

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY120820\  
 Data File : VY003682.D  
 Acq On : 08 Dec 2020 17:52  
 Operator : SY/MD  
 Sample : L4979-07MS  
 Misc : 5.66G/10ML/MSVOA Y/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 GB1F8MS

Quant Time: Dec 09 02:48:30 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\SOM2YLM120420S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Dec 09 01:58:23 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.70  | 114  | 174188   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.49 | 117  | 110490   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 21885    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |          |
|--------------------------------|--------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 2.25   | 65    | 69205    | 28.10    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 112.40%  |
| 7) Chloroethane-d5             | 2.77   | 69    | 53971    | 29.04    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 116.16%  |
| 10) 1,1-Dichloroethene-d2      | 3.86   | 63    | 122586   | 26.44    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 105.76%  |
| 20) 2-Butanone-d5              | 6.90   | 46    | 39136    | 44.57    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 89.14%   |
| 24) Chloroform-d               | 7.49   | 84    | 112202   | 25.03    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 100.12%  |
| 26) 1,2-Dichloroethane-d4      | 8.15   | 65    | 60046    | 23.81    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 95.24%   |
| 29) Benzene-d6                 | 8.12   | 84    | 242287   | 37.88    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 151.52%# |
| 33) 1,2-Dichloropropane-d6     | 9.12   | 67    | 68417    | 36.14    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 144.56%# |
| 37) Toluene-d8                 | 10.18  | 98    | 180651   | 31.50    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 126.00%  |
| 38) trans-1,3-Dichloropropene- | 10.44  | 79    | 26423    | 29.21    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 116.84%  |
| 39) 2-Hexanone-d5              | 10.79  | 63    | 26199    | 55.24    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 110.48%  |
| 48) 1,1,2,2-Tetrachloroethane- | 12.56  | 84    | 32616    | 19.34    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 77.36%   |
| 61) 1,2-Dichlorobenzene-d4     | 13.72  | 152   | 18372    | 23.10    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 92.40%   |

## Target Compounds

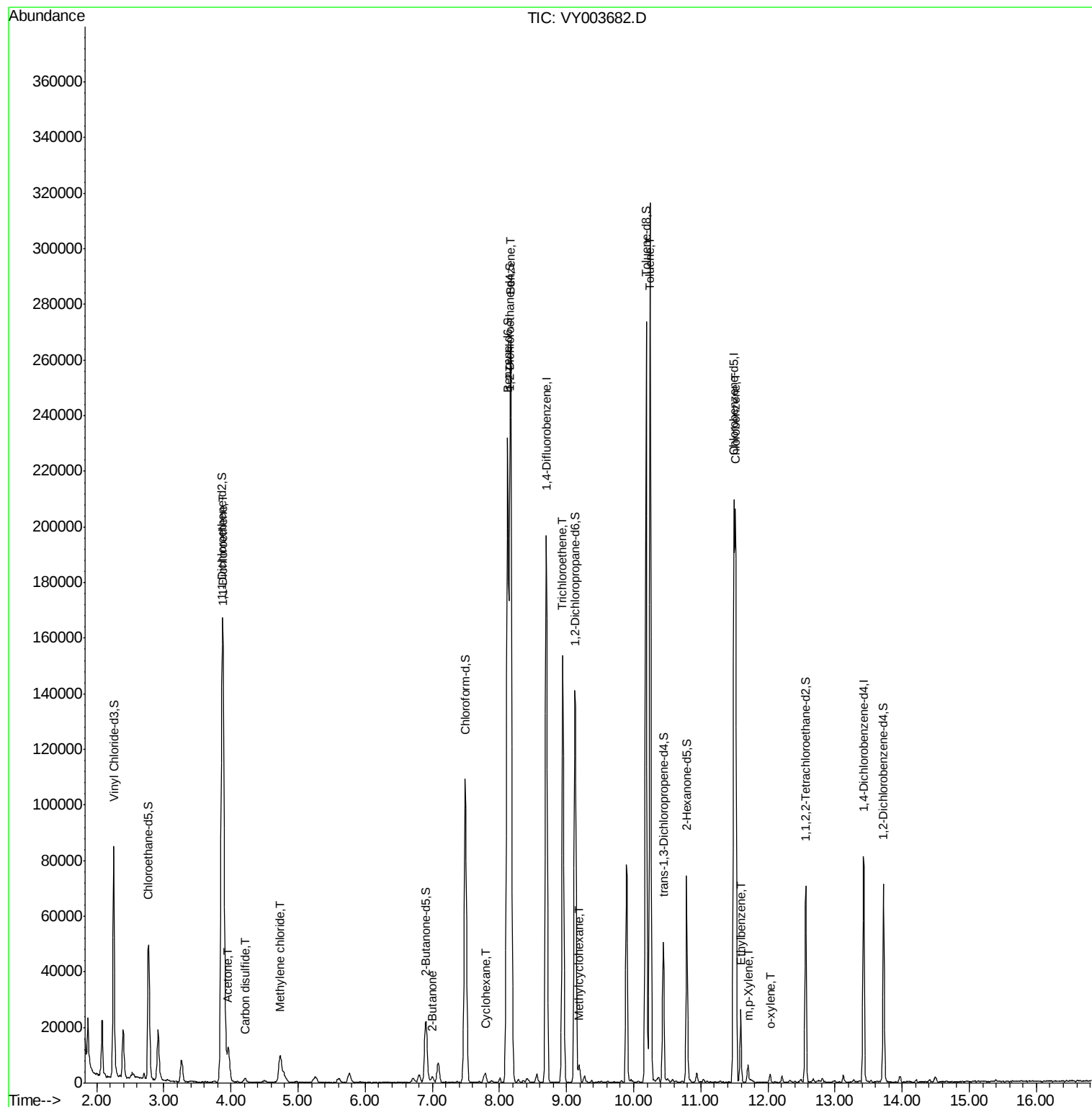
| Target Compounds       | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|------------------------|-------|------|----------|--------|--------|--------|
| 12) 1,1-Dichloroethene | 3.89  | 96   | 56655    | 27.178 | ug/L   | 96     |
| 13) Acetone            | 3.96  | 43   | 17795    | 27.643 | ug/L   | 97     |
| 14) Carbon disulfide   | 4.20  | 76   | 2935     | 0.422  | ug/L   | 99     |
| 16) Methylene chloride | 4.72  | 84   | 6661     | 2.178  | ug/L   | 85     |
| 21) 2-Butanone         | 7.00  | 43   | 3202     | 2.817  | ug/L   | 94     |
| 30) Cyclohexane        | 7.80  | 56   | 1372     | 0.576  | ug/L # | 87     |
| 34) Benzene            | 8.17  | 78   | 230974   | 36.543 | ug/L   | 100    |
| 35) Trichloroethene    | 8.94  | 95   | 50765    | 29.254 | ug/L   | 99     |
| 36) Methylcyclohexane  | 9.19  | 83   | 2047     | 0.770  | ug/L # | 88     |
| 44) Toluene            | 10.25 | 91   | 222075   | 33.308 | ug/L   | 99     |
| 52) Chlorobenzene      | 11.51 | 112  | 101352   | 23.099 | ug/L   | 98     |
| 53) Ethylbenzene       | 11.59 | 91   | 16532    | 2.272  | ug/L   | 100    |
| 54) m,p-Xylene         | 11.70 | 106  | 1884     | 0.671  | ug/L # | 59     |
| 55) o-xylene           | 12.03 | 106  | 752      | 0.279  | ug/L   | 77     |

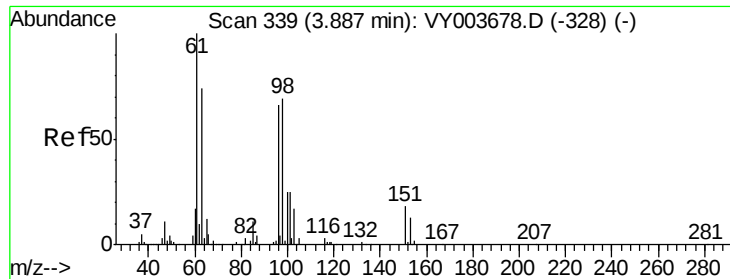
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA Y\DATA\VY120820\  
Data File : VY003682.D  
Acq On : 08 Dec 2020 17:52  
Operator : SY/MD  
Sample : L4979-07MS  
Misc : 5.66G/10ML/MSVOA Y/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
GB1F8MS

Quant Time: Dec 09 02:48:30 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_Y\METHODS\SOM2YLM120420S.M  
Quant Title : VOC Analysis  
QLast Update : Wed Dec 09 01:58:23 2020  
Response via : Initial Calibration

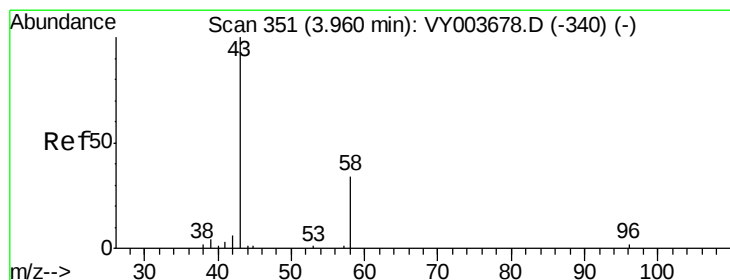
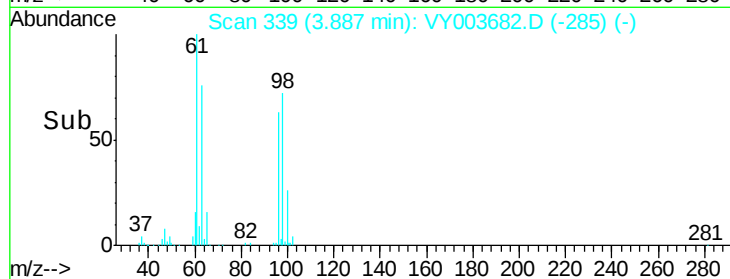
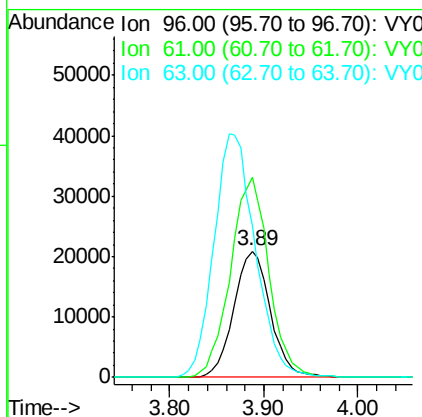
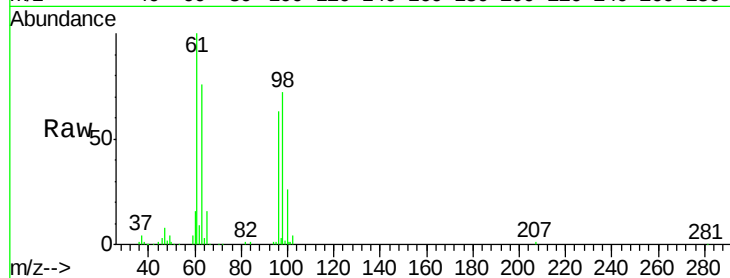




#12  
 1,1-Dichloroethene  
 Concen: 27.178 ug/L  
 RT: 3.89 min Scan# 339  
 Delta R.T. 0.00 min  
 Lab File: VY003682.D  
 Acq: 08 Dec 2020 17:52

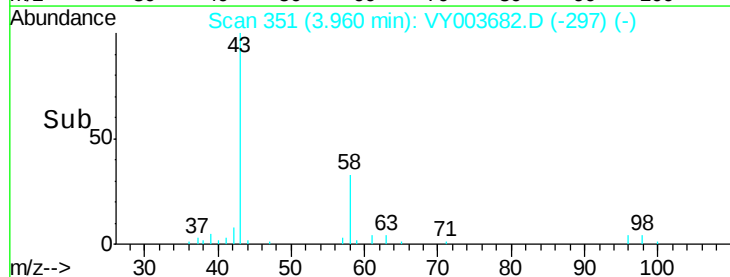
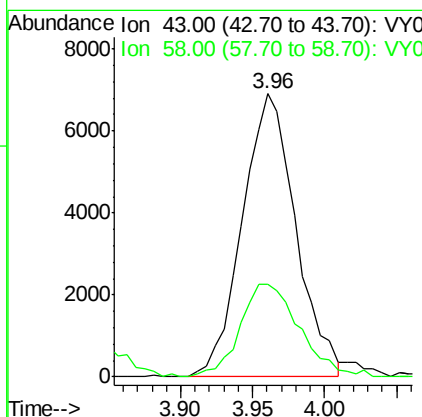
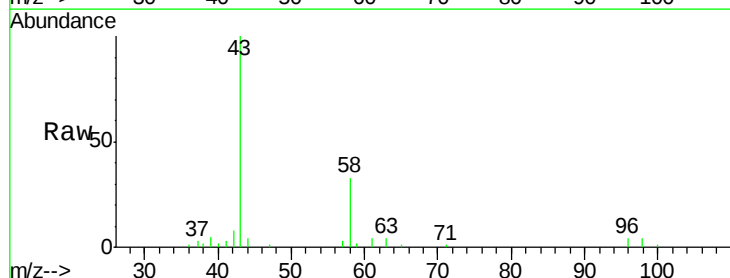
Instrument :  
 MSVOA\_Y  
 ClientSampled :  
 GB1F8MS

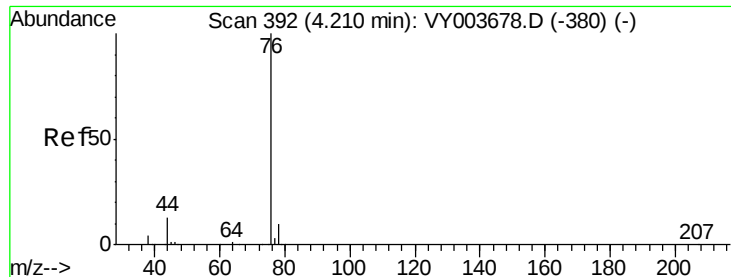
| Tot Ion | 96    | Resp  | 56655 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 96      | 100   |       |       |
| 61      | 159.1 | 108.5 | 201.5 |
| 63      | 120.3 | 87.8  | 163.0 |



#13  
 Acetone  
 Concen: 27.643 ug/L  
 RT: 3.96 min Scan# 351  
 Delta R.T. 0.00 min  
 Lab File: VY003682.D  
 Acq: 08 Dec 2020 17:52

| Tgt Ion | 43    | Resp  | 17795 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 43      | 100   |       |       |
| 58      | 36.3  | 0.0   | 68.8  |





#14

Carbon disulfide

Concen: 0.422 ug/L

RT: 4.20 min Scan# 391

Delta R.T. -0.01 min

Lab File: VY003682.D

Acq: 08 Dec 2020 17:52

Instrument :

MSVOA\_Y

ClientSampleId :

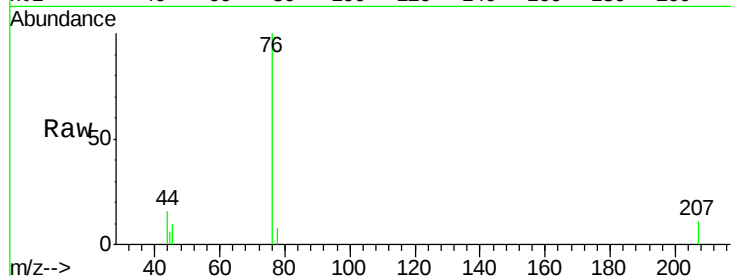
GB1F8MS

Tot Ion: 76 Resp: 2935

Ion Ratio Lower Upper

76 100

78 8.4 7.0 10.6



Abundance Ion 76.00 (75.70 to 76.70): VY0

Ion 78.00 (77.70 to 78.70): VY0

4.20

1200

1000

800

600

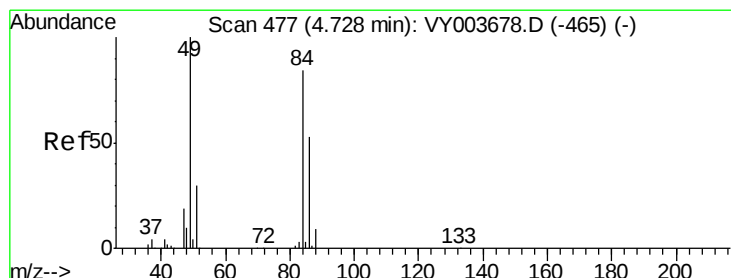
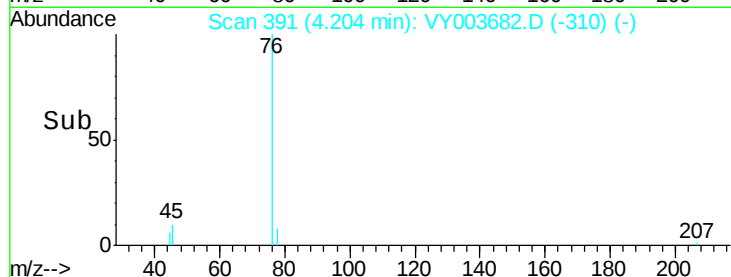
400

200

0

Time-->

4.15 4.20 4.25



#16

Methylene chloride

Concen: 2.178 ug/L

RT: 4.72 min Scan# 476

Delta R.T. -0.01 min

Lab File: VY003682.D

Acq: 08 Dec 2020 17:52

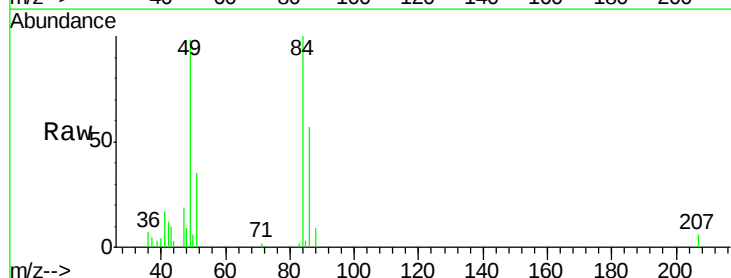
Tgt Ion: 84 Resp: 6661

Ion Ratio Lower Upper

84 100

49 98.5 83.7 155.4

86 57.2 45.0 83.6



Abundance Ion 84.00 (83.70 to 84.70): VY0

Ion 49.00 (48.70 to 49.70): VY0

Ion 86.00 (85.70 to 86.70): VY0

4.72

3000

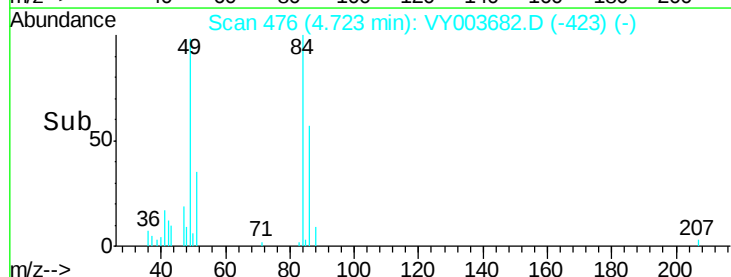
2000

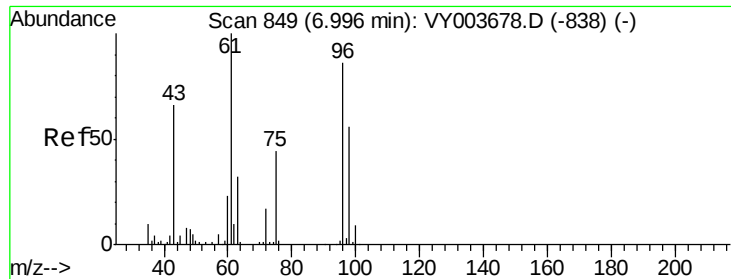
1000

0

Time-->

4.65 4.70 4.75 4.80

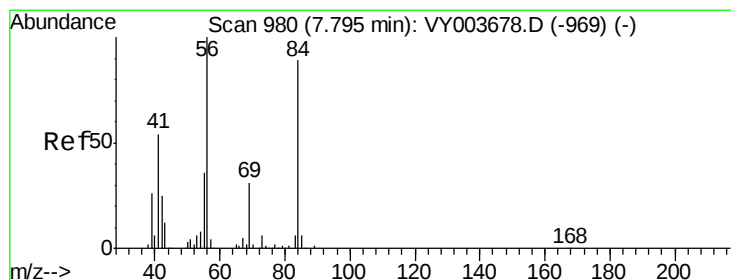
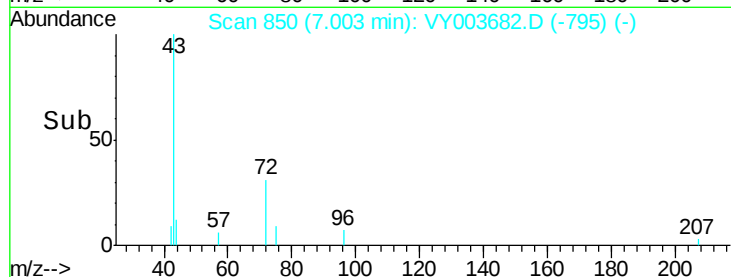
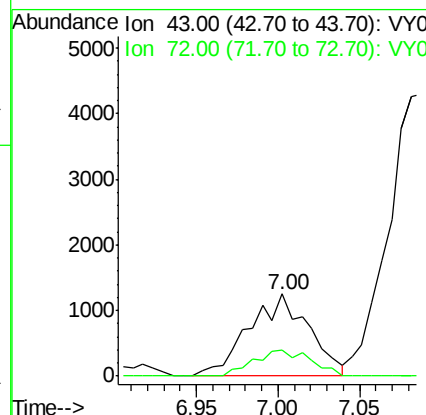
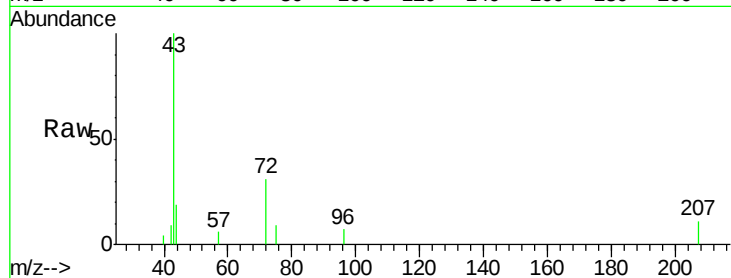




#21  
 2-Butanone  
 Concen: 2.817 ug/L  
 RT: 7.00 min Scan# 850  
 Delta R.T. 0.01 min  
 Lab File: VY003682.D  
 Acq: 08 Dec 2020 17:52

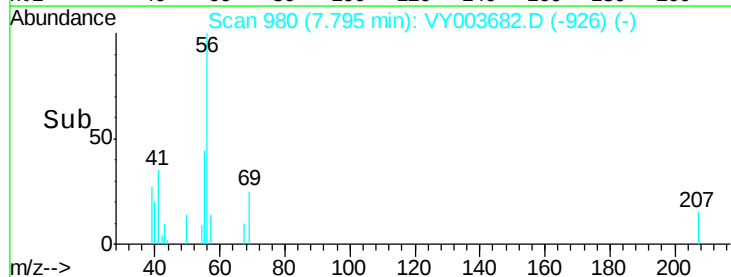
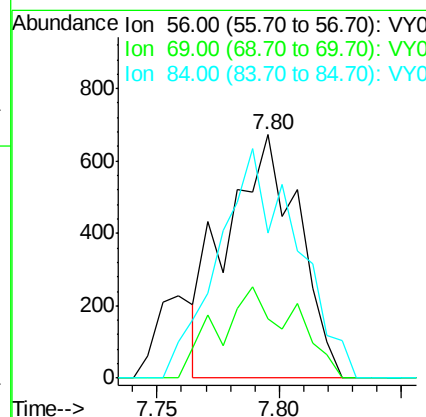
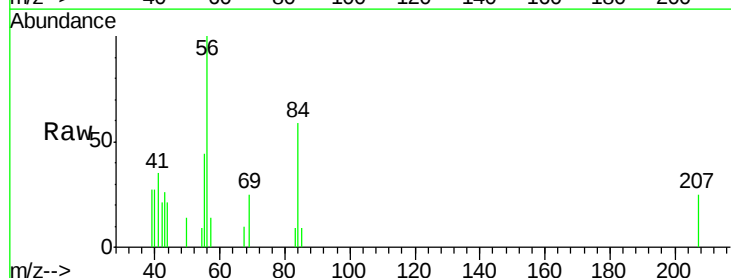
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 GB1F8MS

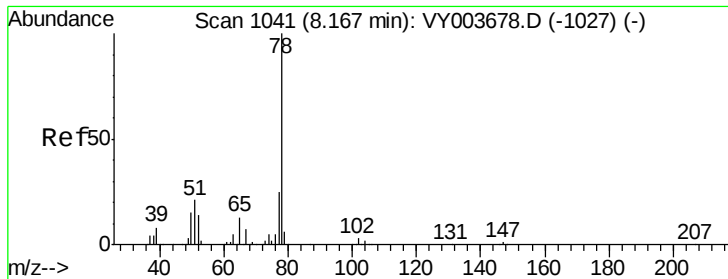
Tot Ion: 43 Resp: 3202  
 Ion Ratio Lower Upper  
 43 100  
 72 29.9 13.3 39.9



#30  
 Cyclohexane  
 Concen: 0.576 ug/L  
 RT: 7.80 min Scan# 980  
 Delta R.T. 0.00 min  
 Lab File: VY003682.D  
 Acq: 08 Dec 2020 17:52

Tgt Ion: 56 Resp: 1372  
 Ion Ratio Lower Upper  
 56 100  
 69 19.9 23.8 35.8#  
 84 102.7 73.2 109.8





#34

Benzene

Concen: 36.543 ug/L

RT: 8.17 min Scan# 1041

Delta R.T. 0.00 min

Lab File: VY003682.D

Acq: 08 Dec 2020 17:52

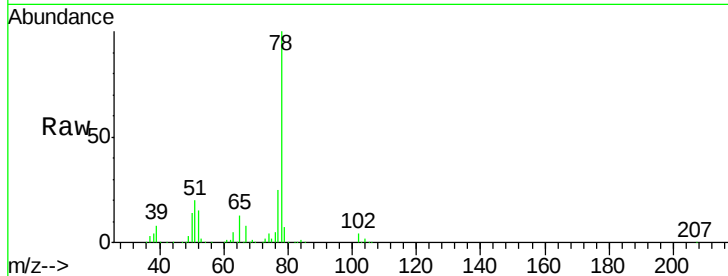
Instrument :

MSVOA\_Y

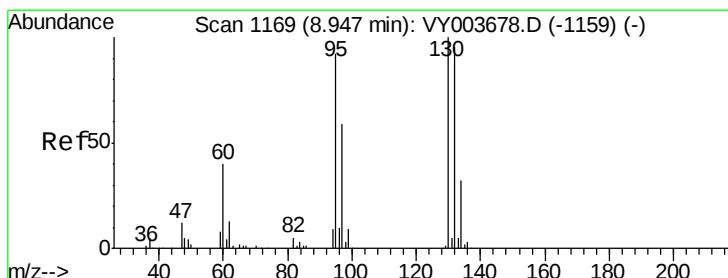
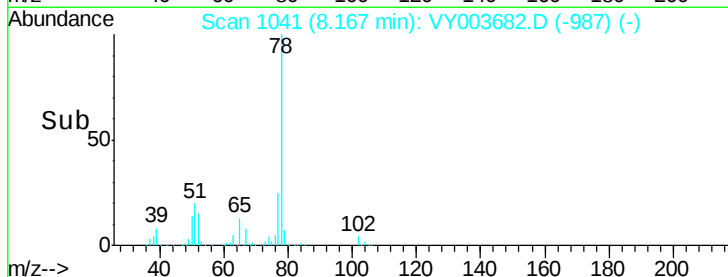
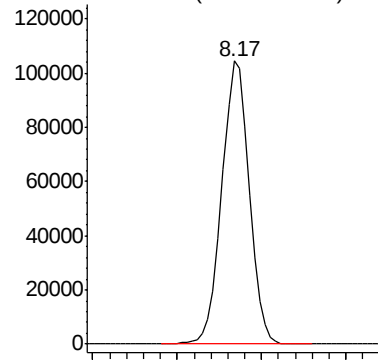
ClientSampleId :

GB1F8MS

Tgt Ion: 78 Resp: 230974



Abundance Ion 78.00 (77.70 to 78.70): VY0



#35

Trichloroethene

Concen: 29.254 ug/L

RT: 8.94 min Scan# 1168

Delta R.T. -0.01 min

Lab File: VY003682.D

Acq: 08 Dec 2020 17:52

Tgt Ion: 95 Resp: 50765

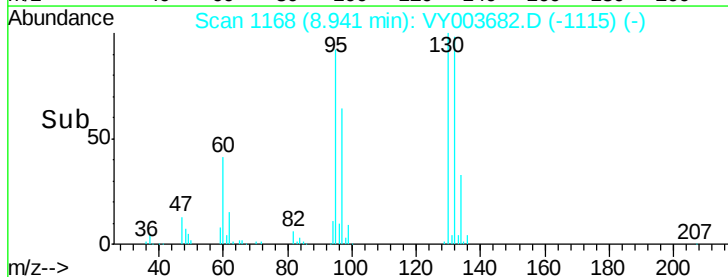
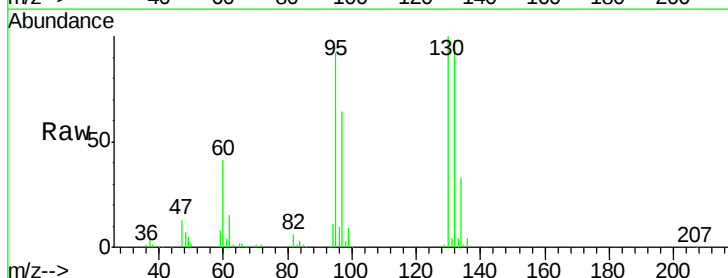
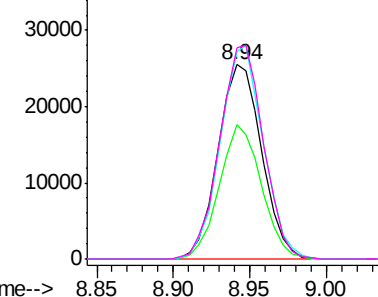
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 66.4  | 45.8  | 85.0  |
| 132 | 107.4 | 74.2  | 137.8 |
| 130 | 109.9 | 76.2  | 141.6 |

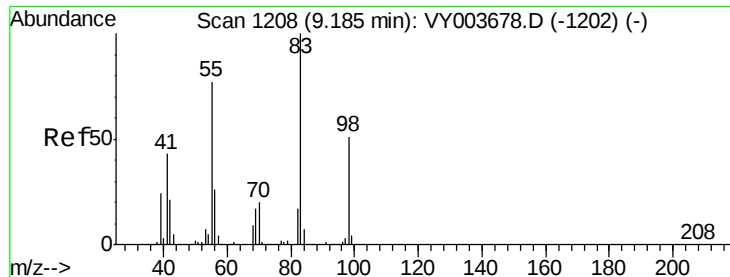
Abundance Ion 95.00 (94.70 to 95.70): VY0

Ion 97.00 (96.70 to 97.70): VY0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V

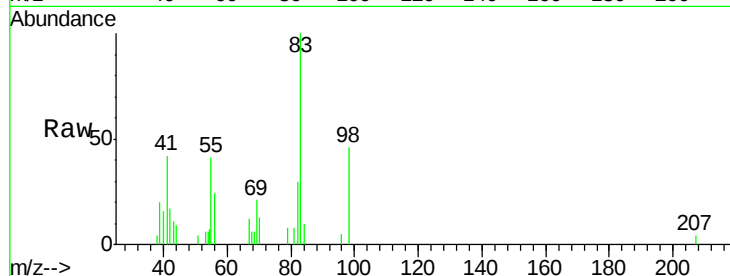




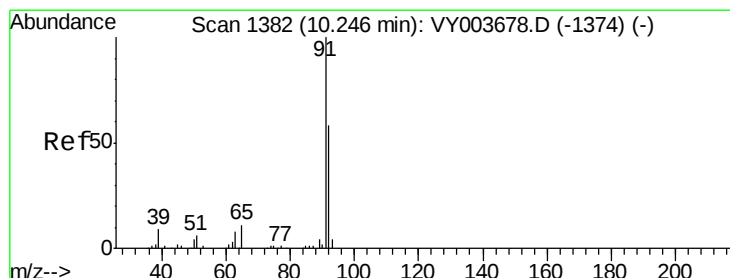
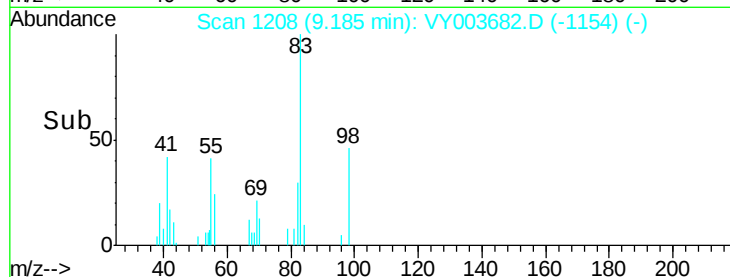
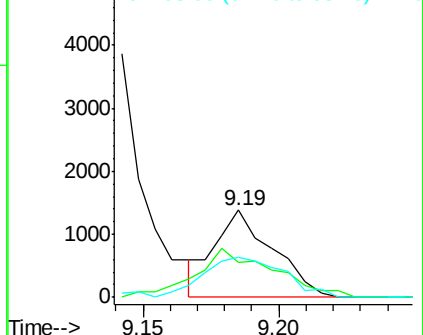
#36  
Methvlcvclohexane  
Concen: 0.770 ug/L  
RT: 9.19 min Scan# 1208  
Delta R.T. 0.00 min  
Lab File: VY003682.D  
Acq: 08 Dec 2020 17:52

Instrument :  
MSVOA\_Y  
ClientSampleId :  
GB1F8MS

Tot Ion: 83 Resp: 2047  
Ion Ratio Lower Upper  
83 100  
55 75.8 56.4 84.6  
98 64.0 40.3 60.5#

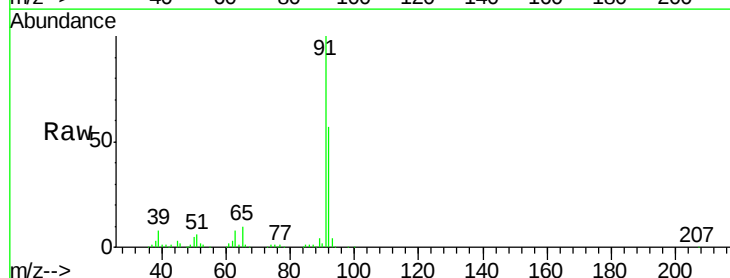


Abundance Ion 83.00 (82.70 to 83.70): VY0  
Ion 55.00 (54.70 to 55.70): VY0  
Ion 98.00 (97.70 to 98.70): VY0

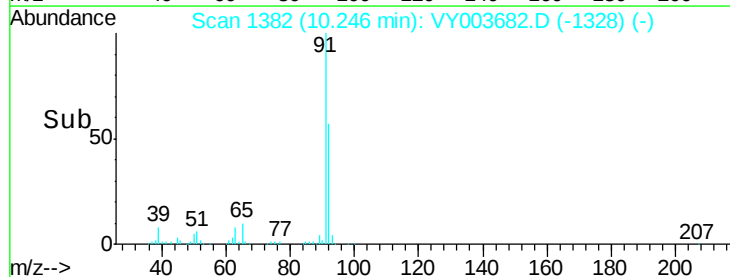
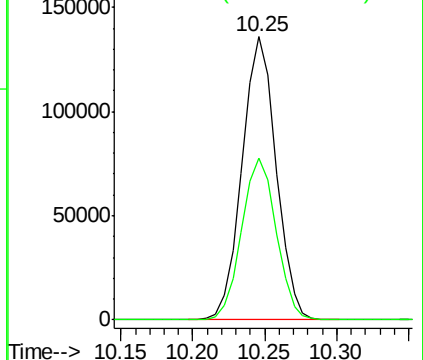


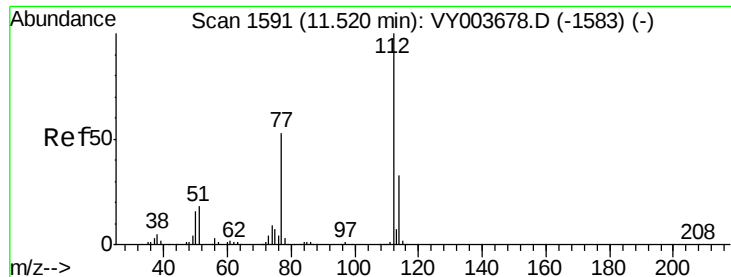
#44  
Toluene  
Concen: 33.308 ug/L  
RT: 10.25 min Scan# 1382  
Delta R.T. 0.00 min  
Lab File: VY003682.D  
Acq: 08 Dec 2020 17:52

Tgt Ion: 91 Resp: 222075  
Ion Ratio Lower Upper  
91 100  
92 57.3 39.8 73.8



Abundance Ion 91.00 (90.70 to 91.70): VY0  
Ion 92.00 (91.70 to 92.70): VY0





#52

Chlorobenzene

Concen: 23.099 ug/L

RT: 11.51 min Scan# 1590

Delta R.T. -0.01 min

Lab File: VY003682.D

Acq: 08 Dec 2020 17:52

Instrument :

MSVOA\_Y

ClientSampleId :

GB1F8MS

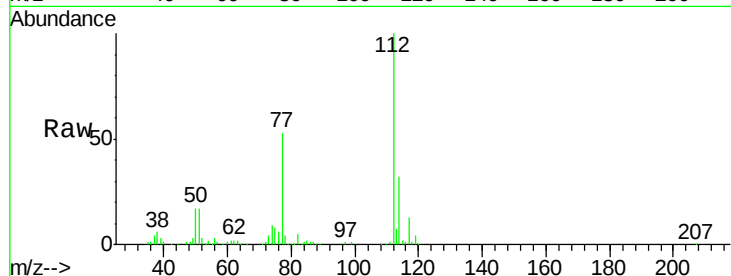
Tot Ion:112 Resp: 101352

Ion Ratio Lower Upper

112 100

77 53.1 44.4 66.6

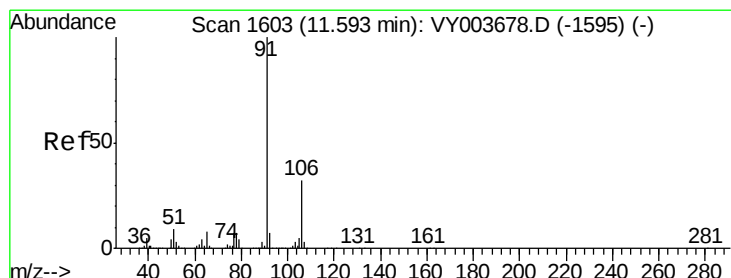
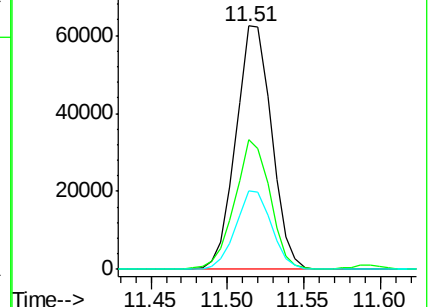
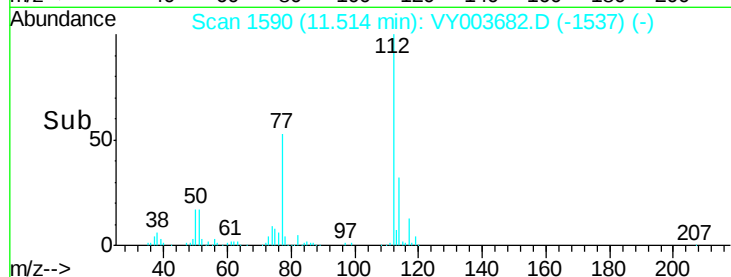
114 32.5 22.4 41.6



Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): VY0

Ion 114.00 (113.70 to 114.70): V



#53

Ethylbenzene

Concen: 2.272 ug/L

RT: 11.59 min Scan# 1603

Delta R.T. 0.00 min

Lab File: VY003682.D

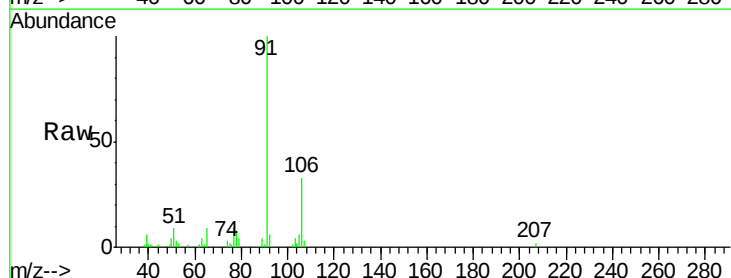
Acq: 08 Dec 2020 17:52

Tgt Ion: 91 Resp: 16532

Ion Ratio Lower Upper

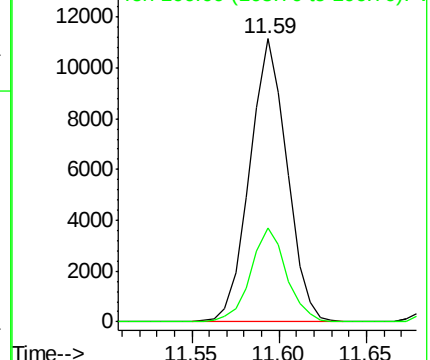
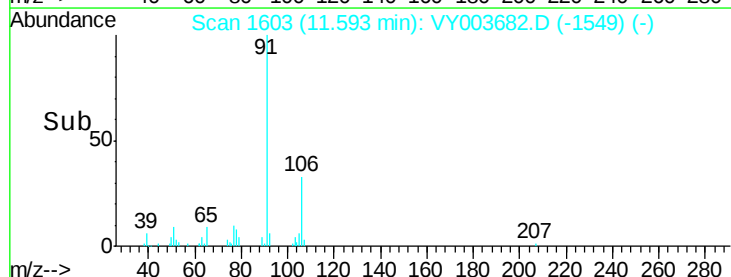
91 100

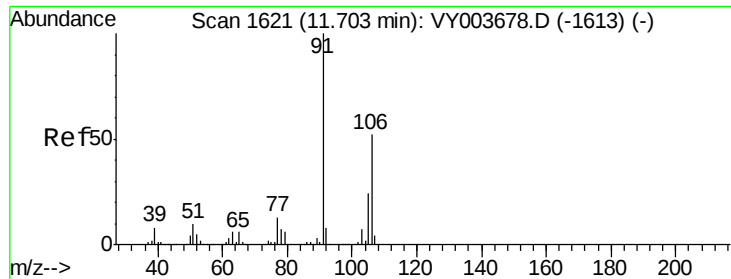
106 33.1 23.3 43.3



Abundance Ion 91.00 (90.70 to 91.70): VY0

Ion 106.00 (105.70 to 106.70): V





#54

m,p-Xylene

Concen: 0.671 ug/L

RT: 11.70 min Scan# 1621

Delta R.T. 0.00 min

Lab File: VY003682.D

Acq: 08 Dec 2020 17:52

Instrument :

MSVOA\_Y

ClientSampleId :

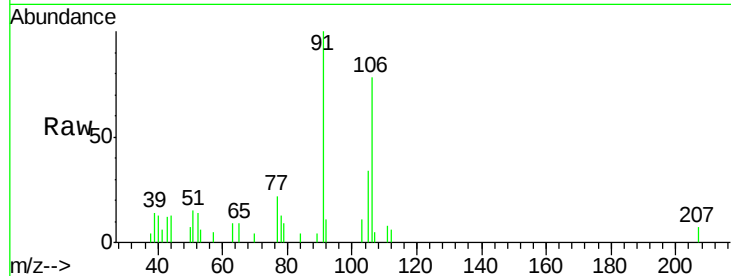
GB1F8MS

Tot Ion:106 Resp: 1884

Ion Ratio Lower Upper

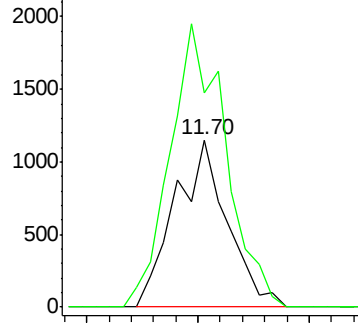
106 100

91 128.6 131.3 243.9#

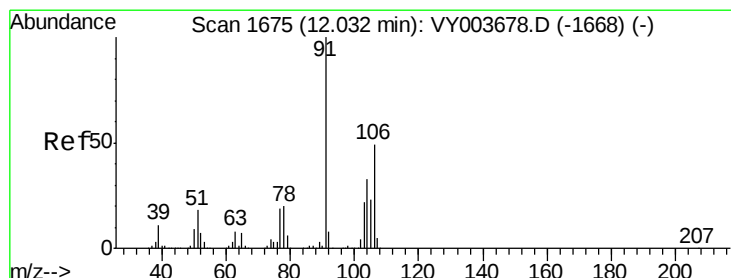
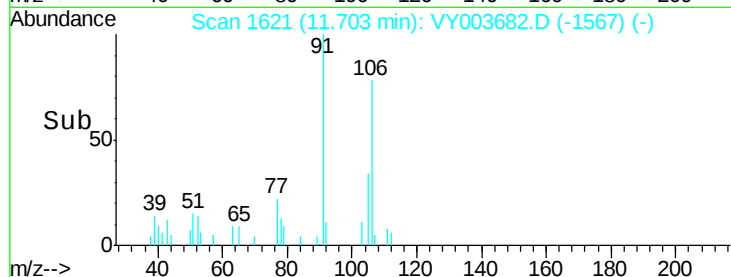


Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VY0



Time-->



#55

o-xylene

Concen: 0.279 ug/L

RT: 12.03 min Scan# 1675

Delta R.T. 0.00 min

Lab File: VY003682.D

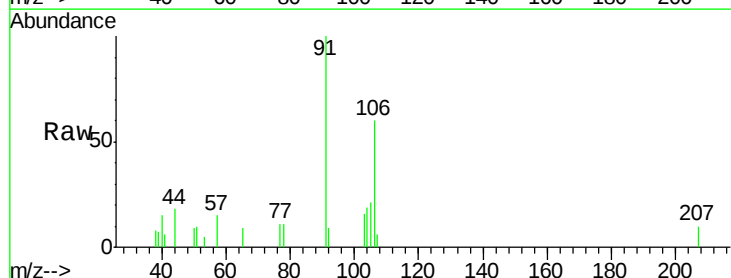
Acq: 08 Dec 2020 17:52

Tgt Ion:106 Resp: 752

Ion Ratio Lower Upper

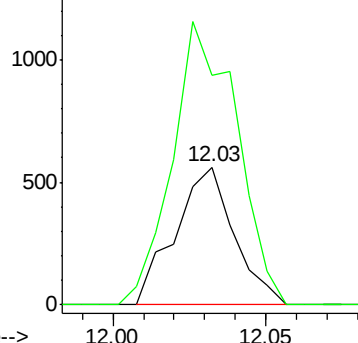
106 100

91 166.7 141.7 263.3



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VY0



Time-->

