

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081718\  
 Data File : VU026181.D  
 Acq On : 17 Aug 2018 16:10  
 Operator : MD/SY  
 Sample : VSTD00141  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Aug 18 00:00:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR081718WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Aug 17 23:59:05 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 136765   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 132555   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 63400    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.40  | 65  | 7226  | 0.75 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.68  | 69  | 6055  | 0.78 | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.28  | 63  | 14604 | 0.82 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 4.20  | 46  | 20647 | 8.54 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.65  | 84  | 16512 | 0.94 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.32  | 65  | 9163  | 1.01 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.35  | 84  | 30492 | 0.82 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.34  | 67  | 9801  | 0.84 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.57  | 98  | 26703 | 0.76 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.86  | 79  | 3364  | 0.85 | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.32  | 63  | 13226 | 6.62 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43 | 84  | 8159  | 0.92 | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.87 | 152 | 11248 | 0.86 | ug/L | 0.00 |

## Target Compounds

|                                |      |     |       |            | Qvalue |
|--------------------------------|------|-----|-------|------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 10704 | 0.960 ug/L | 100    |
| 3) Chloromethane               | 1.33 | 50  | 10722 | 0.944 ug/L | 95     |
| 5) Vinyl chloride              | 1.41 | 62  | 10513 | 0.932 ug/L | 100    |
| 6) Bromomethane                | 1.64 | 94  | 5697  | 0.967 ug/L | 99     |
| 8) Chloroethane                | 1.70 | 64  | 6122  | 0.773 ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 15004 | 1.003 ug/L | 92     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 7984  | 0.900 ug/L | 94     |
| 12) 1,1-Dichloroethene         | 2.29 | 96  | 7329  | 0.877 ug/L | 95     |
| 13) Acetone                    | 2.33 | 43  | 12158 | 8.489 ug/L | 95     |
| 14) Carbon disulfide           | 2.48 | 76  | 25937 | 0.922 ug/L | 95     |
| 15) Methyl Acetate             | 2.62 | 43  | 3464  | 0.795 ug/L | # 73   |
| 16) Methylene chloride         | 2.71 | 84  | 9034  | 0.950 ug/L | 92     |
| 17) Methyl tert-butyl Ether    | 3.00 | 73  | 17664 | 0.875 ug/L | 95     |
| 18) trans-1,2-Dichloroethene   | 2.99 | 96  | 7852  | 0.871 ug/L | 94     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 14711 | 0.854 ug/L | 97     |
| 21) 2-Butanone                 | 4.29 | 43  | 21330 | 8.552 ug/L | 95     |
| 22) cis-1,2-Dichloroethene     | 4.23 | 96  | 9590  | 0.940 ug/L | 90     |
| 23) Bromochloromethane         | 4.55 | 128 | 4443  | 0.980 ug/L | 96     |
| 25) Chloroform                 | 4.68 | 83  | 17682 | 0.991 ug/L | 91     |
| 27) 1,2-Dichloroethane         | 5.41 | 62  | 10379 | 0.966 ug/L | 95     |
| 29) 1,1,1-Trichloroethane      | 4.92 | 97  | 16294 | 1.102 ug/L | 95     |
| 30) Cyclohexane                | 5.00 | 56  | 12468 | 0.818 ug/L | 95     |
| 31) Carbon tetrachloride       | 5.13 | 117 | 14221 | 1.098 ug/L | 94     |
| 33) Benzene                    | 5.39 | 78  | 35803 | 0.915 ug/L | 100    |
| 34) Trichloroethene            | 6.19 | 95  | 9101  | 0.885 ug/L | 95     |
| 35) Methylcyclohexane          | 6.42 | 83  | 11690 | 0.740 ug/L | 95     |
| 37) 1,2-Dichloropropane        | 6.44 | 63  | 8928  | 0.869 ug/L | # 95   |
| 38) Bromodichloromethane       | 6.76 | 83  | 12167 | 1.016 ug/L | 100    |
| 39) cis-1,3-Dichloropropene    | 7.28 | 75  | 11578 | 0.905 ug/L | 92     |
| 40) 4-Methyl-2-pentanone       | 7.47 | 43  | 47240 | 8.397 ug/L | 97     |

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 Operator : MD/SY  
 Sample : VSTD00141  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 3 Sample Multiplier: 1

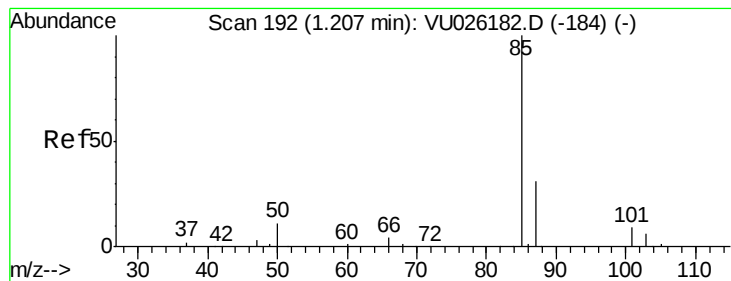
Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Aug 18 00:00:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR081718WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Aug 17 23:59:05 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 42) Toluene                    | 7.64  | 91   | 34980    | 0.869 | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 7.89  | 75   | 10070    | 0.970 | ug/L   | 100      |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 6505     | 0.946 | ug/L   | 95       |
| 47) Tetrachloroethene          | 8.23  | 164  | 8196     | 0.961 | ug/L   | 98       |
| 48) 2-Hexanone                 | 8.37  | 43   | 31992    | 7.907 | ug/L # | 96       |
| 49) Dibromochloromethane       | 8.48  | 129  | 7993     | 0.992 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 6408     | 1.008 | ug/L   | 92       |
| 51) Chlorobenzene              | 9.12  | 112  | 24831    | 0.937 | ug/L   | 98       |
| 52) Ethylbenzene               | 9.26  | 91   | 34864    | 0.837 | ug/L   | 97       |
| 53) m,p-xylene                 | 9.38  | 106  | 13049    | 0.822 | ug/L   | 99       |
| 54) o-xylene                   | 9.78  | 106  | 12064    | 0.779 | ug/L   | 97       |
| 55) Styrene                    | 9.80  | 104  | 20010    | 0.780 | ug/L   | 92       |
| 56) Isopropylbenzene           | 10.17 | 105  | 31978    | 0.791 | ug/L   | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 8233     | 0.950 | ug/L # | 95       |
| 59) 1,2,3-Trichloropropane     | 10.50 | 75   | 5791     | 0.990 | ug/L   | 92       |
| 61) Bromoform                  | 9.96  | 173  | 4244     | 0.909 | ug/L # | 93       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 17656    | 0.882 | ug/L   | 96       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 18289    | 0.907 | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 18031    | 0.899 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.67 | 75   | 563      | 0.449 | ug/L   | 83       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 12888    | 0.827 | ug/L   | 94       |
| 68) 1,2,4-trichlorobenzene     | 13.51 | 180  | 9331     | 0.863 | ug/L   | 93       |
| 69) Naphthalene                | 13.75 | 128  | 12644    | 0.779 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 9275     | 0.879 | ug/L   | 98       |
| -----                          |       |      |          |       |        |          |

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





#2

Dichlorodifluoromethane

Concen: 0.960 ug/L

RT: 1.21 min Scan# 192

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

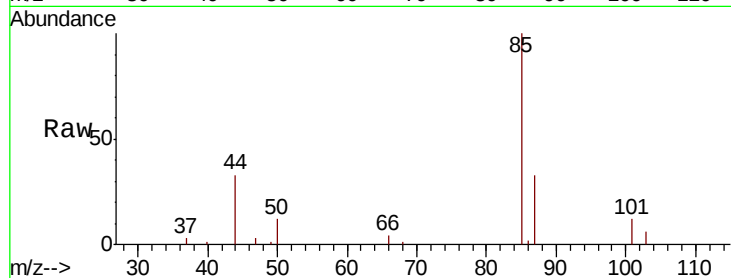
ClientSampled :

Tot Ion: 85 Resp: 10704

Ion Ratio Lower Upper

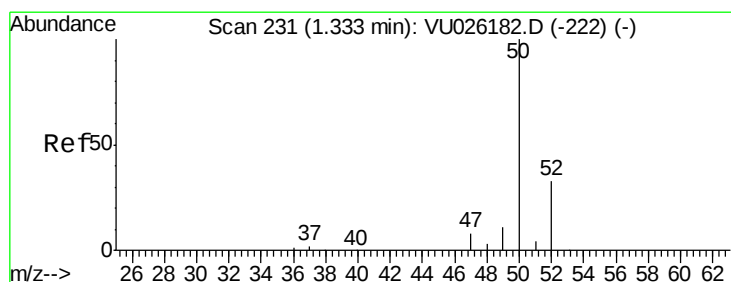
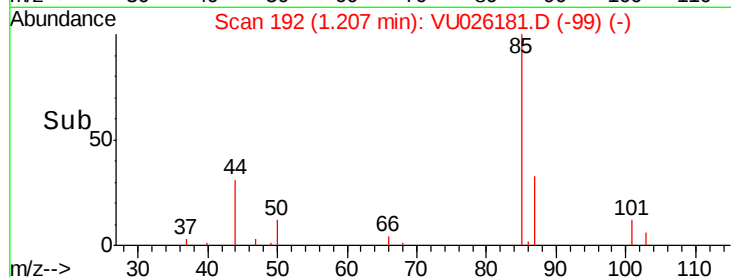
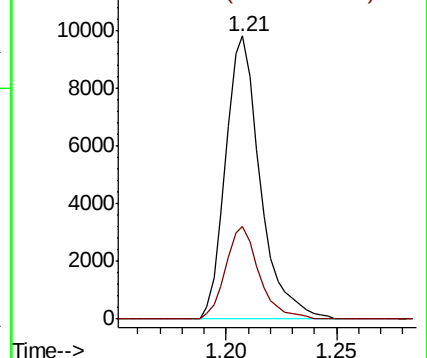
85 100

87 31.6 25.3 37.9



Abundance Ion 85.00 (84.70 to 85.70): VU0

Ion 87.00 (86.70 to 87.70): VU0



#3

Chloromethane

Concen: 0.944 ug/L

RT: 1.33 min Scan# 231

Delta R.T. -0.00 min

Lab File: VU026181.D

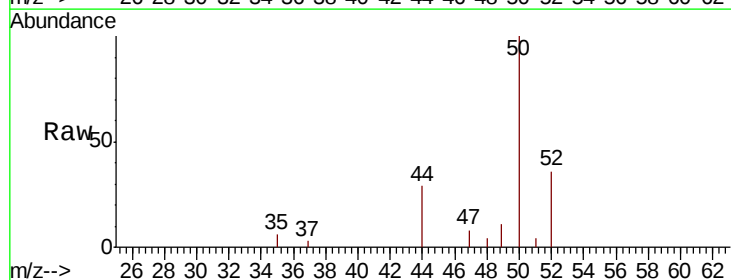
Acq: 17 Aug 2018 16:10

Tgt Ion: 50 Resp: 10722

Ion Ratio Lower Upper

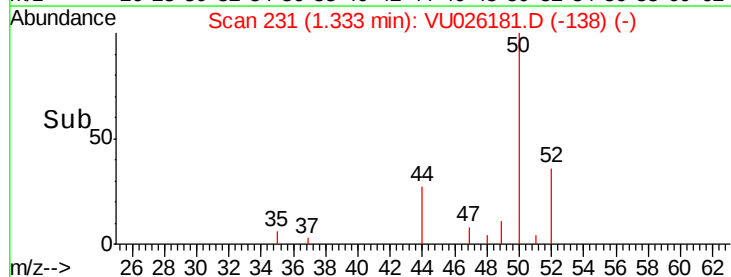
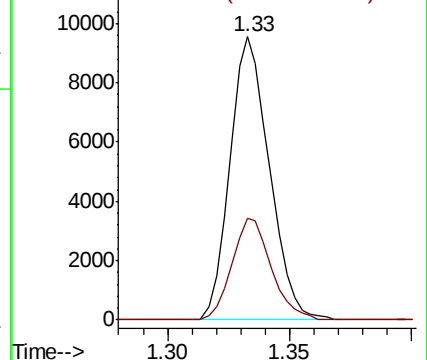
50 100

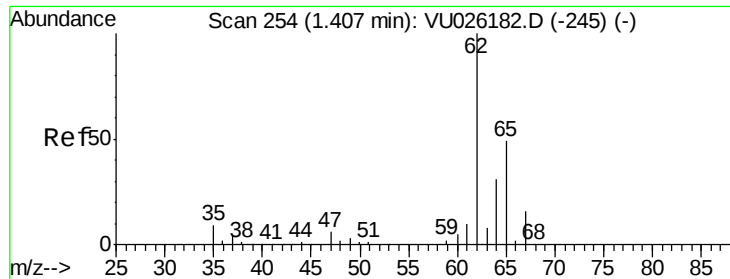
52 35.7 23.1 42.9



Abundance Ion 50.05 (49.75 to 50.75): VU0

Ion 52.05 (51.75 to 52.75): VU0





#5

Vinyl chloride

Concen: 0.932 ug/L

RT: 1.41 min Scan# 254

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

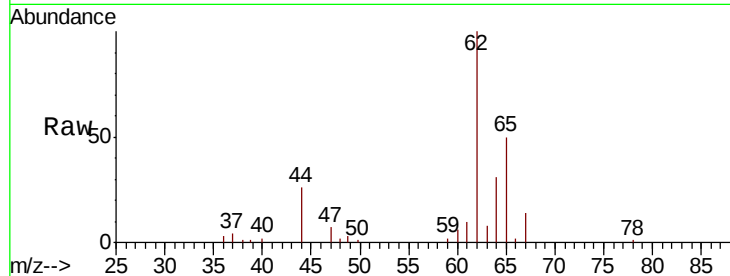
ClientSampled :

Tot Ion: 62 Resp: 10513

Ion Ratio Lower Upper

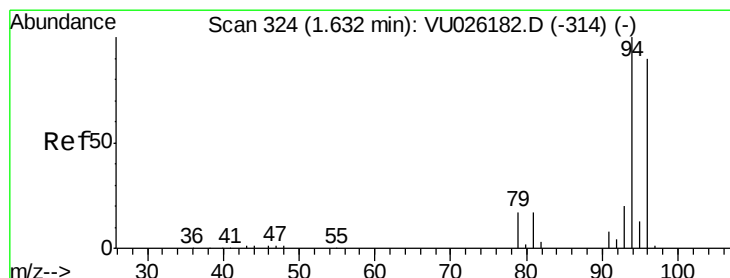
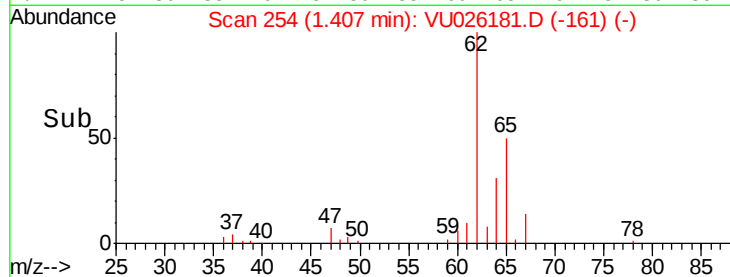
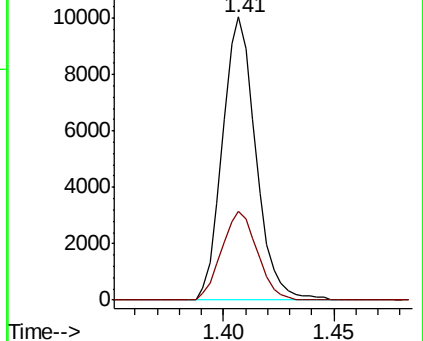
62 100

64 31.3 22.0 40.8



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#6

Bromomethane

Concen: 0.967 ug/L

RT: 1.64 min Scan# 325

Delta R.T. 0.00 min

Lab File: VU026181.D

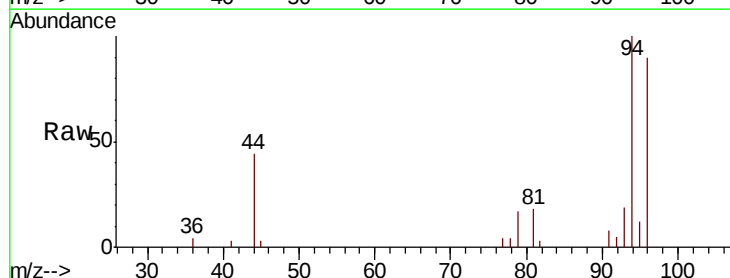
Acq: 17 Aug 2018 16:10

Tgt Ion: 94 Resp: 5697

Ion Ratio Lower Upper

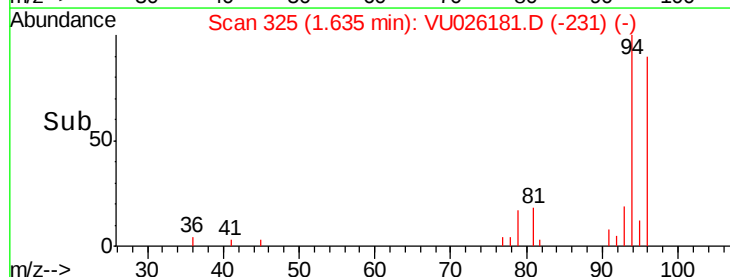
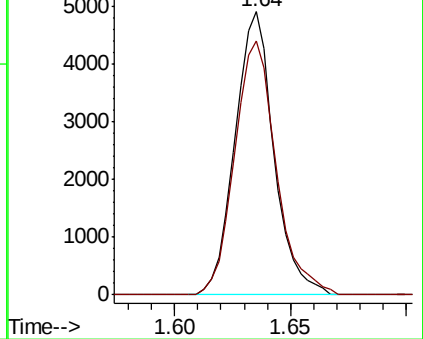
94 100

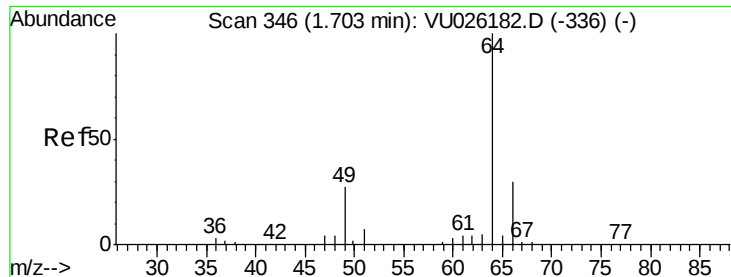
96 89.6 63.1 117.1



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

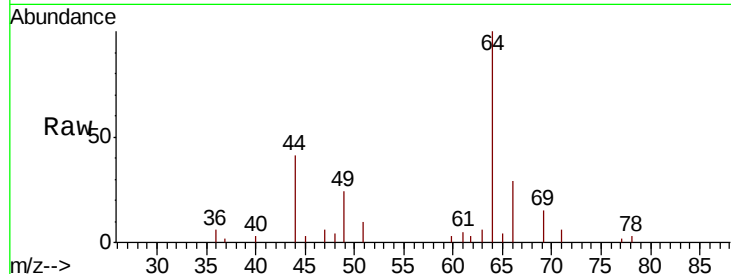




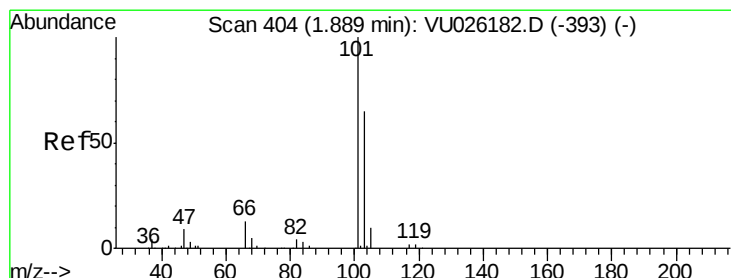
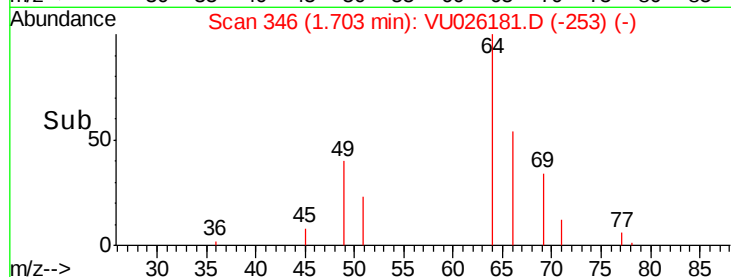
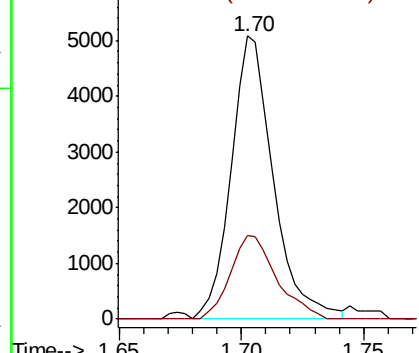
#8  
Chloroethane  
Concen: 0.773 ug/L  
RT: 1.70 min Scan# 346  
Delta R.T. -0.00 min  
Lab File: VU026181.D  
Acq: 17 Aug 2018 16:10

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 64 Resp: 6122  
Ion Ratio Lower Upper  
64 100  
66 29.4 21.1 39.1

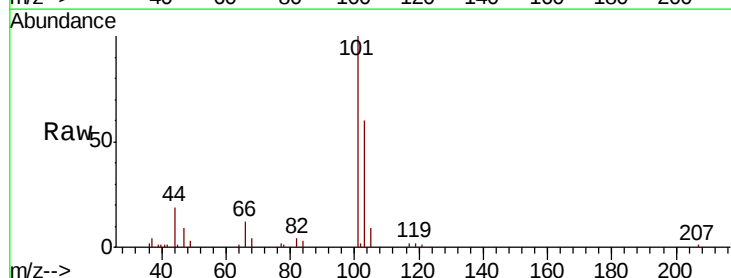


Abundance Ion 64.10 (63.80 to 64.80): VU0  
Ion 66.05 (65.75 to 66.75): VU0

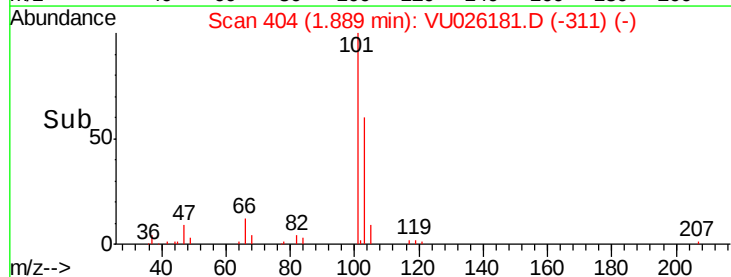
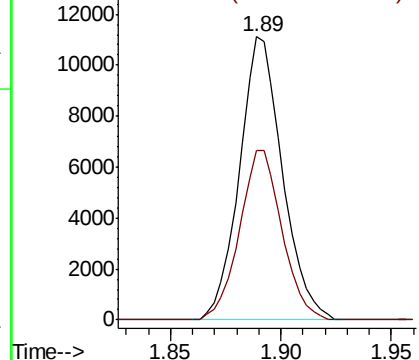


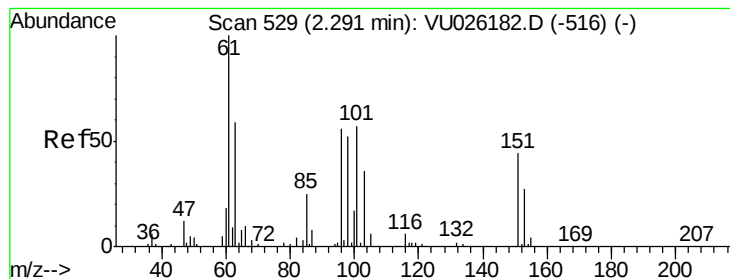
#9  
Trichlorofluoromethane  
Concen: 1.003 ug/L  
RT: 1.89 min Scan# 404  
Delta R.T. -0.00 min  
Lab File: VU026181.D  
Acq: 17 Aug 2018 16:10

Tgt Ion:101 Resp: 15004  
Ion Ratio Lower Upper  
101 100  
103 59.1 52.4 78.6



Abundance Ion 101.00 (100.70 to 101.70): V  
Ion 103.00 (102.70 to 103.70): V





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.900 ug/L

RT: 2.29 min Scan# 530

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

ClientSampleId :

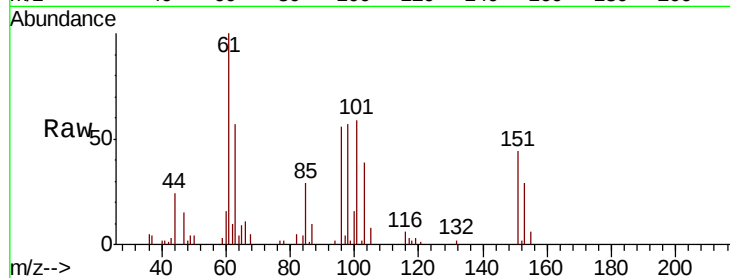
Tot Ion:101 Resp: 7984

Ion Ratio Lower Upper

101 100

85 44.4 36.6 54.8

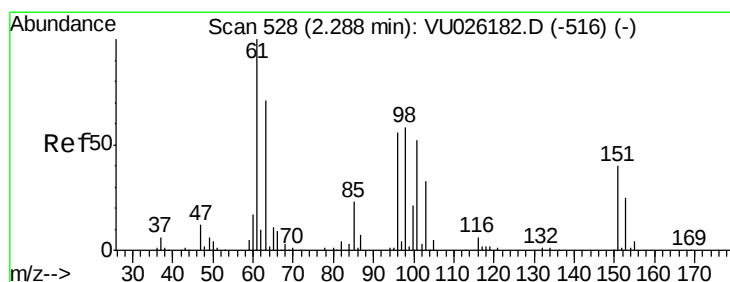
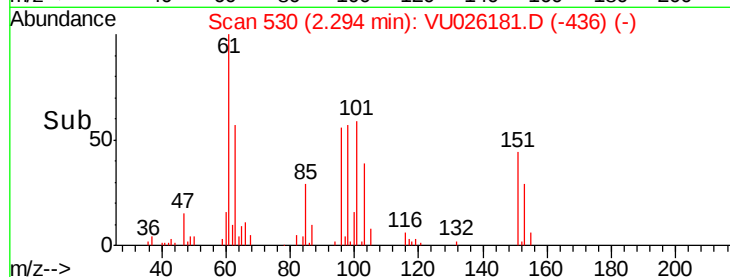
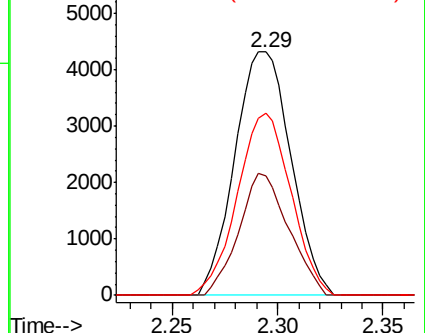
151 71.4 63.4 95.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VU0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 0.877 ug/L

RT: 2.29 min Scan# 528

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

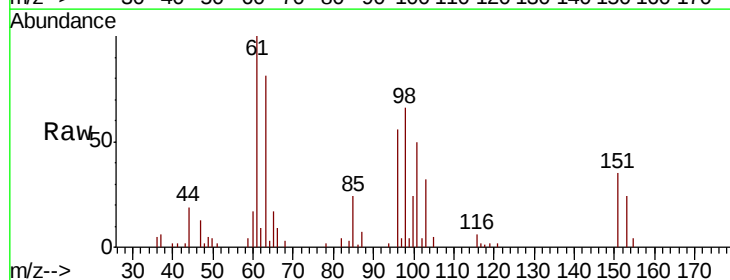
Tgt Ion: 96 Resp: 7329

Ion Ratio Lower Upper

96 100

61 178.4 125.3 232.7

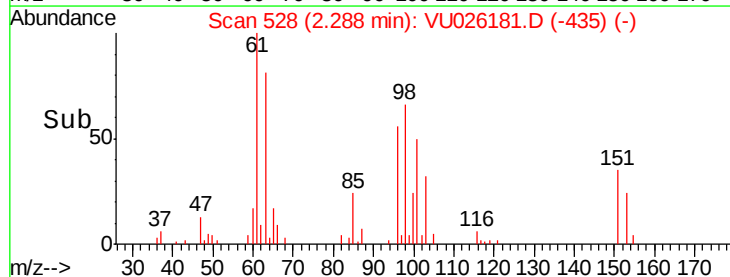
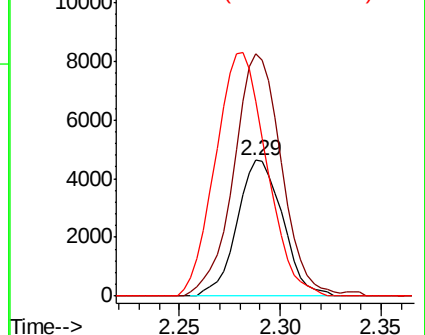
63 143.8 90.9 168.9

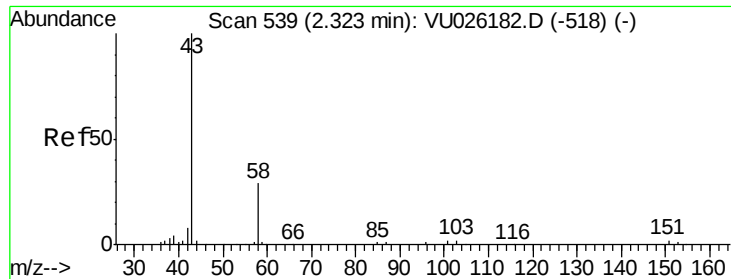


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 8.489 ug/L

RT: 2.33 min Scan# 540

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

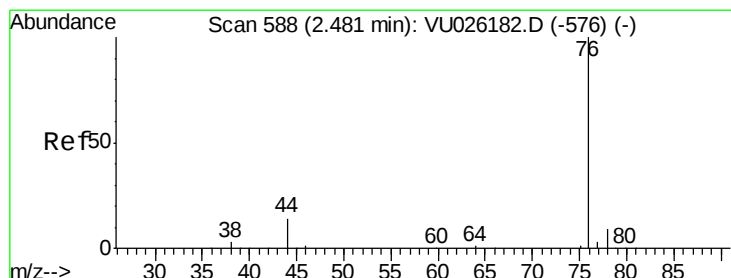
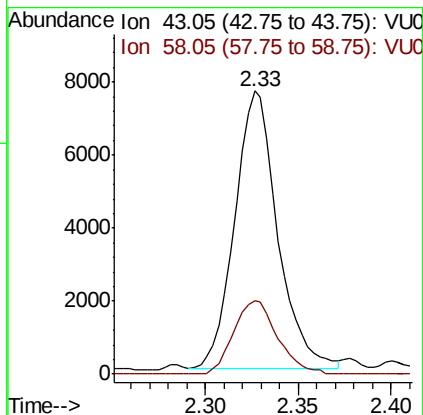
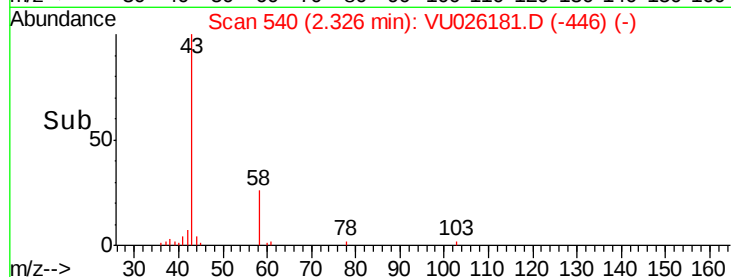
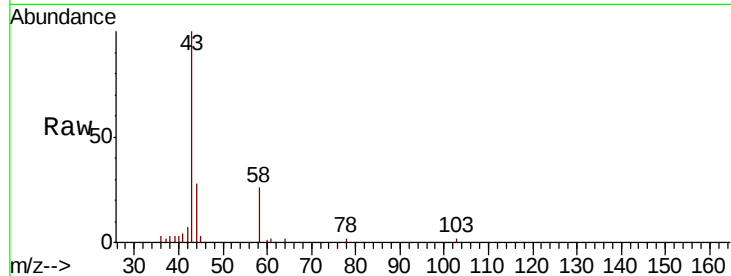
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 43 Resp: 12158

Ion Ratio Lower Upper

43 100

58 27.0 0.0 59.0



#14

Carbon disulfide

Concen: 0.922 ug/L

RT: 2.48 min Scan# 589

Delta R.T. 0.00 min

Lab File: VU026181.D

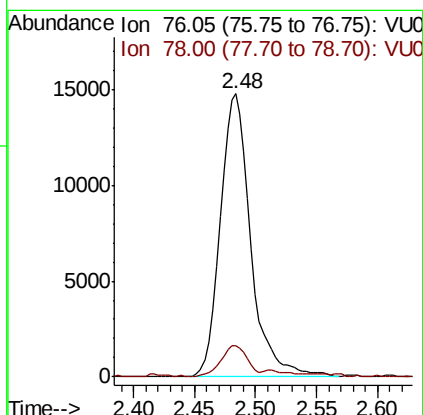
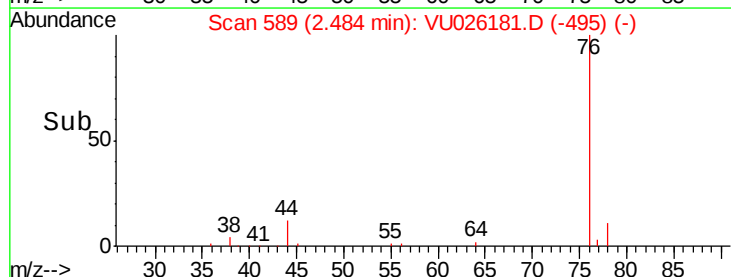
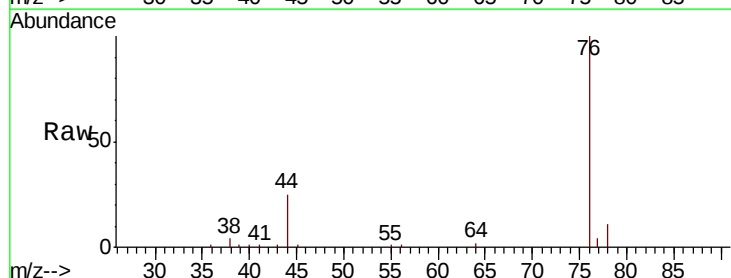
Acq: 17 Aug 2018 16:10

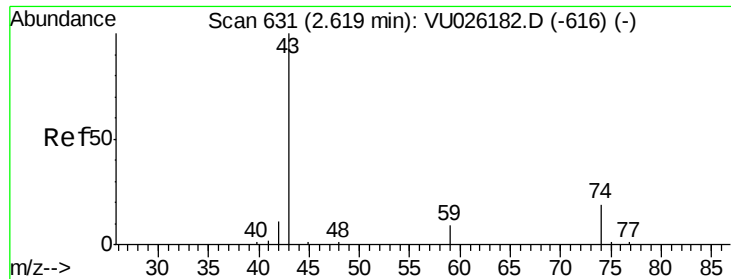
Tgt Ion: 76 Resp: 25937

Ion Ratio Lower Upper

76 100

78 11.0 7.4 11.0





#15

Methvl Acetate

Concen: 0.795 ug/L

RT: 2.62 min Scan# 632

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

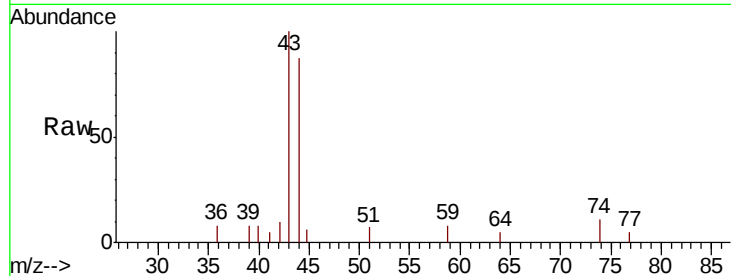
ClientSampleId :

Tot Ion: 43 Resp: 3464

Ion Ratio Lower Upper

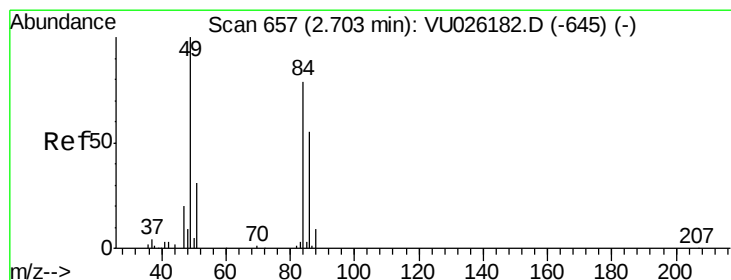
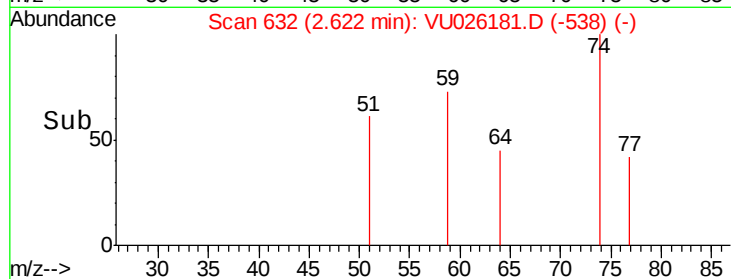
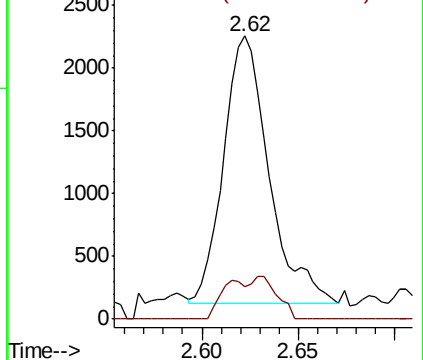
43 100

74 8.0 16.6 24.8#



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 74.05 (73.75 to 74.75): VU0



#16

Methylene chloride

Concen: 0.950 ug/L

RT: 2.71 min Scan# 658

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

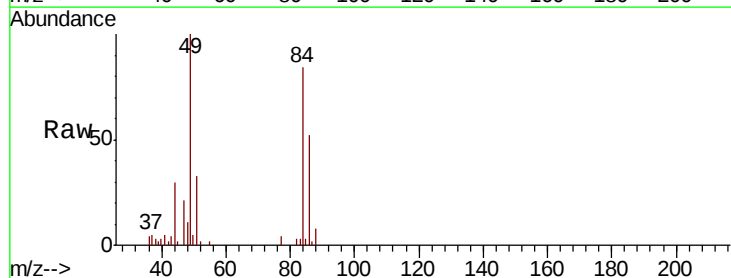
Tgt Ion: 84 Resp: 9034

Ion Ratio Lower Upper

84 100

86 61.3 48.6 90.2

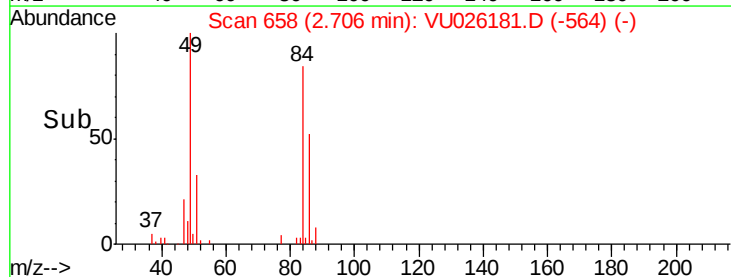
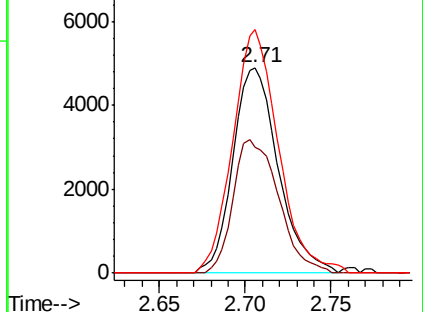
49 118.5 89.0 165.4

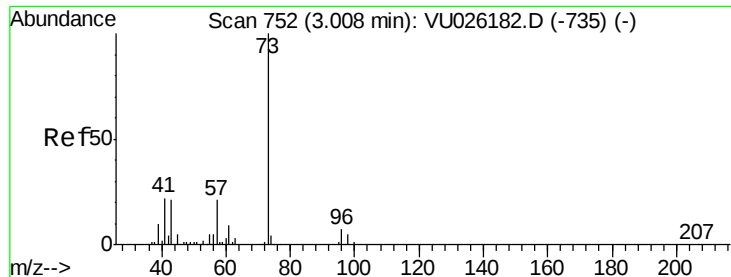


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0

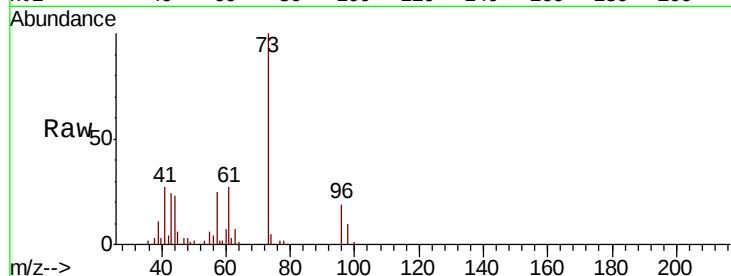




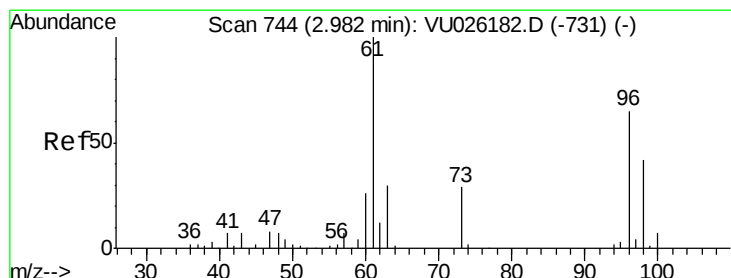
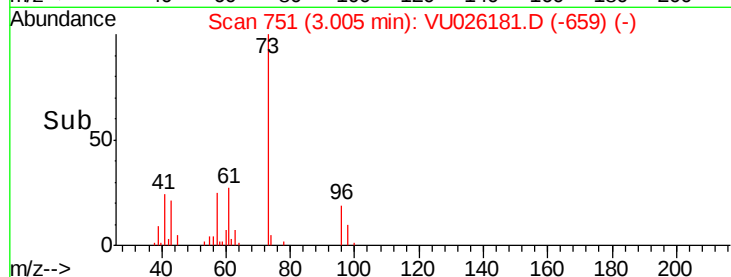
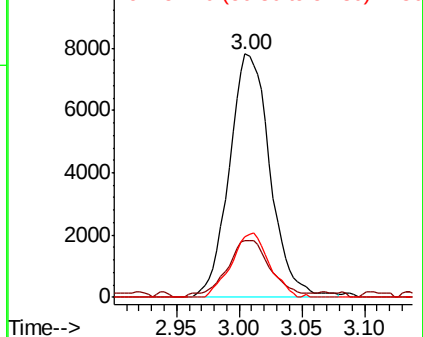
#17  
Methvl tert-butvl Ether  
Concen: 0.875 ug/L  
RT: 3.00 min Scan# 751  
Delta R.T. -0.00 min  
Lab File: VU026181.D  
Acq: 17 Aug 2018 16:10

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 73 Resp: 17664  
Ion Ratio Lower Upper  
73 100  
43 25.2 18.2 27.2  
57 24.4 17.5 26.3

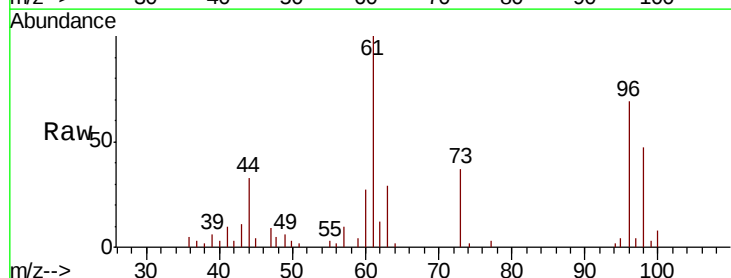


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

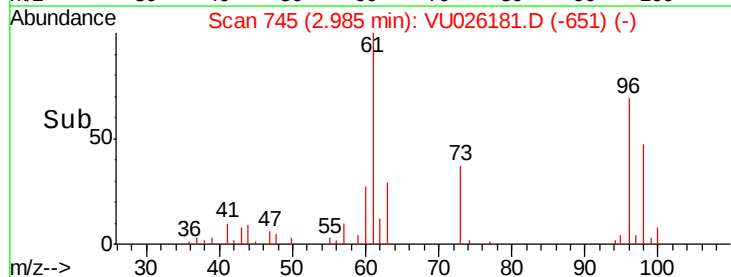
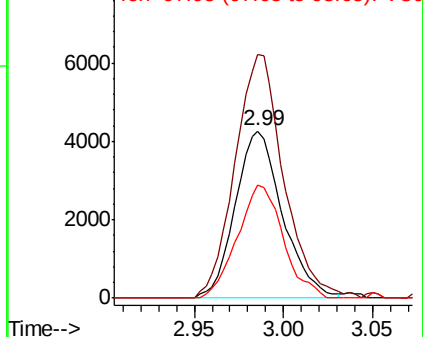


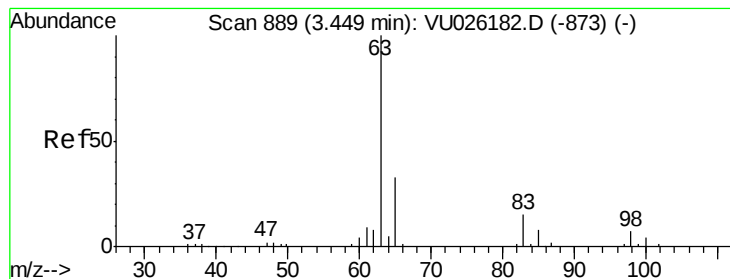
#18  
trans-1,2-Dichloroethene  
Concen: 0.871 ug/L  
RT: 2.99 min Scan# 745  
Delta R.T. 0.00 min  
Lab File: VU026181.D  
Acq: 17 Aug 2018 16:10

Tgt Ion: 96 Resp: 7852  
Ion Ratio Lower Upper  
96 100  
61 145.5 107.0 198.6  
98 67.9 44.4 82.5



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 97.95 (97.65 to 98.65): VU0





#19

1,1-Dichloroethane

Concen: 0.854 ug/L

RT: 3.45 min Scan# 890

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

ClientSampleId :

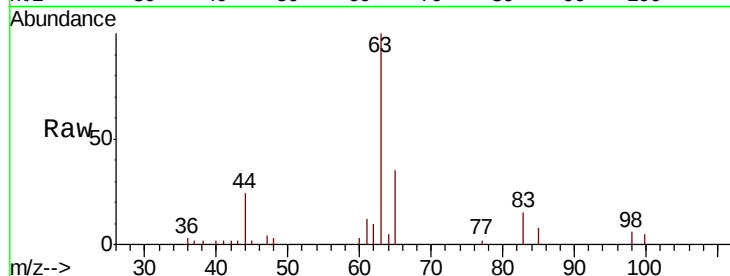
Tot Ion: 63 Resp: 14711

Ion Ratio Lower Upper

63 100

65 34.8 23.2 43.0

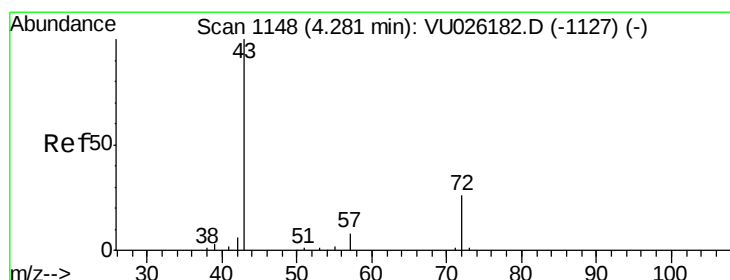
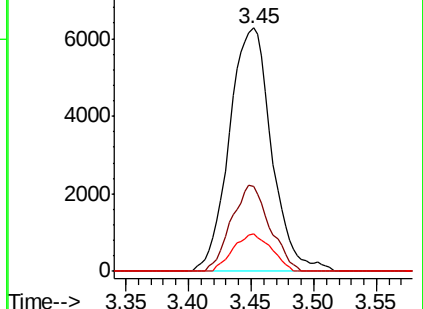
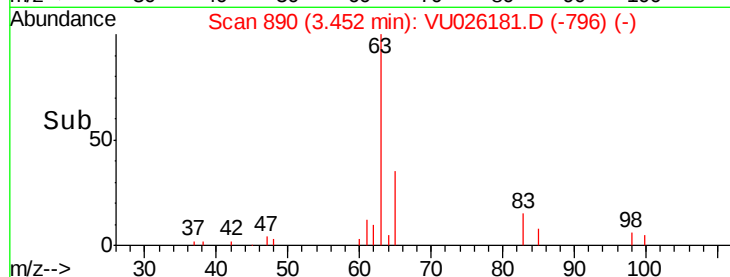
83 15.4 10.1 18.9



Abundance Ion 63.10 (62.80 to 63.80): VU0

Ion 65.10 (64.80 to 65.80): VU0

Ion 83.05 (82.75 to 83.75): VU0



#21

2-Butanone

Concen: 8.552 ug/L

RT: 4.29 min Scan# 1150

Delta R.T. 0.01 min

Lab File: VU026181.D

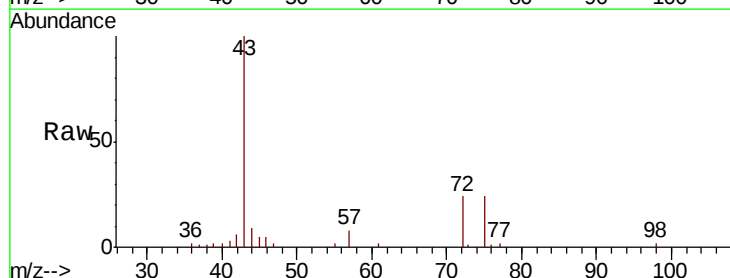
Acq: 17 Aug 2018 16:10

Tgt Ion: 43 Resp: 21330

Ion Ratio Lower Upper

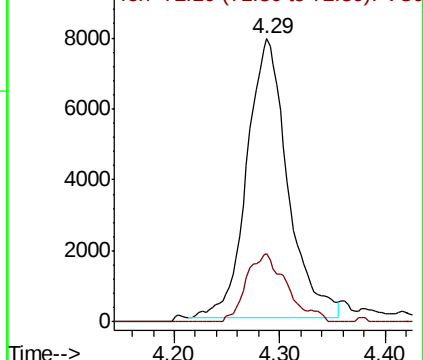
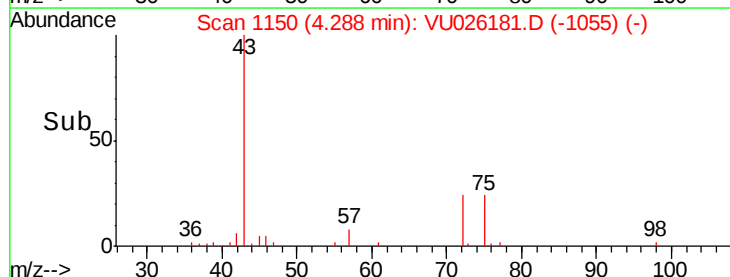
43 100

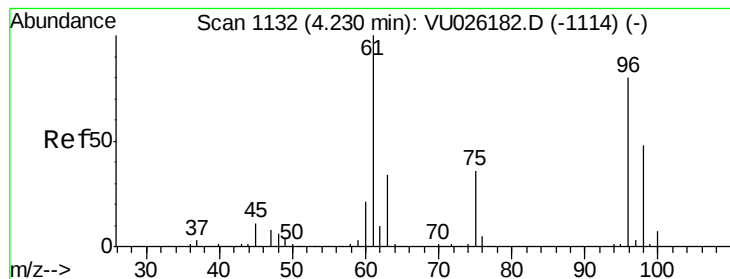
72 24.1 13.3 39.9



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 72.10 (71.80 to 72.80): VU0





#22

cis-1,2-Dichloroethene

Concen: 0.940 ug/L

RT: 4.23 min Scan# 1132

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :  
MSVOA\_U  
ClientSampled :

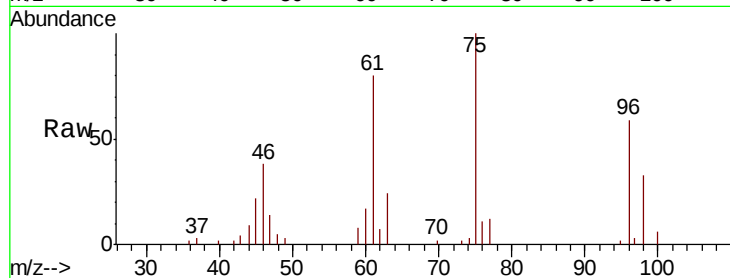
Tot Ion: 96 Resp: 9590

Ion Ratio Lower Upper

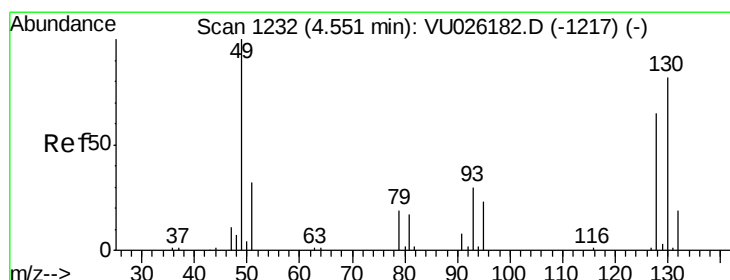
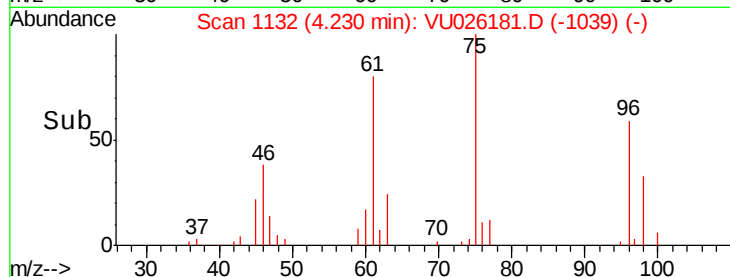
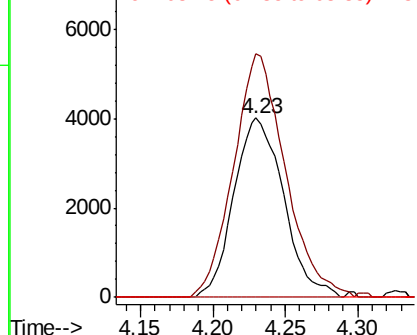
96 100

61 135.6 87.1 161.7

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 68.15 (67.85 to 68.85): VU0



#23

Bromochloromethane

Concen: 0.980 ug/L

RT: 4.55 min Scan# 1233

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Tgt Ion:128 Resp: 4443

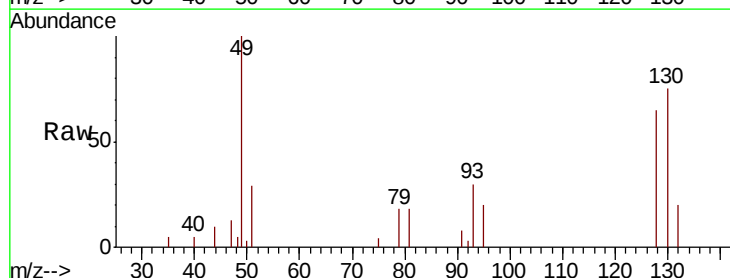
Ion Ratio Lower Upper

128 100

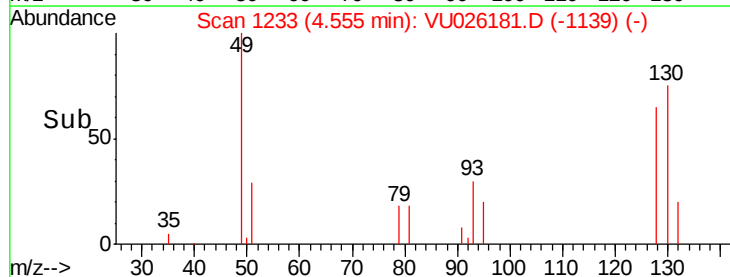
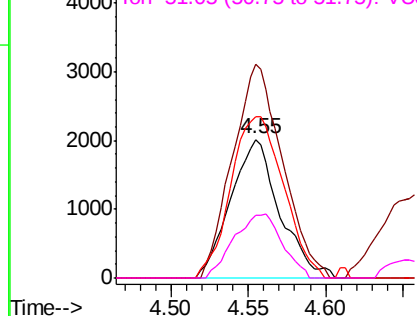
49 154.0 107.6 199.8

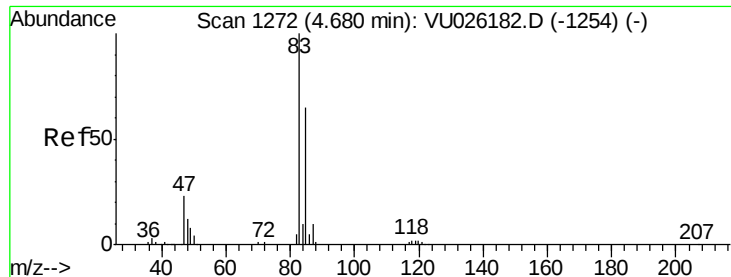
130 116.1 88.2 163.8

51 45.1 39.2 58.8



Abundance Ion 127.90 (127.60 to 128.60): V  
Ion 49.10 (48.80 to 49.80): VU0  
Ion 129.95 (129.65 to 130.65): V  
Ion 51.05 (50.75 to 51.75): VU0





#25

Chloroform

Concen: 0.991 ug/L

RT: 4.68 min Scan# 1272

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

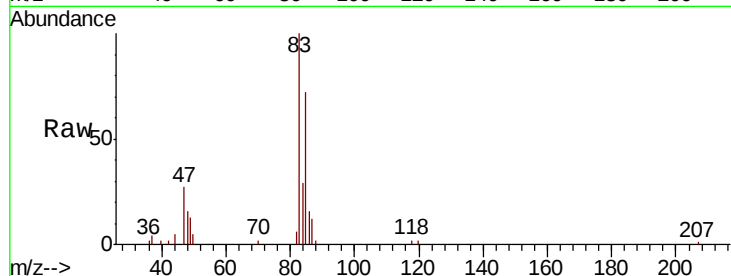
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 83 Resp: 17682

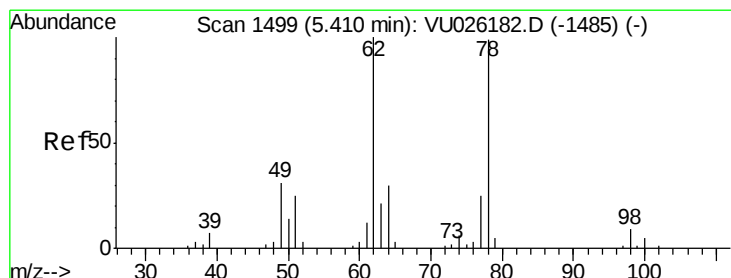
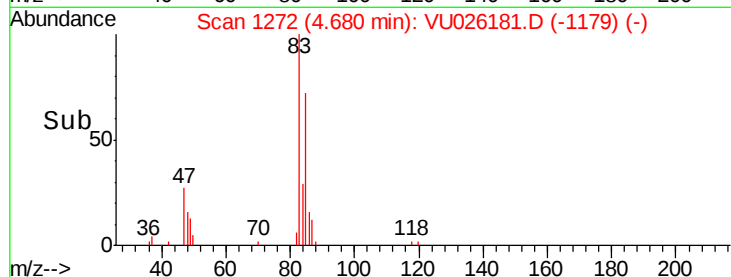
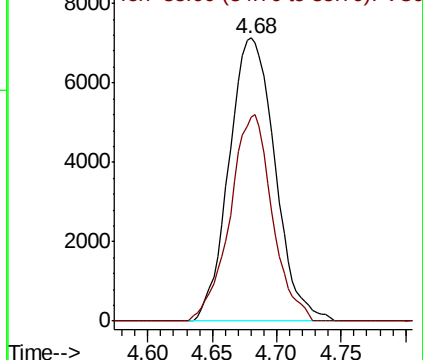
Ion Ratio Lower Upper

83 100

85 72.1 45.5 84.5



Abundance Ion 83.05 (82.75 to 83.75): VU0  
Ion 85.00 (84.70 to 85.70): VU0



#27

1,2-Dichloroethane

Concen: 0.966 ug/L

RT: 5.41 min Scan# 1500

Delta R.T. 0.00 min

Lab File: VU026181.D

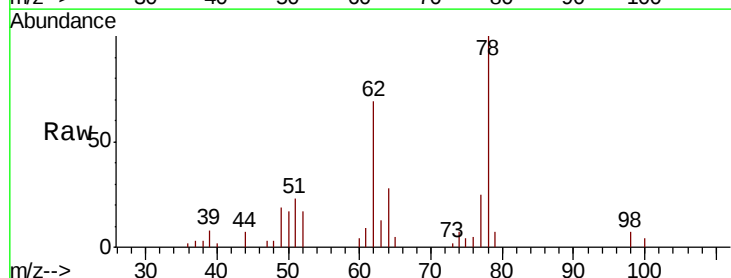
Acq: 17 Aug 2018 16:10

Tgt Ion: 62 Resp: 10379

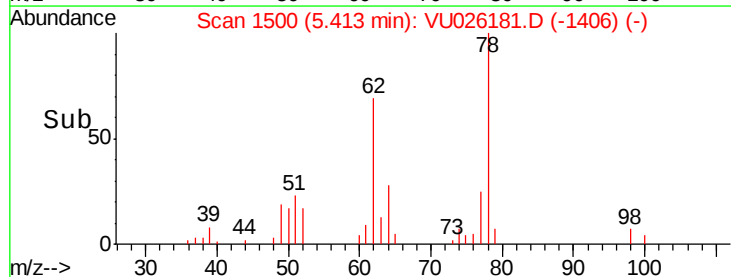
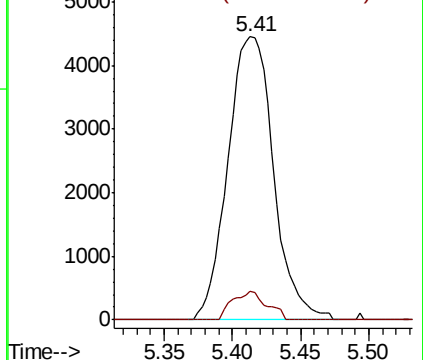
Ion Ratio Lower Upper

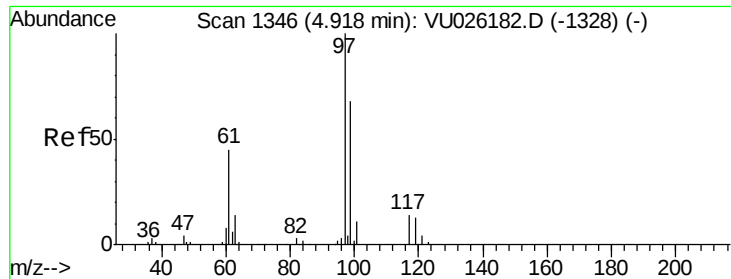
62 100

98 10.3 6.9 10.3



Abundance Ion 62.00 (61.70 to 62.70): VU0  
Ion 98.05 (97.75 to 98.75): VU0

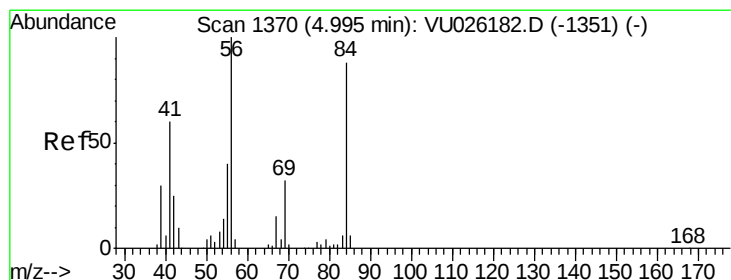
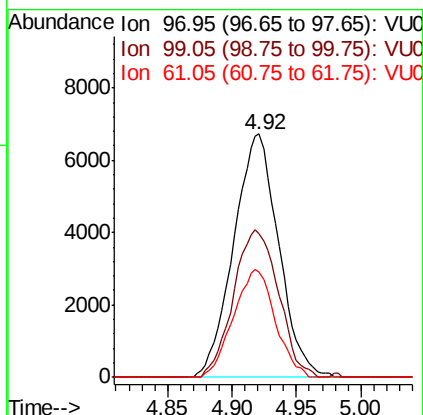
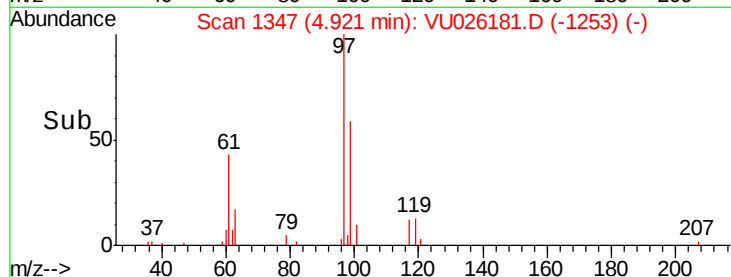
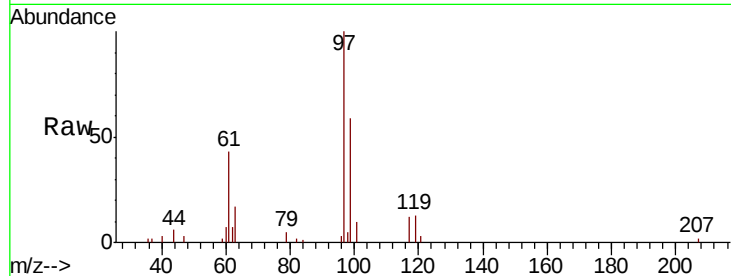




#29  
 1,1,1-Trichloroethane  
 Concen: 1.102 ug/L  
 RT: 4.92 min Scan# 1347  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

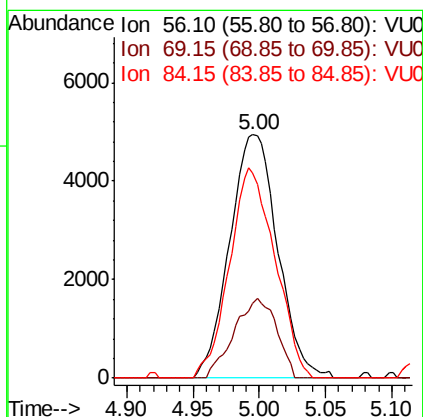
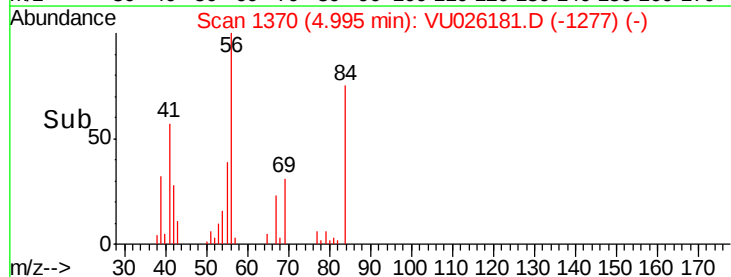
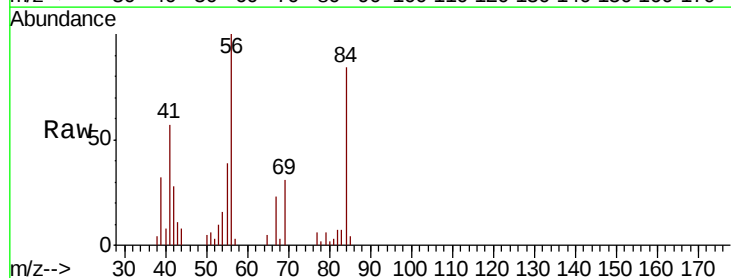
Instrument :  
 MSVOA\_U  
 ClientSampleId :

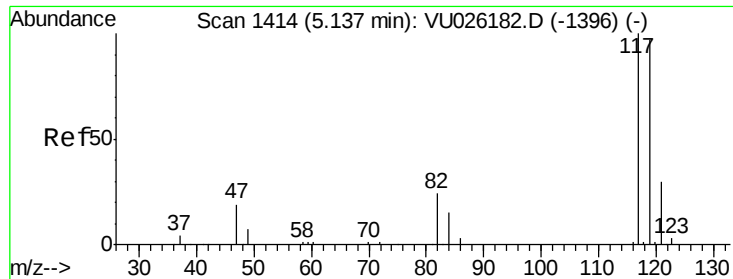
Tot Ion: 97 Resp: 16294  
 Ion Ratio Lower Upper  
 97 100  
 99 60.7 52.3 78.5  
 61 41.1 35.0 52.6



#30  
 Cyclohexane  
 Concen: 0.818 ug/L  
 RT: 5.00 min Scan# 1370  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion: 56 Resp: 12468  
 Ion Ratio Lower Upper  
 56 100  
 69 28.9 24.2 36.2  
 84 81.6 69.3 103.9





#31

Carbon tetrachloride

Concen: 1.098 ug/L

RT: 5.13 min Scan# 1413

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

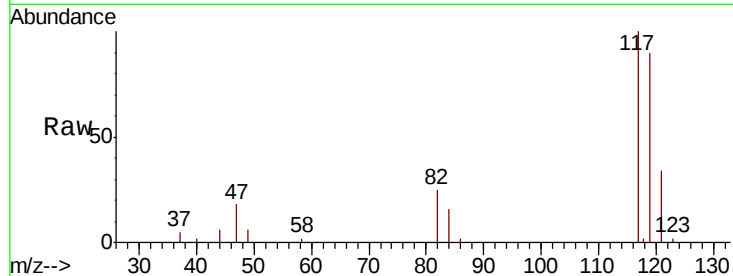
ClientSampleId :

Tot Ion:117 Resp: 14221

Ion Ratio Lower Upper

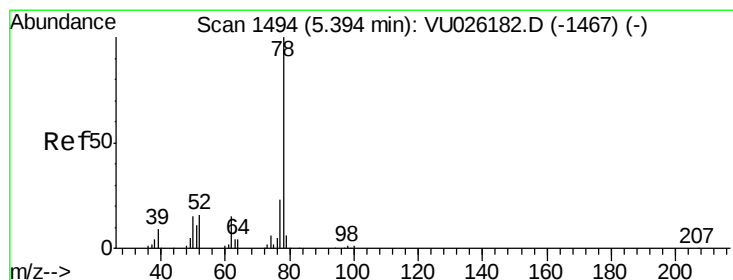
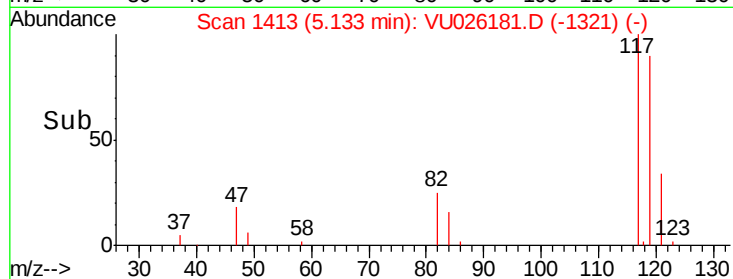
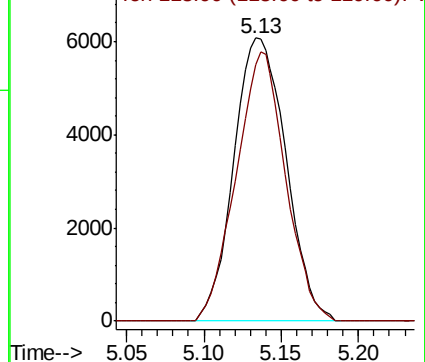
117 100

119 90.2 76.6 115.0



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 0.915 ug/L

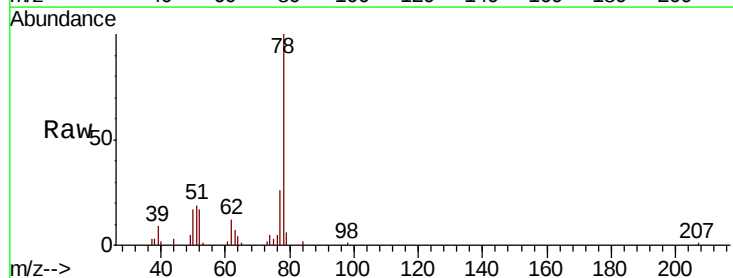
RT: 5.39 min Scan# 1494

Delta R.T. -0.00 min

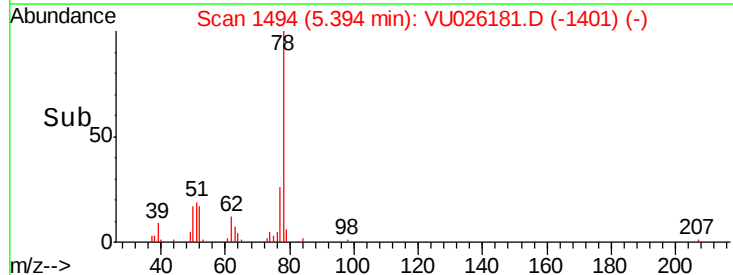
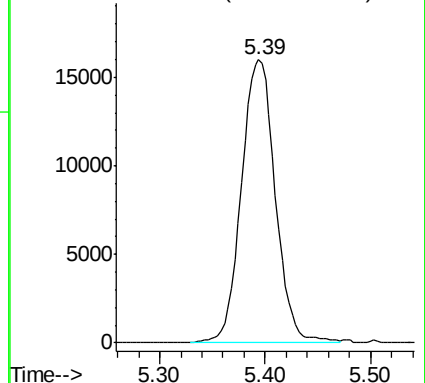
Lab File: VU026181.D

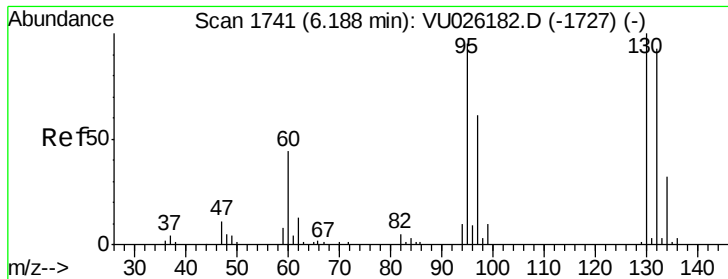
Acq: 17 Aug 2018 16:10

Tgt Ion: 78 Resp: 35803



Abundance Ion 78.10 (77.80 to 78.80): VU0

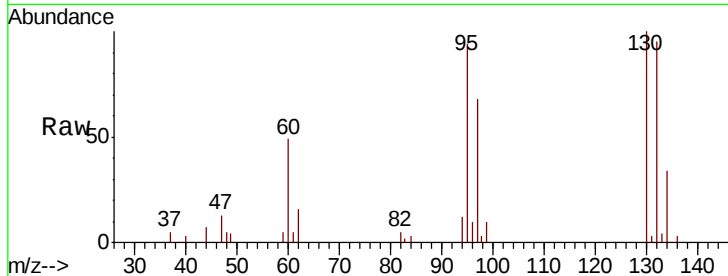




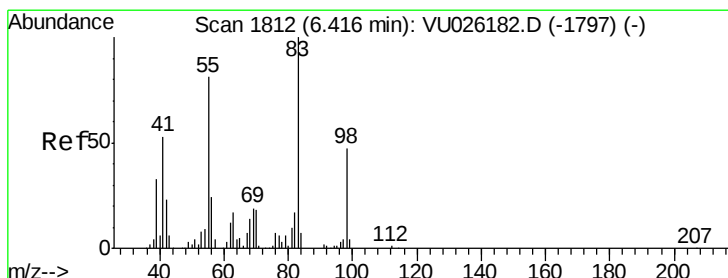
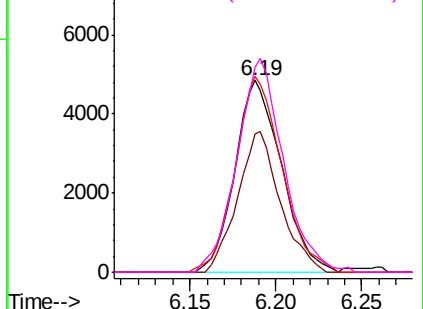
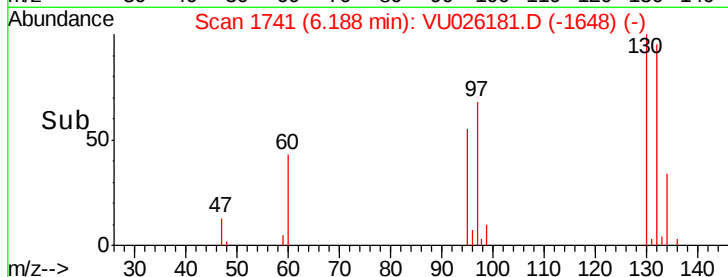
#34  
 Trichloroethene  
 Concen: 0.885 ug/L  
 RT: 6.19 min Scan# 1741  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Instrument :  
 MSVOA\_U  
 ClientSampled :

Tot Ion: 95 Resp: 9101  
 Ion Ratio Lower Upper  
 95 100  
 97 72.4 44.9 83.5  
 132 102.0 68.2 126.6  
 130 106.8 73.4 136.4

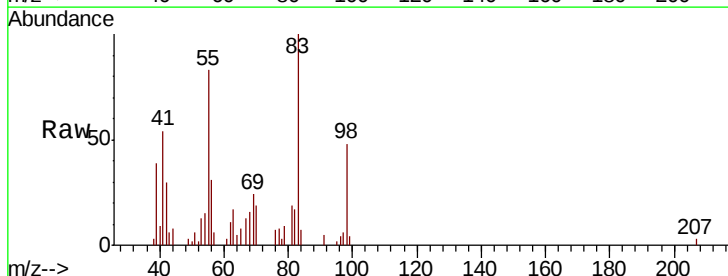


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 96.95 (96.65 to 97.65): VU0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

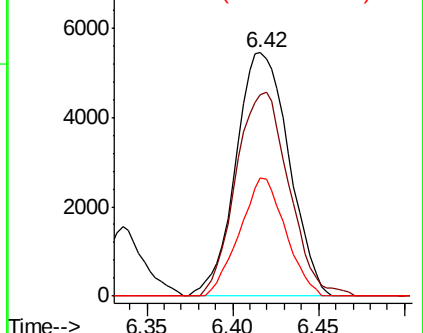
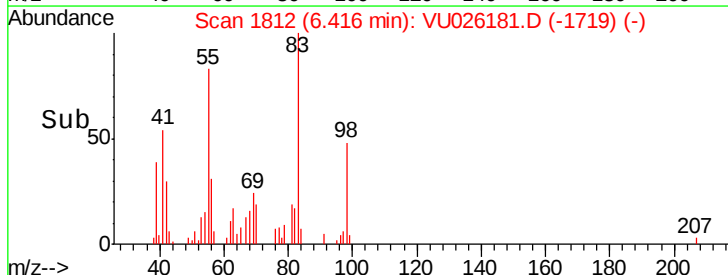


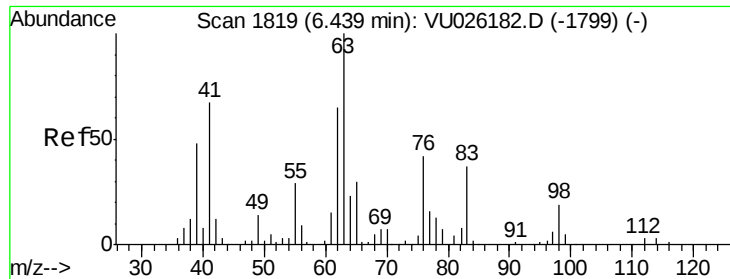
#35  
 Methylcyclohexane  
 Concen: 0.740 ug/L  
 RT: 6.42 min Scan# 1812  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion: 83 Resp: 11690  
 Ion Ratio Lower Upper  
 83 100  
 55 83.7 65.0 97.4  
 98 42.0 37.8 56.6



Abundance Ion 83.15 (82.85 to 83.85): VU0  
 Ion 55.10 (54.80 to 55.80): VU0  
 Ion 98.15 (97.85 to 98.85): VU0

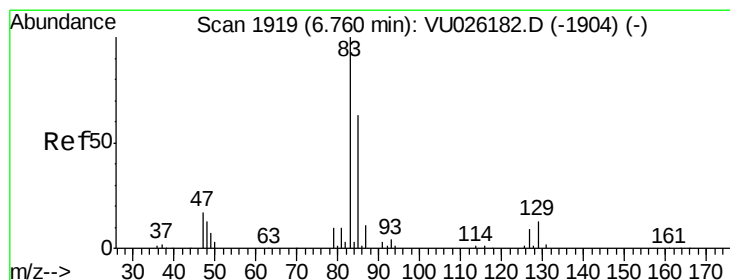
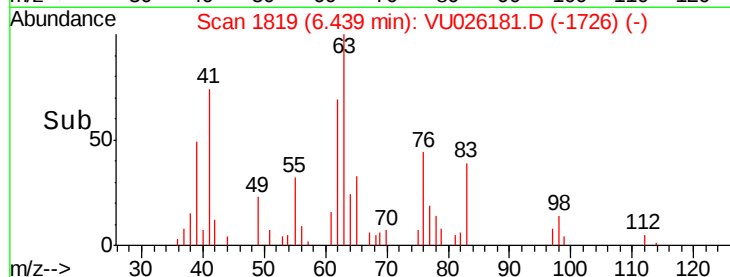
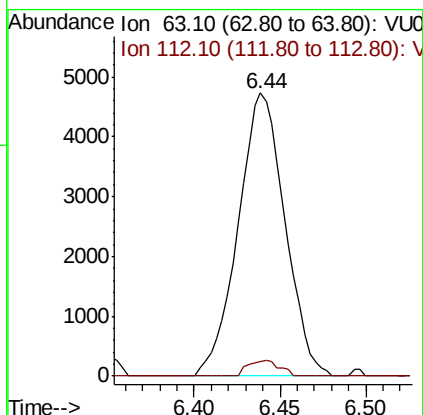
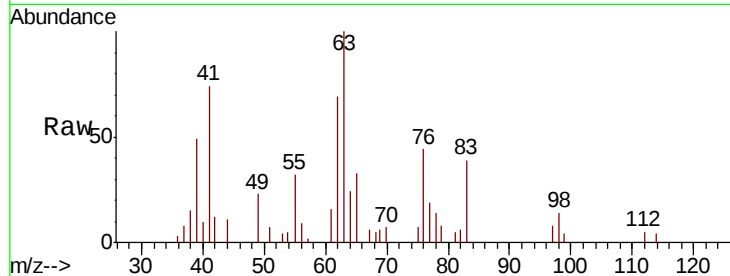




#37  
 1,2-Dichloropropane  
 Concen: 0.869 ug/L  
 RT: 6.44 min Scan# 1819  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

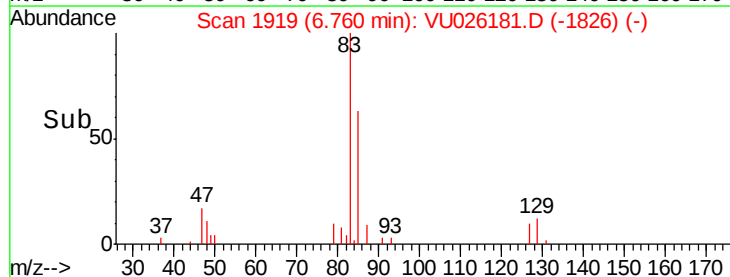
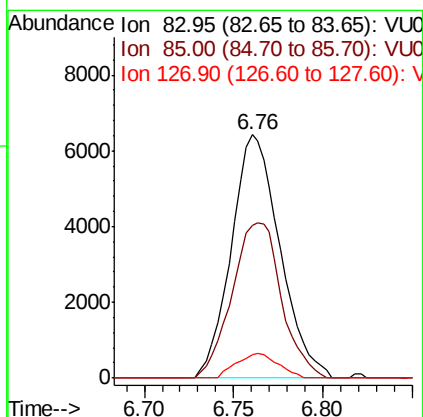
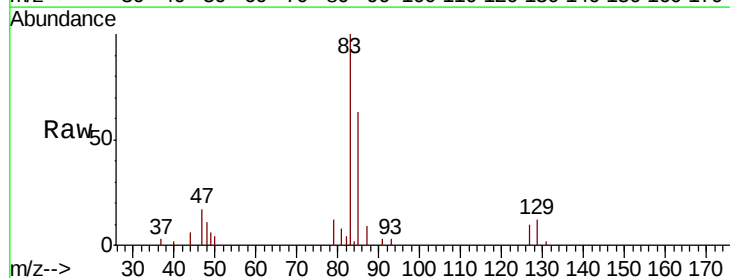
Instrument :  
 MSVOA\_U  
 ClientSampled :

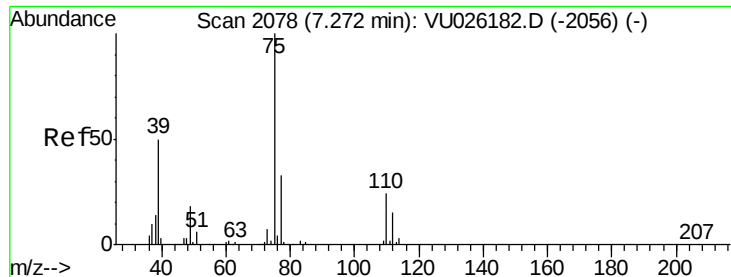
Tot Ion: 63 Resp: 8928  
 Ion Ratio Lower Upper  
 63 100  
 112 3.7 1.4 2.2#



#38  
 Bromodichloromethane  
 Concen: 1.016 ug/L  
 RT: 6.76 min Scan# 1919  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion: 83 Resp: 12167  
 Ion Ratio Lower Upper  
 83 100  
 85 62.9 44.2 82.0  
 127 9.7 7.6 11.4

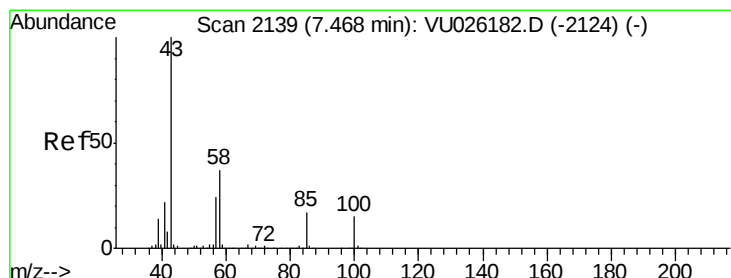
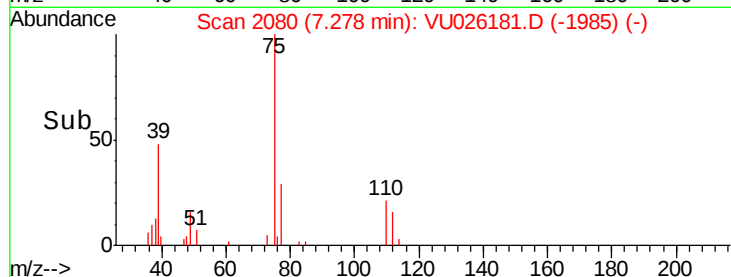
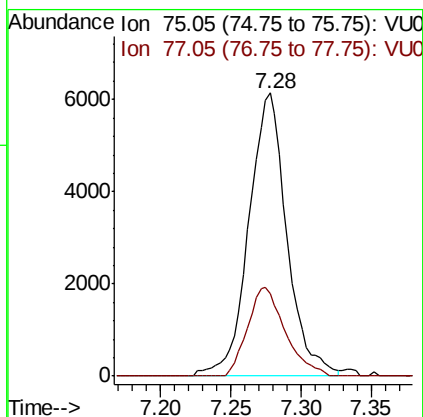
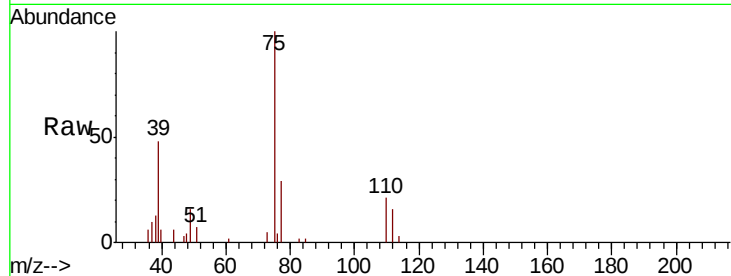




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.905 ug/L  
 RT: 7.28 min Scan# 2080  
 Delta R.T. 0.01 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

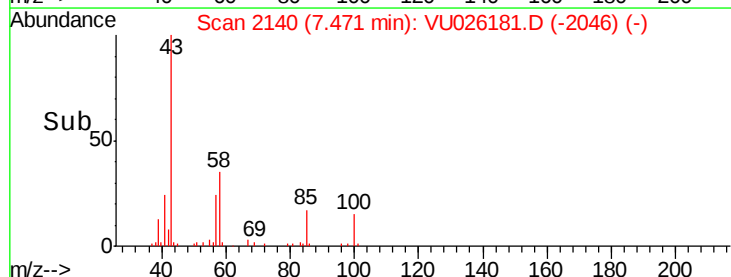
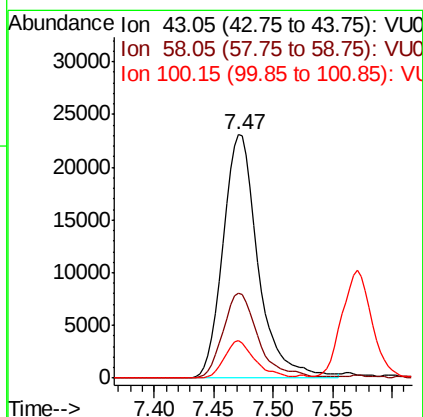
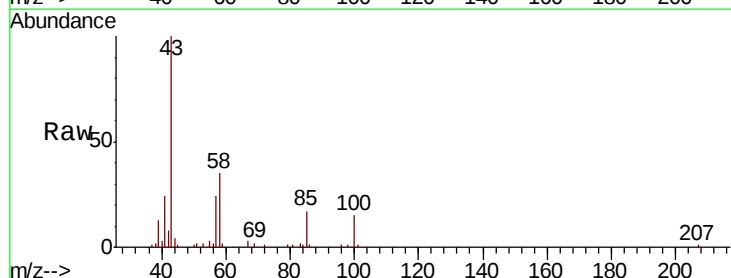
Instrument :  
 MSVOA\_U  
 ClientSampleId :

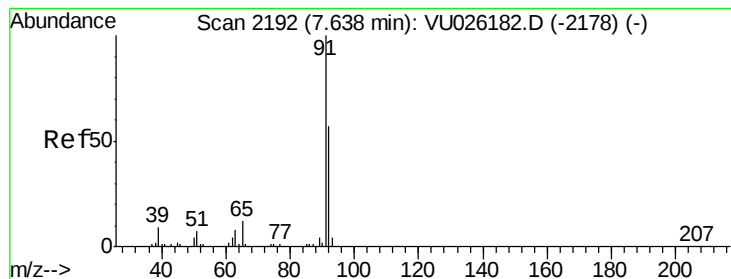
Tot Ion: 75 Resp: 11578  
 Ion Ratio Lower Upper  
 75 100  
 77 29.0 23.3 43.3



#40  
 4-Methyl-2-pentanone  
 Concen: 8.397 ug/L  
 RT: 7.47 min Scan# 2140  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion: 43 Resp: 47240  
 Ion Ratio Lower Upper  
 43 100  
 58 35.1 29.8 44.8  
 100 13.4 11.6 17.4





#42

Toluene

Concen: 0.869 ug/L

RT: 7.64 min Scan# 2193

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

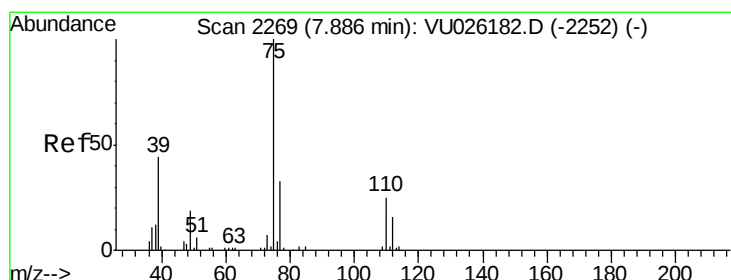
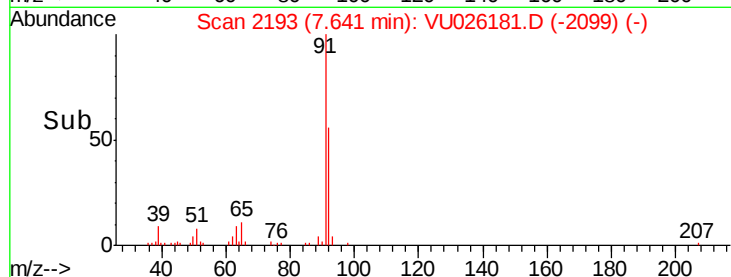
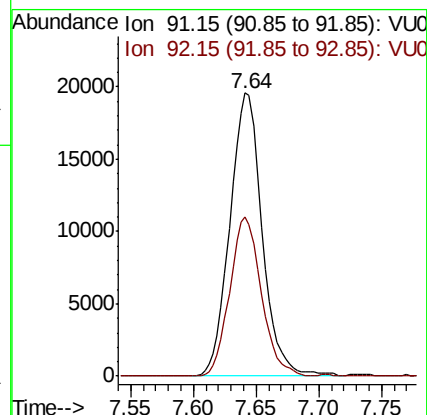
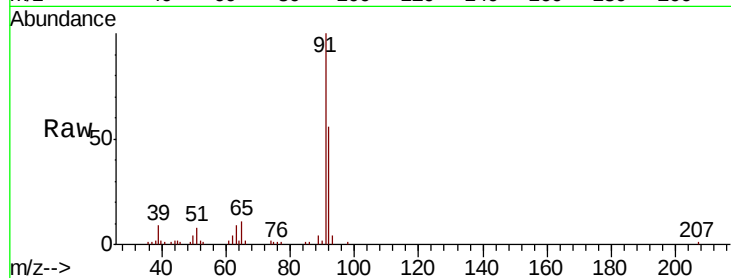
ClientSampleId :

Tot Ion: 91 Resp: 34980

Ion Ratio Lower Upper

91 100

92 56.1 40.0 74.4



#44

trans-1,3-Dichloropropene

Concen: 0.970 ug/L

RT: 7.89 min Scan# 2269

Delta R.T. -0.00 min

Lab File: VU026181.D

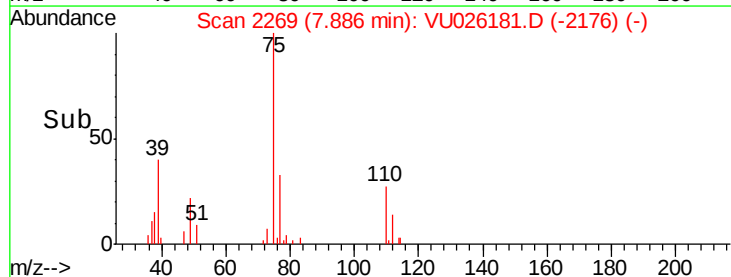
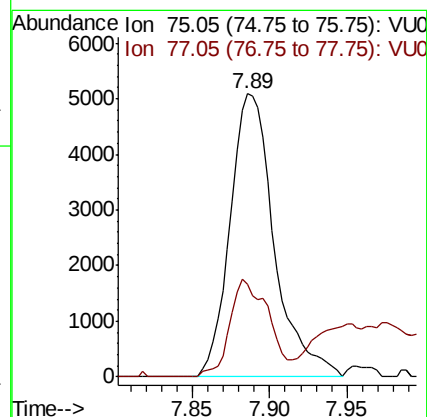
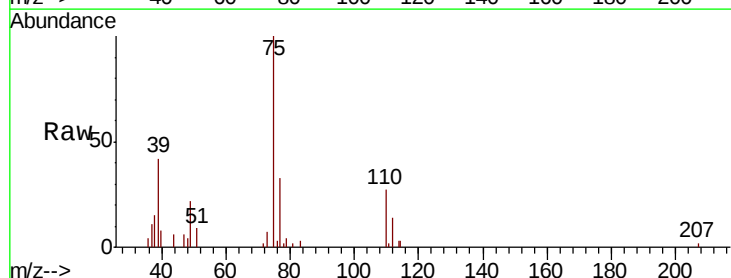
Acq: 17 Aug 2018 16:10

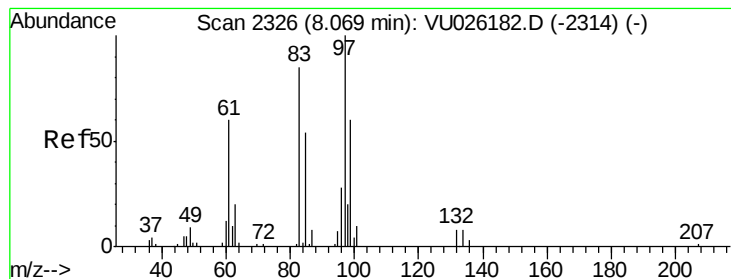
Tgt Ion: 75 Resp: 10070

Ion Ratio Lower Upper

75 100

77 32.5 22.7 42.3





#45

1,1,2-Trichloroethane

Concen: 0.946 ug/L

RT: 8.07 min Scan# 2327

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

ClientSampled :

Tot Ion: 97 Resp: 6505

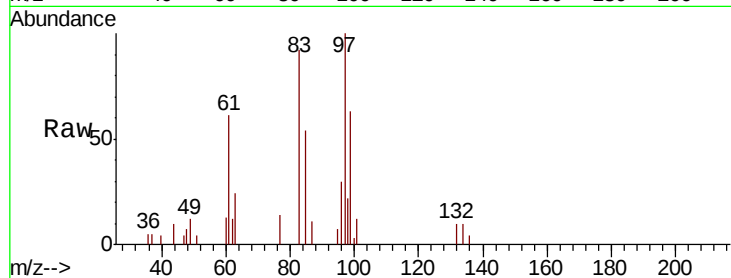
Ion Ratio Lower Upper

97 100

99 63.1 42.1 78.3

83 92.3 59.2 110.0

85 54.3 37.9 70.3

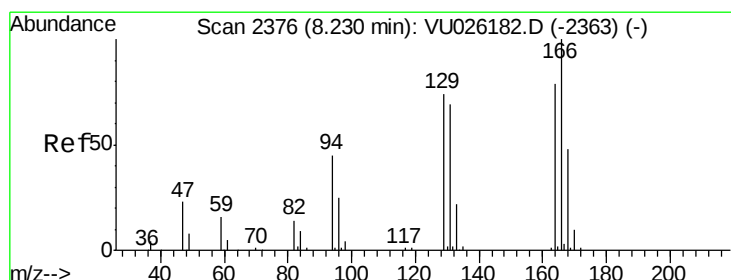
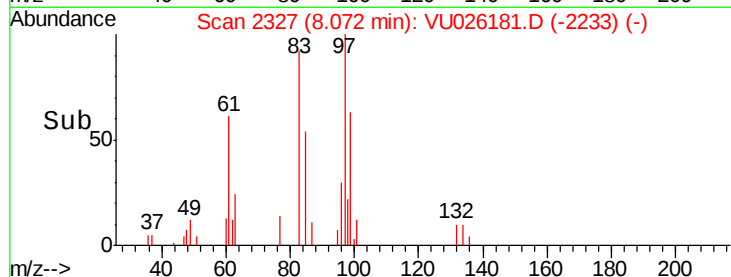
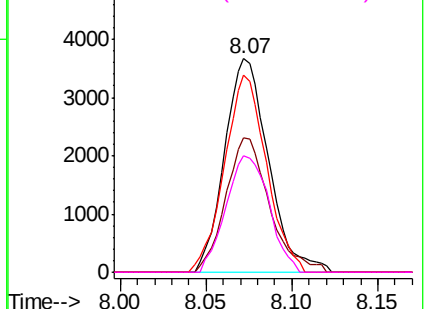


Abundance Ion 96.95 (96.65 to 97.65): VU0

Ion 99.05 (98.75 to 99.75): VU0

Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0



#47

Tetrachloroethene

Concen: 0.961 ug/L

RT: 8.23 min Scan# 2376

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Tgt Ion: 164 Resp: 8196

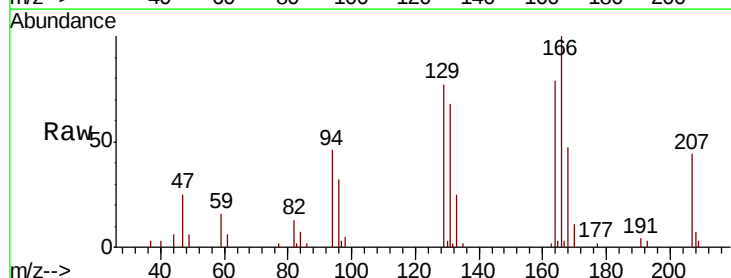
Ion Ratio Lower Upper

164 100

129 96.6 66.1 122.8

131 86.0 61.4 114.0

166 126.3 89.1 165.5

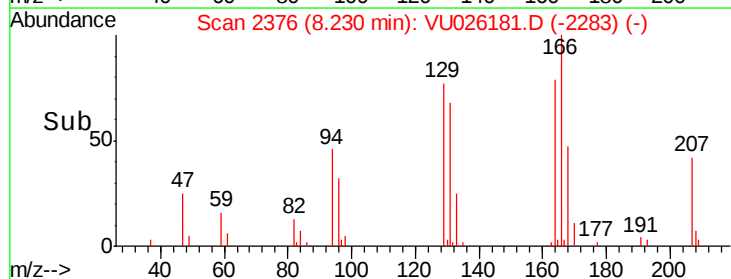
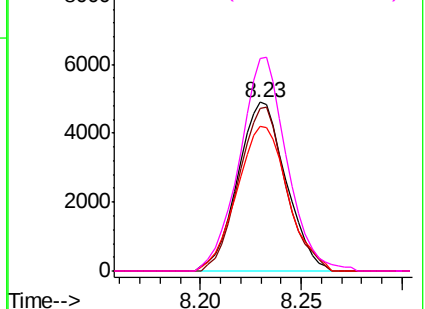


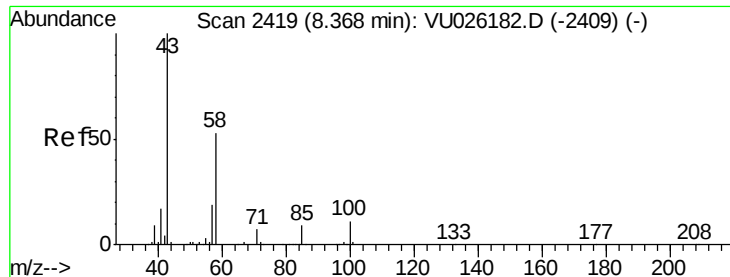
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

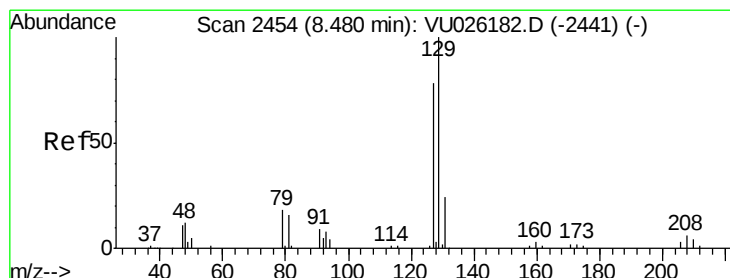
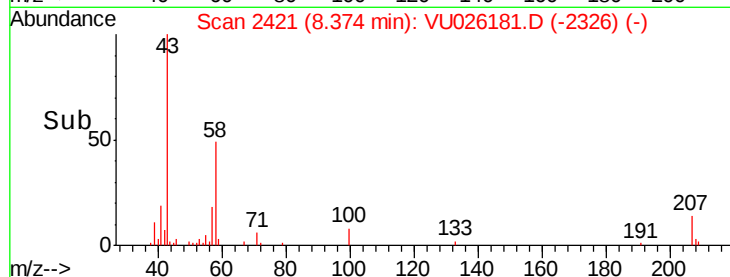
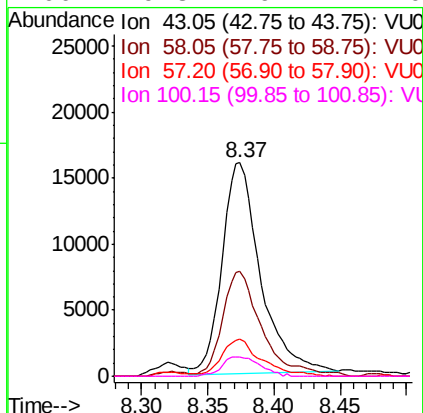
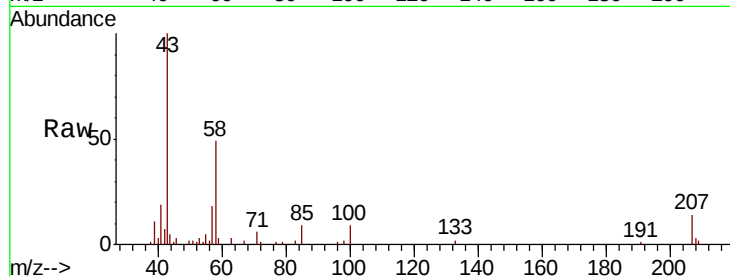




#48  
2-Hexanone  
Concen: 7.907 ug/L  
RT: 8.37 min Scan# 2421  
Delta R.T. 0.01 min  
Lab File: VU026181.D  
Acq: 17 Aug 2018 16:10

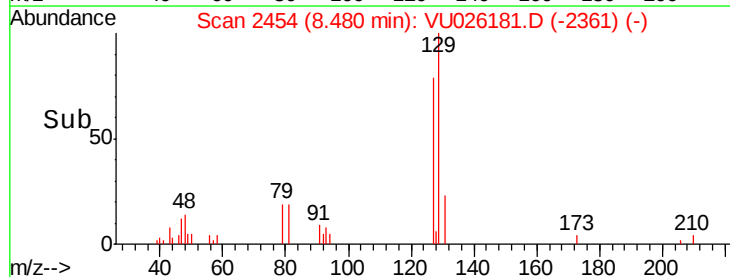
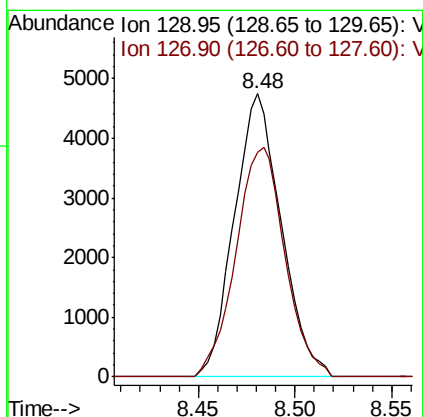
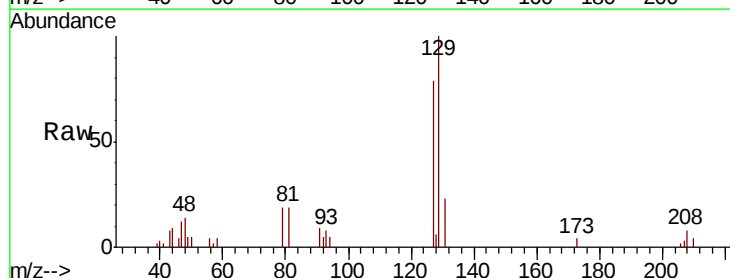
Instrument :  
MSVOA\_U  
ClientSampleId :

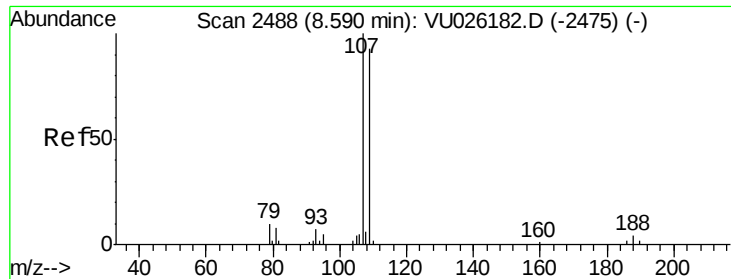
Tot Ion: 43 Resp: 31992  
Ion Ratio Lower Upper  
43 100  
58 51.3 43.1 64.7  
57 18.2 15.4 23.0  
100 9.3 9.4 14.0#



#49  
Dibromochloromethane  
Concen: 0.992 ug/L  
RT: 8.48 min Scan# 2454  
Delta R.T. -0.00 min  
Lab File: VU026181.D  
Acq: 17 Aug 2018 16:10

Tgt Ion: 129 Resp: 7993  
Ion Ratio Lower Upper  
129 100  
127 79.2 54.9 101.9

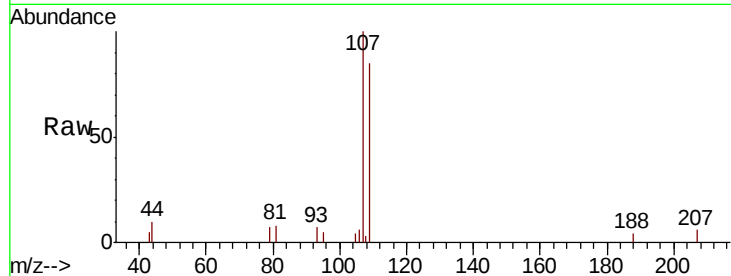




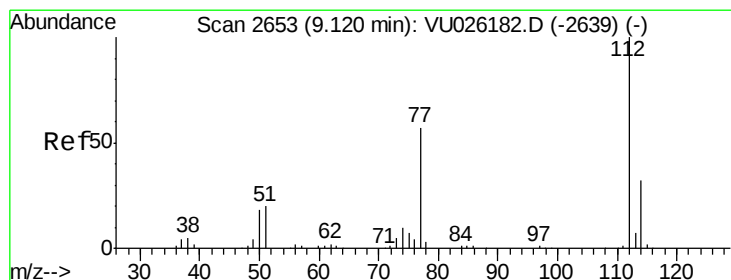
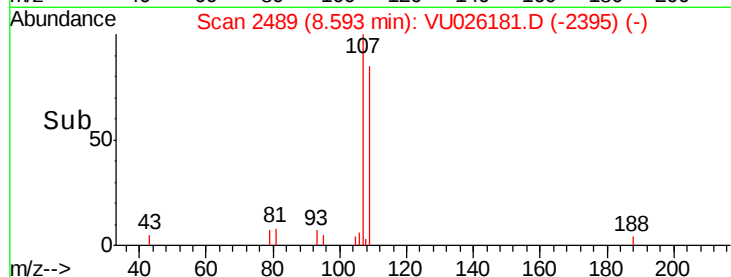
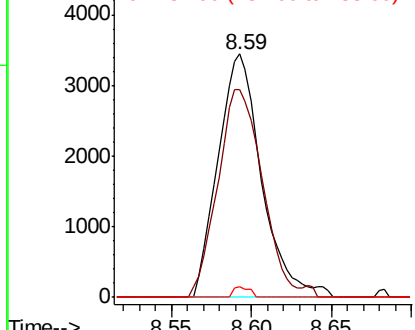
#50  
 1,2-Dibromoethane  
 Concen: 1.008 ug/L  
 RT: 8.59 min Scan# 2489  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tot Ion:107 Resp: 6408  
 Ion Ratio Lower Upper  
 107 100  
 109 85.3 65.3 121.3  
 188 4.2 3.0 4.4

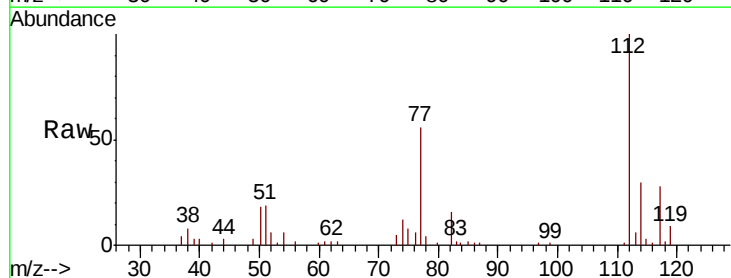


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

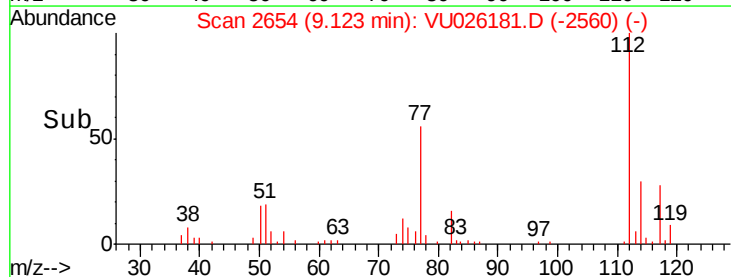
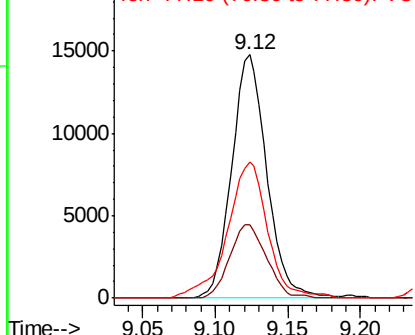


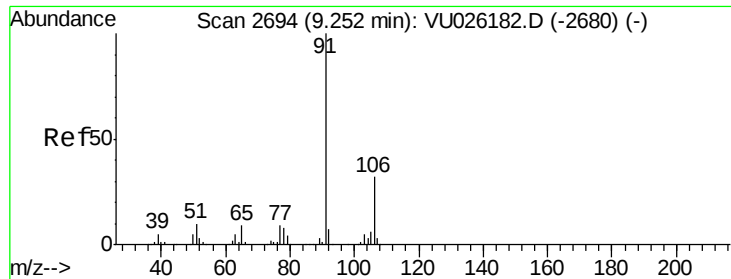
#51  
 Chlorobenzene  
 Concen: 0.937 ug/L  
 RT: 9.12 min Scan# 2654  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion:112 Resp: 24831  
 Ion Ratio Lower Upper  
 112 100  
 114 30.2 22.5 41.7  
 77 55.8 45.8 68.6



Abundance Ion 112.10 (111.80 to 112.80): V  
 Ion 114.05 (113.75 to 114.75): V  
 Ion 77.10 (76.80 to 77.80): VU0





#52

Ethylbenzene

Concen: 0.837 ug/L

RT: 9.26 min Scan# 2695

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

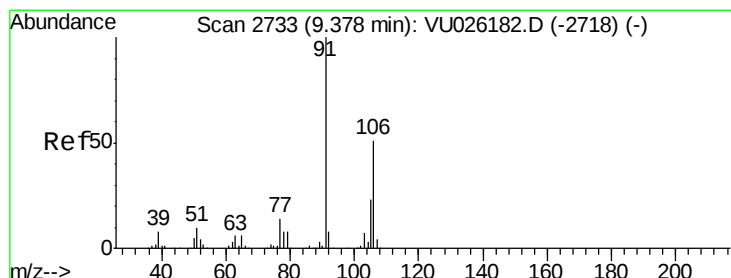
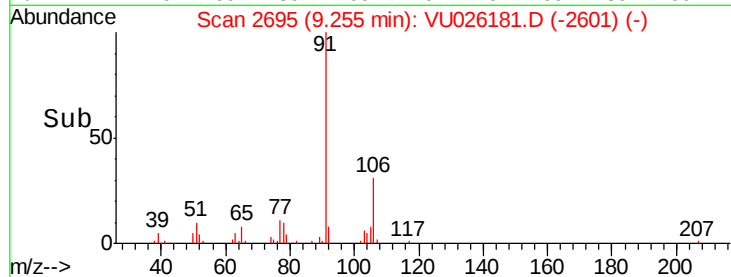
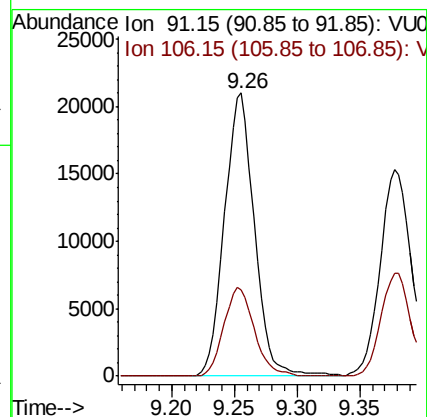
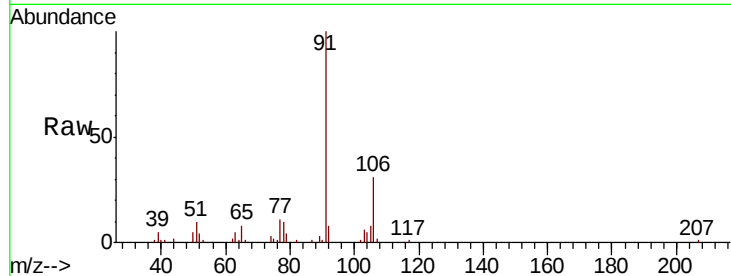
ClientSampleId :

Tot Ion: 91 Resp: 34864

Ion Ratio Lower Upper

91 100

106 30.7 22.5 41.9



#53

m,p-xylene

Concen: 0.822 ug/L

RT: 9.38 min Scan# 2733

Delta R.T. -0.00 min

Lab File: VU026181.D

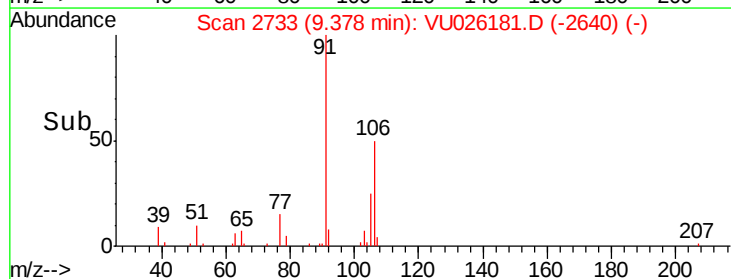
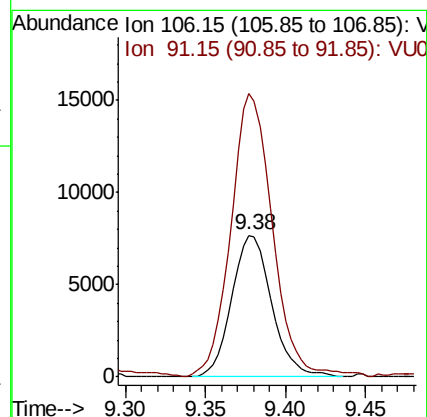
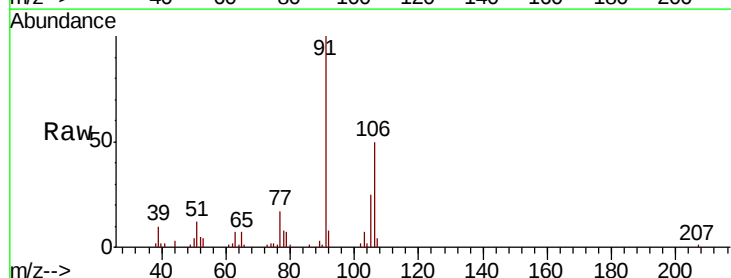
Acq: 17 Aug 2018 16:10

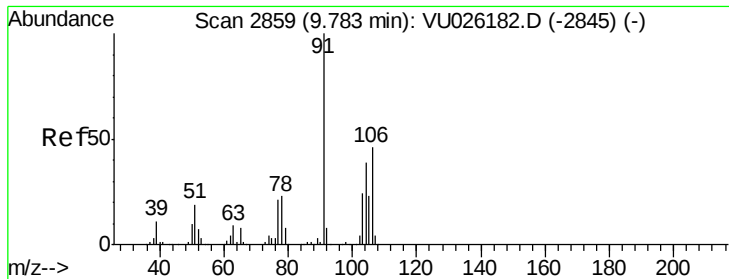
Tgt Ion: 106 Resp: 13049

Ion Ratio Lower Upper

106 100

91 200.1 138.9 257.9





#54

o-xylene

Concen: 0.779 ug/L

RT: 9.78 min Scan# 2859

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

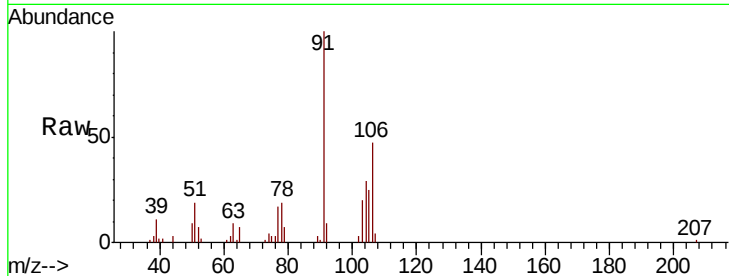
ClientSampleId :

Tot Ion:106 Resp: 12064

Ion Ratio Lower Upper

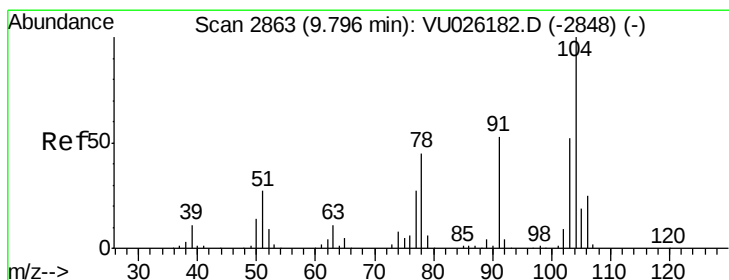
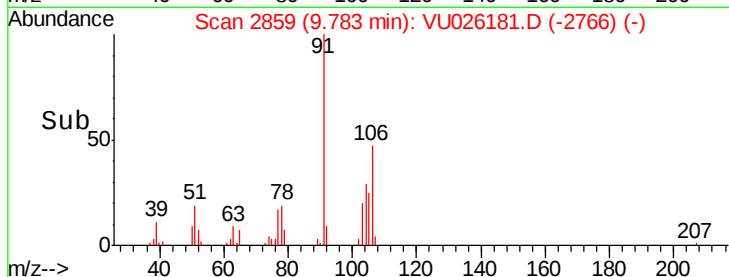
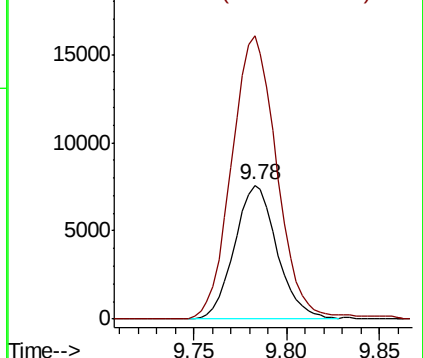
106 100

91 211.1 150.7 279.9



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#55

Styrene

Concen: 0.780 ug/L

RT: 9.80 min Scan# 2863

Delta R.T. -0.00 min

Lab File: VU026181.D

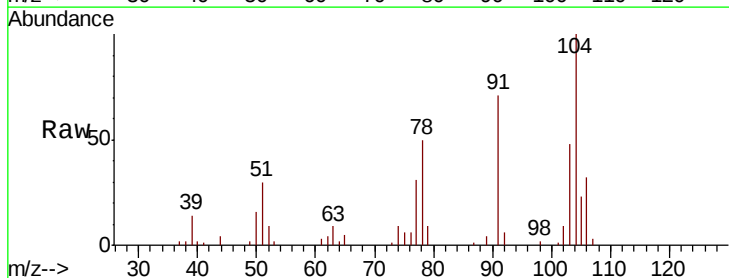
Acq: 17 Aug 2018 16:10

Tgt Ion:104 Resp: 20010

Ion Ratio Lower Upper

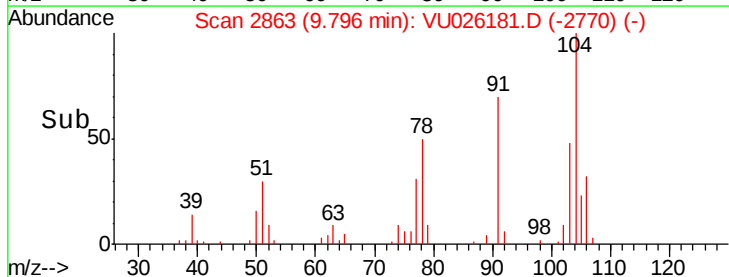
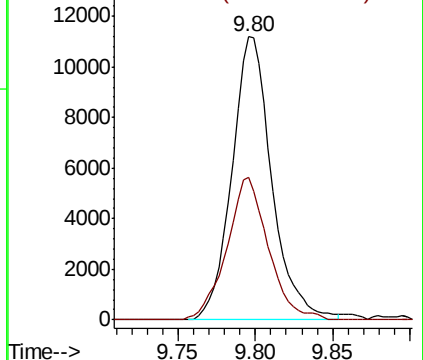
104 100

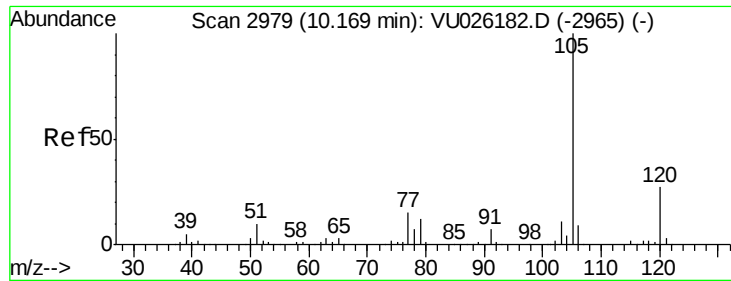
78 50.4 31.8 59.0



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 0.791 ug/L

RT: 10.17 min Scan# 2980

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

ClientSampleId :

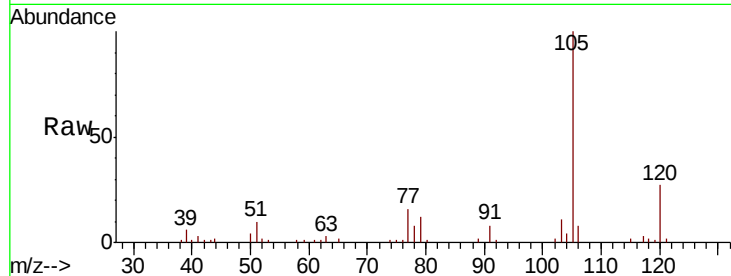
Tot Ion: 105 Resp: 31978

Ion Ratio Lower Upper

105 100

120 26.8 21.4 32.2

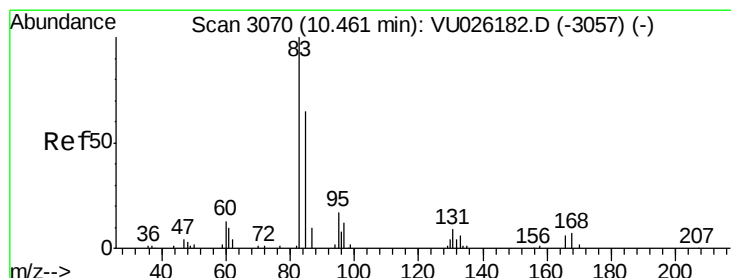
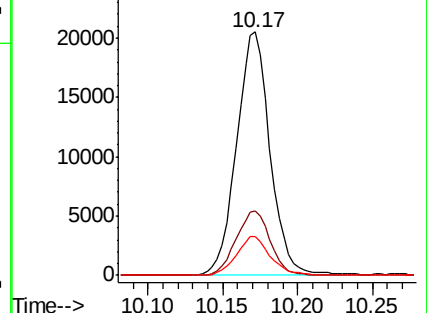
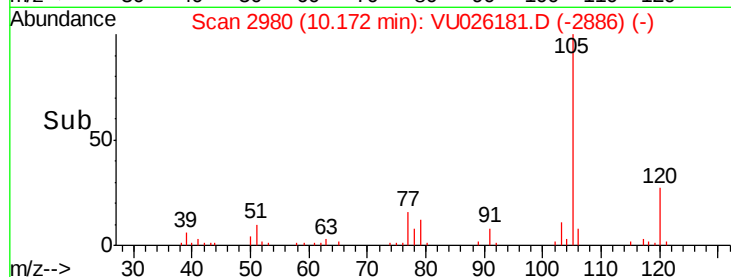
77 15.8 12.4 18.6



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 0.950 ug/L

RT: 10.46 min Scan# 3070

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

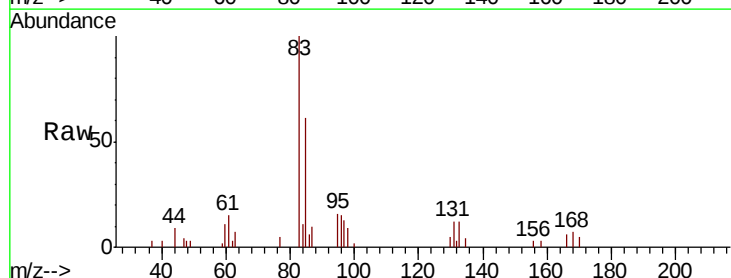
Tgt Ion: 83 Resp: 8233

Ion Ratio Lower Upper

83 100

85 61.5 45.7 84.9

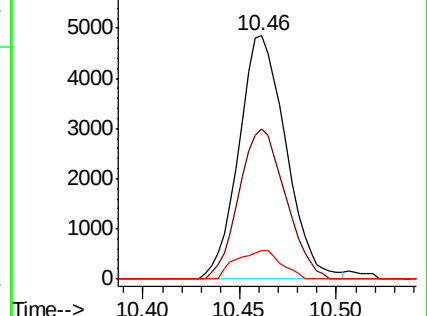
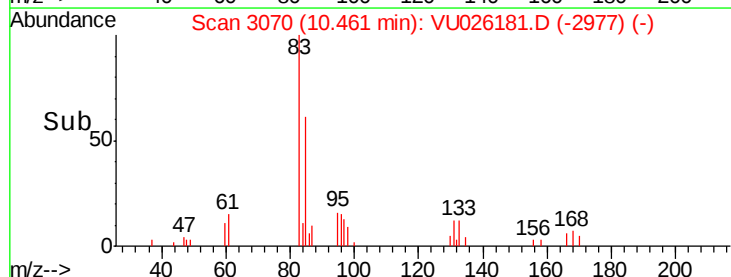
131 11.8 7.7 11.5#

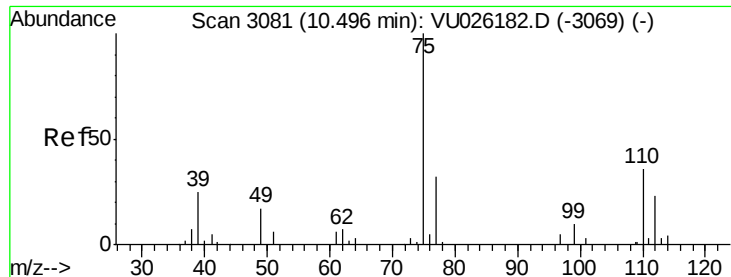


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V

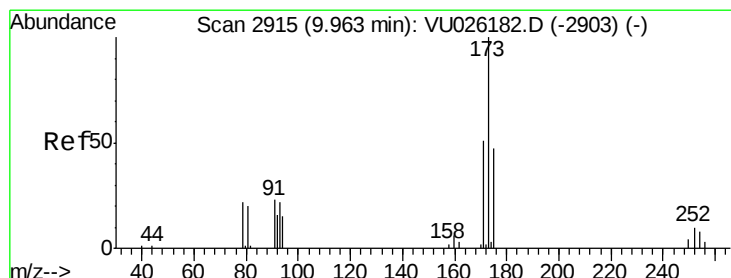
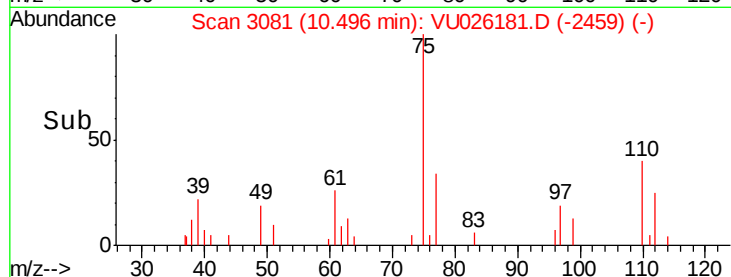
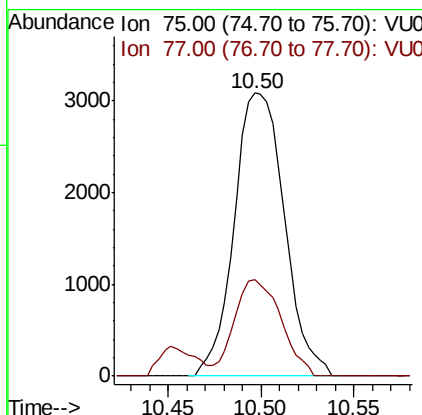
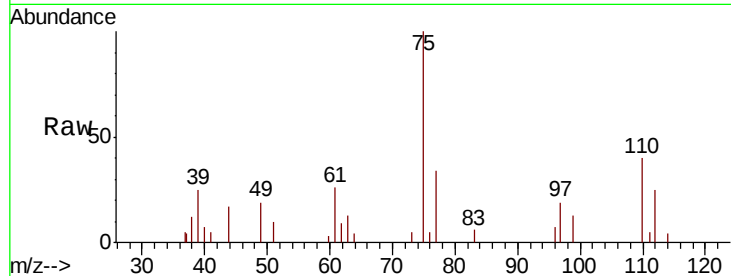




#59  
 1,2,3-Trichloropropane  
 Concen: 0.990 ug/L  
 RT: 10.50 min Scan# 3081  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

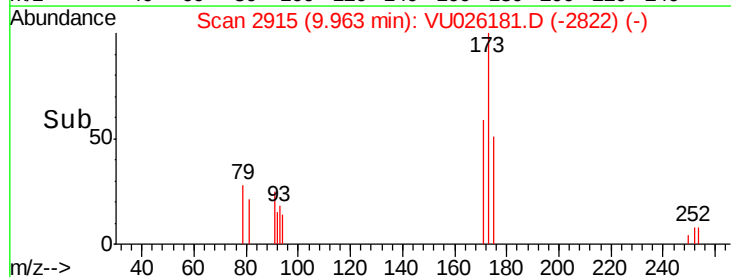
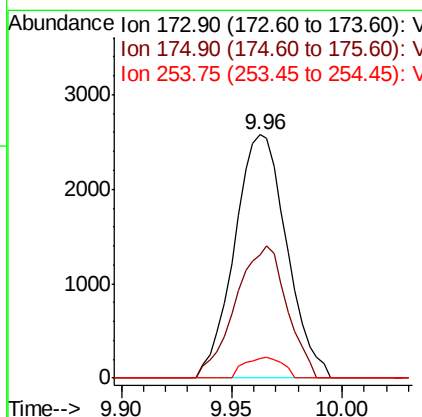
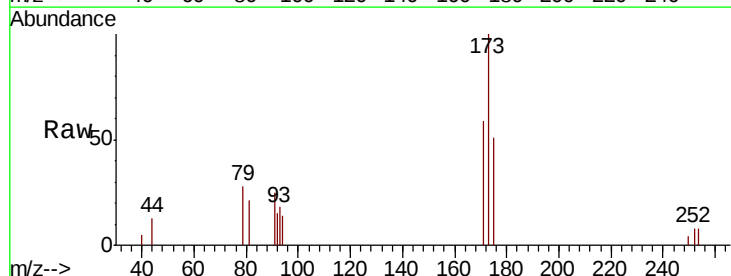
Instrument :  
 MSVOA\_U  
 ClientSampleId :

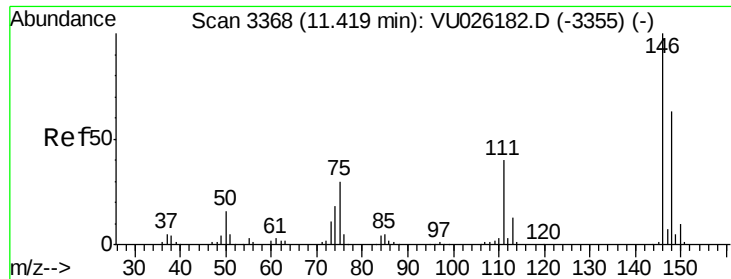
Tot Ion: 75 Resp: 5791  
 Ion Ratio Lower Upper  
 75 100  
 77 31.7 29.0 43.4



#61  
 Bromoform  
 Concen: 0.909 ug/L  
 RT: 9.96 min Scan# 2915  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion:173 Resp: 4244  
 Ion Ratio Lower Upper  
 173 100  
 175 53.5 39.0 58.6  
 254 6.2 6.8 10.2#

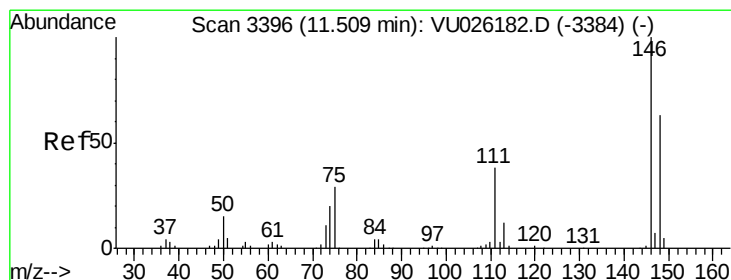
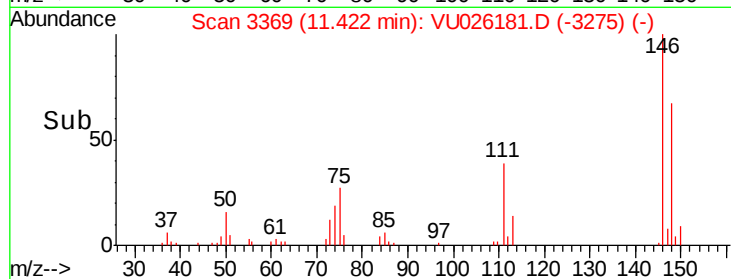
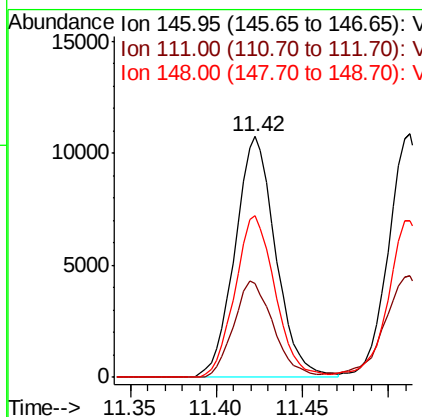
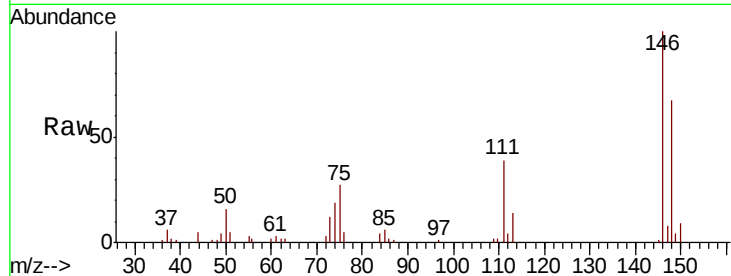




#62  
 1,3-Dichlorobenzene  
 Concen: 0.882 ug/L  
 RT: 11.42 min Scan# 3369  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

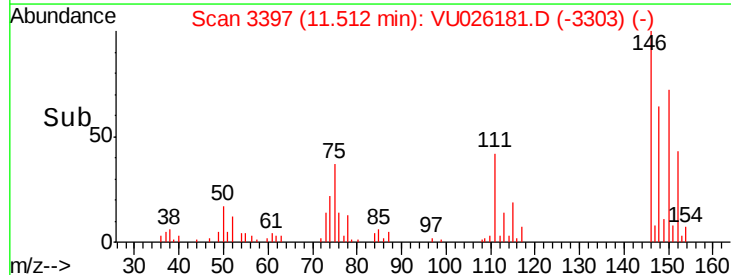
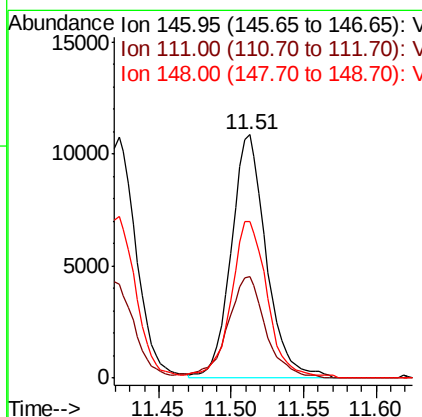
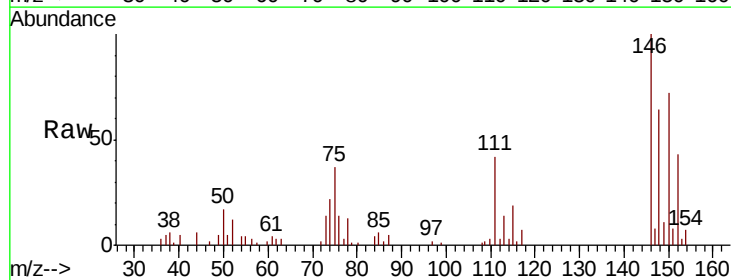
Instrument :  
 MSVOA\_U  
 ClientSampleID :

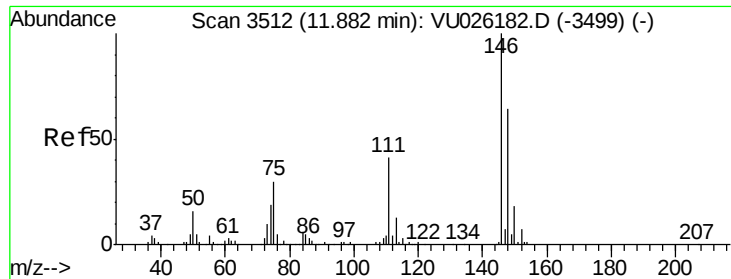
Tot Ion:146 Resp: 17656  
 Ion Ratio Lower Upper  
 146 100  
 111 38.9 27.9 51.7  
 148 67.4 44.2 82.0



#63  
 1,4-Dichlorobenzene  
 Concen: 0.907 ug/L  
 RT: 11.51 min Scan# 3397  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion:146 Resp: 18289  
 Ion Ratio Lower Upper  
 146 100  
 111 41.6 26.8 49.8  
 148 64.5 44.2 82.0

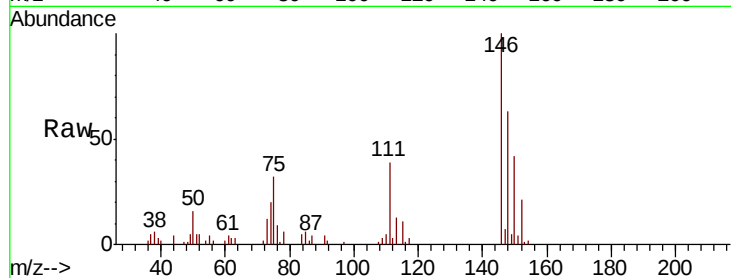




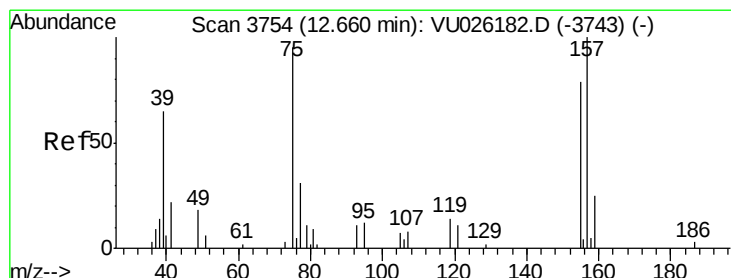
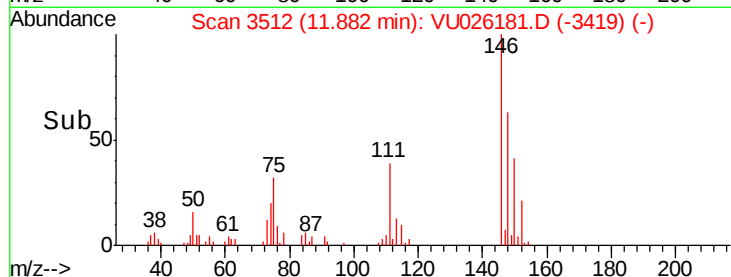
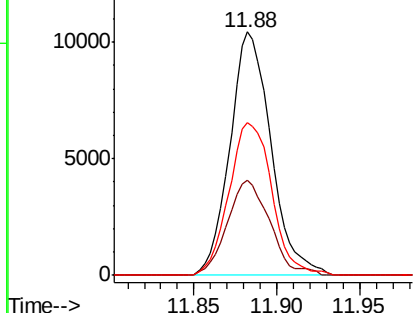
#65  
 1,2-Dichlorobenzene  
 Concen: 0.899 ug/L  
 RT: 11.88 min Scan# 3512  
 Delta R.T. -0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tot Ion:146 Resp: 18031  
 Ion Ratio Lower Upper  
 146 100  
 111 39.1 33.0 49.4  
 148 62.9 51.4 77.0

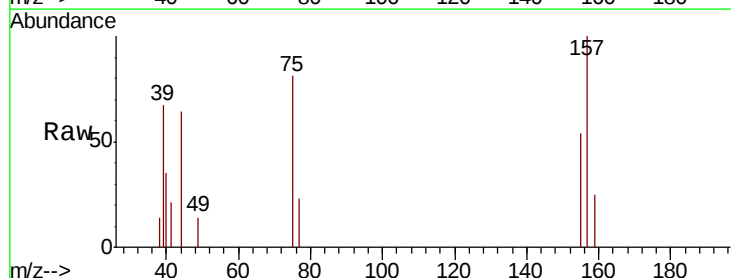


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

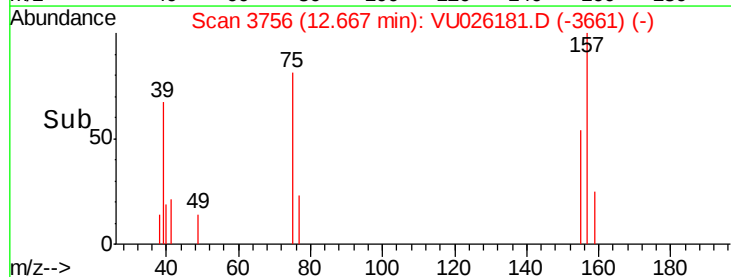
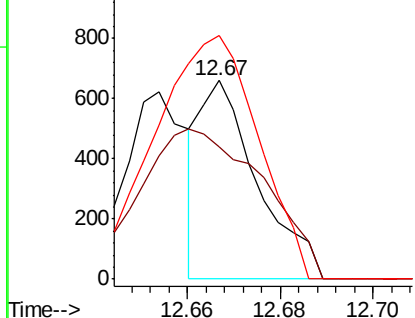


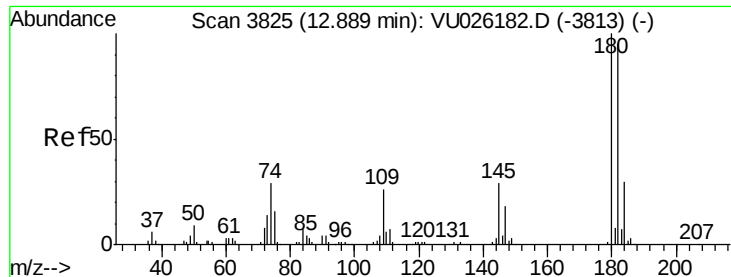
#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 0.449 ug/L  
 RT: 12.67 min Scan# 3756  
 Delta R.T. 0.01 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

Tgt Ion: 75 Resp: 563  
 Ion Ratio Lower Upper  
 75 100  
 155 66.6 66.2 99.4  
 157 122.8 84.2 126.4



Abundance Ion 75.05 (74.75 to 75.75): VU0  
 Ion 154.95 (154.65 to 155.65): V  
 Ion 156.90 (156.60 to 157.60): V

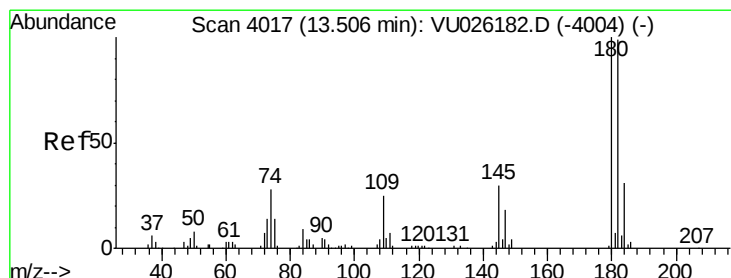
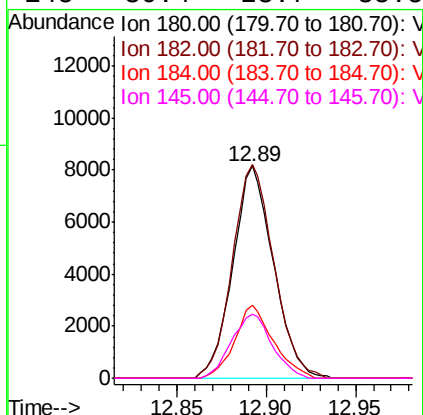
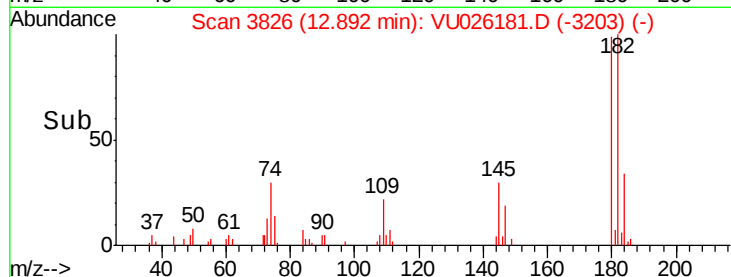
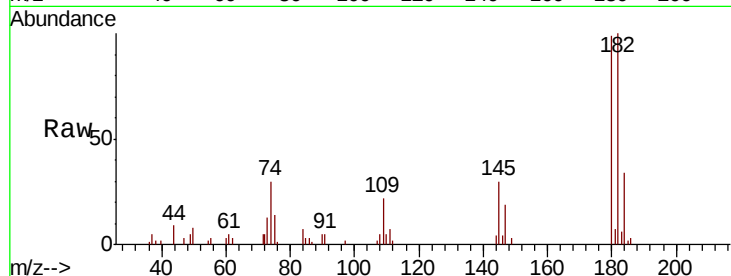




#67  
 1,3,5-Trichlorobenzene  
 Concen: 0.827 ug/L  
 RT: 12.89 min Scan# 3826  
 Delta R.T. 0.00 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

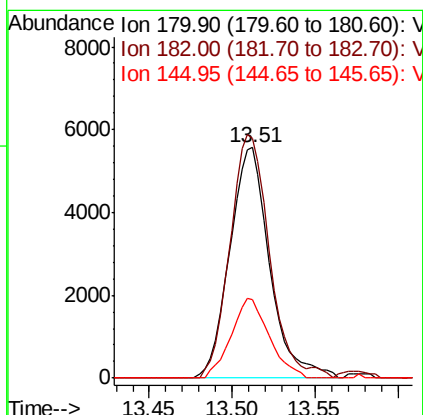
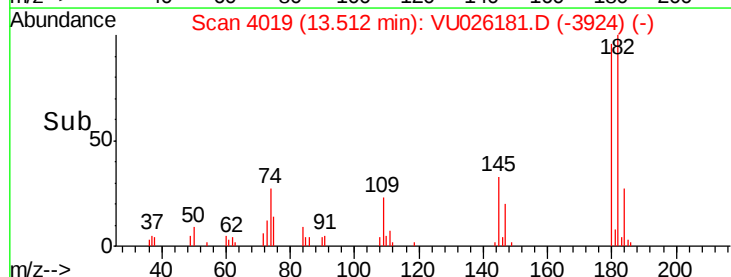
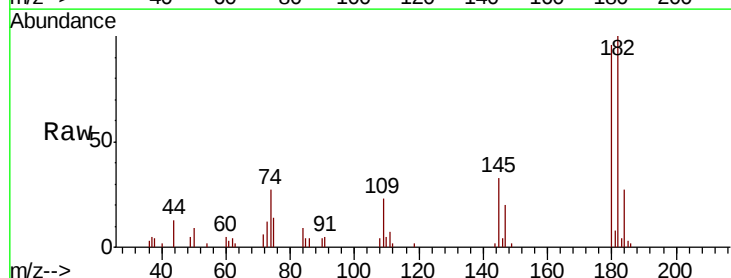
Instrument :  
 MSVOA\_U  
 ClientSampleId :

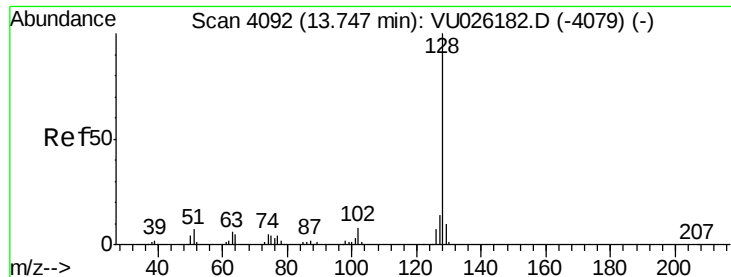
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 102.7 | 75.8  | 113.8 |
| 184     | 32.7  | 24.2  | 36.2  |
| 145     | 30.4  | 23.7  | 35.5  |



#68  
 1,2,4-trichlorobenzene  
 Concen: 0.863 ug/L  
 RT: 13.51 min Scan# 4019  
 Delta R.T. 0.01 min  
 Lab File: VU026181.D  
 Acq: 17 Aug 2018 16:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 104.4 | 77.9  | 116.9 |
| 145     | 32.8  | 24.2  | 36.2  |





#69

Naphthalene

Concen: 0.779 ug/L

RT: 13.75 min Scan# 4093

Delta R.T. 0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

Instrument :

MSVOA\_U

ClientSampleId :

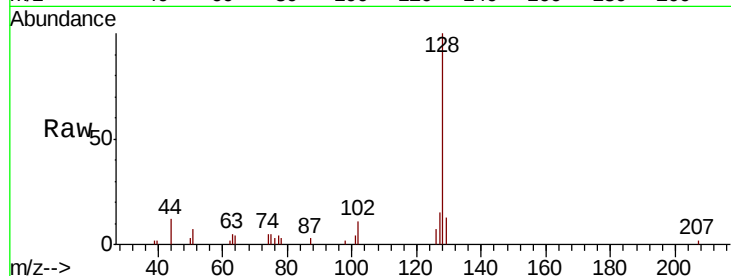
Tot Ion:128 Resp: 12644

Ion Ratio Lower Upper

128 100

129 10.3 8.6 13.0

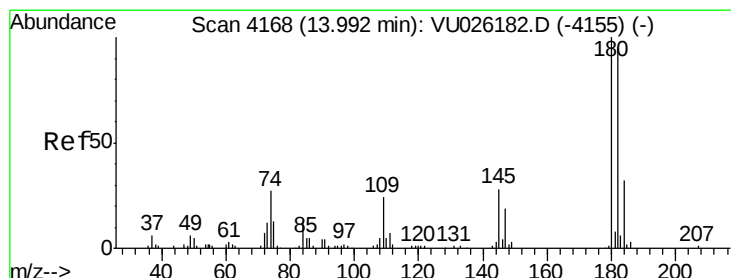
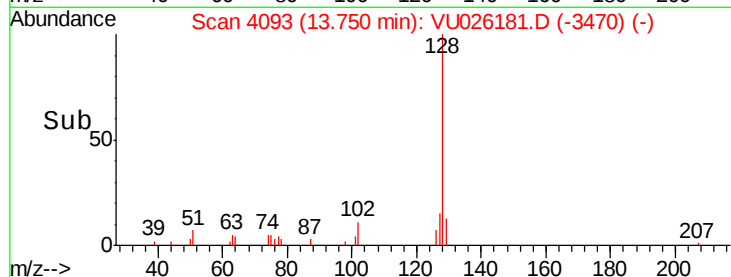
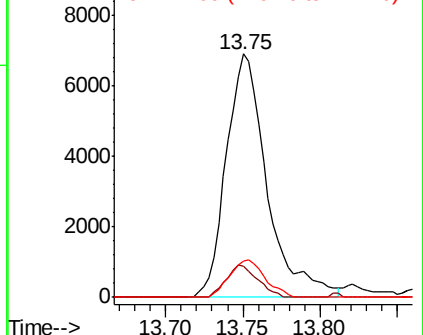
127 13.2 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 0.879 ug/L

RT: 13.99 min Scan# 4168

Delta R.T. -0.00 min

Lab File: VU026181.D

Acq: 17 Aug 2018 16:10

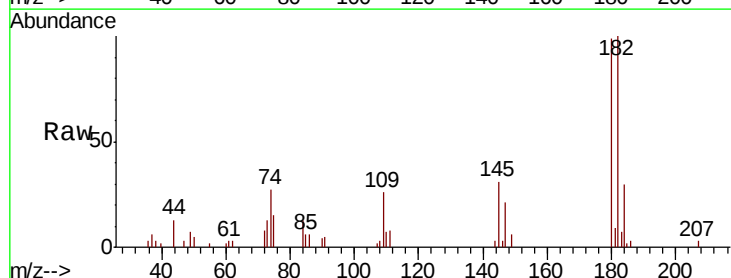
Tgt Ion:180 Resp: 9275

Ion Ratio Lower Upper

180 100

182 95.2 77.8 116.6

145 29.4 24.9 37.3



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

