

Data File : VU028307.D  
Acq On : 21 Nov 2018 10:17  
Operator : MD/SY  
Sample : J5986-20 5X  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
H0FP6

Quant Time: Nov 21 22:36:19 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR111718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Nov 21 22:33:20 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 169300   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 159165   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 70220    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40   | 65    | 66003    | 5.18     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 103.60% |
| 7) Chloroethane-d5             | 1.68   | 69    | 51387    | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 93.40%  |
| 11) 1,1-Dichloroethene-d2      | 2.27   | 63    | 96743    | 3.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 76.40%  |
| 20) 2-Butanone-d5              | 4.21   | 46    | 191899   | 45.01    | ug/L | 0.02    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 90.02%  |
| 24) Chloroform-d               | 4.65   | 84    | 106257   | 4.47     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.40%  |
| 26) 1,2-Dichloroethane-d4      | 5.31   | 65    | 59315    | 4.51     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 90.20%  |
| 32) Benzene-d6                 | 5.34   | 84    | 221205   | 4.83     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 96.60%  |
| 36) 1,2-Dichloropropane-d6     | 6.33   | 67    | 80255    | 4.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 96.40%  |
| 41) Toluene-d8                 | 7.57   | 98    | 194156   | 4.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 94.60%  |
| 43) trans-1,3-Dichloropropene- | 7.85   | 79    | 28641    | 5.39     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 107.80% |
| 46) 2-Hexanone-d5              | 8.31   | 63    | 136691   | 42.89    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 85.78%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43  | 84    | 55762    | 4.64     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 92.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.86  | 152   | 63353    | 4.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 97.00%  |

#### Target Compounds

|                                |      |     |       |        |        | Qvalue |
|--------------------------------|------|-----|-------|--------|--------|--------|
| 5) Vinyl chloride              | 1.40 | 62  | 7556  | 0.440  | ug/L # | 74     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 780   | 0.071  | ug/L # | 21     |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 827   | 0.079  | ug/L # | 1      |
| 13) Acetone                    | 2.36 | 43  | 57380 | 19.570 | ug/L   | 98     |
| 15) Methyl Acetate             | 2.58 | 43  | 1804  | 0.232  | ug/L # | 64     |
| 17) Methyl tert-butyl Ether    | 3.01 | 73  | 5731  | 0.183  | ug/L   | 97     |
| 18) trans-1,2-Dichloroethene   | 2.98 | 96  | 1460  | 0.132  | ug/L   | 85     |
| 19) 1,1-Dichloroethane         | 3.45 | 63  | 1192  | 0.046  | ug/L # | 87     |
| 22) cis-1,2-Dichloroethene     | 4.23 | 96  | 22378 | 1.705  | ug/L   | 86     |
| 25) Chloroform                 | 4.68 | 83  | 4138  | 0.149  | ug/L   | 85     |
| 34) Trichloroethene            | 6.19 | 95  | 7758  | 0.603  | ug/L   | 95     |
| 35) Methylcyclohexane          | 6.33 | 83  | 16065 | 0.793  | ug/L # | 14     |
| 37) 1,2-Dichloropropane        | 6.33 | 63  | 8310  | 0.555  | ug/L # | 92     |
| 39) cis-1,3-Dichloropropene    | 7.23 | 75  | 1915  | 0.101  | ug/L # | 66     |
| 42) Toluene                    | 7.64 | 91  | 7346  | 0.138  | ug/L   | 88     |
| 44) trans-1,3-Dichloropropene  | 7.85 | 75  | 1559  | 0.109  | ug/L   | 97     |
| 47) Tetrachloroethene          | 8.22 | 164 | 631   | 0.071  | ug/L # | 59     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU112118\  
Quantitation Report (Not Reviewed)

Data File : VU028307.D  
Acq On : 21 Nov 2018 10:17  
Operator : MD/SY  
Sample : J5986-20 5X  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
H0FP6

Quant Time: Nov 21 22:36:19 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR111718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Nov 21 22:33:20 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|-------|------|----------|-------|--------|----------|
| 49) Dibromochloromethane   | 8.22  | 129  | 501      | 0.055 | ug/L # | 10       |
| 52) Ethylbenzene           | 9.25  | 91   | 2684     | 0.047 | ug/L   | 97       |
| 53) m,p-xylene             | 9.38  | 106  | 1723     | 0.087 | ug/L   | 89       |
| 59) 1,2,3-Trichloropropane | 11.48 | 75   | 10954    | 1.265 | ug/L   | 98       |

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

Data File : VU028307.D

Acq On : 21 Nov 2018 10:17

Operator : MD/SY

Sample : J5986-20 5X

Misc : 25.0mL/MSV0A\_U/WATER

```
ALS Vial      : 5      Sample Multiplier: 1
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**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
H0FP6

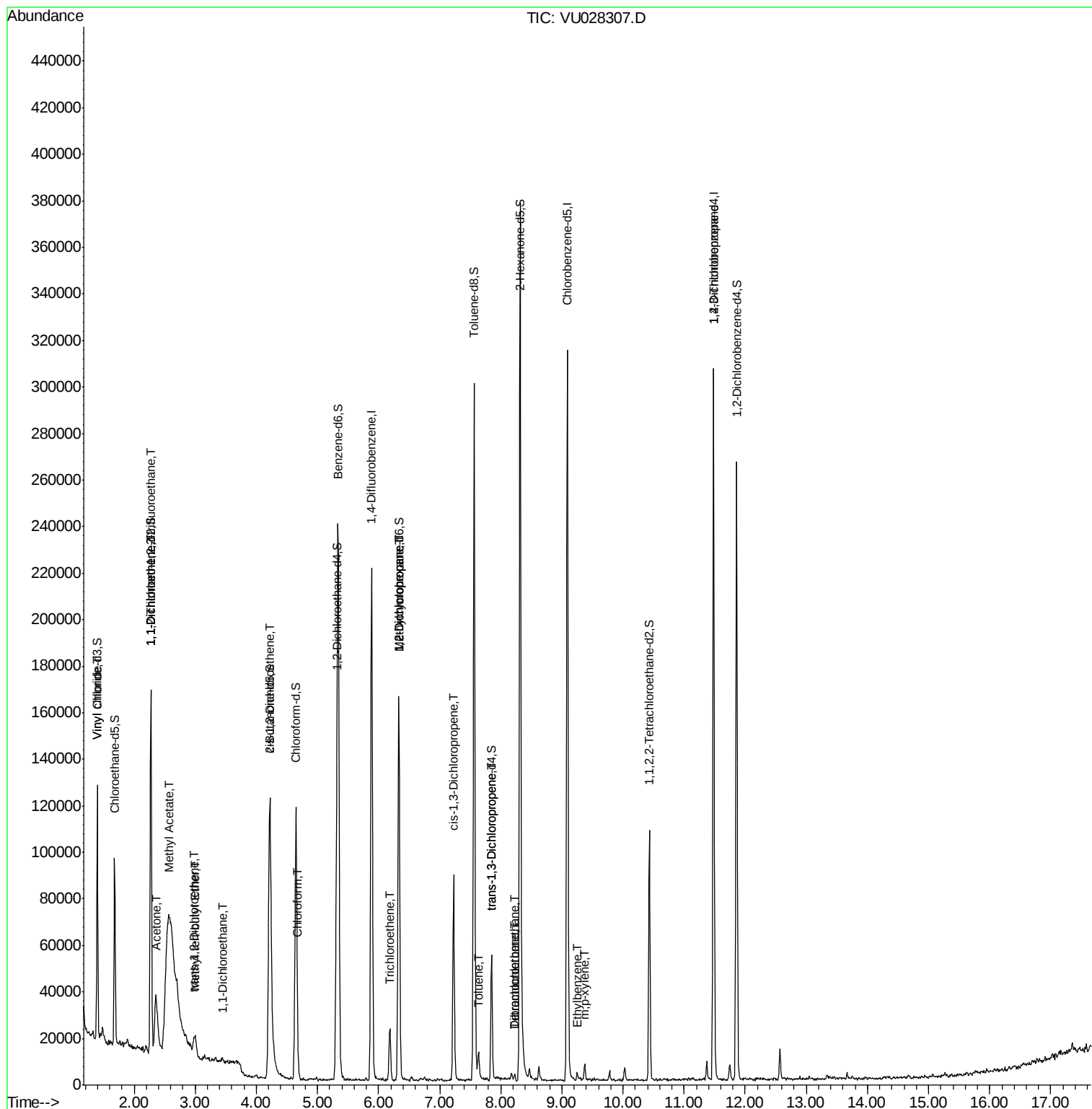
Quant Time: Nov 21 22:36:19 2018

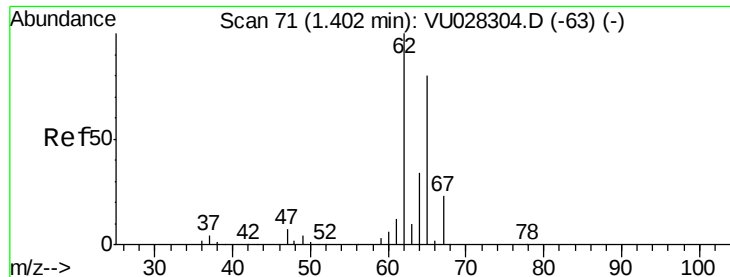
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_U\METHOD\SOMUTR111718WMA.M

Quant Title : TRACE VOA SOM01.0

QLast Update : Wed Nov 21 22:33:20 2018

Response via : Initial Calibration





#5

Vinyl chloride

Concen: 0.440 ug/L

RT: 1.40 min Scan# 71

Delta R.T. -0.00 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

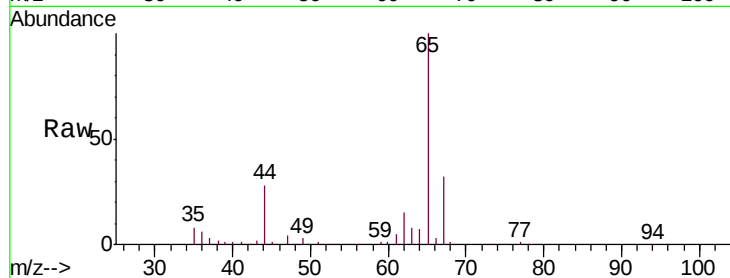
H0FP6

Tgt Ion: 62 Resp: 7556

Ion Ratio Lower Upper

62 100

64 45.3 21.7 40.3#



Abundance Ion 62.00 (61.70 to 62.70): VU028304.D (-63) (-)

Ion 64.10 (63.80 to 64.80): VU028304.D (-63) (-)

1.40

8000

6000

4000

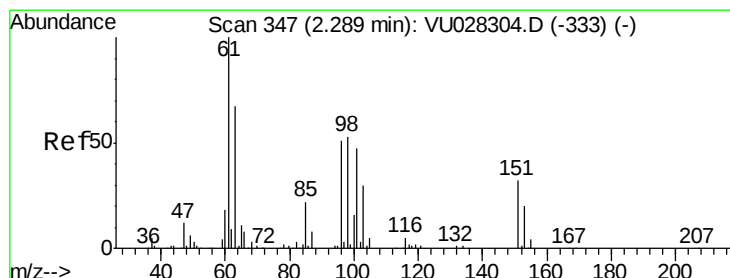
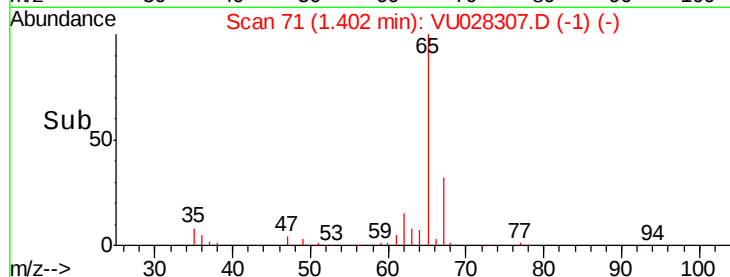
2000

0

1.35

1.40

1.45



#10

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

Concen: 0.071 ug/L

RT: 2.28 min Scan# 343

Delta R.T. -0.01 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

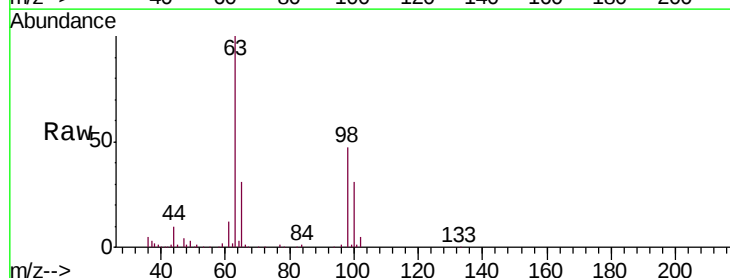
Tgt Ion: 101 Resp: 780

Ion Ratio Lower Upper

101 100

85 0.0 37.4 56.2#

151 0.0 55.0 82.4#



Abundance Ion 101.00 (100.70 to 101.70): VU028304.D (-333) (-)

Ion 85.00 (84.70 to 85.70): VU028304.D (-333) (-)

Ion 151.00 (150.70 to 151.70): VU028304.D (-333) (-)

2.28

800

600

400

200

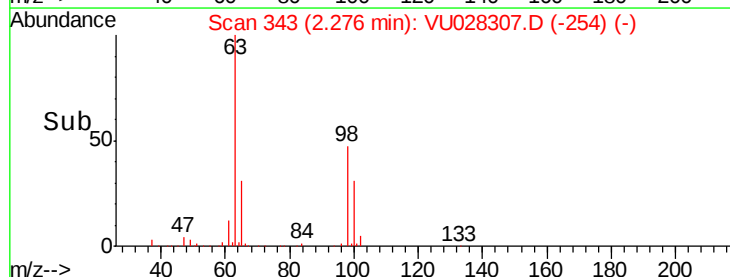
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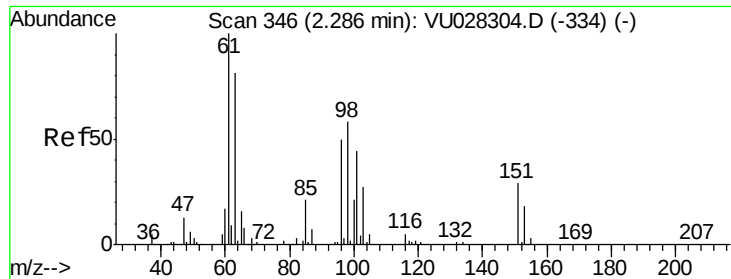
2.24

2.26

2.28

2.30





#12

1,1-Dichloroethene

Concen: 0.079 ug/L

RT: 2.27 min Scan# 342

Delta R.T. -0.01 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

H0FP6

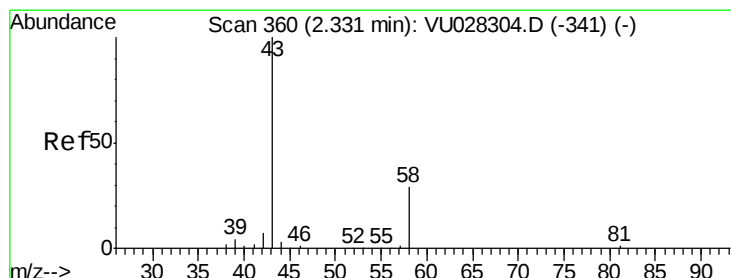
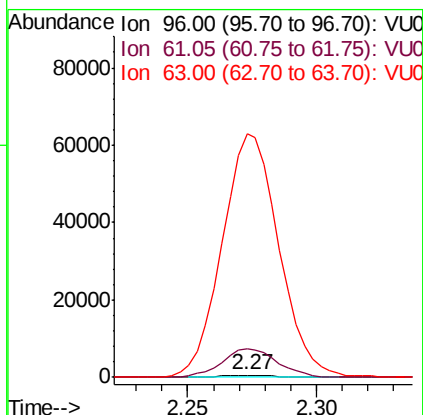
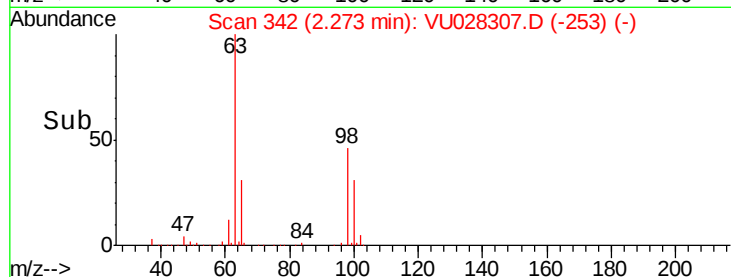
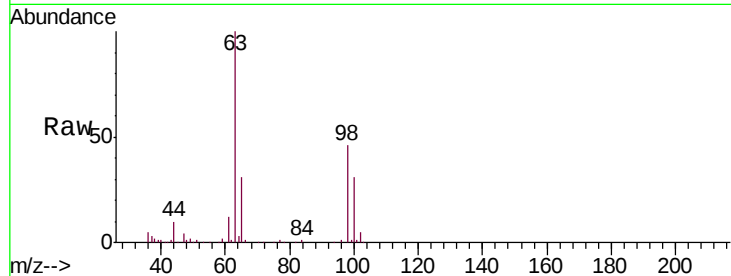
Tgt Ion: 96 Resp: 827

Ion Ratio Lower Upper

96 100

61 1469.7 145.5 270.1#

63 12389.0 98.6 183.2#



#13

Acetone

Concen: 19.570 ug/L

RT: 2.36 min Scan# 368

Delta R.T. 0.03 min

Lab File: VU028307.D

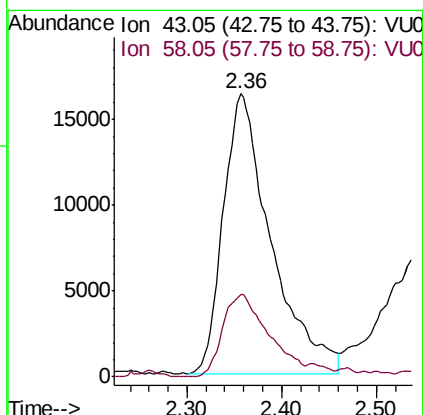
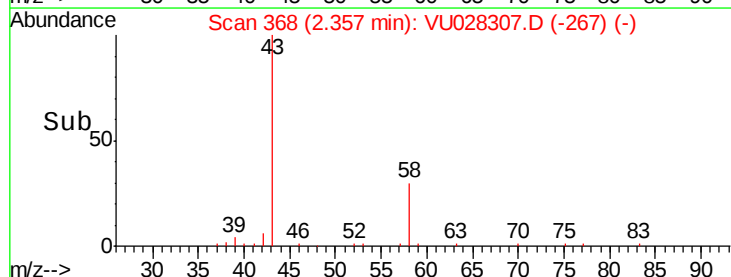
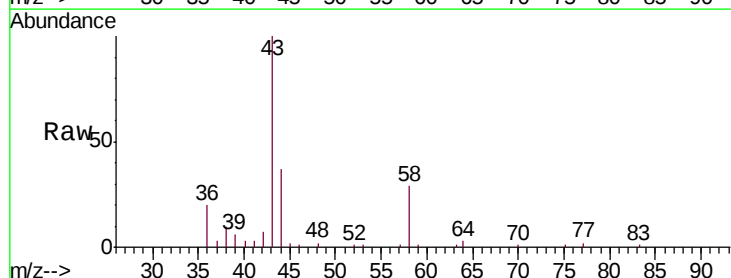
Acq: 21 Nov 2018 10:17

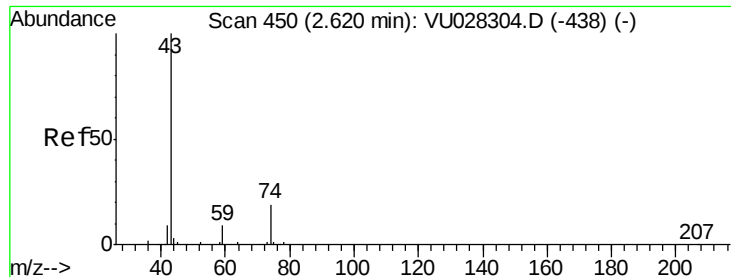
Tgt Ion: 43 Resp: 57380

Ion Ratio Lower Upper

43 100

58 28.2 0.0 58.6

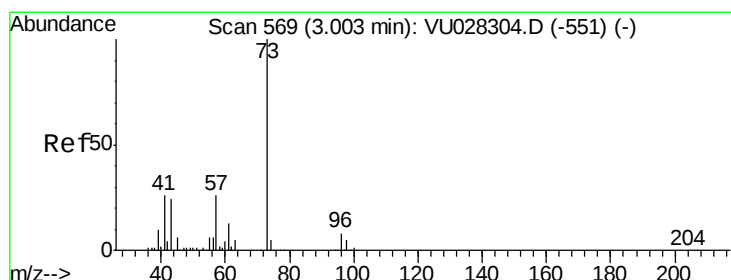
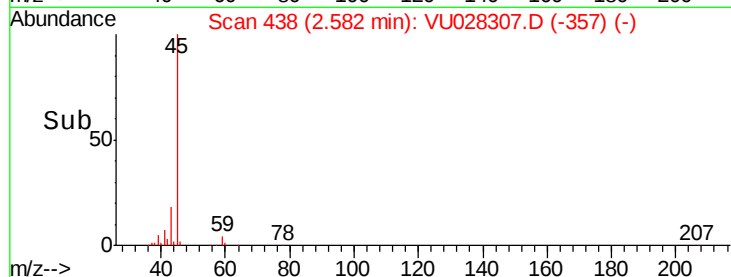
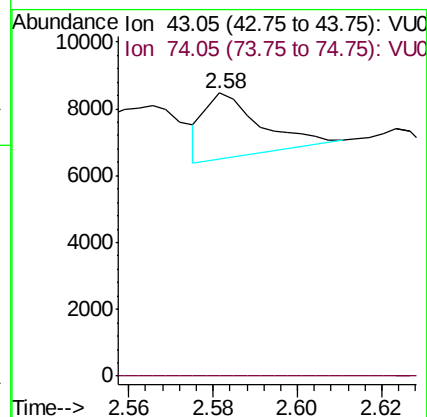
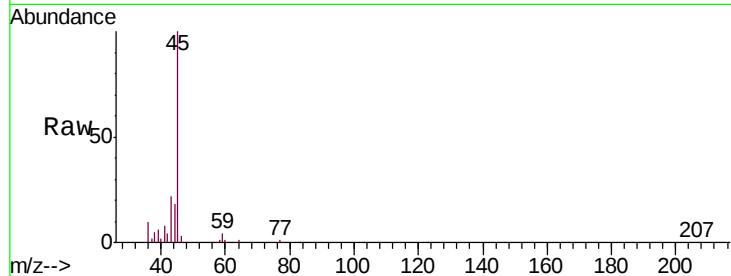




#15  
Methyl Acetate  
Concen: 0.232 ug/L  
RT: 2.58 min Scan# 438  
Delta R.T. -0.04 min  
Lab File: VU028307.D  
Acq: 21 Nov 2018 10:17

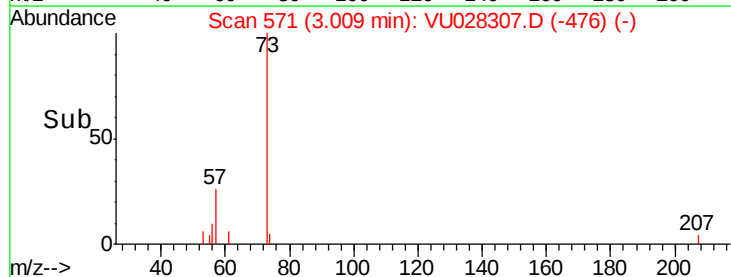
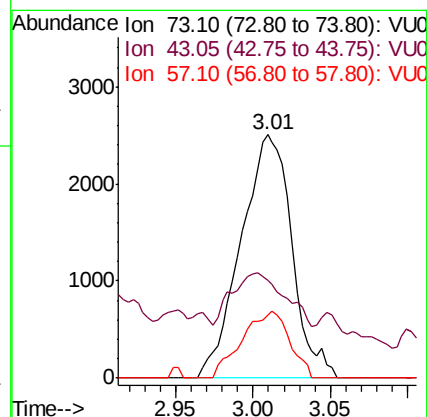
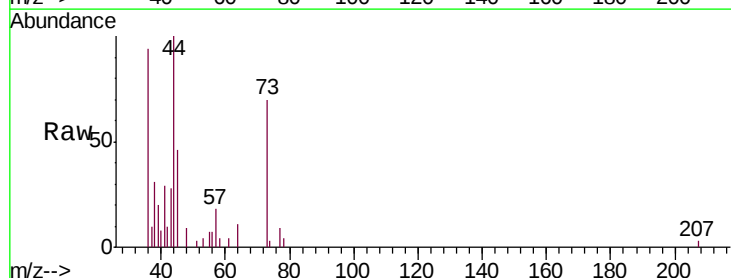
Instrument :  
MSVOA\_U  
ClientSampleId :  
H0FP6

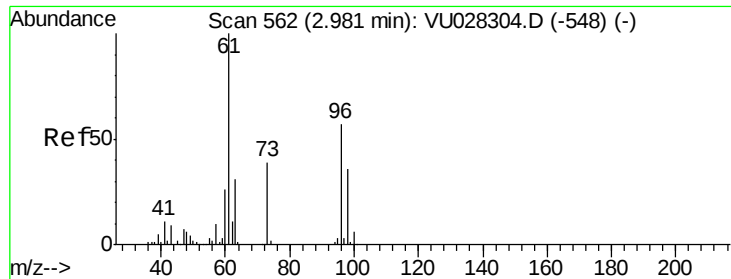
Tgt Ion: 43 Resp: 1804  
Ion Ratio Lower Upper  
43 100  
74 2.2 14.7 22.1#



#17  
Methyl tert-butyl Ether  
Concen: 0.183 ug/L  
RT: 3.01 min Scan# 571  
Delta R.T. 0.01 min  
Lab File: VU028307.D  
Acq: 21 Nov 2018 10:17

Tgt Ion: 73 Resp: 5731  
Ion Ratio Lower Upper  
73 100  
43 24.7 18.8 28.2  
57 25.7 19.2 28.8





#18

trans-1,2-Dichloroethene

Concen: 0.132 ug/L

RT: 2.98 min Scan# 563

Delta R.T. 0.00 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampled :

H0FP6

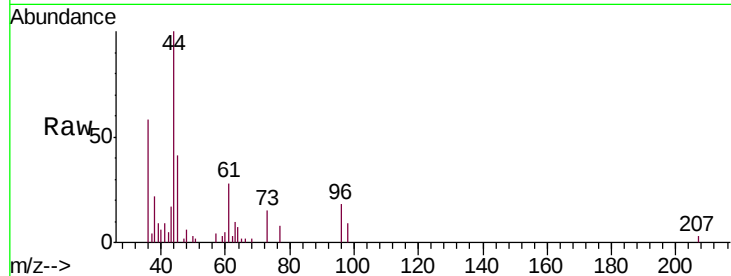
Tgt Ion: 96 Resp: 1460

Ion Ratio Lower Upper

96 100

61 154.8 122.2 227.0

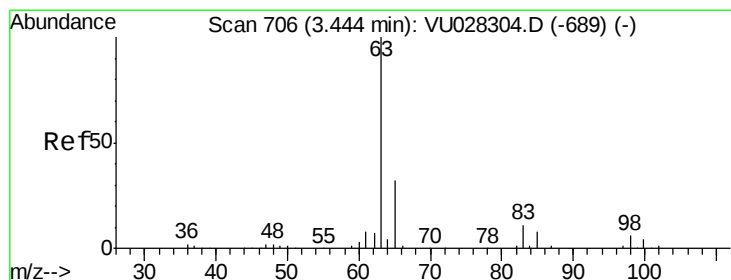
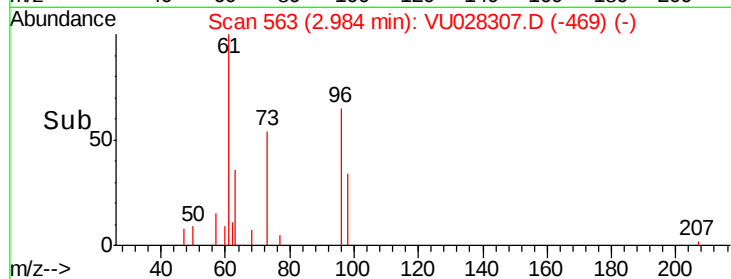
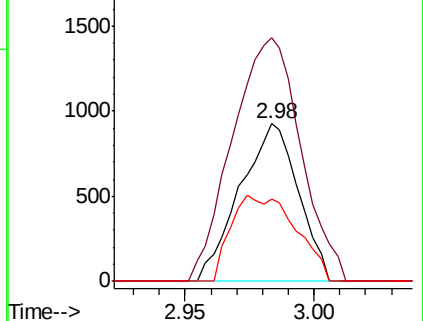
98 51.9 44.9 83.5



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: 0.046 ug/L

RT: 3.45 min Scan# 707

Delta R.T. 0.00 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

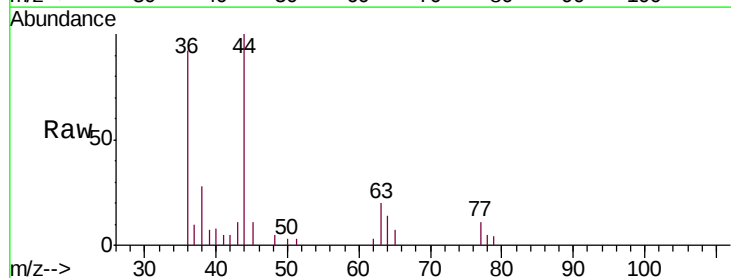
Tgt Ion: 63 Resp: 1192

Ion Ratio Lower Upper

63 100

65 33.0 21.2 39.4

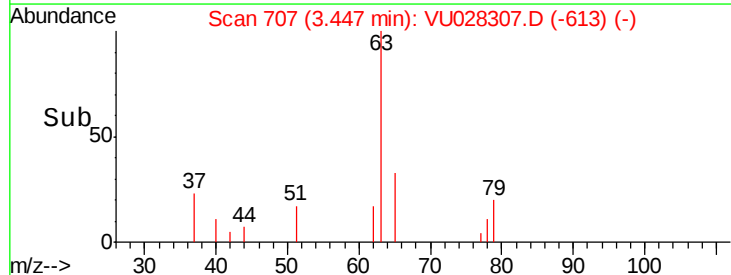
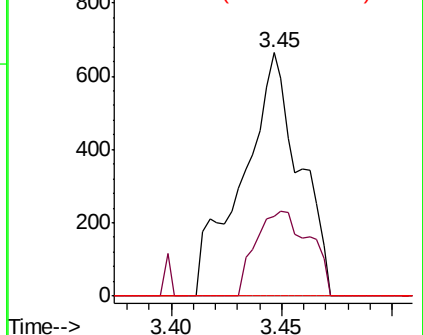
83 0.0 8.8 16.4#

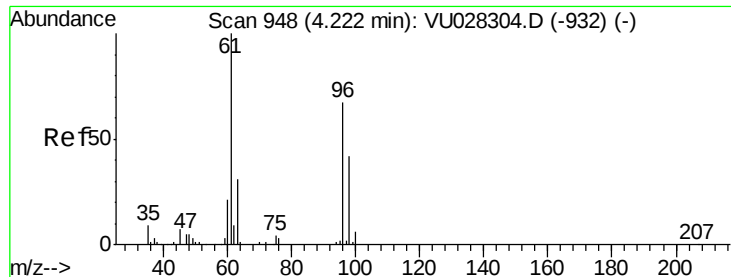


Abundance Ion 63.10 (62.80 to 63.80): VU0

Ion 65.10 (64.80 to 65.80): VU0

Ion 83.05 (82.75 to 83.75): VU0



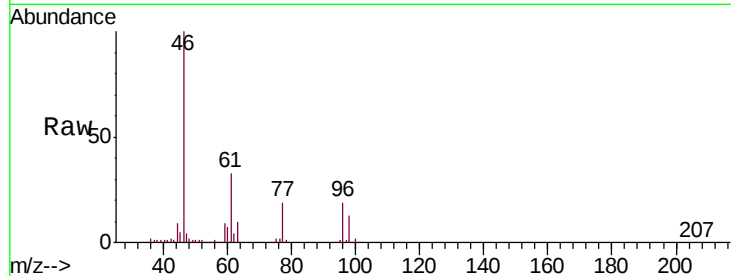


#22

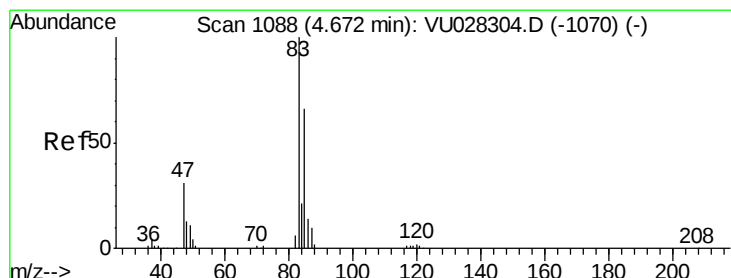
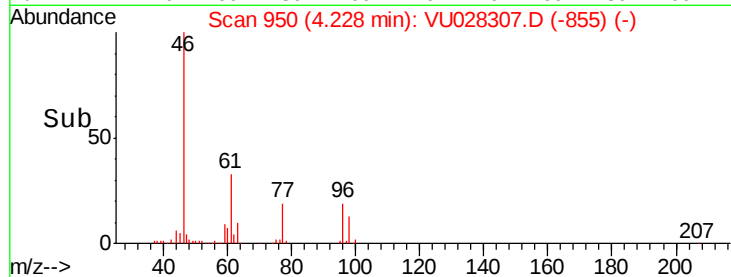
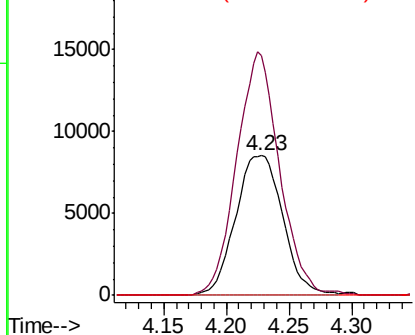
cis-1,2-Dichloroethene  
Concen: 1.705 ug/L  
RT: 4.23 min Scan# 950  
Delta R.T. 0.01 min  
Lab File: VU028307.D  
Acq: 21 Nov 2018 10:17

Instrument :  
MSVOA\_U  
ClientSampleId :  
H0FP6

Tgt Ion: 96 Resp: 22378  
Ion Ratio Lower Upper  
96 100  
61 172.2 108.0 200.6  
68 0.0 0.0 0.0



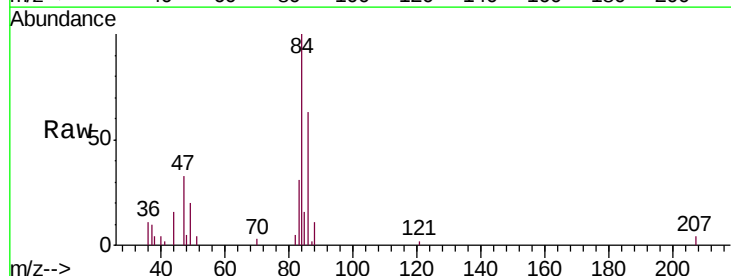
Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 68.15 (67.85 to 68.85): VU0



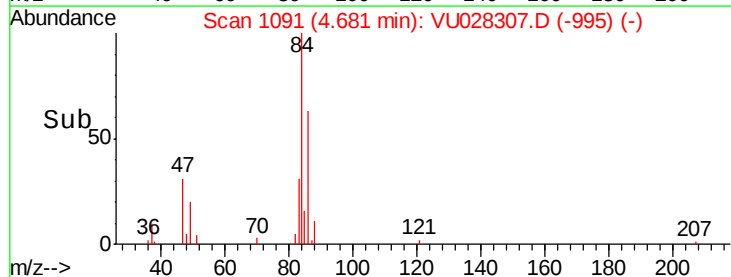
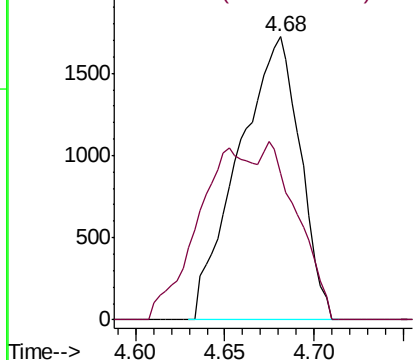
#25

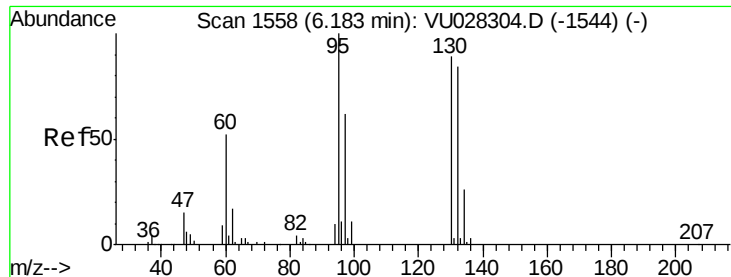
Chloroform  
Concen: 0.149 ug/L  
RT: 4.68 min Scan# 1091  
Delta R.T. 0.01 min  
Lab File: VU028307.D  
Acq: 21 Nov 2018 10:17

Tgt Ion: 83 Resp: 4138  
Ion Ratio Lower Upper  
83 100  
85 51.7 44.6 82.8



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

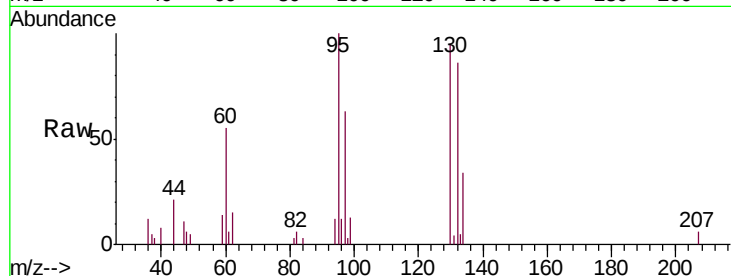




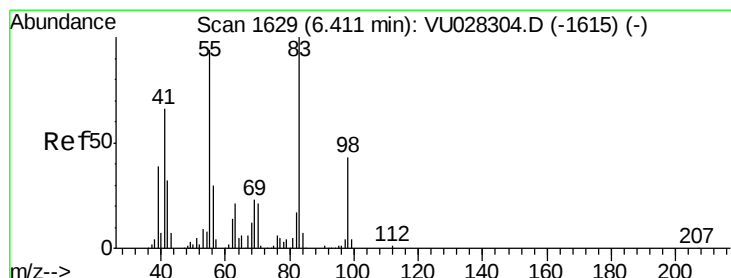
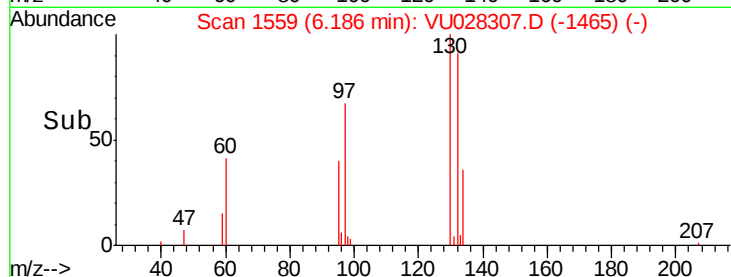
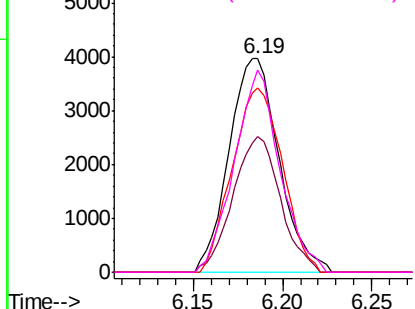
#34  
 Trichloroethene  
 Concen: 0.603 ug/L  
 RT: 6.19 min Scan# 1559  
 Delta R.T. 0.00 min  
 Lab File: VU028307.D  
 Acq: 21 Nov 2018 10:17

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 H0FP6

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 95    | Resp: | 7758  |
| Ion      | Ratio | Lower | Upper |
| 95       | 100   |       |       |
| 97       | 63.4  | 46.5  | 86.3  |
| 132      | 86.2  | 58.9  | 109.3 |
| 130      | 94.8  | 61.3  | 113.9 |

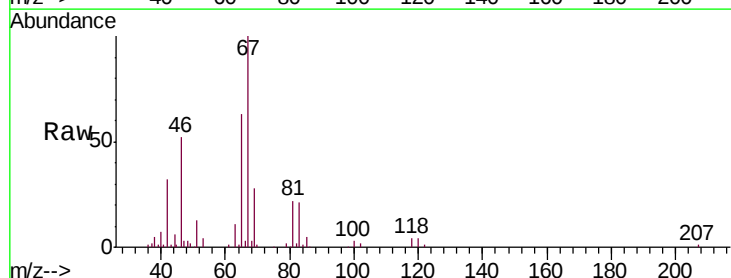


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 96.95 (96.65 to 97.65): VU0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

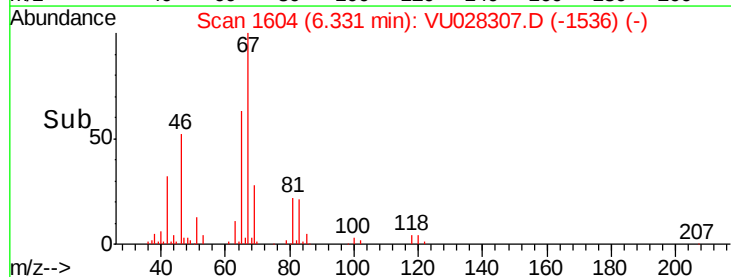
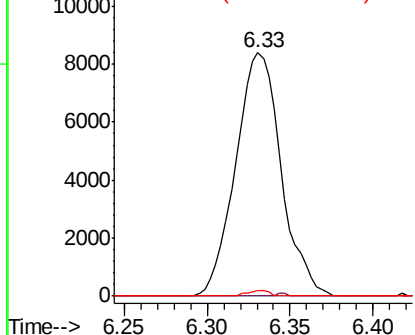


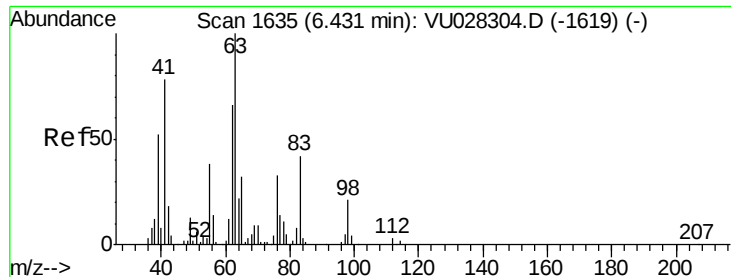
#35  
 Methylcyclohexane  
 Concen: 0.793 ug/L  
 RT: 6.33 min Scan# 1604  
 Delta R.T. -0.08 min  
 Lab File: VU028307.D  
 Acq: 21 Nov 2018 10:17

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 16065  |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 0.3   | 73.2  | 109.8# |
| 98       | 1.1   | 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: 0.555 ug/L

RT: 6.33 min Scan# 1605

Delta R.T. -0.10 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

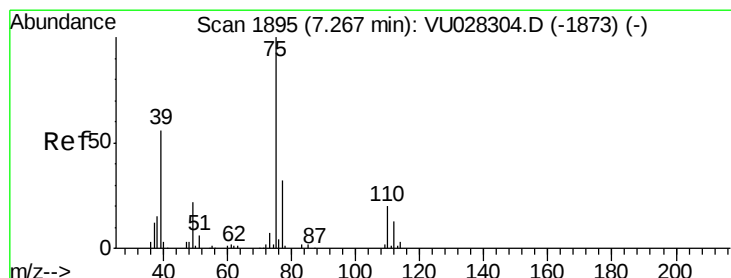
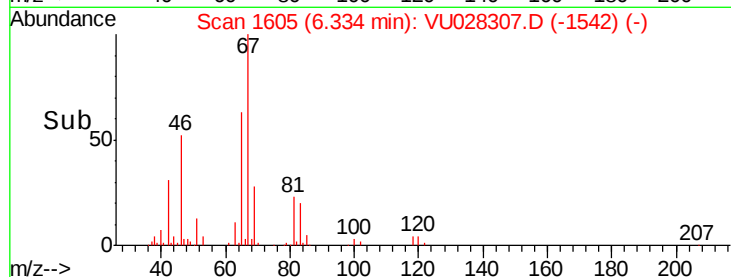
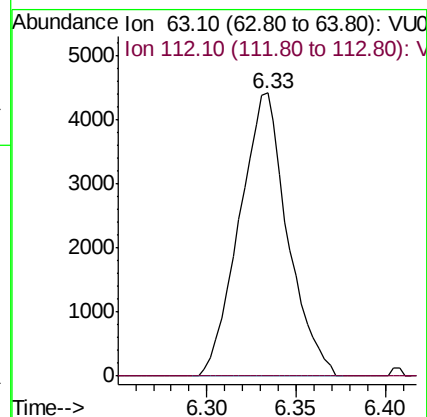
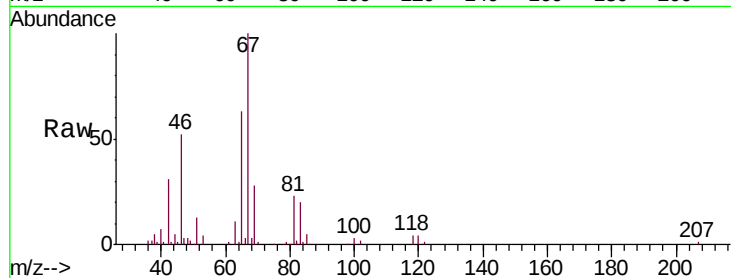
H0FP6

Tgt Ion: 63 Resp: 8310

Ion Ratio Lower Upper

63 100

112 0.0 2.2 3.2#



#39

cis-1,3-Dichloropropene

Concen: 0.101 ug/L

RT: 7.23 min Scan# 1884

Delta R.T. -0.04 min

Lab File: VU028307.D

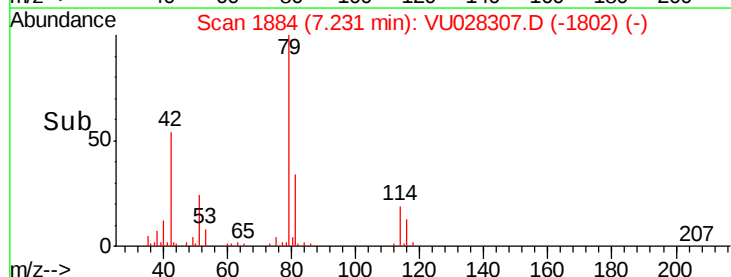
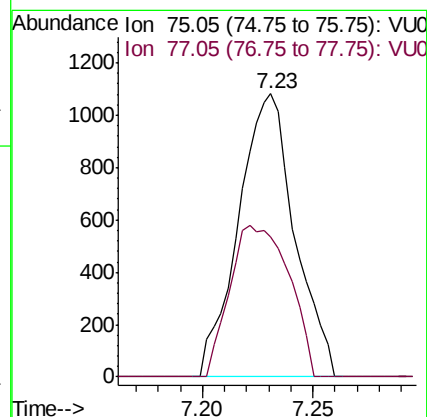
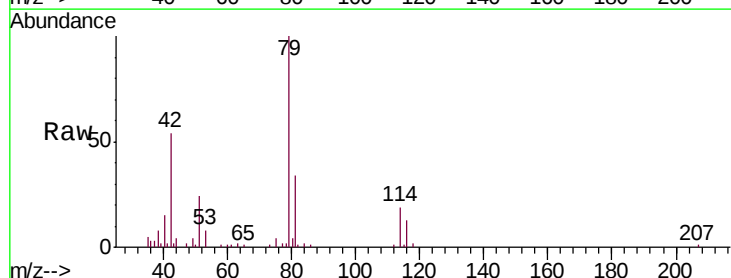
Acq: 21 Nov 2018 10:17

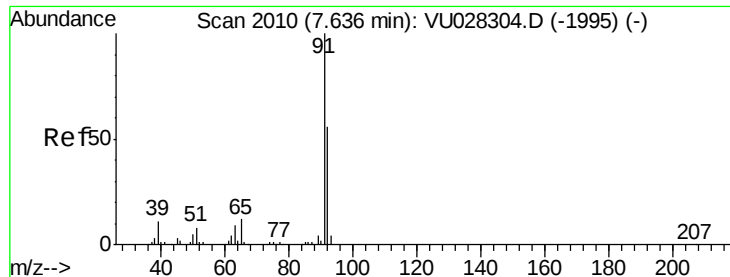
Tgt Ion: 75 Resp: 1915

Ion Ratio Lower Upper

75 100

77 49.5 21.7 40.3#





#42

Toluene

Concen: 0.138 ug/L

RT: 7.64 min Scan# 2010

Delta R.T. -0.00 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

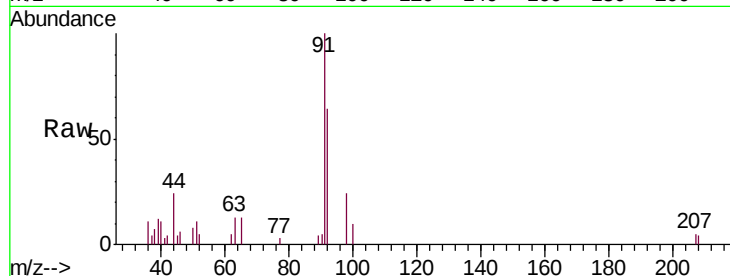
H0FP6

Tgt Ion: 91 Resp: 7346

Ion Ratio Lower Upper

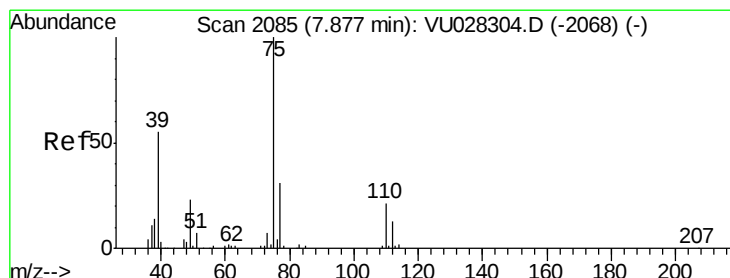
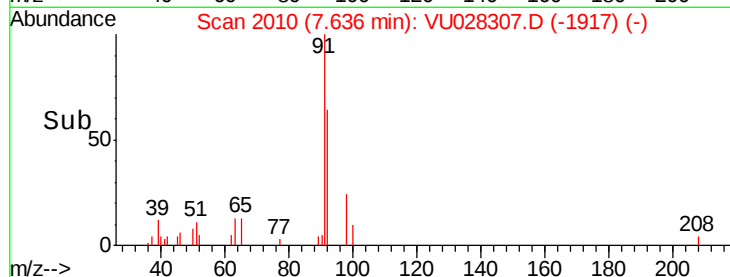
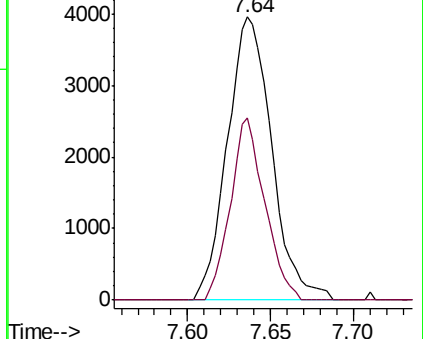
91 100

92 64.3 39.0 72.4



Abundance Ion 91.15 (90.85 to 91.85): VU0

Ion 92.15 (91.85 to 92.85): VU0



#44

trans-1,3-Dichloropropene

Concen: 0.109 ug/L

RT: 7.85 min Scan# 2076

Delta R.T. -0.03 min

Lab File: VU028307.D

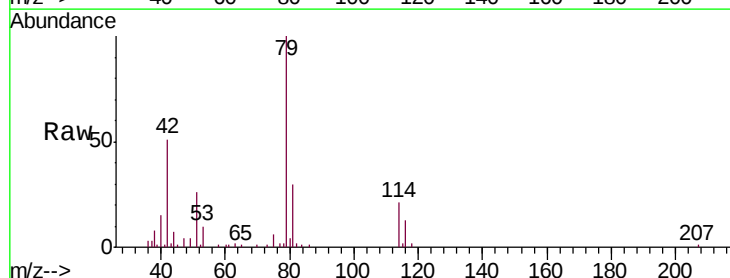
Acq: 21 Nov 2018 10:17

Tgt Ion: 75 Resp: 1559

Ion Ratio Lower Upper

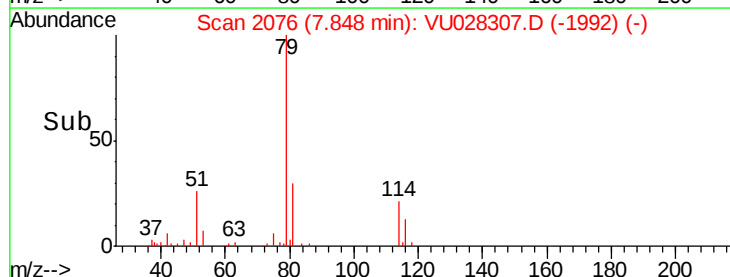
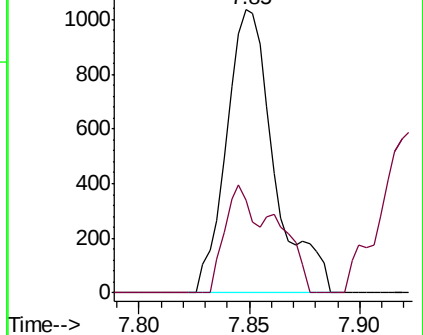
75 100

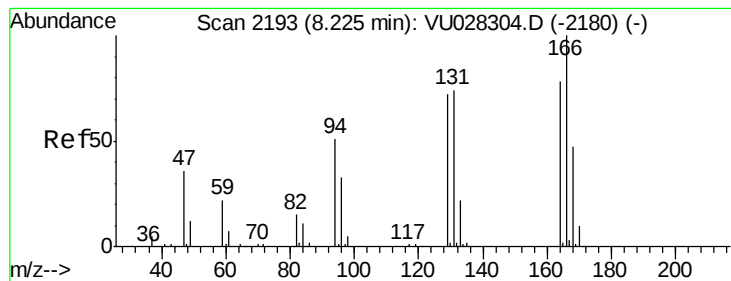
77 32.7 21.8 40.6



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0





#47

Tetrachloroethene

Concen: 0.071 ug/L

RT: 8.22 min Scan# 2191

Delta R.T. -0.01 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

H0FP6

Tgt Ion:164 Resp: 631

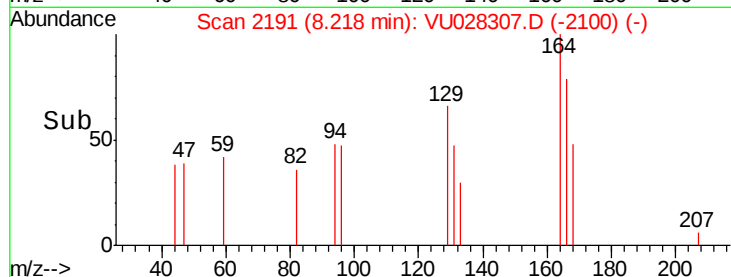
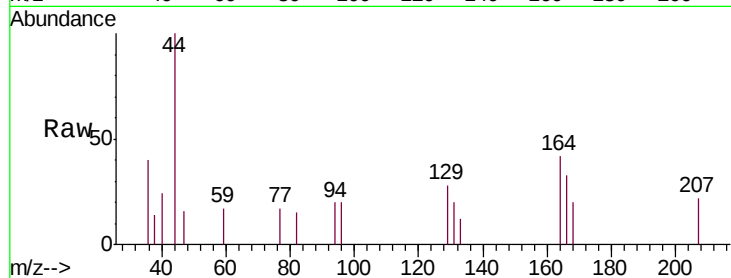
Ion Ratio Lower Upper

164 100

129 66.4 67.6 125.6#

131 47.4 66.3 123.1#

166 79.1 89.2 165.6#

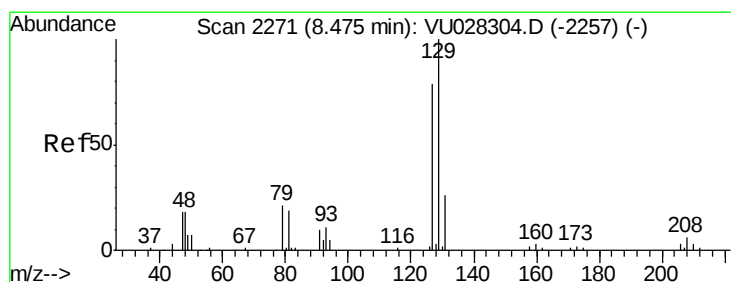
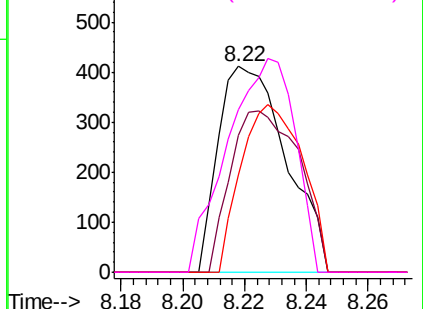


Abundance Ion 163.90 (163.60 to 164.60): V

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



#49

Dibromochloromethane

Concen: 0.055 ug/L

RT: 8.22 min Scan# 2193

Delta R.T. -0.25 min

Lab File: VU028307.D

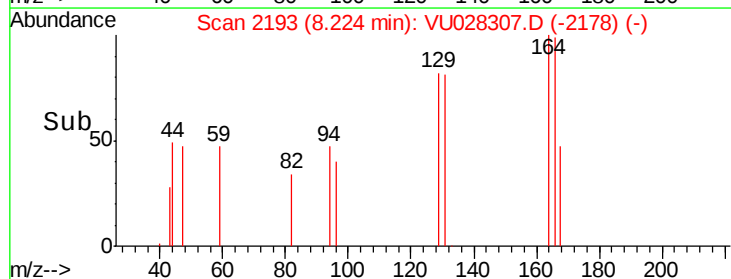
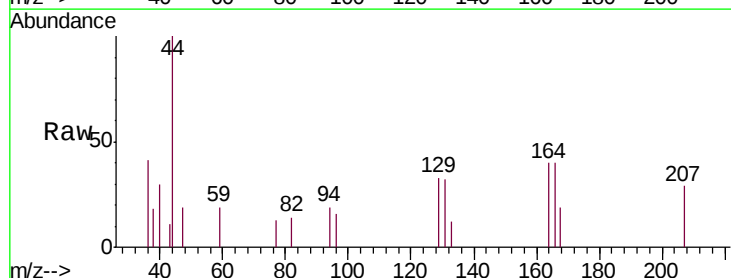
Acq: 21 Nov 2018 10:17

Tgt Ion:129 Resp: 501

Ion Ratio Lower Upper

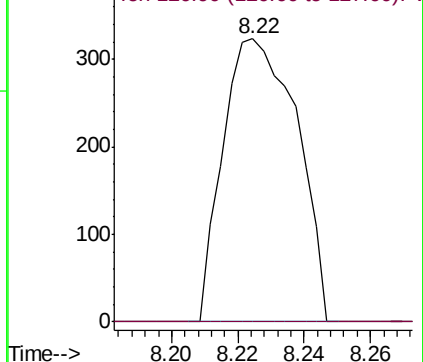
129 100

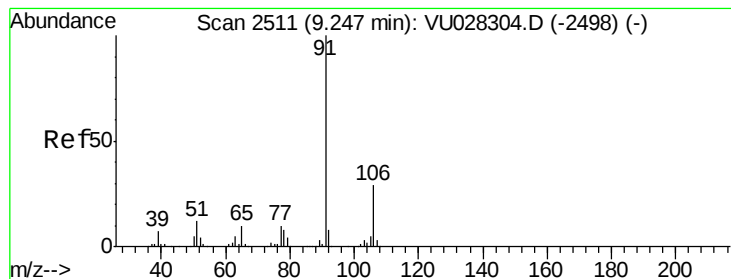
127 0.0 54.7 101.5#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V





#52

Ethylbenzene

Concen: 0.047 ug/L

RT: 9.25 min Scan# 2512

Delta R.T. 0.00 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

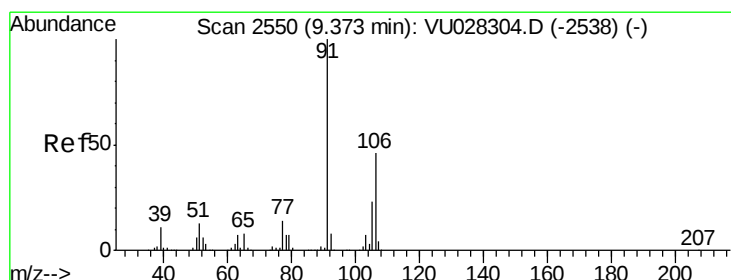
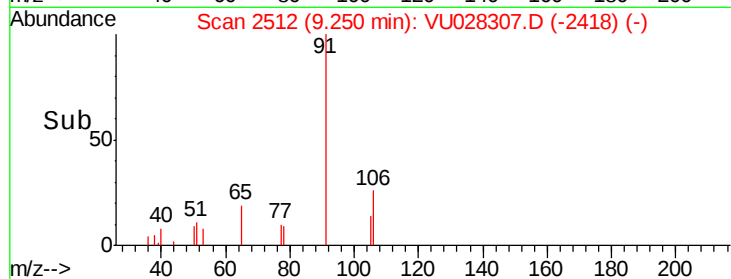
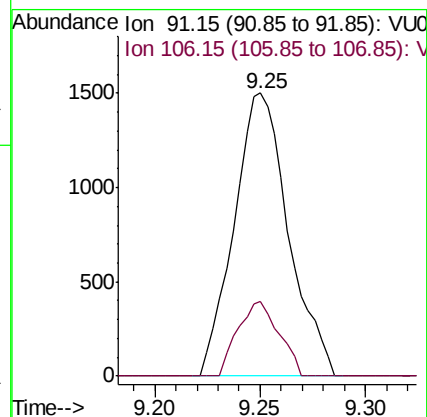
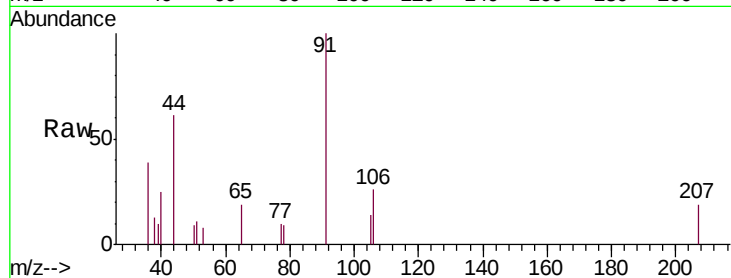
H0FP6

Tgt Ion: 91 Resp: 2684

Ion Ratio Lower Upper

91 100

106 26.2 19.3 35.9



#53

m,p-xylene

Concen: 0.087 ug/L

RT: 9.38 min Scan# 2552

Delta R.T. 0.01 min

Lab File: VU028307.D

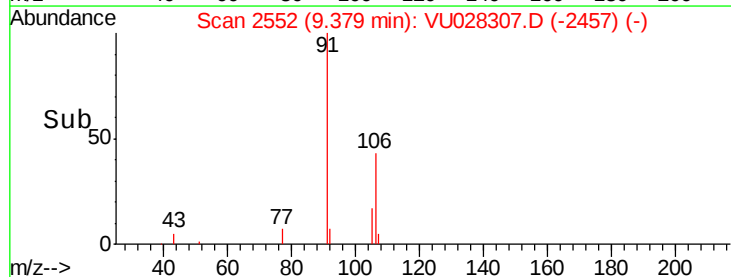
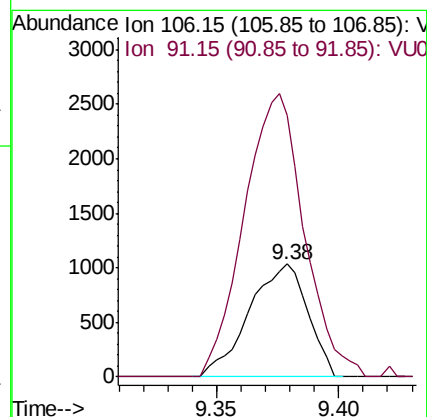
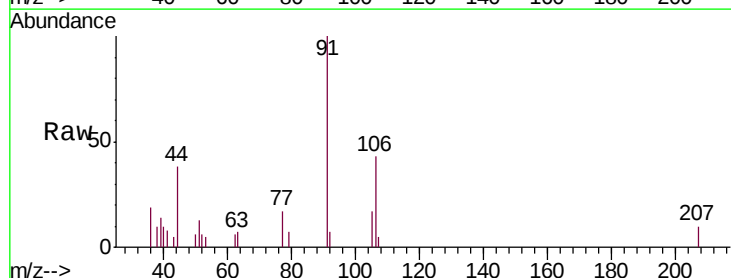
Acq: 21 Nov 2018 10:17

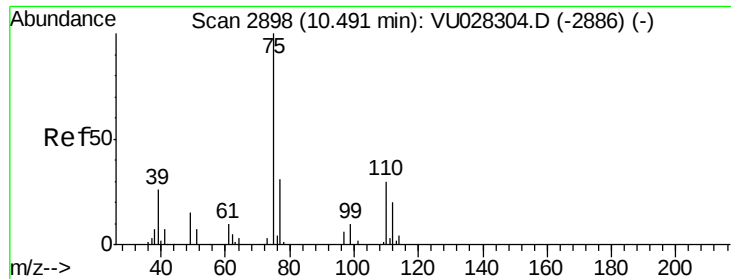
Tgt Ion: 106 Resp: 1723

Ion Ratio Lower Upper

106 100

91 232.7 150.6 279.6





#59

1,2,3-Trichloropropane

Concen: 1.265 ug/L

RT: 11.48 min Scan# 3207

Delta R.T. 0.99 min

Lab File: VU028307.D

Acq: 21 Nov 2018 10:17

Instrument :

MSVOA\_U

ClientSampleId :

H0FP6

Tgt Ion: 75 Resp: 10954

Ion Ratio Lower Upper

75 100

77 33.2 25.7 38.5

