

Data File : VU028221.D  
Acq On : 17 Nov 2018 12:56  
Operator : MD/SY  
Sample : VSTD01017  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01017

Quant Time: Nov 19 01:17:32 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR111718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Mon Nov 19 01:13:46 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 161799   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 155509   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 75338    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |       |      |      |
|--------------------------------|-------|-----|--------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.40  | 65  | 119448 | 9.81  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.68  | 69  | 100773 | 9.59  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.28  | 63  | 236979 | 9.78  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 4.20  | 46  | 390312 | 95.80 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.65  | 84  | 222681 | 9.80  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.31  | 65  | 117531 | 9.36  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.34  | 84  | 435617 | 9.73  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.33  | 67  | 159442 | 9.81  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.57  | 98  | 395990 | 9.88  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.85  | 79  | 53154  | 10.24 | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.31  | 63  | 307436 | 98.73 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43 | 84  | 112016 | 9.54  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.86 | 152 | 133459 | 9.52  | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 128535 | 9.460 ug/L  | 98     |
| 3) Chloromethane               | 1.33 | 50  | 160920 | 9.305 ug/L  | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 154416 | 9.403 ug/L  | 98     |
| 6) Bromomethane                | 1.63 | 94  | 71810  | 9.689 ug/L  | 97     |
| 8) Chloroethane                | 1.70 | 64  | 89608  | 9.232 ug/L  | 97     |
| 9) Trichlorofluoromethane      | 1.89 | 101 | 180590 | 9.443 ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 99582  | 9.461 ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.29 | 96  | 93582  | 9.395 ug/L  | 98     |
| 13) Acetone                    | 2.34 | 43  | 240166 | 85.707 ug/L | 99     |
| 14) Carbon disulfide           | 2.48 | 76  | 301562 | 9.641 ug/L  | 98     |
| 15) Methyl Acetate             | 2.63 | 43  | 62220  | 8.377 ug/L  | 100    |
| 16) Methylene chloride         | 2.70 | 84  | 109382 | 8.716 ug/L  | 97     |
| 17) Methyl tert-butyl Ether    | 3.01 | 73  | 272129 | 9.095 ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.98 | 96  | 101843 | 9.598 ug/L  | 98     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 232230 | 9.439 ug/L  | 100    |
| 21) 2-Butanone                 | 4.29 | 43  | 401698 | 90.023 ug/L | 100    |
| 22) cis-1,2-Dichloroethene     | 4.22 | 96  | 118911 | 9.481 ug/L  | 94     |
| 23) Bromochloromethane         | 4.55 | 128 | 45529  | 9.276 ug/L  | 94     |
| 25) Chloroform                 | 4.67 | 83  | 219147 | 8.231 ug/L  | 99     |
| 27) 1,2-Dichloroethane         | 5.41 | 62  | 141538 | 9.300 ug/L  | 99     |
| 29) 1,1,1-Trichloroethane      | 4.92 | 97  | 171304 | 9.771 ug/L  | 98     |
| 30) Cyclohexane                | 4.99 | 56  | 222015 | 9.677 ug/L  | 100    |
| 31) Carbon tetrachloride       | 5.13 | 117 | 140251 | 9.751 ug/L  | 98     |
| 33) Benzene                    | 5.39 | 78  | 487480 | 9.501 ug/L  | 100    |
| 34) Trichloroethene            | 6.19 | 95  | 121715 | 9.689 ug/L  | 97     |
| 35) Methylcyclohexane          | 6.41 | 83  | 196727 | 9.940 ug/L  | 97     |
| 37) 1,2-Dichloropropane        | 6.44 | 63  | 144407 | 9.863 ug/L  | 99     |
| 38) Bromodichloromethane       | 6.76 | 83  | 149431 | 9.360 ug/L  | 97     |
| 39) cis-1,3-Dichloropropene    | 7.27 | 75  | 182592 | 9.840 ug/L  | 97     |
| 40) 4-Methyl-2-pentanone       | 7.47 | 43  | 983694 | 93.980 ug/L | 99     |

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Instrument :  
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ClientSampleId :  
VSTD01017

Quant Time: Nov 19 01:17:32 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR111718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Mon Nov 19 01:13:46 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) Toluene                    | 7.64  | 91   | 504487   | 9.701  | ug/L  | 97       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 139733   | 10.010 | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 80555    | 9.106  | ug/L  | 94       |
| 47) Tetrachloroethene          | 8.23  | 164  | 83907    | 9.623  | ug/L  | 93       |
| 48) 2-Hexanone                 | 8.37  | 43   | 702580   | 94.143 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.48  | 129  | 87020    | 9.718  | ug/L  | 95       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 75722    | 9.471  | ug/L  | 95       |
| 51) Chlorobenzene              | 9.12  | 112  | 287725   | 9.607  | ug/L  | 98       |
| 52) Ethylbenzene               | 9.25  | 91   | 552321   | 9.869  | ug/L  | 97       |
| 53) m,p-xylene                 | 9.38  | 106  | 199160   | 10.256 | ug/L  | 99       |
| 54) o-xylene                   | 9.78  | 106  | 194708   | 10.039 | ug/L  | 99       |
| 55) Styrene                    | 9.79  | 104  | 335381   | 10.300 | ug/L  | 96       |
| 56) Isopropylbenzene           | 10.17 | 105  | 524251   | 10.092 | ug/L  | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.46 | 83   | 107138   | 9.422  | ug/L  | 96       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 78479    | 9.276  | ug/L  | 98       |
| 61) Bromoform                  | 9.96  | 173  | 44584    | 9.334  | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene        | 11.42 | 146  | 217160   | 9.472  | ug/L  | 97       |
| 63) 1,4-Dichlorobenzene        | 11.51 | 146  | 216002   | 9.235  | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene        | 11.88 | 146  | 208180   | 9.260  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 15167    | 8.660  | ug/L  | 90       |
| 67) 1,3,5-Trichlorobenzene     | 12.89 | 180  | 167233   | 9.536  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 143850   | 9.817  | ug/L  | 98       |
| 69) Naphthalene                | 13.74 | 128  | 259804   | 9.977  | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.99 | 180  | 134464   | 9.688  | ug/L  | 99       |

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

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```
ALS Vial      : 5      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
VSTD01017

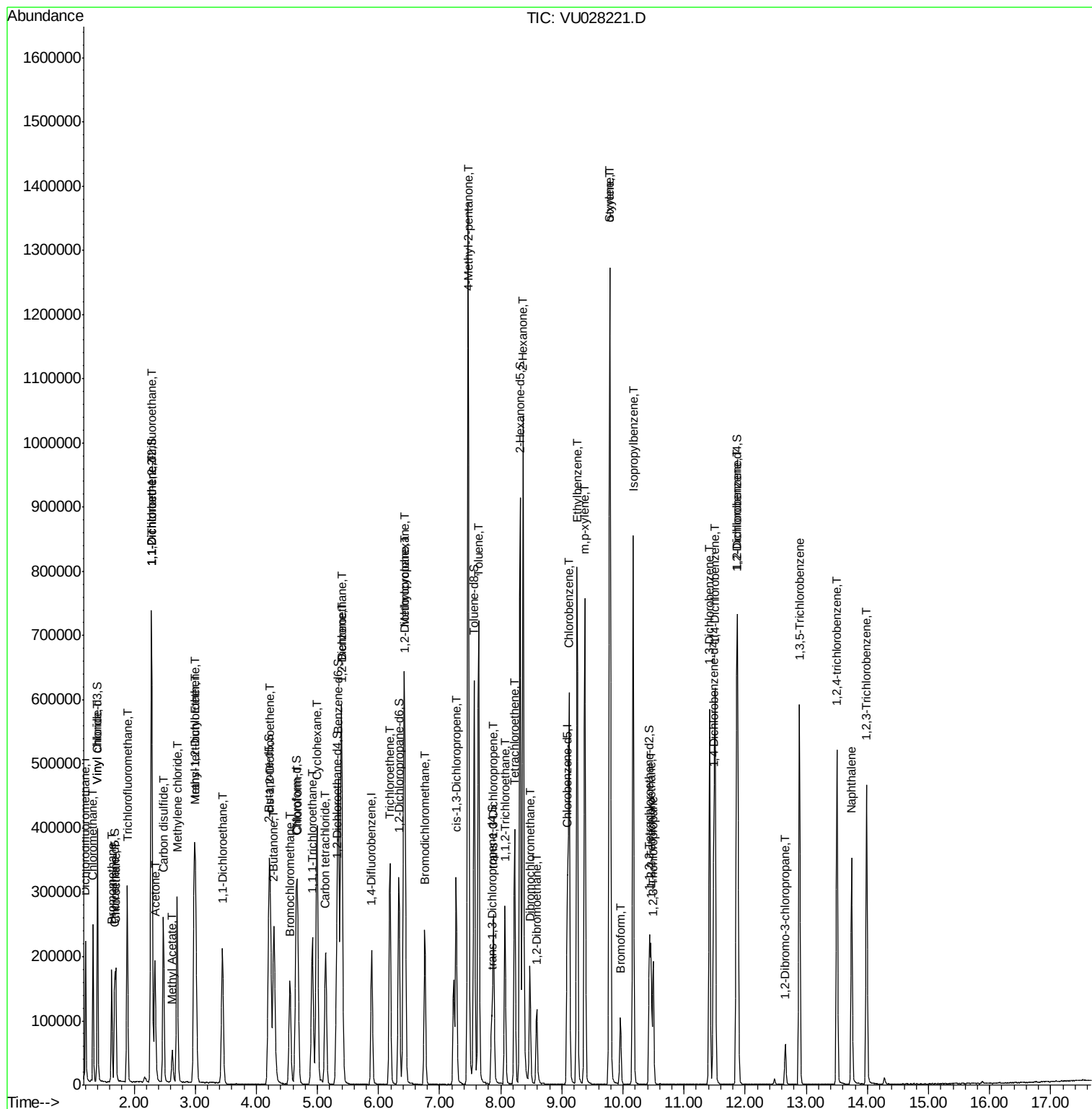
Quant Time: Nov 19 01:17:32 2018

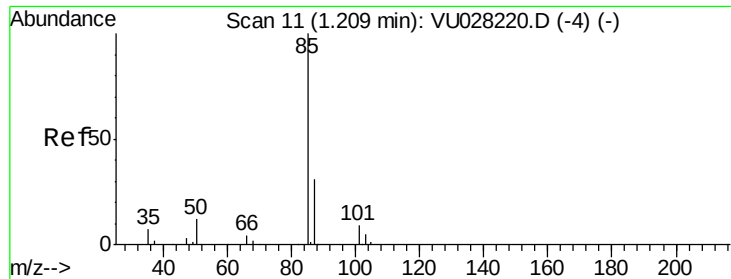
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_U\METHOD\SOMUTR111718WMA.M

Quant Title : TRACE VOA SOM01.0

QLast Update : Mon Nov 19 01:13:46 2018

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 9.460 ug/L

RT: 1.21 min Scan# 10

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

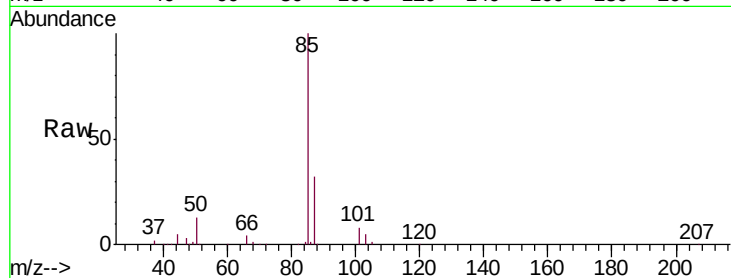
VSTD01017

Tgt Ion: 85 Resp: 128535

Ion Ratio Lower Upper

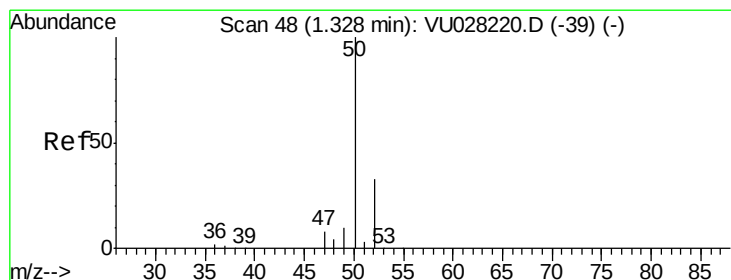
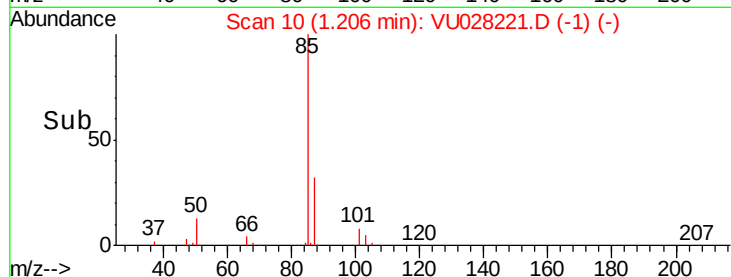
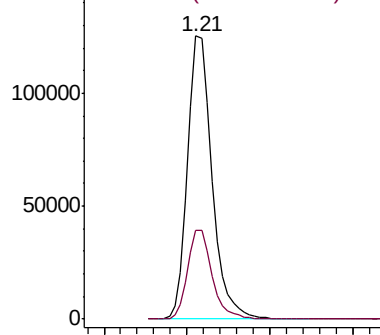
85 100

87 31.5 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VU0

Ion 87.00 (86.70 to 87.70): VU0



#3

Chloromethane

Concen: 9.305 ug/L

RT: 1.33 min Scan# 48

Delta R.T. -0.00 min

Lab File: VU028221.D

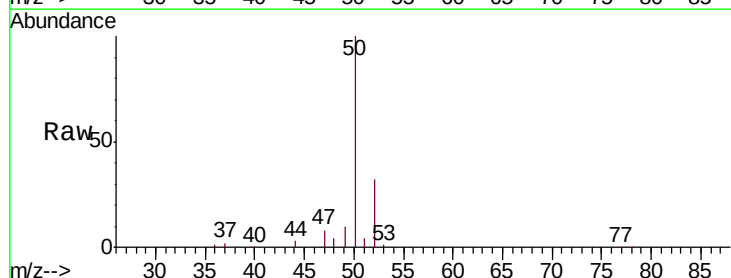
Acq: 17 Nov 2018 12:56

Tgt Ion: 50 Resp: 160920

Ion Ratio Lower Upper

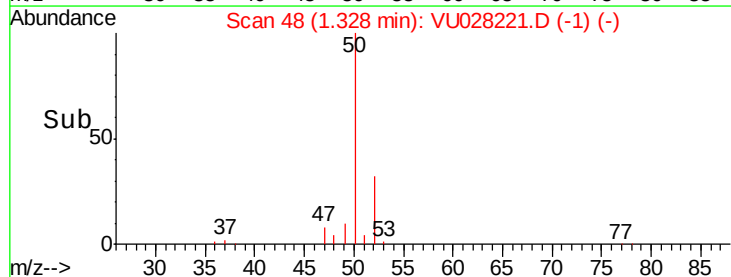
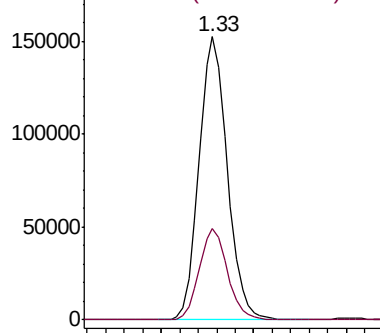
50 100

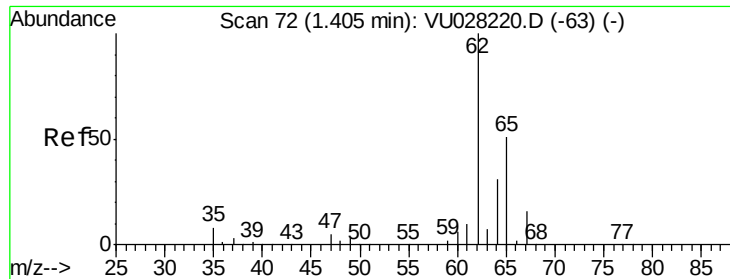
52 32.3 22.8 42.4



Abundance Ion 50.05 (49.75 to 50.75): VU0

Ion 52.05 (51.75 to 52.75): VU0





#5

Vinyl chloride

Concen: 9.403 ug/L

RT: 1.40 min Scan# 72

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

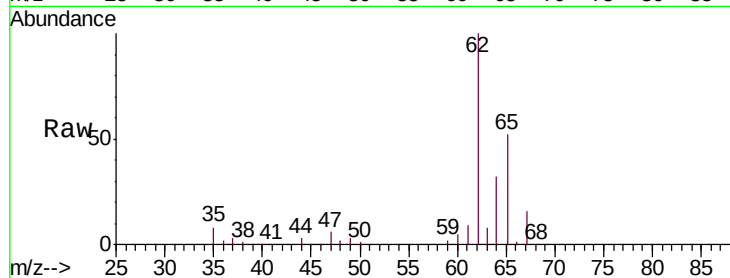
VSTD01017

Tgt Ion: 62 Resp: 154416

Ion Ratio Lower Upper

62 100

64 32.1 21.7 40.3



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0

150000

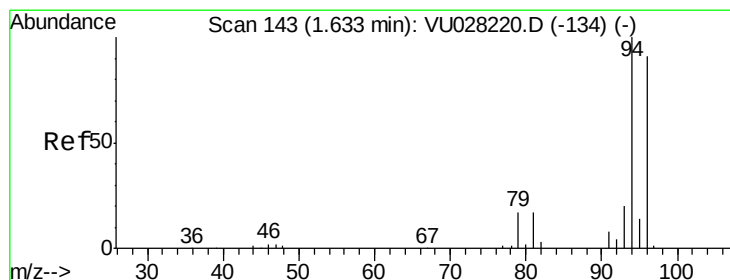
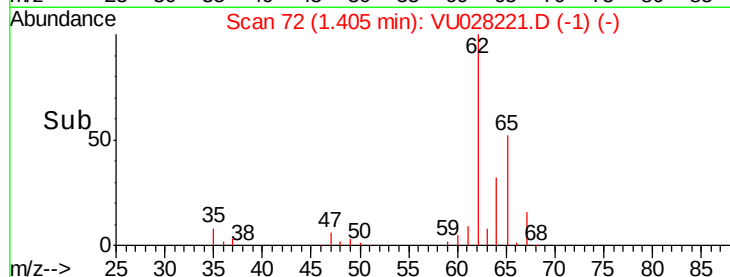
100000

50000

0

1.35 1.40 1.45

Time-->



#6

Bromomethane

Concen: 9.689 ug/L

RT: 1.63 min Scan# 143

Delta R.T. -0.00 min

Lab File: VU028221.D

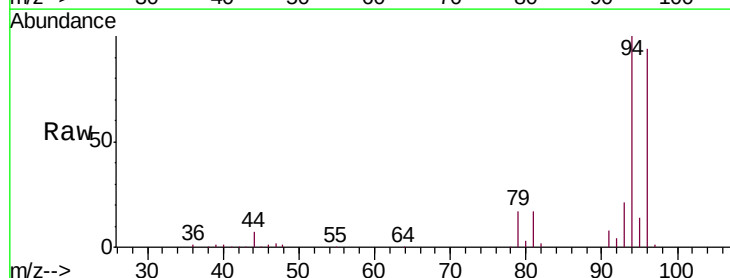
Acq: 17 Nov 2018 12:56

Tgt Ion: 94 Resp: 71810

Ion Ratio Lower Upper

94 100

96 94.0 63.6 118.0



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

60000

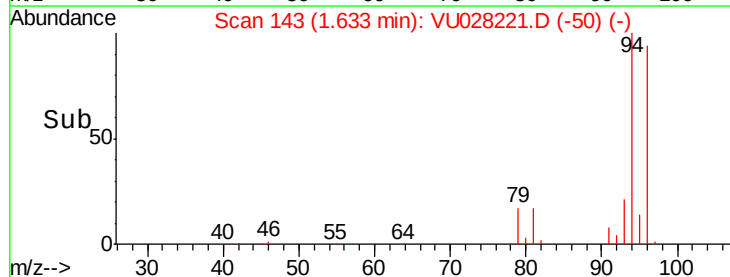
40000

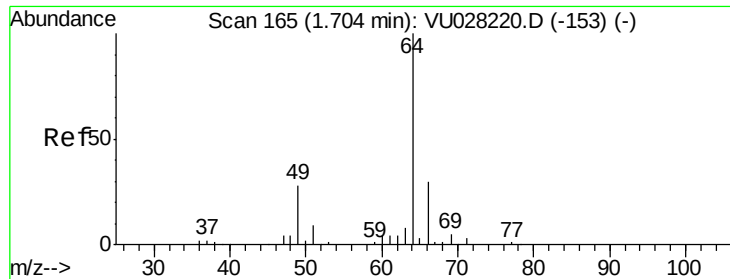
20000

0

1.55 1.60 1.65 1.70

Time-->





#8

Chloroethane

Concen: 9.232 ug/L

RT: 1.70 min Scan# 164

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

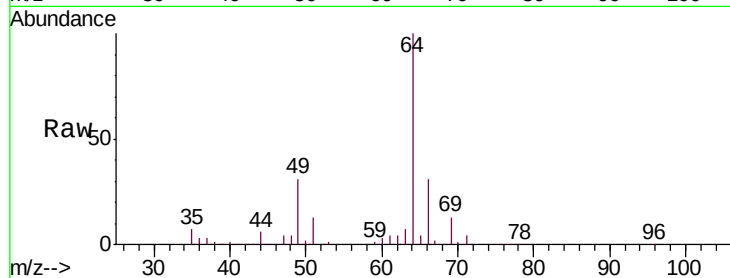
VSTD01017

Tgt Ion: 64 Resp: 89608

Ion Ratio Lower Upper

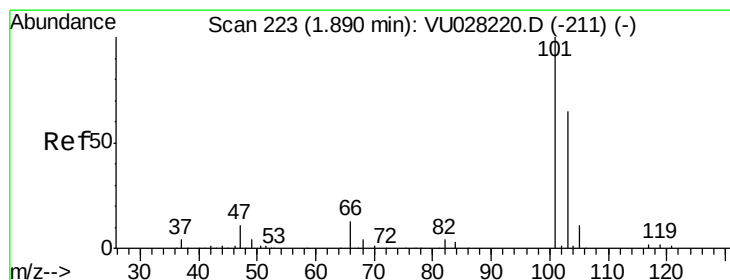
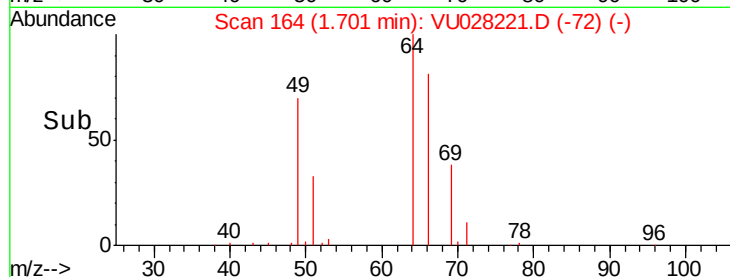
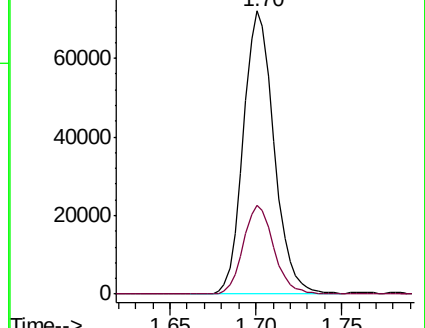
64 100

66 31.4 20.7 38.5



Abundance Ion 64.10 (63.80 to 64.80): VU028221.D (-153) (-)

Ion 66.05 (65.75 to 66.75): VU028221.D (-153) (-)



#9

Trichlorofluoromethane

Concen: 9.443 ug/L

RT: 1.89 min Scan# 222

Delta R.T. -0.00 min

Lab File: VU028221.D

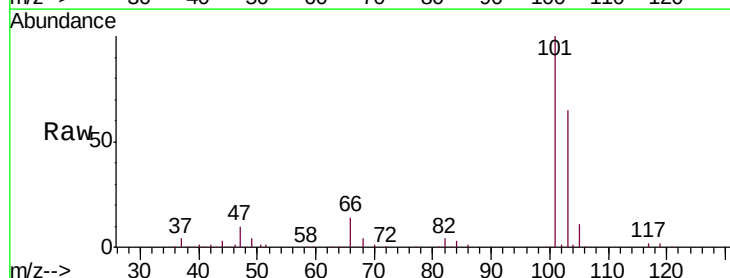
Acq: 17 Nov 2018 12:56

Tgt Ion: 101 Resp: 180590

Ion Ratio Lower Upper

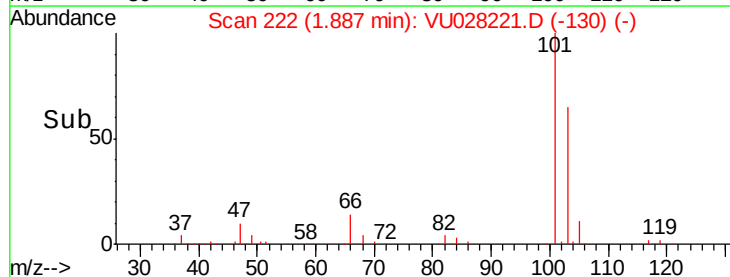
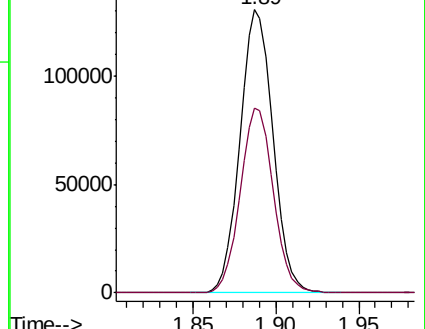
101 100

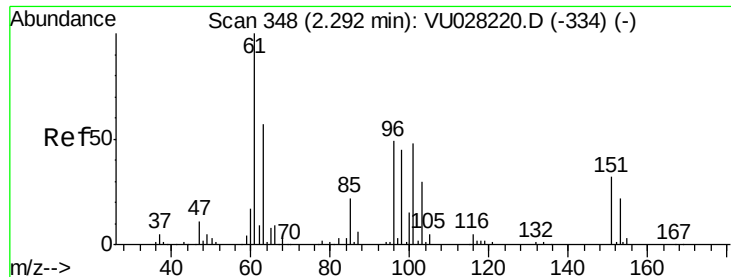
103 65.6 51.7 77.5



Abundance Ion 101.00 (100.70 to 101.70): VU028221.D (-211) (-)

Ion 103.00 (102.70 to 103.70): VU028221.D (-211) (-)





#10

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

Concen: 9.461 ug/L

RT: 2.29 min Scan# 347

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

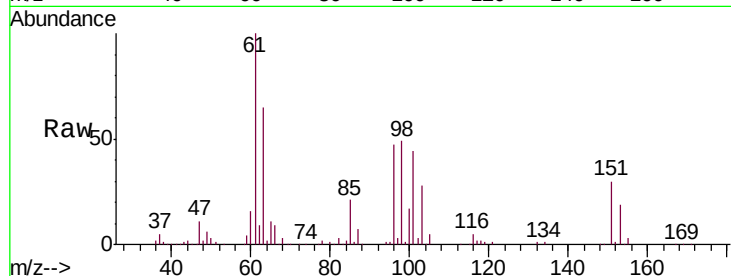
Tgt Ion: 101 Resp: 99582

Ion Ratio Lower Upper

101 100

85 46.4 37.4 56.2

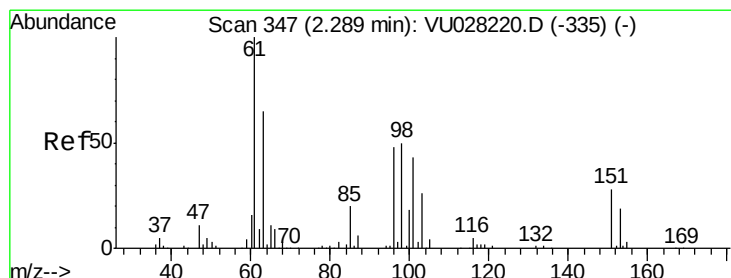
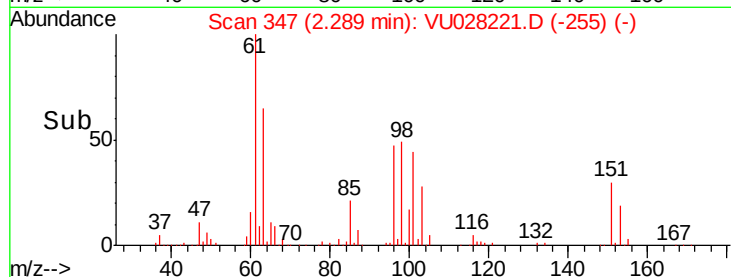
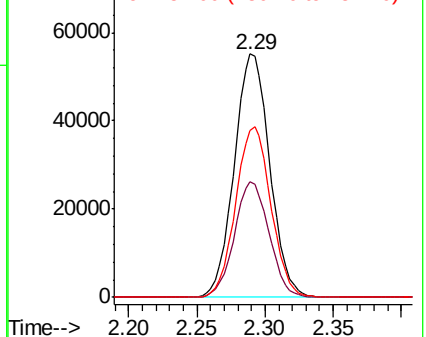
151 69.6 55.0 82.4



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: 9.395 ug/L

RT: 2.29 min Scan# 347

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

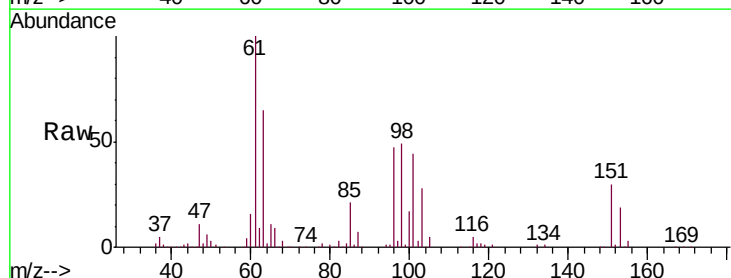
Tgt Ion: 96 Resp: 93582

Ion Ratio Lower Upper

96 100

61 212.7 145.5 270.1

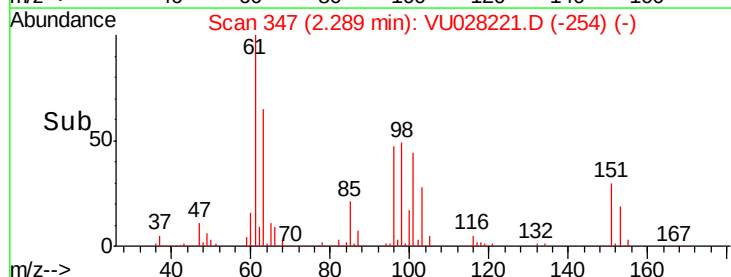
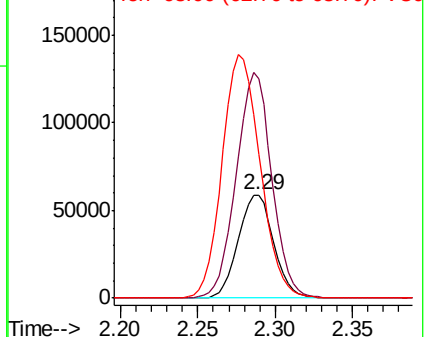
63 139.2 98.6 183.2

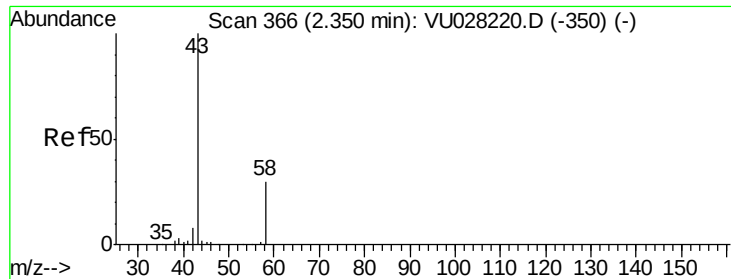


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 85.707 ug/L

RT: 2.34 min Scan# 363

Delta R.T. -0.01 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

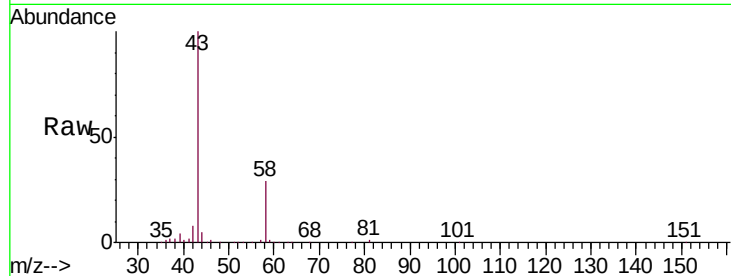
VSTD01017

Tgt Ion: 43 Resp: 240166

Ion Ratio Lower Upper

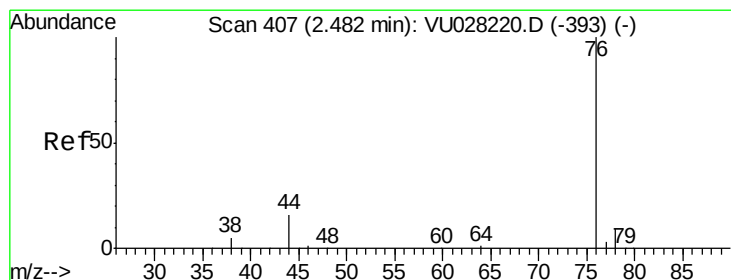
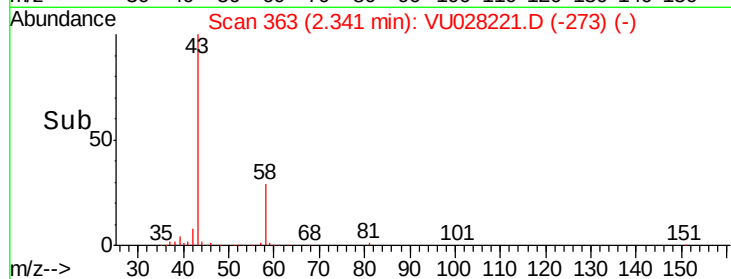
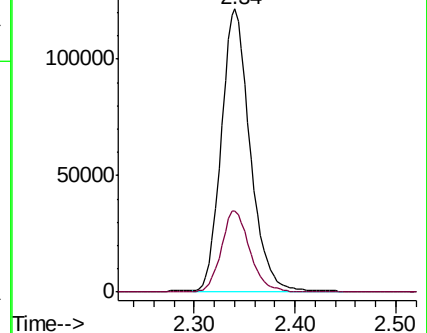
43 100

58 29.0 0.0 58.6



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0



#14

Carbon disulfide

Concen: 9.641 ug/L

RT: 2.48 min Scan# 406

Delta R.T. -0.00 min

Lab File: VU028221.D

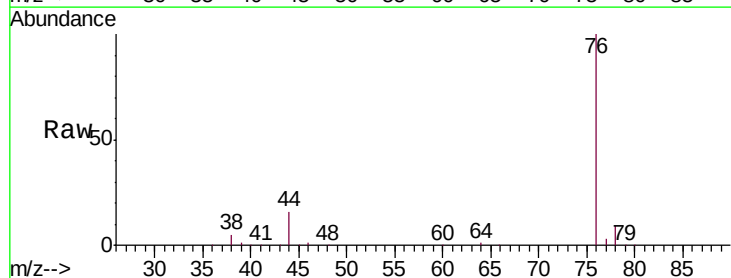
Acq: 17 Nov 2018 12:56

Tgt Ion: 76 Resp: 301562

Ion Ratio Lower Upper

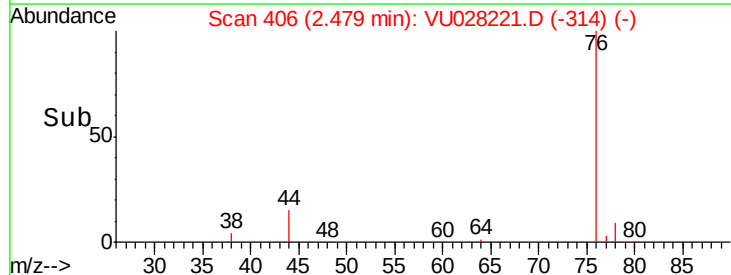
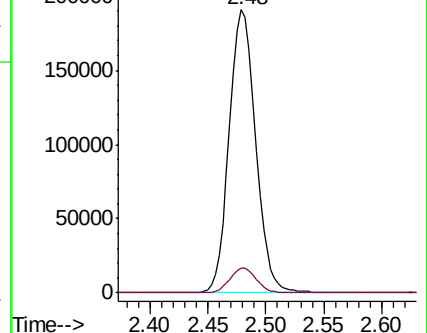
76 100

78 8.8 7.6 11.4

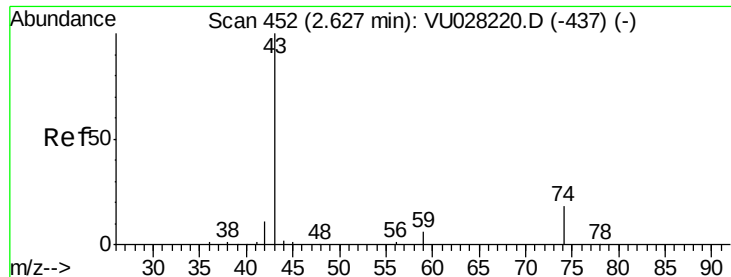


Abundance Ion 76.05 (75.75 to 76.75): VU0

Ion 78.00 (77.70 to 78.70): VU0



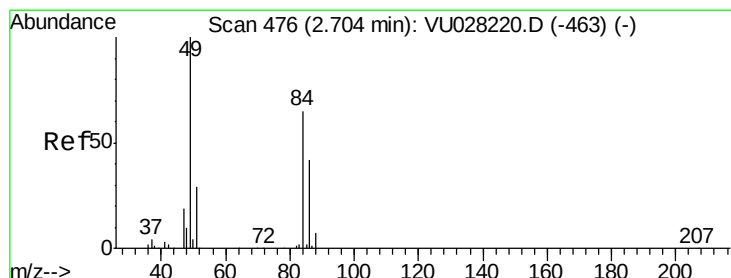
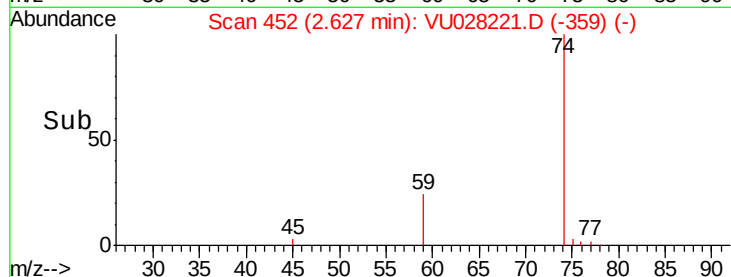
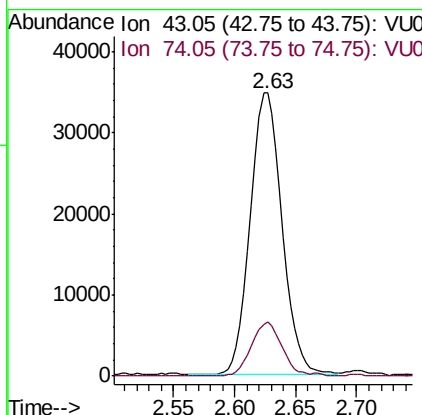
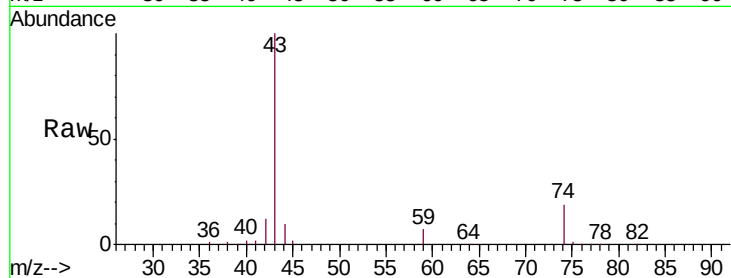




#15  
Methyl Acetate  
Concen: 8.377 ug/L  
RT: 2.63 min Scan# 452  
Delta R.T. -0.00 min  
Lab File: VU028221.D  
Acq: 17 Nov 2018 12:56

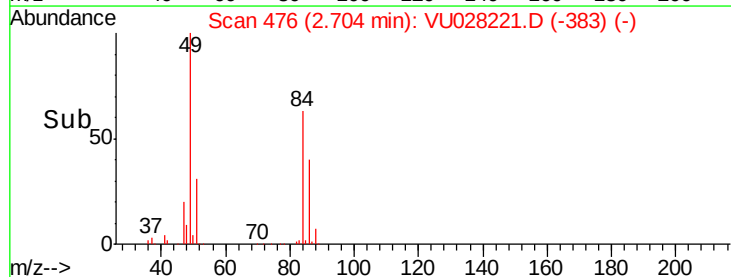
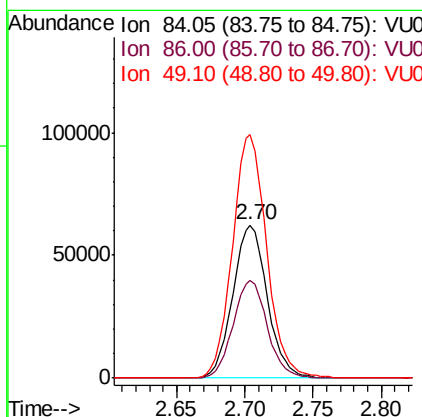
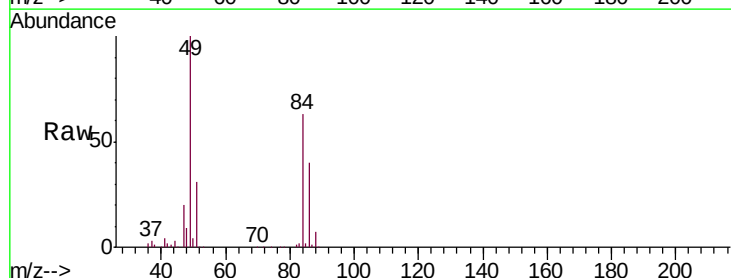
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01017

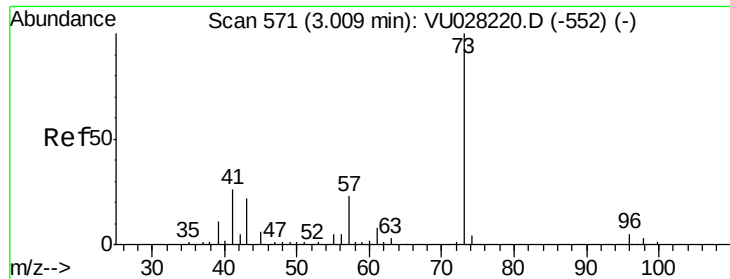
Tgt Ion: 43 Resp: 62220  
Ion Ratio Lower Upper  
43 100  
74 18.3 14.7 22.1



#16  
Methylene chloride  
Concen: 8.716 ug/L  
RT: 2.70 min Scan# 476  
Delta R.T. -0.00 min  
Lab File: VU028221.D  
Acq: 17 Nov 2018 12:56

Tgt Ion: 84 Resp: 109382  
Ion Ratio Lower Upper  
84 100  
86 63.7 45.3 84.1  
49 159.0 107.9 200.5





#17

Methyl tert-butyl Ether

Concen: 9.095 ug/L

RT: 3.01 min Scan# 570

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

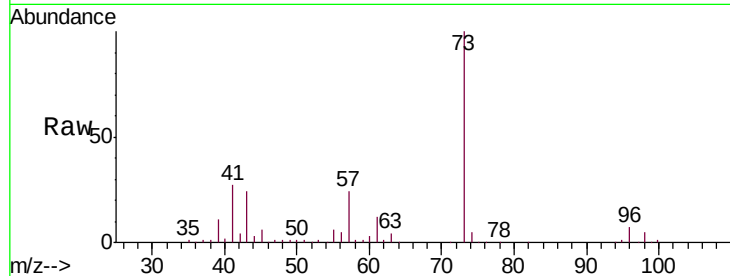
Tgt Ion: 73 Resp: 272129

Ion Ratio Lower Upper

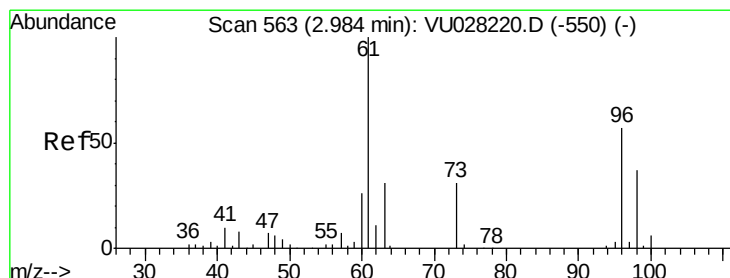
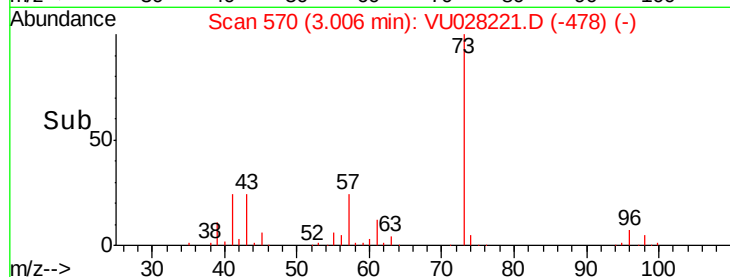
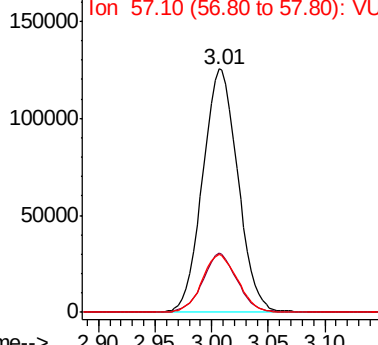
73 100

43 23.0 18.8 28.2

57 23.9 19.2 28.8



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



#18

trans-1,2-Dichloroethene

Concen: 9.598 ug/L

RT: 2.98 min Scan# 563

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

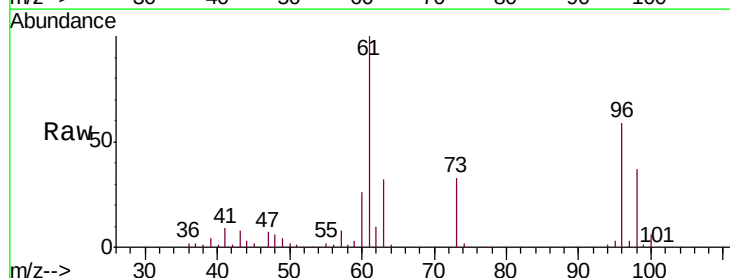
Tgt Ion: 96 Resp: 101843

Ion Ratio Lower Upper

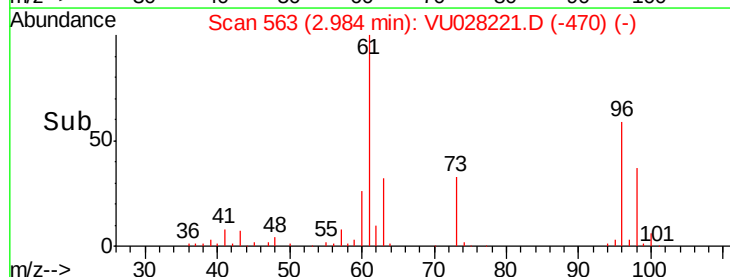
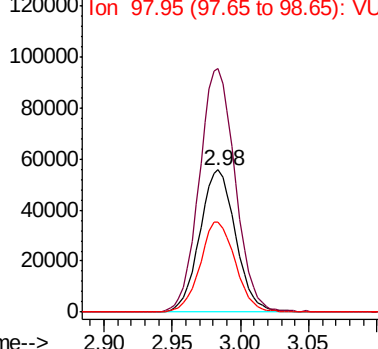
96 100

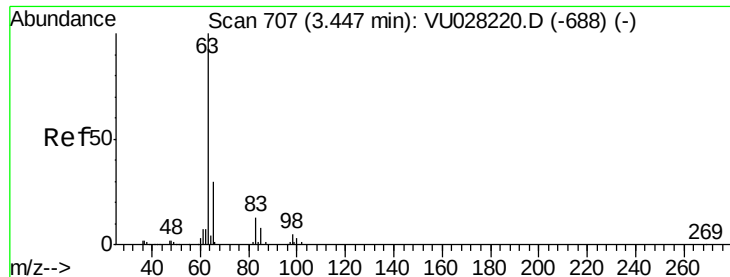
61 170.9 122.2 227.0

98 63.2 44.9 83.5



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

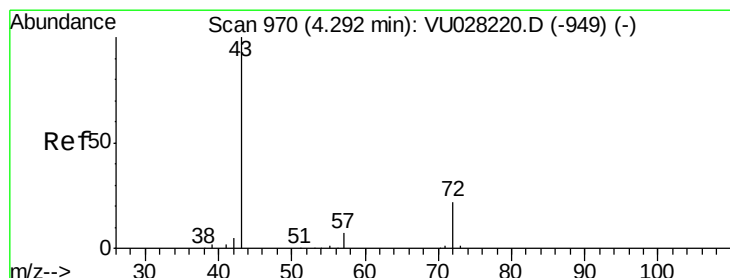
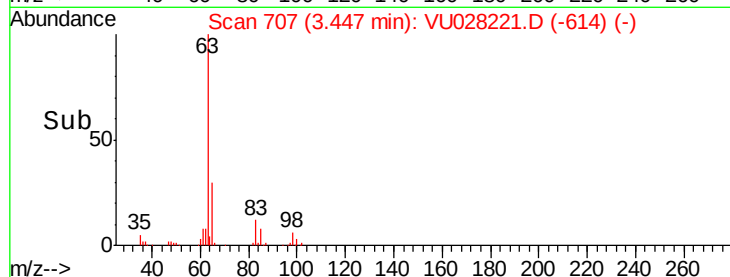
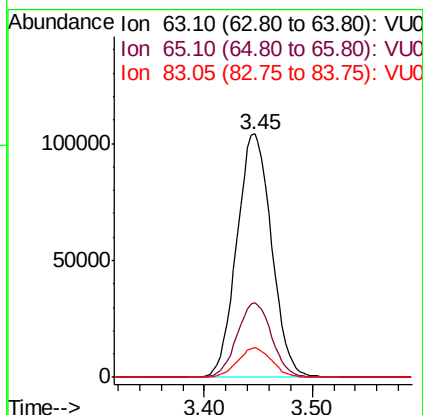
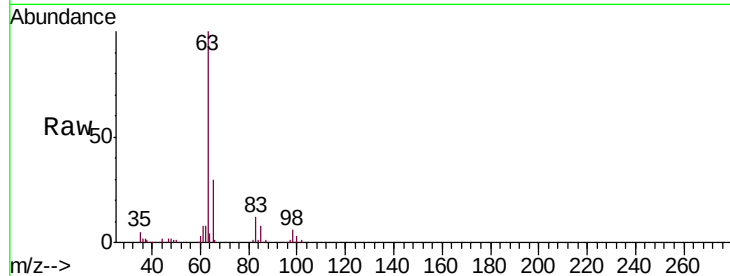




#19  
 1,1-Dichloroethane  
 Concen: 9.439 ug/L  
 RT: 3.45 min Scan# 707  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

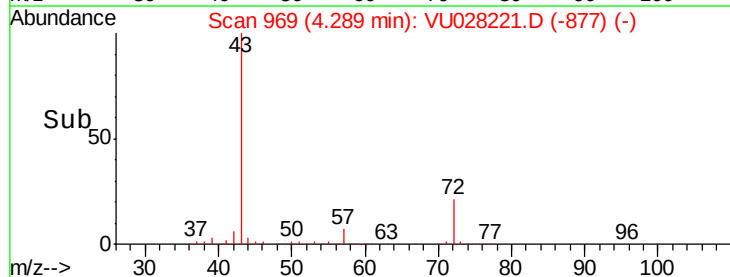
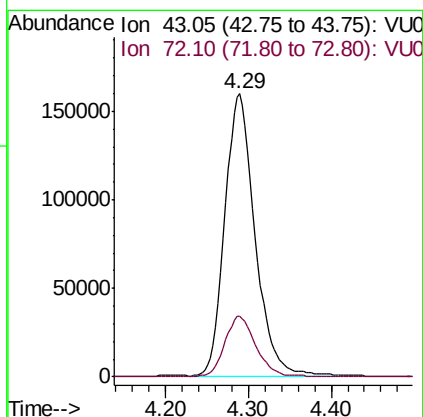
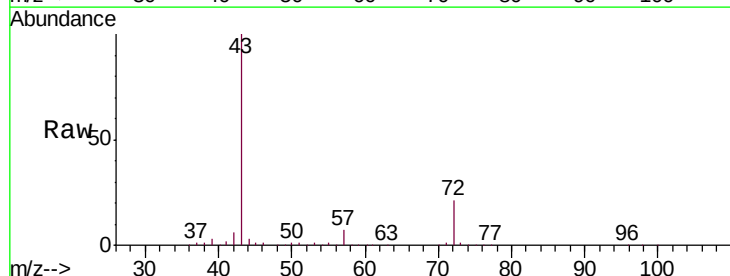
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

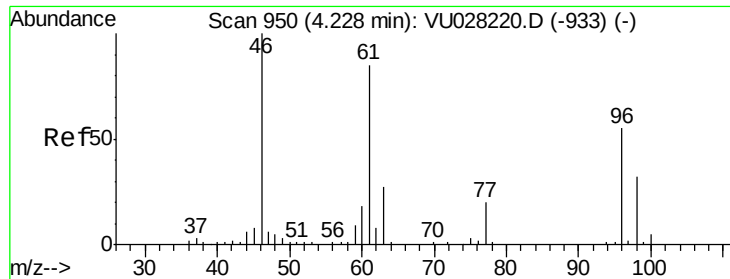
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 30.4  | 21.2  | 39.4  |
| 83      | 12.2  | 8.8   | 16.4  |



#21  
 2-Butanone  
 Concen: 90.023 ug/L  
 RT: 4.29 min Scan# 969  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 21.6  | 10.7  | 32.1  |



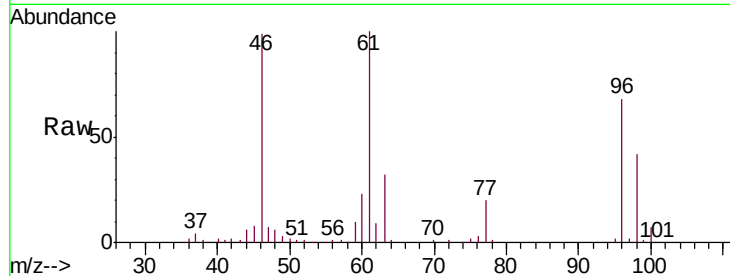


#22

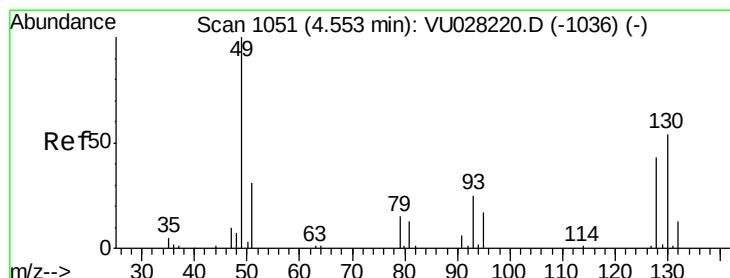
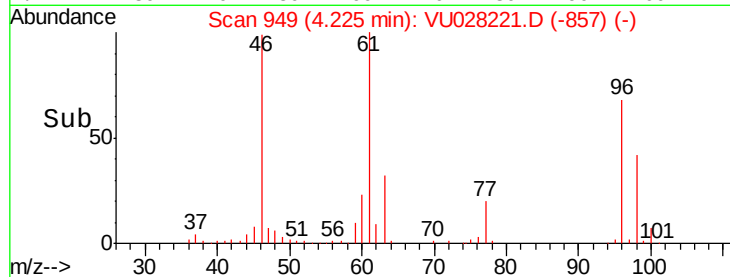
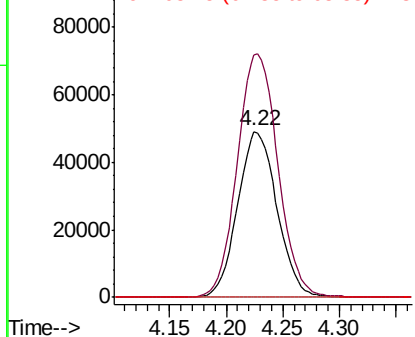
cis-1,2-Dichloroethene  
 Concen: 9.481 ug/L  
 RT: 4.22 min Scan# 949  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

Tgt Ion: 96 Resp: 118911  
 Ion Ratio Lower Upper  
 96 100  
 61 146.0 108.0 200.6  
 68 0.0 0.0 0.0



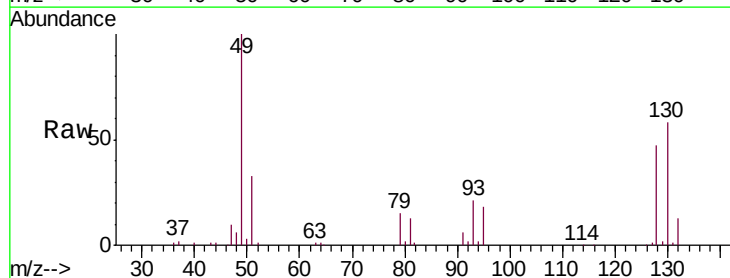
Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 68.15 (67.85 to 68.85): VU0



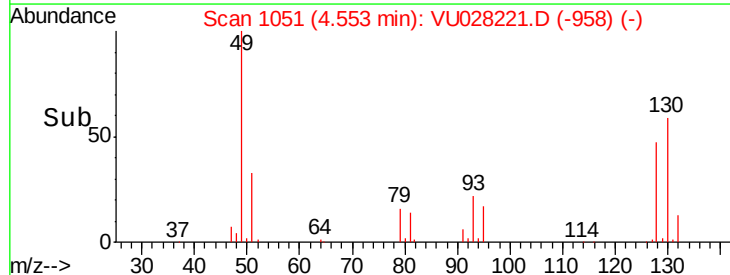
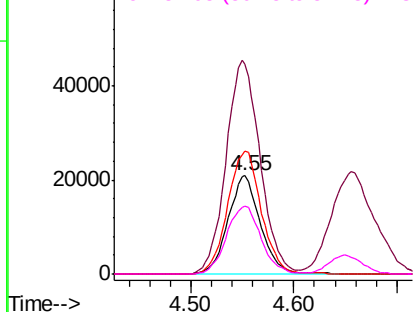
#23

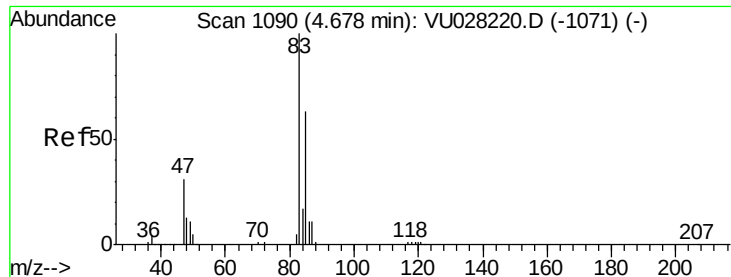
Bromochloromethane  
 Concen: 9.276 ug/L  
 RT: 4.55 min Scan# 1051  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion: 128 Resp: 45529  
 Ion Ratio Lower Upper  
 128 100  
 49 213.6 162.0 300.8  
 130 124.8 87.7 162.9  
 51 69.5 57.6 86.4



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

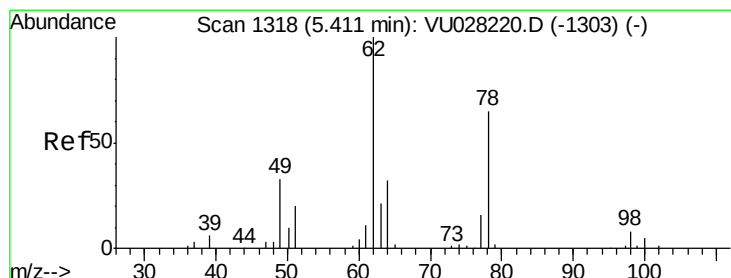
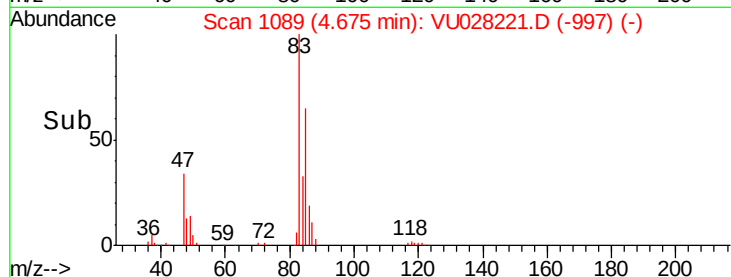
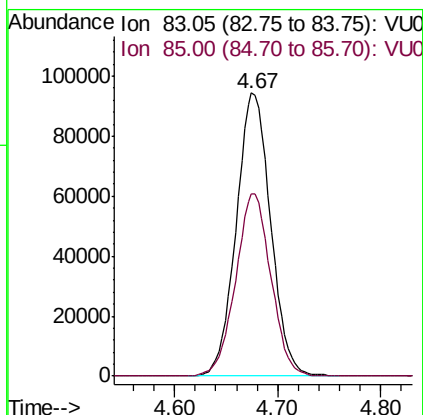
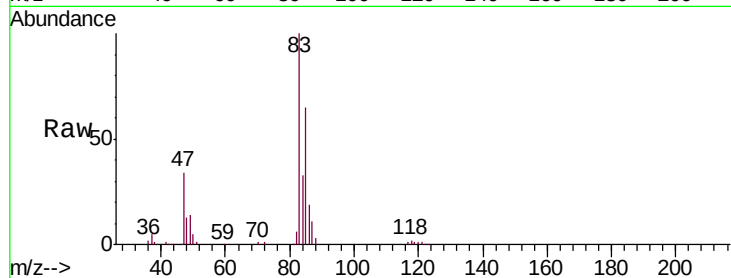




#25  
Chloroform  
Concen: 8.231 ug/L  
RT: 4.67 min Scan# 1089  
Delta R.T. -0.00 min  
Lab File: VU028221.D  
Acq: 17 Nov 2018 12:56

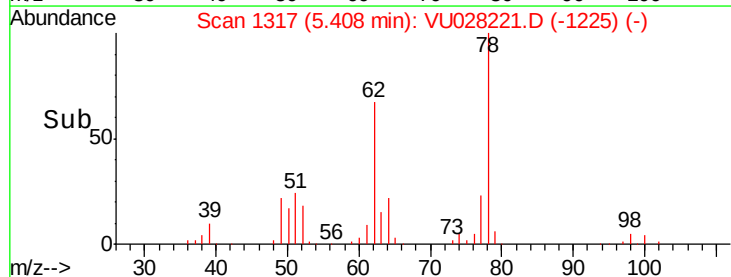
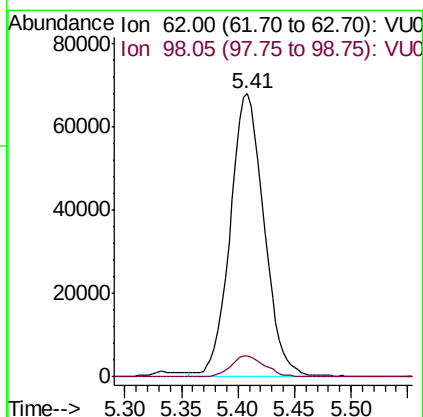
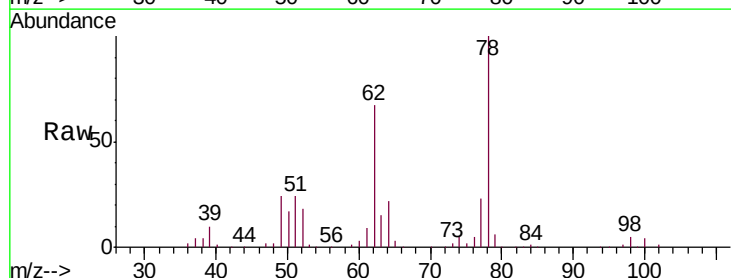
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01017

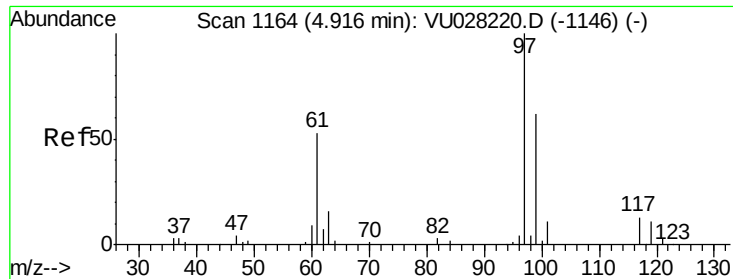
Tgt Ion: 83 Resp: 219147  
Ion Ratio Lower Upper  
83 100  
85 64.6 44.6 82.8



#27  
1,2-Dichloroethane  
Concen: 9.300 ug/L  
RT: 5.41 min Scan# 1317  
Delta R.T. -0.00 min  
Lab File: VU028221.D  
Acq: 17 Nov 2018 12:56

Tgt Ion: 62 Resp: 141538  
Ion Ratio Lower Upper  
62 100  
98 7.5 6.2 9.4

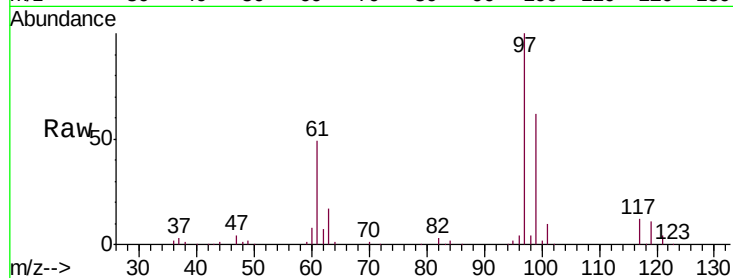




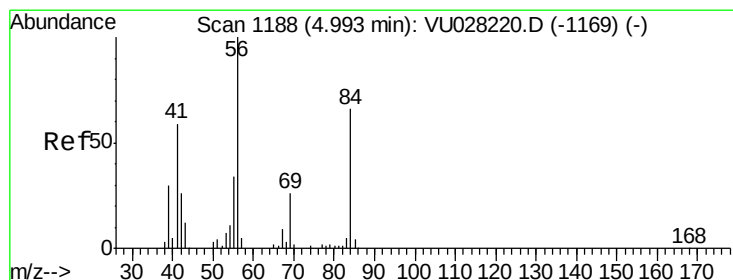
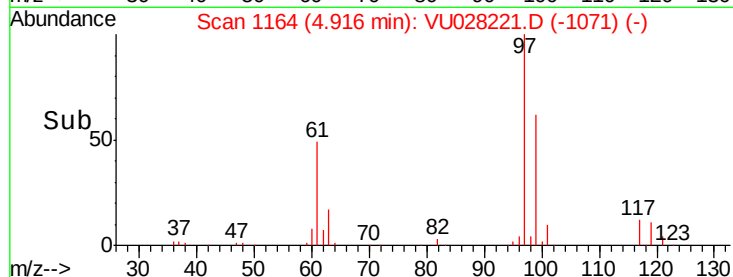
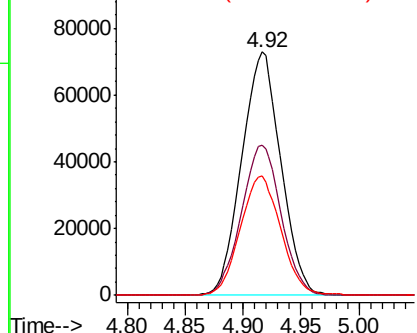
#29  
 1,1,1-Trichloroethane  
 Concen: 9.771 ug/L  
 RT: 4.92 min Scan# 1164  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

Tgt Ion: 97 Resp: 171304  
 Ion Ratio Lower Upper  
 97 100  
 99 62.6 50.8 76.2  
 61 50.4 42.6 64.0

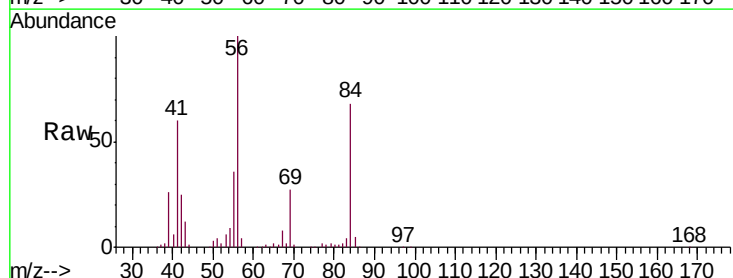


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 61.05 (60.75 to 61.75): VU0

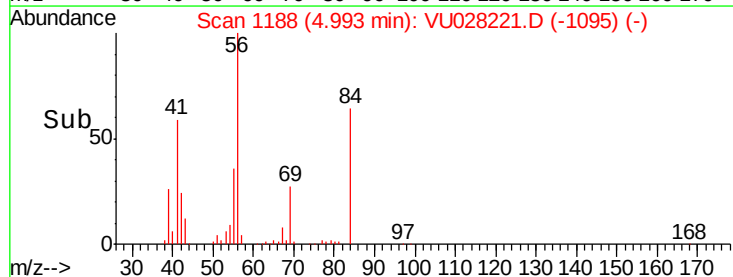
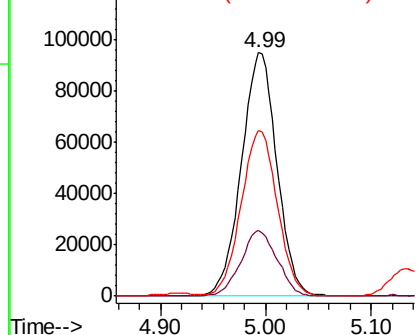


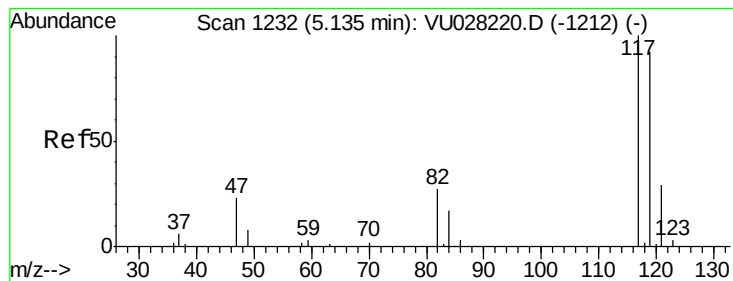
#30  
 Cyclohexane  
 Concen: 9.677 ug/L  
 RT: 4.99 min Scan# 1188  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion: 56 Resp: 222015  
 Ion Ratio Lower Upper  
 56 100  
 69 27.5 22.0 33.0  
 84 70.0 56.0 84.0



Abundance Ion 56.10 (55.80 to 56.80): VU0  
 Ion 69.15 (68.85 to 69.85): VU0  
 Ion 84.15 (83.85 to 84.85): VU0





#31

Carbon tetrachloride

Concen: 9.751 ug/L

RT: 5.13 min Scan# 1232

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

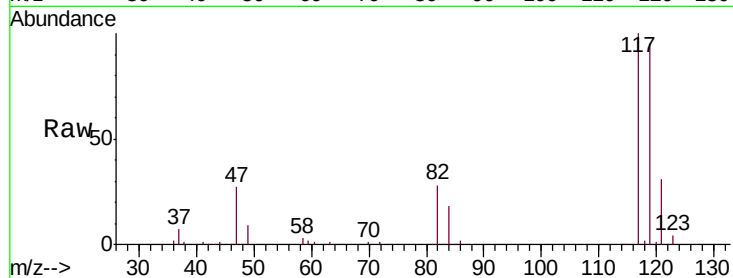
VSTD01017

Tgt Ion:117 Resp: 140251

Ion Ratio Lower Upper

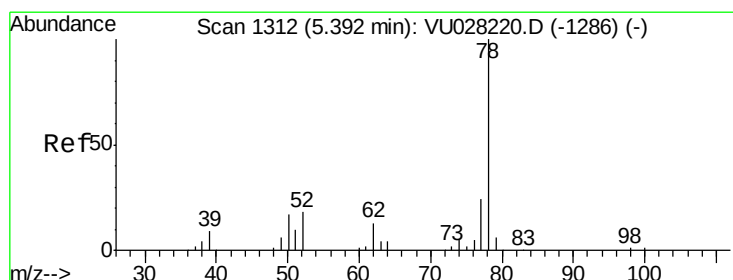
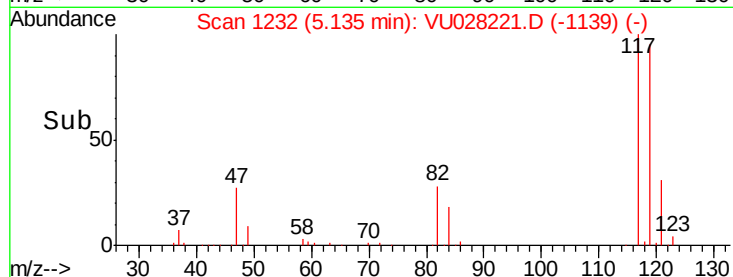
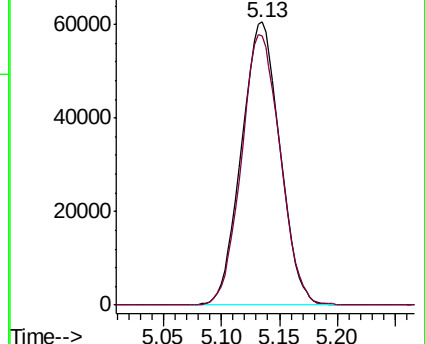
117 100

119 96.1 75.6 113.4



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 9.501 ug/L

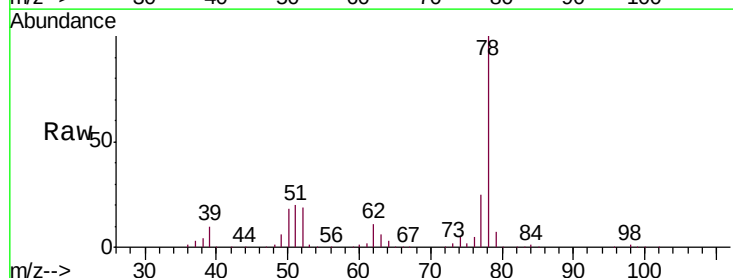
RT: 5.39 min Scan# 1311

Delta R.T. -0.00 min

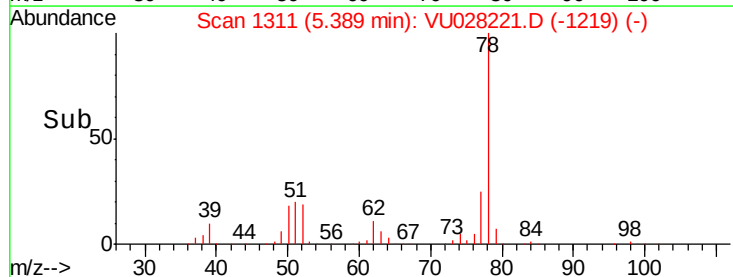
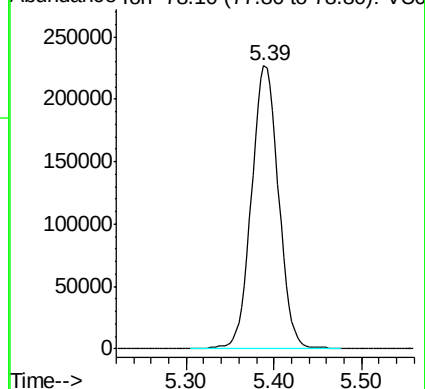
Lab File: VU028221.D

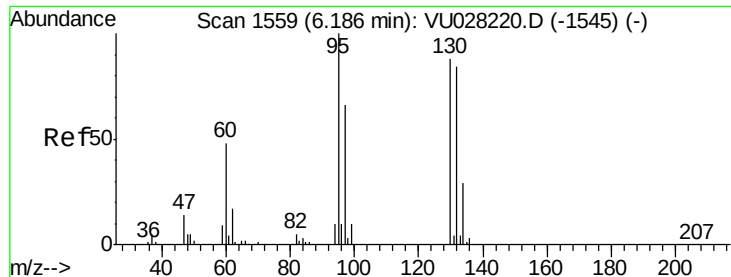
Acq: 17 Nov 2018 12:56

Tgt Ion: 78 Resp: 487480



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 9.689 ug/L

RT: 6.19 min Scan# 1559

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

Tgt Ion: 95 Resp: 121715

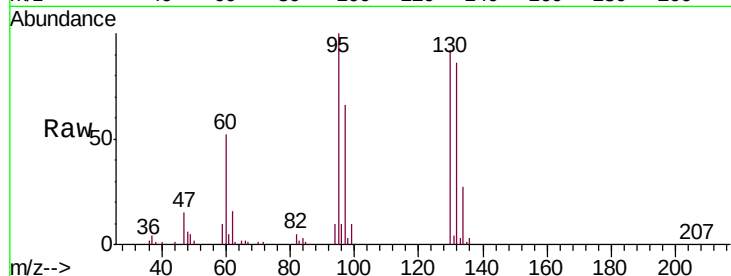
Ion Ratio Lower Upper

95 100

97 65.6 46.5 86.3

132 86.5 58.9 109.3

130 91.8 61.3 113.9

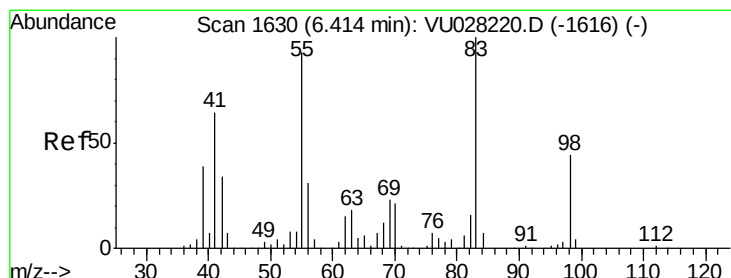
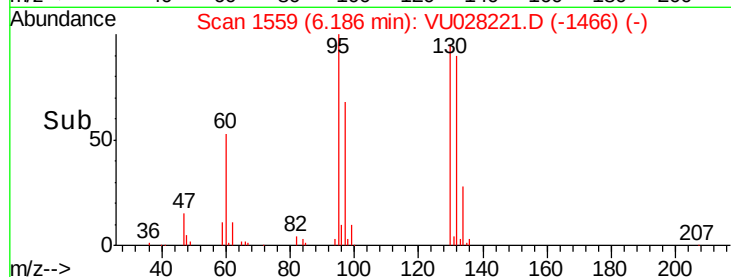
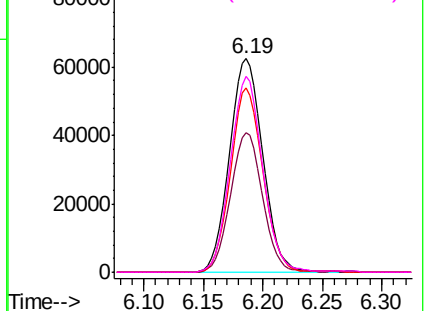


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35

Methylcyclohexane

Concen: 9.940 ug/L

RT: 6.41 min Scan# 1630

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

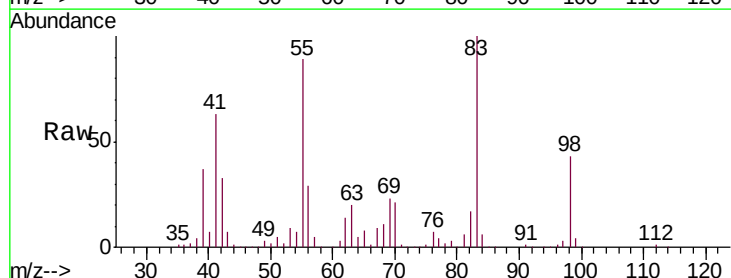
Tgt Ion: 83 Resp: 196727

Ion Ratio Lower Upper

83 100

55 88.5 73.2 109.8

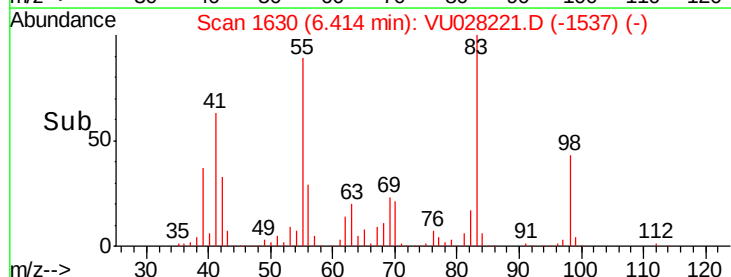
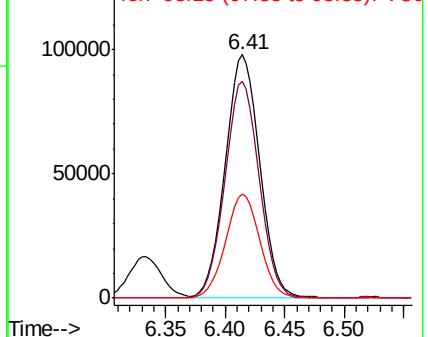
98 42.7 33.4 50.2



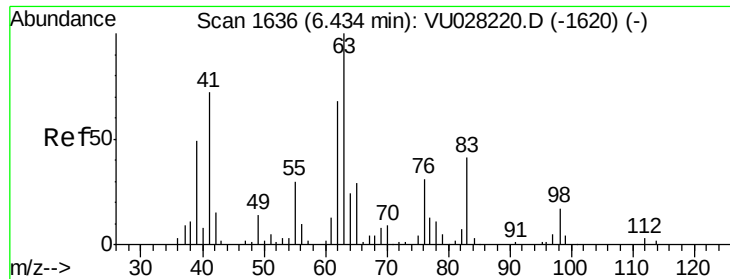
Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



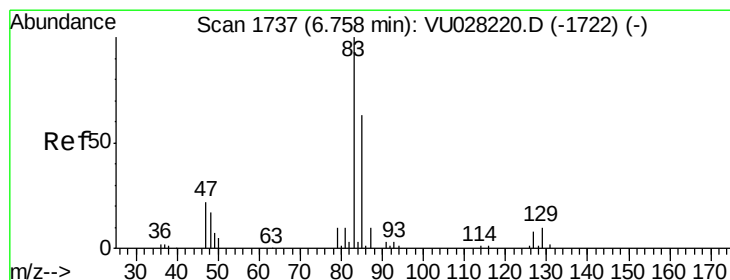
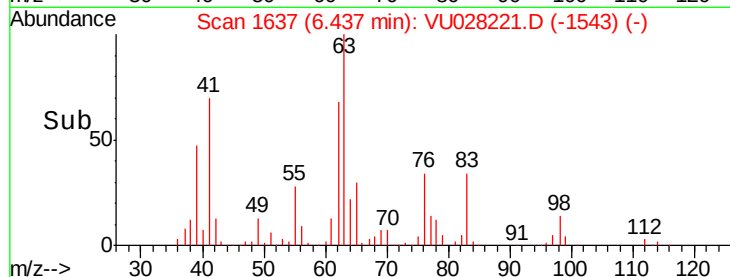
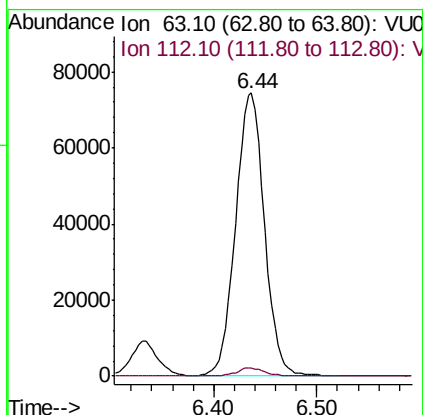
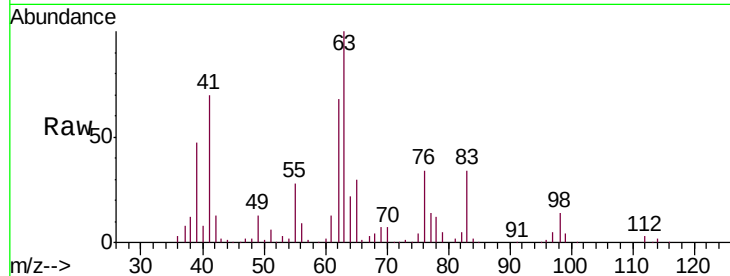




#37  
 1,2-Dichloropropane  
 Concen: 9.863 ug/L  
 RT: 6.44 min Scan# 1637  
 Delta R.T. 0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

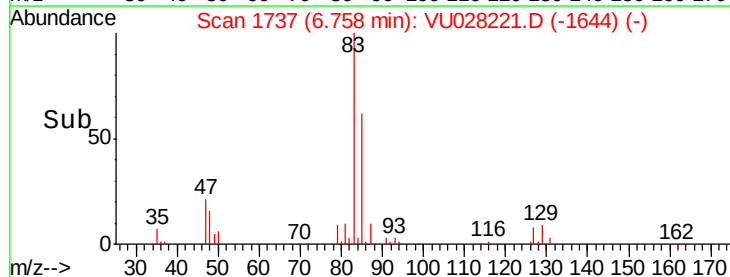
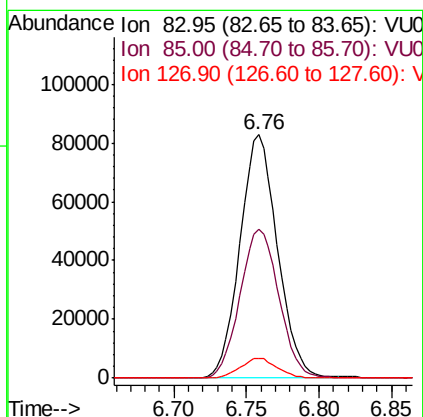
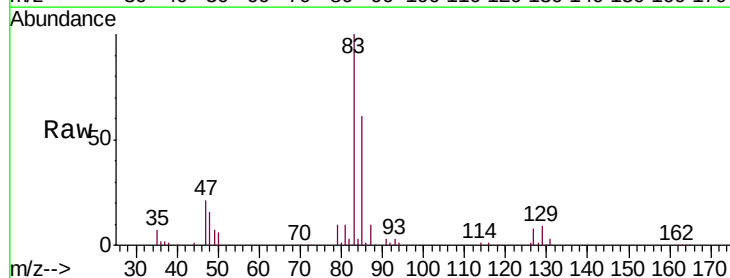
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

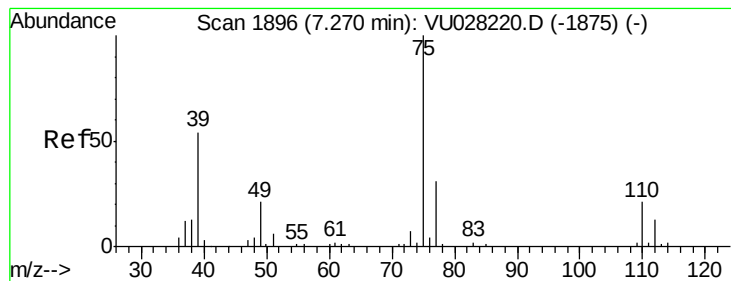
Tgt Ion: 63 Resp: 144407  
 Ion Ratio Lower Upper  
 63 100  
 112 2.9 2.2 3.2



#38  
 Bromodichloromethane  
 Concen: 9.360 ug/L  
 RT: 6.76 min Scan# 1737  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion: 83 Resp: 149431  
 Ion Ratio Lower Upper  
 83 100  
 85 61.0 44.2 82.0  
 127 8.3 6.2 9.4



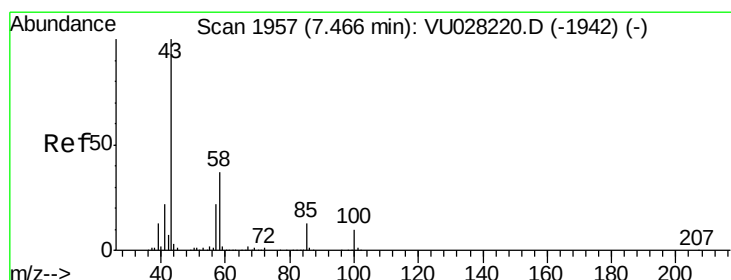
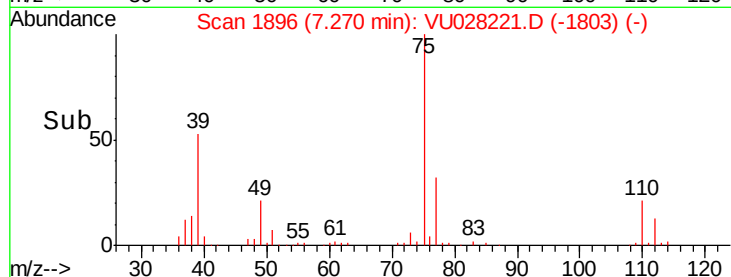
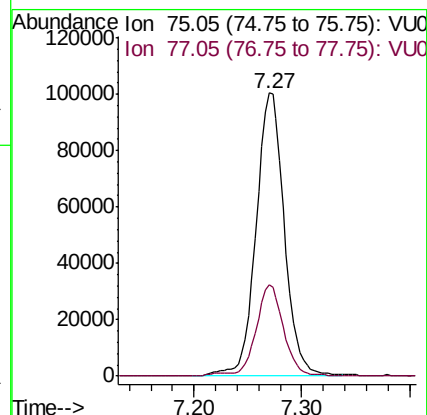
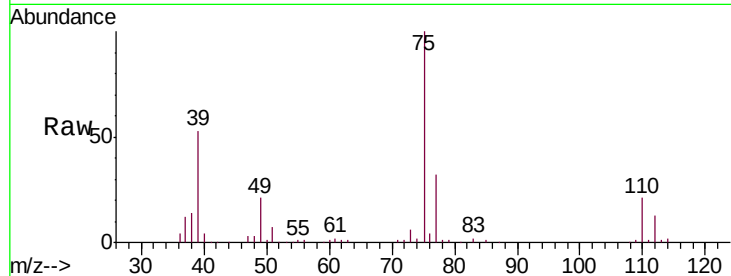


#39

cis-1,3-Dichloropropene  
 Concen: 9.840 ug/L  
 RT: 7.27 min Scan# 1896  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

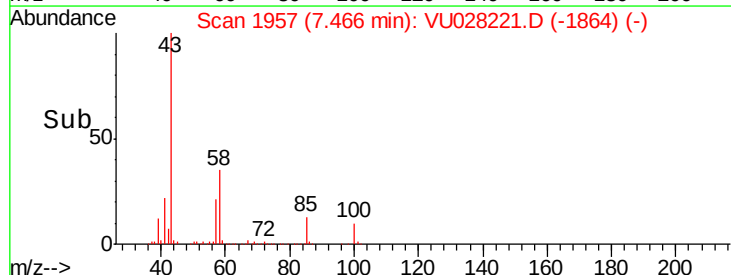
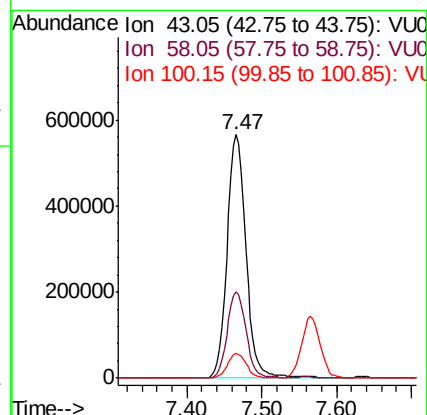
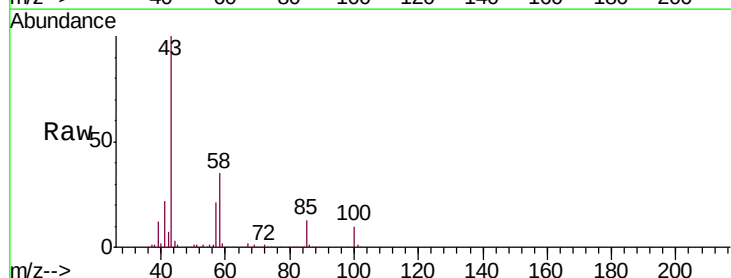
Tgt Ion: 75 Resp: 182592  
 Ion Ratio Lower Upper  
 75 100  
 77 32.5 21.7 40.3

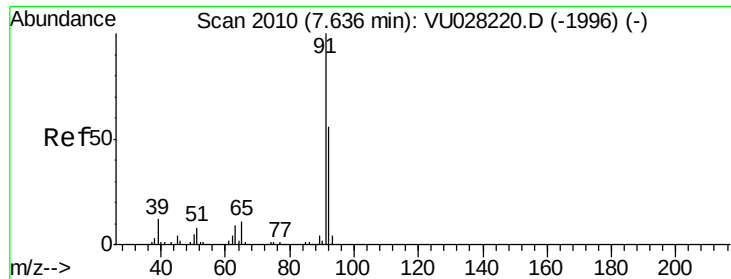


#40

4-Methyl-2-pentanone  
 Concen: 93.980 ug/L  
 RT: 7.47 min Scan# 1957  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion: 43 Resp: 983694  
 Ion Ratio Lower Upper  
 43 100  
 58 35.5 28.8 43.2  
 100 10.3 8.0 12.0





#42

Toluene

Concen: 9.701 ug/L

RT: 7.64 min Scan# 2010

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

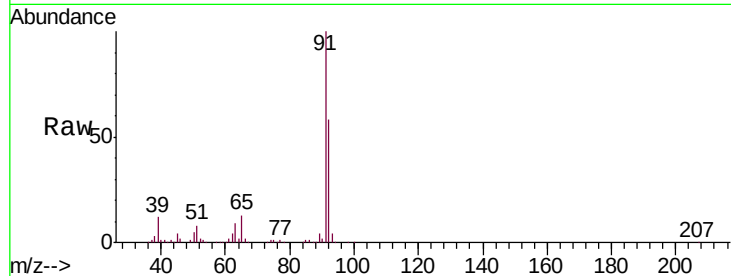
VSTD01017

Tgt Ion: 91 Resp: 504487

Ion Ratio Lower Upper

91 100

92 58.1 39.0 72.4



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0

7.64

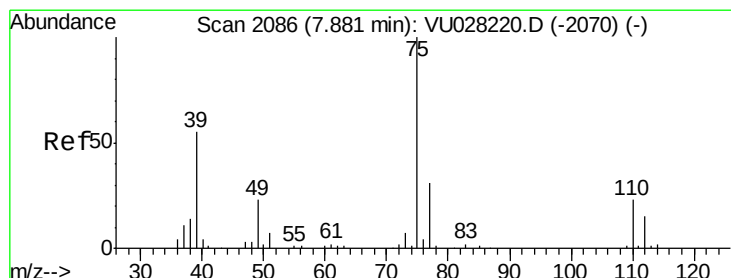
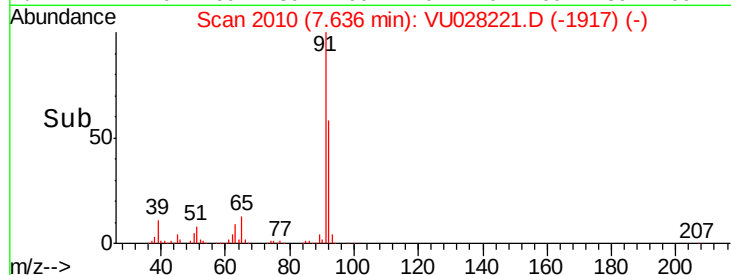
300000

200000

100000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 10.010 ug/L

RT: 7.88 min Scan# 2086

Delta R.T. -0.00 min

Lab File: VU028221.D

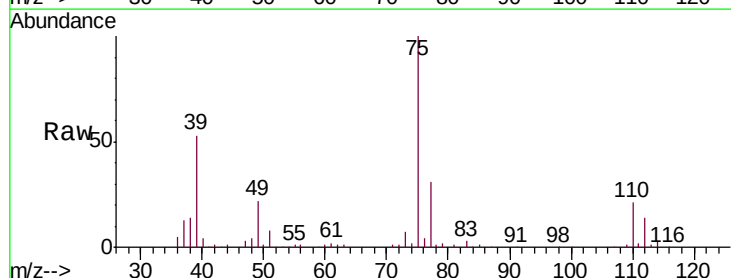
Acq: 17 Nov 2018 12:56

Tgt Ion: 75 Resp: 139733

Ion Ratio Lower Upper

75 100

77 31.0 21.8 40.6



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0

7.88

80000

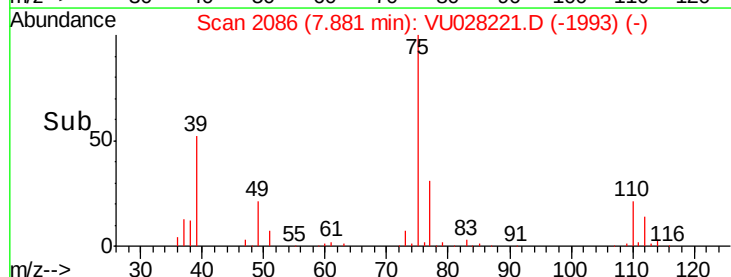
60000

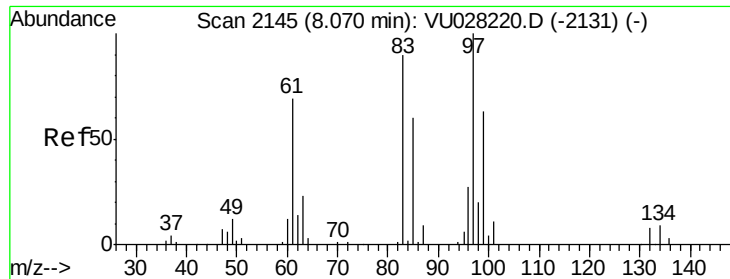
40000

20000

0

Time-->





#45

1,1,2-Trichloroethane

Concen: 9.106 ug/L

RT: 8.07 min Scan# 2145

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

Tgt Ion: 97 Resp: 80555

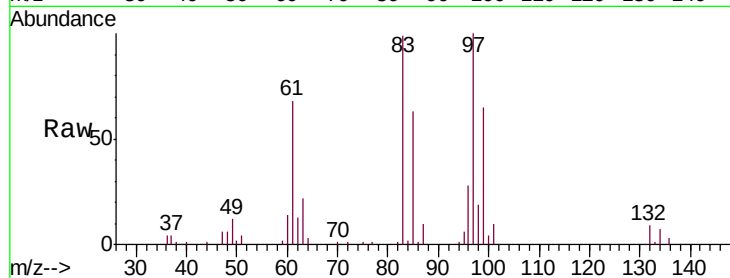
Ion Ratio Lower Upper

97 100

99 65.3 44.2 82.0

83 98.6 63.3 117.5

85 62.9 41.9 77.9

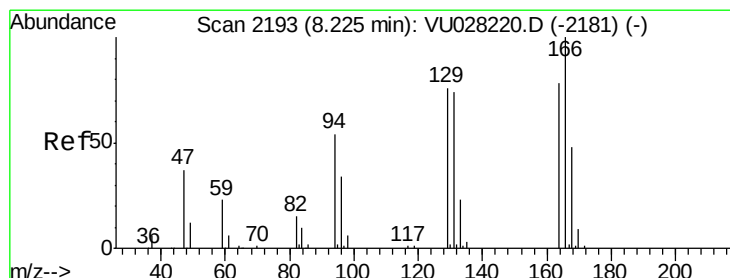
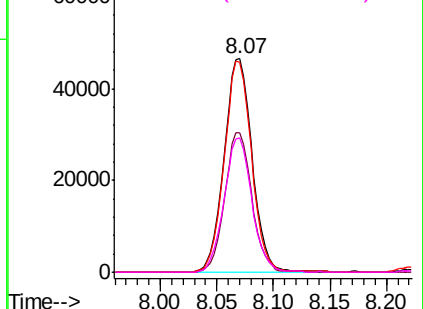
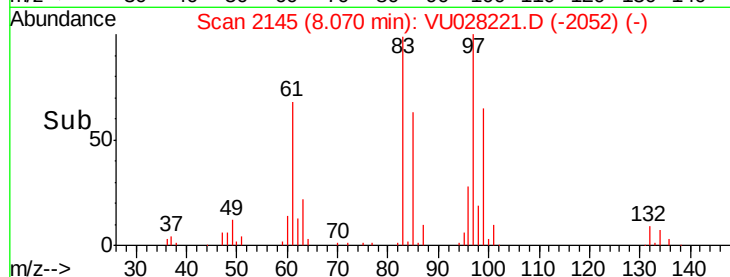


Abundance Ion 96.95 (96.65 to 97.65): VU0

Ion 99.05 (98.75 to 99.75): VU0

Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0



#47

Tetrachloroethene

Concen: 9.623 ug/L

RT: 8.23 min Scan# 2194

Delta R.T. 0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Tgt Ion: 164 Resp: 83907

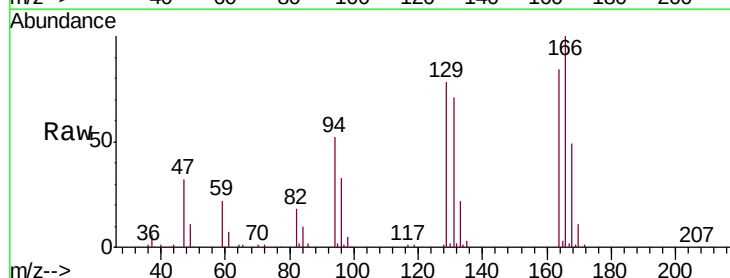
Ion Ratio Lower Upper

164 100

129 92.5 67.6 125.6

131 84.5 66.3 123.1

166 118.6 89.2 165.6

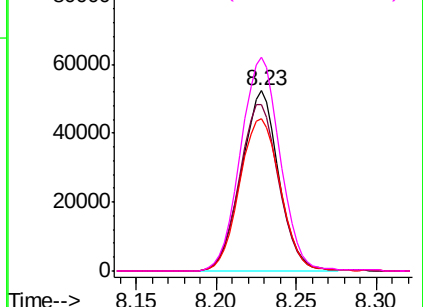
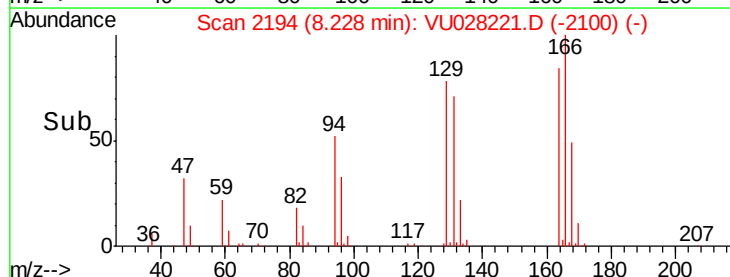


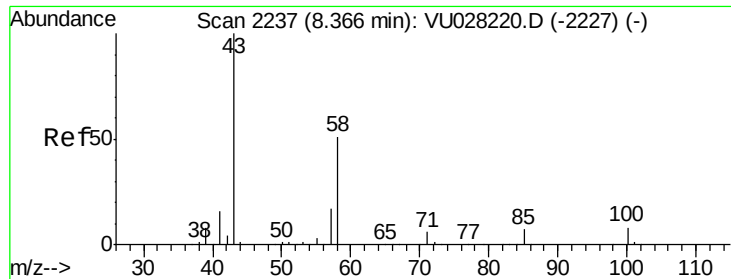
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

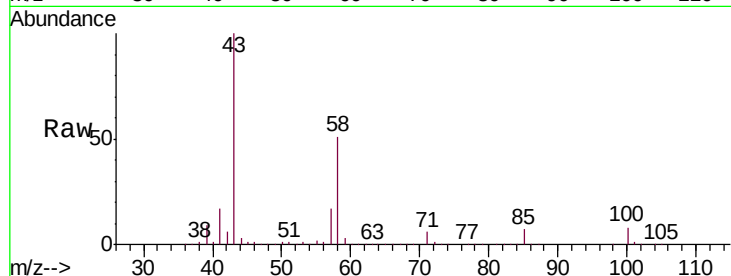




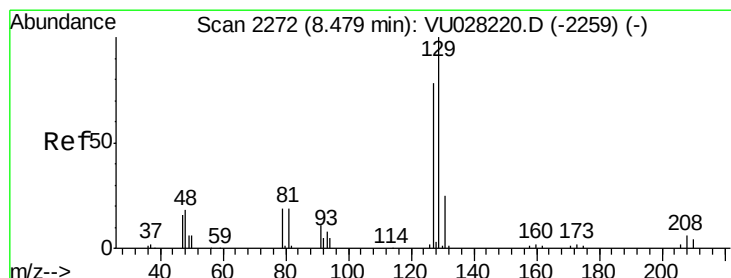
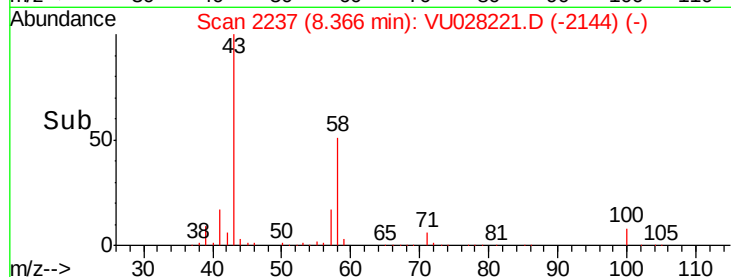
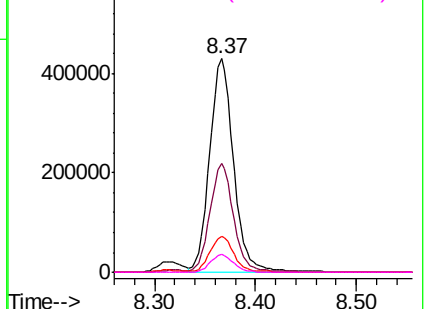
#48  
2-Hexanone  
Concen: 94.143 ug/L  
RT: 8.37 min Scan# 2237  
Delta R.T. -0.00 min  
Lab File: VU028221.D  
Acq: 17 Nov 2018 12:56

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD01017

Tgt Ion: 43 Resp: 702580  
Ion Ratio Lower Upper  
43 100  
58 50.4 41.1 61.7  
57 16.7 13.8 20.8  
100 8.1 6.5 9.7

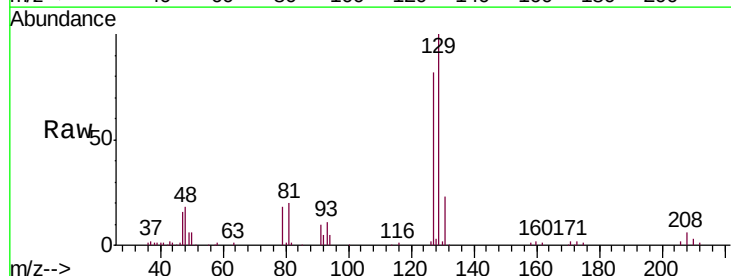


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

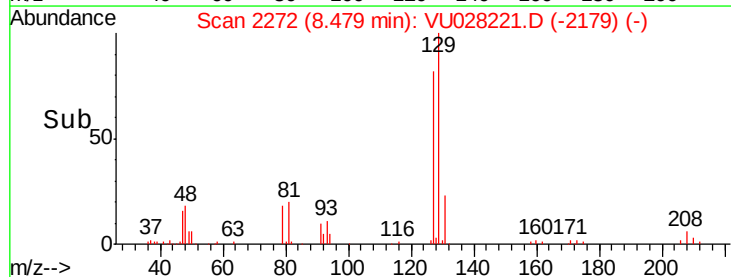
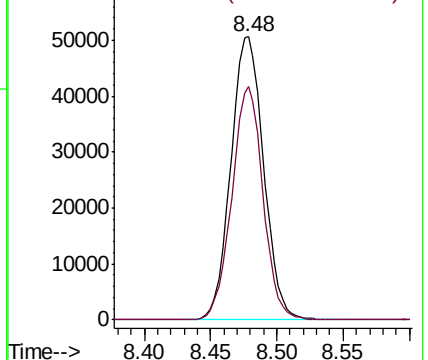


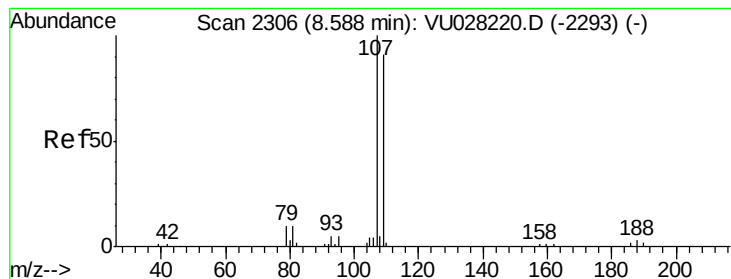
#49  
Dibromochloromethane  
Concen: 9.718 ug/L  
RT: 8.48 min Scan# 2272  
Delta R.T. -0.00 min  
Lab File: VU028221.D  
Acq: 17 Nov 2018 12:56

Tgt Ion: 129 Resp: 87020  
Ion Ratio Lower Upper  
129 100  
127 82.3 54.7 101.5



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





#50

1,2-Dibromoethane

Concen: 9.471 ug/L

RT: 8.59 min Scan# 2306

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

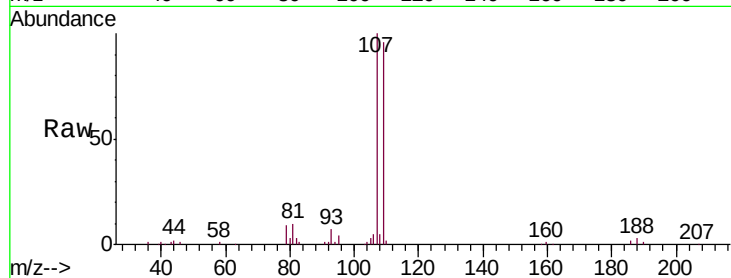
Tgt Ion:107 Resp: 75722

Ion Ratio Lower Upper

107 100

109 95.8 63.7 118.3

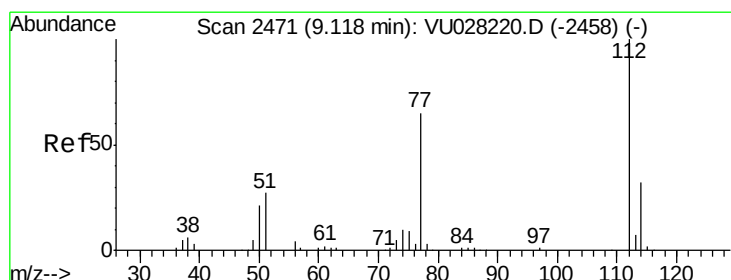
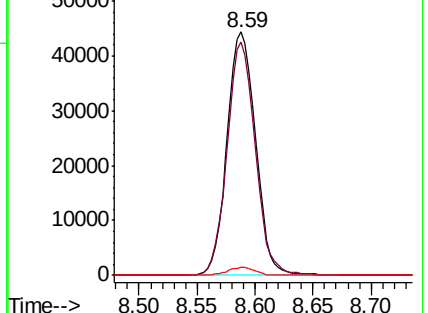
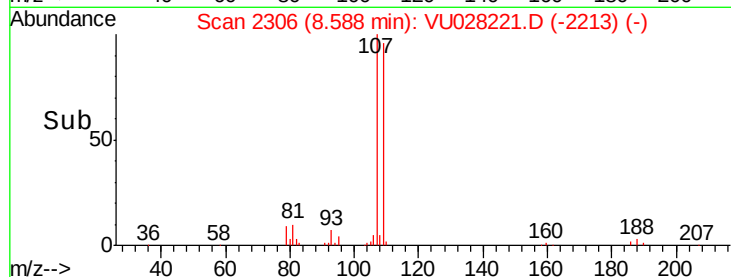
188 3.1 2.5 3.7



Abundance Ion 106.95 (106.65 to 107.65): V

Ion 109.00 (108.70 to 109.70): V

Ion 187.90 (187.60 to 188.60): V



#51

Chlorobenzene

Concen: 9.607 ug/L

RT: 9.12 min Scan# 2471

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

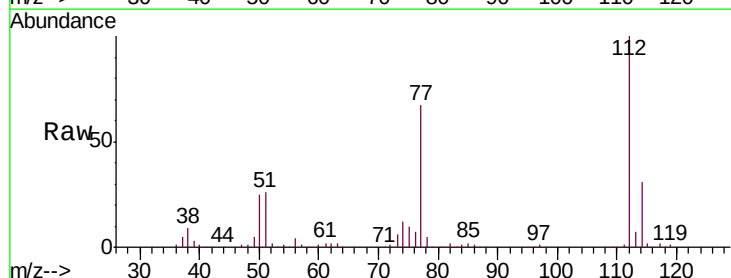
Tgt Ion:112 Resp: 287725

Ion Ratio Lower Upper

112 100

114 31.5 22.3 41.5

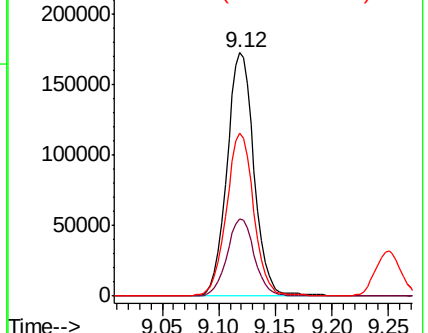
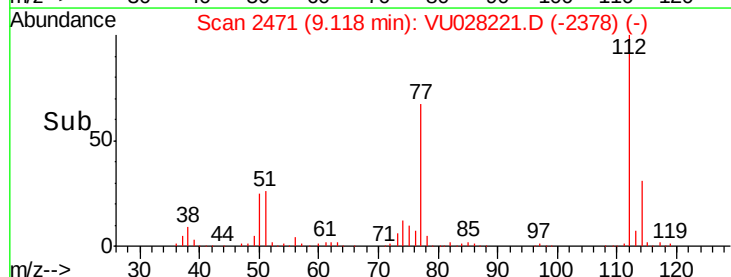
77 67.0 52.4 78.6

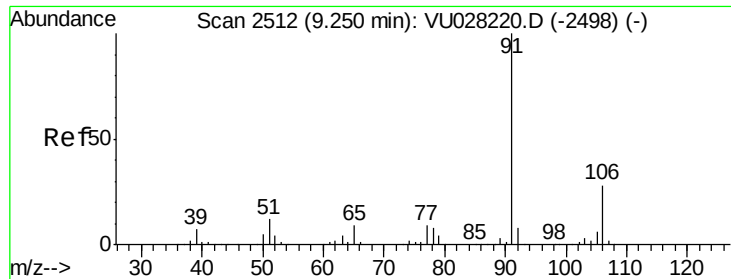


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VU0





#52

Ethylbenzene

Concen: 9.869 ug/L

RT: 9.25 min Scan# 2512

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

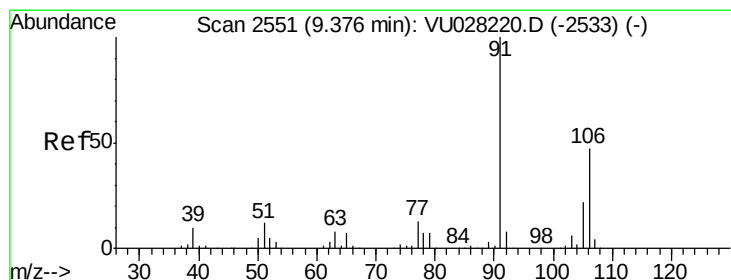
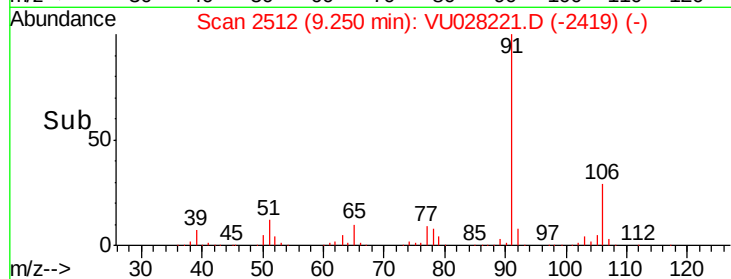
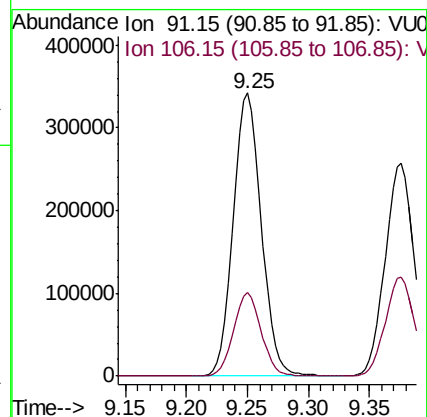
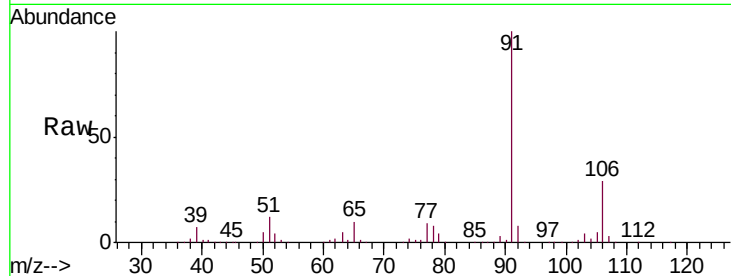
VSTD01017

Tgt Ion: 91 Resp: 552321

Ion Ratio Lower Upper

91 100

106 29.4 19.3 35.9



#53

m,p-xylene

Concen: 10.256 ug/L

RT: 9.38 min Scan# 2551

Delta R.T. -0.00 min

Lab File: VU028221.D

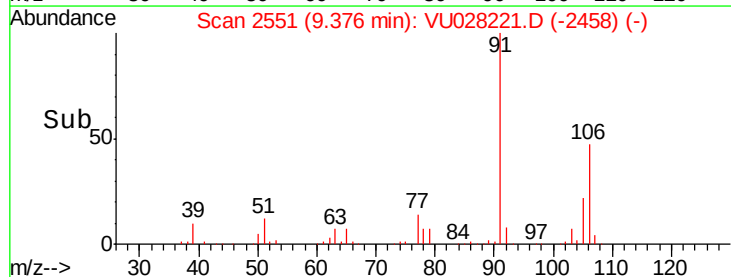
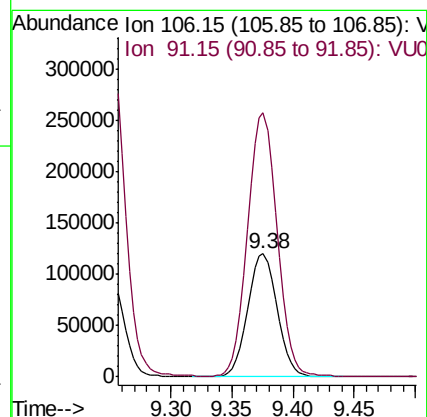
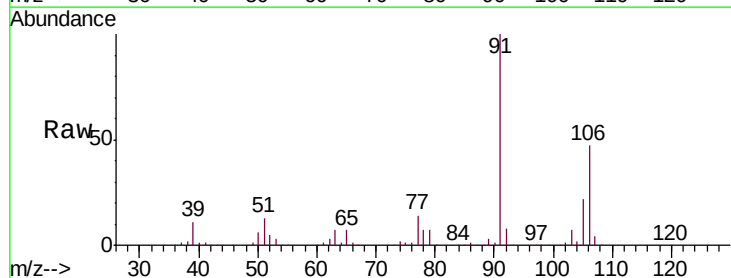
Acq: 17 Nov 2018 12:56

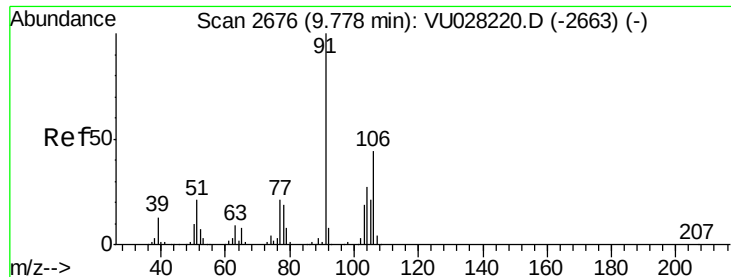
Tgt Ion: 106 Resp: 199160

Ion Ratio Lower Upper

106 100

91 214.1 150.6 279.6





#54

o-xylene

Concen: 10.039 ug/L

RT: 9.78 min Scan# 2677

Delta R.T. 0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

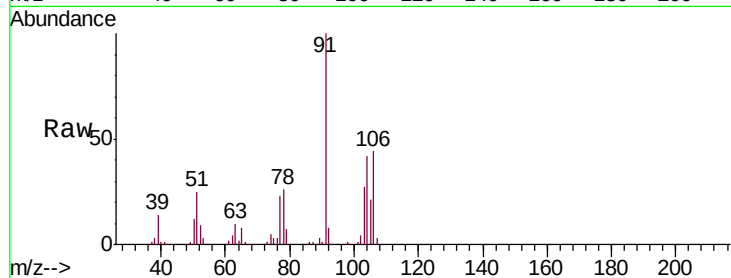
VSTD01017

Tgt Ion:106 Resp: 194708

Ion Ratio Lower Upper

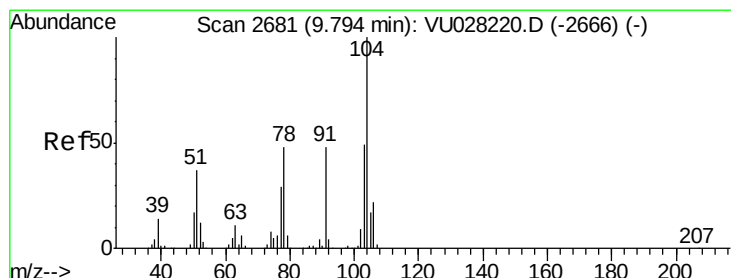
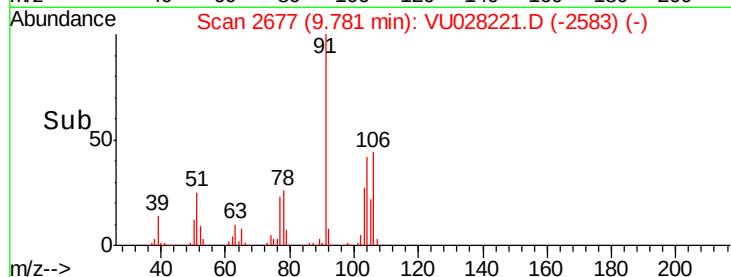
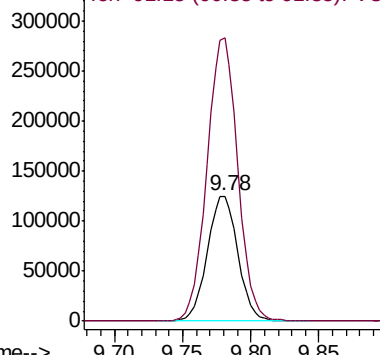
106 100

91 226.2 157.5 292.5



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#55

Styrene

Concen: 10.300 ug/L

RT: 9.79 min Scan# 2680

Delta R.T. -0.00 min

Lab File: VU028221.D

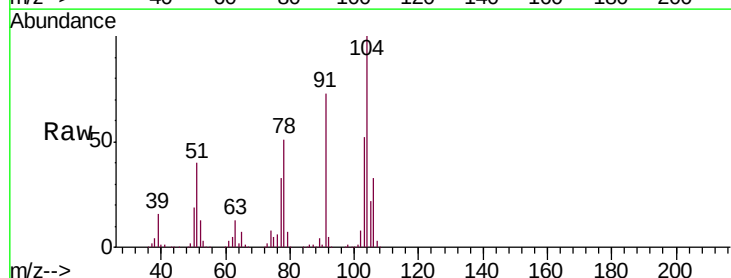
Acq: 17 Nov 2018 12:56

Tgt Ion:104 Resp: 335381

Ion Ratio Lower Upper

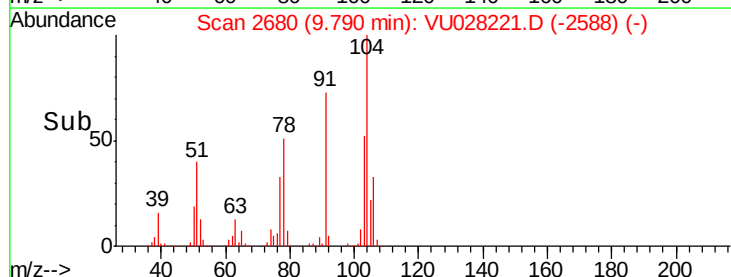
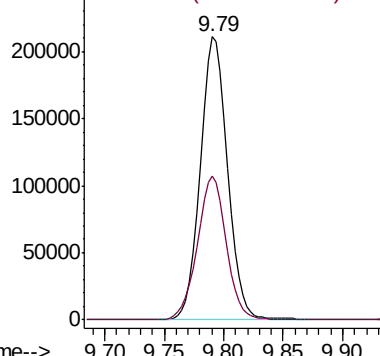
104 100

78 50.7 33.4 62.0

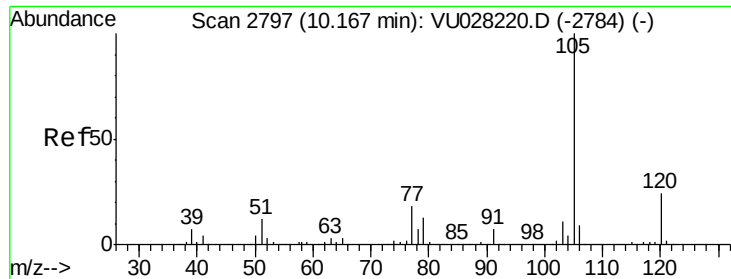


Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VU0







#56

Isopropylbenzene

Concen: 10.092 ug/L

RT: 10.17 min Scan# 2797

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

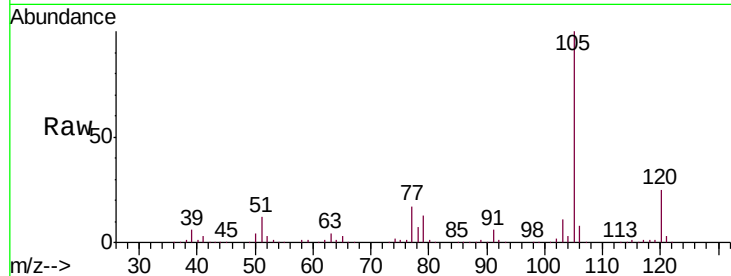
Tgt Ion: 105 Resp: 524251

Ion Ratio Lower Upper

105 100

120 24.9 20.3 30.5

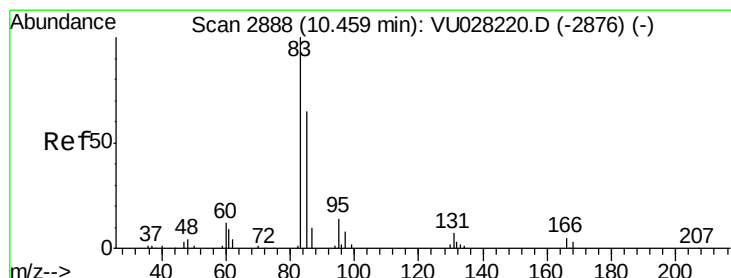
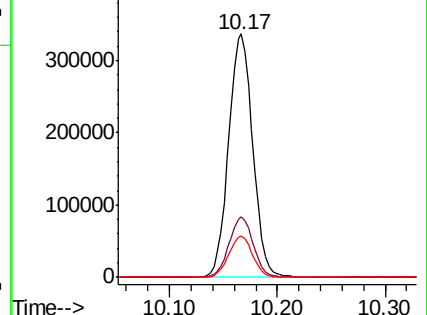
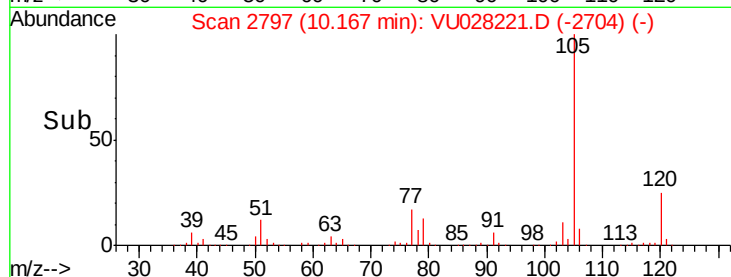
77 16.9 14.5 21.7



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 9.422 ug/L

RT: 10.46 min Scan# 2887

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

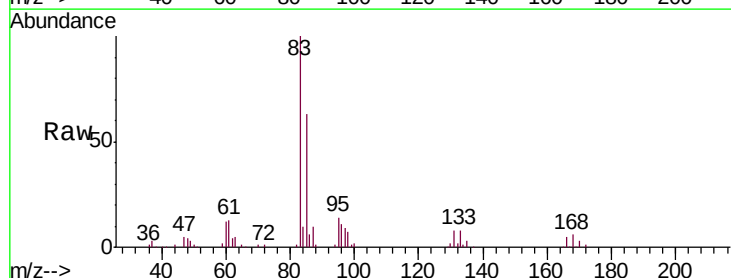
Tgt Ion: 83 Resp: 107138

Ion Ratio Lower Upper

83 100

85 62.5 46.1 85.5

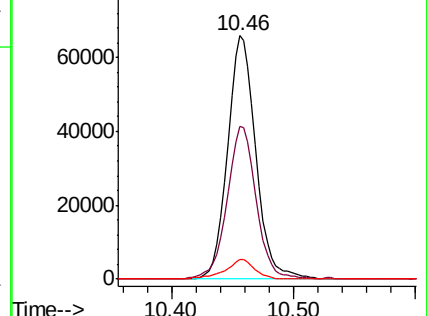
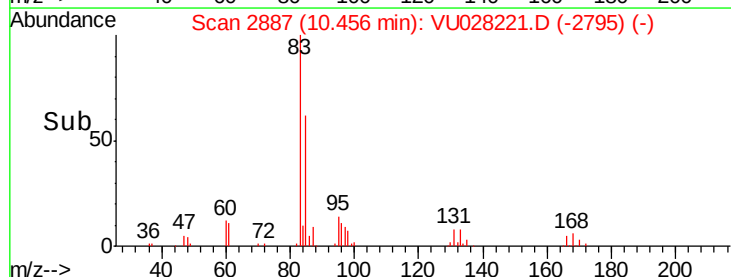
131 8.3 6.2 9.2

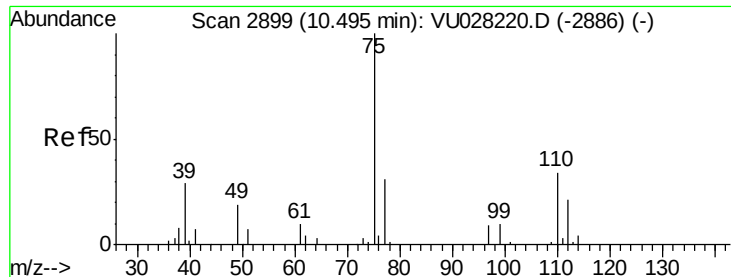


Abundance Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 9.276 ug/L

RT: 10.49 min Scan# 2899

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

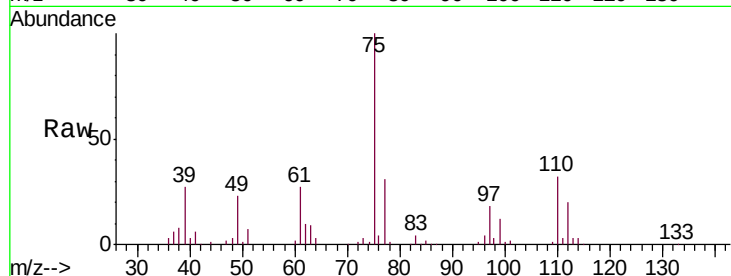
VSTD01017

Tgt Ion: 75 Resp: 78479

Ion Ratio Lower Upper

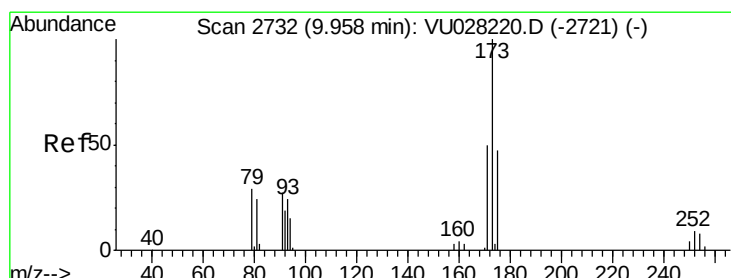
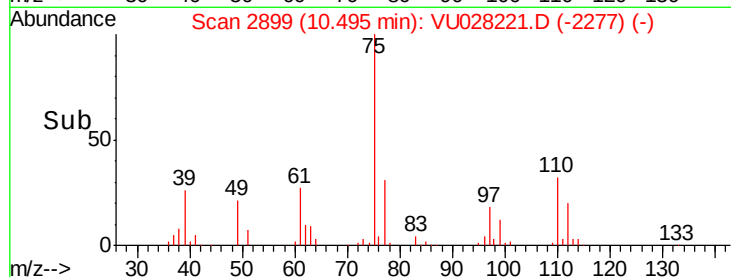
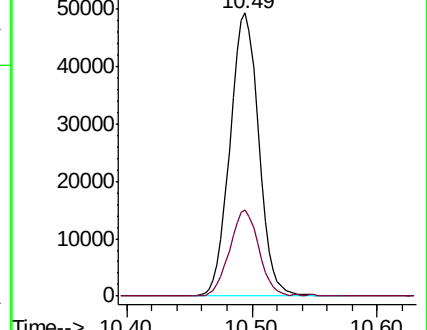
75 100

77 31.0 25.7 38.5



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0



#61

Bromoform

Concen: 9.334 ug/L

RT: 9.96 min Scan# 2732

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

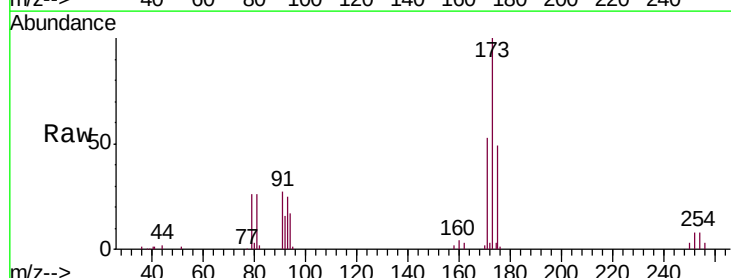
Tgt Ion: 173 Resp: 44584

Ion Ratio Lower Upper

173 100

175 49.6 38.7 58.1

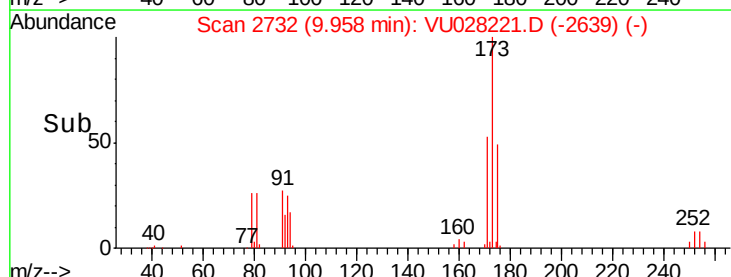
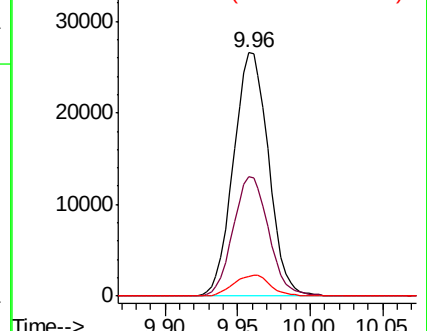
254 8.9 6.6 10.0

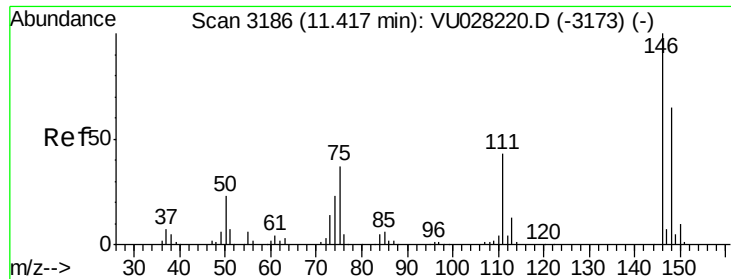


Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 253.75 (253.45 to 254.45): V

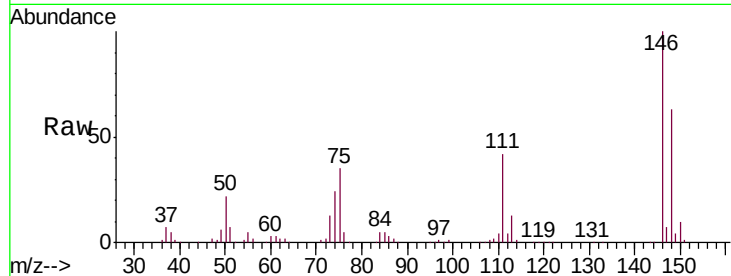




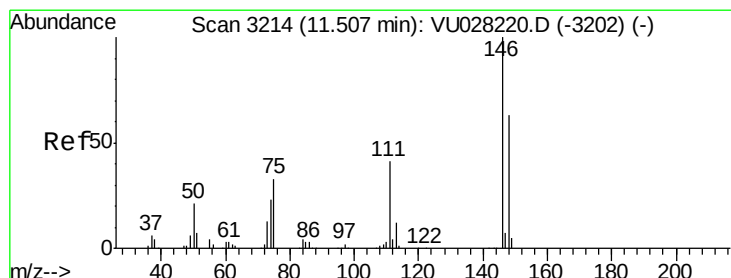
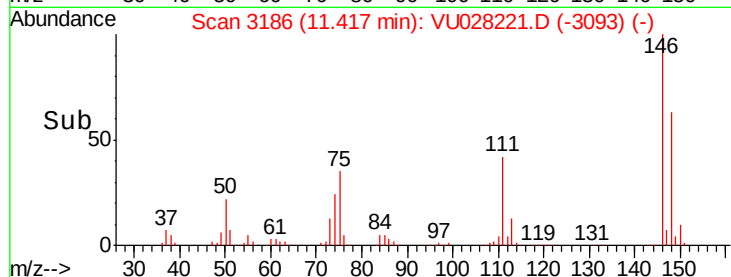
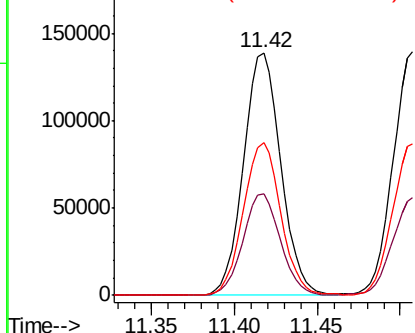
#62  
 1,3-Dichlorobenzene  
 Concen: 9.472 ug/L  
 RT: 11.42 min Scan# 3186  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

Tgt Ion:146 Resp: 217160  
 Ion Ratio Lower Upper  
 146 100  
 111 41.6 30.4 56.4  
 148 62.7 45.3 84.1

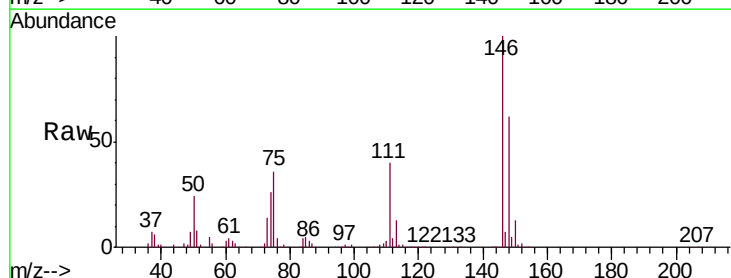


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

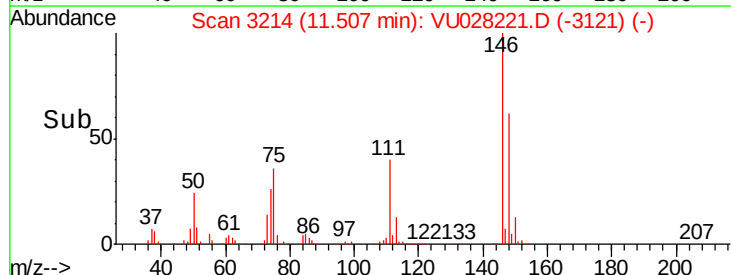
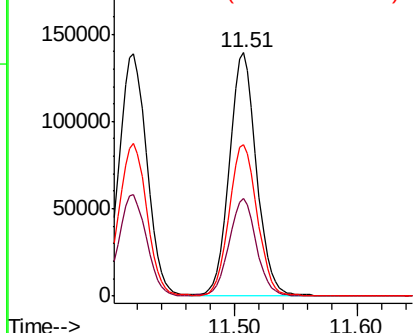


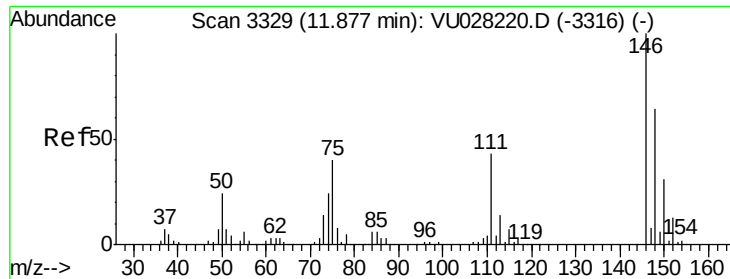
#63  
 1,4-Dichlorobenzene  
 Concen: 9.235 ug/L  
 RT: 11.51 min Scan# 3214  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion:146 Resp: 216002  
 Ion Ratio Lower Upper  
 146 100  
 111 40.2 28.9 53.7  
 148 62.5 44.5 82.7



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

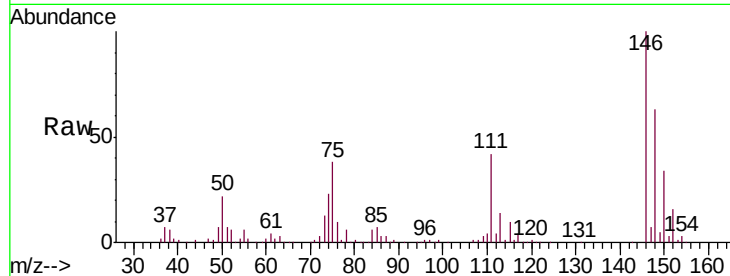




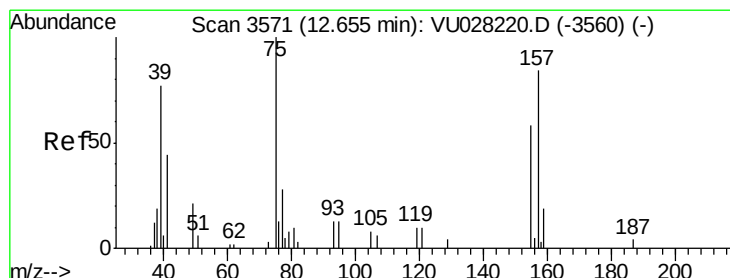
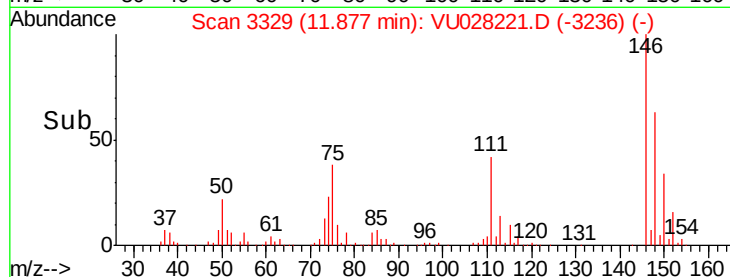
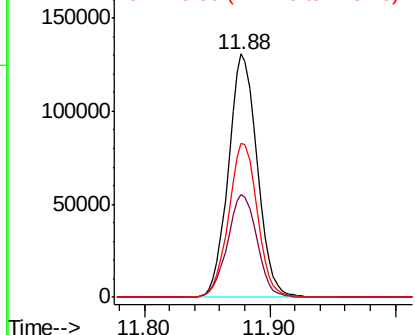
#65  
 1,2-Dichlorobenzene  
 Concen: 9.260 ug/L  
 RT: 11.88 min Scan# 3329  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

Tgt Ion: 146 Resp: 208180  
 Ion Ratio Lower Upper  
 146 100  
 111 42.3 34.7 52.1  
 148 63.4 51.2 76.8

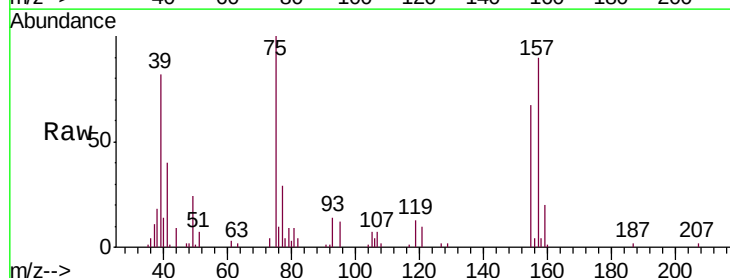


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

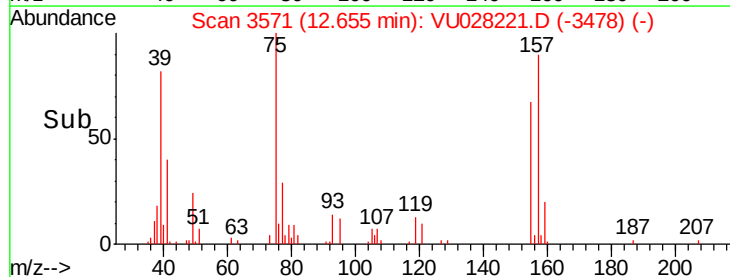
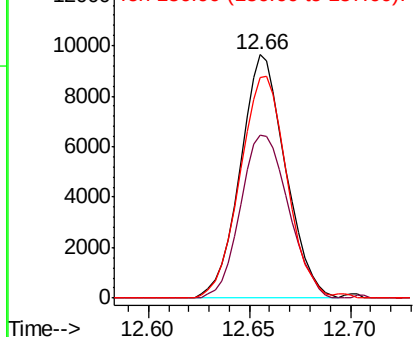


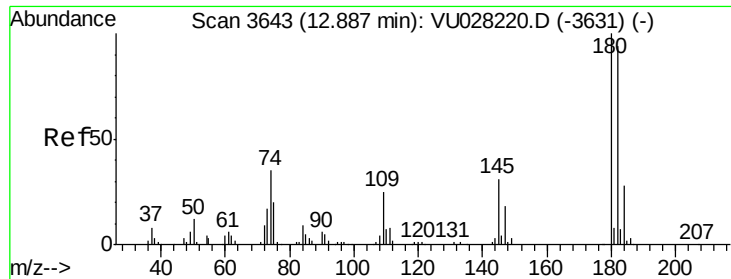
#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 8.660 ug/L  
 RT: 12.66 min Scan# 3571  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion: 75 Resp: 15167  
 Ion Ratio Lower Upper  
 75 100  
 155 67.2 46.1 69.1  
 157 90.3 67.0 100.6



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

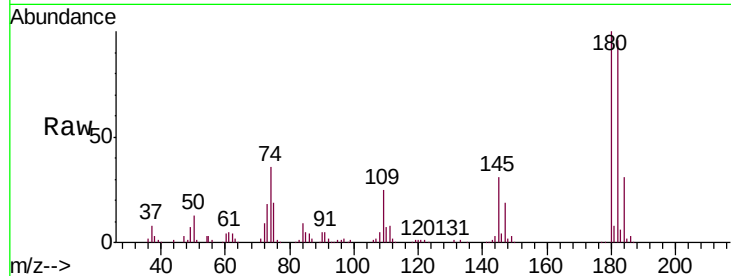




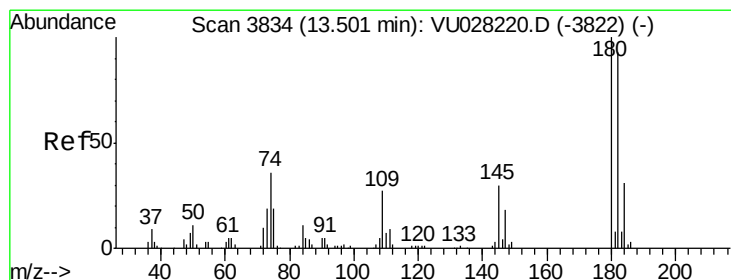
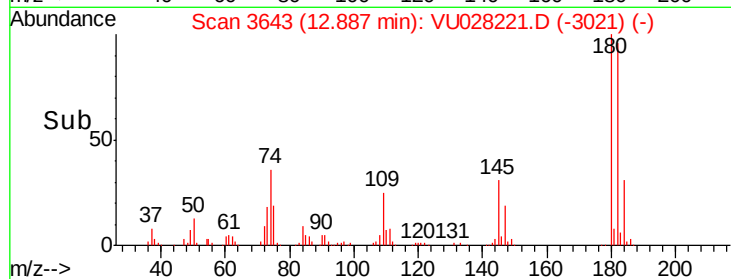
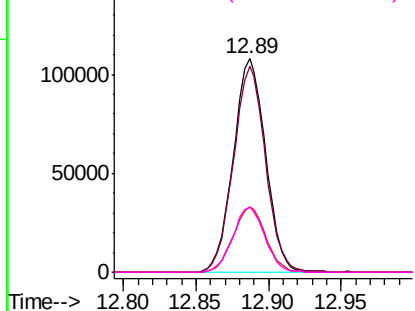
#67  
 1,3,5-Trichlorobenzene  
 Concen: 9.536 ug/L  
 RT: 12.89 min Scan# 3643  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD01017

Tgt Ion:180 Resp: 167233  
 Ion Ratio Lower Upper  
 180 100  
 182 95.2 77.5 116.3  
 184 30.8 23.7 35.5  
 145 30.2 24.2 36.4

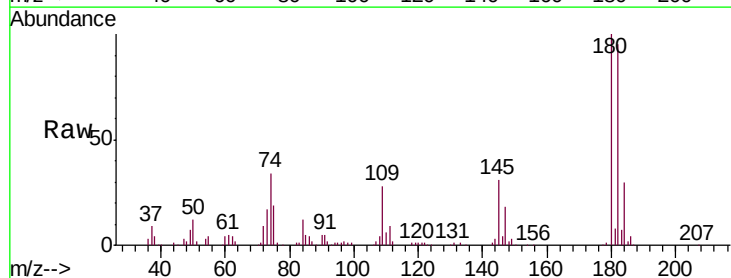


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

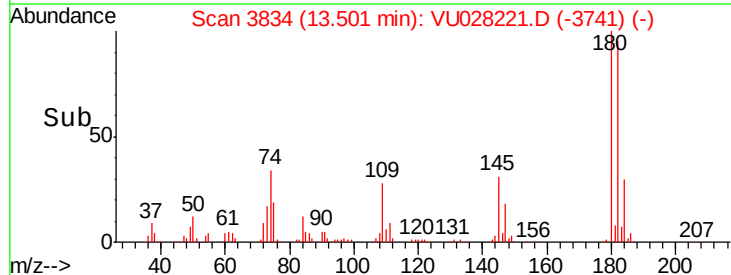
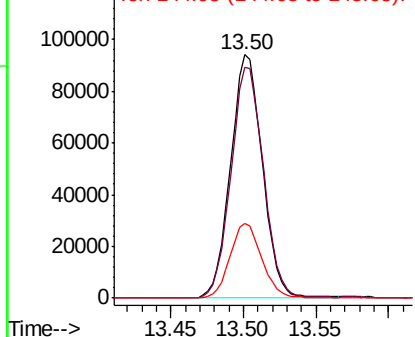


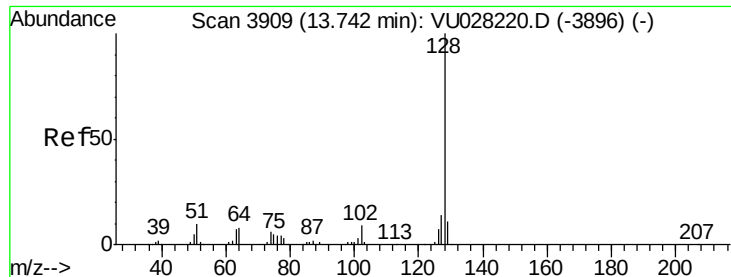
#68  
 1,2,4-trichlorobenzene  
 Concen: 9.817 ug/L  
 RT: 13.50 min Scan# 3834  
 Delta R.T. -0.00 min  
 Lab File: VU028221.D  
 Acq: 17 Nov 2018 12:56

Tgt Ion:180 Resp: 143850  
 Ion Ratio Lower Upper  
 180 100  
 182 96.9 75.4 113.2  
 145 30.6 24.5 36.7



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





#69

Naphthalene

Concen: 9.977 ug/L

RT: 13.74 min Scan# 3909

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

Instrument :

MSVOA\_U

ClientSampleId :

VSTD01017

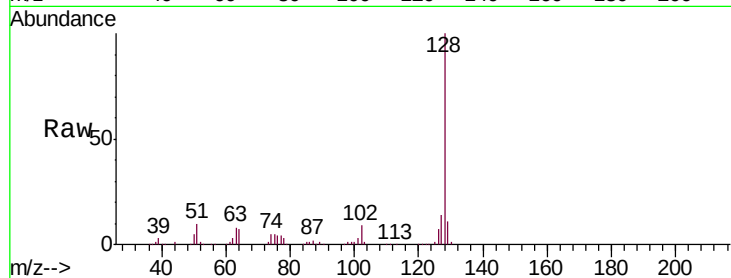
Tgt Ion:128 Resp: 259804

Ion Ratio Lower Upper

128 100

129 10.7 8.6 12.8

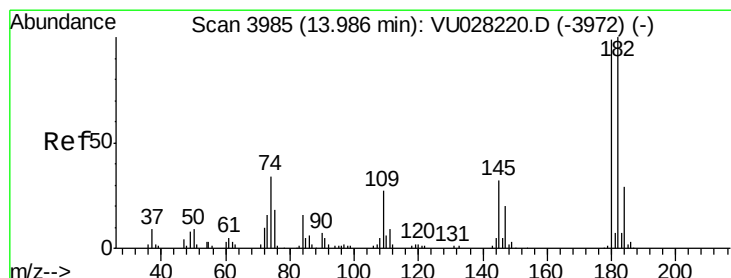
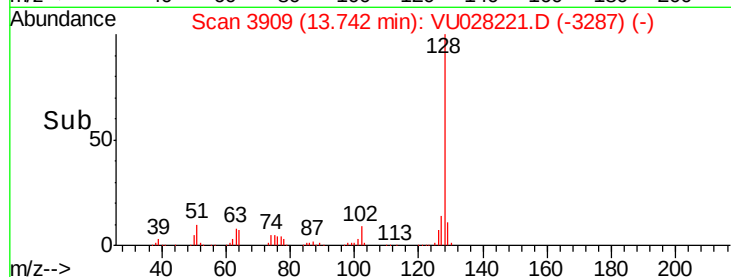
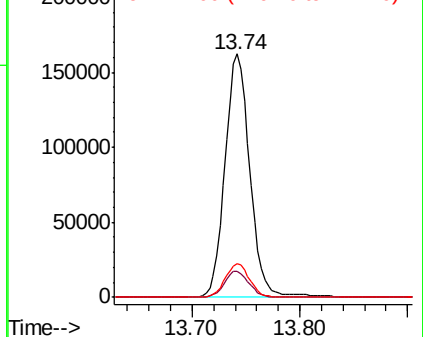
127 13.4 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 9.688 ug/L

RT: 13.99 min Scan# 3985

Delta R.T. -0.00 min

Lab File: VU028221.D

Acq: 17 Nov 2018 12:56

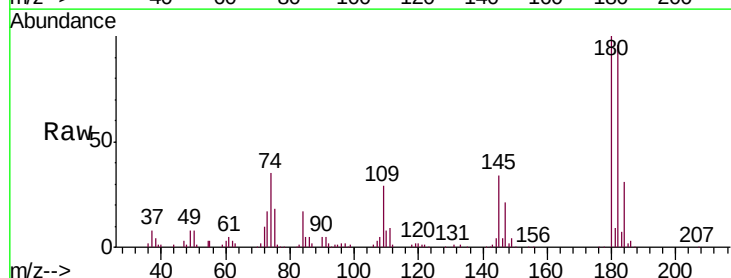
Tgt Ion:180 Resp: 134464

Ion Ratio Lower Upper

180 100

182 95.0 77.0 115.4

145 31.9 25.7 38.5



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

