

Data File : VV009659.D  
Acq On : 14 Mar 2019 11:28  
Operator : SY/MD  
Sample : VSTDCCC025  
Misc : 5.00G/10ML/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

Quant Time: Mar 15 04:26:14 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM031319S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 14 07:37:27 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 156715   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 155645   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 74265    | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 48089    | 24.00    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 96.00% |
| 7) Chloroethane-d5             | 1.57   | 69    | 43723    | 17.69    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 70.76% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 131676   | 24.31    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 97.24% |
| 20) 2-Butanone-d5              | 3.93   | 46    | 23062    | 43.94    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 87.88% |
| 24) Chloroform-d               | 4.40   | 84    | 91716    | 22.96    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 91.84% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 52920    | 23.41    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 93.64% |
| 29) Benzene-d6                 | 5.10   | 84    | 196468   | 24.06    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 96.24% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 55884    | 23.43    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 93.72% |
| 37) Toluene-d8                 | 7.36   | 98    | 193160   | 24.45    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 97.80% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 25531    | 23.29    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 93.16% |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 17830    | 40.59    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 81.18% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 49865    | 22.07    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 88.28% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 66487    | 23.11    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 92.44% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 64159  | 26.461 ug/L | 98     |
| 3) Chloromethane               | 1.25 | 50  | 56578  | 26.190 ug/L | 100    |
| 5) Vinyl chloride              | 1.32 | 62  | 63554  | 27.382 ug/L | 97     |
| 6) Bromomethane                | 1.51 | 94  | 62039  | 24.151 ug/L | 100    |
| 8) Chloroethane                | 1.59 | 64  | 42629  | 21.387 ug/L | 98     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 131406 | 26.688 ug/L | 98     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 71730  | 26.791 ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 61335  | 26.112 ug/L | 97     |
| 13) Acetone                    | 2.19 | 43  | 35224  | 55.668 ug/L | 98     |
| 14) Carbon disulfide           | 2.32 | 76  | 160581 | 27.299 ug/L | 100    |
| 15) Methyl Acetate             | 2.46 | 43  | 21356  | 23.133 ug/L | 96     |
| 16) Methylene chloride         | 2.53 | 84  | 54954  | 24.088 ug/L | 97     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 124457 | 25.507 ug/L | 100    |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 56716  | 27.701 ug/L | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 97521  | 27.289 ug/L | 97     |
| 21) 2-Butanone                 | 4.01 | 43  | 37352  | 47.816 ug/L | 94     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 62797  | 27.370 ug/L | 98     |

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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

Quant Time: Mar 15 04:26:14 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM031319S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 14 07:37:27 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 28267    | 26.649 | ug/L  | 95       |
| 25) Chloroform                 | 4.42  | 83   | 117041   | 28.744 | ug/L  | 98       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 69925    | 24.871 | ug/L  | 96       |
| 30) Cyclohexane                | 4.72  | 56   | 93518    | 26.596 | ug/L  | 100      |
| 31) 1,1,1-Trichloroethane      | 4.66  | 97   | 100973   | 27.703 | ug/L  | 99       |
| 32) Carbon tetrachloride       | 4.87  | 117  | 85976    | 27.839 | ug/L  | 99       |
| 34) Benzene                    | 5.14  | 78   | 236787   | 26.836 | ug/L  | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 64673    | 26.396 | ug/L  | 99       |
| 36) Methylcyclohexane          | 6.17  | 83   | 104486   | 25.681 | ug/L  | 96       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 54193    | 25.280 | ug/L  | 99       |
| 41) Bromodichloromethane       | 6.55  | 83   | 79496    | 26.952 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 89964    | 27.640 | ug/L  | 100      |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 66552    | 45.400 | ug/L  | 97       |
| 44) Toluene                    | 7.43  | 91   | 266763   | 27.143 | ug/L  | 98       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 72653    | 25.848 | ug/L  | 100      |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 44915    | 25.076 | ug/L  | 99       |
| 47) Tetrachloroethene          | 8.02  | 164  | 51719    | 26.722 | ug/L  | 97       |
| 49) 2-Hexanone                 | 8.18  | 43   | 53390    | 48.495 | ug/L  | 97       |
| 50) Dibromochloromethane       | 8.29  | 129  | 53907    | 26.538 | ug/L  | 99       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 44531    | 25.101 | ug/L  | 98       |
| 52) Chlorobenzene              | 8.92  | 112  | 168671   | 26.376 | ug/L  | 98       |
| 53) Ethylbenzene               | 9.05  | 91   | 301347   | 27.723 | ug/L  | 98       |
| 54) m,p-Xylene                 | 9.18  | 106  | 114396   | 27.880 | ug/L  | 96       |
| 55) o-xylene                   | 9.59  | 106  | 108158   | 26.859 | ug/L  | 96       |
| 56) Styrene                    | 9.60  | 104  | 180694   | 27.511 | ug/L  | 99       |
| 57) Isopropylbenzene           | 9.97  | 105  | 299627   | 28.055 | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 57501    | 24.759 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 40128    | 24.068 | ug/L  | 100      |
| 62) Bromoform                  | 9.77  | 173  | 29020    | 25.572 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 128177   | 26.450 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 128583   | 26.068 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 117665   | 26.097 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 8134     | 24.368 | ug/L  | 91       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 91956    | 27.249 | ug/L  | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 63426    | 26.513 | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 95035    | 24.052 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 57233    | 26.016 | ug/L  | 99       |

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

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Sample : VSTDCCC025

Misc : 5.00G/10ML/MSVOA\_V/SOIL

```
ALS Vial      : 1      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD02580

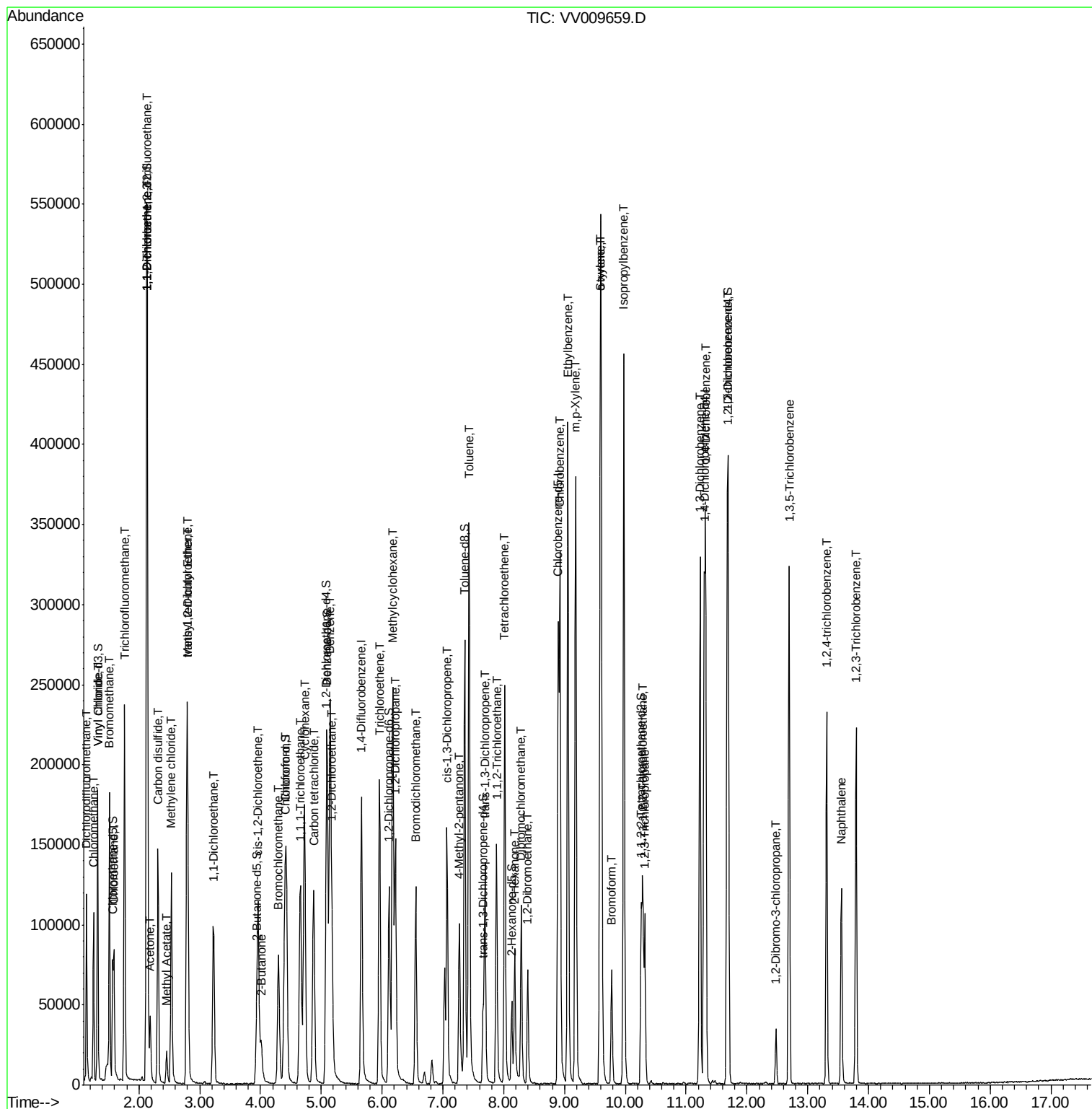
Quant Time: Mar 15 04:26:14 2019

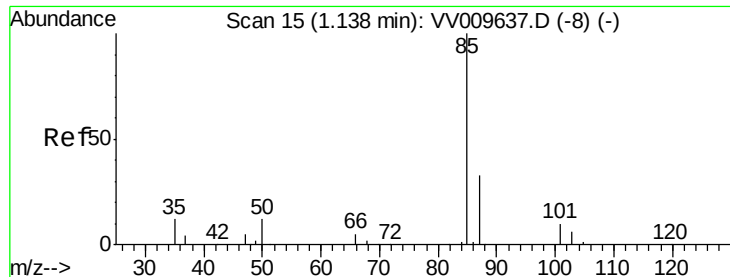
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_V\METHOD\S0M2VLM031319S.M

Quant Title : VOC Analysis

QLast Update : Thu Mar 14 07:37:27 2019

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 26.461 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

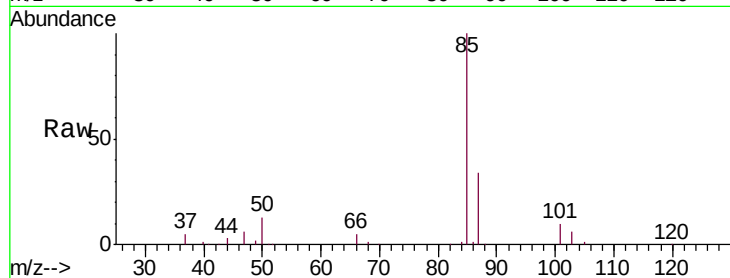
VSTD02580

Tgt Ion: 85 Resp: 64159

Ion Ratio Lower Upper

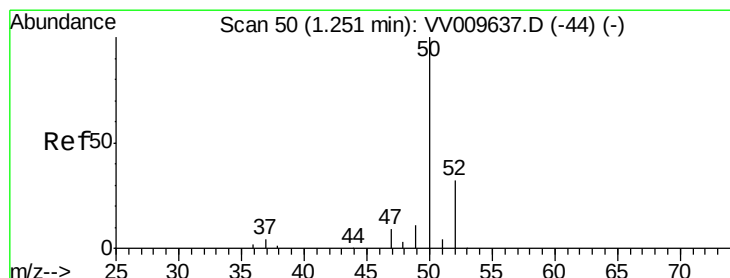
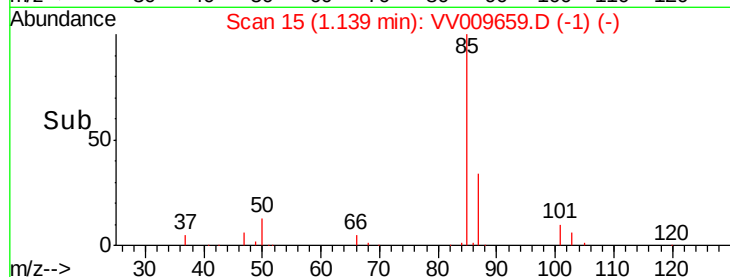
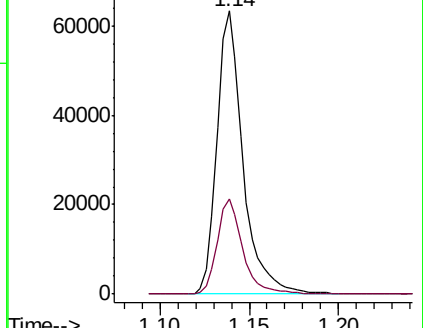
85 100

87 32.9 22.4 41.6



Abundance Ion 85.00 (84.70 to 85.70): VV009637.D (-8) (-)

Ion 87.00 (86.70 to 87.70): VV009637.D (-8) (-)



#3

Chloromethane

Concen: 26.190 ug/L

RT: 1.25 min Scan# 51

Delta R.T. 0.00 min

Lab File: VV009659.D

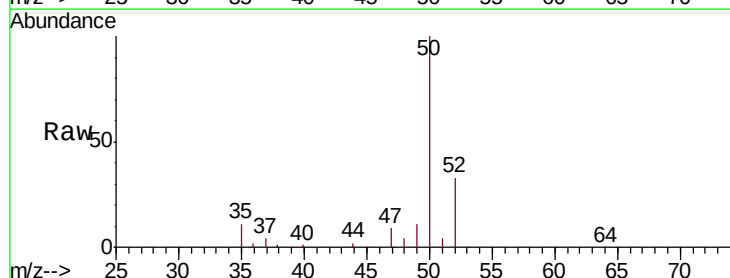
Acq: 14 Mar 2019 11:28

Tgt Ion: 50 Resp: 56578

Ion Ratio Lower Upper

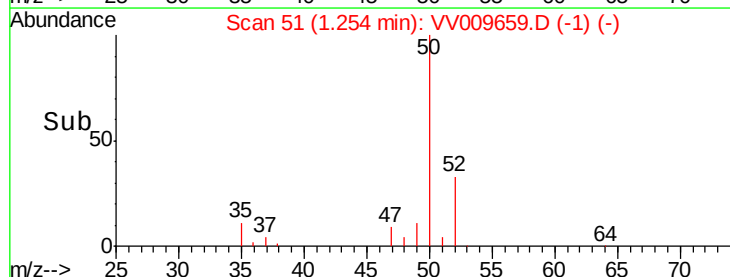
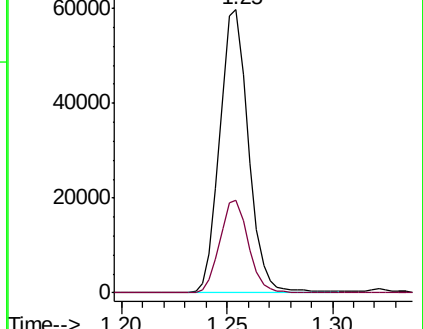
50 100

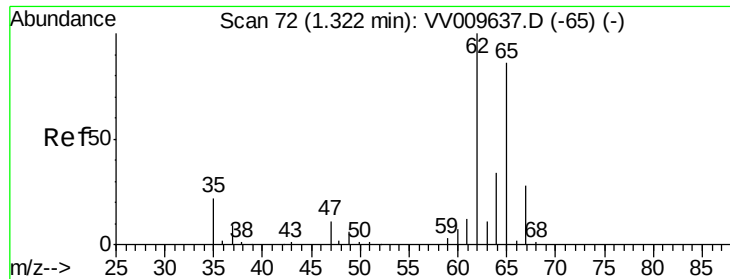
52 32.7 22.9 42.5



Abundance Ion 50.00 (49.70 to 50.70): VV009637.D (-44) (-)

Ion 52.00 (51.70 to 52.70): VV009637.D (-44) (-)





#5

Vinyl chloride

Concen: 27.382 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

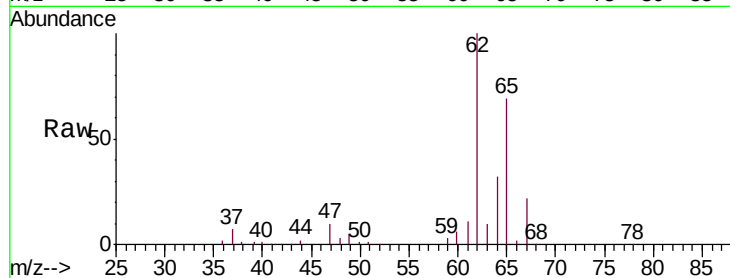
VSTD02580

Tgt Ion: 62 Resp: 63554

Ion Ratio Lower Upper

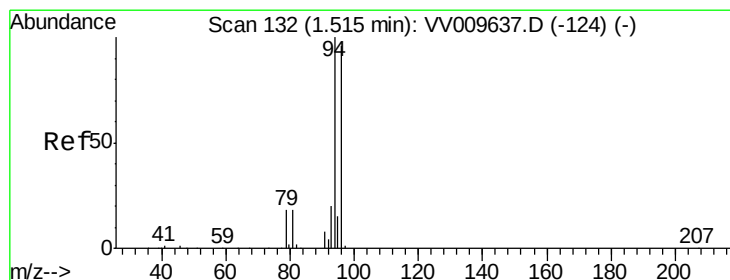
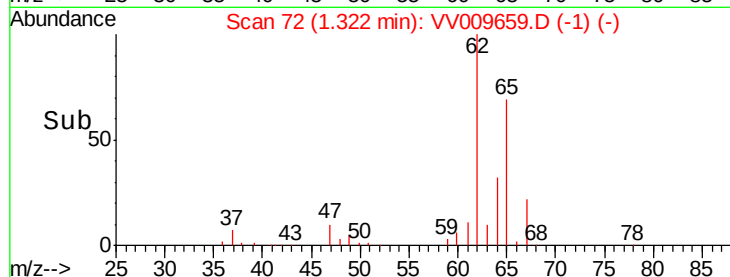
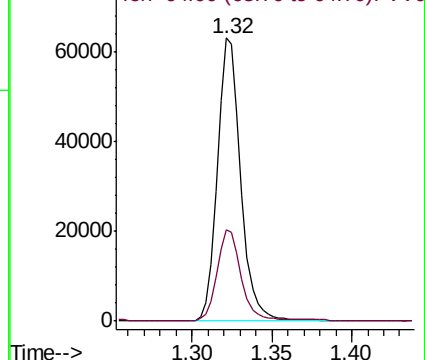
62 100

64 32.1 23.6 43.8



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.00 (63.70 to 64.70): VV0



#6

Bromomethane

Concen: 24.151 ug/L

RT: 1.51 min Scan# 132

Delta R.T. 0.00 min

Lab File: VV009659.D

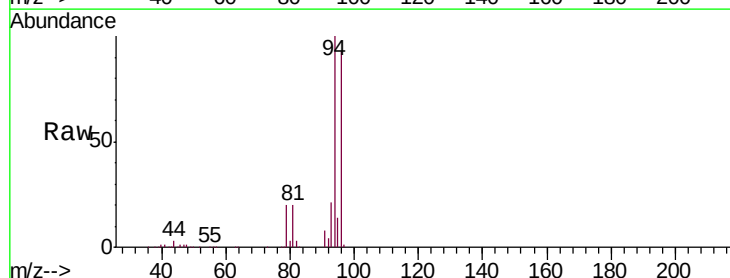
Acq: 14 Mar 2019 11:28

Tgt Ion: 94 Resp: 62039

Ion Ratio Lower Upper

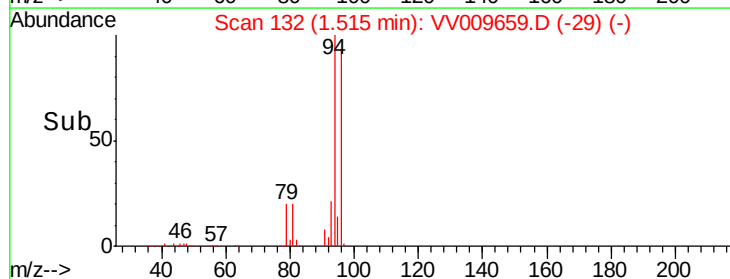
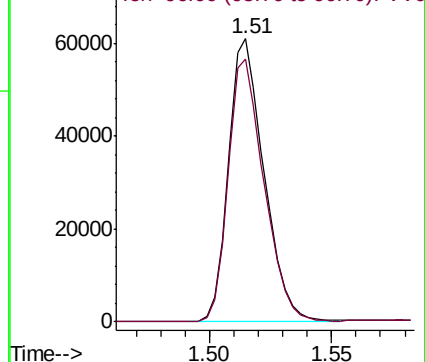
94 100

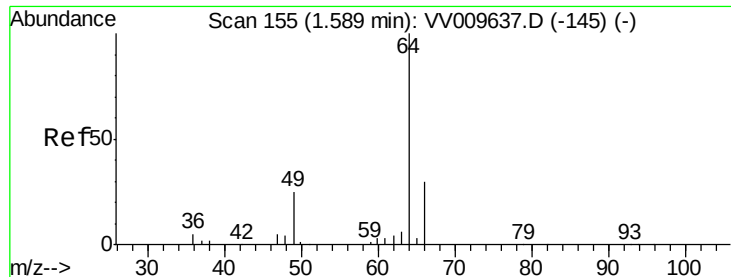
96 93.5 9.4 178.2



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0





#8

Chloroethane

Concen: 21.387 ug/L

RT: 1.59 min Scan# 155

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

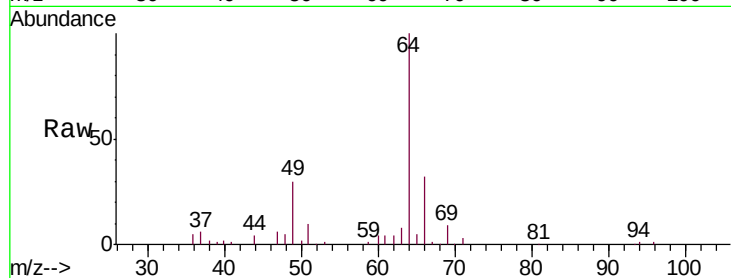
VSTD02580

Tgt Ion: 64 Resp: 42629

Ion Ratio Lower Upper

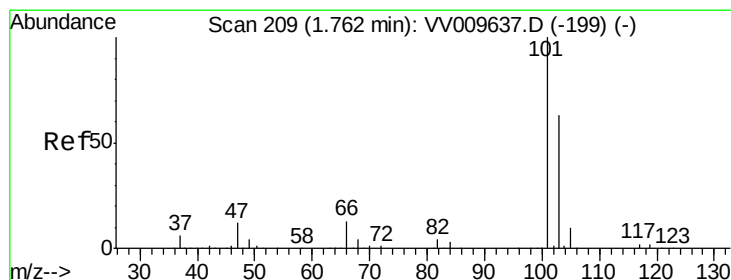
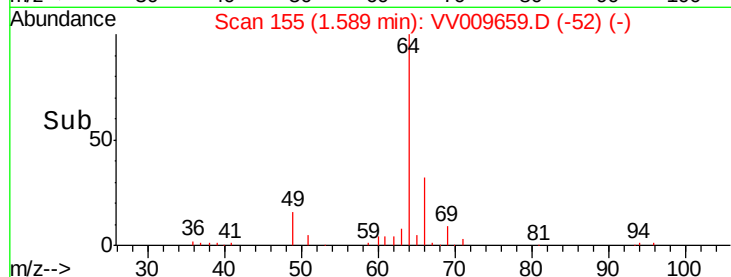
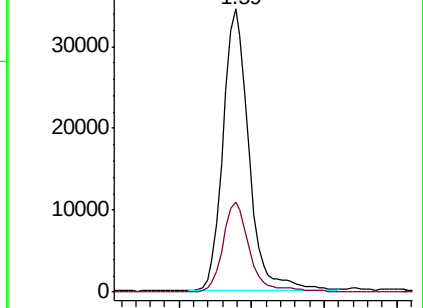
64 100

66 31.9 23.0 42.8



Abundance Ion 64.00 (63.70 to 64.70): VV009637.D (-145) (-)

Ion 66.00 (65.70 to 66.70): VV009637.D (-145) (-)



#9

Trichlorofluoromethane

Concen: 26.688 ug/L

RT: 1.76 min Scan# 209

Delta R.T. 0.00 min

Lab File: VV009659.D

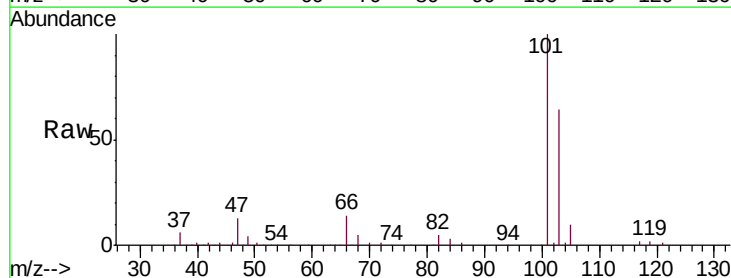
Acq: 14 Mar 2019 11:28

Tgt Ion: 101 Resp: 131406

Ion Ratio Lower Upper

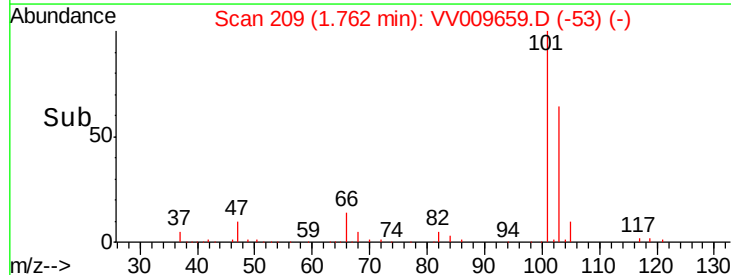
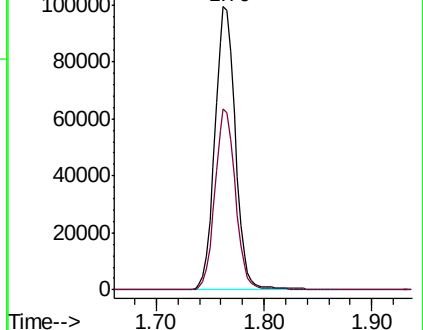
101 100

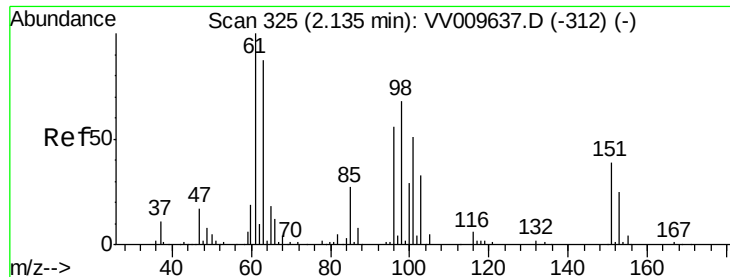
103 63.4 45.4 84.2



Abundance Ion 101.00 (100.70 to 101.70): VV009637.D (-199) (-)

Ion 103.00 (102.70 to 103.70): VV009637.D (-199) (-)





#11

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

Concen: 26.791 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

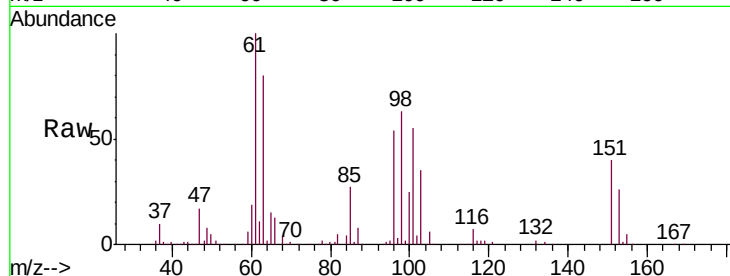
Tgt Ion:101 Resp: 71730

Ion Ratio Lower Upper

101 100

85 49.2 38.7 58.1

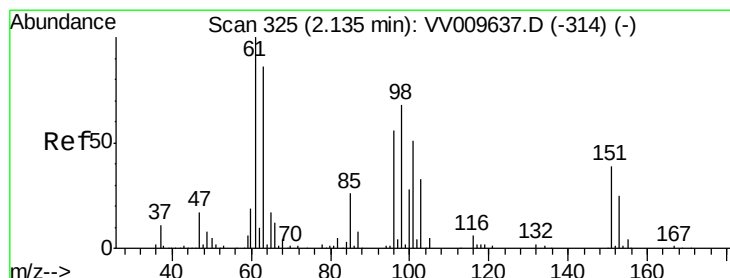
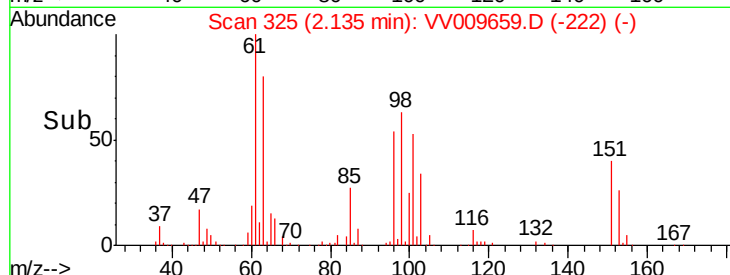
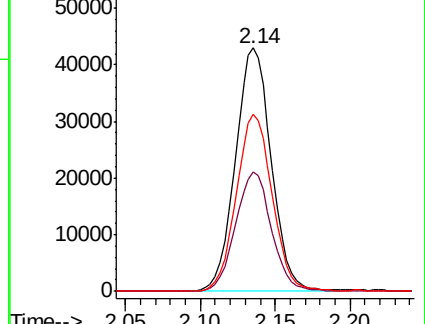
151 72.9 58.5 87.7



Abundance Ion 101.00 (100.70 to 101.70): VV009637.D (-312) (-)

Ion 85.00 (84.70 to 85.70): VV009637.D (-312) (-)

Ion 151.00 (150.70 to 151.70): VV009637.D (-312) (-)



#12

1,1-Dichloroethene

Concen: 26.112 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

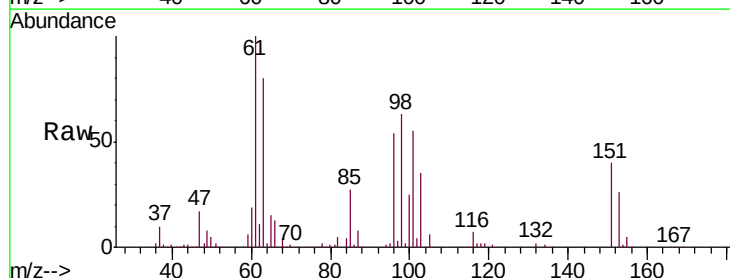
Tgt Ion: 96 Resp: 61335

Ion Ratio Lower Upper

96 100

61 185.7 128.4 238.5

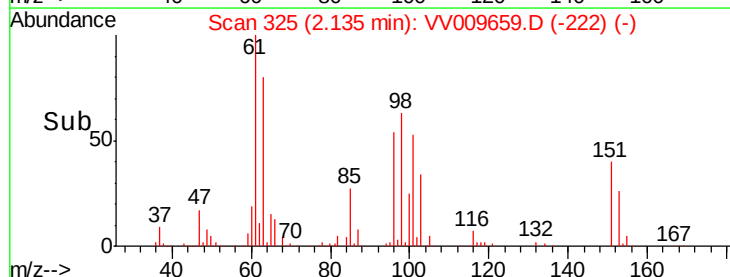
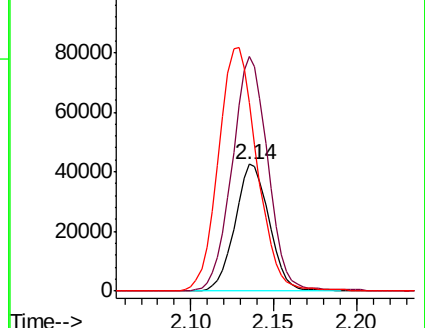
63 149.1 100.7 186.9

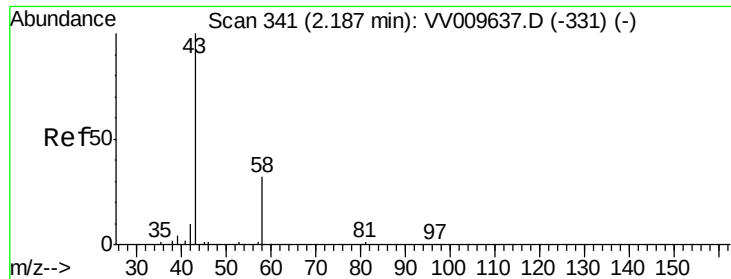


Abundance Ion 96.00 (95.70 to 96.70): VV009637.D (-314) (-)

Ion 61.00 (60.70 to 61.70): VV009637.D (-314) (-)

Ion 63.00 (62.70 to 63.70): VV009637.D (-314) (-)





#13

Acetone

Concen: 55.668 ug/L

RT: 2.19 min Scan# 341

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

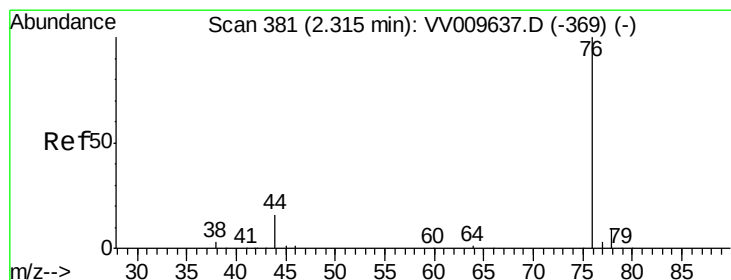
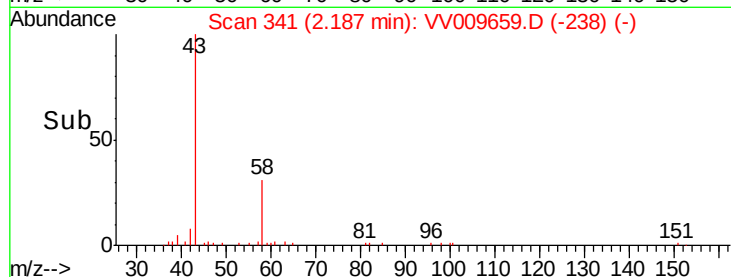
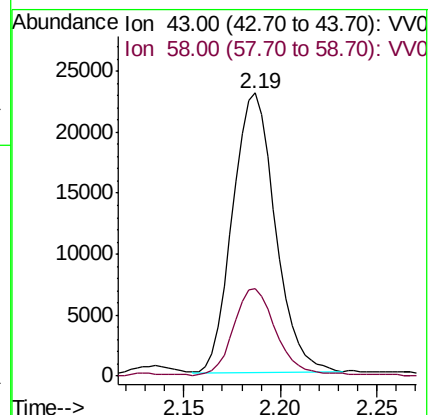
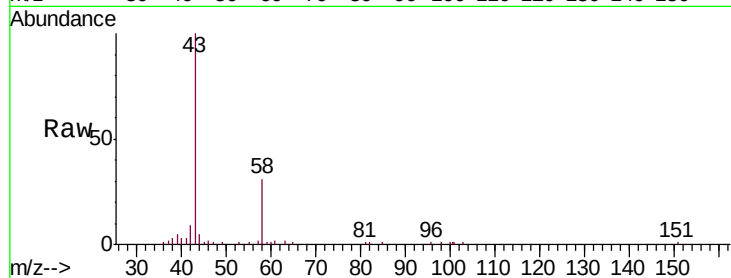
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

Tgt Ion: 43 Resp: 35224

Ion Ratio Lower Upper

43 100

58 31.1 0.0 64.8



#14

Carbon disulfide

Concen: 27.299 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV009659.D

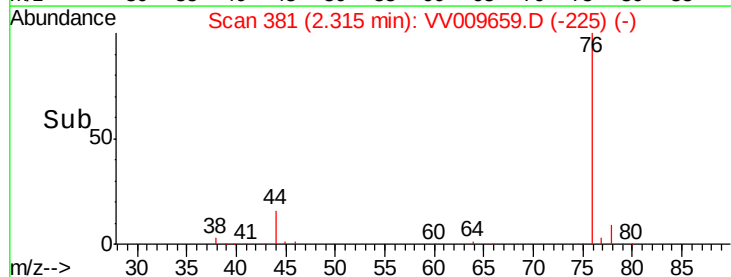
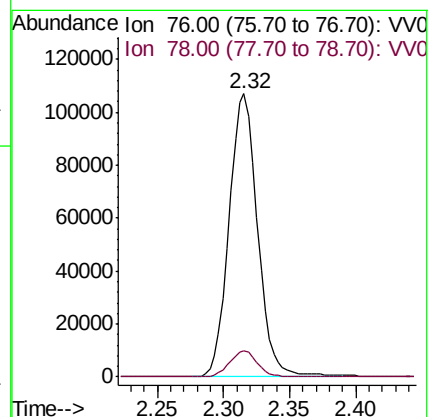
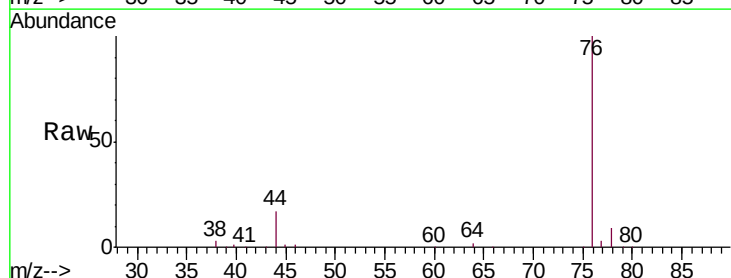
Acq: 14 Mar 2019 11:28

Tgt Ion: 76 Resp: 160581

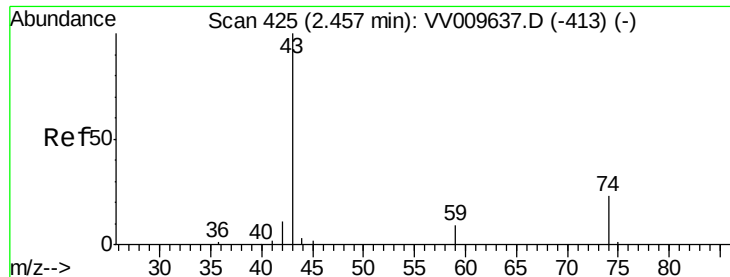
Ion Ratio Lower Upper

76 100

78 9.3 7.3 10.9



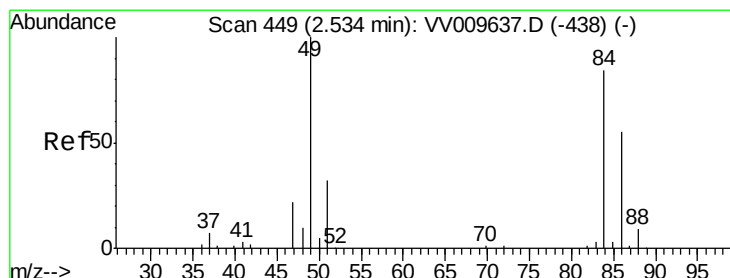
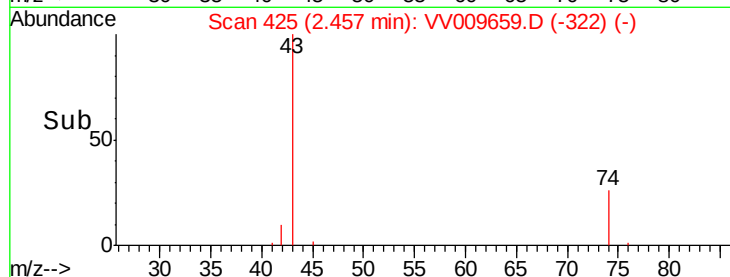
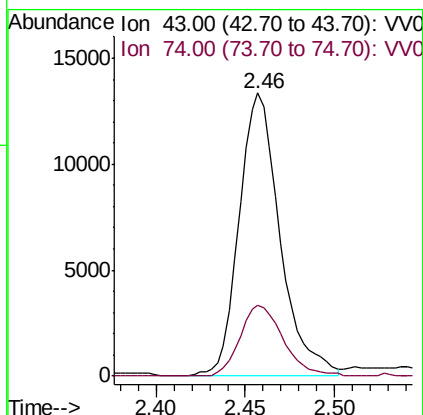
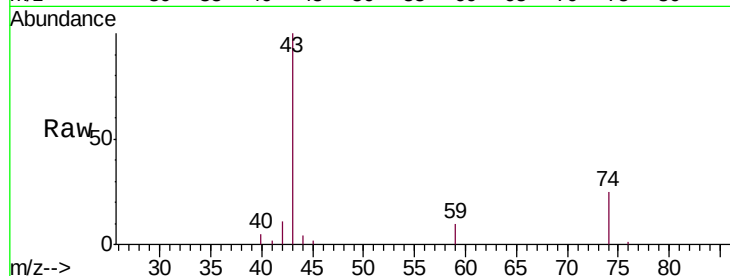




#15  
Methyl Acetate  
Concen: 23.133 ug/L  
RT: 2.46 min Scan# 425  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

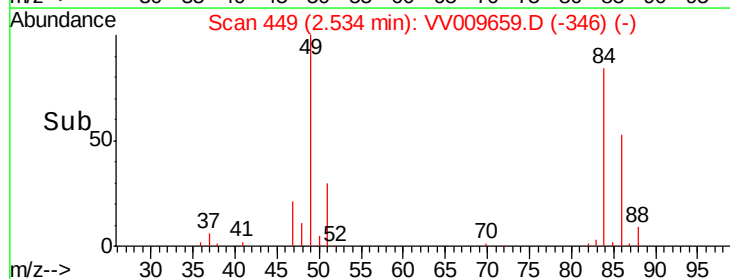
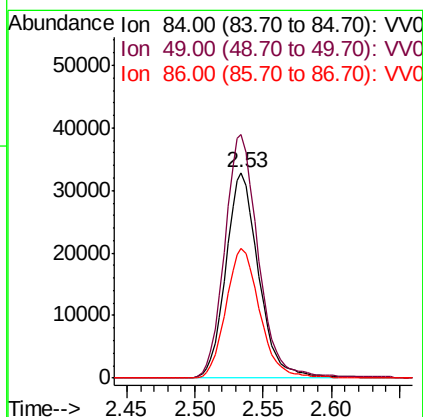
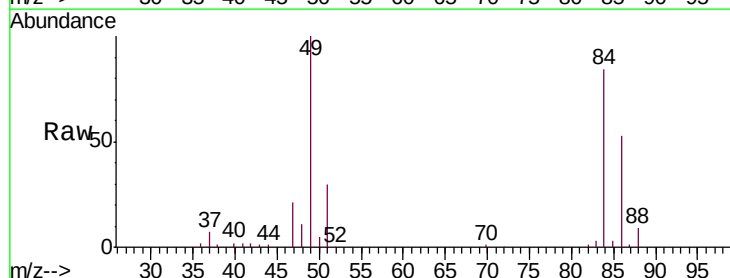
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

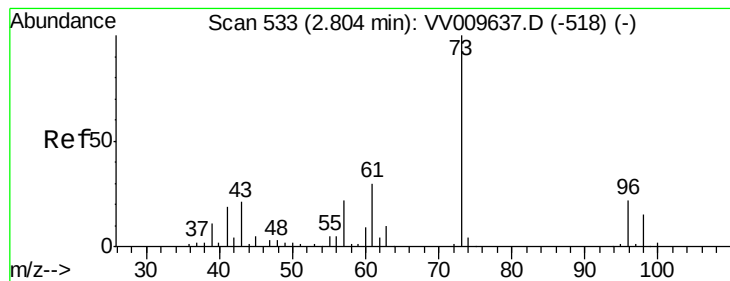
Tgt Ion: 43 Resp: 21356  
Ion Ratio Lower Upper  
43 100  
74 26.5 19.8 29.6



#16  
Methylene chloride  
Concen: 24.088 ug/L  
RT: 2.53 min Scan# 449  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Tgt Ion: 84 Resp: 54954  
Ion Ratio Lower Upper  
84 100  
49 118.7 86.1 159.9  
86 63.1 45.2 84.0





#17

Methyl tert-butyl Ether

Concen: 25.507 ug/L

RT: 2.80 min Scan# 533

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

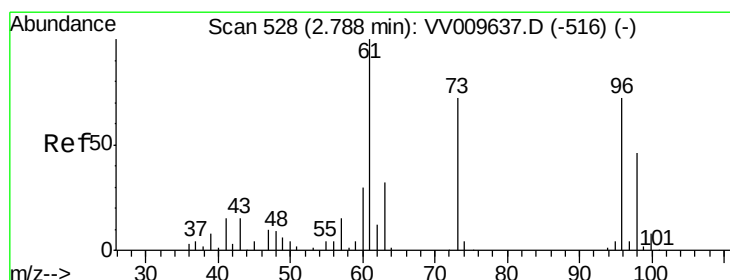
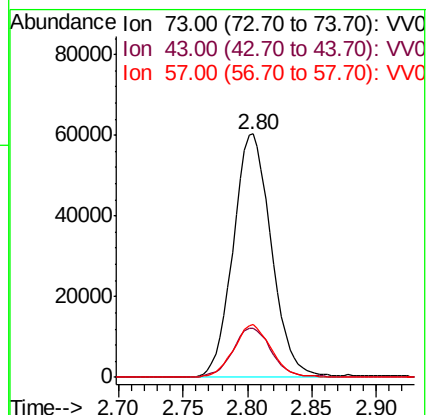
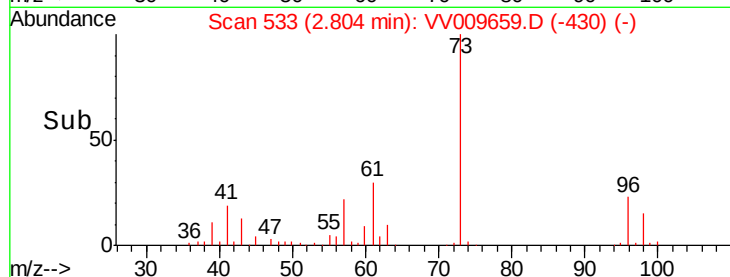
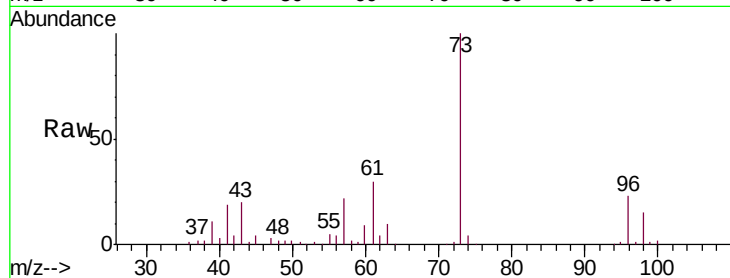
Tgt Ion: 73 Resp: 124457

Ion Ratio Lower Upper

73 100

43 20.4 16.3 24.5

57 21.1 16.7 25.1



#18

trans-1,2-Dichloroethene

Concen: 27.701 ug/L

RT: 2.79 min Scan# 528

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

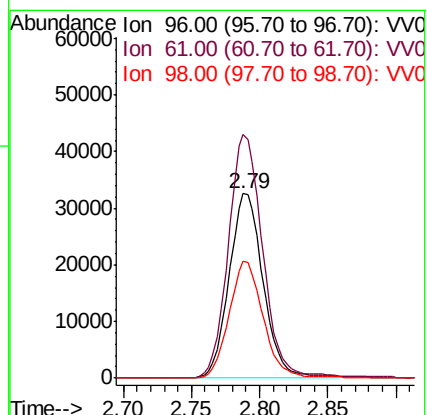
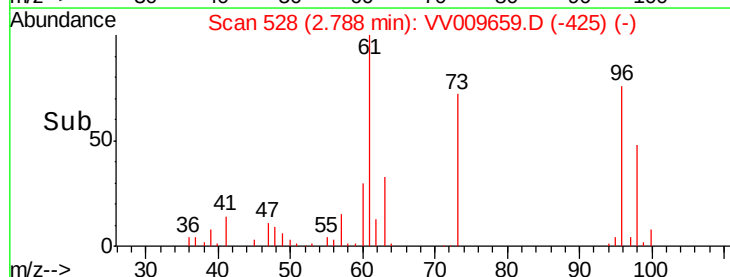
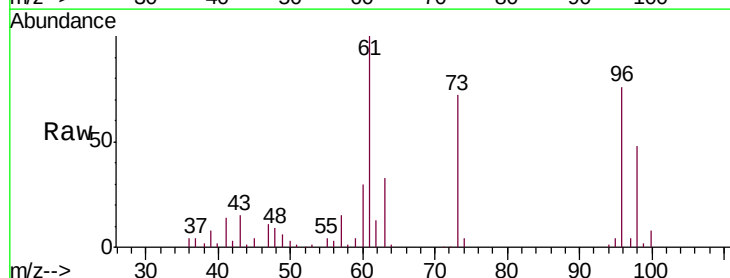
Tgt Ion: 96 Resp: 56716

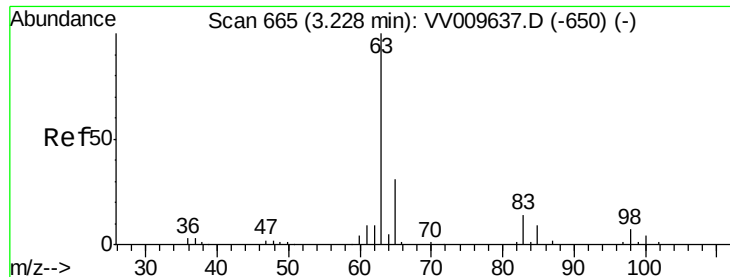
Ion Ratio Lower Upper

96 100

61 132.1 94.4 175.2

98 63.3 45.4 84.4

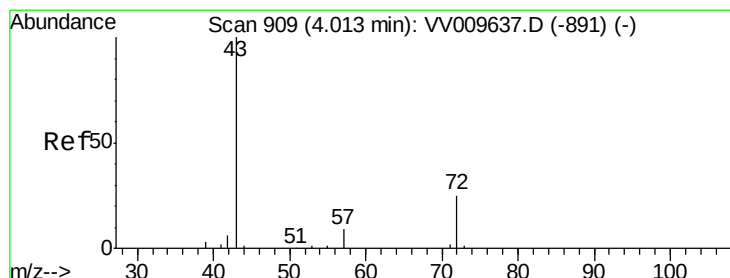
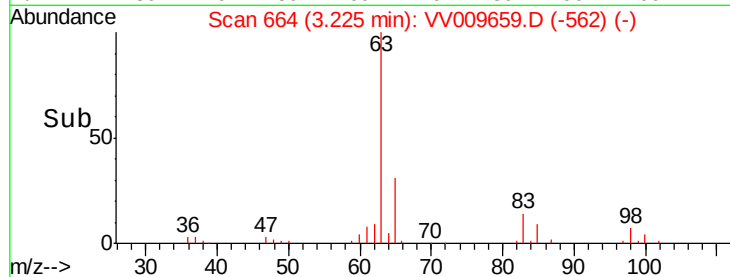
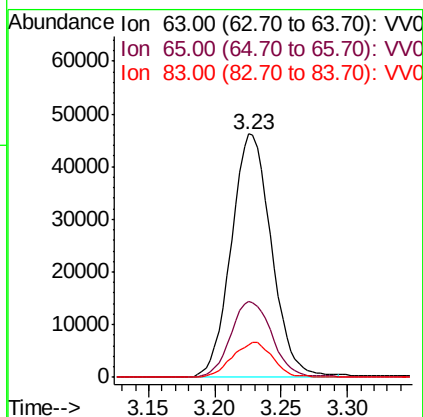
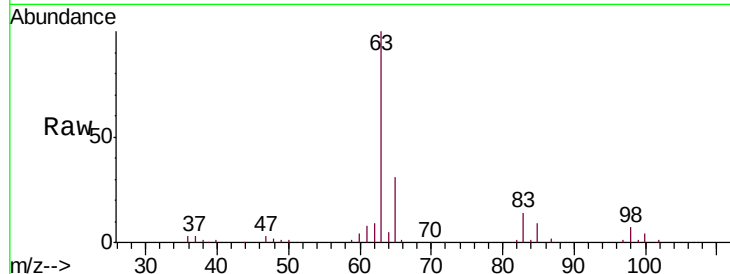




#19  
 1,1-Dichloroethane  
 Concen: 27.289 ug/L  
 RT: 3.23 min Scan# 664  
 Delta R.T. -0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

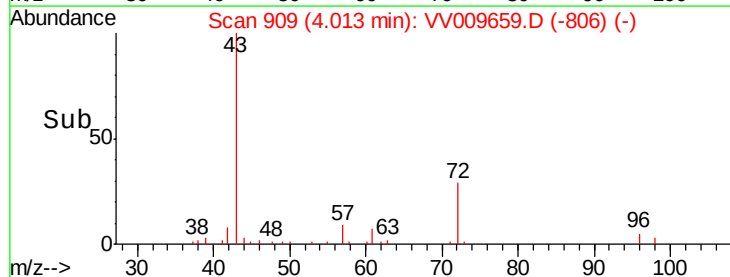
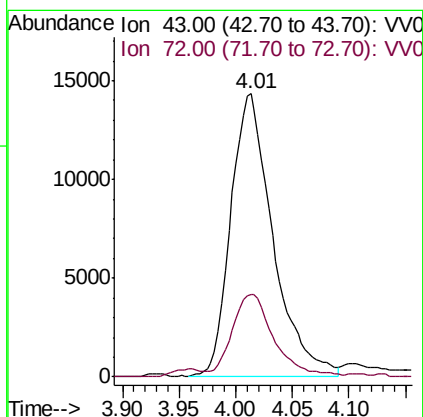
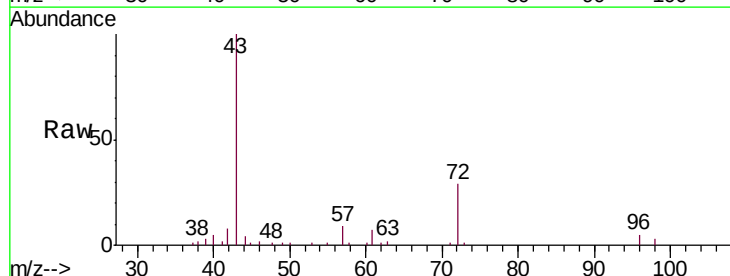
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02580

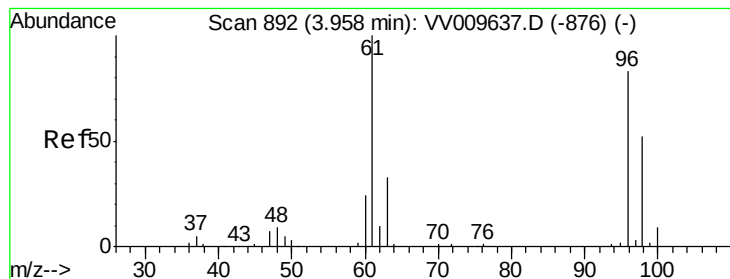
Tgt Ion: 63 Resp: 97521  
 Ion Ratio Lower Upper  
 63 100  
 65 31.3 20.9 38.9  
 83 13.6 10.4 19.4



#21  
 2-Butanone  
 Concen: 47.816 ug/L  
 RT: 4.01 min Scan# 909  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Tgt Ion: 43 Resp: 37352  
 Ion Ratio Lower Upper  
 43 100  
 72 25.9 14.5 43.5



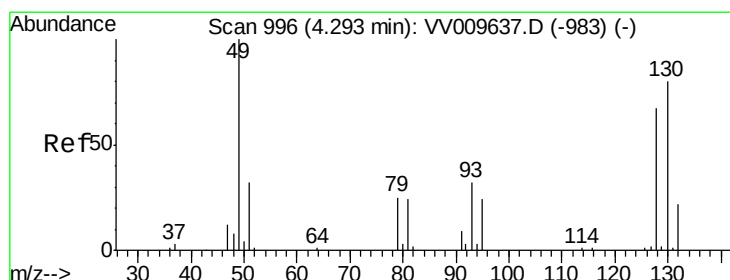
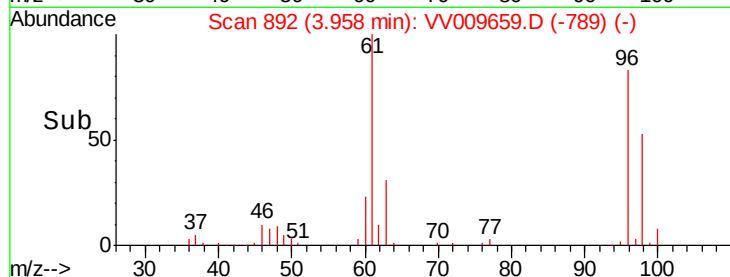
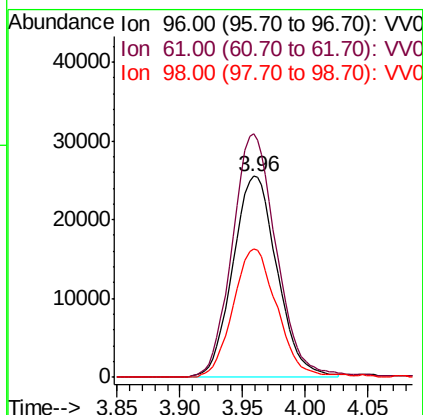
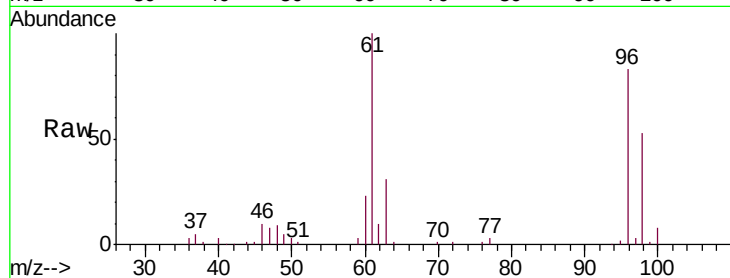


#22

cis-1,2-Dichloroethene  
 Concen: 27.370 ug/L  
 RT: 3.96 min Scan# 892  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02580

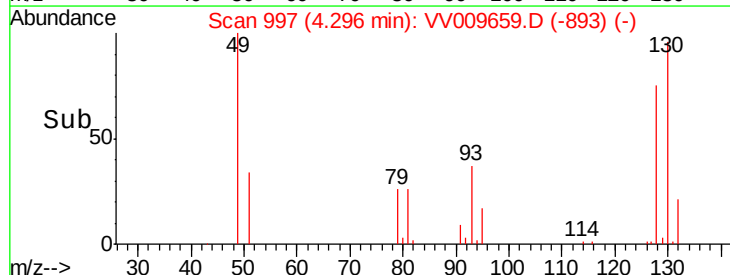
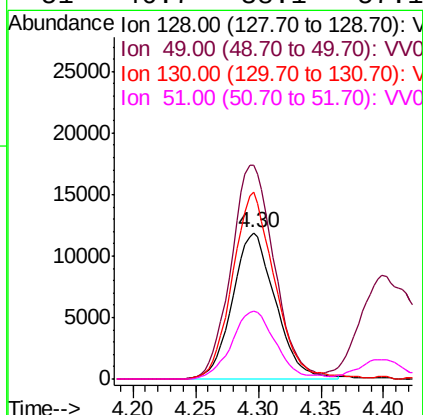
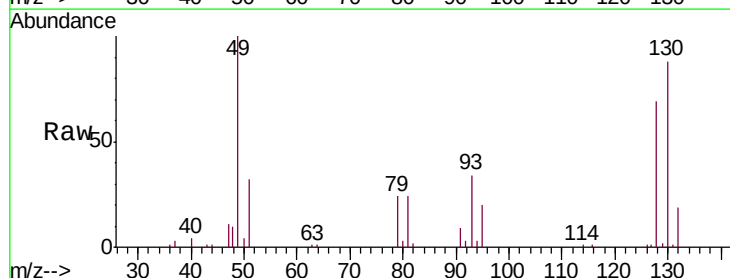
Tgt Ion: 96 Resp: 62797  
 Ion Ratio Lower Upper  
 96 100  
 61 121.0 86.2 160.0  
 98 63.9 46.5 86.3

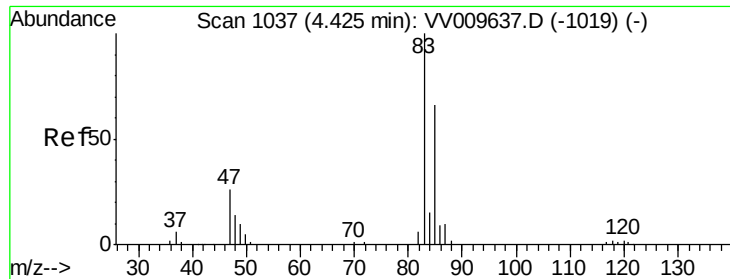


#23

Bromochloromethane  
 Concen: 26.649 ug/L  
 RT: 4.30 min Scan# 997  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Tgt Ion: 128 Resp: 28267  
 Ion Ratio Lower Upper  
 128 100  
 49 146.0 110.0 204.2  
 130 127.9 90.4 168.0  
 51 46.7 38.1 57.1

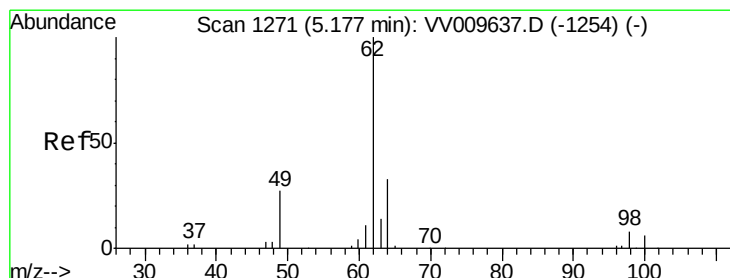
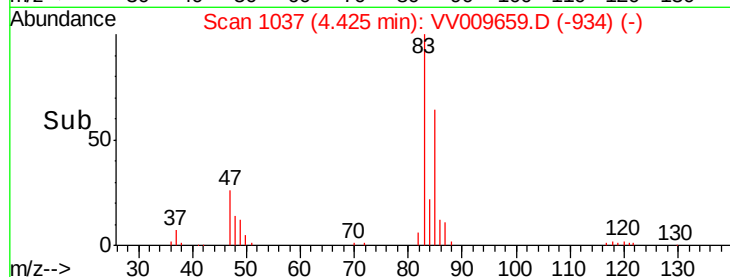
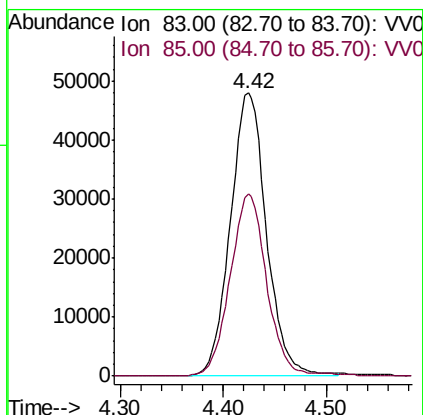
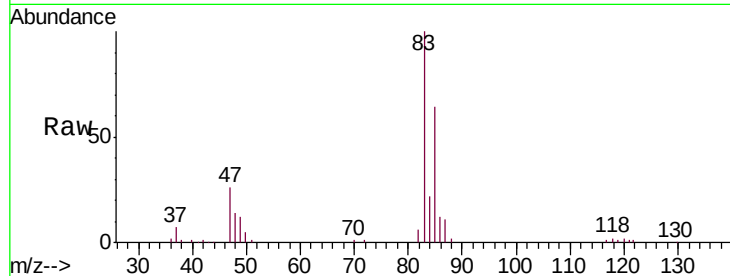




#25  
Chloroform  
Concen: 28.744 ug/L  
RT: 4.42 min Scan# 1037  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

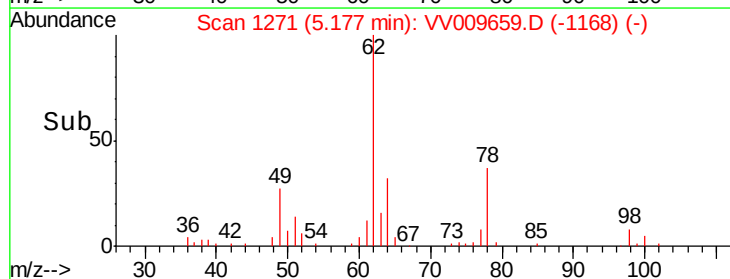
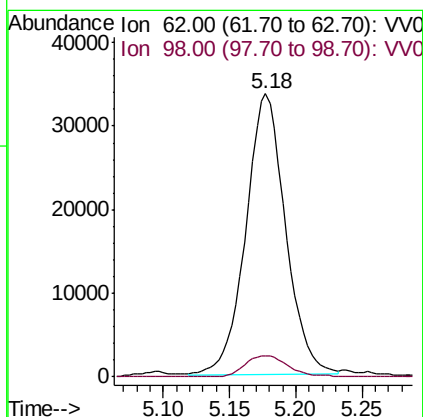
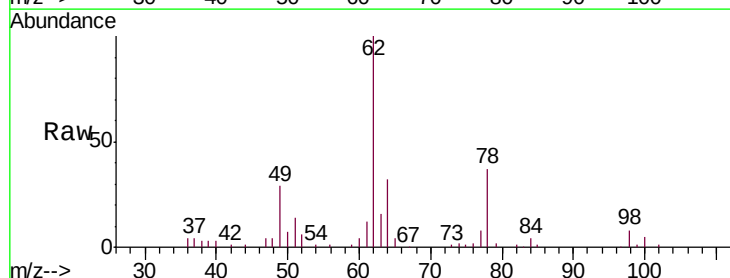
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

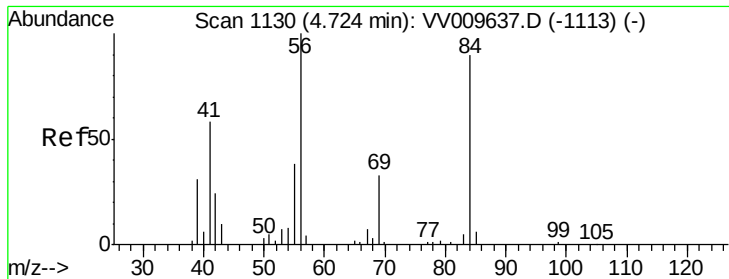
Tgt Ion: 83 Resp: 117041  
Ion Ratio Lower Upper  
83 100  
85 64.8 46.4 86.2



#27  
1,2-Dichloroethane  
Concen: 24.871 ug/L  
RT: 5.18 min Scan# 1271  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Tgt Ion: 62 Resp: 69925  
Ion Ratio Lower Upper  
62 100  
98 7.6 7.2 10.8

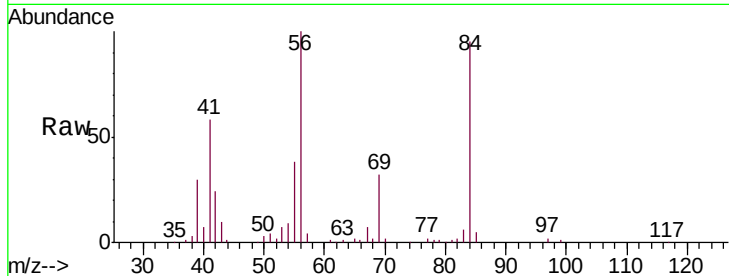




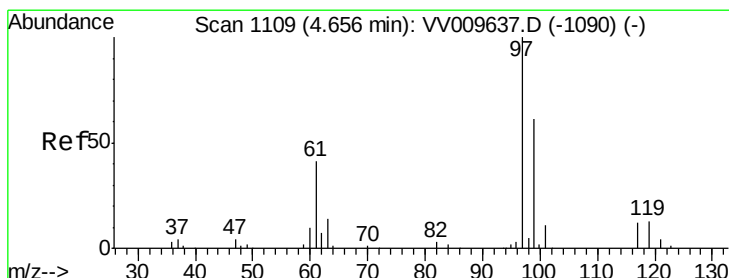
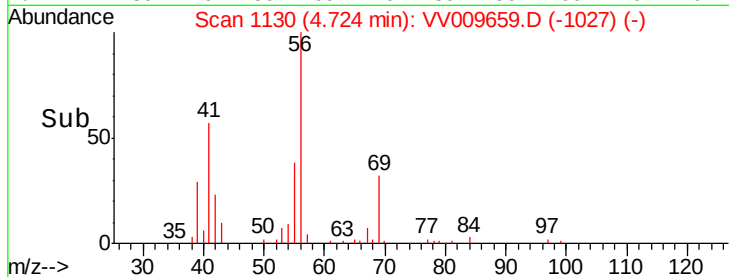
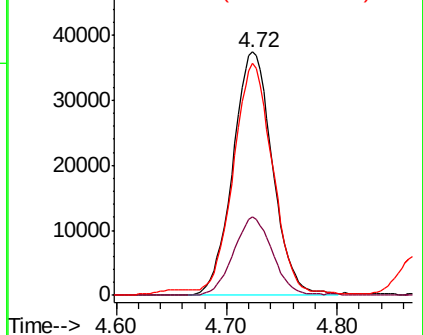
#30  
Cyclohexane  
Concen: 26.596 ug/L  
RT: 4.72 min Scan# 1130  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

Tgt Ion: 56 Resp: 93518  
Ion Ratio Lower Upper  
56 100  
69 31.2 25.4 38.0  
84 91.0 72.6 109.0

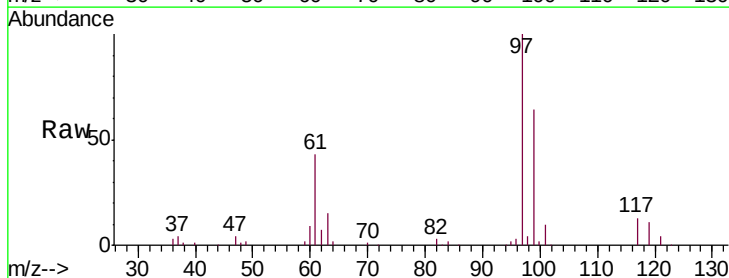


Abundance Ion 56.00 (55.70 to 56.70): VV0  
Ion 69.00 (68.70 to 69.70): VV0  
Ion 84.00 (83.70 to 84.70): VV0

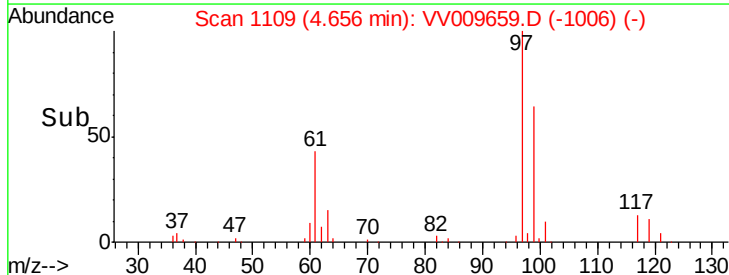
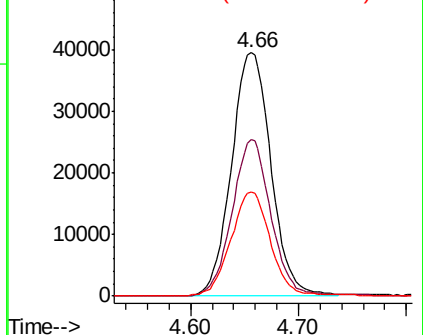


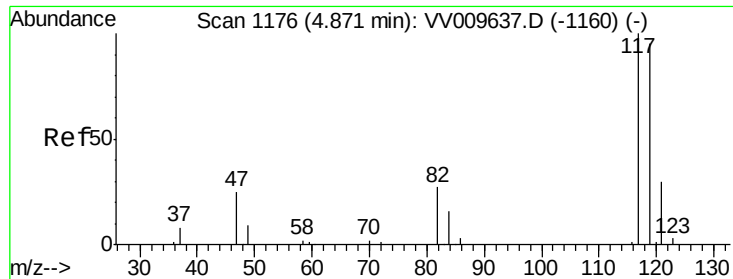
#31  
1,1,1-Trichloroethane  
Concen: 27.703 ug/L  
RT: 4.66 min Scan# 1109  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Tgt Ion: 97 Resp: 100973  
Ion Ratio Lower Upper  
97 100  
99 62.8 51.0 76.6  
61 42.7 33.7 50.5



Abundance Ion 97.00 (96.70 to 97.70): VV0  
Ion 99.00 (98.70 to 99.70): VV0  
Ion 61.00 (60.70 to 61.70): VV0





#32

Carbon tetrachloride

Concen: 27.839 ug/L

RT: 4.87 min Scan# 1177

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

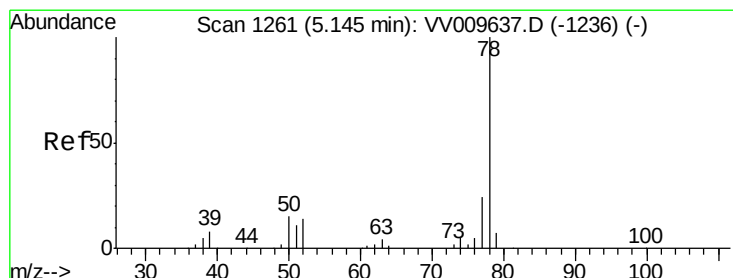
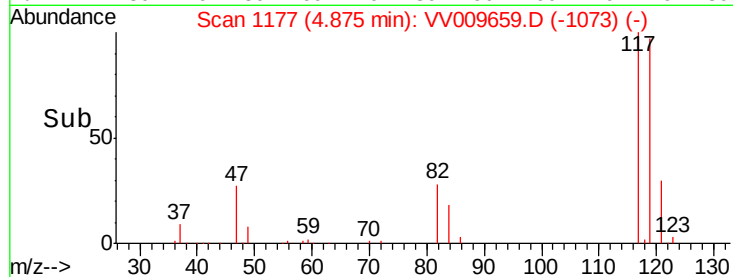
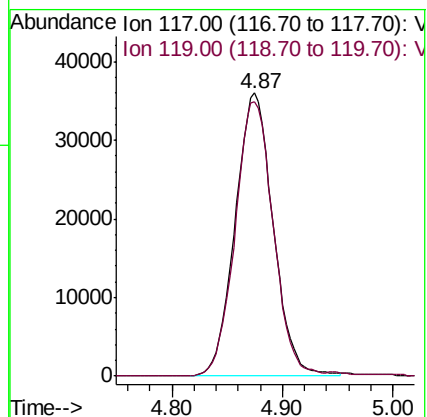
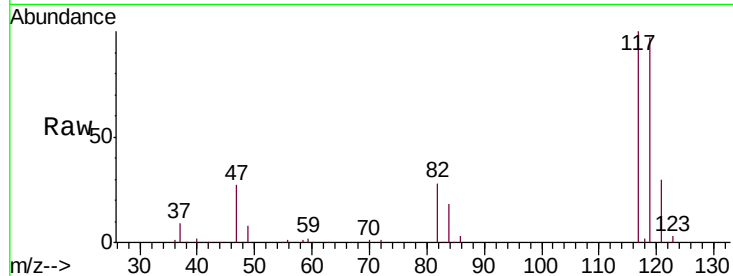
VSTD02580

Tgt Ion:117 Resp: 85976

Ion Ratio Lower Upper

117 100

119 97.0 76.6 114.8



#34

Benzene

Concen: 26.836 ug/L

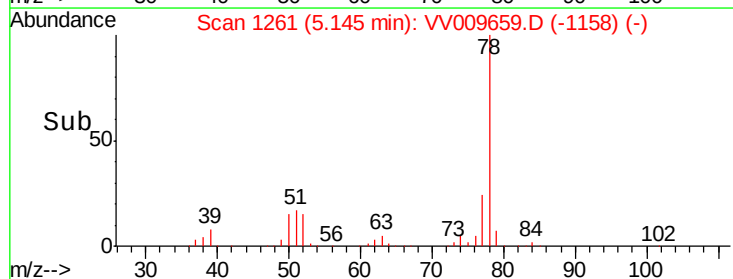
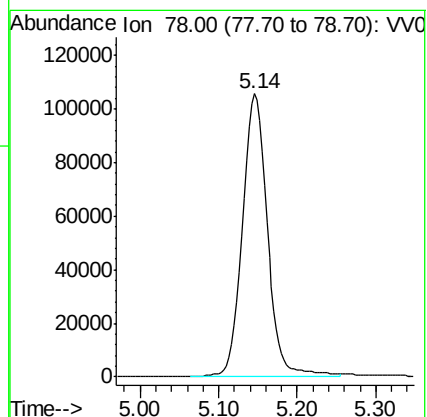
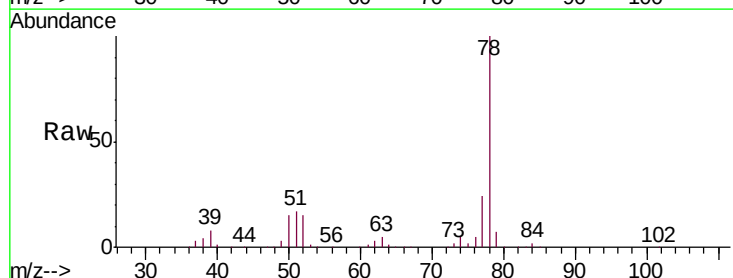
RT: 5.14 min Scan# 1261

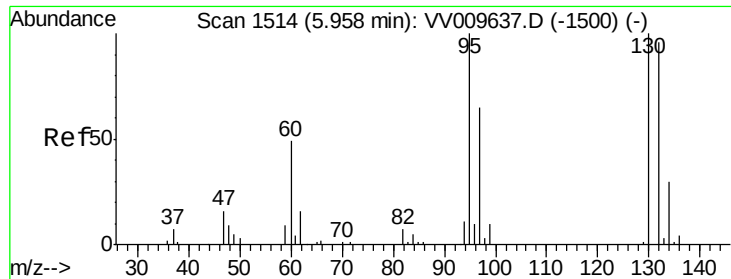
Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Tgt Ion: 78 Resp: 236787

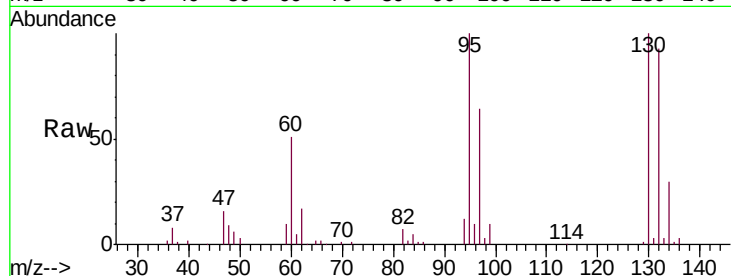




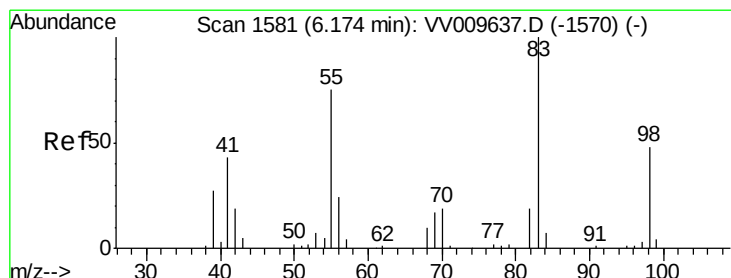
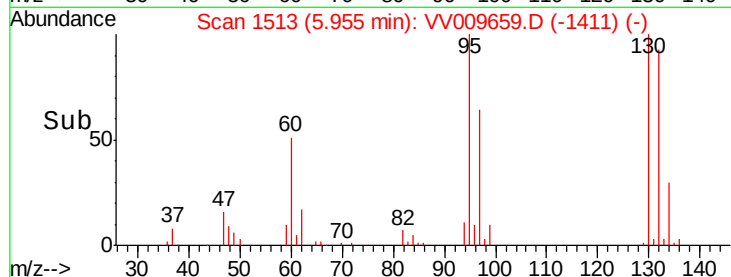
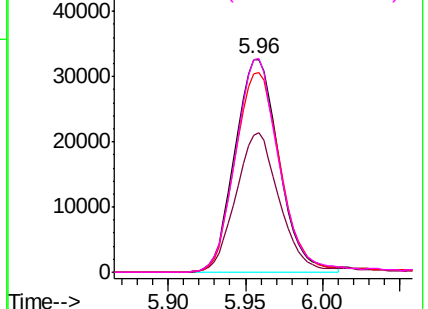
#35  
 Trichloroethene  
 Concen: 26.396 ug/L  
 RT: 5.96 min Scan# 1513  
 Delta R.T. -0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02580

Tgt Ion: 95 Resp: 64673  
 Ion Ratio Lower Upper  
 95 100  
 97 64.6 44.9 83.5  
 132 95.6 66.4 123.2  
 130 99.2 70.2 130.4

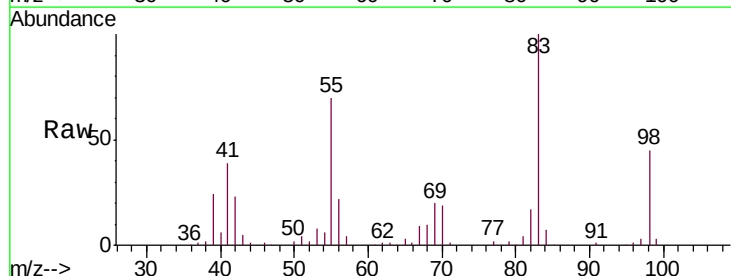


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 97.00 (96.70 to 97.70): VV0  
 Ion 132.00 (131.70 to 132.70): VV0  
 Ion 130.00 (129.70 to 130.70): VV0

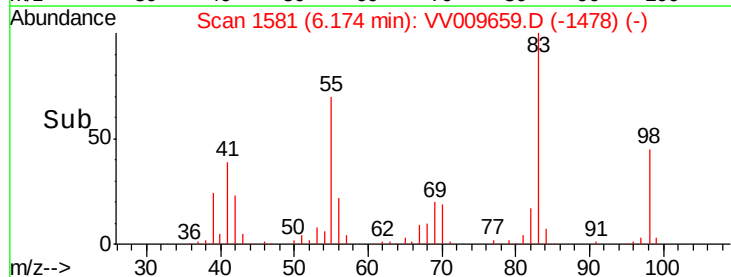
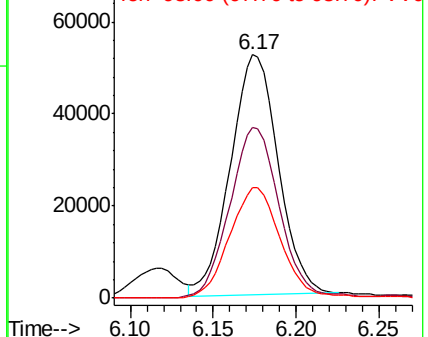


#36  
 Methylcyclohexane  
 Concen: 25.681 ug/L  
 RT: 6.17 min Scan# 1581  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

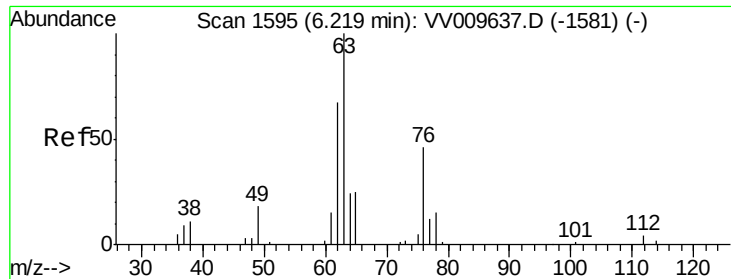
Tgt Ion: 83 Resp: 104486  
 Ion Ratio Lower Upper  
 83 100  
 55 74.3 57.4 86.0  
 98 49.6 37.1 55.7



Abundance Ion 83.00 (82.70 to 83.70): VV0  
 Ion 55.00 (54.70 to 55.70): VV0  
 Ion 98.00 (97.70 to 98.70): VV0



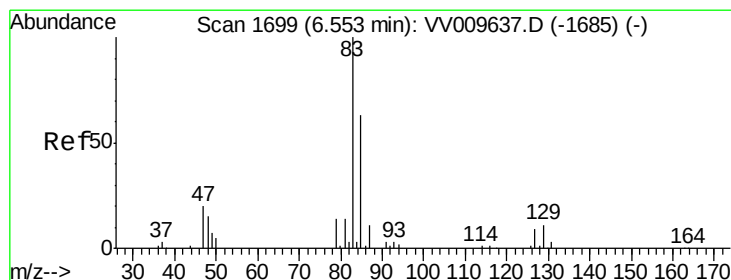
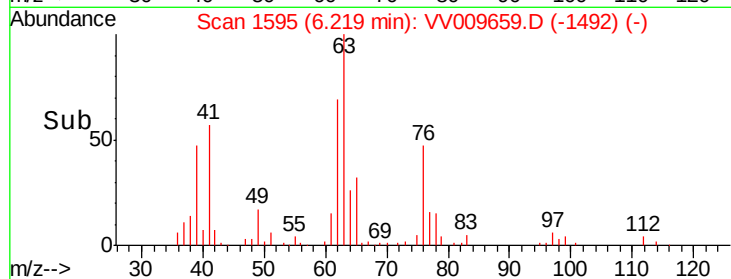
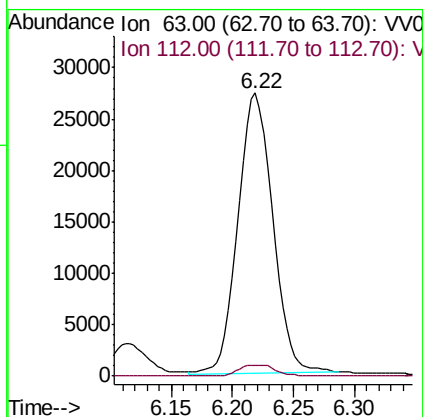
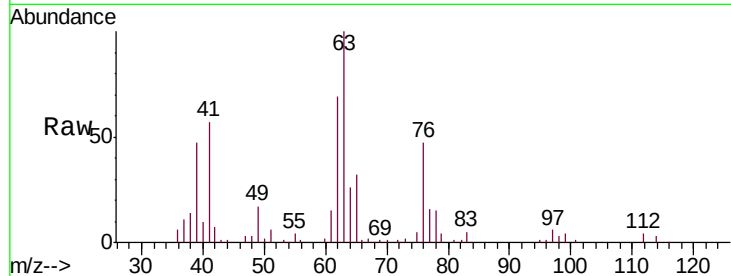




#40  
 1,2-Dichloropropane  
 Concen: 25.280 ug/L  
 RT: 6.22 min Scan# 1595  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

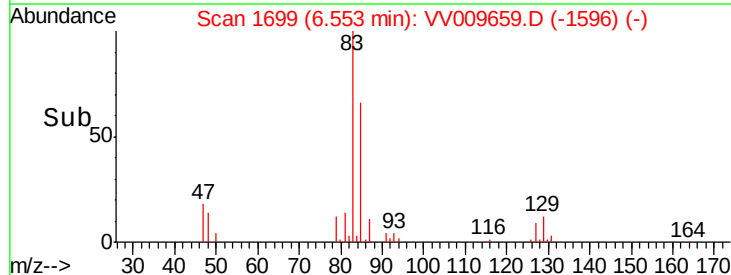
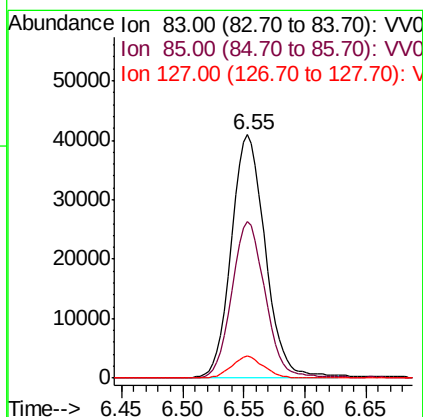
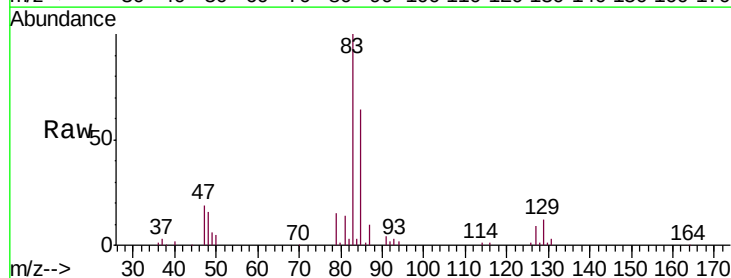
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02580

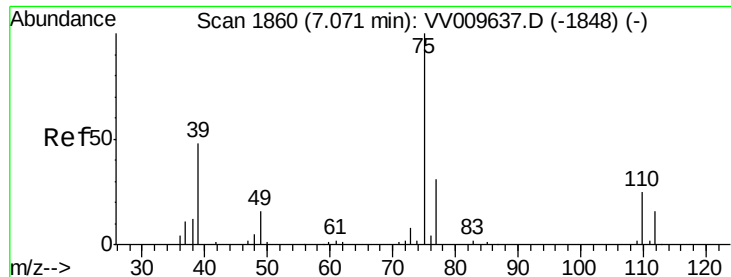
Tgt Ion: 63 Resp: 54193  
 Ion Ratio Lower Upper  
 63 100  
 112 4.2 3.2 4.8



#41  
 Bromodichloromethane  
 Concen: 26.952 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Tgt Ion: 83 Resp: 79496  
 Ion Ratio Lower Upper  
 83 100  
 85 64.1 44.4 82.4  
 127 9.1 6.7 10.1



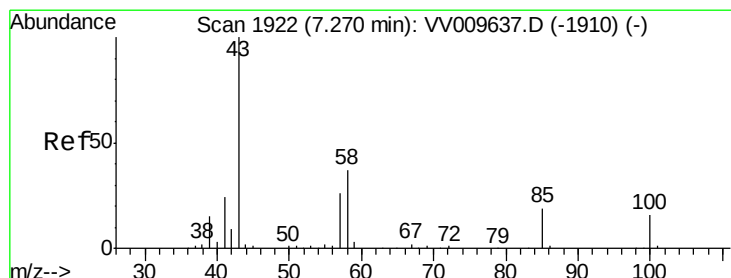
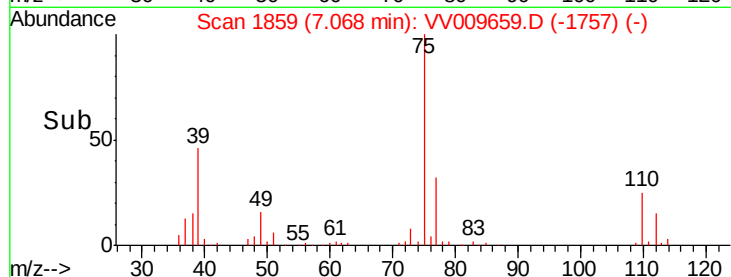
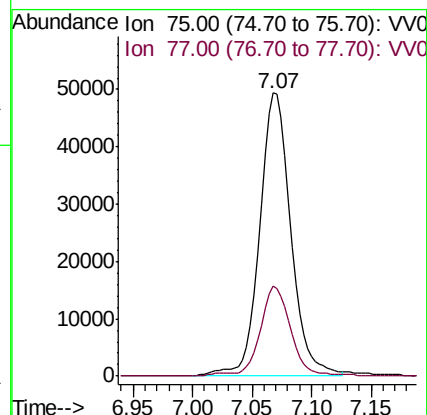
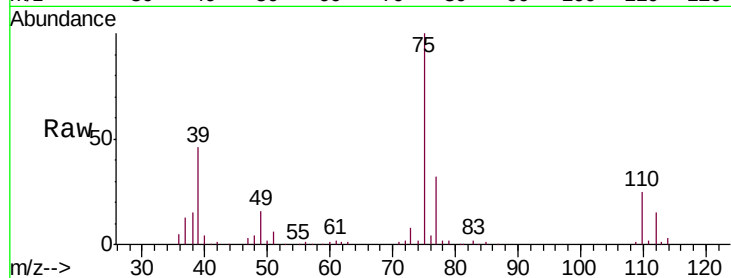


#42

cis-1,3-Dichloropropene  
Concen: 27.640 ug/L  
RT: 7.07 min Scan# 1859  
Delta R.T. -0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD02580

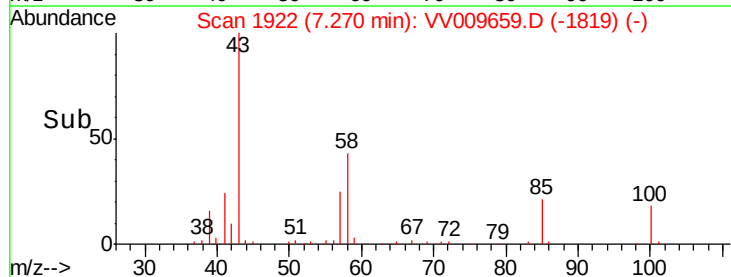
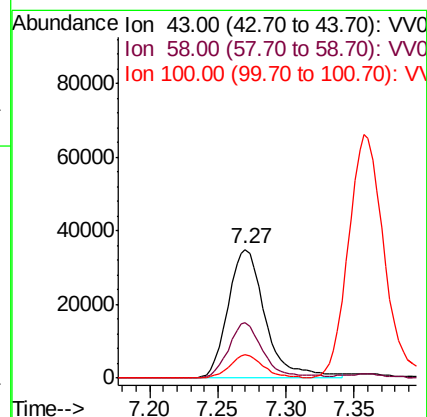
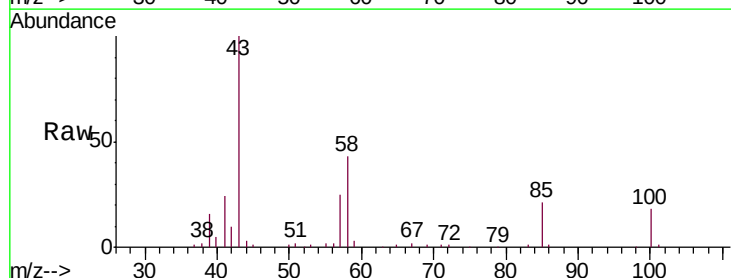
Tgt Ion: 75 Resp: 89964  
Ion Ratio Lower Upper  
75 100  
77 31.7 22.0 40.8

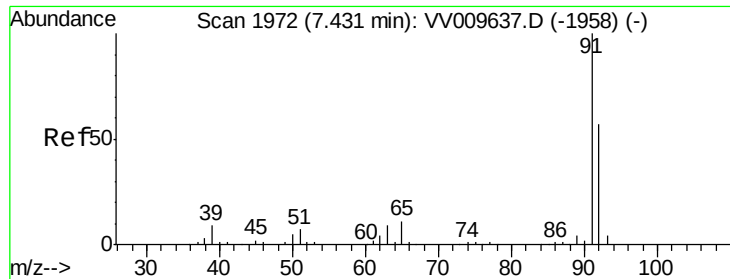


#43

4-Methyl-2-pentanone  
Concen: 45.400 ug/L  
RT: 7.27 min Scan# 1922  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Tgt Ion: 43 Resp: 66552  
Ion Ratio Lower Upper  
43 100  
58 40.4 30.9 46.3  
100 16.2 11.8 17.6





#44

Toluene

Concen: 27.143 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

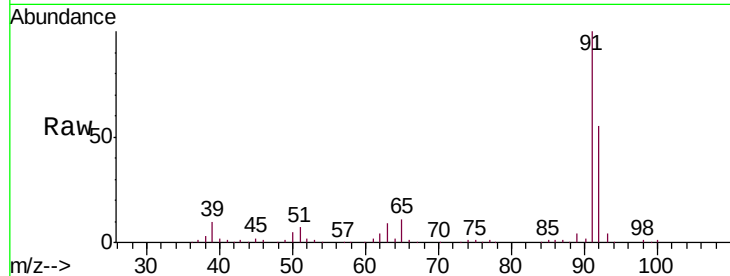
VSTD02580

Tgt Ion: 91 Resp: 266763

Ion Ratio Lower Upper

91 100

92 55.2 39.5 73.4



Abundance Ion 91.00 (90.70 to 91.70): VV009637.D (-1958) (-)

Ion 92.00 (91.70 to 92.70): VV009637.D (-1958) (-)

7.43

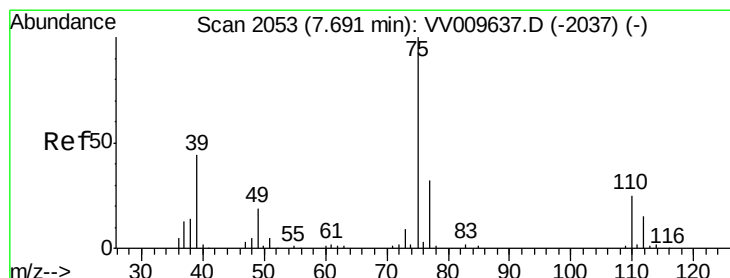
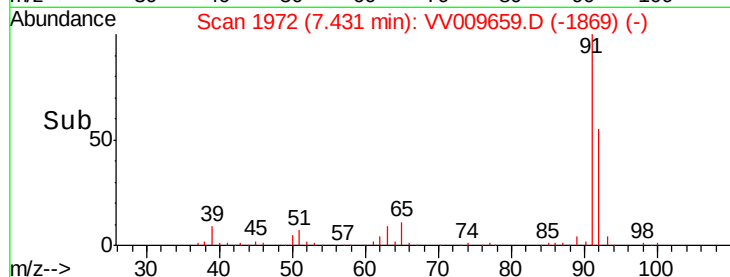
150000

100000

50000

0

Time-->



#45

trans-1,3-Dichloropropene

Concen: 25.848 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV009659.D

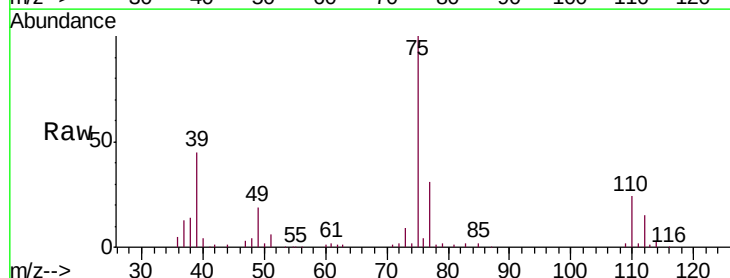
Acq: 14 Mar 2019 11:28

Tgt Ion: 75 Resp: 72653

Ion Ratio Lower Upper

75 100

77 31.1 22.0 40.8



Abundance Ion 75.00 (74.70 to 75.70): VV009637.D (-2037) (-)

Ion 77.00 (76.70 to 77.70): VV009637.D (-2037) (-)

7.69

50000

40000

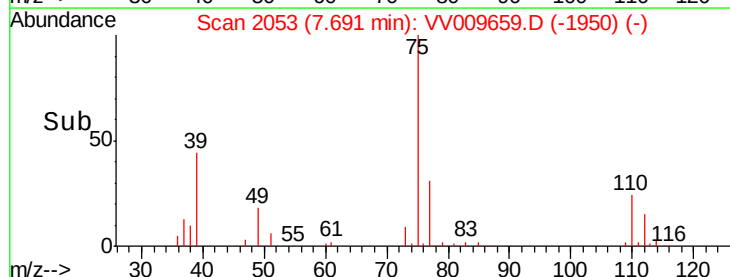
30000

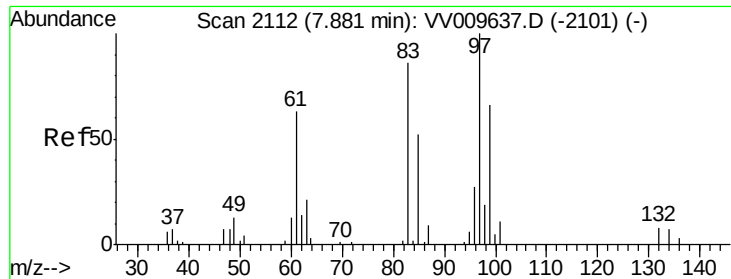
20000

10000

0

Time-->

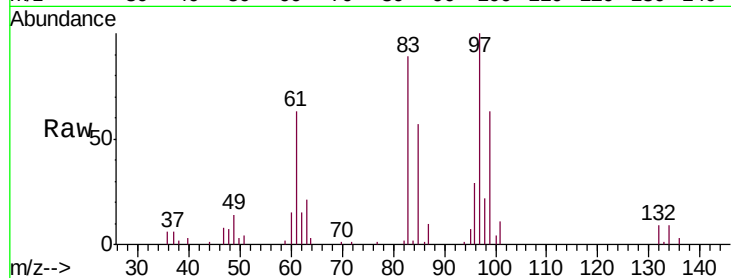




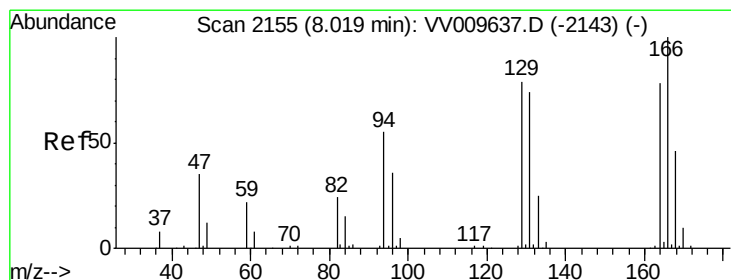
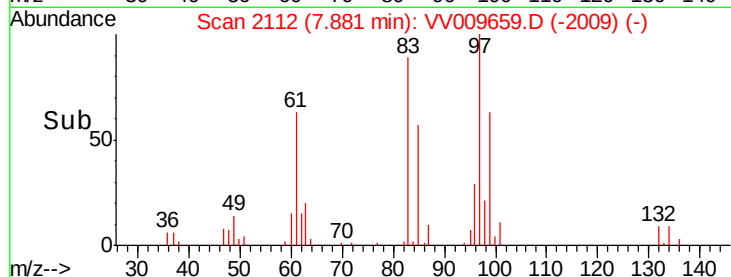
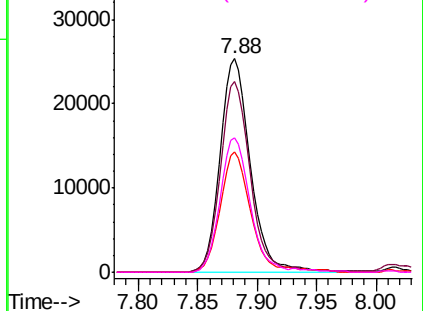
#46  
 1,1,2-Trichloroethane  
 Concen: 25.076 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02580

Tgt Ion: 97 Resp: 44915  
 Ion Ratio Lower Upper  
 97 100  
 83 89.2 62.9 116.7  
 85 56.5 40.0 74.2  
 99 63.2 44.9 83.3

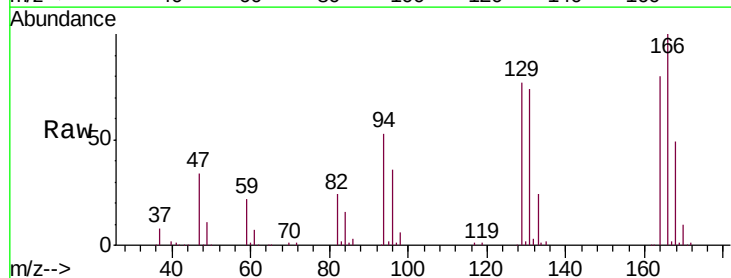


Abundance Ion 97.00 (96.70 to 97.70): VV0  
 Ion 83.00 (82.70 to 83.70): VV0  
 Ion 85.00 (84.70 to 85.70): VV0  
 Ion 99.00 (98.70 to 99.70): VV0

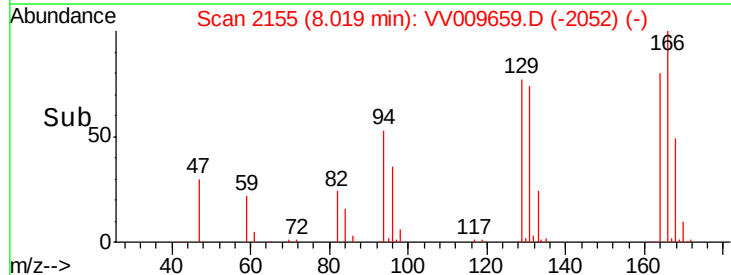
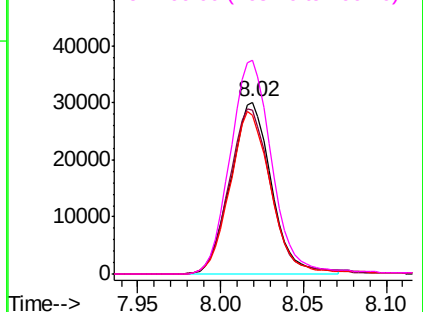


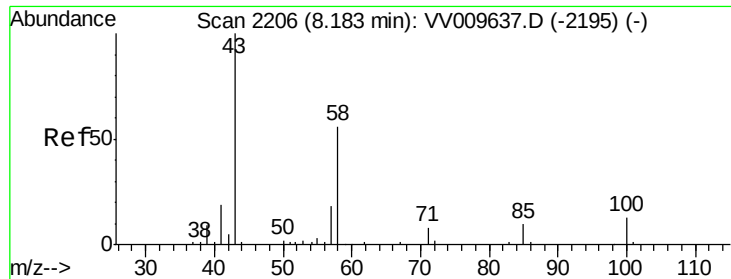
#47  
 Tetrachloroethene  
 Concen: 26.722 ug/L  
 RT: 8.02 min Scan# 2155  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Tgt Ion: 164 Resp: 51719  
 Ion Ratio Lower Upper  
 164 100  
 129 95.3 69.0 128.1  
 131 92.4 65.7 122.1  
 166 124.5 89.4 166.0



Abundance Ion 164.00 (163.70 to 164.70): V  
 Ion 129.00 (128.70 to 129.70): V  
 Ion 131.00 (130.70 to 131.70): V  
 Ion 166.00 (165.70 to 166.70): V

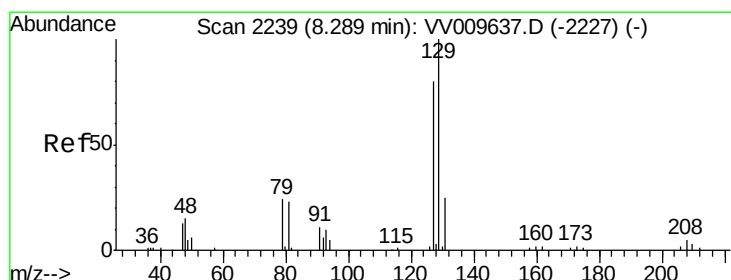
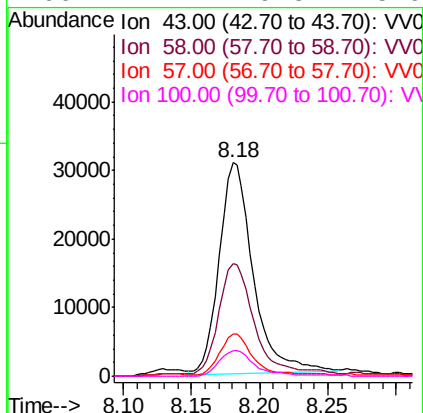
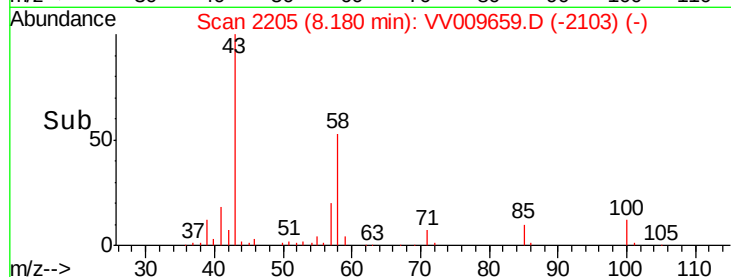
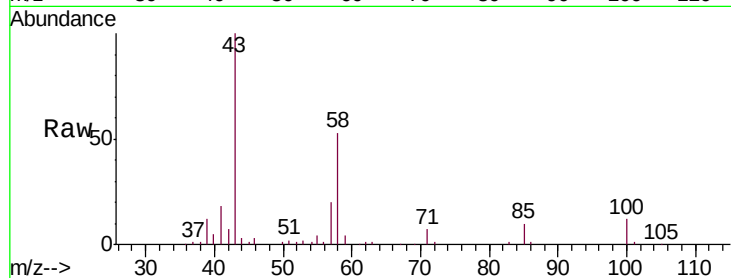




#49  
2-Hexanone  
Concen: 48.495 ug/L  
RT: 8.18 min Scan# 2205  
Delta R.T. -0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

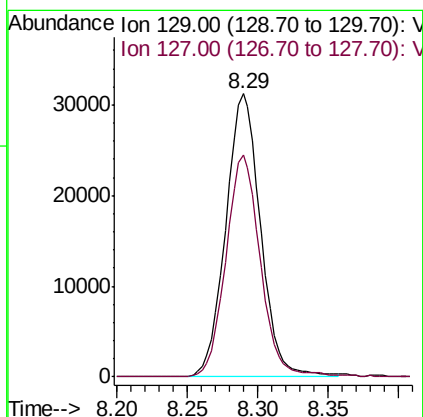
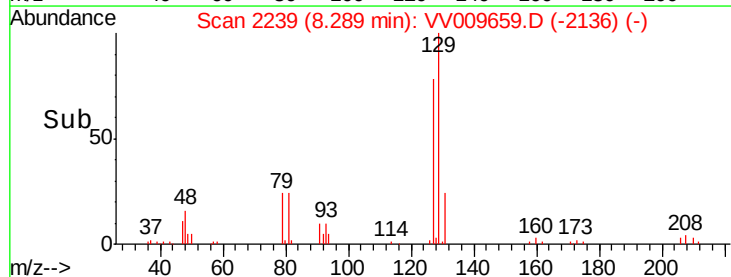
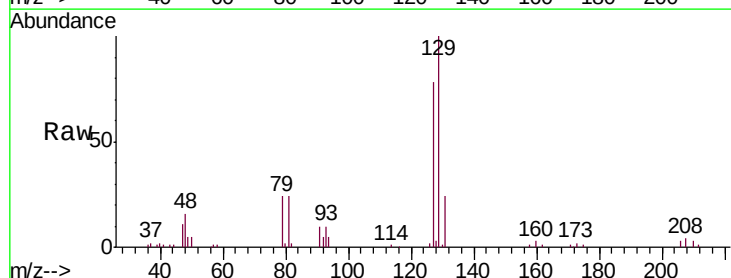
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02580

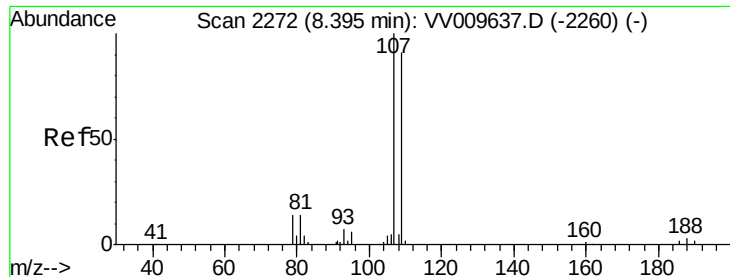
Tgt Ion: 43 Resp: 53390  
Ion Ratio Lower Upper  
43 100  
58 53.3 44.9 67.3  
57 18.3 14.5 21.7  
100 12.7 9.3 13.9



#50  
Dibromochloromethane  
Concen: 26.538 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. 0.00 min  
Lab File: VV009659.D  
Acq: 14 Mar 2019 11:28

Tgt Ion: 129 Resp: 53907  
Ion Ratio Lower Upper  
129 100  
127 78.3 55.4 102.8





#51

1,2-Dibromoethane

Concen: 25.101 ug/L

RT: 8.40 min Scan# 2272

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

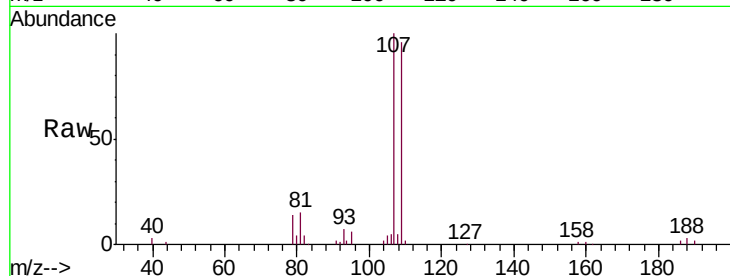
Tgt Ion:107 Resp: 44531

Ion Ratio Lower Upper

107 100

109 95.7 68.4 127.0

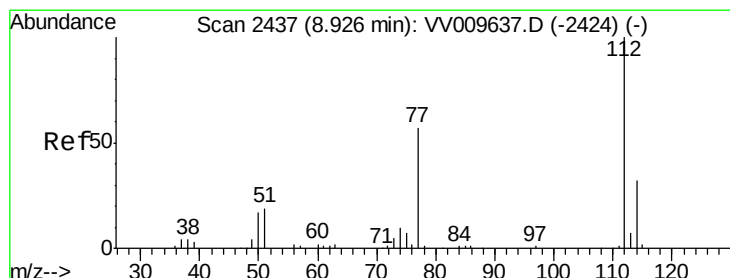
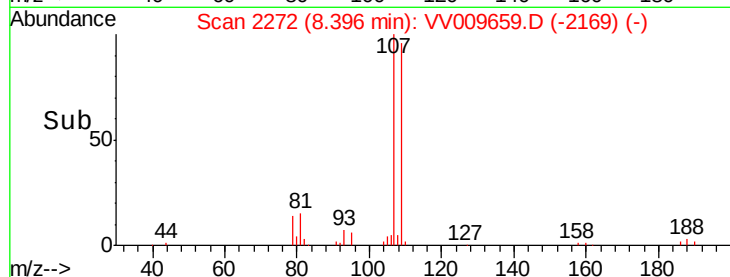
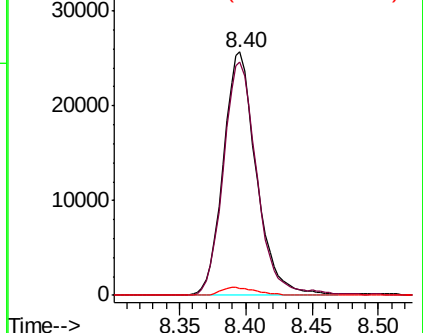
188 2.9 2.6 3.8



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V



#52

Chlorobenzene

Concen: 26.376 ug/L

RT: 8.92 min Scan# 2436

Delta R.T. -0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

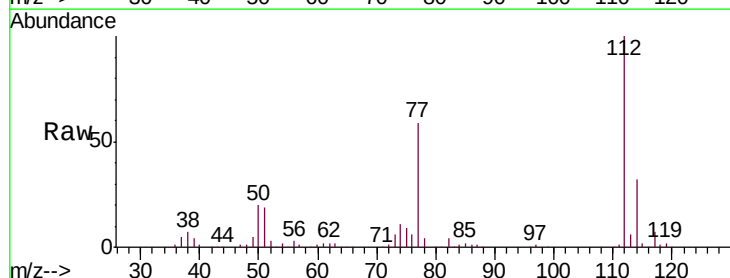
Tgt Ion:112 Resp: 168671

Ion Ratio Lower Upper

112 100

77 58.9 45.6 68.4

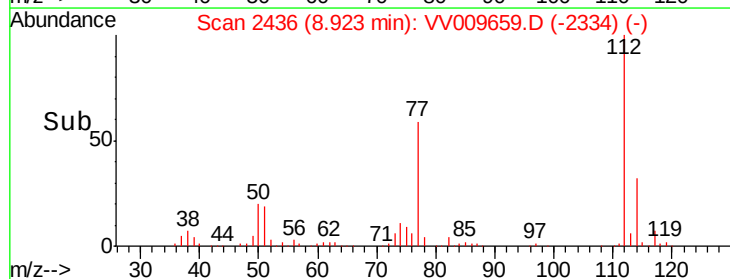
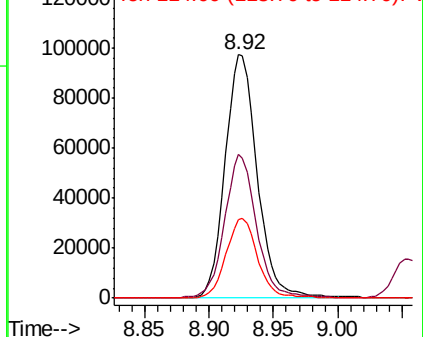
114 32.3 22.3 41.5

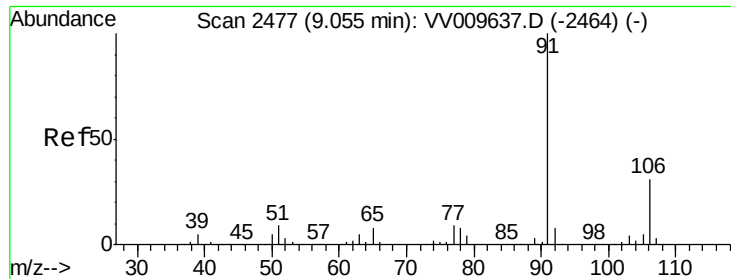


Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): VV0

Ion 114.00 (113.70 to 114.70): V





#53

Ethylbenzene

Concen: 27.723 ug/L

RT: 9.05 min Scan# 2477

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

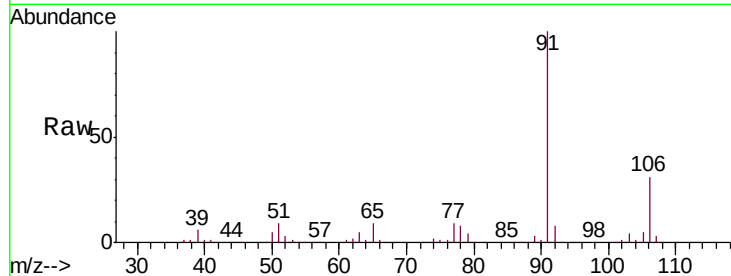
VSTD02580

Tgt Ion: 91 Resp: 301347

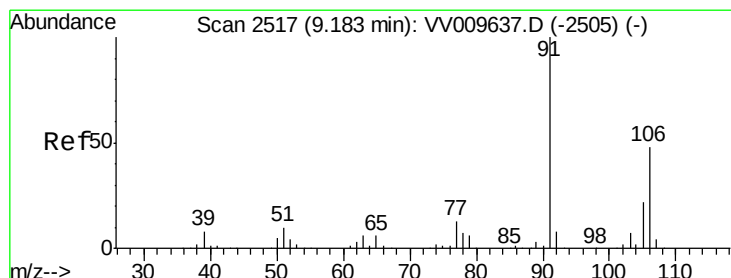
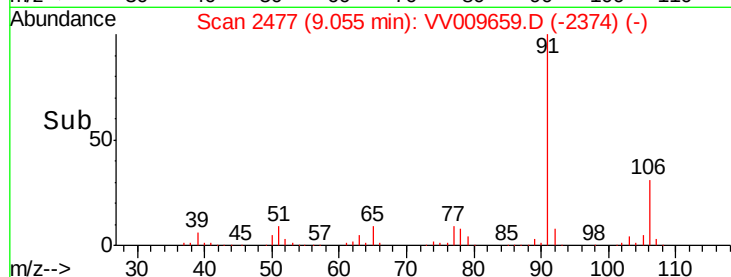
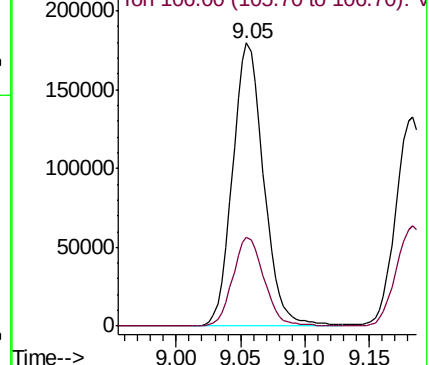
Ion Ratio Lower Upper

91 100

106 31.3 21.1 39.1



Abundance Ion 91.00 (90.70 to 91.70): VV009637.D (-2464) (-)



#54

m,p-Xylene

Concen: 27.880 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. 0.00 min

Lab File: VV009659.D

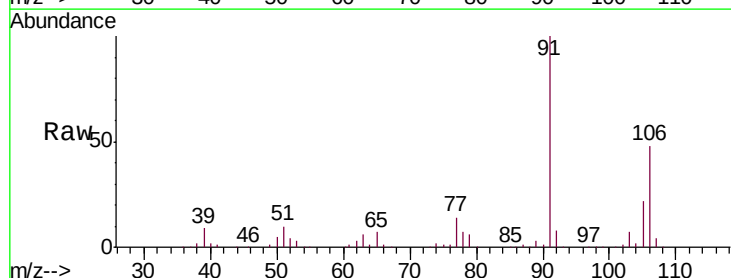
Acq: 14 Mar 2019 11:28

Tgt Ion: 106 Resp: 114396

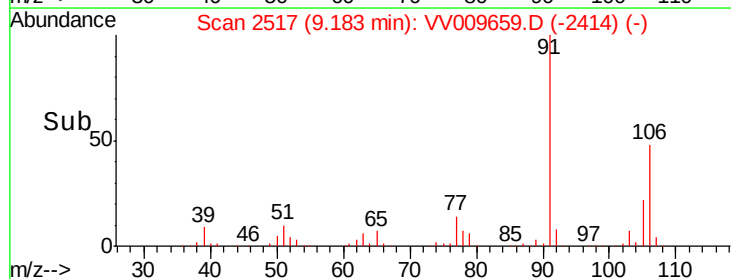
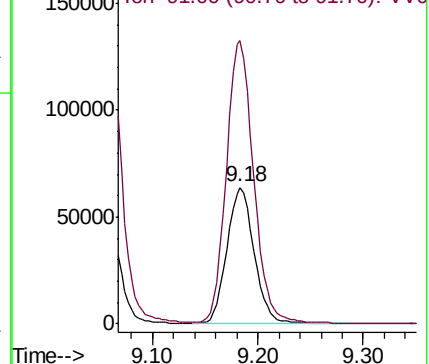
Ion Ratio Lower Upper

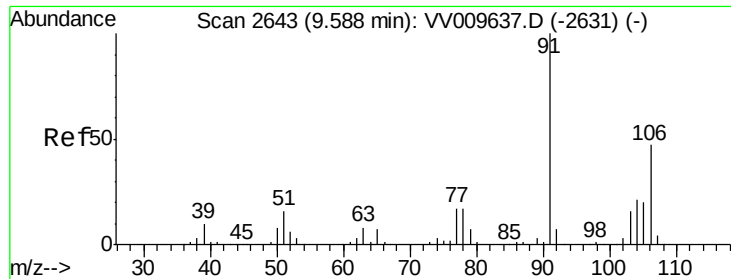
106 100

91 207.8 141.4 262.6



Abundance Ion 106.00 (105.70 to 106.70): VV009637.D (-2505) (-)





#55

o-xylene

Concen: 26.859 ug/L

RT: 9.59 min Scan# 2643

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

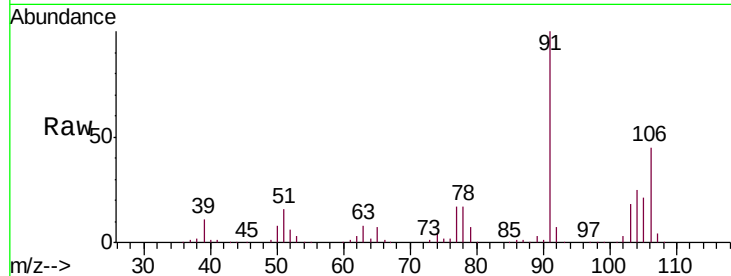
VSTD02580

Tgt Ion:106 Resp: 108158

Ion Ratio Lower Upper

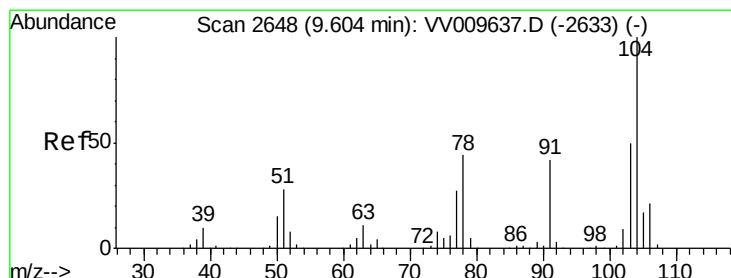
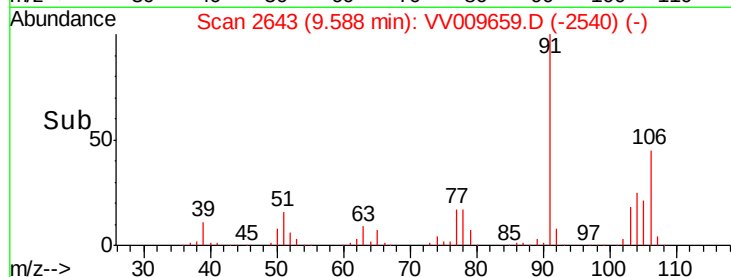
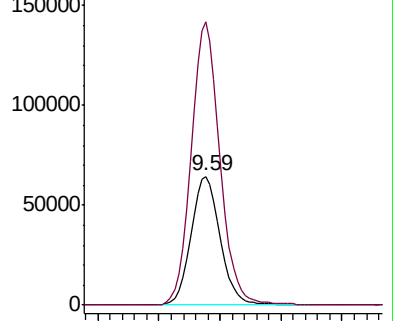
106 100

91 219.9 149.7 278.1



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#56

Styrene

Concen: 27.511 ug/L

RT: 9.60 min Scan# 2648

Delta R.T. 0.00 min

Lab File: VV009659.D

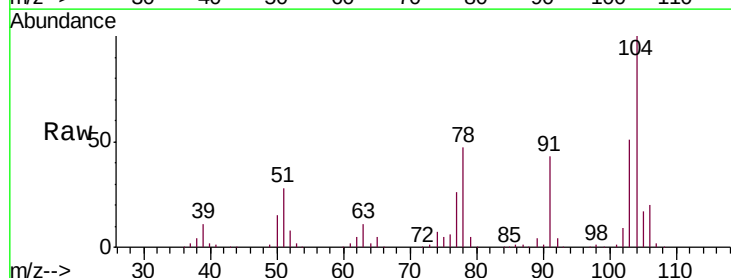
Acq: 14 Mar 2019 11:28

Tgt Ion:104 Resp: 180694

Ion Ratio Lower Upper

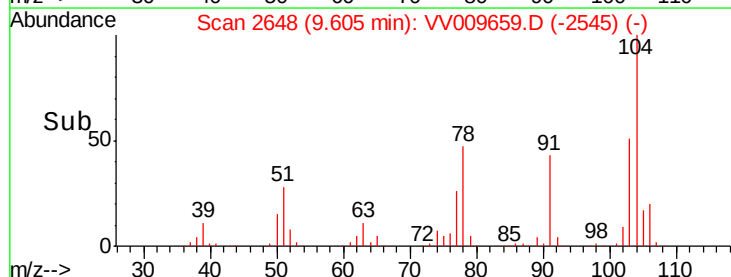
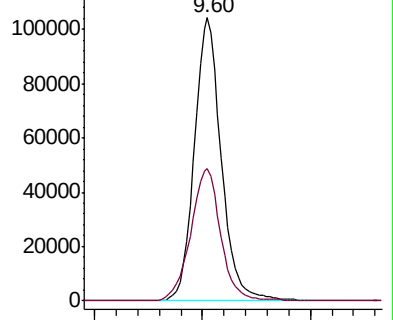
104 100

78 46.8 32.3 59.9

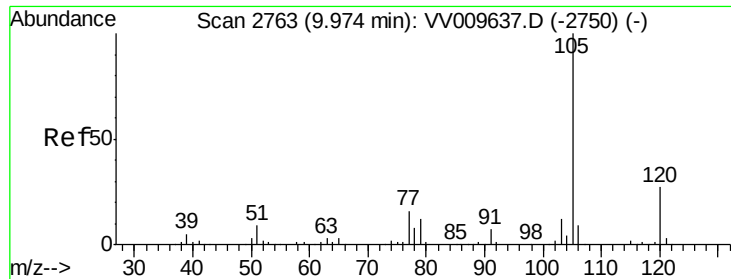


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0







#57

Isopropylbenzene

Concen: 28.055 ug/L

RT: 9.97 min Scan# 2763

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

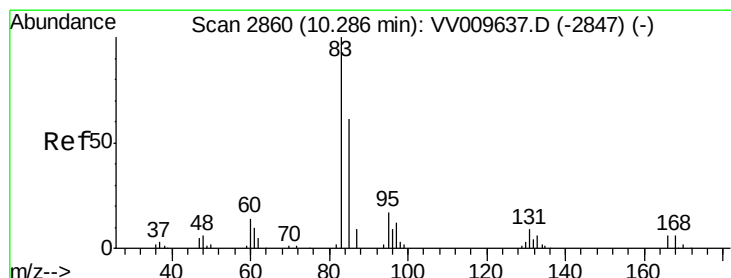
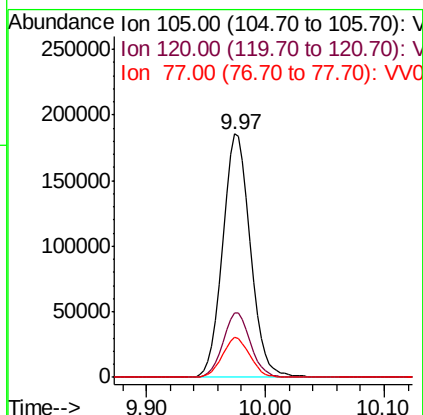
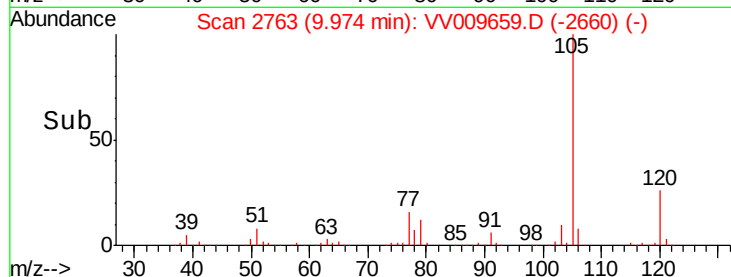
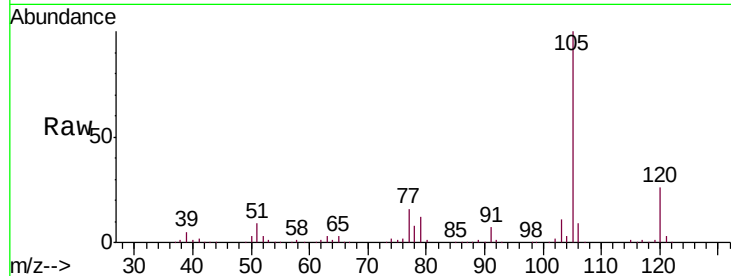
Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 105   | Resp: | 299627 |
| Ion      | Ratio | Lower | Upper  |
| 105      | 100   |       |        |
| 120      | 26.3  | 21.5  | 32.3   |
| 77       | 16.4  | 12.9  | 19.3   |



#58

1,1,2,2-Tetrachloroethane

Concen: 24.759 ug/L

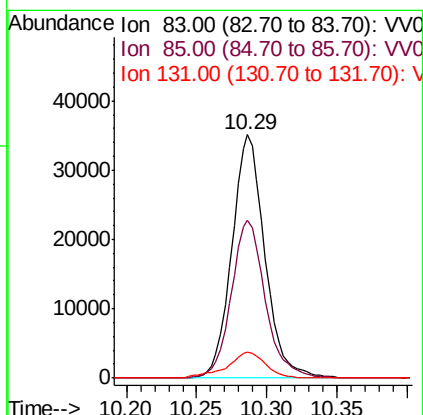
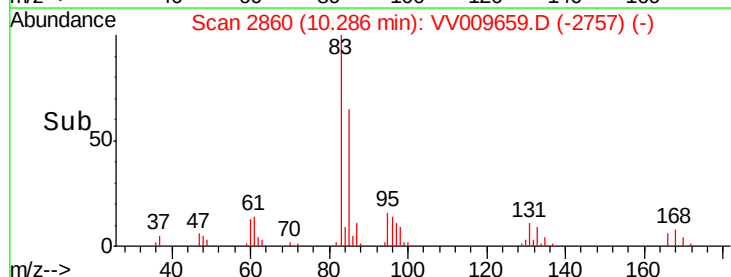
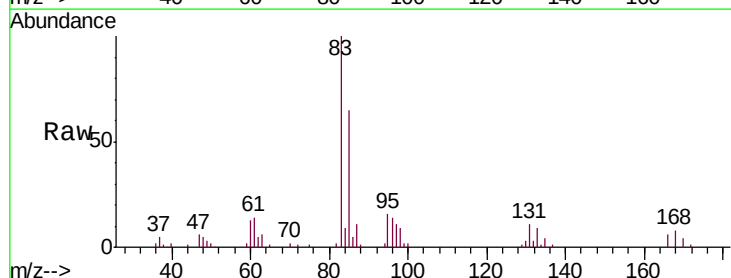
RT: 10.29 min Scan# 2860

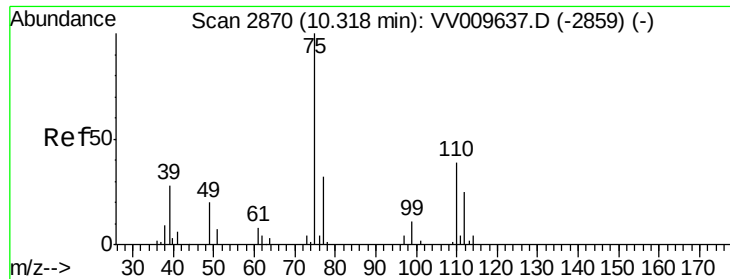
Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 57501 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 85       | 64.9  | 46.1  | 85.7  |
| 131      | 10.5  | 8.0   | 12.0  |

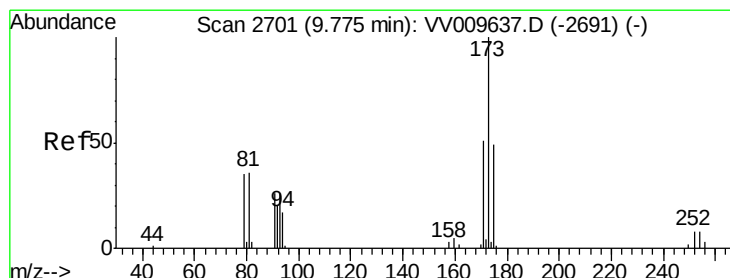
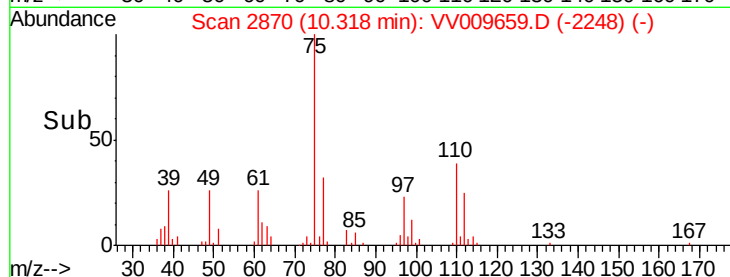
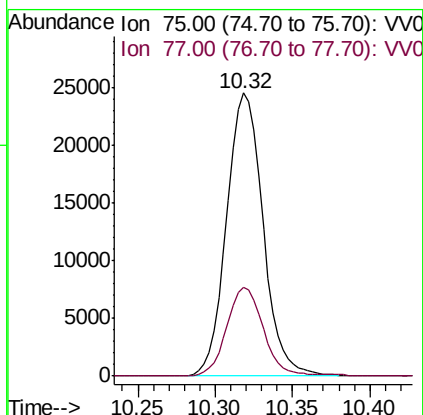
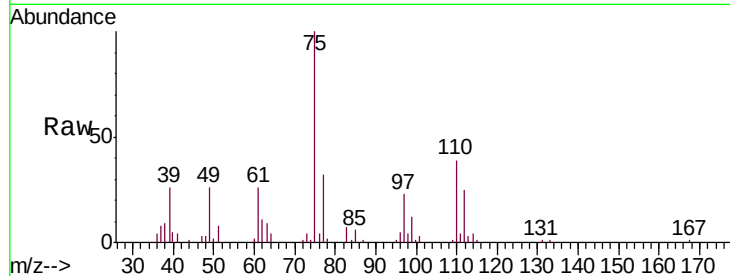




#59  
 1,2,3-Trichloropropane  
 Concen: 24.068 ug/L  
 RT: 10.32 min Scan# 2870  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

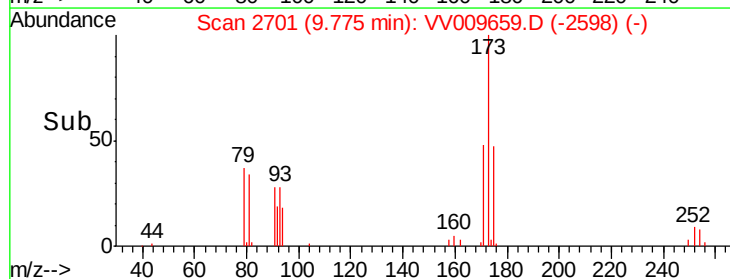
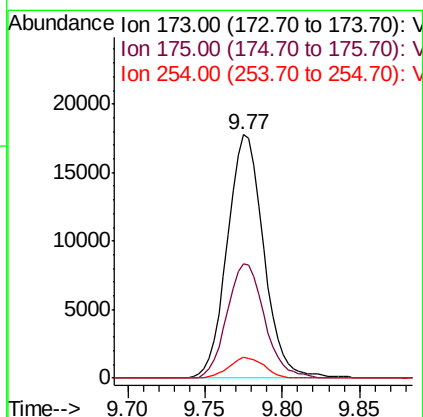
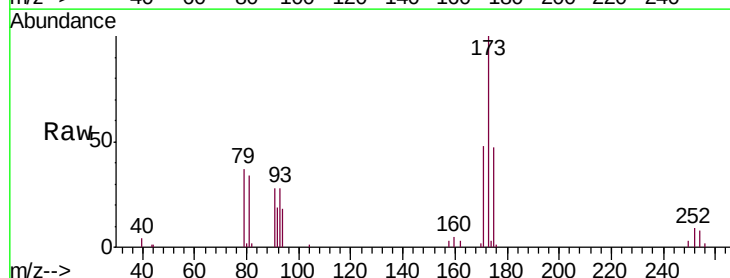
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD02580

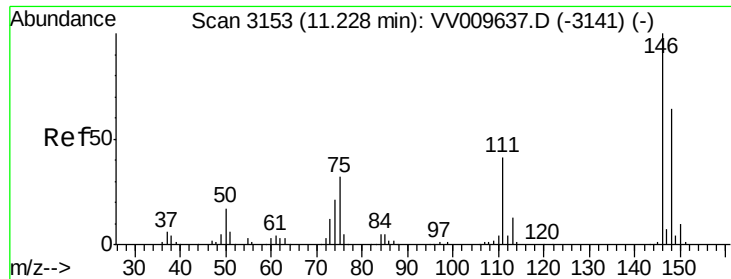
Tgt Ion: 75 Resp: 40128  
 Ion Ratio Lower Upper  
 75 100  
 77 31.5 25.3 37.9



#62  
 Bromoform  
 Concen: 25.572 ug/L  
 RT: 9.77 min Scan# 2701  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Tgt Ion: 173 Resp: 29020  
 Ion Ratio Lower Upper  
 173 100  
 175 48.1 37.8 56.6  
 254 8.3 6.1 9.1





#63

1,3-Dichlorobenzene

Concen: 26.450 ug/L

RT: 11.23 min Scan# 3153

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

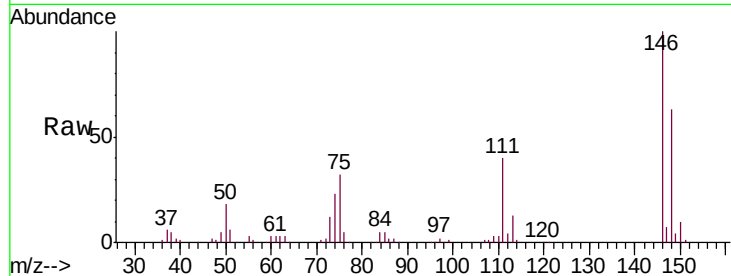
Tgt Ion:146 Resp: 128177

Ion Ratio Lower Upper

146 100

111 40.0 28.8 53.6

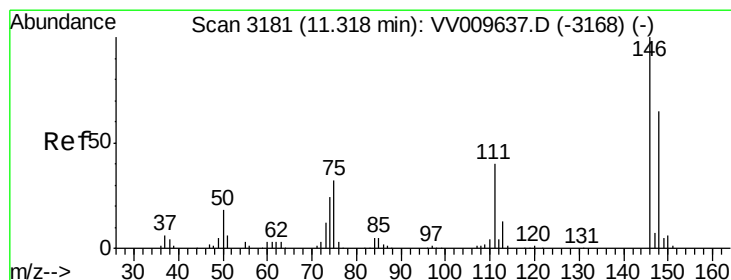
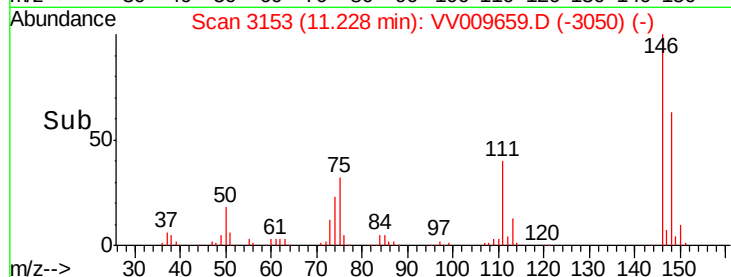
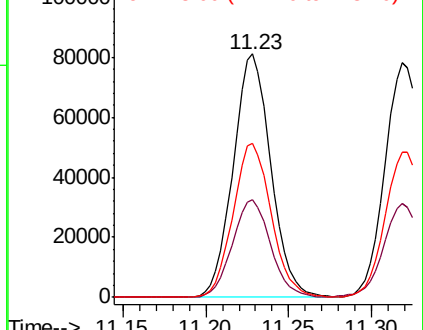
148 63.1 45.1 83.7



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#64

1,4-Dichlorobenzene

Concen: 26.068 ug/L

RT: 11.32 min Scan# 3181

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

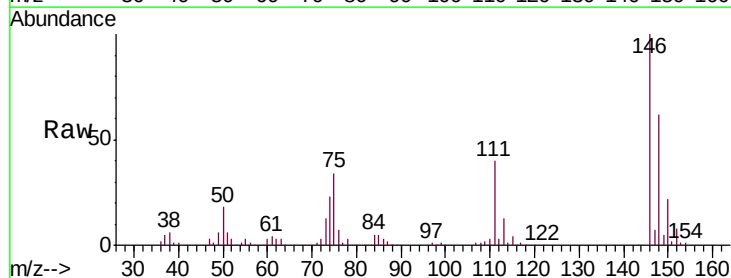
Tgt Ion:146 Resp: 128583

Ion Ratio Lower Upper

146 100

111 39.9 28.2 52.4

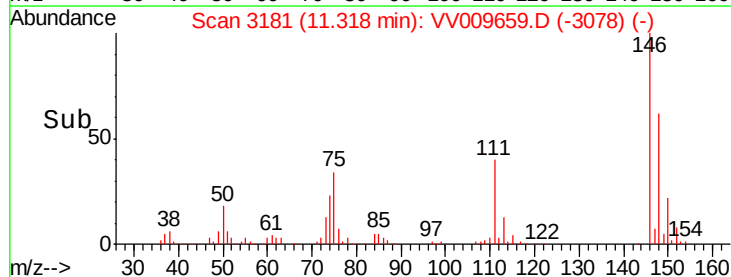
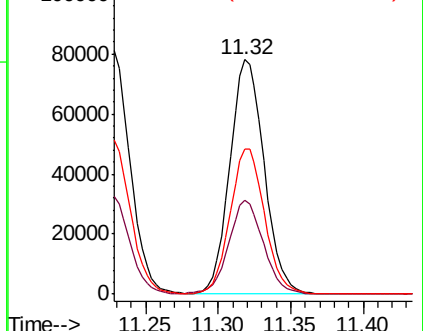
148 62.2 44.2 82.0

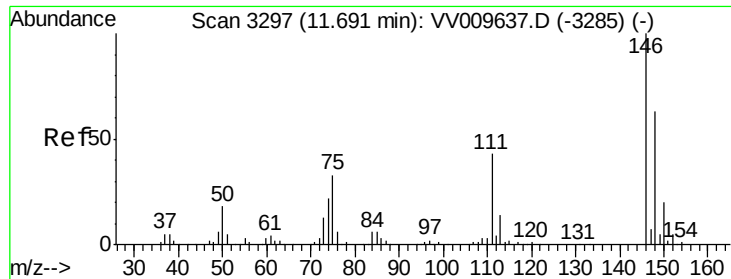


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 26.097 ug/L

RT: 11.69 min Scan# 3297

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

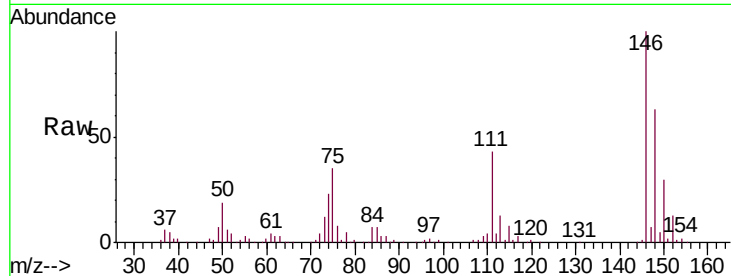
Tgt Ion: 146 Resp: 117665

Ion Ratio Lower Upper

146 100

111 42.5 33.8 50.6

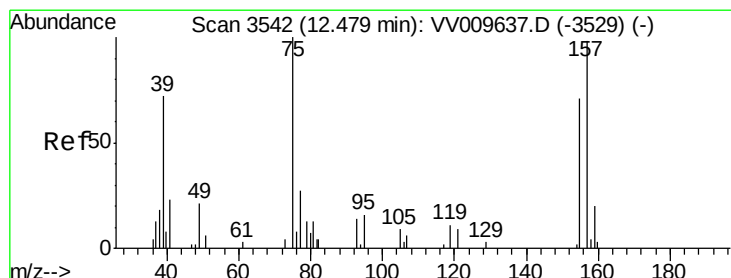
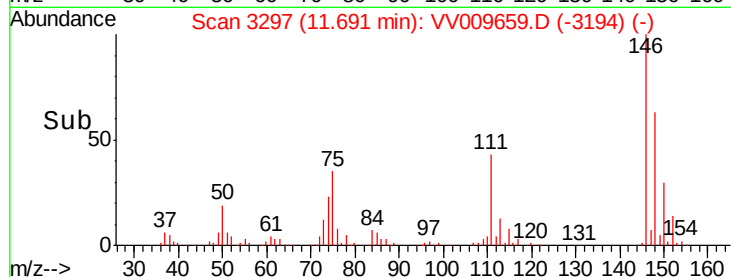
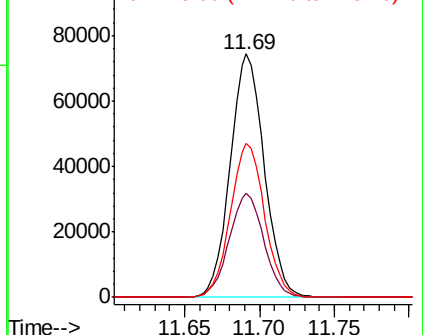
148 63.4 49.1 73.7



Abundance Ion 146.00 (145.70 to 146.70): 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: 24.368 ug/L

RT: 12.48 min Scan# 3542

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

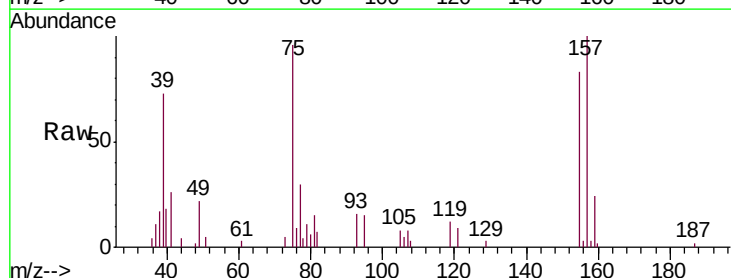
Tgt Ion: 75 Resp: 8134

Ion Ratio Lower Upper

75 100

157 103.9 78.6 118.0

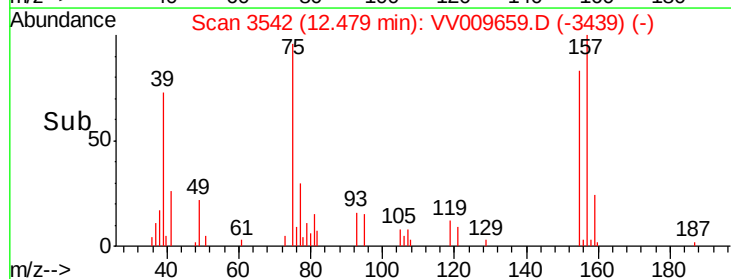
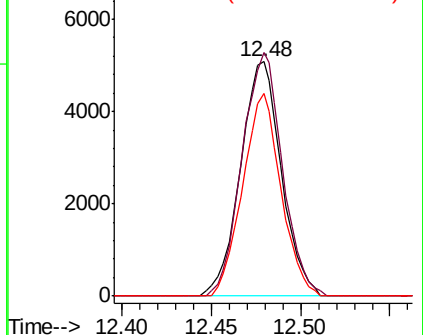
155 86.4 60.0 90.0

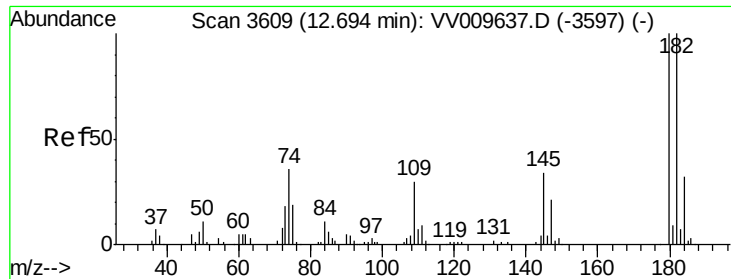


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 157.00 (156.70 to 157.70): V

Ion 155.00 (154.70 to 155.70): V

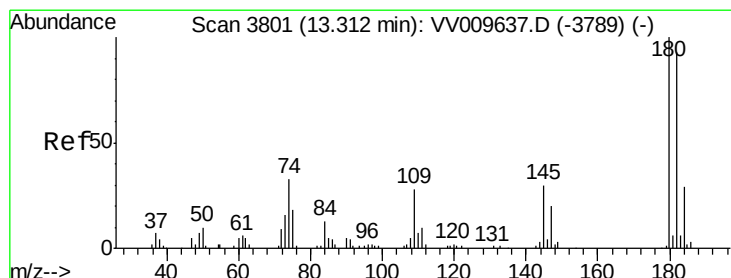
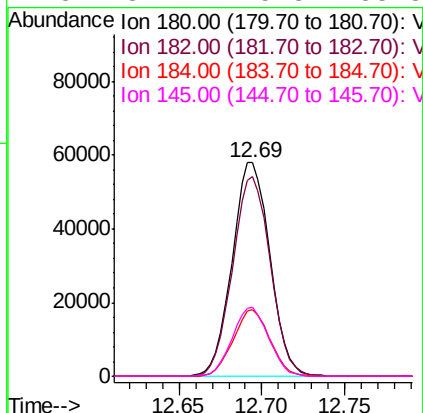
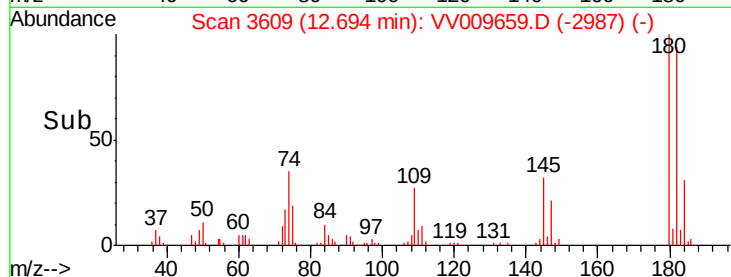
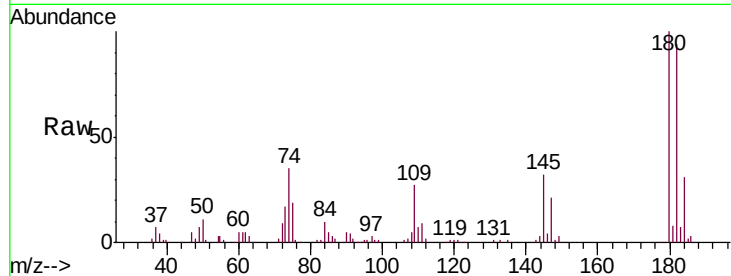




#67  
 1,3,5-Trichlorobenzene  
 Concen: 27.249 ug/L  
 RT: 12.69 min Scan# 3609  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

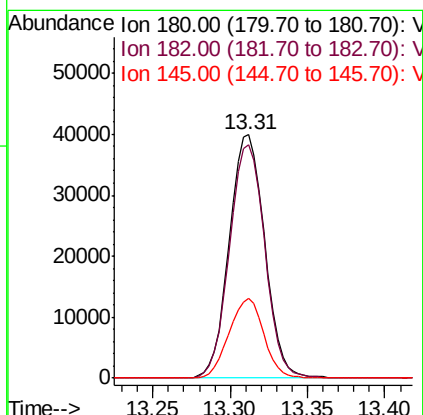
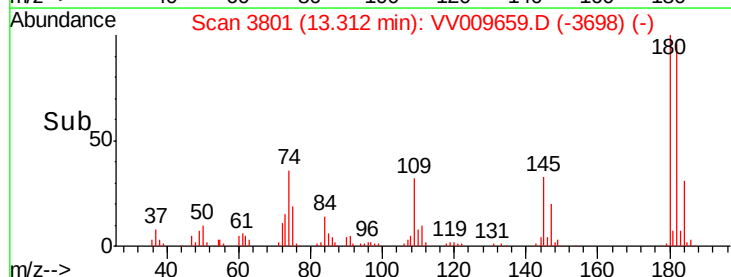
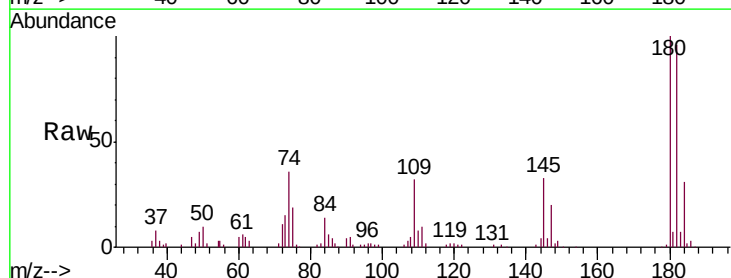
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02580

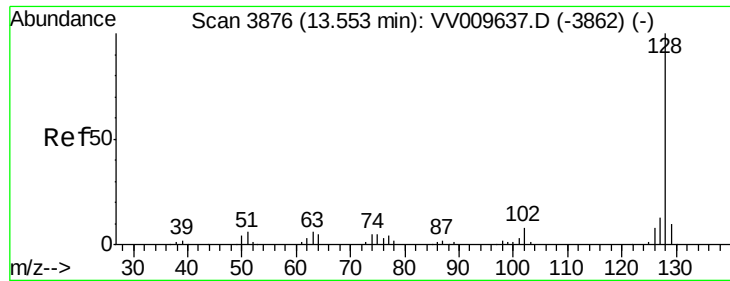
Tgt Ion:180 Resp: 91956  
 Ion Ratio Lower Upper  
 180 100  
 182 93.4 76.3 114.5  
 184 30.2 23.8 35.8  
 145 31.2 25.8 38.8



#68  
 1,2,4-trichlorobenzene  
 Concen: 26.513 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. 0.00 min  
 Lab File: VV009659.D  
 Acq: 14 Mar 2019 11:28

Tgt Ion:180 Resp: 63426  
 Ion Ratio Lower Upper  
 180 100  
 182 95.5 77.4 116.0  
 145 32.0 26.4 39.6





#69

Naphthalene

Concen: 24.052 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02580

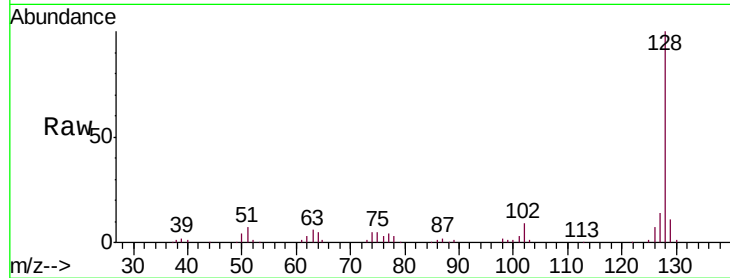
Tgt Ion:128 Resp: 95035

Ion Ratio Lower Upper

128 100

129 10.8 8.3 12.5

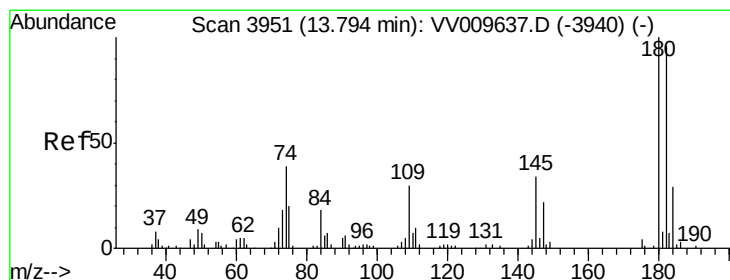
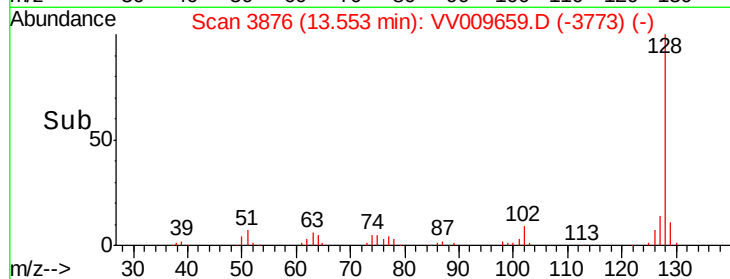
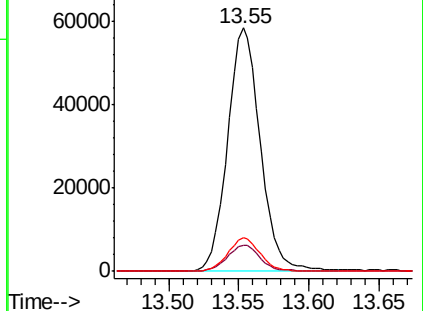
127 13.3 11.0 16.6



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: 26.016 ug/L

RT: 13.79 min Scan# 3951

Delta R.T. 0.00 min

Lab File: VV009659.D

Acq: 14 Mar 2019 11:28

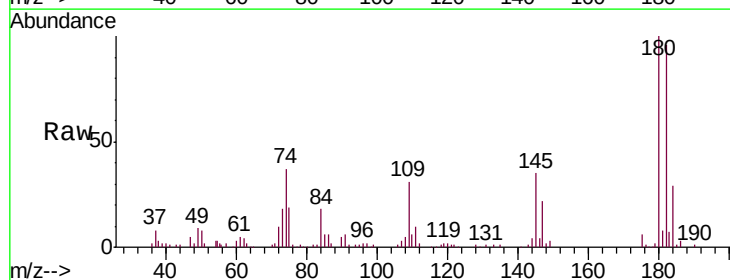
Tgt Ion:180 Resp: 57233

Ion Ratio Lower Upper

180 100

182 94.7 76.9 115.3

145 34.1 27.3 40.9



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

