

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111920\  
 Data File : VN064740.D  
 Acq On : 19 Nov 2020 18:02  
 Operator : JC/MD  
 Sample : L4783-09  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 MW-16

Quant Time: Nov 20 03:52:02 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N111820W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 18 15:29:54 2020  
 Response via : Initial Calibration

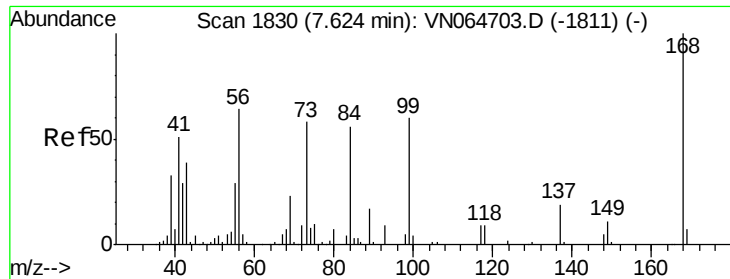
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 282359   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 575127   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 597103   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 193851   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.99  | 65   | 246596   | 49.65 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.30%  |          |
| 35) Dibromofluoromethane    | 7.55  | 113  | 184491   | 56.36 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 112.72% |          |
| 50) Toluene-d8              | 10.06 | 98   | 729707   | 49.05 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.10%  |          |
| 62) 4-Bromofluorobenzene    | 12.38 | 95   | 237596   | 42.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.46%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.72  | 59   | 601      | 1.247  | ug/l # | 70     |
| 13) Acrolein                   | 3.66  | 56   | 34       | 0.301  | ug/l # | 11     |
| 16) Acetone                    | 3.78  | 43   | 1758     | 6.497  | ug/l # | 60     |
| 18) Methyl Acetate             | 4.29  | 43   | 1128     | 1.636  | ug/l # | 54     |
| 19) Methyl tert-butyl Ether    | 5.00  | 73   | 33599    | 3.308  | ug/l   | 100    |
| 31) Cyclohexane                | 7.62  | 56   | 7393     | 1.377  | ug/l # | 20     |
| 36) 1,1-Dichloropropene        | 7.62  | 75   | 24992    | 4.224  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.62  | 117  | 30920    | 4.917  | ug/l # | 18     |
| 40) Benzene                    | 8.00  | 78   | 5310     | 0.322  | ug/l   | 99     |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 153      | 6.155  | ug/l # | 39     |
| 59) 2-Hexanone                 | 10.73 | 43   | 273      | 8.501  | ug/l # | 28     |
| 68) m/p-Xylenes                | 11.60 | 106  | 535      | 4.118  | ug/l # | 67     |
| 71) Bromoform                  | 12.36 | 173  | 304      | 2.525  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.38 | 75   | 134026   | 32.088 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 134026   | 81.692 | ug/l # | 5      |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.00 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampled :

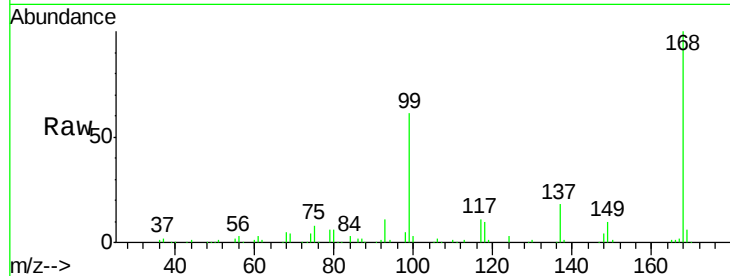
MW-16

Tot Ion:168 Resp: 282359

Ion Ratio Lower Upper

168 100

99 60.6 55.7 83.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

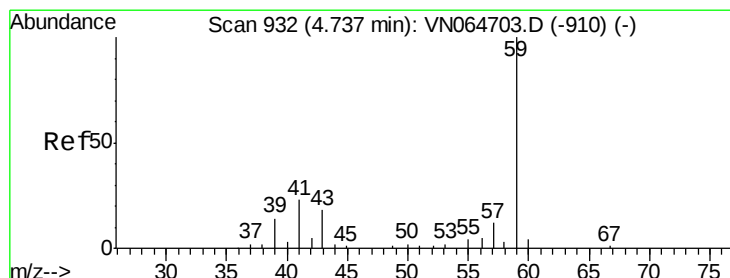
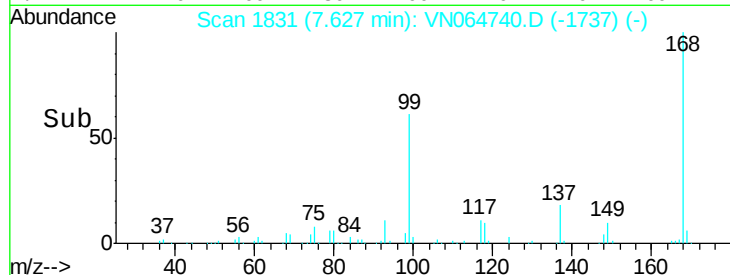
7.63

100000

50000

0

Time--> 7.50 7.60 7.70



#11

Tert butyl alcohol

Concen: 1.247 ug/l

RT: 4.72 min Scan# 928

Delta R.T. -0.01 min

Lab File: VN064740.D

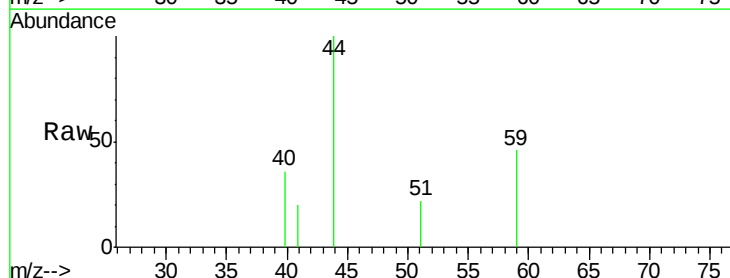
Acq: 19 Nov 2020 18:02

Tgt Ion: 59 Resp: 601

Ion Ratio Lower Upper

59 100

57 0.0 9.1 13.7#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO

4.72

500

400

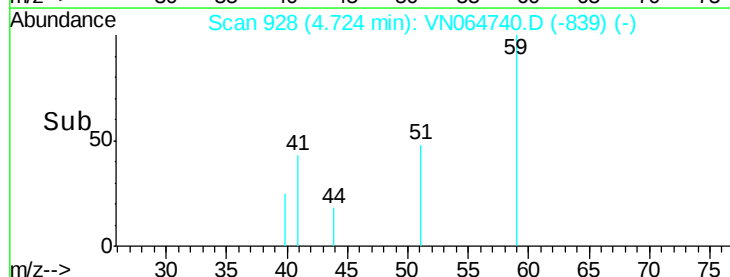
300

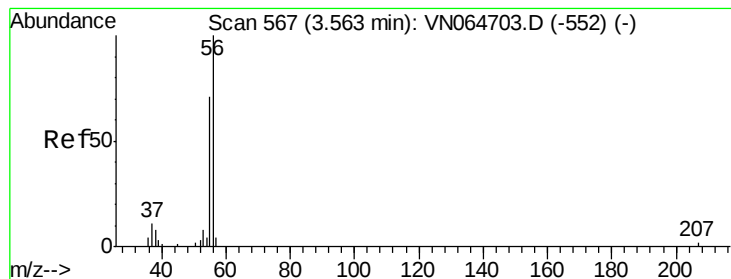
200

100

0

Time--> 4.70 4.72 4.74





#13

Acrolein

Concen: 0.301 ug/l

RT: 3.66 min Scan# 598

Delta R.T. 0.10 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampleId :

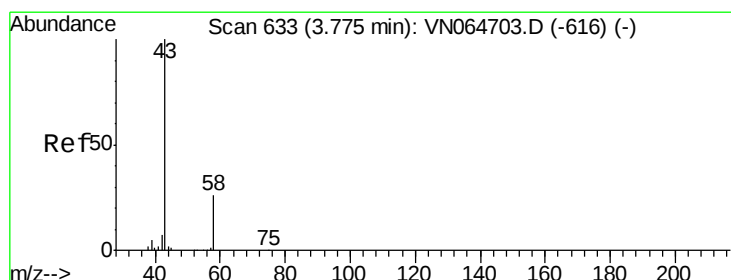
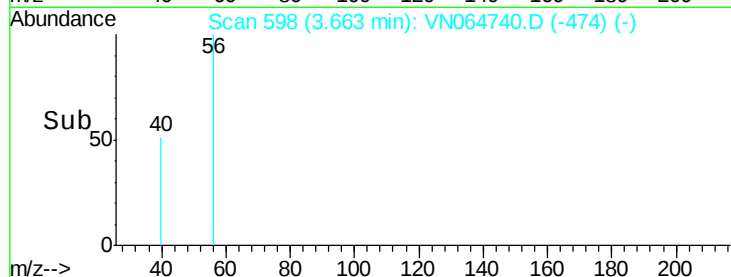
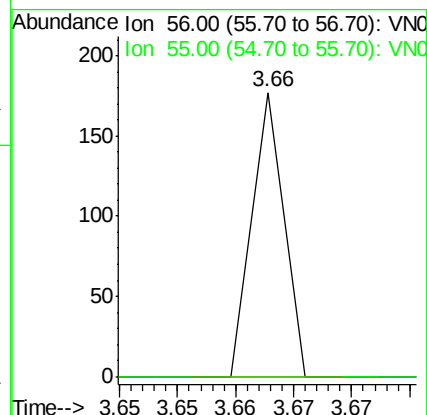
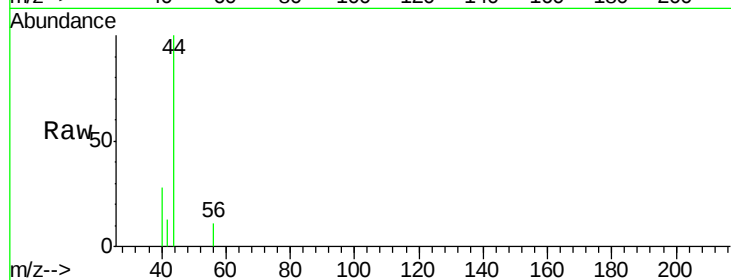
MW-16

Tot Ion: 56 Resp: 34

Ion Ratio Lower Upper

56 100

55 0.0 61.8 92.6#



#16

Acetone

Concen: 6.497 ug/l

RT: 3.78 min Scan# 635

Delta R.T. 0.01 min

Lab File: VN064740.D

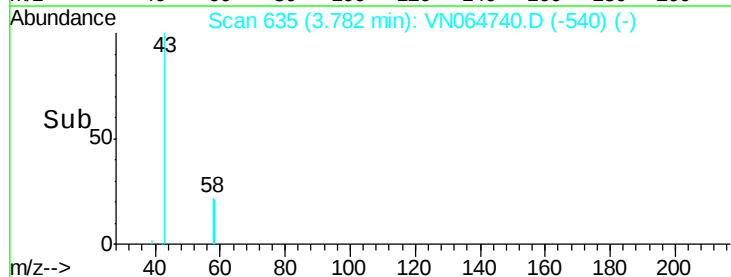
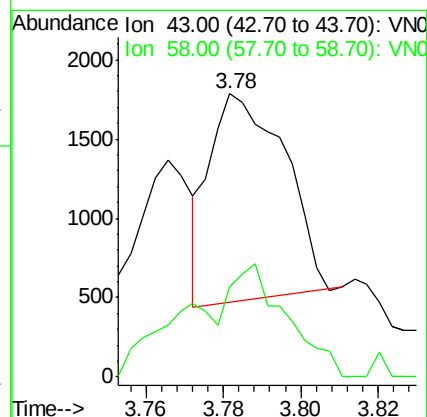
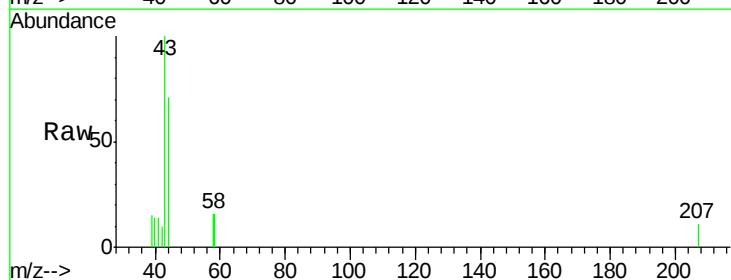
Acq: 19 Nov 2020 18:02

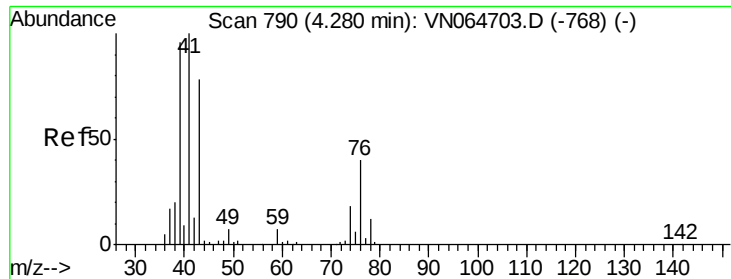
Tgt Ion: 43 Resp: 1758

Ion Ratio Lower Upper

43 100

58 46.8 21.2 31.8#

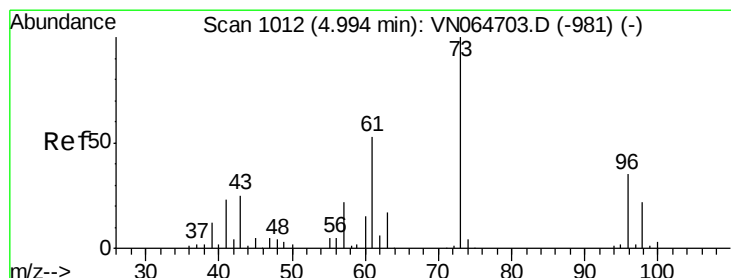
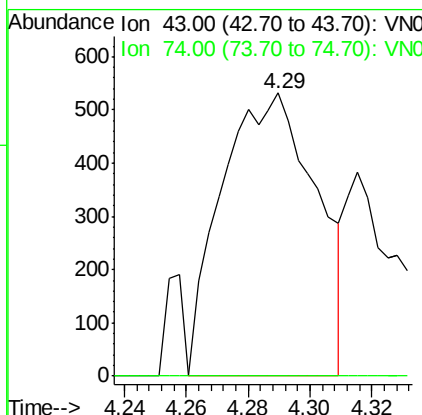
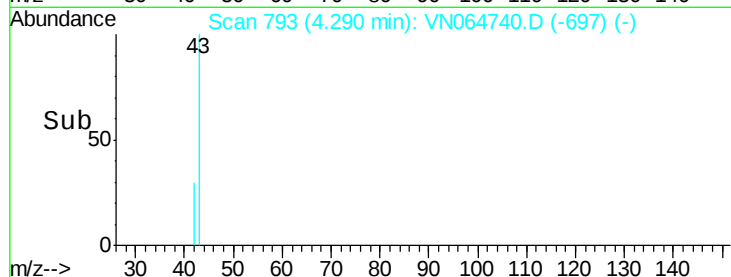
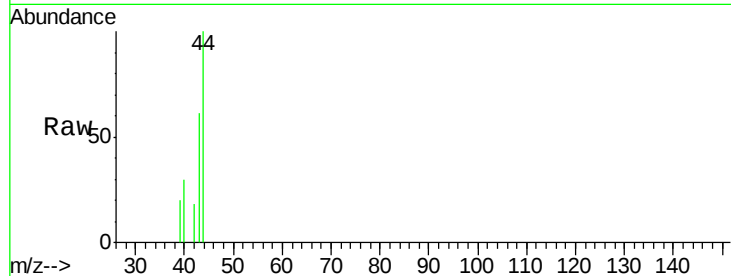




#18  
Methyl Acetate  
Concen: 1.636 ug/l  
RT: 4.29 min Scan# 793  
Delta R.T. 0.01 min  
Lab File: VN064740.D  
Acq: 19 Nov 2020 18:02

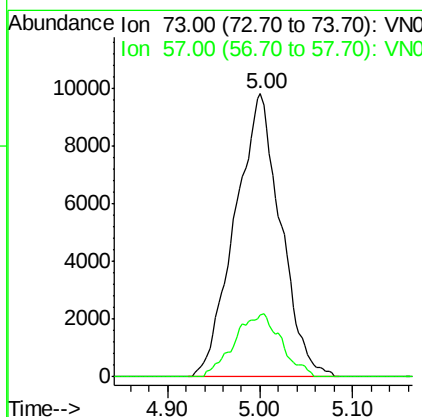
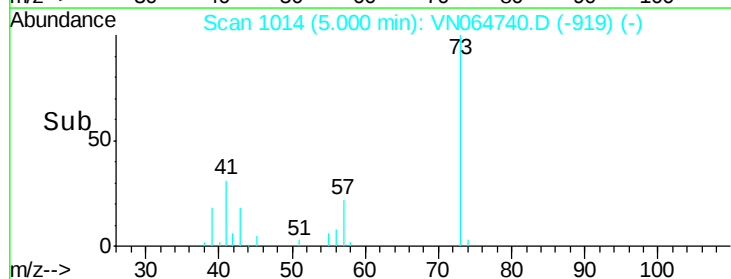
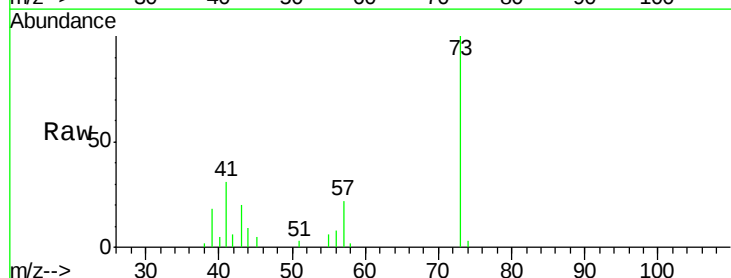
Instrument :  
MSVOA\_N  
ClientSampled :  
MW-16

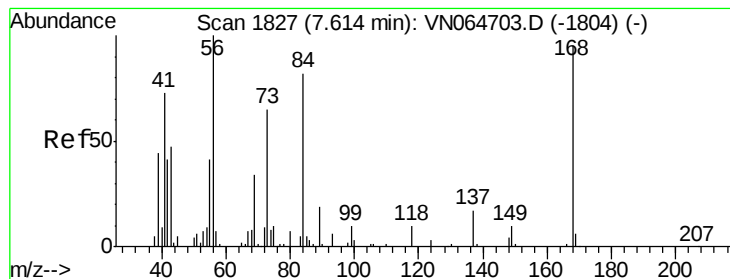
Tot Ion: 43 Resp: 1128  
Ion Ratio Lower Upper  
43 100  
74 0.0 17.6 26.4#



#19  
Methyl tert-butyl Ether  
Concen: 3.308 ug/l  
RT: 5.00 min Scan# 1014  
Delta R.T. 0.01 min  
Lab File: VN064740.D  
Acq: 19 Nov 2020 18:02

Tgt Ion: 73 Resp: 33599  
Ion Ratio Lower Upper  
73 100  
57 21.8 17.3 25.9





#31

Cyclohexane

Concen: 1.377 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. 0.01 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampleId :

MW-16

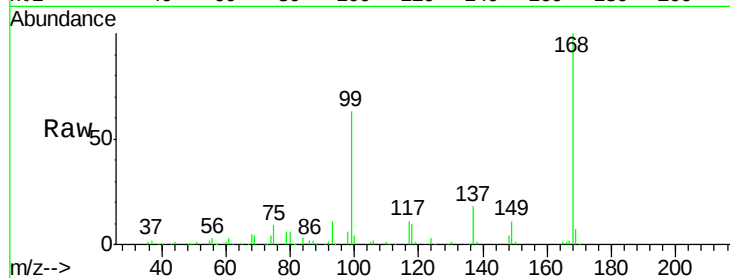
Tot Ion: 56 Resp: 7393

Ion Ratio Lower Upper

56 100

69 145.5 27.2 40.8#

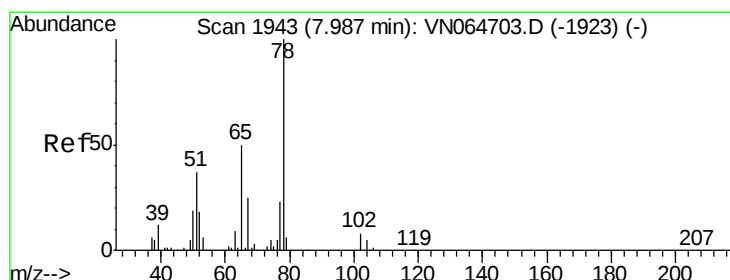
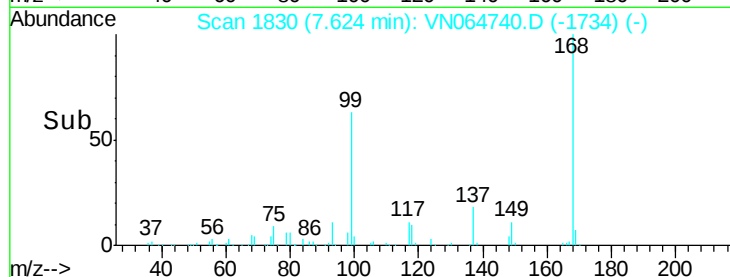
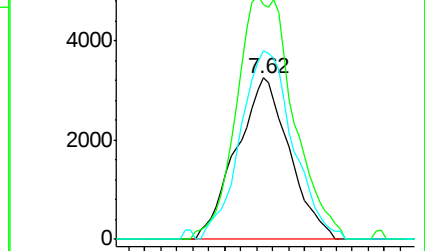
84 112.3 65.9 98.9#



Abundance Ion 56.00 (55.70 to 56.70): VN064740.D (-1830) (-)

Ion 69.00 (68.70 to 69.70): VN064740.D (-1830) (-)

Ion 84.00 (83.70 to 84.70): VN064740.D (-1830) (-)



#33

1,2-Dichloroethane-d4

Concen: 49.645 ug/l

RT: 7.99 min Scan# 1943

Delta R.T. -0.00 min

Lab File: VN064740.D

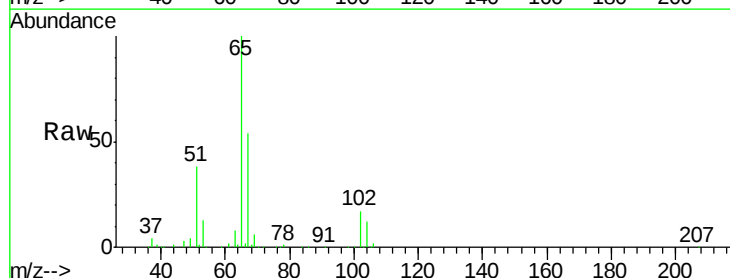
Acq: 19 Nov 2020 18:02

Tgt Ion: 65 Resp: 246596

Ion Ratio Lower Upper

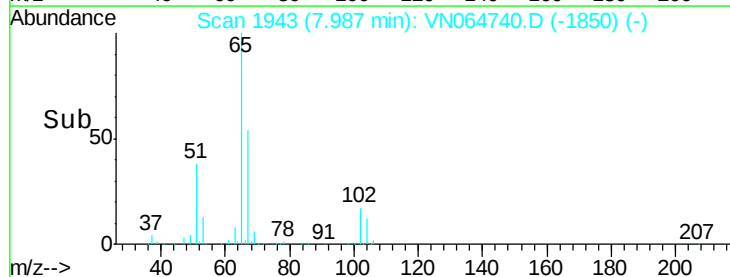
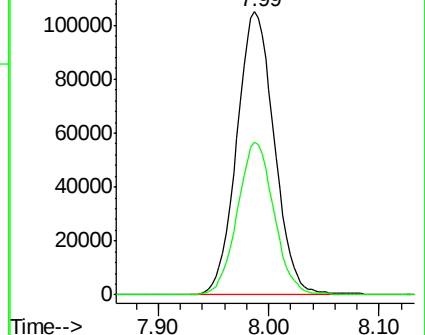
65 100

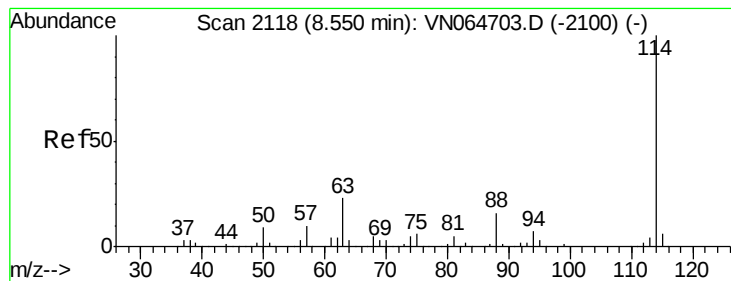
67 52.8 0.0 99.8



Abundance Ion 64.90 (64.60 to 65.60): VN064740.D (-1943) (-)

Ion 66.90 (66.60 to 67.60): VN064740.D (-1943) (-)





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.55 min Scan# 2118

Delta R.T. -0.00 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampleId :

MW-16

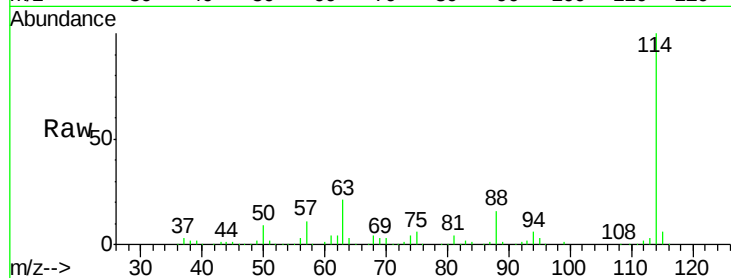
Tot Ion:114 Resp: 575127

Ion Ratio Lower Upper

114 100

63 20.7 0.0 46.0

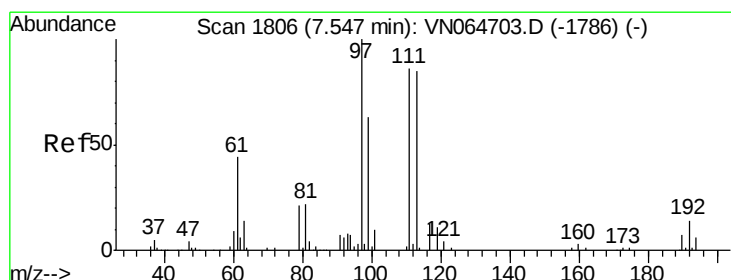
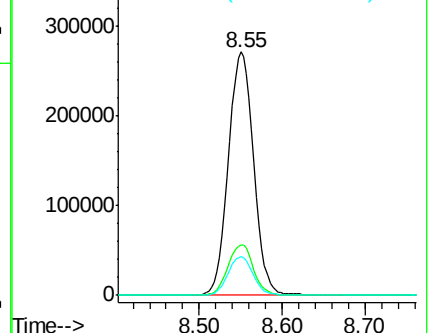
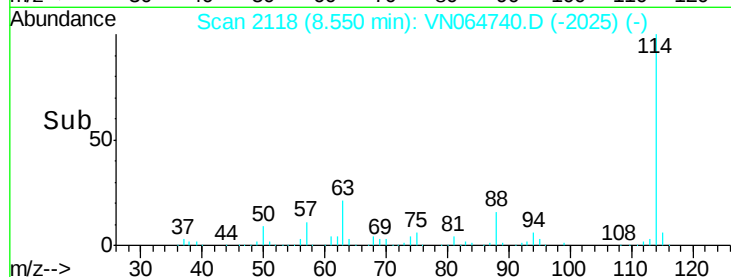
88 15.8 0.0 31.2



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0



#35

Dibromofluoromethane

Concen: 56.359 ug/l

RT: 7.55 min Scan# 1807

Delta R.T. 0.00 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

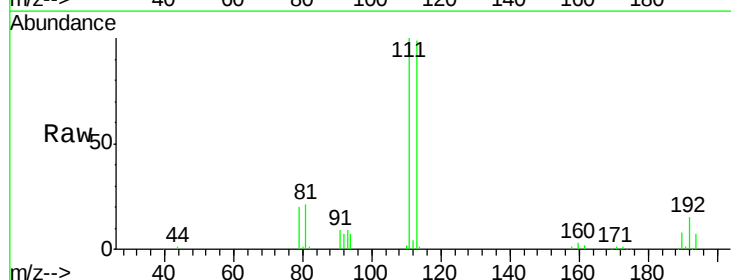
Tgt Ion:113 Resp: 184491

Ion Ratio Lower Upper

113 100

111 102.1 82.2 123.4

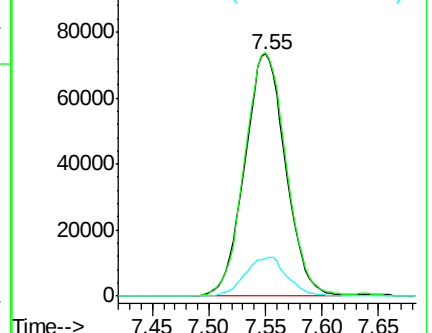
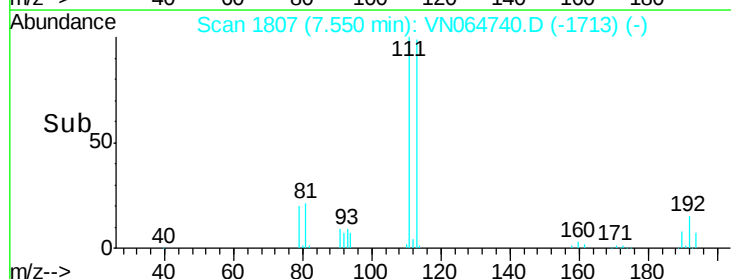
192 16.5 12.7 19.1

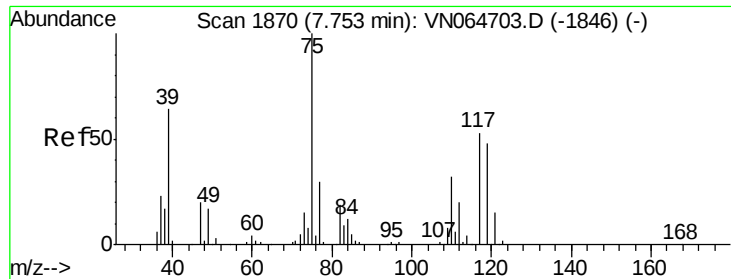


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.224 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.13 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampled :

MW-16

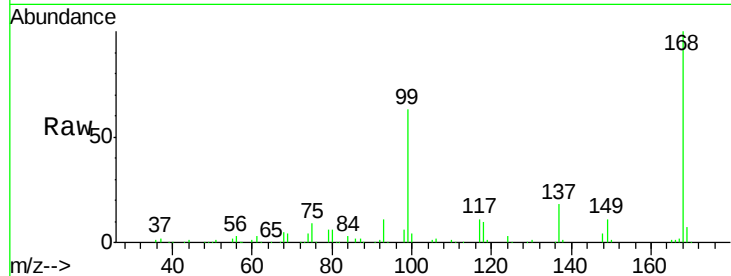
Tot Ion: 75 Resp: 24992

Ion Ratio Lower Upper

75 100

110 8.6 16.2 48.6#

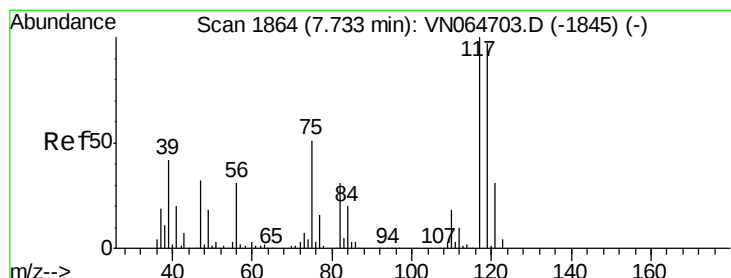
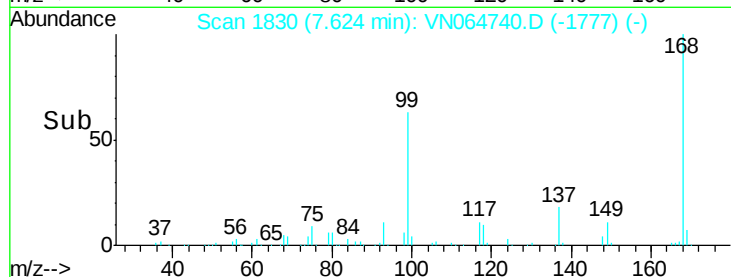
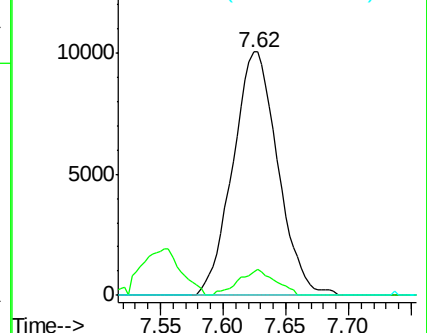
77 0.0 24.4 36.6#



Abundance Ion 74.90 (74.60 to 75.60): VN064740.D (-1777) (-)

Ion 109.90 (109.60 to 110.60): VN064740.D (-1777) (-)

Ion 76.90 (76.60 to 77.60): VN064740.D (-1777) (-)



#38

Carbon Tetrachloride

Concen: 4.917 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.11 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

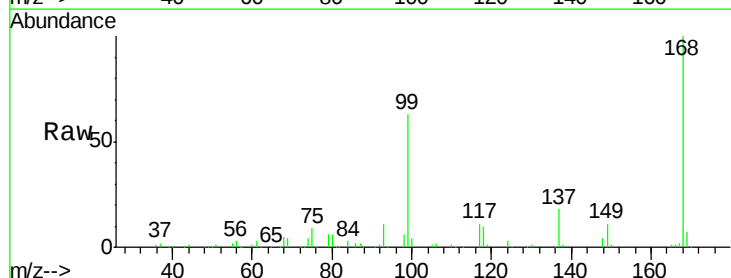
Tgt Ion: 117 Resp: 30920

Ion Ratio Lower Upper

117 100

119 8.2 77.8 116.6#

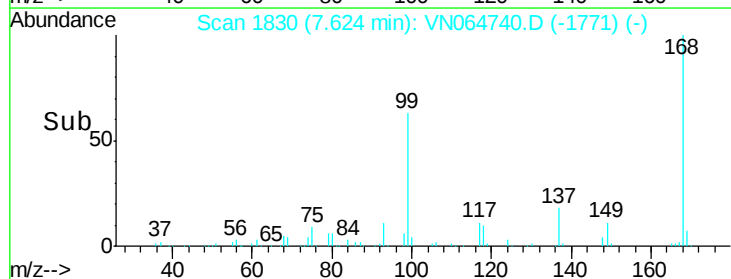
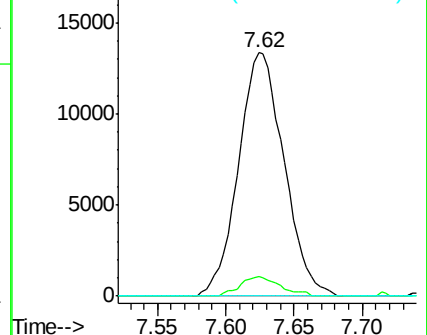
121 0.0 24.9 37.3#

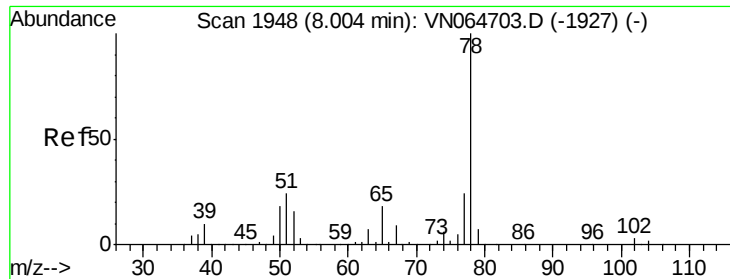


Abundance Ion 116.80 (116.50 to 117.50): VN064740.D (-1771) (-)

Ion 118.80 (118.50 to 119.50): VN064740.D (-1771) (-)

Ion 120.80 (120.50 to 121.50): VN064740.D (-1771) (-)





#40

Benzene

Concen: 0.322 ug/l

RT: 8.00 min Scan# 1947

Delta R.T. -0.00 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampled :

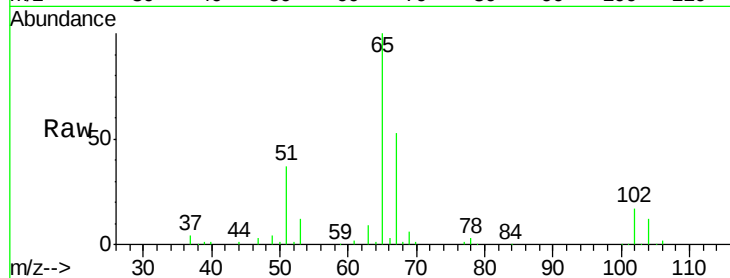
MW-16

Tot Ion: 78 Resp: 5310

Ion Ratio Lower Upper

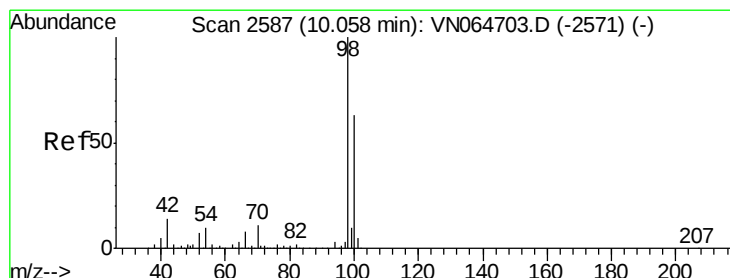
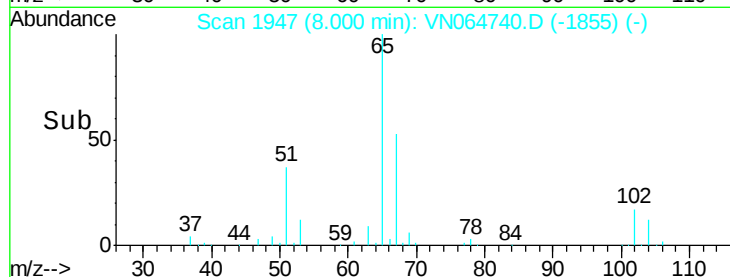
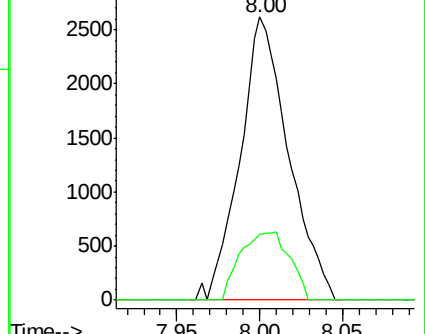
78 100

77 23.4 19.2 28.8



Abundance Ion 78.00 (77.70 to 78.70): VN0

Ion 77.00 (76.70 to 77.70): VN0



#50

Toluene-d8

Concen: 49.048 ug/l

RT: 10.06 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN064740.D

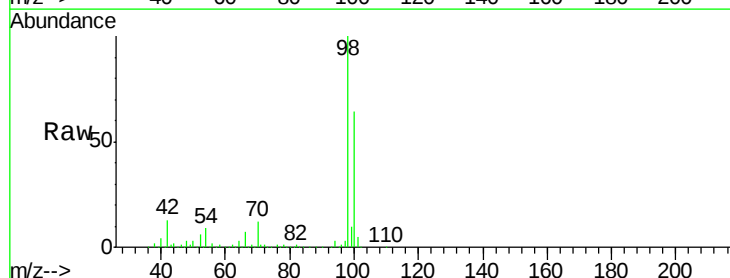
Acq: 19 Nov 2020 18:02

Tgt Ion: 98 Resp: 729707

Ion Ratio Lower Upper

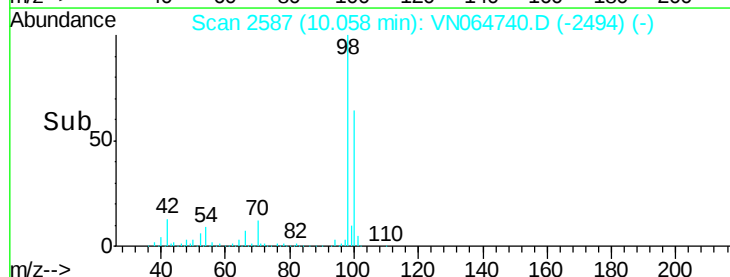
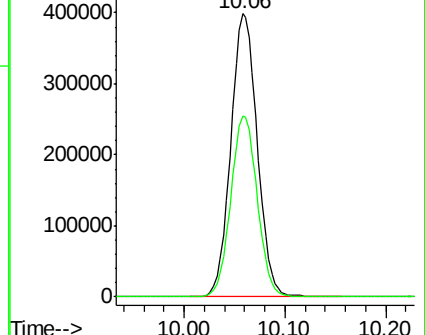
98 100

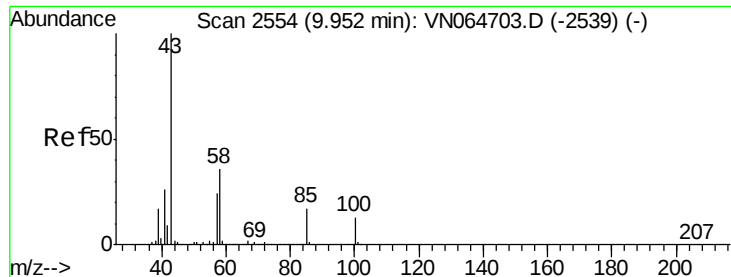
100 63.8 50.4 75.6



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0

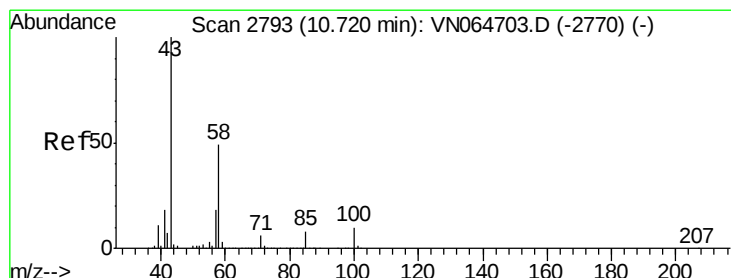
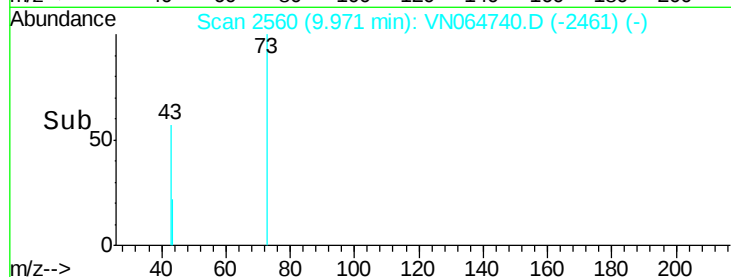
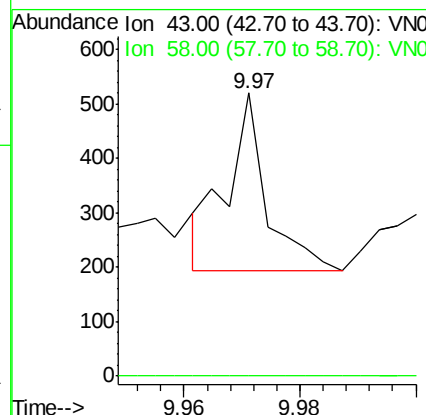
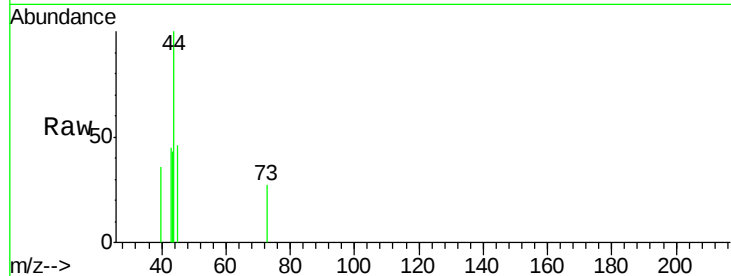




#51  
 4-Methyl-2-Pentanone  
 Concen: 6.155 ug/l  
 RT: 9.97 min Scan# 2560  
 Delta R.T. 0.02 min  
 Lab File: VN064740.D  
 Acq: 19 Nov 2020 18:02

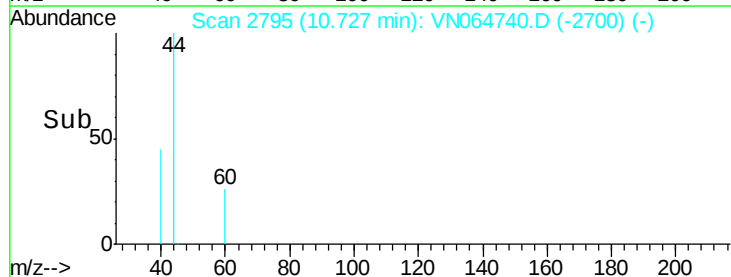
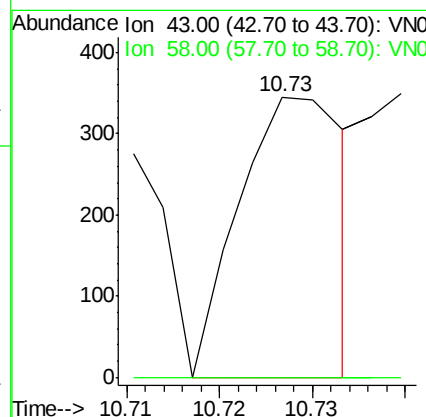
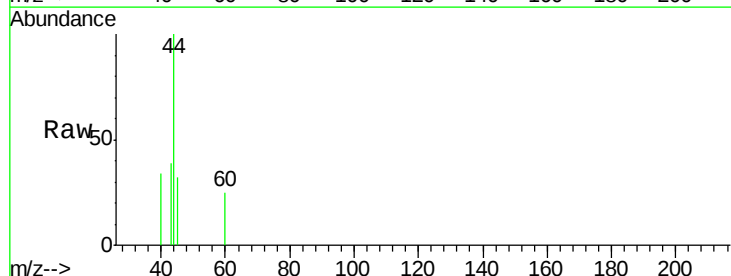
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 MW-16

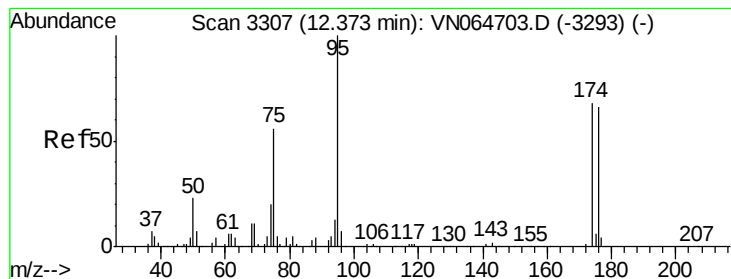
Tot Ion: 43 Resp: 153  
 Ion Ratio Lower Upper  
 43 100  
 58 0.0 28.5 42.7#



#59  
 2-Hexanone  
 Concen: 8.501 ug/l  
 RT: 10.73 min Scan# 2795  
 Delta R.T. 0.01 min  
 Lab File: VN064740.D  
 Acq: 19 Nov 2020 18:02

Tgt Ion: 43 Resp: 273  
 Ion Ratio Lower Upper  
 43 100  
 58 0.0 24.4 73.4#





#62

4-Bromofluorobenzene

Concen: 42.727 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.00 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampled :

MW-16

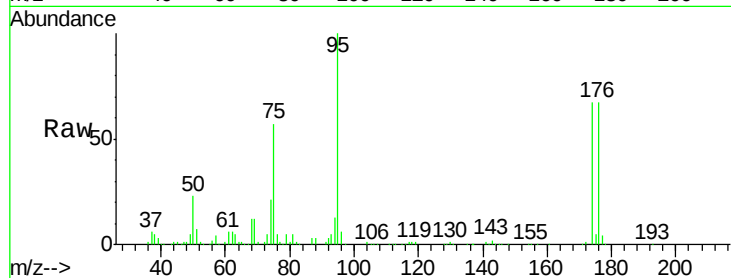
Tot Ion: 95 Resp: 237596

Ion Ratio Lower Upper

95 100

174 69.2 0.0 136.8

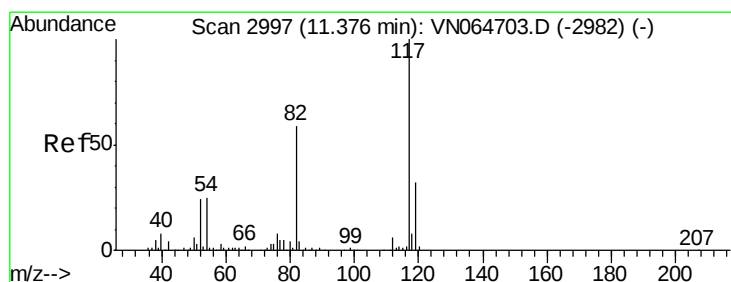
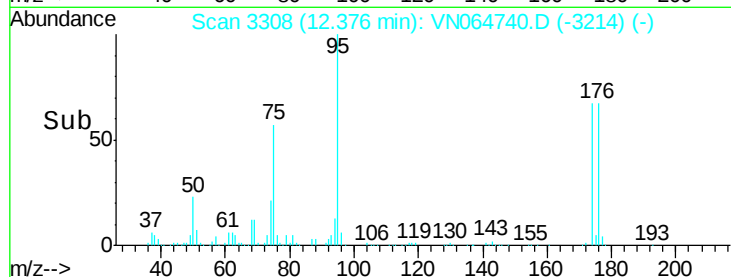
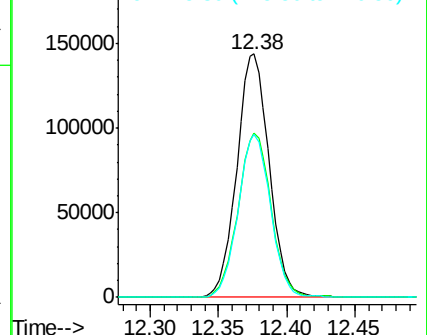
176 66.9 0.0 134.2



Abundance Ion 94.90 (94.60 to 95.60): VN064740.D (-3293) (-)

Ion 173.80 (173.50 to 174.50): VN064740.D (-3293) (-)

Ion 175.80 (175.50 to 176.50): VN064740.D (-3293) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.38 min Scan# 2998

Delta R.T. 0.00 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

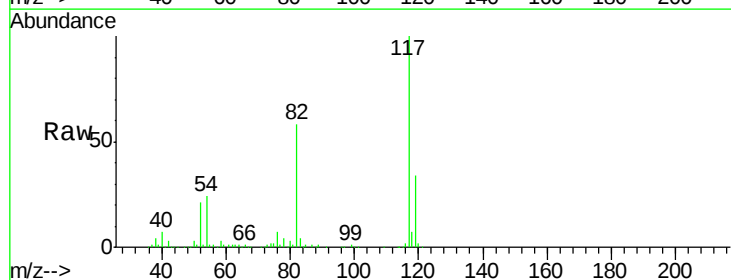
Tgt Ion: 117 Resp: 597103

Ion Ratio Lower Upper

117 100

82 58.2 47.0 70.6

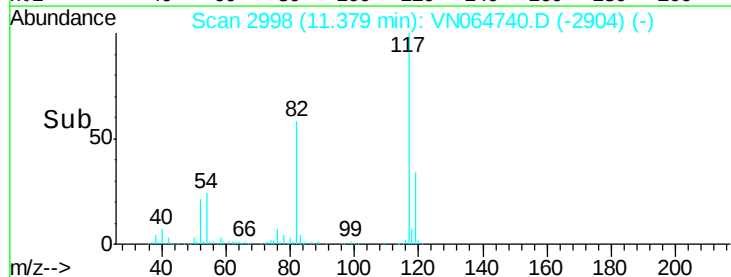
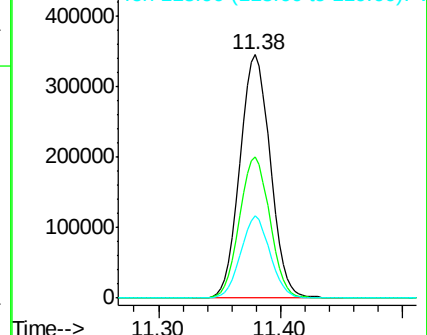
119 33.6 25.4 38.2

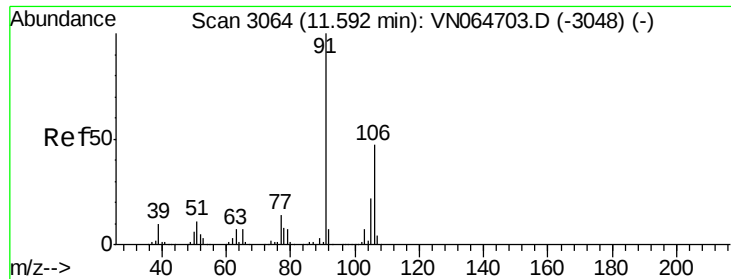


Abundance Ion 116.90 (116.60 to 117.60): VN064740.D (-2982) (-)

Ion 82.00 (81.70 to 82.70): VN064740.D (-2982) (-)

Ion 118.90 (118.60 to 119.60): VN064740.D (-2982) (-)





#68

m/p-Xvlenes

Concen: 4.118 ug/l

RT: 11.60 min Scan# 3066

Delta R.T. 0.01 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampleId :

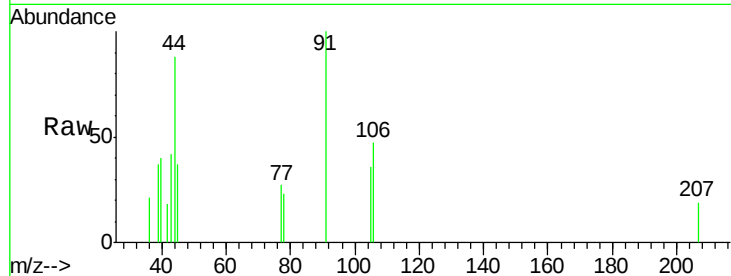
MW-16

Tot Ion:106 Resp: 535

Ion Ratio Lower Upper

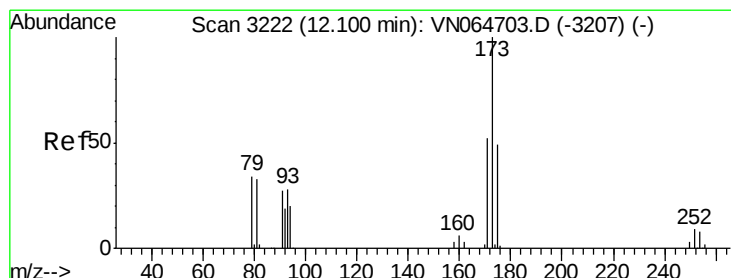
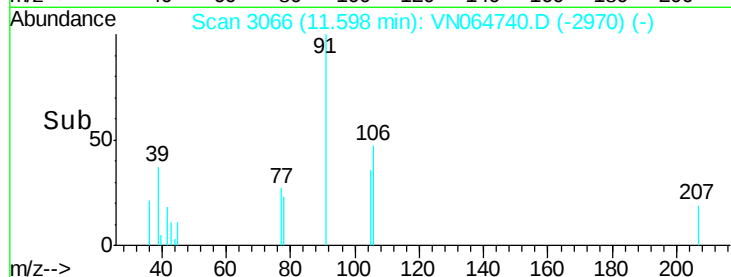
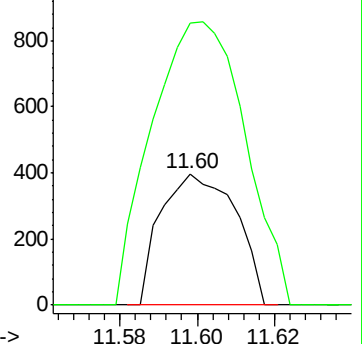
106 100

91 267.7 171.9 257.9#



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN



#71

Bromoform

Concen: 2.525 ug/l

RT: 12.36 min Scan# 3303

Delta R.T. 0.26 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

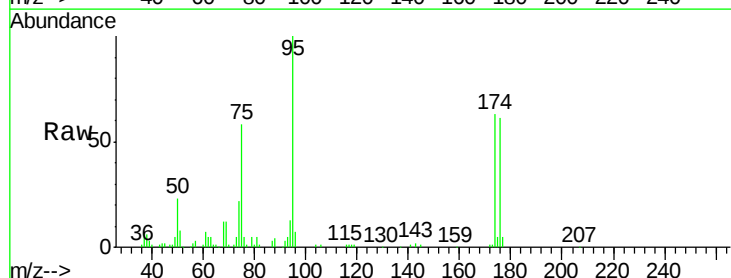
Tgt Ion:173 Resp: 304

Ion Ratio Lower Upper

173 100

175 3481.3 24.3 72.9#

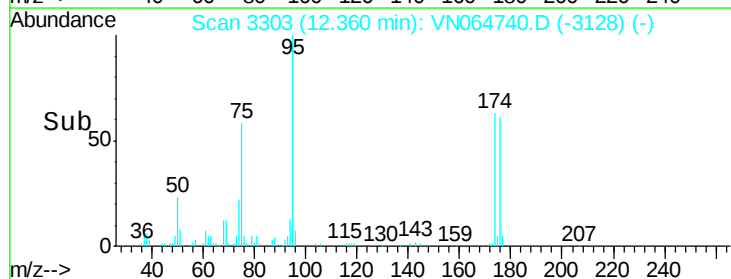
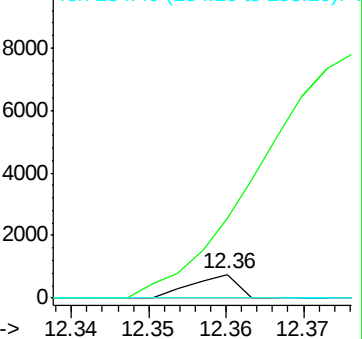
254 0.0 0.1 0.1#

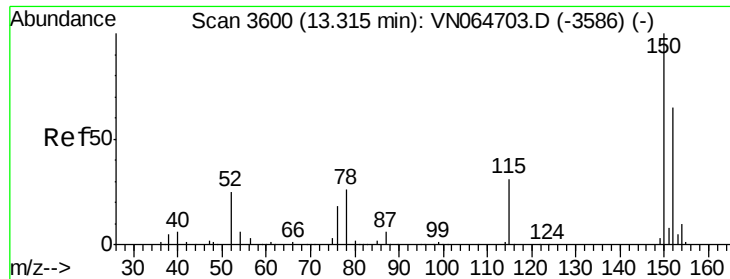


Abundance Ion 172.70 (172.40 to 173.40): V

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: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampled :

MW-16

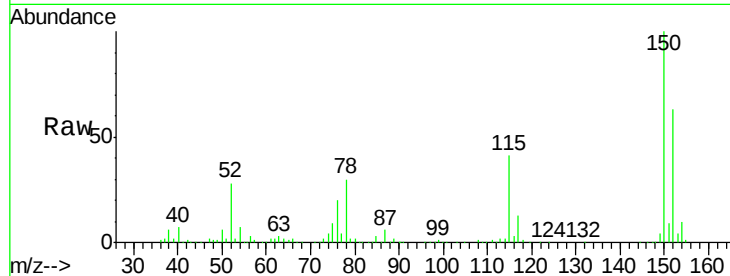
Tot Ion:152 Resp: 193851

Ion Ratio Lower Upper

152 100

115 65.1 32.1 96.3

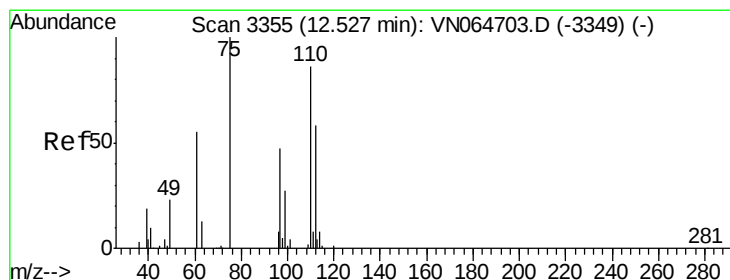
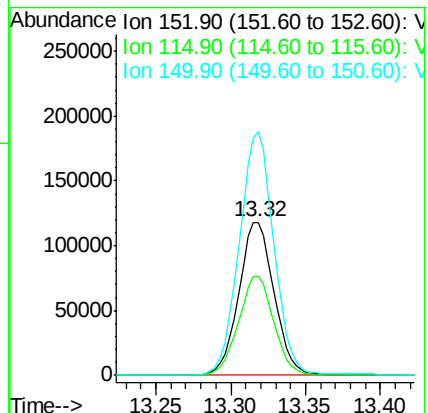
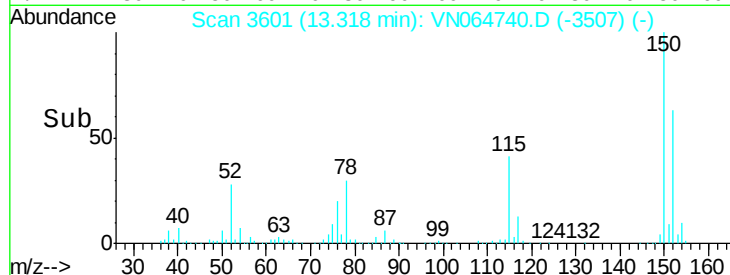
150 156.3 0.0 344.8



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: 32.088 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. -0.15 min

Lab File: VN064740.D

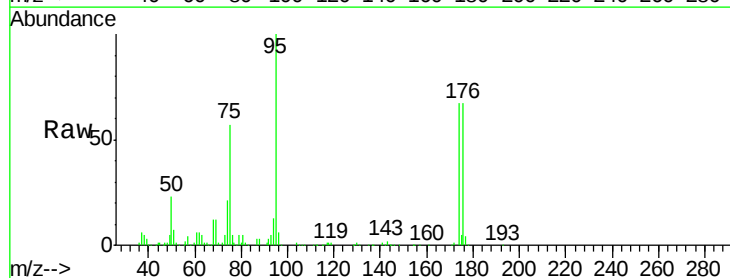
Acq: 19 Nov 2020 18:02

Tgt Ion: 75 Resp: 134026

Ion Ratio Lower Upper

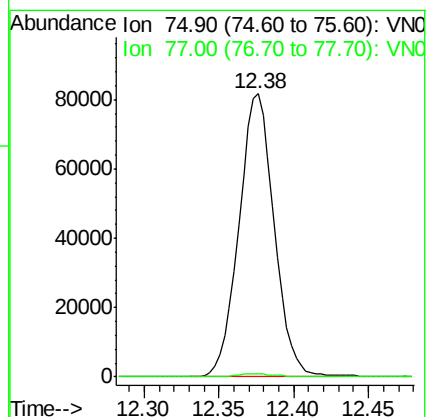
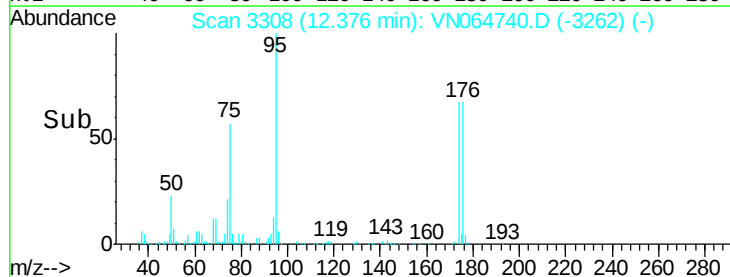
75 100

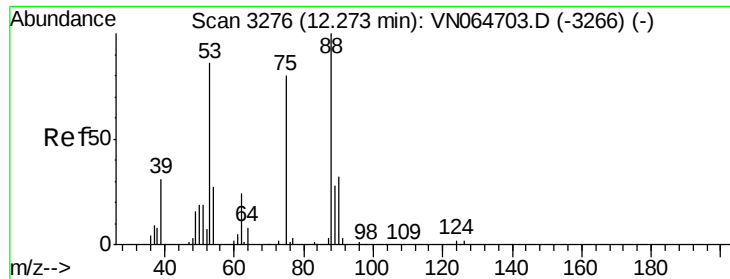
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 81.692 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.10 min

Lab File: VN064740.D

Acq: 19 Nov 2020 18:02

Instrument :

MSVOA\_N

ClientSampleId :

MW-16

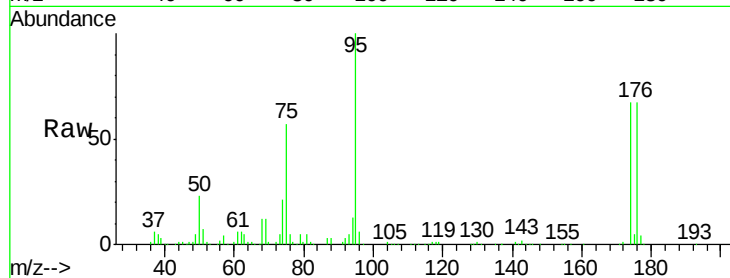
Tot Ion: 75 Resp: 134026

Ion Ratio Lower Upper

75 100

53 0.3 88.8 133.2#

89 0.0 43.1 64.7#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

