

Data File : VU033301.D  
Acq On : 17 Jul 2019 19:37  
Operator : JC/SP  
Sample : VSTDCCC005EC  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

Quant Time: Jul 18 08:07:29 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR071619WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jul 18 08:01:21 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 116791   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 126201   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 62196    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39   | 65    | 52648    | 4.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 89.60%  |
| 7) Chloroethane-d5             | 1.67   | 69    | 53018    | 5.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 108.20% |
| 11) 1,1-Dichloroethene-d2      | 2.26   | 63    | 108566   | 4.77     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 95.40%  |
| 20) 2-Butanone-d5              | 4.17   | 46    | 115874   | 52.28    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 104.56% |
| 24) Chloroform-d               | 4.62   | 84    | 88691    | 5.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 102.20% |
| 26) 1,2-Dichloroethane-d4      | 5.29   | 65    | 46134    | 4.92     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 98.40%  |
| 32) Benzene-d6                 | 5.32   | 84    | 159902   | 4.55     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 91.00%  |
| 36) 1,2-Dichloropropane-d6     | 6.31   | 67    | 52728    | 4.71     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 94.20%  |
| 41) Toluene-d8                 | 7.55   | 98    | 152905   | 4.59     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 91.80%  |
| 43) trans-1,3-Dichloropropene- | 7.83   | 79    | 20609    | 4.60     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 92.00%  |
| 46) 2-Hexanone-d5              | 8.30   | 63    | 91709    | 49.82    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 99.64%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41  | 84    | 47494    | 5.11     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 102.20% |
| 64) 1,2-Dichlorobenzene-d4     | 11.85  | 152   | 57010    | 4.71     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 94.20%  |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 54007  | 5.447 ug/L  | 100    |
| 3) Chloromethane               | 1.32 | 50  | 66389  | 5.672 ug/L  | 100    |
| 5) Vinyl chloride              | 1.40 | 62  | 72155  | 5.739 ug/L  | 100    |
| 6) Bromomethane                | 1.62 | 94  | 47298  | 5.934 ug/L  | 93     |
| 8) Chloroethane                | 1.69 | 64  | 50168  | 6.235 ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 100379 | 5.571 ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 56540  | 5.681 ug/L  | 100    |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 53173  | 5.542 ug/L  | 93     |
| 13) Acetone                    | 2.32 | 43  | 104472 | 53.835 ug/L | 99     |
| 14) Carbon disulfide           | 2.46 | 76  | 168929 | 5.438 ug/L  | 99     |
| 15) Methyl Acetate             | 2.61 | 43  | 27133  | 5.598 ug/L  | 98     |
| 16) Methylene chloride         | 2.68 | 84  | 63525  | 5.430 ug/L  | 96     |
| 17) Methyl tert-butyl Ether    | 2.99 | 73  | 145895 | 5.805 ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.96 | 96  | 58283  | 5.499 ug/L  | 98     |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 88358  | 5.548 ug/L  | 98     |
| 21) 2-Butanone                 | 4.26 | 43  | 122363 | 54.864 ug/L | 100    |
| 22) cis-1,2-Dichloroethene     | 4.20 | 96  | 49384  | 5.513 ug/L  | 96     |

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jul 18 08:01:21 2019  
Response via : Initial Calibration

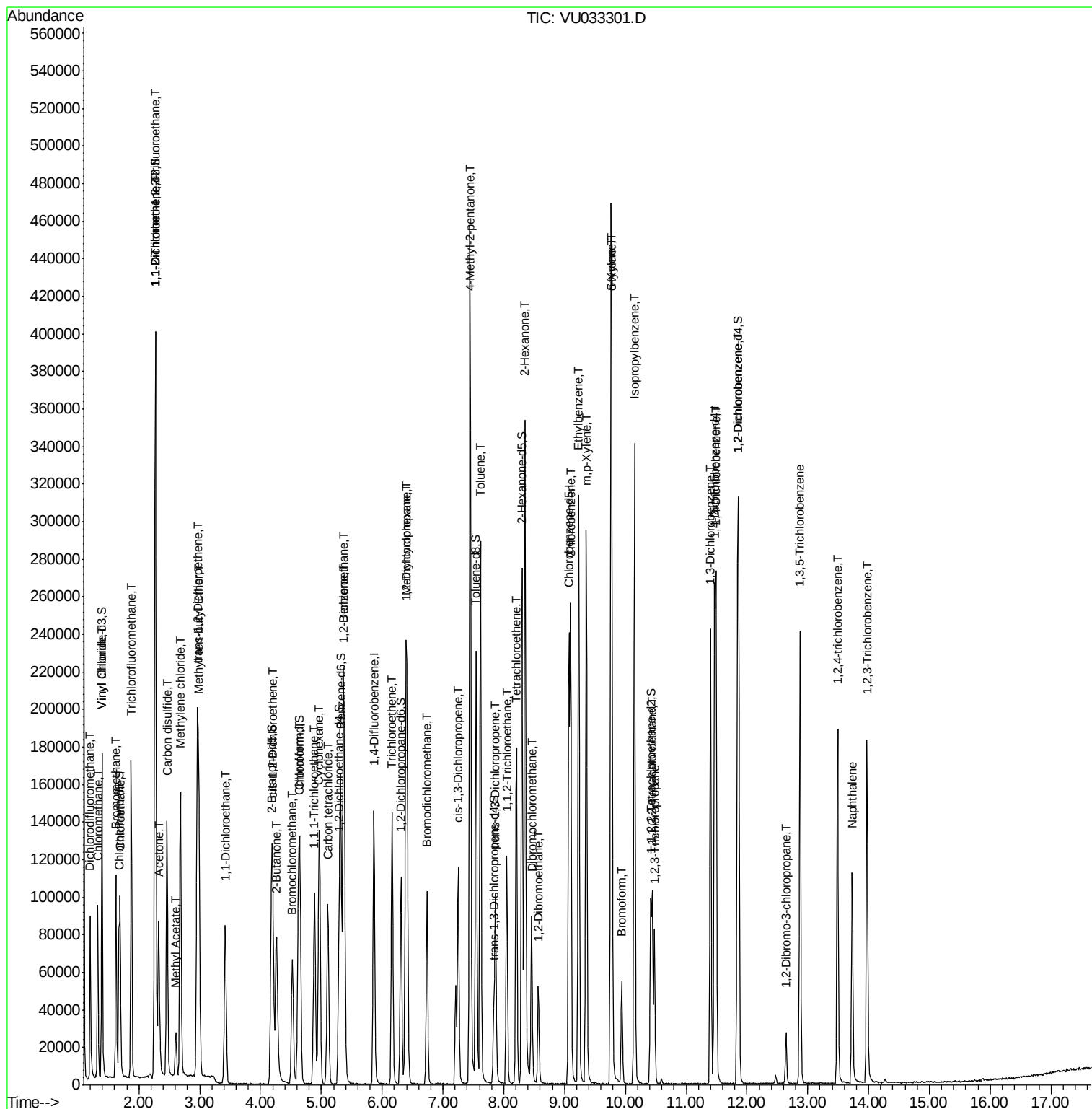
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.52  | 128  | 22455    | 5.691  | ug/L   | 95       |
| 25) Chloroform                 | 4.65  | 83   | 96224    | 5.455  | ug/L   | 99       |
| 27) 1,2-Dichloroethane         | 5.38  | 62   | 58257    | 5.552  | ug/L # | 95       |
| 29) 1,1,1-Trichloroethane      | 4.89  | 97   | 78773    | 5.404  | ug/L   | 98       |
| 30) Cyclohexane                | 4.97  | 56   | 63482    | 4.850  | ug/L   | 99       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 67281    | 5.272  | ug/L   | 98       |
| 33) Benzene                    | 5.37  | 78   | 190700   | 5.336  | ug/L   | 100      |
| 34) Trichloroethene            | 6.16  | 95   | 48792    | 5.159  | ug/L   | 97       |
| 35) Methylcyclohexane          | 6.39  | 83   | 69415    | 4.871  | ug/L   | 98       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 52607    | 5.443  | ug/L   | 99       |
| 38) Bromodichloromethane       | 6.74  | 83   | 65274    | 5.294  | ug/L   | 98       |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 67506    | 4.896  | ug/L   | 100      |
| 40) 4-Methyl-2-pentanone       | 7.45  | 43   | 295431   | 53.345 | ug/L   | 99       |
| 42) Toluene                    | 7.62  | 91   | 209302   | 5.455  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 57901    | 5.193  | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 37273    | 5.393  | ug/L   | 97       |
| 47) Tetrachloroethene          | 8.21  | 164  | 38403    | 5.067  | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.35  | 43   | 219289   | 54.137 | ug/L   | 99       |
| 49) Dibromochloromethane       | 8.46  | 129  | 44065    | 5.294  | ug/L   | 94       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 34901    | 5.261  | ug/L # | 99       |
| 51) Chlorobenzene              | 9.10  | 112  | 130459   | 5.180  | ug/L   | 99       |
| 52) Ethylbenzene               | 9.23  | 91   | 211818   | 5.171  | ug/L   | 98       |
| 53) m,p-Xylene                 | 9.36  | 106  | 82513    | 5.333  | ug/L   | 96       |
| 54) o-Xylene                   | 9.76  | 106  | 78875    | 5.347  | ug/L   | 98       |
| 55) Styrene                    | 9.77  | 104  | 140320   | 5.458  | ug/L   | 99       |
| 56) Isopropylbenzene           | 10.15 | 105  | 206596   | 5.268  | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 48137    | 5.441  | ug/L   | 97       |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 32536    | 5.163  | ug/L   | 99       |
| 61) Bromoform                  | 9.94  | 173  | 23406    | 5.472  | ug/L   | 97       |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 97523    | 5.247  | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 100820   | 5.151  | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 98211    | 5.323  | ug/L   | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 7101     | 5.085  | ug/L   | 99       |
| 67) 1,3,5-Trichlorobenzene     | 12.87 | 180  | 74827    | 5.123  | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.49 | 180  | 59767    | 5.066  | ug/L   | 97       |
| 69) Naphthalene                | 13.73 | 128  | 91425    | 4.575  | ug/L   | 98       |
| 70) 1,2,3-Trichlorobenzene     | 13.97 | 180  | 57845    | 5.204  | ug/L   | 99       |

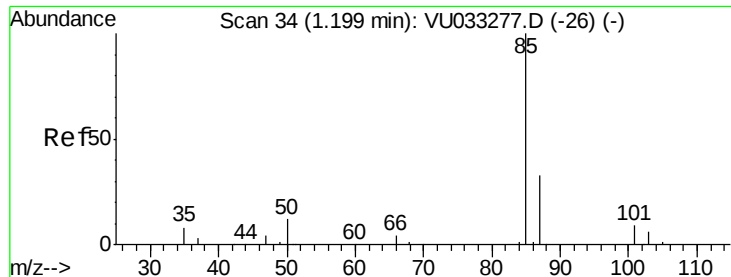
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 5.447 ug/L

RT: 1.20 min Scan# 34

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

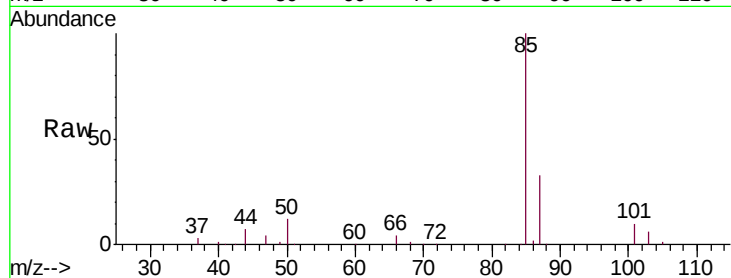
VSTD00516

Tgt Ion: 85 Resp: 54007

Ion Ratio Lower Upper

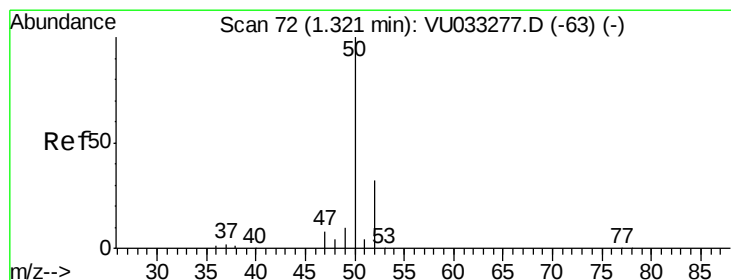
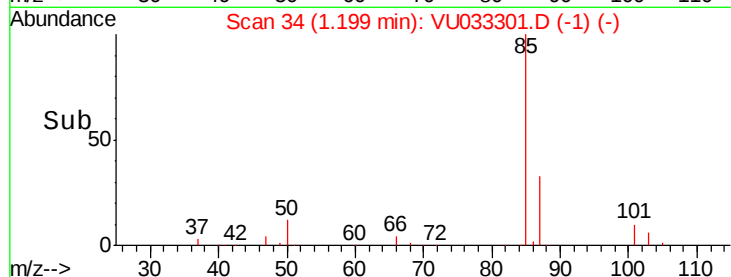
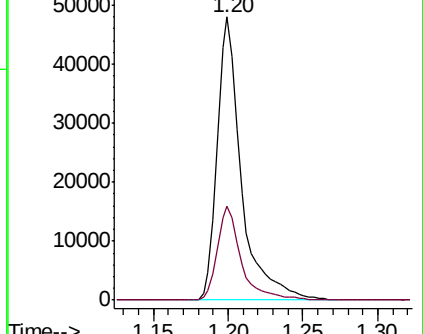
85 100

87 32.9 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VU033301.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VU033301.D (-1) (-)



#3

Chloromethane

Concen: 5.672 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VU033301.D

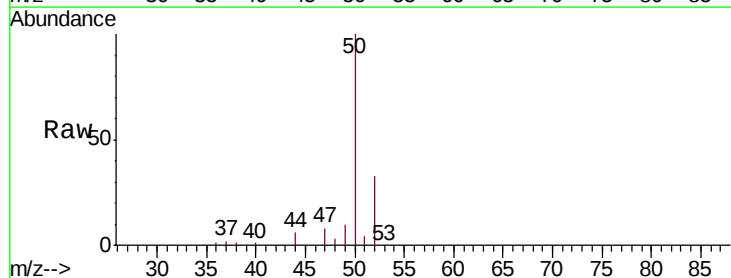
Acq: 17 Jul 2019 19:37

Tgt Ion: 50 Resp: 66389

Ion Ratio Lower Upper

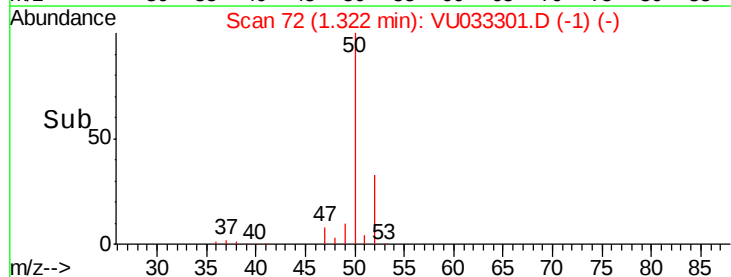
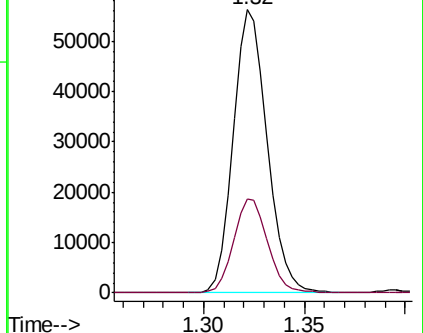
50 100

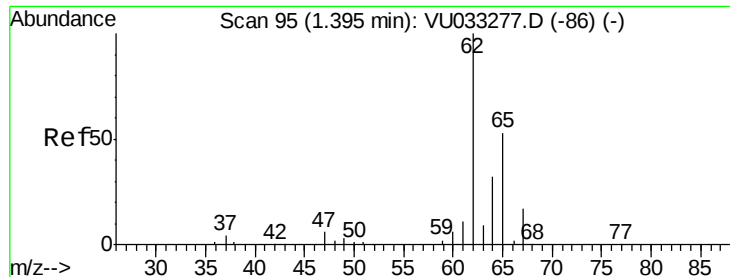
52 33.3 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VU033301.D (-1) (-)

Ion 52.05 (51.75 to 52.75): VU033301.D (-1) (-)





#5

Vinyl chloride

Concen: 5.739 ug/L

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

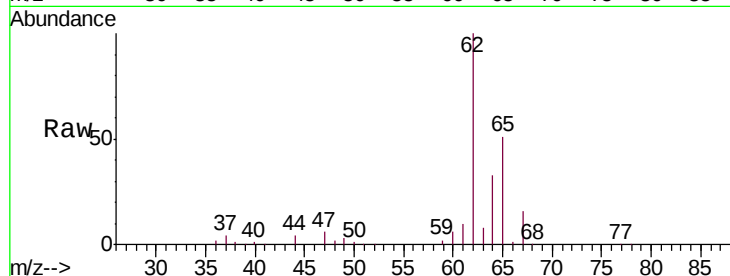
VSTD00516

Tgt Ion: 62 Resp: 72155

Ion Ratio Lower Upper

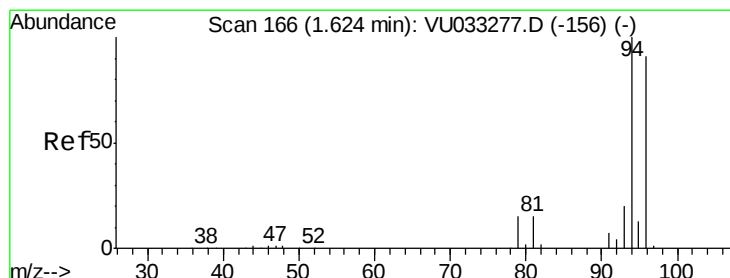
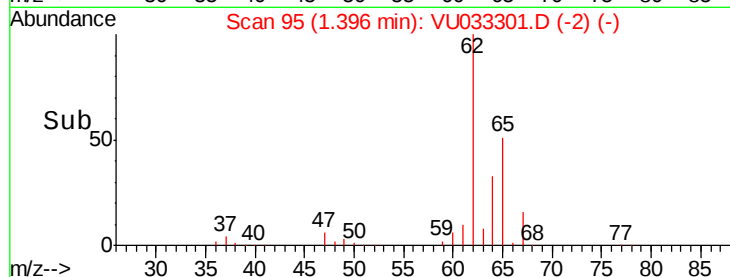
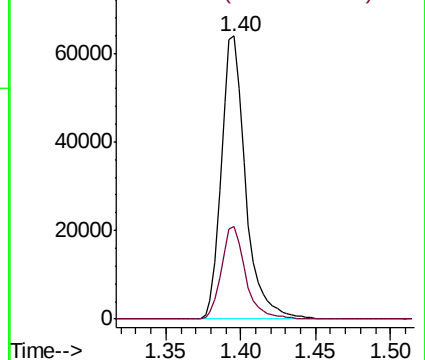
62 100

64 32.8 22.8 42.4



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0



#6

Bromomethane

Concen: 5.934 ug/L

RT: 1.62 min Scan# 165

Delta R.T. -0.00 min

Lab File: VU033301.D

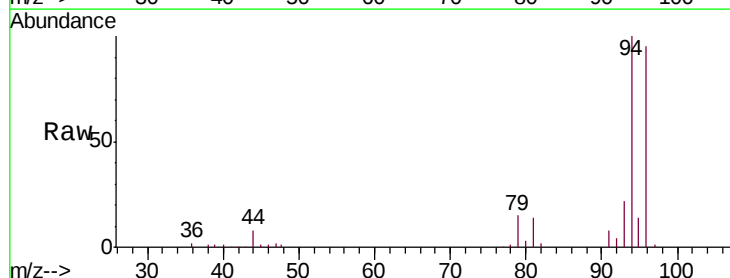
Acq: 17 Jul 2019 19:37

Tgt Ion: 94 Resp: 47298

Ion Ratio Lower Upper

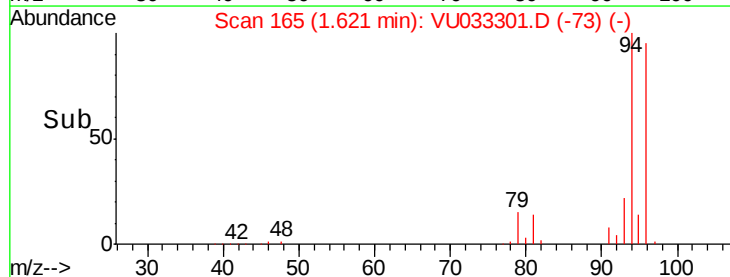
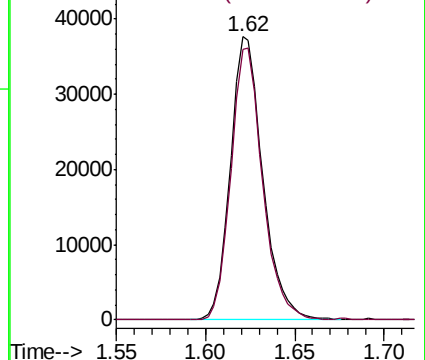
94 100

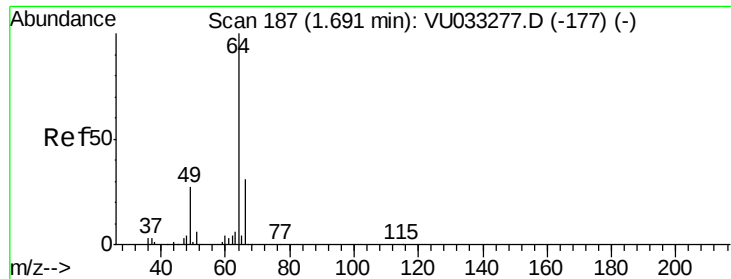
96 95.5 62.4 116.0



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0

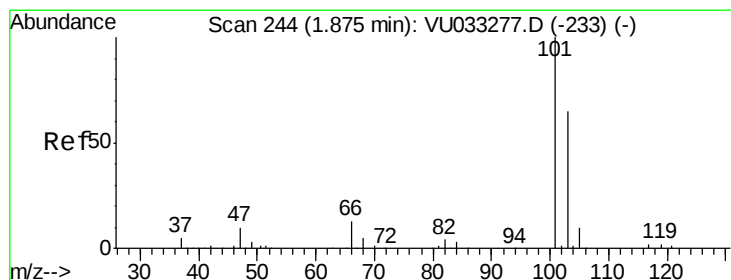
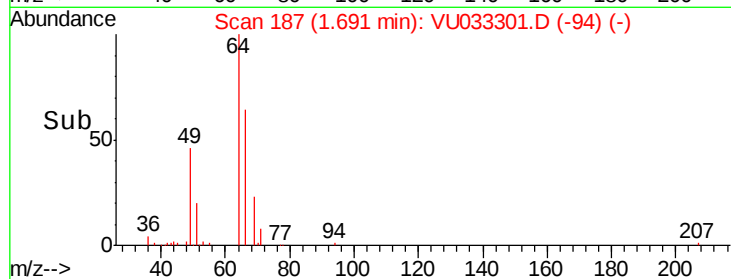
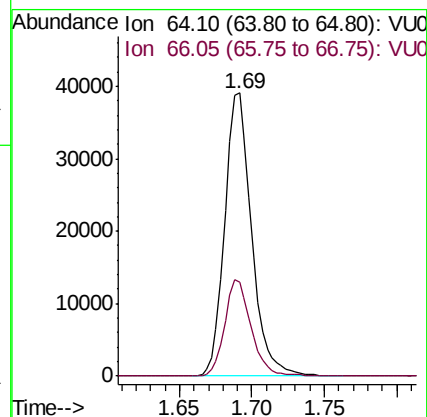
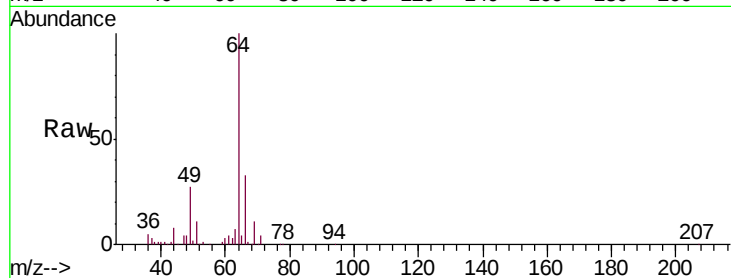




#8  
Chloroethane  
Concen: 6.235 ug/L  
RT: 1.69 min Scan# 187  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

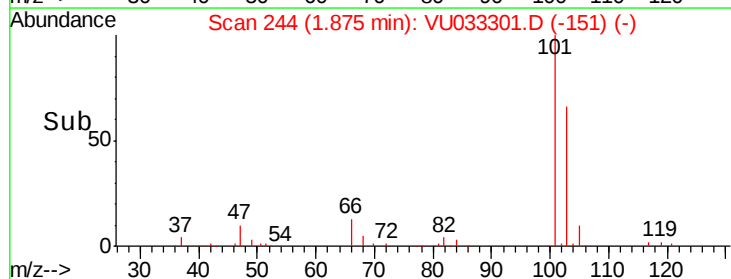
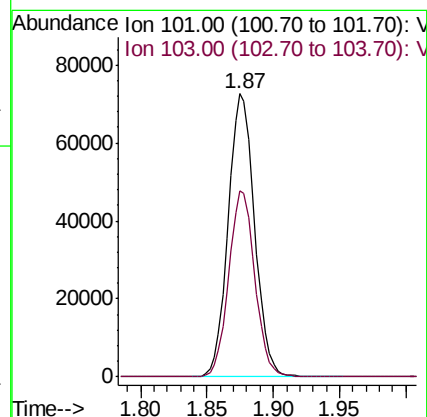
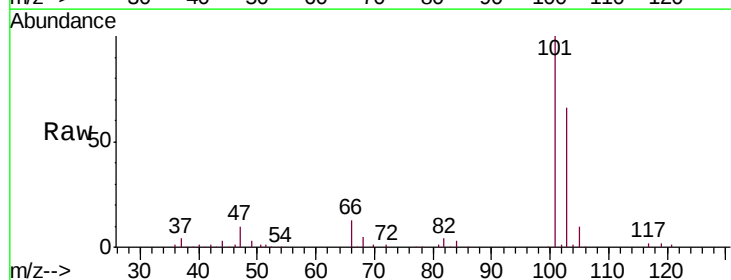
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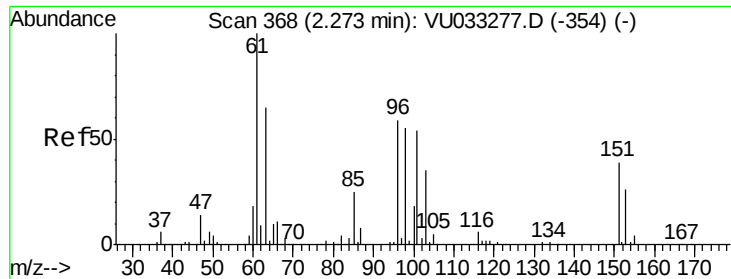
Tgt Ion: 64 Resp: 50168  
Ion Ratio Lower Upper  
64 100  
66 33.3 23.2 43.2



#9  
Trichlorofluoromethane  
Concen: 5.571 ug/L  
RT: 1.87 min Scan# 244  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Tgt Ion: 101 Resp: 100379  
Ion Ratio Lower Upper  
101 100  
103 65.1 52.2 78.4





#10

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

Concen: 5.681 ug/L

RT: 2.27 min Scan# 368

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

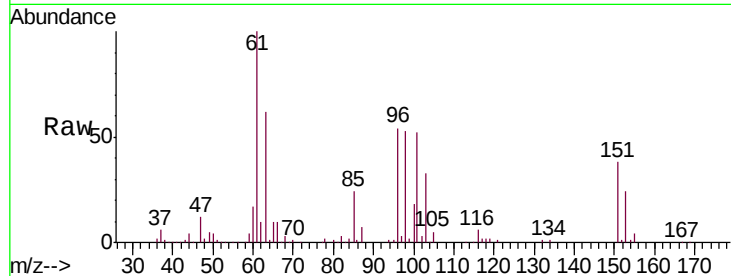
Tgt Ion: 101 Resp: 56540

Ion Ratio Lower Upper

101 100

85 46.4 37.4 56.0

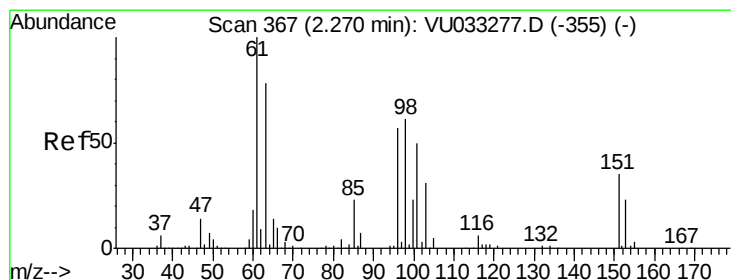
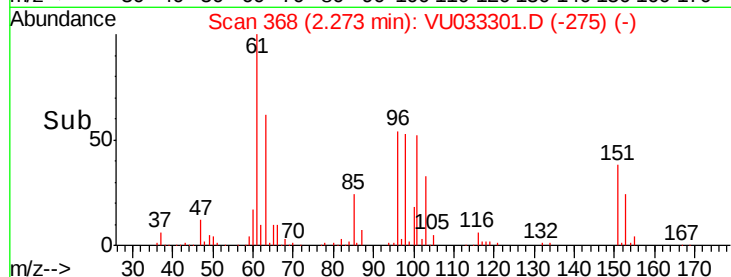
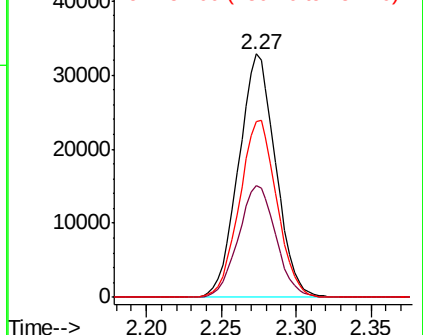
151 73.4 58.6 87.8



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: 5.542 ug/L

RT: 2.27 min Scan# 367

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

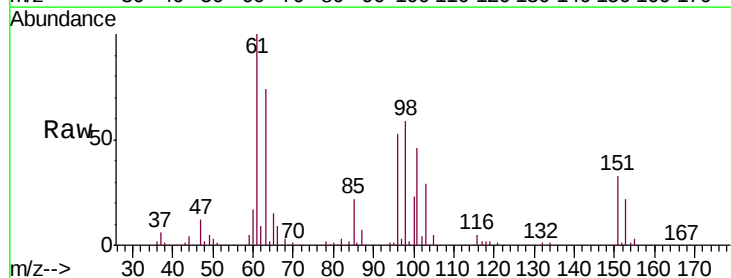
Tgt Ion: 96 Resp: 53173

Ion Ratio Lower Upper

96 100

61 189.6 129.3 240.1

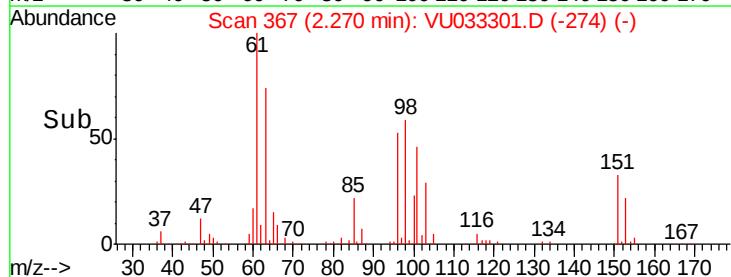
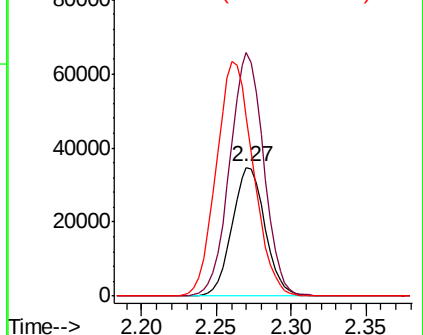
63 140.0 108.9 202.3

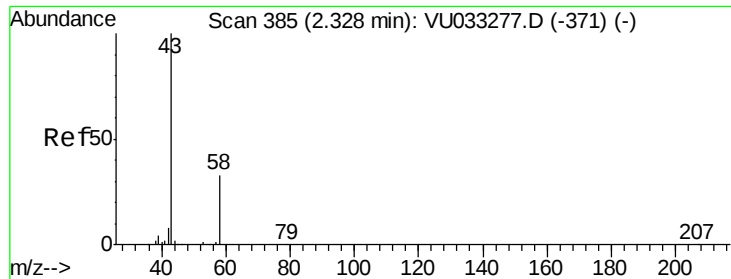


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 53.835 ug/L

RT: 2.32 min Scan# 384

Delta R.T. -0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

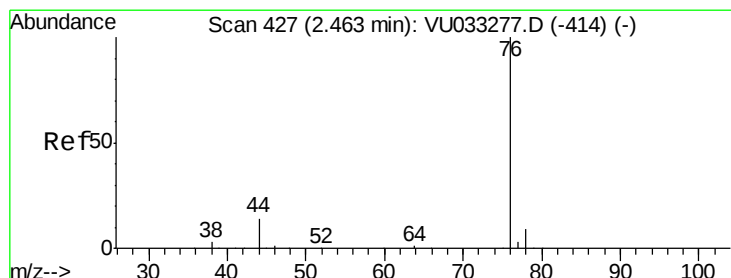
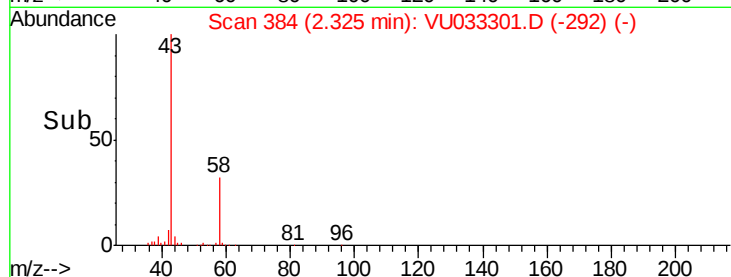
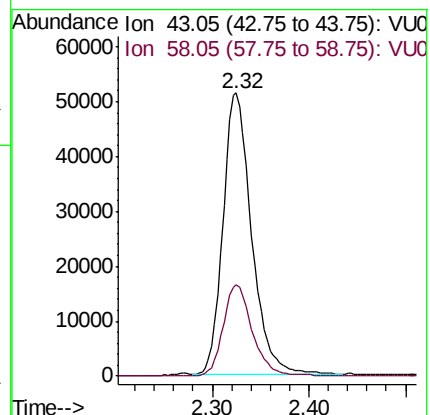
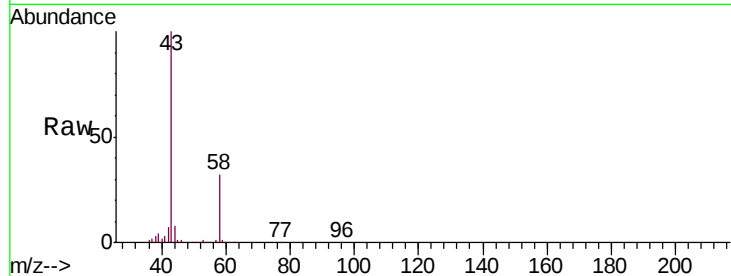
VSTD00516

Tgt Ion: 43 Resp: 104472

Ion Ratio Lower Upper

43 100

58 32.6 0.0 66.6



#14

Carbon disulfide

Concen: 5.438 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VU033301.D

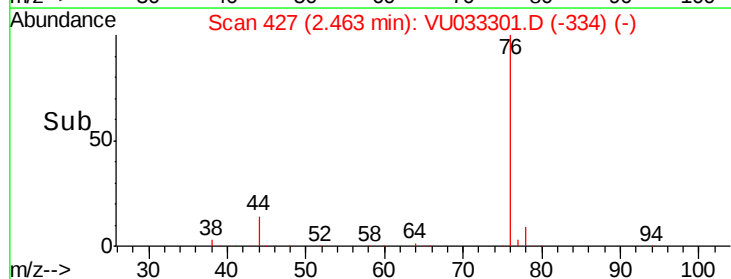
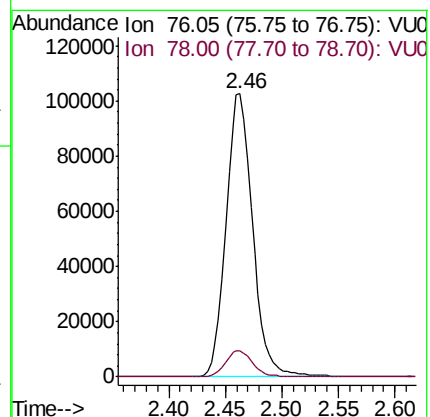
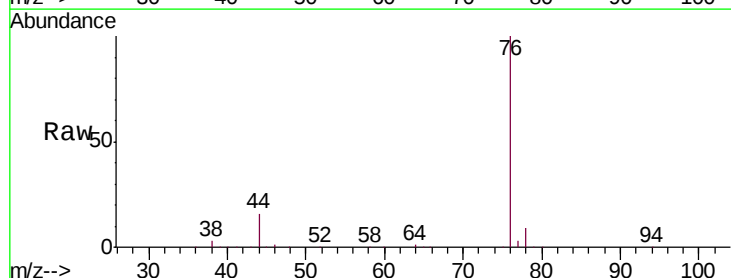
Acq: 17 Jul 2019 19:37

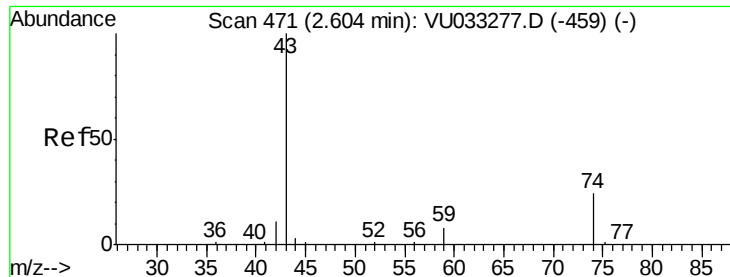
Tgt Ion: 76 Resp: 168929

Ion Ratio Lower Upper

76 100

78 9.3 7.1 10.7

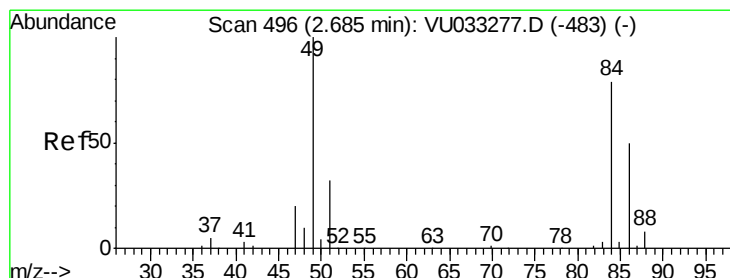
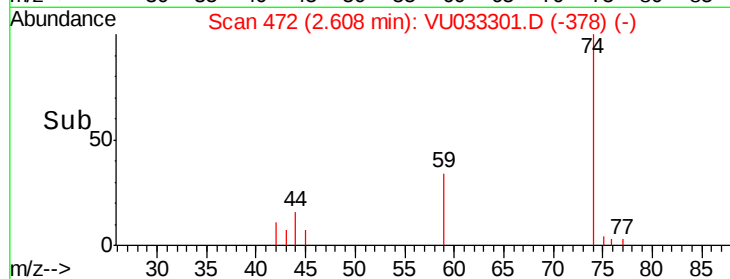
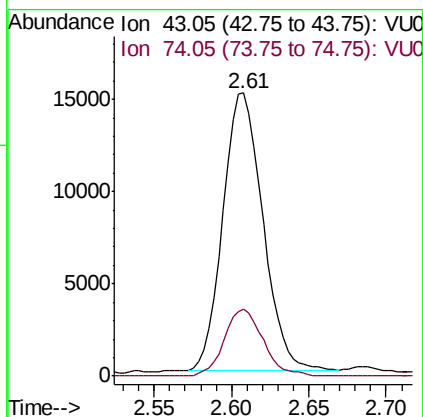
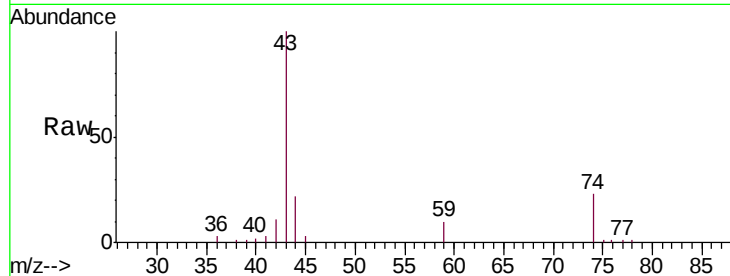




#15  
Methyl Acetate  
Concen: 5.598 ug/L  
RT: 2.61 min Scan# 472  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

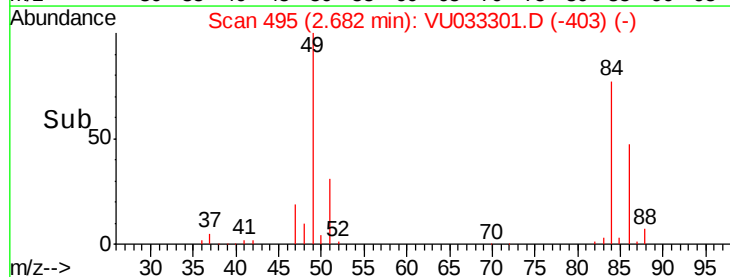
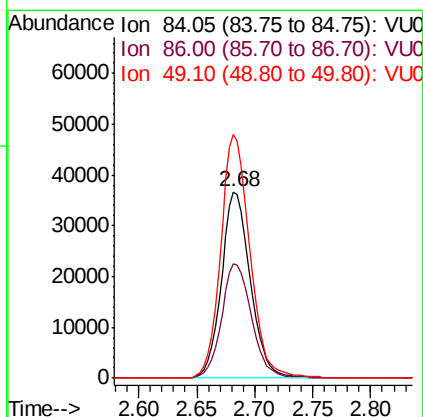
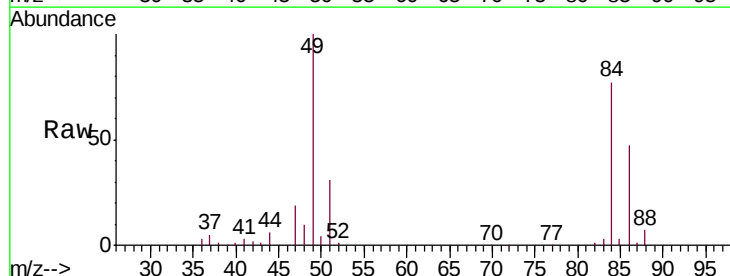
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

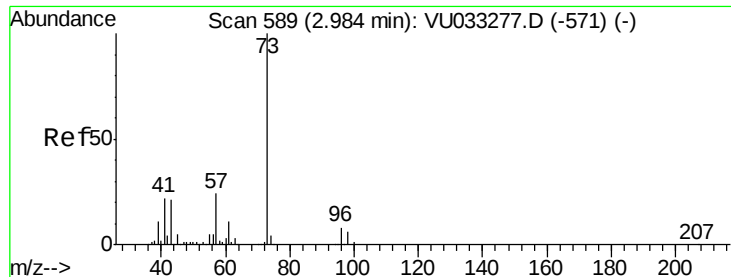
Tgt Ion: 43 Resp: 27133  
Ion Ratio Lower Upper  
43 100  
74 23.2 17.8 26.8



#16  
Methylene chloride  
Concen: 5.430 ug/L  
RT: 2.68 min Scan# 495  
Delta R.T. -0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Tgt Ion: 84 Resp: 63525  
Ion Ratio Lower Upper  
84 100  
86 61.0 42.5 78.9  
49 130.5 86.9 161.3

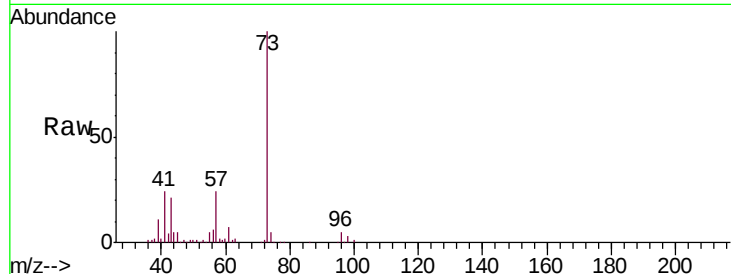




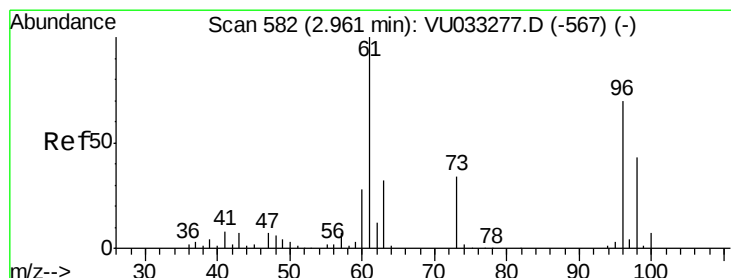
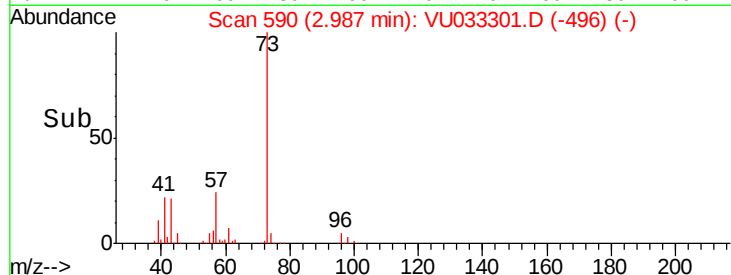
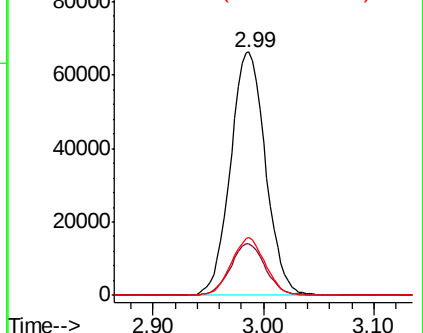
#17  
Methyl tert-butyl Ether  
Concen: 5.805 ug/L  
RT: 2.99 min Scan# 590  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 43      | 20.6  | 16.3  | 24.5  |
| 57      | 23.0  | 18.6  | 28.0  |

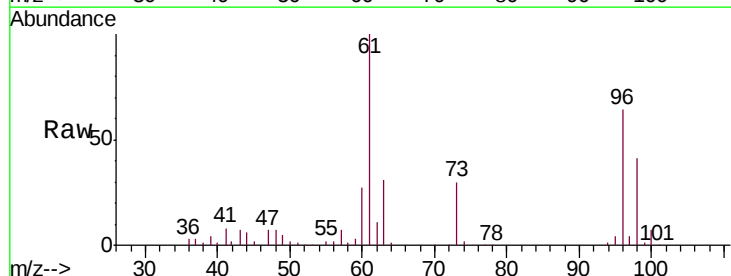


Abundance Ion 73.10 (72.80 to 73.80): VU0  
Ion 43.05 (42.75 to 43.75): VU0  
Ion 57.10 (56.80 to 57.80): VU0

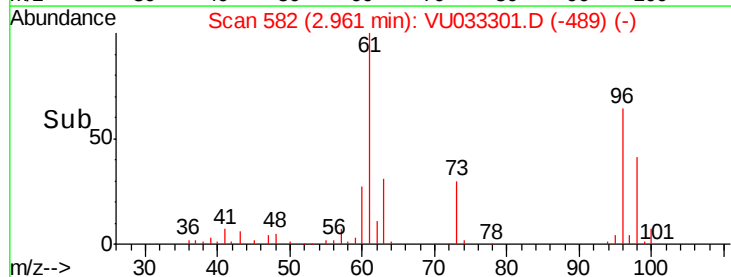
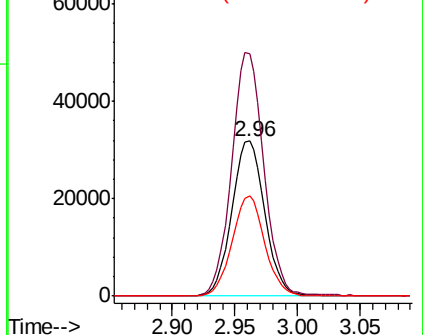


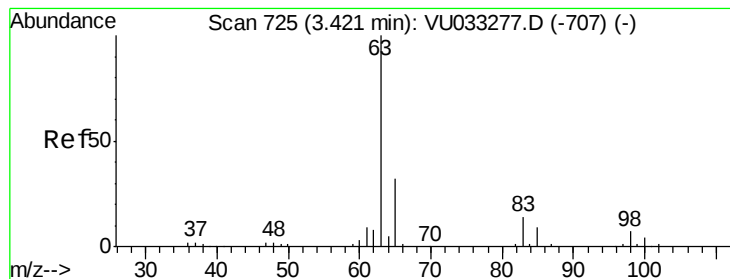
#18  
trans-1,2-Dichloroethene  
Concen: 5.499 ug/L  
RT: 2.96 min Scan# 582  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 156.3 | 107.1 | 198.9 |
| 98      | 64.7  | 45.4  | 84.4  |



Abundance Ion 96.00 (95.70 to 96.70): VU0  
Ion 61.05 (60.75 to 61.75): VU0  
Ion 97.95 (97.65 to 98.65): VU0





#19

1,1-Dichloroethane

Concen: 5.548 ug/L

RT: 3.42 min Scan# 725

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

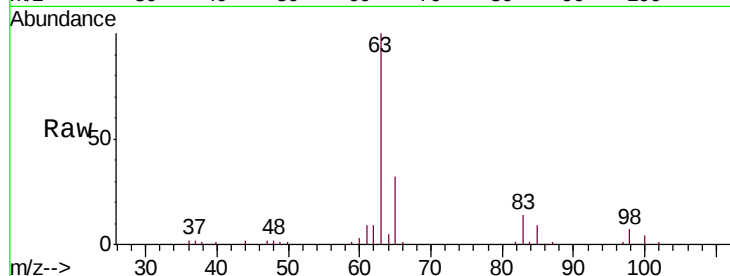
Tgt Ion: 63 Resp: 88358

Ion Ratio Lower Upper

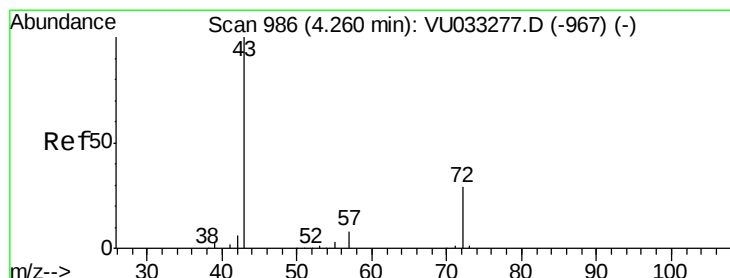
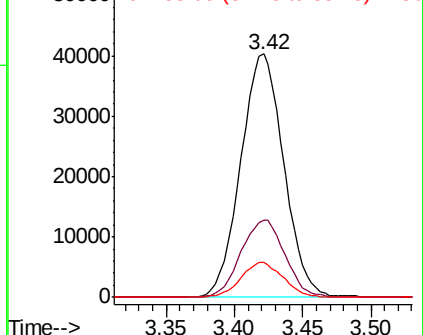
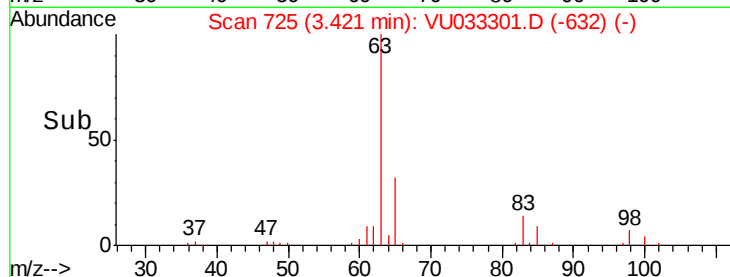
63 100

65 32.0 21.7 40.3

83 14.4 9.0 16.8



Abundance Ion 63.10 (62.80 to 63.80): VU033301.D (-632) (-)



#21

2-Butanone

Concen: 54.864 ug/L

RT: 4.26 min Scan# 986

Delta R.T. 0.00 min

Lab File: VU033301.D

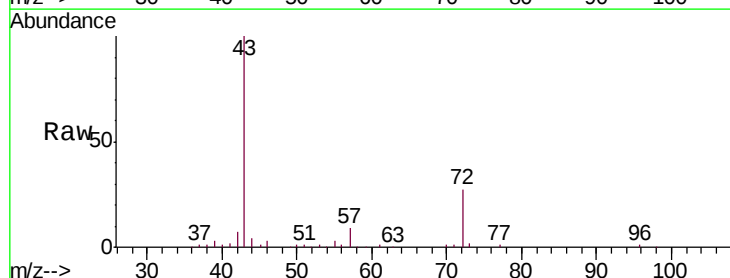
Acq: 17 Jul 2019 19:37

Tgt Ion: 43 Resp: 122363

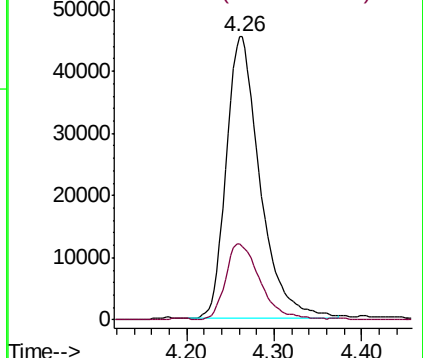
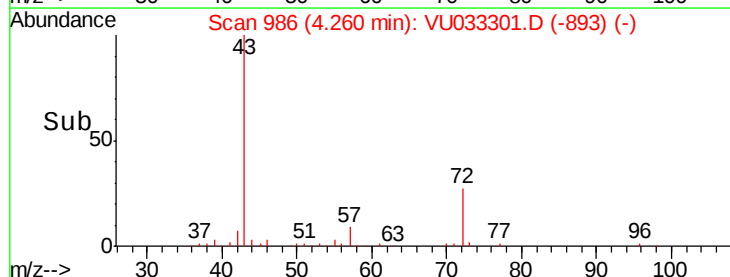
Ion Ratio Lower Upper

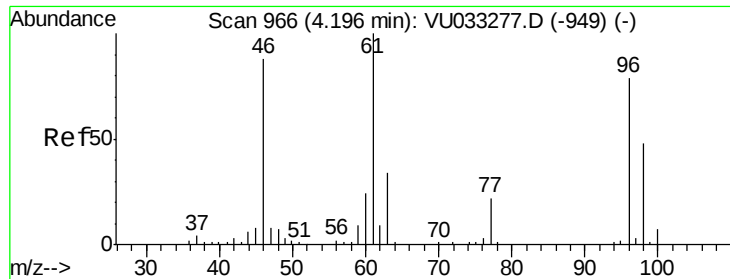
43 100

72 27.1 13.5 40.4



Abundance Ion 43.05 (42.75 to 43.75): VU033301.D (-893) (-)



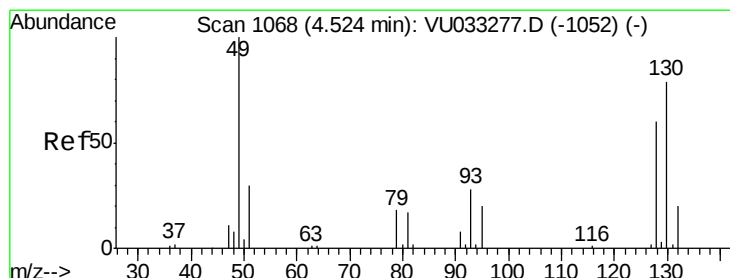
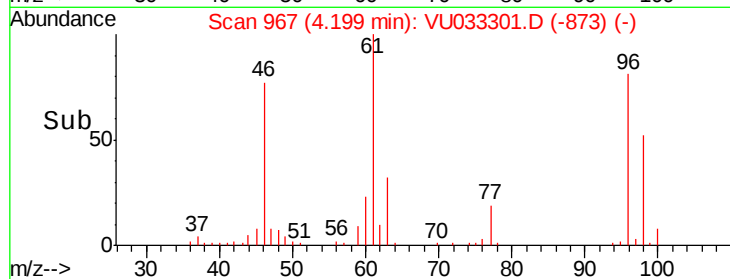
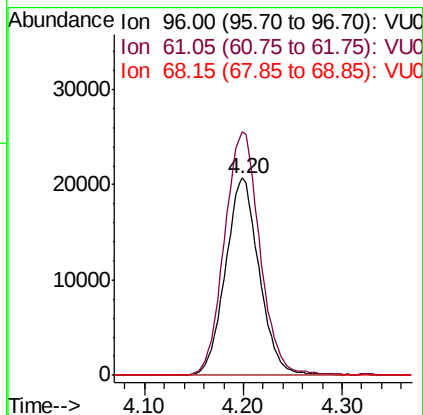
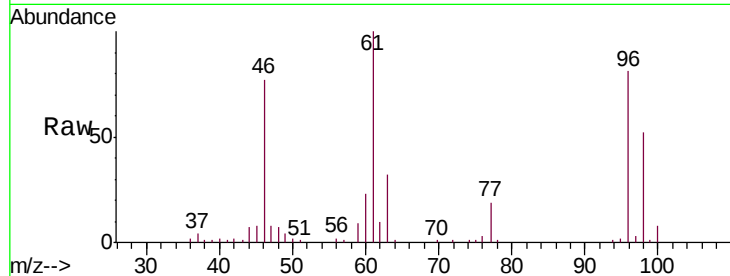


#22

cis-1,2-Dichloroethene  
 Concen: 5.513 ug/L  
 RT: 4.20 min Scan# 967  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

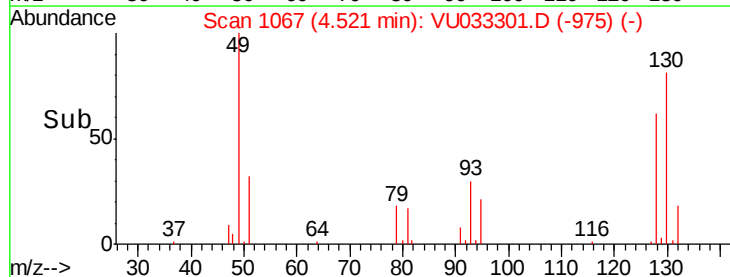
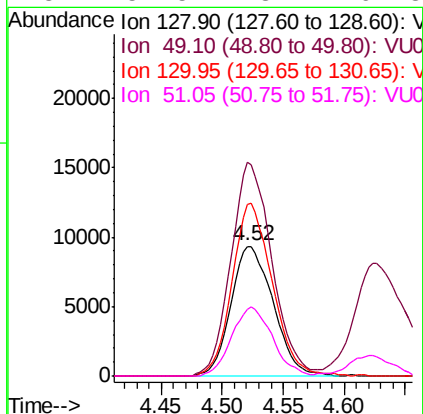
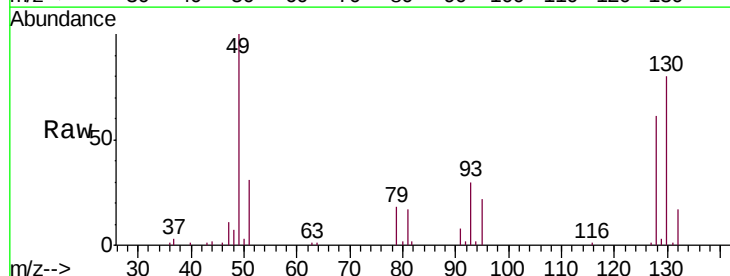
Tgt Ion: 96 Resp: 49384  
 Ion Ratio Lower Upper  
 96 100  
 61 123.3 89.2 165.6  
 68 0.0 0.0 0.0

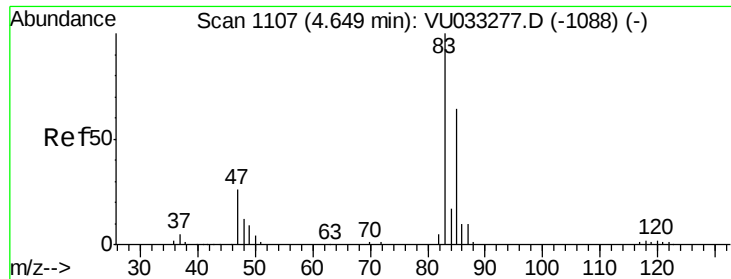


#23

Bromochloromethane  
 Concen: 5.691 ug/L  
 RT: 4.52 min Scan# 1067  
 Delta R.T. -0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Tgt Ion: 128 Resp: 22455  
 Ion Ratio Lower Upper  
 128 100  
 49 165.0 110.5 205.3  
 130 132.1 88.6 164.6  
 51 51.5 43.2 64.8

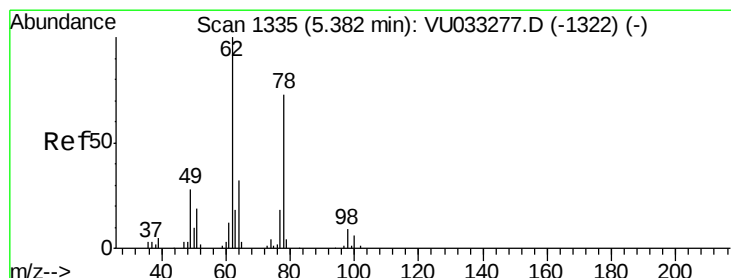
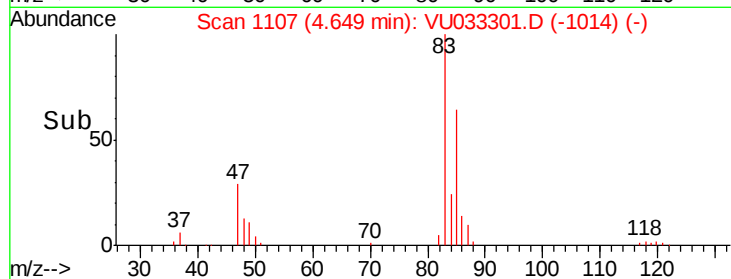
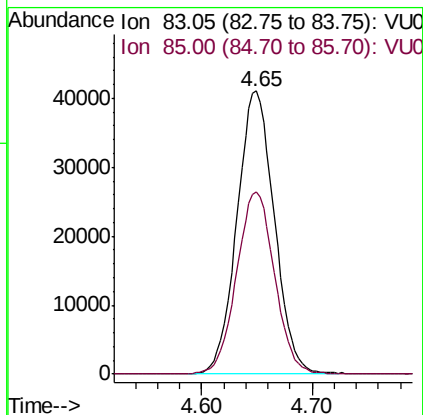
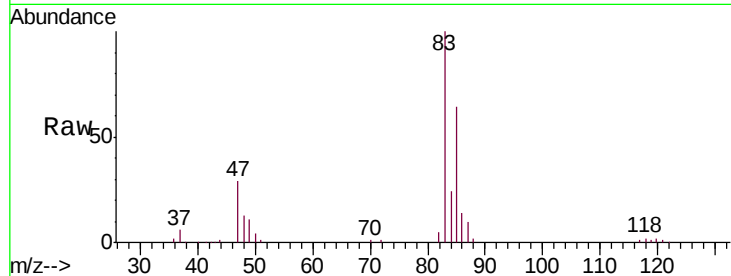




#25  
Chloroform  
Concen: 5.455 ug/L  
RT: 4.65 min Scan# 1107  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

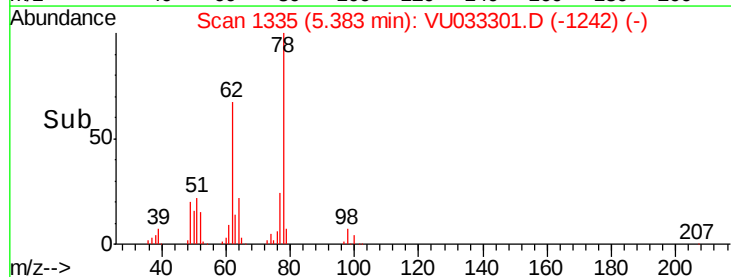
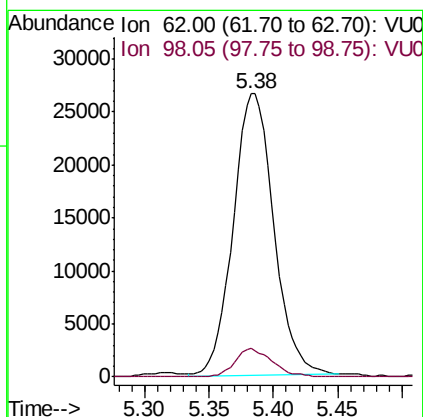
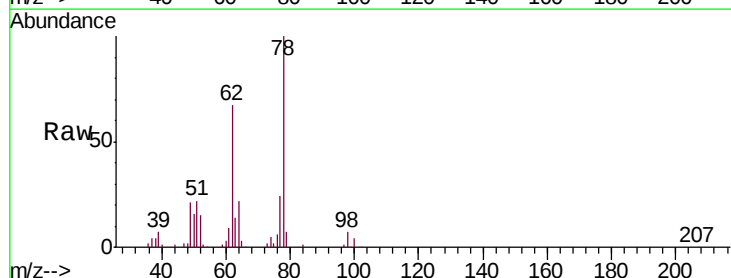
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

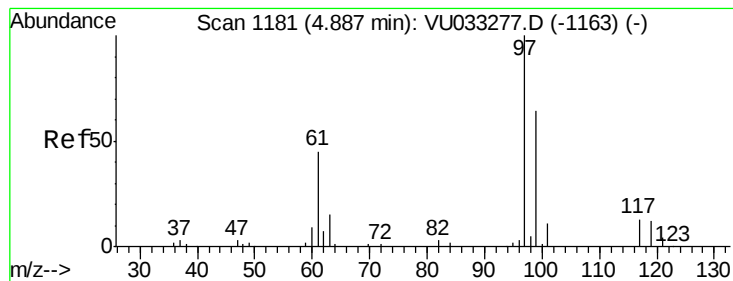
Tgt Ion: 83 Resp: 96224  
Ion Ratio Lower Upper  
83 100  
85 64.3 45.4 84.4



#27  
1,2-Dichloroethane  
Concen: 5.552 ug/L  
RT: 5.38 min Scan# 1335  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Tgt Ion: 62 Resp: 58257  
Ion Ratio Lower Upper  
62 100  
98 10.0 6.6 10.0#





#29

1,1,1-Trichloroethane

Concen: 5.404 ug/L

RT: 4.89 min Scan# 1181

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

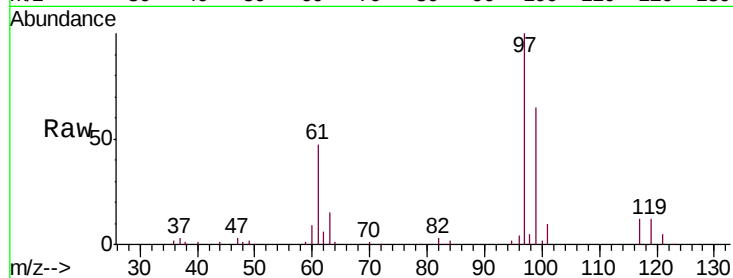
Tgt Ion: 97 Resp: 78773

Ion Ratio Lower Upper

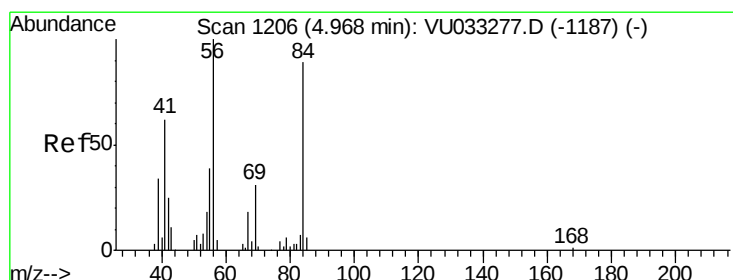
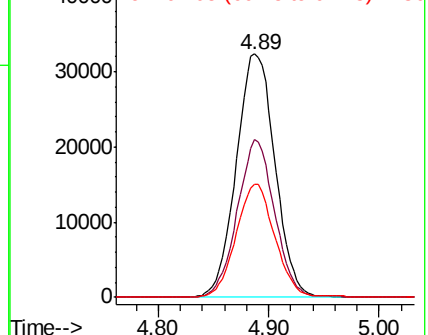
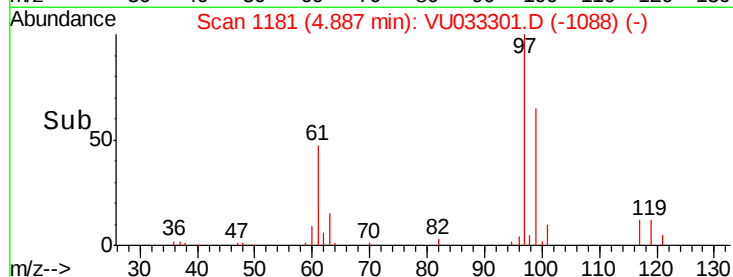
97 100

99 62.4 51.6 77.4

61 46.5 36.2 54.4



Abundance Ion 96.95 (96.65 to 97.65): VU033301.D (-1088) (-)



#30

Cyclohexane

Concen: 4.850 ug/L

RT: 4.97 min Scan# 1206

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

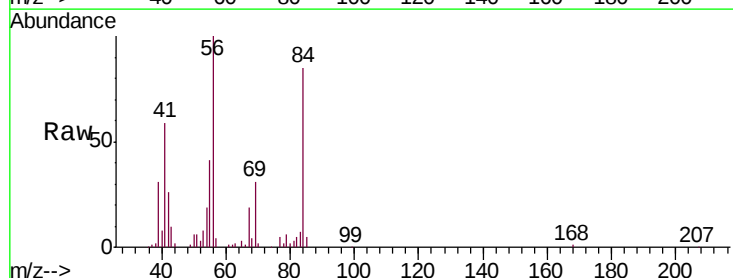
Tgt Ion: 56 Resp: 63482

Ion Ratio Lower Upper

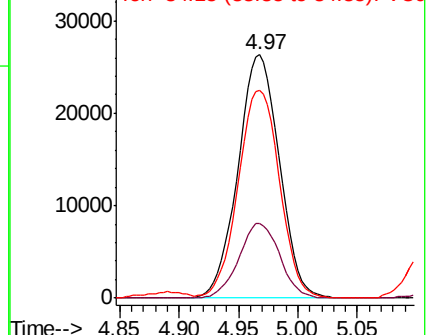
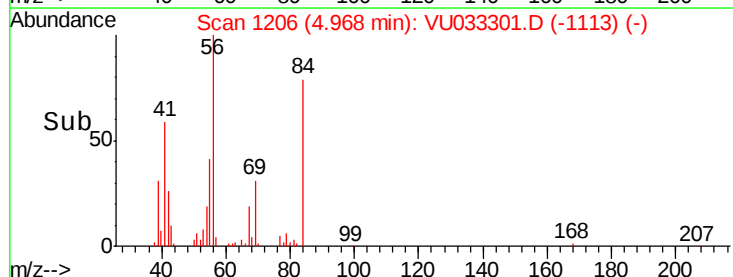
56 100

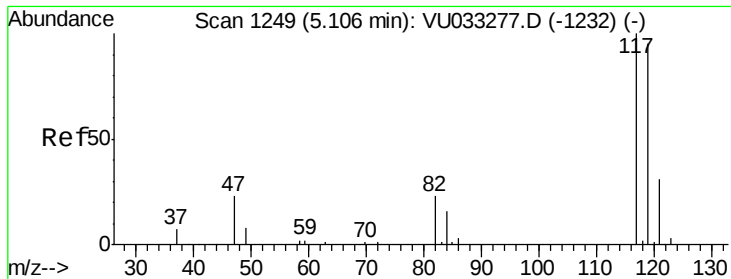
69 30.2 23.9 35.9

84 85.5 69.5 104.3



Abundance Ion 56.10 (55.80 to 56.80): VU033301.D (-1113) (-)





#31

Carbon tetrachloride

Concen: 5.272 ug/L

RT: 5.11 min Scan# 1249

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

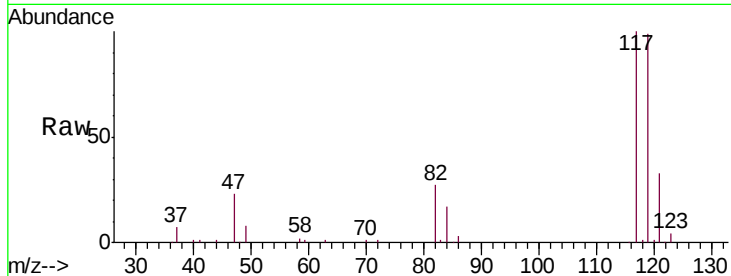
VSTD00516

Tgt Ion:117 Resp: 67281

Ion Ratio Lower Upper

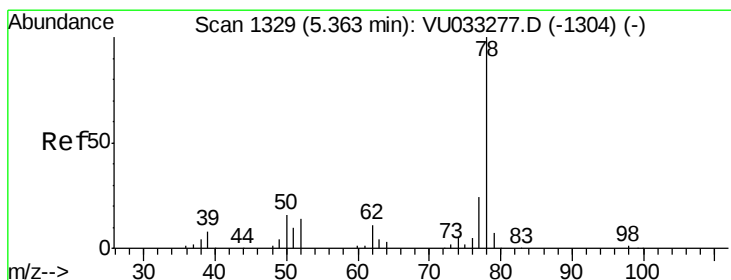
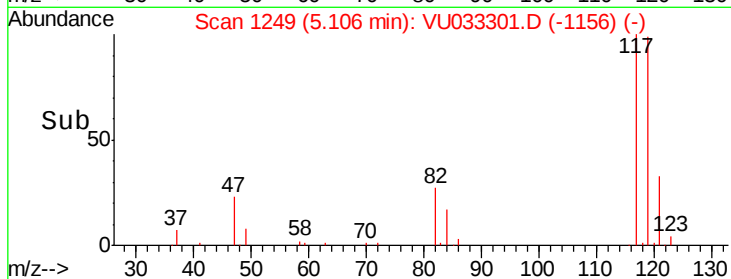
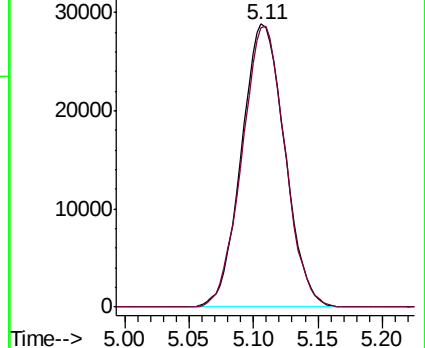
117 100

119 98.5 77.5 116.3



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.336 ug/L

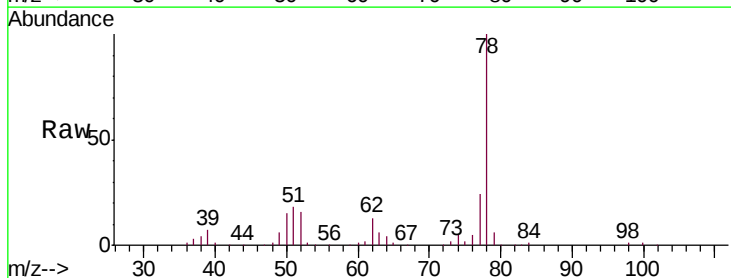
RT: 5.37 min Scan# 1330

Delta R.T. 0.00 min

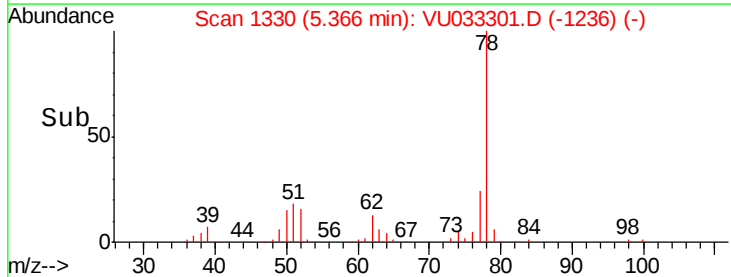
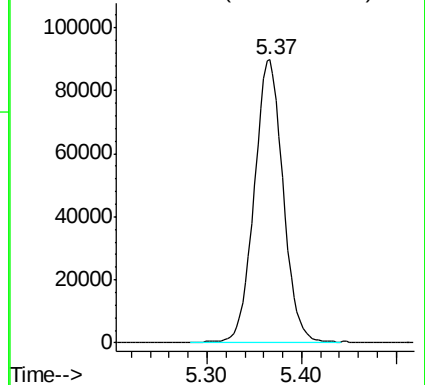
Lab File: VU033301.D

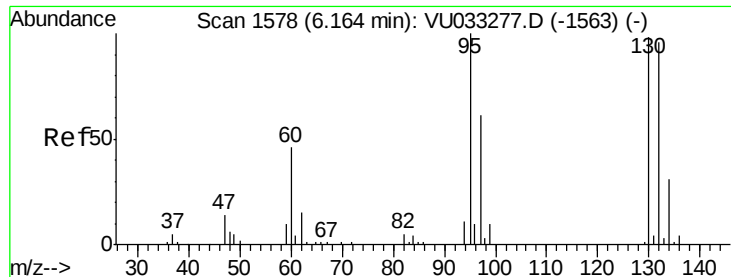
Acq: 17 Jul 2019 19:37

Tgt Ion: 78 Resp: 190700



Abundance Ion 78.10 (77.80 to 78.80): VU0

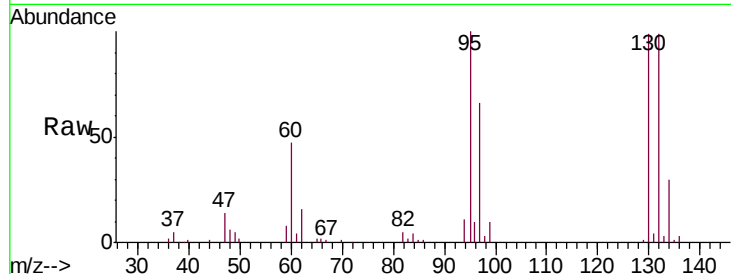




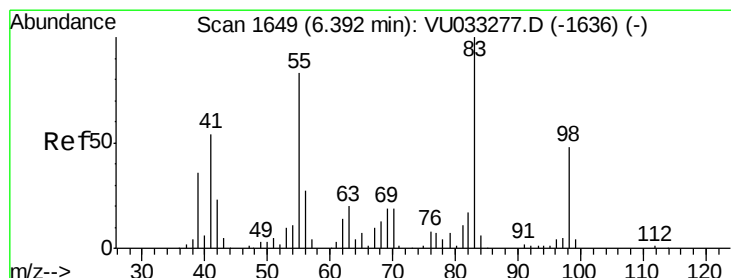
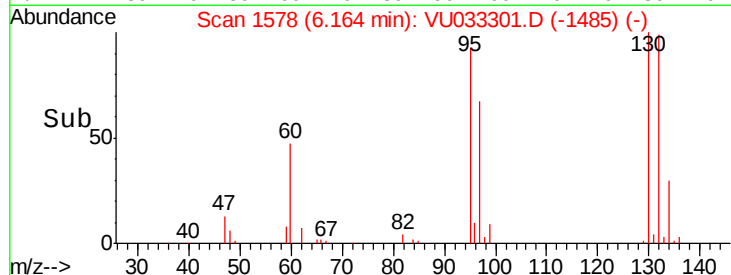
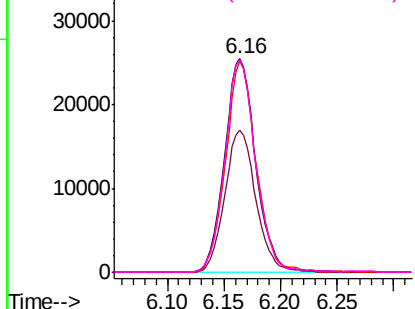
#34  
 Trichloroethene  
 Concen: 5.159 ug/L  
 RT: 6.16 min Scan# 1578  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Tgt Ion: 95 Resp: 48792  
 Ion Ratio Lower Upper  
 95 100  
 97 66.4 44.5 82.7  
 132 98.6 66.6 123.8  
 130 99.2 68.9 127.9

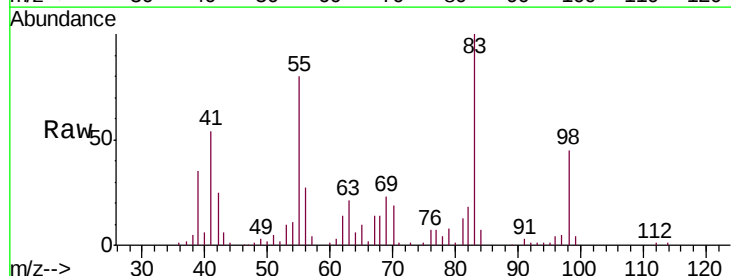


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 96.95 (96.65 to 97.65): VU0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

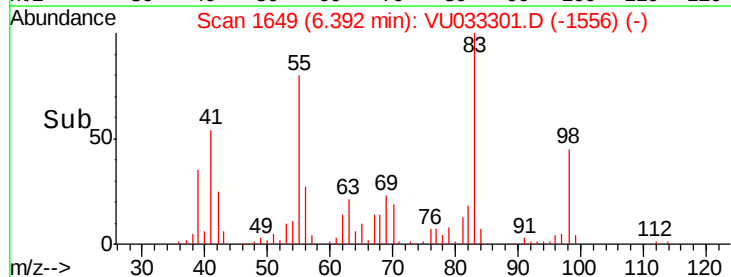
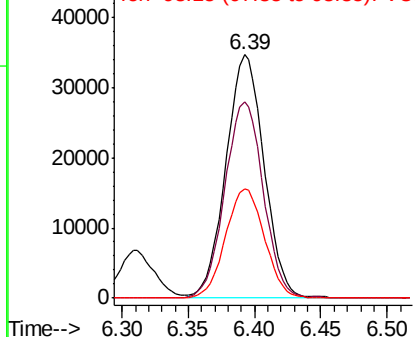


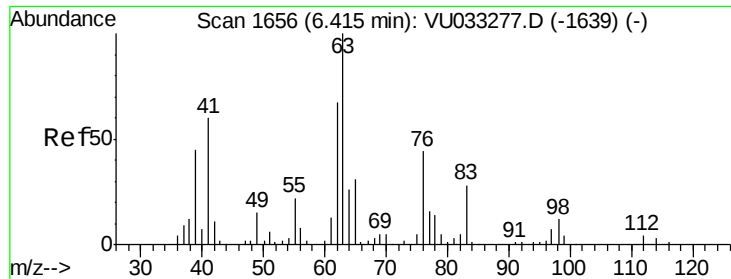
#35  
 Methylcyclohexane  
 Concen: 4.871 ug/L  
 RT: 6.39 min Scan# 1649  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Tgt Ion: 83 Resp: 69415  
 Ion Ratio Lower Upper  
 83 100  
 55 81.0 62.6 94.0  
 98 45.6 36.2 54.2



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

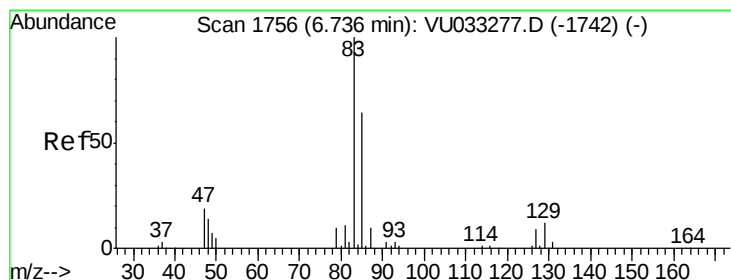
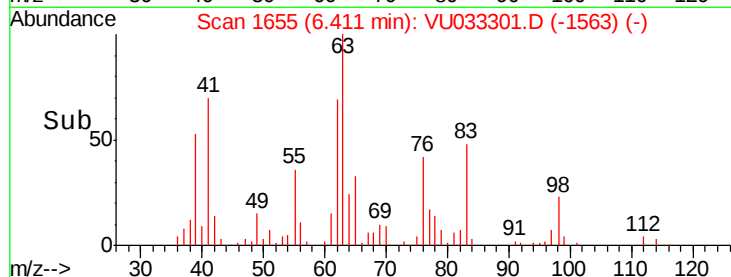
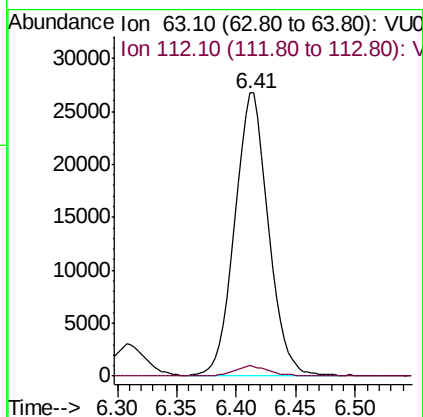
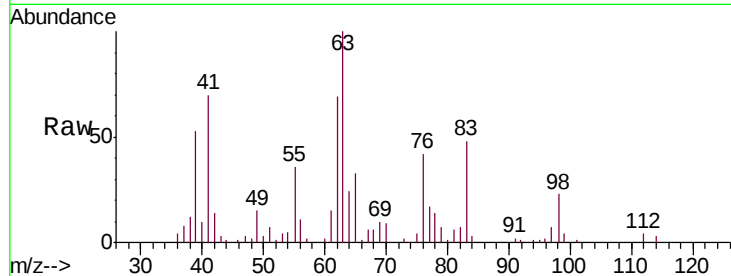




#37  
 1,2-Dichloropropane  
 Concen: 5.443 ug/L  
 RT: 6.41 min Scan# 1655  
 Delta R.T. -0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

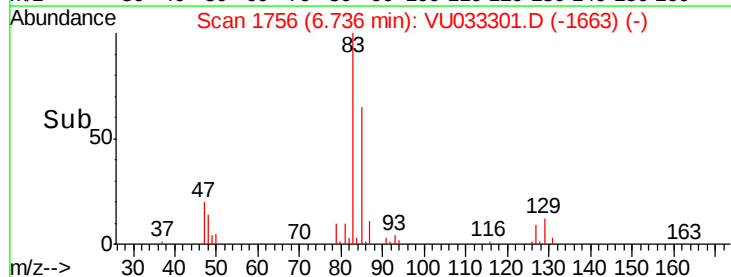
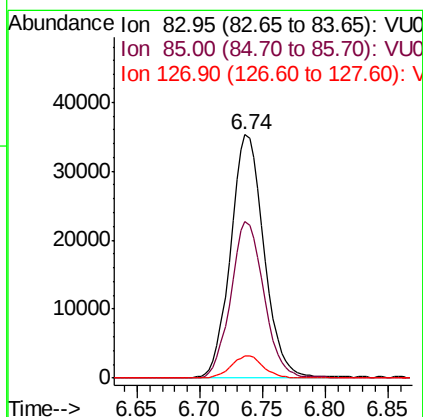
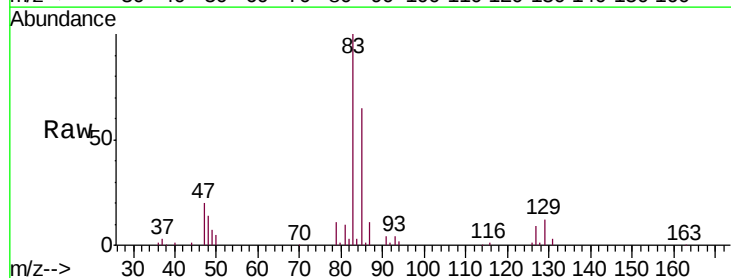
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

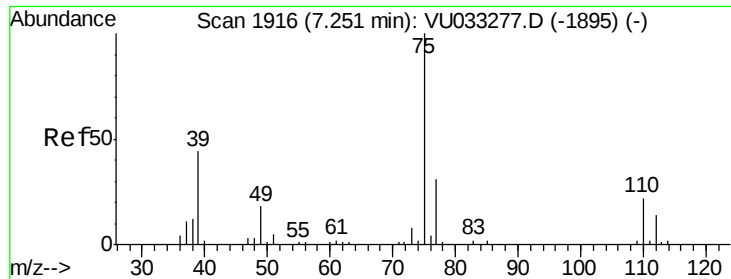
Tgt Ion: 63 Resp: 52607  
 Ion Ratio Lower Upper  
 63 100  
 112 3.6 3.1 4.7



#38  
 Bromodichloromethane  
 Concen: 5.294 ug/L  
 RT: 6.74 min Scan# 1756  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Tgt Ion: 83 Resp: 65274  
 Ion Ratio Lower Upper  
 83 100  
 85 64.6 44.0 81.8  
 127 8.9 7.0 10.4

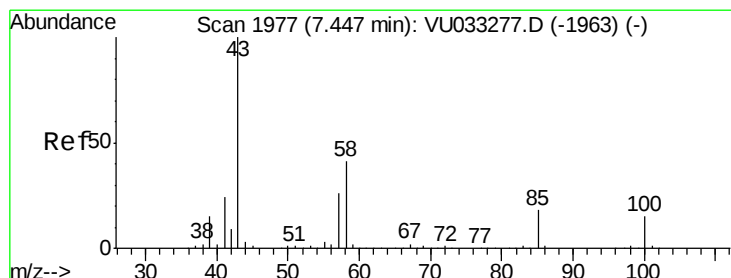
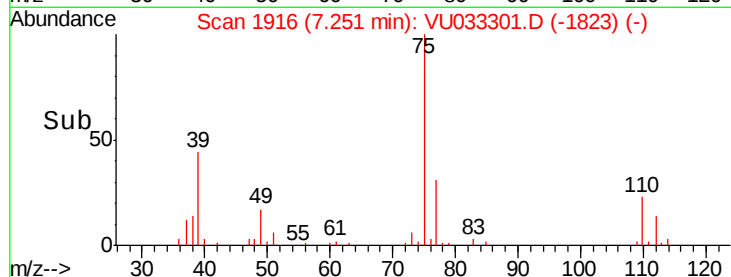
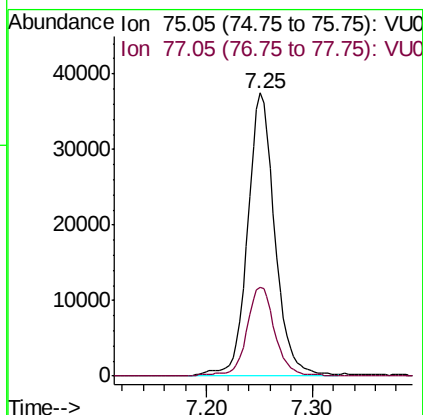
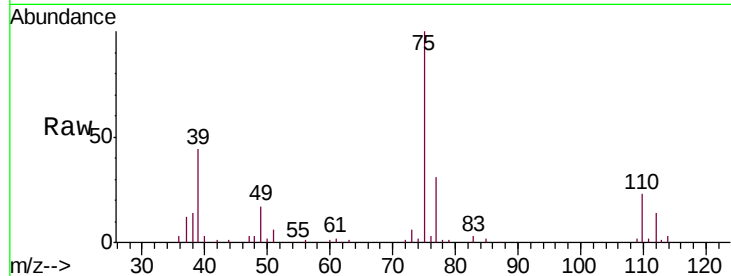




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.896 ug/L  
 RT: 7.25 min Scan# 1916  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

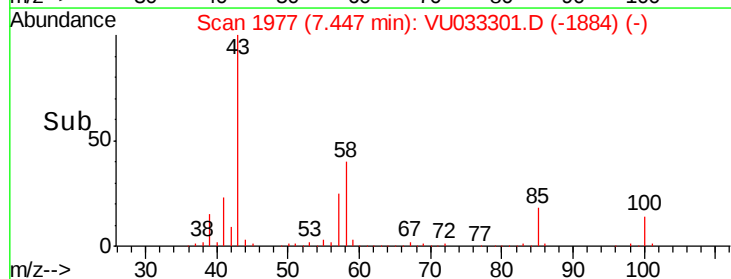
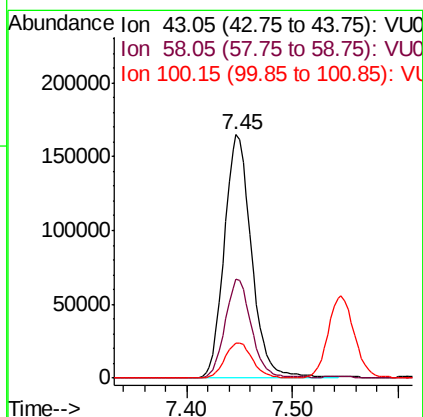
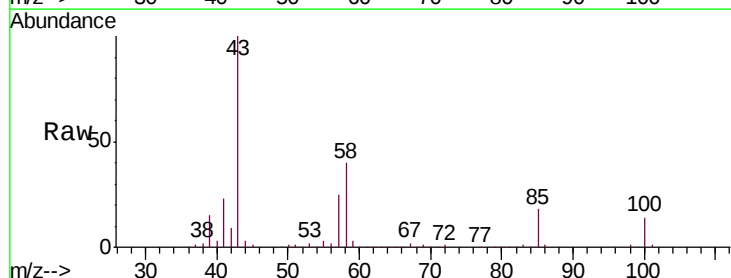
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

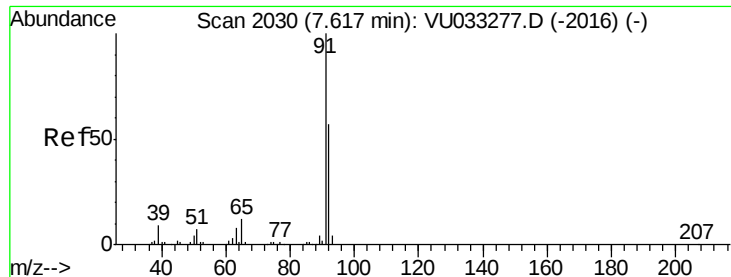
Tgt Ion: 75 Resp: 67506  
 Ion Ratio Lower Upper  
 75 100  
 77 31.3 22.1 41.1



#40  
 4-Methyl-2-pentanone  
 Concen: 53.345 ug/L  
 RT: 7.45 min Scan# 1977  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Tgt Ion: 43 Resp: 295431  
 Ion Ratio Lower Upper  
 43 100  
 58 39.5 32.4 48.6  
 100 14.7 11.9 17.9





#42

Toluene

Concen: 5.455 ug/L

RT: 7.62 min Scan# 2030

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

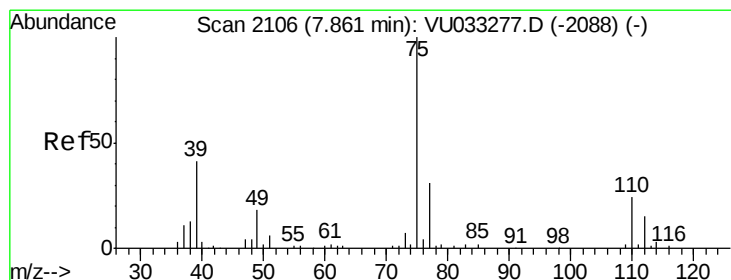
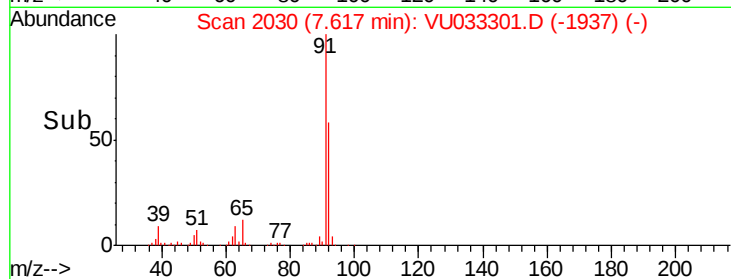
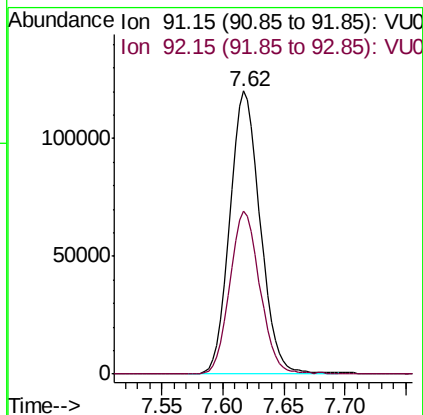
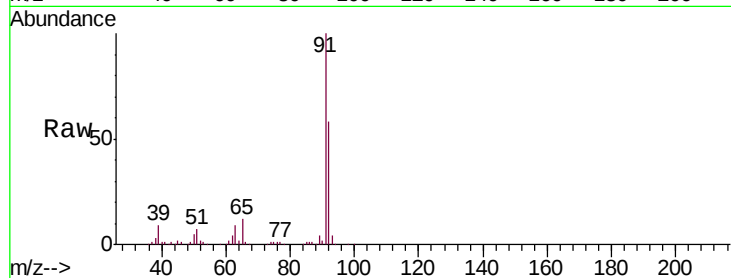
VSTD00516

Tgt Ion: 91 Resp: 209302

Ion Ratio Lower Upper

91 100

92 57.5 40.0 74.2



#44

trans-1,3-Dichloropropene

Concen: 5.193 ug/L

RT: 7.86 min Scan# 2106

Delta R.T. 0.00 min

Lab File: VU033301.D

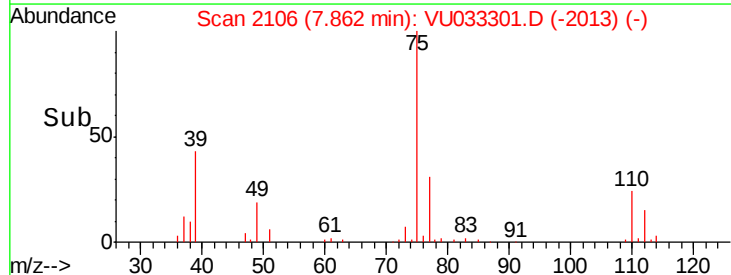
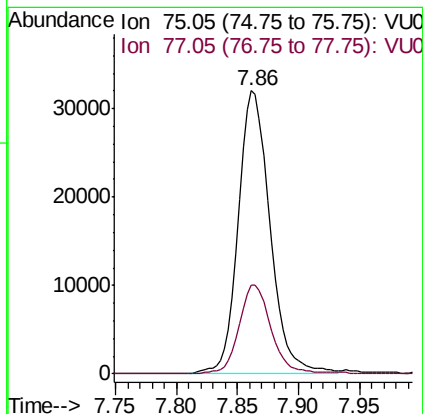
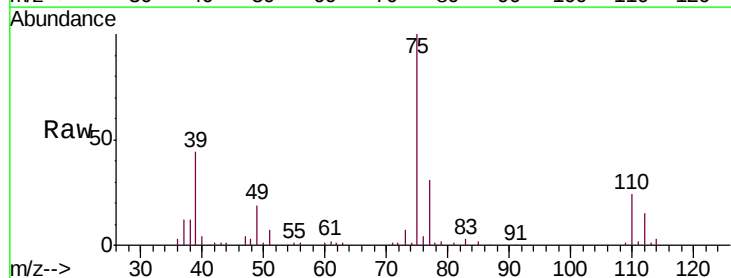
Acq: 17 Jul 2019 19:37

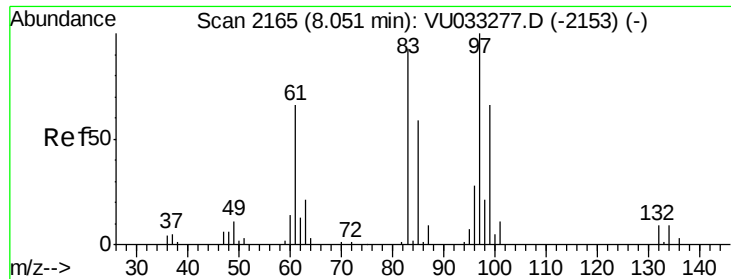
Tgt Ion: 75 Resp: 57901

Ion Ratio Lower Upper

75 100

77 31.2 21.6 40.0

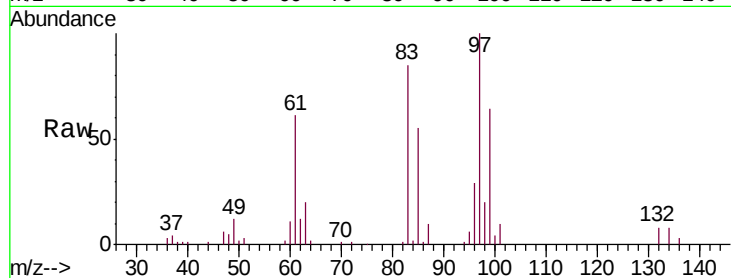




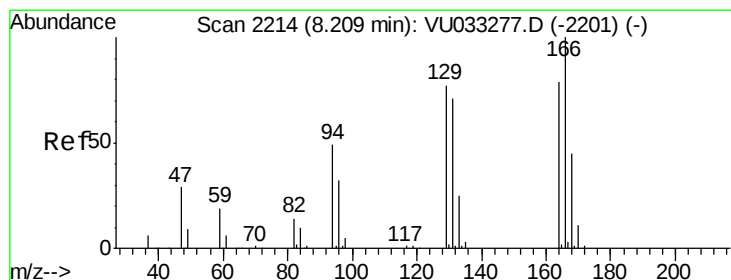
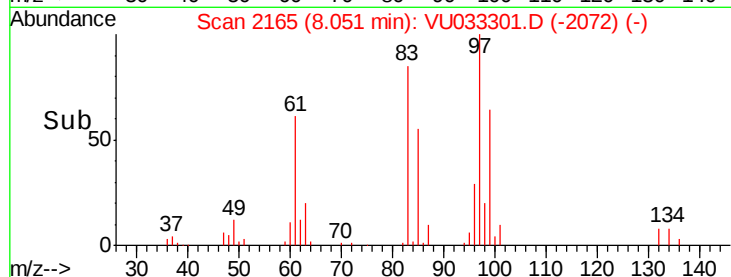
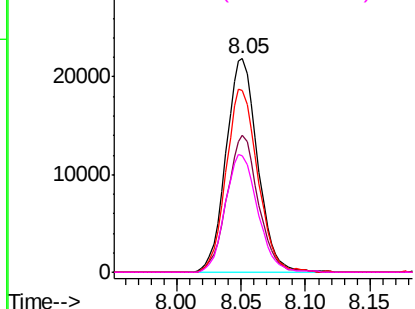
#45  
 1,1,2-Trichloroethane  
 Concen: 5.393 ug/L  
 RT: 8.05 min Scan# 2165  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 37273 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 64.1  | 42.3  | 78.5  |
| 83       | 85.3  | 58.0  | 107.6 |
| 85       | 54.7  | 37.8  | 70.2  |

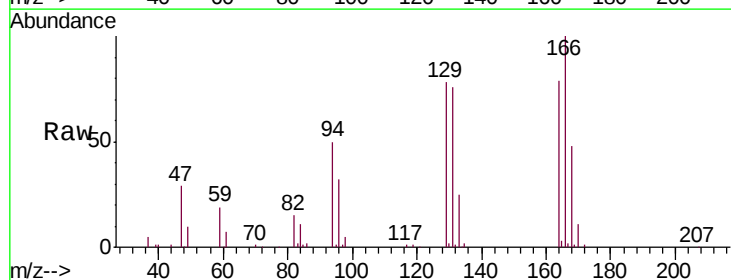


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 82.95 (82.65 to 83.65): VU0  
 Ion 85.00 (84.70 to 85.70): VU0

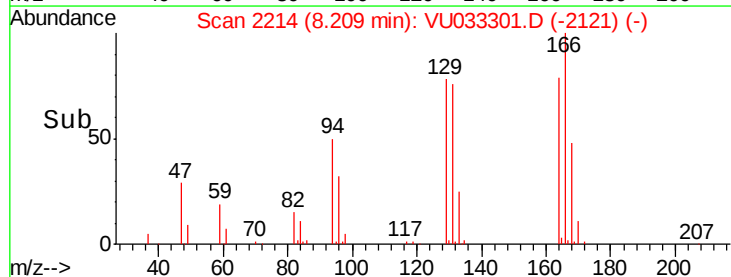
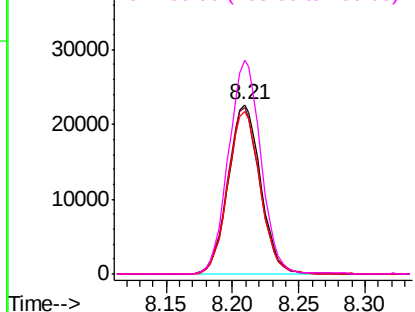


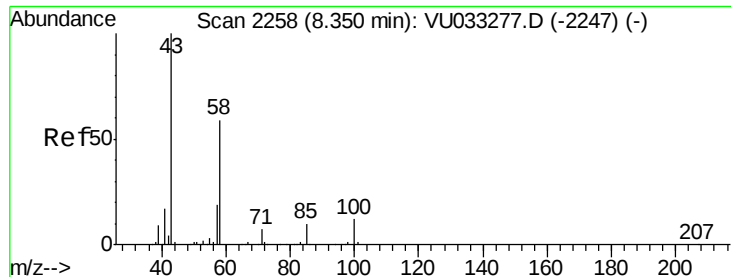
#47  
 Tetrachloroethene  
 Concen: 5.067 ug/L  
 RT: 8.21 min Scan# 2214  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 38403 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 98.3  | 68.5  | 127.1 |
| 131      | 95.8  | 67.3  | 124.9 |
| 166      | 126.1 | 93.1  | 172.9 |



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

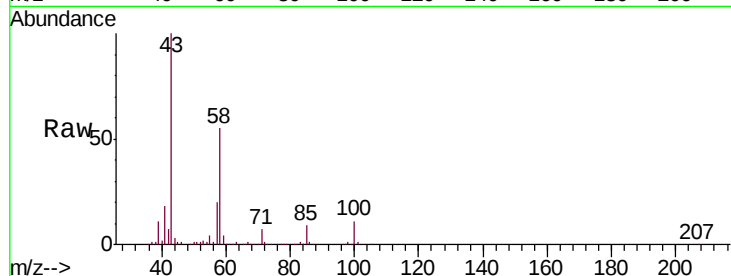




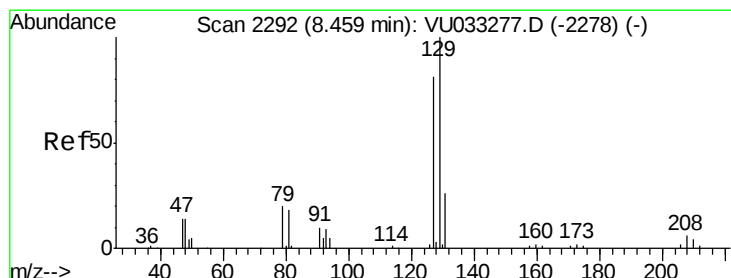
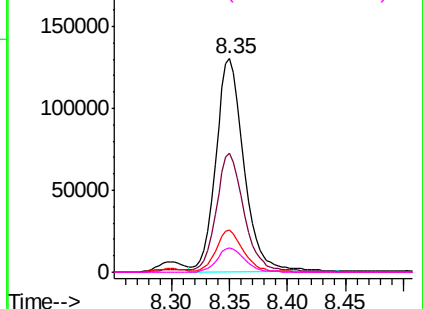
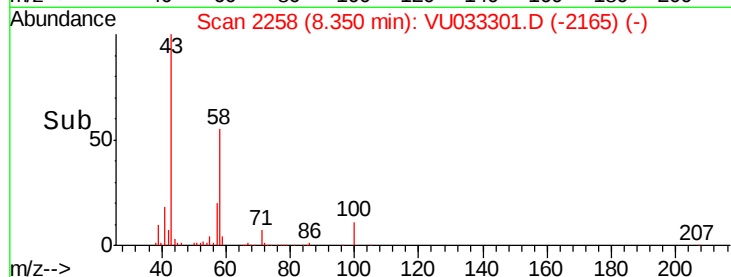
#48  
2-Hexanone  
Concen: 54.137 ug/L  
RT: 8.35 min Scan# 2258  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 219289 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 58       | 55.6  | 44.1  | 66.1   |
| 57       | 19.5  | 15.8  | 23.8   |
| 100      | 11.5  | 9.4   | 14.2   |

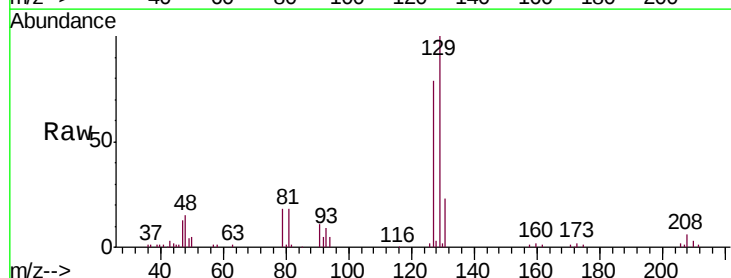


Abundance Ion 43.05 (42.75 to 43.75): VU033301.D (-2165) (-)  
Ion 58.05 (57.75 to 58.75): VU033301.D (-2165) (-)  
Ion 57.20 (56.90 to 57.90): VU033301.D (-2165) (-)  
Ion 100.15 (99.85 to 100.85): VU033301.D (-2165) (-)

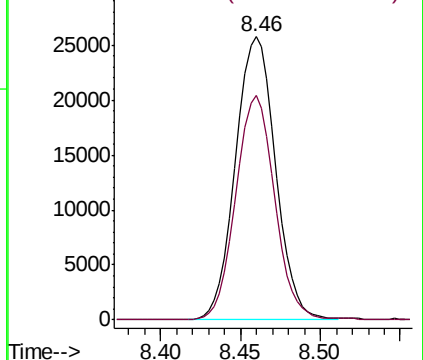
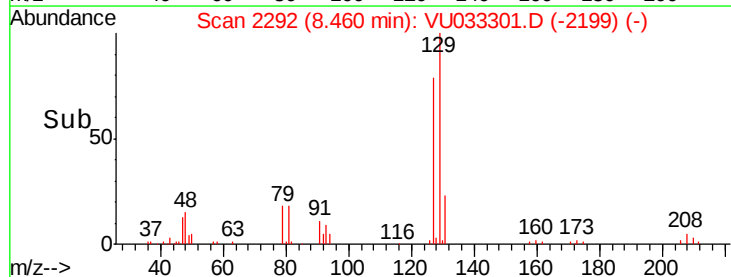


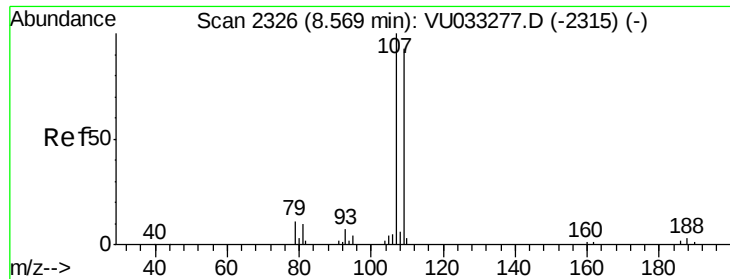
#49  
Dibromochloromethane  
Concen: 5.294 ug/L  
RT: 8.46 min Scan# 2292  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 44065 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 79.3  | 51.9  | 96.5  |



Abundance Ion 128.95 (128.65 to 129.65): VU033301.D (-2199) (-)  
Ion 126.90 (126.60 to 127.60): VU033301.D (-2199) (-)

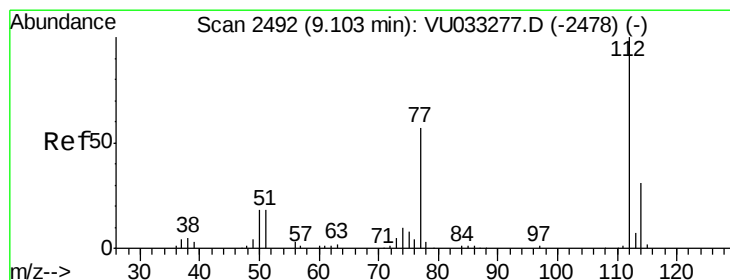
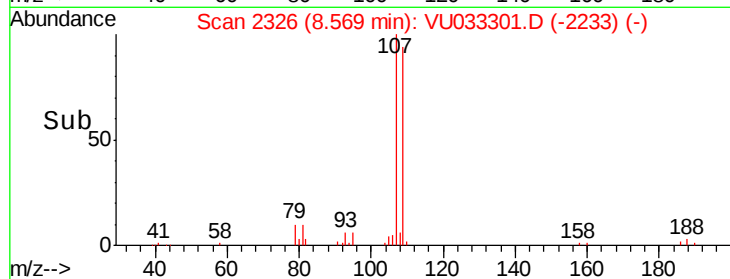
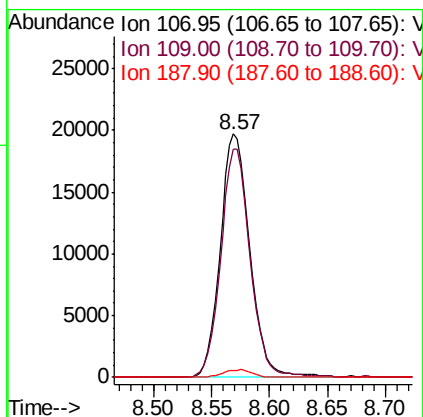
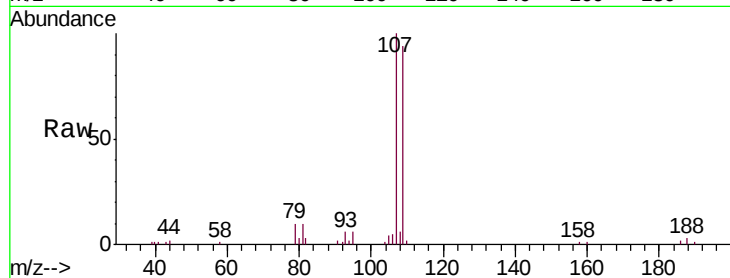




#50  
1,2-Dibromoethane  
Concen: 5.261 ug/L  
RT: 8.57 min Scan# 2326  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

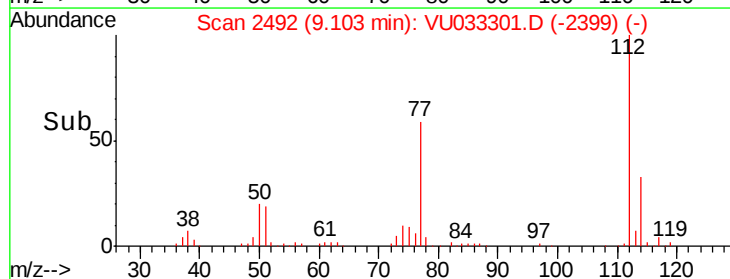
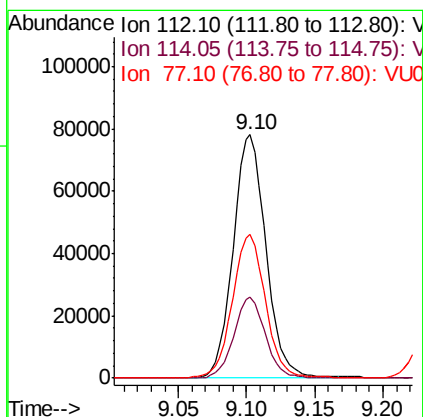
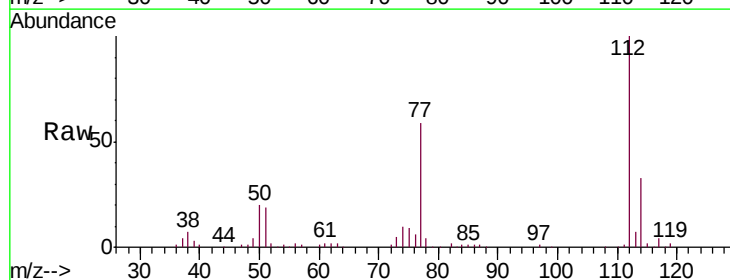
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

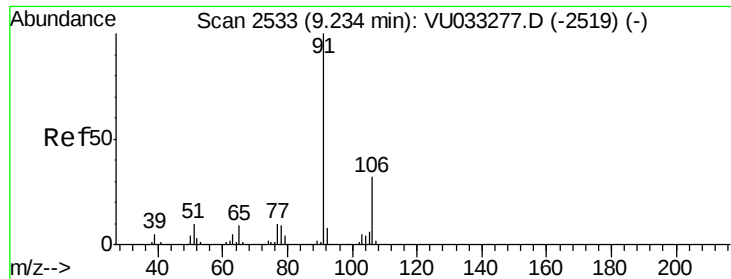
Tgt Ion:107 Resp: 34901  
Ion Ratio Lower Upper  
107 100  
109 93.7 64.8 120.4  
188 2.9 3.0 4.6#



#51  
Chlorobenzene  
Concen: 5.180 ug/L  
RT: 9.10 min Scan# 2492  
Delta R.T. 0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Tgt Ion:112 Resp: 130459  
Ion Ratio Lower Upper  
112 100  
114 33.2 22.1 41.1  
77 58.9 46.9 70.3





#52

Ethylbenzene

Concen: 5.171 ug/L

RT: 9.23 min Scan# 2532

Delta R.T. -0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

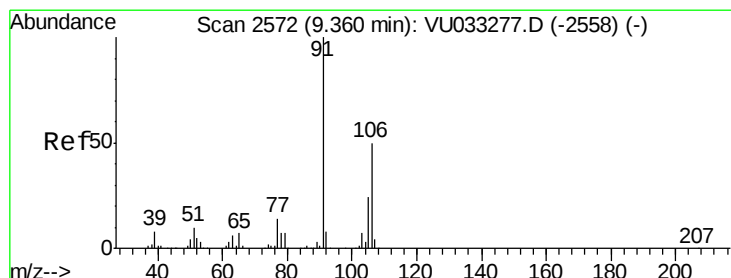
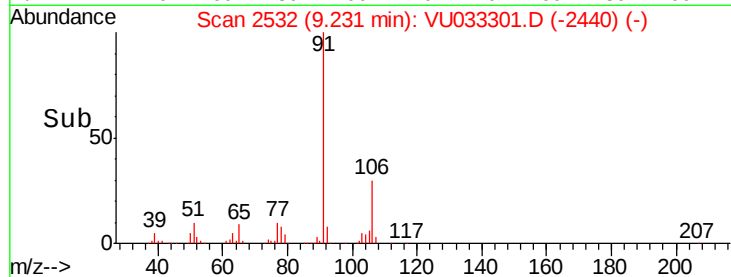
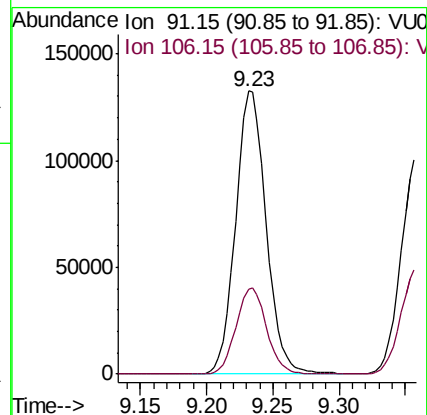
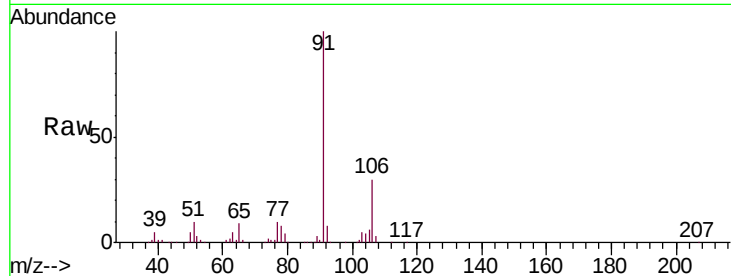
VSTD00516

Tgt Ion: 91 Resp: 211818

Ion Ratio Lower Upper

91 100

106 30.0 21.6 40.2



#53

m,p-Xylene

Concen: 5.333 ug/L

RT: 9.36 min Scan# 2571

Delta R.T. -0.00 min

Lab File: VU033301.D

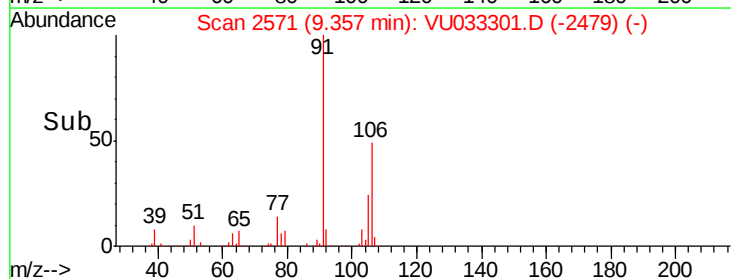
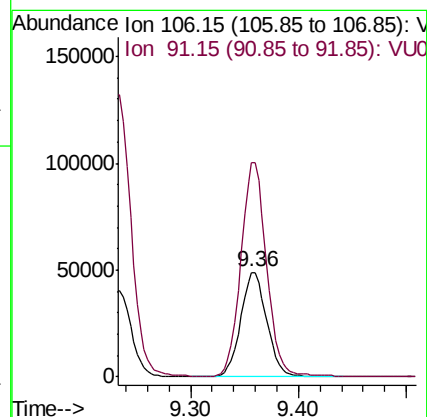
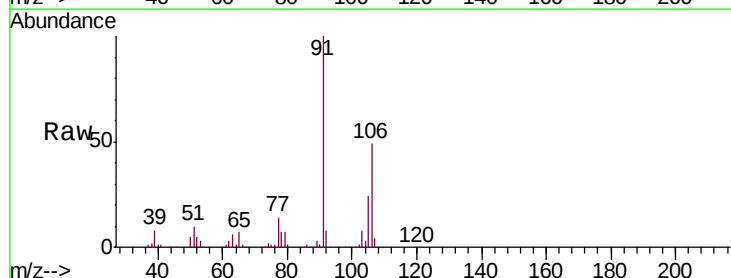
Acq: 17 Jul 2019 19:37

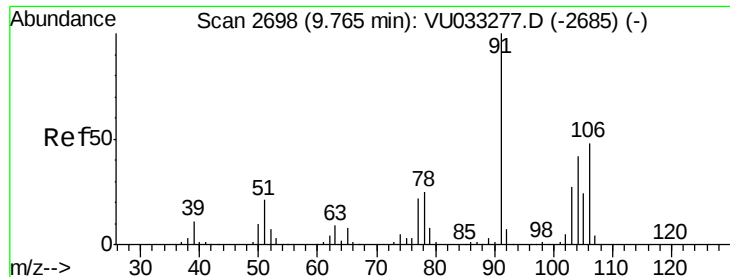
Tgt Ion: 106 Resp: 82513

Ion Ratio Lower Upper

106 100

91 204.6 147.6 274.0

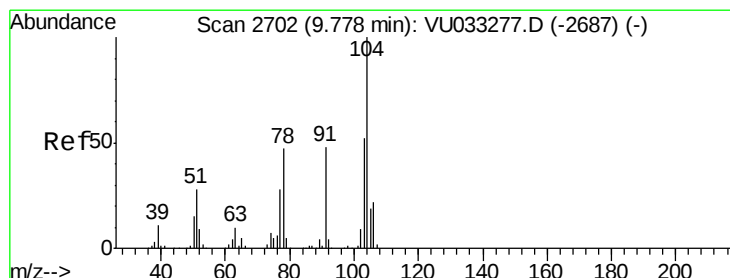
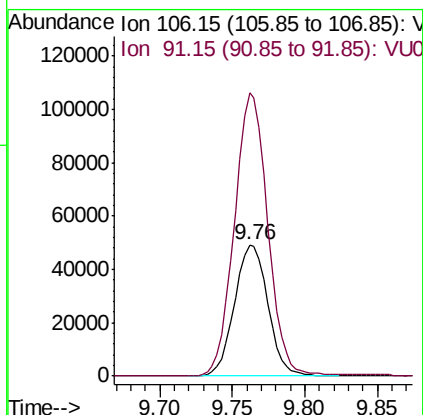
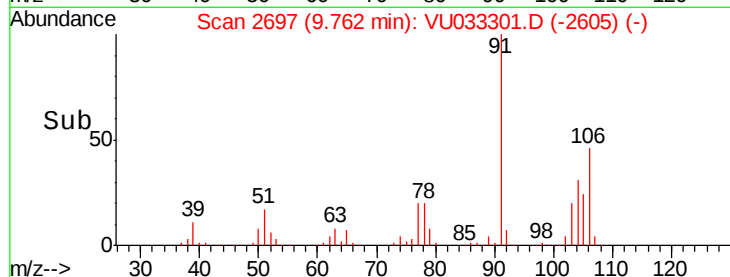
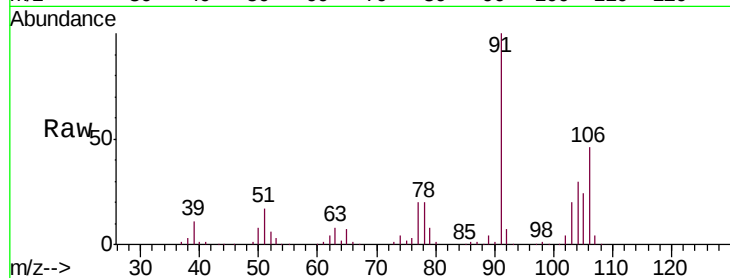




#54  
o-Xylene  
Concen: 5.347 ug/L  
RT: 9.76 min Scan# 2697  
Delta R.T. -0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

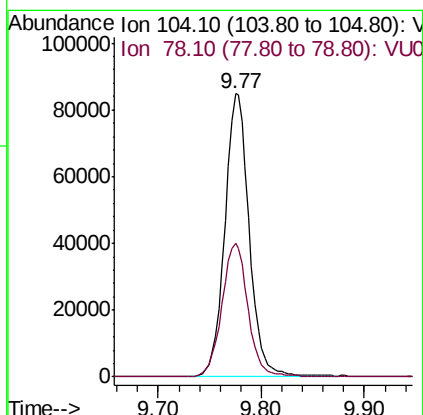
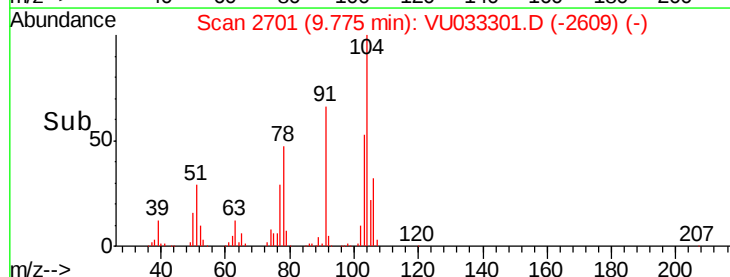
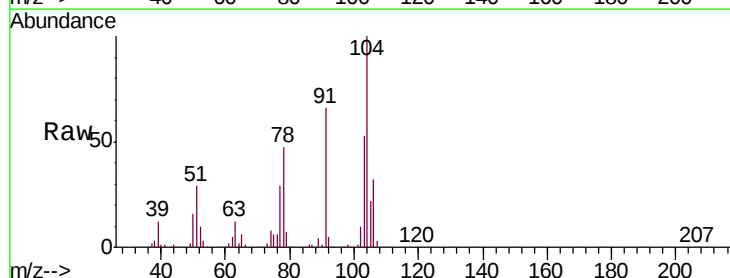
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

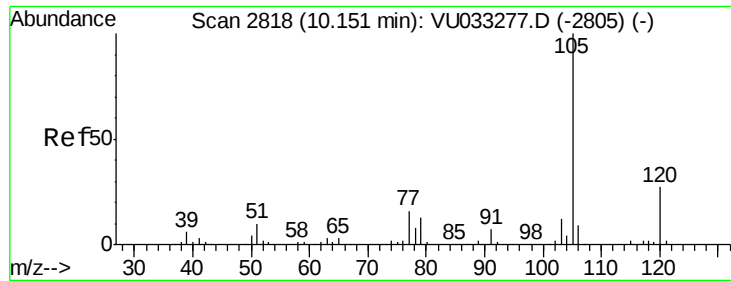
Tgt Ion:106 Resp: 78875  
Ion Ratio Lower Upper  
106 100  
91 215.5 148.5 275.7



#55  
Styrene  
Concen: 5.458 ug/L  
RT: 9.77 min Scan# 2701  
Delta R.T. -0.00 min  
Lab File: VU033301.D  
Acq: 17 Jul 2019 19:37

Tgt Ion:104 Resp: 140320  
Ion Ratio Lower Upper  
104 100  
78 47.2 32.8 60.8





#56

Isopropylbenzene

Concen: 5.268 ug/L

RT: 10.15 min Scan# 2818

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

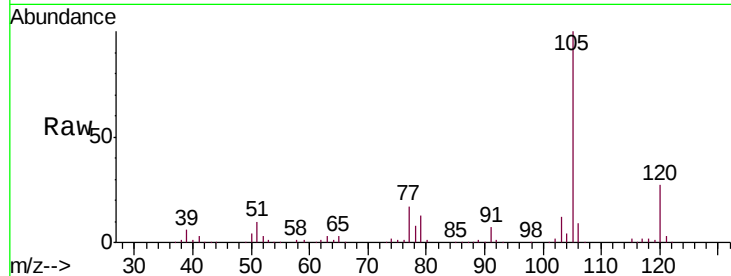
Tgt Ion: 105 Resp: 206596

Ion Ratio Lower Upper

105 100

120 26.4 21.3 31.9

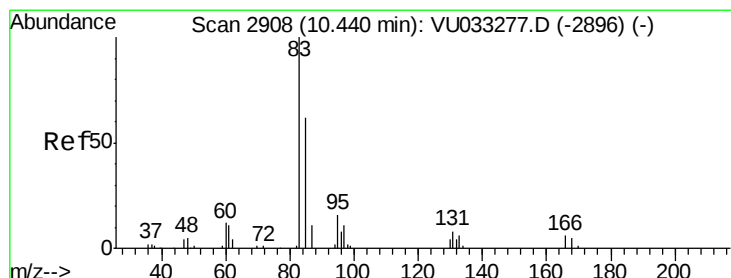
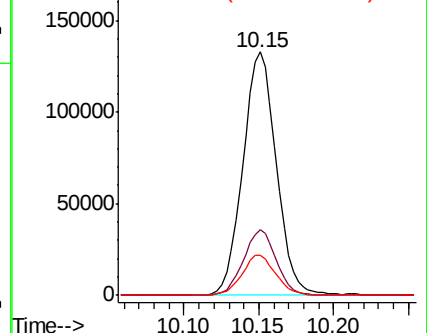
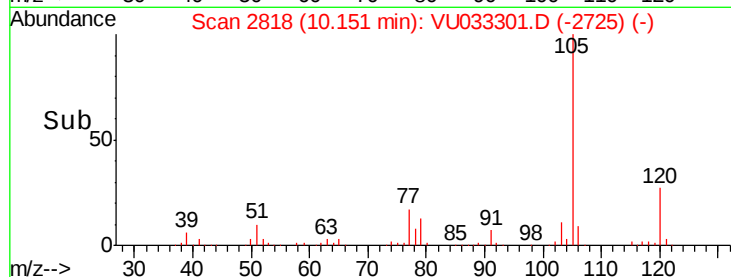
77 16.8 13.0 19.4



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: 5.441 ug/L

RT: 10.44 min Scan# 2908

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

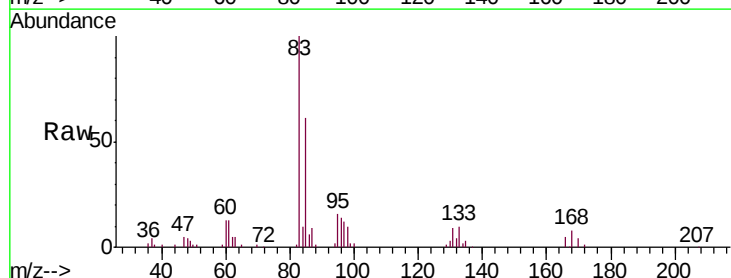
Tgt Ion: 83 Resp: 48137

Ion Ratio Lower Upper

83 100

85 61.3 44.6 82.8

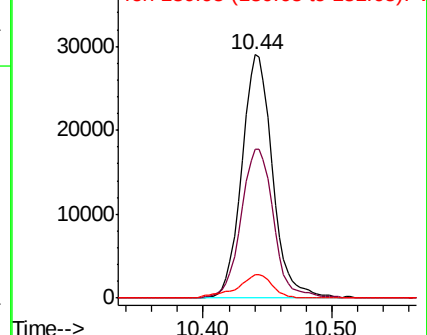
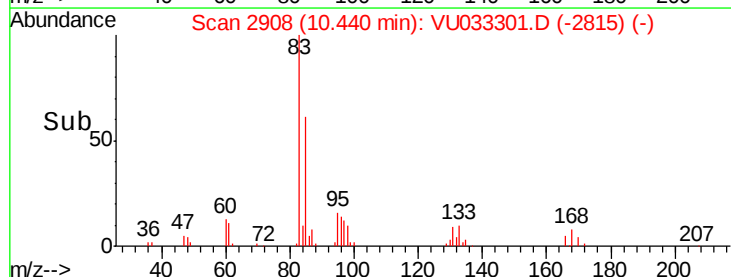
131 9.4 7.4 11.2

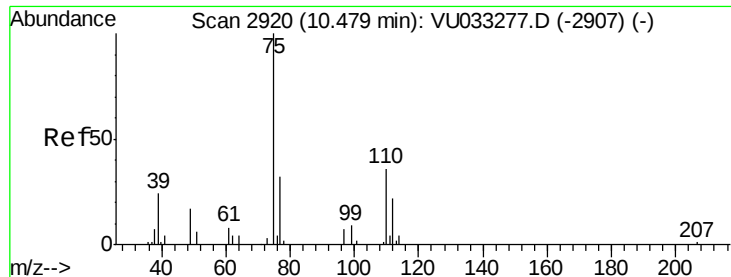


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V

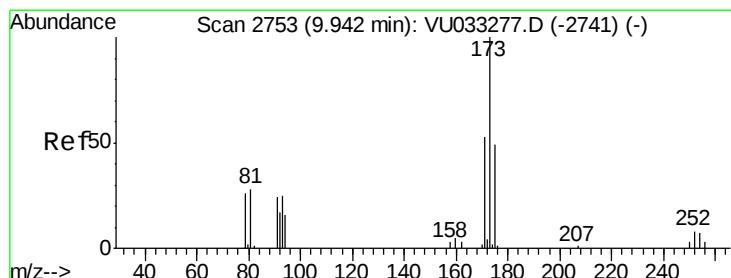
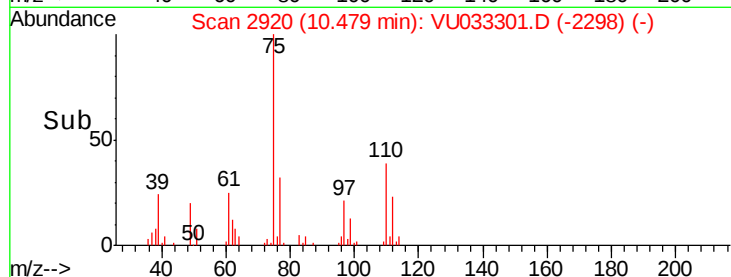
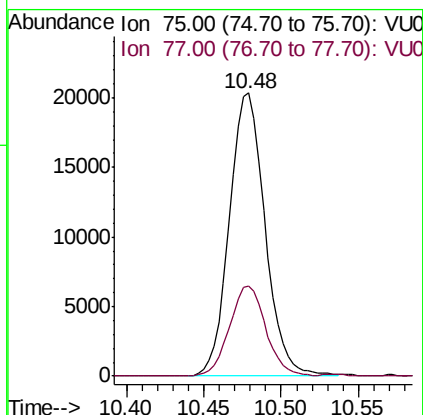
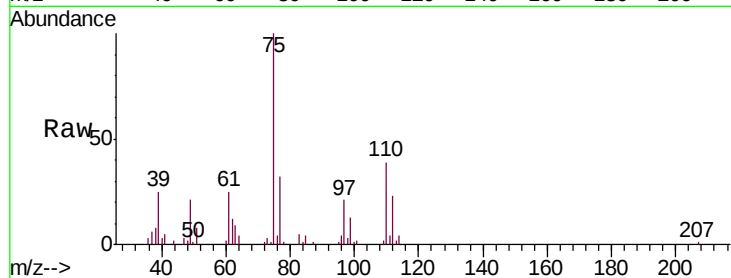




#59  
 1,2,3-Trichloropropane  
 Concen: 5.163 ug/L  
 RT: 10.48 min Scan# 2920  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

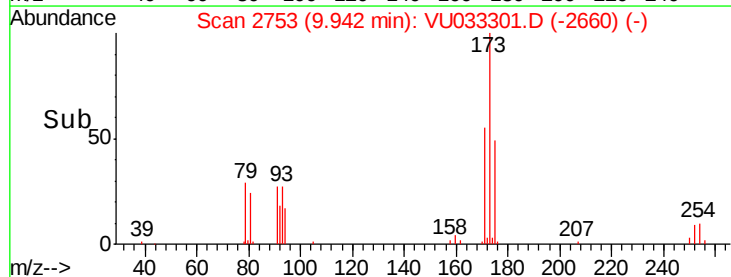
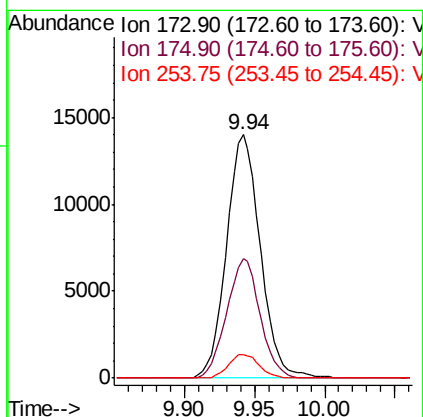
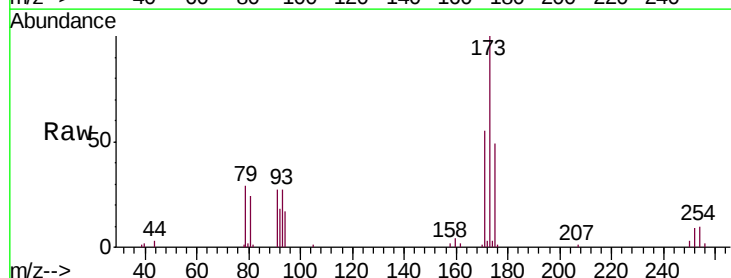
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

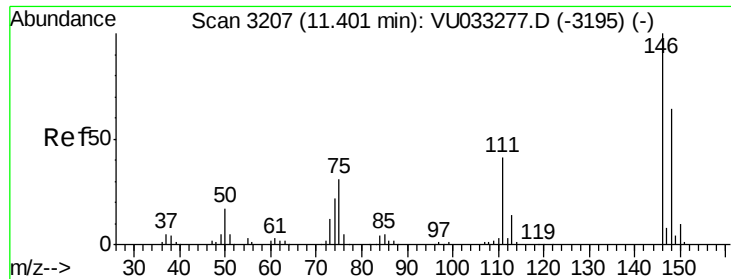
Tgt Ion: 75 Resp: 32536  
 Ion Ratio Lower Upper  
 75 100  
 77 32.3 26.5 39.7



#61  
 Bromoform  
 Concen: 5.472 ug/L  
 RT: 9.94 min Scan# 2753  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Tgt Ion: 173 Resp: 23406  
 Ion Ratio Lower Upper  
 173 100  
 175 48.3 37.2 55.8  
 254 8.9 6.6 9.8

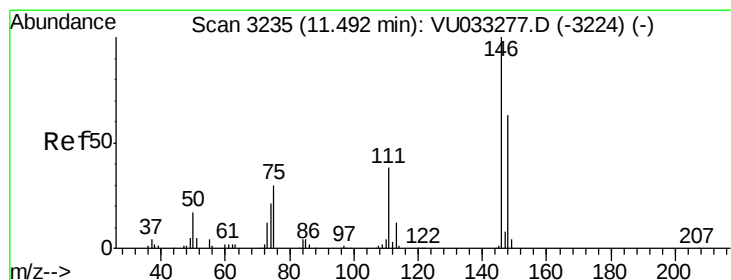
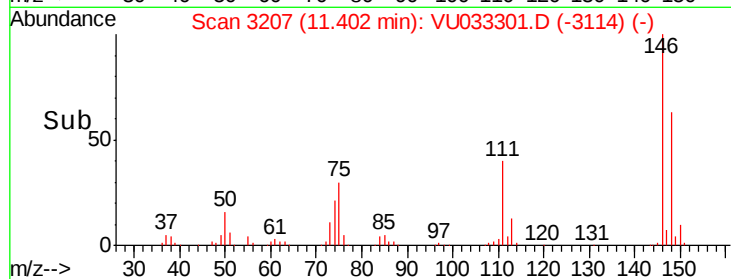
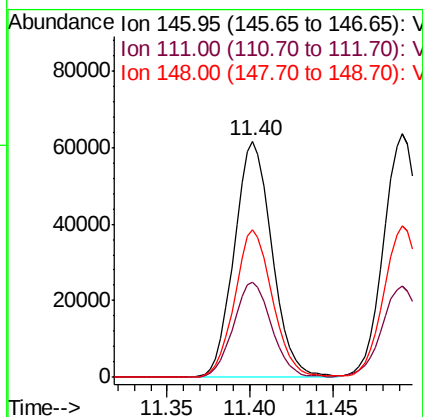
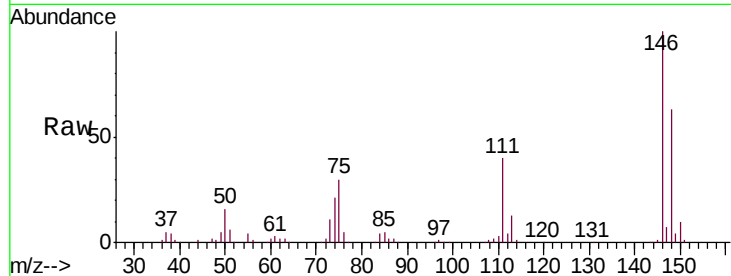




#62  
 1,3-Dichlorobenzene  
 Concen: 5.247 ug/L  
 RT: 11.40 min Scan# 3207  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

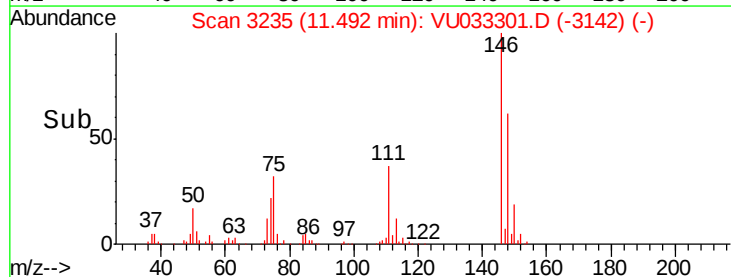
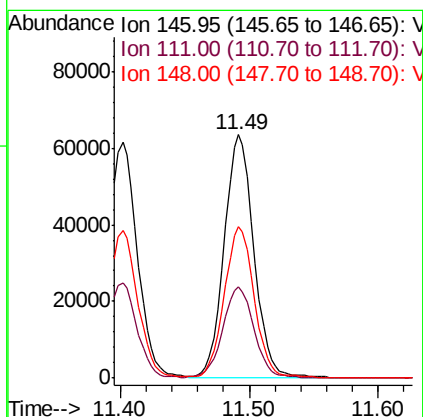
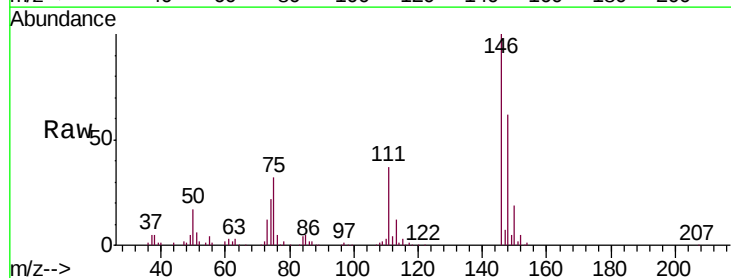
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

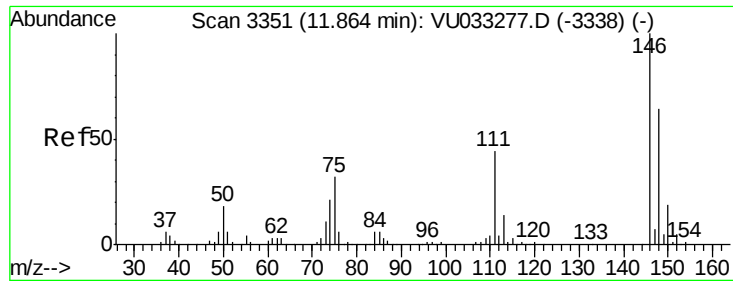
Tgt Ion:146 Resp: 97523  
 Ion Ratio Lower Upper  
 146 100  
 111 40.5 28.6 53.2  
 148 62.6 45.0 83.6



#63  
 1,4-Dichlorobenzene  
 Concen: 5.151 ug/L  
 RT: 11.49 min Scan# 3235  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Tgt Ion:146 Resp: 100820  
 Ion Ratio Lower Upper  
 146 100  
 111 37.3 27.9 51.7  
 148 62.3 44.1 81.9





#65

1,2-Dichlorobenzene

Concen: 5.323 ug/L

RT: 11.86 min Scan# 3351

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

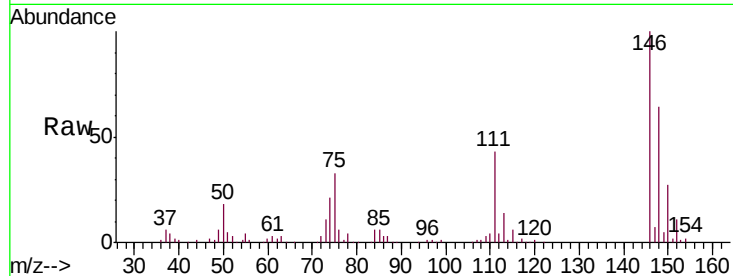
Tgt Ion:146 Resp: 98211

Ion Ratio Lower Upper

146 100

111 43.4 34.2 51.4

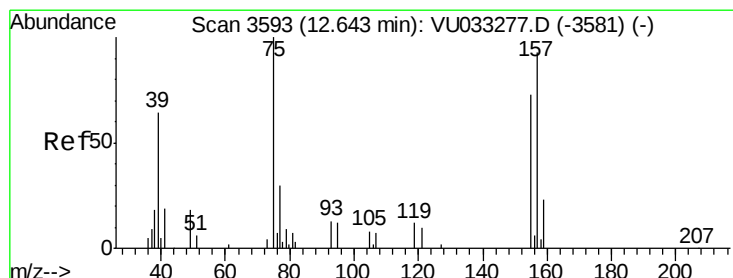
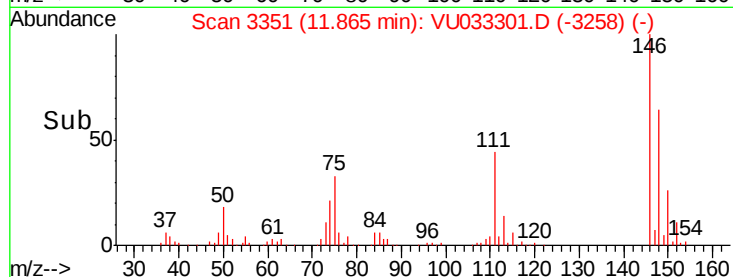
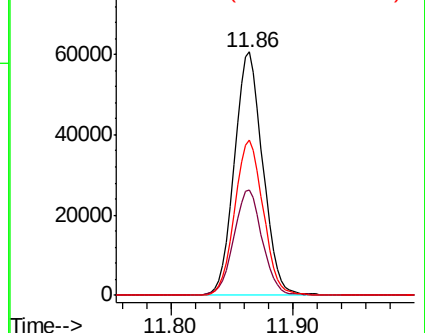
148 63.7 52.0 78.0



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



#66

1,2-Dibromo-3-chloropropane

Concen: 5.085 ug/L

RT: 12.64 min Scan# 3593

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

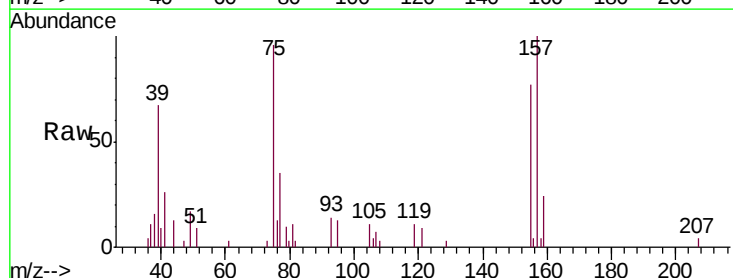
Tgt Ion: 75 Resp: 7101

Ion Ratio Lower Upper

75 100

155 80.9 67.1 100.7

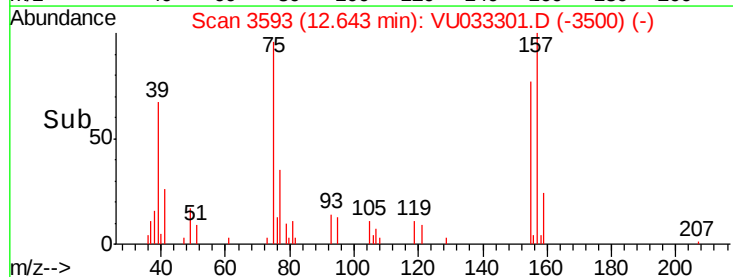
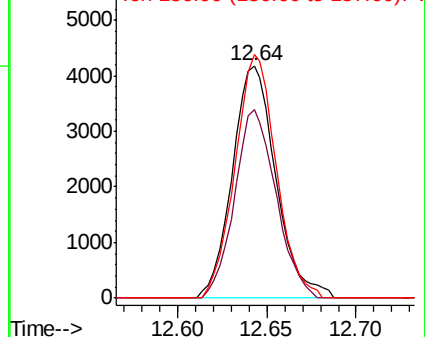
157 104.6 83.7 125.5

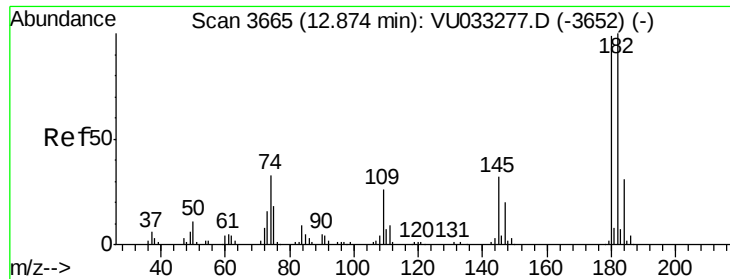


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

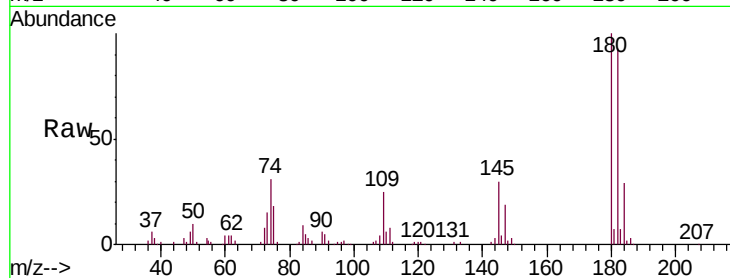




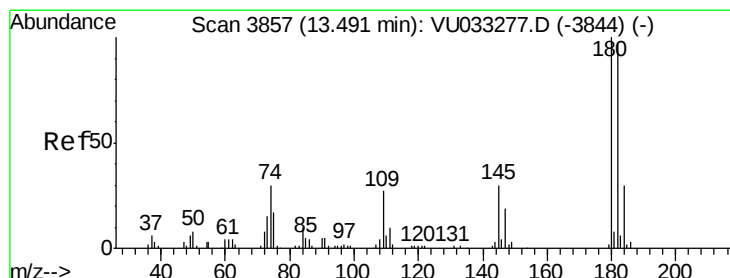
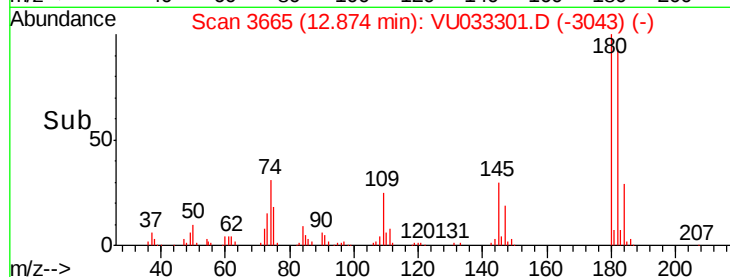
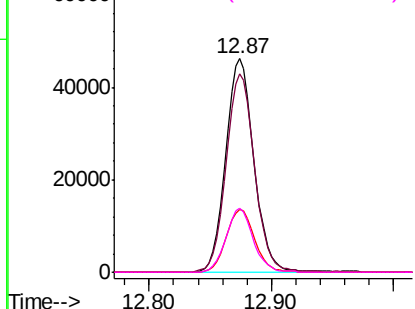
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.123 ug/L  
 RT: 12.87 min Scan# 3665  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 74827 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 93.7  | 76.0  | 114.0 |
| 184      | 29.6  | 24.2  | 36.2  |
| 145      | 29.0  | 24.6  | 37.0  |

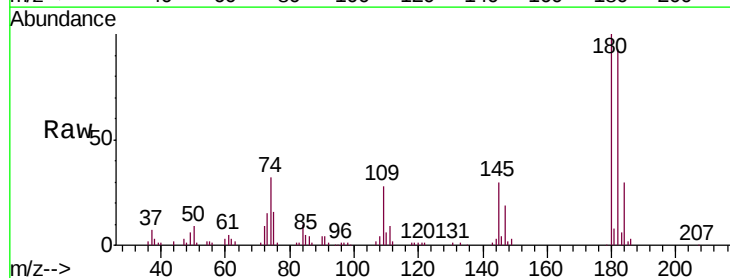


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

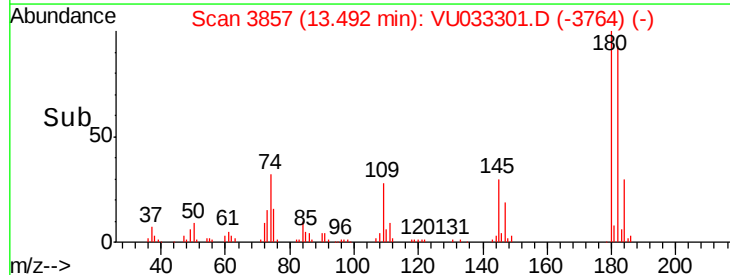
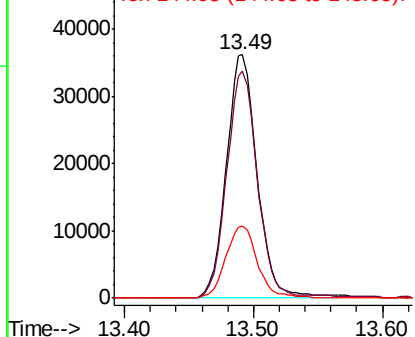


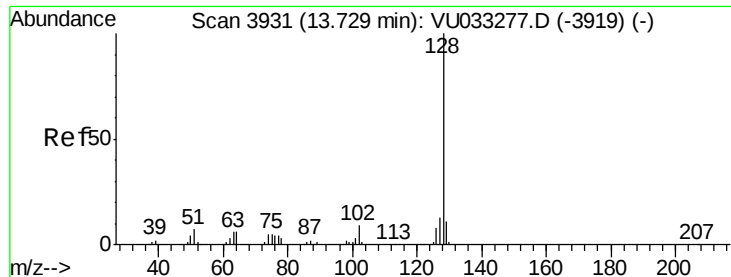
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.066 ug/L  
 RT: 13.49 min Scan# 3857  
 Delta R.T. 0.00 min  
 Lab File: VU033301.D  
 Acq: 17 Jul 2019 19:37

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 59767 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 93.3  | 77.3  | 115.9 |
| 145      | 30.7  | 24.5  | 36.7  |



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: 4.575 ug/L

RT: 13.73 min Scan# 3931

Delta R.T. 0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

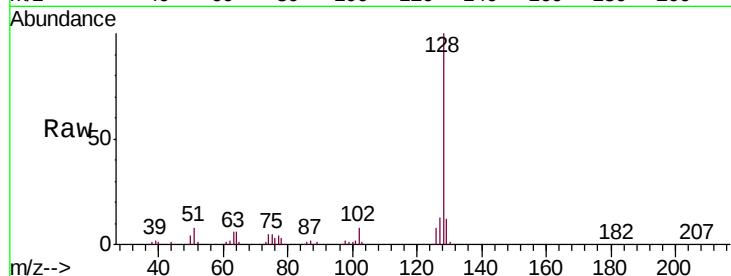
Tgt Ion:128 Resp: 91425

Ion Ratio Lower Upper

128 100

129 11.3 8.7 13.1

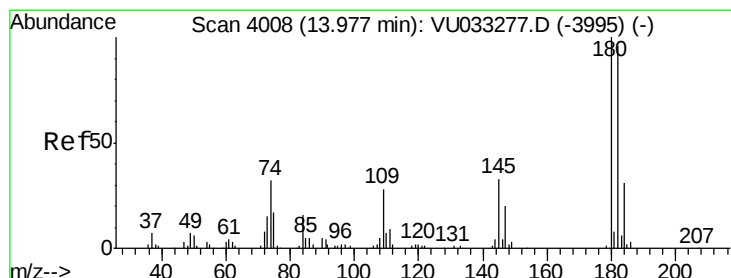
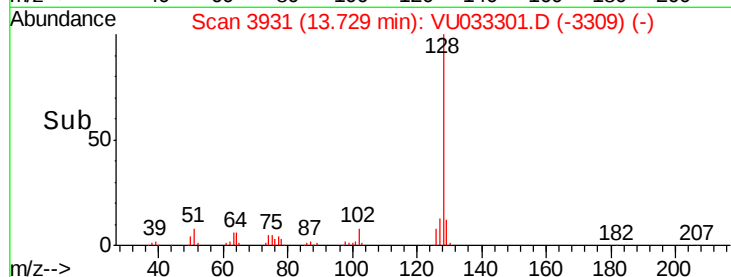
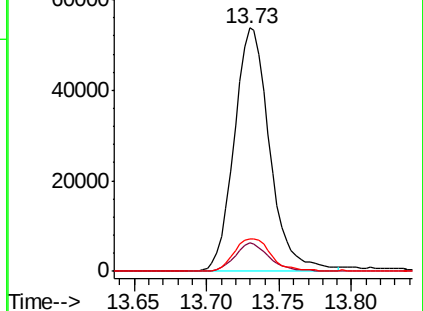
127 14.0 10.6 15.8



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: 5.204 ug/L

RT: 13.97 min Scan# 4007

Delta R.T. -0.00 min

Lab File: VU033301.D

Acq: 17 Jul 2019 19:37

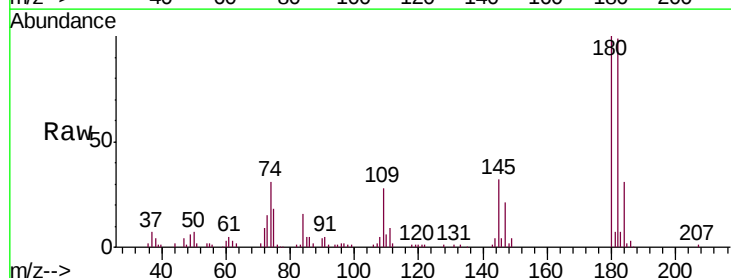
Tgt Ion:180 Resp: 57845

Ion Ratio Lower Upper

180 100

182 95.0 77.0 115.4

145 31.3 25.9 38.9



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

