

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN040119\  
 Data File : VN054878.D  
 Acq On : 1 Apr 2019 16:49  
 Operator : JC/SP  
 Sample : K2182-18  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 S7C(10)

Quant Time: Apr 02 04:23:23 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 30 00:48:18 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 501918   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 843196   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 736242   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 257804   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 335919   | 49.65 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.30% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 270510   | 48.12 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.24% |      |
| 50) Toluene-d8            | 10.09  | 98  | 1022459  | 48.92 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.84% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 313759   | 45.14 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.28% |      |

## Target Compounds

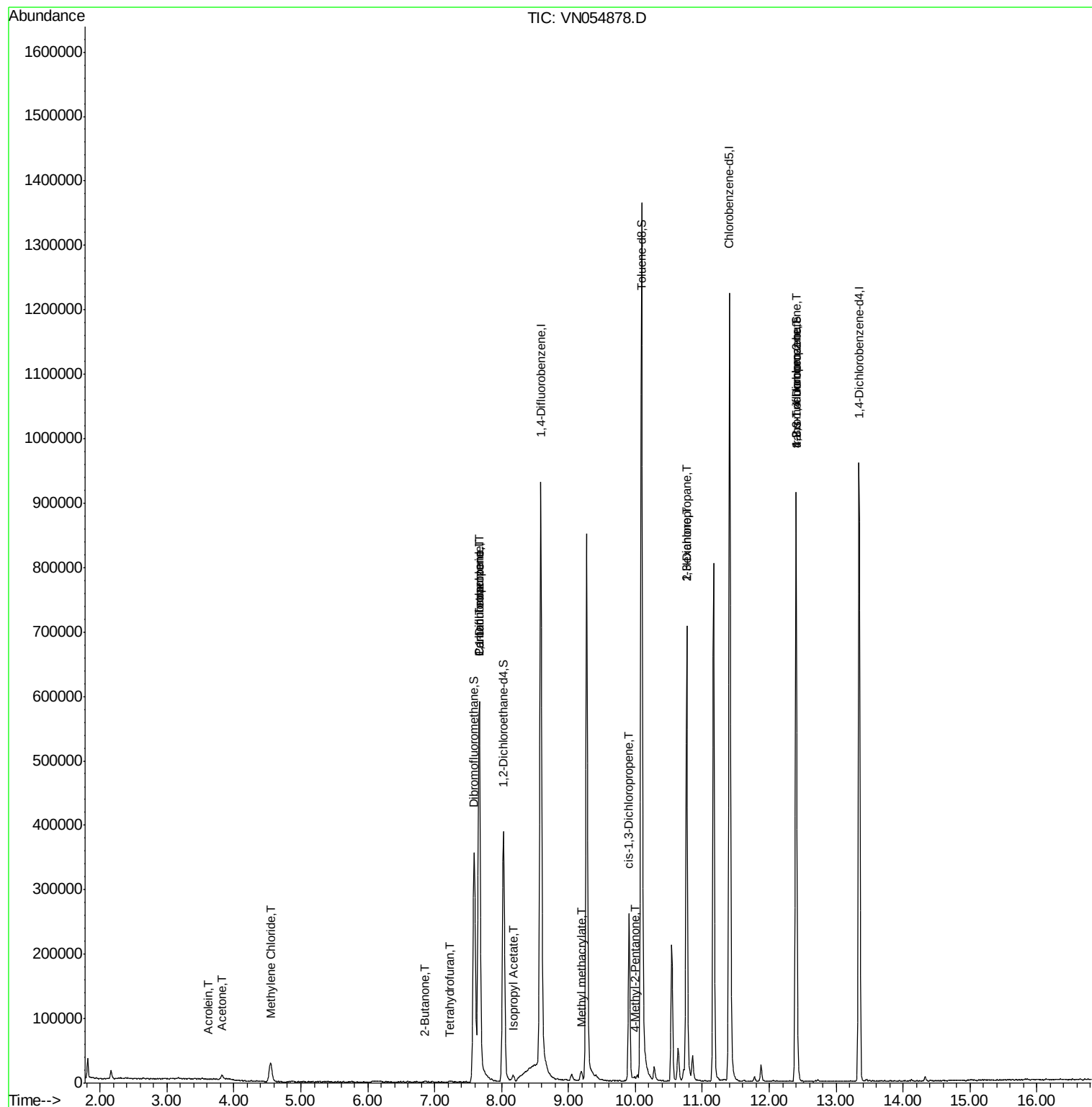
|                                |       |     |        |           | Qvalue |     |
|--------------------------------|-------|-----|--------|-----------|--------|-----|
| 5) Bromomethane                | 2.58  | 94  | 30     | Below Cal | #      | 2   |
| 13) Acrolein                   | 3.61  | 56  | 138    | 0.438     | ug/l   | 98  |
| 16) Acetone                    | 3.82  | 43  | 10714  | 6.640     | ug/l # | 82  |
| 18) Methyl Acetate             | 4.32  | 43  | 705    | Below Cal | #      | 49  |
| 20) Methylene Chloride         | 4.55  | 84  | 19786  | 3.477     | ug/l # | 83  |
| 25) 2-Butanone                 | 6.86  | 43  | 1325   | 0.556     | ug/l   | 92  |
| 29) Tetrahydrofuran            | 7.22  | 42  | 456    | 0.275     | ug/l # | 35  |
| 31) Cyclohexane                | 7.66  | 56  | 10780  | Below Cal | #      | 24  |
| 36) 1,1-Dichloropropene        | 7.67  | 75  | 39043  | 4.969     | ug/l # | 48  |
| 38) Carbon Tetrachloride       | 7.67  | 117 | 47264  | 6.193     | ug/l # | 17  |
| 43) Isopropyl Acetate          | 8.17  | 43  | 11765  | 1.257     | ug/l # | 88  |
| 48) Methyl methacrylate        | 9.18  | 41  | 6100   | 1.202     | ug/l # | 11  |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43  | 4519   | 0.859     | ug/l # | 62  |
| 54) cis-1,3-Dichloropropene    | 9.91  | 75  | 43383  | 5.151     | ug/l # | 71  |
| 57) 1,3-Dichloropropane        | 10.76 | 76  | 6549   | 0.766     | ug/l # | 43  |
| 59) 2-Hexanone                 | 10.77 | 43  | 115969 | 34.417    | ug/l # | 48  |
| 75) 1,1,2,2-Tetrachloroethane  | 12.56 | 83  | 30     | Below Cal | #      | 26  |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75  | 162452 | 36.273    | ug/l # | 100 |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75  | 162452 | 141.091   | ug/l # | 11  |

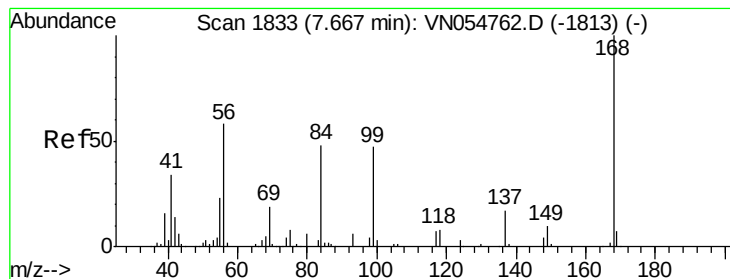
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN040119\  
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Instrument :  
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ClientSampleId :  
S7C(10)

Quant Time: Apr 02 04:23:23 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
Quant Title : SW846 8260  
QLast Update : Sat Mar 30 00:48:18 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampled :

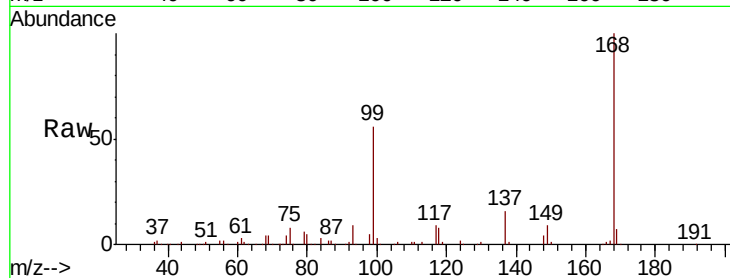
S7C(10)

Tot Ion:168 Resp: 501918

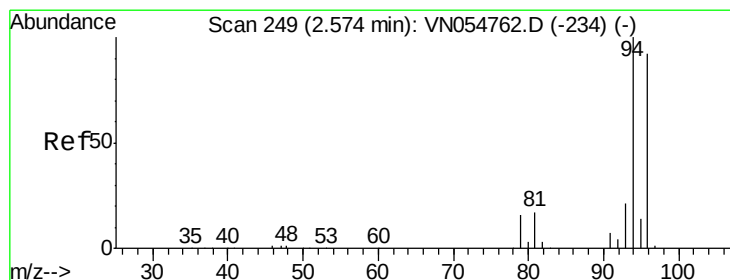
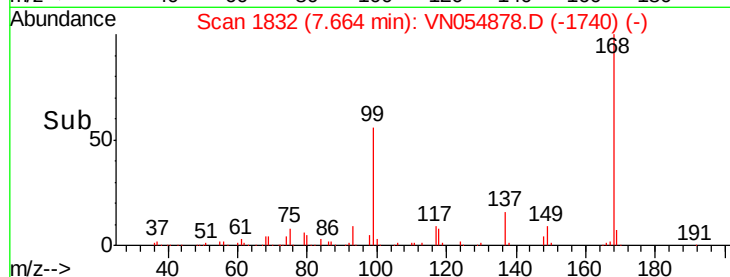
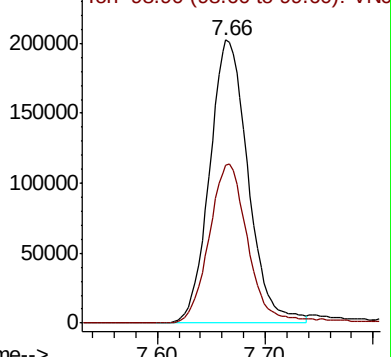
Ion Ratio Lower Upper

168 100

99 55.7 37.1 55.7#



Abundance Ion 167.90 (167.60 to 168.60): VN054878.D (-1740) (-)



#5

Bromomethane

Concen: Below Cal

RT: 2.58 min Scan# 251

Delta R.T. 0.01 min

Lab File: VN054878.D

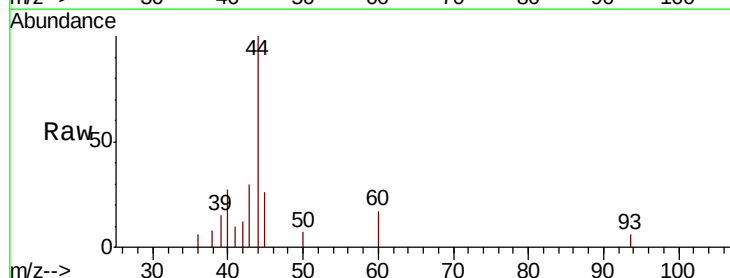
Acq: 1 Apr 2019 16:49

Tgt Ion: 94 Resp: 30

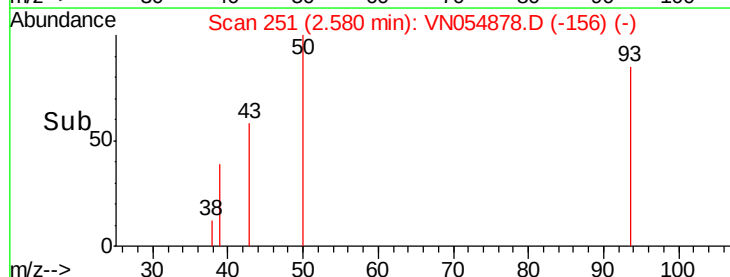
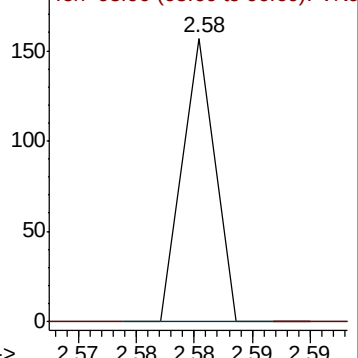
Ion Ratio Lower Upper

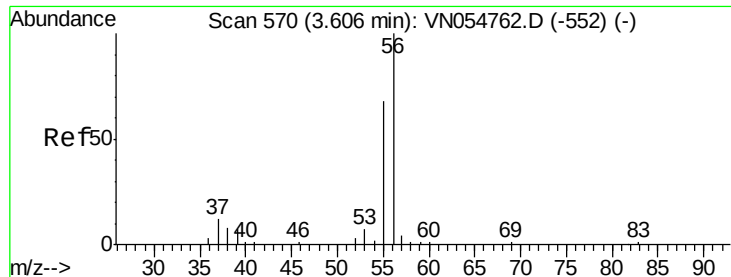
94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VN054878.D (-156) (-)





#13

Acrolein

Concen: 0.438 ug/l

RT: 3.61 min Scan# 571

Delta R.T. 0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampleId :

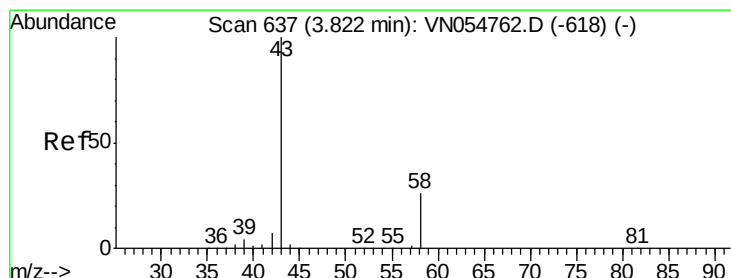
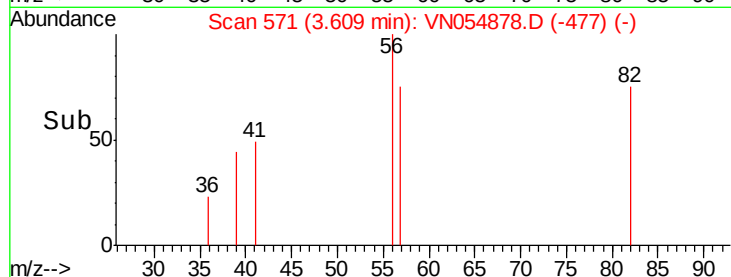
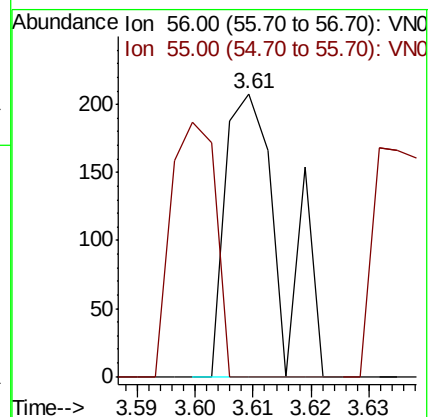
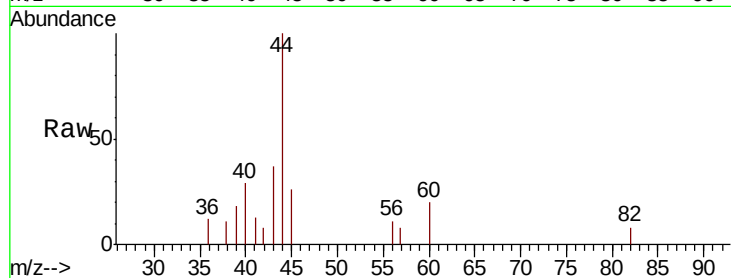
S7C(10)

Tot Ion: 56 Resp: 138

Ion Ratio Lower Upper

56 100

55 72.5 56.7 85.1



#16

Acetone

Concen: 6.640 ug/l

RT: 3.82 min Scan# 637

Delta R.T. -0.00 min

Lab File: VN054878.D

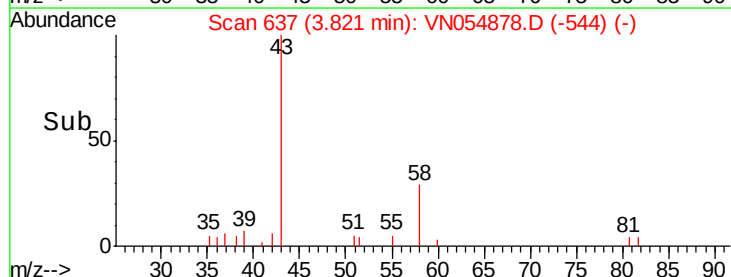
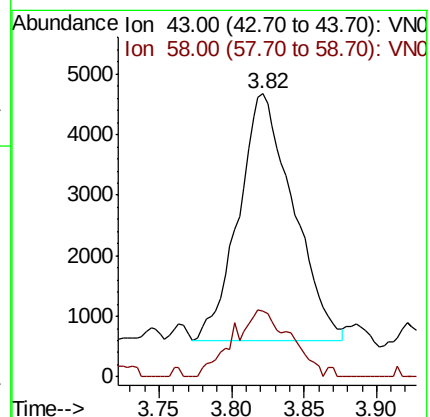
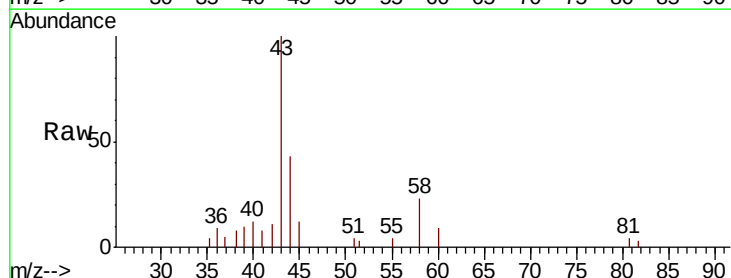
Acq: 1 Apr 2019 16:49

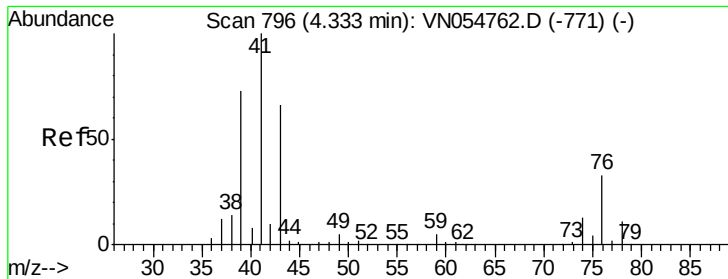
Tgt Ion: 43 Resp: 10714

Ion Ratio Lower Upper

43 100

58 26.8 29.9 44.9#

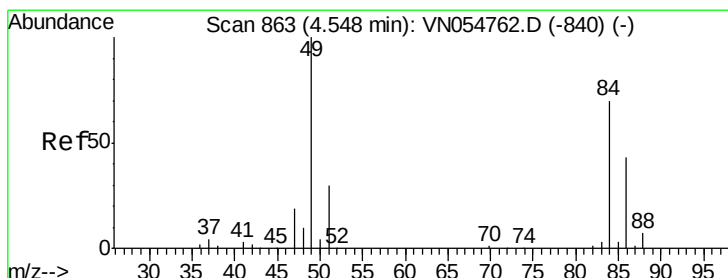
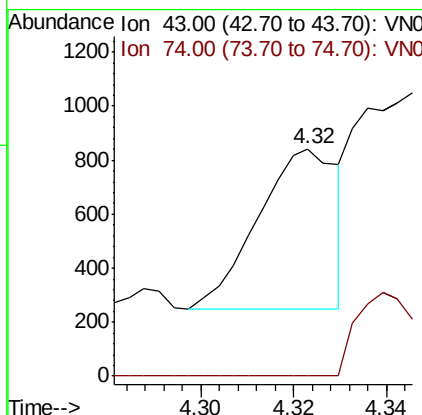
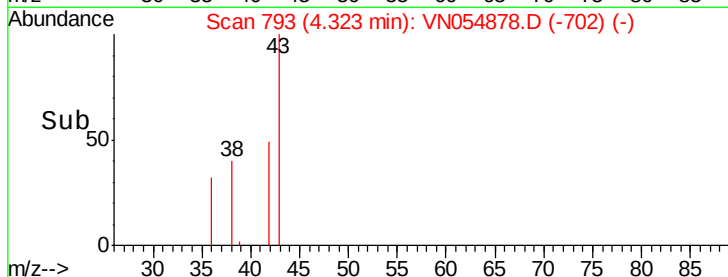
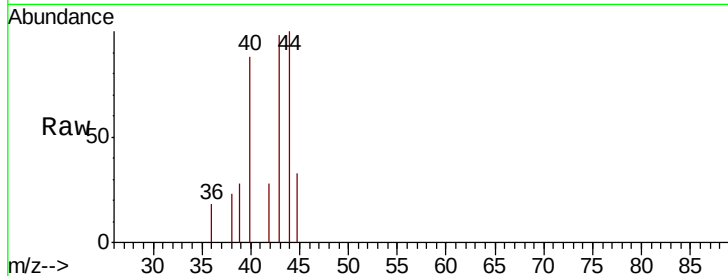




#18  
Methyl Acetate  
Concen: Below Cal  
RT: 4.32 min Scan# 793  
Delta R.T. -0.01 min  
Lab File: VN054878.D  
Acq: 1 Apr 2019 16:49

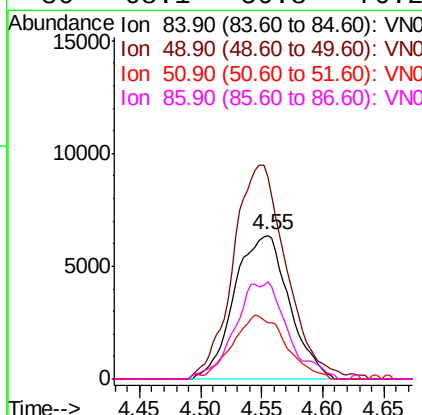
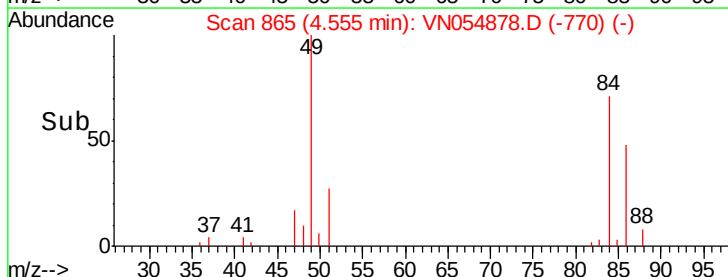
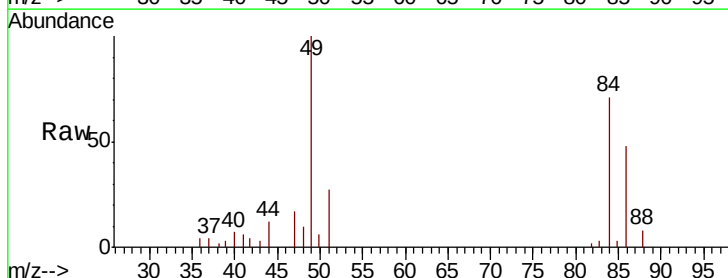
Instrument :  
MSVOA\_N  
ClientSampled :  
S7C(10)

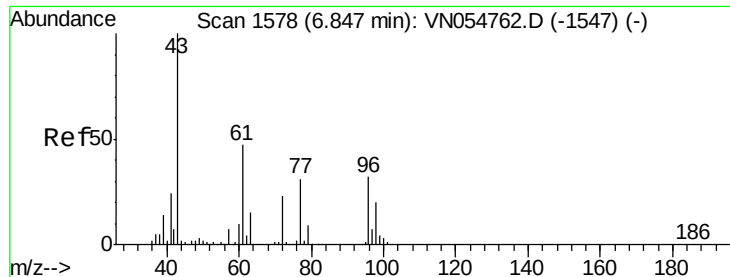
Tot Ion: 43 Resp: 705  
Ion Ratio Lower Upper  
43 100  
74 0.0 20.8 31.2#



#20  
Methylene Chloride  
Concen: 3.477 ug/l  
RT: 4.55 min Scan# 865  
Delta R.T. 0.01 min  
Lab File: VN054878.D  
Acq: 1 Apr 2019 16:49

Tgt Ion: 84 Resp: 19786  
Ion Ratio Lower Upper  
84 100  
49 141.3 89.7 134.5#  
51 38.8 28.2 42.4  
86 68.1 50.8 76.2





#25

2-Butanone

Concen: 0.556 ug/l

RT: 6.86 min Scan# 1581

Delta R.T. 0.01 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

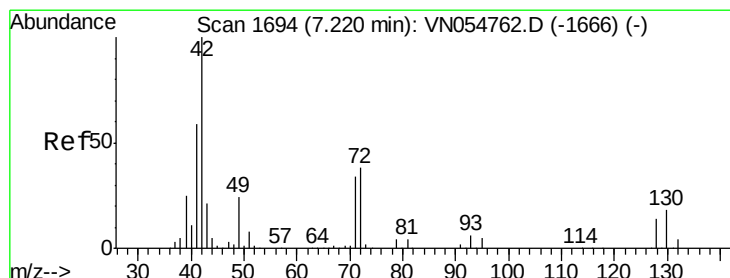
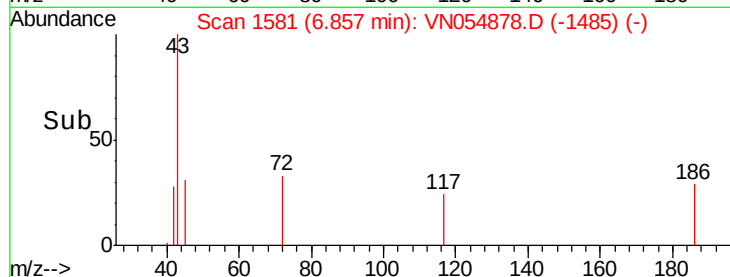
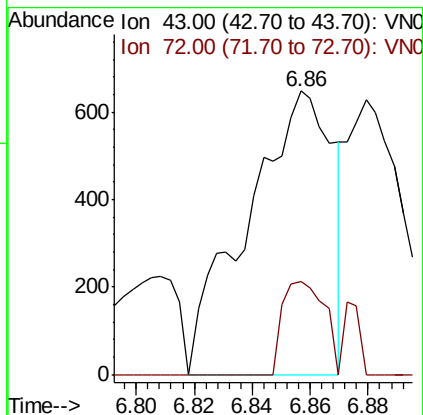
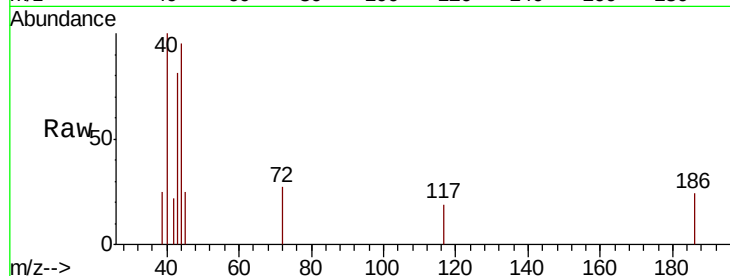
Instrument :  
MSVOA\_N  
ClientSampled :  
S7C(10)

Tot Ion: 43 Resp: 1325

Ion Ratio Lower Upper

43 100

72 33.0 23.0 34.6



#29

Tetrahydrofuran

Concen: 0.275 ug/l

RT: 7.22 min Scan# 1694

Delta R.T. -0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

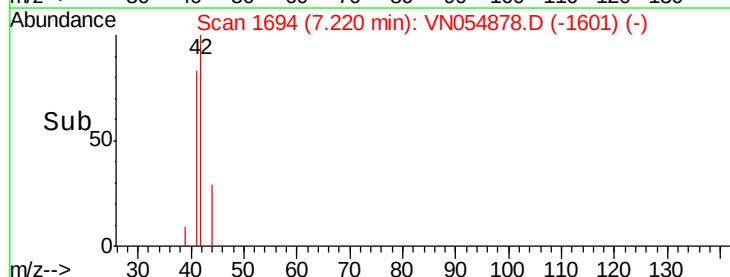
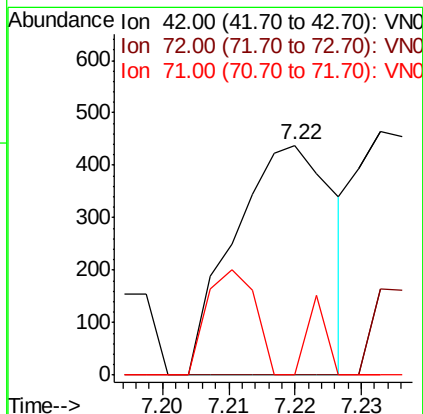
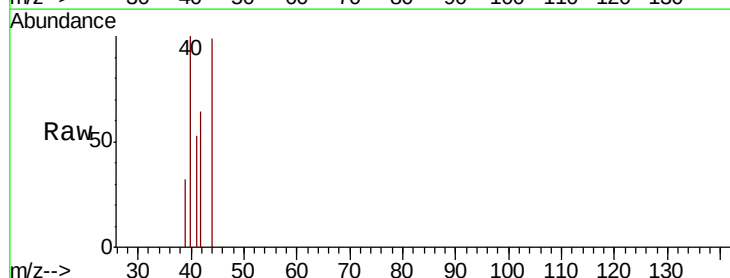
Tgt Ion: 42 Resp: 456

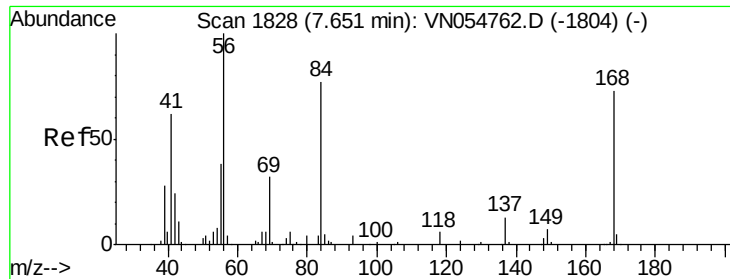
Ion Ratio Lower Upper

42 100

72 0.0 37.8 56.6#

71 6.4 36.2 54.2#

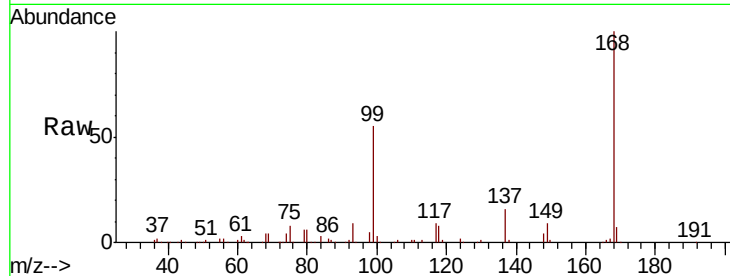




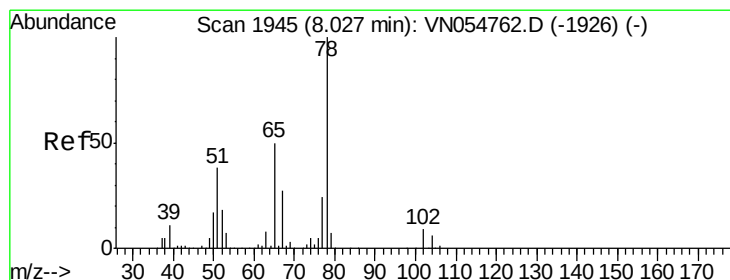
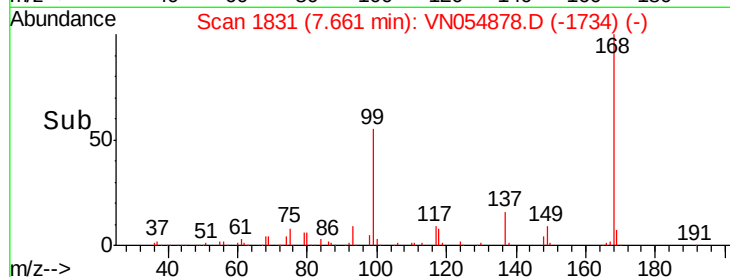
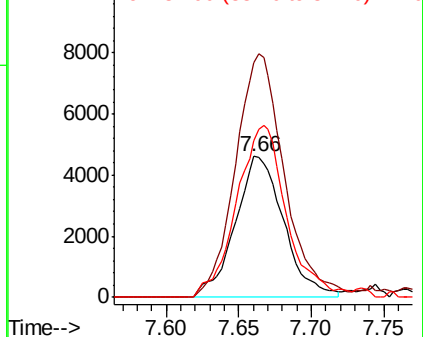
#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.66 min Scan# 1831  
Delta R.T. 0.01 min  
Lab File: VN054878.D  
Acq: 1 Apr 2019 16:49

Instrument :  
MSVOA\_N  
ClientSampleId :  
S7C(10)

Tot Ion: 56 Resp: 10780  
Ion Ratio Lower Upper  
56 100  
69 166.6 27.8 41.6#  
84 111.2 74.6 111.8

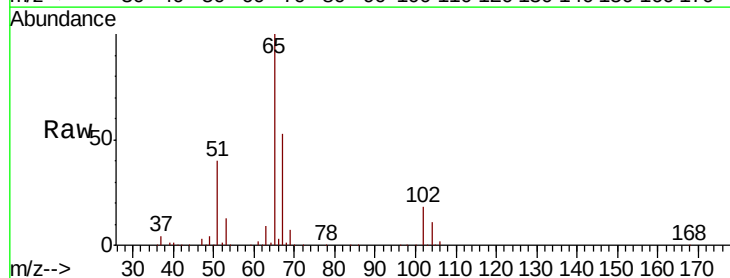


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

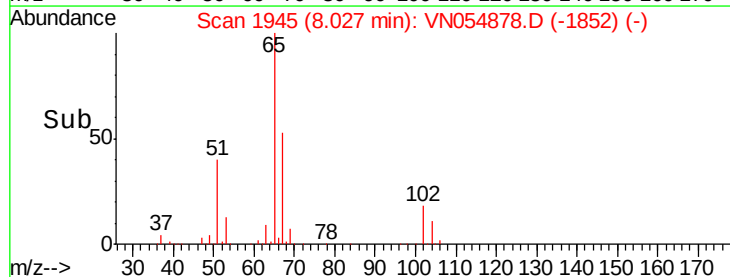
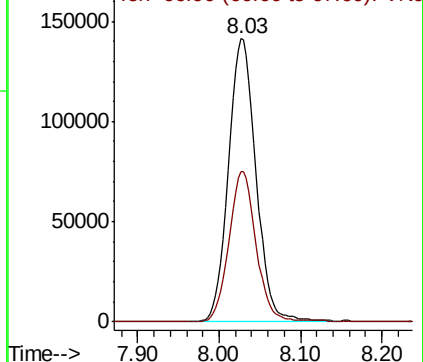


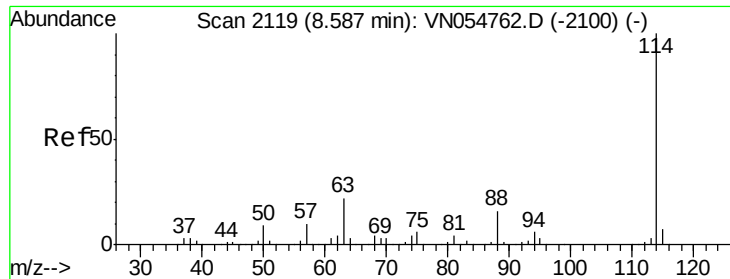
#33  
1,2-Dichloroethane-d4  
Concen: 49.648 ug/l  
RT: 8.03 min Scan# 1945  
Delta R.T. -0.00 min  
Lab File: VN054878.D  
Acq: 1 Apr 2019 16:49

Tgt Ion: 65 Resp: 335919  
Ion Ratio Lower Upper  
65 100  
67 52.3 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VN0  
Ion 66.90 (66.60 to 67.60): VN0

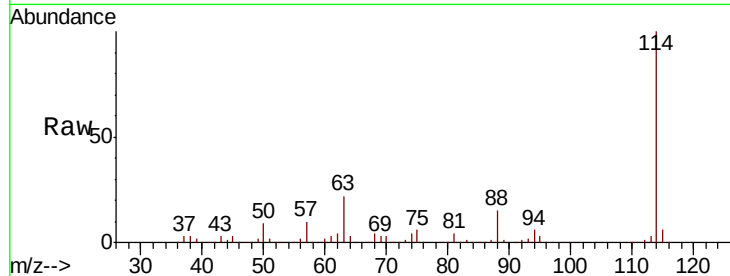




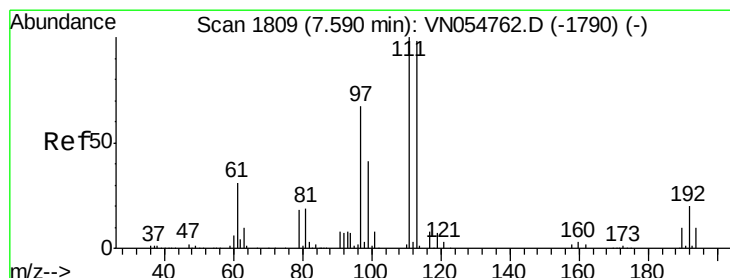
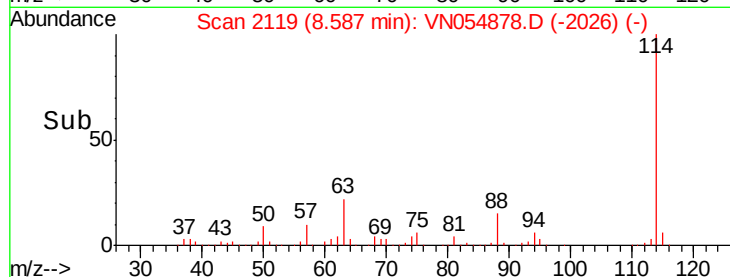
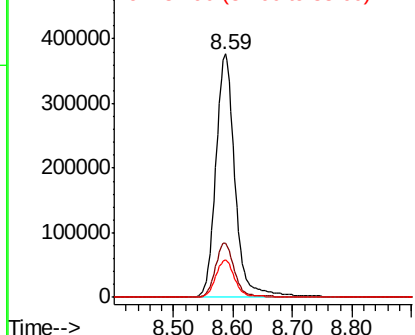
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.59 min Scan# 2119  
 Delta R.T. -0.00 min  
 Lab File: VN054878.D  
 Acq: 1 Apr 2019 16:49

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 S7C(10)

Tot Ion:114 Resp: 843196  
 Ion Ratio Lower Upper  
 114 100  
 63 22.5 0.0 35.2  
 88 15.4 0.0 30.2

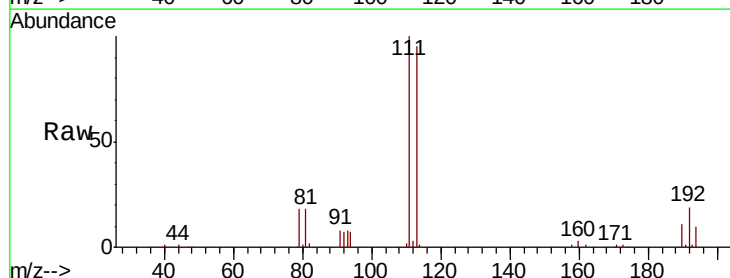


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

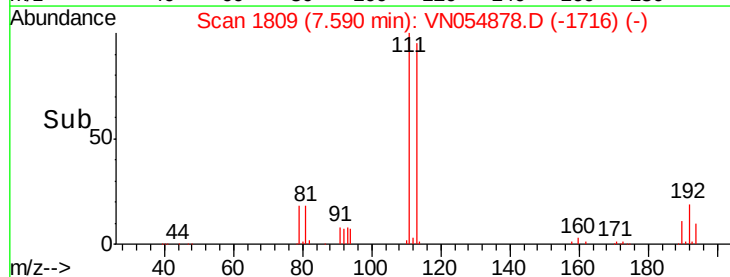
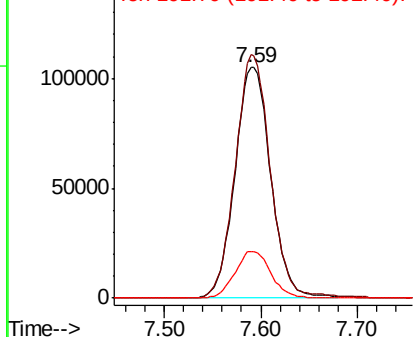


#35  
 Dibromofluoromethane  
 Concen: 48.121 ug/l  
 RT: 7.59 min Scan# 1809  
 Delta R.T. -0.00 min  
 Lab File: VN054878.D  
 Acq: 1 Apr 2019 16:49

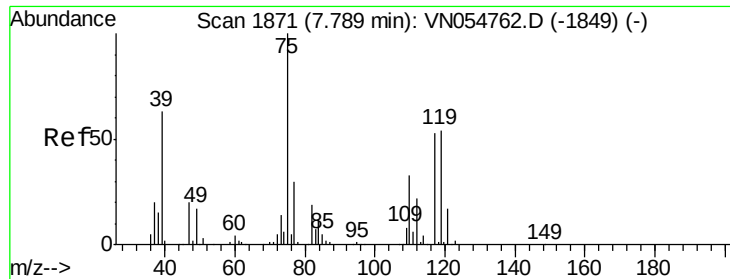
Tgt Ion:113 Resp: 270510  
 Ion Ratio Lower Upper  
 113 100  
 111 103.1 82.2 123.4  
 192 20.3 19.2 28.8



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: 4.969 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.12 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampleId :

S7C(10)

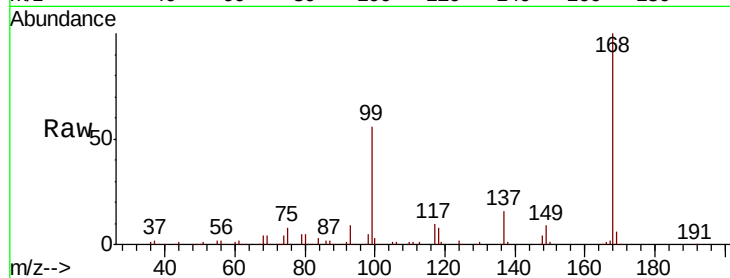
Tot Ion: 75 Resp: 39043

Ion Ratio Lower Upper

75 100

110 8.6 19.1 57.5#

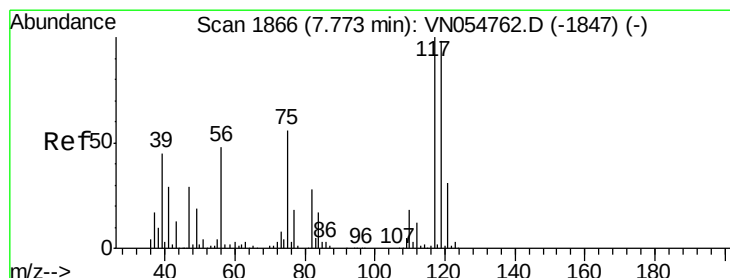
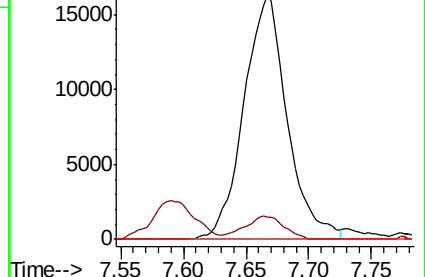
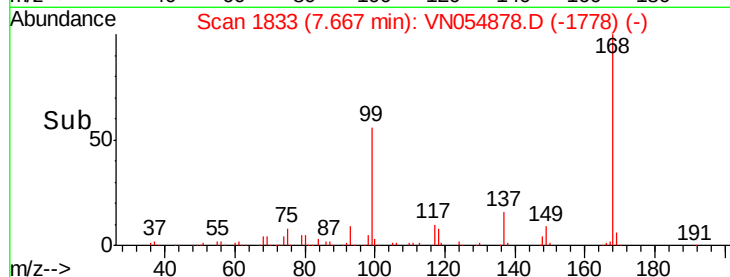
77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): VN054878.D (-1778) (-)

Ion 109.90 (109.60 to 110.60): VN054878.D (-1778) (-)

Ion 76.90 (76.60 to 77.60): VN054878.D (-1778) (-)



#38

Carbon Tetrachloride

Concen: 6.193 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

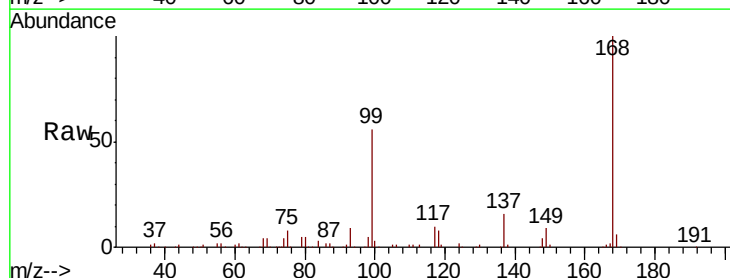
Tgt Ion: 117 Resp: 47264

Ion Ratio Lower Upper

117 100

119 5.7 76.3 114.5#

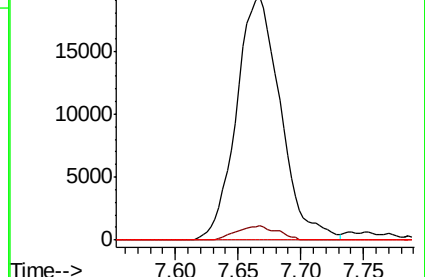
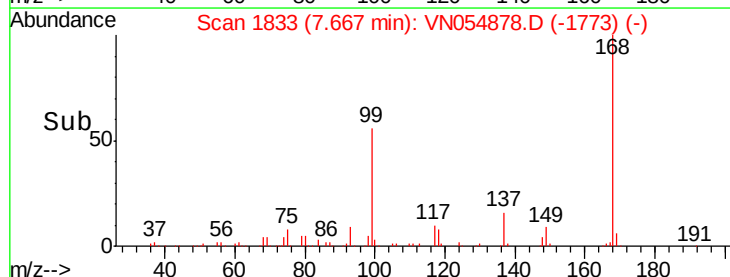
121 0.0 24.6 36.8#

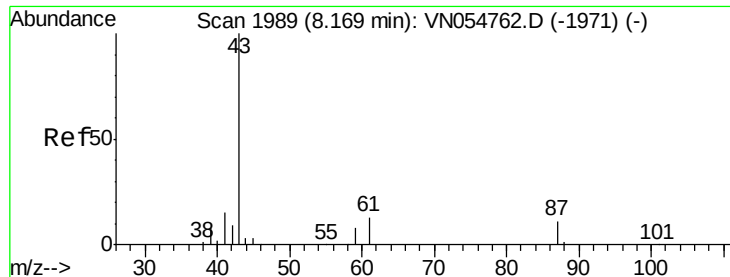


Abundance Ion 116.80 (116.50 to 117.50): VN054878.D (-1773) (-)

Ion 118.80 (118.50 to 119.50): VN054878.D (-1773) (-)

Ion 120.80 (120.50 to 121.50): VN054878.D (-1773) (-)





#43

Isopropyl Acetate

Concen: 1.257 ug/l

RT: 8.17 min Scan# 1990

Delta R.T. 0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampleId :

S7C(10)

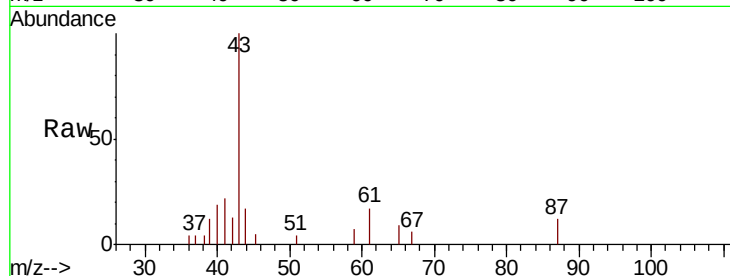
Tot Ion: 43 Resp: 11765

Ion Ratio Lower Upper

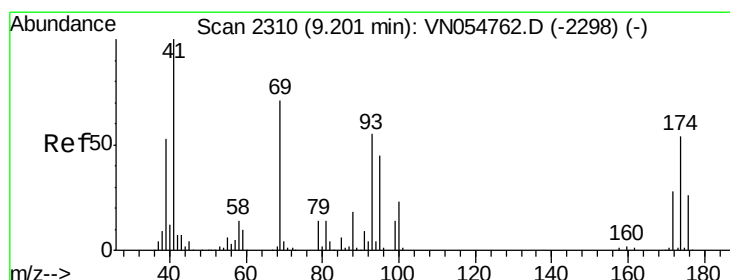
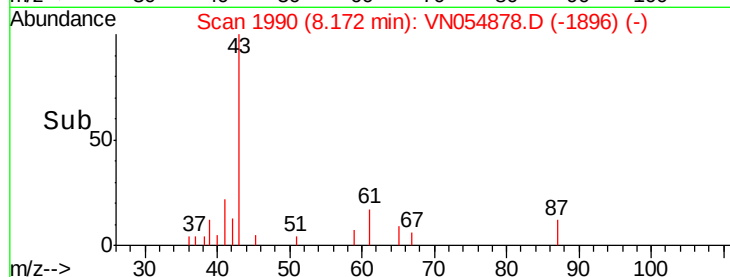
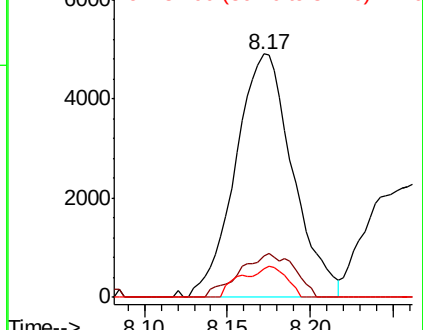
43 100

61 17.2 15.8 23.8

87 6.1 12.0 18.0#



Abundance Ion 43.00 (42.70 to 43.70): VNC  
Ion 61.00 (60.70 to 61.70): VNC  
Ion 87.00 (86.70 to 87.70): VNC



#48

Methyl methacrylate

Concen: 1.202 ug/l

RT: 9.18 min Scan# 2304

Delta R.T. -0.02 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

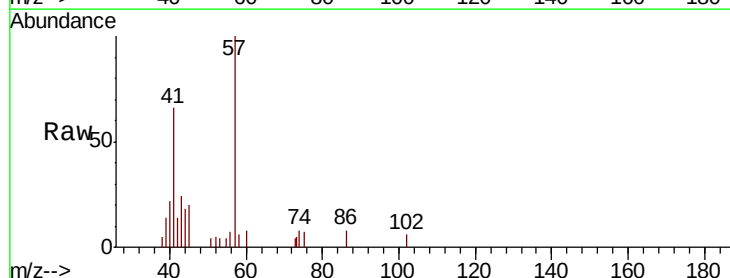
Tgt Ion: 41 Resp: 6100

Ion Ratio Lower Upper

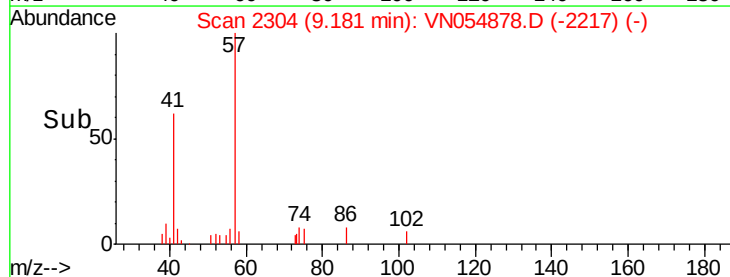
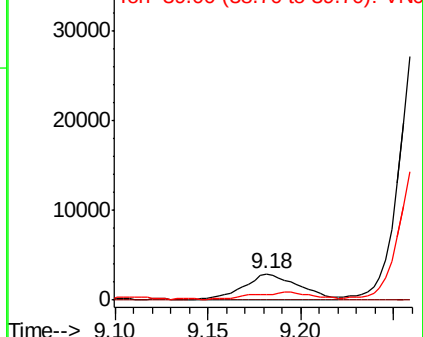
41 100

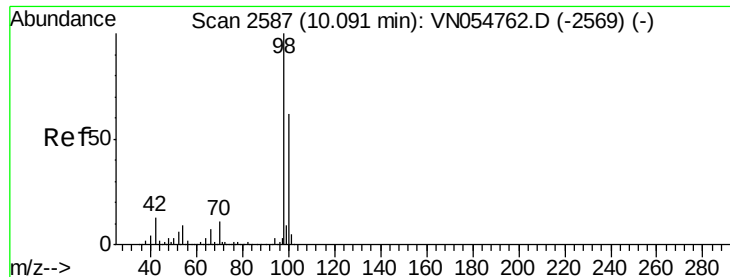
69 0.0 72.6 108.8#

39 0.0 47.5 71.3#



Abundance Ion 41.00 (40.70 to 41.70): VNC  
Ion 69.00 (68.70 to 69.70): VNC  
Ion 39.00 (38.70 to 39.70): VNC





#50

Toluene-d8

Concen: 48.922 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampled :

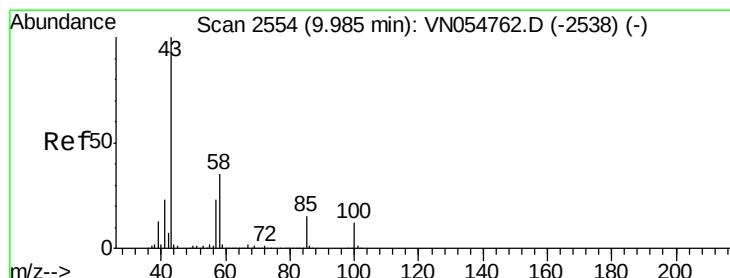
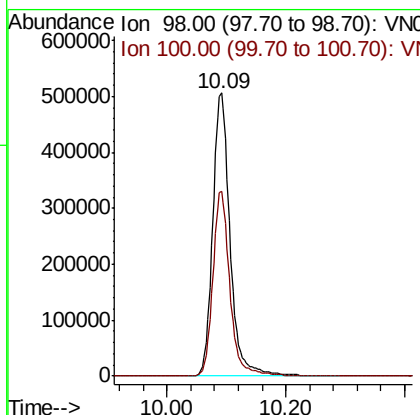
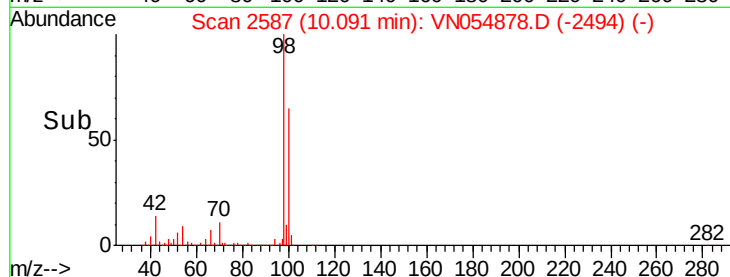
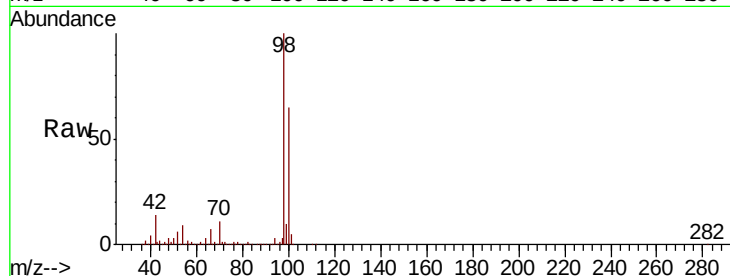
S7C(10)

Tot Ion: 98 Resp: 1022459

Ion Ratio Lower Upper

98 100

100 63.9 51.2 76.8



#51

4-Methyl-2-Pentanone

Concen: 0.859 ug/l

RT: 9.99 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN054878.D

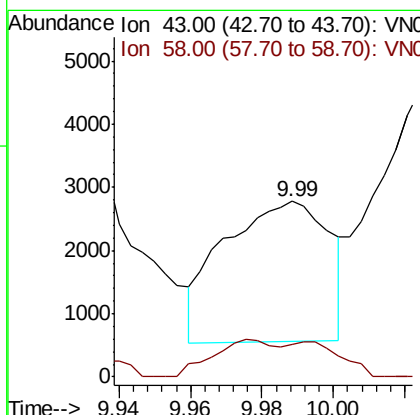
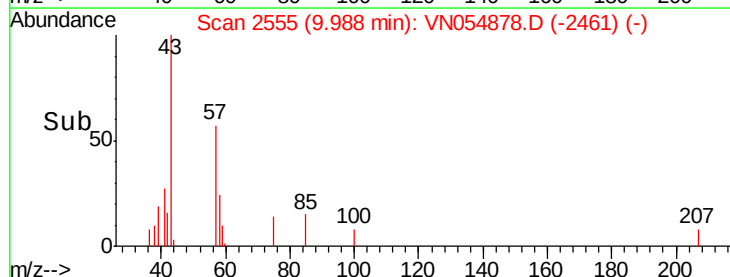
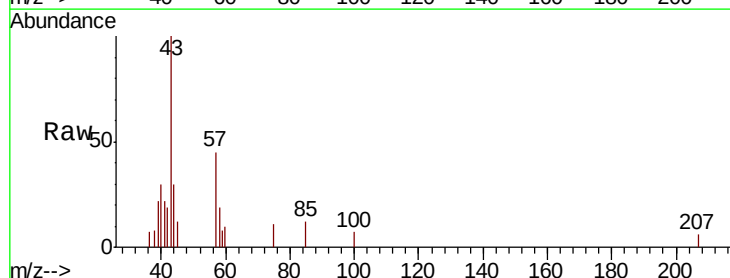
Acq: 1 Apr 2019 16:49

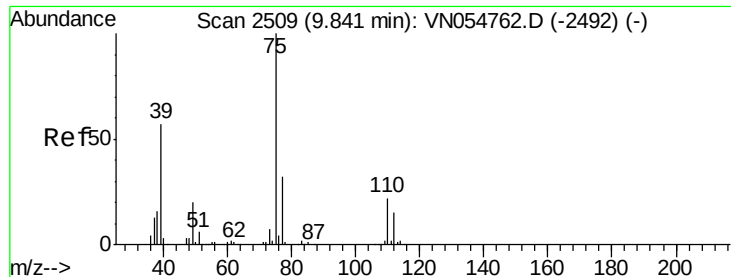
Tgt Ion: 43 Resp: 4519

Ion Ratio Lower Upper

43 100

58 16.4 31.8 47.6#



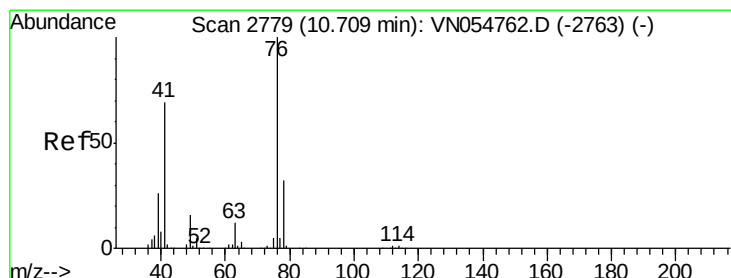
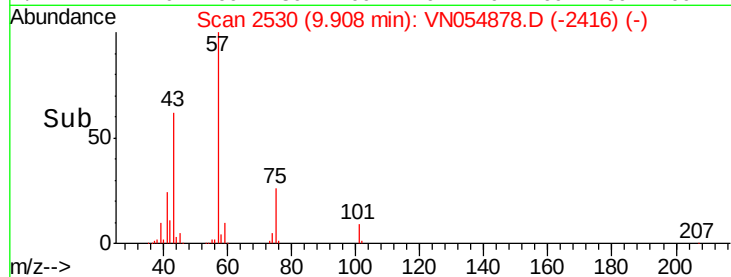
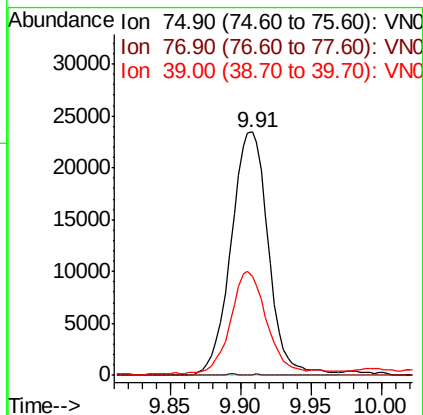
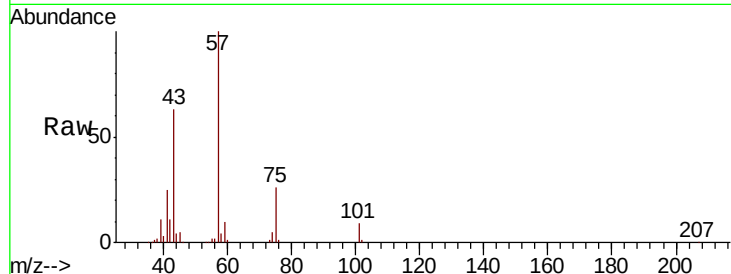


#54

cis-1,3-Dichloropropene  
 Concen: 5.151 ug/l  
 RT: 9.91 min Scan# 2530  
 Delta R.T. 0.07 min  
 Lab File: VN054878.D  
 Acq: 1 Apr 2019 16:49

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 S7C(10)

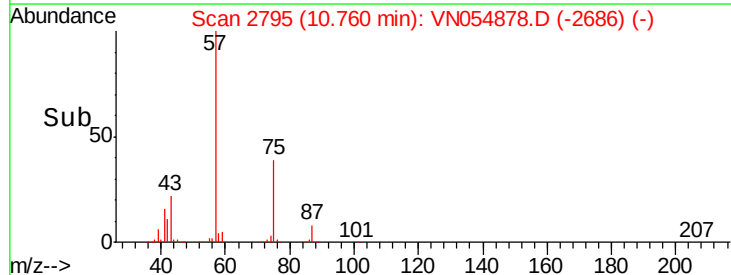
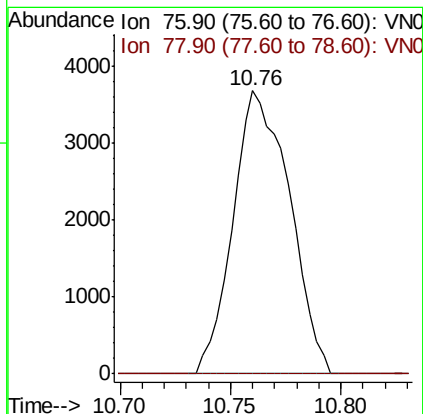
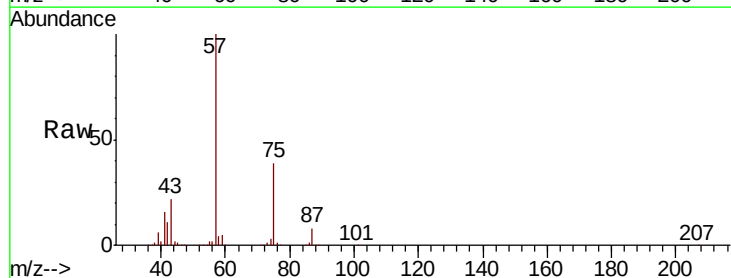
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 0.0   | 25.4  | 38.0# |
| 39      | 39.8  | 37.2  | 55.8  |

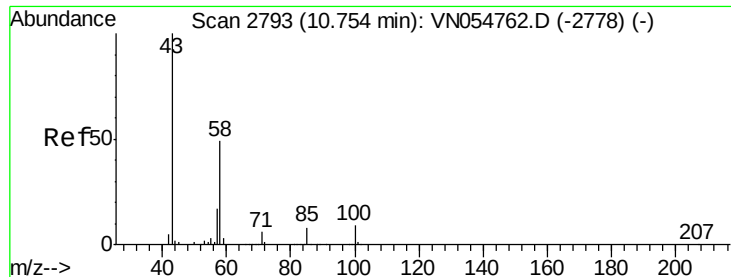


#57

1,3-Dichloropropane  
 Concen: 0.766 ug/l  
 RT: 10.76 min Scan# 2795  
 Delta R.T. 0.05 min  
 Lab File: VN054878.D  
 Acq: 1 Apr 2019 16:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 76      | 100   |       |       |
| 78      | 0.0   | 25.7  | 38.5# |





#59

2-Hexanone

Concen: 34.417 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.01 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampleId :

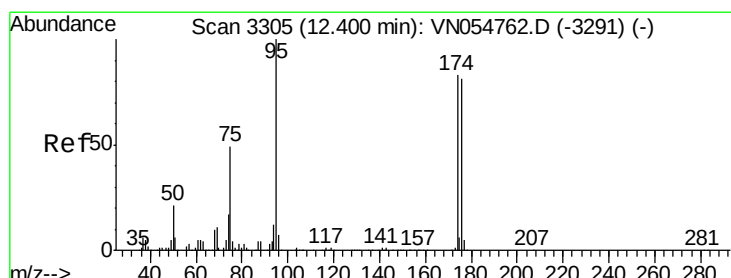
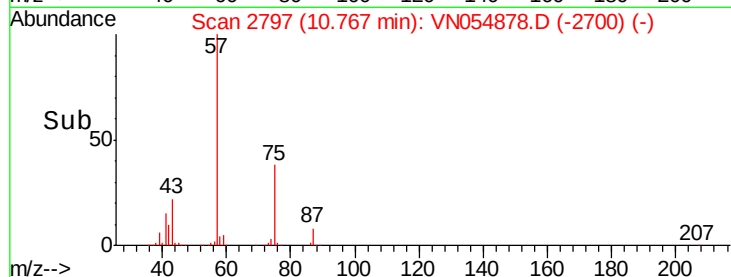
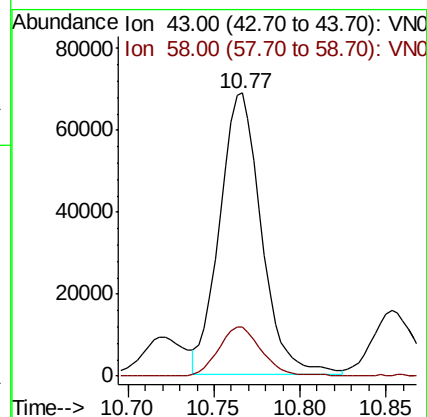
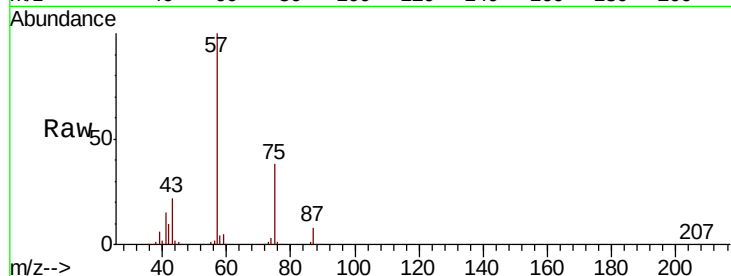
S7C(10)

Tot Ion: 43 Resp: 115969

Ion Ratio Lower Upper

43 100

58 18.3 28.0 83.9#



#62

4-Bromofluorobenzene

Concen: 45.141 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

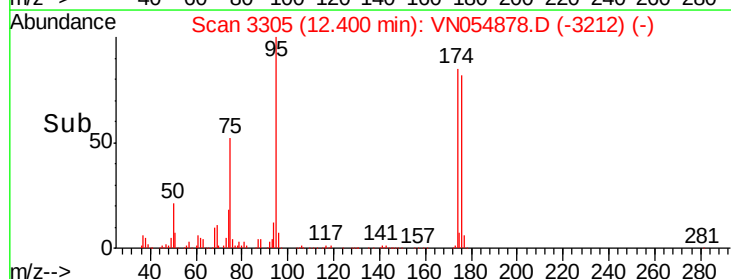
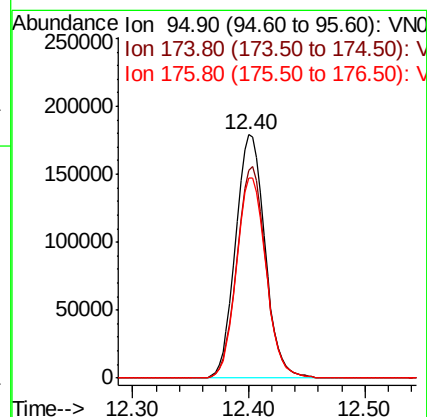
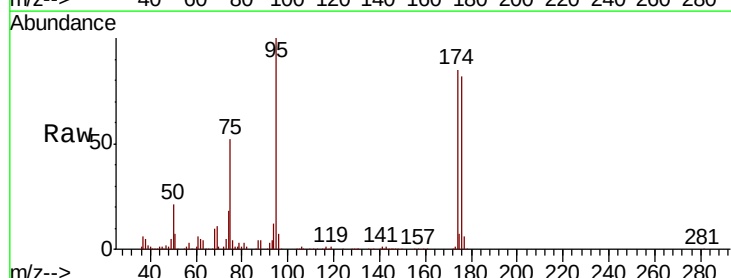
Tgt Ion: 95 Resp: 313759

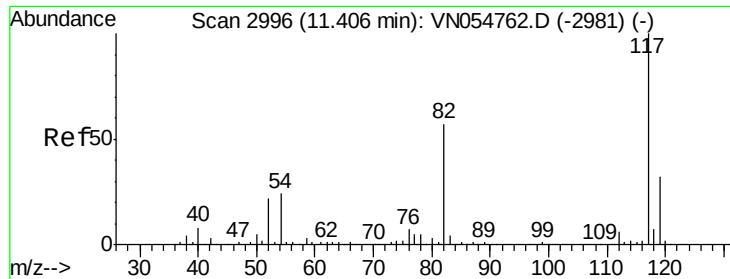
Ion Ratio Lower Upper

95 100

174 85.6 0.0 191.0

176 82.7 0.0 187.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampled :

S7C(10)

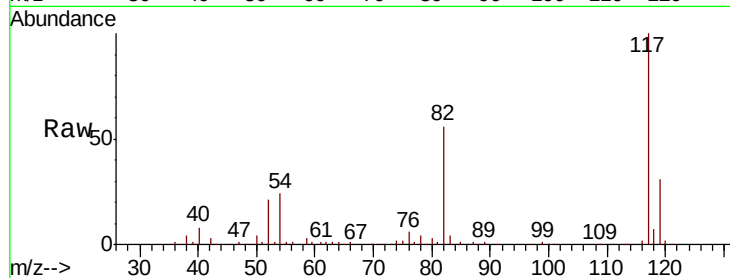
Tot Ion:117 Resp: 736242

Ion Ratio Lower Upper

117 100

82 55.9 40.0 60.0

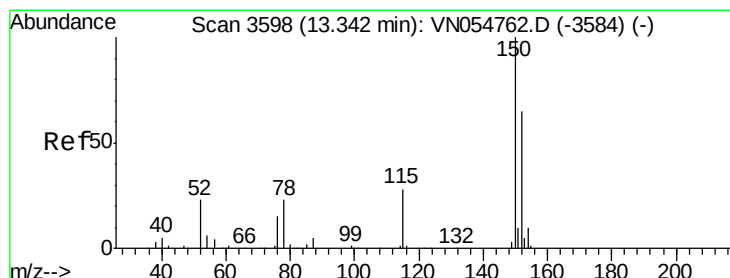
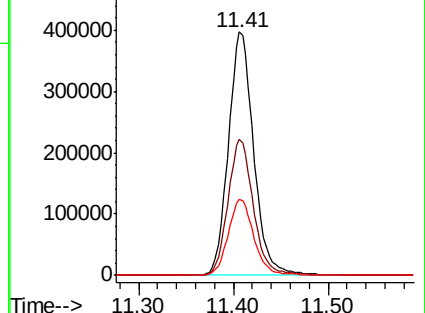
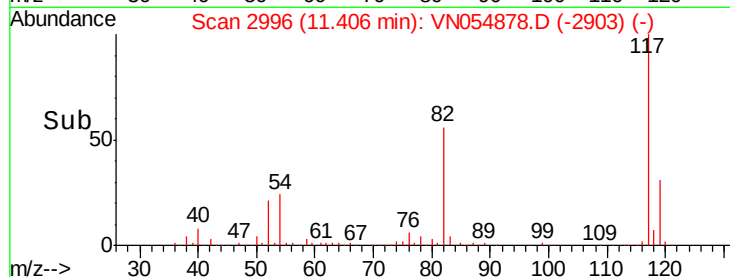
119 31.1 25.8 38.6



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VN

Ion 118.90 (118.60 to 119.60): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. -0.00 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

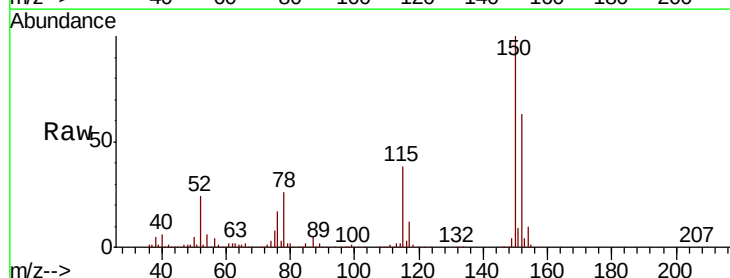
Tgt Ion:152 Resp: 257804

Ion Ratio Lower Upper

152 100

115 59.2 27.2 81.6

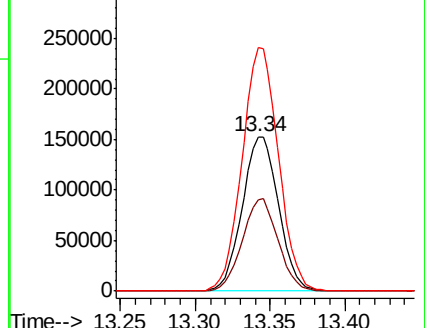
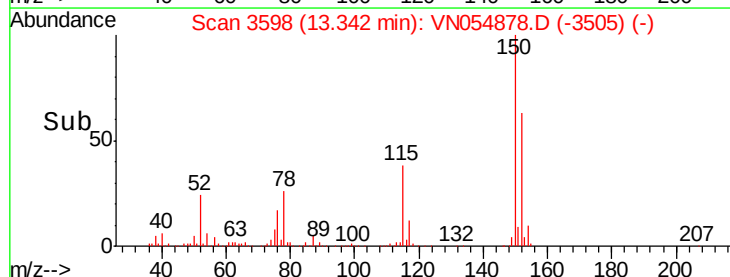
150 157.9 0.0 349.2

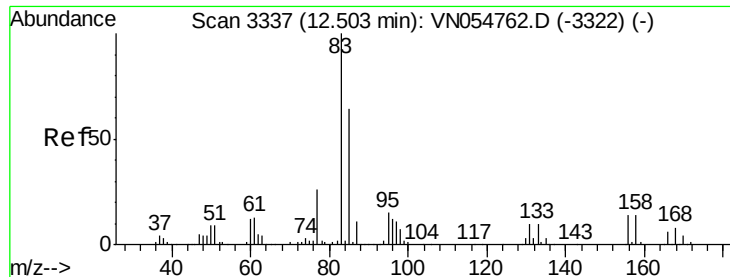


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.56 min Scan# 3356

Delta R.T. 0.06 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampleId :

S7C(10)

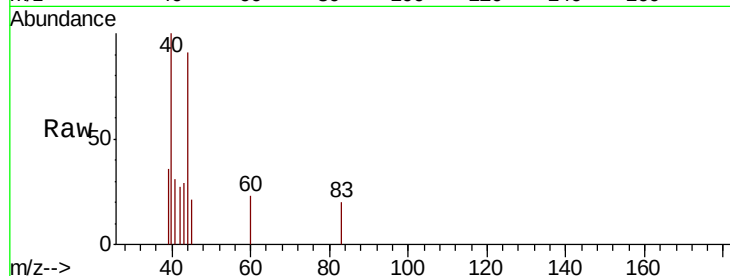
Tot Ion: 83 Resp: 30

Ion Ratio Lower Upper

83 100

131 0.0 5.8 17.4#

85 0.0 32.2 96.6#



Abundance Ion 82.90 (82.60 to 83.60): VN0

Ion 130.80 (130.50 to 131.50): VN0

Ion 84.90 (84.60 to 85.60): VN0

12.56

150

100

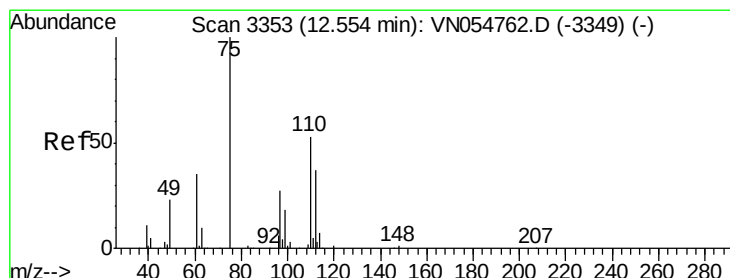
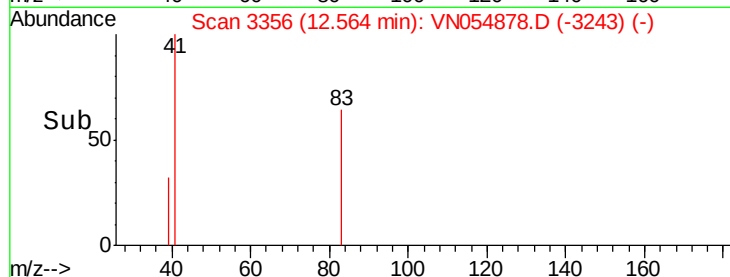
50

0

12.56

12.57

Time-->



#76

1,2,3-Trichloropropane

Concen: 36.273 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054878.D

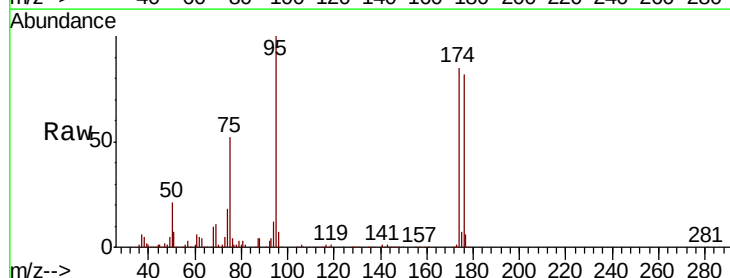
Acq: 1 Apr 2019 16:49

Tgt Ion: 75 Resp: 162452

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

12.40

100000

80000

60000

40000

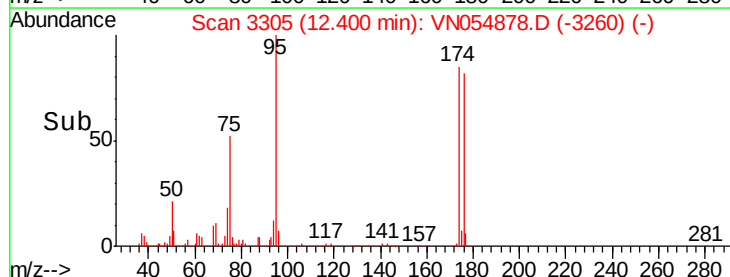
20000

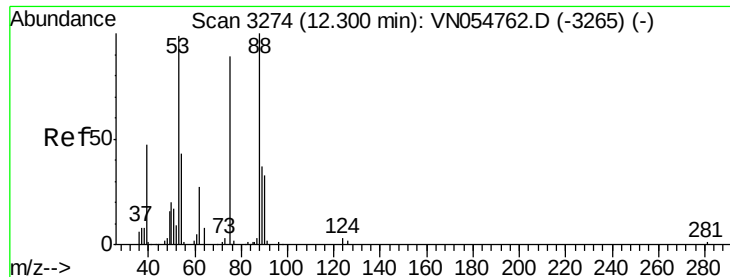
0

12.40

12.50

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 141.091 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054878.D

Acq: 1 Apr 2019 16:49

Instrument :

MSVOA\_N

ClientSampleId :

S7C(10)

Tot Ion: 75 Resp: 162452

Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

89 0.0 39.2 58.8#

