

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN022119\  
 Data File : VN053879.D  
 Acq On : 21 Feb 2019 9:10  
 Operator : JC/SP  
 Sample : VN0221WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0221WBL01

Quant Time: Feb 22 00:33:16 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N022019W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Feb 21 03:36:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 595518   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 990778   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 910484   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 321318   | 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   | 317763   | 52.21 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.42% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 316478   | 48.67 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.34%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 1204651  | 51.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.60% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 370059   | 47.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.46%  |          |

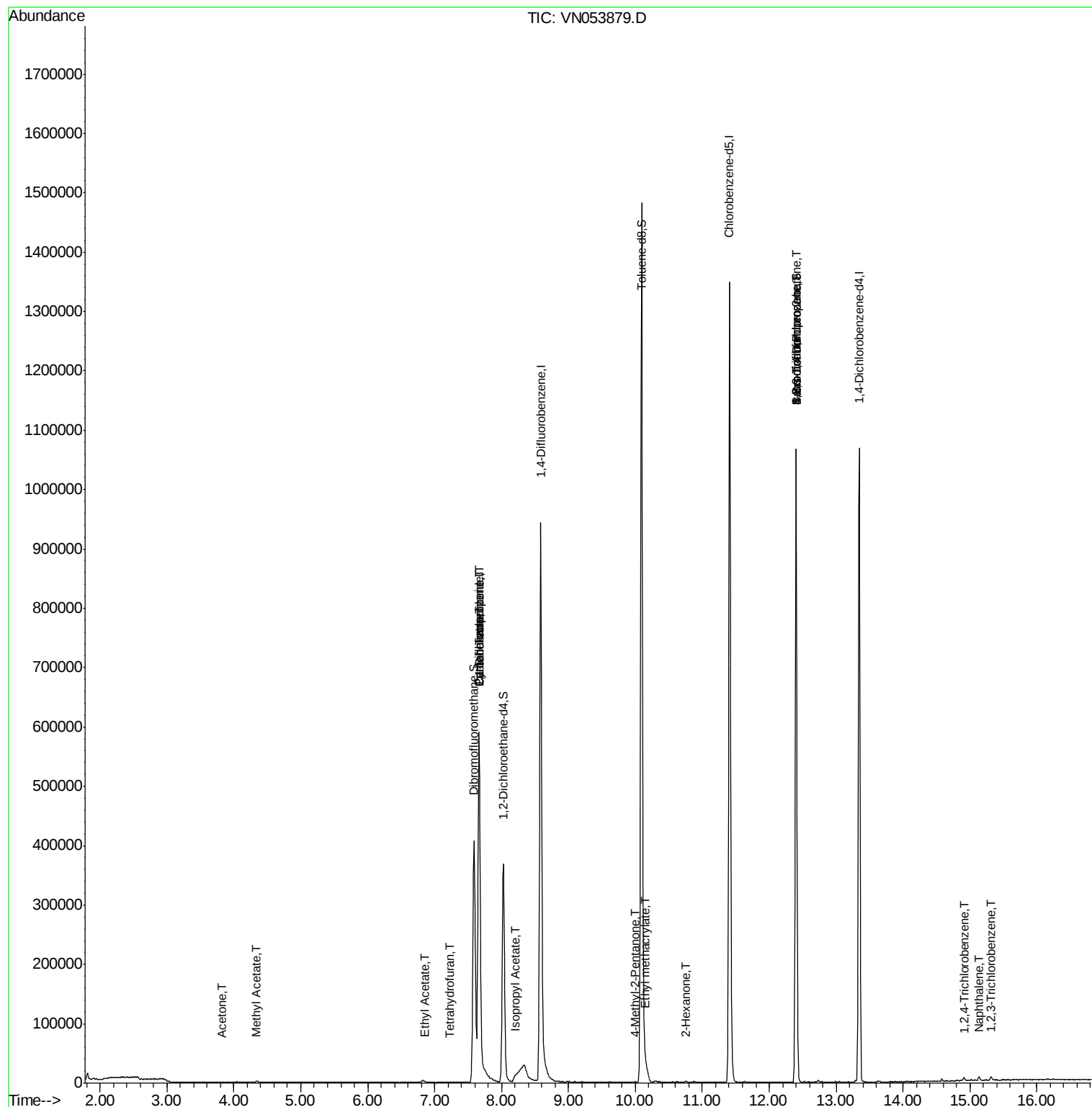
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 3.82  | 43   | 512      | 0.306     | ug/l # | 40     |
| 18) Methyl Acetate             | 4.34  | 43   | 4087     | 1.035     | ug/l # | 69     |
| 29) Tetrahydrofuran            | 7.22  | 42   | 775      | 0.555     | ug/l # | 37     |
| 31) Cyclohexane                | 7.66  | 56   | 8328     | 0.326     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 34640    | 3.814     | ug/l # | 48     |
| 37) Ethyl Acetate              | 6.86  | 43   | 99       | 0.237     | ug/l # | 67     |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 48583    | 5.355     | ug/l # | 16     |
| 41) Methacrylonitrile          | 7.22  | 41   | 263      | Below Cal | #      | 100    |
| 43) Isopropyl Acetate          | 8.20  | 43   | 7542     | 0.779     | ug/l # | 58     |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1378     | 6.791     | ug/l # | 34     |
| 56) Ethyl methacrylate         | 10.16 | 69   | 58       | 2.473     | ug/l # | 29     |
| 59) 2-Hexanone                 | 10.75 | 43   | 1593     | 0.524     | ug/l # | 58     |
| 71) Bromoform                  | 12.40 | 173  | 2059     | 0.417     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 172428   | 36.555    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 172428   | 120.678   | ug/l # | 15     |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 2276     | 3.267     | ug/l   | 93     |
| 95) Naphthalene                | 15.13 | 128  | 5585     | 5.010     | ug/l   | 98     |
| 96) 1,2,3-Trichlorobenzene     | 15.32 | 180  | 2959     | 3.034     | ug/l   | 89     |

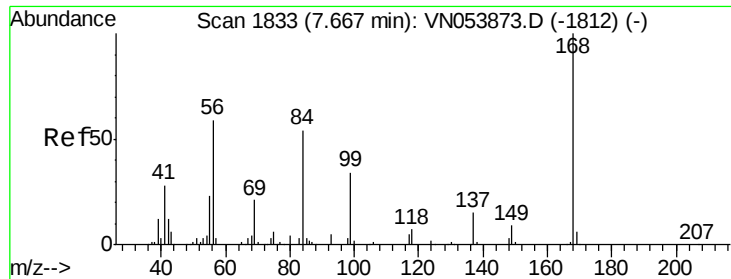
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN022119\  
Data File : VN053879.D  
Acq On : 21 Feb 2019 9:10  
Operator : JC/SP  
Sample : VN0221WBL01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0221WBL01

Quant Time: Feb 22 00:33:16 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N022019W.M  
Quant Title : SW846 8260  
QLast Update : Thu Feb 21 03:36:07 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: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampled :

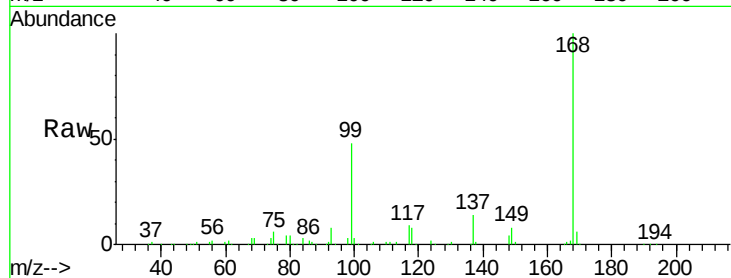
VN0221WBL01

Tot Ion:168 Resp: 595518

Ion Ratio Lower Upper

168 100

99 48.2 36.9 55.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.66

250000

200000

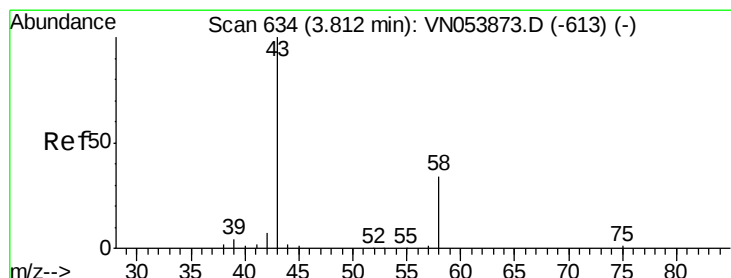
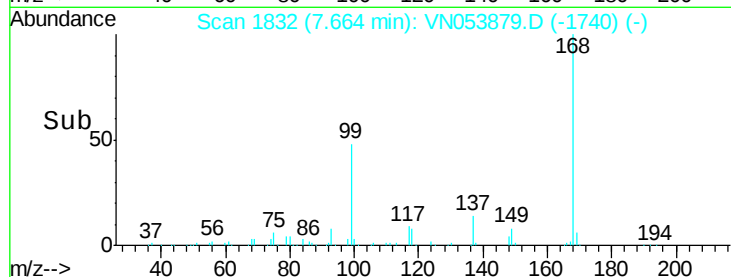
150000

100000

50000

0

Time--> 7.50 7.60 7.70 7.80



#16

Acetone

Concen: 0.306 ug/l

RT: 3.82 min Scan# 637

Delta R.T. 0.01 min

Lab File: VN053879.D

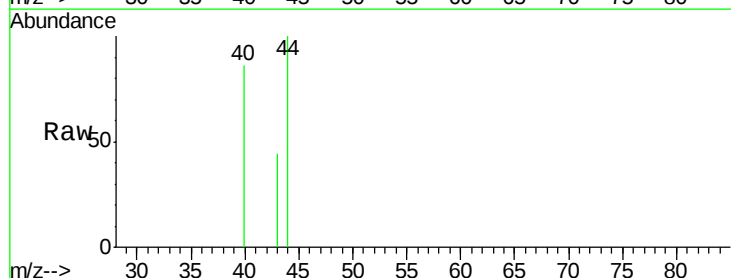
Acq: 21 Feb 2019 9:10

Tgt Ion: 43 Resp: 512

Ion Ratio Lower Upper

43 100

58 0.0 27.6 41.4#



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

500

400

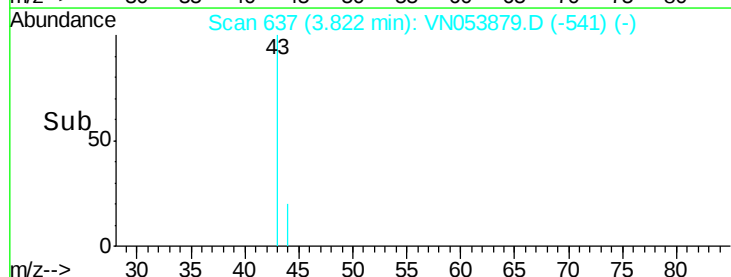
300

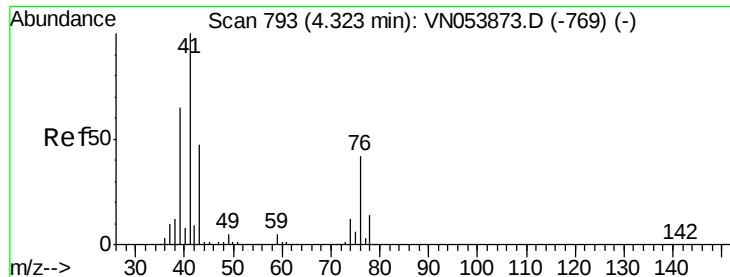
200

100

0

Time--> 3.78 3.80 3.82 3.84

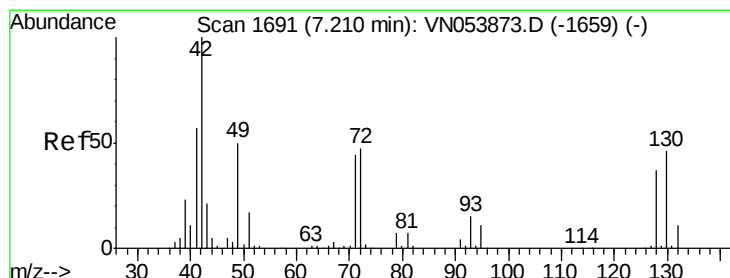
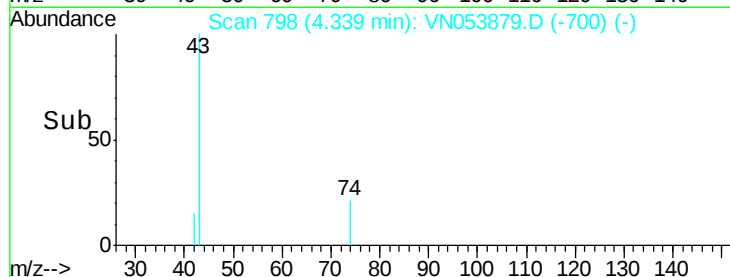
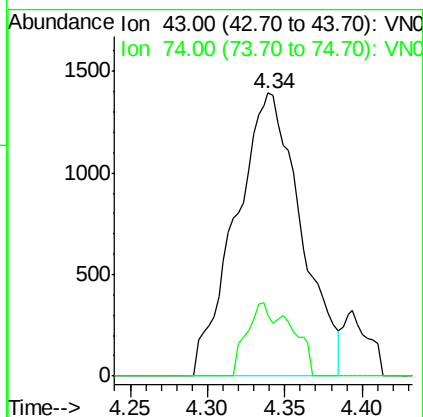
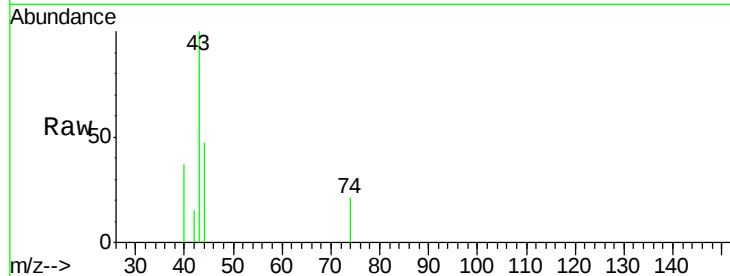




#18  
Methyl Acetate  
Concen: 1.035 ug/l  
RT: 4.34 min Scan# 798  
Delta R.T. 0.02 min  
Lab File: VN053879.D  
Acq: 21 Feb 2019 9:10

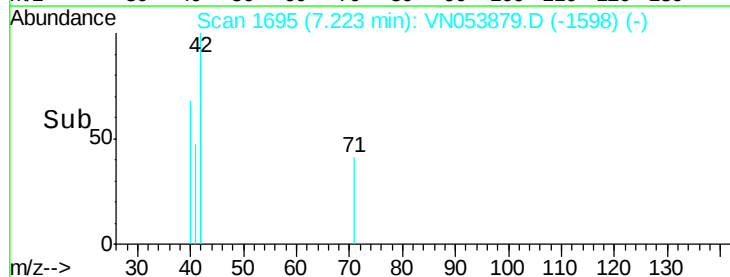
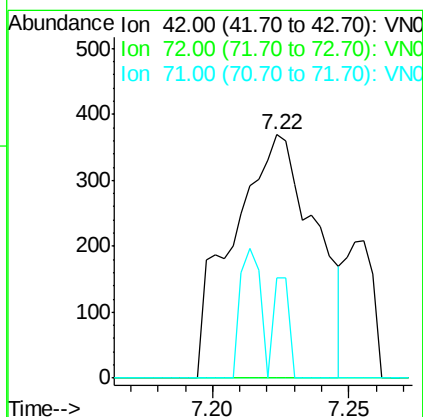
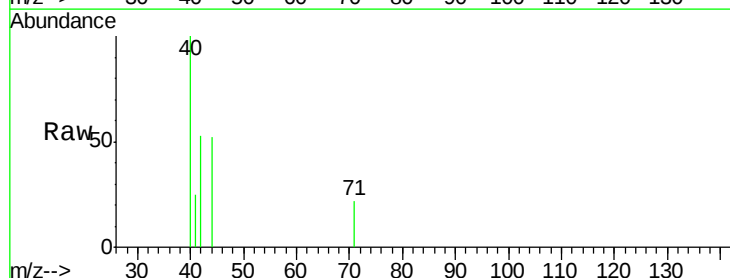
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0221WBL01

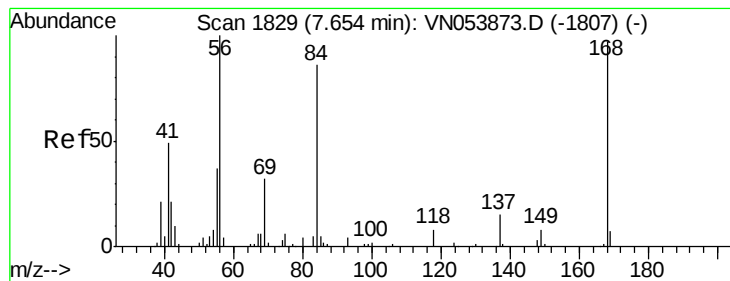
Tot Ion: 43 Resp: 4087  
Ion Ratio Lower Upper  
43 100  
74 10.0 20.5 30.7#



#29  
Tetrahydrofuran  
Concen: 0.555 ug/l  
RT: 7.22 min Scan# 1695  
Delta R.T. 0.01 min  
Lab File: VN053879.D  
Acq: 21 Feb 2019 9:10

Tgt Ion: 42 Resp: 775  
Ion Ratio Lower Upper  
42 100  
72 0.0 36.9 55.3#  
71 7.6 34.6 52.0#





#31

Cyclohexane

Concen: 0.326 ug/l

RT: 7.66 min Scan# 1831

Delta R.T. 0.01 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

VN0221WBL01

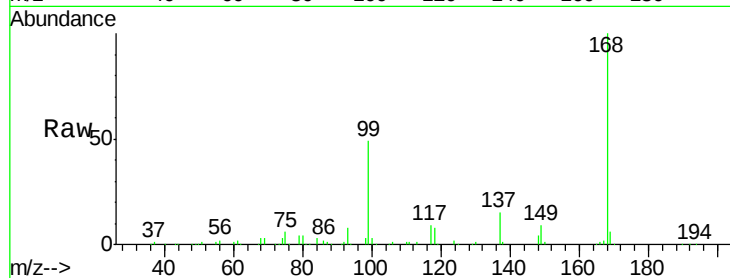
Tot Ion: 56 Resp: 8328

Ion Ratio Lower Upper

56 100

69 186.1 26.0 39.0#

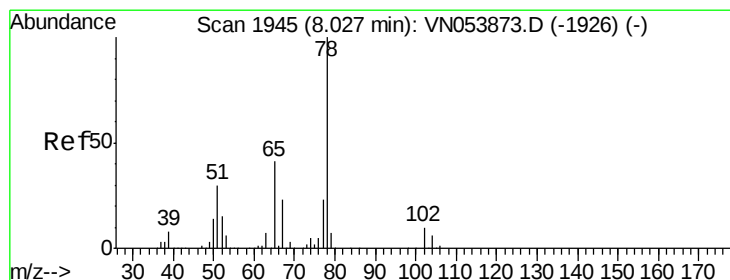
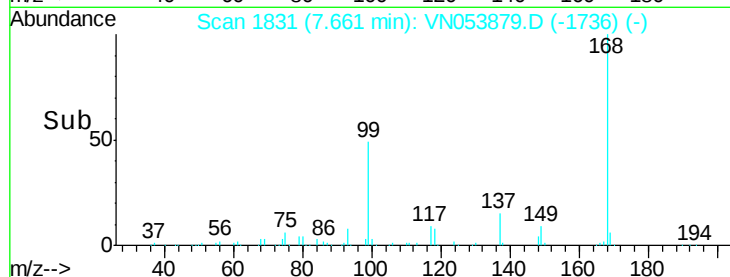
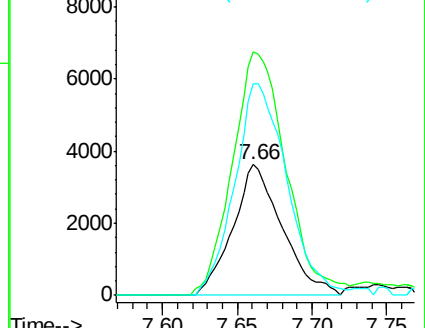
84 161.5 69.1 103.7#



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: 52.211 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN053879.D

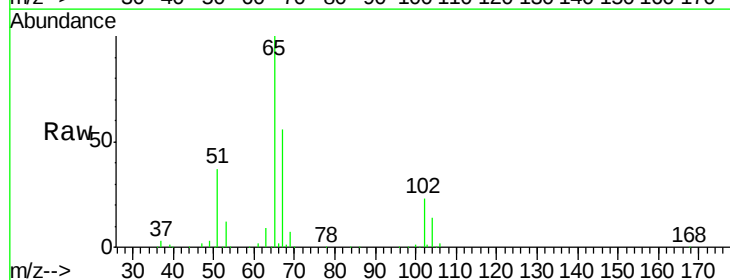
Acq: 21 Feb 2019 9:10

Tgt Ion: 65 Resp: 317763

Ion Ratio Lower Upper

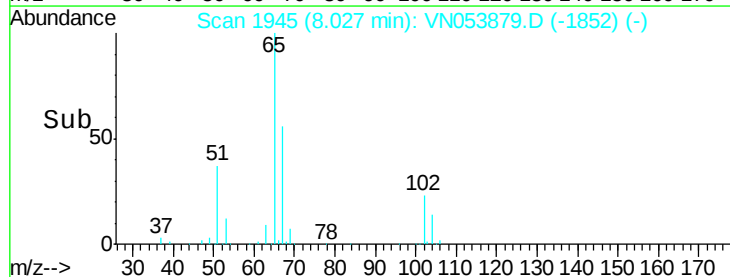
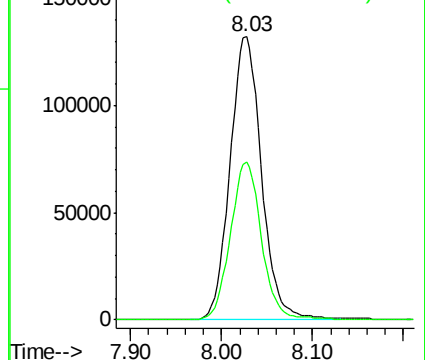
65 100

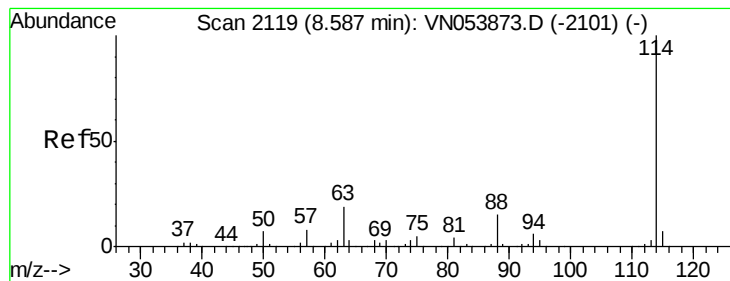
67 55.3 0.0 111.8



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: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

VN0221WBL01

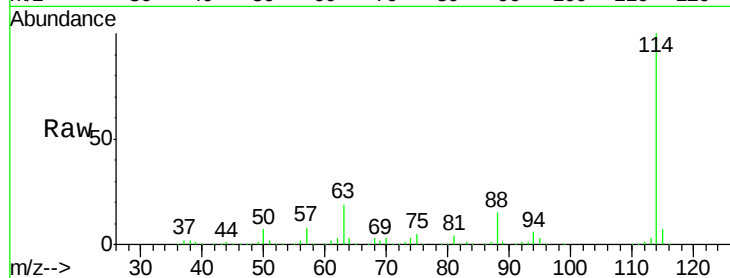
Tot Ion:114 Resp: 990778

Ion Ratio Lower Upper

114 100

63 18.9 0.0 37.4

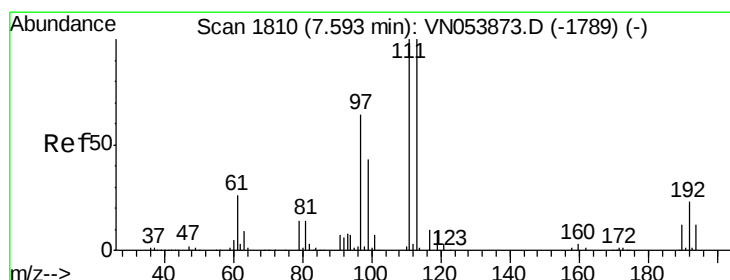
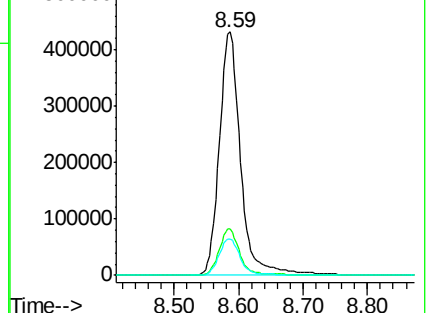
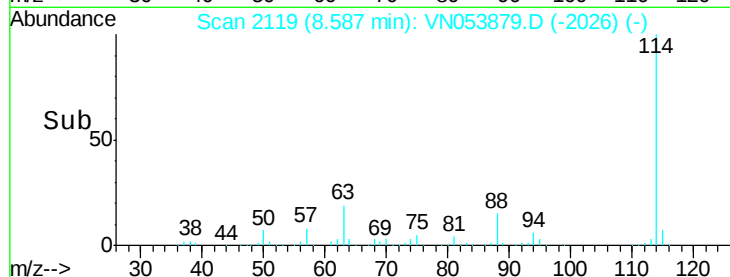
88 14.9 0.0 30.4



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: 48.672 ug/l

RT: 7.59 min Scan# 1809

Delta R.T. -0.00 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

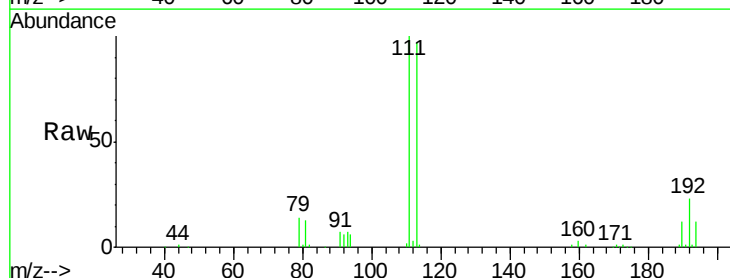
Tgt Ion:113 Resp: 316478

Ion Ratio Lower Upper

113 100

111 103.7 81.1 121.7

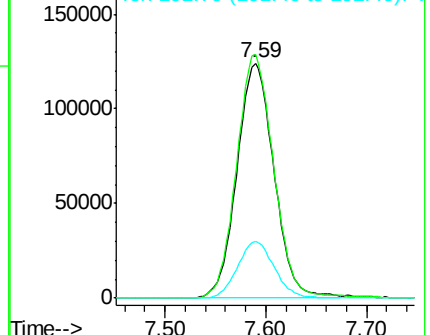
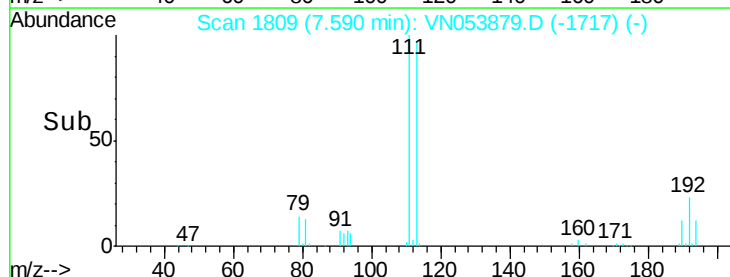
192 23.8 18.8 28.2

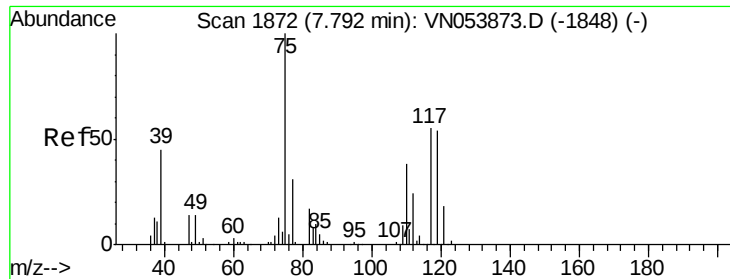


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 3.814 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

VN0221WBL01

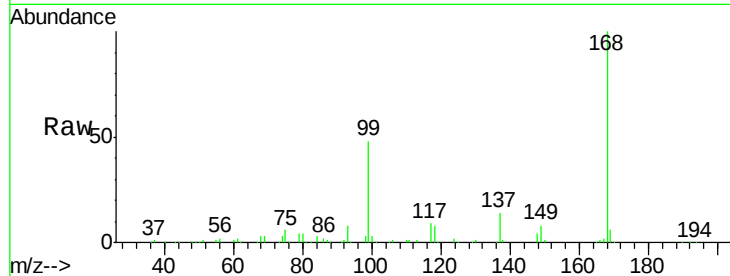
Tot Ion: 75 Resp: 34640

Ion Ratio Lower Upper

75 100

110 8.7 19.0 57.0#

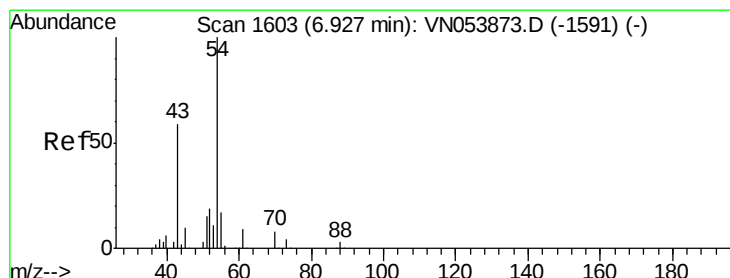
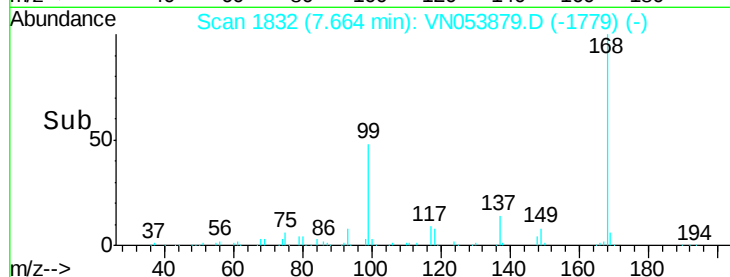
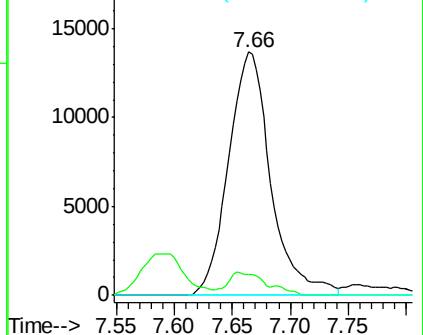
77 0.0 25.4 38.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 109.90 (109.60 to 110.60): VN0

Ion 76.90 (76.60 to 77.60): VN0



#37

Ethyl Acetate

Concen: 0.237 ug/l

RT: 6.86 min Scan# 1581

Delta R.T. -0.07 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

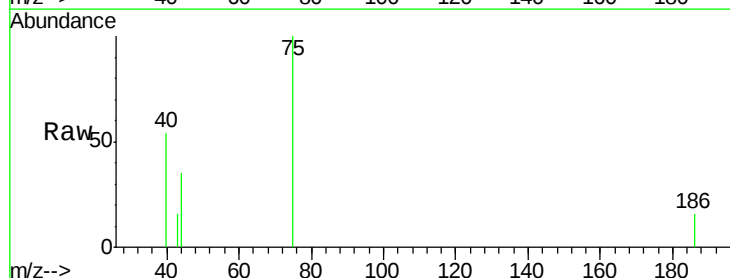
Tgt Ion: 43 Resp: 99

Ion Ratio Lower Upper

43 100

61 0.0 12.0 18.0#

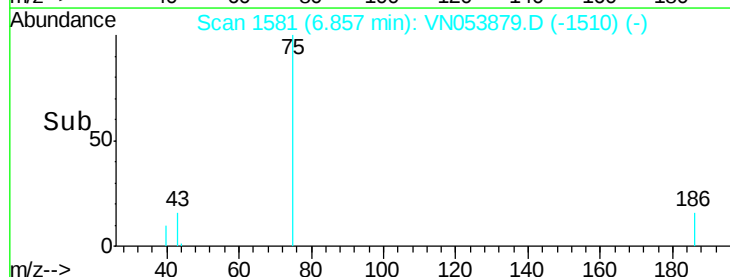
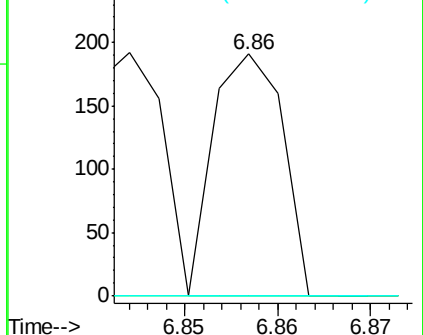
70 0.0 8.7 13.1#

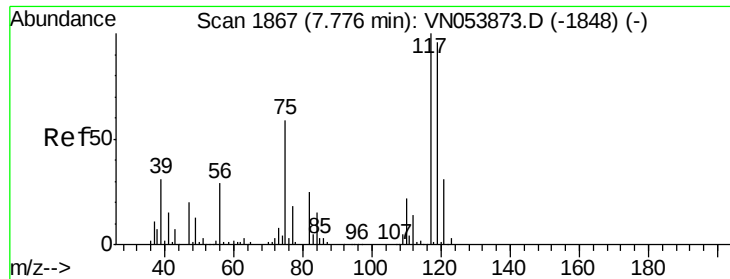


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 60.90 (60.60 to 61.60): VN0

Ion 70.00 (69.70 to 70.70): VN0





#38

Carbon Tetrachloride

Concen: 5.355 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampled :

VN0221WBL01

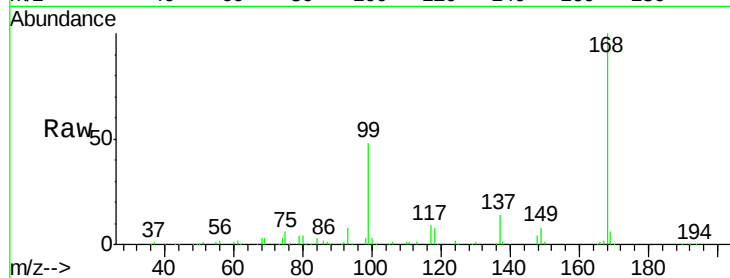
Tot Ion:117 Resp: 48583

Ion Ratio Lower Upper

117 100

119 4.8 76.2 114.2#

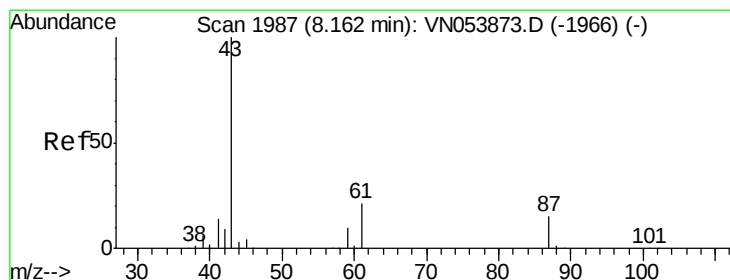
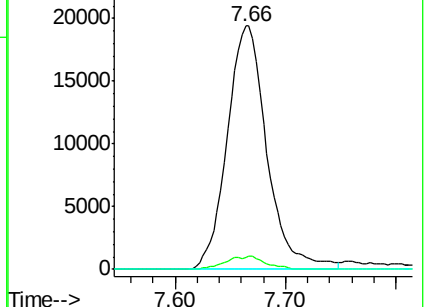
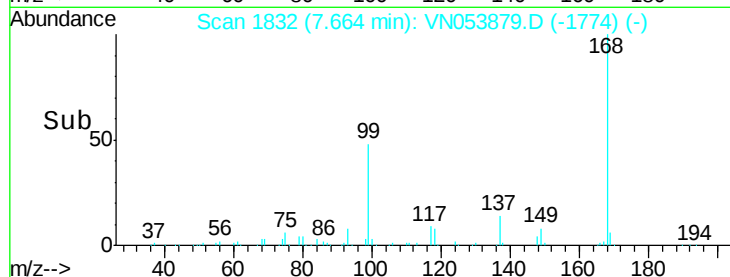
121 0.0 24.6 36.8#



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



#43

Isopropyl Acetate

Concen: 0.779 ug/l

RT: 8.20 min Scan# 1998

Delta R.T. 0.04 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

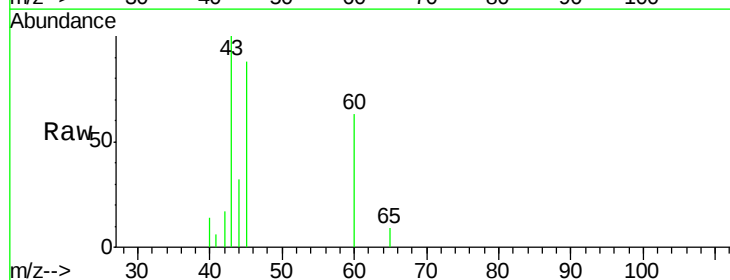
Tgt Ion: 43 Resp: 7542

Ion Ratio Lower Upper

43 100

61 0.0 17.4 26.0#

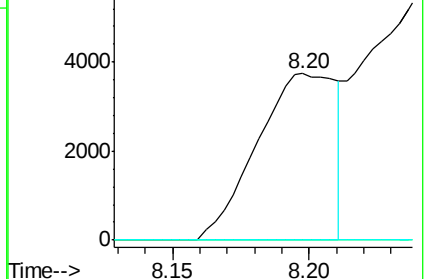
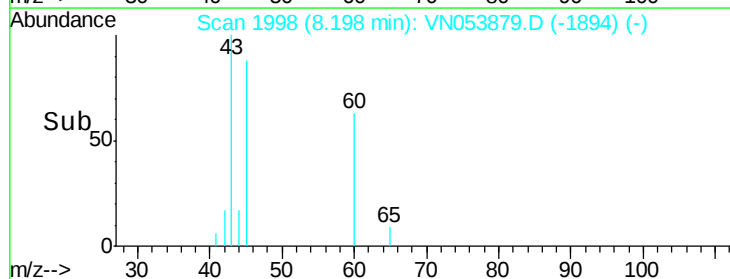
87 0.0 11.5 17.3#

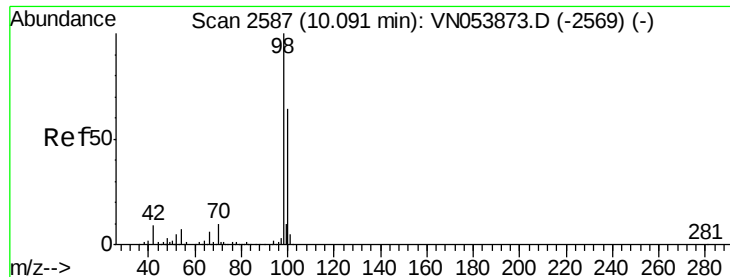


Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 61.00 (60.70 to 61.70): VNO

Ion 87.00 (86.70 to 87.70): VNO





#50

Toluene-d8

Concen: 51.295 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

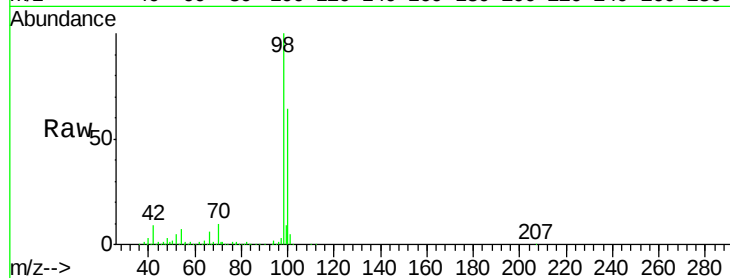
VN0221WBL01

Tot Ion: 98 Resp: 1204651

Ion Ratio Lower Upper

98 100

100 64.6 51.9 77.9



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN

10.09

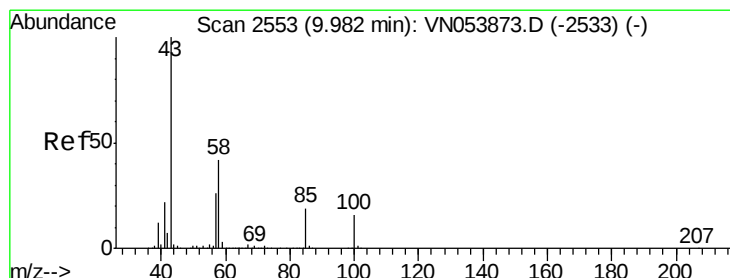
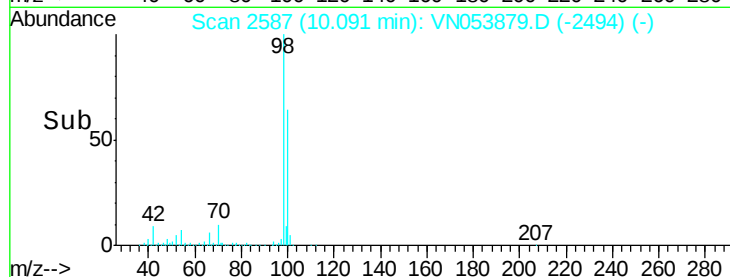
600000

400000

200000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 6.791 ug/l

RT: 9.99 min Scan# 2555

Delta R.T. 0.01 min

Lab File: VN053879.D

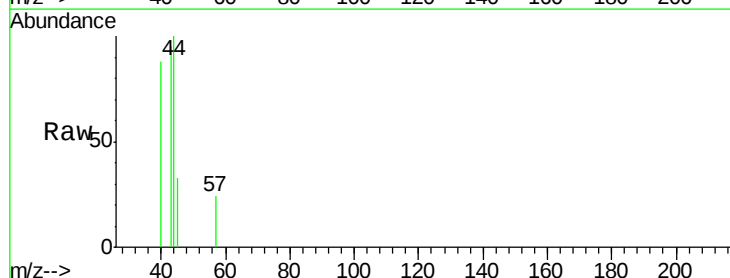
Acq: 21 Feb 2019 9:10

Tgt Ion: 43 Resp: 1378

Ion Ratio Lower Upper

43 100

58 0.0 32.7 49.1#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

9.99

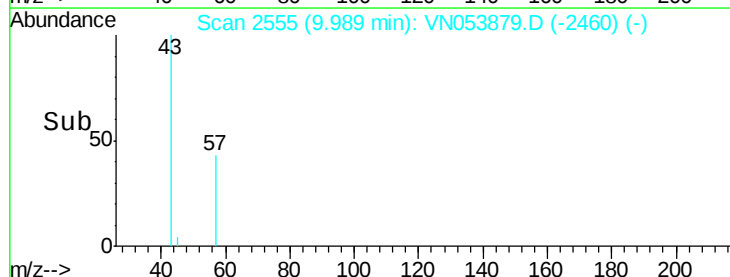
600

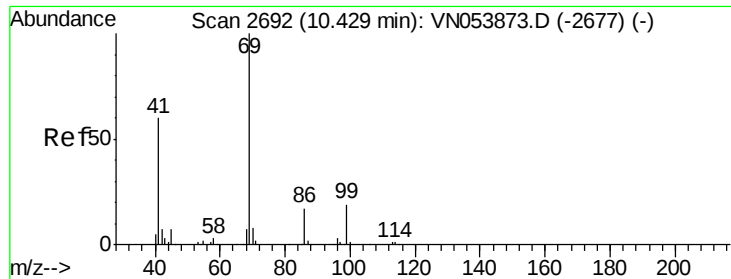
400

200

0

Time-->





#56

Ethyl methacrylate

Concen: 2.473 ug/l

RT: 10.16 min Scan# 2607

Delta R.T. -0.27 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampled :

VN0221WBL01

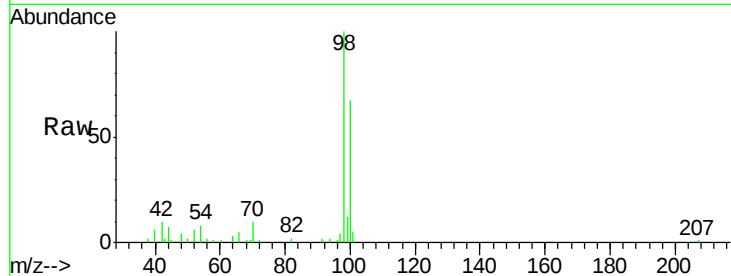
Tot Ion: 69 Resp: 58

Ion Ratio Lower Upper

69 100

41 0.0 47.5 71.3#

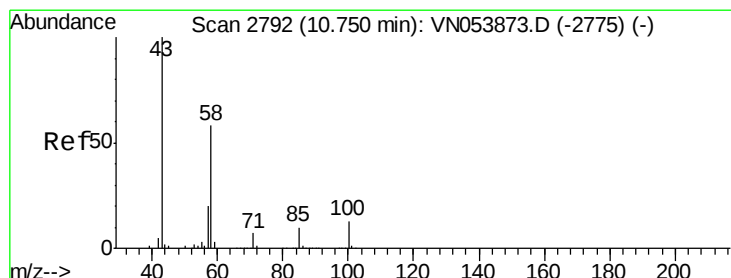
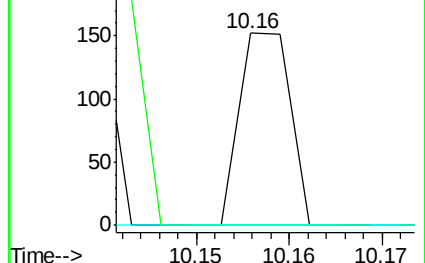
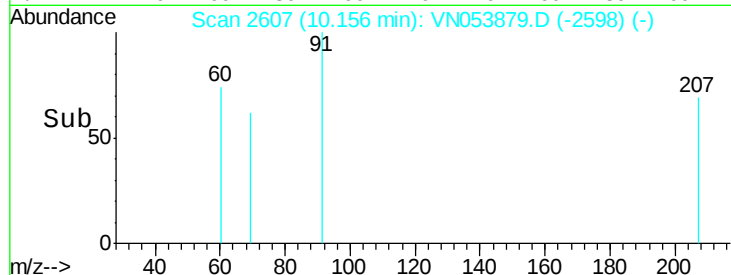
39 0.0 23.4 35.0#



Abundance Ion 69.00 (68.70 to 69.70): VN0

Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0



#59

2-Hexanone

Concen: 0.524 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.00 min

Lab File: VN053879.D

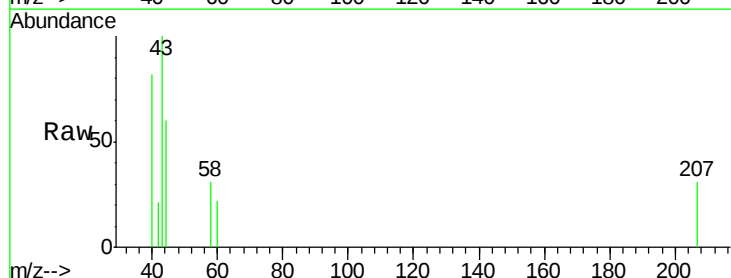
Acq: 21 Feb 2019 9:10

Tgt Ion: 43 Resp: 1593

Ion Ratio Lower Upper

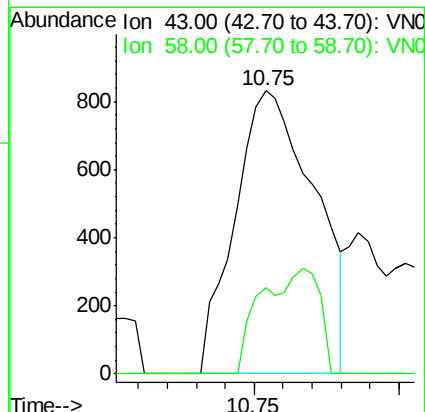
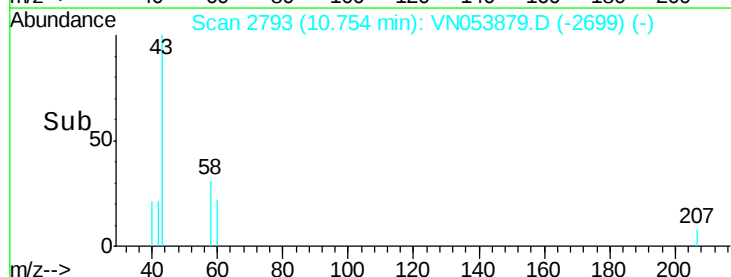
43 100

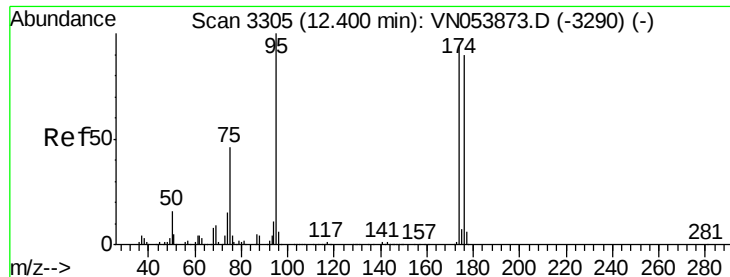
58 26.9 29.1 87.4#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#62

4-Bromofluorobenzene

Concen: 47.730 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

VN0221WBL01

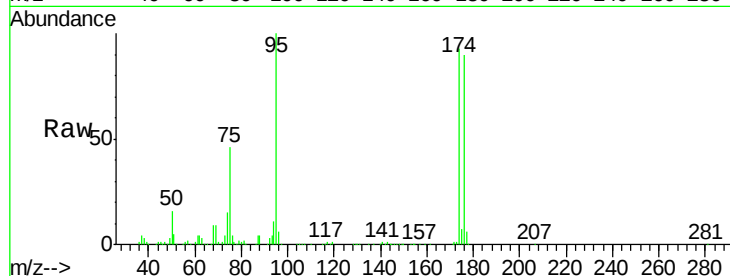
Tot Ion: 95 Resp: 370059

Ion Ratio Lower Upper

95 100

174 96.2 0.0 188.8

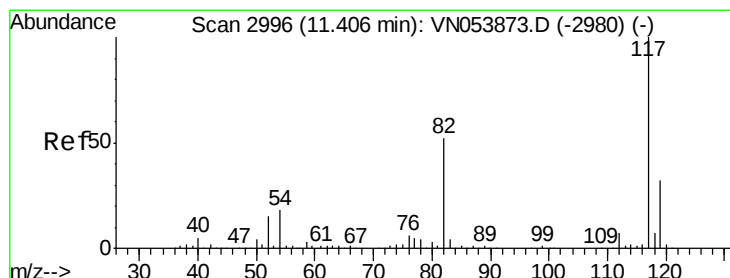
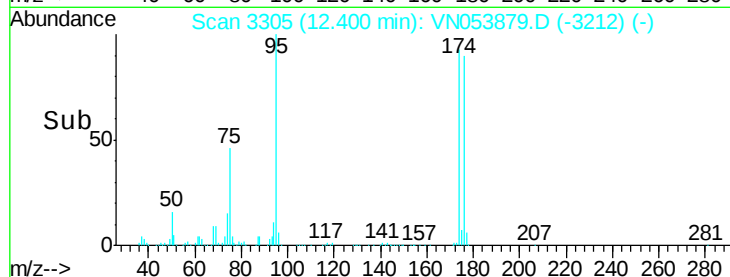
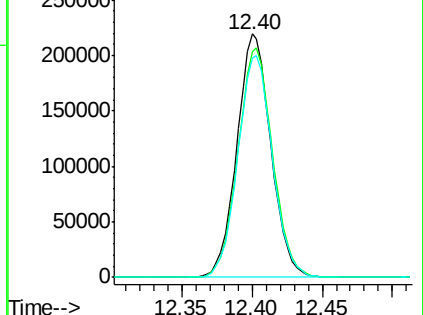
176 92.7 0.0 182.6



Abundance Ion 94.90 (94.60 to 95.60): VN053879.D (-3290) (-)

Ion 173.80 (173.50 to 174.50): VN053879.D (-3290) (-)

Ion 175.80 (175.50 to 176.50): VN053879.D (-3290) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

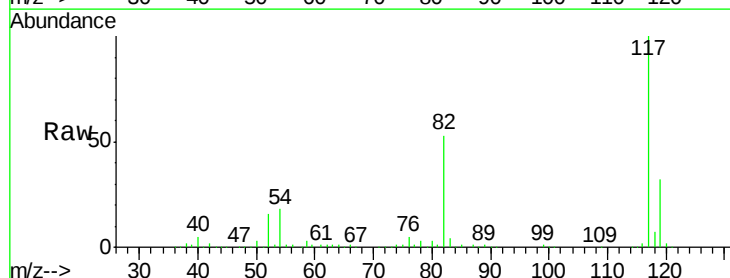
Tgt Ion: 117 Resp: 910484

Ion Ratio Lower Upper

117 100

82 52.7 41.4 62.2

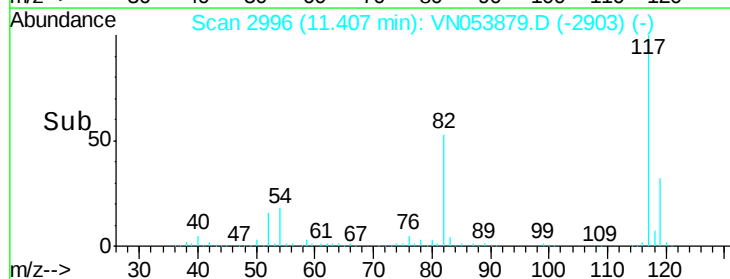
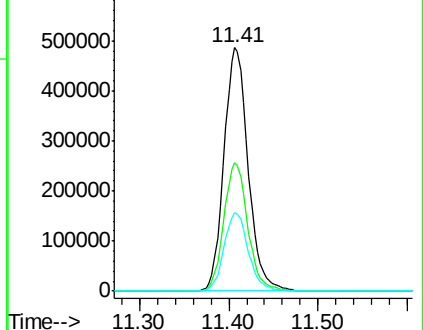
119 32.1 25.3 37.9

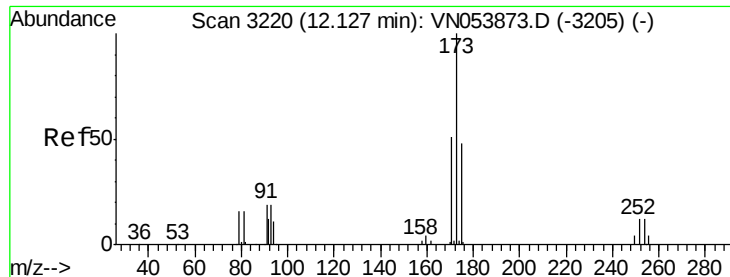


Abundance Ion 116.90 (116.60 to 117.60): VN053879.D (-2903) (-)

Ion 82.00 (81.70 to 82.70): VN053879.D (-2903) (-)

Ion 118.90 (118.60 to 119.60): VN053879.D (-2903) (-)





#71

Bromoform

Concen: 0.417 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.27 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

VN0221WBL01

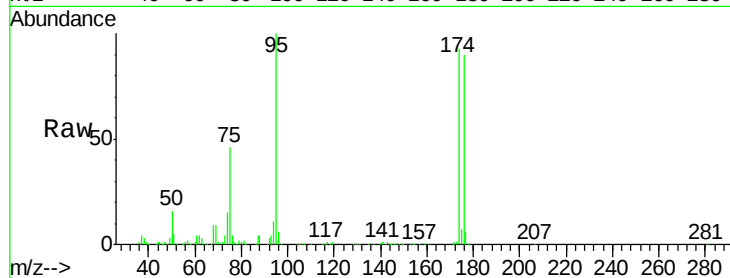
Tot Ion:173 Resp: 2059

Ion Ratio Lower Upper

173 100

175 1059.0 24.3 72.8#

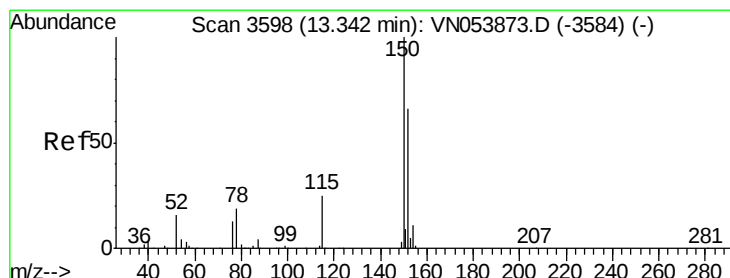
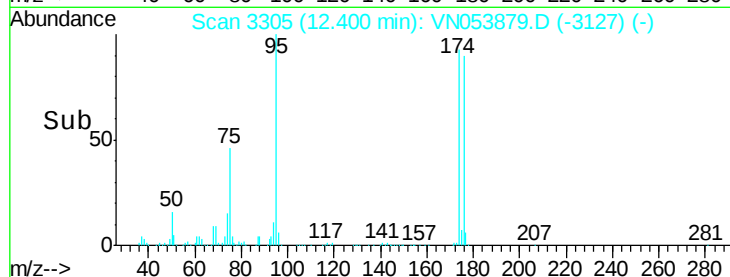
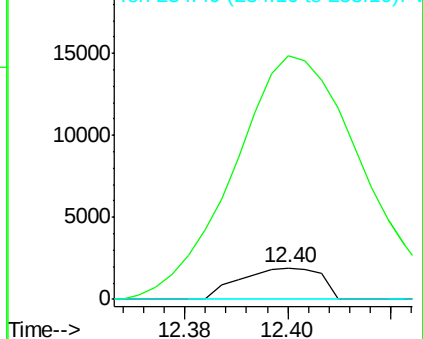
254 0.0 0.2 0.2#



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: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

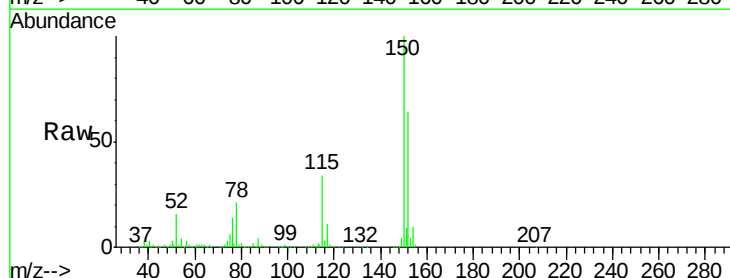
Tgt Ion:152 Resp: 321318

Ion Ratio Lower Upper

152 100

115 54.0 27.2 81.6

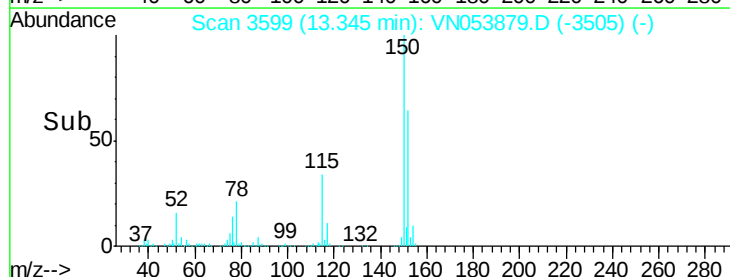
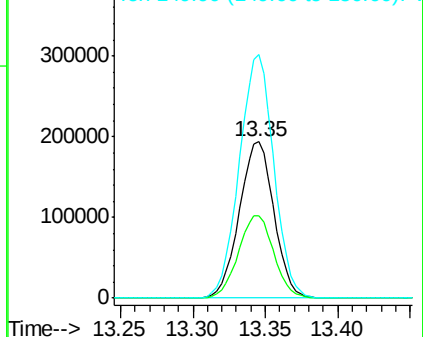
150 155.6 0.0 348.2

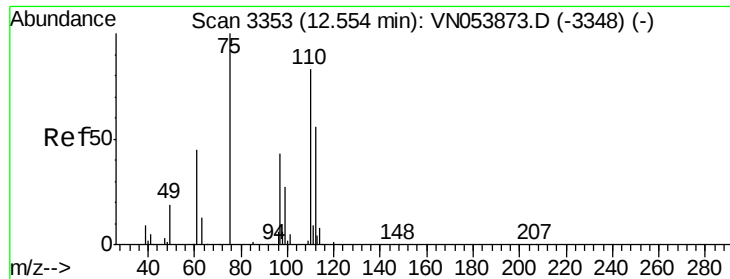


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 36.555 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

Instrument :

MSVOA\_N

ClientSampleId :

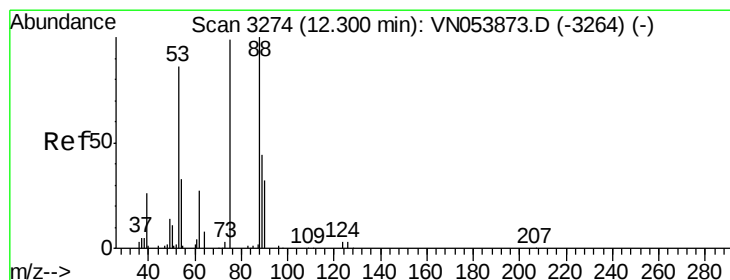
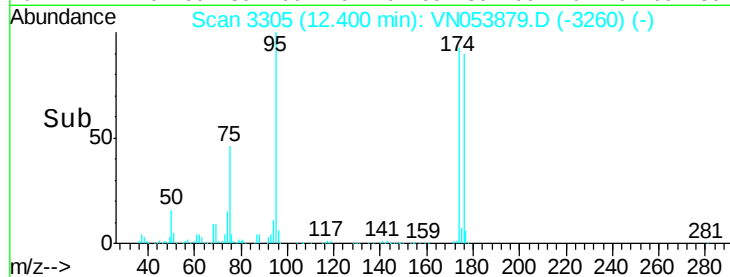
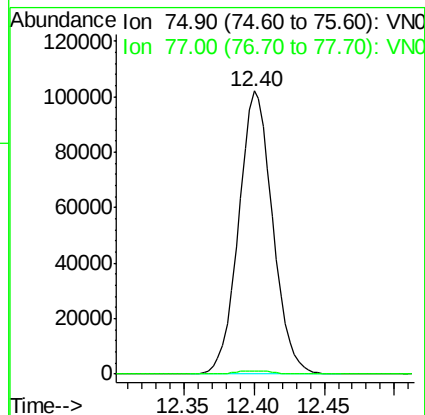
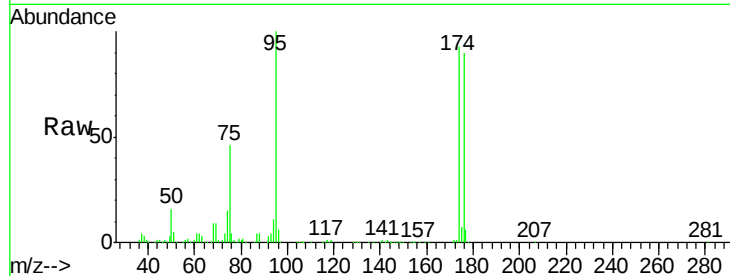
VN0221WBL01

Tot Ion: 75 Resp: 172428

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 120.678 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN053879.D

Acq: 21 Feb 2019 9:10

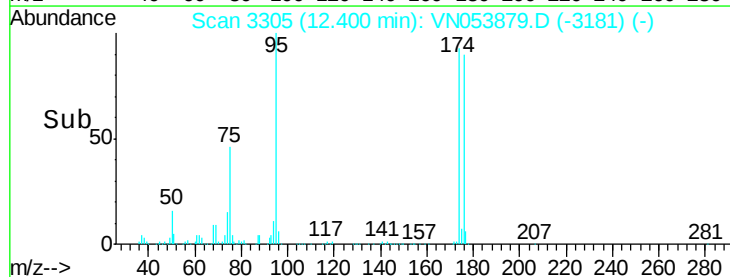
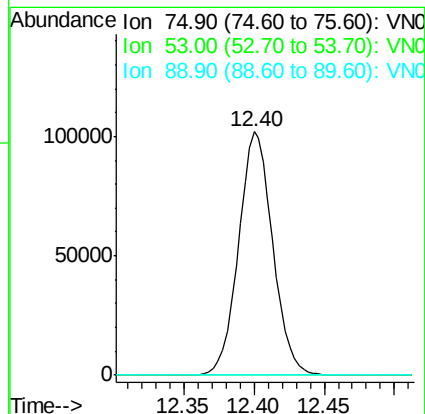
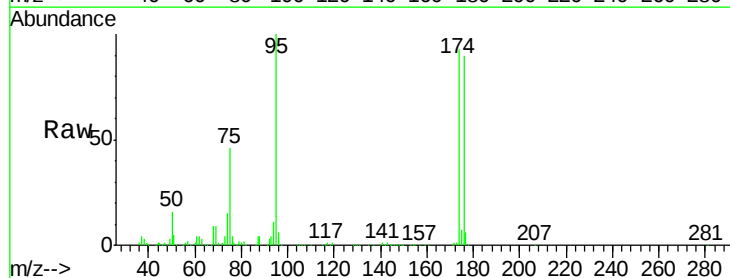
Tgt Ion: 75 Resp: 172428

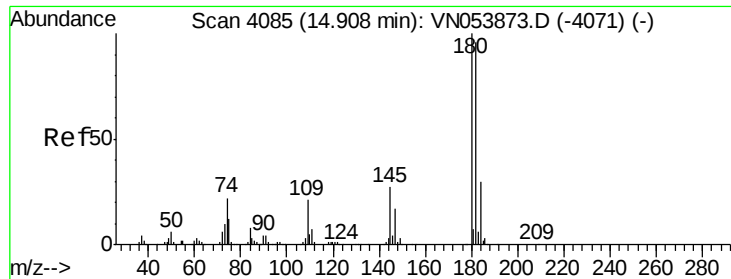
Ion Ratio Lower Upper

75 100

53 0.0 68.6 102.8#

89 0.0 35.3 52.9#

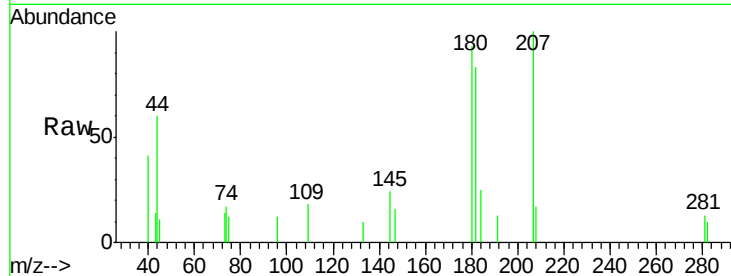




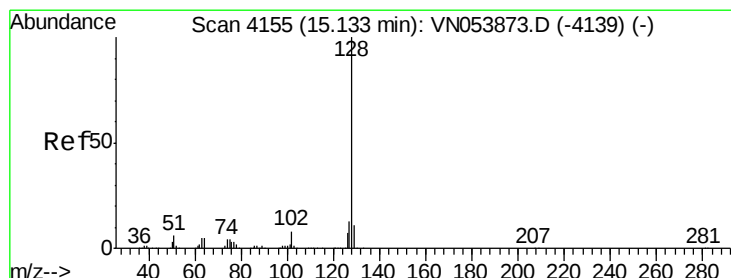
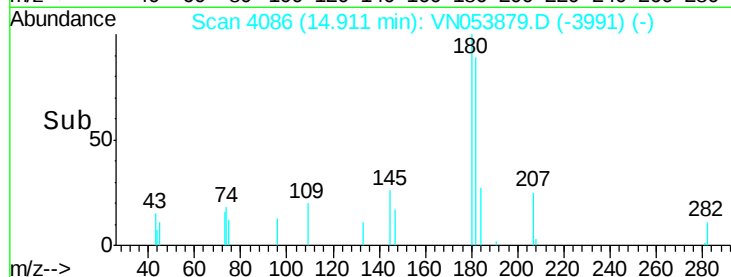
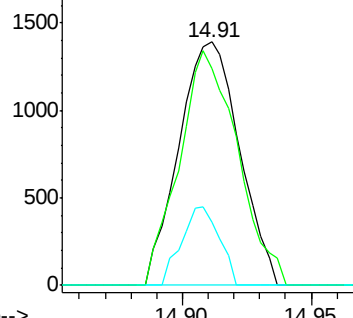
#93  
 1,2,4-Trichlorobenzene  
 Concen: 3.267 ug/l  
 RT: 14.91 min Scan# 4086  
 Delta R.T. 0.00 min  
 Lab File: VN053879.D  
 Acq: 21 Feb 2019 9:10

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0221WBL01

Tot Ion:180 Resp: 2276  
 Ion Ratio Lower Upper  
 180 100  
 182 93.1 48.6 145.9  
 145 19.9 13.8 41.3

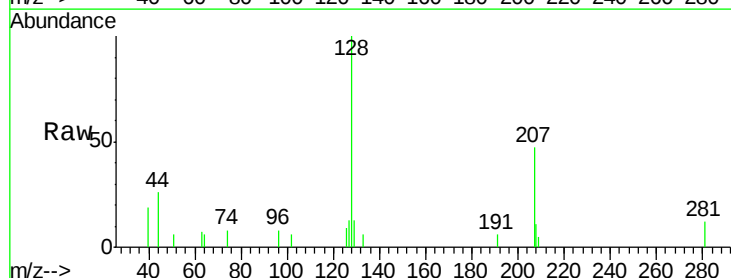


Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.80 (144.50 to 145.50): V

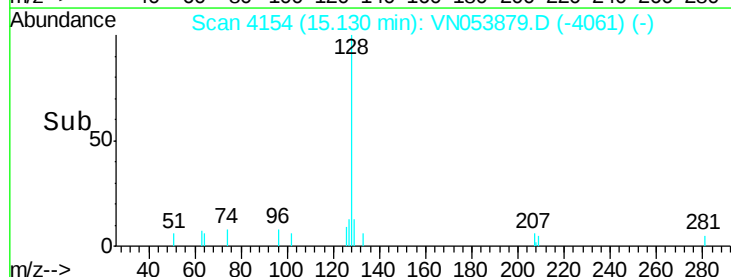
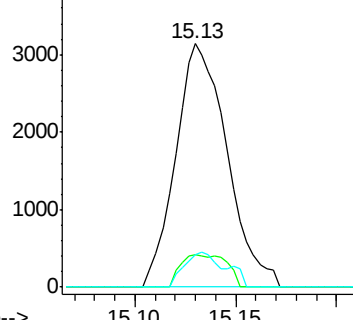


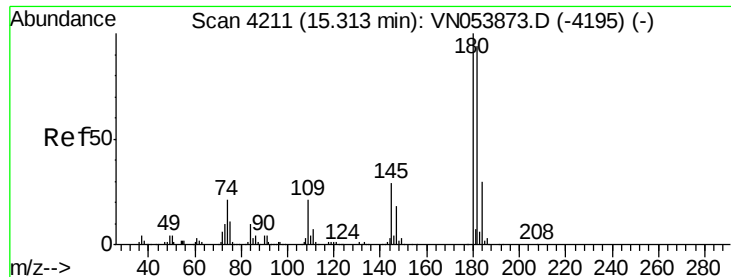
#95  
 Naphthalene  
 Concen: 5.010 ug/l  
 RT: 15.13 min Scan# 4154  
 Delta R.T. -0.00 min  
 Lab File: VN053879.D  
 Acq: 21 Feb 2019 9:10

Tgt Ion:128 Resp: 5585  
 Ion Ratio Lower Upper  
 128 100  
 127 12.0 10.2 15.2  
 129 11.6 8.6 12.8



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

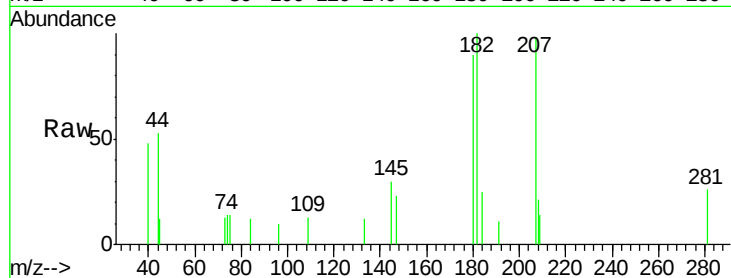




#96  
 1,2,3-Trichlorobenzene  
 Concen: 3.034 ug/l  
 RT: 15.32 min Scan# 4212  
 Delta R.T. 0.00 min  
 Lab File: VN053879.D  
 Acq: 21 Feb 2019 9:10

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0221WBL01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 108.1 | 47.3  | 141.8 |
| 145     | 28.9  | 14.4  | 43.0  |



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

