

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY050420\  
 Data File : VY002566.D  
 Acq On : 05 May 2020 01:58  
 Operator : SY/MD  
 Sample : L2478-02  
 Misc : 6.36G/5ML/MSVOA Y/SOIL  
 ALS Vial : 43 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 FK-0D015-03-013

Quant Time: May 05 07:18:56 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y043020S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon May 04 12:22:08 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.82  | 168  | 348365   | 50.00 | ug/l  | 0.01     |
| 34) 1,4-Difluorobenzene    | 8.71  | 114  | 569573   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.50 | 117  | 511884   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.44 | 152  | 252709   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.17   | 65  | 172655   | 58.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 117.88% |      |
| 35) Dibromofluoromethane  | 7.75   | 113 | 122782   | 37.69 | ug/l    | 0.01 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 75.38%  |      |
| 50) Toluene-d8            | 10.20  | 98  | 666552   | 52.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.80% |      |
| 62) 4-Bromofluorobenzene  | 12.49  | 95  | 222215   | 51.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.96% |      |

## Target Compounds

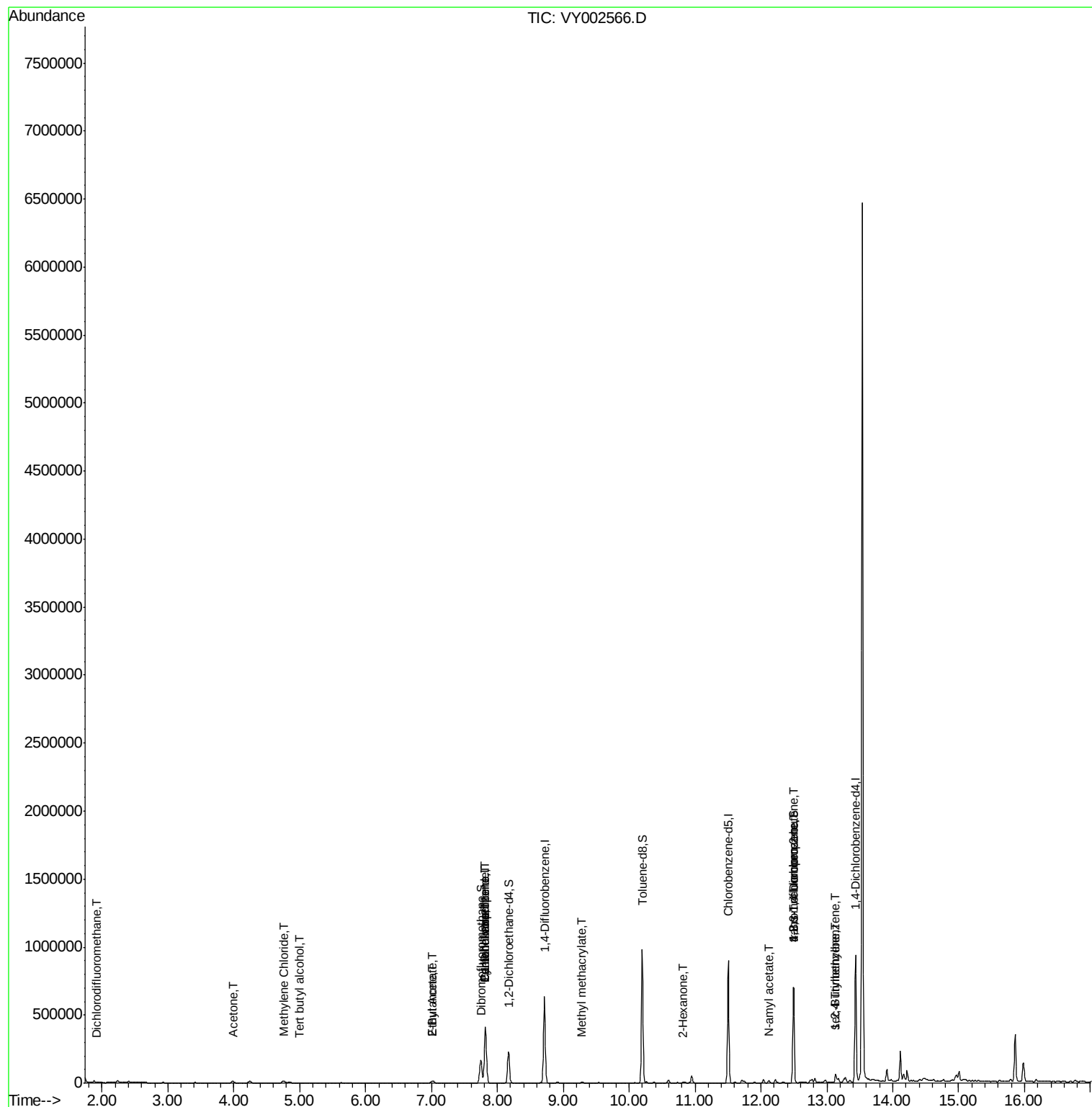
|                                |       |     |        |        |        | Qvalue |
|--------------------------------|-------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.93  | 85  | 46     | 1.800  | ug/l # | 43     |
| 11) Tert butyl alcohol         | 5.00  | 59  | 2207   | 7.324  | ug/l   | 97     |
| 16) Acetone                    | 3.99  | 43  | 23819  | 39.402 | ug/l   | 97     |
| 20) Methylene Chloride         | 4.75  | 84  | 12599  | 3.727  | ug/l   | 97     |
| 25) 2-Butanone                 | 7.02  | 43  | 6248   | 6.314  | ug/l # | 87     |
| 31) Cyclohexane                | 7.81  | 56  | 6251   | 1.187  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.82  | 75  | 22288  | 4.668  | ug/l # | 49     |
| 37) Ethyl Acetate              | 7.02  | 43  | 6248   | 2.546  | ug/l # | 74     |
| 38) Carbon Tetrachloride       | 7.82  | 117 | 31838  | 6.108  | ug/l # | 15     |
| 48) Methyl methacrylate        | 9.28  | 41  | 2289   | 1.100  | ug/l # | 34     |
| 59) 2-Hexanone                 | 10.81 | 43  | 3645   | 2.234  | ug/l # | 22     |
| 74) N-amyl acetate             | 12.12 | 43  | 9671   | 2.455  | ug/l # | 44     |
| 76) 1,2,3-Trichloropropane     | 12.49 | 75  | 106907 | 47.604 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.49 | 75  | 106907 | 95.456 | ug/l # | 15     |
| 84) 1,2,4-Trimethylbenzene     | 13.13 | 105 | 29269  | 2.163  | ug/l   | 91     |
| 85) sec-Butylbenzene           | 13.13 | 105 | 29269  | 1.772  | ug/l # | 54     |

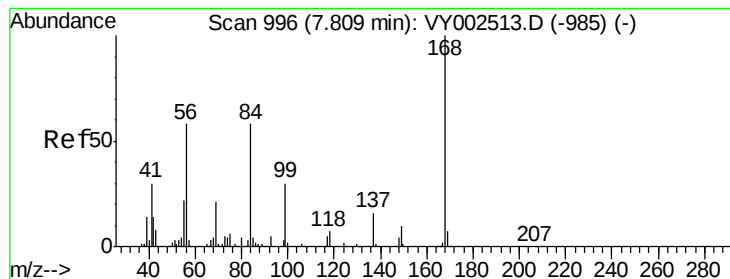
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA Y\DATA\VY050420\  
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Sample : L2478-02  
Misc : 6.36G/5ML/MSVOA Y/SOIL  
ALS Vial : 43 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
FK-0D015-03-013

Quant Time: May 05 07:18:56 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y043020S.M  
Quant Title : SW846 8260  
QLast Update : Mon May 04 12:22:08 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.82 min Scan# 998

Delta R.T. 0.01 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

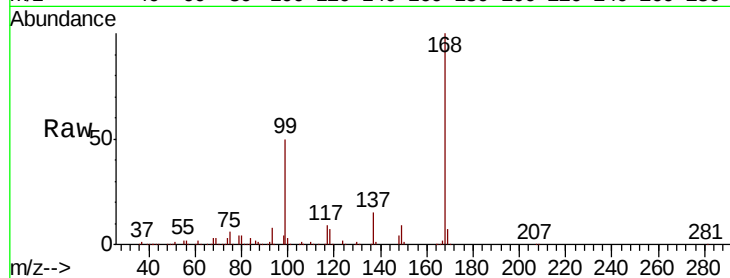
FK-0D015-03-013

Tot Ion:168 Resp: 348365

Ion Ratio Lower Upper

168 100

99 49.6 39.2 58.8



Abundance Ion 167.90 (167.60 to 168.60): VY002513.D (-985) (-)

Ion 98.90 (98.60 to 99.60): VY002513.D (-985) (-)

7.82

150000

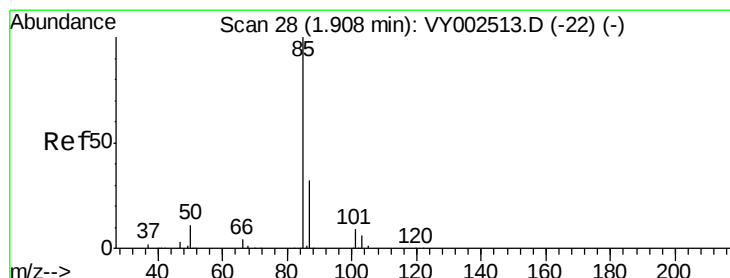
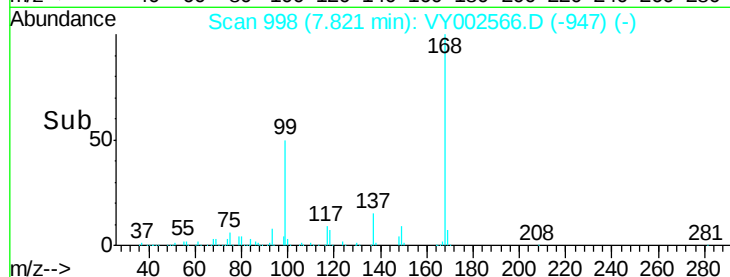
100000

50000

0

7.70 7.80 7.90

Time-->



#2

Dichlorodifluoromethane

Concen: 1.800 ug/l

RT: 1.93 min Scan# 31

Delta R.T. 0.02 min

Lab File: VY002566.D

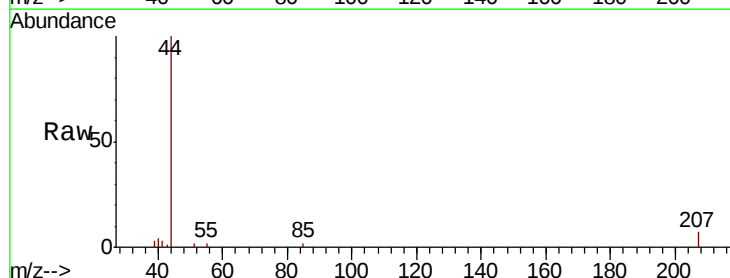
Acq: 05 May 2020 01:58

Tgt Ion: 85 Resp: 46

Ion Ratio Lower Upper

85 100

87 0.0 15.8 47.4#



Abundance Ion 84.90 (84.60 to 85.60): VY002513.D (-22) (-)

Ion 86.90 (86.60 to 87.60): VY002513.D (-22) (-)

1.93

80

60

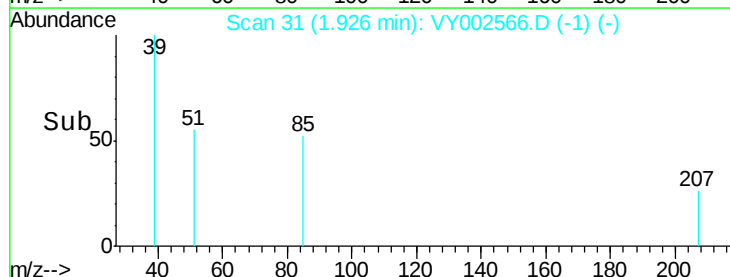
40

20

0

1.90 1.92 1.94

Time-->

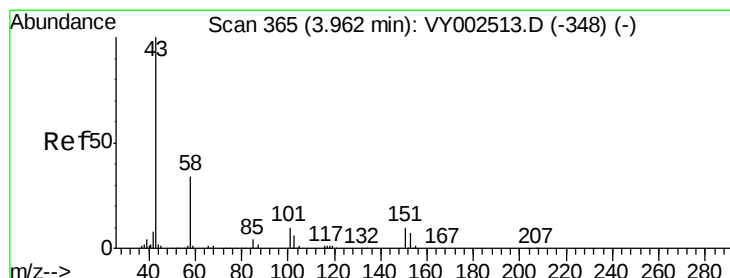
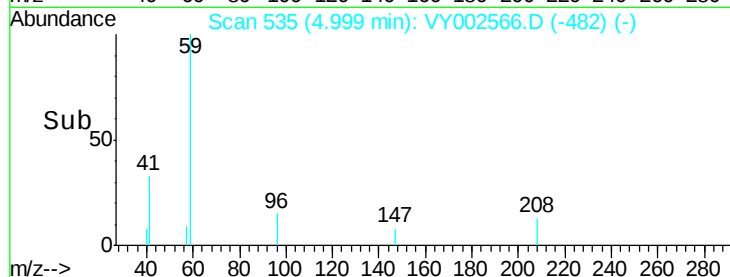
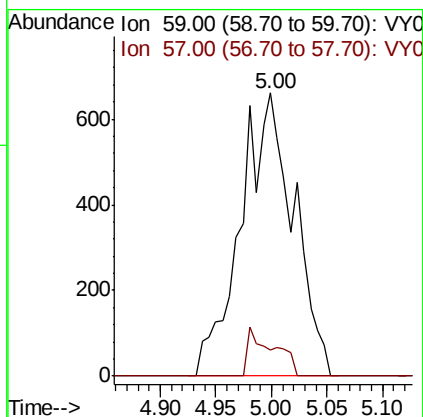
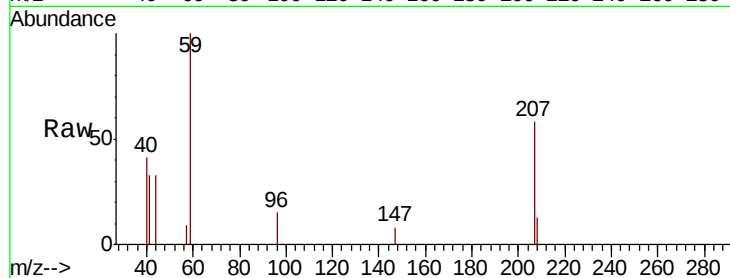




#11  
Tert butyl alcohol  
Concen: 7.324 ug/l  
RT: 5.00 min Scan# 535  
Delta R.T. 0.02 min  
Lab File: VY002566.D  
Acq: 05 May 2020 01:58

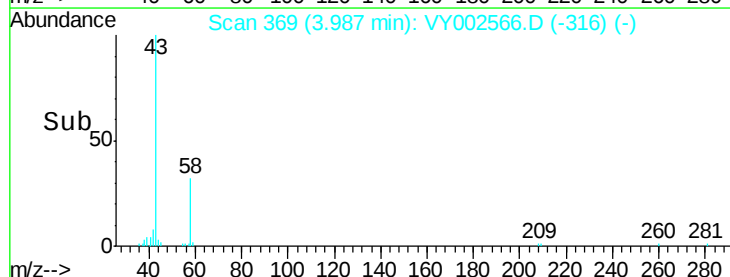
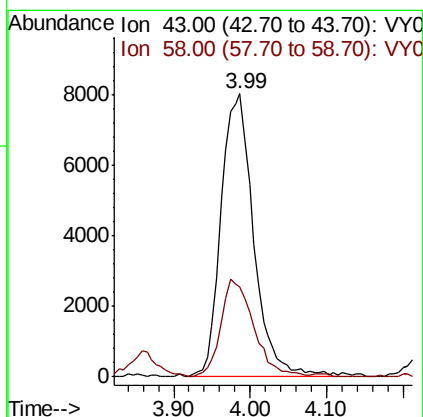
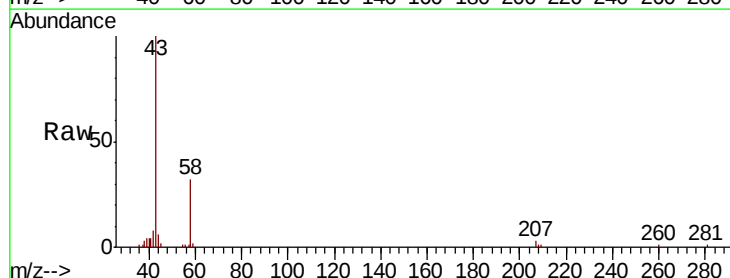
Instrument :  
MSVOA\_Y  
ClientSampleId :  
FK-0D015-03-013

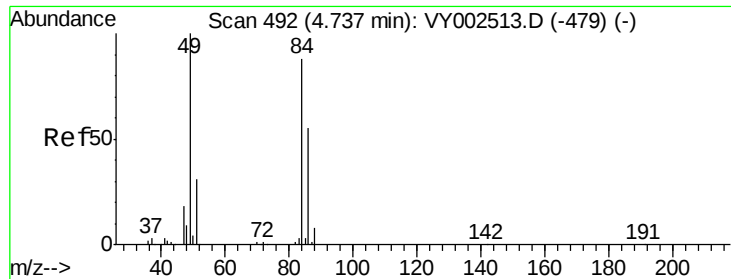
Tot Ion: 59 Resp: 2207  
Ion Ratio Lower Upper  
59 100  
57 8.4 7.8 11.6



#16  
Acetone  
Concen: 39.402 ug/l  
RT: 3.99 min Scan# 369  
Delta R.T. 0.02 min  
Lab File: VY002566.D  
Acq: 05 May 2020 01:58

Tgt Ion: 43 Resp: 23819  
Ion Ratio Lower Upper  
43 100  
58 31.9 26.9 40.3

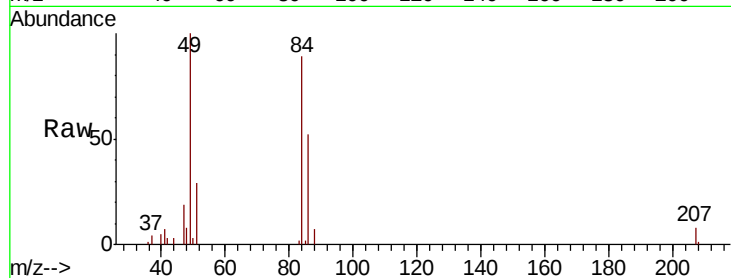




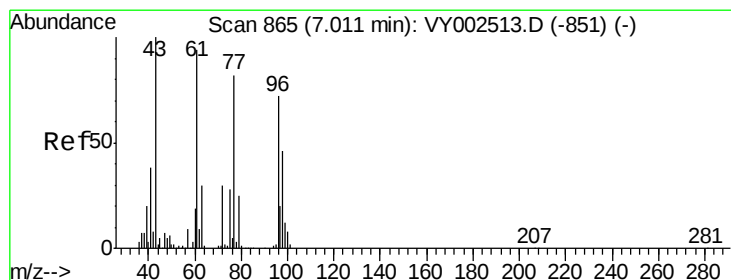
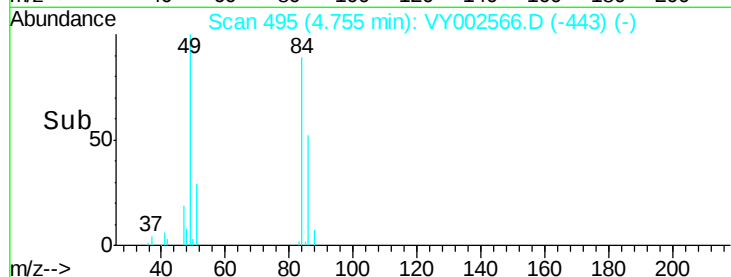
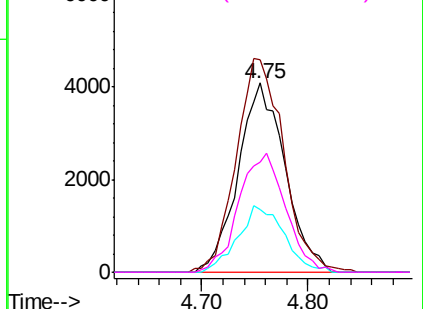
#20  
Methvlene Chloride  
Concen: 3.727 ug/l  
RT: 4.75 min Scan# 495  
Delta R.T. 0.02 min  
Lab File: VY002566.D  
Acq: 05 May 2020 01:58

Instrument :  
MSVOA\_Y  
ClientSampleId :  
FK-0D015-03-013

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 12599 |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 112.4 | 90.5  | 135.7 |
| 51       | 33.0  | 28.3  | 42.5  |
| 86       | 58.3  | 49.9  | 74.9  |

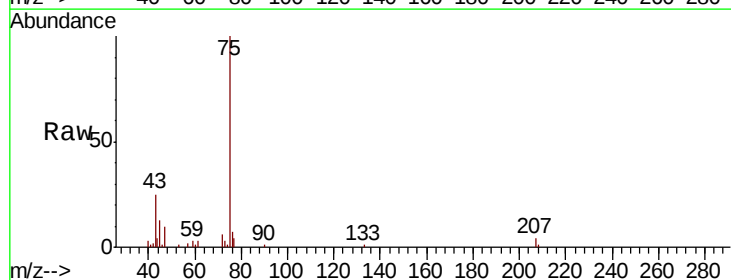


Abundance Ion 83.90 (83.60 to 84.60): VY0  
Ion 48.90 (48.60 to 49.60): VY0  
Ion 50.90 (50.60 to 51.60): VY0  
Ion 85.90 (85.60 to 86.60): VY0

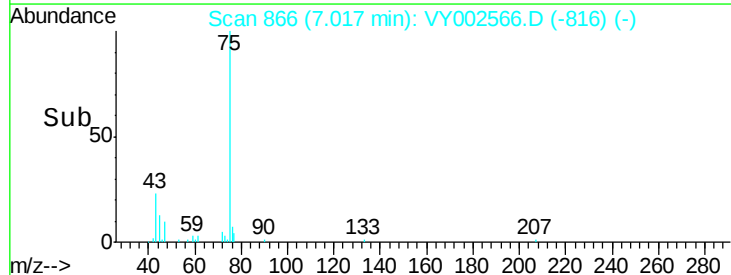
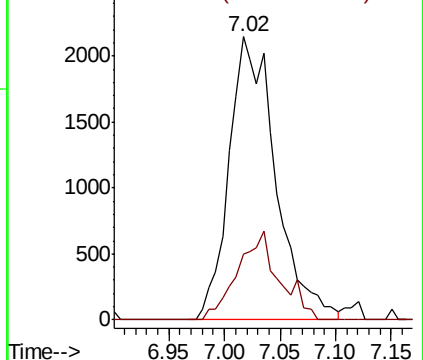


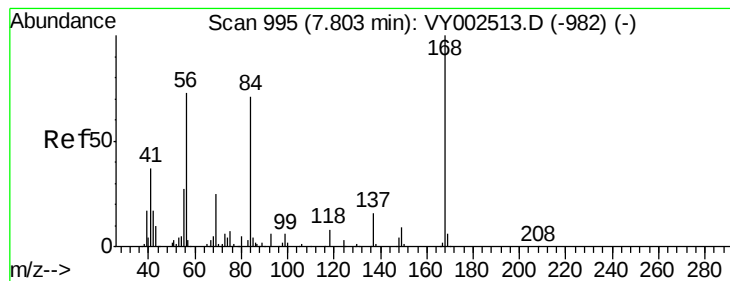
#25  
2-Butanone  
Concen: 6.314 ug/l  
RT: 7.02 min Scan# 866  
Delta R.T. 0.01 min  
Lab File: VY002566.D  
Acq: 05 May 2020 01:58

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 6248  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 23.3  | 24.1  | 36.1# |



Abundance Ion 43.00 (42.70 to 43.70): VY0  
Ion 72.00 (71.70 to 72.70): VY0





#31

Cyclohexane

Concen: 1.187 ug/l

RT: 7.81 min Scan# 996

Delta R.T. 0.01 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

FK-0D015-03-013

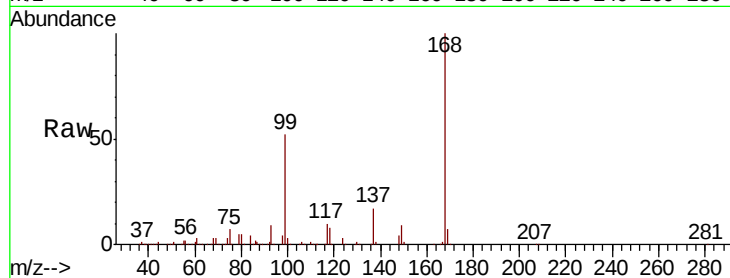
Tot Ion: 56 Resp: 6251

Ion Ratio Lower Upper

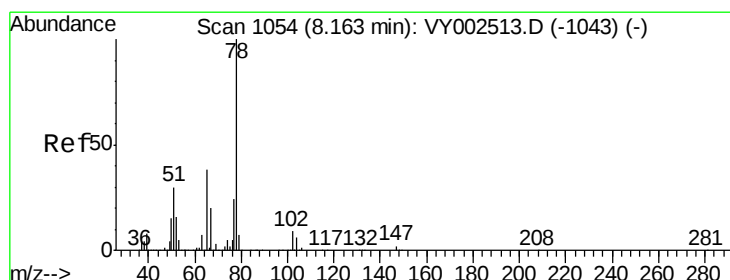
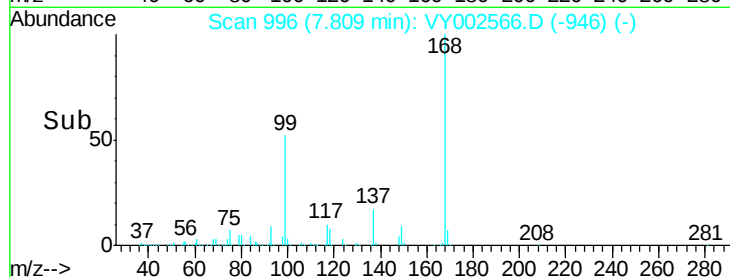
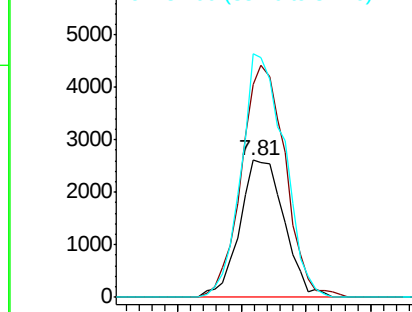
56 100

69 155.4 27.6 41.4#

84 177.9 77.7 116.5#



Abundance Ion 56.00 (55.70 to 56.70): VY0  
Ion 69.00 (68.70 to 69.70): VY0  
Ion 84.00 (83.70 to 84.70): VY0



#33

1,2-Dichloroethane-d4

Concen: 58.944 ug/l

RT: 8.17 min Scan# 1055

Delta R.T. 0.01 min

Lab File: VY002566.D

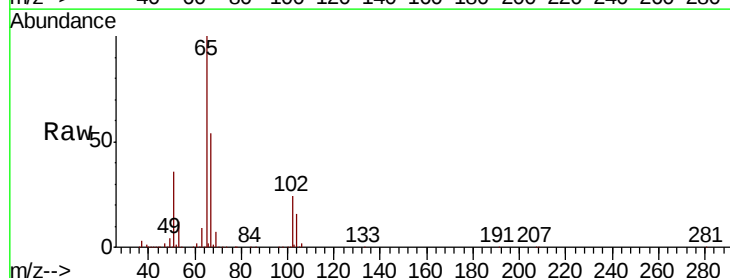
Acq: 05 May 2020 01:58

Tgt Ion: 65 Resp: 172655

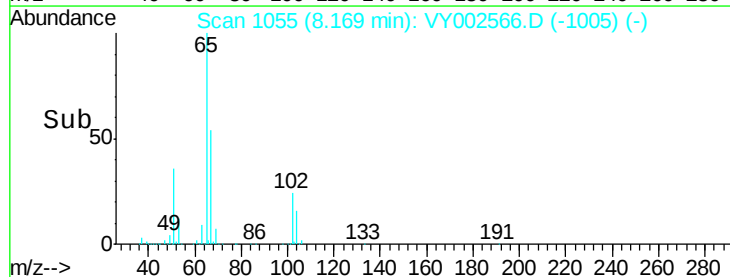
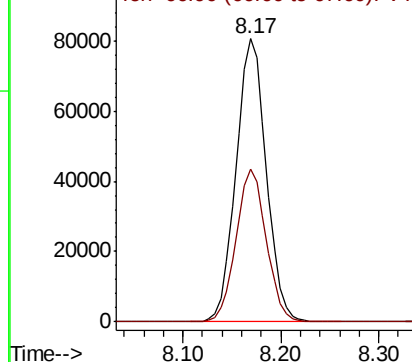
Ion Ratio Lower Upper

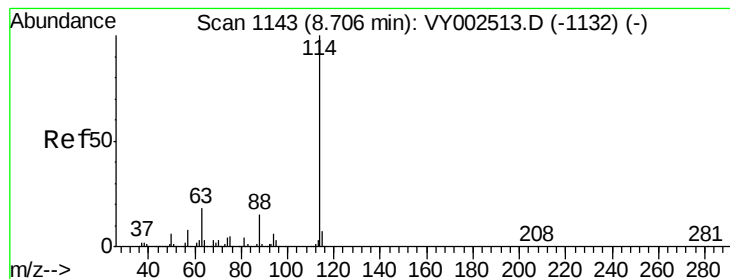
65 100

67 53.8 0.0 107.2



Abundance Ion 64.90 (64.60 to 65.60): VY0  
Ion 66.90 (66.60 to 67.60): VY0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.71 min Scan# 1144

Delta R.T. 0.01 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

FK-0D015-03-013

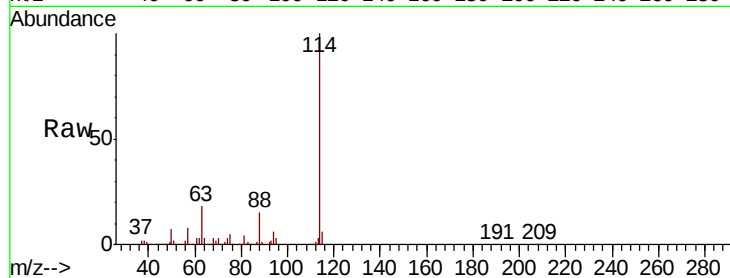
Tot Ion:114 Resp: 569573

Ion Ratio Lower Upper

114 100

63 17.7 0.0 36.4

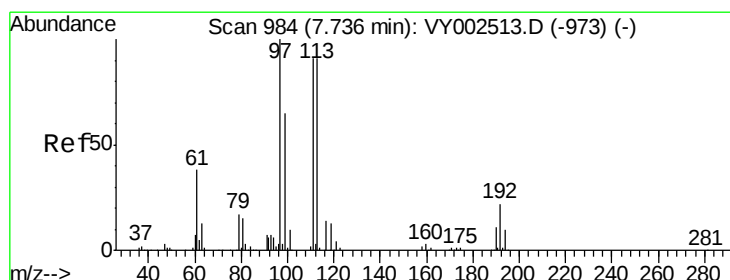
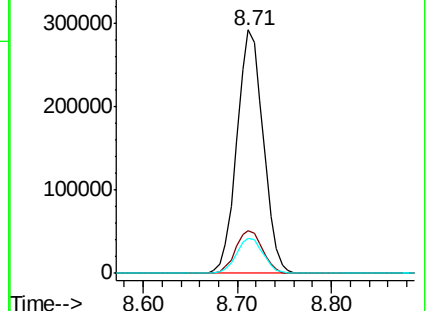
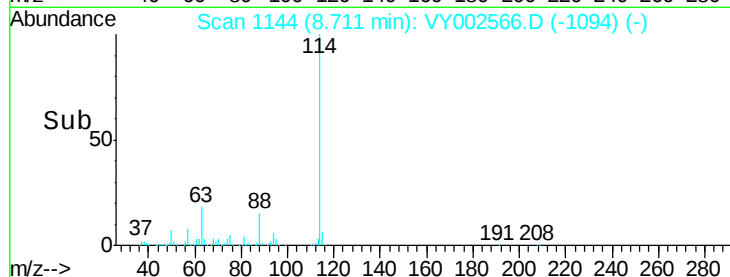
88 14.6 0.0 29.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VY0

Ion 87.90 (87.60 to 88.60): VY0



#35

Dibromofluoromethane

Concen: 37.693 ug/l

RT: 7.75 min Scan# 986

Delta R.T. 0.01 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

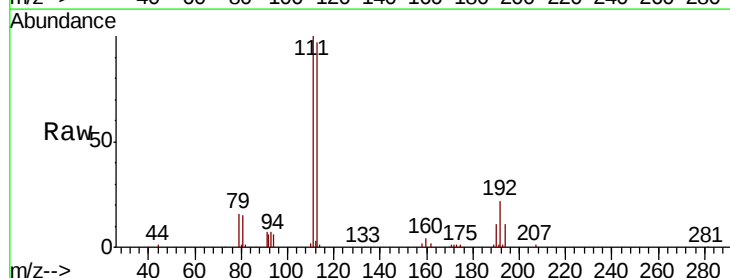
Tgt Ion:113 Resp: 122782

Ion Ratio Lower Upper

113 100

111 101.3 81.8 122.6

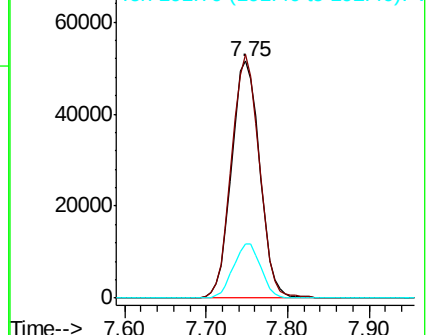
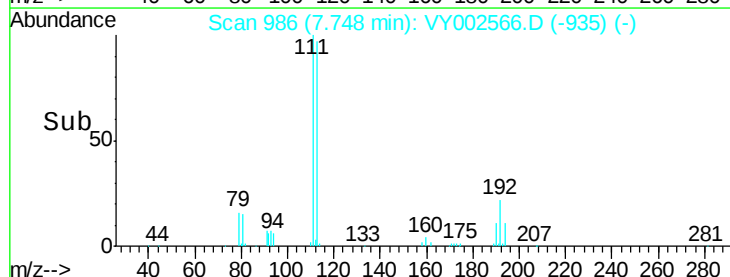
192 22.3 18.2 27.4

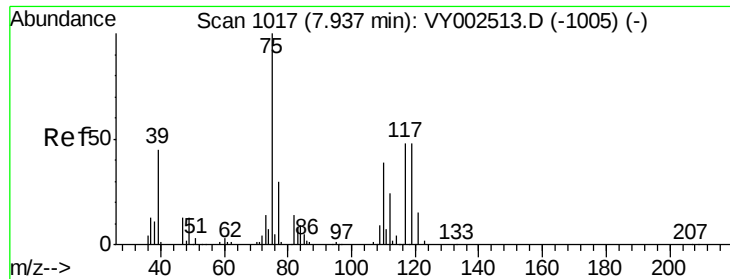


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

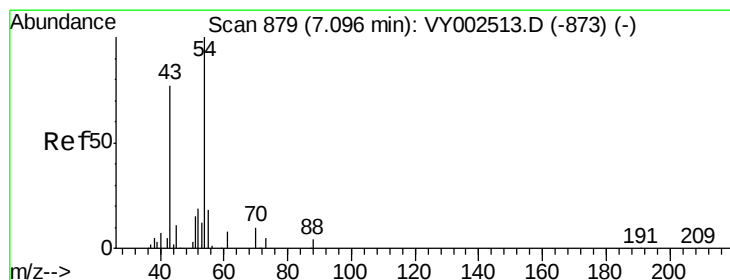
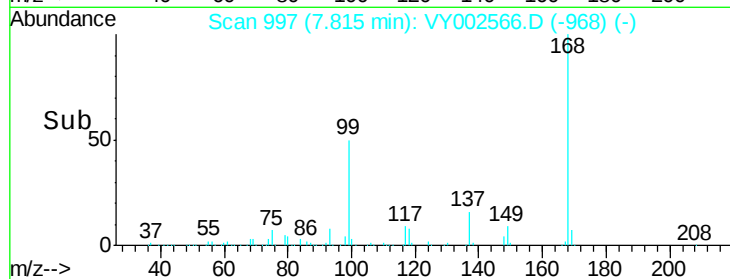
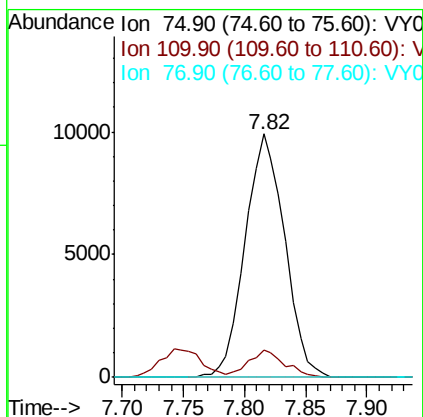
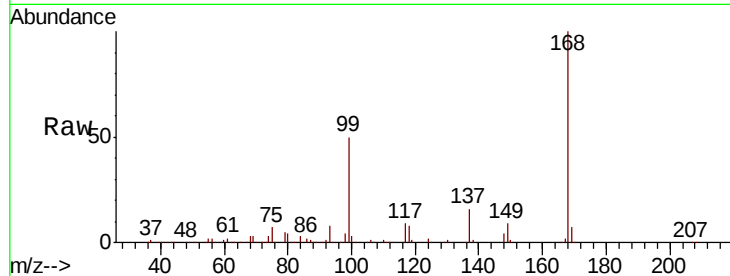




#36  
 1,1-Dichloropropene  
 Concen: 4.668 ug/l  
 RT: 7.82 min Scan# 997  
 Delta R.T. -0.12 min  
 Lab File: VY002566.D  
 Acq: 05 May 2020 01:58

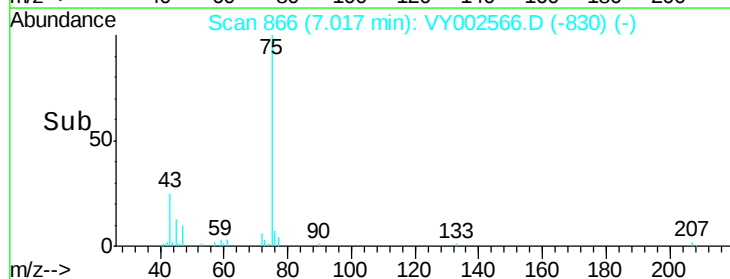
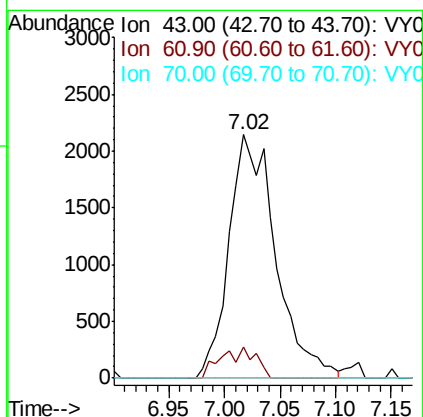
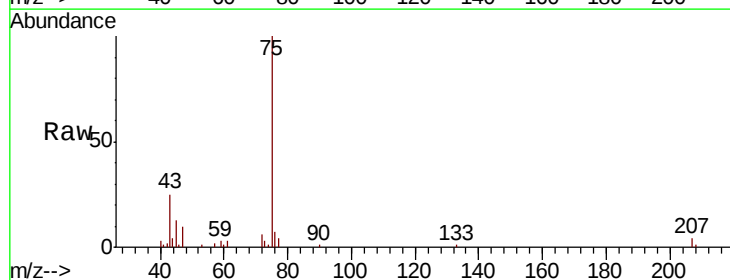
Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 FK-0D015-03-013

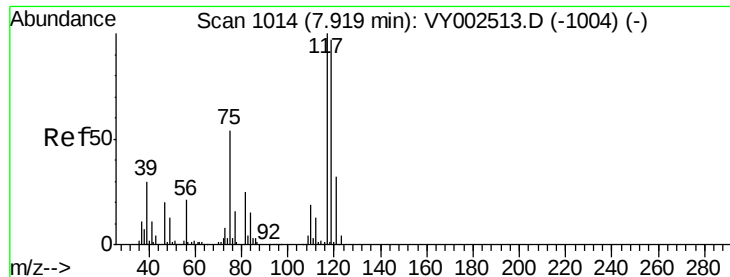
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.2  | 19.1  | 57.3# |
| 77      | 0.0   | 24.6  | 37.0# |



#37  
 Ethyl Acetate  
 Concen: 2.546 ug/l  
 RT: 7.02 min Scan# 866  
 Delta R.T. -0.08 min  
 Lab File: VY002566.D  
 Acq: 05 May 2020 01:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 61      | 5.1   | 11.6  | 17.4# |
| 70      | 0.0   | 9.0   | 13.6# |





#38

Carbon Tetrachloride

Concen: 6.108 ug/l

RT: 7.82 min Scan# 998

Delta R.T. -0.10 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

FK-0D015-03-013

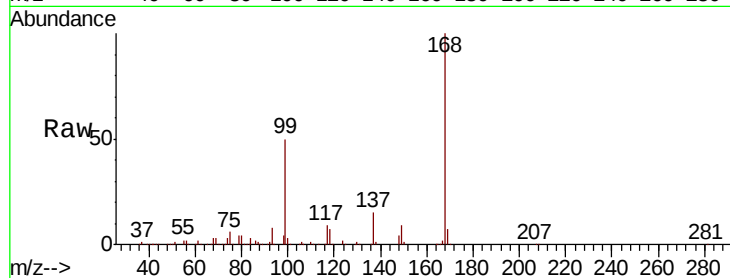
Tot Ion:117 Resp: 31838

Ion Ratio Lower Upper

117 100

119 4.7 77.1 115.7#

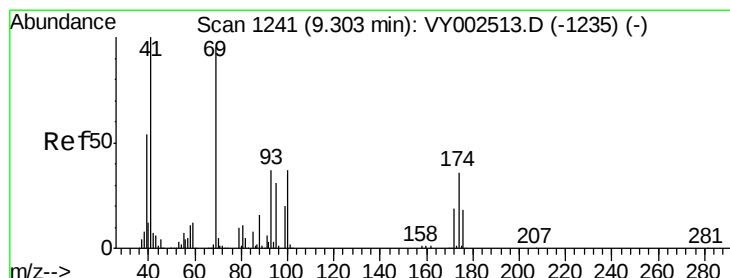
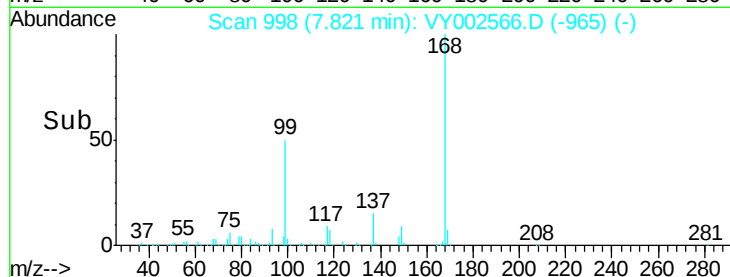
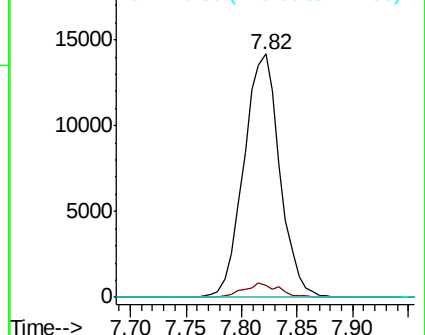
121 0.0 25.2 37.8#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#48

Methyl methacrylate

Concen: 1.100 ug/l

RT: 9.28 min Scan# 1238

Delta R.T. -0.02 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

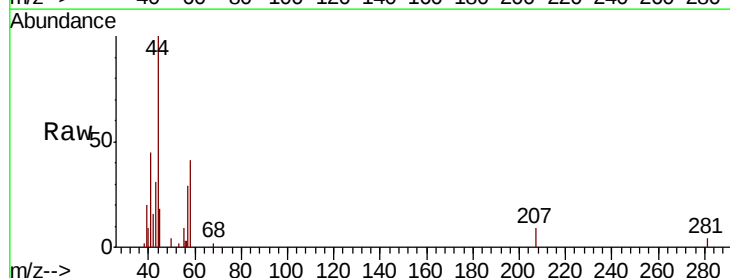
Tgt Ion: 41 Resp: 2289

Ion Ratio Lower Upper

41 100

69 0.0 76.2 114.4#

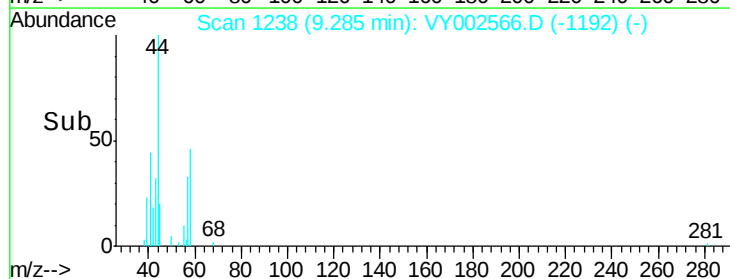
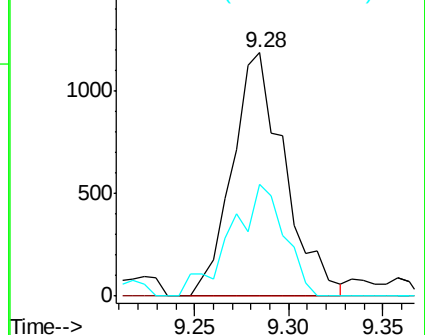
39 46.8 42.7 64.1

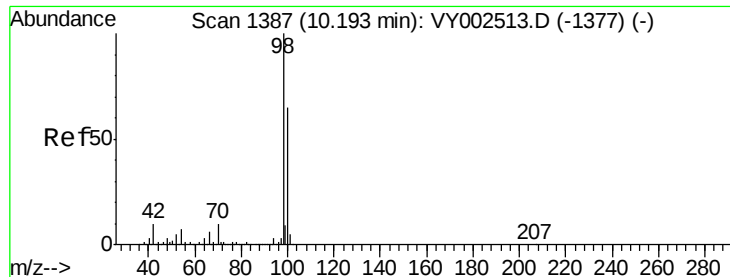


Abundance Ion 41.00 (40.70 to 41.70): VY0

Ion 69.00 (68.70 to 69.70): VY0

Ion 39.00 (38.70 to 39.70): VY0





#50

Toluene-d8

Concen: 52.399 ug/l

RT: 10.20 min Scan# 1388

Delta R.T. 0.01 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

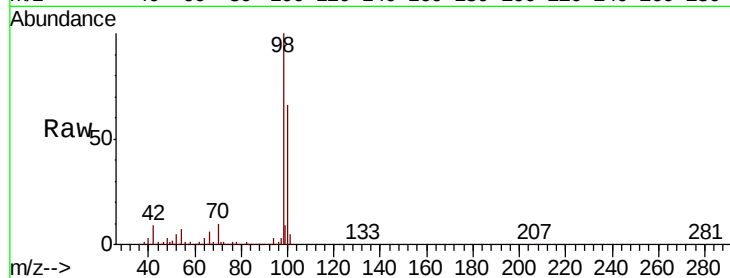
FK-0D015-03-013

Tot Ion: 98 Resp: 666552

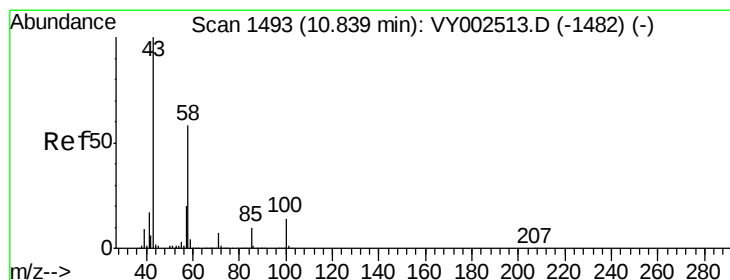
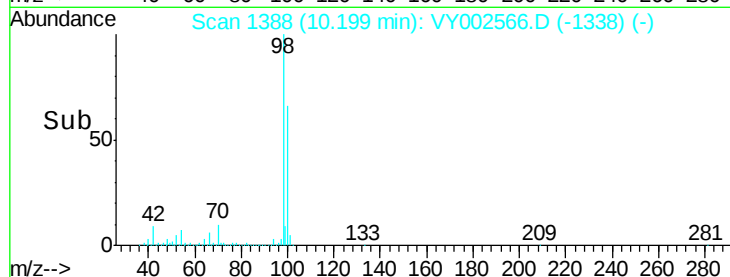
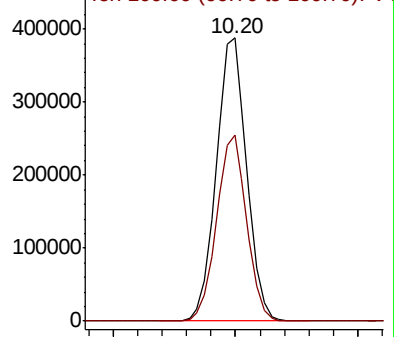
Ion Ratio Lower Upper

98 100

100 65.0 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VY002513.D (-1377) (-)



#59

2-Hexanone

Concen: 2.234 ug/l

RT: 10.81 min Scan# 1489

Delta R.T. -0.02 min

Lab File: VY002566.D

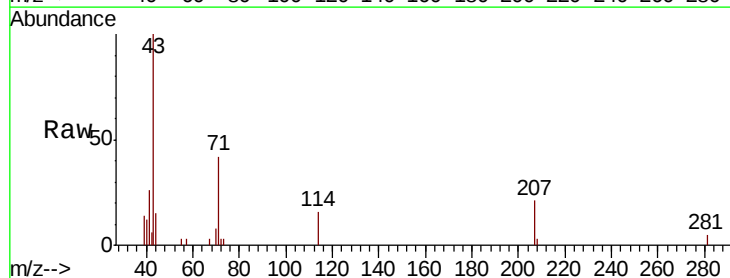
Acq: 05 May 2020 01:58

Tgt Ion: 43 Resp: 3645

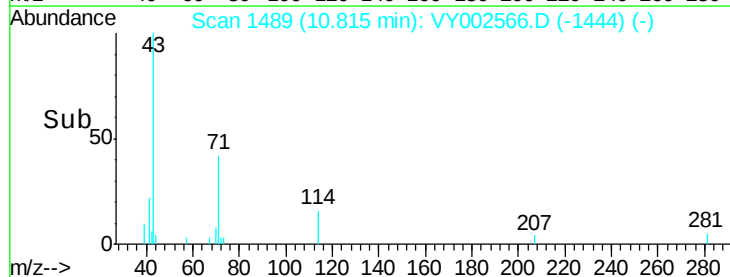
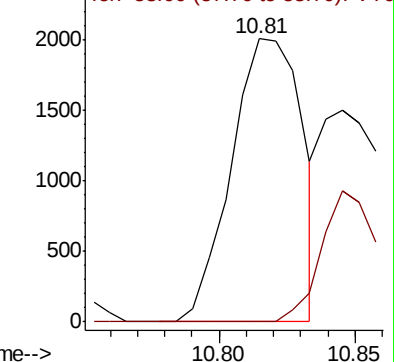
Ion Ratio Lower Upper

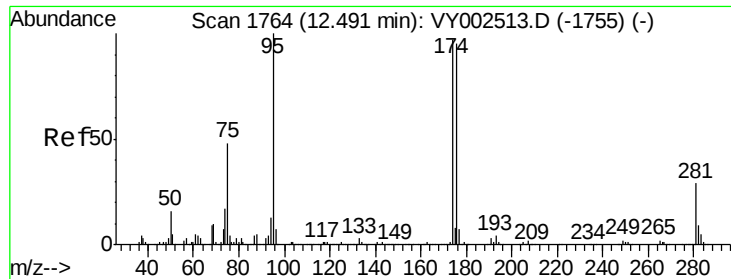
43 100

58 0.0 29.1 87.3#



Abundance Ion 43.00 (42.70 to 43.70): VY002513.D (-1482) (-)

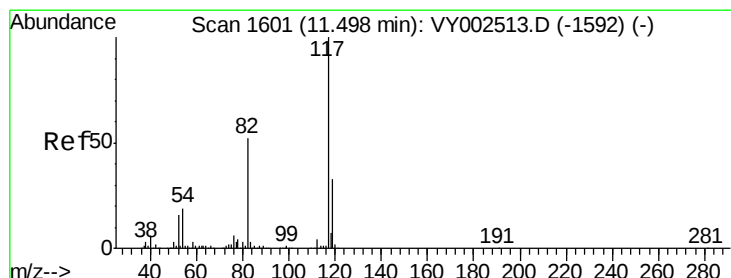
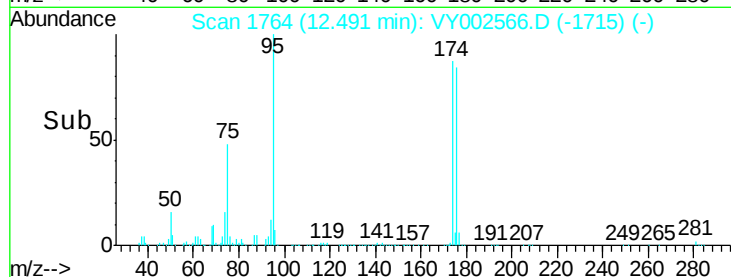
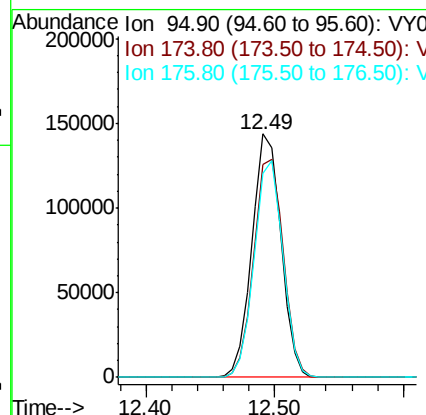
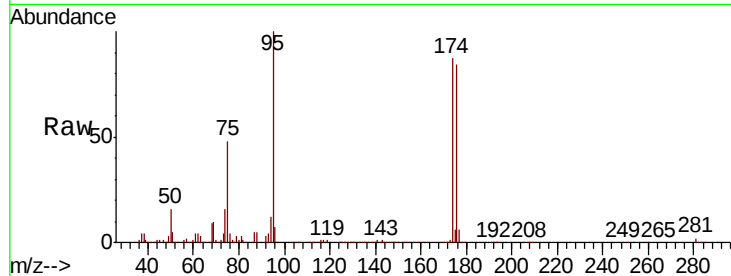




#62  
4-Bromofluorobenzene  
Concen: 51.481 ug/l  
RT: 12.49 min Scan# 1764  
Delta R.T. -0.00 min  
Lab File: VY002566.D  
Acq: 05 May 2020 01:58

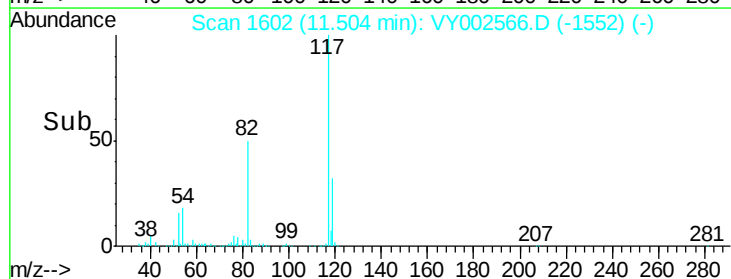
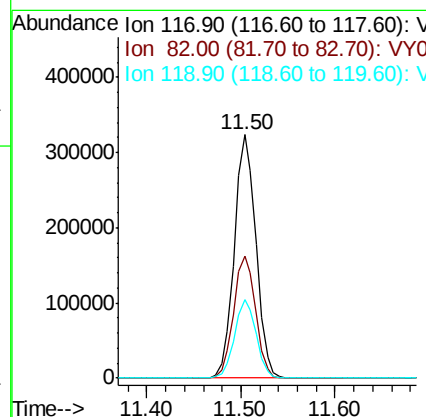
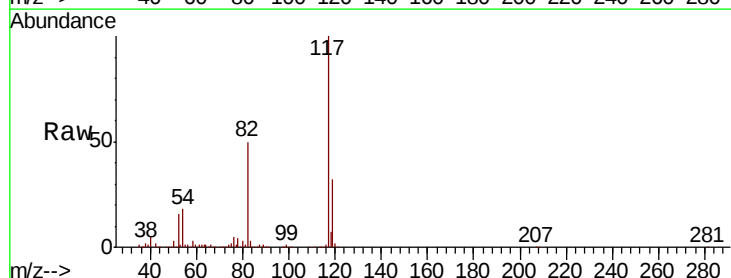
Instrument :  
MSVOA\_Y  
ClientSampleId :  
FK-0D015-03-013

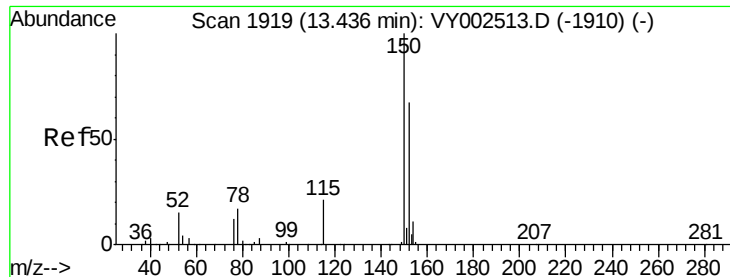
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 91.6  | 0.0   | 188.8 |
| 176     | 88.3  | 0.0   | 183.2 |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.50 min Scan# 1602  
Delta R.T. 0.01 min  
Lab File: VY002566.D  
Acq: 05 May 2020 01:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 50.4  | 41.3  | 61.9  |
| 119     | 32.1  | 26.0  | 39.0  |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.44 min Scan# 1919

Delta R.T. -0.00 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

FK-0D015-03-013

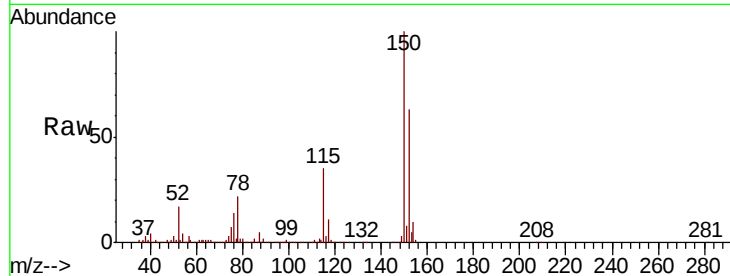
Tot Ion:152 Resp: 252709

Ion Ratio Lower Upper

152 100

115 55.1 27.5 82.4

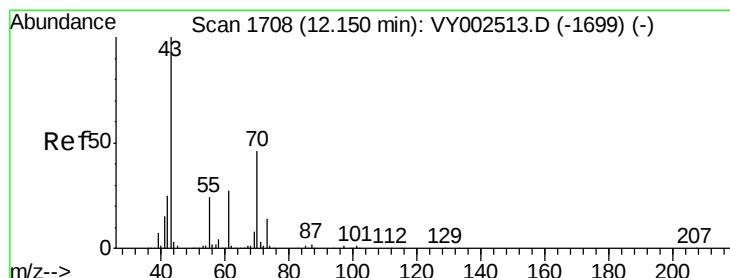
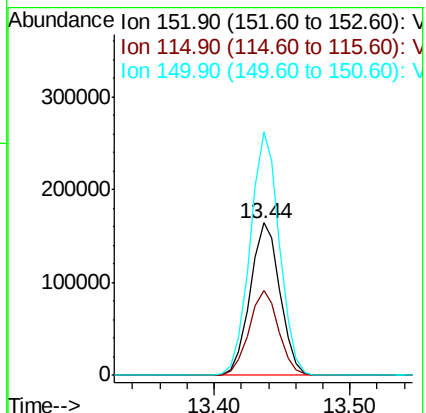
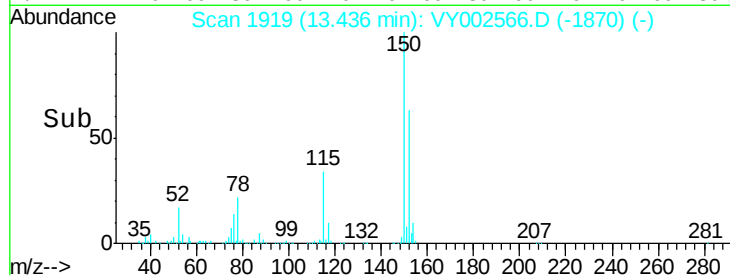
150 156.8 0.0 346.4



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



#74

N-ethyl acetate

Concen: 2.455 ug/l

RT: 12.12 min Scan# 1703

Delta R.T. -0.03 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Tgt Ion: 43 Resp: 9671

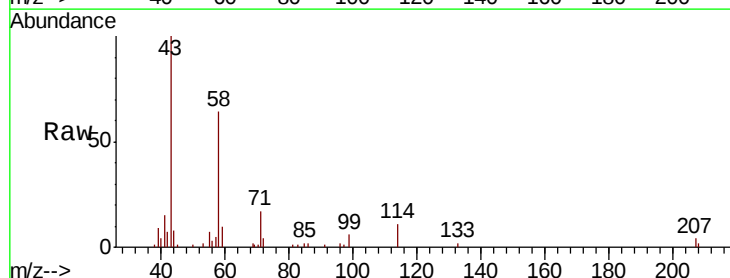
Ion Ratio Lower Upper

43 100

70 0.0 36.7 55.1#

55 7.6 19.2 28.8#

61 0.0 21.1 31.7#

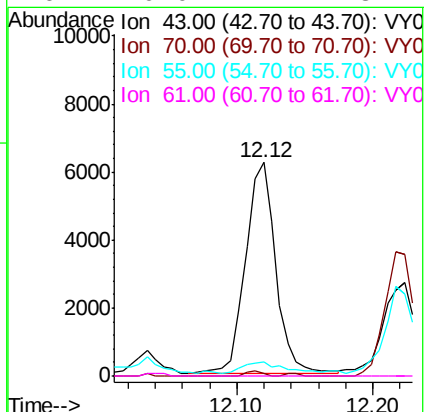
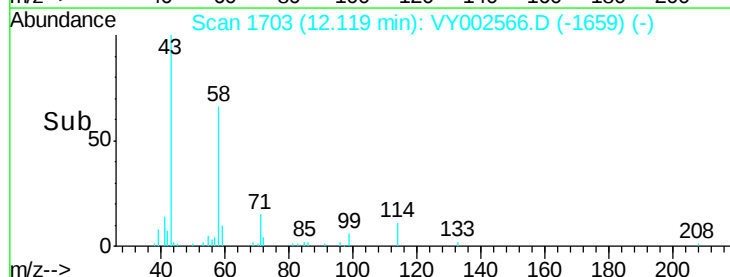


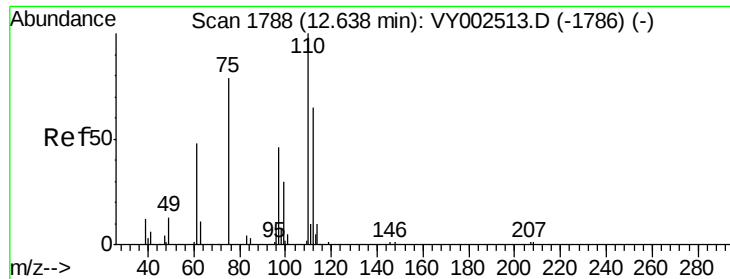
Abundance Ion 43.00 (42.70 to 43.70): VY0

Ion 70.00 (69.70 to 70.70): VY0

Ion 55.00 (54.70 to 55.70): VY0

Ion 61.00 (60.70 to 61.70): VY0





#76

1,2,3-Trichloropropane

Concen: 47.604 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. -0.15 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

Instrument :

MSVOA\_Y

ClientSampleId :

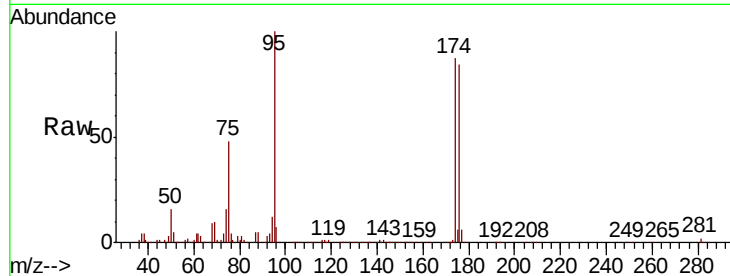
FK-0D015-03-013

Tot Ion: 75 Resp: 106907

Ion Ratio Lower Upper

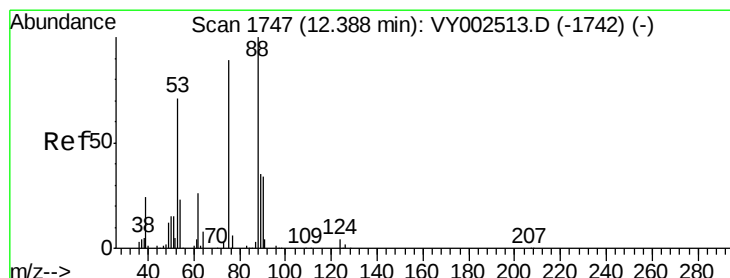
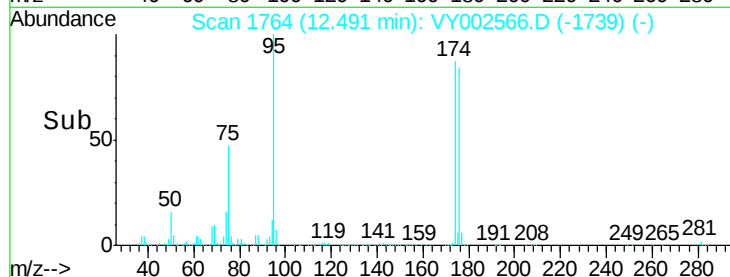
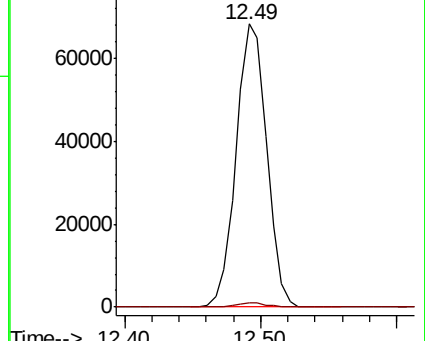
75 100

77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 77.00 (76.70 to 77.70): VY0



#81

trans-1,4-Dichloro-2-butene

Concen: 95.456 ug/l

RT: 12.49 min Scan# 1764

Delta R.T. 0.10 min

Lab File: VY002566.D

Acq: 05 May 2020 01:58

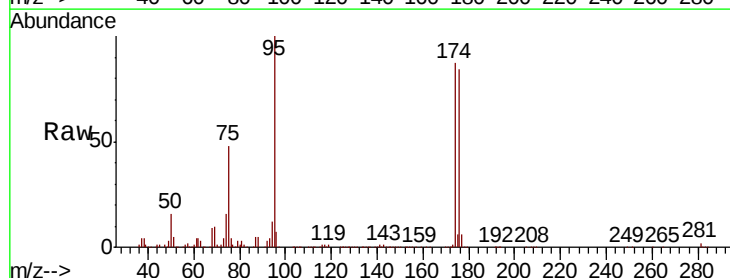
Tgt Ion: 75 Resp: 106907

Ion Ratio Lower Upper

75 100

53 0.0 67.4 101.0#

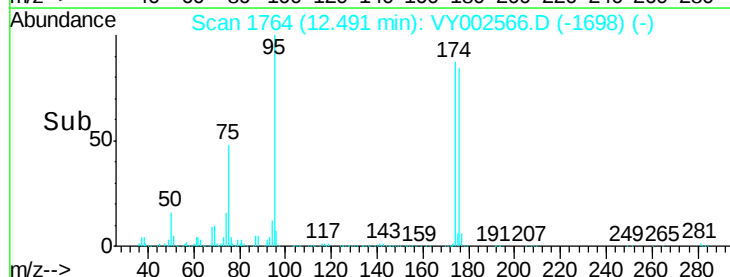
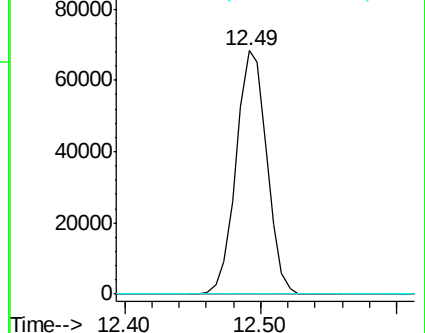
89 0.1 37.4 56.0#

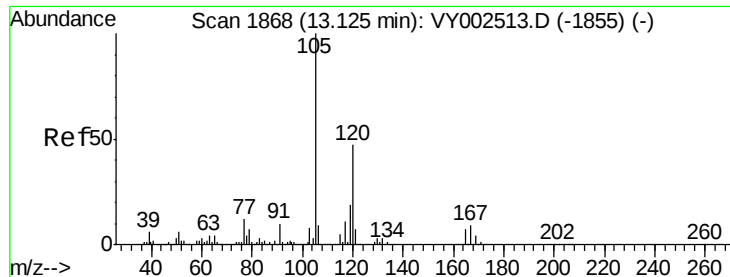


Abundance Ion 74.90 (74.60 to 75.60): VY0

Ion 53.00 (52.70 to 53.70): VY0

Ion 88.90 (88.60 to 89.60): VY0

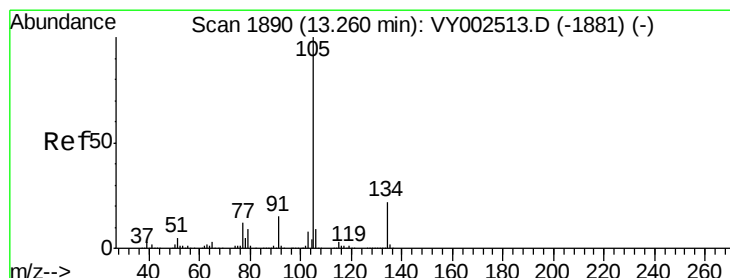
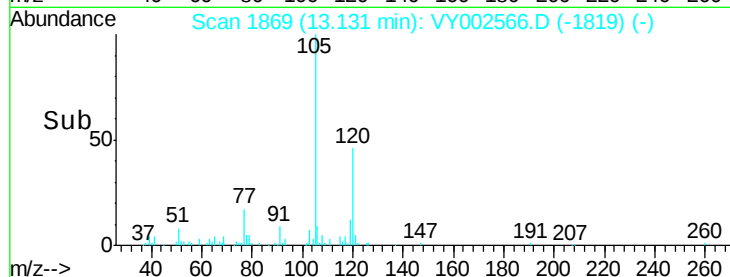
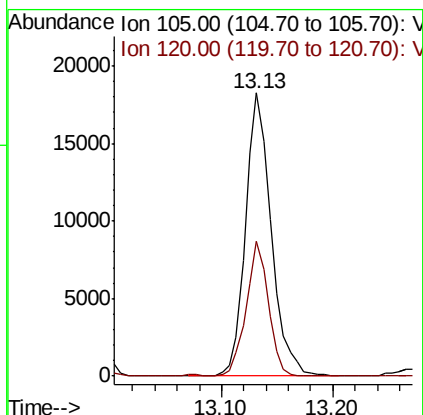
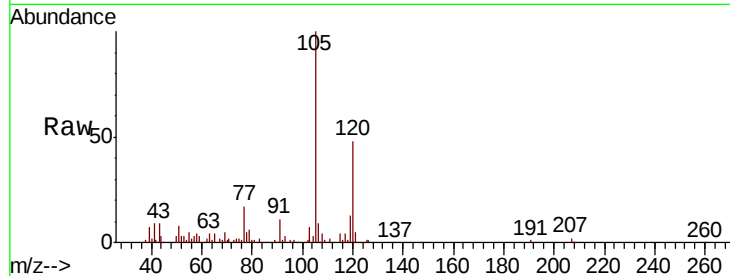




#84  
 1,2,4-Trimethylbenzene  
 Concen: 2.163 ug/l  
 RT: 13.13 min Scan# 1869  
 Delta R.T. 0.01 min  
 Lab File: VY002566.D  
 Acq: 05 May 2020 01:58

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 FK-0D015-03-013

Tot Ion:105 Resp: 29269  
 Ion Ratio Lower Upper  
 105 100  
 120 41.0 23.4 70.3



#85  
 sec-Butylbenzene  
 Concen: 1.772 ug/l  
 RT: 13.13 min Scan# 1869  
 Delta R.T. -0.13 min  
 Lab File: VY002566.D  
 Acq: 05 May 2020 01:58

Tgt Ion:105 Resp: 29269  
 Ion Ratio Lower Upper  
 105 100  
 134 0.0 10.8 32.3#

