

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU091618\  
 Data File : VU026769.D  
 Acq On : 15 Sep 2018 10:55  
 Operator : MD/SY  
 Sample : VSTD0.540  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Sep 17 04:16:50 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR091618WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Sep 17 04:13:24 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 125416   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 107925   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 48671    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.40  | 65  | 4578  | 0.30 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.68  | 69  | 3620  | 0.31 | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.28  | 63  | 8570  | 0.33 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 4.23  | 46  | 10492 | 3.62 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.65  | 84  | 7623  | 0.41 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.32  | 65  | 4622  | 0.41 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.34  | 84  | 15569 | 0.43 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.33  | 67  | 4843  | 0.41 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.57  | 98  | 13537 | 0.41 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.86  | 79  | 1767  | 0.41 | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.33  | 63  | 5406  | 2.89 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.44 | 84  | 3791  | 0.41 | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.86 | 152 | 4629  | 0.42 | ug/L | 0.00 |

## Target Compounds

|                                |      |     |       |              | Qvalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 6710  | 0.543 ug/L   | 100    |
| 3) Chloromethane               | 1.33 | 50  | 6573  | 0.426 ug/L   | 98     |
| 5) Vinyl chloride              | 1.40 | 62  | 6709  | 0.431 ug/L   | 97     |
| 6) Bromomethane                | 1.63 | 94  | 2998  | 0.397 ug/L   | 99     |
| 8) Chloroethane                | 1.70 | 64  | 4667  | 0.502 ug/L   | 93     |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 8508  | 0.455 ug/L   | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 4736  | 0.431 ug/L   | 95     |
| 12) 1,1-Dichloroethene         | 2.29 | 96  | 4707  | 0.469 ug/L   | 89     |
| 13) Acetone                    | 2.36 | 43  | 10243 | 4.623 ug/L   | 99     |
| 14) Carbon disulfide           | 2.48 | 76  | 16118 | 0.438 ug/L   | 99     |
| 15) Methyl Acetate             | 2.63 | 43  | 2772  | 0.451 ug/L # | 87     |
| 16) Methylene chloride         | 2.70 | 84  | 7135  | 0.570 ug/L   | 98     |
| 17) Methyl tert-butyl Ether    | 3.01 | 73  | 11093 | 0.442 ug/L   | 96     |
| 18) trans-1,2-Dichloroethene   | 2.98 | 96  | 5272  | 0.477 ug/L   | 95     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 9580  | 0.426 ug/L   | 98     |
| 21) 2-Butanone                 | 4.31 | 43  | 15343 | 5.181 ug/L   | 95     |
| 22) cis-1,2-Dichloroethene     | 4.23 | 96  | 5549  | 0.487 ug/L   | 89     |
| 23) Bromochloromethane         | 4.55 | 128 | 2366  | 0.509 ug/L   | 86     |
| 25) Chloroform                 | 4.68 | 83  | 9067  | 0.414 ug/L   | 96     |
| 27) 1,2-Dichloroethane         | 5.41 | 62  | 5790  | 0.467 ug/L # | 92     |
| 29) 1,1,1-Trichloroethane      | 4.92 | 97  | 7727  | 0.552 ug/L   | 99     |
| 30) Cyclohexane                | 4.99 | 56  | 8912  | 0.612 ug/L   | 97     |
| 31) Carbon tetrachloride       | 5.13 | 117 | 6680  | 0.532 ug/L   | 96     |
| 33) Benzene                    | 5.39 | 78  | 20765 | 0.565 ug/L   | 100    |
| 34) Trichloroethene            | 6.19 | 95  | 5226  | 0.526 ug/L   | 94     |
| 35) Methylcyclohexane          | 6.41 | 83  | 8038  | 0.561 ug/L   | 99     |
| 37) 1,2-Dichloropropane        | 6.44 | 63  | 5296  | 0.524 ug/L # | 89     |
| 38) Bromodichloromethane       | 6.76 | 83  | 6588  | 0.552 ug/L   | 96     |
| 39) cis-1,3-Dichloropropene    | 7.27 | 75  | 6733  | 0.520 ug/L   | 93     |
| 40) 4-Methyl-2-pentanone       | 7.48 | 43  | 28725 | 4.997 ug/L   | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU091618\  
 Data File : VU026769.D  
 Acq On : 15 Sep 2018 10:55  
 Operator : MD/SY  
 Sample : VSTD0.540  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

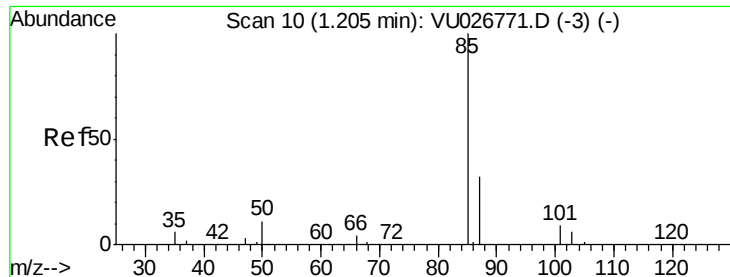
Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Sep 17 04:16:50 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR091618WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Sep 17 04:13:24 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 42) Toluene                    | 7.64  | 91   | 18815    | 0.505 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 5250     | 0.495 | ug/L   | 88       |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 3658     | 0.570 | ug/L   | 97       |
| 47) Tetrachloroethene          | 8.23  | 164  | 4576     | 0.602 | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.38  | 43   | 18890    | 4.472 | ug/L   | 94       |
| 49) Dibromochloromethane       | 8.48  | 129  | 4223     | 0.536 | ug/L   | 98       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 3306     | 0.546 | ug/L # | 99       |
| 51) Chlorobenzene              | 9.12  | 112  | 14300    | 0.586 | ug/L   | 98       |
| 52) Ethylbenzene               | 9.25  | 91   | 16857    | 0.430 | ug/L   | 92       |
| 53) m,p-xylene                 | 9.38  | 106  | 6049     | 0.413 | ug/L   | 95       |
| 54) o-xylene                   | 9.78  | 106  | 5928     | 0.428 | ug/L   | 88       |
| 55) Styrene                    | 9.79  | 104  | 9533     | 0.391 | ug/L   | 97       |
| 56) Isopropylbenzene           | 10.17 | 105  | 15005    | 0.410 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 4455     | 0.531 | ug/L # | 99       |
| 59) 1,2,3-Trichloropropane     | 10.50 | 75   | 2914     | 0.494 | ug/L   | 95       |
| 61) Bromoform                  | 9.96  | 173  | 2497     | 0.623 | ug/L # | 96       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 8830     | 0.550 | ug/L   | 96       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 11255    | 0.658 | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 9770     | 0.611 | ug/L   | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 579      | 0.550 | ug/L   | 97       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 7236     | 0.536 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.51 | 180  | 5905     | 0.545 | ug/L   | 96       |
| 69) Naphthalene                | 13.75 | 128  | 7053     | 0.434 | ug/L # | 92       |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 4970     | 0.493 | ug/L   | 99       |
| -----                          |       |      |          |       |        |          |

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





#2

Dichlorodifluoromethane

Concen: 0.543 ug/L

RT: 1.21 min Scan# 10

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

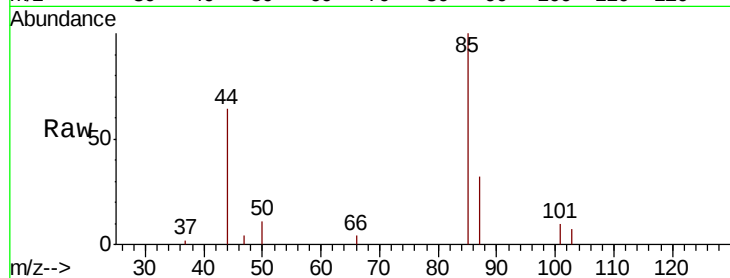
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 85 Resp: 6710

Ion Ratio Lower Upper

85 100

87 31.7 25.4 38.2



Abundance Ion 85.00 (84.70 to 85.70): VU026771.D (-3) (-)

Ion 87.00 (86.70 to 87.70): VU026771.D (-3) (-)

1.21

6000

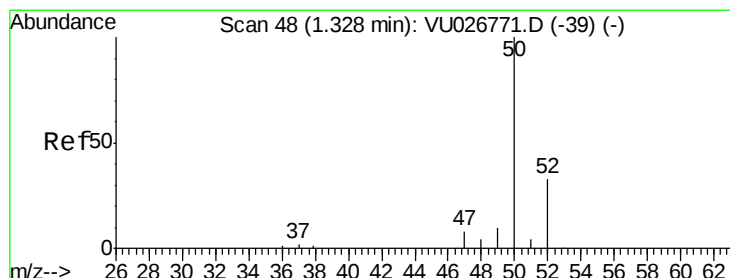
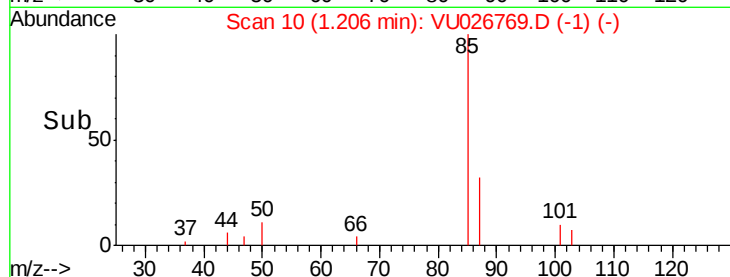
4000

2000

0

1.20 1.21 1.22 1.23 1.24 1.25

Time-->



#3

Chloromethane

Concen: 0.426 ug/L

RT: 1.33 min Scan# 48

Delta R.T. 0.00 min

Lab File: VU026769.D

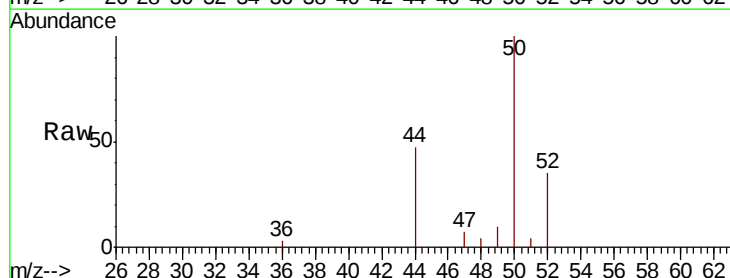
Acq: 15 Sep 2018 10:55

Tgt Ion: 50 Resp: 6573

Ion Ratio Lower Upper

50 100

52 34.6 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VU026771.D (-39) (-)

Ion 52.05 (51.75 to 52.75): VU026771.D (-39) (-)

1.33

6000

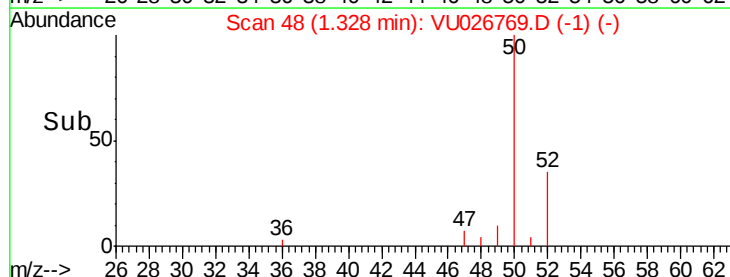
4000

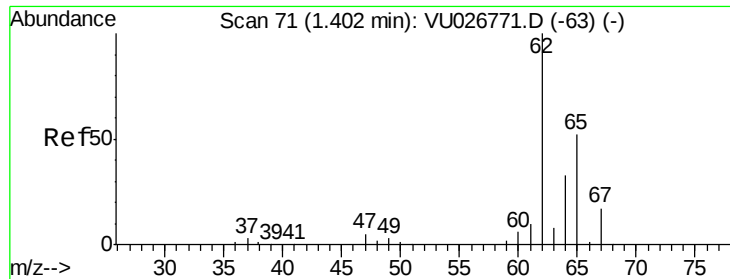
2000

0

1.30 1.31 1.32 1.33 1.34 1.35

Time-->





#5

Vinyl chloride

Concen: 0.431 ug/L

RT: 1.40 min Scan# 71

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

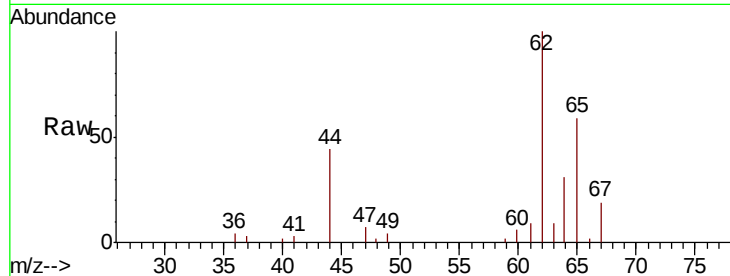
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 62 Resp: 6709

Ion Ratio Lower Upper

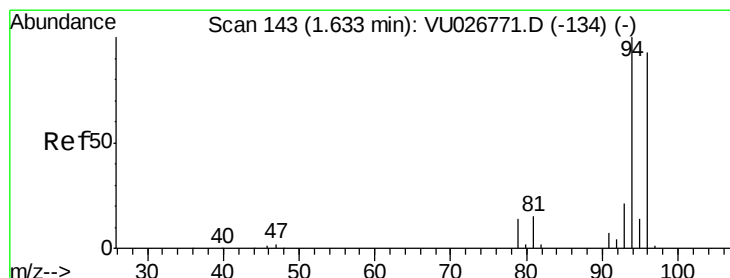
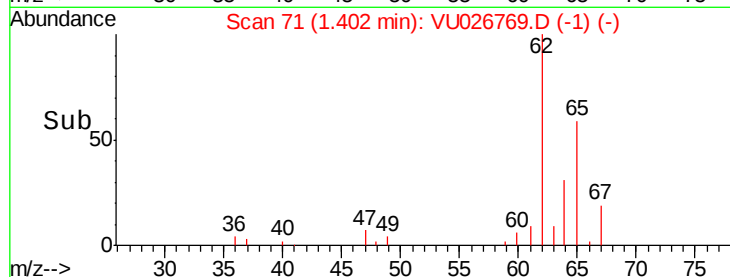
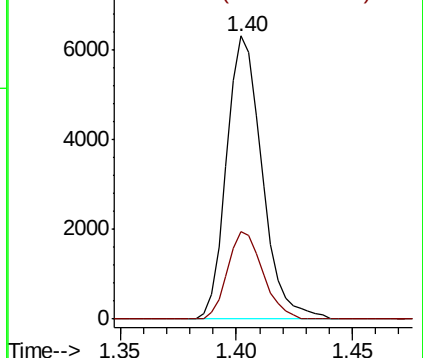
62 100

64 30.8 22.7 42.3



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#6

Bromomethane

Concen: 0.397 ug/L

RT: 1.63 min Scan# 143

Delta R.T. 0.00 min

Lab File: VU026769.D

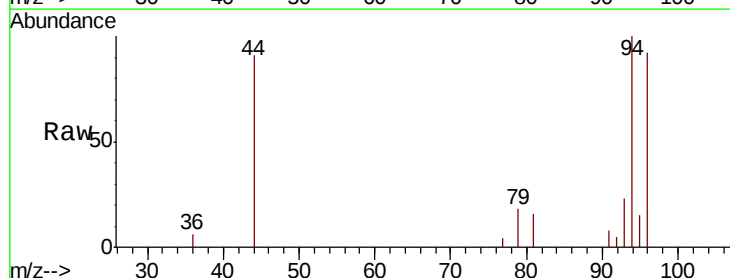
Acq: 15 Sep 2018 10:55

Tgt Ion: 94 Resp: 2998

Ion Ratio Lower Upper

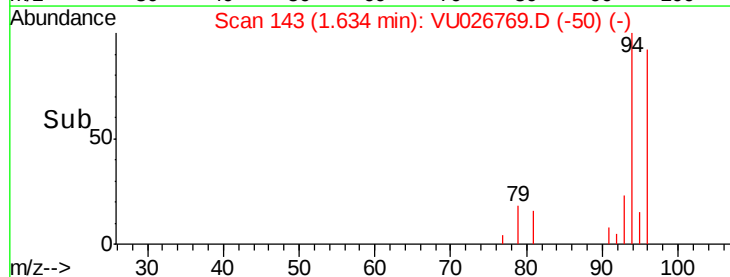
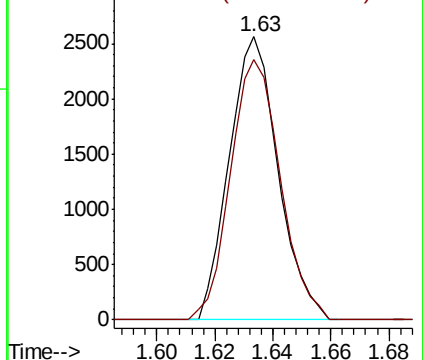
94 100

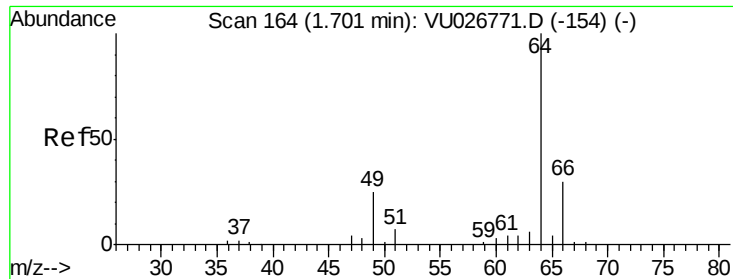
96 92.0 64.8 120.4



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

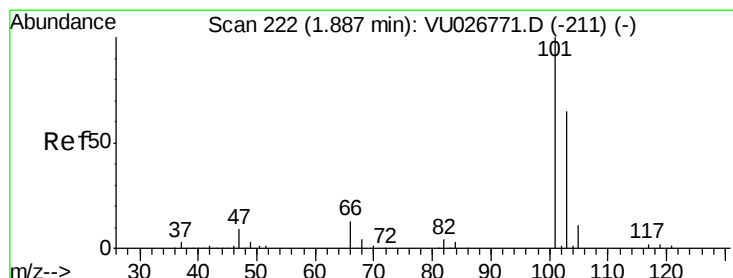
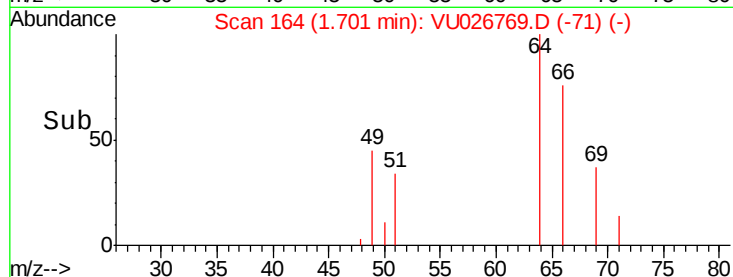
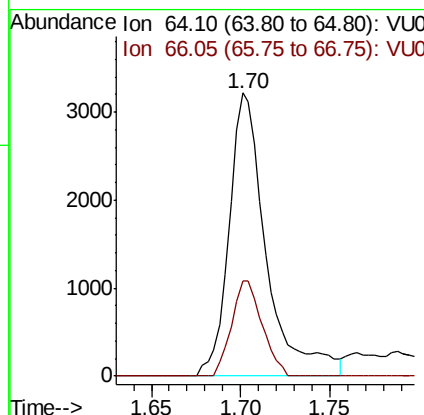
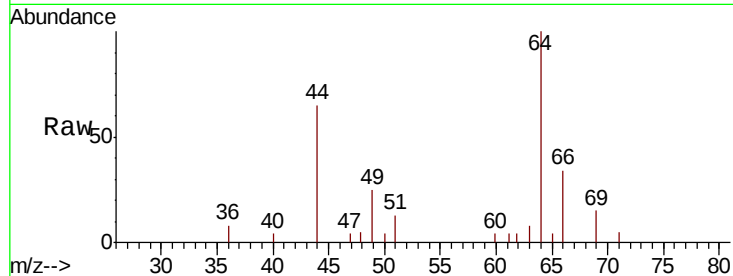




#8  
 Chloroethane  
 Concen: 0.502 ug/L  
 RT: 1.70 min Scan# 164  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

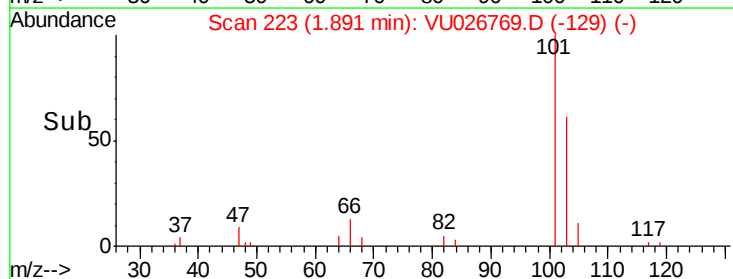
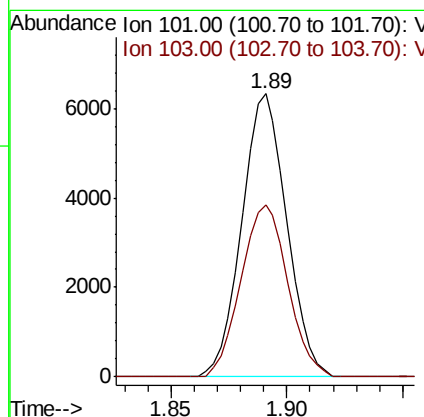
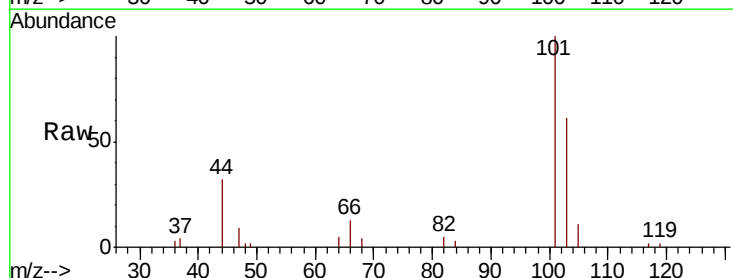
Instrument :  
 MSVOA\_U  
 ClientSampleId :

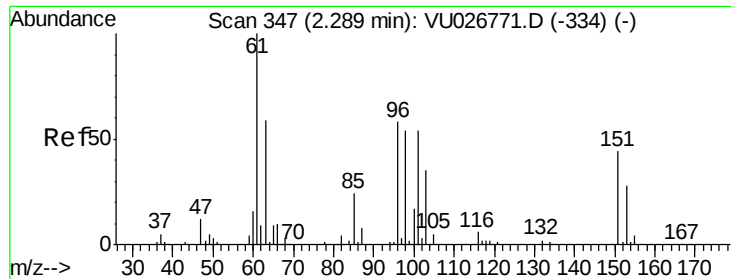
Tot Ion: 64 Resp: 4667  
 Ion Ratio Lower Upper  
 64 100  
 66 33.6 20.9 38.9



#9  
 Trichlorofluoromethane  
 Concen: 0.455 ug/L  
 RT: 1.89 min Scan# 223  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion:101 Resp: 8508  
 Ion Ratio Lower Upper  
 101 100  
 103 63.4 51.2 76.8





#10

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

Concen: 0.431 ug/L

RT: 2.29 min Scan# 348

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

ClientSampleId :

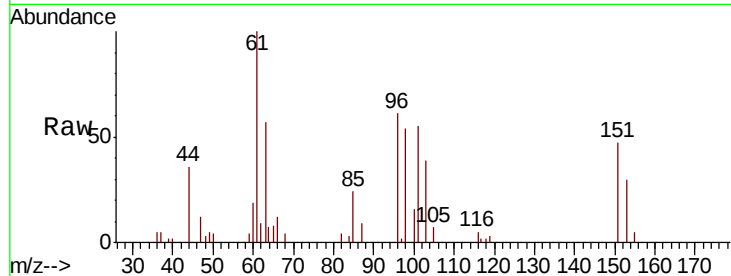
Tot Ion:101 Resp: 4736

Ion Ratio Lower Upper

101 100

85 43.7 35.1 52.7

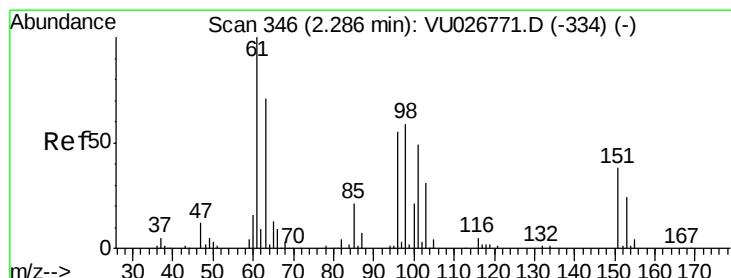
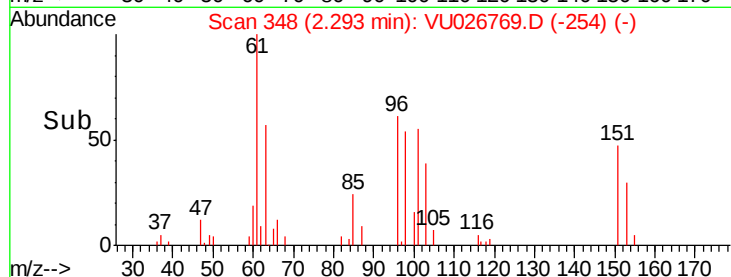
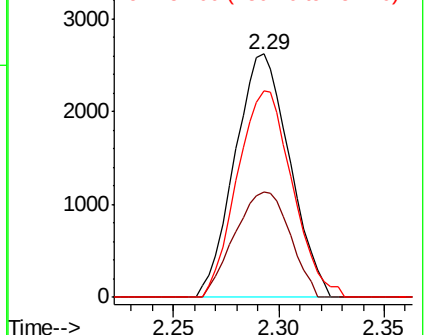
151 85.1 63.3 94.9



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: 0.469 ug/L

RT: 2.29 min Scan# 347

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

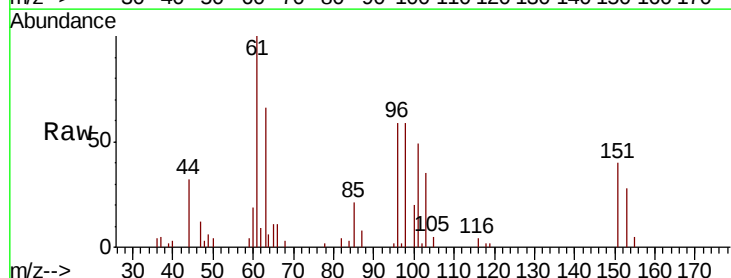
Tgt Ion: 96 Resp: 4707

Ion Ratio Lower Upper

96 100

61 169.2 126.6 235.2

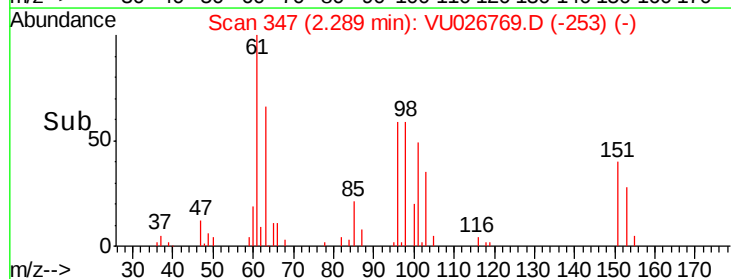
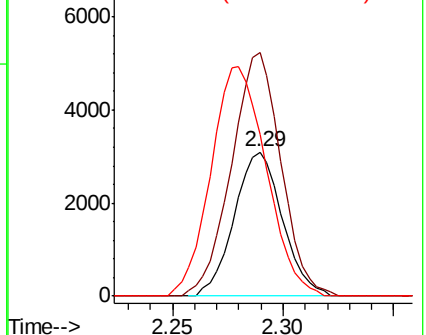
63 112.4 91.3 169.5

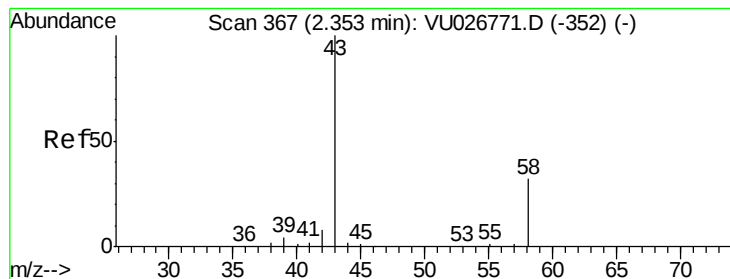


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 4.623 ug/L

RT: 2.36 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

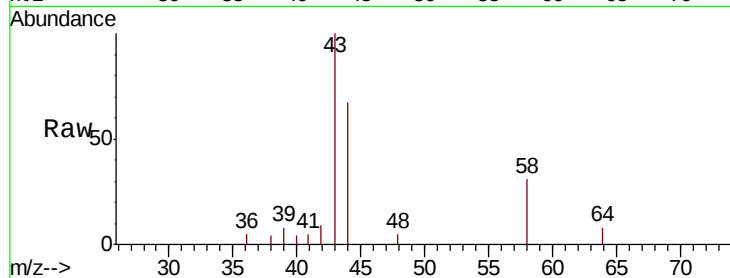
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 43 Resp: 10243

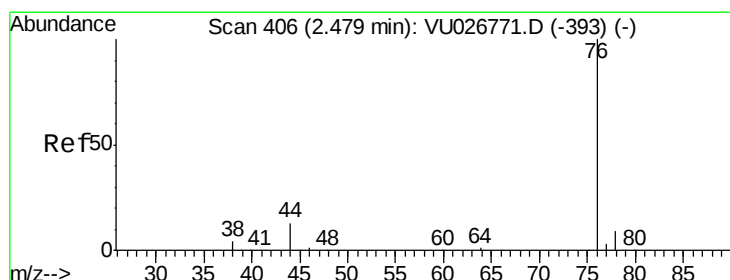
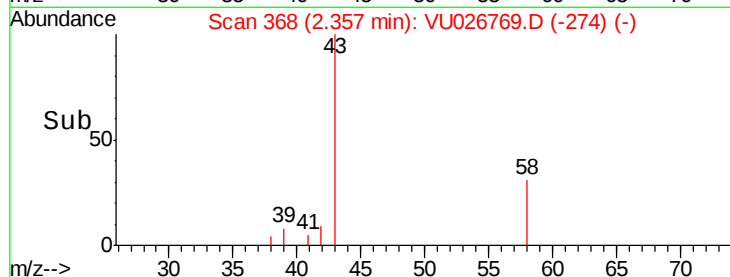
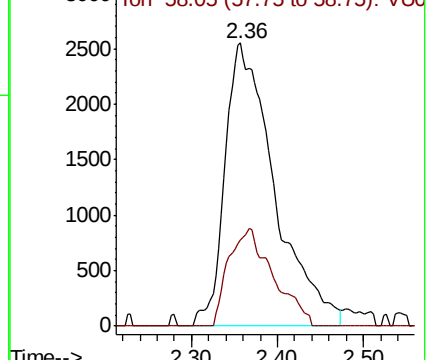
Ion Ratio Lower Upper

43 100

58 30.9 0.0 63.0



Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0



#14

Carbon disulfide

Concen: 0.438 ug/L

RT: 2.48 min Scan# 407

Delta R.T. 0.00 min

Lab File: VU026769.D

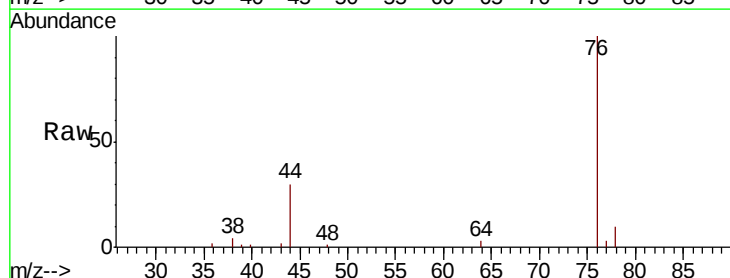
Acq: 15 Sep 2018 10:55

Tgt Ion: 76 Resp: 16118

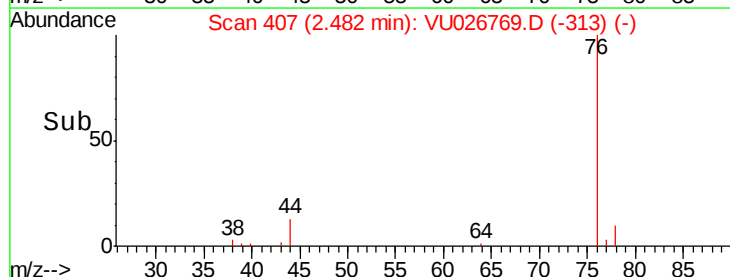
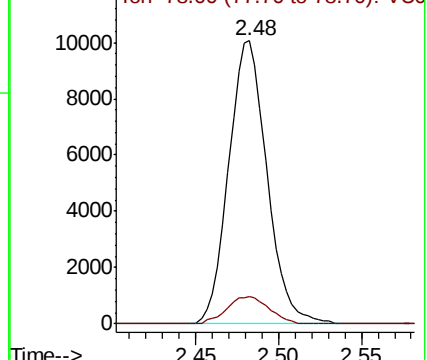
Ion Ratio Lower Upper

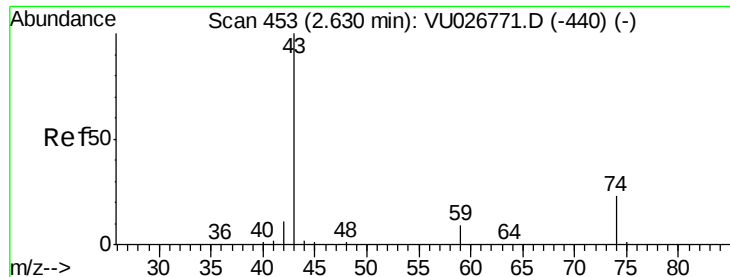
76 100

78 9.5 7.4 11.2



Abundance Ion 76.05 (75.75 to 76.75): VU0  
Ion 78.00 (77.70 to 78.70): VU0





#15

Methvl Acetate

Concen: 0.451 ug/L

RT: 2.63 min Scan# 453

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

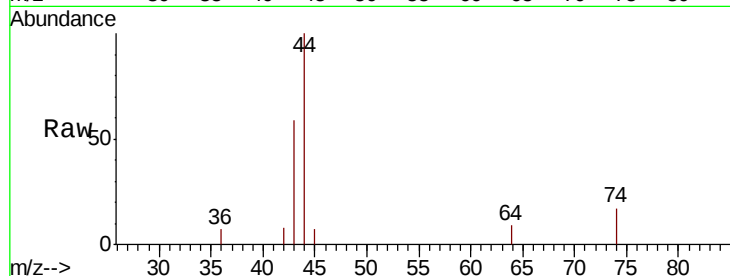
ClientSampled :

Tot Ion: 43 Resp: 2772

Ion Ratio Lower Upper

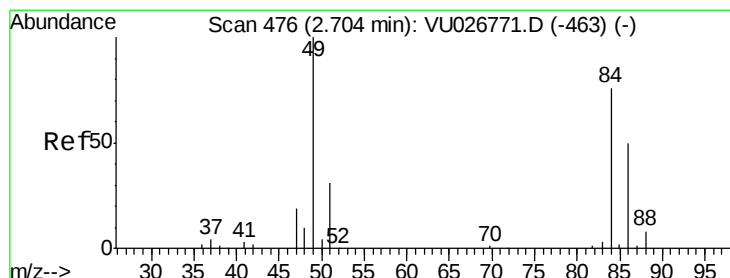
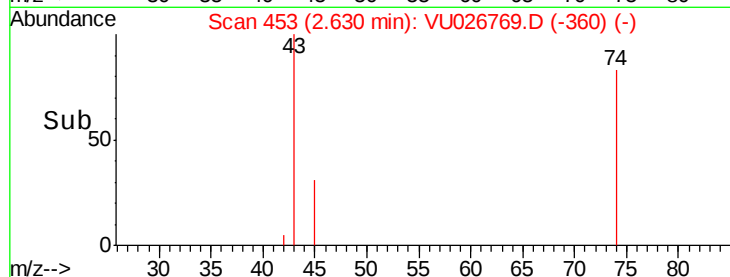
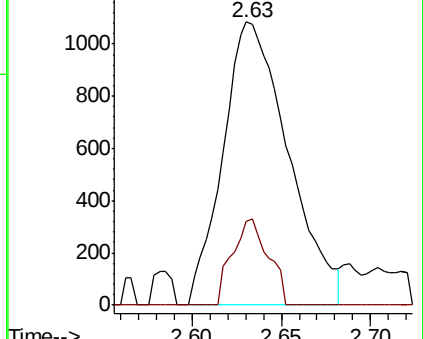
43 100

74 16.7 18.5 27.7#



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 74.05 (73.75 to 74.75): VU0



#16

Methylene chloride

Concen: 0.570 ug/L

RT: 2.70 min Scan# 476

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

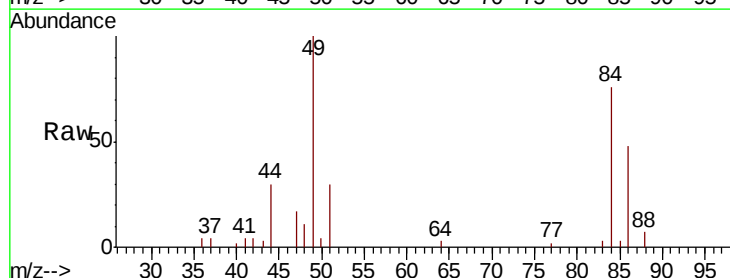
Tgt Ion: 84 Resp: 7135

Ion Ratio Lower Upper

84 100

86 63.0 46.1 85.5

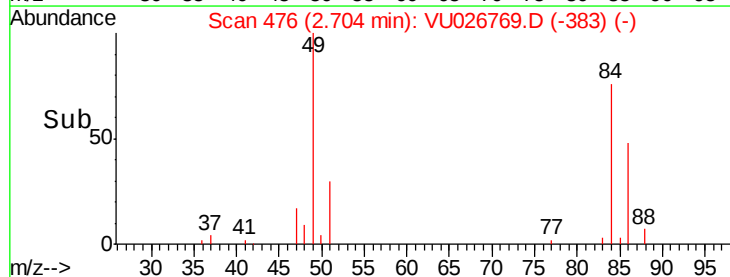
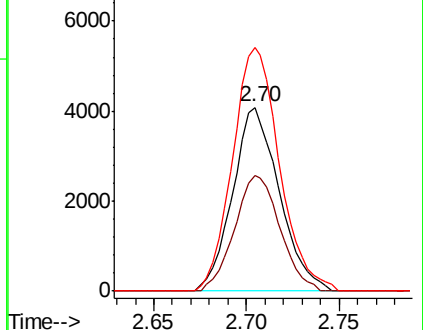
49 132.4 92.1 171.1

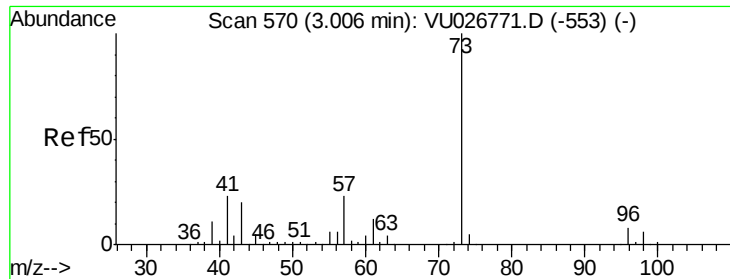


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0

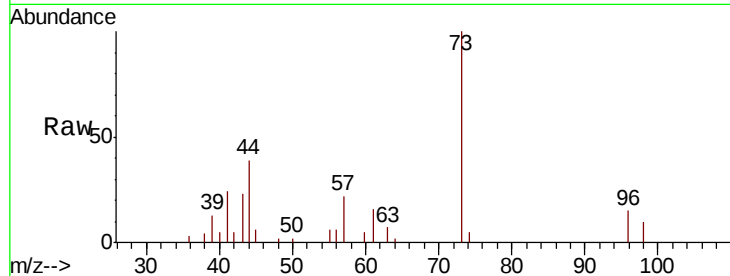




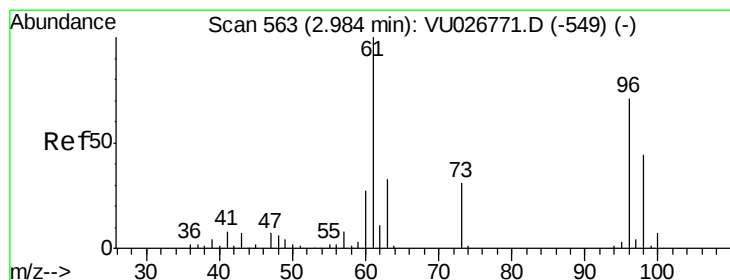
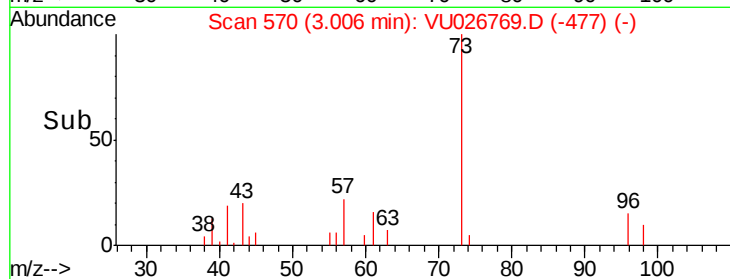
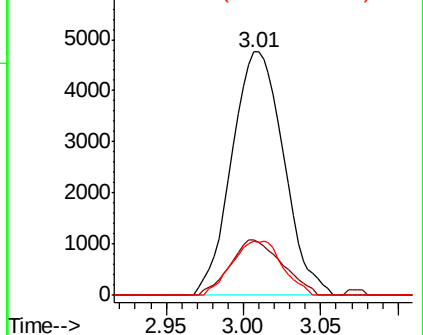
#17  
Methvl tert-butvl Ether  
Concen: 0.442 ug/L  
RT: 3.01 min Scan# 570  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 73 Resp: 11093  
Ion Ratio Lower Upper  
73 100  
43 22.8 16.0 24.0  
57 21.7 18.2 27.4

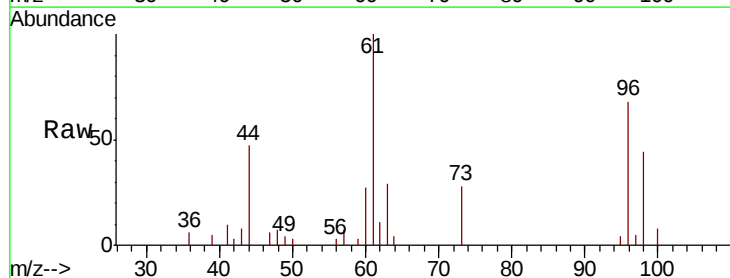


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

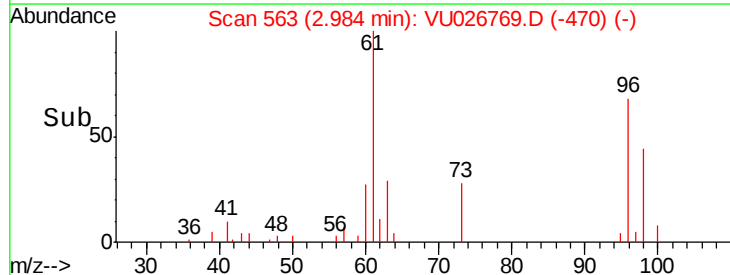
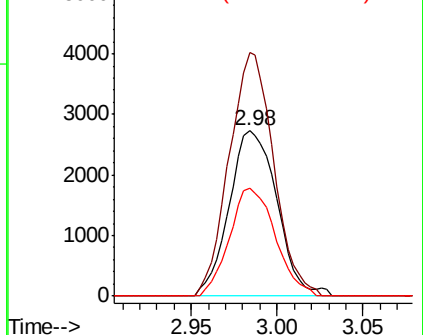


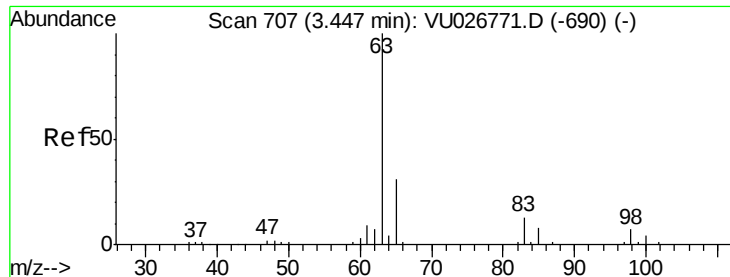
#18  
trans-1,2-Dichloroethene  
Concen: 0.477 ug/L  
RT: 2.98 min Scan# 563  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Tgt Ion: 96 Resp: 5272  
Ion Ratio Lower Upper  
96 100  
61 147.3 99.0 183.8  
98 65.1 43.1 80.1



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

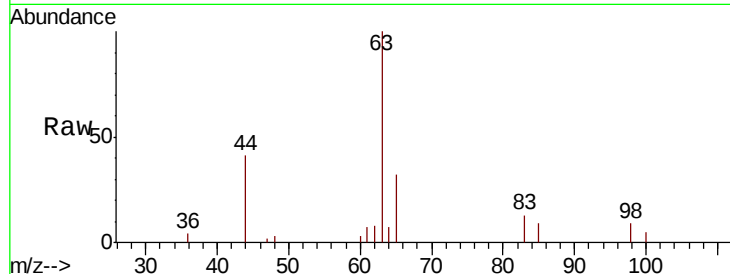




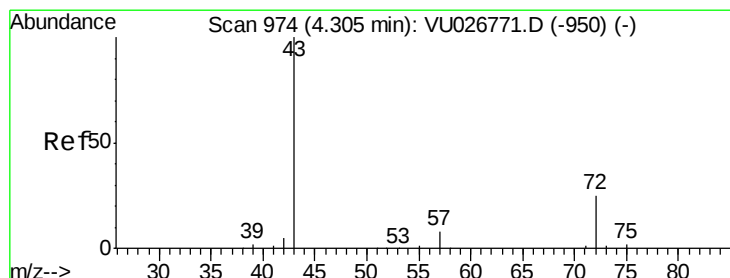
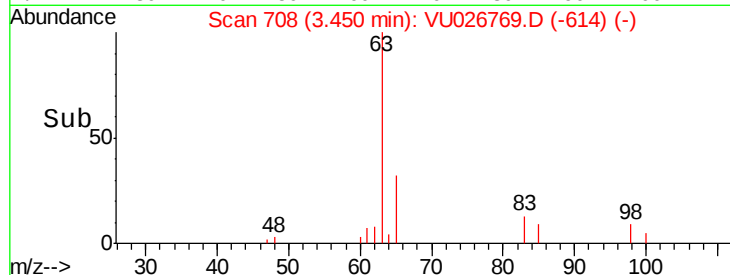
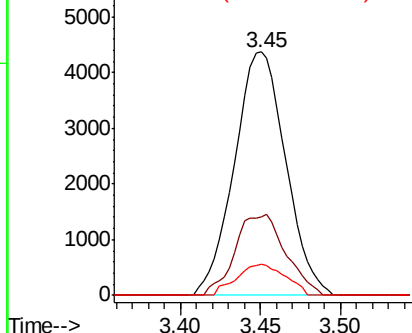
#19  
 1,1-Dichloroethane  
 Concen: 0.426 ug/L  
 RT: 3.45 min Scan# 708  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tot Ion: 63 Resp: 9580  
 Ion Ratio Lower Upper  
 63 100  
 65 32.5 21.7 40.3  
 83 12.7 9.0 16.6

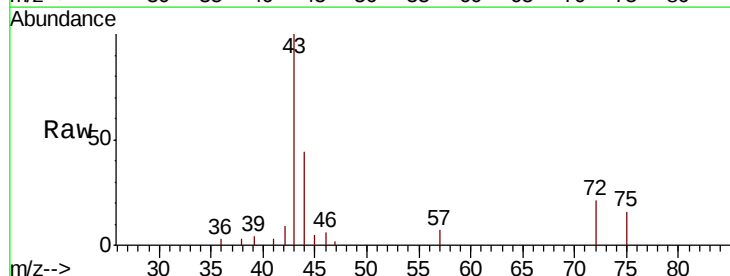


Abundance Ion 63.10 (62.80 to 63.80): VU0  
 Ion 65.10 (64.80 to 65.80): VU0  
 Ion 83.05 (82.75 to 83.75): VU0

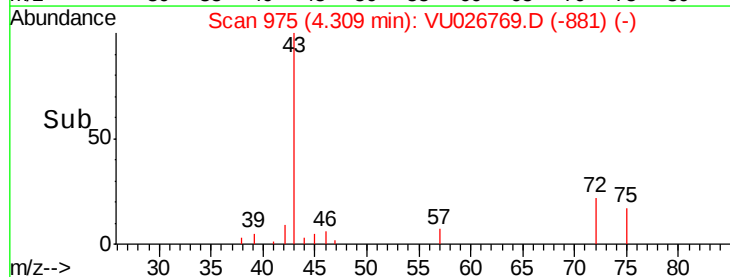
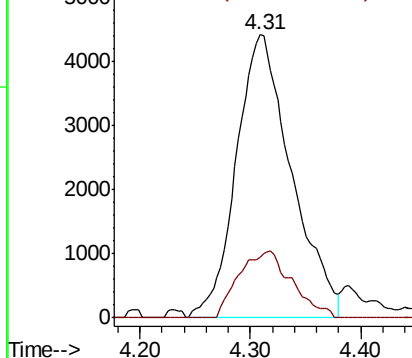


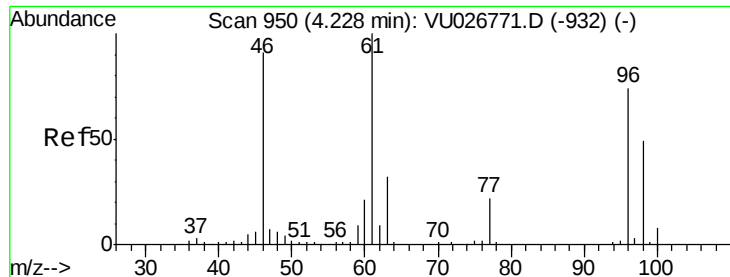
#21  
 2-Butanone  
 Concen: 5.181 ug/L  
 RT: 4.31 min Scan# 975  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion: 43 Resp: 15343  
 Ion Ratio Lower Upper  
 43 100  
 72 22.8 12.6 37.8



Abundance Ion 43.05 (42.75 to 43.75): VU0  
 Ion 72.10 (71.80 to 72.80): VU0



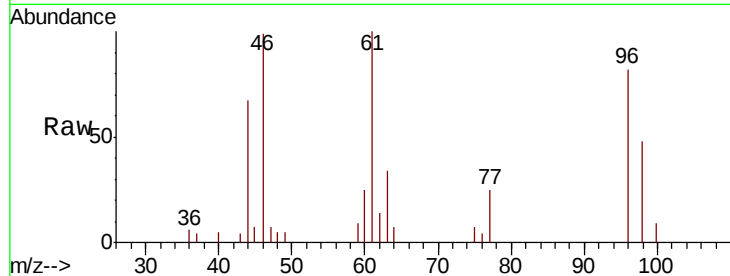


#22

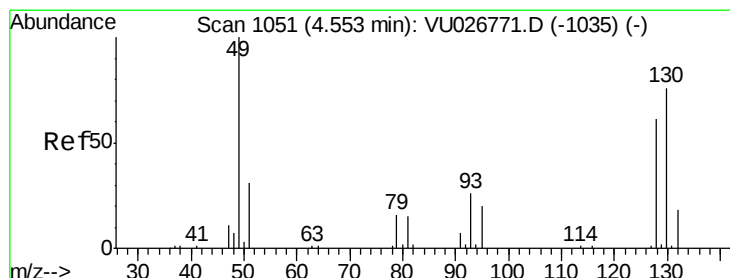
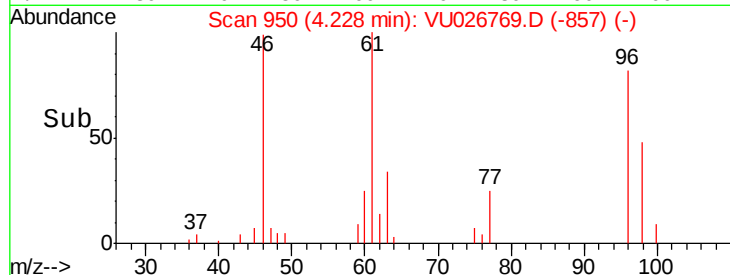
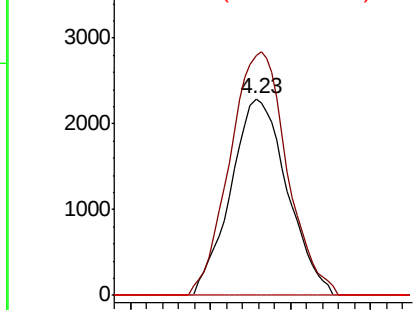
cis-1,2-Dichloroethene  
Concen: 0.487 ug/L  
RT: 4.23 min Scan# 950  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 96 Resp: 5549  
Ion Ratio Lower Upper  
96 100  
61 122.0 94.4 175.2  
68 0.0 0.0 0.0



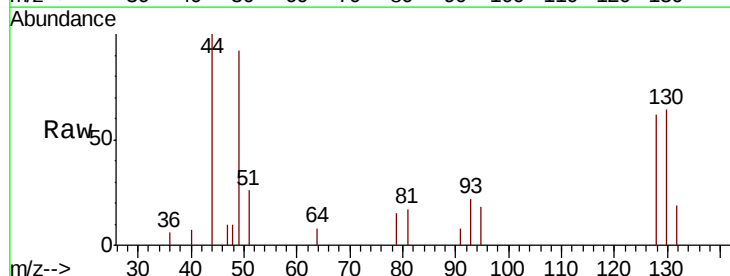
Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 68.15 (67.85 to 68.85): VU0



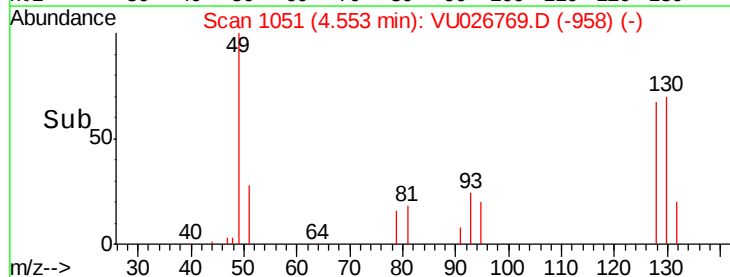
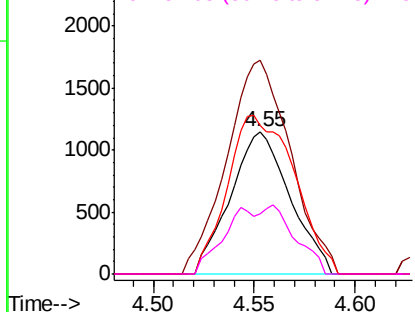
#23

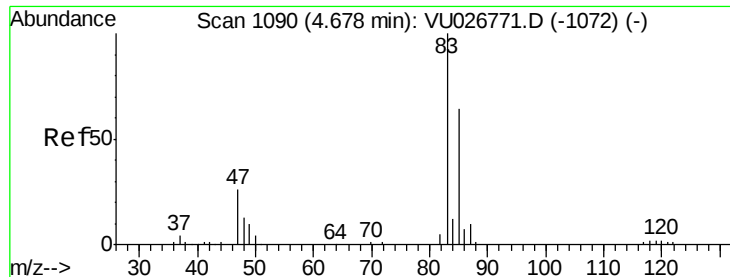
Bromochloromethane  
Concen: 0.509 ug/L  
RT: 4.55 min Scan# 1051  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Tgt Ion: 128 Resp: 2366  
Ion Ratio Lower Upper  
128 100  
49 149.9 115.0 213.6  
130 104.5 87.2 161.9  
51 42.1 40.6 61.0



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

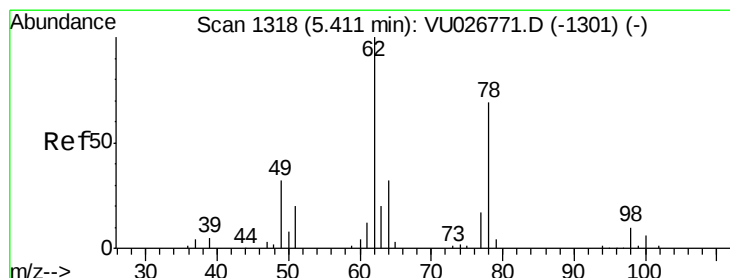
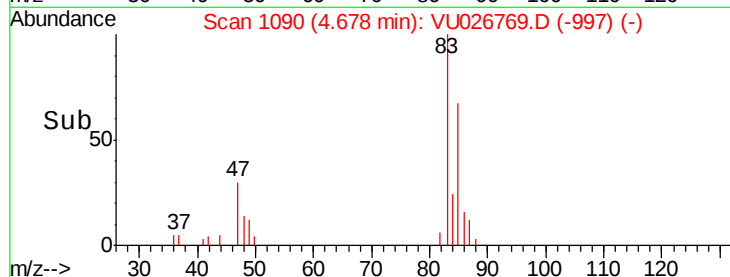
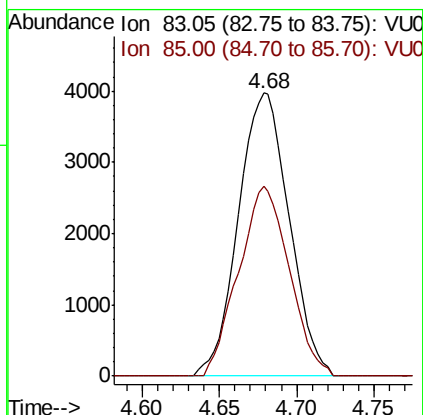
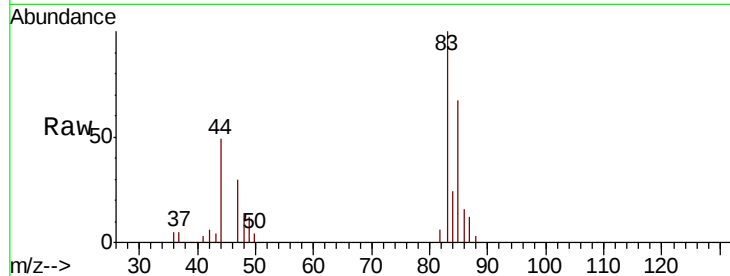




#25  
Chloroform  
Concen: 0.414 ug/L  
RT: 4.68 min Scan# 1090  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

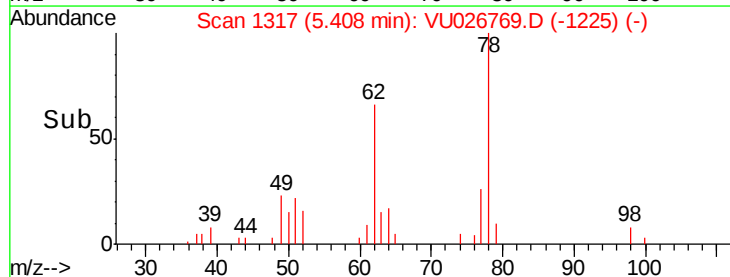
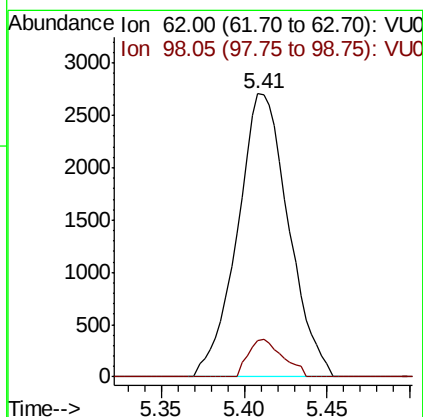
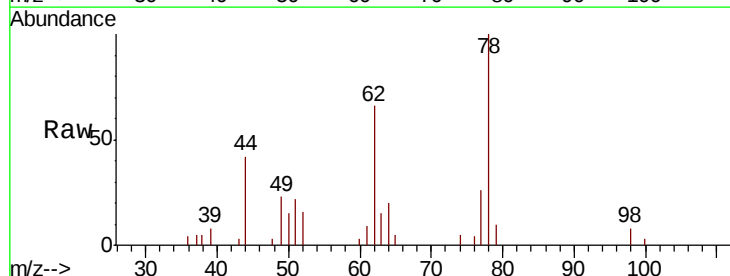
Instrument :  
MSVOA\_U  
ClientSampled :

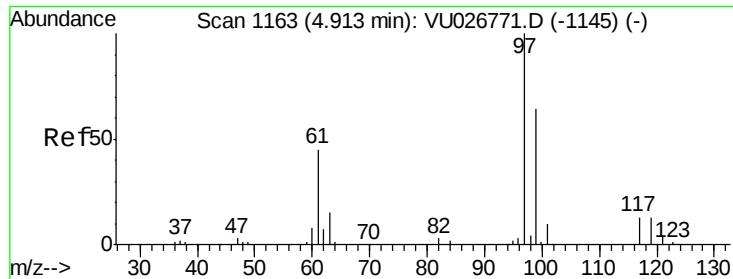
Tot Ion: 83 Resp: 9067  
Ion Ratio Lower Upper  
83 100  
85 66.9 44.8 83.2



#27  
1,2-Dichloroethane  
Concen: 0.467 ug/L  
RT: 5.41 min Scan# 1317  
Delta R.T. -0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Tgt Ion: 62 Resp: 5790  
Ion Ratio Lower Upper  
62 100  
98 12.8 7.8 11.8#

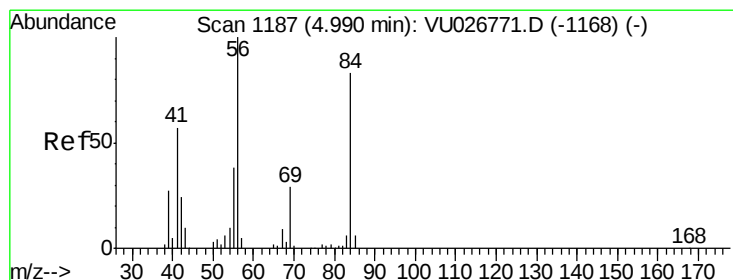
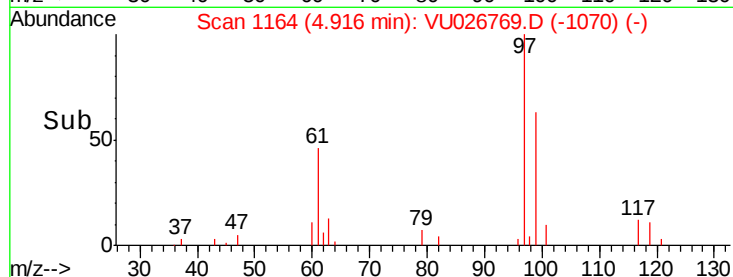
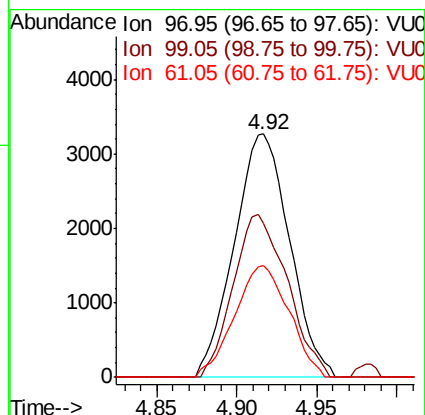
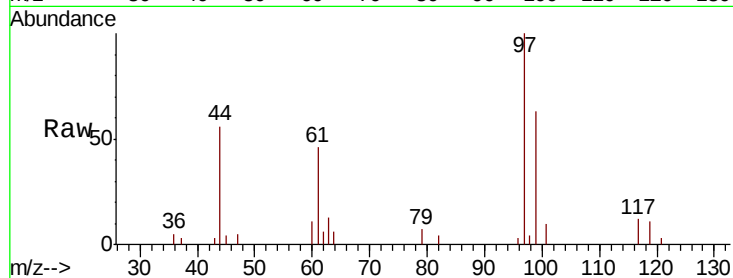




#29  
 1,1,1-Trichloroethane  
 Concen: 0.552 ug/L  
 RT: 4.92 min Scan# 1164  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

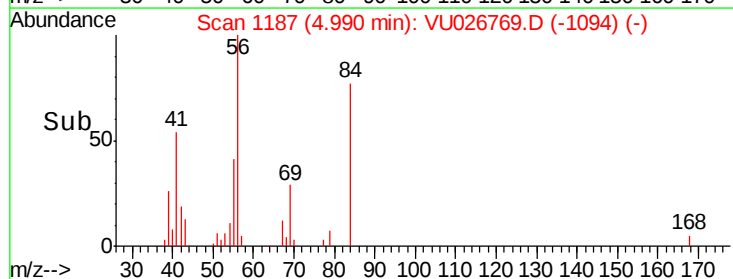
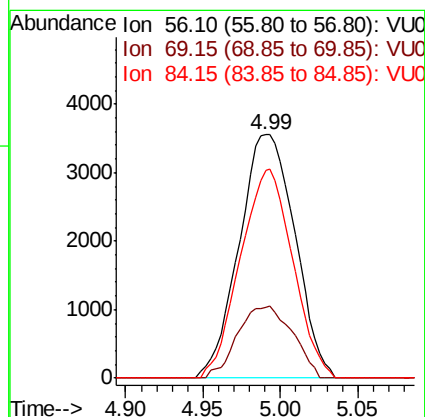
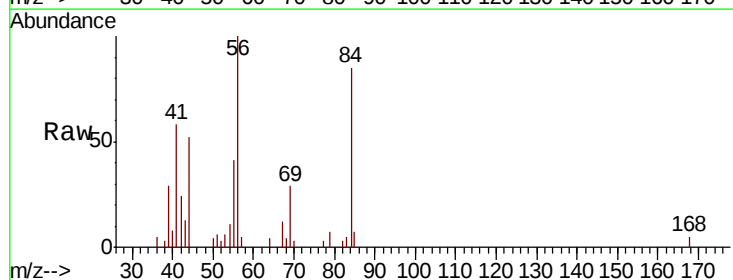
Instrument :  
 MSVOA\_U  
 ClientSampleId :

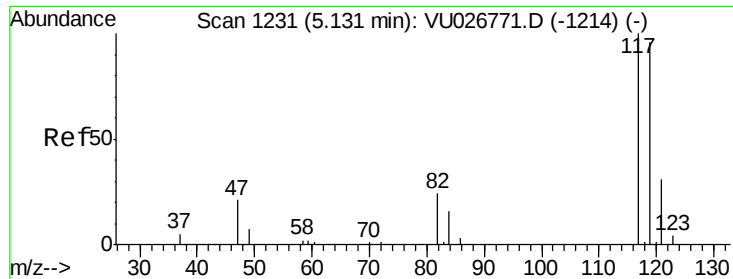
Tot Ion: 97 Resp: 7727  
 Ion Ratio Lower Upper  
 97 100  
 99 65.4 51.5 77.3  
 61 45.2 36.6 54.8



#30  
 Cyclohexane  
 Concen: 0.612 ug/L  
 RT: 4.99 min Scan# 1187  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion: 56 Resp: 8912  
 Ion Ratio Lower Upper  
 56 100  
 69 29.0 23.9 35.9  
 84 80.6 66.6 100.0





#31

Carbon tetrachloride

Concen: 0.532 ug/L

RT: 5.13 min Scan# 1231

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

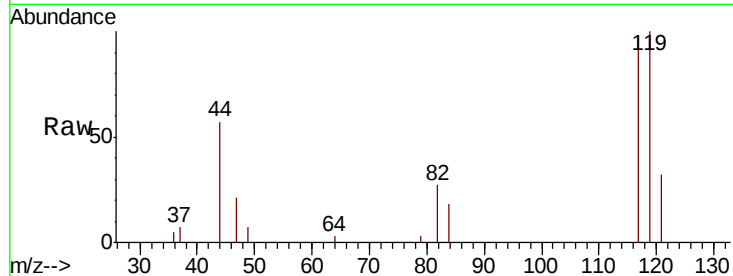
ClientSampleId :

Tot Ion:117 Resp: 6680

Ion Ratio Lower Upper

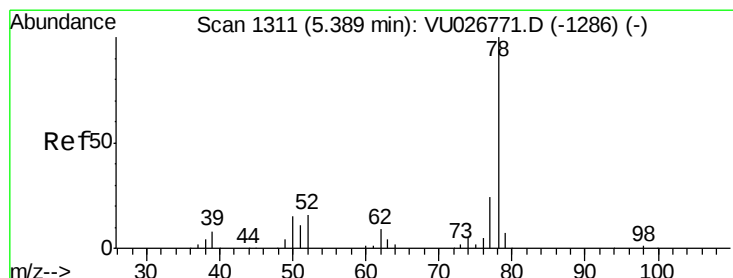
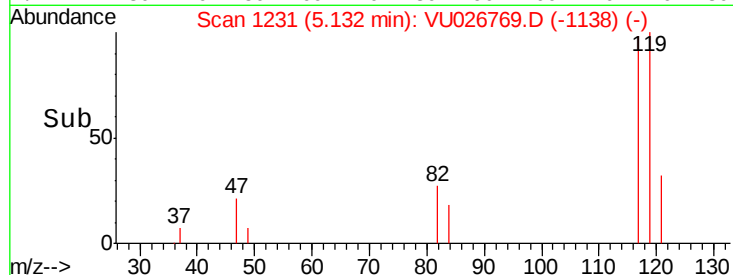
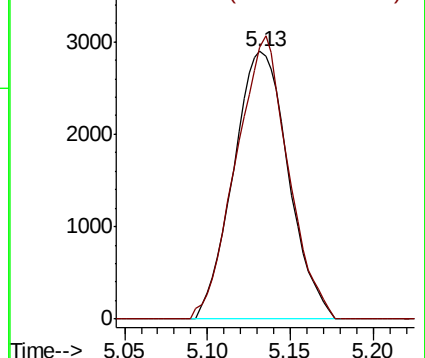
117 100

119 100.3 76.9 115.3



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 0.565 ug/L

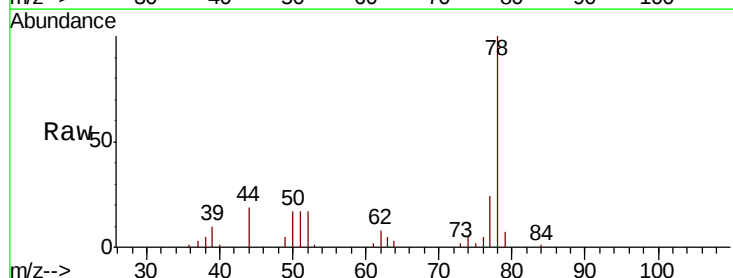
RT: 5.39 min Scan# 1311

Delta R.T. 0.00 min

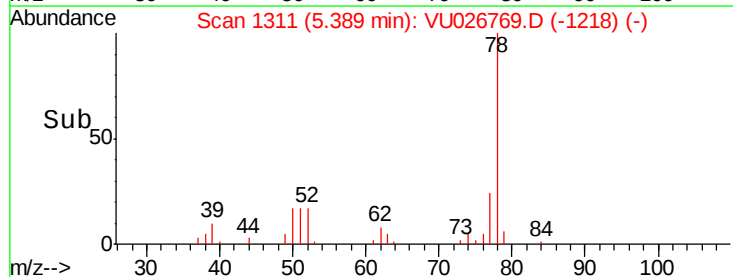
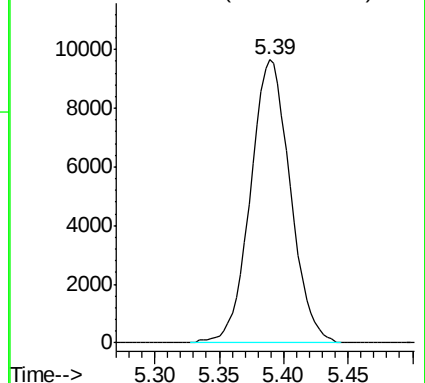
Lab File: VU026769.D

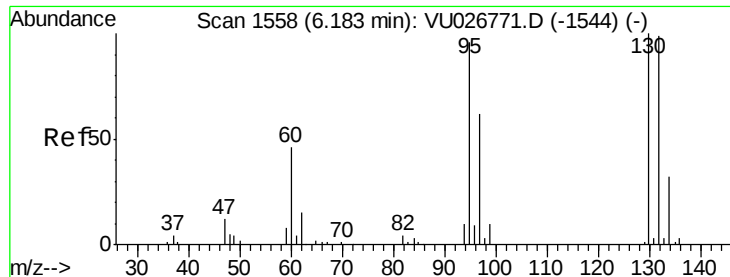
Acq: 15 Sep 2018 10:55

Tgt Ion: 78 Resp: 20765



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 0.526 ug/L

RT: 6.19 min Scan# 1559

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

ClientSampleId :

Tot Ion: 95 Resp: 5226

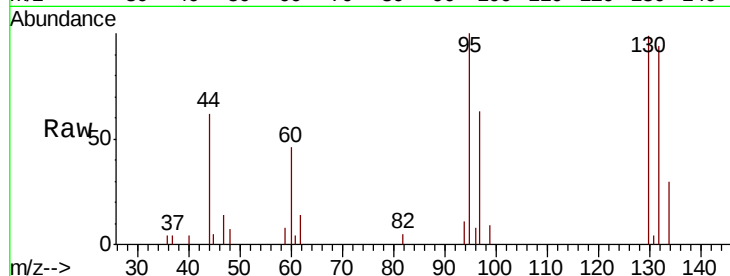
Ion Ratio Lower Upper

95 100

97 62.6 45.1 83.9

132 94.1 72.0 133.8

130 98.5 73.1 135.7

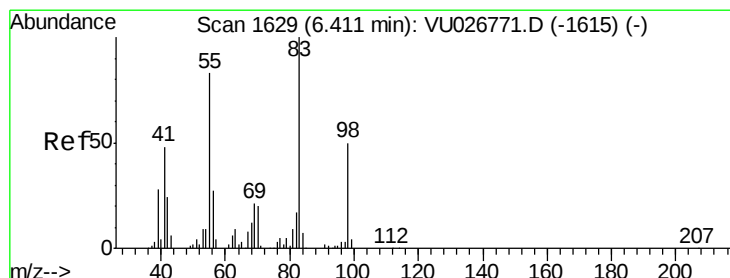
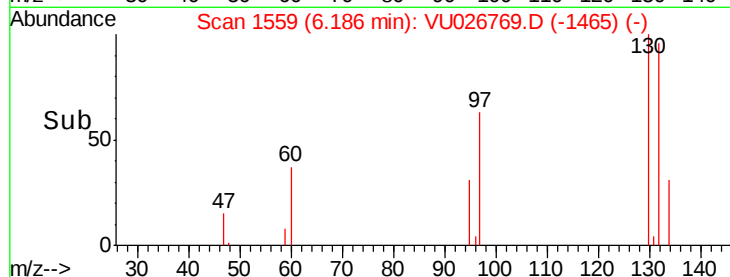
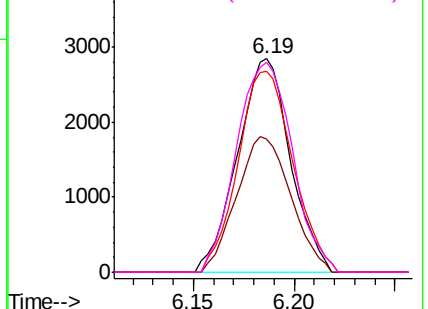


Abundance Ion 95.00 (94.70 to 95.70): VU026771.D (-1544) (-)

Ion 96.95 (96.65 to 97.65): VU026771.D (-1544) (-)

Ion 131.95 (131.65 to 132.65): VU026771.D (-1544) (-)

Ion 129.95 (129.65 to 130.65): VU026771.D (-1544) (-)



#35

Methylcyclohexane

Concen: 0.561 ug/L

RT: 6.41 min Scan# 1629

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

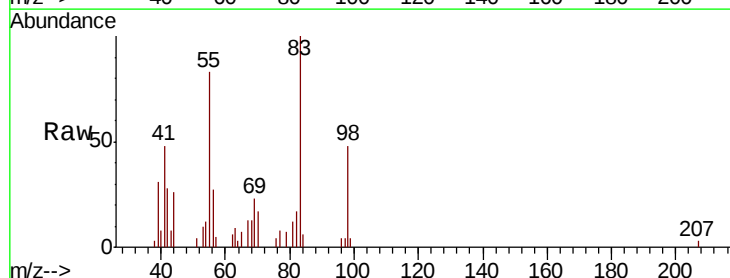
Tgt Ion: 83 Resp: 8038

Ion Ratio Lower Upper

83 100

55 81.6 64.9 97.3

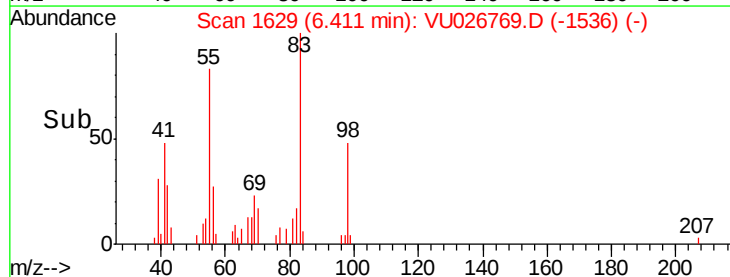
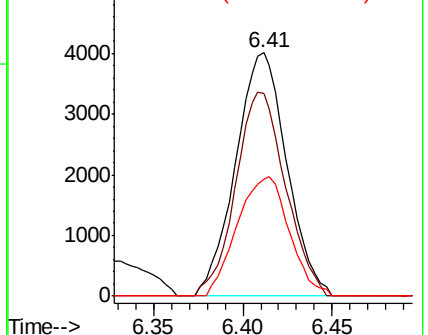
98 49.8 39.3 58.9

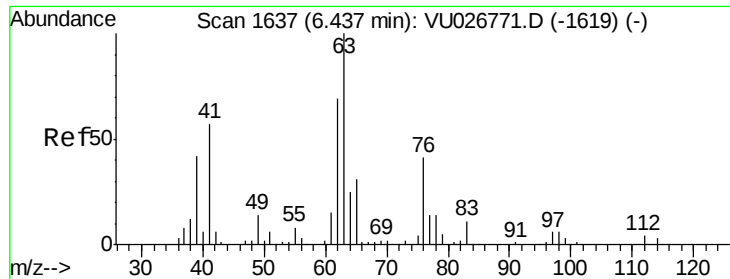


Abundance Ion 83.15 (82.85 to 83.85): VU026771.D (-1615) (-)

Ion 55.10 (54.80 to 55.80): VU026771.D (-1615) (-)

Ion 98.15 (97.85 to 98.85): VU026771.D (-1615) (-)

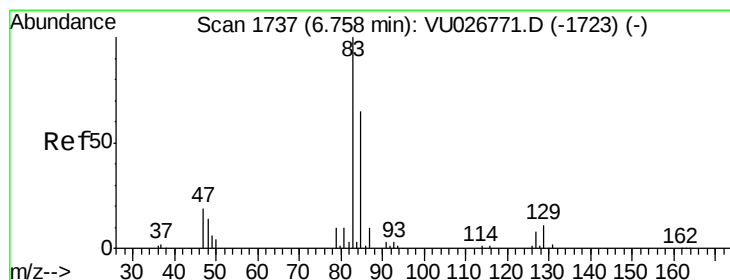
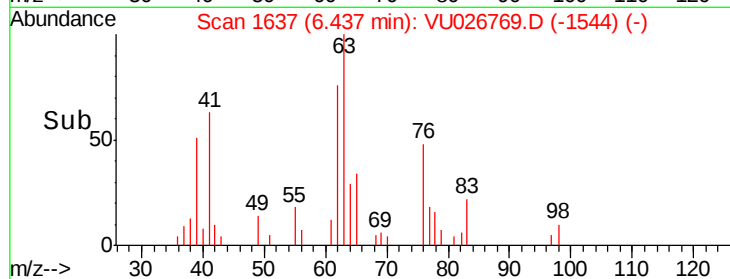
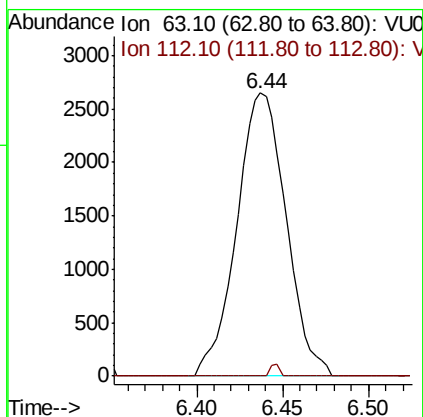
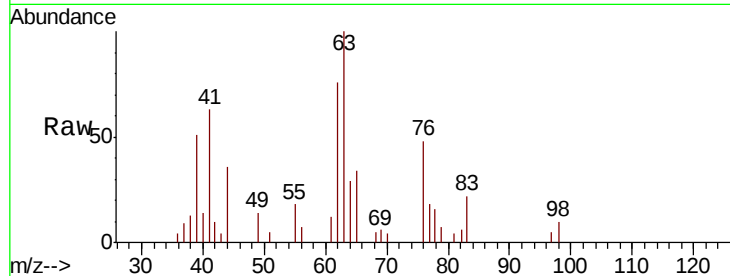




#37  
 1,2-Dichloropropane  
 Concen: 0.524 ug/L  
 RT: 6.44 min Scan# 1637  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

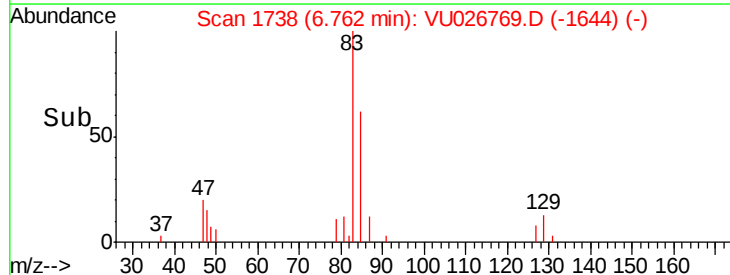
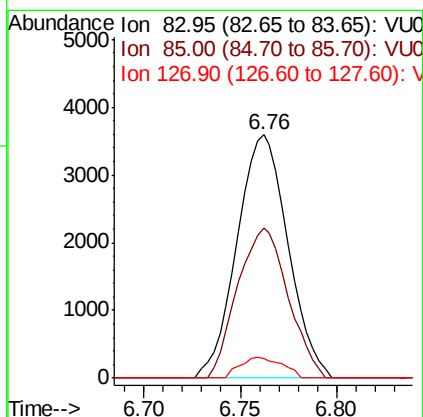
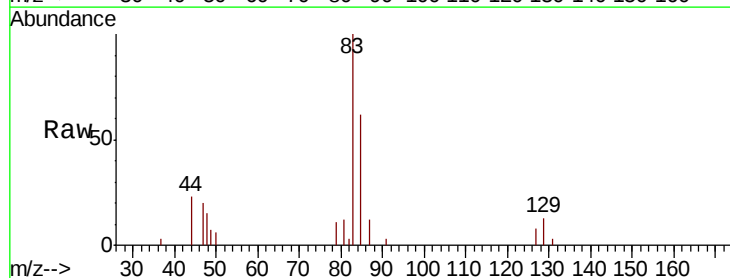
Instrument :  
 MSVOA\_U  
 ClientSampleId :

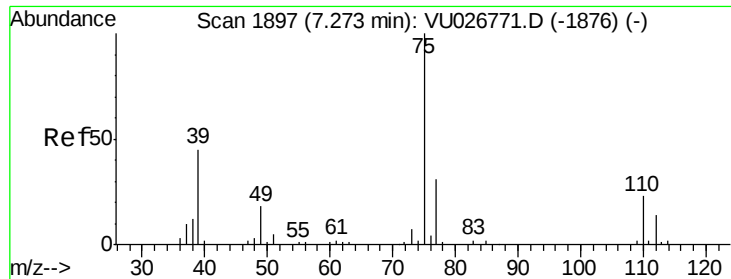
Tot Ion: 63 Resp: 5296  
 Ion Ratio Lower Upper  
 63 100  
 112 0.8 3.4 5.2#



#38  
 Bromodichloromethane  
 Concen: 0.552 ug/L  
 RT: 6.76 min Scan# 1738  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion: 83 Resp: 6588  
 Ion Ratio Lower Upper  
 83 100  
 85 61.8 45.8 85.0  
 127 8.1 6.6 10.0

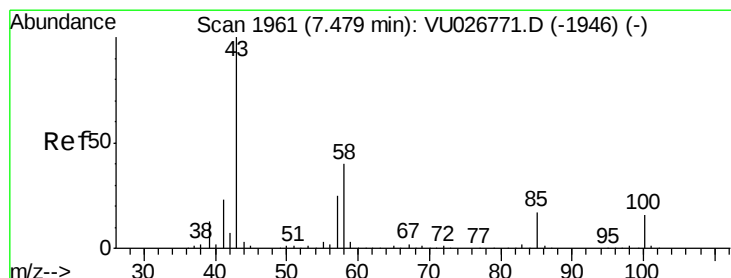
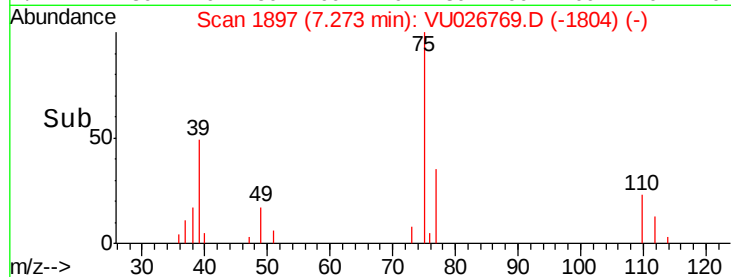
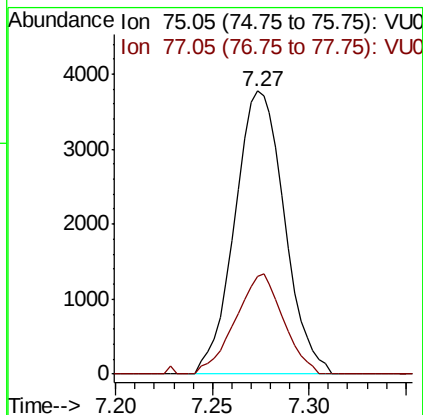
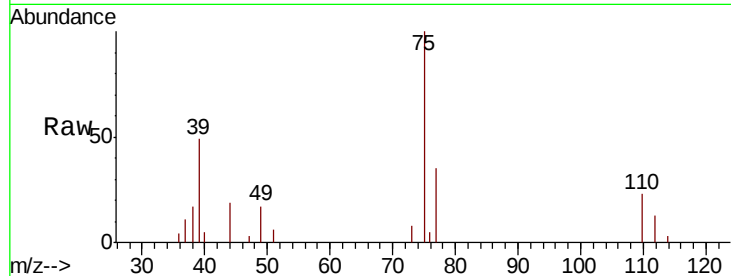




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.520 ug/L  
 RT: 7.27 min Scan# 1897  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

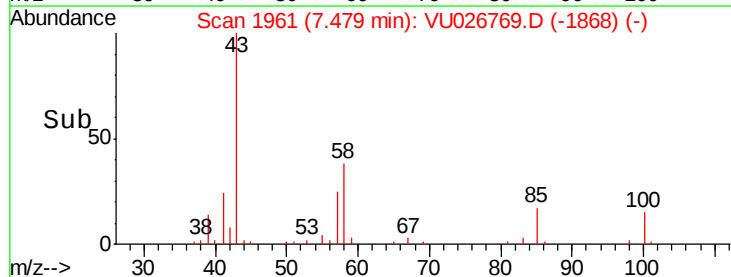
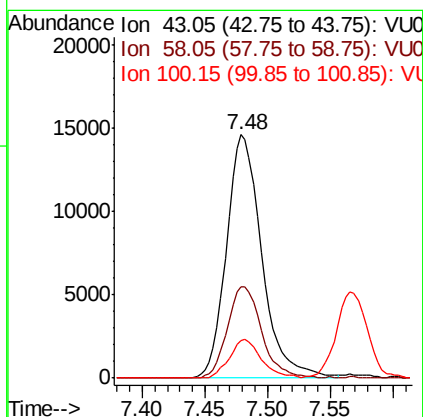
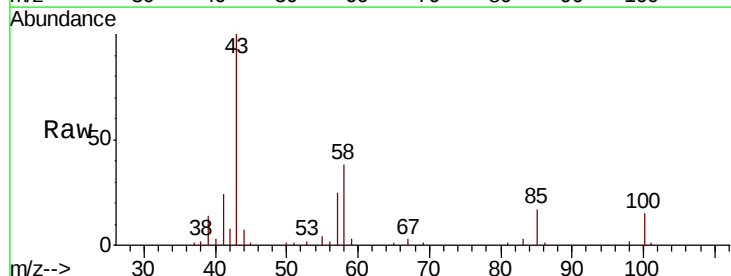
Instrument :  
 MSVOA\_U  
 ClientSampleId :

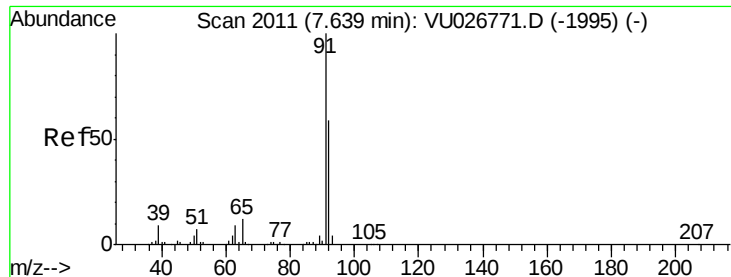
Tot Ion: 75 Resp: 6733  
 Ion Ratio Lower Upper  
 75 100  
 77 34.7 21.7 40.3



#40  
 4-Methyl-2-pentanone  
 Concen: 4.997 ug/L  
 RT: 7.48 min Scan# 1961  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion: 43 Resp: 28725  
 Ion Ratio Lower Upper  
 43 100  
 58 36.5 30.9 46.3  
 100 14.2 12.3 18.5





#42

Toluene

Concen: 0.505 ug/L

RT: 7.64 min Scan# 2011

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

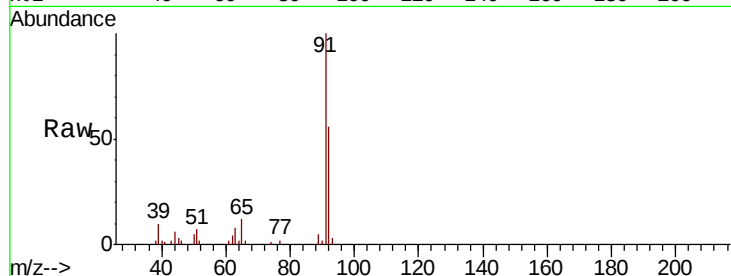
ClientSampleId :

Tot Ion: 91 Resp: 18815

Ion Ratio Lower Upper

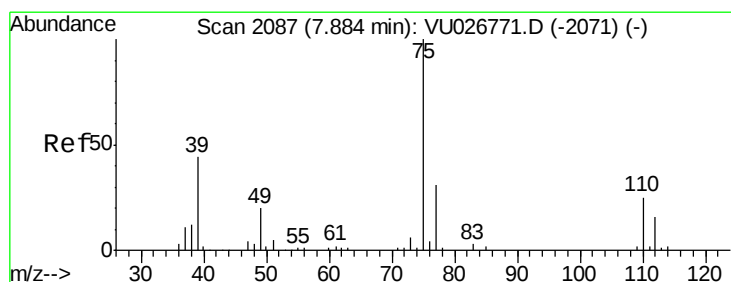
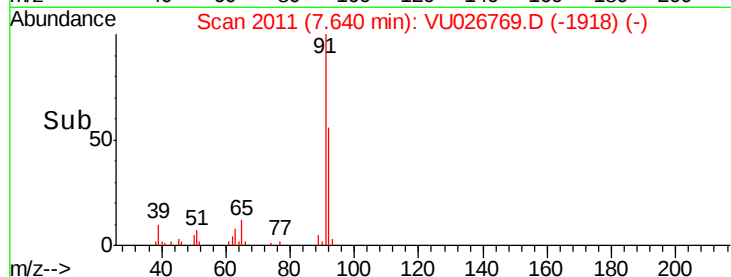
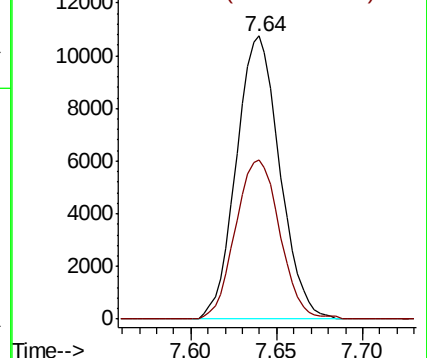
91 100

92 56.1 40.9 76.0



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0



#44

trans-1,3-Dichloropropene

Concen: 0.495 ug/L

RT: 7.88 min Scan# 2087

Delta R.T. 0.00 min

Lab File: VU026769.D

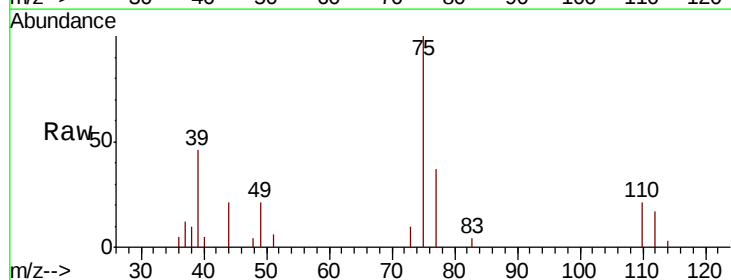
Acq: 15 Sep 2018 10:55

Tgt Ion: 75 Resp: 5250

Ion Ratio Lower Upper

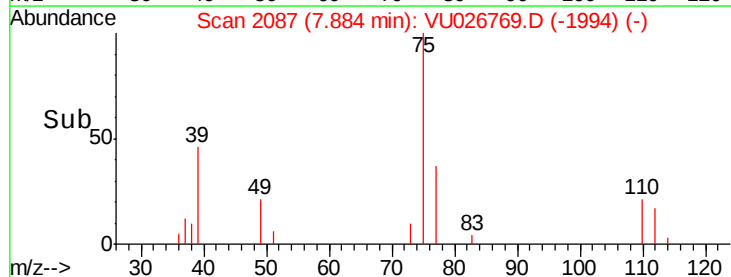
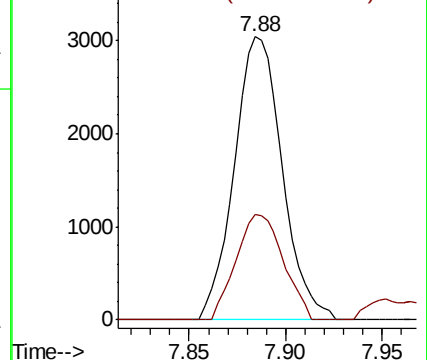
75 100

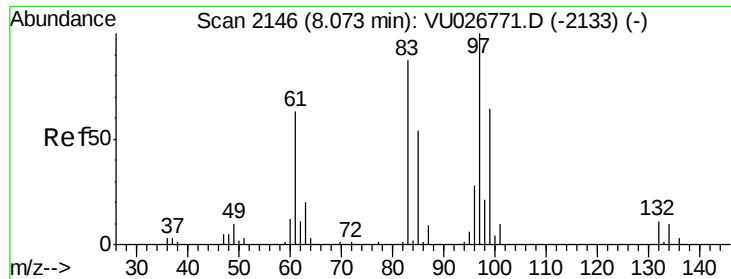
77 37.4 21.7 40.3



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0

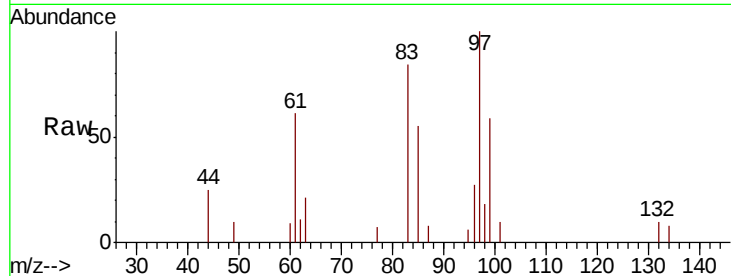




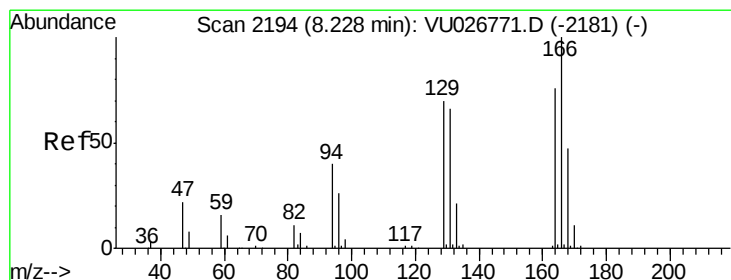
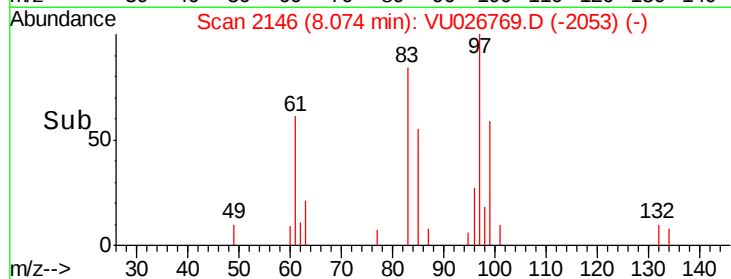
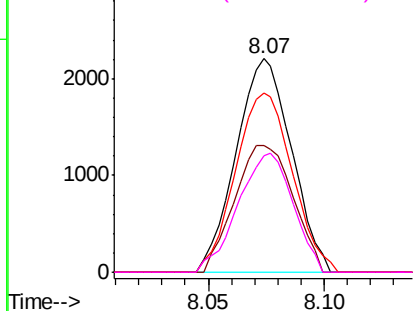
#45  
1,1,2-Trichloroethane  
Concen: 0.570 ug/L  
RT: 8.07 min Scan# 2146  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Instrument :  
MSVOA\_U  
ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 3658  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 59.4  | 45.0  | 83.6  |
| 83       | 83.9  | 60.8  | 112.8 |
| 85       | 54.6  | 38.1  | 70.9  |

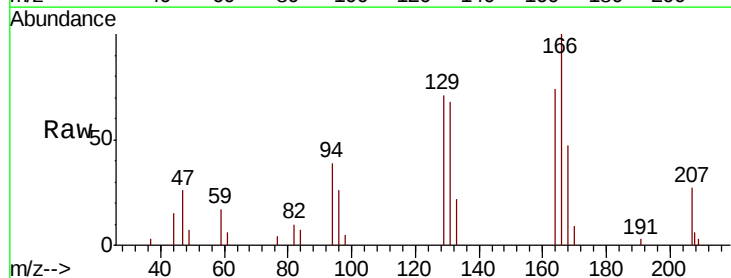


Abundance Ion 96.95 (96.65 to 97.65): VU0  
Ion 99.05 (98.75 to 99.75): VU0  
Ion 82.95 (82.65 to 83.65): VU0  
Ion 85.00 (84.70 to 85.70): VU0

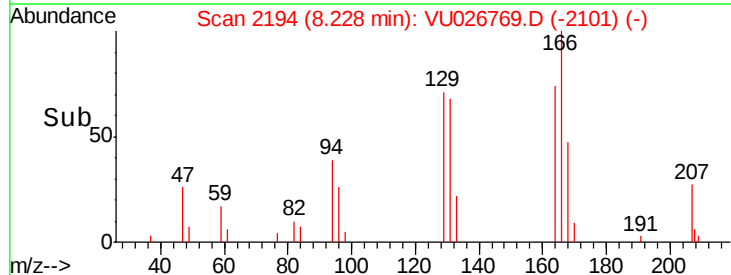
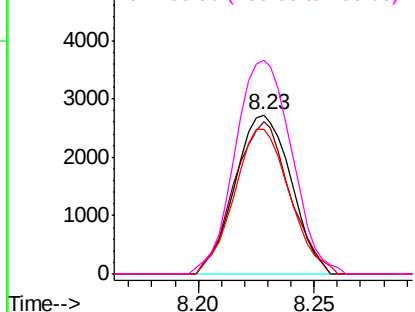


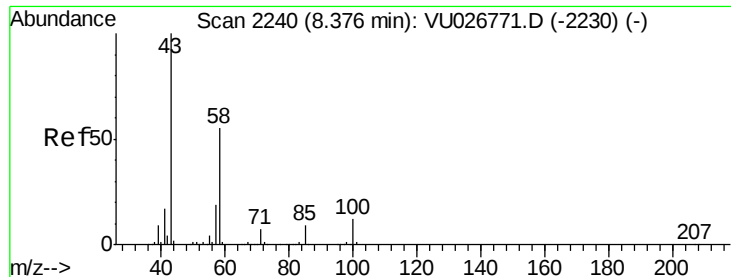
#47  
Tetrachloroethene  
Concen: 0.602 ug/L  
RT: 8.23 min Scan# 2194  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 4576  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 95.7  | 64.8  | 120.3 |
| 131      | 90.7  | 61.4  | 114.0 |
| 166      | 134.4 | 92.6  | 172.0 |



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

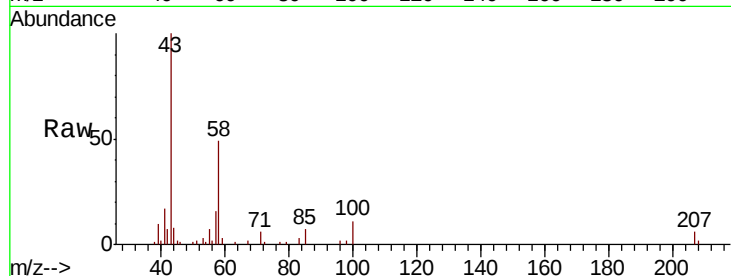




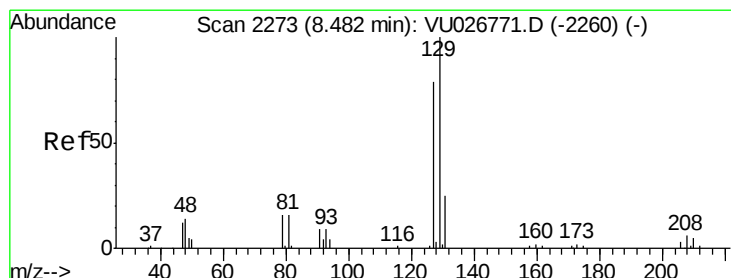
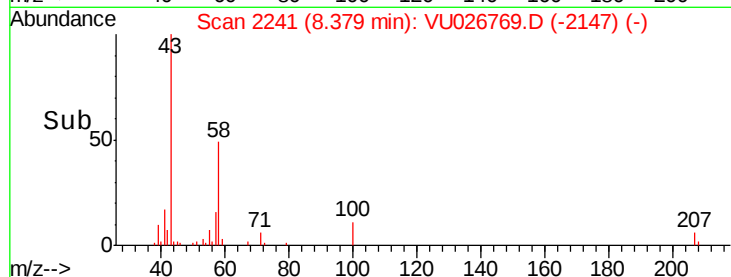
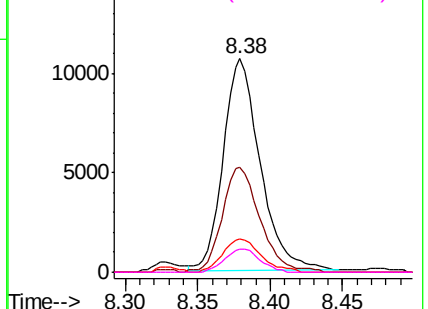
#48  
2-Hexanone  
Concen: 4.472 ug/L  
RT: 8.38 min Scan# 2241  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 43 Resp: 18890  
Ion Ratio Lower Upper  
43 100  
58 50.5 43.7 65.5  
57 16.2 15.2 22.8  
100 10.4 10.1 15.1

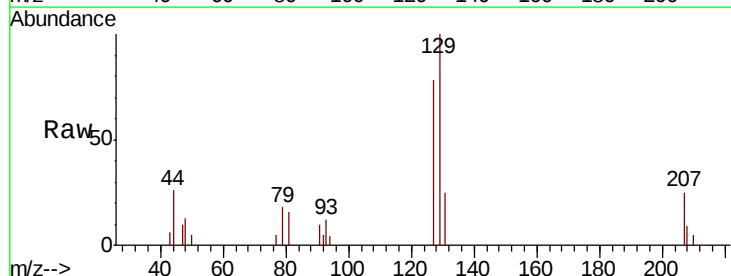


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

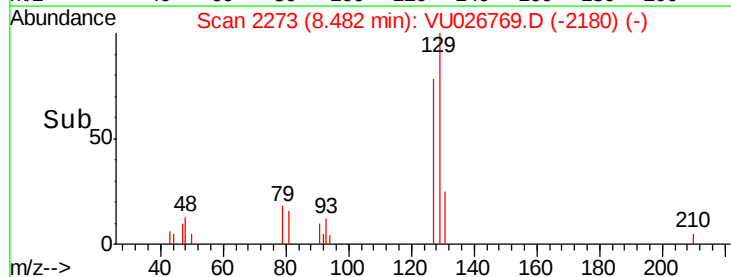
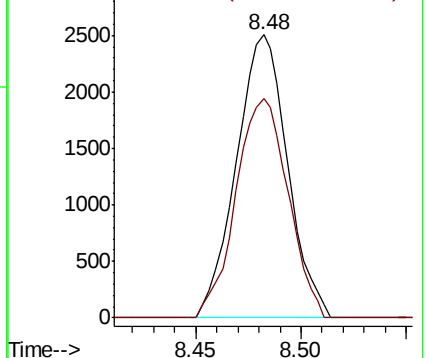


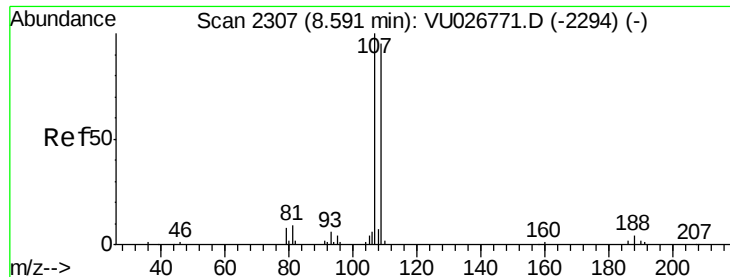
#49  
Dibromochloromethane  
Concen: 0.536 ug/L  
RT: 8.48 min Scan# 2273  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Tgt Ion: 129 Resp: 4223  
Ion Ratio Lower Upper  
129 100  
127 77.6 55.4 103.0



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V

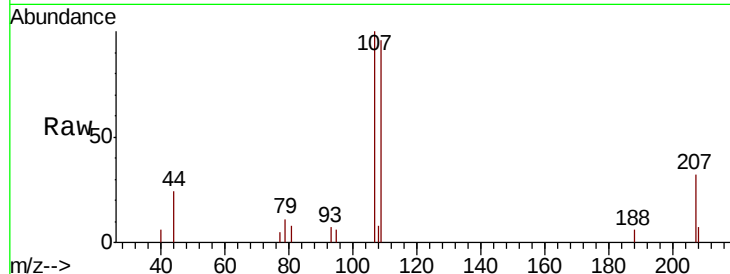




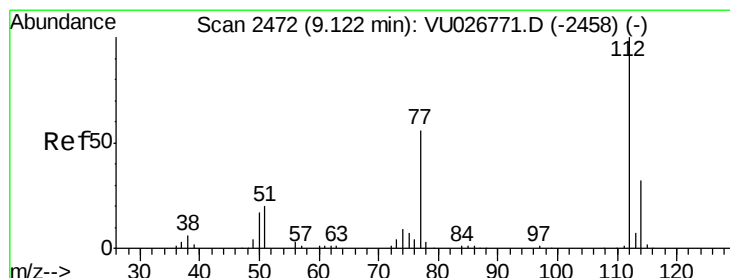
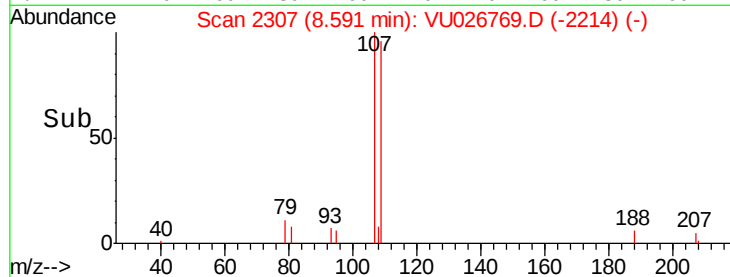
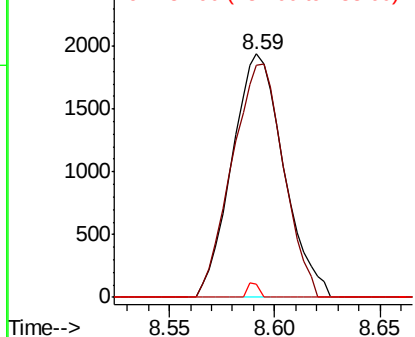
#50  
1,2-Dibromoethane  
Concen: 0.546 ug/L  
RT: 8.59 min Scan# 2307  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:107 Resp: 3306  
Ion Ratio Lower Upper  
107 100  
109 95.6 66.4 123.2  
188 5.6 3.1 4.7#

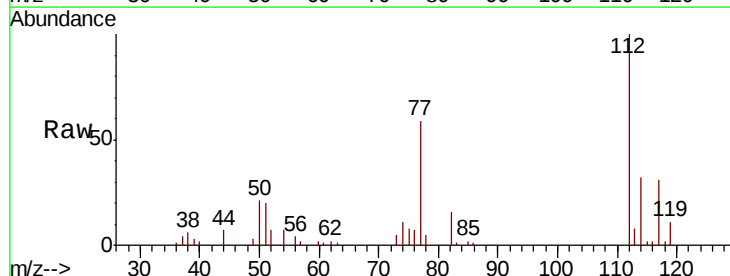


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

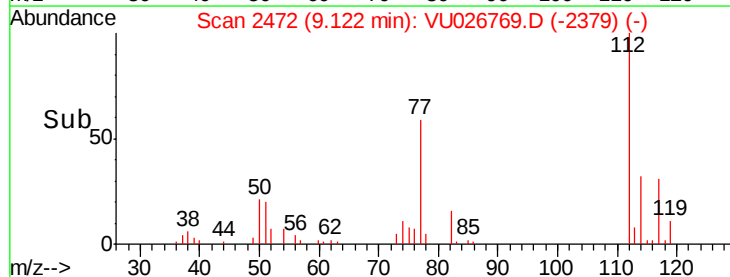
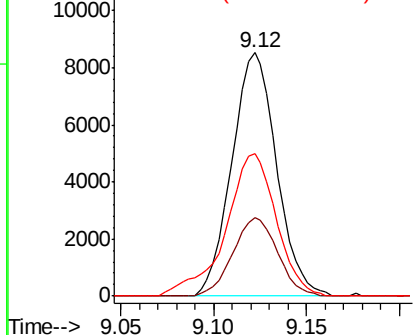


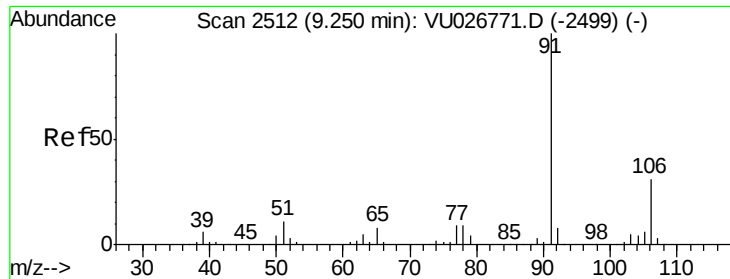
#51  
Chlorobenzene  
Concen: 0.586 ug/L  
RT: 9.12 min Scan# 2472  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Tgt Ion:112 Resp: 14300  
Ion Ratio Lower Upper  
112 100  
114 32.4 22.6 42.0  
77 58.6 45.1 67.7



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): VU





#52

Ethylbenzene

Concen: 0.430 ug/L

RT: 9.25 min Scan# 2513

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

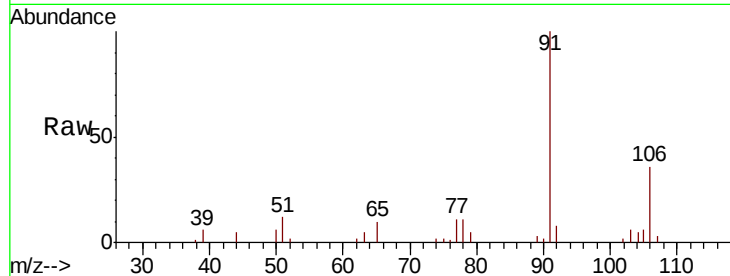
ClientSampled :

Tot Ion: 91 Resp: 16857

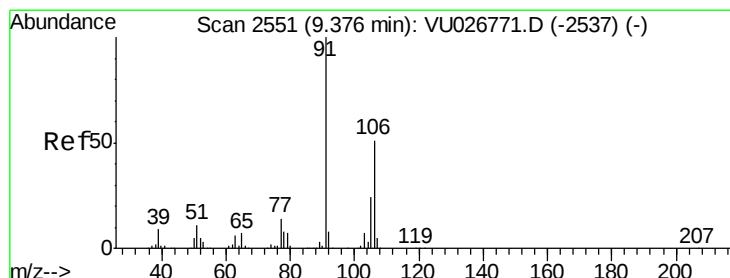
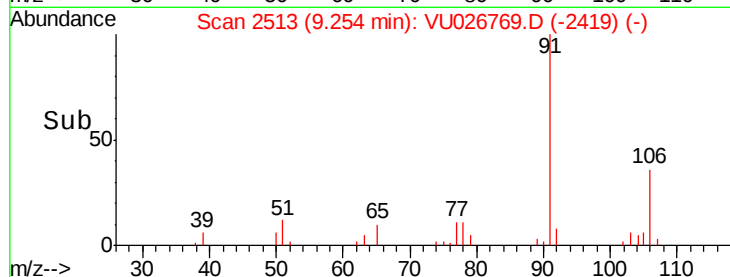
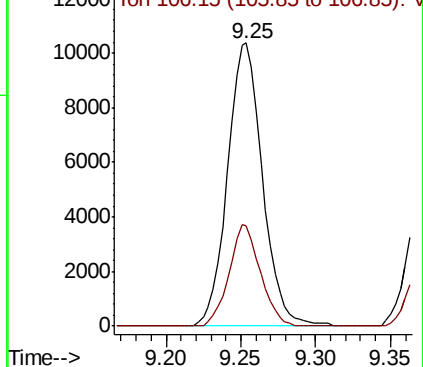
Ion Ratio Lower Upper

91 100

106 35.7 21.9 40.7



Abundance Ion 91.15 (90.85 to 91.85): VU026771.D (-2499) (-)



#53

m,p-xylene

Concen: 0.413 ug/L

RT: 9.38 min Scan# 2551

Delta R.T. 0.00 min

Lab File: VU026769.D

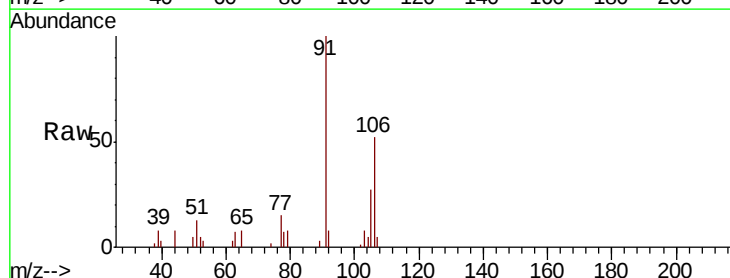
Acq: 15 Sep 2018 10:55

Tgt Ion: 106 Resp: 6049

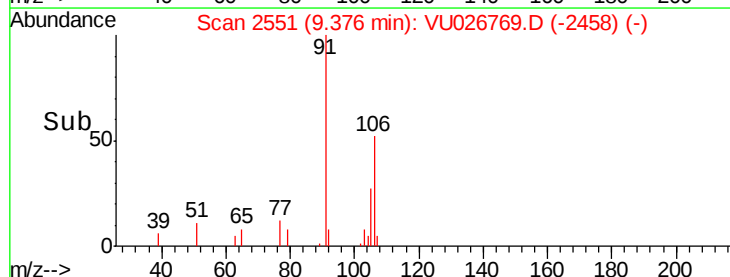
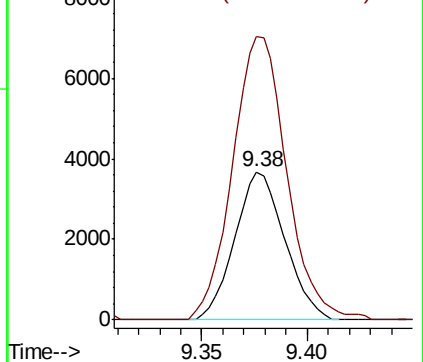
Ion Ratio Lower Upper

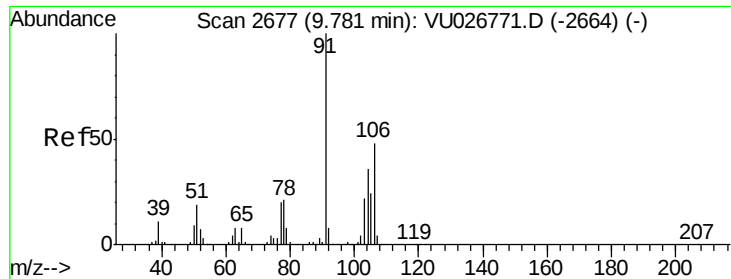
106 100

91 191.1 138.9 257.9



Abundance Ion 106.15 (105.85 to 106.85): VU026771.D (-2537) (-)

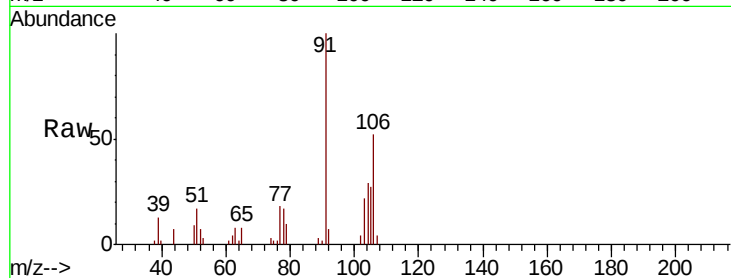




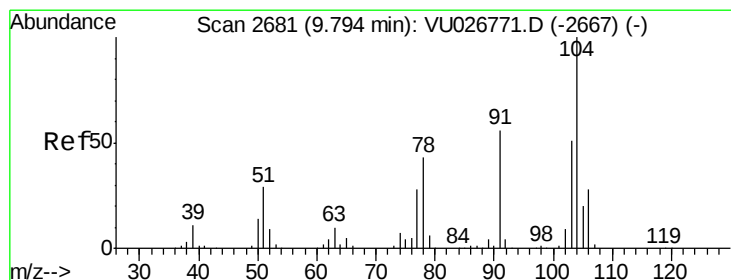
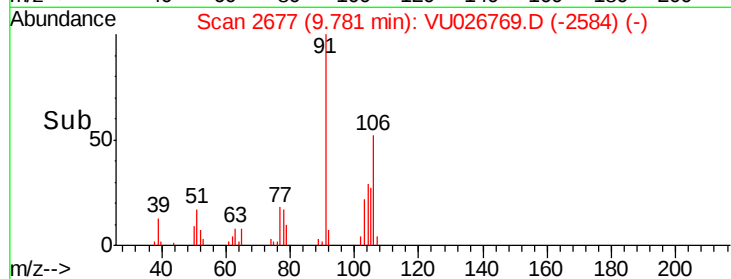
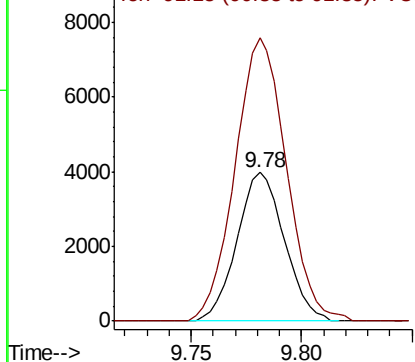
#54  
o-xylene  
Concen: 0.428 ug/L  
RT: 9.78 min Scan# 2677  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion:106 Resp: 5928  
Ion Ratio Lower Upper  
106 100  
91 190.7 147.1 273.1

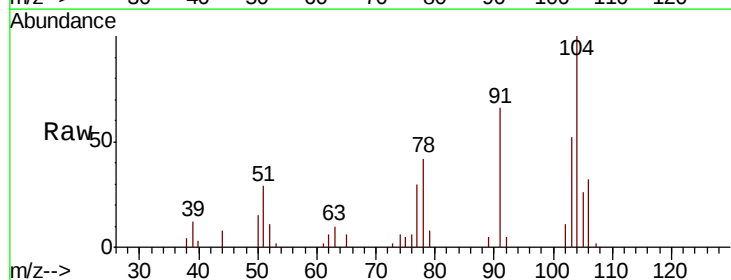


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

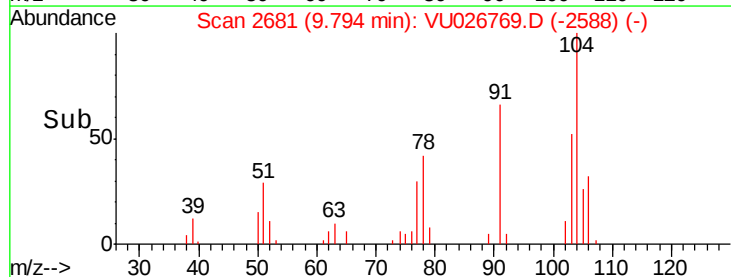
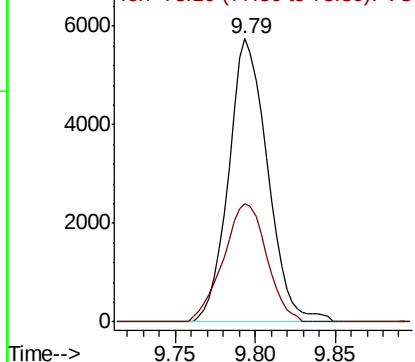


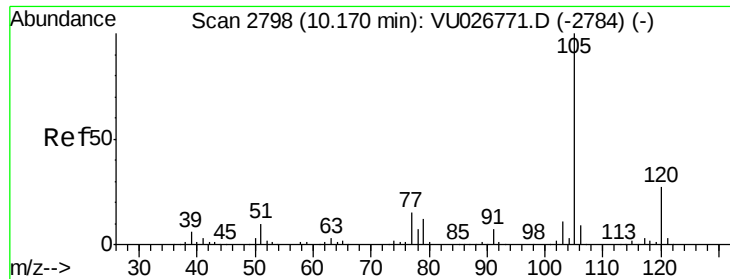
#55  
Styrene  
Concen: 0.391 ug/L  
RT: 9.79 min Scan# 2681  
Delta R.T. 0.00 min  
Lab File: VU026769.D  
Acq: 15 Sep 2018 10:55

Tgt Ion:104 Resp: 9533  
Ion Ratio Lower Upper  
104 100  
78 41.8 30.4 56.4



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 0.410 ug/L

RT: 10.17 min Scan# 2797

Delta R.T. -0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

ClientSampleId :

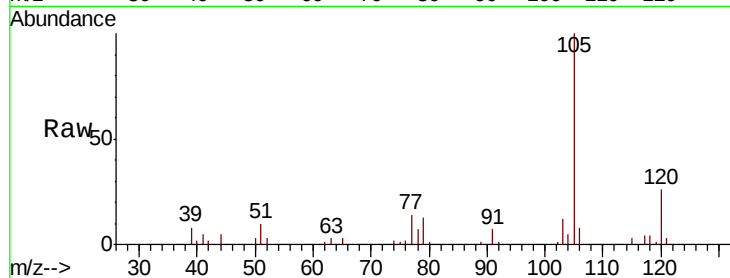
Tot Ion: 105 Resp: 15005

Ion Ratio Lower Upper

105 100

120 26.1 21.4 32.2

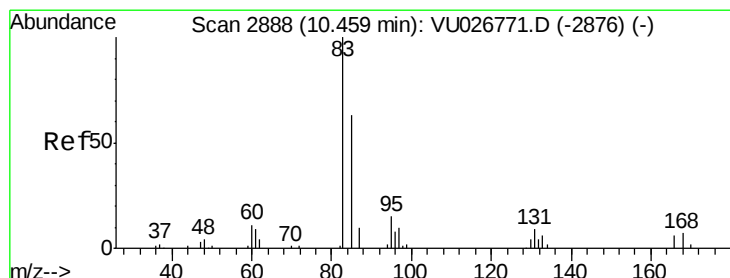
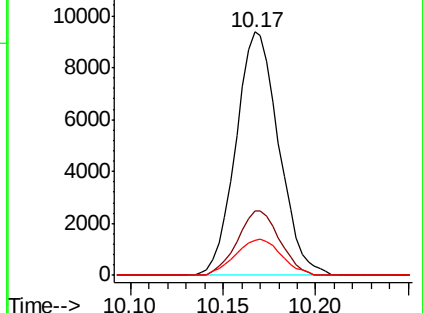
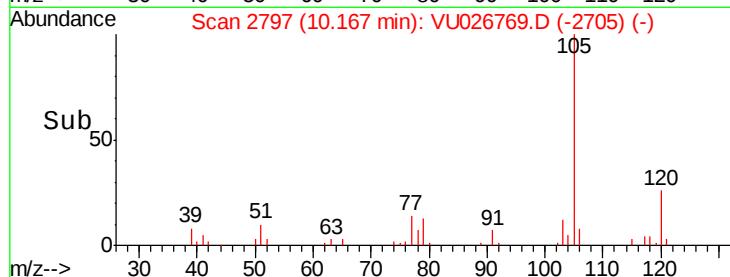
77 15.8 12.6 19.0



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: 0.531 ug/L

RT: 10.46 min Scan# 2888

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

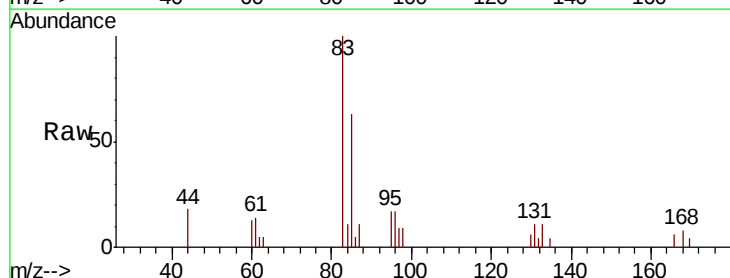
Tgt Ion: 83 Resp: 4455

Ion Ratio Lower Upper

83 100

85 62.8 44.4 82.5

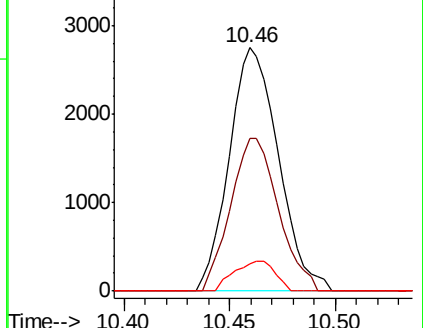
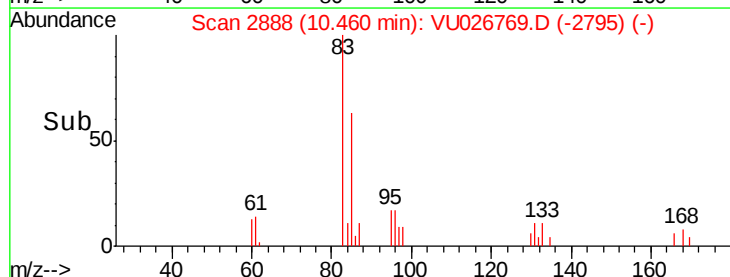
131 11.0 7.2 10.8#

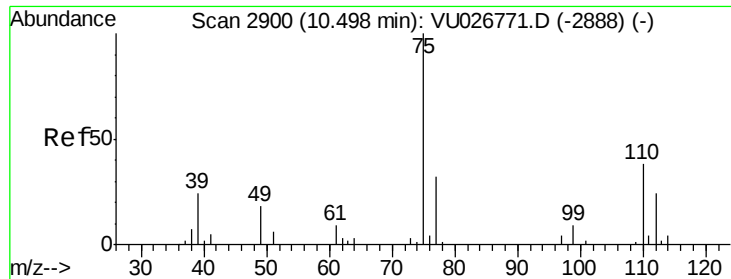


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V

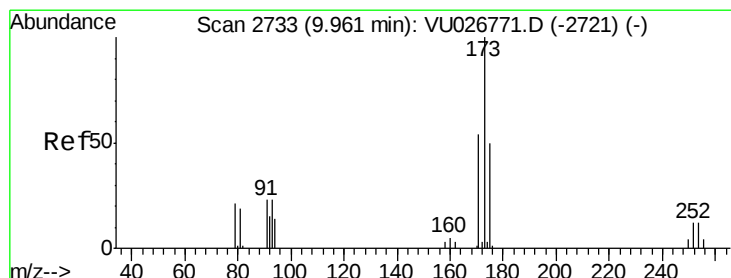
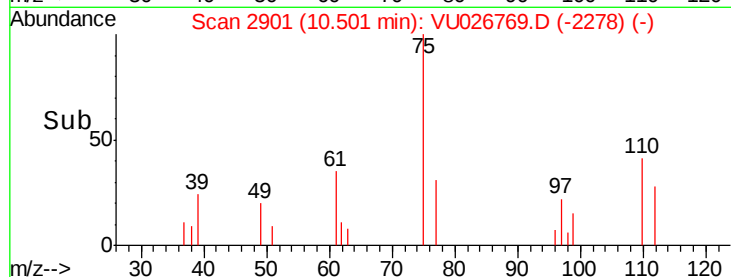
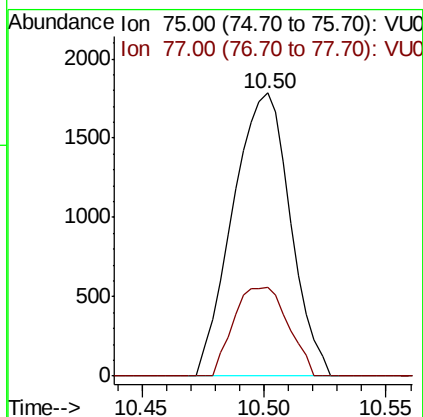
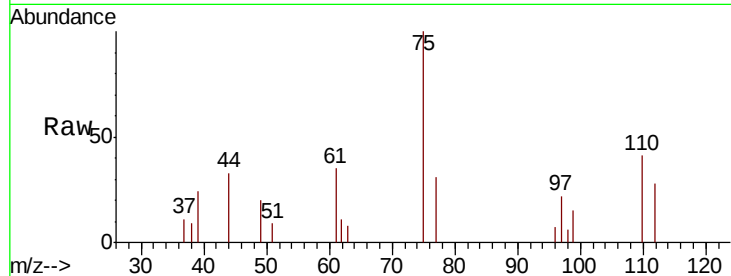




#59  
 1,2,3-Trichloropropane  
 Concen: 0.494 ug/L  
 RT: 10.50 min Scan# 2901  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

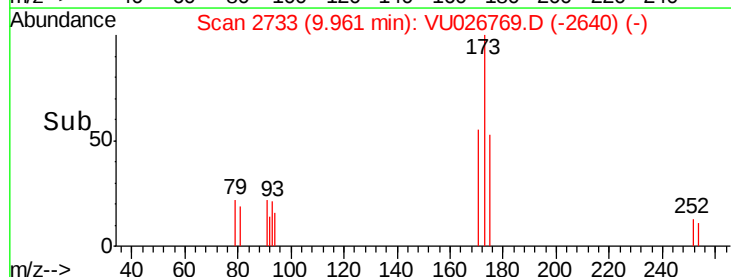
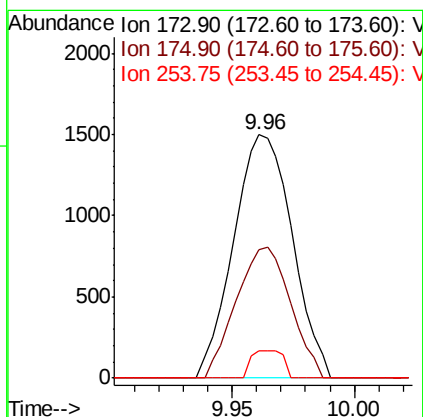
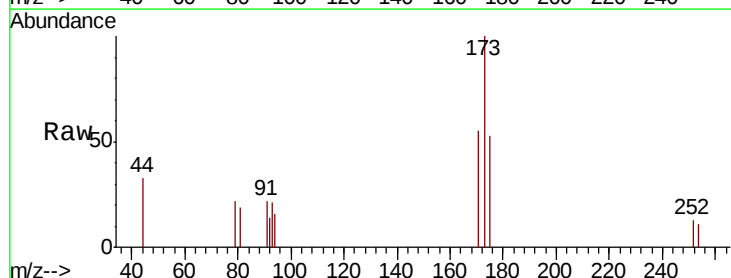
Instrument :  
 MSVOA\_U  
 ClientSampled :

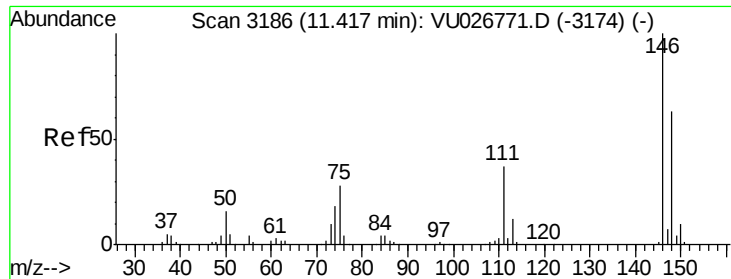
Tot Ion: 75 Resp: 2914  
 Ion Ratio Lower Upper  
 75 100  
 77 29.7 25.9 38.9



#61  
 Bromoform  
 Concen: 0.623 ug/L  
 RT: 9.96 min Scan# 2733  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion:173 Resp: 2497  
 Ion Ratio Lower Upper  
 173 100  
 175 50.0 38.8 58.2  
 254 6.0 9.1 13.7#

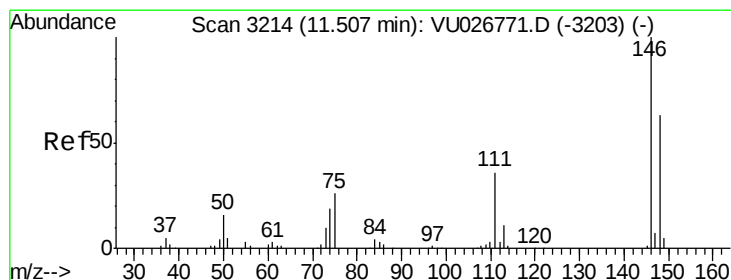
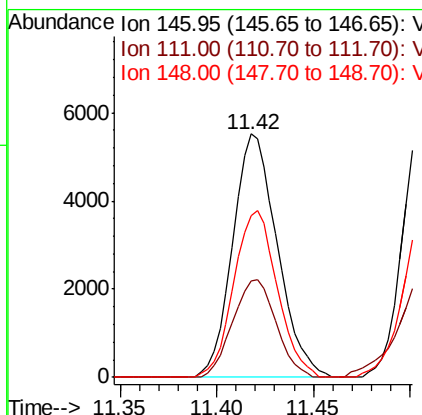
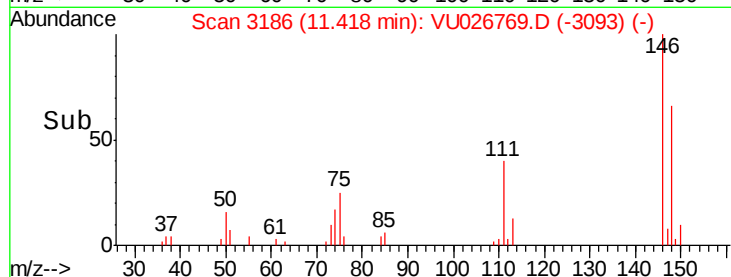
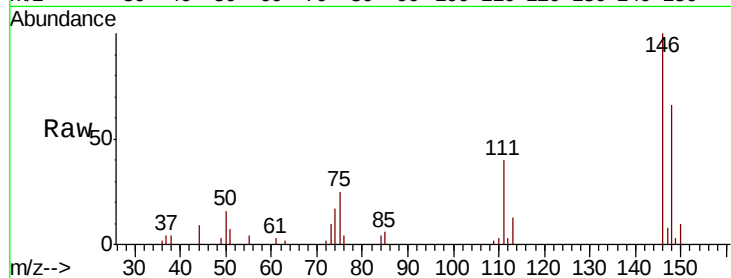




#62  
 1,3-Dichlorobenzene  
 Concen: 0.550 ug/L  
 RT: 11.42 min Scan# 3186  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

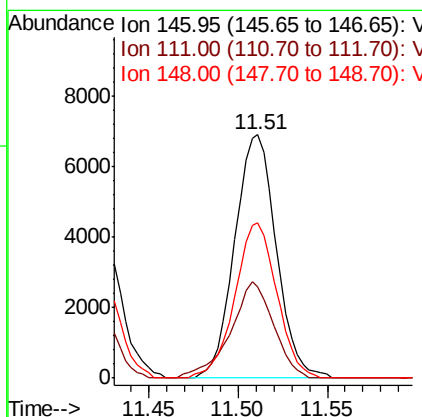
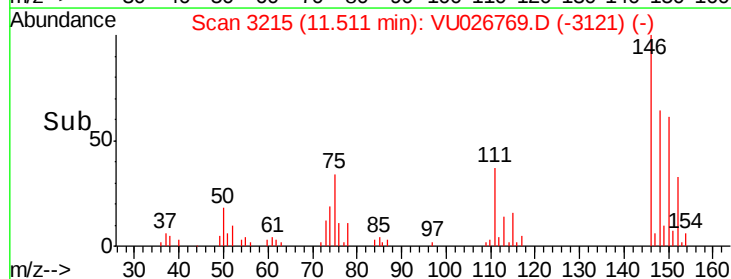
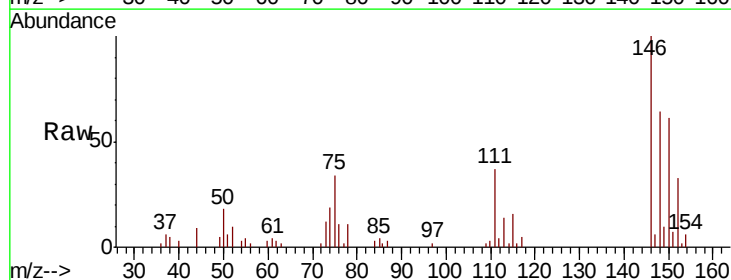
Instrument :  
 MSVOA\_U  
 ClientSampleId :

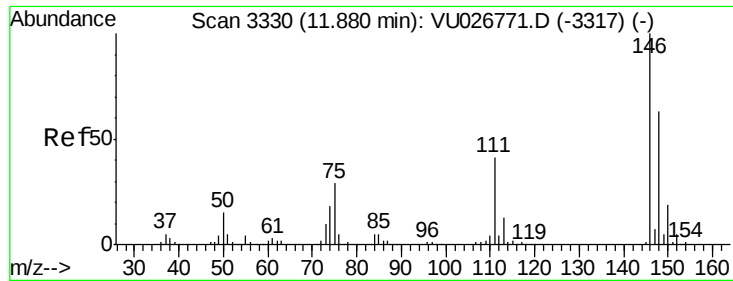
Tot Ion:146 Resp: 8830  
 Ion Ratio Lower Upper  
 146 100  
 111 39.7 26.2 48.6  
 148 66.4 44.4 82.4



#63  
 1,4-Dichlorobenzene  
 Concen: 0.658 ug/L  
 RT: 11.51 min Scan# 3215  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion:146 Resp: 11255  
 Ion Ratio Lower Upper  
 146 100  
 111 37.4 25.3 46.9  
 148 63.6 44.5 82.7





#65

1,2-Dichlorobenzene

Concen: 0.611 ug/L

RT: 11.88 min Scan# 3330

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

ClientSampleId :

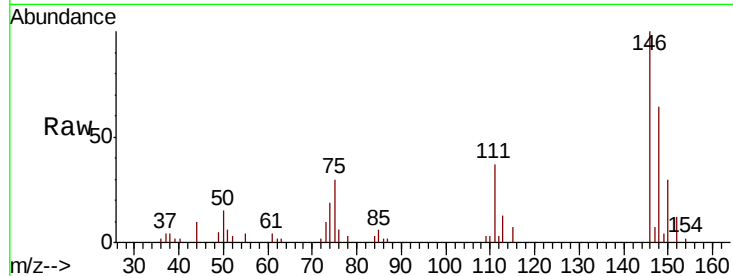
Tot Ion:146 Resp: 9770

Ion Ratio Lower Upper

146 100

111 37.2 32.5 48.7

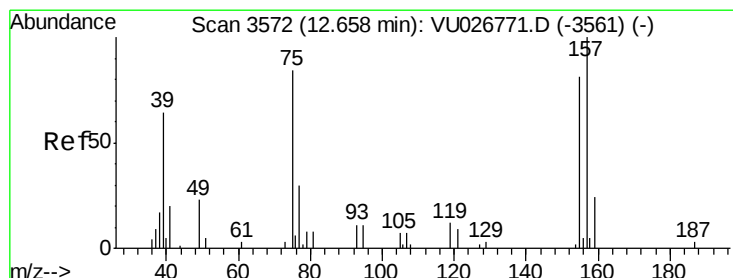
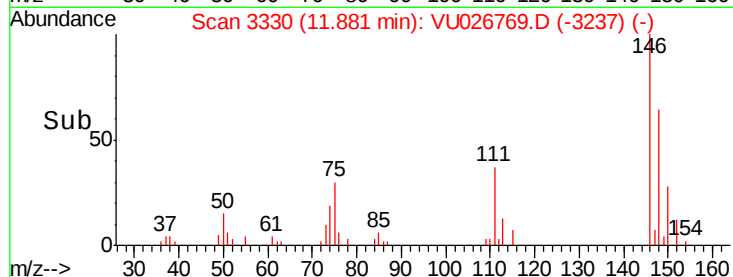
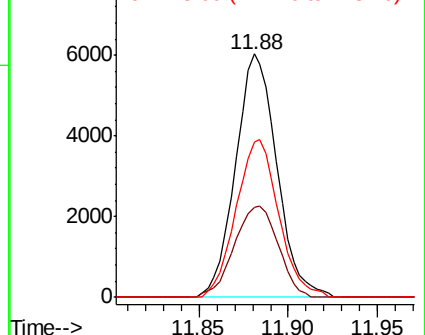
148 63.7 50.5 75.7



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: 0.550 ug/L

RT: 12.66 min Scan# 3573

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

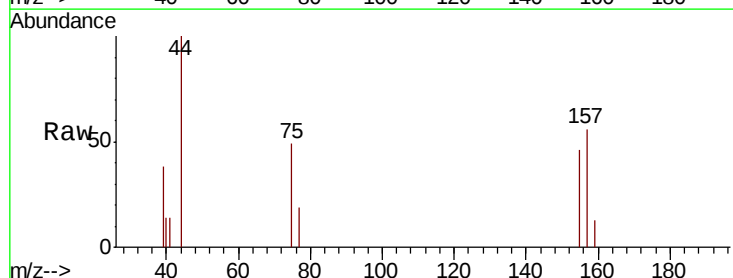
Tgt Ion: 75 Resp: 579

Ion Ratio Lower Upper

75 100

155 94.2 76.7 115.1

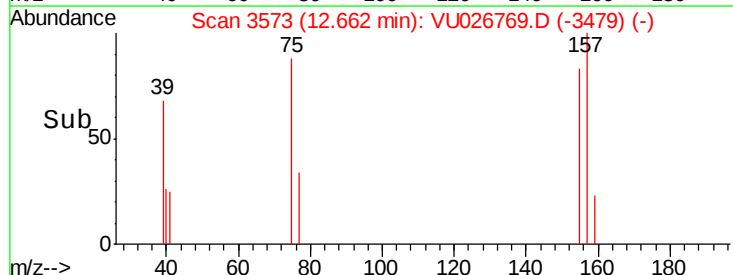
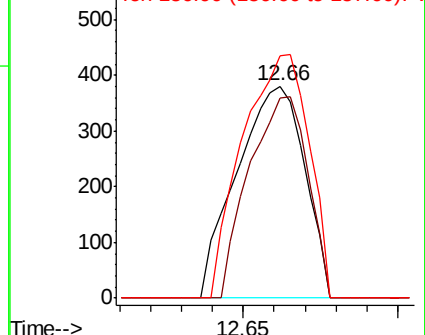
157 114.2 95.1 142.7

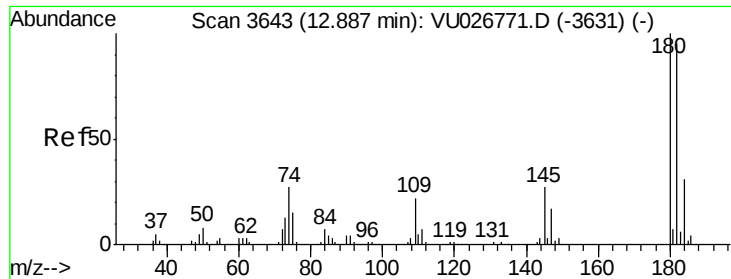


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

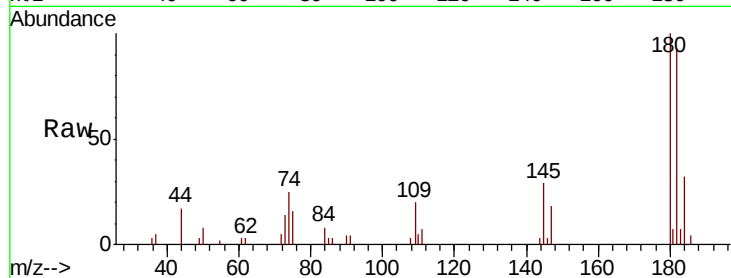




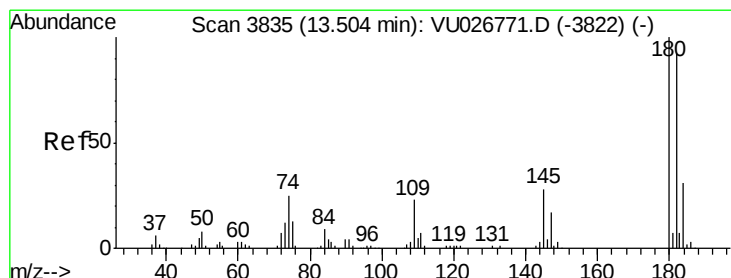
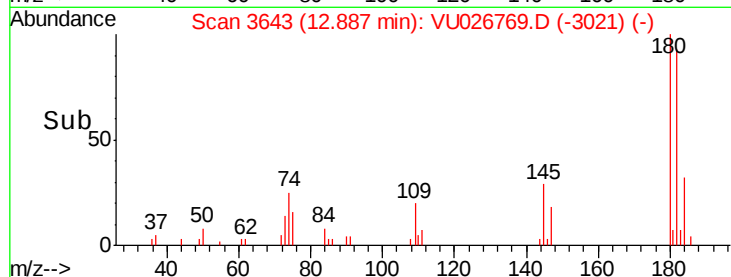
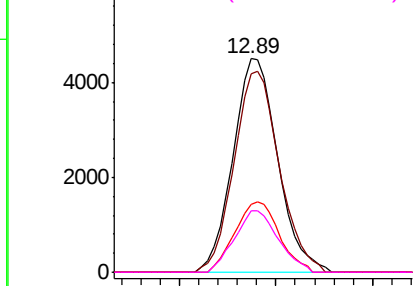
#67  
 1,3,5-Trichlorobenzene  
 Concen: 0.536 ug/L  
 RT: 12.89 min Scan# 3643  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Tot Ion:180 Resp: 7236  
 Ion Ratio Lower Upper  
 180 100  
 182 94.7 76.8 115.2  
 184 32.5 24.6 36.8  
 145 28.1 21.5 32.3

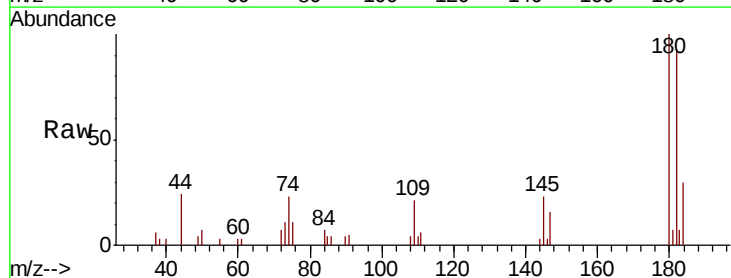


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

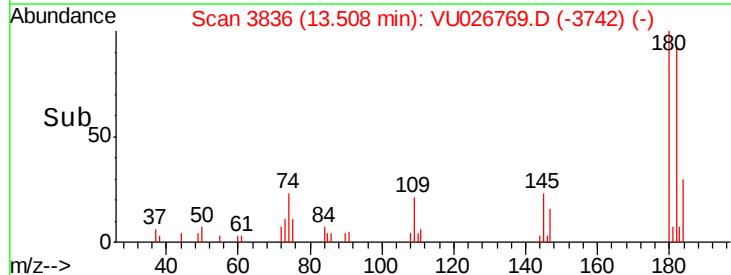
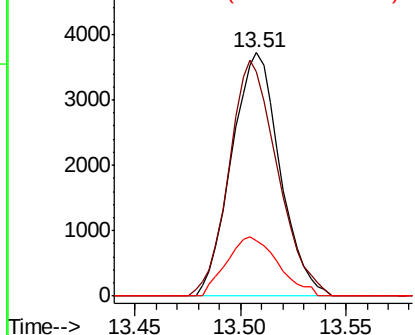


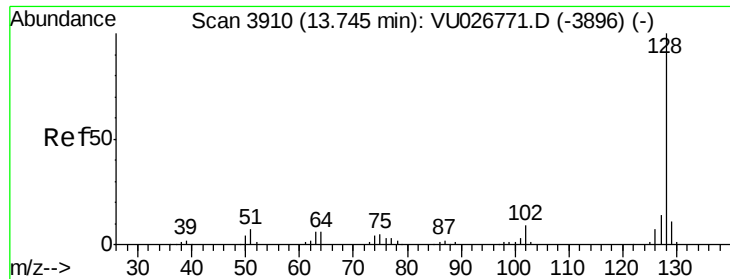
#68  
 1,2,4-trichlorobenzene  
 Concen: 0.545 ug/L  
 RT: 13.51 min Scan# 3836  
 Delta R.T. 0.00 min  
 Lab File: VU026769.D  
 Acq: 15 Sep 2018 10:55

Tgt Ion:180 Resp: 5905  
 Ion Ratio Lower Upper  
 180 100  
 182 97.0 74.7 112.1  
 145 25.8 22.3 33.5



Abundance Ion 179.90 (179.60 to 180.60): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 0.434 ug/L

RT: 13.75 min Scan# 3910

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

Instrument :

MSVOA\_U

ClientSampleId :

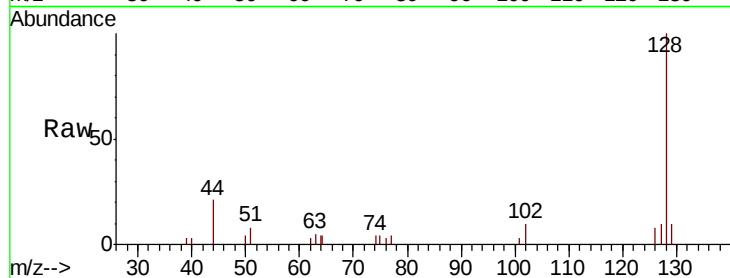
Tot Ion:128 Resp: 7053

Ion Ratio Lower Upper

128 100

129 7.7 8.6 12.8#

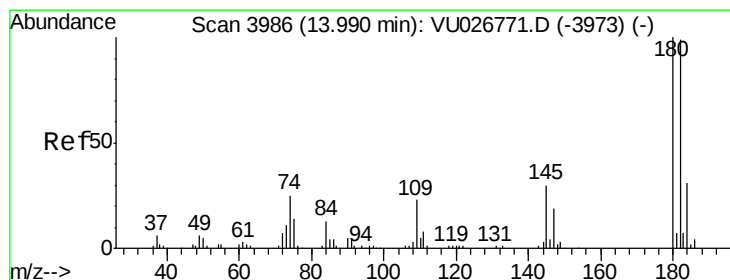
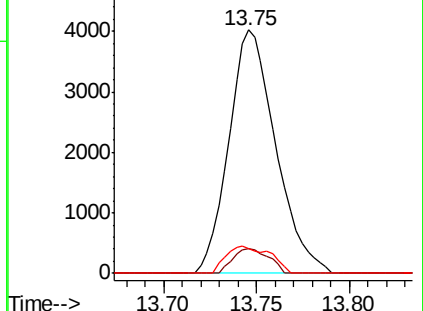
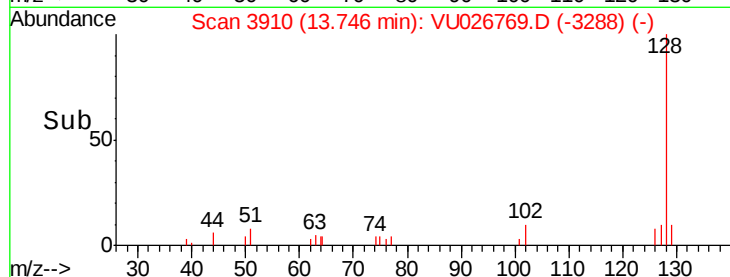
127 10.6 10.8 16.2#



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: 0.493 ug/L

RT: 13.99 min Scan# 3986

Delta R.T. 0.00 min

Lab File: VU026769.D

Acq: 15 Sep 2018 10:55

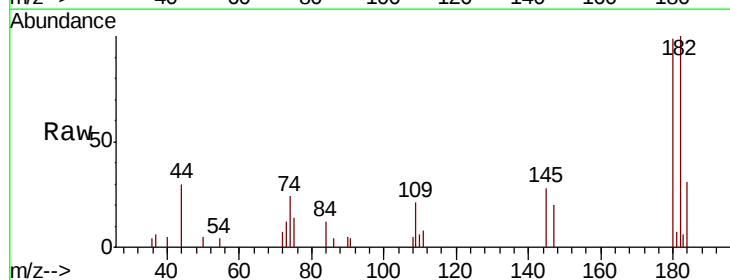
Tgt Ion:180 Resp: 4970

Ion Ratio Lower Upper

180 100

182 96.8 77.0 115.6

145 28.2 23.4 35.2



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

