

Data File : VV009562.D  
Acq On : 10 Mar 2019 12:22  
Operator : SY/MD  
Sample : VSTDCCC025  
Misc : 5.00G/10ML/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

Quant Time: Mar 11 04:44:23 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM030519S.M  
Quant Title : VOC Analysis  
QLast Update : Sat Mar 09 01:24:39 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 180994   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 166798   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 80363    | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 46526    | 21.36    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 85.44% |
| 7) Chloroethane-d5             | 1.57   | 69    | 70171    | 22.27    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 89.08% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 129285   | 22.80    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 91.20% |
| 20) 2-Butanone-d5              | 3.94   | 46    | 29824    | 40.17    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 80.34% |
| 24) Chloroform-d               | 4.40   | 84    | 104267   | 24.18    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 96.72% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 56672    | 23.10    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 92.40% |
| 29) Benzene-d6                 | 5.10   | 84    | 198297   | 24.00    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 96.00% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 58313    | 23.92    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 95.68% |
| 37) Toluene-d8                 | 7.36   | 98    | 197059   | 24.47    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 97.88% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 26803    | 22.69    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 90.76% |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 22662    | 39.83    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 79.66% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 58283    | 22.43    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 89.72% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 69328    | 23.63    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 94.52% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 53190  | 25.523 ug/L | 98     |
| 3) Chloromethane               | 1.25 | 50  | 52366  | 23.577 ug/L | 99     |
| 5) Vinyl chloride              | 1.32 | 62  | 58697  | 23.971 ug/L | 99     |
| 6) Bromomethane                | 1.53 | 94  | 73067  | 23.970 ug/L | 98     |
| 8) Chloroethane                | 1.59 | 64  | 51250  | 18.835 ug/L | 98     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 125771 | 25.040 ug/L | 99     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 71966  | 25.588 ug/L | 96     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 58452  | 24.291 ug/L | 90     |
| 13) Acetone                    | 2.20 | 43  | 27316  | 36.187 ug/L | 98     |
| 14) Carbon disulfide           | 2.31 | 76  | 147315 | 24.153 ug/L | 99     |
| 15) Methyl Acetate             | 2.46 | 43  | 22796  | 18.648 ug/L | 97     |
| 16) Methylene chloride         | 2.53 | 84  | 51980  | 21.883 ug/L | 99     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 121708 | 22.586 ug/L | 98     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 53686  | 24.838 ug/L | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 96841  | 25.427 ug/L | 98     |
| 21) 2-Butanone                 | 4.02 | 43  | 31700  | 33.274 ug/L | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 63464  | 26.008 ug/L | 93     |

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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

Quant Time: Mar 11 04:44:23 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM030519S.M  
Quant Title : VOC Analysis  
QLast Update : Sat Mar 09 01:24:39 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 27624    | 24.551 | ug/L  | 94       |
| 25) Chloroform                 | 4.42  | 83   | 106962   | 25.166 | ug/L  | 99       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 69759    | 23.632 | ug/L  | 97       |
| 30) Cyclohexane                | 4.72  | 56   | 87679    | 24.769 | ug/L  | 95       |
| 31) 1,1,1-Trichloroethane      | 4.66  | 97   | 97380    | 26.116 | ug/L  | 98       |
| 32) Carbon tetrachloride       | 4.87  | 117  | 83065    | 26.350 | ug/L  | 99       |
| 34) Benzene                    | 5.14  | 78   | 221653   | 25.718 | ug/L  | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 63149    | 25.495 | ug/L  | 97       |
| 36) Methylcyclohexane          | 6.17  | 83   | 99644    | 24.695 | ug/L  | 98       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 53894    | 24.252 | ug/L  | 99       |
| 41) Bromodichloromethane       | 6.55  | 83   | 77373    | 25.795 | ug/L  | 95       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 86239    | 24.997 | ug/L  | 97       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 68107    | 38.878 | ug/L  | 99       |
| 44) Toluene                    | 7.43  | 91   | 249996   | 25.661 | ug/L  | 100      |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 74020    | 24.566 | ug/L  | 98       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 44772    | 24.250 | ug/L  | 93       |
| 47) Tetrachloroethene          | 8.02  | 164  | 48014    | 25.557 | ug/L  | 96       |
| 49) 2-Hexanone                 | 8.19  | 43   | 50476    | 38.105 | ug/L  | 96       |
| 50) Dibromochloromethane       | 8.29  | 129  | 54719    | 24.480 | ug/L  | 97       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 44206    | 23.174 | ug/L  | 98       |
| 52) Chlorobenzene              | 8.93  | 112  | 161318   | 24.982 | ug/L  | 99       |
| 53) Ethylbenzene               | 9.05  | 91   | 284744   | 25.542 | ug/L  | 99       |
| 54) m,p-Xylene                 | 9.18  | 106  | 107359   | 25.444 | ug/L  | 93       |
| 55) o-xylene                   | 9.59  | 106  | 103914   | 25.540 | ug/L  | 95       |
| 56) Styrene                    | 9.60  | 104  | 170922   | 25.535 | ug/L  | 99       |
| 57) Isopropylbenzene           | 9.97  | 105  | 285920   | 25.478 | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 59135    | 22.683 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 40869    | 21.747 | ug/L  | 100      |
| 62) Bromoform                  | 9.78  | 173  | 29705    | 22.778 | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 124530   | 24.808 | ug/L  | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 123331   | 24.043 | ug/L  | 96       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 114780   | 24.519 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 9491     | 20.242 | ug/L  | 95       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 89500    | 24.856 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 68989    | 23.931 | ug/L  | 98       |
| 69) Naphthalene                | 13.55 | 128  | 130232   | 21.447 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 64666    | 24.383 | ug/L  | 98       |

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

Data File : VV009562.D

Acq On : 10 Mar 2019 12:22

Operator : SY/MD

Sample : VSTDCCC025

Misc : 5.00G/10ML/MSVOA V/SOIL

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

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD02574

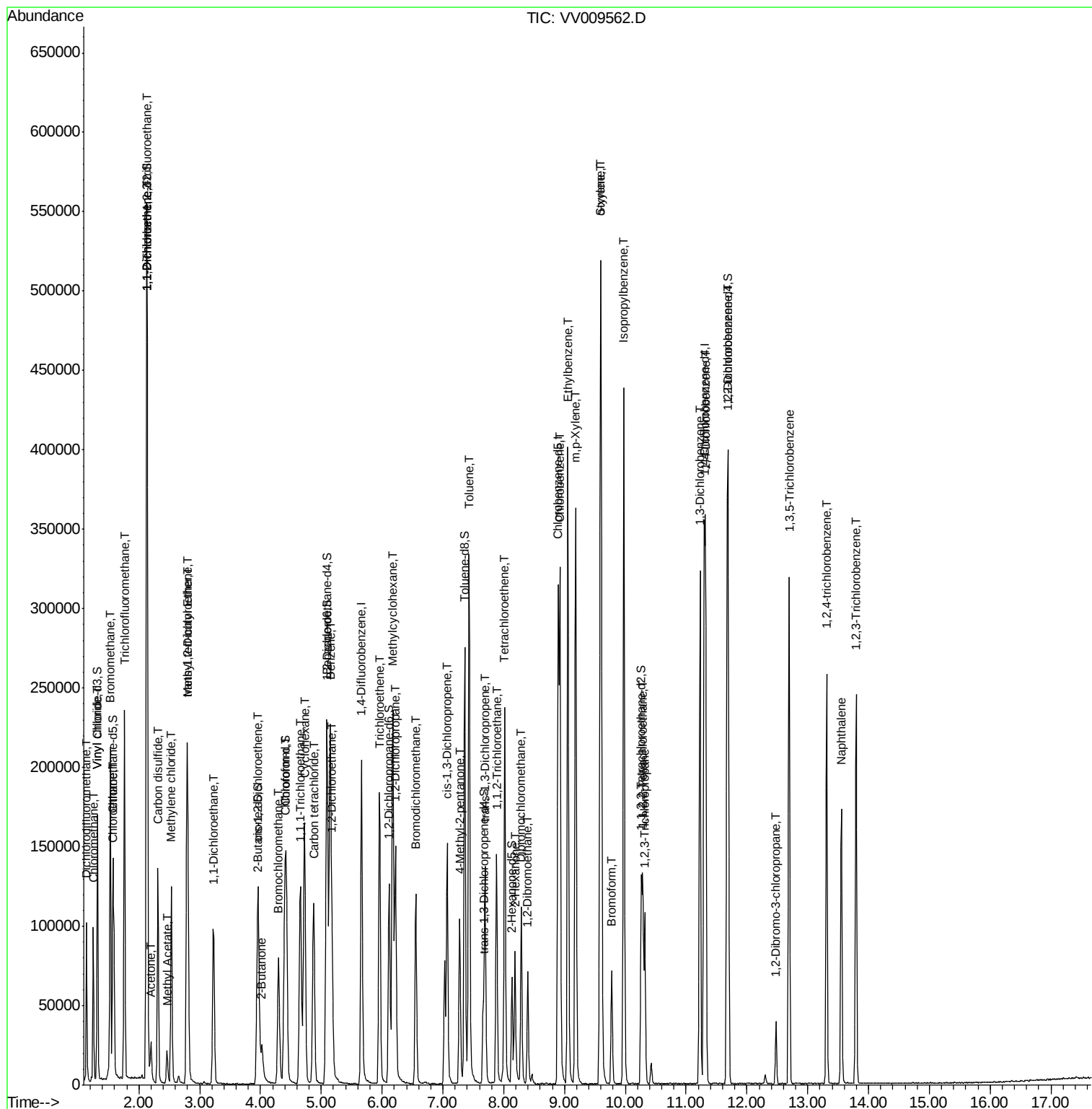
Quant Time: Mar 11 04:44:23 2019

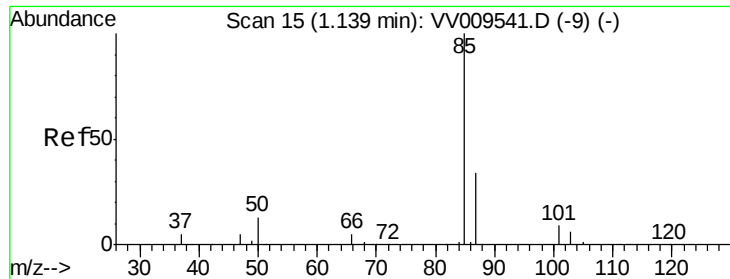
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A\_V\METHOD\S0M2VLM030519S.M

Quant Title : VOC Analysis

QLast Update : Sat Mar 09 01:24:39 2019

Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 25.523 ug/L

RT: 1.14 min Scan# 15

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

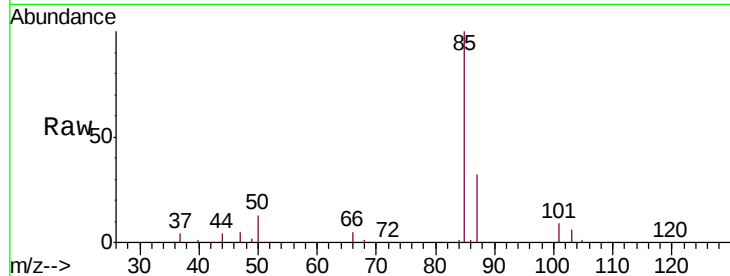
VSTD02574

Tgt Ion: 85 Resp: 53190

Ion Ratio Lower Upper

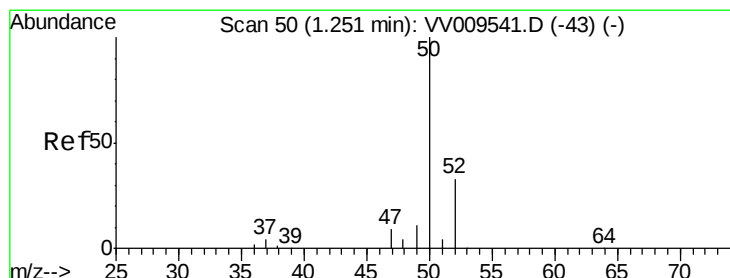
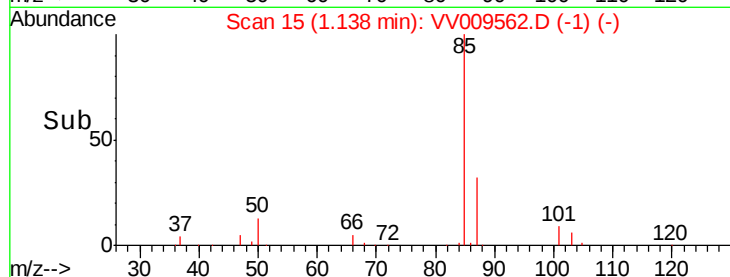
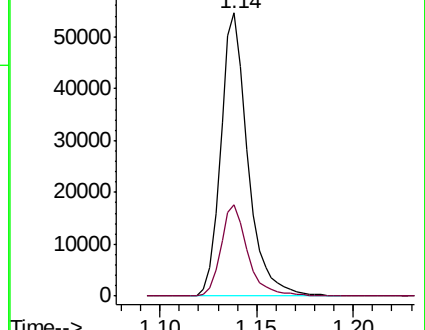
85 100

87 32.0 23.4 43.4



Abundance Ion 85.00 (84.70 to 85.70): VV009541.D (-9) (-)

Ion 87.00 (86.70 to 87.70): VV009541.D (-9) (-)



#3

Chloromethane

Concen: 23.577 ug/L

RT: 1.25 min Scan# 50

Delta R.T. -0.00 min

Lab File: VV009562.D

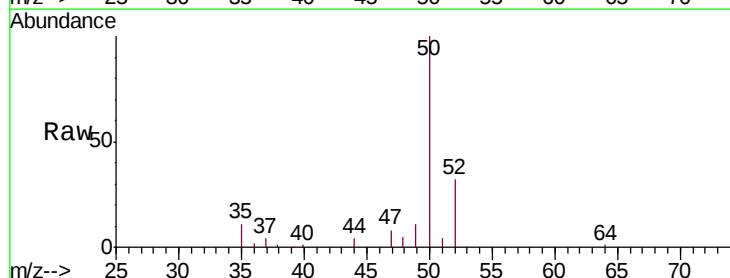
Acq: 10 Mar 2019 12:22

Tgt Ion: 50 Resp: 52366

Ion Ratio Lower Upper

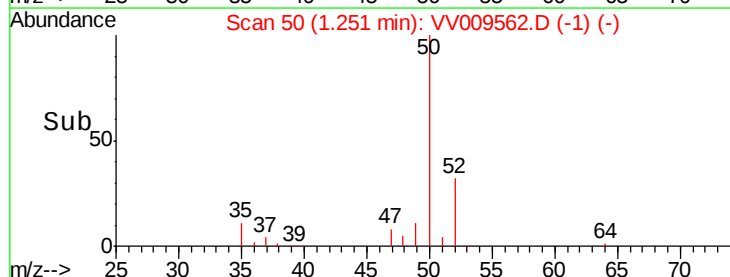
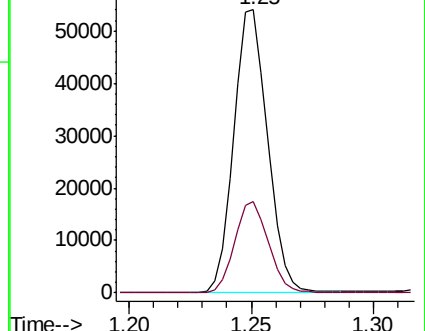
50 100

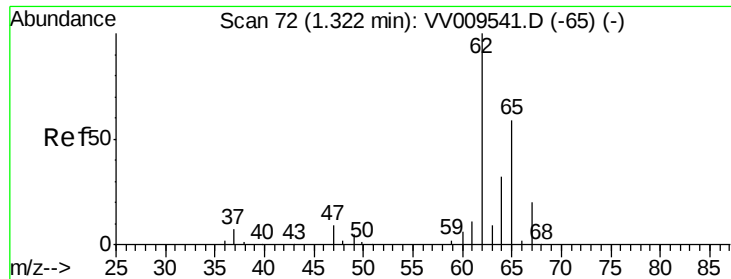
52 32.2 23.1 42.9



Abundance Ion 50.00 (49.70 to 50.70): VV009541.D (-43) (-)

Ion 52.00 (51.70 to 52.70): VV009541.D (-43) (-)





#5

Vinyl chloride

Concen: 23.971 ug/L

RT: 1.32 min Scan# 72

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

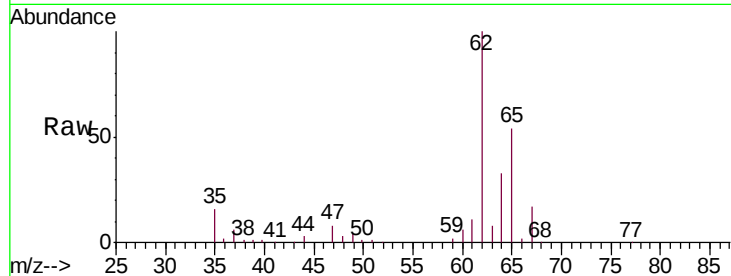
VSTD02574

Tgt Ion: 62 Resp: 58697

Ion Ratio Lower Upper

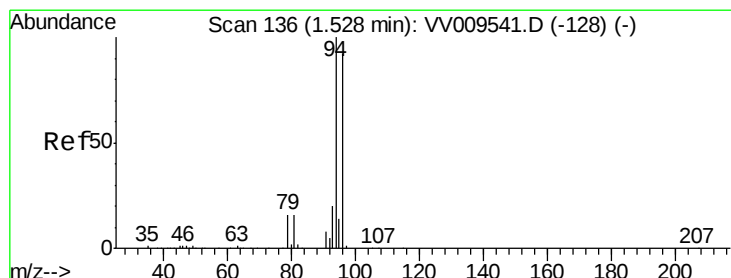
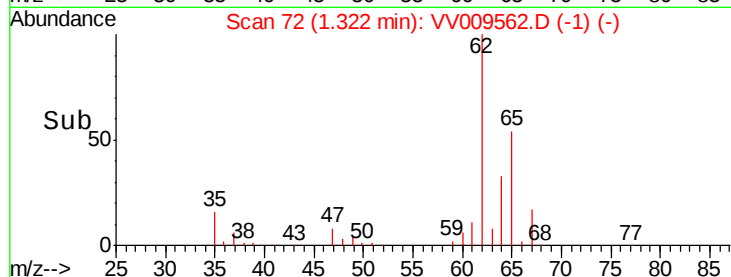
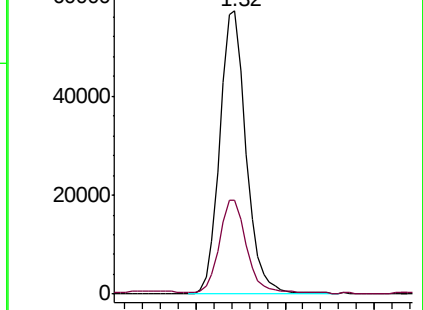
62 100

64 33.3 23.5 43.7



Abundance Ion 62.00 (61.70 to 62.70): VV009541.D (-65) (-)

Ion 64.00 (63.70 to 64.70): VV009541.D (-65) (-)



#6

Bromomethane

Concen: 23.970 ug/L

RT: 1.53 min Scan# 136

Delta R.T. -0.00 min

Lab File: VV009562.D

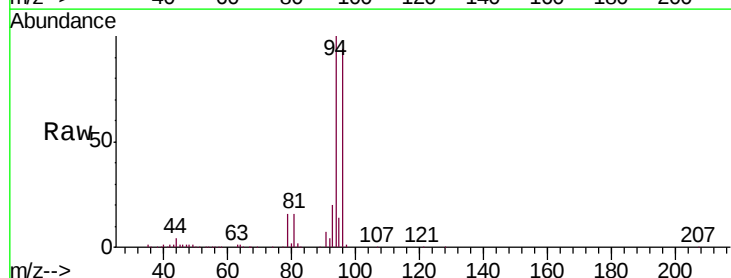
Acq: 10 Mar 2019 12:22

Tgt Ion: 94 Resp: 73067

Ion Ratio Lower Upper

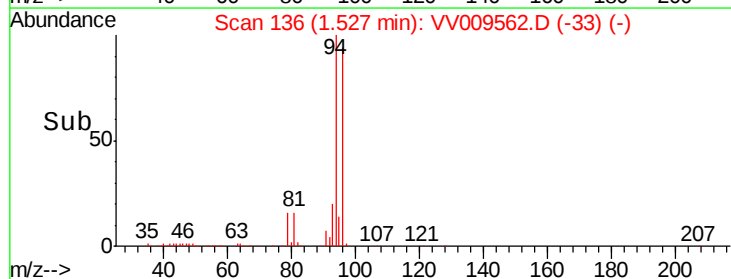
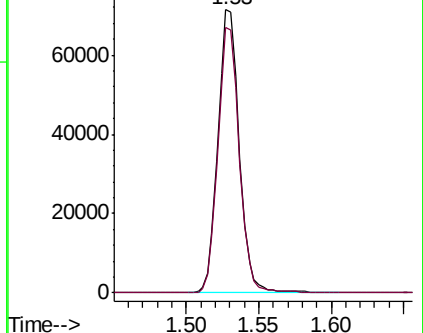
94 100

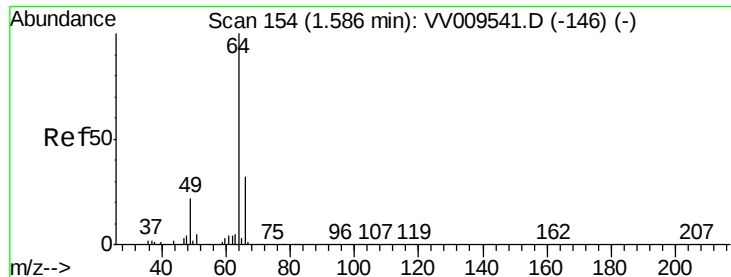
96 93.2 9.5 181.4



Abundance Ion 94.00 (93.70 to 94.70): VV009541.D (-128) (-)

Ion 96.00 (95.70 to 96.70): VV009541.D (-128) (-)





#8

Chloroethane

Concen: 18.835 ug/L

RT: 1.59 min Scan# 155

Delta R.T. 0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

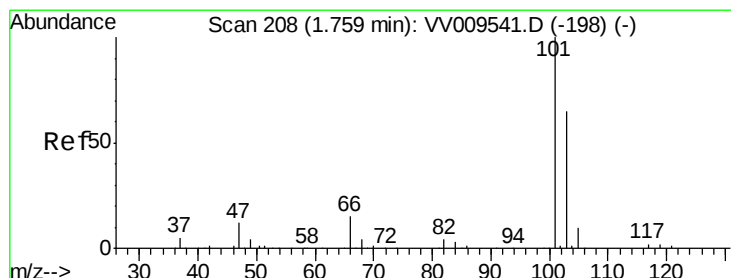
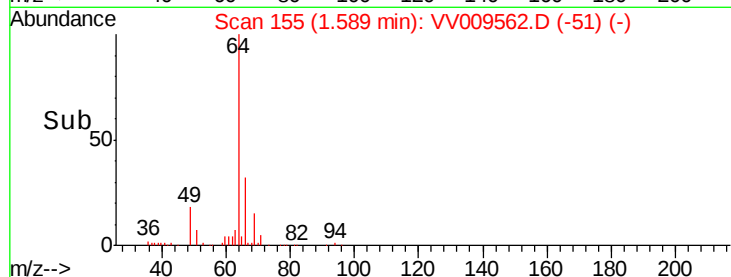
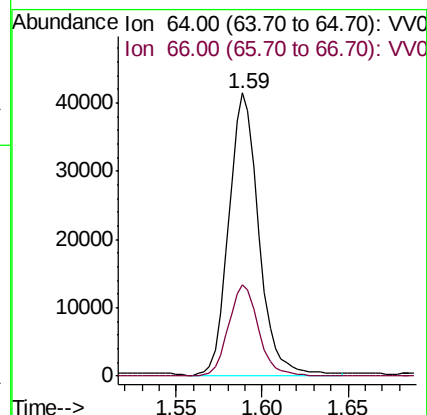
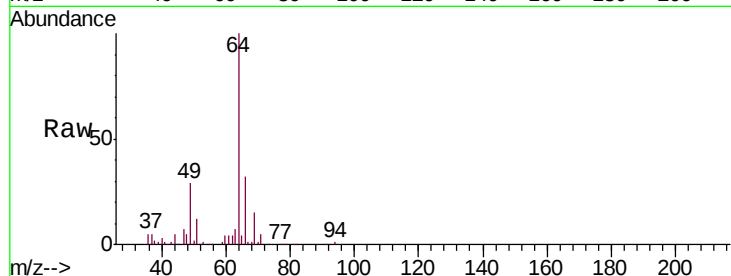
VSTD02574

Tgt Ion: 64 Resp: 51250

Ion Ratio Lower Upper

64 100

66 32.3 21.8 40.6



#9

Trichlorofluoromethane

Concen: 25.040 ug/L

RT: 1.76 min Scan# 209

Delta R.T. 0.00 min

Lab File: VV009562.D

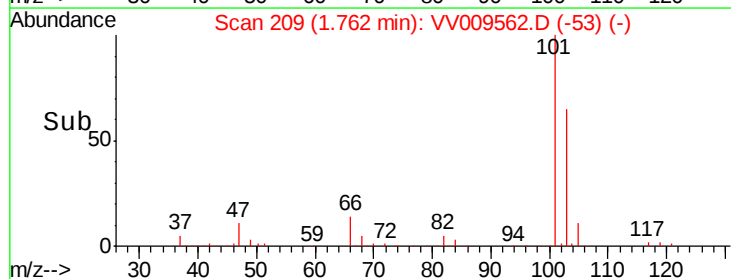
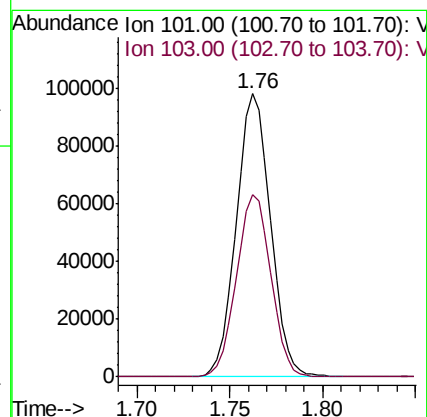
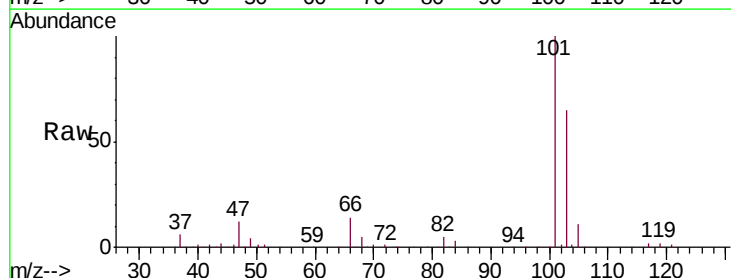
Acq: 10 Mar 2019 12:22

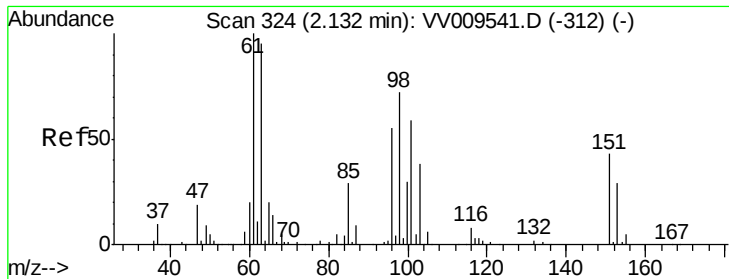
Tgt Ion: 101 Resp: 125771

Ion Ratio Lower Upper

101 100

103 64.8 44.7 83.1





#11

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

Concen: 25.588 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02574

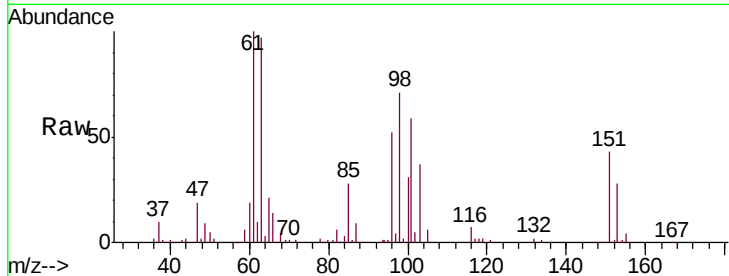
Tgt Ion: 101 Resp: 71966

Ion Ratio Lower Upper

101 100

85 48.1 40.1 60.1

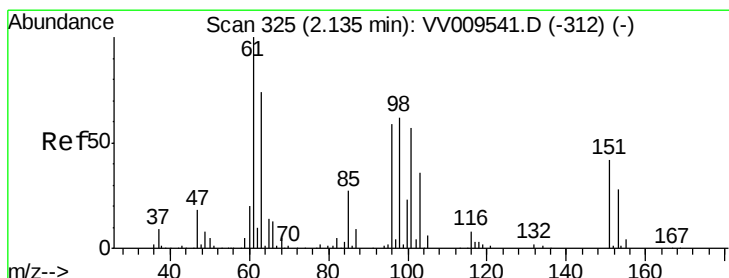
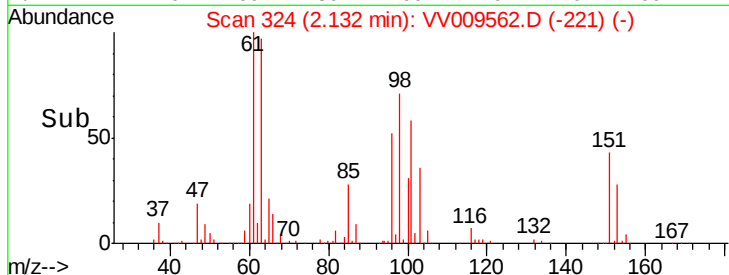
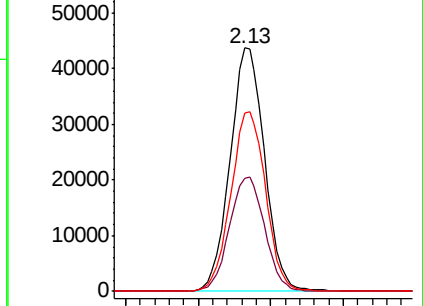
151 74.3 55.9 83.9



Abundance Ion 101.00 (100.70 to 101.70): VV009541.D (-312) (-)

Ion 85.00 (84.70 to 85.70): VV009541.D (-312) (-)

Ion 151.00 (150.70 to 151.70): VV009541.D (-312) (-)



#12

1,1-Dichloroethene

Concen: 24.291 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

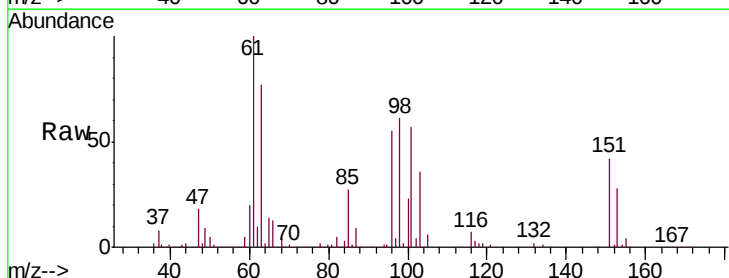
Tgt Ion: 96 Resp: 58452

Ion Ratio Lower Upper

96 100

61 182.2 136.9 254.3

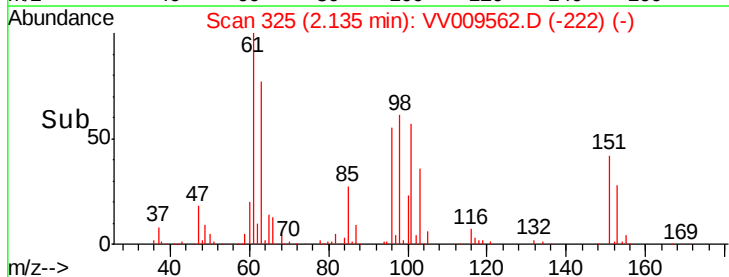
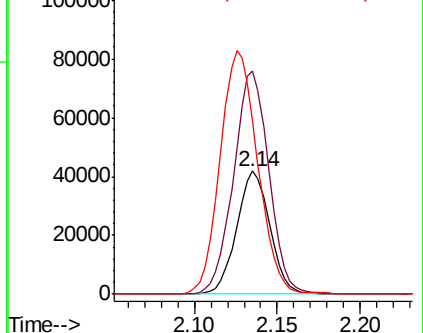
63 141.0 108.7 201.9

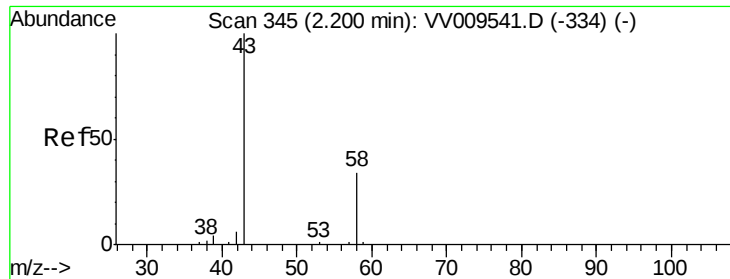


Abundance Ion 96.00 (95.70 to 96.70): VV009541.D (-312) (-)

Ion 61.00 (60.70 to 61.70): VV009541.D (-312) (-)

Ion 63.00 (62.70 to 63.70): VV009541.D (-312) (-)





#13

Acetone

Concen: 36.187 ug/L

RT: 2.20 min Scan# 345

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

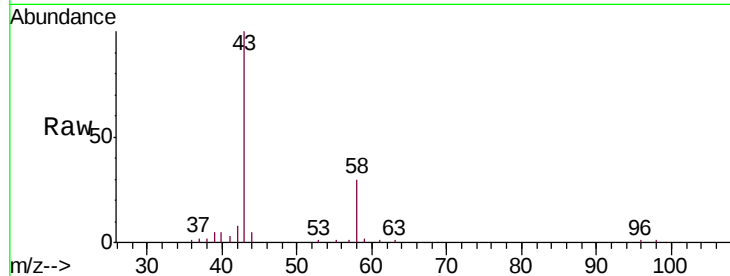
VSTD02574

Tgt Ion: 43 Resp: 27316

Ion Ratio Lower Upper

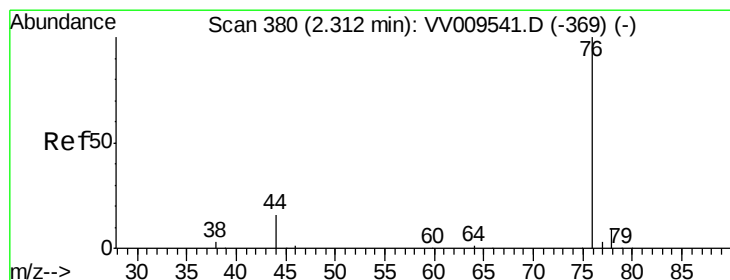
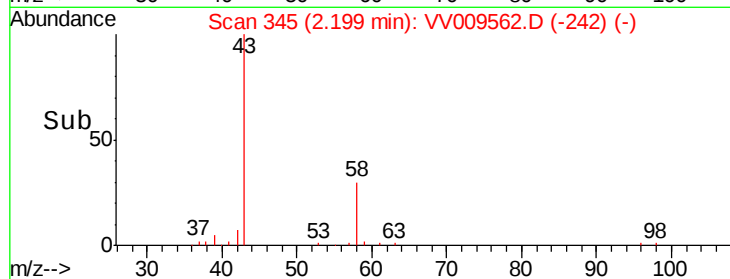
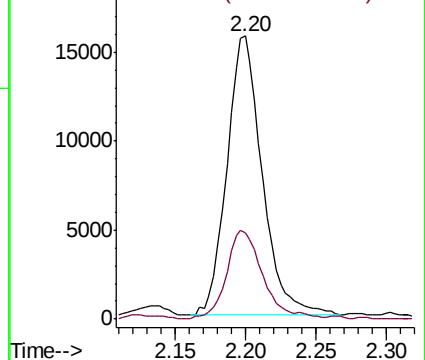
43 100

58 33.0 0.0 68.8



Abundance Ion 43.00 (42.70 to 43.70): VV009541.D (-334) (-)

Ion 58.00 (57.70 to 58.70): VV009541.D (-334) (-)



#14

Carbon disulfide

Concen: 24.153 ug/L

RT: 2.31 min Scan# 380

Delta R.T. -0.00 min

Lab File: VV009562.D

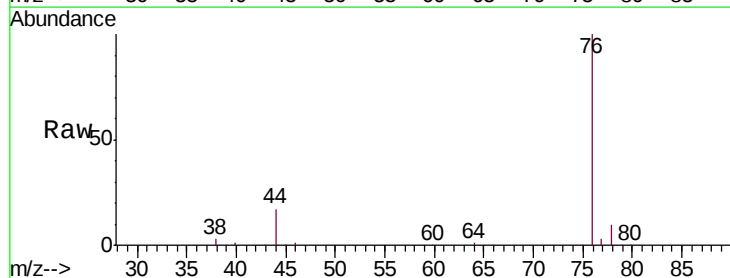
Acq: 10 Mar 2019 12:22

Tgt Ion: 76 Resp: 147315

Ion Ratio Lower Upper

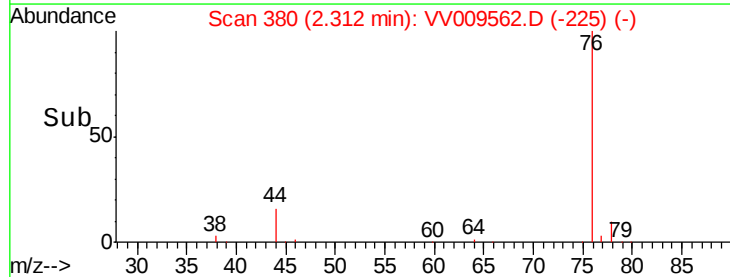
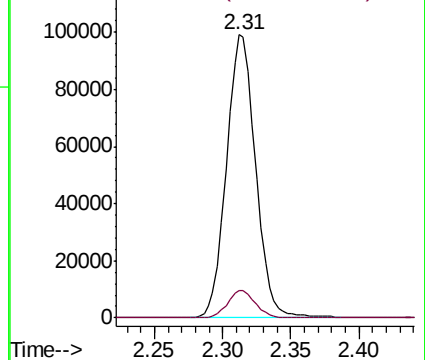
76 100

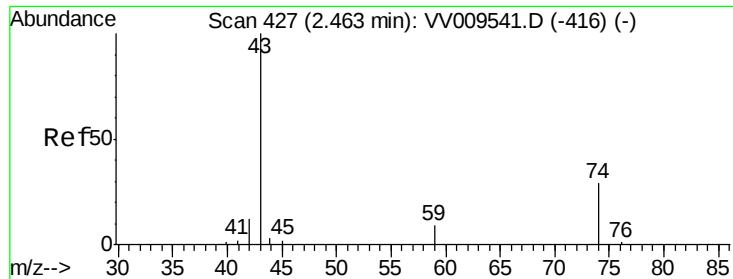
78 9.8 7.5 11.3



Abundance Ion 76.00 (75.70 to 76.70): VV009541.D (-369) (-)

Ion 78.00 (77.70 to 78.70): VV009541.D (-369) (-)

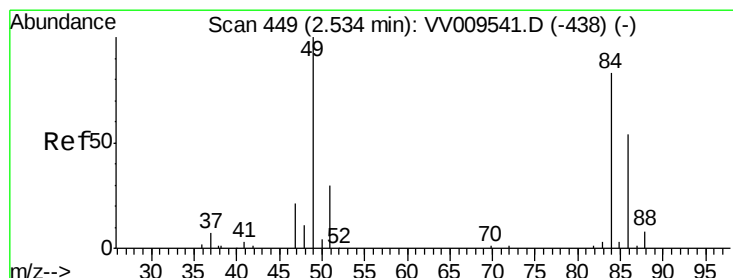
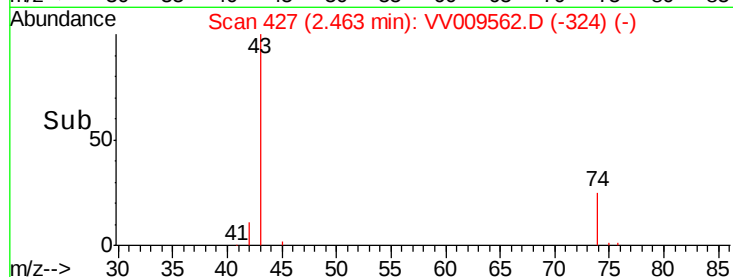
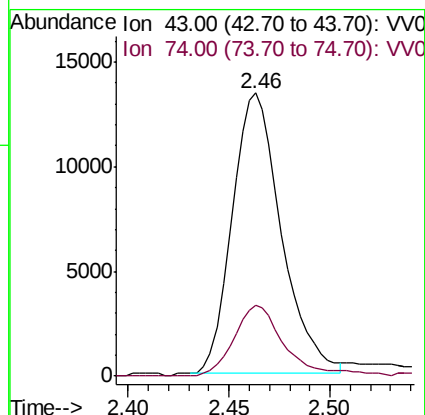
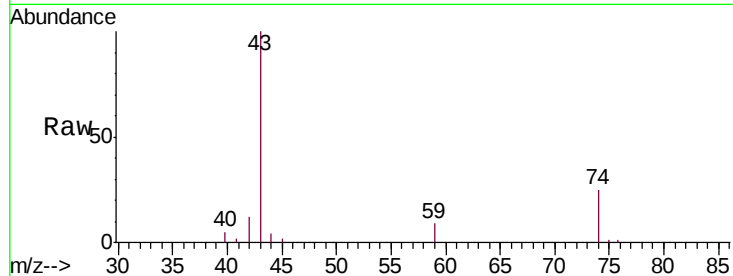




#15  
Methyl Acetate  
Concen: 18.648 ug/L  
RT: 2.46 min Scan# 427  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

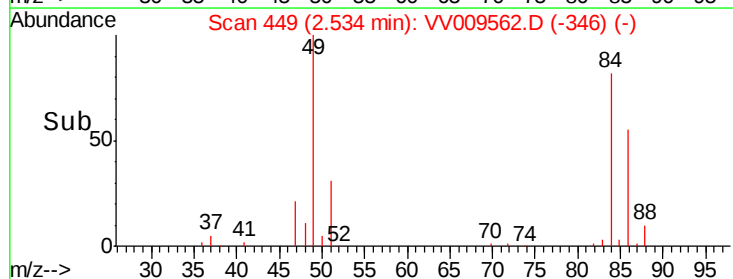
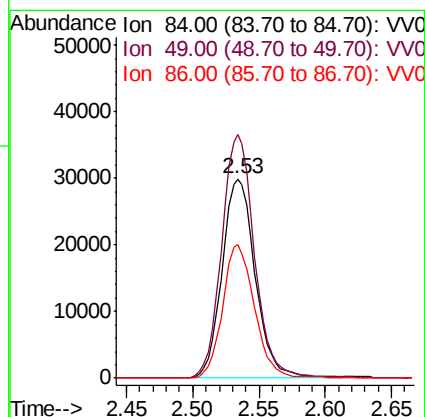
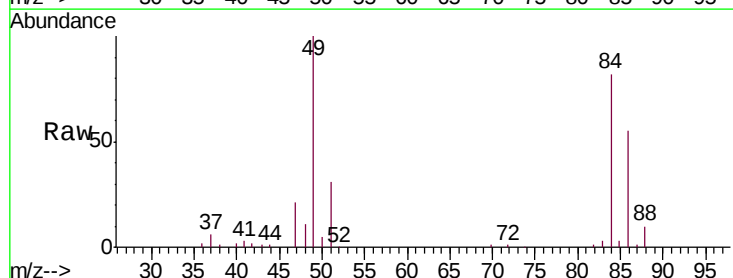
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

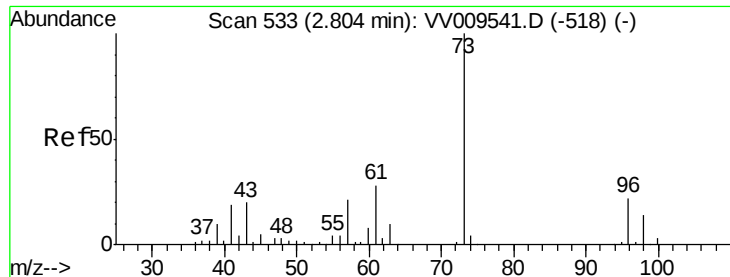
Tgt Ion: 43 Resp: 22796  
Ion Ratio Lower Upper  
43 100  
74 25.9 21.8 32.8



#16  
Methylene chloride  
Concen: 21.883 ug/L  
RT: 2.53 min Scan# 449  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion: 84 Resp: 51980  
Ion Ratio Lower Upper  
84 100  
49 122.1 84.6 157.0  
86 66.9 46.1 85.7

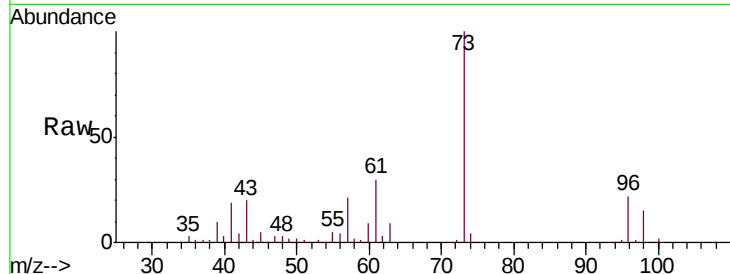




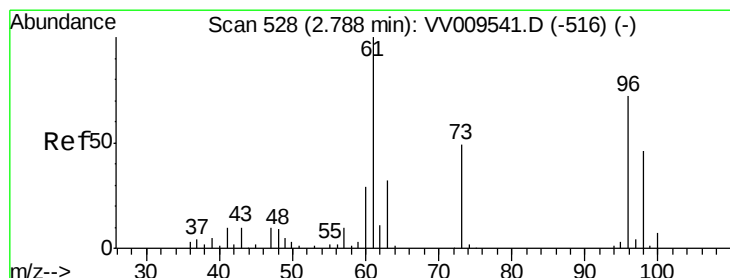
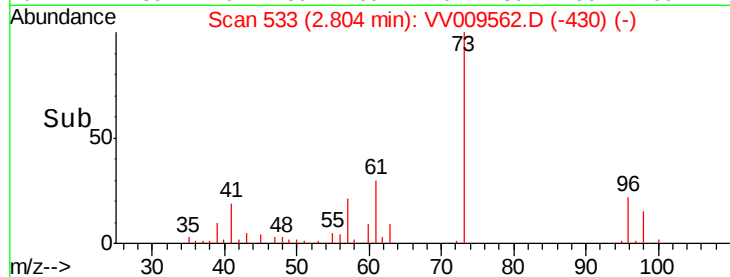
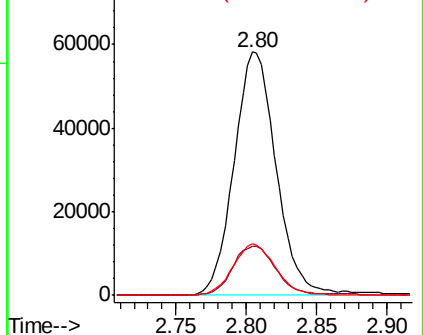
#17  
Methyl tert-butyl Ether  
Concen: 22.586 ug/L  
RT: 2.80 min Scan# 533  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

Tgt Ion: 73 Resp: 121708  
Ion Ratio Lower Upper  
73 100  
43 20.5 15.0 22.4  
57 21.3 17.0 25.4

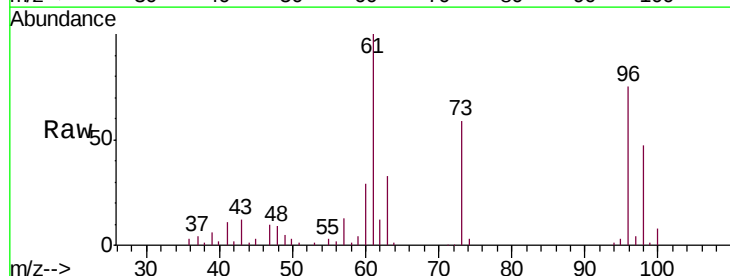


Abundance Ion 73.00 (72.70 to 73.70): VV0  
Ion 43.00 (42.70 to 43.70): VV0  
Ion 57.00 (56.70 to 57.70): VV0

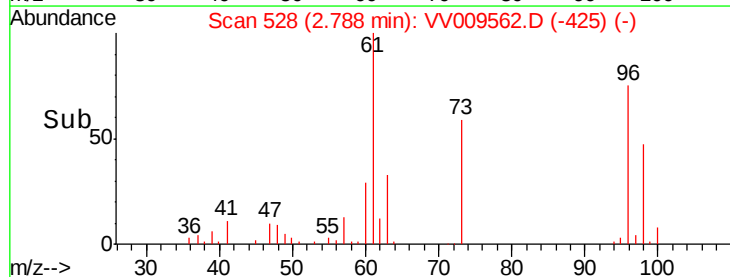
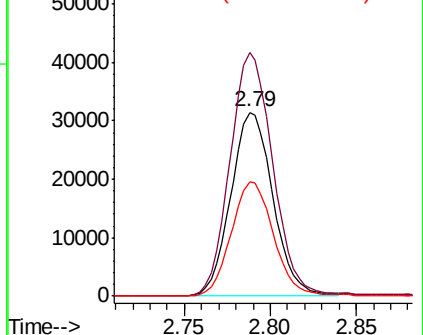


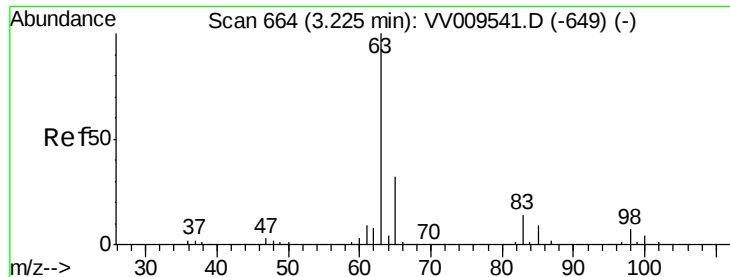
#18  
trans-1,2-Dichloroethene  
Concen: 24.838 ug/L  
RT: 2.79 min Scan# 528  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion: 96 Resp: 53686  
Ion Ratio Lower Upper  
96 100  
61 132.6 95.6 177.6  
98 62.5 44.0 81.6



Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.00 (60.70 to 61.70): VV0  
Ion 98.00 (97.70 to 98.70): VV0

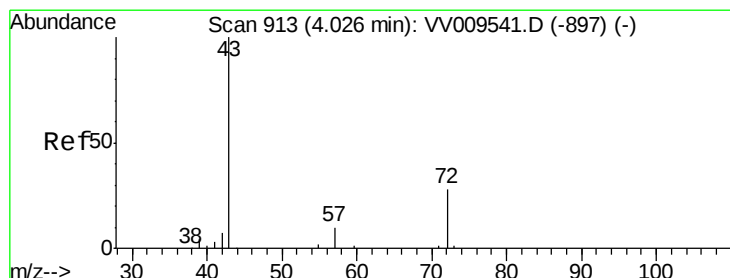
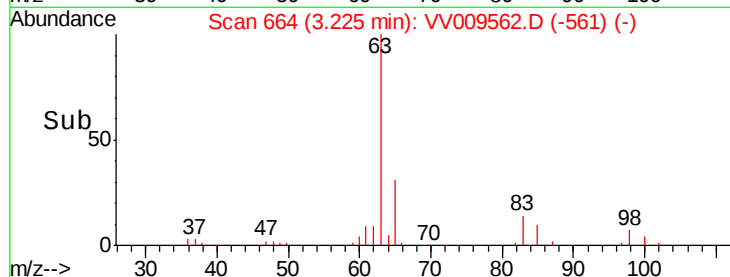
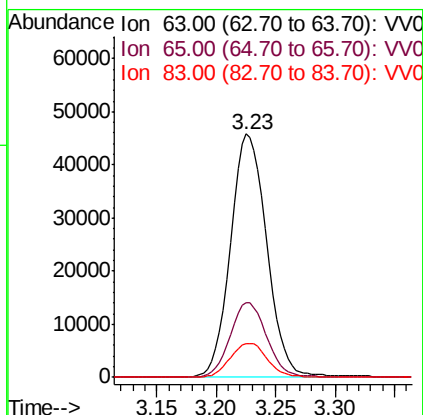
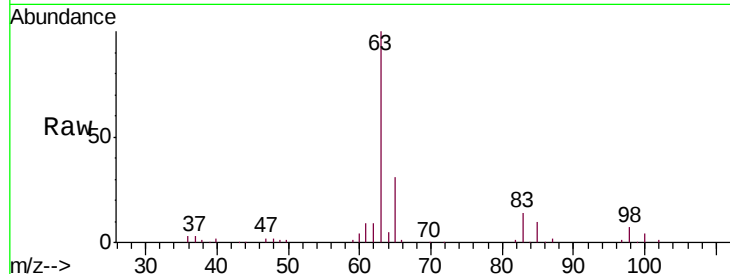




#19  
 1,1-Dichloroethane  
 Concen: 25.427 ug/L  
 RT: 3.23 min Scan# 664  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

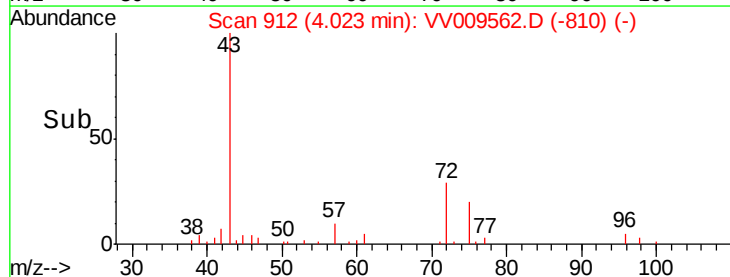
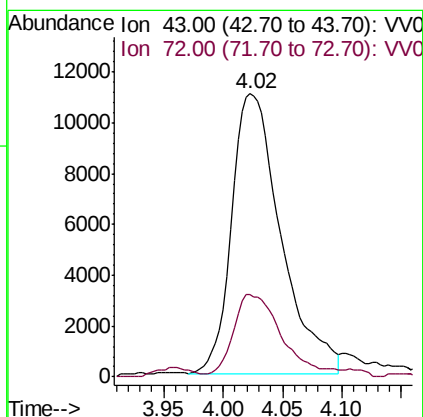
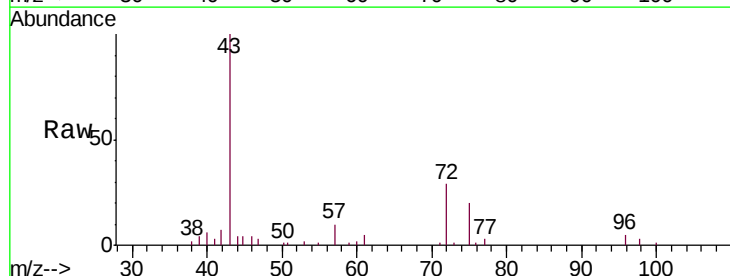
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02574

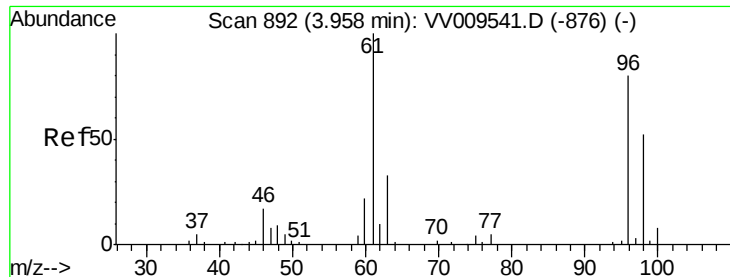
Tgt Ion: 63 Resp: 96841  
 Ion Ratio Lower Upper  
 63 100  
 65 30.8 22.1 41.1  
 83 13.9 10.2 19.0



#21  
 2-Butanone  
 Concen: 33.274 ug/L  
 RT: 4.02 min Scan# 912  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Tgt Ion: 43 Resp: 31700  
 Ion Ratio Lower Upper  
 43 100  
 72 26.6 13.7 41.0



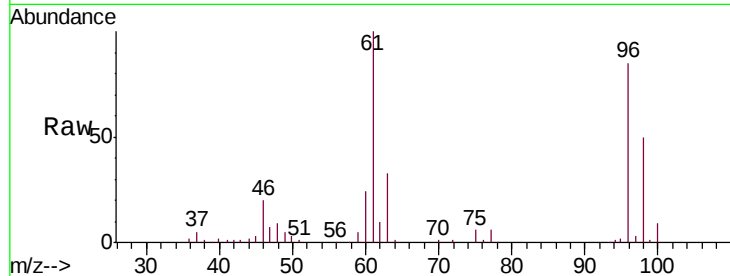


#22

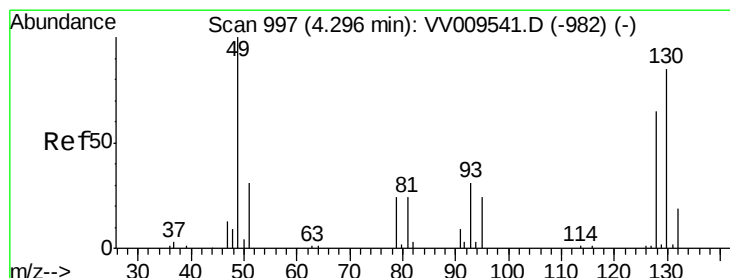
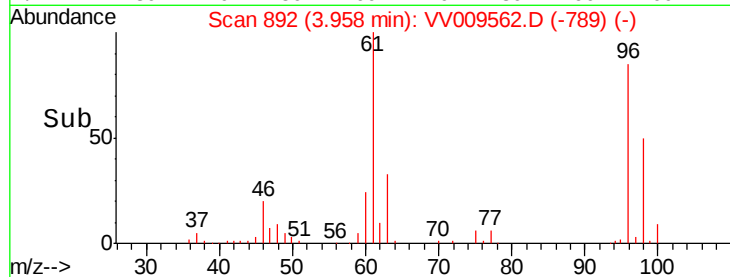
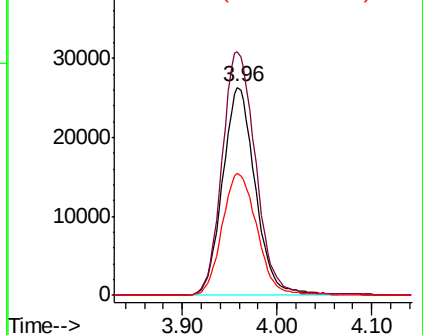
cis-1,2-Dichloroethene  
Concen: 26.008 ug/L  
RT: 3.96 min Scan# 892  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

Tgt Ion: 96 Resp: 63464  
Ion Ratio Lower Upper  
96 100  
61 117.0 87.2 161.9  
98 58.8 44.6 82.8



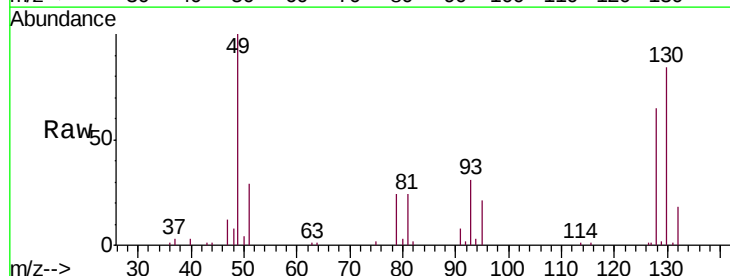
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.00 (60.70 to 61.70): VV0  
Ion 98.00 (97.70 to 98.70): VV0



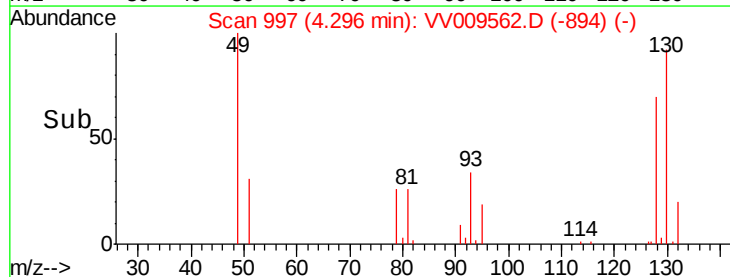
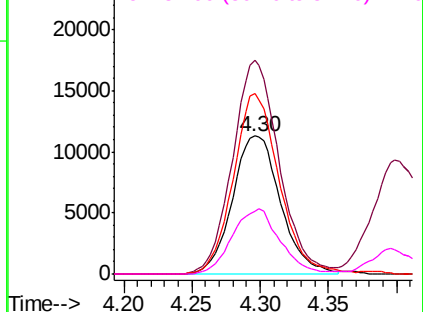
#23

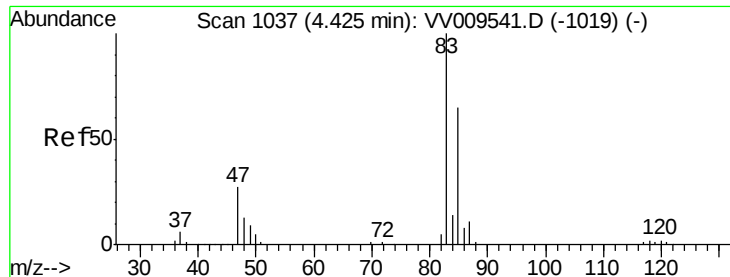
Bromochloromethane  
Concen: 24.551 ug/L  
RT: 4.30 min Scan# 997  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion: 128 Resp: 27624  
Ion Ratio Lower Upper  
128 100  
49 155.0 115.5 214.5  
130 130.9 92.6 172.0  
51 45.6 43.4 65.2



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 49.00 (48.70 to 49.70): VV0  
Ion 130.00 (129.70 to 130.70): V  
Ion 51.00 (50.70 to 51.70): VV0

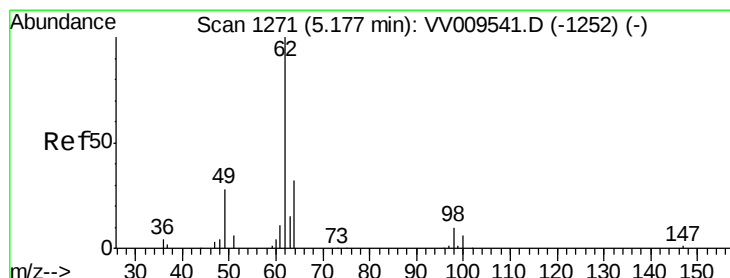
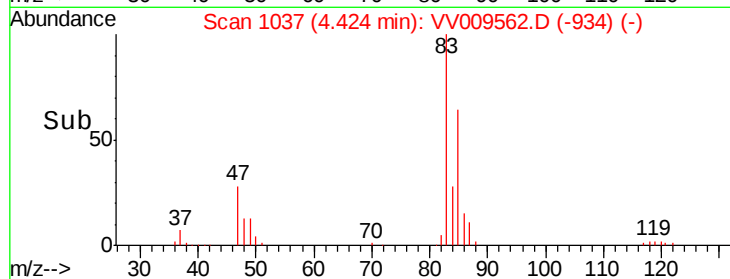
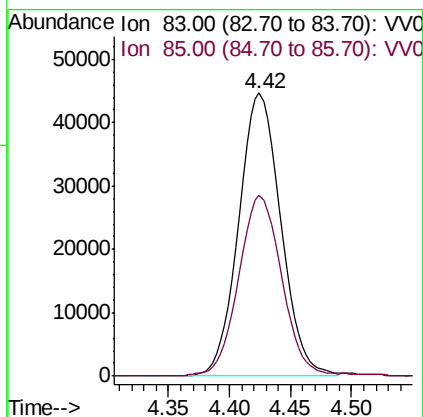
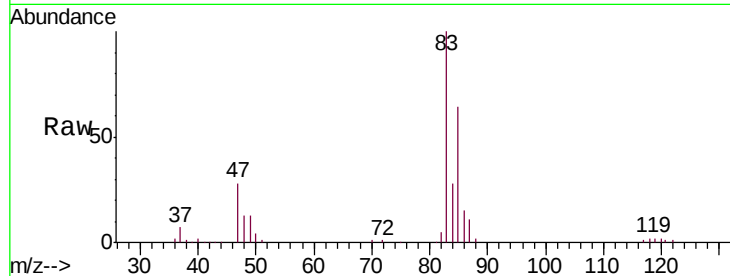




#25  
Chloroform  
Concen: 25.166 ug/L  
RT: 4.42 min Scan# 1037  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

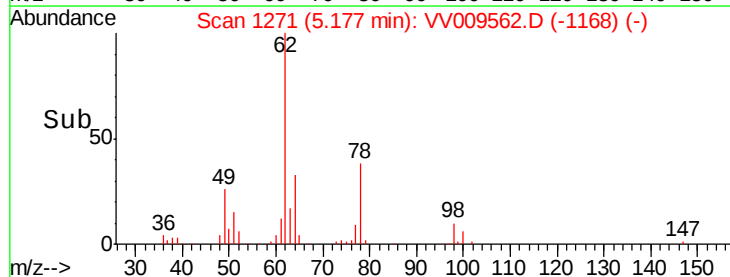
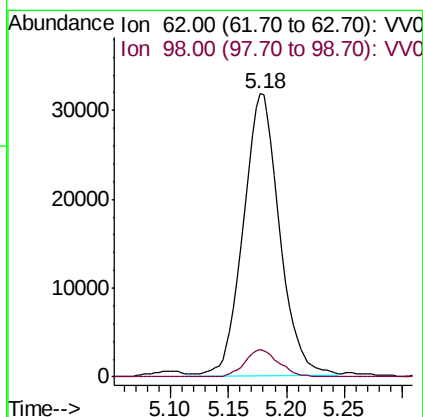
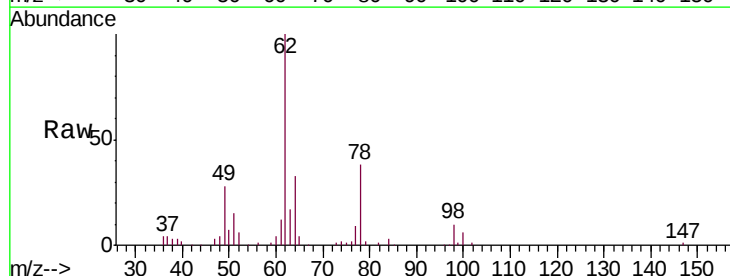
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

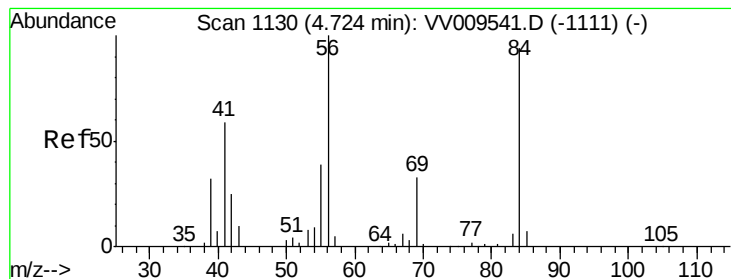
Tgt Ion: 83 Resp: 106962  
Ion Ratio Lower Upper  
83 100  
85 65.2 45.4 84.2



#27  
1,2-Dichloroethane  
Concen: 23.632 ug/L  
RT: 5.18 min Scan# 1271  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion: 62 Resp: 69759  
Ion Ratio Lower Upper  
62 100  
98 9.5 6.6 10.0





#30

Cyclohexane

Concen: 24.769 ug/L

RT: 4.72 min Scan# 1129

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02574

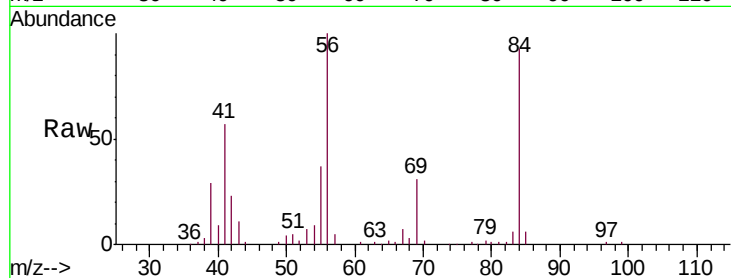
Tgt Ion: 56 Resp: 87679

Ion Ratio Lower Upper

56 100

69 32.5 24.9 37.3

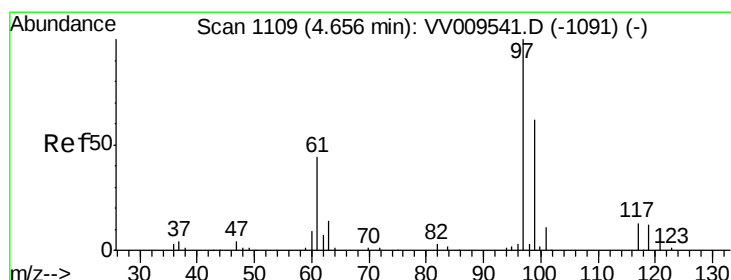
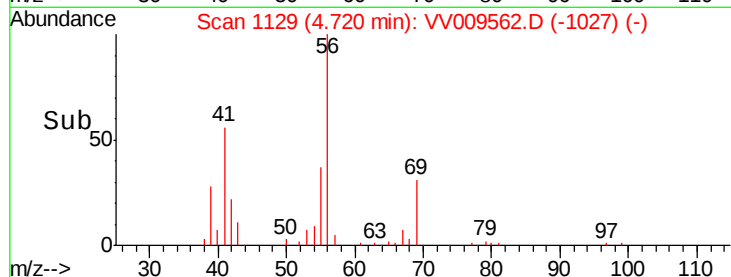
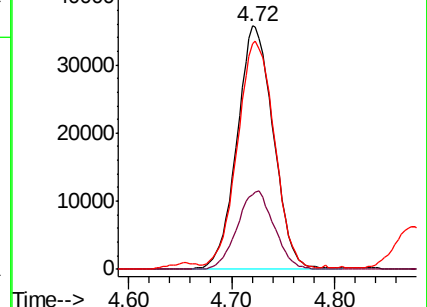
84 95.8 71.9 107.9



Abundance Ion 56.00 (55.70 to 56.70): VV009541.D (-1111) (-)

Ion 69.00 (68.70 to 69.70): VV009541.D (-1111) (-)

Ion 84.00 (83.70 to 84.70): VV009541.D (-1111) (-)



#31

1,1,1-Trichloroethane

Concen: 26.116 ug/L

RT: 4.66 min Scan# 1109

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

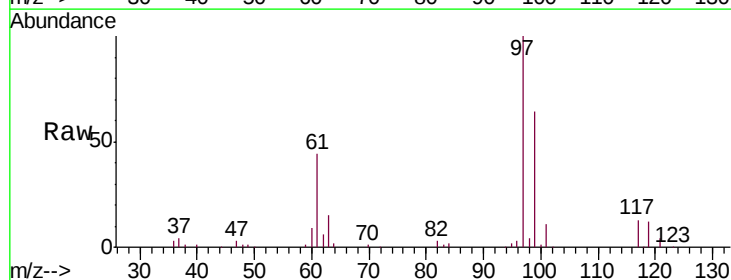
Tgt Ion: 97 Resp: 97380

Ion Ratio Lower Upper

97 100

99 64.9 51.0 76.4

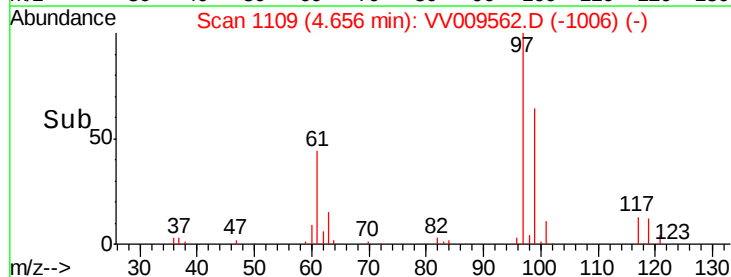
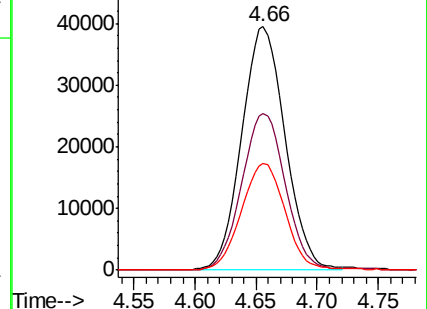
61 43.9 36.1 54.1

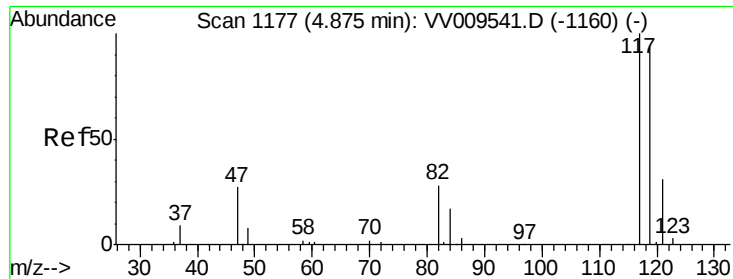


Abundance Ion 97.00 (96.70 to 97.70): VV009541.D (-1091) (-)

Ion 99.00 (98.70 to 99.70): VV009541.D (-1091) (-)

Ion 61.00 (60.70 to 61.70): VV009541.D (-1091) (-)





#32

Carbon tetrachloride

Concen: 26.350 ug/L

RT: 4.87 min Scan# 1177

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

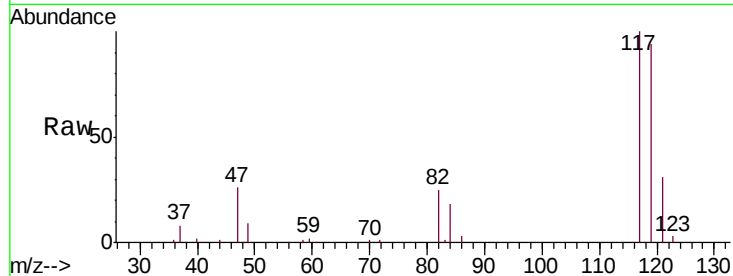
VSTD02574

Tgt Ion:117 Resp: 83065

Ion Ratio Lower Upper

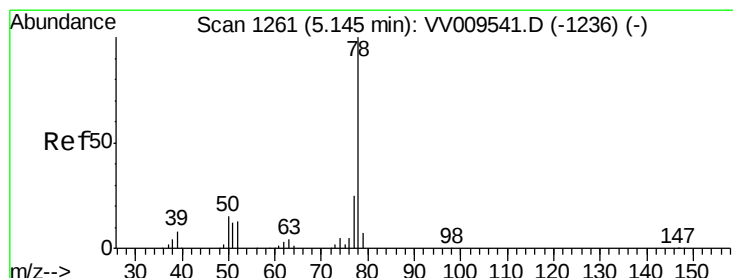
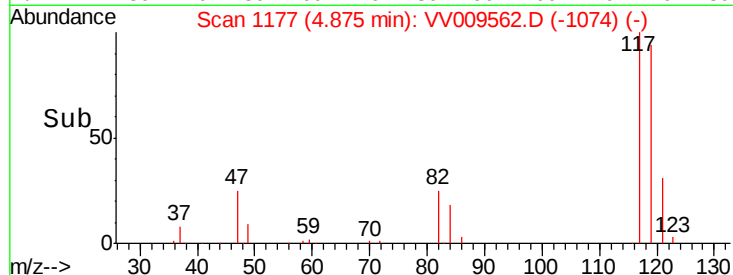
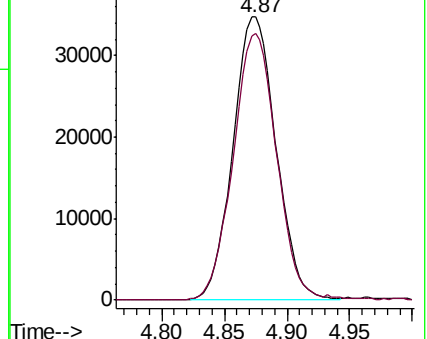
117 100

119 94.4 76.5 114.7



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 25.718 ug/L

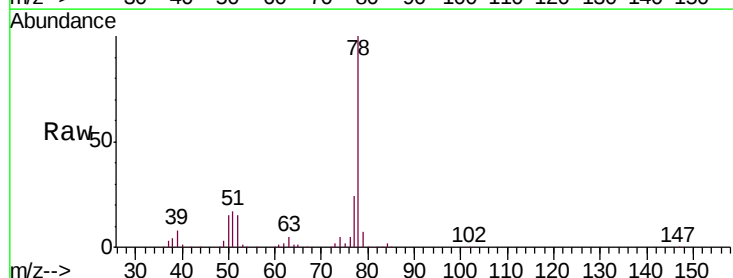
RT: 5.14 min Scan# 1261

Delta R.T. -0.00 min

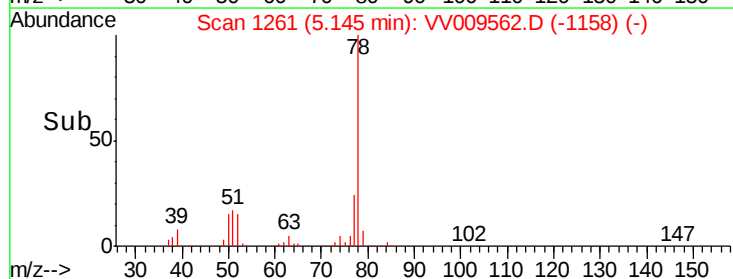
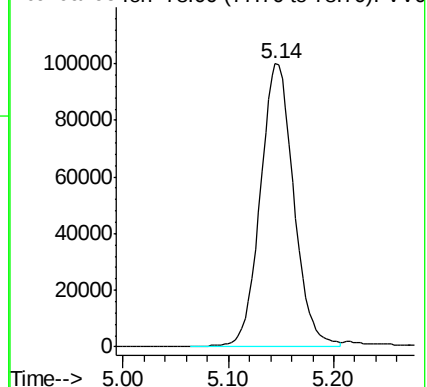
Lab File: VV009562.D

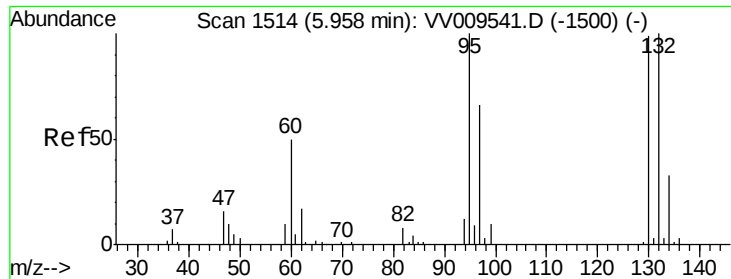
Acq: 10 Mar 2019 12:22

Tgt Ion: 78 Resp: 221653



Abundance Ion 78.00 (77.70 to 78.70): VV0

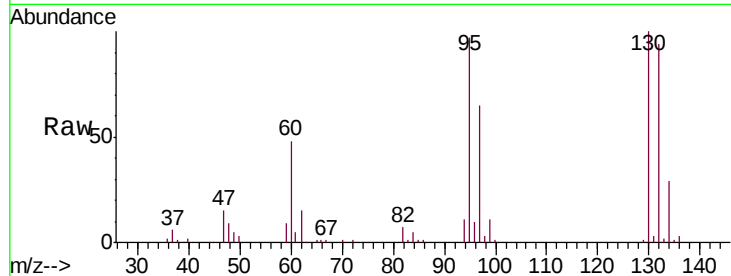




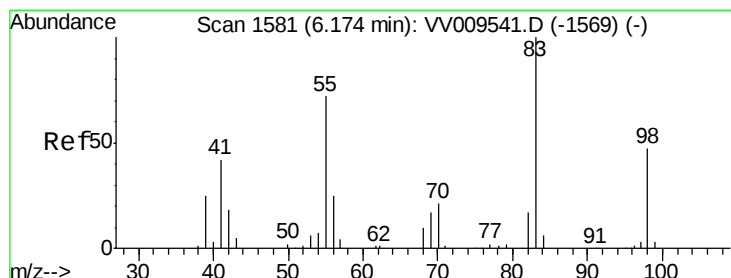
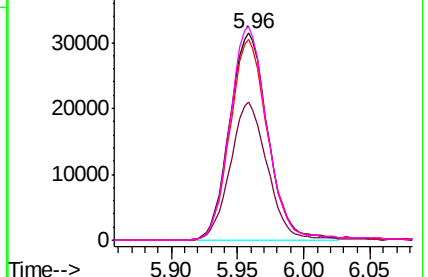
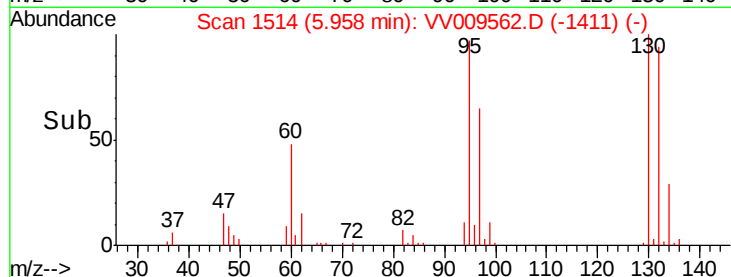
#35  
 Trichloroethene  
 Concen: 25.495 ug/L  
 RT: 5.96 min Scan# 1514  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02574

Tgt Ion: 95 Resp: 63149  
 Ion Ratio Lower Upper  
 95 100  
 97 64.3 44.3 82.3  
 132 95.5 64.4 119.6  
 130 101.9 69.4 128.8

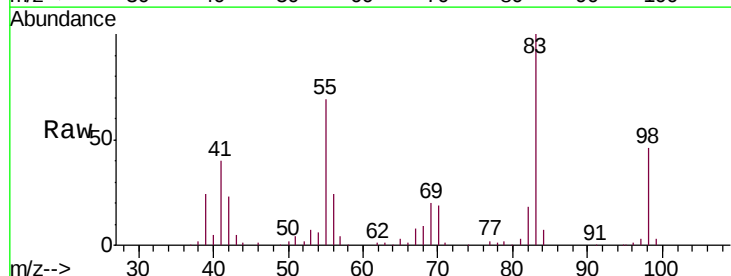


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 97.00 (96.70 to 97.70): VV0  
 Ion 132.00 (131.70 to 132.70): VV0  
 Ion 130.00 (129.70 to 130.70): VV0

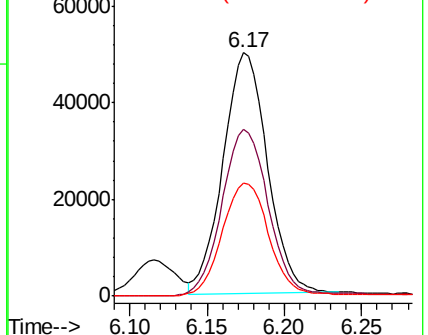
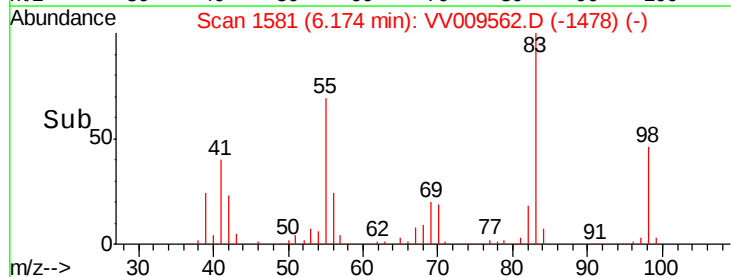


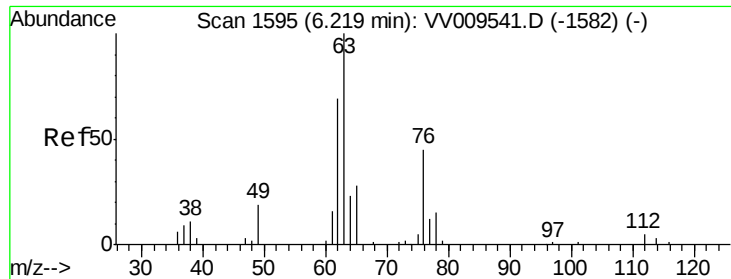
#36  
 Methylcyclohexane  
 Concen: 24.695 ug/L  
 RT: 6.17 min Scan# 1581  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Tgt Ion: 83 Resp: 99644  
 Ion Ratio Lower Upper  
 83 100  
 55 72.3 58.8 88.2  
 98 48.8 37.7 56.5



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

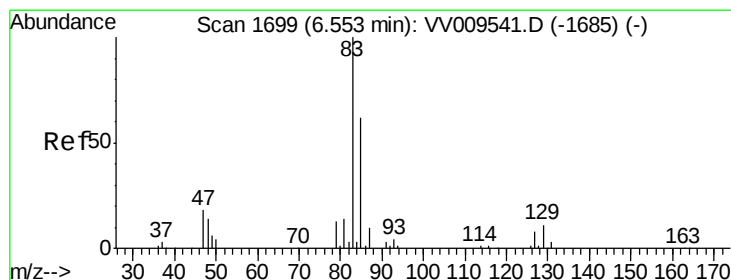
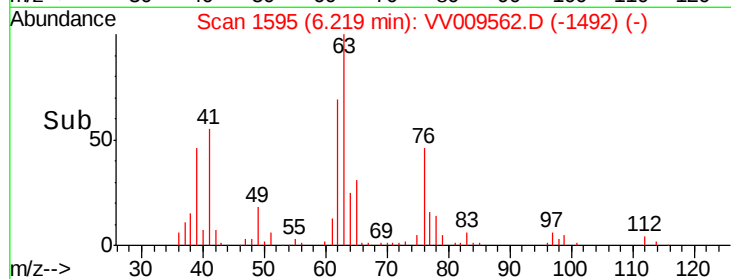
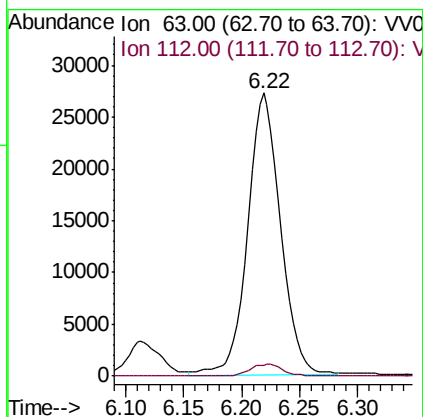
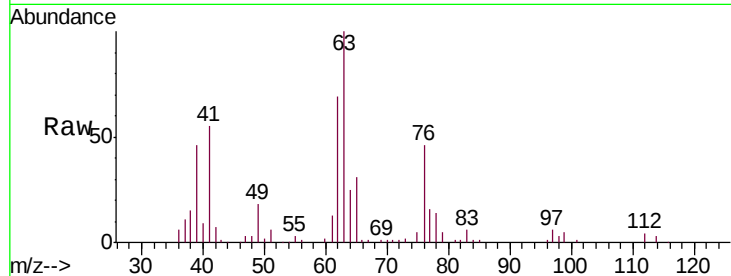




#40  
 1,2-Dichloropropane  
 Concen: 24.252 ug/L  
 RT: 6.22 min Scan# 1595  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

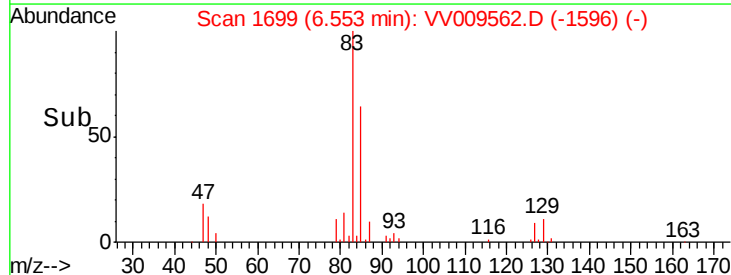
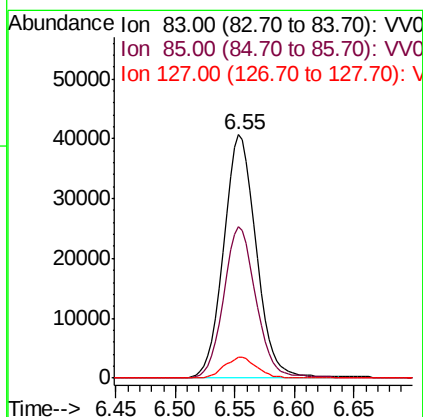
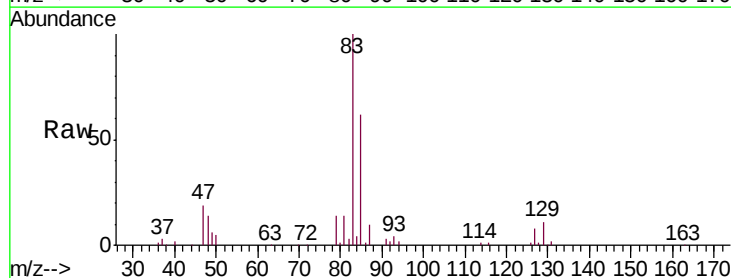
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02574

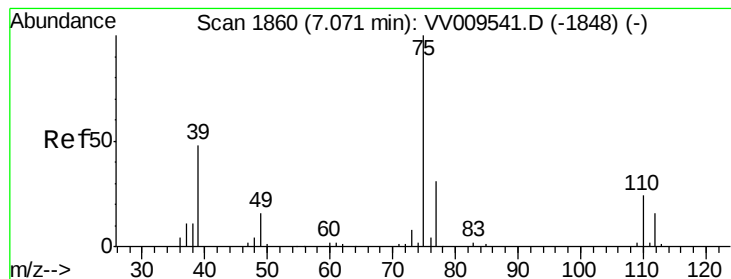
Tgt Ion: 63 Resp: 53894  
 Ion Ratio Lower Upper  
 63 100  
 112 4.1 3.0 4.4



#41  
 Bromodichloromethane  
 Concen: 25.795 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Tgt Ion: 83 Resp: 77373  
 Ion Ratio Lower Upper  
 83 100  
 85 62.0 46.5 86.3  
 127 8.4 7.2 10.8



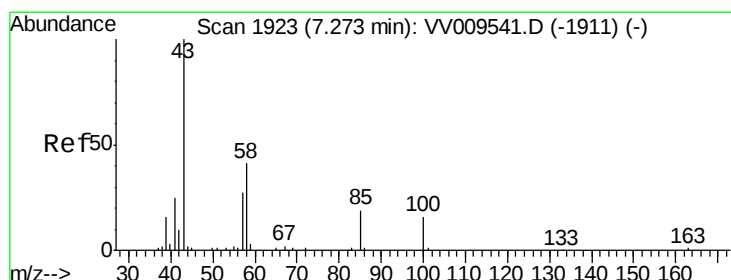
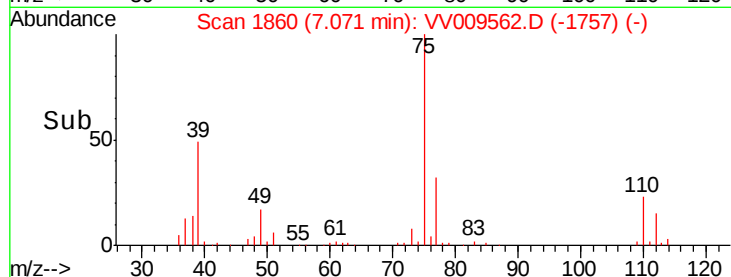
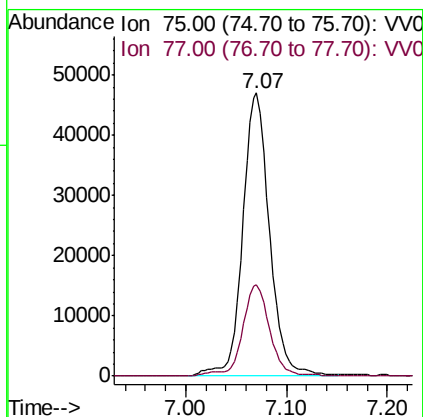
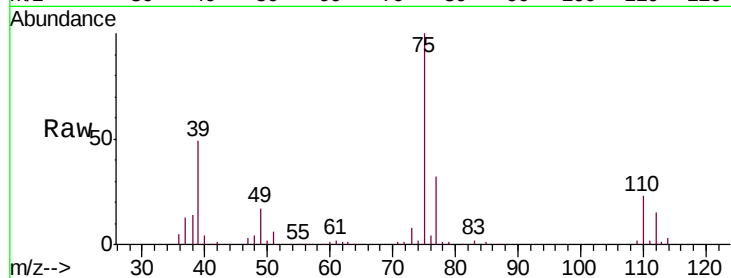


#42

cis-1,3-Dichloropropene  
Concen: 24.997 ug/L  
RT: 7.07 min Scan# 1860  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

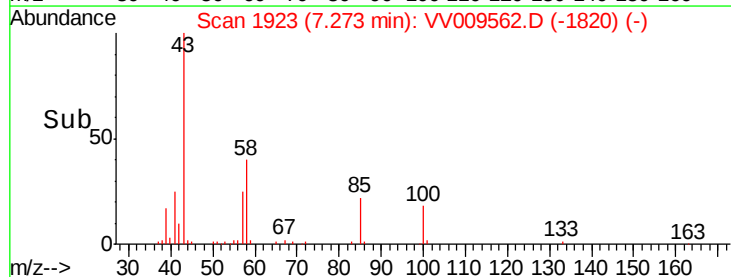
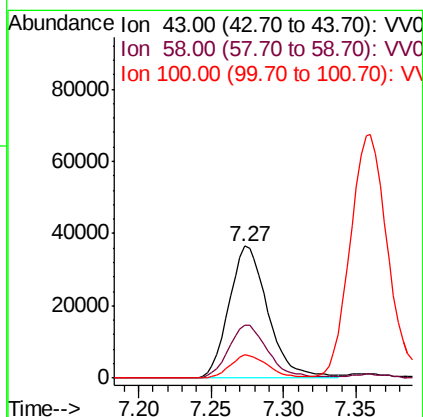
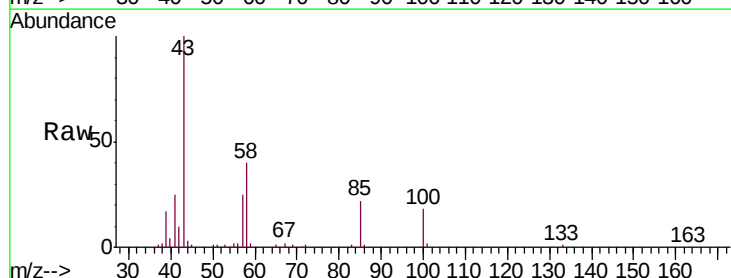
Tgt Ion: 75 Resp: 86239  
Ion Ratio Lower Upper  
75 100  
77 32.3 21.4 39.8

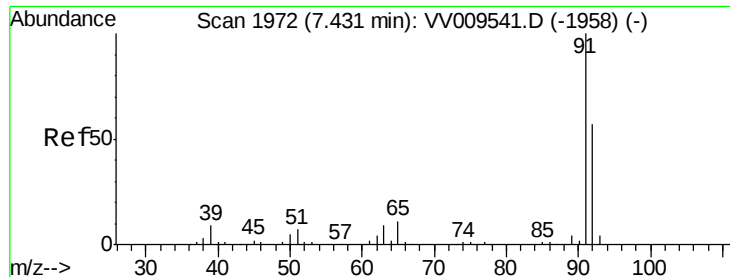


#43

4-Methyl-2-pentanone  
Concen: 38.878 ug/L  
RT: 7.27 min Scan# 1923  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion: 43 Resp: 68107  
Ion Ratio Lower Upper  
43 100  
58 40.4 31.9 47.9  
100 17.2 12.8 19.2





#44

Toluene

Concen: 25.661 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

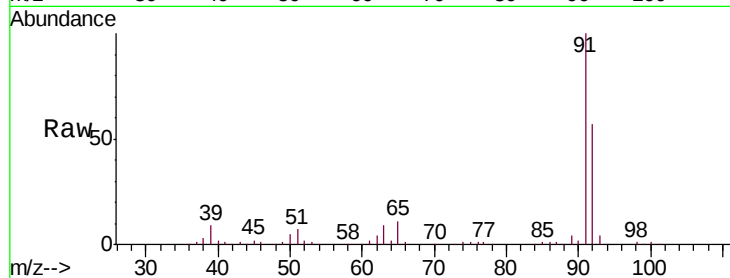
VSTD02574

Tgt Ion: 91 Resp: 249996

Ion Ratio Lower Upper

91 100

92 56.7 39.6 73.6



Abundance Ion 91.00 (90.70 to 91.70): VV009541.D (-1958) (-)

Ion 92.00 (91.70 to 92.70): VV009541.D (-1958) (-)

7.43

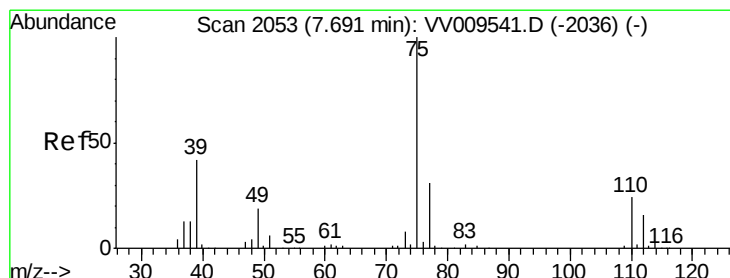
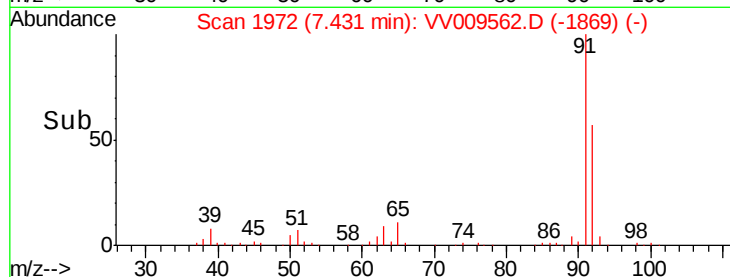
150000

100000

50000

0

Time-->



#45

trans-1,3-Dichloropropene

Concen: 24.566 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. -0.00 min

Lab File: VV009562.D

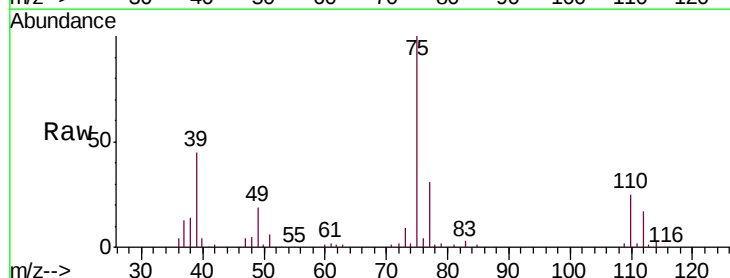
Acq: 10 Mar 2019 12:22

Tgt Ion: 75 Resp: 74020

Ion Ratio Lower Upper

75 100

77 31.1 22.5 41.7



Abundance Ion 75.00 (74.70 to 75.70): VV009541.D (-2036) (-)

Ion 77.00 (76.70 to 77.70): VV009541.D (-2036) (-)

7.69

50000

40000

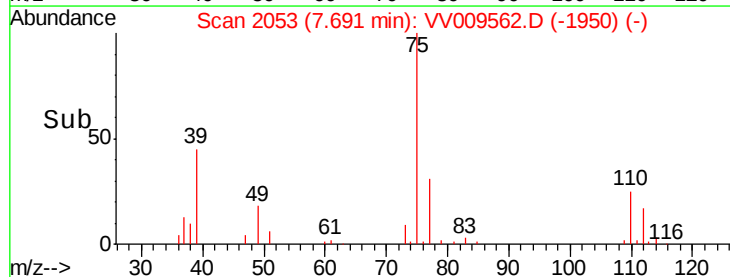
30000

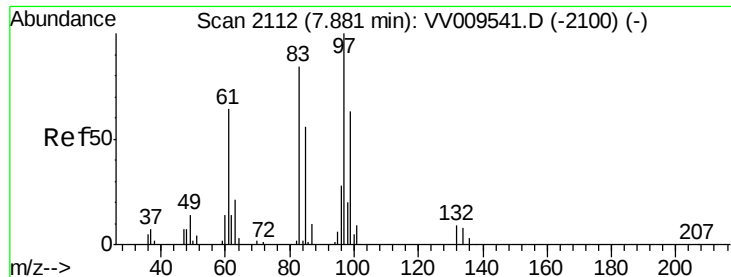
20000

10000

0

Time-->

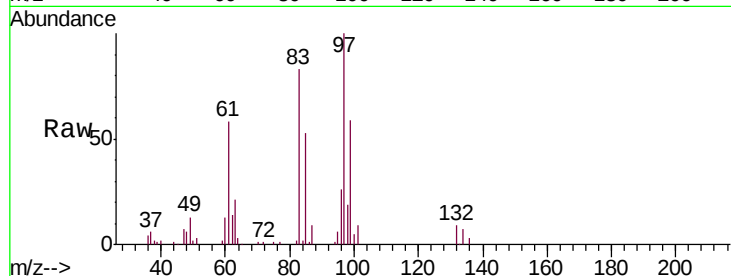




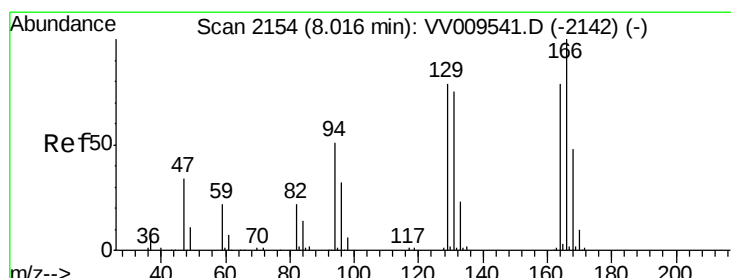
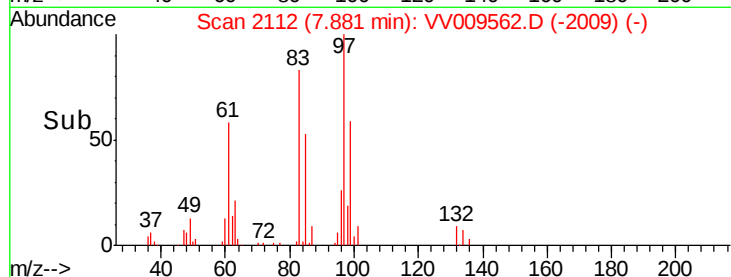
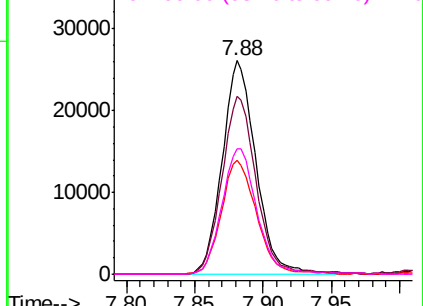
#46  
 1,1,2-Trichloroethane  
 Concen: 24.250 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02574

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 44772 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 83.4  | 63.8  | 118.6 |
| 85       | 53.4  | 39.5  | 73.4  |
| 99       | 59.0  | 45.9  | 85.3  |

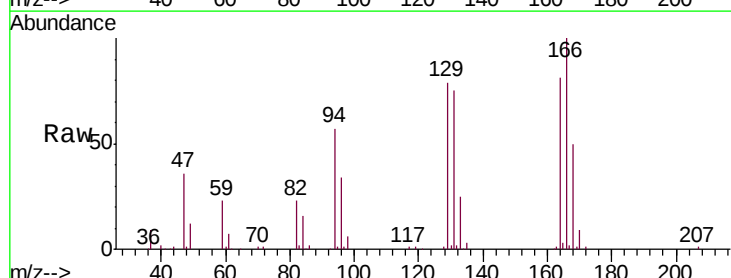


Abundance Ion 97.00 (96.70 to 97.70): VV009541.D (-2100) (-)

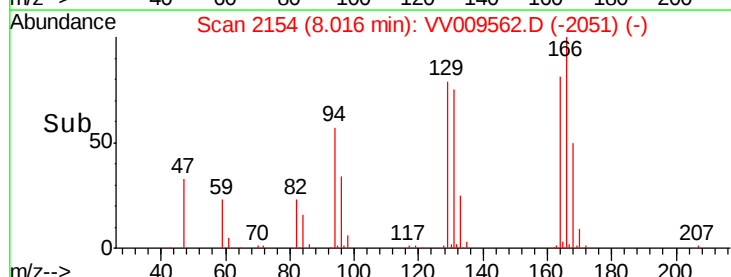
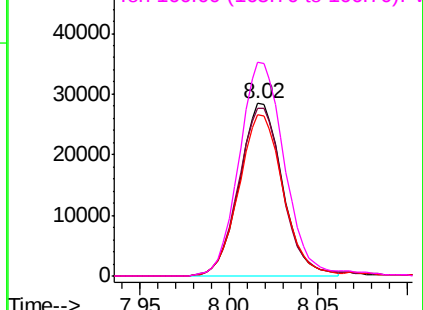


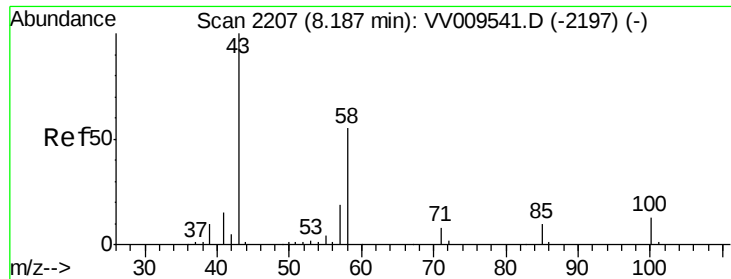
#47  
 Tetrachloroethene  
 Concen: 25.557 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 48014 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 97.3  | 67.7  | 125.7 |
| 131      | 93.3  | 67.5  | 125.3 |
| 166      | 123.8 | 81.6  | 151.6 |



Abundance Ion 164.00 (163.70 to 164.70): VV009541.D (-2142) (-)

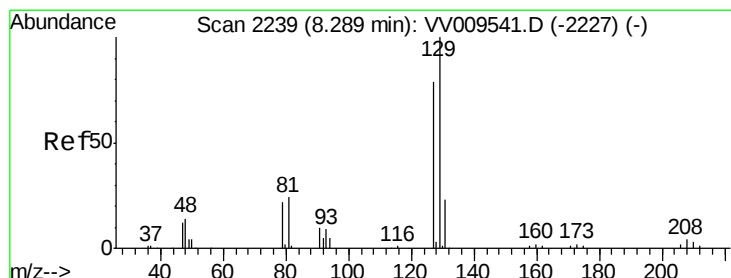
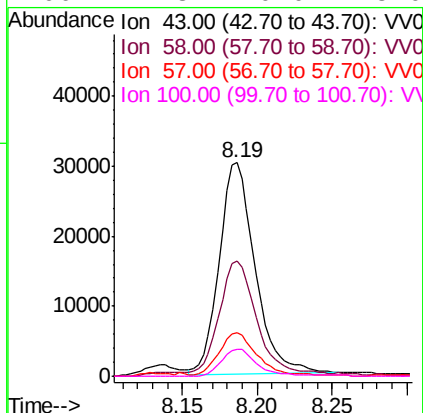
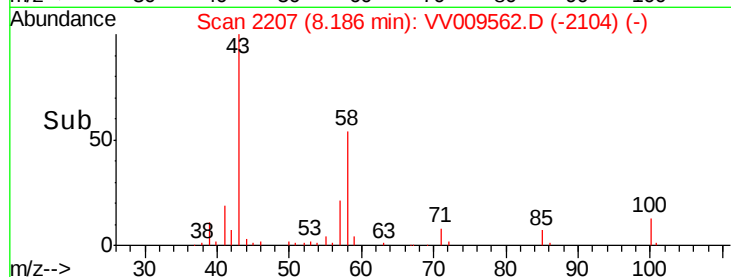
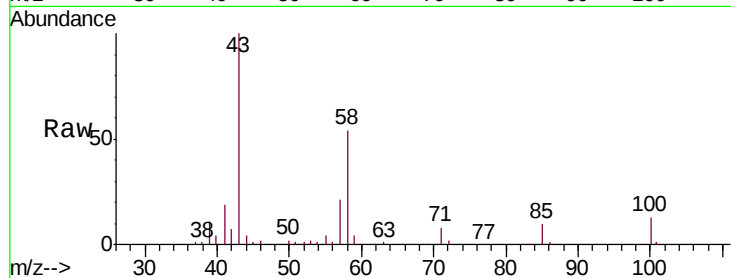




#49  
2-Hexanone  
Concen: 38.105 ug/L  
RT: 8.19 min Scan# 2207  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

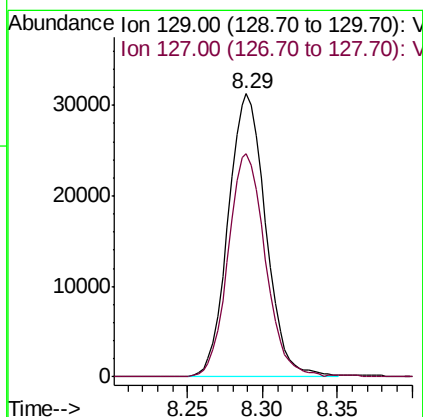
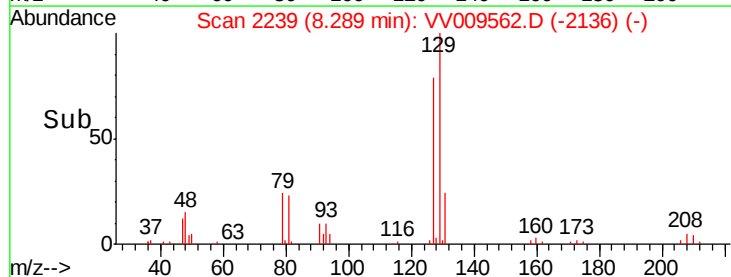
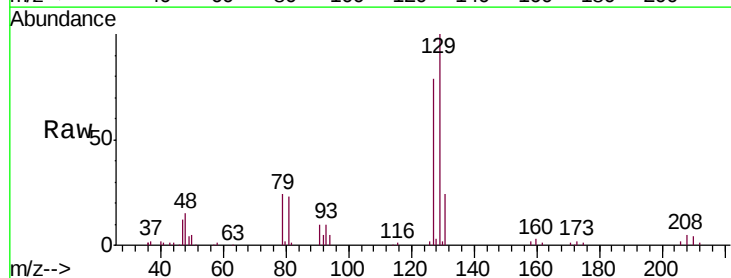
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02574

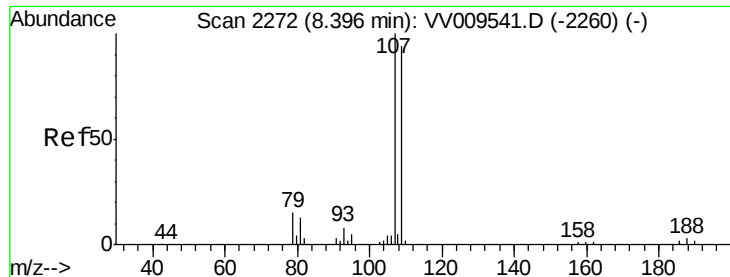
Tgt Ion: 43 Resp: 50476  
Ion Ratio Lower Upper  
43 100  
58 53.6 46.3 69.5  
57 21.2 15.8 23.6  
100 12.3 10.0 15.0



#50  
Dibromochloromethane  
Concen: 24.480 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion: 129 Resp: 54719  
Ion Ratio Lower Upper  
129 100  
127 79.1 53.7 99.7

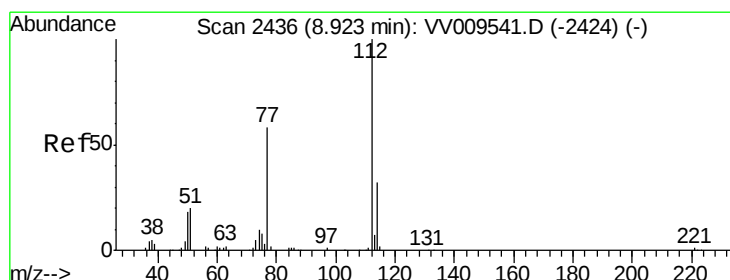
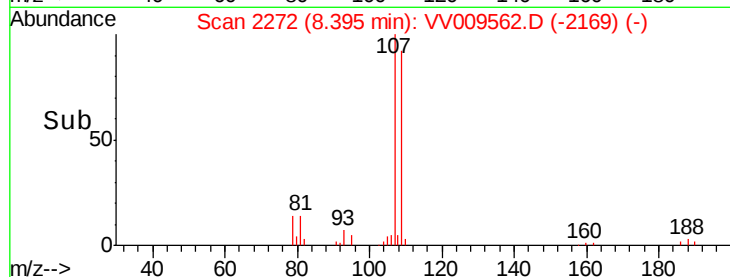
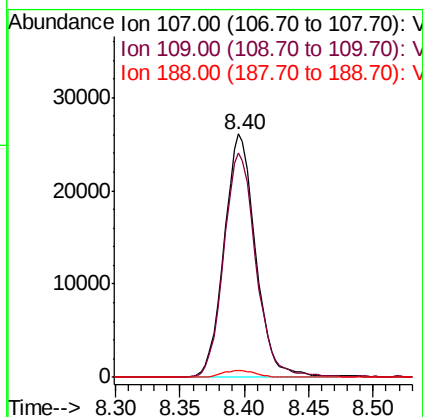
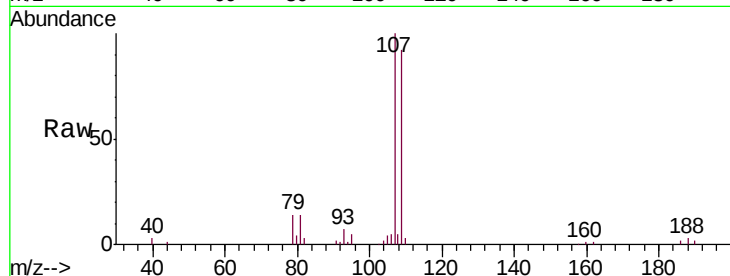




#51  
 1,2-Dibromoethane  
 Concen: 23.174 ug/L  
 RT: 8.40 min Scan# 2272  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

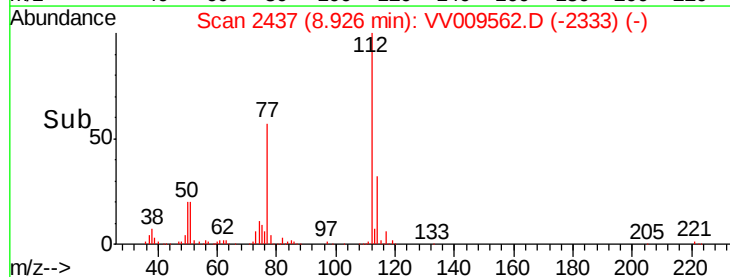
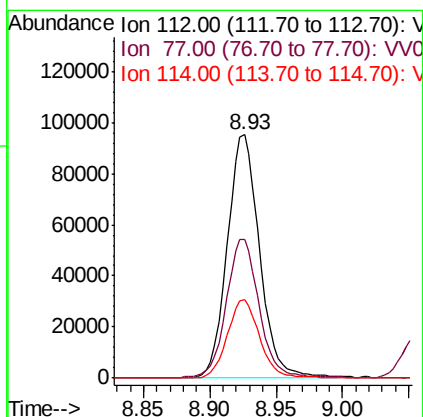
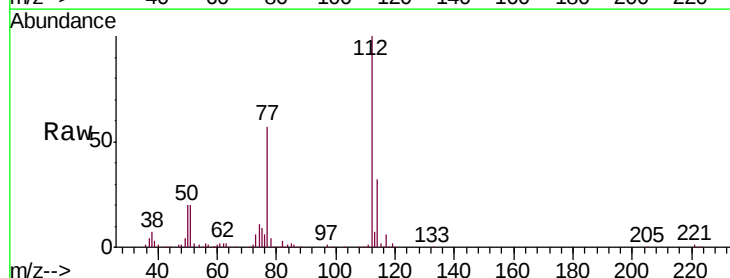
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02574

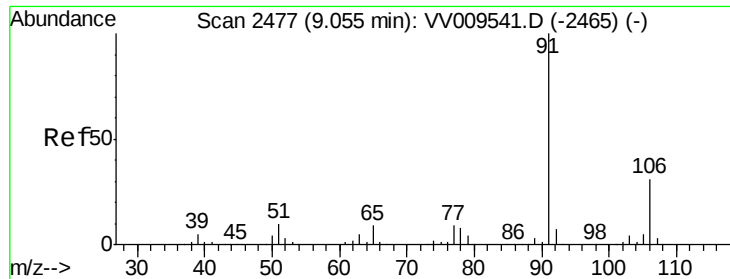
Tgt Ion:107 Resp: 44206  
 Ion Ratio Lower Upper  
 107 100  
 109 92.2 65.6 121.8  
 188 2.8 2.3 3.5



#52  
 Chlorobenzene  
 Concen: 24.982 ug/L  
 RT: 8.93 min Scan# 2437  
 Delta R.T. 0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Tgt Ion:112 Resp: 161318  
 Ion Ratio Lower Upper  
 112 100  
 77 57.2 45.0 67.6  
 114 32.3 22.9 42.5





#53

Ethylbenzene

Concen: 25.542 ug/L

RT: 9.05 min Scan# 2477

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

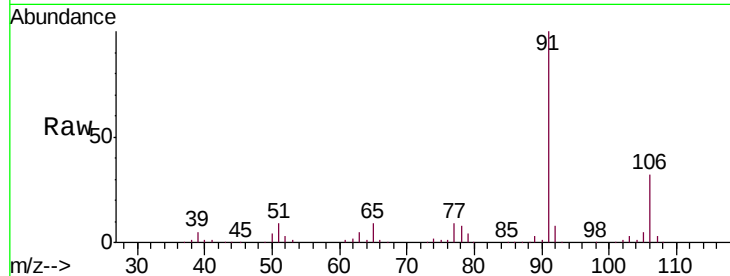
VSTD02574

Tgt Ion: 91 Resp: 284744

Ion Ratio Lower Upper

91 100

106 32.2 23.0 42.6



Abundance Ion 91.00 (90.70 to 91.70): VV009562.D (-2374) (-)

Ion 106.00 (105.70 to 106.70): VV009562.D (-2374) (-)

200000

150000

100000

50000

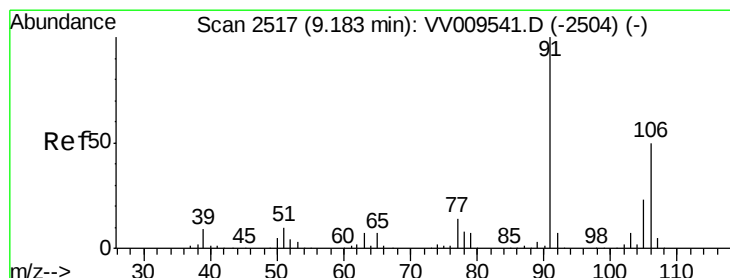
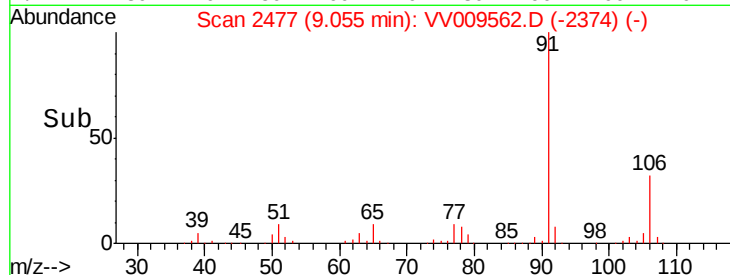
0

9.05

9.10

9.15

Time-->



#54

m,p-Xylene

Concen: 25.444 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. -0.00 min

Lab File: VV009562.D

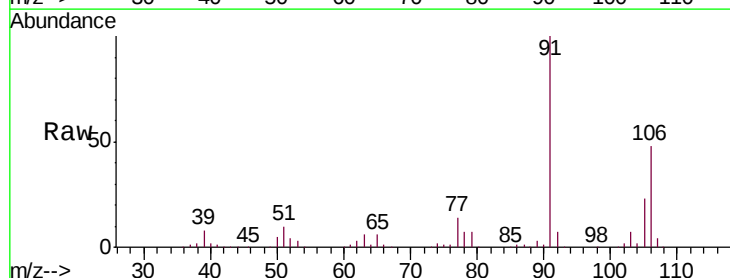
Acq: 10 Mar 2019 12:22

Tgt Ion: 106 Resp: 107359

Ion Ratio Lower Upper

106 100

91 208.4 138.5 257.1



Abundance Ion 106.00 (105.70 to 106.70): VV009562.D (-2414) (-)

Ion 91.00 (90.70 to 91.70): VV009562.D (-2414) (-)

150000

100000

50000

0

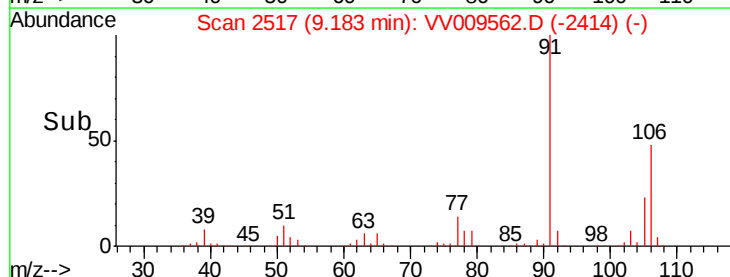
9.18

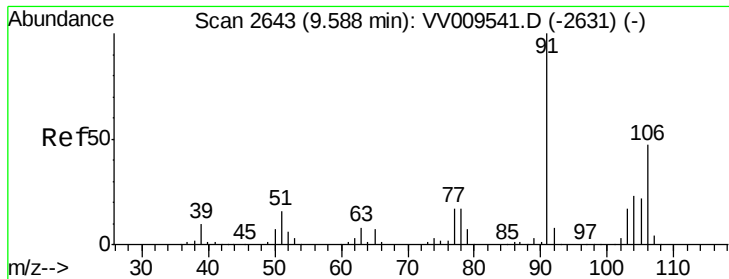
9.20

9.25

9.30

Time-->

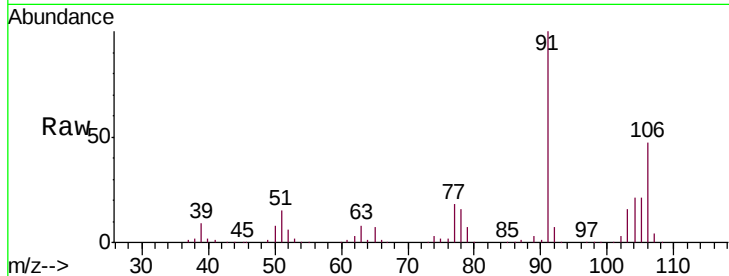




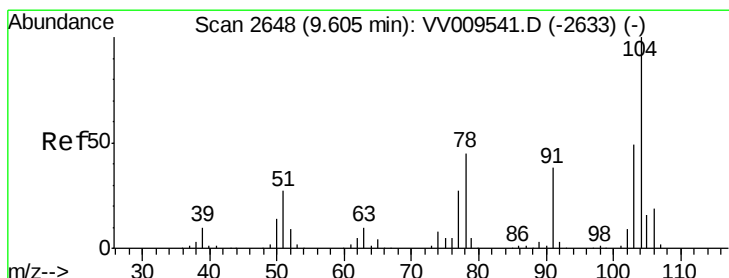
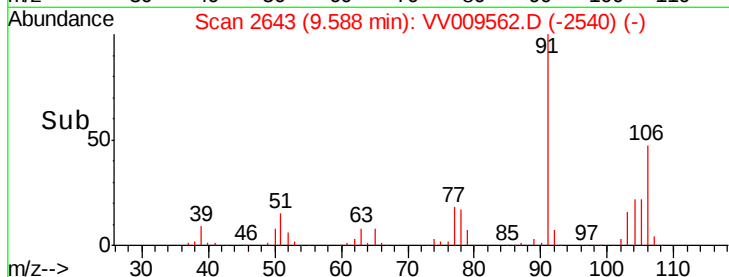
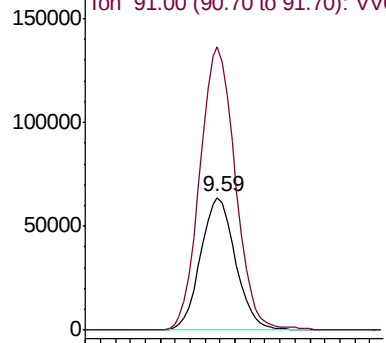
#55  
o-xylene  
Concen: 25.540 ug/L  
RT: 9.59 min Scan# 2643  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD02574

Tgt Ion:106 Resp: 103914  
Ion Ratio Lower Upper  
106 100  
91 213.7 143.8 267.0

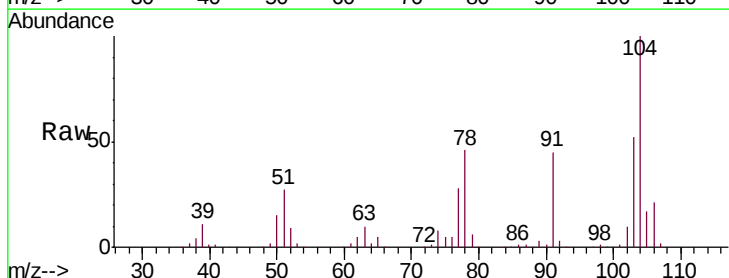


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VV0

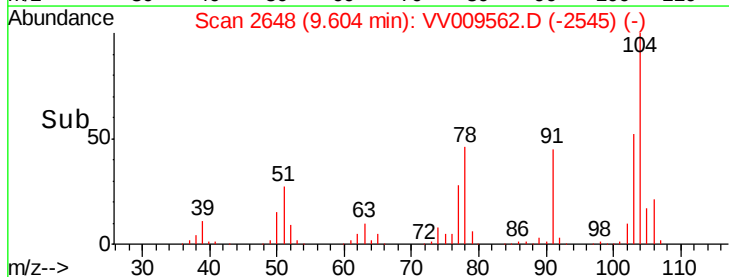
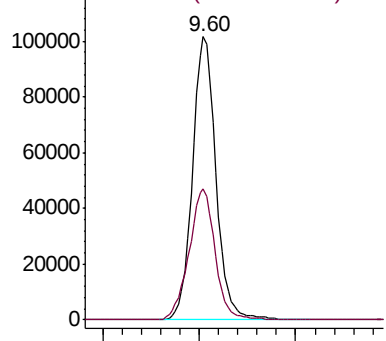


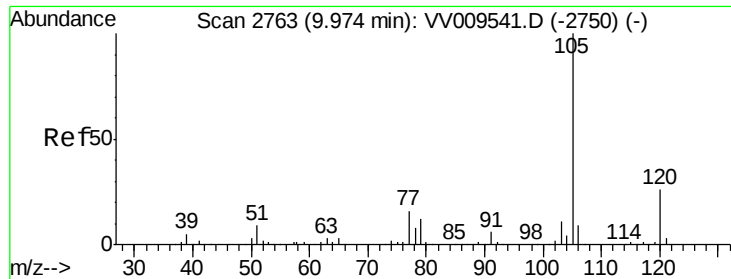
#56  
Styrene  
Concen: 25.535 ug/L  
RT: 9.60 min Scan# 2648  
Delta R.T. -0.00 min  
Lab File: VV009562.D  
Acq: 10 Mar 2019 12:22

Tgt Ion:104 Resp: 170922  
Ion Ratio Lower Upper  
104 100  
78 46.4 32.7 60.7



Abundance Ion 104.00 (103.70 to 104.70): V  
Ion 78.00 (77.70 to 78.70): VV0





#57

Isopropylbenzene

Concen: 25.478 ug/L

RT: 9.97 min Scan# 2763

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02574

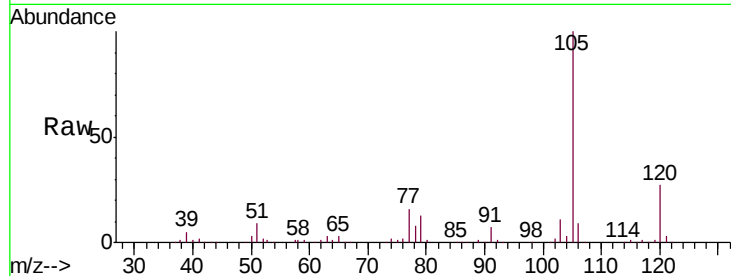
Tgt Ion: 105 Resp: 285920

Ion Ratio Lower Upper

105 100

120 27.0 21.4 32.2

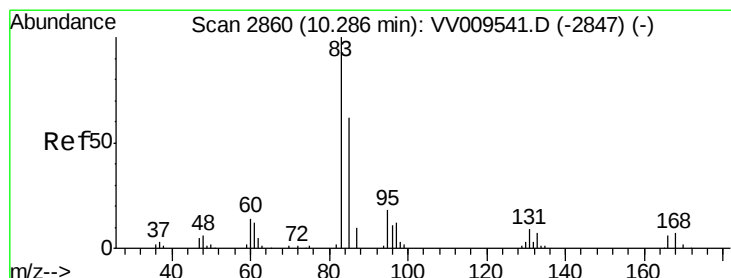
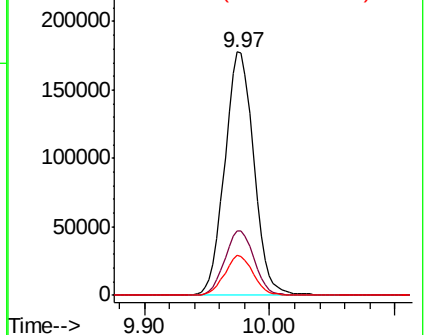
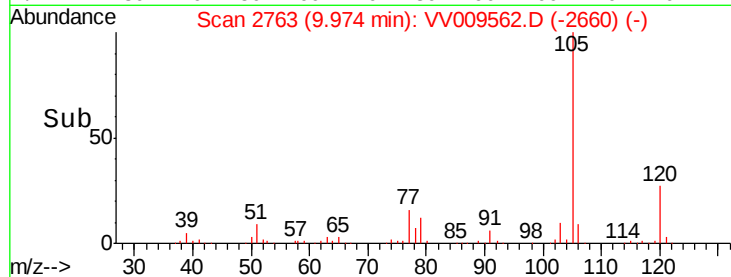
77 16.2 12.8 19.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): V



#58

1,1,2,2-Tetrachloroethane

Concen: 22.683 ug/L

RT: 10.29 min Scan# 2860

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

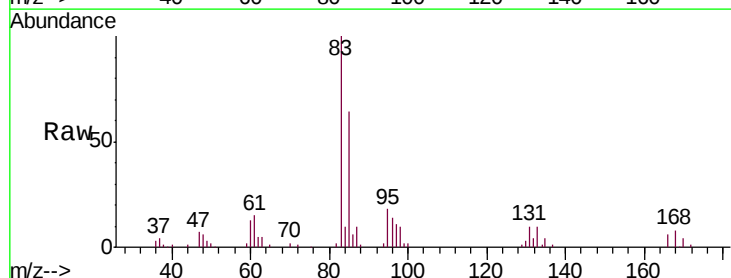
Tgt Ion: 83 Resp: 59135

Ion Ratio Lower Upper

83 100

85 64.3 44.7 83.1

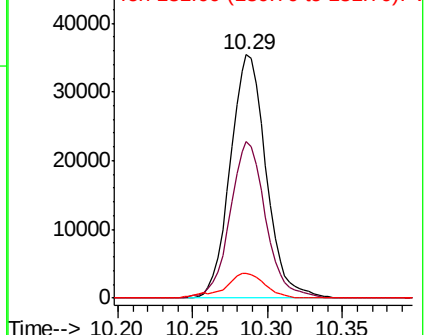
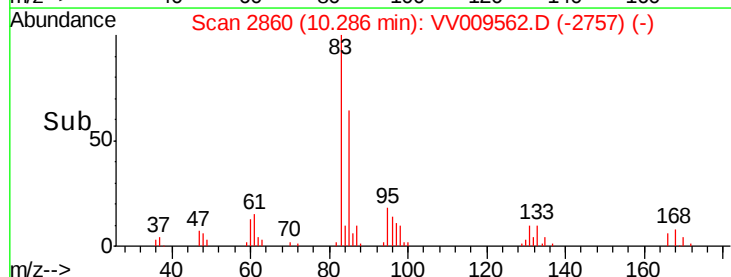
131 10.3 7.0 10.6

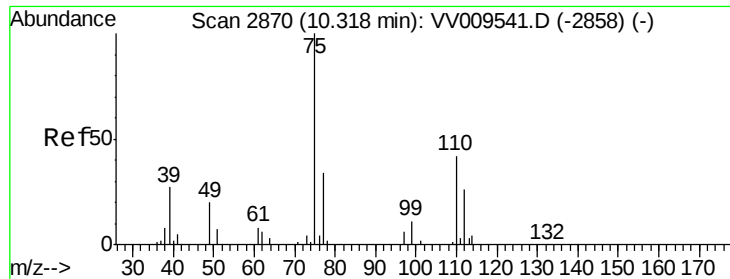


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 131.00 (130.70 to 131.70): V

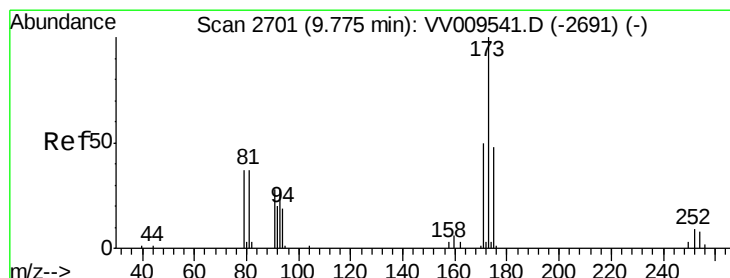
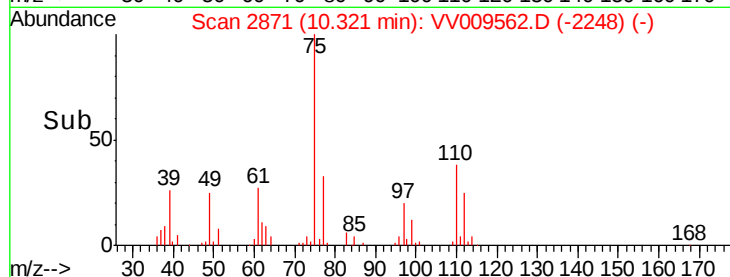
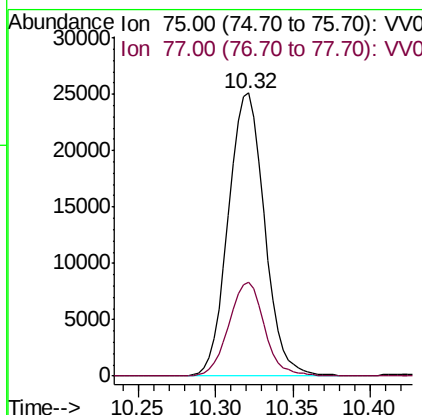
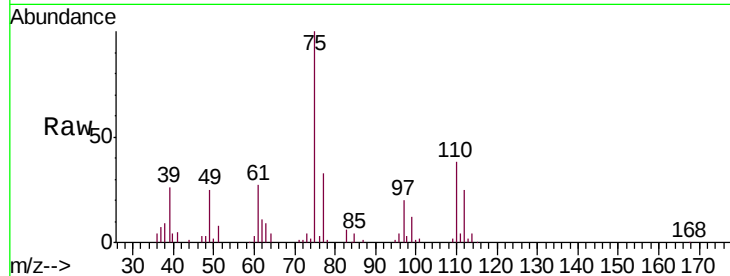




#59  
 1,2,3-Trichloropropane  
 Concen: 21.747 ug/L  
 RT: 10.32 min Scan# 2871  
 Delta R.T. 0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

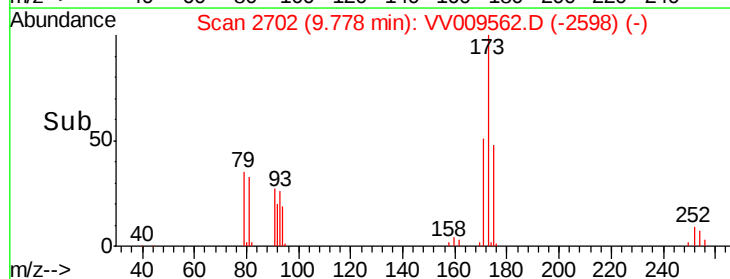
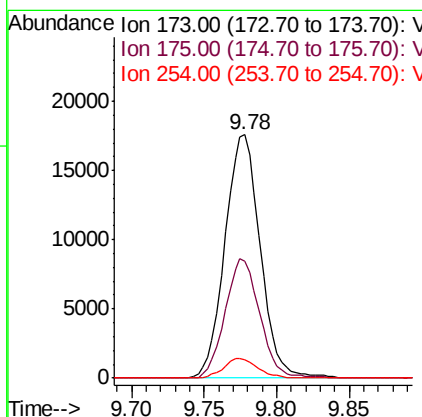
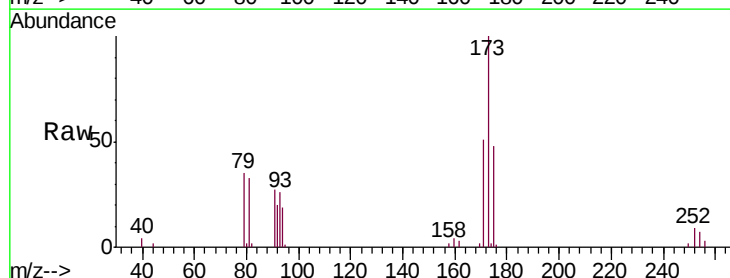
Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 VSTD02574

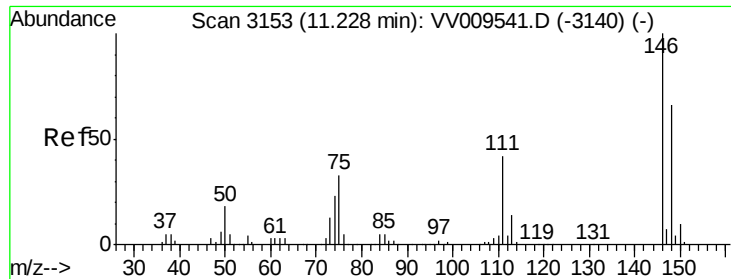
Tgt Ion: 75 Resp: 40869  
 Ion Ratio Lower Upper  
 75 100  
 77 32.5 25.9 38.9



#62  
 Bromoform  
 Concen: 22.778 ug/L  
 RT: 9.78 min Scan# 2702  
 Delta R.T. 0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Tgt Ion: 173 Resp: 29705  
 Ion Ratio Lower Upper  
 173 100  
 175 47.4 38.8 58.2  
 254 7.7 5.8 8.8





#63

1,3-Dichlorobenzene

Concen: 24.808 ug/L

RT: 11.23 min Scan# 3153

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02574

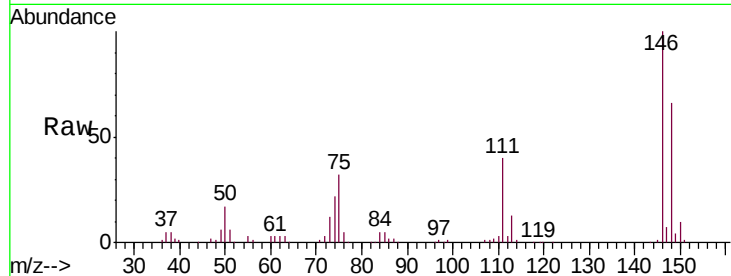
Tgt Ion:146 Resp: 124530

Ion Ratio Lower Upper

146 100

111 40.4 29.6 55.0

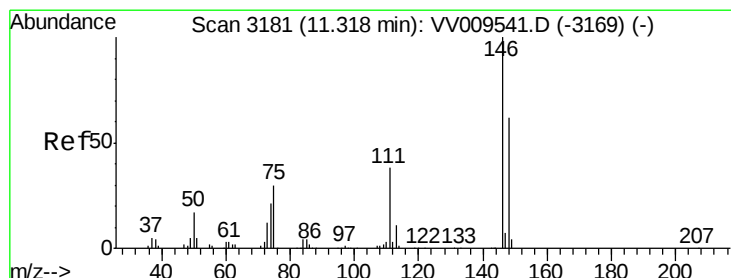
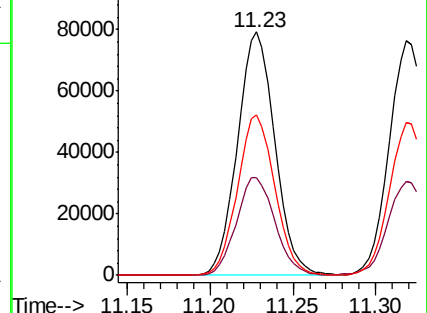
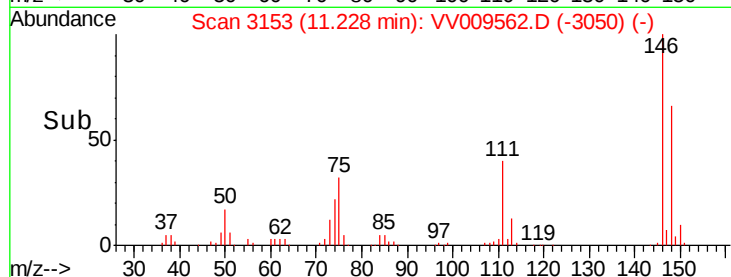
148 66.1 44.8 83.2



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: 24.043 ug/L

RT: 11.32 min Scan# 3181

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

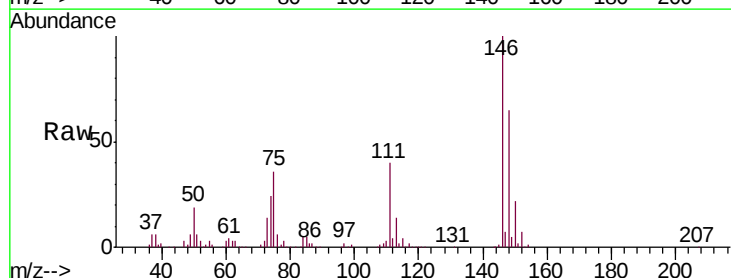
Tgt Ion:146 Resp: 123331

Ion Ratio Lower Upper

146 100

111 40.2 29.2 54.2

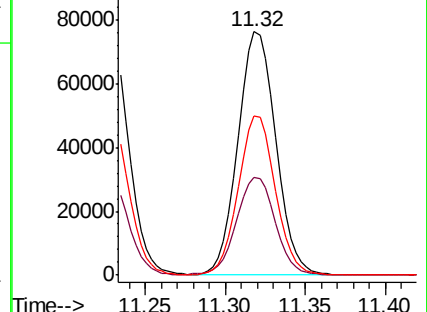
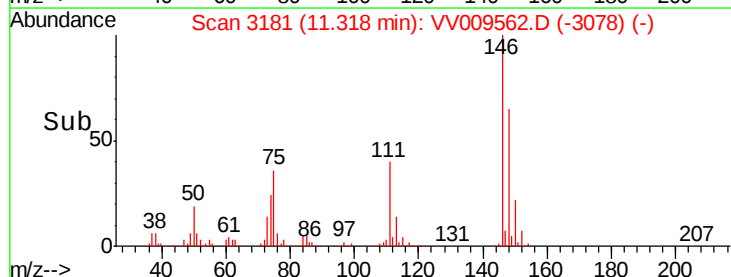
148 65.3 43.0 79.8

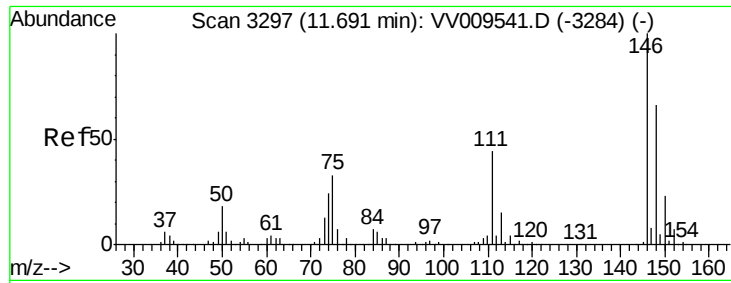


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 24.519 ug/L

RT: 11.69 min Scan# 3297

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02574

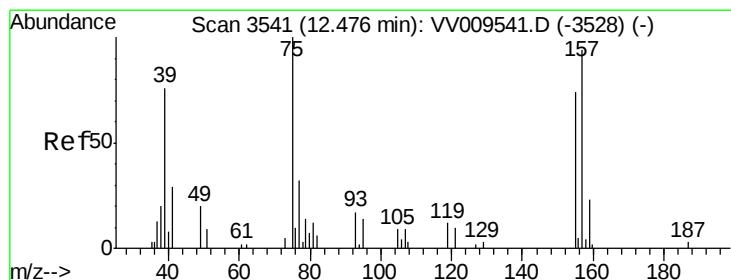
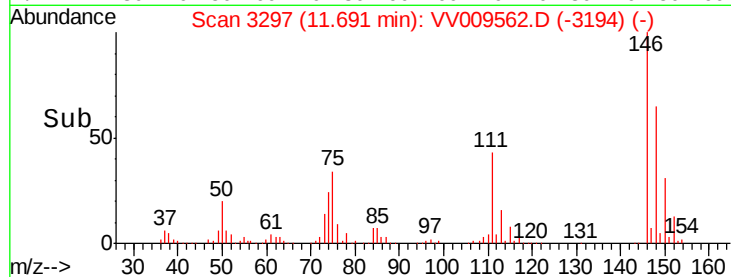
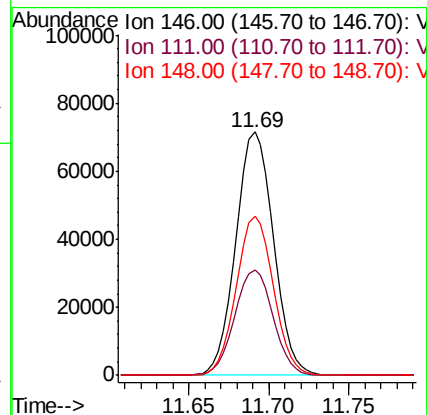
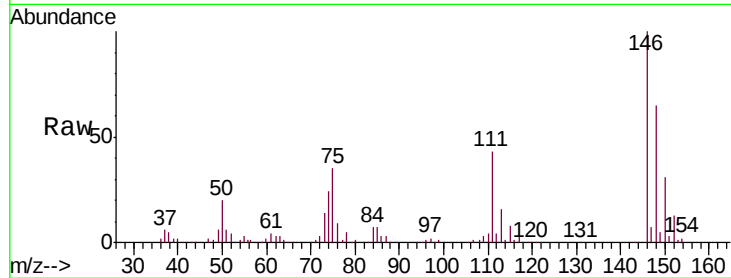
Tgt Ion:146 Resp: 114780

Ion Ratio Lower Upper

146 100

111 43.2 35.4 53.0

148 65.3 50.6 76.0



#66

1,2-Dibromo-3-chloropropane

Concen: 20.242 ug/L

RT: 12.48 min Scan# 3541

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

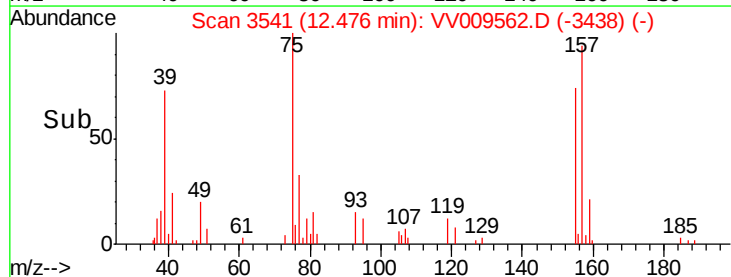
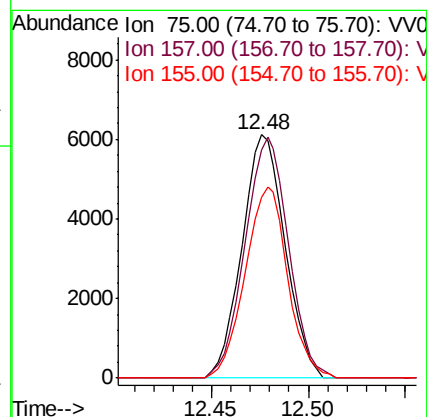
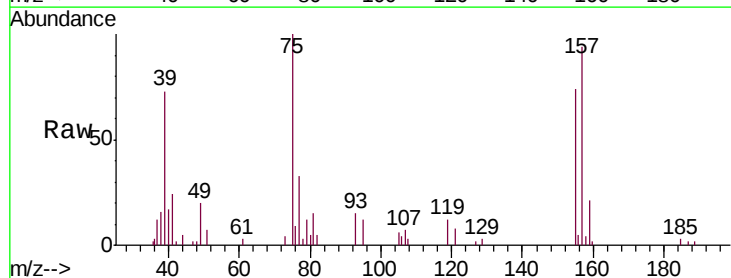
Tgt Ion: 75 Resp: 9491

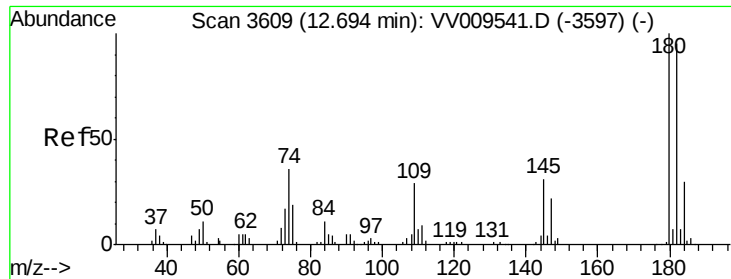
Ion Ratio Lower Upper

75 100

157 94.0 81.0 121.4

155 74.3 61.2 91.8

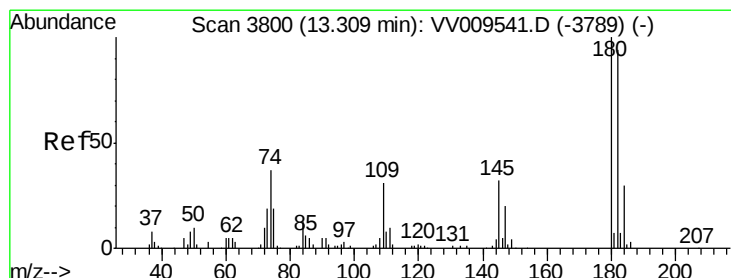
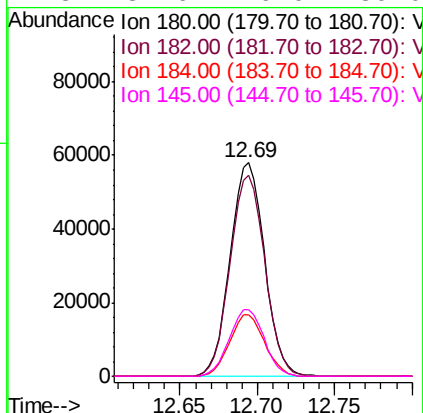
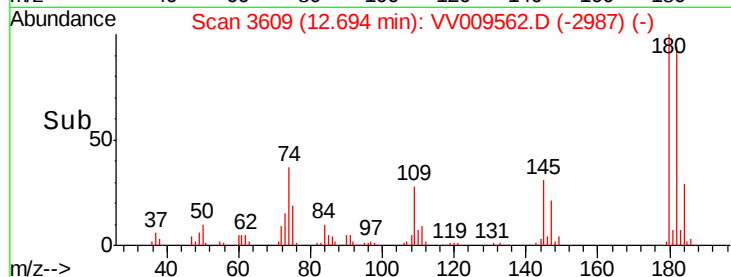
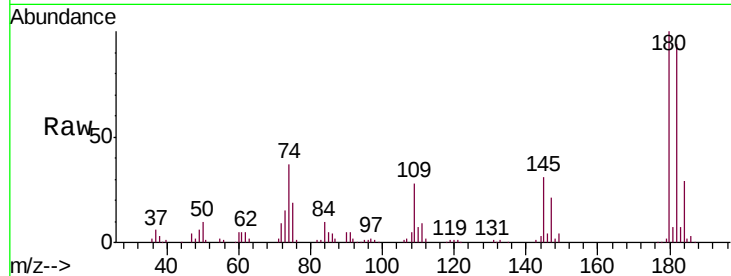




#67  
 1,3,5-Trichlorobenzene  
 Concen: 24.856 ug/L  
 RT: 12.69 min Scan# 3609  
 Delta R.T. -0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

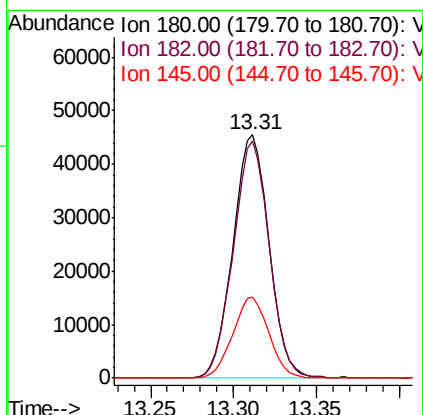
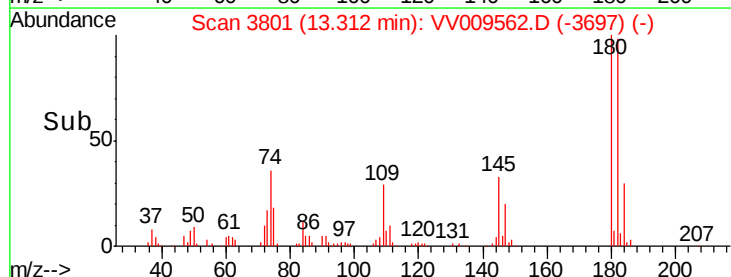
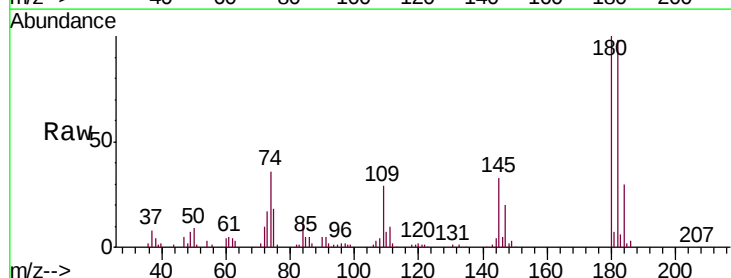
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02574

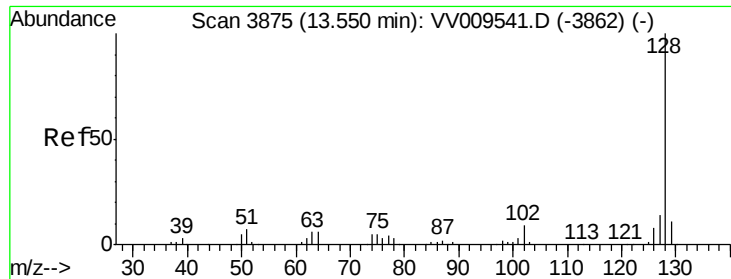
Tgt Ion:180 Resp: 89500  
 Ion Ratio Lower Upper  
 180 100  
 182 94.7 75.4 113.2  
 184 29.2 23.9 35.9  
 145 31.6 26.0 39.0



#68  
 1,2,4-trichlorobenzene  
 Concen: 23.931 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. 0.00 min  
 Lab File: VV009562.D  
 Acq: 10 Mar 2019 12:22

Tgt Ion:180 Resp: 68989  
 Ion Ratio Lower Upper  
 180 100  
 182 97.1 75.9 113.9  
 145 33.2 26.2 39.4





#69

Naphthalene

Concen: 21.447 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. 0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02574

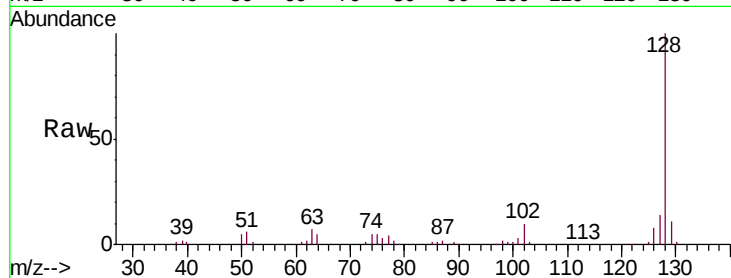
Tgt Ion:128 Resp: 130232

Ion Ratio Lower Upper

128 100

129 11.6 8.8 13.2

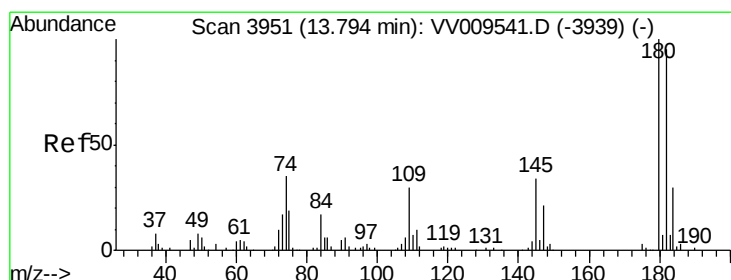
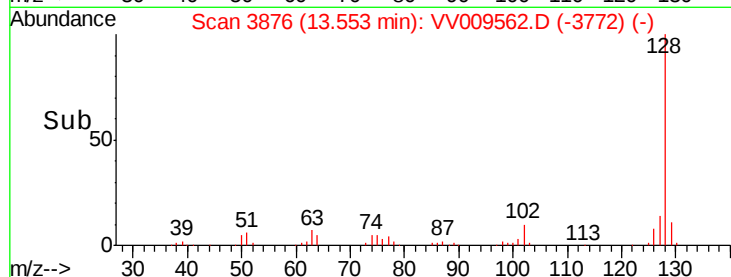
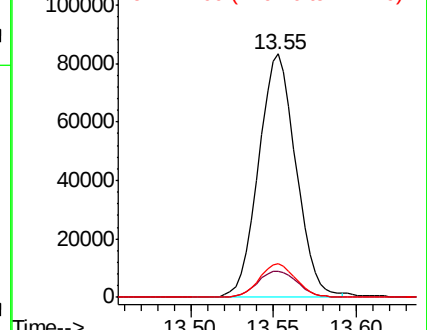
127 13.6 10.6 16.0



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: 24.383 ug/L

RT: 13.79 min Scan# 3951

Delta R.T. -0.00 min

Lab File: VV009562.D

Acq: 10 Mar 2019 12:22

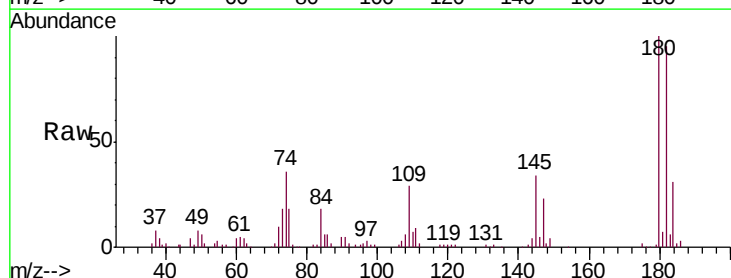
Tgt Ion:180 Resp: 64666

Ion Ratio Lower Upper

180 100

182 95.2 74.2 111.2

145 34.3 27.7 41.5



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

