

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U110620\  
 Data File : VU041124.D  
 Acq On : 06 Nov 2020 19:45  
 Operator : SY/MD  
 Sample : L4648-02DL 5X  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0AA9DL

Quant Time: Nov 06 23:12:58 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR102620WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Nov 06 23:04:51 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 61943    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 65561    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 28385    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 20035    | 3.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 77.00%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 17625    | 4.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 88.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 32397    | 3.17     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 63.40%  |
| 20) 2-Butanone-d5              | 4.65   | 46    | 92848    | 54.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 108.36% |
| 24) Chloroform-d               | 5.08   | 84    | 47010    | 5.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 102.20% |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 29736    | 5.21     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 104.20% |
| 32) Benzene-d6                 | 5.74   | 84    | 85651    | 4.89     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 97.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 29606    | 5.18     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 103.60% |
| 41) Toluene-d8                 | 7.91   | 98    | 71163    | 4.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 89.60%  |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 10965    | 4.43     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 88.60%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 66140    | 49.64    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 99.28%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 26518    | 5.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 100.00% |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 28993    | 5.82     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 116.40% |

## Target Compounds

| Target Compounds              | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|-------------------------------|-------|------|----------|-------|--------|--------|
| 9) Trichlorofluoromethane     | 2.15  | 101  | 13827    | 1.749 | ug/L   | 99     |
| 16) Methylene chloride        | 3.06  | 84   | 1464     | 0.287 | ug/L   | 95     |
| 25) Chloroform                | 5.11  | 83   | 1344     | 0.151 | ug/L   | 83     |
| 27) 1,2-Dichloroethane        | 5.75  | 62   | 490      | 0.074 | ug/L # | 74     |
| 31) Carbon tetrachloride      | 5.54  | 117  | 284      | 0.040 | ug/L   | 84     |
| 33) Benzene                   | 5.75  | 78   | 691      | 0.035 | ug/L   | 100    |
| 34) Trichloroethene           | 6.56  | 95   | 913      | 0.183 | ug/L   | 81     |
| 35) Methylcyclohexane         | 6.70  | 83   | 6847     | 0.921 | ug/L # | 15     |
| 37) 1,2-Dichloropropane       | 6.70  | 63   | 3467     | 0.654 | ug/L # | 86     |
| 39) cis-1,3-Dichloropropene   | 7.57  | 75   | 824      | 0.113 | ug/L # | 59     |
| 44) trans-1,3-Dichloropropene | 8.19  | 75   | 606      | 0.089 | ug/L # | 66     |
| 45) 1,1,2-Trichloroethane     | 8.56  | 97   | 302      | 0.077 | ug/L # | 26     |
| 47) Tetrachloroethene         | 8.56  | 164  | 31446    | 8.578 | ug/L   | 96     |
| 48) 2-Hexanone                | 8.64  | 43   | 10196    | 3.204 | ug/L # | 71     |
| 49) Dibromochloromethane      | 8.56  | 129  | 31258    | 6.821 | ug/L # | 11     |
| 59) 1,2,3-Trichloropropane    | 11.81 | 75   | 3718     | 0.941 | ug/L # | 88     |

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Instrument :  
MSVOA\_U  
ClientSampleId :  
C0AA9DL

Quant Time: Nov 06 23:12:58 2020  
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Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Nov 06 23:04:51 2020  
Response via : Initial Calibration

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

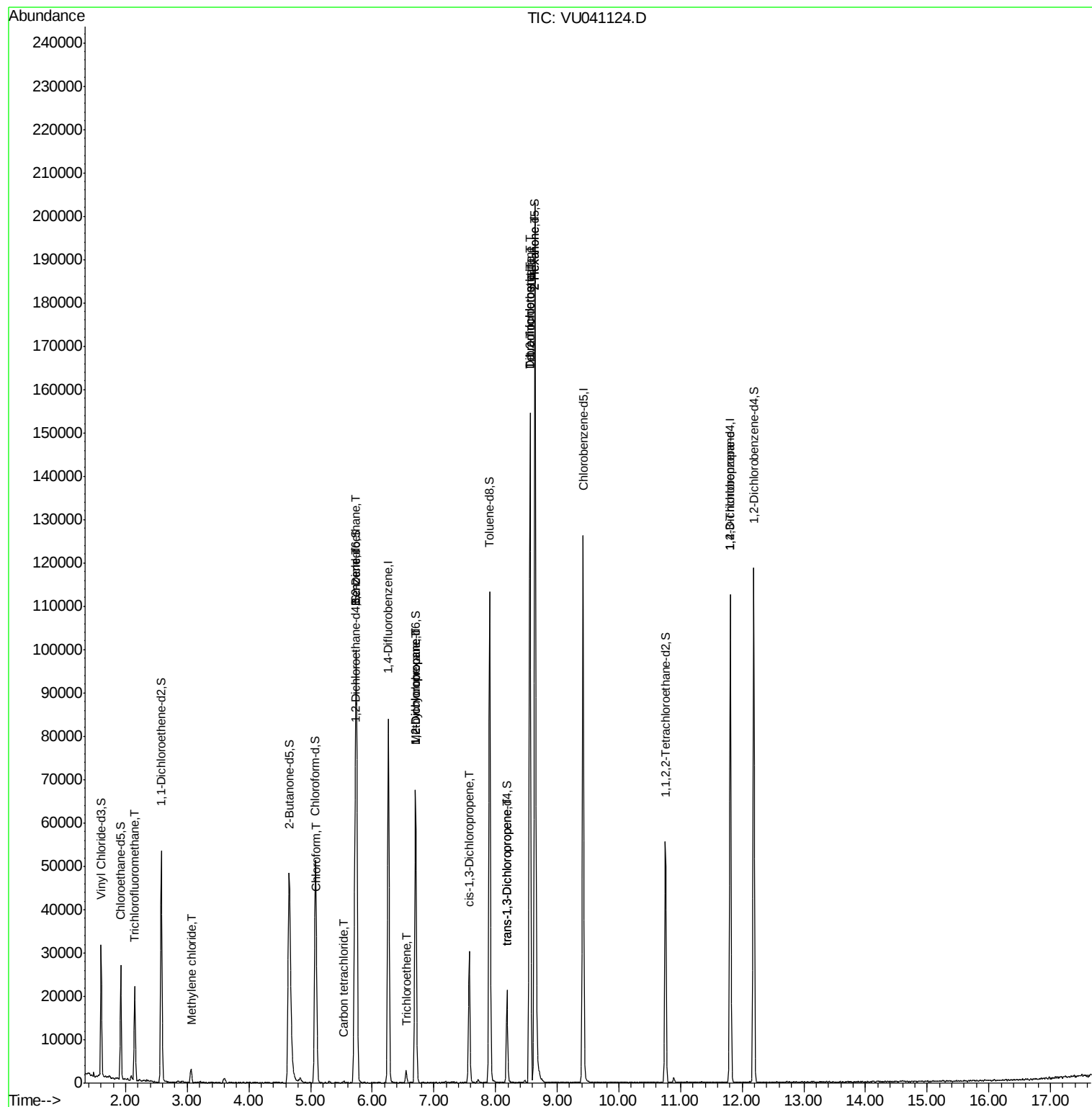
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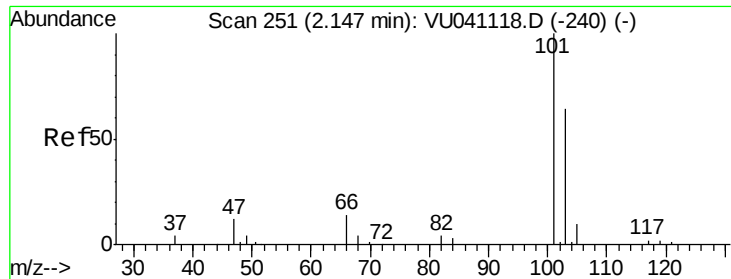
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Fri Nov 06 23:04:51 2020  
Response via : Initial Calibration





#9

Trichlorofluoromethane

Concen: 1.749 ug/L

RT: 2.15 min Scan# 251

Delta R.T. -0.00 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Instrument :

MSVOA\_U

ClientSampled :

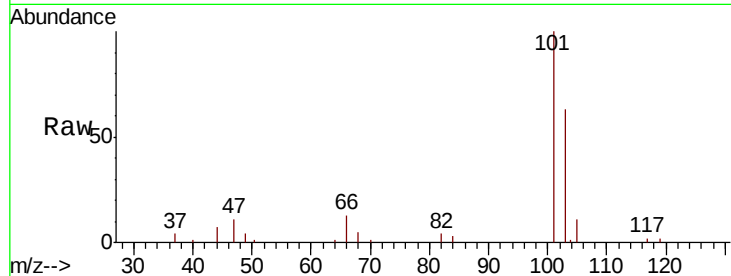
C0AA9DL

Tot Ion:101 Resp: 13827

Ion Ratio Lower Upper

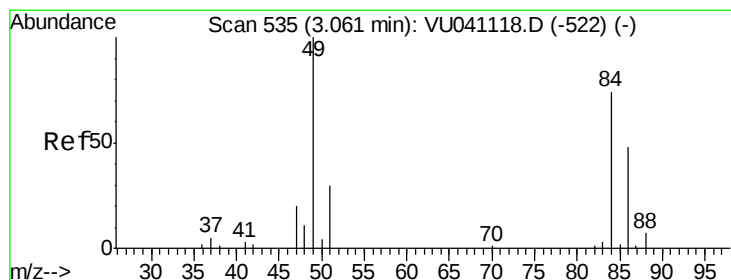
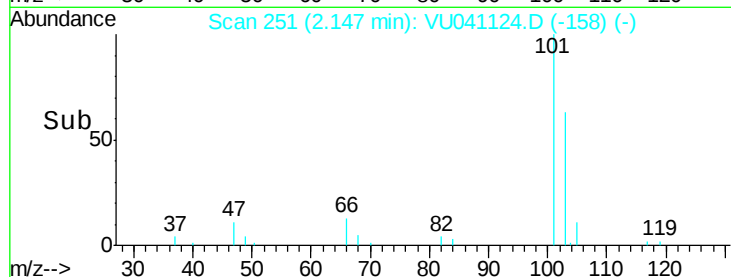
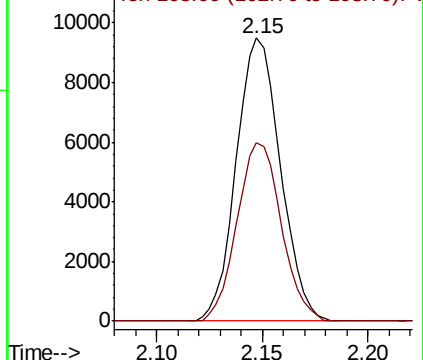
101 100

103 63.2 51.0 76.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#16

Methylene chloride

Concen: 0.287 ug/L

RT: 3.06 min Scan# 536

Delta R.T. 0.00 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

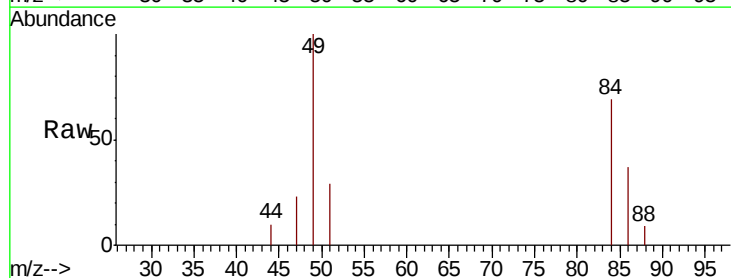
Tgt Ion: 84 Resp: 1464

Ion Ratio Lower Upper

84 100

86 53.5 42.8 79.6

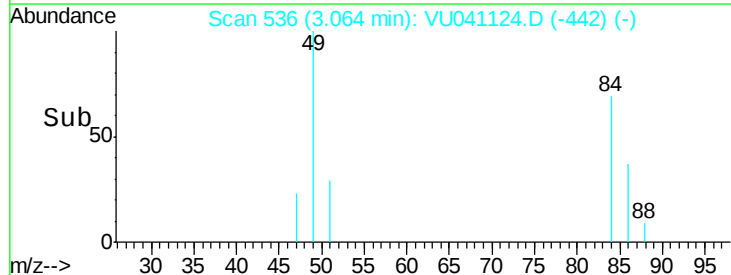
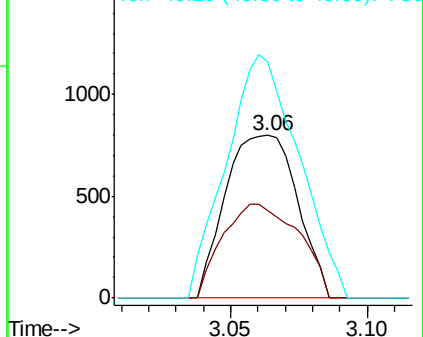
49 145.0 99.5 184.7

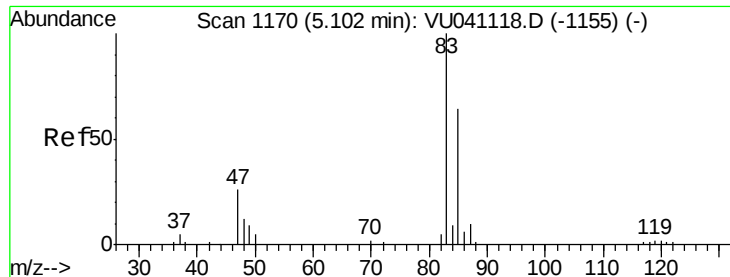


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0

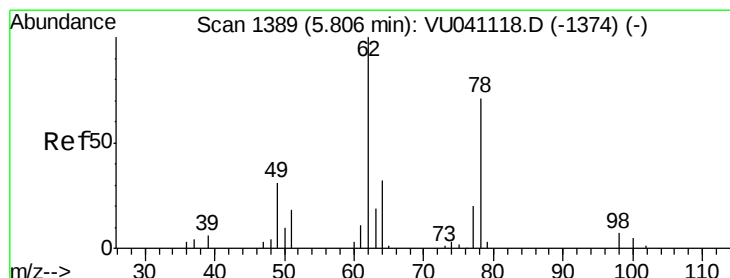
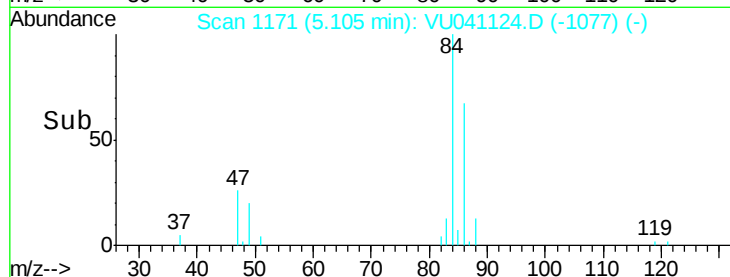
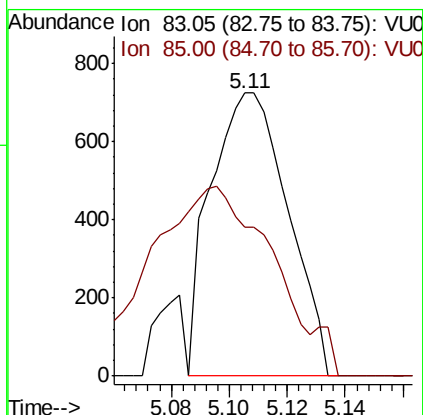
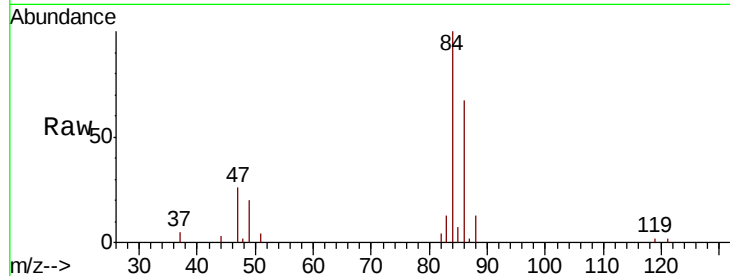




#25  
Chloroform  
Concen: 0.151 ug/L  
RT: 5.11 min Scan# 1171  
Delta R.T. 0.00 min  
Lab File: VU041124.D  
Acq: 06 Nov 2020 19:45

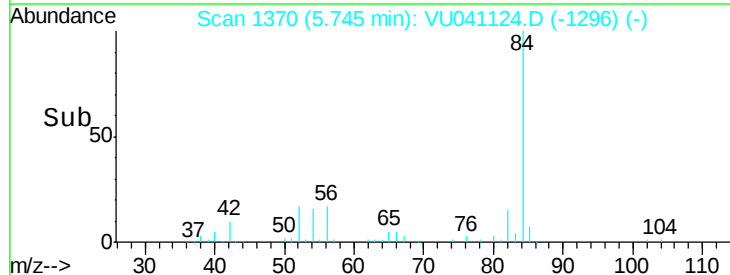
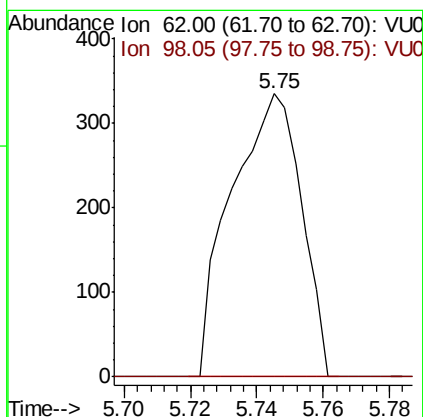
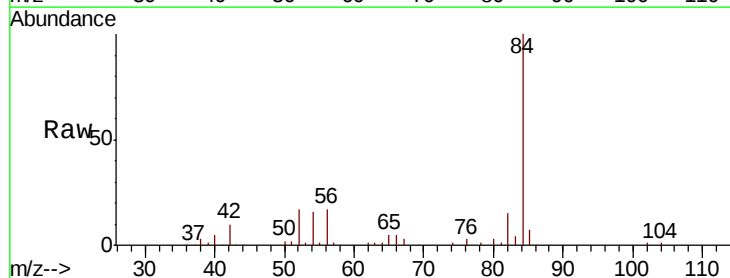
Instrument :  
MSVOA\_U  
ClientSampleId :  
C0AA9DL

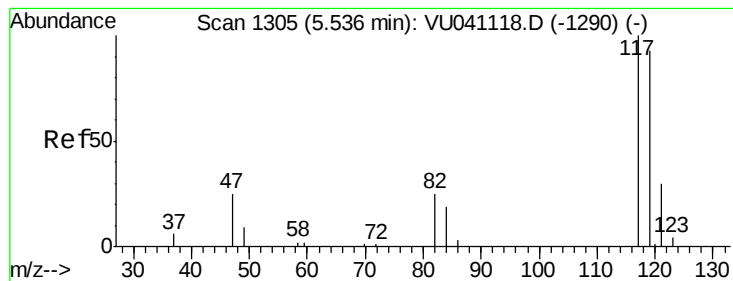
Tot Ion: 83 Resp: 1344  
Ion Ratio Lower Upper  
83 100  
85 52.5 46.1 85.7



#27  
1,2-Dichloroethane  
Concen: 0.074 ug/L  
RT: 5.75 min Scan# 1370  
Delta R.T. -0.06 min  
Lab File: VU041124.D  
Acq: 06 Nov 2020 19:45

Tgt Ion: 62 Resp: 490  
Ion Ratio Lower Upper  
62 100  
98 0.0 7.6 11.4#





#31

Carbon tetrachloride

Concen: 0.040 ug/L

RT: 5.54 min Scan# 1305

Delta R.T. -0.00 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Instrument :

MSVOA\_U

ClientSampleId :

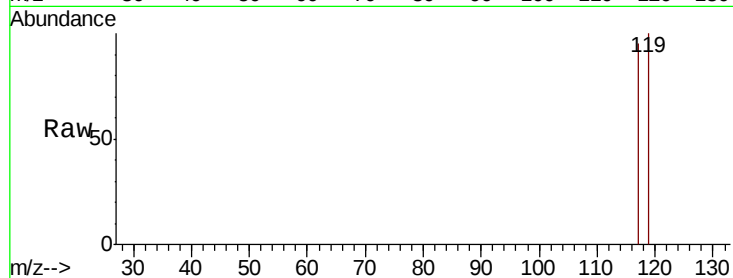
C0AA9DL

Tot Ion:117 Resp: 284

Ion Ratio Lower Upper

117 100

119 110.6 76.1 114.1



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V

5.54

250

200

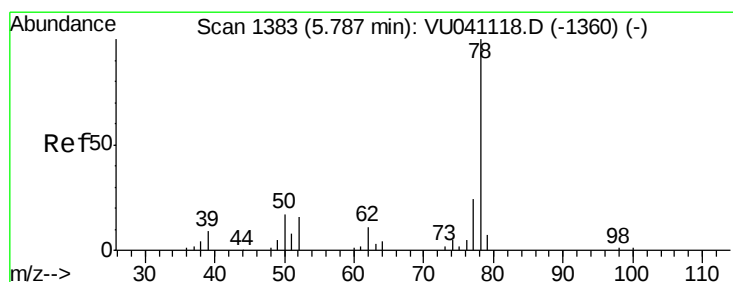
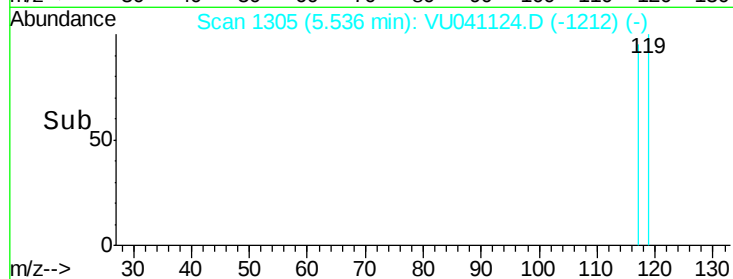
150

100

50

0

Time-->



#33

Benzene

Concen: 0.035 ug/L

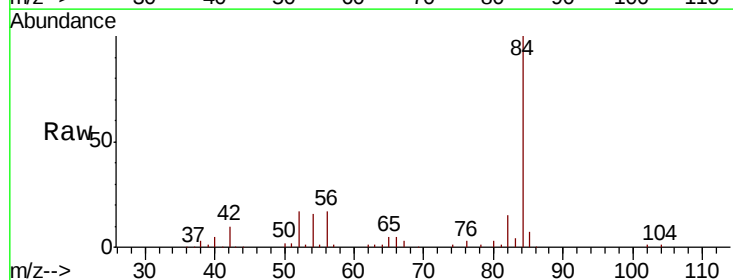
RT: 5.75 min Scan# 1370

Delta R.T. -0.04 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Tgt Ion: 78 Resp: 691



Abundance Ion 78.10 (77.80 to 78.80): VU0

5.75

400

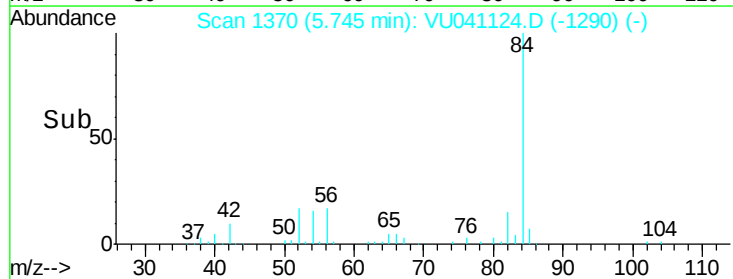
300

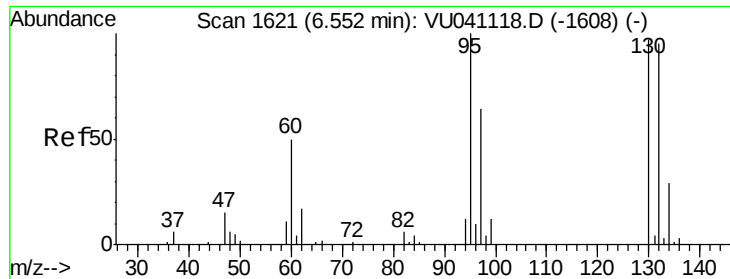
200

100

0

Time-->





#34

Trichloroethene

Concen: 0.183 ug/L

RT: 6.56 min Scan# 1622

Delta R.T. 0.00 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Instrument :

MSVOA\_U

ClientSampleId :

C0AA9DL

Tot Ion: 95 Resp: 913

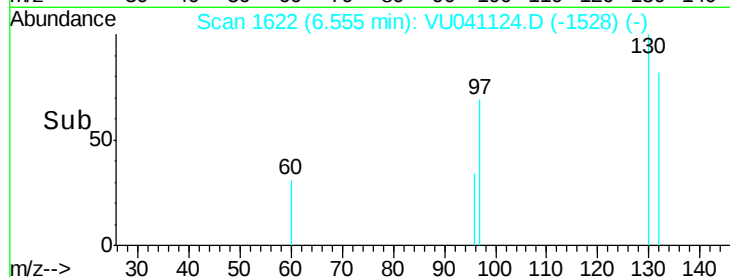
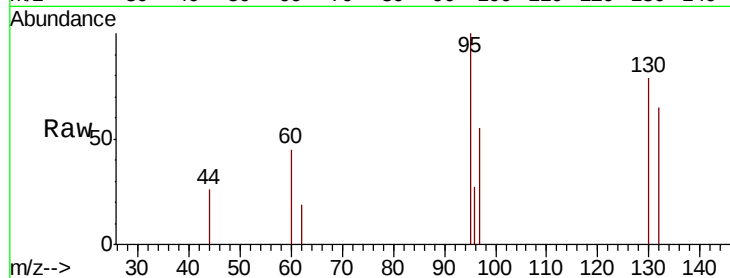
Ion Ratio Lower Upper

95 100

97 54.7 45.6 84.6

132 65.0 64.8 120.4

130 79.1 64.8 120.4

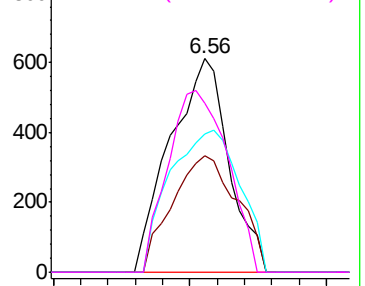


Abundance Ion 95.00 (94.70 to 95.70): VU0

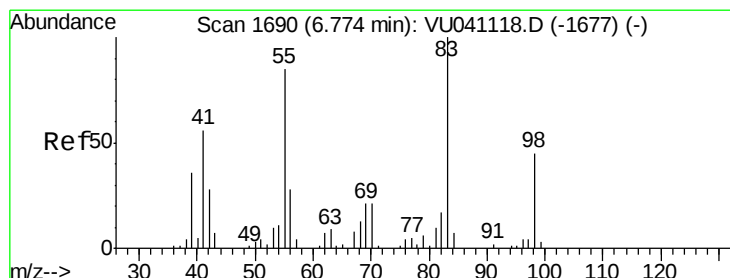
Ion 96.95 (96.65 to 97.65): VU0

Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



Time--> 6.50



#35

Methylcyclohexane

Concen: 0.921 ug/L

RT: 6.70 min Scan# 1668

Delta R.T. -0.07 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

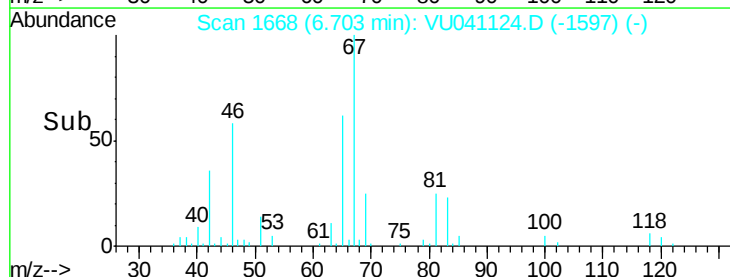
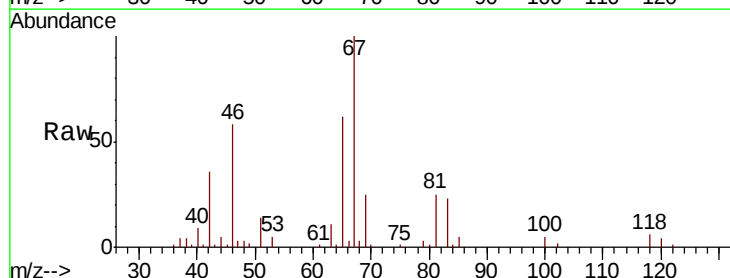
Tgt Ion: 83 Resp: 6847

Ion Ratio Lower Upper

83 100

55 0.0 72.0 108.0#

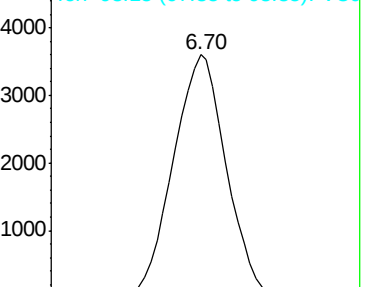
98 3.1 36.6 55.0#



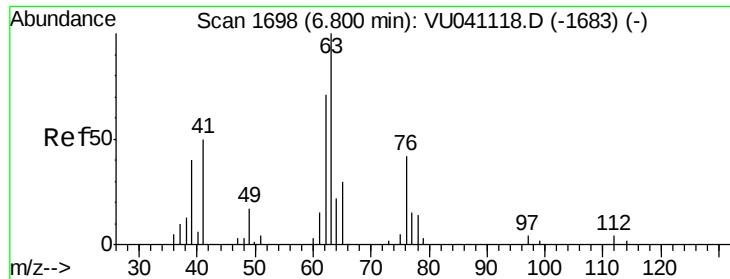
Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



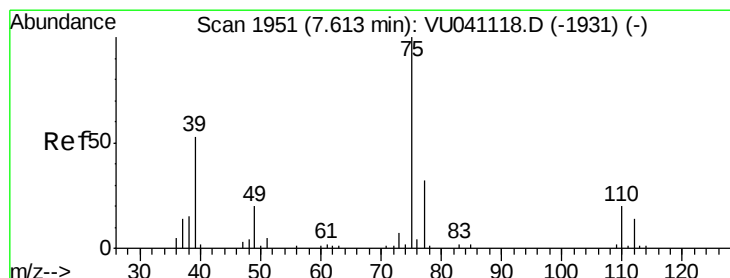
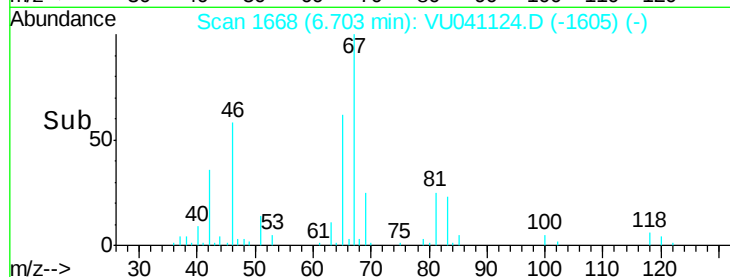
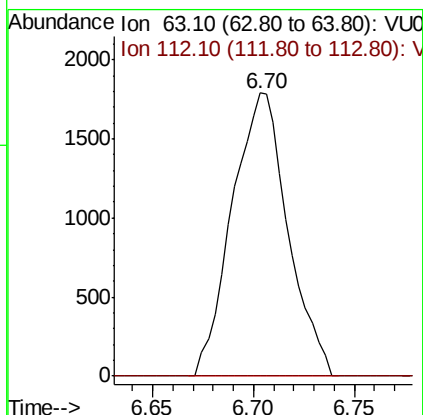
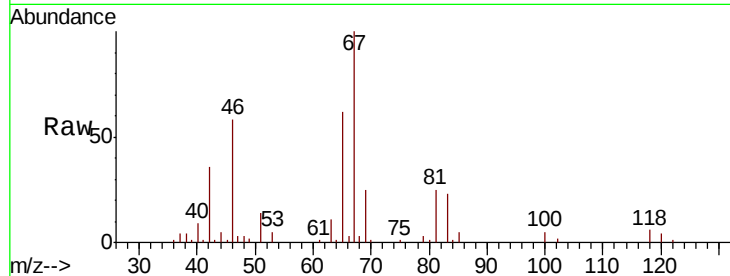
Time--> 6.65



#37  
 1,2-Dichloropropane  
 Concen: 0.654 ug/L  
 RT: 6.70 min Scan# 1668  
 Delta R.T. -0.10 min  
 Lab File: VU041124.D  
 Acq: 06 Nov 2020 19:45

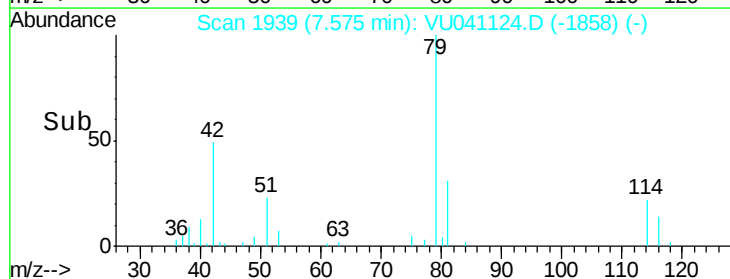
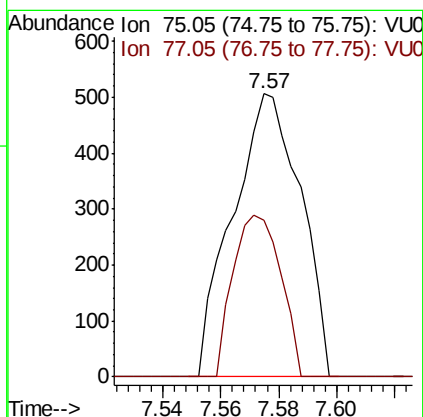
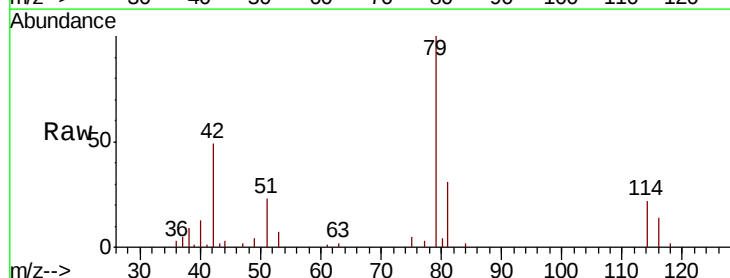
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 C0AA9DL

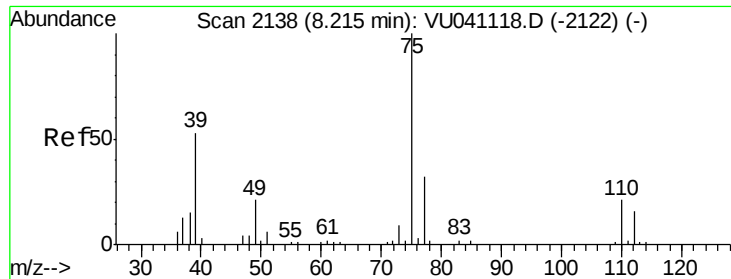
Tot Ion: 63 Resp: 3467  
 Ion Ratio Lower Upper  
 63 100  
 112 0.0 3.6 5.4#



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.113 ug/L  
 RT: 7.57 min Scan# 1939  
 Delta R.T. -0.04 min  
 Lab File: VU041124.D  
 Acq: 06 Nov 2020 19:45

Tgt Ion: 75 Resp: 824  
 Ion Ratio Lower Upper  
 75 100  
 77 55.3 22.7 42.3#





#44

trans-1,3-Dichloropropene

Concen: 0.089 ug/L

RT: 8.19 min Scan# 2130

Delta R.T. -0.03 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Instrument :

MSVOA\_U

ClientSampleId :

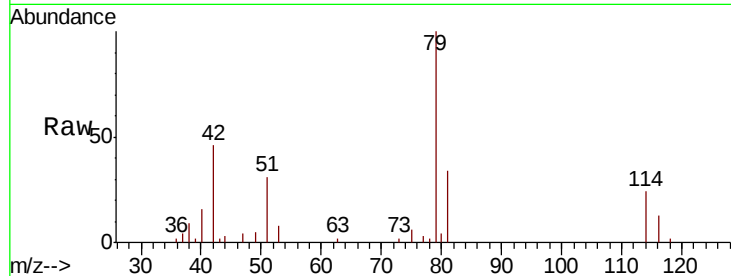
C0AA9DL

Tot Ion: 75 Resp: 606

Ion Ratio Lower Upper

75 100

77 52.7 23.3 43.3#



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0

8.19

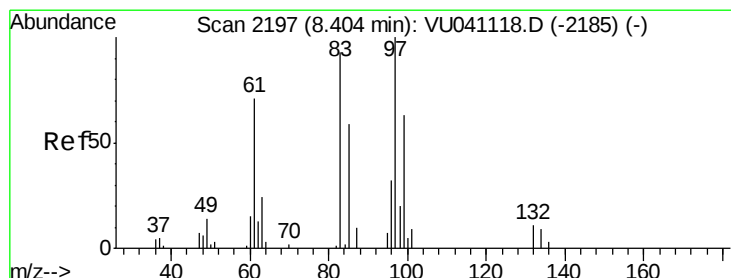
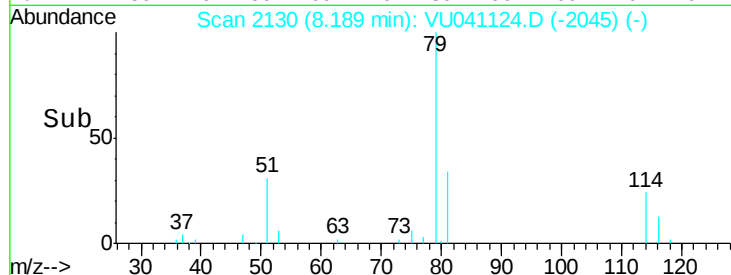
300

200

100

0

Time--> 8.14 8.16 8.18 8.20 8.22



#45

1,1,2-Trichloroethane

Concen: 0.077 ug/L

RT: 8.56 min Scan# 2245

Delta R.T. 0.15 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Tgt Ion: 97 Resp: 302

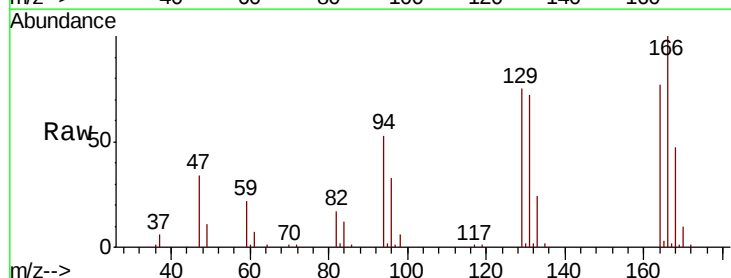
Ion Ratio Lower Upper

97 100

99 0.0 45.8 85.2#

83 159.2 67.9 126.1#

85 0.0 42.8 79.6#



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

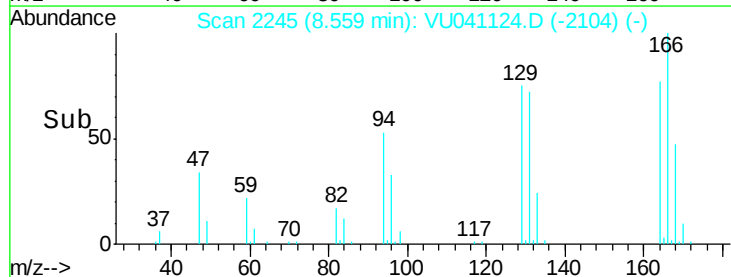
600

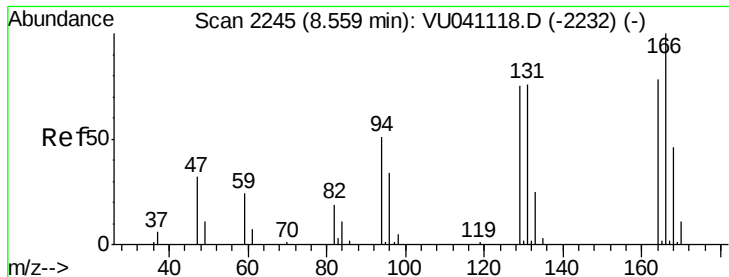
400

200

0

Time--> 8.54 8.56 8.58





#47

Tetrachloroethene

Concen: 8.578 ug/L

RT: 8.56 min Scan# 2245

Delta R.T. -0.00 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Instrument :

MSVOA\_U

ClientSampleId :

C0AA9DL

Tot Ion:164 Resp: 31446

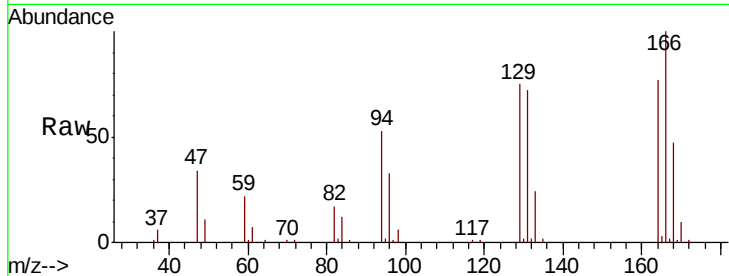
Ion Ratio Lower Upper

164 100

129 97.4 70.3 130.7

131 93.3 70.8 131.4

166 129.8 92.0 170.8

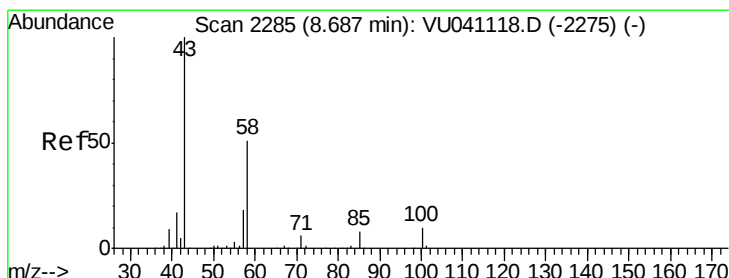
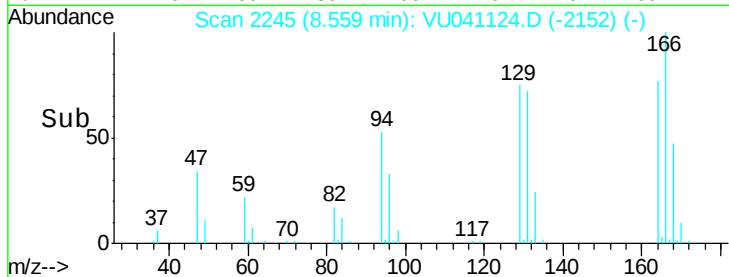
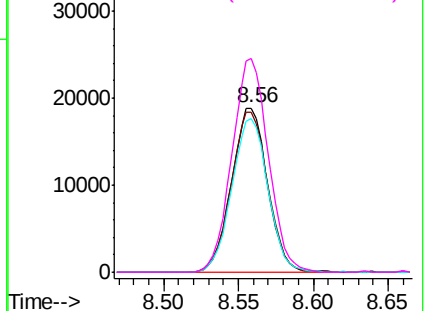


Abundance Ion 163.90 (163.60 to 164.60): V

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: 3.204 ug/L

RT: 8.64 min Scan# 2270

Delta R.T. -0.05 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Tgt Ion: 43 Resp: 10196

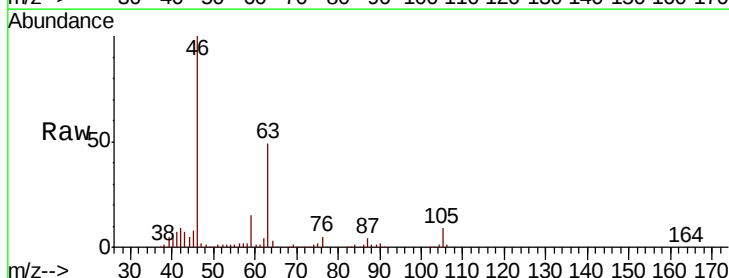
Ion Ratio Lower Upper

43 100

58 29.3 41.4 62.2#

57 28.1 14.6 21.8#

100 0.5 8.3 12.5#

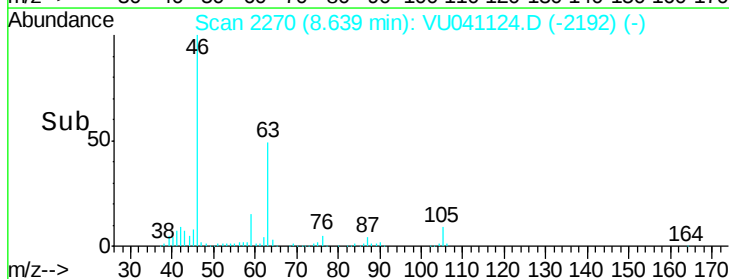
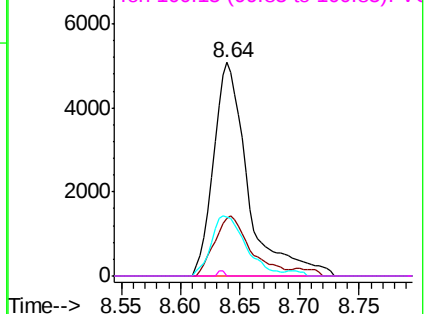


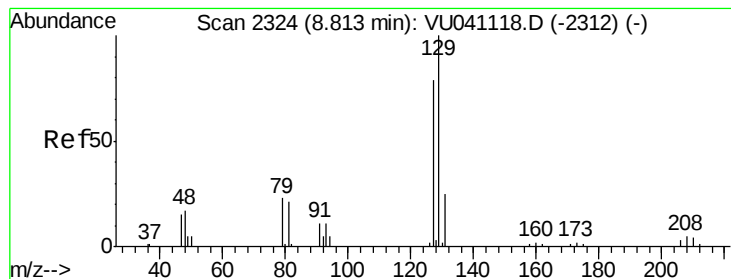
Abundance Ion 43.05 (42.75 to 43.75): VU0

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: 6.821 ug/L

RT: 8.56 min Scan# 2244

Delta R.T. -0.26 min

Lab File: VU041124.D

Acq: 06 Nov 2020 19:45

Instrument :

MSVOA\_U

ClientSampleId :

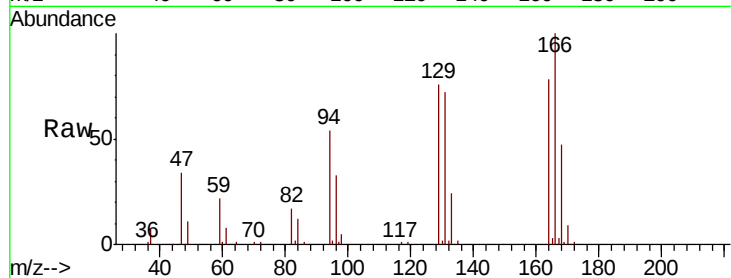
C0AA9DL

Tot Ion:129 Resp: 31258

Ion Ratio Lower Upper

129 100

127 0.0 53.4 99.2#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V

8.56

20000

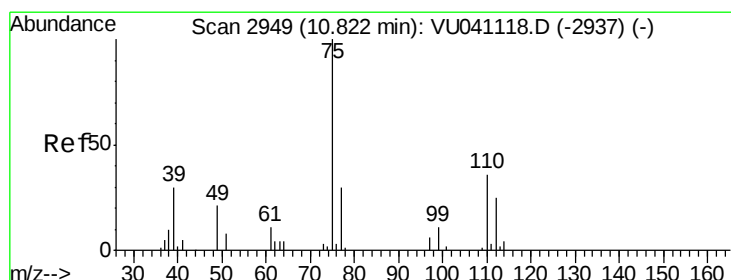
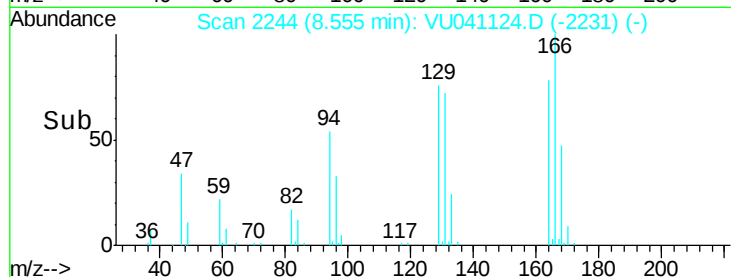
15000

10000

5000

0

Time--> 8.50 8.55 8.60



#59

1,2,3-Trichloropropane

Concen: 0.941 ug/L

RT: 11.81 min Scan# 3255

Delta R.T. 0.98 min

Lab File: VU041124.D

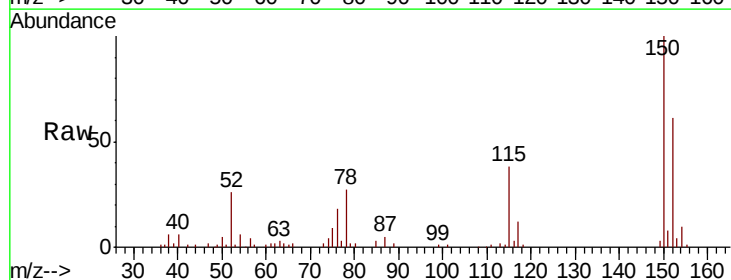
Acq: 06 Nov 2020 19:45

Tgt Ion: 75 Resp: 3718

Ion Ratio Lower Upper

75 100

77 39.0 25.7 38.5#



Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 77.00 (76.70 to 77.70): VU0

11.81

2500

2000

1500

1000

500

0

Time--> 11.75 11.80 11.85

