

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110518\  
 Data File : VN052163.D  
 Acq On : 5 Nov 2018 22:34  
 Operator : MD\SY  
 Sample : J5812-28  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 23 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TP4-A

Quant Time: Nov 06 05:17:53 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110518W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 05 22:32:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 327739   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 598514   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 574036   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 238758   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 252021   | 64.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 129.70% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 220268   | 59.28 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 118.56% |          |
| 50) Toluene-d8              | 10.09 | 98   | 879136   | 61.19 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 122.38% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 299704   | 63.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 127.10% |          |

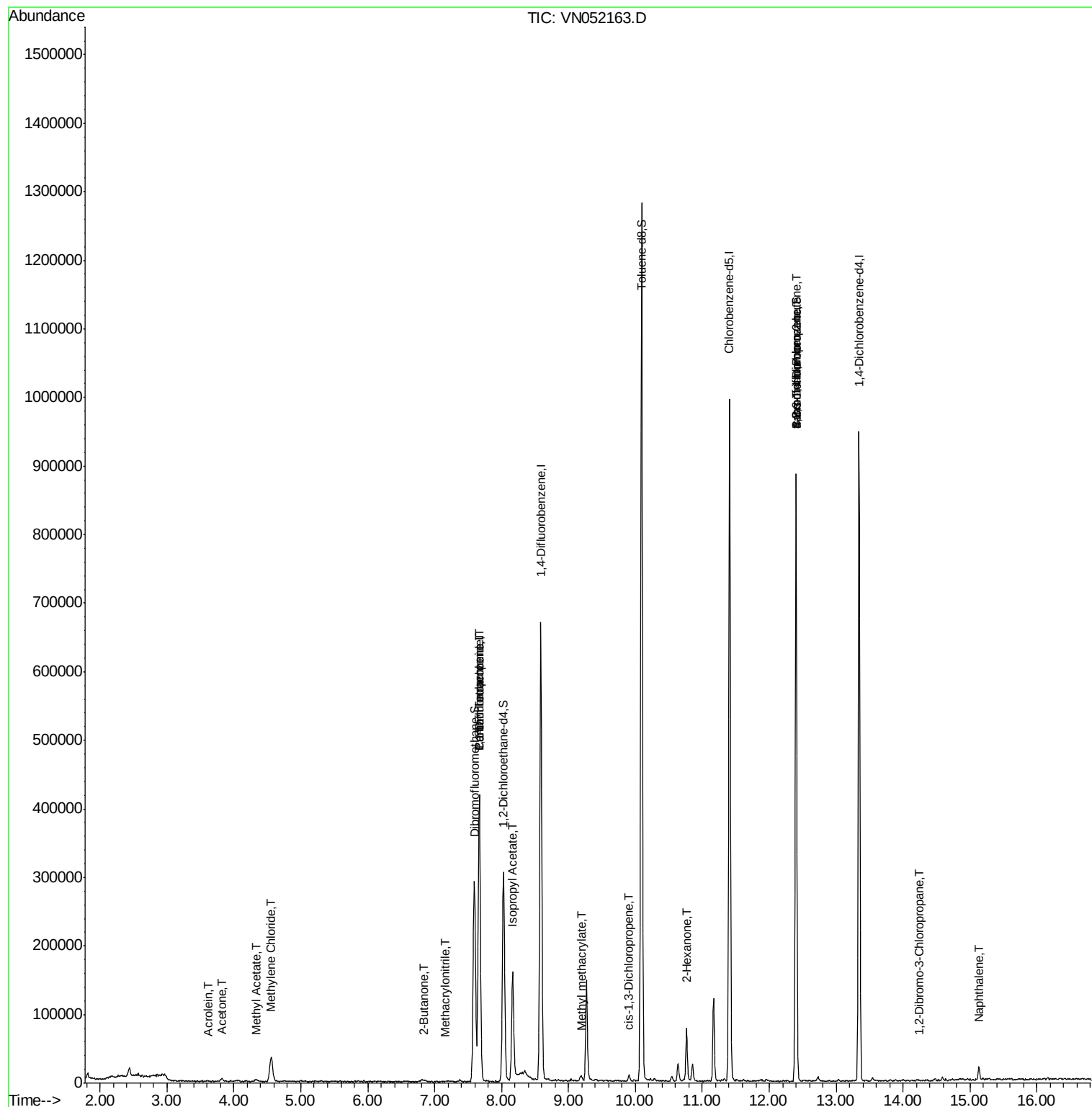
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 13) Acrolein                   | 3.62  | 56   | 74       | 32.375    | ug/l # | 9      |
| 16) Acetone                    | 3.82  | 43   | 6038     | 6.858     | ug/l   | 92     |
| 18) Methyl Acetate             | 4.34  | 43   | 2535     | 0.906     | ug/l # | 59     |
| 20) Methylene Chloride         | 4.56  | 84   | 26763    | 7.315     | ug/l   | 93     |
| 25) 2-Butanone                 | 6.85  | 43   | 1138     | 0.834     | ug/l   | 92     |
| 31) Cyclohexane                | 7.66  | 56   | 4088     | Below Cal | #      | 8      |
| 36) 1,1-Dichloropropene        | 7.67  | 75   | 27168    | 5.131     | ug/l # | 51     |
| 37) Ethyl Acetate              | 6.91  | 43   | 108      | Below Cal | #      | 24     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 34607    | 6.538     | ug/l # | 17     |
| 41) Methacrylonitrile          | 7.16  | 41   | 253      | 1.529     | ug/l # | 54     |
| 43) Isopropyl Acetate          | 8.17  | 43   | 193327   | 32.001    | ug/l # | 88     |
| 48) Methyl methacrylate        | 9.18  | 41   | 5382     | 1.851     | ug/l # | 14     |
| 49) 1,4-Dioxane                | 9.43  | 88   | 69       | Below Cal | #      | 21     |
| 54) cis-1,3-Dichloropropene    | 9.91  | 75   | 1510     | 0.257     | ug/l # | 58     |
| 59) 2-Hexanone                 | 10.76 | 43   | 11430    | 5.145     | ug/l # | 44     |
| 71) Bromoform                  | 12.40 | 173  | 3590     | 4.089     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 151701   | 40.374    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 151701   | 144.565   | ug/l # | 10     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.23 | 75   | 135      | 0.259     | ug/l # | 1      |
| 95) Naphthalene                | 15.13 | 128  | 16086    | 2.200     | ug/l # | 96     |

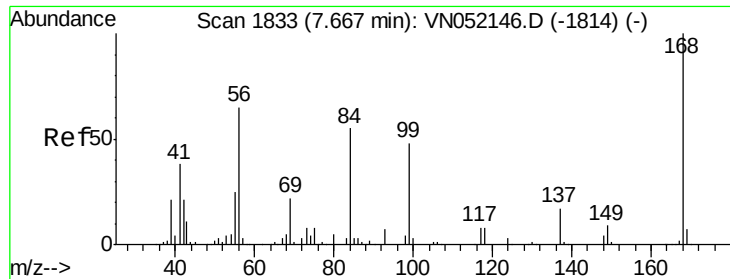
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Mon Nov 05 22:32:25 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampled :

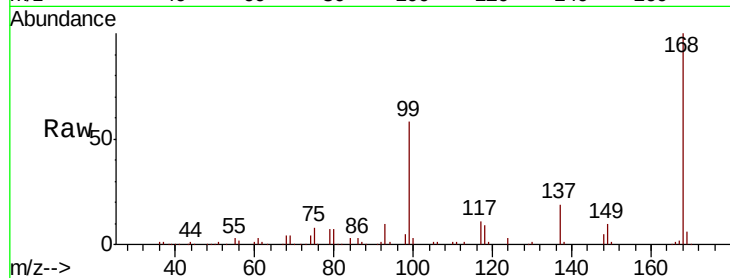
TP4-A

Tot Ion:168 Resp: 327739

Ion Ratio Lower Upper

168 100

99 58.2 45.4 68.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0

7.67

150000

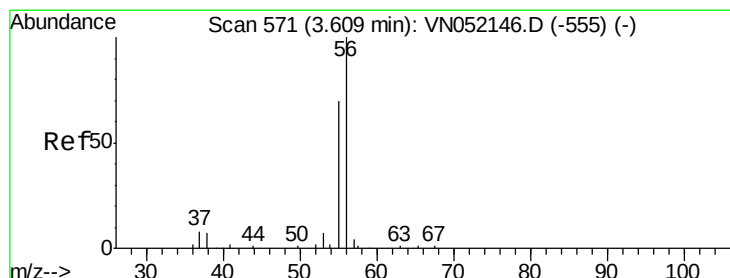
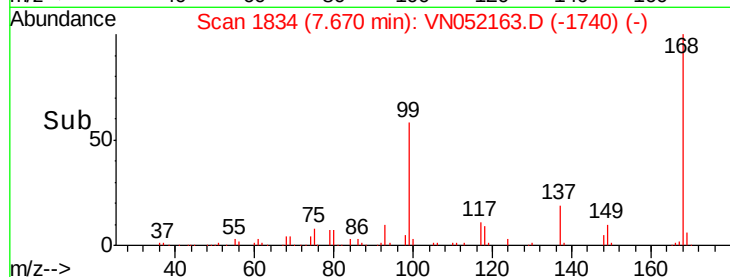
100000

50000

0

Time-->

7.60 7.70 7.80



#13

Acrolein

Concen: 32.375 ug/l

RT: 3.62 min Scan# 575

Delta R.T. 0.01 min

Lab File: VN052163.D

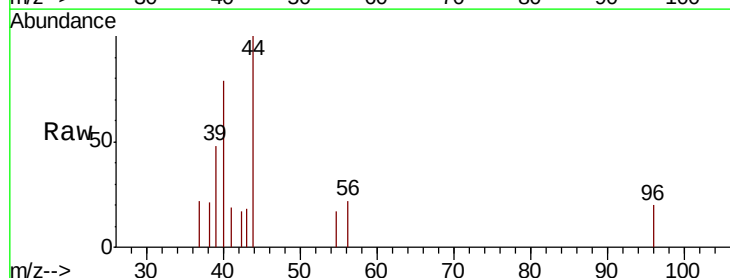
Acq: 5 Nov 2018 22:34

Tgt Ion: 56 Resp: 74

Ion Ratio Lower Upper

56 100

55 145.9 56.6 84.8#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

3.62

250

200

150

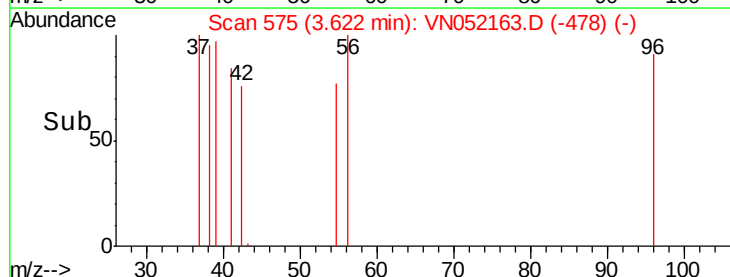
100

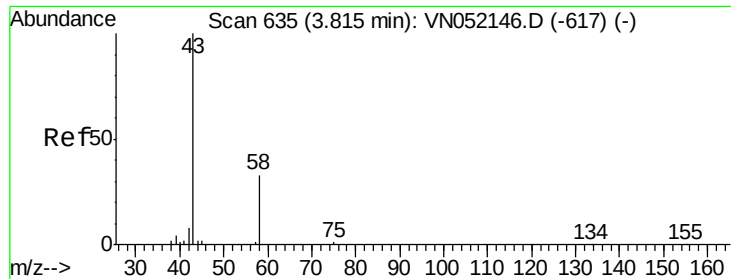
50

0

Time-->

3.61 3.62 3.63





#16

Acetone

Concen: 6.858 ug/l

RT: 3.82 min Scan# 636

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampled :

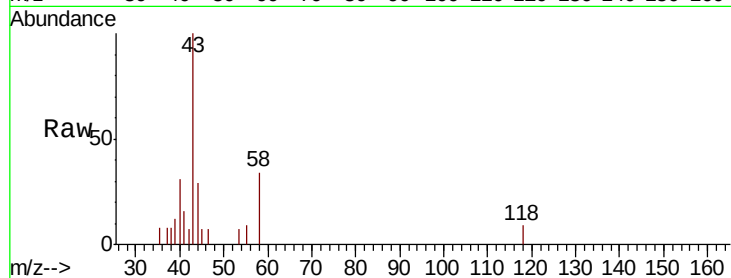
TP4-A

Tot Ion: 43 Resp: 6038

Ion Ratio Lower Upper

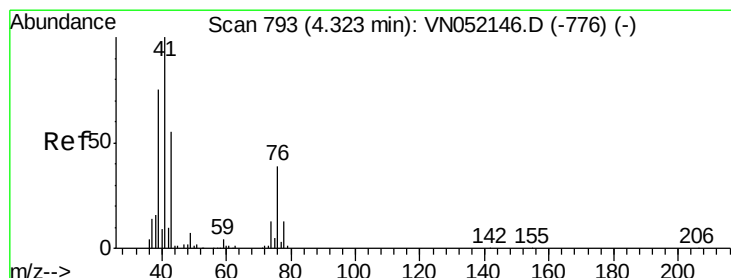
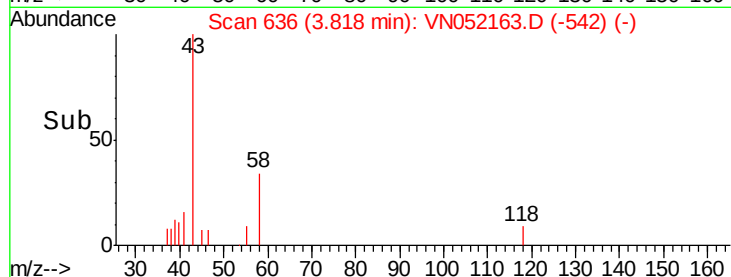
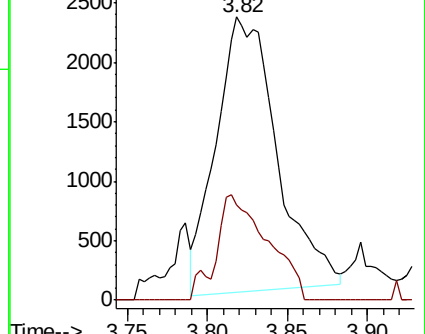
43 100

58 37.0 26.2 39.2



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#18

Methyl Acetate

Concen: 0.906 ug/l

RT: 4.34 min Scan# 797

Delta R.T. 0.01 min

Lab File: VN052163.D

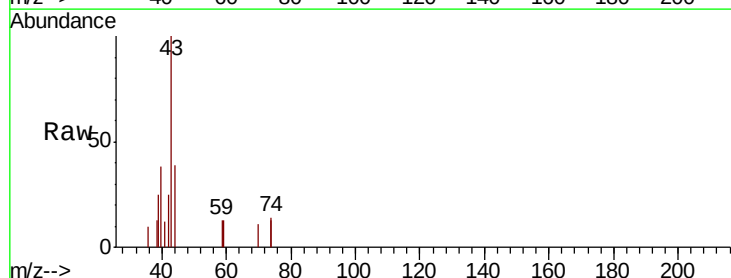
Acq: 5 Nov 2018 22:34

Tgt Ion: 43 Resp: 2535

Ion Ratio Lower Upper

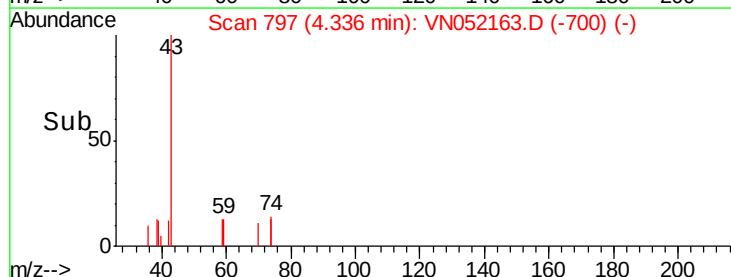
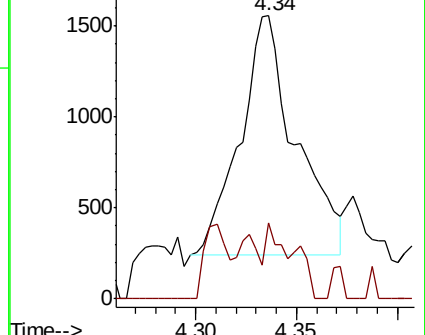
43 100

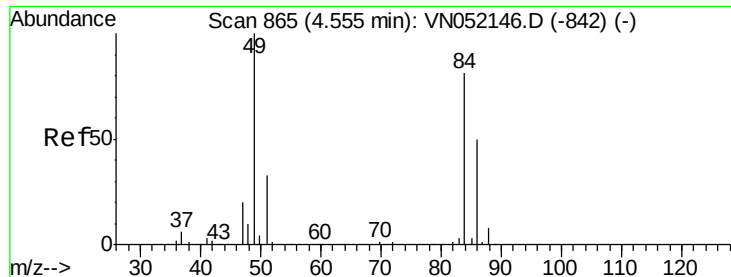
74 4.1 19.3 28.9#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0





#20

Methvlene Chloride

Concen: 7.315 ug/l

RT: 4.56 min Scan# 866

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampled :

TP4-A

Tot Ion: 84 Resp: 26763

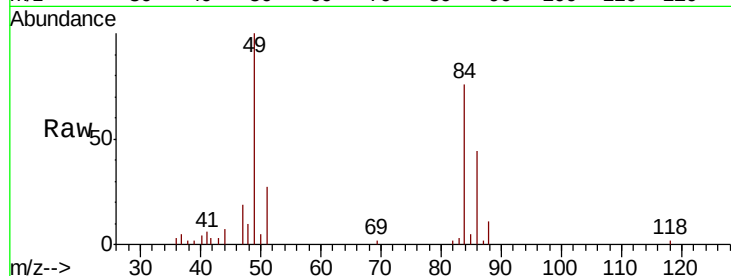
Ion Ratio Lower Upper

84 100

49 132.4 98.4 147.6

51 36.0 32.5 48.7

86 57.8 49.7 74.5

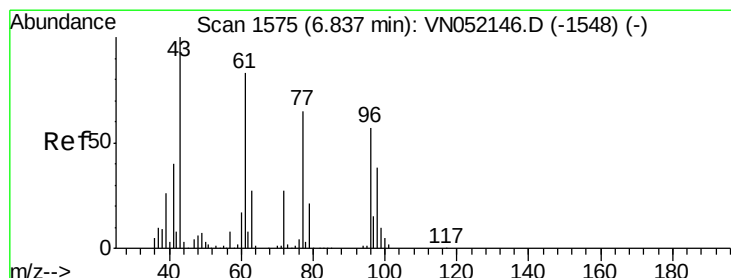
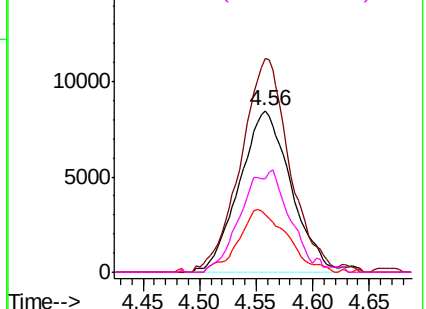
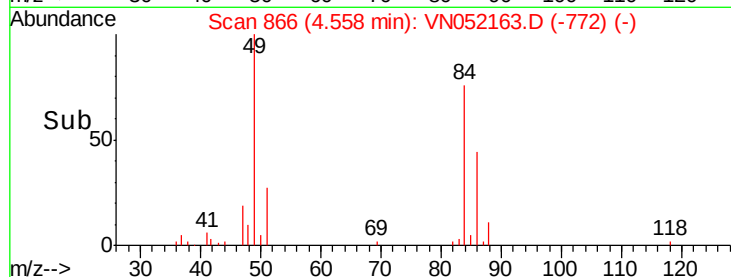


Abundance Ion 83.90 (83.60 to 84.60): VN0

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



#25

2-Butanone

Concen: 0.834 ug/l

RT: 6.85 min Scan# 1579

Delta R.T. 0.01 min

Lab File: VN052163.D

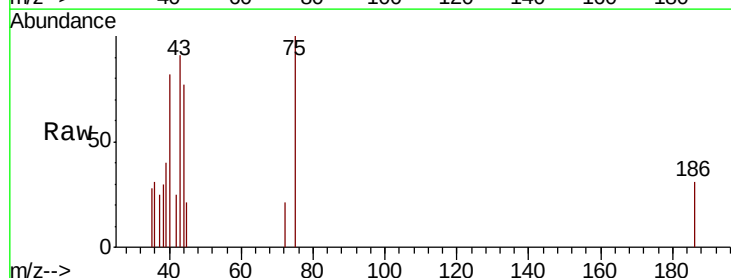
Acq: 5 Nov 2018 22:34

Tgt Ion: 43 Resp: 1138

Ion Ratio Lower Upper

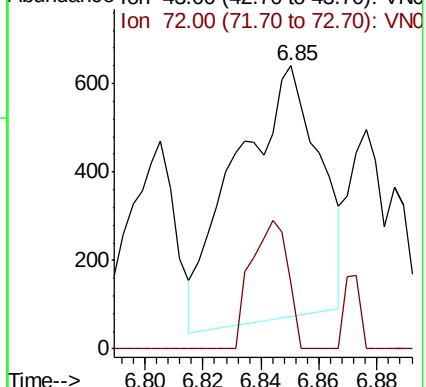
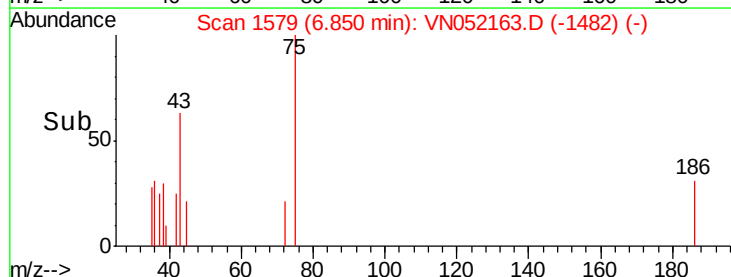
43 100

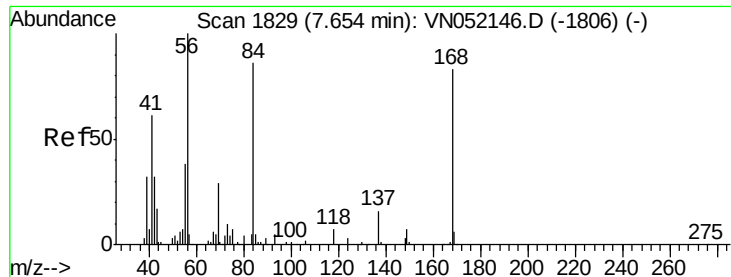
72 30.9 21.4 32.2



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

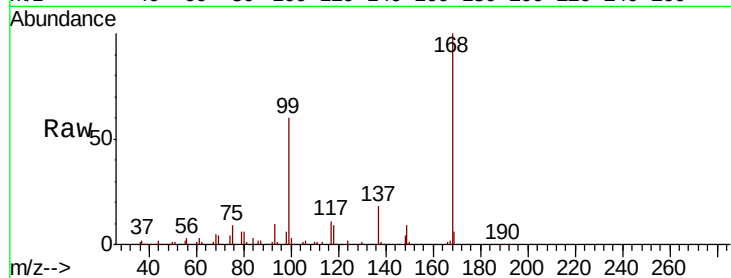




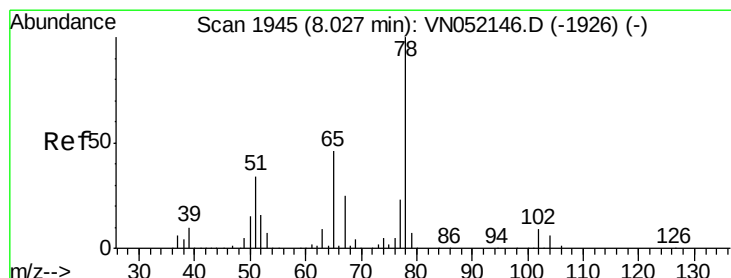
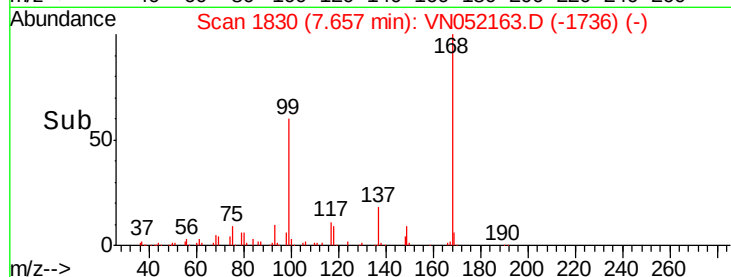
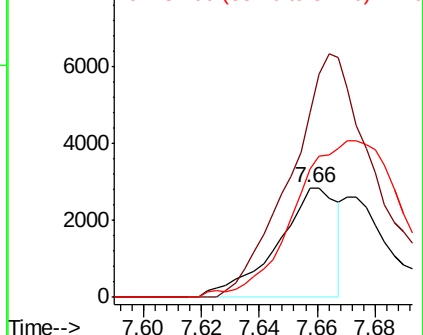
#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.66 min Scan# 1830  
Delta R.T. 0.00 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

Instrument :  
MSVOA\_N  
ClientSampled :  
TP4-A

Tot Ion: 56 Resp: 4088  
Ion Ratio Lower Upper  
56 100  
69 169.2 23.5 35.3#  
84 118.0 68.7 103.1#

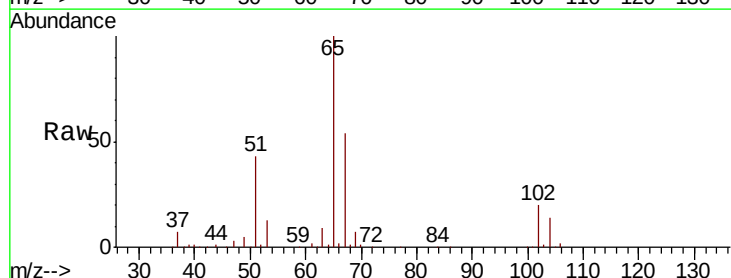


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

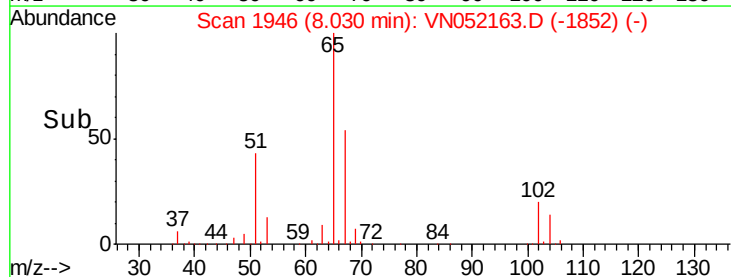
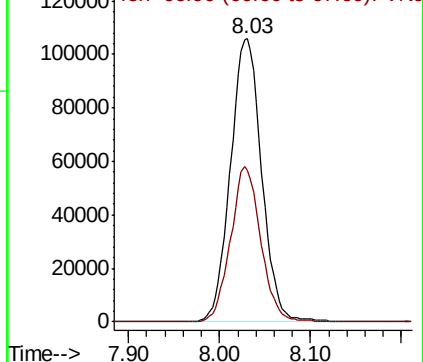


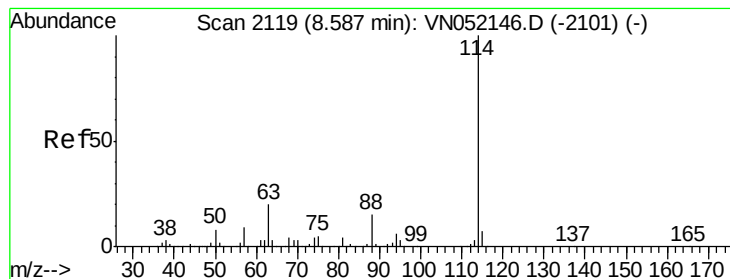
#33  
1,2-Dichloroethane-d4  
Concen: Below ug/l  
RT: 8.03 min Scan# 1946  
Delta R.T. 0.00 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

Tgt Ion: 65 Resp: 252021  
Ion Ratio Lower Upper  
65 100  
67 52.8 0.0 107.6



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: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampleId :

TP4-A

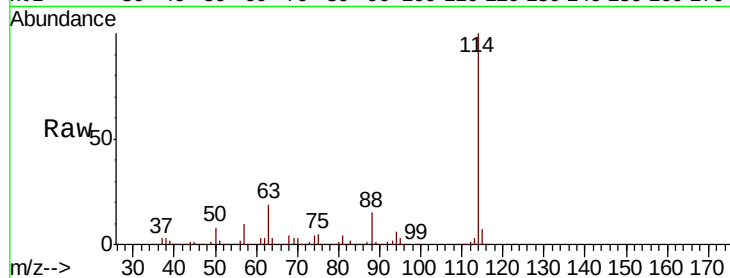
Tot Ion:114 Resp: 598514

Ion Ratio Lower Upper

114 100

63 19.1 0.0 40.0

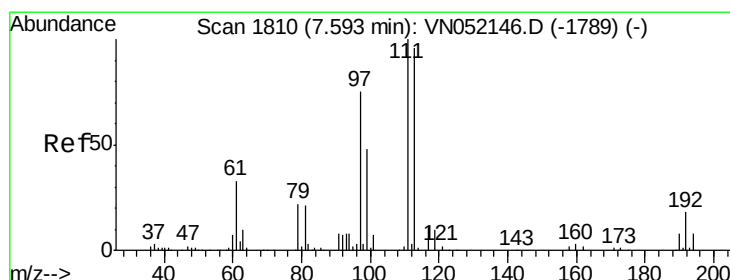
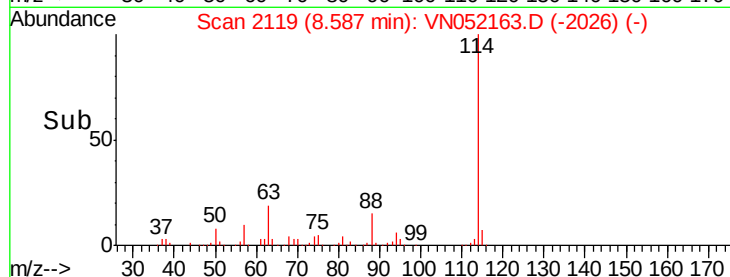
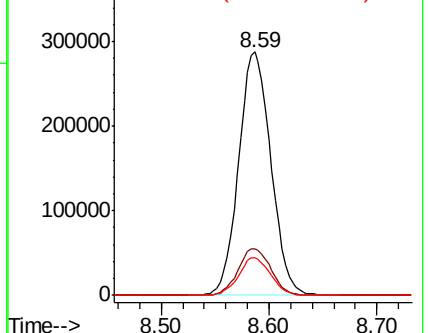
88 15.5 0.0 31.0



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: 50.000 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

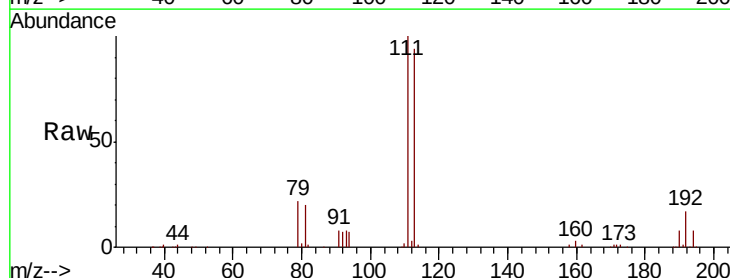
Tgt Ion:113 Resp: 220268

Ion Ratio Lower Upper

113 100

111 103.6 81.7 122.5

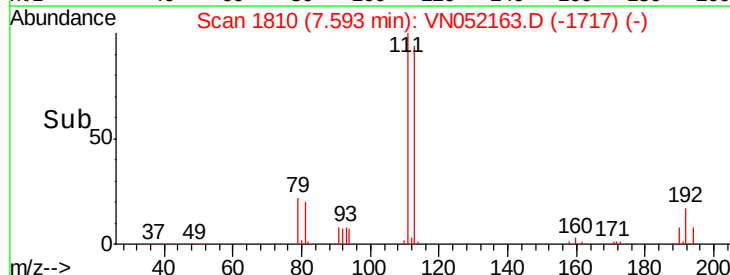
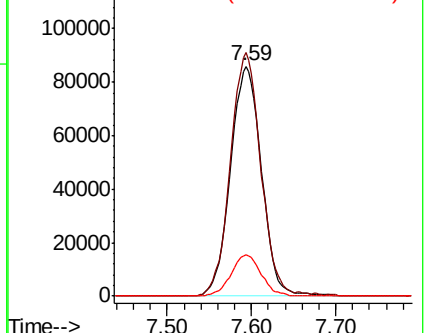
192 17.4 14.2 21.4

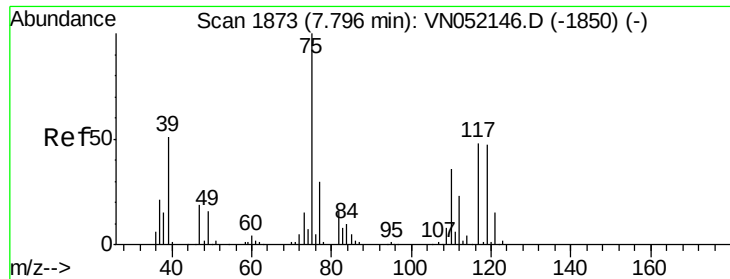


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

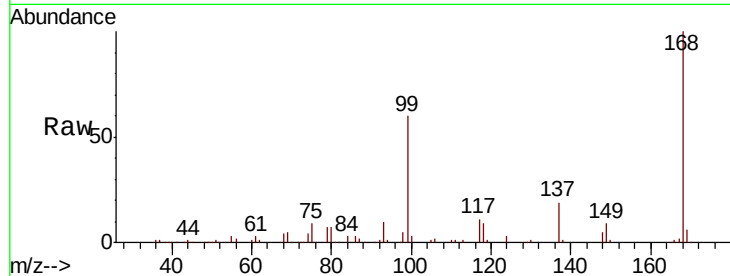




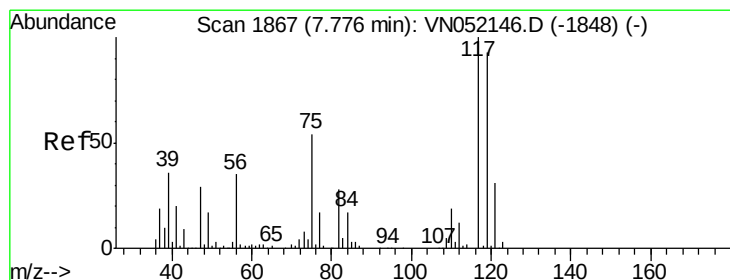
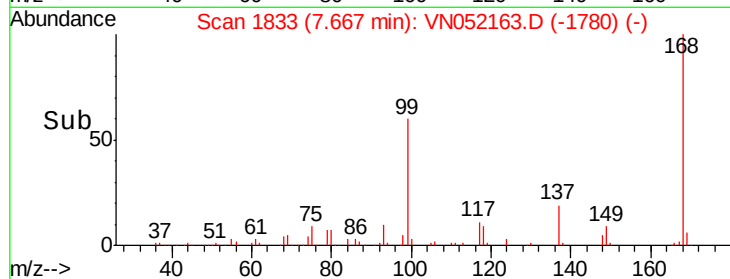
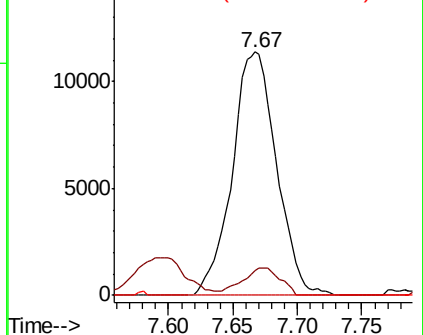
#36  
 1,1-Dichloropropene  
 Concen: 5.131 ug/l  
 RT: 7.67 min Scan# 1833  
 Delta R.T. -0.13 min  
 Lab File: VN052163.D  
 Acq: 5 Nov 2018 22:34

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TP4-A

Tot Ion: 75 Resp: 27168  
 Ion Ratio Lower Upper  
 75 100  
 110 9.9 17.8 53.5#  
 77 0.0 24.0 36.0#

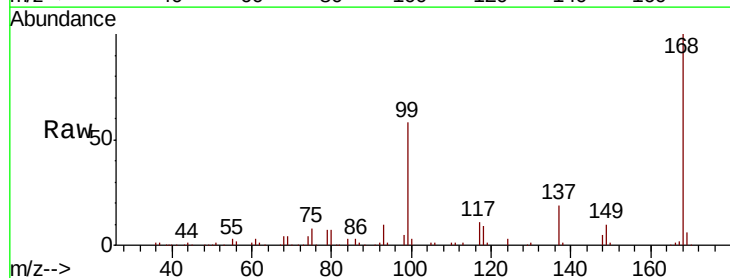


Abundance Ion 74.90 (74.60 to 75.60): VN0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VN0

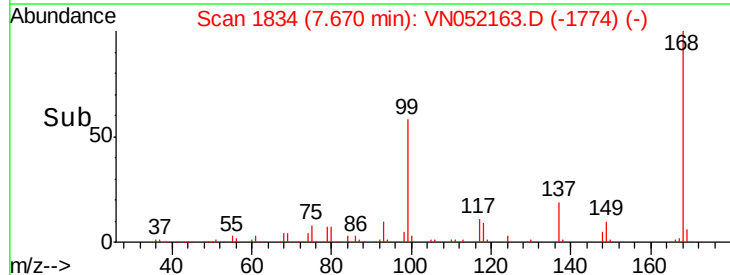
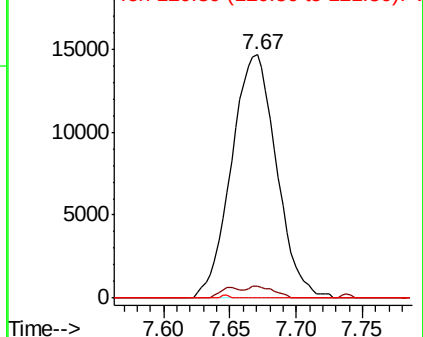


#38  
 Carbon Tetrachloride  
 Concen: 6.538 ug/l  
 RT: 7.67 min Scan# 1834  
 Delta R.T. -0.11 min  
 Lab File: VN052163.D  
 Acq: 5 Nov 2018 22:34

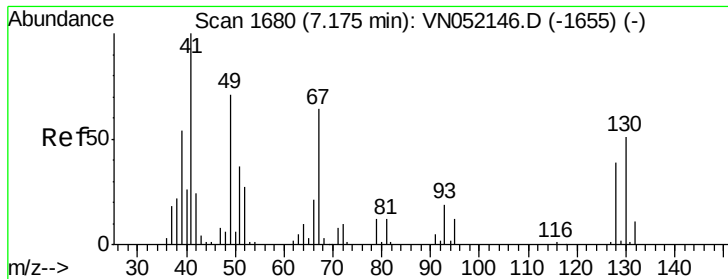
Tgt Ion: 117 Resp: 34607  
 Ion Ratio Lower Upper  
 117 100  
 119 4.8 74.7 112.1#  
 121 0.0 24.5 36.7#



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



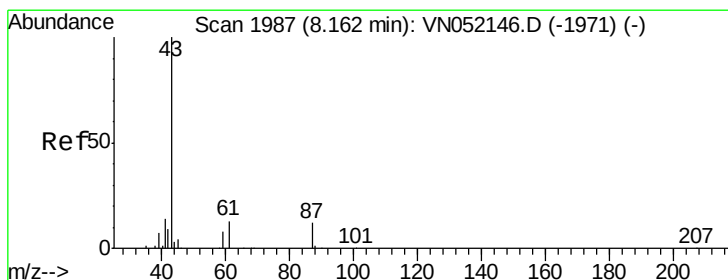
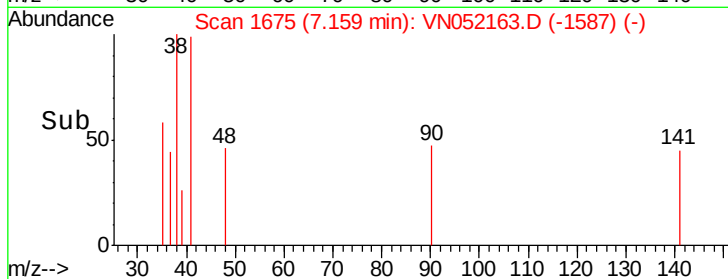
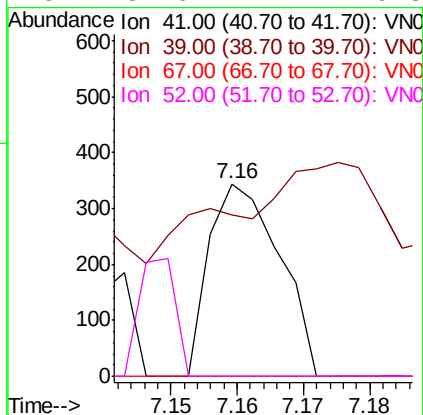
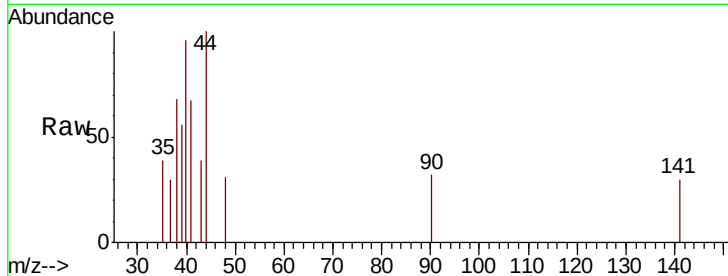




#41  
Methacrylonitrile  
Concen: 1.529 ug/l  
RT: 7.16 min Scan# 1675  
Delta R.T. -0.02 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

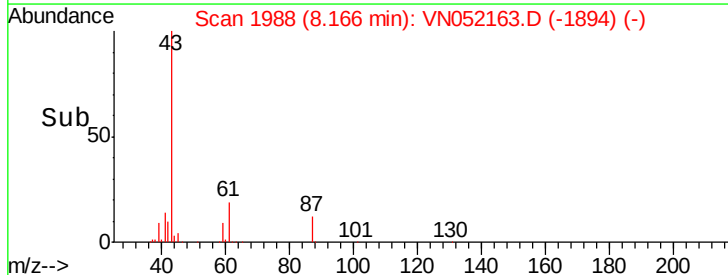
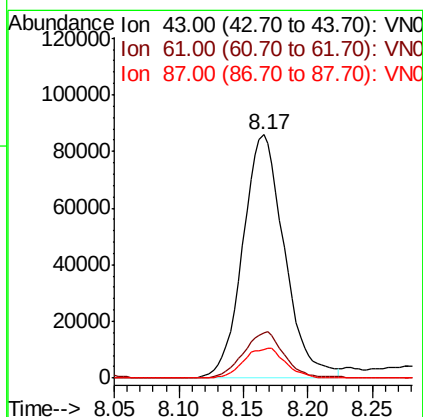
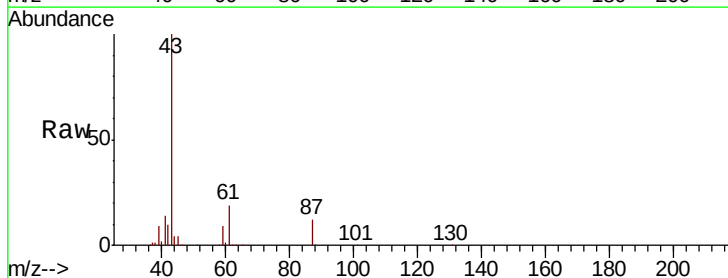
Instrument :  
MSVOA\_N  
ClientSampleId :  
TP4-A

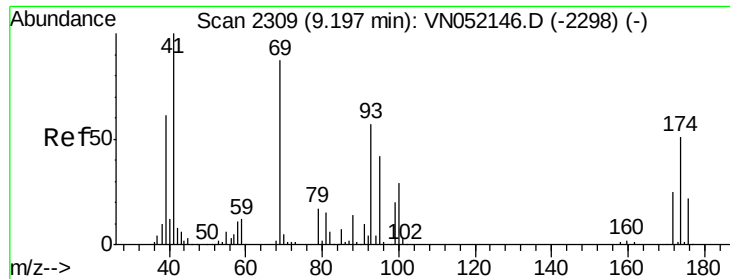
Tot Ion: 41 Resp: 253  
Ion Ratio Lower Upper  
41 100  
39 55.7 49.6 74.4  
67 0.0 65.4 98.2#  
52 31.6 27.2 40.8



#43  
Isopropyl Acetate  
Concen: 32.001 ug/l  
RT: 8.17 min Scan# 1988  
Delta R.T. 0.00 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

Tgt Ion: 43 Resp: 193327  
Ion Ratio Lower Upper  
43 100  
61 17.9 21.5 32.3#  
87 12.5 10.2 15.2

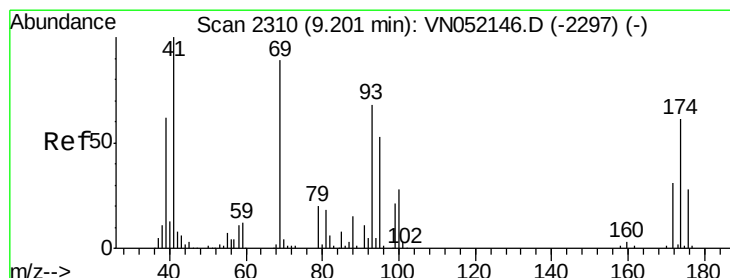
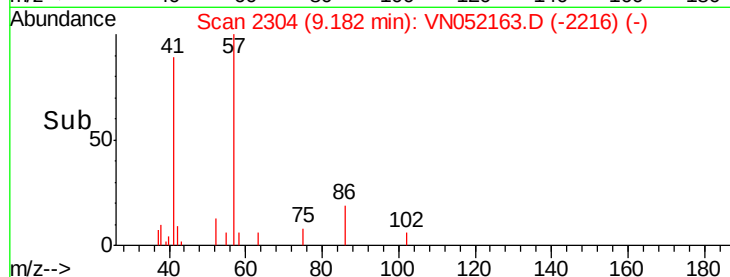
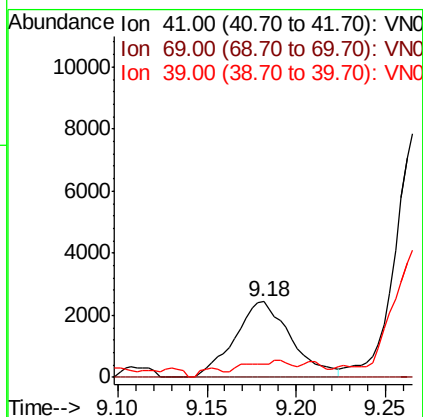
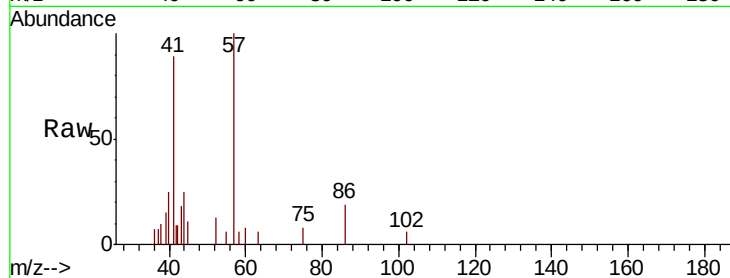




#48  
Methvl methacrylate  
Concen: 1.851 ug/l  
RT: 9.18 min Scan# 2304  
Delta R.T. -0.02 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

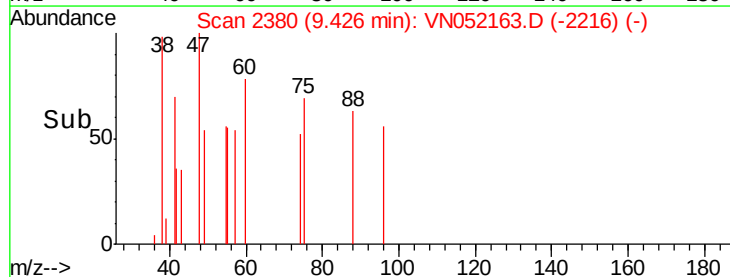
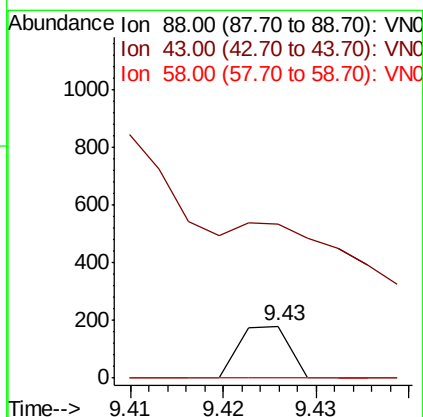
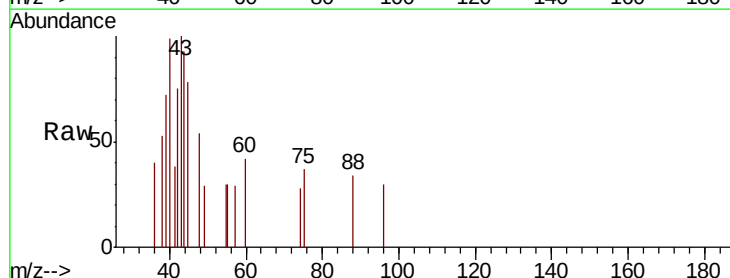
Instrument :  
MSVOA\_N  
ClientSampled :  
TP4-A

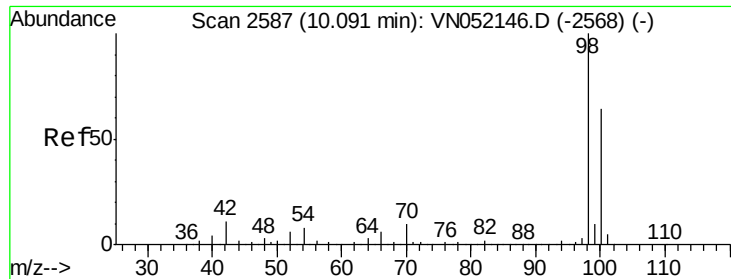
Tot Ion: 41 Resp: 5382  
Ion Ratio Lower Upper  
41 100  
69 0.0 69.7 104.5#  
39 5.0 50.6 76.0#



#49  
1,4-Dioxane  
Concen: Below Cal  
RT: 9.43 min Scan# 2380  
Delta R.T. 0.23 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

Tgt Ion: 88 Resp: 69  
Ion Ratio Lower Upper  
88 100  
43 0.0 33.0 49.6#  
58 0.0 58.6 88.0#





#50

Toluene-d8

Concen: Below ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampled :

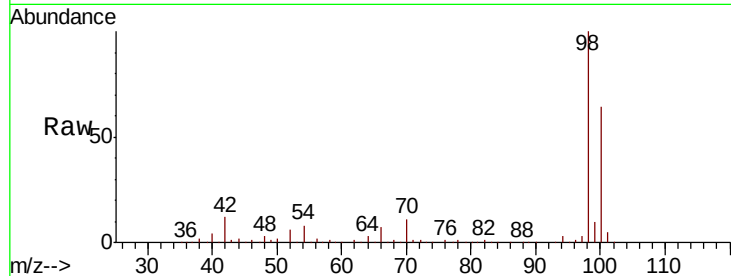
TP4-A

Tot Ion: 98 Resp: 879136

Ion Ratio Lower Upper

98 100

100 64.2 50.5 75.7



Abundance Ion 98.00 (97.70 to 98.70): VN052146.D (-2568) (-)

Ion 100.00 (99.70 to 100.70): VN052146.D (-2568) (-)

10.09

500000

400000

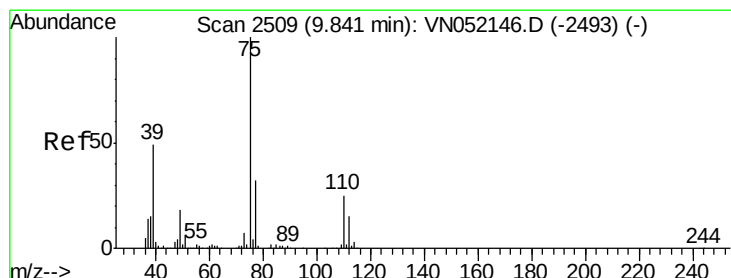
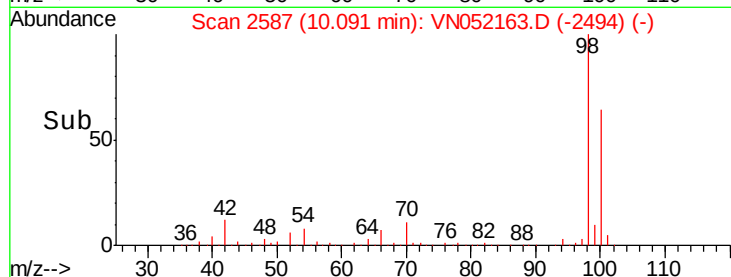
300000

200000

100000

0

Time-->



#54

cis-1,3-Dichloropropene

Concen: 0.257 ug/l

RT: 9.91 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

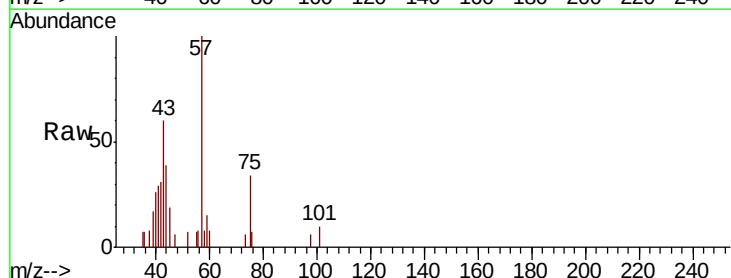
Tgt Ion: 75 Resp: 1510

Ion Ratio Lower Upper

75 100

77 0.0 25.8 38.8#

39 27.3 39.2 58.8#



Abundance Ion 74.90 (74.60 to 75.60): VN052146.D (-2493) (-)

Ion 76.90 (76.60 to 77.60): VN052146.D (-2493) (-)

Ion 39.00 (38.70 to 39.70): VN052146.D (-2493) (-)

9.91

1200

1000

800

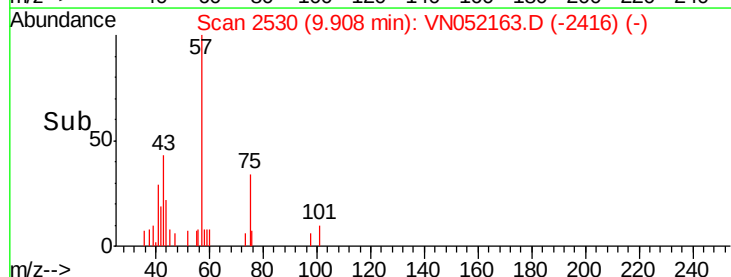
600

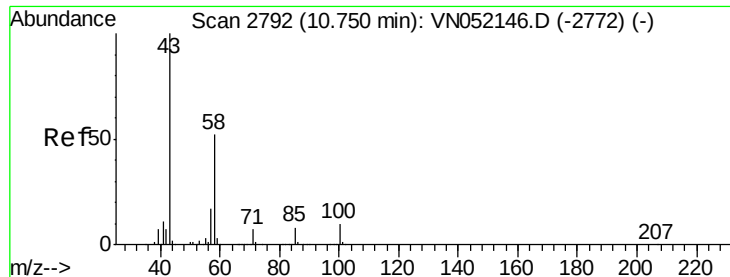
400

200

0

Time-->





#59

2-Hexanone

Concen: 5.145 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.01 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampleId :

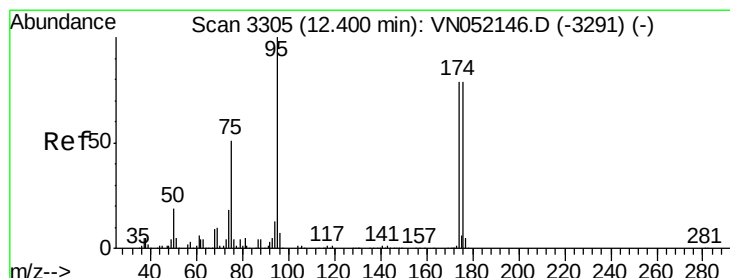
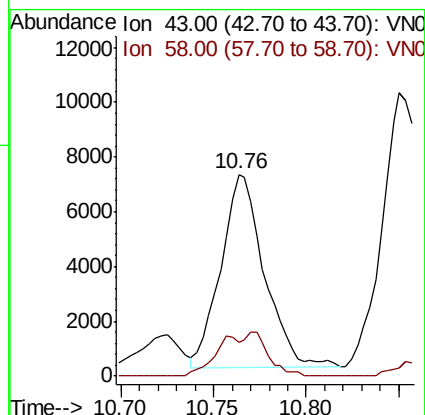
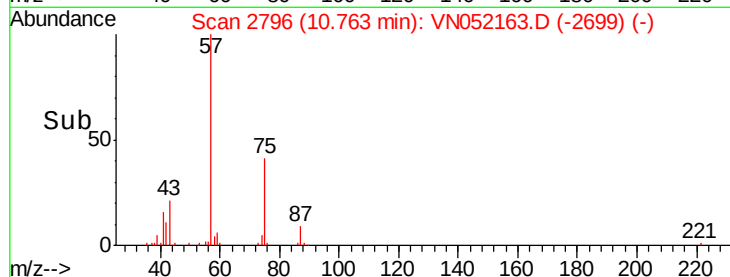
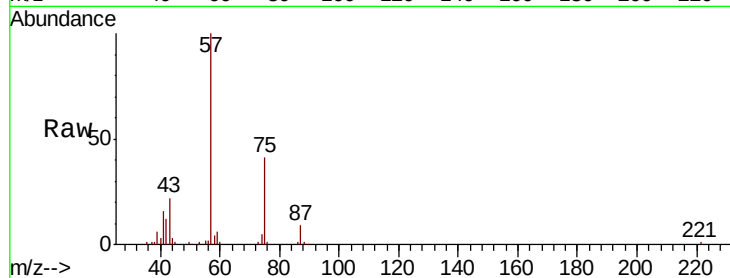
TP4-A

Tot Ion: 43 Resp: 11430

Ion Ratio Lower Upper

43 100

58 12.2 25.8 77.4#



#62

4-Bromofluorobenzene

Concen: Below ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

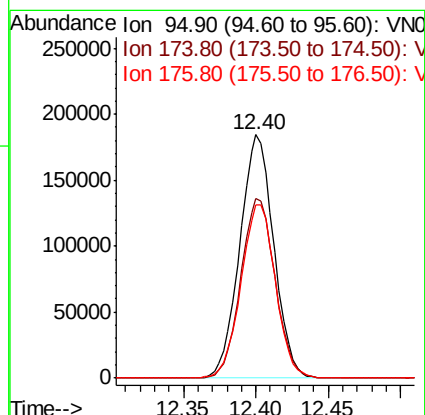
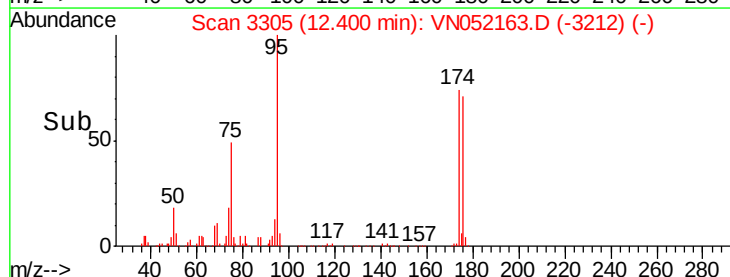
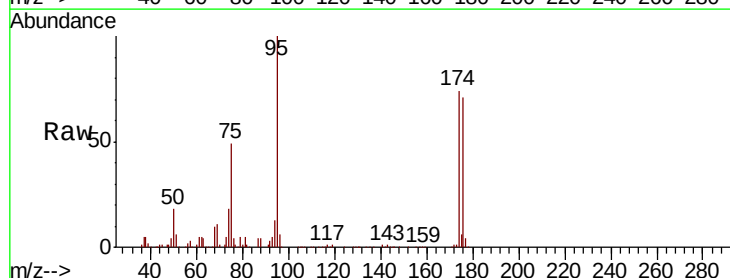
Tgt Ion: 95 Resp: 299704

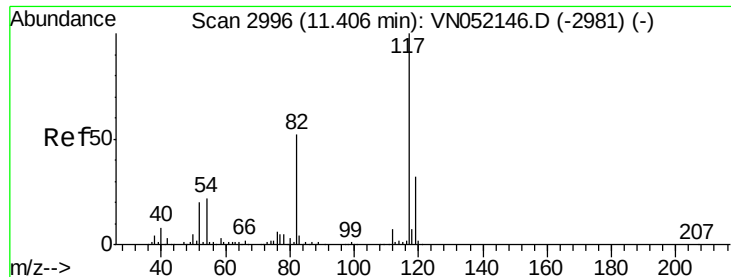
Ion Ratio Lower Upper

95 100

174 74.9 0.0 162.6

176 72.6 0.0 155.4

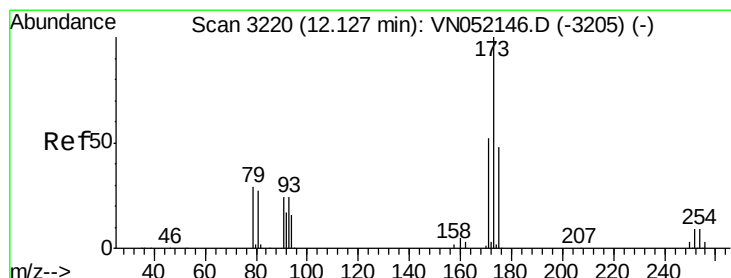
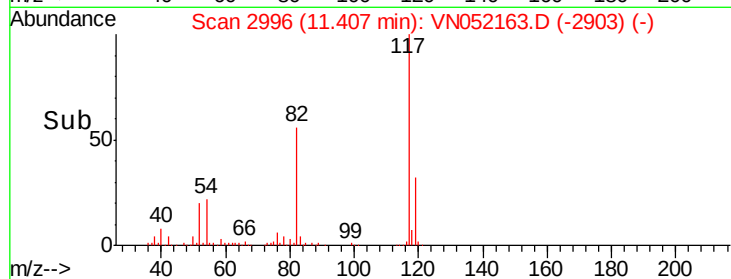
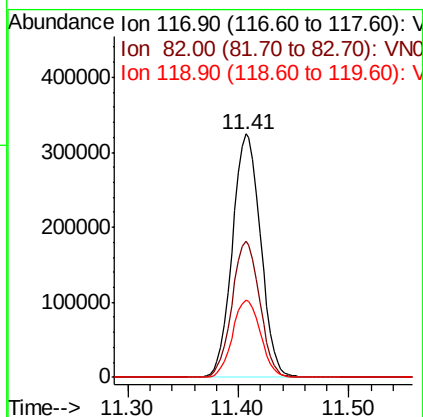
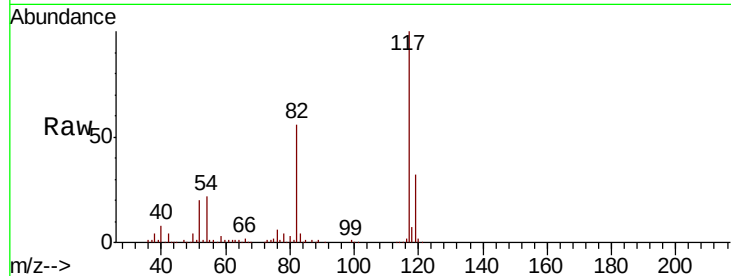




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. 0.00 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

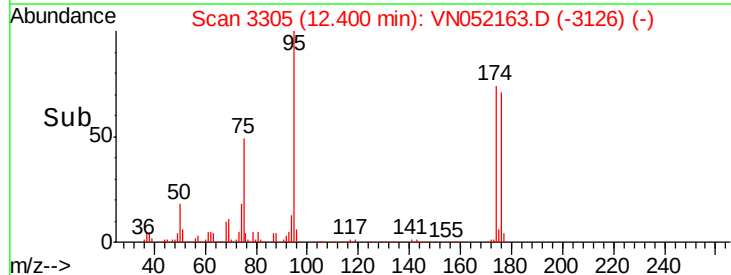
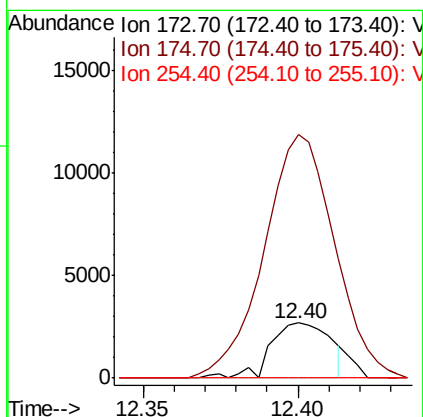
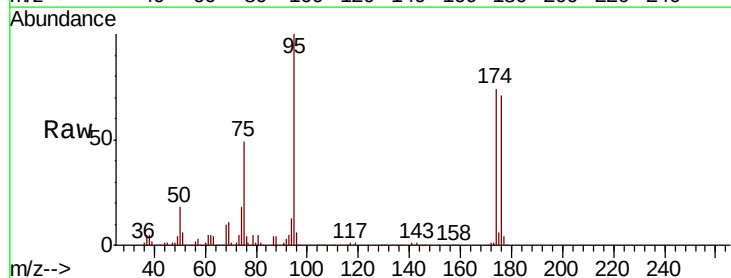
Instrument :  
MSVOA\_N  
ClientSampleId :  
TP4-A

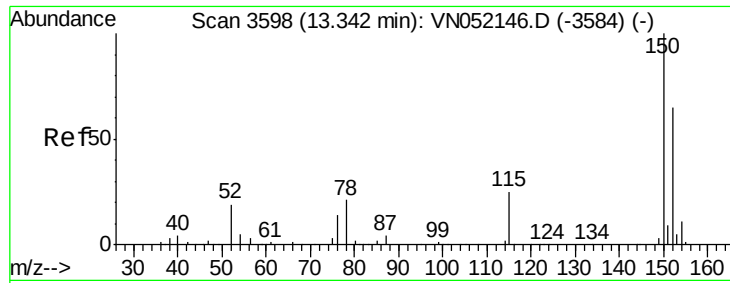
Tot Ion:117 Resp: 574036  
Ion Ratio Lower Upper  
117 100  
82 56.0 41.9 62.9  
119 31.5 25.7 38.5



#71  
Bromoform  
Concen: 4.089 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. 0.27 min  
Lab File: VN052163.D  
Acq: 5 Nov 2018 22:34

Tgt Ion:173 Resp: 3590  
Ion Ratio Lower Upper  
173 100  
175 474.0 24.8 74.4#  
254 0.0 0.2 0.2#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampleId :

TP4-A

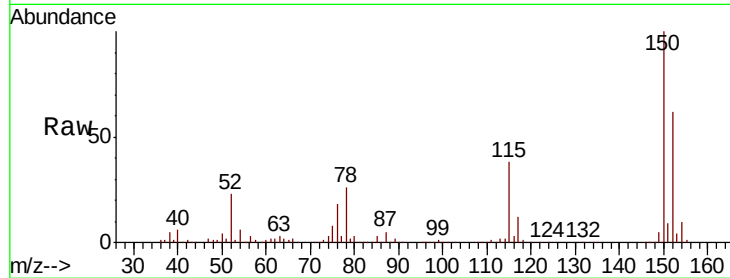
Tot Ion:152 Resp: 238758

Ion Ratio Lower Upper

152 100

115 62.0 28.5 85.5

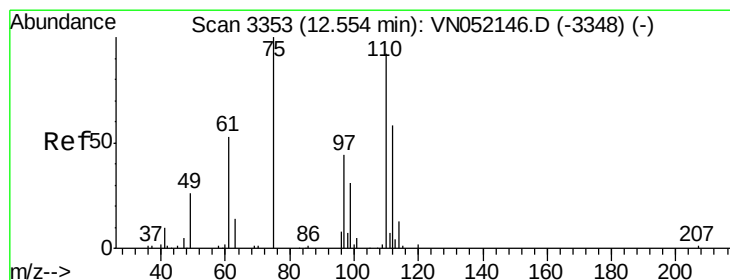
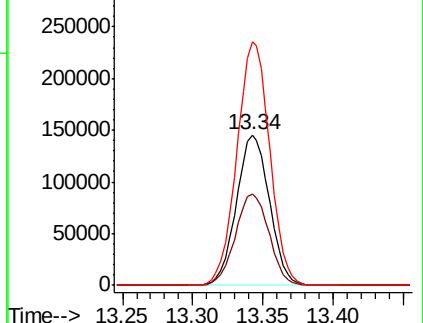
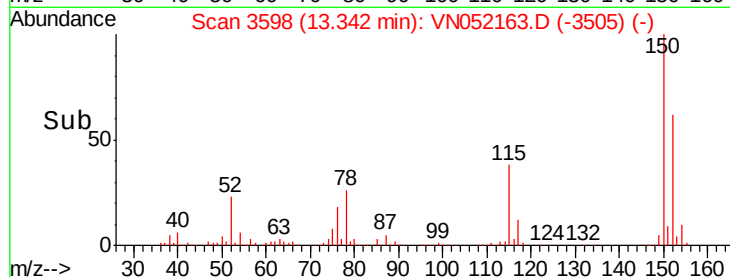
150 161.0 0.0 348.6



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: 40.374 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN052163.D

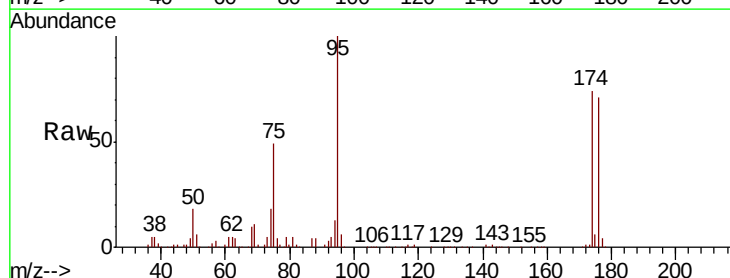
Acq: 5 Nov 2018 22:34

Tgt Ion: 75 Resp: 151701

Ion Ratio Lower Upper

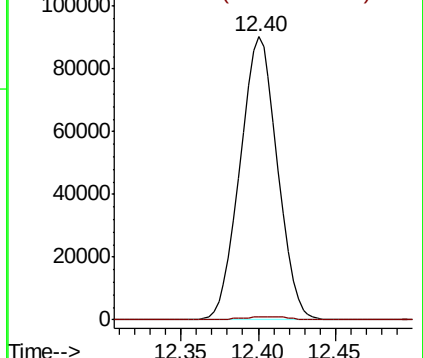
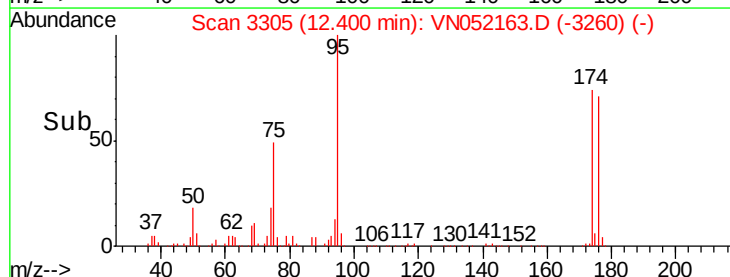
75 100

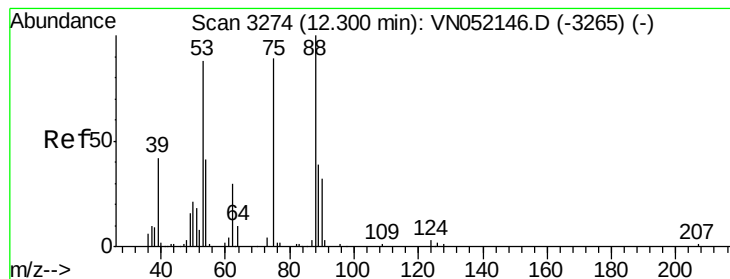
77 1.3 0.0 0.0#



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: 144.565 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampleId :

TP4-A

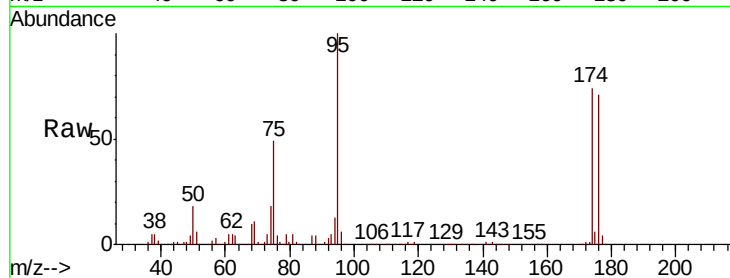
Tot Ion: 75 Resp: 151701

Ion Ratio Lower Upper

75 100

53 0.1 79.4 119.0#

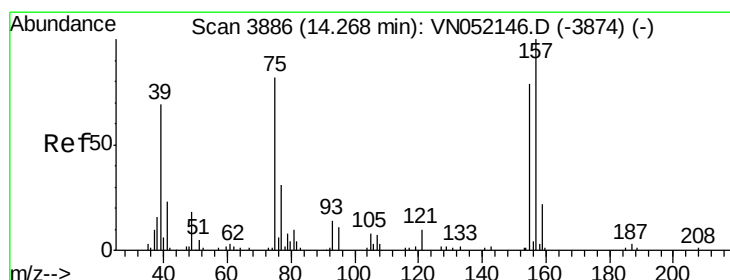
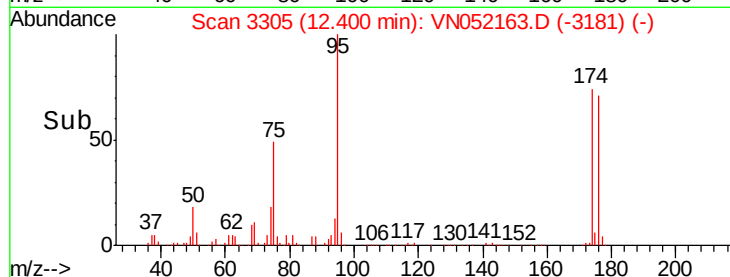
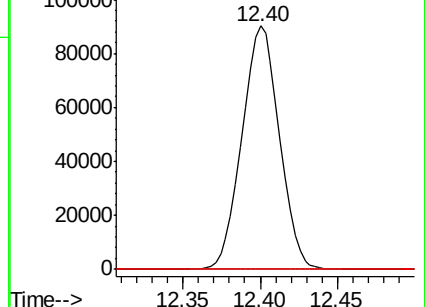
89 0.0 35.8 53.8#



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



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.259 ug/l

RT: 14.23 min Scan# 3875

Delta R.T. -0.04 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

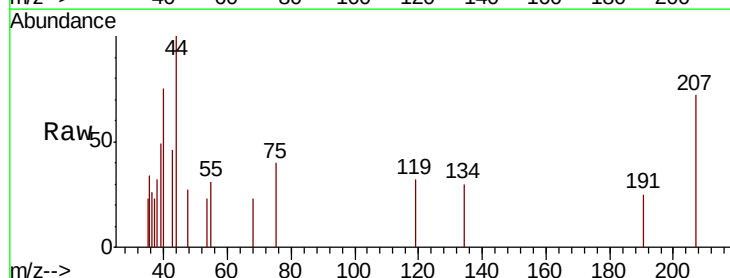
Tgt Ion: 75 Resp: 135

Ion Ratio Lower Upper

75 100

155 0.0 47.4 142.2#

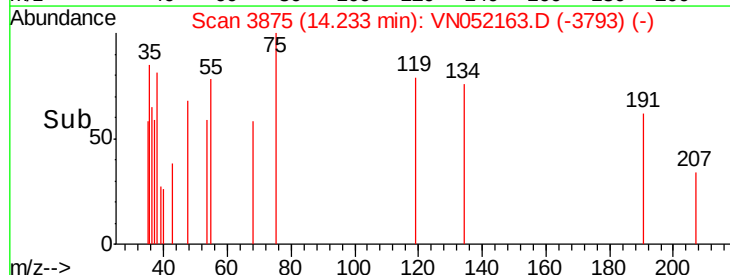
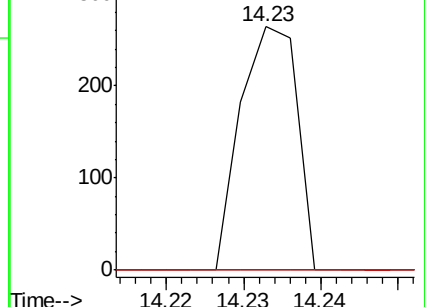
157 0.0 60.3 180.8#

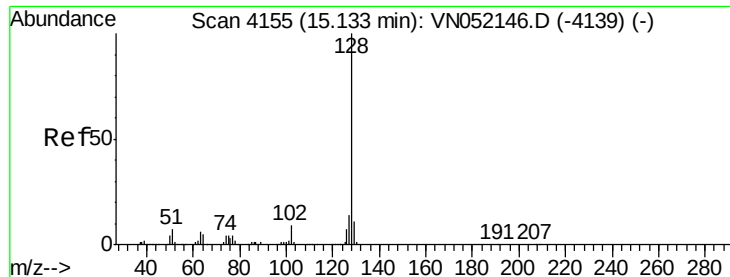


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V





#95

Naphthalene

Concen: 2.200 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN052163.D

Acq: 5 Nov 2018 22:34

Instrument :

MSVOA\_N

ClientSampleId :

TP4-A

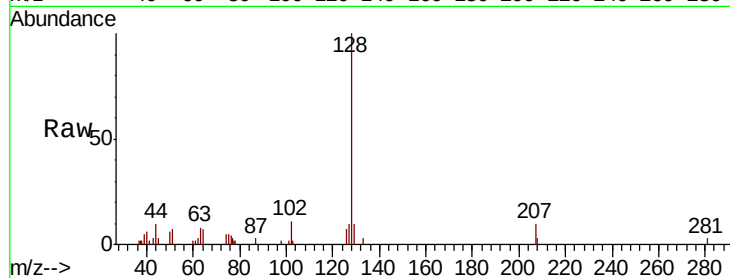
Tot Ion:128 Resp: 16086

Ion Ratio Lower Upper

128 100

127 10.6 10.8 16.2#

129 11.2 9.1 13.7



Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

