

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032719\  
 Data File : VN054710.D  
 Acq On : 27 Mar 2019 10:01  
 Operator : JC/SP  
 Sample : VN0327WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Mar 28 04:33:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 22 02:09:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 538967   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 869337   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 736880   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 258554   | 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   | 353533   | 52.74 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.48% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 276841   | 49.43 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.86%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 1047269  | 49.74 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.48%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 320202   | 44.69 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.38%  |          |

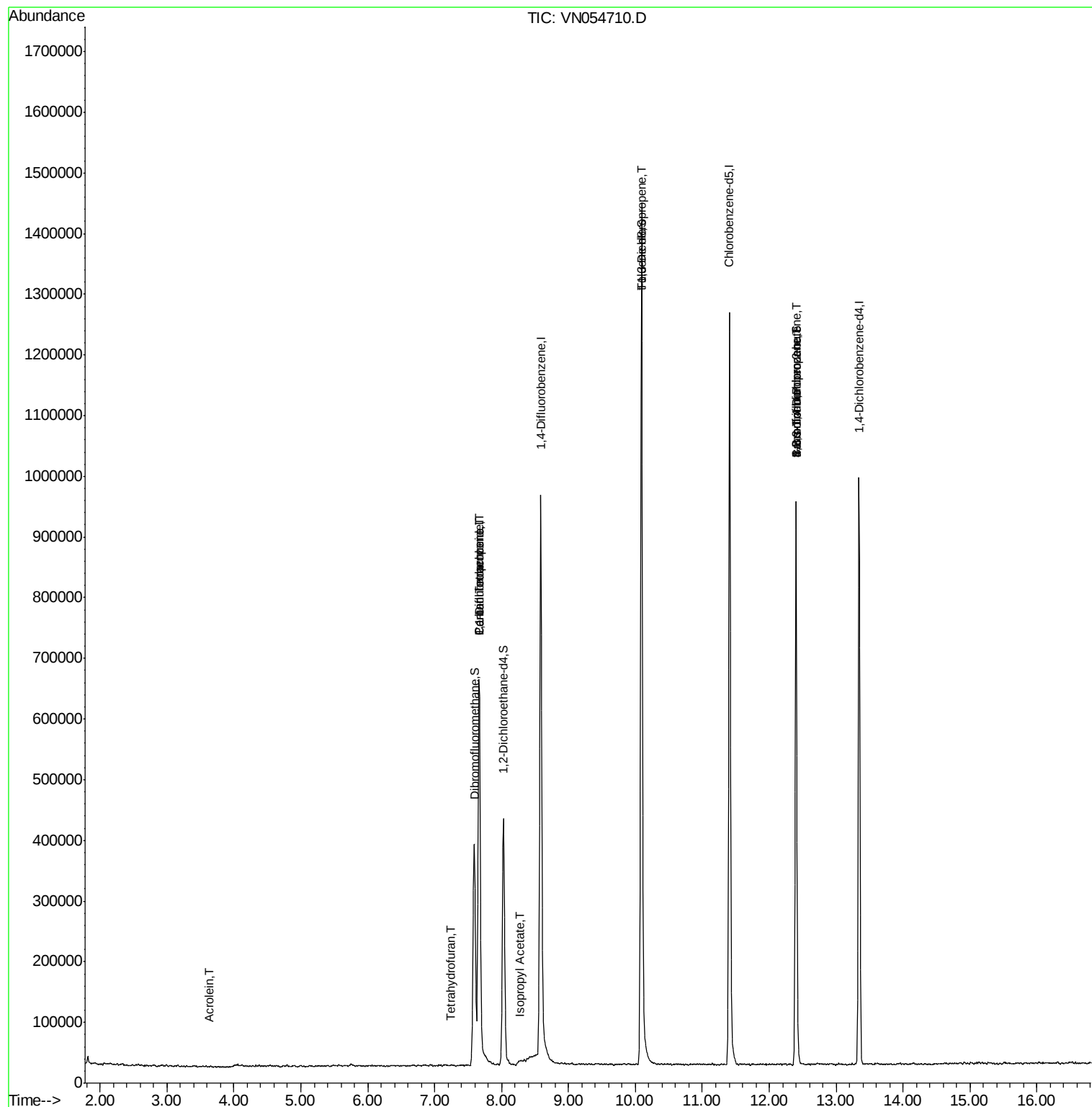
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 13) Acrolein                   | 3.63  | 56   | 177      | 0.316     | ug/l # | 10     |
| 29) Tetrahydrofuran            | 7.23  | 42   | 618      | 0.369     | ug/l # | 30     |
| 31) Cyclohexane                | 7.66  | 56   | 11992    | Below Cal | #      | 26     |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 41080    | 5.054     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 50818    | 6.434     | ug/l # | 16     |
| 43) Isopropyl Acetate          | 8.26  | 43   | 3673     | 0.376     | ug/l # | 60     |
| 53) t-1,3-Dichloropropene      | 10.09 | 75   | 102      | 2.244     | ug/l # | 66     |
| 71) Bromoform                  | 12.39 | 173  | 921      | 2.458     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 163107   | 39.754    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 163107   | 131.526   | ug/l # | 11     |
| 94) Hexachlorobutadiene        | 15.01 | 225  | 103      | Below Cal | #      | 42     |

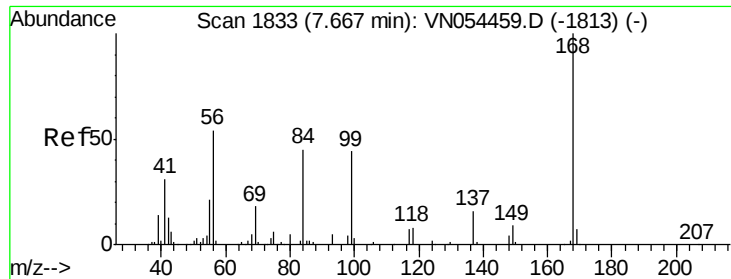
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : VN0327WBL01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampled :

Quant Time: Mar 28 04:33:11 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 22 02:09:07 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: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

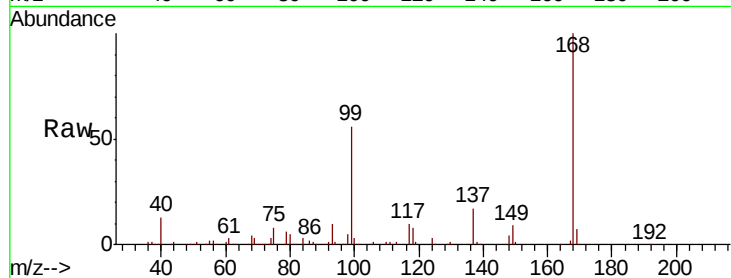
ClientSampleId :

Tot Ion:168 Resp: 538967

Ion Ratio Lower Upper

168 100

99 55.9 37.1 55.7#



Abundance Ion 167.90 (167.60 to 168.60): VN054710.D (-1740) (-)

Ion 98.90 (98.60 to 99.60): VN054710.D (-1740) (-)

7.67

250000

200000

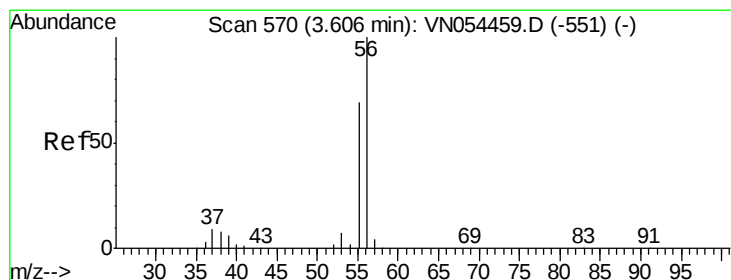
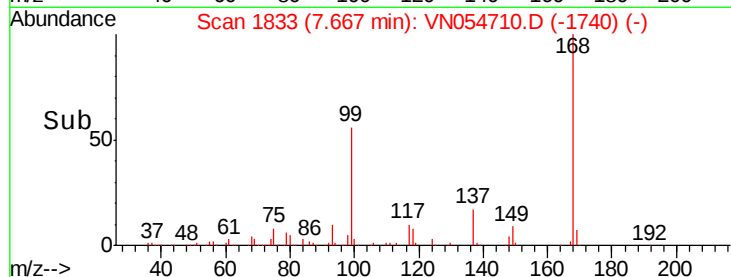
150000

100000

50000

0

Time-->



#13

Acrolein

Concen: 0.316 ug/l

RT: 3.63 min Scan# 576

Delta R.T. 0.02 min

Lab File: VN054710.D

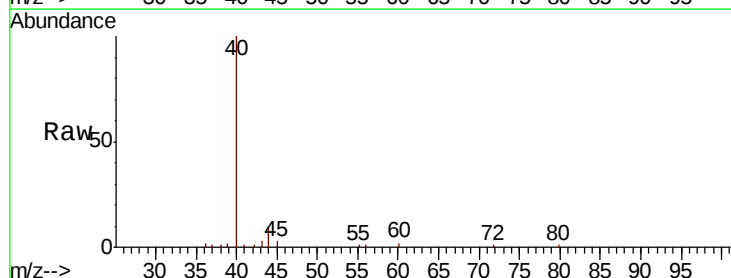
Acq: 27 Mar 2019 10:01

Tgt Ion: 56 Resp: 177

Ion Ratio Lower Upper

56 100

55 145.2 56.7 85.1#



Abundance Ion 56.00 (55.70 to 56.70): VN054710.D (-477) (-)

Ion 55.00 (54.70 to 55.70): VN054710.D (-477) (-)

3.63

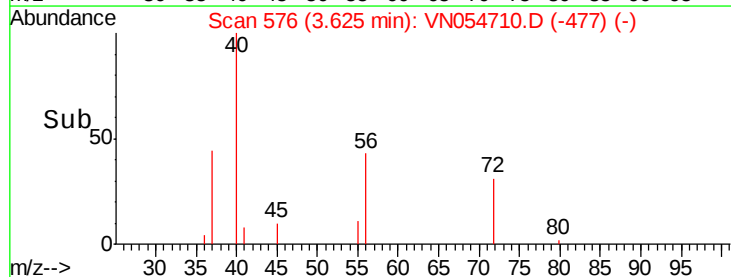
300

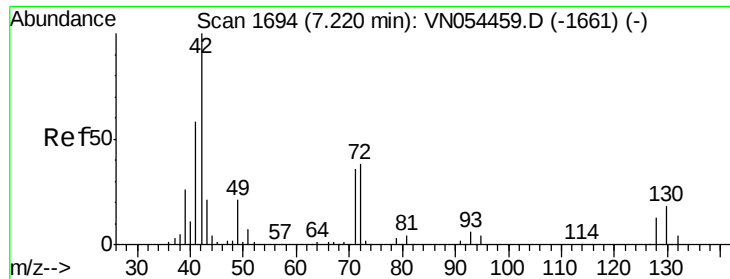
200

100

0

Time-->

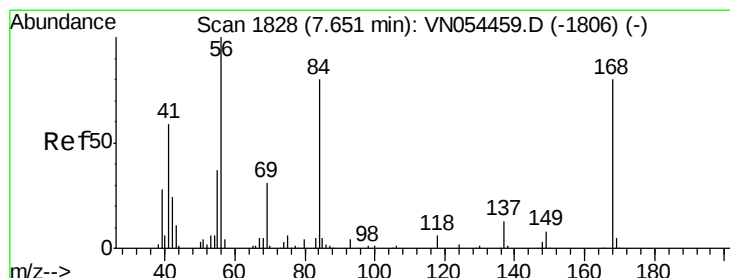
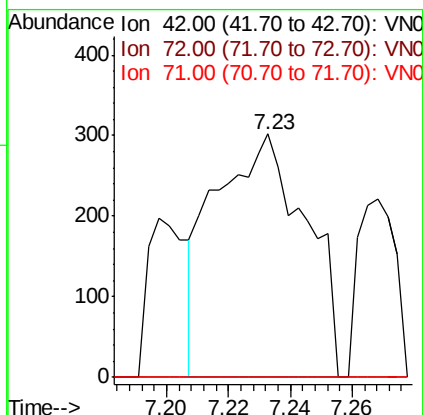
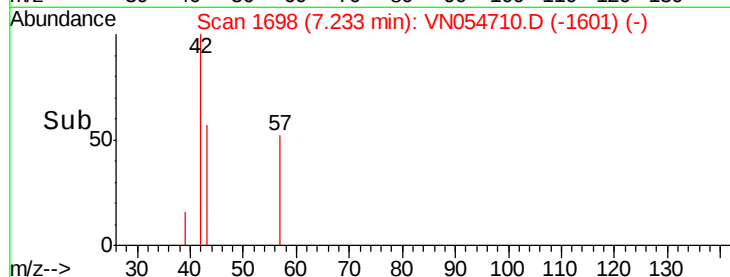
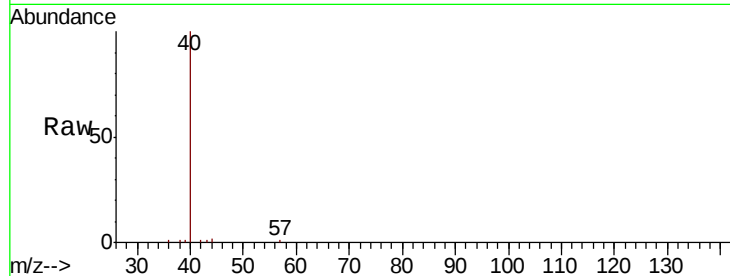




#29  
Tetrahydrofuran  
Concen: 0.369 ug/l  
RT: 7.23 min Scan# 1698  
Delta R.T. 0.01 min  
Lab File: VN054710.D  
Acq: 27 Mar 2019 10:01

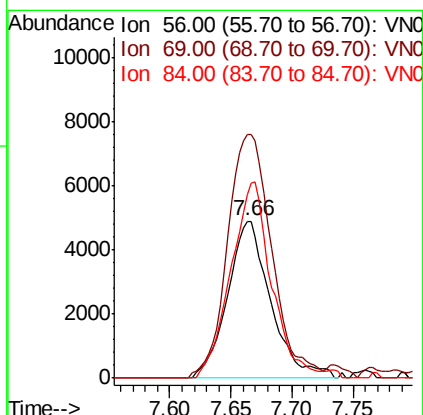
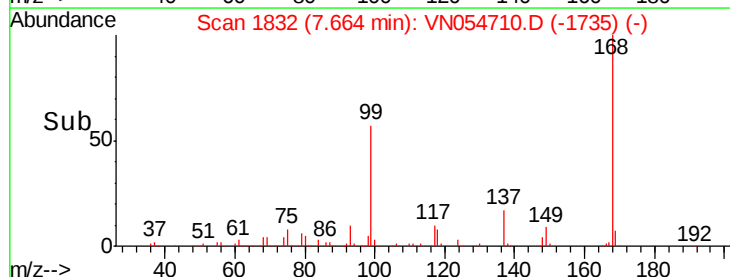
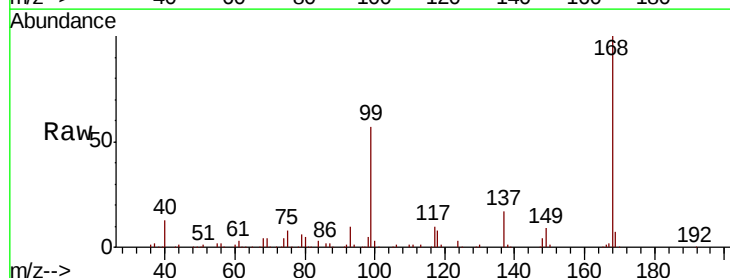
Instrument :  
MSVOA\_N  
ClientSampled :

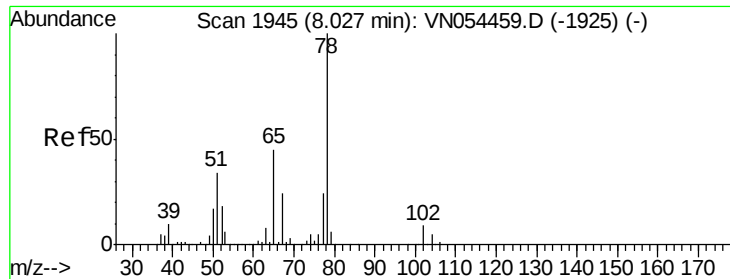
Tot Ion: 42 Resp: 618  
Ion Ratio Lower Upper  
42 100  
72 0.0 37.8 56.6#  
71 0.0 36.2 54.2#



#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.66 min Scan# 1832  
Delta R.T. 0.01 min  
Lab File: VN054710.D  
Acq: 27 Mar 2019 10:01

Tgt Ion: 56 Resp: 11992  
Ion Ratio Lower Upper  
56 100  
69 154.7 27.8 41.6#  
84 116.5 74.6 111.8#





#33

1,2-Dichloroethane-d4

Concen: 52.736 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

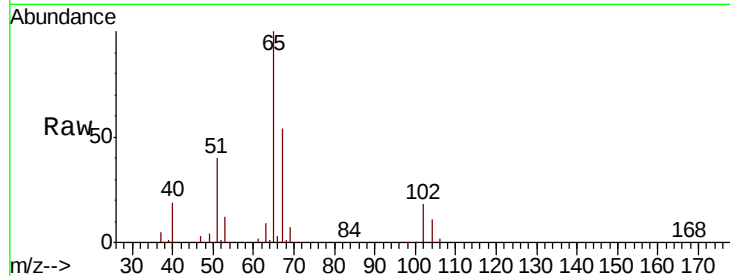
ClientSampleId :

Tot Ion: 65 Resp: 353533

Ion Ratio Lower Upper

65 100

67 53.0 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VN054710.D (-1852) (-)

Ion 66.90 (66.60 to 67.60): VN054710.D (-1852) (-)

8.03

150000

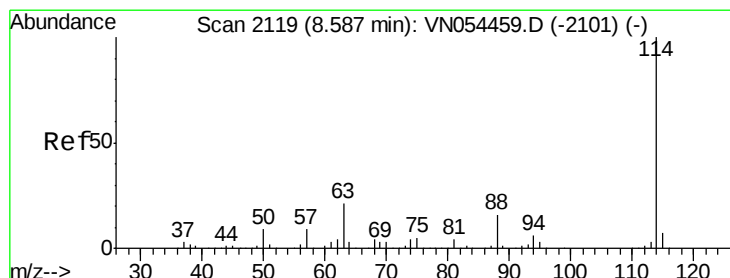
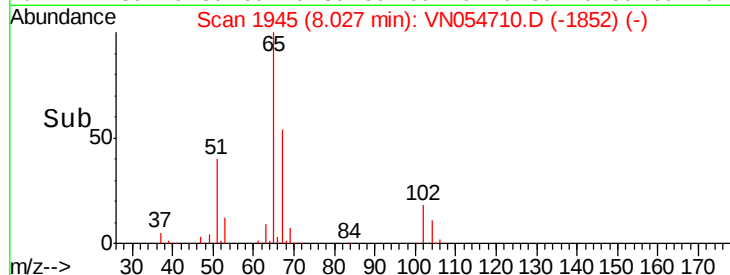
100000

50000

0

7.90 8.00 8.10 8.20

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

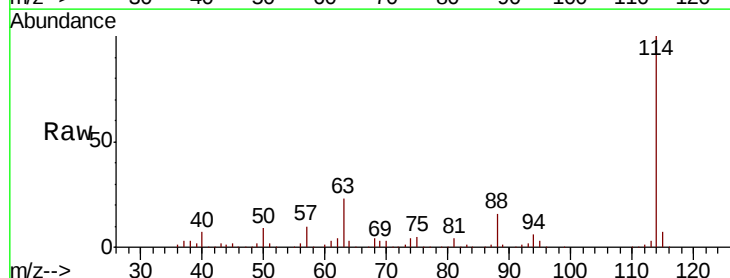
Tgt Ion: 114 Resp: 869337

Ion Ratio Lower Upper

114 100

63 22.6 0.0 35.2

88 15.6 0.0 30.2



Abundance Ion 113.90 (113.60 to 114.60): VN054710.D (-2026) (-)

Ion 63.00 (62.70 to 63.70): VN054710.D (-2026) (-)

Ion 87.90 (87.60 to 88.60): VN054710.D (-2026) (-)

8.59

500000

400000

300000

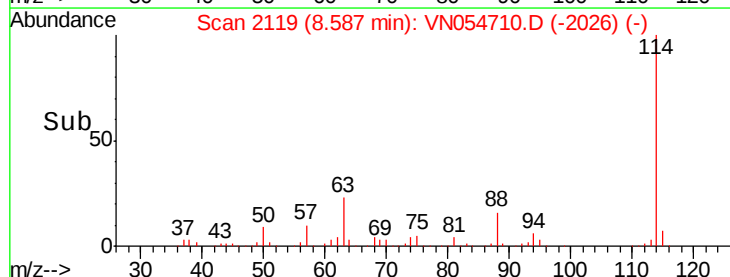
200000

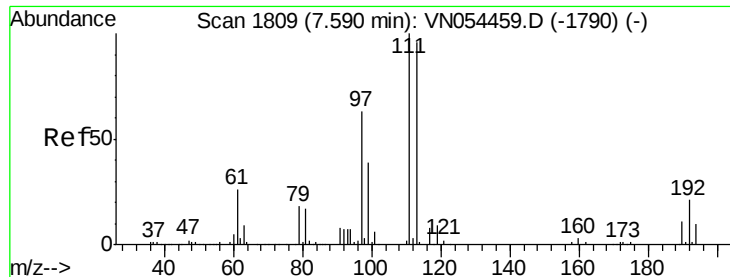
100000

0

8.50 8.60 8.70 8.80

Time-->





#35

Dibromofluoromethane

Concen: 49.430 ug/l

RT: 7.59 min Scan# 1809

Delta R.T. -0.00 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :  
MSVOA\_N  
ClientSampled :

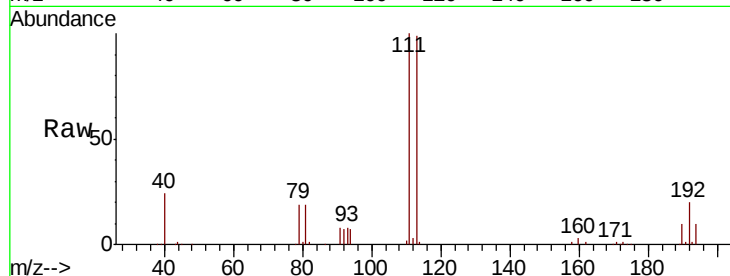
Tot Ion:113 Resp: 276841

Ion Ratio Lower Upper

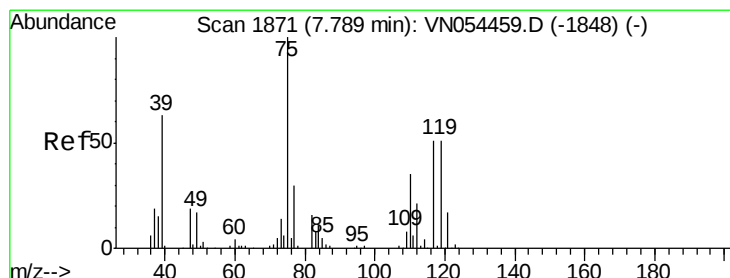
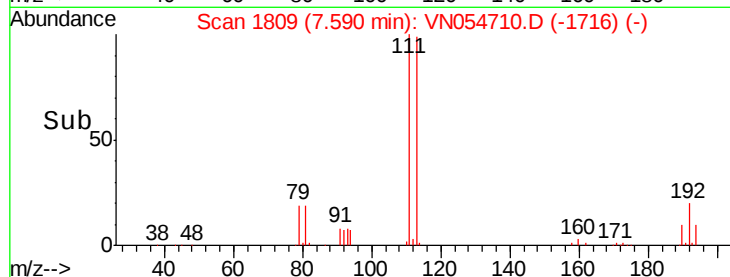
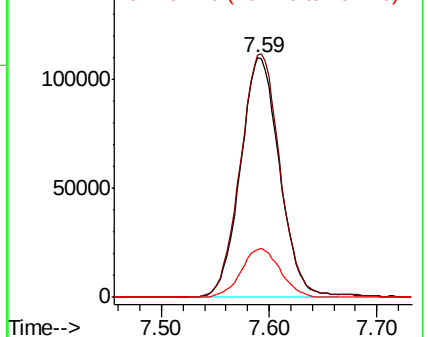
113 100

111 104.0 82.2 123.4

192 20.5 19.2 28.8



Abundance Ion 112.80 (112.50 to 113.50): V  
Ion 110.80 (110.50 to 111.50): V  
Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.054 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

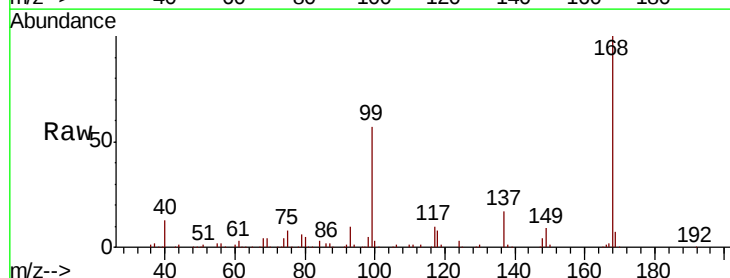
Tgt Ion: 75 Resp: 41080

Ion Ratio Lower Upper

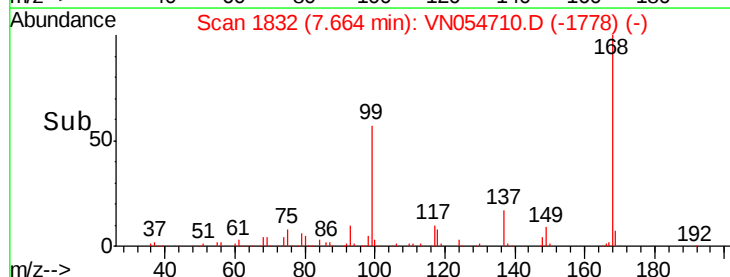
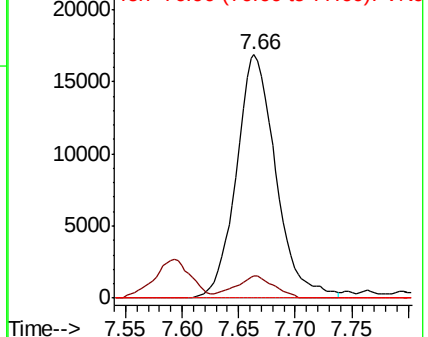
75 100

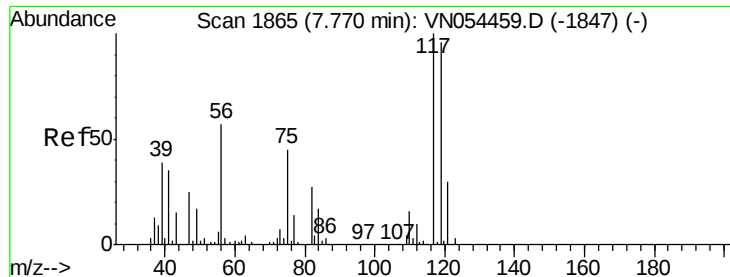
110 8.8 19.1 57.5#

77 0.0 25.0 37.4#



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





#38

Carbon Tetrachloride

Concen: 6.434 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.10 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

ClientSampleId :

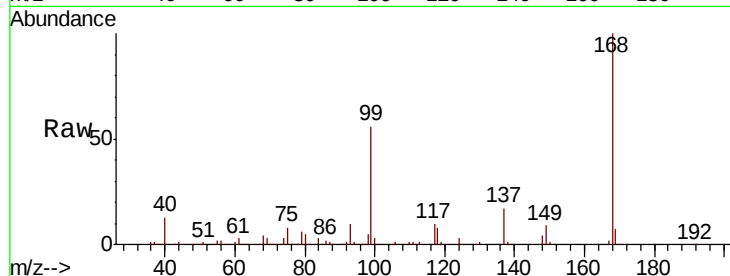
Tot Ion:117 Resp: 50818

Ion Ratio Lower Upper

117 100

119 5.2 76.3 114.5#

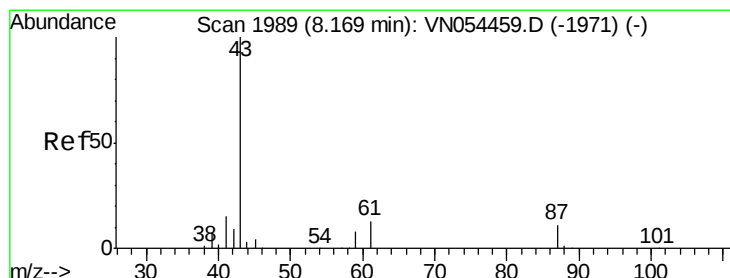
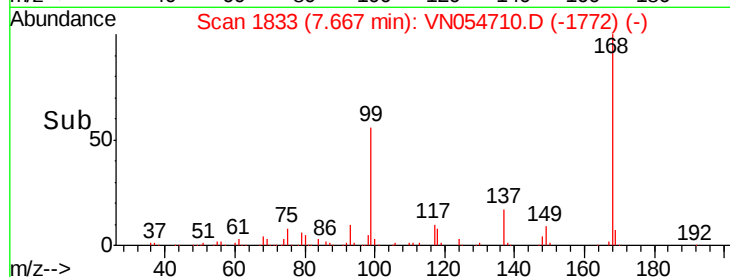
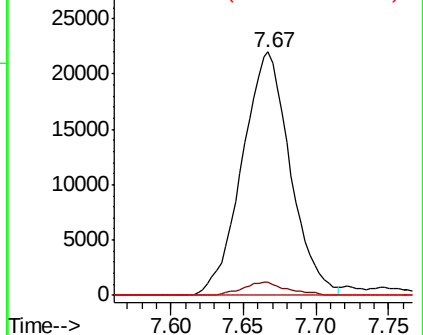
121 0.0 24.6 36.8#



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: 0.376 ug/l

RT: 8.26 min Scan# 2017

Delta R.T. 0.09 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

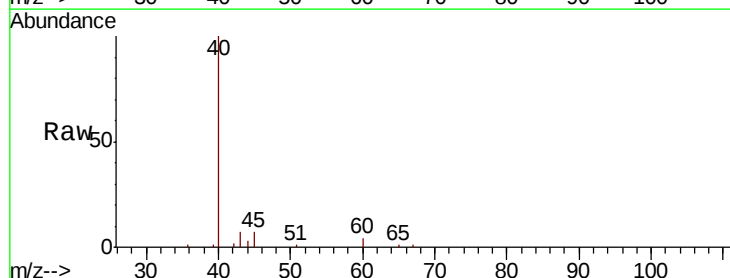
Tgt Ion: 43 Resp: 3673

Ion Ratio Lower Upper

43 100

61 0.0 15.8 23.8#

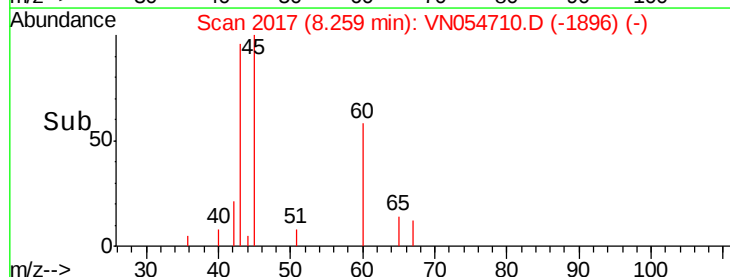
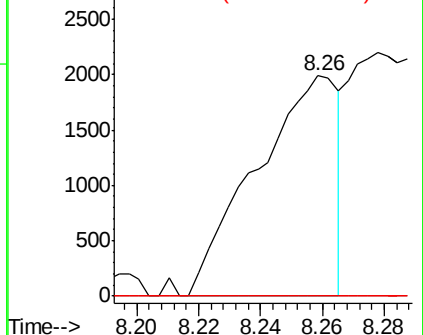
87 0.0 12.0 18.0#

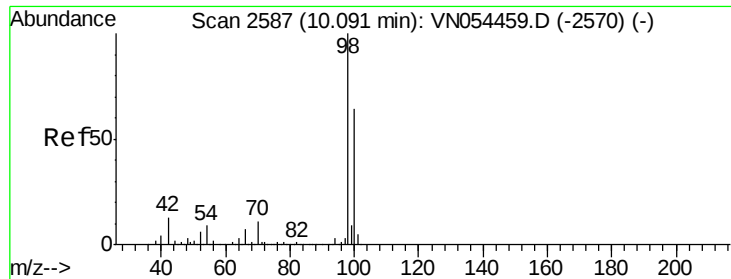


Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 61.00 (60.70 to 61.70): VNO

Ion 87.00 (86.70 to 87.70): VNO





#50

Toluene-d8

Concen: 49.739 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

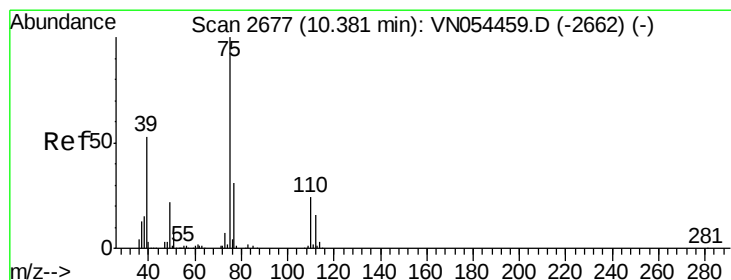
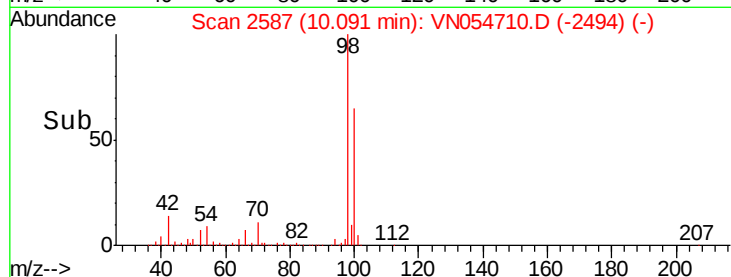
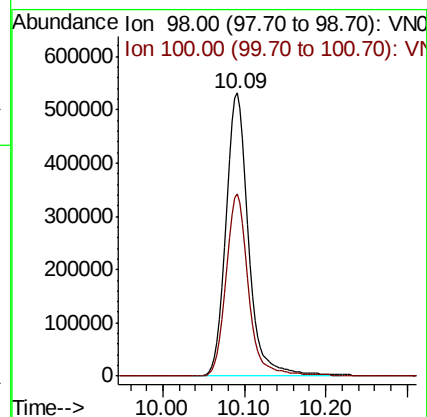
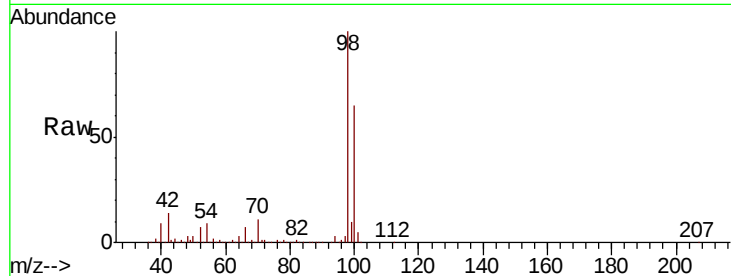
ClientSampleId :

Tot Ion: 98 Resp: 1047269

Ion Ratio Lower Upper

98 100

100 64.4 51.2 76.8



#53

t-1,3-Dichloropropene

Concen: 2.244 ug/l

RT: 10.09 min Scan# 2588

Delta R.T. -0.29 min

Lab File: VN054710.D

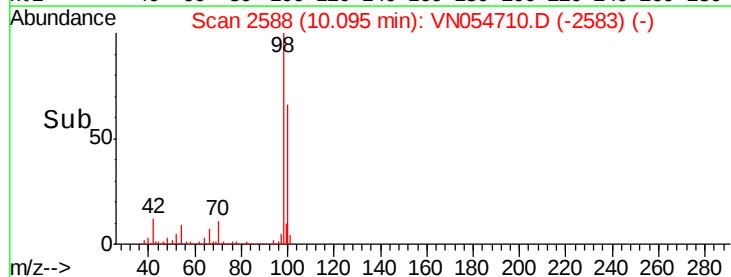
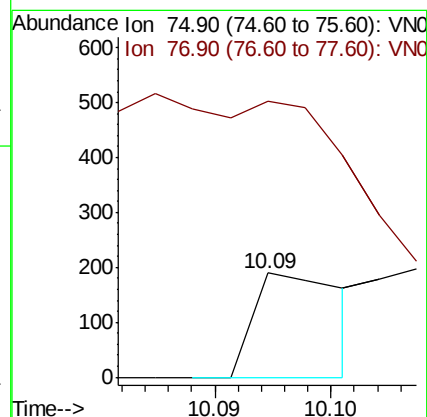
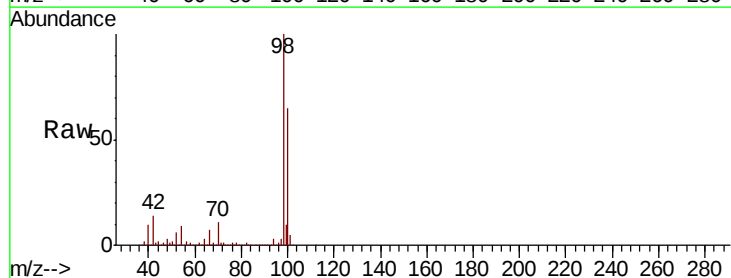
Acq: 27 Mar 2019 10:01

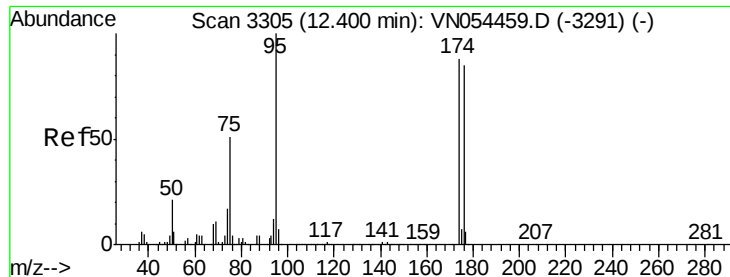
Tgt Ion: 75 Resp: 102

Ion Ratio Lower Upper

75 100

77 51.6 25.8 38.8#

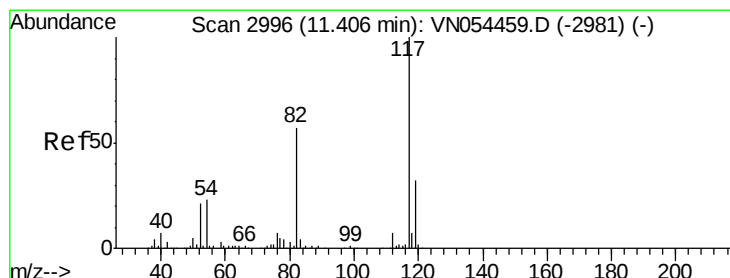
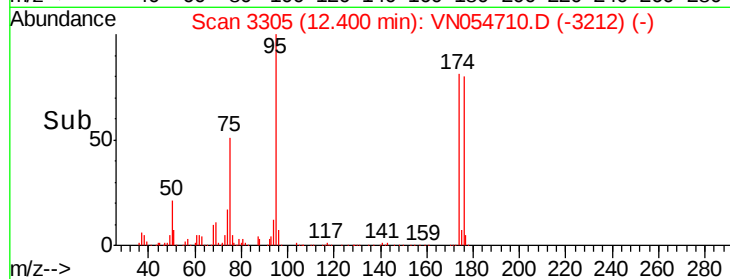
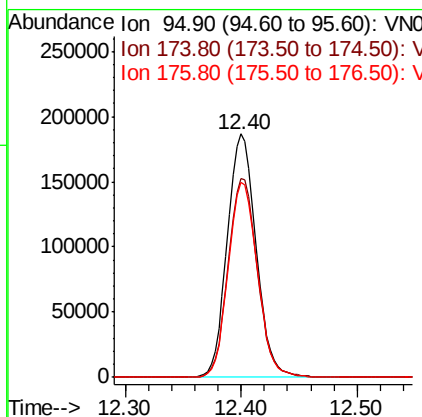
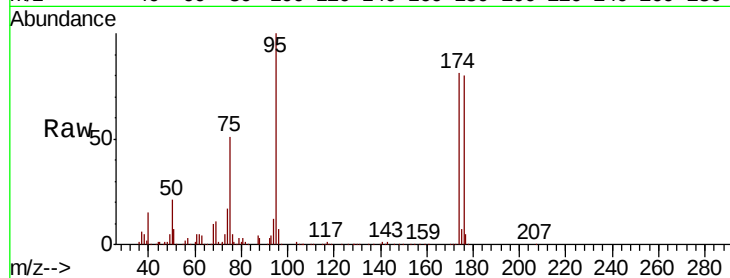




#62  
 4-Bromofluorobenzene  
 Concen: 44.691 ug/l  
 RT: 12.40 min Scan# 3305  
 Delta R.T. -0.00 min  
 Lab File: VN054710.D  
 Acq: 27 Mar 2019 10:01

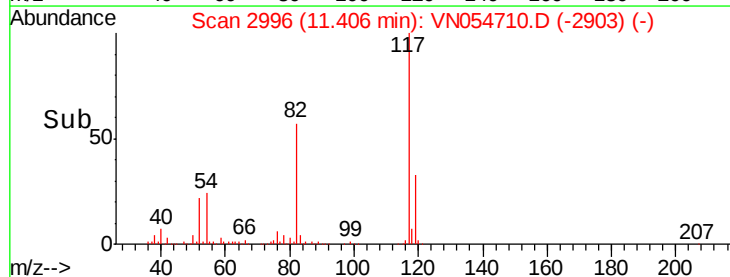
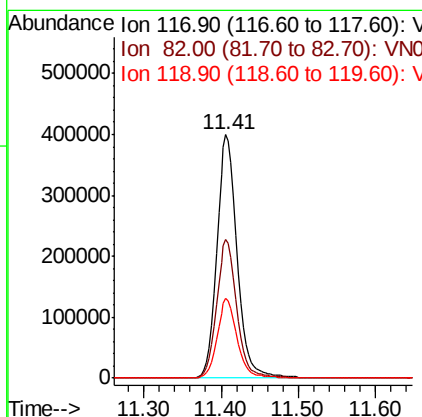
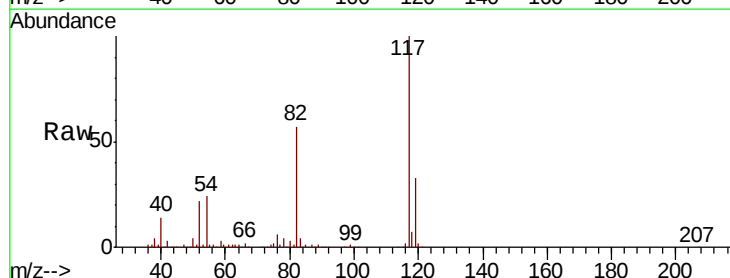
Instrument :  
 MSVOA\_N  
 ClientSampleId :

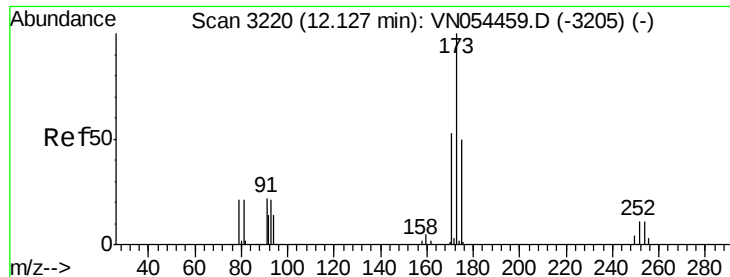
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 82.6  | 0.0   | 191.0 |
| 176     | 81.2  | 0.0   | 187.4 |



#63  
 Chlorobenzene-d5  
 Concen: 50.000 ug/l  
 RT: 11.41 min Scan# 2996  
 Delta R.T. -0.00 min  
 Lab File: VN054710.D  
 Acq: 27 Mar 2019 10:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 56.9  | 40.0  | 60.0  |
| 119     | 32.7  | 25.8  | 38.6  |





#71

Bromoform

Concen: 2.458 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.27 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

ClientSampleId :

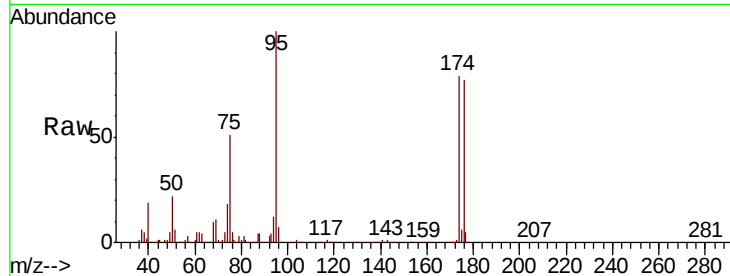
Tot Ion:173 Resp: 921

Ion Ratio Lower Upper

173 100

175 1937.8 24.4 73.2#

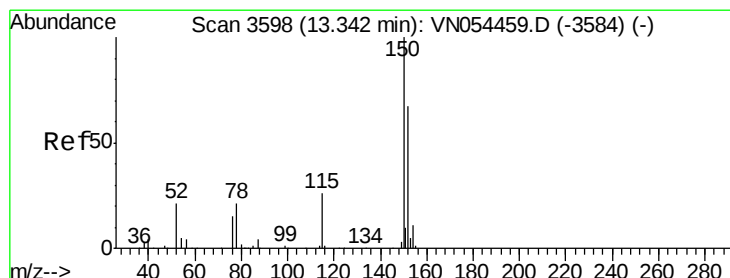
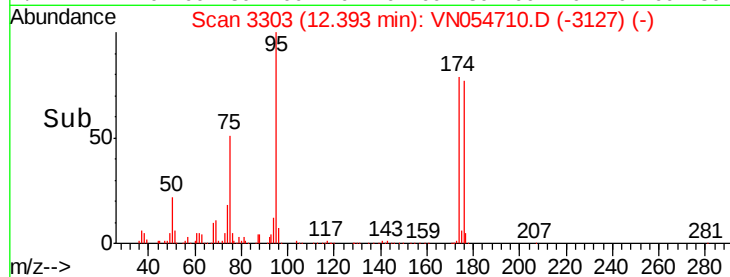
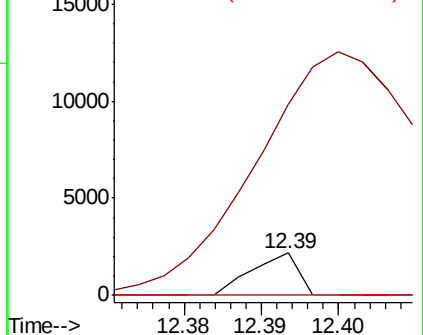
254 0.0 0.1 0.1#



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: VN054710.D

Acq: 27 Mar 2019 10:01

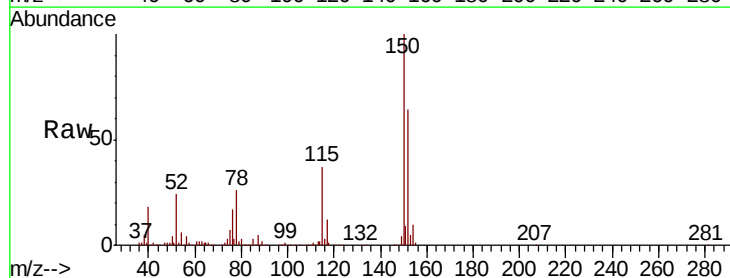
Tgt Ion:152 Resp: 258554

Ion Ratio Lower Upper

152 100

115 58.6 27.2 81.6

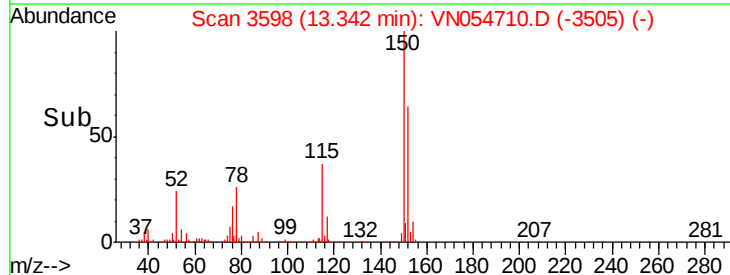
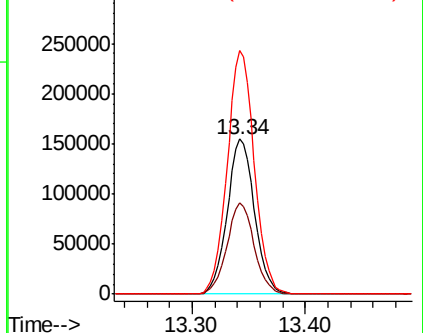
150 155.8 0.0 349.2

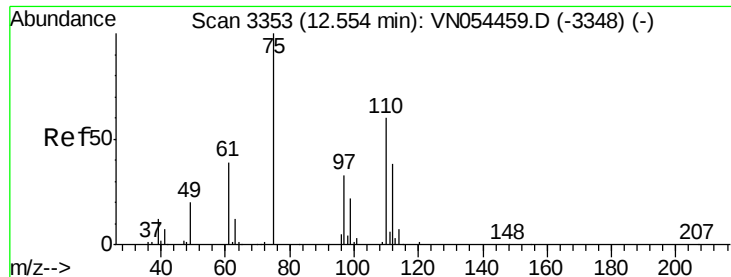


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 39.754 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

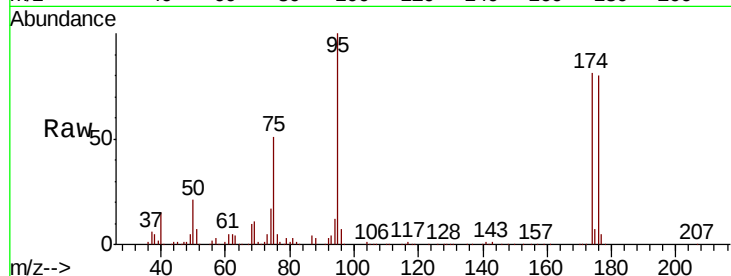
ClientSampled :

Tot Ion: 75 Resp: 163107

Ion Ratio Lower Upper

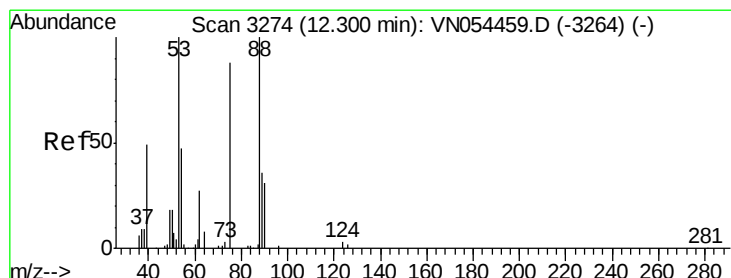
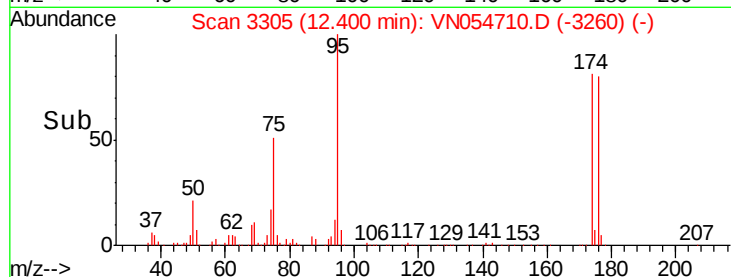
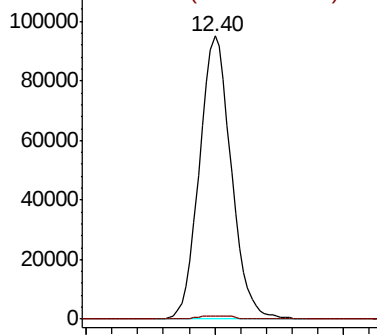
75 100

77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#81

trans-1,4-Dichloro-2-butene

Concen: 131.526 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

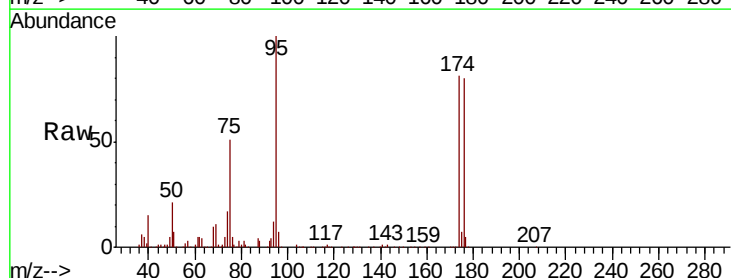
Tgt Ion: 75 Resp: 163107

Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

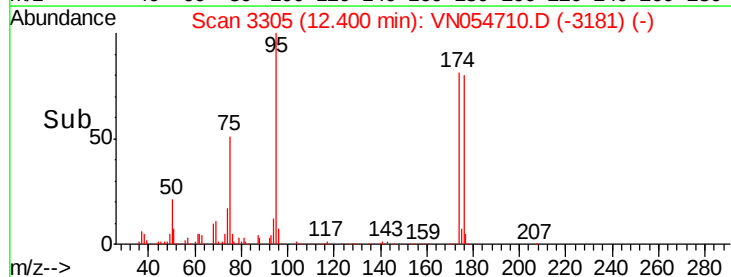
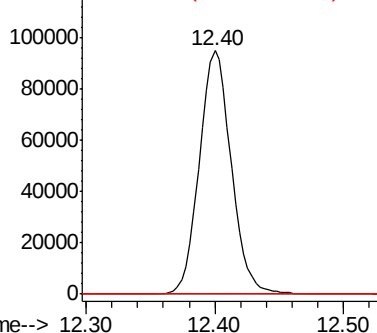
89 0.0 39.2 58.8#

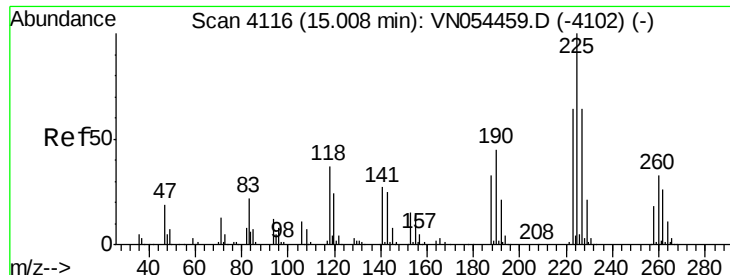


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0





#94

Hexachlorobutadiene

Concen: Below Cal

RT: 15.01 min Scan# 4116

Delta R.T. 0.00 min

Lab File: VN054710.D

Acq: 27 Mar 2019 10:01

Instrument :

MSVOA\_N

ClientSampleId :

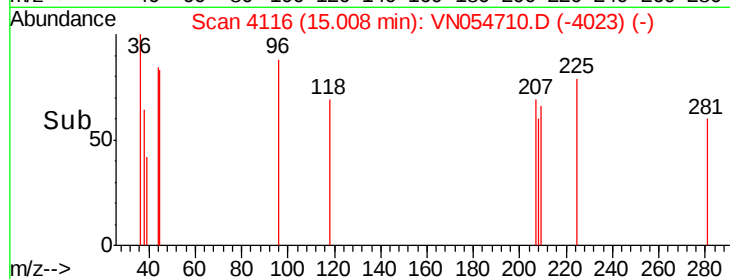
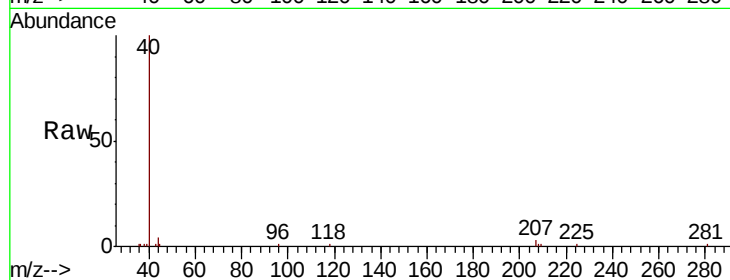
Tot Ion: 225 Resp: 103

Ion Ratio Lower Upper

225 100

223 0.0 31.1 93.5#

227 91.3 31.9 95.9



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

