

Data File : VU028409.D  
Acq On : 30 Nov 2018 09:27  
Operator : MD/SY  
Sample : VSTD01054  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

Quant Time: Nov 30 22:53:18 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM113018WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Nov 30 22:49:59 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 512848   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 476948   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 222248   | 50.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |       |      |      |
|--------------------------------|-------|-----|--------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.40  | 65  | 44617  | 9.72  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.68  | 69  | 34443  | 9.78  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.28  | 63  | 79484  | 9.74  | ug/L | 0.00 |
| 21) 2-Butanone-d5              | 4.18  | 46  | 74324  | 19.74 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.65  | 84  | 71822  | 9.70  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.31  | 65  | 51023  | 10.12 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.34  | 84  | 149228 | 10.05 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.33  | 67  | 53803  | 10.04 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.57  | 98  | 135068 | 10.04 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.85  | 79  | 23440  | 9.69  | ug/L | 0.00 |
| 47) 2-Hexanone-d5              | 8.31  | 63  | 50443  | 19.49 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43 | 84  | 68786  | 10.04 | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.86 | 152 | 44490  | 9.95  | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |        |        |      | Qvalue |
|--------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 44988  | 9.811  | ug/L | 97     |
| 3) Chloromethane               | 1.33 | 50  | 64787  | 9.778  | ug/L | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 57209  | 10.095 | ug/L | 100    |
| 6) Bromomethane                | 1.63 | 94  | 15354  | 9.626  | ug/L | 100    |
| 8) Chloroethane                | 1.70 | 64  | 31994  | 10.057 | ug/L | 100    |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 57852  | 10.024 | ug/L | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 33481  | 9.994  | ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.29 | 96  | 32238  | 9.961  | ug/L | 93     |
| 13) Acetone                    | 2.32 | 43  | 90171  | 23.018 | ug/L | 97     |
| 14) Carbon disulfide           | 2.48 | 76  | 123270 | 10.061 | ug/L | 99     |
| 15) Methyl Acetate             | 2.62 | 43  | 61119  | 10.546 | ug/L | 97     |
| 16) Methylene chloride         | 2.70 | 84  | 42941  | 10.250 | ug/L | 95     |
| 17) trans-1,2-Dichloroethene   | 2.98 | 96  | 37140  | 10.126 | ug/L | 93     |
| 18) Methyl tert-butyl Ether    | 3.00 | 73  | 129712 | 10.177 | ug/L | 99     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 80547  | 10.166 | ug/L | 98     |
| 20) cis-1,2-Dichloroethene     | 4.23 | 96  | 40699  | 9.648  | ug/L | 97     |
| 22) 2-Butanone                 | 4.27 | 43  | 103941 | 21.195 | ug/L | 97     |
| 23) Bromochloromethane         | 4.55 | 128 | 18733  | 10.151 | ug/L | 98     |
| 25) Chloroform                 | 4.67 | 83  | 73103  | 10.078 | ug/L | 96     |
| 27) 1,2-Dichloroethane         | 5.40 | 62  | 61177  | 10.187 | ug/L | 98     |
| 29) Cyclohexane                | 4.99 | 56  | 79245  | 10.238 | ug/L | 98     |
| 30) 1,1,1-Trichloroethane      | 4.91 | 97  | 57863  | 10.249 | ug/L | 99     |
| 31) Carbon tetrachloride       | 5.13 | 117 | 47176  | 10.375 | ug/L | 95     |
| 33) Benzene                    | 5.39 | 78  | 169097 | 10.321 | ug/L | 100    |
| 34) Trichloroethene            | 6.19 | 95  | 38897  | 9.929  | ug/L | 98     |
| 35) Methylcyclohexane          | 6.42 | 83  | 67326  | 9.873  | ug/L | 98     |
| 37) 1,2-Dichloropropane        | 6.43 | 63  | 50019  | 10.297 | ug/L | 99     |
| 38) Bromodichloromethane       | 6.76 | 83  | 55391  | 10.276 | ug/L | 97     |
| 39) cis-1,3-Dichloropropene    | 7.27 | 75  | 71192  | 10.322 | ug/L | 99     |
| 40) 4-Methyl-2-pentanone       | 7.46 | 43  | 159452 | 20.755 | ug/L | 98     |

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Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

Quant Time: Nov 30 22:53:18 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM113018WMA.M  
Quant Title : VOC Analysis  
QLast Update : Fri Nov 30 22:49:59 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) Toluene                    | 7.64  | 91   | 168513   | 10.107 | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 63008    | 9.969  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 38618    | 10.223 | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.22  | 164  | 28168    | 10.225 | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.36  | 43   | 134230   | 20.796 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.48  | 129  | 40249    | 10.416 | ug/L  | 89       |
| 50) 1,2-Dibromoethane          | 8.58  | 107  | 40697    | 10.023 | ug/L  | 96       |
| 51) Chlorobenzene              | 9.12  | 112  | 100765   | 10.131 | ug/L  | 99       |
| 52) Ethylbenzene               | 9.25  | 91   | 184113   | 9.996  | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.37  | 106  | 65089    | 9.908  | ug/L  | 97       |
| 54) o-xylene                   | 9.78  | 106  | 64499    | 9.913  | ug/L  | 97       |
| 55) Styrene                    | 9.79  | 104  | 108383   | 9.722  | ug/L  | 98       |
| 56) Isopropylbenzene           | 10.17 | 105  | 170313   | 9.922  | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 71669    | 10.171 | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 56894    | 10.318 | ug/L  | 97       |
| 61) Bromoform                  | 9.96  | 173  | 27112    | 9.917  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 72552    | 10.016 | ug/L  | 97       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 74725    | 10.244 | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 74878    | 10.414 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 14779    | 10.203 | ug/L  | 97       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 53118    | 9.968  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 48564    | 9.785  | ug/L  | 97       |
| 69) Naphthalene                | 13.74 | 128  | 174159   | 10.064 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 50587    | 10.119 | ug/L  | 98       |

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

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Misc : 5.0mL/MSVOA U/WATER

```
ALS Vial      : 3      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
VSTD01054

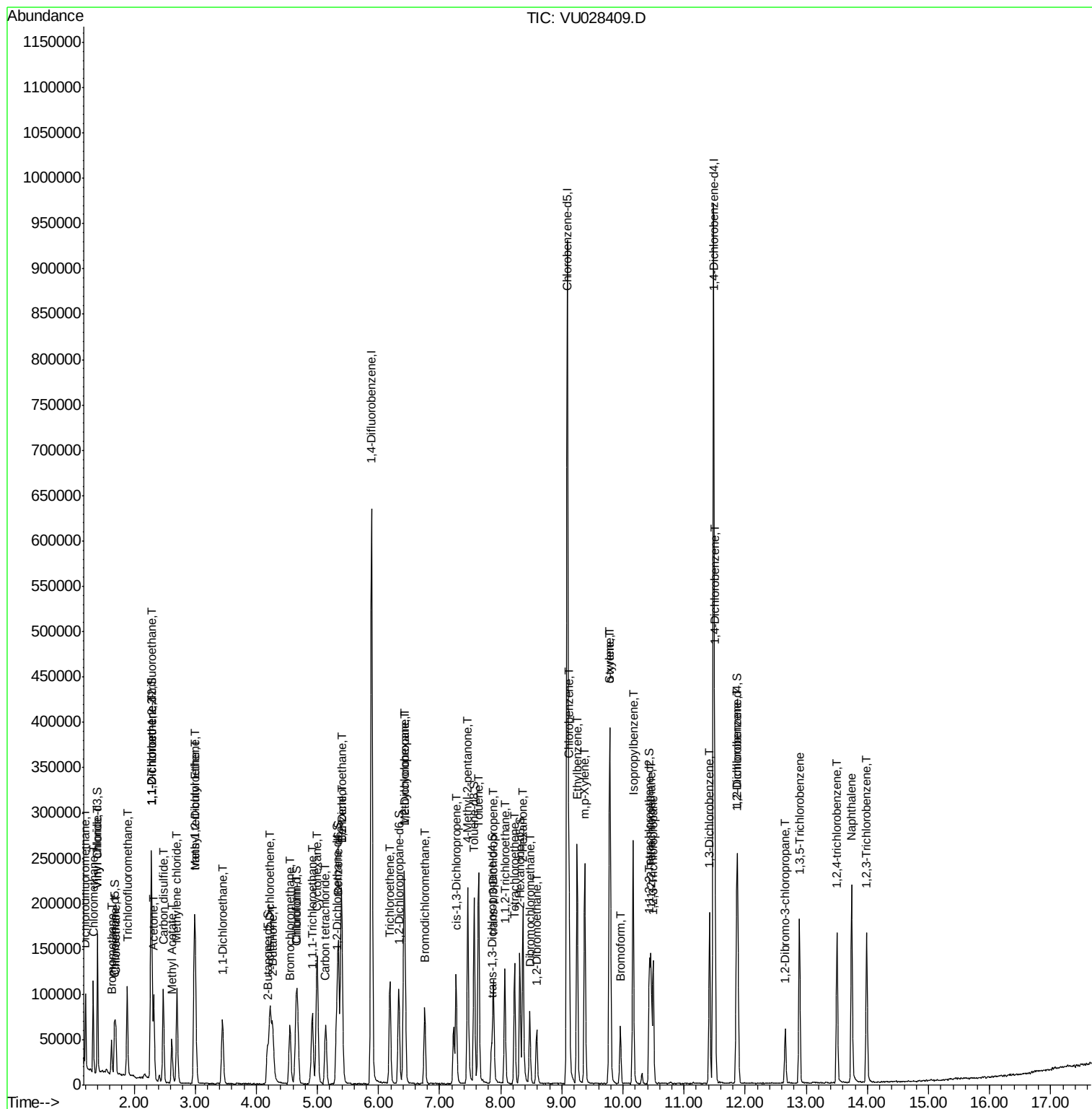
Quant Time: Nov 30 22:53:18 2018

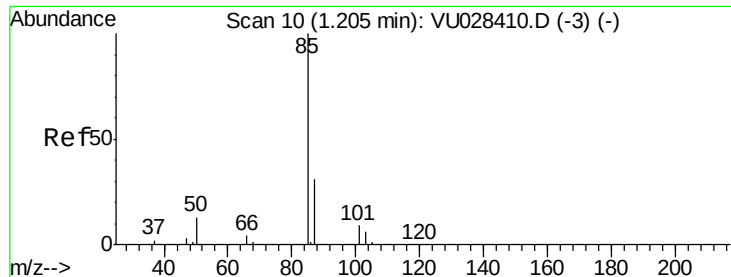
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_U\METHOD\SOMULM113018WMA.M

Quant Title : VOC Analysis

QLast Update : Fri Nov 30 22:49:59 2018

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 9.811 ug/L

RT: 1.21 min Scan# 10

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

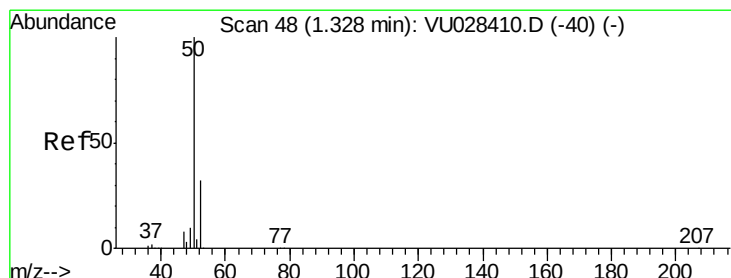
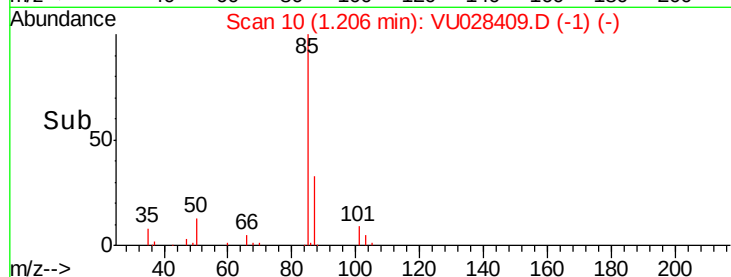
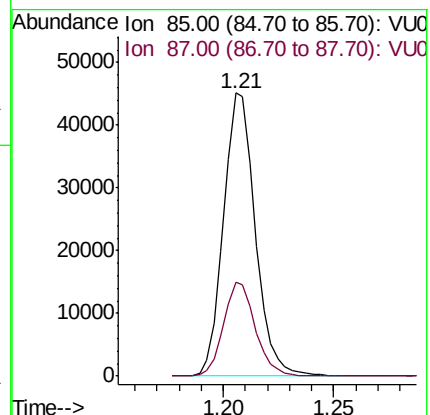
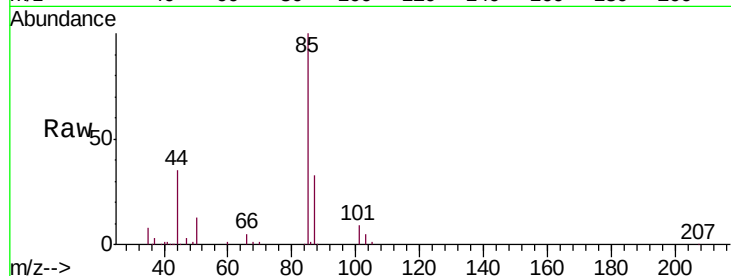
VSTD01054

Tgt Ion: 85 Resp: 44988

Ion Ratio Lower Upper

85 100

87 33.0 25.2 37.8



#3

Chloromethane

Concen: 9.778 ug/L

RT: 1.33 min Scan# 49

Delta R.T. 0.00 min

Lab File: VU028409.D

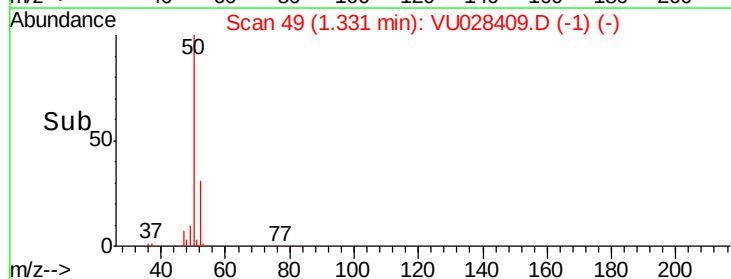
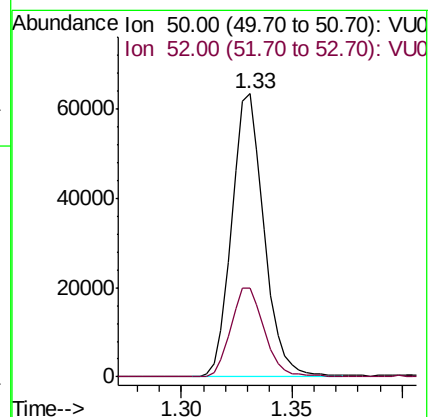
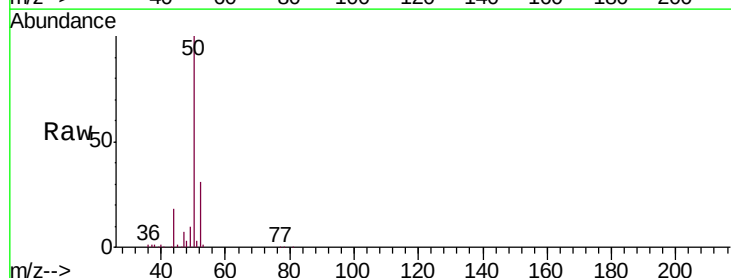
Acq: 30 Nov 2018 09:27

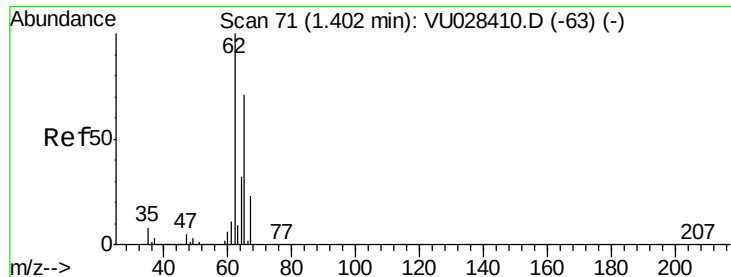
Tgt Ion: 50 Resp: 64787

Ion Ratio Lower Upper

50 100

52 31.5 22.6 42.0





#5

Vinyl chloride

Concen: 10.095 ug/L

RT: 1.40 min Scan# 71

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

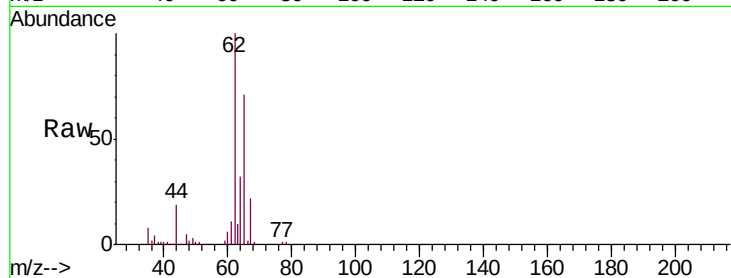
VSTD01054

Tgt Ion: 62 Resp: 57209

Ion Ratio Lower Upper

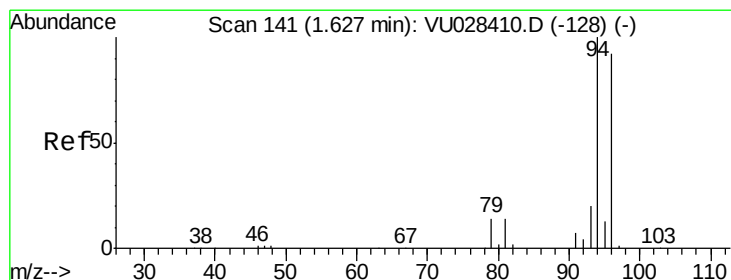
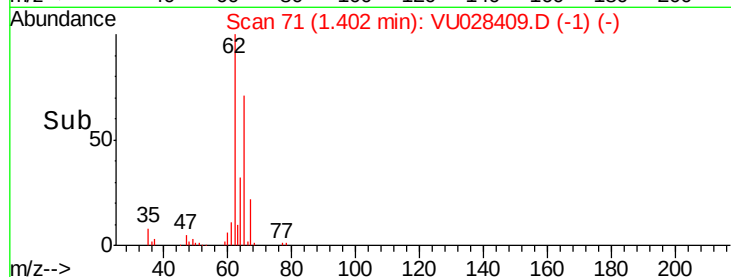
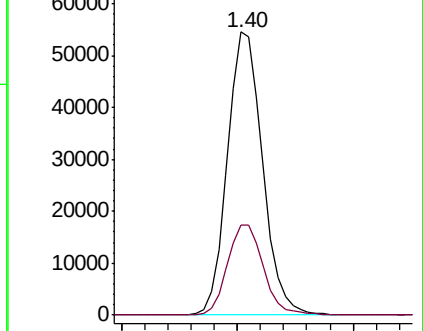
62 100

64 31.7 22.4 41.6



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0



#6

Bromomethane

Concen: 9.626 ug/L

RT: 1.63 min Scan# 142

Delta R.T. 0.00 min

Lab File: VU028409.D

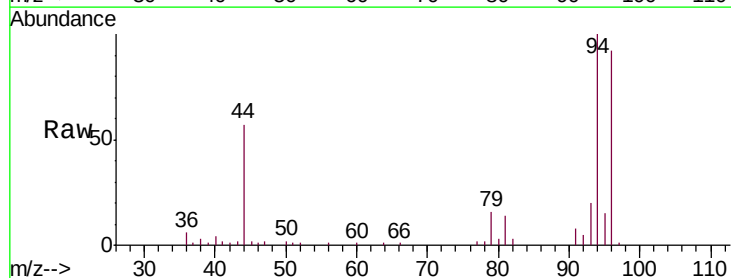
Acq: 30 Nov 2018 09:27

Tgt Ion: 94 Resp: 15354

Ion Ratio Lower Upper

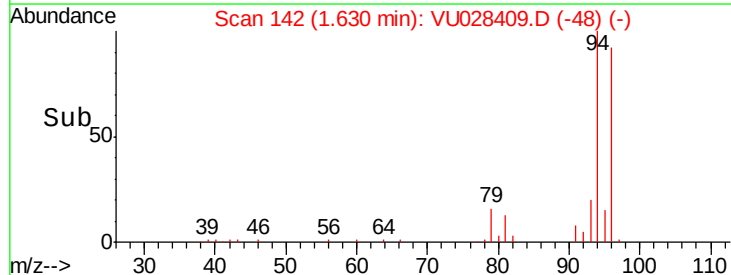
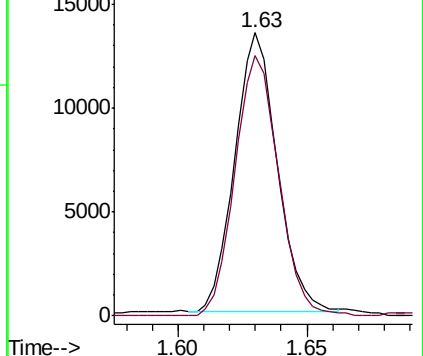
94 100

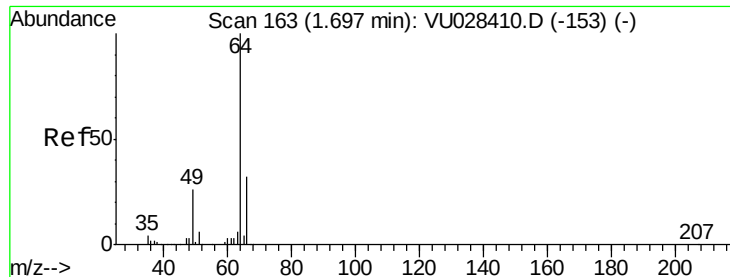
96 92.0 64.5 119.9



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 10.057 ug/L

RT: 1.70 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

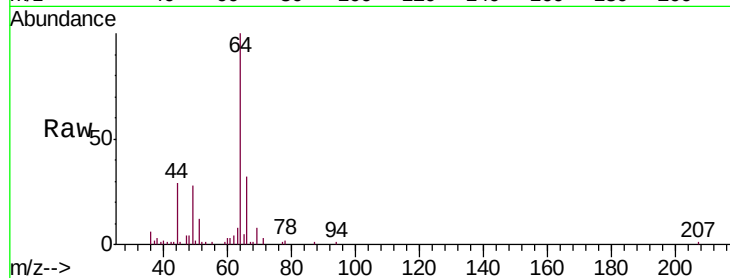
VSTD01054

Tgt Ion: 64 Resp: 31994

Ion Ratio Lower Upper

64 100

66 31.9 22.5 41.7



Abundance Ion 64.00 (63.70 to 64.70): VU028410.D (-153) (-)

Ion 66.00 (65.70 to 66.70): VU028410.D (-153) (-)

1.70

25000

20000

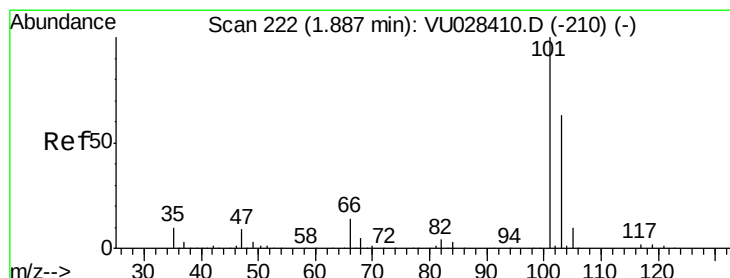
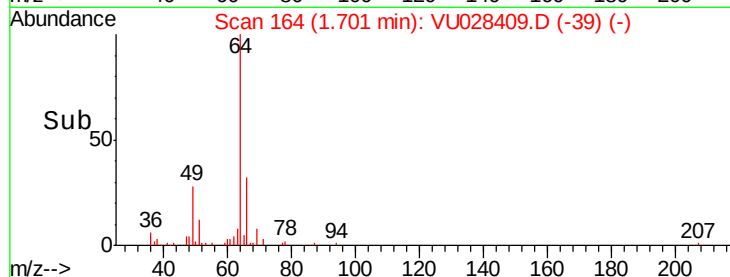
15000

10000

5000

0

Time-->



#9

Trichlorofluoromethane

Concen: 10.024 ug/L

RT: 1.89 min Scan# 222

Delta R.T. 0.00 min

Lab File: VU028409.D

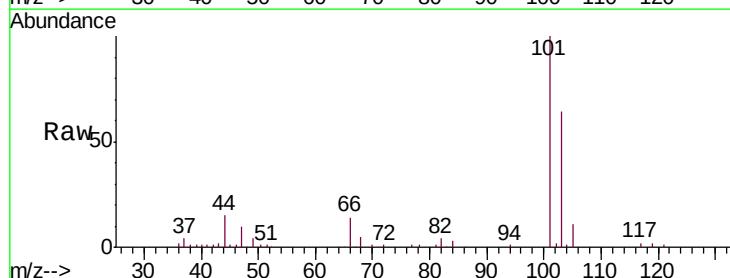
Acq: 30 Nov 2018 09:27

Tgt Ion: 101 Resp: 57852

Ion Ratio Lower Upper

101 100

103 63.5 51.0 76.6



Abundance Ion 101.00 (100.70 to 101.70): VU028410.D (-210) (-)

Ion 103.00 (102.70 to 103.70): VU028410.D (-210) (-)

1.89

50000

40000

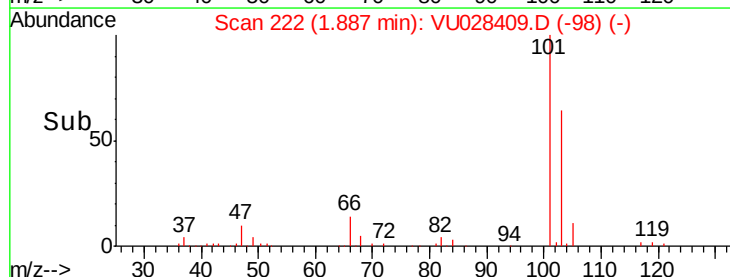
30000

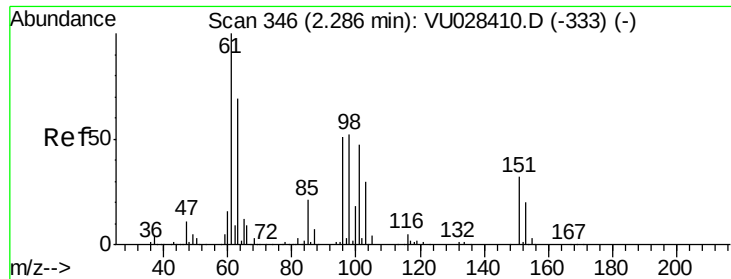
20000

10000

0

Time-->





#10

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

Concen: 9.994 ug/L

RT: 2.29 min Scan# 346

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01054

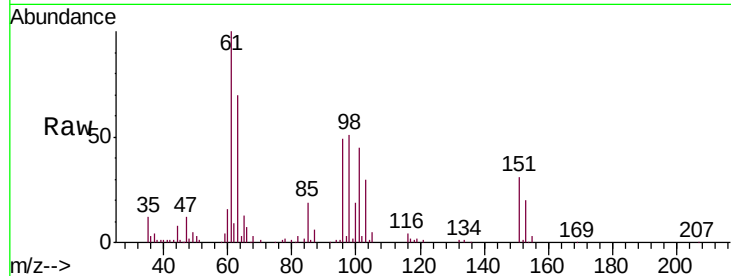
Tgt Ion: 101 Resp: 33481

Ion Ratio Lower Upper

101 100

85 44.7 36.5 54.7

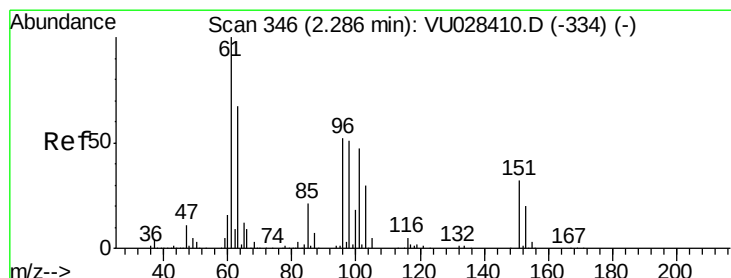
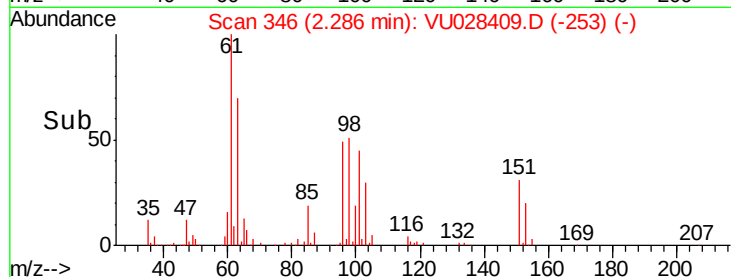
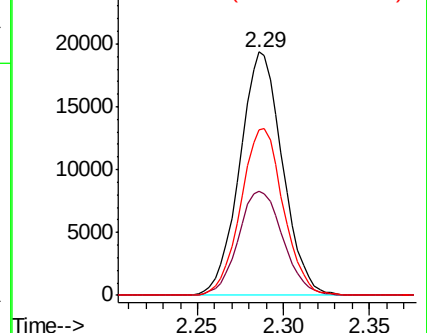
151 67.9 55.0 82.6



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: 9.961 ug/L

RT: 2.29 min Scan# 346

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

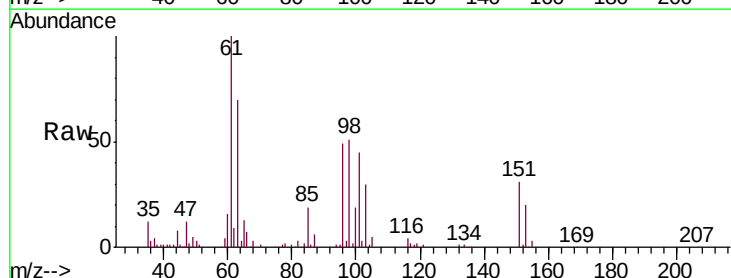
Tgt Ion: 96 Resp: 32238

Ion Ratio Lower Upper

96 100

61 205.4 136.2 252.9

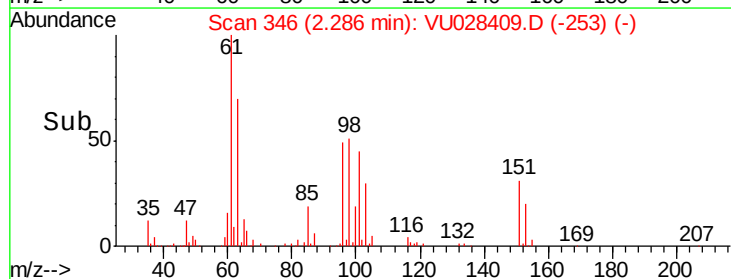
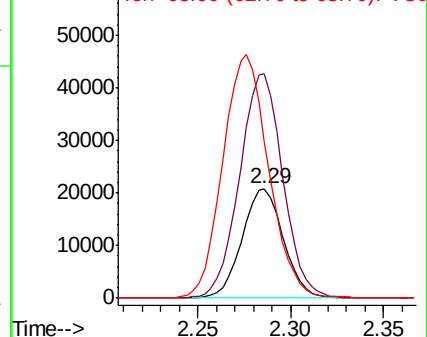
63 143.3 95.5 177.4

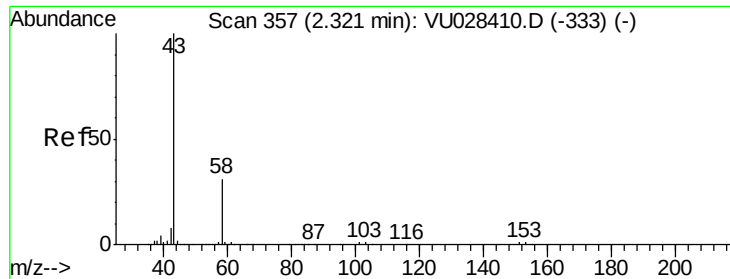


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 23.018 ug/L

RT: 2.32 min Scan# 357

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

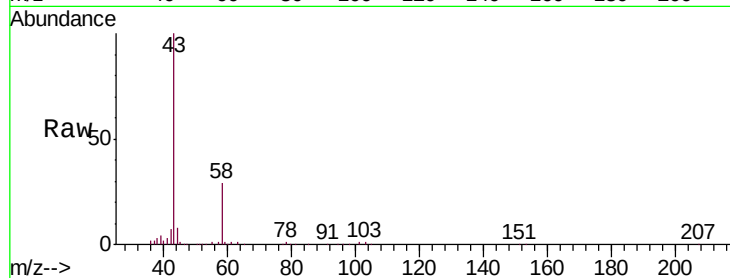
VSTD01054

Tgt Ion: 43 Resp: 90171

Ion Ratio Lower Upper

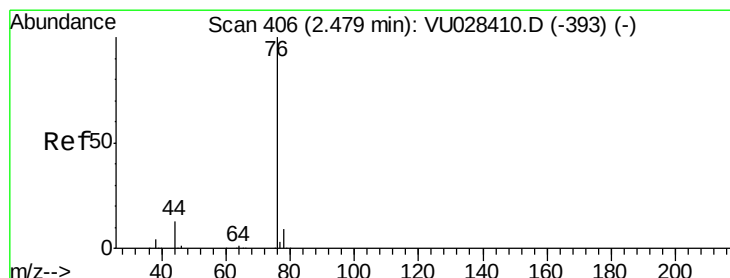
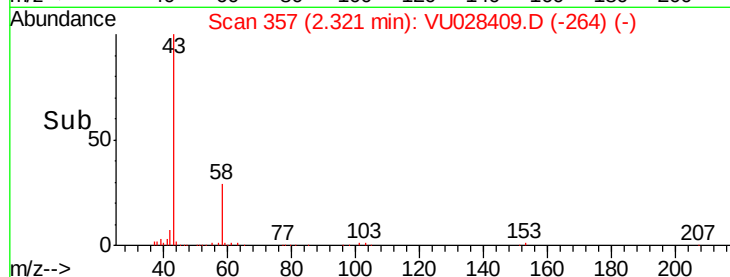
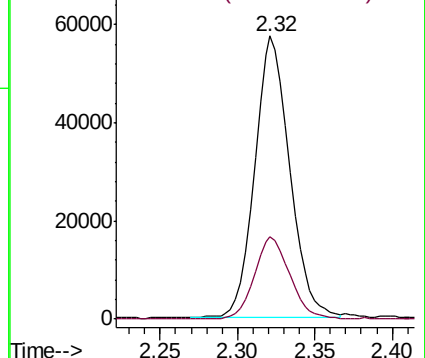
43 100

58 29.7 0.0 63.0



Abundance Ion 43.00 (42.70 to 43.70): VU028410.D (-333) (-)

Ion 58.00 (57.70 to 58.70): VU028410.D (-333) (-)



#14

Carbon disulfide

Concen: 10.061 ug/L

RT: 2.48 min Scan# 406

Delta R.T. 0.00 min

Lab File: VU028409.D

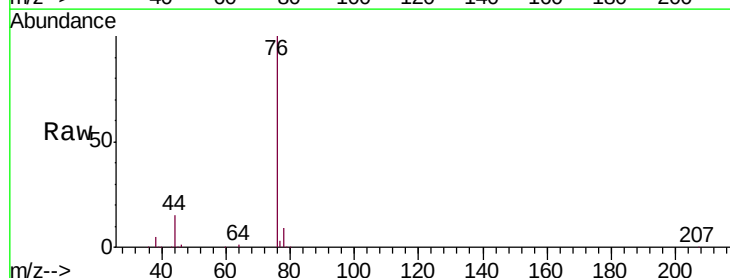
Acq: 30 Nov 2018 09:27

Tgt Ion: 76 Resp: 123270

Ion Ratio Lower Upper

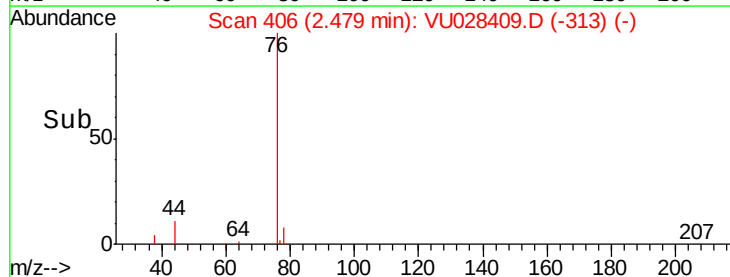
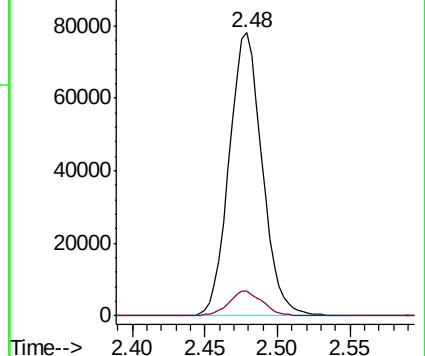
76 100

78 8.7 7.4 11.0

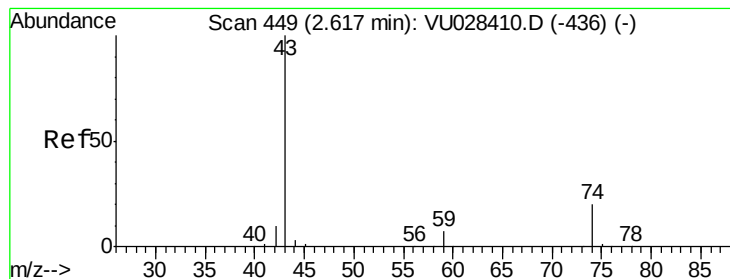


Abundance Ion 76.00 (75.70 to 76.70): VU028410.D (-393) (-)

Ion 78.00 (77.70 to 78.70): VU028410.D (-393) (-)







#15

Methyl Acetate

Concen: 10.546 ug/L

RT: 2.62 min Scan# 449

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

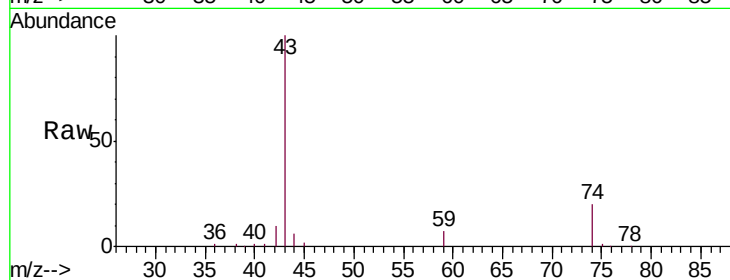
VSTD01054

Tgt Ion: 43 Resp: 61119

Ion Ratio Lower Upper

43 100

74 19.1 16.2 24.4



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 74.00 (73.70 to 74.70): VU0

2.62

30000

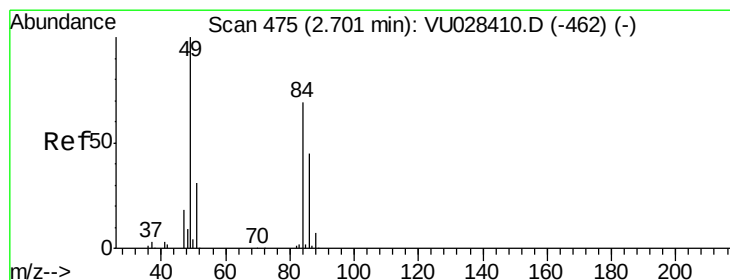
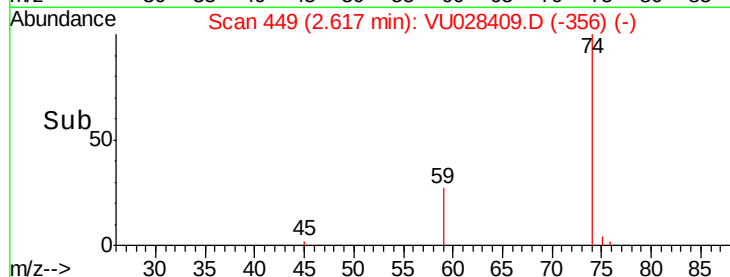
20000

10000

0

Time-->

2.55 2.60 2.65 2.70



#16

Methylene chloride

Concen: 10.250 ug/L

RT: 2.70 min Scan# 476

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

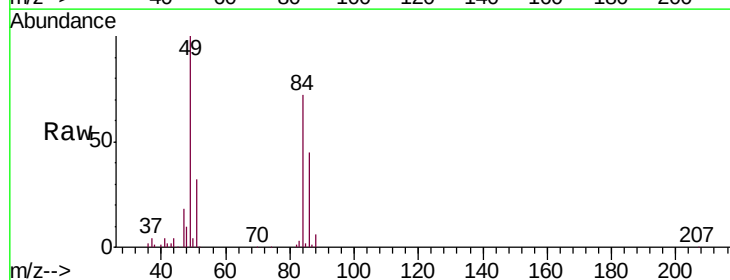
Tgt Ion: 84 Resp: 42941

Ion Ratio Lower Upper

84 100

86 61.4 45.6 84.8

49 138.0 101.3 188.1



Abundance Ion 84.00 (83.70 to 84.70): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.00 (48.70 to 49.70): VU0

40000

30000

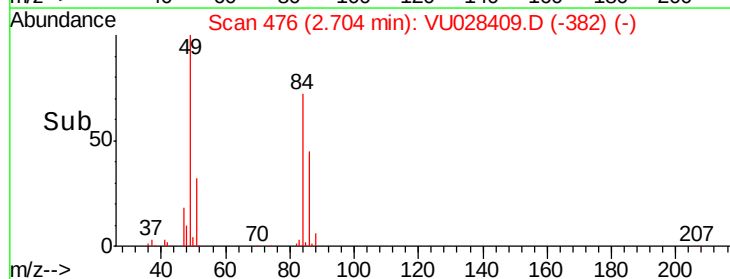
20000

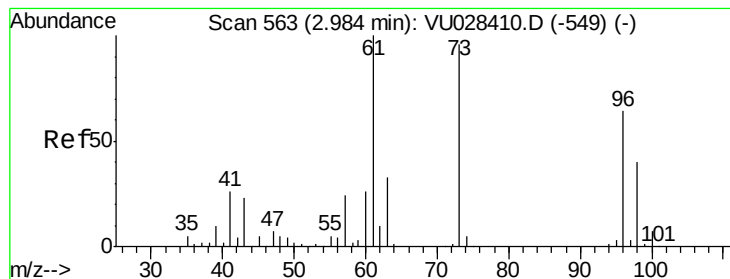
10000

0

Time-->

2.65 2.70 2.75





#17

trans-1,2-Dichloroethene

Concen: 10.126 ug/L

RT: 2.98 min Scan# 563

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampled :

VSTD01054

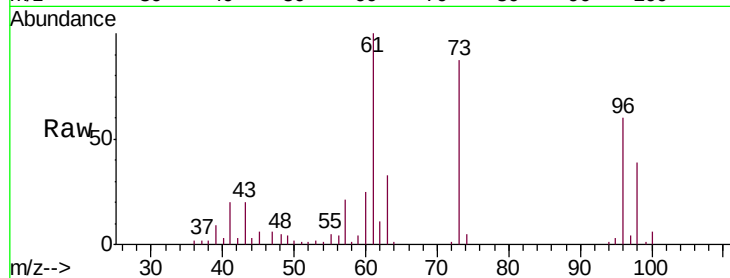
Tgt Ion: 96 Resp: 37140

Ion Ratio Lower Upper

96 100

61 166.1 109.5 203.3

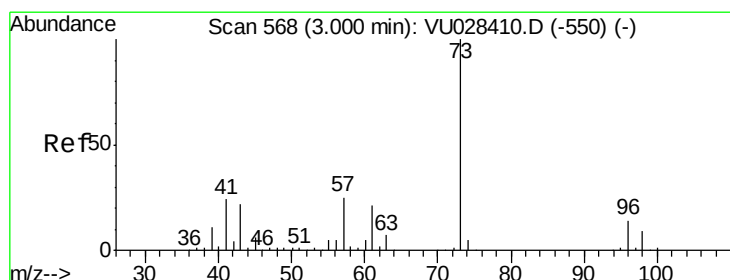
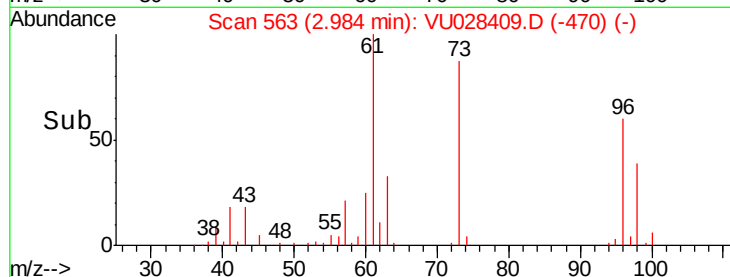
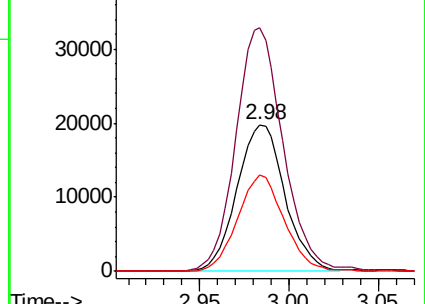
98 65.4 43.3 80.5



Abundance Ion 96.00 (95.70 to 96.70): VU028410.D (-549) (-)

Ion 61.00 (60.70 to 61.70): VU028410.D (-549) (-)

Ion 98.00 (97.70 to 98.70): VU028410.D (-549) (-)



#18

Methyl tert-butyl Ether

Concen: 10.177 ug/L

RT: 3.00 min Scan# 568

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

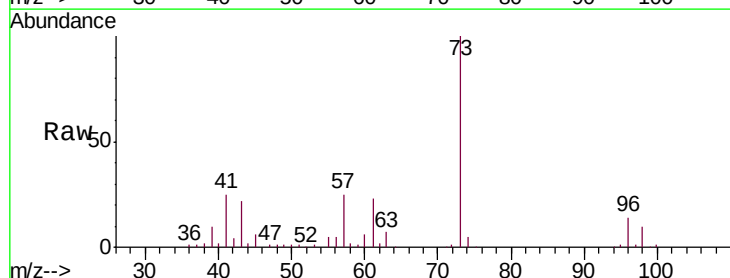
Tgt Ion: 73 Resp: 129712

Ion Ratio Lower Upper

73 100

43 22.4 17.9 26.9

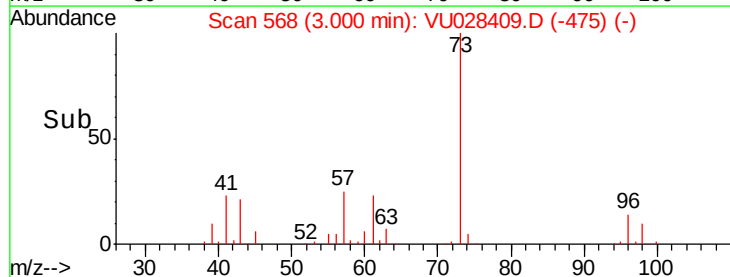
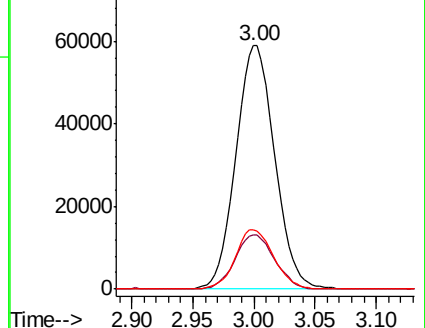
57 24.1 19.7 29.5

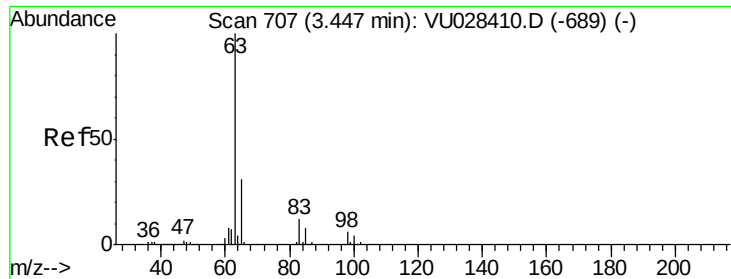


Abundance Ion 73.00 (72.70 to 73.70): VU028410.D (-550) (-)

Ion 43.00 (42.70 to 43.70): VU028410.D (-550) (-)

Ion 57.00 (56.70 to 57.70): VU028410.D (-550) (-)

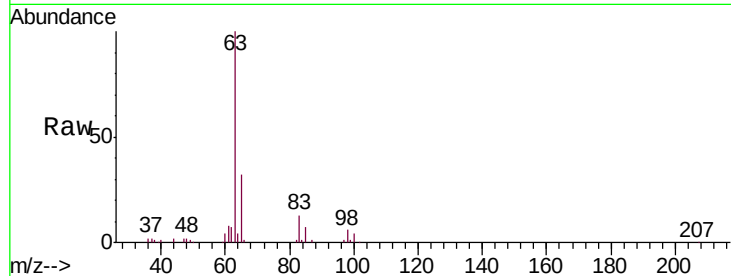




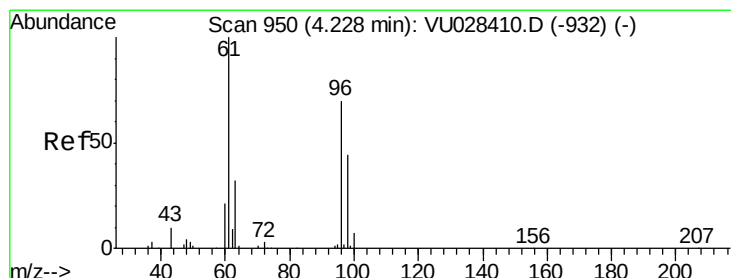
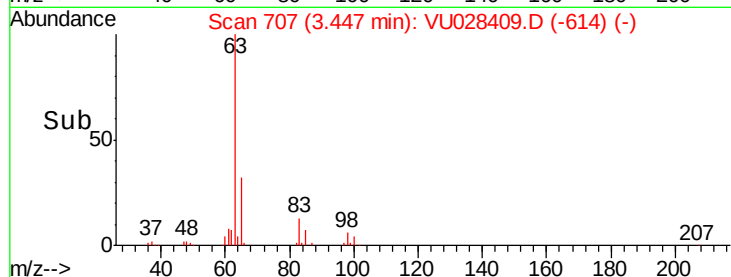
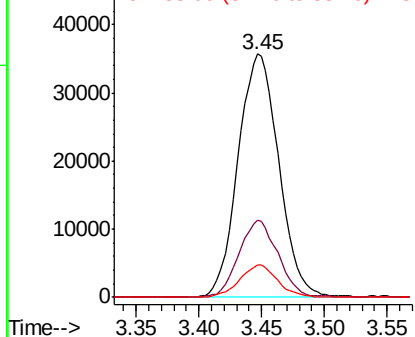
#19  
 1,1-Dichloroethane  
 Concen: 10.166 ug/L  
 RT: 3.45 min Scan# 707  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01054

Tgt Ion: 63 Resp: 80547  
 Ion Ratio Lower Upper  
 63 100  
 65 31.5 21.6 40.0  
 83 13.4 8.5 15.7

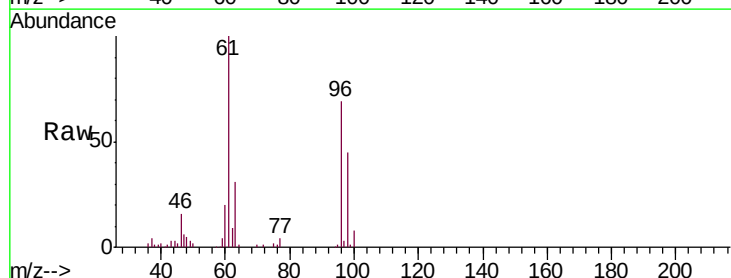


Abundance Ion 63.00 (62.70 to 63.70): VU0  
 Ion 65.00 (64.70 to 65.70): VU0  
 Ion 83.00 (82.70 to 83.70): VU0

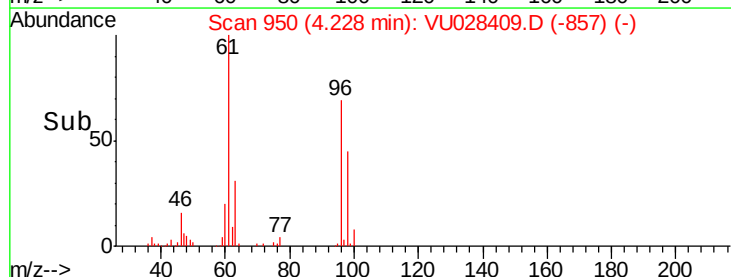
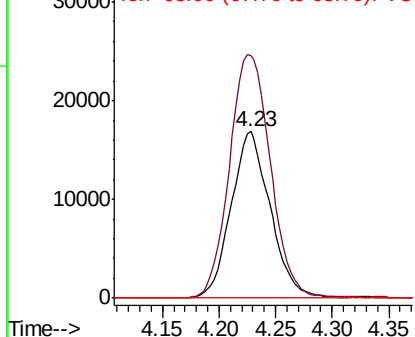


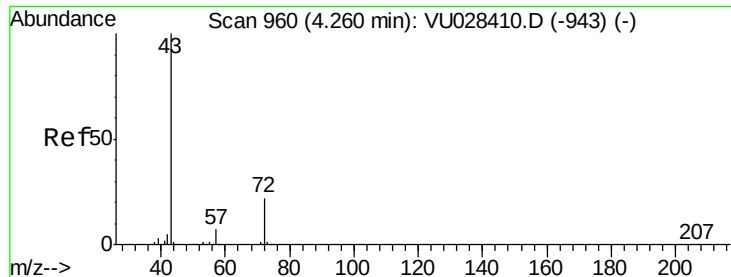
#20  
 cis-1,2-Dichloroethene  
 Concen: 9.648 ug/L  
 RT: 4.23 min Scan# 950  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Tgt Ion: 96 Resp: 40699  
 Ion Ratio Lower Upper  
 96 100  
 61 145.8 99.8 185.3  
 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: 21.195 ug/L

RT: 4.27 min Scan# 962

Delta R.T. 0.01 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

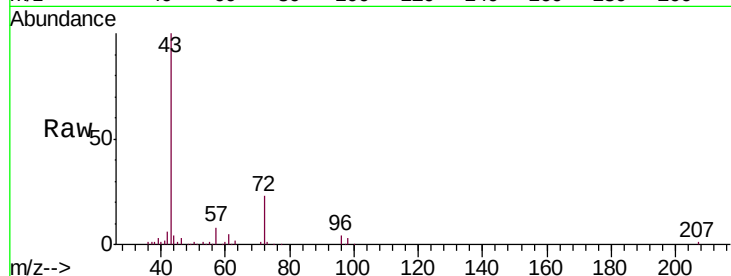
VSTD01054

Tgt Ion: 43 Resp: 103941

Ion Ratio Lower Upper

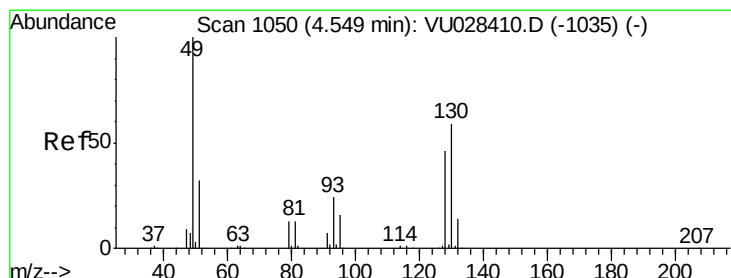
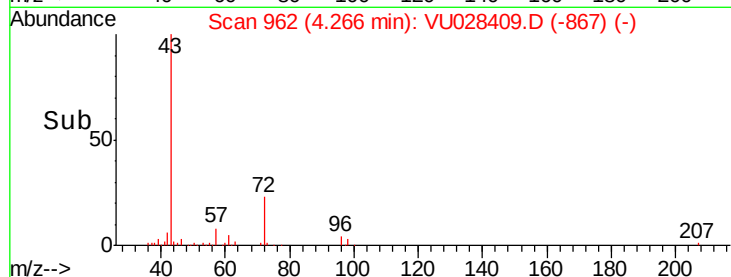
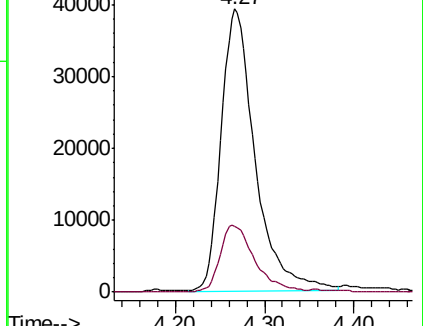
43 100

72 24.2 11.3 33.9



Abundance Ion 43.00 (42.70 to 43.70): VU028410.D (-943) (-)

Ion 72.00 (71.70 to 72.70): VU028410.D (-943) (-)



#23

Bromochloromethane

Concen: 10.151 ug/L

RT: 4.55 min Scan# 1050

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Tgt Ion: 128 Resp: 18733

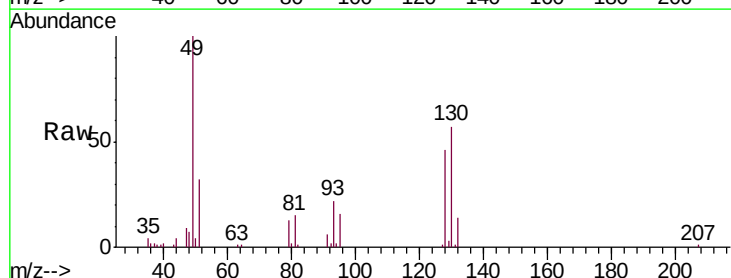
Ion Ratio Lower Upper

128 100

49 216.6 152.5 283.3

130 123.7 89.8 166.8

51 70.0 56.2 84.2

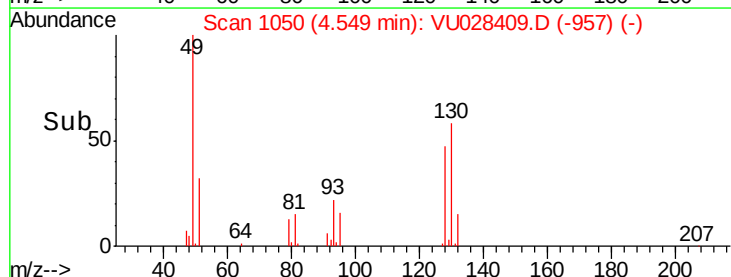
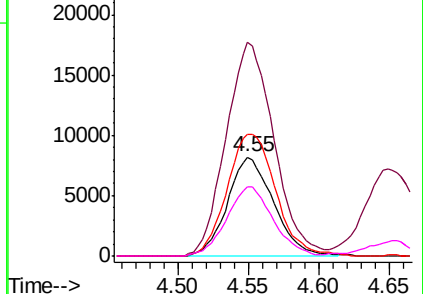


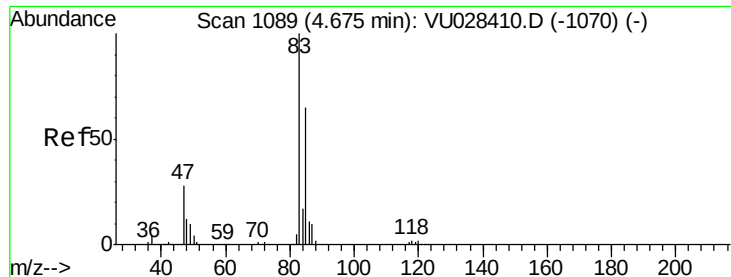
Abundance Ion 128.00 (127.70 to 128.70): VU028409.D (-957) (-)

Ion 49.00 (48.70 to 49.70): VU028409.D (-957) (-)

Ion 130.00 (129.70 to 130.70): VU028409.D (-957) (-)

Ion 51.00 (50.70 to 51.70): VU028409.D (-957) (-)

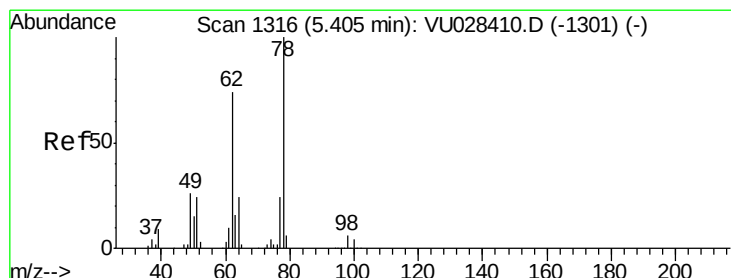
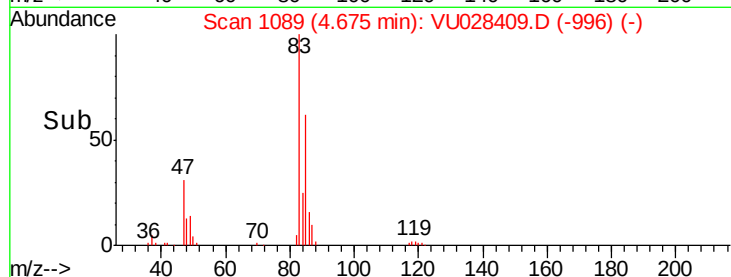
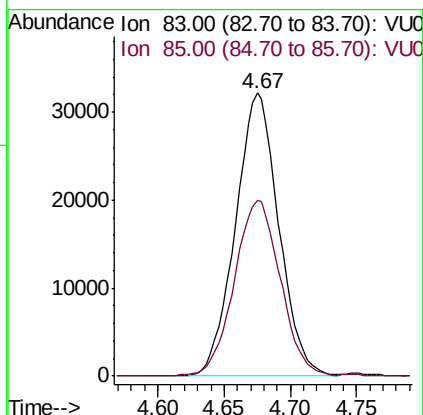
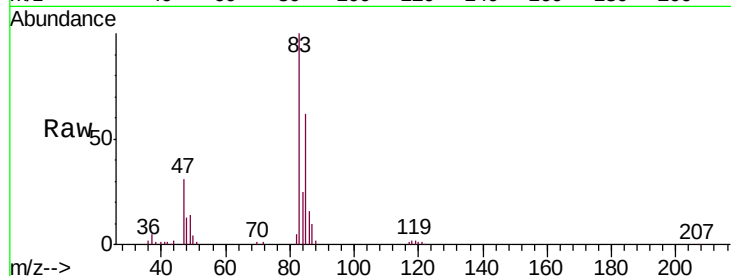




#25  
Chloroform  
Concen: 10.078 ug/L  
RT: 4.67 min Scan# 1089  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

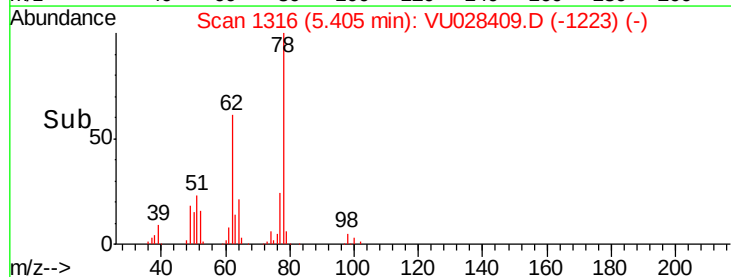
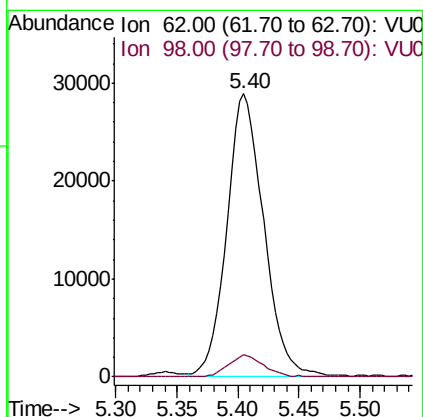
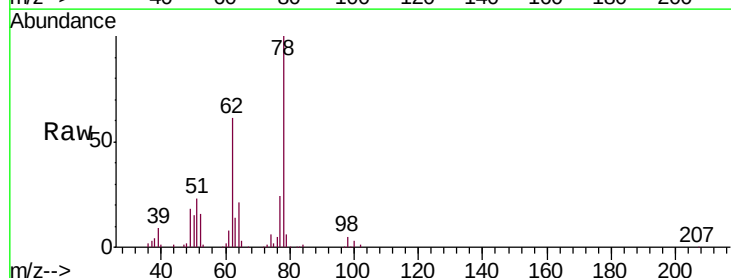
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

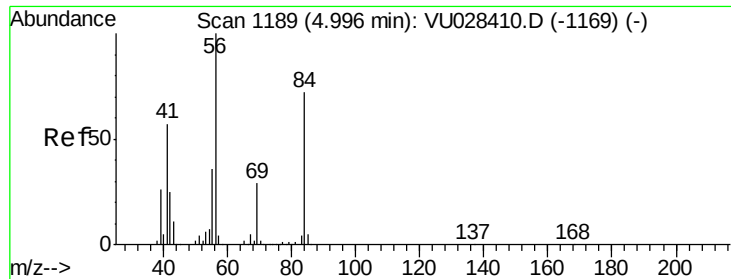
Tgt Ion: 83 Resp: 73103  
Ion Ratio Lower Upper  
83 100  
85 62.2 45.7 84.9



#27  
1,2-Dichloroethane  
Concen: 10.187 ug/L  
RT: 5.40 min Scan# 1316  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

Tgt Ion: 62 Resp: 61177  
Ion Ratio Lower Upper  
62 100  
98 7.7 6.7 10.1

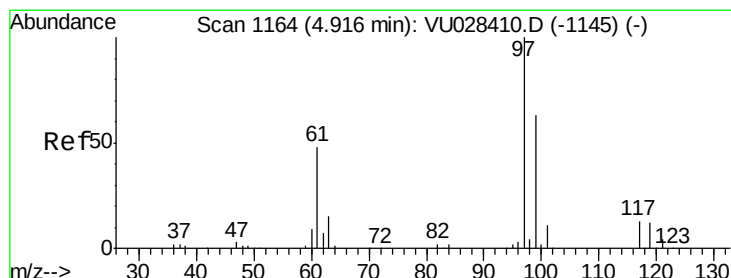
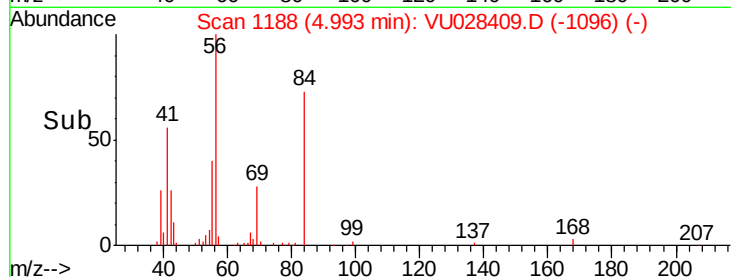
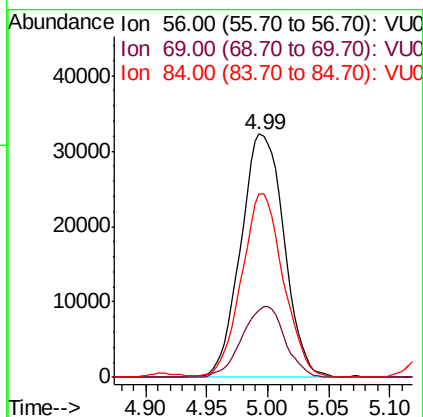
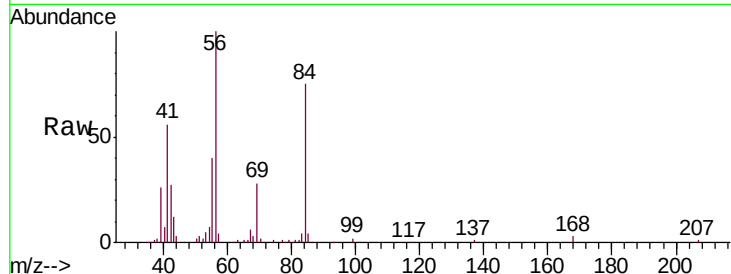




#29  
Cyclohexane  
Concen: 10.238 ug/L  
RT: 4.99 min Scan# 1188  
Delta R.T. -0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

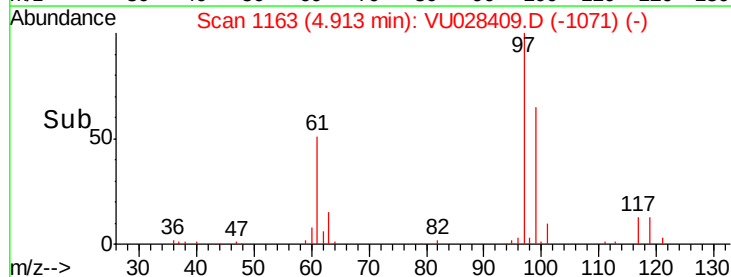
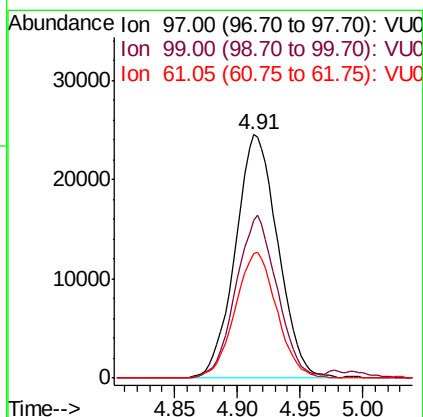
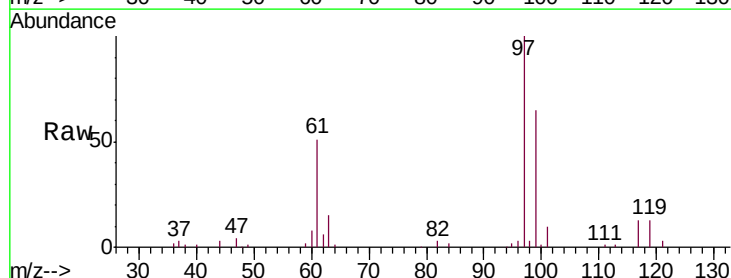
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

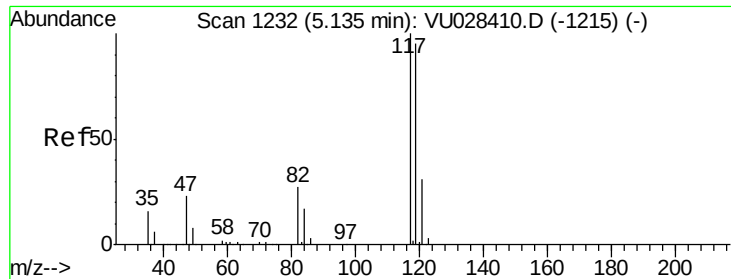
Tgt Ion: 56 Resp: 79245  
Ion Ratio Lower Upper  
56 100  
69 28.8 22.5 33.7  
84 72.7 56.6 85.0



#30  
1,1,1-Trichloroethane  
Concen: 10.249 ug/L  
RT: 4.91 min Scan# 1163  
Delta R.T. -0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

Tgt Ion: 97 Resp: 57863  
Ion Ratio Lower Upper  
97 100  
99 64.7 51.4 77.0  
61 50.5 39.3 58.9

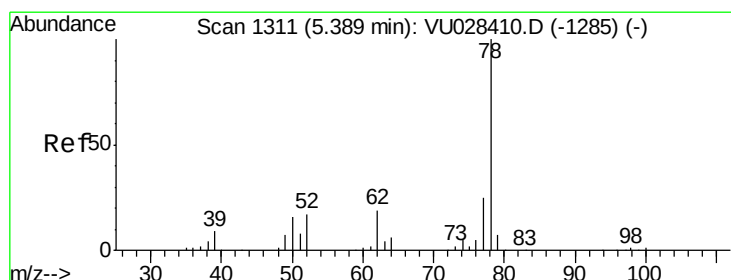
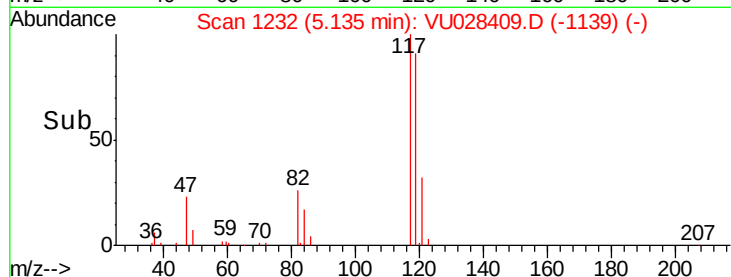
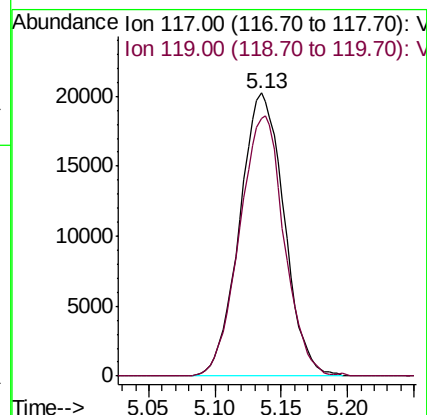
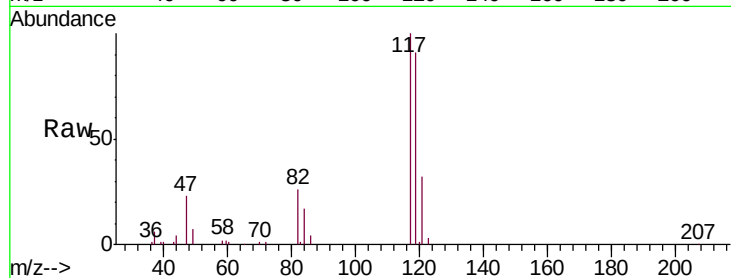




#31  
Carbon tetrachloride  
Concen: 10.375 ug/L  
RT: 5.13 min Scan# 1232  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

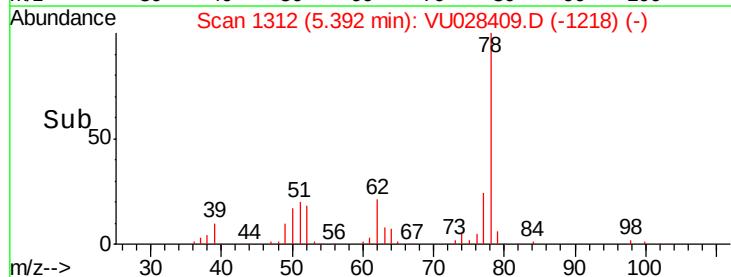
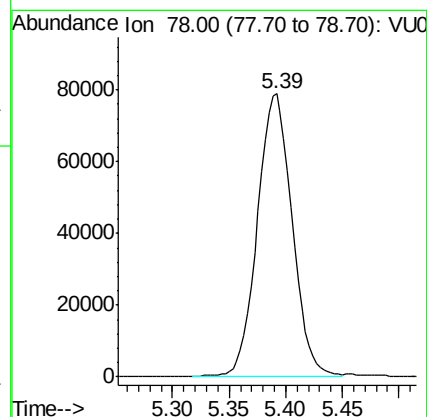
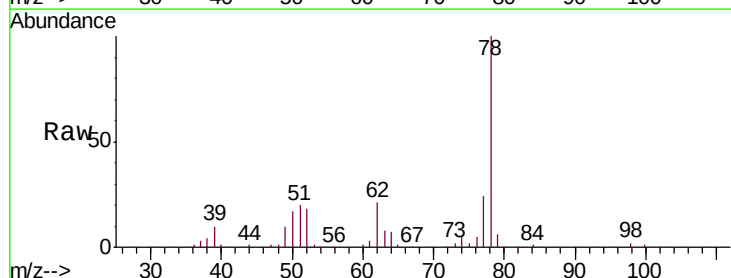
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

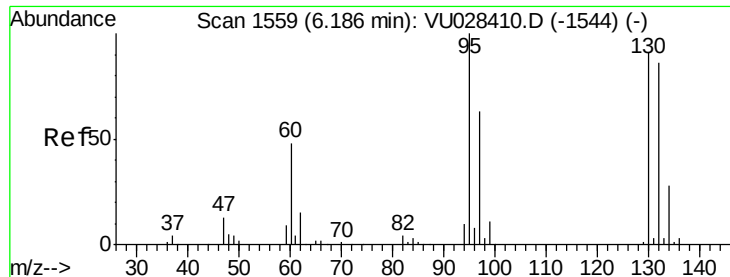
Tgt Ion:117 Resp: 47176  
Ion Ratio Lower Upper  
117 100  
119 92.2 77.4 116.0



#33  
Benzene  
Concen: 10.321 ug/L  
RT: 5.39 min Scan# 1312  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

Tgt Ion: 78 Resp: 169097





#34

Trichloroethene

Concen: 9.929 ug/L

RT: 6.19 min Scan# 1559

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01054

Tgt Ion: 95 Resp: 38897

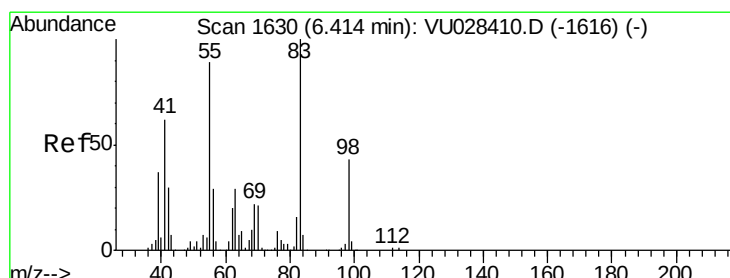
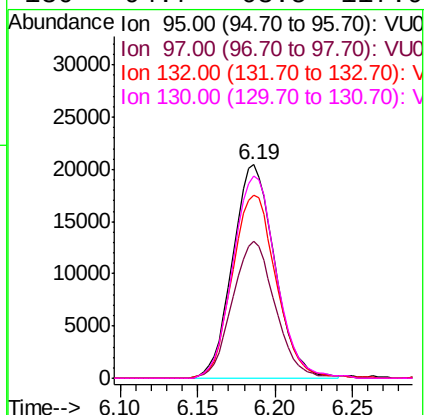
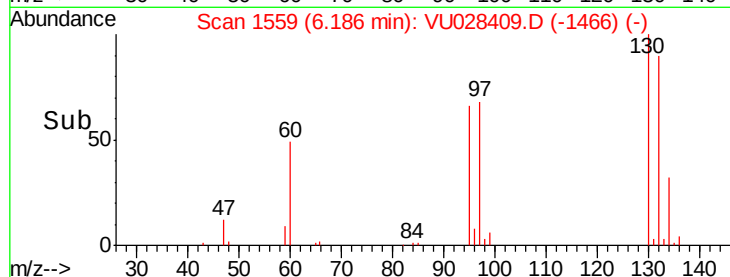
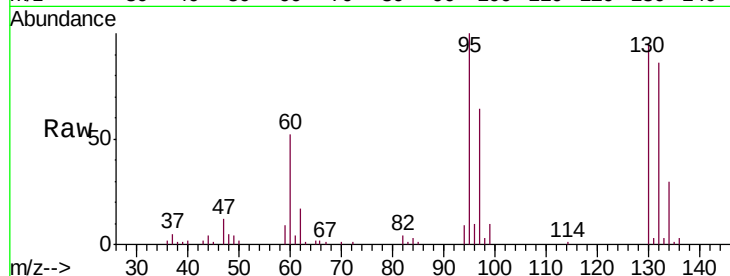
Ion Ratio Lower Upper

95 100

97 64.2 44.1 81.9

132 85.6 60.2 111.8

130 94.7 63.5 117.9



#35

Methylcyclohexane

Concen: 9.873 ug/L

RT: 6.42 min Scan# 1631

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

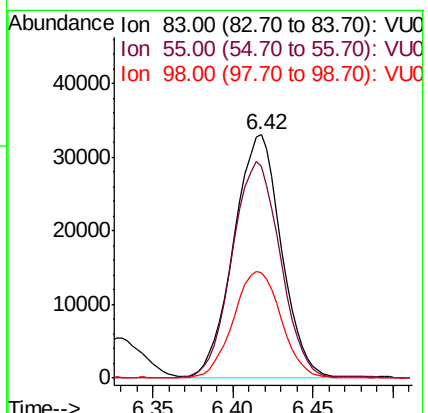
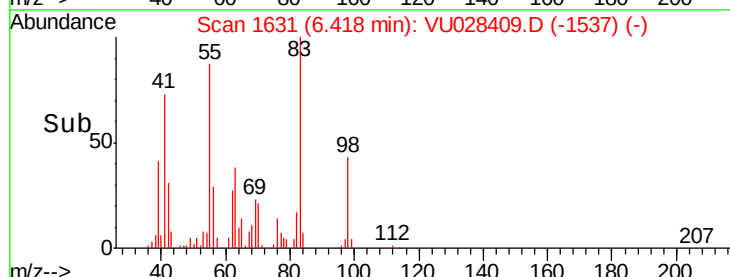
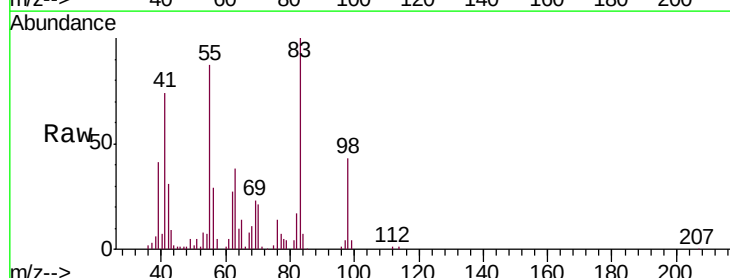
Tgt Ion: 83 Resp: 67326

Ion Ratio Lower Upper

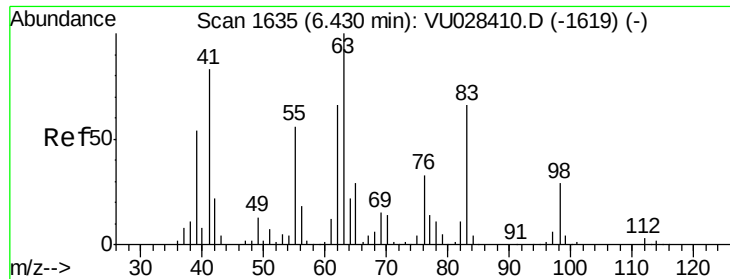
83 100

55 89.8 70.5 105.7

98 43.9 34.6 52.0



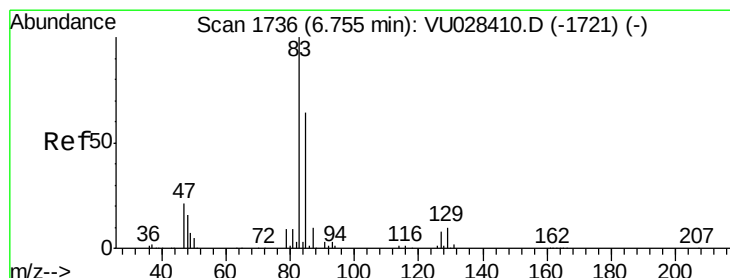
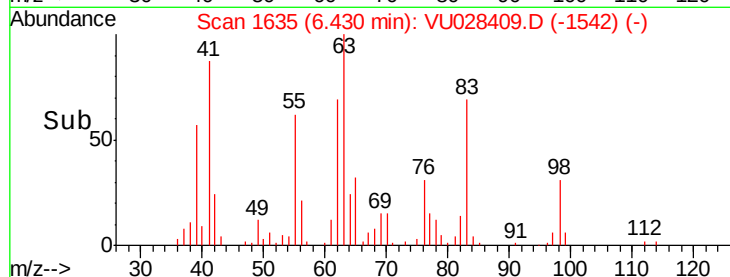
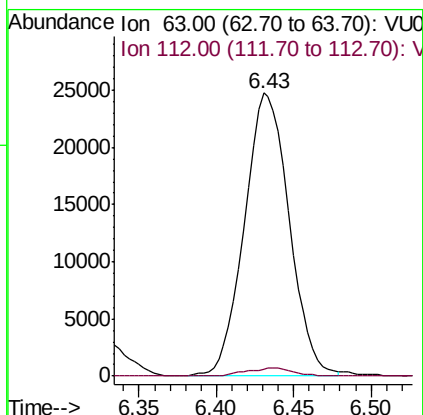
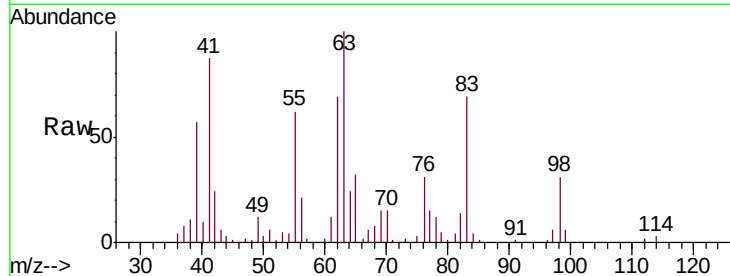




#37  
 1,2-Dichloropropane  
 Concen: 10.297 ug/L  
 RT: 6.43 min Scan# 1635  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

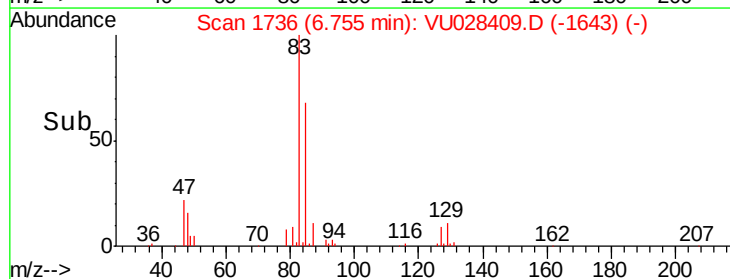
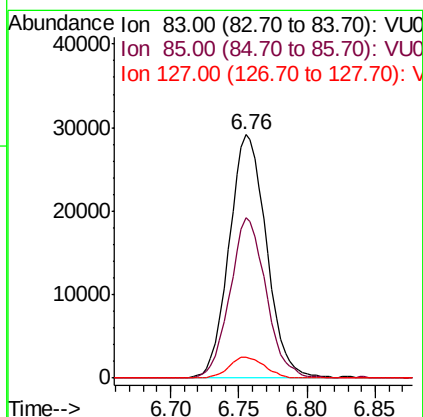
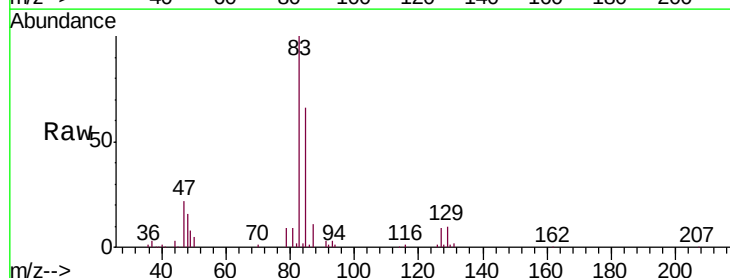
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01054

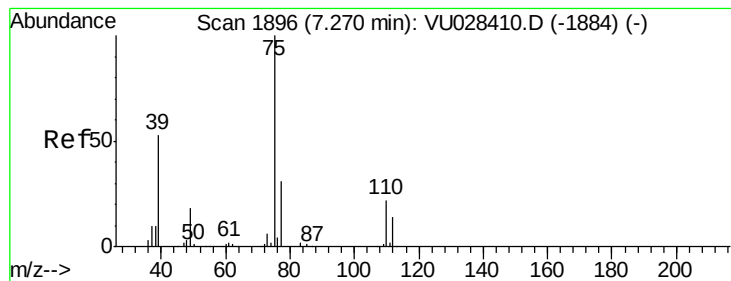
Tgt Ion: 63 Resp: 50019  
 Ion Ratio Lower Upper  
 63 100  
 112 3.0 2.6 3.8



#38  
 Bromodichloromethane  
 Concen: 10.276 ug/L  
 RT: 6.76 min Scan# 1736  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Tgt Ion: 83 Resp: 55391  
 Ion Ratio Lower Upper  
 83 100  
 85 66.1 44.9 83.3  
 127 8.7 6.0 9.0



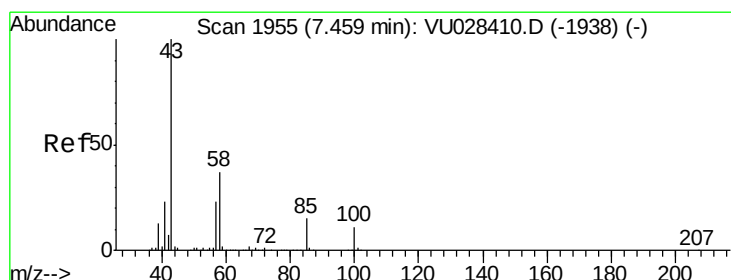
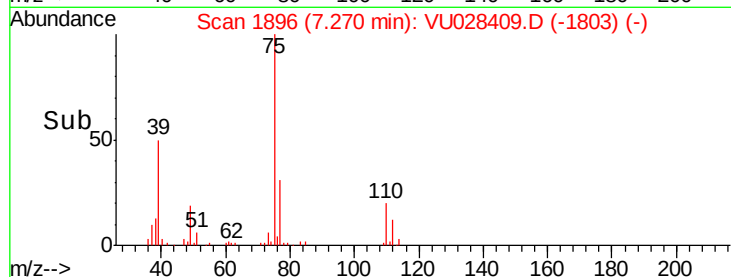
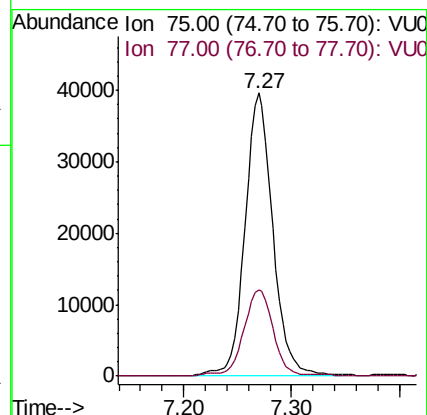
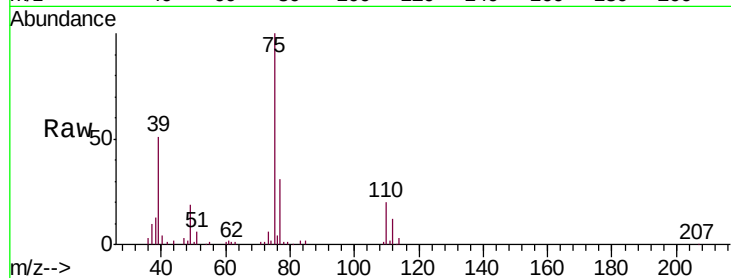


#39

cis-1,3-Dichloropropene  
 Concen: 10.322 ug/L  
 RT: 7.27 min Scan# 1896  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01054

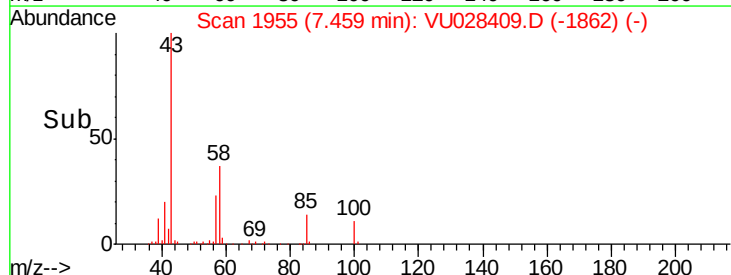
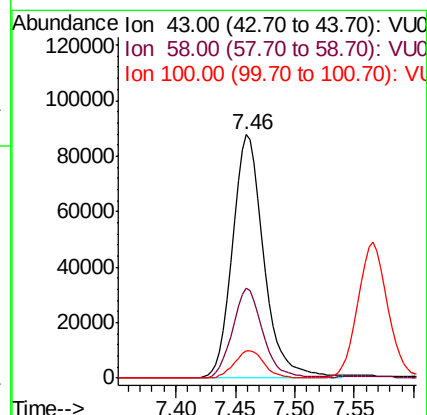
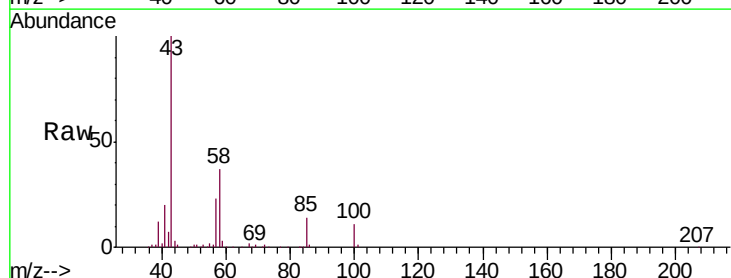
Tgt Ion: 75 Resp: 71192  
 Ion Ratio Lower Upper  
 75 100  
 77 30.6 21.9 40.7

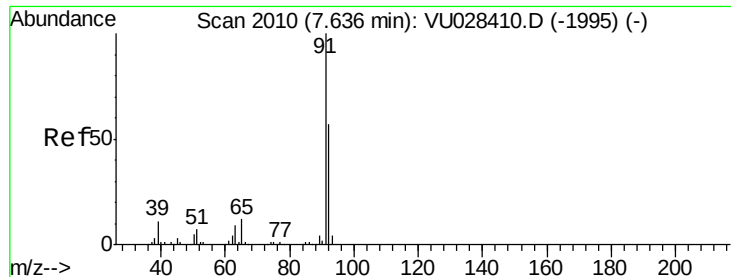


#40

4-Methyl-2-pentanone  
 Concen: 20.755 ug/L  
 RT: 7.46 min Scan# 1955  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Tgt Ion: 43 Resp: 159452  
 Ion Ratio Lower Upper  
 43 100  
 58 36.1 29.9 44.9  
 100 10.8 8.7 13.1





#42

Toluene

Concen: 10.107 ug/L

RT: 7.64 min Scan# 2010

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

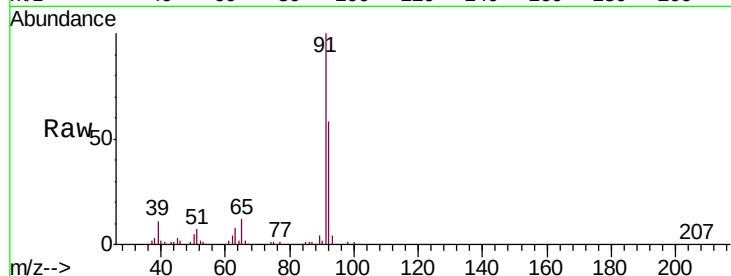
VSTD01054

Tgt Ion: 91 Resp: 168513

Ion Ratio Lower Upper

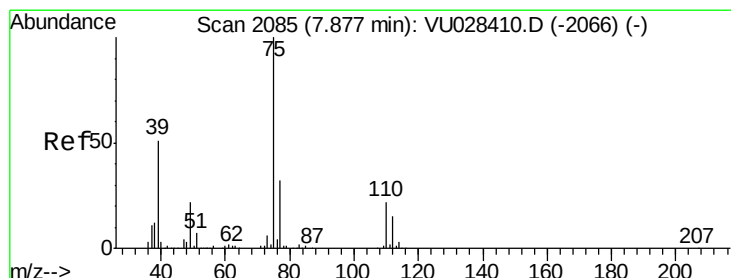
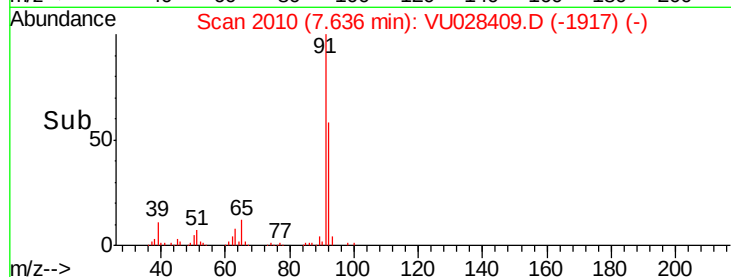
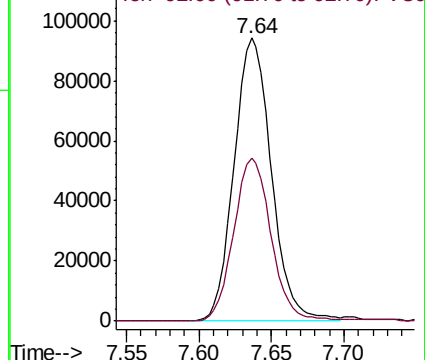
91 100

92 57.7 40.1 74.5



Abundance Ion 91.00 (90.70 to 91.70): VU0

Ion 92.00 (91.70 to 92.70): VU0



#44

trans-1,3-Dichloropropene

Concen: 9.969 ug/L

RT: 7.88 min Scan# 2086

Delta R.T. 0.00 min

Lab File: VU028409.D

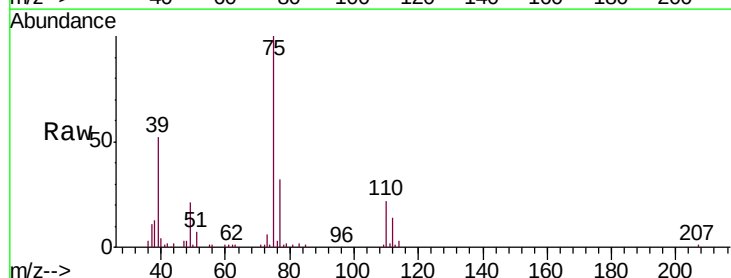
Acq: 30 Nov 2018 09:27

Tgt Ion: 75 Resp: 63008

Ion Ratio Lower Upper

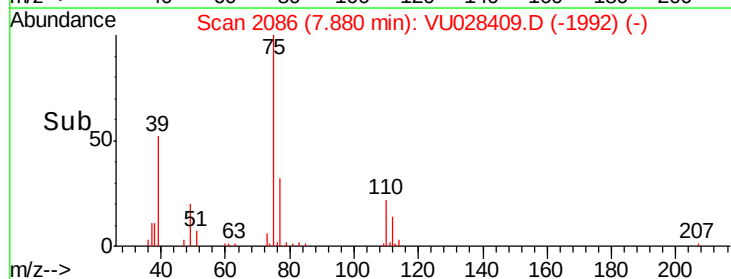
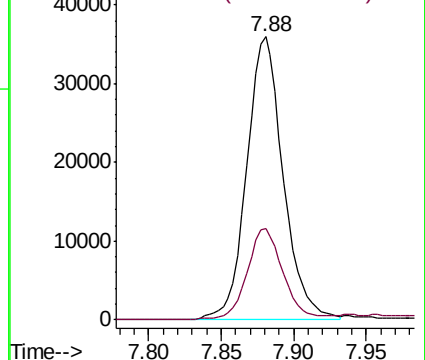
75 100

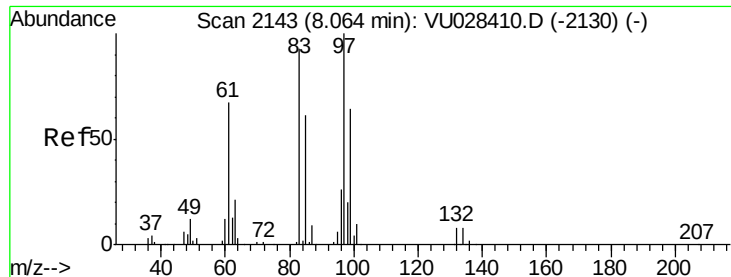
77 32.2 22.1 41.1



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0

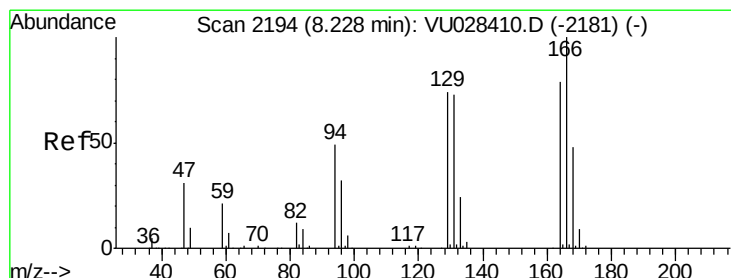
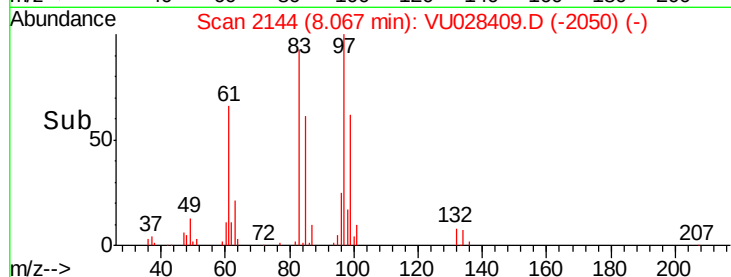
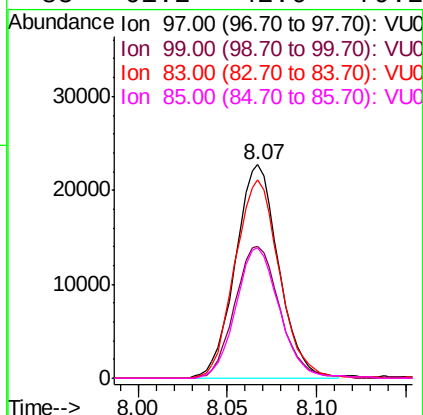
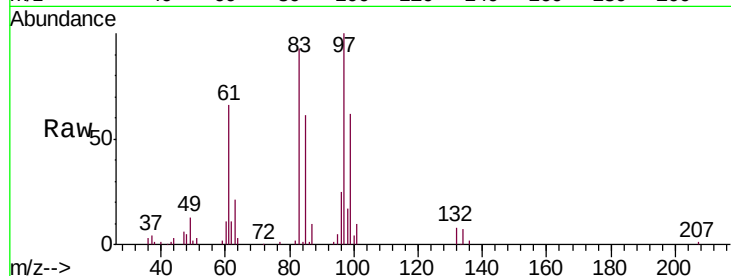




#45  
 1,1,2-Trichloroethane  
 Concen: 10.223 ug/L  
 RT: 8.07 min Scan# 2144  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

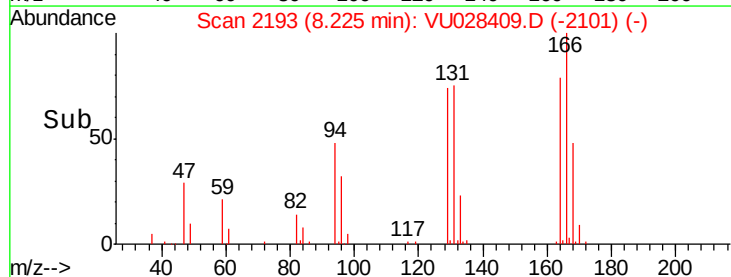
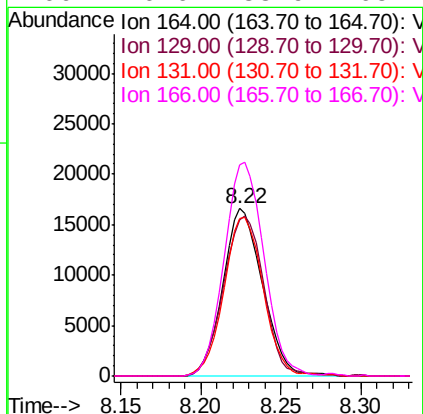
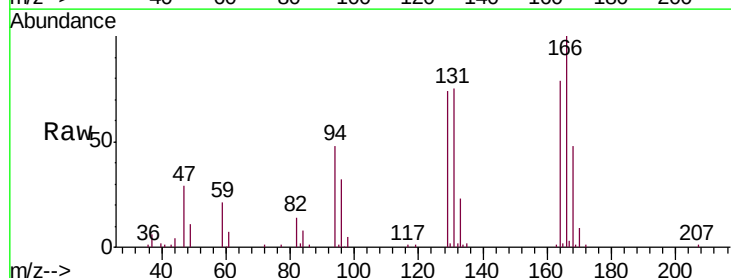
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01054

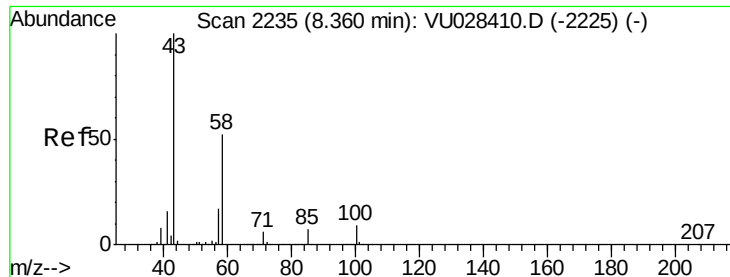
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 38618 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 62.0  | 44.9  | 83.3  |
| 83       | 92.8  | 65.1  | 120.9 |
| 85       | 61.2  | 42.6  | 79.2  |



#46  
 Tetrachloroethene  
 Concen: 10.225 ug/L  
 RT: 8.22 min Scan# 2193  
 Delta R.T. -0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 28168 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 93.7  | 65.8  | 122.2 |
| 131      | 94.4  | 65.2  | 121.0 |
| 166      | 126.6 | 88.9  | 165.1 |

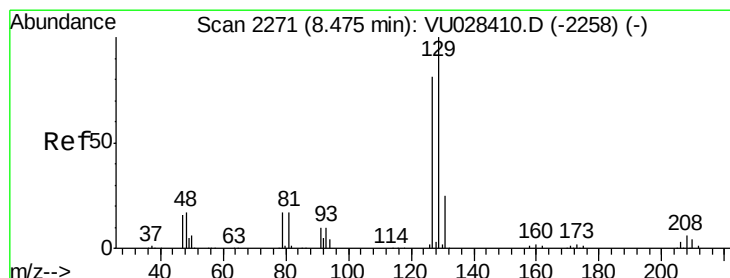
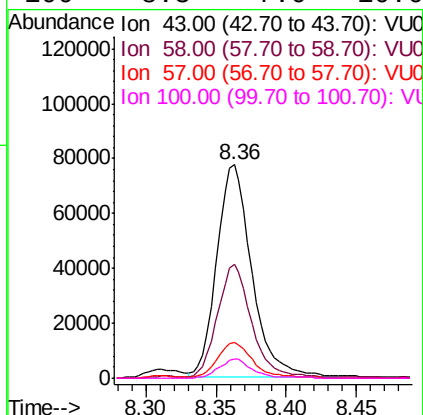
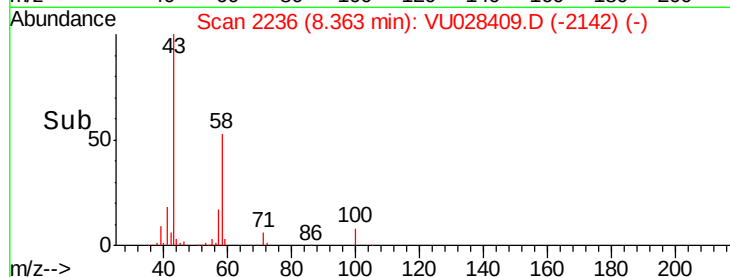
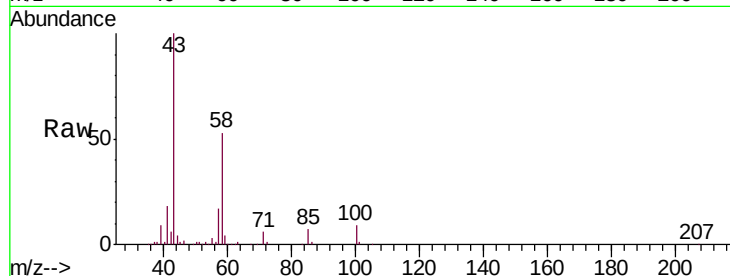




#48  
2-Hexanone  
Concen: 20.796 ug/L  
RT: 8.36 min Scan# 2236  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

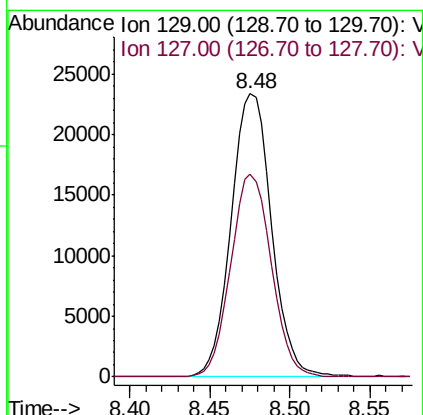
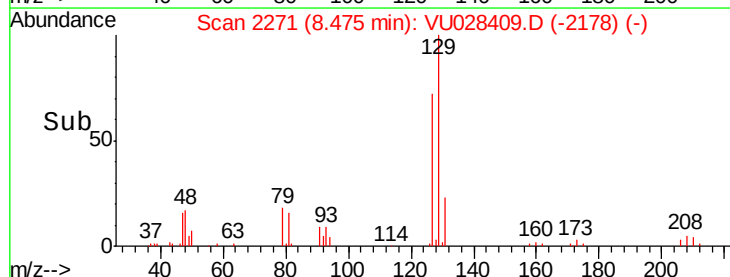
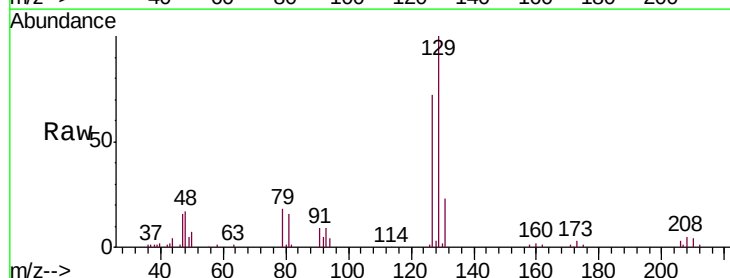
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

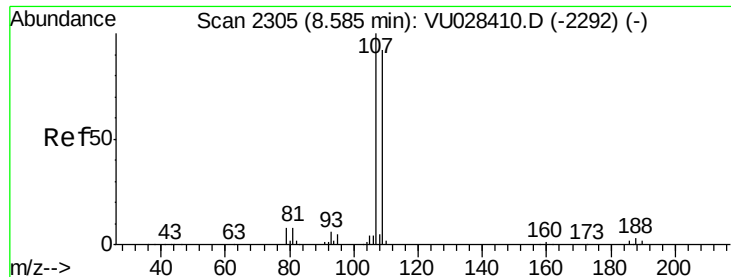
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 134230 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 52.9  | 41.4  | 62.0   |
| 57       | 17.4  | 14.0  | 21.0   |
| 100      | 8.3   | 7.0   | 10.6   |



#49  
Dibromochloromethane  
Concen: 10.416 ug/L  
RT: 8.48 min Scan# 2271  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 40249 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 71.7  | 56.8  | 105.4 |

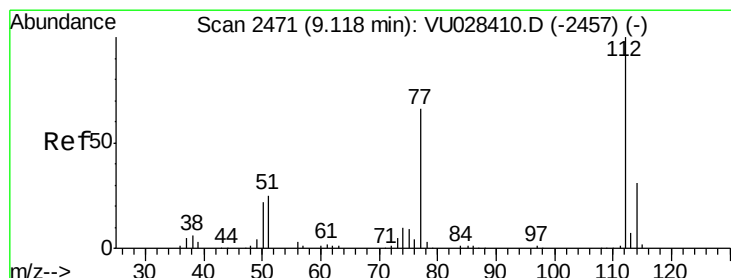
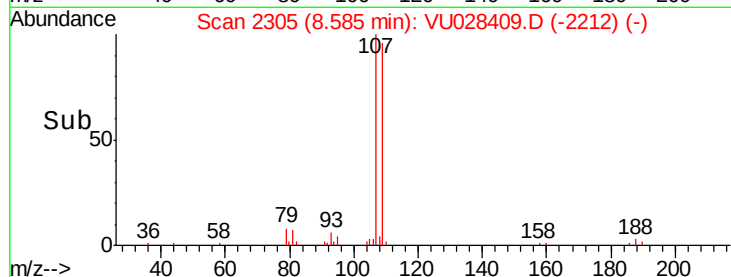
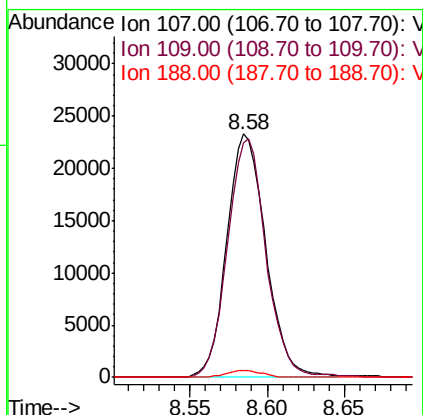
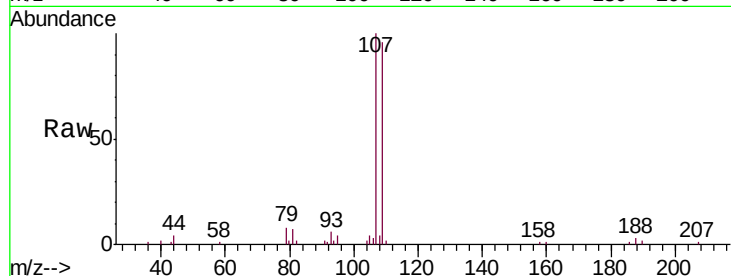




#50  
1,2-Dibromoethane  
Concen: 10.023 ug/L  
RT: 8.58 min Scan# 2305  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

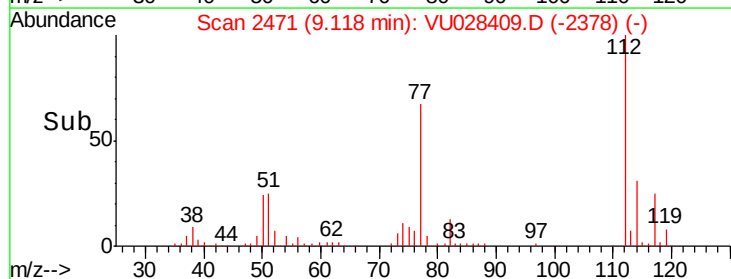
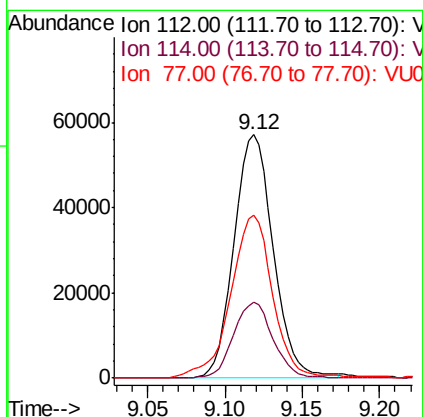
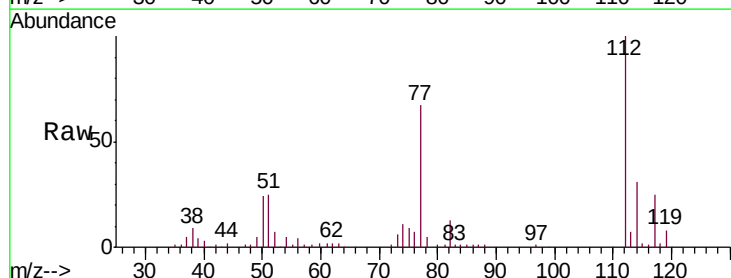
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

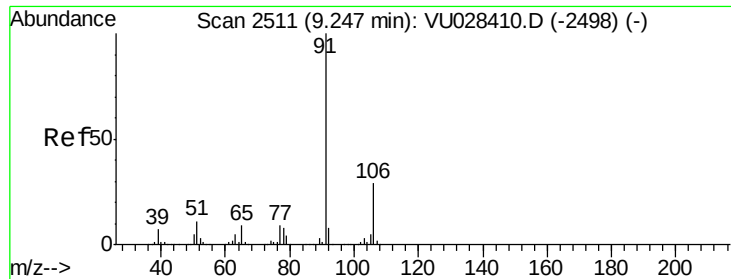
Tgt Ion:107 Resp: 40697  
Ion Ratio Lower Upper  
107 100  
109 96.1 64.5 119.7  
188 3.0 2.6 3.8



#51  
Chlorobenzene  
Concen: 10.131 ug/L  
RT: 9.12 min Scan# 2471  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

Tgt Ion:112 Resp: 100765  
Ion Ratio Lower Upper  
112 100  
114 30.9 21.6 40.0  
77 67.2 53.0 79.6





#52

Ethylbenzene

Concen: 9.996 ug/L

RT: 9.25 min Scan# 2512

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

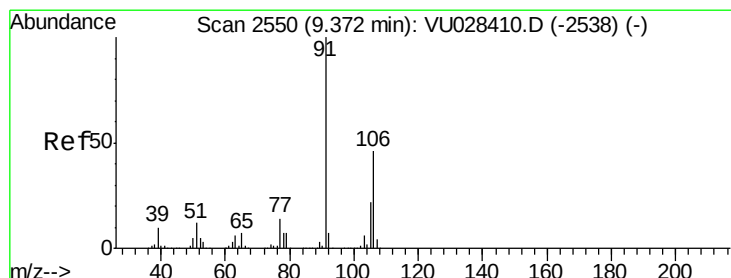
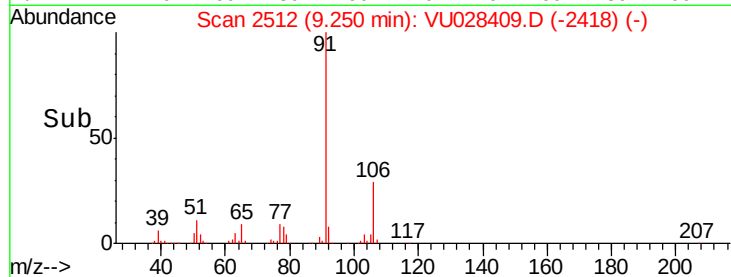
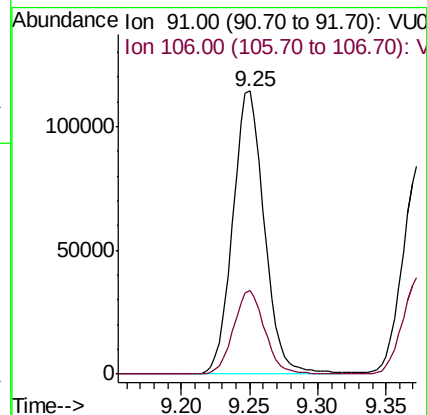
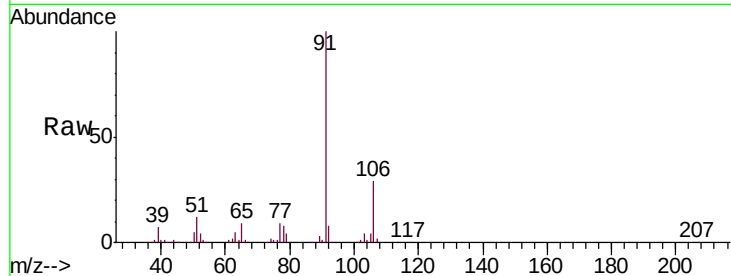
VSTD01054

Tgt Ion: 91 Resp: 184113

Ion Ratio Lower Upper

91 100

106 29.5 20.2 37.6



#53

m,p-Xylene

Concen: 9.908 ug/L

RT: 9.37 min Scan# 2550

Delta R.T. 0.00 min

Lab File: VU028409.D

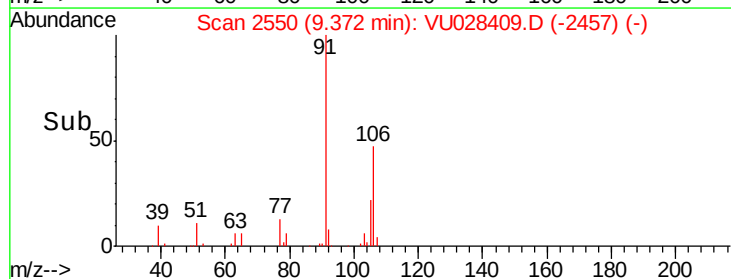
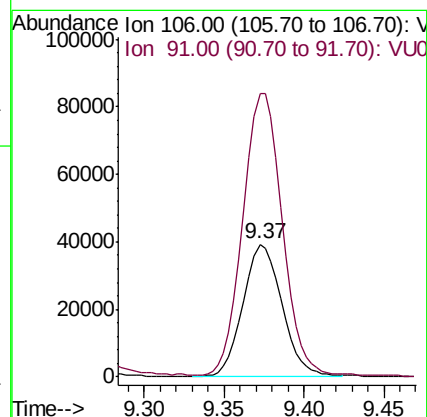
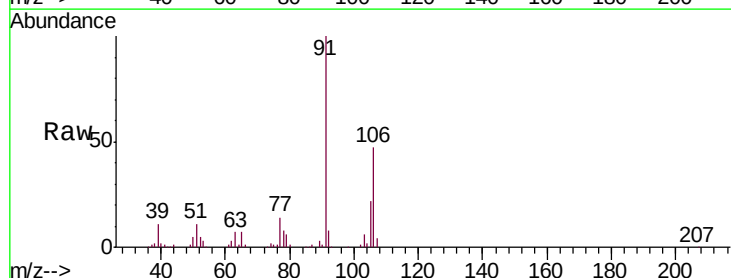
Acq: 30 Nov 2018 09:27

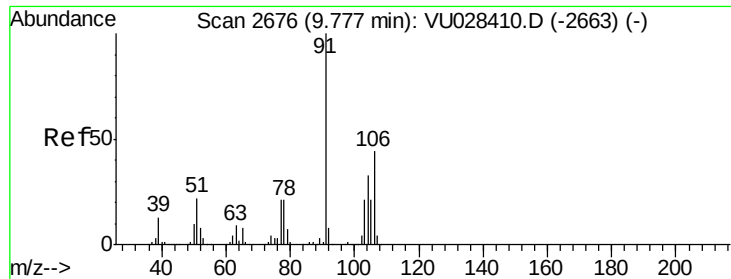
Tgt Ion: 106 Resp: 65089

Ion Ratio Lower Upper

106 100

91 213.8 152.9 283.9

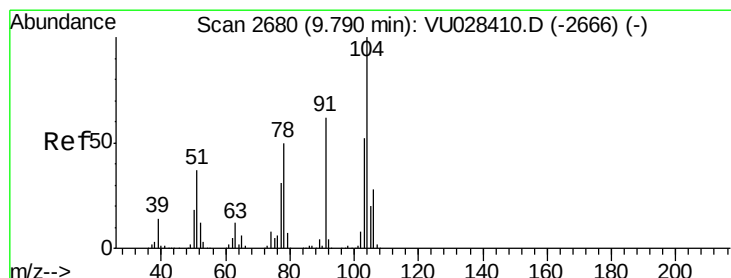
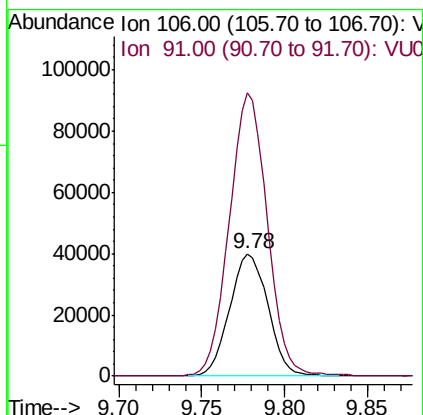
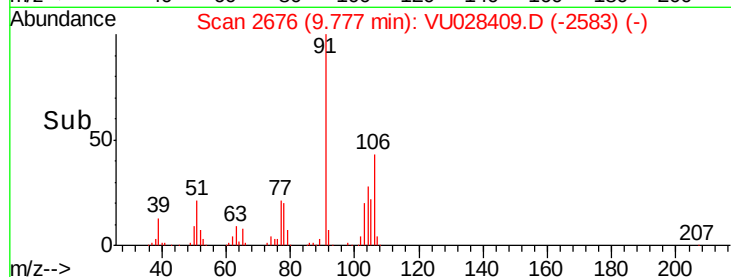
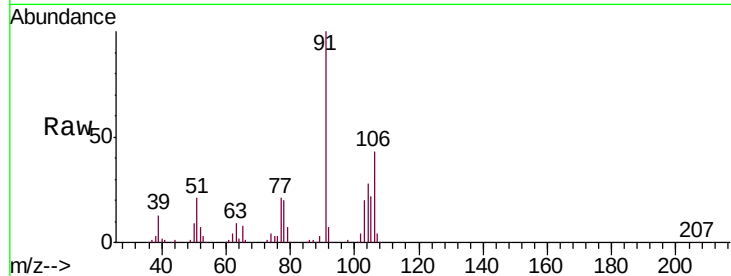




#54  
o-xylene  
Concen: 9.913 ug/L  
RT: 9.78 min Scan# 2676  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

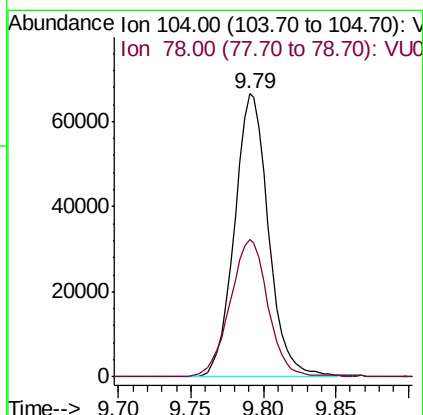
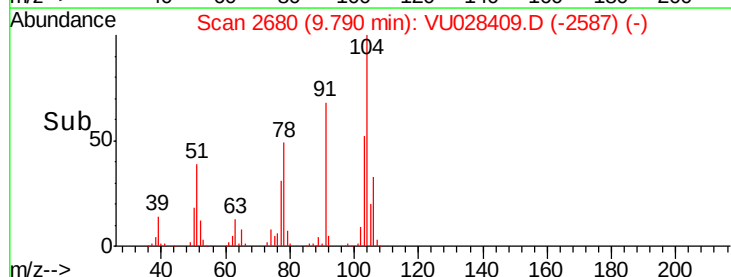
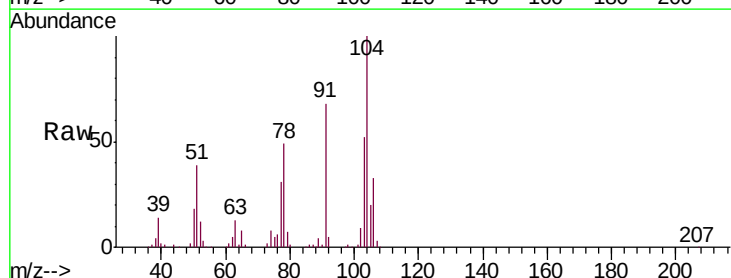
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01054

Tgt Ion:106 Resp: 64499  
Ion Ratio Lower Upper  
106 100  
91 231.6 158.4 294.2

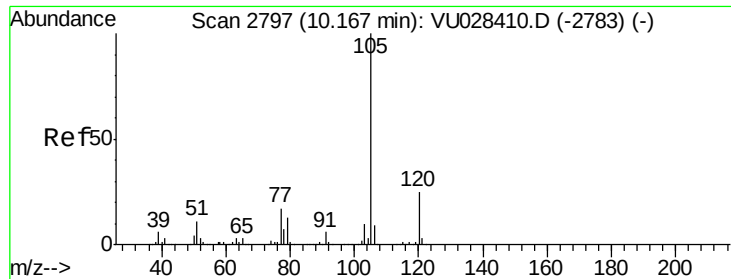


#55  
Styrene  
Concen: 9.722 ug/L  
RT: 9.79 min Scan# 2680  
Delta R.T. 0.00 min  
Lab File: VU028409.D  
Acq: 30 Nov 2018 09:27

Tgt Ion:104 Resp: 108383  
Ion Ratio Lower Upper  
104 100  
78 48.6 35.0 65.0







#56

Isopropylbenzene

Concen: 9.922 ug/L

RT: 10.17 min Scan# 2797

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampled :

VSTD01054

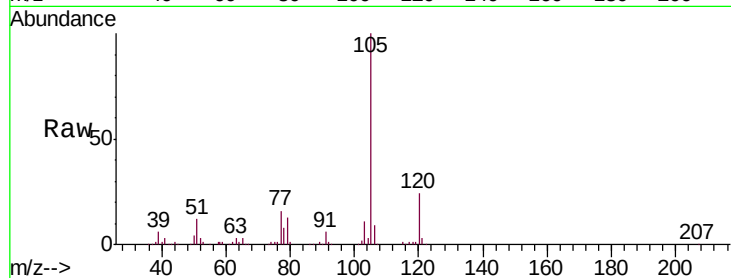
Tgt Ion: 105 Resp: 170313

Ion Ratio Lower Upper

105 100

120 24.9 20.1 30.1

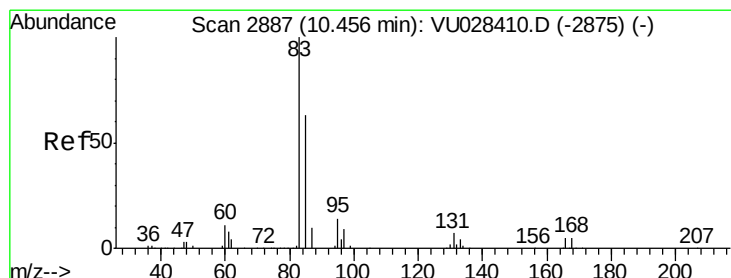
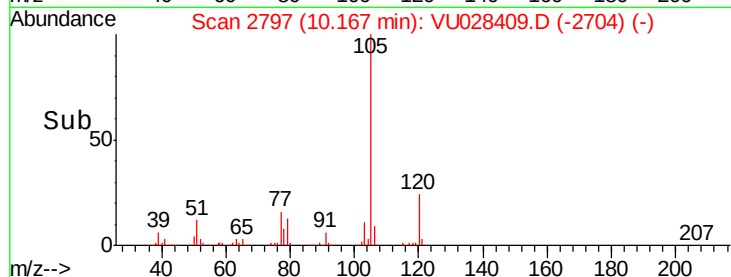
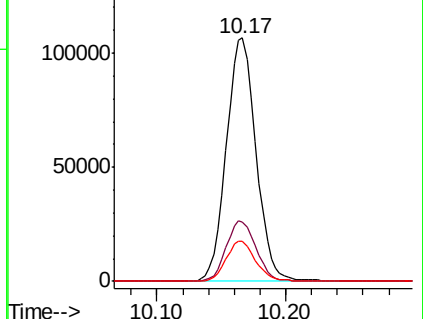
77 16.5 13.4 20.0



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: 10.171 ug/L

RT: 10.46 min Scan# 2887

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

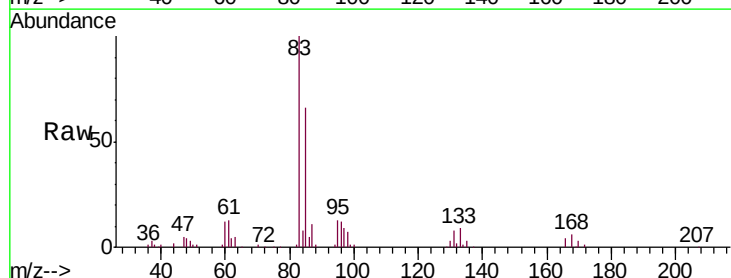
Tgt Ion: 83 Resp: 71669

Ion Ratio Lower Upper

83 100

85 65.6 44.7 83.1

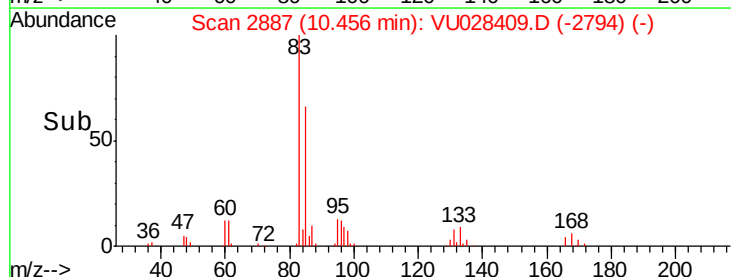
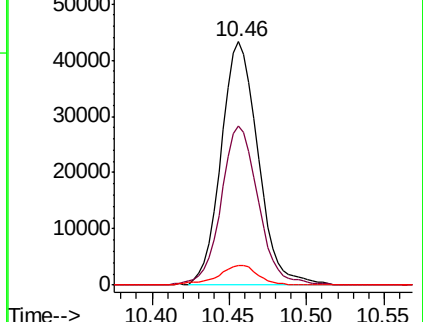
131 8.3 6.5 9.7

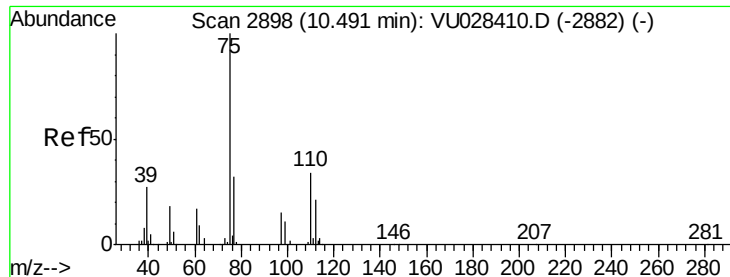


Abundance Ion 83.00 (82.70 to 83.70): V

Ion 85.00 (84.70 to 85.70): V

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 10.318 ug/L

RT: 10.49 min Scan# 2898

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

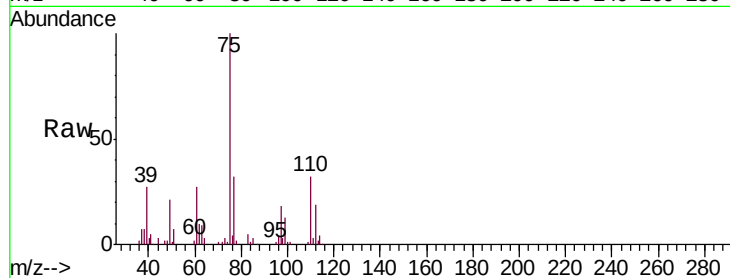
VSTD01054

Tgt Ion: 75 Resp: 56894

Ion Ratio Lower Upper

75 100

77 33.4 25.6 38.4

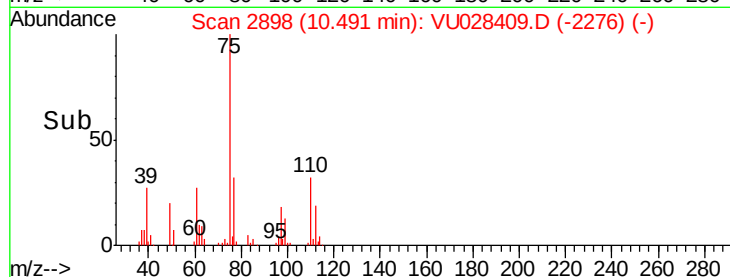


Abundance Ion 75.00 (74.70 to 75.70): VU028410.D (-2882) (-)

Ion 77.00 (76.70 to 77.70): VU028410.D (-2882) (-)

10.49

Time-->

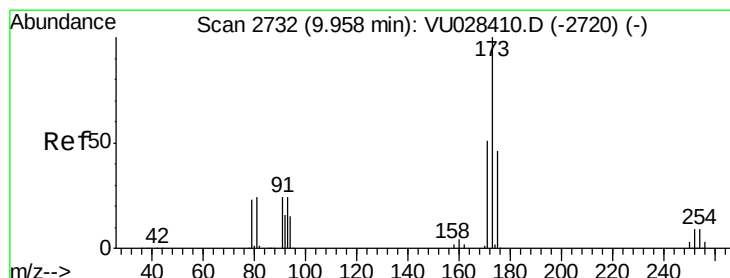


Abundance Ion 75.00 (74.70 to 75.70): VU028409.D (-2276) (-)

Ion 77.00 (76.70 to 77.70): VU028409.D (-2276) (-)

10.49

Time-->



#61

Bromoform

Concen: 9.917 ug/L

RT: 9.96 min Scan# 2732

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

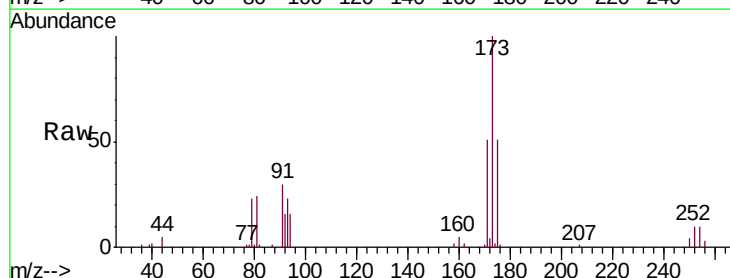
Tgt Ion: 173 Resp: 27112

Ion Ratio Lower Upper

173 100

175 48.5 38.1 57.1

254 9.4 6.8 10.2



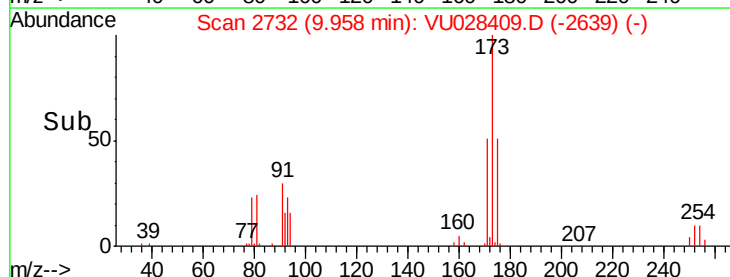
Abundance Ion 173.00 (172.70 to 173.70): VU028410.D (-2720) (-)

Ion 175.00 (174.70 to 175.70): VU028410.D (-2720) (-)

Ion 254.00 (253.70 to 254.70): VU028410.D (-2720) (-)

9.96

Time-->



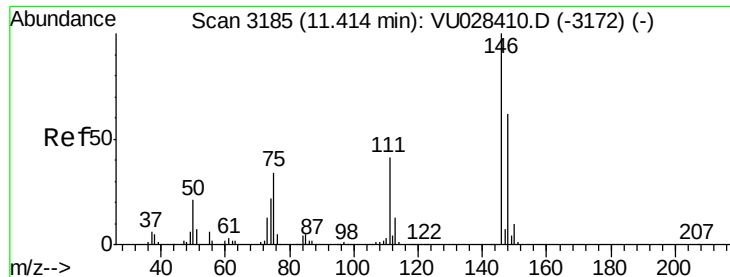
Abundance Ion 173.00 (172.70 to 173.70): VU028409.D (-2639) (-)

Ion 175.00 (174.70 to 175.70): VU028409.D (-2639) (-)

Ion 254.00 (253.70 to 254.70): VU028409.D (-2639) (-)

9.96

Time-->



#62

1,3-Dichlorobenzene

Concen: 10.016 ug/L

RT: 11.42 min Scan# 3186

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01054

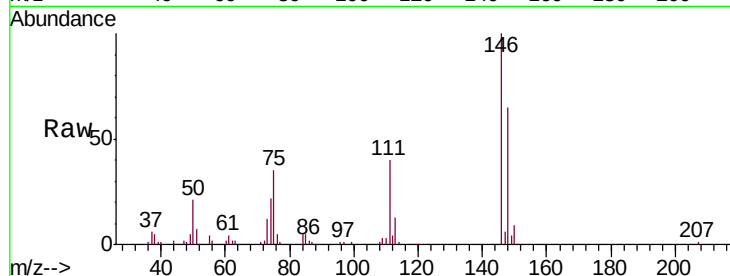
Tgt Ion:146 Resp: 72552

Ion Ratio Lower Upper

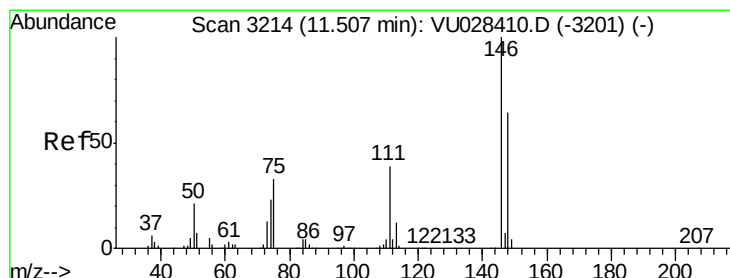
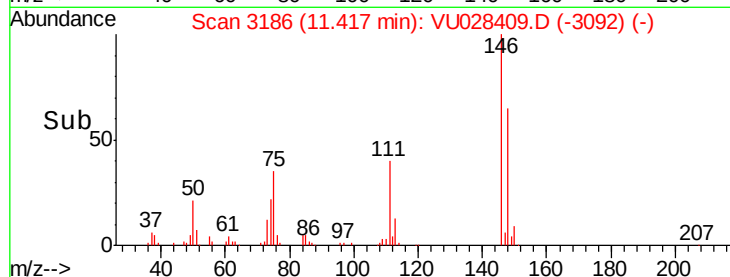
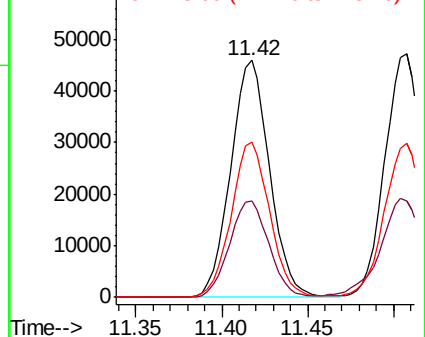
146 100

111 40.5 28.8 53.4

148 65.3 43.1 80.1



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: 10.244 ug/L

RT: 11.51 min Scan# 3214

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

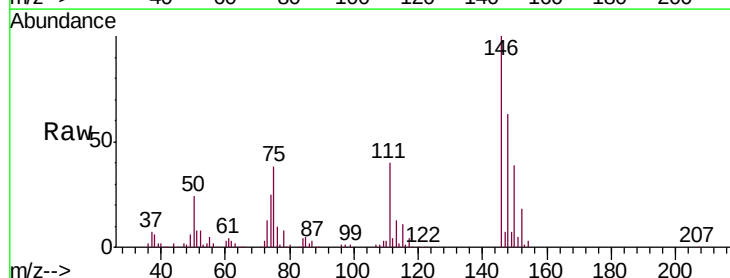
Tgt Ion:146 Resp: 74725

Ion Ratio Lower Upper

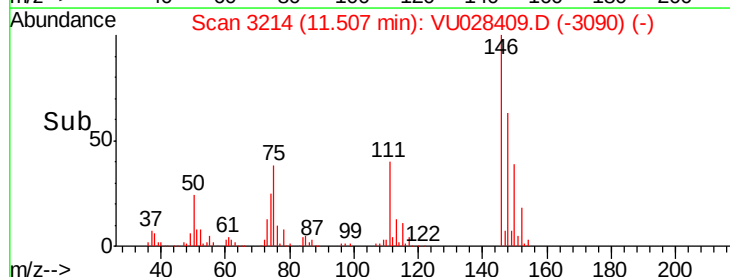
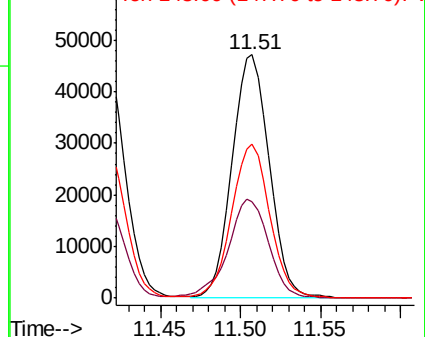
146 100

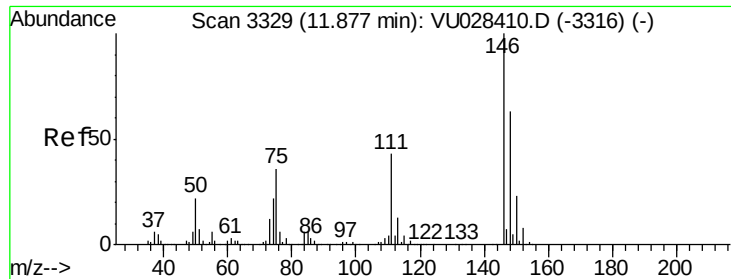
111 39.5 27.6 51.4

148 63.5 44.7 82.9



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





#65

1,2-Dichlorobenzene

Concen: 10.414 ug/L

RT: 11.88 min Scan# 3329

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01054

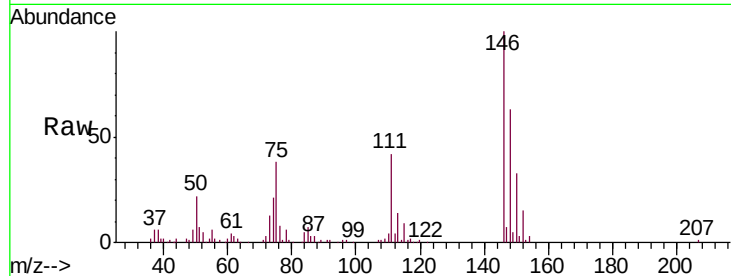
Tgt Ion:146 Resp: 74878

Ion Ratio Lower Upper

146 100

111 42.0 34.9 52.3

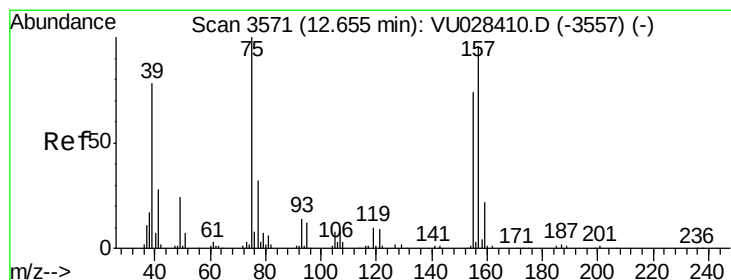
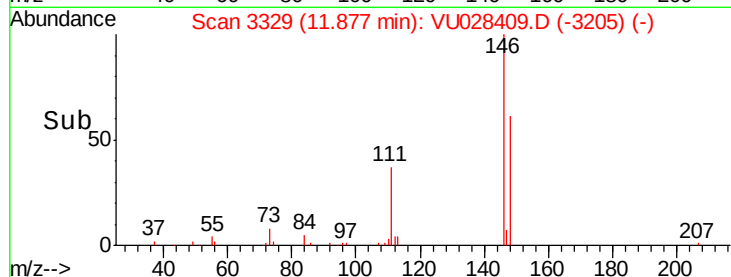
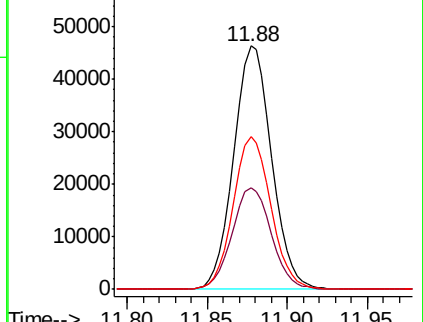
148 62.6 50.8 76.2



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



#66

1,2-Dibromo-3-chloropropane

Concen: 10.203 ug/L

RT: 12.66 min Scan# 3571

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

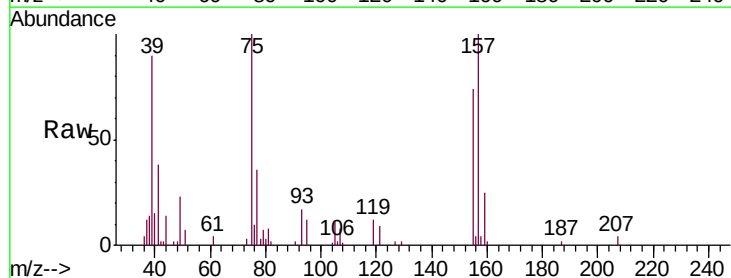
Tgt Ion: 75 Resp: 14779

Ion Ratio Lower Upper

75 100

155 74.5 58.8 88.2

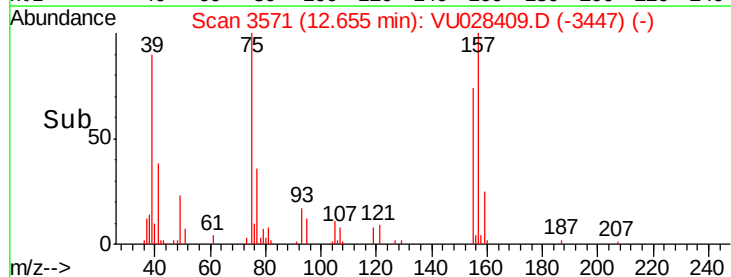
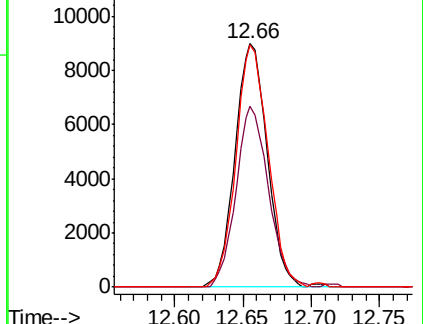
157 99.8 76.9 115.3

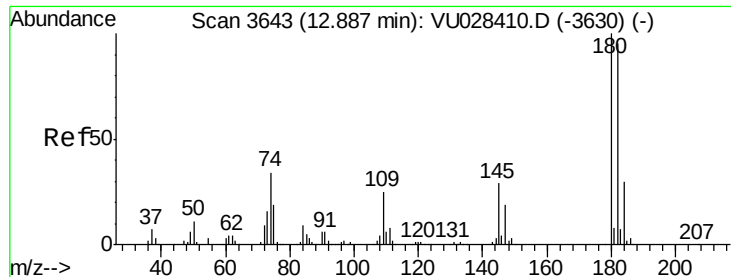


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

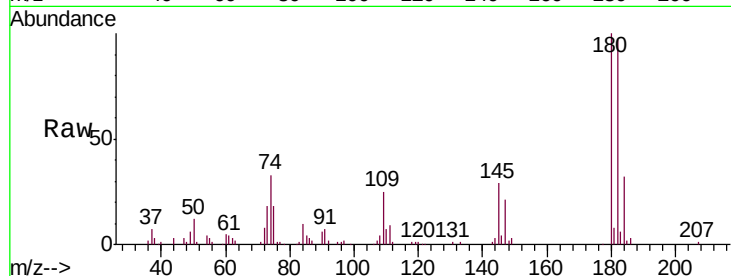




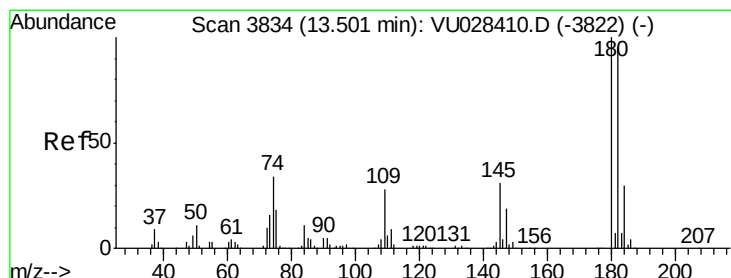
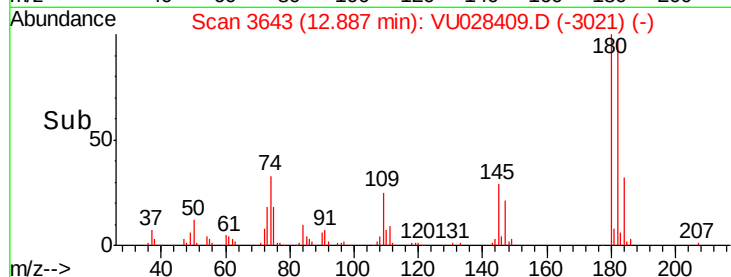
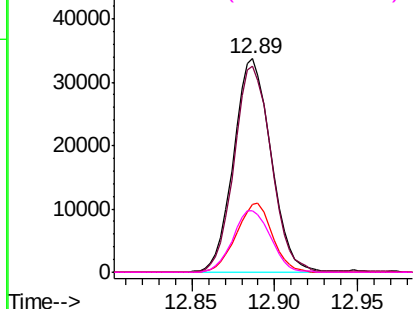
#67  
 1,3,5-Trichlorobenzene  
 Concen: 9.968 ug/L  
 RT: 12.89 min Scan# 3643  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01054

Tgt Ion:180 Resp: 53118  
 Ion Ratio Lower Upper  
 180 100  
 182 95.7 75.8 113.6  
 184 30.8 24.0 36.0  
 145 29.2 23.8 35.8

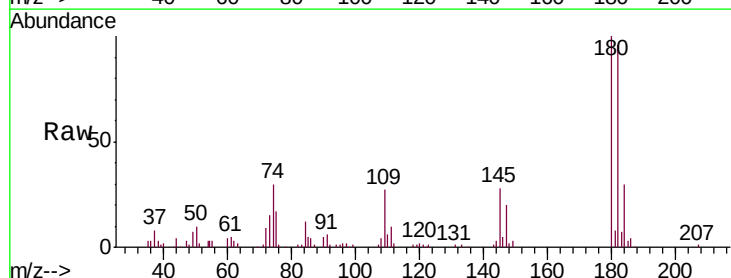


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

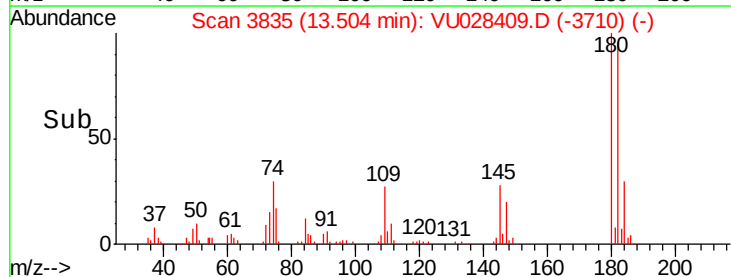
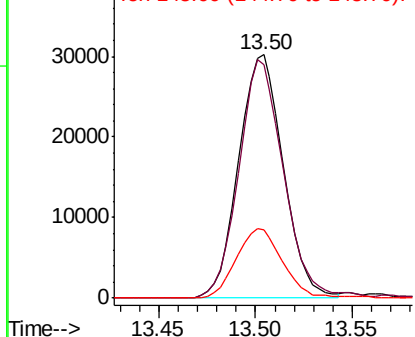


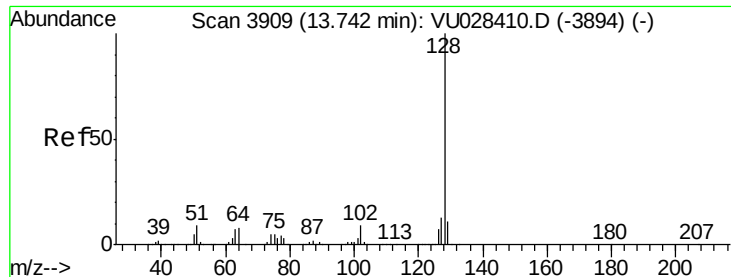
#68  
 1,2,4-trichlorobenzene  
 Concen: 9.785 ug/L  
 RT: 13.50 min Scan# 3835  
 Delta R.T. 0.00 min  
 Lab File: VU028409.D  
 Acq: 30 Nov 2018 09:27

Tgt Ion:180 Resp: 48564  
 Ion Ratio Lower Upper  
 180 100  
 182 98.0 76.0 114.0  
 145 29.3 24.2 36.2



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: 10.064 ug/L

RT: 13.74 min Scan# 3909

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01054

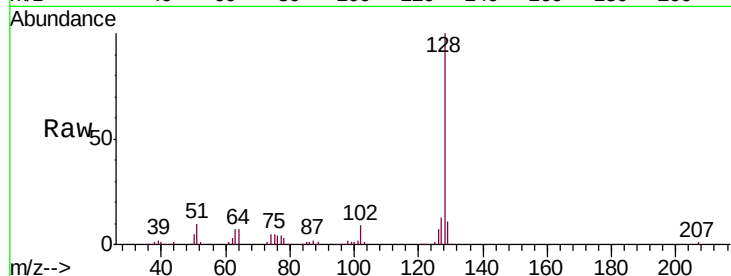
Tgt Ion:128 Resp: 174159

Ion Ratio Lower Upper

128 100

127 12.7 10.4 15.6

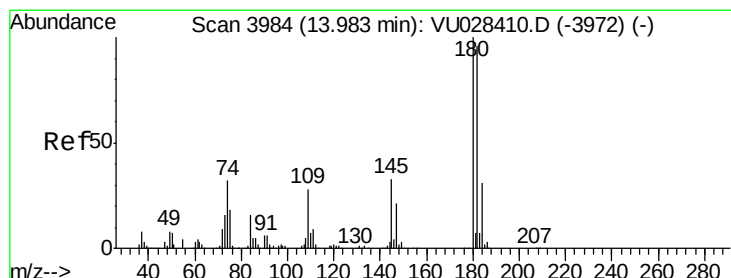
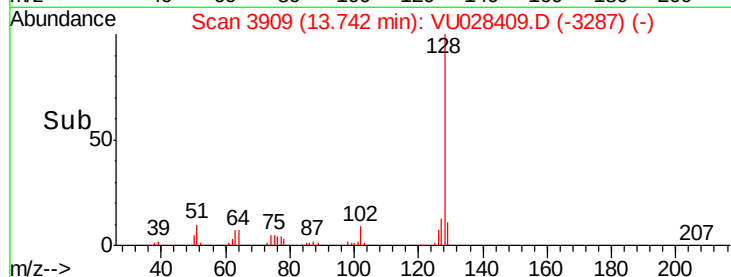
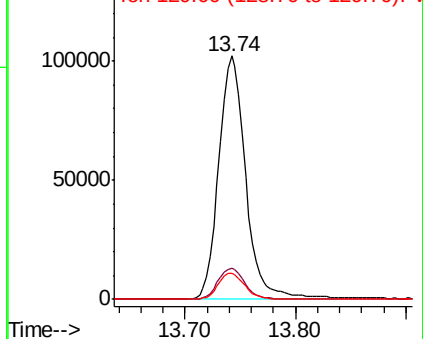
129 10.5 8.6 12.8



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: 10.119 ug/L

RT: 13.99 min Scan# 3985

Delta R.T. 0.00 min

Lab File: VU028409.D

Acq: 30 Nov 2018 09:27

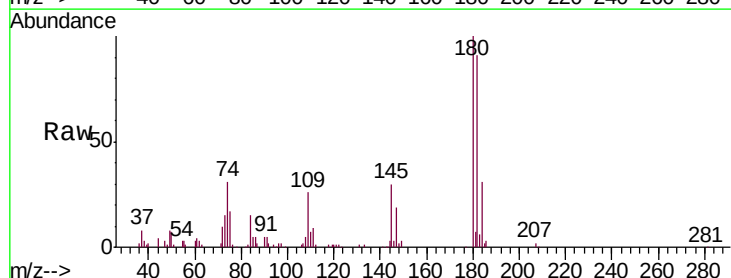
Tgt Ion:180 Resp: 50587

Ion Ratio Lower Upper

180 100

182 94.0 76.6 115.0

145 30.7 26.2 39.2



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

