

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU041620\  
 Data File : VU037748.D  
 Acq On : 16 Apr 2020 12:32  
 Operator : JC/MD  
 Sample : L2296-04  
 Misc : 25mL/MSVOA U/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BFS90

Quant Time: Apr 17 02:59:34 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR041420WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Apr 17 01:29:02 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.28  | 114  | 265352   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.44  | 117  | 258387   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 129977   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 92747    | 4.62     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 92.40%  |
| 7) Chloroethane-d5             | 1.93   | 69    | 79083    | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 93.40%  |
| 11) 1,1-Dichloroethene-d2      | 2.59   | 63    | 122686   | 3.44     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 68.80%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 283112   | 51.34    | ug/L | -0.01   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 102.68% |
| 24) Chloroform-d               | 5.10   | 84    | 153873   | 4.80     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 96.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.74   | 65    | 91213    | 4.95     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 99.00%  |
| 32) Benzene-d6                 | 5.76   | 84    | 327215   | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 93.40%  |
| 36) 1,2-Dichloropropane-d6     | 6.72   | 67    | 110248   | 4.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 97.00%  |
| 41) Toluene-d8                 | 7.92   | 98    | 292290   | 4.61     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 92.20%  |
| 43) trans-1,3-Dichloropropene- | 8.20   | 79    | 45462    | 4.45     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 89.00%  |
| 46) 2-Hexanone-d5              | 8.65   | 63    | 255124   | 48.83    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 97.66%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.77  | 84    | 85862    | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 95.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.21  | 152   | 111112   | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 95.80%  |

## Target Compounds

| Target Compounds             | R.T.  | QIon | Response | Conc   | Units | Ovalue |
|------------------------------|-------|------|----------|--------|-------|--------|
| 5) Vinyl chloride            | 1.62  | 62   | 51279    | 1.834  | ug/L  | 89     |
| 12) 1,1-Dichloroethene       | 2.60  | 96   | 8597     | 0.469  | ug/L  | # 1    |
| 13) Acetone                  | 2.66  | 43   | 3119     | 0.858  | ug/L  | 99     |
| 18) trans-1,2-Dichloroethene | 3.39  | 96   | 2665     | 0.134  | ug/L  | 83     |
| 19) 1,1-Dichloroethane       | 3.91  | 63   | 40705    | 1.060  | ug/L  | 100    |
| 22) cis-1,2-Dichloroethene   | 4.71  | 96   | 245349   | 11.438 | ug/L  | 95     |
| 25) Chloroform               | 5.13  | 83   | 130404   | 3.575  | ug/L  | 99     |
| 29) 1,1,1-Trichloroethane    | 5.35  | 97   | 78265    | 2.496  | ug/L  | 98     |
| 30) Cyclohexane              | 5.42  | 56   | 7391     | 0.190  | ug/L  | 93     |
| 34) Trichloroethene          | 6.57  | 95   | 10283    | 0.490  | ug/L  | 94     |
| 51) Chlorobenzene            | 9.47  | 112  | 32508    | 0.596  | ug/L  | 97     |
| 62) 1,3-Dichlorobenzene      | 11.76 | 146  | 8797     | 0.202  | ug/L  | 99     |
| 63) 1,4-Dichlorobenzene      | 11.85 | 146  | 8742     | 0.200  | ug/L  | 95     |
| 65) 1,2-Dichlorobenzene      | 12.23 | 146  | 3868     | 0.094  | ug/L  | 90     |
| 68) 1,2,4-trichlorobenzene   | 13.87 | 180  | 10465    | 0.357  | ug/L  | 94     |
| 70) 1,2,3-Trichlorobenzene   | 14.36 | 180  | 8693     | 0.333  | ug/L  | 98     |

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Quant Time: Apr 17 02:59:34 2020  
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Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Apr 17 01:29:02 2020  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

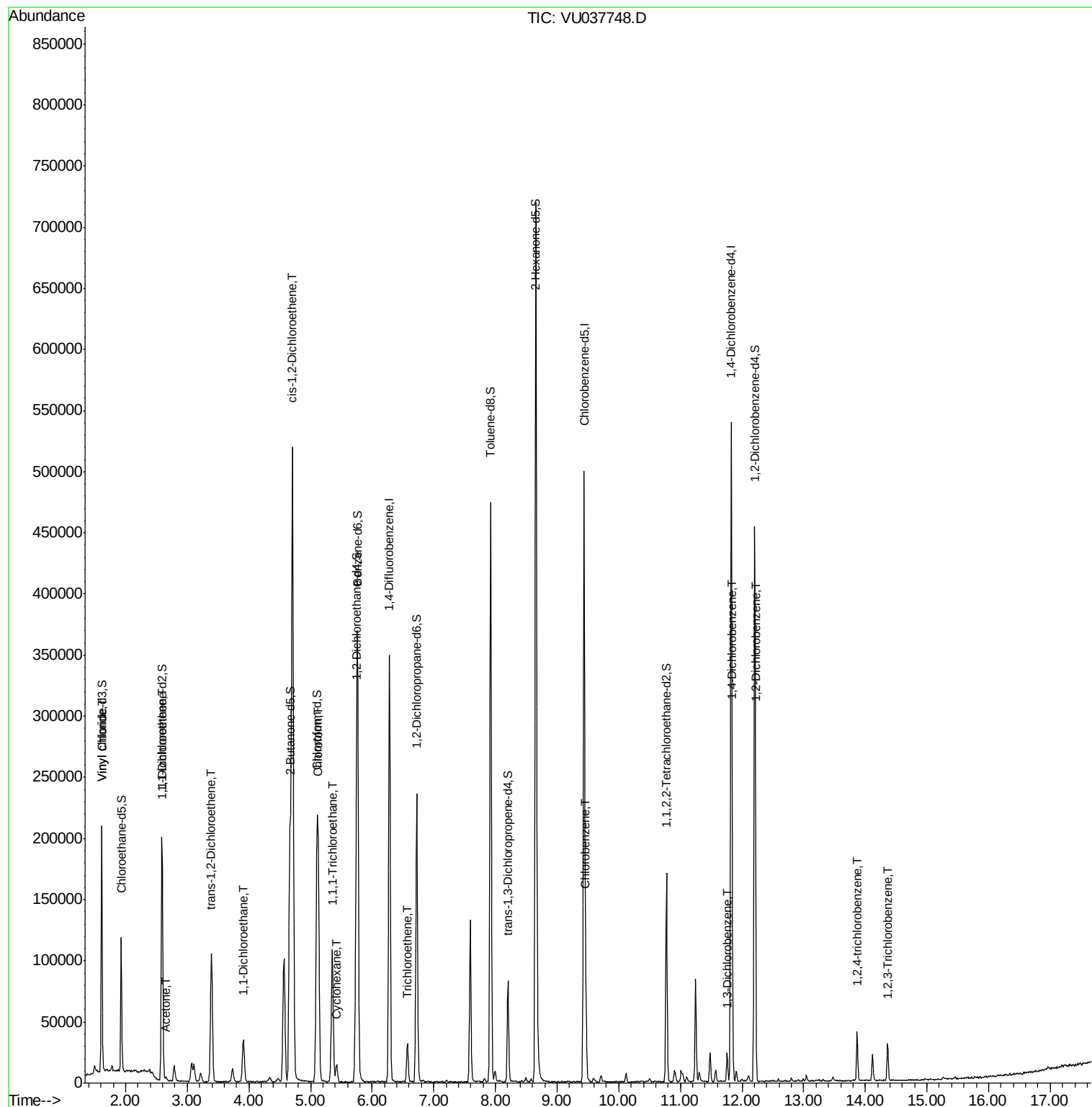
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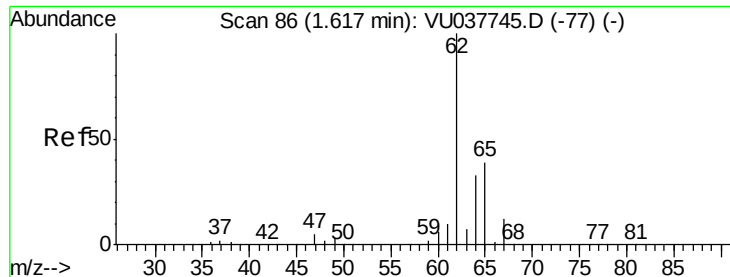
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU041620\  
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Quant Title : TRACE VOA SOM01.0  
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Response via : Initial Calibration





#5

Vinyl chloride

Concen: 1.834 ug/L

RT: 1.62 min Scan# 86

Delta R.T. 0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

Instrument :

MSVOA\_U

ClientSampled :

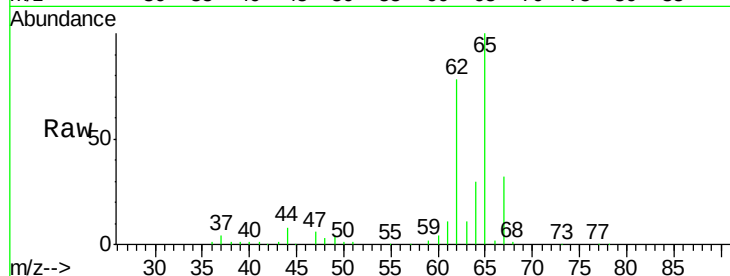
BFS90

Tot Ion: 62 Resp: 51279

Ion Ratio Lower Upper

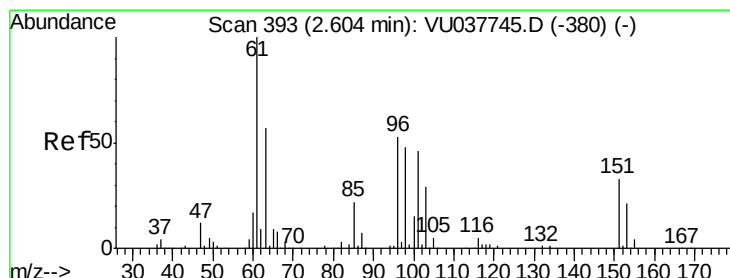
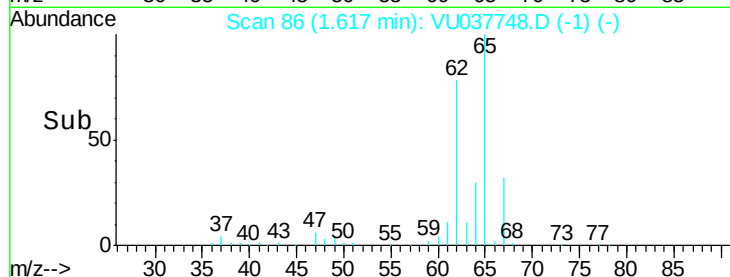
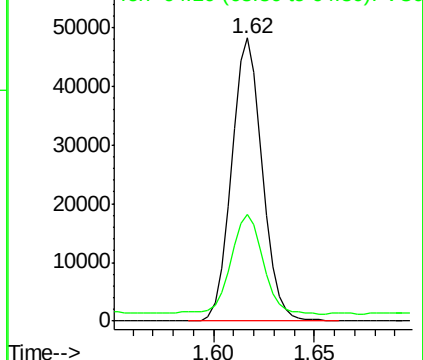
62 100

64 37.8 22.1 41.1



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#12

1,1-Dichloroethene

Concen: 0.469 ug/L

RT: 2.60 min Scan# 393

Delta R.T. 0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

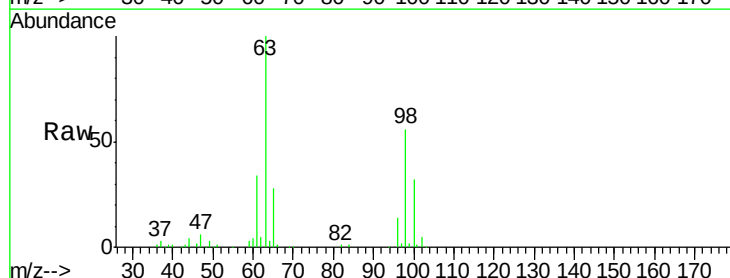
Tgt Ion: 96 Resp: 8597

Ion Ratio Lower Upper

96 100

61 243.6 127.7 237.3#

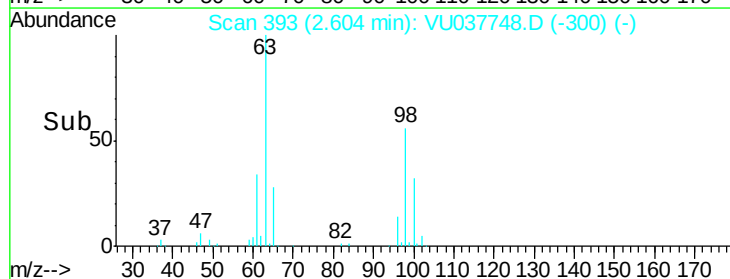
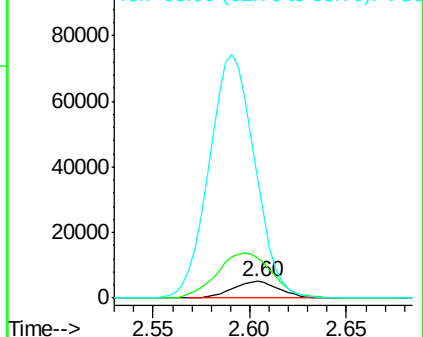
63 717.8 85.0 157.8#

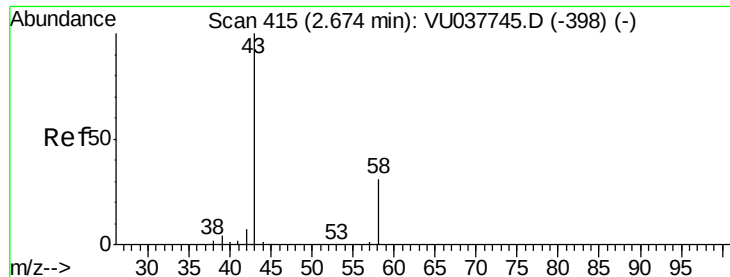


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 0.858 ug/L

RT: 2.66 min Scan# 409

Delta R.T. -0.02 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

Instrument :

MSVOA\_U

ClientSampleId :

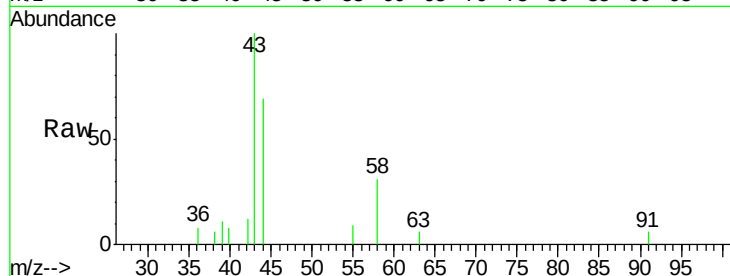
BFS90

Tot Ion: 43 Resp: 3119

Ion Ratio Lower Upper

43 100

58 32.1 0.0 64.8



Abundance Ion 43.05 (42.75 to 43.75): VU037748.D (-409) (-)

Ion 58.05 (57.75 to 58.75): VU037748.D (-409) (-)

2000

1500

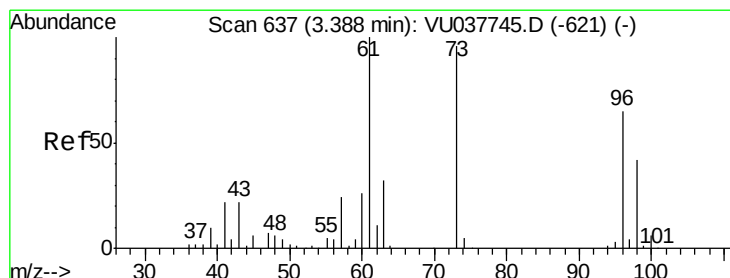
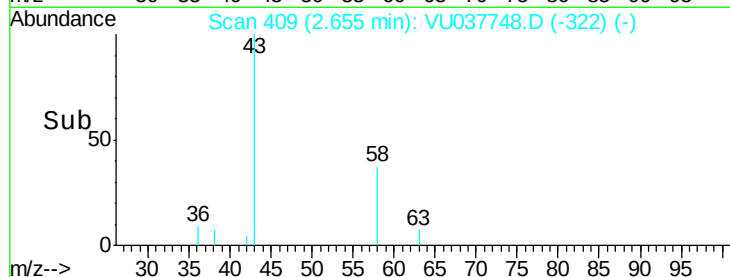
1000

500

0

Time-->

2.60 2.65 2.70



#18

trans-1,2-Dichloroethene

Concen: 0.134 ug/L

RT: 3.39 min Scan# 636

Delta R.T. -0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

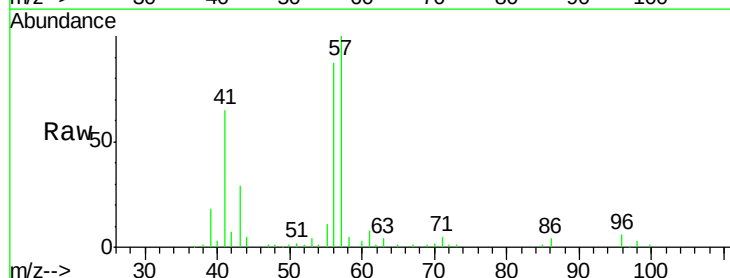
Tgt Ion: 96 Resp: 2665

Ion Ratio Lower Upper

96 100

61 129.9 106.7 198.3

98 52.1 44.3 82.3



Abundance Ion 96.00 (95.70 to 96.70): VU037748.D (-636) (-)

Ion 61.05 (60.75 to 61.75): VU037748.D (-636) (-)

Ion 97.95 (97.65 to 98.65): VU037748.D (-636) (-)

3000

2500

2000

1500

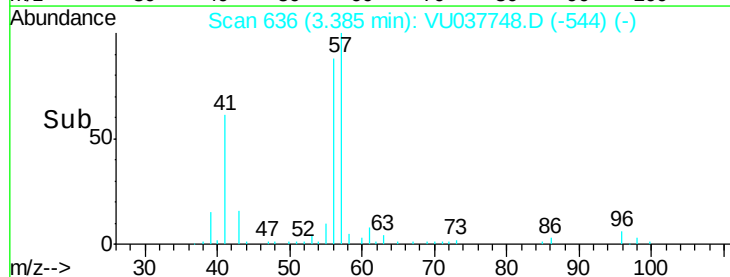
1000

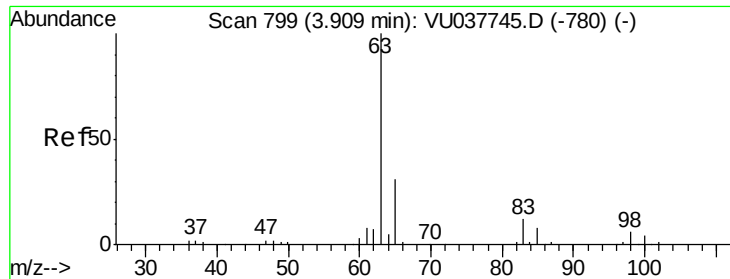
500

0

Time-->

3.35 3.40

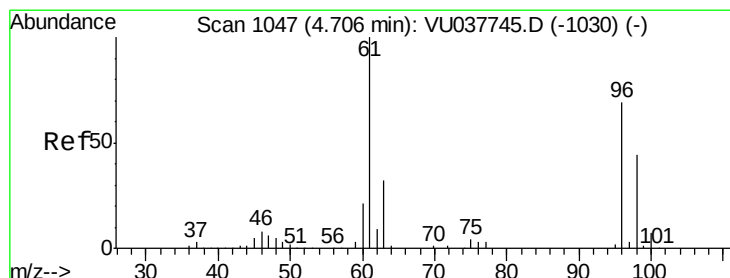
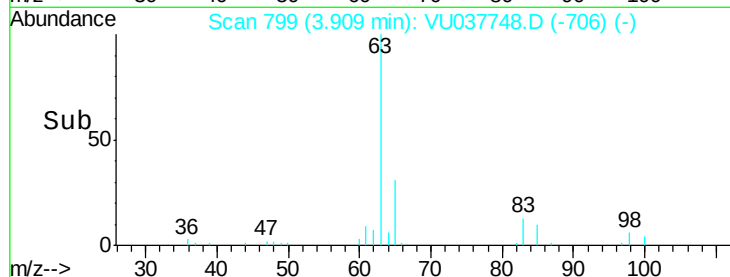
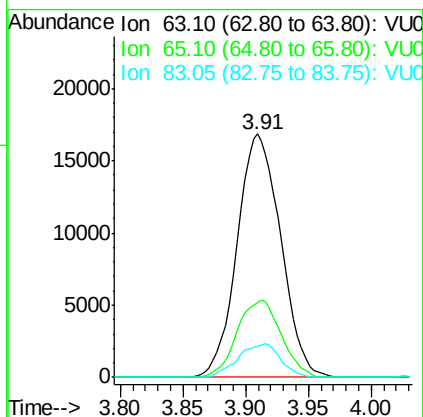
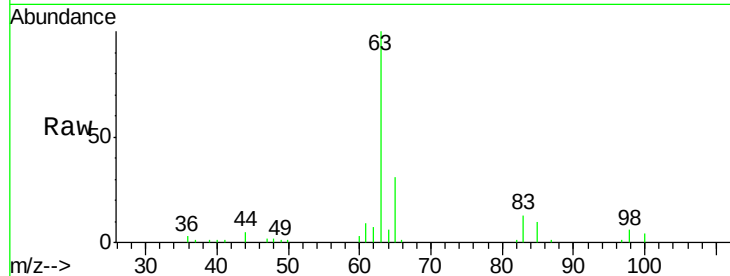




#19  
 1,1-Dichloroethane  
 Concen: 1.060 ug/L  
 RT: 3.91 min Scan# 799  
 Delta R.T. 0.00 min  
 Lab File: VU037748.D  
 Acq: 16 Apr 2020 12:32

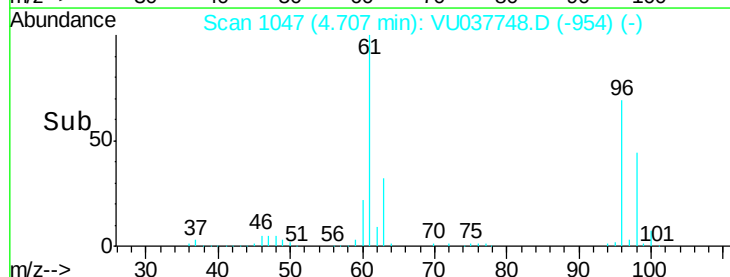
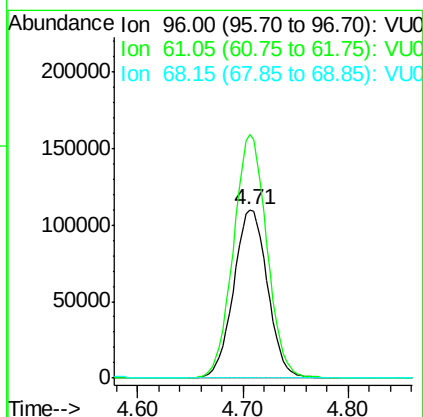
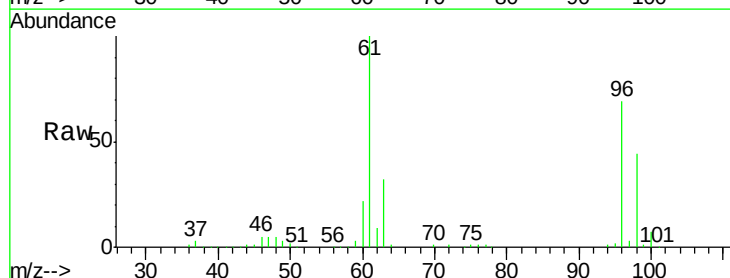
Instrument :  
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 ClientSampleId :  
 BFS90

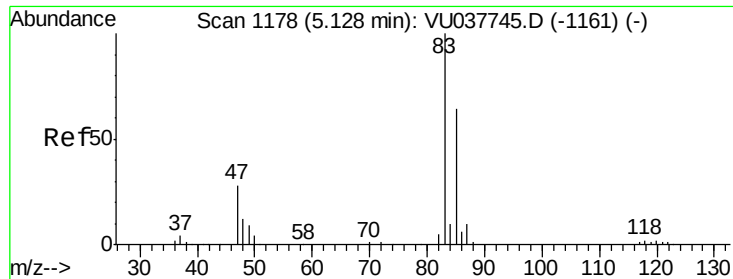
Tot Ion: 63 Resp: 40705  
 Ion Ratio Lower Upper  
 63 100  
 65 30.8 21.6 40.2  
 83 12.6 8.6 16.0



#22  
 cis-1,2-Dichloroethene  
 Concen: 11.438 ug/L  
 RT: 4.71 min Scan# 1047  
 Delta R.T. 0.00 min  
 Lab File: VU037748.D  
 Acq: 16 Apr 2020 12:32

Tgt Ion: 96 Resp: 245349  
 Ion Ratio Lower Upper  
 96 100  
 61 144.4 97.0 180.2  
 68 0.0 0.0 0.0

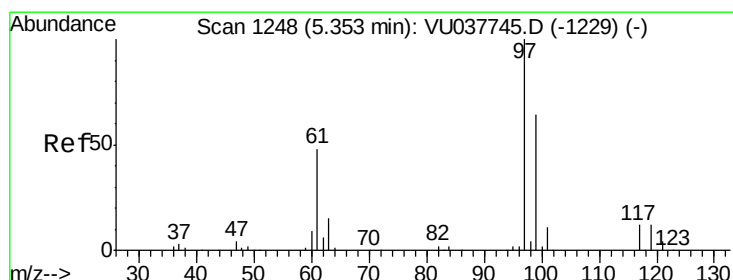
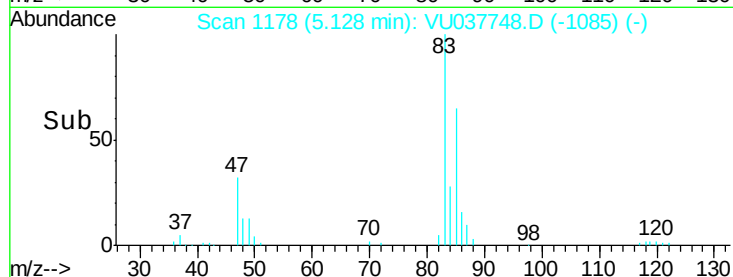
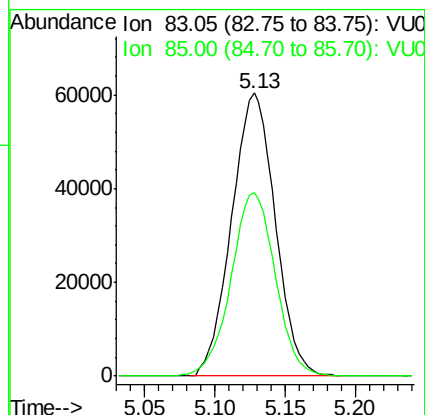
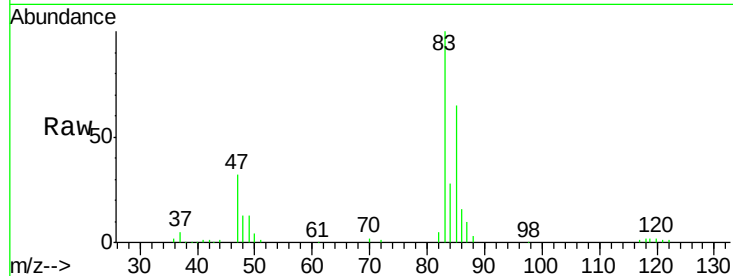




#25  
Chloroform  
Concen: 3.575 ug/L  
RT: 5.13 min Scan# 1178  
Delta R.T. 0.00 min  
Lab File: VU037748.D  
Acq: 16 Apr 2020 12:32

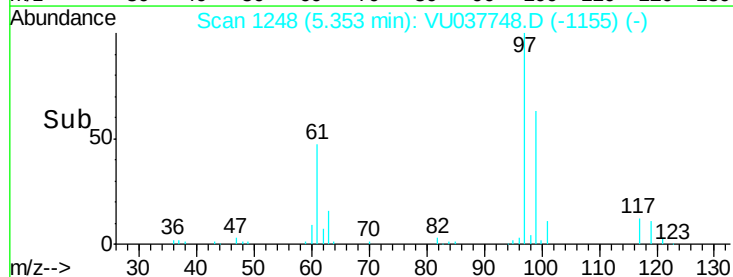
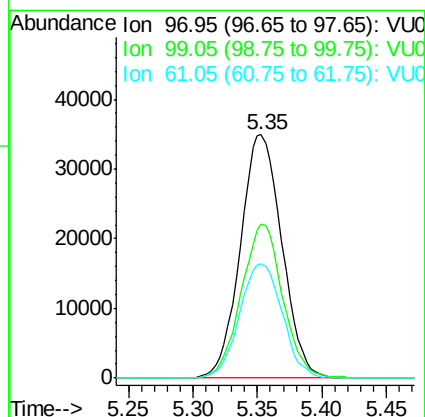
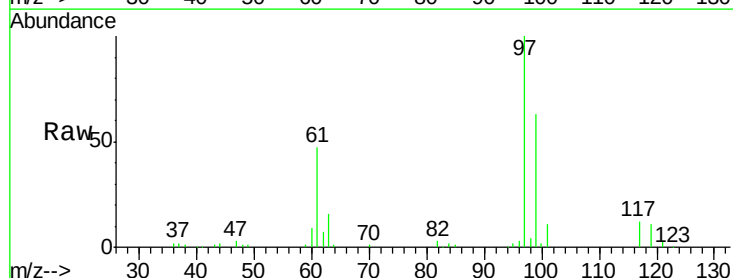
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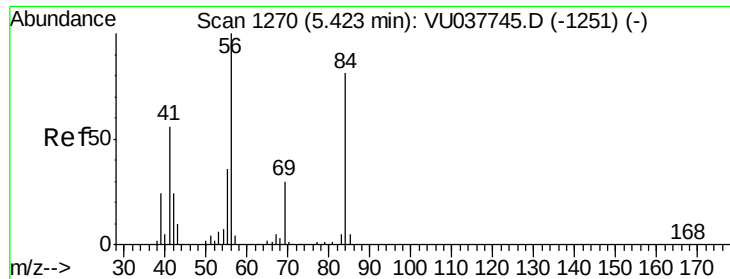
Tot Ion: 83 Resp: 130404  
Ion Ratio Lower Upper  
83 100  
85 64.7 44.9 83.3



#29  
1,1,1-Trichloroethane  
Concen: 2.496 ug/L  
RT: 5.35 min Scan# 1248  
Delta R.T. 0.00 min  
Lab File: VU037748.D  
Acq: 16 Apr 2020 12:32

Tgt Ion: 97 Resp: 78265  
Ion Ratio Lower Upper  
97 100  
99 63.4 52.0 78.0  
61 48.5 37.8 56.8

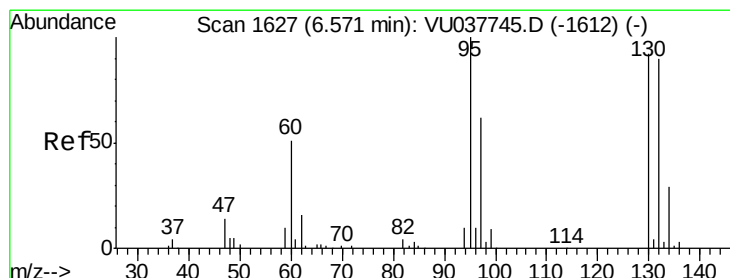
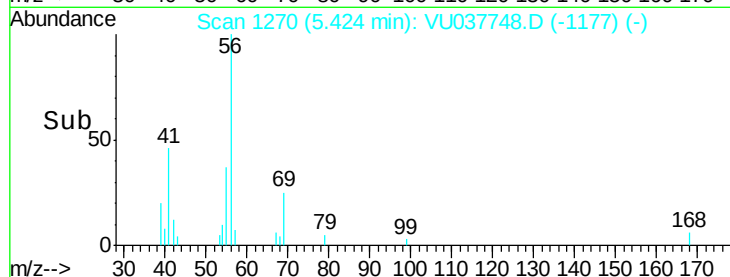
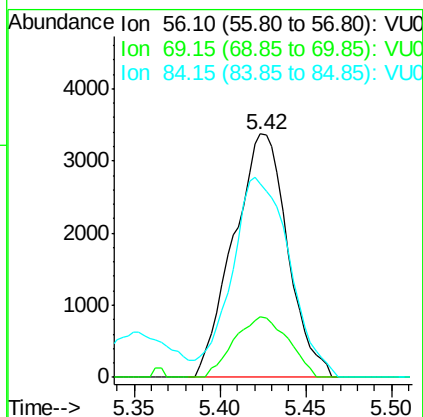
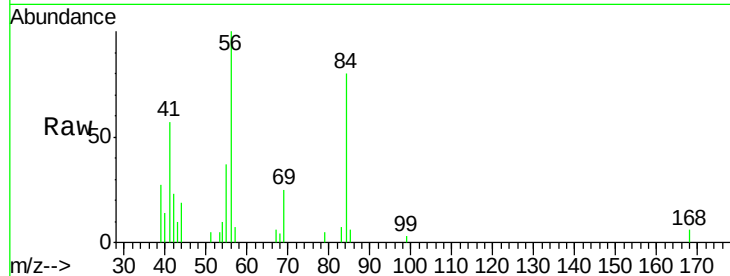




#30  
Cyclohexane  
Concen: 0.190 ug/L  
RT: 5.42 min Scan# 1270  
Delta R.T. 0.00 min  
Lab File: VU037748.D  
Acq: 16 Apr 2020 12:32

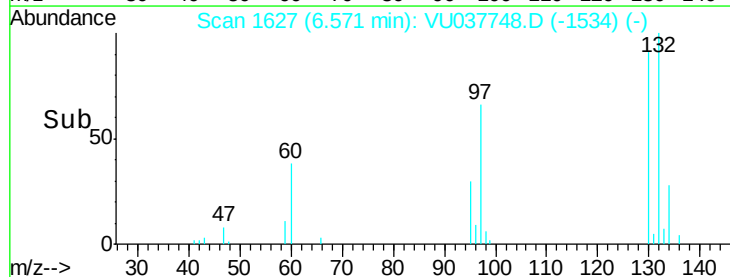
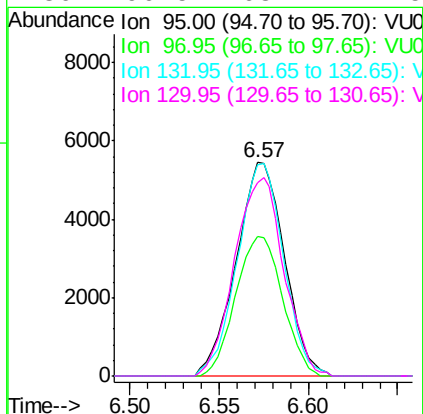
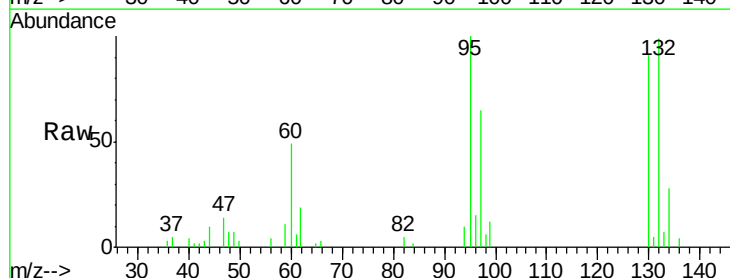
Instrument :  
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Tot Ion: 56 Resp: 7391  
Ion Ratio Lower Upper  
56 100  
69 24.8 23.9 35.9  
84 87.9 65.6 98.4

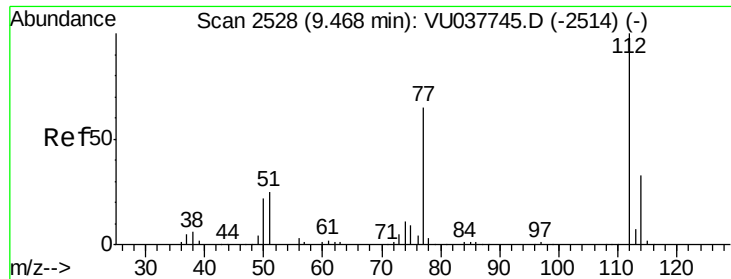


#34  
Trichloroethene  
Concen: 0.490 ug/L  
RT: 6.57 min Scan# 1627  
Delta R.T. 0.00 min  
Lab File: VU037748.D  
Acq: 16 Apr 2020 12:32

Tgt Ion: 95 Resp: 10283  
Ion Ratio Lower Upper  
95 100  
97 65.0 45.4 84.2  
132 99.1 63.7 118.3  
130 90.5 68.7 127.5







#51

Chlorobenzene

Concen: 0.596 ug/L

RT: 9.47 min Scan# 2528

Delta R.T. 0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

Instrument :

MSVOA\_U

ClientSampleId :

BFS90

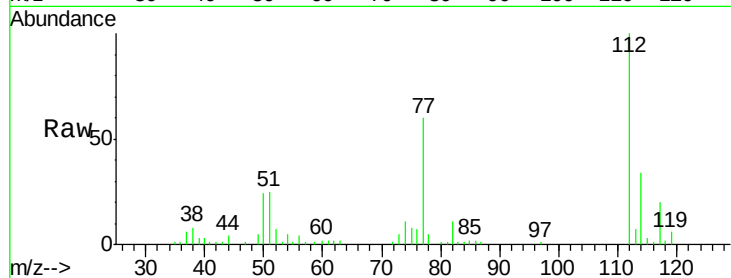
Tot Ion:112 Resp: 32508

Ion Ratio Lower Upper

112 100

114 33.8 22.6 42.0

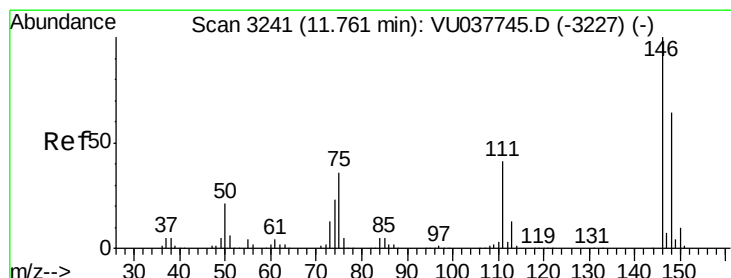
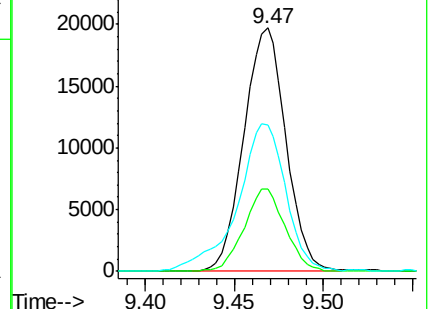
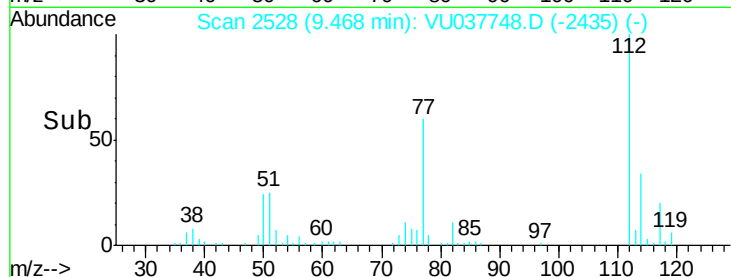
77 60.0 50.2 75.4



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): V



#62

1,3-Dichlorobenzene

Concen: 0.202 ug/L

RT: 11.76 min Scan# 3241

Delta R.T. 0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

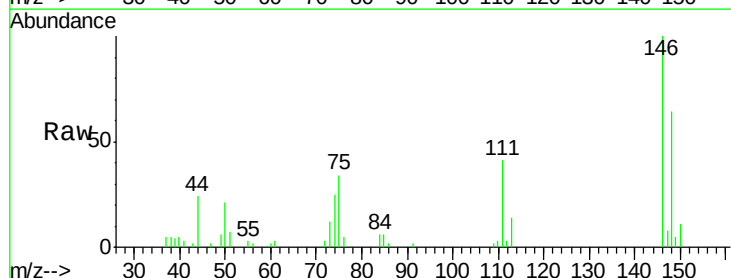
Tgt Ion:146 Resp: 8797

Ion Ratio Lower Upper

146 100

111 41.2 29.8 55.3

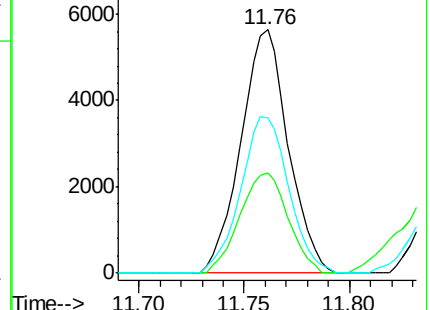
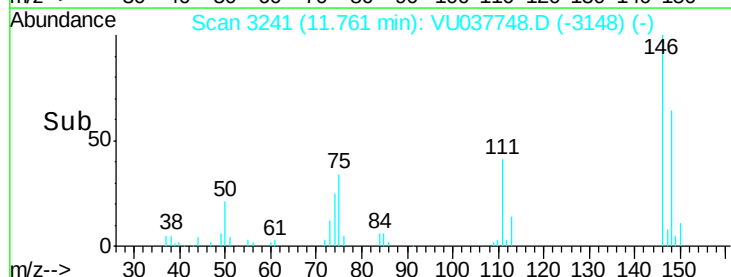
148 63.6 44.5 82.7

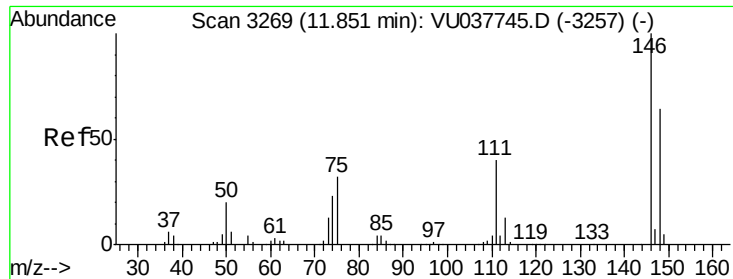


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#63

1,4-Dichlorobenzene

Concen: 0.200 ug/L

RT: 11.85 min Scan# 3268

Delta R.T. -0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

Instrument :

MSVOA\_U

ClientSampleId :

BFS90

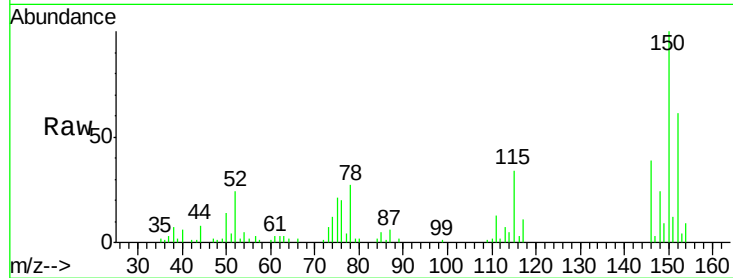
Tot Ion:146 Resp: 8742

Ion Ratio Lower Upper

146 100

111 33.3 28.4 52.8

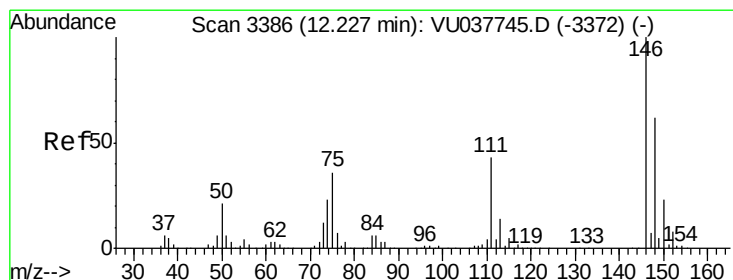
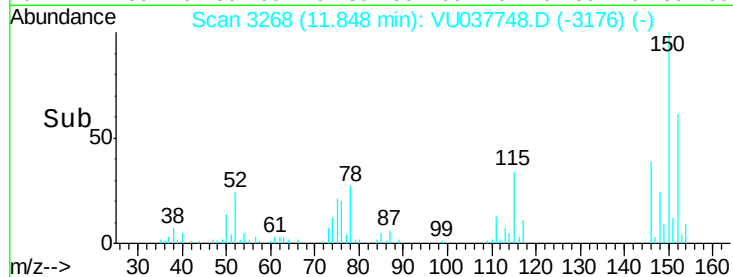
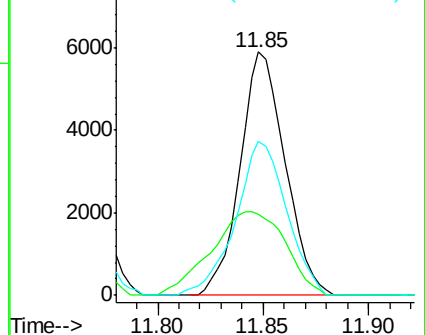
148 63.2 44.9 83.3



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: 0.094 ug/L

RT: 12.23 min Scan# 3386

Delta R.T. 0.00 min

Lab File: VU037748.D

Acq: 16 Apr 2020 12:32

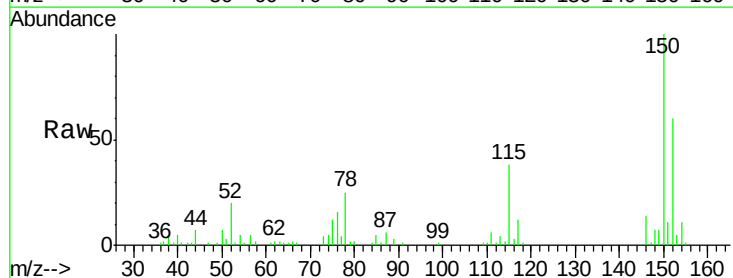
Tgt Ion:146 Resp: 3868

Ion Ratio Lower Upper

146 100

111 40.6 35.0 52.6

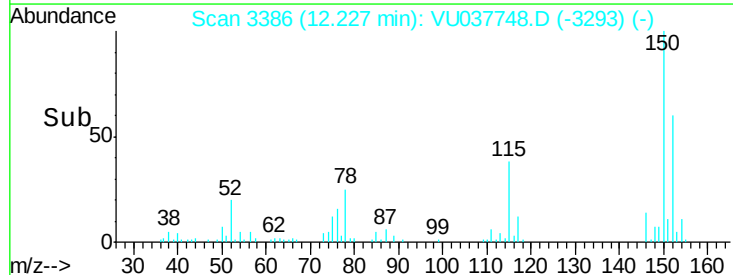
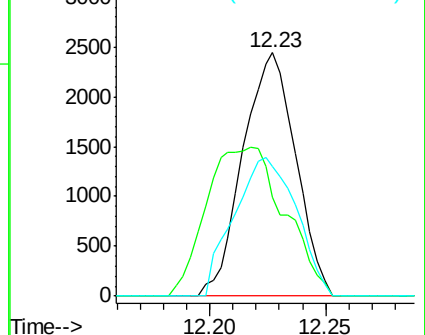
148 53.3 51.5 77.3

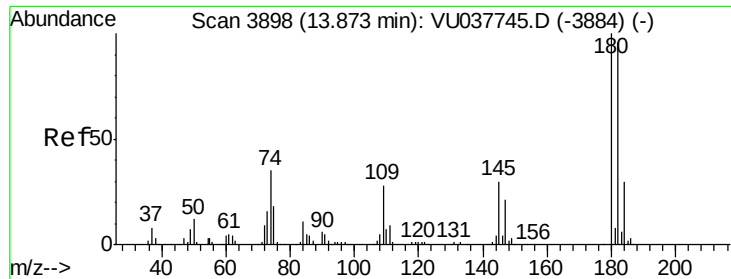


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

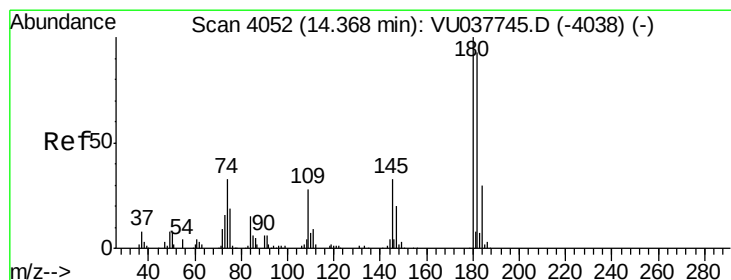
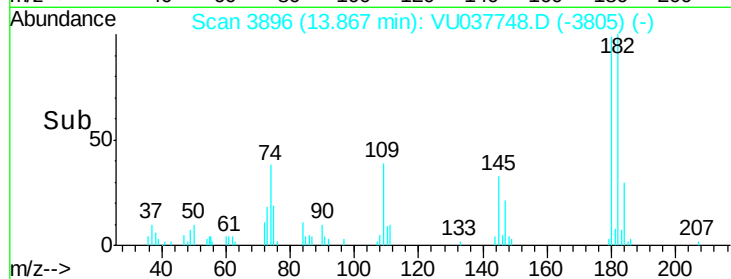
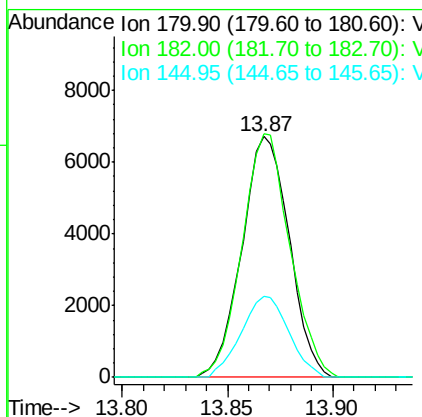
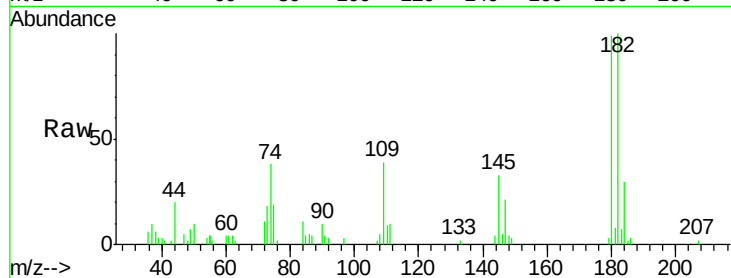




#68  
 1,2,4-trichlorobenzene  
 Concen: 0.357 ug/L  
 RT: 13.87 min Scan# 3896  
 Delta R.T. -0.01 min  
 Lab File: VU037748.D  
 Acq: 16 Apr 2020 12:32

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BFS90

Tot Ion:180 Resp: 10465  
 Ion Ratio Lower Upper  
 180 100  
 182 102.2 76.4 114.6  
 145 33.8 25.1 37.7



#70  
 1,2,3-Trichlorobenzene  
 Concen: 0.333 ug/L  
 RT: 14.36 min Scan# 4050  
 Delta R.T. -0.01 min  
 Lab File: VU037748.D  
 Acq: 16 Apr 2020 12:32

Tgt Ion:180 Resp: 8693  
 Ion Ratio Lower Upper  
 180 100  
 182 94.2 76.6 115.0  
 145 34.3 26.7 40.1

