

Data File : VV014306.D  
Acq On : 15 Jan 2020 10:26  
Operator : SY/MD  
Sample : VSTD00532  
Misc : 25.0mL/MSVOA\_V/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

Quant Time: Jan 16 01:54:51 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVTR011520WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jan 16 01:51:39 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 911111   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 828732   | 5.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 388770   | 5.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |         |       |      |      |
|--------------------------------|-------|-----|---------|-------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 279423  | 5.36  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.59  | 69  | 217164  | 5.85  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.13  | 63  | 433593  | 4.71  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.96  | 46  | 686851  | 57.51 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.40  | 84  | 549637  | 4.98  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 272329  | 4.67  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.10  | 84  | 1173712 | 5.55  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.12  | 67  | 363010  | 6.00  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.36  | 98  | 1062743 | 5.28  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.66  | 79  | 151135  | 5.81  | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.13  | 63  | 585408  | 62.14 | ug/L | 0.00 |
| 56) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 247713  | 5.57  | ug/L | 0.00 |
| 66) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 333626  | 4.90  | ug/L | 0.00 |

Target Compounds

|                                |      |     |         |             | Qvalue |
|--------------------------------|------|-----|---------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 367293  | 3.770 ug/L  | 100    |
| 3) Chloromethane               | 1.26 | 50  | 353898  | 5.712 ug/L  | 100    |
| 5) Vinyl chloride              | 1.32 | 62  | 326644  | 5.280 ug/L  | 100    |
| 6) Bromomethane                | 1.54 | 94  | 181827  | 5.007 ug/L  | 100    |
| 8) Chloroethane                | 1.60 | 64  | 172081  | 5.136 ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 394060  | 3.963 ug/L  | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 211388  | 4.695 ug/L  | 100    |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 199975  | 4.771 ug/L  | 100    |
| 13) Acetone                    | 2.23 | 43  | 385555  | 56.926 ug/L | 100    |
| 14) Carbon disulfide           | 2.32 | 76  | 941964  | 7.129 ug/L  | 100    |
| 15) Methyl Acetate             | 2.48 | 43  | 116339  | 7.494 ug/L  | 100    |
| 16) Methylene chloride         | 2.54 | 84  | 361862  | 7.329 ug/L  | 100    |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 705372  | 5.258 ug/L  | 100    |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 307576  | 5.043 ug/L  | 100    |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 579368  | 5.282 ug/L  | 100    |
| 21) 2-Butanone                 | 4.05 | 43  | 733140  | 55.774 ug/L | 100    |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 333824  | 5.122 ug/L  | 100    |
| 23) Bromochloromethane         | 4.30 | 128 | 125364  | 4.531 ug/L  | 100    |
| 25) Chloroform                 | 4.43 | 83  | 591103  | 4.467 ug/L  | 100    |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 329152  | 4.483 ug/L  | 100    |
| 29) 1,1,1-Trichloroethane      | 4.66 | 97  | 494105  | 4.854 ug/L  | 100    |
| 30) Cyclohexane                | 4.72 | 56  | 588170  | 6.285 ug/L  | 100    |
| 31) Carbon tetrachloride       | 4.87 | 117 | 419925  | 4.649 ug/L  | 100    |
| 33) Benzene                    | 5.15 | 78  | 1280195 | 5.546 ug/L  | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 327240  | 5.061 ug/L  | 100    |
| 35) Methylcyclohexane          | 6.17 | 83  | 580197  | 5.588 ug/L  | 100    |
| 37) 1,2-Dichloropropane        | 6.22 | 63  | 312911  | 5.784 ug/L  | 100    |
| 38) Bromodichloromethane       | 6.55 | 83  | 406247  | 5.422 ug/L  | 100    |
| 39) cis-1,3-Dichloropropene    | 7.07 | 75  | 502317  | 5.906 ug/L  | 100    |
| 40) 4-Methyl-2-pentanone       | 7.27 | 43  | 1922941 | 61.866 ug/L | 100    |

Data File : VV014306.D  
Acq On : 15 Jan 2020 10:26  
Operator : SY/MD  
Sample : VSTD00532  
Misc : 25.0mL/MSVOA\_V/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

Quant Time: Jan 16 01:54:51 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVTR011520WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jan 16 01:51:39 2020  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) Toluene                    | 7.43  | 91   | 1345329  | 5.326  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 382766   | 5.639  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 197345   | 4.972  | ug/L  | 100      |
| 47) Tetrachloroethene          | 8.02  | 164  | 228558   | 4.266  | ug/L  | 100      |
| 48) 2-Hexanone                 | 8.18  | 43   | 1349953  | 61.735 | ug/L  | 100      |
| 49) Dibromochloromethane       | 8.29  | 129  | 246595   | 5.076  | ug/L  | 100      |
| 50) 1,2-Dibromoethane          | 8.39  | 107  | 188384   | 5.067  | ug/L  | 100      |
| 51) Chlorobenzene              | 8.92  | 112  | 817046   | 4.900  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.05  | 91   | 1524472  | 5.278  | ug/L  | 100      |
| 53) m,p-xylene                 | 9.18  | 106  | 565286   | 5.209  | ug/L  | 100      |
| 54) o-xylene                   | 9.58  | 106  | 551272   | 5.305  | ug/L  | 100      |
| 55) Styrene                    | 9.60  | 104  | 911759   | 5.247  | ug/L  | 100      |
| 57) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 247003   | 5.623  | ug/L  | 100      |
| 59) Bromoform                  | 9.77  | 173  | 119351   | 5.016  | ug/L  | 100      |
| 60) Isopropylbenzene           | 9.97  | 105  | 1473122  | 5.702  | ug/L  | 100      |
| 61) 1,2,3-Trichloropropane     | 10.31 | 75   | 182974   | 6.070  | ug/L  | 100      |
| 62) 1,3,5-Trimethylbenzene     | 10.58 | 105  | 1258377  | 5.874  | ug/L  | 100      |
| 63) 1,2,4-Trimethylbenzene     | 10.95 | 105  | 1246832  | 5.886  | ug/L  | 100      |
| 64) 1,3-Dichlorobenzene        | 11.22 | 146  | 610918   | 4.916  | ug/L  | 100      |
| 65) 1,4-Dichlorobenzene        | 11.31 | 146  | 605146   | 4.811  | ug/L  | 100      |
| 67) 1,2-Dichlorobenzene        | 11.68 | 146  | 549255   | 4.880  | ug/L  | 100      |
| 68) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 43112    | 6.735  | ug/L  | 100      |
| 69) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 444488   | 4.413  | ug/L  | 100      |
| 70) 1,2,4-trichlorobenzene     | 13.31 | 180  | 377572   | 4.676  | ug/L  | 100      |
| 71) Naphthalene                | 13.55 | 128  | 713907   | 5.938  | ug/L  | 100      |
| 72) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 327302   | 4.604  | ug/L  | 100      |

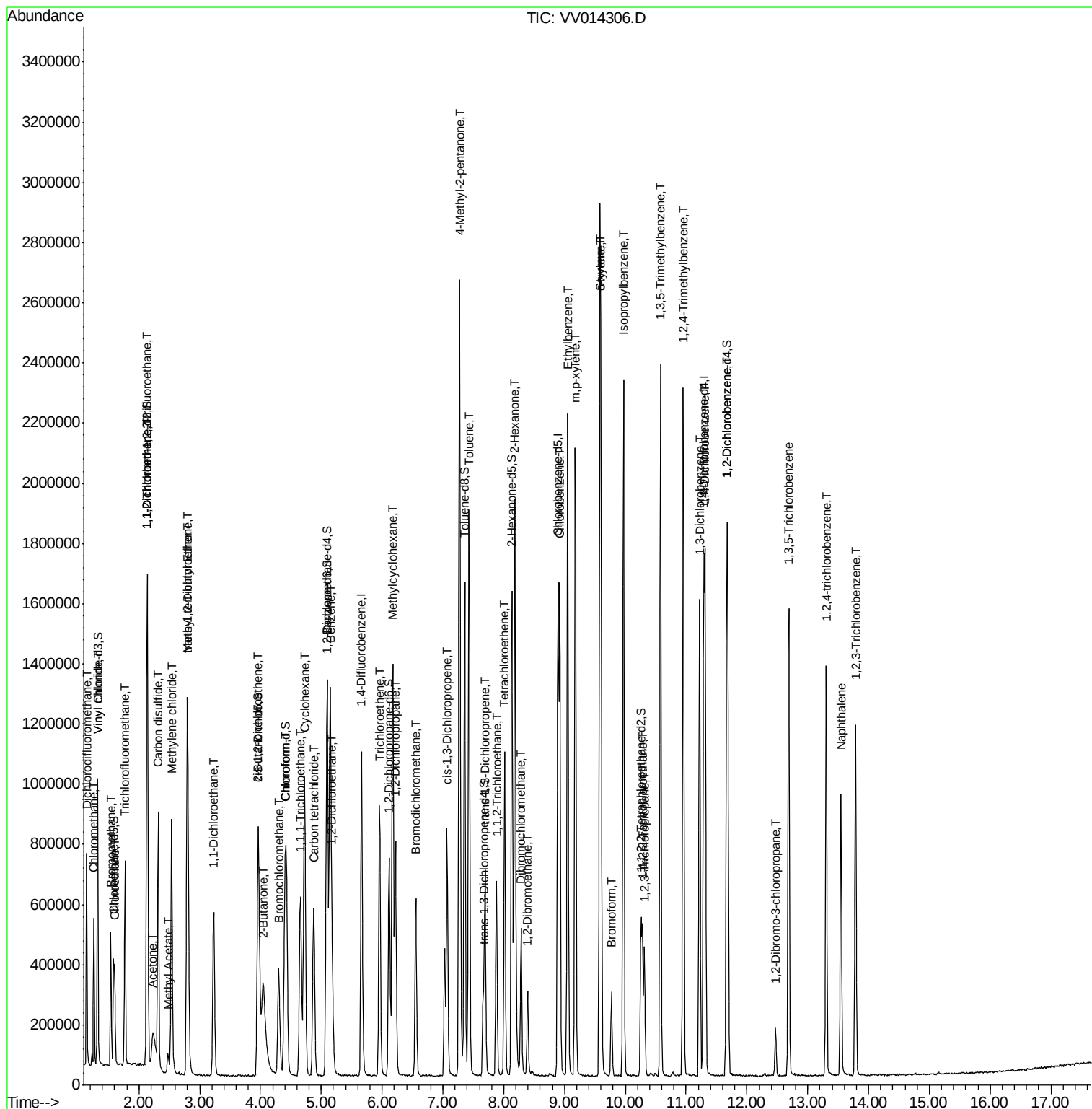
(#) = qualifier out of range (m) = manual integration (+) = signals summed

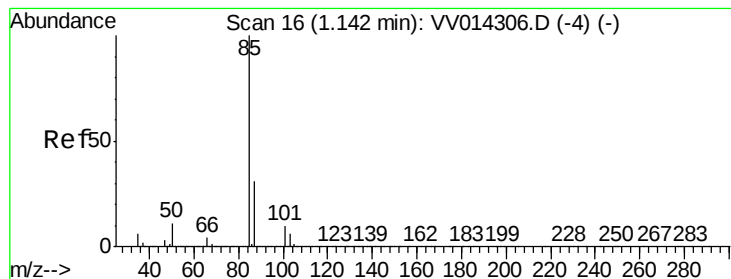
Data File : VV014306.D

```
Acq On       : 15 Jan 2020   10:26
Operator     : SY/MD
Sample       : VSTD00532
Misc         : 25.0mL/MSV0A_V/WATER
ALS Vial     : 4      Sample Multiplier: 1
```

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD005323

Quant Time: Jan 16 01:54:51 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVTR011520WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Jan 16 01:51:39 2020  
Response via : Initial Calibration





#2

Dichlorodifluoromethane

Concen: 3.770 ug/L

RT: 1.14 min Scan# 16

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

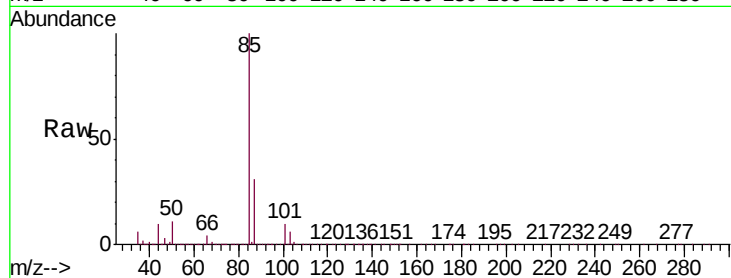
VSTD005323

Tgt Ion: 85 Resp: 367293

Ion Ratio Lower Upper

85 100

87 31.1 24.9 37.3



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0

1.14

400000

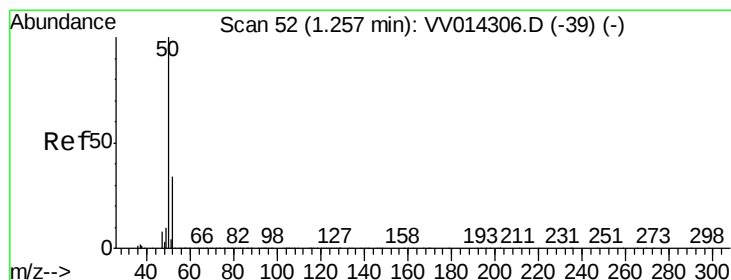
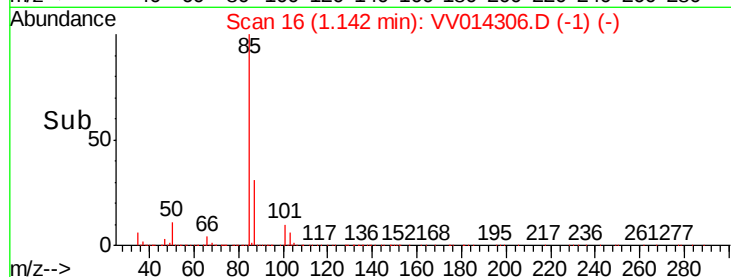
300000

200000

100000

0

Time-->



#3

Chloromethane

Concen: 5.712 ug/L

RT: 1.26 min Scan# 52

Delta R.T. 0.00 min

Lab File: VV014306.D

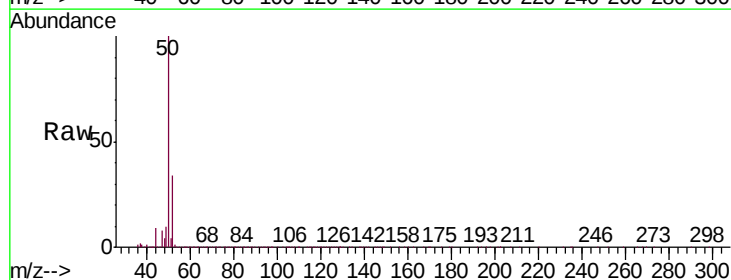
Acq: 15 Jan 2020 10:26

Tgt Ion: 50 Resp: 353898

Ion Ratio Lower Upper

50 100

52 33.6 23.5 43.7



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0

1.26

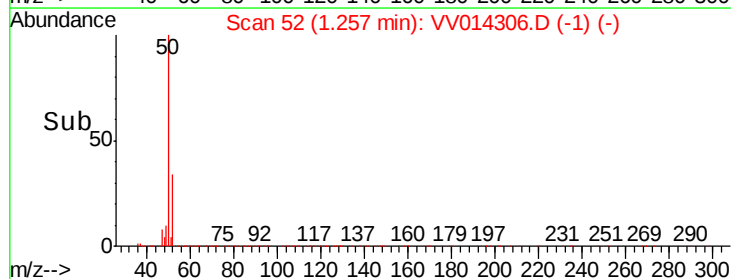
300000

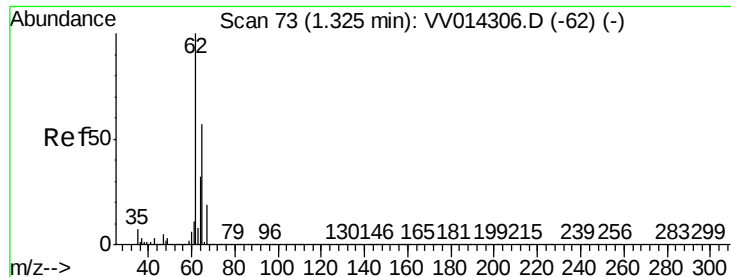
200000

100000

0

Time-->





#5

Vinyl chloride

Concen: 5.280 ug/L

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

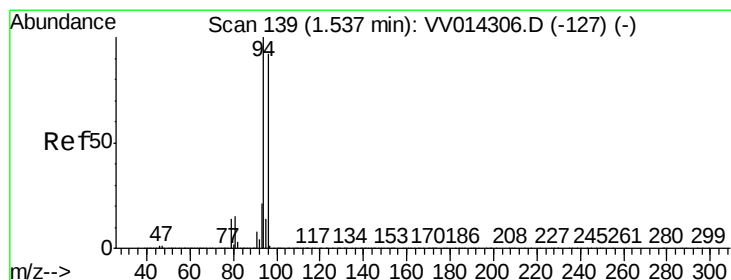
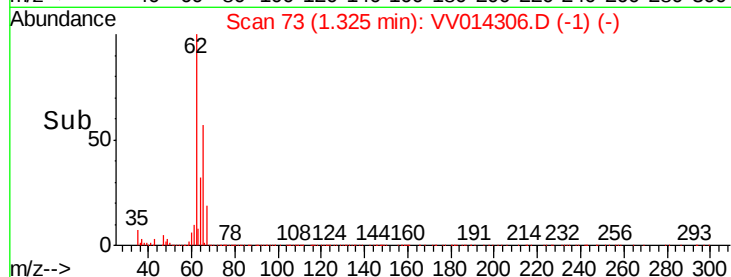
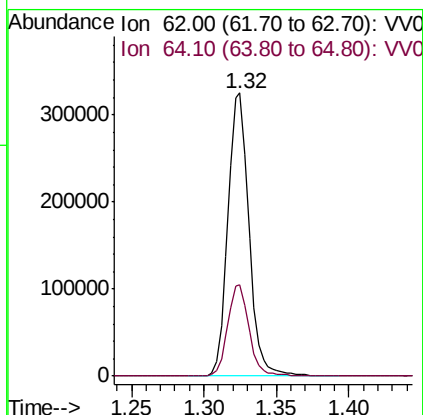
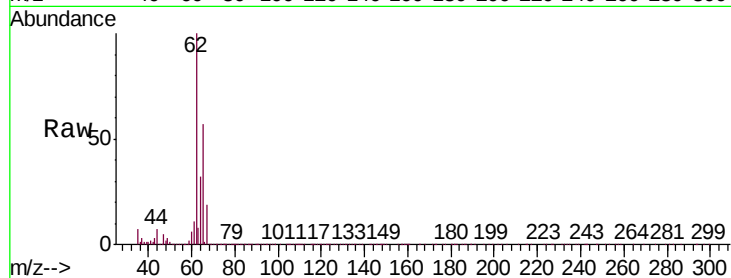
VSTD005323

Tgt Ion: 62 Resp: 326644

Ion Ratio Lower Upper

62 100

64 32.3 22.6 42.0



#6

Bromomethane

Concen: 5.007 ug/L

RT: 1.54 min Scan# 139

Delta R.T. 0.00 min

Lab File: VV014306.D

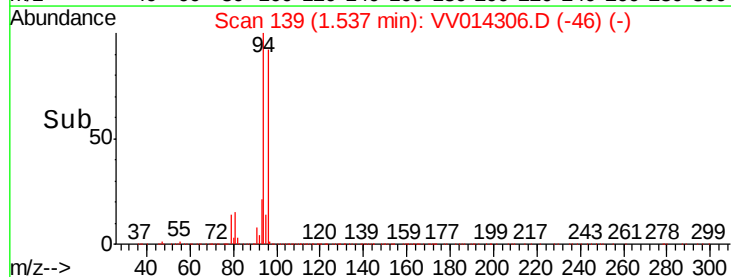
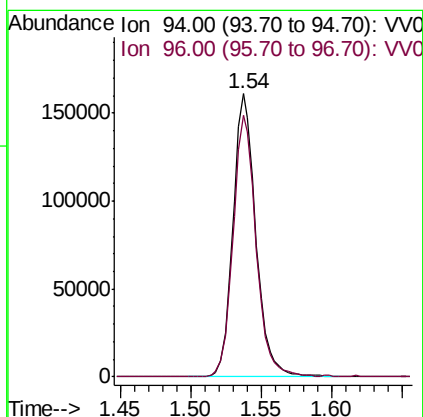
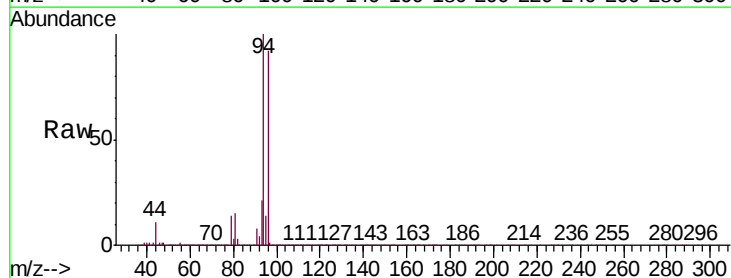
Acq: 15 Jan 2020 10:26

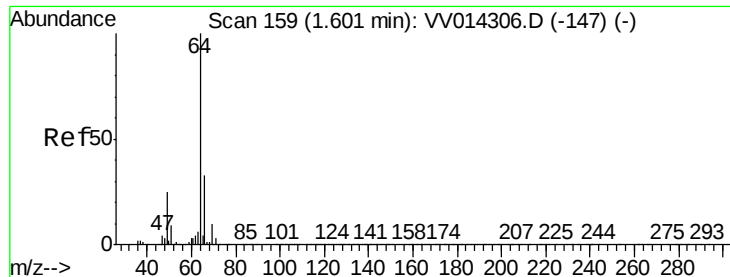
Tgt Ion: 94 Resp: 181827

Ion Ratio Lower Upper

94 100

96 92.3 64.6 120.0

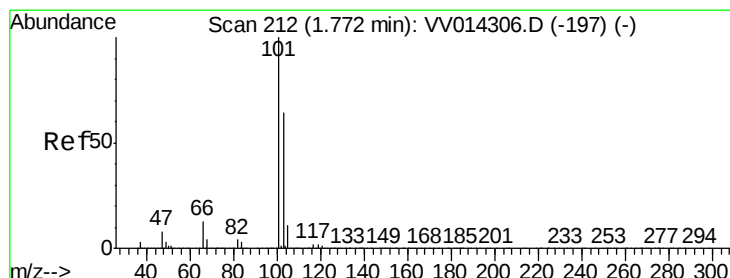
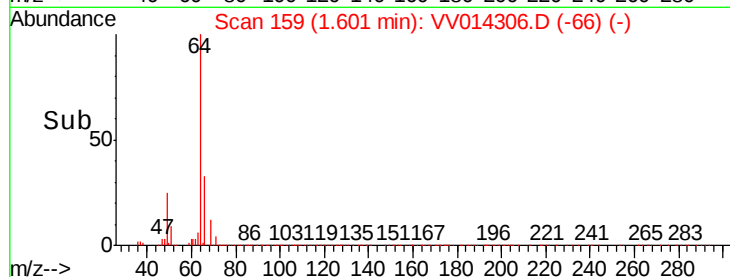
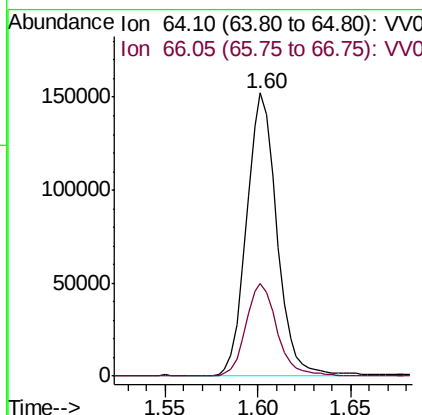
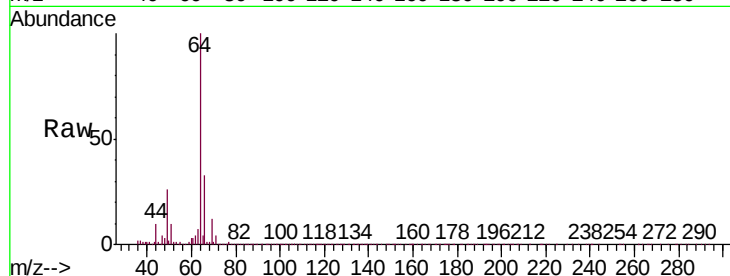




#8  
Chloroethane  
Concen: 5.136 ug/L  
RT: 1.60 min Scan# 159  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

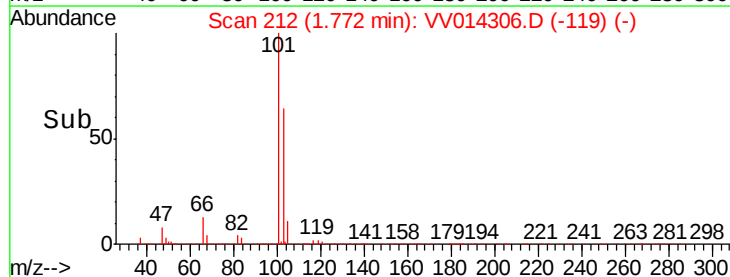
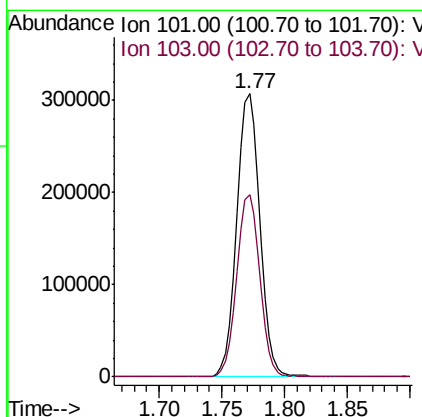
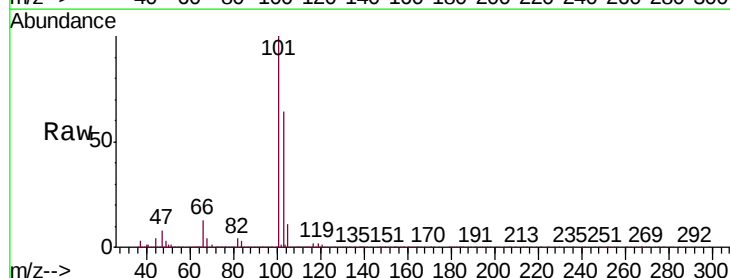
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

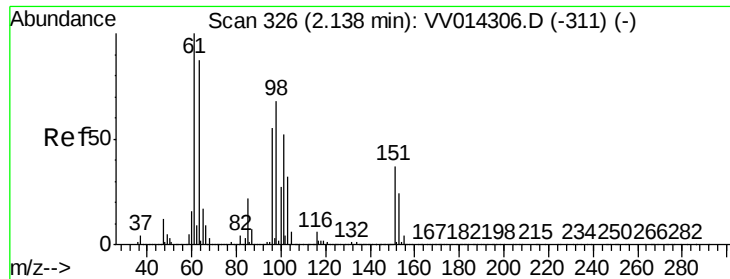
Tgt Ion: 64 Resp: 172081  
Ion Ratio Lower Upper  
64 100  
66 32.9 23.0 42.8



#9  
Trichlorofluoromethane  
Concen: 3.963 ug/L  
RT: 1.77 min Scan# 212  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 101 Resp: 394060  
Ion Ratio Lower Upper  
101 100  
103 64.0 51.2 76.8





#10

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

Concen: 4.695 ug/L

RT: 2.14 min Scan# 326

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005323

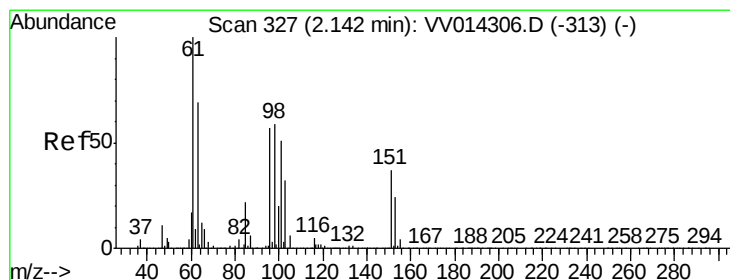
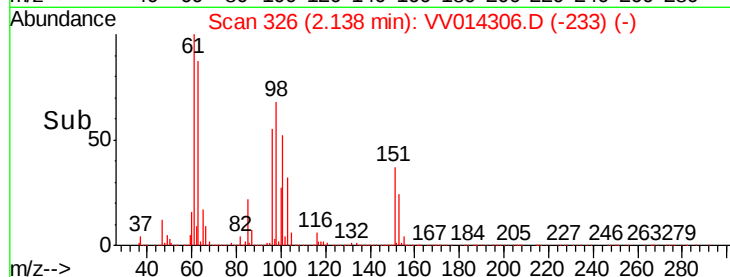
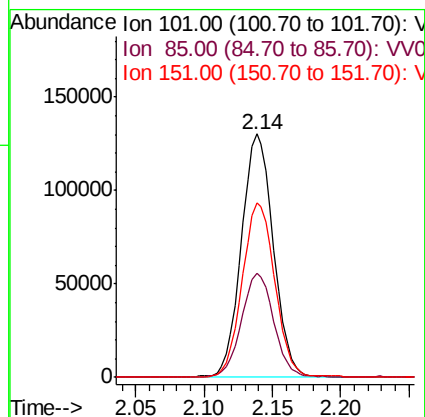
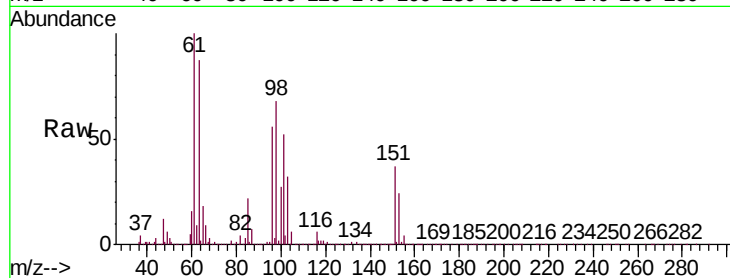
Tgt Ion: 101 Resp: 211388

Ion Ratio Lower Upper

101 100

85 42.7 34.2 51.2

151 73.4 58.7 88.1



#12

1,1-Dichloroethene

Concen: 4.771 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

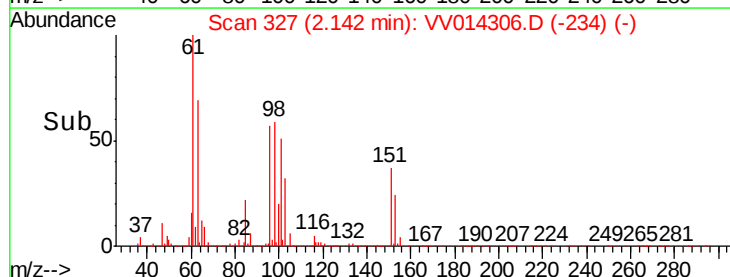
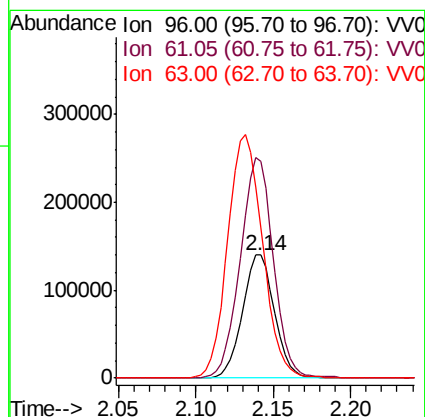
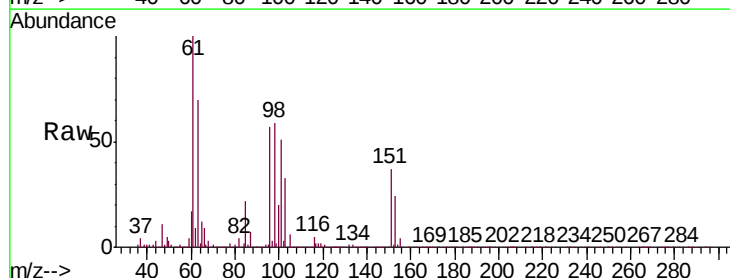
Tgt Ion: 96 Resp: 199975

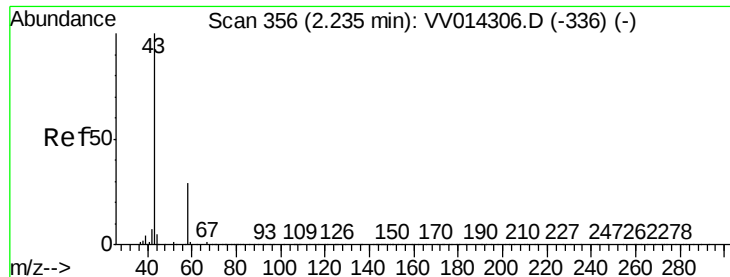
Ion Ratio Lower Upper

96 100

61 176.0 123.2 228.8

63 122.3 85.6 159.0





#13

Acetone

Concen: 56.926 ug/L

RT: 2.23 min Scan# 356

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

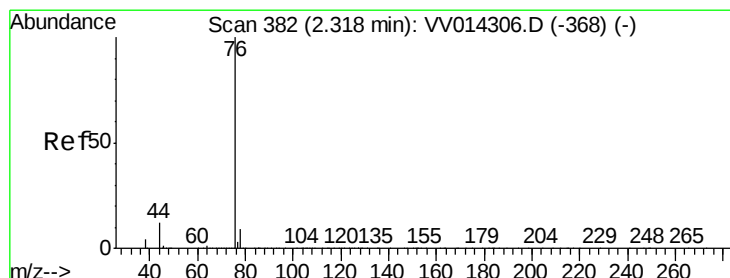
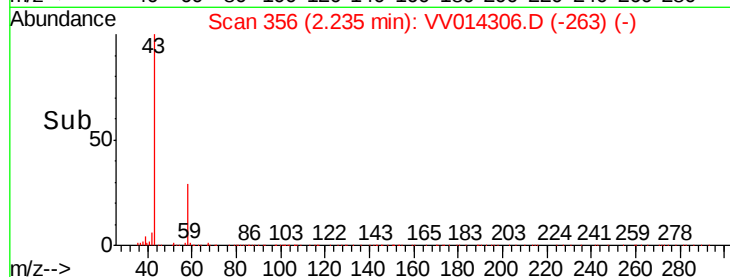
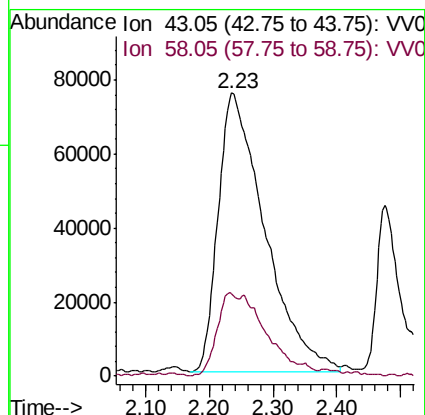
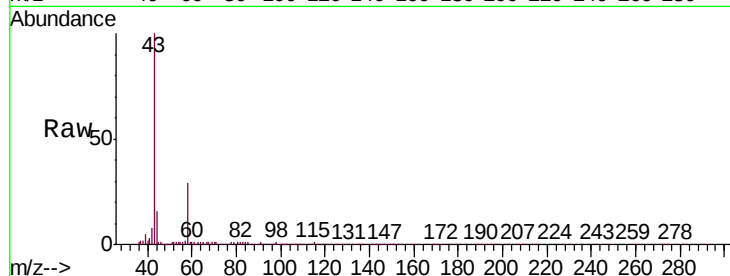
VSTD005323

Tgt Ion: 43 Resp: 385555

Ion Ratio Lower Upper

43 100

58 12.9 0.0 25.8



#14

Carbon disulfide

Concen: 7.129 ug/L

RT: 2.32 min Scan# 382

Delta R.T. 0.00 min

Lab File: VV014306.D

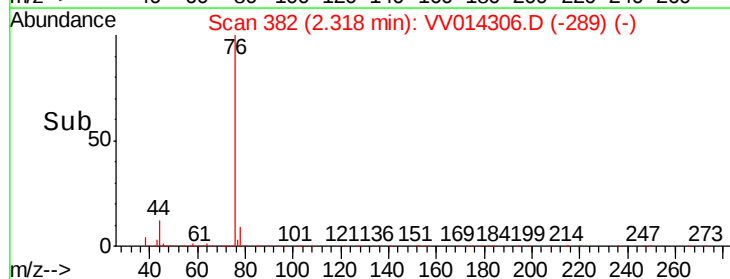
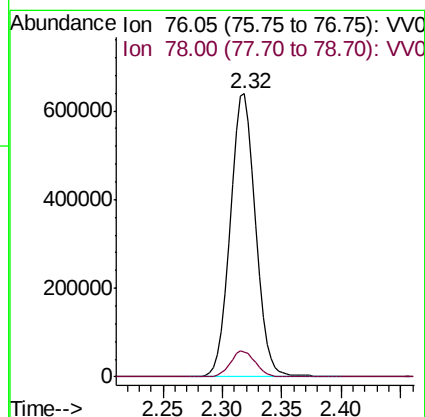
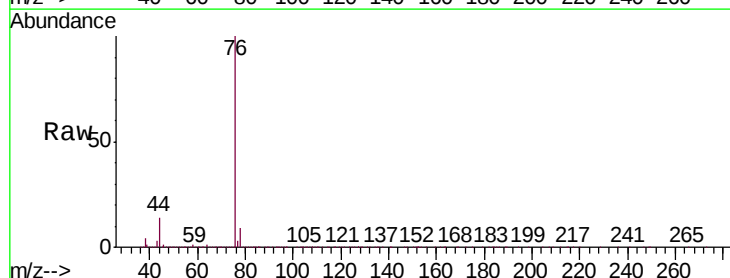
Acq: 15 Jan 2020 10:26

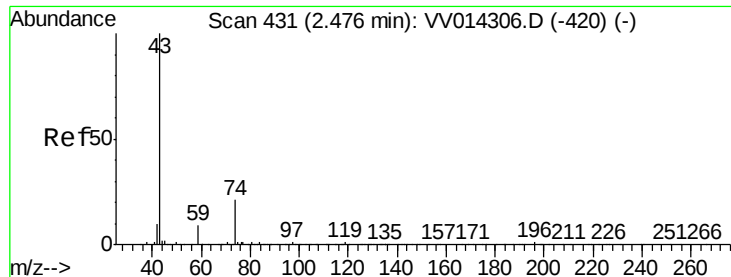
Tgt Ion: 76 Resp: 941964

Ion Ratio Lower Upper

76 100

78 9.0 7.2 10.8

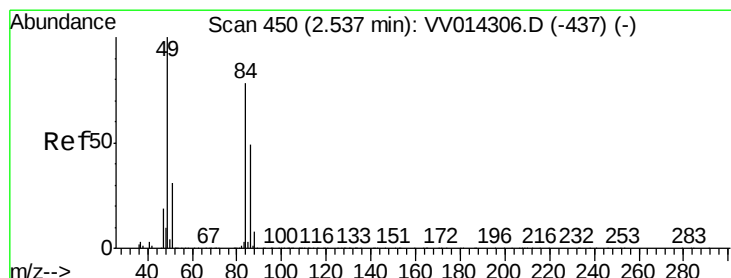
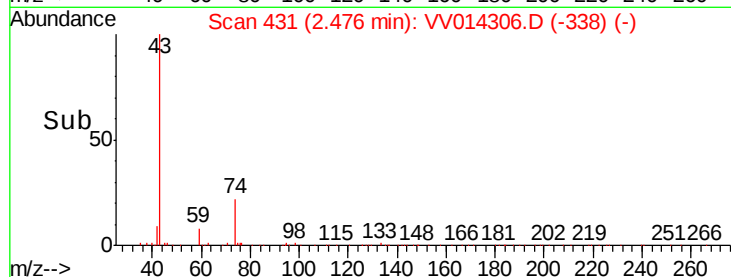
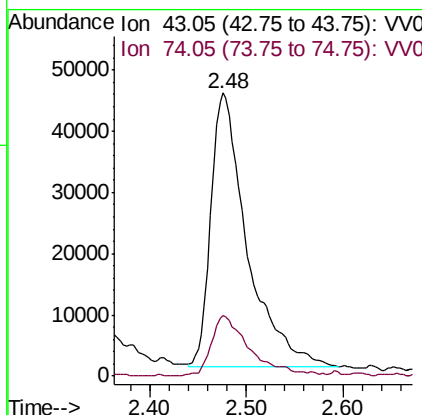
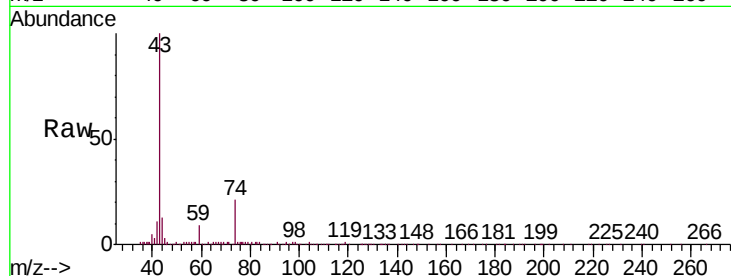




#15  
Methyl Acetate  
Concen: 7.494 ug/L  
RT: 2.48 min Scan# 431  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

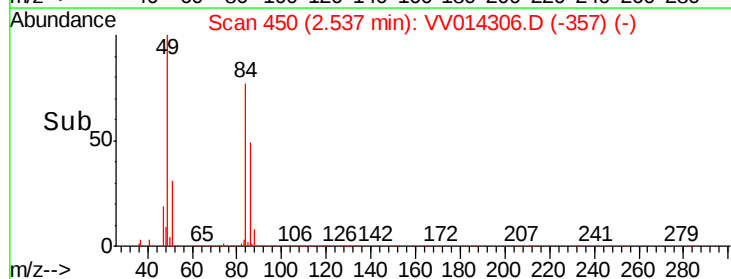
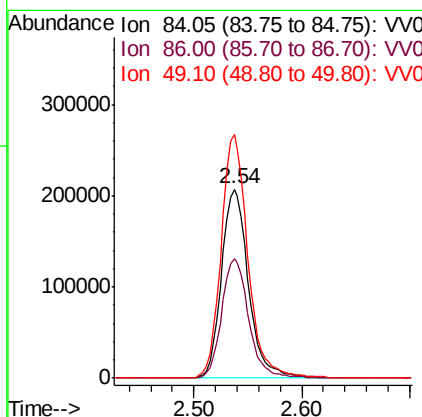
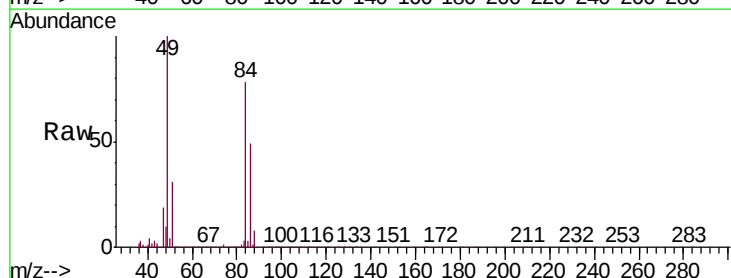
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

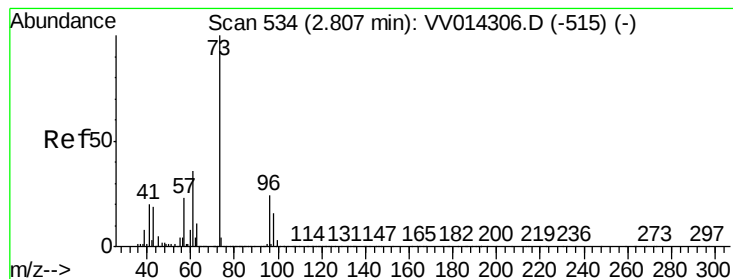
Tgt Ion: 43 Resp: 116339  
Ion Ratio Lower Upper  
43 100  
74 23.3 18.6 28.0



#16  
Methylene chloride  
Concen: 7.329 ug/L  
RT: 2.54 min Scan# 450  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 84 Resp: 361862  
Ion Ratio Lower Upper  
84 100  
86 63.4 44.4 82.4  
49 128.9 90.2 167.6





#17

Methyl tert-butyl Ether

Concen: 5.258 ug/L

RT: 2.81 min Scan# 534

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005323

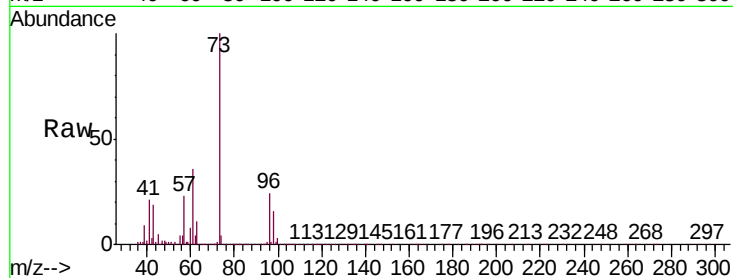
Tgt Ion: 73 Resp: 705372

Ion Ratio Lower Upper

73 100

43 19.2 15.4 23.0

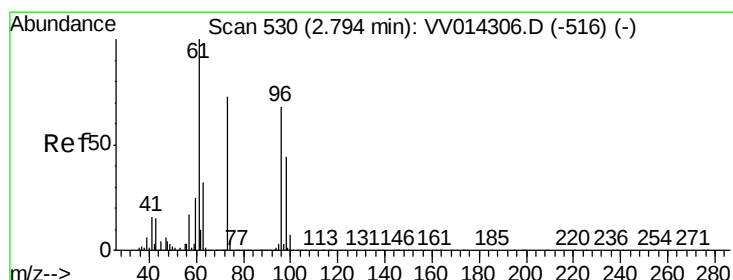
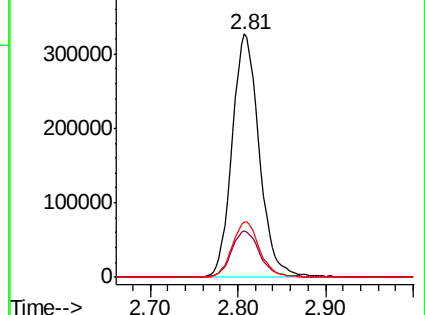
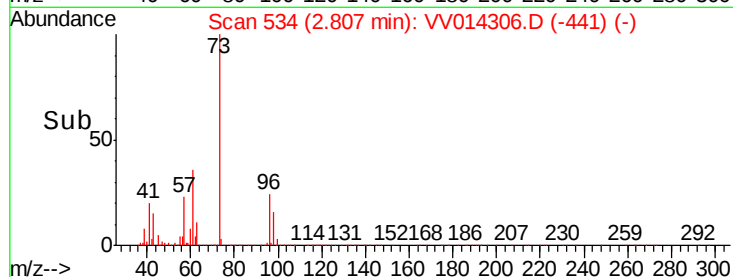
57 22.9 18.3 27.5



Abundance Ion 73.10 (72.80 to 73.80): VV0

Ion 43.05 (42.75 to 43.75): VV0

Ion 57.10 (56.80 to 57.80): VV0



#18

trans-1,2-Dichloroethene

Concen: 5.043 ug/L

RT: 2.79 min Scan# 530

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

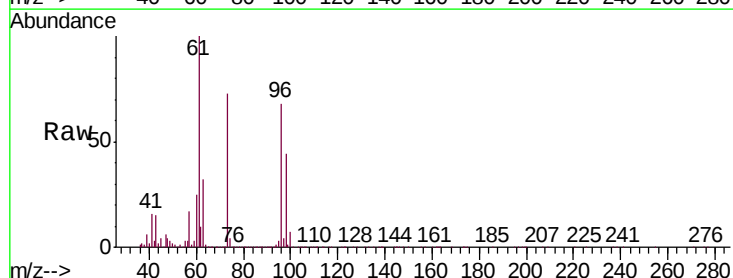
Tgt Ion: 96 Resp: 307576

Ion Ratio Lower Upper

96 100

61 147.0 102.9 191.1

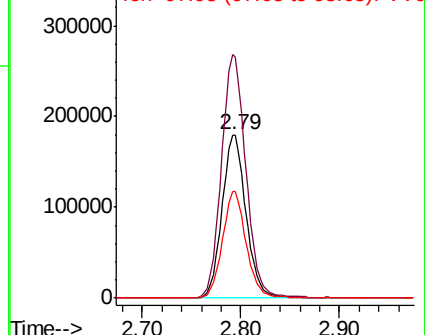
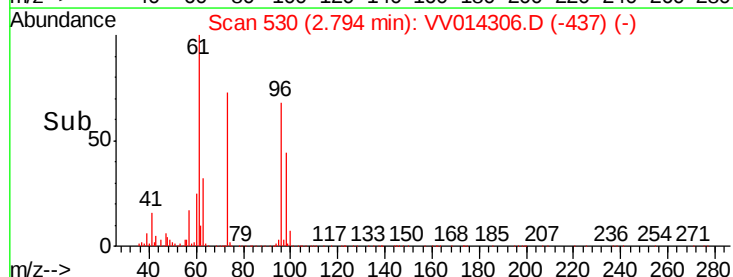
98 65.4 45.8 85.0

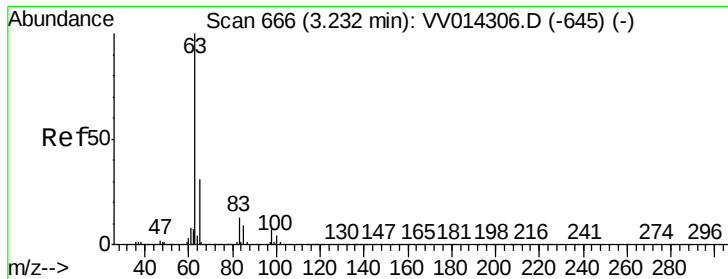


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 97.95 (97.65 to 98.65): VV0

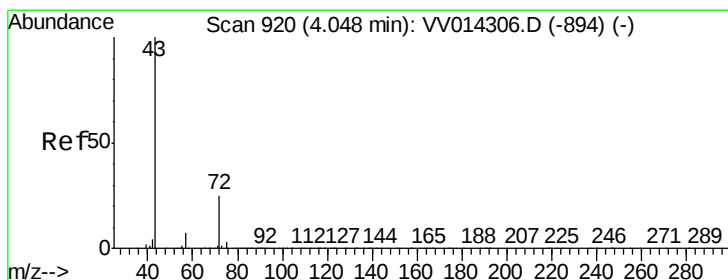
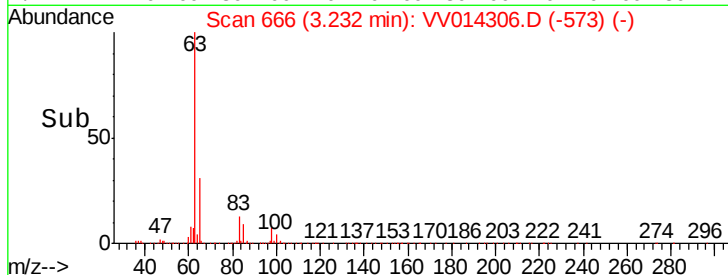
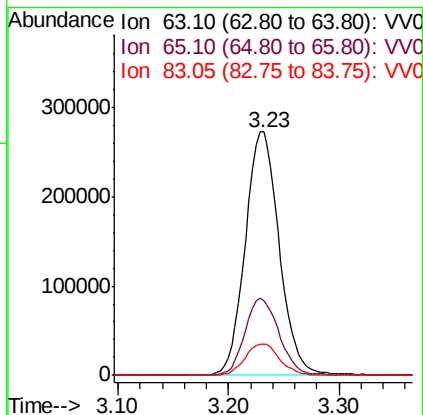
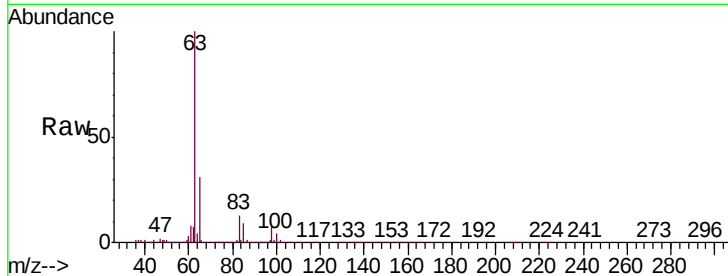




#19  
 1,1-Dichloroethane  
 Concen: 5.282 ug/L  
 RT: 3.23 min Scan# 666  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

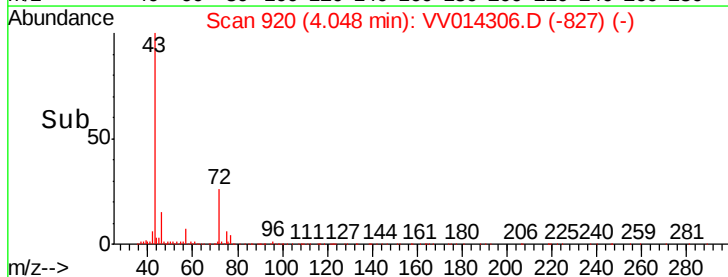
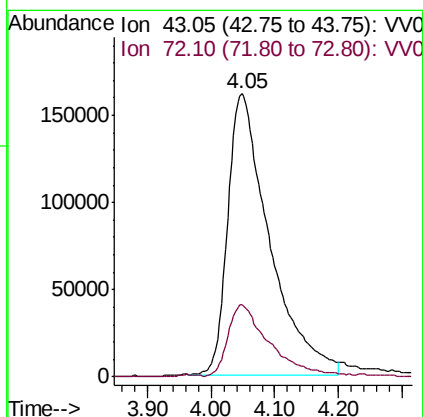
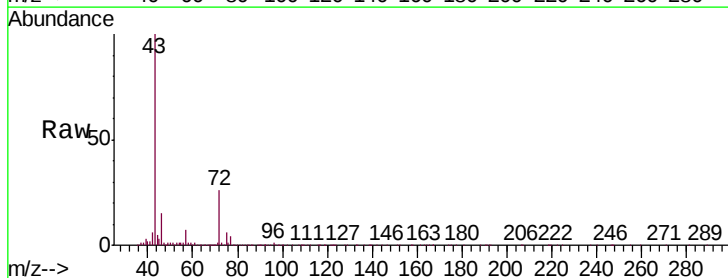
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005323

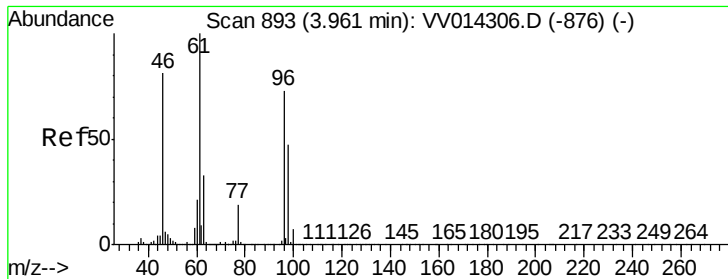
Tgt Ion: 63 Resp: 579368  
 Ion Ratio Lower Upper  
 63 100  
 65 30.8 21.6 40.0  
 83 12.9 9.0 16.8



#21  
 2-Butanone  
 Concen: 55.774 ug/L  
 RT: 4.05 min Scan# 920  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

Tgt Ion: 43 Resp: 733140  
 Ion Ratio Lower Upper  
 43 100  
 72 24.4 12.2 36.6



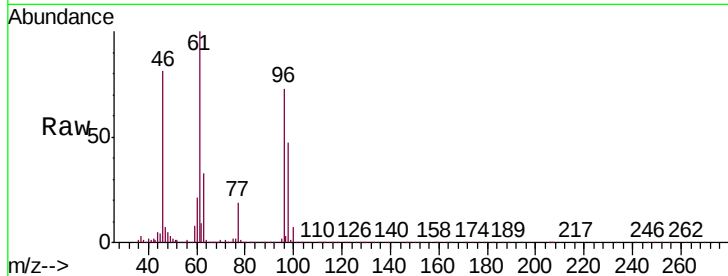


#22

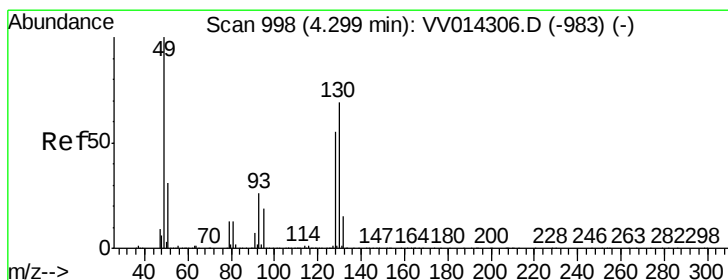
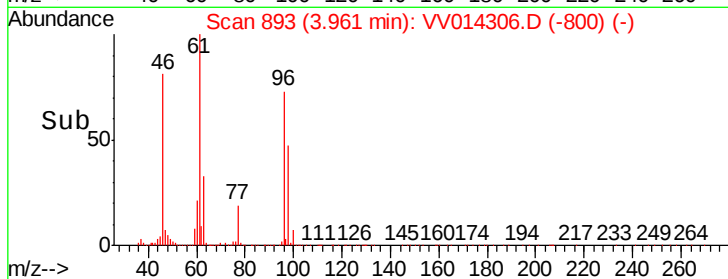
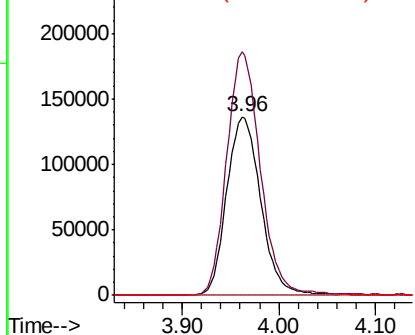
cis-1,2-Dichloroethene  
Concen: 5.122 ug/L  
RT: 3.96 min Scan# 893  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

Tgt Ion: 96 Resp: 333824  
Ion Ratio Lower Upper  
96 100  
61 136.4 95.5 177.3  
68 0.2 0.1 0.3



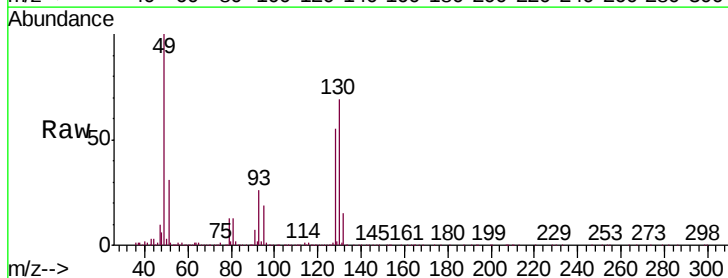
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0  
Ion 68.15 (67.85 to 68.85): VV0



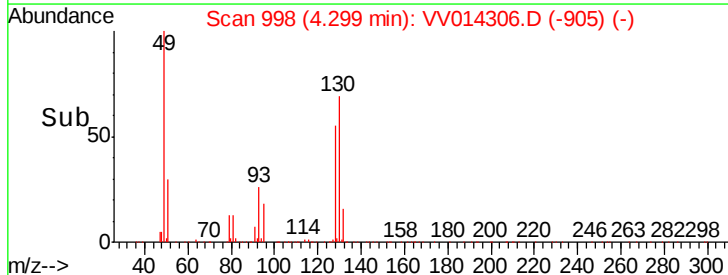
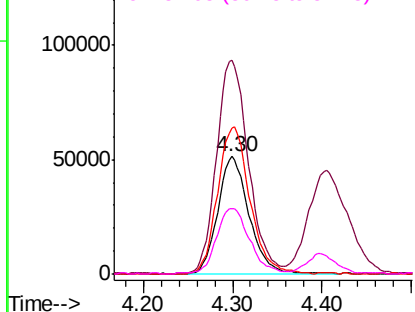
#23

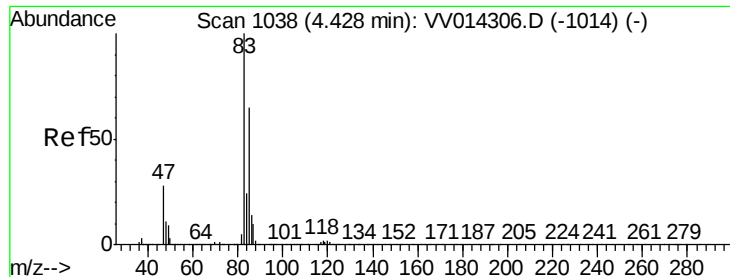
Bromochloromethane  
Concen: 4.531 ug/L  
RT: 4.30 min Scan# 998  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 128 Resp: 125364  
Ion Ratio Lower Upper  
128 100  
49 182.1 127.5 236.7  
130 125.0 87.5 162.5  
51 56.2 45.0 67.4



Abundance Ion 127.90 (127.60 to 128.60): V  
Ion 49.10 (48.80 to 49.80): VV0  
Ion 129.95 (129.65 to 130.65): V  
Ion 51.05 (50.75 to 51.75): VV0

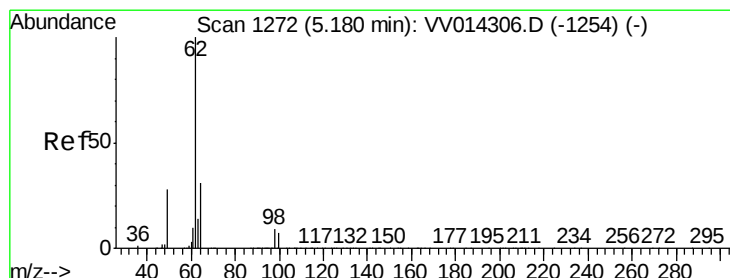
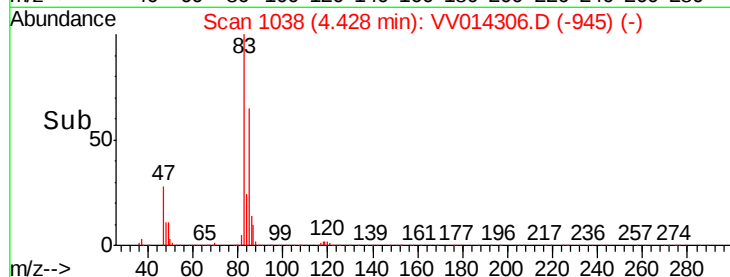
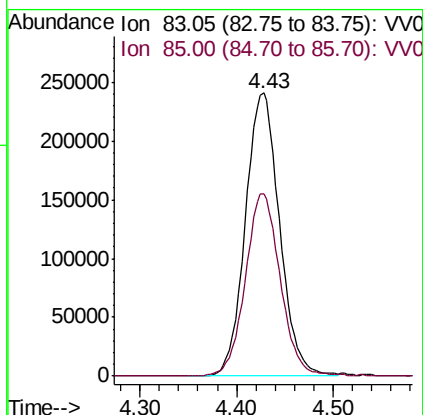
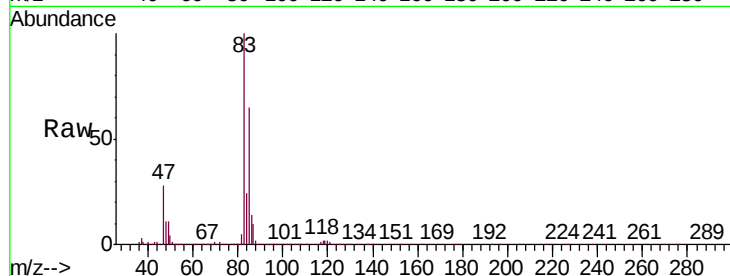




#25  
Chloroform  
Concen: 4.467 ug/L  
RT: 4.43 min Scan# 1038  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

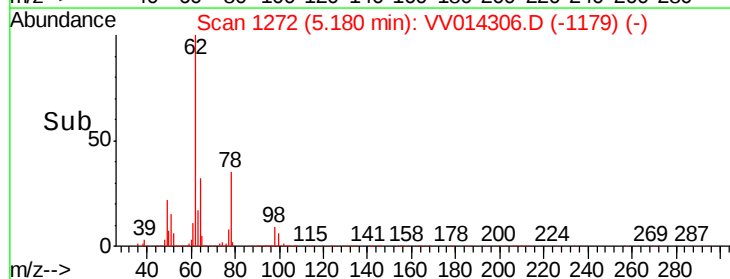
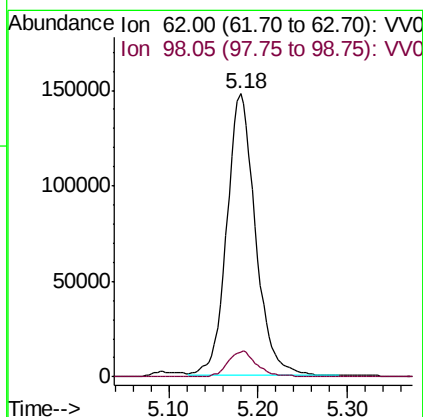
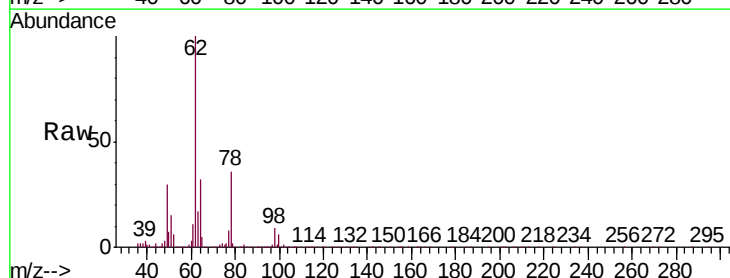
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

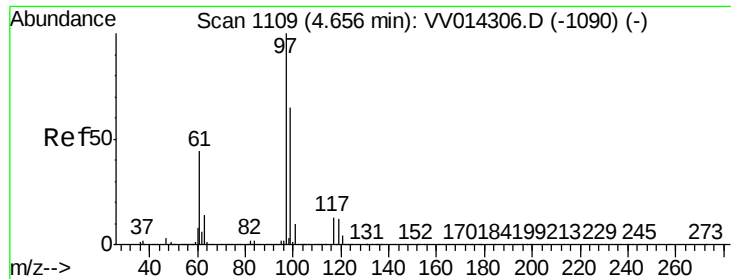
Tgt Ion: 83 Resp: 591103  
Ion Ratio Lower Upper  
83 100  
85 64.6 45.2 84.0



#27  
1,2-Dichloroethane  
Concen: 4.483 ug/L  
RT: 5.18 min Scan# 1272  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 62 Resp: 329152  
Ion Ratio Lower Upper  
62 100  
98 8.9 7.1 10.7

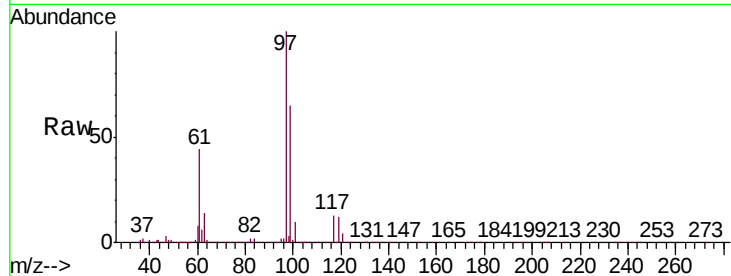




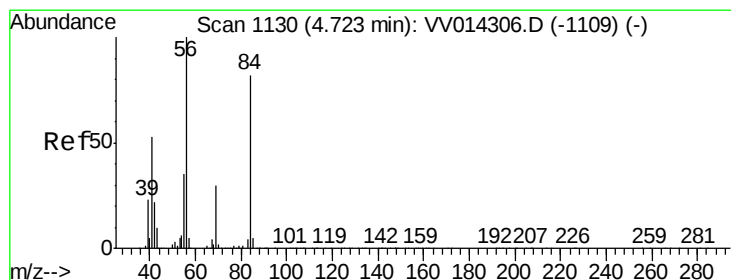
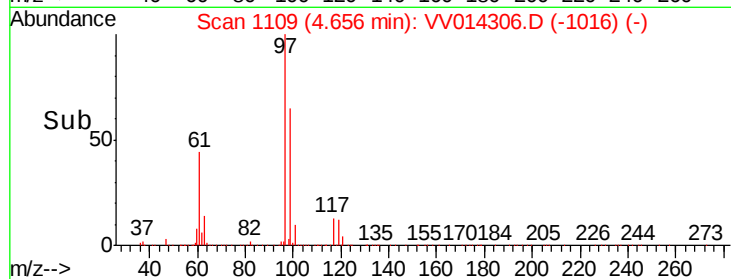
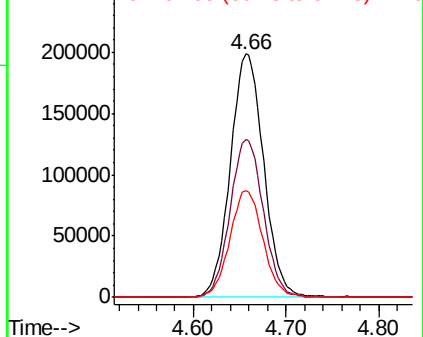
#29  
1,1,1-Trichloroethane  
Concen: 4.854 ug/L  
RT: 4.66 min Scan# 1109  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

Tgt Ion: 97 Resp: 494105  
Ion Ratio Lower Upper  
97 100  
99 64.6 51.7 77.5  
61 42.8 34.2 51.4

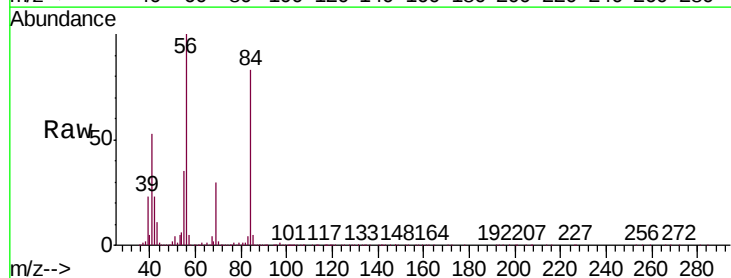


Abundance Ion 96.95 (96.65 to 97.65): VV0  
Ion 99.05 (98.75 to 99.75): VV0  
Ion 61.05 (60.75 to 61.75): VV0

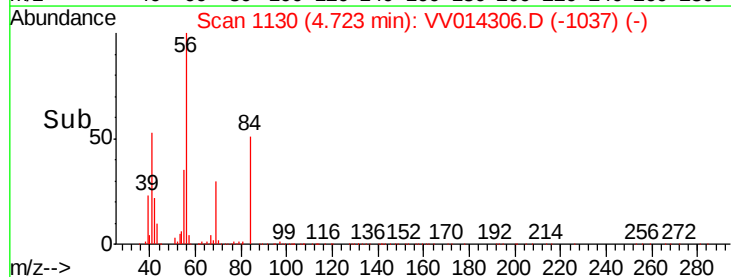
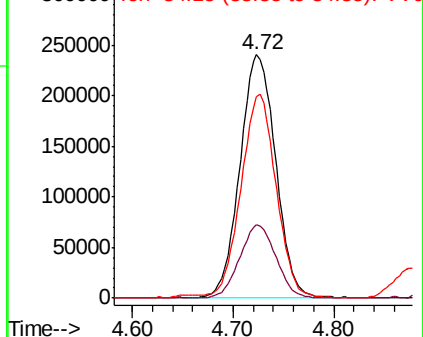


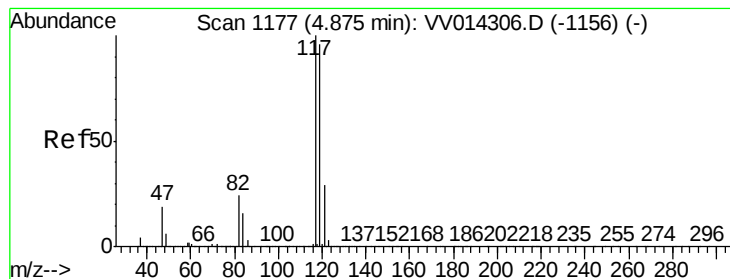
#30  
Cyclohexane  
Concen: 6.285 ug/L  
RT: 4.72 min Scan# 1130  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 56 Resp: 588170  
Ion Ratio Lower Upper  
56 100  
69 30.5 24.4 36.6  
84 82.3 65.8 98.8



Abundance Ion 56.10 (55.80 to 56.80): VV0  
Ion 69.15 (68.85 to 69.85): VV0  
Ion 84.15 (83.85 to 84.85): VV0





#31

Carbon tetrachloride

Concen: 4.649 ug/L

RT: 4.87 min Scan# 1177

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

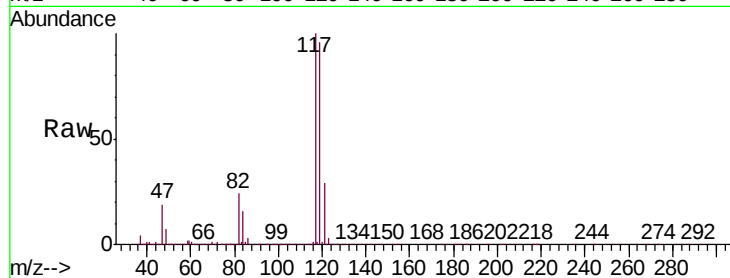
VSTD005323

Tgt Ion:117 Resp: 419925

Ion Ratio Lower Upper

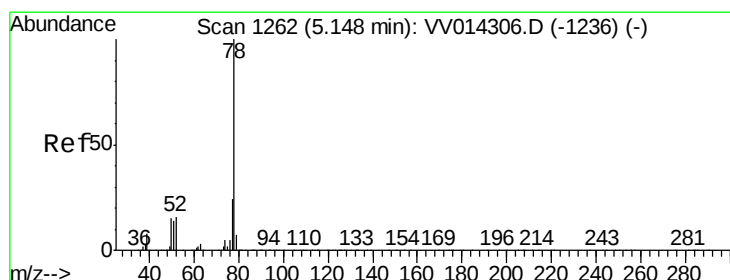
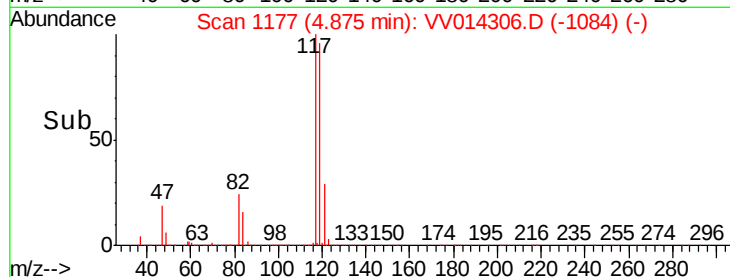
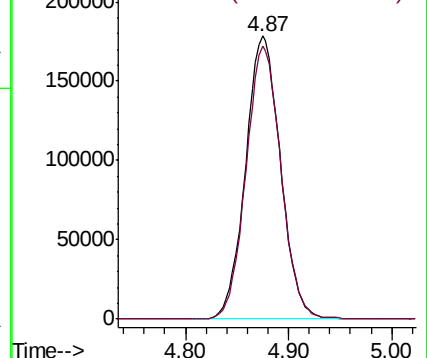
117 100

119 96.4 77.1 115.7



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 5.546 ug/L

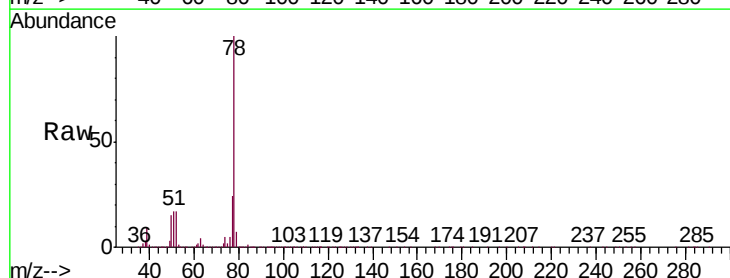
RT: 5.15 min Scan# 1262

Delta R.T. 0.00 min

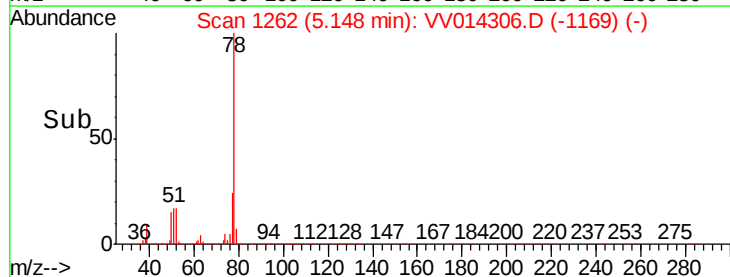
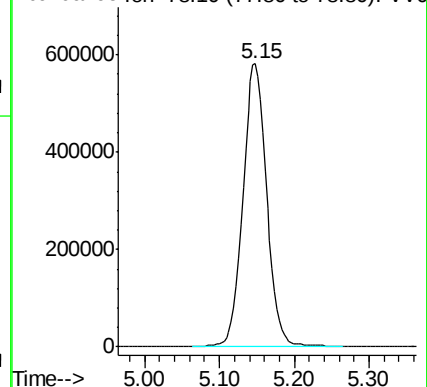
Lab File: VV014306.D

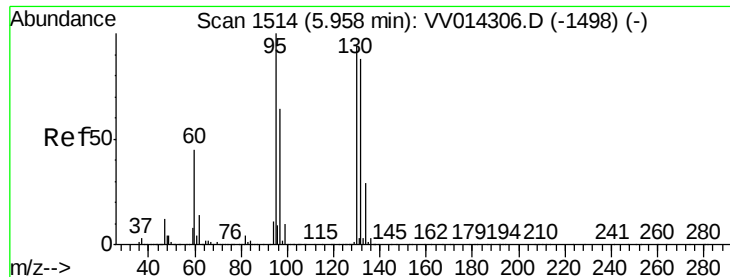
Acq: 15 Jan 2020 10:26

Tgt Ion: 78 Resp: 1280195



Abundance Ion 78.10 (77.80 to 78.80): VV0





#34

Trichloroethene

Concen: 5.061 ug/L

RT: 5.96 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005323

Tgt Ion: 95 Resp: 327240

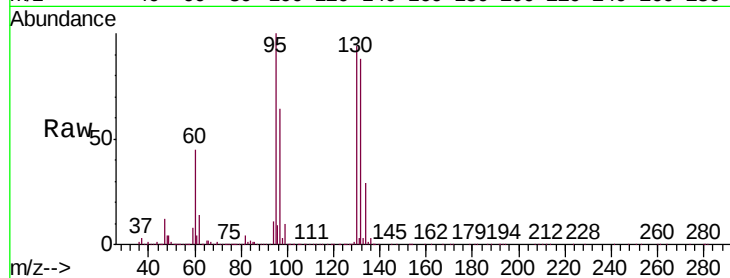
Ion Ratio Lower Upper

95 100

97 63.6 44.5 82.7

132 88.2 61.7 114.7

130 94.3 66.0 122.6

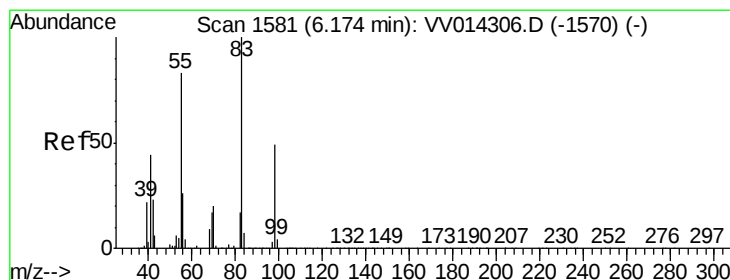
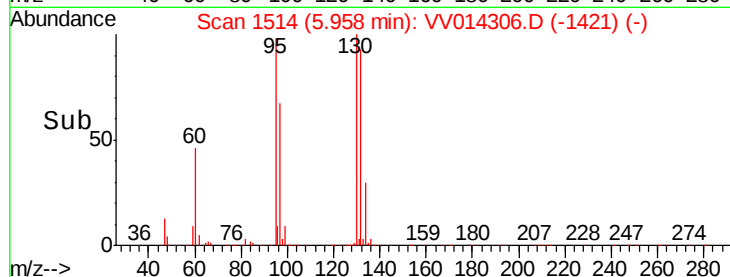
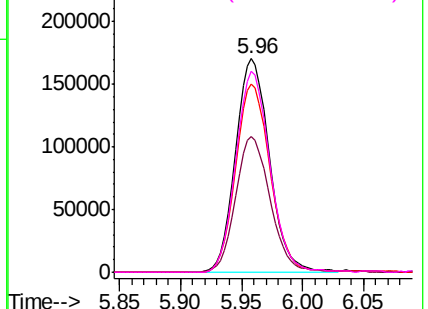


Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0



#35

Methylcyclohexane

Concen: 5.588 ug/L

RT: 6.17 min Scan# 1581

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

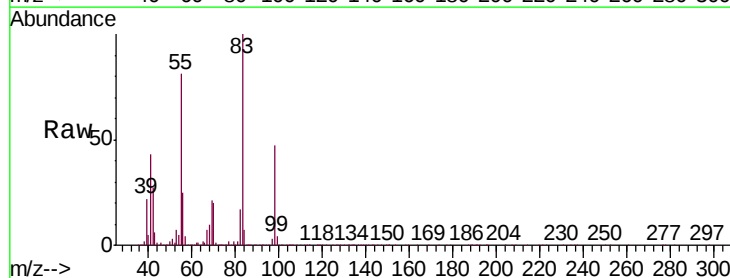
Tgt Ion: 83 Resp: 580197

Ion Ratio Lower Upper

83 100

55 81.9 65.5 98.3

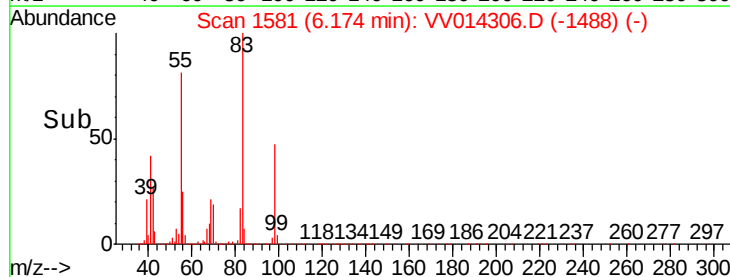
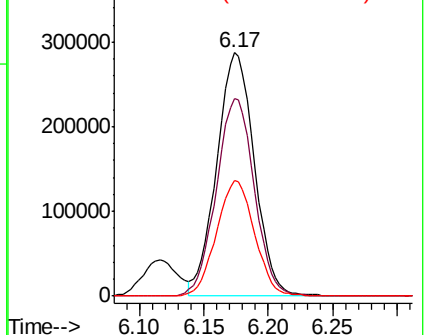
98 47.9 38.3 57.5

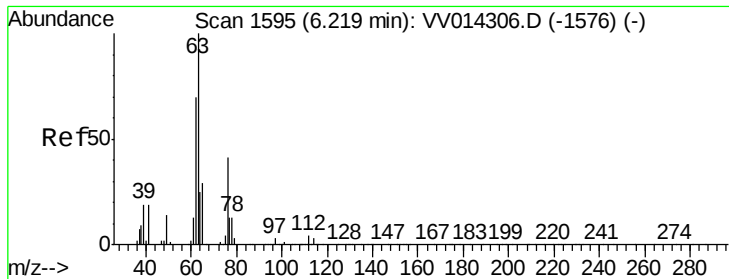


Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0





#37

1,2-Dichloropropane

Concen: 5.784 ug/L

RT: 6.22 min Scan# 1595

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

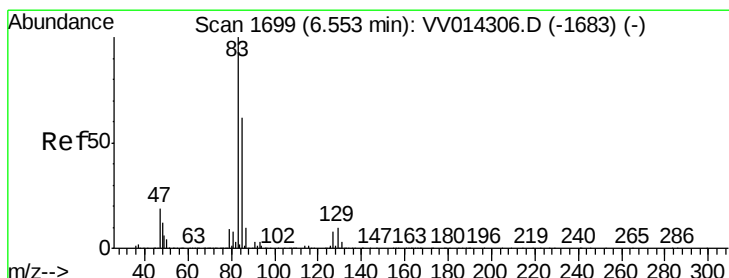
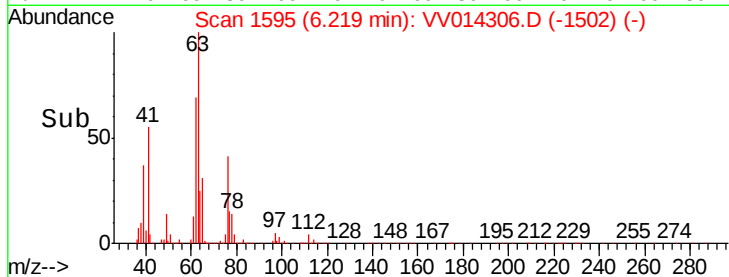
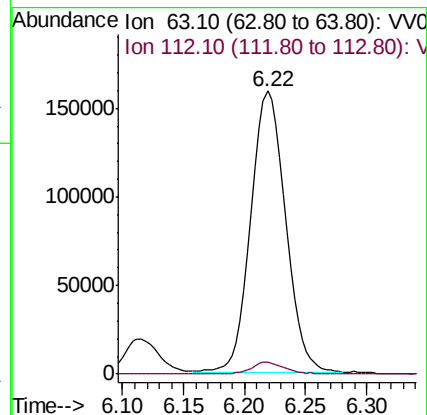
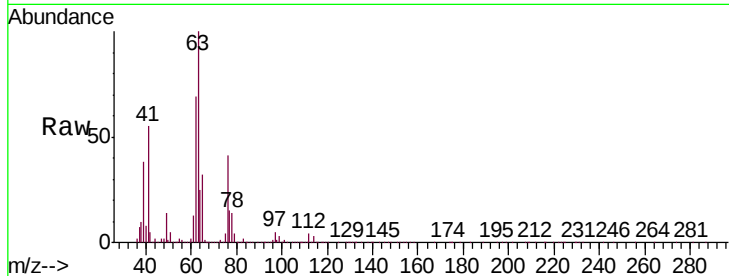
VSTD005323

Tgt Ion: 63 Resp: 312911

Ion Ratio Lower Upper

63 100

112 4.1 3.3 4.9



#38

Bromodichloromethane

Concen: 5.422 ug/L

RT: 6.55 min Scan# 1699

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

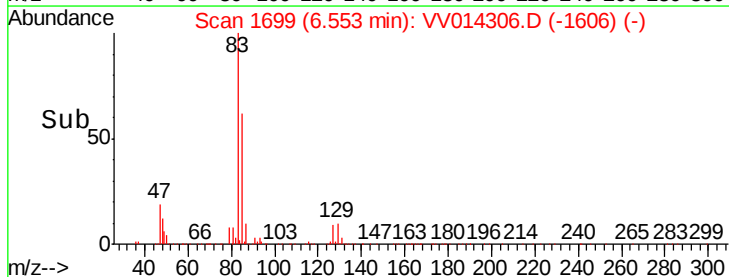
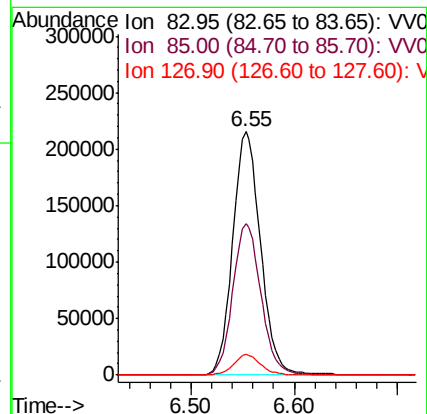
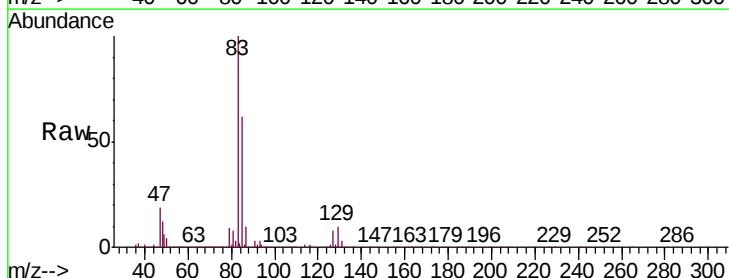
Tgt Ion: 83 Resp: 406247

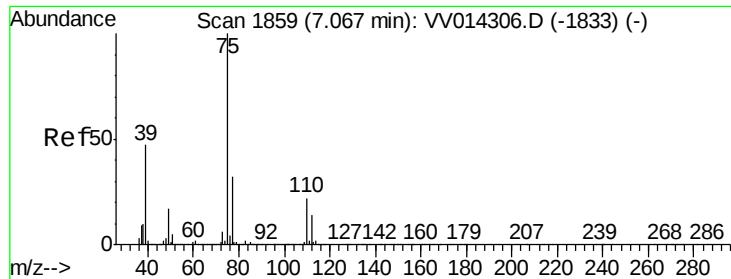
Ion Ratio Lower Upper

83 100

85 62.2 43.5 80.9

127 8.5 6.8 10.2

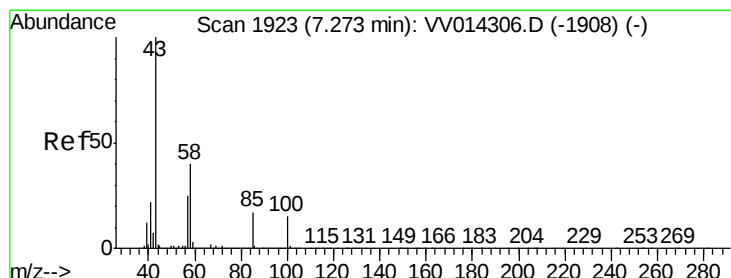
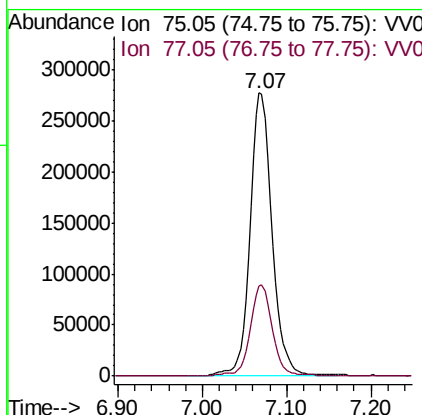
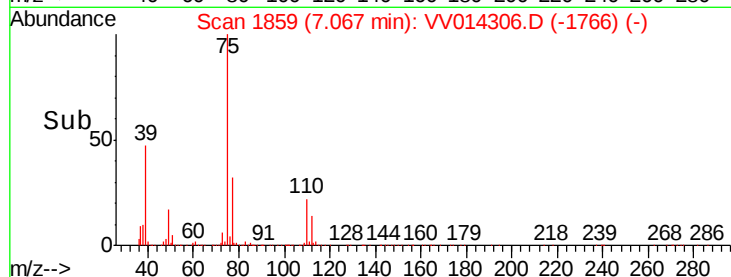
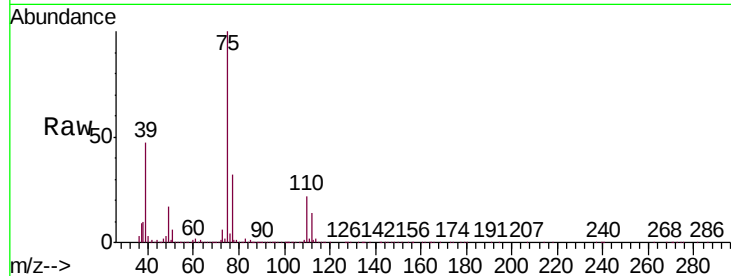




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.906 ug/L  
 RT: 7.07 min Scan# 1859  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

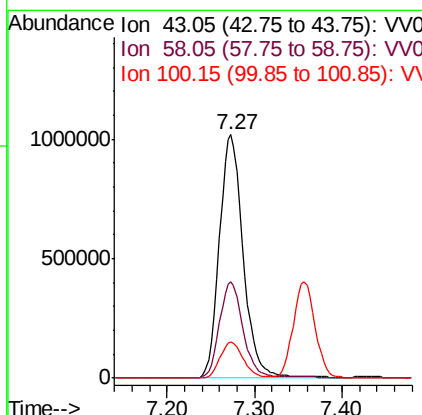
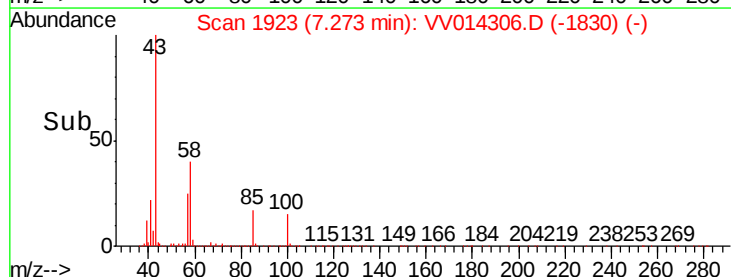
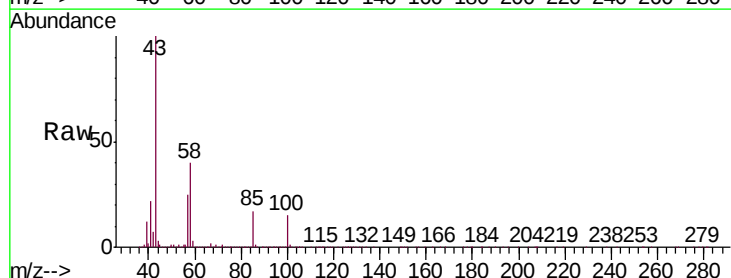
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005323

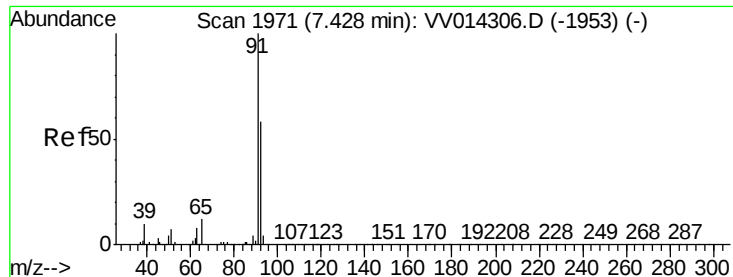
Tgt Ion: 75 Resp: 502317  
 Ion Ratio Lower Upper  
 75 100  
 77 31.7 22.2 41.2



#40  
 4-Methyl-2-pentanone  
 Concen: 61.866 ug/L  
 RT: 7.27 min Scan# 1923  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

Tgt Ion: 43 Resp: 1922941  
 Ion Ratio Lower Upper  
 43 100  
 58 39.1 31.3 46.9  
 100 14.6 11.7 17.5





#42

Toluene

Concen: 5.326 ug/L

RT: 7.43 min Scan# 1971

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

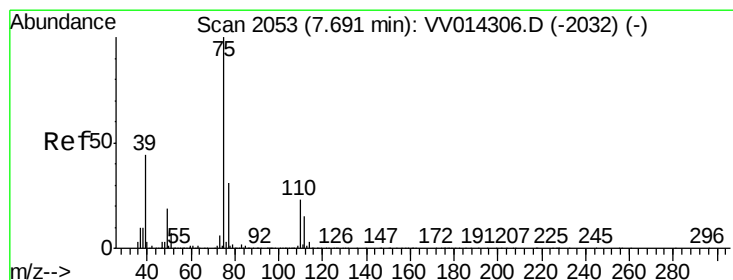
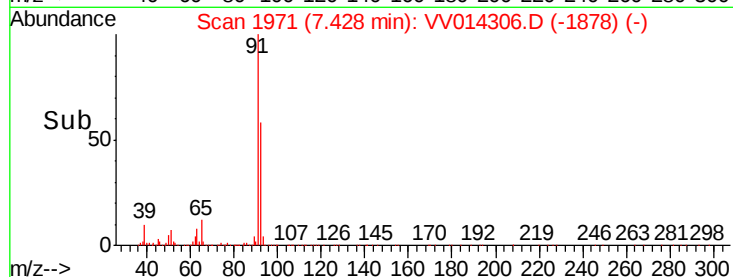
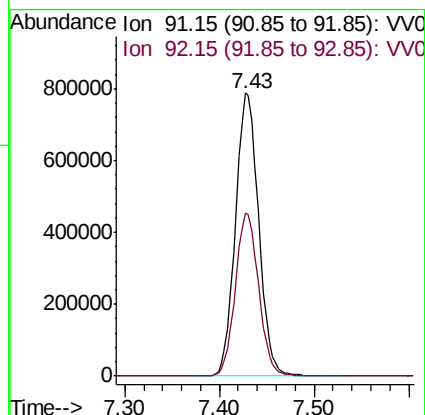
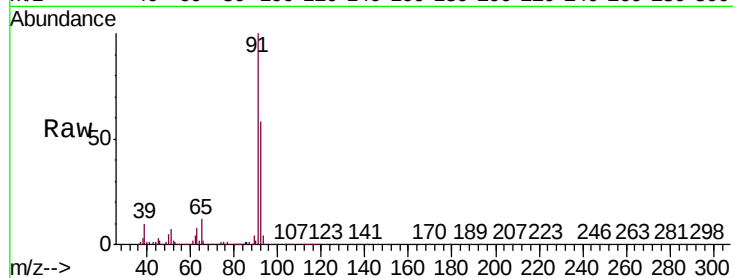
VSTD005323

Tgt Ion: 91 Resp: 1345329

Ion Ratio Lower Upper

91 100

92 57.8 40.5 75.1



#44

trans-1,3-Dichloropropene

Concen: 5.639 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV014306.D

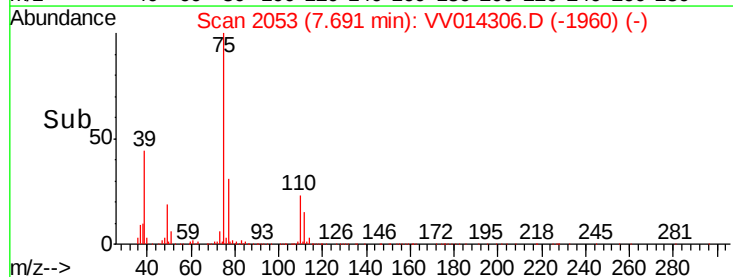
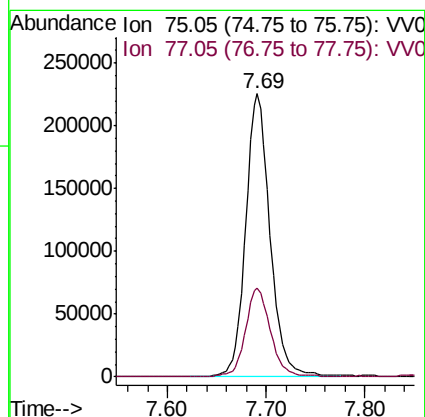
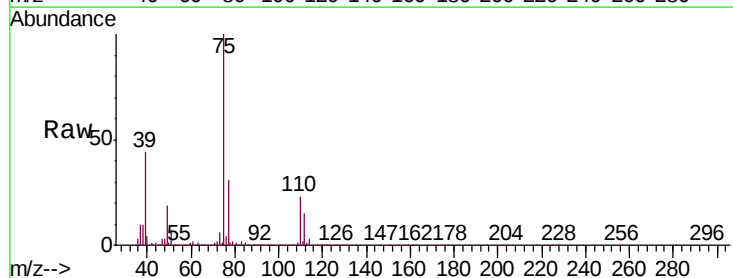
Acq: 15 Jan 2020 10:26

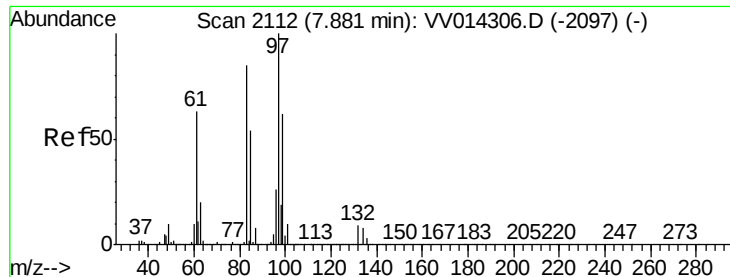
Tgt Ion: 75 Resp: 382766

Ion Ratio Lower Upper

75 100

77 31.3 21.9 40.7

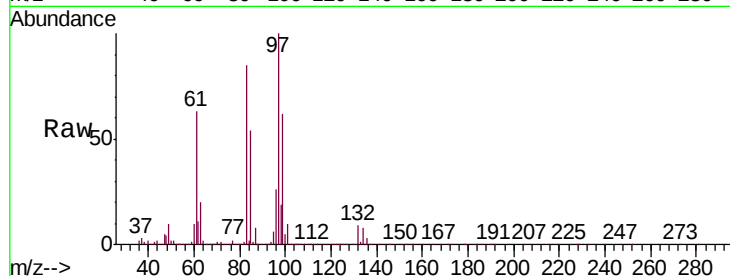




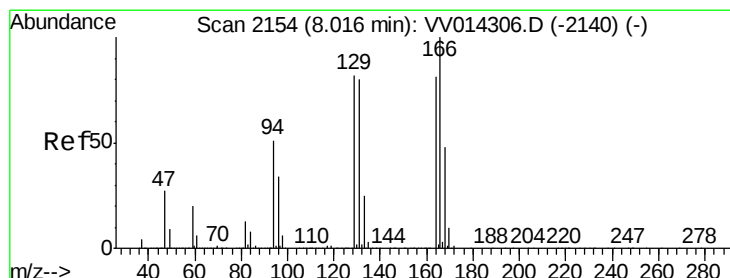
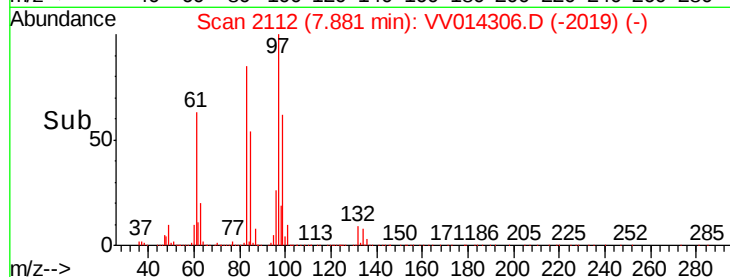
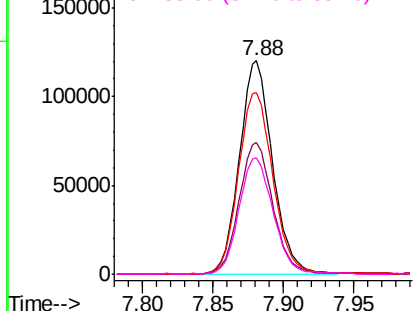
#45  
 1,1,2-Trichloroethane  
 Concen: 4.972 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005323

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 197345 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 61.7  | 43.2  | 80.2   |
| 83       | 85.3  | 59.7  | 110.9  |
| 85       | 54.3  | 38.0  | 70.6   |

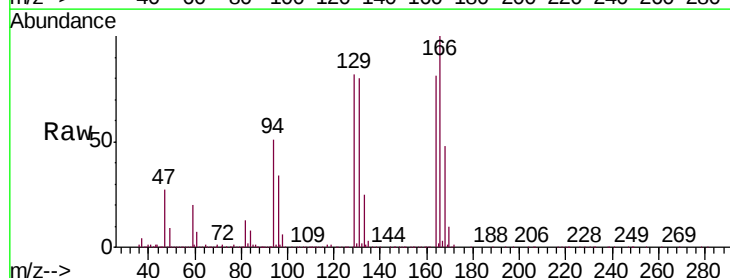


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 82.95 (82.65 to 83.65): VV0  
 Ion 85.00 (84.70 to 85.70): VV0

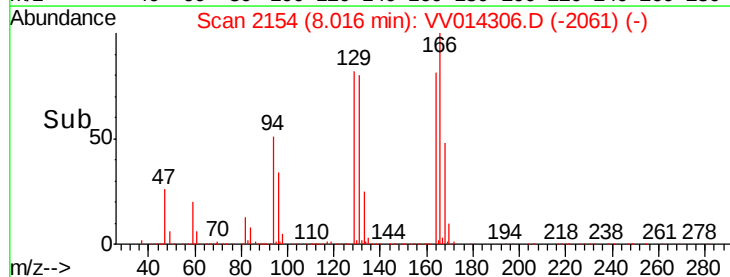
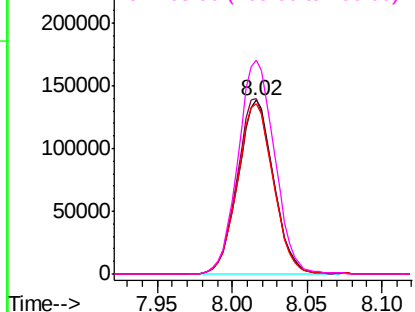


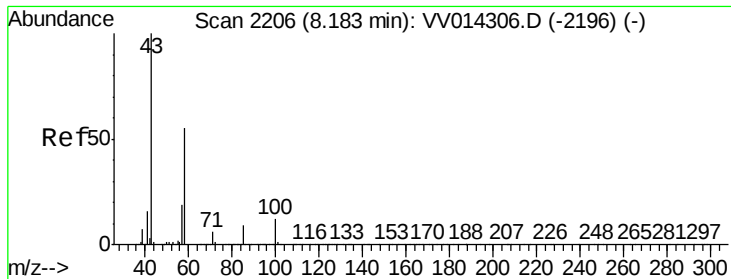
#47  
 Tetrachloroethene  
 Concen: 4.266 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 228558 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 100.8 | 70.6  | 131.0  |
| 131      | 98.1  | 68.7  | 127.5  |
| 166      | 122.9 | 86.0  | 159.8  |



Abundance Ion 163.90 (163.60 to 164.60): V  
 Ion 128.95 (128.65 to 129.65): V  
 Ion 130.95 (130.65 to 131.65): V  
 Ion 165.90 (165.60 to 166.60): V

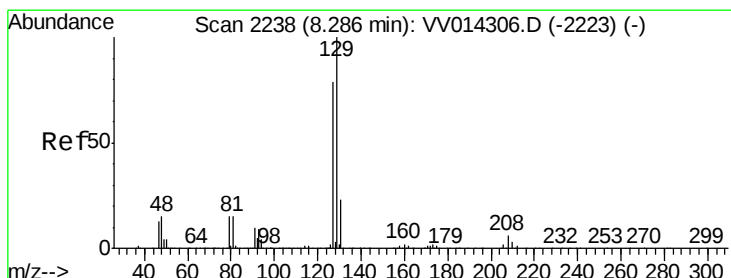
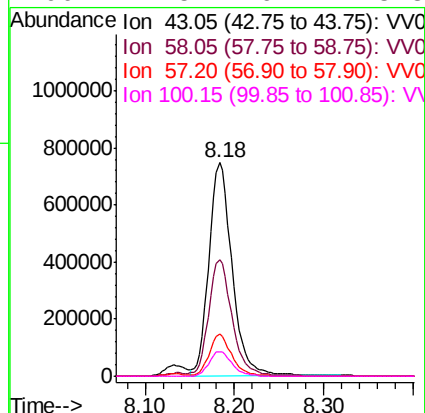
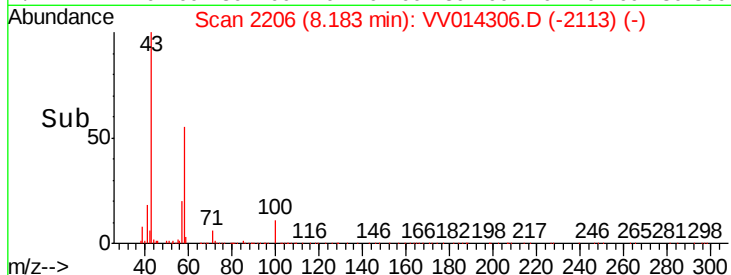
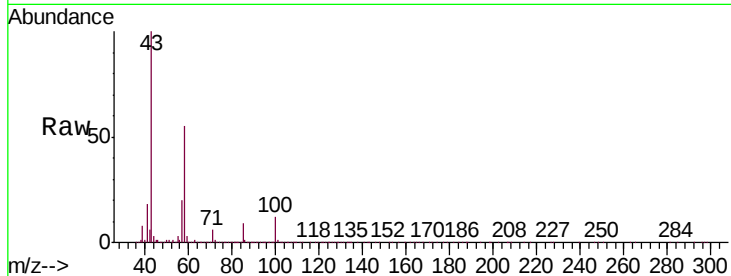




#48  
2-Hexanone  
Concen: 61.735 ug/L  
RT: 8.18 min Scan# 2206  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

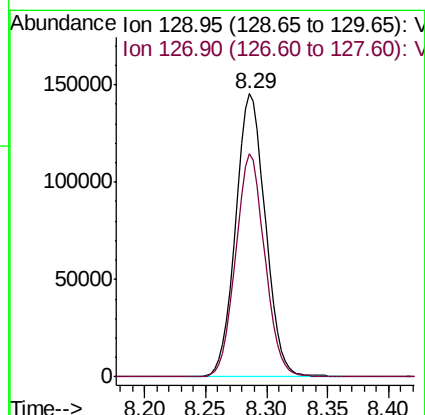
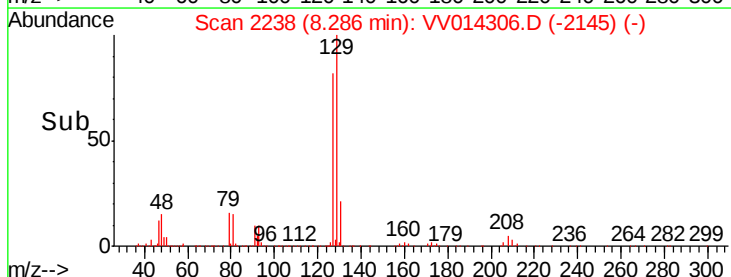
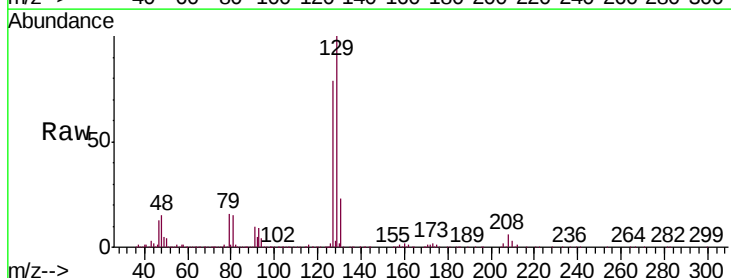
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

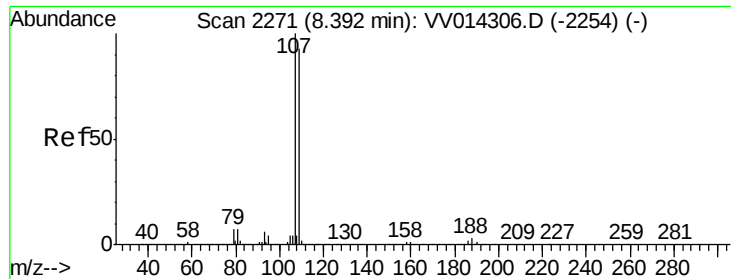
Tgt Ion: 43 Resp: 1349953  
Ion Ratio Lower Upper  
43 100  
58 54.9 43.9 65.9  
57 18.6 14.9 22.3  
100 11.5 9.2 13.8



#49  
Dibromochloromethane  
Concen: 5.076 ug/L  
RT: 8.29 min Scan# 2238  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 129 Resp: 246595  
Ion Ratio Lower Upper  
129 100  
127 79.1 55.4 102.8

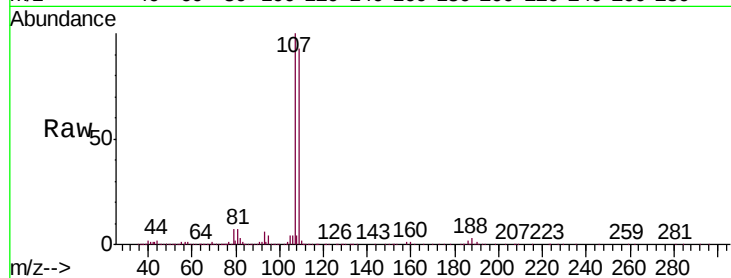




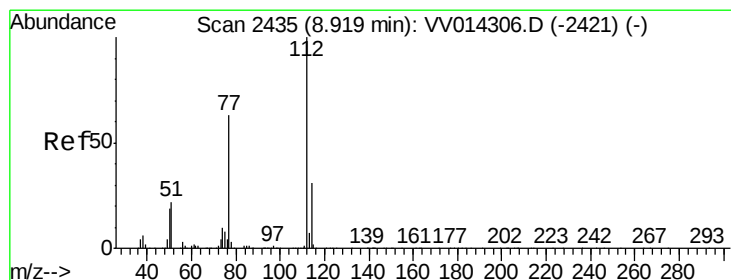
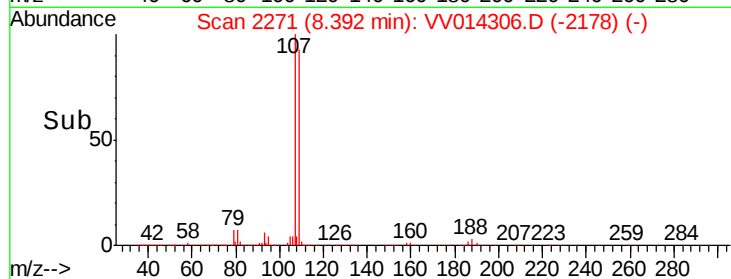
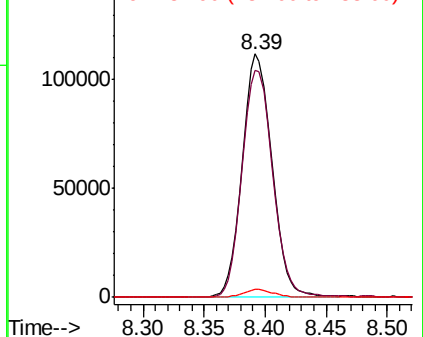
#50  
1,2-Dibromoethane  
Concen: 5.067 ug/L  
RT: 8.39 min Scan# 2271  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 93.2  | 65.2  | 121.2 |
| 188     | 3.2   | 2.6   | 3.8   |

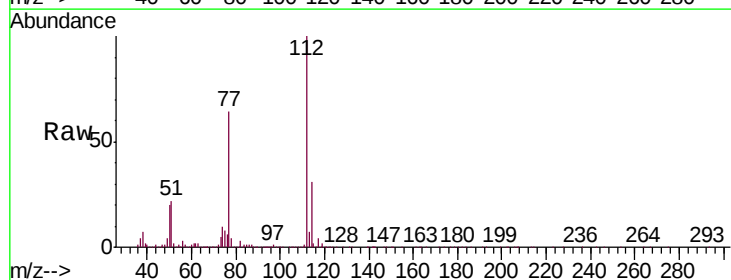


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

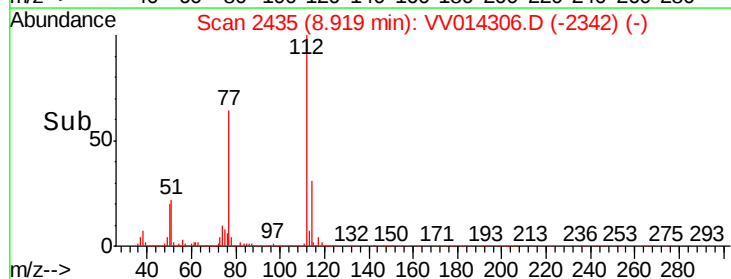
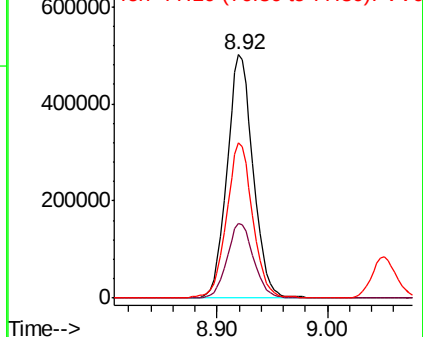


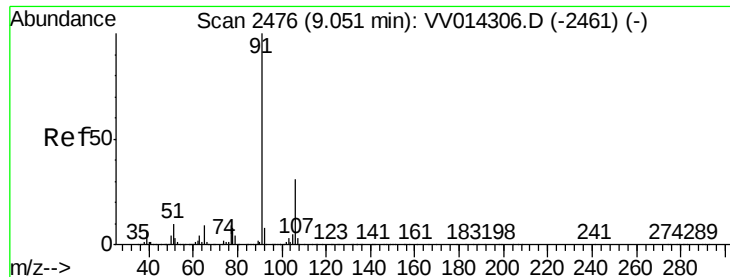
#51  
Chlorobenzene  
Concen: 4.900 ug/L  
RT: 8.92 min Scan# 2435  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 30.7  | 21.5  | 39.9  |
| 77      | 63.7  | 51.0  | 76.4  |



Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V





#52

Ethylbenzene

Concen: 5.278 ug/L

RT: 9.05 min Scan# 2476

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

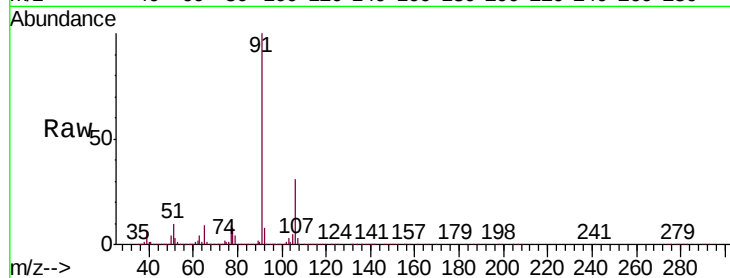
VSTD005323

Tgt Ion: 91 Resp: 1524472

Ion Ratio Lower Upper

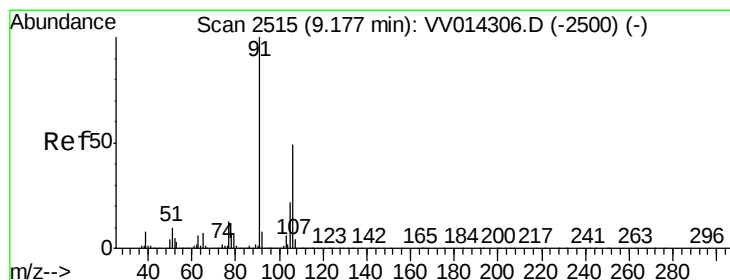
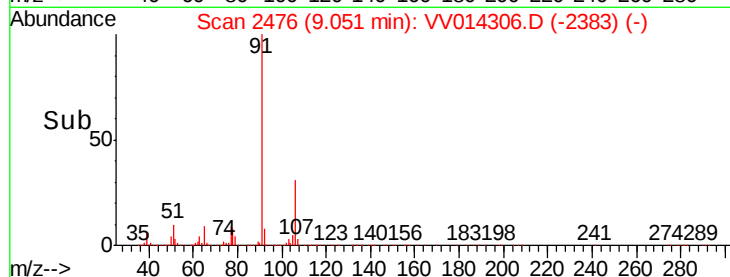
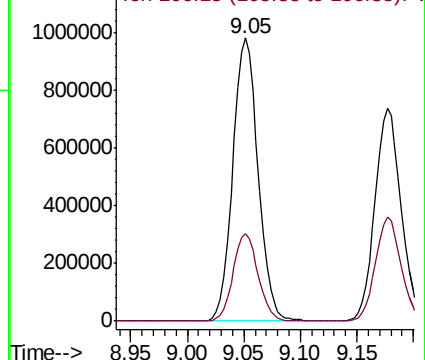
91 100

106 30.7 21.5 39.9



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 106.15 (105.85 to 106.85): V



#53

m,p-xylene

Concen: 5.209 ug/L

RT: 9.18 min Scan# 2515

Delta R.T. 0.00 min

Lab File: VV014306.D

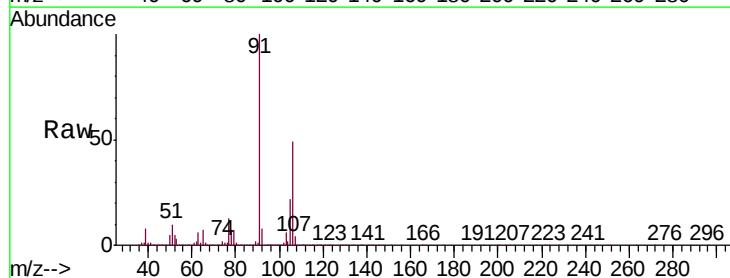
Acq: 15 Jan 2020 10:26

Tgt Ion: 106 Resp: 565286

Ion Ratio Lower Upper

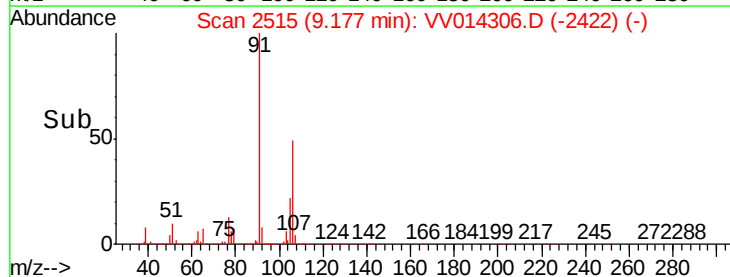
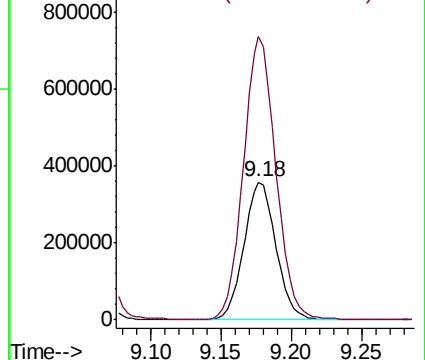
106 100

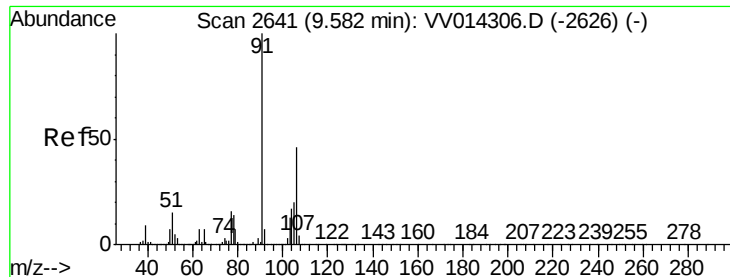
91 205.1 143.6 266.6



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0





#54

o-xylene

Concen: 5.305 ug/L

RT: 9.58 min Scan# 2641

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

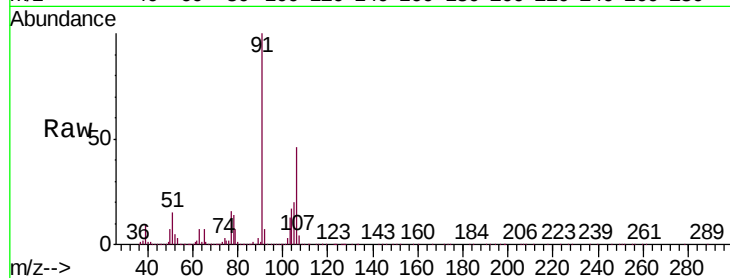
VSTD005323

Tgt Ion:106 Resp: 551272

Ion Ratio Lower Upper

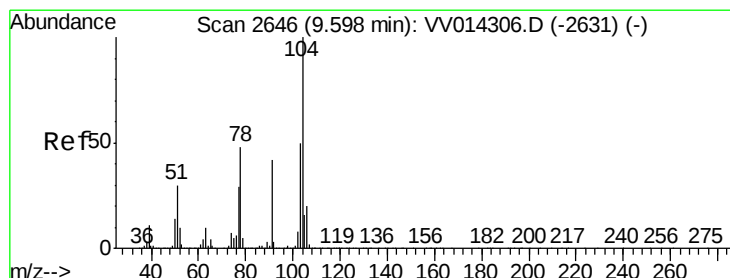
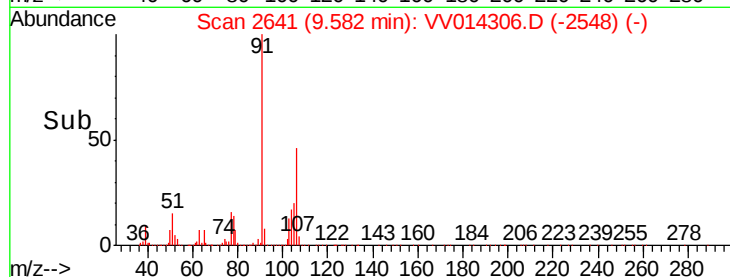
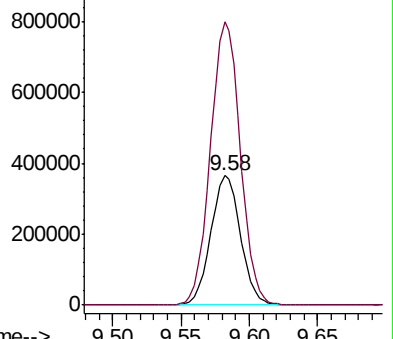
106 100

91 218.6 153.0 284.2



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 5.247 ug/L

RT: 9.60 min Scan# 2646

Delta R.T. 0.00 min

Lab File: VV014306.D

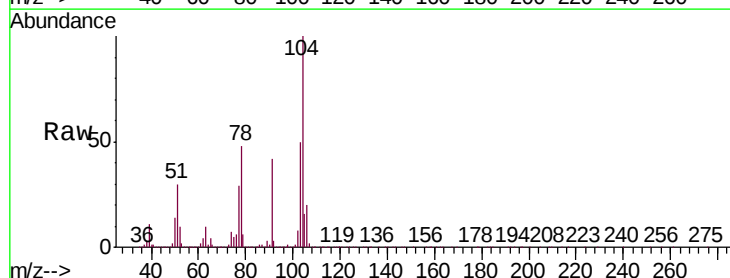
Acq: 15 Jan 2020 10:26

Tgt Ion:104 Resp: 911759

Ion Ratio Lower Upper

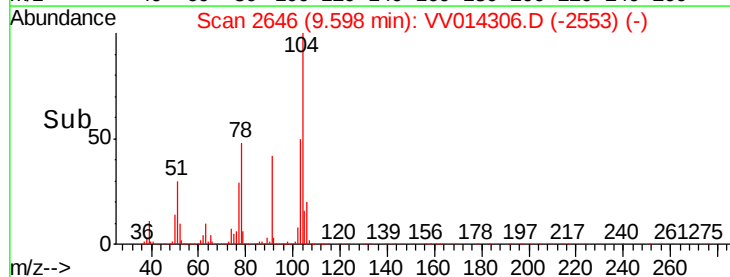
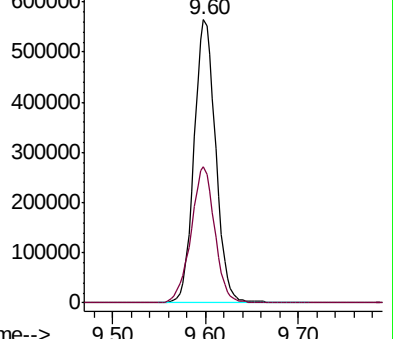
104 100

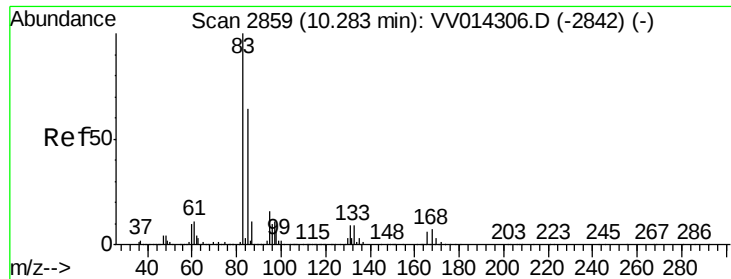
78 48.3 33.8 62.8



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0

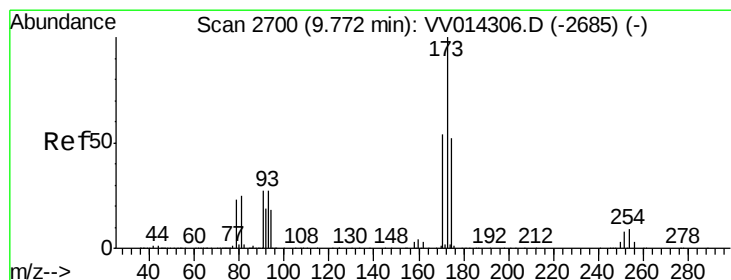
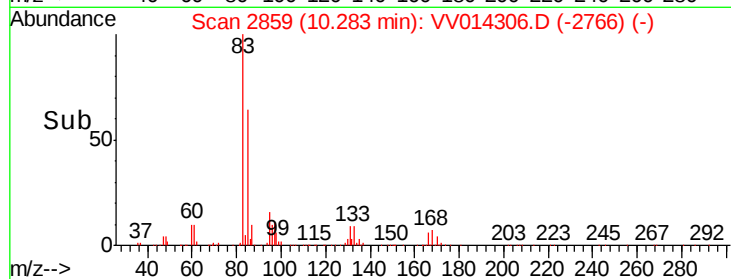
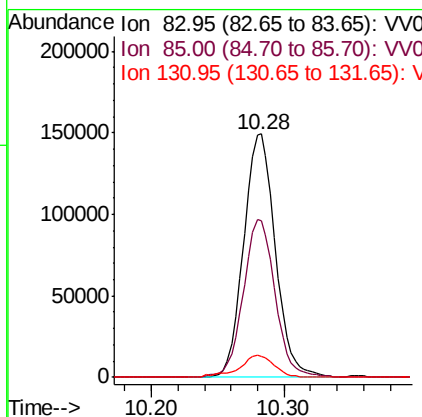
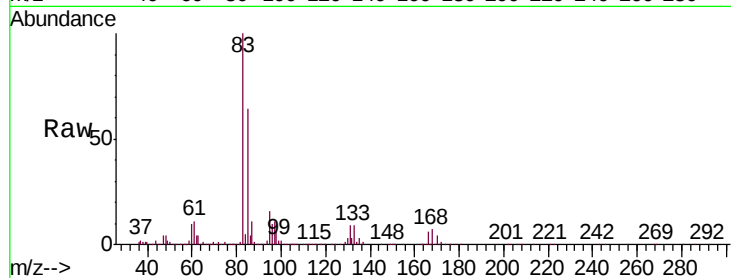




#57  
1,1,2,2-Tetrachloroethane  
Concen: 5.623 ug/L  
RT: 10.28 min Scan# 2859  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

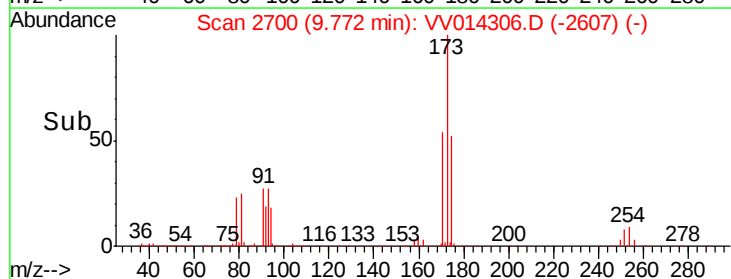
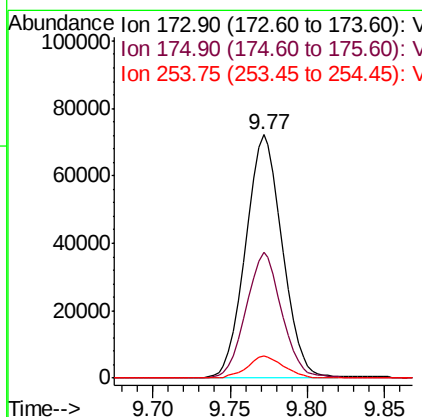
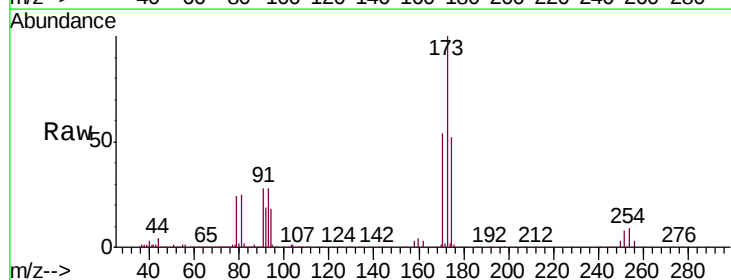
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

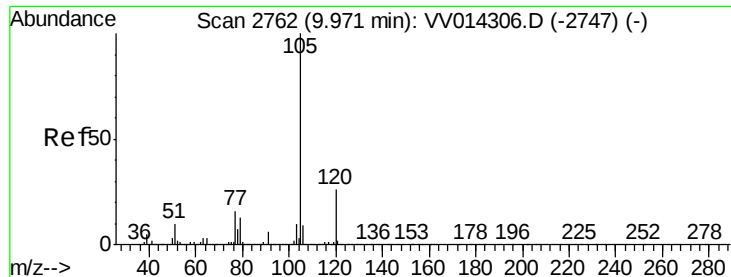
Tgt Ion: 83 Resp: 247003  
Ion Ratio Lower Upper  
83 100  
85 64.5 45.1 83.9  
131 8.8 7.0 10.6



#59  
Bromoform  
Concen: 5.016 ug/L  
RT: 9.77 min Scan# 2700  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Tgt Ion: 173 Resp: 119351  
Ion Ratio Lower Upper  
173 100  
175 50.5 40.4 60.6  
254 9.0 7.2 10.8





#60

Isopropylbenzene

Concen: 5.702 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005323

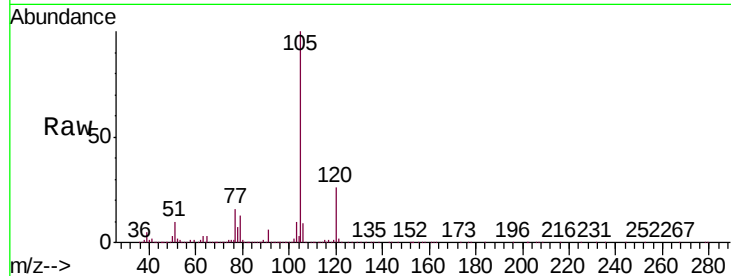
Tgt Ion:105 Resp: 1473122

Ion Ratio Lower Upper

105 100

120 25.7 20.6 30.8

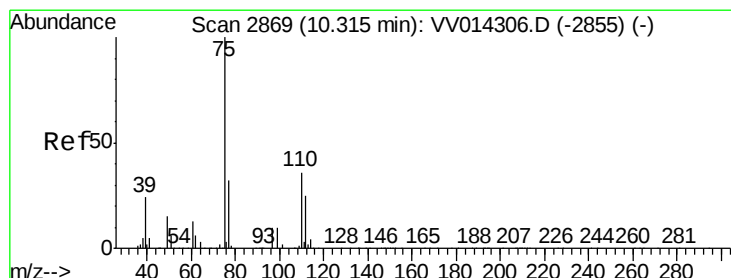
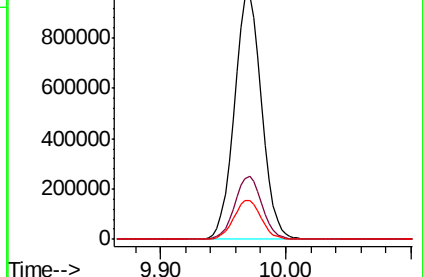
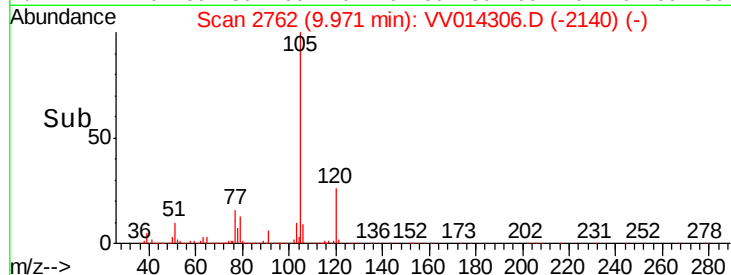
77 15.9 12.7 19.1



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



#61

1,2,3-Trichloropropane

Concen: 6.070 ug/L

RT: 10.31 min Scan# 2869

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

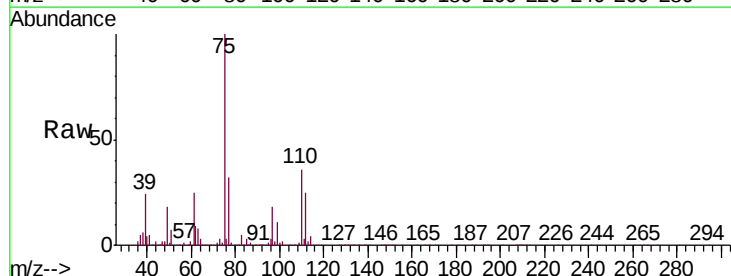
Tgt Ion: 75 Resp: 182974

Ion Ratio Lower Upper

75 100

77 31.2 25.0 37.4

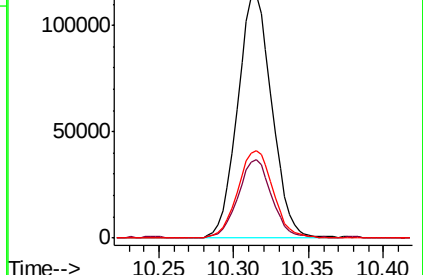
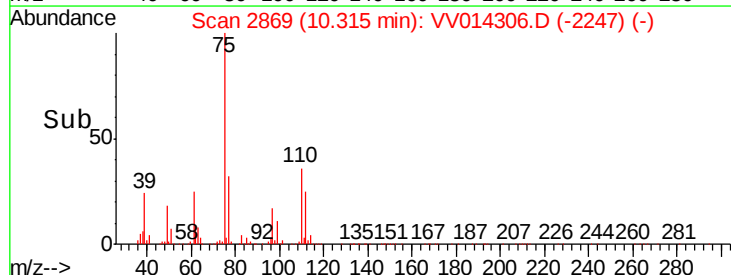
110 37.2 29.8 44.6

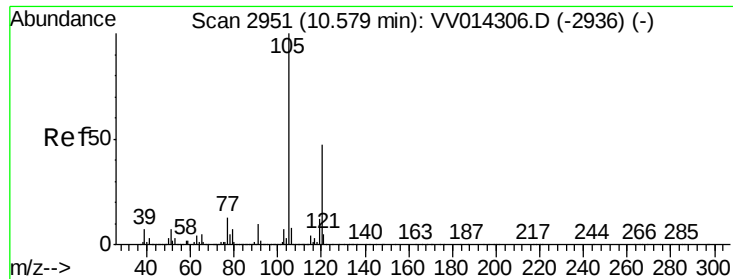


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0

Ion 110.00 (109.70 to 110.70): V





#62

1,3,5-Trimethylbenzene

Concen: 5.874 ug/L

RT: 10.58 min Scan# 2951

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

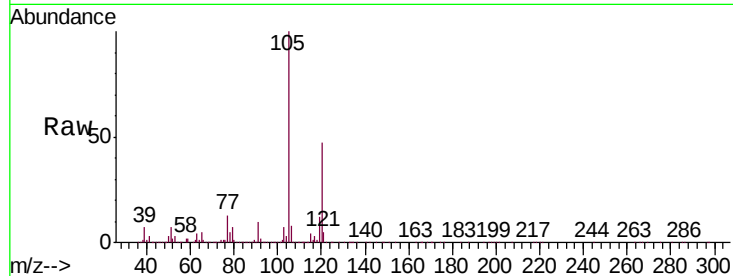
VSTD005323

Tgt Ion:105 Resp: 1258377

Ion Ratio Lower Upper

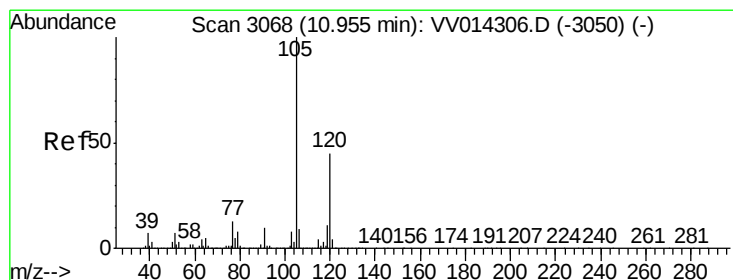
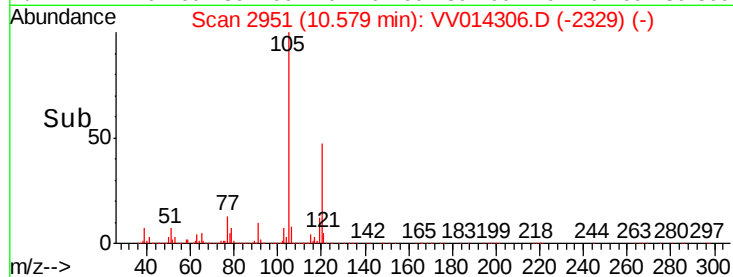
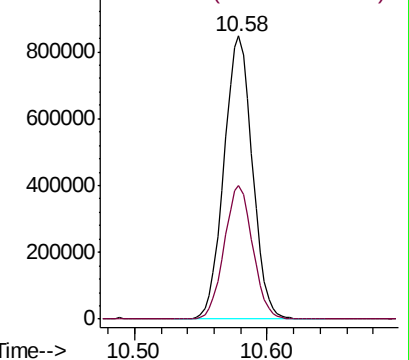
105 100

120 47.4 37.9 56.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#63

1,2,4-Trimethylbenzene

Concen: 5.886 ug/L

RT: 10.95 min Scan# 3068

Delta R.T. 0.00 min

Lab File: VV014306.D

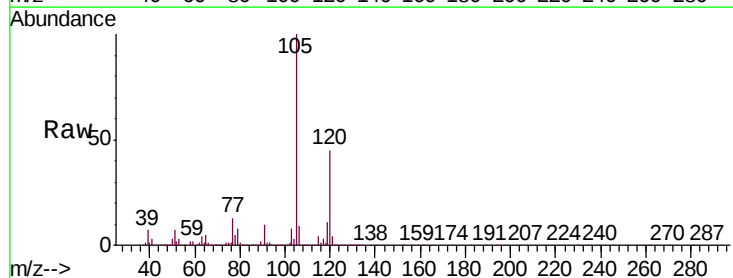
Acq: 15 Jan 2020 10:26

Tgt Ion:105 Resp: 1246832

Ion Ratio Lower Upper

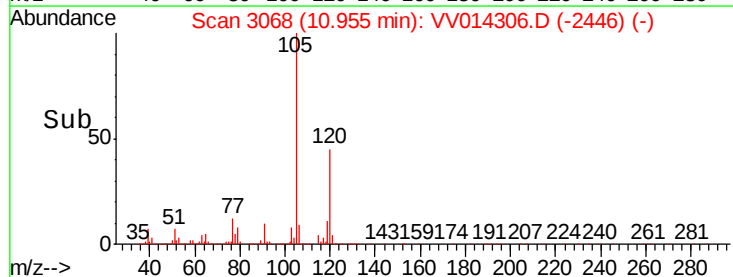
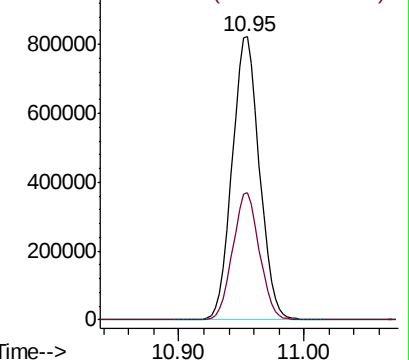
105 100

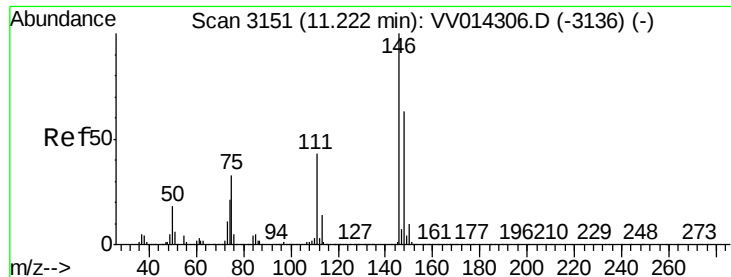
120 44.1 35.3 52.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#64

1,3-Dichlorobenzene

Concen: 4.916 ug/L

RT: 11.22 min Scan# 3151

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

Instrument :

MSVOA\_V

ClientSampleId :

VSTD005323

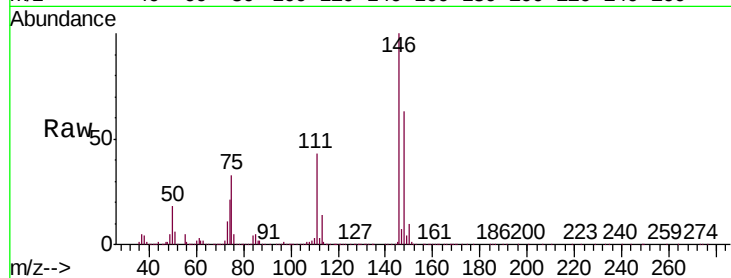
Tgt Ion:146 Resp: 610918

Ion Ratio Lower Upper

146 100

111 42.5 29.8 55.3

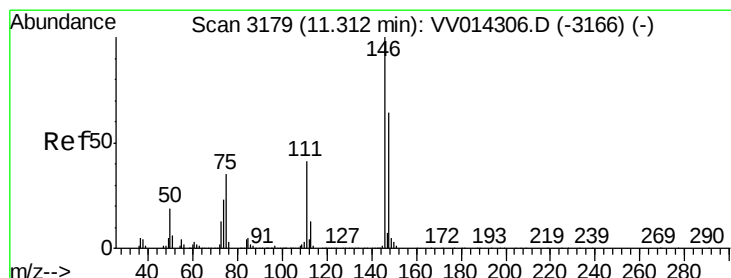
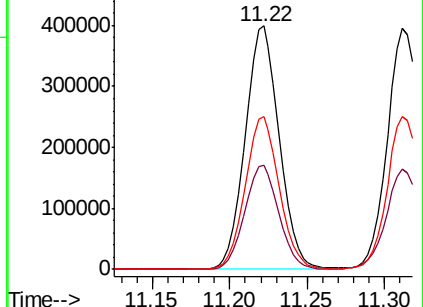
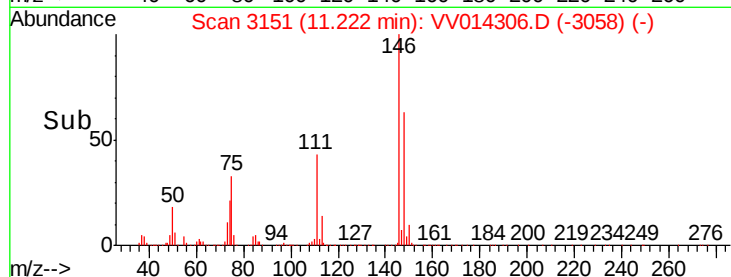
148 62.6 43.8 81.4



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#65

1,4-Dichlorobenzene

Concen: 4.811 ug/L

RT: 11.31 min Scan# 3179

Delta R.T. 0.00 min

Lab File: VV014306.D

Acq: 15 Jan 2020 10:26

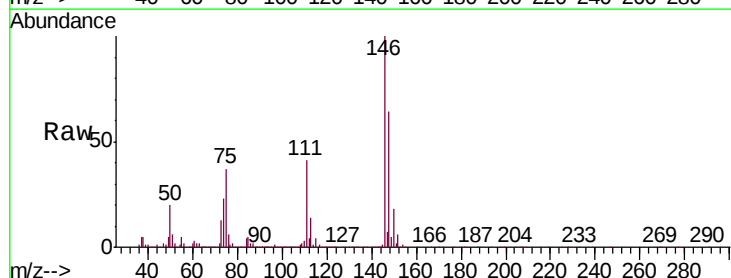
Tgt Ion:146 Resp: 605146

Ion Ratio Lower Upper

146 100

111 41.5 29.0 53.9

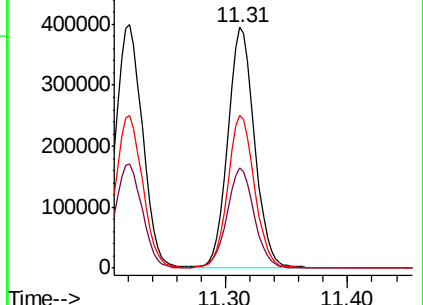
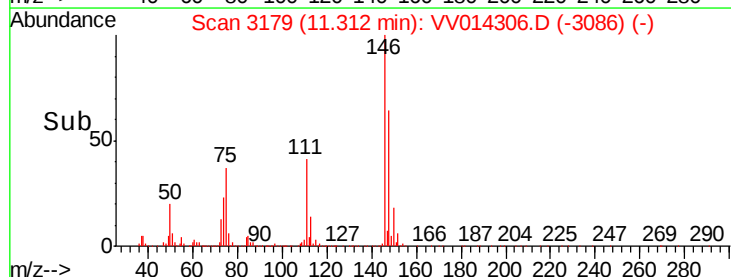
148 63.8 44.7 82.9

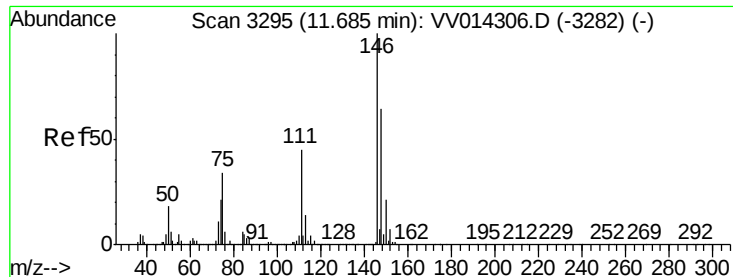


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

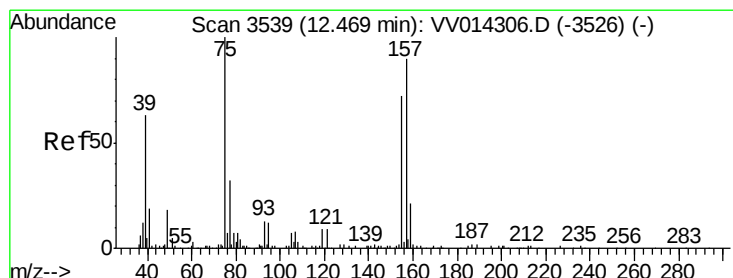
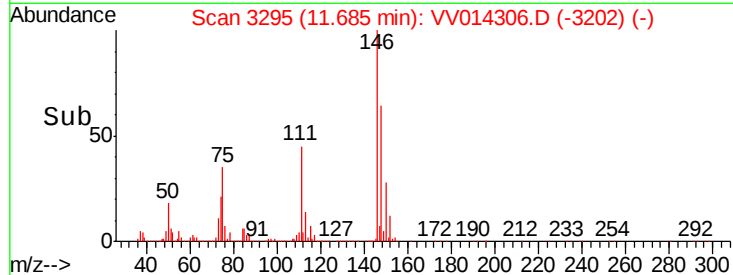
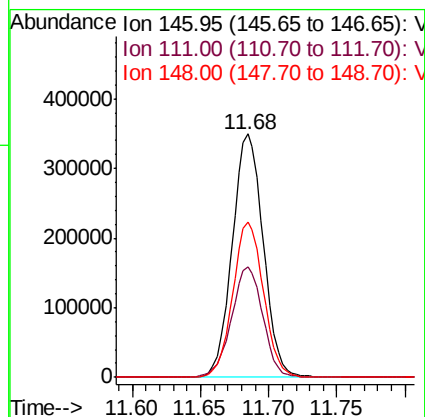
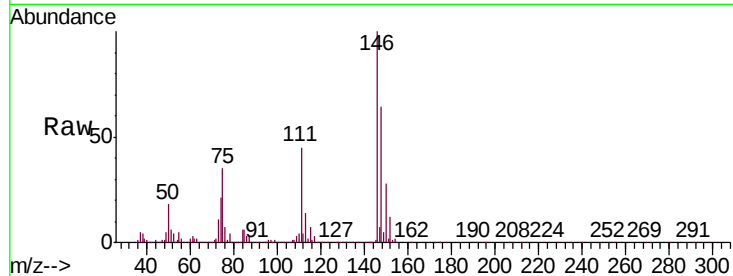




#67  
 1,2-Dichlorobenzene  
 Concen: 4.880 ug/L  
 RT: 11.68 min Scan# 3295  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

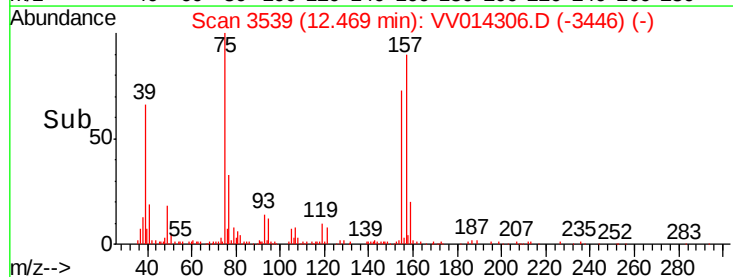
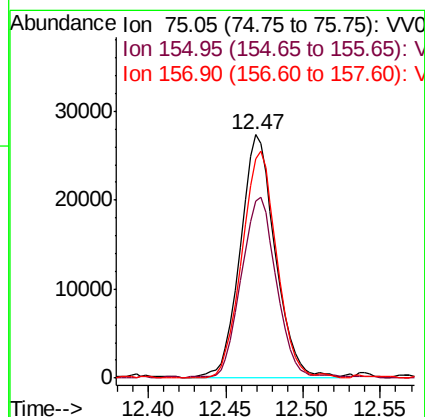
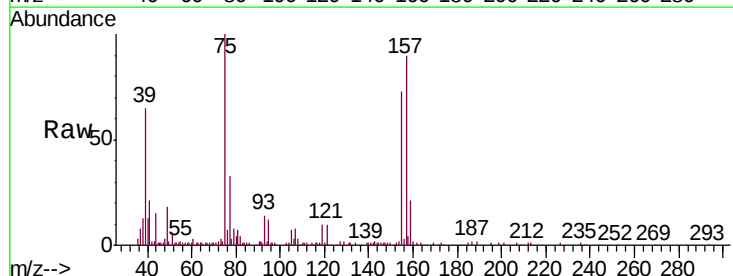
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005323

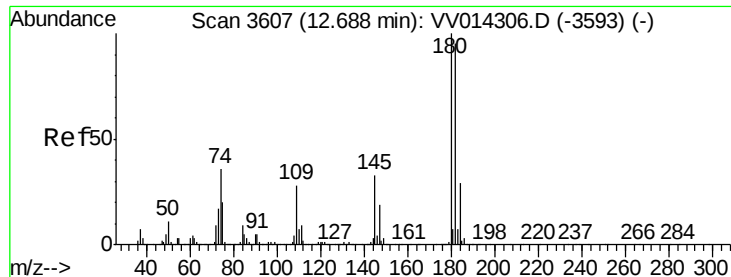
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 45.3  | 36.2  | 54.4  |
| 148     | 63.9  | 51.1  | 76.7  |



#68  
 1,2-Dibromo-3-chloropropane  
 Concen: 6.735 ug/L  
 RT: 12.47 min Scan# 3539  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 155     | 72.5  | 58.0  | 87.0  |
| 157     | 90.1  | 72.1  | 108.1 |

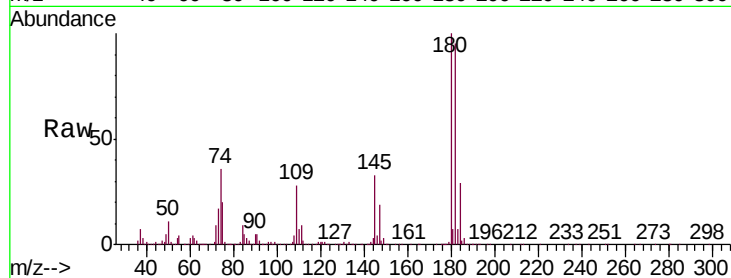




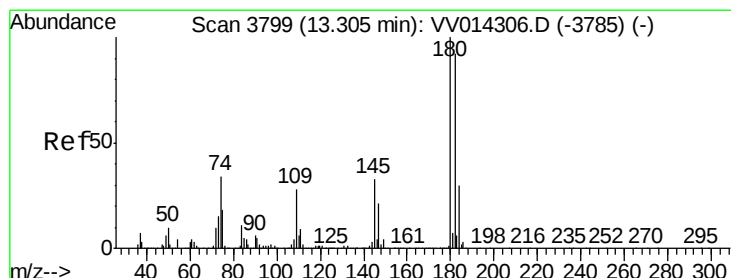
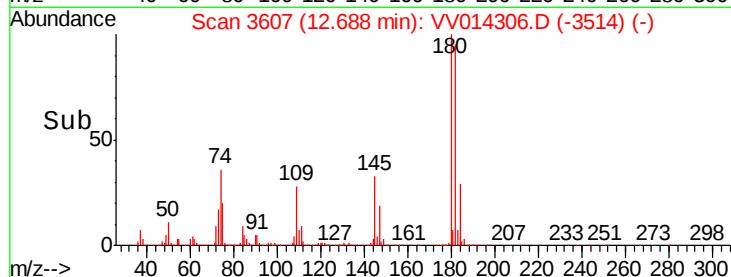
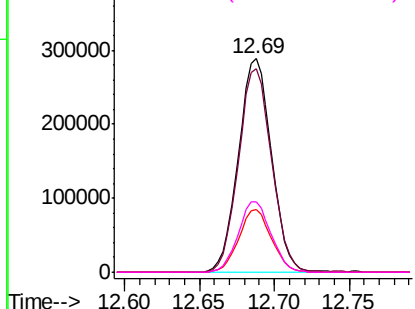
#69  
 1,3,5-Trichlorobenzene  
 Concen: 4.413 ug/L  
 RT: 12.69 min Scan# 3607  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD005323

Tgt Ion:180 Resp: 444488  
 Ion Ratio Lower Upper  
 180 100  
 182 95.7 76.6 114.8  
 184 29.1 23.3 34.9  
 145 32.8 26.2 39.4

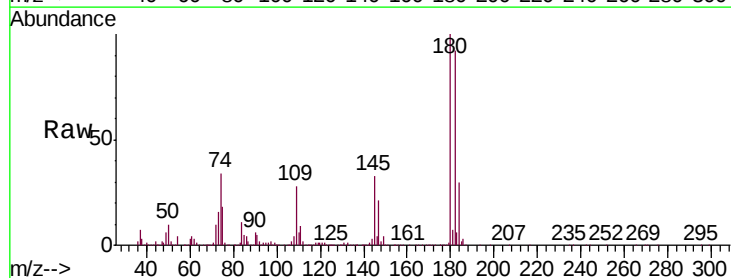


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

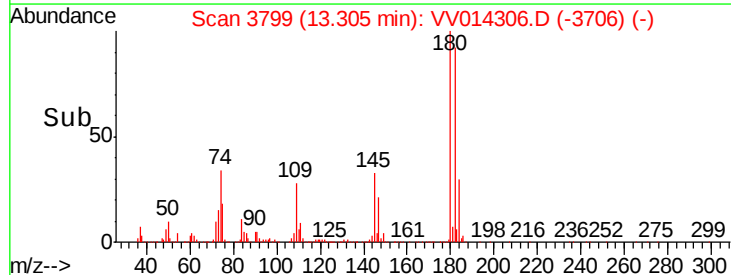
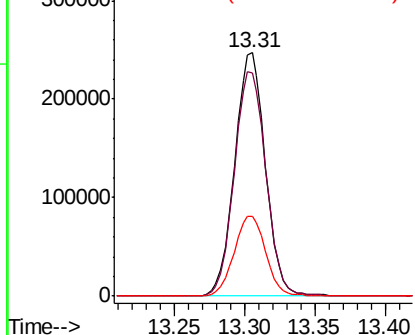


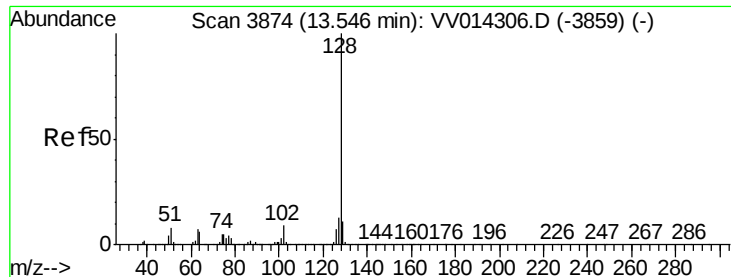
#70  
 1,2,4-trichlorobenzene  
 Concen: 4.676 ug/L  
 RT: 13.31 min Scan# 3799  
 Delta R.T. 0.00 min  
 Lab File: VV014306.D  
 Acq: 15 Jan 2020 10:26

Tgt Ion:180 Resp: 377572  
 Ion Ratio Lower Upper  
 180 100  
 182 94.8 75.8 113.8  
 145 33.6 26.9 40.3



Abundance Ion 179.90 (179.60 to 180.60): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 144.95 (144.65 to 145.65): V

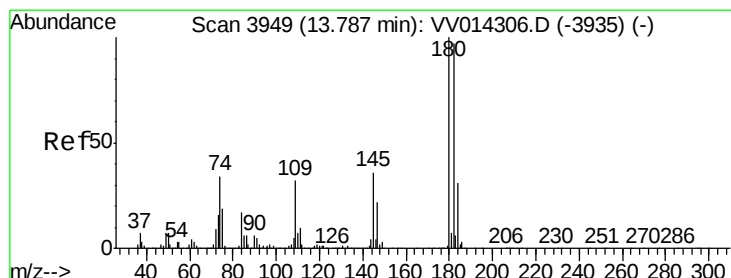
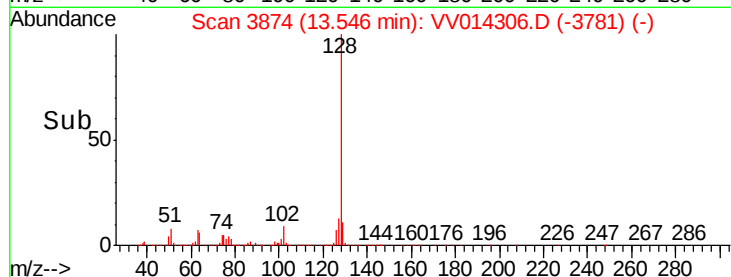
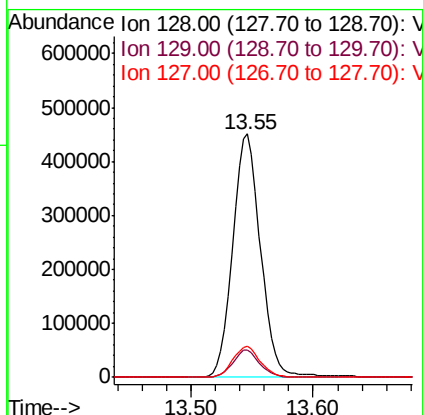
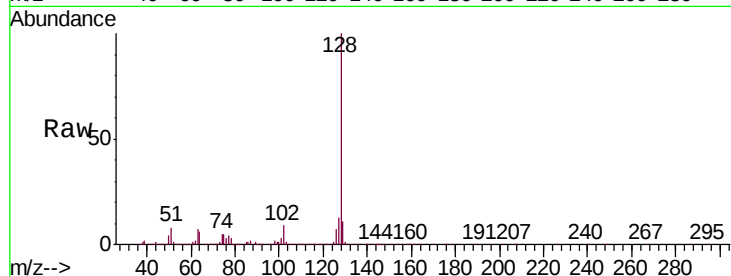




#71  
Naphthalene  
Concen: 5.938 ug/L  
RT: 13.55 min Scan# 3874  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD005323

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.0  | 8.8   | 13.2  |
| 127     | 12.5  | 10.0  | 15.0  |



#72  
1,2,3-Trichlorobenzene  
Concen: 4.604 ug/L  
RT: 13.79 min Scan# 3949  
Delta R.T. 0.00 min  
Lab File: VV014306.D  
Acq: 15 Jan 2020 10:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.9  | 76.7  | 115.1 |
| 145     | 36.0  | 28.8  | 43.2  |

