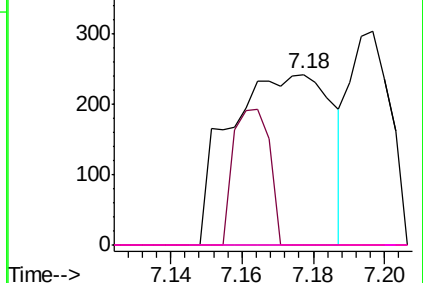


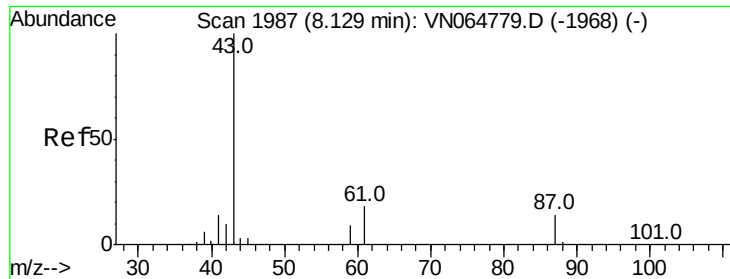
Abundance Ion 41.00 (40.70 to 41.70): V

Ion 39.00 (38.70 to 39.70): V

Ion 67.00 (66.70 to 67.70): V

Ion 52.00 (51.70 to 52.70): V





#43

Isopropyl Acetate

Concen: 3.730 ug/l

RT: 8.13 min Scan# 1987

Delta R.T. 0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampled :

4S1-A-TOP

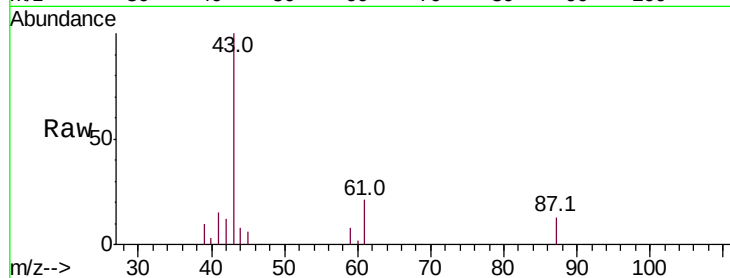
Tot Ion: 43 Resp: 16576

Ion Ratio Lower Upper

43 100

61 19.1 17.2 25.8

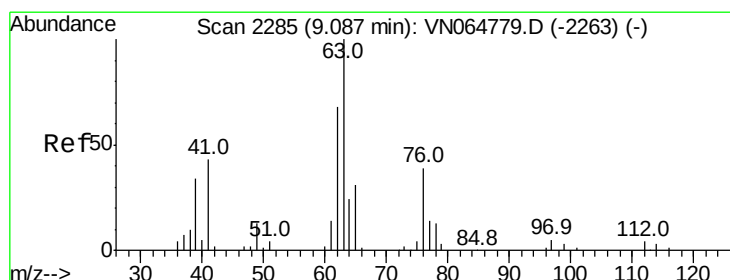
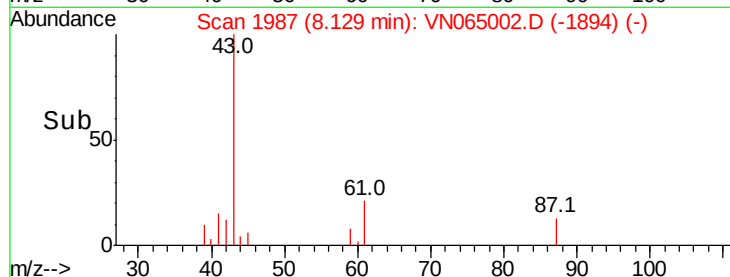
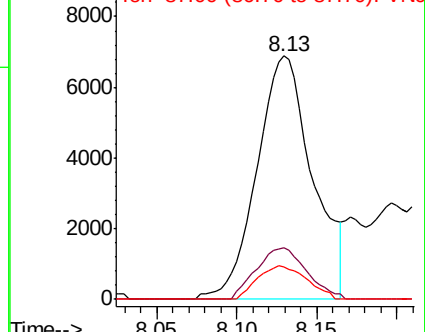
87 12.2 11.4 17.0



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#45

1,2-Dichloropropane

Concen: 0.529 ug/l

RT: 9.24 min Scan# 2331

Delta R.T. 0.15 min

Lab File: VN065002.D

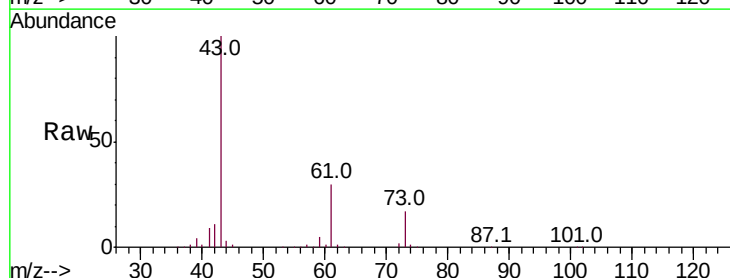
Acq: 9 Dec 2020 5:27

Tgt Ion: 63 Resp: 1204

Ion Ratio Lower Upper

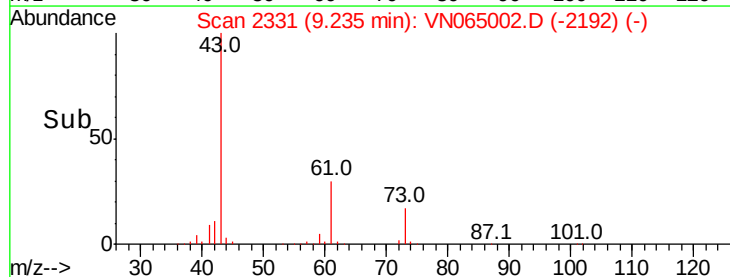
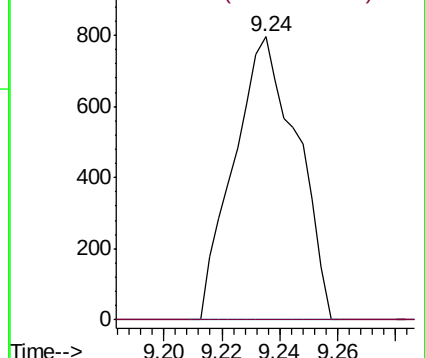
63 100

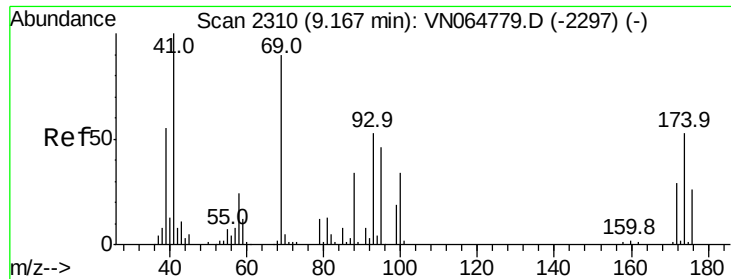
65 0.0 25.0 37.4#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 64.90 (64.60 to 65.60): VN0

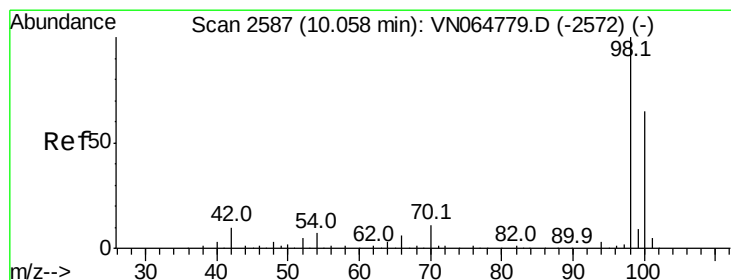
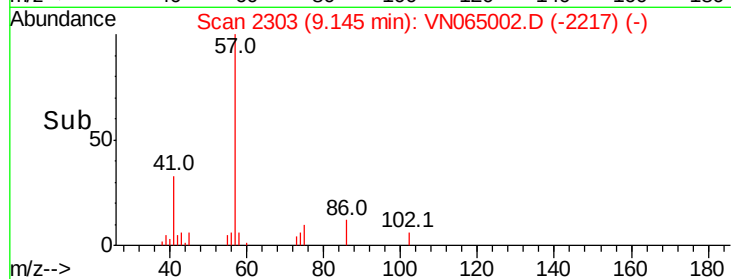
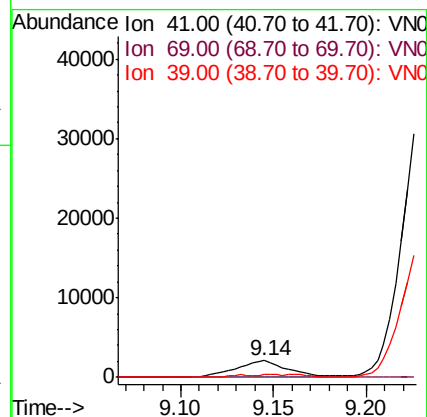
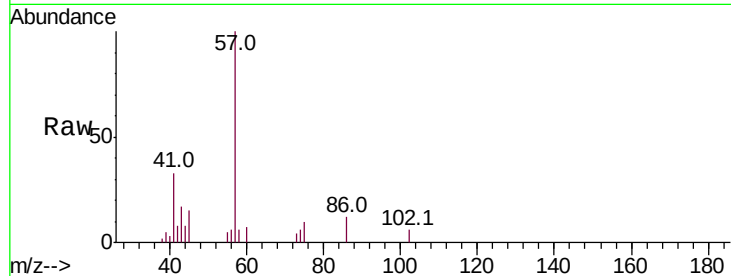




#48
Methvl methacrylate
Concen: 1.918 ug/l
RT: 9.14 min Scan# 2303
Delta R.T. -0.02 min
Lab File: VN065002.D
Acq: 9 Dec 2020 5:27

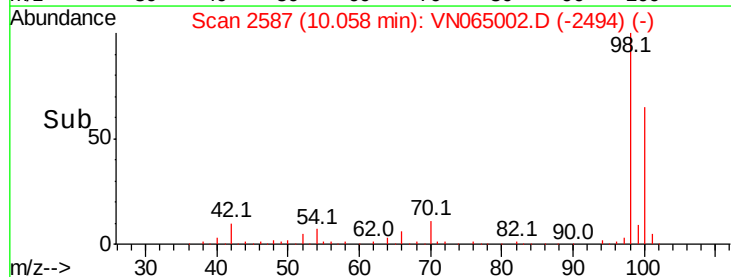
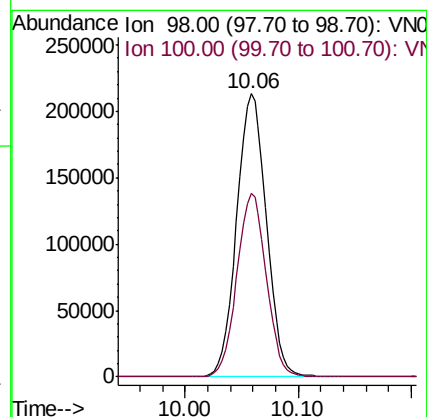
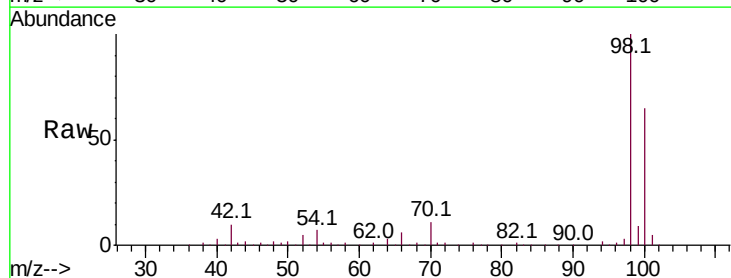
Instrument :
MSVOA_N
ClientSampled :
4S1-A-TOP

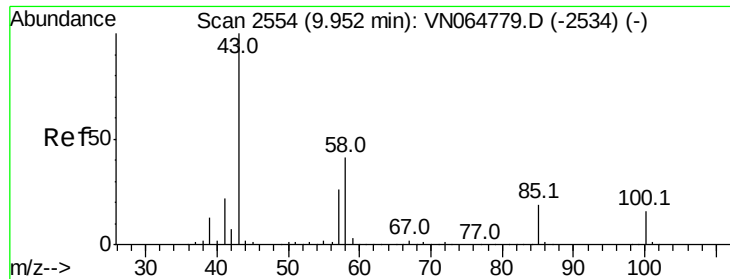
Tot Ion: 41 Resp: 4073
Ion Ratio Lower Upper
41 100
69 0.0 71.8 107.8#
39 0.0 44.1 66.1#



#50
Toluene-d8
Concen: 51.646 ug/l
RT: 10.06 min Scan# 2587
Delta R.T. 0.00 min
Lab File: VN065002.D
Acq: 9 Dec 2020 5:27

Tgt Ion: 98 Resp: 390527
Ion Ratio Lower Upper
98 100
100 64.2 51.7 77.5





#51

4-Methyl-2-Pentanone

Concen: 1.327 ug/l

RT: 9.96 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampled :

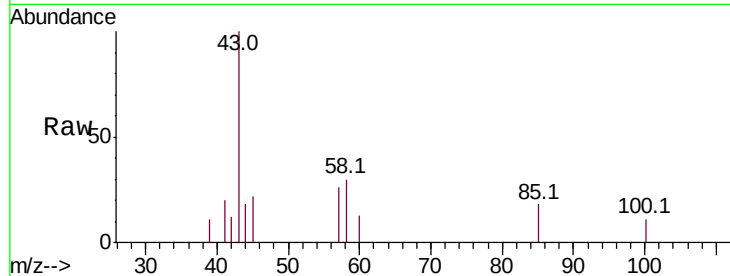
4S1-A-TOP

Tot Ion: 43 Resp: 3540

Ion Ratio Lower Upper

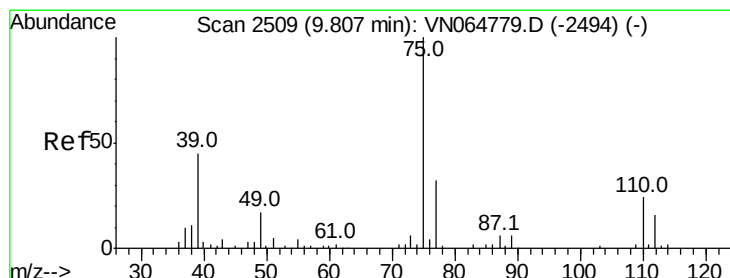
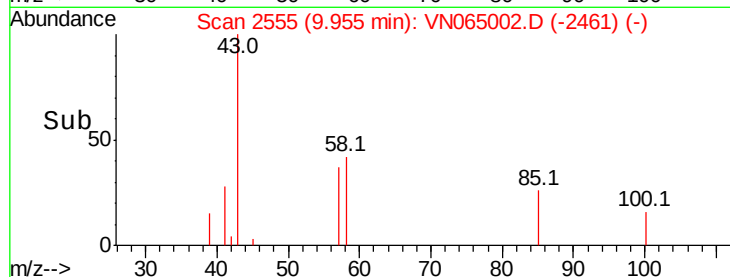
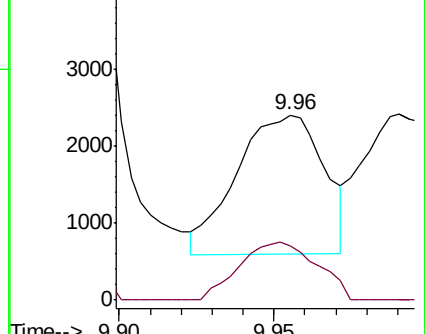
43 100

58 37.1 32.4 48.6



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#54

cis-1,3-Dichloropropene

Concen: 7.308 ug/l

RT: 9.87 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

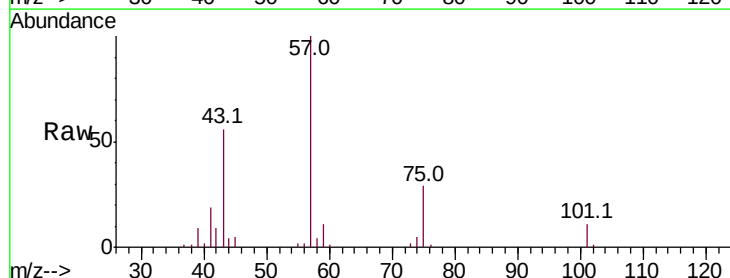
Tgt Ion: 75 Resp: 26681

Ion Ratio Lower Upper

75 100

77 0.0 25.5 38.3#

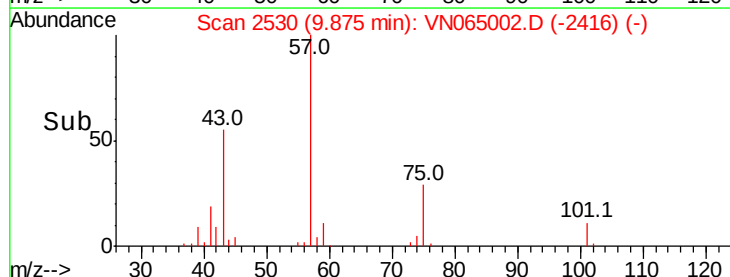
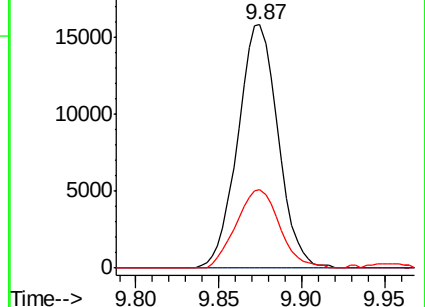
39 32.3 35.6 53.4#

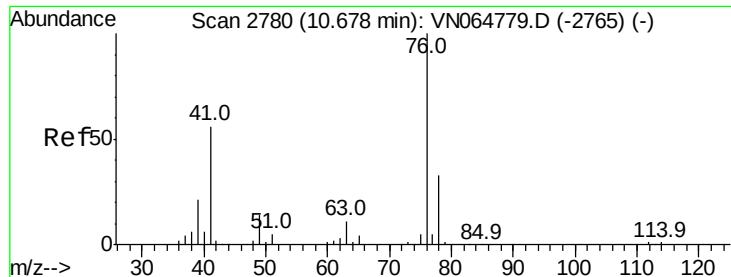


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 76.90 (76.60 to 77.60): VN0

Ion 39.00 (38.70 to 39.70): VN0





#57

1,3-Dichloropropane

Concen: 4.687 ug/l

RT: 10.73 min Scan# 2797

Delta R.T. 0.05 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampled :

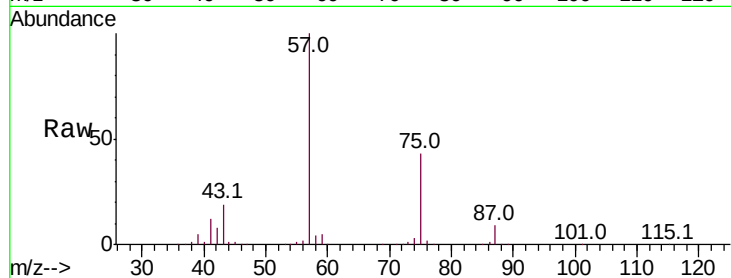
4S1-A-TOP

Tot Ion: 76 Resp: 17199

Ion Ratio Lower Upper

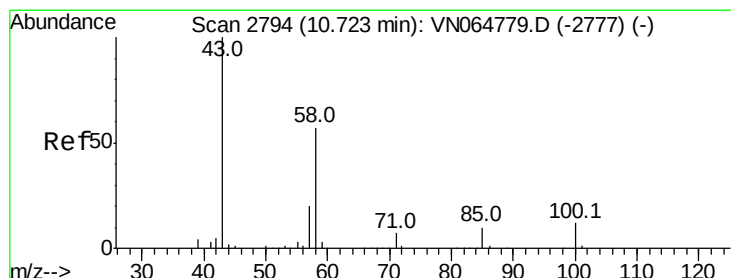
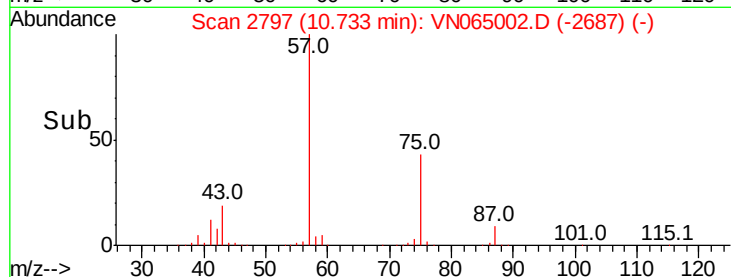
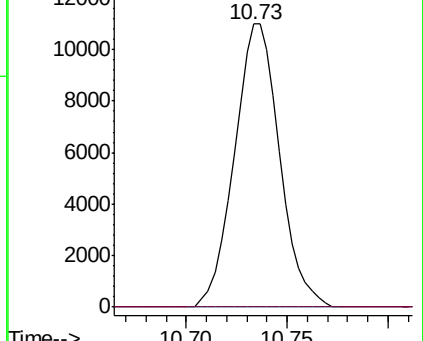
76 100

78 0.0 26.1 39.1#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#59

2-Hexanone

Concen: 111.677 ug/l

RT: 10.73 min Scan# 2797

Delta R.T. 0.01 min

Lab File: VN065002.D

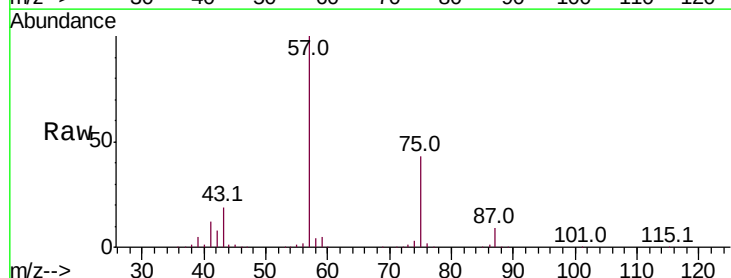
Acq: 9 Dec 2020 5:27

Tgt Ion: 43 Resp: 214404

Ion Ratio Lower Upper

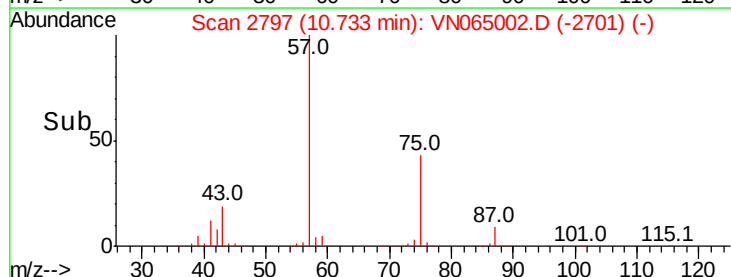
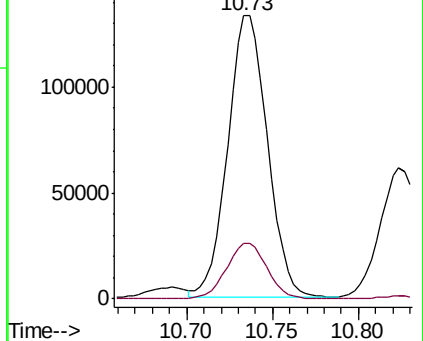
43 100

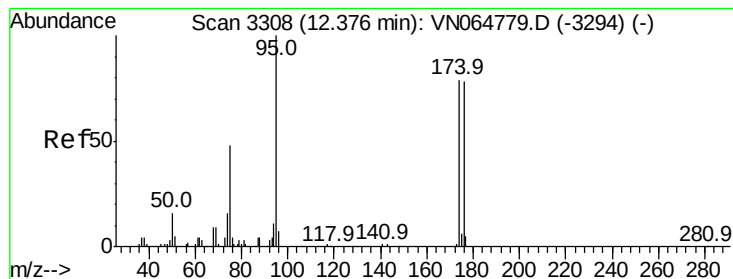
58 20.2 28.3 84.9#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#62

4-Bromofluorobenzene

Concen: 53.518 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampled :

4S1-A-TOP

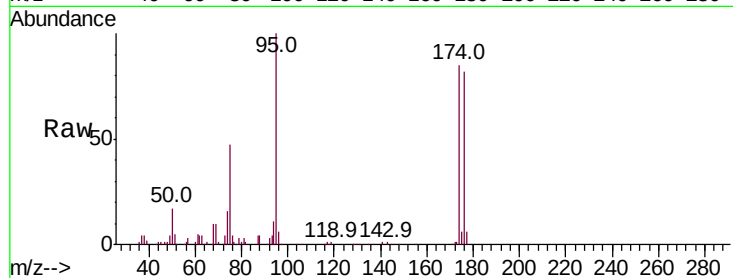
Tot Ion: 95 Resp: 144827

Ion Ratio Lower Upper

95 100

174 83.8 0.0 160.4

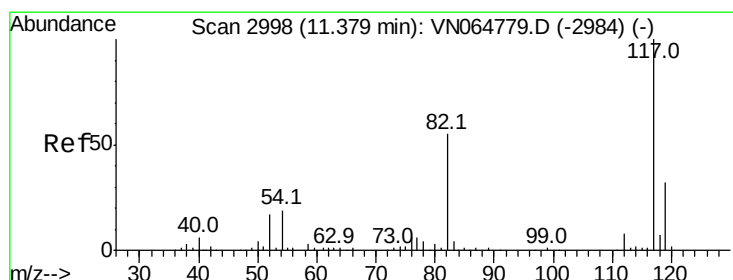
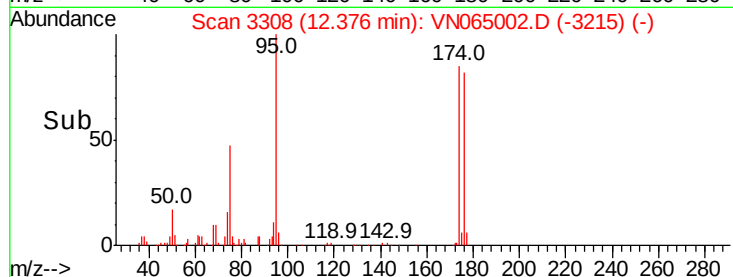
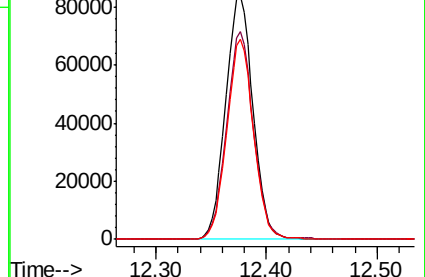
176 80.0 0.0 158.4



Abundance Ion 94.90 (94.60 to 95.60): VN064779.D (-3294) (-)

Ion 173.80 (173.50 to 174.50): VN064779.D (-3294) (-)

Ion 175.80 (175.50 to 176.50): VN064779.D (-3294) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.38 min Scan# 2998

Delta R.T. 0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

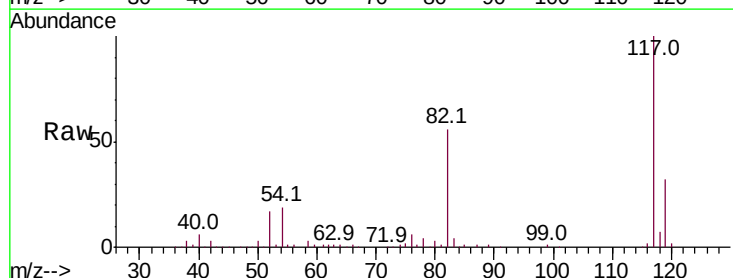
Tgt Ion: 117 Resp: 327405

Ion Ratio Lower Upper

117 100

82 55.6 44.2 66.2

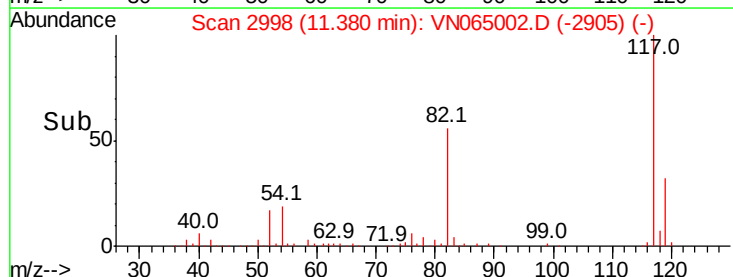
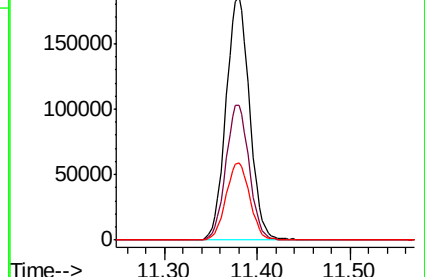
119 31.8 25.8 38.6

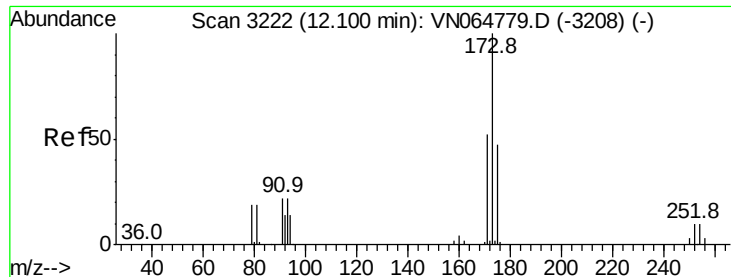


Abundance Ion 116.90 (116.60 to 117.60): VN064779.D (-2984) (-)

Ion 82.00 (81.70 to 82.70): VN064779.D (-2984) (-)

Ion 118.90 (118.60 to 119.60): VN064779.D (-2984) (-)





#71

Bromoform

Concen: 0.390 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.28 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

Instrument :

MSVOA_N

ClientSampled :

4S1-A-TOP

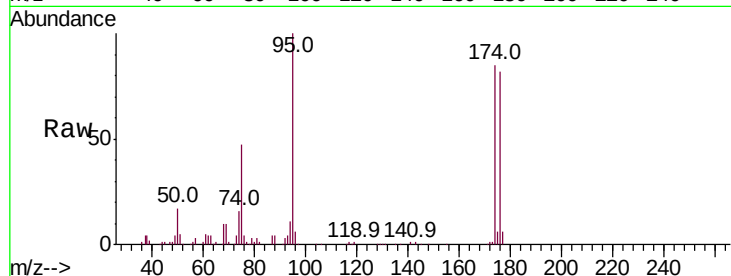
Tot Ion:173 Resp: 804

Ion Ratio Lower Upper

173 100

175 941.2 24.3 72.8#

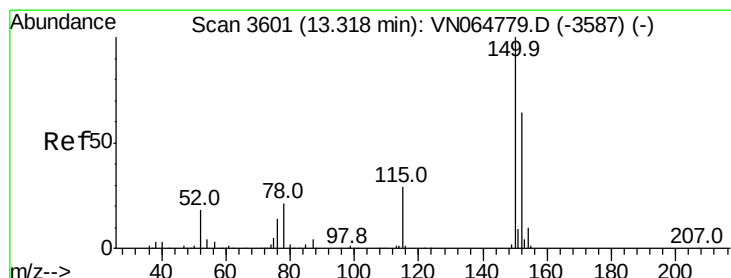
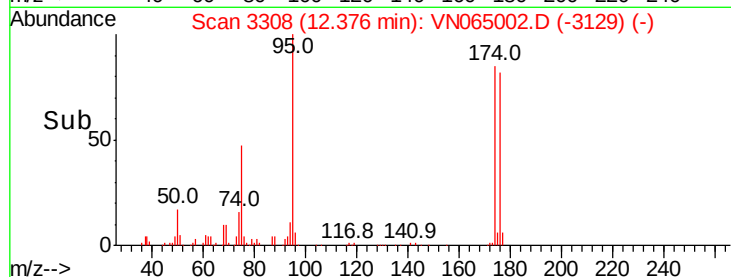
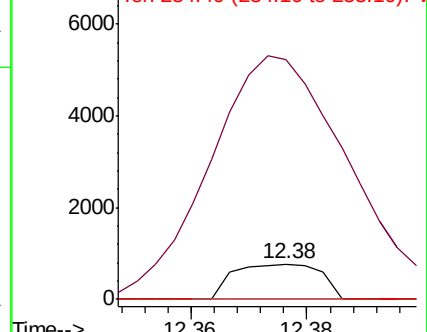
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN065002.D

Acq: 9 Dec 2020 5:27

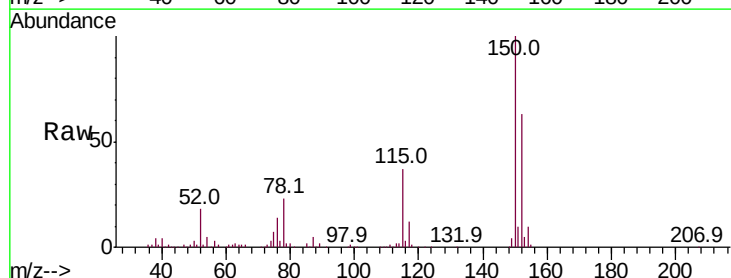
Tgt Ion:152 Resp: 137061

Ion Ratio Lower Upper

152 100

115 58.7 29.7 89.1

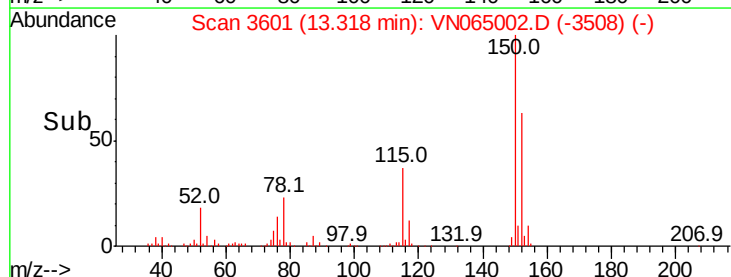
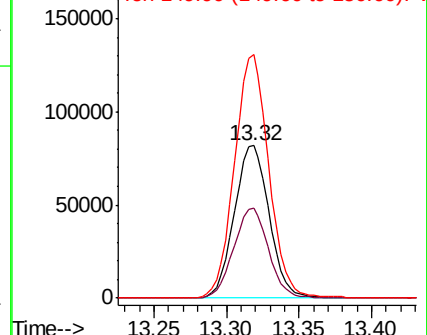
150 157.1 0.0 350.6

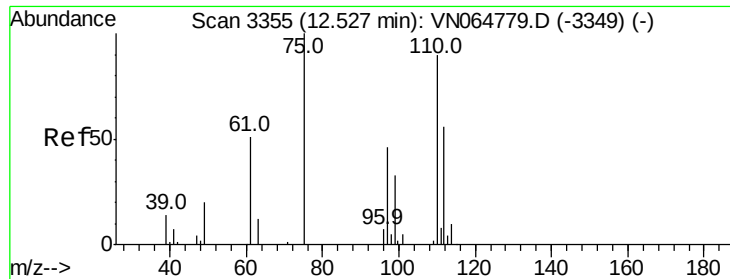


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

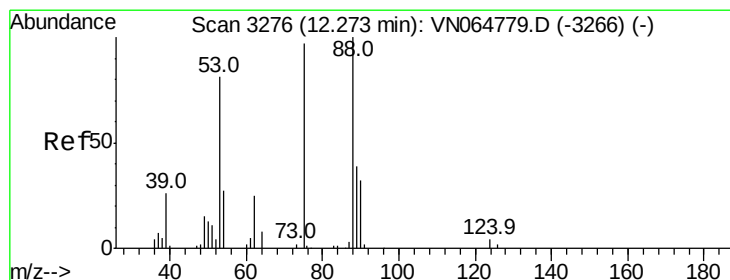
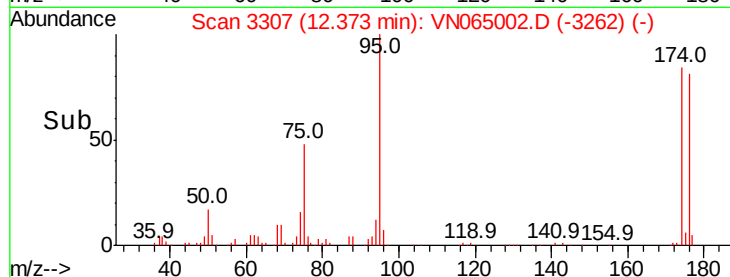
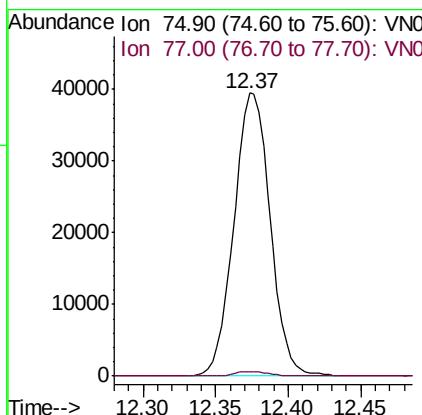
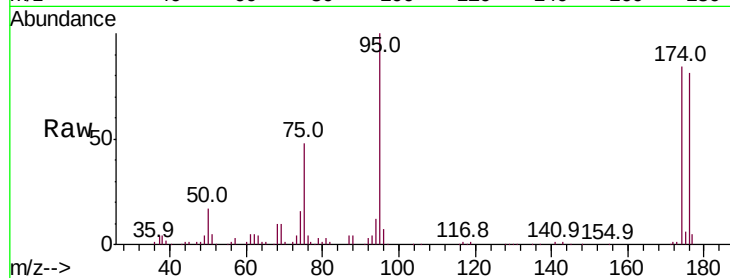




#76
 1,2,3-Trichloropropane
 Concen: 23.267 ug/l
 RT: 12.37 min Scan# 3307
 Delta R.T. -0.15 min
 Lab File: VN065002.D
 Acq: 9 Dec 2020 5:27

Instrument :
 MSVOA_N
 ClientSampled :
 4S1-A-TOP

Tot Ion: 75 Resp: 68679
 Ion Ratio Lower Upper
 75 100
 77 1.3 0.0 0.0#



#81
 trans-1,4-Dichloro-2-butene
 Concen: 63.770 ug/l
 RT: 12.37 min Scan# 3307
 Delta R.T. 0.10 min
 Lab File: VN065002.D
 Acq: 9 Dec 2020 5:27

Tgt Ion: 75 Resp: 68679
 Ion Ratio Lower Upper
 75 100
 53 0.0 67.0 100.4#
 89 0.0 39.6 59.4#

