

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU052919\  
 Data File : VU032346.D  
 Acq On : 29 May 2019 09:03  
 Operator : JC/SP  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Quant Time: May 30 05:19:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR052219WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri May 24 02:55:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 362417   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 354836   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 170396   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40   | 65    | 79360    | 3.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 78.00%  |
| 7) Chloroethane-d5             | 1.68   | 69    | 82483    | 4.35     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 87.00%  |
| 11) 1,1-Dichloroethene-d2      | 2.27   | 63    | 160477   | 4.28     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 85.60%  |
| 20) 2-Butanone-d5              | 4.21   | 46    | 313400   | 54.59    | ug/L | 0.02    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 109.18% |
| 24) Chloroform-d               | 4.64   | 84    | 240497   | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 92.60%  |
| 26) 1,2-Dichloroethane-d4      | 5.31   | 65    | 127446   | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 92.60%  |
| 32) Benzene-d6                 | 5.33   | 84    | 443953   | 4.41     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 88.20%  |
| 36) 1,2-Dichloropropane-d6     | 6.33   | 67    | 153353   | 4.69     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 93.80%  |
| 41) Toluene-d8                 | 7.56   | 98    | 438028   | 4.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 89.60%  |
| 43) trans-1,3-Dichloropropene- | 7.85   | 79    | 61107    | 4.86     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 97.20%  |
| 46) 2-Hexanone-d5              | 8.31   | 63    | 240490   | 50.83    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 101.66% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43  | 84    | 158983   | 4.89     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 97.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.85  | 152   | 208460   | 4.44     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 88.80%  |

## Target Compounds

|                                |      |     |        |        | Qvalue  |
|--------------------------------|------|-----|--------|--------|---------|
| 2) Dichlorodifluoromethane     | 1.21 | 85  | 77593  | 5.008  | ug/L 99 |
| 3) Chloromethane               | 1.33 | 50  | 74520  | 4.797  | ug/L 99 |
| 5) Vinyl chloride              | 1.40 | 62  | 76773  | 4.895  | ug/L 95 |
| 6) Bromomethane                | 1.63 | 94  | 51686  | 5.201  | ug/L 96 |
| 8) Chloroethane                | 1.70 | 64  | 47699  | 4.790  | ug/L 96 |
| 9) Trichlorofluoromethane      | 1.88 | 101 | 101162 | 4.975  | ug/L 98 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.29 | 101 | 65563  | 5.109  | ug/L 98 |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 63002  | 4.885  | ug/L 95 |
| 13) Acetone                    | 2.35 | 43  | 94420  | 53.082 | ug/L 96 |
| 14) Carbon disulfide           | 2.48 | 76  | 195235 | 4.885  | ug/L 98 |
| 15) Methyl Acetate             | 2.63 | 43  | 25331  | 4.853  | ug/L 94 |
| 16) Methylene chloride         | 2.70 | 84  | 69252  | 4.025  | ug/L 96 |
| 17) Methyl tert-butyl Ether    | 3.00 | 73  | 146229 | 5.029  | ug/L 99 |
| 18) trans-1,2-Dichloroethene   | 2.98 | 96  | 69428  | 5.015  | ug/L 94 |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 113355 | 5.302  | ug/L 96 |
| 21) 2-Butanone                 | 4.29 | 43  | 156695 | 58.394 | ug/L 87 |
| 22) cis-1,2-Dichloroethene     | 4.22 | 96  | 68688  | 5.083  | ug/L 99 |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU052919\  
 Data File : VU032346.D  
 Acq On : 29 May 2019 09:03  
 Operator : JC/SP  
 Sample : VSTDCCC005  
 Misc : 25.0mL/MSVOA\_U/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Quant Time: May 30 05:19:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR052219WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri May 24 02:55:50 2019  
 Response via : Initial Calibration

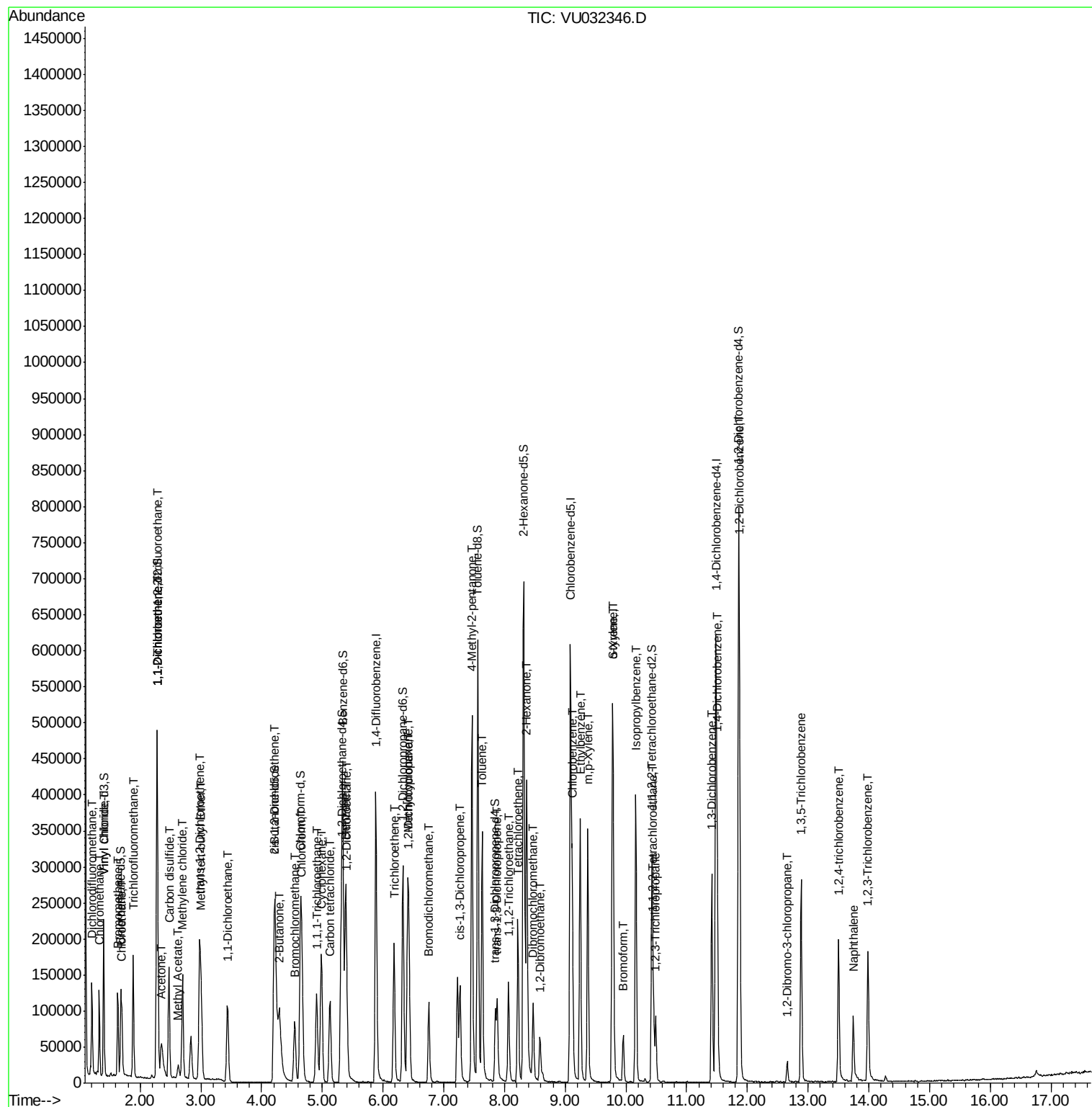
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| -----                          |       |      |          |        |        |          |
| 23) Bromochloromethane         | 4.54  | 128  | 31712    | 5.310  | ug/L   | 95       |
| 25) Chloroform                 | 4.67  | 83   | 118402   | 5.128  | ug/L   | 91       |
| 27) 1,2-Dichloroethane         | 5.41  | 62   | 69218    | 5.151  | ug/L   | 97       |
| 29) 1,1,1-Trichloroethane      | 4.91  | 97   | 94350    | 5.123  | ug/L   | 96       |
| 30) Cyclohexane                | 4.98  | 56   | 89470    | 5.196  | ug/L   | 95       |
| 31) Carbon tetrachloride       | 5.13  | 117  | 83457    | 5.144  | ug/L   | 99       |
| 33) Benzene                    | 5.38  | 78   | 257005   | 5.354  | ug/L   | 100      |
| 34) Trichloroethene            | 6.18  | 95   | 66792    | 5.185  | ug/L   | 94       |
| 35) Methylcyclohexane          | 6.41  | 83   | 96334    | 5.077  | ug/L   | 96       |
| 37) 1,2-Dichloropropane        | 6.43  | 63   | 63495    | 5.494  | ug/L # | 94       |
| 38) Bromodichloromethane       | 6.76  | 83   | 77817    | 5.181  | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene    | 7.27  | 75   | 89695    | 5.451  | ug/L   | 100      |
| 40) 4-Methyl-2-pentanone       | 7.46  | 43   | 335381   | 57.412 | ug/L   | 97       |
| 42) Toluene                    | 7.63  | 91   | 271413   | 5.322  | ug/L   | 96       |
| 44) trans-1,3-Dichloropropene  | 7.88  | 75   | 69759    | 5.395  | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 8.07  | 97   | 47304    | 5.301  | ug/L   | 99       |
| 47) Tetrachloroethene          | 8.22  | 164  | 56448    | 5.308  | ug/L   | 99       |
| 48) 2-Hexanone                 | 8.36  | 43   | 265506   | 59.258 | ug/L   | 96       |
| 49) Dibromochloromethane       | 8.47  | 129  | 55185    | 5.433  | ug/L   | 93       |
| 50) 1,2-Dibromoethane          | 8.59  | 107  | 43995    | 5.229  | ug/L   | 98       |
| 51) Chlorobenzene              | 9.12  | 112  | 173428   | 5.313  | ug/L   | 98       |
| 52) Ethylbenzene               | 9.25  | 91   | 267110   | 5.203  | ug/L   | 98       |
| 53) m,p-Xylene                 | 9.37  | 106  | 106485   | 5.578  | ug/L   | 100      |
| 54) o-Xylene                   | 9.77  | 106  | 99930    | 5.239  | ug/L   | 96       |
| 55) Styrene                    | 9.79  | 104  | 172934   | 5.418  | ug/L   | 98       |
| 56) Isopropylbenzene           | 10.16 | 105  | 255860   | 5.305  | ug/L   | 97       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.45 | 83   | 56268    | 5.235  | ug/L   | 96       |
| 59) 1,2,3-Trichloropropane     | 10.49 | 75   | 38707    | 5.143  | ug/L   | 95       |
| 61) Bromoform                  | 9.95  | 173  | 32101    | 5.260  | ug/L   | 94       |
| 62) 1,3-Dichlorobenzene        | 11.41 | 146  | 128935   | 5.121  | ug/L   | 98       |
| 63) 1,4-Dichlorobenzene        | 11.50 | 146  | 132875   | 5.032  | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.87 | 146  | 130540   | 5.112  | ug/L   | 95       |
| 66) 1,2-Dibromo-3-chloropropan | 12.66 | 75   | 8679     | 5.263  | ug/L   | 88       |
| 67) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 97584    | 5.094  | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 69527    | 5.147  | ug/L   | 99       |
| 69) Naphthalene                | 13.74 | 128  | 85286    | 4.127  | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 70128    | 4.904  | ug/L   | 98       |
| -----                          |       |      |          |        |        |          |

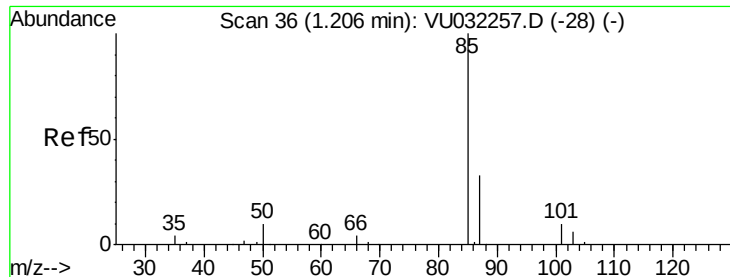
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_U\DATA\VU052919\  
Data File : VU032346.D  
Acq On : 29 May 2019 09:03  
Operator : JC/SP  
Sample : VSTDCCC005  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

Quant Time: May 30 05:19:56 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR052219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri May 24 02:55:50 2019  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 5.008 ug/L

RT: 1.21 min Scan# 36

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

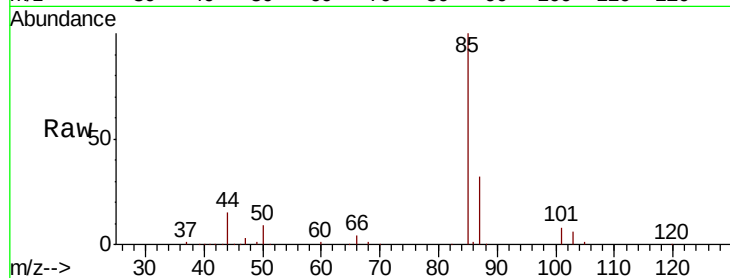
VSTD00516

Tgt Ion: 85 Resp: 77593

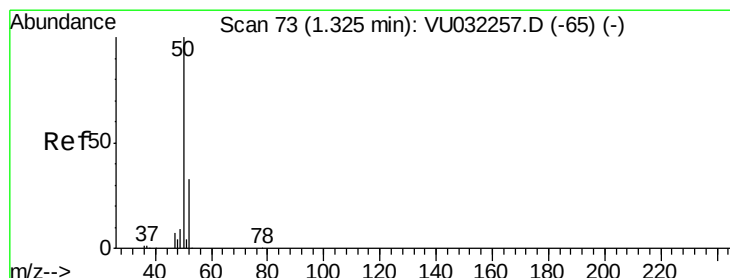
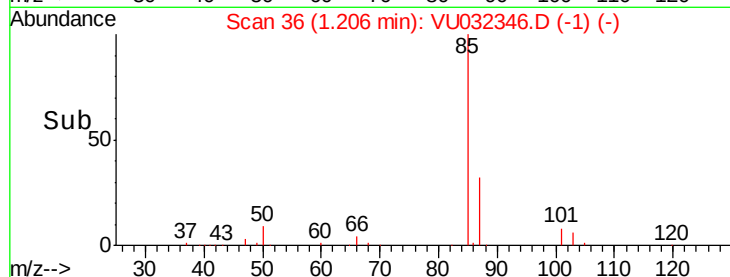
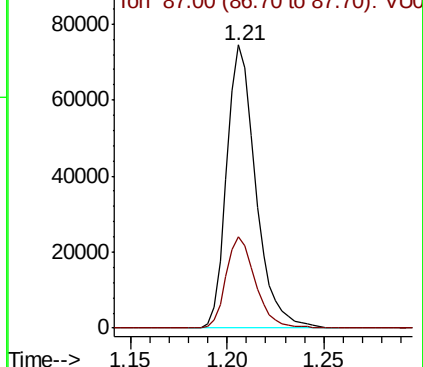
Ion Ratio Lower Upper

85 100

87 32.5 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VU032257.D (-28) (-)



#3

Chloromethane

Concen: 4.797 ug/L

RT: 1.33 min Scan# 74

Delta R.T. 0.00 min

Lab File: VU032346.D

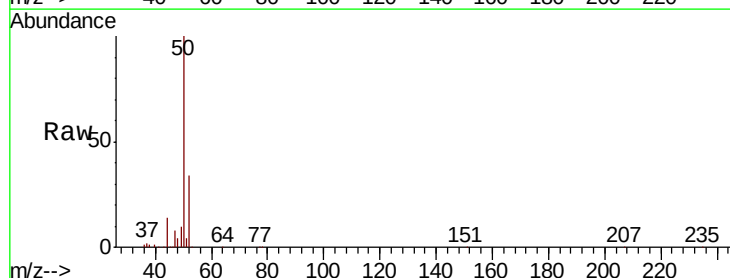
Acq: 29 May 2019 09:03

Tgt Ion: 50 Resp: 74520

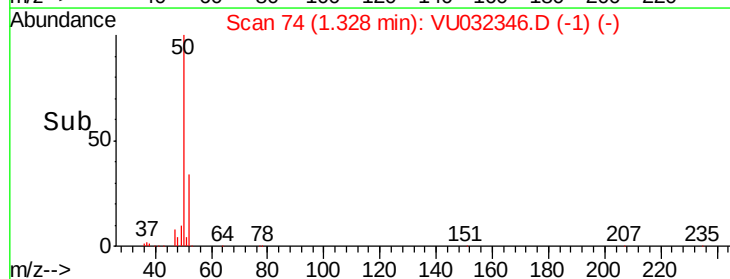
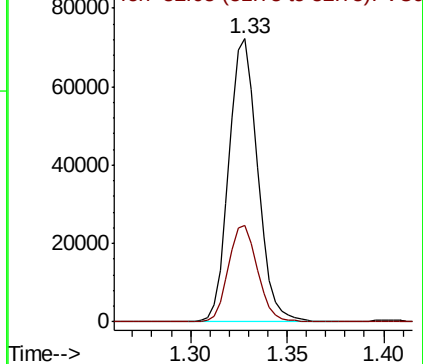
Ion Ratio Lower Upper

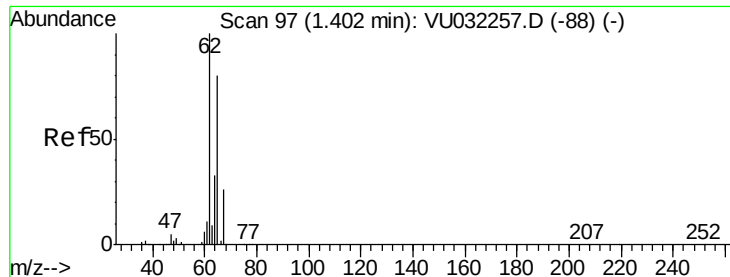
50 100

52 34.0 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VU032257.D (-65) (-)





#5

Vinyl chloride

Concen: 4.895 ug/L

RT: 1.40 min Scan# 97

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

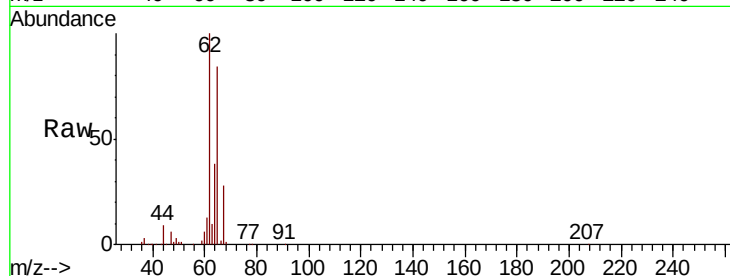
VSTD00516

Tgt Ion: 62 Resp: 76773

Ion Ratio Lower Upper

62 100

64 37.8 24.4 45.2



Abundance Ion 62.00 (61.70 to 62.70): VU032257.D (-88) (-)

Ion 64.10 (63.80 to 64.80): VU032257.D (-88) (-)

1.40

80000

60000

40000

20000

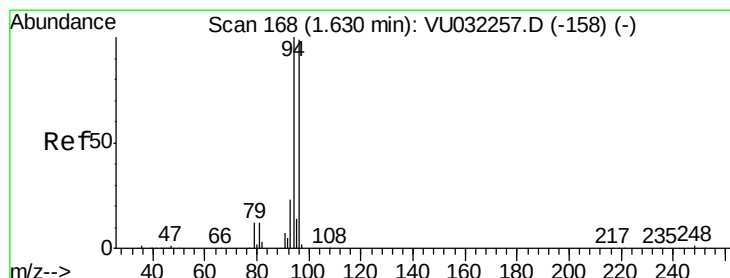
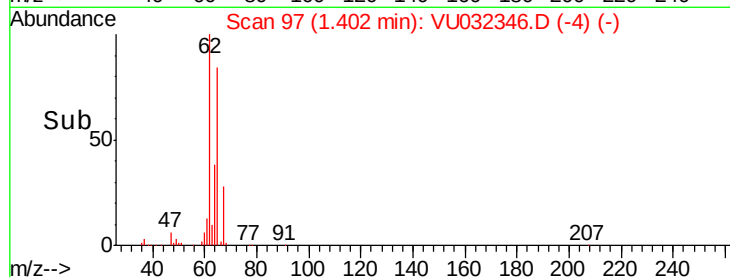
0

Time-->

1.35

1.40

1.45



#6

Bromomethane

Concen: 5.201 ug/L

RT: 1.63 min Scan# 168

Delta R.T. 0.01 min

Lab File: VU032346.D

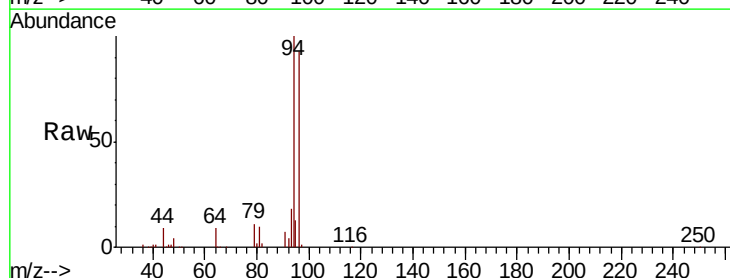
Acq: 29 May 2019 09:03

Tgt Ion: 94 Resp: 51686

Ion Ratio Lower Upper

94 100

96 93.5 63.0 117.0



Abundance Ion 94.00 (93.70 to 94.70): VU032257.D (-158) (-)

Ion 96.00 (95.70 to 96.70): VU032257.D (-158) (-)

1.63

50000

40000

30000

20000

10000

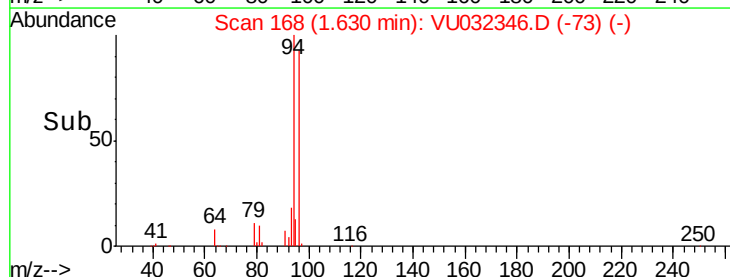
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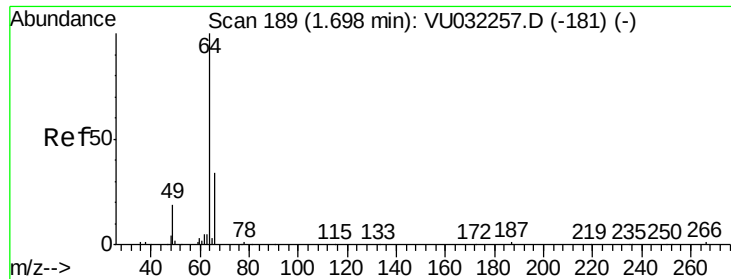
Time-->

1.60

1.65

1.70

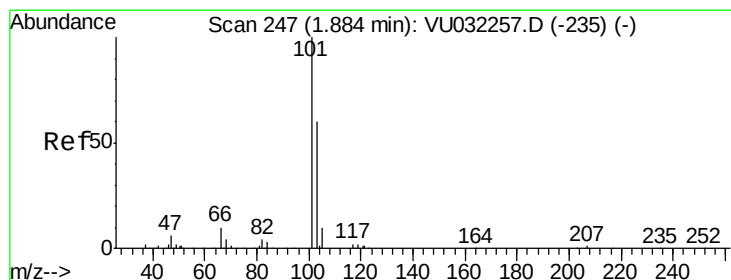
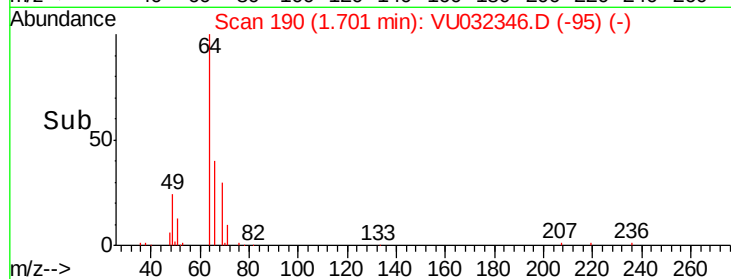
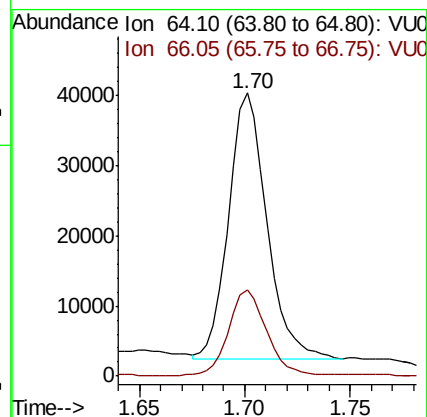
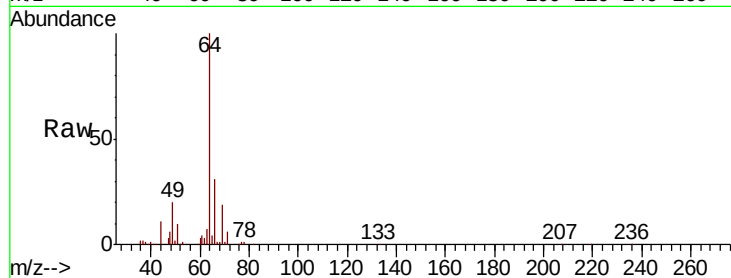




#8  
Chloroethane  
Concen: 4.790 ug/L  
RT: 1.70 min Scan# 190  
Delta R.T. 0.01 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

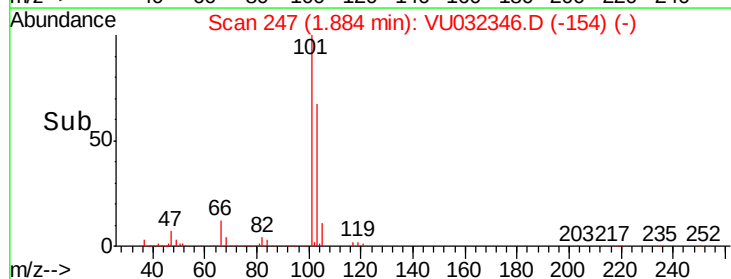
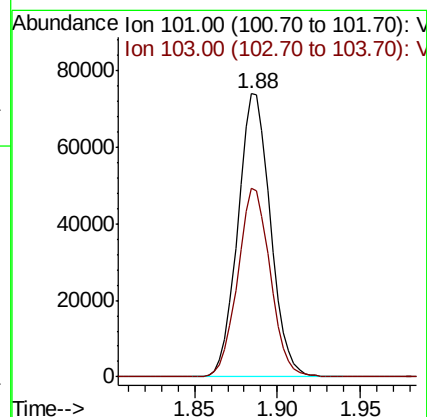
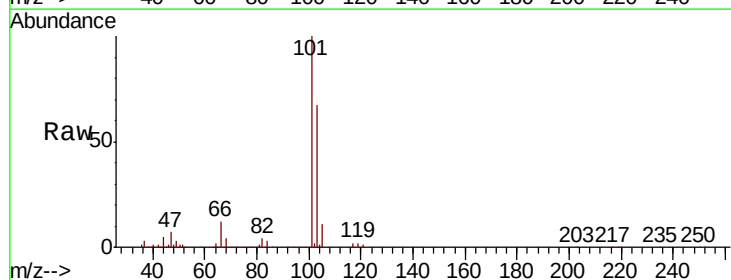
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

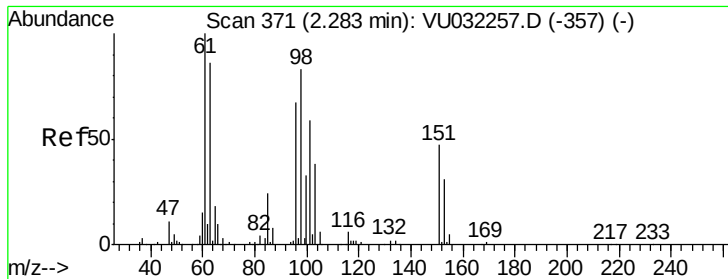
Tgt Ion: 64 Resp: 47699  
Ion Ratio Lower Upper  
64 100  
66 30.6 23.1 42.9



#9  
Trichlorofluoromethane  
Concen: 4.975 ug/L  
RT: 1.88 min Scan# 247  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Tgt Ion: 101 Resp: 101162  
Ion Ratio Lower Upper  
101 100  
103 66.6 51.9 77.9





#10

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

Concen: 5.109 ug/L

RT: 2.29 min Scan# 372

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

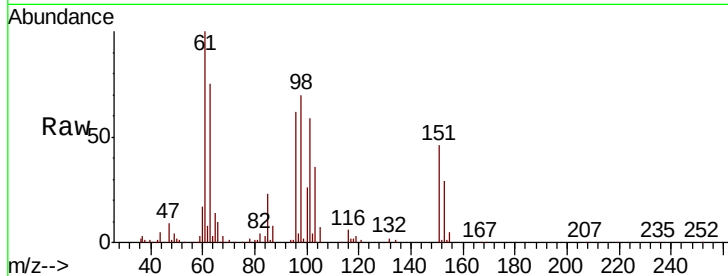
Tgt Ion:101 Resp: 65563

Ion Ratio Lower Upper

101 100

85 41.4 34.2 51.4

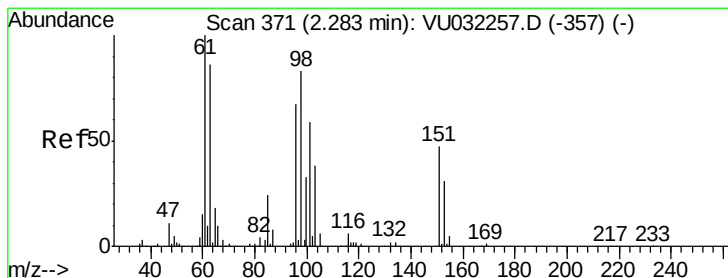
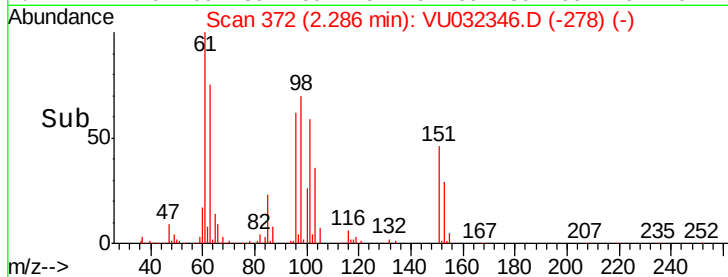
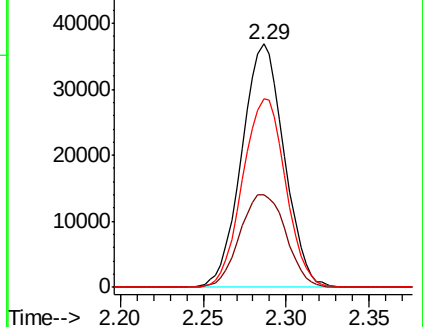
151 78.7 64.4 96.6



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: 4.885 ug/L

RT: 2.28 min Scan# 371

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

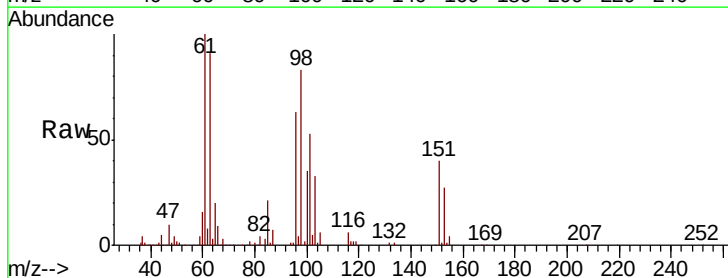
Tgt Ion: 96 Resp: 63002

Ion Ratio Lower Upper

96 100

61 159.5 113.8 211.3

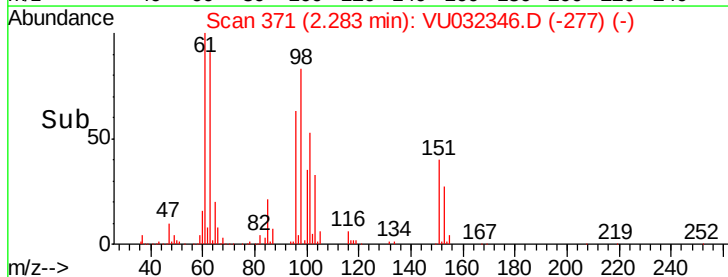
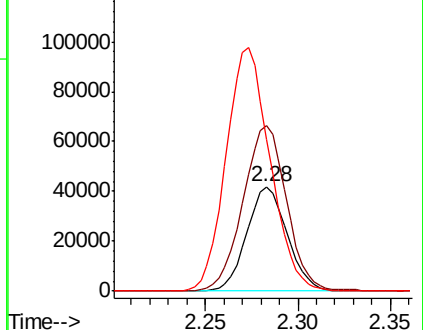
63 145.8 108.8 202.2

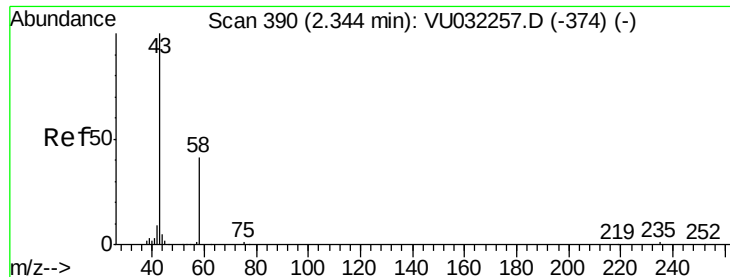


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0





#13

Acetone

Concen: 53.082 ug/L

RT: 2.35 min Scan# 391

Delta R.T. 0.02 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

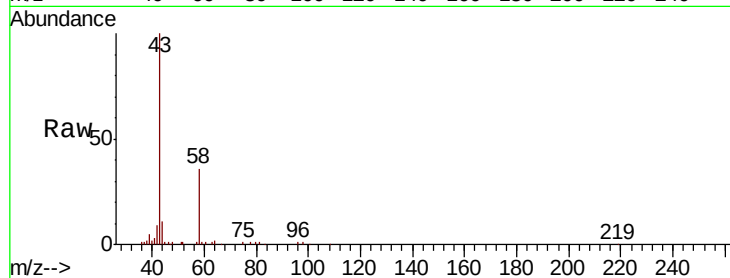
VSTD00516

Tgt Ion: 43 Resp: 94420

Ion Ratio Lower Upper

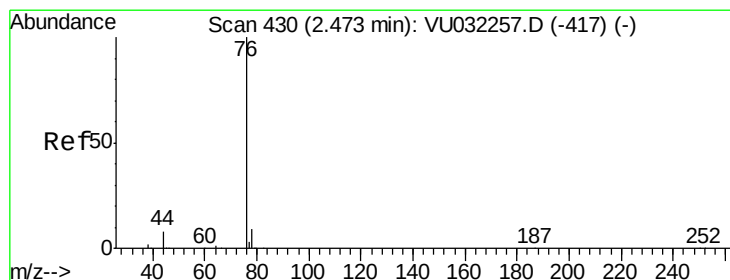
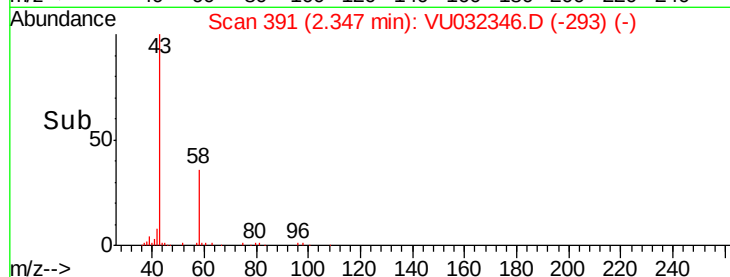
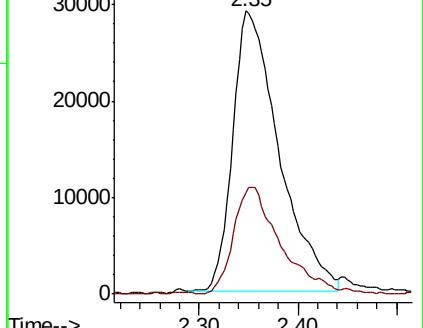
43 100

58 38.5 0.0 72.6



Abundance Ion 43.05 (42.75 to 43.75): VU032257.D (-374) (-)

Ion 58.05 (57.75 to 58.75): VU032257.D (-374) (-)



#14

Carbon disulfide

Concen: 4.885 ug/L

RT: 2.48 min Scan# 431

Delta R.T. 0.00 min

Lab File: VU032346.D

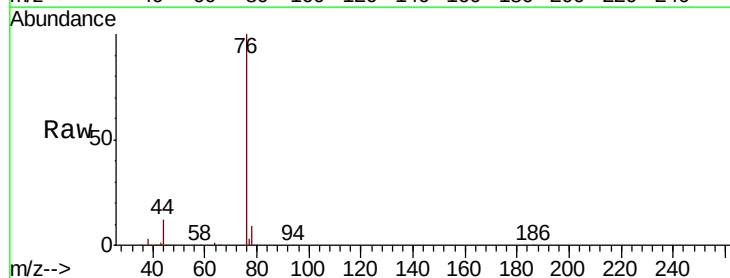
Acq: 29 May 2019 09:03

Tgt Ion: 76 Resp: 195235

Ion Ratio Lower Upper

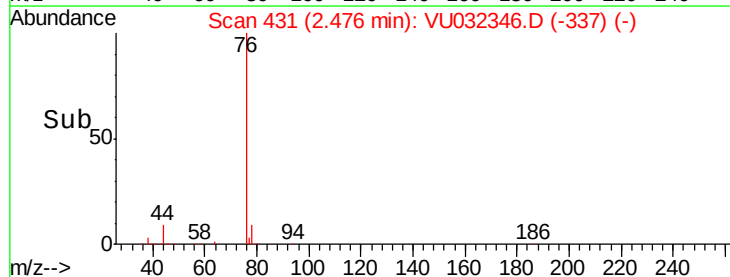
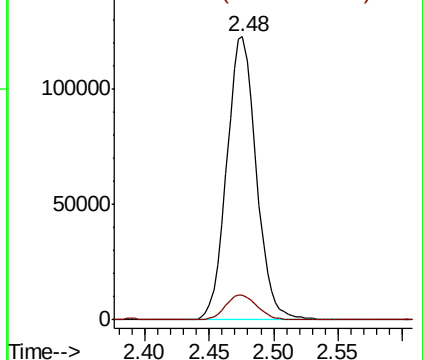
76 100

78 8.7 7.5 11.3

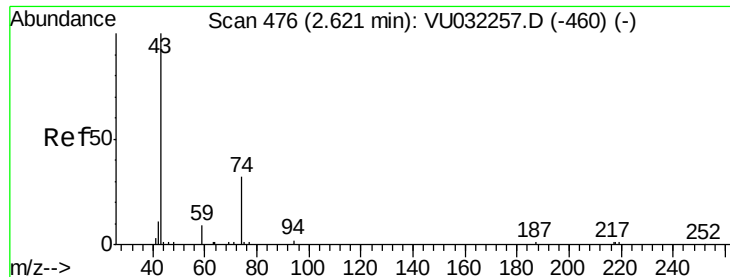


Abundance Ion 76.05 (75.75 to 76.75): VU032257.D (-417) (-)

Ion 78.00 (77.70 to 78.70): VU032257.D (-417) (-)



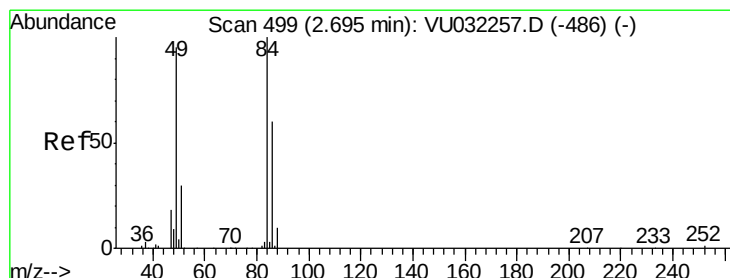
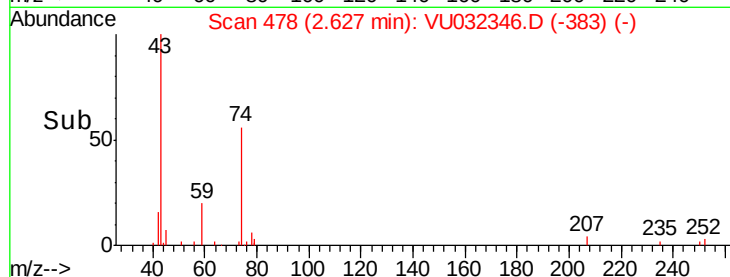
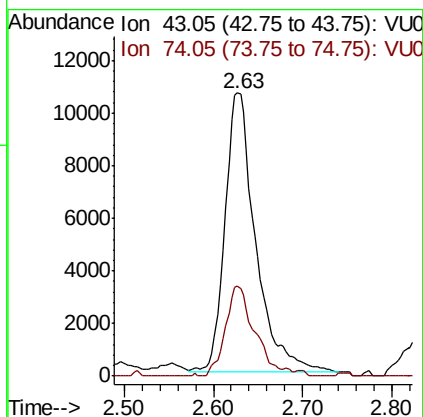
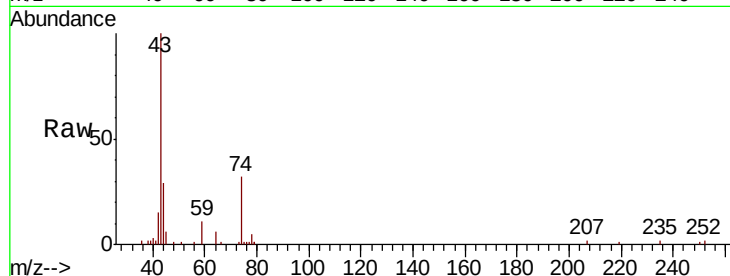




#15  
Methyl Acetate  
Concen: 4.853 ug/L  
RT: 2.63 min Scan# 478  
Delta R.T. 0.01 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

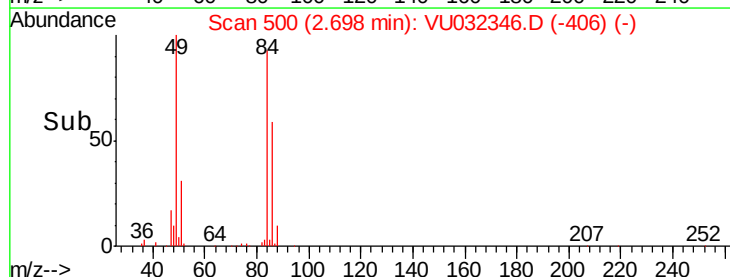
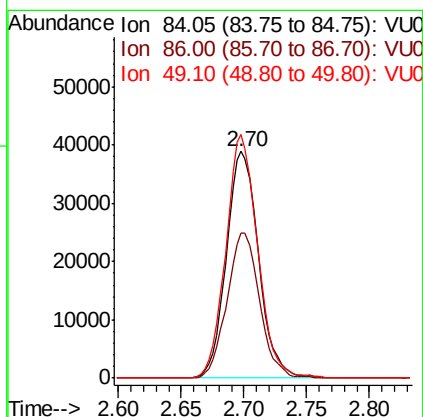
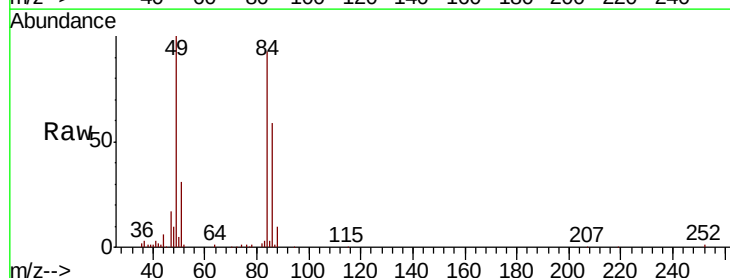
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

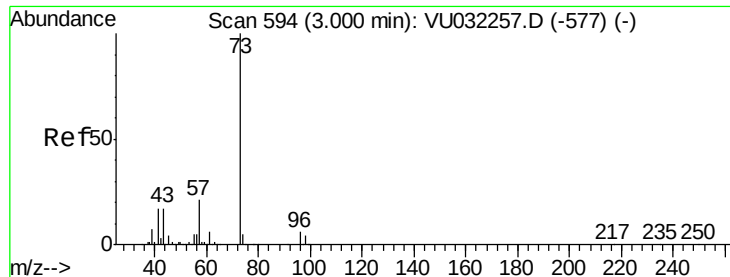
Tgt Ion: 43 Resp: 25331  
Ion Ratio Lower Upper  
43 100  
74 30.4 27.3 40.9



#16  
Methylene chloride  
Concen: 4.025 ug/L  
RT: 2.70 min Scan# 500  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Tgt Ion: 84 Resp: 69252  
Ion Ratio Lower Upper  
84 100  
86 63.8 43.6 81.0  
49 107.4 71.1 132.1

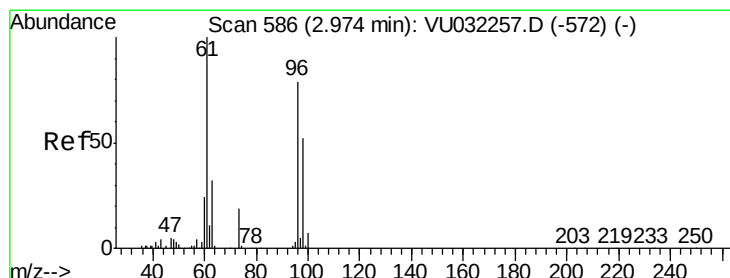
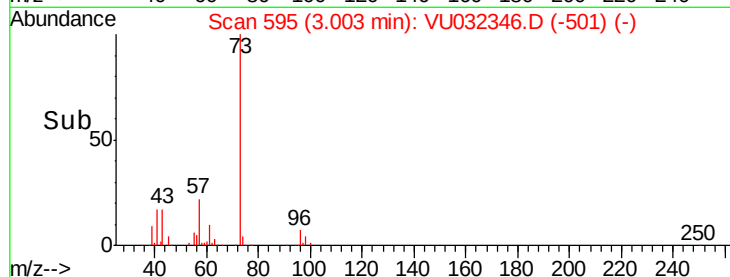
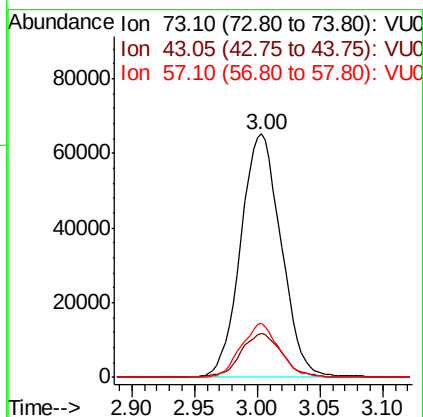
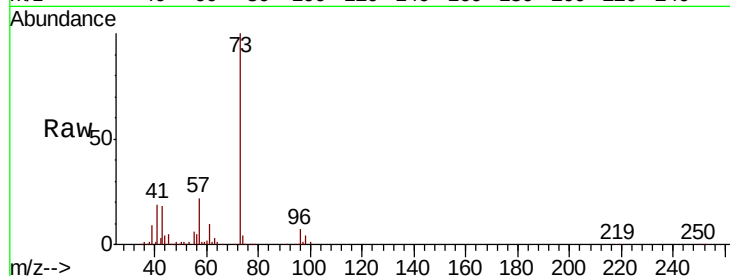




#17  
Methyl tert-butyl Ether  
Concen: 5.029 ug/L  
RT: 3.00 min Scan# 595  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

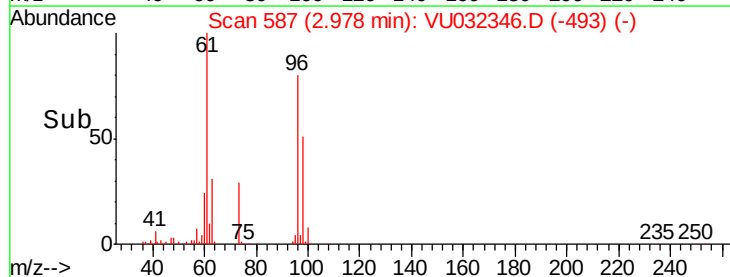
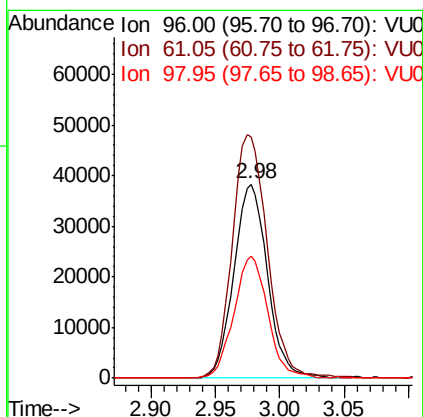
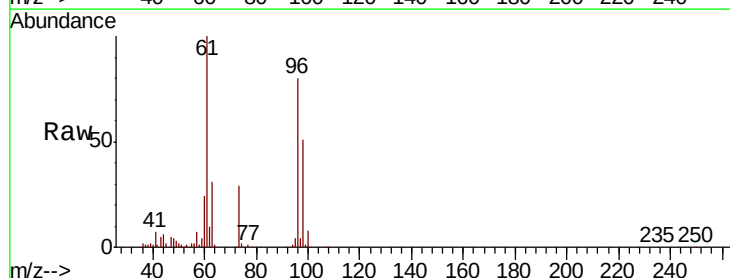
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

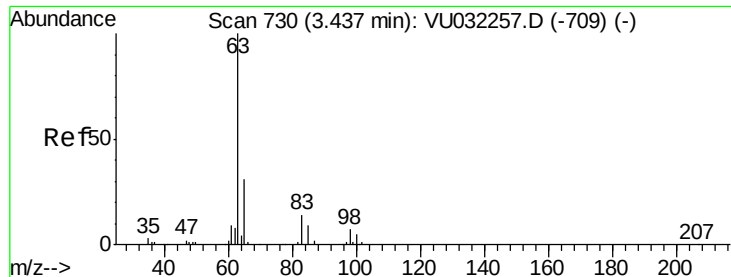
Tgt Ion: 73 Resp: 146229  
Ion Ratio Lower Upper  
73 100  
43 17.8 13.8 20.6  
57 21.0 16.2 24.4



#18  
trans-1,2-Dichloroethene  
Concen: 5.015 ug/L  
RT: 2.98 min Scan# 587  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Tgt Ion: 96 Resp: 69428  
Ion Ratio Lower Upper  
96 100  
61 124.2 90.6 168.3  
98 63.0 49.5 91.9

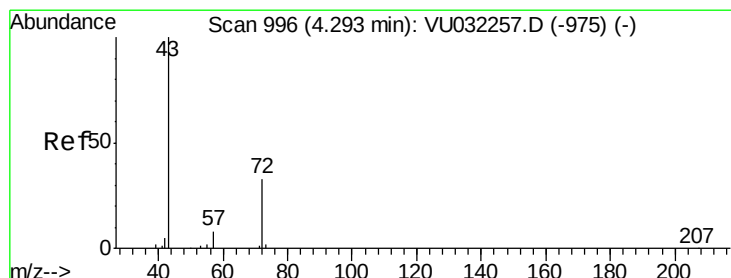
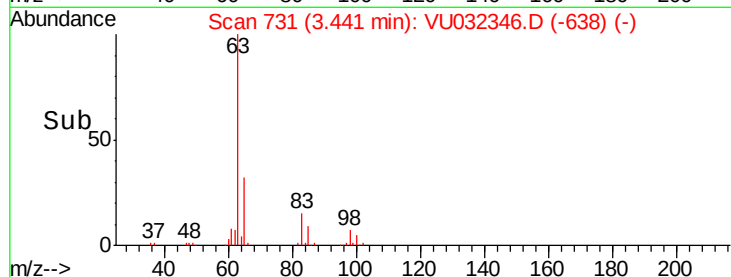
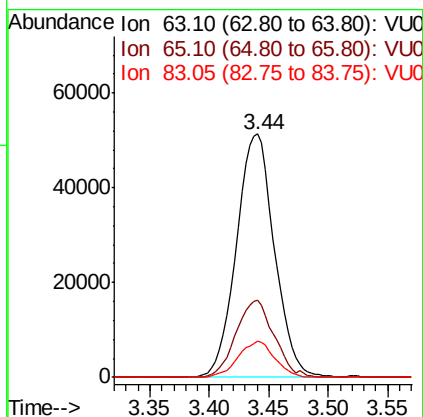
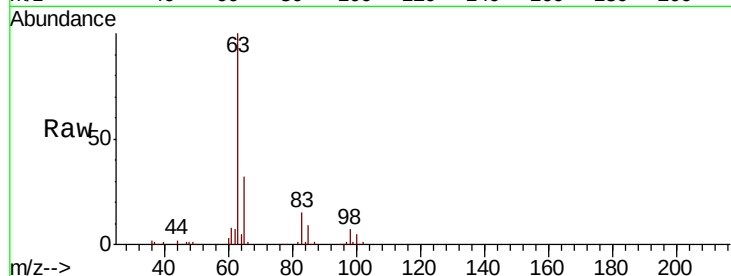




#19  
 1,1-Dichloroethane  
 Concen: 5.302 ug/L  
 RT: 3.44 min Scan# 731  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

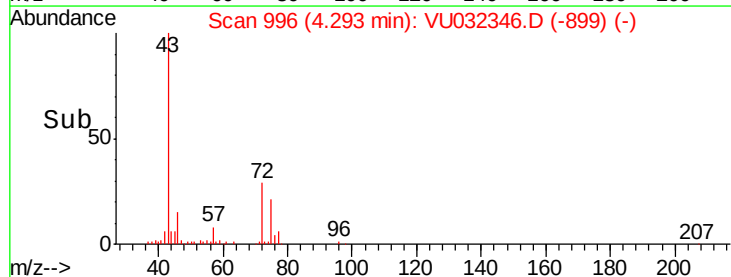
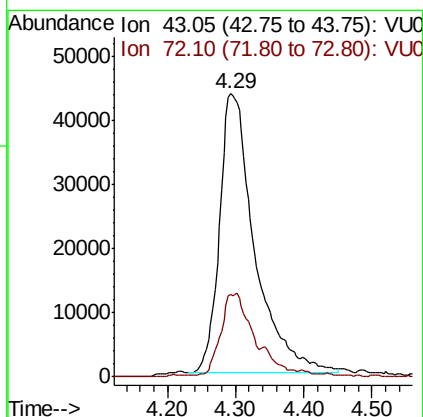
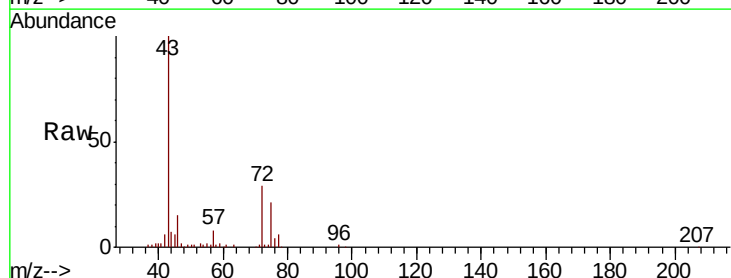
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

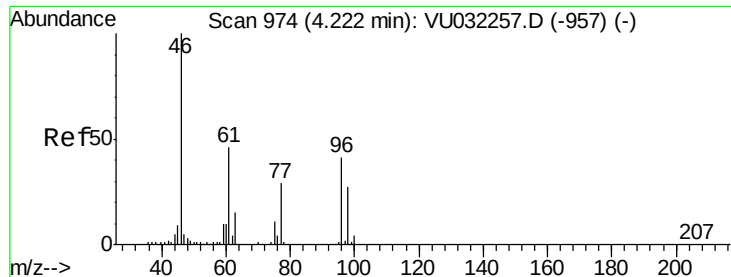
Tgt Ion: 63 Resp: 113355  
 Ion Ratio Lower Upper  
 63 100  
 65 31.7 23.5 43.7  
 83 14.7 8.8 16.3



#21  
 2-Butanone  
 Concen: 58.394 ug/L  
 RT: 4.29 min Scan# 996  
 Delta R.T. 0.01 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 43 Resp: 156695  
 Ion Ratio Lower Upper  
 43 100  
 72 23.1 15.2 45.6



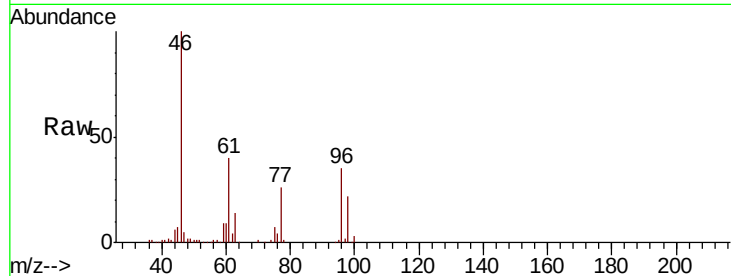


#22

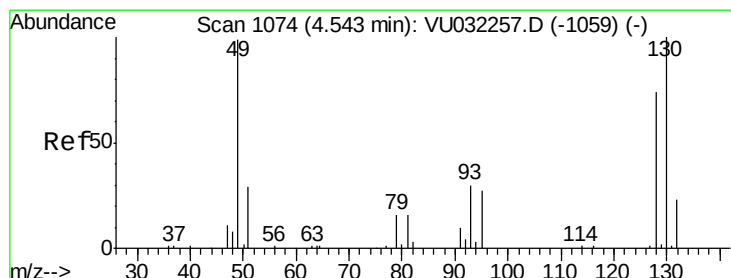
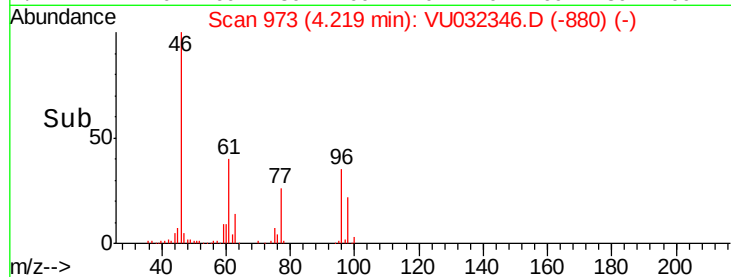
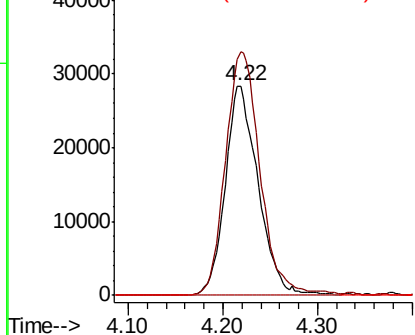
cis-1,2-Dichloroethene  
 Concen: 5.083 ug/L  
 RT: 4.22 min Scan# 973  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Tgt Ion: 96 Resp: 68688  
 Ion Ratio Lower Upper  
 96 100  
 61 116.3 82.5 153.1  
 68 0.0 0.0 0.0



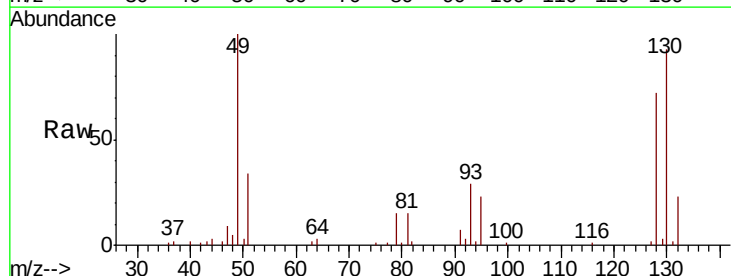
Abundance Ion 96.00 (95.70 to 96.70): VU0  
 Ion 61.05 (60.75 to 61.75): VU0  
 Ion 68.15 (67.85 to 68.85): VU0



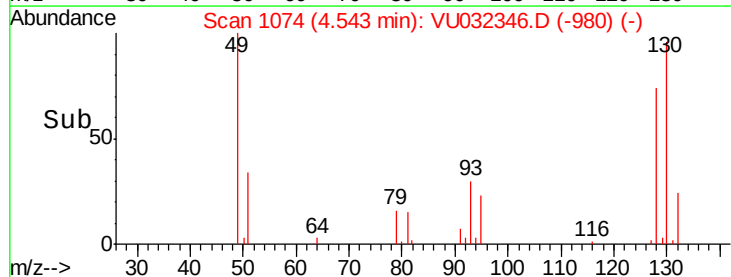
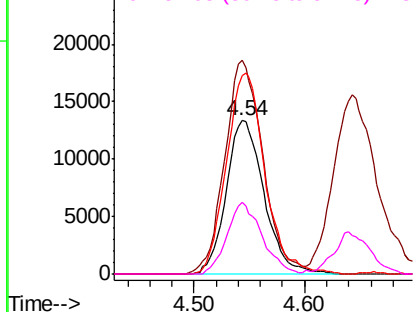
#23

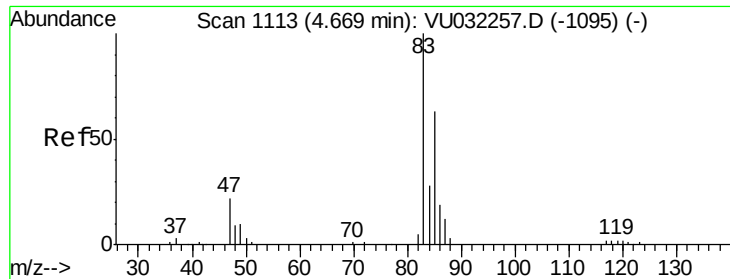
Bromochloromethane  
 Concen: 5.310 ug/L  
 RT: 4.54 min Scan# 1074  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 128 Resp: 31712  
 Ion Ratio Lower Upper  
 128 100  
 49 139.3 93.9 174.3  
 130 129.1 85.3 158.3  
 51 47.2 35.6 53.4



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

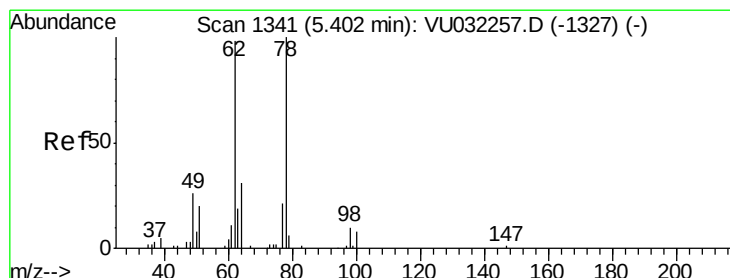
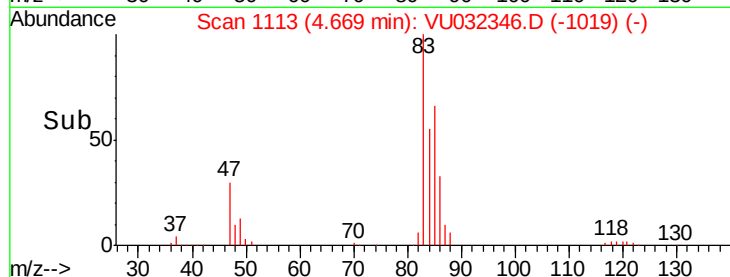
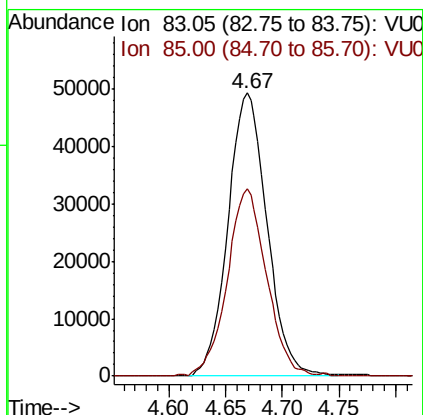
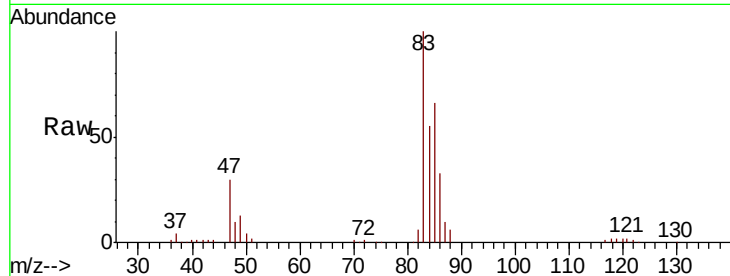




#25  
Chloroform  
Concen: 5.128 ug/L  
RT: 4.67 min Scan# 1113  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

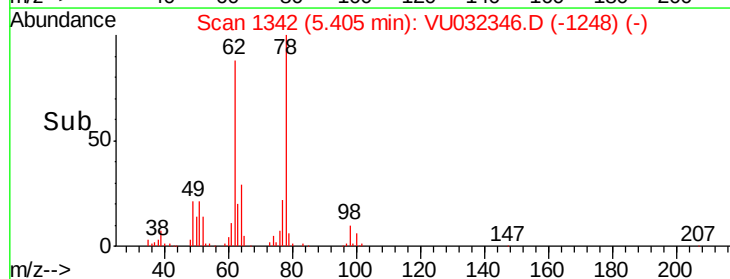
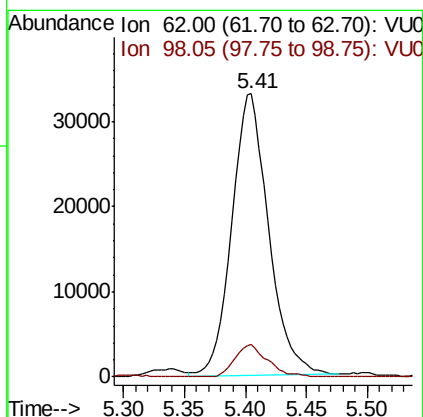
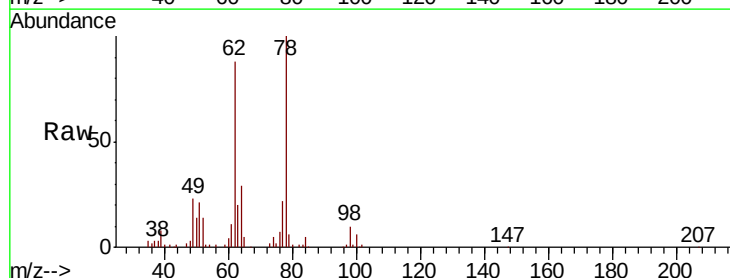
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

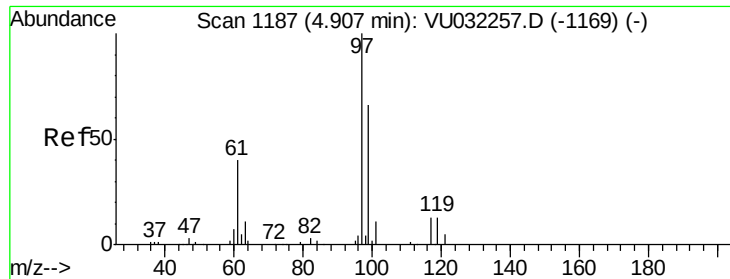
Tgt Ion: 83 Resp: 118402  
Ion Ratio Lower Upper  
83 100  
85 66.2 41.6 77.3



#27  
1,2-Dichloroethane  
Concen: 5.151 ug/L  
RT: 5.41 min Scan# 1342  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Tgt Ion: 62 Resp: 69218  
Ion Ratio Lower Upper  
62 100  
98 11.3 8.2 12.2

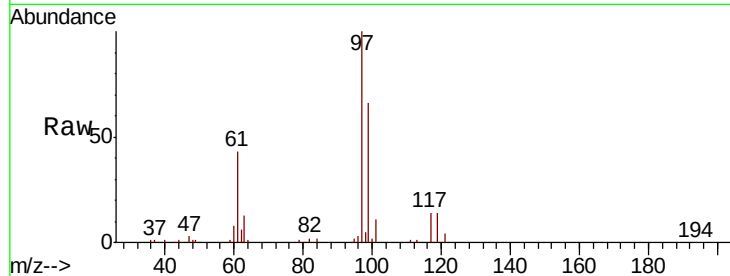




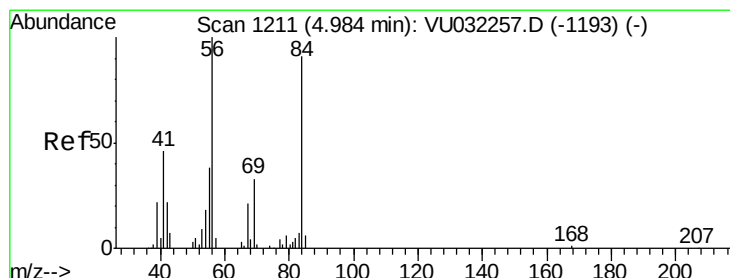
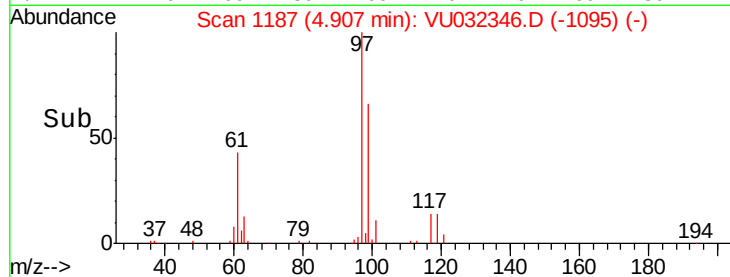
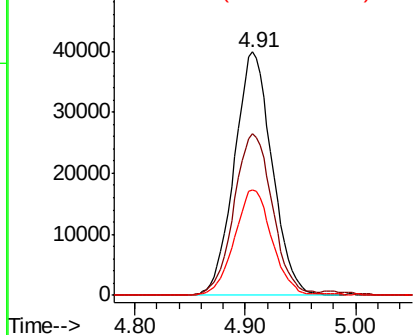
#29  
 1,1,1-Trichloroethane  
 Concen: 5.123 ug/L  
 RT: 4.91 min Scan# 1187  
 Delta R.T. -0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Tgt Ion: 97 Resp: 94350  
 Ion Ratio Lower Upper  
 97 100  
 99 67.8 50.3 75.5  
 61 43.0 34.1 51.1

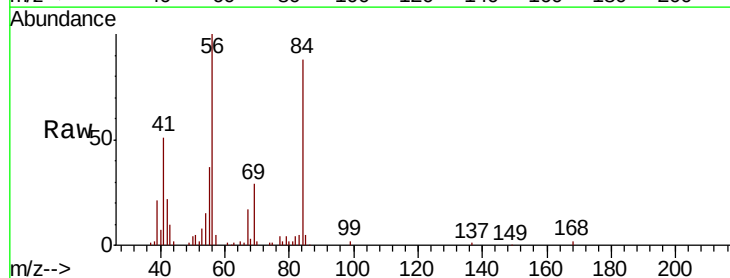


Abundance Ion 96.95 (96.65 to 97.65): VU0  
 Ion 99.05 (98.75 to 99.75): VU0  
 Ion 61.05 (60.75 to 61.75): VU0

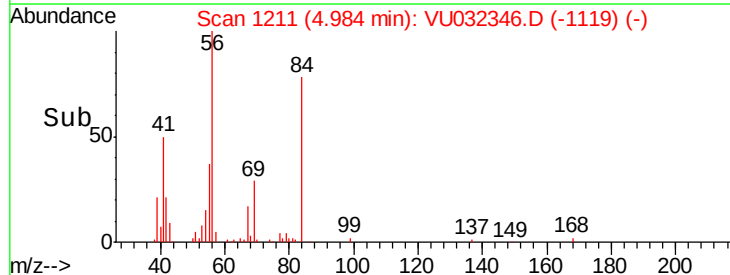
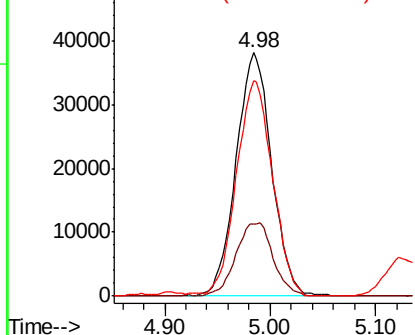


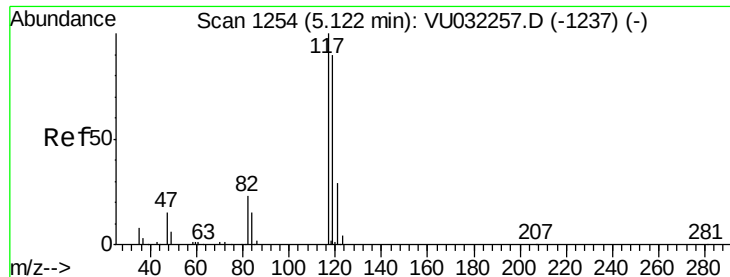
#30  
 Cyclohexane  
 Concen: 5.196 ug/L  
 RT: 4.98 min Scan# 1211  
 Delta R.T. -0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 56 Resp: 89470  
 Ion Ratio Lower Upper  
 56 100  
 69 31.4 26.6 39.8  
 84 88.7 75.0 112.6



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





#31

Carbon tetrachloride

Concen: 5.144 ug/L

RT: 5.13 min Scan# 1255

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

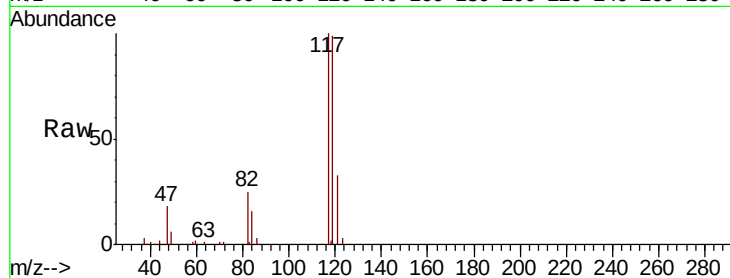
VSTD00516

Tgt Ion:117 Resp: 83457

Ion Ratio Lower Upper

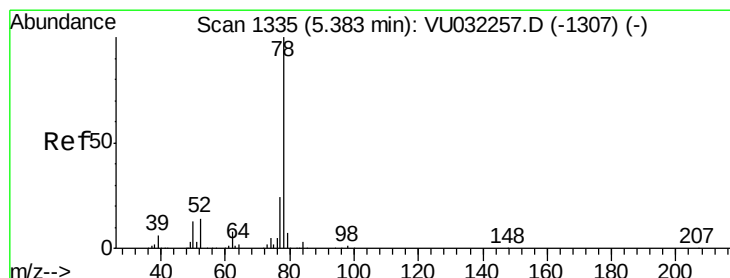
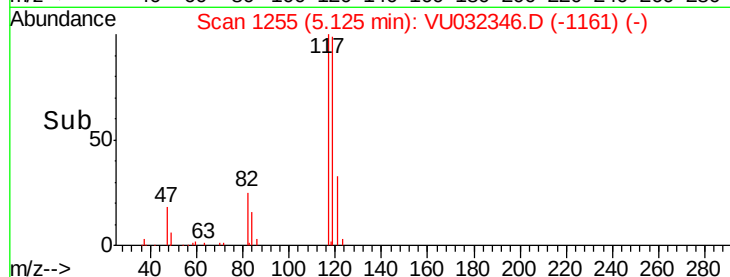
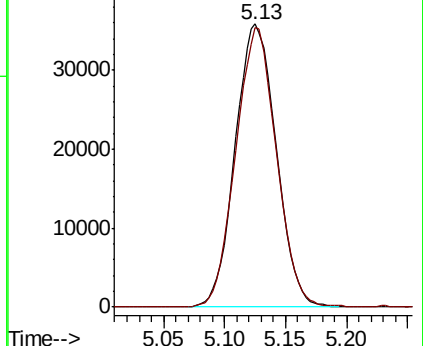
117 100

119 97.5 76.9 115.3



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.354 ug/L

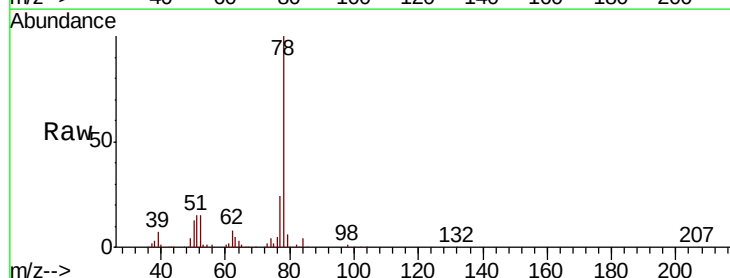
RT: 5.38 min Scan# 1335

Delta R.T. 0.00 min

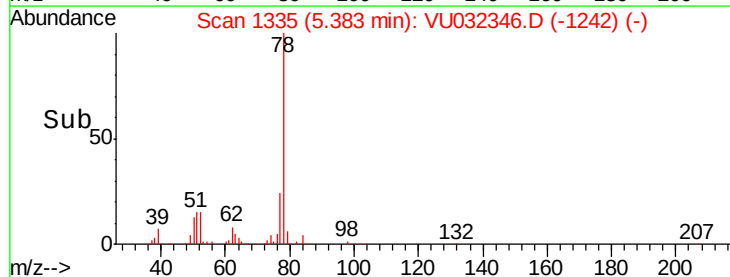
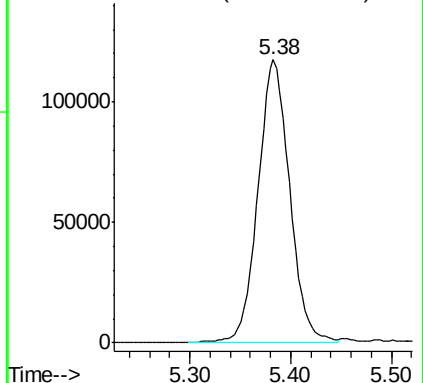
Lab File: VU032346.D

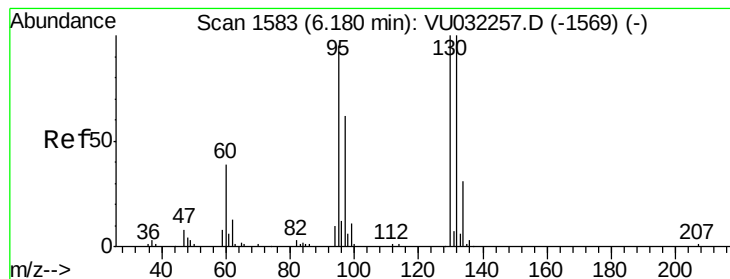
Acq: 29 May 2019 09:03

Tgt Ion: 78 Resp: 257005



Abundance Ion 78.10 (77.80 to 78.80): VU0





#34

Trichloroethene

Concen: 5.185 ug/L

RT: 6.18 min Scan# 1584

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

Tgt Ion: 95 Resp: 66792

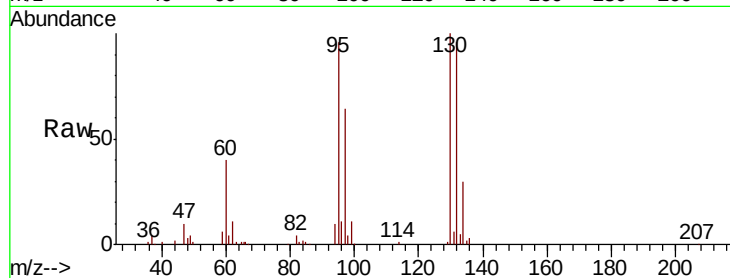
Ion Ratio Lower Upper

95 100

97 66.4 39.9 74.1

132 99.6 65.9 122.5

130 103.6 70.6 131.2

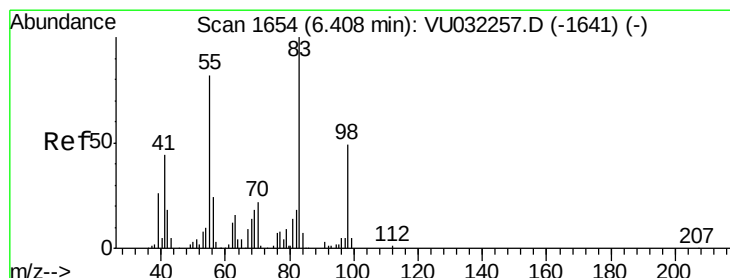
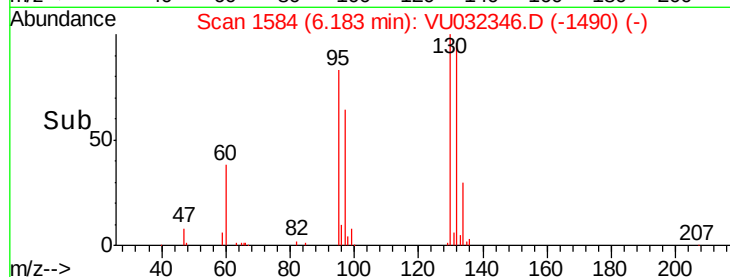
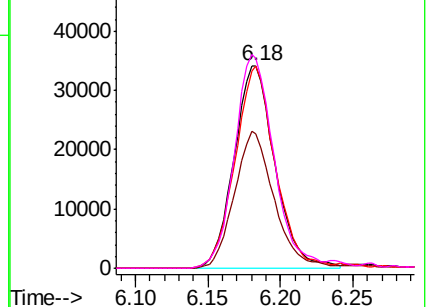


Abundance Ion 95.00 (94.70 to 95.70): VU0

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: 5.077 ug/L

RT: 6.41 min Scan# 1654

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

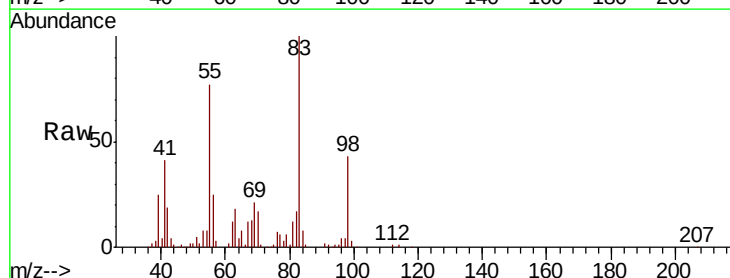
Tgt Ion: 83 Resp: 96334

Ion Ratio Lower Upper

83 100

55 79.0 59.7 89.5

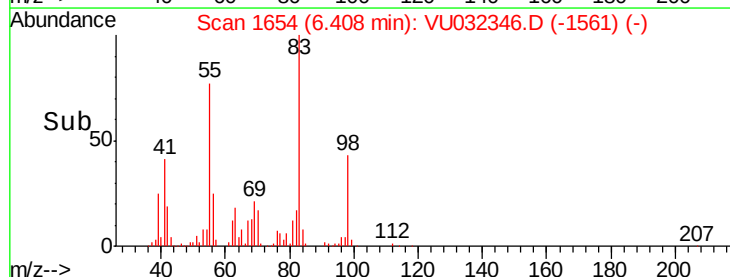
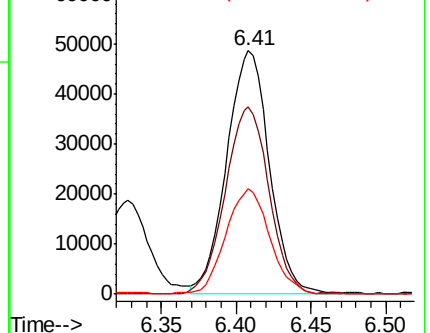
98 44.8 37.5 56.3



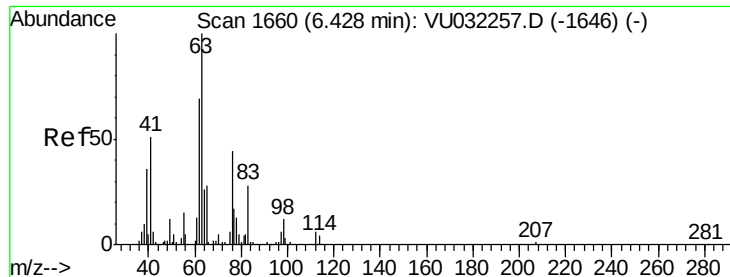
Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



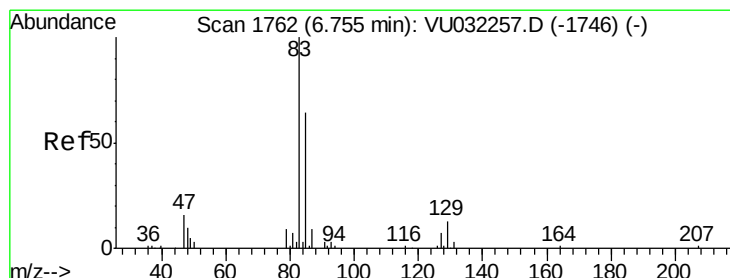
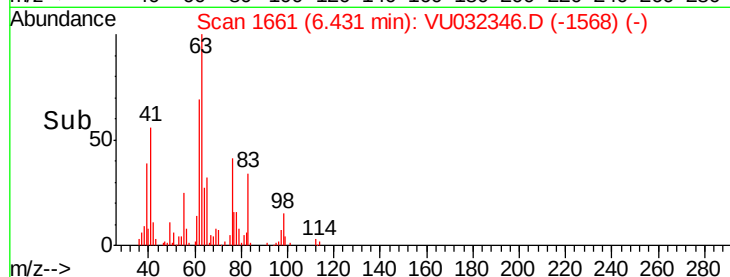
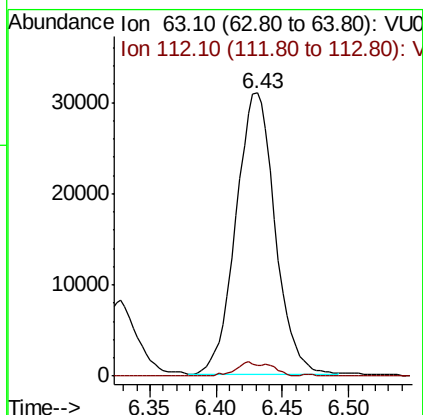
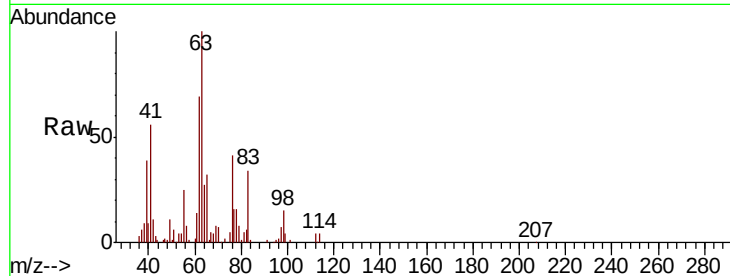




#37  
 1,2-Dichloropropane  
 Concen: 5.494 ug/L  
 RT: 6.43 min Scan# 1661  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

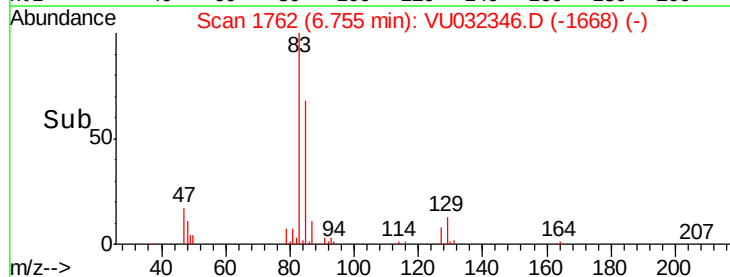
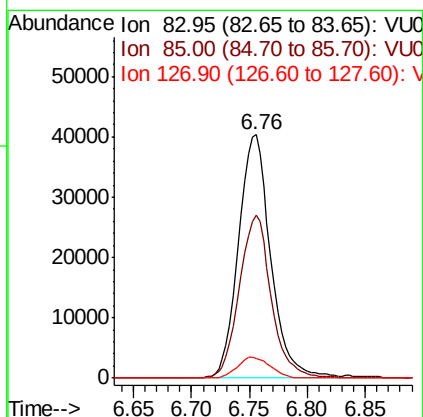
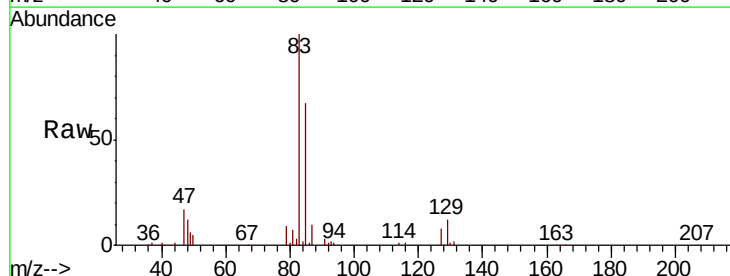
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

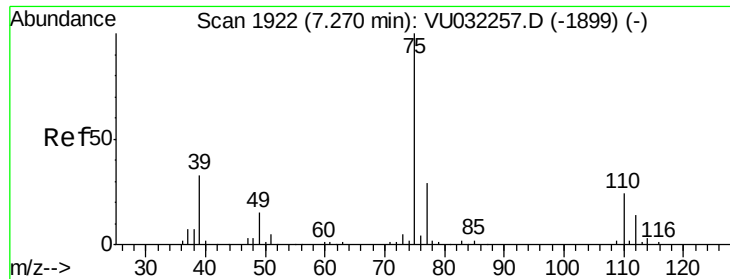
Tgt Ion: 63 Resp: 63495  
 Ion Ratio Lower Upper  
 63 100  
 112 2.7 3.8 5.8#



#38  
 Bromodichloromethane  
 Concen: 5.181 ug/L  
 RT: 6.76 min Scan# 1762  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 83 Resp: 77817  
 Ion Ratio Lower Upper  
 83 100  
 85 66.9 44.4 82.4  
 127 8.1 7.0 10.6

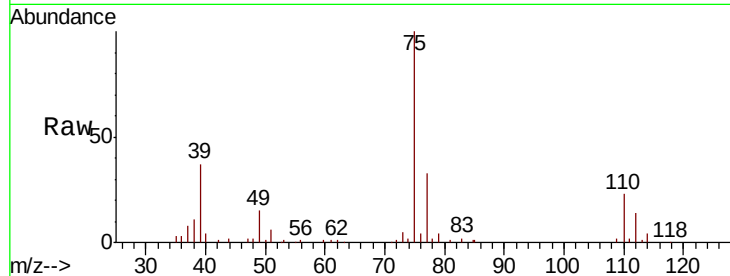




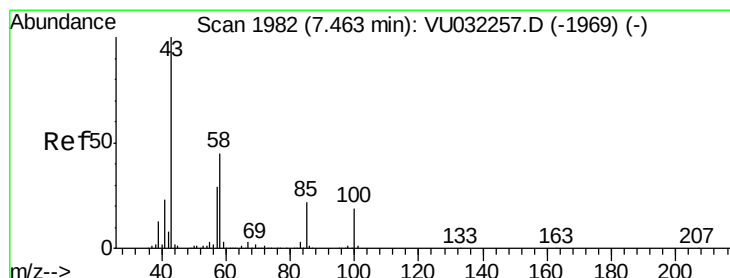
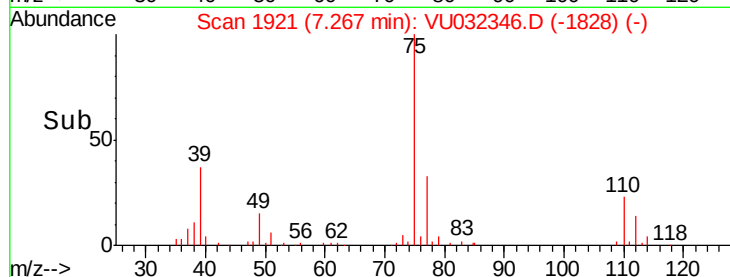
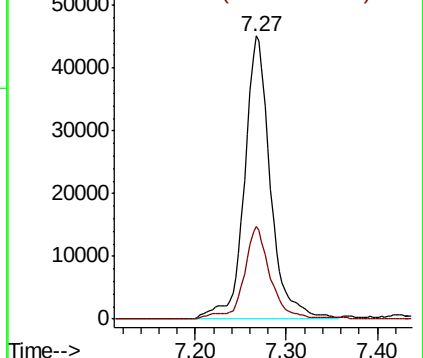
#39  
 cis-1,3-Dichloropropene  
 Concen: 5.451 ug/L  
 RT: 7.27 min Scan# 1921  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Tgt Ion: 75 Resp: 89695  
 Ion Ratio Lower Upper  
 75 100  
 77 32.5 22.6 42.0

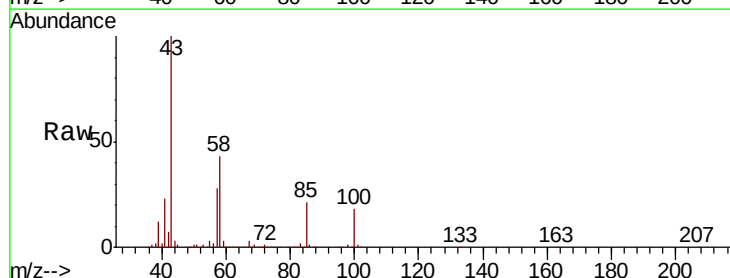


Abundance Ion 75.05 (74.75 to 75.75): VU032257.D (-1899) (-)  
 Ion 77.05 (76.75 to 77.75): VU032257.D (-1899) (-)

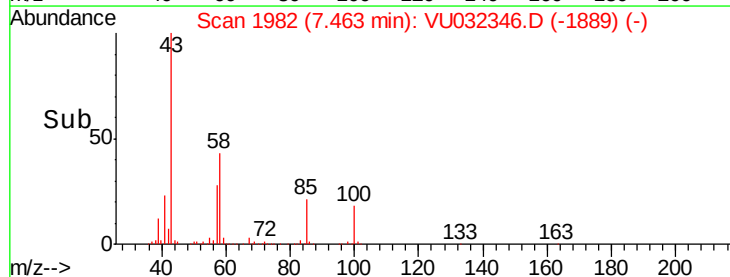
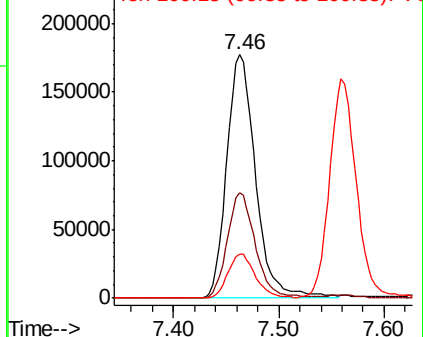


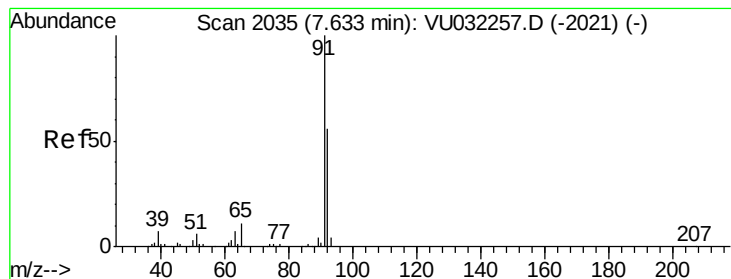
#40  
 4-Methyl-2-pentanone  
 Concen: 57.412 ug/L  
 RT: 7.46 min Scan# 1982  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 43 Resp: 335381  
 Ion Ratio Lower Upper  
 43 100  
 58 42.4 35.8 53.6  
 100 17.4 14.6 22.0



Abundance Ion 43.05 (42.75 to 43.75): VU032257.D (-1969) (-)  
 Ion 58.05 (57.75 to 58.75): VU032257.D (-1969) (-)  
 Ion 100.15 (99.85 to 100.85): VU032257.D (-1969) (-)





#42

Toluene

Concen: 5.322 ug/L

RT: 7.63 min Scan# 2035

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

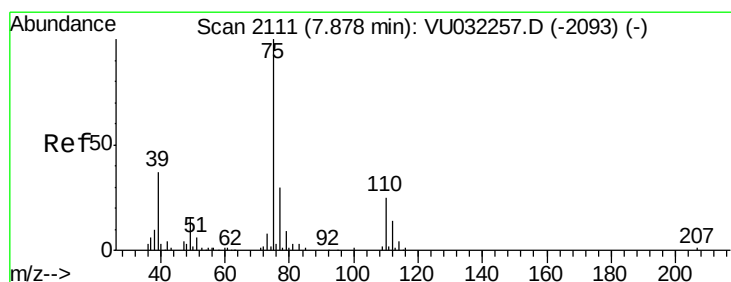
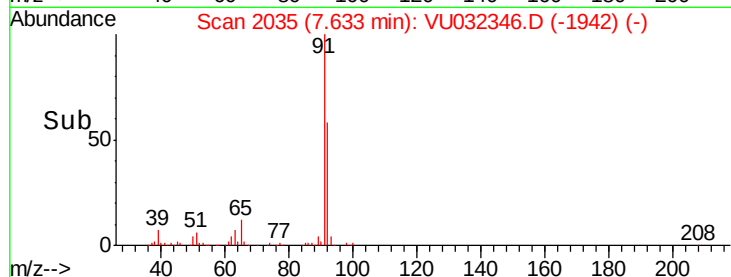
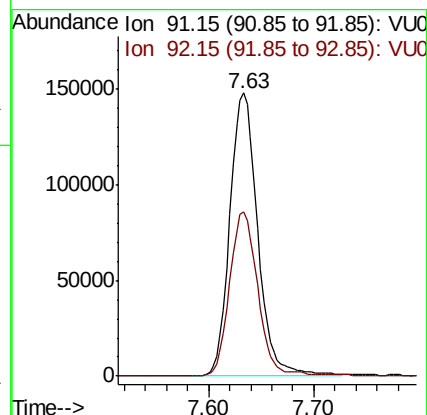
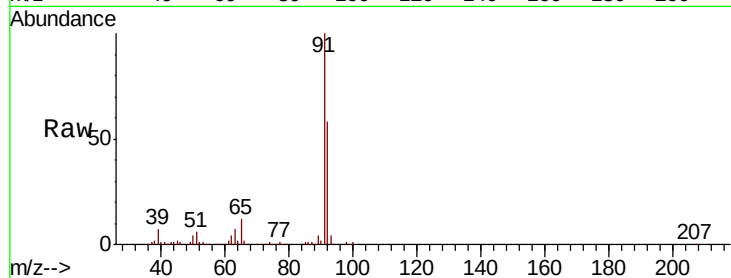
VSTD00516

Tgt Ion: 91 Resp: 271413

Ion Ratio Lower Upper

91 100

92 58.0 38.5 71.5



#44

trans-1,3-Dichloropropene

Concen: 5.395 ug/L

RT: 7.88 min Scan# 2111

Delta R.T. -0.00 min

Lab File: VU032346.D

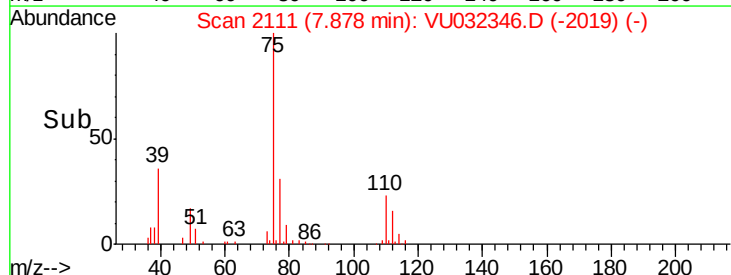
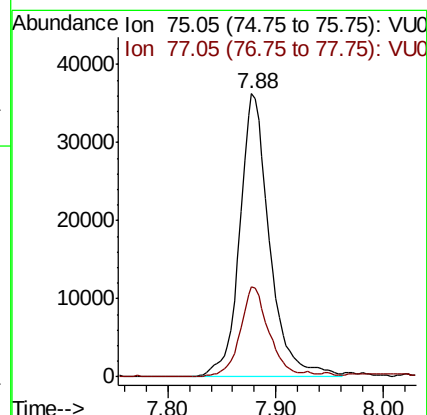
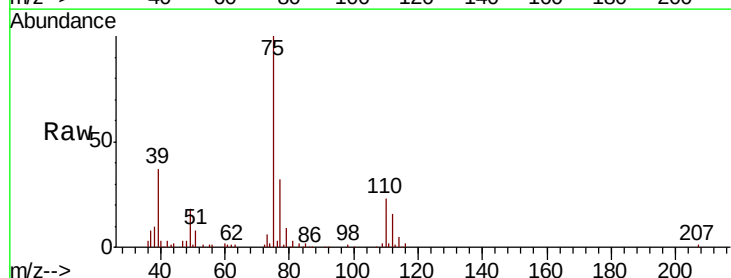
Acq: 29 May 2019 09:03

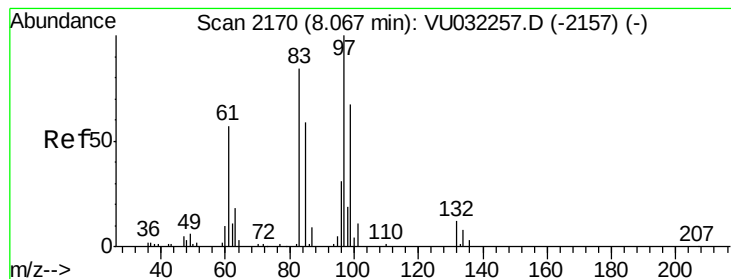
Tgt Ion: 75 Resp: 69759

Ion Ratio Lower Upper

75 100

77 31.7 22.5 41.9





#45

1,1,2-Trichloroethane

Concen: 5.301 ug/L

RT: 8.07 min Scan# 2170

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

Tgt Ion: 97 Resp: 47304

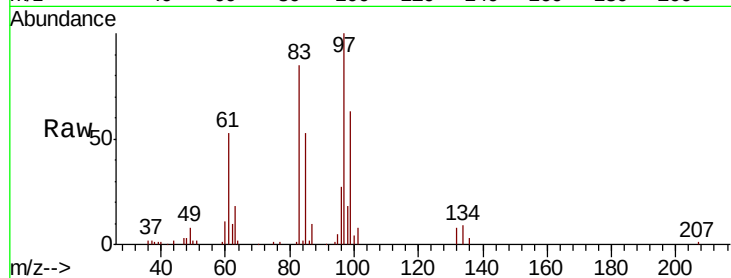
Ion Ratio Lower Upper

97 100

99 63.0 44.2 82.0

83 84.7 60.5 112.3

85 52.7 36.3 67.3



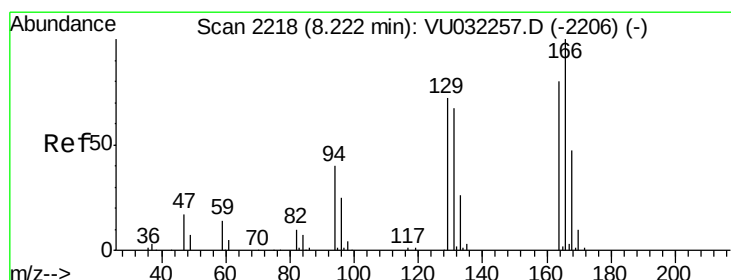
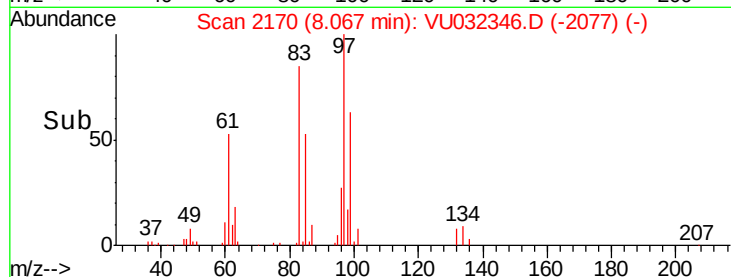
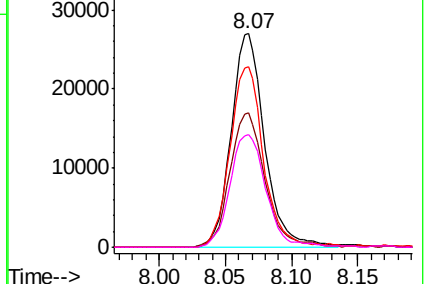
Abundance

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: 5.308 ug/L

RT: 8.22 min Scan# 2218

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Tgt Ion: 164 Resp: 56448

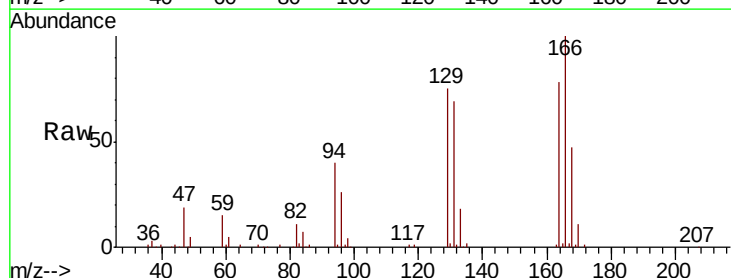
Ion Ratio Lower Upper

164 100

129 96.2 67.1 124.7

131 88.3 62.2 115.4

166 128.7 90.9 168.9



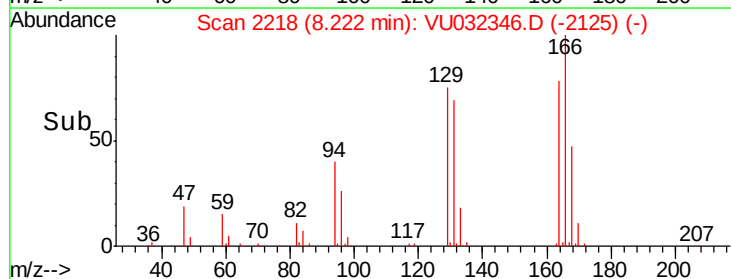
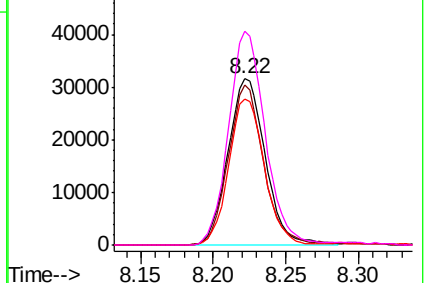
Abundance

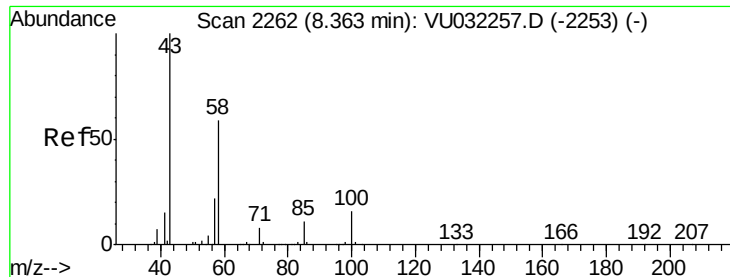
Ion 163.90 (163.60 to 164.60): V

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

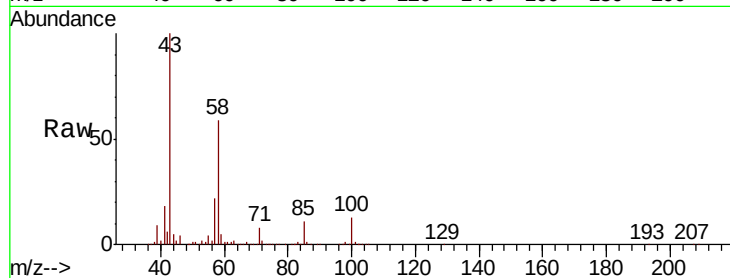




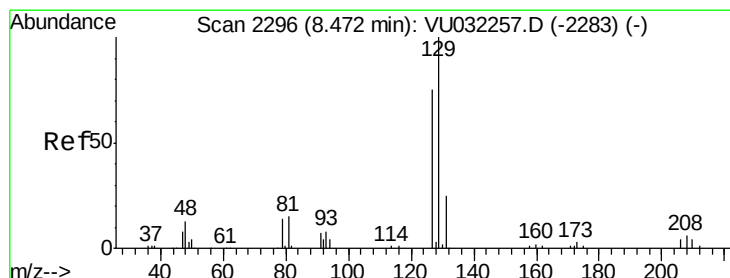
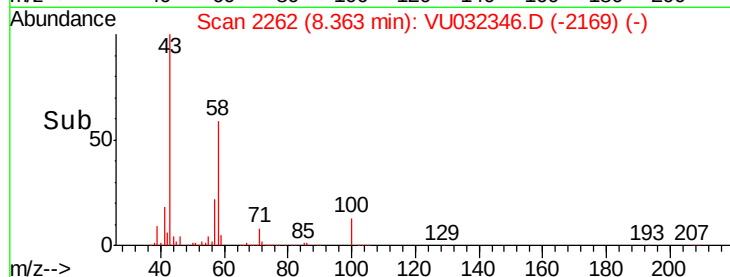
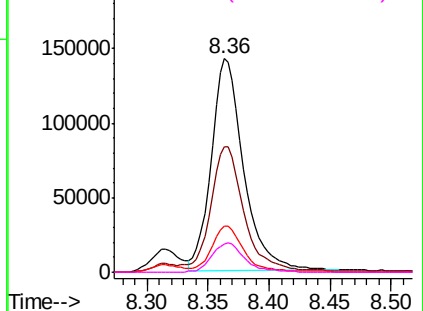
#48  
2-Hexanone  
Concen: 59.258 ug/L  
RT: 8.36 min Scan# 2262  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

Tgt Ion: 43 Resp: 265506  
Ion Ratio Lower Upper  
43 100  
58 58.2 49.7 74.5  
57 21.6 17.1 25.7  
100 13.6 11.6 17.4

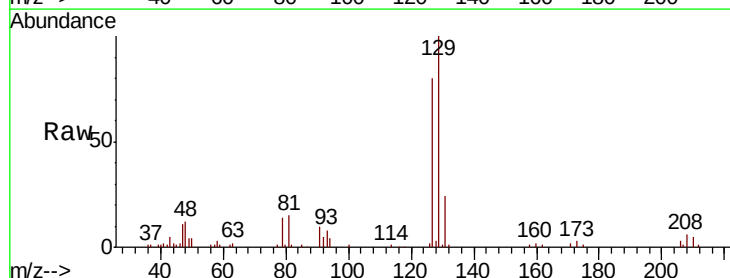


Abundance Ion 43.05 (42.75 to 43.75): VU0  
Ion 58.05 (57.75 to 58.75): VU0  
Ion 57.20 (56.90 to 57.90): VU0  
Ion 100.15 (99.85 to 100.85): VU0

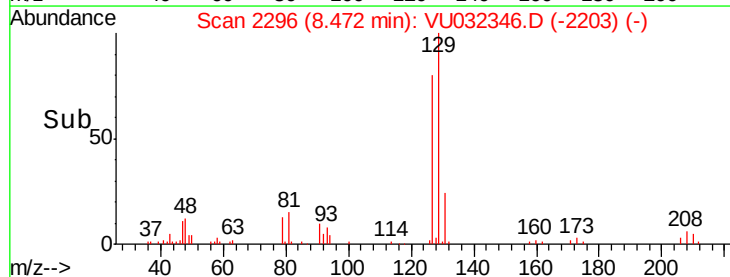
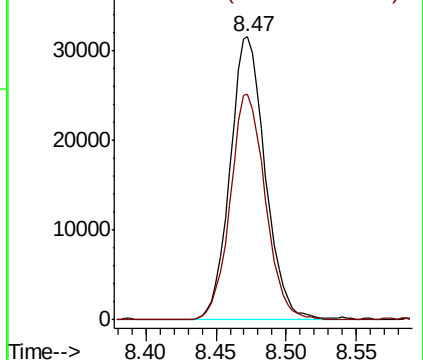


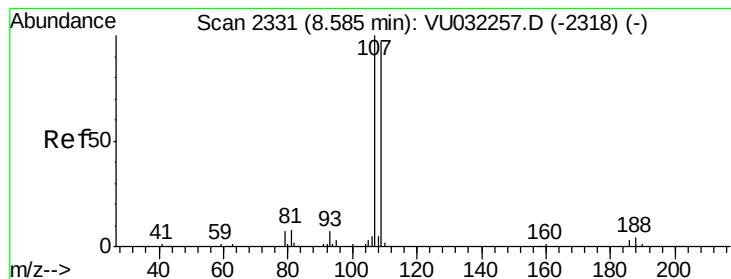
#49  
Dibromochloromethane  
Concen: 5.433 ug/L  
RT: 8.47 min Scan# 2296  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Tgt Ion: 129 Resp: 55185  
Ion Ratio Lower Upper  
129 100  
127 79.9 51.7 95.9



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V





#50

1,2-Dibromoethane

Concen: 5.229 ug/L

RT: 8.59 min Scan# 2331

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

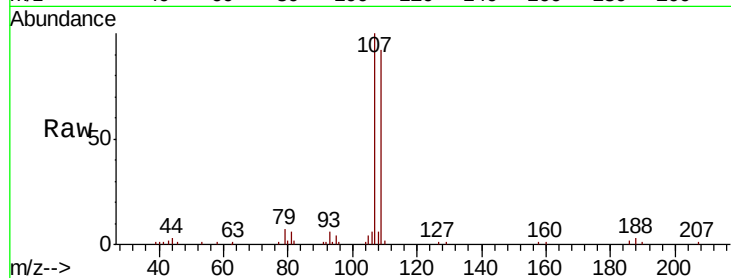
Tgt Ion:107 Resp: 43995

Ion Ratio Lower Upper

107 100

109 91.7 65.8 122.2

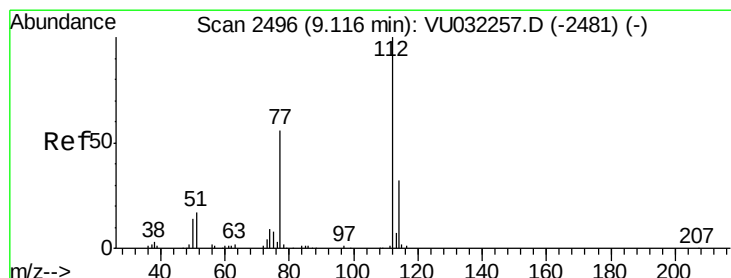
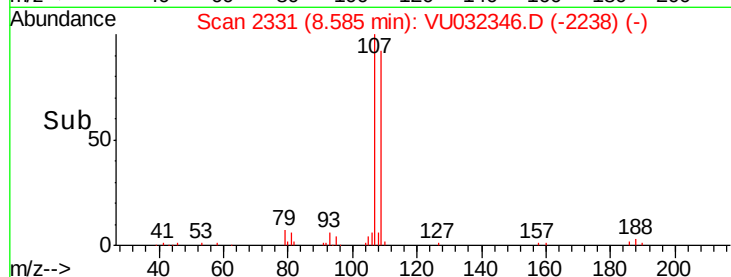
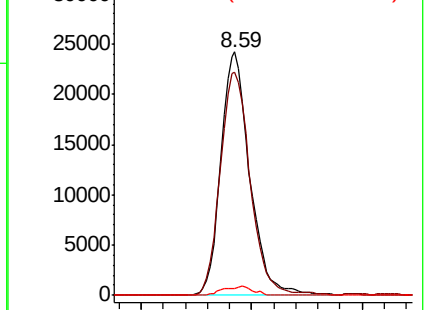
188 2.9 2.6 3.8



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: 5.313 ug/L

RT: 9.12 min Scan# 2496

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

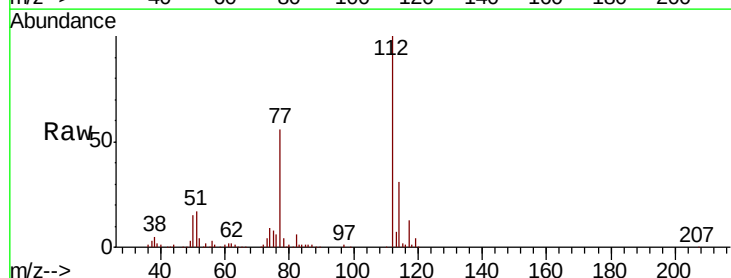
Tgt Ion:112 Resp: 173428

Ion Ratio Lower Upper

112 100

114 31.3 22.6 42.0

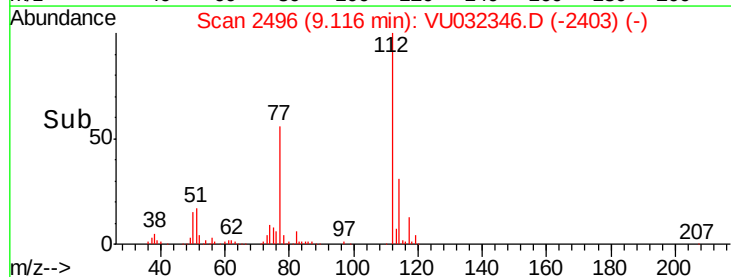
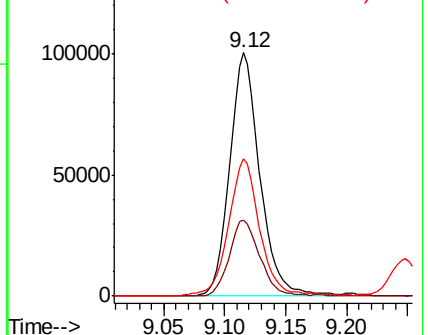
77 56.4 46.8 70.2

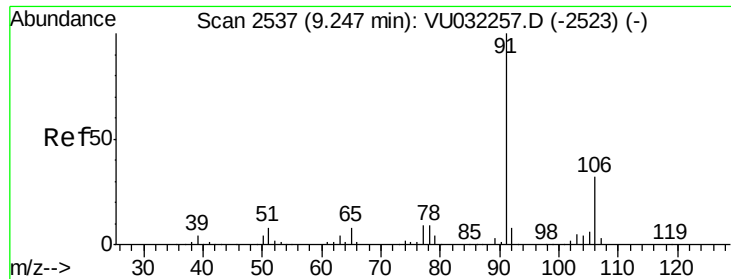


Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VU





#52

Ethylbenzene

Concen: 5.203 ug/L

RT: 9.25 min Scan# 2537

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

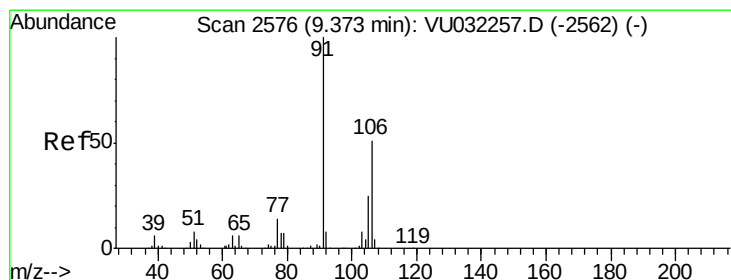
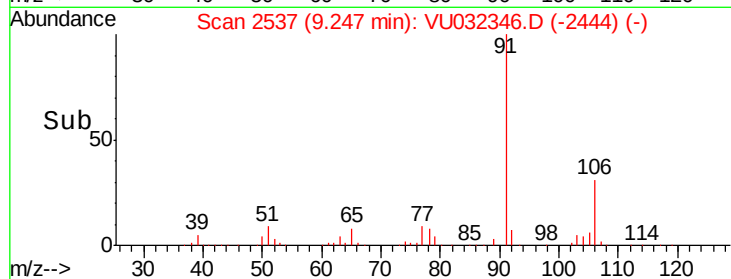
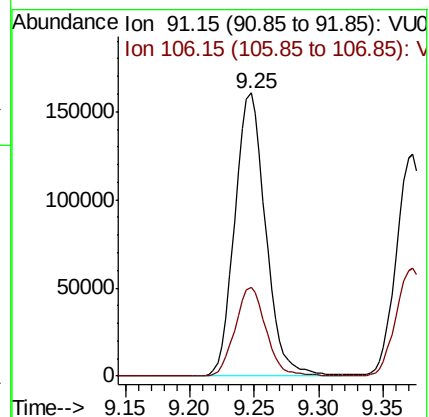
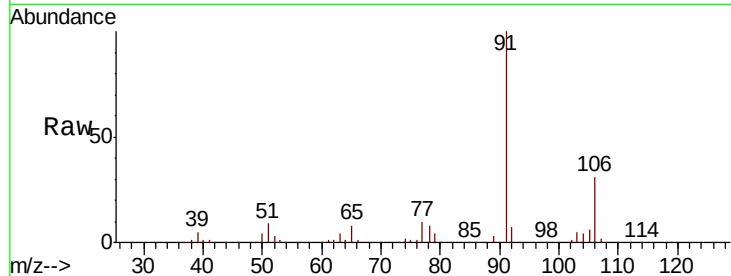
VSTD00516

Tgt Ion: 91 Resp: 267110

Ion Ratio Lower Upper

91 100

106 31.2 20.9 38.9



#53

m,p-Xylene

Concen: 5.578 ug/L

RT: 9.37 min Scan# 2576

Delta R.T. 0.00 min

Lab File: VU032346.D

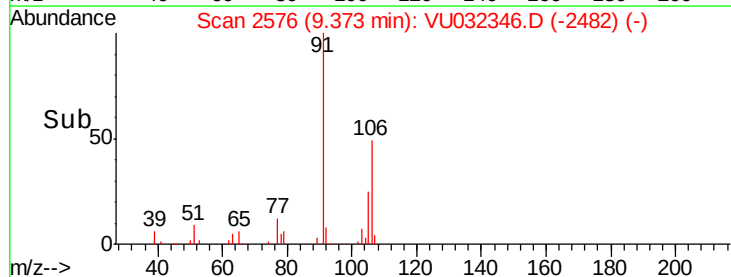
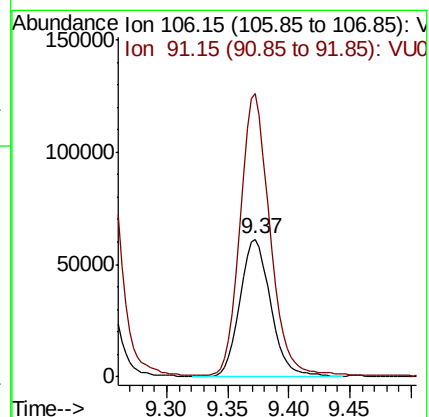
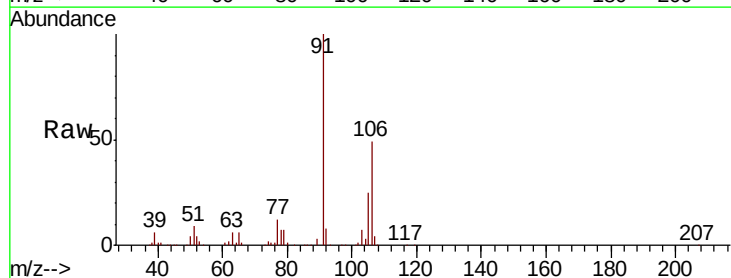
Acq: 29 May 2019 09:03

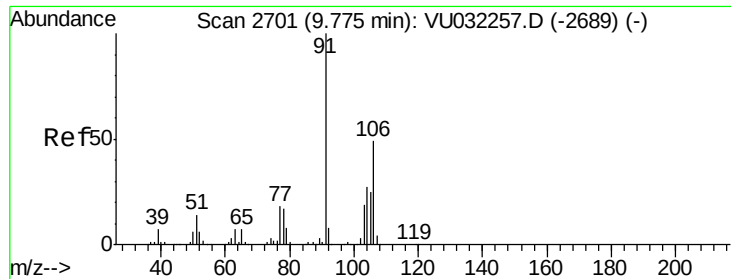
Tgt Ion: 106 Resp: 106485

Ion Ratio Lower Upper

106 100

91 205.6 143.9 267.2

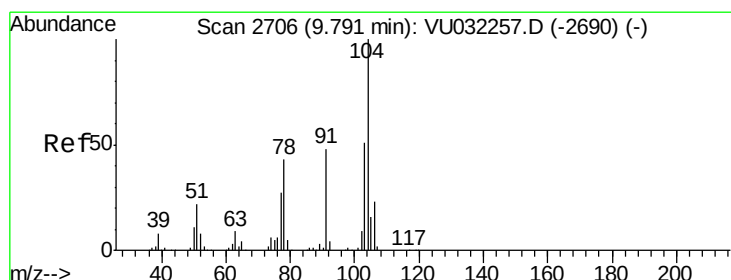
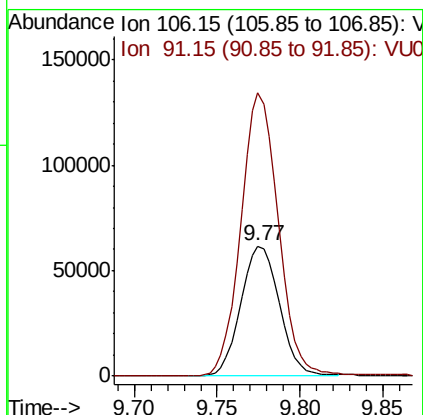
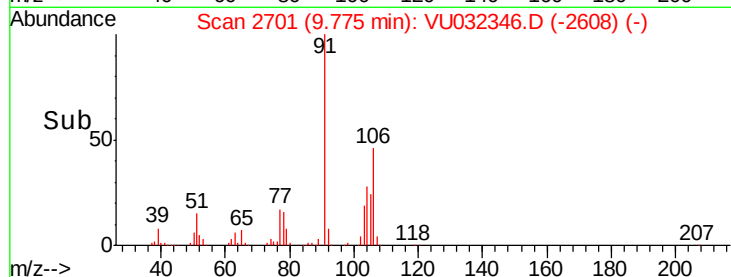
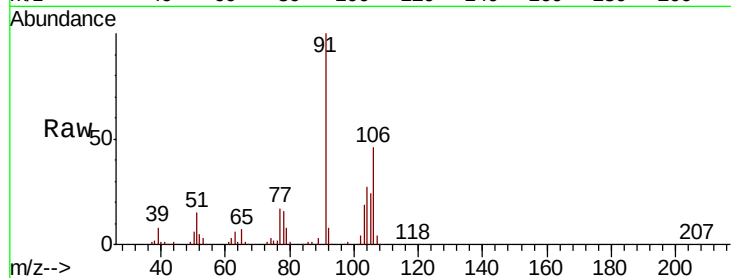




#54  
o-Xylene  
Concen: 5.239 ug/L  
RT: 9.77 min Scan# 2701  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

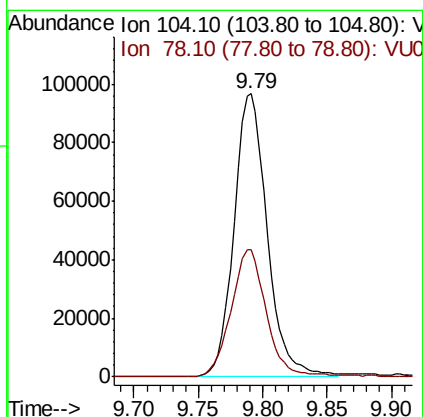
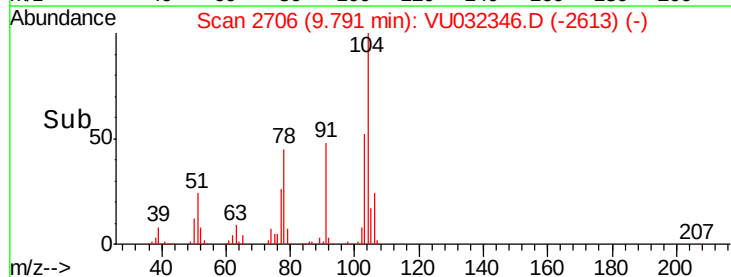
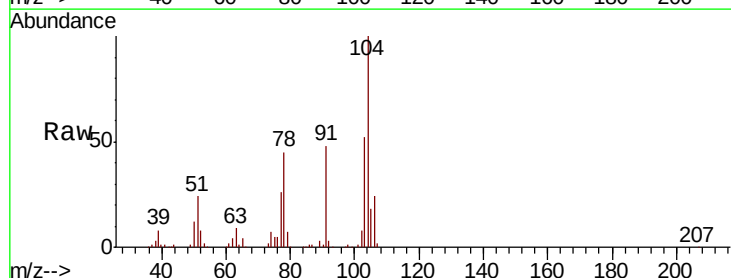
Instrument :  
MSVOA\_U  
ClientSampleId :  
VSTD00516

Tgt Ion:106 Resp: 99930  
Ion Ratio Lower Upper  
106 100  
91 217.3 147.8 274.4

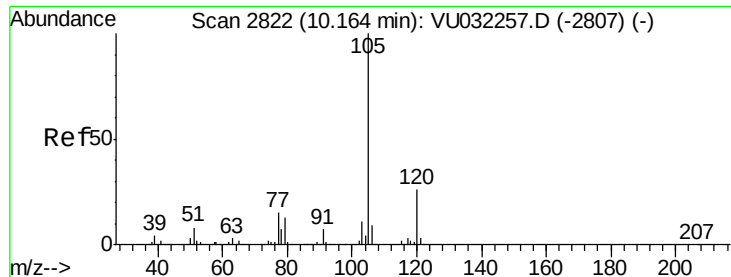


#55  
Styrene  
Concen: 5.418 ug/L  
RT: 9.79 min Scan# 2706  
Delta R.T. 0.00 min  
Lab File: VU032346.D  
Acq: 29 May 2019 09:03

Tgt Ion:104 Resp: 172934  
Ion Ratio Lower Upper  
104 100  
78 44.9 30.3 56.3







#56

Isopropylbenzene

Concen: 5.305 ug/L

RT: 10.16 min Scan# 2822

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

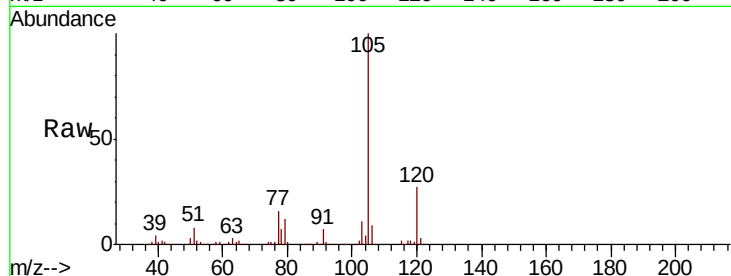
Tgt Ion: 105 Resp: 255860

Ion Ratio Lower Upper

105 100

120 27.7 21.0 31.6

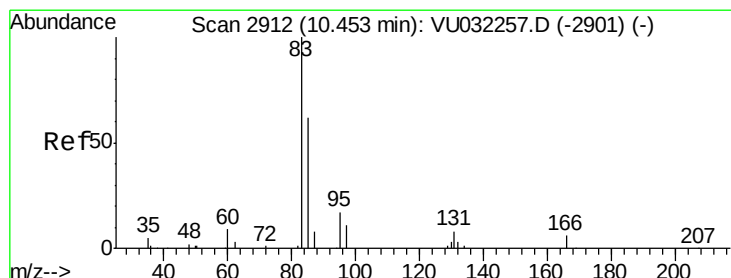
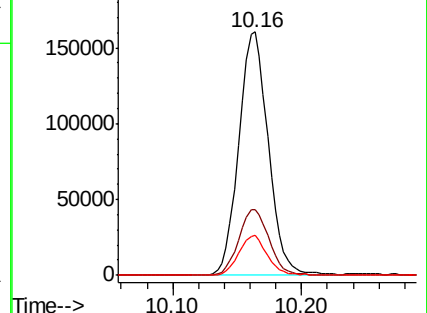
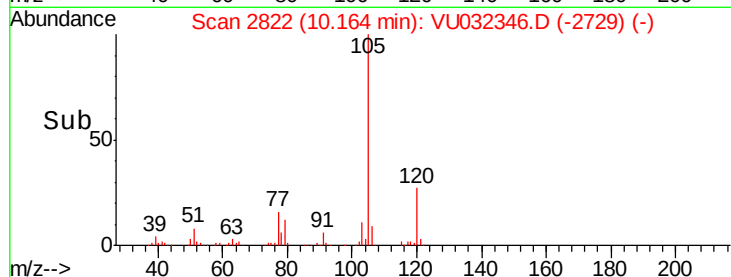
77 16.0 11.9 17.9



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 5.235 ug/L

RT: 10.45 min Scan# 2912

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

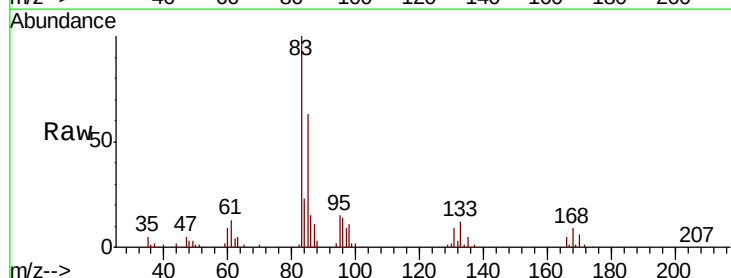
Tgt Ion: 83 Resp: 56268

Ion Ratio Lower Upper

83 100

85 62.8 46.5 86.3

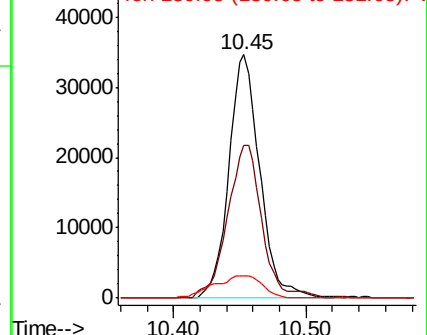
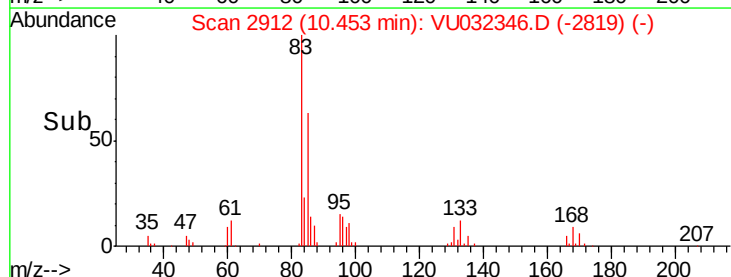
131 8.9 7.8 11.6

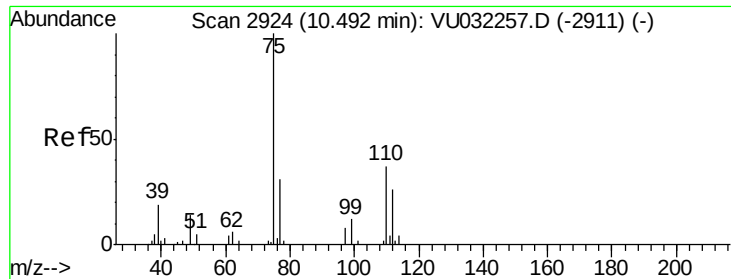


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 85.00 (84.70 to 85.70): V

Ion 130.95 (130.65 to 131.65): V

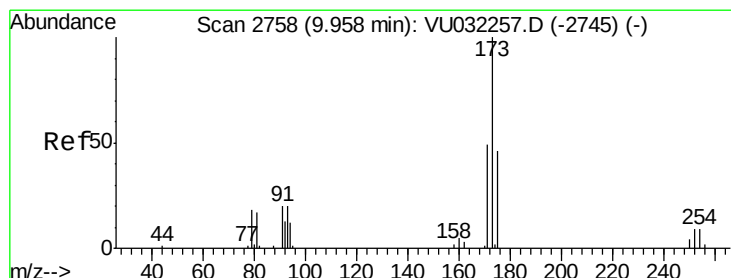
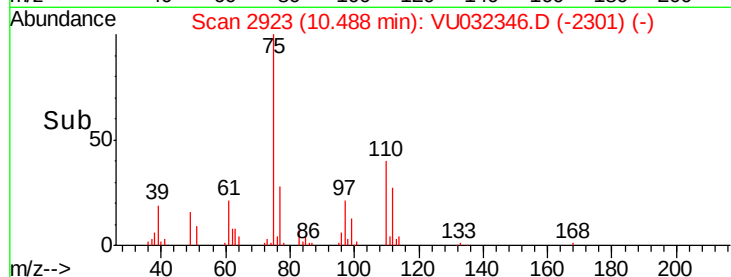
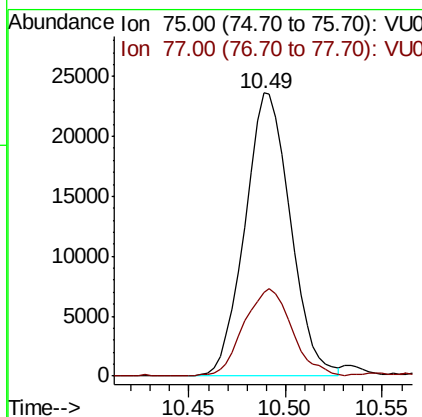
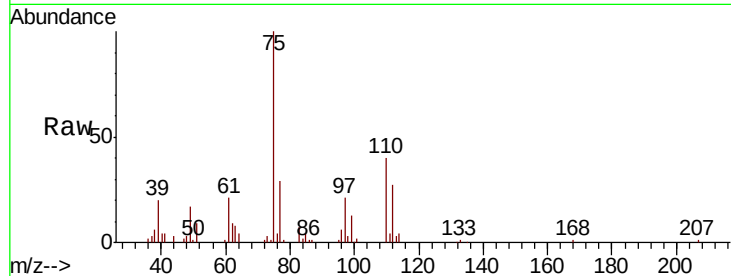




#59  
 1,2,3-Trichloropropane  
 Concen: 5.143 ug/L  
 RT: 10.49 min Scan# 2923  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

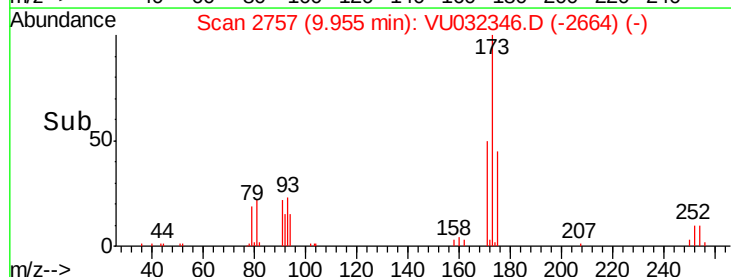
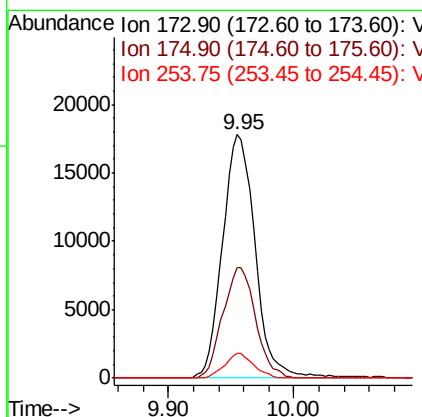
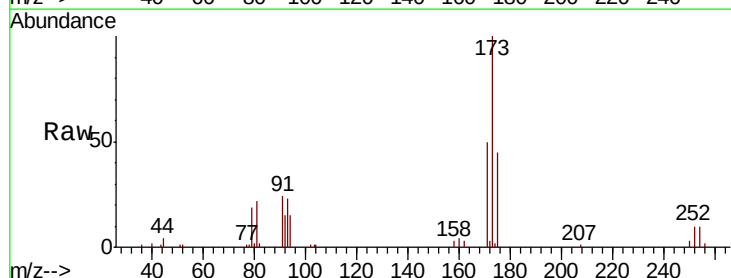
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

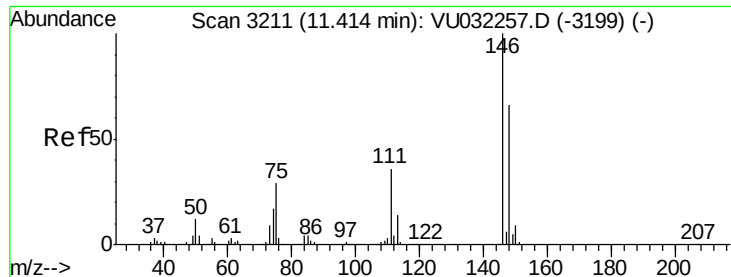
Tgt Ion: 75 Resp: 38707  
 Ion Ratio Lower Upper  
 75 100  
 77 32.6 28.2 42.4



#61  
 Bromoform  
 Concen: 5.260 ug/L  
 RT: 9.95 min Scan# 2757  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 173 Resp: 32101  
 Ion Ratio Lower Upper  
 173 100  
 175 45.4 40.1 60.1  
 254 9.0 7.8 11.6





#62

1,3-Dichlorobenzene

Concen: 5.121 ug/L

RT: 11.41 min Scan# 3211

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

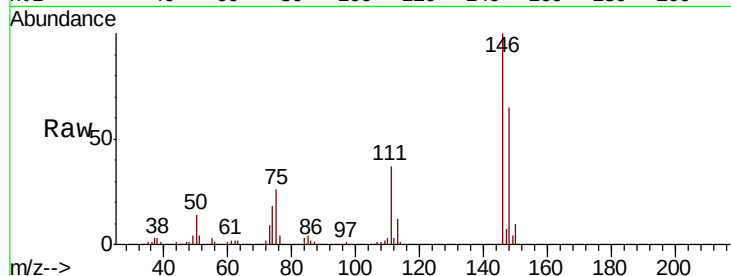
Tgt Ion:146 Resp: 128935

Ion Ratio Lower Upper

146 100

111 37.5 28.2 52.4

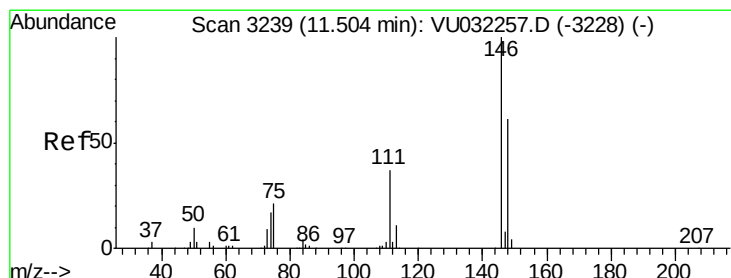
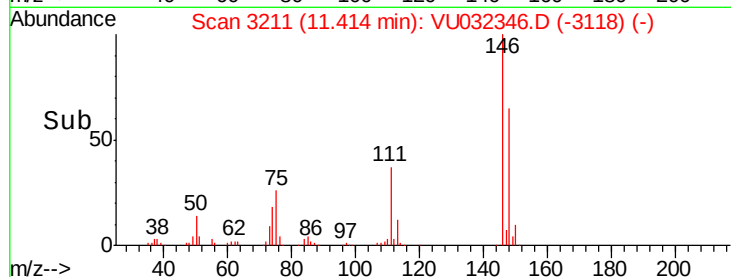
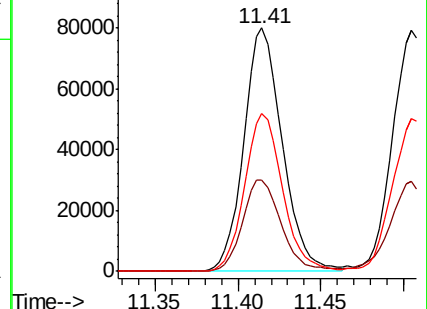
148 65.0 46.0 85.4



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



#63

1,4-Dichlorobenzene

Concen: 5.032 ug/L

RT: 11.50 min Scan# 3239

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

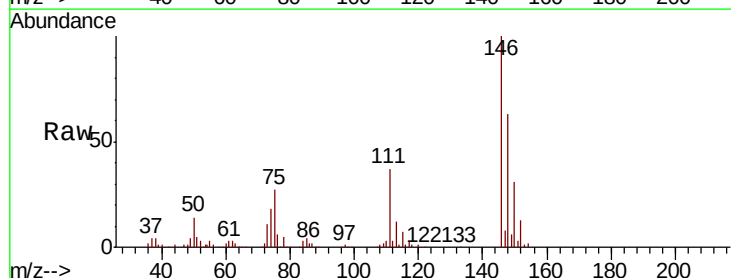
Tgt Ion:146 Resp: 132875

Ion Ratio Lower Upper

146 100

111 37.4 26.6 49.4

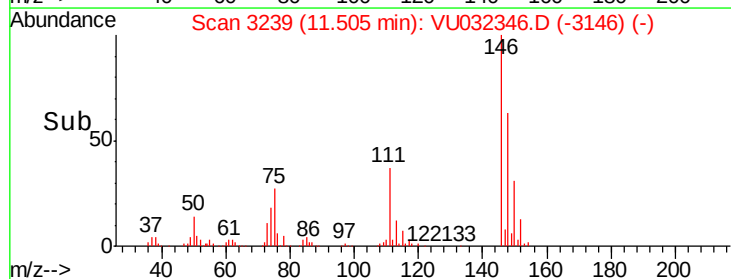
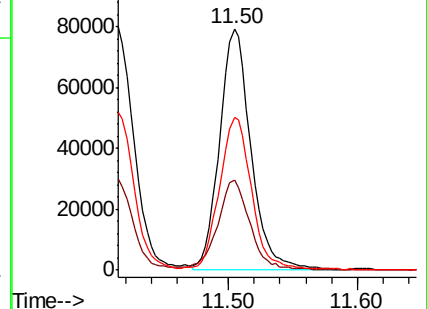
148 63.2 45.2 84.0

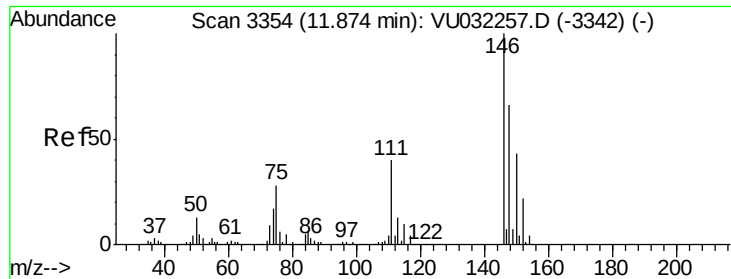


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

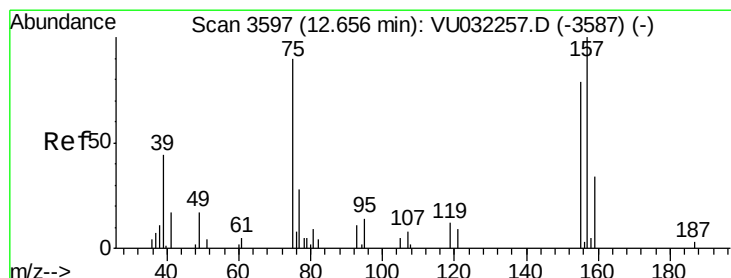
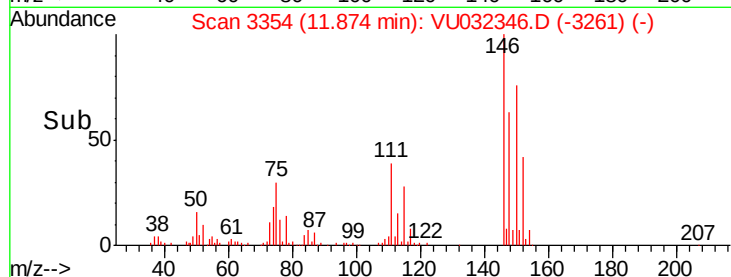
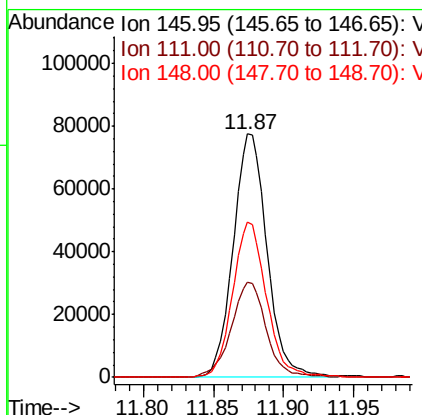
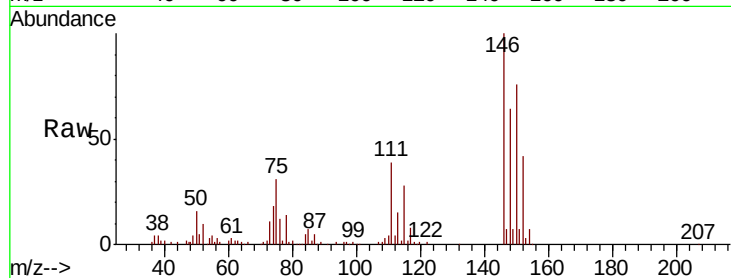




#65  
 1,2-Dichlorobenzene  
 Concen: 5.112 ug/L  
 RT: 11.87 min Scan# 3354  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

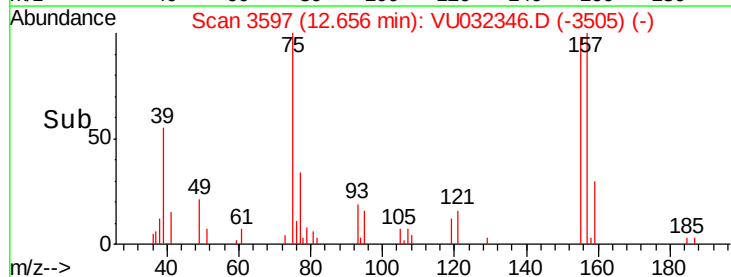
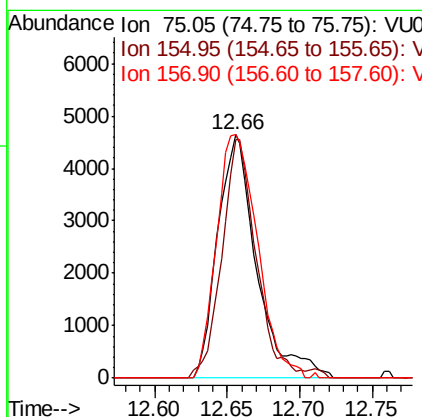
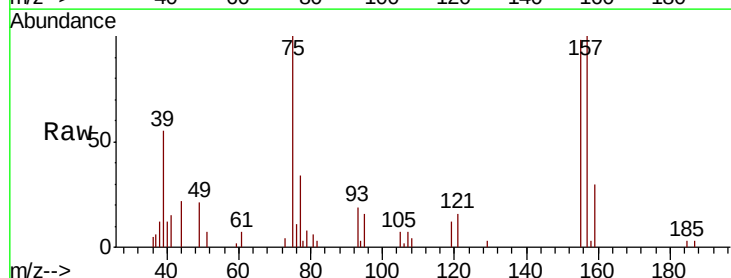
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

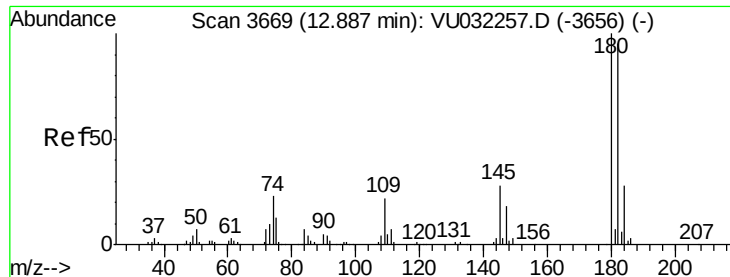
Tgt Ion:146 Resp: 130540  
 Ion Ratio Lower Upper  
 146 100  
 111 39.3 33.9 50.9  
 148 63.8 54.3 81.5



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 5.263 ug/L  
 RT: 12.66 min Scan# 3597  
 Delta R.T. -0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion: 75 Resp: 8679  
 Ion Ratio Lower Upper  
 75 100  
 155 98.1 69.3 103.9  
 157 100.0 90.6 135.8

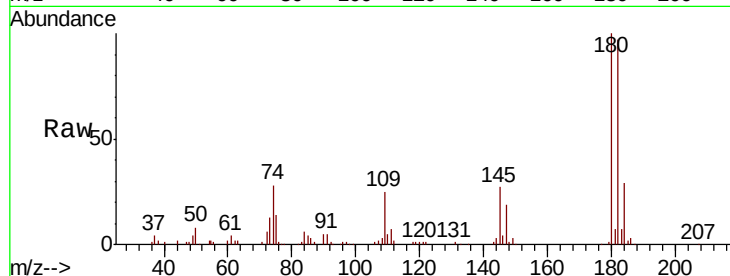




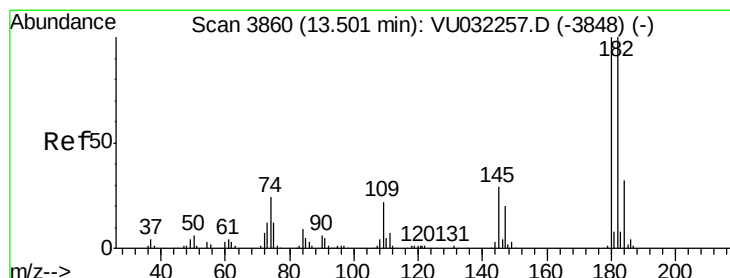
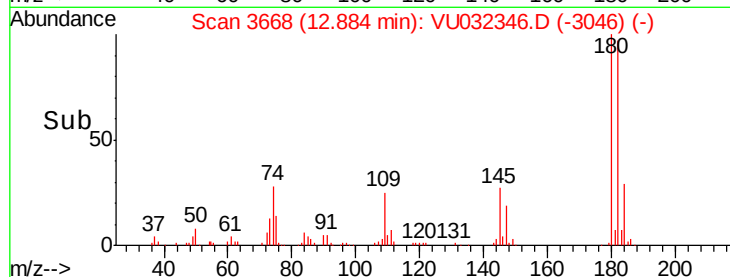
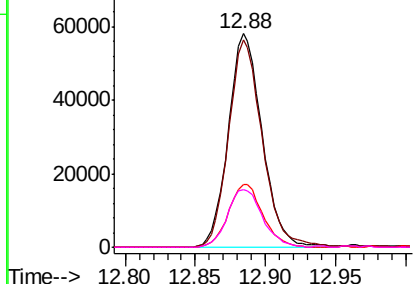
#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.094 ug/L  
 RT: 12.88 min Scan# 3668  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 VSTD00516

Tgt Ion:180 Resp: 97584  
 Ion Ratio Lower Upper  
 180 100  
 182 96.6 76.2 114.4  
 184 29.7 24.3 36.5  
 145 28.1 23.6 35.4

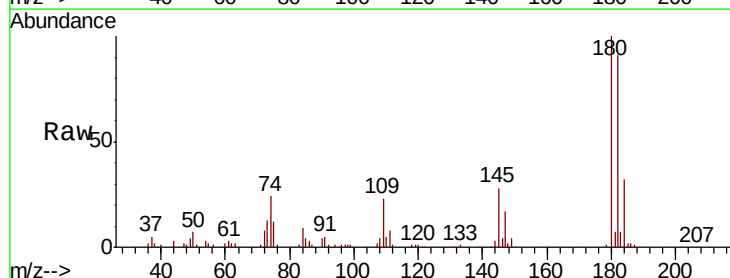


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

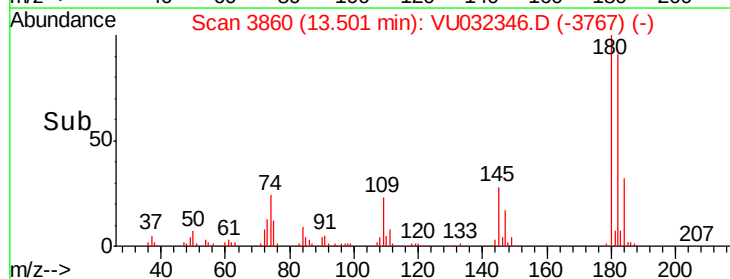
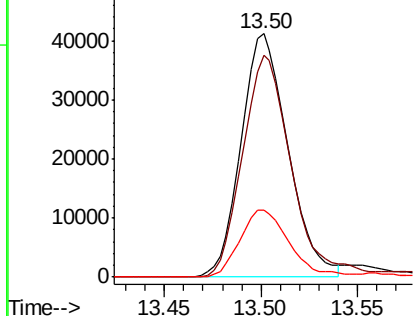


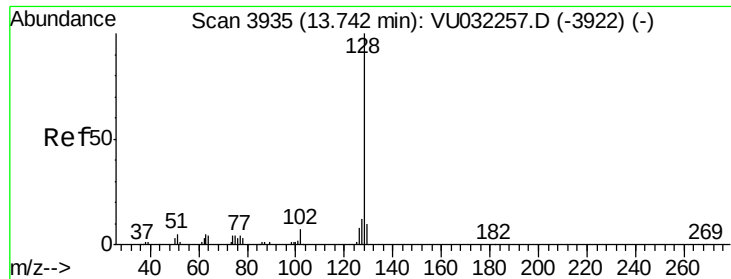
#68  
 1,2,4-trichlorobenzene  
 Concen: 5.147 ug/L  
 RT: 13.50 min Scan# 3860  
 Delta R.T. 0.00 min  
 Lab File: VU032346.D  
 Acq: 29 May 2019 09:03

Tgt Ion:180 Resp: 69527  
 Ion Ratio Lower Upper  
 180 100  
 182 94.4 75.9 113.9  
 145 28.8 21.7 32.5



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: 4.127 ug/L

RT: 13.74 min Scan# 3935

Delta R.T. 0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

Instrument :

MSVOA\_U

ClientSampleId :

VSTD00516

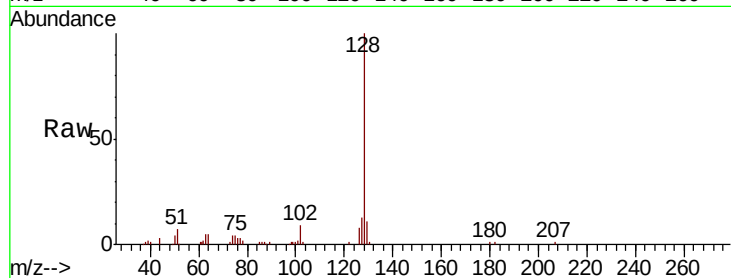
Tgt Ion:128 Resp: 85286

Ion Ratio Lower Upper

128 100

129 11.1 9.2 13.8

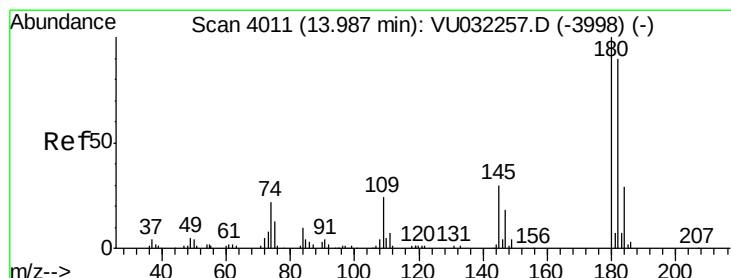
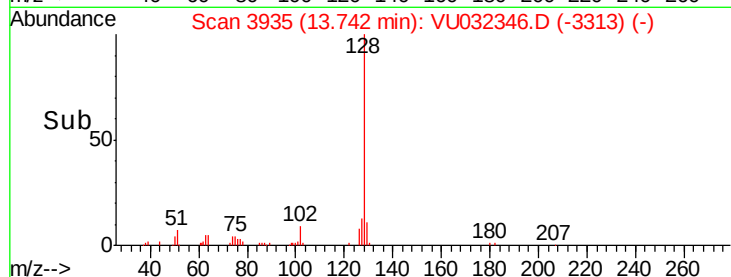
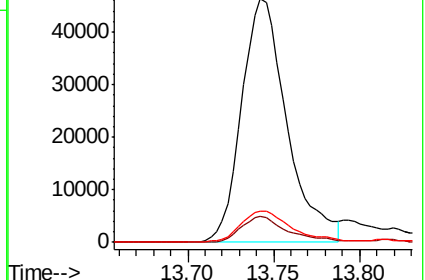
127 14.4 11.1 16.7



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: 4.904 ug/L

RT: 13.98 min Scan# 4010

Delta R.T. -0.00 min

Lab File: VU032346.D

Acq: 29 May 2019 09:03

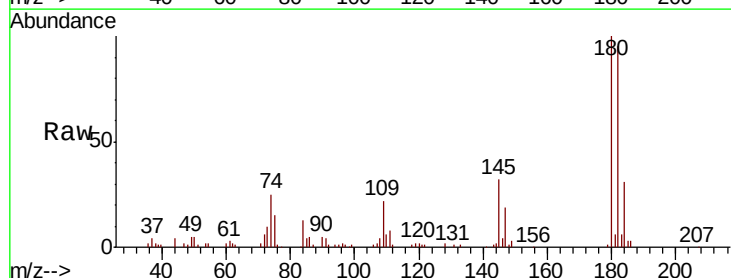
Tgt Ion:180 Resp: 70128

Ion Ratio Lower Upper

180 100

182 94.7 74.6 111.8

145 31.6 23.4 35.0



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

