

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU051520\  
 Data File : VU038197.D  
 Acq On : 15 May 2020 14:53  
 Operator : JC/MD  
 Sample : L2657-03  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BFST6

Quant Time: May 16 06:05:02 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR050720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Sat May 16 03:30:00 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.28  | 114  | 339914   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.44  | 117  | 332106   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 156978   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61   | 65    | 111184   | 3.58     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 71.60%  |
| 7) Chloroethane-d5             | 1.93   | 69    | 111880   | 4.16     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 83.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.59   | 63    | 157412   | 3.03     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 60.60%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 392766   | 51.20    | ug/L | -0.01   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 102.40% |
| 24) Chloroform-d               | 5.10   | 84    | 213865   | 4.53     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 90.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.74   | 65    | 128259   | 4.74     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 94.80%  |
| 32) Benzene-d6                 | 5.76   | 84    | 450121   | 4.52     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 90.40%  |
| 36) 1,2-Dichloropropane-d6     | 6.72   | 67    | 148765   | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 92.60%  |
| 41) Toluene-d8                 | 7.92   | 98    | 387872   | 4.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 86.80%  |
| 43) trans-1,3-Dichloropropene- | 8.20   | 79    | 53040    | 4.12     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 82.40%  |
| 46) 2-Hexanone-d5              | 8.65   | 63    | 321113   | 52.85    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 105.70% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.77  | 84    | 118961   | 4.69     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 93.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.20  | 152   | 144673   | 4.74     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 94.80%  |

## Target Compounds

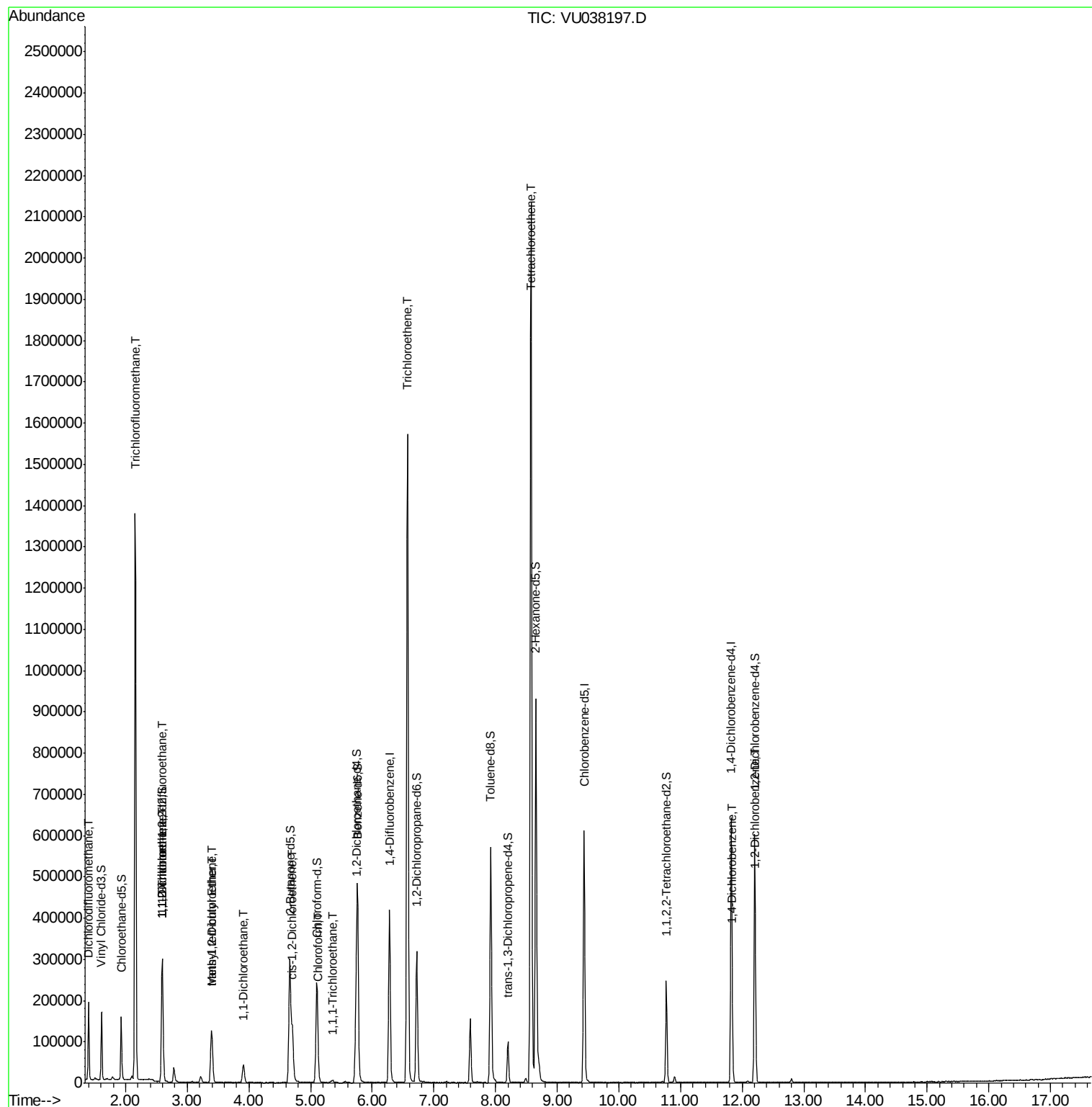
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.39  | 85   | 64988    | 2.090  | ug/L   | 99     |
| 9) Trichlorofluoromethane      | 2.16  | 101  | 875569   | 23.327 | ug/L   | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.61  | 101  | 22033    | 0.947  | ug/L   | 93     |
| 12) 1,1-Dichloroethene         | 2.61  | 96   | 16177    | 0.686  | ug/L # | 1      |
| 17) Methyl tert-butyl Ether    | 3.40  | 73   | 90579    | 1.382  | ug/L   | 99     |
| 18) trans-1,2-Dichloroethene   | 3.39  | 96   | 22275    | 0.865  | ug/L   | 97     |
| 19) 1,1-Dichloroethane         | 3.91  | 63   | 50223    | 0.998  | ug/L   | 96     |
| 22) cis-1,2-Dichloroethene     | 4.71  | 96   | 56455    | 2.034  | ug/L   | 99     |
| 25) Chloroform                 | 5.13  | 83   | 16786    | 0.358  | ug/L   | 96     |
| 29) 1,1,1-Trichloroethane      | 5.36  | 97   | 4790     | 0.126  | ug/L # | 79     |
| 34) Trichloroethene            | 6.57  | 95   | 534287   | 20.087 | ug/L   | 97     |
| 47) Tetrachloroethene          | 8.57  | 164  | 470287   | 25.277 | ug/L   | 99     |
| 63) 1,4-Dichlorobenzene        | 11.85 | 146  | 12616    | 0.244  | ug/L   | 92     |
| 65) 1,2-Dichlorobenzene        | 12.22 | 146  | 9255     | 0.188  | ug/L   | 95     |

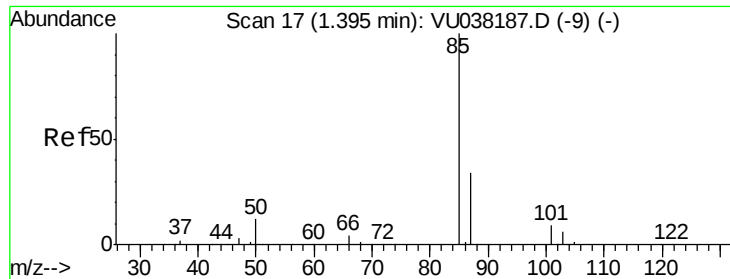
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU051520\  
Data File : VU038197.D  
Acq On : 15 May 2020 14:53  
Operator : JC/MD  
Sample : L2657-03  
Misc : 25.0mL/MSVOA U/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
BFST6

Quant Time: May 16 06:05:02 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR050720WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Sat May 16 03:30:00 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 2.090 ug/L

RT: 1.39 min Scan# 17

Delta R.T. 0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

Instrument :

MSVOA\_U

ClientSampleId :

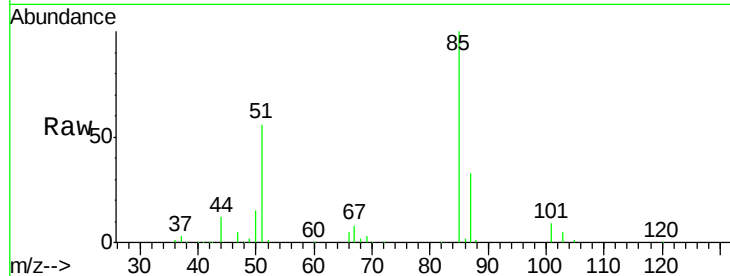
BFST6

Tot Ion: 85 Resp: 64988

Ion Ratio Lower Upper

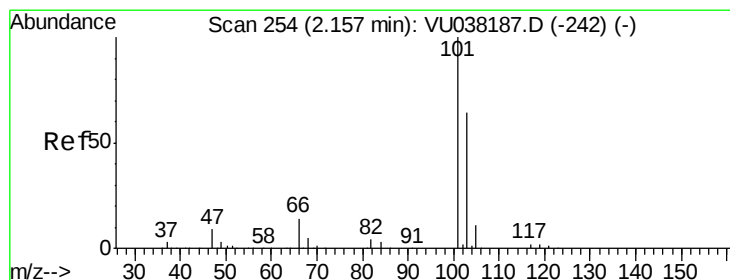
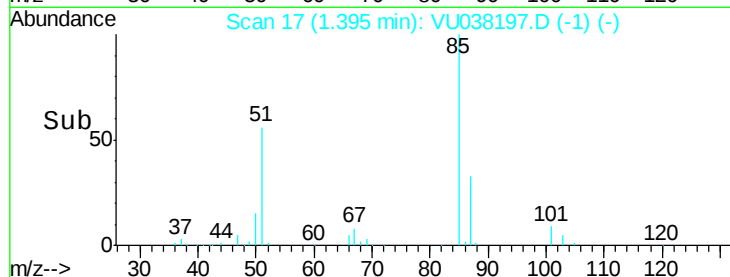
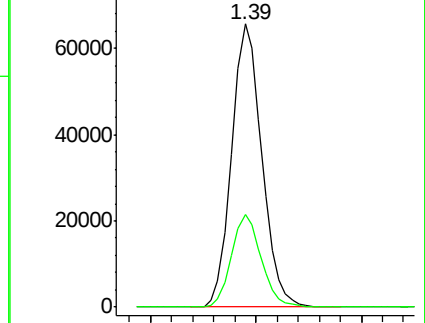
85 100

87 32.2 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VU038187.D (-9) (-)

Ion 87.00 (86.70 to 87.70): VU038187.D (-9) (-)



#9

Trichlorofluoromethane

Concen: 23.327 ug/L

RT: 2.16 min Scan# 255

Delta R.T. 0.00 min

Lab File: VU038197.D

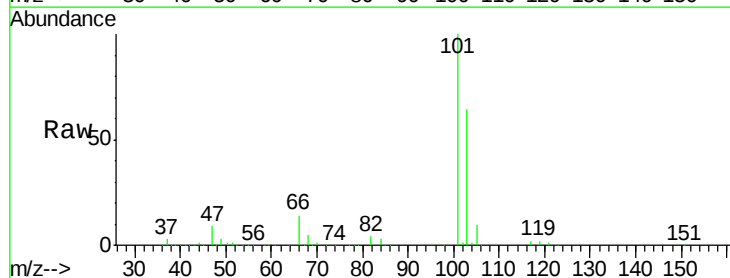
Acq: 15 May 2020 14:53

Tgt Ion: 101 Resp: 875569

Ion Ratio Lower Upper

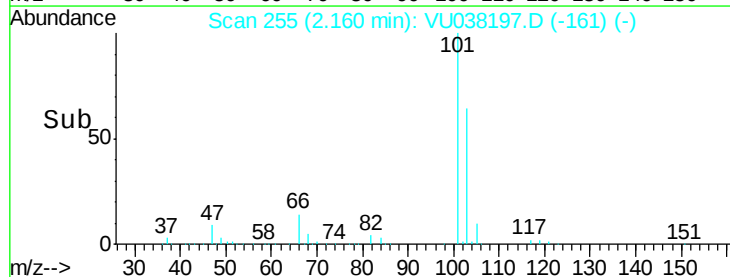
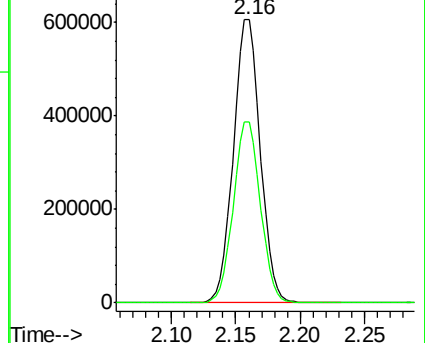
101 100

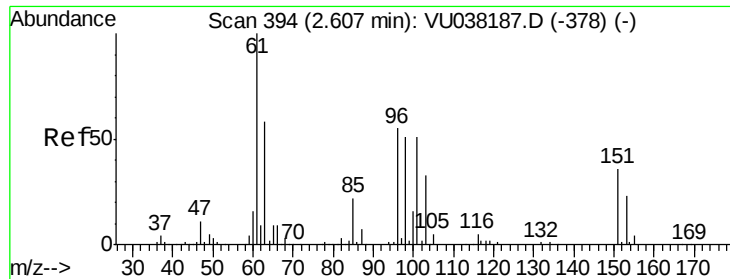
103 64.5 51.0 76.4



Abundance Ion 101.00 (100.70 to 101.70): VU038187.D (-242) (-)

Ion 103.00 (102.70 to 103.70): VU038187.D (-242) (-)





#10

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

Concen: 0.947 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

Instrument :

MSVOA\_U

ClientSampleId :

BFST6

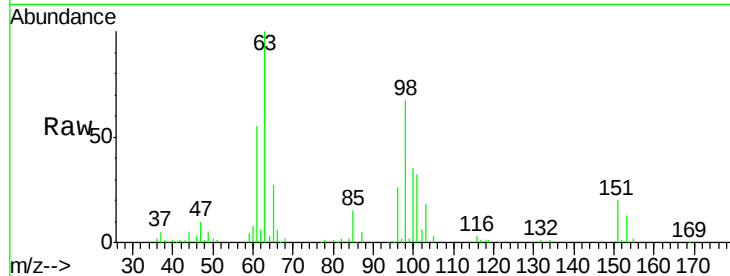
Tot Ion:101 Resp: 22033

Ion Ratio Lower Upper

101 100

85 45.4 35.3 52.9

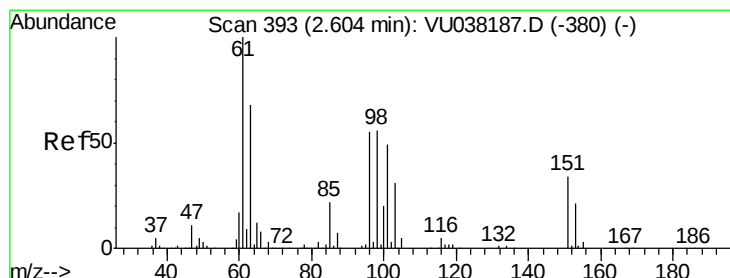
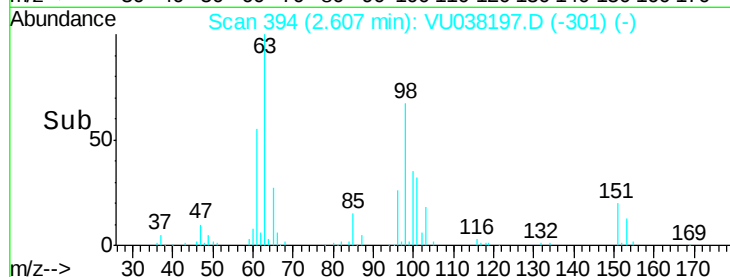
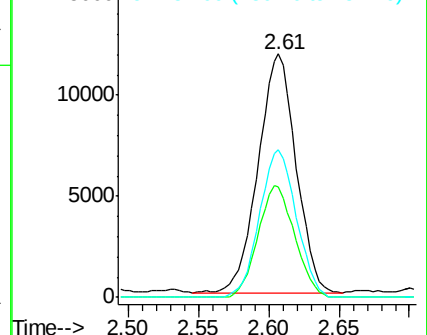
151 60.0 54.2 81.2



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: 0.686 ug/L

RT: 2.61 min Scan# 394

Delta R.T. 0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

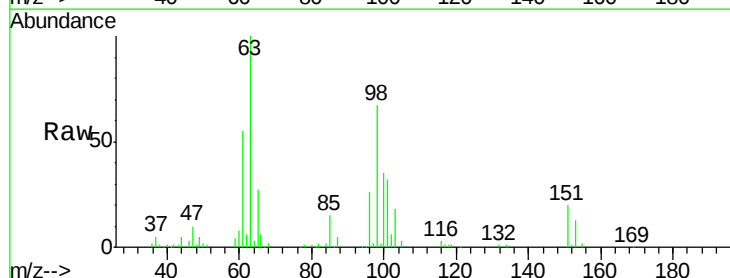
Tgt Ion: 96 Resp: 16177

Ion Ratio Lower Upper

96 100

61 211.1 126.2 234.4

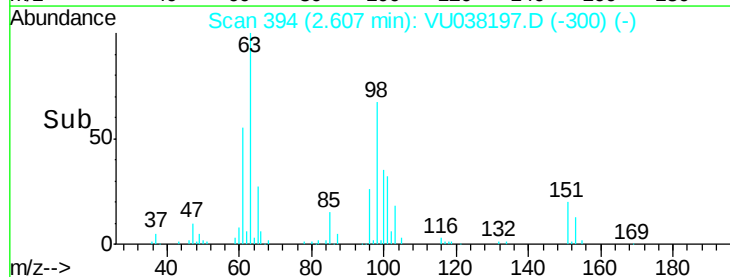
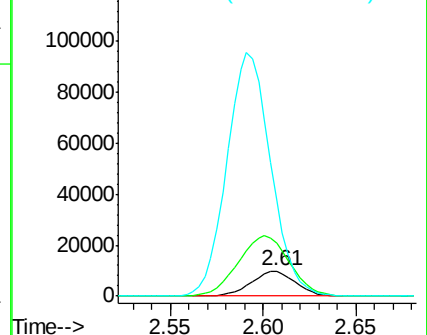
63 381.3 96.9 179.9#

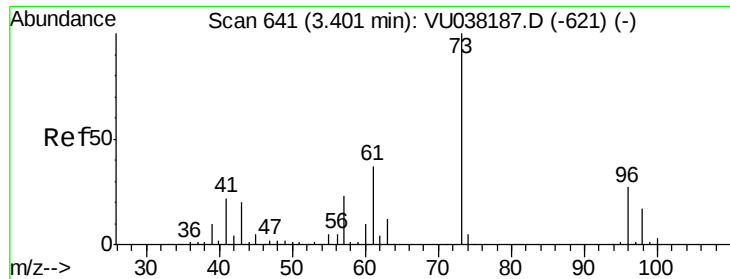


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0

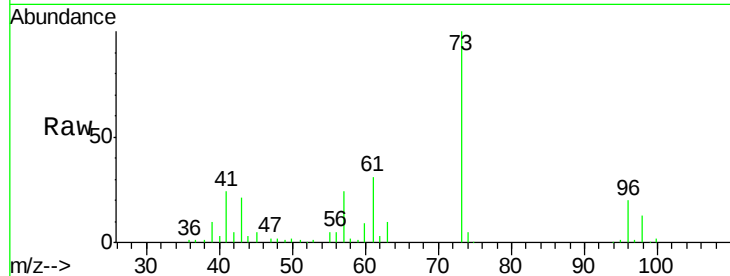




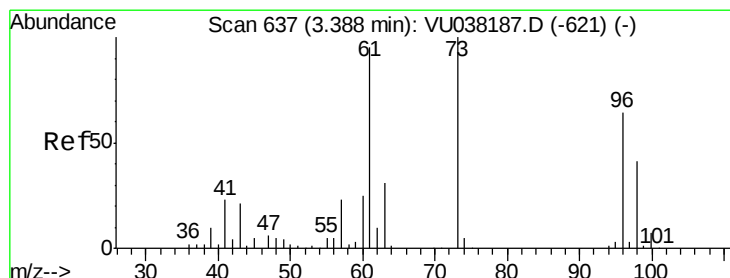
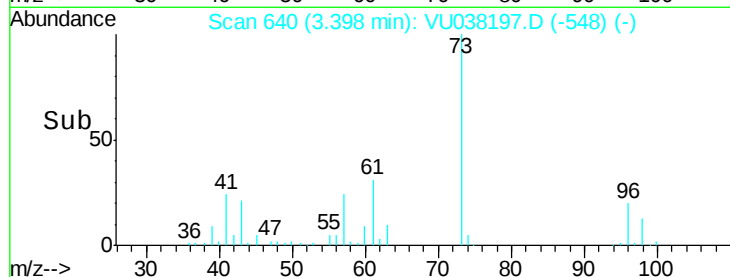
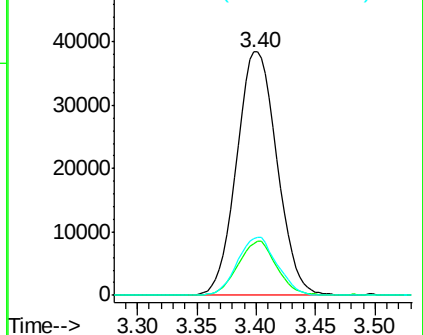
#17  
Methvl tert-butvl Ether  
Concen: 1.382 ug/L  
RT: 3.40 min Scan# 640  
Delta R.T. -0.00 min  
Lab File: VU038197.D  
Acq: 15 May 2020 14:53

Instrument :  
MSVOA\_U  
ClientSampleId :  
BFST6

Tot Ion: 73 Resp: 90579  
Ion Ratio Lower Upper  
73 100  
43 21.3 16.9 25.3  
57 23.3 18.2 27.2

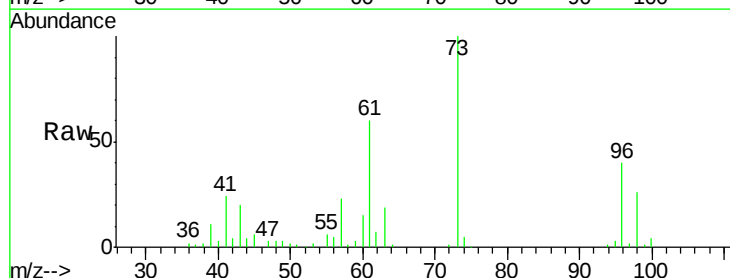


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

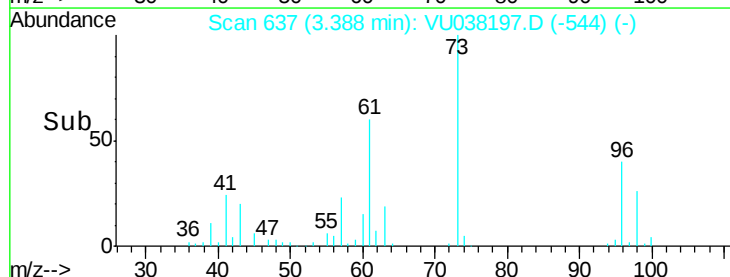
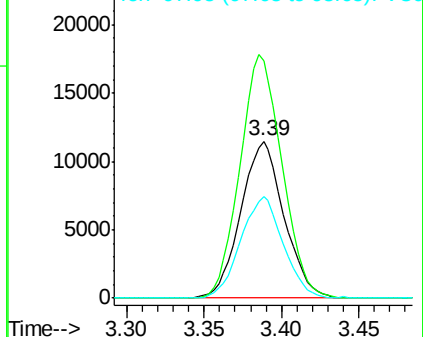


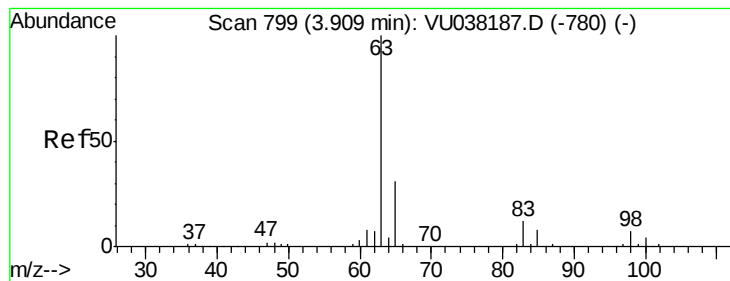
#18  
trans-1,2-Dichloroethene  
Concen: 0.865 ug/L  
RT: 3.39 min Scan# 637  
Delta R.T. 0.00 min  
Lab File: VU038197.D  
Acq: 15 May 2020 14:53

Tgt Ion: 96 Resp: 22275  
Ion Ratio Lower Upper  
96 100  
61 151.1 102.1 189.5  
98 65.0 45.6 84.8



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: 0.998 ug/L

RT: 3.91 min Scan# 800

Delta R.T. 0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

Instrument :

MSVOA\_U

ClientSampled :

BFST6

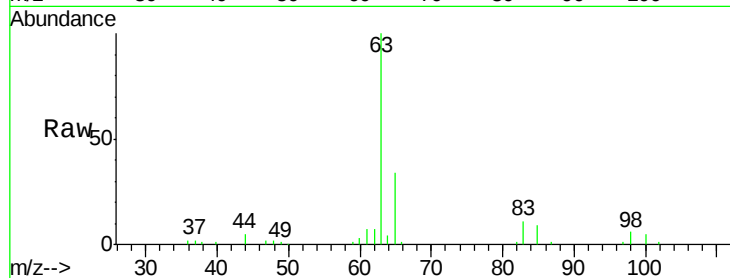
Tot Ion: 63 Resp: 50223

Ion Ratio Lower Upper

63 100

65 34.3 22.5 41.7

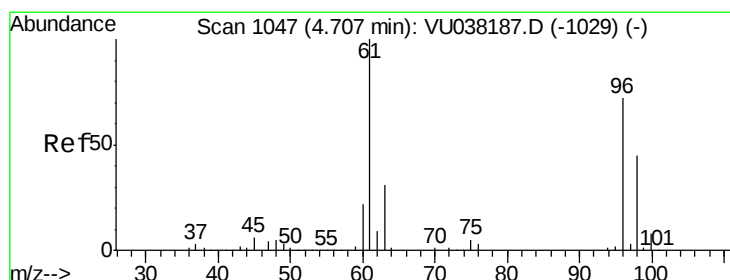
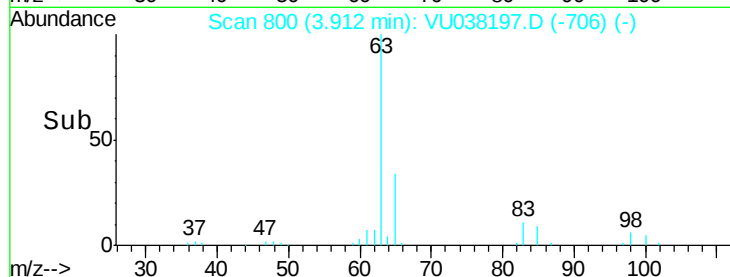
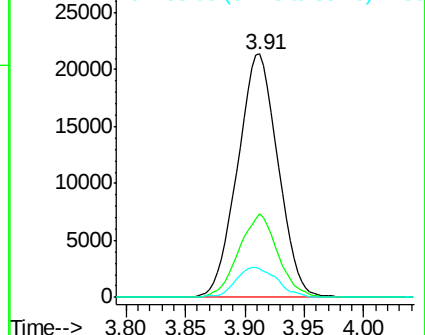
83 11.5 8.9 16.5



Abundance Ion 63.10 (62.80 to 63.80): VU038197.D (-780) (-)

Ion 65.10 (64.80 to 65.80): VU038197.D (-780) (-)

Ion 83.05 (82.75 to 83.75): VU038197.D (-780) (-)



#22

cis-1,2-Dichloroethene

Concen: 2.034 ug/L

RT: 4.71 min Scan# 1047

Delta R.T. 0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

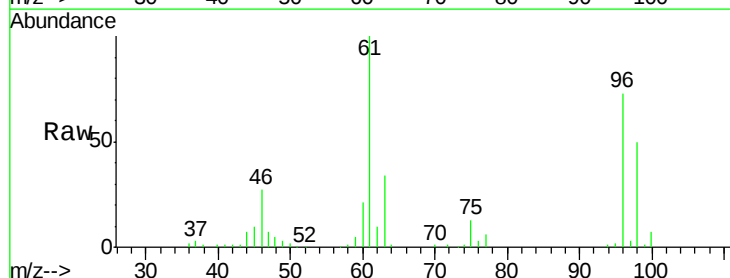
Tgt Ion: 96 Resp: 56455

Ion Ratio Lower Upper

96 100

61 137.0 95.3 176.9

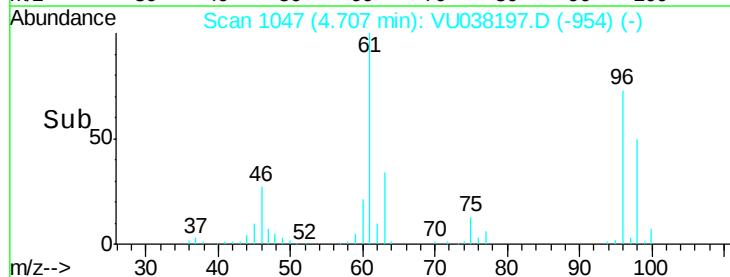
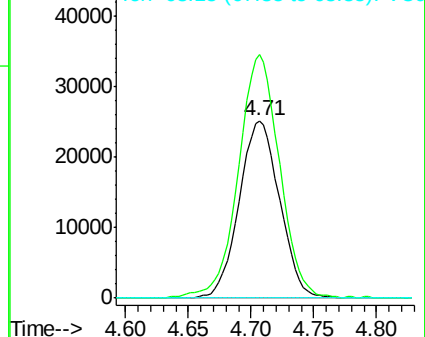
68 0.0 0.0 0.0

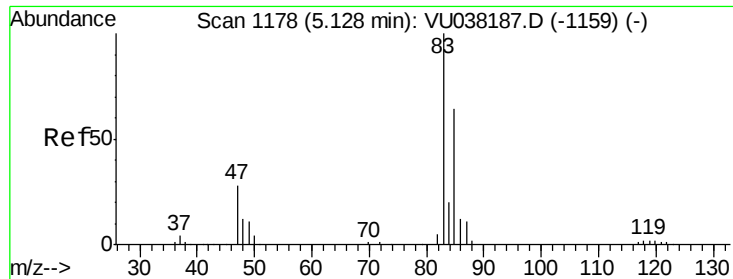


Abundance Ion 96.00 (95.70 to 96.70): VU038197.D (-1029) (-)

Ion 61.05 (60.75 to 61.75): VU038197.D (-1029) (-)

Ion 68.15 (67.85 to 68.85): VU038197.D (-1029) (-)

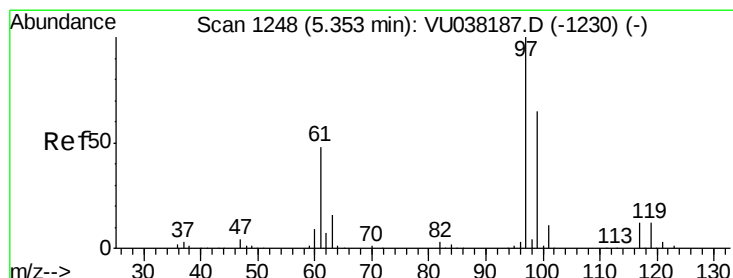
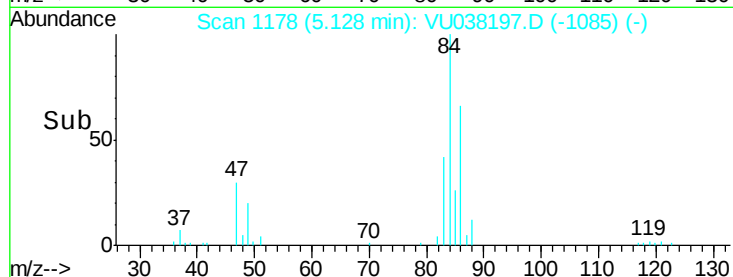
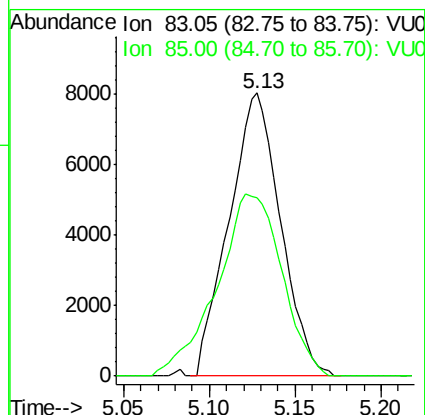
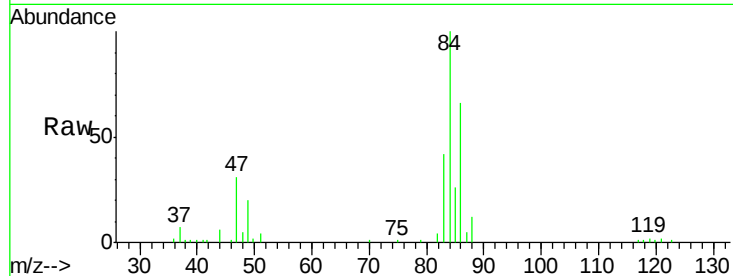




#25  
Chloroform  
Concen: 0.358 ug/L  
RT: 5.13 min Scan# 1178  
Delta R.T. 0.00 min  
Lab File: VU038197.D  
Acq: 15 May 2020 14:53

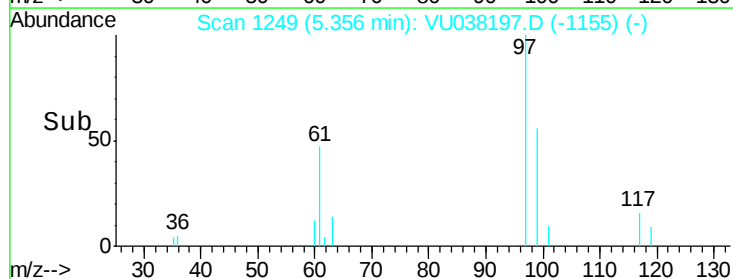
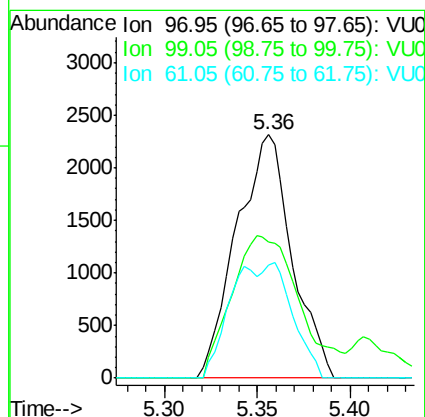
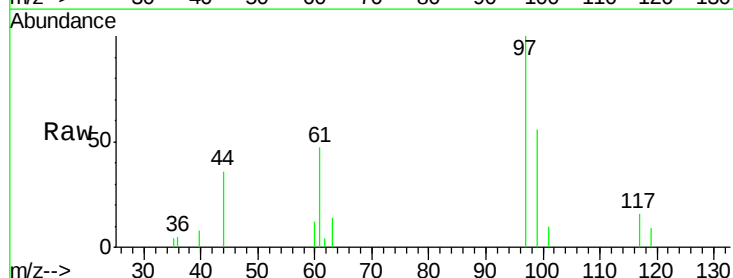
Instrument :  
MSVOA\_U  
ClientSampleId :  
BFST6

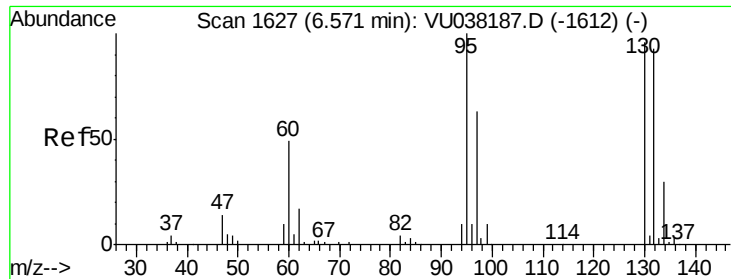
Tot Ion: 83 Resp: 16786  
Ion Ratio Lower Upper  
83 100  
85 62.9 46.2 85.8



#29  
1,1,1-Trichloroethane  
Concen: 0.126 ug/L  
RT: 5.36 min Scan# 1249  
Delta R.T. 0.00 min  
Lab File: VU038197.D  
Acq: 15 May 2020 14:53

Tgt Ion: 97 Resp: 4790  
Ion Ratio Lower Upper  
97 100  
99 72.5 51.0 76.4  
61 25.5 38.2 57.4#

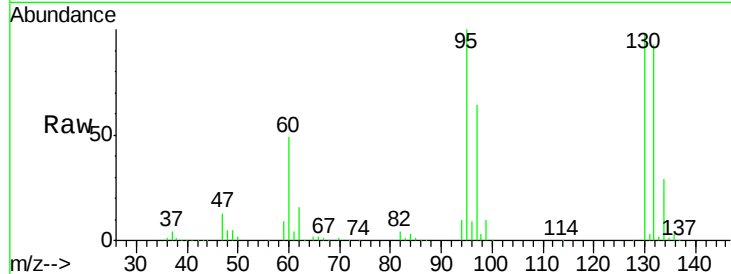




#34  
 Trichloroethene  
 Concen: 20.087 ug/L  
 RT: 6.57 min Scan# 1627  
 Delta R.T. 0.00 min  
 Lab File: VU038197.D  
 Acq: 15 May 2020 14:53

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BFST6

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 95    | Resp: | 534287 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 97       | 64.0  | 44.9  | 83.3   |
| 132      | 92.9  | 63.3  | 117.5  |
| 130      | 98.1  | 65.7  | 122.1  |

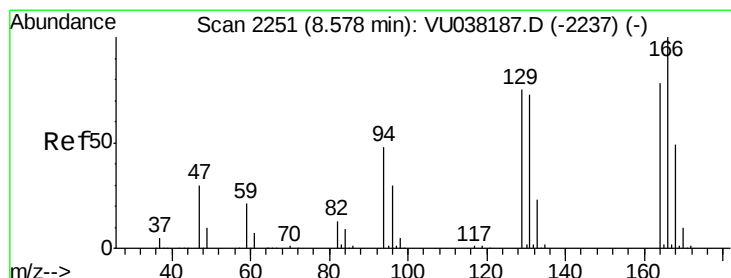
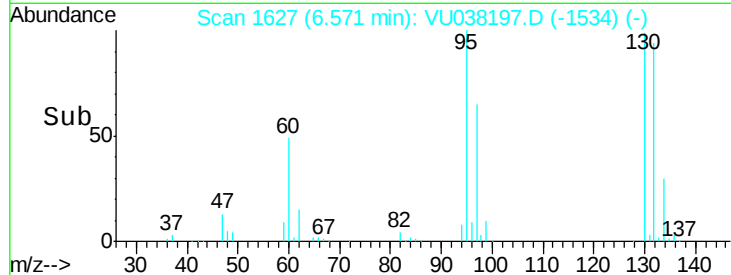
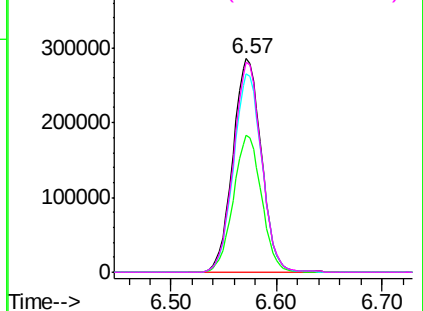


Abundance Ion 95.00 (94.70 to 95.70): VU038197.D (-1612) (-)

Ion 96.95 (96.65 to 97.65): VU038197.D (-1612) (-)

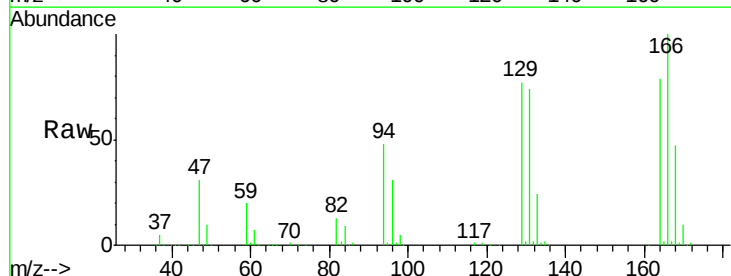
Ion 131.95 (131.65 to 132.65): VU038197.D (-1612) (-)

Ion 129.95 (129.65 to 130.65): VU038197.D (-1612) (-)



#47  
 Tetrachloroethene  
 Concen: 25.277 ug/L  
 RT: 8.57 min Scan# 2250  
 Delta R.T. -0.00 min  
 Lab File: VU038197.D  
 Acq: 15 May 2020 14:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 470287 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 98.1  | 68.8  | 127.8  |
| 131      | 93.8  | 66.8  | 124.2  |
| 166      | 127.3 | 88.9  | 165.1  |

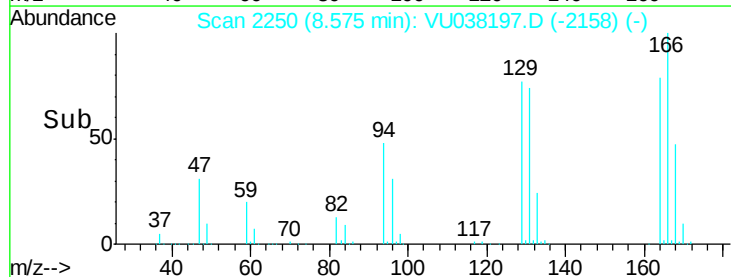
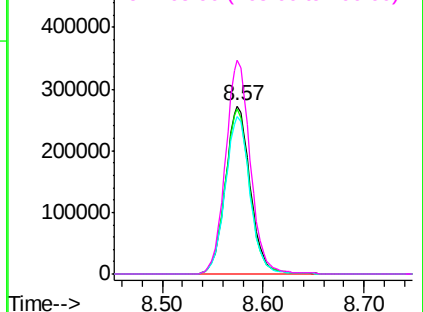


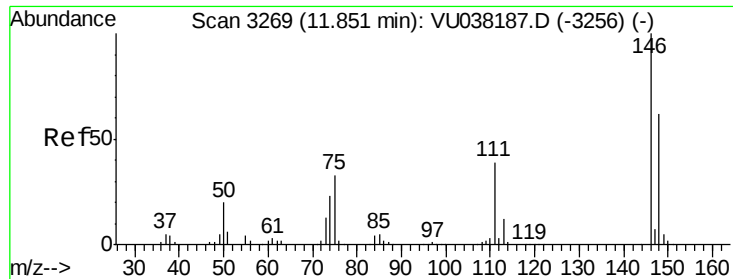
Abundance Ion 163.90 (163.60 to 164.60): VU038197.D (-2237) (-)

Ion 128.95 (128.65 to 129.65): VU038197.D (-2237) (-)

Ion 130.95 (130.65 to 131.65): VU038197.D (-2237) (-)

Ion 165.90 (165.60 to 166.60): VU038197.D (-2237) (-)





#63

1,4-Dichlorobenzene

Concen: 0.244 ug/L

RT: 11.85 min Scan# 3268

Delta R.T. -0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

Instrument :

MSVOA\_U

ClientSampled :

BFST6

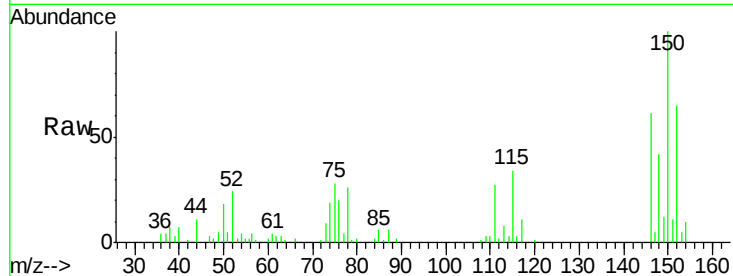
Tot Ion:146 Resp: 12616

Ion Ratio Lower Upper

146 100

111 44.1 27.2 50.6

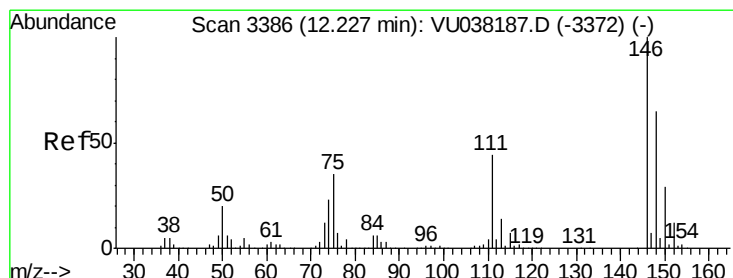
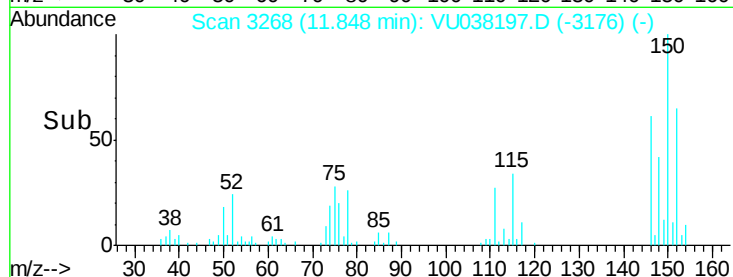
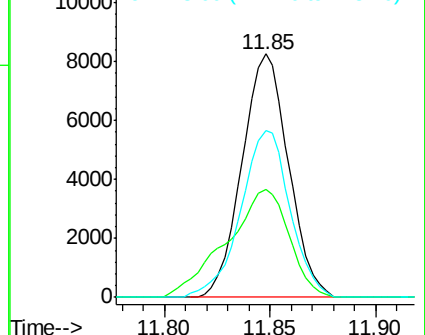
148 68.3 43.8 81.3



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: 0.188 ug/L

RT: 12.22 min Scan# 3385

Delta R.T. -0.00 min

Lab File: VU038197.D

Acq: 15 May 2020 14:53

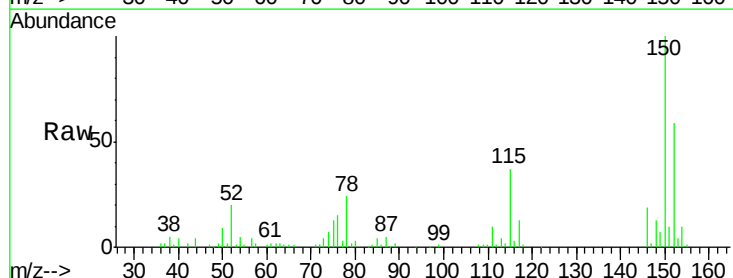
Tgt Ion:146 Resp: 9255

Ion Ratio Lower Upper

146 100

111 50.0 35.3 52.9

148 65.7 51.0 76.4



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

