

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111318\  
 Data File : VN052289.D  
 Acq On : 13 Nov 2018 16:23  
 Operator : MD\SY  
 Sample : PB114744ZHE#02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 14 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 14 00:09:21 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110918W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Nov 12 00:34:27 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 317627   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 534242   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 466914   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 172400   | 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   | 218956   | 50.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.80% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 170504   | 49.27 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.54%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 677177   | 50.00 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.00% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 207744   | 47.43 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.86%  |          |

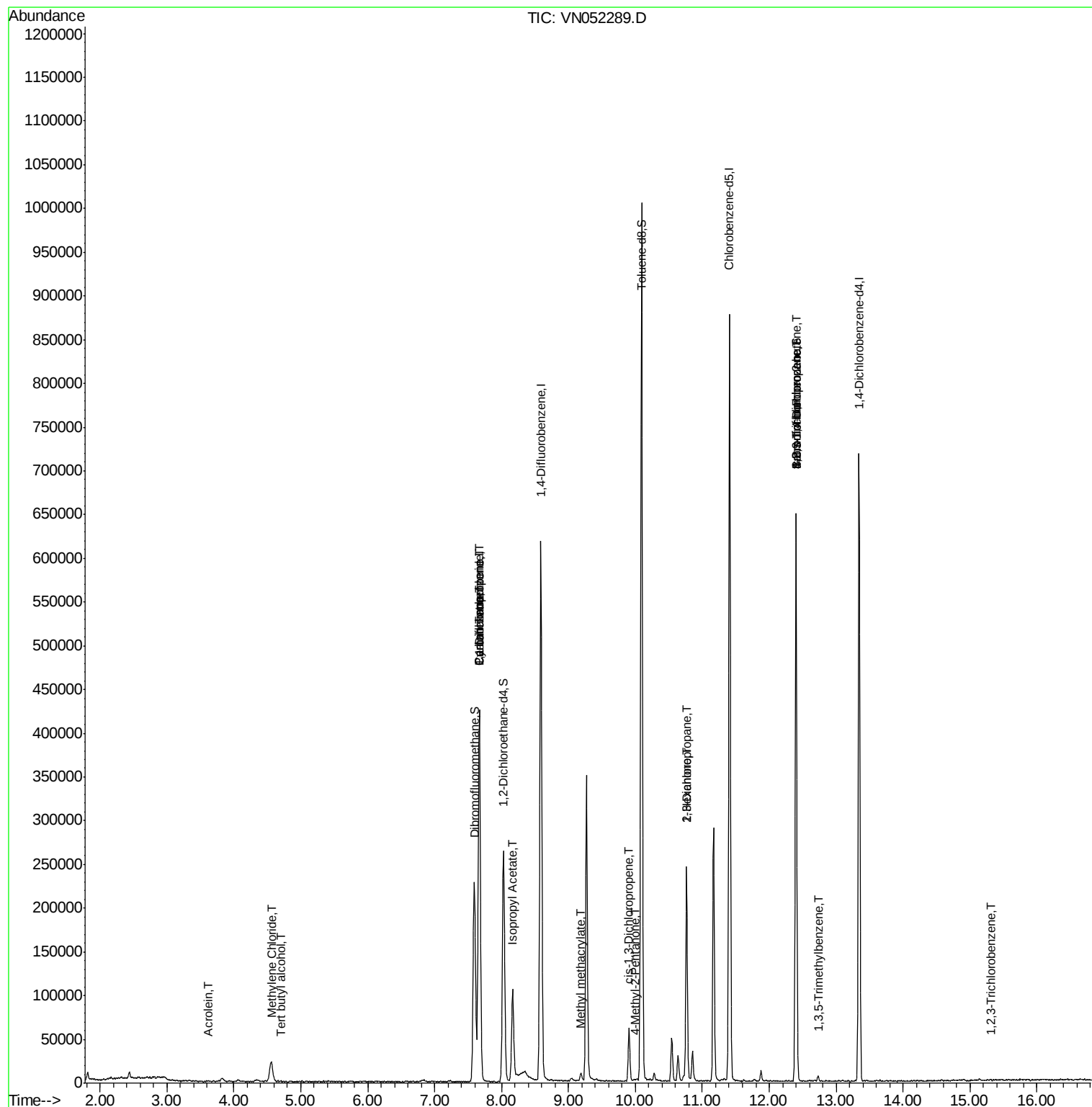
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.70  | 59   | 65       | 0.292     | ug/l # | 71     |
| 13) Acrolein                   | 3.62  | 56   | 275      | 34.786    | ug/l # | 56     |
| 16) Acetone                    | 3.82  | 43   | 5617     | Below Cal | #      | 85     |
| 20) Methylene Chloride         | 4.56  | 84   | 15174    | 3.832     | ug/l   | 95     |
| 31) Cyclohexane                | 7.67  | 56   | 8738     | 0.620     | ug/l # | 15     |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 28344    | 5.256     | ug/l # | 52     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 34651    | 7.091     | ug/l # | 17     |
| 43) Isopropyl Acetate          | 8.17  | 43   | 130194   | 18.417    | ug/l   | 98     |
| 48) Methyl methacrylate        | 9.18  | 41   | 4607     | 1.237     | ug/l # | 15     |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1283     | 0.329     | ug/l   | 91     |
| 54) cis-1,3-Dichloropropene    | 9.90  | 75   | 9890     | 1.654     | ug/l # | 71     |
| 57) 1,3-Dichloropropane        | 10.77 | 76   | 2340     | 0.388     | ug/l # | 43     |
| 59) 2-Hexanone                 | 10.76 | 43   | 40628    | 14.824    | ug/l # | 56     |
| 71) Bromoform                  | 12.40 | 173  | 1164     | 0.582     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 113156   | 37.098    | ug/l # | 100    |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 2727     | 0.243     | ug/l   | 95     |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 113156   | 126.631   | ug/l # | 8      |
| 96) 1,2,3-Trichlorobenzene     | 15.32 | 180  | 519      | 0.248     | ug/l # | 53     |

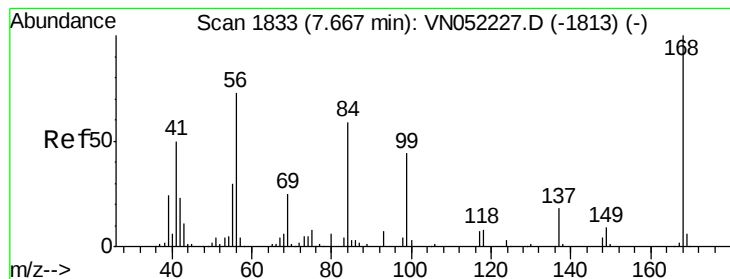
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN111318\  
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MSVOA\_N  
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Quant Time: Nov 14 00:09:21 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N110918W.M  
Quant Title : SW846 8260  
QLast Update : Mon Nov 12 00:34:27 2018  
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: VN052289.D

Acq: 13 Nov 2018 16:23

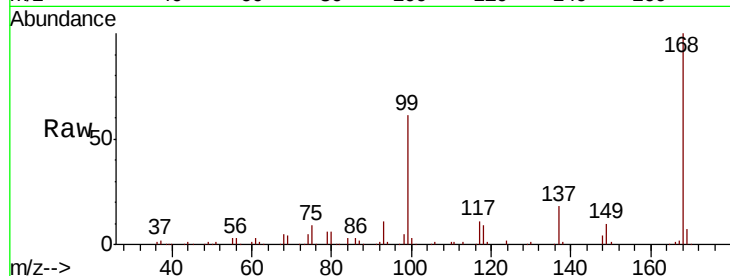
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:168 Resp: 317627

Ion Ratio Lower Upper

168 100

99 60.9 44.7 67.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0

7.67

150000

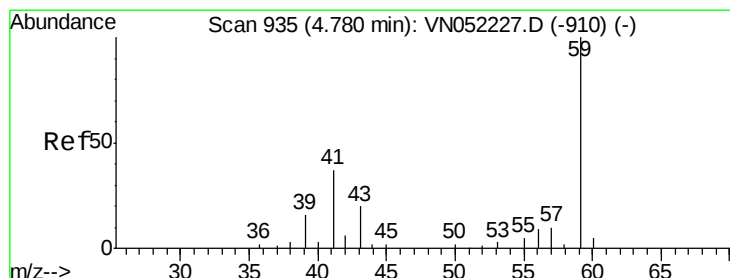
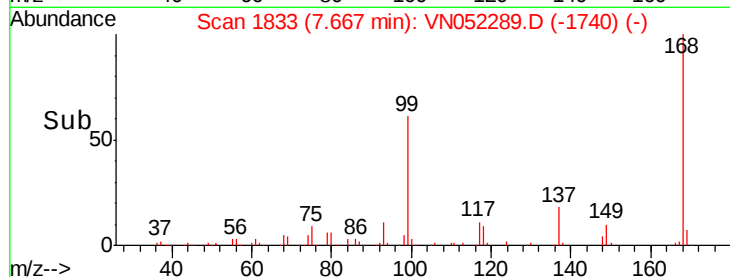
100000

50000

0

Time-->

7.60 7.70 7.80



#11

Tert butyl alcohol

Concen: 0.292 ug/l

RT: 4.70 min Scan# 910

Delta R.T. -0.08 min

Lab File: VN052289.D

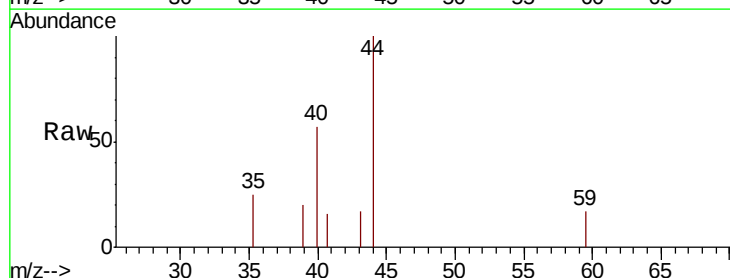
Acq: 13 Nov 2018 16:23

Tgt Ion: 59 Resp: 65

Ion Ratio Lower Upper

59 100

57 0.0 8.8 13.2#



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 57.00 (56.70 to 57.70): VN0

4.70

200

150

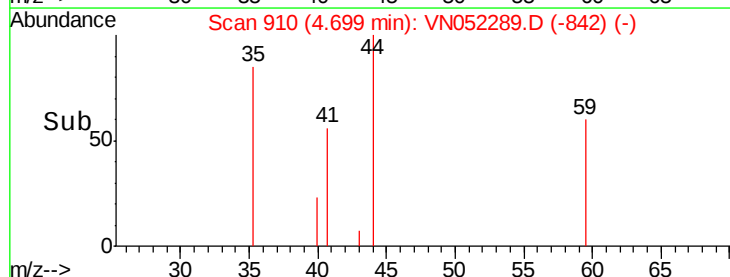
100

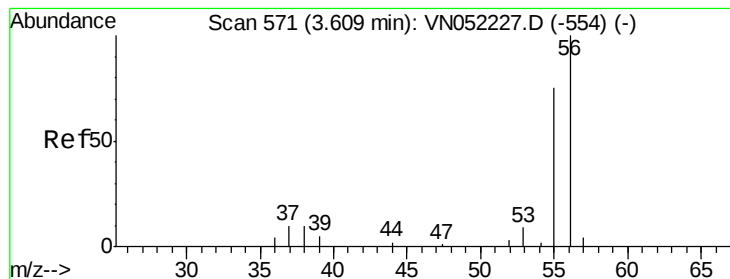
50

0

Time-->

4.69 4.70 4.71





#13

Acrolein

Concen: 34.786 ug/l

RT: 3.62 min Scan# 573

Delta R.T. 0.01 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

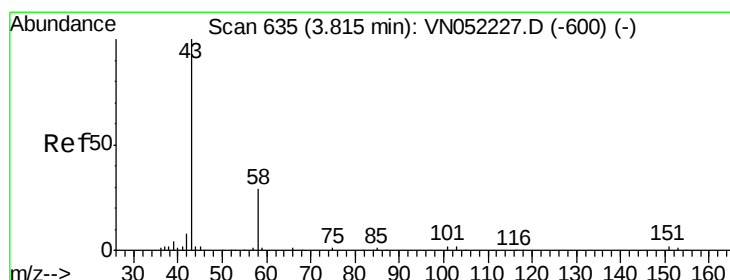
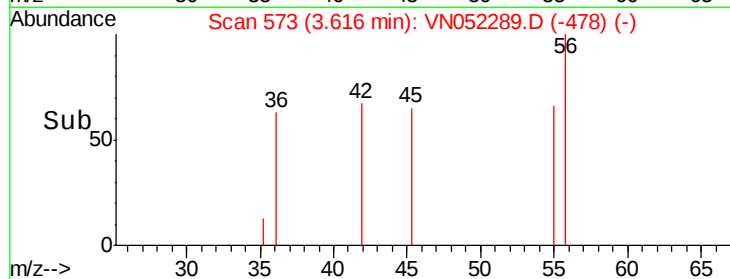
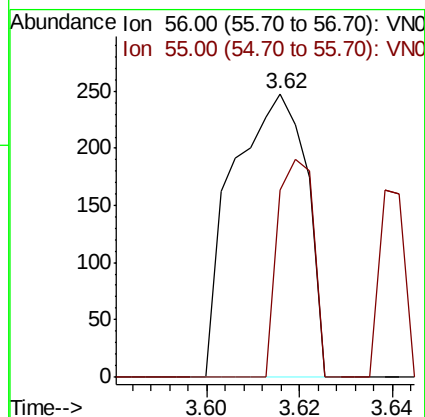
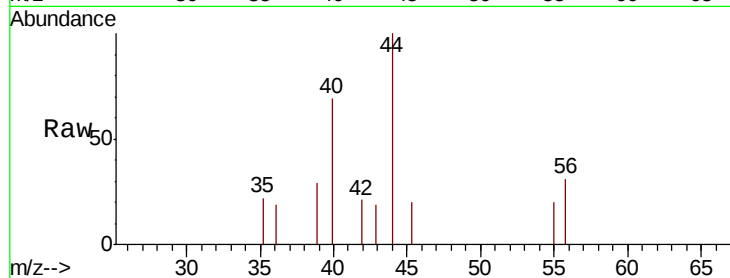
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 56 Resp: 275

Ion Ratio Lower Upper

56 100

55 37.5 59.9 89.9#



#16

Acetone

Concen: Below Cal

RT: 3.82 min Scan# 636

Delta R.T. 0.00 min

Lab File: VN052289.D

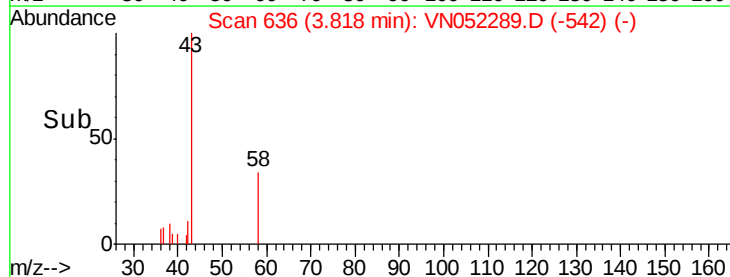
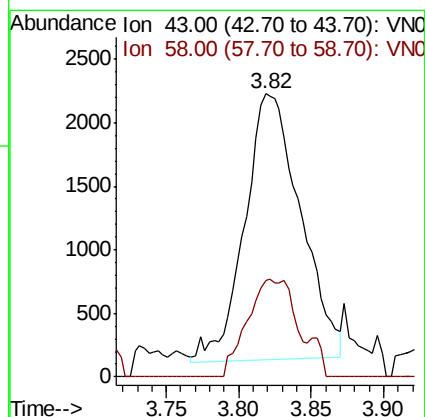
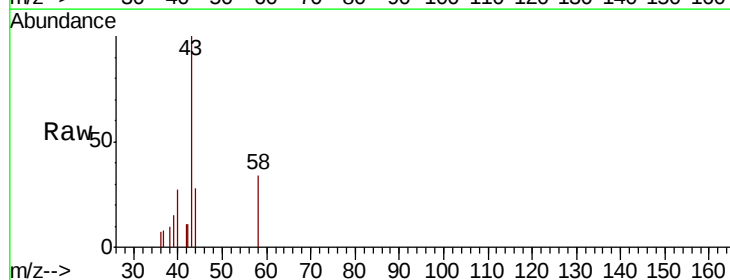
Acq: 13 Nov 2018 16:23

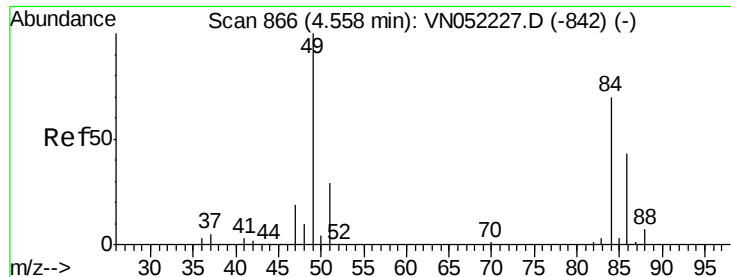
Tgt Ion: 43 Resp: 5617

Ion Ratio Lower Upper

43 100

58 36.8 23.0 34.6#

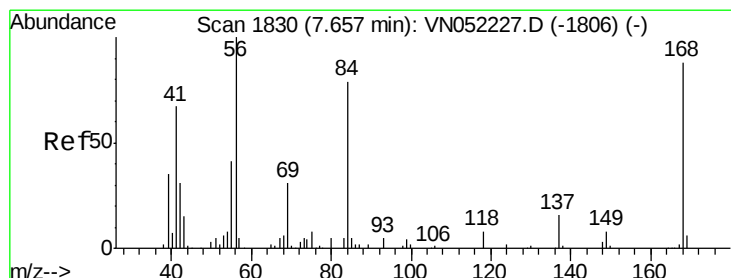
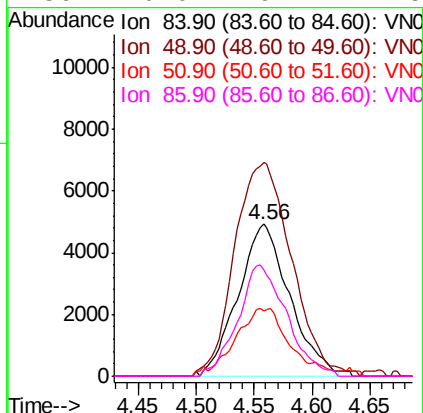
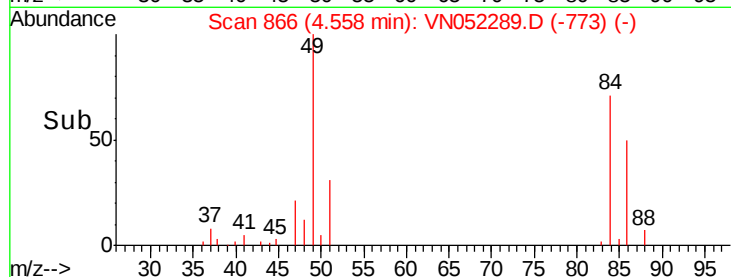
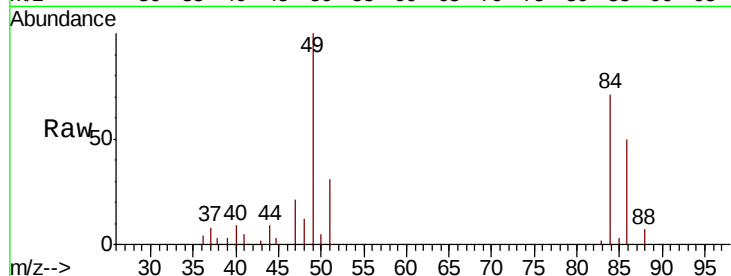




#20  
Methylene Chloride  
Concen: 3.832 ug/l  
RT: 4.56 min Scan# 866  
Delta R.T. 0.00 min  
Lab File: VN052289.D  
Acq: 13 Nov 2018 16:23

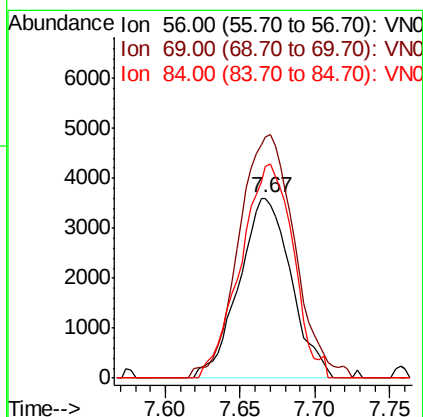
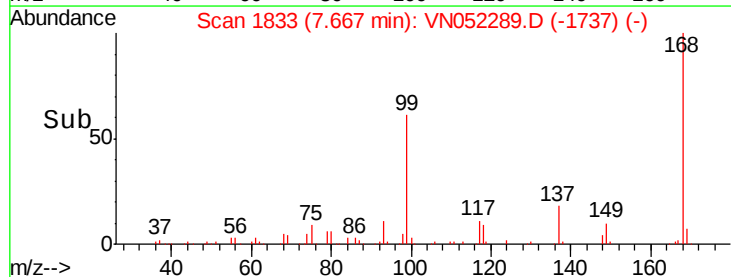
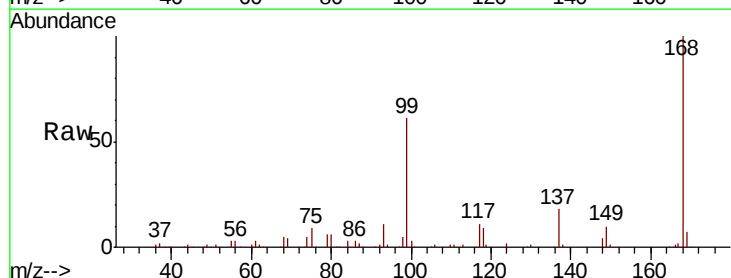
Instrument :  
MSVOA\_N  
ClientSampled :

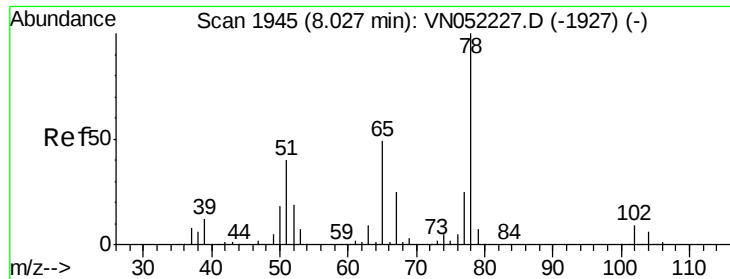
Tot Ion: 84 Resp: 15174  
Ion Ratio Lower Upper  
84 100  
49 140.4 114.8 172.2  
51 43.3 33.1 49.7  
86 70.0 49.7 74.5



#31  
Cyclohexane  
Concen: 0.620 ug/l  
RT: 7.67 min Scan# 1833  
Delta R.T. 0.01 min  
Lab File: VN052289.D  
Acq: 13 Nov 2018 16:23

Tgt Ion: 56 Resp: 8738  
Ion Ratio Lower Upper  
56 100  
69 134.1 24.8 37.2#  
84 117.6 63.1 94.7#

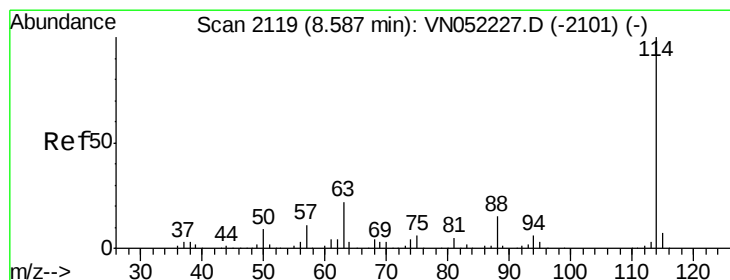
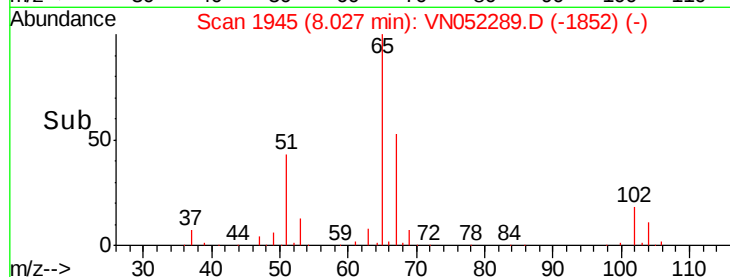
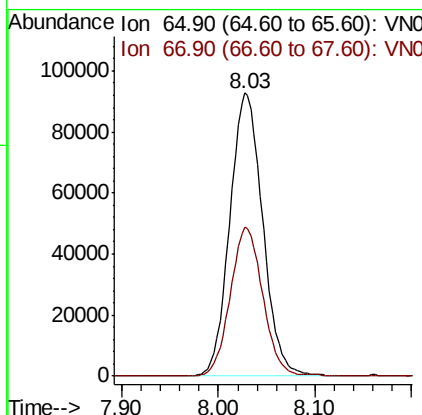
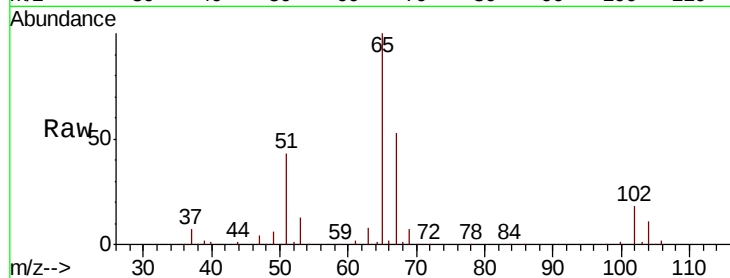




#33  
 1,2-Dichloroethane-d4  
 Concen: Below ug/l  
 RT: 8.03 min Scan# 1945  
 Delta R.T. 0.00 min  
 Lab File: VN052289.D  
 Acq: 13 Nov 2018 16:23

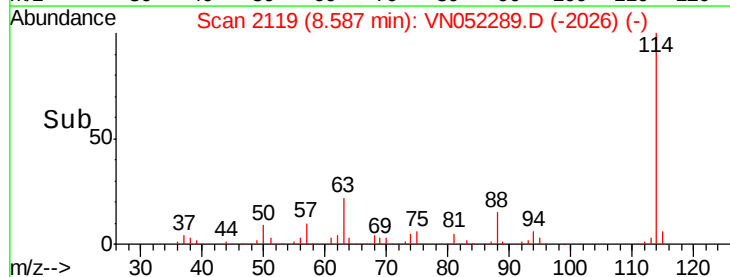
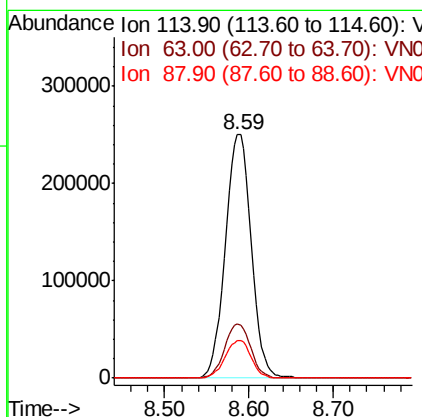
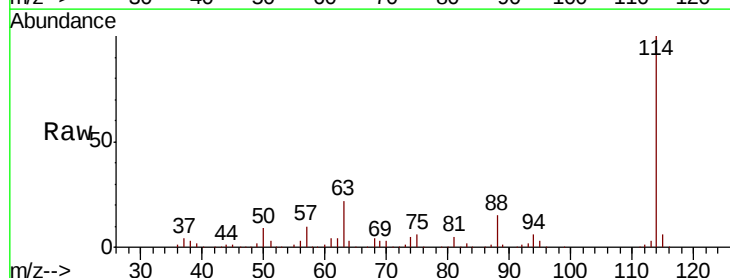
Instrument :  
 MSVOA\_N  
 ClientSampled :

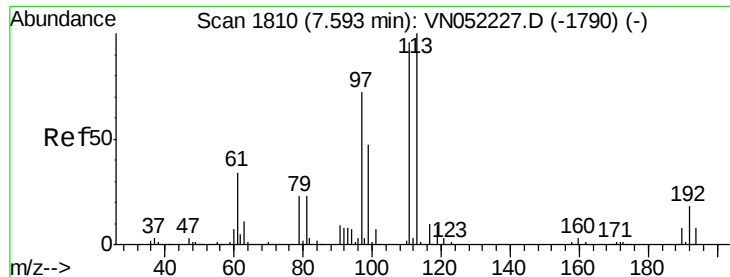
Tot Ion: 65 Resp: 218956  
 Ion Ratio Lower Upper  
 65 100  
 67 52.1 0.0 106.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.59 min Scan# 2119  
 Delta R.T. 0.00 min  
 Lab File: VN052289.D  
 Acq: 13 Nov 2018 16:23

Tgt Ion: 114 Resp: 534242  
 Ion Ratio Lower Upper  
 114 100  
 63 22.2 0.0 43.4  
 88 15.3 0.0 30.2

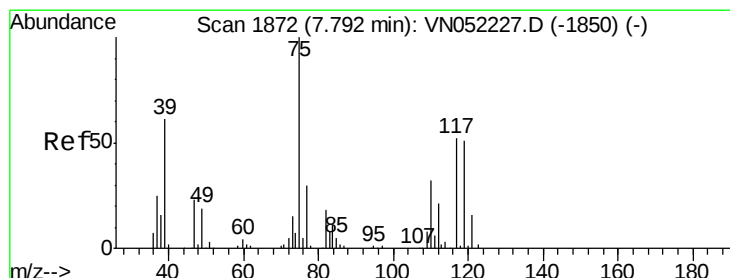
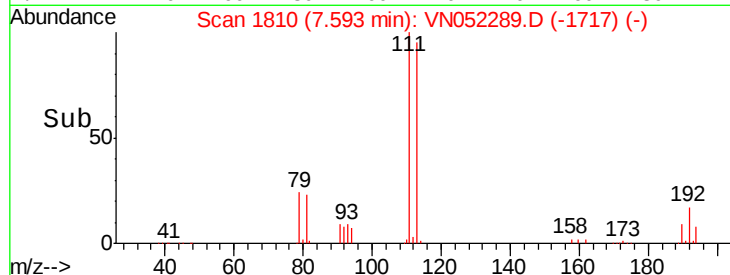
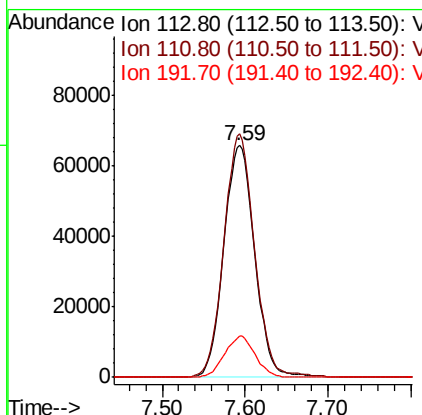
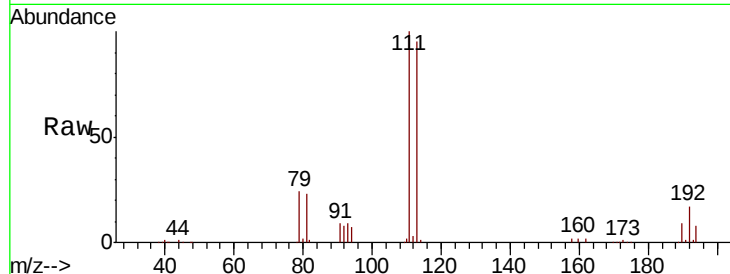




#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 7.59 min Scan# 1810  
 Delta R.T. 0.00 min  
 Lab File: VN052289.D  
 Acq: 13 Nov 2018 16:23

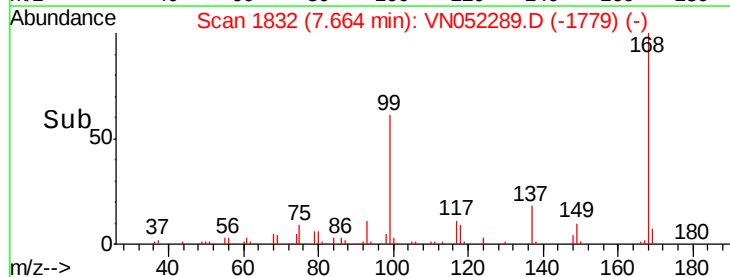
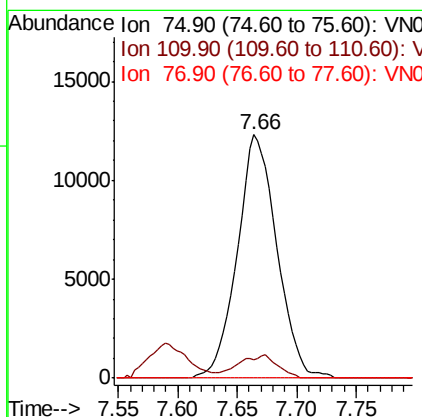
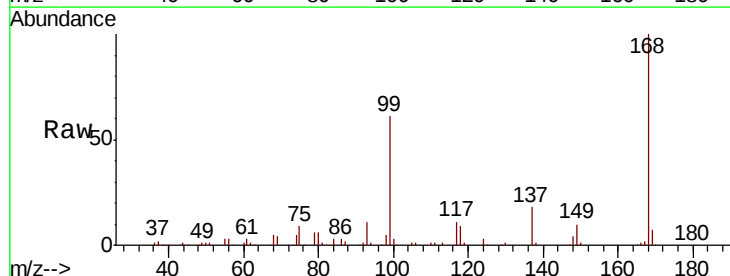
Instrument :  
 MSVOA\_N  
 ClientSampleId :

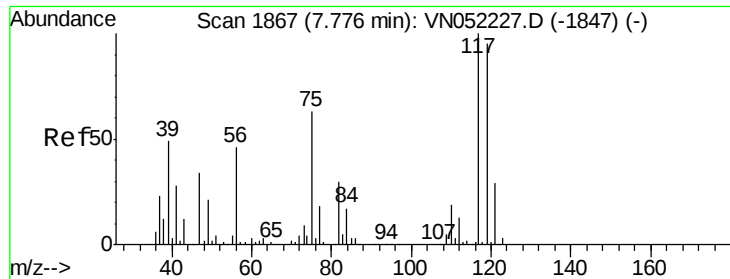
Tot Ion:113 Resp: 170504  
 Ion Ratio Lower Upper  
 113 100  
 111 104.1 80.2 120.4  
 192 17.5 14.1 21.1



#36  
 1,1-Dichloropropene  
 Concen: 5.256 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.13 min  
 Lab File: VN052289.D  
 Acq: 13 Nov 2018 16:23

Tgt Ion: 75 Resp: 28344  
 Ion Ratio Lower Upper  
 75 100  
 110 9.4 16.4 49.4#  
 77 0.0 23.9 35.9#





#38

Carbon Tetrachloride

Concen: 7.091 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

Instrument :

MSVOA\_N

ClientSampleId :

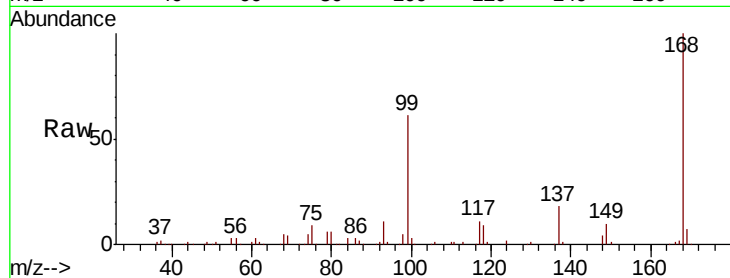
Tot Ion:117 Resp: 34651

Ion Ratio Lower Upper

117 100

119 5.3 75.8 113.8#

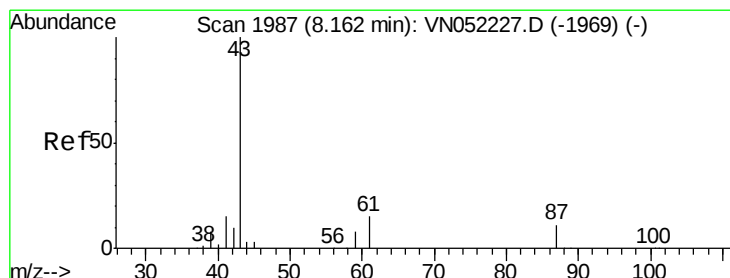
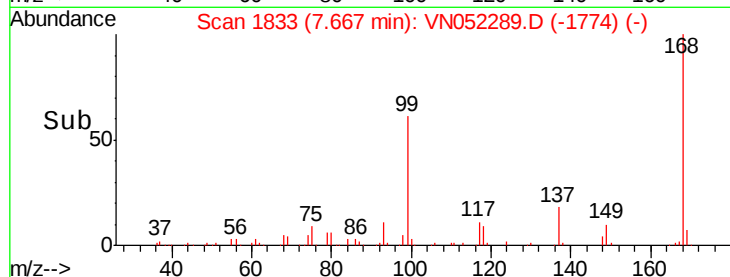
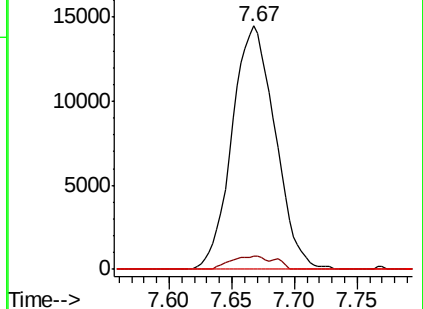
121 0.0 23.4 35.2#



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: 18.417 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

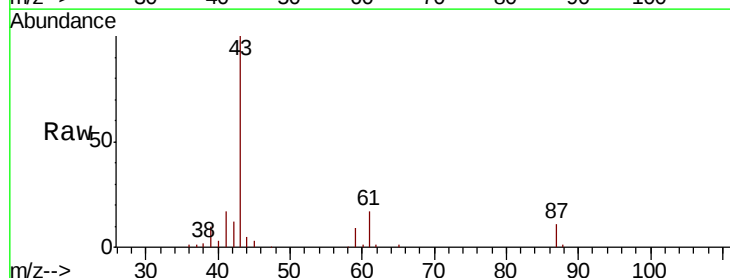
Tgt Ion: 43 Resp: 130194

Ion Ratio Lower Upper

43 100

61 16.4 14.2 21.4

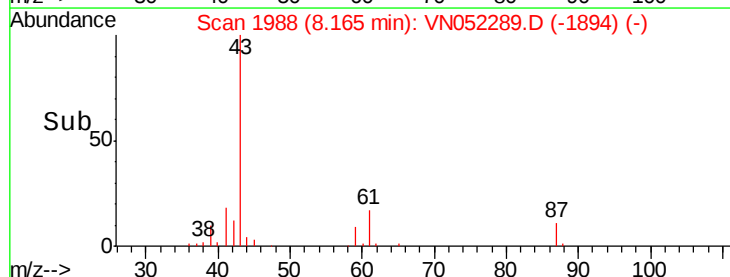
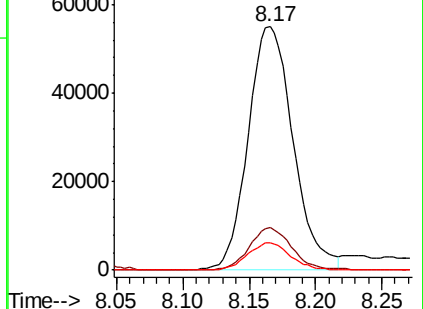
87 10.6 8.4 12.6

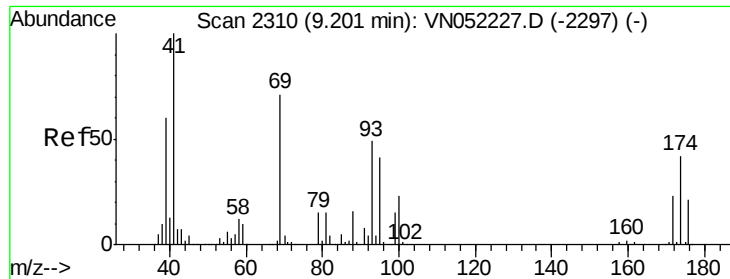


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V

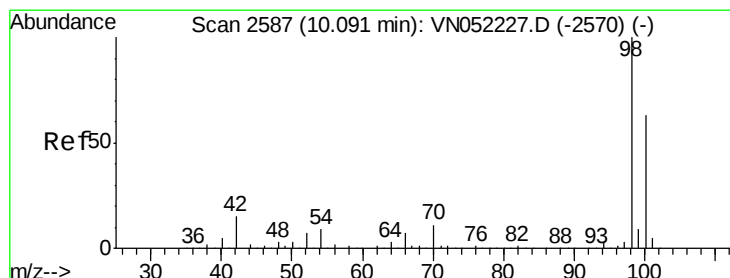
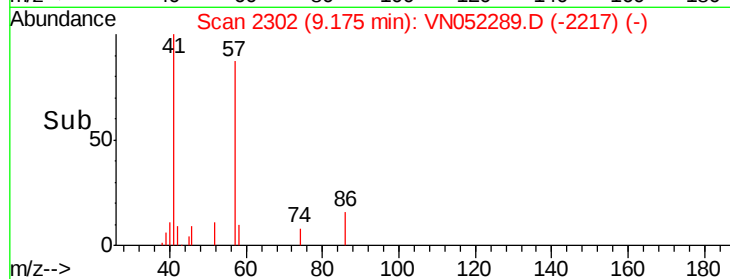
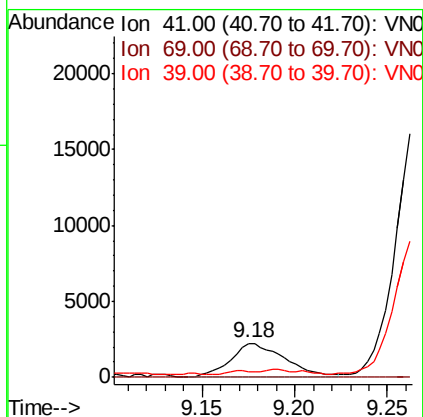
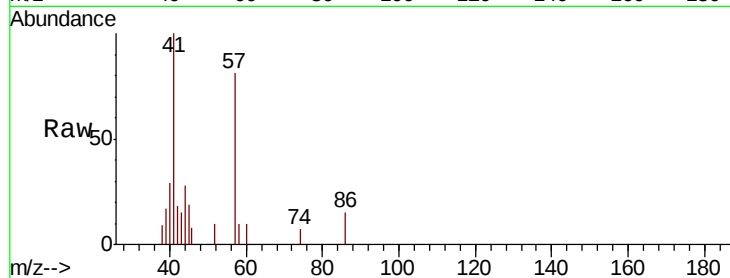




#48  
Methvl methacrylate  
Concen: 1.237 ug/l  
RT: 9.18 min Scan# 2302  
Delta R.T. -0.03 min  
Lab File: VN052289.D  
Acq: 13 Nov 2018 16:23

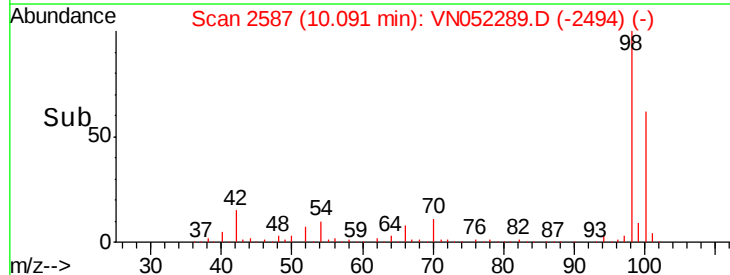
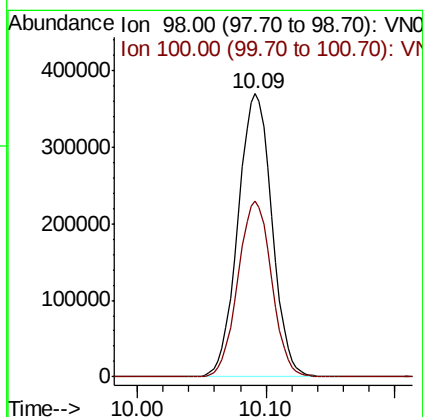
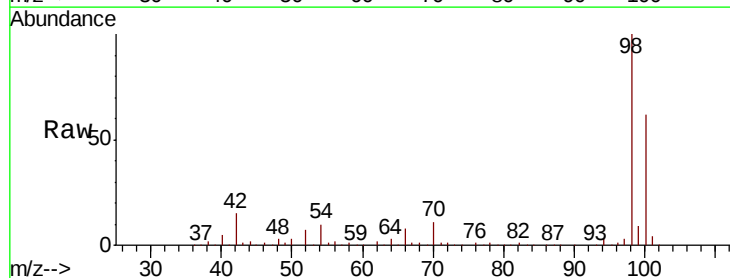
Instrument :  
MSVOA\_N  
ClientSampleId :

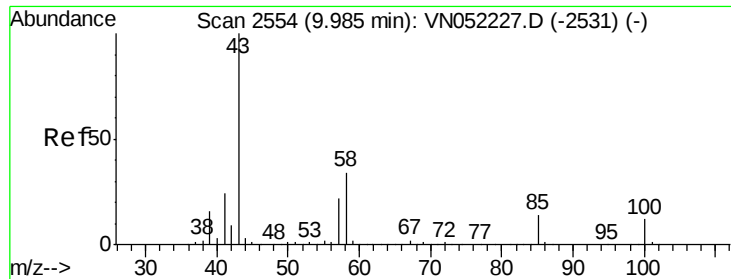
Tot Ion: 41 Resp: 4607  
Ion Ratio Lower Upper  
41 100  
69 0.0 58.8 88.2#  
39 0.0 50.7 76.1#



#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. 0.00 min  
Lab File: VN052289.D  
Acq: 13 Nov 2018 16:23

Tgt Ion: 98 Resp: 677177  
Ion Ratio Lower Upper  
98 100  
100 61.7 50.2 75.2





#51

4-Methyl-2-Pentanone

Concen: 0.329 ug/l

RT: 9.99 min Scan# 2556

Delta R.T. 0.01 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

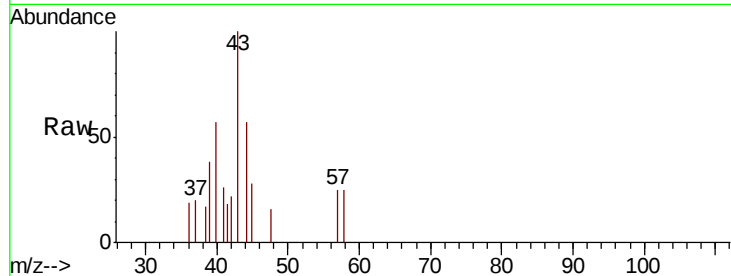
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 43 Resp: 1283

Ion Ratio Lower Upper

43 100

58 29.2 27.4 41.0



Abundance Ion 43.00 (42.70 to 43.70): VN052227.D (-2531) (-)

Ion 58.00 (57.70 to 58.70): VN052227.D (-2531) (-)

8000

6000

4000

2000

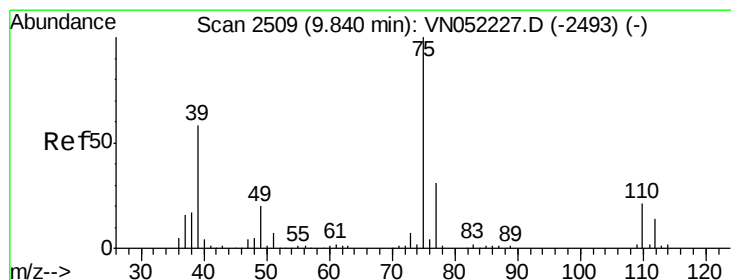
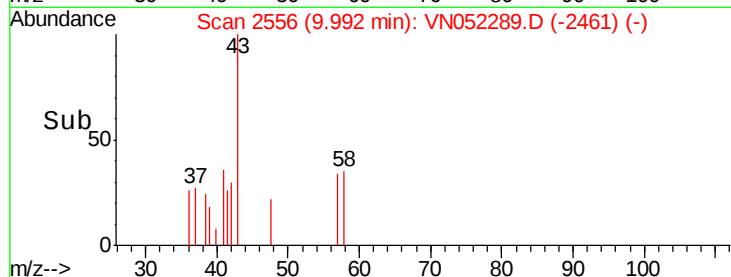
0

9.95

10.00

9.99

Time-->



#54

cis-1,3-Dichloropropene

Concen: 1.654 ug/l

RT: 9.90 min Scan# 2528

Delta R.T. 0.06 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

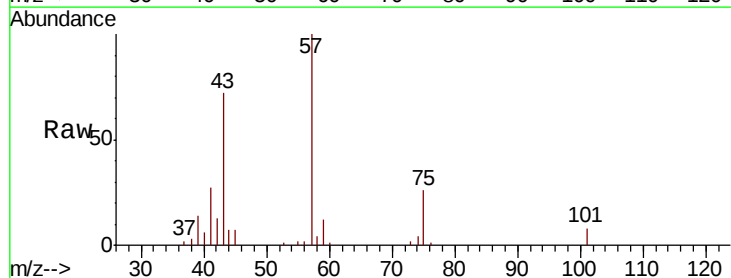
Tgt Ion: 75 Resp: 9890

Ion Ratio Lower Upper

75 100

77 0.0 25.2 37.8#

39 48.2 46.6 70.0



Abundance Ion 74.90 (74.60 to 75.60): VN052227.D (-2493) (-)

Ion 76.90 (76.60 to 77.60): VN052227.D (-2493) (-)

Ion 39.00 (38.70 to 39.70): VN052227.D (-2493) (-)

6000

4000

2000

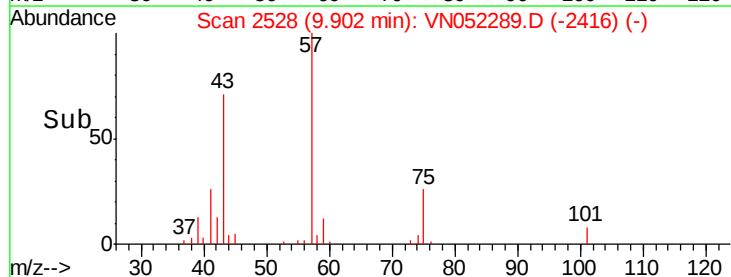
0

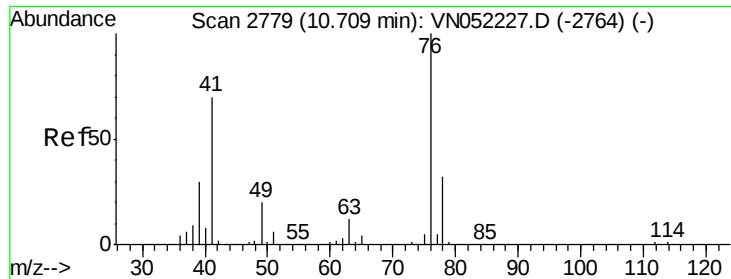
9.85

9.90

9.95

Time-->





#57

1,3-Dichloropropane

Concen: 0.388 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.06 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

Instrument :

MSVOA\_N

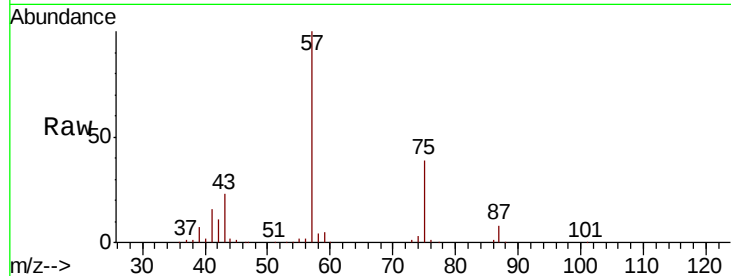
ClientSampled :

Tot Ion: 76 Resp: 2340

Ion Ratio Lower Upper

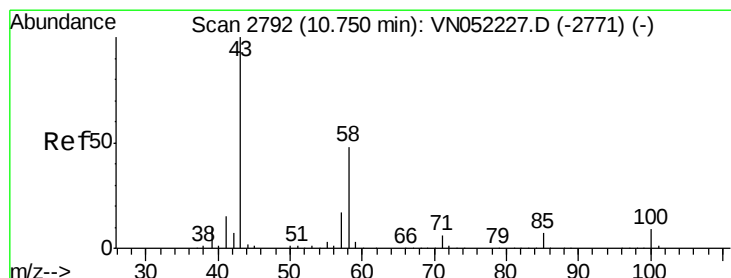
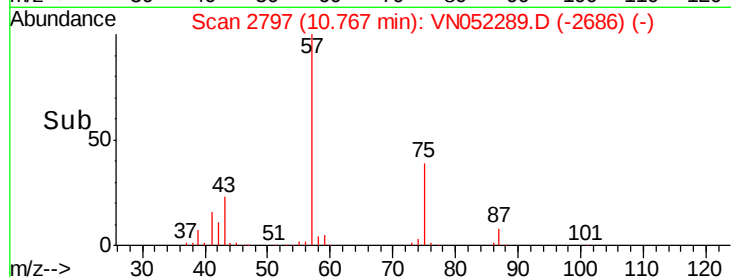
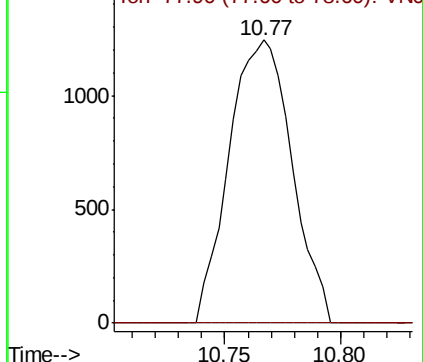
76 100

78 0.0 25.7 38.5#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#59

2-Hexanone

Concen: 14.824 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.01 min

Lab File: VN052289.D

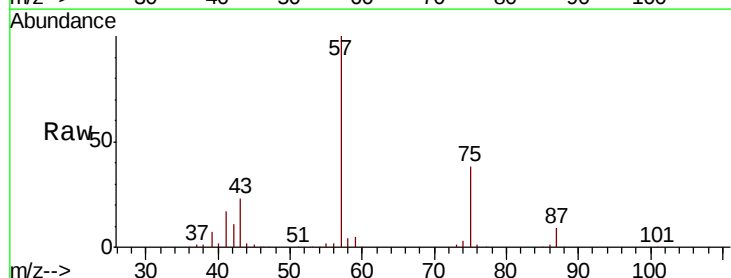
Acq: 13 Nov 2018 16:23

Tgt Ion: 43 Resp: 40628

Ion Ratio Lower Upper

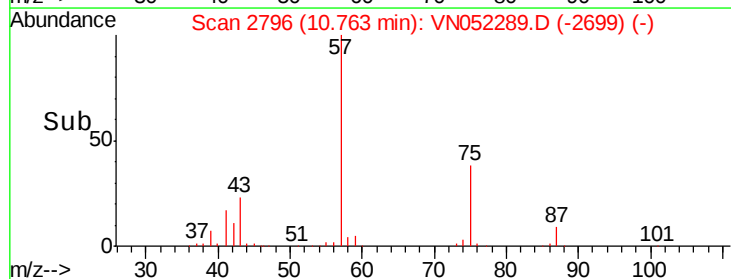
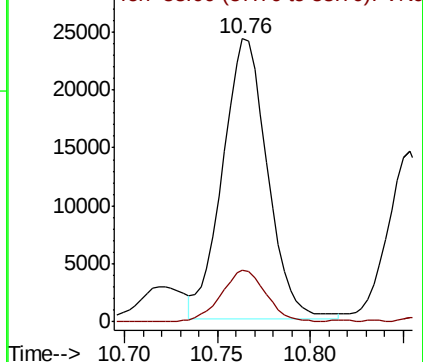
43 100

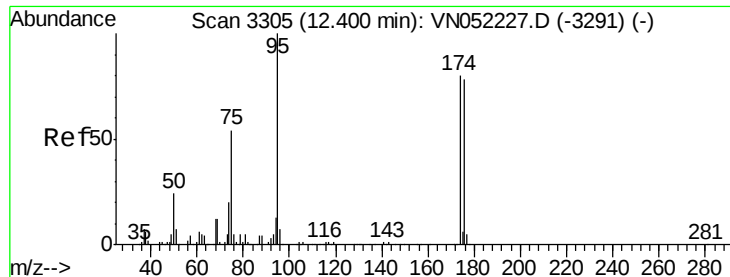
58 18.5 24.1 72.3#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

Instrument :

MSVOA\_N

ClientSampleId :

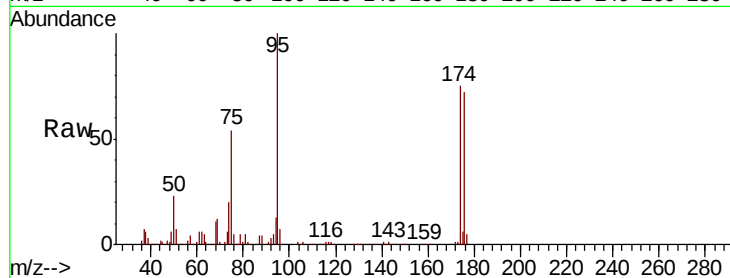
Tot Ion: 95 Resp: 207744

Ion Ratio Lower Upper

95 100

174 77.0 0.0 159.4

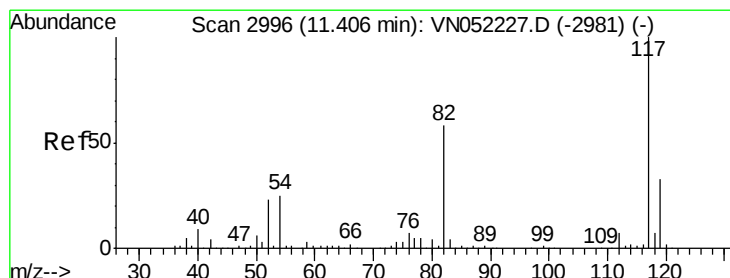
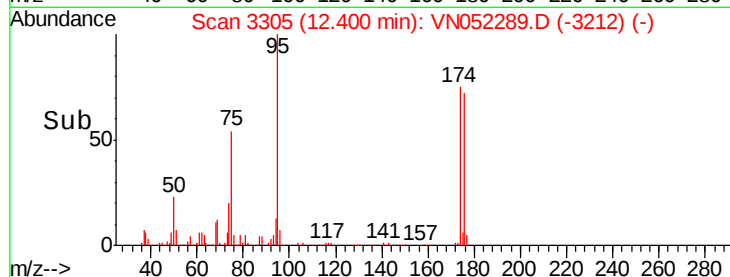
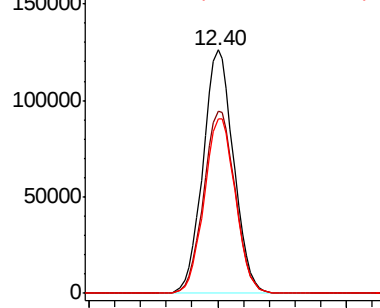
176 73.1 0.0 157.8



Abundance Ion 94.90 (94.60 to 95.60): VN052289.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN052289.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN052289.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

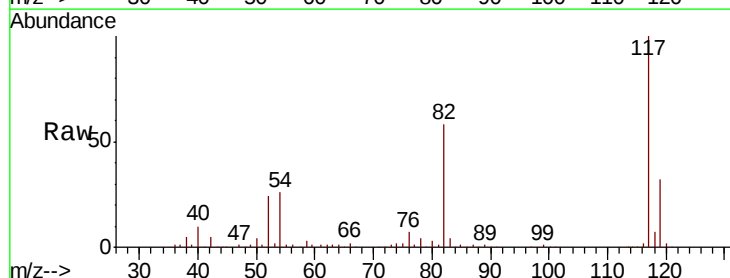
Tgt Ion: 117 Resp: 466914

Ion Ratio Lower Upper

117 100

82 57.6 46.2 69.2

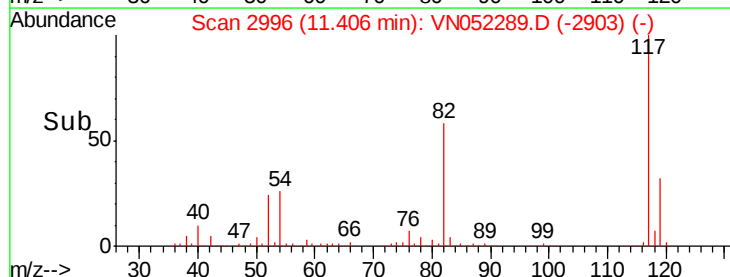
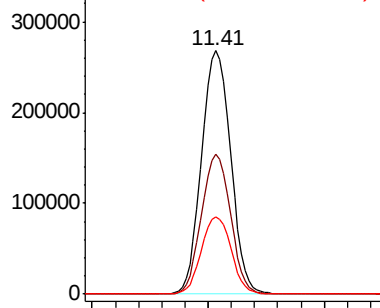
119 31.5 26.2 39.4

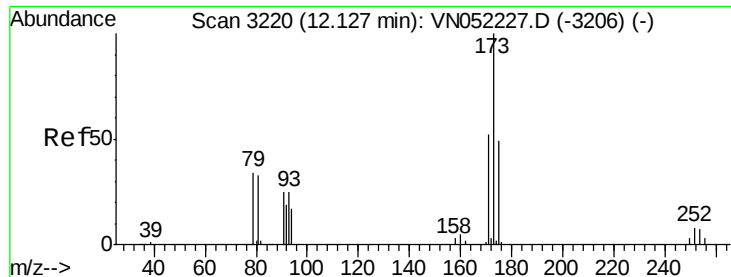


Abundance Ion 116.90 (116.60 to 117.60): VN052289.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN052289.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN052289.D (-2981) (-)





#71

Bromoform

Concen: 0.582 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.27 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

Instrument :

MSVOA\_N

ClientSampled :

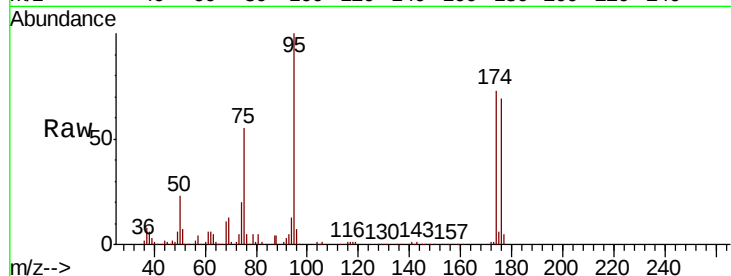
Tot Ion:173 Resp: 1164

Ion Ratio Lower Upper

173 100

175 1004.1 24.5 73.5#

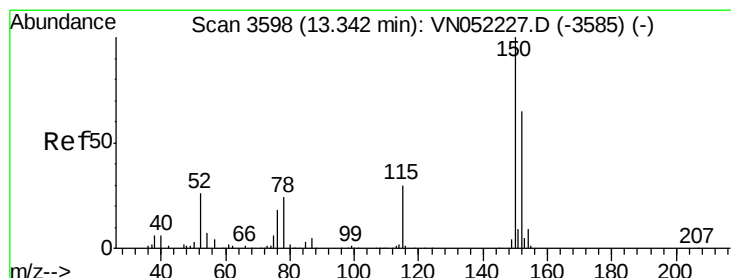
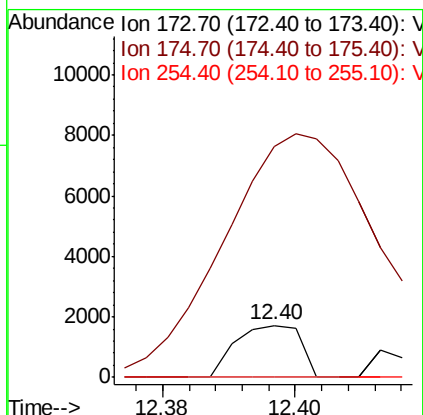
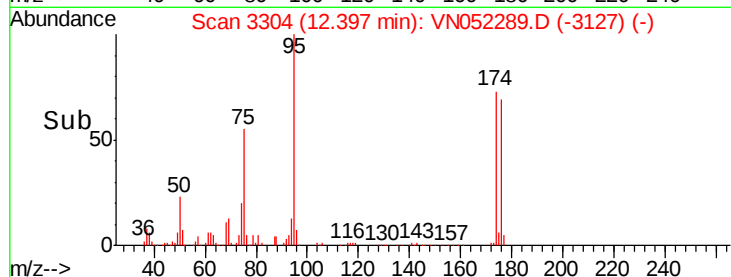
254 0.0 0.0 0.0



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: VN052289.D

Acq: 13 Nov 2018 16:23

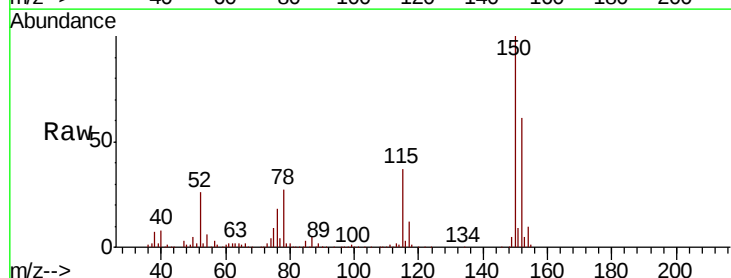
Tgt Ion:152 Resp: 172400

Ion Ratio Lower Upper

152 100

115 59.7 29.8 89.5

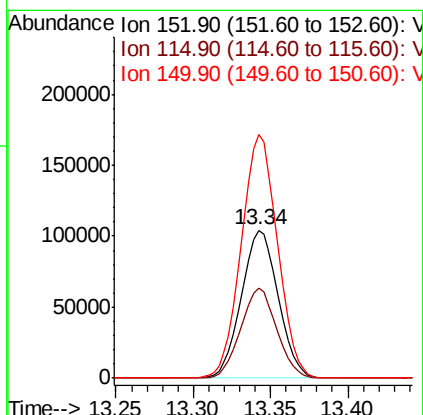
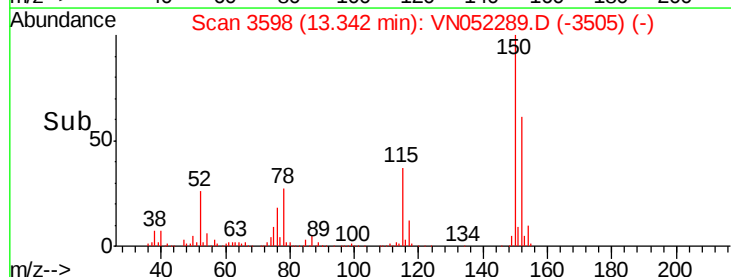
150 162.1 0.0 350.2

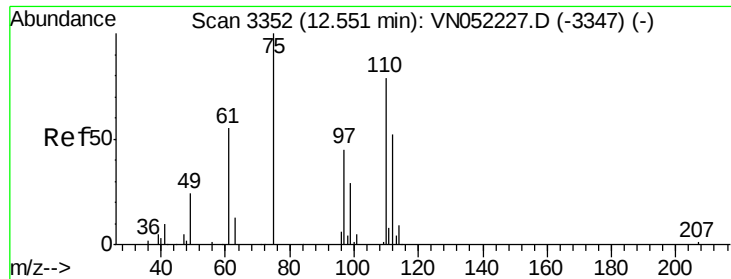


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

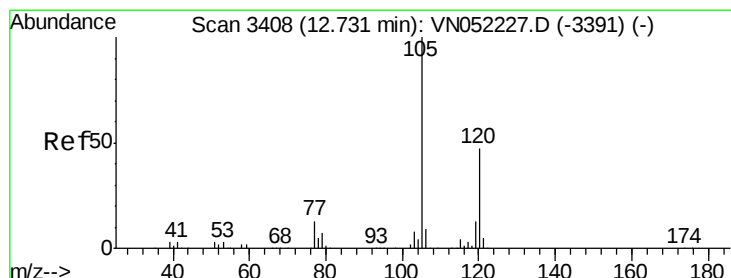
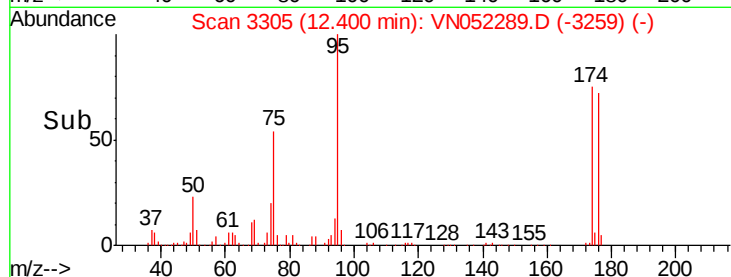
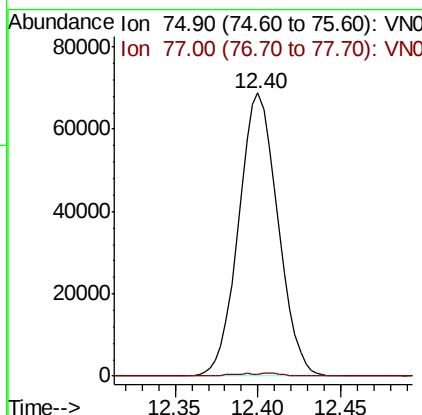
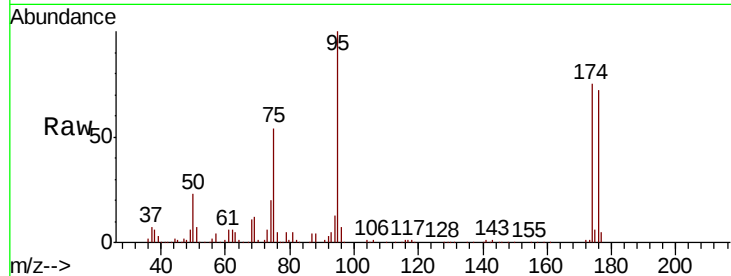




#76  
 1,2,3-Trichloropropane  
 Concen: 37.098 ug/l  
 RT: 12.40 min Scan# 3305  
 Delta R.T. -0.15 min  
 Lab File: VN052289.D  
 Acq: 13 Nov 2018 16:23

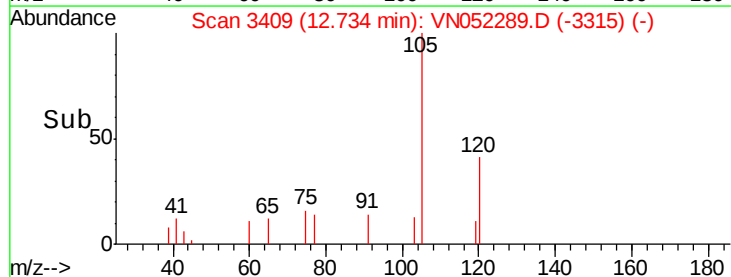
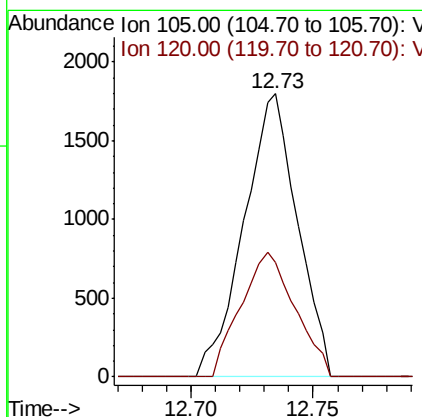
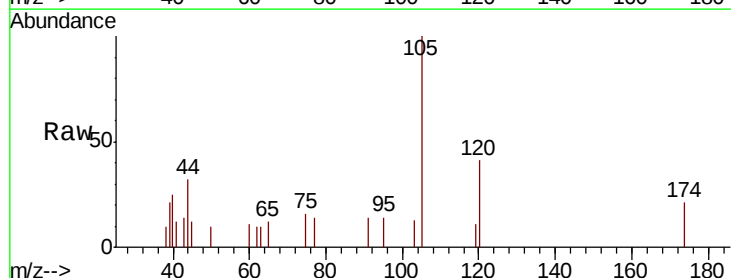
Instrument :  
 MSVOA\_N  
 ClientSampleId :

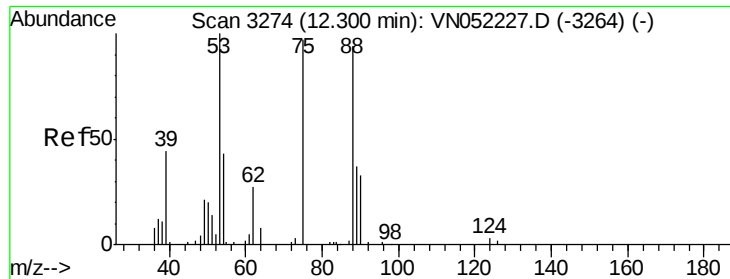
Tot Ion: 75 Resp: 113156  
 Ion Ratio Lower Upper  
 75 100  
 77 1.2 0.0 0.0#



#80  
 1,3,5-Trimethylbenzene  
 Concen: 0.243 ug/l  
 RT: 12.73 min Scan# 3409  
 Delta R.T. 0.00 min  
 Lab File: VN052289.D  
 Acq: 13 Nov 2018 16:23

Tgt Ion: 105 Resp: 2727  
 Ion Ratio Lower Upper  
 105 100  
 120 44.6 23.9 71.8





#81

trans-1,4-Dichloro-2-butene

Concen: 126.631 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

Instrument :

MSVOA\_N

ClientSampleId :

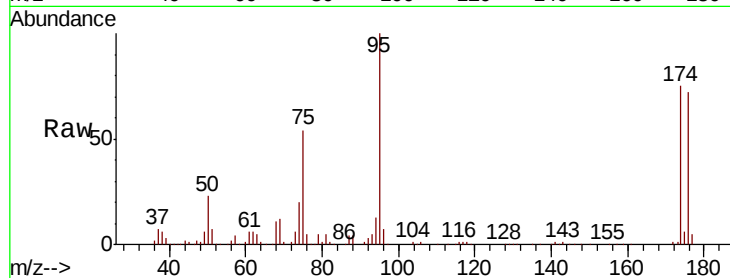
Tot Ion: 75 Resp: 113156

Ion Ratio Lower Upper

75 100

53 0.1 84.0 126.0#

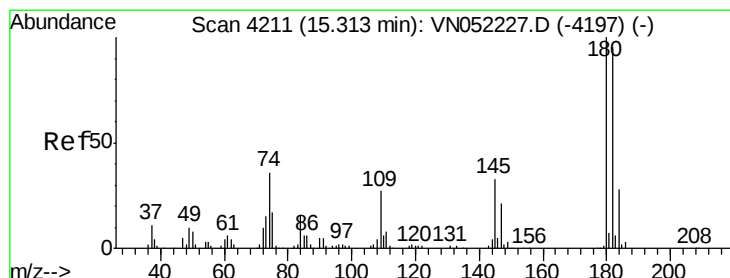
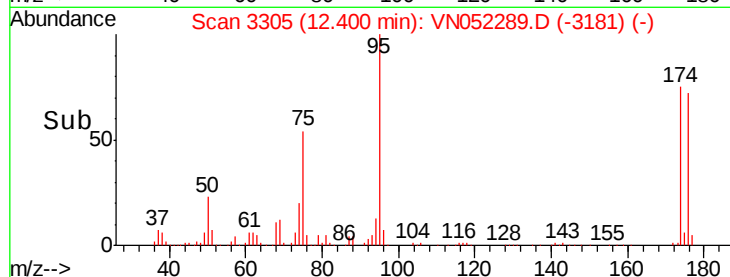
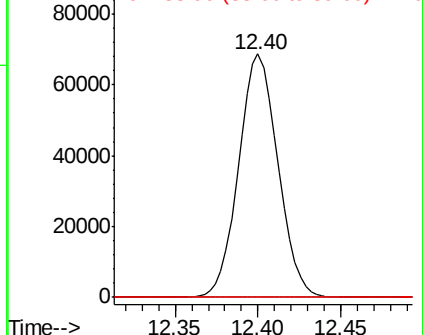
89 0.0 33.7 50.5#



Abundance Ion 74.90 (74.60 to 75.60): VN052227.D (-3264) (-)

Ion 53.00 (52.70 to 53.70): VN052227.D (-3264) (-)

Ion 88.90 (88.60 to 89.60): VN052227.D (-3264) (-)



#96

1,2,3-Trichlorobenzene

Concen: 0.248 ug/l

RT: 15.32 min Scan# 4212

Delta R.T. 0.00 min

Lab File: VN052289.D

Acq: 13 Nov 2018 16:23

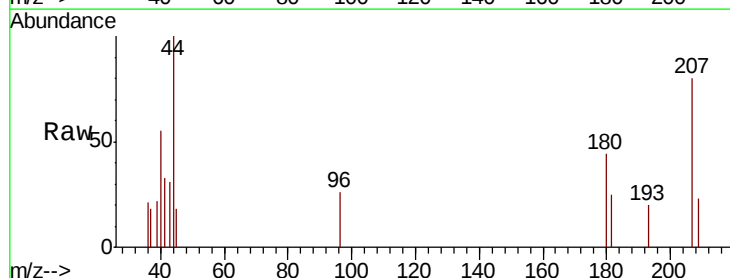
Tgt Ion: 180 Resp: 519

Ion Ratio Lower Upper

180 100

182 53.4 47.7 143.1

145 0.0 16.8 50.3#



Abundance Ion 179.80 (179.50 to 180.50): VN052227.D (-4197) (-)

Ion 181.80 (181.50 to 182.50): VN052227.D (-4197) (-)

Ion 144.90 (144.60 to 145.60): VN052227.D (-4197) (-)

