

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U121020\  
 Data File : VU041551.D  
 Acq On : 10 Dec 2020 21:18  
 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00510

Quant Time: Dec 11 06:10:08 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR120420WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Dec 11 06:06:19 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 46181    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 45565    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 27133    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.60   | 65    | 11042    | 4.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 93.20%  |
| 7) Chloroethane-d5             | 1.92   | 69    | 10546    | 5.07     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 101.40% |
| 11) 1,1-Dichloroethene-d2      | 2.58   | 63    | 27887    | 4.85     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 97.00%  |
| 20) 2-Butanone-d5              | 4.66   | 46    | 32309    | 36.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 72.64%  |
| 24) Chloroform-d               | 5.08   | 84    | 33501    | 5.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 102.20% |
| 26) 1,2-Dichloroethane-d4      | 5.72   | 65    | 20611    | 4.68     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 93.60%  |
| 32) Benzene-d6                 | 5.74   | 84    | 49834    | 4.91     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 98.20%  |
| 36) 1,2-Dichloropropane-d6     | 6.70   | 67    | 12699    | 4.28     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 85.60%  |
| 41) Toluene-d8                 | 7.91   | 98    | 52141    | 5.24     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 104.80% |
| 43) trans-1,3-Dichloropropene- | 8.19   | 79    | 8213     | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 93.40%  |
| 46) 2-Hexanone-d5              | 8.64   | 63    | 25426    | 34.74    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 69.48%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.75  | 84    | 13207    | 4.04     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 80.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 12.19  | 152   | 24204    | 5.22     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 104.40% |

## Target Compounds

|                                |      |     |       |        | Ovalue  |
|--------------------------------|------|-----|-------|--------|---------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 18801 | 4.598  | ug/L 99 |
| 3) Chloromethane               | 1.53 | 50  | 10564 | 3.997  | ug/L 95 |
| 5) Vinyl chloride              | 1.61 | 62  | 13647 | 4.331  | ug/L 97 |
| 6) Bromomethane                | 1.87 | 94  | 11169 | 5.127  | ug/L 92 |
| 8) Chloroethane                | 1.94 | 64  | 9011  | 4.396  | ug/L 90 |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 36014 | 5.130  | ug/L 98 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.60 | 101 | 15836 | 5.033  | ug/L 90 |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 13349 | 4.938  | ug/L 98 |
| 13) Acetone                    | 2.66 | 43  | 26029 | 37.589 | ug/L 98 |
| 14) Carbon disulfide           | 2.81 | 76  | 37058 | 4.447  | ug/L 97 |
| 15) Methyl Acetate             | 2.97 | 43  | 4845  | 3.824  | ug/L 96 |
| 16) Methylene chloride         | 3.06 | 84  | 15369 | 4.259  | ug/L 85 |
| 17) Methyl tert-butyl Ether    | 3.38 | 73  | 36624 | 4.465  | ug/L 96 |
| 18) trans-1,2-Dichloroethene   | 3.37 | 96  | 13758 | 5.039  | ug/L 87 |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 23196 | 4.598  | ug/L 94 |
| 21) 2-Butanone                 | 4.74 | 43  | 32905 | 37.976 | ug/L 99 |
| 22) cis-1,2-Dichloroethene     | 4.69 | 96  | 14758 | 4.874  | ug/L 91 |

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 Operator : SY/MD  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA U/WATER  
 ALS Vial : 25 Sample Multiplier: 1

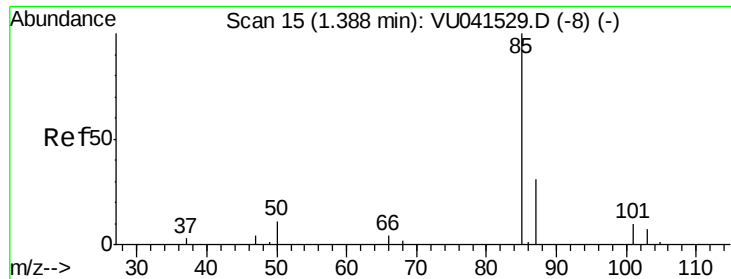
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00510

Quant Time: Dec 11 06:10:08 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR120420WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Dec 11 06:06:19 2020  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|---------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane          | 4.99  | 128  | 8049     | 5.086  | ug/L   | 91       |
| 25) Chloroform                  | 5.11  | 83   | 31557    | 4.910  | ug/L   | 99       |
| 27) 1,2-Dichloroethane          | 5.81  | 62   | 23392    | 4.657  | ug/L   | 98       |
| 29) 1,1,1-Trichloroethane       | 5.33  | 97   | 32071    | 4.912  | ug/L   | 96       |
| 30) Cyclohexane                 | 5.41  | 56   | 16519    | 4.023  | ug/L   | 88       |
| 31) Carbon tetrachloride        | 5.54  | 117  | 30463    | 5.038  | ug/L   | 98       |
| 33) Benzene                     | 5.79  | 78   | 51419    | 4.559  | ug/L   | 100      |
| 34) Trichloroethene             | 6.55  | 95   | 16630    | 4.886  | ug/L   | 93       |
| 35) Methylcyclohexane           | 6.77  | 83   | 21652    | 4.663  | ug/L   | 94       |
| 37) 1,2-Dichloropropane         | 6.80  | 63   | 11620    | 4.397  | ug/L   | 100      |
| 38) Bromodichloromethane        | 7.11  | 83   | 23374    | 4.841  | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene     | 7.61  | 75   | 20843    | 4.366  | ug/L   | 97       |
| 40) 4-Methyl-2-pentanone        | 7.80  | 43   | 76544    | 36.148 | ug/L # | 94       |
| 42) Toluene                     | 7.98  | 91   | 61534    | 4.848  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene   | 8.22  | 75   | 21652    | 4.541  | ug/L   | 93       |
| 45) 1,1,2-Trichloroethane       | 8.40  | 97   | 11491    | 4.508  | ug/L   | 94       |
| 47) Tetrachloroethene           | 8.56  | 164  | 15204    | 5.655  | ug/L   | 98       |
| 48) 2-Hexanone                  | 8.69  | 43   | 59916    | 35.213 | ug/L # | 95       |
| 49) Dibromochloromethane        | 8.82  | 129  | 18058    | 5.200  | ug/L   | 98       |
| 50) 1,2-Dibromoethane           | 8.93  | 107  | 12092    | 4.703  | ug/L   | 95       |
| 51) Chlorobenzene               | 9.45  | 112  | 43115    | 5.097  | ug/L   | 96       |
| 52) Ethylbenzene                | 9.57  | 91   | 70039    | 4.815  | ug/L   | 98       |
| 53) m,p-Xylene                  | 9.69  | 106  | 26701    | 5.057  | ug/L   | 98       |
| 54) o-Xylene                    | 10.10 | 106  | 25244    | 4.931  | ug/L   | 94       |
| 55) Styrene                     | 10.11 | 104  | 45713    | 5.258  | ug/L   | 91       |
| 56) Isopropylbenzene            | 10.48 | 105  | 72696    | 5.030  | ug/L   | 98       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.78 | 83   | 13416    | 4.285  | ug/L   | 97       |
| 59) 1,2,3-Trichloropropane      | 10.82 | 75   | 11002    | 4.290  | ug/L   | 97       |
| 61) Bromoform                   | 10.29 | 173  | 11977    | 5.253  | ug/L   | 98       |
| 62) 1,3-Dichlorobenzene         | 11.74 | 146  | 39538    | 5.171  | ug/L   | 96       |
| 63) 1,4-Dichlorobenzene         | 11.83 | 146  | 38798    | 4.949  | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene         | 12.21 | 146  | 37801    | 4.993  | ug/L   | 97       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.99 | 75   | 3122     | 4.210  | ug/L # | 85       |
| 67) 1,3,5-Trichlorobenzene      | 13.21 | 180  | 30671    | 5.020  | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.83 | 180  | 23172    | 4.738  | ug/L   | 99       |
| 69) Naphthalene                 | 14.08 | 128  | 31259    | 4.068  | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene      | 14.32 | 180  | 22313    | 5.155  | ug/L   | 96       |

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





#2

Dichlorodifluoromethane

Concen: 4.598 ug/L

RT: 1.39 min Scan# 15

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

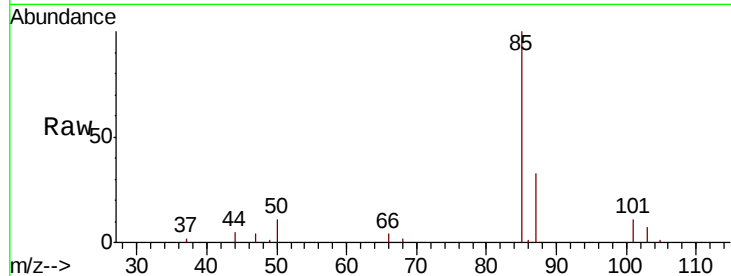
VSTD00510

Tot Ion: 85 Resp: 18801

Ion Ratio Lower Upper

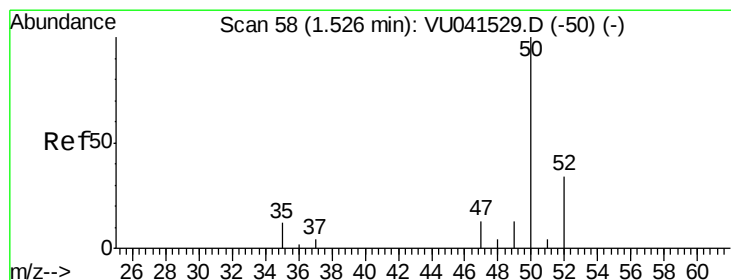
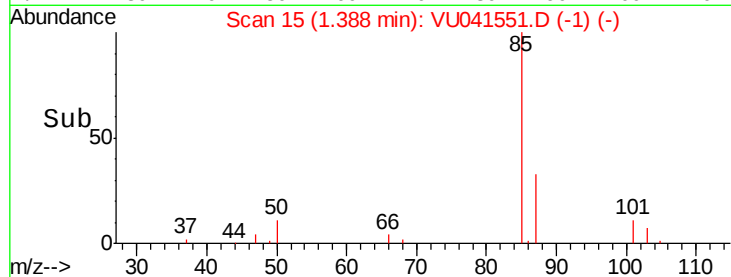
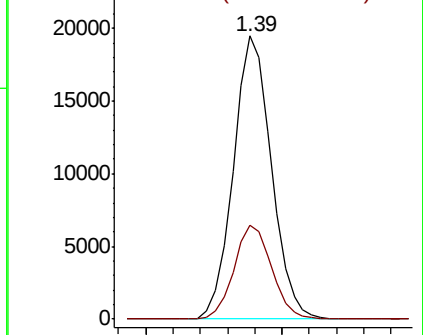
85 100

87 32.9 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VU041529.D (-8) (-)

Ion 87.00 (86.70 to 87.70): VU041529.D (-8) (-)



#3

Chloromethane

Concen: 3.997 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU041551.D

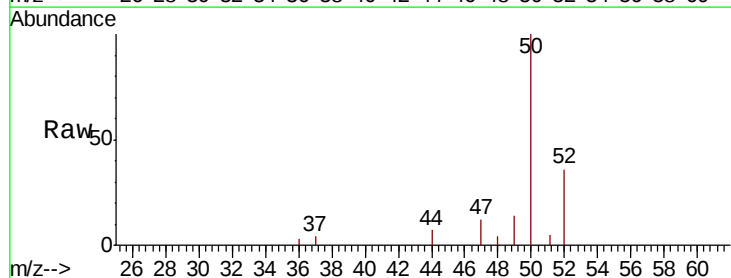
Acq: 10 Dec 2020 21:18

Tgt Ion: 50 Resp: 10564

Ion Ratio Lower Upper

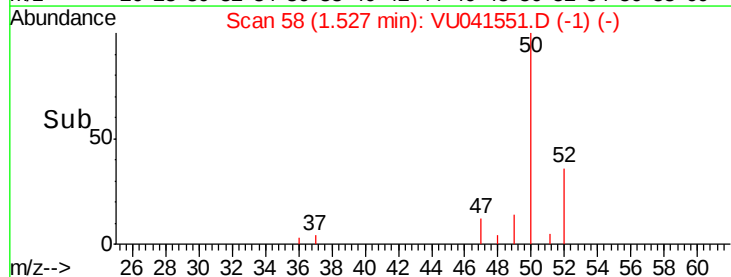
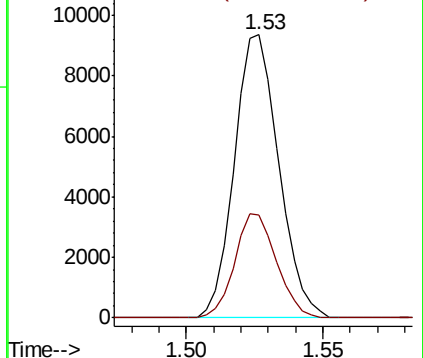
50 100

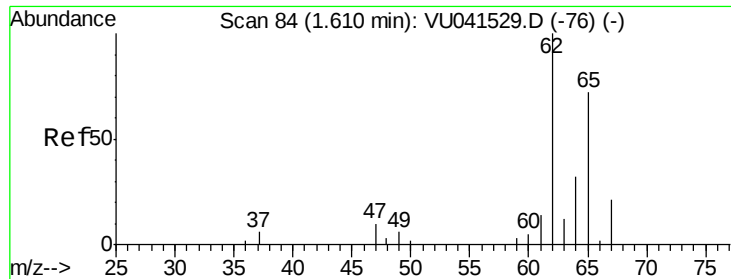
52 36.2 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VU041529.D (-50) (-)

Ion 52.05 (51.75 to 52.75): VU041529.D (-50) (-)





#5

Vinyl chloride

Concen: 4.331 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

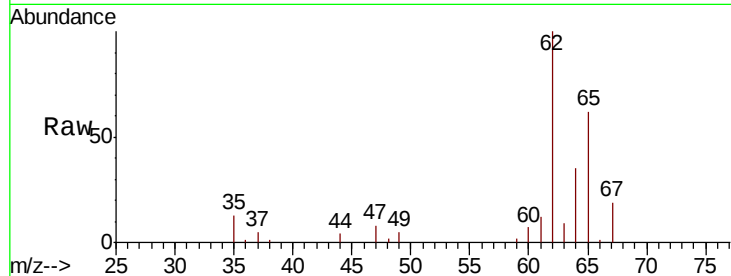
VSTD00510

Tot Ion: 62 Resp: 13647

Ion Ratio Lower Upper

62 100

64 34.6 23.0 42.8



Abundance Ion 62.00 (61.70 to 62.70): VU041551.D (-76) (-)

Ion 64.10 (63.80 to 64.80): VU041551.D (-76) (-)

1.61

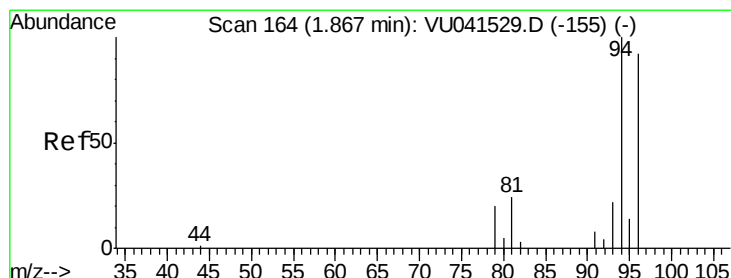
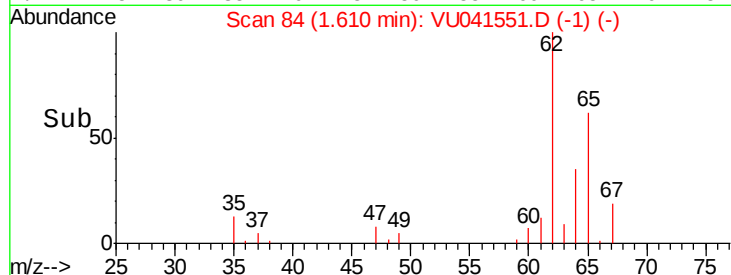
15000

10000

5000

0

Time-->



#6

Bromomethane

Concen: 5.127 ug/L

RT: 1.87 min Scan# 164

Delta R.T. 0.00 min

Lab File: VU041551.D

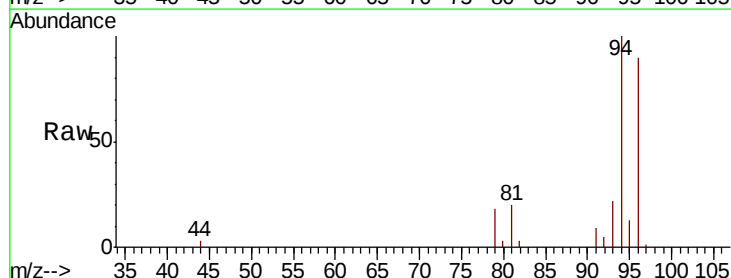
Acq: 10 Dec 2020 21:18

Tgt Ion: 94 Resp: 11169

Ion Ratio Lower Upper

94 100

96 90.0 68.5 127.1



Abundance Ion 94.00 (93.70 to 94.70): VU041551.D (-155) (-)

Ion 96.00 (95.70 to 96.70): VU041551.D (-155) (-)

1.87

10000

8000

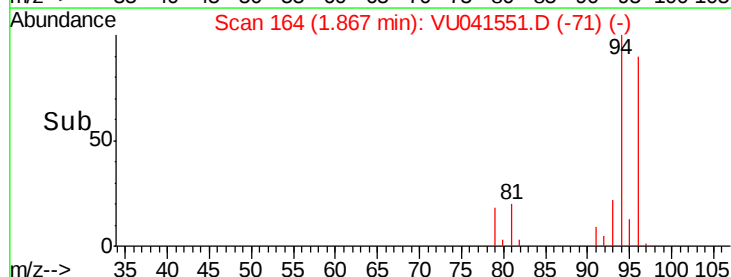
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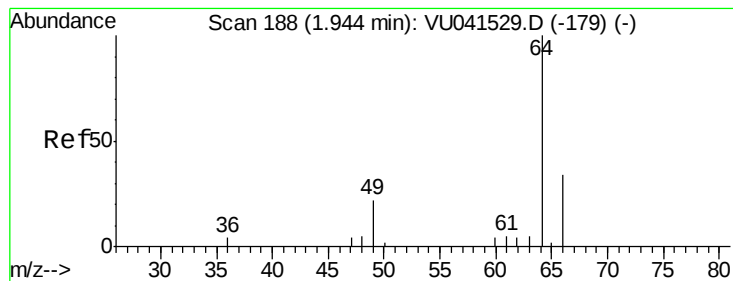
4000

2000

0

Time-->





#8

Chloroethane

Concen: 4.396 ug/L

RT: 1.94 min Scan# 188

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

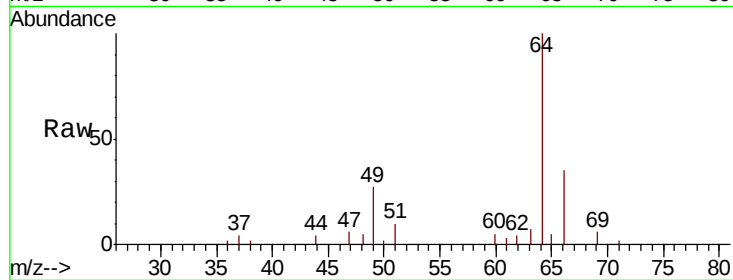
VSTD00510

Tot Ion: 64 Resp: 9011

Ion Ratio Lower Upper

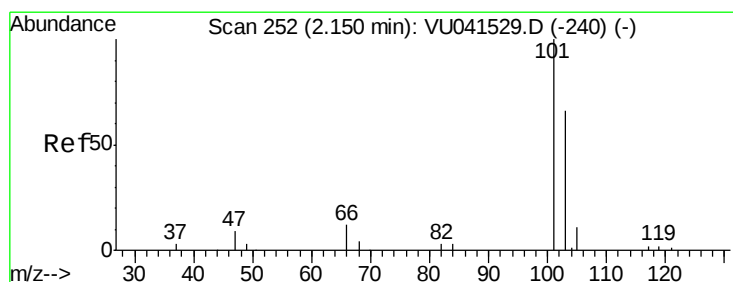
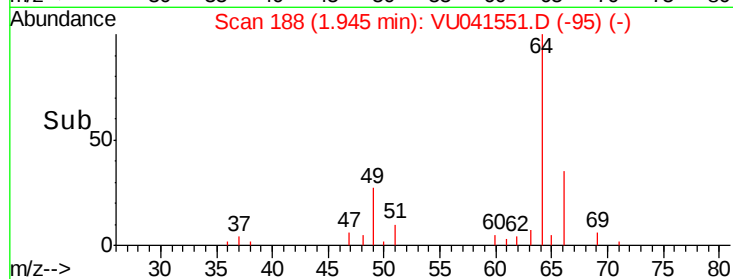
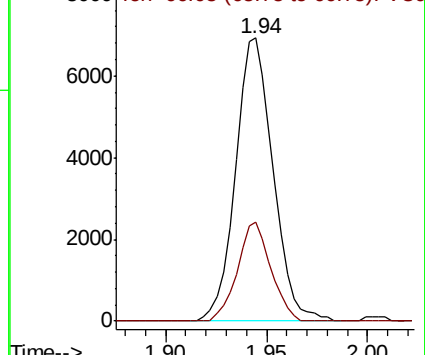
64 100

66 35.1 20.9 38.9



Abundance Ion 64.10 (63.80 to 64.80): VU0

Ion 66.05 (65.75 to 66.75): VU0



#9

Trichlorofluoromethane

Concen: 5.130 ug/L

RT: 2.15 min Scan# 252

Delta R.T. 0.00 min

Lab File: VU041551.D

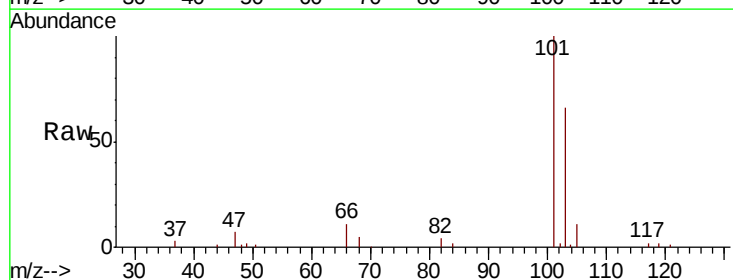
Acq: 10 Dec 2020 21:18

Tgt Ion: 101 Resp: 36014

Ion Ratio Lower Upper

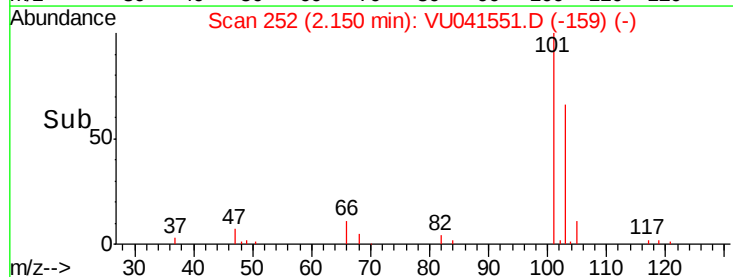
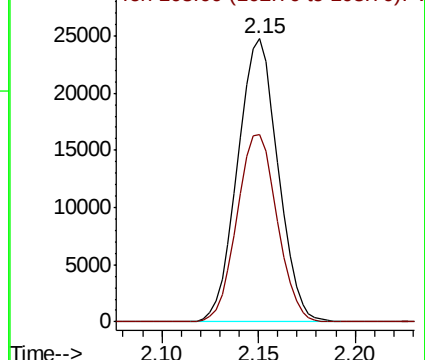
101 100

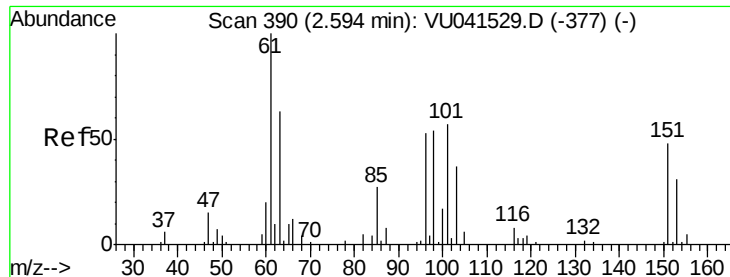
103 65.7 51.4 77.0



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#10

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

Concen: 5.033 ug/L

RT: 2.60 min Scan# 391

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

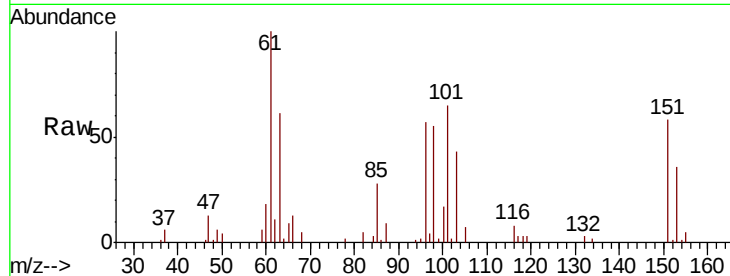
Tot Ion:101 Resp: 15836

Ion Ratio Lower Upper

101 100

85 42.3 39.4 59.2

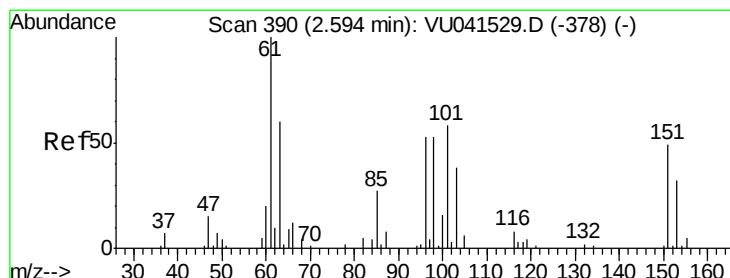
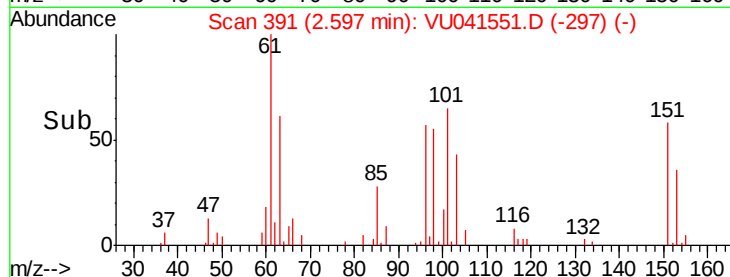
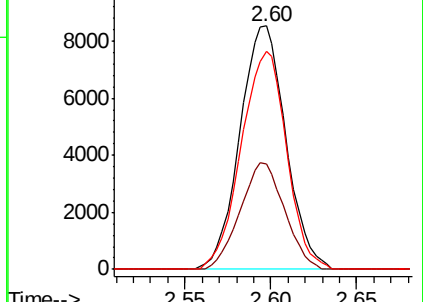
151 88.4 63.8 95.8



Abundance Ion 101.00 (100.70 to 101.70): VU041529.D (-377) (-)

Ion 85.00 (84.70 to 85.70): VU041529.D (-377) (-)

Ion 151.00 (150.70 to 151.70): VU041529.D (-377) (-)



#12

1,1-Dichloroethene

Concen: 4.938 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

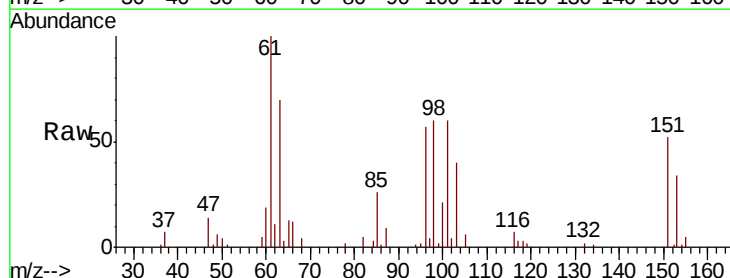
Tgt Ion: 96 Resp: 13349

Ion Ratio Lower Upper

96 100

61 176.8 127.8 237.4

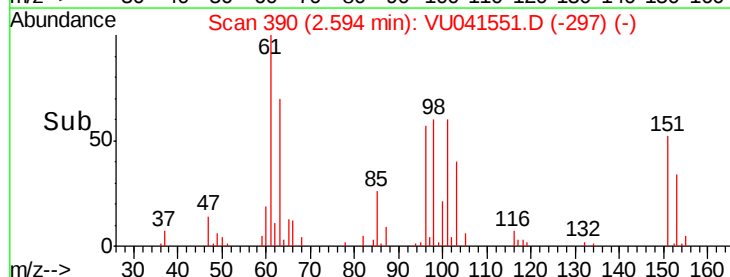
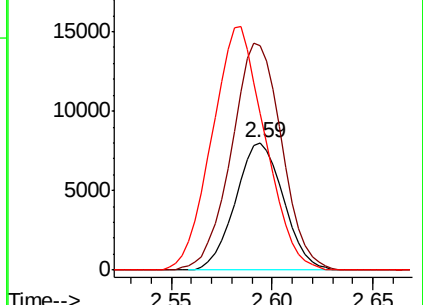
63 123.0 86.2 160.0

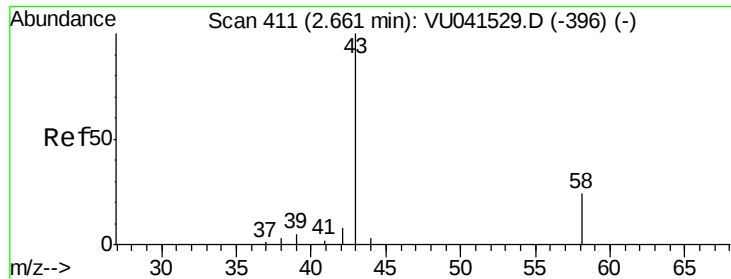


Abundance Ion 96.00 (95.70 to 96.70): VU041529.D (-378) (-)

Ion 61.05 (60.75 to 61.75): VU041529.D (-378) (-)

Ion 63.00 (62.70 to 63.70): VU041529.D (-378) (-)





#13

Acetone

Concen: 37.589 ug/L

RT: 2.66 min Scan# 410

Delta R.T. -0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

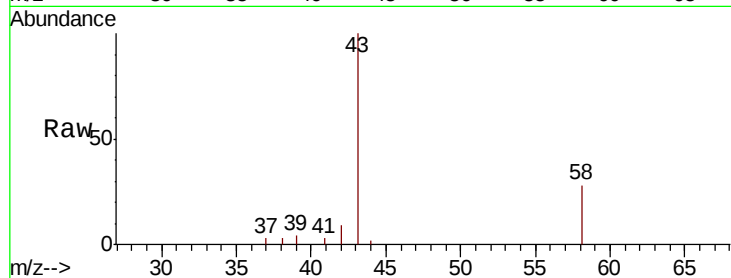
VSTD00510

Tot Ion: 43 Resp: 26029

Ion Ratio Lower Upper

43 100

58 24.2 0.0 50.0



Abundance Ion 43.05 (42.75 to 43.75): VU041529.D (-396) (-)

Ion 58.05 (57.75 to 58.75): VU041529.D (-396) (-)

2.66

8000

6000

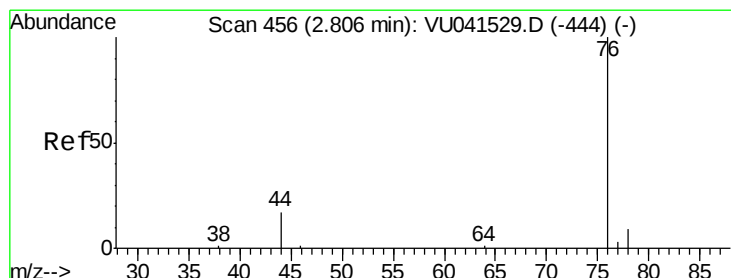
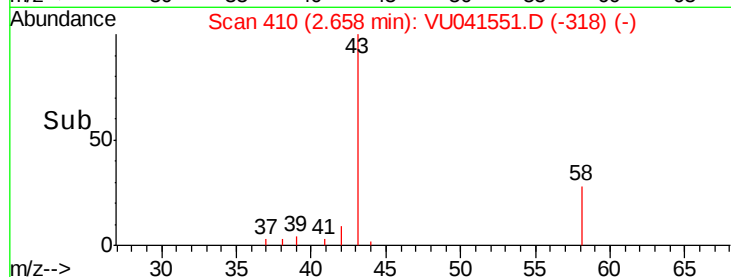
4000

2000

0

Time-->

2.60 2.70 2.80



#14

Carbon disulfide

Concen: 4.447 ug/L

RT: 2.81 min Scan# 456

Delta R.T. 0.00 min

Lab File: VU041551.D

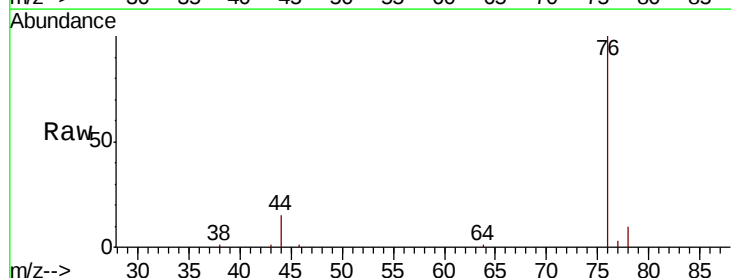
Acq: 10 Dec 2020 21:18

Tgt Ion: 76 Resp: 37058

Ion Ratio Lower Upper

76 100

78 9.5 6.8 10.2



Abundance Ion 76.05 (75.75 to 76.75): VU041529.D (-444) (-)

Ion 78.00 (77.70 to 78.70): VU041529.D (-444) (-)

2.81

25000

20000

15000

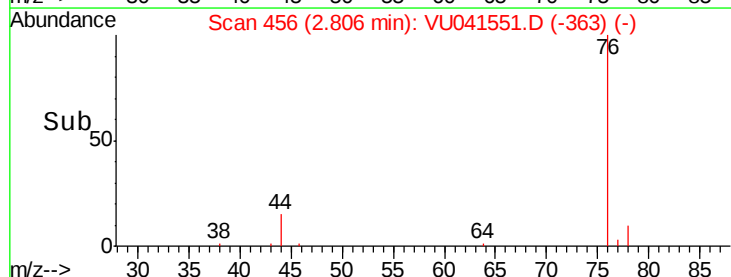
10000

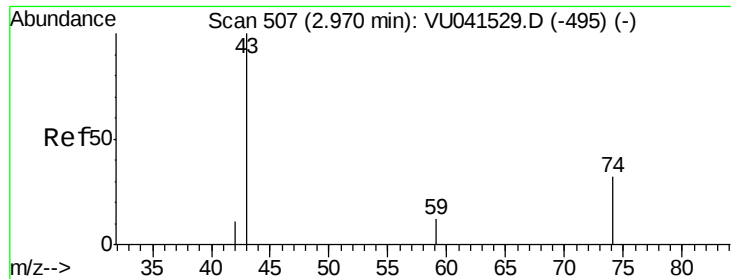
5000

0

Time-->

2.75 2.80 2.85





#15

Methyl Acetate

Concen: 3.824 ug/L

RT: 2.97 min Scan# 507

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

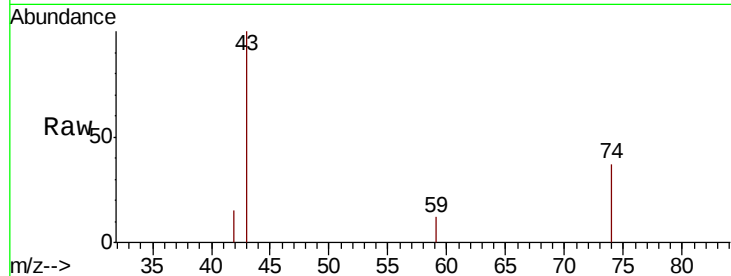
VSTD00510

Tot Ion: 43 Resp: 4845

Ion Ratio Lower Upper

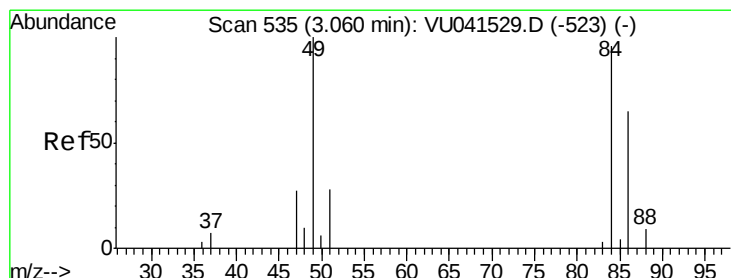
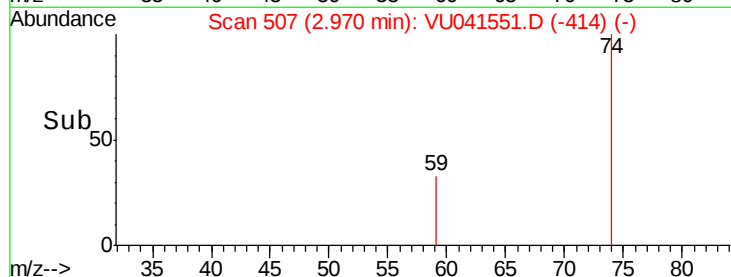
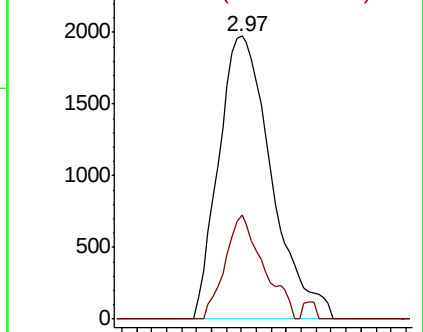
43 100

74 26.8 19.7 29.5



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 74.05 (73.75 to 74.75): VU0



#16

Methylene chloride

Concen: 4.259 ug/L

RT: 3.06 min Scan# 535

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

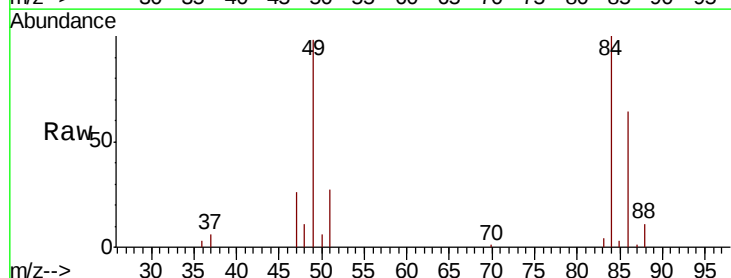
Tgt Ion: 84 Resp: 15369

Ion Ratio Lower Upper

84 100

86 63.7 44.1 81.9

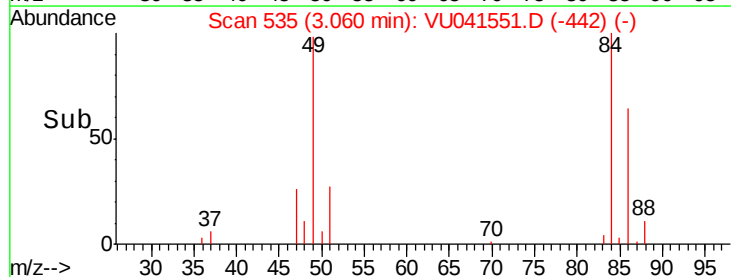
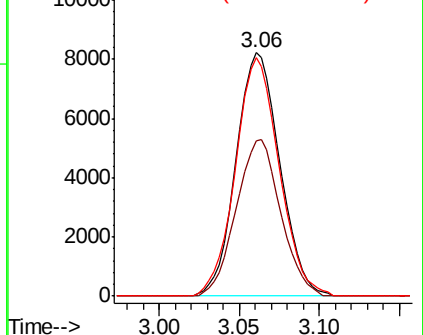
49 97.8 86.1 159.9

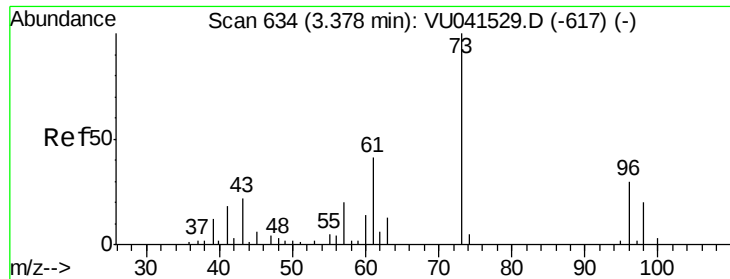


Abundance Ion 84.05 (83.75 to 84.75): VU0

Ion 86.00 (85.70 to 86.70): VU0

Ion 49.10 (48.80 to 49.80): VU0

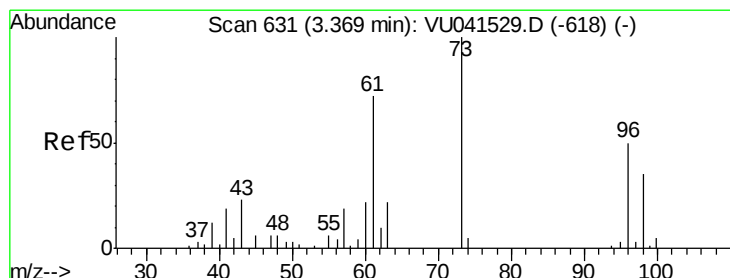
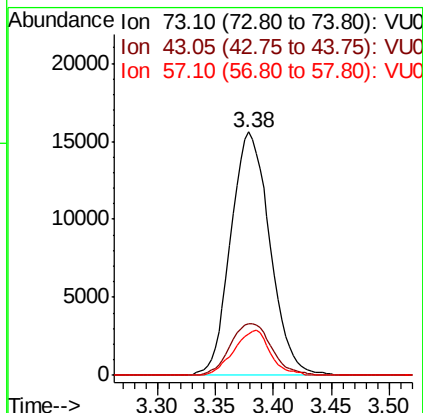
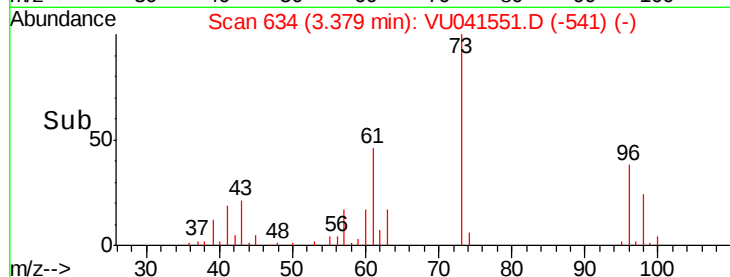
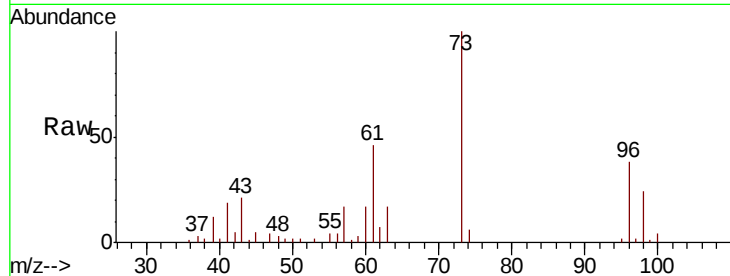




#17  
Methvl tert-butvl Ether  
Concen: 4.465 ug/L  
RT: 3.38 min Scan# 634  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

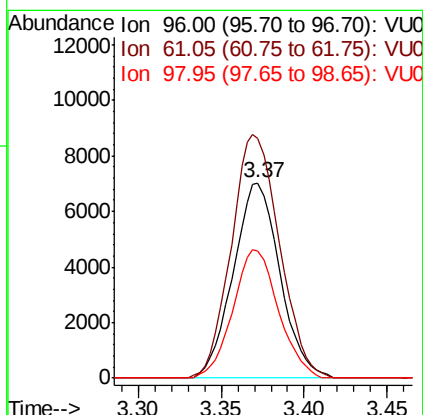
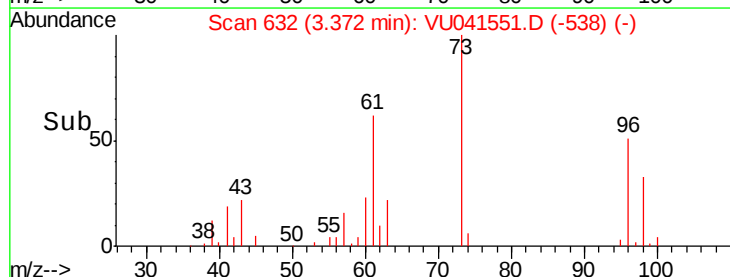
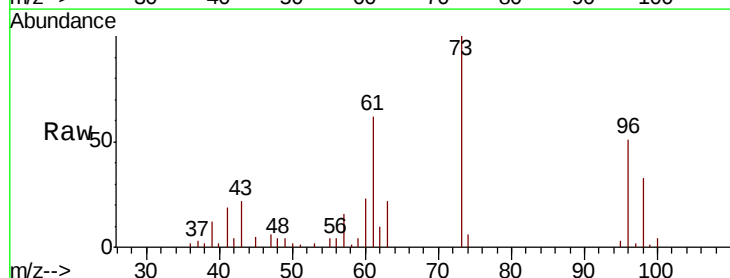
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

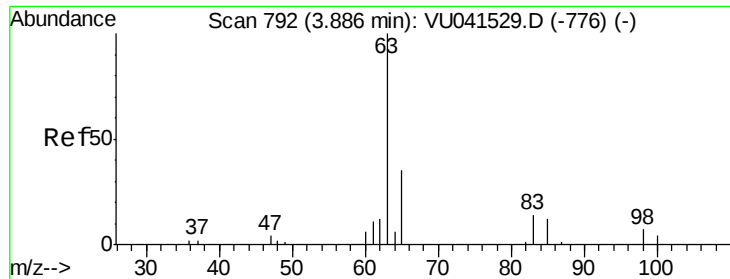
Tot Ion: 73 Resp: 36624  
Ion Ratio Lower Upper  
73 100  
43 22.4 19.1 28.7  
57 17.2 15.5 23.3



#18  
trans-1,2-Dichloroethene  
Concen: 5.039 ug/L  
RT: 3.37 min Scan# 632  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion: 96 Resp: 13758  
Ion Ratio Lower Upper  
96 100  
61 122.3 98.8 183.4  
98 65.2 41.7 77.5

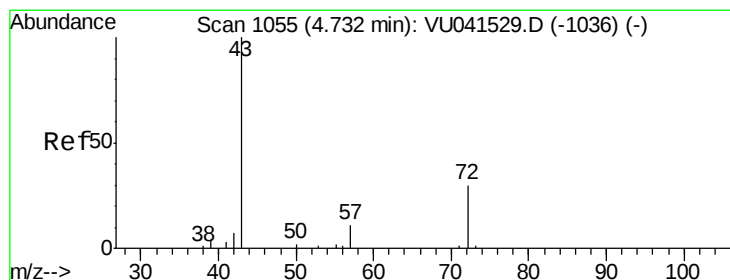
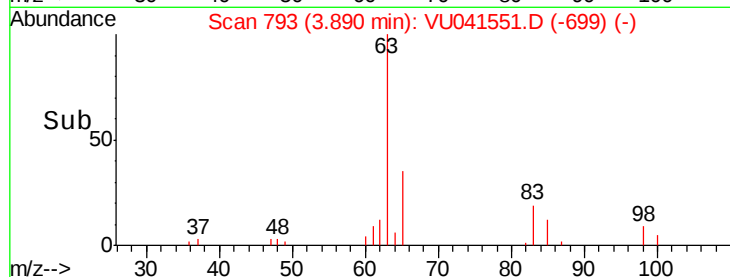
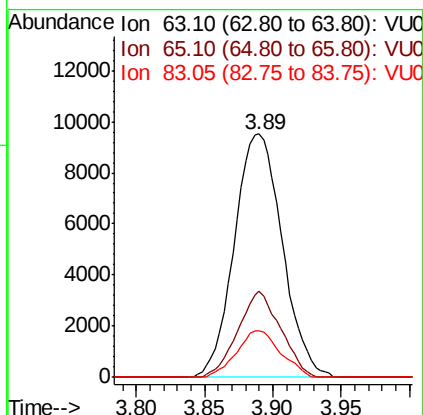
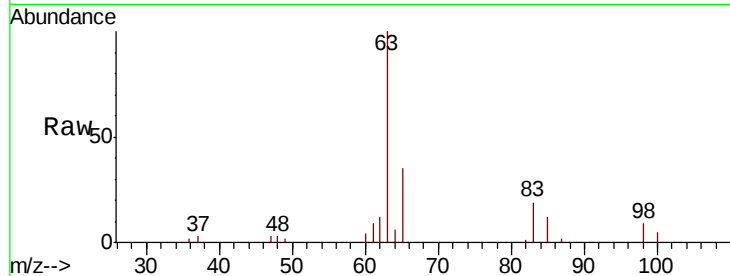




#19  
 1,1-Dichloroethane  
 Concen: 4.598 ug/L  
 RT: 3.89 min Scan# 793  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

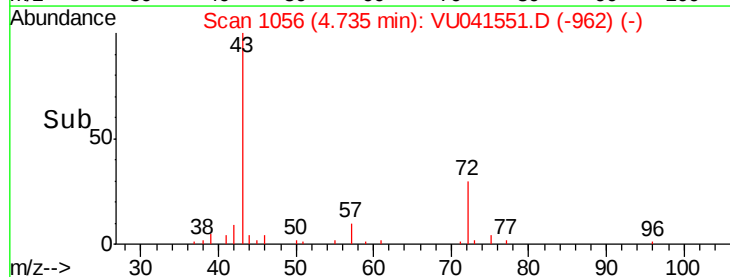
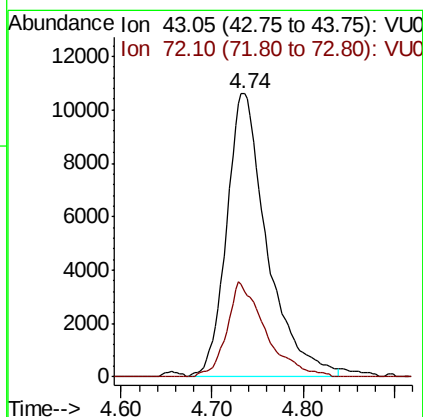
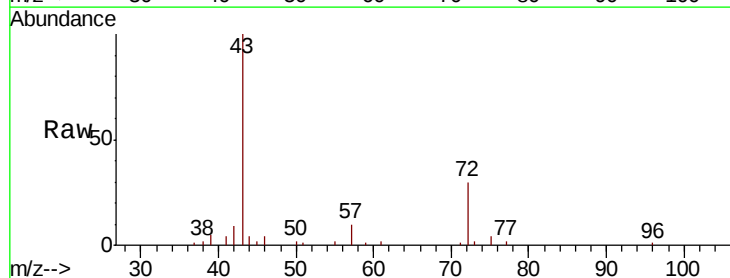
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00510

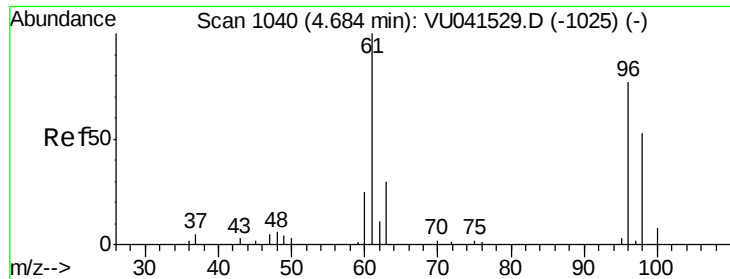
Tot Ion: 63 Resp: 23196  
 Ion Ratio Lower Upper  
 63 100  
 65 35.3 22.3 41.5  
 83 19.0 11.1 20.7



#21  
 2-Butanone  
 Concen: 37.976 ug/L  
 RT: 4.74 min Scan# 1056  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

Tgt Ion: 43 Resp: 32905  
 Ion Ratio Lower Upper  
 43 100  
 72 32.0 15.7 47.1





#22

cis-1,2-Dichloroethene

Concen: 4.874 ug/L

RT: 4.69 min Scan# 1041

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

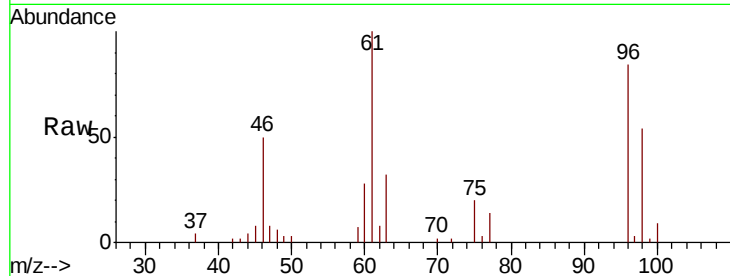
Tot Ion: 96 Resp: 14758

Ion Ratio Lower Upper

96 100

61 118.9 90.5 168.1

68 0.0 0.0 0.0

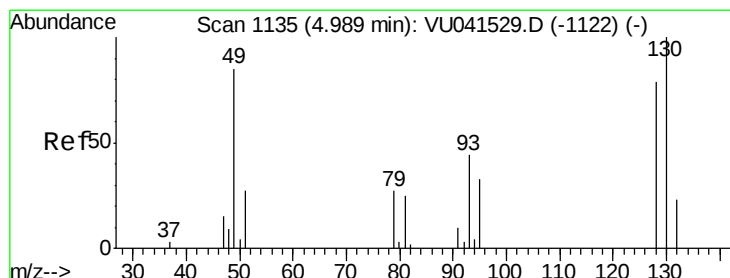
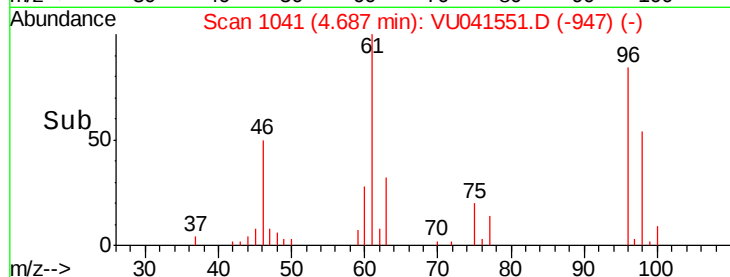
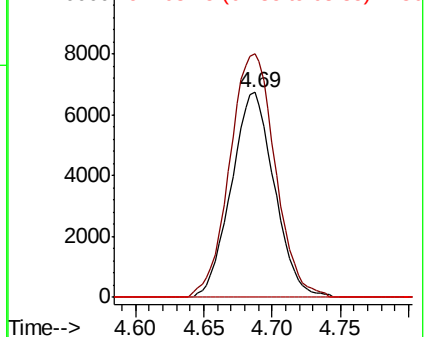


Abundance

Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 68.15 (67.85 to 68.85): VU0



#23

Bromochloromethane

Concen: 5.086 ug/L

RT: 4.99 min Scan# 1136

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Tgt Ion:128 Resp: 8049

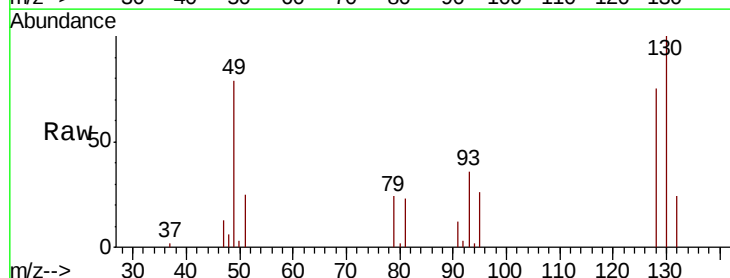
Ion Ratio Lower Upper

128 100

49 104.6 84.2 156.4

130 133.2 89.9 167.0

51 33.5 30.4 45.6



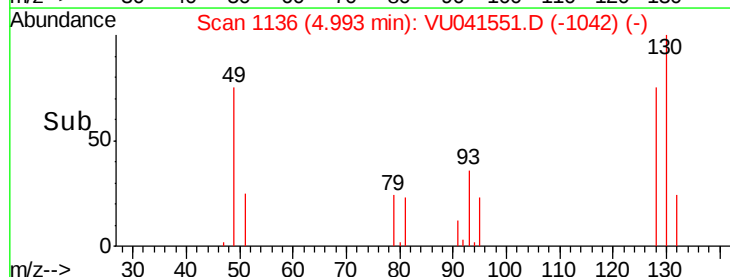
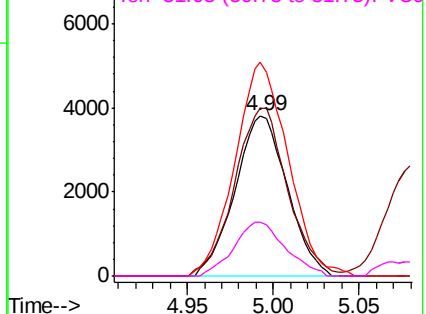
Abundance

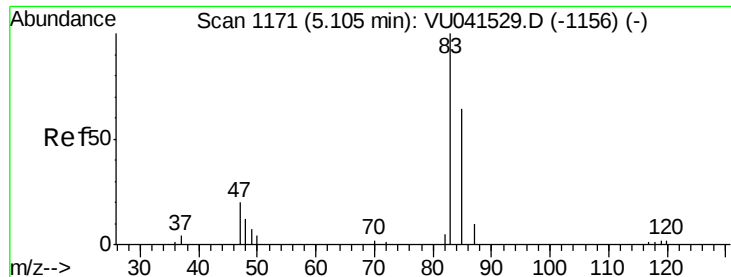
Ion 127.90 (127.60 to 128.60): V

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

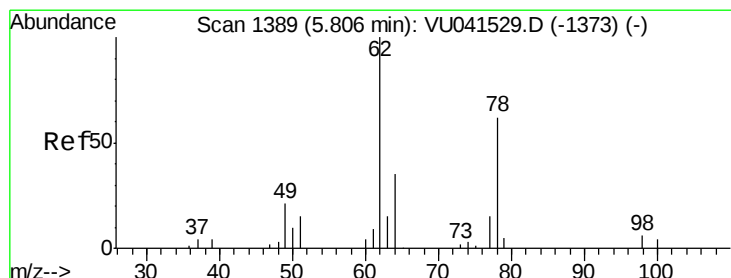
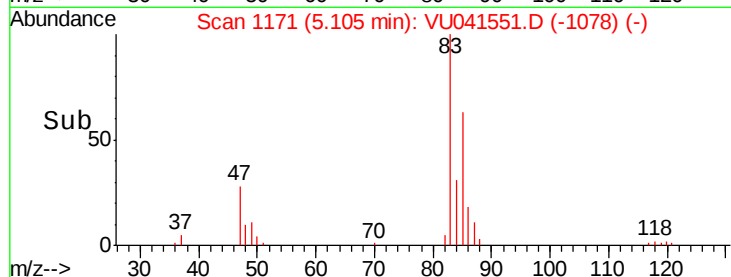
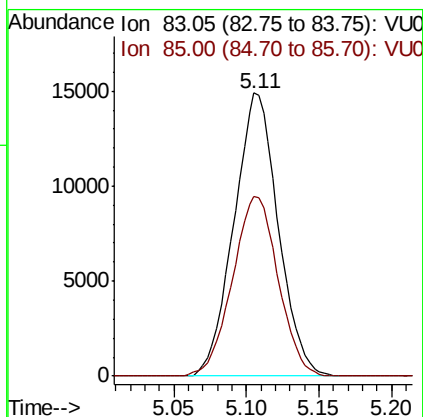
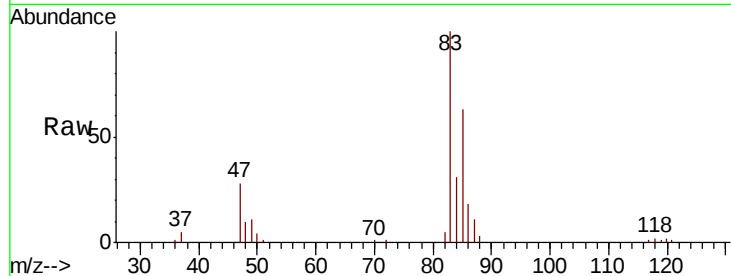




#25  
Chloroform  
Concen: 4.910 ug/L  
RT: 5.11 min Scan# 1171  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

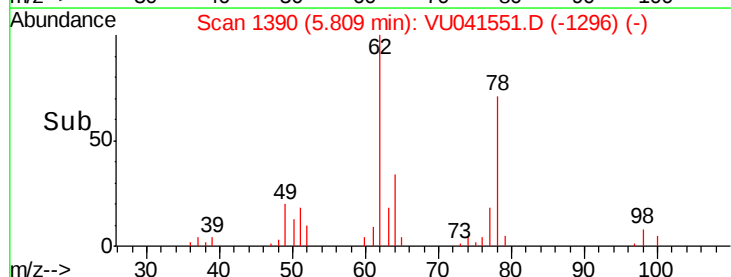
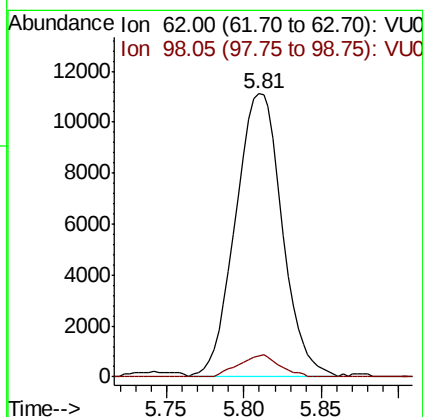
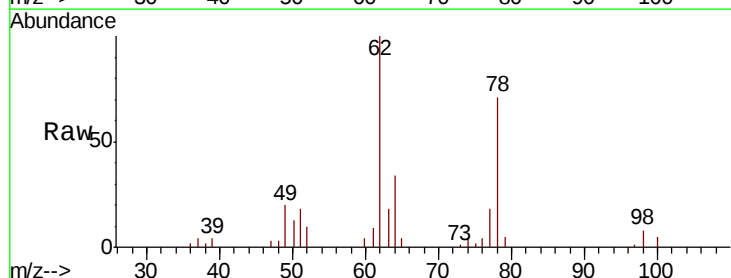
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

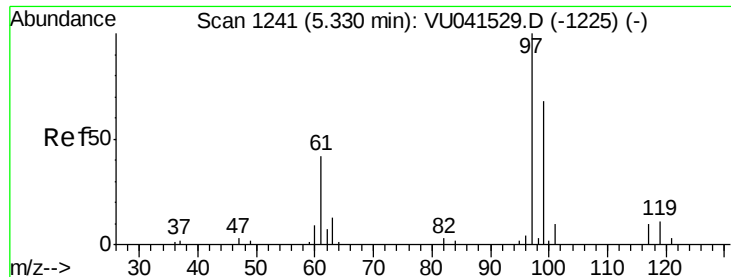
Tot Ion: 83 Resp: 31557  
Ion Ratio Lower Upper  
83 100  
85 63.4 44.7 82.9



#27  
1,2-Dichloroethane  
Concen: 4.657 ug/L  
RT: 5.81 min Scan# 1390  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion: 62 Resp: 23392  
Ion Ratio Lower Upper  
62 100  
98 7.6 5.7 8.5

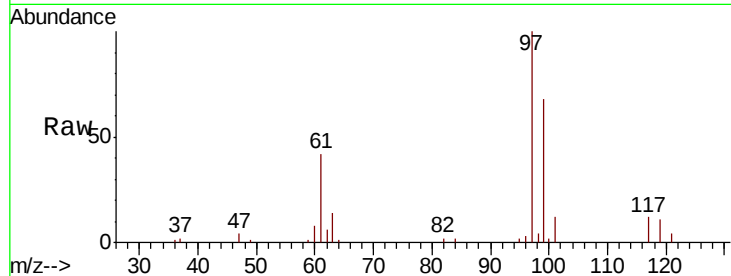




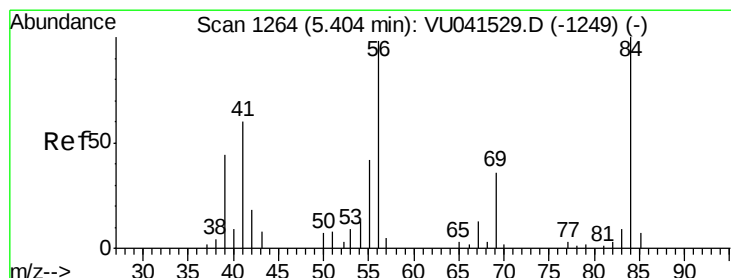
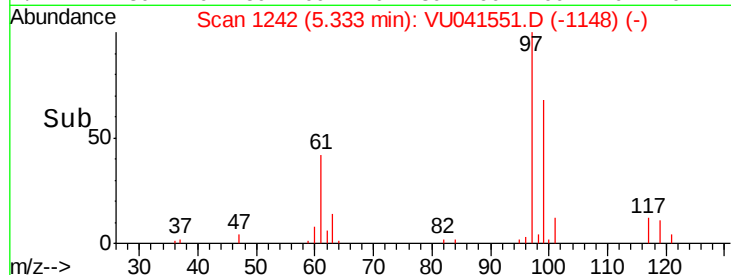
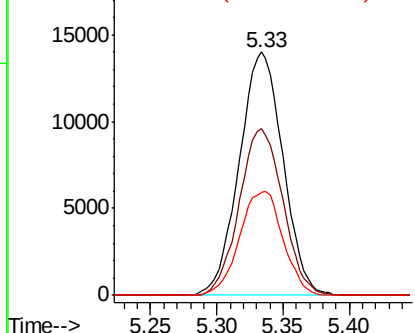
#29  
1,1,1-Trichloroethane  
Concen: 4.912 ug/L  
RT: 5.33 min Scan# 1242  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

Tot Ion: 97 Resp: 32071  
Ion Ratio Lower Upper  
97 100  
99 68.4 51.0 76.6  
61 42.3 34.6 52.0

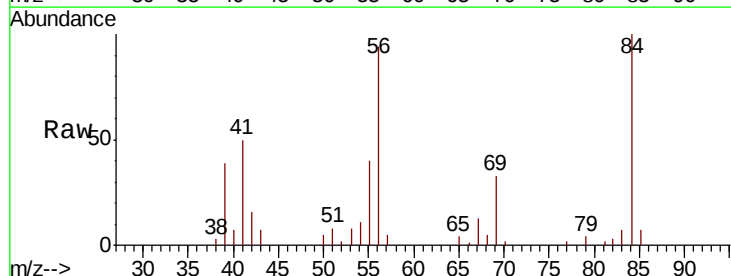


Abundance Ion 96.95 (96.65 to 97.65): VU0  
Ion 99.05 (98.75 to 99.75): VU0  
Ion 61.05 (60.75 to 61.75): VU0

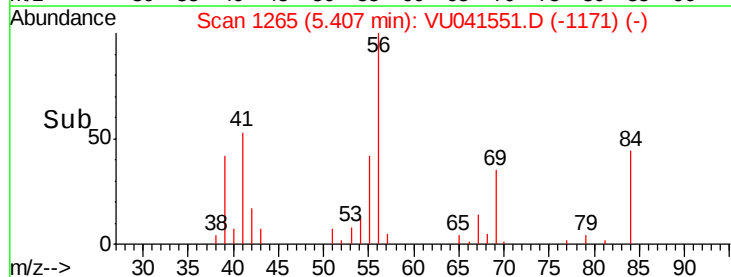
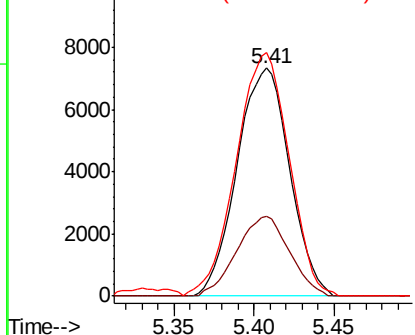


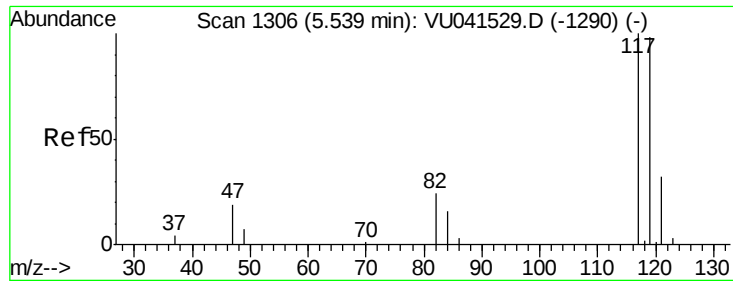
#30  
Cyclohexane  
Concen: 4.023 ug/L  
RT: 5.41 min Scan# 1265  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion: 56 Resp: 16519  
Ion Ratio Lower Upper  
56 100  
69 35.1 25.9 38.9  
84 107.1 74.9 112.3



Abundance Ion 56.10 (55.80 to 56.80): VU0  
Ion 69.15 (68.85 to 69.85): VU0  
Ion 84.15 (83.85 to 84.85): VU0

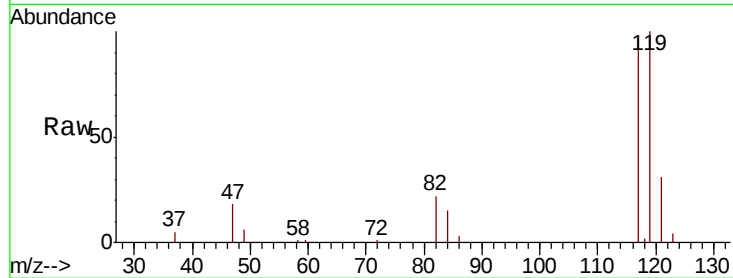




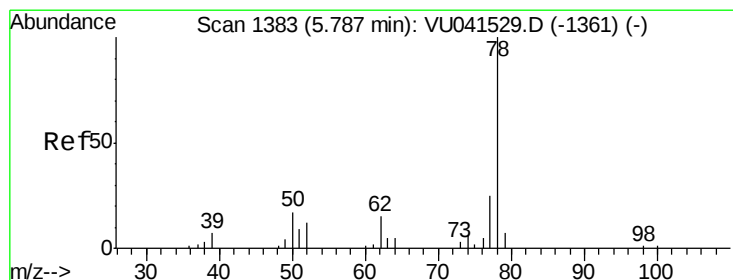
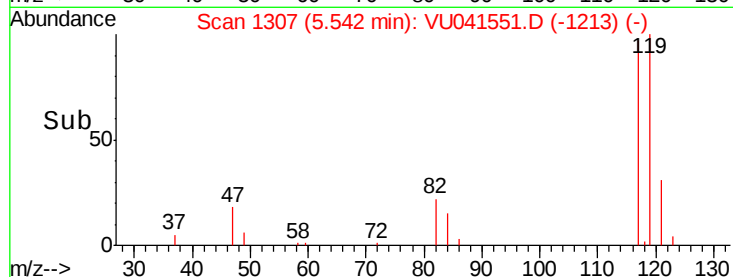
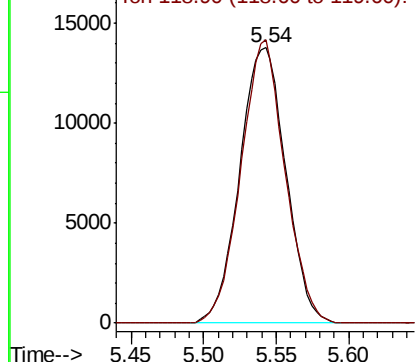
#31  
Carbon tetrachloride  
Concen: 5.038 ug/L  
RT: 5.54 min Scan# 1307  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

Tot Ion:117 Resp: 30463  
Ion Ratio Lower Upper  
117 100  
119 98.1 77.2 115.8

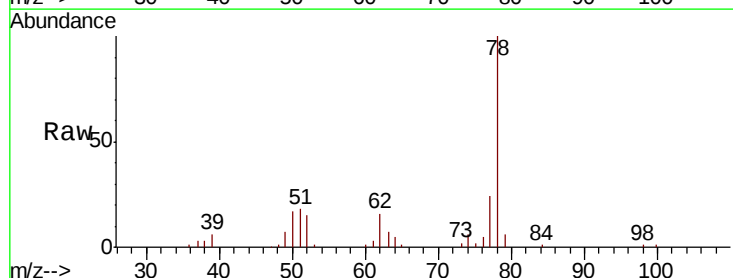


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 118.90 (118.60 to 119.60): V

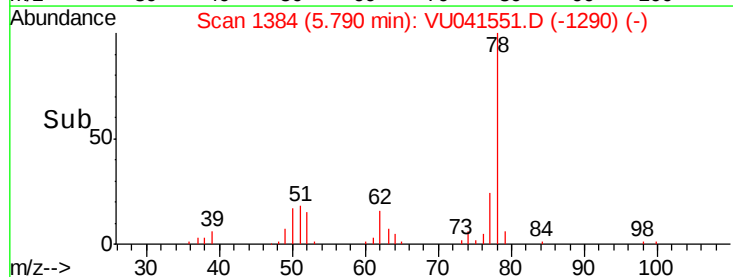
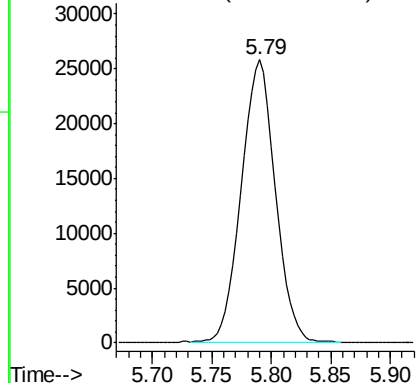


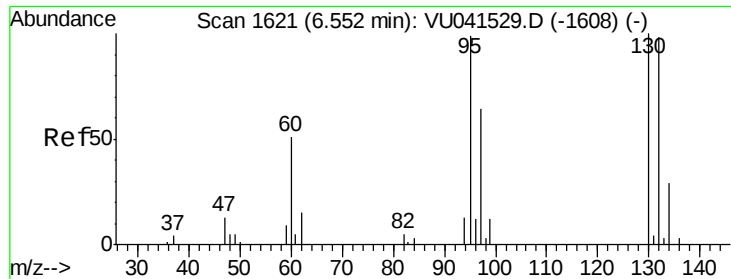
#33  
Benzene  
Concen: 4.559 ug/L  
RT: 5.79 min Scan# 1384  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion: 78 Resp: 51419



Abundance Ion 78.10 (77.80 to 78.80): VU0

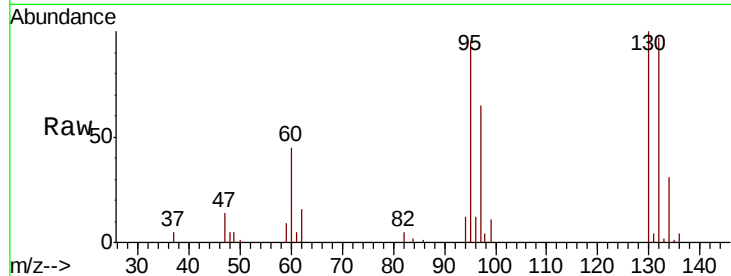




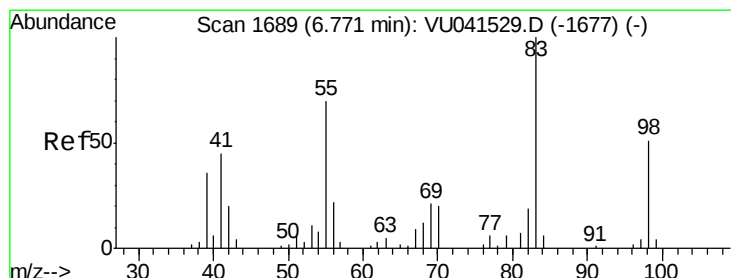
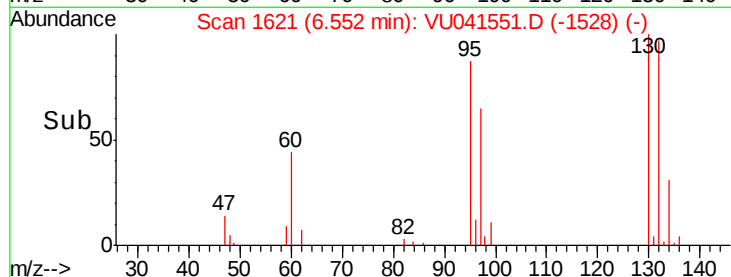
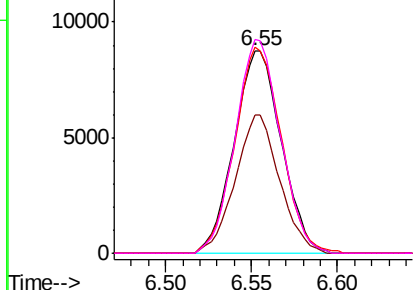
#34  
 Trichloroethene  
 Concen: 4.886 ug/L  
 RT: 6.55 min Scan# 1621  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00510

Tot Ion: 95 Resp: 16630  
 Ion Ratio Lower Upper  
 95 100  
 97 68.5 44.7 83.1  
 132 101.9 65.7 121.9  
 130 105.5 68.8 127.8

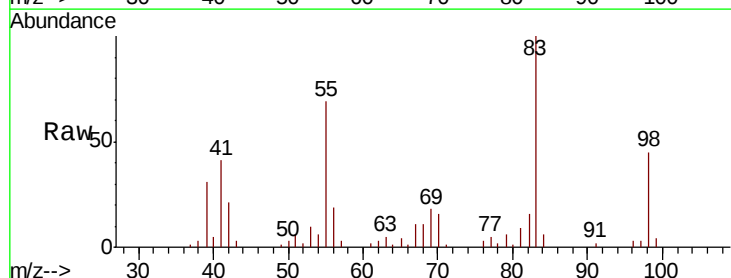


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 96.95 (96.65 to 97.65): VU0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

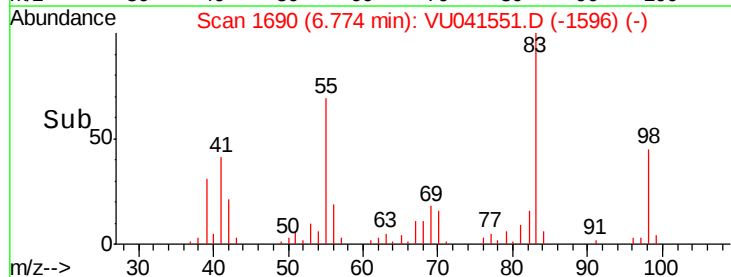
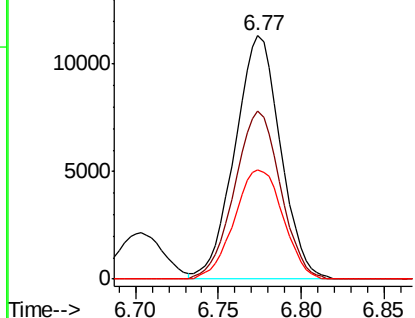


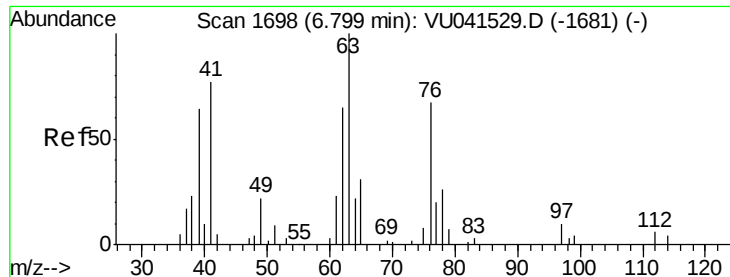
#35  
 Methylcyclohexane  
 Concen: 4.663 ug/L  
 RT: 6.77 min Scan# 1690  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

Tgt Ion: 83 Resp: 21652  
 Ion Ratio Lower Upper  
 83 100  
 55 69.3 62.1 93.1  
 98 48.1 38.7 58.1



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

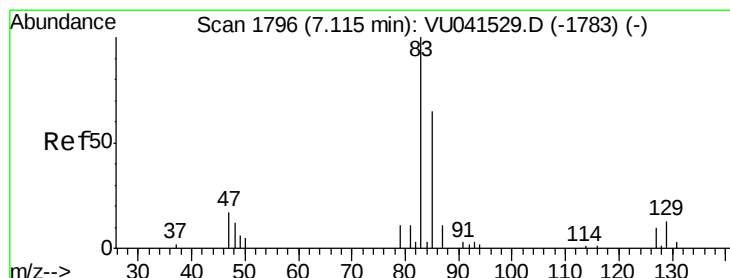
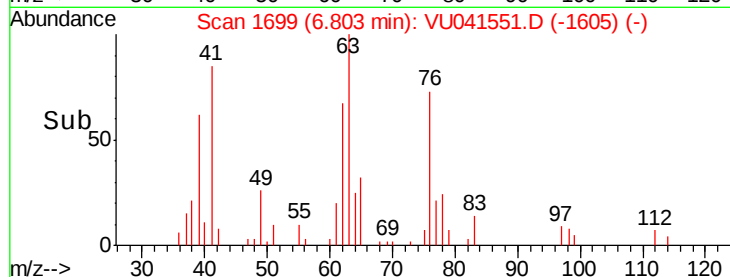
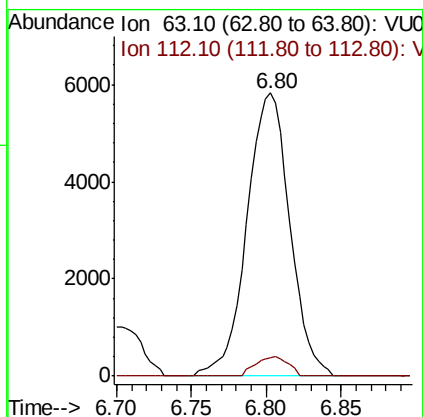
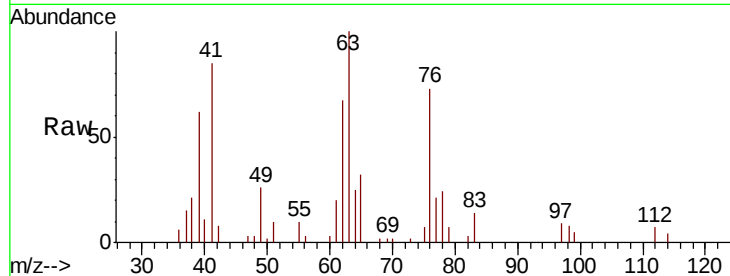




#37  
 1,2-Dichloropropane  
 Concen: 4.397 ug/L  
 RT: 6.80 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

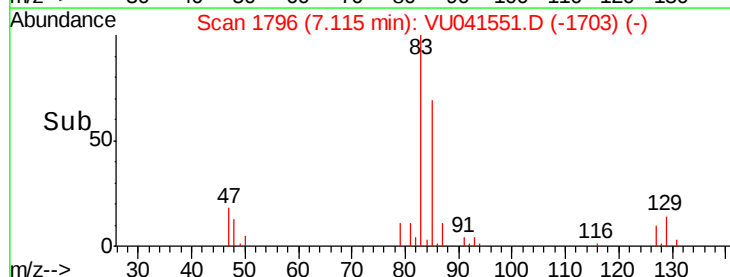
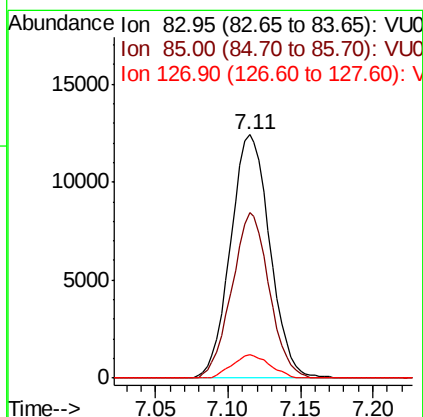
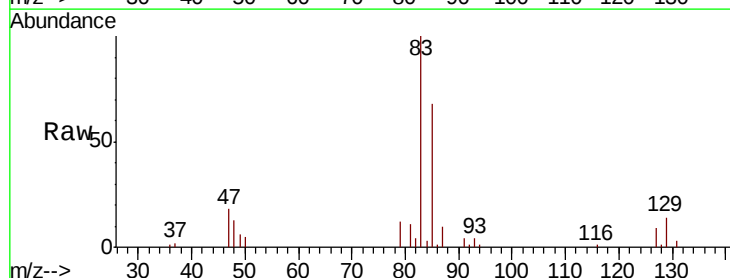
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00510

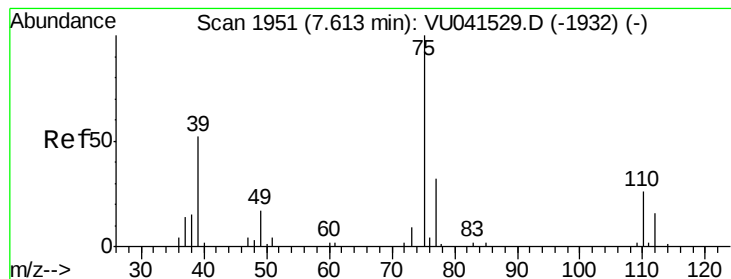
Tot Ion: 63 Resp: 11620  
 Ion Ratio Lower Upper  
 63 100  
 112 5.2 4.2 6.2



#38  
 Bromodichloromethane  
 Concen: 4.841 ug/L  
 RT: 7.11 min Scan# 1796  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

Tgt Ion: 83 Resp: 23374  
 Ion Ratio Lower Upper  
 83 100  
 85 67.8 46.7 86.7  
 127 9.4 6.6 10.0





#39

cis-1,3-Dichloropropene

Concen: 4.366 ug/L

RT: 7.61 min Scan# 1951

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

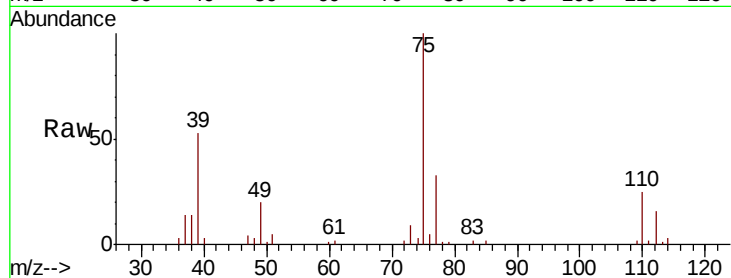
VSTD00510

Tot Ion: 75 Resp: 20843

Ion Ratio Lower Upper

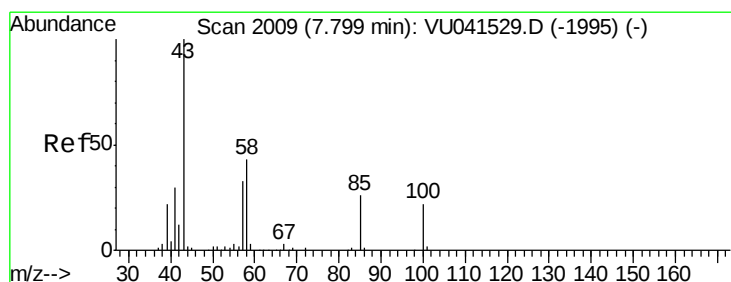
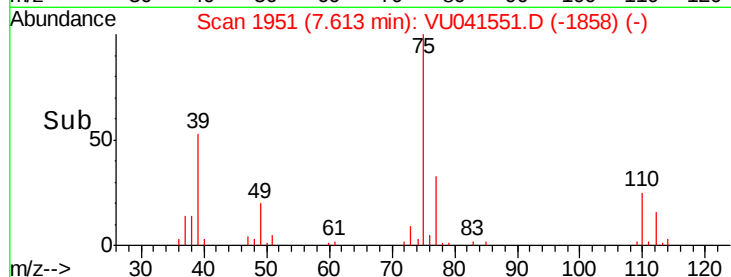
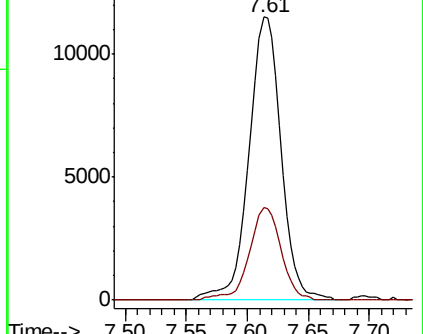
75 100

77 32.5 24.0 44.6



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0



#40

4-Methyl-2-pentanone

Concen: 36.148 ug/L

RT: 7.80 min Scan# 2009

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

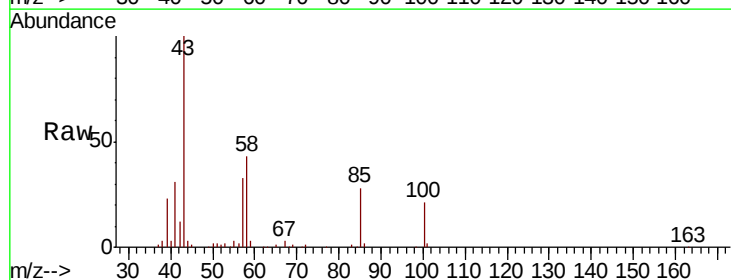
Tgt Ion: 43 Resp: 76544

Ion Ratio Lower Upper

43 100

58 43.1 32.0 48.0

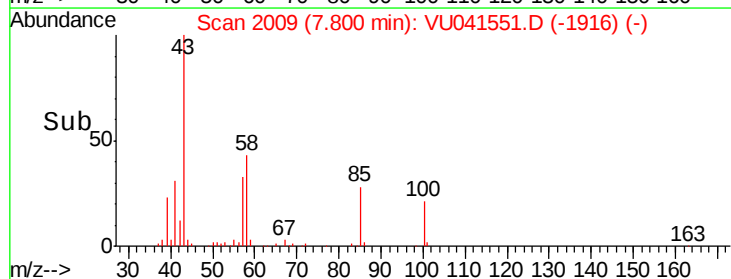
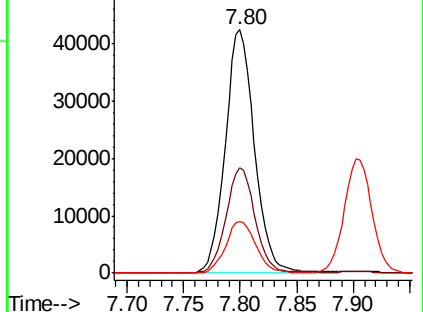
100 21.9 14.2 21.2#

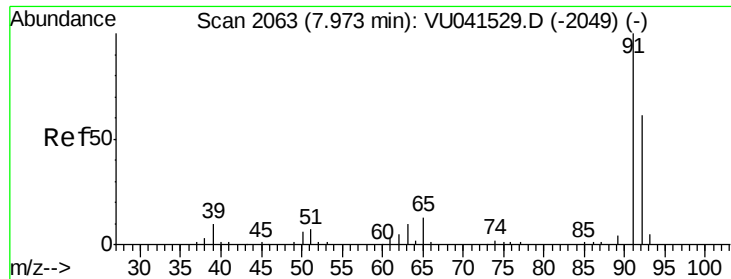


Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0

Ion 100.15 (99.85 to 100.85): VU0





#42

Toluene

Concen: 4.848 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

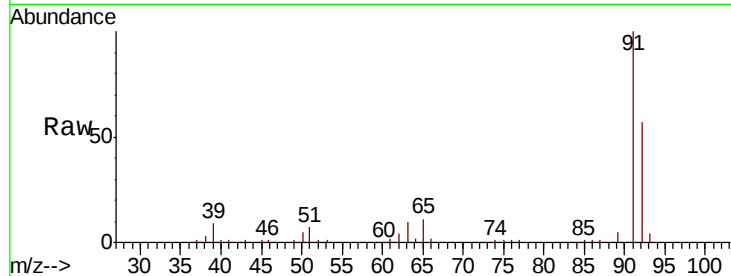
VSTD00510

Tot Ion: 91 Resp: 61534

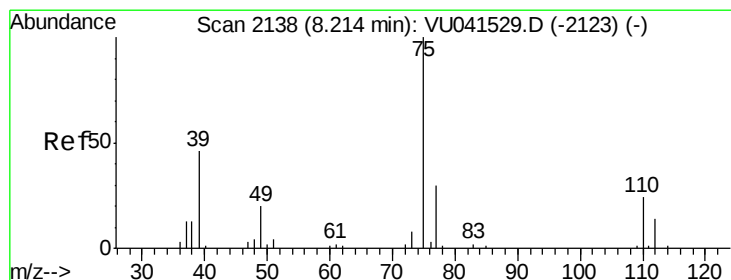
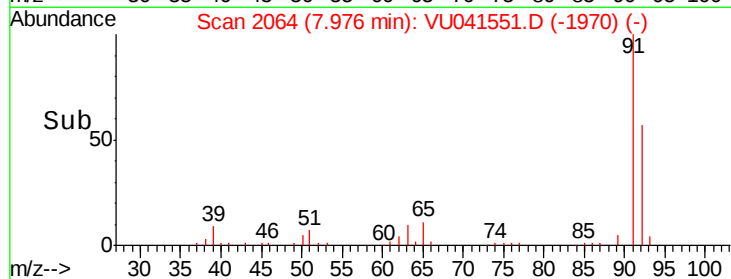
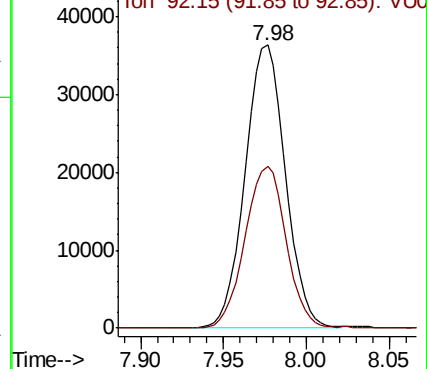
Ion Ratio Lower Upper

91 100

92 57.3 40.8 75.8



Abundance Ion 91.15 (90.85 to 91.85): VU041529.D (-2049) (-)



#44

trans-1,3-Dichloropropene

Concen: 4.541 ug/L

RT: 8.22 min Scan# 2139

Delta R.T. 0.00 min

Lab File: VU041551.D

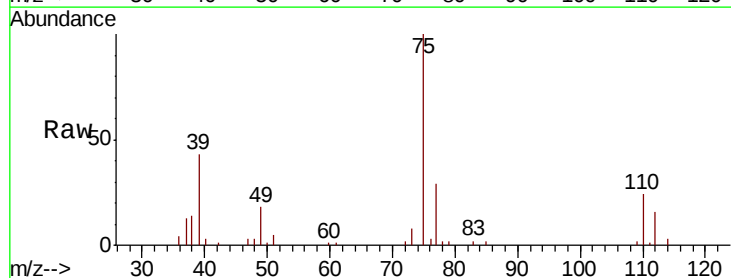
Acq: 10 Dec 2020 21:18

Tgt Ion: 75 Resp: 21652

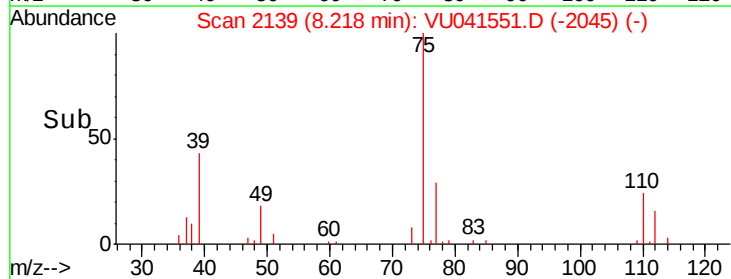
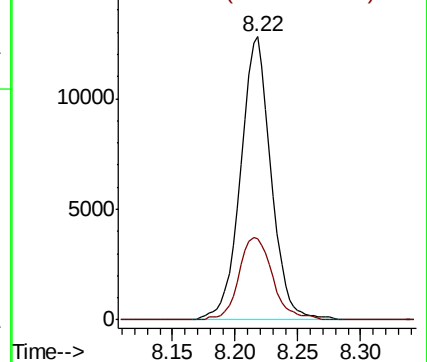
Ion Ratio Lower Upper

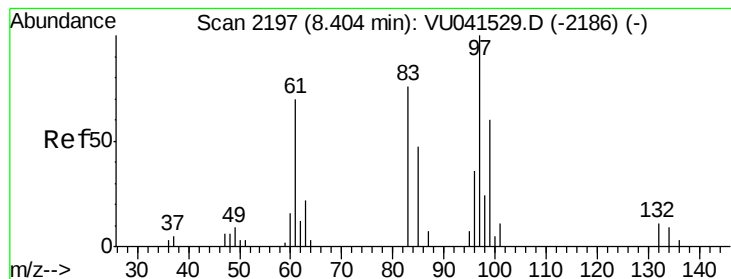
75 100

77 28.6 22.7 42.3



Abundance Ion 75.05 (74.75 to 75.75): VU041529.D (-2123) (-)





#45

1,1,2-Trichloroethane

Concen: 4.508 ug/L

RT: 8.40 min Scan# 2197

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

Tot Ion: 97 Resp: 11491

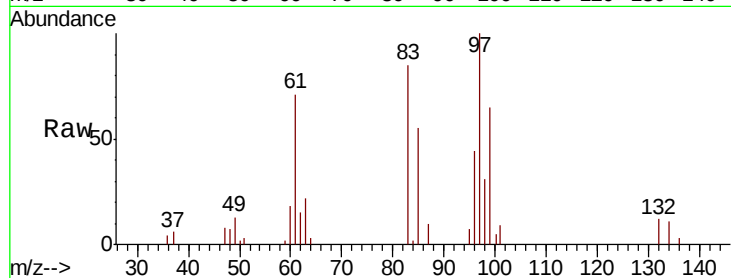
Ion Ratio Lower Upper

97 100

99 64.8 40.7 75.7

83 85.2 56.2 104.4

85 54.6 36.0 67.0

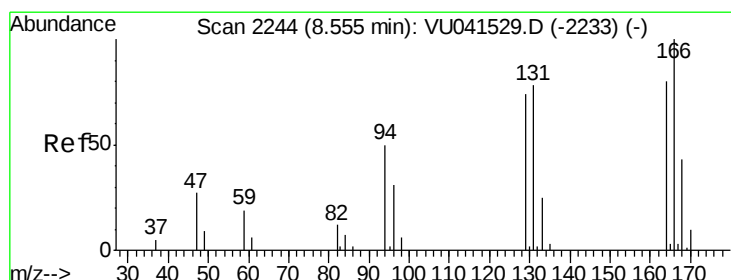
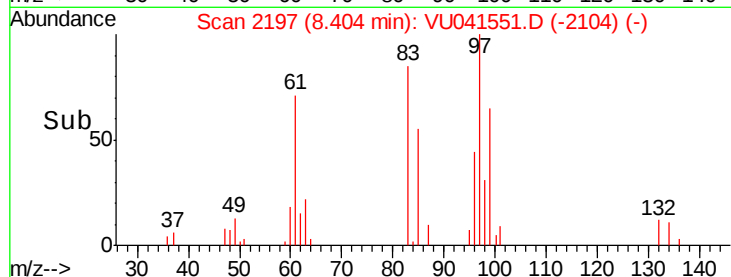
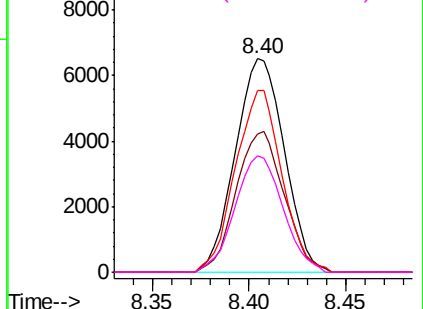


Abundance Ion 96.95 (96.65 to 97.65): VU0

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



#47

Tetrachloroethene

Concen: 5.655 ug/L

RT: 8.56 min Scan# 2245

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Tgt Ion: 164 Resp: 15204

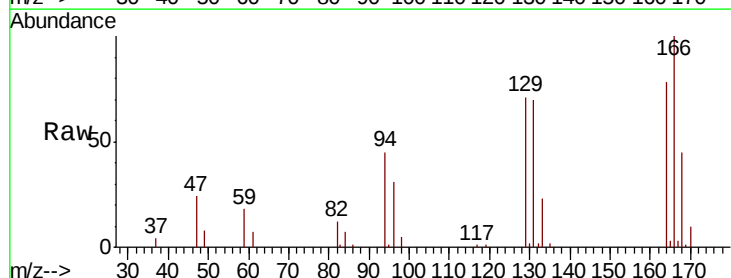
Ion Ratio Lower Upper

164 100

129 90.8 67.1 124.7

131 90.4 63.3 117.7

166 128.6 88.8 164.8

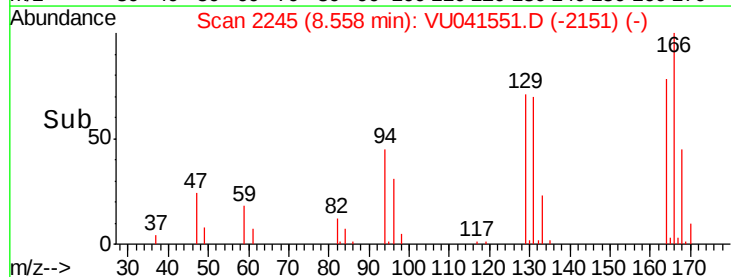
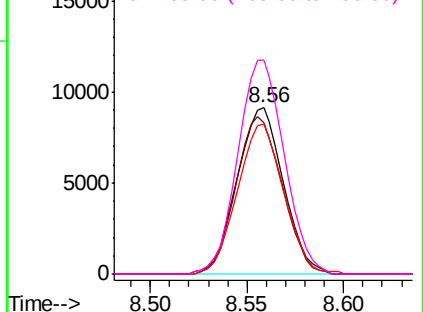


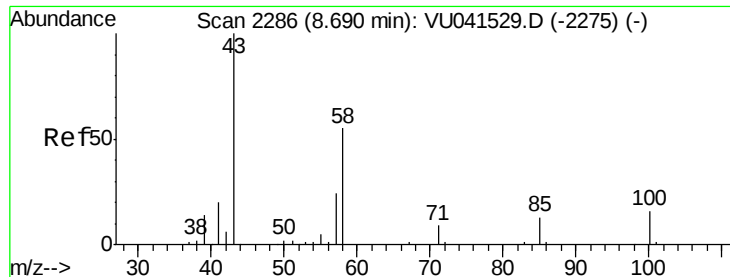
Abundance Ion 163.90 (163.60 to 164.60): V

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

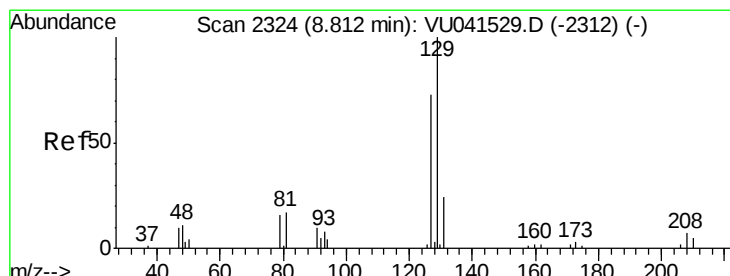
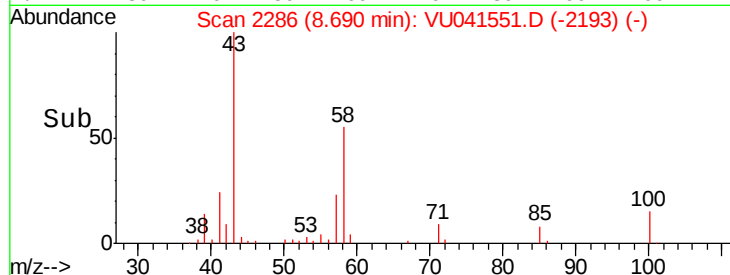
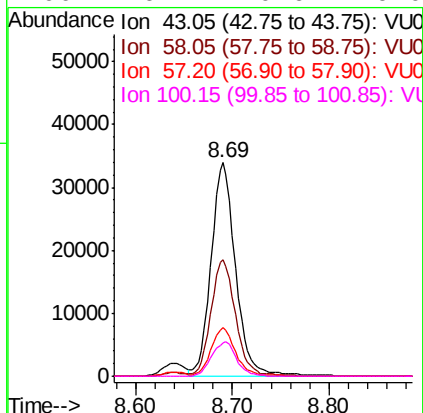
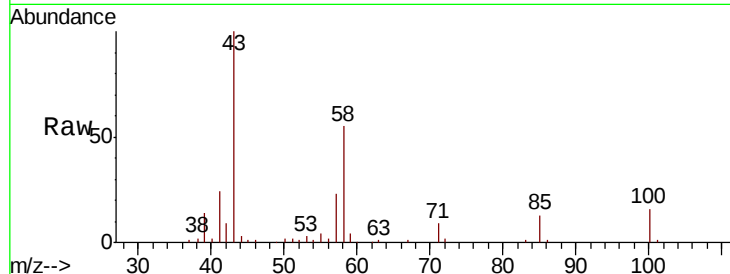




#48  
2-Hexanone  
Concen: 35.213 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

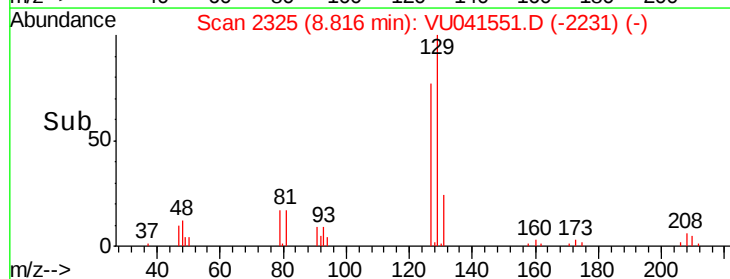
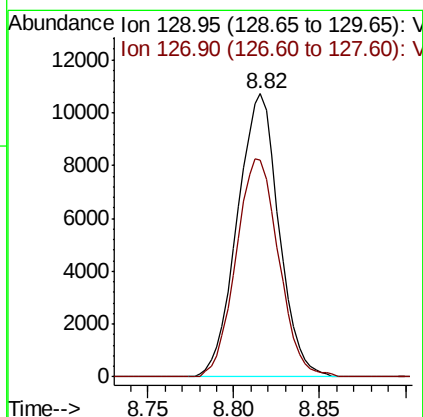
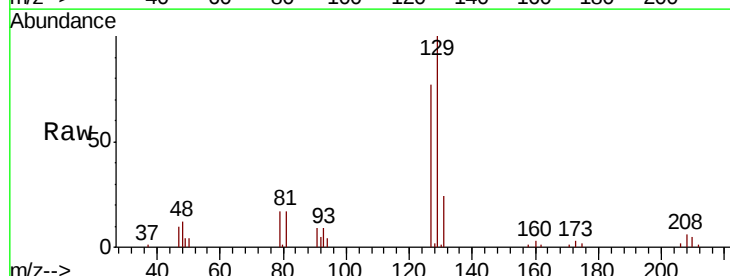
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

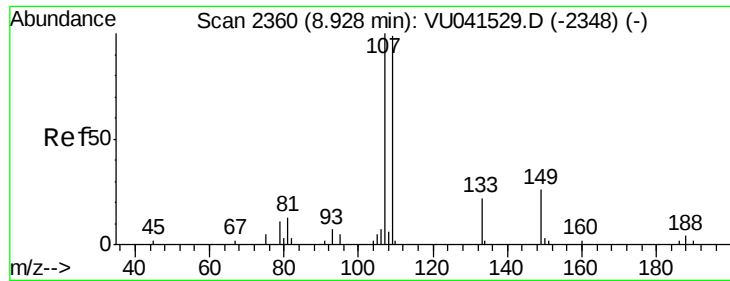
Tot Ion: 43 Resp: 59916  
Ion Ratio Lower Upper  
43 100  
58 55.0 41.4 62.0  
57 22.8 17.1 25.7  
100 16.2 10.6 16.0#



#49  
Dibromochloromethane  
Concen: 5.200 ug/L  
RT: 8.82 min Scan# 2325  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion:129 Resp: 18058  
Ion Ratio Lower Upper  
129 100  
127 76.8 52.4 97.2

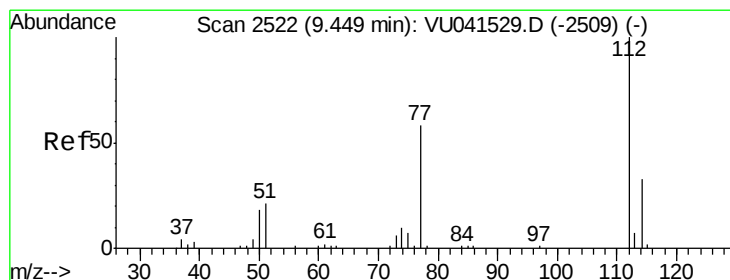
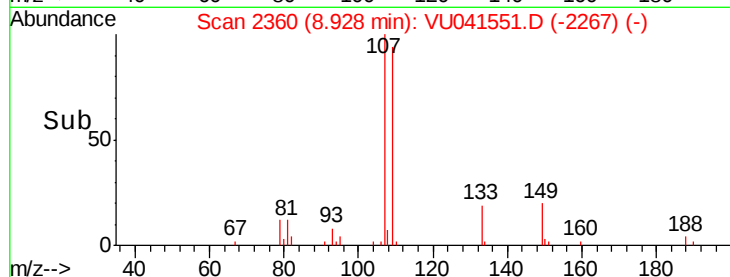
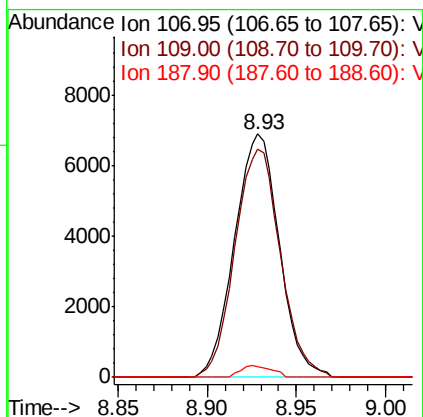
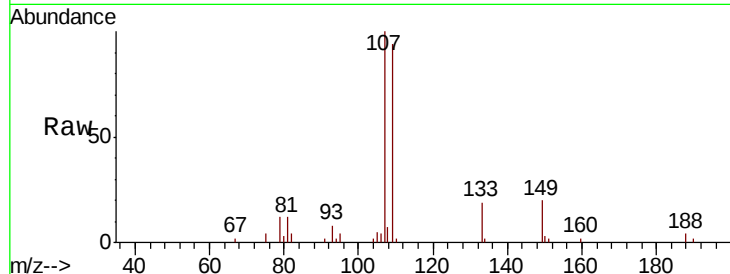




#50  
1,2-Dibromoethane  
Concen: 4.703 ug/L  
RT: 8.93 min Scan# 2360  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

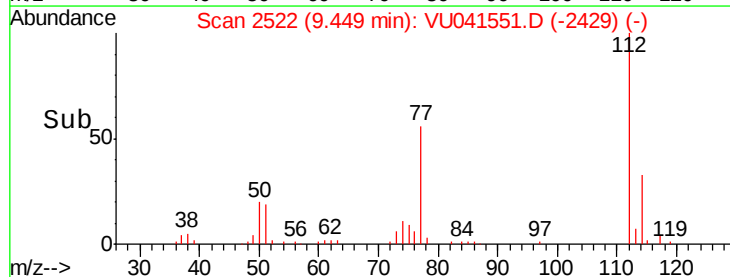
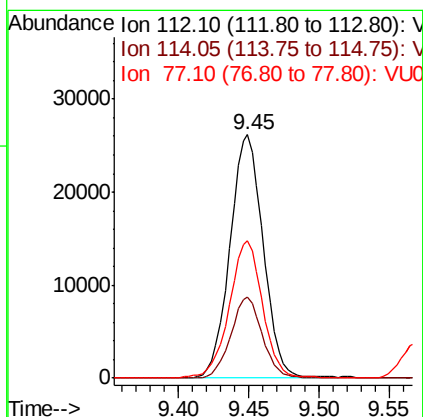
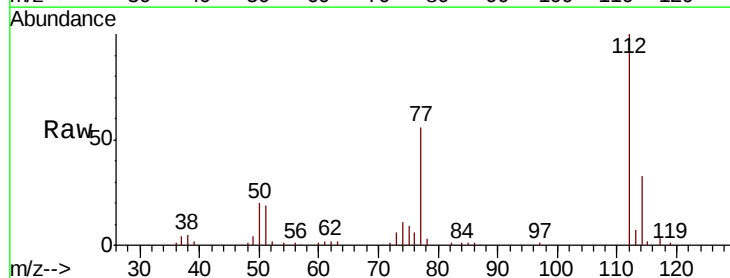
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

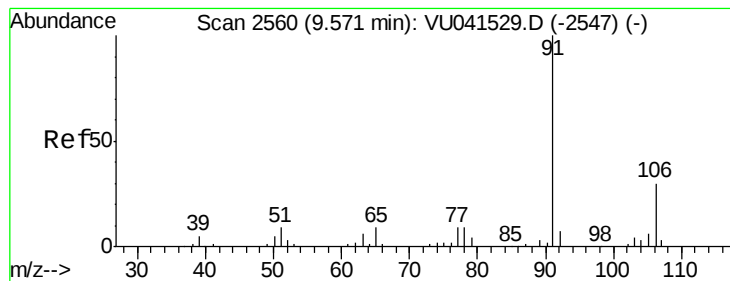
Tot Ion:107 Resp: 12092  
Ion Ratio Lower Upper  
107 100  
109 93.8 62.3 115.7  
188 4.4 4.2 6.4



#51  
Chlorobenzene  
Concen: 5.097 ug/L  
RT: 9.45 min Scan# 2522  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion:112 Resp: 43115  
Ion Ratio Lower Upper  
112 100  
114 33.2 22.7 42.1  
77 56.3 48.2 72.2





#52

Ethylbenzene

Concen: 4.815 ug/L

RT: 9.57 min Scan# 2560

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

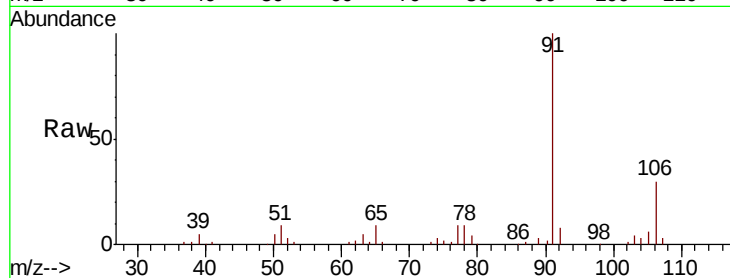
VSTD00510

Tot Ion: 91 Resp: 70039

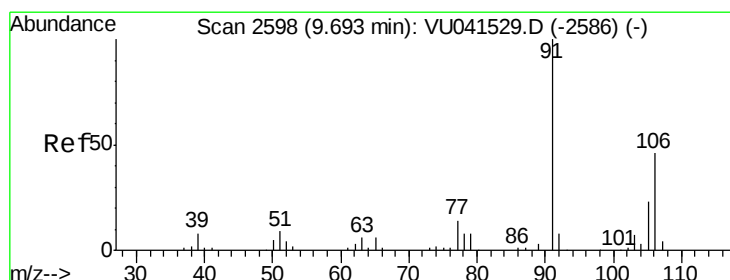
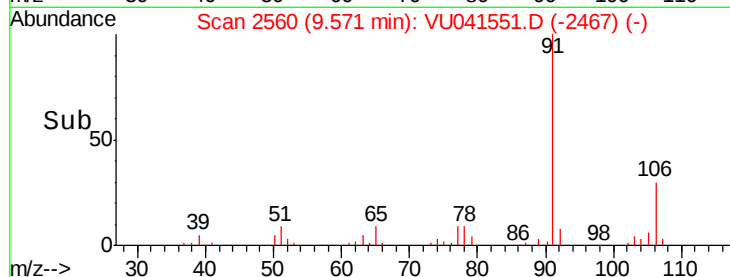
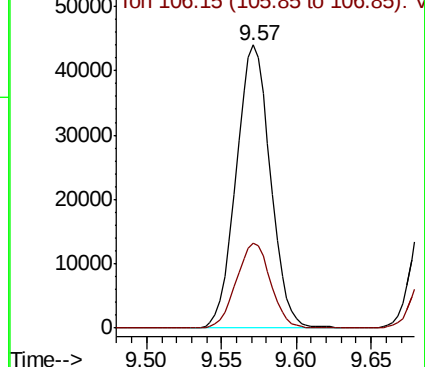
Ion Ratio Lower Upper

91 100

106 29.9 21.8 40.4



Abundance Ion 91.15 (90.85 to 91.85): VU041551.D (-2547) (-)



#53

m,p-Xylene

Concen: 5.057 ug/L

RT: 9.69 min Scan# 2598

Delta R.T. 0.00 min

Lab File: VU041551.D

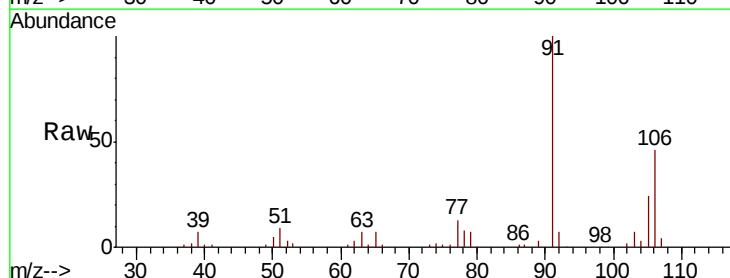
Acq: 10 Dec 2020 21:18

Tgt Ion: 106 Resp: 26701

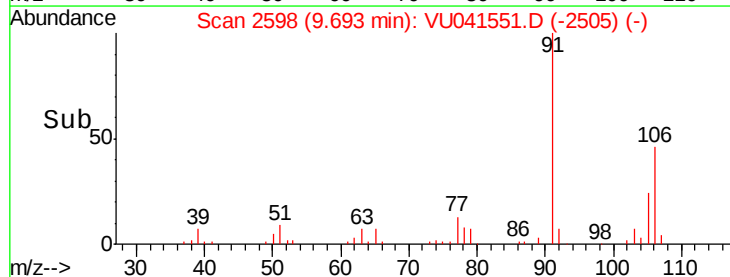
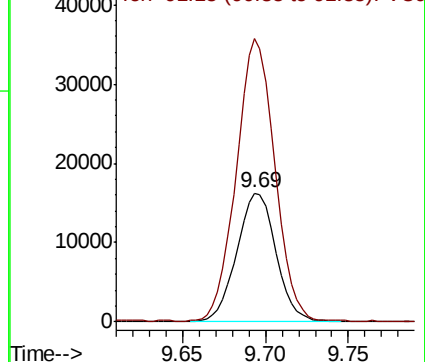
Ion Ratio Lower Upper

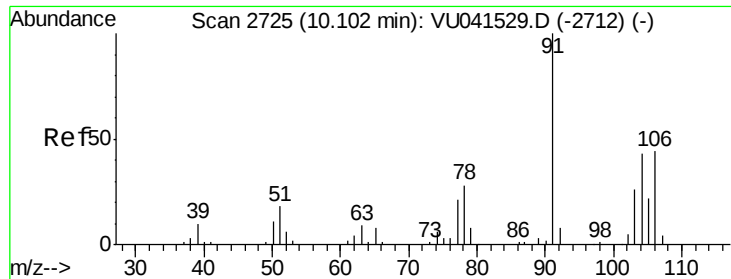
106 100

91 219.3 151.8 282.0



Abundance Ion 106.15 (105.85 to 106.85): VU041551.D (-2586) (-)

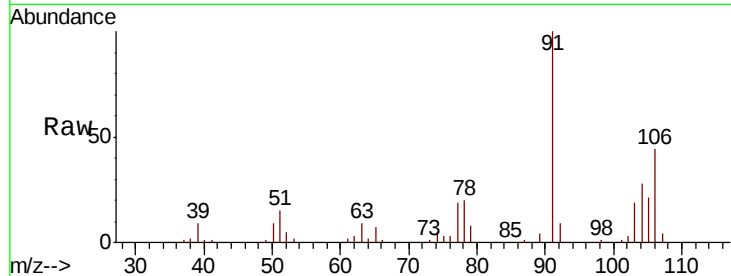




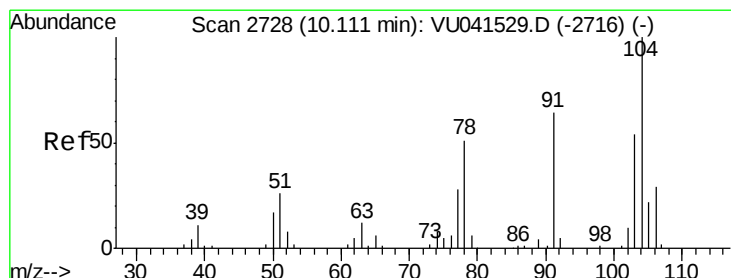
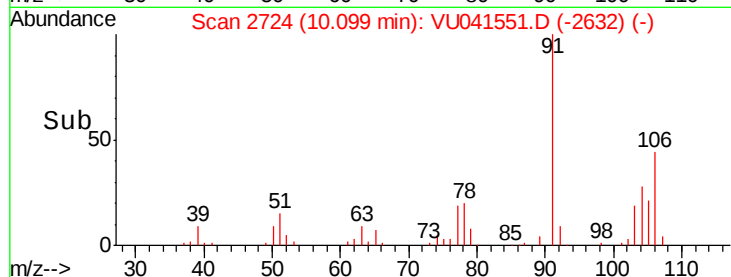
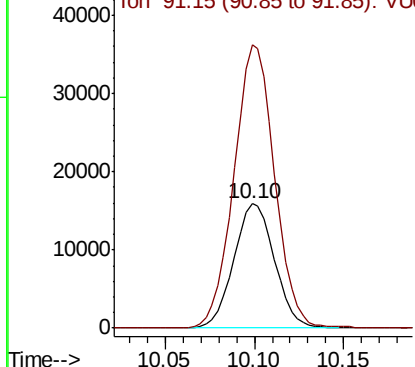
#54  
o-Xylene  
Concen: 4.931 ug/L  
RT: 10.10 min Scan# 2724  
Delta R.T. -0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00510

Tot Ion:106 Resp: 25244  
Ion Ratio Lower Upper  
106 100  
91 227.5 165.8 308.0

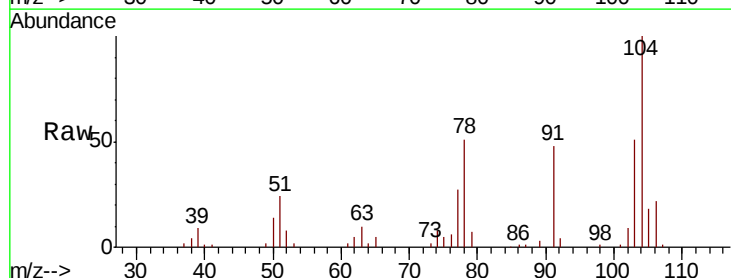


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

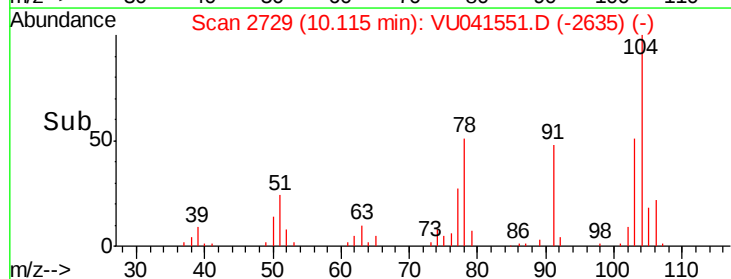
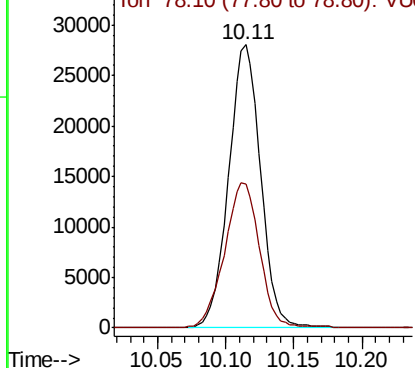


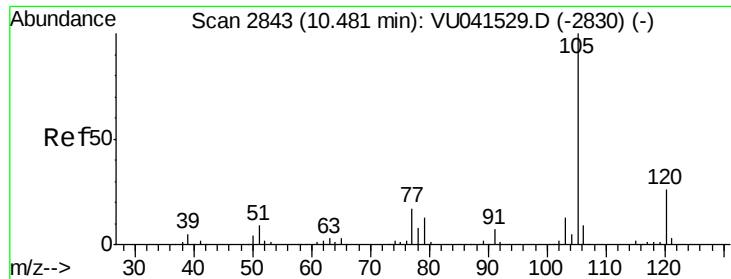
#55  
Styrene  
Concen: 5.258 ug/L  
RT: 10.11 min Scan# 2729  
Delta R.T. 0.00 min  
Lab File: VU041551.D  
Acq: 10 Dec 2020 21:18

Tgt Ion:104 Resp: 45713  
Ion Ratio Lower Upper  
104 100  
78 50.6 39.8 74.0



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VU0





#56

Isopropylbenzene

Concen: 5.030 ug/L

RT: 10.48 min Scan# 2843

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

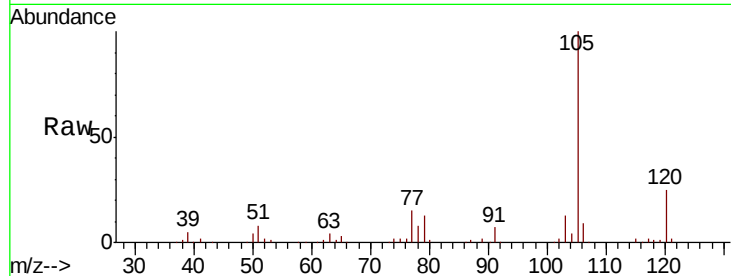
Tot Ion:105 Resp: 72696

Ion Ratio Lower Upper

105 100

120 25.3 20.0 30.0

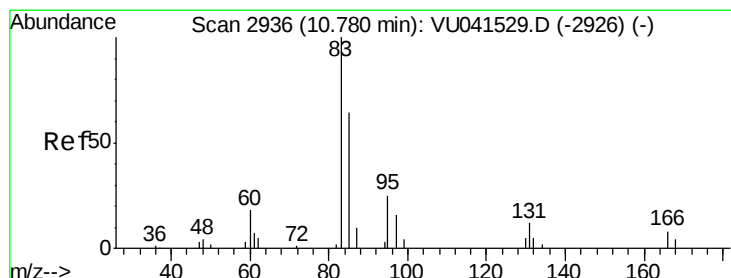
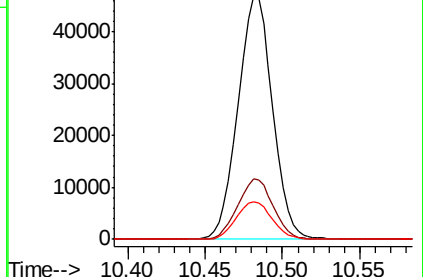
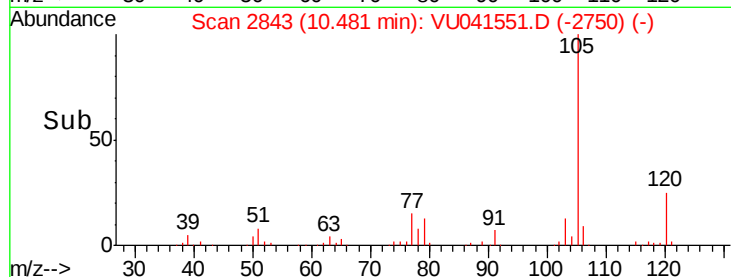
77 15.9 13.9 20.9



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): V



#58

1,1,2,2-Tetrachloroethane

Concen: 4.285 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

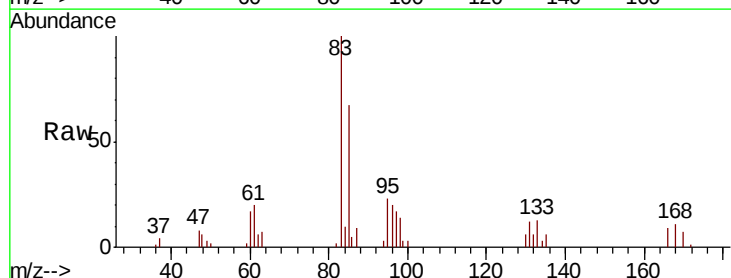
Tgt Ion: 83 Resp: 13416

Ion Ratio Lower Upper

83 100

85 67.4 45.2 84.0

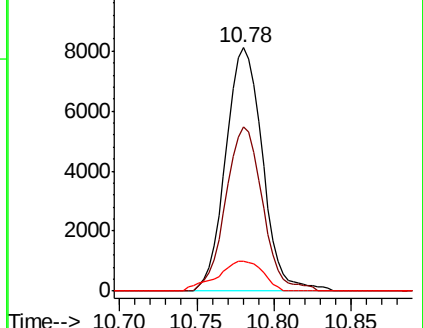
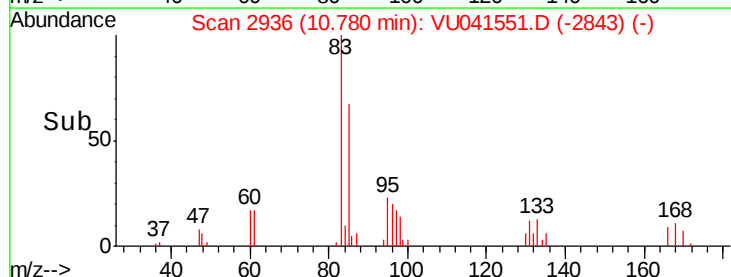
131 12.2 9.1 13.7

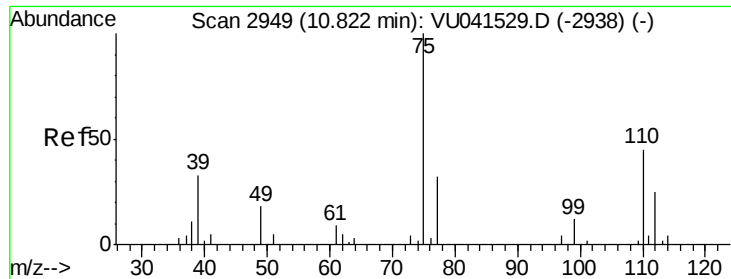


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 4.290 ug/L

RT: 10.82 min Scan# 2949

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

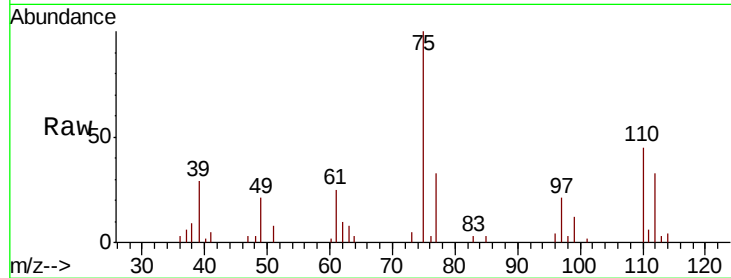
VSTD00510

Tot Ion: 75 Resp: 11002

Ion Ratio Lower Upper

75 100

77 34.4 26.3 39.5



Abundance Ion 75.00 (74.70 to 75.70): VU041529.D (-2938) (-)

Ion 77.00 (76.70 to 77.70): VU041529.D (-2938) (-)

10.82

8000

6000

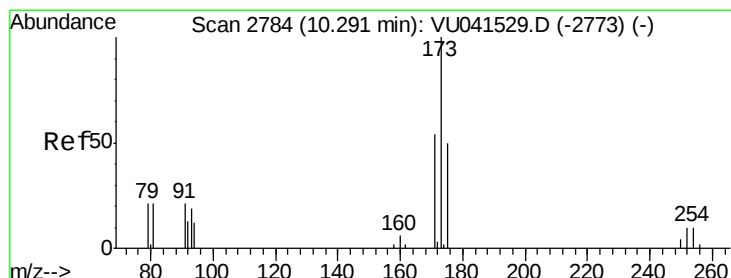
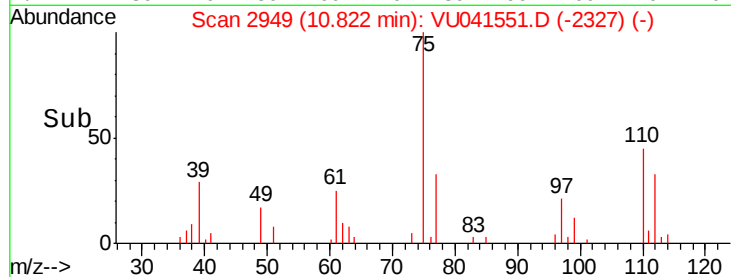
4000

2000

0

Time-->

10.75 10.80 10.85



#61

Bromoform

Concen: 5.253 ug/L

RT: 10.29 min Scan# 2783

Delta R.T. -0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

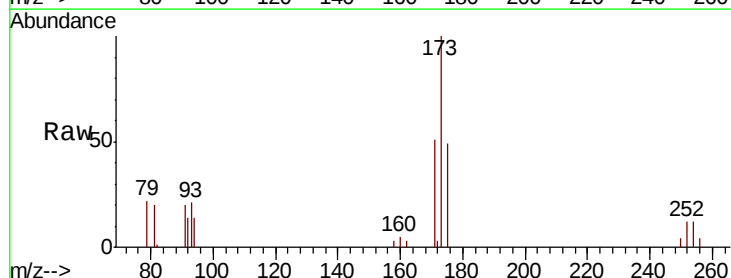
Tgt Ion: 173 Resp: 11977

Ion Ratio Lower Upper

173 100

175 47.2 38.8 58.2

254 10.1 7.6 11.4



Abundance Ion 172.90 (172.60 to 173.60): VU041529.D (-2773) (-)

Ion 174.90 (174.60 to 175.60): VU041529.D (-2773) (-)

Ion 253.75 (253.45 to 254.45): VU041529.D (-2773) (-)

10.29

8000

6000

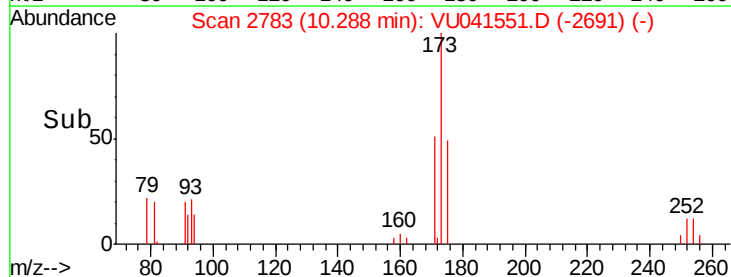
4000

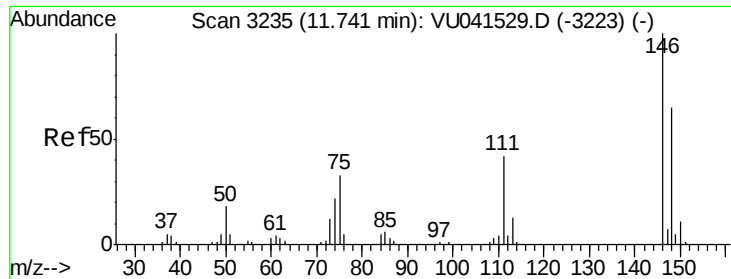
2000

0

Time-->

10.25 10.30 10.35





#62

1,3-Dichlorobenzene

Concen: 5.171 ug/L

RT: 11.74 min Scan# 3235

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

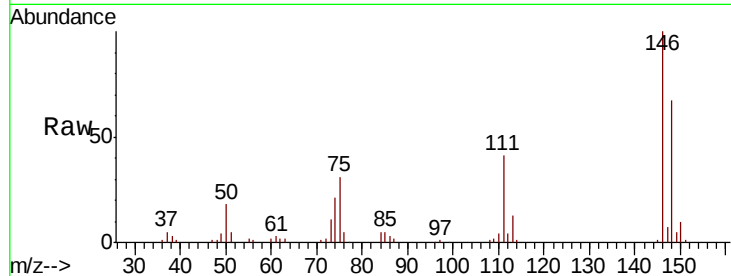
Tot Ion:146 Resp: 39538

Ion Ratio Lower Upper

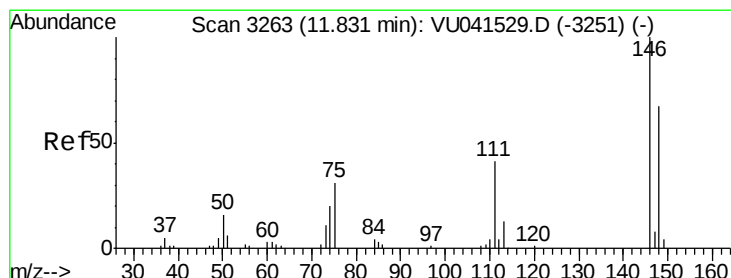
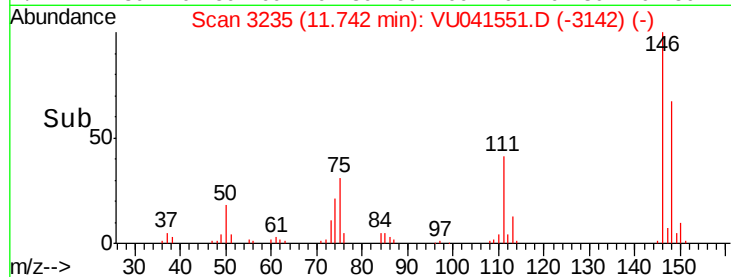
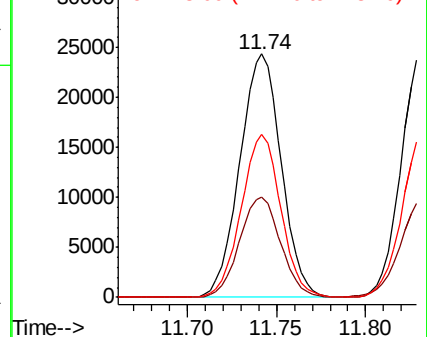
146 100

111 41.3 30.2 56.0

148 66.8 44.0 81.6



Abundance Ion 145.95 (145.65 to 146.65): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 4.949 ug/L

RT: 11.83 min Scan# 3263

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

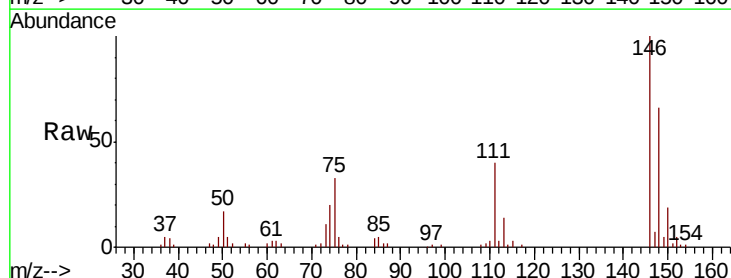
Tgt Ion:146 Resp: 38798

Ion Ratio Lower Upper

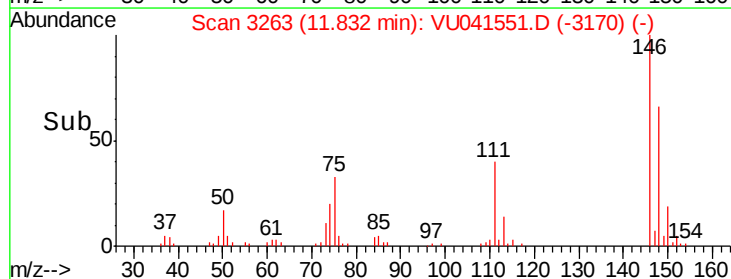
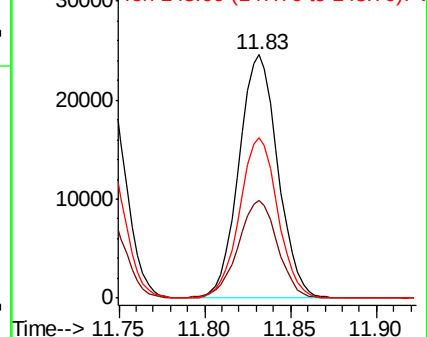
146 100

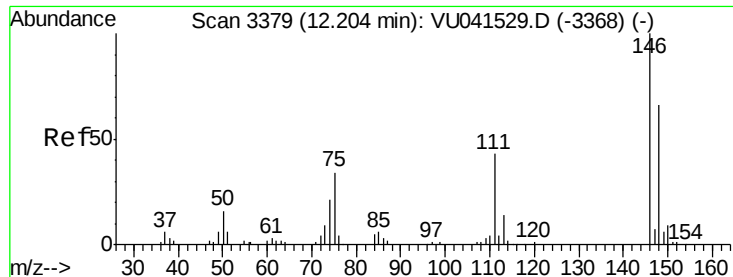
111 39.9 30.7 57.1

148 66.1 45.8 85.2



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: 4.993 ug/L

RT: 12.21 min Scan# 3380

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

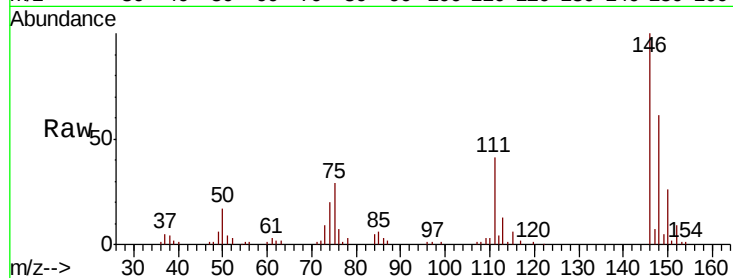
Tot Ion:146 Resp: 37801

Ion Ratio Lower Upper

146 100

111 41.3 36.0 54.0

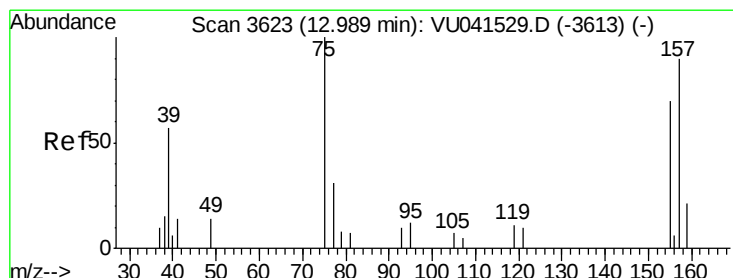
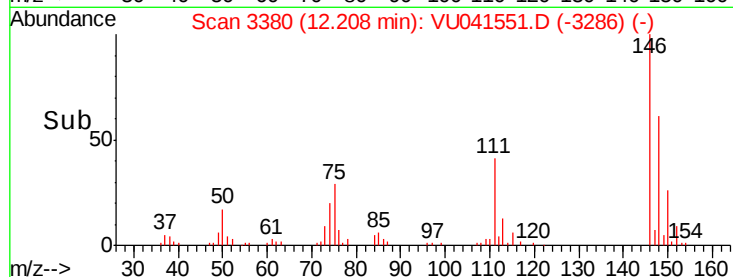
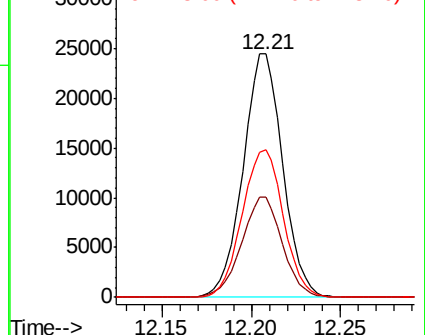
148 60.8 49.0 73.6



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



#66

1,2-Dibromo-3-chloropropane

Concen: 4.210 ug/L

RT: 12.99 min Scan# 3623

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

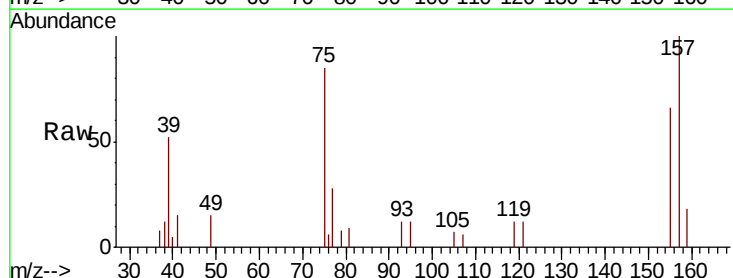
Tgt Ion: 75 Resp: 3122

Ion Ratio Lower Upper

75 100

155 77.5 58.0 87.0

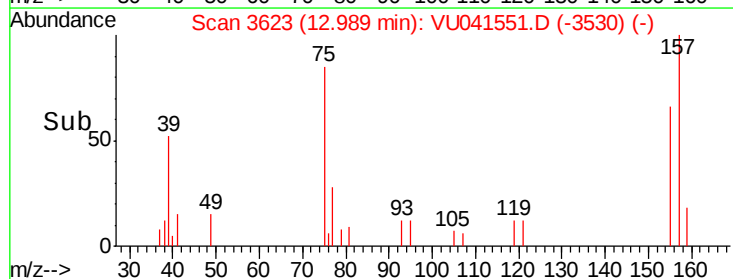
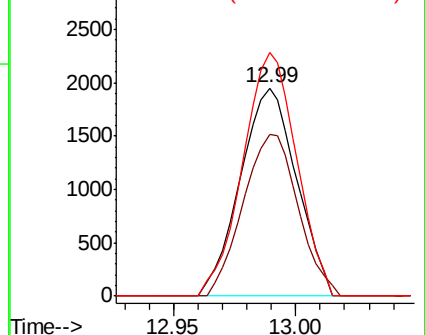
157 117.0 77.1 115.7#

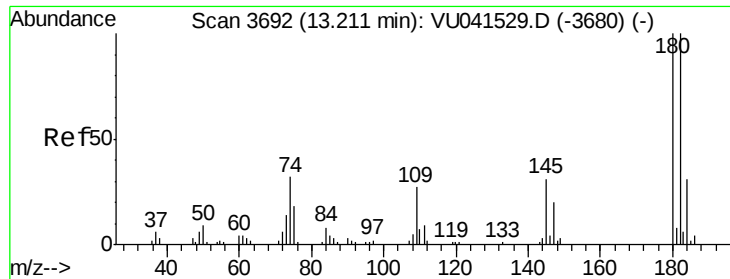


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

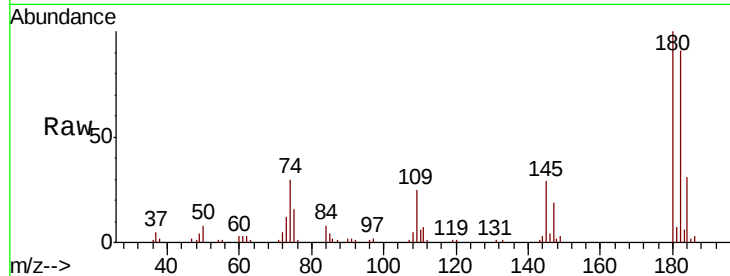




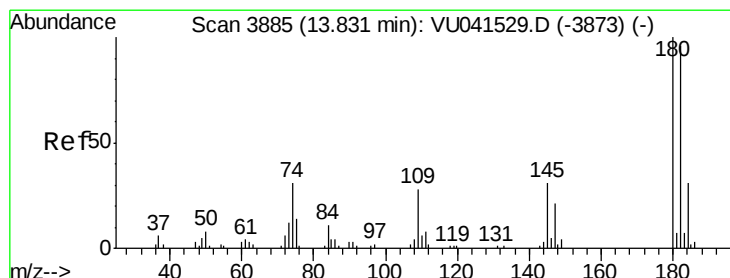
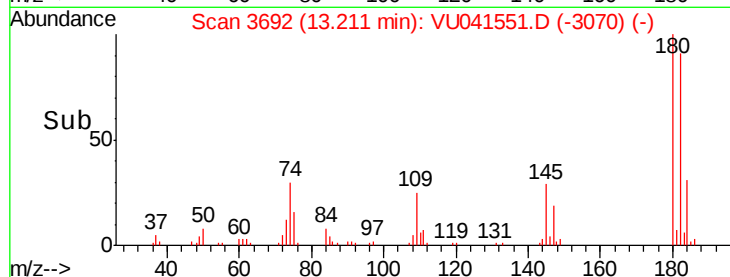
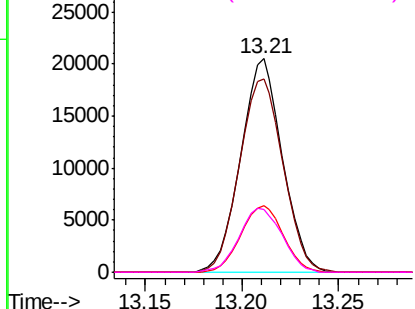
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.020 ug/L  
 RT: 13.21 min Scan# 3692  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00510

Tot Ion:180 Resp: 30671  
 Ion Ratio Lower Upper  
 180 100  
 182 94.8 76.3 114.5  
 184 31.9 23.8 35.6  
 145 31.1 25.1 37.7

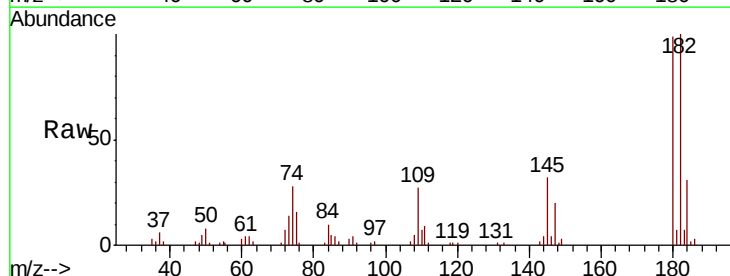


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

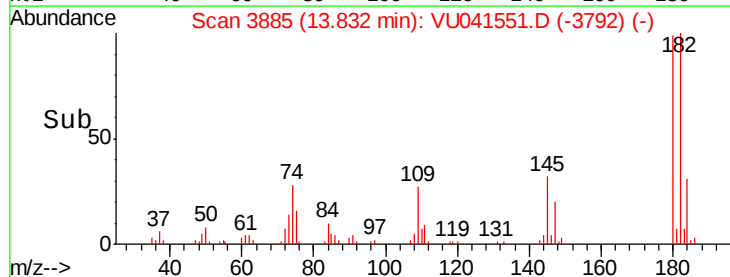
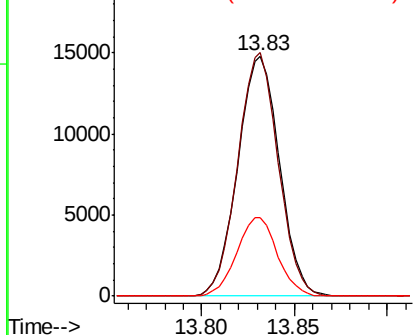


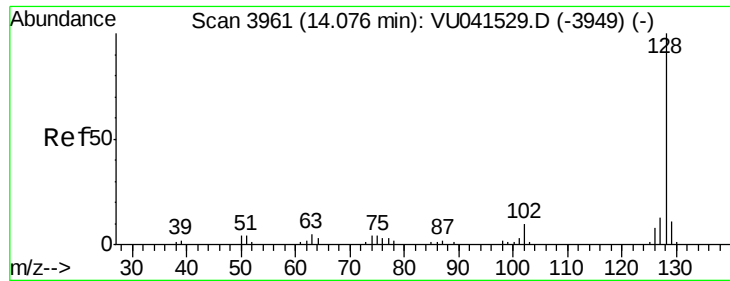
#68  
 1,2,4-trichlorobenzene  
 Concen: 4.738 ug/L  
 RT: 13.83 min Scan# 3885  
 Delta R.T. 0.00 min  
 Lab File: VU041551.D  
 Acq: 10 Dec 2020 21:18

Tgt Ion:180 Resp: 23172  
 Ion Ratio Lower Upper  
 180 100  
 182 98.5 77.8 116.8  
 145 31.9 26.4 39.6



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: 4.068 ug/L

RT: 14.08 min Scan# 3961

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00510

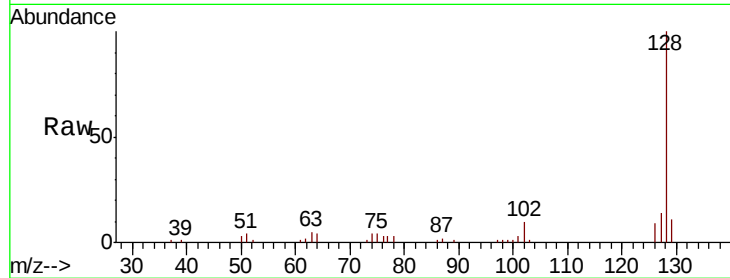
Tot Ion:128 Resp: 31259

Ion Ratio Lower Upper

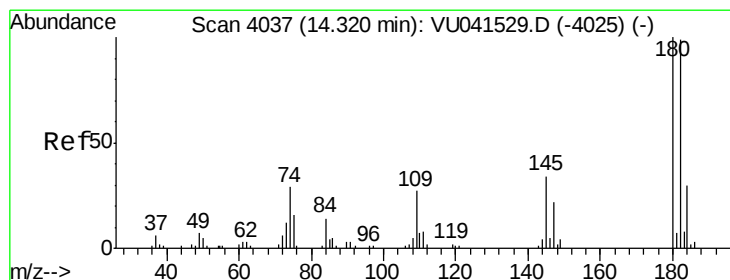
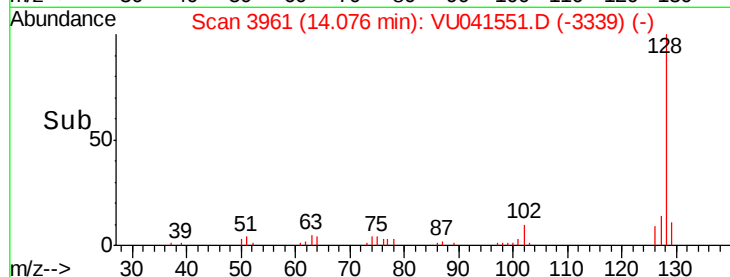
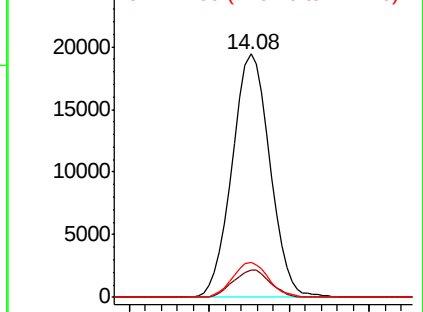
128 100

129 10.9 8.6 12.8

127 13.4 10.9 16.3



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: 5.155 ug/L

RT: 14.32 min Scan# 4037

Delta R.T. 0.00 min

Lab File: VU041551.D

Acq: 10 Dec 2020 21:18

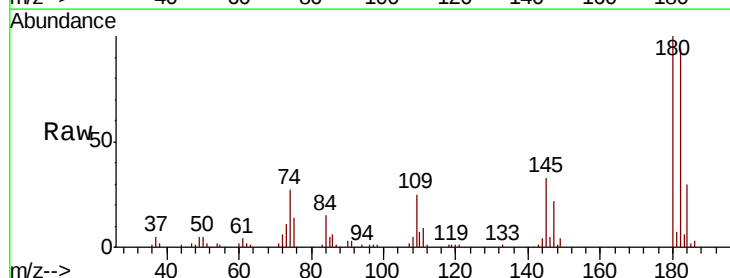
Tgt Ion:180 Resp: 22313

Ion Ratio Lower Upper

180 100

182 94.3 79.1 118.7

145 33.8 27.8 41.8



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

