

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY021120\  
 Data File : VY001600.D  
 Acq On : 11 Feb 2020 15:37  
 Operator : SY/MD  
 Sample : L1488-04  
 Misc : 6.10G/5ML/MSVOA Y/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :

Quant Time: Feb 12 07:54:47 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y020420S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Feb 04 15:10:08 2020  
 Response via : Initial Calibration

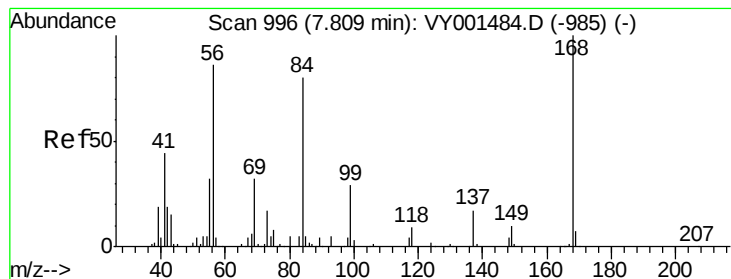
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.80  | 168  | 164741   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.70  | 114  | 298120   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 265840   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.43 | 152  | 118945   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.16  | 65   | 99079    | 59.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 119.46% |          |
| 35) Dibromofluoromethane    | 7.73  | 113  | 86454    | 50.29 | ug/l    | -0.01    |
| Spiked Amount               |       |      | Recovery | =     | 100.58% |          |
| 50) Toluene-d8              | 10.18 | 98   | 357519   | 54.97 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.94% |          |
| 62) 4-Bromofluorobenzene    | 12.49 | 95   | 119898   | 46.79 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.58%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 11) Tert butyl alcohol         | 4.96  | 59   | 1602     | Below Cal | #     | 76     |
| 16) Acetone                    | 3.97  | 43   | 30077    | 62.687    | ug/l  | 98     |
| 20) Methylene Chloride         | 4.74  | 84   | 2478     | Below Cal |       | 88     |
| 25) 2-Butanone                 | 7.00  | 43   | 4194     | 6.738     | ug/l  | 92     |
| 27) cis-1,2-Dichloroethene     | 7.00  | 96   | 6115     | 2.908     | ug/l  | 98     |
| 29) Tetrahydrofuran            | 7.37  | 42   | 413      | 1.107     | ug/l  | # 44   |
| 31) Cyclohexane                | 7.80  | 56   | 4045     | 1.252     | ug/l  | # 1    |
| 36) 1,1-Dichloropropene        | 7.80  | 75   | 13043    | 4.782     | ug/l  | # 49   |
| 37) Ethyl Acetate              | 7.00  | 43   | 4194     | 3.177     | ug/l  | # 1    |
| 38) Carbon Tetrachloride       | 7.80  | 117  | 16088    | 6.097     | ug/l  | # 16   |
| 76) 1,2,3-Trichloropropane     | 12.48 | 75   | 61472    | 48.057    | ug/l  | # 100  |
| 81) trans-1,4-Dichloro-2-buten | 12.48 | 75   | 61472    | 92.989    | ug/l  | # 16   |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.80 min Scan# 995

Delta R.T. -0.01 min

Lab File: VY001600.D

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Instrument :

MSVOA\_Y

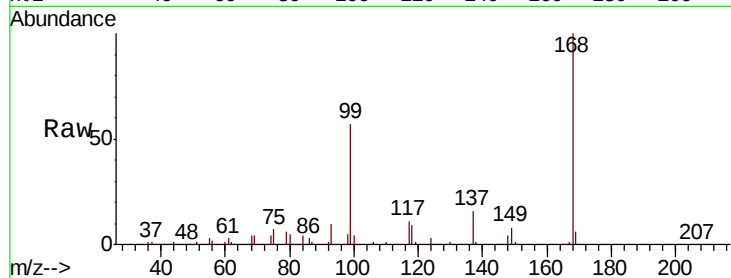
ClientSampleId :

Tot Ion:168 Resp: 164741

Ion Ratio Lower Upper

168 100

99 56.9 48.2 72.4



Abundance Ion 167.90 (167.60 to 168.60): VY001484.D (-985) (-)

Ion 98.90 (98.60 to 99.60): VY001484.D (-985) (-)

7.80

80000

60000

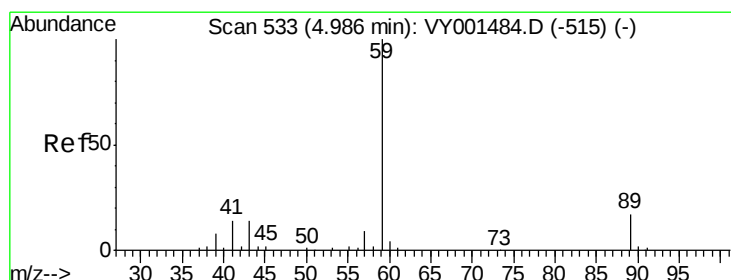
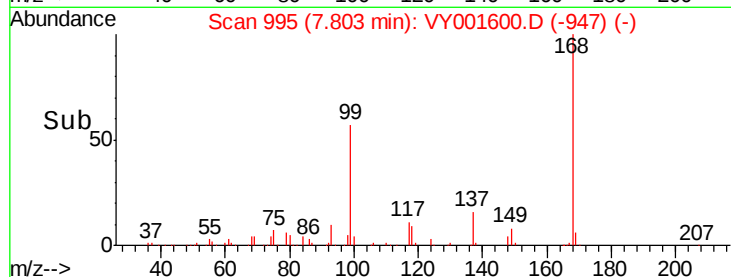
40000

20000

0

7.70 7.80 7.90

Time-->



#11

Tert butyl alcohol

Concen: Below Cal

RT: 4.96 min Scan# 528

Delta R.T. -0.03 min

Lab File: VY001600.D

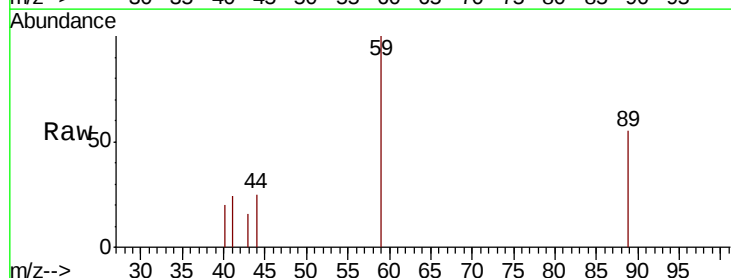
Acq: 11 Feb 2020 15:37

Tgt Ion: 59 Resp: 1602

Ion Ratio Lower Upper

59 100

57 0.0 7.0 10.6#



Abundance Ion 59.00 (58.70 to 59.70): VY001484.D (-515) (-)

Ion 57.00 (56.70 to 57.70): VY001484.D (-515) (-)

4.96

600

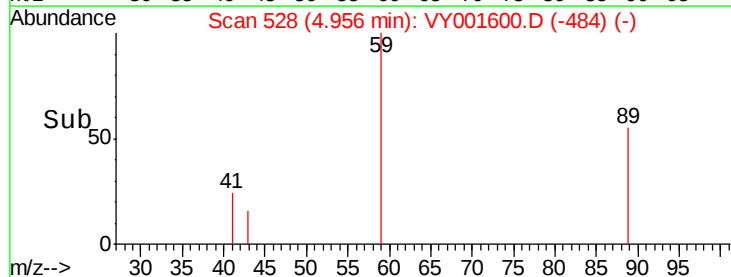
400

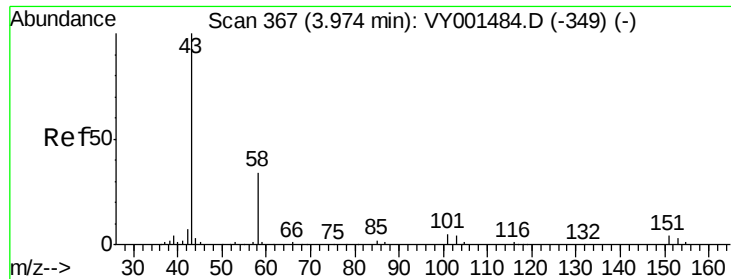
200

0

4.90 4.95 5.00

Time-->

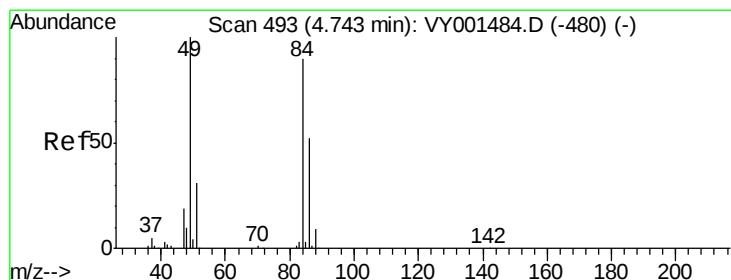
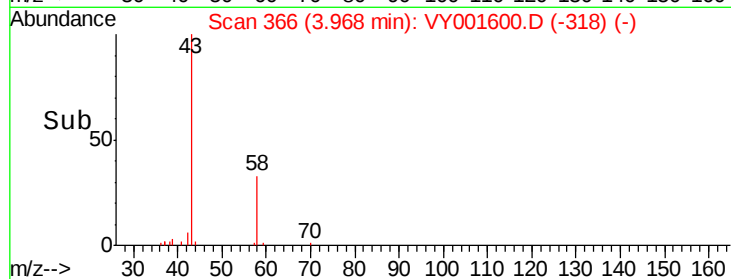
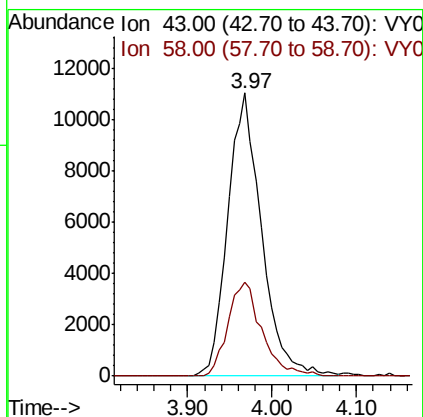
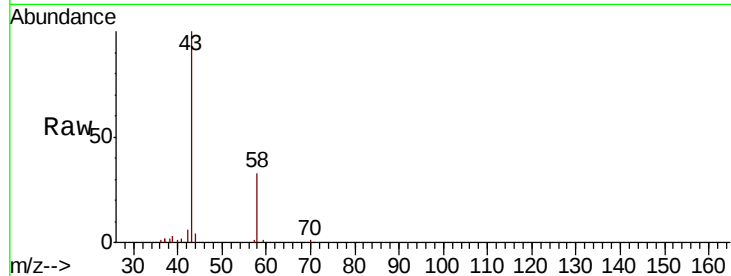




#16  
Acetone  
Concen: 62.687 ug/l  
RT: 3.97 min Scan# 366  
Delta R.T. -0.01 min  
Lab File: VY001600.D  
Acq: 11 Feb 2020 15:37

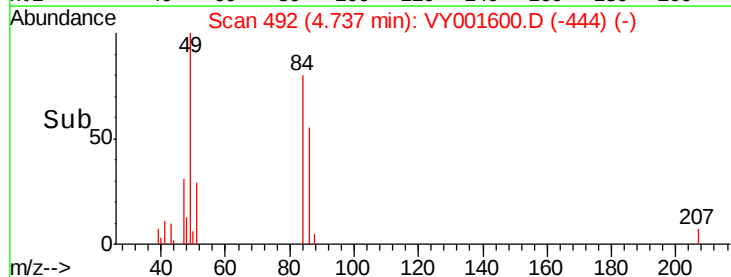
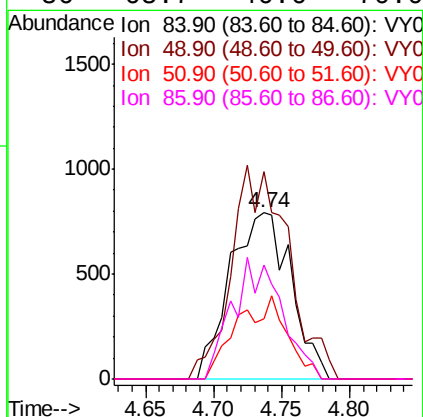
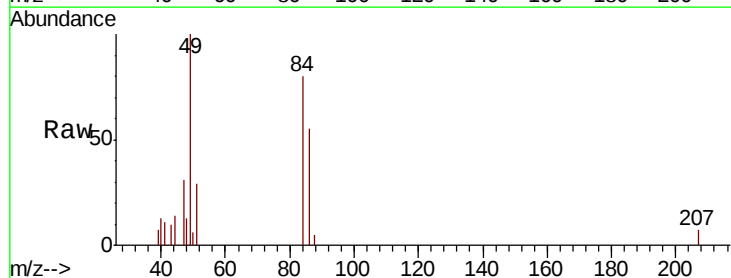
Instrument :  
MSVOA\_Y  
ClientSampleId :

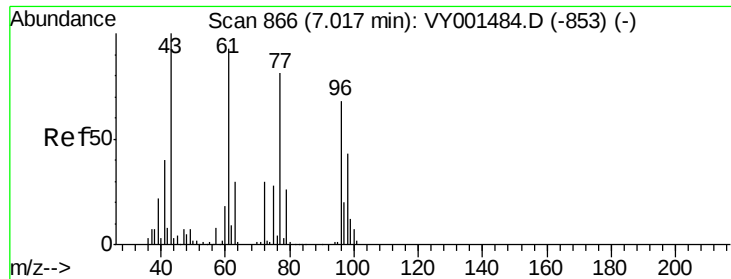
Tot Ion: 43 Resp: 30077  
Ion Ratio Lower Upper  
43 100  
58 33.1 27.5 41.3



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 4.74 min Scan# 492  
Delta R.T. -0.01 min  
Lab File: VY001600.D  
Acq: 11 Feb 2020 15:37

Tgt Ion: 84 Resp: 2478  
Ion Ratio Lower Upper  
84 100  
49 125.0 89.0 133.6  
51 36.2 27.4 41.2  
86 68.7 46.6 70.0





#25

2-Butanone

Concen: 6.738 ug/l

RT: 7.00 min Scan# 864

Delta R.T. -0.01 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Instrument :

MSVOA\_Y

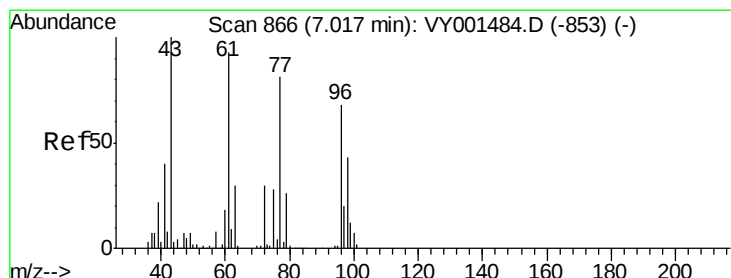
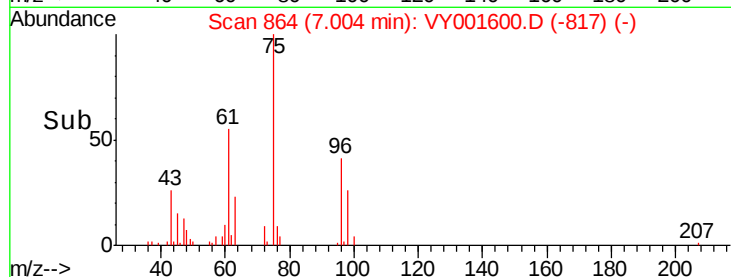
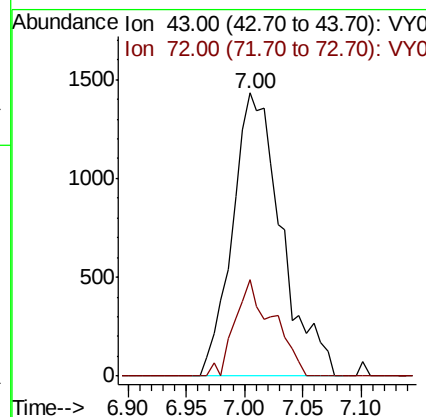
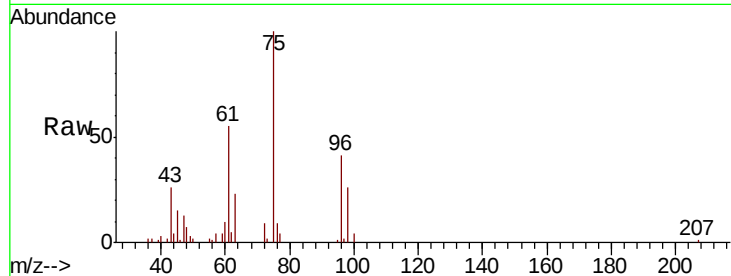
ClientSampleId :

Tot Ion: 43 Resp: 4194

Ion Ratio Lower Upper

43 100

72 33.9 23.8 35.8



#27

cis-1,2-Dichloroethene

Concen: 2.908 ug/l

RT: 7.00 min Scan# 864

Delta R.T. -0.01 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

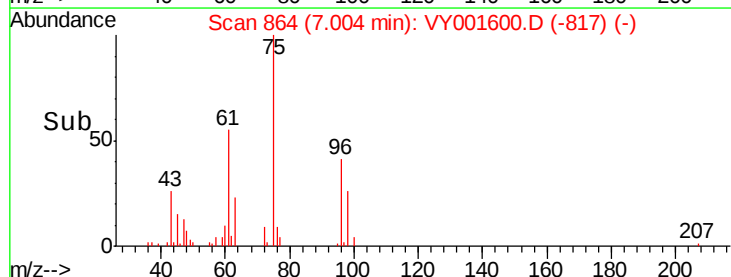
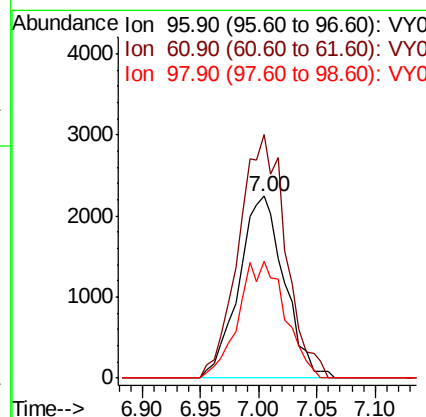
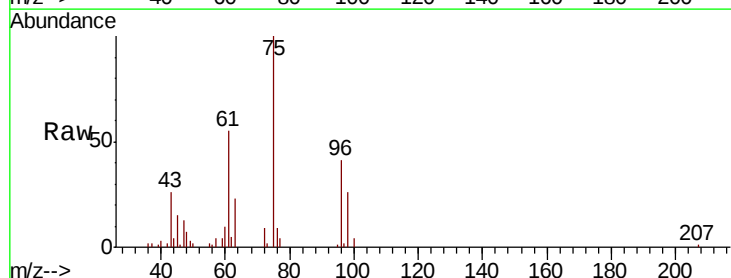
Tgt Ion: 96 Resp: 6115

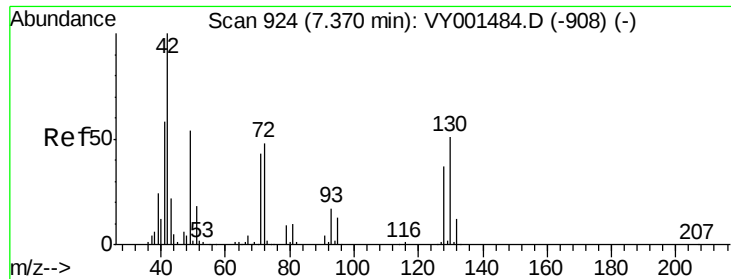
Ion Ratio Lower Upper

96 100

61 137.6 0.0 278.8

98 66.0 0.0 128.8

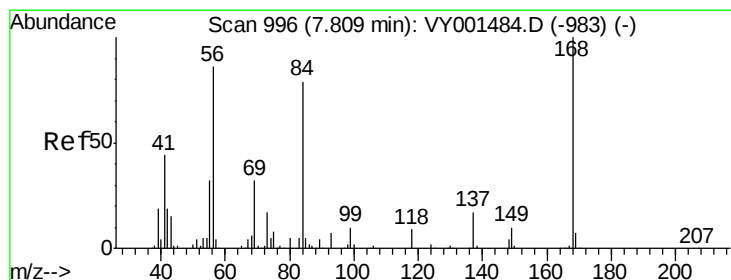
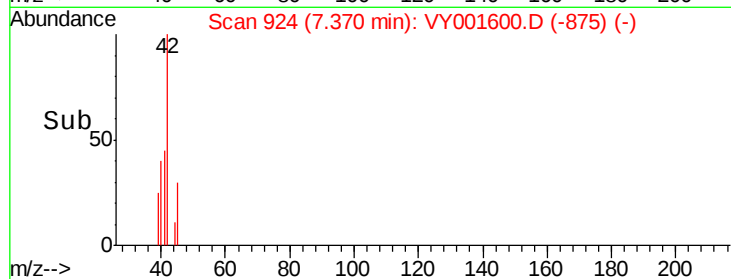
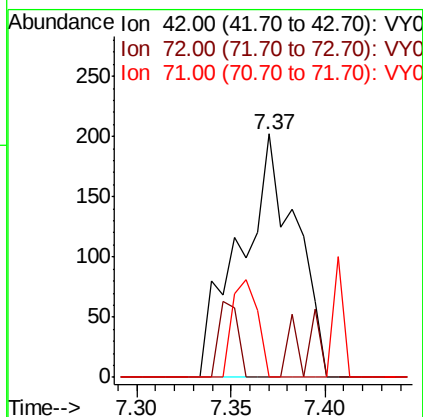
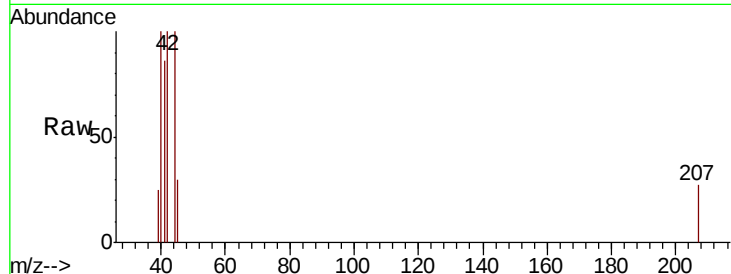




#29  
Tetrahydrofuran  
Concen: 1.107 ug/l  
RT: 7.37 min Scan# 924  
Delta R.T. 0.00 min  
Lab File: VY001600.D  
Acq: 11 Feb 2020 15:37

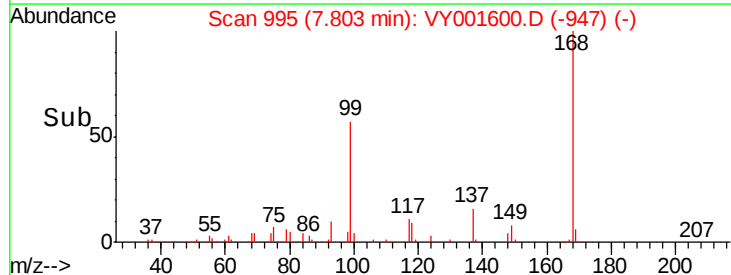
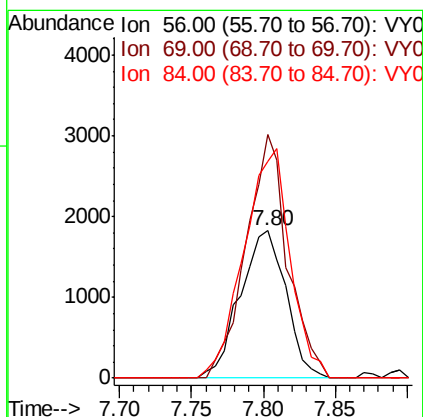
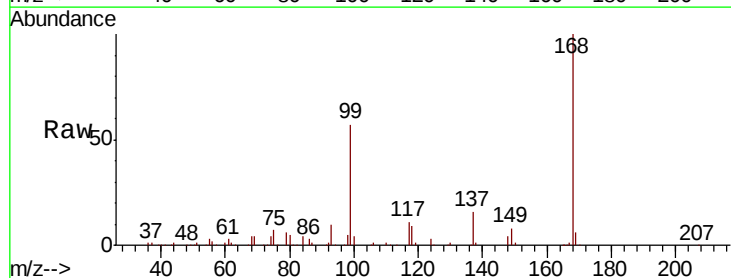
Instrument :  
MSVOA\_Y  
ClientSampled :

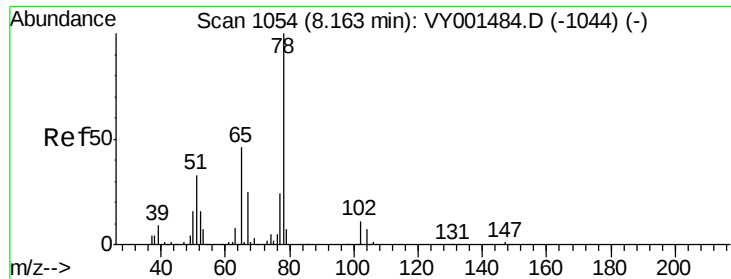
Tot Ion: 42 Resp: 413  
Ion Ratio Lower Upper  
42 100  
72 0.0 37.8 56.6#  
71 18.2 34.8 52.2#



#31  
Cyclohexane  
Concen: 1.252 ug/l  
RT: 7.80 min Scan# 995  
Delta R.T. -0.01 min  
Lab File: VY001600.D  
Acq: 11 Feb 2020 15:37

Tgt Ion: 56 Resp: 4045  
Ion Ratio Lower Upper  
56 100  
69 165.2 29.6 44.4#  
84 147.4 73.6 110.4#

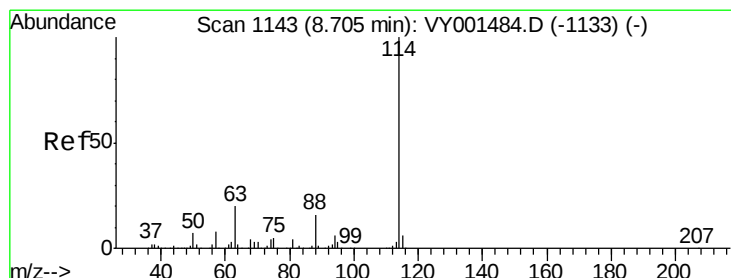
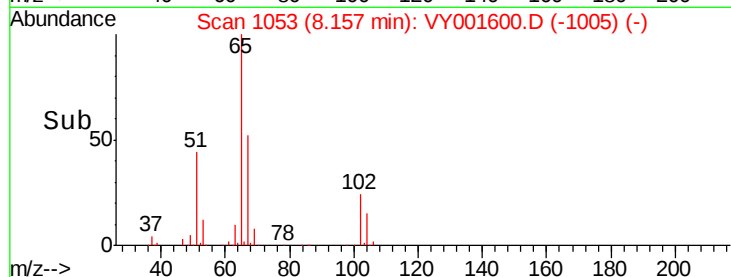
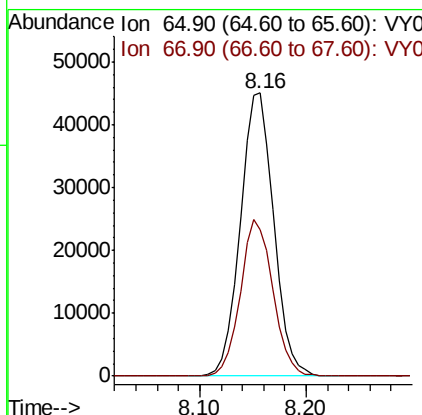
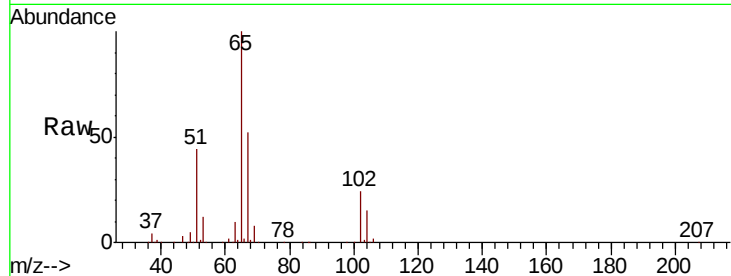




#33  
 1,2-Dichloroethane-d4  
 Concen: 59.733 ug/l  
 RT: 8.16 min Scan# 1053  
 Delta R.T. -0.01 min  
 Lab File: VY001600.D  
 Acq: 11 Feb 2020 15:37

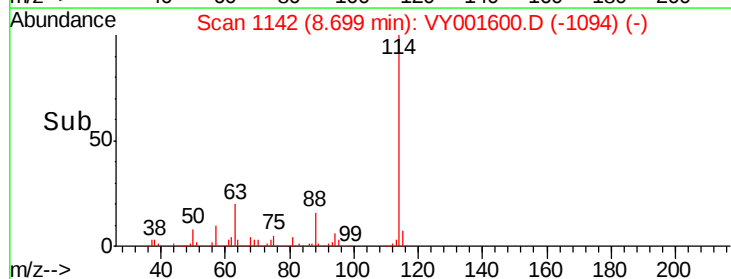
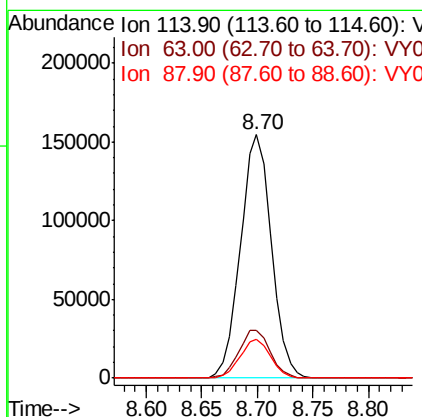
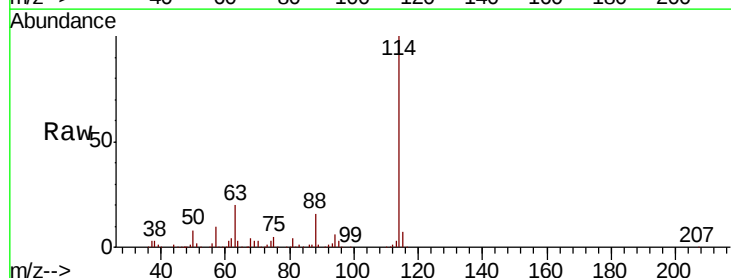
Instrument :  
 MSVOA\_Y  
 ClientSampled :

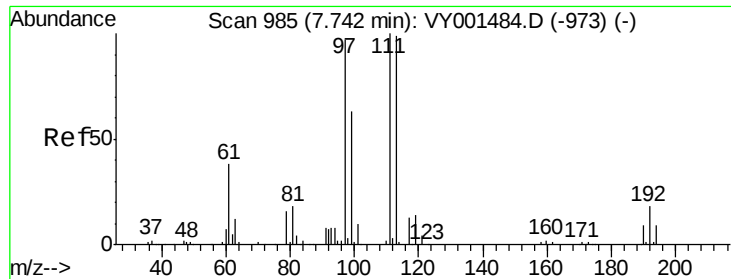
Tot Ion: 65 Resp: 99079  
 Ion Ratio Lower Upper  
 65 100  
 67 53.9 0.0 108.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.70 min Scan# 1142  
 Delta R.T. -0.01 min  
 Lab File: VY001600.D  
 Acq: 11 Feb 2020 15:37

Tgt Ion: 114 Resp: 298120  
 Ion Ratio Lower Upper  
 114 100  
 63 19.8 0.0 39.8  
 88 16.1 0.0 32.6





#35

Dibromofluoromethane

Concen: 50.290 ug/l

RT: 7.73 min Scan# 983

Delta R.T. -0.01 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Instrument :  
MSVOA\_Y  
ClientSampleId :

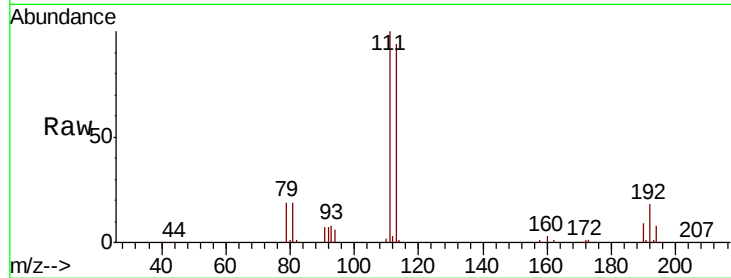
Tot Ion:113 Resp: 86454

Ion Ratio Lower Upper

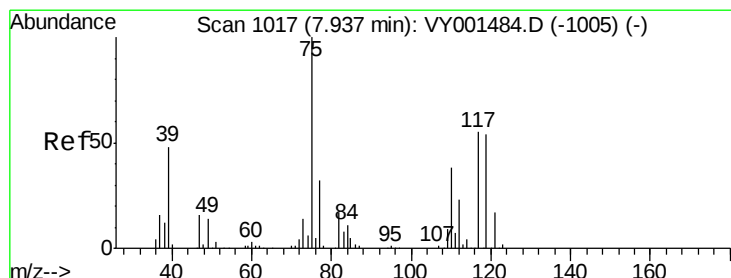
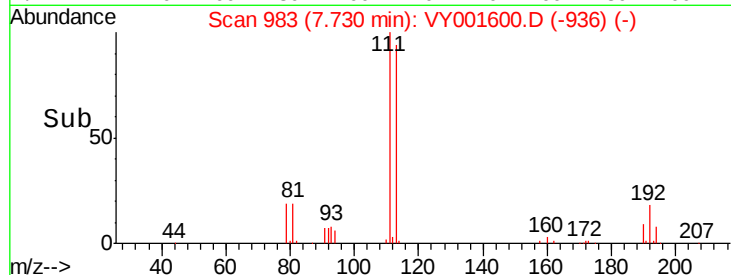
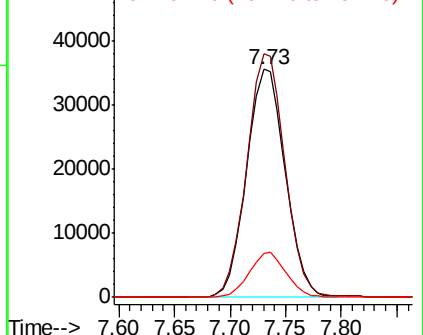
113 100

111 105.4 82.9 124.3

192 18.6 14.6 22.0



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: 4.782 ug/l

RT: 7.80 min Scan# 994

Delta R.T. -0.14 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

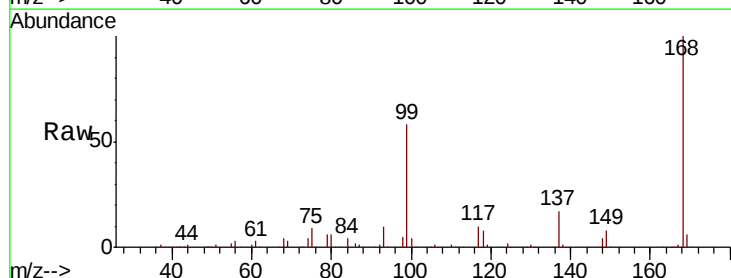
Tgt Ion: 75 Resp: 13043

Ion Ratio Lower Upper

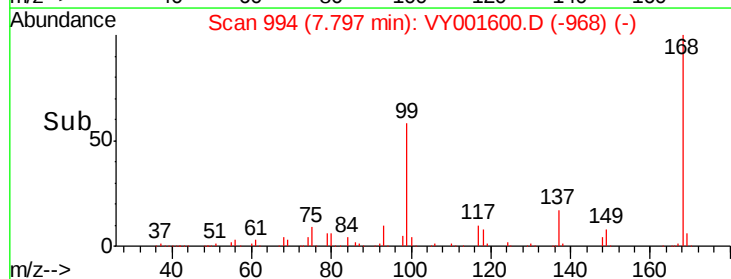
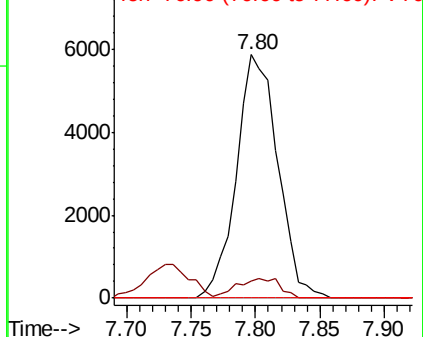
75 100

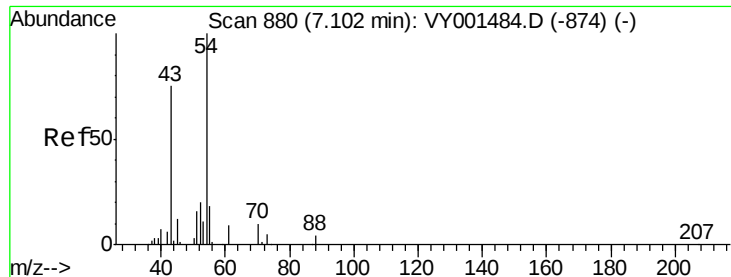
110 8.6 18.2 54.6#

77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): VY0  
Ion 109.90 (109.60 to 110.60): V  
Ion 76.90 (76.60 to 77.60): VY0





#37

Ethyl Acetate

Concen: 3.177 ug/l

RT: 7.00 min Scan# 864

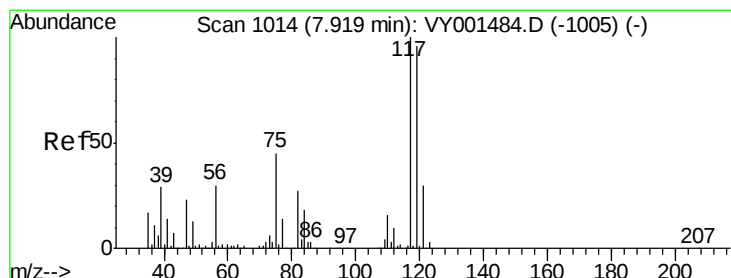
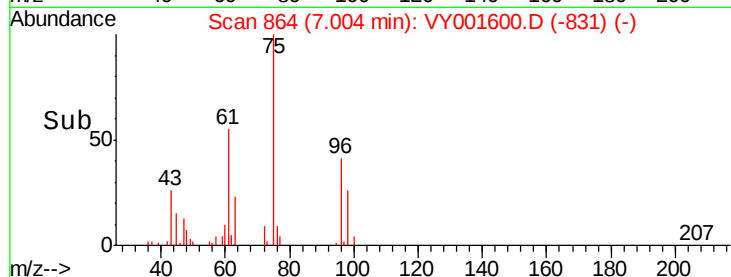
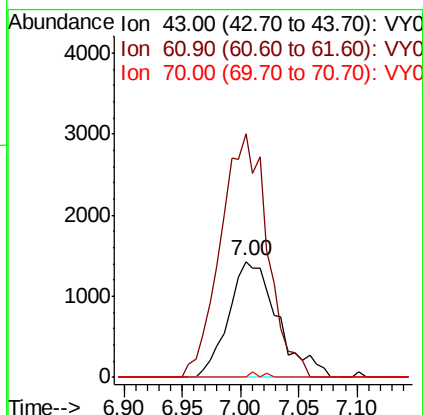
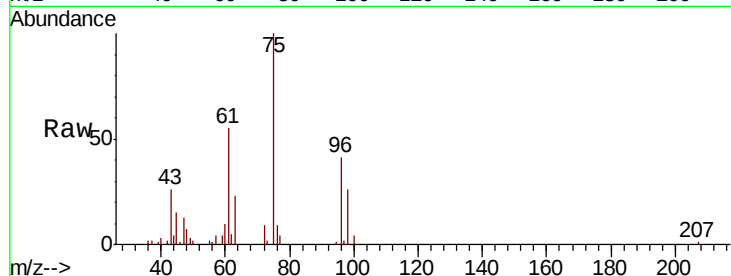
Delta R.T. -0.10 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Instrument :  
MSVOA\_Y  
ClientSampleId :

Tot Ion: 43 Resp: 4194  
Ion Ratio Lower Upper  
43 100  
61 200.7 12.0 18.0#  
70 1.1 10.2 15.4#



#38

Carbon Tetrachloride

Concen: 6.097 ug/l

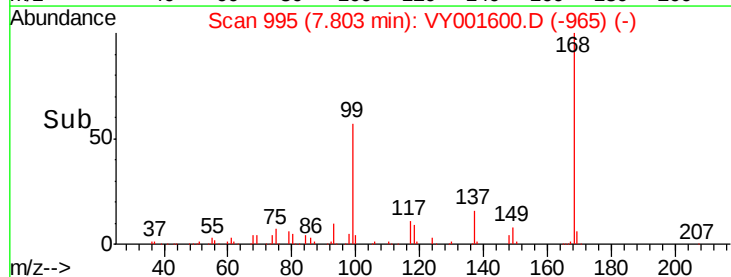
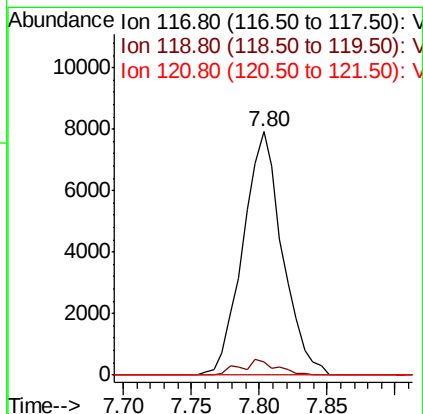
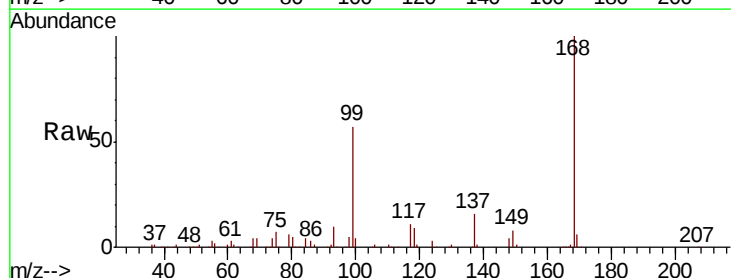
RT: 7.80 min Scan# 995

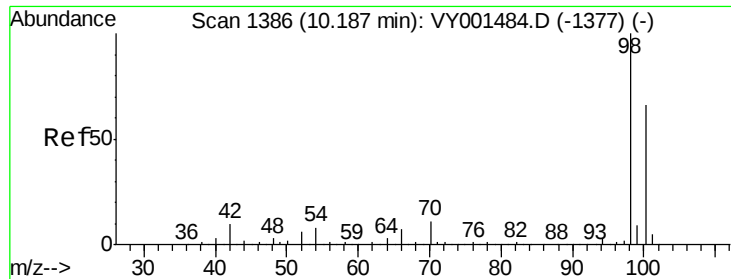
Delta R.T. -0.12 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Tgt Ion: 117 Resp: 16088  
Ion Ratio Lower Upper  
117 100  
119 5.4 76.4 114.6#  
121 0.0 24.2 36.4#





#50

Toluene-d8

Concen: 54.968 ug/l

RT: 10.18 min Scan# 1385

Delta R.T. -0.01 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Instrument :

MSVOA\_Y

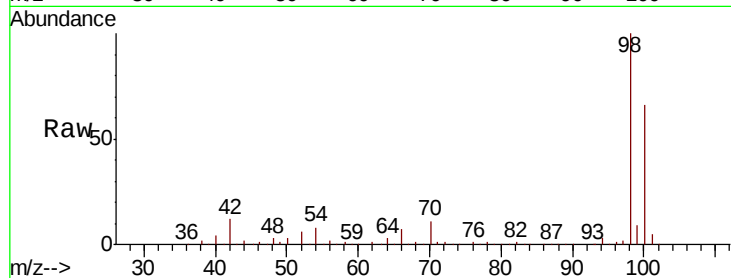
ClientSampleId :

Tot Ion: 98 Resp: 357519

Ion Ratio Lower Upper

98 100

100 65.8 53.0 79.6



Abundance Ion 98.00 (97.70 to 98.70): VY001484.D (-1377) (-)

Ion 100.00 (99.70 to 100.70): VY001600.D (-1337) (-)

10.18

250000

200000

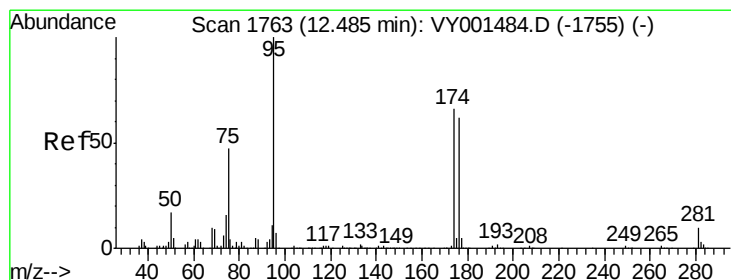
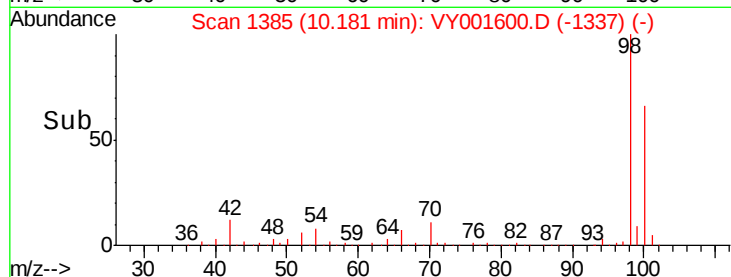
150000

100000

50000

0

Time-->



#62

4-Bromofluorobenzene

Concen: 46.794 ug/l

RT: 12.49 min Scan# 1763

Delta R.T. 0.00 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

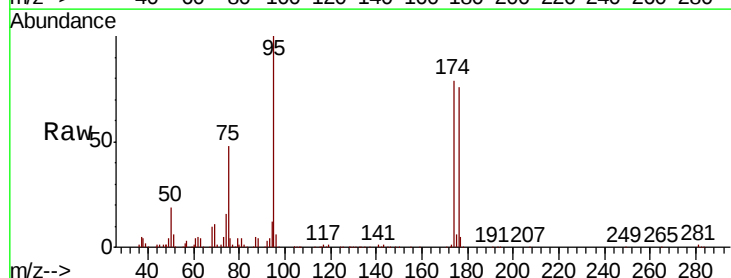
Tgt Ion: 95 Resp: 119898

Ion Ratio Lower Upper

95 100

174 76.4 0.0 141.4

176 74.3 0.0 135.4



Abundance Ion 94.90 (94.60 to 95.60): VY001484.D (-1755) (-)

Ion 173.80 (173.50 to 174.50): VY001600.D (-1714) (-)

Ion 175.80 (175.50 to 176.50): VY001600.D (-1714) (-)

12.49

100000

80000

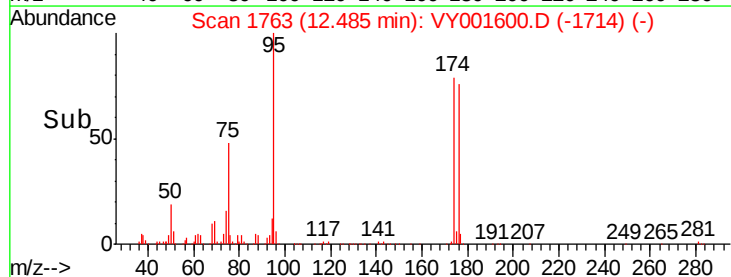
60000

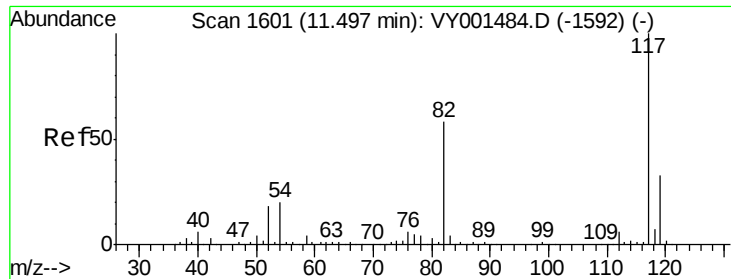
40000

20000

0

Time-->

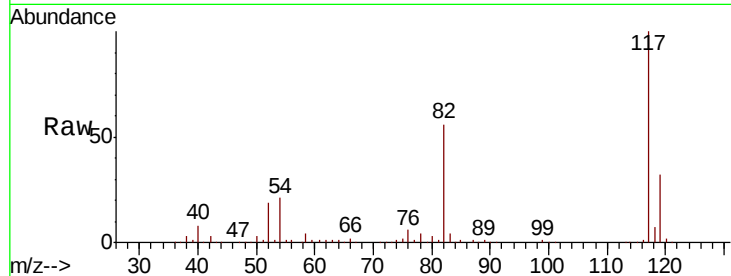




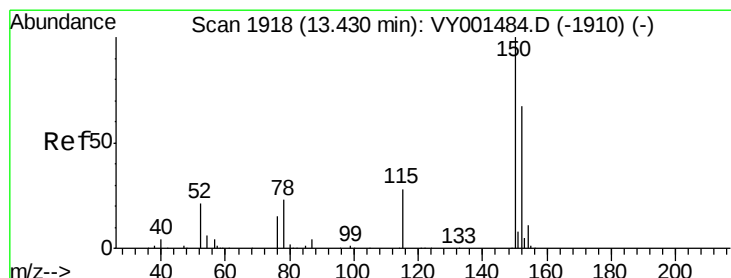
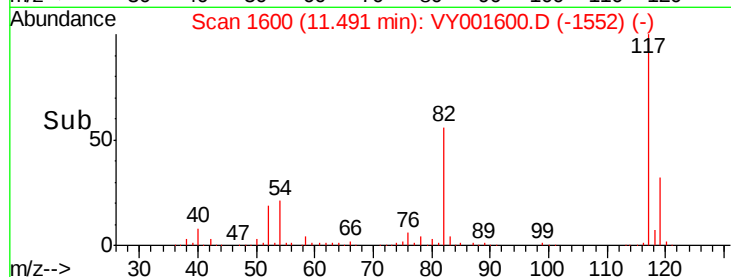
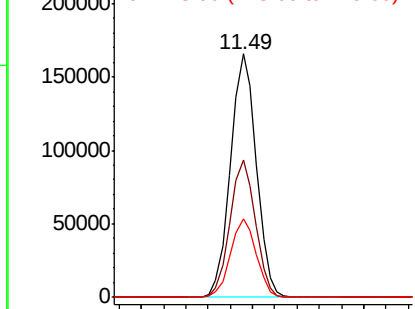
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.49 min Scan# 1600  
Delta R.T. -0.01 min  
Lab File: VY001600.D  
Acq: 11 Feb 2020 15:37

Instrument :  
MSVOA\_Y  
ClientSampleId :

Tot Ion:117 Resp: 265840  
Ion Ratio Lower Upper  
117 100  
82 56.4 46.1 69.1  
119 32.2 26.1 39.1

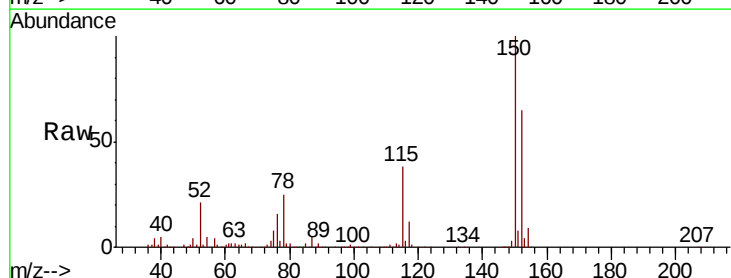


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VY0  
Ion 118.90 (118.60 to 119.60): V

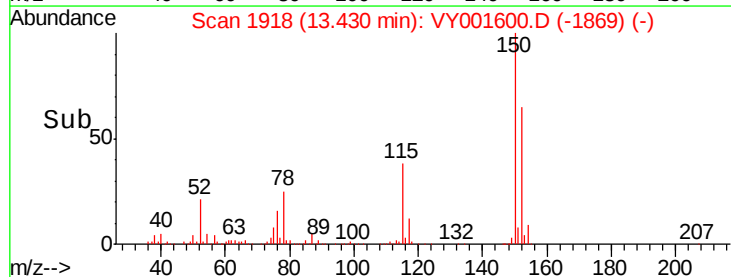
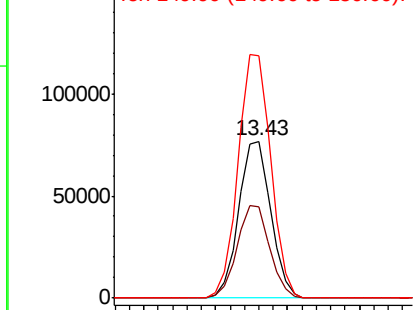


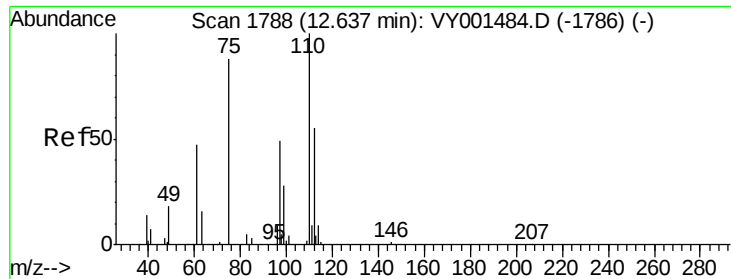
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.43 min Scan# 1918  
Delta R.T. 0.00 min  
Lab File: VY001600.D  
Acq: 11 Feb 2020 15:37

Tgt Ion:152 Resp: 118945  
Ion Ratio Lower Upper  
152 100  
115 59.5 31.4 94.3  
150 157.6 0.0 346.8



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: 48.057 ug/l

RT: 12.48 min Scan# 1762

Delta R.T. -0.16 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Instrument :

MSVOA\_Y

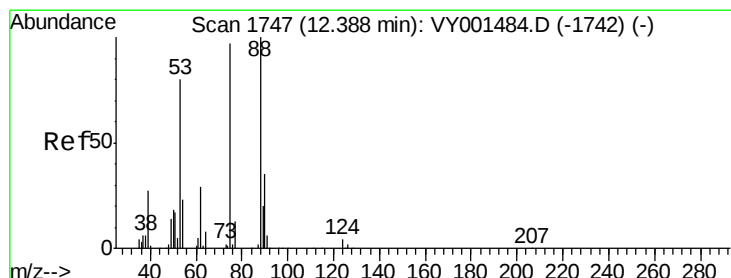
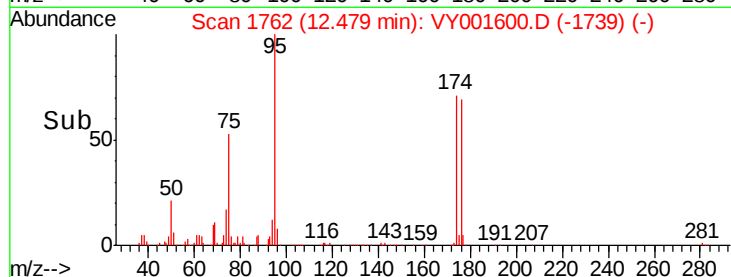
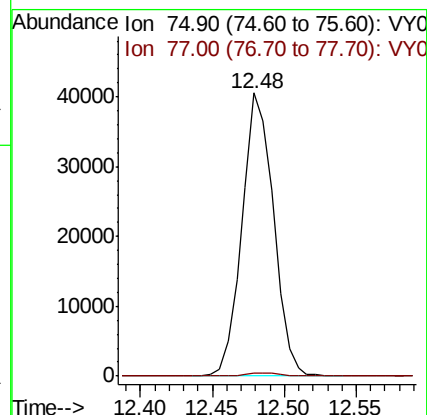
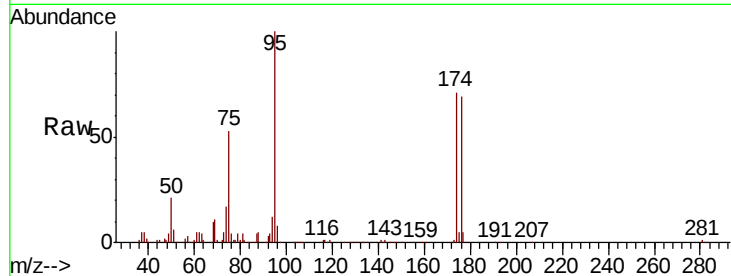
ClientSampleId :

Tot Ion: 75 Resp: 61472

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 92.989 ug/l

RT: 12.48 min Scan# 1762

Delta R.T. 0.09 min

Lab File: VY001600.D

Acq: 11 Feb 2020 15:37

Tgt Ion: 75 Resp: 61472

Ion Ratio Lower Upper

75 100

53 0.0 67.7 101.5#

89 0.0 34.6 52.0#

