

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN060719\  
 Data File : VN056066.D  
 Acq On : 7 Jun 2019 00:33  
 Operator : JC/SP  
 Sample : K3190-13  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 39 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 BPS1-TT-MW306S-20190604

Quant Time: Jun 07 05:32:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 04 11:02:09 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 326969   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 496455   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 457471   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 140500   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 173293   | 53.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.76% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 152848   | 50.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.36% |      |
| 50) Toluene-d8            | 10.09  | 98  | 625600   | 53.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.76% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 192071   | 48.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.38%  |      |

## Target Compounds

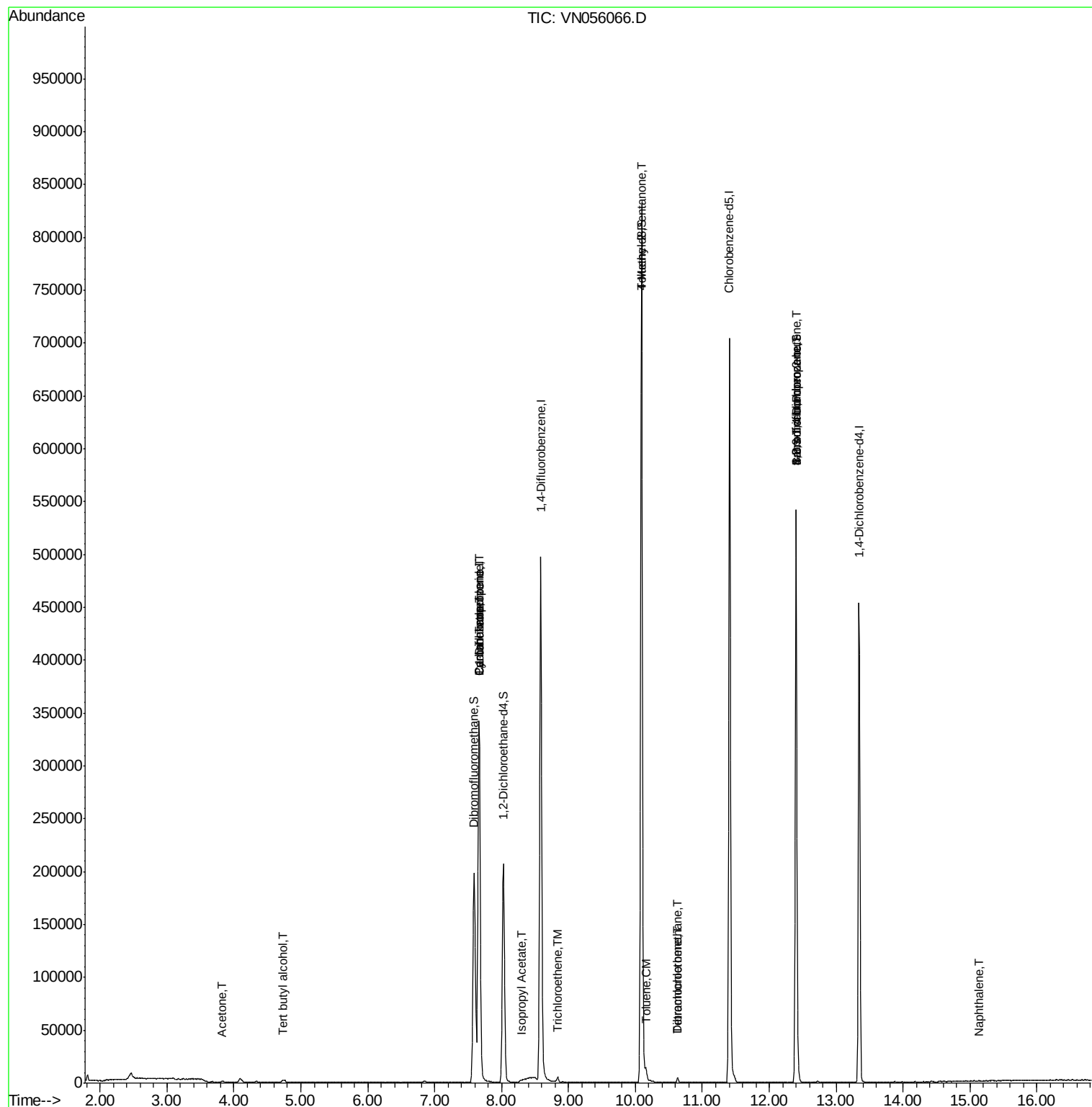
|                                |       |     |       |           |        | Qvalue |
|--------------------------------|-------|-----|-------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.73  | 59  | 1413  | 2.501     | ug/l # | 74     |
| 16) Acetone                    | 3.82  | 43  | 2036  | 1.311     | ug/l # | 81     |
| 18) Methyl Acetate             | 4.33  | 43  | 1074  | Below Cal | #      | 68     |
| 31) Cyclohexane                | 7.67  | 56  | 4623  | 0.897     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.66  | 75  | 19286 | 4.518     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.66  | 117 | 26707 | 6.786     | ug/l # | 15     |
| 43) Isopropyl Acetate          | 8.30  | 43  | 1861  | 0.302     | ug/l # | 53     |
| 44) Trichloroethene            | 8.84  | 130 | 2067  | 0.555     | ug/l   | 100    |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43  | 2504  | 0.651     | ug/l # | 1      |
| 52) Toluene                    | 10.16 | 92  | 3611  | 0.448     | ug/l   | 96     |
| 60) Dibromochloromethane       | 10.63 | 129 | 1011  | 2.725     | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.63 | 164 | 1093  | 0.276     | ug/l # | 83     |
| 71) Bromoform                  | 12.40 | 173 | 1121  | 3.144     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75  | 85761 | 33.173    | ug/l # | 100    |
| 79) 2-Chlorotoluene            | 12.40 | 91  | 537   | Below Cal | #      | 39     |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75  | 85761 | 110.473   | ug/l # | 15     |
| 95) Naphthalene                | 15.13 | 128 | 130   | 3.869     | ug/l # | 69     |

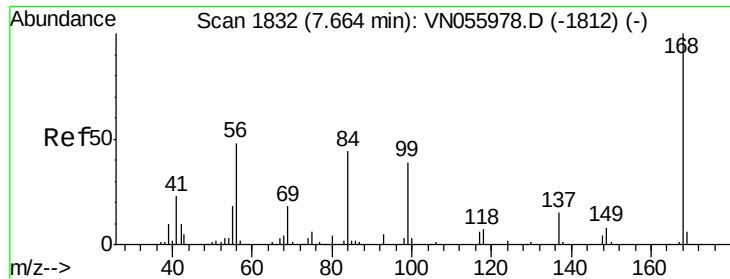
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN060719\  
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Sample : K3190-13  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 39 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
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BPS1-TT-MW306S-20190604

Quant Time: Jun 07 05:32:57 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jun 04 11:02:09 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: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

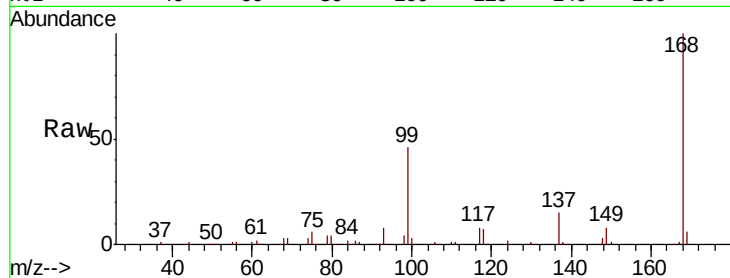
BPS1-TT-MW306S-20190604

Tot Ion:168 Resp: 326969

Ion Ratio Lower Upper

168 100

99 46.2 37.2 55.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.66

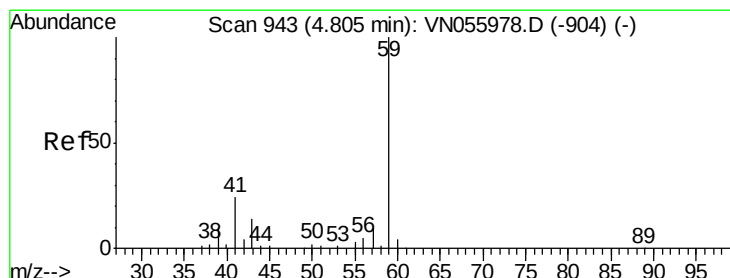
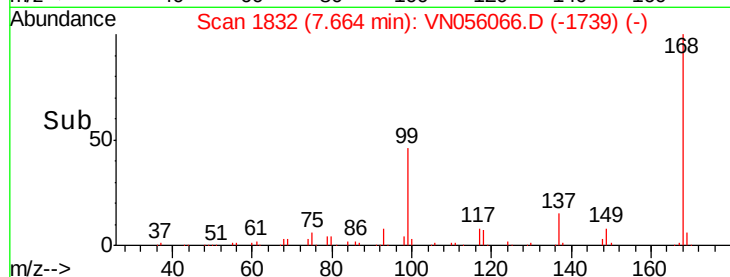
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 2.501 ug/l

RT: 4.73 min Scan# 921

Delta R.T. -0.07 min

Lab File: VN056066.D

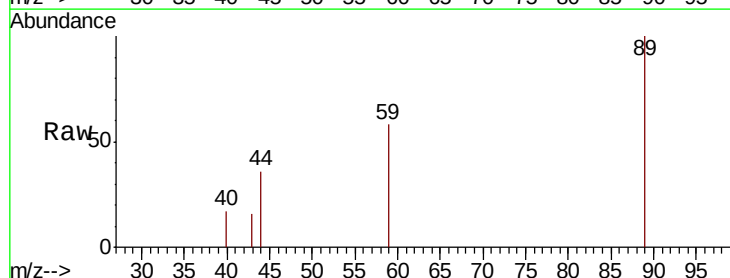
Acq: 7 Jun 2019 00:33

Tgt Ion: 59 Resp: 1413

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.6#



Abundance Ion 59.00 (58.70 to 59.70): VN

Ion 57.00 (56.70 to 57.70): VN

4.73

800

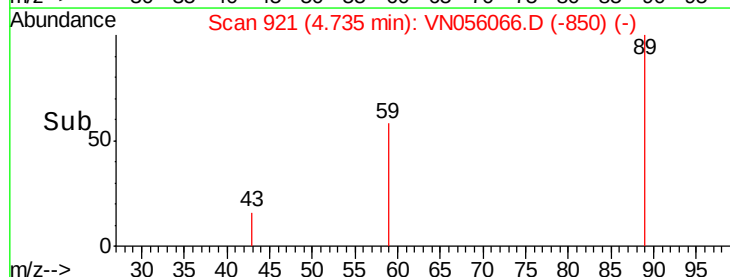
600

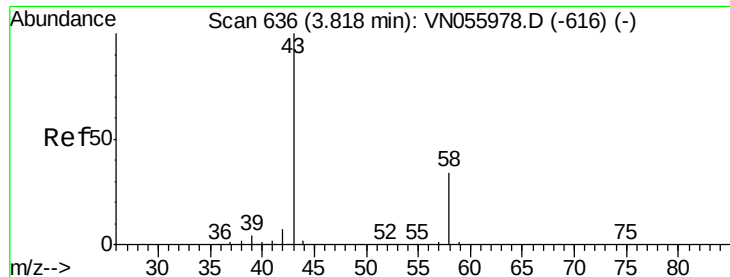
400

200

0

Time-->





#16

Acetone

Concen: 1.311 ug/l

RT: 3.82 min Scan# 638

Delta R.T. 0.01 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

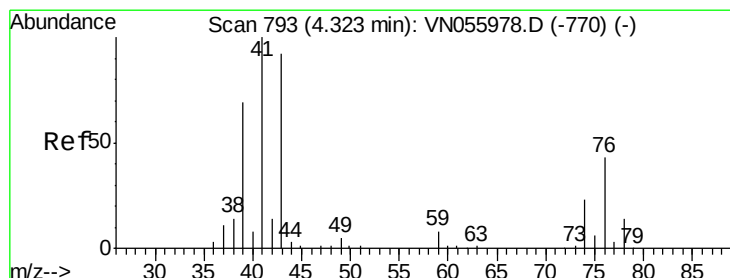
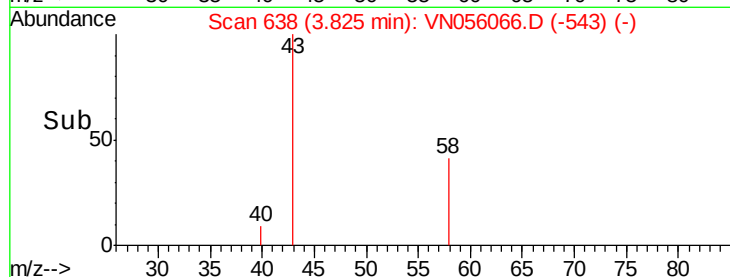
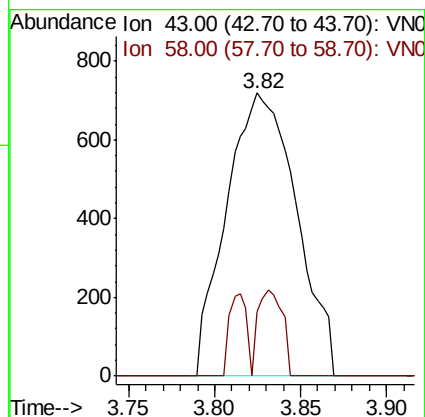
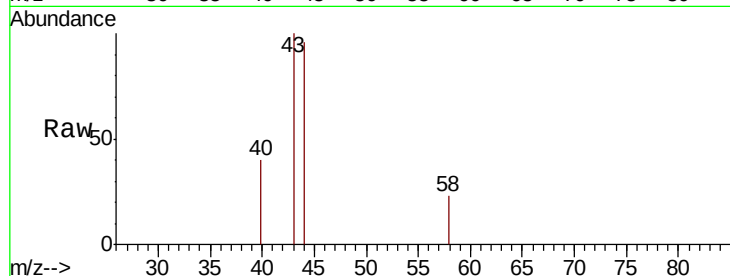
BPS1-TT-MW306S-20190604

Tot Ion: 43 Resp: 2036

Ion Ratio Lower Upper

43 100

58 22.5 26.6 39.8#



#18

Methyl Acetate

Concen: Below Cal

RT: 4.33 min Scan# 795

Delta R.T. 0.01 min

Lab File: VN056066.D

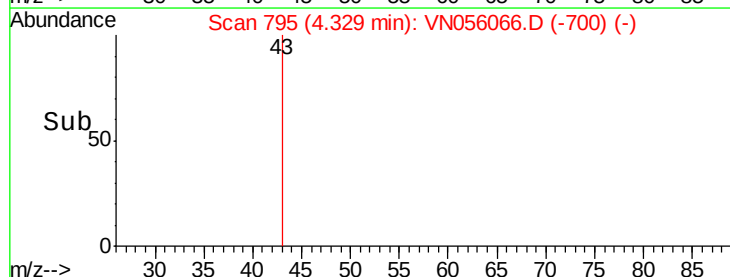
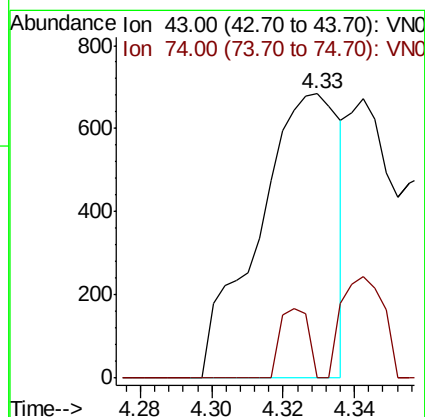
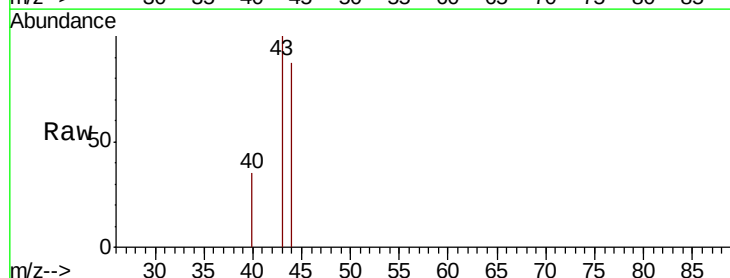
Acq: 7 Jun 2019 00:33

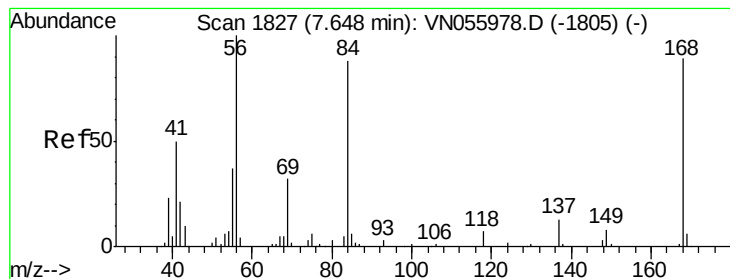
Tgt Ion: 43 Resp: 1074

Ion Ratio Lower Upper

43 100

74 8.4 19.3 28.9#





#31

Cyclohexane

Concen: 0.897 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. 0.02 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

BPS1-TT-MW306S-20190604

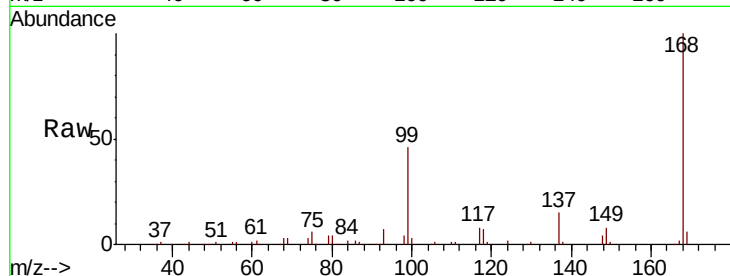
Tot Ion: 56 Resp: 4623

Ion Ratio Lower Upper

56 100

69 179.2 25.6 38.4#

84 160.4 67.4 101.0#

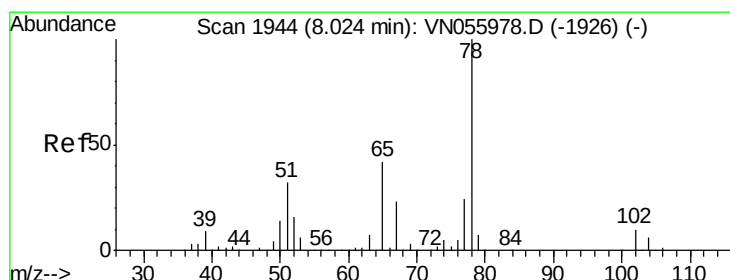
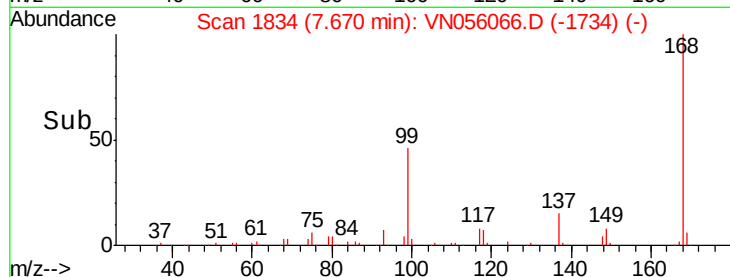
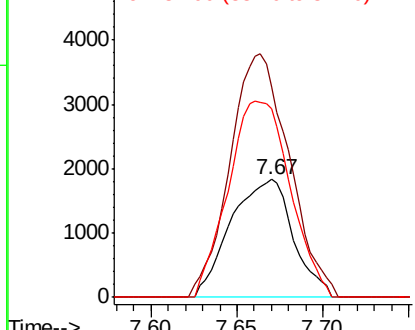


Abundance

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: 53.378 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN056066.D

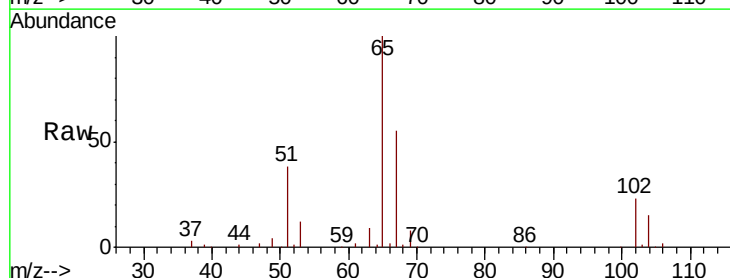
Acq: 7 Jun 2019 00:33

Tgt Ion: 65 Resp: 173293

Ion Ratio Lower Upper

65 100

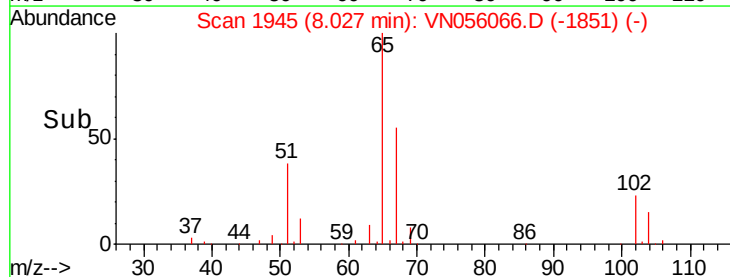
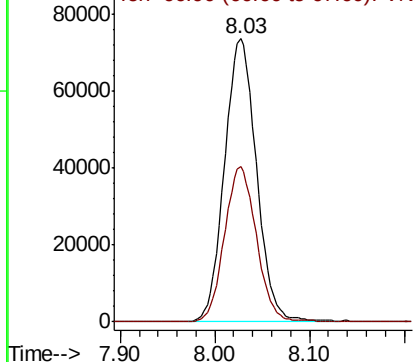
67 54.7 0.0 109.2

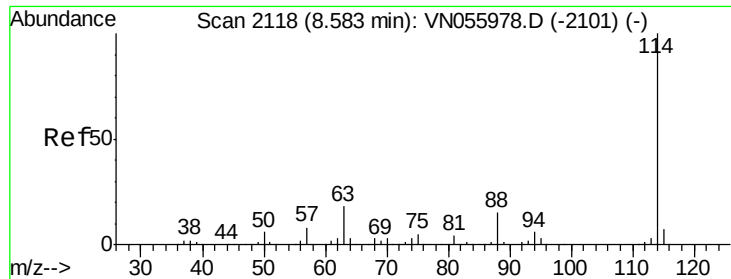


Abundance

Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

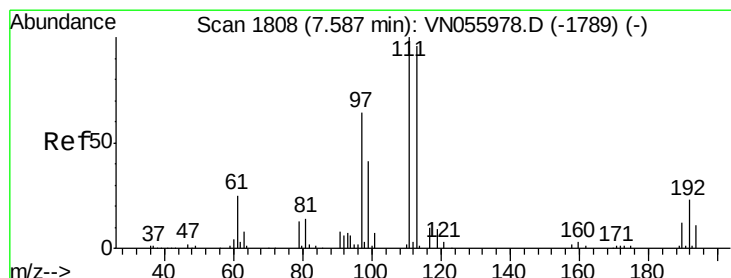
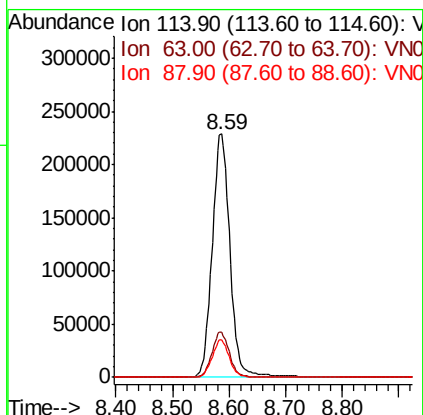
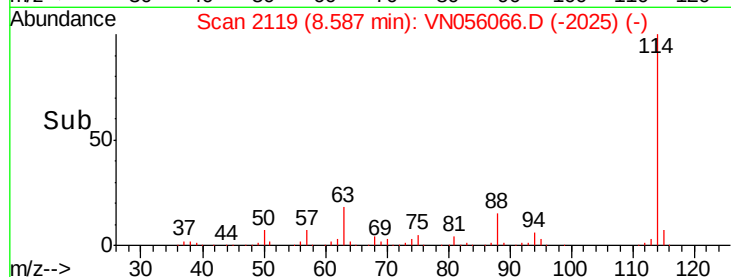
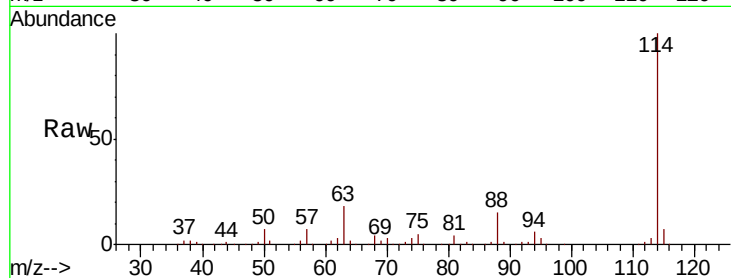




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.59 min Scan# 2119  
Delta R.T. 0.00 min  
Lab File: VN056066.D  
Acq: 7 Jun 2019 00:33

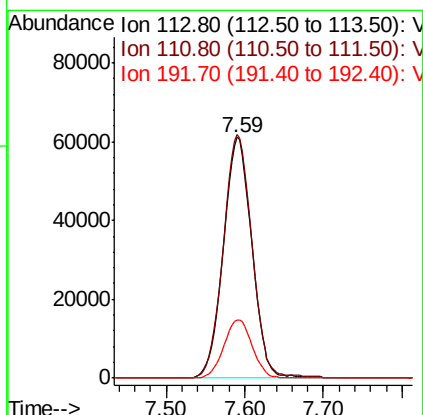
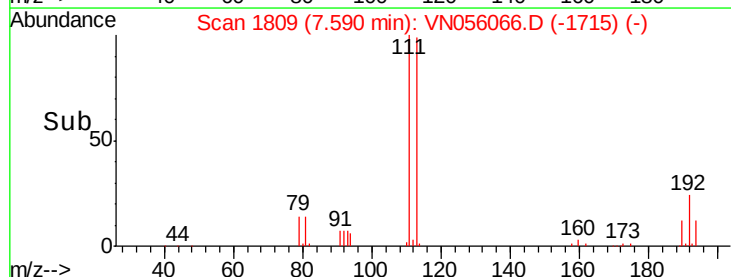
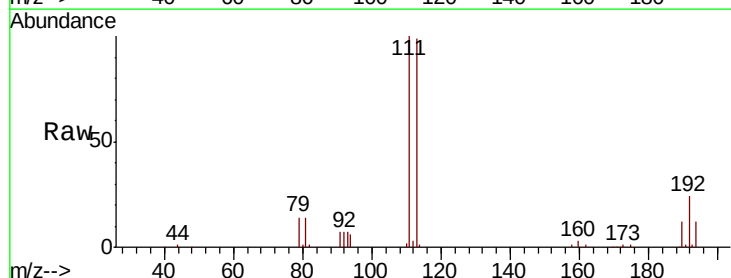
Instrument :  
MSVOA\_N  
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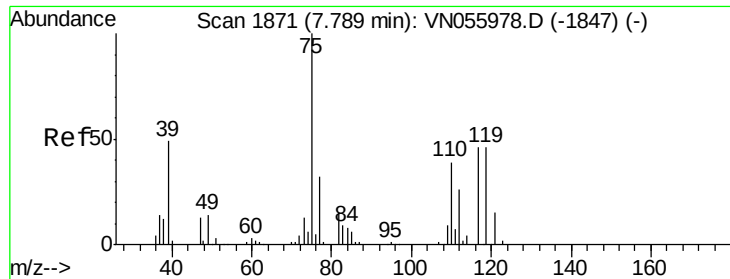
Tot Ion:114 Resp: 496455  
Ion Ratio Lower Upper  
114 100  
63 18.5 0.0 39.2  
88 15.3 0.0 31.0



#35  
Dibromofluoromethane  
Concen: 50.181 ug/l  
RT: 7.59 min Scan# 1809  
Delta R.T. 0.00 min  
Lab File: VN056066.D  
Acq: 7 Jun 2019 00:33

Tgt Ion:113 Resp: 152848  
Ion Ratio Lower Upper  
113 100  
111 101.9 81.9 122.9  
192 24.1 19.5 29.3

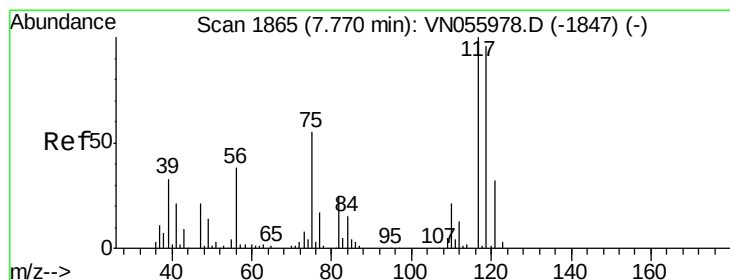
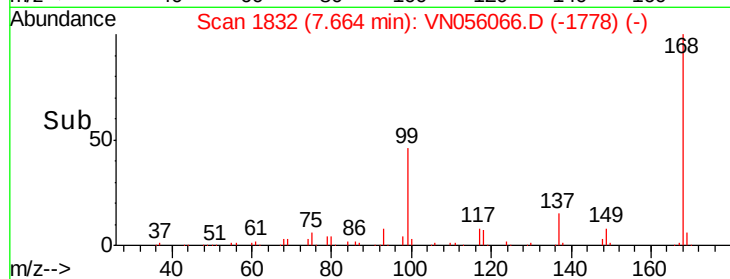
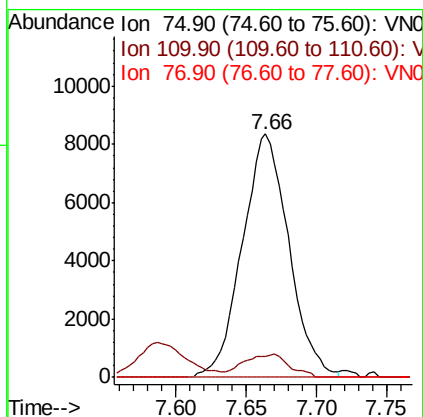
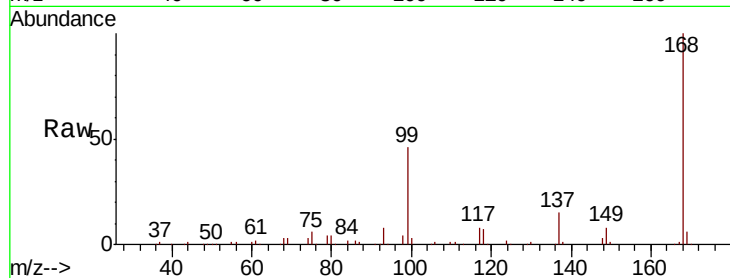




#36  
 1,1-Dichloropropene  
 Concen: 4.518 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.13 min  
 Lab File: VN056066.D  
 Acq: 7 Jun 2019 00:33

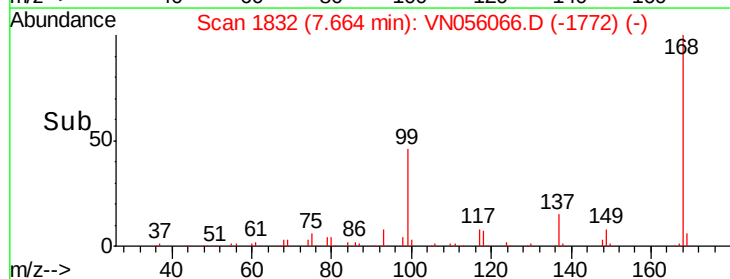
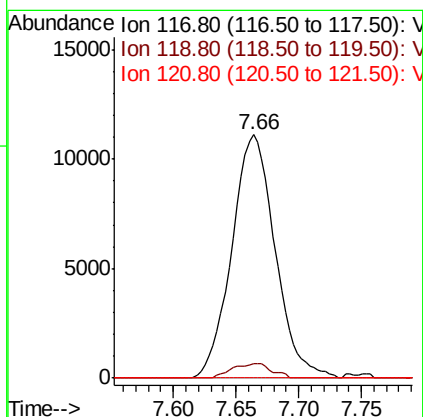
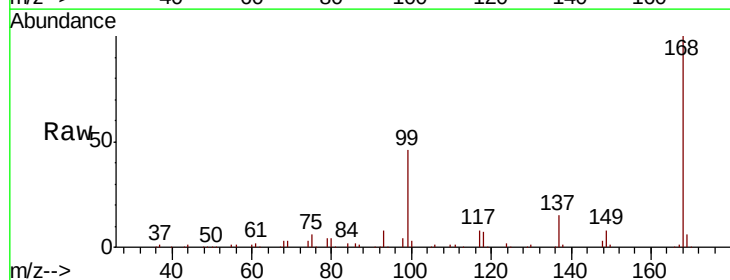
Instrument :  
 MSVOA\_N  
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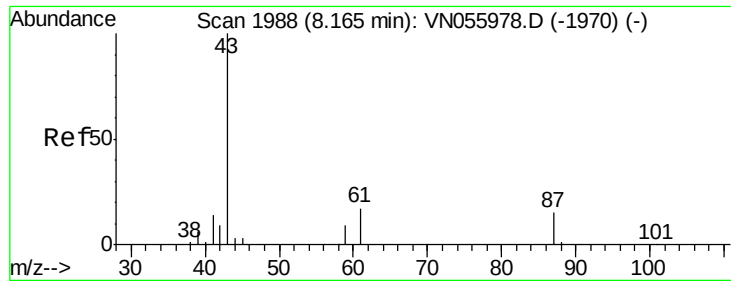
| Tot Ion   | 75    | Resp  | 19286 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 110       | 9.6   | 19.0  | 57.0# |
| 77        | 0.0   | 25.1  | 37.7# |



#38  
 Carbon Tetrachloride  
 Concen: 6.786 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.11 min  
 Lab File: VN056066.D  
 Acq: 7 Jun 2019 00:33

| Tgt Ion   | 117   | Resp  | 26707  |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 119       | 5.8   | 79.0  | 118.6# |
| 121       | 0.0   | 24.7  | 37.1#  |





#43

Isopropyl Acetate

Concen: 0.302 ug/l

RT: 8.30 min Scan# 2029

Delta R.T. 0.13 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

BPS1-TT-MW306S-20190604

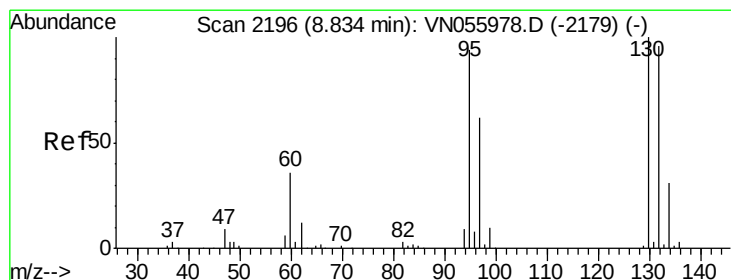
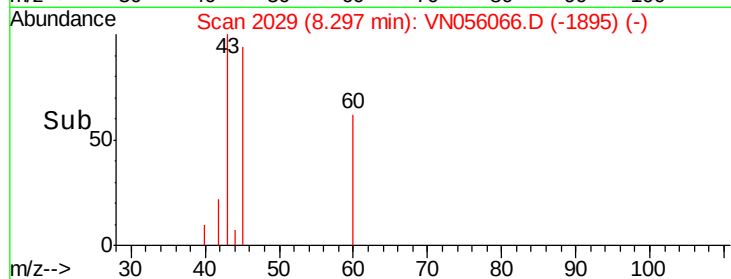
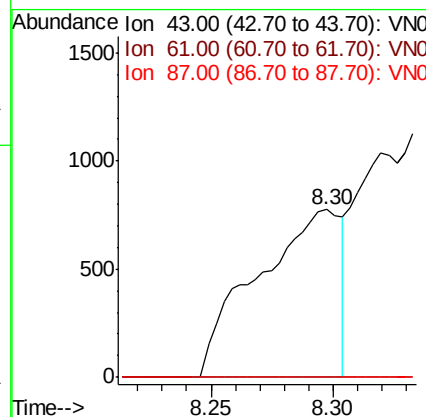
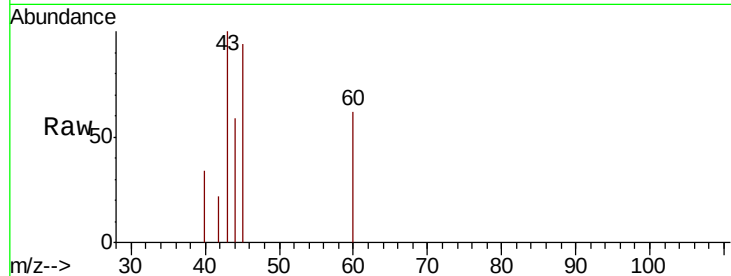
Tot Ion: 43 Resp: 1861

Ion Ratio Lower Upper

43 100

61 0.0 22.2 33.4#

87 0.0 11.4 17.2#



#44

Trichloroethene

Concen: 0.555 ug/l

RT: 8.84 min Scan# 2197

Delta R.T. 0.00 min

Lab File: VN056066.D

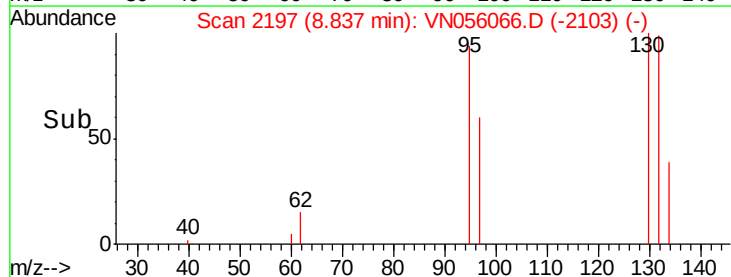
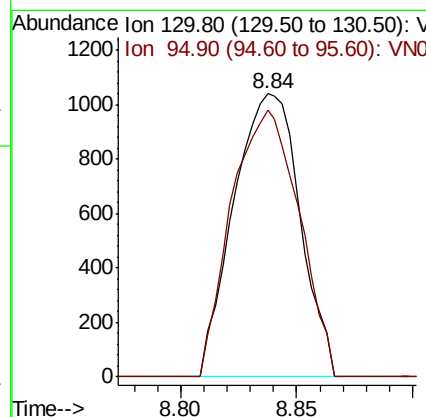
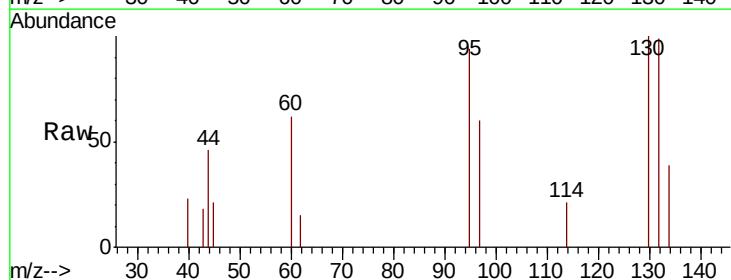
Acq: 7 Jun 2019 00:33

Tgt Ion: 130 Resp: 2067

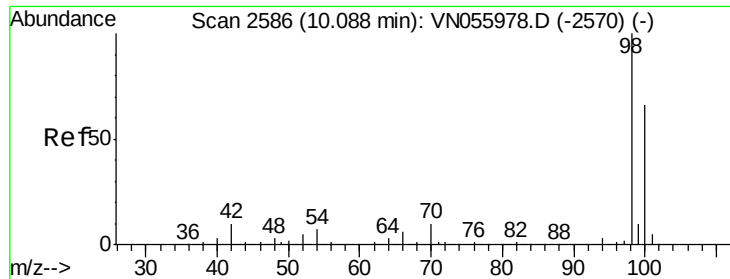
Ion Ratio Lower Upper

130 100

95 94.2 0.0 188.0







#50

Toluene-d8

Concen: 53.376 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

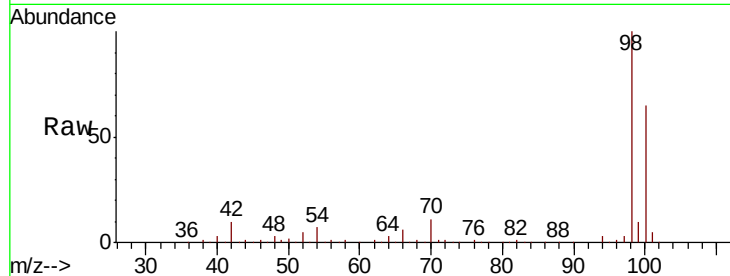
BPS1-TT-MW306S-20190604

Tot Ion: 98 Resp: 625600

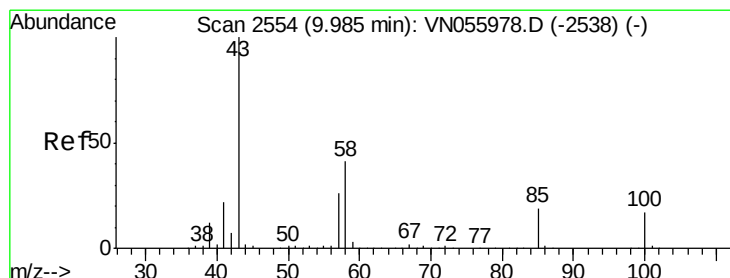
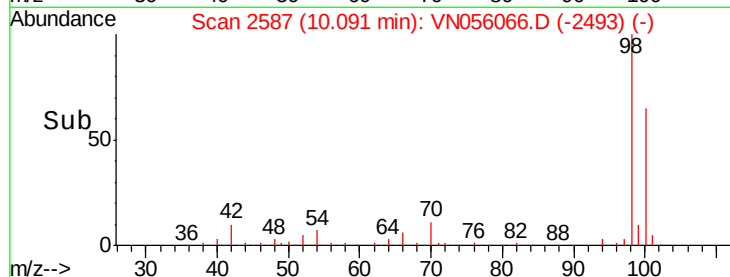
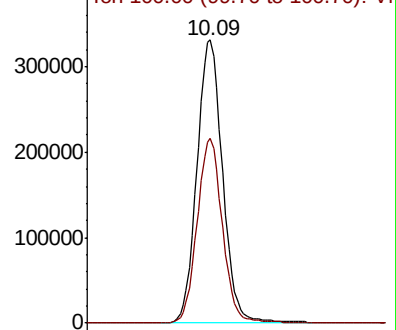
Ion Ratio Lower Upper

98 100

100 64.5 51.9 77.9



Abundance Ion 98.00 (97.70 to 98.70): VN055978.D (-2570) (-)



#51

4-Methyl-2-Pentanone

Concen: 0.651 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. 0.10 min

Lab File: VN056066.D

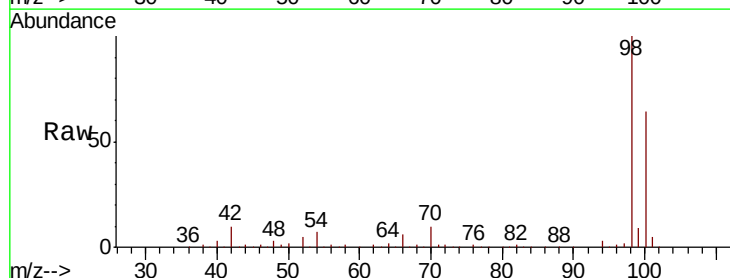
Acq: 7 Jun 2019 00:33

Tgt Ion: 43 Resp: 2504

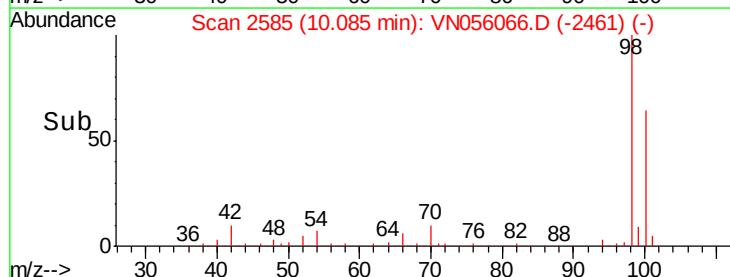
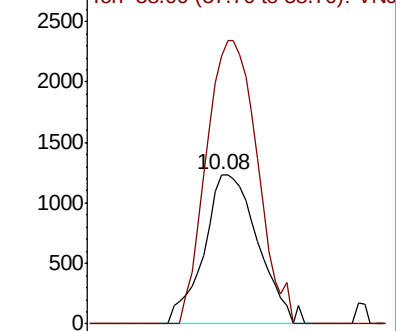
Ion Ratio Lower Upper

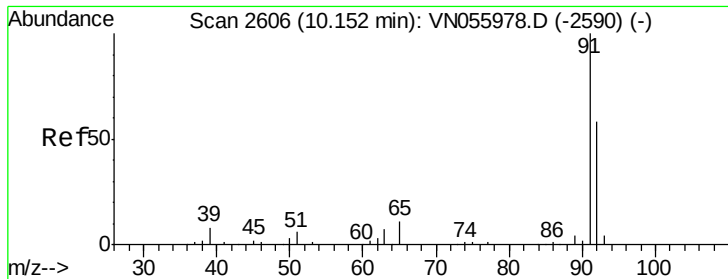
43 100

58 178.3 32.1 48.1#



Abundance Ion 43.00 (42.70 to 43.70): VN055978.D (-2538) (-)





#52

Toluene

Concen: 0.448 ug/l

RT: 10.16 min Scan# 2607

Delta R.T. 0.00 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

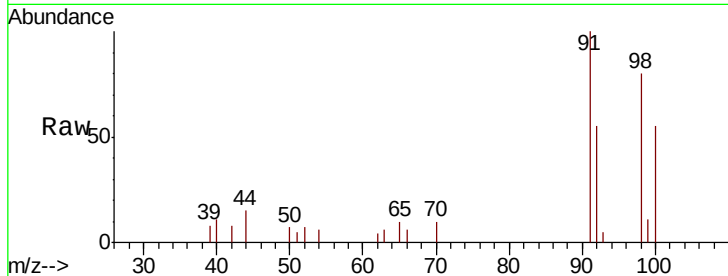
BPS1-TT-MW306S-20190604

Tot Ion: 92 Resp: 3611

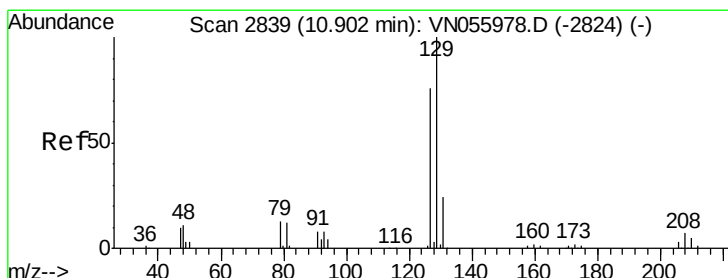
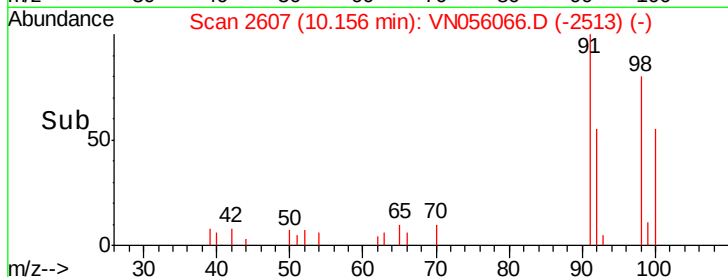
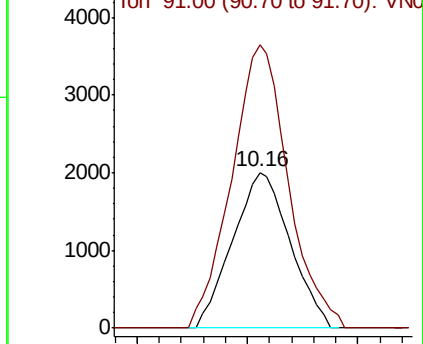
Ion Ratio Lower Upper

92 100

91 179.9 139.4 209.2



Abundance Ion 92.00 (91.70 to 92.70): VN055978.D (-2590) (-)



#60

Dibromochloromethane

Concen: 2.725 ug/l

RT: 10.63 min Scan# 2755

Delta R.T. -0.27 min

Lab File: VN056066.D

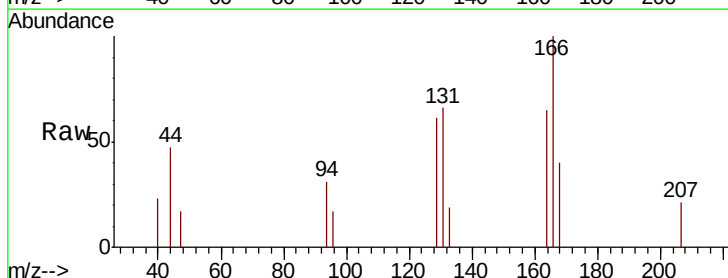
Acq: 7 Jun 2019 00:33

Tgt Ion: 129 Resp: 1011

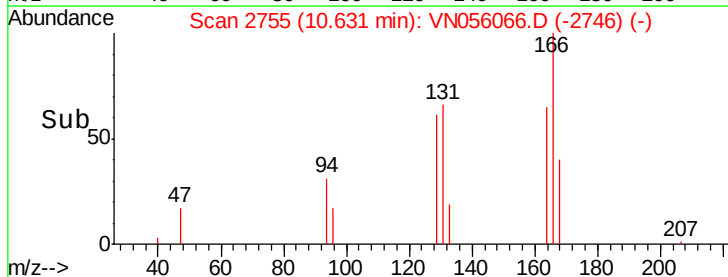
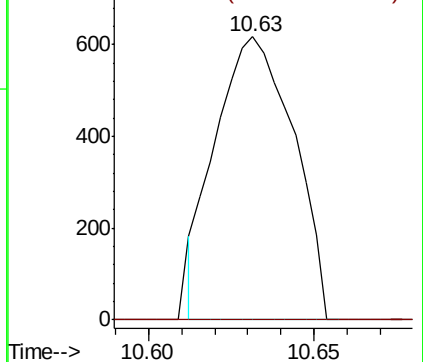
Ion Ratio Lower Upper

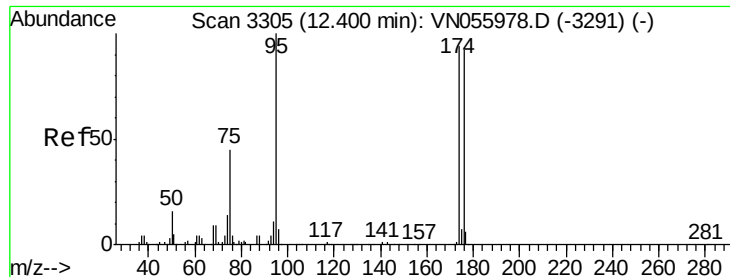
129 100

127 0.0 38.1 114.3#



Abundance Ion 128.80 (128.50 to 129.50): VN055978.D (-2824) (-)





#62

4-Bromofluorobenzene

Concen: 48.187 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

BPS1-TT-MW306S-20190604

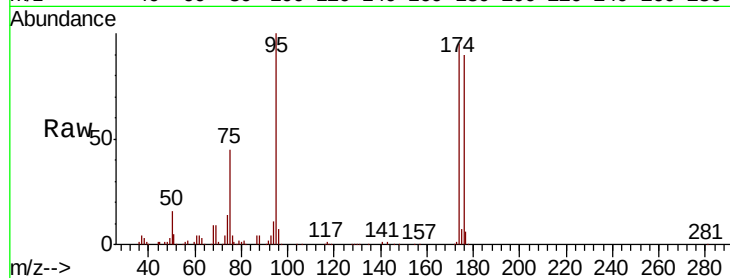
Tot Ion: 95 Resp: 192071

Ion Ratio Lower Upper

95 100

174 95.4 0.0 191.0

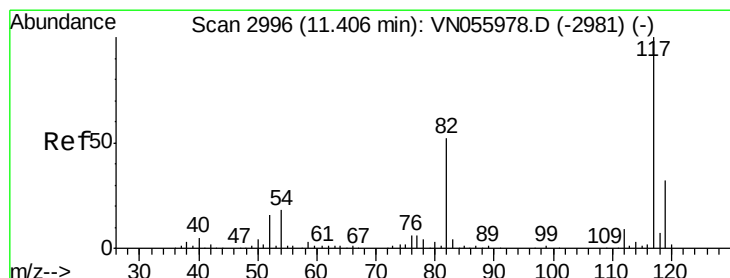
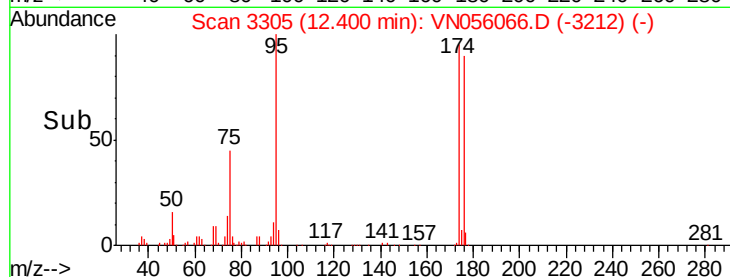
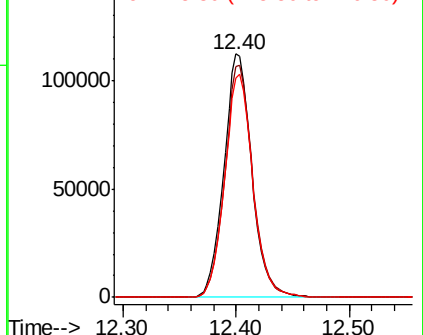
176 92.6 0.0 185.2



Abundance Ion 94.90 (94.60 to 95.60): VN055978.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN055978.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN055978.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

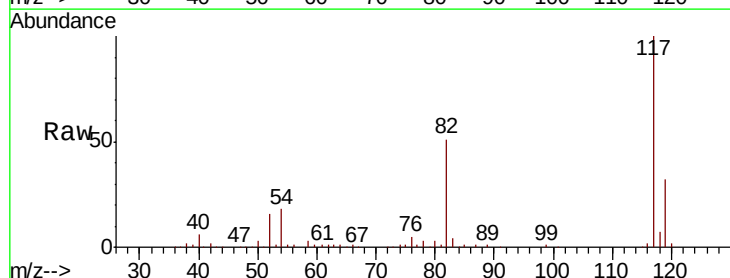
Tgt Ion: 117 Resp: 457471

Ion Ratio Lower Upper

117 100

82 51.4 41.8 62.8

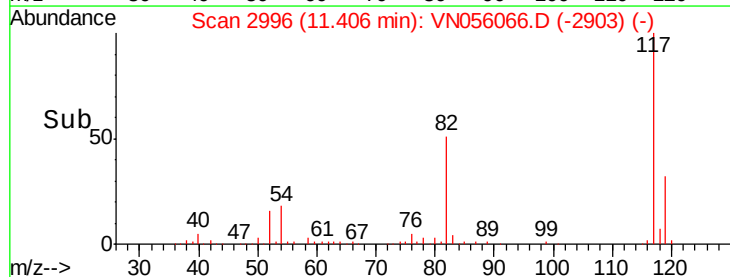
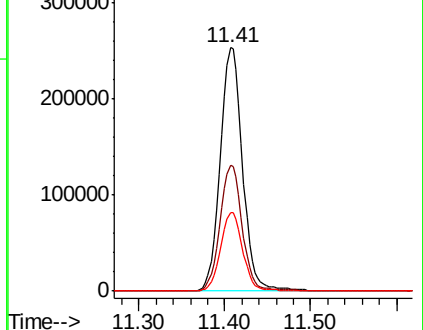
119 32.1 25.4 38.0

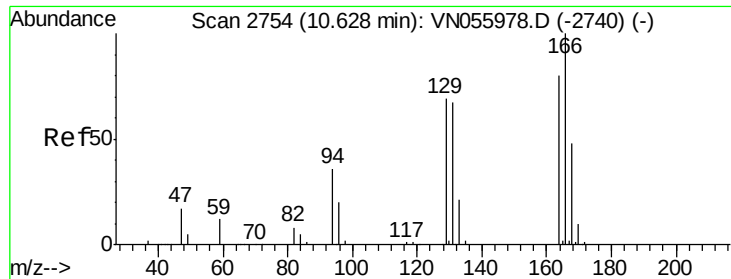


Abundance Ion 116.90 (116.60 to 117.60): VN055978.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN055978.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN055978.D (-2981) (-)





#64

Tetrachloroethene

Concen: 0.276 ug/l

RT: 10.63 min Scan# 2755

Delta R.T. 0.00 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

BPS1-TT-MW306S-20190604

Tot Ion:164 Resp: 1093

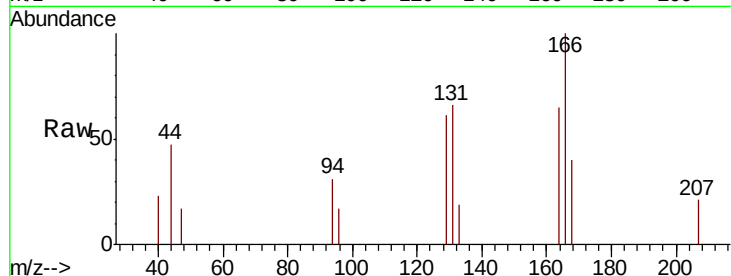
Ion Ratio Lower Upper

164 100

166 155.0 103.0 154.6#

129 95.1 70.6 105.8

131 102.6 68.6 102.8

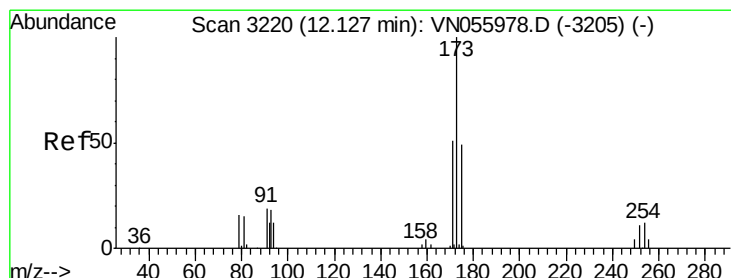
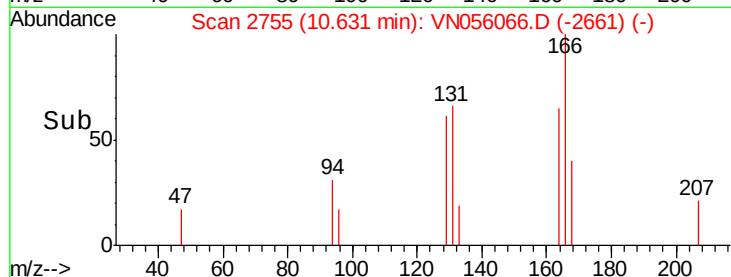
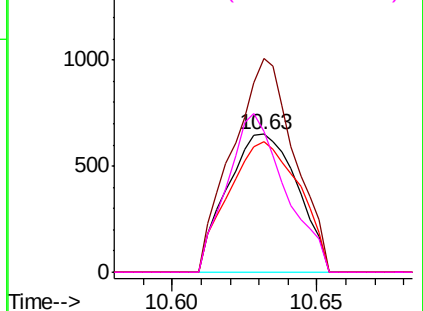


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#71

Bromoform

Concen: 3.144 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.28 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

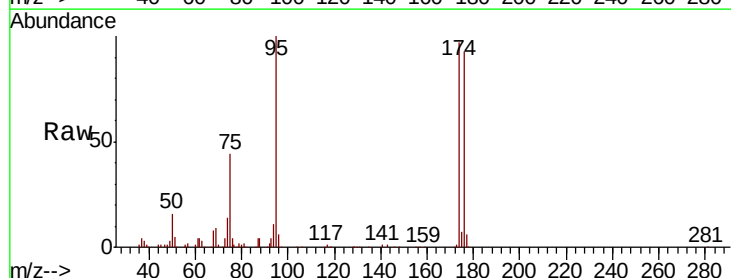
Tgt Ion:173 Resp: 1121

Ion Ratio Lower Upper

173 100

175 1017.8 24.3 72.8#

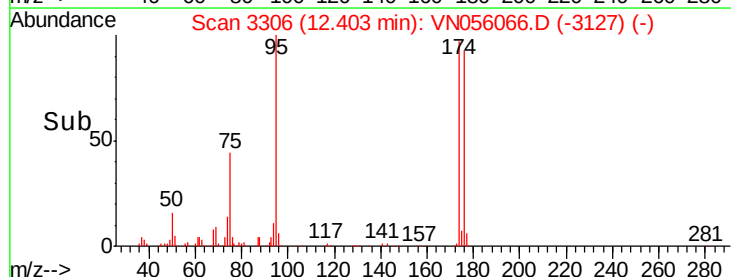
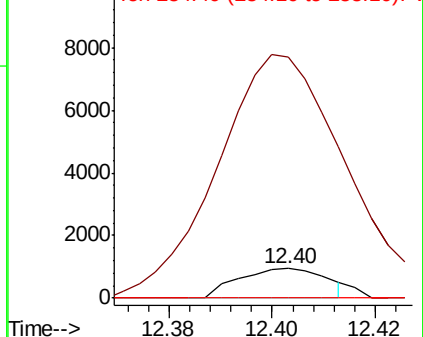
254 0.0 0.0 0.0

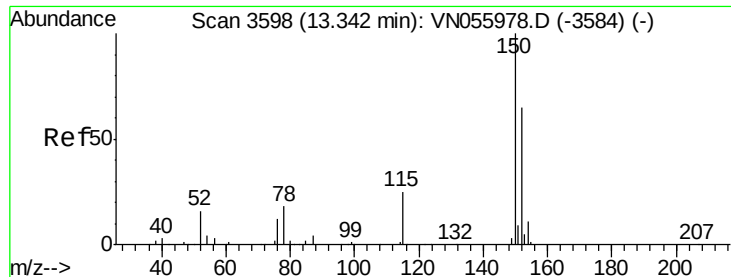


Abundance Ion 172.70 (172.40 to 173.40): V

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: 13.34 min Scan# 3598

Delta R.T. -0.00 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

BPS1-TT-MW306S-20190604

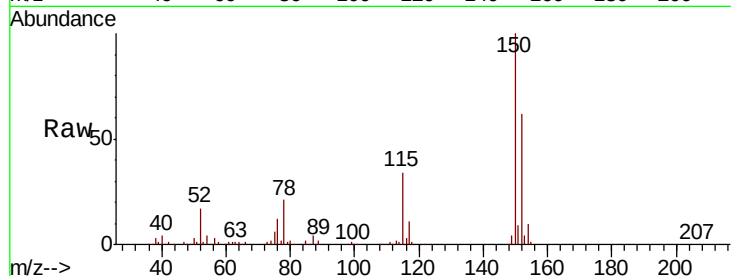
Tot Ion:152 Resp: 140500

Ion Ratio Lower Upper

152 100

115 53.8 27.0 81.0

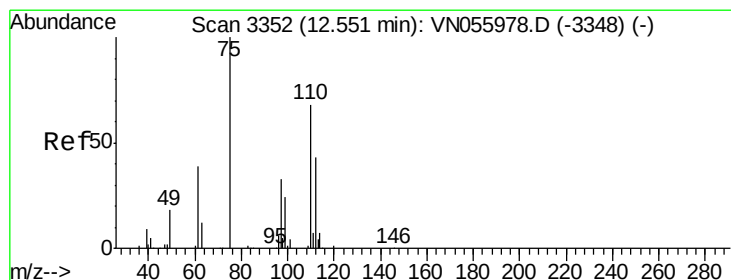
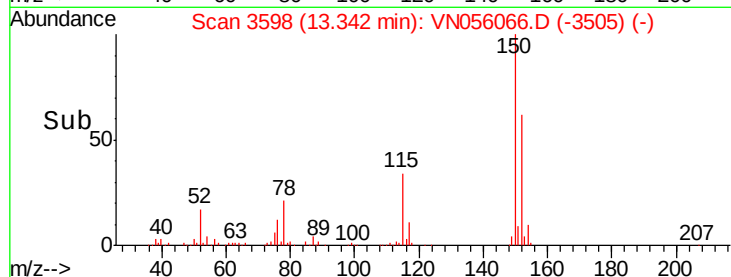
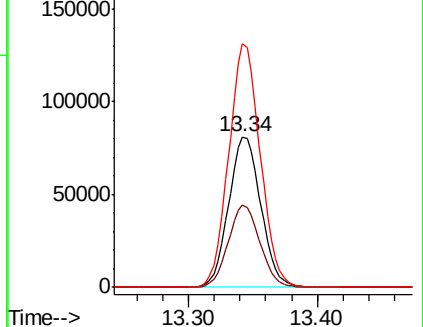
150 158.6 0.0 343.2



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: 33.173 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN056066.D

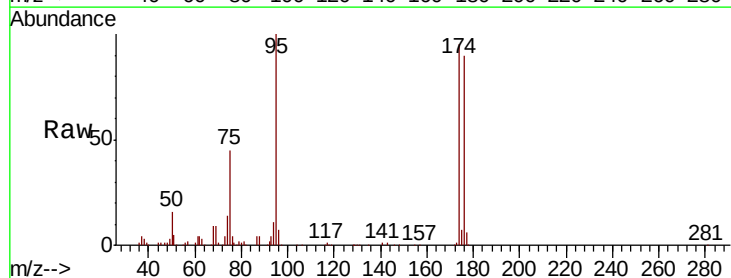
Acq: 7 Jun 2019 00:33

Tgt Ion: 75 Resp: 85761

Ion Ratio Lower Upper

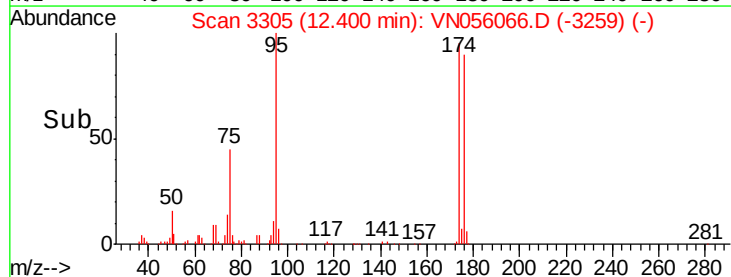
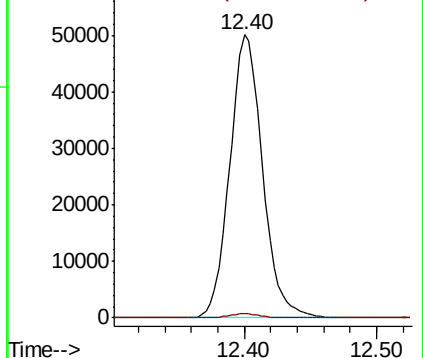
75 100

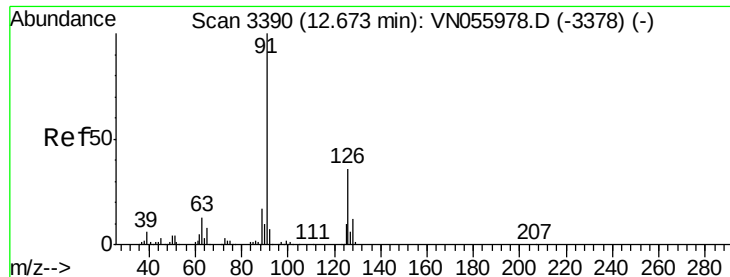
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#79

2-Chlorotoluene

Concen: Below Cal

RT: 12.40 min Scan# 3306

Delta R.T. -0.27 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

Instrument :

MSVOA\_N

ClientSampleId :

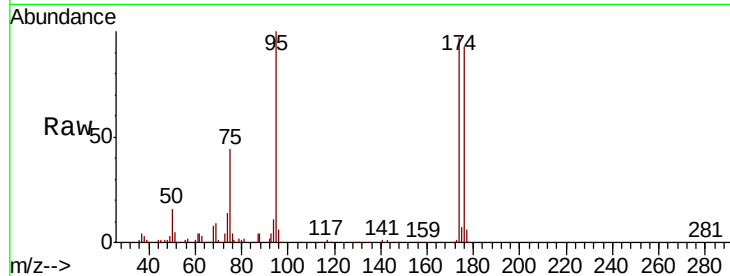
BPS1-TT-MW306S-20190604

Tot Ion: 91 Resp: 537

Ion Ratio Lower Upper

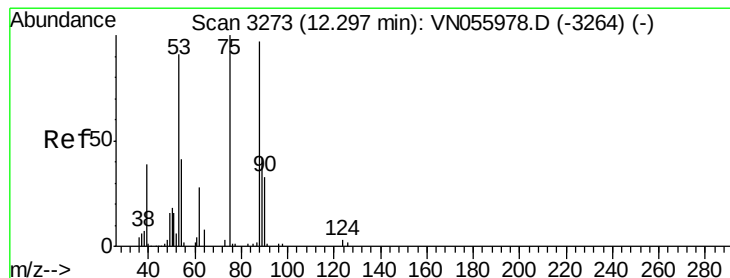
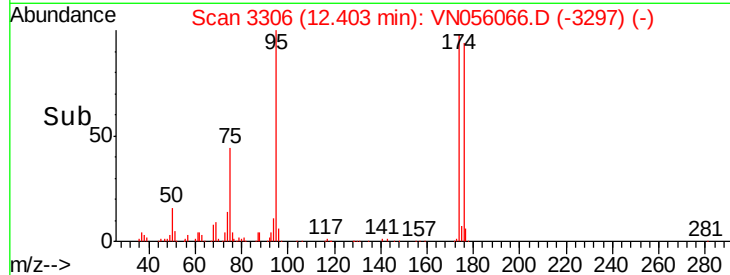
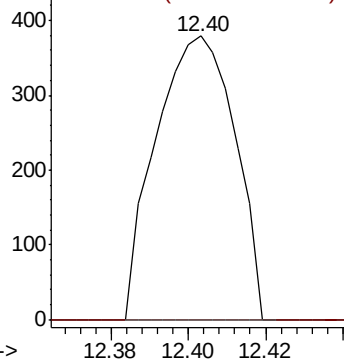
91 100

126 0.0 18.1 54.4#



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 125.90 (125.60 to 126.60): VN



#81

trans-1,4-Dichloro-2-butene

Concen: 110.473 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN056066.D

Acq: 7 Jun 2019 00:33

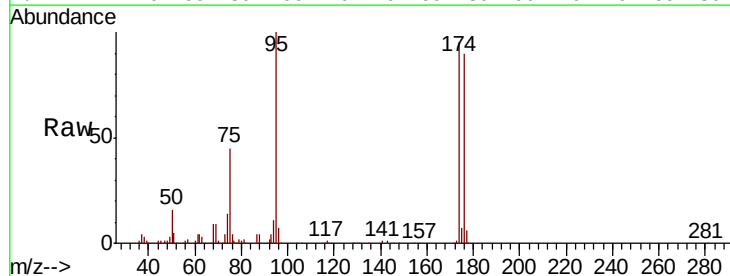
Tgt Ion: 75 Resp: 85761

Ion Ratio Lower Upper

75 100

53 0.0 68.1 102.1#

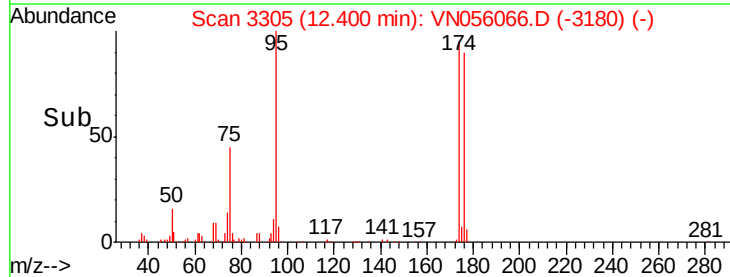
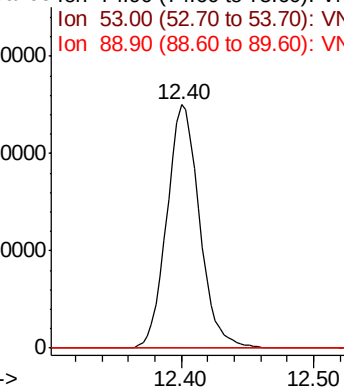
89 0.0 36.9 55.3#

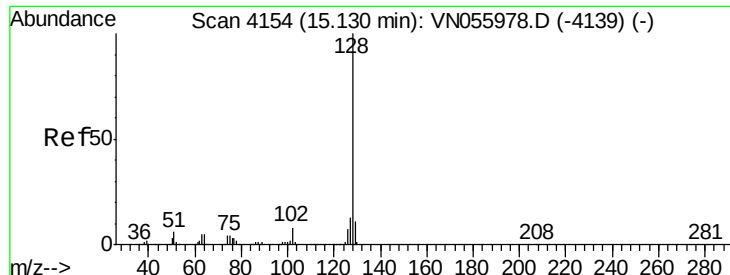


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0





#95  
Naphthalene  
Concen: 3.869 ug/l  
RT: 15.13 min Scan# 4155  
Delta R.T. 0.00 min  
Lab File: VN056066.D  
Acq: 7 Jun 2019 00:33

Instrument :  
MSVOA\_N  
ClientSampleId :  
BPS1-TT-MW306S-20190604

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 0.0   | 10.3  | 15.5# |
| 129     | 0.0   | 8.7   | 13.1# |

