

Data File : VU031980.D  
Acq On : 13 May 2019 19:55  
Operator : JC/SP  
Sample : VSTDCCC005EC  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00530

Quant Time: May 14 02:44:29 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR050819WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue May 14 02:38:02 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 481137   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 476928   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 214704   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40   | 65    | 142719   | 4.35     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 87.00%  |
| 7) Chloroethane-d5             | 1.67   | 69    | 137061   | 5.07     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 101.40% |
| 11) 1,1-Dichloroethene-d2      | 2.27   | 63    | 288035   | 4.08     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 81.60%  |
| 20) 2-Butanone-d5              | 4.19   | 46    | 551804   | 43.10    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 86.20%  |
| 24) Chloroform-d               | 4.64   | 84    | 301986   | 4.49     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 89.80%  |
| 26) 1,2-Dichloroethane-d4      | 5.31   | 65    | 161003   | 3.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 78.80%  |
| 32) Benzene-d6                 | 5.33   | 84    | 541352   | 4.44     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 88.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.33   | 67    | 194920   | 4.35     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 87.00%  |
| 41) Toluene-d8                 | 7.56   | 98    | 443994   | 4.25     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 85.00%  |
| 43) trans-1,3-Dichloropropene- | 7.85   | 79    | 67472    | 4.29     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 85.80%  |
| 46) 2-Hexanone-d5              | 8.31   | 63    | 458244   | 57.59    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 115.18% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43  | 84    | 180672   | 5.17     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 103.40% |
| 64) 1,2-Dichlorobenzene-d4     | 11.85  | 152   | 175787   | 4.95     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 99.00%  |

#### Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 212208 | 3.831 ug/L   | 97     |
| 3) Chloromethane               | 1.32 | 50  | 231546 | 3.507 ug/L   | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 244583 | 4.239 ug/L   | 97     |
| 6) Bromomethane                | 1.62 | 94  | 113847 | 4.298 ug/L   | 94     |
| 8) Chloroethane                | 1.69 | 64  | 150949 | 4.750 ug/L   | 99     |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 297915 | 4.464 ug/L   | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.28 | 101 | 184936 | 5.325 ug/L   | 95     |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 181066 | 5.536 ug/L   | 74     |
| 13) Acetone                    | 2.33 | 43  | 341478 | 39.052 ug/L  | 82     |
| 14) Carbon disulfide           | 2.47 | 76  | 532813 | 4.628 ug/L   | 100    |
| 15) Methyl Acetate             | 2.62 | 43  | 96771  | 4.290 ug/L # | 89     |
| 16) Methylene chloride         | 2.69 | 84  | 215325 | 4.745 ug/L   | 81     |
| 17) Methyl tert-butyl Ether    | 3.00 | 73  | 509551 | 5.230 ug/L # | 90     |
| 18) trans-1,2-Dichloroethene   | 2.97 | 96  | 195190 | 5.537 ug/L   | 80     |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 367786 | 4.242 ug/L   | 98     |
| 21) 2-Butanone                 | 4.28 | 43  | 557776 | 38.172 ug/L  | 87     |
| 22) cis-1,2-Dichloroethene     | 4.22 | 96  | 210223 | 4.965 ug/L   | 76     |

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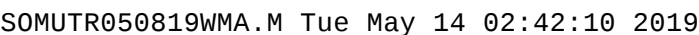
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00530

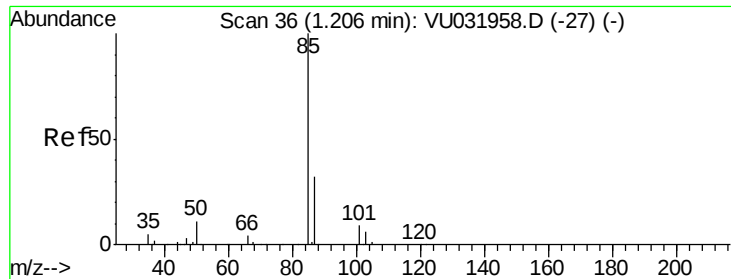
Quant Time: May 14 02:44:29 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR050819WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue May 14 02:38:02 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.54  | 128  | 85643    | 5.041  | ug/L # | 75       |
| 25) Chloroform                 | 4.67  | 83   | 366641   | 4.297  | ug/L   | 98       |
| 27) 1,2-Dichloroethane         | 5.40  | 62   | 223801   | 3.974  | ug/L # | 91       |
| 29) 1,1,1-Trichloroethane      | 4.91  | 97   | 282053   | 4.315  | ug/L   | 97       |
| 30) Cyclohexane                | 4.99  | 56   | 292069   | 4.080  | ug/L   | 88       |
| 31) Carbon tetrachloride       | 5.13  | 117  | 239227   | 4.298  | ug/L   | 100      |
| 33) Benzene                    | 5.38  | 78   | 787370   | 4.735  | ug/L   | 100      |
| 34) Trichloroethene            | 6.18  | 95   | 198346   | 4.731  | ug/L   | 94       |
| 35) Methylcyclohexane          | 6.41  | 83   | 287344   | 4.771  | ug/L   | 88       |
| 37) 1,2-Dichloropropane        | 6.43  | 63   | 212969   | 4.475  | ug/L # | 98       |
| 38) Bromodichloromethane       | 6.75  | 83   | 251065   | 4.429  | ug/L   | 93       |
| 39) cis-1,3-Dichloropropene    | 7.27  | 75   | 271509   | 4.553  | ug/L   | 98       |
| 40) 4-Methyl-2-pentanone       | 7.46  | 43   | 1314964  | 41.056 | ug/L # | 89       |
| 42) Toluene                    | 7.63  | 91   | 845656   | 5.150  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 220236   | 4.663  | ug/L   | 97       |
| 45) 1,1,2-Trichloroethane      | 8.06  | 97   | 147552   | 5.233  | ug/L   | 98       |
| 47) Tetrachloroethene          | 8.22  | 164  | 137090   | 5.028  | ug/L   | 95       |
| 48) 2-Hexanone                 | 8.36  | 43   | 984294   | 43.239 | ug/L # | 90       |
| 49) Dibromochloromethane       | 8.47  | 129  | 160778   | 4.903  | ug/L   | 94       |
| 50) 1,2-Dibromoethane          | 8.58  | 107  | 137616   | 5.363  | ug/L # | 98       |
| 51) Chlorobenzene              | 9.12  | 112  | 504096   | 5.165  | ug/L   | 94       |
| 52) Ethylbenzene               | 9.25  | 91   | 849177   | 4.958  | ug/L   | 99       |
| 53) m,p-Xylene                 | 9.37  | 106  | 318452   | 5.223  | ug/L   | 93       |
| 54) o-Xylene                   | 9.77  | 106  | 313976   | 5.385  | ug/L   | 93       |
| 55) Styrene                    | 9.79  | 104  | 559653   | 5.593  | ug/L   | 91       |
| 56) Isopropylbenzene           | 10.16 | 105  | 813615   | 5.212  | ug/L   | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.45 | 83   | 192970   | 5.124  | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 133588   | 4.742  | ug/L   | 98       |
| 61) Bromoform                  | 9.95  | 173  | 87434    | 5.090  | ug/L   | 100      |
| 62) 1,3-Dichlorobenzene        | 11.41 | 146  | 350261   | 5.137  | ug/L   | 99       |
| 63) 1,4-Dichlorobenzene        | 11.50 | 146  | 359262   | 5.195  | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.87 | 146  | 357199   | 5.370  | ug/L   | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.65 | 75   | 29568    | 4.728  | ug/L # | 76       |
| 67) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 266314   | 5.141  | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 197793   | 5.169  | ug/L   | 97       |
| 69) Naphthalene                | 13.74 | 128  | 353758   | 5.390  | ug/L   | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 206797   | 5.806  | ug/L   | 97       |

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

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#2

Dichlorodifluoromethane

Concen: 3.831 ug/L

RT: 1.21 min Scan# 36

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

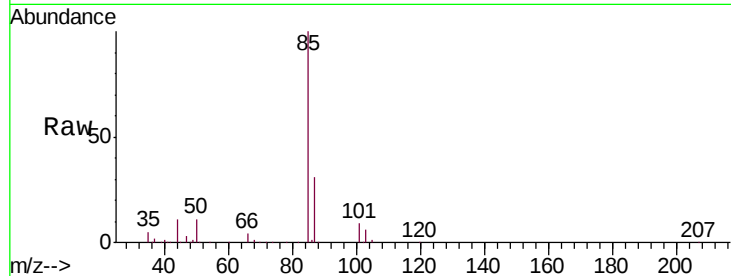
VSTD00530

Tgt Ion: 85 Resp: 212208

Ion Ratio Lower Upper

85 100

87 31.0 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VU031958.D (-27) (-)

Ion 87.00 (86.70 to 87.70): VU031958.D (-27) (-)

1.21

200000

150000

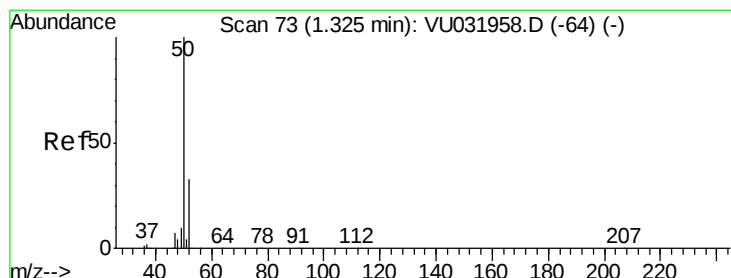
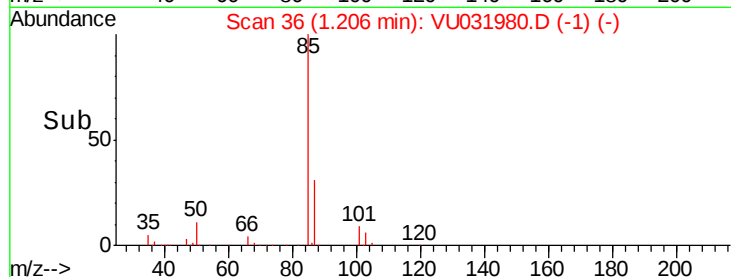
100000

50000

0

1.15 1.20 1.25 1.30

Time-->



#3

Chloromethane

Concen: 3.507 ug/L

RT: 1.32 min Scan# 73

Delta R.T. -0.00 min

Lab File: VU031980.D

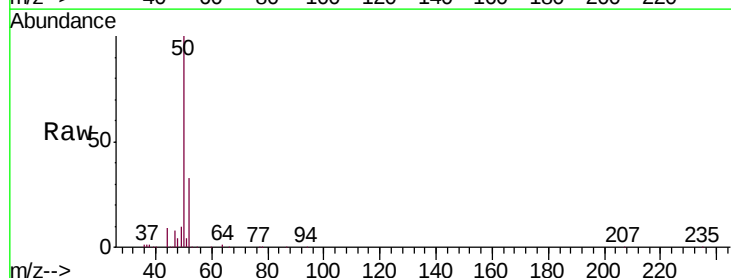
Acq: 13 May 2019 19:55

Tgt Ion: 50 Resp: 231546

Ion Ratio Lower Upper

50 100

52 32.8 22.5 41.7



Abundance Ion 50.05 (49.75 to 50.75): VU031958.D (-64) (-)

Ion 52.05 (51.75 to 52.75): VU031958.D (-64) (-)

1.32

250000

200000

150000

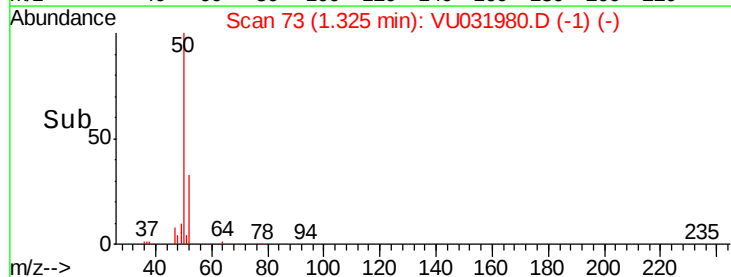
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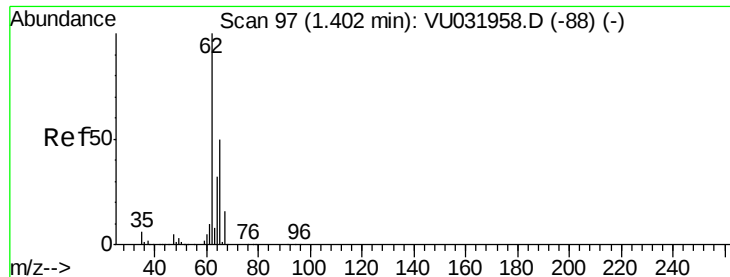
50000

0

1.25 1.30 1.35

Time-->





#5

Vinyl chloride

Concen: 4.239 ug/L

RT: 1.40 min Scan# 97

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

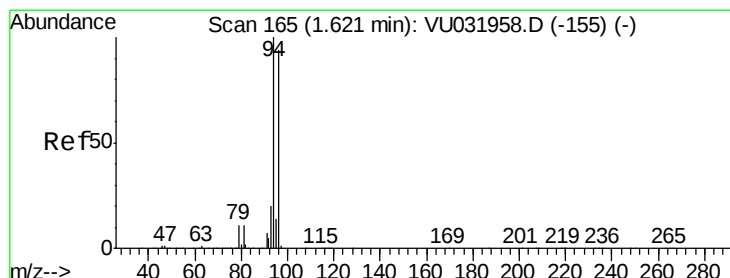
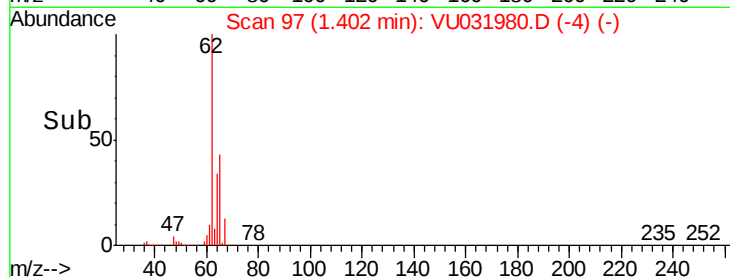
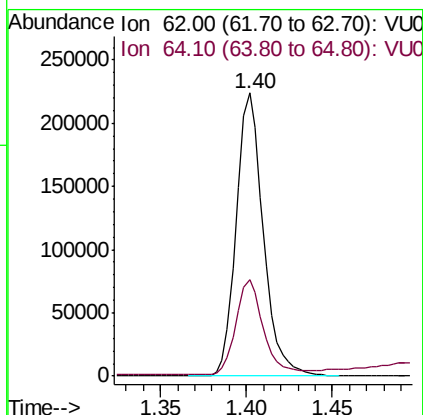
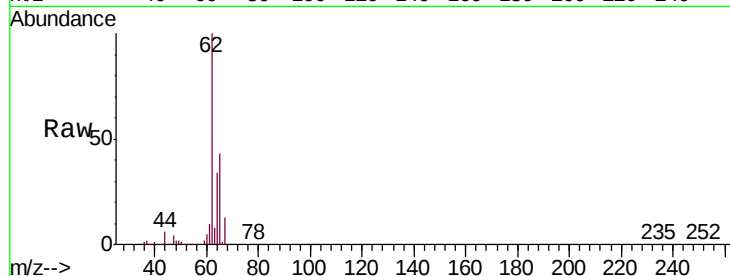
VSTD00530

Tgt Ion: 62 Resp: 244583

Ion Ratio Lower Upper

62 100

64 34.0 22.5 41.9



#6

Bromomethane

Concen: 4.298 ug/L

RT: 1.62 min Scan# 166

Delta R.T. 0.00 min

Lab File: VU031980.D

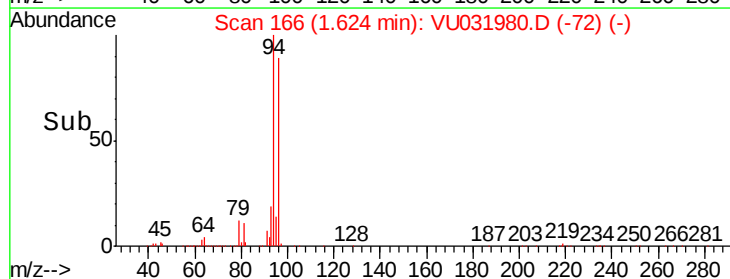
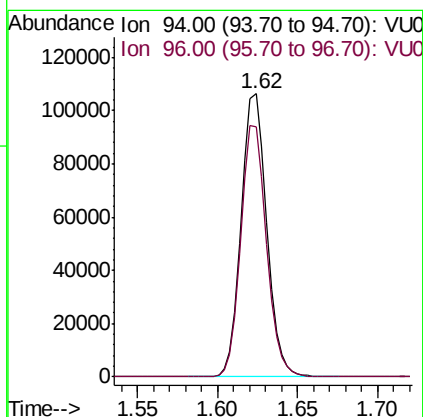
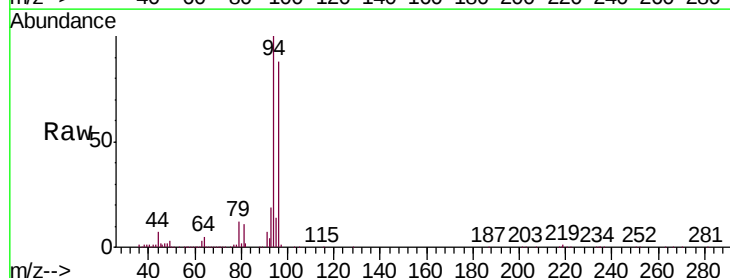
Acq: 13 May 2019 19:55

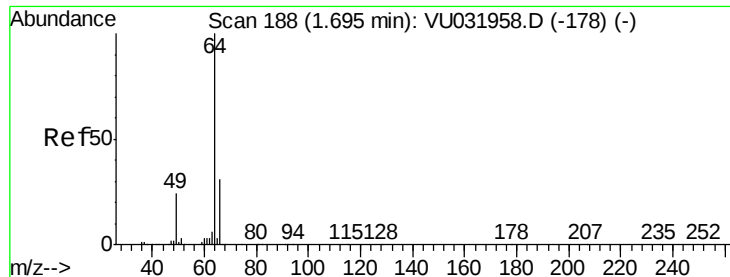
Tgt Ion: 94 Resp: 113847

Ion Ratio Lower Upper

94 100

96 88.5 66.1 122.8

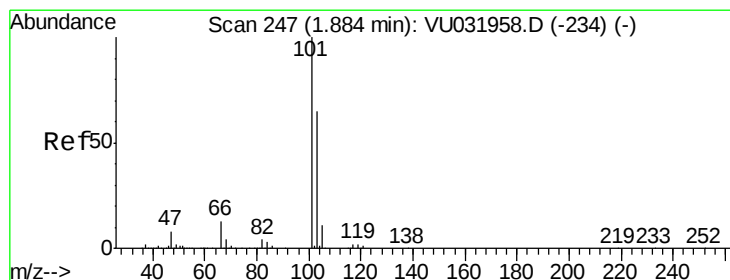
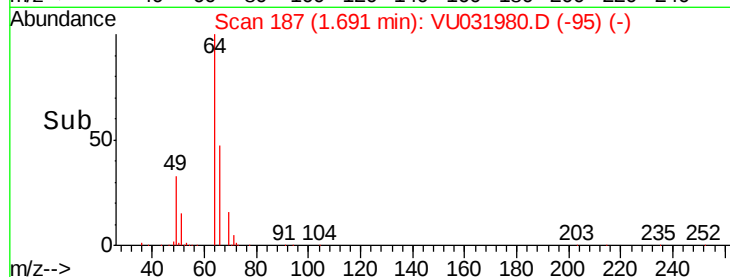
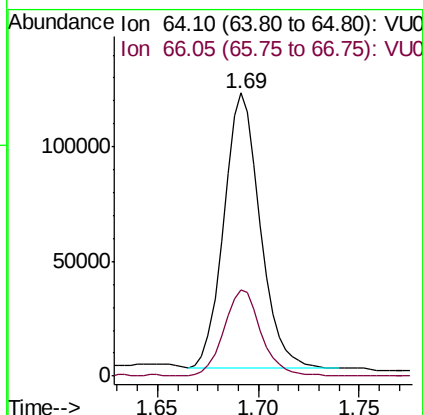
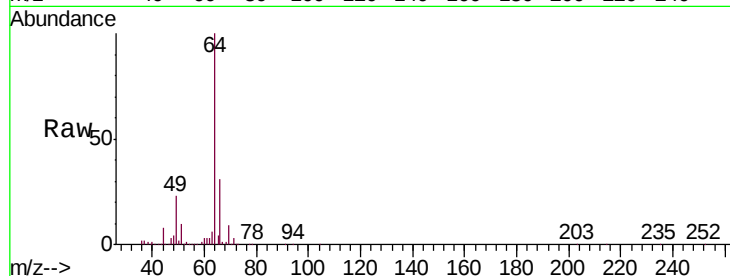




#8  
Chloroethane  
Concen: 4.750 ug/L  
RT: 1.69 min Scan# 187  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

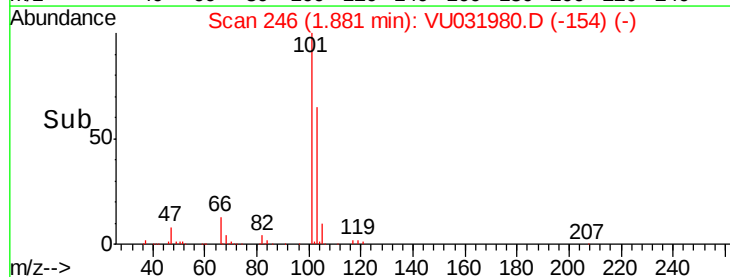
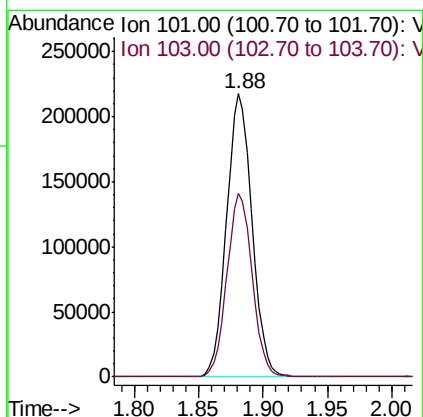
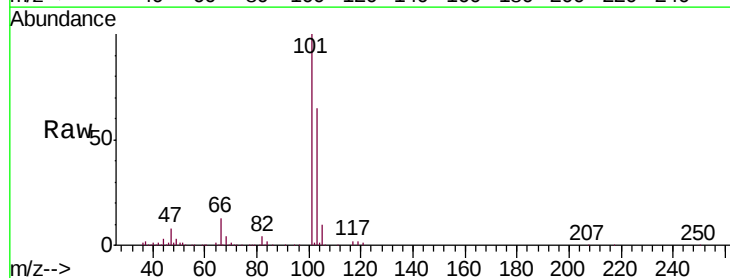
Instrument :  
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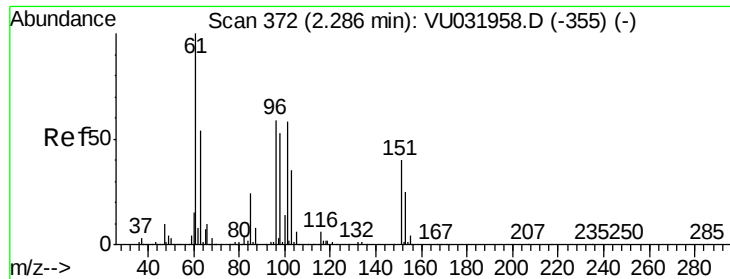
Tgt Ion: 64 Resp: 150949  
Ion Ratio Lower Upper  
64 100  
66 30.6 21.9 40.7



#9  
Trichlorofluoromethane  
Concen: 4.464 ug/L  
RT: 1.88 min Scan# 246  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

Tgt Ion: 101 Resp: 297915  
Ion Ratio Lower Upper  
101 100  
103 64.3 52.1 78.1





#10

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

Concen: 5.325 ug/L

RT: 2.28 min Scan# 371

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

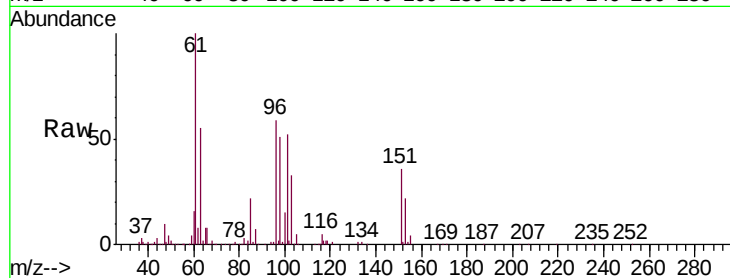
Tgt Ion: 101 Resp: 184936

Ion Ratio Lower Upper

101 100

85 43.2 40.0 60.0

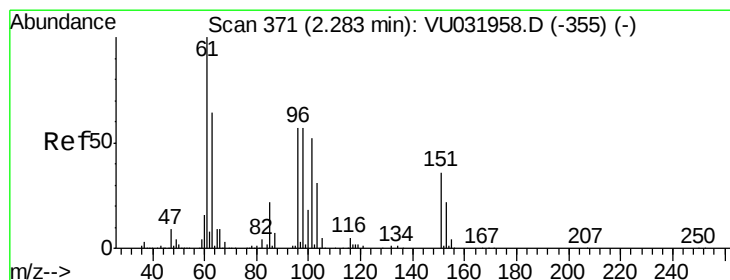
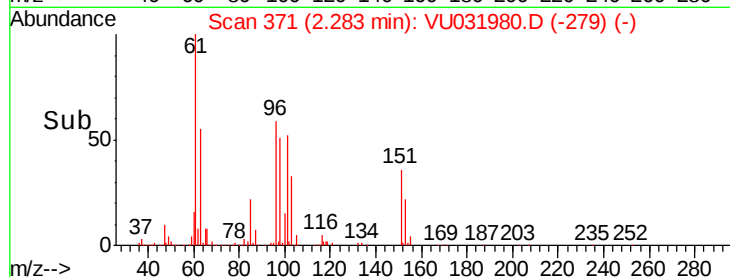
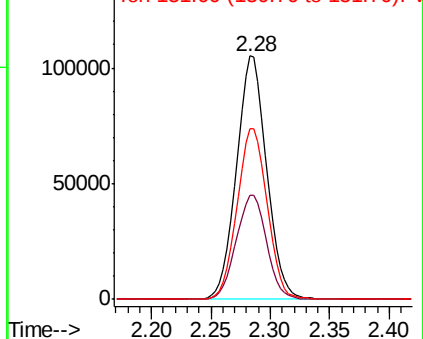
151 70.0 54.6 82.0



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: 5.536 ug/L

RT: 2.28 min Scan# 370

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

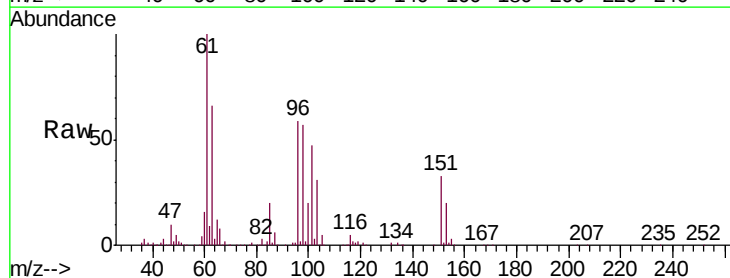
Tgt Ion: 96 Resp: 181066

Ion Ratio Lower Upper

96 100

61 170.4 149.0 276.6

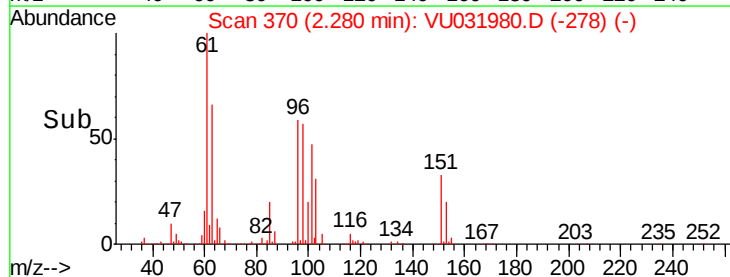
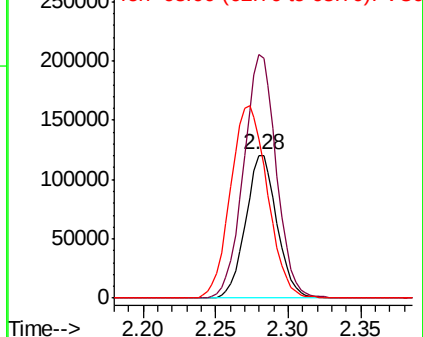
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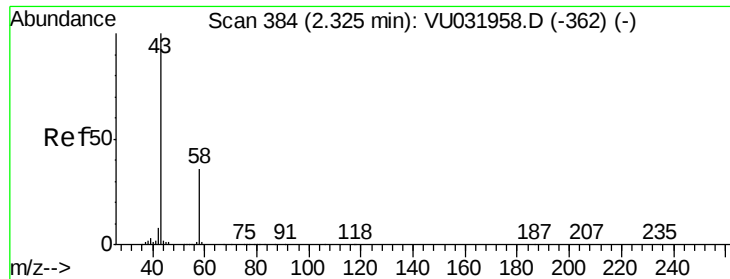


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 39.052 ug/L

RT: 2.33 min Scan# 385

Delta R.T. 0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

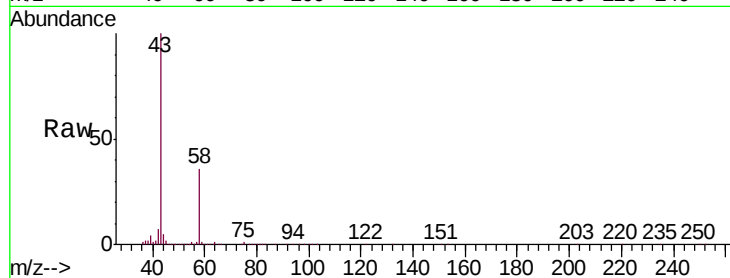
VSTD00530

Tgt Ion: 43 Resp: 341478

Ion Ratio Lower Upper

43 100

58 36.2 0.0 53.6



Abundance Ion 43.05 (42.75 to 43.75): VU031958.D (-362) (-)

Ion 58.05 (57.75 to 58.75): VU031958.D (-362) (-)

2.33

200000

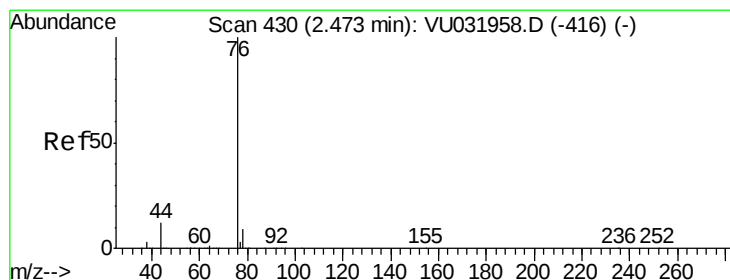
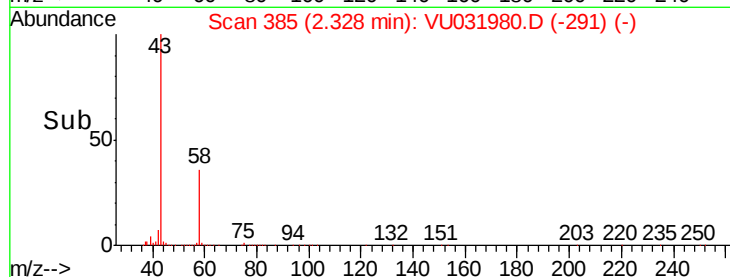
150000

100000

50000

0

Time-->



#14

Carbon disulfide

Concen: 4.628 ug/L

RT: 2.47 min Scan# 430

Delta R.T. -0.00 min

Lab File: VU031980.D

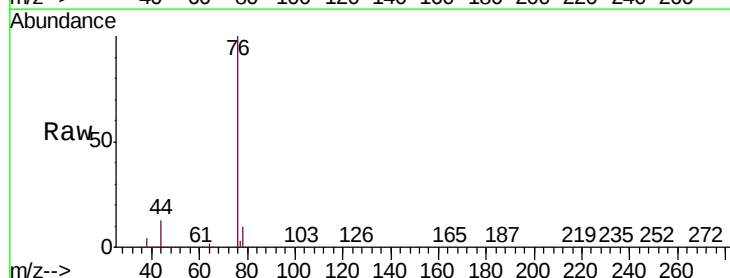
Acq: 13 May 2019 19:55

Tgt Ion: 76 Resp: 532813

Ion Ratio Lower Upper

76 100

78 9.5 7.5 11.3



Abundance Ion 76.05 (75.75 to 76.75): VU031958.D (-416) (-)

Ion 78.00 (77.70 to 78.70): VU031958.D (-416) (-)

2.47

400000

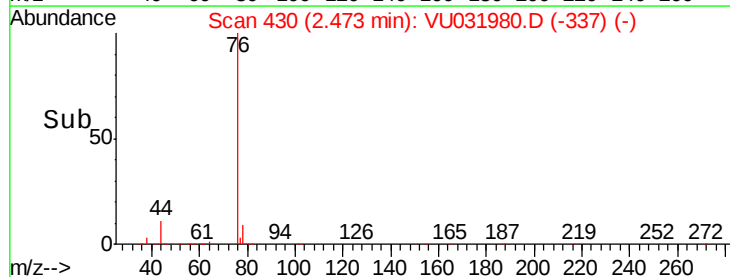
300000

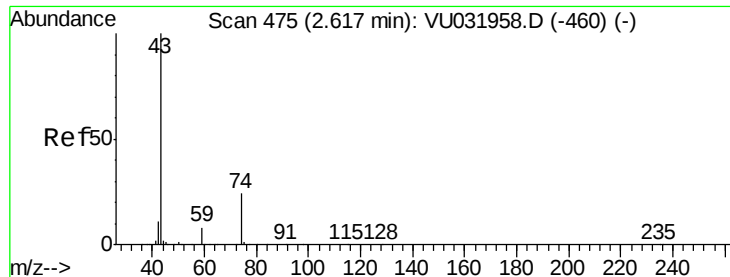
200000

100000

0

Time-->





#15

Methyl Acetate

Concen: 4.290 ug/L

RT: 2.62 min Scan# 475

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

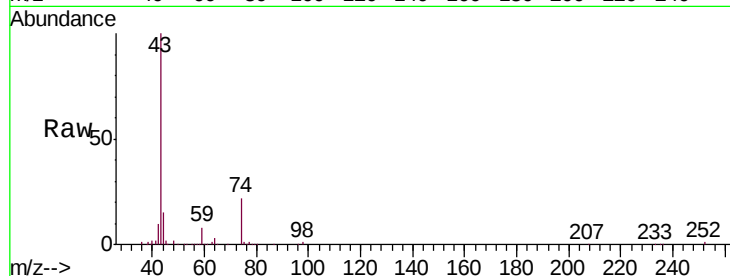
VSTD00530

Tgt Ion: 43 Resp: 96771

Ion Ratio Lower Upper

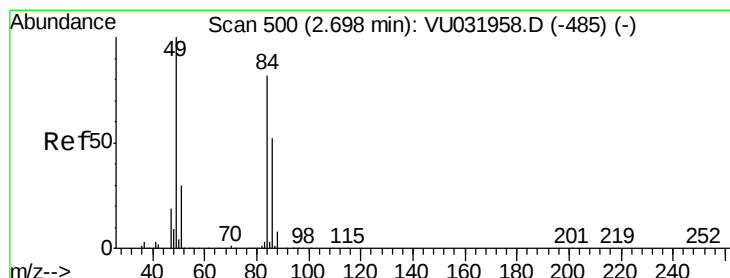
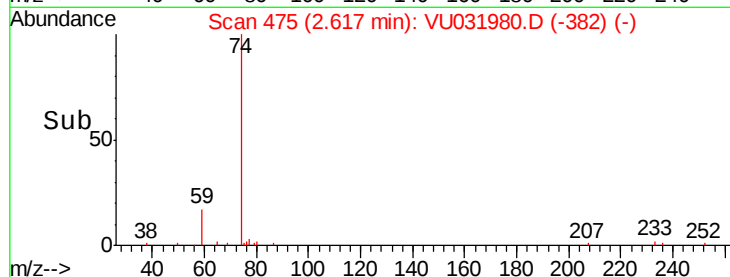
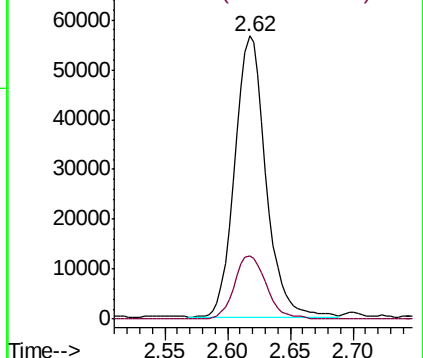
43 100

74 23.4 14.7 22.1#



Abundance Ion 43.05 (42.75 to 43.75): VU031980.D (-460) (-)

Ion 74.05 (73.75 to 74.75): VU031980.D (-460) (-)



#16

Methylene chloride

Concen: 4.745 ug/L

RT: 2.69 min Scan# 499

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

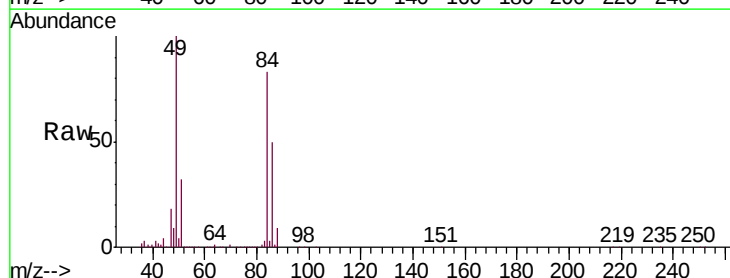
Tgt Ion: 84 Resp: 215325

Ion Ratio Lower Upper

84 100

86 60.5 45.6 84.8

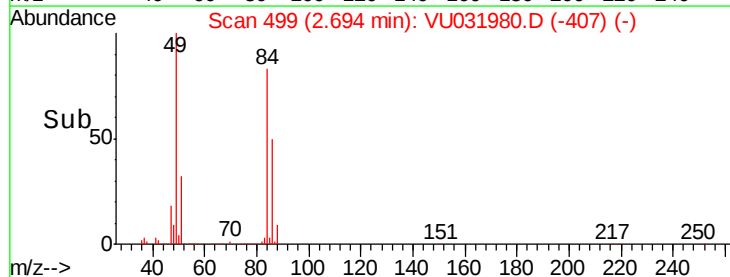
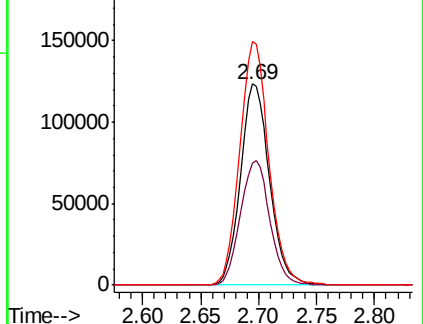
49 120.9 106.7 198.1

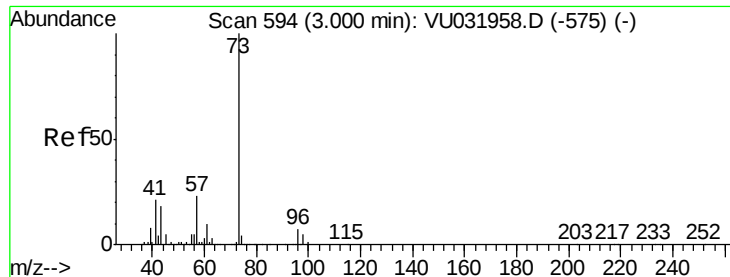


Abundance Ion 84.05 (83.75 to 84.75): VU031980.D (-407) (-)

Ion 86.00 (85.70 to 86.70): VU031980.D (-407) (-)

Ion 49.10 (48.80 to 49.80): VU031980.D (-407) (-)





#17

Methyl tert-butyl Ether

Concen: 5.230 ug/L

RT: 3.00 min Scan# 594

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

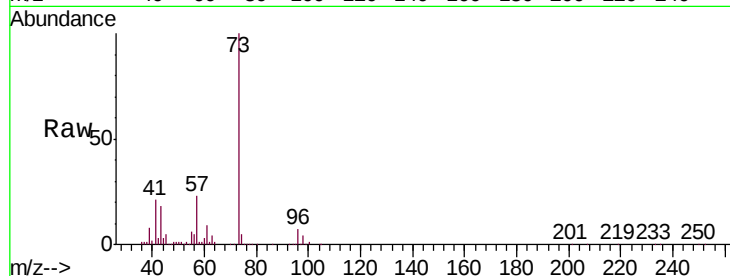
Tgt Ion: 73 Resp: 509551

Ion Ratio Lower Upper

73 100

43 17.9 20.5 30.7#

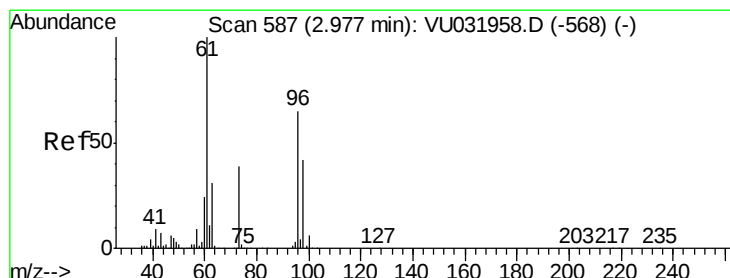
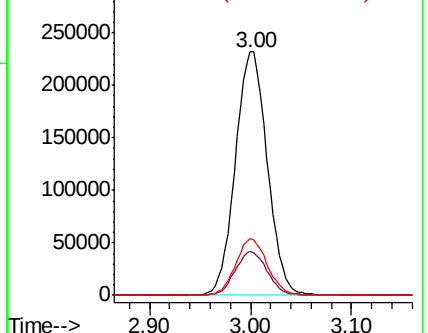
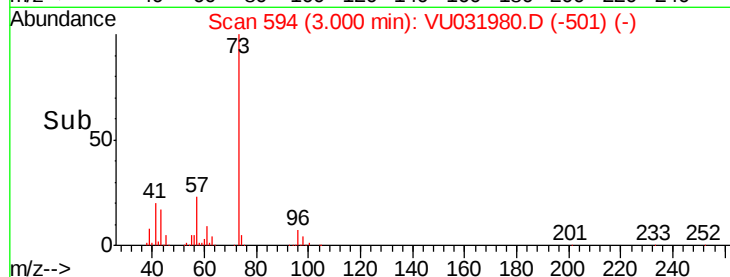
57 23.0 19.9 29.9



Abundance Ion 73.10 (72.80 to 73.80): VU031980.D (-501) (-)

Ion 43.05 (42.75 to 43.75): VU031980.D (-501) (-)

Ion 57.10 (56.80 to 57.80): VU031980.D (-501) (-)



#18

trans-1,2-Dichloroethene

Concen: 5.537 ug/L

RT: 2.97 min Scan# 586

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

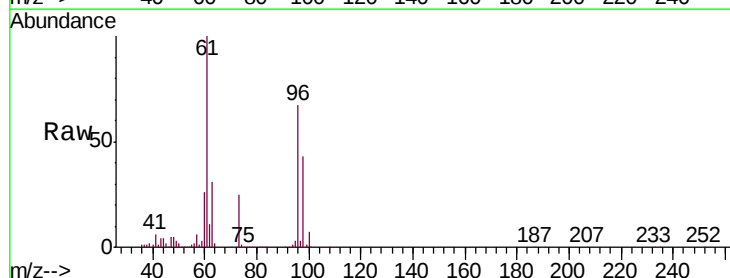
Tgt Ion: 96 Resp: 195190

Ion Ratio Lower Upper

96 100

61 149.0 130.9 243.1

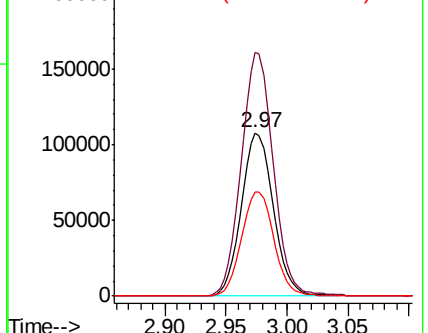
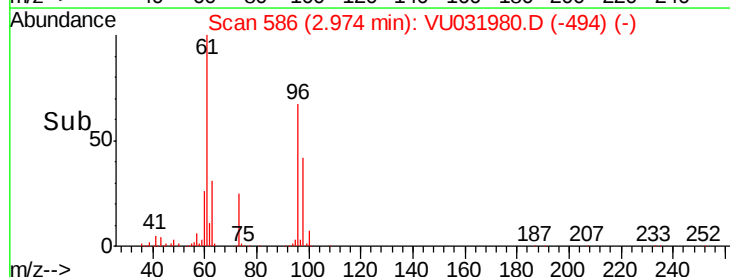
98 63.4 46.2 85.8

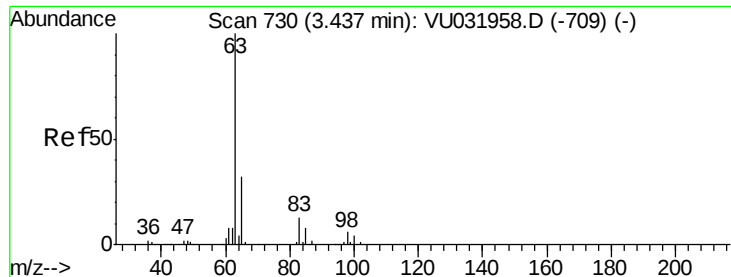


Abundance Ion 96.00 (95.70 to 96.70): VU031980.D (-494) (-)

Ion 61.05 (60.75 to 61.75): VU031980.D (-494) (-)

Ion 97.95 (97.65 to 98.65): VU031980.D (-494) (-)

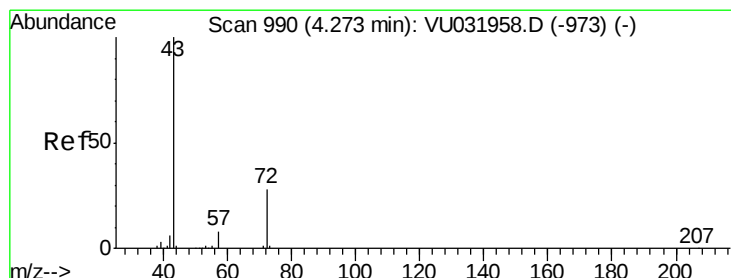
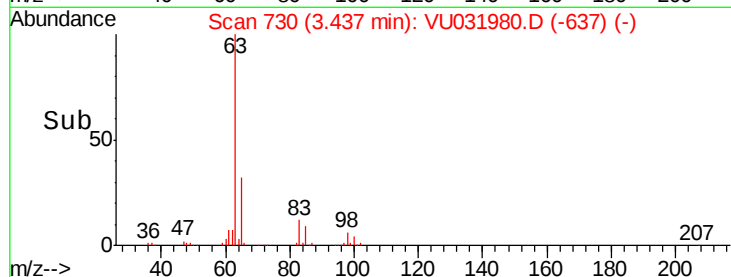
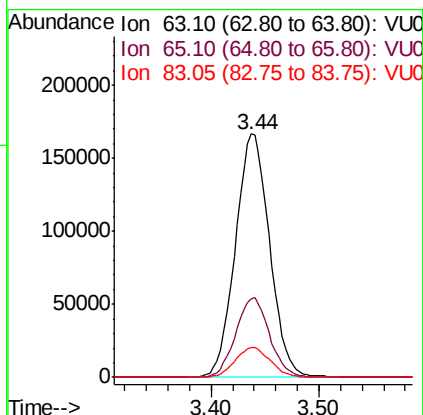
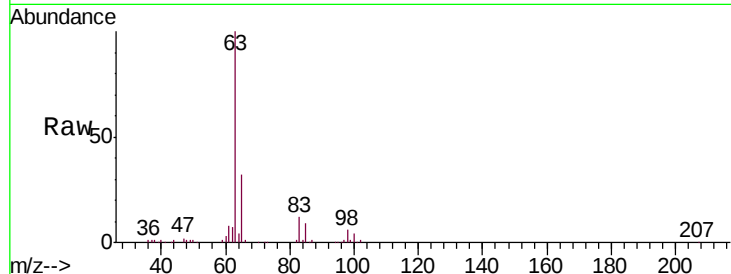




#19  
 1,1-Dichloroethane  
 Concen: 4.242 ug/L  
 RT: 3.44 min Scan# 730  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

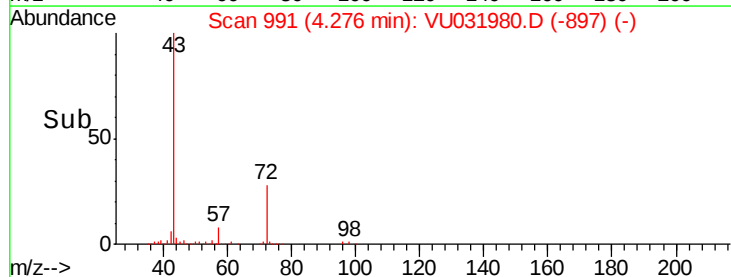
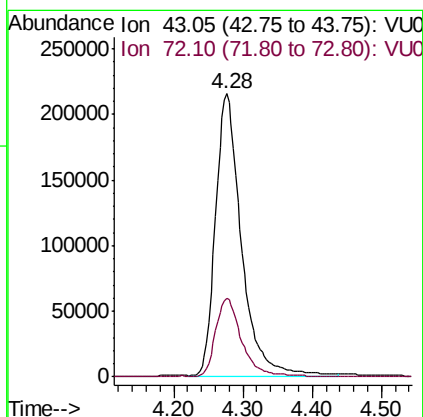
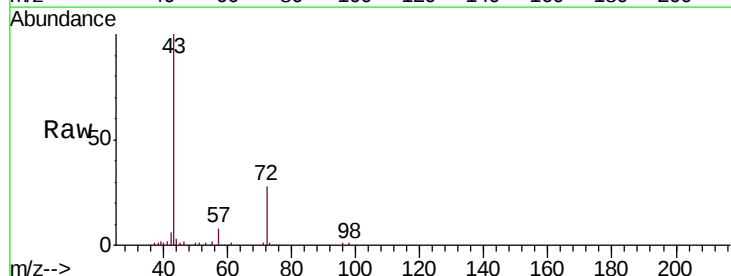
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

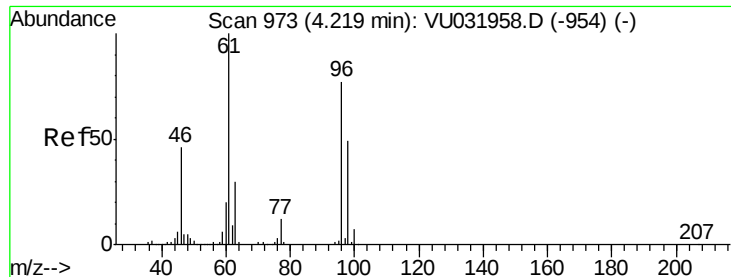
Tgt Ion: 63 Resp: 367786  
 Ion Ratio Lower Upper  
 63 100  
 65 32.3 21.8 40.4  
 83 12.0 7.9 14.7



#21  
 2-Butanone  
 Concen: 38.172 ug/L  
 RT: 4.28 min Scan# 991  
 Delta R.T. 0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Tgt Ion: 43 Resp: 557776  
 Ion Ratio Lower Upper  
 43 100  
 72 26.8 10.4 31.1



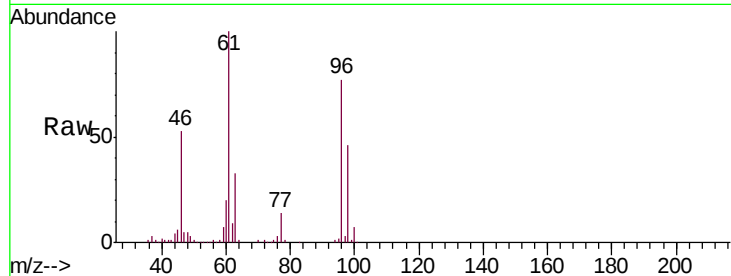


#22

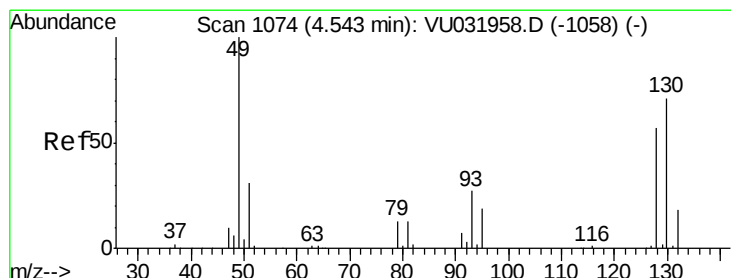
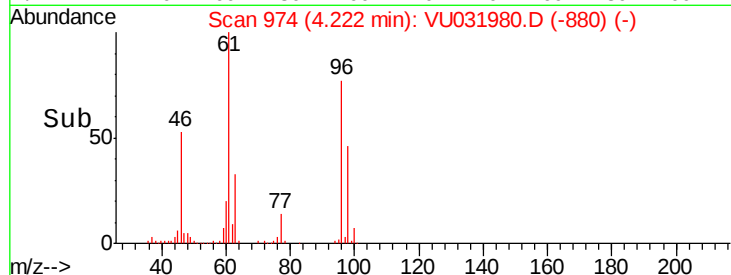
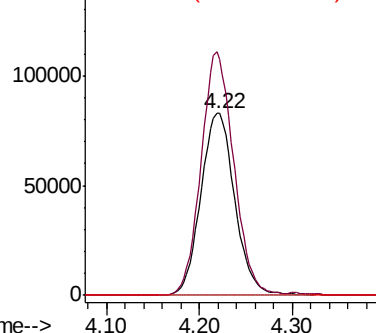
cis-1,2-Dichloroethene  
 Concen: 4.965 ug/L  
 RT: 4.22 min Scan# 974  
 Delta R.T. 0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

Tgt Ion: 96 Resp: 210223  
 Ion Ratio Lower Upper  
 96 100  
 61 129.9 113.3 210.5  
 68 0.0 0.0 0.0



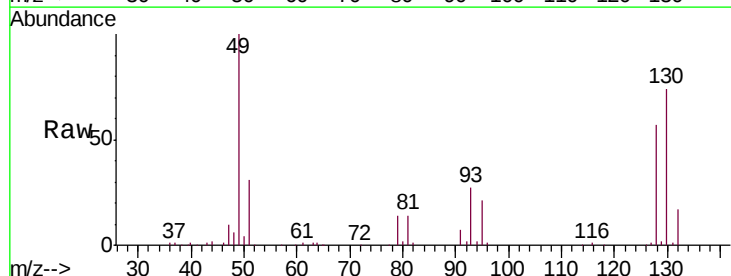
Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 68.15 (67.85 to 68.85): VU0



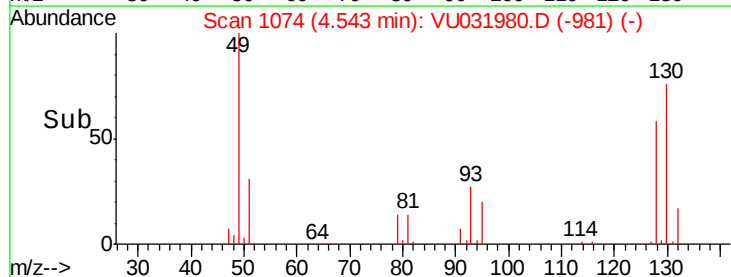
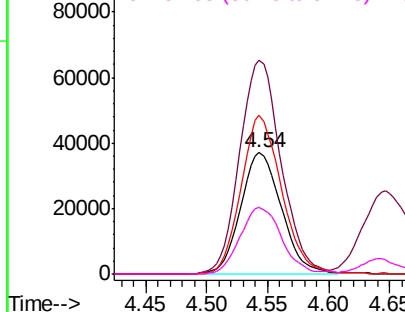
#23

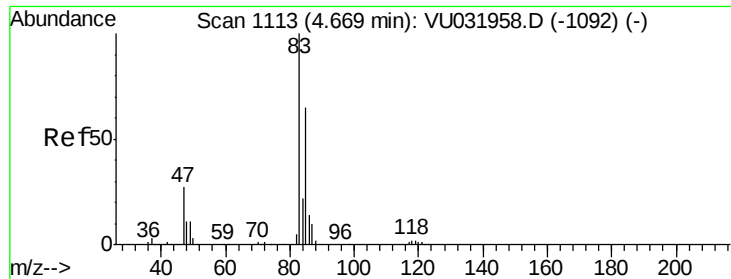
Bromochloromethane  
 Concen: 5.041 ug/L  
 RT: 4.54 min Scan# 1074  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Tgt Ion: 128 Resp: 85643  
 Ion Ratio Lower Upper  
 128 100  
 49 176.3 168.8 313.4  
 130 130.6 93.0 172.8  
 51 55.0 61.3 91.9#



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

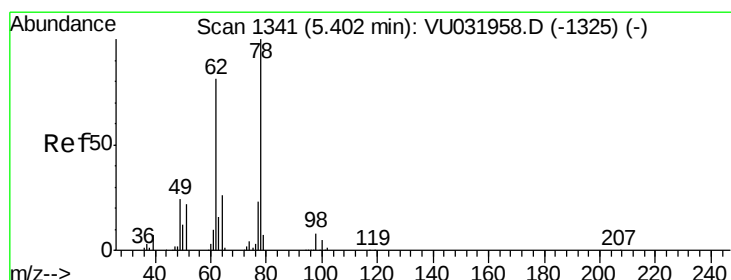
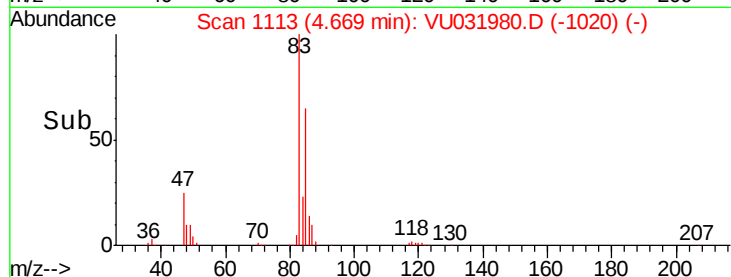
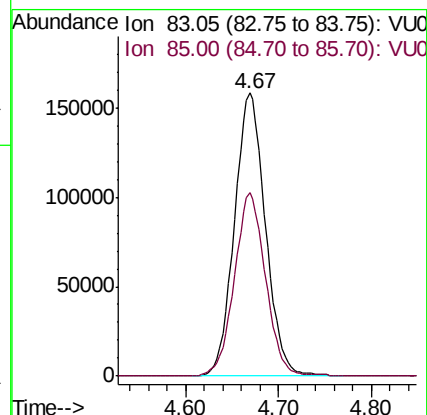
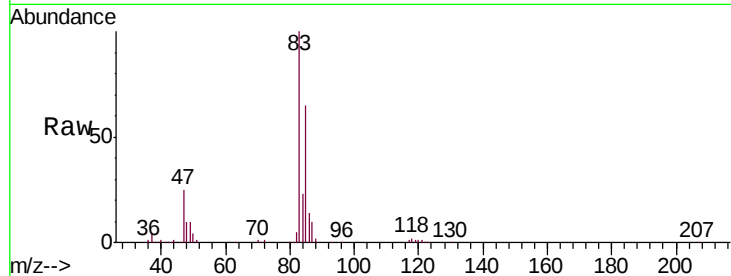




#25  
Chloroform  
Concen: 4.297 ug/L  
RT: 4.67 min Scan# 1113  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

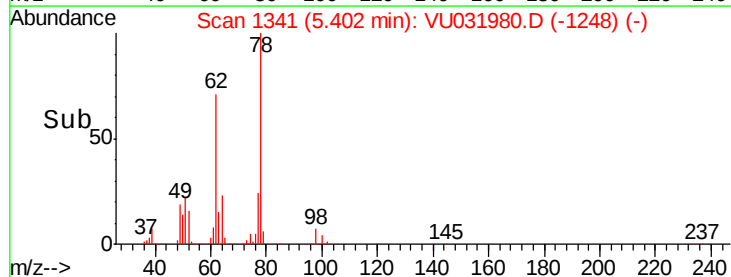
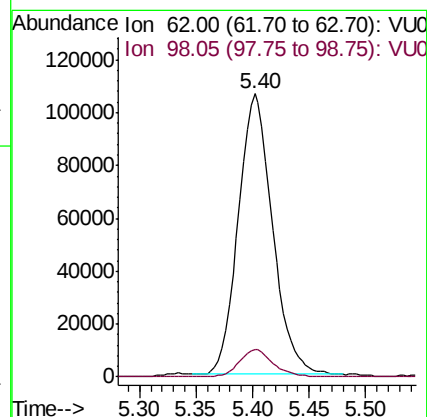
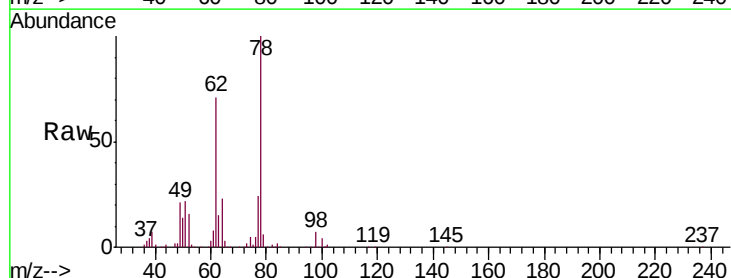
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00530

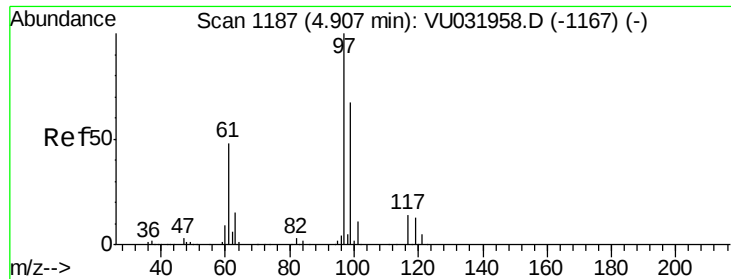
Tgt Ion: 83 Resp: 366641  
Ion Ratio Lower Upper  
83 100  
85 64.7 44.4 82.5



#27  
1,2-Dichloroethane  
Concen: 3.974 ug/L  
RT: 5.40 min Scan# 1341  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

Tgt Ion: 62 Resp: 223801  
Ion Ratio Lower Upper  
62 100  
98 9.7 5.4 8.2#

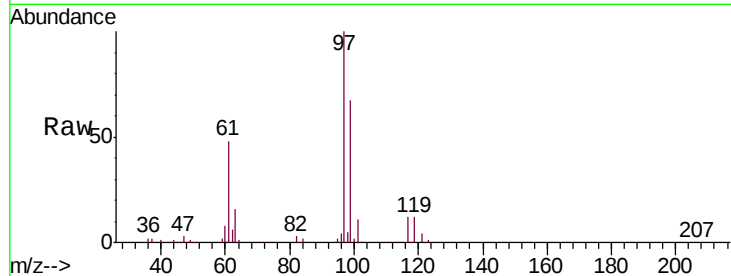




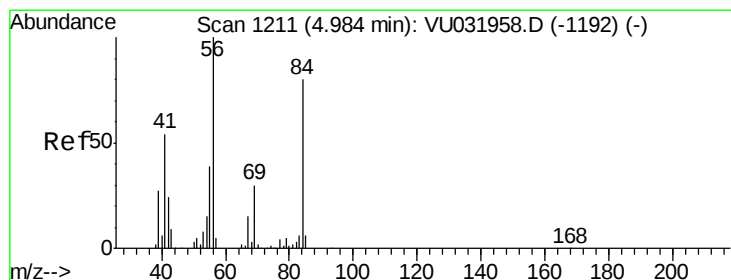
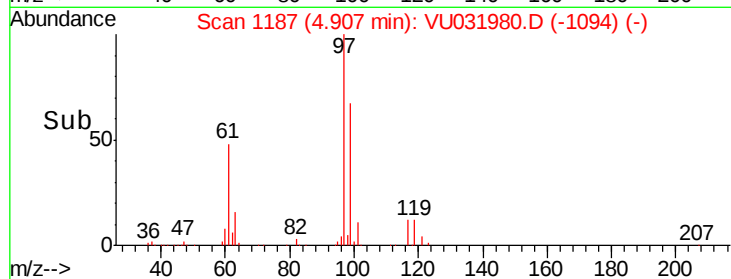
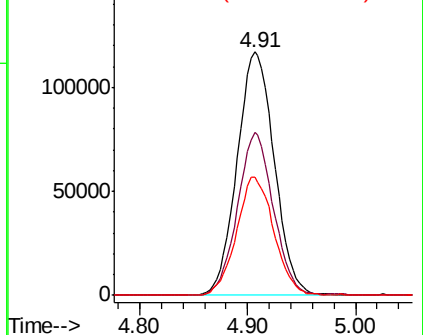
#29  
 1,1,1-Trichloroethane  
 Concen: 4.315 ug/L  
 RT: 4.91 min Scan# 1187  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

Tgt Ion: 97 Resp: 282053  
 Ion Ratio Lower Upper  
 97 100  
 99 64.2 50.6 75.8  
 61 48.6 42.2 63.2

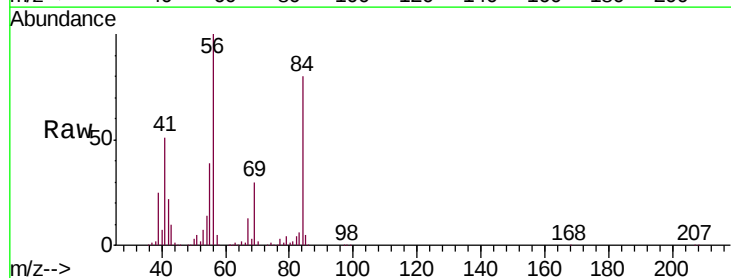


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 61.05 (60.75 to 61.75): VU0

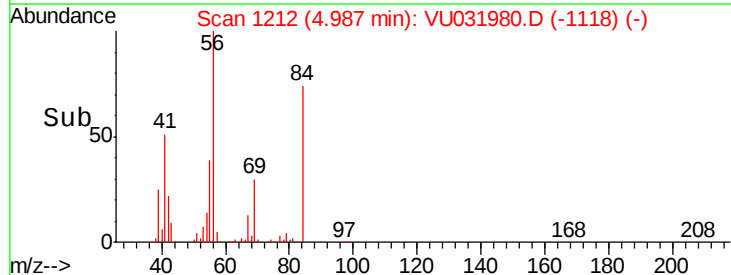
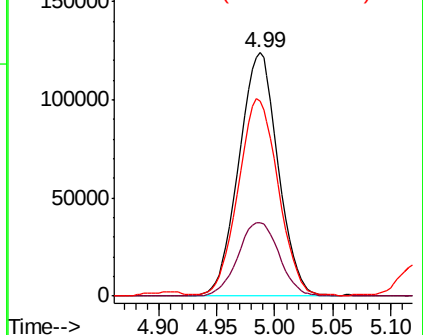


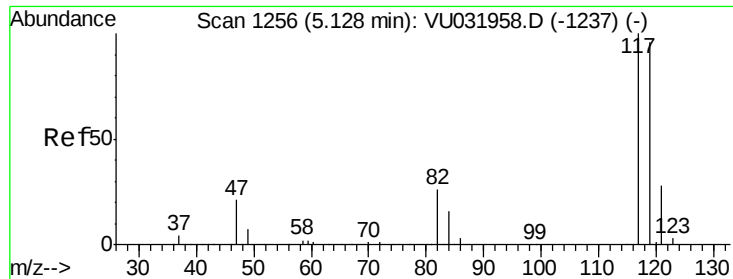
#30  
 Cyclohexane  
 Concen: 4.080 ug/L  
 RT: 4.99 min Scan# 1212  
 Delta R.T. 0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Tgt Ion: 56 Resp: 292069  
 Ion Ratio Lower Upper  
 56 100  
 69 31.8 21.8 32.8  
 84 82.4 56.8 85.2



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: 4.298 ug/L

RT: 5.13 min Scan# 1255

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

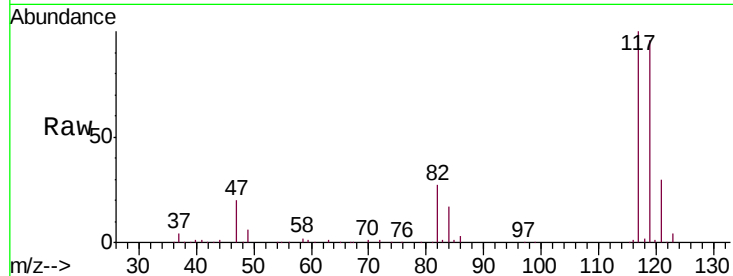
VSTD00530

Tgt Ion:117 Resp: 239227

Ion Ratio Lower Upper

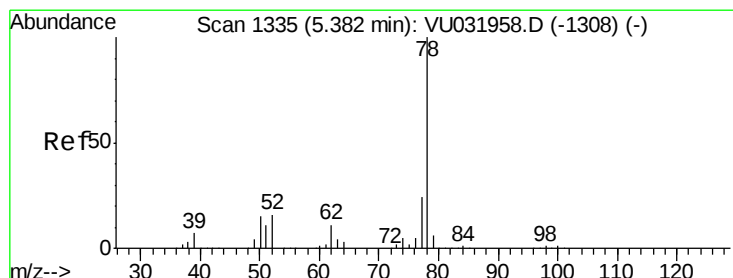
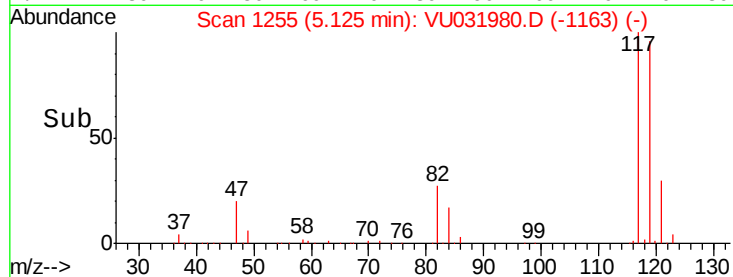
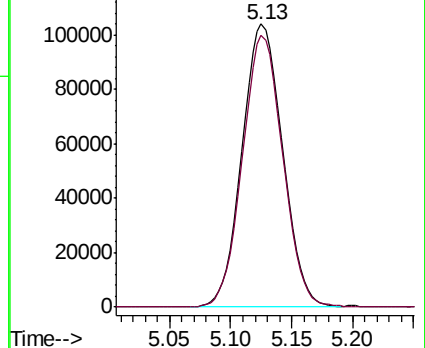
117 100

119 95.4 76.4 114.6



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 4.735 ug/L

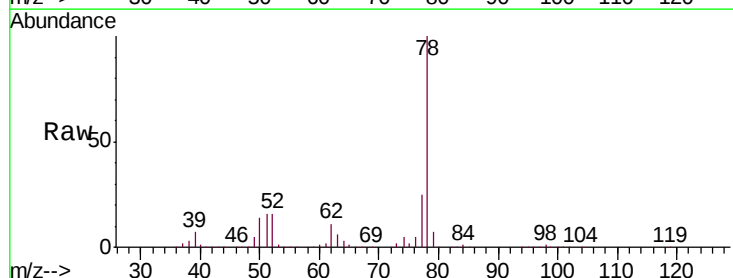
RT: 5.38 min Scan# 1335

Delta R.T. -0.00 min

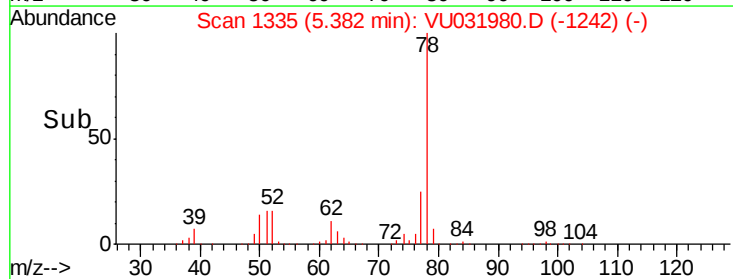
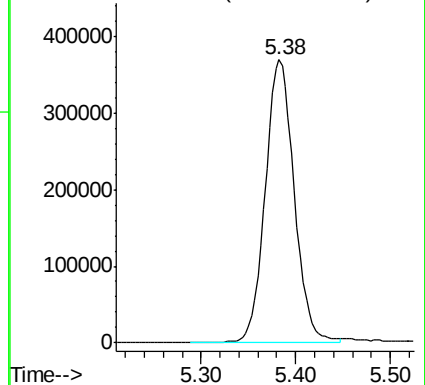
Lab File: VU031980.D

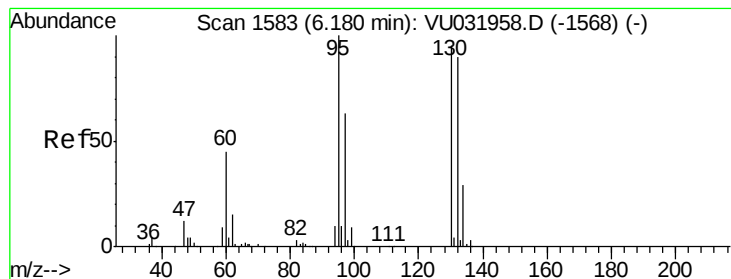
Acq: 13 May 2019 19:55

Tgt Ion: 78 Resp: 787370



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 4.731 ug/L

RT: 6.18 min Scan# 1583

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

Tgt Ion: 95 Resp: 198346

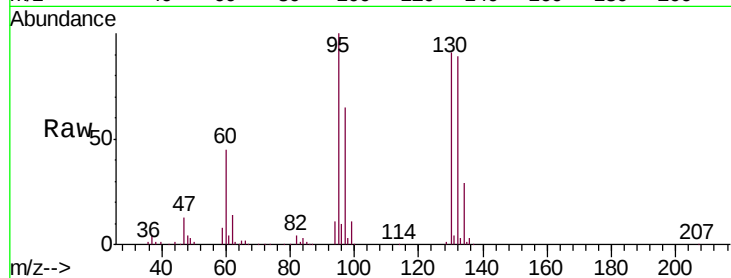
Ion Ratio Lower Upper

95 100

97 64.6 45.8 85.2

132 88.9 56.0 104.0

130 90.6 60.4 112.2

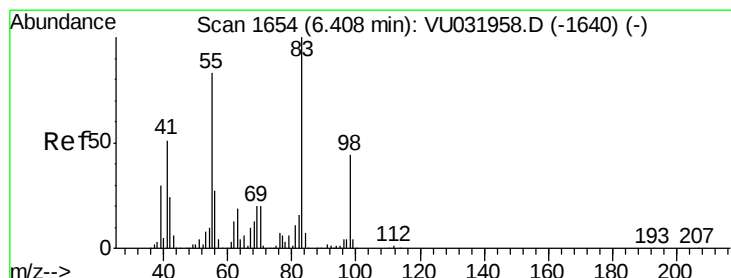
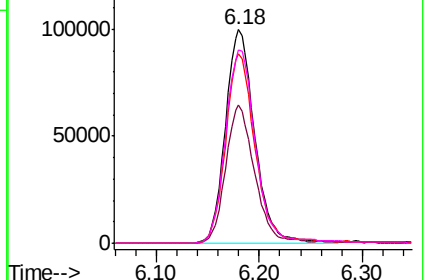
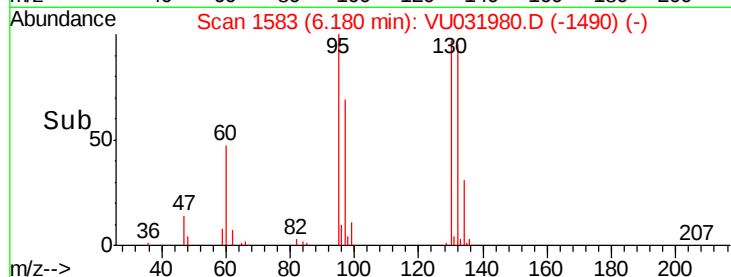


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 4.771 ug/L

RT: 6.41 min Scan# 1654

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

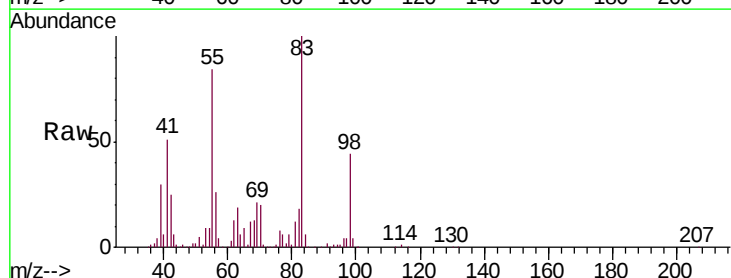
Tgt Ion: 83 Resp: 287344

Ion Ratio Lower Upper

83 100

55 83.2 79.2 118.8

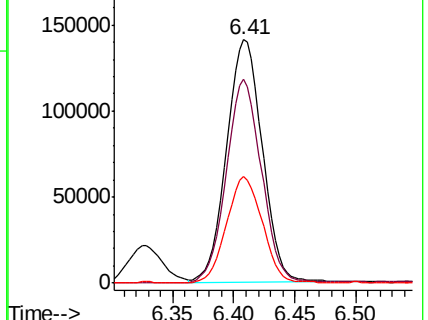
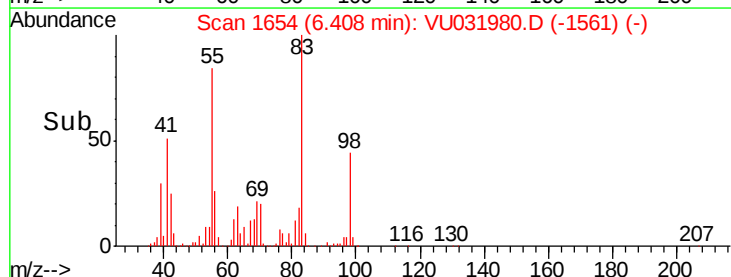
98 44.1 34.0 51.0

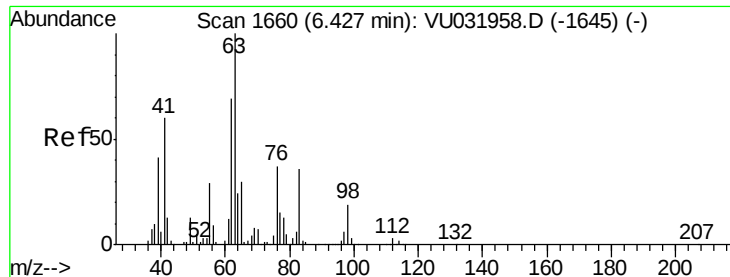


Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0





#37

1,2-Dichloropropane

Concen: 4.475 ug/L

RT: 6.43 min Scan# 1660

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

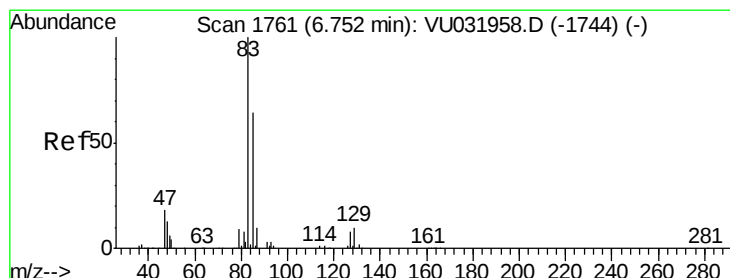
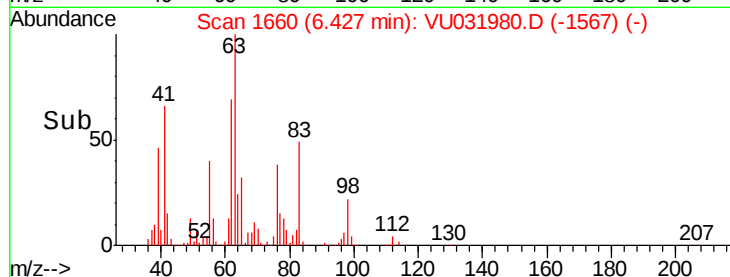
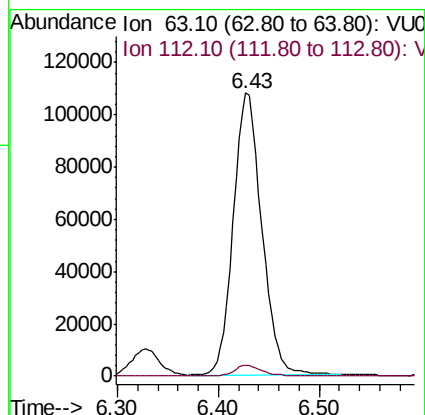
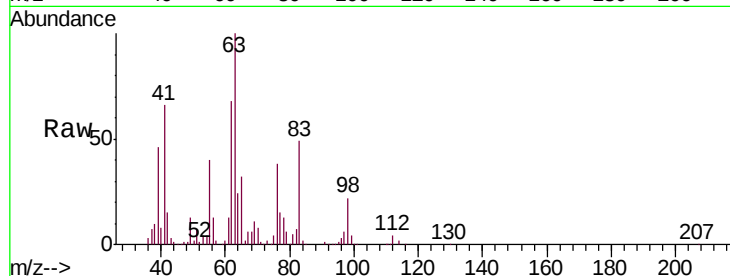
VSTD00530

Tgt Ion: 63 Resp: 212969

Ion Ratio Lower Upper

63 100

112 3.8 2.5 3.7#



#38

Bromodichloromethane

Concen: 4.429 ug/L

RT: 6.75 min Scan# 1761

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

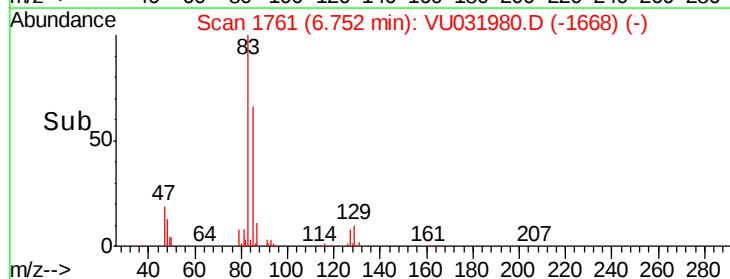
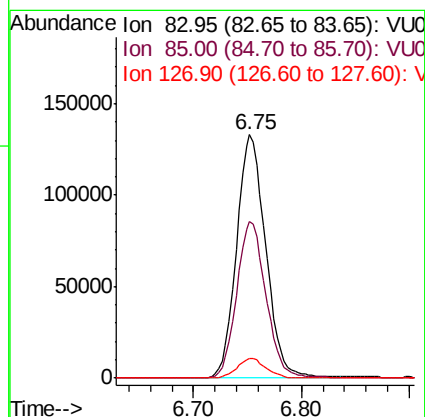
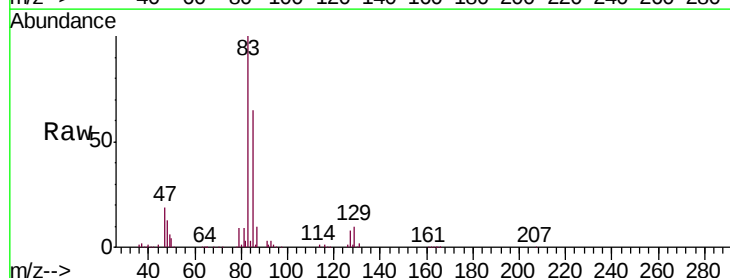
Tgt Ion: 83 Resp: 251065

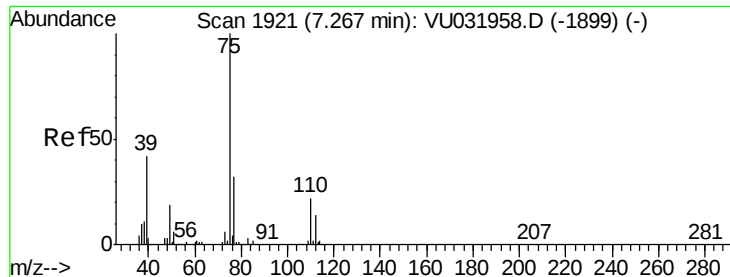
Ion Ratio Lower Upper

83 100

85 64.5 41.3 76.7

127 8.1 5.8 8.6

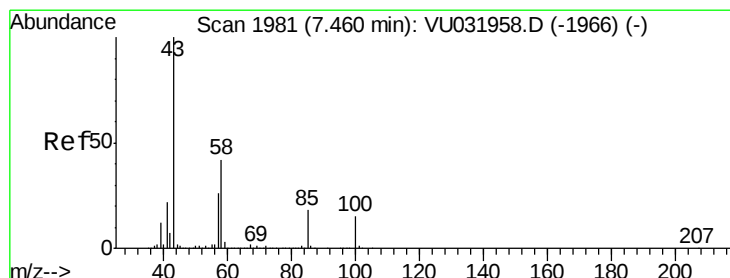
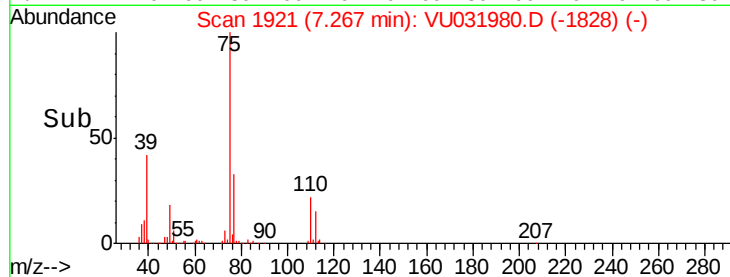
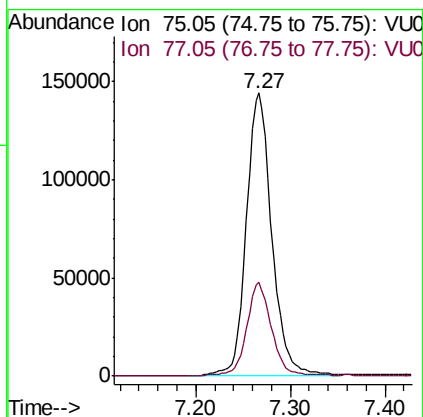
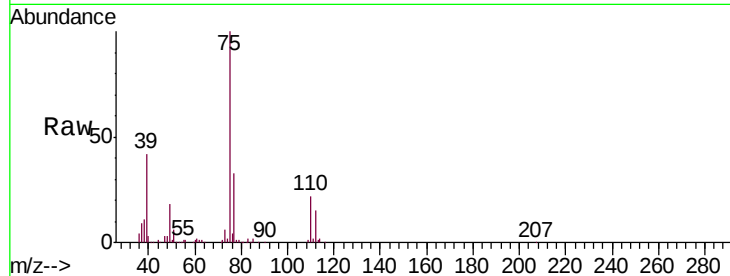




#39  
 cis-1,3-Dichloropropene  
 Concen: 4.553 ug/L  
 RT: 7.27 min Scan# 1921  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

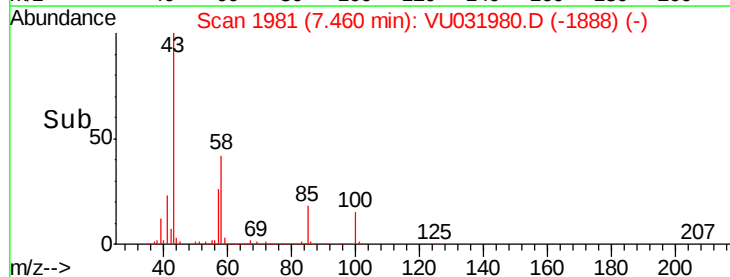
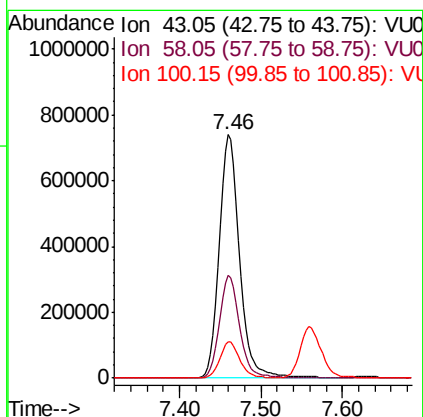
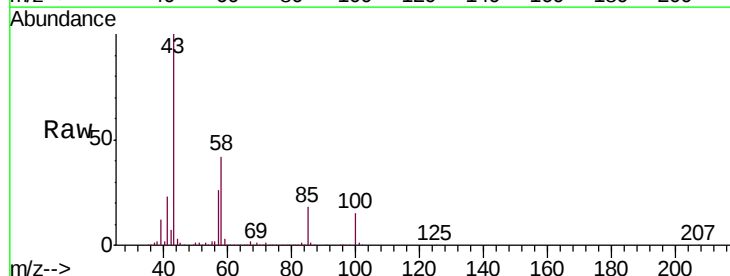
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

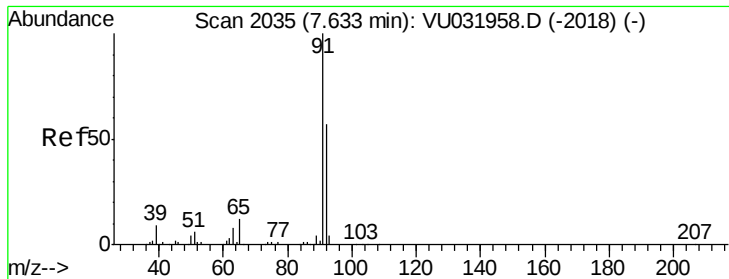
Tgt Ion: 75 Resp: 271509  
 Ion Ratio Lower Upper  
 75 100  
 77 33.0 22.3 41.5



#40  
 4-Methyl-2-pentanone  
 Concen: 41.056 ug/L  
 RT: 7.46 min Scan# 1981  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Tgt Ion: 43 Resp: 1314964  
 Ion Ratio Lower Upper  
 43 100  
 58 41.7 28.0 42.0  
 100 14.6 8.2 12.4#





#42

Toluene

Concen: 5.150 ug/L

RT: 7.63 min Scan# 2035

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

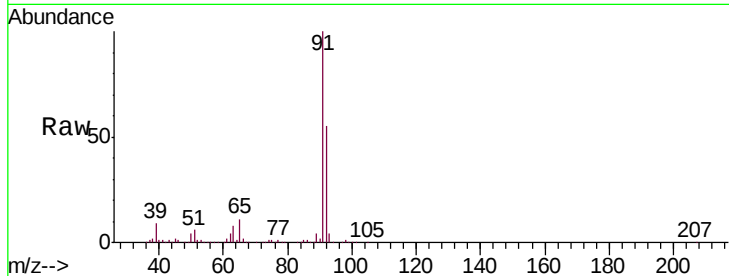
VSTD00530

Tgt Ion: 91 Resp: 845656

Ion Ratio Lower Upper

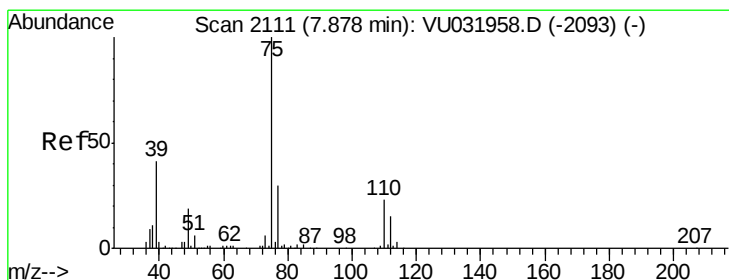
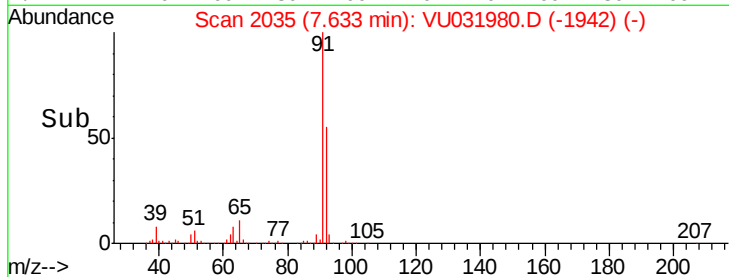
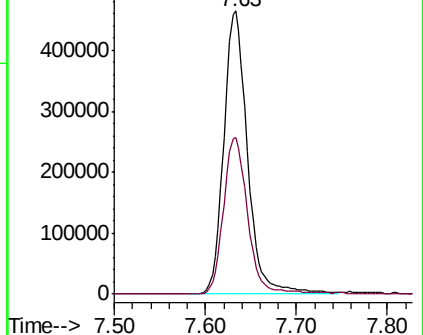
91 100

92 55.2 38.1 70.9



Abundance Ion 91.15 (90.85 to 91.85): VU031958.D (-2018) (-)

Ion 92.15 (91.85 to 92.85): VU031958.D (-2018) (-)



#44

trans-1,3-Dichloropropene

Concen: 4.663 ug/L

RT: 7.88 min Scan# 2111

Delta R.T. -0.00 min

Lab File: VU031980.D

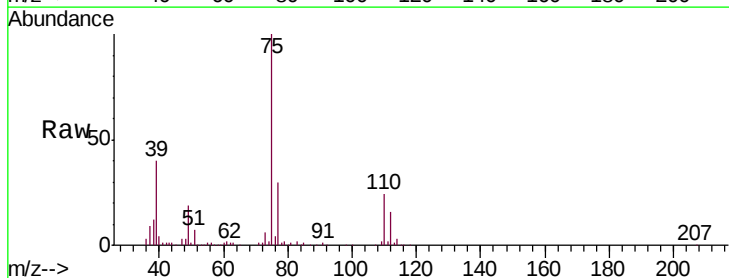
Acq: 13 May 2019 19:55

Tgt Ion: 75 Resp: 220236

Ion Ratio Lower Upper

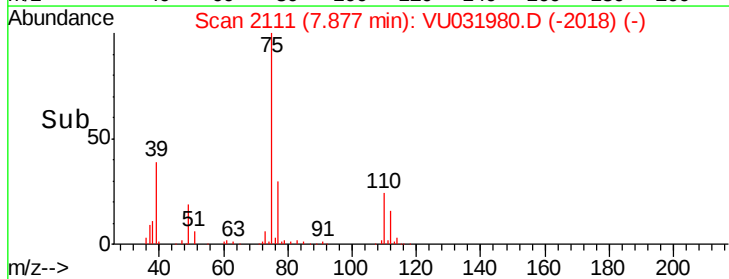
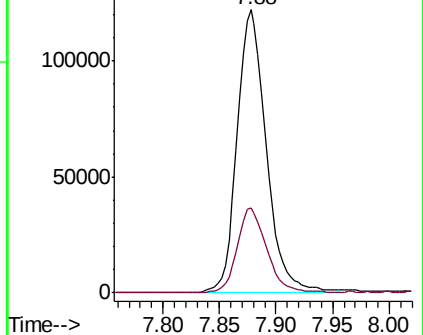
75 100

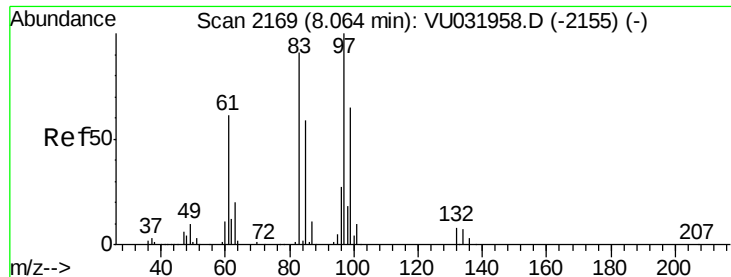
77 30.2 22.3 41.3



Abundance Ion 75.05 (74.75 to 75.75): VU031958.D (-2093) (-)

Ion 77.05 (76.75 to 77.75): VU031958.D (-2093) (-)

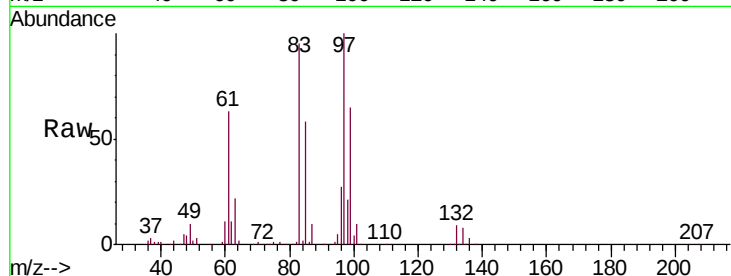




#45  
 1,1,2-Trichloroethane  
 Concen: 5.233 ug/L  
 RT: 8.06 min Scan# 2169  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 147552 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 65.1  | 45.8  | 85.0   |
| 83       | 95.2  | 64.5  | 119.7  |
| 85       | 57.6  | 41.6  | 77.3   |



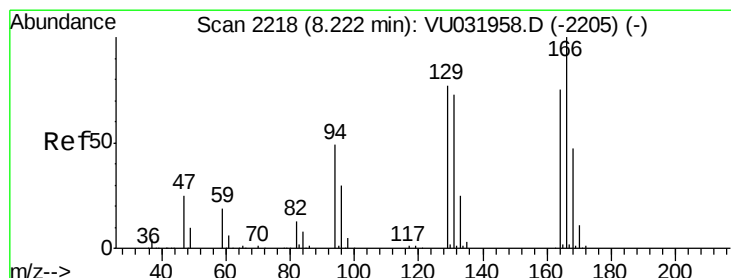
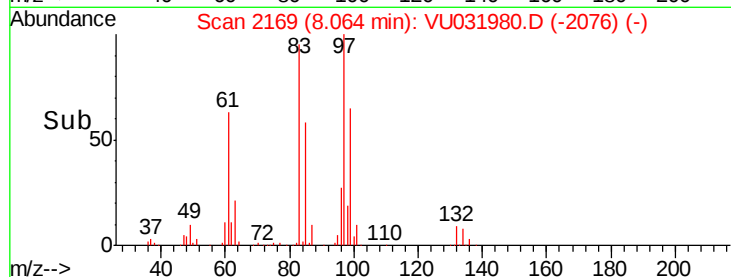
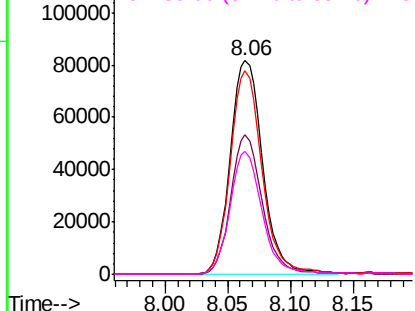
Abundance

Ion 96.95 (96.65 to 97.65): VU0

Ion 99.05 (98.75 to 99.75): VU0

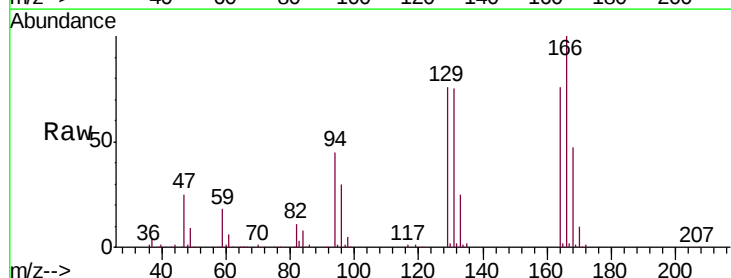
Ion 82.95 (82.65 to 83.65): VU0

Ion 85.00 (84.70 to 85.70): VU0



#47  
 Tetrachloroethene  
 Concen: 5.028 ug/L  
 RT: 8.22 min Scan# 2218  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 137090 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 100.6 | 70.3  | 130.5  |
| 131      | 99.4  | 65.4  | 121.4  |
| 166      | 132.1 | 86.0  | 159.8  |



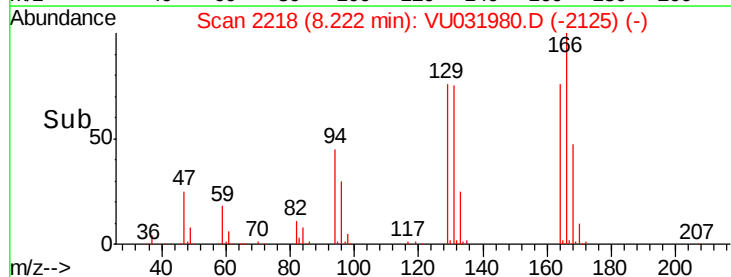
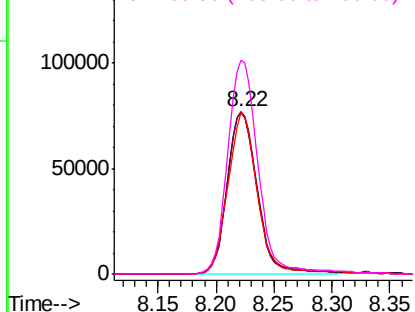
Abundance

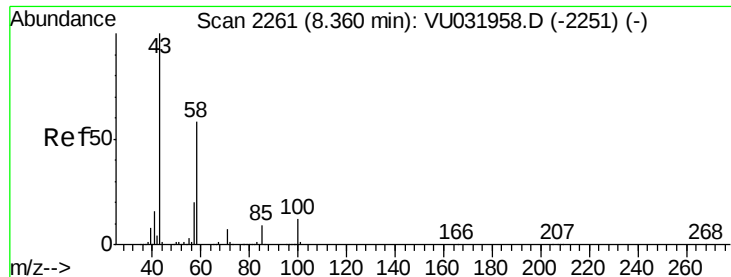
Ion 163.90 (163.60 to 164.60): V

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

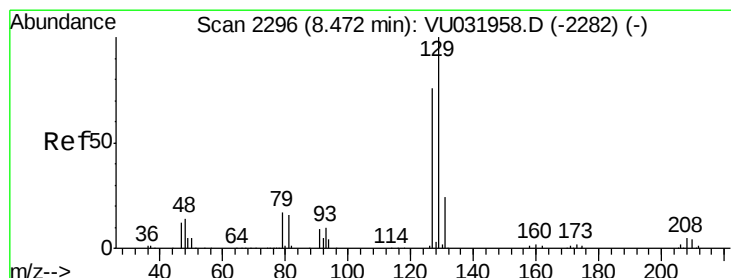
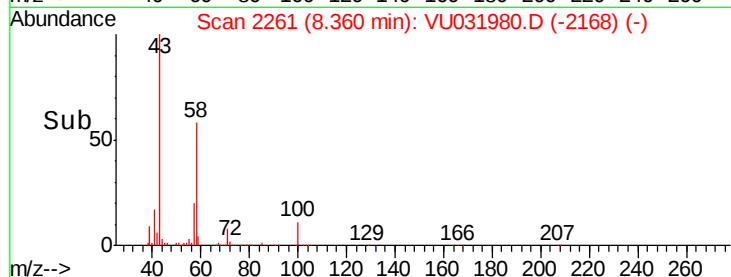
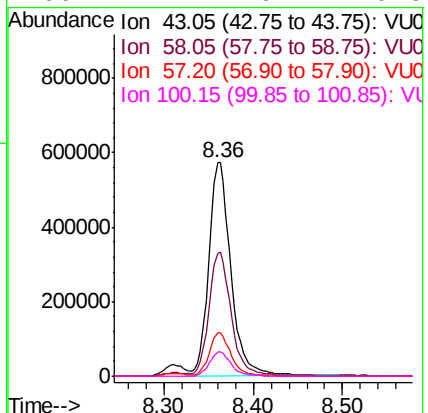
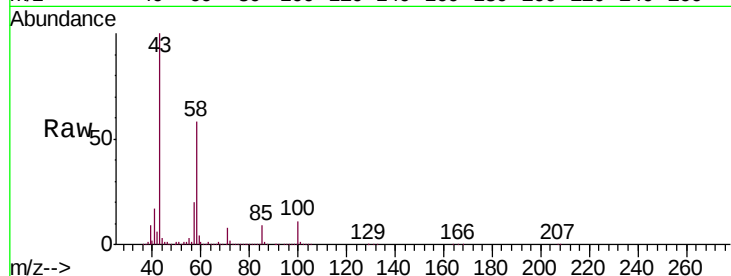




#48  
2-Hexanone  
Concen: 43.239 ug/L  
RT: 8.36 min Scan# 2261  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

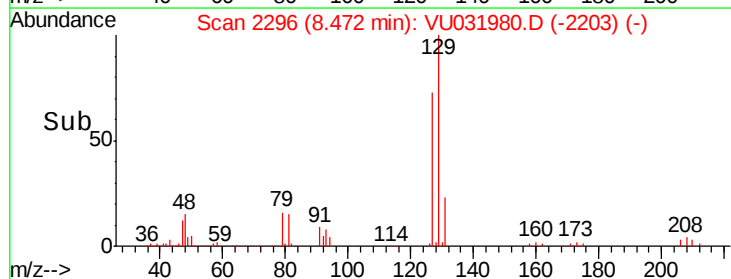
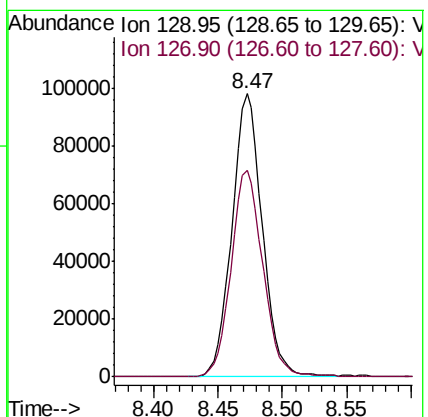
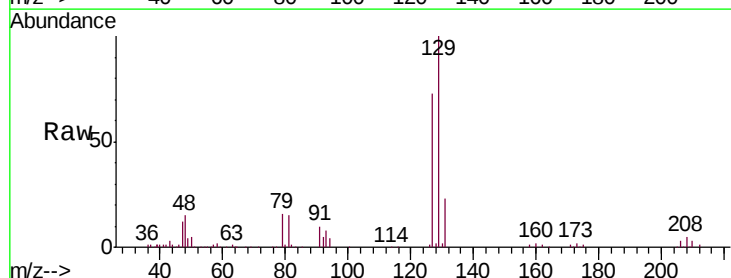
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00530

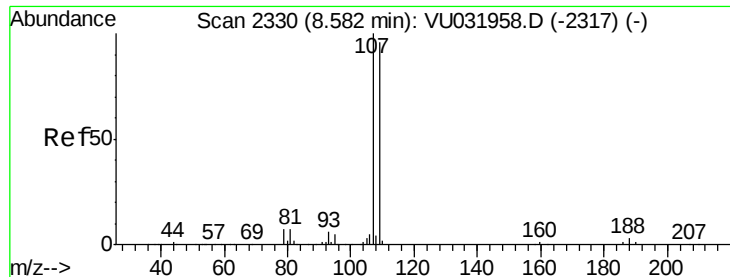
Tgt Ion: 43 Resp: 984294  
Ion Ratio Lower Upper  
43 100  
58 57.9 40.2 60.2  
57 19.9 13.8 20.6  
100 11.2 6.4 9.6#



#49  
Dibromochloromethane  
Concen: 4.903 ug/L  
RT: 8.47 min Scan# 2296  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

Tgt Ion: 129 Resp: 160778  
Ion Ratio Lower Upper  
129 100  
127 73.2 54.7 101.7





#50

1,2-Dibromoethane

Concen: 5.363 ug/L

RT: 8.58 min Scan# 2330

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

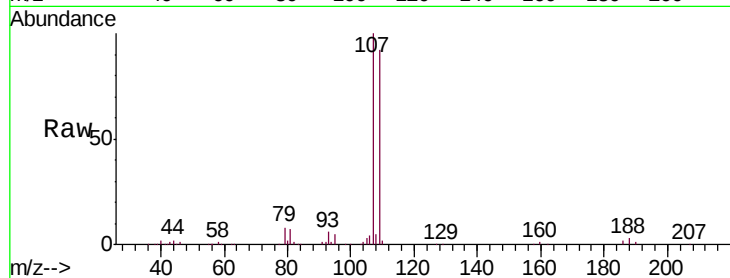
Tgt Ion:107 Resp: 137616

Ion Ratio Lower Upper

107 100

109 91.7 62.6 116.3

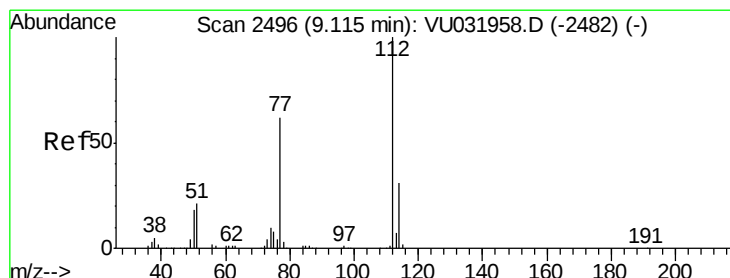
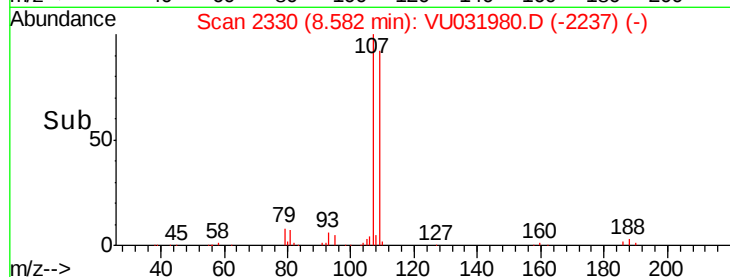
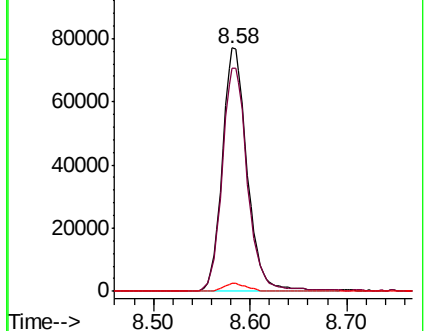
188 3.4 2.1 3.1#



Abundance Ion 106.95 (106.65 to 107.65): V

Ion 109.00 (108.70 to 109.70): V

Ion 187.90 (187.60 to 188.60): V



#51

Chlorobenzene

Concen: 5.165 ug/L

RT: 9.12 min Scan# 2496

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

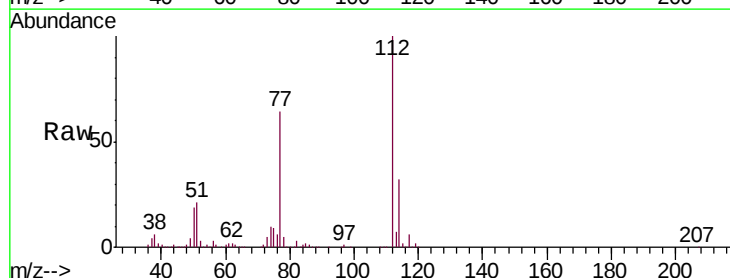
Tgt Ion:112 Resp: 504096

Ion Ratio Lower Upper

112 100

114 31.9 22.5 41.7

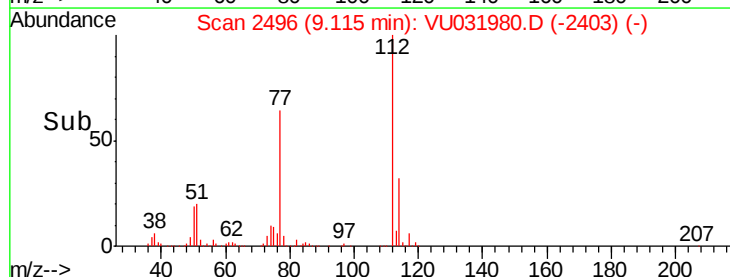
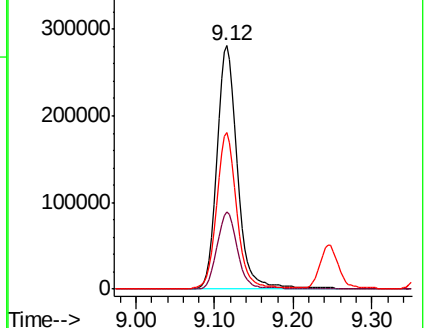
77 64.3 56.9 85.3

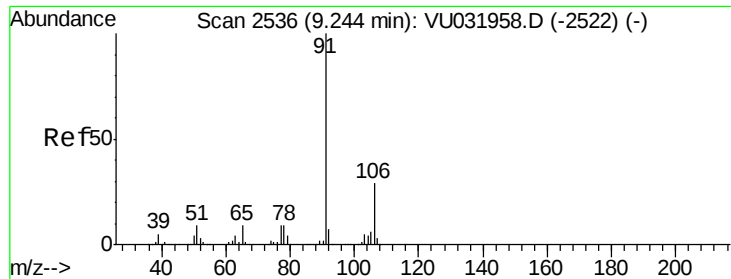


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VU





#52

Ethylbenzene

Concen: 4.958 ug/L

RT: 9.25 min Scan# 2537

Delta R.T. 0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

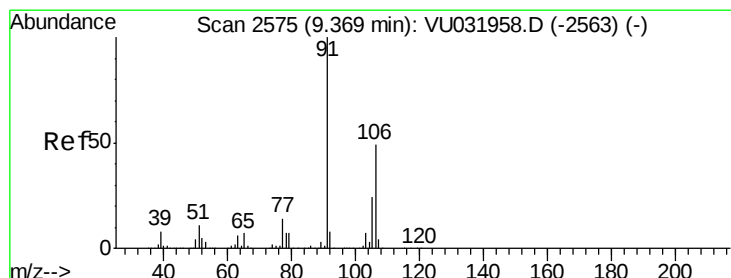
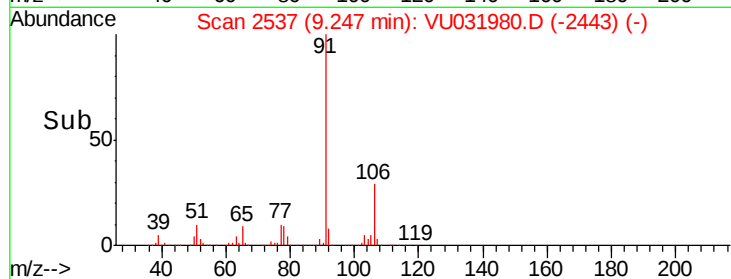
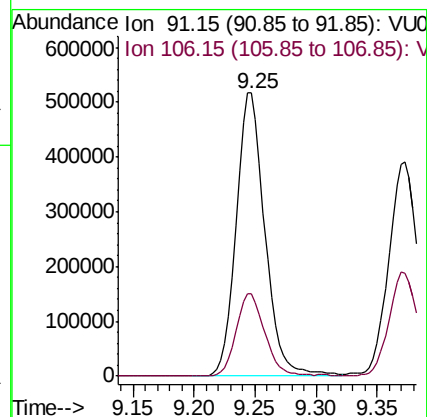
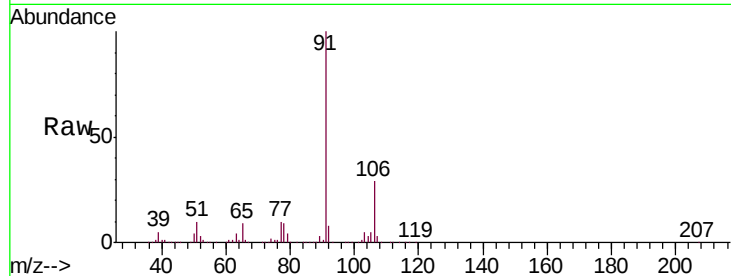
VSTD00530

Tgt Ion: 91 Resp: 849177

Ion Ratio Lower Upper

91 100

106 29.0 20.0 37.2



#53

m,p-Xylene

Concen: 5.223 ug/L

RT: 9.37 min Scan# 2575

Delta R.T. -0.00 min

Lab File: VU031980.D

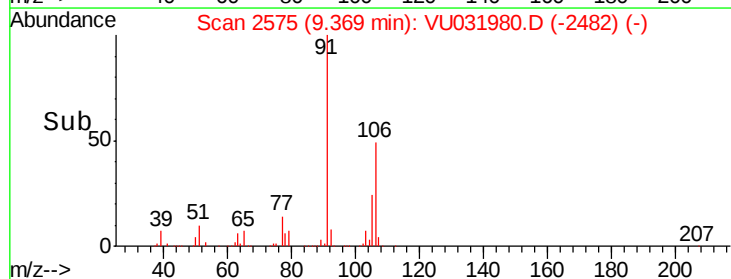
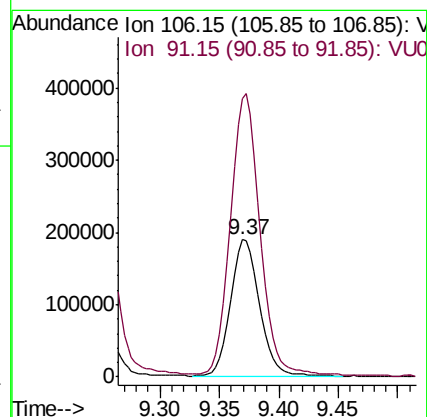
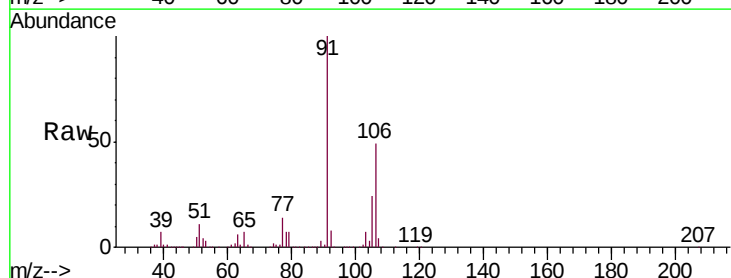
Acq: 13 May 2019 19:55

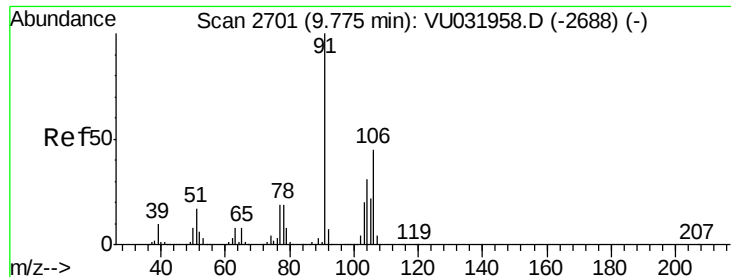
Tgt Ion: 106 Resp: 318452

Ion Ratio Lower Upper

106 100

91 203.7 150.3 279.1

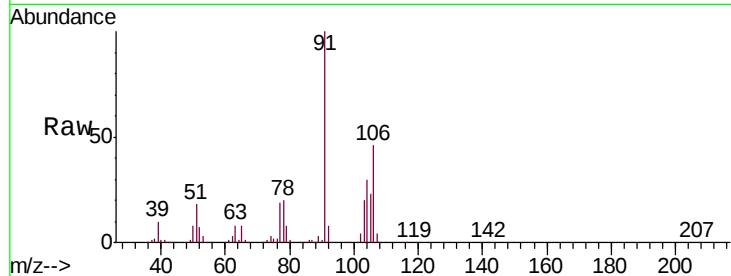




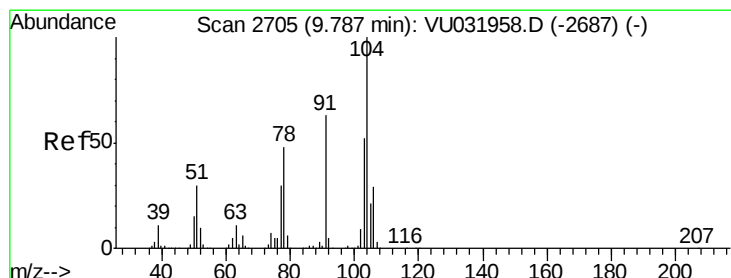
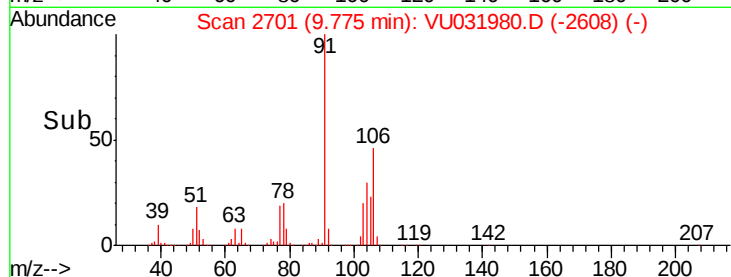
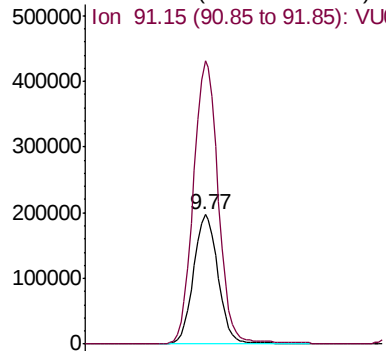
#54  
o-Xylene  
Concen: 5.385 ug/L  
RT: 9.77 min Scan# 2701  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00530

Tgt Ion:106 Resp: 313976  
Ion Ratio Lower Upper  
106 100  
91 219.1 161.8 300.6

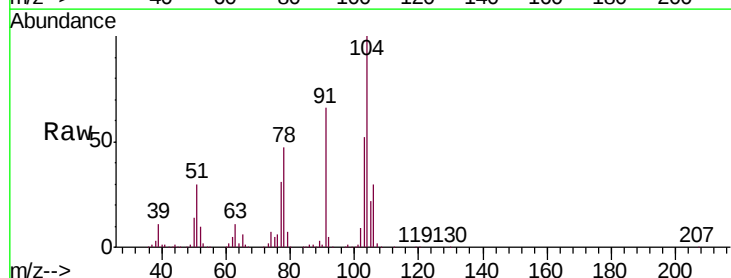


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VU0

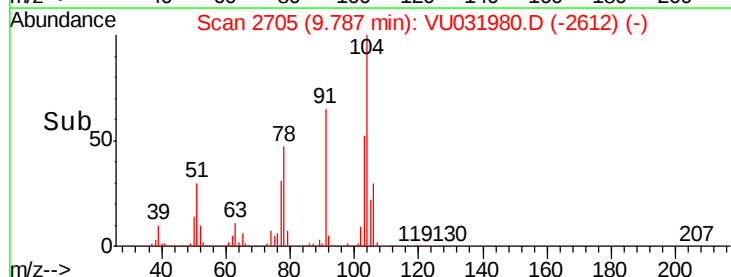
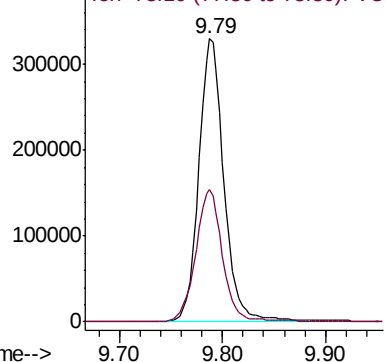


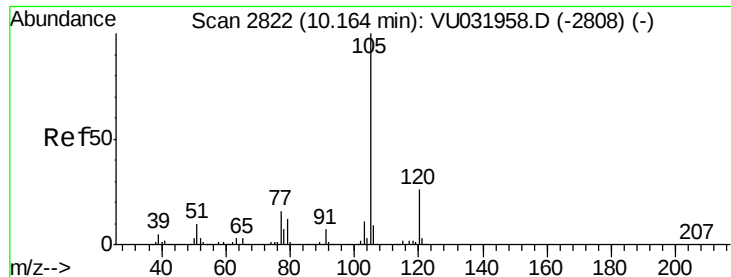
#55  
Styrene  
Concen: 5.593 ug/L  
RT: 9.79 min Scan# 2705  
Delta R.T. -0.00 min  
Lab File: VU031980.D  
Acq: 13 May 2019 19:55

Tgt Ion:104 Resp: 559653  
Ion Ratio Lower Upper  
104 100  
78 46.9 37.2 69.0



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





#56

Isopropylbenzene

Concen: 5.212 ug/L

RT: 10.16 min Scan# 2822

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

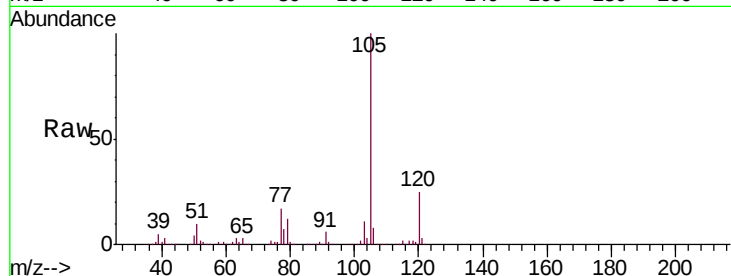
Tgt Ion: 105 Resp: 813615

Ion Ratio Lower Upper

105 100

120 25.0 20.2 30.4

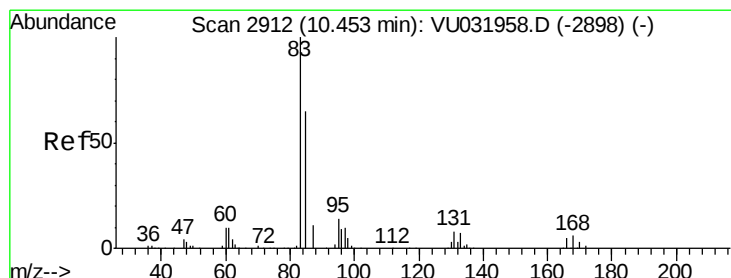
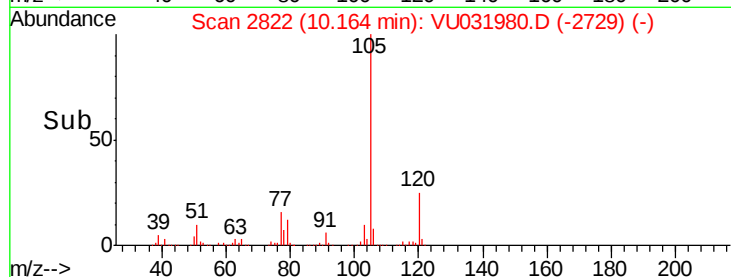
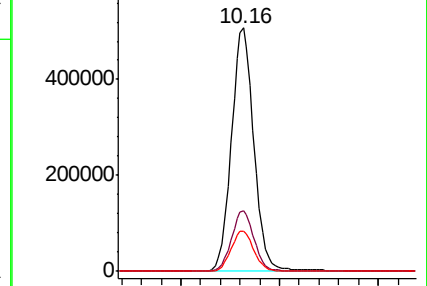
77 16.6 14.8 22.2



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: 5.124 ug/L

RT: 10.45 min Scan# 2912

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

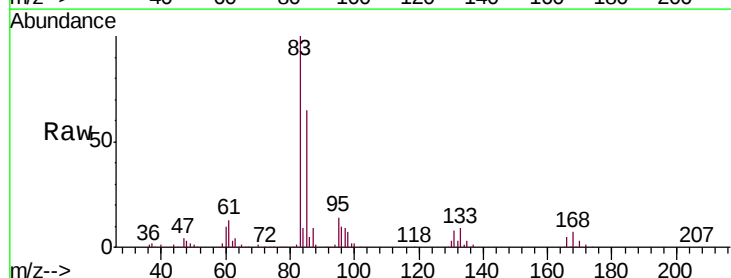
Tgt Ion: 83 Resp: 192970

Ion Ratio Lower Upper

83 100

85 65.1 44.3 82.3

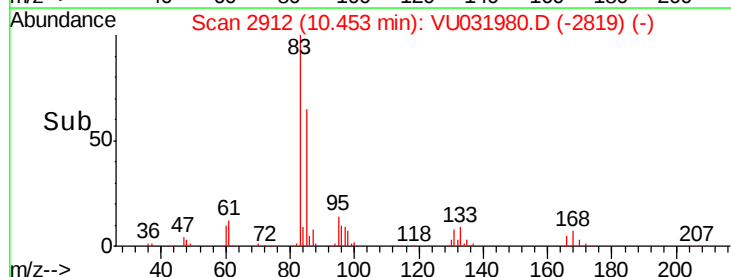
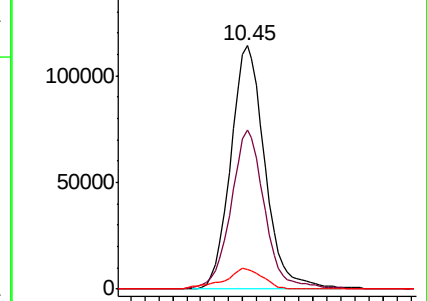
131 8.3 6.0 9.0

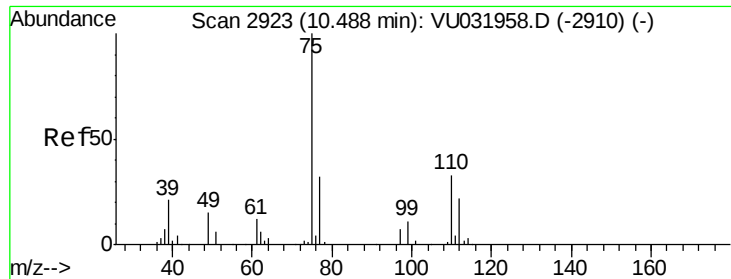


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V

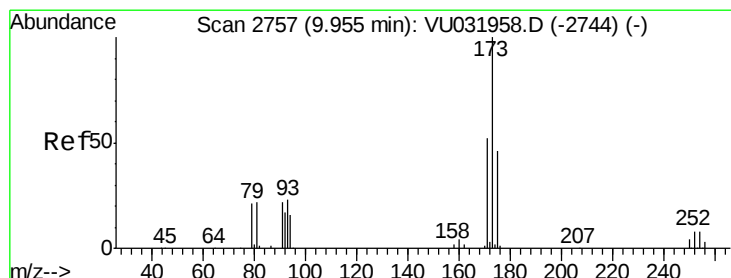
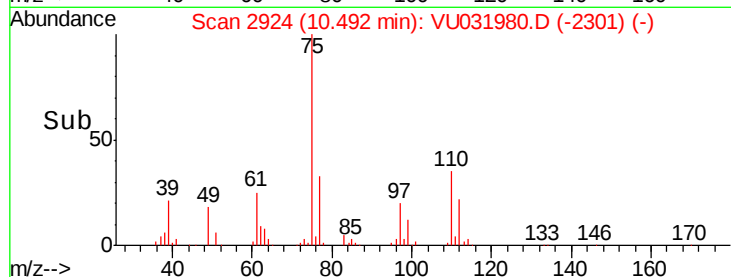
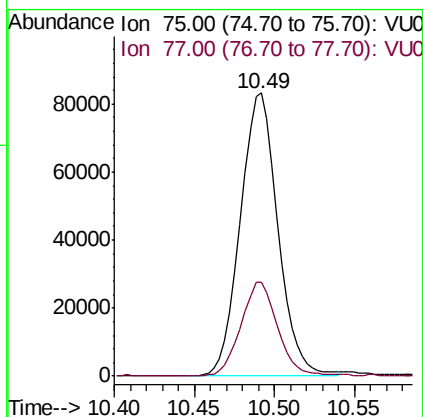
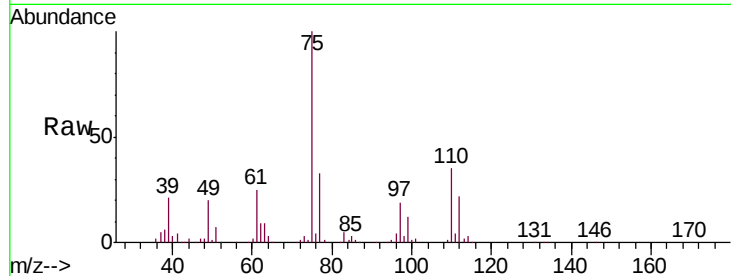




#59  
 1,2,3-Trichloropropane  
 Concen: 4.742 ug/L  
 RT: 10.49 min Scan# 2924  
 Delta R.T. 0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

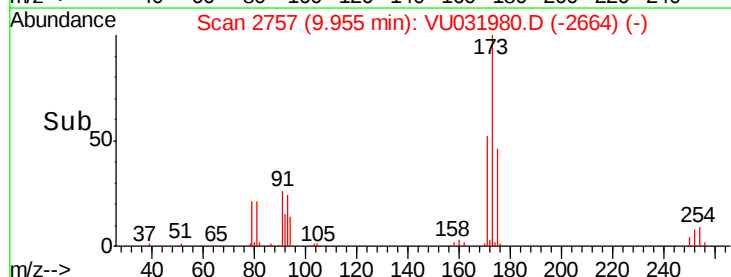
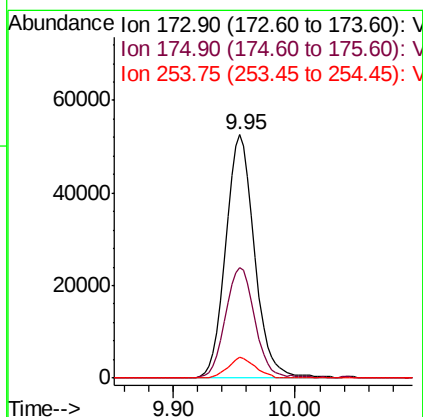
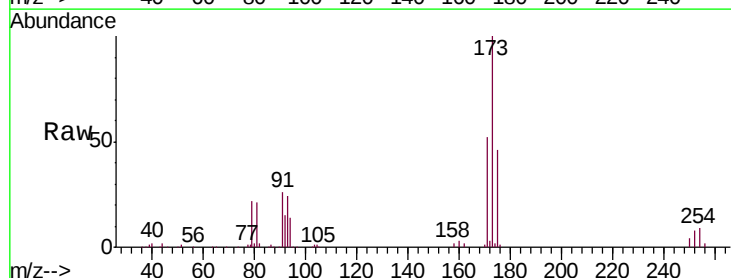
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

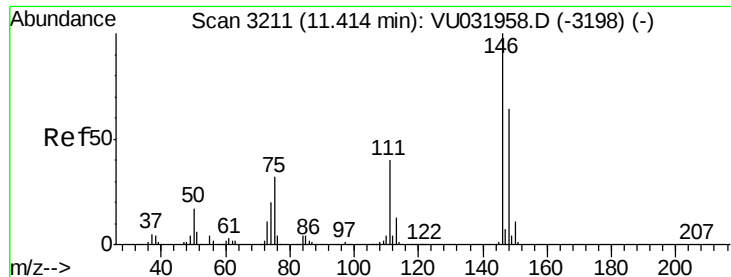
Tgt Ion: 75 Resp: 133588  
 Ion Ratio Lower Upper  
 75 100  
 77 31.8 26.3 39.5



#61  
 Bromoform  
 Concen: 5.090 ug/L  
 RT: 9.95 min Scan# 2757  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Tgt Ion: 173 Resp: 87434  
 Ion Ratio Lower Upper  
 173 100  
 175 46.5 37.2 55.8  
 254 8.2 5.8 8.8





#62

1,3-Dichlorobenzene

Concen: 5.137 ug/L

RT: 11.41 min Scan# 3211

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

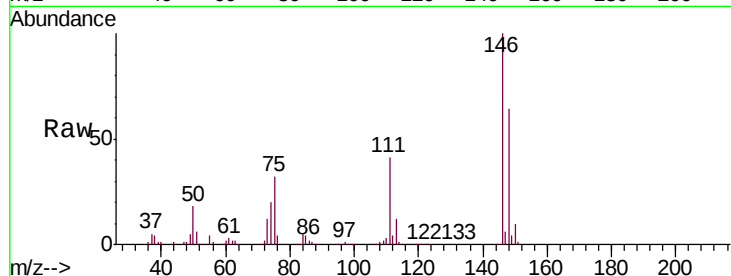
Tgt Ion:146 Resp: 350261

Ion Ratio Lower Upper

146 100

111 41.2 29.4 54.6

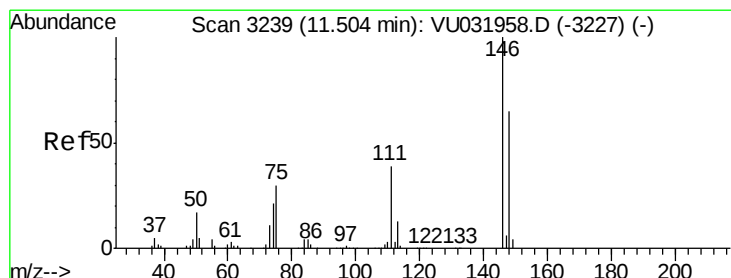
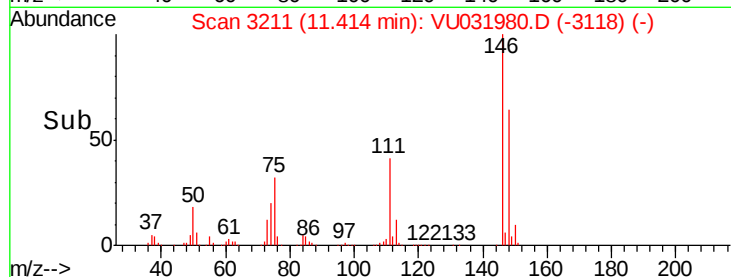
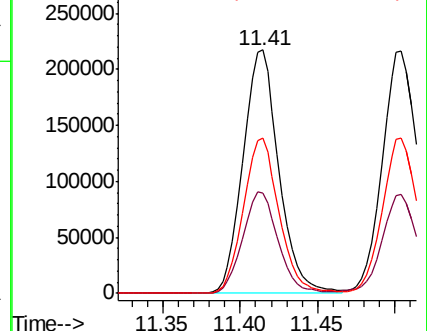
148 63.7 44.0 81.6



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: 5.195 ug/L

RT: 11.50 min Scan# 3239

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

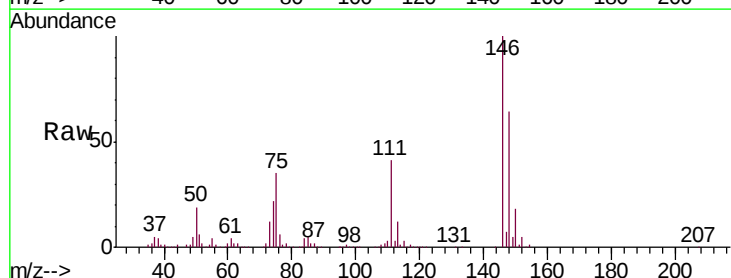
Tgt Ion:146 Resp: 359262

Ion Ratio Lower Upper

146 100

111 40.9 29.5 54.7

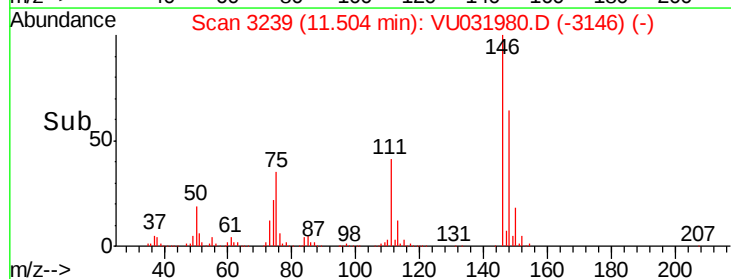
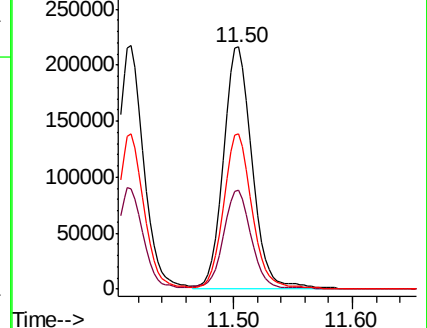
148 64.4 44.8 83.2

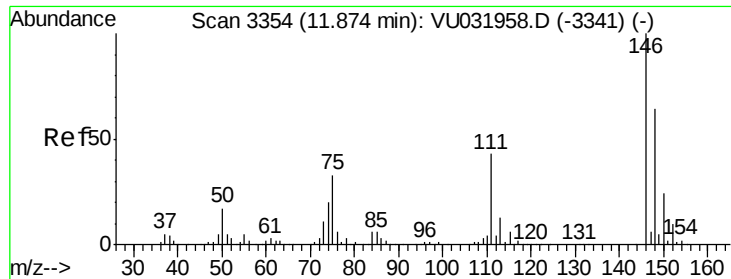


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 5.370 ug/L

RT: 11.87 min Scan# 3354

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

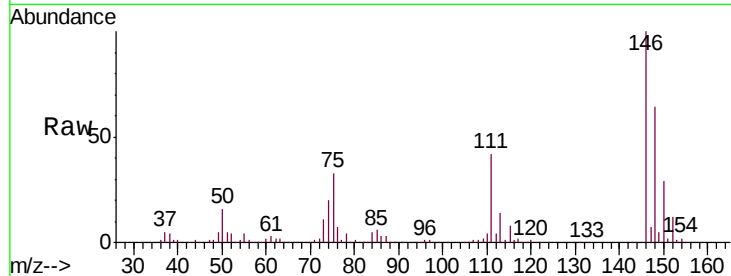
Tgt Ion:146 Resp: 357199

Ion Ratio Lower Upper

146 100

111 42.5 37.0 55.4

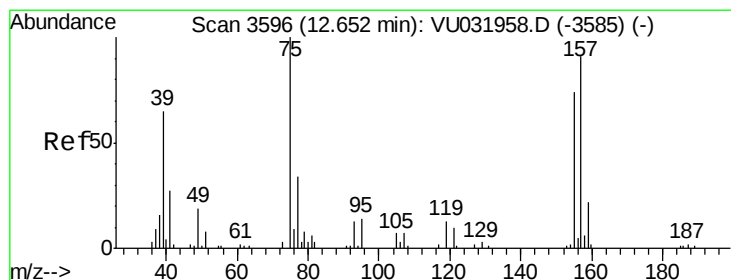
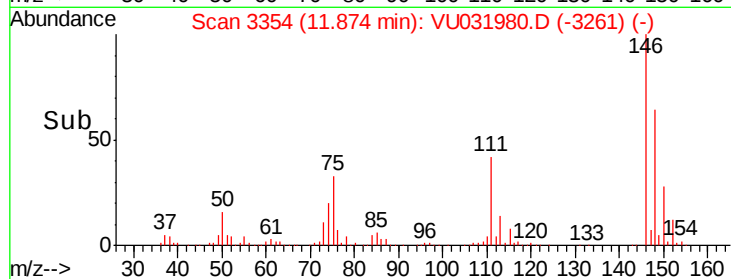
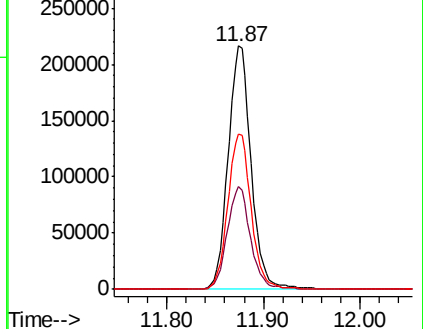
148 63.9 52.2 78.4



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 4.728 ug/L

RT: 12.65 min Scan# 3596

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

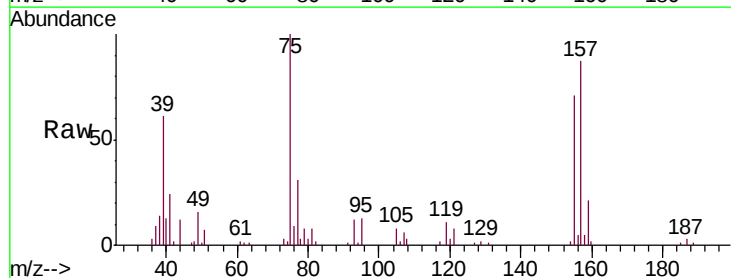
Tgt Ion: 75 Resp: 29568

Ion Ratio Lower Upper

75 100

155 71.0 42.2 63.2#

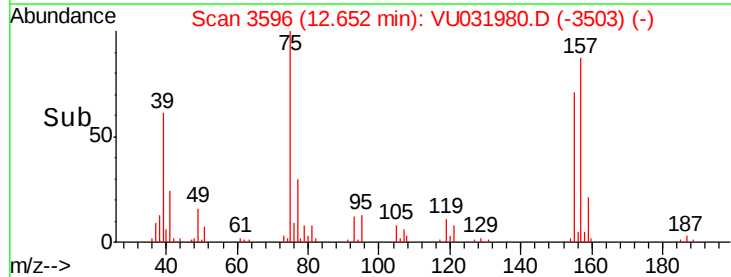
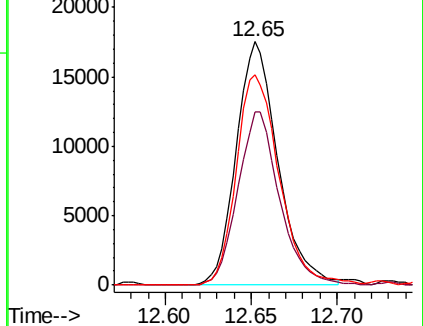
157 86.5 54.9 82.3#

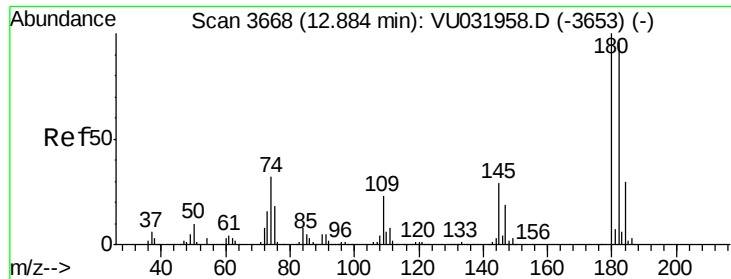


Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

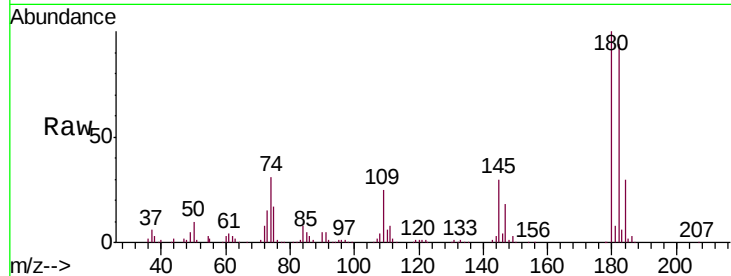




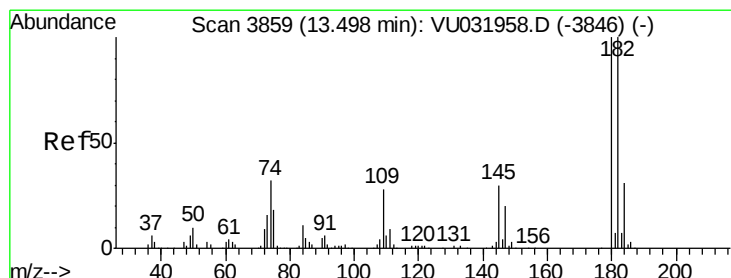
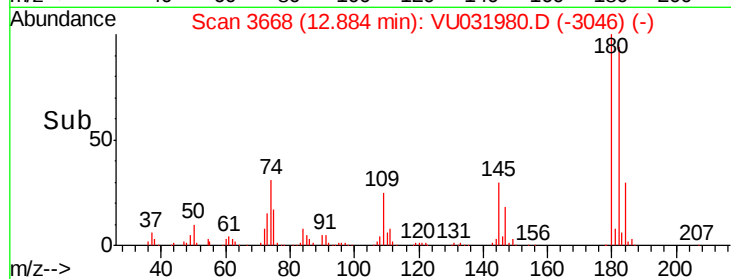
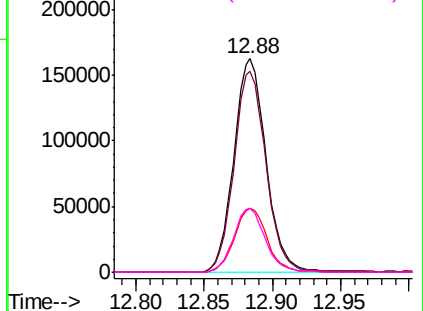
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.141 ug/L  
 RT: 12.88 min Scan# 3668  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00530

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 93.5  | 77.0  | 115.4 |
| 184     | 30.4  | 24.1  | 36.1  |
| 145     | 29.4  | 24.5  | 36.7  |

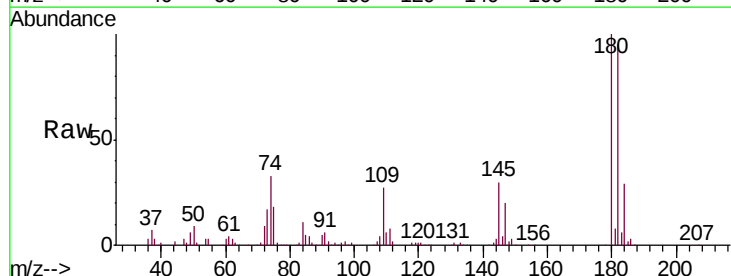


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

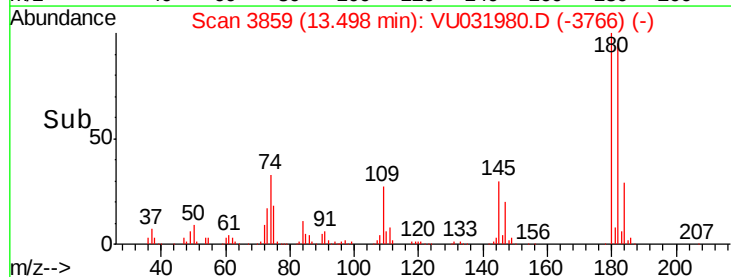
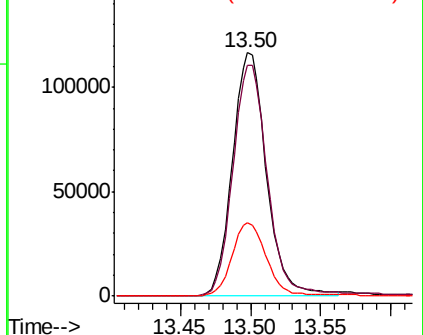


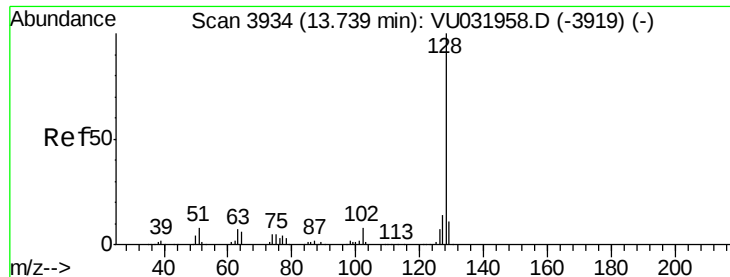
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.169 ug/L  
 RT: 13.50 min Scan# 3859  
 Delta R.T. -0.00 min  
 Lab File: VU031980.D  
 Acq: 13 May 2019 19:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.9  | 74.8  | 112.2 |
| 145     | 30.4  | 25.4  | 38.2  |



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: 5.390 ug/L

RT: 13.74 min Scan# 3934

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00530

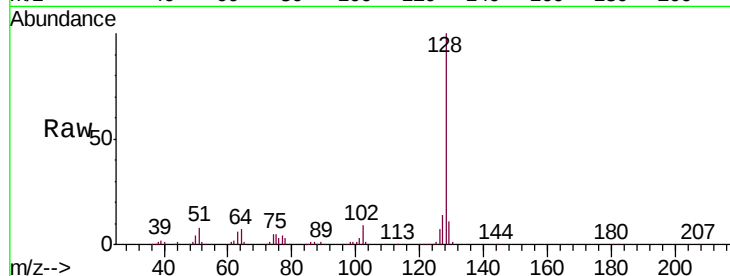
Tgt Ion:128 Resp: 353758

Ion Ratio Lower Upper

128 100

129 10.1 8.0 12.0

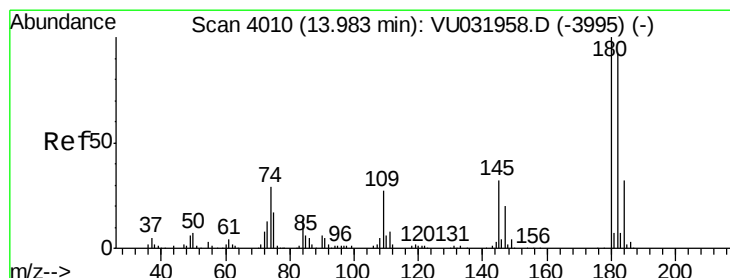
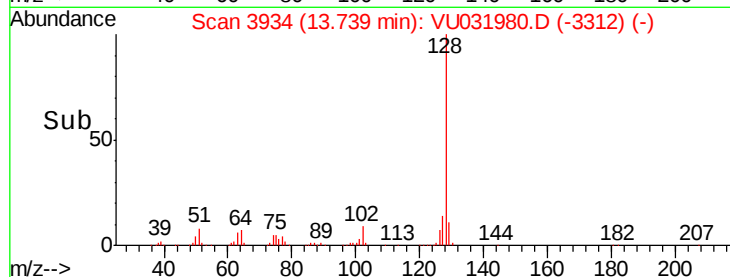
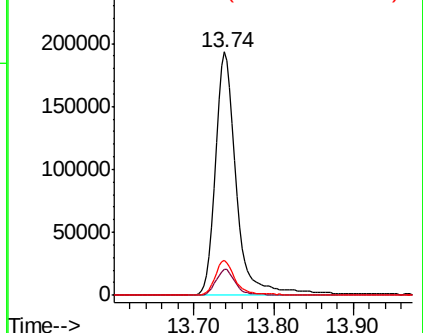
127 13.2 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 5.806 ug/L

RT: 13.98 min Scan# 4010

Delta R.T. -0.00 min

Lab File: VU031980.D

Acq: 13 May 2019 19:55

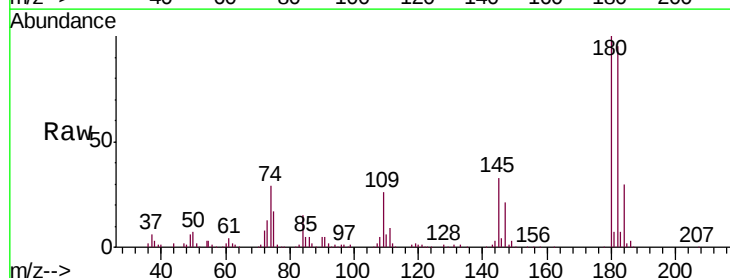
Tgt Ion:180 Resp: 206797

Ion Ratio Lower Upper

180 100

182 95.5 78.4 117.6

145 32.4 27.4 41.0



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

