

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN022119\  
 Data File : VN053885.D  
 Acq On : 21 Feb 2019 12:03  
 Operator : JC/SP  
 Sample : K1548-01RE  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 TB-01-190219

Quant Time: Feb 22 00:35:35 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      | 7.67  | 168  | 599639   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1009822  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 966847   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 377606   | 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   | 322486   | 52.62 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.24% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 323692   | 48.84 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.68%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 1242363  | 51.90 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.80% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 413876   | 52.37 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.74% |          |

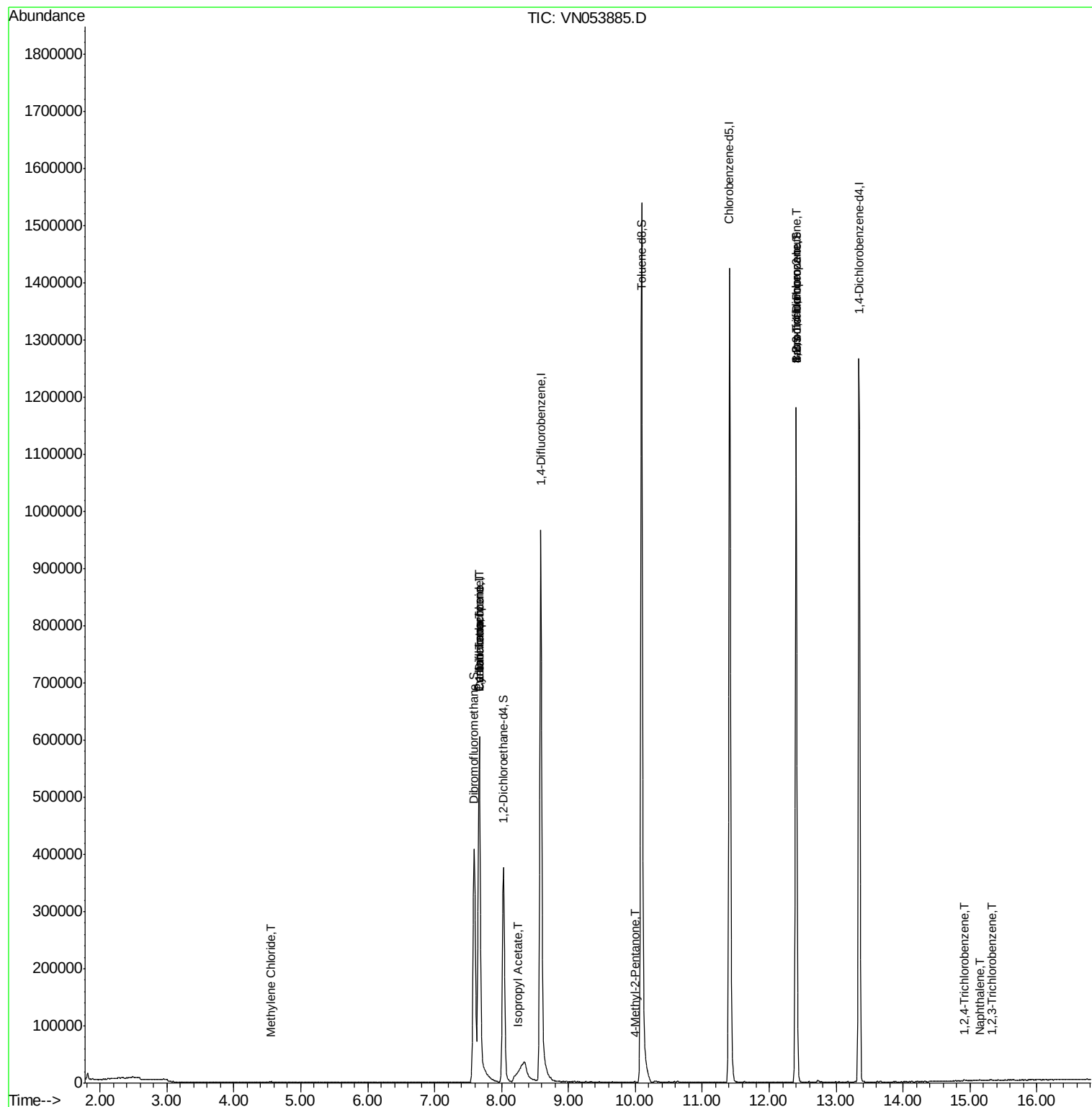
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 20) Methylene Chloride         | 4.55  | 84   | 1389     | 0.220   | ug/l # | 79     |
| 31) Cyclohexane                | 7.67  | 56   | 8385     | 0.326   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.67  | 75   | 34818    | 3.762   | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 49428    | 5.346   | ug/l # | 17     |
| 43) Isopropyl Acetate          | 8.24  | 43   | 20030    | 2.029   | ug/l # | 58     |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 371      | 6.592   | ug/l # | 34     |
| 71) Bromoform                  | 12.40 | 173  | 2065     | 0.394   | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 190235   | 34.318  | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 190235   | 113.294 | ug/l # | 15     |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 590      | 3.002   | ug/l # | 64     |
| 95) Naphthalene                | 15.14 | 128  | 994      | 4.673   | ug/l # | 70     |
| 96) 1,2,3-Trichlorobenzene     | 15.32 | 180  | 334      | 2.609   | ug/l # | 16     |

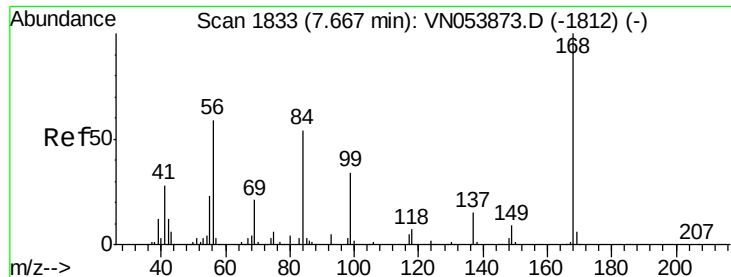
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampled :

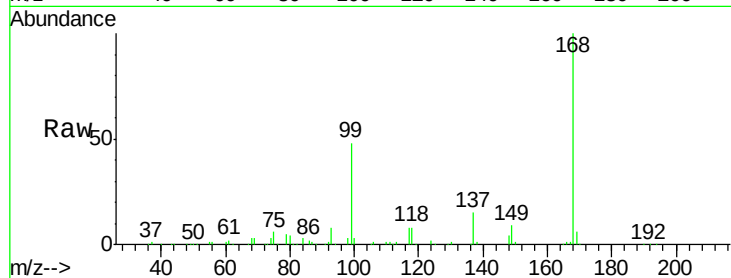
TB-01-190219

Tot Ion:168 Resp: 599639

Ion Ratio Lower Upper

168 100

99 48.1 36.9 55.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.67

250000

200000

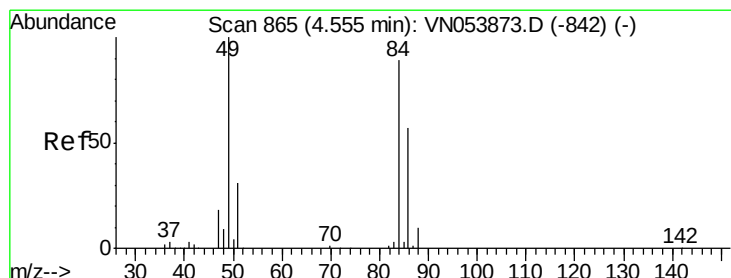
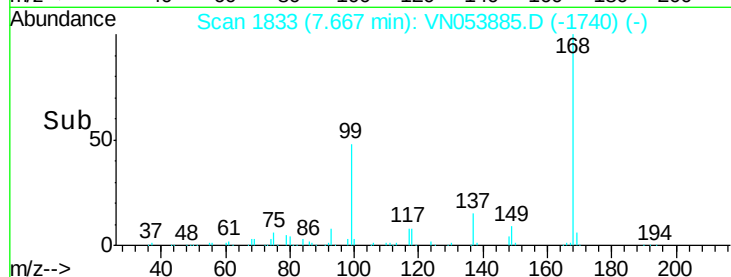
150000

100000

50000

0

Time-->



#20

Methylene Chloride

Concen: 0.220 ug/l

RT: 4.55 min Scan# 865

Delta R.T. 0.00 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Tgt Ion: 84 Resp: 1389

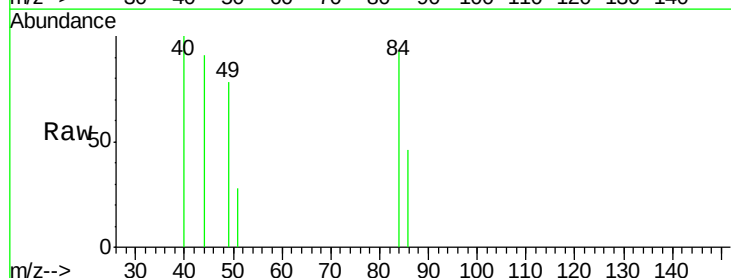
Ion Ratio Lower Upper

84 100

49 84.0 89.7 134.5#

51 29.7 27.8 41.8

86 49.3 51.3 76.9#



Abundance Ion 83.90 (83.60 to 84.60): VNO

Ion 48.90 (48.60 to 49.60): VNO

Ion 50.90 (50.60 to 51.60): VNO

Ion 85.90 (85.60 to 86.60): VNO

4.55

1000

800

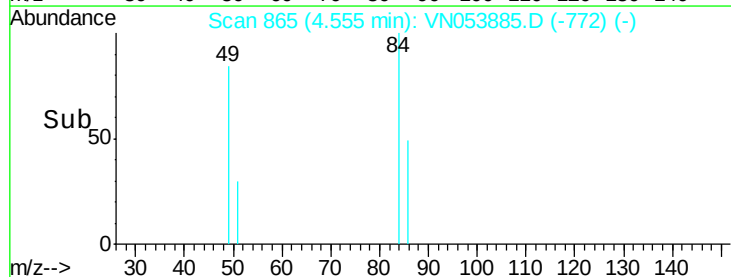
600

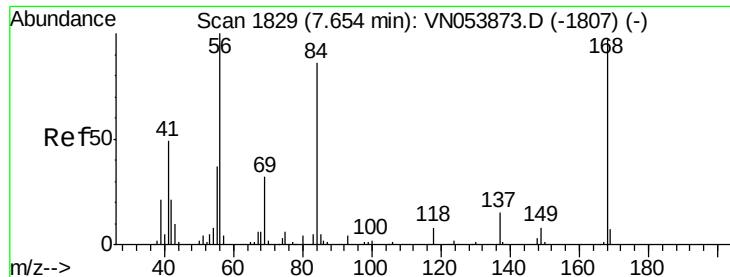
400

200

0

Time-->





#31

Cyclohexane

Concen: 0.326 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.01 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampleId :

TB-01-190219

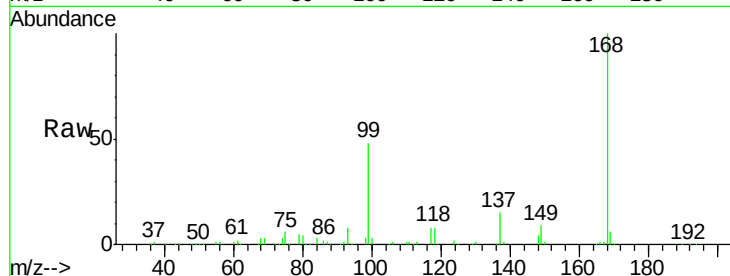
Tot Ion: 56 Resp: 8385

Ion Ratio Lower Upper

56 100

69 197.7 26.0 39.0#

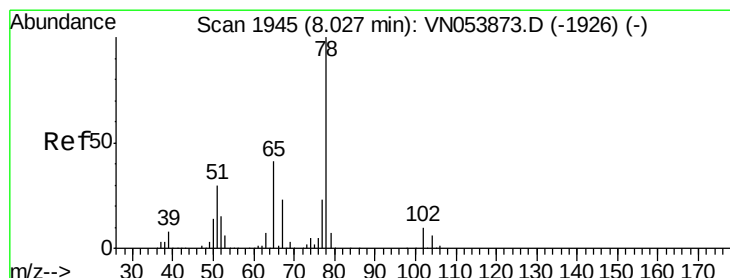
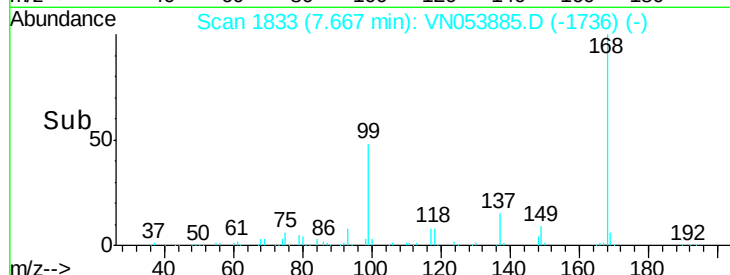
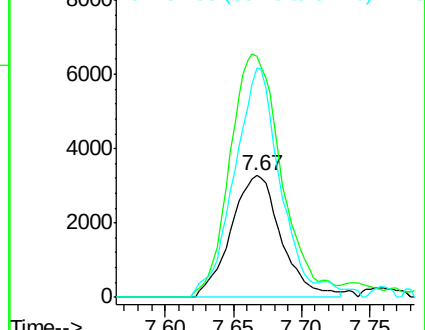
84 188.2 69.1 103.7#



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: 52.623 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN053885.D

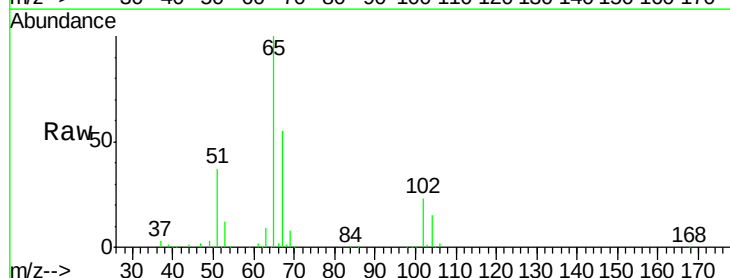
Acq: 21 Feb 2019 12:03

Tgt Ion: 65 Resp: 322486

Ion Ratio Lower Upper

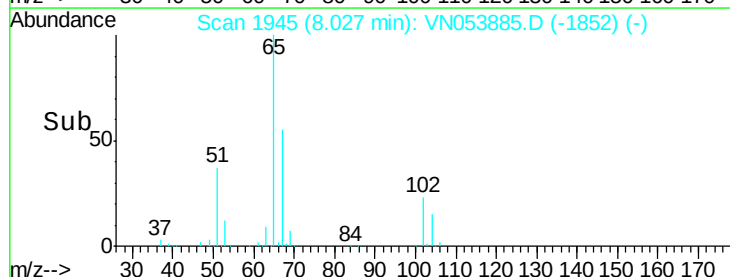
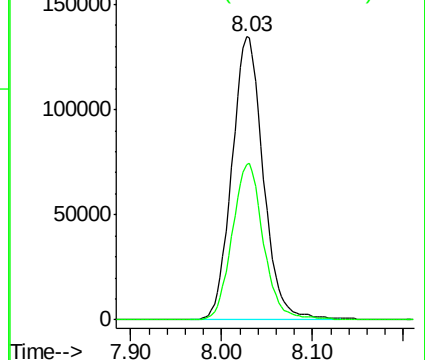
65 100

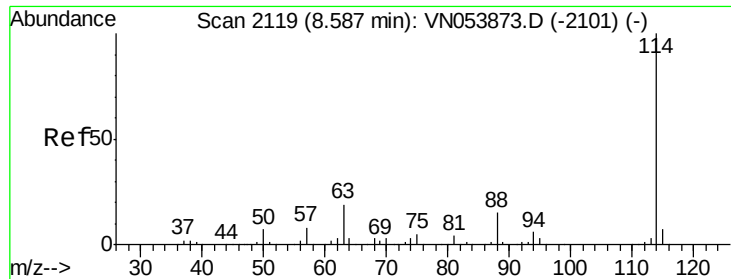
67 55.1 0.0 111.8



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

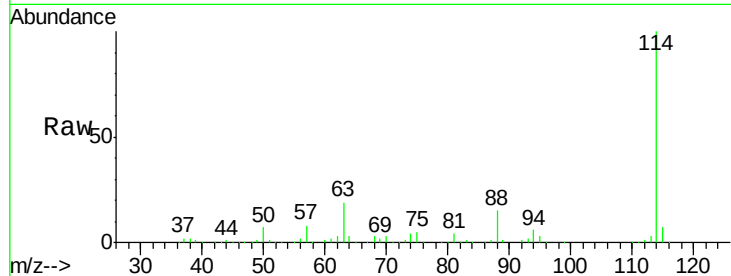




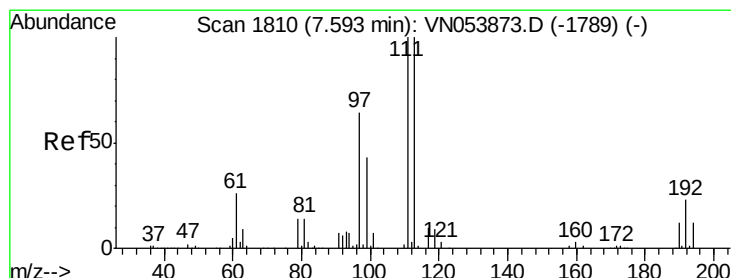
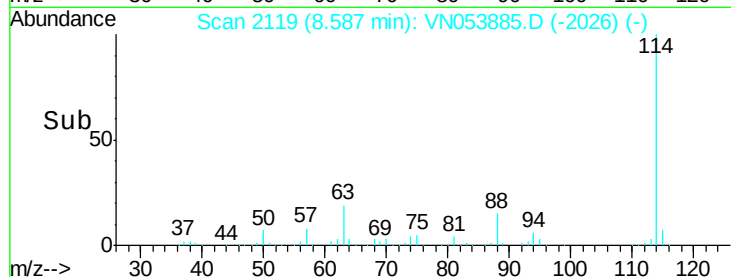
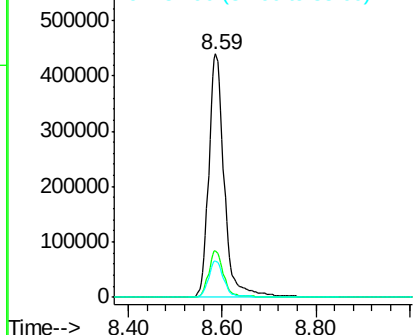
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.59 min Scan# 2119  
Delta R.T. 0.00 min  
Lab File: VN053885.D  
Acq: 21 Feb 2019 12:03

Instrument :  
MSVOA\_N  
ClientSampleId :  
TB-01-190219

Tot Ion:114 Resp: 1009822  
Ion Ratio Lower Upper  
114 100  
63 19.2 0.0 37.4  
88 14.9 0.0 30.4

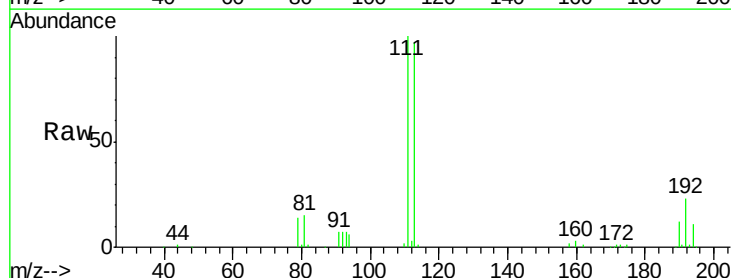


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VN  
Ion 87.90 (87.60 to 88.60): VN

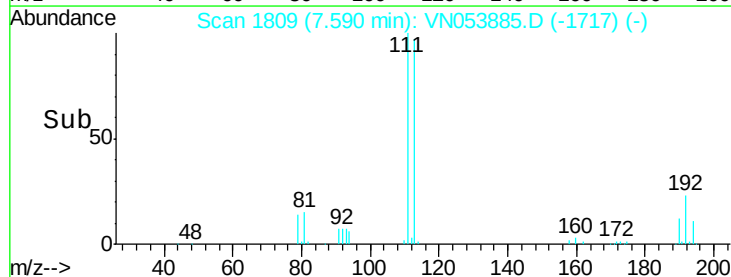
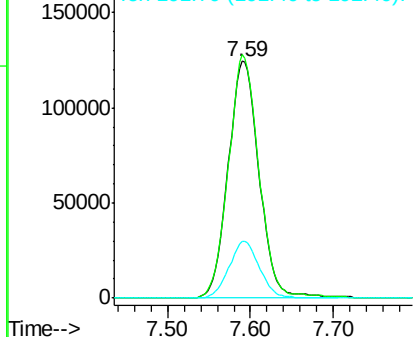


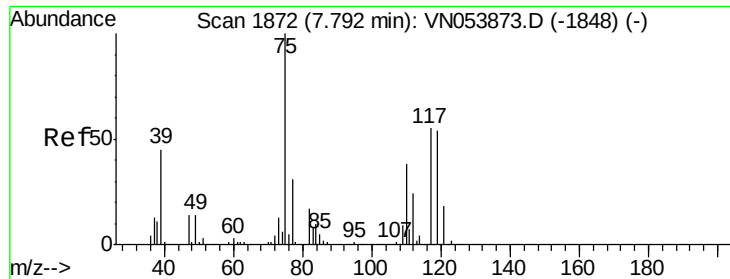
#35  
Dibromofluoromethane  
Concen: 48.842 ug/l  
RT: 7.59 min Scan# 1809  
Delta R.T. -0.00 min  
Lab File: VN053885.D  
Acq: 21 Feb 2019 12:03

Tgt Ion:113 Resp: 323692  
Ion Ratio Lower Upper  
113 100  
111 101.3 81.1 121.7  
192 23.6 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: 3.762 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.13 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampleId :

TB-01-190219

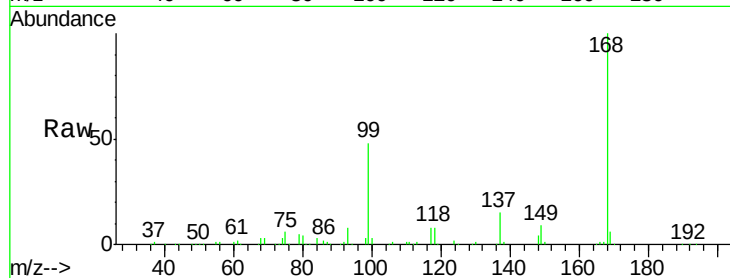
Tot Ion: 75 Resp: 34818

Ion Ratio Lower Upper

75 100

110 9.4 19.0 57.0#

77 0.0 25.4 38.0#

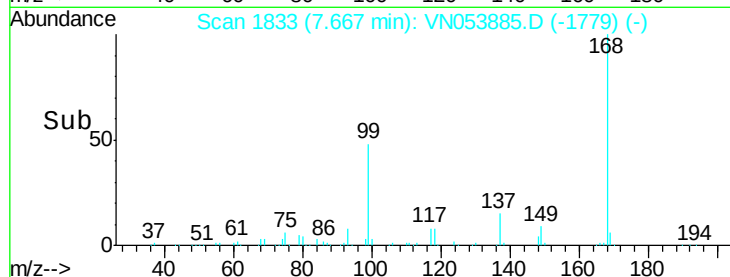


Abundance Ion 74.90 (74.60 to 75.60): VN053885.D (-1779) (-)

Ion 109.90 (109.60 to 110.60): VN053885.D (-1779) (-)

Ion 76.90 (76.60 to 77.60): VN053885.D (-1779) (-)

Time-->



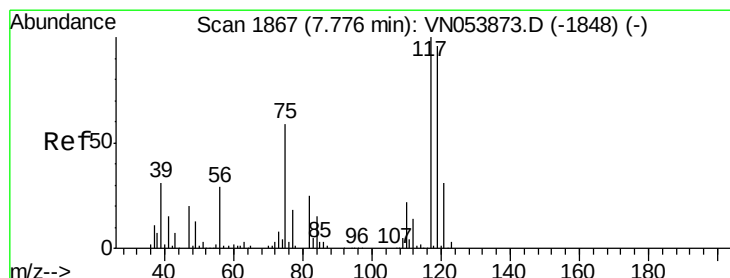
Abundance

Ion 74.90 (74.60 to 75.60): VN053885.D (-1779) (-)

Ion 109.90 (109.60 to 110.60): VN053885.D (-1779) (-)

Ion 76.90 (76.60 to 77.60): VN053885.D (-1779) (-)

Time-->



#38

Carbon Tetrachloride

Concen: 5.346 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

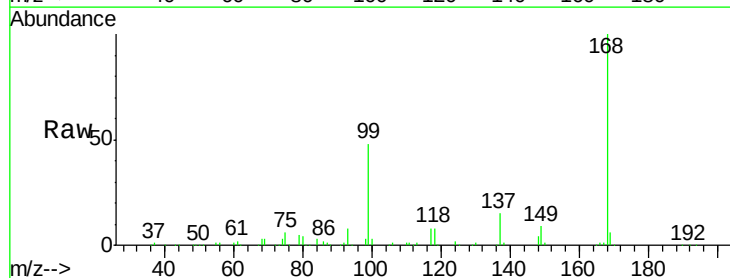
Tgt Ion: 117 Resp: 49428

Ion Ratio Lower Upper

117 100

119 5.7 76.2 114.2#

121 0.0 24.6 36.8#

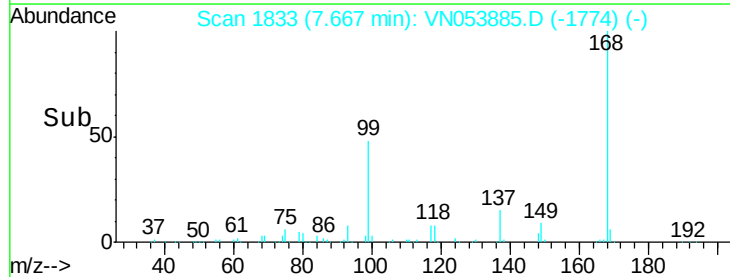


Abundance Ion 116.80 (116.50 to 117.50): VN053885.D (-1774) (-)

Ion 118.80 (118.50 to 119.50): VN053885.D (-1774) (-)

Ion 120.80 (120.50 to 121.50): VN053885.D (-1774) (-)

Time-->



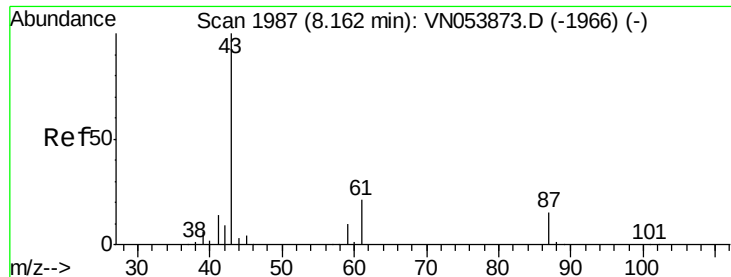
Abundance

Ion 116.80 (116.50 to 117.50): VN053885.D (-1774) (-)

Ion 118.80 (118.50 to 119.50): VN053885.D (-1774) (-)

Ion 120.80 (120.50 to 121.50): VN053885.D (-1774) (-)

Time-->



#43

Isopropyl Acetate

Concen: 2.029 ug/l

RT: 8.24 min Scan# 2012

Delta R.T. 0.08 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampleId :

TB-01-190219

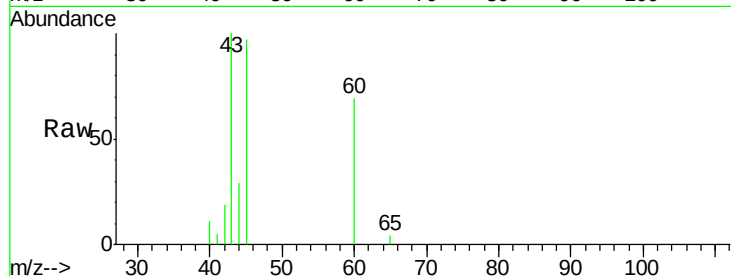
Tot Ion: 43 Resp: 20030

Ion Ratio Lower Upper

43 100

61 0.0 17.4 26.0#

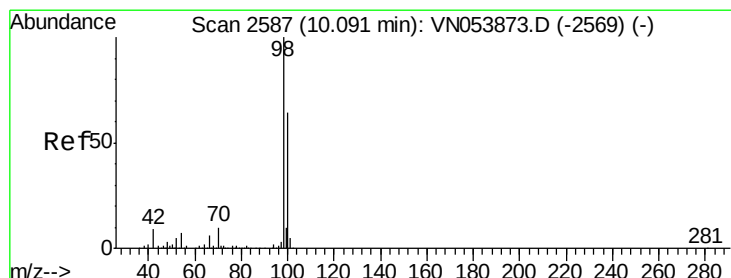
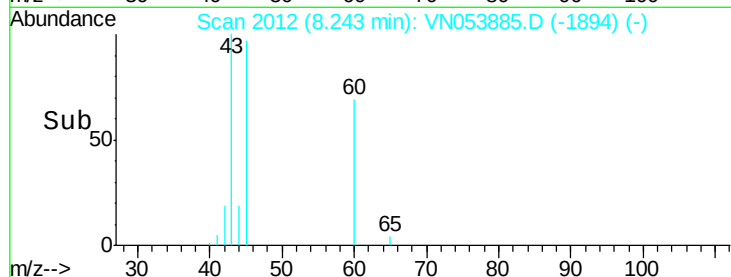
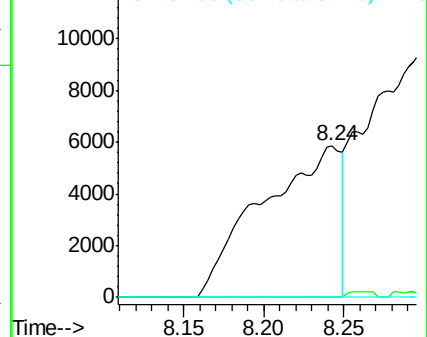
87 0.0 11.5 17.3#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#50

Toluene-d8

Concen: 51.903 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN053885.D

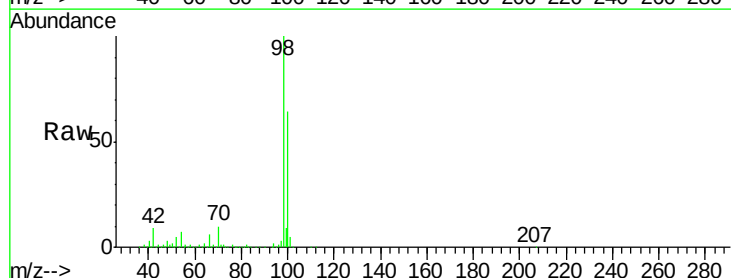
Acq: 21 Feb 2019 12:03

Tgt Ion: 98 Resp: 1242363

Ion Ratio Lower Upper

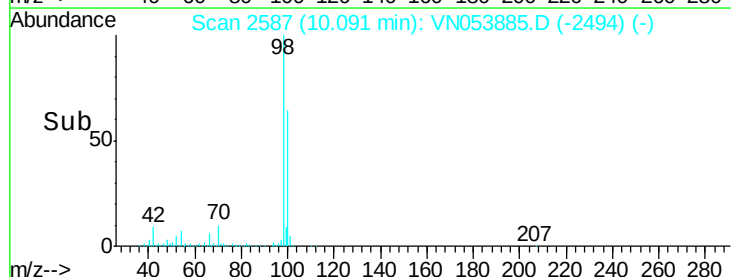
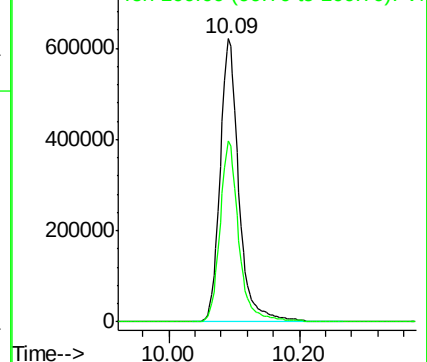
98 100

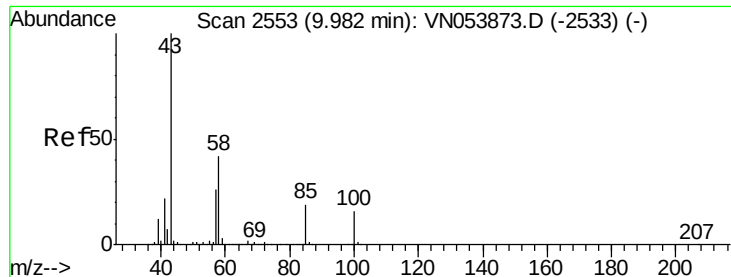
100 64.0 51.9 77.9



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





#51

4-Methyl-2-Pentanone

Concen: 6.592 ug/l

RT: 9.99 min Scan# 2555

Delta R.T. 0.01 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampleId :

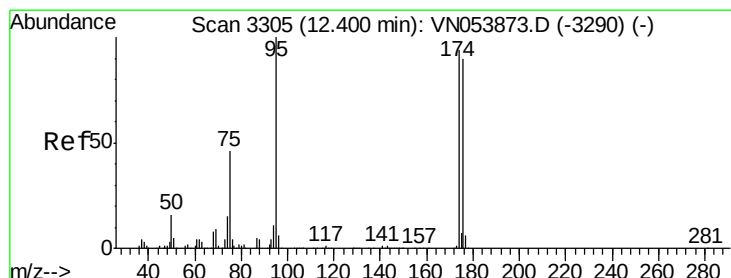
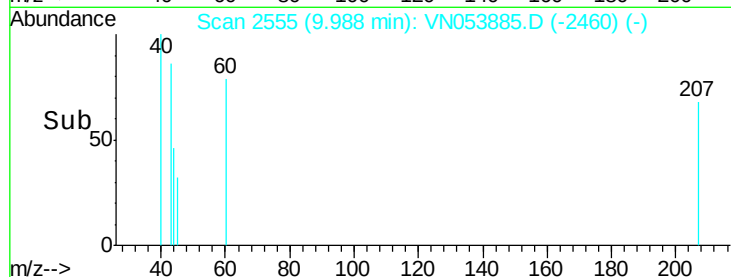
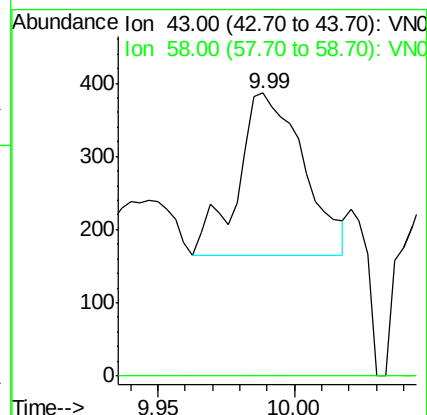
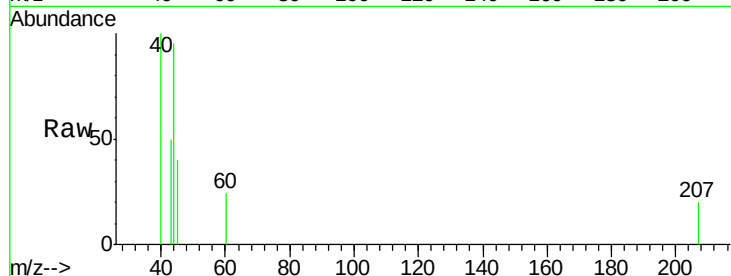
TB-01-190219

Tot Ion: 43 Resp: 371

Ion Ratio Lower Upper

43 100

58 0.0 32.7 49.1#



#62

4-Bromofluorobenzene

Concen: 52.374 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

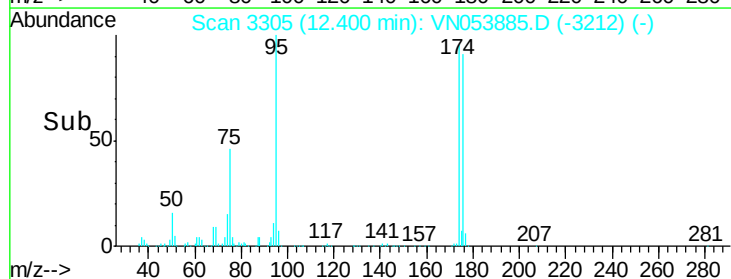
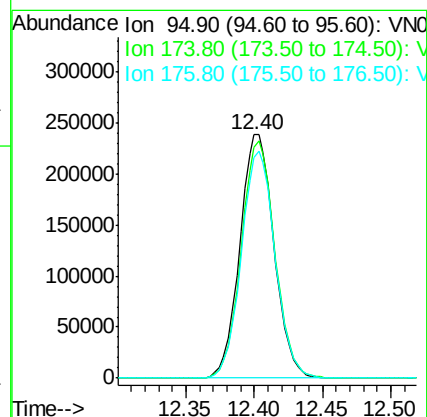
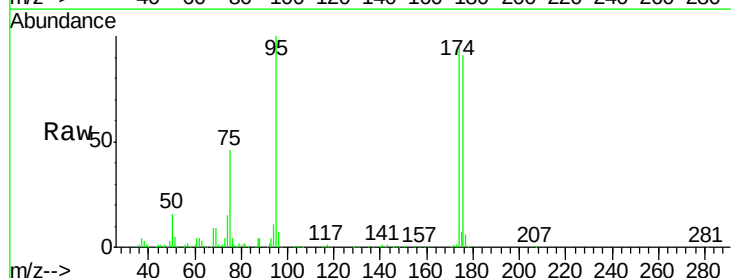
Tgt Ion: 95 Resp: 413876

Ion Ratio Lower Upper

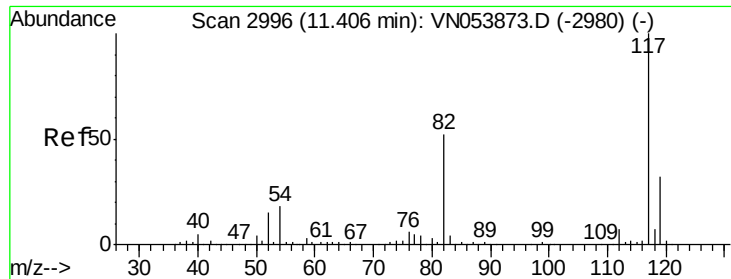
95 100

174 96.0 0.0 188.8

176 92.2 0.0 182.6



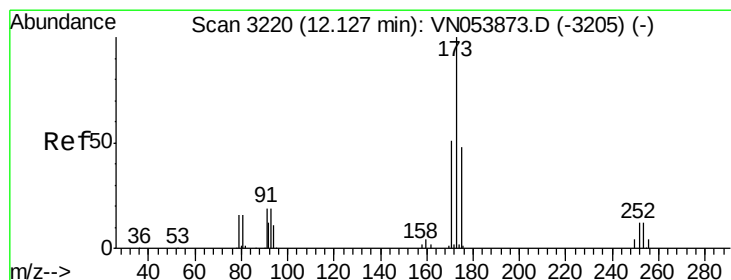
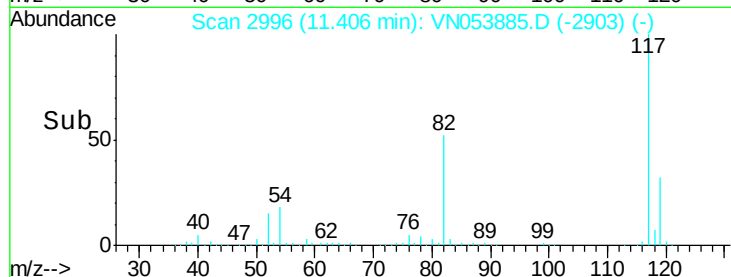
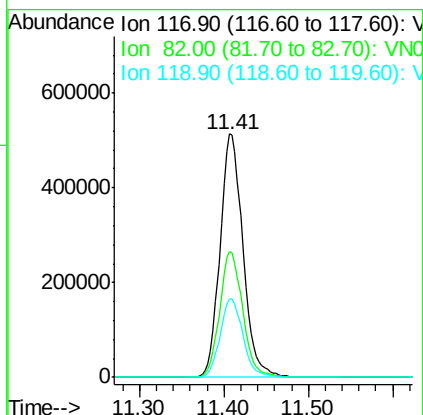
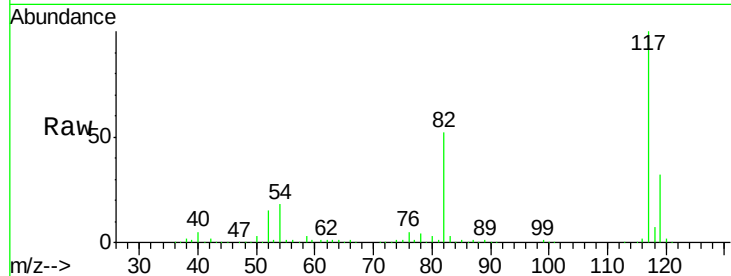




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. 0.00 min  
Lab File: VN053885.D  
Acq: 21 Feb 2019 12:03

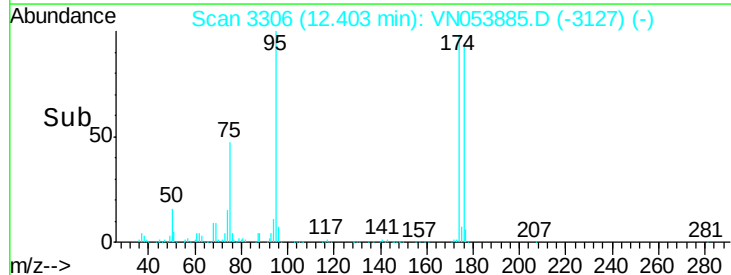
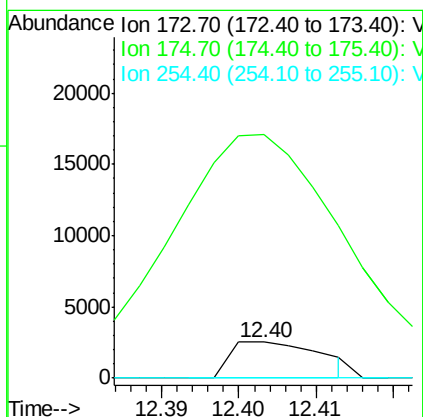
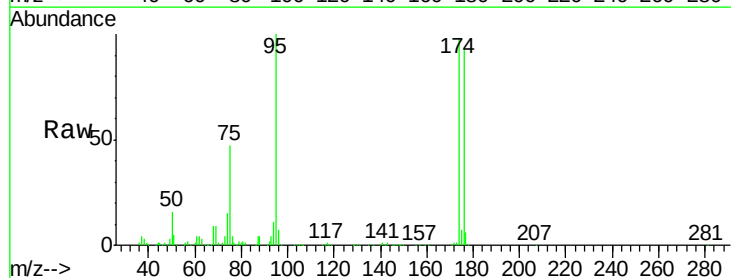
Instrument :  
MSVOA\_N  
ClientSampled :  
TB-01-190219

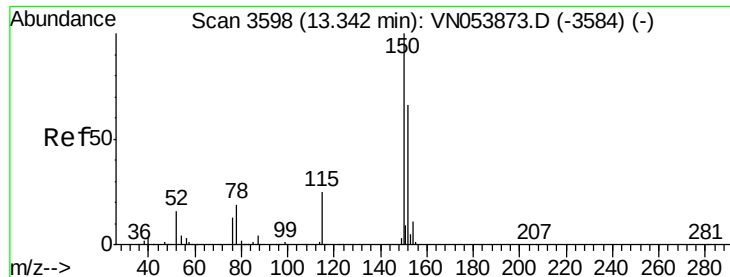
Tot Ion:117 Resp: 966847  
Ion Ratio Lower Upper  
117 100  
82 51.9 41.4 62.2  
119 32.4 25.3 37.9



#71  
Bromoform  
Concen: 0.394 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.28 min  
Lab File: VN053885.D  
Acq: 21 Feb 2019 12:03

Tgt Ion:173 Resp: 2065  
Ion Ratio Lower Upper  
173 100  
175 1173.1 24.3 72.8#  
254 0.0 0.2 0.2#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampleId :

TB-01-190219

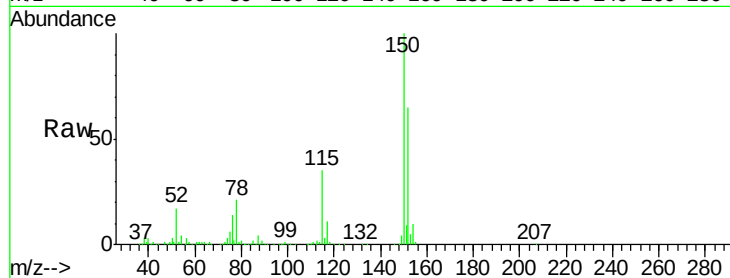
Tot Ion:152 Resp: 377606

Ion Ratio Lower Upper

152 100

115 54.6 27.2 81.6

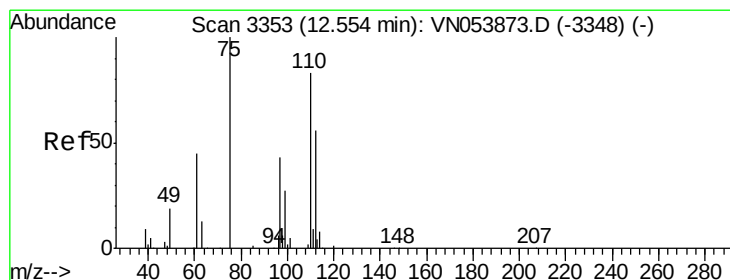
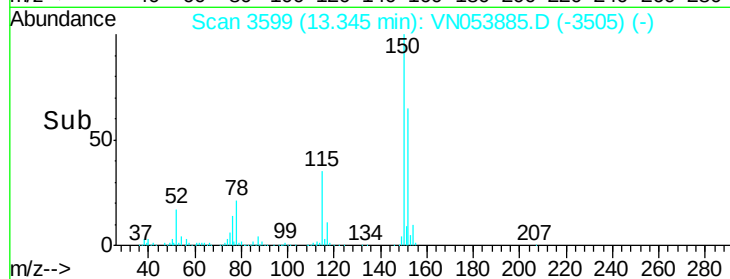
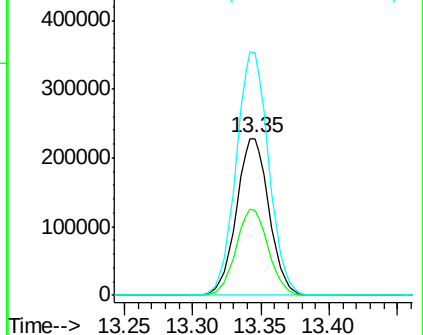
150 155.7 0.0 348.2



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: 34.318 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN053885.D

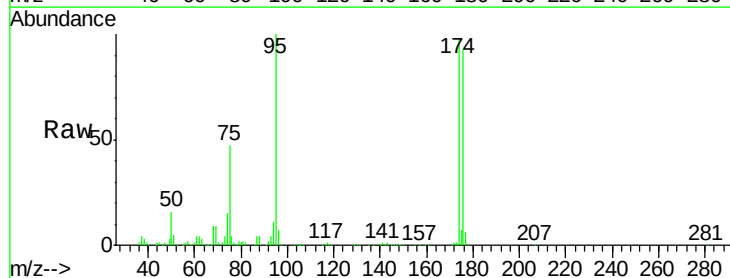
Acq: 21 Feb 2019 12:03

Tgt Ion: 75 Resp: 190235

Ion Ratio Lower Upper

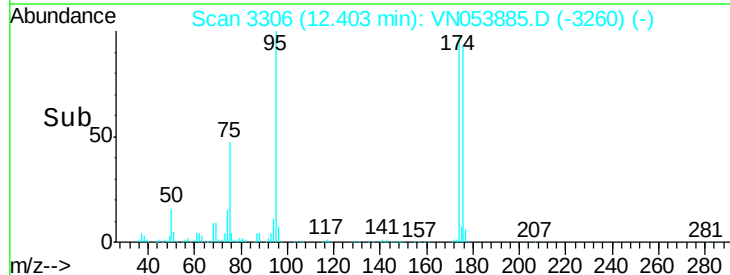
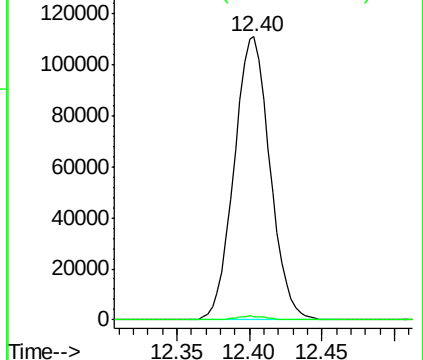
75 100

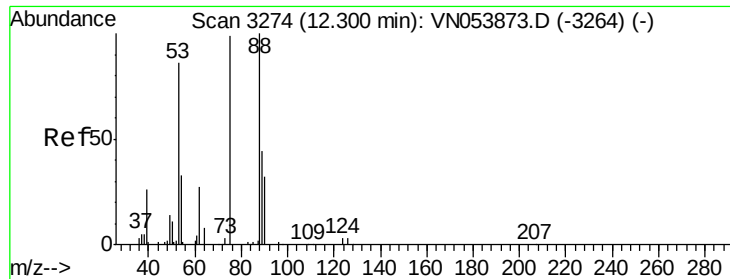
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V

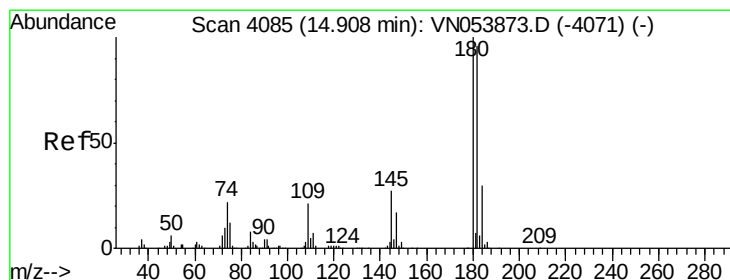
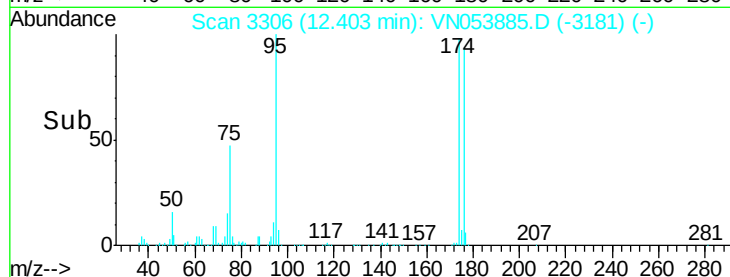
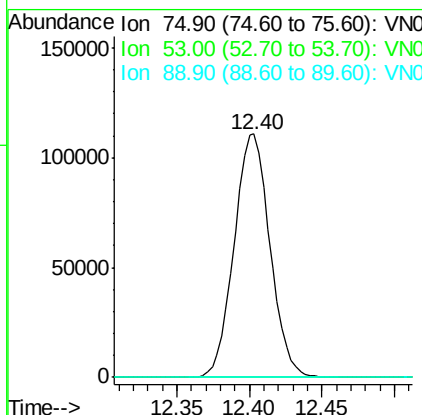
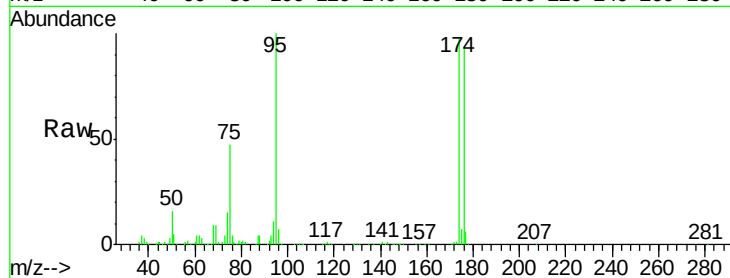




#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 113.294 ug/l  
 RT: 12.40 min Scan# 3306  
 Delta R.T. 0.10 min  
 Lab File: VN053885.D  
 Acq: 21 Feb 2019 12:03

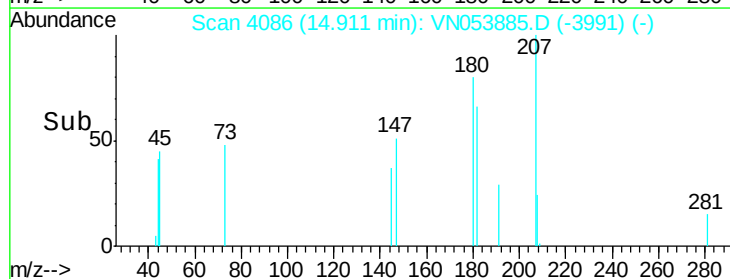
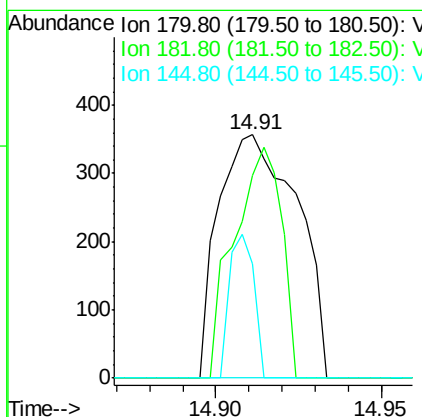
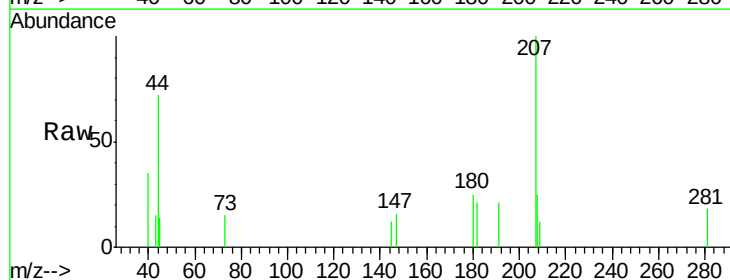
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 TB-01-190219

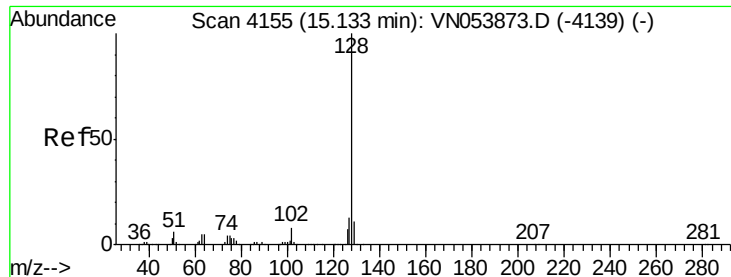
Tot Ion: 75 Resp: 190235  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 68.6 102.8#  
 89 0.0 35.3 52.9#



#93  
 1,2,4-Trichlorobenzene  
 Concen: 3.002 ug/l  
 RT: 14.91 min Scan# 4086  
 Delta R.T. 0.00 min  
 Lab File: VN053885.D  
 Acq: 21 Feb 2019 12:03

Tgt Ion: 180 Resp: 590  
 Ion Ratio Lower Upper  
 180 100  
 182 56.9 48.6 145.9  
 145 18.5 13.8 41.3





#95

Naphthalene

Concen: 4.673 ug/l

RT: 15.14 min Scan# 4157

Delta R.T. 0.01 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

Instrument :

MSVOA\_N

ClientSampleId :

TB-01-190219

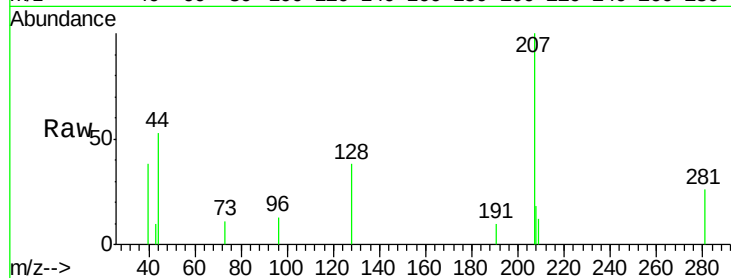
Tot Ion:128 Resp: 994

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.2#

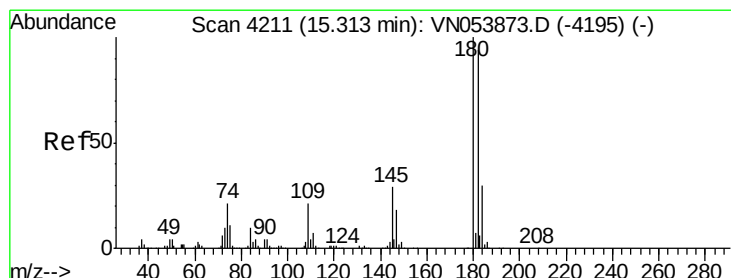
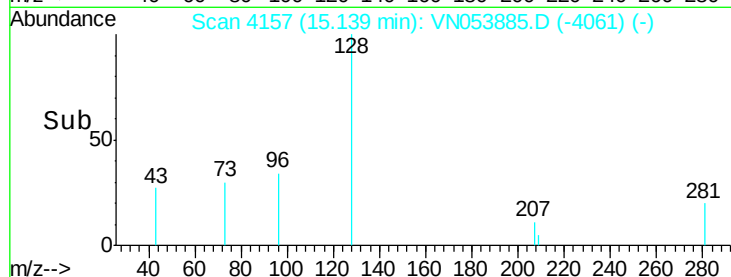
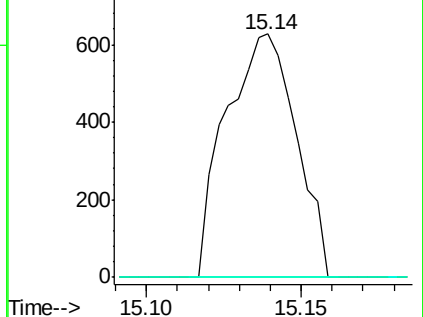
129 0.0 8.6 12.8#



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: 2.609 ug/l

RT: 15.32 min Scan# 4214

Delta R.T. 0.01 min

Lab File: VN053885.D

Acq: 21 Feb 2019 12:03

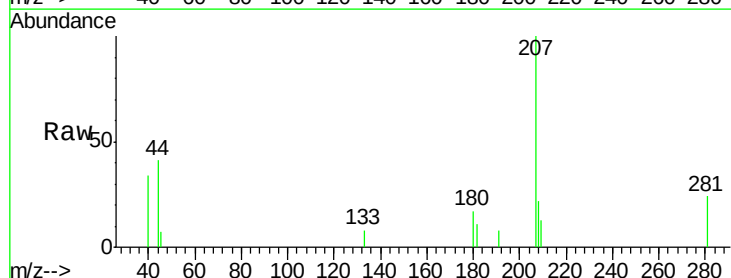
Tgt Ion:180 Resp: 334

Ion Ratio Lower Upper

180 100

182 184.7 47.3 141.8#

145 0.0 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

