

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU071718\  
 Data File : VU025465.D  
 Acq On : 17 Jul 2018 19:00  
 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

Quant Time: Jul 18 05:57:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM071718WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Jul 18 05:54:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 355284   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 328398   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 170324   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 77790    | 46.43    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 92.86% |
| 7) Chloroethane-d5             | 1.68    | 69    | 68122    | 47.73    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 95.46% |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 177520   | 48.25    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 96.50% |
| 21) 2-Butanone-d5              | 4.18    | 46    | 174859   | 98.08    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 98.08% |
| 24) Chloroform-d               | 4.65    | 84    | 214538   | 49.36    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.72% |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 142615   | 48.22    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.44% |
| 32) Benzene-d6                 | 5.35    | 84    | 386452   | 48.70    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.40% |
| 36) 1,2-Dichloropropane-d6     | 6.34    | 67    | 130091   | 49.50    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 99.00% |
| 41) Toluene-d8                 | 7.57    | 98    | 376530   | 49.02    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.04% |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 67761    | 49.53    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 99.06% |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 130587   | 95.84    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 95.84% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.44   | 84    | 192431   | 49.32    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 98.64% |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 168406   | 49.34    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.68% |

## Target Compounds

|                                |      |     |        |        | Qvalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 142300 | 48.683 | ug/L 99  |
| 3) Chloromethane               | 1.33 | 50  | 127716 | 49.375 | ug/L 99  |
| 5) Vinyl chloride              | 1.41 | 62  | 126292 | 48.559 | ug/L 99  |
| 6) Bromomethane                | 1.63 | 94  | 75737  | 53.430 | ug/L 98  |
| 8) Chloroethane                | 1.70 | 64  | 78299  | 50.307 | ug/L 98  |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 186255 | 48.713 | ug/L 99  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 108332 | 52.185 | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 96388  | 50.054 | ug/L 92  |
| 13) Acetone                    | 2.32 | 43  | 147353 | 94.647 | ug/L 99  |
| 14) Carbon disulfide           | 2.48 | 76  | 292368 | 46.985 | ug/L 100 |
| 15) Methyl Acetate             | 2.62 | 43  | 137422 | 47.762 | ug/L 99  |
| 16) Methylene chloride         | 2.71 | 84  | 124786 | 49.551 | ug/L 99  |
| 17) trans-1,2-Dichloroethene   | 2.99 | 96  | 112639 | 49.452 | ug/L 97  |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 397020 | 49.193 | ug/L 99  |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 223331 | 49.014 | ug/L 98  |
| 20) cis-1,2-Dichloroethene     | 4.23 | 96  | 133805 | 47.980 | ug/L 97  |
| 22) 2-Butanone                 | 4.27 | 43  | 208071 | 97.096 | ug/L 100 |

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 Operator : MD/SY  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 14 Sample Multiplier: 1

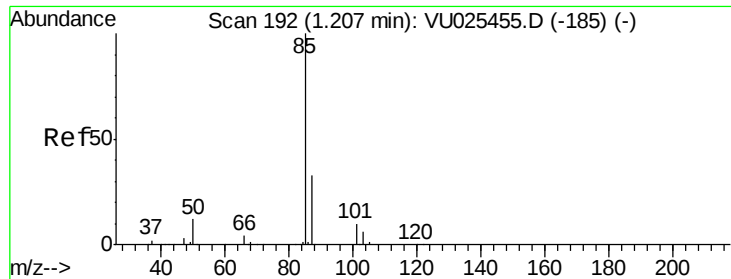
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

Quant Time: Jul 18 05:57:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM071718WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Jul 18 05:54:25 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.55  | 128  | 68992    | 49.358 | ug/L  | 94       |
| 25) Chloroform                 | 4.68  | 83   | 234239   | 48.923 | ug/L  | 95       |
| 27) 1,2-Dichloroethane         | 5.41  | 62   | 193333   | 48.624 | ug/L  | 99       |
| 29) Cyclohexane                | 5.00  | 56   | 191075   | 50.527 | ug/L  | 98       |
| 30) 1,1,1-Trichloroethane      | 4.92  | 97   | 212128   | 48.540 | ug/L  | 99       |
| 31) Carbon tetrachloride       | 5.14  | 117  | 190140   | 49.526 | ug/L  | 99       |
| 33) Benzene                    | 5.39  | 78   | 477938   | 49.194 | ug/L  | 100      |
| 34) Trichloroethene            | 6.19  | 95   | 128463   | 49.950 | ug/L  | 98       |
| 35) Methylcyclohexane          | 6.42  | 83   | 199609   | 51.120 | ug/L  | 99       |
| 37) 1,2-Dichloropropane        | 6.44  | 63   | 134279   | 50.103 | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.76  | 83   | 177151   | 48.955 | ug/L  | 99       |
| 39) cis-1,3-Dichloropropene    | 7.27  | 75   | 207092   | 49.872 | ug/L  | 98       |
| 40) 4-Methyl-2-pentanone       | 7.46  | 43   | 376800   | 96.939 | ug/L  | 99       |
| 42) Toluene                    | 7.64  | 91   | 524856   | 50.666 | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 200685   | 50.343 | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 126878   | 49.932 | ug/L  | 97       |
| 46) Tetrachloroethene          | 8.23  | 164  | 107127   | 49.932 | ug/L  | 98       |
| 48) 2-Hexanone                 | 8.36  | 43   | 297212   | 95.705 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.48  | 129  | 152916   | 49.712 | ug/L  | 99       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 139820   | 49.852 | ug/L  | 99       |
| 51) Chlorobenzene              | 9.12  | 112  | 350161   | 50.377 | ug/L  | 100      |
| 52) Ethylbenzene               | 9.25  | 91   | 584084   | 50.510 | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.38  | 106  | 226429   | 51.087 | ug/L  | 99       |
| 54) o-xylene                   | 9.78  | 106  | 224598   | 50.231 | ug/L  | 98       |
| 55) Styrene                    | 9.80  | 104  | 380430   | 51.514 | ug/L  | 99       |
| 56) Isopropylbenzene           | 10.17 | 105  | 595194   | 51.401 | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 211982   | 48.455 | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane     | 10.50 | 75   | 170708   | 47.898 | ug/L  | 100      |
| 61) Bromoform                  | 9.96  | 173  | 112954   | 47.013 | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 276256   | 48.937 | ug/L  | 100      |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 280828   | 49.227 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 291342   | 48.876 | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 50661    | 45.416 | ug/L  | 98       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 214728   | 49.487 | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.51 | 180  | 192239   | 49.685 | ug/L  | 99       |
| 69) Naphthalene                | 13.74 | 128  | 639746   | 47.787 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 205460   | 49.237 | ug/L  | 100      |

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





#2

Dichlorodifluoromethane

Concen: 48.683 ug/L

RT: 1.21 min Scan# 192

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

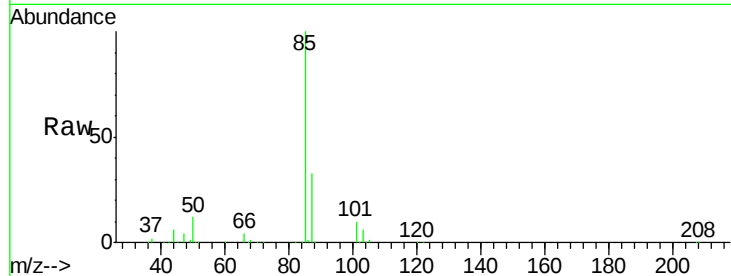
VSTD05047

Tgt Ion: 85 Resp: 142300

Ion Ratio Lower Upper

85 100

87 33.1 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VU025465.D (-99) (-)

Ion 87.00 (86.70 to 87.70): VU025465.D (-99) (-)

1.21

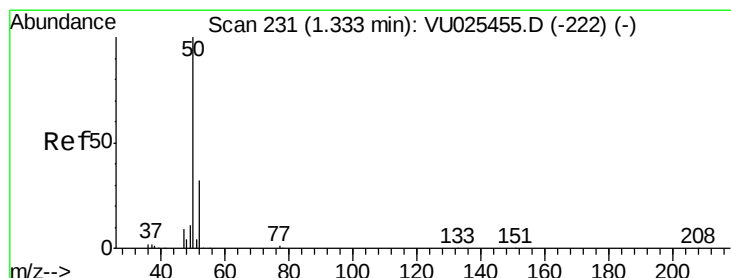
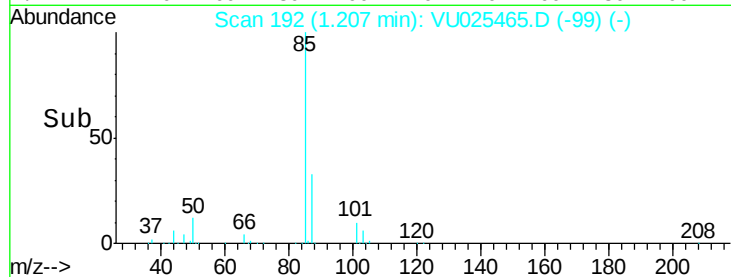
150000

100000

50000

0

Time--> 1.15 1.20 1.25



#3

Chloromethane

Concen: 49.375 ug/L

RT: 1.33 min Scan# 231

Delta R.T. -0.00 min

Lab File: VU025465.D

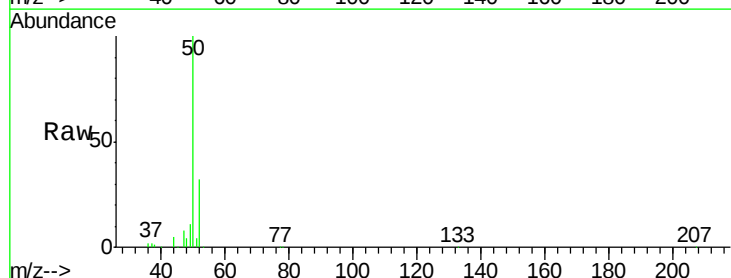
Acq: 17 Jul 2018 19:00

Tgt Ion: 50 Resp: 127716

Ion Ratio Lower Upper

50 100

52 32.5 22.4 41.6



Abundance Ion 50.00 (49.70 to 50.70): VU025465.D (-138) (-)

Ion 52.00 (51.70 to 52.70): VU025465.D (-138) (-)

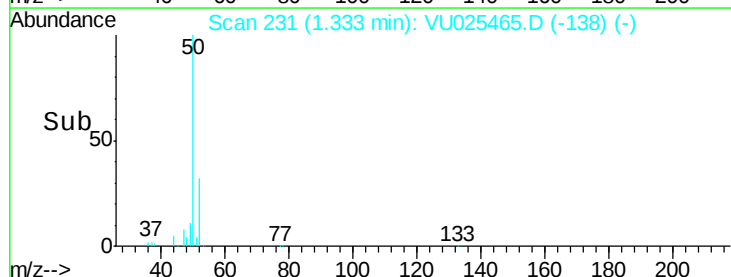
1.33

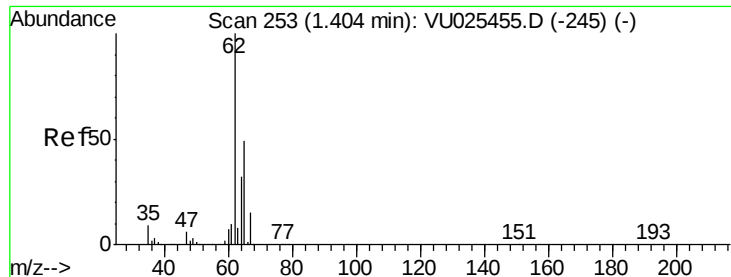
100000

50000

0

Time--> 1.30 1.35 1.40





#5

Vinyl chloride

Concen: 48.559 ug/L

RT: 1.41 min Scan# 254

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

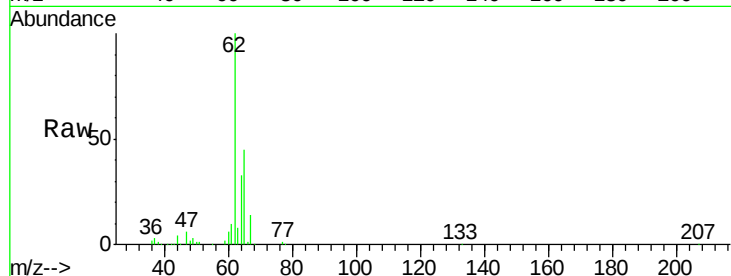
VSTD05047

Tgt Ion: 62 Resp: 126292

Ion Ratio Lower Upper

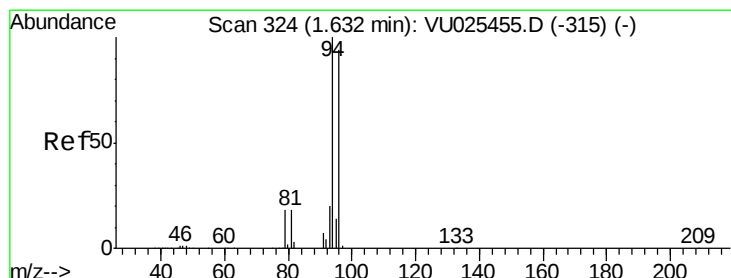
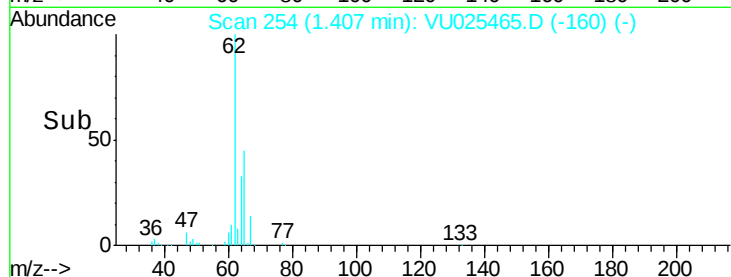
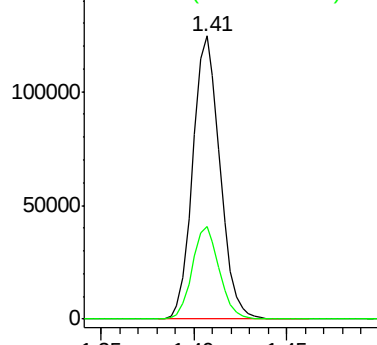
62 100

64 32.7 22.7 42.1



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0



#6

Bromomethane

Concen: 53.430 ug/L

RT: 1.63 min Scan# 323

Delta R.T. -0.00 min

Lab File: VU025465.D

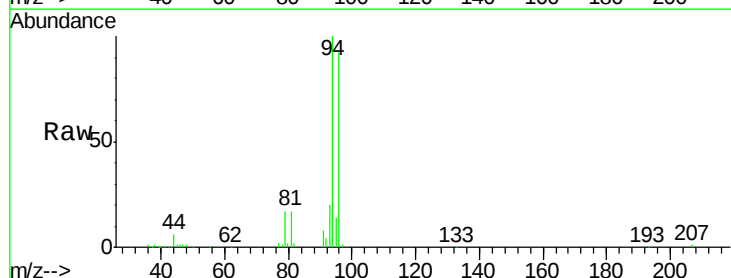
Acq: 17 Jul 2018 19:00

Tgt Ion: 94 Resp: 75737

Ion Ratio Lower Upper

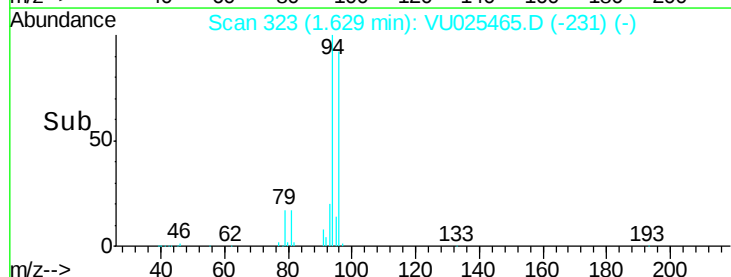
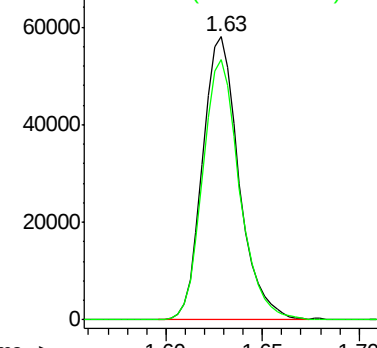
94 100

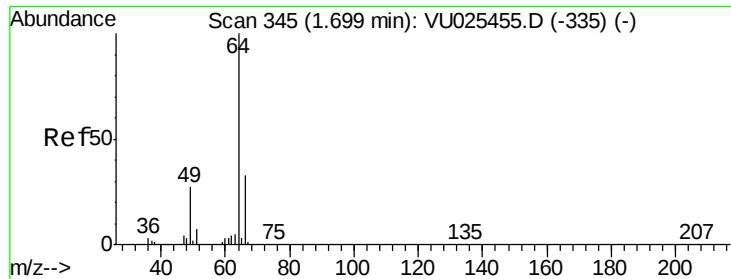
96 92.1 65.8 122.2



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 50.307 ug/L

RT: 1.70 min Scan# 345

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

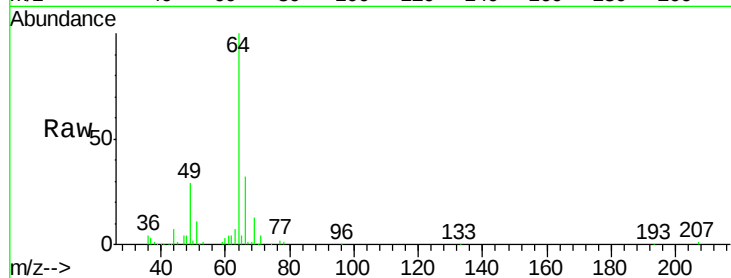
VSTD05047

Tgt Ion: 64 Resp: 78299

Ion Ratio Lower Upper

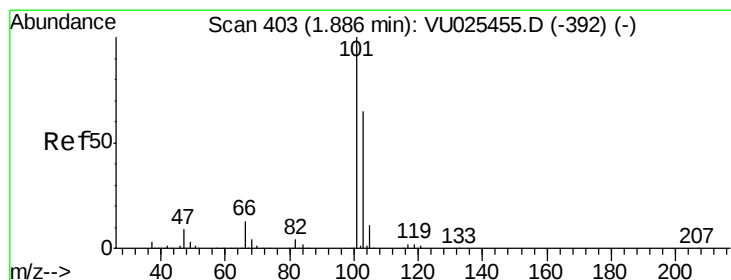
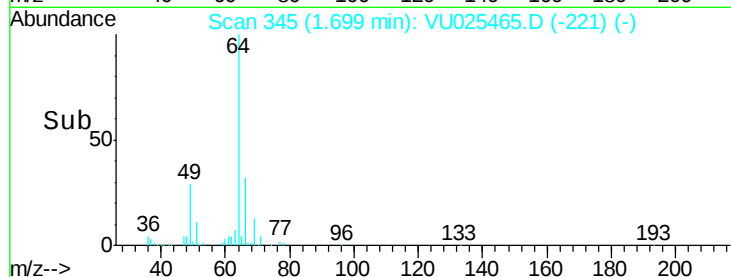
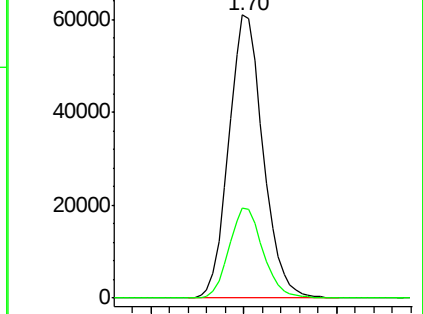
64 100

66 31.7 23.0 42.8



Abundance Ion 64.00 (63.70 to 64.70): VU025455.D (-335) (-)

Ion 66.00 (65.70 to 66.70): VU025455.D (-335) (-)



#9

Trichlorofluoromethane

Concen: 48.713 ug/L

RT: 1.89 min Scan# 404

Delta R.T. 0.00 min

Lab File: VU025465.D

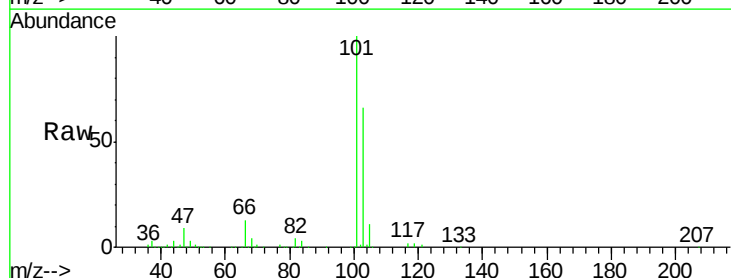
Acq: 17 Jul 2018 19:00

Tgt Ion: 101 Resp: 186255

Ion Ratio Lower Upper

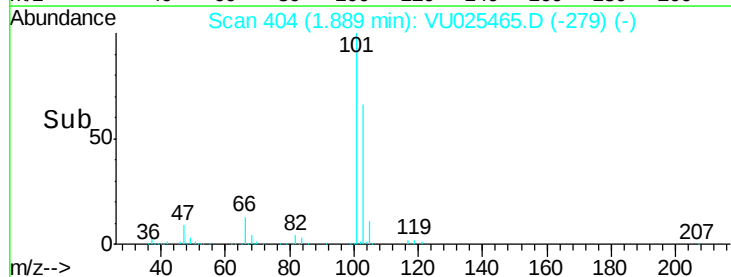
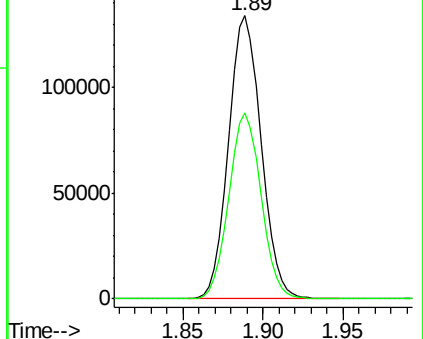
101 100

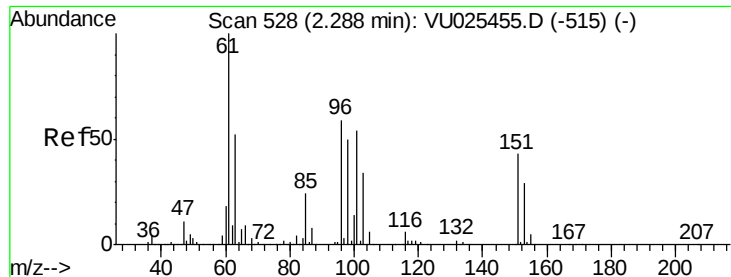
103 64.8 52.3 78.5



Abundance Ion 101.00 (100.70 to 101.70): VU025455.D (-392) (-)

Ion 103.00 (102.70 to 103.70): VU025455.D (-392) (-)





#10

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

Concen: 52.185 ug/L

RT: 2.29 min Scan# 528

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

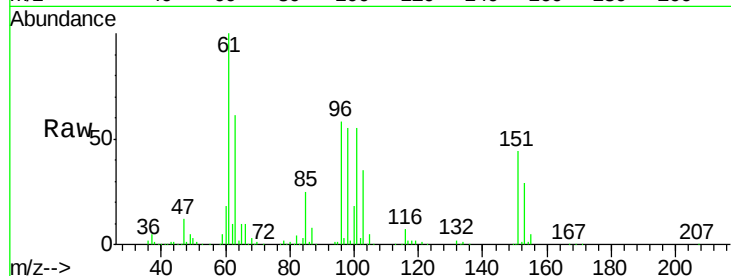
Tgt Ion: 101 Resp: 108332

Ion Ratio Lower Upper

101 100

85 44.3 35.4 53.2

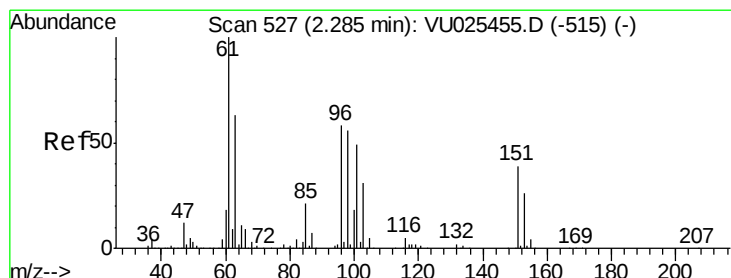
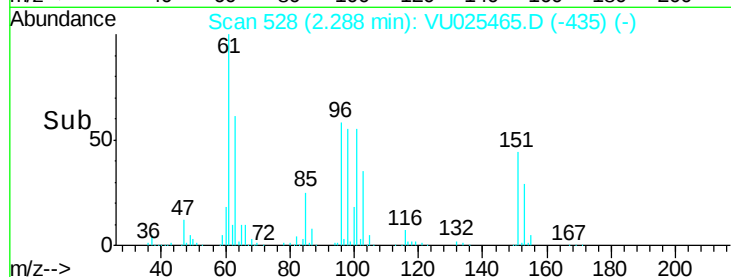
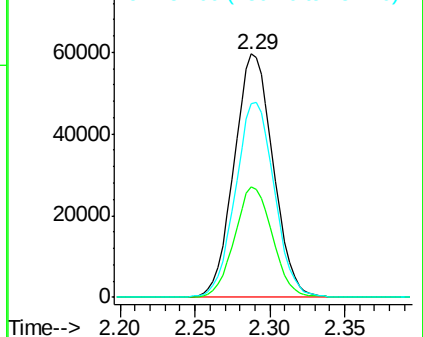
151 80.0 65.0 97.4



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: 50.054 ug/L

RT: 2.28 min Scan# 527

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

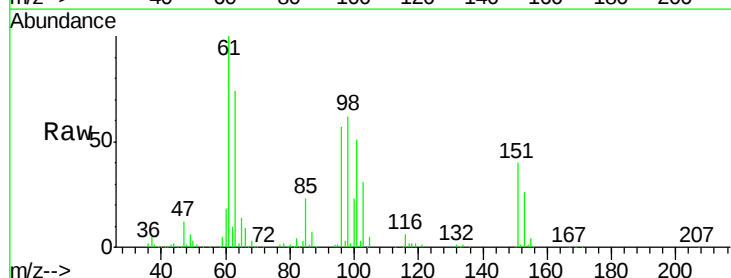
Tgt Ion: 96 Resp: 96388

Ion Ratio Lower Upper

96 100

61 176.4 120.6 224.0

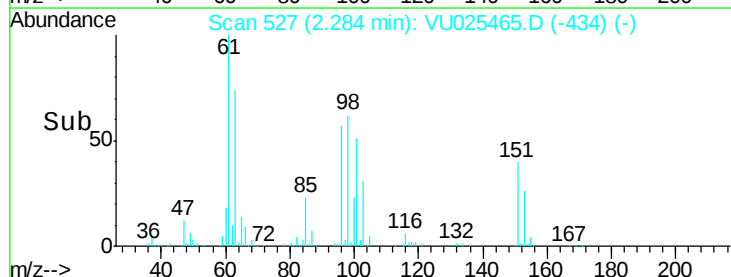
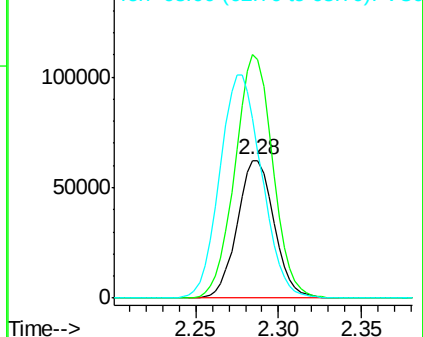
63 130.2 79.3 147.3

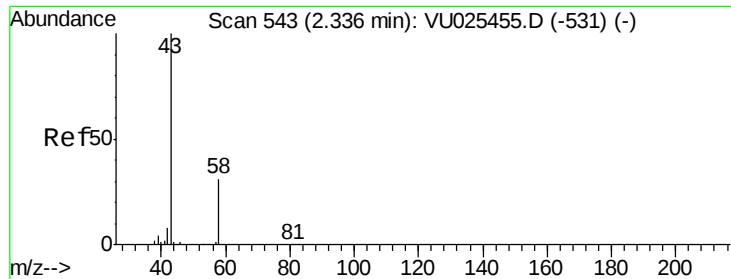


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 94.647 ug/L

RT: 2.32 min Scan# 539

Delta R.T. -0.01 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

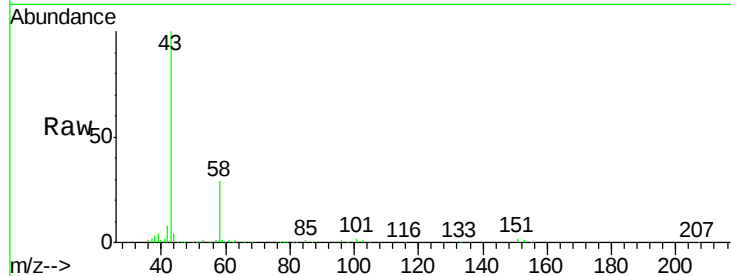
VSTD05047

Tgt Ion: 43 Resp: 147353

Ion Ratio Lower Upper

43 100

58 29.9 0.0 59.0



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0

2.32

100000

80000

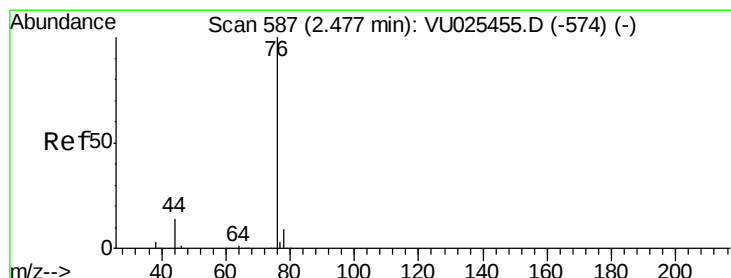
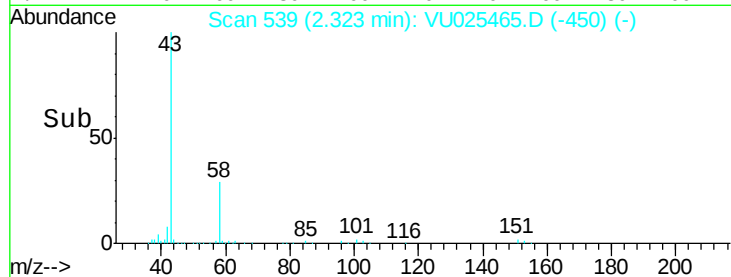
60000

40000

20000

0

Time-->



#14

Carbon disulfide

Concen: 46.985 ug/L

RT: 2.48 min Scan# 588

Delta R.T. 0.00 min

Lab File: VU025465.D

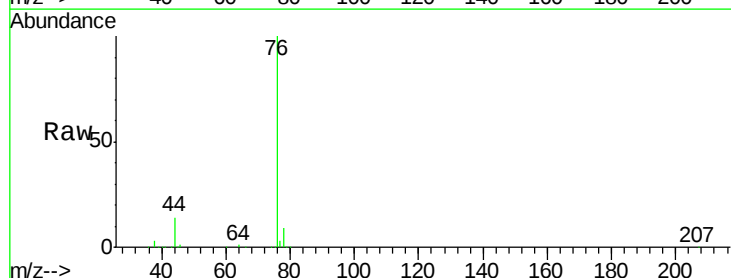
Acq: 17 Jul 2018 19:00

Tgt Ion: 76 Resp: 292368

Ion Ratio Lower Upper

76 100

78 9.1 7.3 10.9



Abundance Ion 76.00 (75.70 to 76.70): VU0

Ion 78.00 (77.70 to 78.70): VU0

2.48

200000

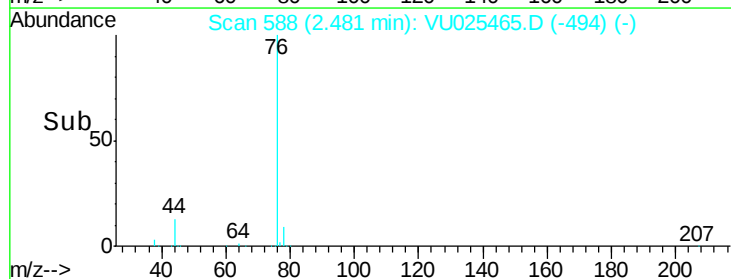
150000

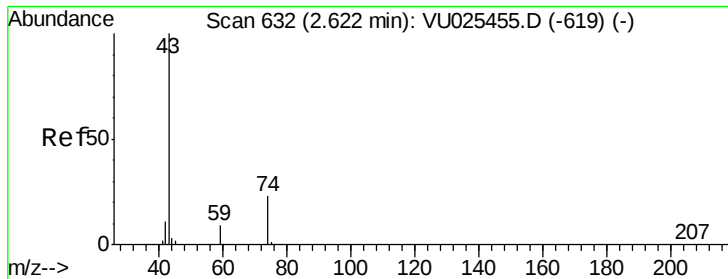
100000

50000

0

Time-->

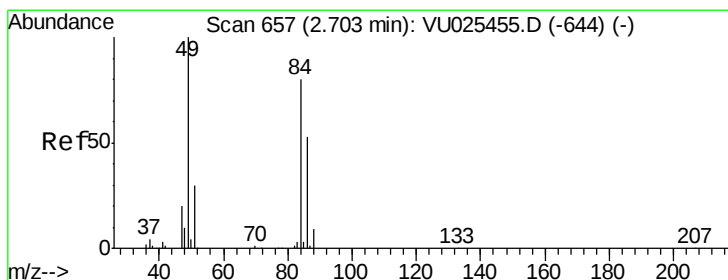
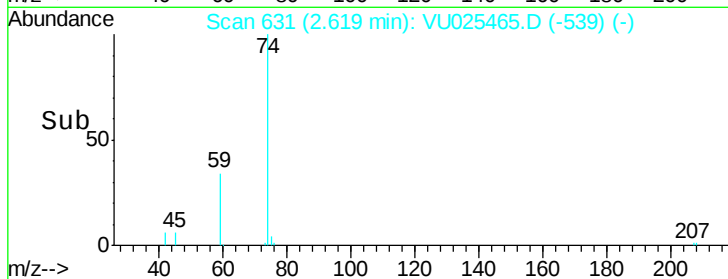
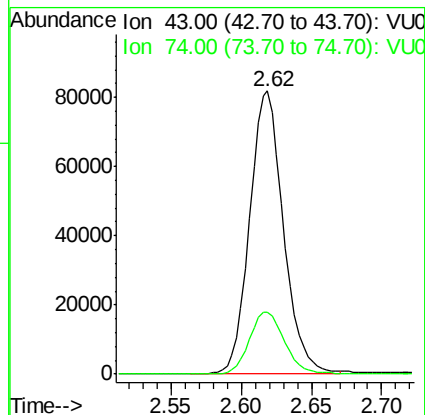
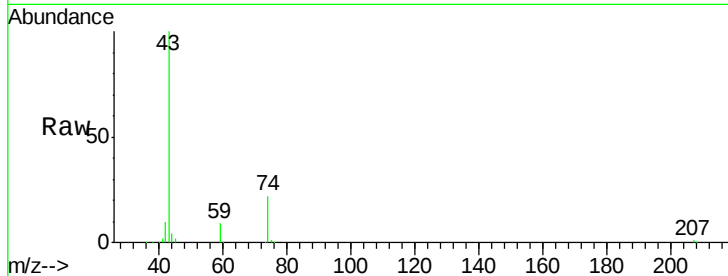




#15  
Methyl Acetate  
Concen: 47.762 ug/L  
RT: 2.62 min Scan# 631  
Delta R.T. -0.00 min  
Lab File: VU025465.D  
Acq: 17 Jul 2018 19:00

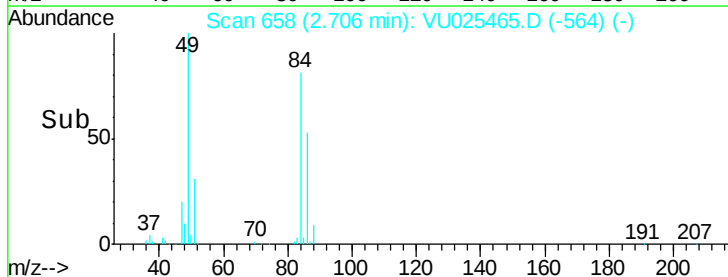
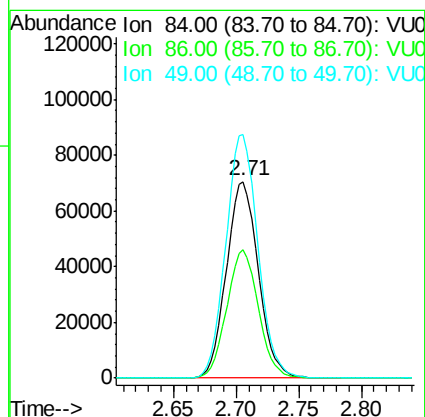
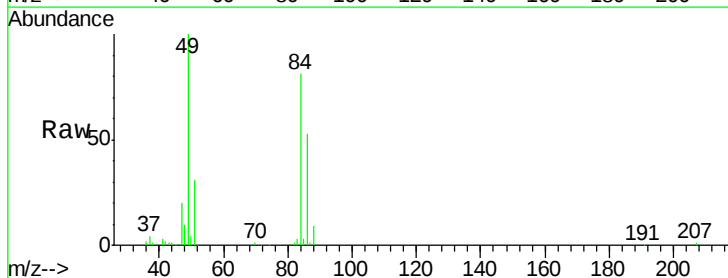
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05047

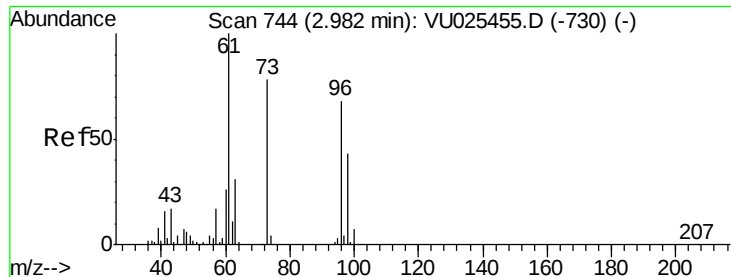
Tgt Ion: 43 Resp: 137422  
Ion Ratio Lower Upper  
43 100  
74 23.0 17.8 26.8



#16  
Methylene chloride  
Concen: 49.551 ug/L  
RT: 2.71 min Scan# 658  
Delta R.T. 0.00 min  
Lab File: VU025465.D  
Acq: 17 Jul 2018 19:00

Tgt Ion: 84 Resp: 124786  
Ion Ratio Lower Upper  
84 100  
86 65.1 46.3 85.9  
49 124.0 87.9 163.3





#17

trans-1,2-Dichloroethene

Concen: 49.452 ug/L

RT: 2.99 min Scan# 745

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

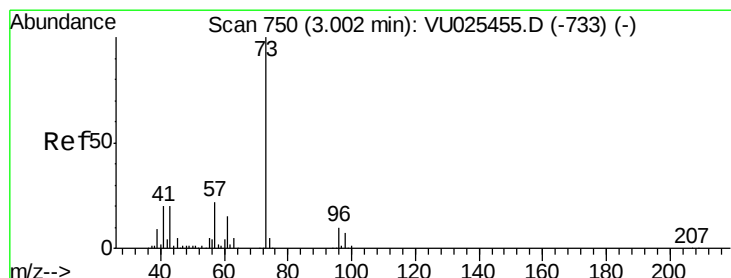
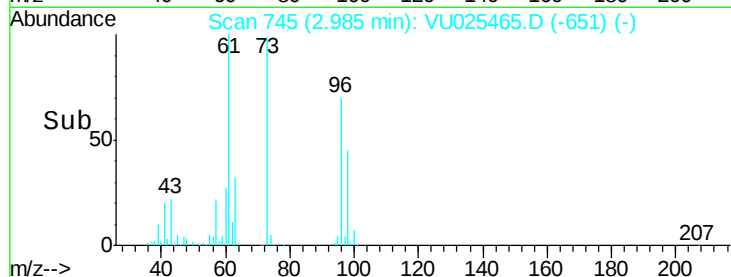
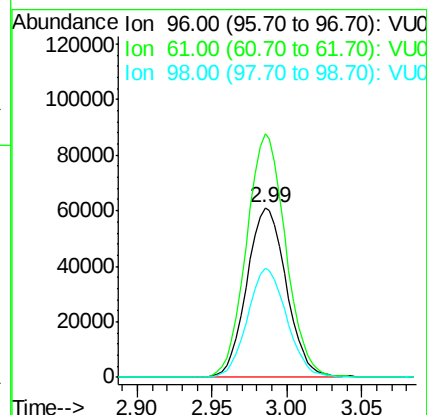
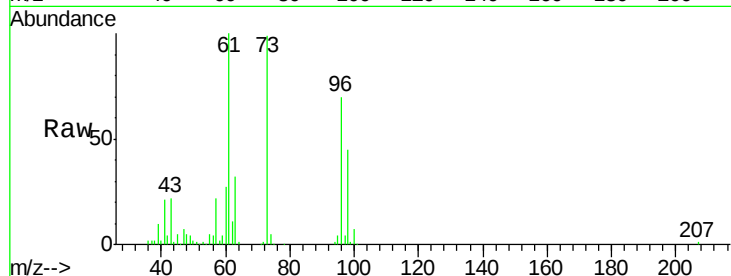
Tgt Ion: 96 Resp: 112639

Ion Ratio Lower Upper

96 100

61 143.4 103.6 192.4

98 64.0 44.8 83.2



#18

Methyl tert-butyl Ether

Concen: 49.193 ug/L

RT: 3.00 min Scan# 750

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

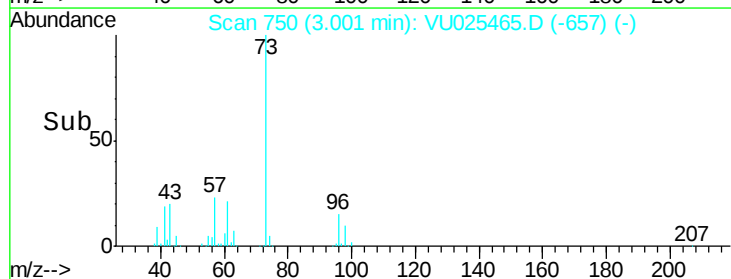
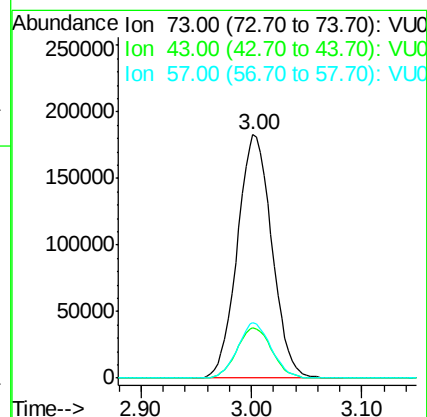
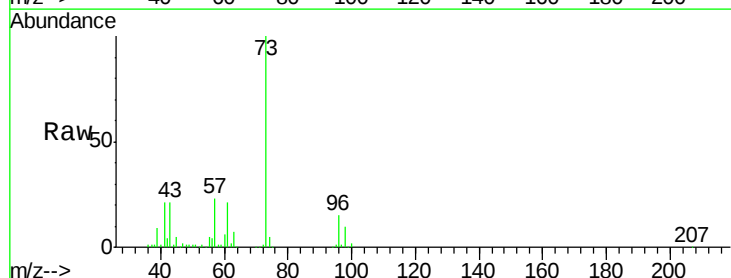
Tgt Ion: 73 Resp: 397020

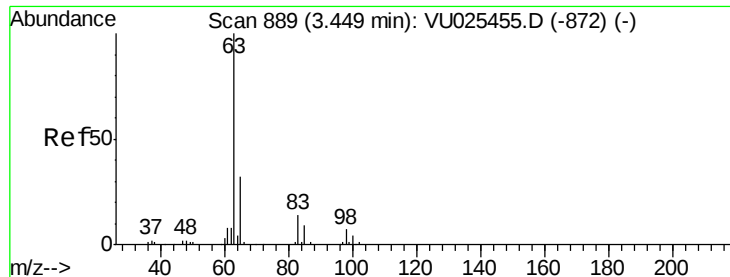
Ion Ratio Lower Upper

73 100

43 21.1 16.6 24.8

57 22.1 17.0 25.6





#19

1,1-Dichloroethane

Concen: 49.014 ug/L

RT: 3.45 min Scan# 890

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

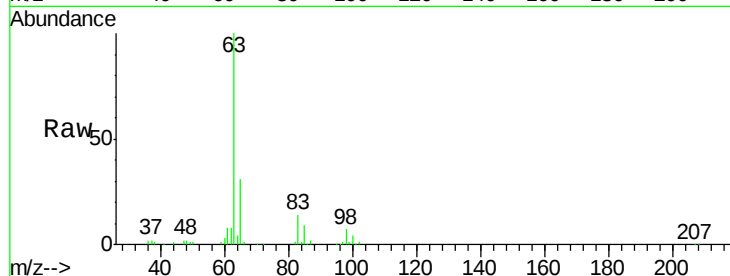
Tgt Ion: 63 Resp: 223331

Ion Ratio Lower Upper

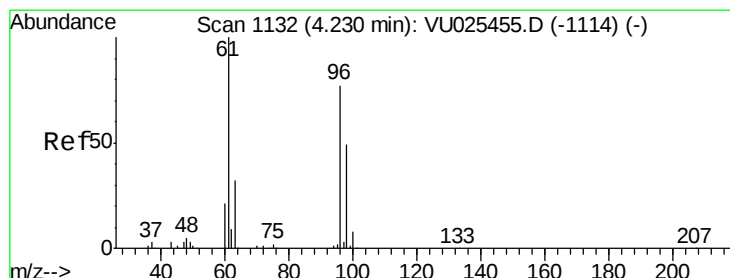
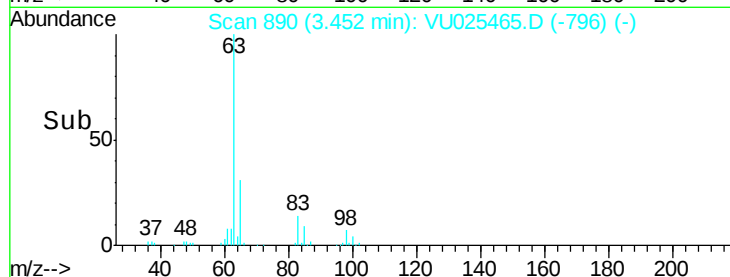
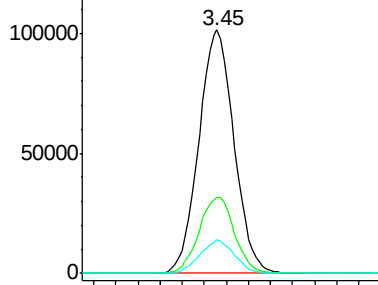
63 100

65 31.2 22.7 42.1

83 13.6 9.9 18.3



Abundance Ion 63.00 (62.70 to 63.70): VU0  
Ion 65.00 (64.70 to 65.70): VU0  
Ion 83.00 (82.70 to 83.70): VU0



#20

cis-1,2-Dichloroethene

Concen: 47.980 ug/L

RT: 4.23 min Scan# 1133

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

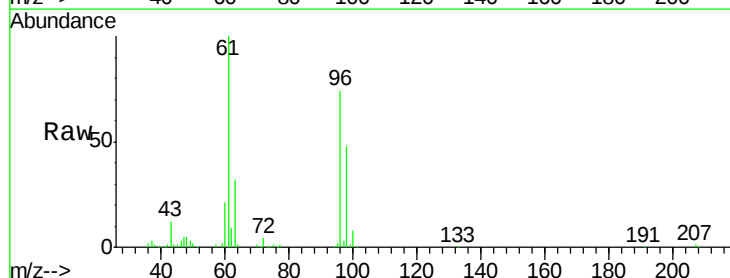
Tgt Ion: 96 Resp: 133805

Ion Ratio Lower Upper

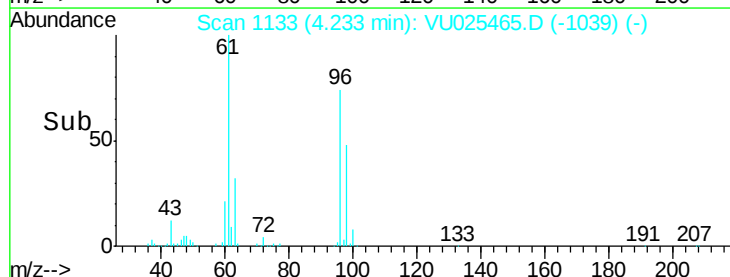
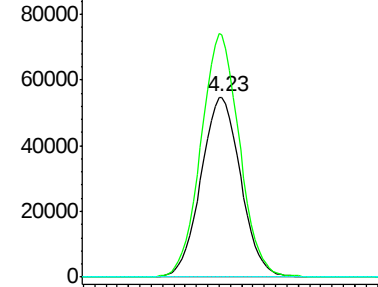
96 100

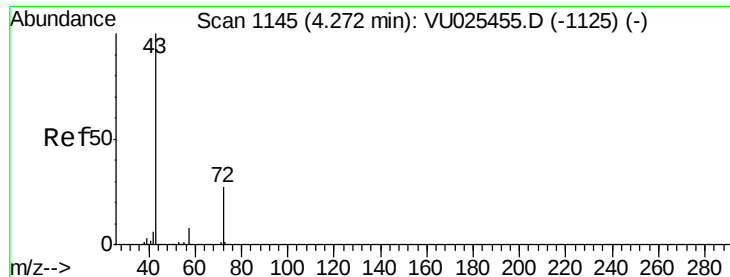
61 134.5 91.7 170.3

68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.00 (60.70 to 61.70): VU0  
Ion 68.00 (67.70 to 68.70): VU0





#22

2-Butanone

Concen: 97.096 ug/L

RT: 4.27 min Scan# 1143

Delta R.T. -0.01 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

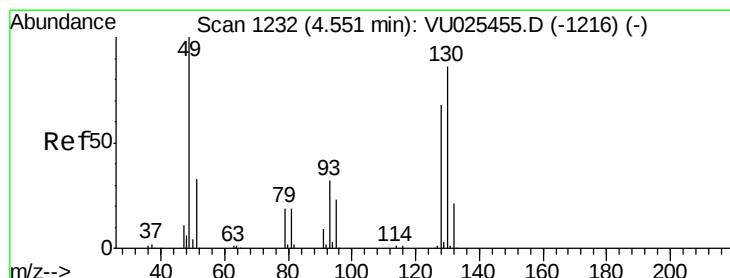
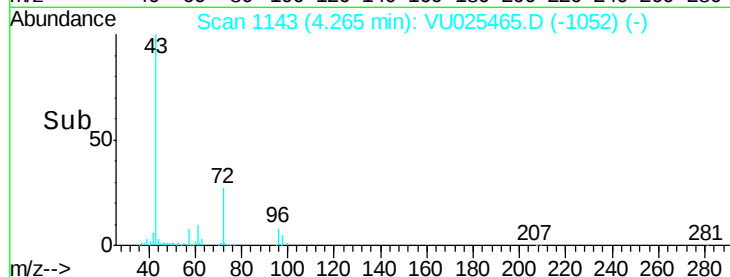
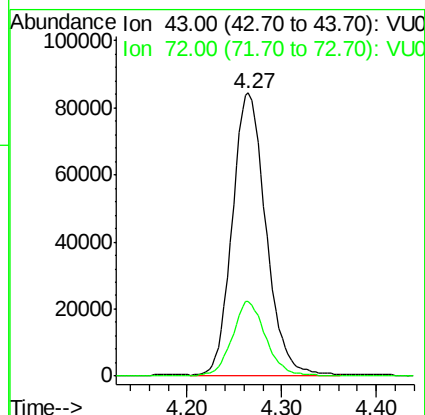
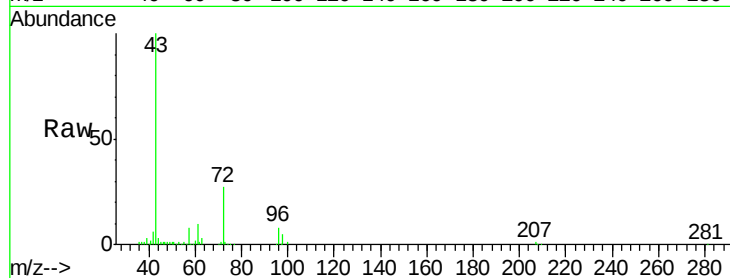
VSTD05047

Tgt Ion: 43 Resp: 208071

Ion Ratio Lower Upper

43 100

72 26.6 13.4 40.2



#23

Bromochloromethane

Concen: 49.358 ug/L

RT: 4.55 min Scan# 1233

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Tgt Ion: 128 Resp: 68992

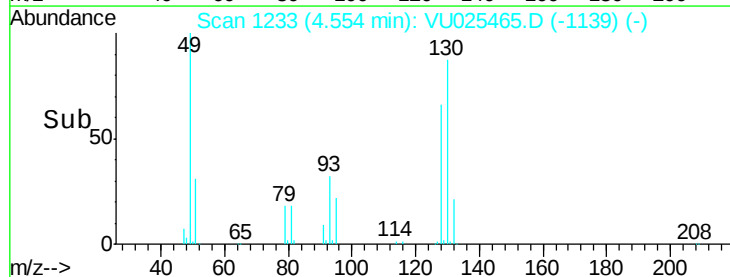
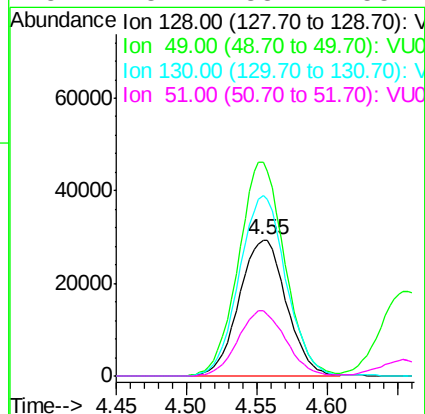
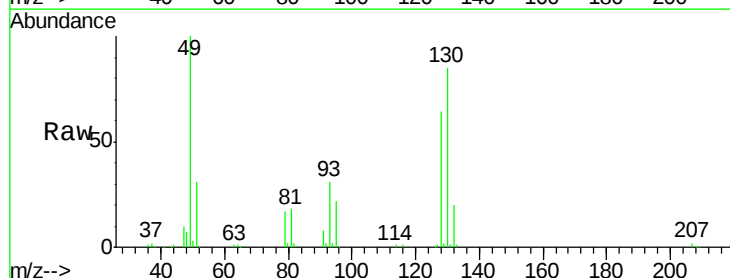
Ion Ratio Lower Upper

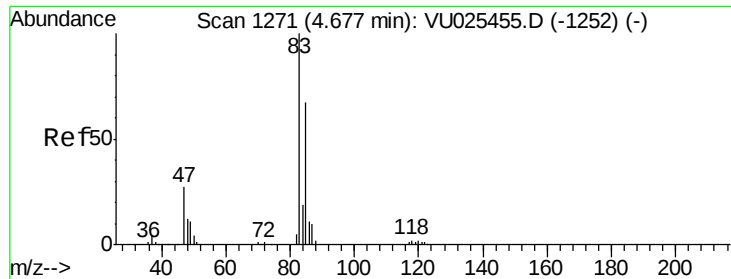
128 100

49 156.6 103.0 191.2

130 132.9 88.5 164.3

51 48.4 38.7 58.1





#25

Chloroform

Concen: 48.923 ug/L

RT: 4.68 min Scan# 1272

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

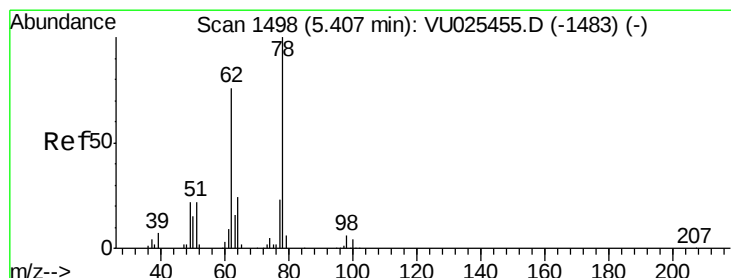
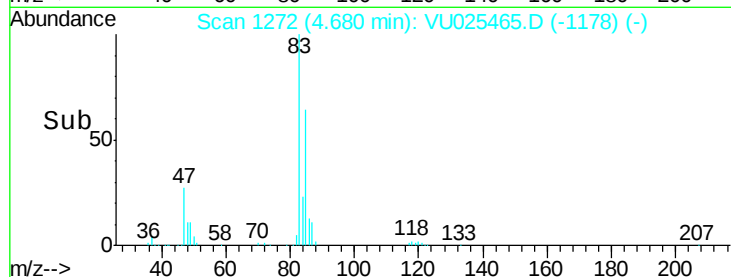
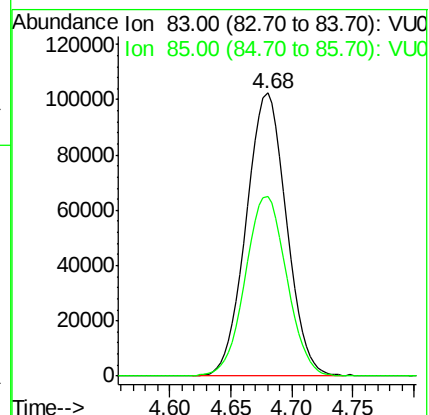
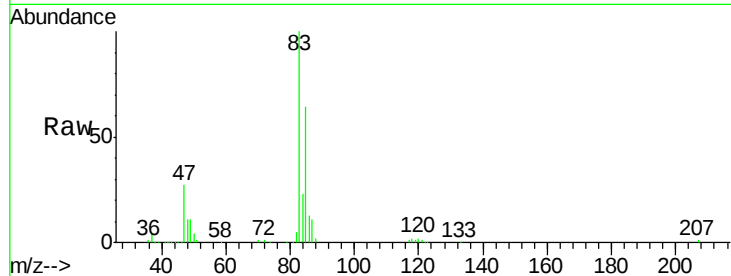
VSTD05047

Tgt Ion: 83 Resp: 234239

Ion Ratio Lower Upper

83 100

85 63.6 47.2 87.6



#27

1,2-Dichloroethane

Concen: 48.624 ug/L

RT: 5.41 min Scan# 1499

Delta R.T. 0.00 min

Lab File: VU025465.D

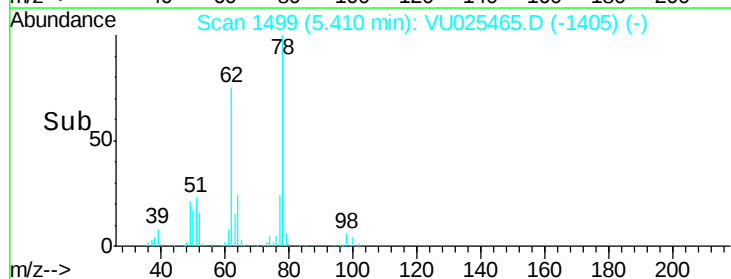
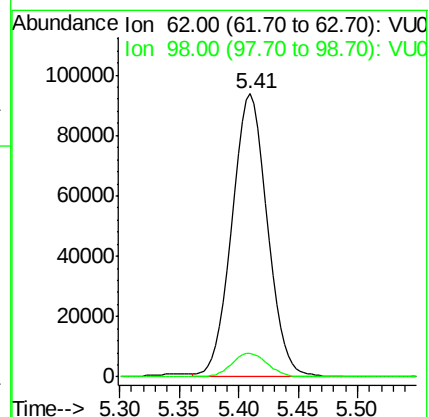
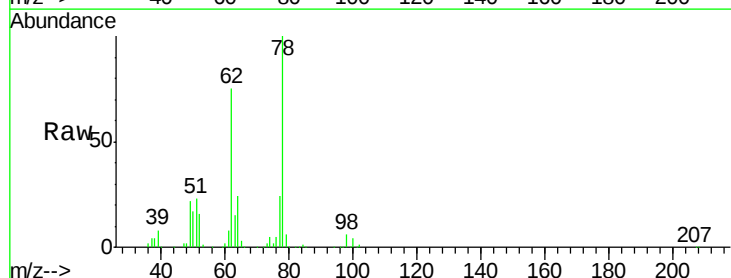
Acq: 17 Jul 2018 19:00

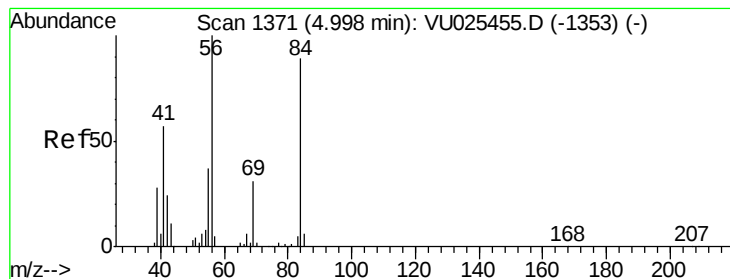
Tgt Ion: 62 Resp: 193333

Ion Ratio Lower Upper

62 100

98 8.3 6.5 9.7





#29

Cyclohexane

Concen: 50.527 ug/L

RT: 5.00 min Scan# 1372

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

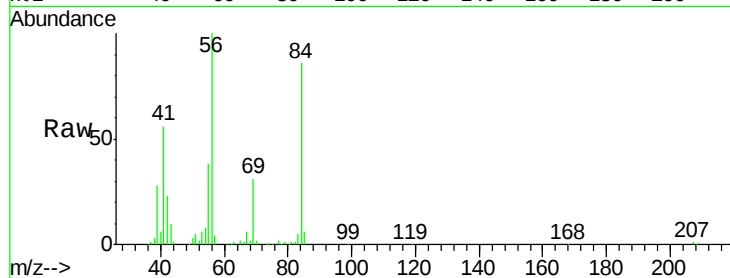
Tgt Ion: 56 Resp: 191075

Ion Ratio Lower Upper

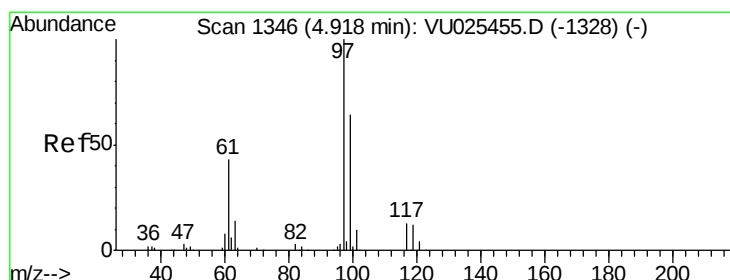
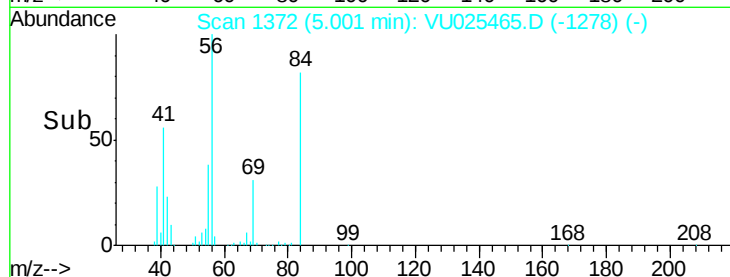
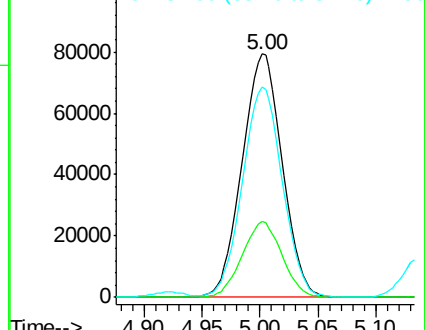
56 100

69 30.7 25.0 37.4

84 86.2 70.3 105.5



Abundance Ion 56.00 (55.70 to 56.70): VU0  
Ion 69.00 (68.70 to 69.70): VU0  
Ion 84.00 (83.70 to 84.70): VU0



#30

1,1,1-Trichloroethane

Concen: 48.540 ug/L

RT: 4.92 min Scan# 1347

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

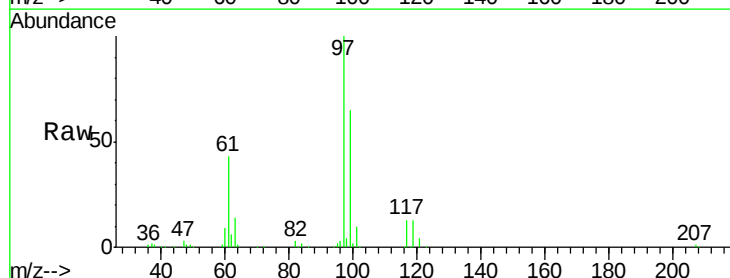
Tgt Ion: 97 Resp: 212128

Ion Ratio Lower Upper

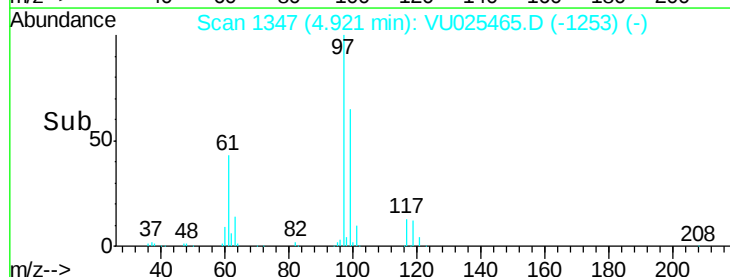
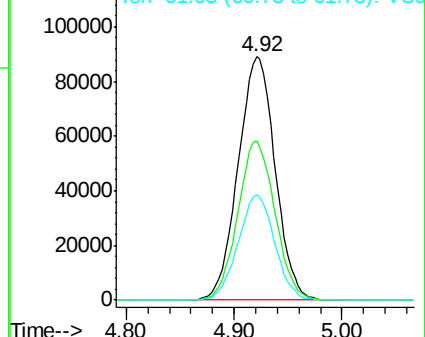
97 100

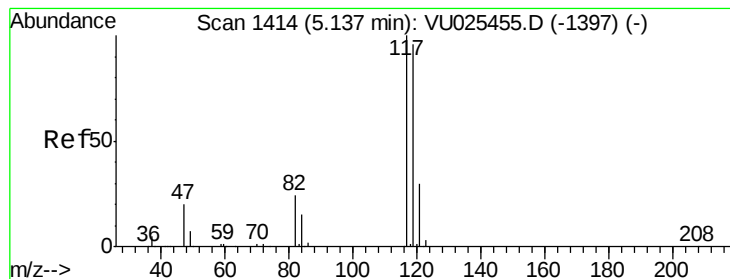
99 65.4 51.5 77.3

61 42.7 34.1 51.1



Abundance Ion 97.00 (96.70 to 97.70): VU0  
Ion 99.00 (98.70 to 99.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0





#31

Carbon tetrachloride

Concen: 49.526 ug/L

RT: 5.14 min Scan# 1415

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

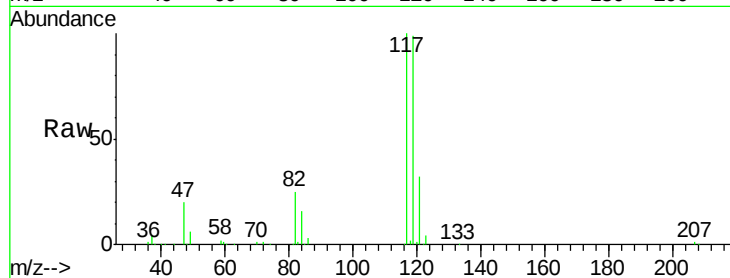
VSTD05047

Tgt Ion:117 Resp: 190140

Ion Ratio Lower Upper

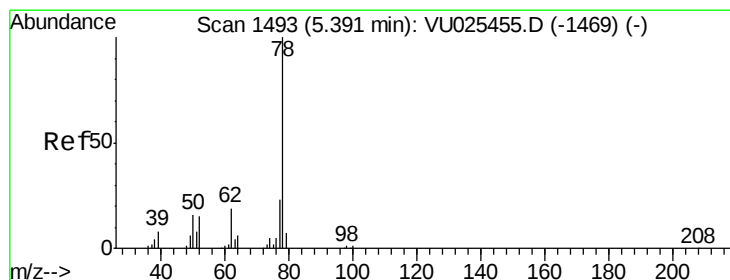
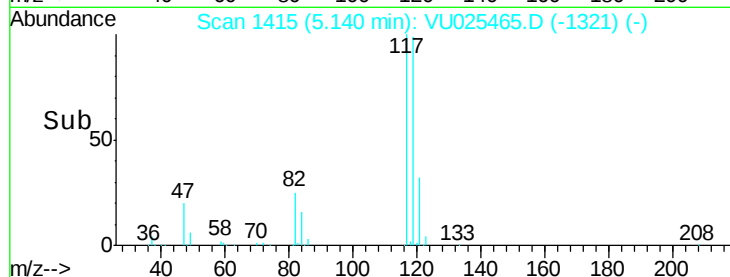
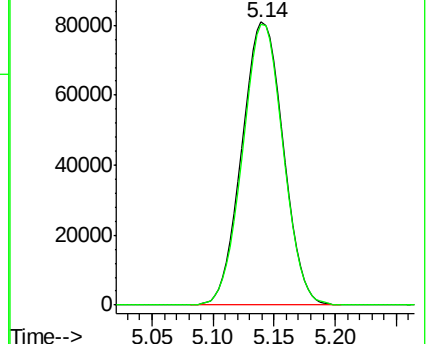
117 100

119 97.3 77.1 115.7



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 49.194 ug/L

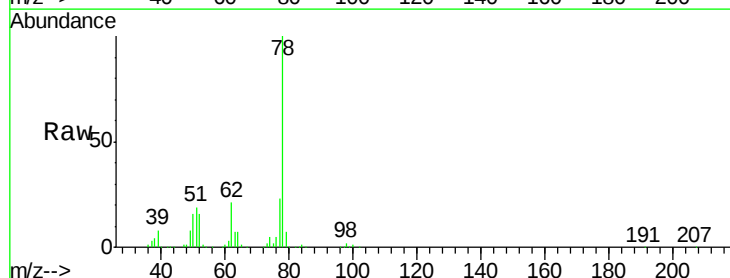
RT: 5.39 min Scan# 1494

Delta R.T. 0.00 min

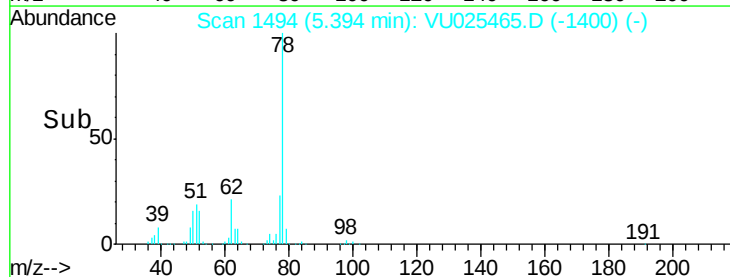
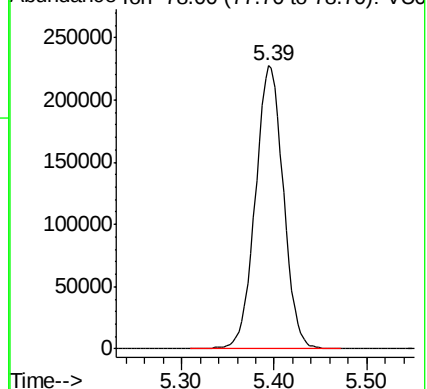
Lab File: VU025465.D

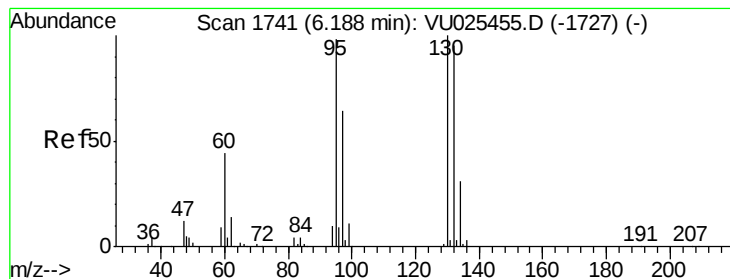
Acq: 17 Jul 2018 19:00

Tgt Ion: 78 Resp: 477938



Abundance Ion 78.00 (77.70 to 78.70): VU0





#34

Trichloroethene

Concen: 49.950 ug/L

RT: 6.19 min Scan# 1741

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

Tgt Ion: 95 Resp: 128463

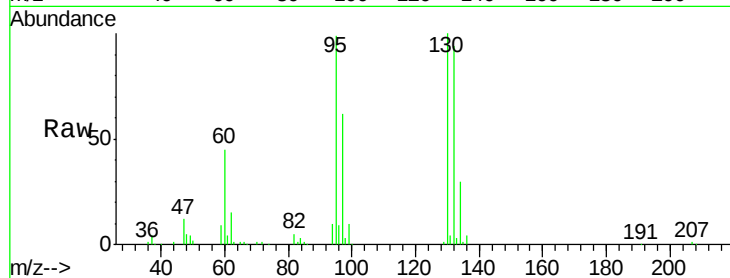
Ion Ratio Lower Upper

95 100

97 63.1 45.9 85.3

132 95.3 68.2 126.6

130 101.4 71.8 133.4

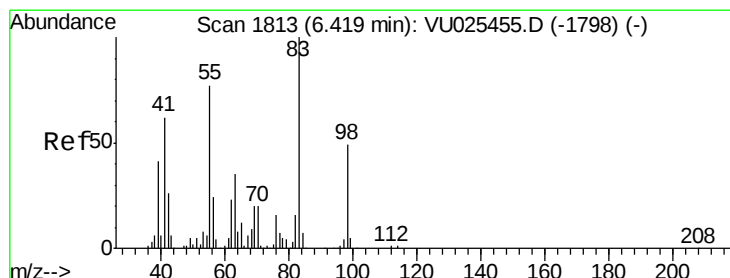
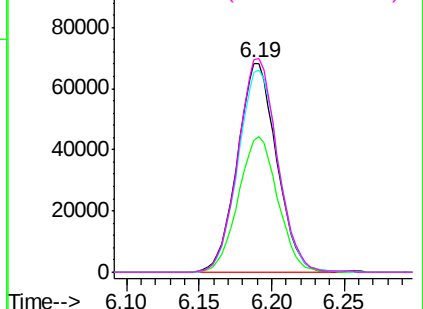
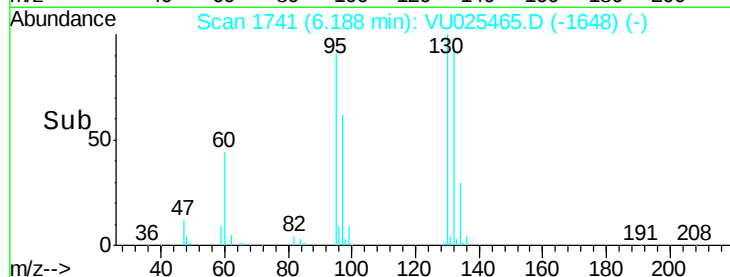


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#35

Methylcyclohexane

Concen: 51.120 ug/L

RT: 6.42 min Scan# 1813

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

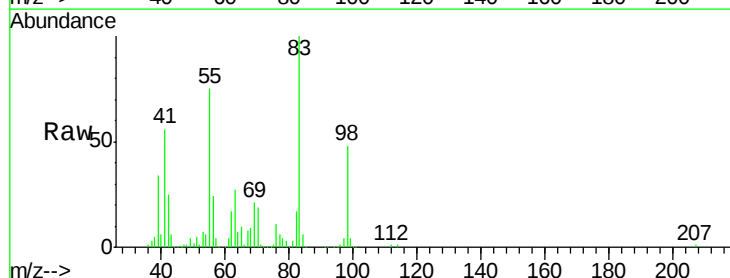
Tgt Ion: 83 Resp: 199609

Ion Ratio Lower Upper

83 100

55 76.6 61.8 92.8

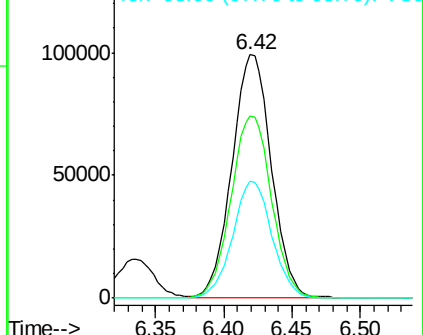
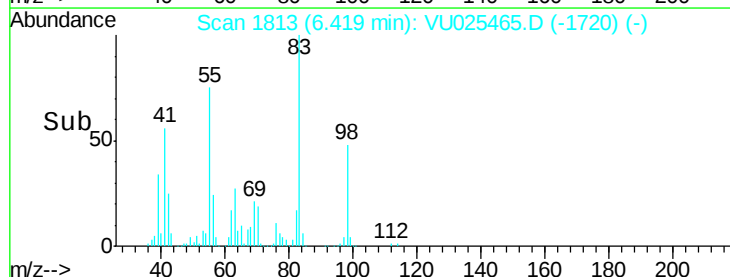
98 47.5 38.7 58.1

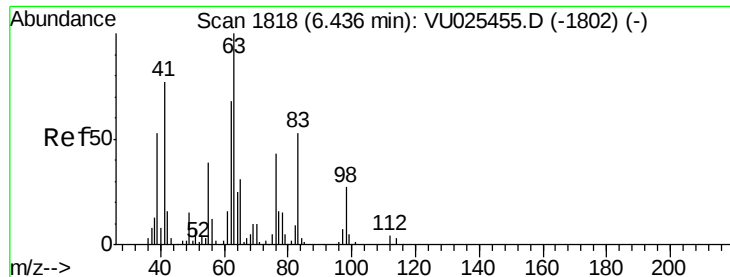


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 98.00 (97.70 to 98.70): VU0

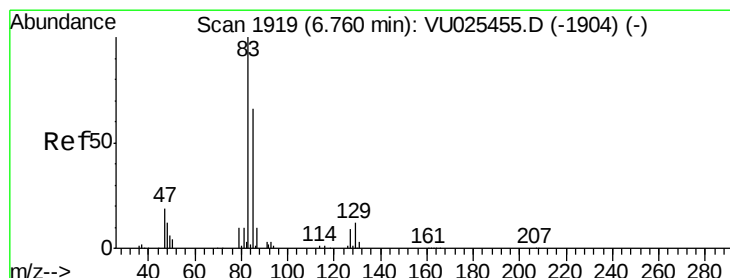
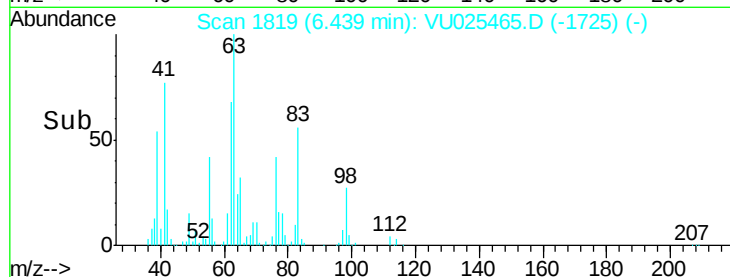
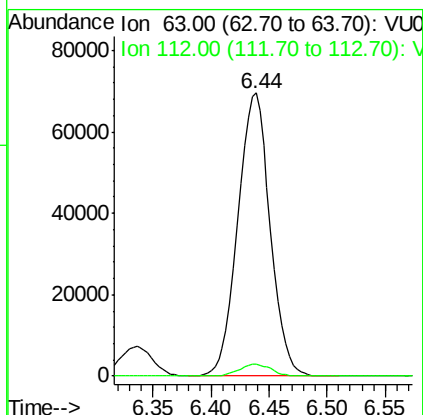
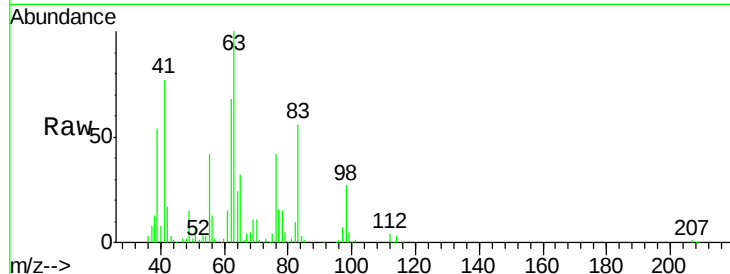




#37  
 1,2-Dichloropropane  
 Concen: 50.103 ug/L  
 RT: 6.44 min Scan# 1819  
 Delta R.T. 0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

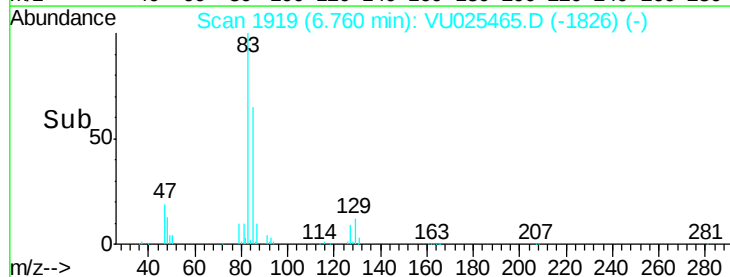
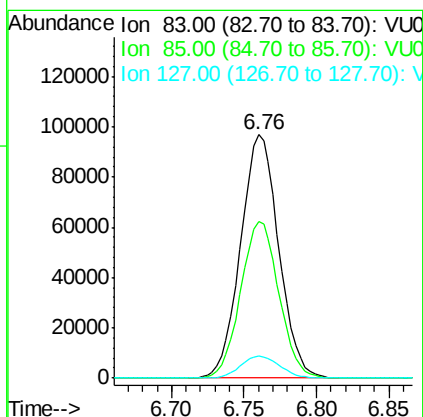
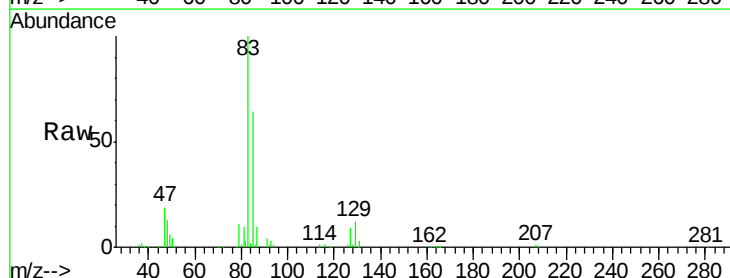
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

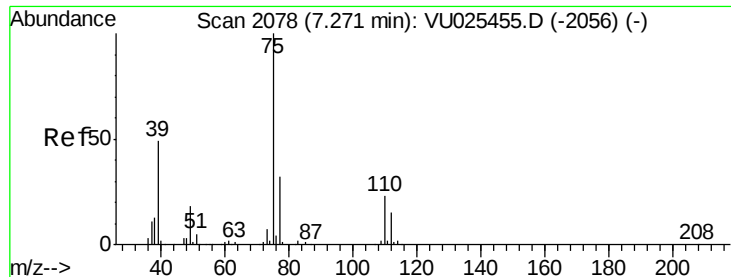
Tgt Ion: 63 Resp: 134279  
 Ion Ratio Lower Upper  
 63 100  
 112 4.1 3.2 4.8



#38  
 Bromodichloromethane  
 Concen: 48.955 ug/L  
 RT: 6.76 min Scan# 1919  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

Tgt Ion: 83 Resp: 177151  
 Ion Ratio Lower Upper  
 83 100  
 85 64.3 45.8 85.2  
 127 9.0 7.3 10.9





#39

cis-1,3-Dichloropropene

Concen: 49.872 ug/L

RT: 7.27 min Scan# 2078

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

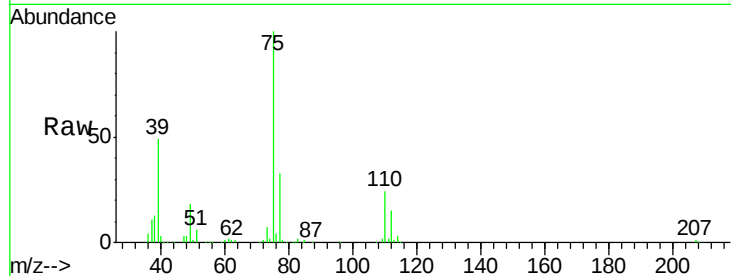
VSTD05047

Tgt Ion: 75 Resp: 207092

Ion Ratio Lower Upper

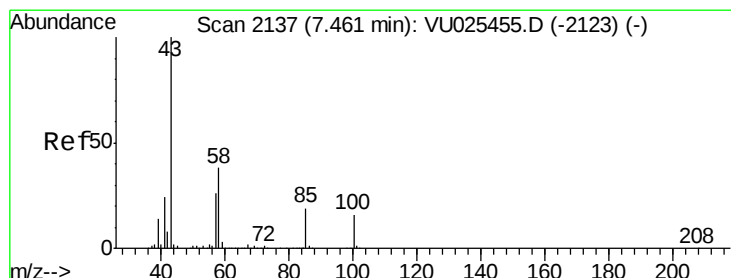
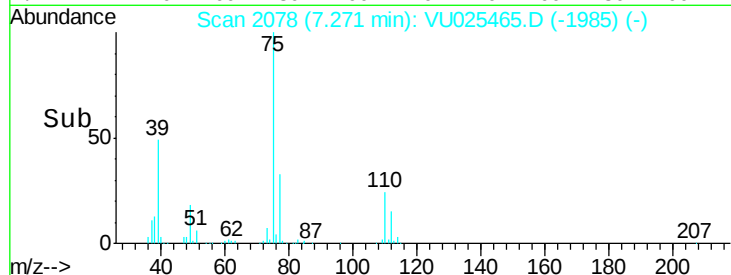
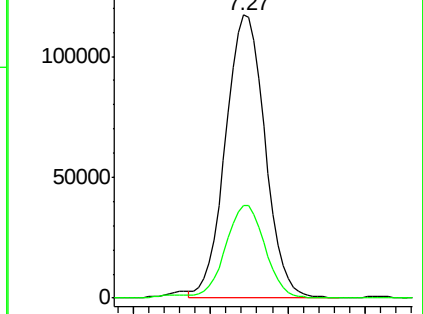
75 100

77 32.9 22.1 41.1



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0



#40

4-Methyl-2-pentanone

Concen: 96.939 ug/L

RT: 7.46 min Scan# 2137

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

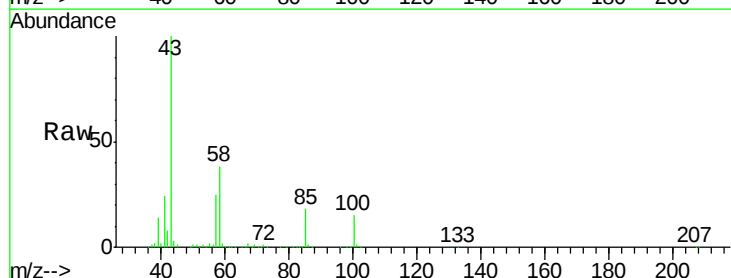
Tgt Ion: 43 Resp: 376800

Ion Ratio Lower Upper

43 100

58 37.8 30.9 46.3

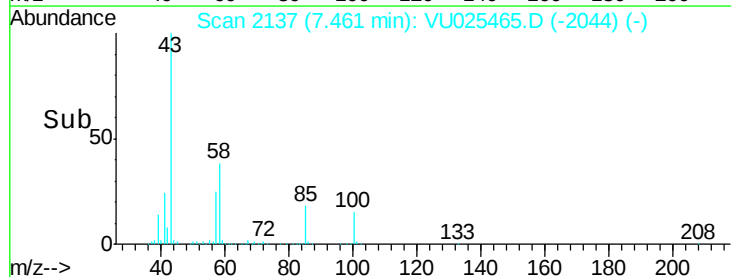
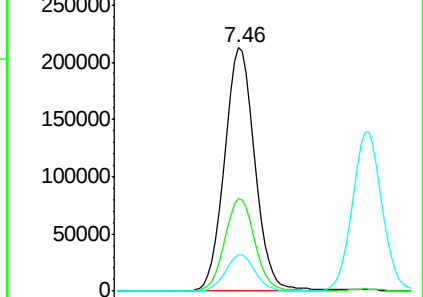
100 14.9 12.4 18.6

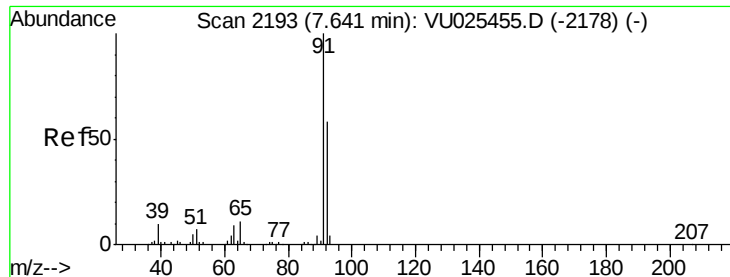


Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0

Ion 100.00 (99.70 to 100.70): VU0





#42

Toluene

Concen: 50.666 ug/L

RT: 7.64 min Scan# 2193

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

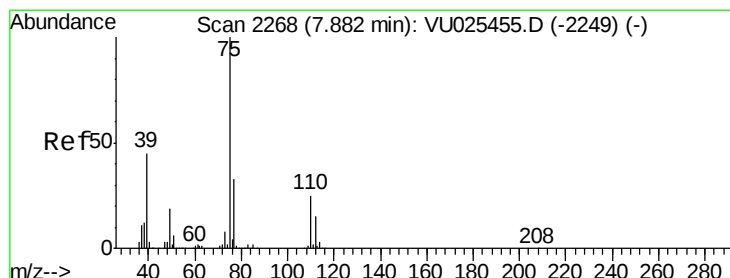
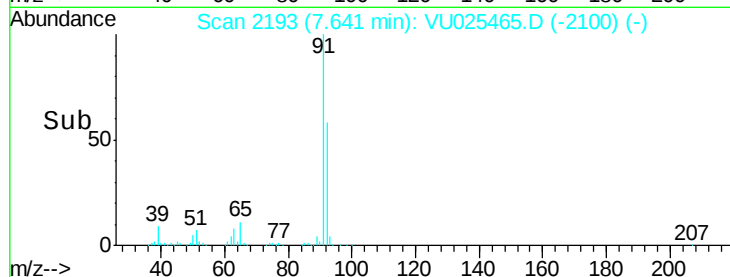
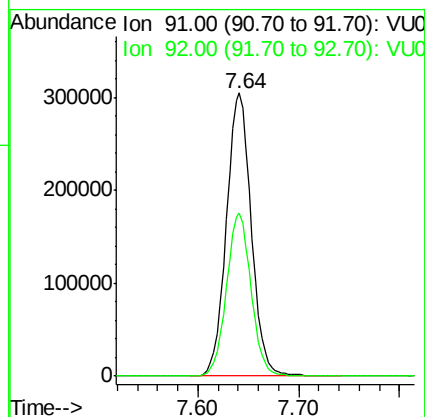
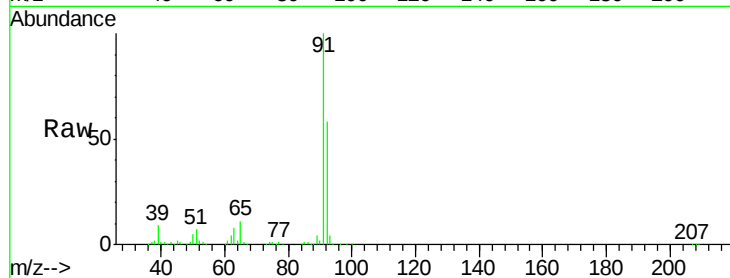
VSTD05047

Tgt Ion: 91 Resp: 524856

Ion Ratio Lower Upper

91 100

92 57.5 40.5 75.1



#44

trans-1,3-Dichloropropene

Concen: 50.343 ug/L

RT: 7.88 min Scan# 2268

Delta R.T. -0.00 min

Lab File: VU025465.D

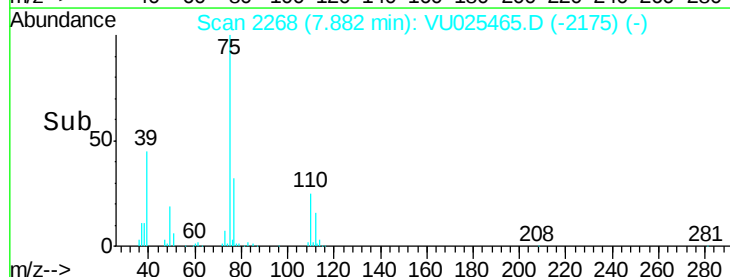
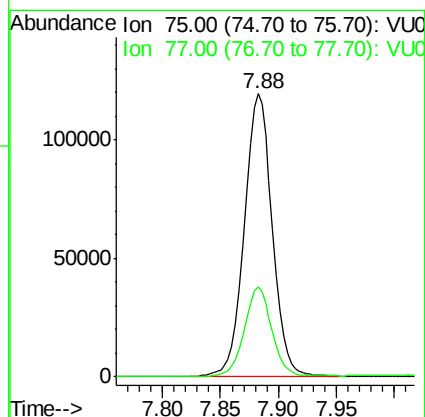
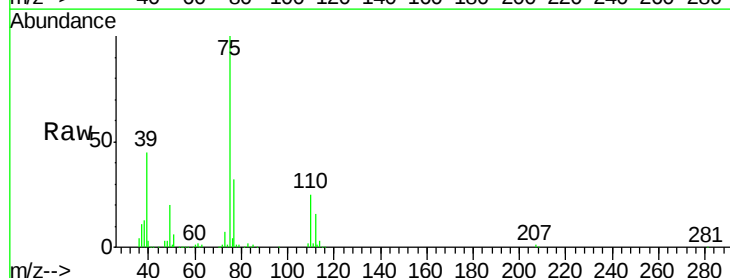
Acq: 17 Jul 2018 19:00

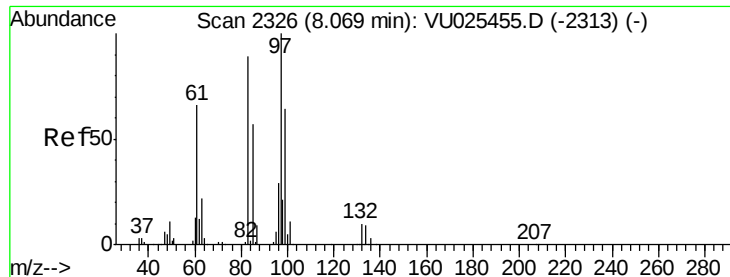
Tgt Ion: 75 Resp: 200685

Ion Ratio Lower Upper

75 100

77 31.7 22.7 42.3

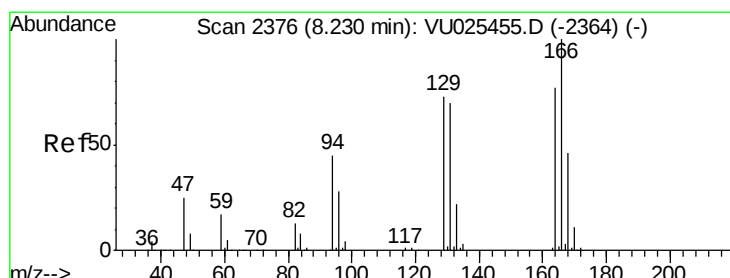
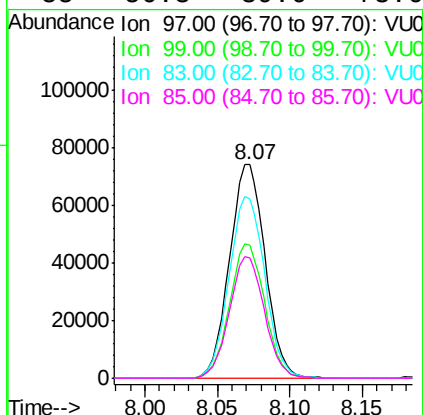
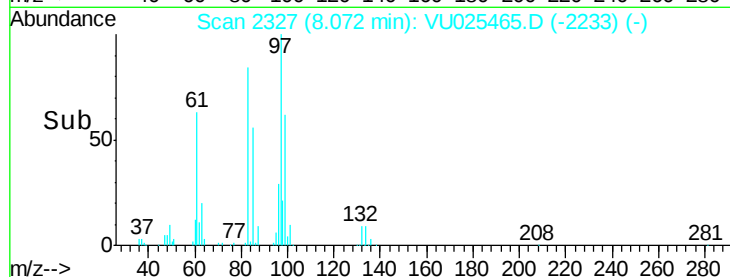
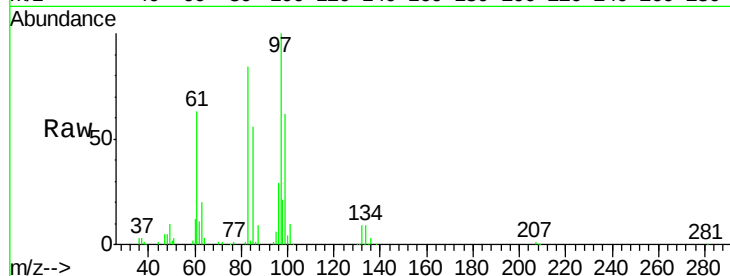




#45  
 1,1,2-Trichloroethane  
 Concen: 49.932 ug/L  
 RT: 8.07 min Scan# 2327  
 Delta R.T. 0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

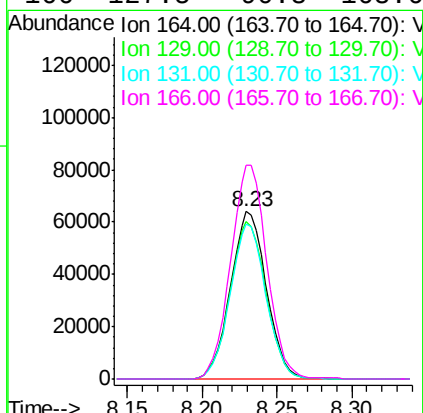
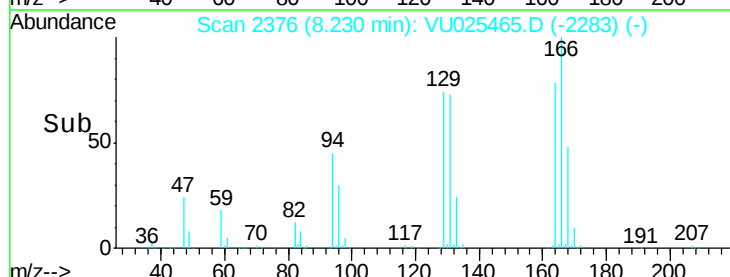
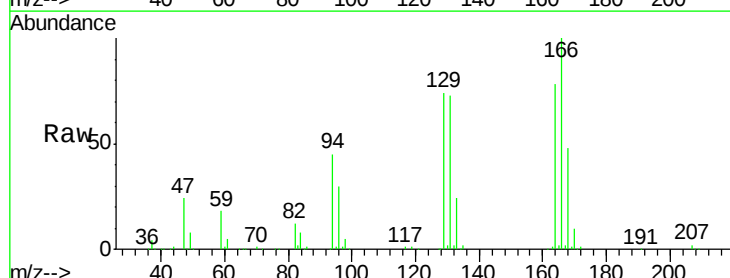
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

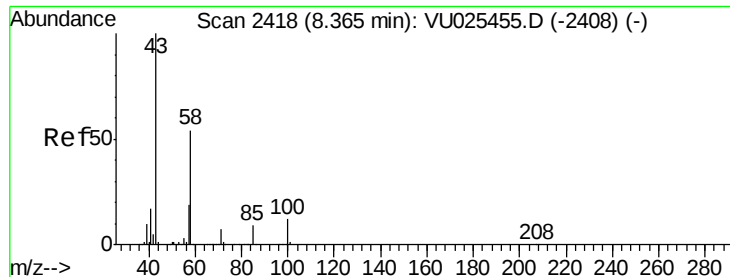
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 126878 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 62.2  | 44.7  | 83.1   |
| 83       | 84.2  | 62.0  | 115.2  |
| 85       | 56.3  | 39.6  | 73.6   |



#46  
 Tetrachloroethene  
 Concen: 49.932 ug/L  
 RT: 8.23 min Scan# 2376  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 107127 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 94.3  | 66.5  | 123.5  |
| 131      | 92.8  | 63.7  | 118.3  |
| 166      | 127.5 | 90.8  | 168.6  |

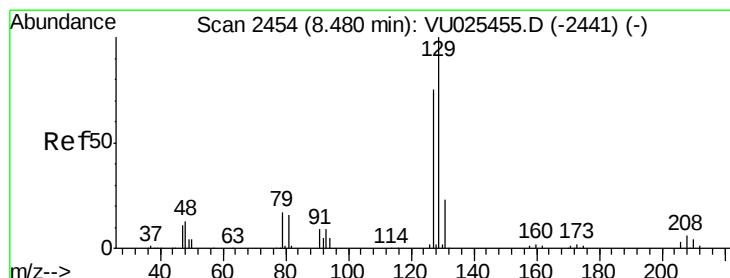
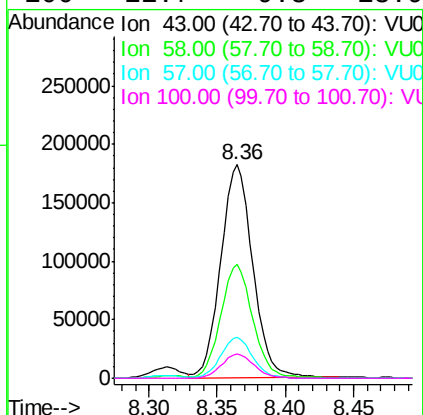
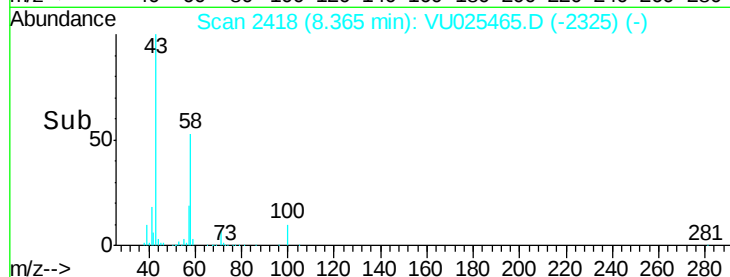
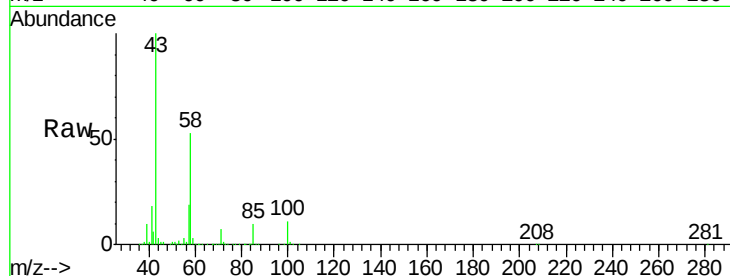




#48  
2-Hexanone  
Concen: 95.705 ug/L  
RT: 8.36 min Scan# 2418  
Delta R.T. -0.00 min  
Lab File: VU025465.D  
Acq: 17 Jul 2018 19:00

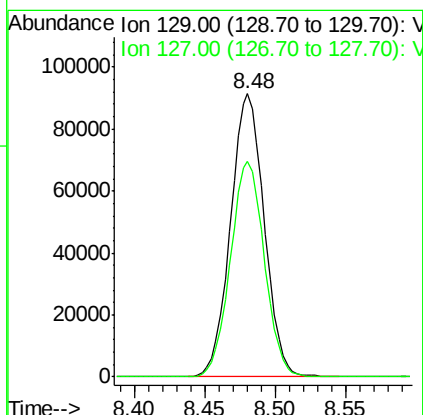
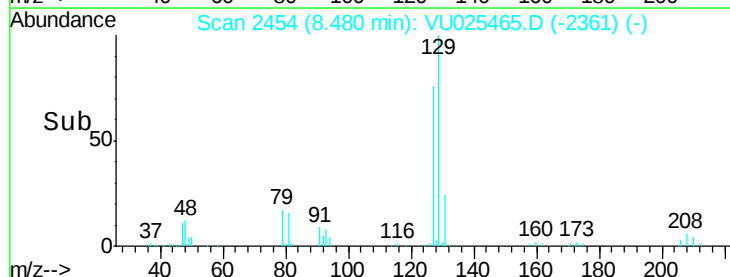
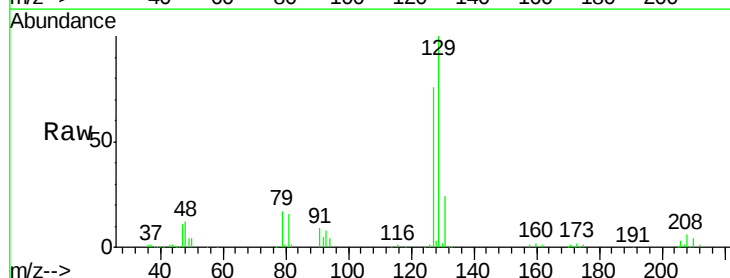
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05047

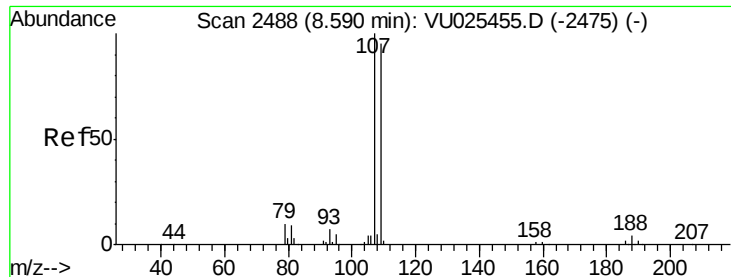
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 297212 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 53.1  | 42.3  | 63.5   |
| 57       | 18.9  | 15.6  | 23.4   |
| 100      | 11.7  | 9.3   | 13.9   |



#49  
Dibromochloromethane  
Concen: 49.712 ug/L  
RT: 8.48 min Scan# 2454  
Delta R.T. -0.00 min  
Lab File: VU025465.D  
Acq: 17 Jul 2018 19:00

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 129   | Resp: | 152916 |
| Ion      | Ratio | Lower | Upper  |
| 129      | 100   |       |        |
| 127      | 76.0  | 52.4  | 97.2   |

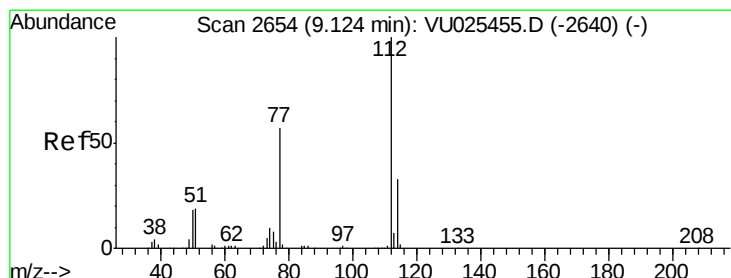
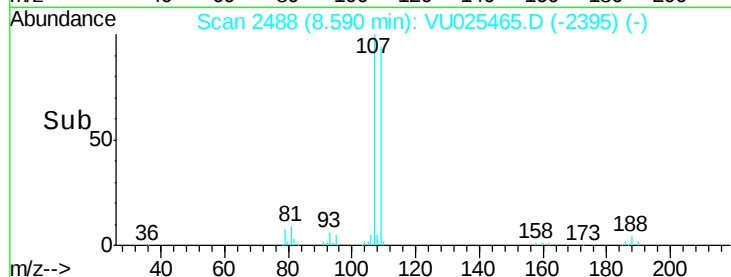
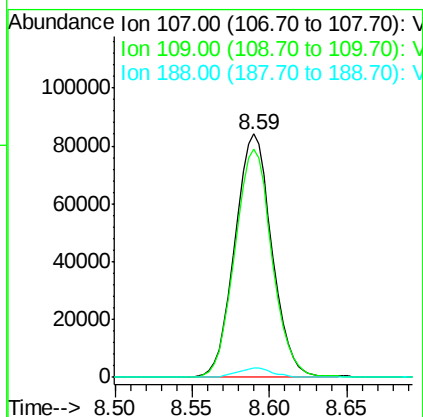
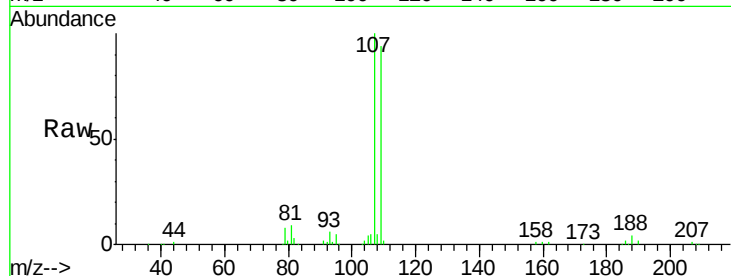




#50  
1,2-Dibromoethane  
Concen: 49.852 ug/L  
RT: 8.59 min Scan# 2488  
Delta R.T. -0.00 min  
Lab File: VU025465.D  
Acq: 17 Jul 2018 19:00

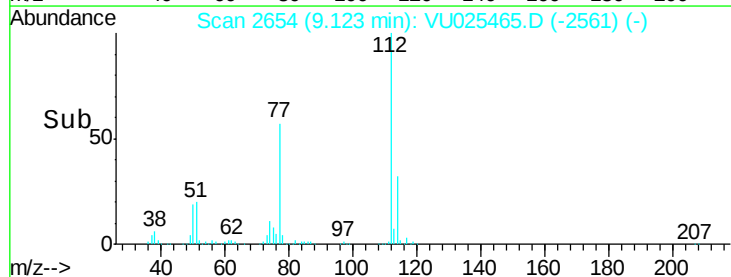
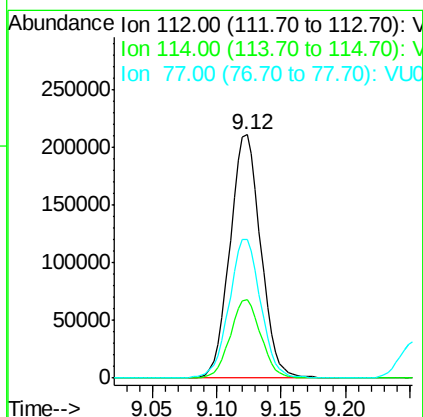
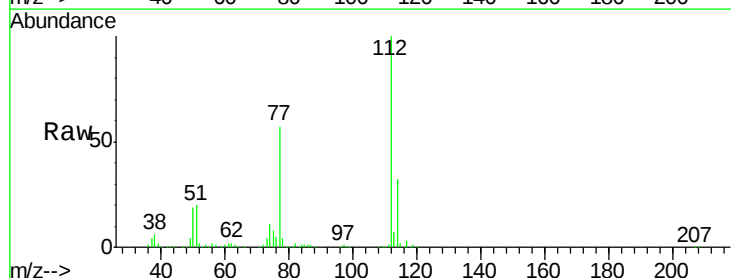
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD05047

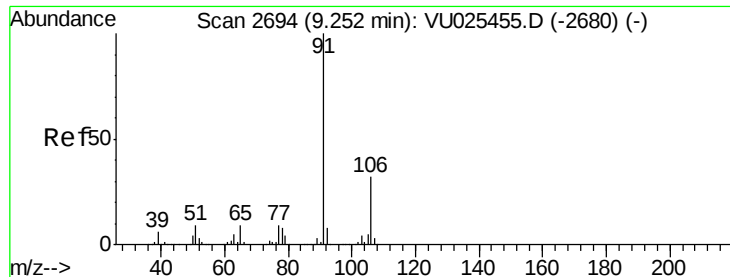
Tgt Ion:107 Resp: 139820  
Ion Ratio Lower Upper  
107 100  
109 93.9 66.5 123.5  
188 3.8 3.4 5.0



#51  
Chlorobenzene  
Concen: 50.377 ug/L  
RT: 9.12 min Scan# 2654  
Delta R.T. -0.00 min  
Lab File: VU025465.D  
Acq: 17 Jul 2018 19:00

Tgt Ion:112 Resp: 350161  
Ion Ratio Lower Upper  
112 100  
114 32.3 22.8 42.4  
77 57.1 45.8 68.8





#52

Ethylbenzene

Concen: 50.510 ug/L

RT: 9.25 min Scan# 2694

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

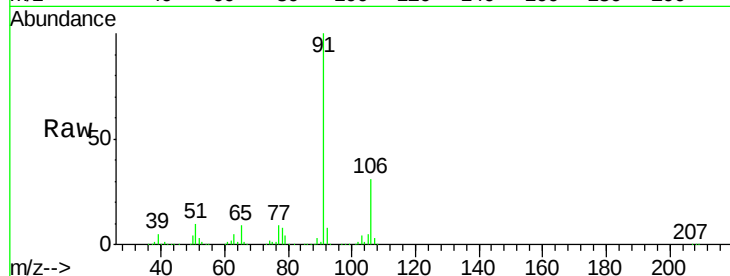
VSTD05047

Tgt Ion: 91 Resp: 584084

Ion Ratio Lower Upper

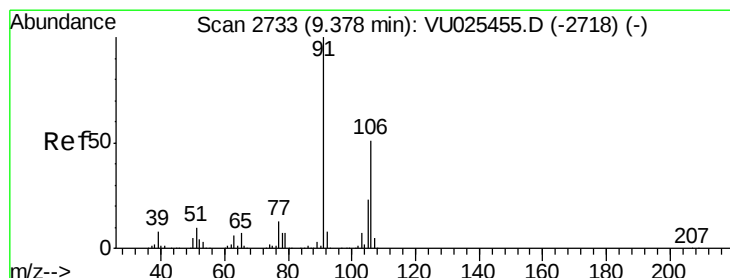
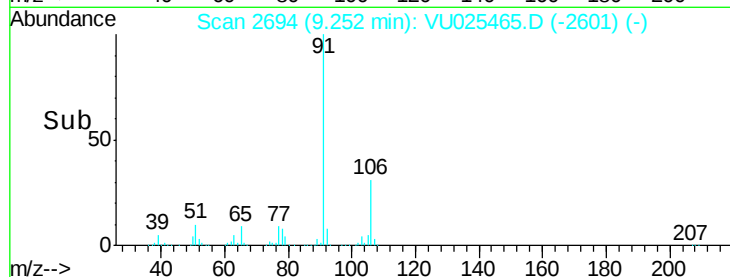
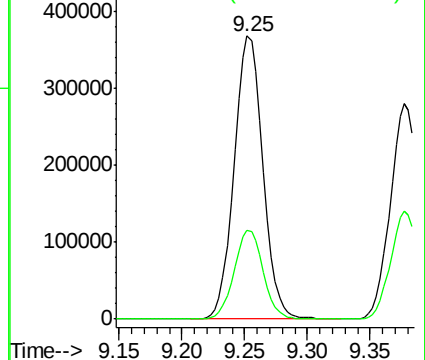
91 100

106 31.4 22.4 41.6



Abundance Ion 91.00 (90.70 to 91.70): VU0

Ion 106.00 (105.70 to 106.70): V



#53

m,p-Xylene

Concen: 51.087 ug/L

RT: 9.38 min Scan# 2733

Delta R.T. -0.00 min

Lab File: VU025465.D

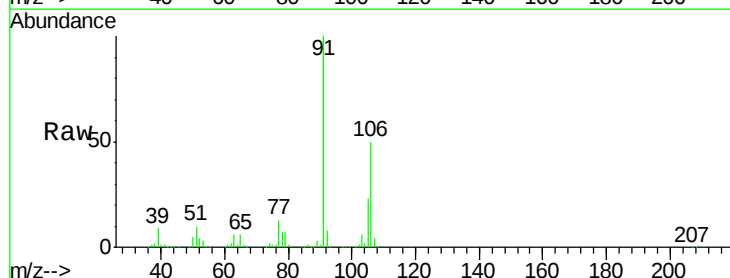
Acq: 17 Jul 2018 19:00

Tgt Ion: 106 Resp: 226429

Ion Ratio Lower Upper

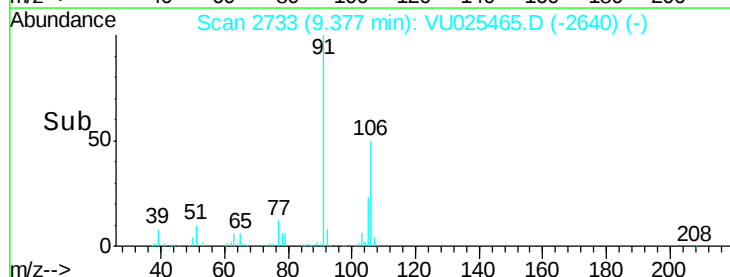
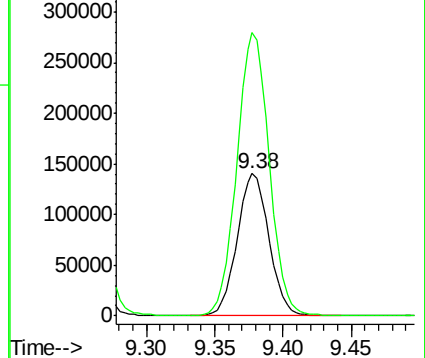
106 100

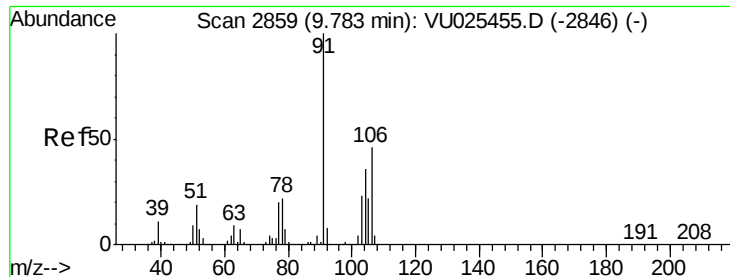
91 198.9 138.6 257.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0





#54

o-xylene

Concen: 50.231 ug/L

RT: 9.78 min Scan# 2859

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

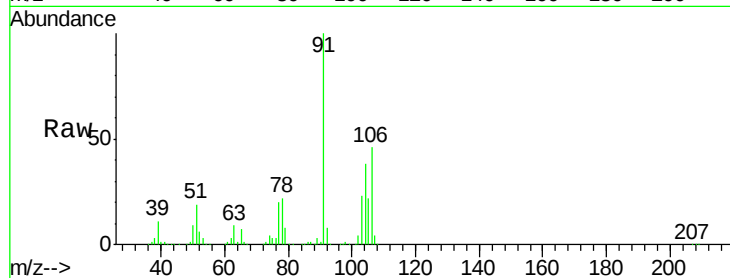
VSTD05047

Tgt Ion:106 Resp: 224598

Ion Ratio Lower Upper

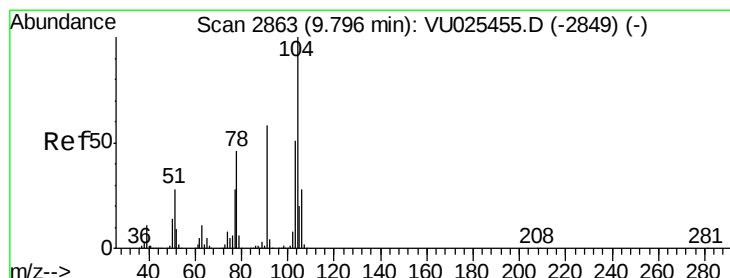
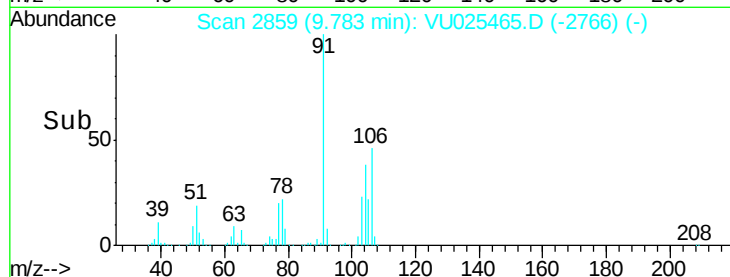
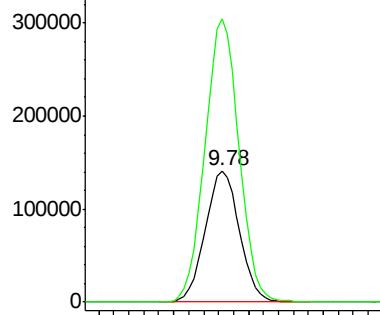
106 100

91 215.3 152.8 283.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 51.514 ug/L

RT: 9.80 min Scan# 2863

Delta R.T. -0.00 min

Lab File: VU025465.D

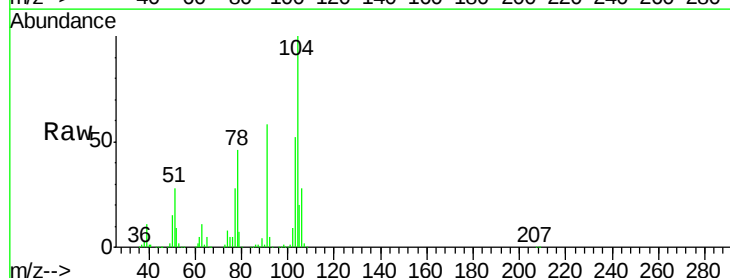
Acq: 17 Jul 2018 19:00

Tgt Ion:104 Resp: 380430

Ion Ratio Lower Upper

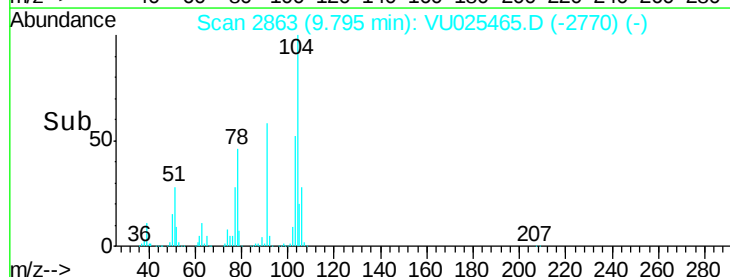
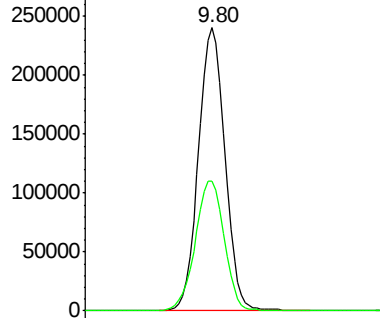
104 100

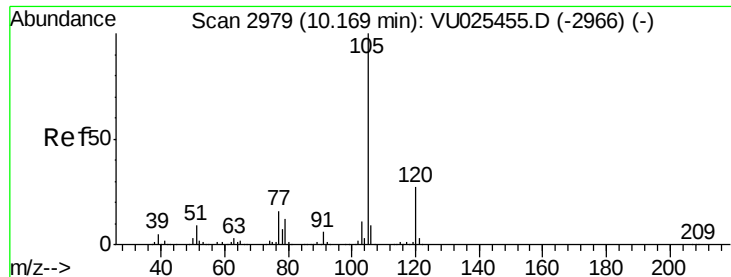
78 46.0 32.6 60.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0





#56

Isopropylbenzene

Concen: 51.401 ug/L

RT: 10.17 min Scan# 2980

Delta R.T. 0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

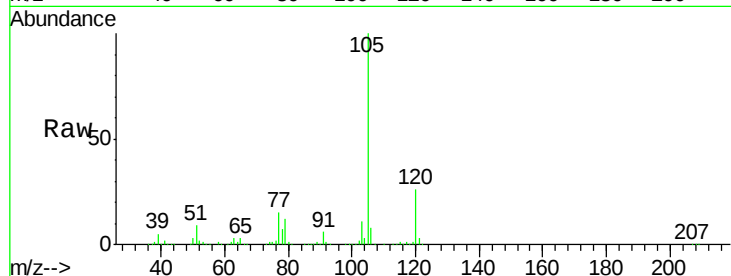
Tgt Ion:105 Resp: 595194

Ion Ratio Lower Upper

105 100

120 26.3 21.6 32.4

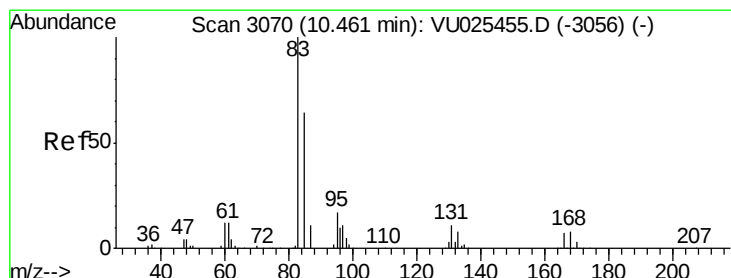
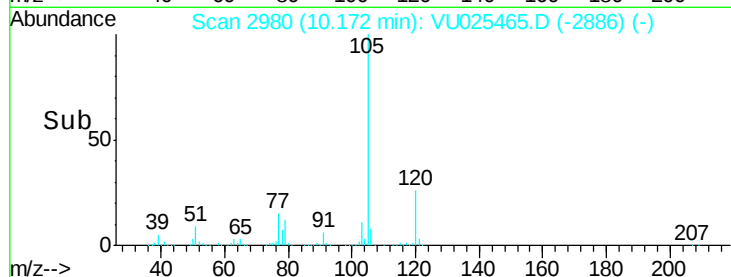
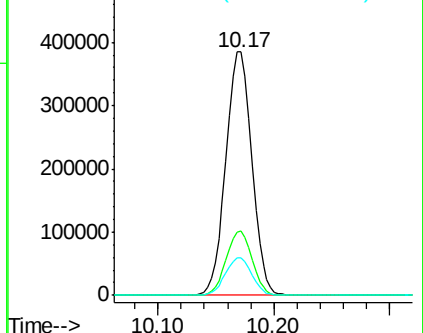
77 15.6 12.6 19.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 48.455 ug/L

RT: 10.46 min Scan# 3070

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

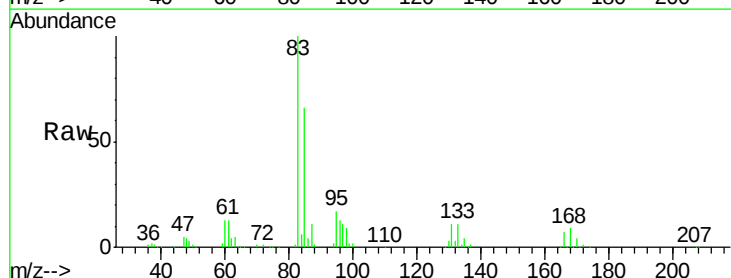
Tgt Ion: 83 Resp: 211982

Ion Ratio Lower Upper

83 100

85 66.0 44.9 83.5

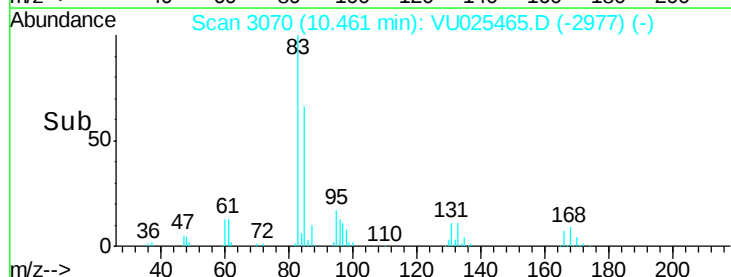
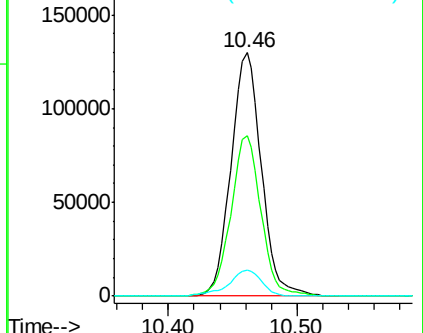
131 10.7 8.9 13.3

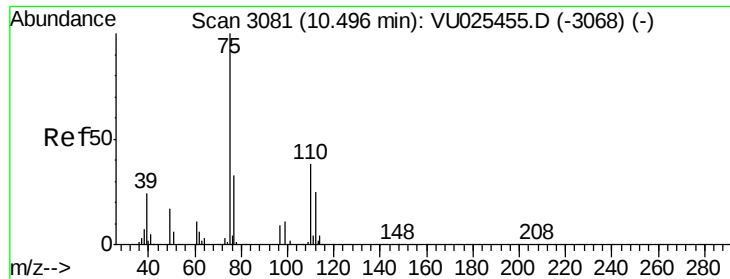


Abundance Ion 83.00 (82.70 to 83.70): V

Ion 85.00 (84.70 to 85.70): V

Ion 131.00 (130.70 to 131.70): V

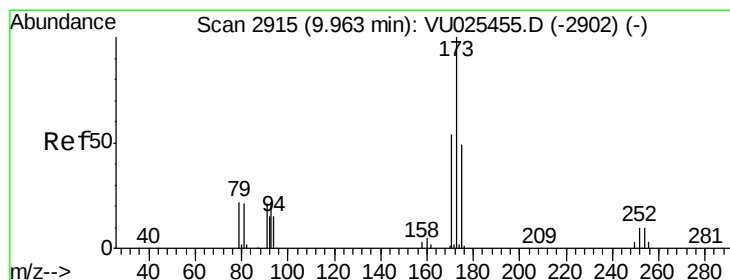
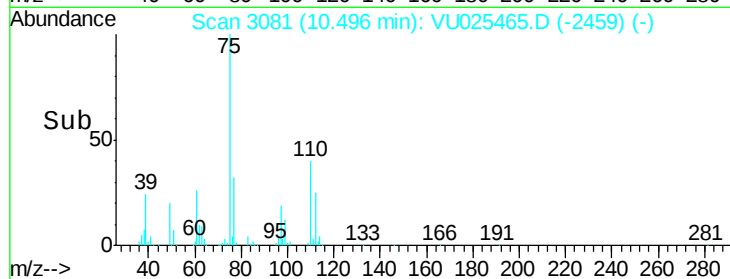
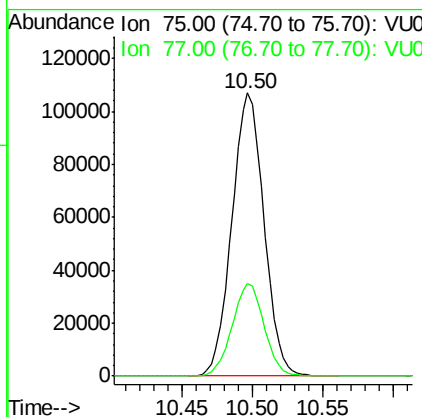
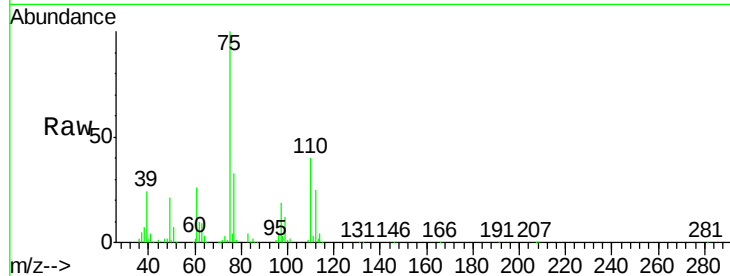




#59  
 1,2,3-Trichloropropane  
 Concen: 47.898 ug/L  
 RT: 10.50 min Scan# 3081  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

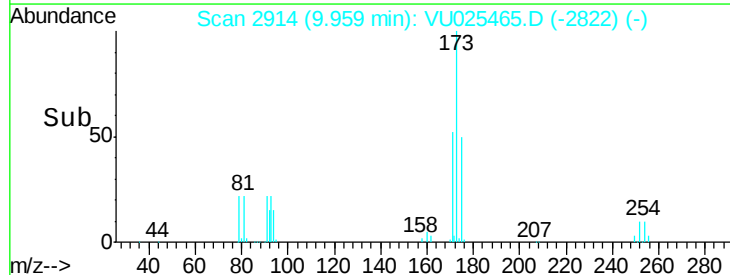
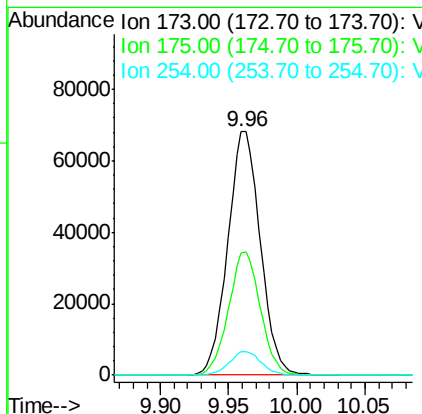
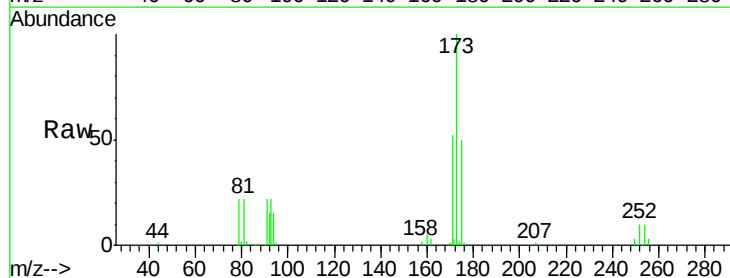
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

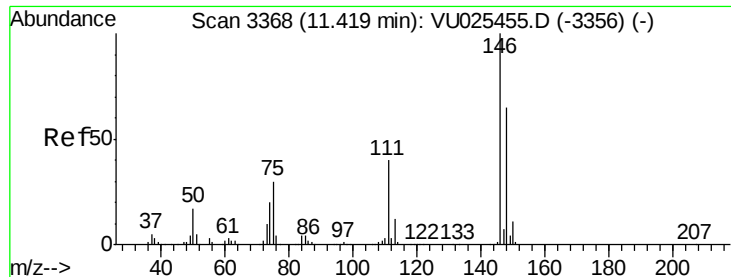
Tgt Ion: 75 Resp: 170708  
 Ion Ratio Lower Upper  
 75 100  
 77 32.7 26.2 39.2



#61  
 Bromoform  
 Concen: 47.013 ug/L  
 RT: 9.96 min Scan# 2914  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

Tgt Ion: 173 Resp: 112954  
 Ion Ratio Lower Upper  
 173 100  
 175 49.3 39.1 58.7  
 254 9.4 7.3 10.9





#62

1,3-Dichlorobenzene

Concen: 48.937 ug/L

RT: 11.42 min Scan# 3368

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

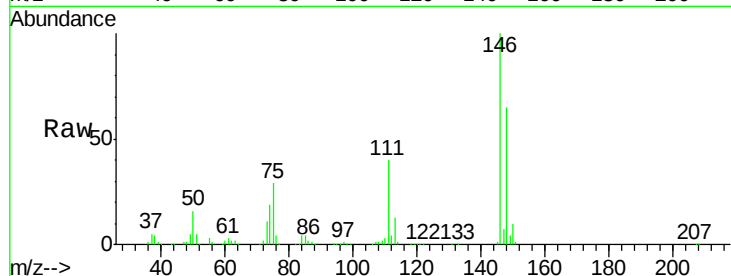
Tgt Ion:146 Resp: 276256

Ion Ratio Lower Upper

146 100

111 39.8 28.1 52.3

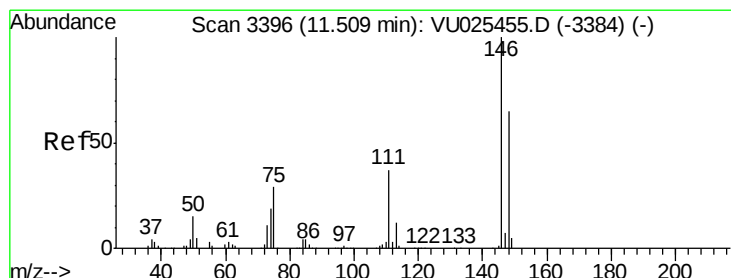
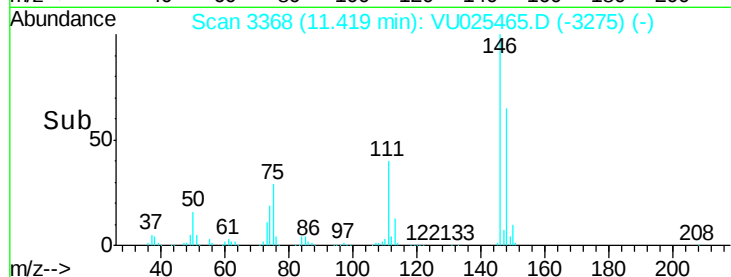
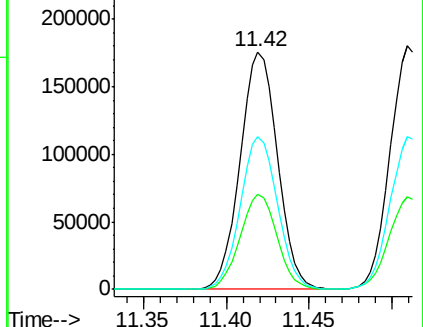
148 64.5 45.1 83.9



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 49.227 ug/L

RT: 11.51 min Scan# 3396

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

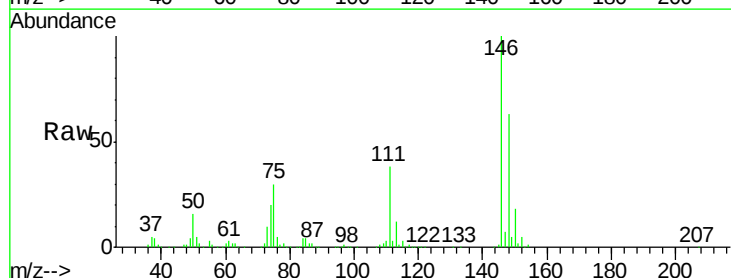
Tgt Ion:146 Resp: 280828

Ion Ratio Lower Upper

146 100

111 37.8 26.4 49.0

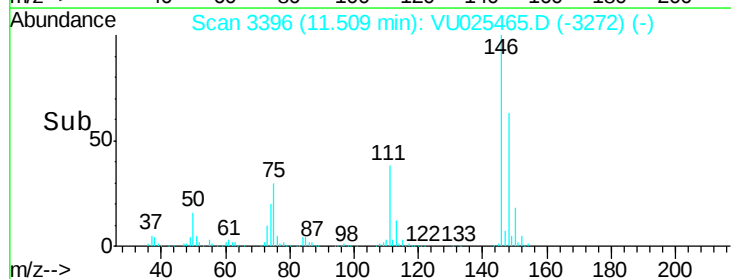
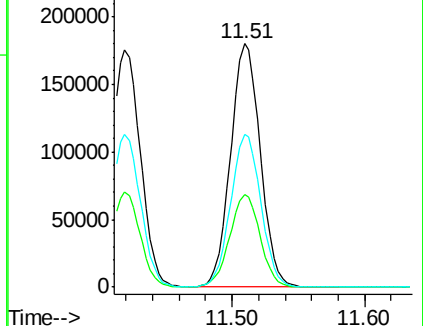
148 62.7 45.6 84.8

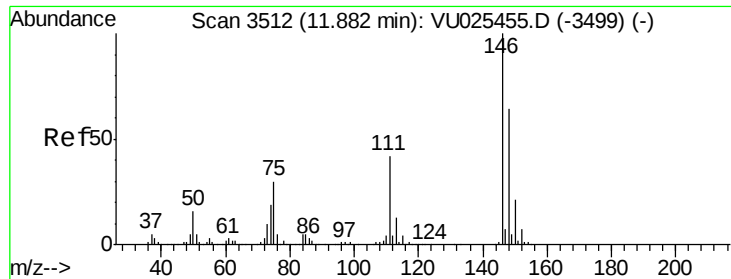


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

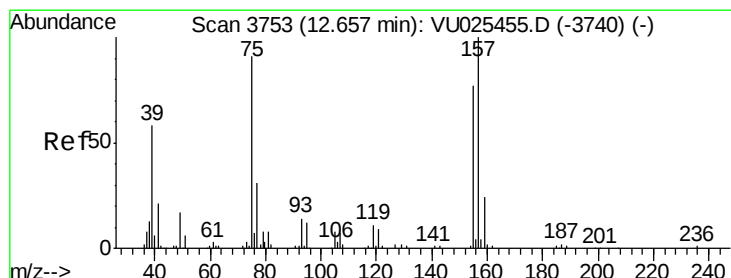
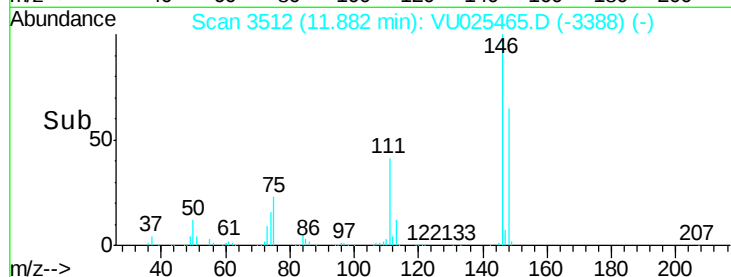
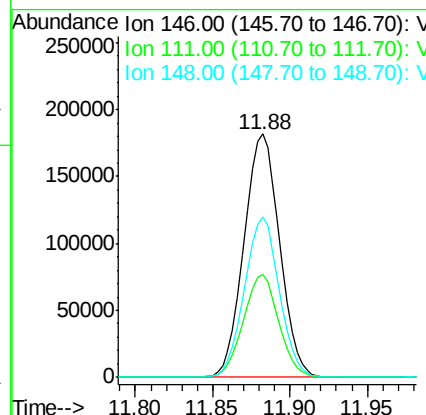
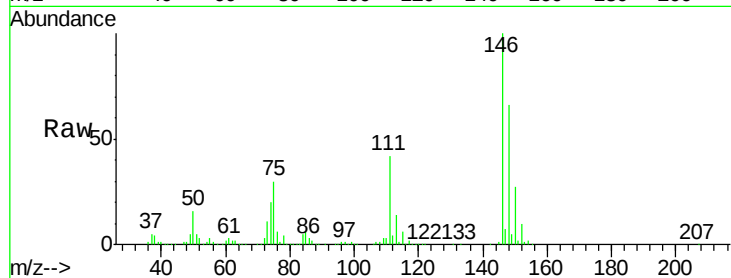




#65  
 1,2-Dichlorobenzene  
 Concen: 48.876 ug/L  
 RT: 11.88 min Scan# 3512  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

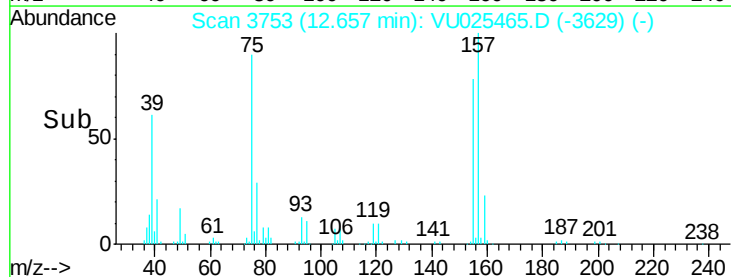
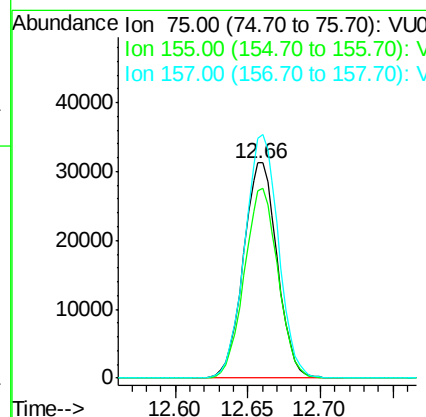
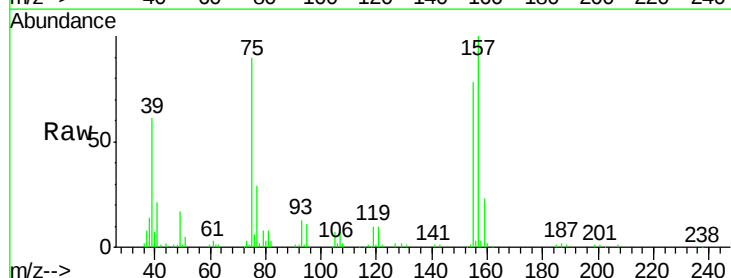
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

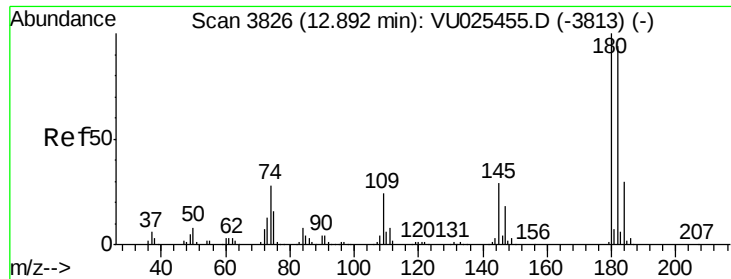
Tgt Ion: 146 Resp: 291342  
 Ion Ratio Lower Upper  
 146 100  
 111 42.2 33.8 50.6  
 148 65.7 51.5 77.3



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 45.416 ug/L  
 RT: 12.66 min Scan# 3753  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

Tgt Ion: 75 Resp: 50661  
 Ion Ratio Lower Upper  
 75 100  
 155 86.9 67.4 101.0  
 157 111.1 87.9 131.9

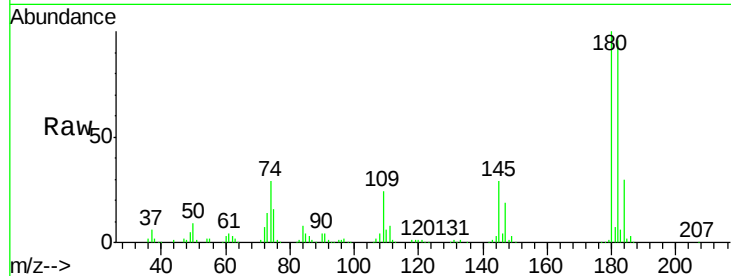




#67  
 1,3,5-Trichlorobenzene  
 Concen: 49.487 ug/L  
 RT: 12.89 min Scan# 3825  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD05047

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.9  | 75.1  | 112.7 |
| 184     | 30.6  | 24.6  | 36.8  |
| 145     | 29.4  | 23.1  | 34.7  |

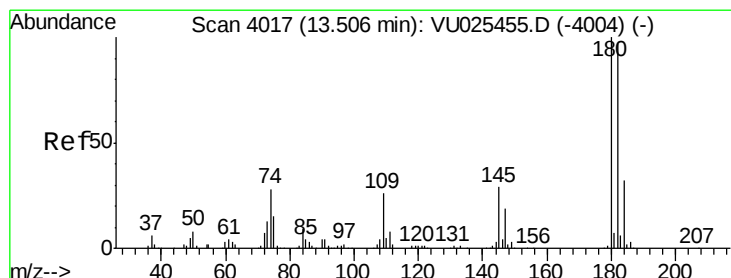
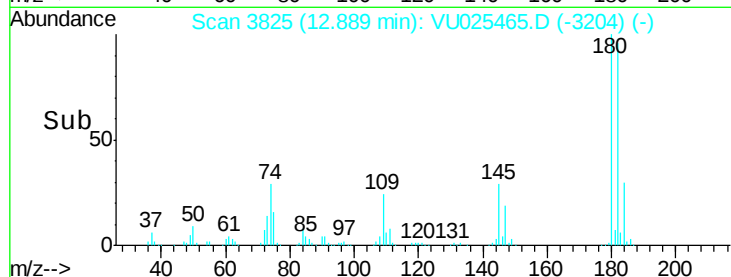
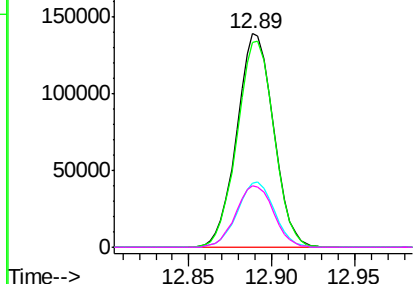


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

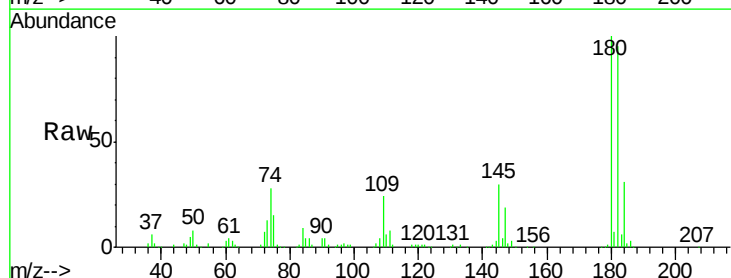
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 49.685 ug/L  
 RT: 13.51 min Scan# 4017  
 Delta R.T. -0.00 min  
 Lab File: VU025465.D  
 Acq: 17 Jul 2018 19:00

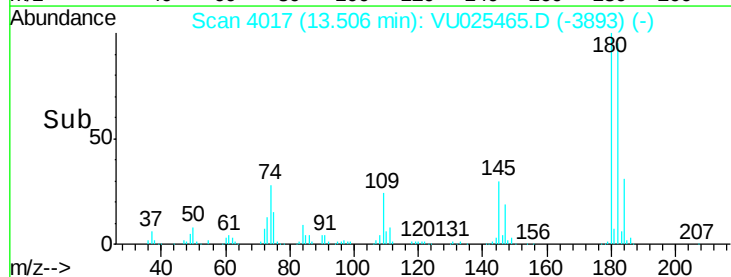
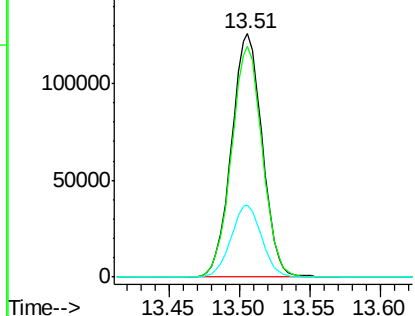
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 94.9  | 76.6  | 115.0 |
| 145     | 29.4  | 23.4  | 35.2  |

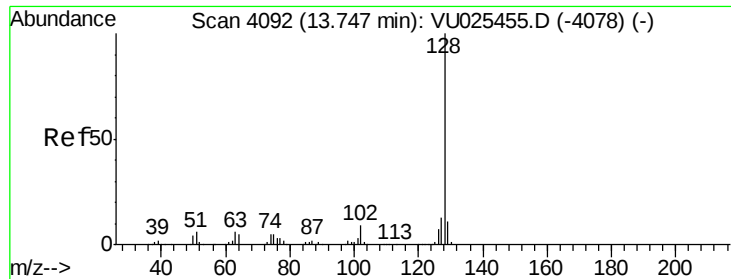


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





#69

Naphthalene

Concen: 47.787 ug/L

RT: 13.74 min Scan# 4091

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

Instrument :

MSVOA\_U

ClientSampleId :

VSTD05047

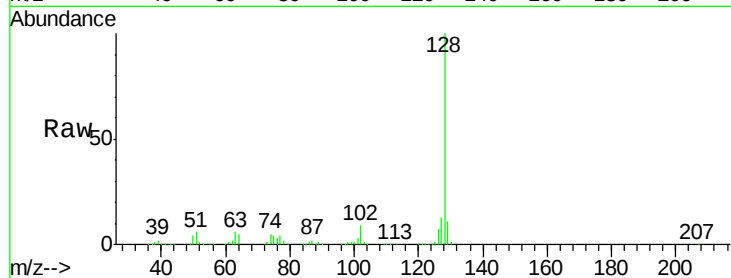
Tgt Ion:128 Resp: 639746

Ion Ratio Lower Upper

128 100

127 12.7 10.5 15.7

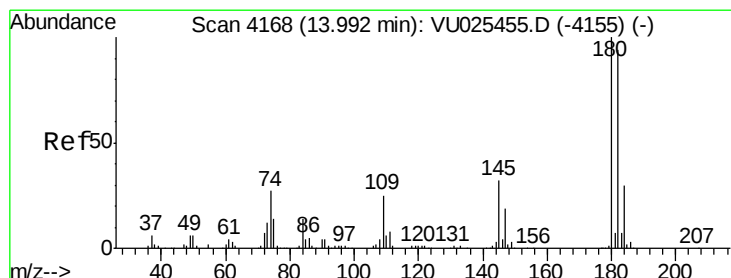
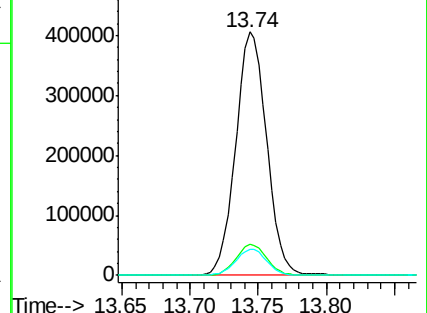
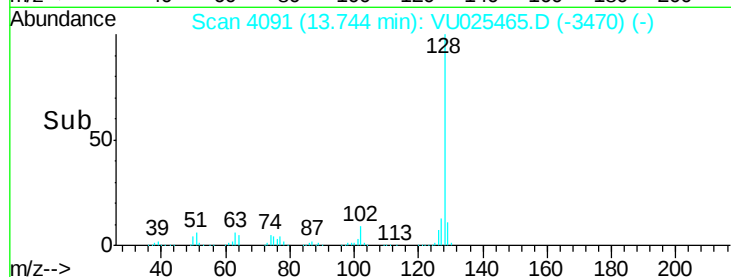
129 10.8 8.9 13.3



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#70

1,2,3-Trichlorobenzene

Concen: 49.237 ug/L

RT: 13.99 min Scan# 4167

Delta R.T. -0.00 min

Lab File: VU025465.D

Acq: 17 Jul 2018 19:00

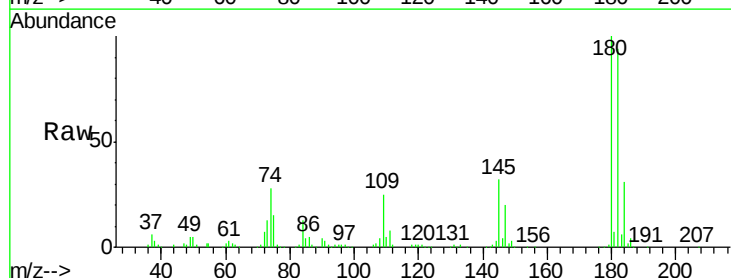
Tgt Ion:180 Resp: 205460

Ion Ratio Lower Upper

180 100

182 94.8 75.8 113.8

145 31.3 25.3 37.9



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

