

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN110119\  
 Data File : VN059060.D  
 Acq On : 1 Nov 2019 14:23  
 Operator : JC/SP  
 Sample : VN1101WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 02 06:03:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 02 05:43:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 457224   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 710702   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 614448   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 221126   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.01  | 65   | 292639   | 48.33 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.66% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 220438   | 48.08 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.16% |          |
| 50) Toluene-d8              | 10.08 | 98   | 870764   | 48.78 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.56% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 273022   | 42.55 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.10% |          |

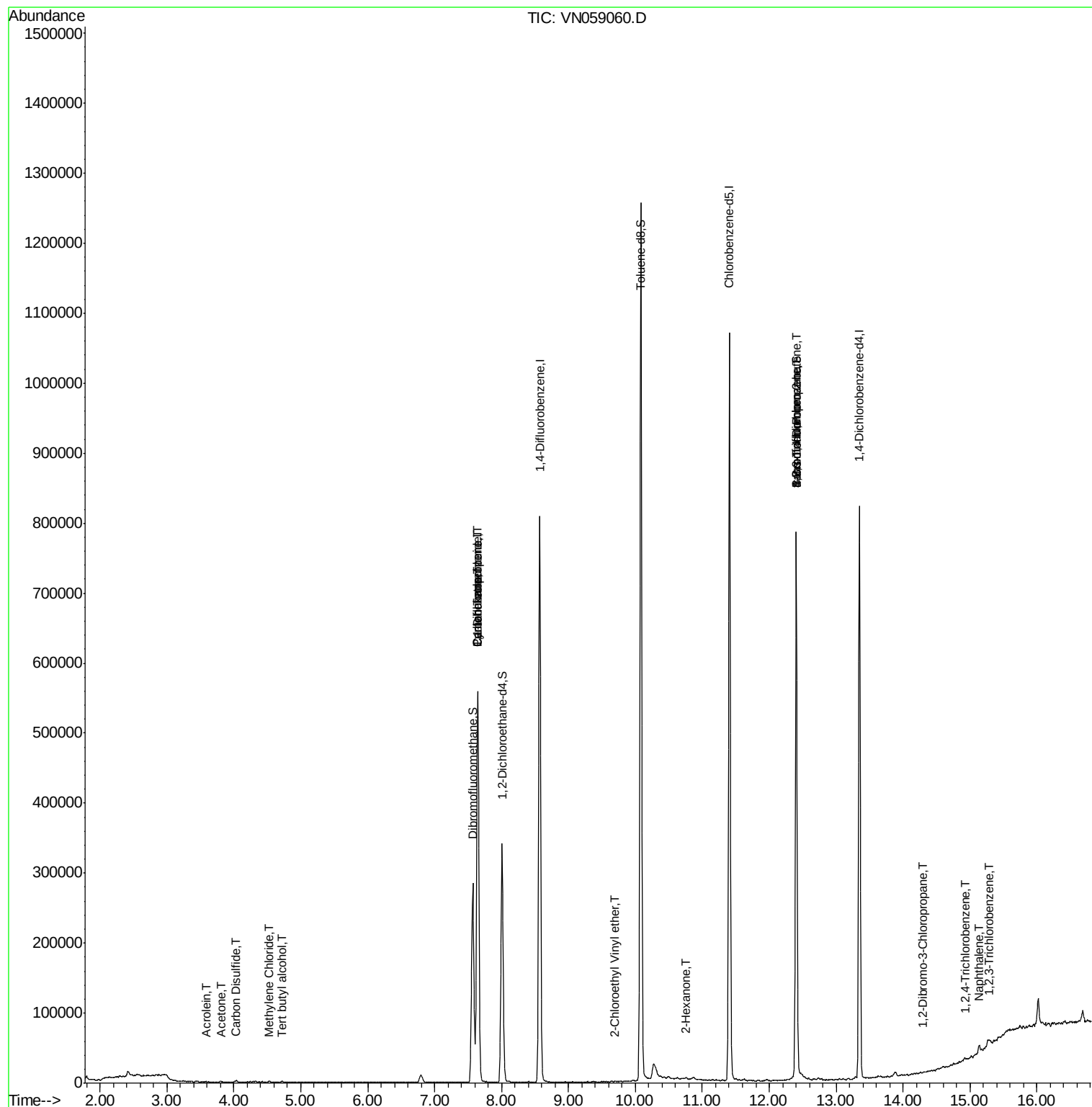
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.71  | 59   | 1108     | 0.989  | ug/l # | 72     |
| 13) Acrolein                   | 3.59  | 56   | 450      | 0.636  | ug/l   | 90     |
| 16) Acetone                    | 3.81  | 43   | 1083     | 0.353  | ug/l # | 43     |
| 17) Carbon Disulfide           | 4.03  | 76   | 4256     | 0.295  | ug/l   | 96     |
| 20) Methylene Chloride         | 4.53  | 84   | 1109     | 0.207  | ug/l # | 44     |
| 31) Cyclohexane                | 7.64  | 56   | 9366     | 1.004  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 34734    | 4.917  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 44412    | 6.452  | ug/l # | 16     |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 116      | 11.455 | ug/l # | 51     |
| 59) 2-Hexanone                 | 10.75 | 43   | 1295     | 0.239  | ug/l   | 76     |
| 71) Bromoform                  | 12.40 | 173  | 1476     | 0.411  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 139224   | 26.606 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 139224   | 68.206 | ug/l # | 14     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75   | 331      | 0.264  | ug/l # | 15     |
| 93) 1,2,4-Trichlorobenzene     | 14.92 | 180  | 1538     | 0.397  | ug/l   | 91     |
| 95) Naphthalene                | 15.14 | 128  | 5580     | 3.420  | ug/l   | 98     |
| 96) 1,2,3-Trichlorobenzene     | 15.30 | 180  | 2208     | 0.559  | ug/l   | 86     |

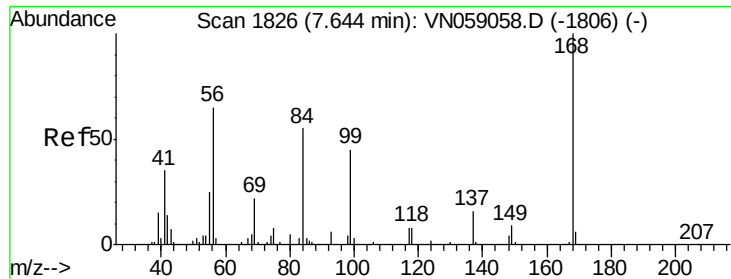
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN110119\  
Data File : VN059060.D  
Acq On : 1 Nov 2019 14:23  
Operator : JC/SP  
Sample : VN1101WBL01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Nov 02 06:03:46 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N110119W.M  
Quant Title : SW846 8260  
QLast Update : Sat Nov 02 05:43:23 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :

MSVOA\_N

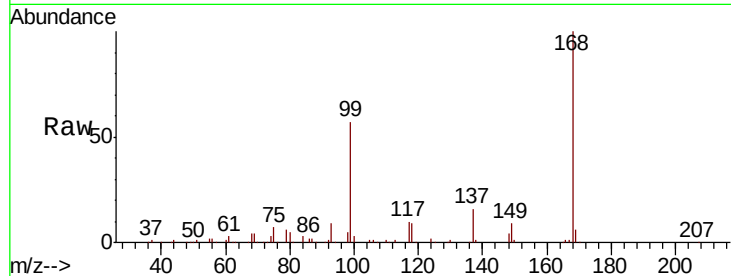
ClientSampleId :

Tot Ion:168 Resp: 457224

Ion Ratio Lower Upper

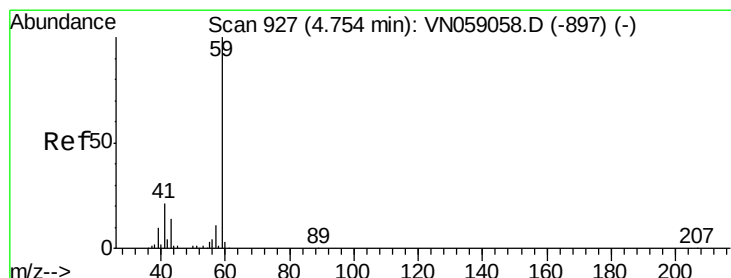
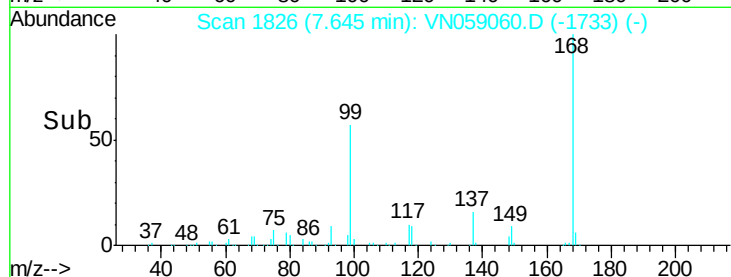
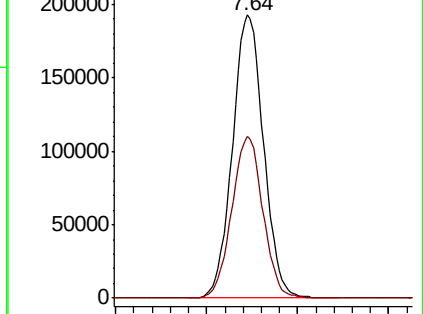
168 100

99 57.0 44.1 66.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#11

Tert butyl alcohol

Concen: 0.989 ug/l

RT: 4.71 min Scan# 914

Delta R.T. -0.04 min

Lab File: VN059060.D

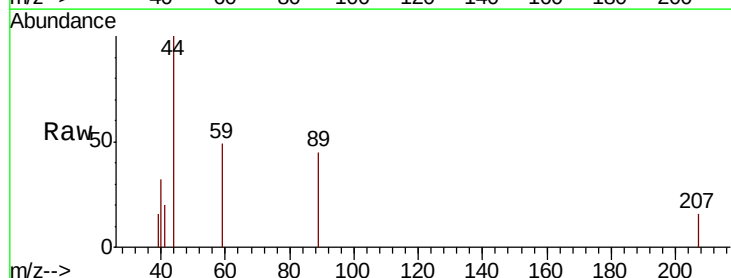
Acq: 1 Nov 2019 14:23

Tgt Ion: 59 Resp: 1108

Ion Ratio Lower Upper

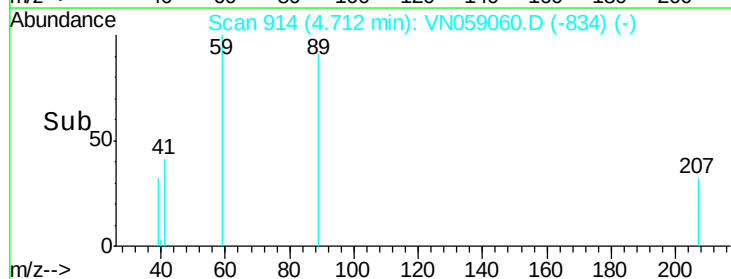
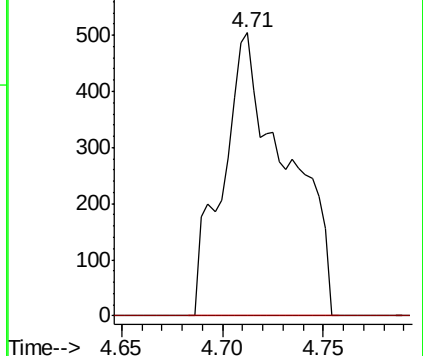
59 100

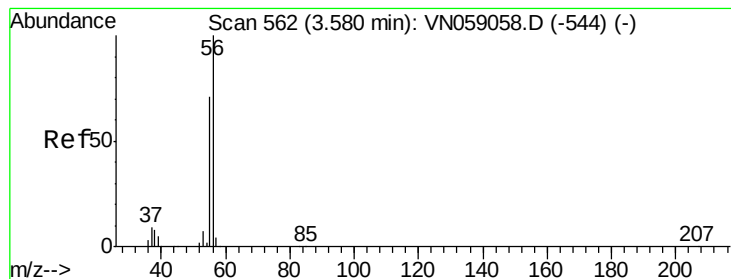
57 0.0 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO





#13

Acrolein

Concen: 0.636 ug/l

RT: 3.59 min Scan# 564

Delta R.T. 0.01 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :

MSVOA\_N

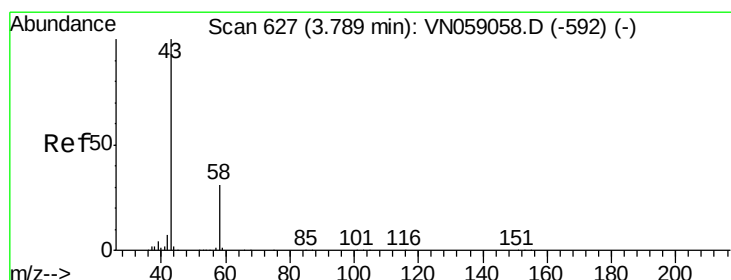
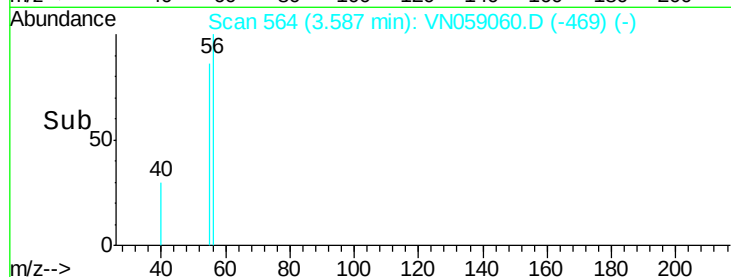
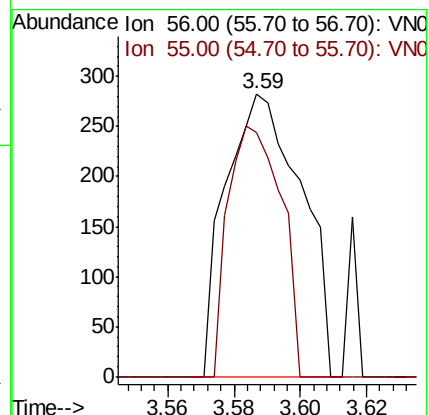
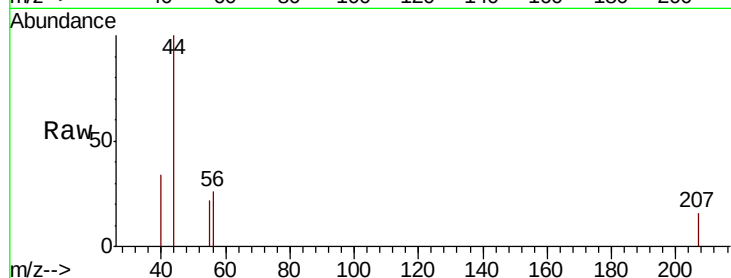
ClientSampled :

Tot Ion: 56 Resp: 450

Ion Ratio Lower Upper

56 100

55 61.8 56.1 84.1



#16

Acetone

Concen: 0.353 ug/l

RT: 3.81 min Scan# 634

Delta R.T. 0.02 min

Lab File: VN059060.D

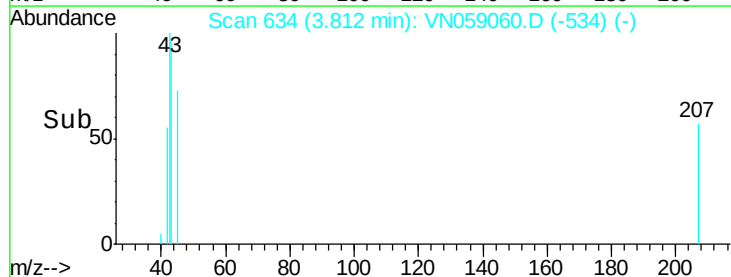
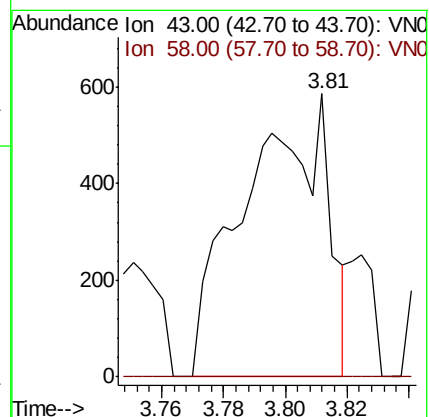
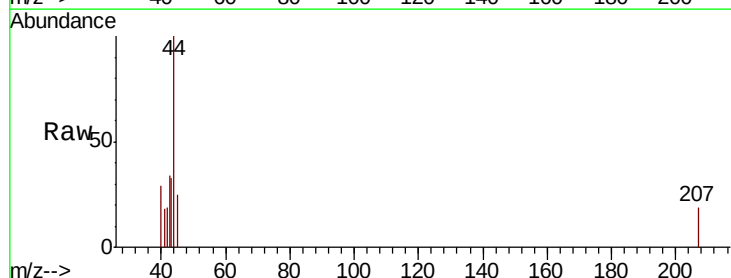
Acq: 1 Nov 2019 14:23

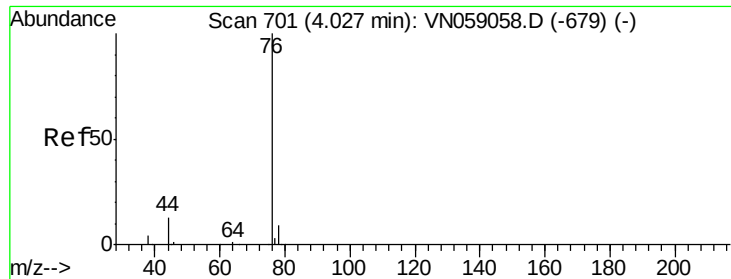
Tgt Ion: 43 Resp: 1083

Ion Ratio Lower Upper

43 100

58 0.0 25.0 37.6#





#17

Carbon Disulfide

Concen: 0.295 ug/l

RT: 4.03 min Scan# 702

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

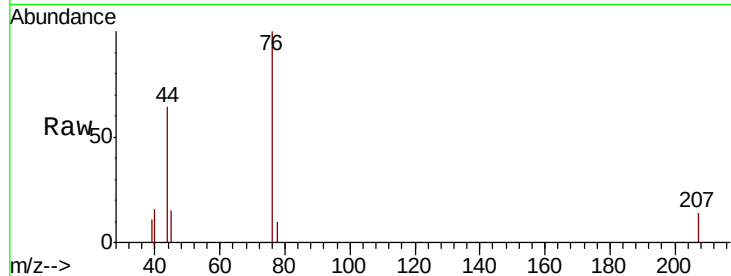
Instrument :  
MSVOA\_N  
ClientSampleId :

Tot Ion: 76 Resp: 4256

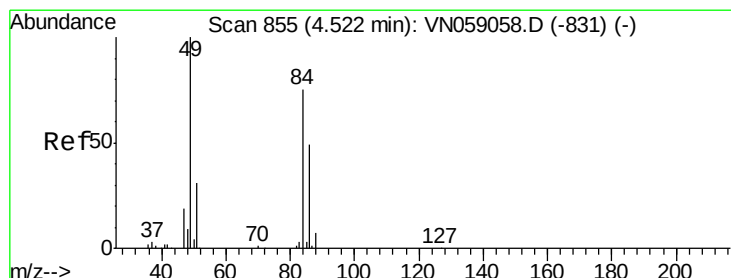
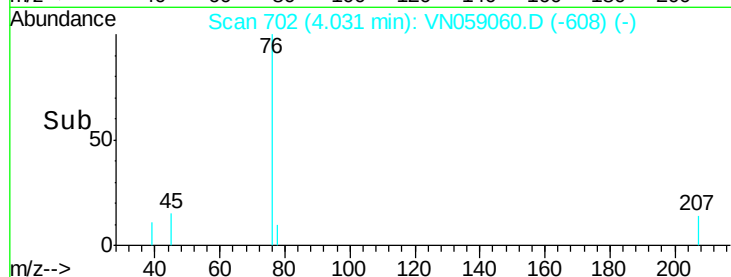
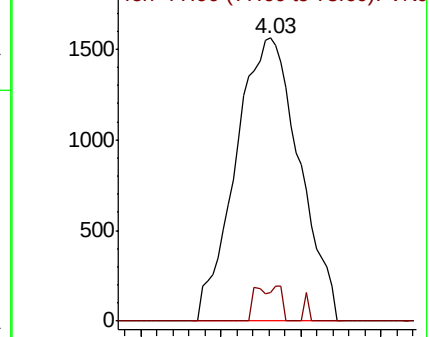
Ion Ratio Lower Upper

76 100

78 10.3 7.0 10.6



Abundance Ion 75.90 (75.60 to 76.60): VNC  
Ion 77.90 (77.60 to 78.60): VNC



#20

Methylene Chloride

Concen: 0.207 ug/l

RT: 4.53 min Scan# 857

Delta R.T. 0.01 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Tgt Ion: 84 Resp: 1109

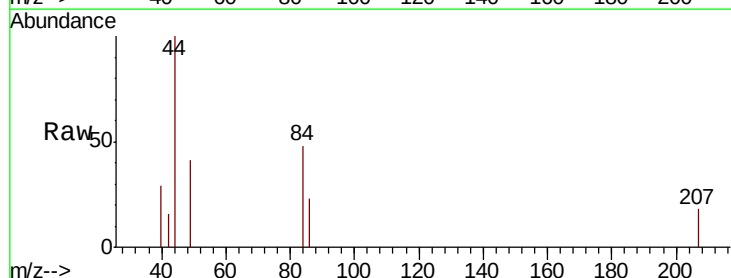
Ion Ratio Lower Upper

84 100

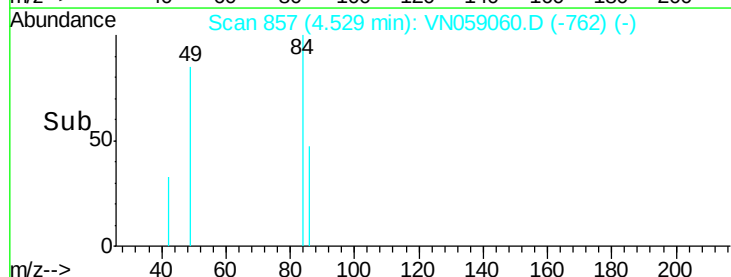
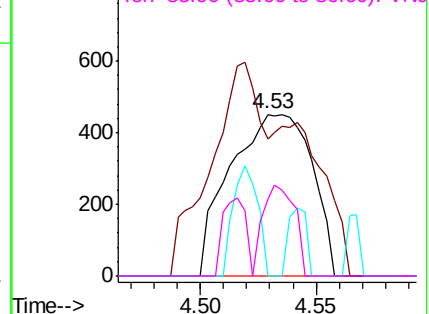
49 51.8 106.4 159.6#

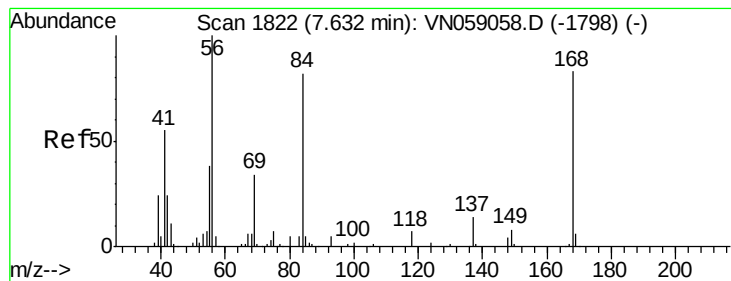
51 0.0 33.0 49.4#

86 47.1 52.0 78.0#



Abundance Ion 83.90 (83.60 to 84.60): VNC  
Ion 48.90 (48.60 to 49.60): VNC  
Ion 50.90 (50.60 to 51.60): VNC  
Ion 85.90 (85.60 to 86.60): VNC





#31

Cyclohexane

Concen: 1.004 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. 0.01 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :  
MSVOA\_N  
ClientSampled :

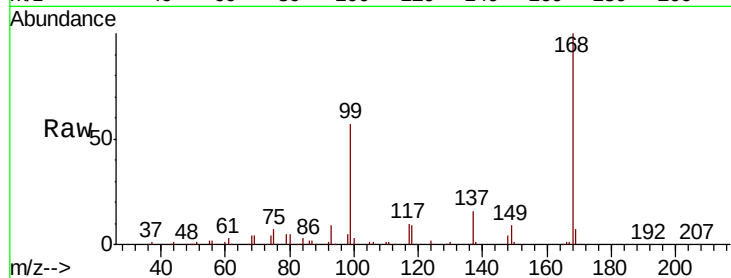
Tot Ion: 56 Resp: 9366

Ion Ratio Lower Upper

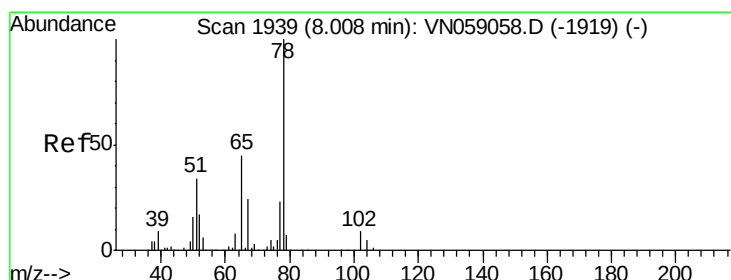
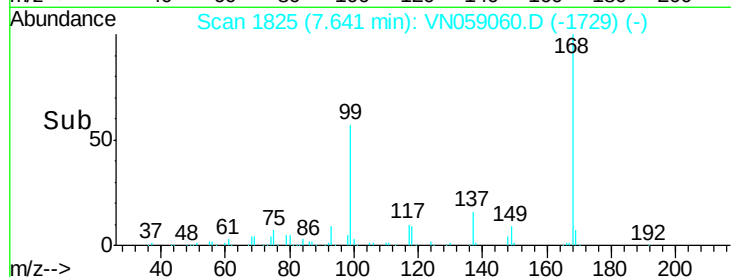
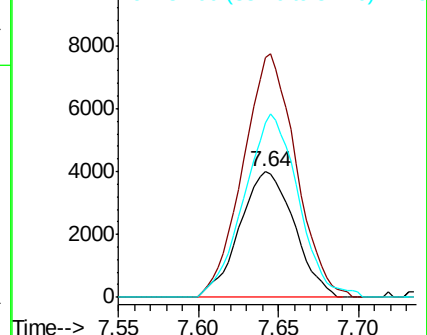
56 100

69 191.3 27.2 40.8#

84 139.5 65.2 97.8#



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: 48.327 ug/l

RT: 8.01 min Scan# 1939

Delta R.T. 0.00 min

Lab File: VN059060.D

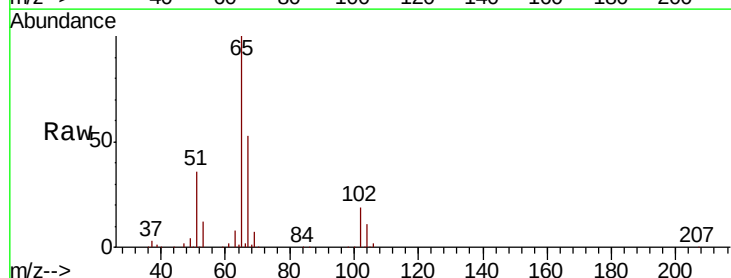
Acq: 1 Nov 2019 14:23

Tgt Ion: 65 Resp: 292639

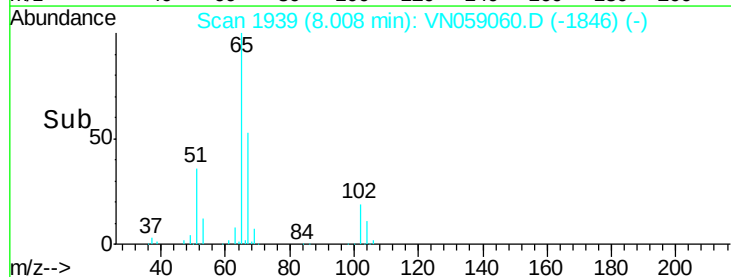
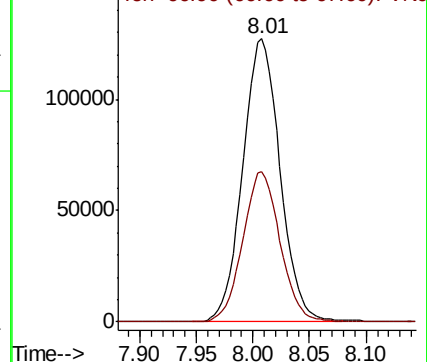
Ion Ratio Lower Upper

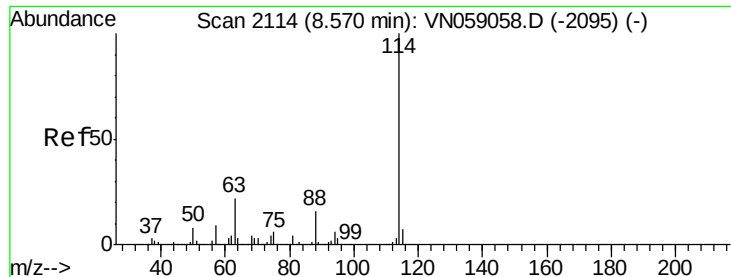
65 100

67 53.1 0.0 107.6



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: 8.57 min Scan# 2114

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :  
MSVOA\_N  
ClientSampleId :

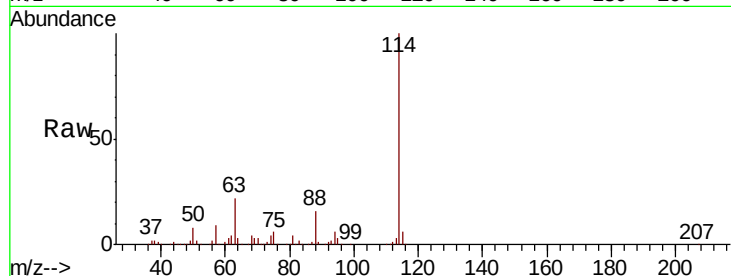
Tot Ion:114 Resp: 710702

Ion Ratio Lower Upper

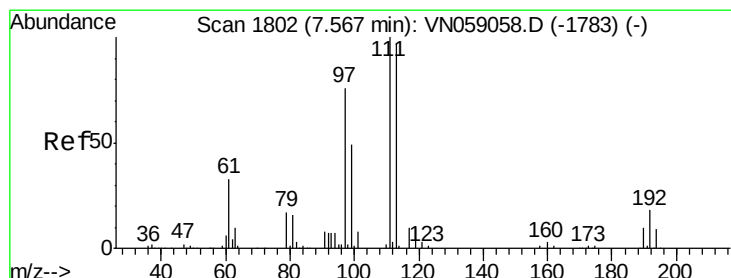
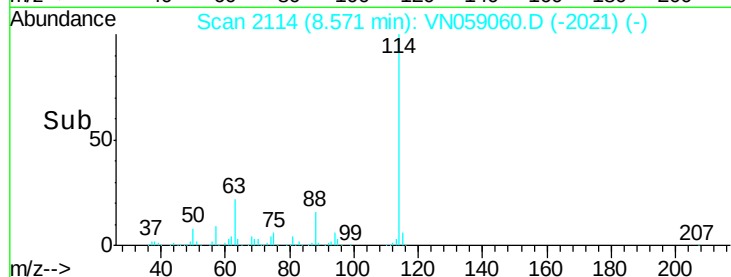
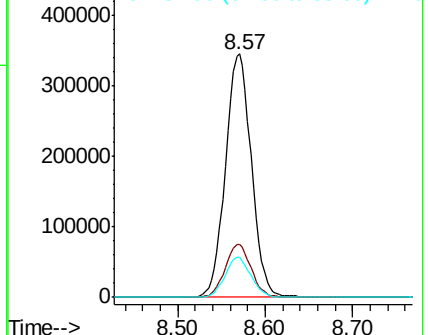
114 100

63 21.8 0.0 43.2

88 16.2 0.0 33.0



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: 48.079 ug/l

RT: 7.57 min Scan# 1803

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

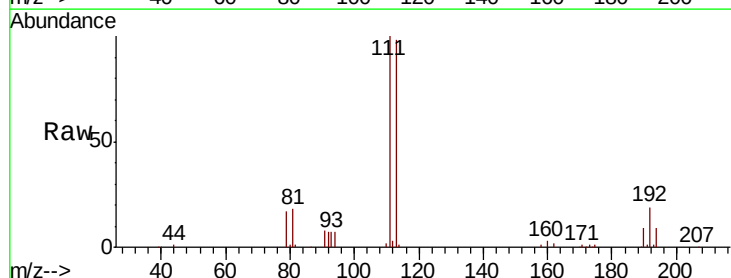
Tgt Ion:113 Resp: 220438

Ion Ratio Lower Upper

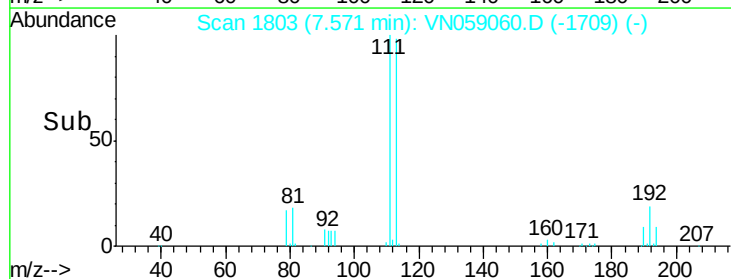
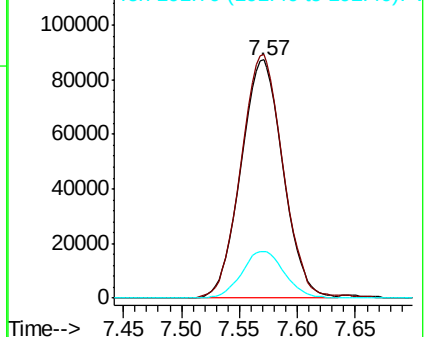
113 100

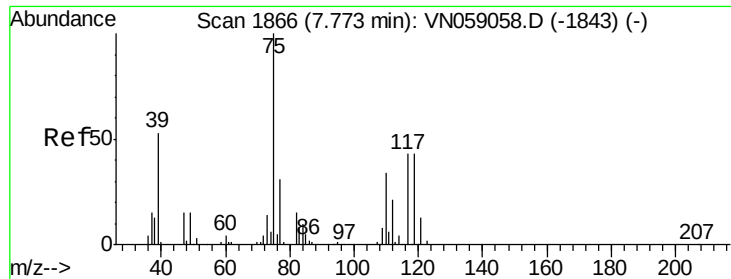
111 102.6 82.9 124.3

192 19.9 15.9 23.9



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: 4.917 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.13 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :  
MSVOA\_N  
ClientSampled :

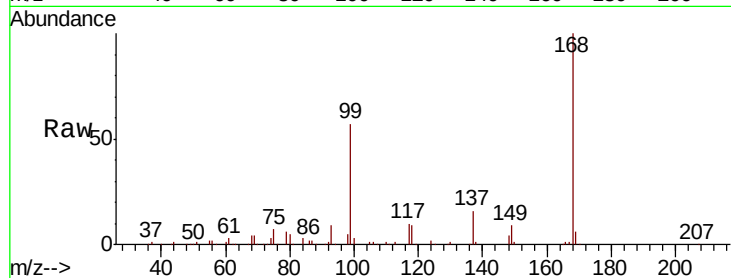
Tot Ion: 75 Resp: 34734

Ion Ratio Lower Upper

75 100

110 9.0 16.9 50.6#

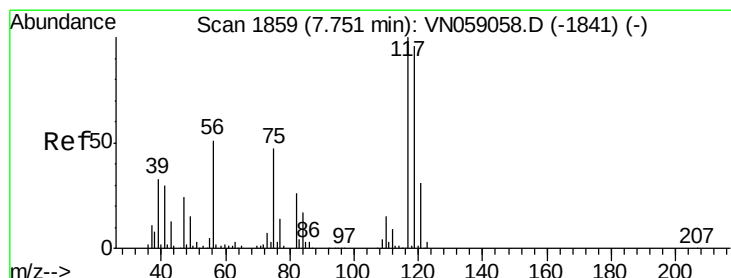
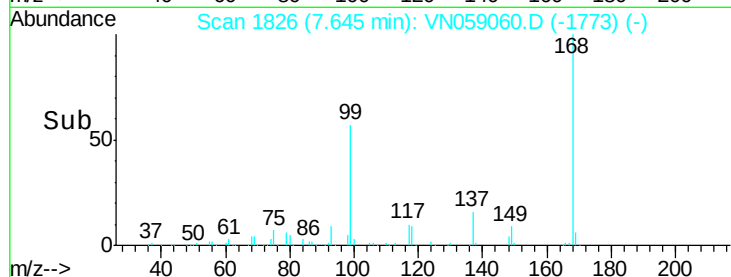
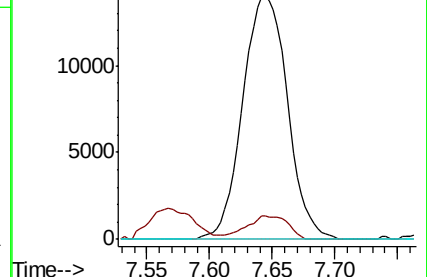
77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): VN059058.D (-1843) (-)

Ion 109.90 (109.60 to 110.60): VN059058.D (-1843) (-)

Ion 76.90 (76.60 to 77.60): VN059058.D (-1843) (-)



#38

Carbon Tetrachloride

Concen: 6.452 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.11 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

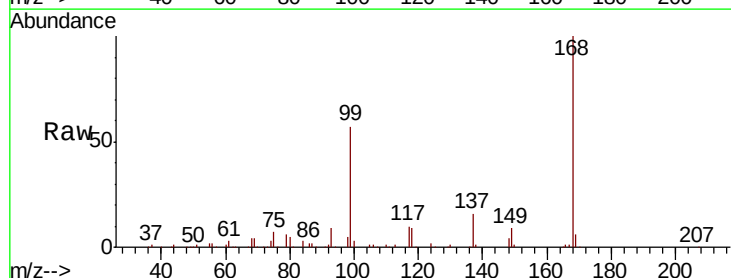
Tgt Ion: 117 Resp: 44412

Ion Ratio Lower Upper

117 100

119 4.6 76.6 114.8#

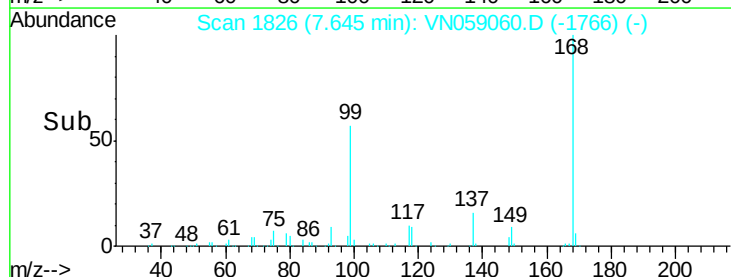
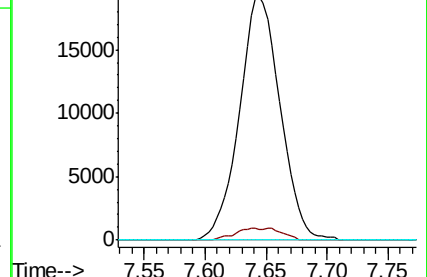
121 0.0 24.6 37.0#



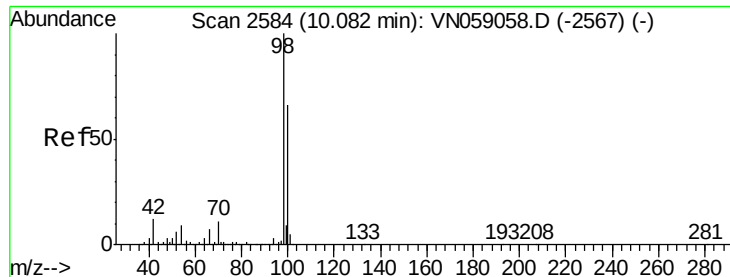
Abundance Ion 116.80 (116.50 to 117.50): VN059058.D (-1841) (-)

Ion 118.80 (118.50 to 119.50): VN059058.D (-1841) (-)

Ion 120.80 (120.50 to 121.50): VN059058.D (-1841) (-)



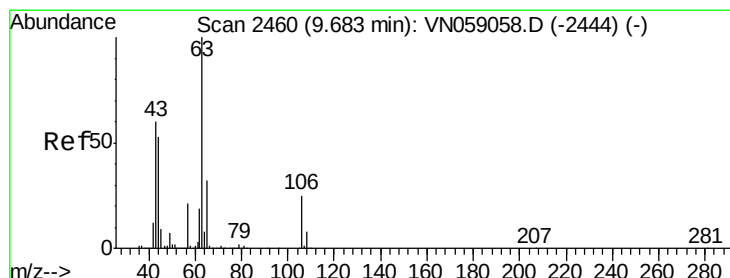
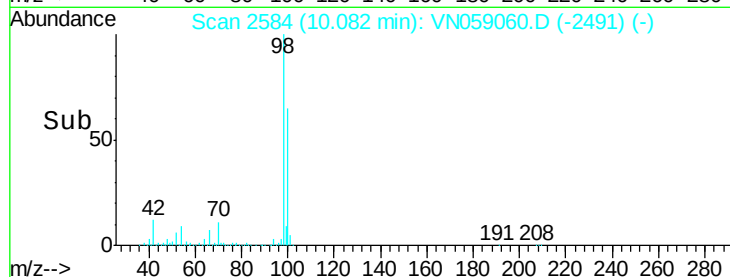
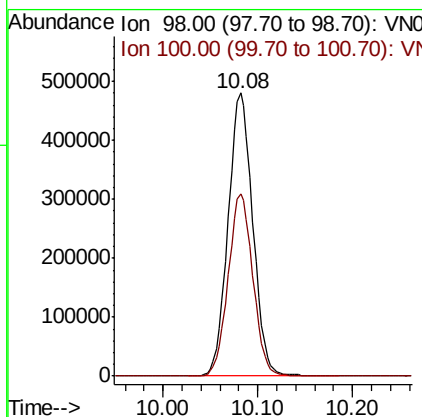
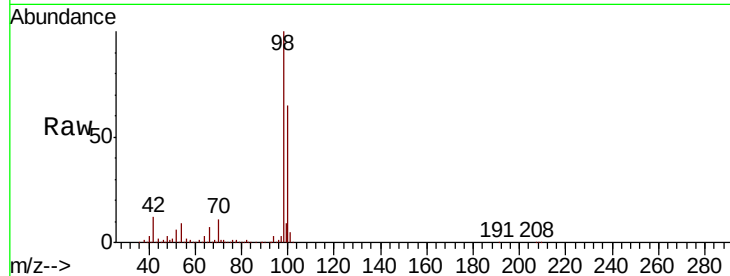




#50  
Toluene-d8  
Concen: 48.781 ug/l  
RT: 10.08 min Scan# 2584  
Delta R.T. 0.00 min  
Lab File: VN059060.D  
Acq: 1 Nov 2019 14:23

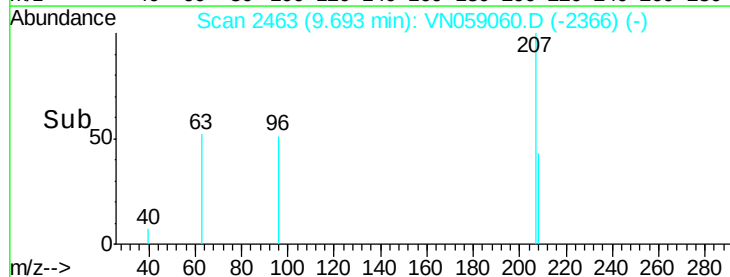
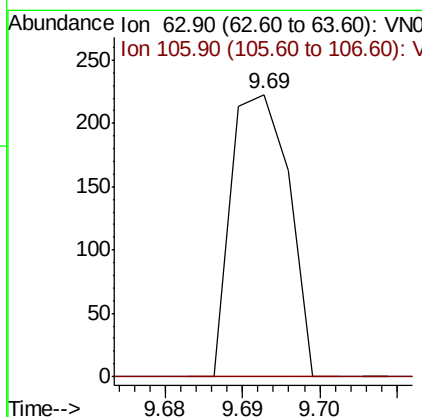
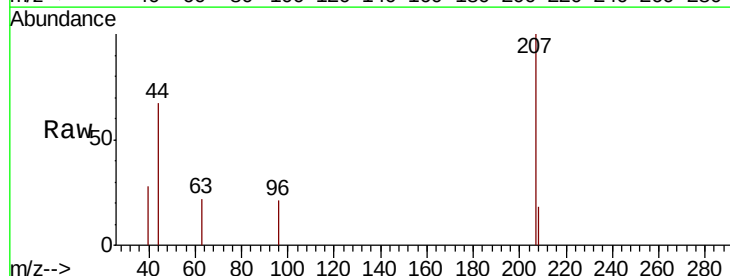
Instrument :  
MSVOA\_N  
ClientSampled :

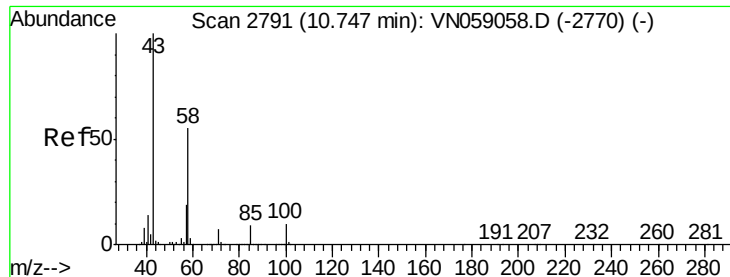
Tot Ion: 98 Resp: 870764  
Ion Ratio Lower Upper  
98 100  
100 64.5 51.7 77.5



#58  
2-Chloroethyl Vinyl ether  
Concen: 11.455 ug/l  
RT: 9.69 min Scan# 2463  
Delta R.T. 0.01 min  
Lab File: VN059060.D  
Acq: 1 Nov 2019 14:23

Tgt Ion: 63 Resp: 116  
Ion Ratio Lower Upper  
63 100  
106 0.0 19.8 29.6#





#59

2-Hexanone

Concen: 0.239 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.01 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :

MSVOA\_N

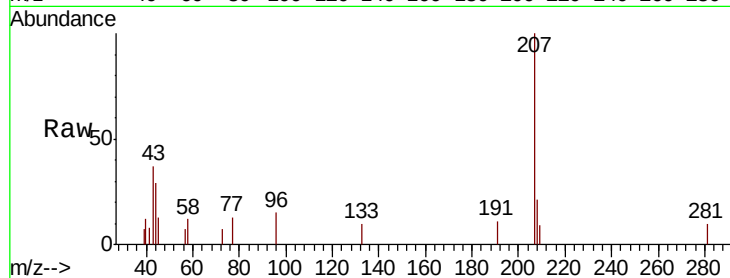
ClientSampled :

Tot Ion: 43 Resp: 1295

Ion Ratio Lower Upper

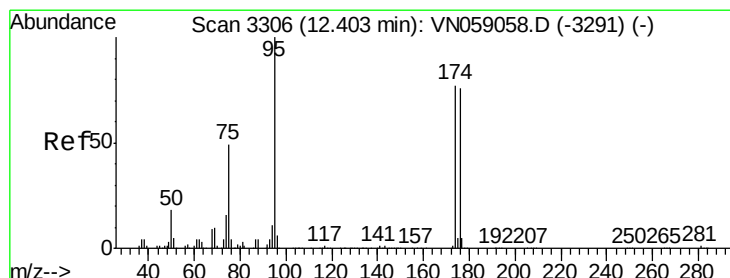
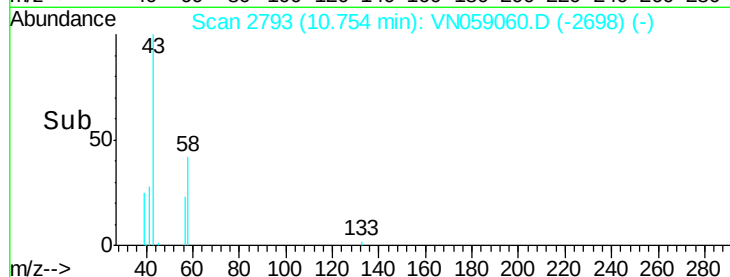
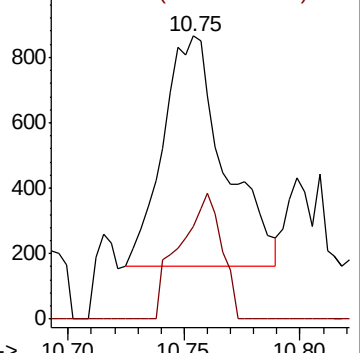
43 100

58 37.6 27.4 82.2



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#62

4-Bromofluorobenzene

Concen: 42.549 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

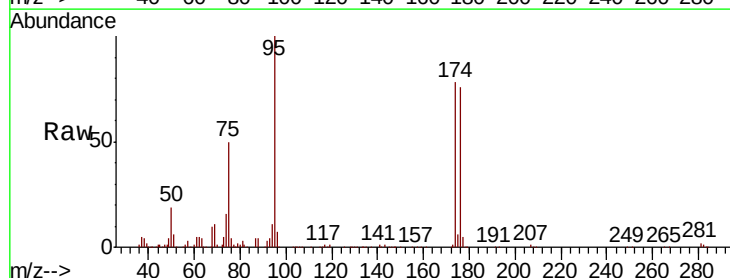
Tgt Ion: 95 Resp: 273022

Ion Ratio Lower Upper

95 100

174 78.2 0.0 155.8

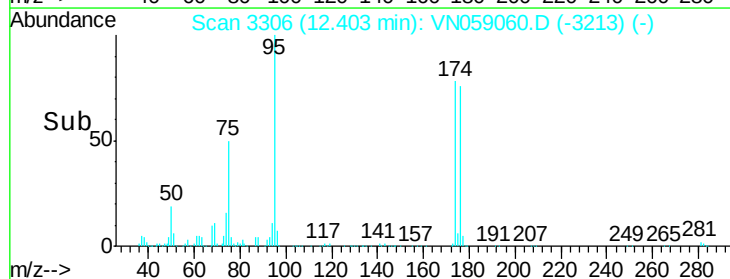
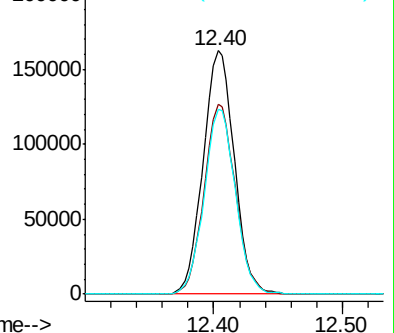
176 76.2 0.0 151.6

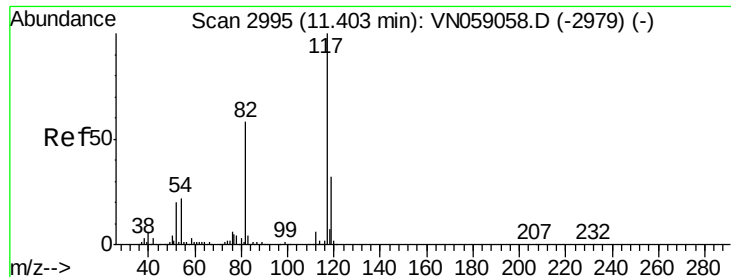


Abundance Ion 94.90 (94.60 to 95.60): VN0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :

MSVOA\_N

ClientSampled :

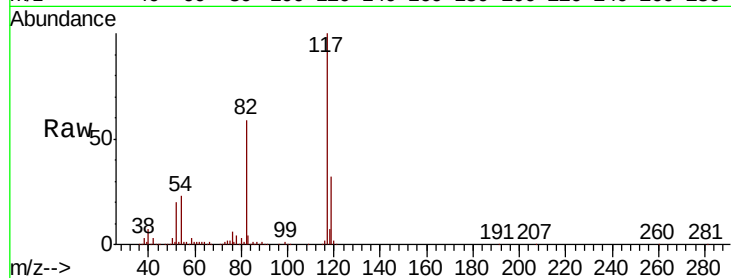
Tot Ion:117 Resp: 614448

Ion Ratio Lower Upper

117 100

82 58.5 46.0 69.0

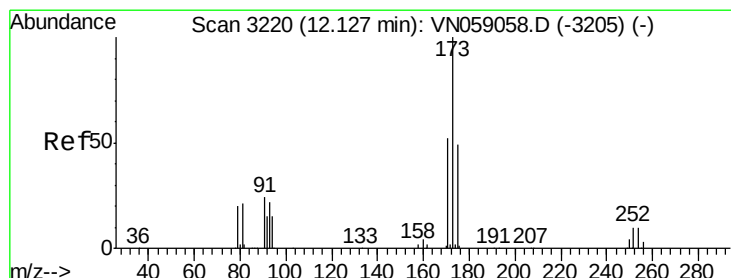
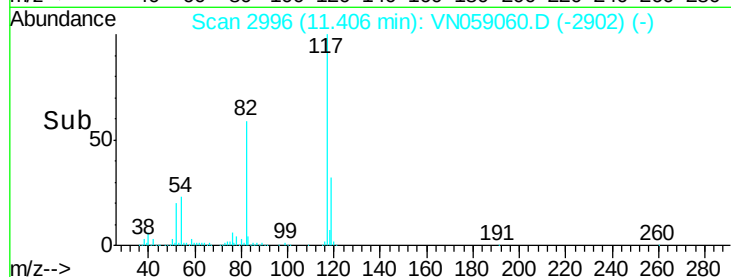
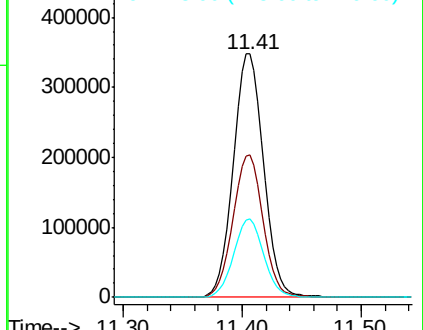
119 32.3 25.6 38.4



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VN0

Ion 118.90 (118.60 to 119.60): V



#71

Bromoform

Concen: 0.411 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.27 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

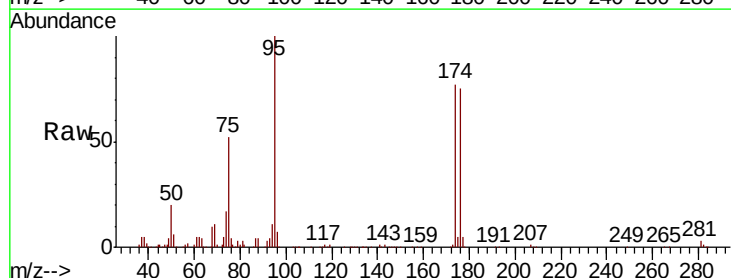
Tgt Ion:173 Resp: 1476

Ion Ratio Lower Upper

173 100

175 813.5 24.4 73.2#

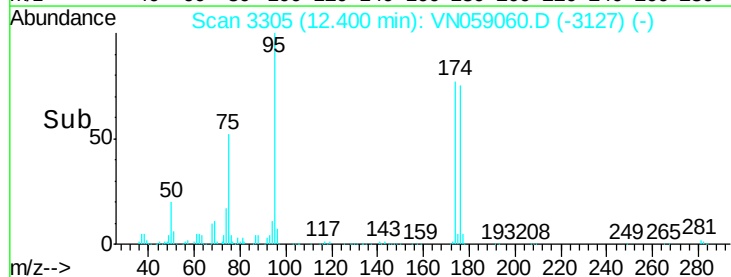
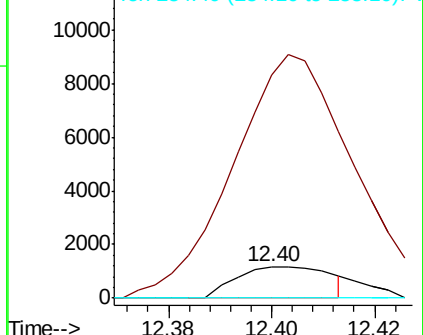
254 0.0 0.1 0.1#

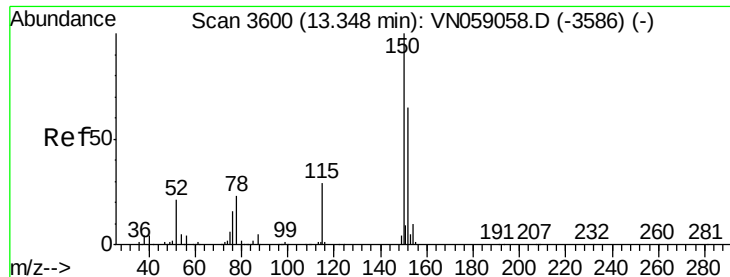


Abundance Ion 172.70 (172.40 to 173.40): V

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: 13.35 min Scan# 3600

Delta R.T. 0.00 min

Lab File: VN059060.D

Acq: 1 Nov 2019 14:23

Instrument :

MSVOA\_N

ClientSampled :

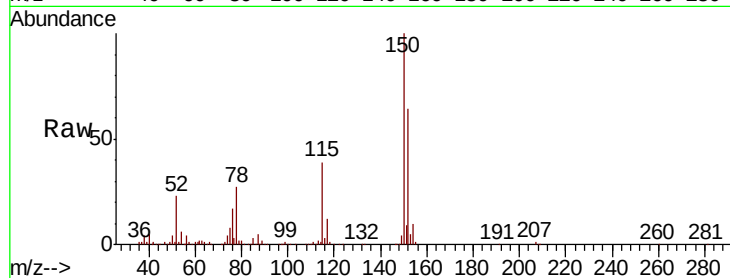
Tot Ion:152 Resp: 221126

Ion Ratio Lower Upper

152 100

115 60.0 29.6 88.9

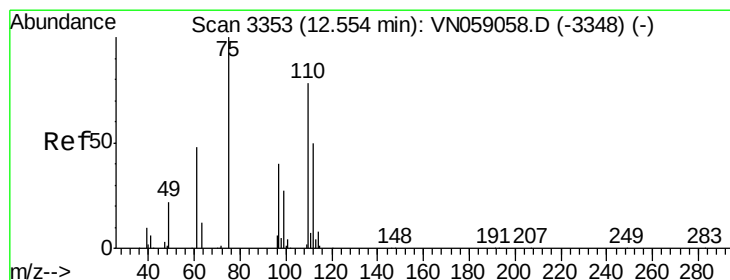
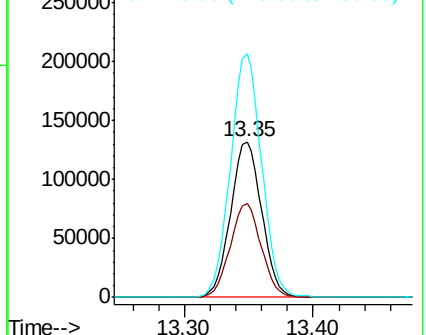
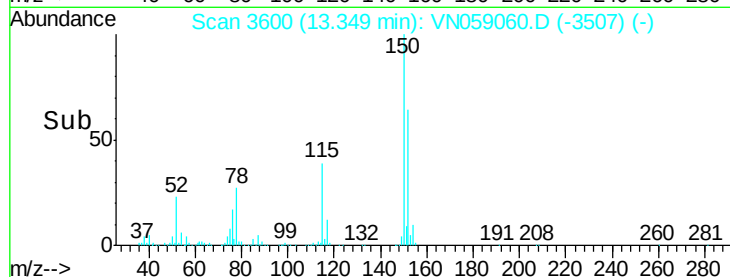
150 157.0 0.0 345.8



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: 26.606 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN059060.D

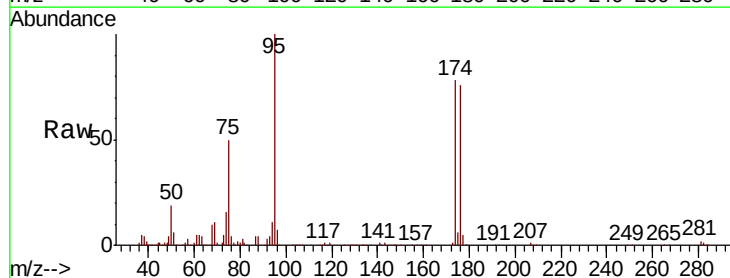
Acq: 1 Nov 2019 14:23

Tgt Ion: 75 Resp: 139224

Ion Ratio Lower Upper

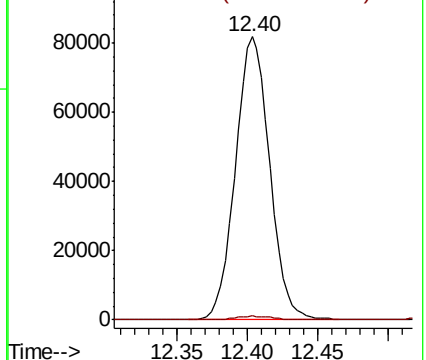
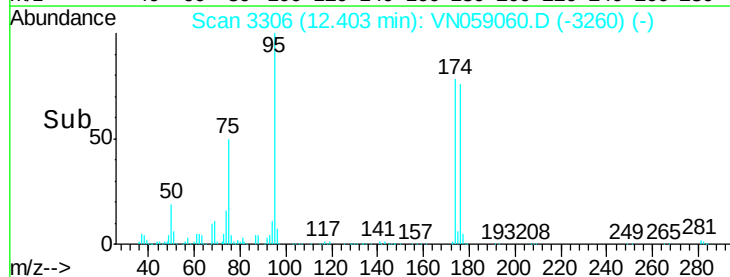
75 100

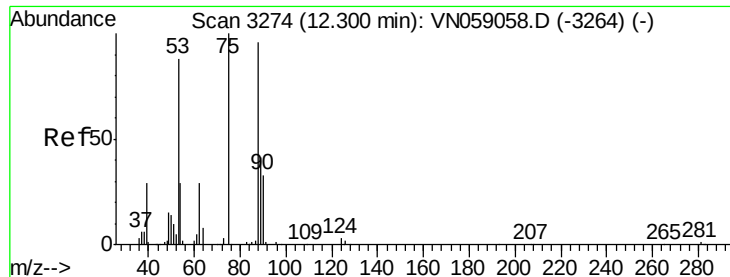
77 1.5 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V

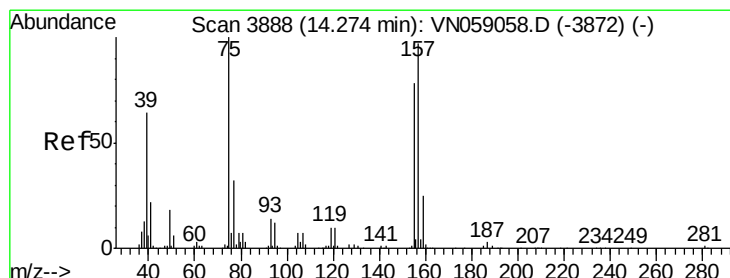
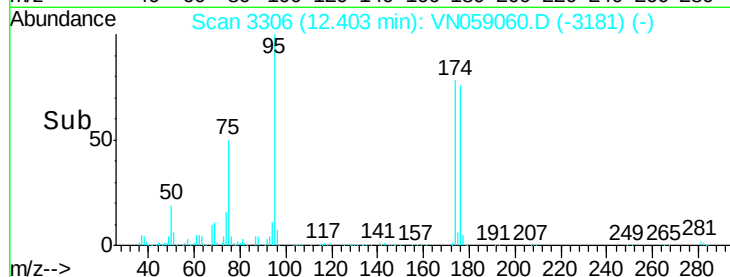
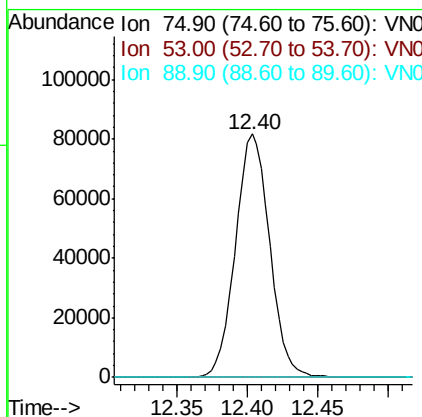
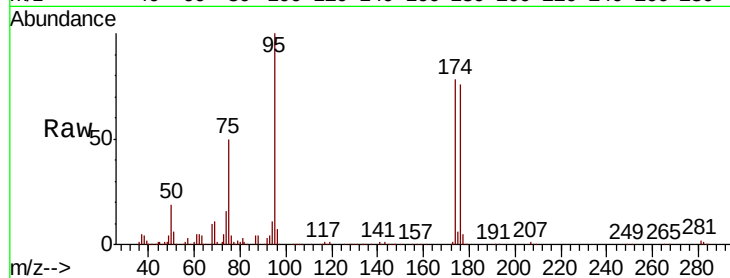




#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 68.206 ug/l  
 RT: 12.40 min Scan# 3306  
 Delta R.T. 0.10 min  
 Lab File: VN059060.D  
 Acq: 1 Nov 2019 14:23

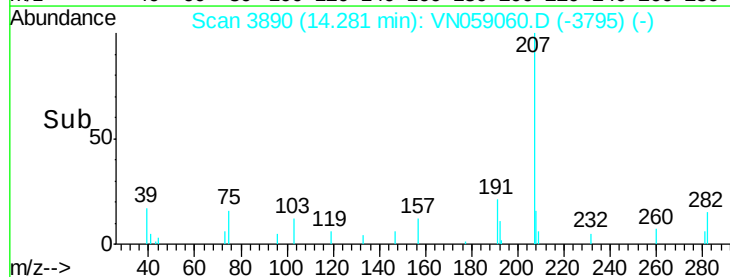
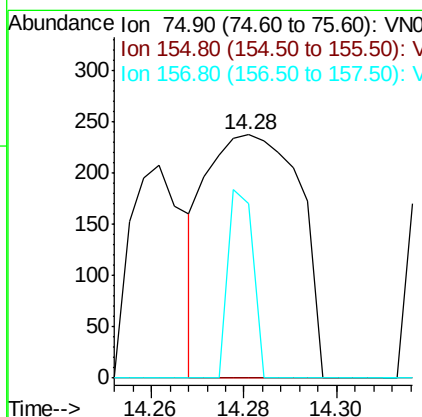
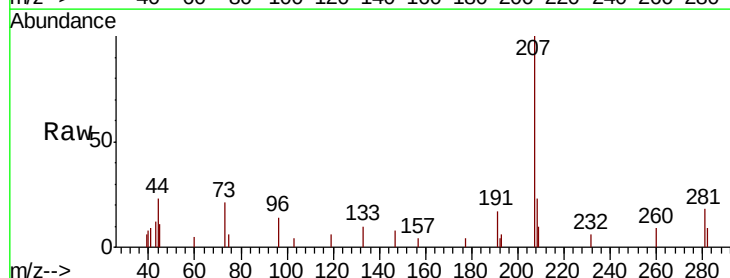
Instrument :  
 MSVOA\_N  
 ClientSampled :

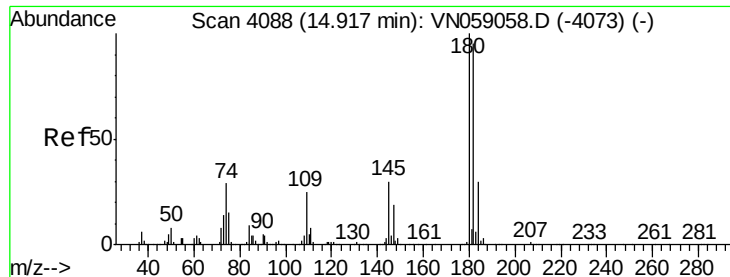
Tot Ion: 75 Resp: 139224  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 70.4 105.6#  
 89 0.0 34.2 51.2#



#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: 0.264 ug/l  
 RT: 14.28 min Scan# 3890  
 Delta R.T. 0.01 min  
 Lab File: VN059060.D  
 Acq: 1 Nov 2019 14:23

Tgt Ion: 75 Resp: 331  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 39.7 119.1#  
 157 20.5 51.0 153.0#

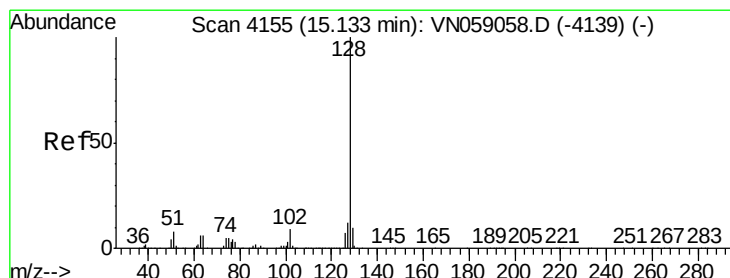
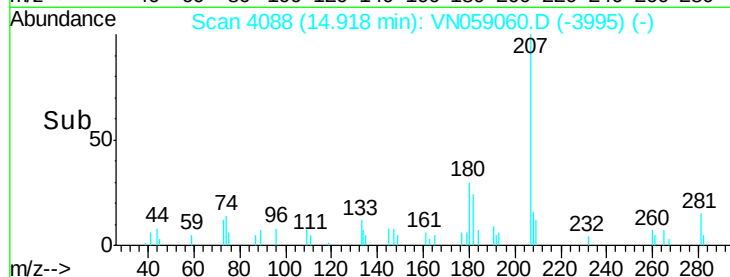
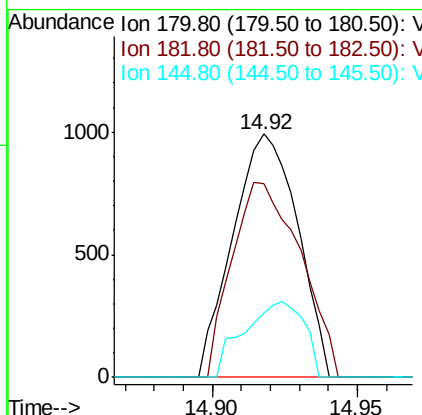
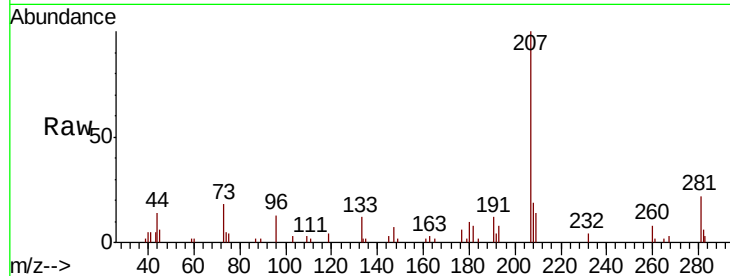




#93  
 1,2,4-Trichlorobenzene  
 Concen: 0.397 ug/l  
 RT: 14.92 min Scan# 4088  
 Delta R.T. 0.00 min  
 Lab File: VN059060.D  
 Acq: 1 Nov 2019 14:23

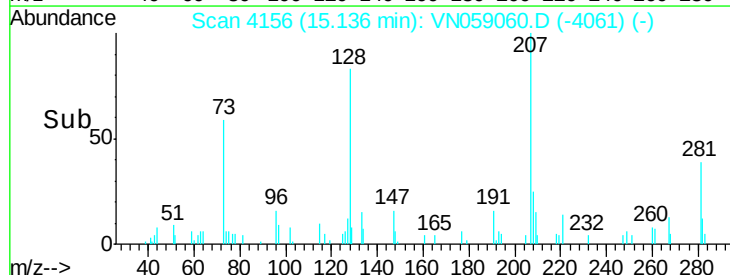
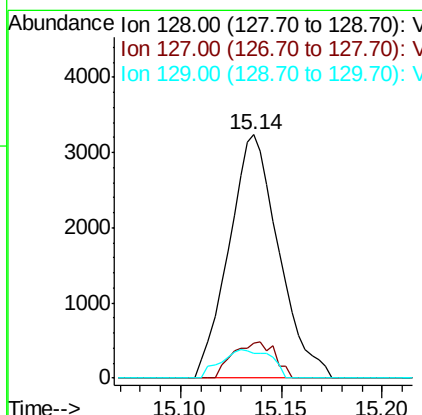
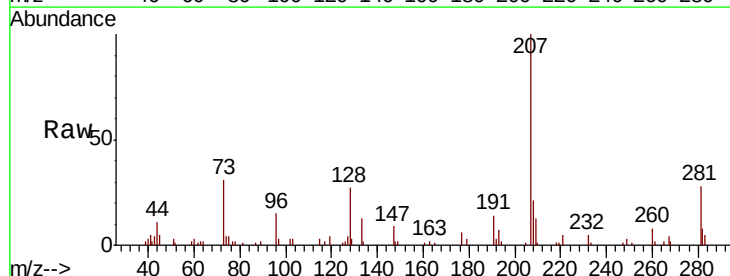
Instrument :  
 MSVOA\_N  
 ClientSampled :

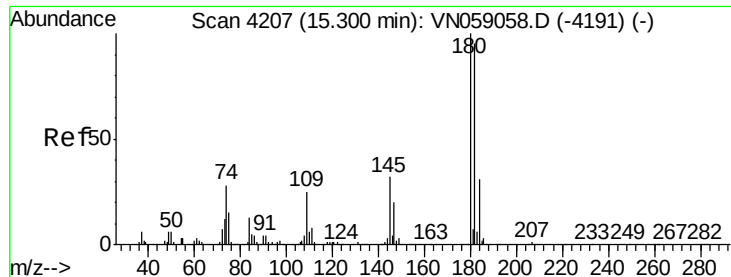
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 84.6  | 47.8  | 143.4 |
| 145     | 28.9  | 15.1  | 45.3  |



#95  
 Naphthalene  
 Concen: 3.420 ug/l  
 RT: 15.14 min Scan# 4156  
 Delta R.T. 0.00 min  
 Lab File: VN059060.D  
 Acq: 1 Nov 2019 14:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.6  | 9.9   | 14.9  |
| 129     | 11.6  | 8.4   | 12.6  |

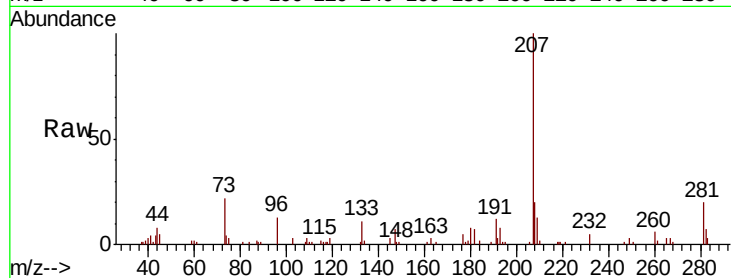




#96  
 1,2,3-Trichlorobenzene  
 Concen: 0.559 ug/l  
 RT: 15.30 min Scan# 4207  
 Delta R.T. 0.00 min  
 Lab File: VN059060.D  
 Acq: 1 Nov 2019 14:23

Instrument :  
 MSVOA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 77.5  | 47.7  | 143.1 |
| 145     | 33.1  | 16.0  | 48.0  |



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

