

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV110119\  
 Data File : VV013471.D  
 Acq On : 01 Nov 2019 16:18  
 Operator : SY/MD  
 Sample : MDL05  
 Misc : 5.00G/10.0ML/MSVOA V/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Nov 02 04:00:17 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM110119S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Nov 02 03:55:22 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 656546   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 631845   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 320605   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 244803   | 26.48    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 105.92% |
| 7) Chloroethane-d5             | 1.58   | 69    | 184827   | 27.40    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 109.60% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 314514   | 19.56    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 78.24%  |
| 20) 2-Butanone-d5              | 3.95   | 46    | 210757   | 48.60    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 97.20%  |
| 24) Chloroform-d               | 4.40   | 84    | 440193   | 23.67    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 94.68%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 263877   | 24.79    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 99.16%  |
| 29) Benzene-d6                 | 5.09   | 84    | 940370   | 25.35    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 101.40% |
| 33) 1,2-Dichloropropane-d6     | 6.11   | 67    | 285145   | 25.19    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 100.76% |
| 37) Toluene-d8                 | 7.36   | 98    | 851144   | 25.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 102.44% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 118827   | 24.15    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 96.60%  |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 112482   | 46.47    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 92.94%  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 241603   | 23.30    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 93.20%  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 326972   | 26.10    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 104.40% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 13413    | 1.310 | ug/L   | 98     |
| 3) Chloromethane               | 1.25 | 50   | 12276    | 1.176 | ug/L   | 91     |
| 6) Bromomethane                | 1.54 | 94   | 6297     | 1.311 | ug/L   | 95     |
| 9) Trichlorofluoromethane      | 1.77 | 101  | 17127    | 1.224 | ug/L   | 99     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101  | 13021    | 1.559 | ug/L # | 79     |
| 13) Acetone                    | 2.22 | 43   | 21776    | 4.296 | ug/L   | 71     |
| 14) Carbon disulfide           | 2.32 | 76   | 35125    | 1.147 | ug/L   | 100    |
| 16) Methylene chloride         | 2.53 | 84   | 28045    | 2.295 | ug/L   | 100    |
| 17) Methyl tert-butyl Ether    | 2.80 | 73   | 27308    | 1.054 | ug/L   | 100    |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96   | 12113    | 1.151 | ug/L   | 93     |
| 19) 1,1-Dichloroethane         | 3.23 | 63   | 23176    | 1.208 | ug/L   | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96   | 11856    | 1.072 | ug/L   | 81     |
| 23) Bromochloromethane         | 4.30 | 128  | 6255     | 1.178 | ug/L   | 92     |
| 25) Chloroform                 | 4.42 | 83   | 36153    | 1.840 | ug/L   | 88     |
| 27) 1,2-Dichloroethane         | 5.18 | 62   | 17001    | 1.246 | ug/L   | 96     |
| 30) Cyclohexane                | 4.72 | 56   | 19107    | 1.120 | ug/L   | 97     |
| 32) Carbon tetrachloride       | 4.88 | 117  | 16865    | 1.181 | ug/L   | 95     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV110119\  
 Data File : VV013471.D  
 Acq On : 01 Nov 2019 16:18  
 Operator : SY/MD  
 Sample : MDL05  
 Misc : 5.00G/10.0ML/MSVOA V/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

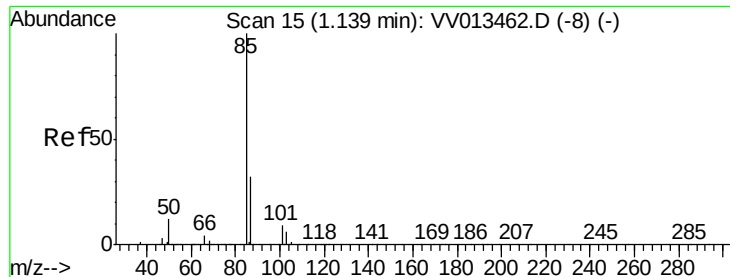
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Nov 02 04:00:17 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM110119S.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Nov 02 03:55:22 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 34) Benzene                    | 5.15  | 78   | 46144    | 1.113 | ug/L   | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 13938    | 1.246 | ug/L   | 97       |
| 36) Methylcyclohexane          | 6.17  | 83   | 19938    | 1.138 | ug/L   | 97       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 10666    | 1.022 | ug/L # | 88       |
| 41) Bromodichloromethane       | 6.55  | 83   | 15584    | 1.160 | ug/L # | 97       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 16493    | 1.066 | ug/L   | 99       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 24806    | 2.575 | ug/L # | 93       |
| 44) Toluene                    | 7.43  | 91   | 50273    | 1.187 | ug/L   | 98       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 13386    | 1.009 | ug/L   | 99       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 9501     | 1.136 | ug/L   | 89       |
| 47) Tetrachloroethene          | 8.02  | 164  | 11062    | 1.166 | ug/L   | 97       |
| 49) 2-Hexanone                 | 8.19  | 43   | 25862    | 3.687 | ug/L # | 95       |
| 50) Dibromochloromethane       | 8.29  | 129  | 10049    | 1.005 | ug/L   | 99       |
| 51) 1,2-Dibromoethane          | 8.39  | 107  | 9341     | 1.080 | ug/L   | 91       |
| 52) Chlorobenzene              | 8.92  | 112  | 32676    | 1.140 | ug/L   | 98       |
| 53) Ethylbenzene               | 9.05  | 91   | 49890    | 1.069 | ug/L   | 96       |
| 54) m,p-Xylene                 | 9.18  | 106  | 17972    | 1.024 | ug/L   | 93       |
| 55) o-xylene                   | 9.59  | 106  | 17067    | 1.028 | ug/L   | 91       |
| 56) Styrene                    | 9.60  | 104  | 26962    | 0.937 | ug/L   | 97       |
| 57) Isopropylbenzene           | 9.97  | 105  | 42582    | 0.951 | ug/L   | 96       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 13652    | 1.272 | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 10747    | 1.195 | ug/L   | 97       |
| 62) Bromoform                  | 9.78  | 173  | 6900     | 1.086 | ug/L # | 95       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 25553    | 1.154 | ug/L   | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 28990    | 1.281 | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 26407    | 1.284 | ug/L   | 93       |
| 66) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 2314     | 1.223 | ug/L   | 81       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 23142    | 1.322 | ug/L   | 97       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 18381    | 1.232 | ug/L   | 96       |
| 69) Naphthalene                | 13.55 | 128  | 29379    | 1.018 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 16459    | 1.179 | ug/L   | 98       |
| -----                          |       |      |          |       |        |          |

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





#2

Dichlorodifluoromethane

Concen: 1.310 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

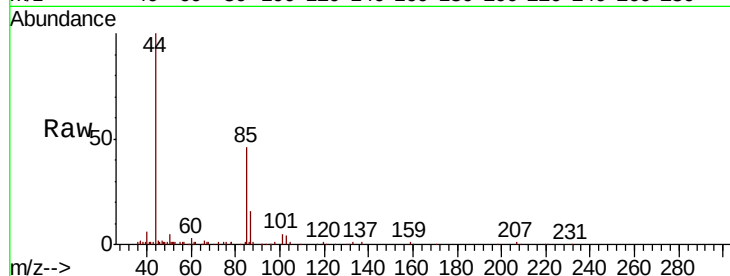
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 85 Resp: 13413

Ion Ratio Lower Upper

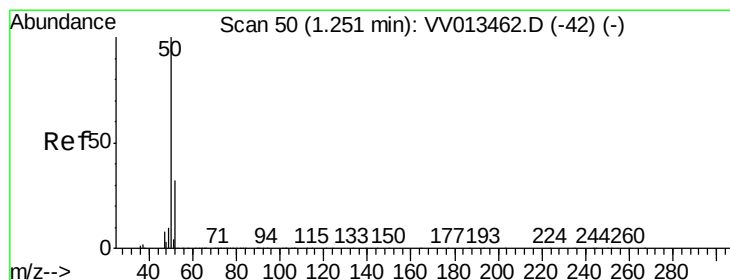
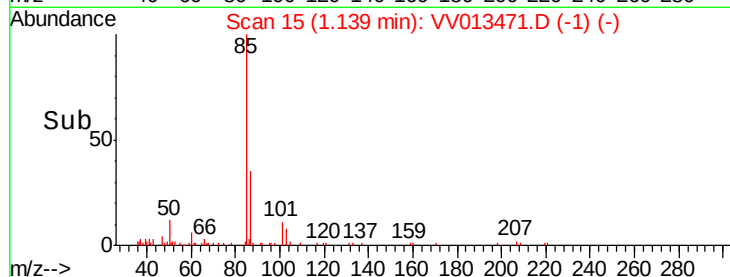
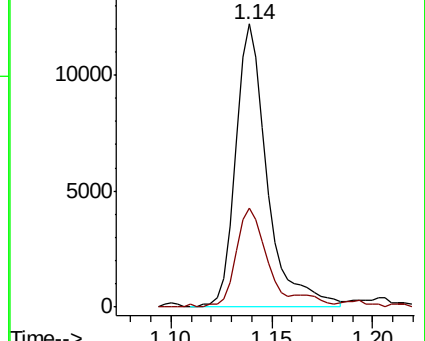
85 100

87 33.0 22.2 41.2



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 1.176 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV013471.D

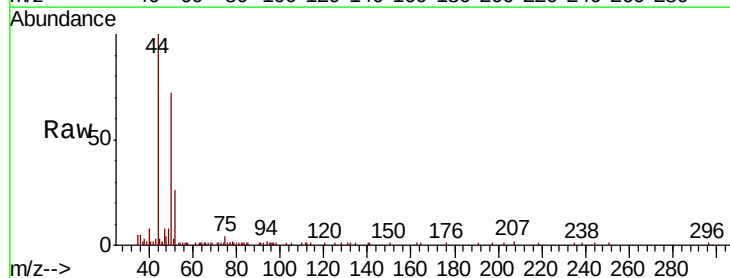
Acq: 01 Nov 2019 16:18

Tgt Ion: 50 Resp: 12276

Ion Ratio Lower Upper

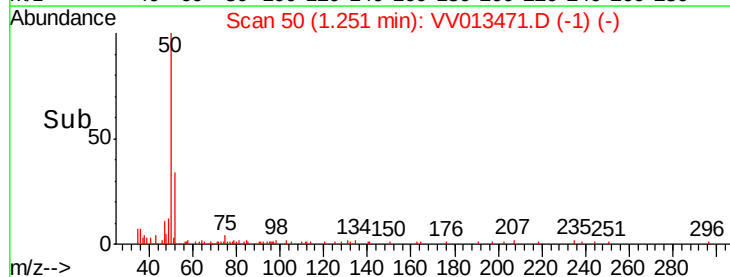
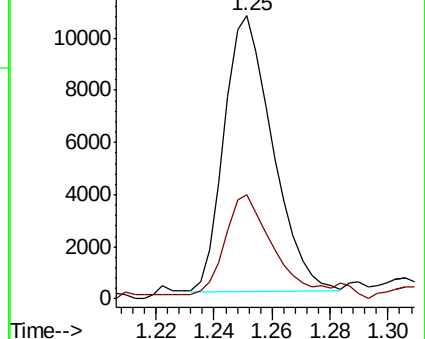
50 100

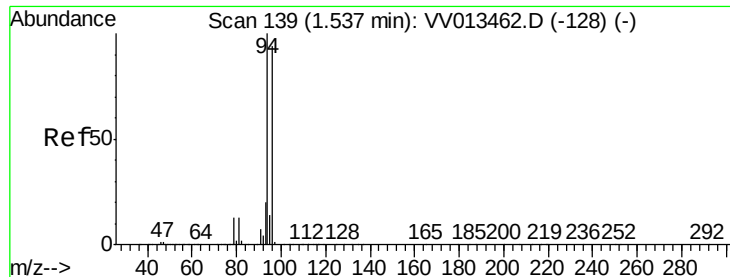
52 36.8 22.2 41.2



Abundance Ion 50.00 (49.70 to 50.70): VV0

Ion 52.00 (51.70 to 52.70): VV0





#6

Bromomethane

Concen: 1.311 ug/L

RT: 1.54 min Scan# 139

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

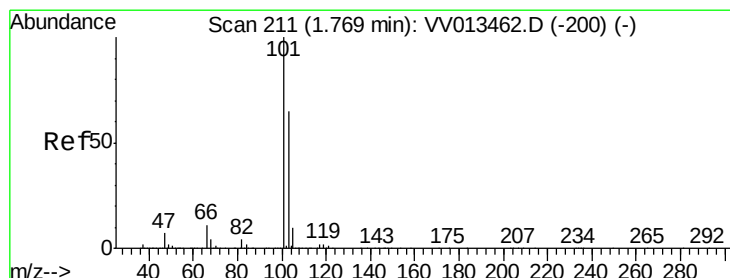
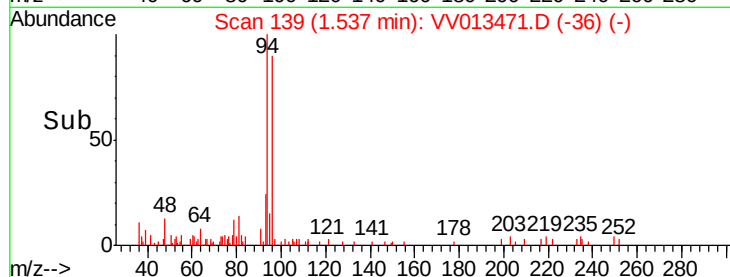
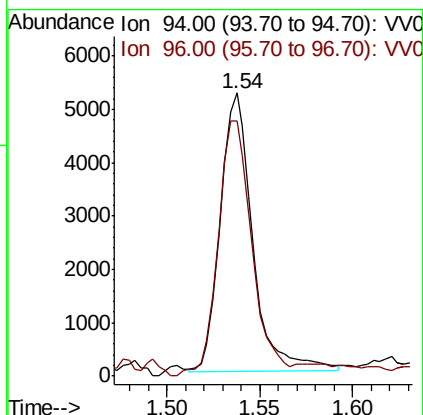
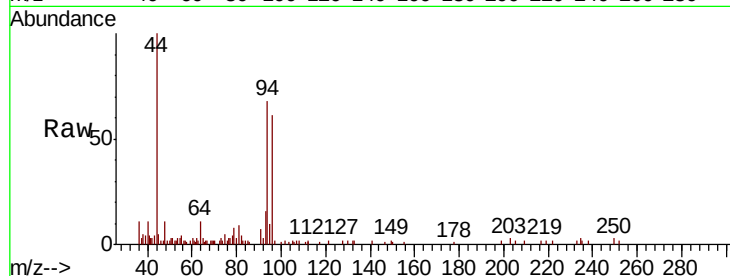
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 94 Resp: 6297

Ion Ratio Lower Upper

94 100

96 89.0 9.4 177.8



#9

Trichlorofluoromethane

Concen: 1.224 ug/L

RT: 1.77 min Scan# 211

Delta R.T. 0.00 min

Lab File: VV013471.D

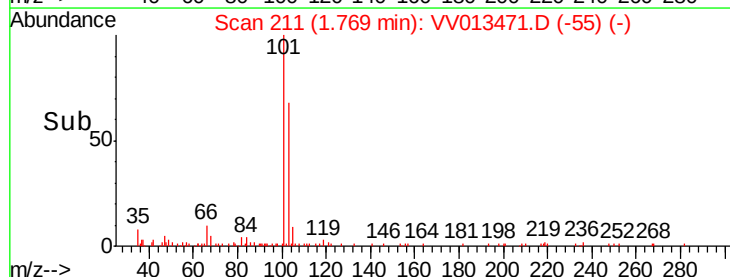
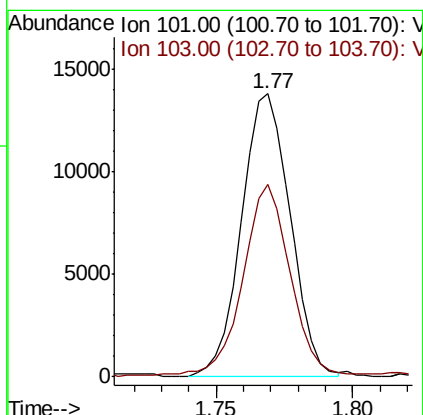
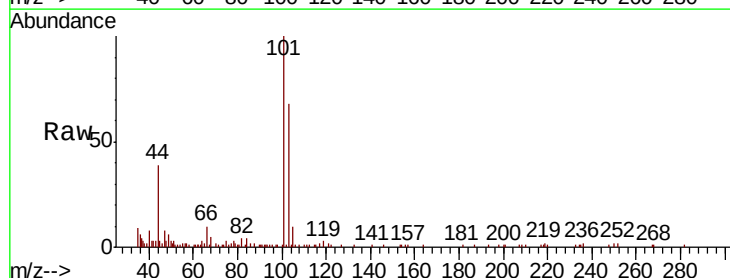
Acq: 01 Nov 2019 16:18

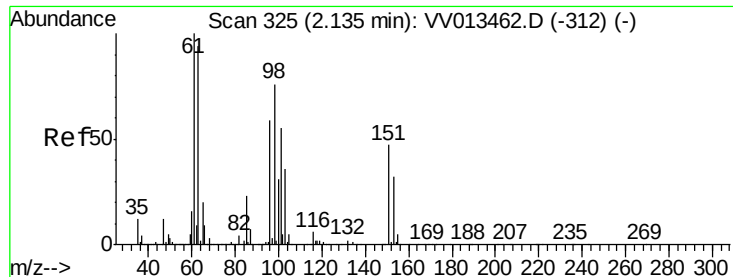
Tgt Ion: 101 Resp: 17127

Ion Ratio Lower Upper

101 100

103 63.8 45.1 83.9





#11

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

Concen: 1.559 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampleId :

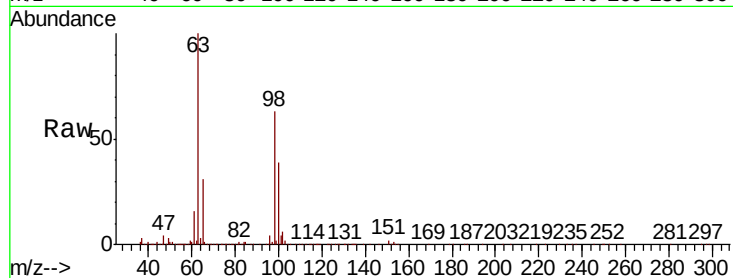
Tot Ion:101 Resp: 13021

Ion Ratio Lower Upper

101 100

85 30.9 33.1 49.7#

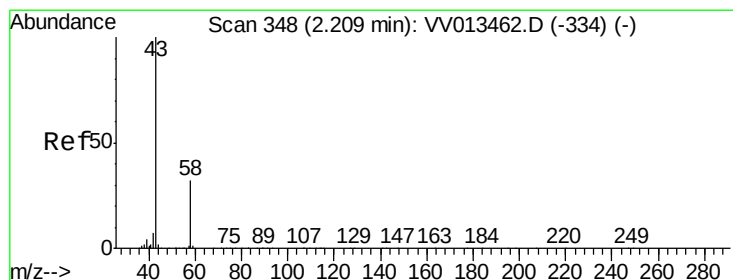
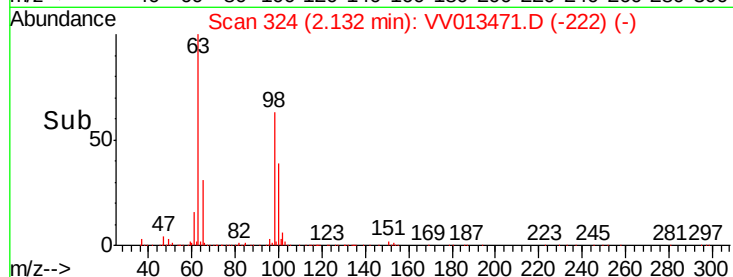
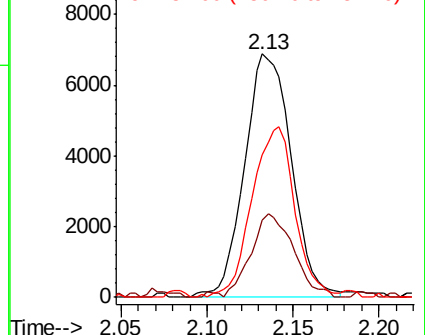
151 63.8 68.3 102.5#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#13

Acetone

Concen: 4.296 ug/L

RT: 2.22 min Scan# 350

Delta R.T. 0.01 min

Lab File: VV013471.D

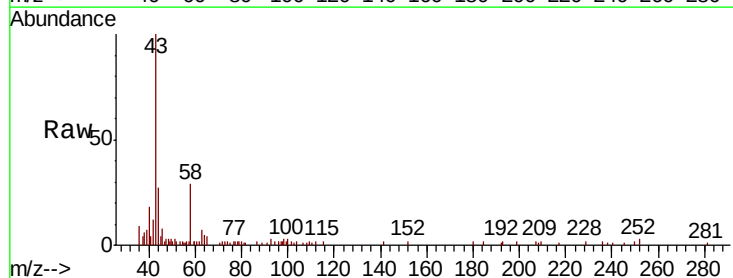
Acq: 01 Nov 2019 16:18

Tgt Ion: 43 Resp: 21776

Ion Ratio Lower Upper

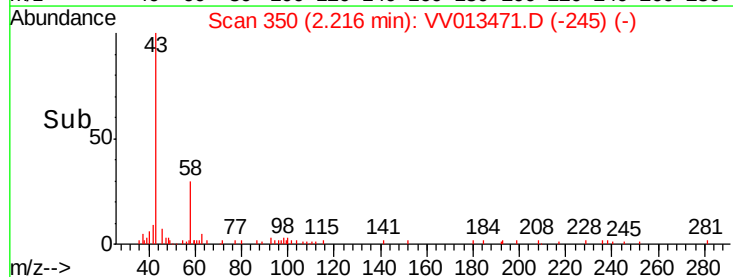
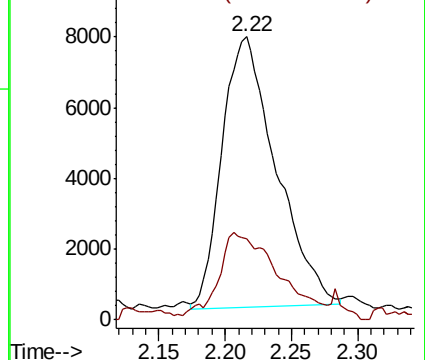
43 100

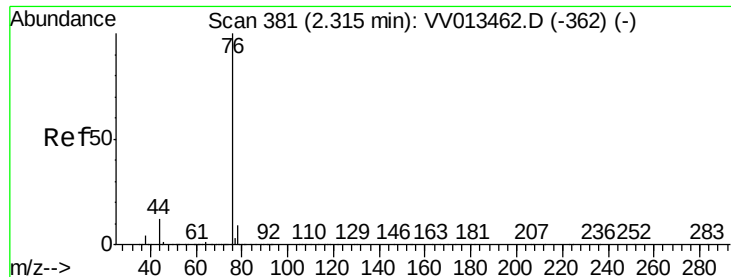
58 15.3 0.0 63.2



Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0





#14

Carbon disulfide

Concen: 1.147 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

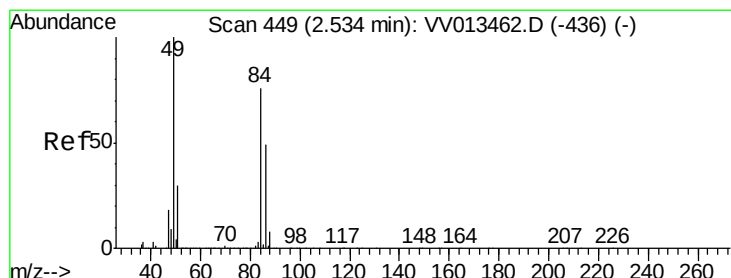
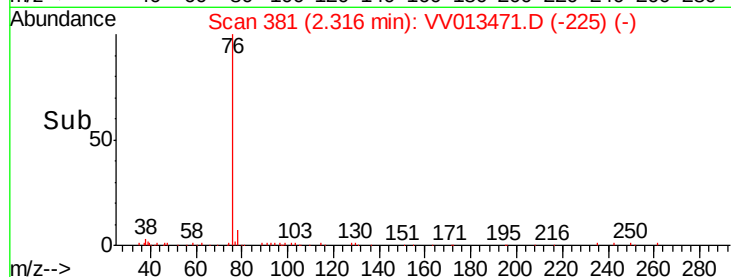
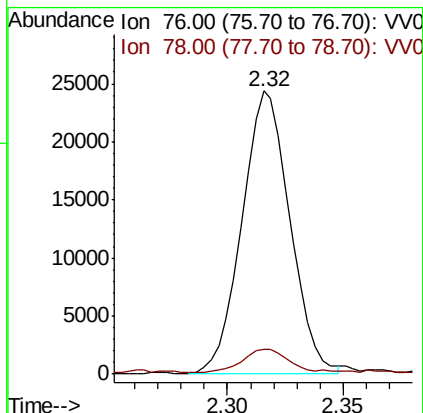
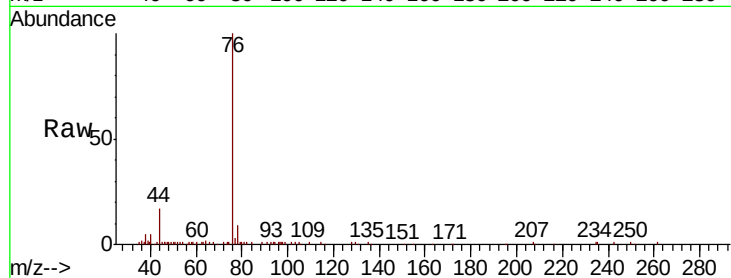
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 76 Resp: 35125

Ion Ratio Lower Upper

76 100

78 8.9 7.1 10.7



#16

Methylene chloride

Concen: 2.295 ug/L

RT: 2.53 min Scan# 449

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

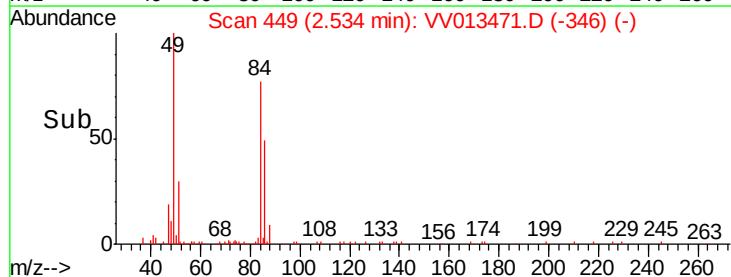
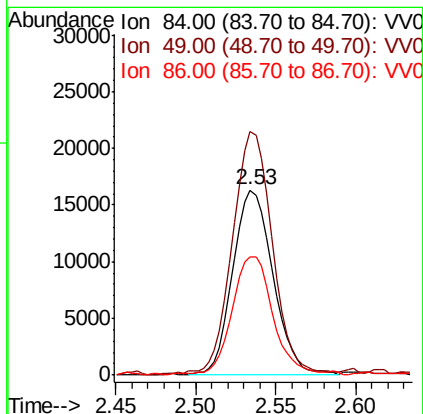
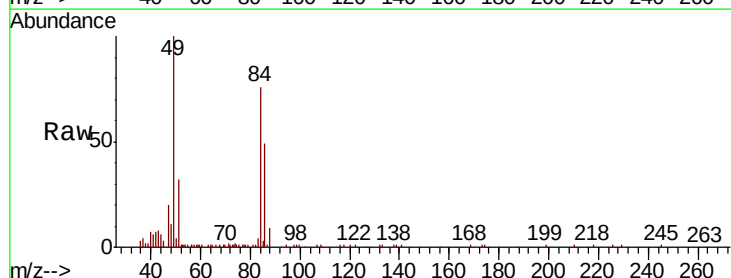
Tgt Ion: 84 Resp: 28045

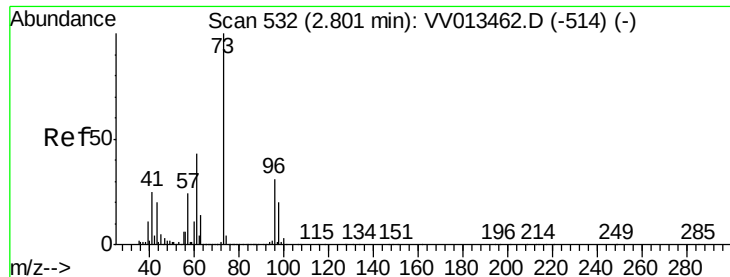
Ion Ratio Lower Upper

84 100

49 131.8 92.4 171.6

86 64.3 45.1 83.7

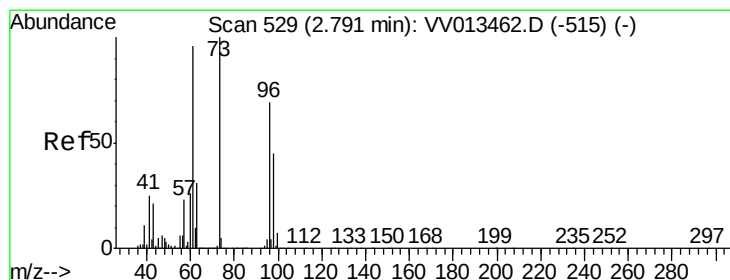
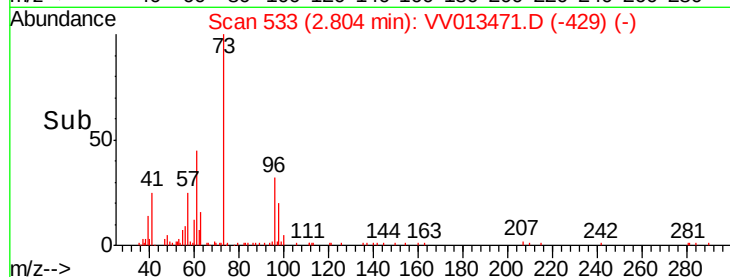
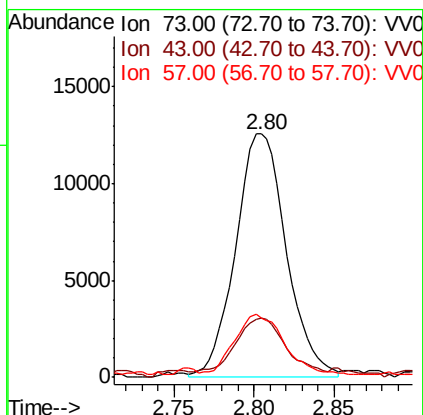
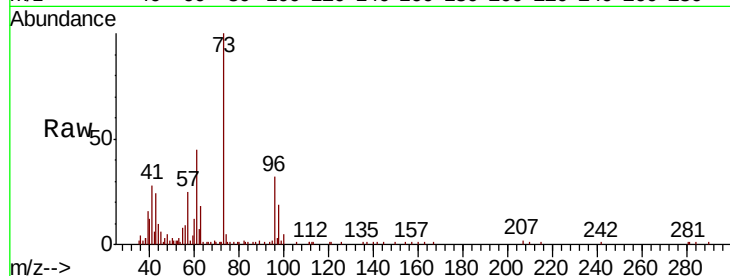




#17  
Methvl tert-butvl Ether  
Concen: 1.054 ug/L  
RT: 2.80 min Scan# 533  
Delta R.T. 0.00 min  
Lab File: VV013471.D  
Acq: 01 Nov 2019 16:18

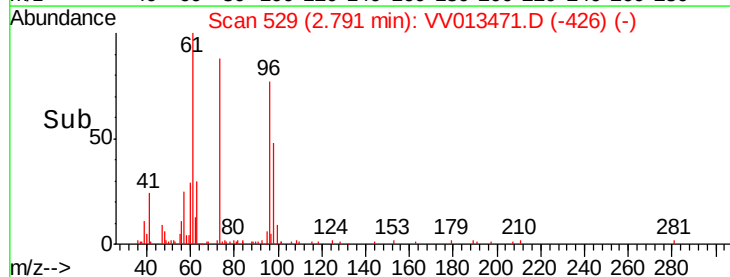
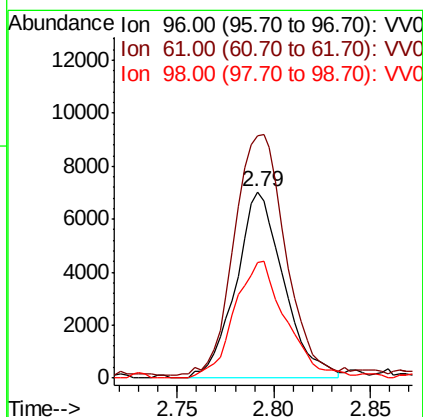
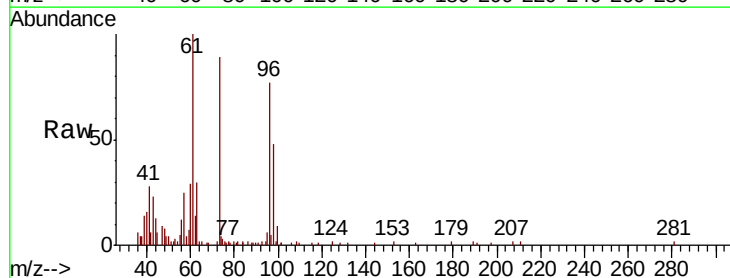
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 73 Resp: 27308  
Ion Ratio Lower Upper  
73 100  
43 20.5 16.2 24.2  
57 23.2 18.6 27.8

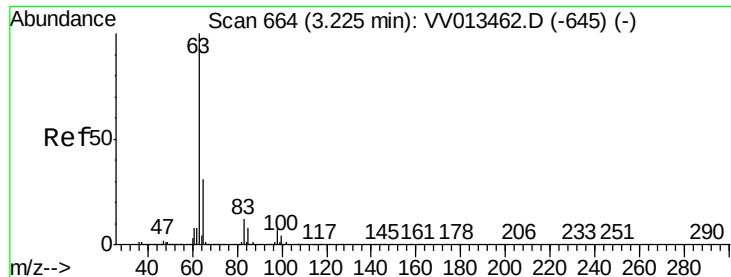


#18  
trans-1,2-Dichloroethene  
Concen: 1.151 ug/L  
RT: 2.79 min Scan# 529  
Delta R.T. 0.00 min  
Lab File: VV013471.D  
Acq: 01 Nov 2019 16:18

Tgt Ion: 96 Resp: 12113  
Ion Ratio Lower Upper  
96 100  
61 130.0 98.0 182.0  
98 62.1 45.6 84.8







#19

1,1-Dichloroethane

Concen: 1.208 ug/L

RT: 3.23 min Scan# 665

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampled :

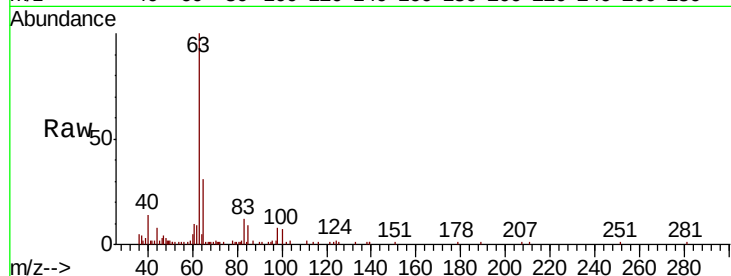
Tot Ion: 63 Resp: 23176

Ion Ratio Lower Upper

63 100

65 30.6 21.7 40.3

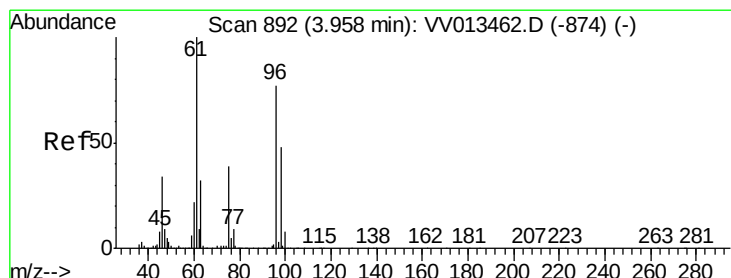
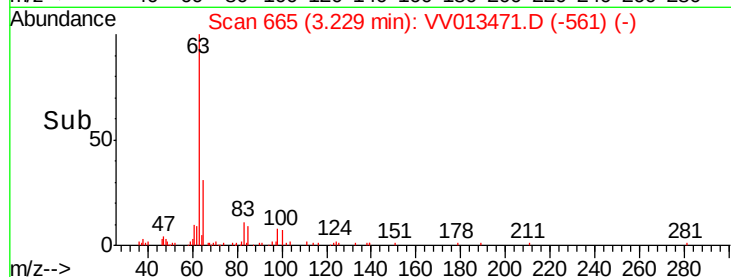
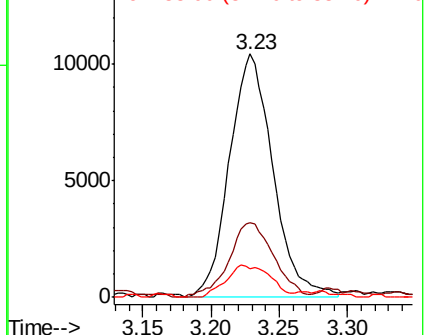
83 12.0 8.8 16.3



Abundance Ion 63.00 (62.70 to 63.70): VV0

Ion 65.00 (64.70 to 65.70): VV0

Ion 83.00 (82.70 to 83.70): VV0



#22

cis-1,2-Dichloroethene

Concen: 1.072 ug/L

RT: 3.96 min Scan# 892

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

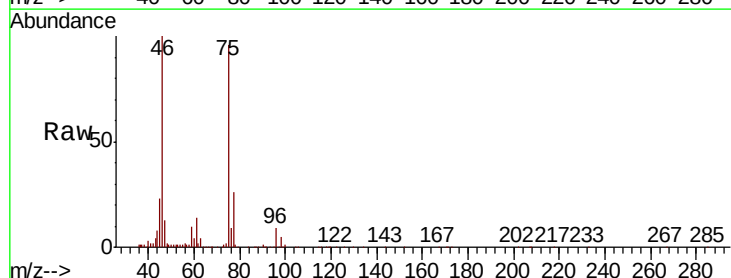
Tgt Ion: 96 Resp: 11856

Ion Ratio Lower Upper

96 100

61 162.2 91.5 169.9

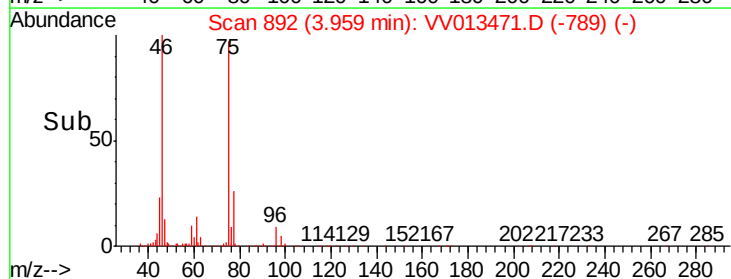
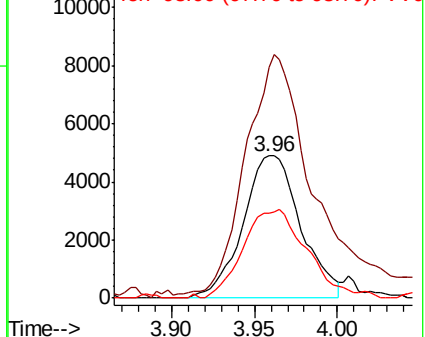
98 59.5 43.8 81.3

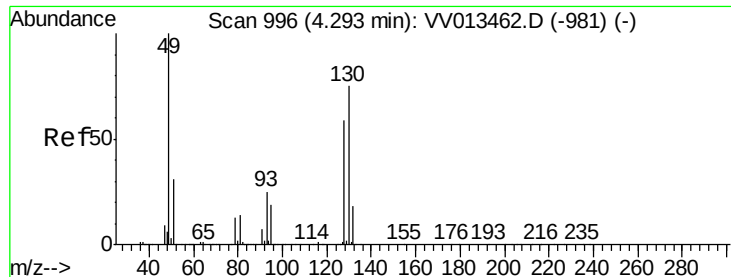


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 98.00 (97.70 to 98.70): VV0





#23

Bromochloromethane

Concen: 1.178 ug/L

RT: 4.30 min Scan# 998

Delta R.T. 0.01 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:128 Resp: 6255

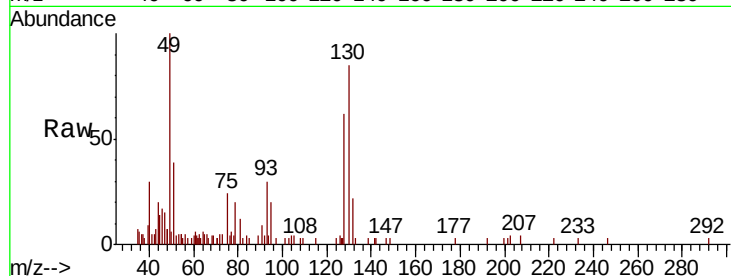
Ion Ratio Lower Upper

128 100

49 161.3 118.2 219.4

130 137.2 89.0 165.4

51 62.7 42.2 63.4

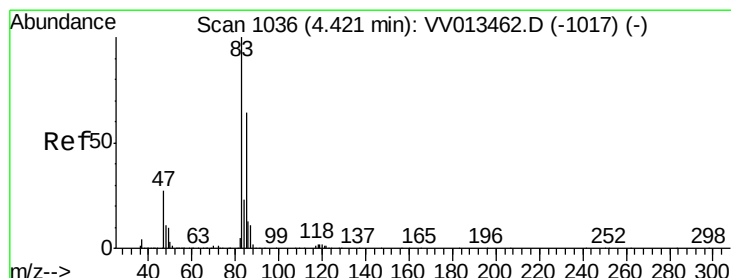
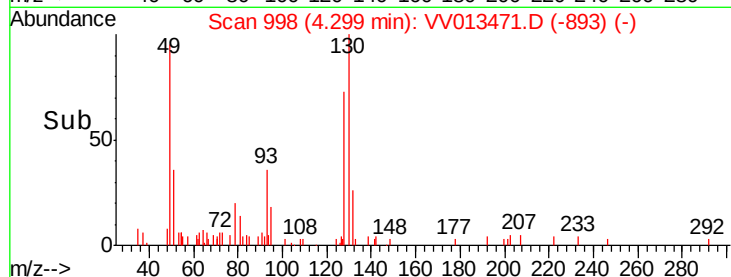
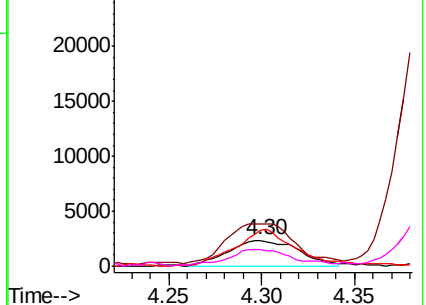


Abundance Ion 128.00 (127.70 to 128.70): V

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: 1.840 ug/L

RT: 4.42 min Scan# 1036

Delta R.T. 0.00 min

Lab File: VV013471.D

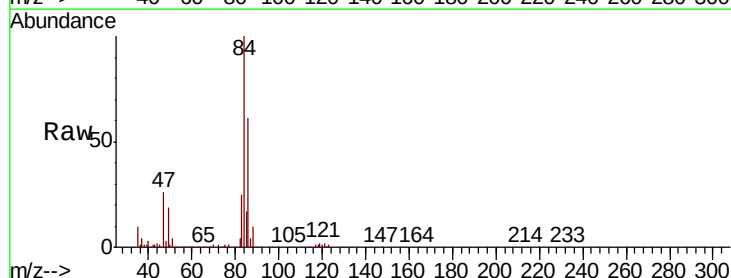
Acq: 01 Nov 2019 16:18

Tgt Ion: 83 Resp: 36153

Ion Ratio Lower Upper

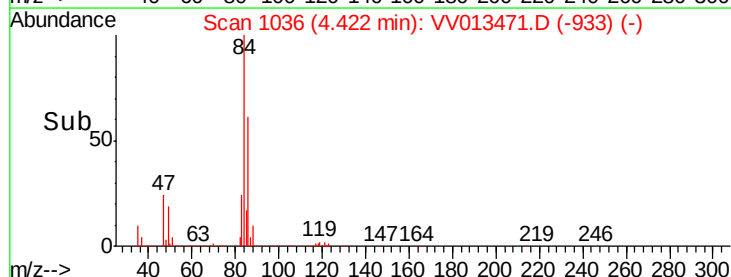
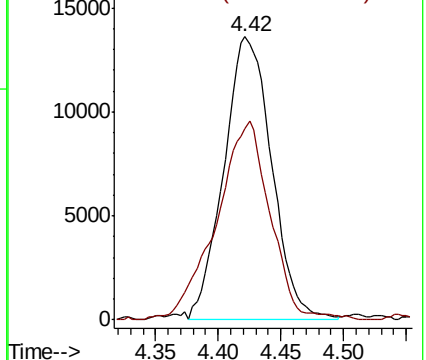
83 100

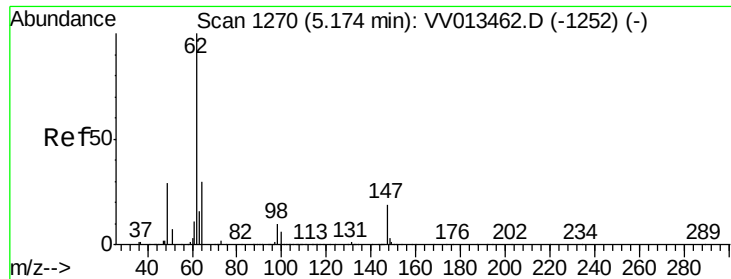
85 75.2 45.8 85.0



Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

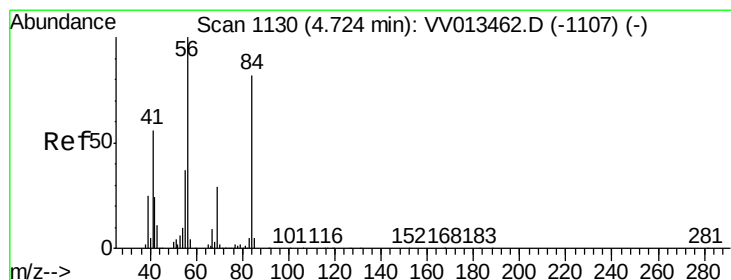
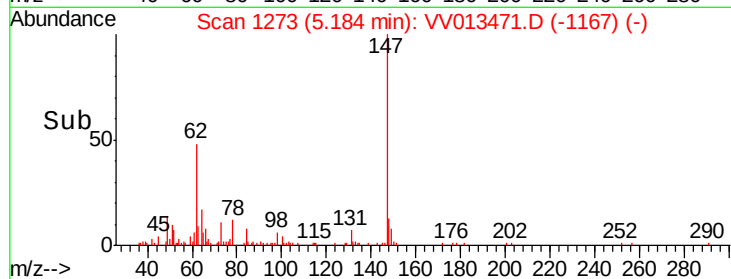
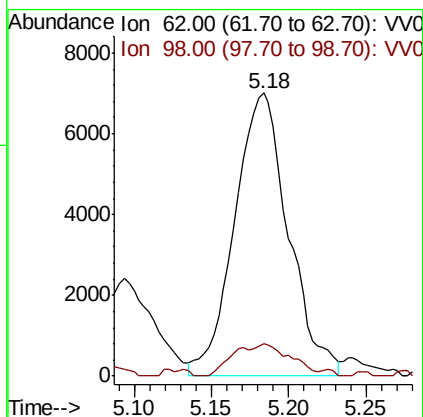
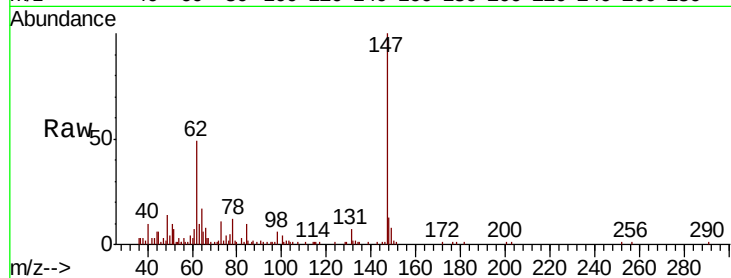




#27  
 1,2-Dichloroethane  
 Concen: 1.246 ug/L  
 RT: 5.18 min Scan# 1273  
 Delta R.T. 0.01 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

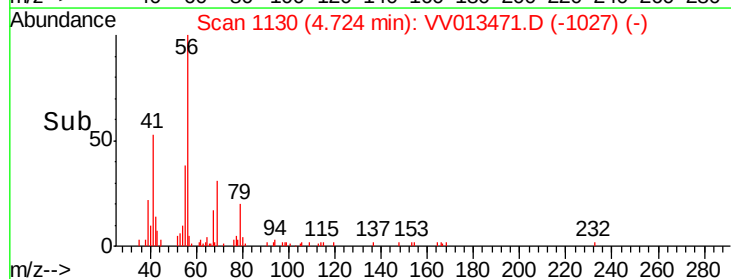
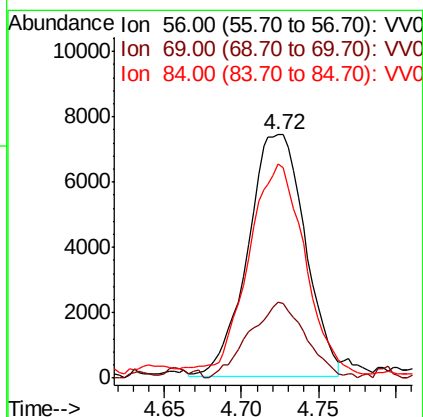
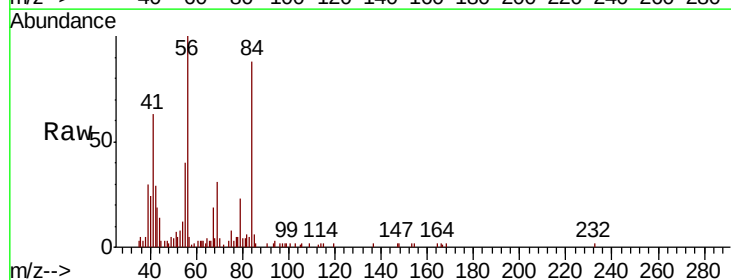
Instrument :  
 MSVOA\_V  
 ClientSampleId :

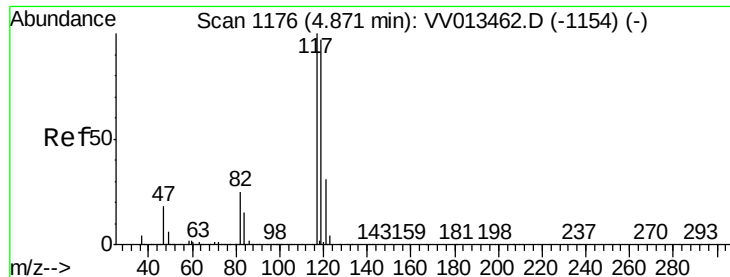
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 62      | 100   |       |       |
| 98      | 11.3  | 7.8   | 11.6  |



#30  
 Cyclohexane  
 Concen: 1.120 ug/L  
 RT: 4.72 min Scan# 1130  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 30.7  | 23.0  | 34.6  |
| 84      | 85.3  | 66.2  | 99.4  |





#32

Carbon tetrachloride

Concen: 1.181 ug/L

RT: 4.88 min Scan# 1178

Delta R.T. 0.01 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

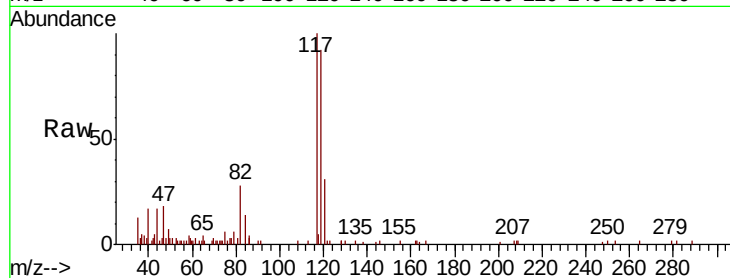
ClientSampleId :

Tot Ion:117 Resp: 16865

Ion Ratio Lower Upper

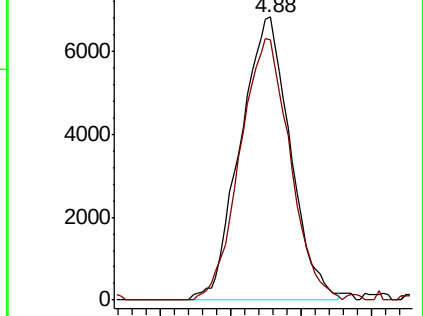
117 100

119 92.3 77.4 116.0

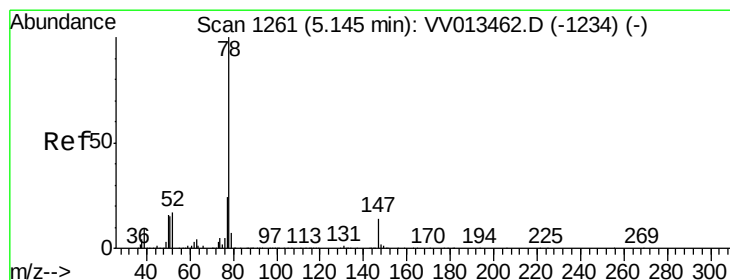
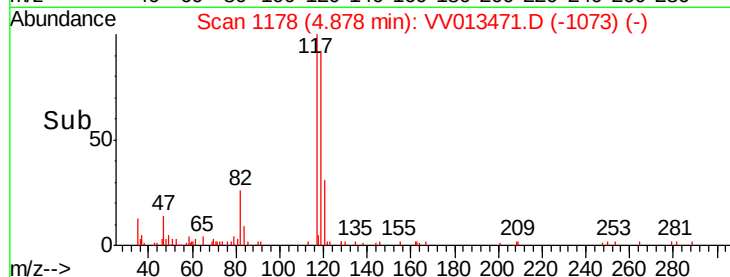


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



Time-->



#34

Benzene

Concen: 1.113 ug/L

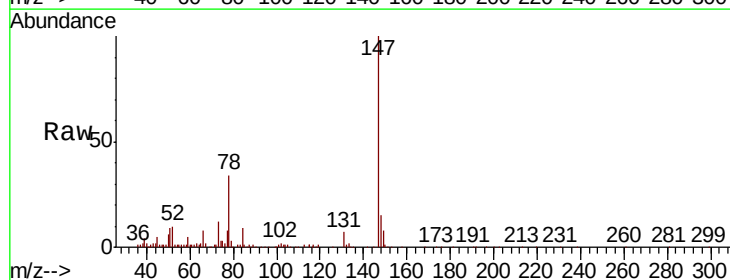
RT: 5.15 min Scan# 1262

Delta R.T. 0.00 min

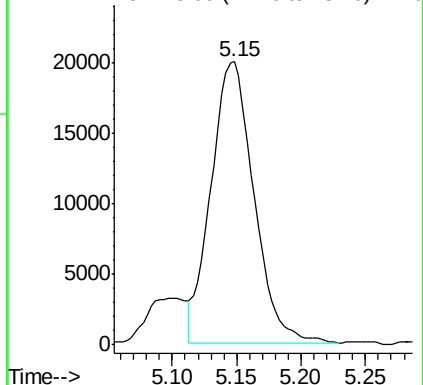
Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

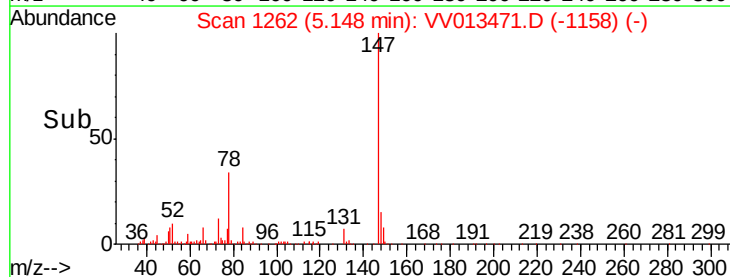
Tgt Ion: 78 Resp: 46144

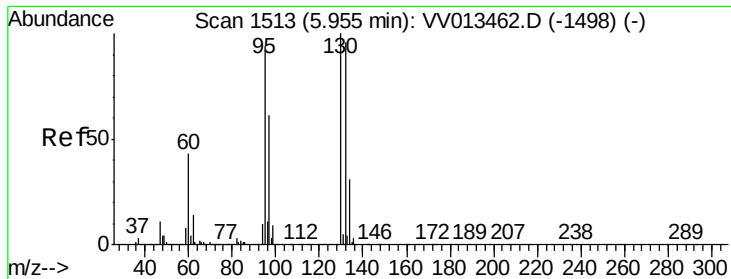


Abundance Ion 78.00 (77.70 to 78.70): VV0



Time-->





#35

Trichloroethene

Concen: 1.246 ug/L

RT: 5.96 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 95 Resp: 13938

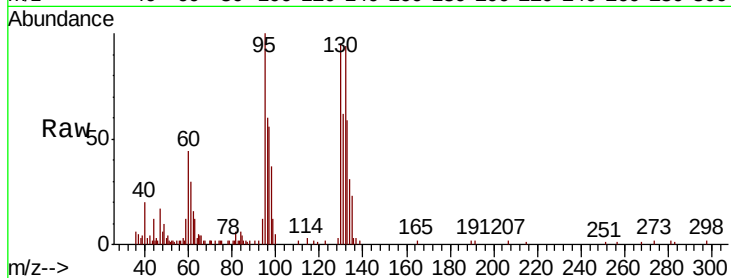
Ion Ratio Lower Upper

95 100

97 69.4 44.7 83.1

132 101.3 71.0 131.8

130 110.0 74.1 137.7

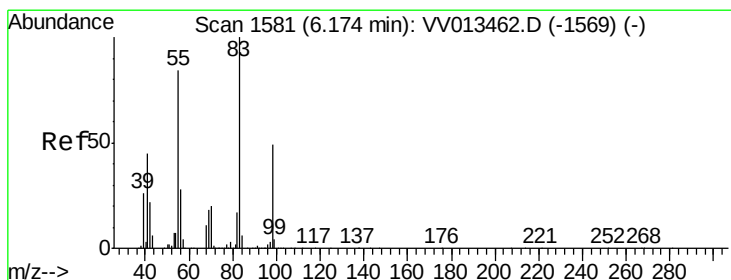
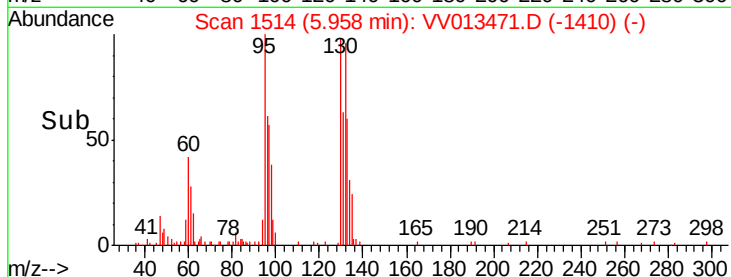
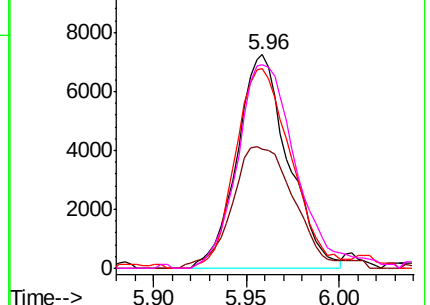


Abundance Ion 95.00 (94.70 to 95.70): VV0

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: 1.138 ug/L

RT: 6.17 min Scan# 1581

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

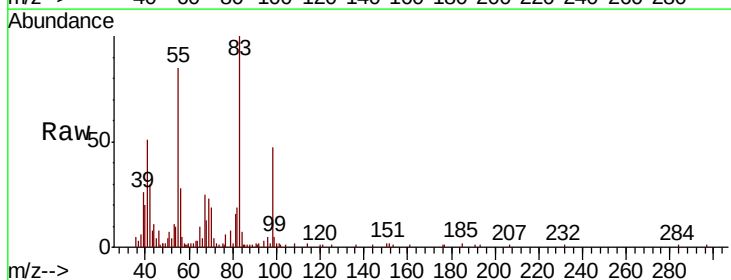
Tgt Ion: 83 Resp: 19938

Ion Ratio Lower Upper

83 100

55 81.7 64.2 96.4

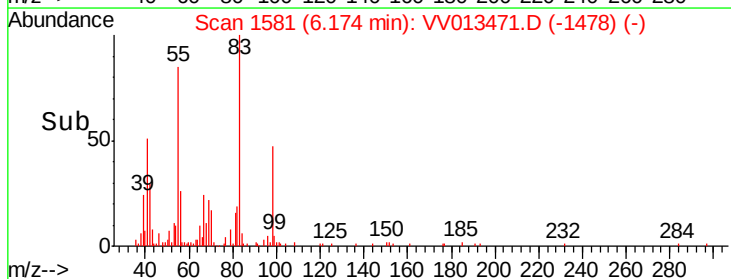
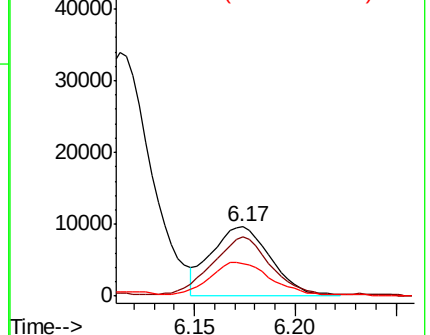
98 51.3 38.4 57.6

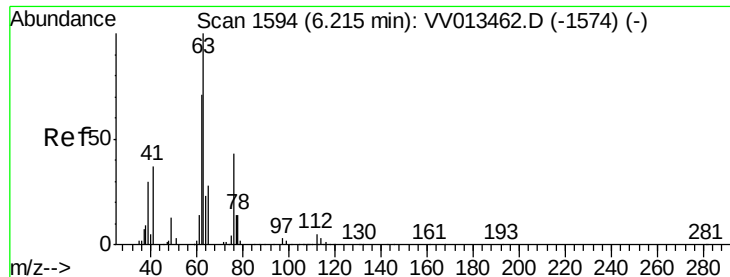


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0





#40

1,2-Dichloropropane

Concen: 1.022 ug/L

RT: 6.22 min Scan# 1596

Delta R.T. 0.01 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

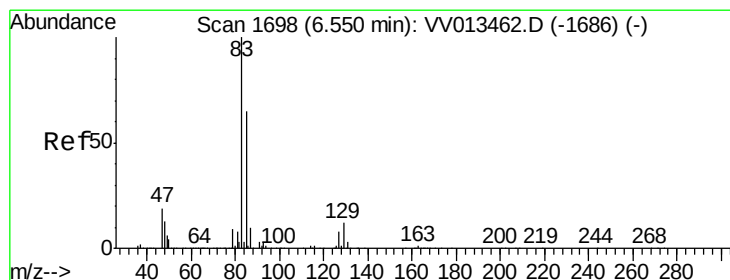
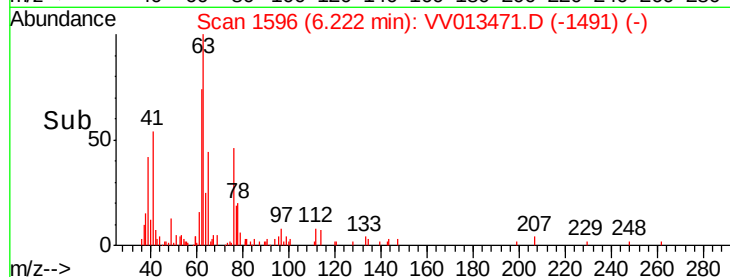
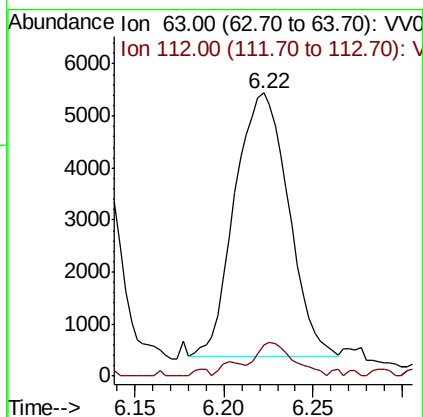
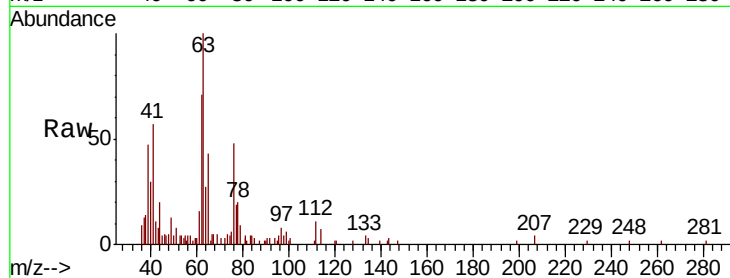
ClientSampleId :

Tot Ion: 63 Resp: 10666

Ion Ratio Lower Upper

63 100

112 8.7 3.8 5.6#



#41

Bromodichloromethane

Concen: 1.160 ug/L

RT: 6.55 min Scan# 1699

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

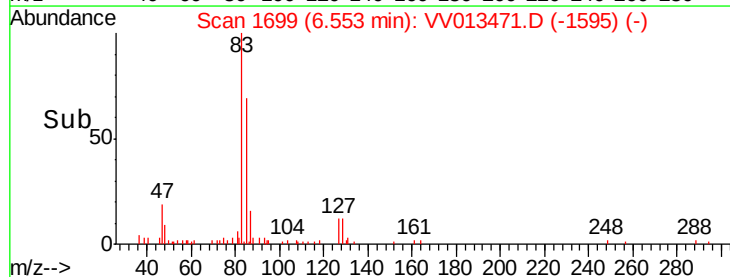
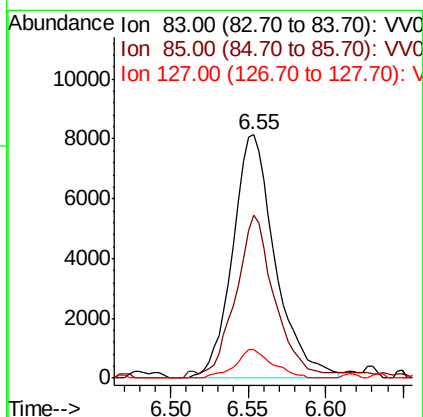
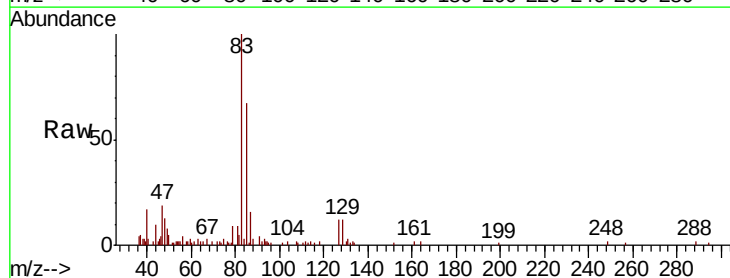
Tgt Ion: 83 Resp: 15584

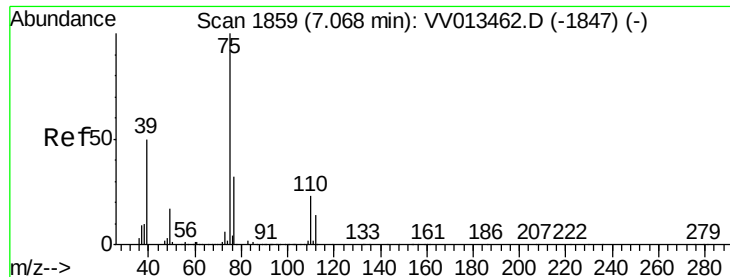
Ion Ratio Lower Upper

83 100

85 66.9 45.4 84.4

127 11.8 6.7 10.1#





#42

cis-1,3-Dichloropropene

Concen: 1.066 ug/L

RT: 7.07 min Scan# 1859

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

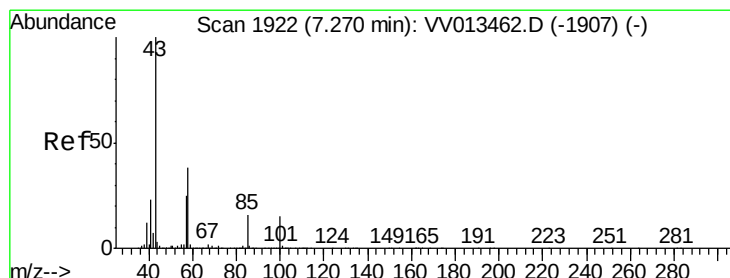
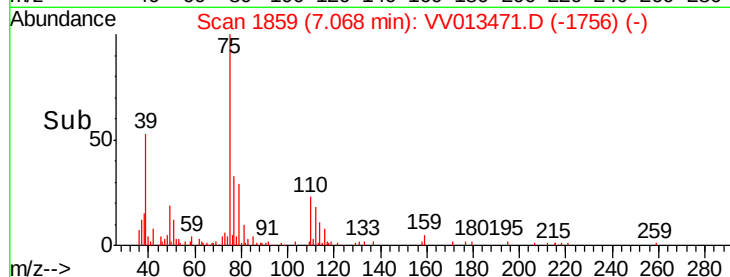
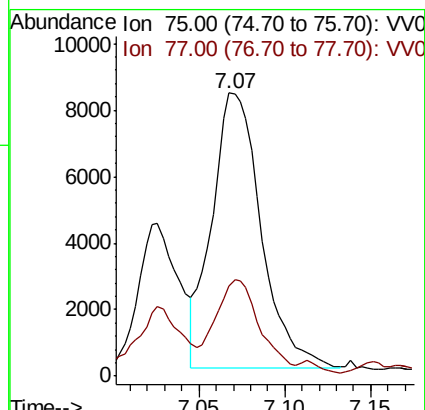
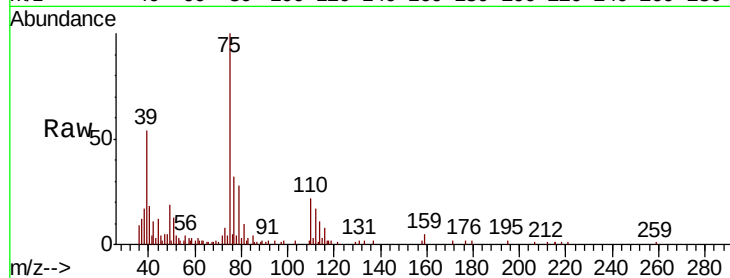
ClientSampleId :

Tot Ion: 75 Resp: 16493

Ion Ratio Lower Upper

75 100

77 32.0 22.7 42.1



#43

4-Methyl-2-pentanone

Concen: 2.575 ug/L

RT: 7.27 min Scan# 1923

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

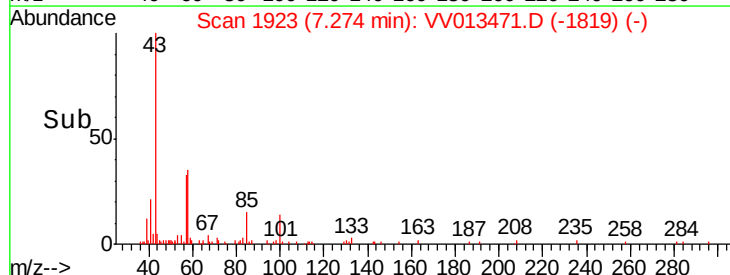
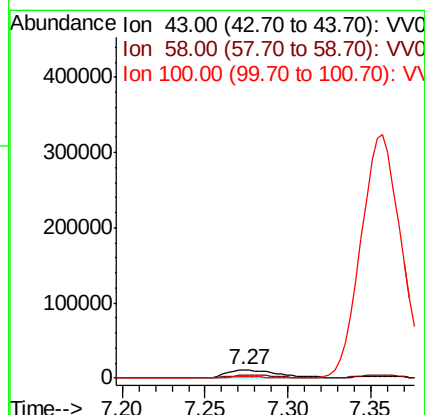
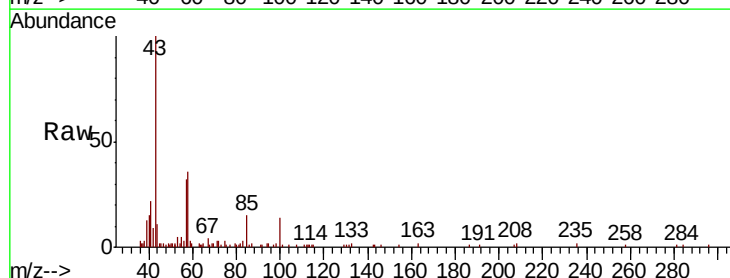
Tgt Ion: 43 Resp: 24806

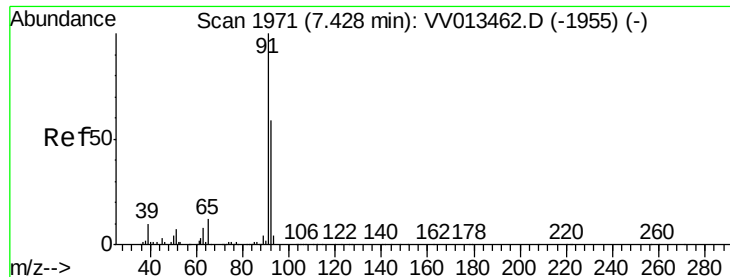
Ion Ratio Lower Upper

43 100

58 35.6 29.9 44.9

100 6.9 11.5 17.3#





#44

Toluene

Concen: 1.187 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

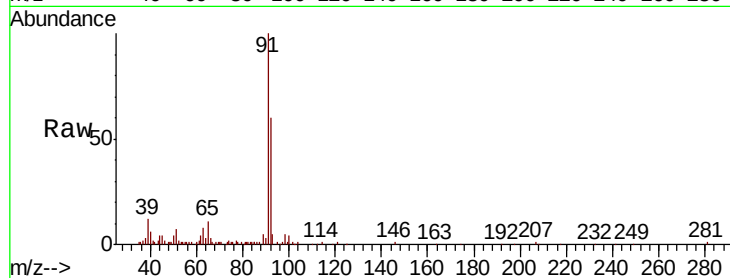
ClientSampleId :

Tot Ion: 91 Resp: 50273

Ion Ratio Lower Upper

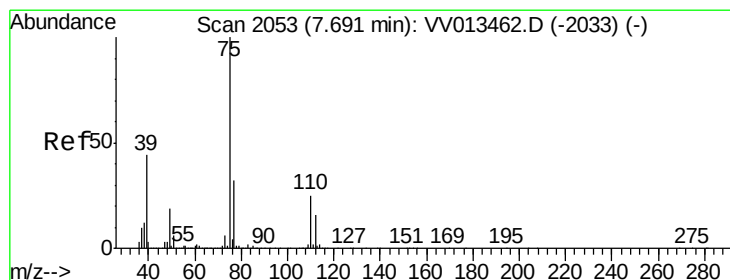
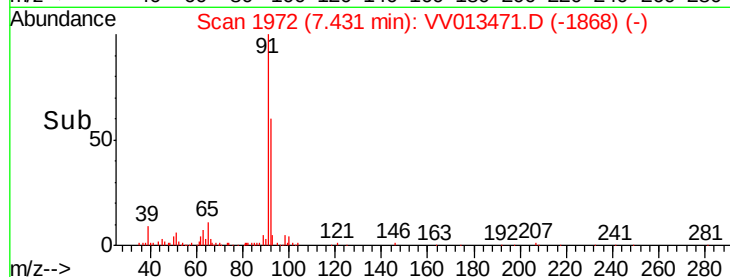
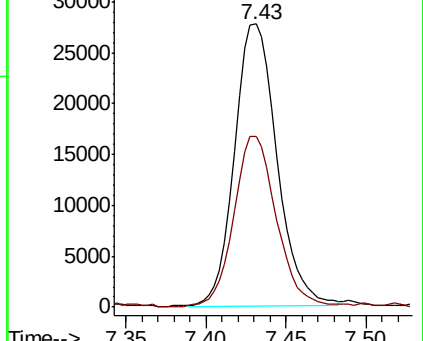
91 100

92 60.2 41.4 76.8



Abundance Ion 91.00 (90.70 to 91.70): VV0

Ion 92.00 (91.70 to 92.70): VV0



#45

trans-1,3-Dichloropropene

Concen: 1.009 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV013471.D

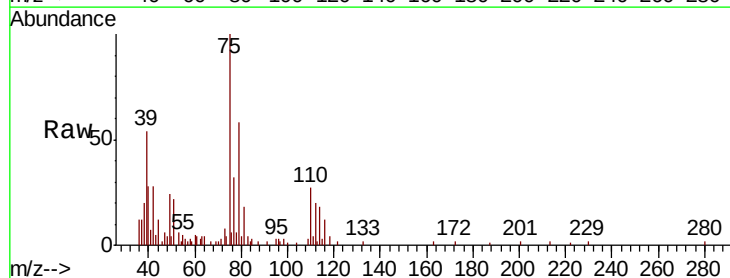
Acq: 01 Nov 2019 16:18

Tgt Ion: 75 Resp: 13386

Ion Ratio Lower Upper

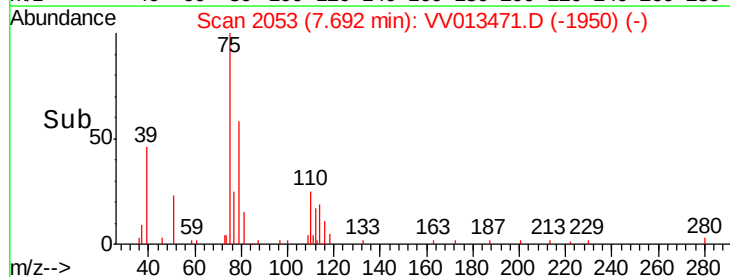
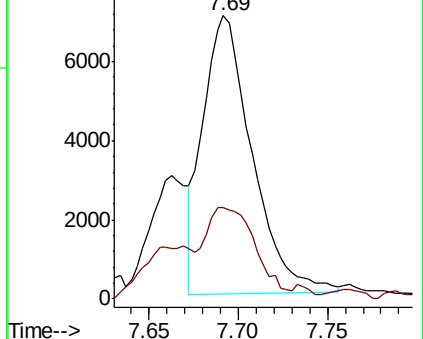
75 100

77 32.5 22.5 41.7

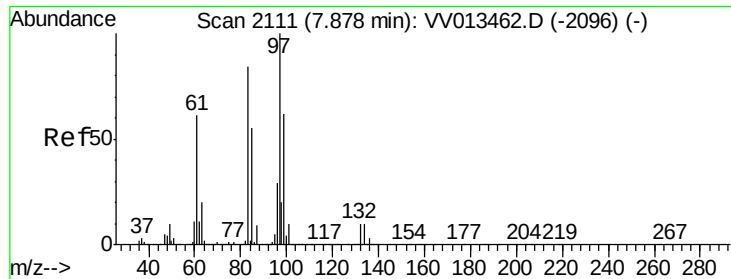


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0



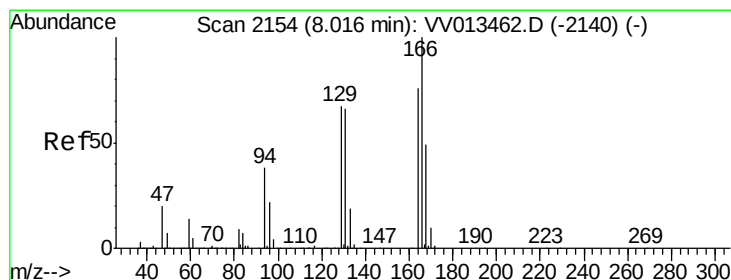
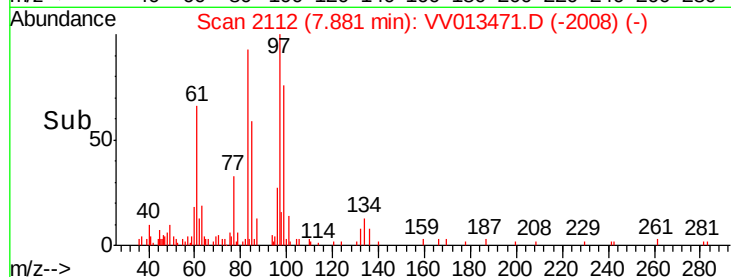
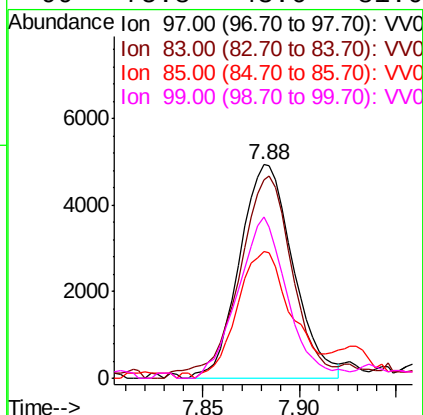
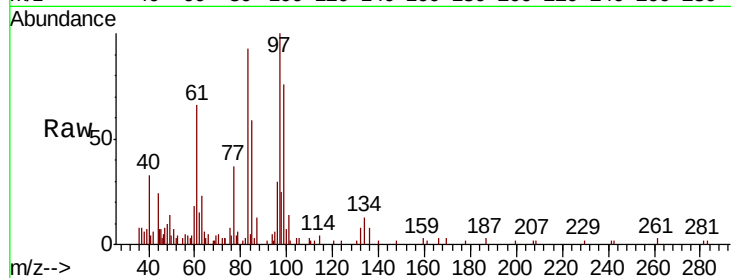




#46  
 1,1,2-Trichloroethane  
 Concen: 1.136 ug/L  
 RT: 7.88 min Scan# 2112  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

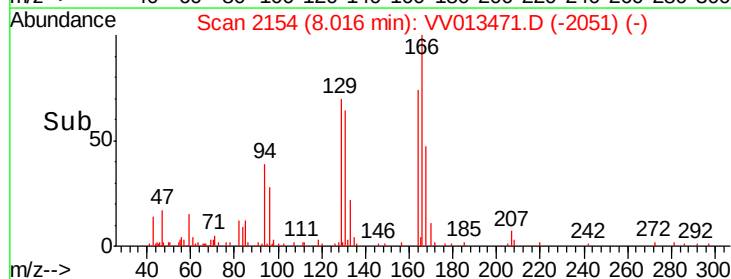
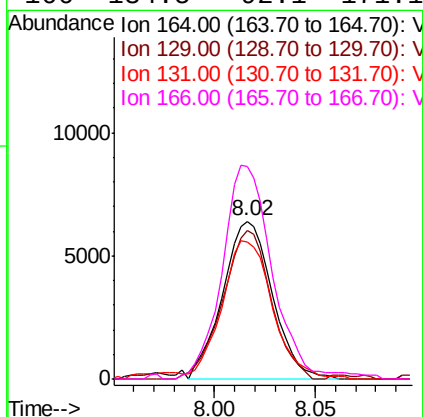
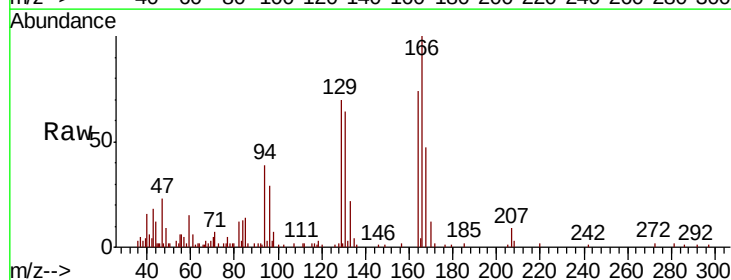
Instrument :  
 MSVOA\_V  
 ClientSampleId :

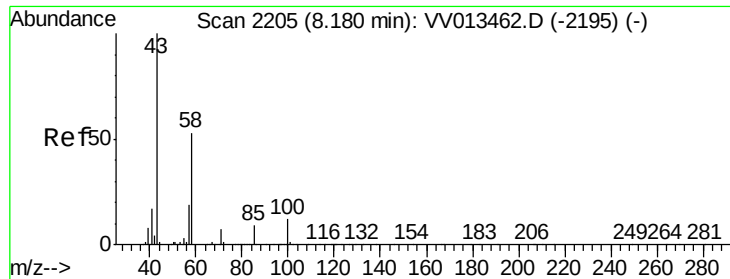
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 9501  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 83       | 93.1  | 58.9  | 109.3 |
| 85       | 59.2  | 38.6  | 71.6  |
| 99       | 75.8  | 43.6  | 81.0  |



#47  
 Tetrachloroethene  
 Concen: 1.166 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 11062 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 94.0  | 61.8  | 114.8 |
| 131      | 86.5  | 61.0  | 113.2 |
| 166      | 134.5 | 92.1  | 171.1 |

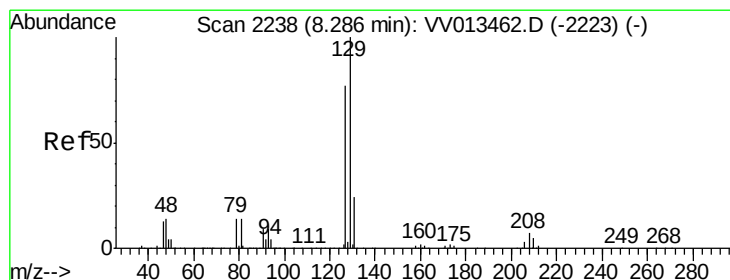
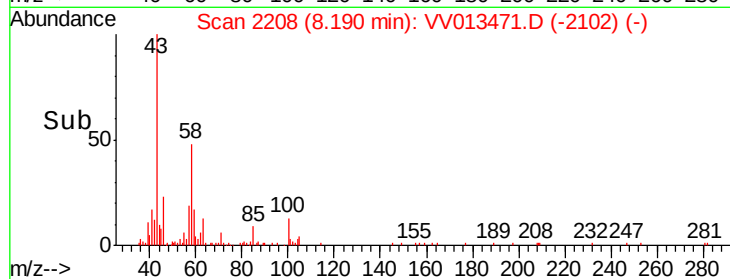
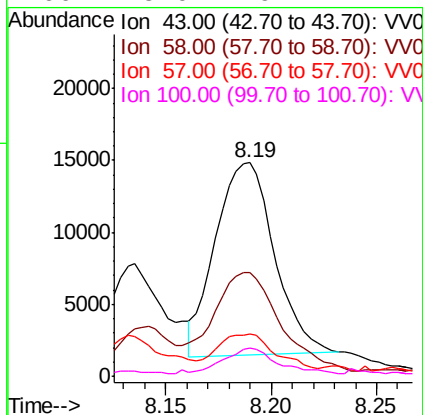
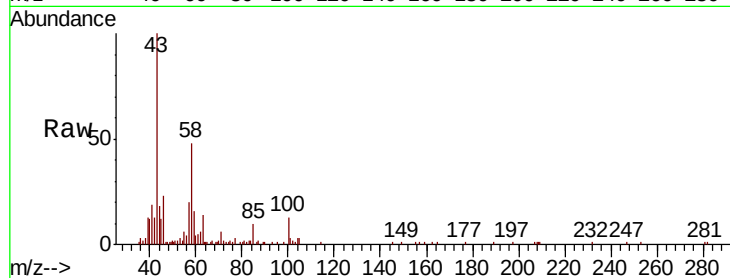




#49  
2-Hexanone  
Concen: 3.687 ug/L  
RT: 8.19 min Scan# 2208  
Delta R.T. 0.01 min  
Lab File: VV013471.D  
Acq: 01 Nov 2019 16:18

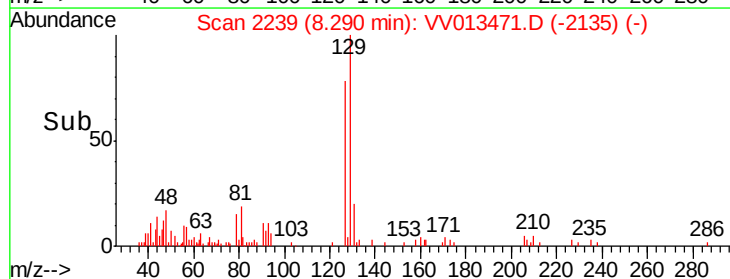
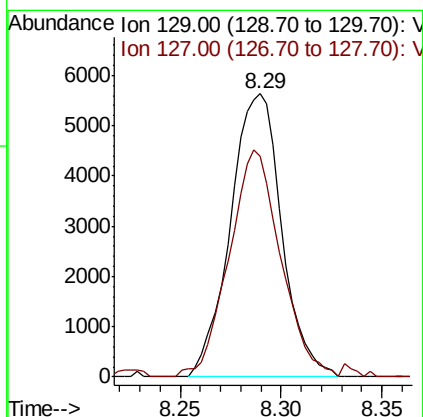
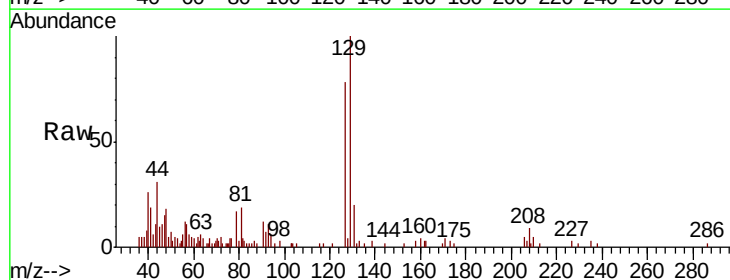
Instrument :  
MSVOA\_V  
ClientSampleId :

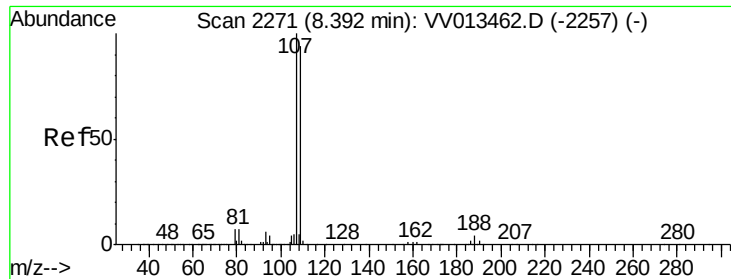
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 25862 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 58       | 57.2  | 43.8  | 65.8  |
| 57       | 22.7  | 15.0  | 22.4# |
| 100      | 15.0  | 9.4   | 14.2# |



#50  
Dibromochloromethane  
Concen: 1.005 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. 0.00 min  
Lab File: VV013471.D  
Acq: 01 Nov 2019 16:18

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 129   | Resp: | 10049 |
| Ion      | Ratio | Lower | Upper |
| 129      | 100   |       |       |
| 127      | 77.9  | 53.9  | 100.1 |





#51

1,2-Dibromoethane

Concen: 1.080 ug/L

RT: 8.39 min Scan# 2271

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampleId :

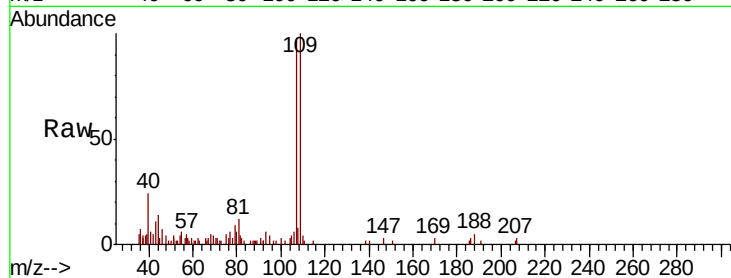
Tot Ion:107 Resp: 9341

Ion Ratio Lower Upper

107 100

109 103.0 65.6 121.8

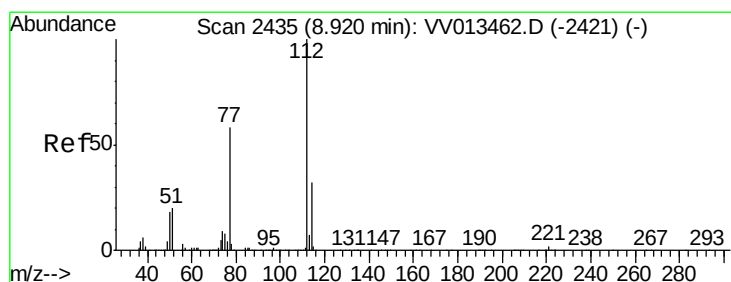
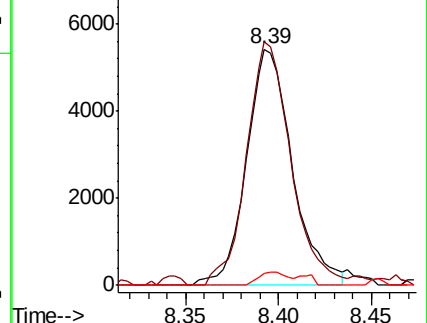
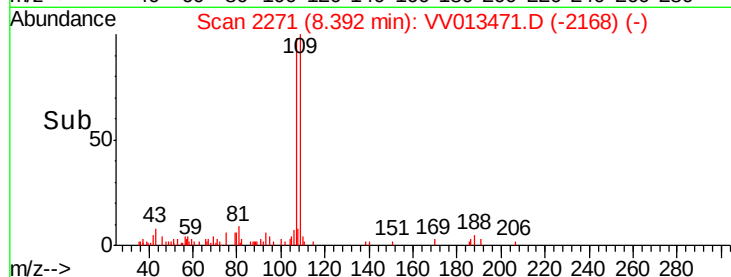
188 4.8 3.5 5.3



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V



#52

Chlorobenzene

Concen: 1.140 ug/L

RT: 8.92 min Scan# 2436

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

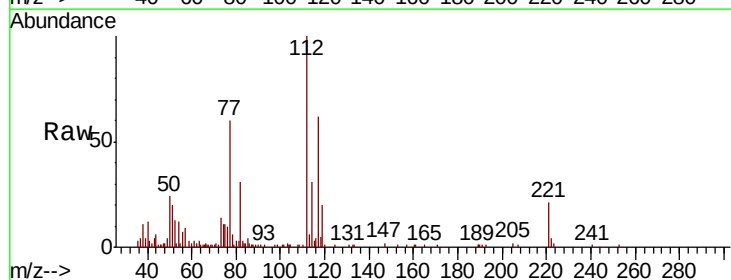
Tgt Ion:112 Resp: 32676

Ion Ratio Lower Upper

112 100

77 60.0 46.6 70.0

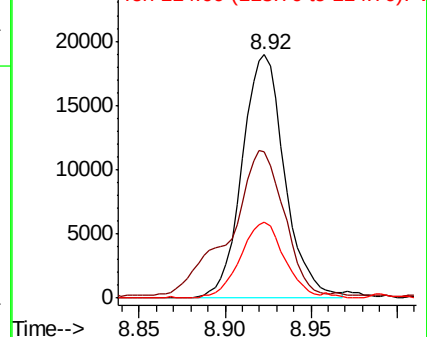
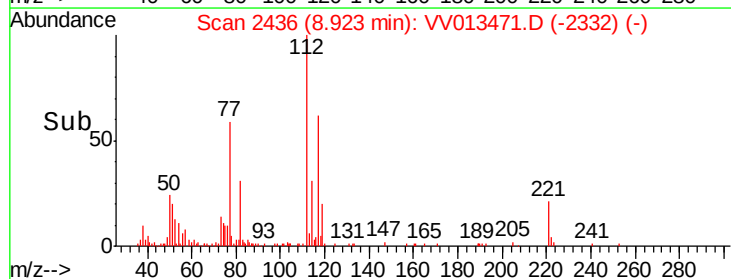
114 31.0 22.5 41.9

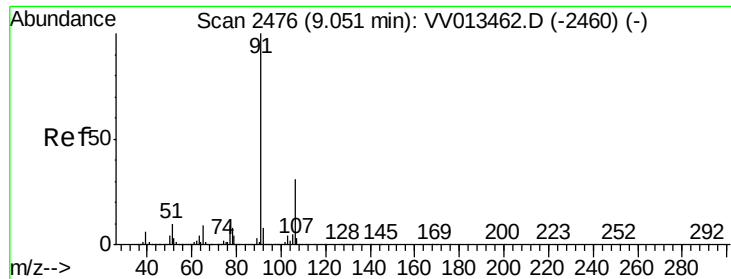


Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): VV0

Ion 114.00 (113.70 to 114.70): V





#53

Ethylbenzene

Concen: 1.069 ug/L

RT: 9.05 min Scan# 2476

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

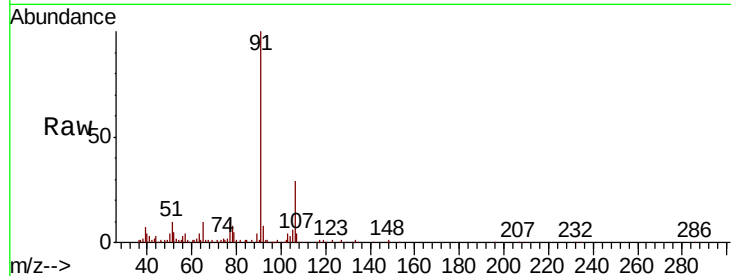
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 91 Resp: 49890

Ion Ratio Lower Upper

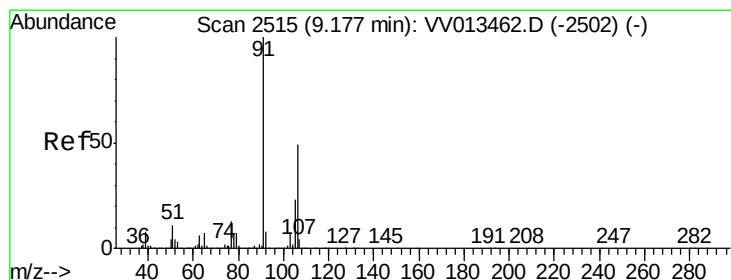
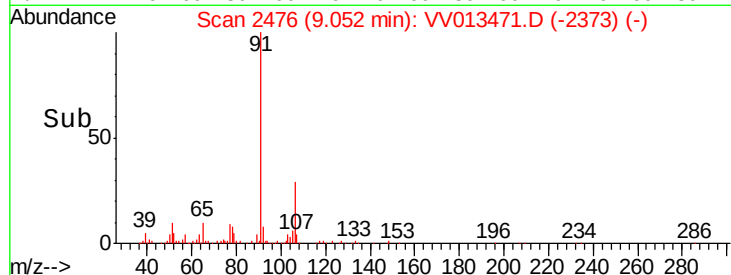
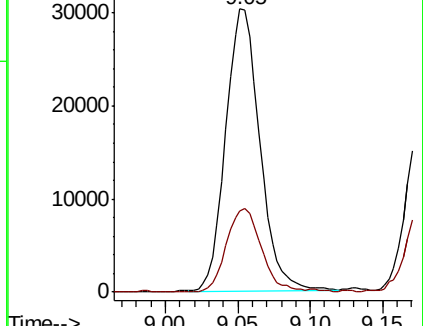
91 100

106 28.7 21.5 39.9



Abundance Ion 91.00 (90.70 to 91.70): VV013462.D (-2460) (-)

Ion 106.00 (105.70 to 106.70): VV013471.D (-2373) (-)



#54

m,p-Xylene

Concen: 1.024 ug/L

RT: 9.18 min Scan# 2516

Delta R.T. 0.00 min

Lab File: VV013471.D

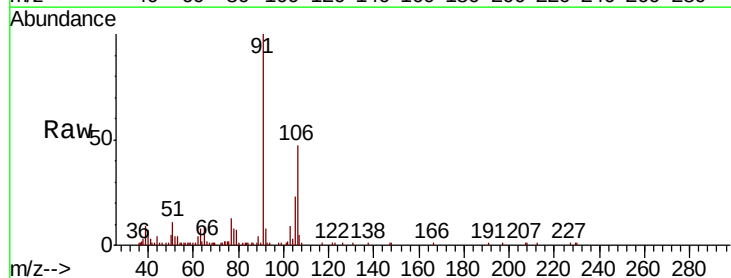
Acq: 01 Nov 2019 16:18

Tgt Ion: 106 Resp: 17972

Ion Ratio Lower Upper

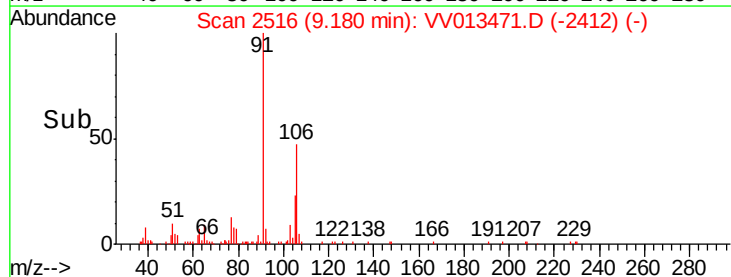
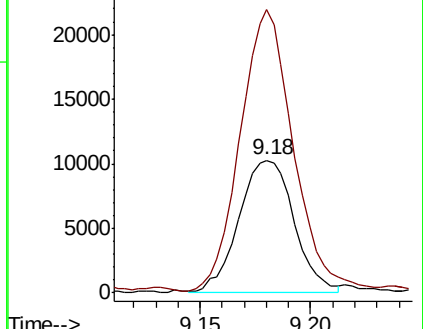
106 100

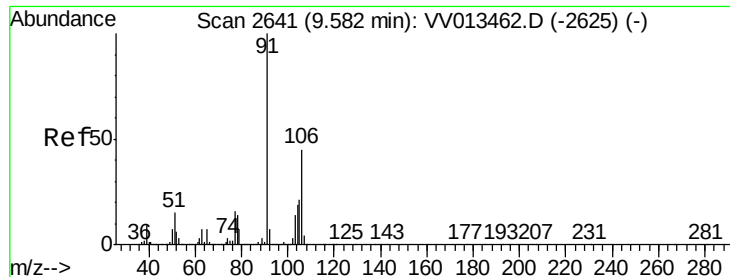
91 213.2 141.7 263.1



Abundance Ion 106.00 (105.70 to 106.70): VV013471.D (-2412) (-)

Ion 91.00 (90.70 to 91.70): VV013462.D (-2502) (-)





#55

o-xylene

Concen: 1.028 ug/L

RT: 9.59 min Scan# 2642

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

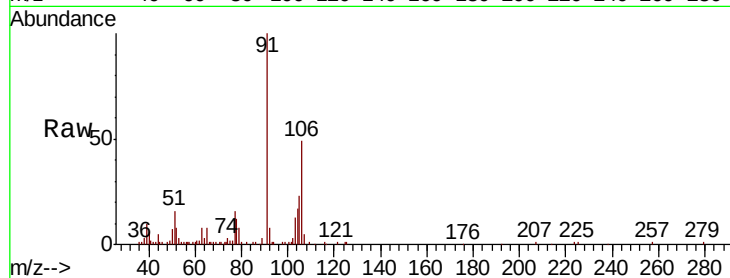
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:106 Resp: 17067

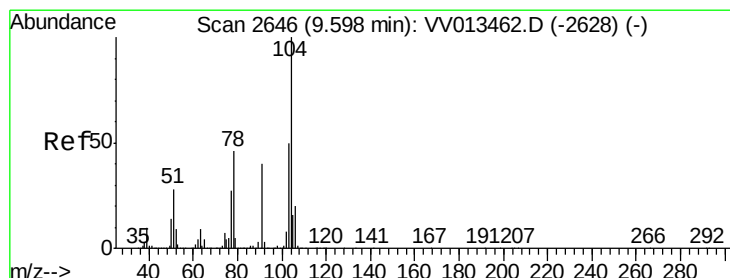
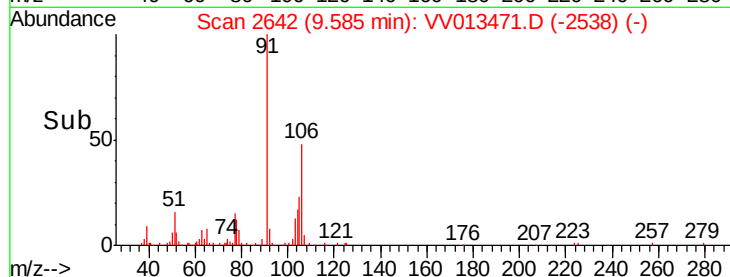
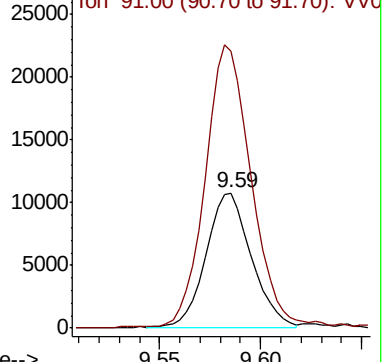
Ion Ratio Lower Upper

106 100

91 205.3 154.2 286.4



Abundance Ion 106.00 (105.70 to 106.70): VV013462.D (-2625) (-)



#56

Styrene

Concen: 0.937 ug/L

RT: 9.60 min Scan# 2647

Delta R.T. 0.00 min

Lab File: VV013471.D

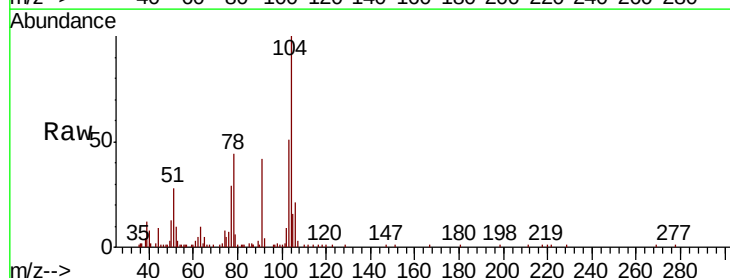
Acq: 01 Nov 2019 16:18

Tgt Ion:104 Resp: 26962

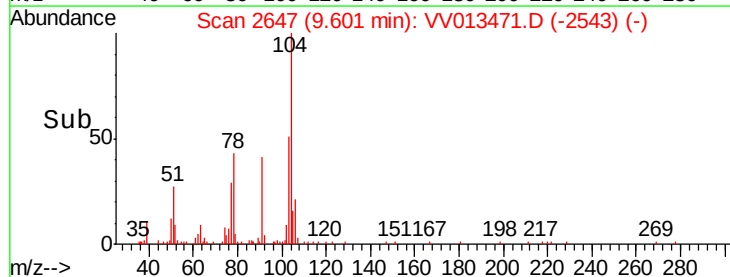
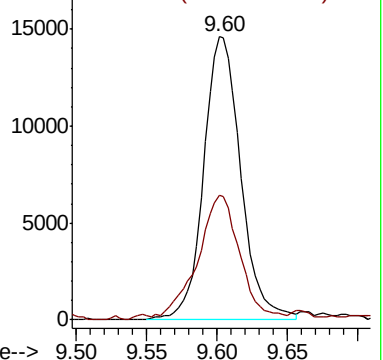
Ion Ratio Lower Upper

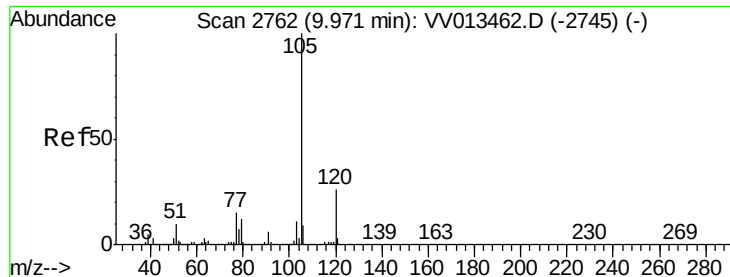
104 100

78 44.0 32.1 59.5



Abundance Ion 104.00 (103.70 to 104.70): VV013462.D (-2628) (-)





#57

Isopropylbenzene

Concen: 0.951 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampleId :

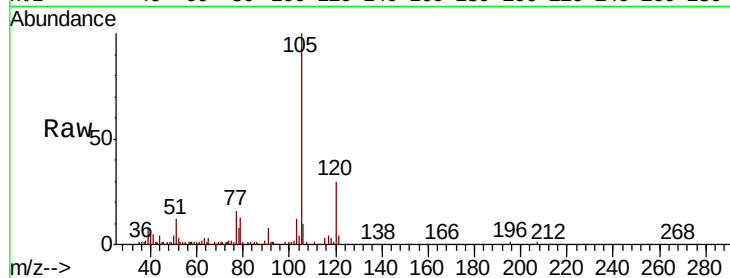
Tot Ion:105 Resp: 42582

Ion Ratio Lower Upper

105 100

120 28.4 21.1 31.7

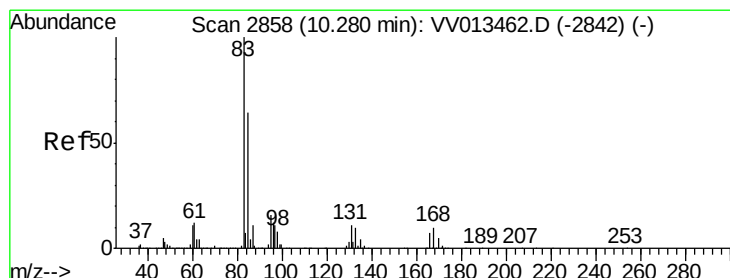
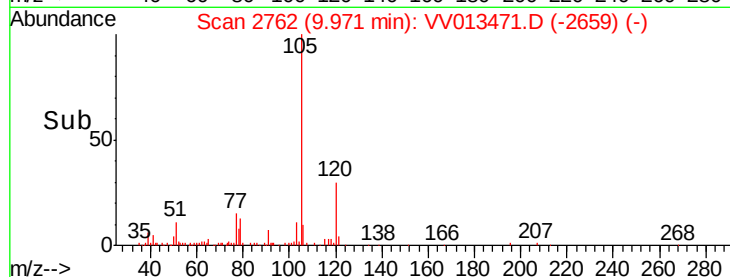
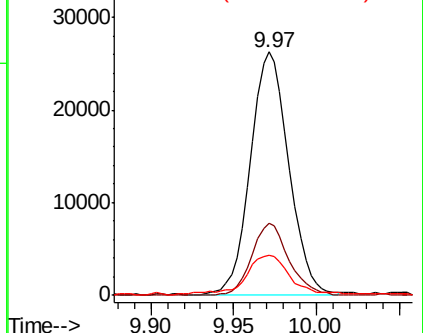
77 16.9 12.3 18.5



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: 1.272 ug/L

RT: 10.28 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

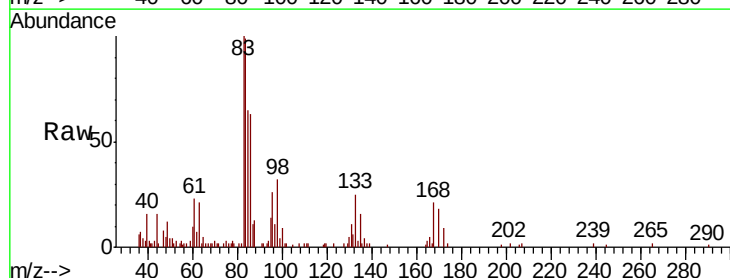
Tgt Ion: 83 Resp: 13652

Ion Ratio Lower Upper

83 100

85 65.4 45.1 83.7

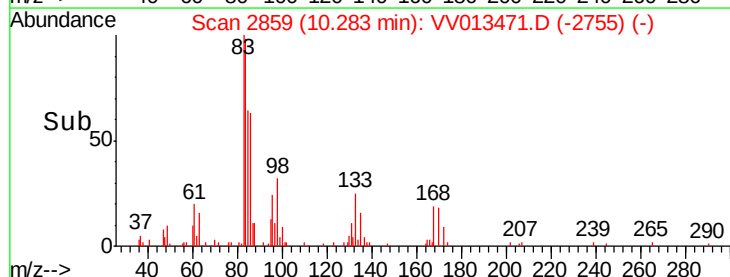
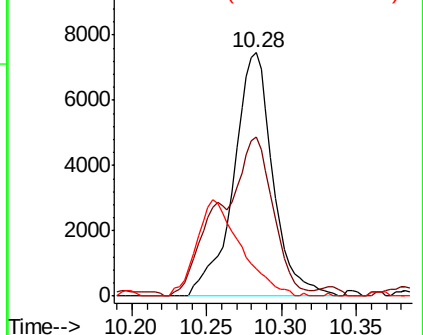
131 11.2 8.5 12.7

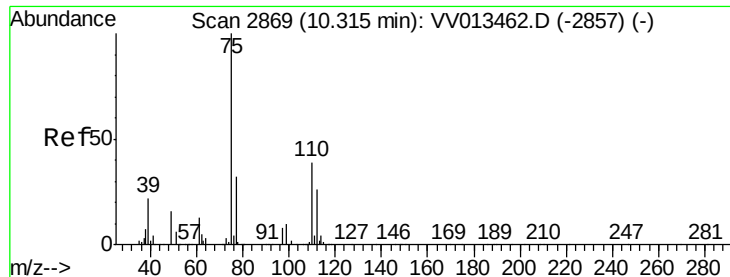


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 131.00 (130.70 to 131.70): V





#59

1,2,3-Trichloropropane

Concen: 1.195 ug/L

RT: 10.32 min Scan# 2869

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

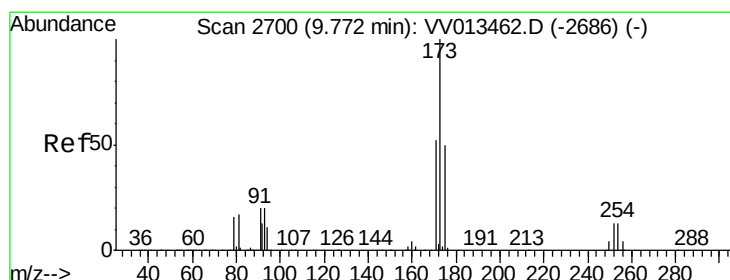
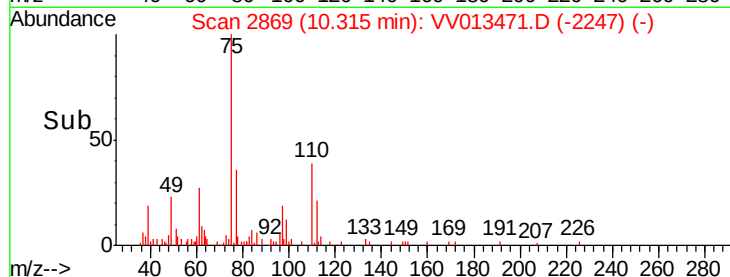
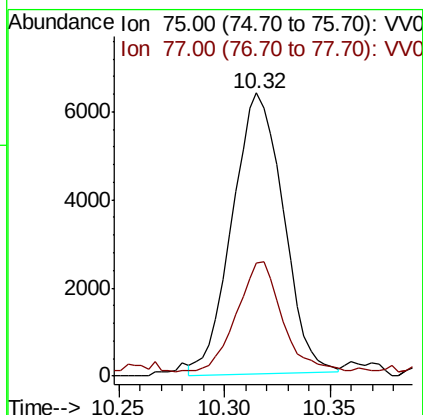
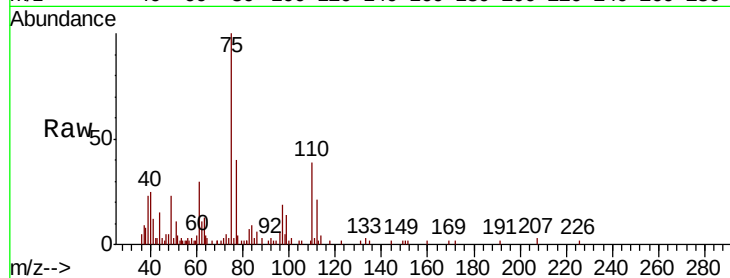
ClientSampleId :

Tot Ion: 75 Resp: 10747

Ion Ratio Lower Upper

75 100

77 33.6 25.7 38.5



#62

Bromoform

Concen: 1.086 ug/L

RT: 9.78 min Scan# 2701

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

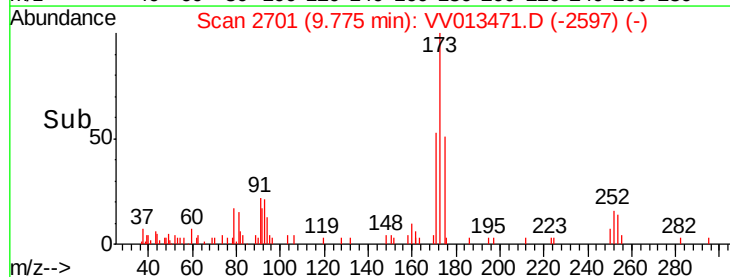
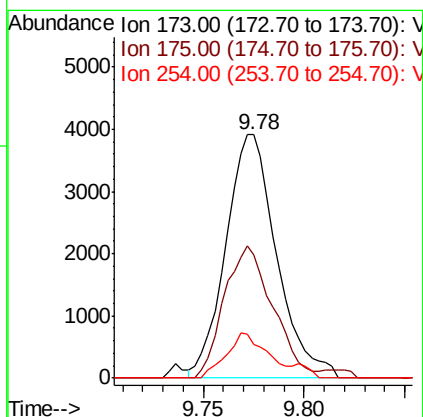
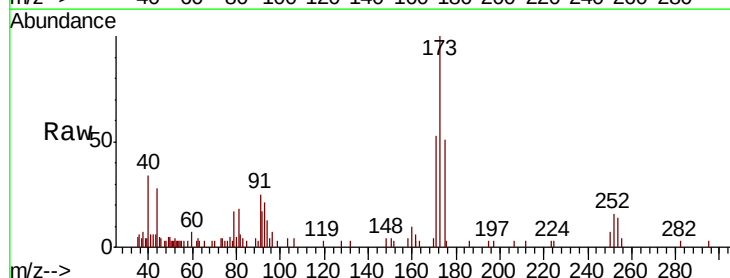
Tgt Ion: 173 Resp: 6900

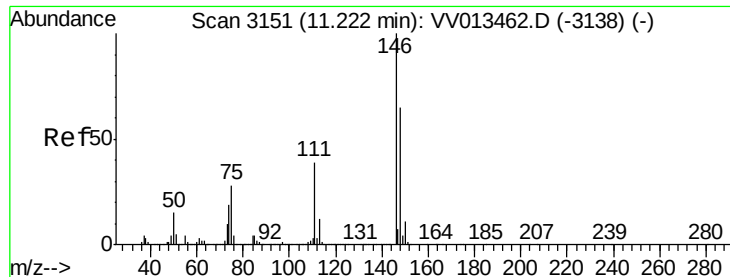
Ion Ratio Lower Upper

173 100

175 51.9 39.4 59.0

254 15.1 10.1 15.1#





#63

1,3-Dichlorobenzene

Concen: 1.154 ug/L

RT: 11.23 min Scan# 3152

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampleId :

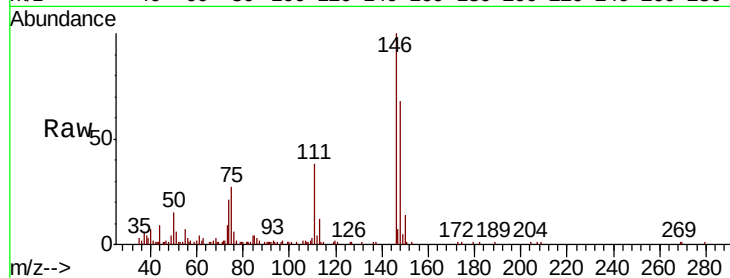
Tot Ion:146 Resp: 25553

Ion Ratio Lower Upper

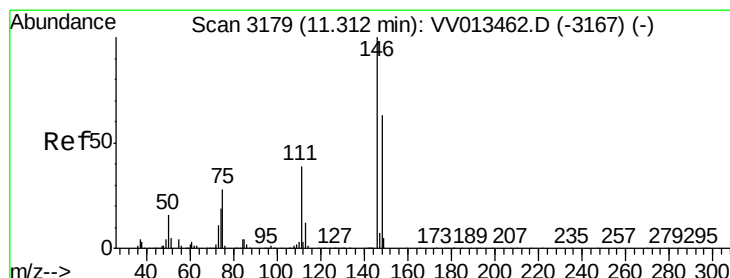
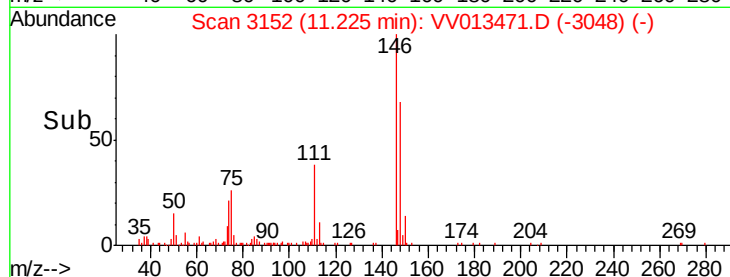
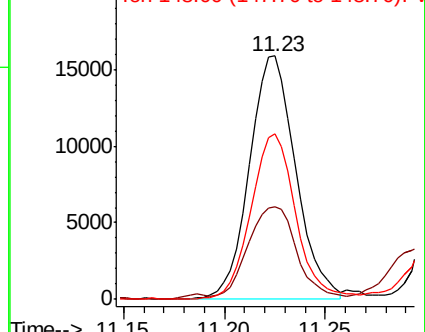
146 100

111 38.0 27.1 50.3

148 67.8 45.4 84.2



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: 1.281 ug/L

RT: 11.32 min Scan# 3180

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

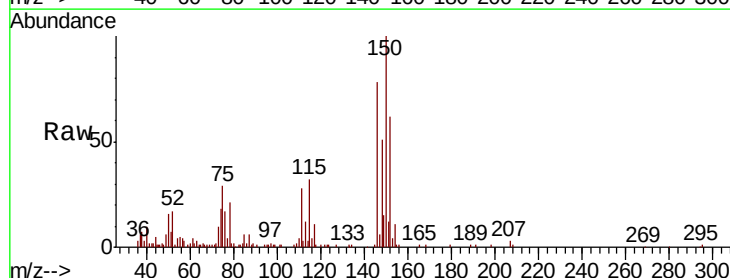
Tgt Ion:146 Resp: 28990

Ion Ratio Lower Upper

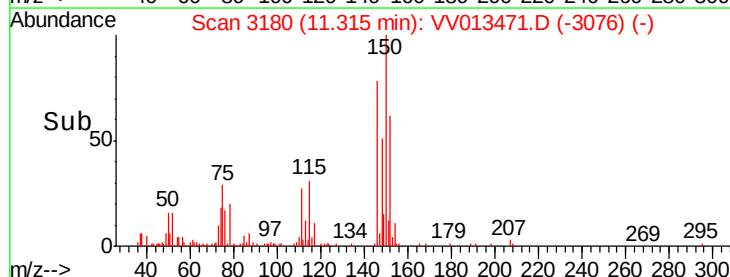
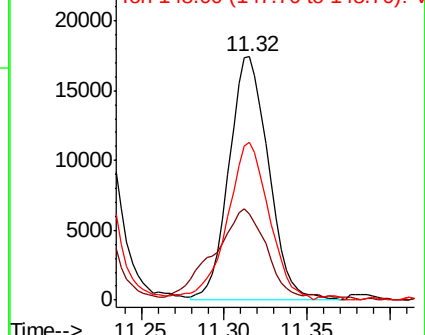
146 100

111 35.5 27.2 50.6

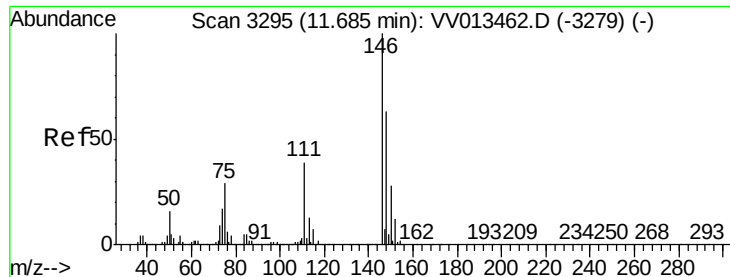
148 65.0 44.4 82.5



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



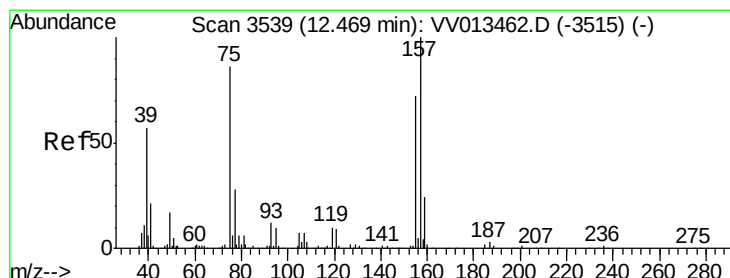
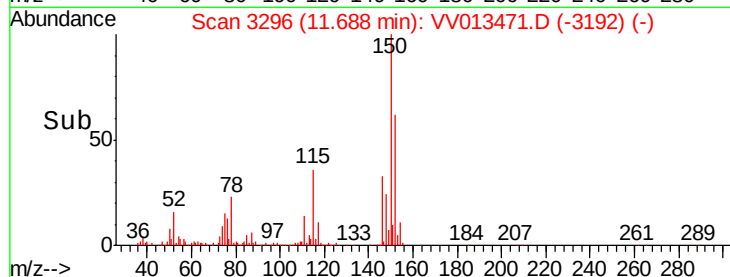
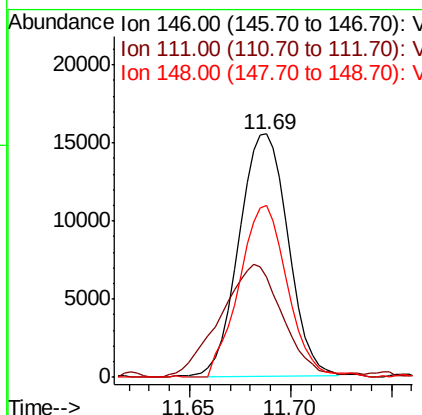
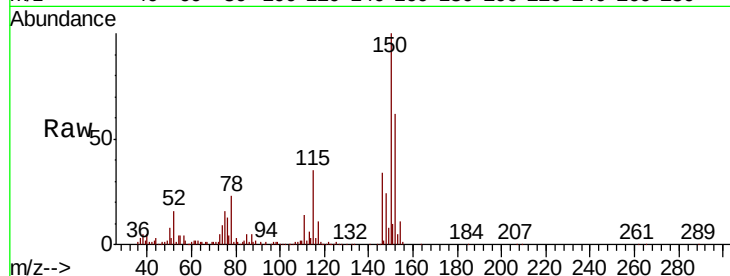




#65  
 1,2-Dichlorobenzene  
 Concen: 1.284 ug/L  
 RT: 11.69 min Scan# 3296  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

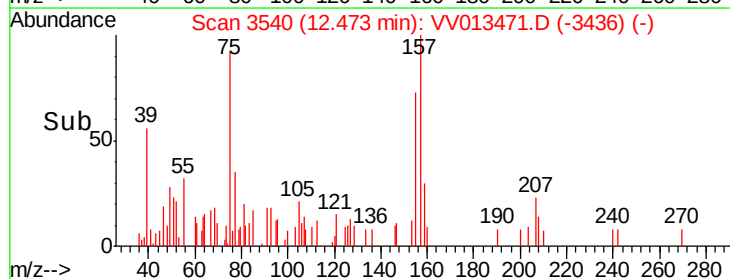
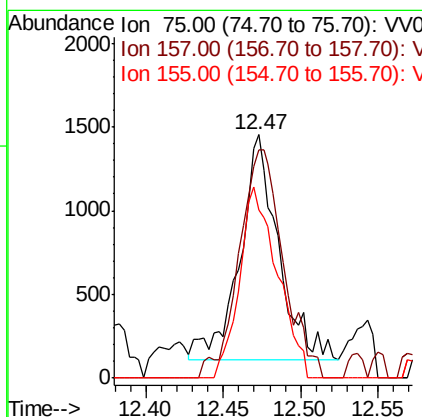
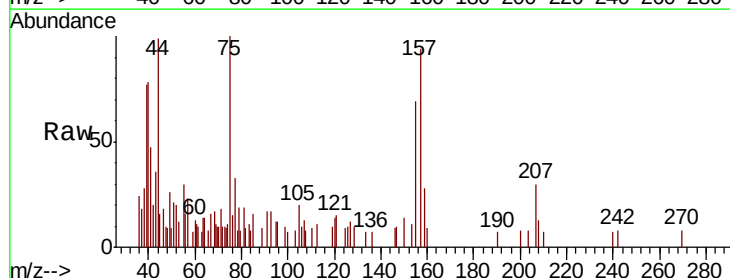
Instrument :  
 MSVOA\_V  
 ClientSampled :

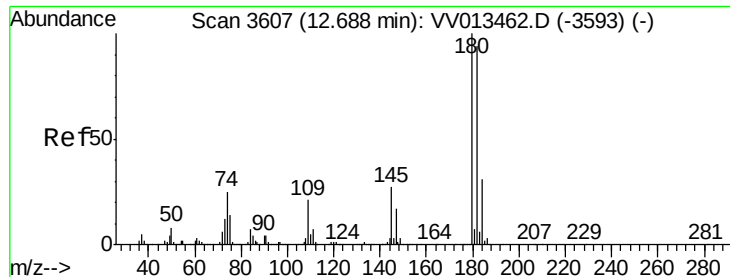
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 41.0  | 31.4  | 47.2  |
| 148     | 70.5  | 50.5  | 75.7  |



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 1.223 ug/L  
 RT: 12.47 min Scan# 3540  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 157     | 94.0  | 93.2  | 139.8 |
| 155     | 68.9  | 66.9  | 100.3 |

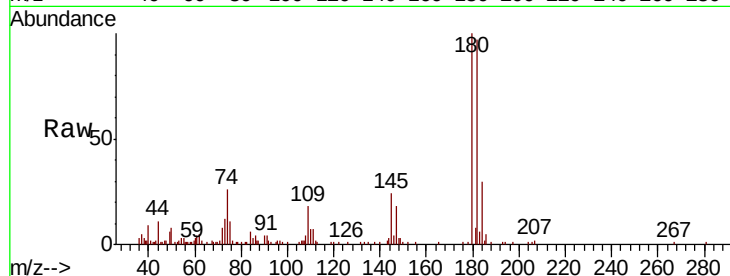




#67  
 1,3,5-Trichlorobenzene  
 Concen: 1.322 ug/L  
 RT: 12.69 min Scan# 3608  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

Instrument :  
 MSVOA\_V  
 ClientSampleId :

| Tot Ion   | 180  | Resp  | 23142 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 180       | 100  |       |       |
| 182       | 90.6 | 74.8  | 112.2 |
| 184       | 29.8 | 24.3  | 36.5  |
| 145       | 24.0 | 21.1  | 31.7  |



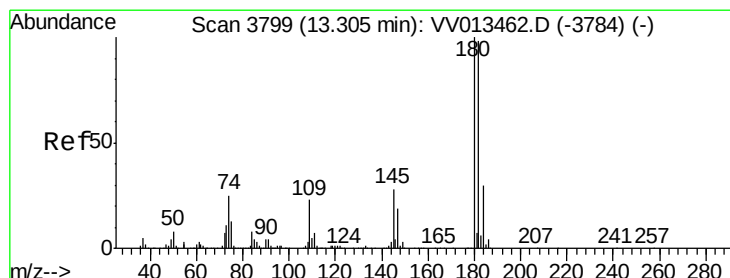
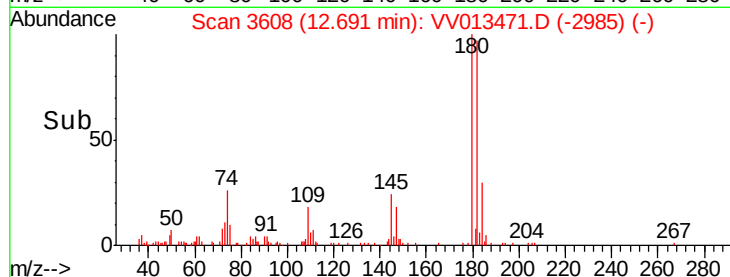
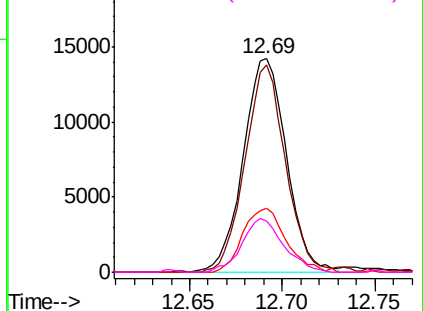
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

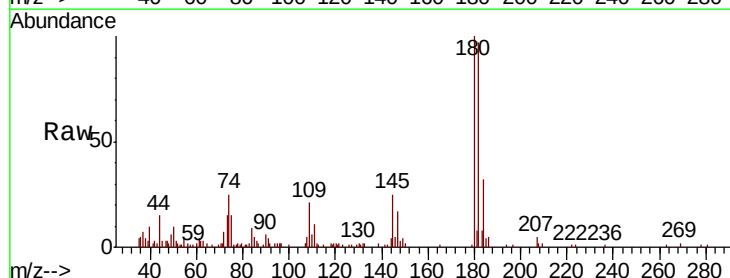
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 1.232 ug/L  
 RT: 13.31 min Scan# 3799  
 Delta R.T. 0.00 min  
 Lab File: VV013471.D  
 Acq: 01 Nov 2019 16:18

| Tgt Ion   | 180  | Resp  | 18381 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 180       | 100  |       |       |
| 182       | 93.0 | 77.4  | 116.0 |
| 145       | 26.3 | 22.3  | 33.5  |

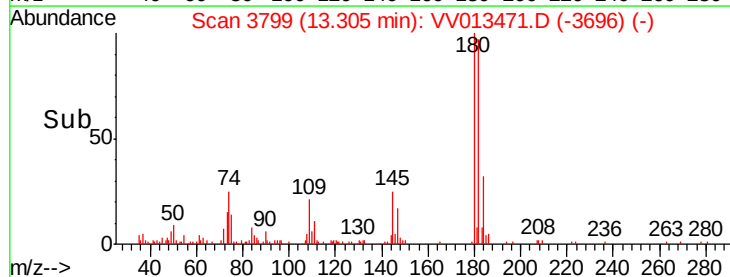
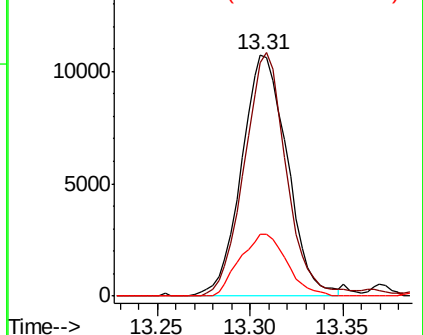


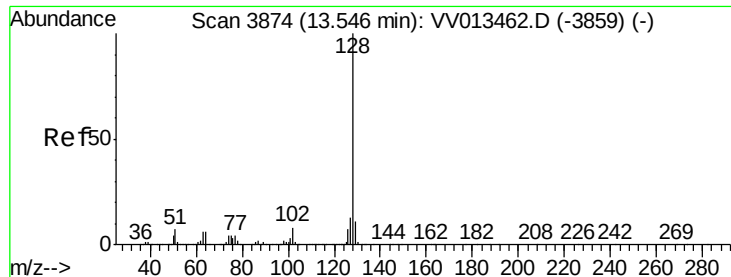
Abundance

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





#69

Naphthalene

Concen: 1.018 ug/L

RT: 13.55 min Scan# 3875

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

Instrument :

MSVOA\_V

ClientSampleId :

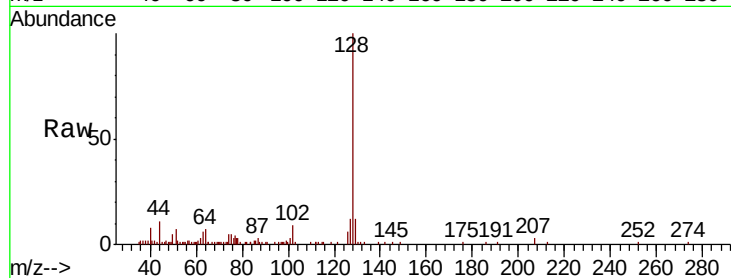
Tot Ion:128 Resp: 29379

Ion Ratio Lower Upper

128 100

129 10.4 8.6 13.0

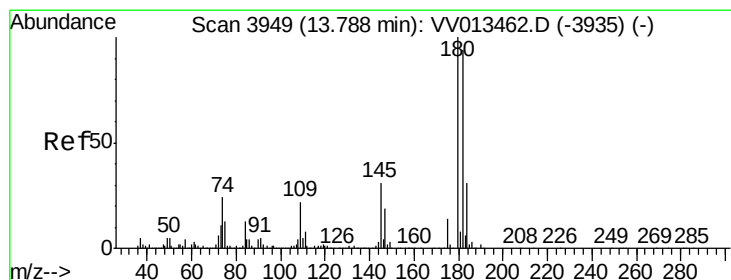
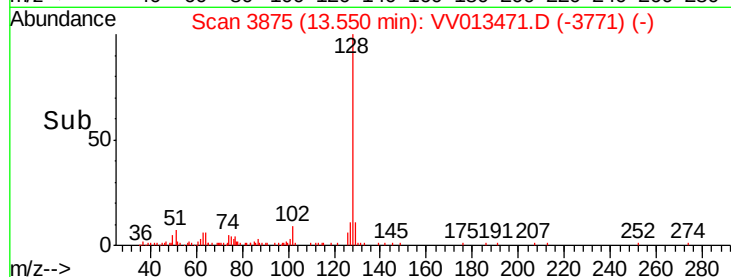
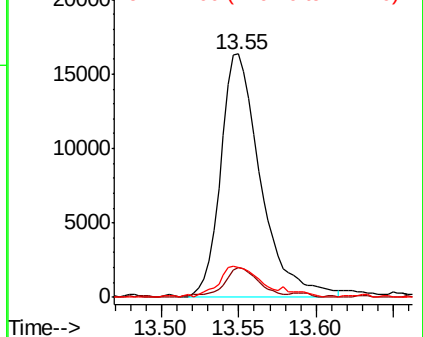
127 12.6 10.5 15.7



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 1.179 ug/L

RT: 13.79 min Scan# 3950

Delta R.T. 0.00 min

Lab File: VV013471.D

Acq: 01 Nov 2019 16:18

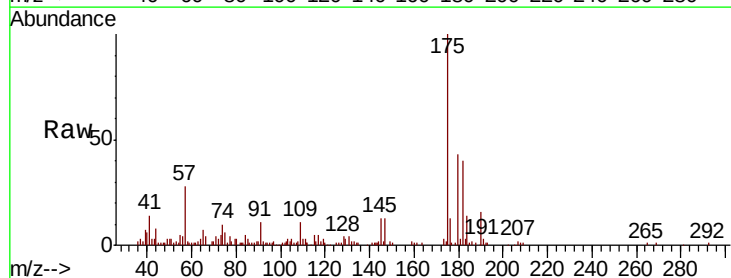
Tgt Ion:180 Resp: 16459

Ion Ratio Lower Upper

180 100

182 91.9 75.2 112.8

145 31.2 23.8 35.6



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

