

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN012119\  
 Data File : VN053495.D  
 Acq On : 21 Jan 2019 10:06  
 Operator : JC/SP  
 Sample : VN0121WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 3 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0121WBL01

Quant Time: Jan 22 04:02:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011519W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 16 03:10:53 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 833469   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.58  | 114  | 1297368  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1214983  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 557351   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.02  | 65   | 408209   | 49.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.10%  |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 391928   | 52.93 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.86% |          |
| 50) Toluene-d8              | 10.09 | 98   | 1608669  | 51.37 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.74% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 548995   | 50.00 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.00% |          |

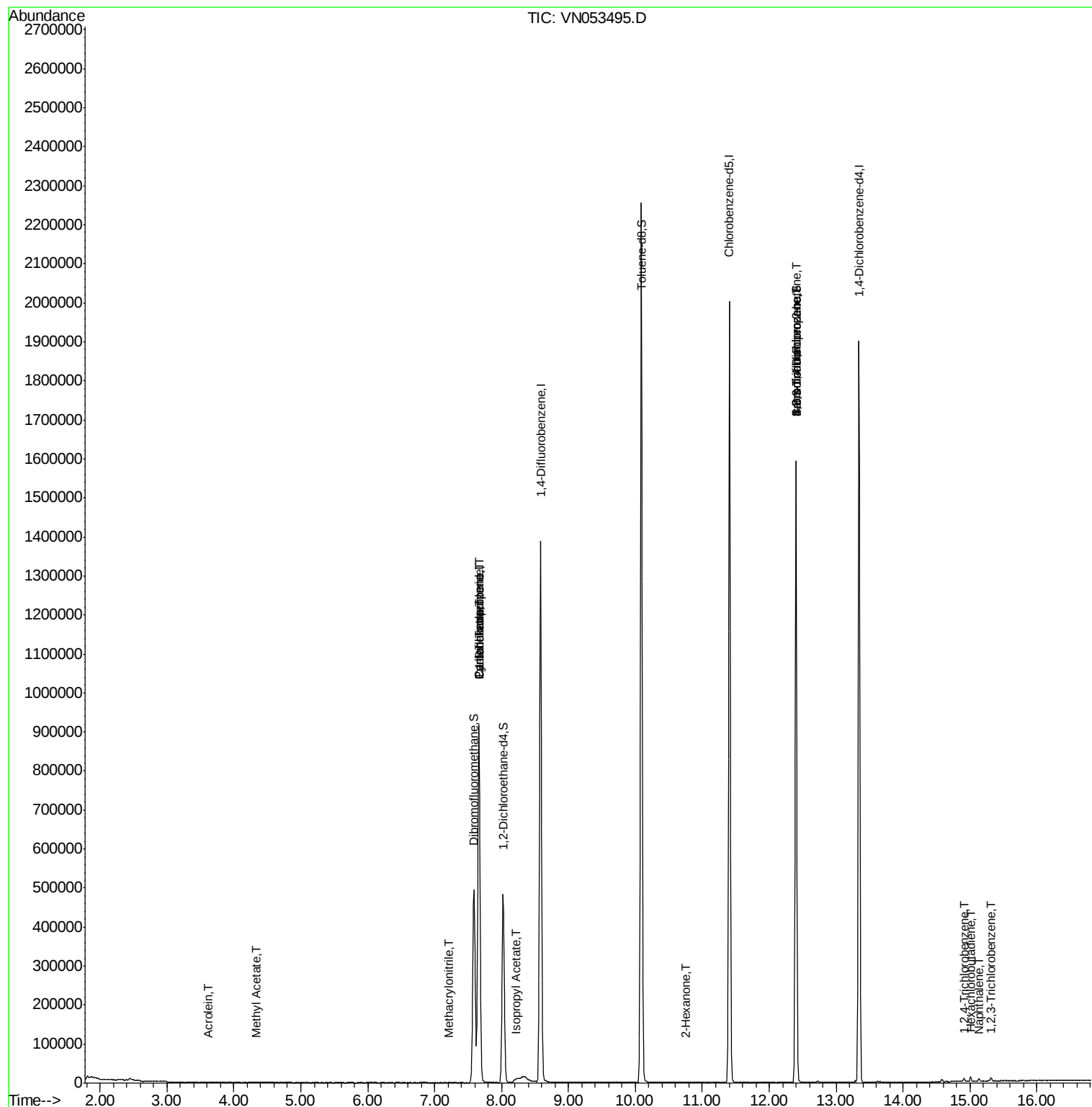
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 13) Acrolein                   | 3.61  | 56   | 101      | 22.854 | ug/l # | 14     |
| 18) Methyl Acetate             | 4.33  | 43   | 1689     | 0.259  | ug/l # | 51     |
| 31) Cyclohexane                | 7.66  | 56   | 12593    | 0.649  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 53335    | 4.514  | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 71161    | 6.362  | ug/l # | 16     |
| 41) Methacrylonitrile          | 7.21  | 41   | 59       | 0.682  | ug/l # | 20     |
| 43) Isopropyl Acetate          | 8.21  | 43   | 6671     | 0.546  | ug/l # | 51     |
| 59) 2-Hexanone                 | 10.75 | 43   | 1167     | 0.249  | ug/l # | 49     |
| 71) Bromoform                  | 12.40 | 173  | 4017     | 0.652  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 255877   | 34.838 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 255877   | 86.232 | ug/l # | 15     |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 3413     | 3.186  | ug/l   | 94     |
| 94) Hexachlorobutadiene        | 15.01 | 225  | 2875     | 0.530  | ug/l   | 94     |
| 95) Naphthalene                | 15.13 | 128  | 6354     | 4.373  | ug/l   | 99     |
| 96) 1,2,3-Trichlorobenzene     | 15.31 | 180  | 3534     | 4.484  | ug/l   | 98     |

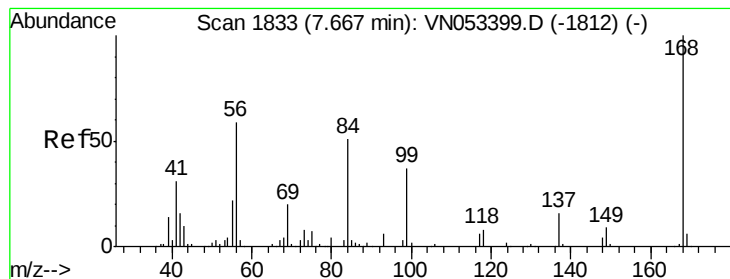
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN012119\  
Data File : VN053495.D  
Acq On : 21 Jan 2019 10:06  
Operator : JC/SP  
Sample : VN0121WBL01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 3 Sample Multiplier: 28

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0121WBL01

Quant Time: Jan 22 04:02:44 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N011519W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 16 03:10:53 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1831

Delta R.T. -0.01 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampleId :

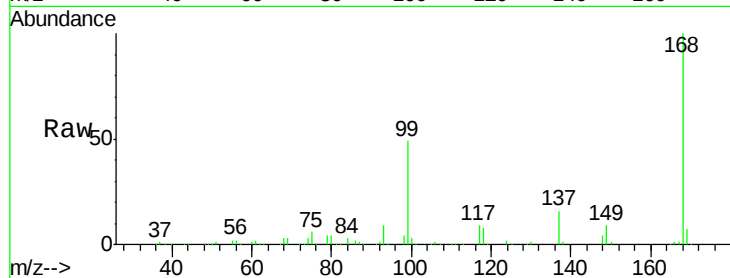
VN0121WBL01

Tot Ion:168 Resp: 833469

Ion Ratio Lower Upper

168 100

99 48.9 39.1 58.7



Abundance Ion 167.90 (167.60 to 168.60): VN053399.D (-1812) (-)

Ion 98.90 (98.60 to 99.60): VN053399.D (-1812) (-)

7.66

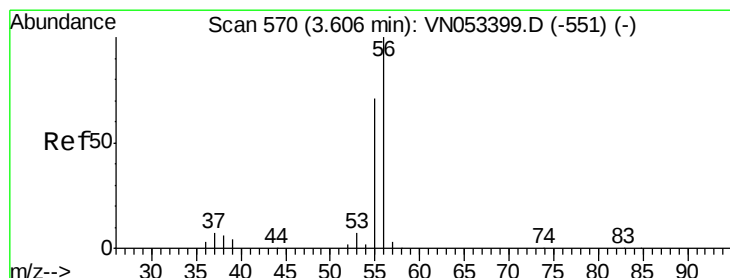
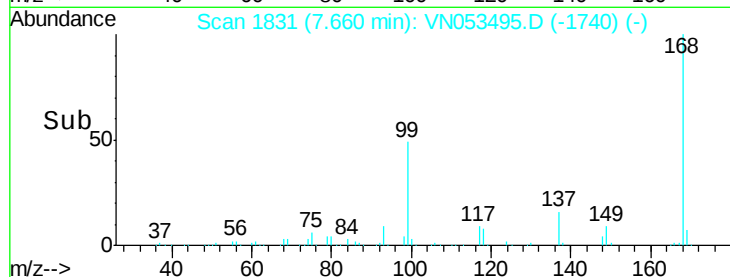
300000

200000

100000

0

Time-->



#13

Acrolein

Concen: 22.854 ug/l

RT: 3.61 min Scan# 572

Delta R.T. 0.01 min

Lab File: VN053495.D

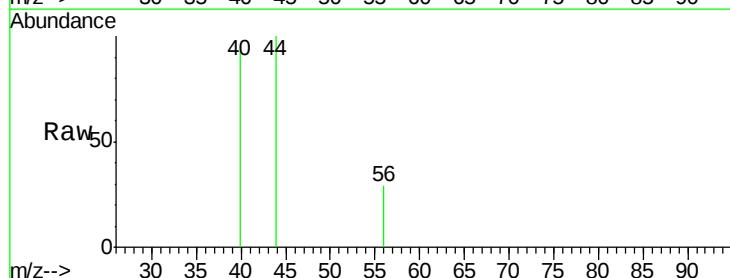
Acq: 21 Jan 2019 10:06

Tgt Ion: 56 Resp: 101

Ion Ratio Lower Upper

56 100

55 0.0 57.4 86.0#



Abundance Ion 56.00 (55.70 to 56.70): VN053399.D (-551) (-)

Ion 55.00 (54.70 to 55.70): VN053399.D (-551) (-)

3.61

200

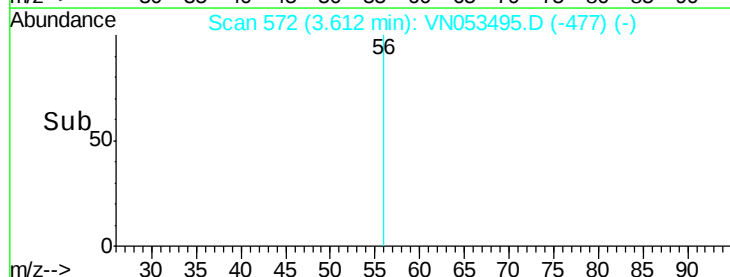
150

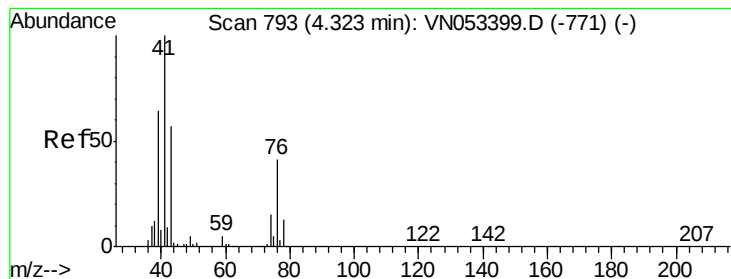
100

50

0

Time-->





#18

Methvl Acetate

Concen: 0.259 ug/l

RT: 4.33 min Scan# 795

Delta R.T. 0.01 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampleId :

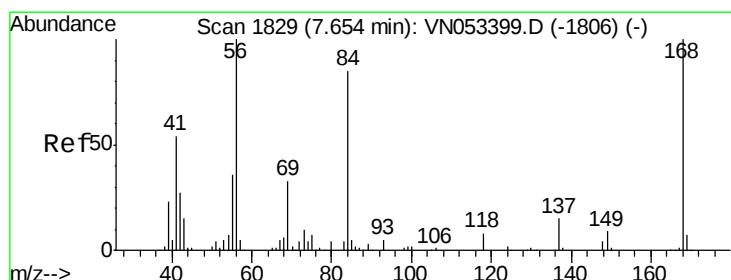
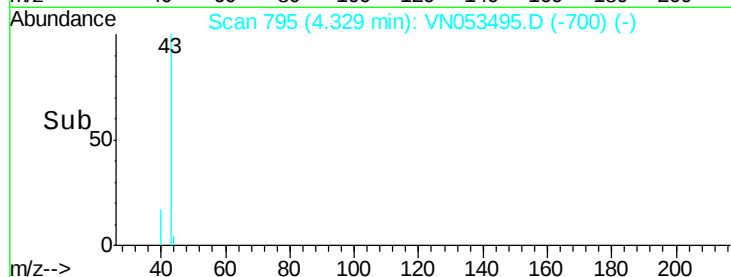
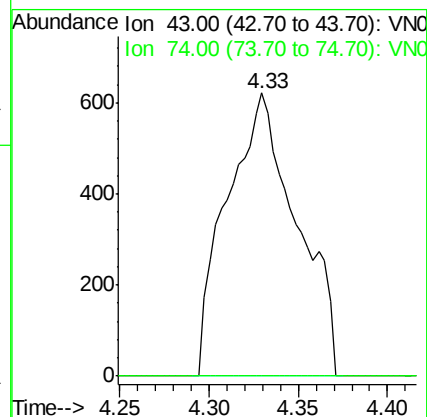
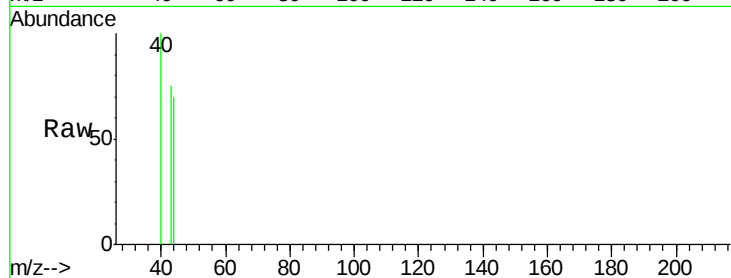
VN0121WBL01

Tot Ion: 43 Resp: 1689

Ion Ratio Lower Upper

43 100

74 0.0 19.4 29.2#



#31

Cyclohexane

Concen: 0.649 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. 0.01 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

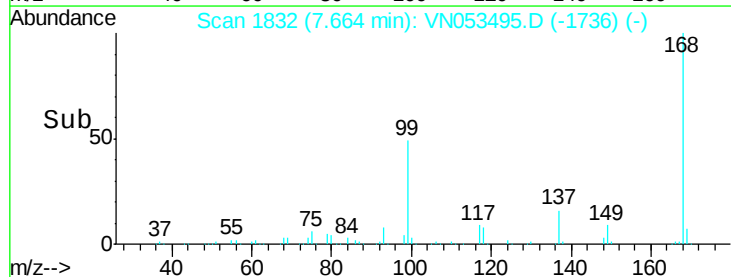
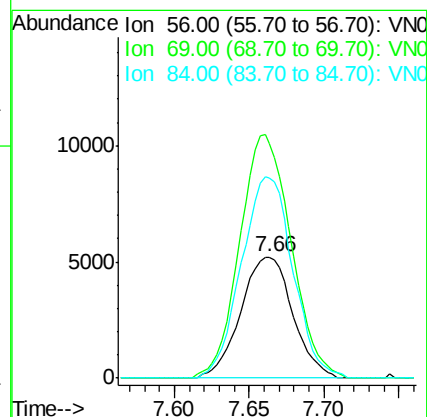
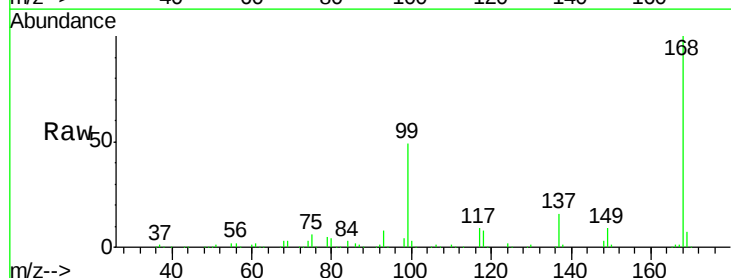
Tgt Ion: 56 Resp: 12593

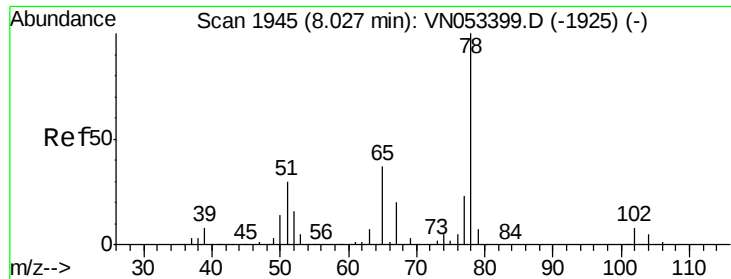
Ion Ratio Lower Upper

56 100

69 194.0 26.4 39.6#

84 165.8 67.9 101.9#

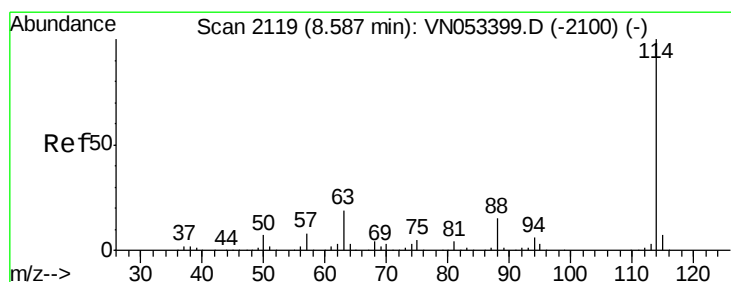
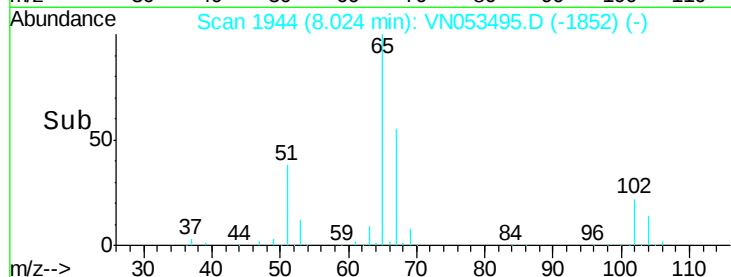
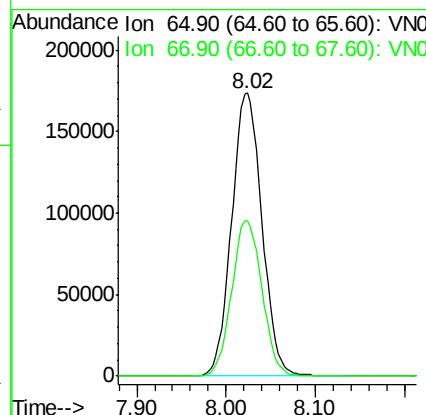
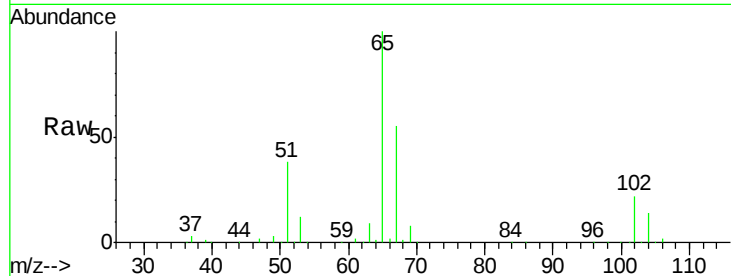




#33  
 1,2-Dichloroethane-d4  
 Concen: N.D. ug/l  
 RT: 8.02 min Scan# 1944  
 Delta R.T. -0.00 min  
 Lab File: VN053495.D  
 Acq: 21 Jan 2019 10:06

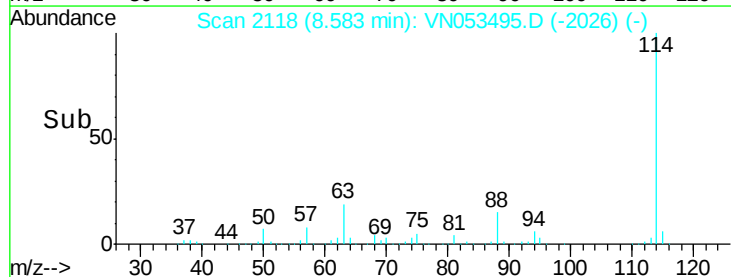
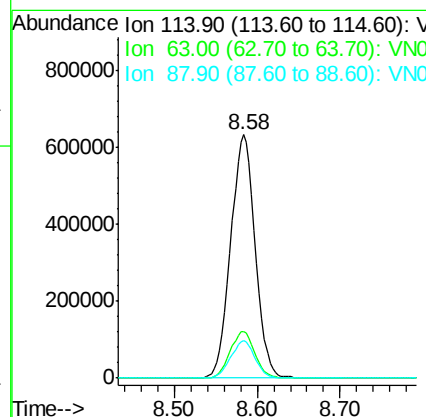
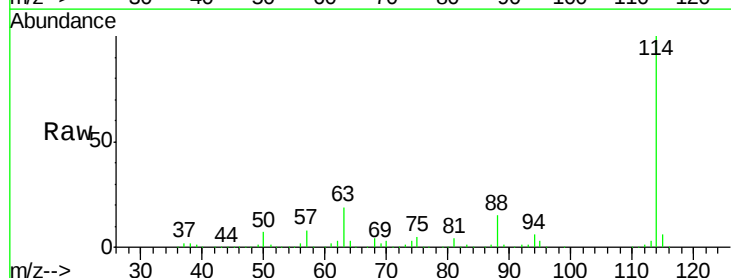
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0121WBL01

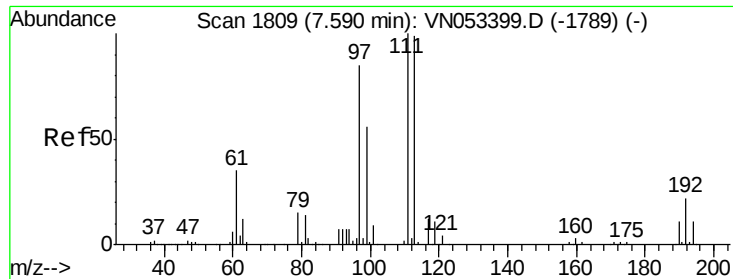
Tot Ion: 65 Resp: 408209  
 Ion Ratio Lower Upper  
 65 100  
 67 55.0 0.0 111.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.58 min Scan# 2118  
 Delta R.T. -0.00 min  
 Lab File: VN053495.D  
 Acq: 21 Jan 2019 10:06

Tgt Ion: 114 Resp: 1297368  
 Ion Ratio Lower Upper  
 114 100  
 63 19.2 0.0 38.6  
 88 15.3 0.0 30.4

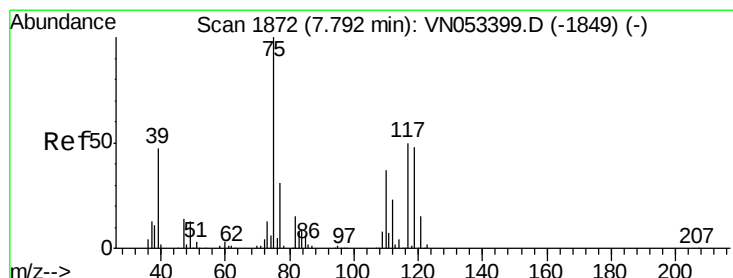
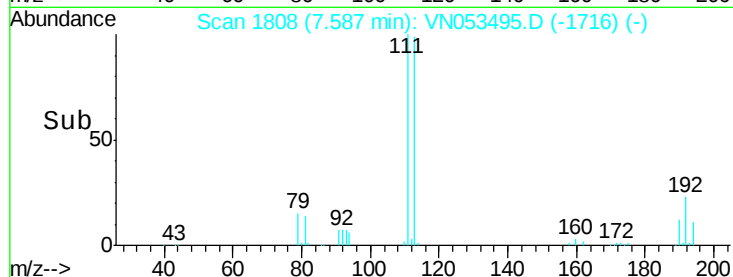
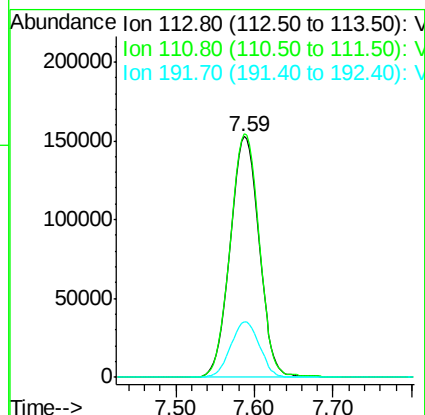
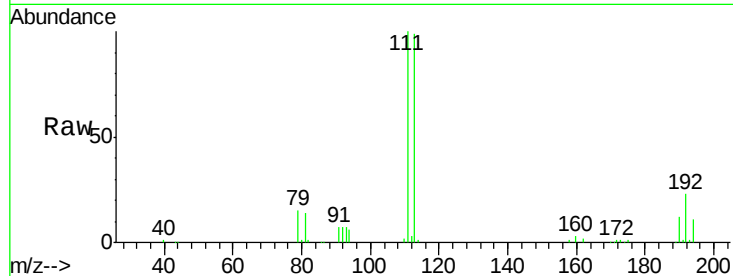




#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 7.59 min Scan# 1808  
 Delta R.T. -0.00 min  
 Lab File: VN053495.D  
 Acq: 21 Jan 2019 10:06

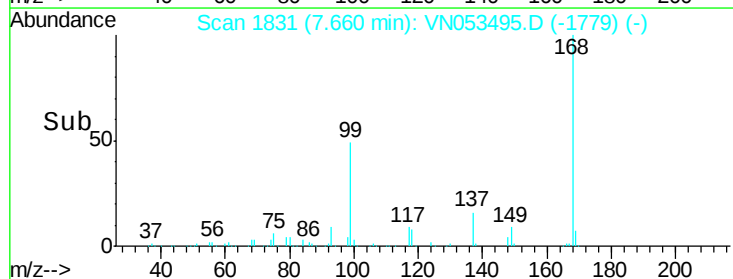
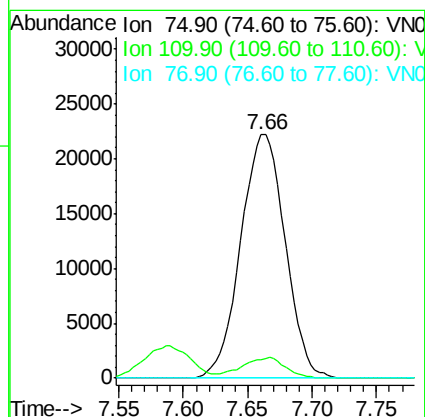
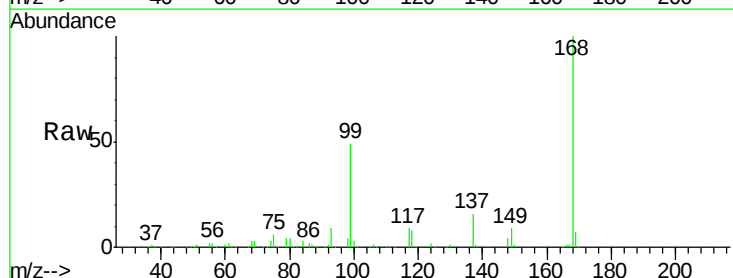
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0121WBL01

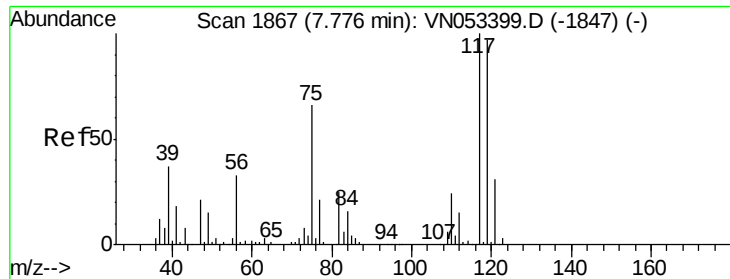
Tot Ion:113 Resp: 391928  
 Ion Ratio Lower Upper  
 113 100  
 111 101.1 81.1 121.7  
 192 23.0 18.2 27.2



#36  
 1,1-Dichloropropene  
 Concen: 4.514 ug/l  
 RT: 7.66 min Scan# 1831  
 Delta R.T. -0.13 min  
 Lab File: VN053495.D  
 Acq: 21 Jan 2019 10:06

Tgt Ion: 75 Resp: 53335  
 Ion Ratio Lower Upper  
 75 100  
 110 8.4 18.1 54.3#  
 77 0.0 25.1 37.7#





#38

Carbon Tetrachloride

Concen: 6.362 ug/l

RT: 7.66 min Scan# 1831

Delta R.T. -0.12 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampleId :

VN0121WBL01

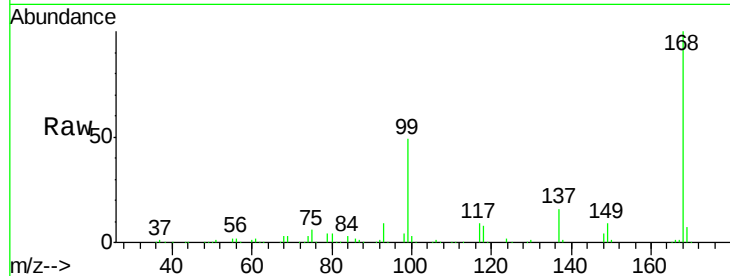
Tot Ion: 117 Resp: 71161

Ion Ratio Lower Upper

117 100

119 5.6 77.2 115.8#

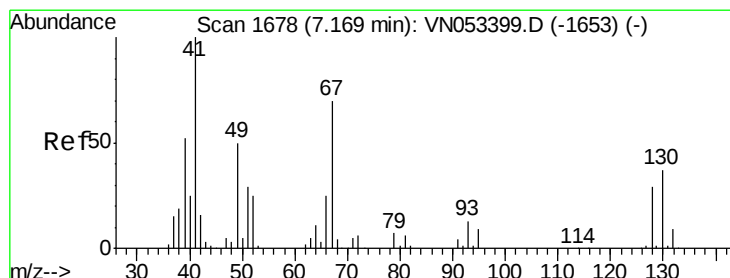
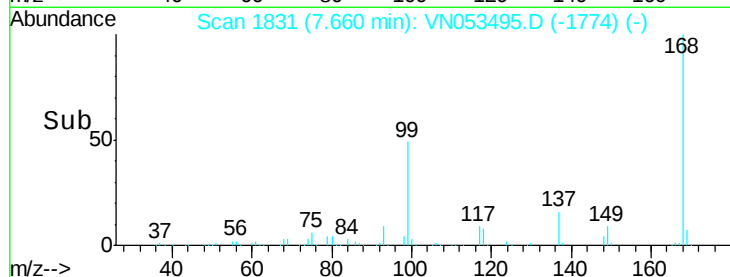
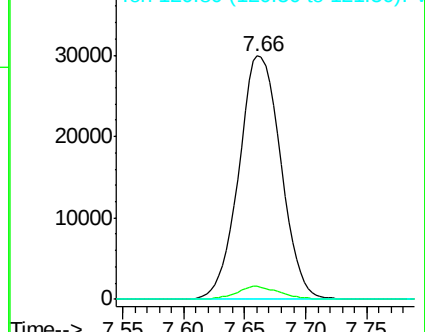
121 0.0 24.6 37.0#



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: 0.682 ug/l

RT: 7.21 min Scan# 1690

Delta R.T. 0.04 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Tgt Ion: 41 Resp: 59

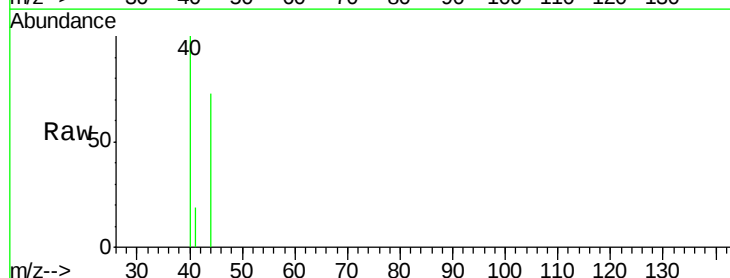
Ion Ratio Lower Upper

41 100

39 0.0 46.8 70.2#

67 0.0 63.0 94.6#

52 0.0 23.8 35.8#

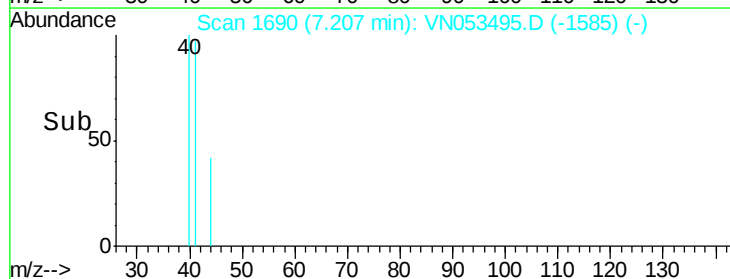
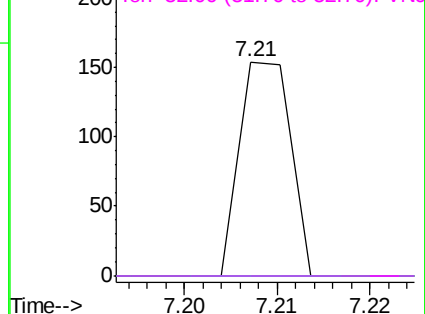


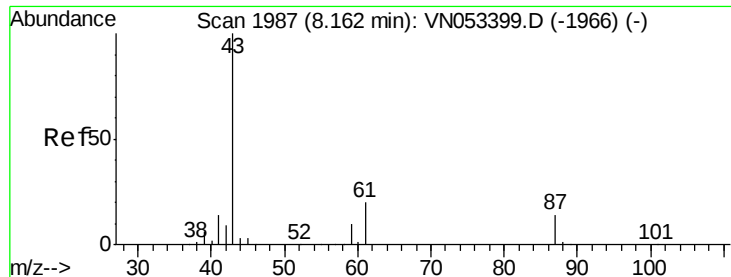
Abundance Ion 41.00 (40.70 to 41.70): V

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: 0.546 ug/l

RT: 8.21 min Scan# 2002

Delta R.T. 0.05 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampleId :

VN0121WBL01

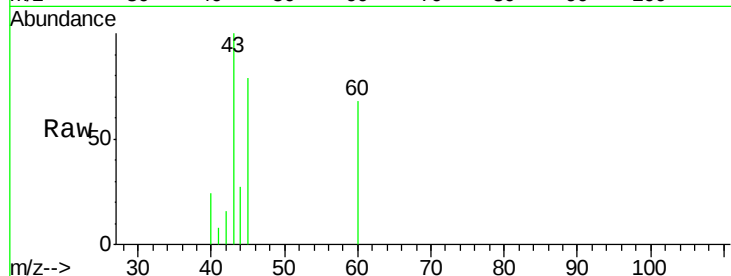
Tot Ion: 43 Resp: 6671

Ion Ratio Lower Upper

43 100

61 0.0 23.9 35.9#

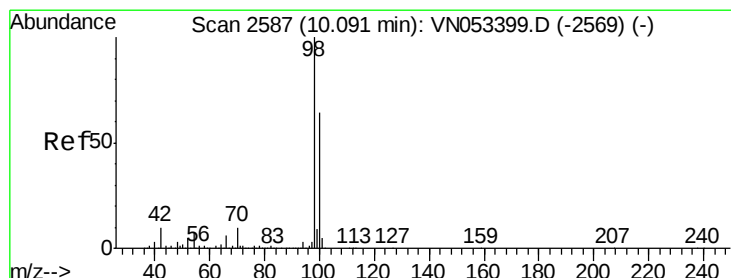
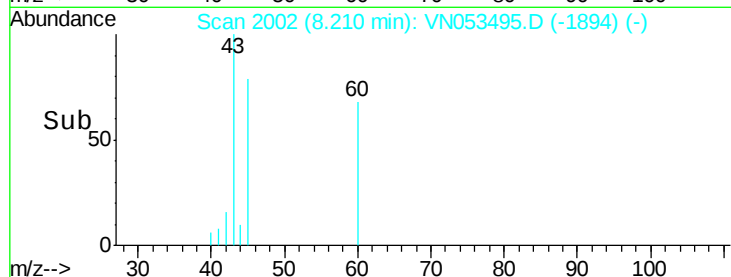
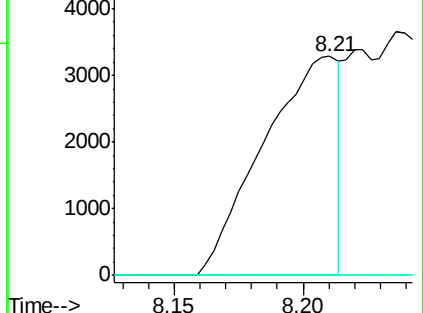
87 0.0 11.0 16.6#



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



#50

Toluene-d8

Concen: N.D. ug/l

RT: 10.09 min Scan# 2586

Delta R.T. -0.00 min

Lab File: VN053495.D

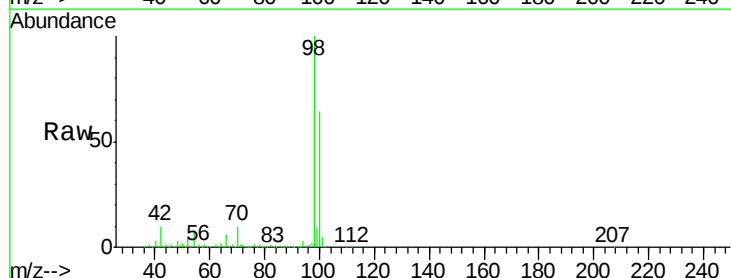
Acq: 21 Jan 2019 10:06

Tgt Ion: 98 Resp: 1608669

Ion Ratio Lower Upper

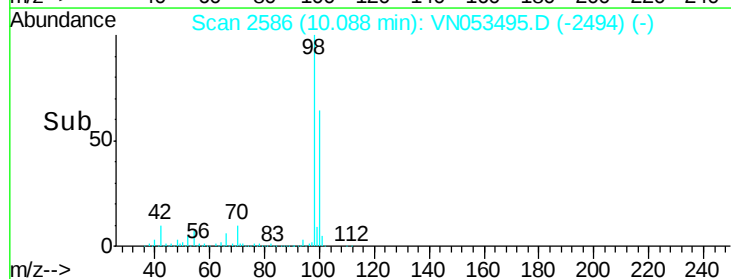
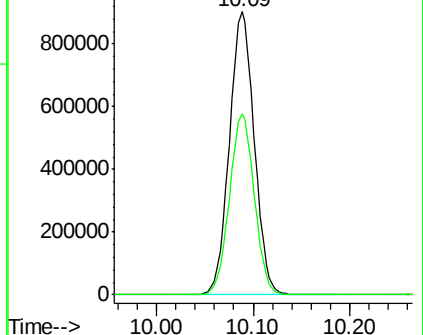
98 100

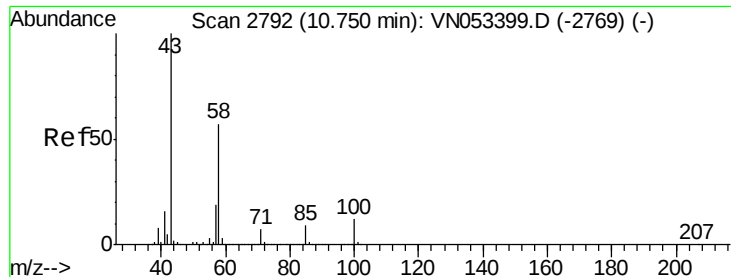
100 63.9 51.4 77.0



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





#59

2-Hexanone

Concen: 0.249 ug/l

RT: 10.75 min Scan# 2792

Delta R.T. -0.00 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampled :

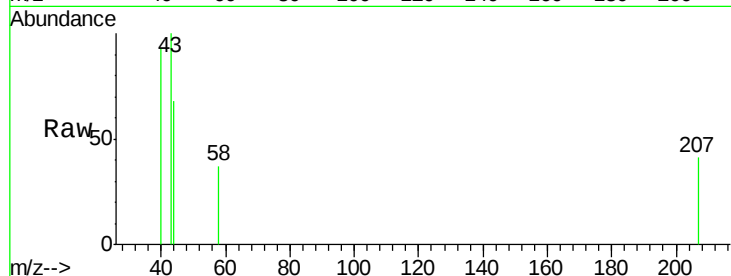
VN0121WBL01

Tot Ion: 43 Resp: 1167

Ion Ratio Lower Upper

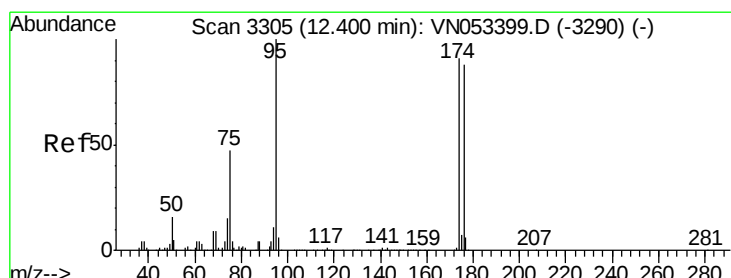
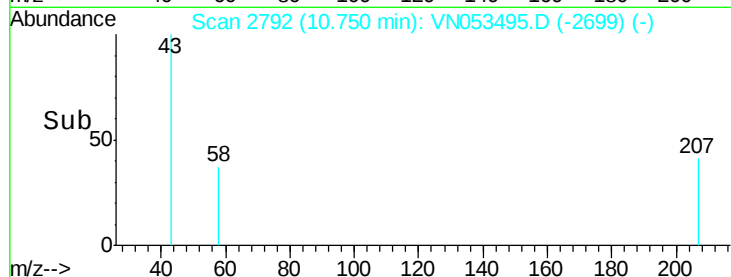
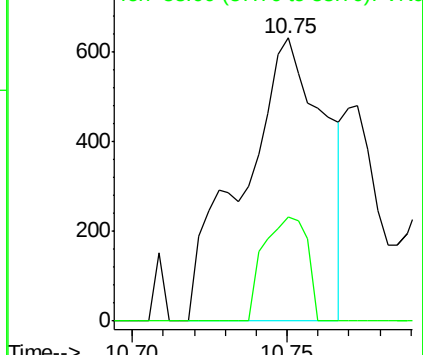
43 100

58 19.6 28.6 85.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

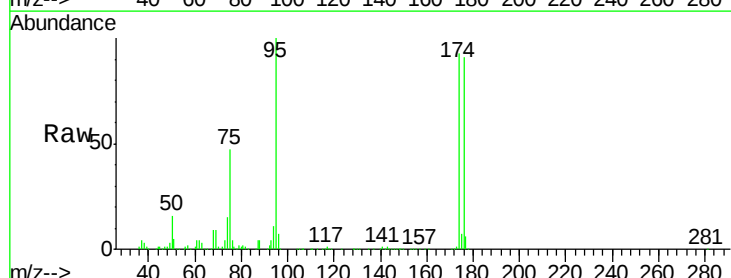
Tgt Ion: 95 Resp: 548995

Ion Ratio Lower Upper

95 100

174 92.4 0.0 183.2

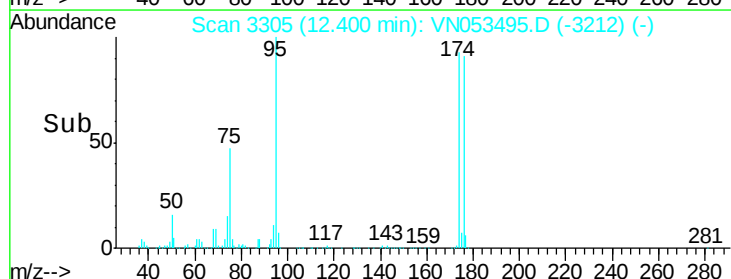
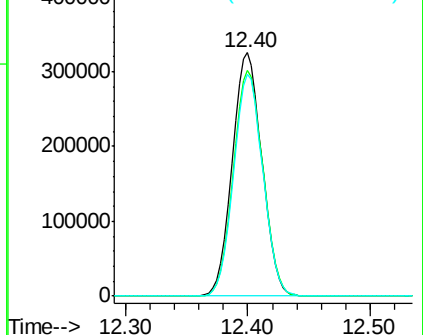
176 89.9 0.0 177.4

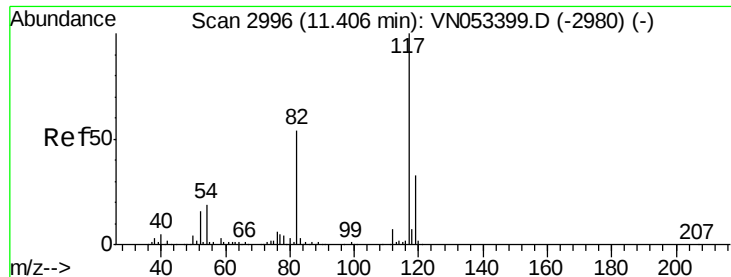


Abundance Ion 94.90 (94.60 to 95.60): VN0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

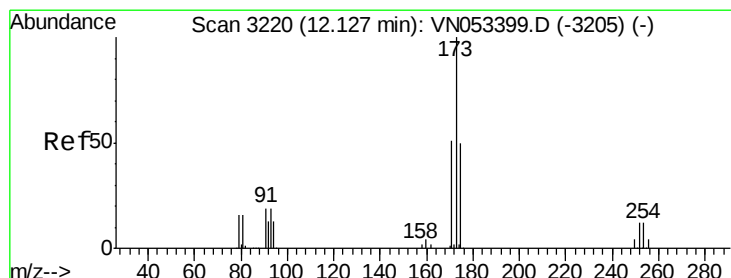
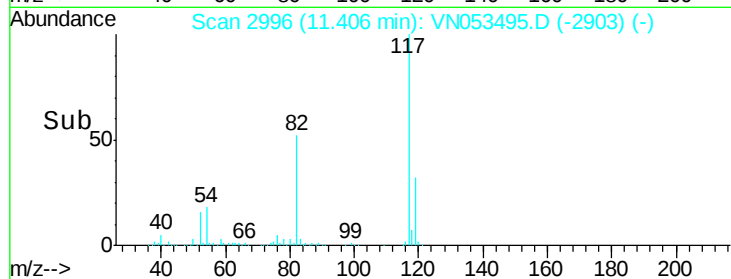
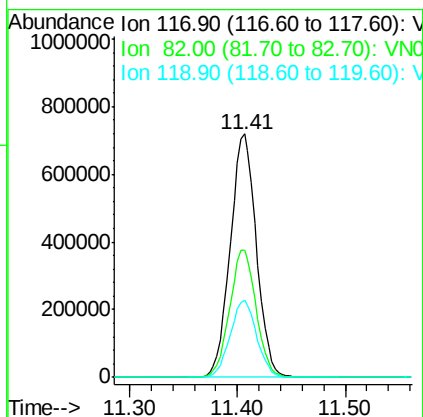
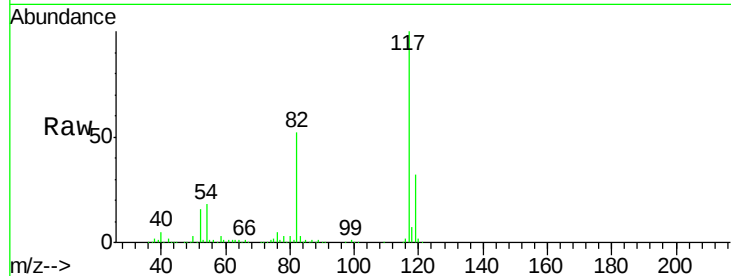




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. -0.00 min  
Lab File: VN053495.D  
Acq: 21 Jan 2019 10:06

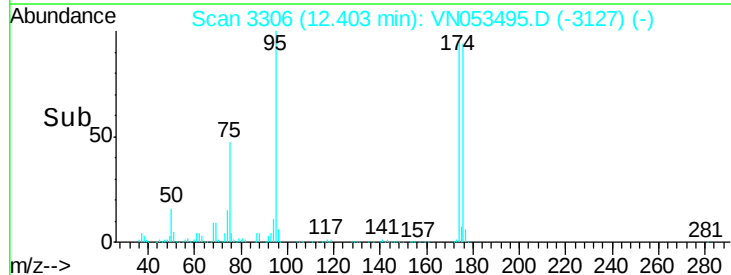
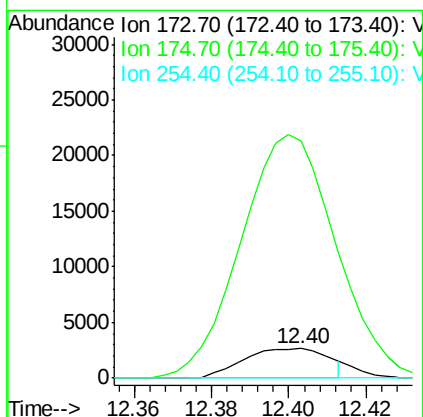
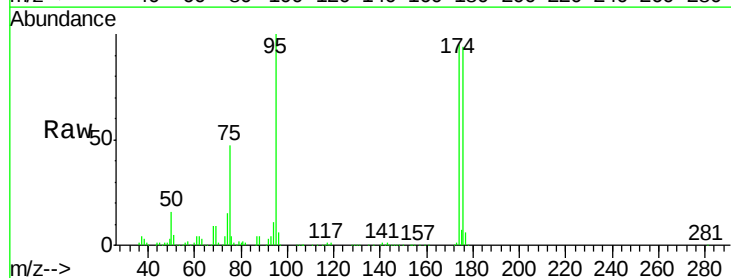
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0121WBL01

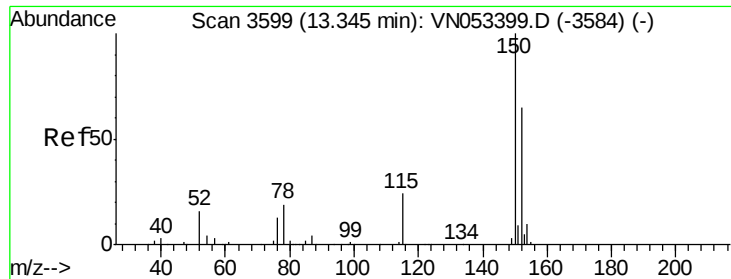
Tot Ion:117 Resp: 1214983  
Ion Ratio Lower Upper  
117 100  
82 52.4 42.9 64.3  
119 31.6 26.0 39.0



#71  
Bromoform  
Concen: 0.652 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.28 min  
Lab File: VN053495.D  
Acq: 21 Jan 2019 10:06

Tgt Ion:173 Resp: 4017  
Ion Ratio Lower Upper  
173 100  
175 833.4 24.6 74.0#  
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: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampleId :

VN0121WBL01

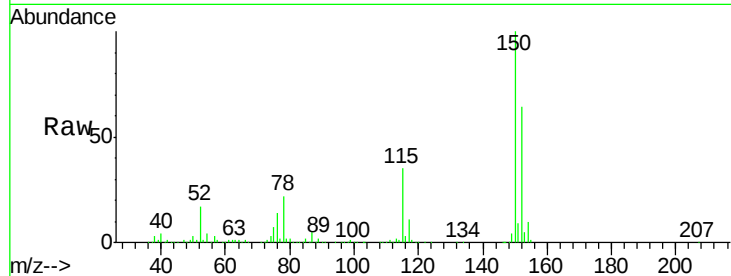
Tot Ion:152 Resp: 557351

Ion Ratio Lower Upper

152 100

115 54.7 27.8 83.4

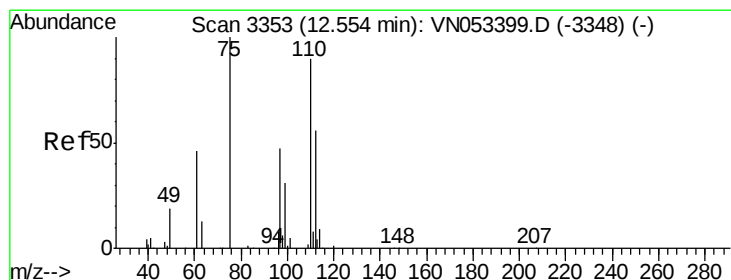
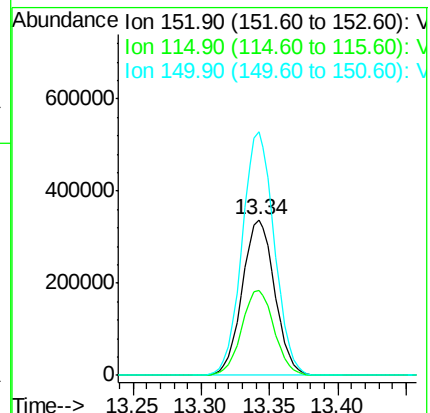
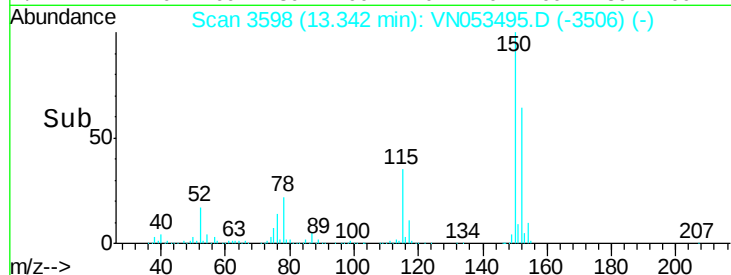
150 155.3 0.0 349.0



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: 34.838 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN053495.D

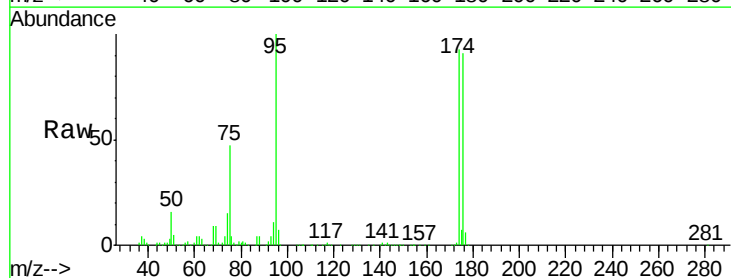
Acq: 21 Jan 2019 10:06

Tgt Ion: 75 Resp: 255877

Ion Ratio Lower Upper

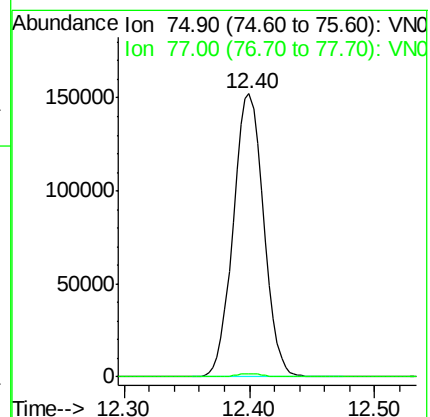
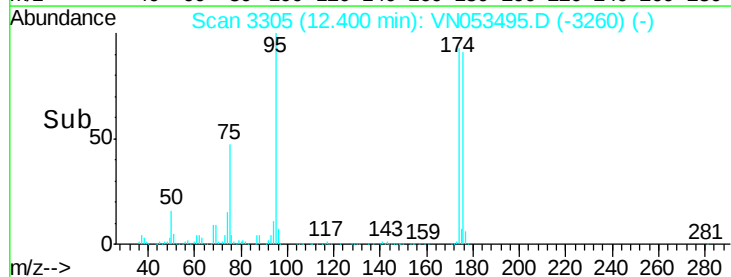
75 100

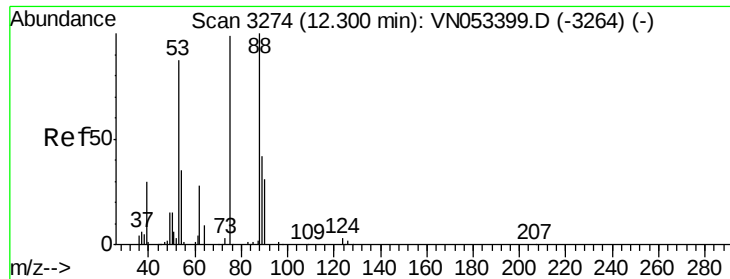
77 1.1 0.0 0.0#



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: 86.232 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

Instrument :

MSVOA\_N

ClientSampleId :

VN0121WBL01

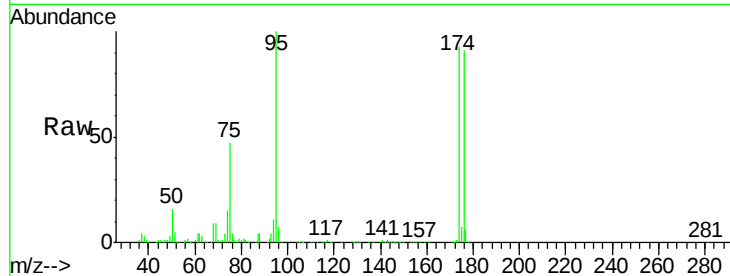
Tot Ion: 75 Resp: 255877

Ion Ratio Lower Upper

75 100

53 0.1 69.8 104.6#

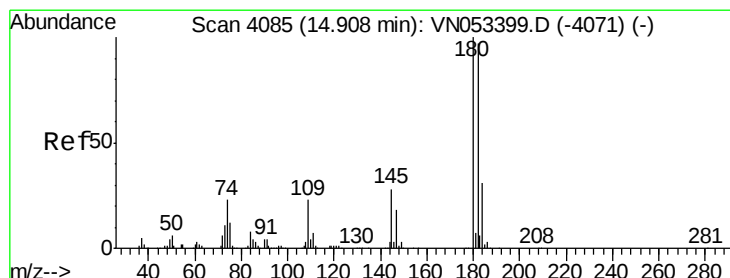
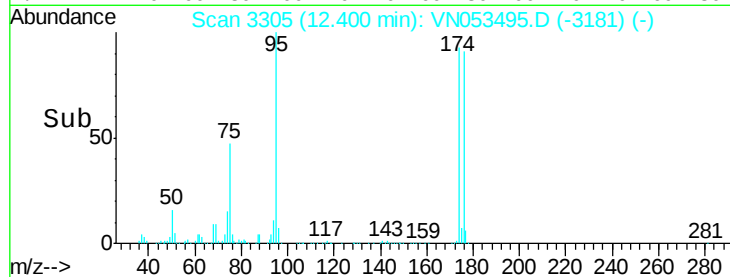
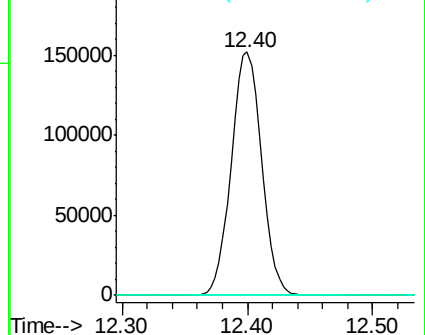
89 0.0 35.6 53.4#



Abundance Ion 74.90 (74.60 to 75.60): VN053399.D (-3264) (-)

Ion 53.00 (52.70 to 53.70): VN053399.D (-3264) (-)

Ion 88.90 (88.60 to 89.60): VN053399.D (-3264) (-)



#93

1,2,4-Trichlorobenzene

Concen: 3.186 ug/l

RT: 14.91 min Scan# 4086

Delta R.T. 0.00 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

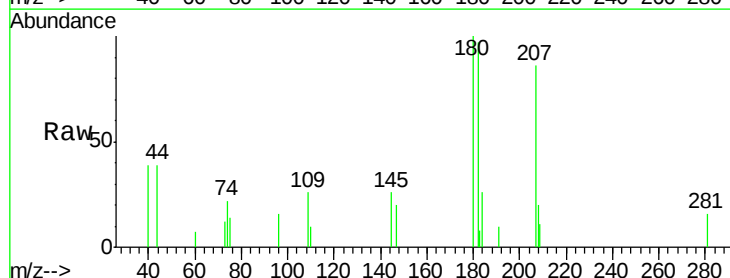
Tgt Ion: 180 Resp: 3413

Ion Ratio Lower Upper

180 100

182 99.3 48.1 144.3

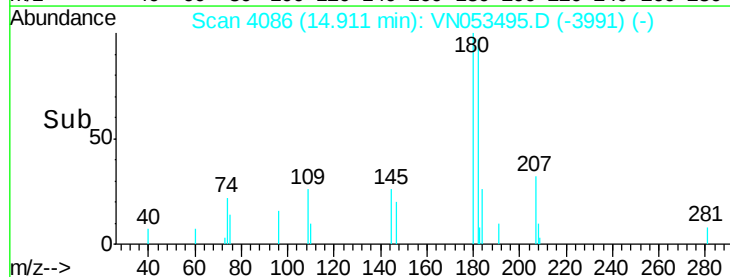
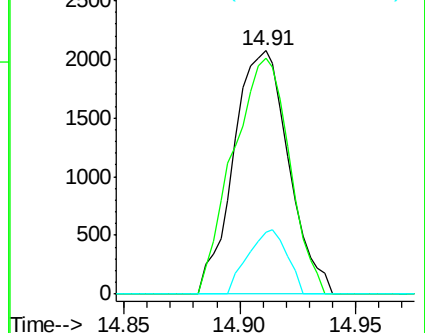
145 18.8 13.9 41.6

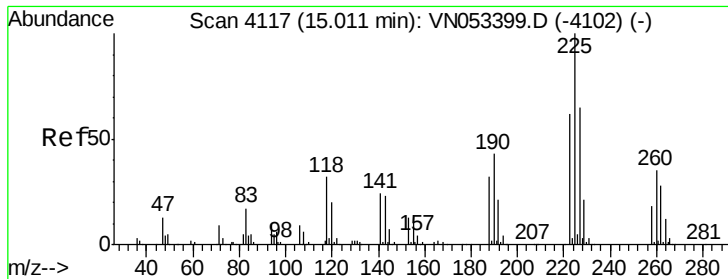


Abundance Ion 179.80 (179.50 to 180.50): VN053399.D (-4071) (-)

Ion 181.80 (181.50 to 182.50): VN053399.D (-4071) (-)

Ion 144.80 (144.50 to 145.50): VN053399.D (-4071) (-)





#94

Hexachlorobutadiene

Concen: 0.530 ug/l

RT: 15.01 min Scan# 4116

Delta R.T. -0.00 min

Lab File: VN053495.D

Acq: 21 Jan 2019 10:06

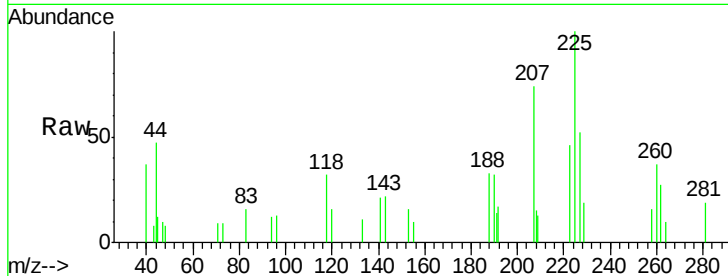
Instrument :

MSVOA\_N

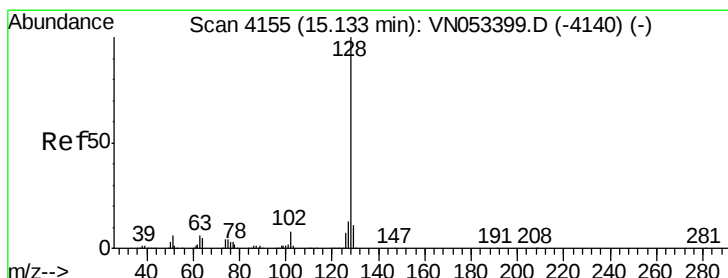
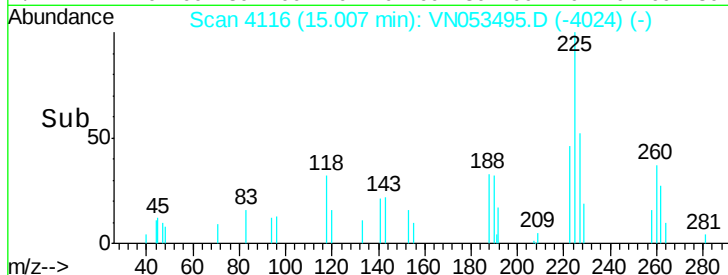
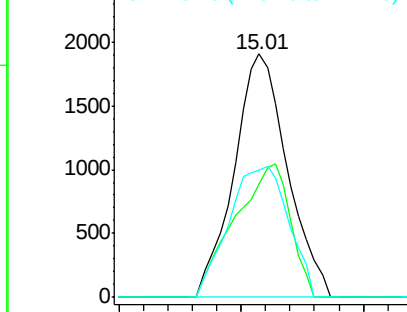
ClientSampled :

VN0121WBL01

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 225   | Resp: | 2875  |
| Ion      | Ratio | Lower | Upper |
| 225      | 100   |       |       |
| 223      | 57.0  | 31.1  | 93.2  |
| 227      | 60.4  | 32.0  | 96.2  |



Abundance Ion 224.70 (224.40 to 225.40): V  
Ion 222.70 (222.40 to 223.40): V  
Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 4.373 ug/l

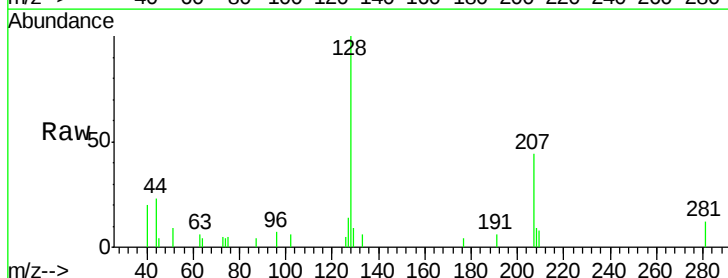
RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

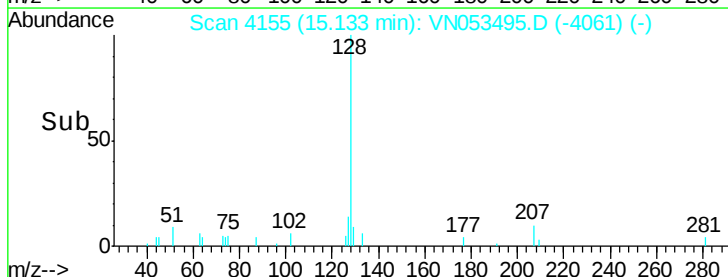
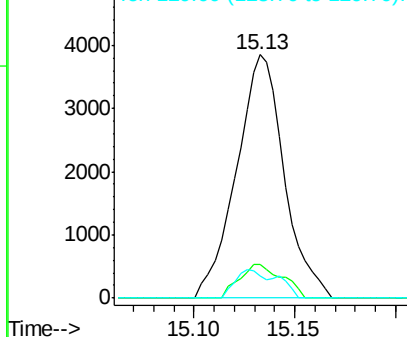
Lab File: VN053495.D

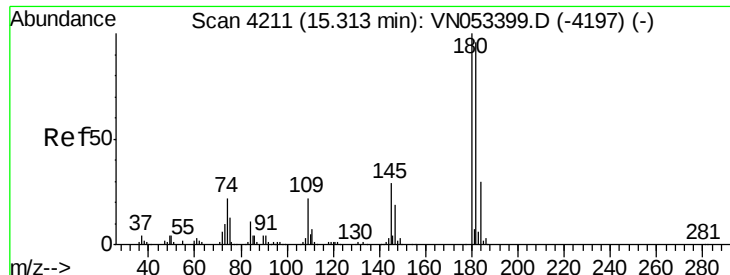
Acq: 21 Jan 2019 10:06

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 128   | Resp: | 6354  |
| Ion      | Ratio | Lower | Upper |
| 128      | 100   |       |       |
| 127      | 12.5  | 10.3  | 15.5  |
| 129      | 10.3  | 8.6   | 13.0  |



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

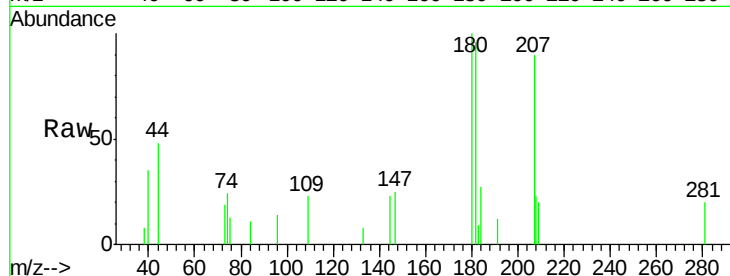




#96  
 1,2,3-Trichlorobenzene  
 Concen: 4.484 ug/l  
 RT: 15.31 min Scan# 4211  
 Delta R.T. 0.00 min  
 Lab File: VN053495.D  
 Acq: 21 Jan 2019 10:06

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0121WBL01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.6  | 47.9  | 143.8 |
| 145     | 26.3  | 14.7  | 44.1  |



Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.90 (144.60 to 145.60): V

