

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU090220\  
 Data File : VU040022.D  
 Acq On : 02 Sep 2020 13:23  
 Operator : SY/MD  
 Sample : MDL07  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Sep 03 01:20:58 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR083120WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Sep 03 01:16:12 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 113196   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 114777   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 53976    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 26836    | 4.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 86.80%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 24791    | 4.81     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 96.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 48705    | 3.07     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 61.40%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 127880   | 51.73    | ug/L | 0.01    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 103.46% |
| 24) Chloroform-d               | 5.08   | 84    | 65761    | 4.55     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 91.00%  |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 42877    | 4.81     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.20%  |
| 32) Benzene-d6                 | 5.74   | 84    | 122941   | 4.59     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 91.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 39832    | 4.51     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 90.20%  |
| 41) Toluene-d8                 | 7.91   | 98    | 105064   | 4.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 86.80%  |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 16382    | 4.04     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 80.80%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 96003    | 49.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 99.90%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 37006    | 4.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 97.00%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 40981    | 4.69     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 93.80%  |

## Target Compounds

|                                |      |     |      |              | Ovalue |
|--------------------------------|------|-----|------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 1993 | 0.177 ug/L   | 97     |
| 3) Chloromethane               | 1.53 | 50  | 2149 | 0.200 ug/L   | 97     |
| 5) Vinyl chloride              | 1.61 | 62  | 2207 | 0.202 ug/L # | 69     |
| 6) Bromomethane                | 1.87 | 94  | 1166 | 0.209 ug/L   | 92     |
| 8) Chloroethane                | 1.94 | 64  | 1603 | 0.245 ug/L   | 91     |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 3350 | 0.214 ug/L   | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101 | 2542 | 0.251 ug/L # | 76     |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 2242 | 0.256 ug/L # | 1      |
| 13) Acetone                    | 2.68 | 43  | 3773 | 1.649 ug/L   | 91     |
| 14) Carbon disulfide           | 2.81 | 76  | 5326 | 0.190 ug/L   | 100    |
| 16) Methylene chloride         | 3.07 | 84  | 3775 | 0.329 ug/L   | 96     |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 4719 | 0.179 ug/L # | 83     |
| 18) trans-1,2-Dichloroethene   | 3.38 | 96  | 1991 | 0.211 ug/L # | 77     |
| 19) 1,1-Dichloroethane         | 3.88 | 63  | 2034 | 0.105 ug/L   | 97     |
| 21) 2-Butanone                 | 4.74 | 43  | 8415 | 2.252 ug/L   | 80     |
| 22) cis-1,2-Dichloroethene     | 4.69 | 96  | 2029 | 0.200 ug/L   | 94     |
| 23) Bromochloromethane         | 5.00 | 128 | 1002 | 0.226 ug/L # | 69     |

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 Operator : SY/MD  
 Sample : MDL07  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 11 Sample Multiplier: 1

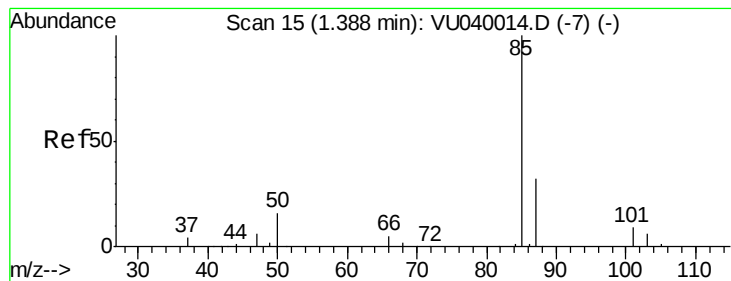
Instrument :  
 MSVOA\_U  
 ClientSampleId :

Quant Time: Sep 03 01:20:58 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR083120WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Thu Sep 03 01:16:12 2020  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| -----                         |       |      |          |       |        |          |
| 25) Chloroform                | 5.11  | 83   | 6536     | 0.329 | ug/L   | 94       |
| 27) 1,2-Dichloroethane        | 5.82  | 62   | 3125     | 0.215 | ug/L # | 93       |
| 29) 1,1,1-Trichloroethane     | 5.34  | 97   | 3361     | 0.187 | ug/L # | 73       |
| 30) Cyclohexane               | 5.41  | 56   | 2920     | 0.167 | ug/L   | 97       |
| 31) Carbon tetrachloride      | 5.54  | 117  | 2964     | 0.192 | ug/L   | 98       |
| 33) Benzene                   | 5.79  | 78   | 7824     | 0.191 | ug/L   | 100      |
| 34) Trichloroethene           | 6.55  | 95   | 2066     | 0.188 | ug/L   | 95       |
| 35) Methylcyclohexane         | 6.77  | 83   | 2916     | 0.173 | ug/L # | 93       |
| 37) 1,2-Dichloropropane       | 6.80  | 63   | 2047     | 0.184 | ug/L # | 88       |
| 38) Bromodichloromethane      | 7.11  | 83   | 2754     | 0.181 | ug/L   | 86       |
| 39) cis-1,3-Dichloropropene   | 7.61  | 75   | 3187     | 0.194 | ug/L   | 99       |
| 40) 4-Methyl-2-pentanone      | 7.80  | 43   | 16743    | 1.835 | ug/L   | 96       |
| 42) Toluene                   | 7.98  | 91   | 7638     | 0.181 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene | 8.21  | 75   | 2843     | 0.187 | ug/L # | 14       |
| 45) 1,1,2-Trichloroethane     | 8.41  | 97   | 1393     | 0.172 | ug/L # | 76       |
| 47) Tetrachloroethene         | 8.56  | 164  | 1366     | 0.189 | ug/L   | 93       |
| 48) 2-Hexanone                | 8.69  | 43   | 15183    | 2.282 | ug/L   | 99       |
| 49) Dibromochloromethane      | 8.81  | 129  | 1808     | 0.186 | ug/L   | 82       |
| 50) 1,2-Dibromoethane         | 8.92  | 107  | 1357     | 0.174 | ug/L # | 97       |
| 51) Chlorobenzene             | 9.45  | 112  | 5422     | 0.207 | ug/L   | 92       |
| 52) Ethylbenzene              | 9.57  | 91   | 8795     | 0.183 | ug/L   | 90       |
| 53) m,p-Xylene                | 9.70  | 106  | 3038     | 0.178 | ug/L   | 83       |
| 54) o-Xylene                  | 10.10 | 106  | 2688     | 0.165 | ug/L   | 96       |
| 55) Styrene                   | 10.11 | 104  | 4986     | 0.176 | ug/L   | 89       |
| 56) Isopropylbenzene          | 10.48 | 105  | 7409     | 0.167 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane | 10.78 | 83   | 2258     | 0.217 | ug/L # | 75       |
| 59) 1,2,3-Trichloropropane    | 10.83 | 75   | 1758     | 0.213 | ug/L   | 99       |
| 61) Bromoform                 | 10.29 | 173  | 936      | 0.189 | ug/L # | 92       |
| 62) 1,3-Dichlorobenzene       | 11.74 | 146  | 3905     | 0.198 | ug/L   | 97       |
| 63) 1,4-Dichlorobenzene       | 11.83 | 146  | 4000     | 0.200 | ug/L   | 92       |
| 65) 1,2-Dichlorobenzene       | 12.21 | 146  | 3866     | 0.203 | ug/L   | 91       |
| 67) 1,3,5-Trichlorobenzene    | 13.83 | 180  | 2049     | 0.148 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene    | 13.83 | 180  | 2049     | 0.171 | ug/L   | 97       |
| 69) Naphthalene               | 14.07 | 128  | 3520     | 0.141 | ug/L # | 78       |
| 70) 1,2,3-Trichlorobenzene    | 14.32 | 180  | 1906     | 0.174 | ug/L   | 97       |
| -----                         |       |      |          |       |        |          |

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





#2

Dichlorodifluoromethane

Concen: 0.177 ug/L

RT: 1.39 min Scan# 16

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

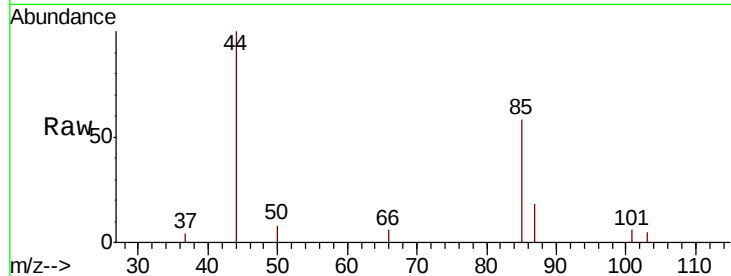
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 85 Resp: 1993

Ion Ratio Lower Upper

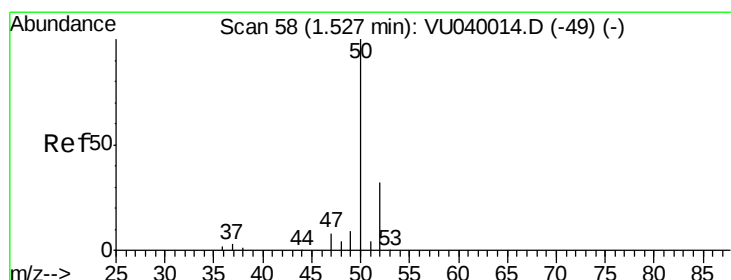
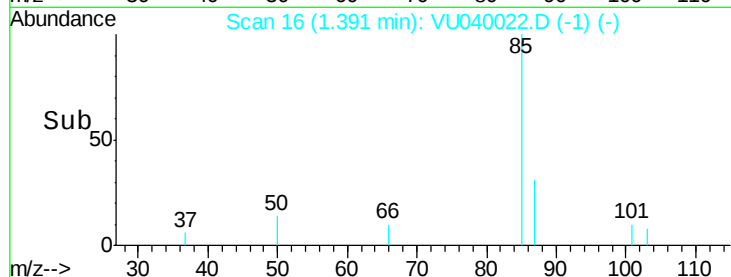
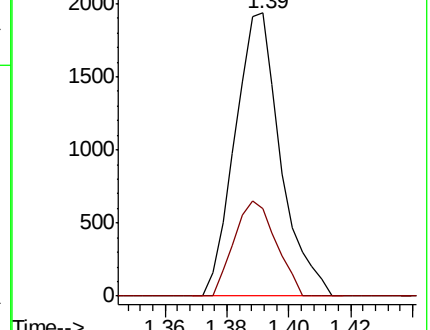
85 100

87 30.8 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: 0.200 ug/L

RT: 1.53 min Scan# 58

Delta R.T. -0.00 min

Lab File: VU040022.D

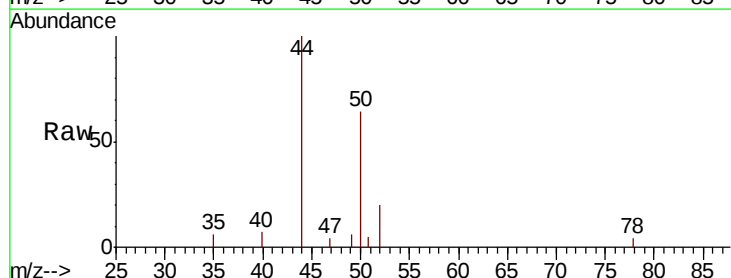
Acq: 02 Sep 2020 13:23

Tgt Ion: 50 Resp: 2149

Ion Ratio Lower Upper

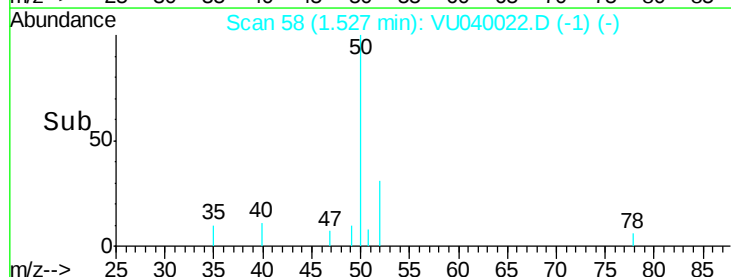
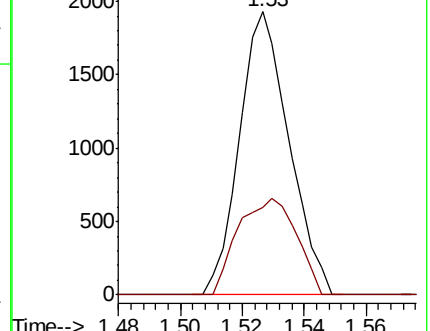
50 100

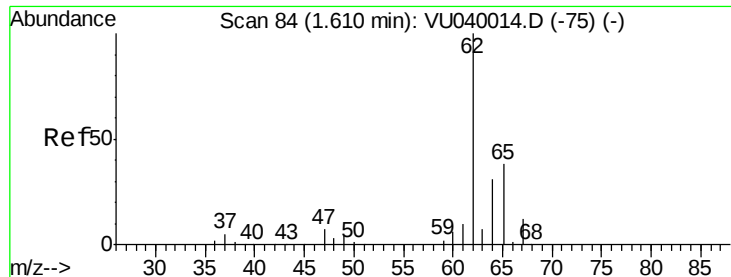
52 30.9 22.8 42.4



Abundance Ion 50.05 (49.75 to 50.75): VU0

Ion 52.05 (51.75 to 52.75): VU0





#5

Vinyl chloride

Concen: 0.202 ug/L

RT: 1.61 min Scan# 84

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

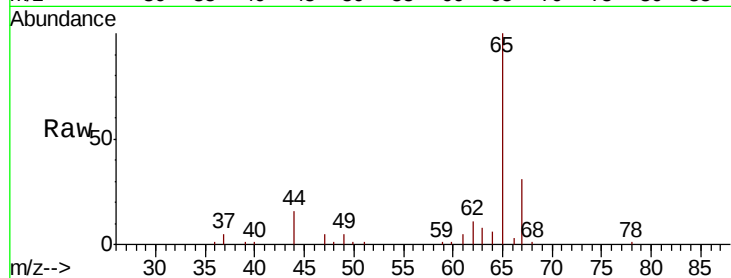
ClientSampleId :

Tot Ion: 62 Resp: 2207

Ion Ratio Lower Upper

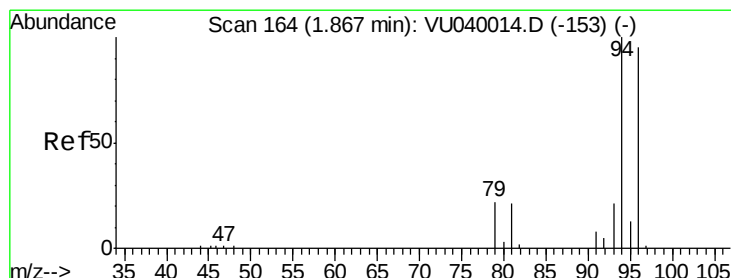
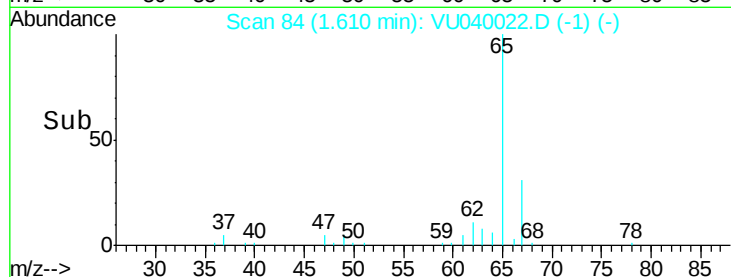
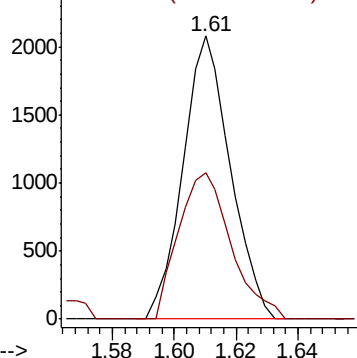
62 100

64 51.7 23.9 44.3#



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#6

Bromomethane

Concen: 0.209 ug/L

RT: 1.87 min Scan# 164

Delta R.T. -0.00 min

Lab File: VU040022.D

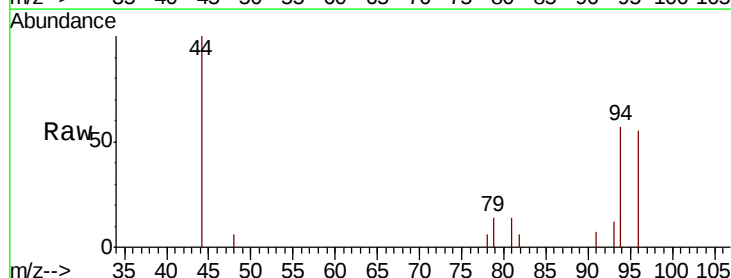
Acq: 02 Sep 2020 13:23

Tgt Ion: 94 Resp: 1166

Ion Ratio Lower Upper

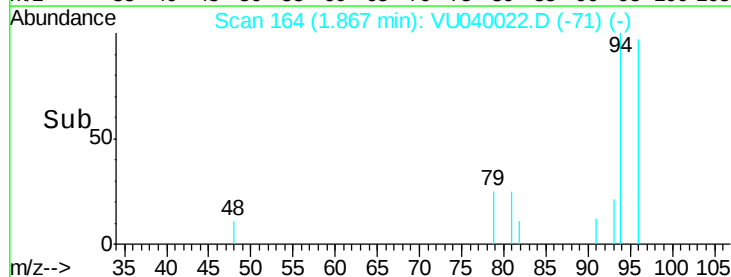
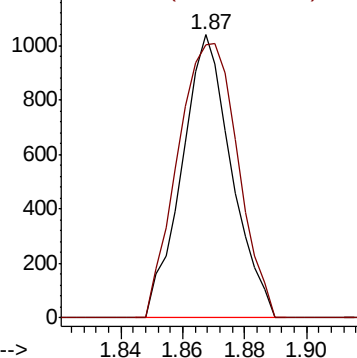
94 100

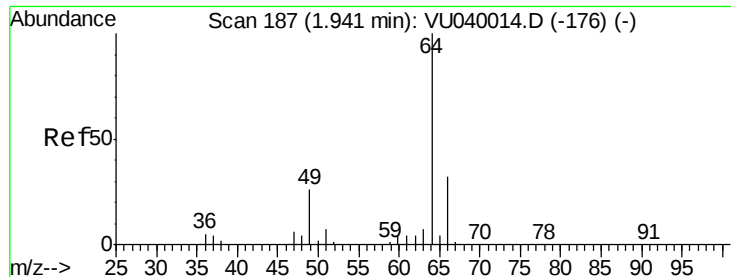
96 96.6 62.3 115.7



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 0.245 ug/L

RT: 1.94 min Scan# 188

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

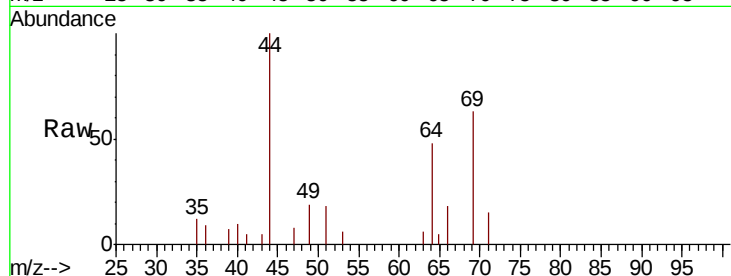
ClientSampleId :

Tot Ion: 64 Resp: 1603

Ion Ratio Lower Upper

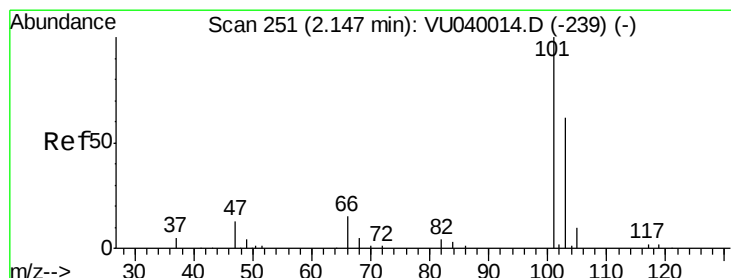
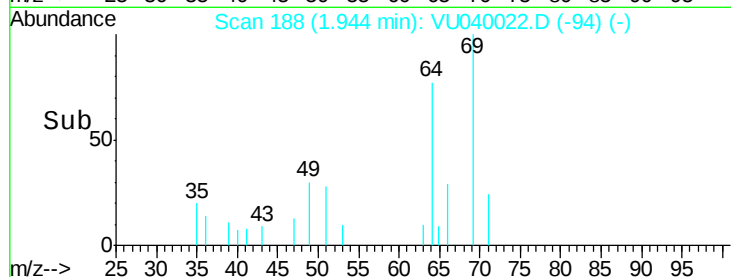
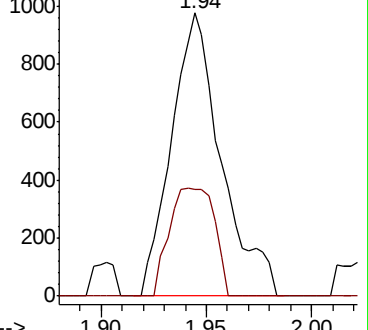
64 100

66 37.5 22.7 42.1



Abundance Ion 64.10 (63.80 to 64.80): VU040022.D (-94) (-)

Ion 66.05 (65.75 to 66.75): VU040022.D (-94) (-)



#9

Trichlorofluoromethane

Concen: 0.214 ug/L

RT: 2.15 min Scan# 252

Delta R.T. 0.00 min

Lab File: VU040022.D

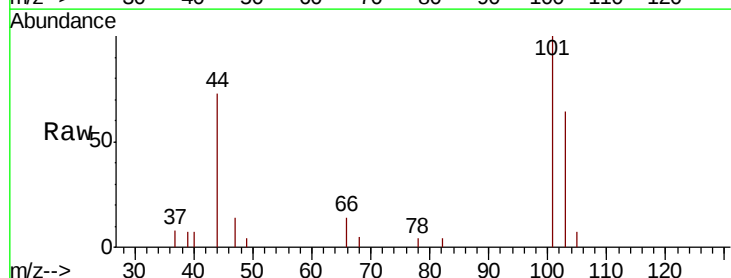
Acq: 02 Sep 2020 13:23

Tgt Ion: 101 Resp: 3350

Ion Ratio Lower Upper

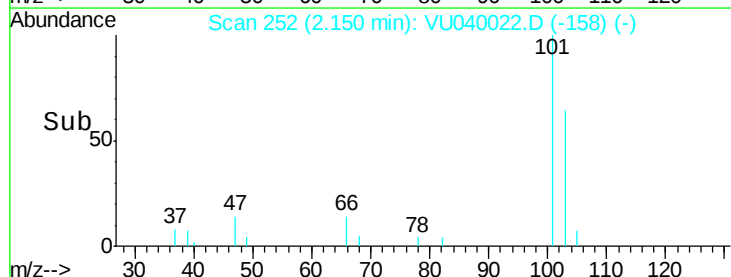
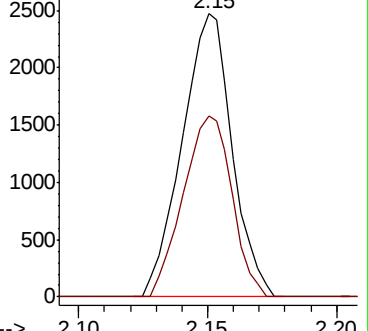
101 100

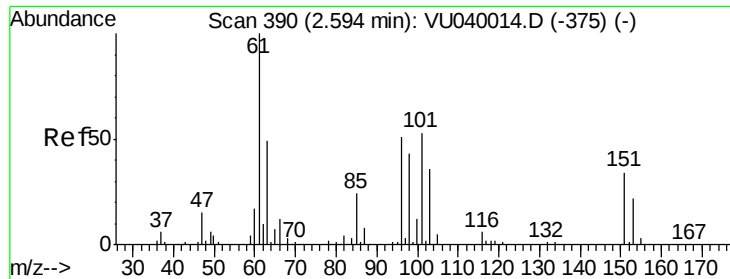
103 62.2 51.3 76.9



Abundance Ion 101.00 (100.70 to 101.70): VU040022.D (-158) (-)

Ion 103.00 (102.70 to 103.70): VU040022.D (-158) (-)





#10

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

Concen: 0.251 ug/L

RT: 2.59 min Scan# 388

Delta R.T. -0.01 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampleId :

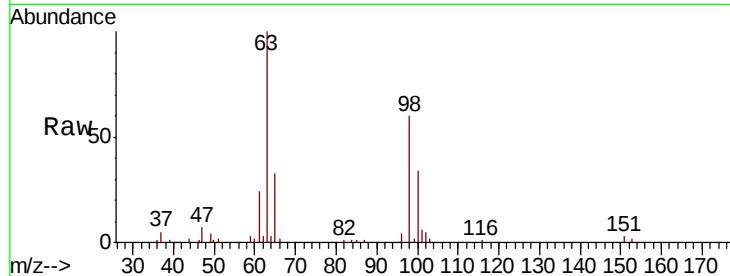
Tot Ion:101 Resp: 2542

Ion Ratio Lower Upper

101 100

85 28.8 37.7 56.5#

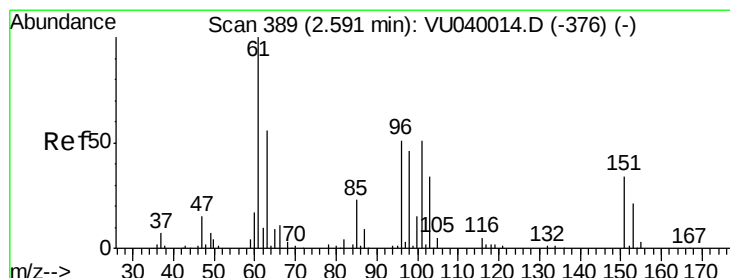
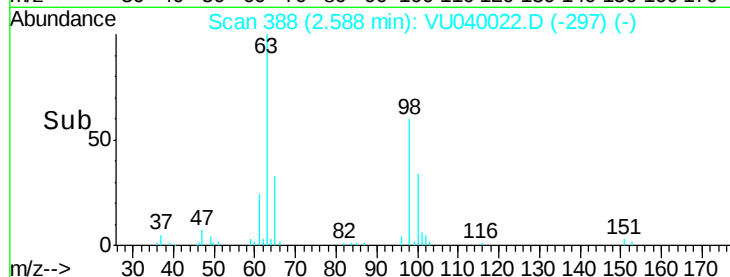
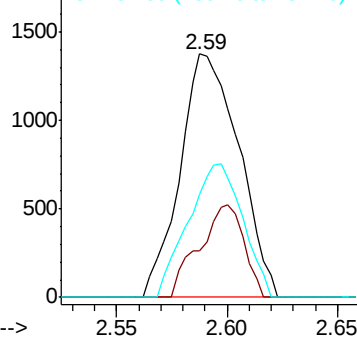
151 50.6 53.9 80.9#



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: 0.256 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

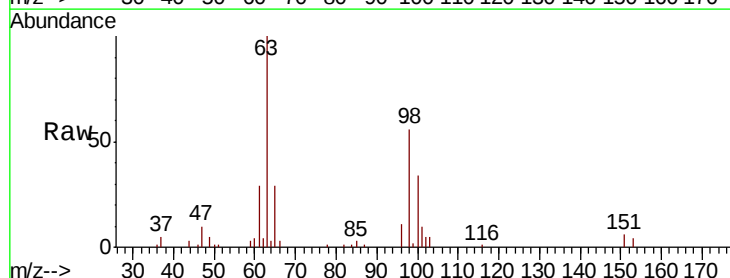
Tgt Ion: 96 Resp: 2242

Ion Ratio Lower Upper

96 100

61 276.9 138.3 256.8#

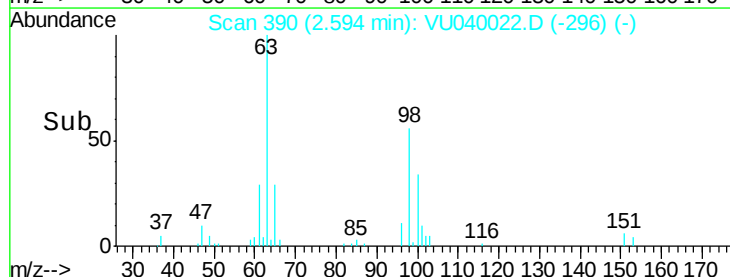
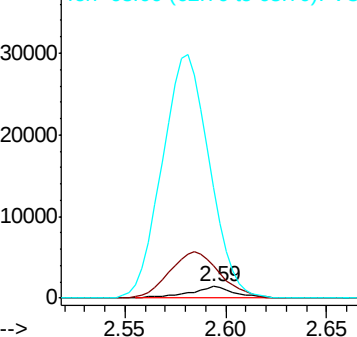
63 951.5 77.6 144.2#

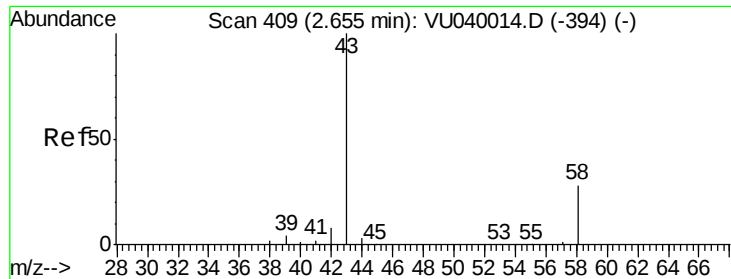


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 1.649 ug/L

RT: 2.68 min Scan# 416

Delta R.T. 0.02 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

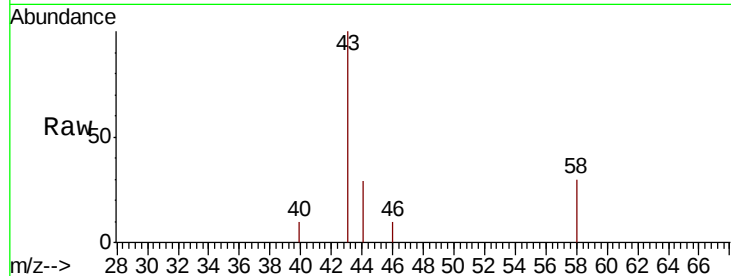
Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 43 Resp: 3773

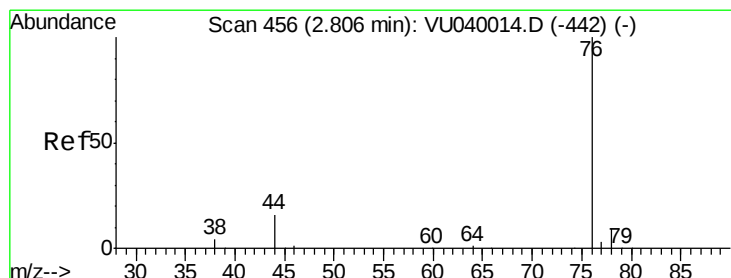
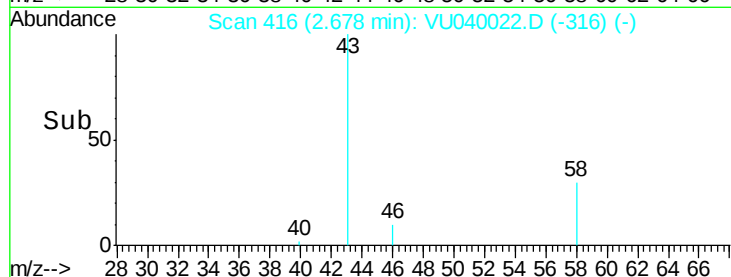
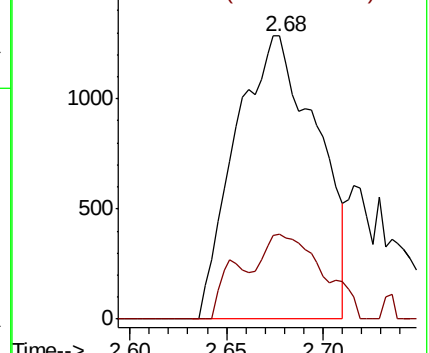
Ion Ratio Lower Upper

43 100

58 22.8 0.0 55.4



Abundance Ion 43.05 (42.75 to 43.75): VU040022.D (-316) (-)



#14

Carbon disulfide

Concen: 0.190 ug/L

RT: 2.81 min Scan# 457

Delta R.T. 0.00 min

Lab File: VU040022.D

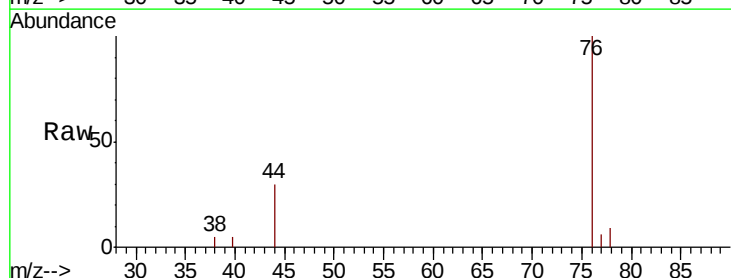
Acq: 02 Sep 2020 13:23

Tgt Ion: 76 Resp: 5326

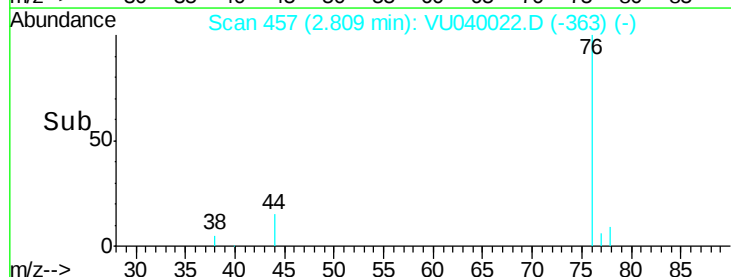
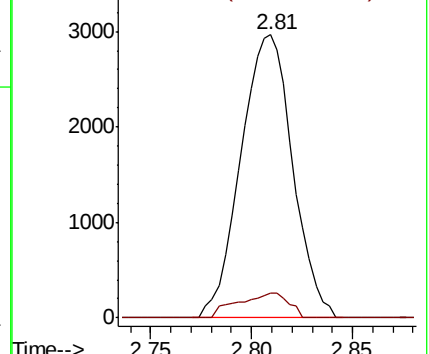
Ion Ratio Lower Upper

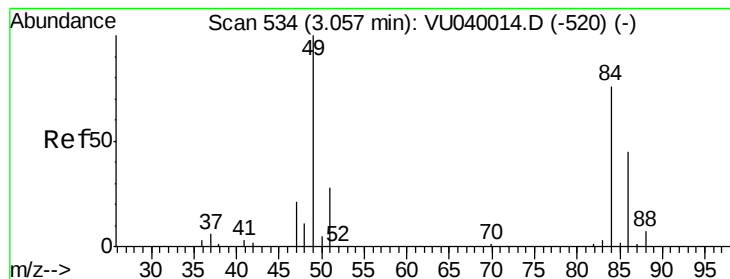
76 100

78 9.0 7.2 10.8



Abundance Ion 76.05 (75.75 to 76.75): VU040022.D (-363) (-)





#16

Methylene chloride

Concen: 0.329 ug/L

RT: 3.07 min Scan# 537

Delta R.T. 0.01 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampleId :

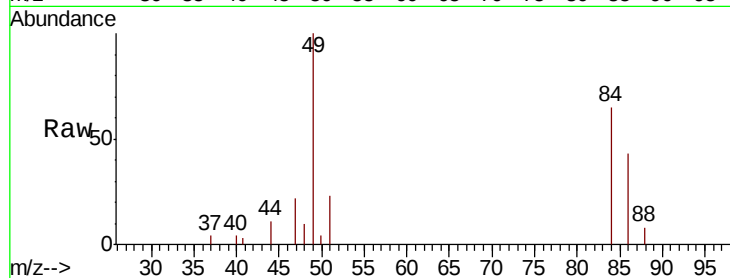
Tot Ion: 84 Resp: 3775

Ion Ratio Lower Upper

84 100

86 66.4 45.2 84.0

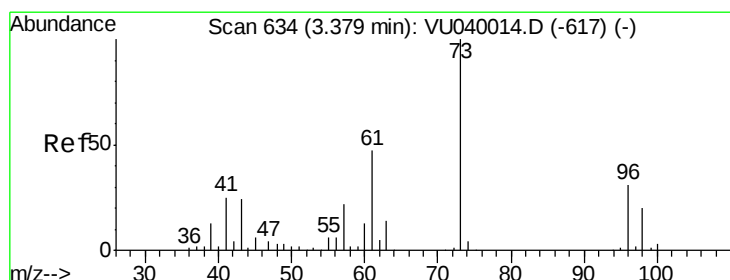
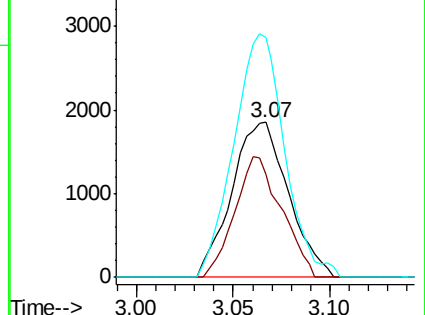
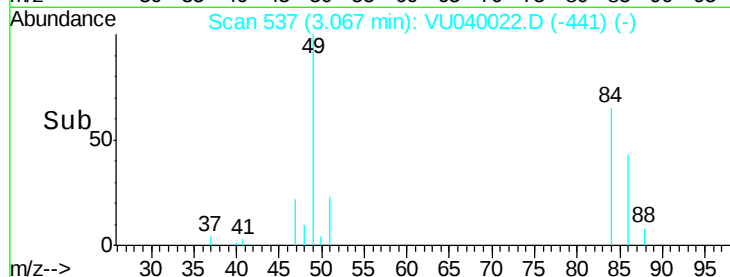
49 154.7 104.0 193.2



Abundance Ion 84.05 (83.75 to 84.75): VU040022.D (-541) (-)

Ion 86.00 (85.70 to 86.70): VU040022.D (-541) (-)

Ion 49.10 (48.80 to 49.80): VU040022.D (-541) (-)



#17

Methyl tert-butyl Ether

Concen: 0.179 ug/L

RT: 3.38 min Scan# 635

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

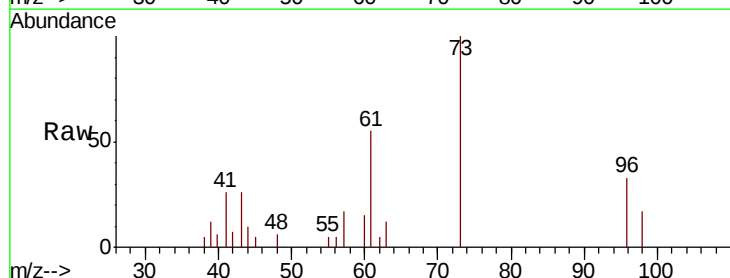
Tgt Ion: 73 Resp: 4719

Ion Ratio Lower Upper

73 100

43 24.6 19.1 28.7

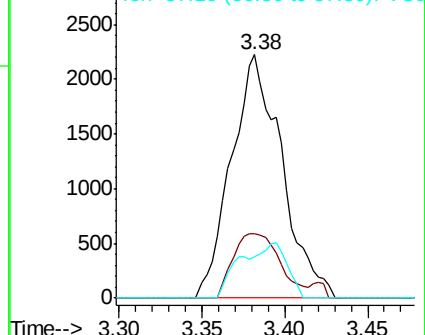
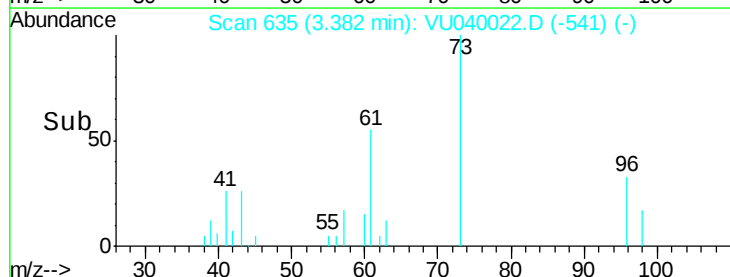
57 7.2 18.3 27.5#

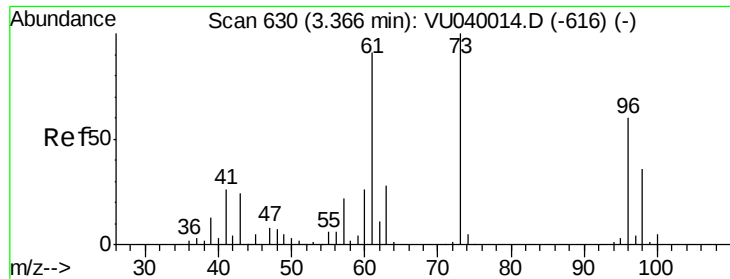


Abundance Ion 73.10 (72.80 to 73.80): VU040022.D (-541) (-)

Ion 43.05 (42.75 to 43.75): VU040022.D (-541) (-)

Ion 57.10 (56.80 to 57.80): VU040022.D (-541) (-)

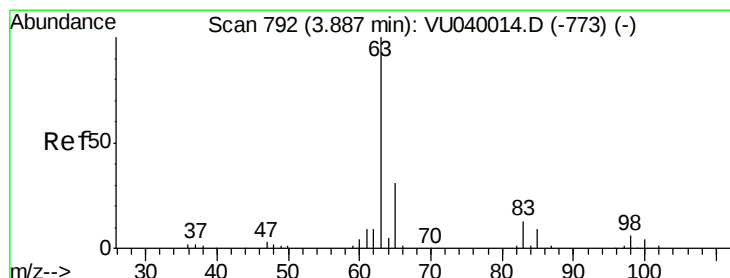
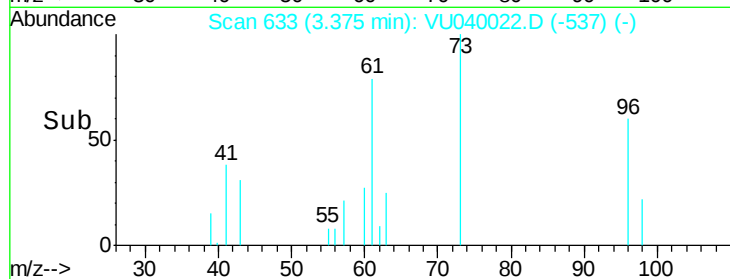
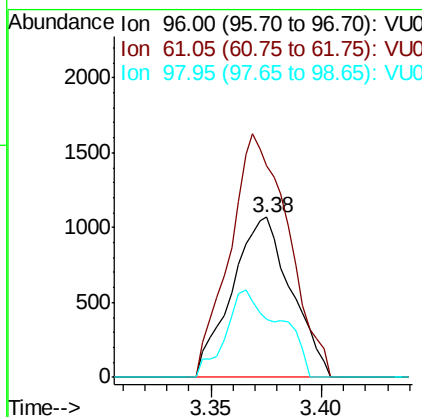
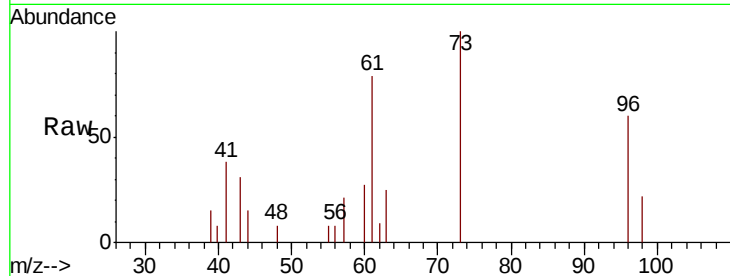




#18  
 trans-1,2-Dichloroethene  
 Concen: 0.211 ug/L  
 RT: 3.38 min Scan# 633  
 Delta R.T. 0.01 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

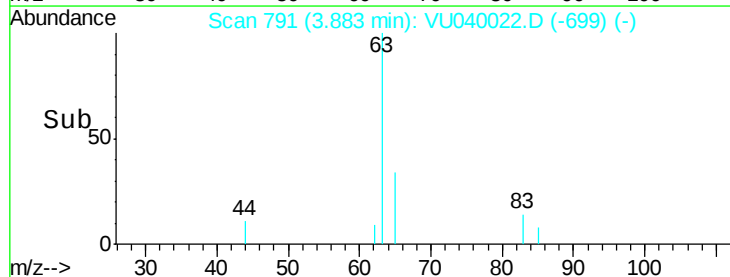
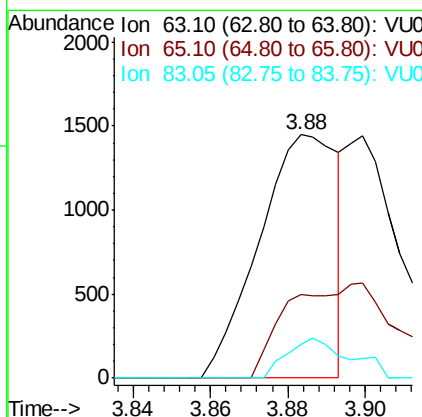
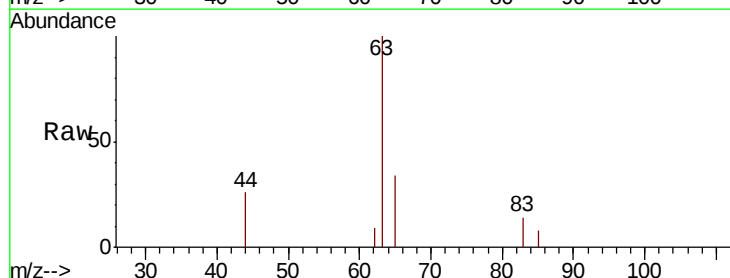
Instrument :  
 MSVOA\_U  
 ClientSampleId :

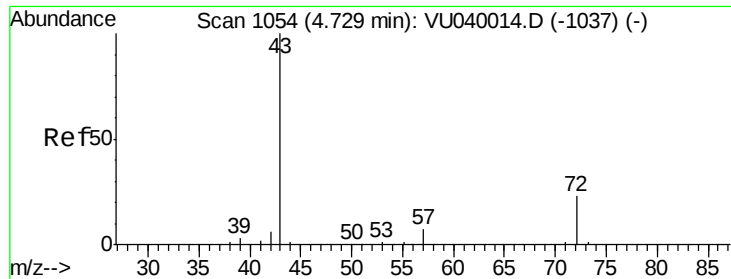
Tot Ion: 96 Resp: 1991  
 Ion Ratio Lower Upper  
 96 100  
 61 132.1 110.5 205.3  
 98 36.2 43.2 80.2#



#19  
 1,1-Dichloroethane  
 Concen: 0.105 ug/L  
 RT: 3.88 min Scan# 791  
 Delta R.T. -0.00 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

Tgt Ion: 63 Resp: 2034  
 Ion Ratio Lower Upper  
 63 100  
 65 34.2 22.2 41.2  
 83 13.9 9.4 17.6





#21

2-Butanone

Concen: 2.252 ug/L

RT: 4.74 min Scan# 1058

Delta R.T. 0.01 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

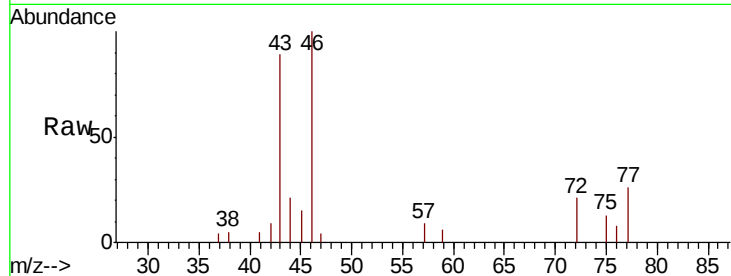
Instrument :  
MSVOA\_U  
ClientSampled :

Tot Ion: 43 Resp: 8415

Ion Ratio Lower Upper

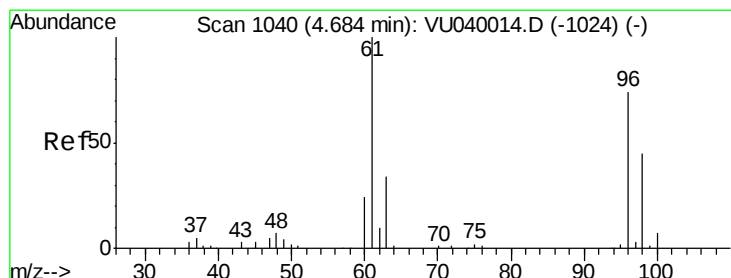
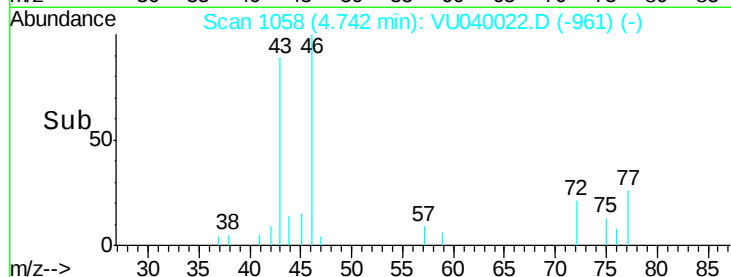
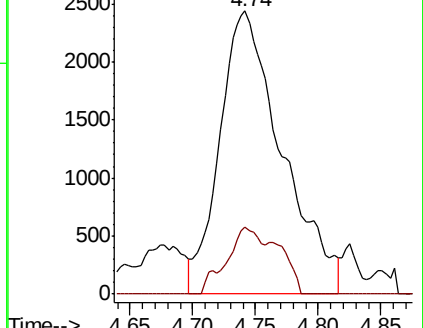
43 100

72 13.3 11.7 35.0



Abundance Ion 43.05 (42.75 to 43.75): VU040014.D (-1037) (-)

Ion 72.10 (71.80 to 72.80): VU040014.D (-1037) (-)



#22

cis-1,2-Dichloroethene

Concen: 0.200 ug/L

RT: 4.69 min Scan# 1041

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

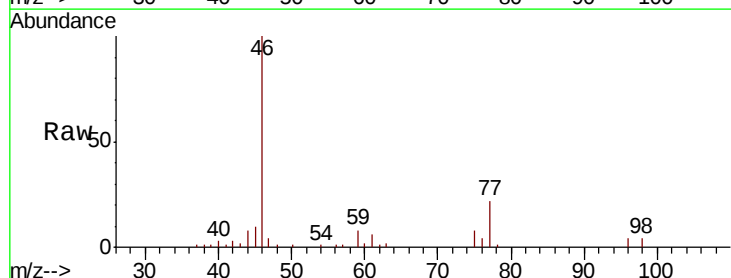
Tgt Ion: 96 Resp: 2029

Ion Ratio Lower Upper

96 100

61 147.9 98.8 183.4

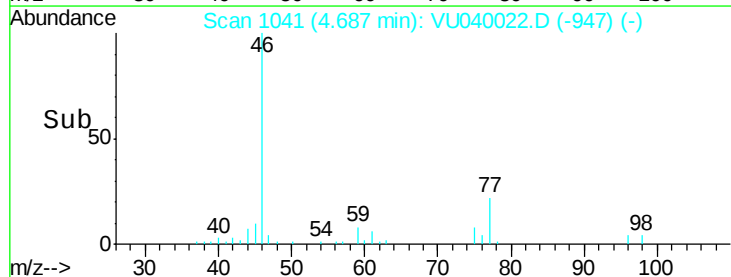
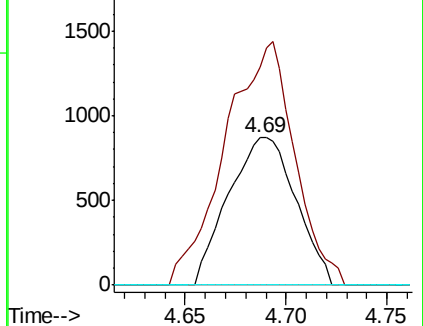
68 0.0 0.0 0.0

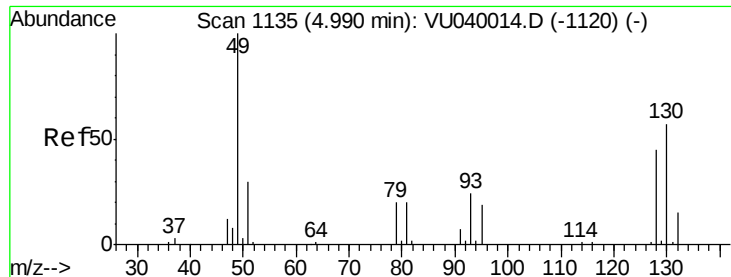


Abundance Ion 96.00 (95.70 to 96.70): VU040014.D (-1024) (-)

Ion 61.05 (60.75 to 61.75): VU040014.D (-1024) (-)

Ion 68.15 (67.85 to 68.85): VU040014.D (-1024) (-)

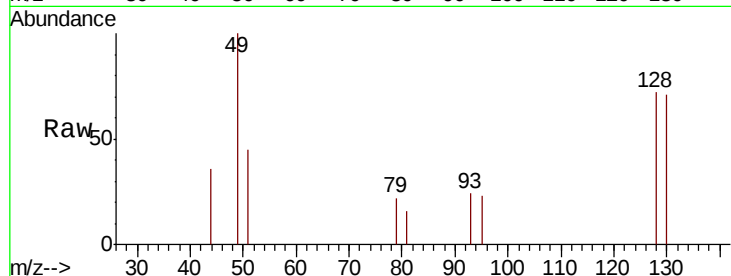




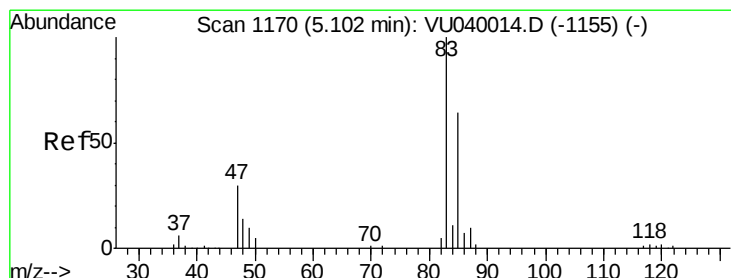
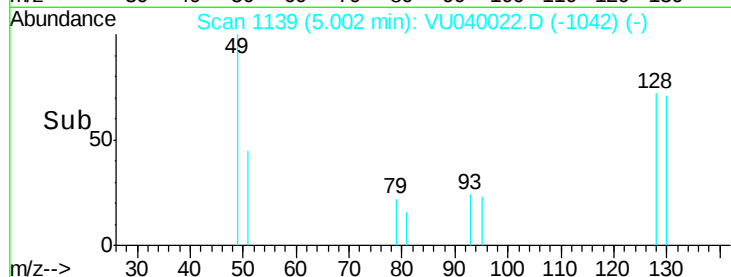
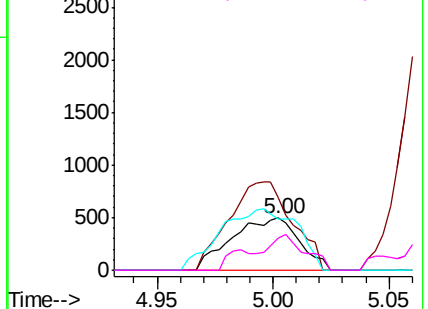
#23  
Bromochloromethane  
Concen: 0.226 ug/L  
RT: 5.00 min Scan# 1139  
Delta R.T. 0.01 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:128 Resp: 1002  
Ion Ratio Lower Upper  
128 100  
49 139.2 143.4 266.4#  
130 98.6 89.5 166.3  
51 62.0 51.0 76.4

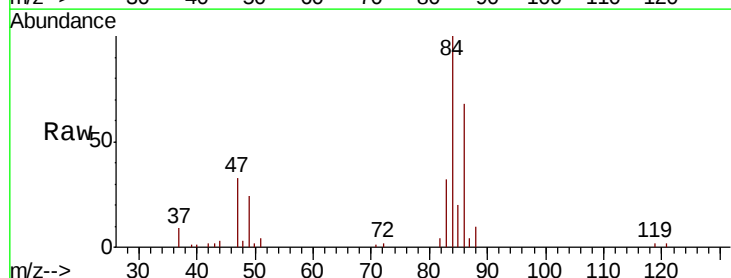


Abundance Ion 127.90 (127.60 to 128.60): V  
Ion 49.10 (48.80 to 49.80): VU0  
Ion 129.95 (129.65 to 130.65): V  
Ion 51.05 (50.75 to 51.75): VU0

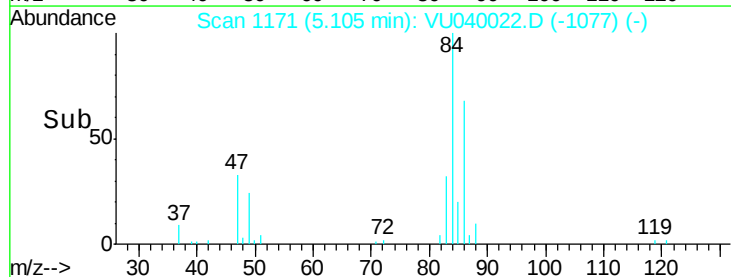
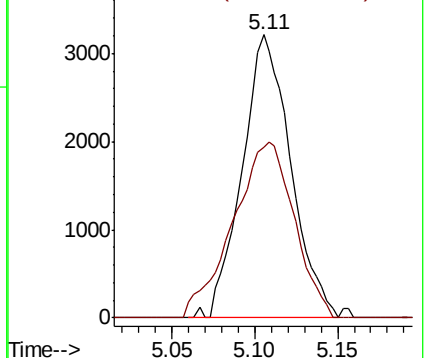


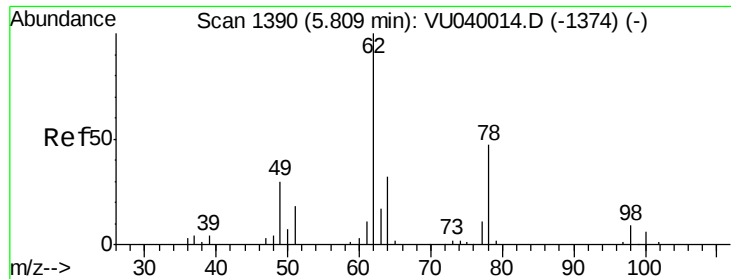
#25  
Chloroform  
Concen: 0.329 ug/L  
RT: 5.11 min Scan# 1171  
Delta R.T. 0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Tgt Ion: 83 Resp: 6536  
Ion Ratio Lower Upper  
83 100  
85 60.3 45.3 84.1



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

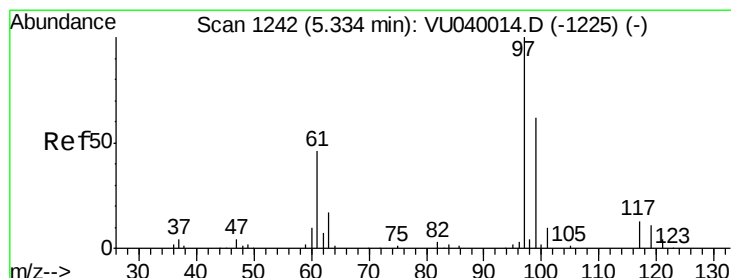
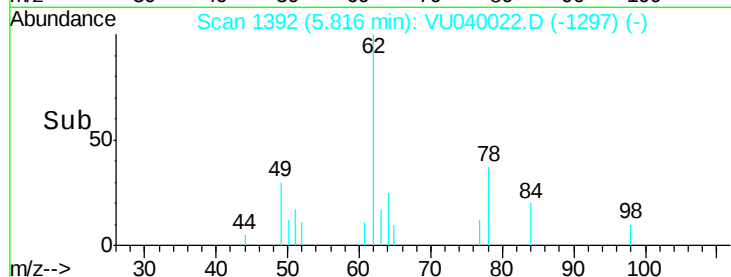
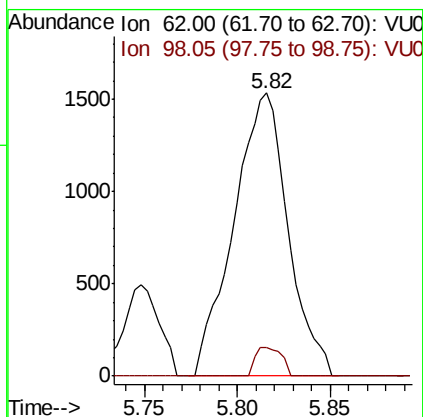
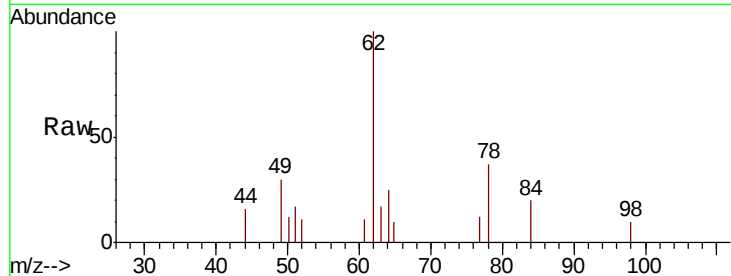




#27  
 1,2-Dichloroethane  
 Concen: 0.215 ug/L  
 RT: 5.82 min Scan# 1392  
 Delta R.T. 0.01 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

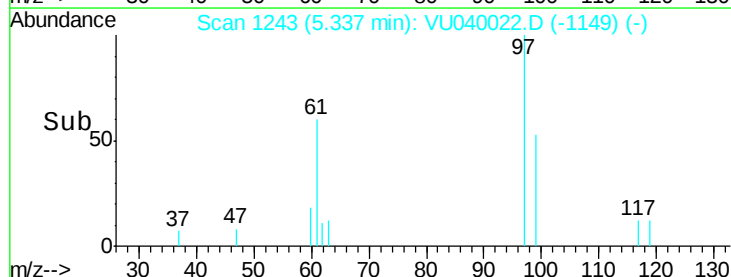
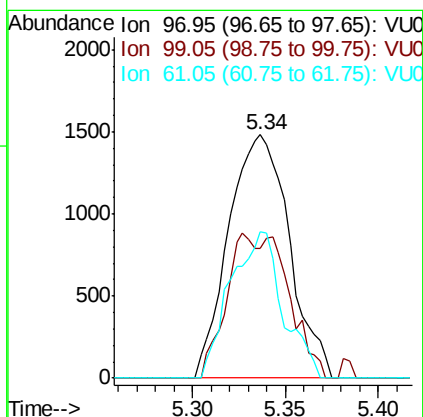
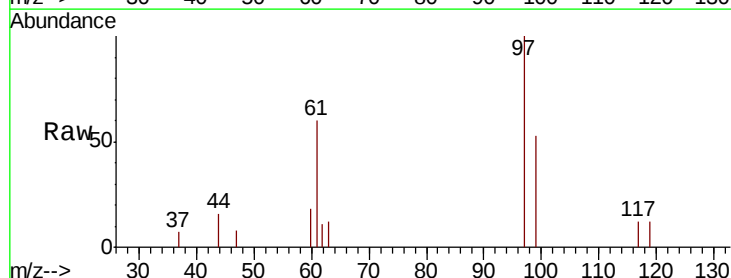
Instrument :  
 MSVOA\_U  
 ClientSampleId :

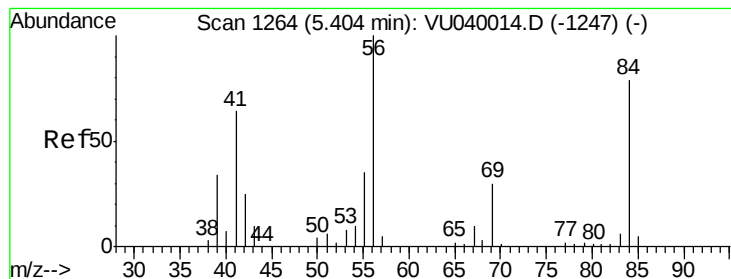
Tot Ion: 62 Resp: 3125  
 Ion Ratio Lower Upper  
 62 100  
 98 10.1 6.1 9.1#



#29  
 1,1,1-Trichloroethane  
 Concen: 0.187 ug/L  
 RT: 5.34 min Scan# 1243  
 Delta R.T. 0.00 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

Tgt Ion: 97 Resp: 3361  
 Ion Ratio Lower Upper  
 97 100  
 99 28.7 50.9 76.3#  
 61 51.9 39.5 59.3





#30

Cyclohexane

Concen: 0.167 ug/L

RT: 5.41 min Scan# 1265

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampled :

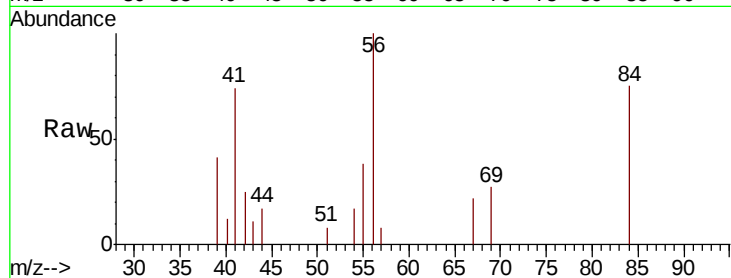
Tot Ion: 56 Resp: 2920

Ion Ratio Lower Upper

56 100

69 30.1 24.1 36.1

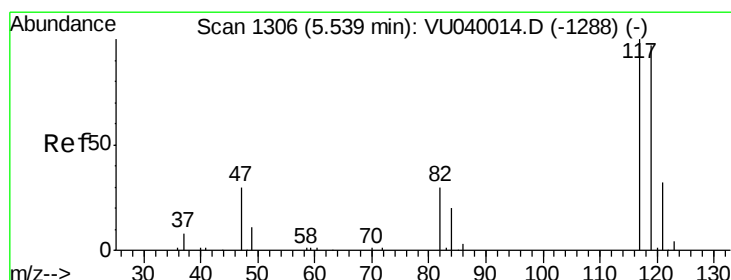
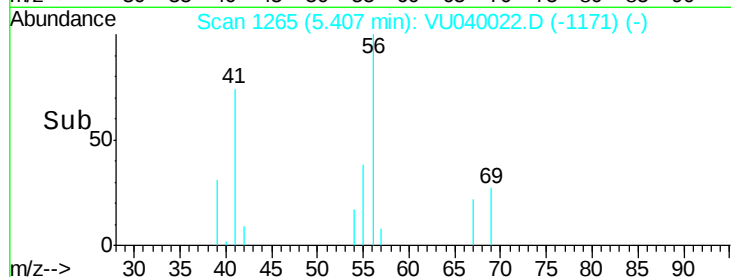
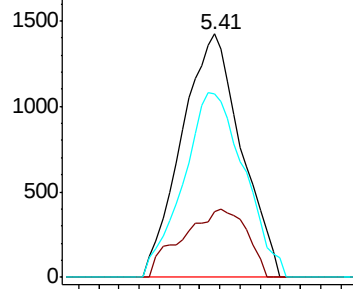
84 77.8 65.0 97.4



Abundance Ion 56.10 (55.80 to 56.80): VU040022.D (-1171) (-)

Ion 69.15 (68.85 to 69.85): VU040022.D (-1171) (-)

Ion 84.15 (83.85 to 84.85): VU040022.D (-1171) (-)



#31

Carbon tetrachloride

Concen: 0.192 ug/L

RT: 5.54 min Scan# 1306

Delta R.T. -0.00 min

Lab File: VU040022.D

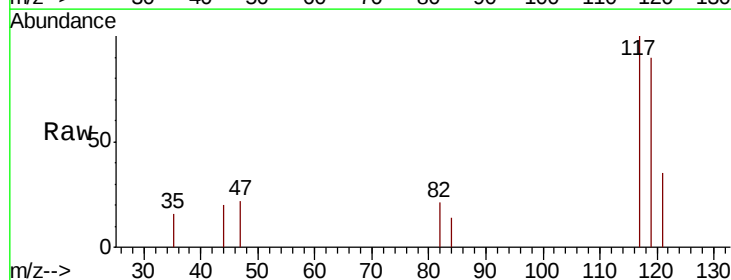
Acq: 02 Sep 2020 13:23

Tgt Ion: 117 Resp: 2964

Ion Ratio Lower Upper

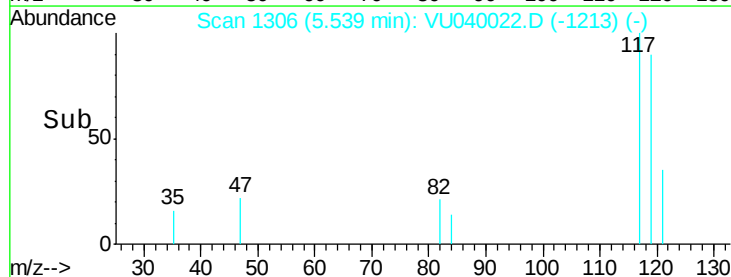
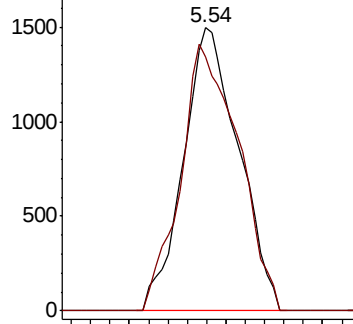
117 100

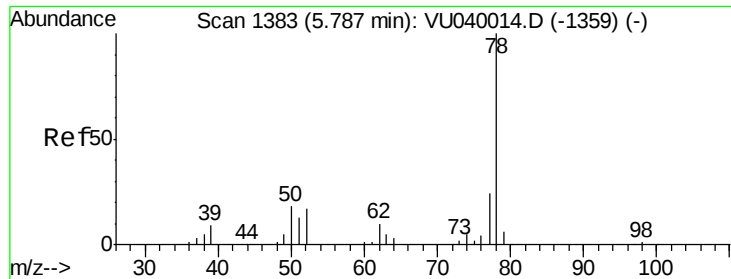
119 98.7 77.7 116.5



Abundance Ion 116.90 (116.60 to 117.60): VU040022.D (-1213) (-)

Ion 118.90 (118.60 to 119.60): VU040022.D (-1213) (-)

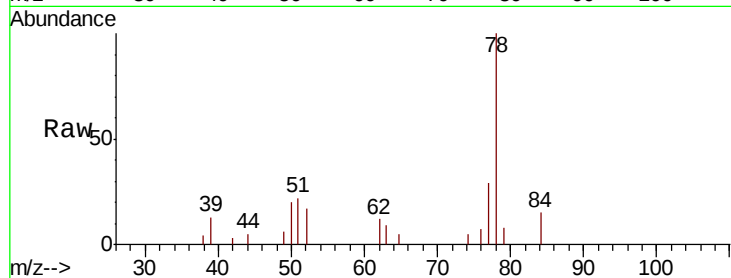




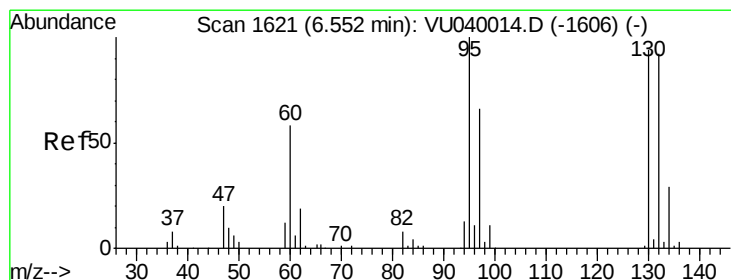
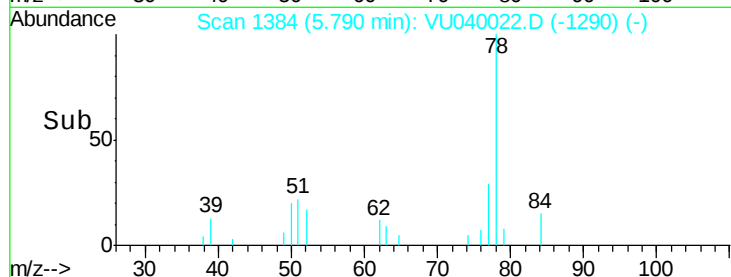
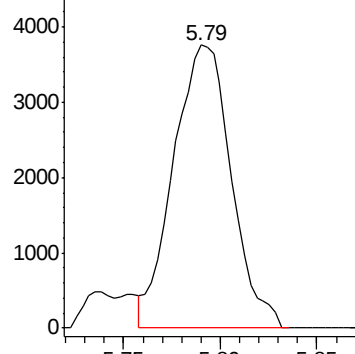
#33  
Benzene  
Concen: 0.191 ug/L  
RT: 5.79 min Scan# 1384  
Delta R.T. 0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Instrument :  
MSVOA\_U  
ClientSampled :

Tgt Ion: 78 Resp: 7824



Abundance Ion 78.10 (77.80 to 78.80): VU0



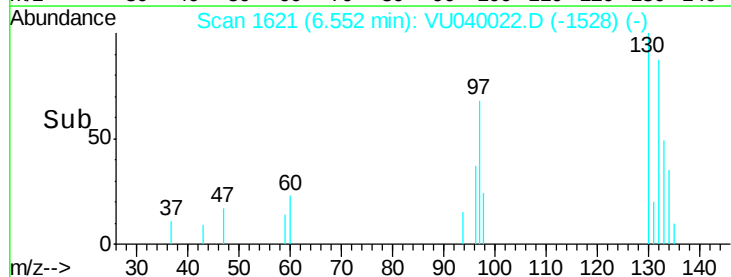
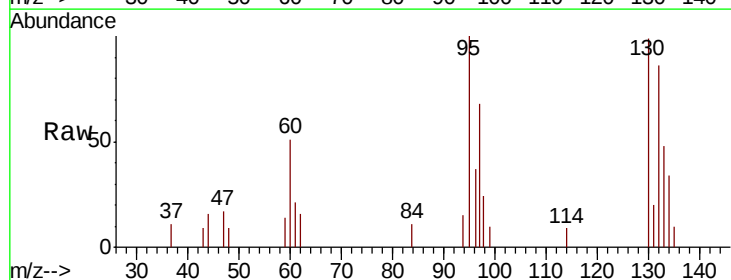
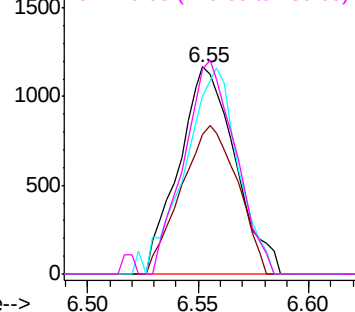
#34  
Trichloroethene  
Concen: 0.188 ug/L  
RT: 6.55 min Scan# 1621  
Delta R.T. -0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

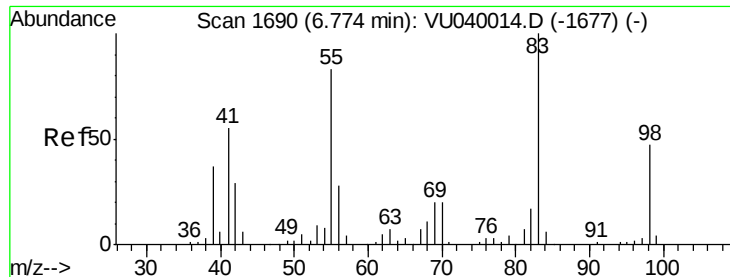
Tgt Ion: 95 Resp: 2066

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 67.5  | 43.3  | 80.5  |
| 132 | 86.0  | 59.4  | 110.4 |
| 130 | 98.8  | 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): VU0  
Ion 129.95 (129.65 to 130.65): VU0

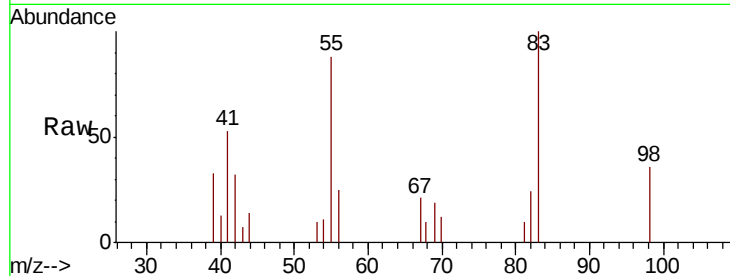




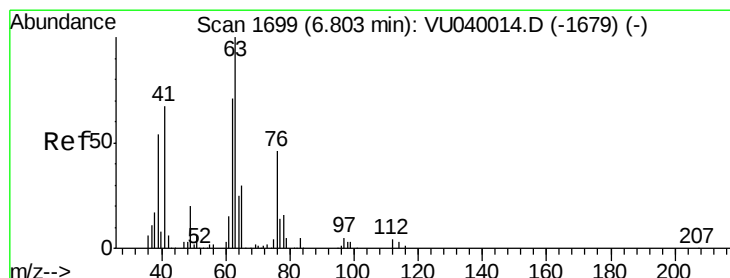
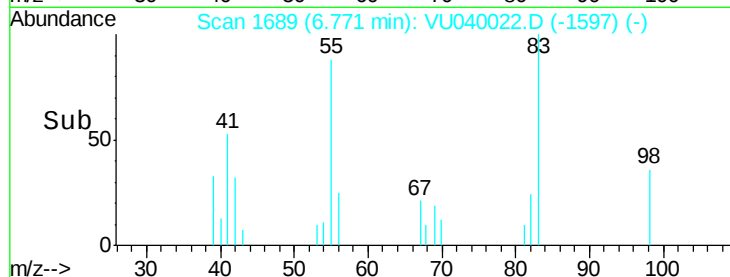
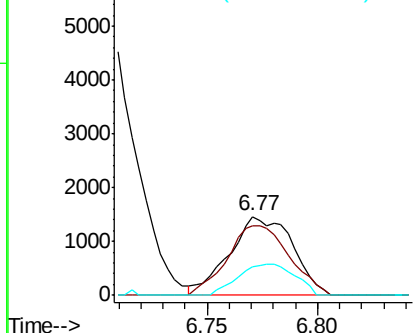
#35  
Methvlcvclohexane  
Concen: 0.173 ug/L  
RT: 6.77 min Scan# 1689  
Delta R.T. -0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 83 Resp: 2916  
Ion Ratio Lower Upper  
83 100  
55 86.5 70.5 105.7  
98 35.3 37.8 56.6#

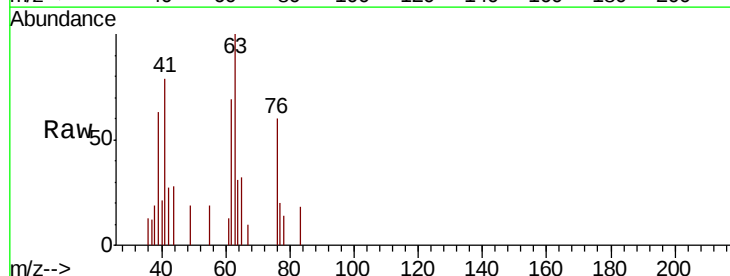


Abundance Ion 83.15 (82.85 to 83.85): VU0  
Ion 55.10 (54.80 to 55.80): VU0  
Ion 98.15 (97.85 to 98.85): VU0

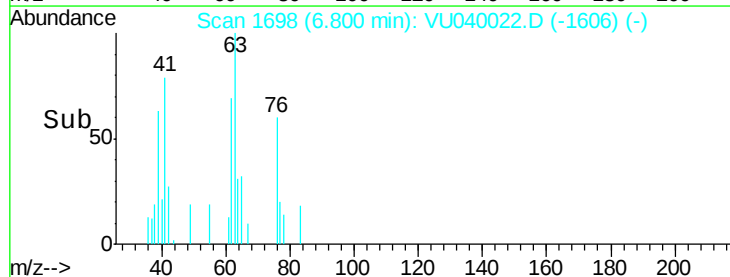
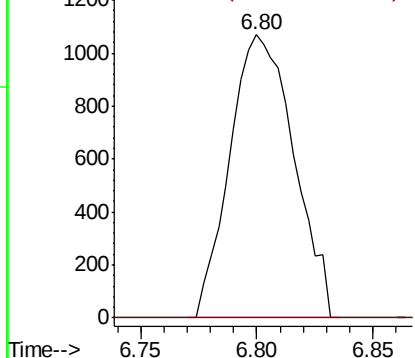


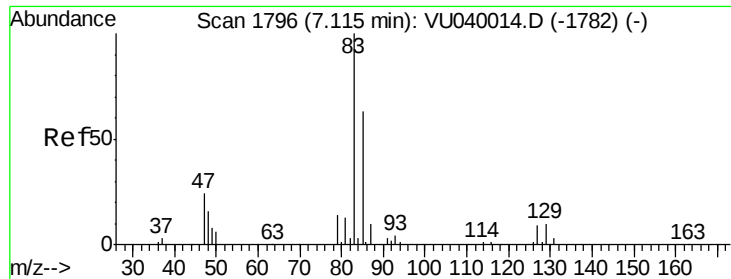
#37  
1,2-Dichloropropane  
Concen: 0.184 ug/L  
RT: 6.80 min Scan# 1698  
Delta R.T. -0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Tgt Ion: 63 Resp: 2047  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.2 4.8#



Abundance Ion 63.10 (62.80 to 63.80): VU0  
Ion 112.10 (111.80 to 112.80): V

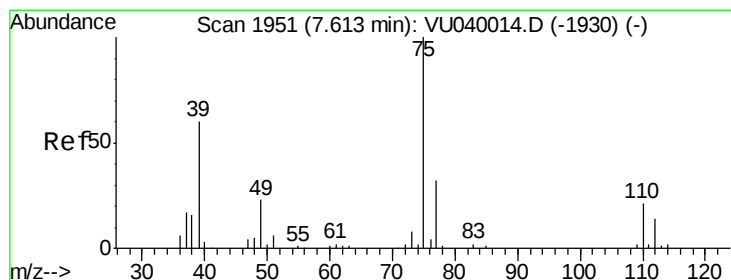
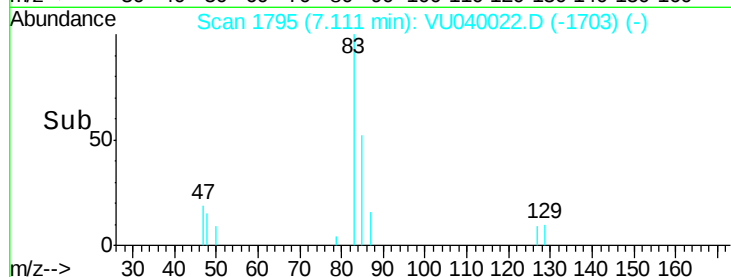
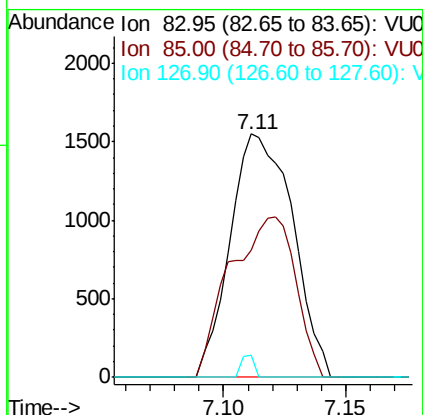
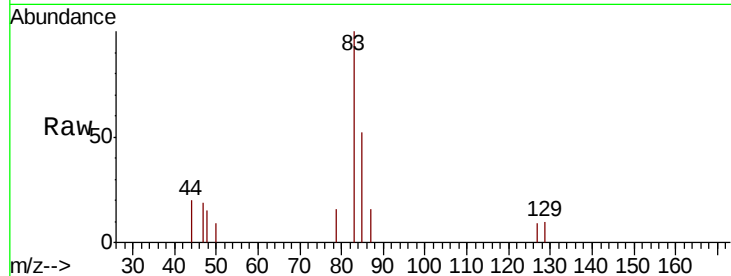




#38  
 Bromodichloromethane  
 Concen: 0.181 ug/L  
 RT: 7.11 min Scan# 1795  
 Delta R.T. -0.00 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

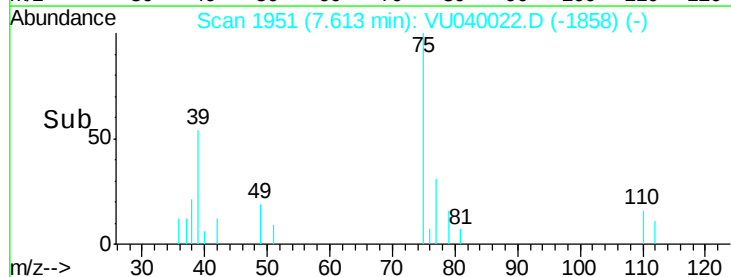
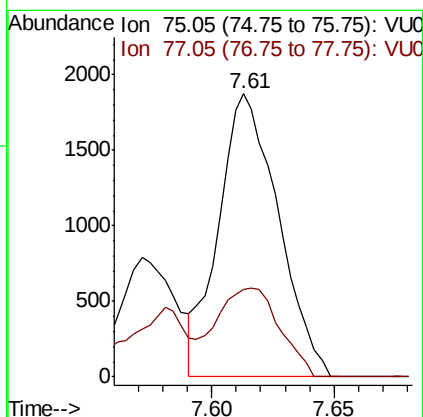
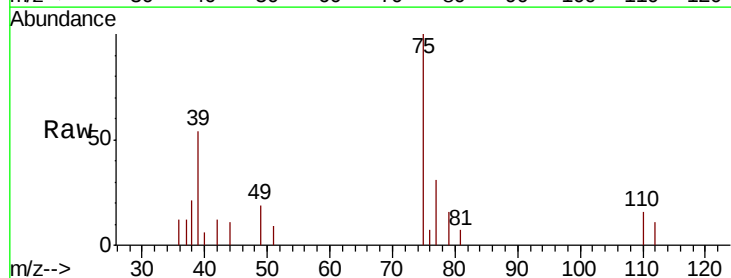
Instrument :  
 MSVOA\_U  
 ClientSampleId :

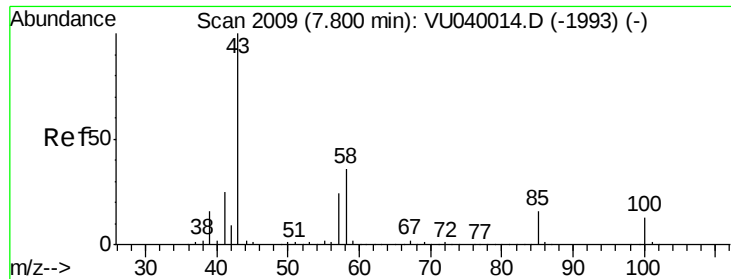
Tot Ion: 83 Resp: 2754  
 Ion Ratio Lower Upper  
 83 100  
 85 52.3 45.1 83.9  
 127 8.9 6.7 10.1



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.194 ug/L  
 RT: 7.61 min Scan# 1951  
 Delta R.T. -0.00 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

Tgt Ion: 75 Resp: 3187  
 Ion Ratio Lower Upper  
 75 100  
 77 31.0 21.1 39.3

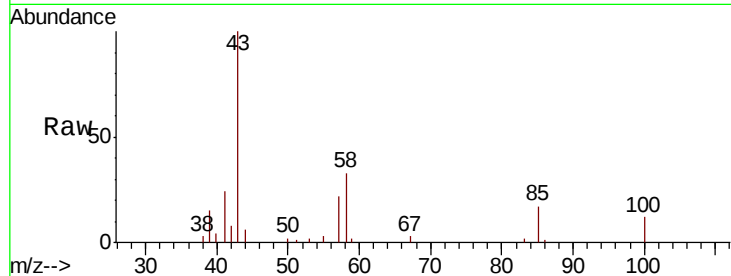




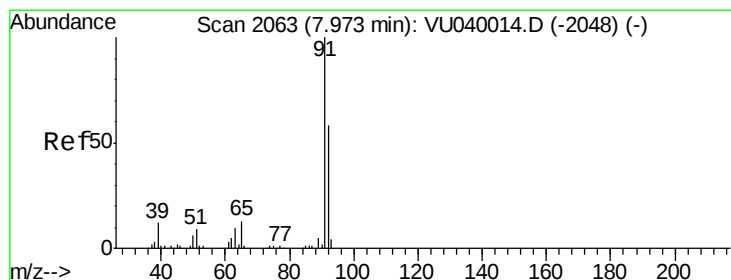
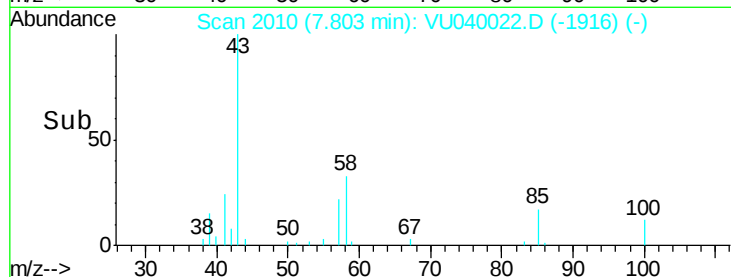
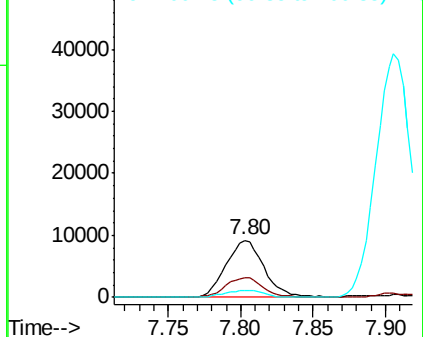
#40  
4-Methyl-2-pentanone  
Concen: 1.835 ug/L  
RT: 7.80 min Scan# 2010  
Delta R.T. 0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion: 43 Resp: 16743  
Ion Ratio Lower Upper  
43 100  
58 33.2 28.7 43.1  
100 12.3 10.2 15.2

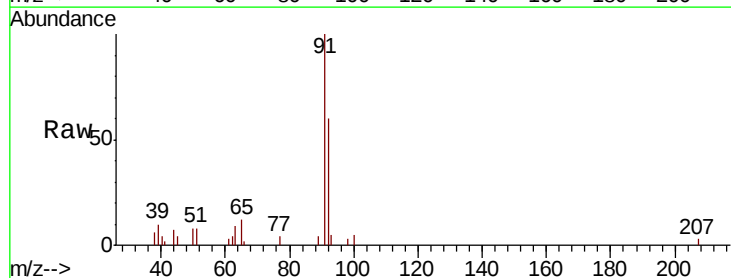


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 100.15 (99.85 to 100.85): VU0

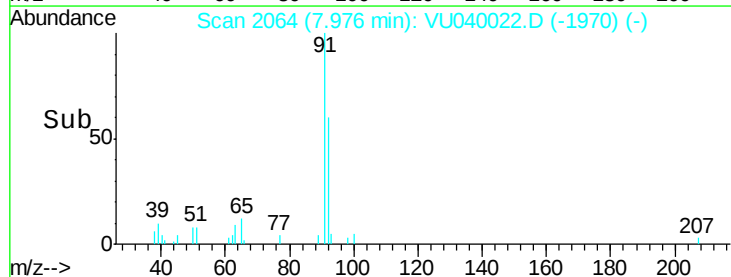
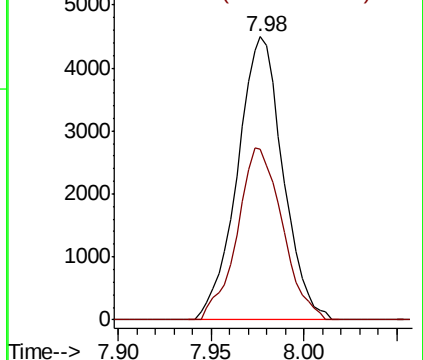


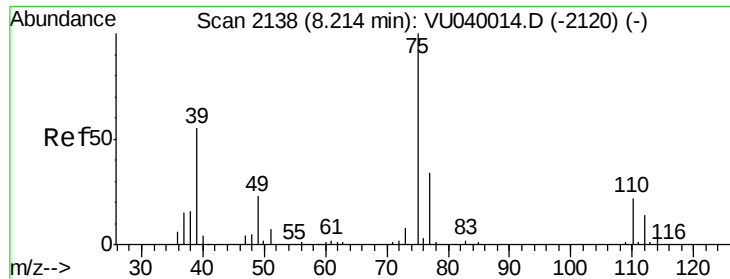
#42  
Toluene  
Concen: 0.181 ug/L  
RT: 7.98 min Scan# 2064  
Delta R.T. 0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Tgt Ion: 91 Resp: 7638  
Ion Ratio Lower Upper  
91 100  
92 60.2 40.7 75.5



Abundance Ion 91.15 (90.85 to 91.85): VU0  
Ion 92.15 (91.85 to 92.85): VU0

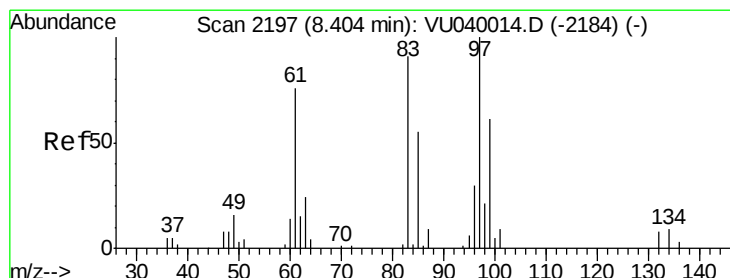
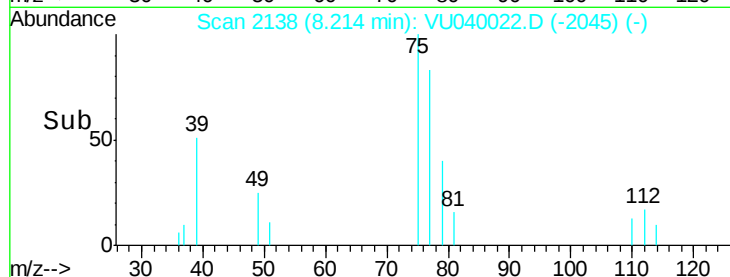
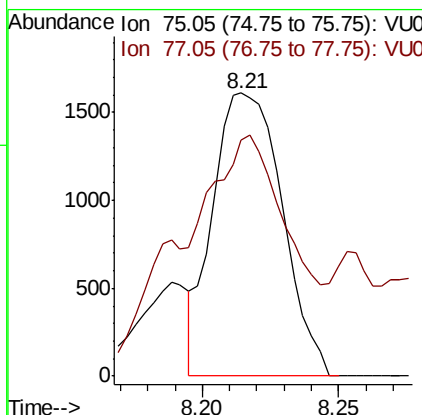
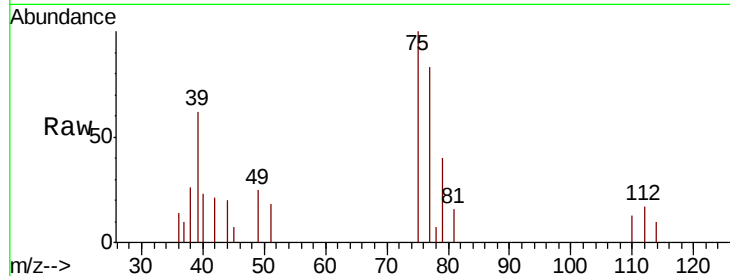




#44  
trans-1,3-Dichloropropene  
Concen: 0.187 ug/L  
RT: 8.21 min Scan# 2138  
Delta R.T. -0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

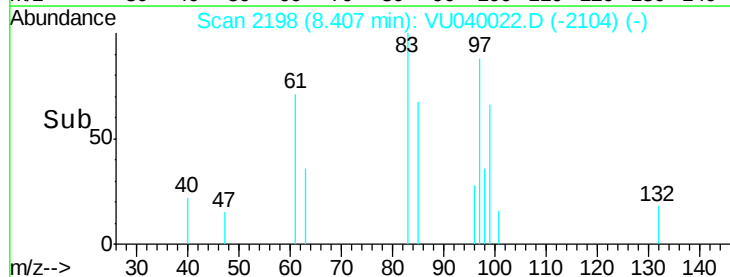
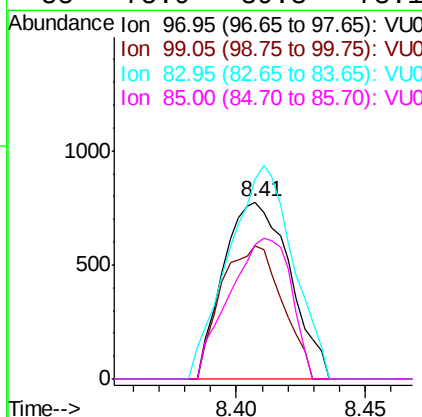
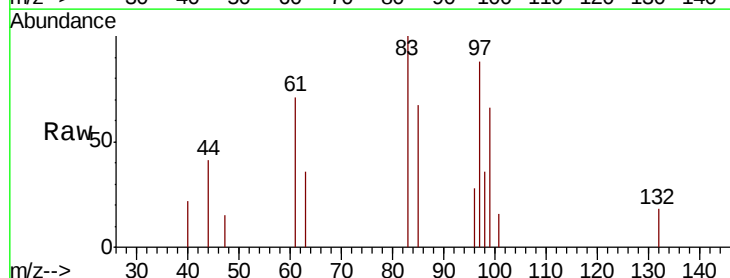
Instrument :  
MSVOA\_U  
ClientSampleId :

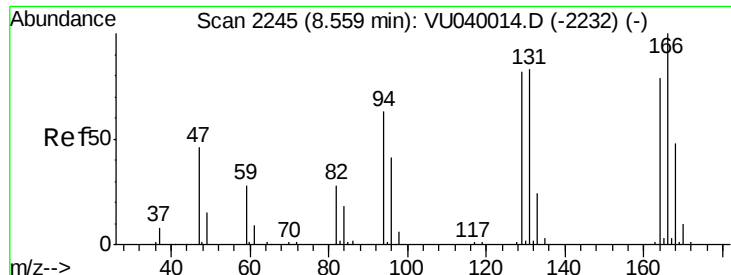
Tot Ion: 75 Resp: 2843  
Ion Ratio Lower Upper  
75 100  
77 83.3 23.9 44.3#



#45  
1,1,2-Trichloroethane  
Concen: 0.172 ug/L  
RT: 8.41 min Scan# 2198  
Delta R.T. 0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Tgt Ion: 97 Resp: 1393  
Ion Ratio Lower Upper  
97 100  
99 75.1 43.0 79.8  
83 113.1 61.7 114.7  
85 75.9 39.3 73.1#





#47

Tetrachloroethene

Concen: 0.189 ug/L

RT: 8.56 min Scan# 2245

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:164 Resp: 1366

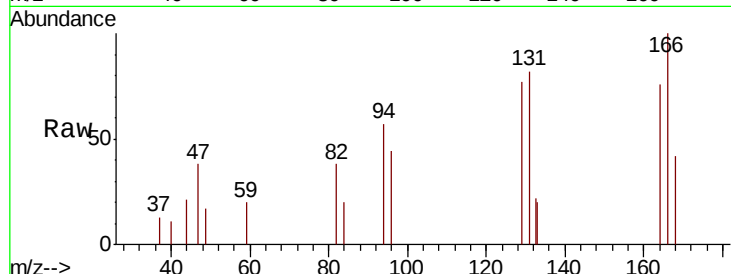
Ion Ratio Lower Upper

164 100

129 100.7 71.5 132.7

131 107.6 65.9 122.5

166 131.2 87.3 162.1

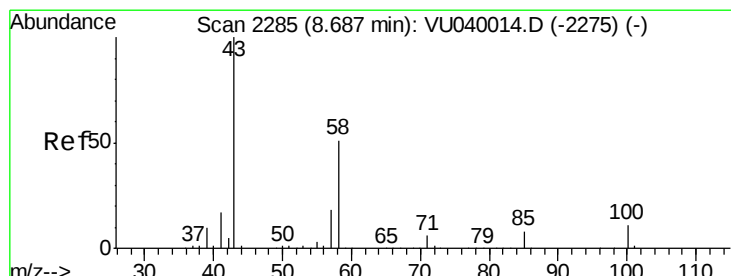
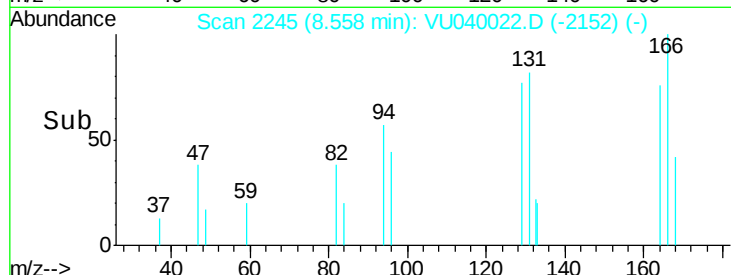
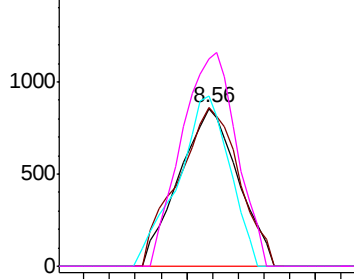


Abundance Ion 163.90 (163.60 to 164.60): V

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: 2.282 ug/L

RT: 8.69 min Scan# 2286

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Tgt Ion: 43 Resp: 15183

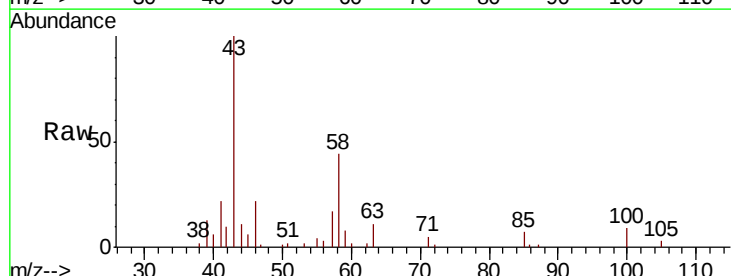
Ion Ratio Lower Upper

43 100

58 48.6 39.6 59.4

57 18.4 14.3 21.5

100 10.4 8.0 12.0

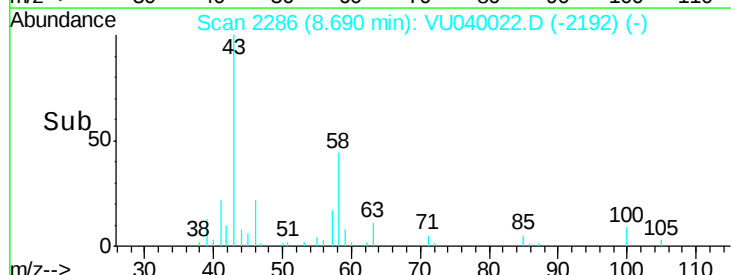
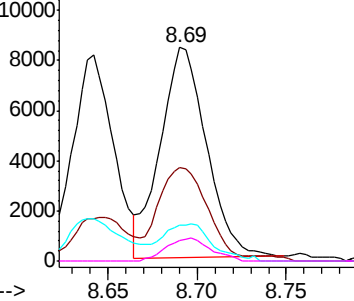


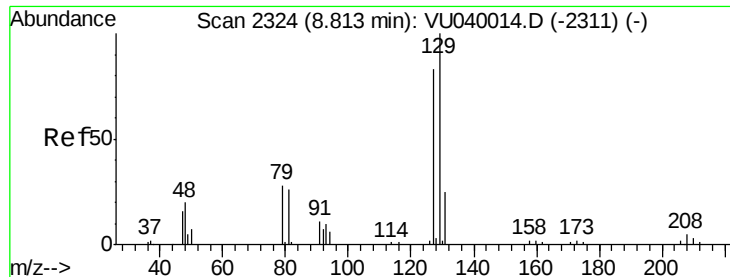
Abundance Ion 43.05 (42.75 to 43.75): VU0

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: 0.186 ug/L

RT: 8.81 min Scan# 2324

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

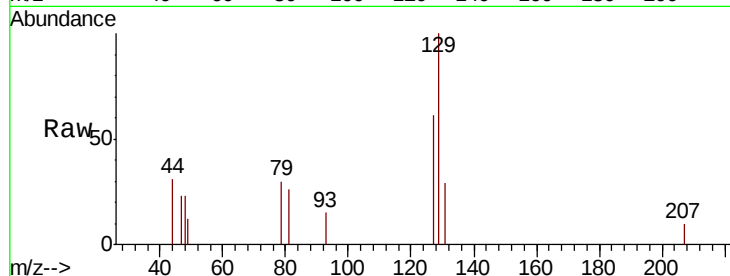
ClientSampleId :

Tot Ion:129 Resp: 1808

Ion Ratio Lower Upper

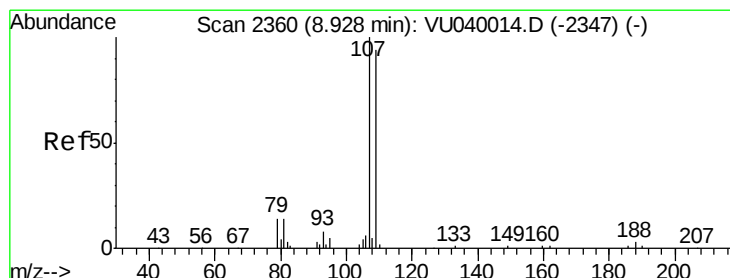
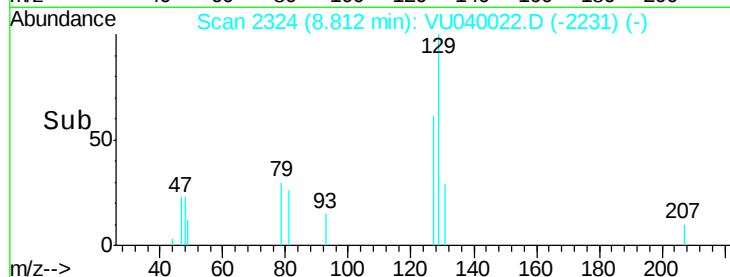
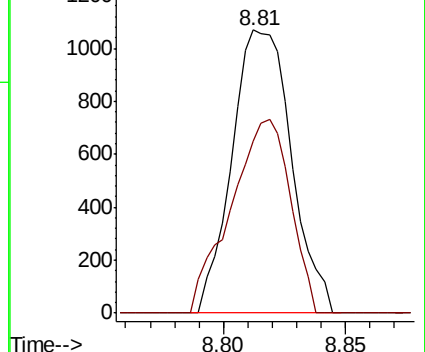
129 100

127 61.0 53.7 99.7



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V



#50

1,2-Dibromoethane

Concen: 0.174 ug/L

RT: 8.92 min Scan# 2359

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

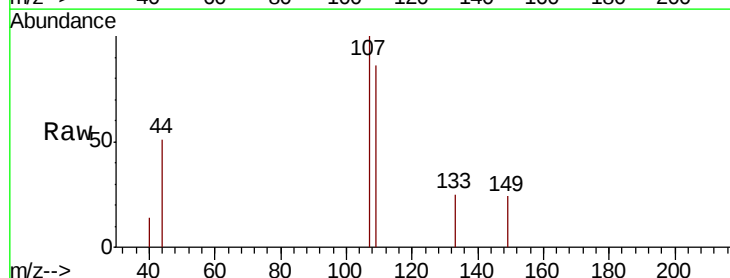
Tgt Ion:107 Resp: 1357

Ion Ratio Lower Upper

107 100

109 86.3 62.4 115.8

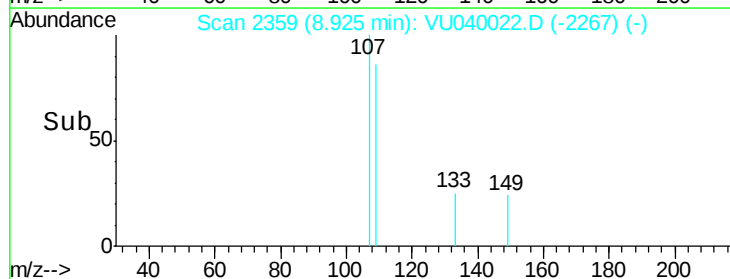
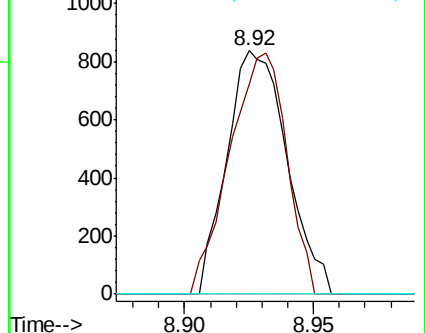
188 0.0 2.3 3.5#

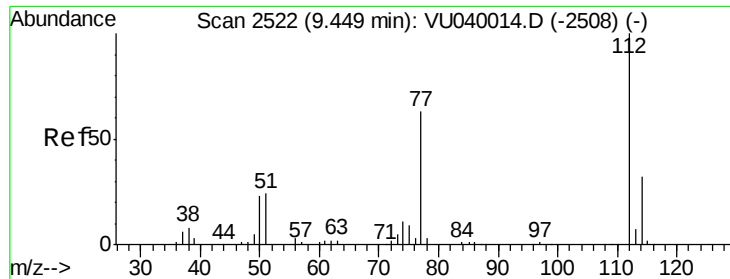


Abundance Ion 106.95 (106.65 to 107.65): V

Ion 109.00 (108.70 to 109.70): V

Ion 187.90 (187.60 to 188.60): V

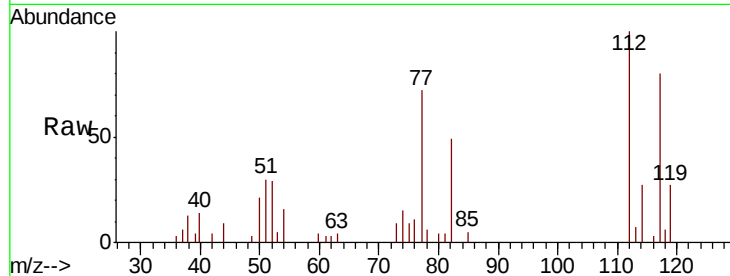




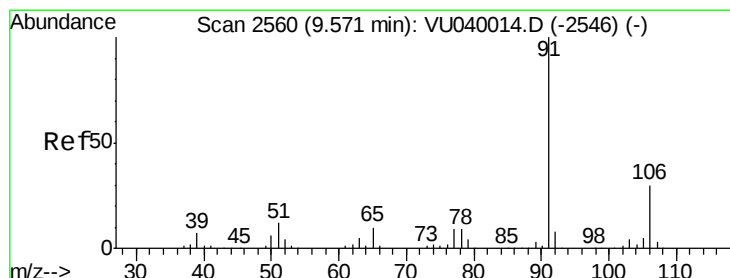
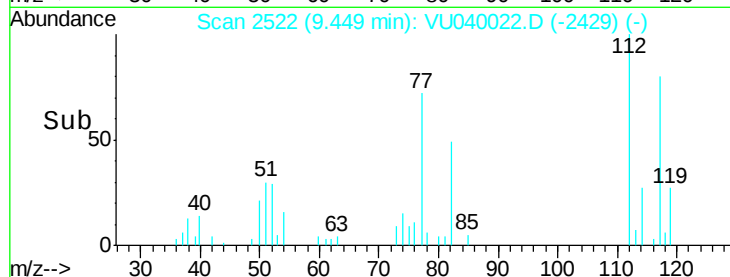
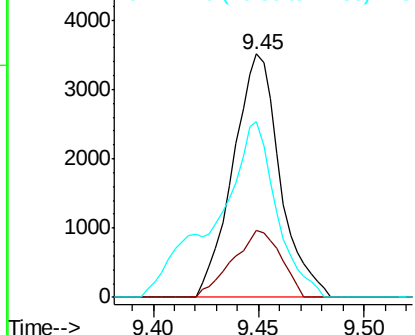
#51  
Chlorobenzene  
Concen: 0.207 ug/L  
RT: 9.45 min Scan# 2522  
Delta R.T. -0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:112 Resp: 5422  
Ion Ratio Lower Upper  
112 100  
114 27.4 22.7 42.3  
77 72.2 53.2 79.8

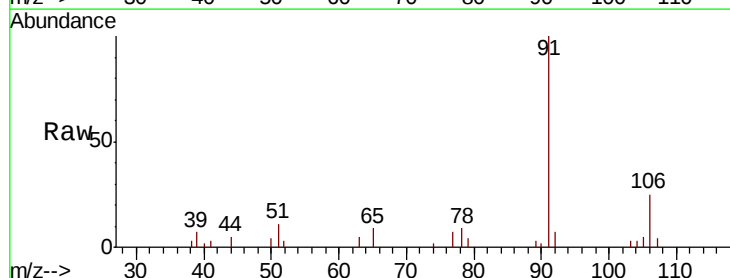


Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V

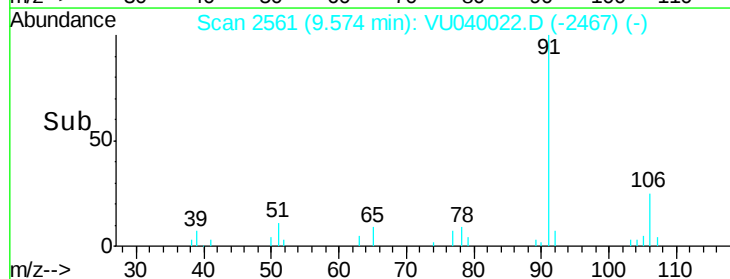
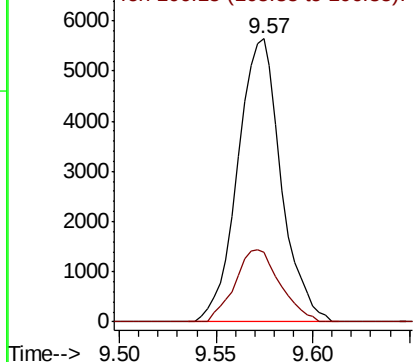


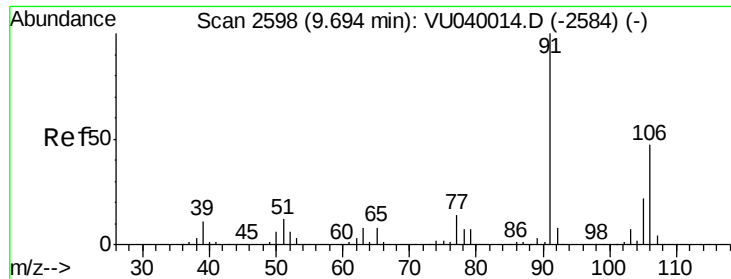
#52  
Ethylbenzene  
Concen: 0.183 ug/L  
RT: 9.57 min Scan# 2561  
Delta R.T. 0.00 min  
Lab File: VU040022.D  
Acq: 02 Sep 2020 13:23

Tgt Ion: 91 Resp: 8795  
Ion Ratio Lower Upper  
91 100  
106 24.6 21.0 39.0



Abundance Ion 91.15 (90.85 to 91.85): V  
Ion 106.15 (105.85 to 106.85): V





#53

m,p-Xylene

Concen: 0.178 ug/L

RT: 9.70 min Scan# 2599

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

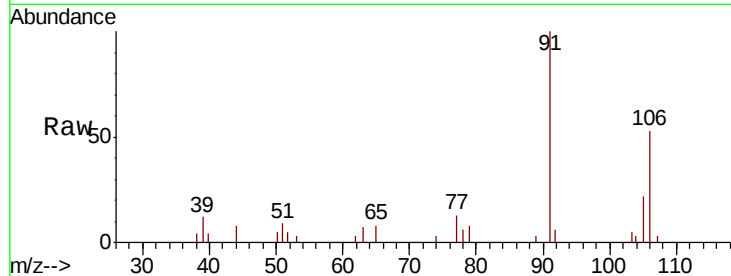
Instrument :  
MSVOA\_U  
ClientSampleId :

Tot Ion:106 Resp: 3038

Ion Ratio Lower Upper

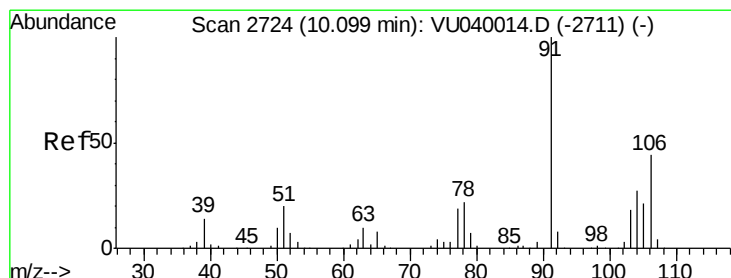
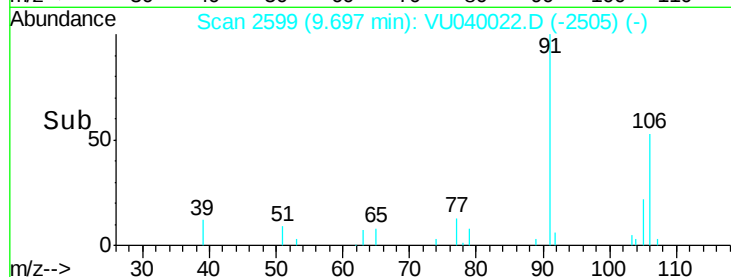
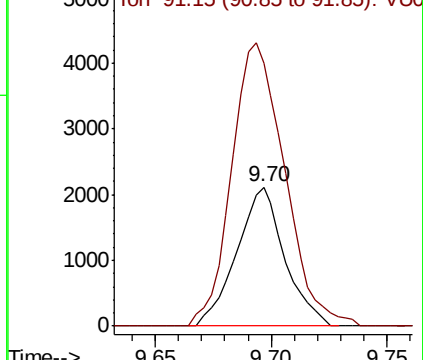
106 100

91 189.0 151.7 281.7



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0



#54

o-Xylene

Concen: 0.165 ug/L

RT: 10.10 min Scan# 2726

Delta R.T. 0.01 min

Lab File: VU040022.D

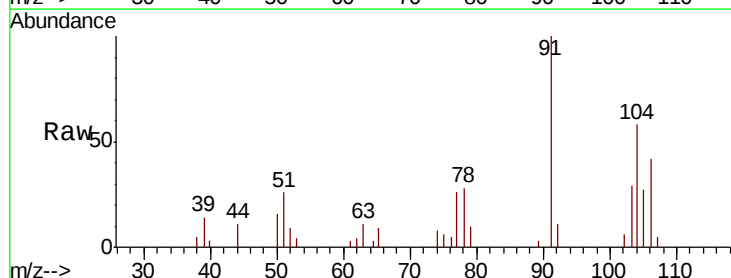
Acq: 02 Sep 2020 13:23

Tgt Ion:106 Resp: 2688

Ion Ratio Lower Upper

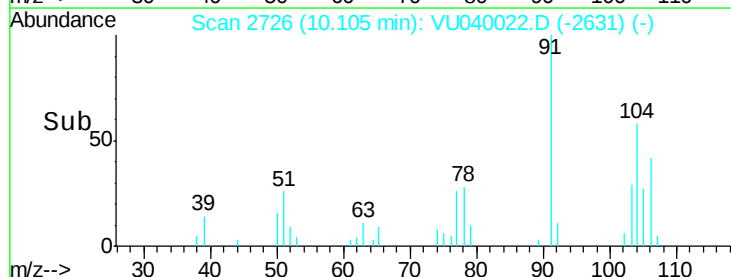
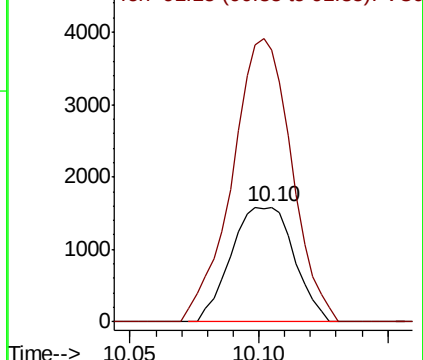
106 100

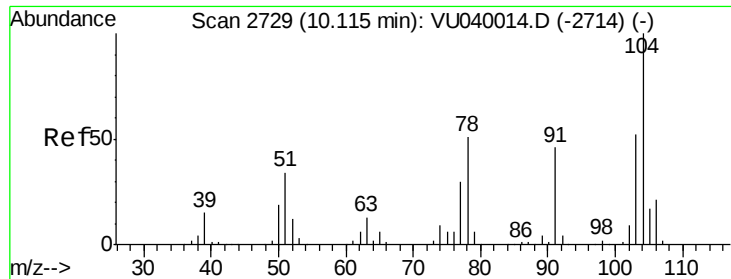
91 236.8 160.8 298.6



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0





#55

Stvrene

Concen: 0.176 ug/L

RT: 10.11 min Scan# 2729

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

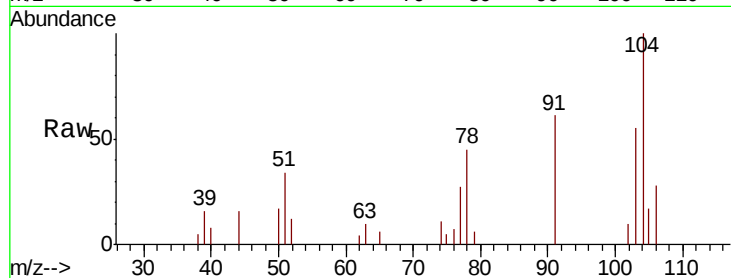
ClientSampled :

Tot Ion:104 Resp: 4986

Ion Ratio Lower Upper

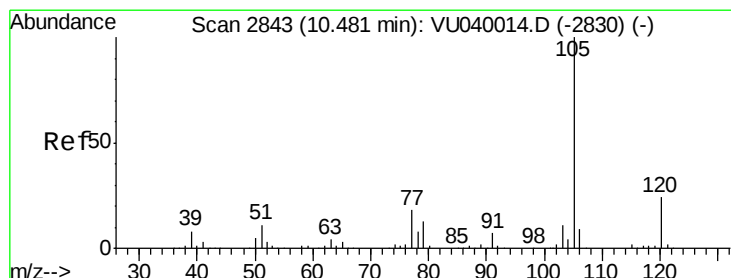
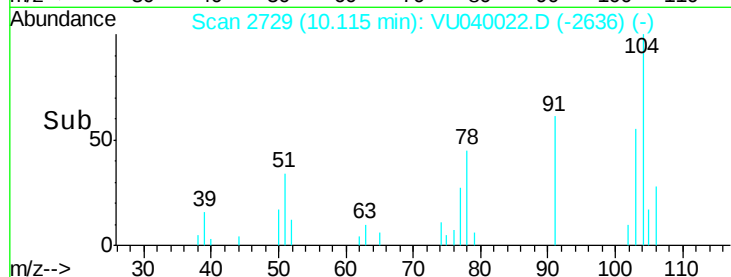
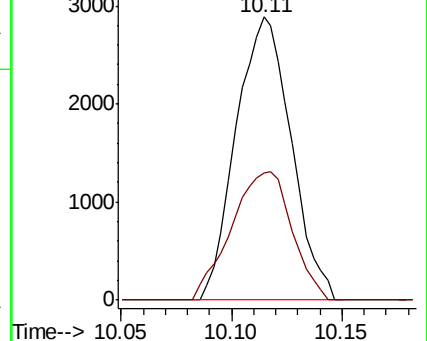
104 100

78 45.0 36.8 68.3



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VU



#56

Isopropylbenzene

Concen: 0.167 ug/L

RT: 10.48 min Scan# 2844

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

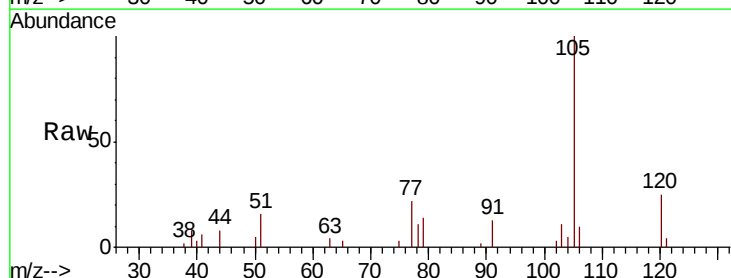
Tgt Ion:105 Resp: 7409

Ion Ratio Lower Upper

105 100

120 24.9 20.1 30.1

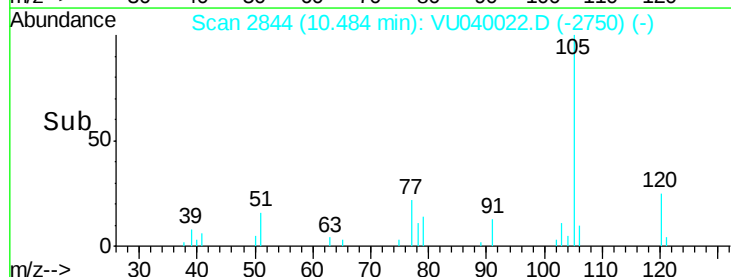
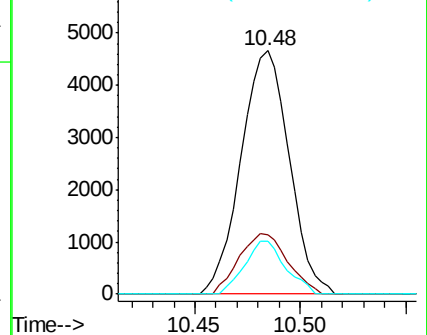
77 18.4 14.4 21.6

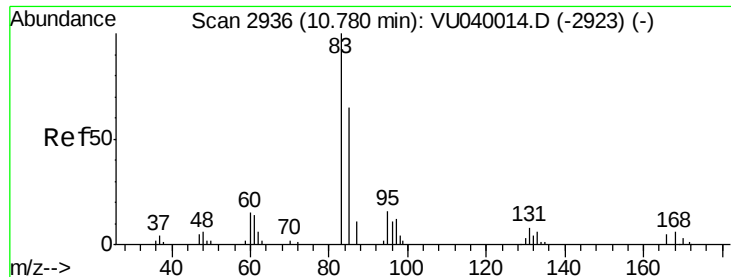


Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): VU





#58

1,1,2,2-Tetrachloroethane

Concen: 0.217 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampleId :

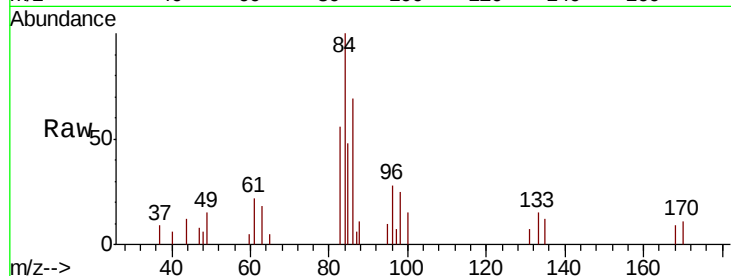
Tot Ion: 83 Resp: 2258

Ion Ratio Lower Upper

83 100

85 85.8 44.9 83.3#

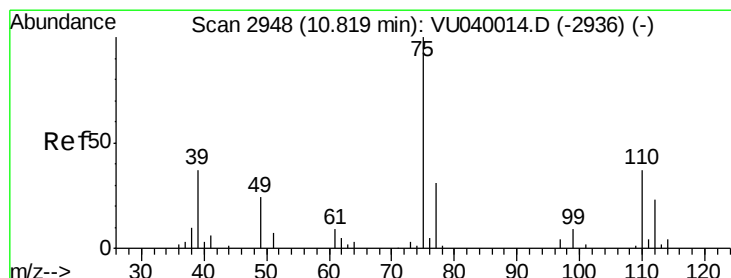
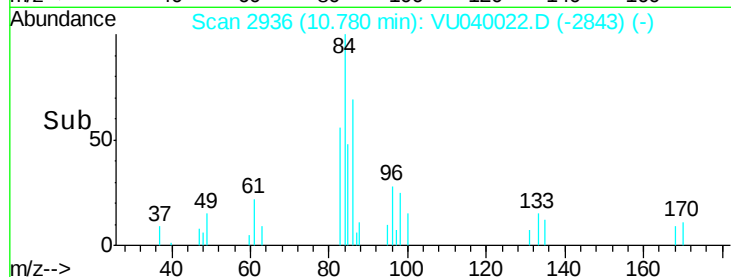
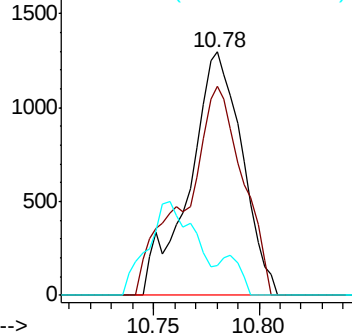
131 12.1 7.4 11.0#



Abundance Ion 82.95 (82.65 to 83.65): VU040014.D (-2923) (-)

Ion 85.00 (84.70 to 85.70): VU040014.D (-2923) (-)

Ion 130.95 (130.65 to 131.65): VU040014.D (-2923) (-)



#59

1,2,3-Trichloropropane

Concen: 0.213 ug/L

RT: 10.83 min Scan# 2950

Delta R.T. 0.01 min

Lab File: VU040022.D

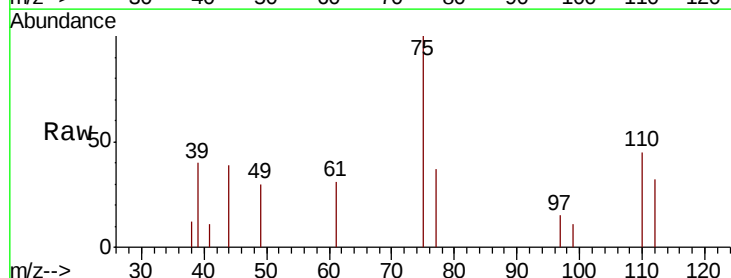
Acq: 02 Sep 2020 13:23

Tgt Ion: 75 Resp: 1758

Ion Ratio Lower Upper

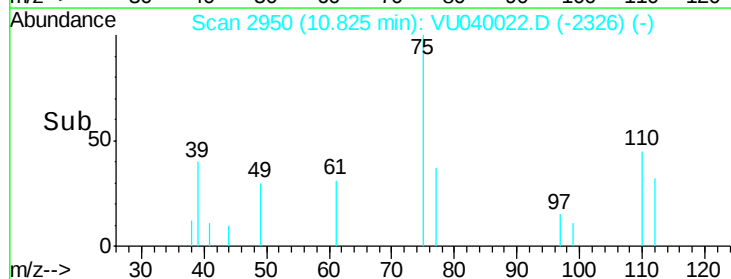
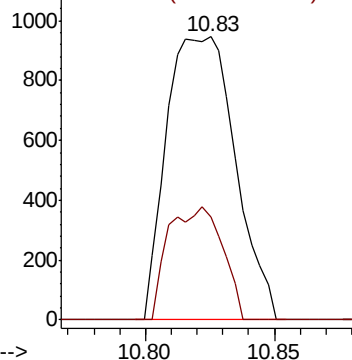
75 100

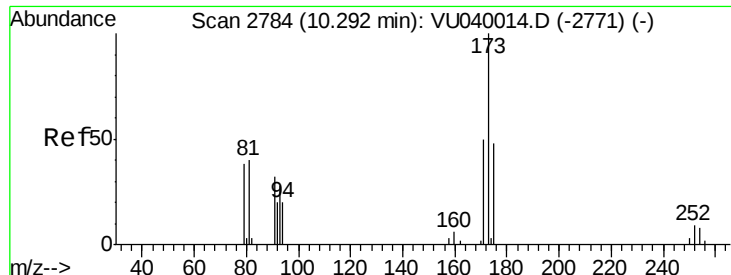
77 31.5 24.9 37.3



Abundance Ion 75.00 (74.70 to 75.70): VU040014.D (-2936) (-)

Ion 77.00 (76.70 to 77.70): VU040014.D (-2936) (-)





#61

Bromoform

Concen: 0.189 ug/L

RT: 10.29 min Scan# 2783

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampleId :

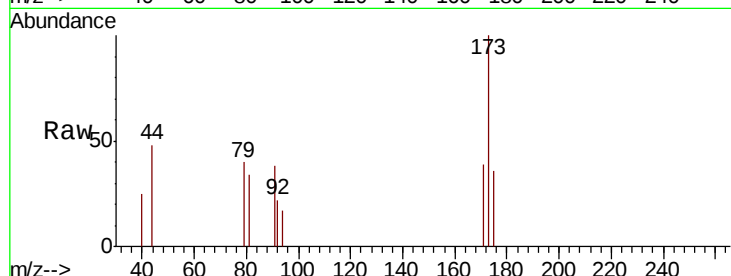
Tot Ion:173 Resp: 936

Ion Ratio Lower Upper

173 100

175 43.8 37.8 56.6

254 0.0 6.8 10.2#



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

10.29

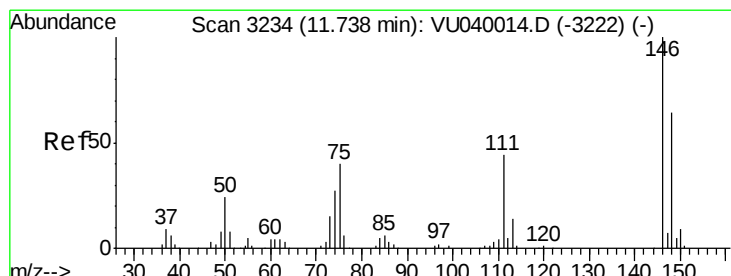
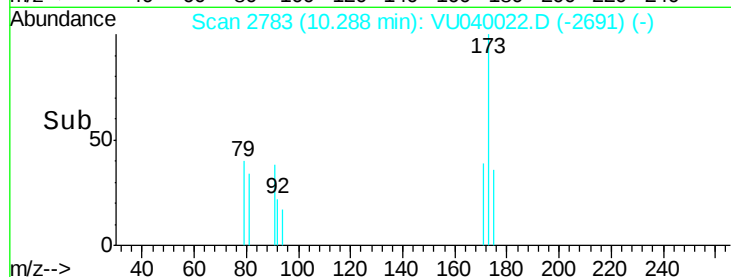
600

400

200

0

Time--> 10.25 10.30



#62

1,3-Dichlorobenzene

Concen: 0.198 ug/L

RT: 11.74 min Scan# 3235

Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

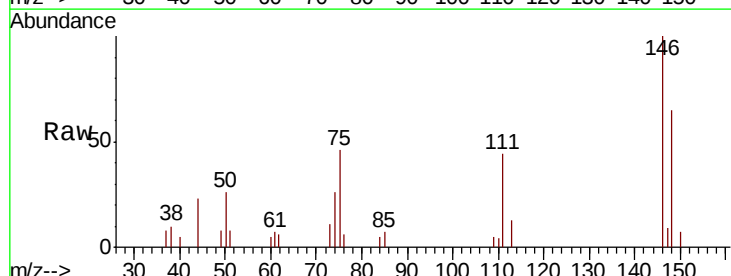
Tgt Ion:146 Resp: 3905

Ion Ratio Lower Upper

146 100

111 43.9 31.6 58.8

148 65.4 44.2 82.0



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

11.74

3000

2500

2000

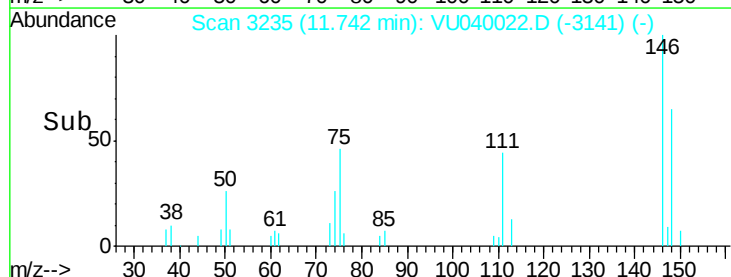
1500

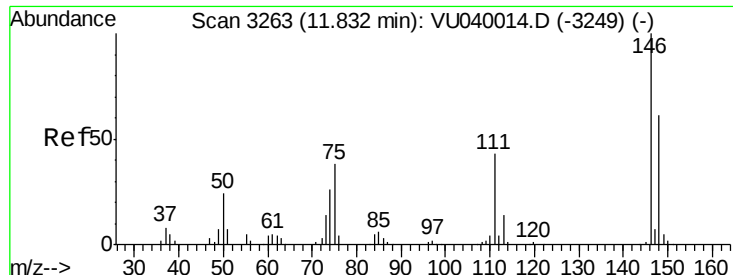
1000

500

0

Time--> 11.70 11.75





#63

1,4-Dichlorobenzene

Concen: 0.200 ug/L

RT: 11.83 min Scan# 3262

Delta R.T. -0.00 min

Lab File: VU040022.D

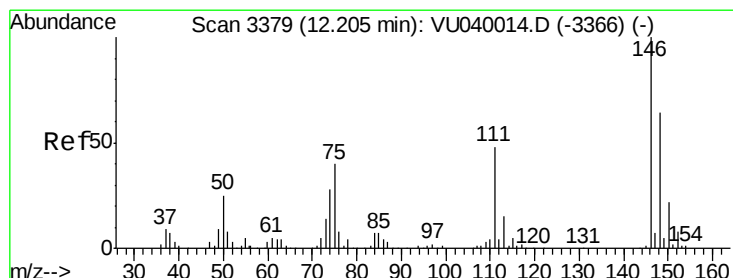
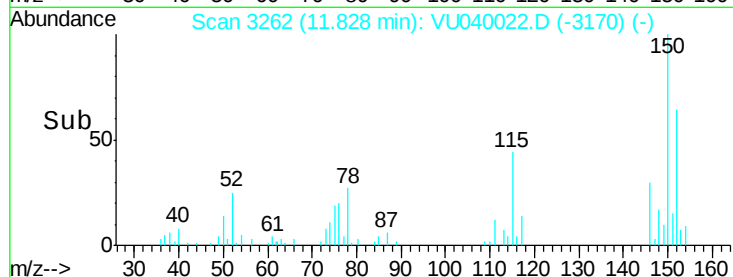
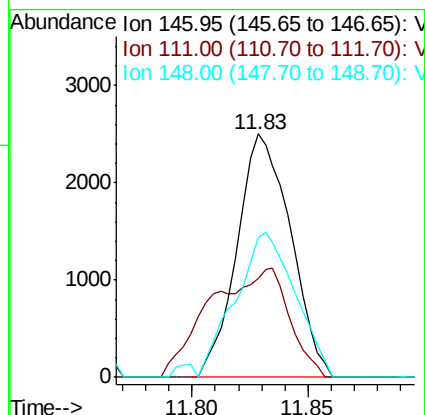
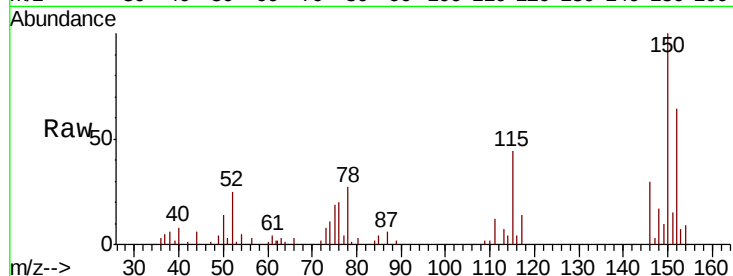
Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampled :

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:146 | Resp: | 4000      |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 40.5  | 30.5 56.7 |
| 148         | 57.5  | 45.4 84.4 |



#65

1,2-Dichlorobenzene

Concen: 0.203 ug/L

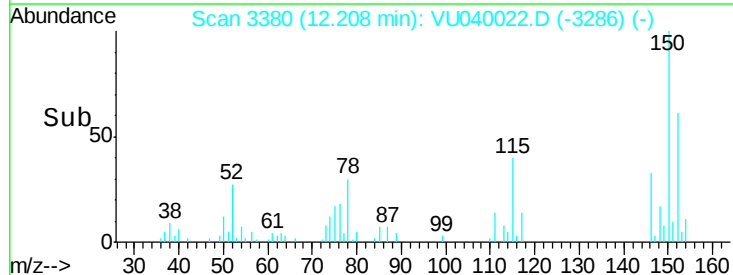
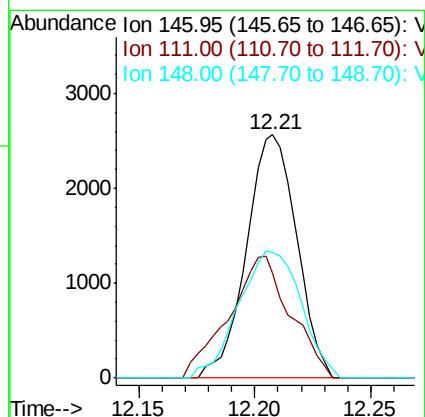
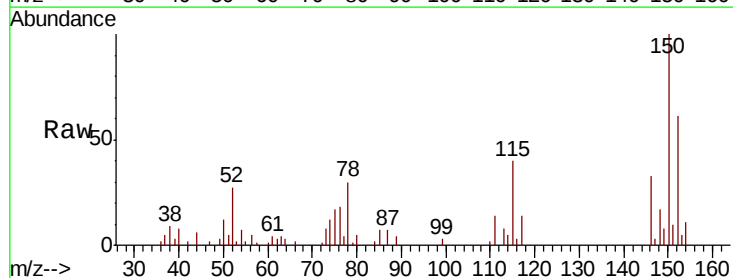
RT: 12.21 min Scan# 3380

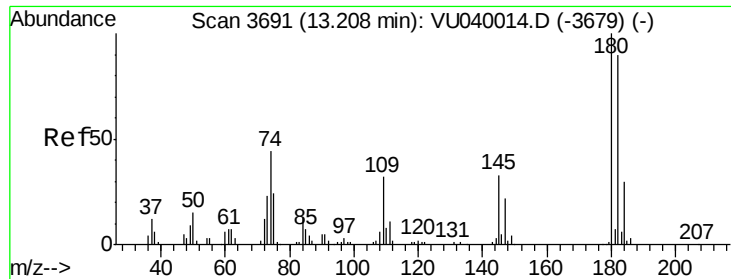
Delta R.T. 0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:146 | Resp: | 3866      |
| Ion Ratio   | Lower | Upper     |
| 146         | 100   |           |
| 111         | 43.0  | 36.5 54.7 |
| 148         | 51.5  | 48.6 72.8 |

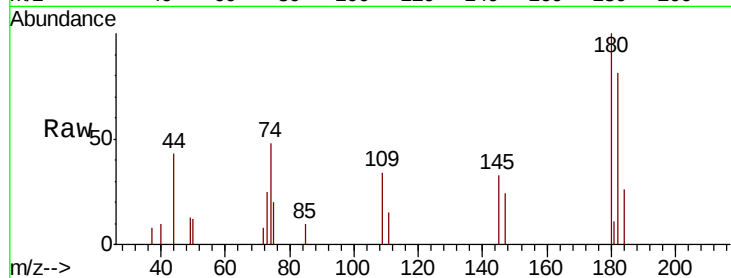




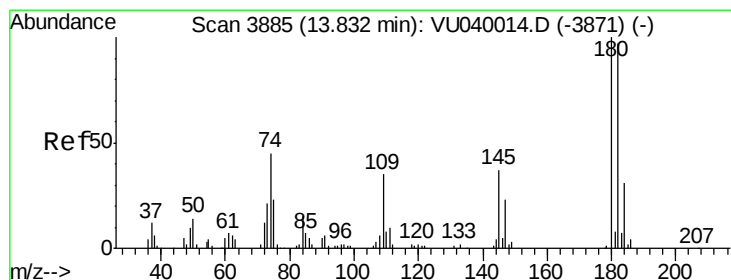
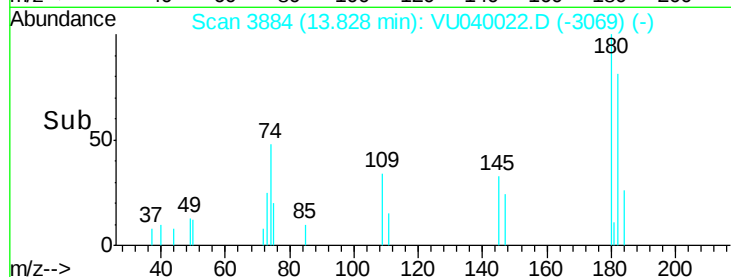
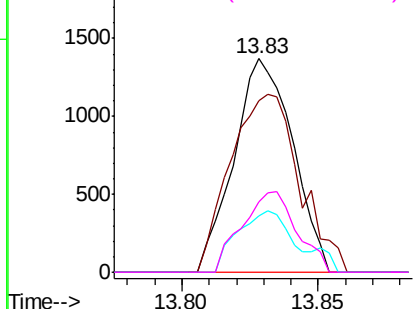
#67  
 1,3,5-Trichlorobenzene  
 Concen: 0.148 ug/L  
 RT: 13.83 min Scan# 3884  
 Delta R.T. 0.62 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

Instrument :  
 MSVOA\_U  
 ClientSampled :

|             |       |       |  |
|-------------|-------|-------|--|
| Tot Ion:180 | Resp: | 2049  |  |
| Ion Ratio   | Lower | Upper |  |
| 180 100     |       |       |  |
| 182 98.1    | 76.9  | 115.3 |  |
| 184 29.3    | 24.6  | 36.8  |  |
| 145 35.1    | 27.0  | 40.6  |  |

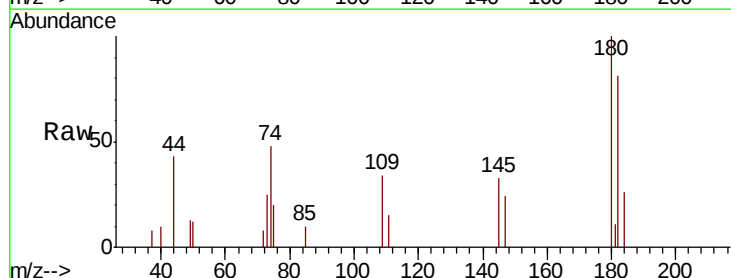


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

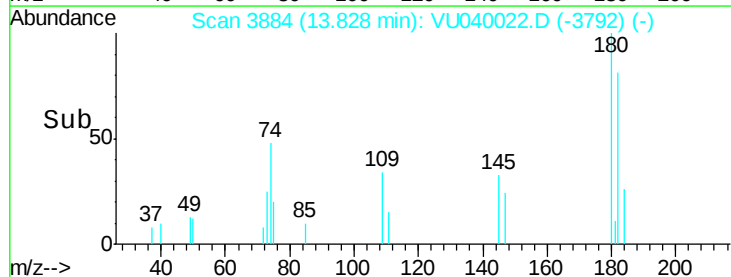
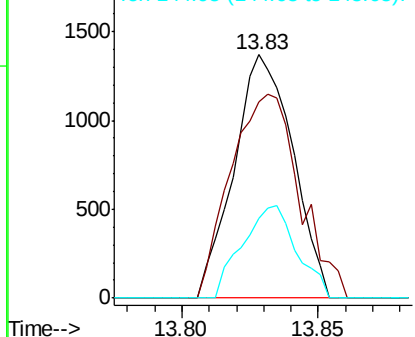


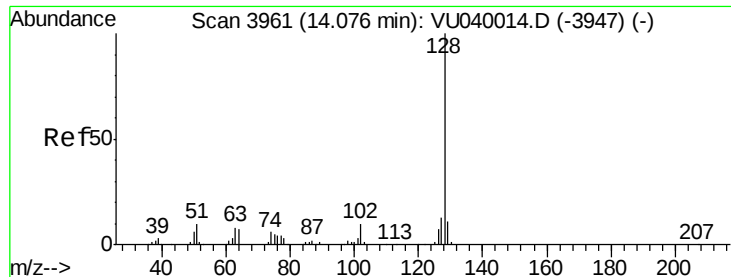
#68  
 1,2,4-trichlorobenzene  
 Concen: 0.171 ug/L  
 RT: 13.83 min Scan# 3884  
 Delta R.T. -0.00 min  
 Lab File: VU040022.D  
 Acq: 02 Sep 2020 13:23

|             |       |       |
|-------------|-------|-------|
| Tgt Ion:180 | Resp: | 2049  |
| Ion Ratio   | Lower | Upper |
| 180 100     |       |       |
| 182 98.1    | 76.0  | 114.0 |
| 145 35.1    | 28.4  | 42.6  |



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: 0.141 ug/L

RT: 14.07 min Scan# 3960

Delta R.T. -0.00 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

Instrument :

MSVOA\_U

ClientSampleId :

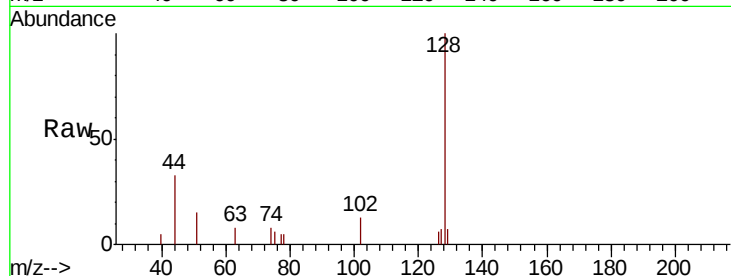
Tot Ion:128 Resp: 3520

Ion Ratio Lower Upper

128 100

129 4.3 8.7 13.1#

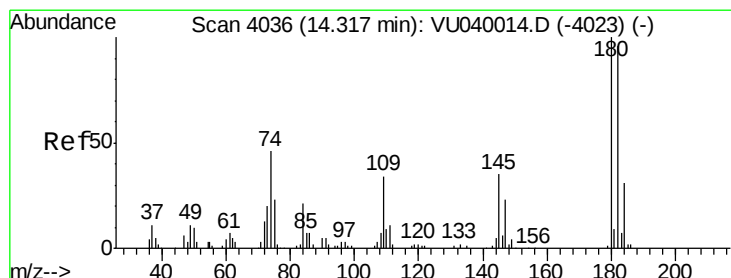
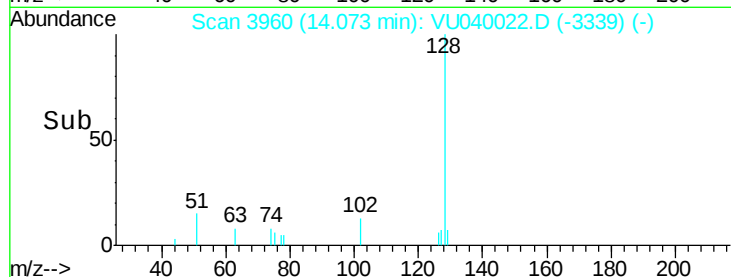
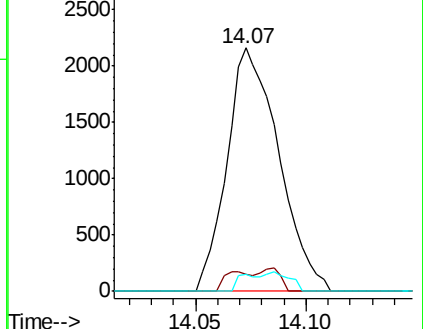
127 3.0 10.7 16.1#



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: 0.174 ug/L

RT: 14.32 min Scan# 4038

Delta R.T. 0.01 min

Lab File: VU040022.D

Acq: 02 Sep 2020 13:23

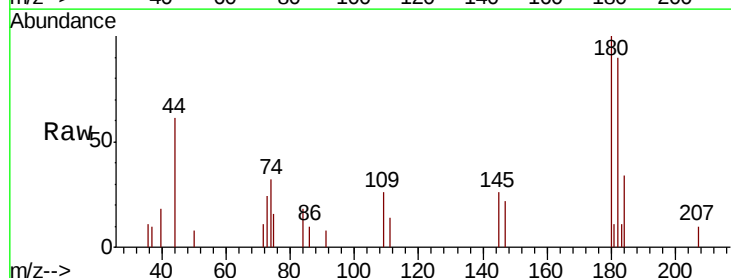
Tgt Ion:180 Resp: 1906

Ion Ratio Lower Upper

180 100

182 93.7 77.8 116.6

145 35.2 28.7 43.1



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

