

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV110119\  
 Data File : VV013470.D  
 Acq On : 01 Nov 2019 15:51  
 Operator : SY/MD  
 Sample : MDL04  
 Misc : 5.00G/10.0ML/MSVOA V/SOIL  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Nov 02 03:59:55 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  | 705129   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 686097   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 347560   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 240009   | 24.17    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 96.68%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 188963   | 26.08    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 104.32% |
| 10) 1,1-Dichloroethene-d2      | 2.03   | 63    | 223      | 0.01     | ug/L | -0.10   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 0.04%#  |
| 20) 2-Butanone-d5              | 3.95   | 46    | 228354   | 49.03    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 98.06%  |
| 24) Chloroform-d               | 4.40   | 84    | 447733   | 22.42    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 89.68%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 280857   | 24.57    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 98.28%  |
| 29) Benzene-d6                 | 5.09   | 84    | 963292   | 23.91    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 95.64%  |
| 33) 1,2-Dichloropropane-d6     | 6.11   | 67    | 294383   | 23.95    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 95.80%  |
| 37) Toluene-d8                 | 7.36   | 98    | 852472   | 23.62    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 94.48%  |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 120380   | 22.54    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 90.16%  |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 124008   | 47.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 94.36%  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 263765   | 23.42    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 93.68%  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 336768   | 24.79    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 99.16%  |

## Target Compounds

|                                |      |     |       |              | Ovalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 12591 | 1.145 ug/L   | 92     |
| 3) Chloromethane               | 1.25 | 50  | 10653 | 0.950 ug/L   | 95     |
| 5) Vinyl chloride              | 1.32 | 62  | 11935 | 1.087 ug/L # | 61     |
| 6) Bromomethane                | 1.54 | 94  | 5858  | 1.135 ug/L   | 97     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 15601 | 1.038 ug/L   | 93     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 11090 | 1.237 ug/L   | 88     |
| 13) Acetone                    | 2.22 | 43  | 23052 | 4.234 ug/L   | 98     |
| 14) Carbon disulfide           | 2.32 | 76  | 31907 | 0.970 ug/L # | 95     |
| 16) Methylene chloride         | 2.53 | 84  | 34777 | 2.650 ug/L   | 98     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 26097 | 0.938 ug/L   | 97     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 11271 | 0.997 ug/L   | 93     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 20268 | 0.983 ug/L   | 96     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 10835 | 0.912 ug/L   | 78     |
| 25) Chloroform                 | 4.42 | 83  | 34406 | 1.631 ug/L   | 83     |
| 30) Cyclohexane                | 4.72 | 56  | 17408 | 0.940 ug/L   | 98     |
| 31) 1,1,1-Trichloroethane      | 4.66 | 97  | 17279 | 0.992 ug/L   | 97     |
| 32) Carbon tetrachloride       | 4.87 | 117 | 14670 | 0.946 ug/L   | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV110119\  
 Data File : VV013470.D  
 Acq On : 01 Nov 2019 15:51  
 Operator : SY/MD  
 Sample : MDL04  
 Misc : 5.00G/10.0ML/MSVOA V/SOIL  
 ALS Vial : 15 Sample Multiplier: 1

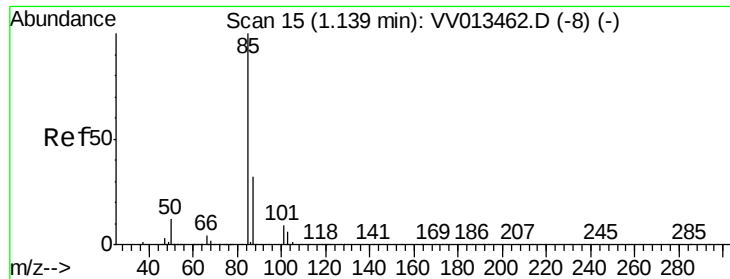
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Nov 02 03:59:55 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   | 40806    | 0.907 | ug/L   | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 13828    | 1.138 | ug/L # | 85       |
| 36) Methylcyclohexane          | 6.17  | 83   | 16952    | 0.891 | ug/L   | 94       |
| 41) Bromodichloromethane       | 6.56  | 83   | 13980    | 0.958 | ug/L   | 97       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 14533    | 0.865 | ug/L   | 86       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 22881    | 2.187 | ug/L   | 92       |
| 44) Toluene                    | 7.43  | 91   | 44766    | 0.974 | ug/L   | 99       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 14249    | 0.989 | ug/L   | 90       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 10519    | 1.158 | ug/L   | 97       |
| 47) Tetrachloroethene          | 8.01  | 164  | 10209    | 0.991 | ug/L   | 93       |
| 49) 2-Hexanone                 | 8.19  | 43   | 32027    | 4.205 | ug/L   | 97       |
| 50) Dibromochloromethane       | 8.29  | 129  | 10364    | 0.954 | ug/L   | 96       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 9253     | 0.986 | ug/L   | 89       |
| 52) Chlorobenzene              | 8.92  | 112  | 28913    | 0.929 | ug/L   | 94       |
| 53) Ethylbenzene               | 9.05  | 91   | 45054    | 0.889 | ug/L   | 96       |
| 54) m,p-Xylene                 | 9.18  | 106  | 16767    | 0.880 | ug/L   | 97       |
| 55) o-xylene                   | 9.58  | 106  | 15971    | 0.886 | ug/L   | 95       |
| 56) Styrene                    | 9.60  | 104  | 23782    | 0.761 | ug/L   | 98       |
| 57) Isopropylbenzene           | 9.97  | 105  | 39492    | 0.812 | ug/L   | 94       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 13696    | 1.176 | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane     | 10.31 | 75   | 10241    | 1.049 | ug/L   | 91       |
| 62) Bromoform                  | 9.77  | 173  | 6256     | 0.908 | ug/L   | 95       |
| 63) 1,3-Dichlorobenzene        | 11.22 | 146  | 25692    | 1.071 | ug/L   | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 26533    | 1.081 | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.68 | 146  | 25200    | 1.130 | ug/L   | 93       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 2811     | 1.370 | ug/L   | 95       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 20736    | 1.093 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 17189    | 1.063 | ug/L   | 98       |
| 69) Naphthalene                | 13.55 | 128  | 27597    | 0.882 | ug/L   | 97       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 15630    | 1.033 | ug/L   | 98       |

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





#2

Dichlorodifluoromethane

Concen: 1.145 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

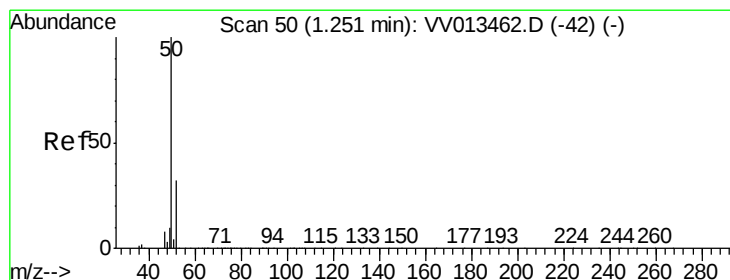
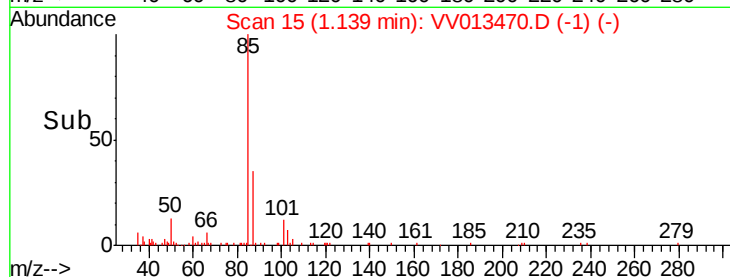
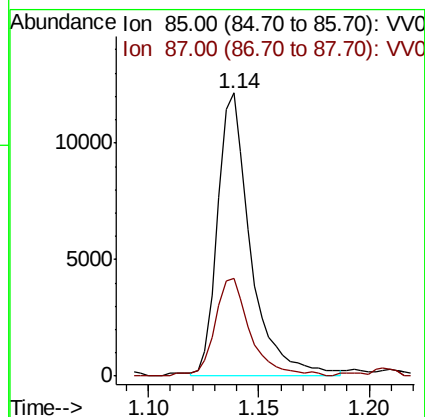
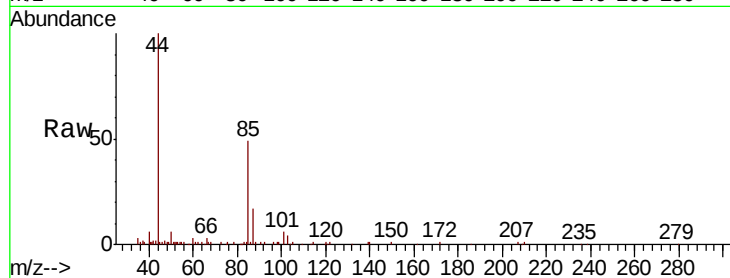
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 85 Resp: 12591

Ion Ratio Lower Upper

85 100

87 36.0 22.2 41.2



#3

Chloromethane

Concen: 0.950 ug/L

RT: 1.25 min Scan# 49

Delta R.T. -0.00 min

Lab File: VV013470.D

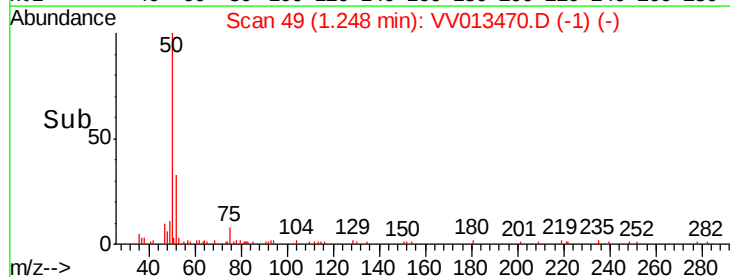
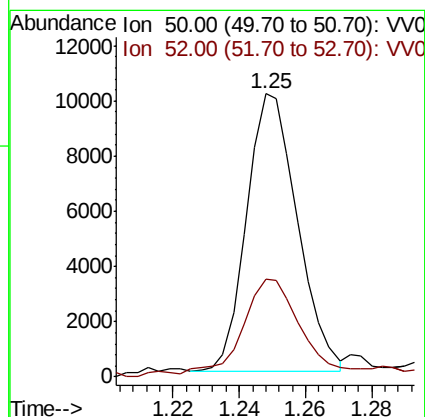
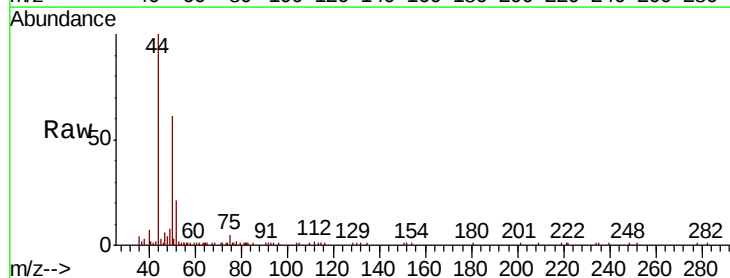
Acq: 01 Nov 2019 15:51

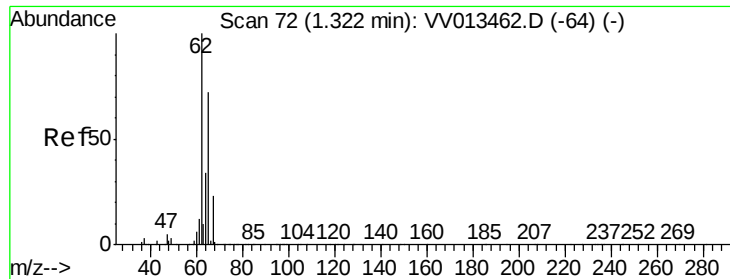
Tgt Ion: 50 Resp: 10653

Ion Ratio Lower Upper

50 100

52 34.6 22.2 41.2





#5

Vinyl chloride

Concen: 1.087 ug/L

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

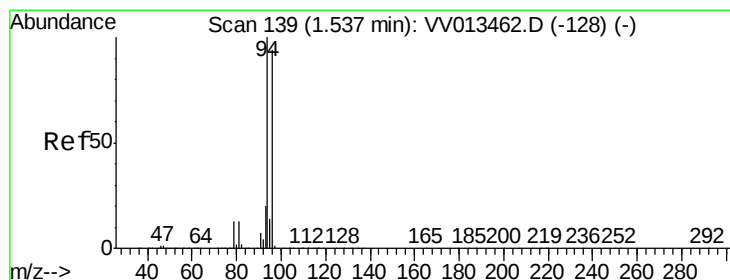
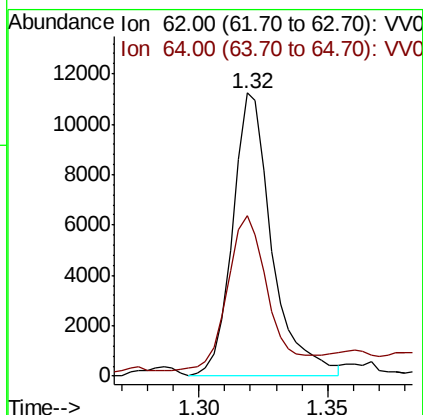
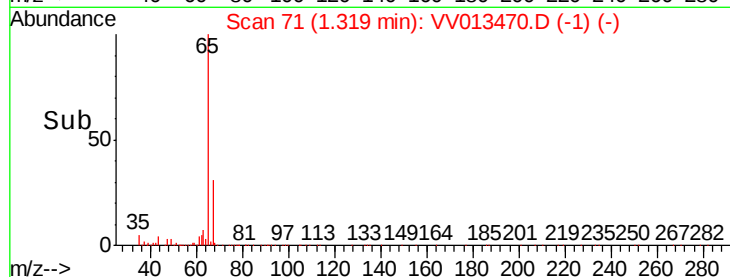
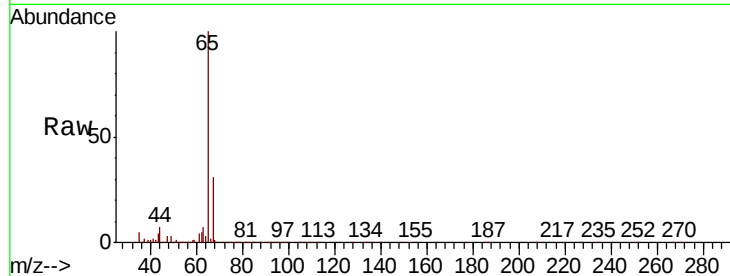
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 62 Resp: 11935

Ion Ratio Lower Upper

62 100

64 56.6 23.8 44.2#



#6

Bromomethane

Concen: 1.135 ug/L

RT: 1.54 min Scan# 139

Delta R.T. 0.00 min

Lab File: VV013470.D

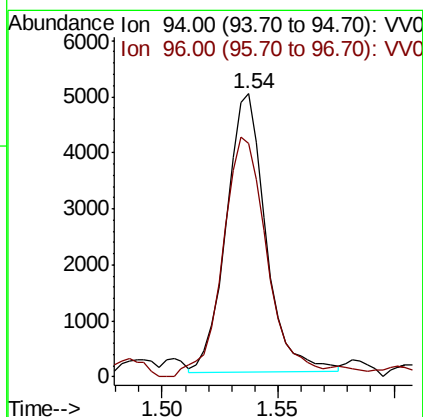
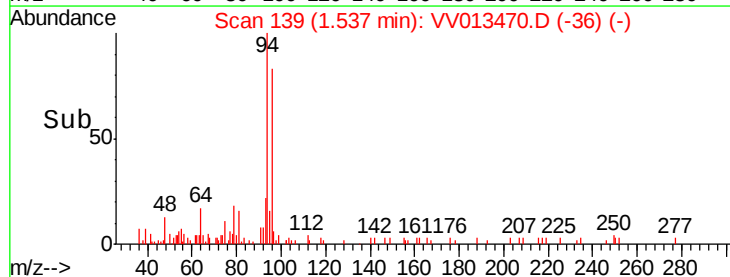
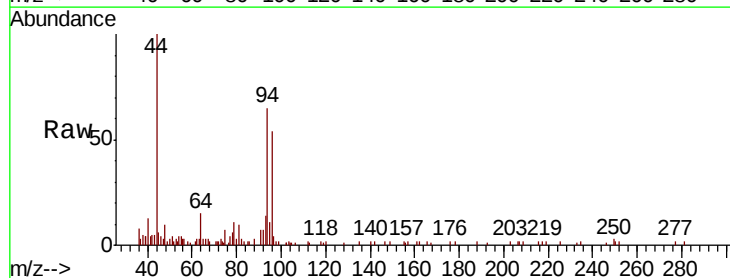
Acq: 01 Nov 2019 15:51

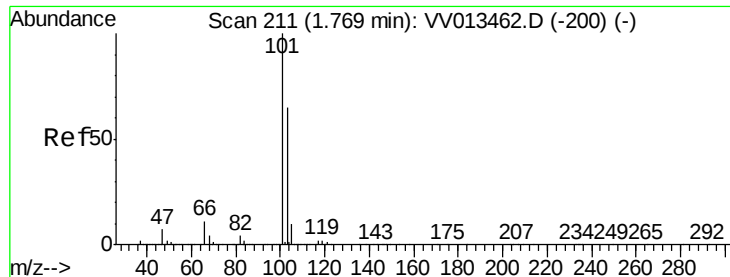
Tgt Ion: 94 Resp: 5858

Ion Ratio Lower Upper

94 100

96 96.5 9.4 177.8



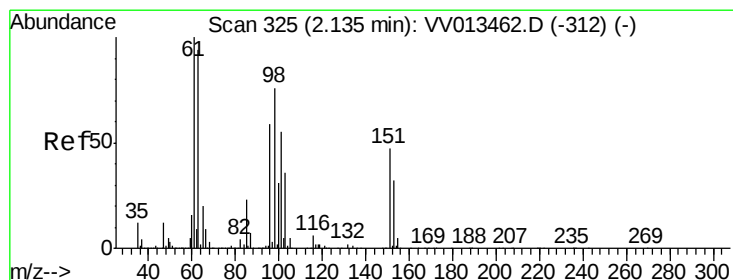
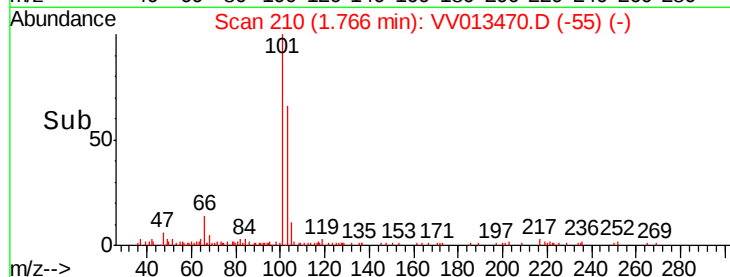
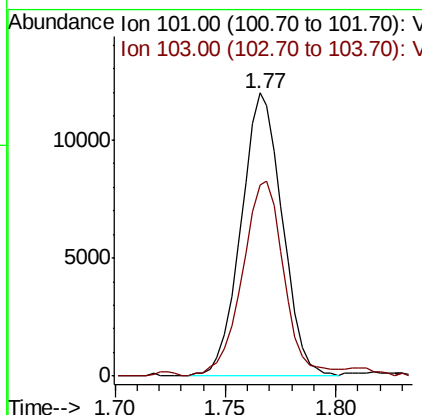
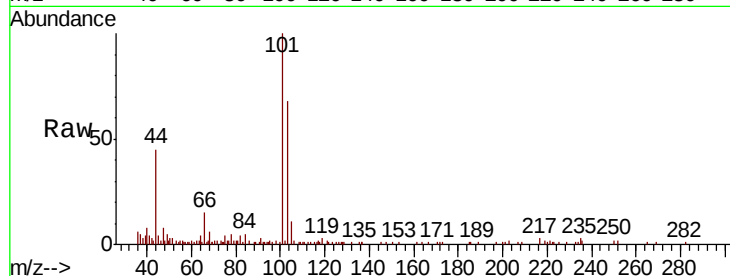


#9

Trichlorofluoromethane  
 Concen: 1.038 ug/L  
 RT: 1.77 min Scan# 210  
 Delta R.T. -0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

Instrument :  
 MSVOA\_V  
 ClientSampleId :

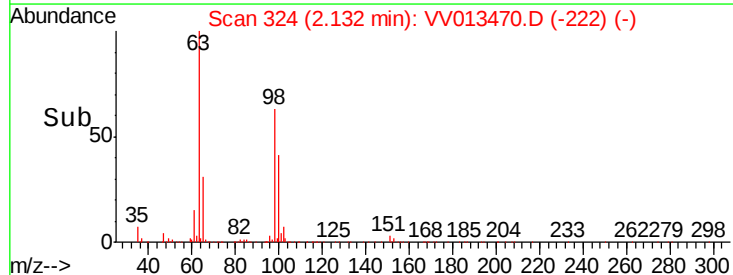
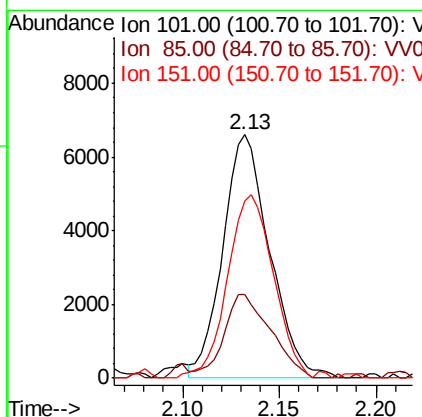
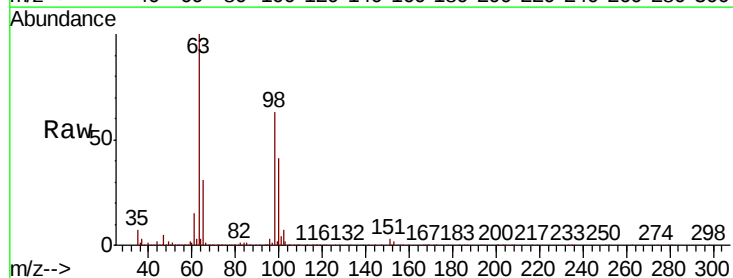
Tot Ion:101 Resp: 15601  
 Ion Ratio Lower Upper  
 101 100  
 103 69.8 45.1 83.9

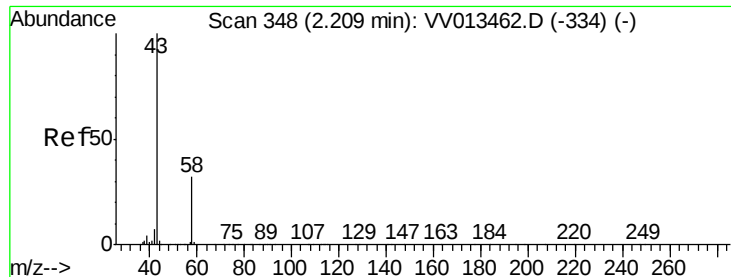


#11

1,1,2-Trichloro-1,2,2-trifluoroethane  
 Concen: 1.237 ug/L  
 RT: 2.13 min Scan# 324  
 Delta R.T. -0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

Tgt Ion:101 Resp: 11090  
 Ion Ratio Lower Upper  
 101 100  
 85 34.6 33.1 49.7  
 151 74.0 68.3 102.5





#13

Acetone

Concen: 4.234 ug/L

RT: 2.22 min Scan# 351

Delta R.T. 0.01 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

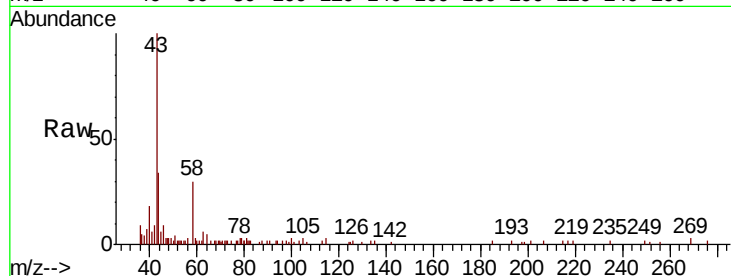
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 23052

Ion Ratio Lower Upper

43 100

58 30.3 0.0 63.2



Abundance Ion 43.00 (42.70 to 43.70): VV013462.D (-334) (-)

Ion 58.00 (57.70 to 58.70): VV013462.D (-334) (-)

8000

6000

4000

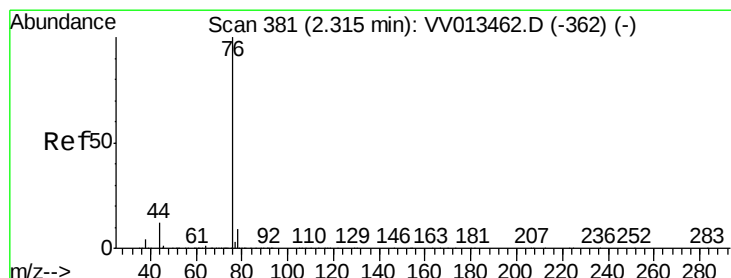
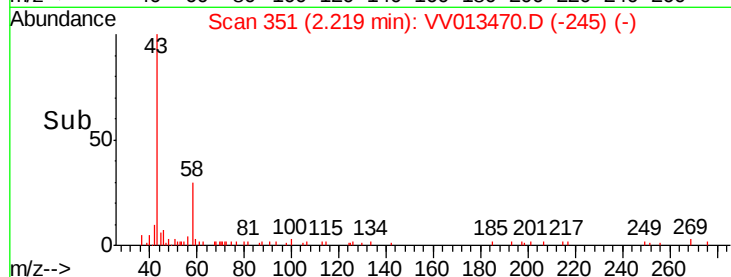
2000

0

2.22

2.30

Time-->



#14

Carbon disulfide

Concen: 0.970 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV013470.D

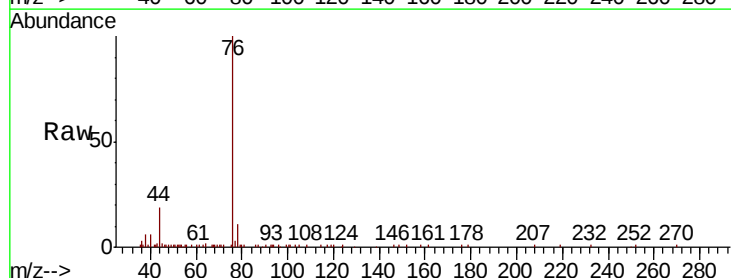
Acq: 01 Nov 2019 15:51

Tgt Ion: 76 Resp: 31907

Ion Ratio Lower Upper

76 100

78 10.7 7.1 10.7#



Abundance Ion 76.00 (75.70 to 76.70): VV013462.D (-362) (-)

Ion 78.00 (77.70 to 78.70): VV013462.D (-362) (-)

25000

20000

15000

10000

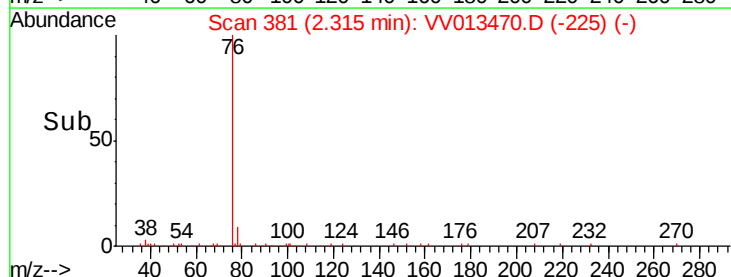
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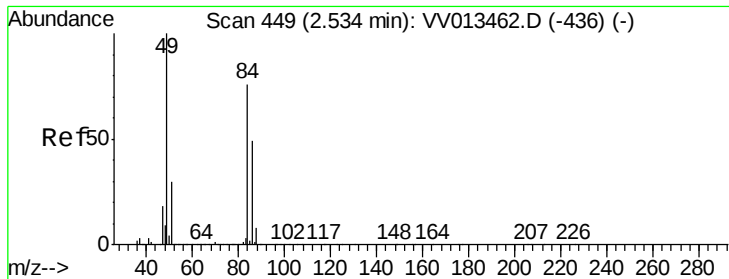
0

2.32

2.35

Time-->

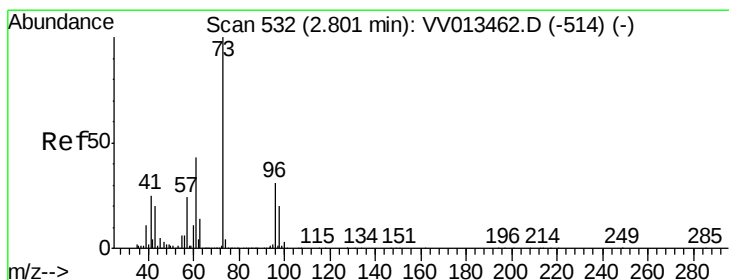
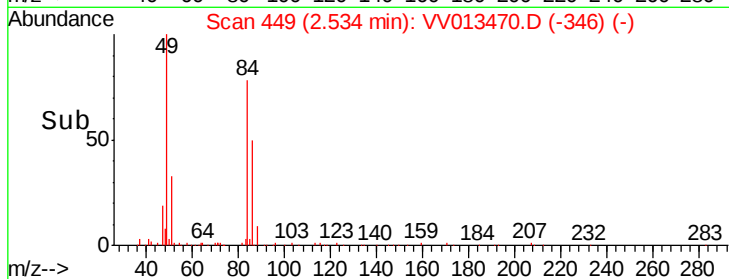
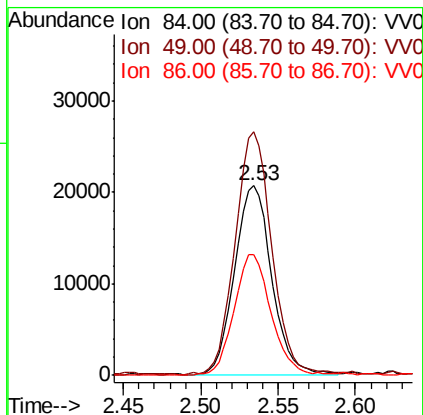
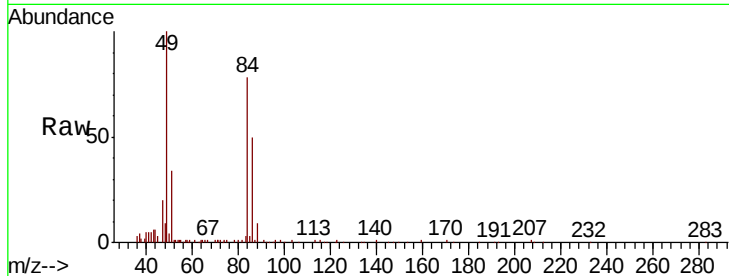




#16  
Methylene chloride  
Concen: 2.650 ug/L  
RT: 2.53 min Scan# 449  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

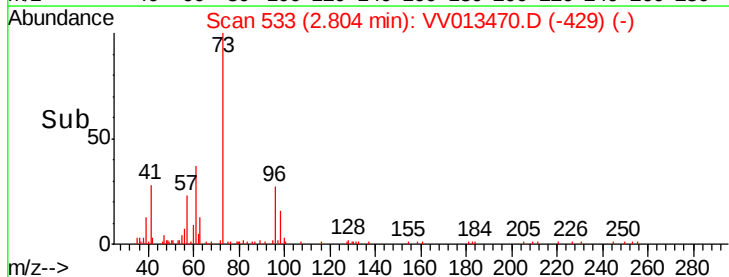
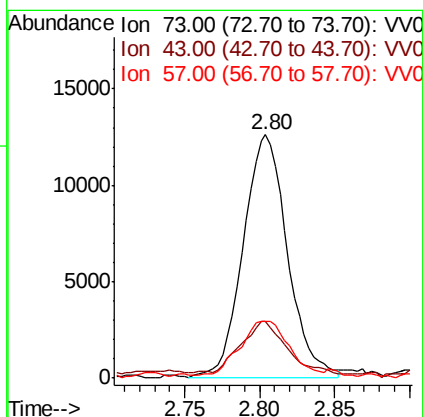
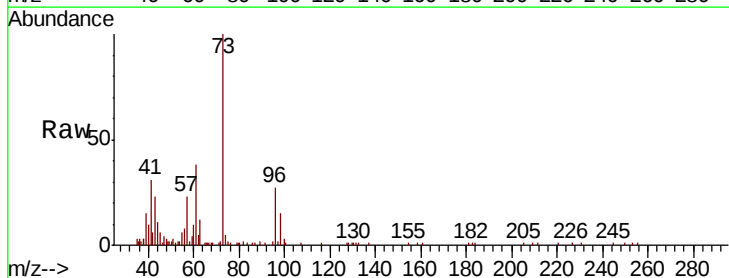
Instrument :  
MSVOA\_V  
ClientSampleId :

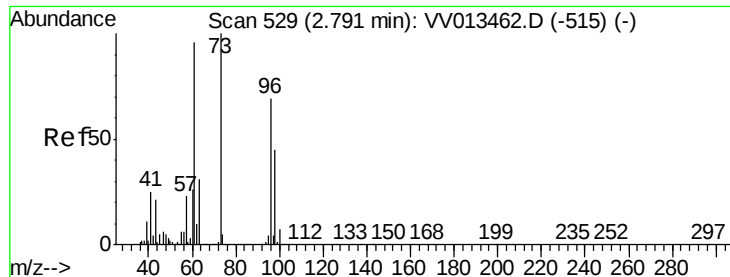
Tot Ion: 84 Resp: 34777  
Ion Ratio Lower Upper  
84 100  
49 128.6 92.4 171.6  
86 64.1 45.1 83.7



#17  
Methyl tert-butyl Ether  
Concen: 0.938 ug/L  
RT: 2.80 min Scan# 533  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

Tgt Ion: 73 Resp: 26097  
Ion Ratio Lower Upper  
73 100  
43 21.8 16.2 24.2  
57 24.4 18.6 27.8

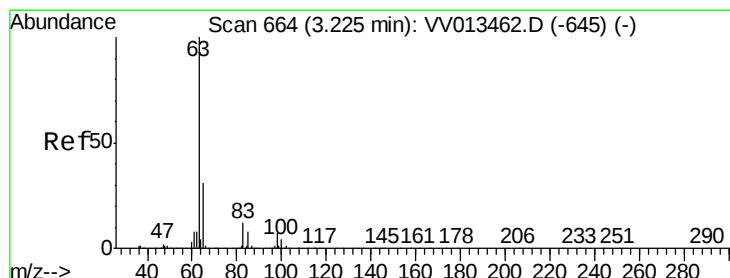
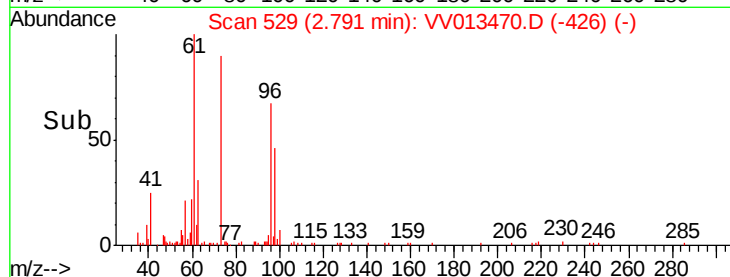
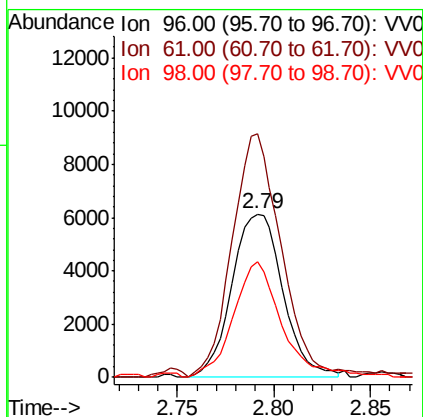
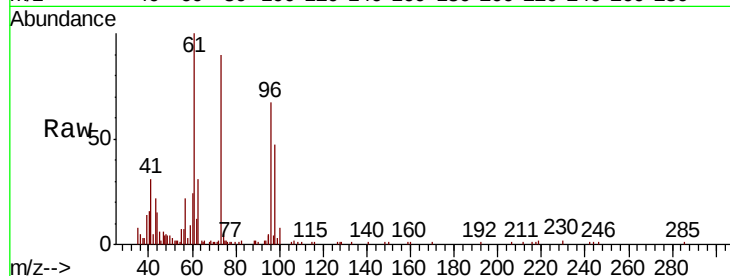




#18  
trans-1,2-Dichloroethene  
Concen: 0.997 ug/L  
RT: 2.79 min Scan# 529  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

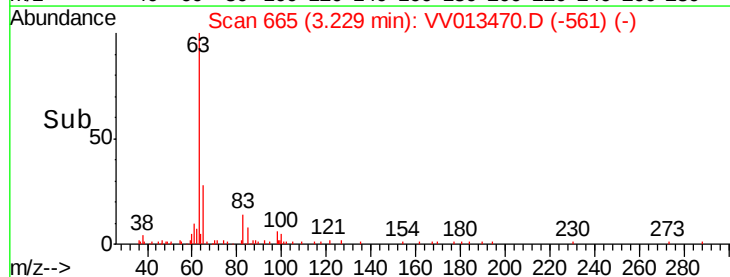
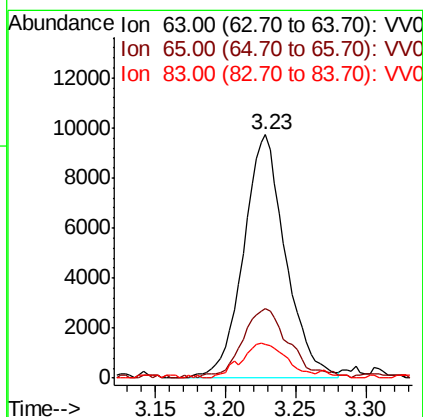
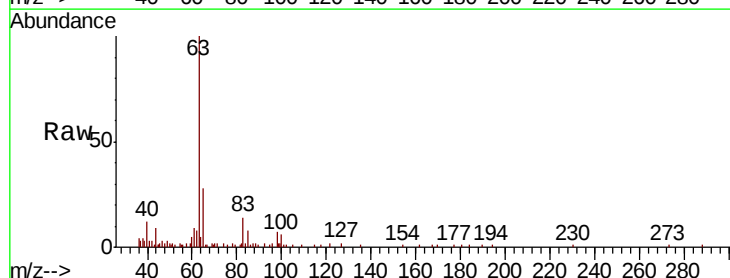
Instrument :  
MSVOA\_V  
ClientSampleId :

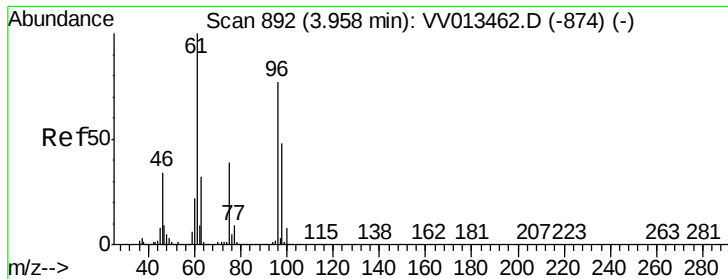
Tot Ion: 96 Resp: 11271  
Ion Ratio Lower Upper  
96 100  
61 149.4 98.0 182.0  
98 70.6 45.6 84.8



#19  
1,1-Dichloroethane  
Concen: 0.983 ug/L  
RT: 3.23 min Scan# 665  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

Tgt Ion: 63 Resp: 20268  
Ion Ratio Lower Upper  
63 100  
65 28.4 21.7 40.3  
83 14.1 8.8 16.3



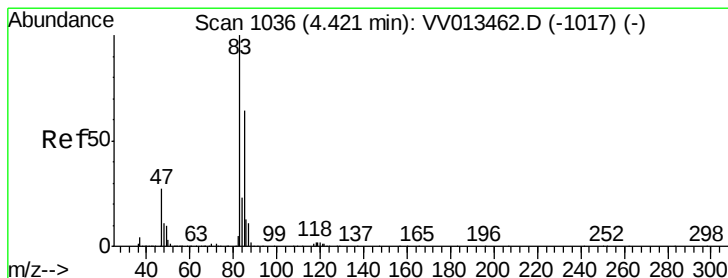
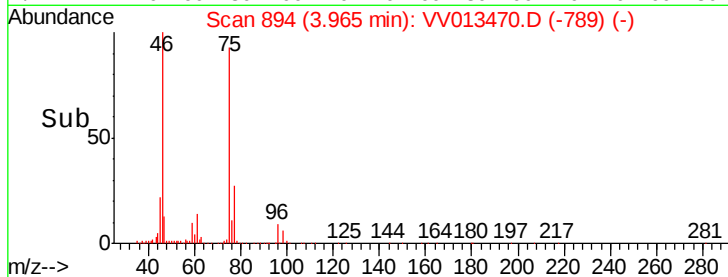
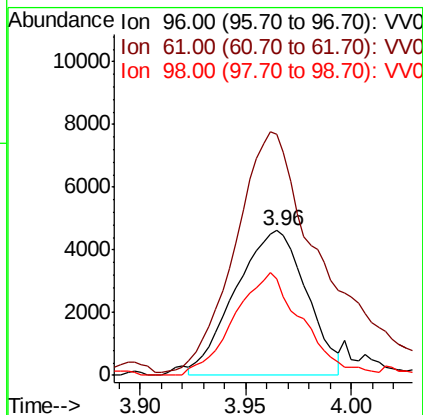
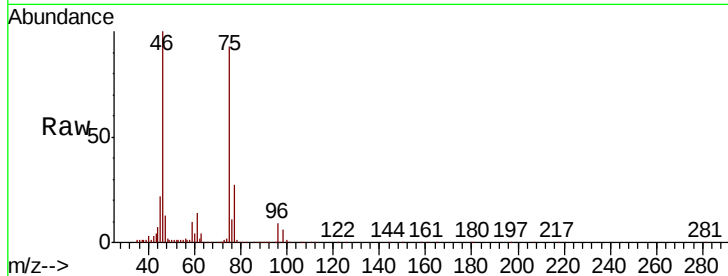


#22

cis-1,2-Dichloroethene  
 Concen: 0.912 ug/L  
 RT: 3.96 min Scan# 894  
 Delta R.T. 0.01 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

Instrument :  
 MSVOA\_V  
 ClientSampled :

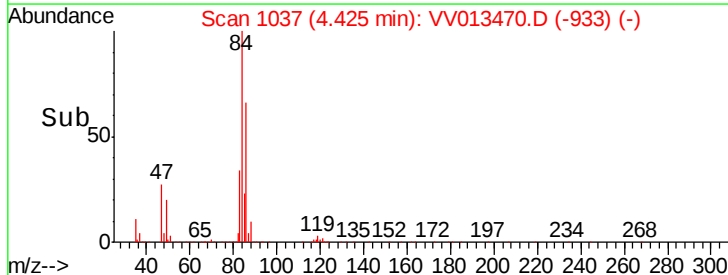
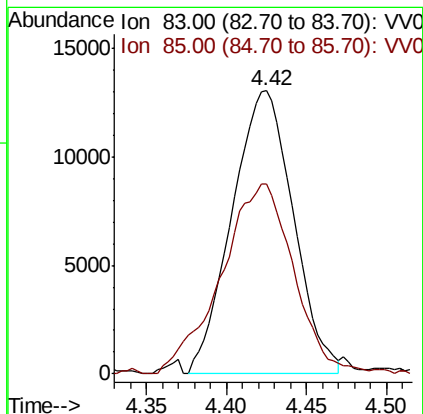
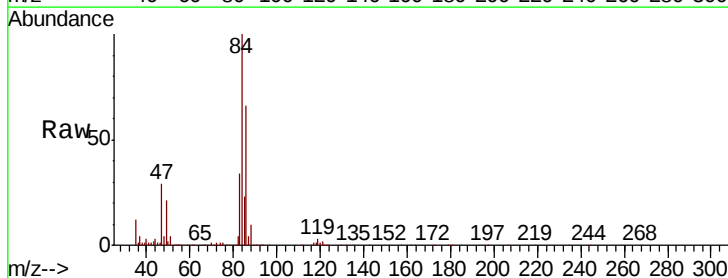
| Tot Ion   | 96    | Resp  | 10835 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 96        | 100   |       |       |
| 61        | 166.5 | 91.5  | 169.9 |
| 98        | 66.2  | 43.8  | 81.3  |

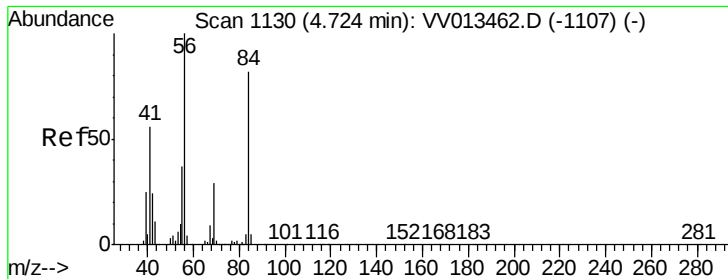


#25

Chloroform  
 Concen: 1.631 ug/L  
 RT: 4.42 min Scan# 1037  
 Delta R.T. 0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

| Tgt Ion   | 83    | Resp  | 34406 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 85        | 79.1  | 45.8  | 85.0  |





#30

Cyclohexane

Concen: 0.940 ug/L

RT: 4.72 min Scan# 1130

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :  
MSVOA\_V  
ClientSampleId :

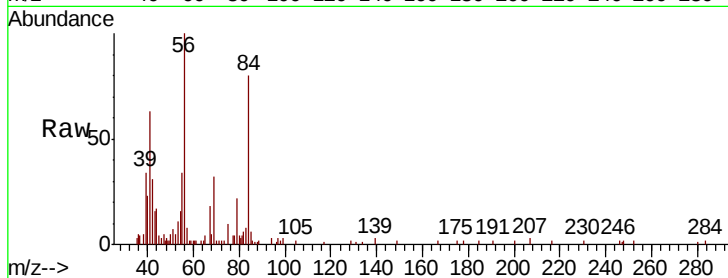
Tot Ion: 56 Resp: 17408

Ion Ratio Lower Upper

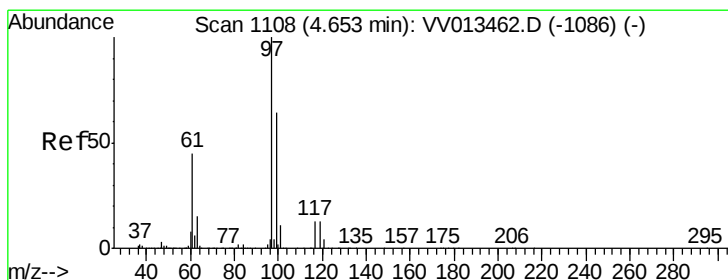
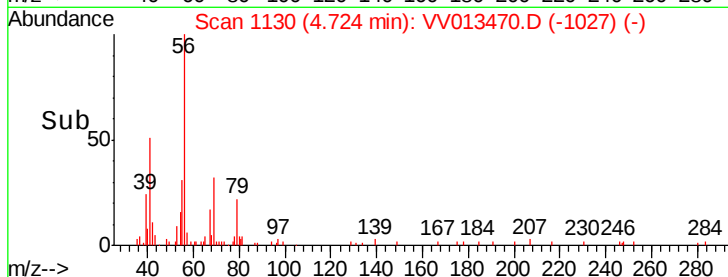
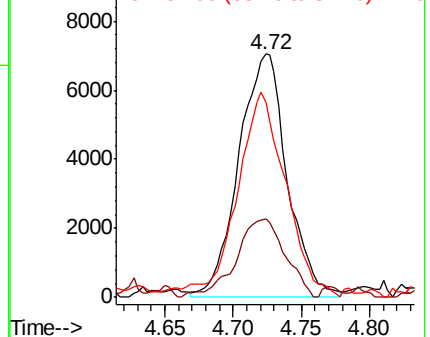
56 100

69 32.1 23.0 34.6

84 82.1 66.2 99.4



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



#31

1,1,1-Trichloroethane

Concen: 0.992 ug/L

RT: 4.66 min Scan# 1109

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

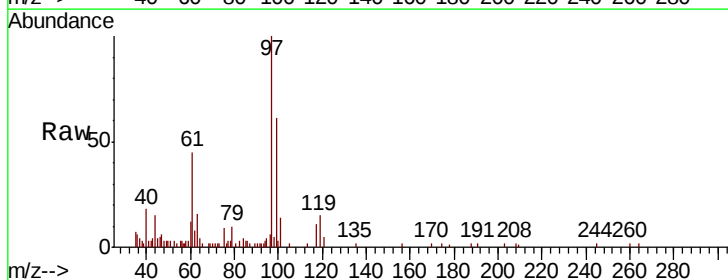
Tgt Ion: 97 Resp: 17279

Ion Ratio Lower Upper

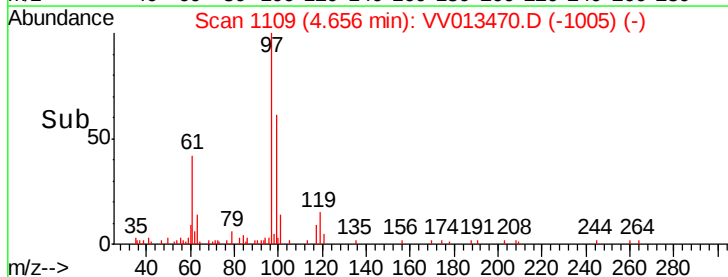
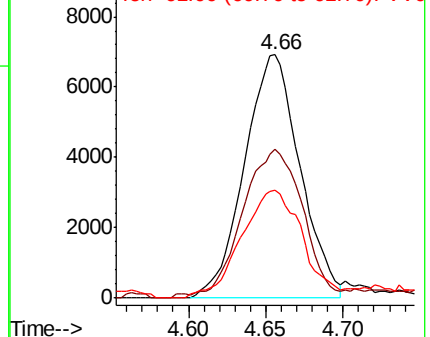
97 100

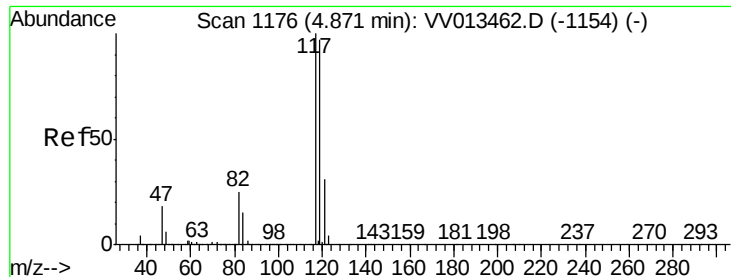
99 62.4 51.1 76.7

61 48.5 36.3 54.5



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





#32

Carbon tetrachloride

Concen: 0.946 ug/L

RT: 4.87 min Scan# 1177

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

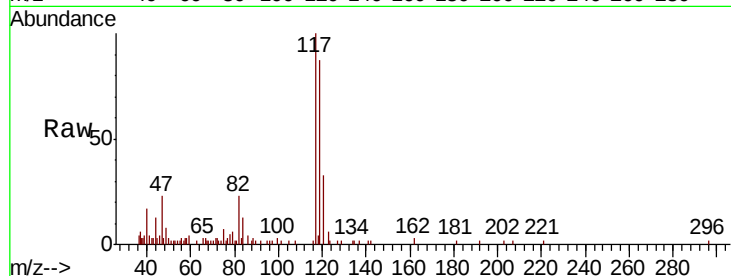
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:117 Resp: 14670

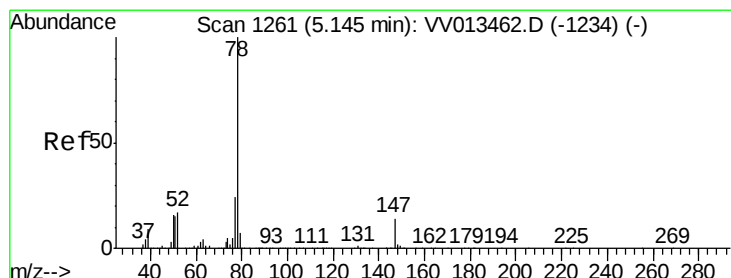
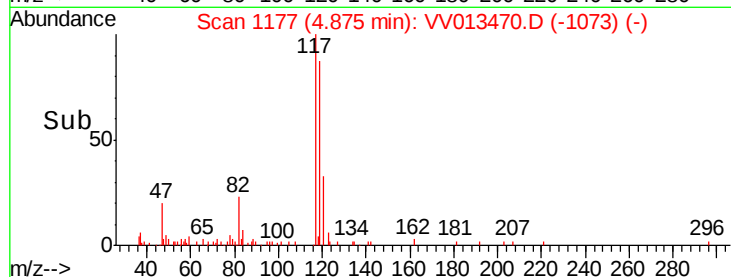
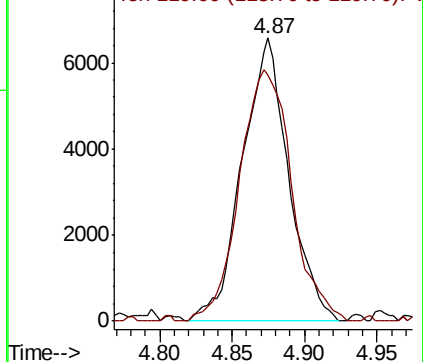
Ion Ratio Lower Upper

117 100

119 99.5 77.4 116.0



Abundance Ion 117.00 (116.70 to 117.70): V  
Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 0.907 ug/L

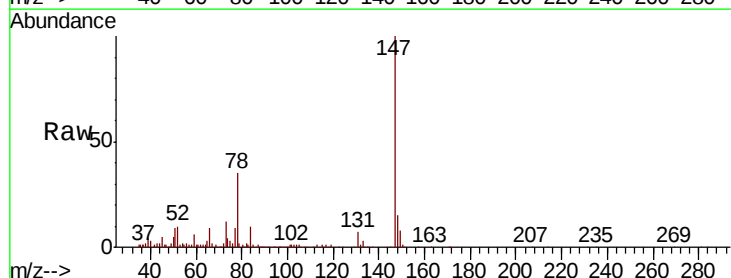
RT: 5.15 min Scan# 1262

Delta R.T. 0.00 min

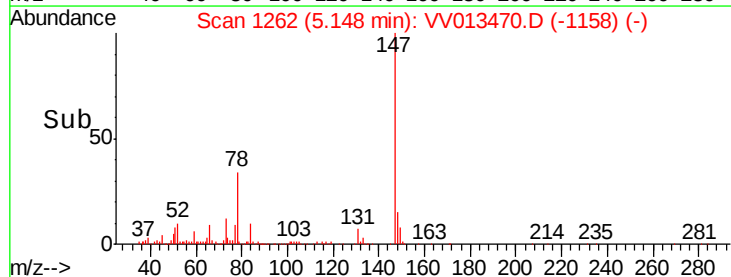
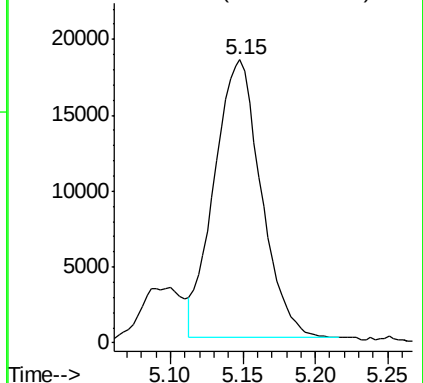
Lab File: VV013470.D

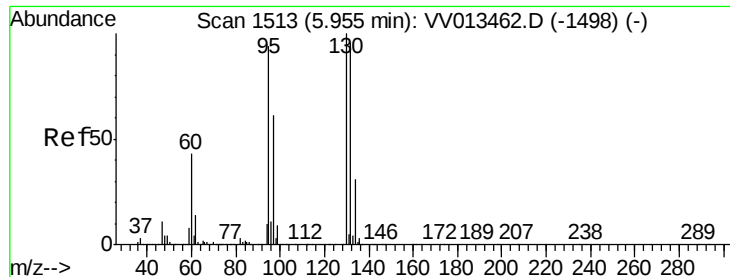
Acq: 01 Nov 2019 15:51

Tgt Ion: 78 Resp: 40806



Abundance Ion 78.00 (77.70 to 78.70): VV0





#35

Trichloroethene

Concen: 1.138 ug/L

RT: 5.96 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 95 Resp: 13828

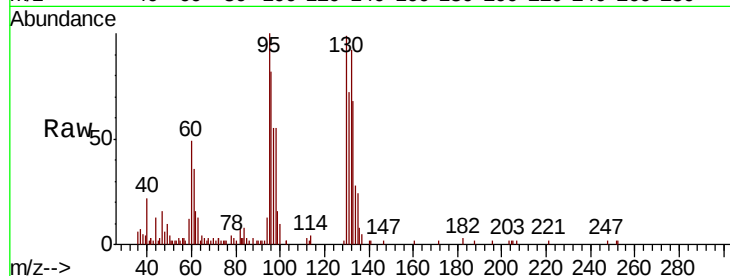
Ion Ratio Lower Upper

95 100

97 33.9 44.7 83.1#

132 94.0 71.0 131.8

130 96.7 74.1 137.7

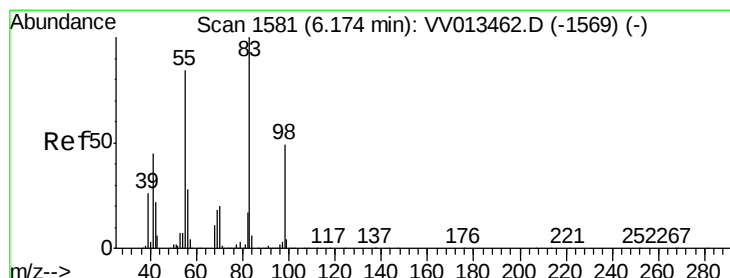
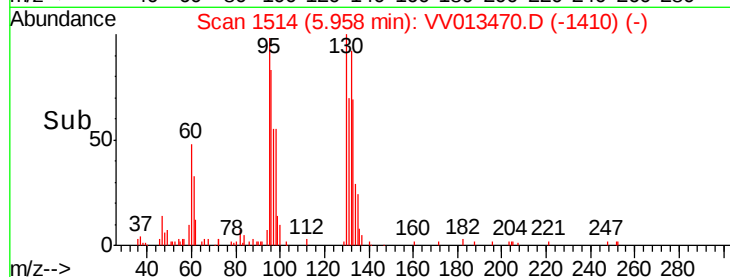
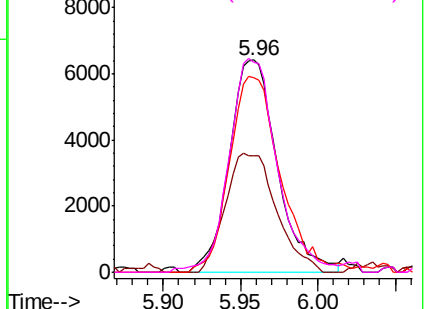


Abundance Ion 95.00 (94.70 to 95.70): VV0

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: 0.891 ug/L

RT: 6.17 min Scan# 1581

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

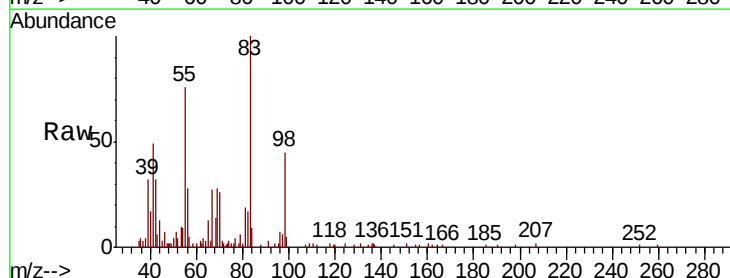
Tgt Ion: 83 Resp: 16952

Ion Ratio Lower Upper

83 100

55 83.8 64.2 96.4

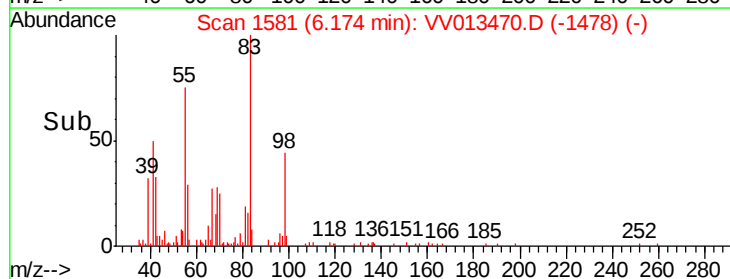
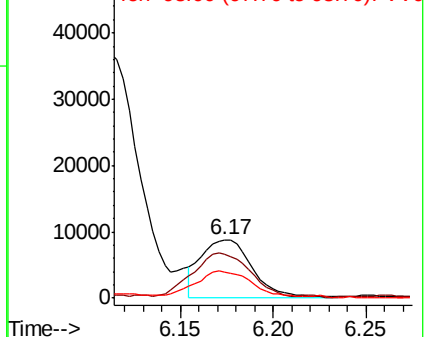
98 53.6 38.4 57.6

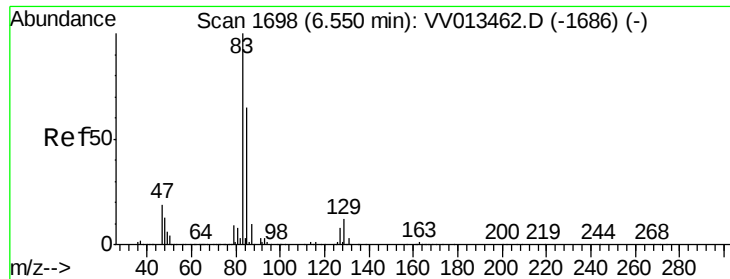


Abundance Ion 83.00 (82.70 to 83.70): VV0

Ion 55.00 (54.70 to 55.70): VV0

Ion 98.00 (97.70 to 98.70): VV0





#41

Bromodichloromethane

Concen: 0.958 ug/L

RT: 6.56 min Scan# 1700

Delta R.T. 0.01 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :

MSVOA\_V

ClientSampleId :

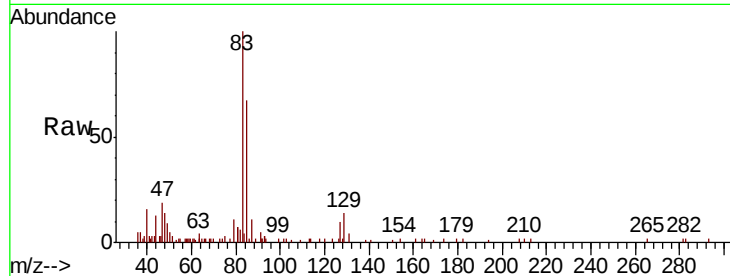
Tot Ion: 83 Resp: 13980

Ion Ratio Lower Upper

83 100

85 67.3 45.4 84.4

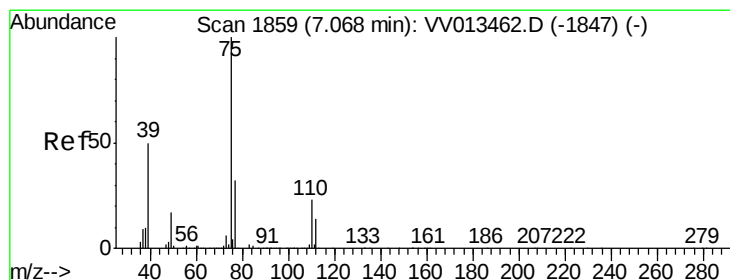
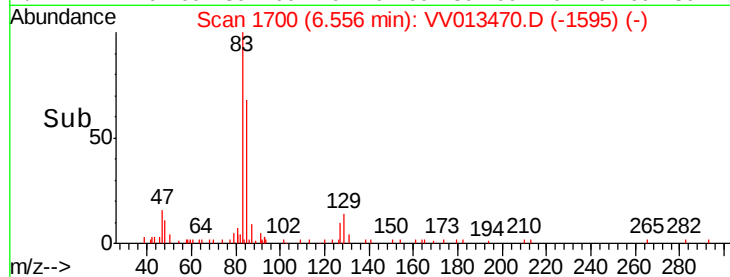
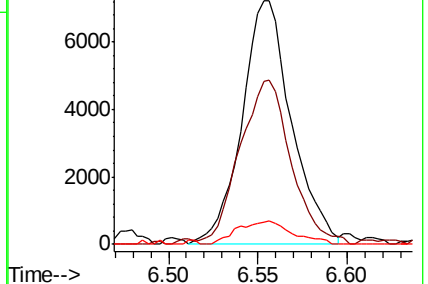
127 9.6 6.7 10.1



Abundance Ion 83.00 (82.70 to 83.70): VV013462.D (-1686) (-)

Ion 85.00 (84.70 to 85.70): VV013462.D (-1686) (-)

Ion 127.00 (126.70 to 127.70): VV013462.D (-1686) (-)



#42

cis-1,3-Dichloropropene

Concen: 0.865 ug/L

RT: 7.07 min Scan# 1860

Delta R.T. 0.00 min

Lab File: VV013470.D

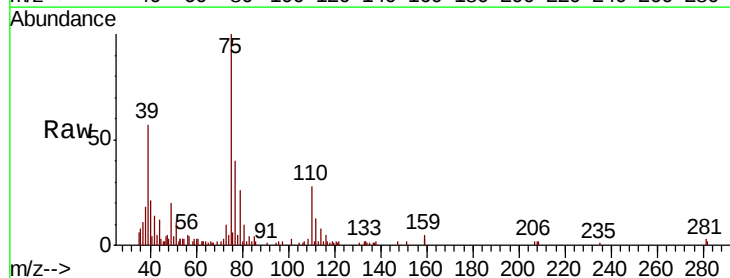
Acq: 01 Nov 2019 15:51

Tgt Ion: 75 Resp: 14533

Ion Ratio Lower Upper

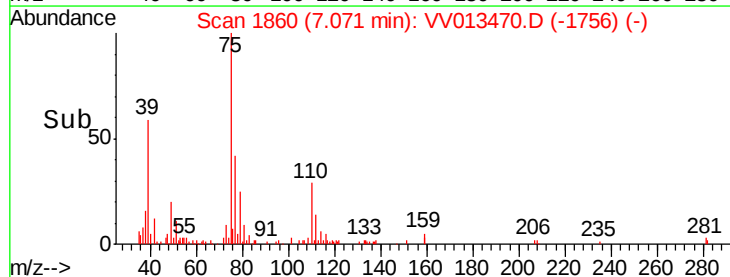
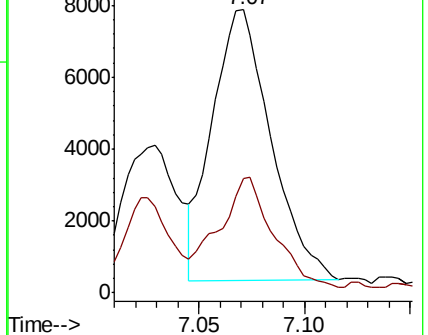
75 100

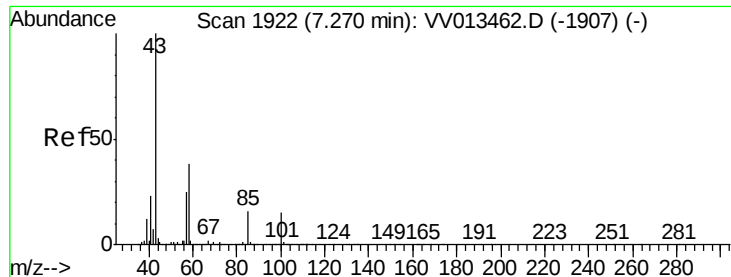
77 40.5 22.7 42.1



Abundance Ion 75.00 (74.70 to 75.70): VV013462.D (-1847) (-)

Ion 77.00 (76.70 to 77.70): VV013462.D (-1847) (-)

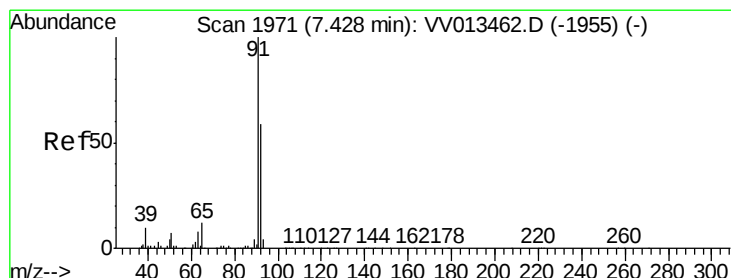
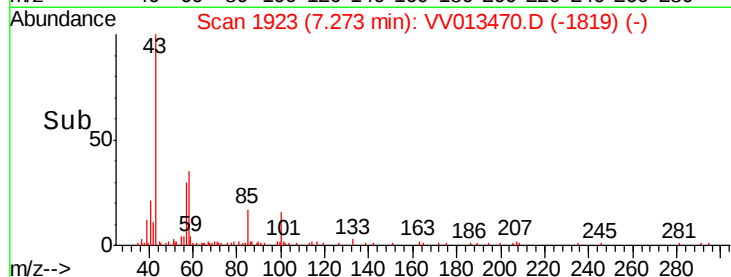
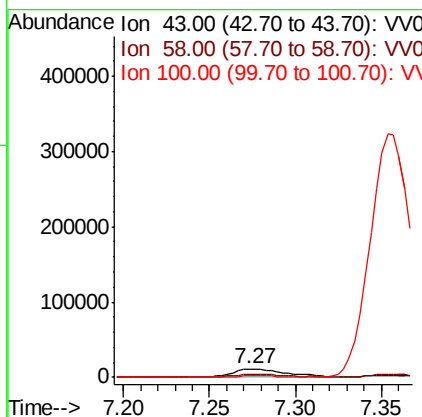
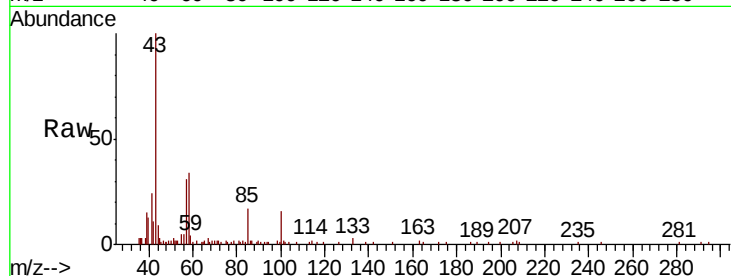




#43  
4-Methyl-2-pentanone  
Concen: 2.187 ug/L  
RT: 7.27 min Scan# 1923  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

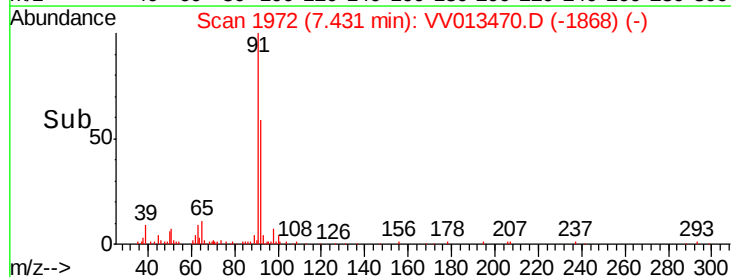
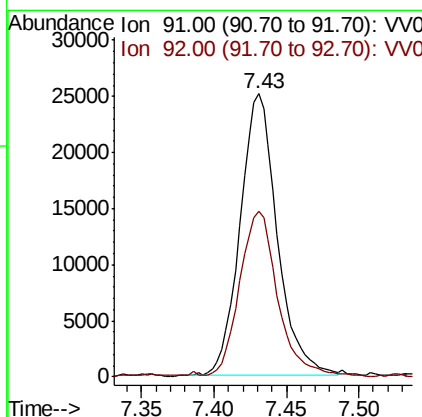
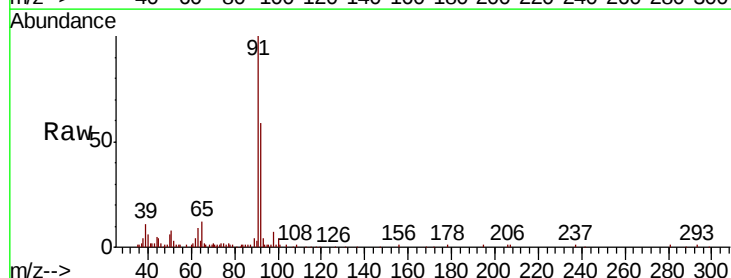
Instrument :  
MSVOA\_V  
ClientSampleId :

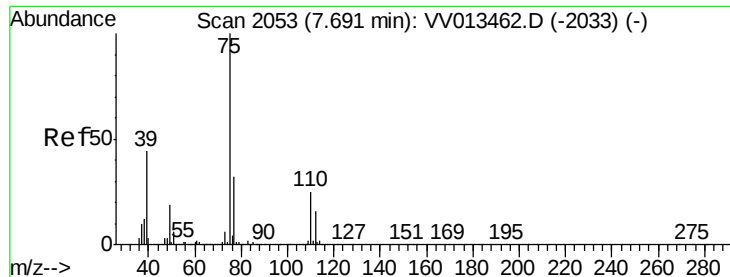
Tot Ion: 43 Resp: 22881  
Ion Ratio Lower Upper  
43 100  
58 32.1 29.9 44.9  
100 16.3 11.5 17.3



#44  
Toluene  
Concen: 0.974 ug/L  
RT: 7.43 min Scan# 1972  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

Tgt Ion: 91 Resp: 44766  
Ion Ratio Lower Upper  
91 100  
92 58.6 41.4 76.8





#45

trans-1,3-Dichloropropene

Concen: 0.989 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

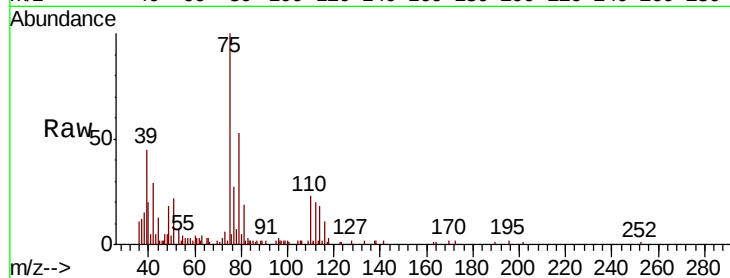
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 75 Resp: 14249

Ion Ratio Lower Upper

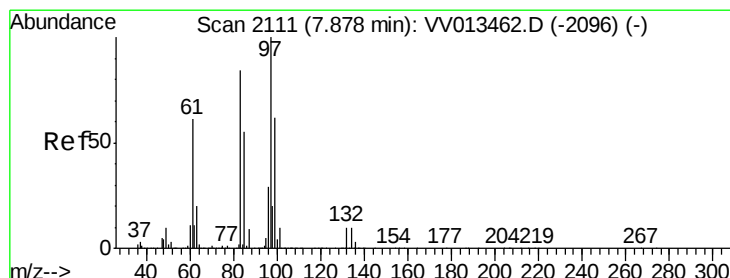
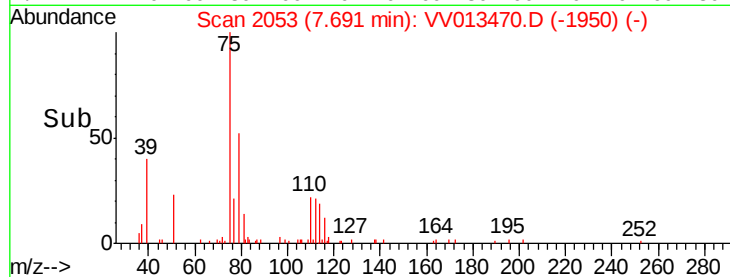
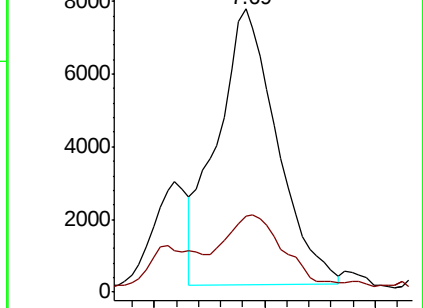
75 100

77 26.7 22.5 41.7



Abundance Ion 75.00 (74.70 to 75.70): VV013462.D (-2033) (-)

Ion 77.00 (76.70 to 77.70): VV013462.D (-2033) (-)



#46

1,1,2-Trichloroethane

Concen: 1.158 ug/L

RT: 7.88 min Scan# 2112

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Tgt Ion: 97 Resp: 10519

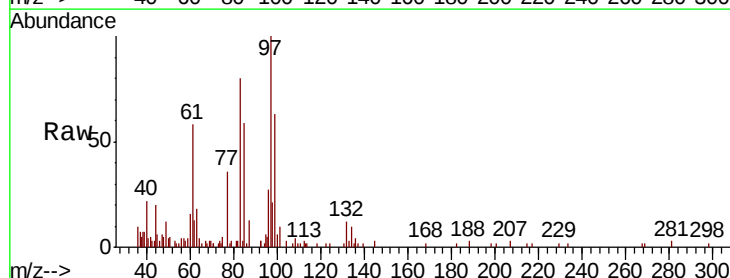
Ion Ratio Lower Upper

97 100

83 80.1 58.9 109.3

85 59.0 38.6 71.6

99 62.8 43.6 81.0

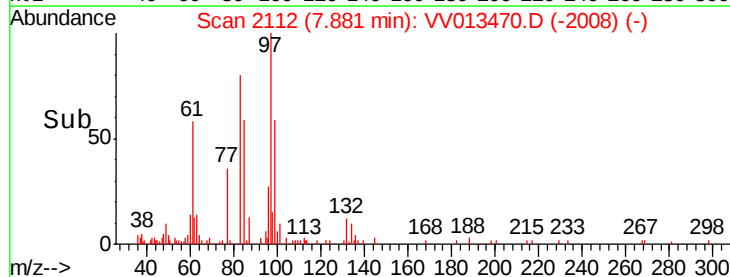
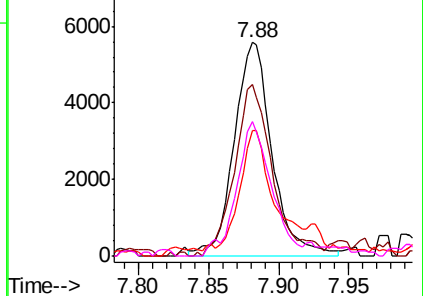


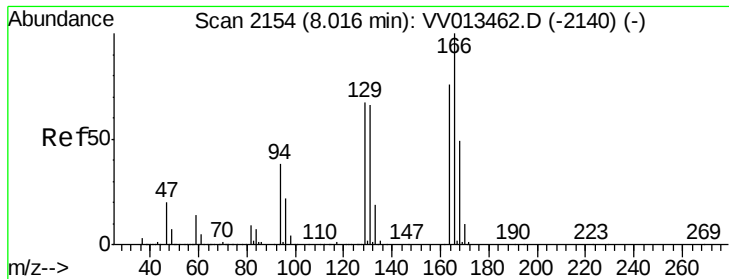
Abundance Ion 97.00 (96.70 to 97.70): VV013462.D (-2096) (-)

Ion 83.00 (82.70 to 83.70): VV013462.D (-2096) (-)

Ion 85.00 (84.70 to 85.70): VV013462.D (-2096) (-)

Ion 99.00 (98.70 to 99.70): VV013462.D (-2096) (-)





#47

Tetrachloroethene

Concen: 0.991 ug/L

RT: 8.01 min Scan# 2153

Delta R.T. -0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:164 Resp: 10209

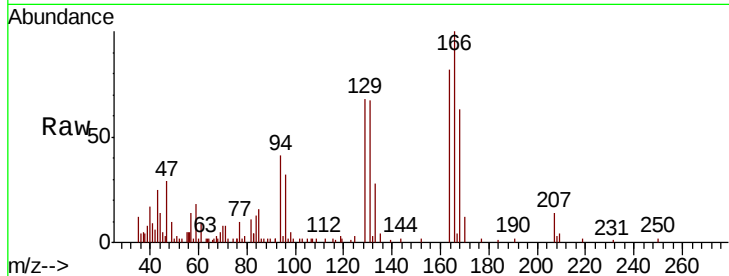
Ion Ratio Lower Upper

164 100

129 82.5 61.8 114.8

131 81.2 61.0 113.2

166 121.8 92.1 171.1



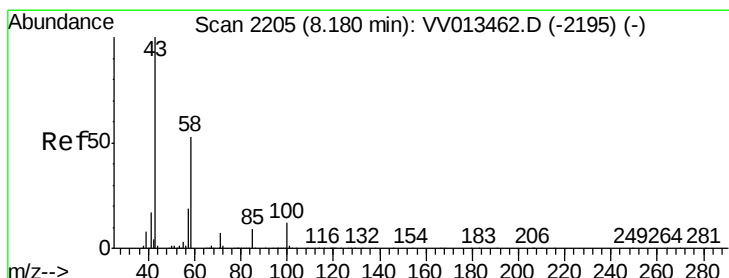
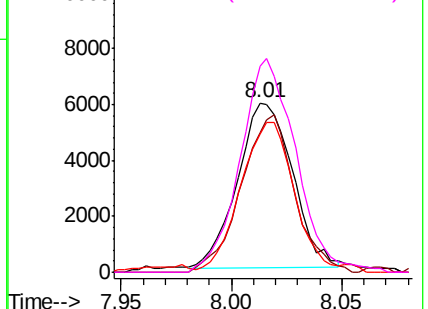
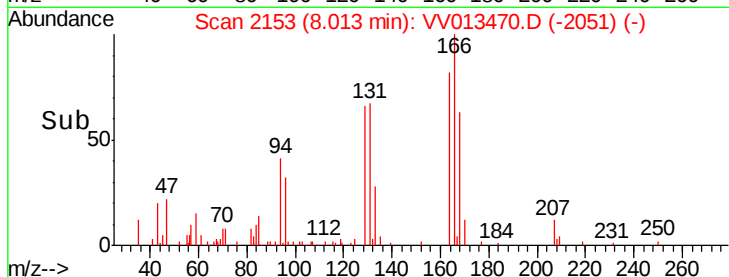
Abundance

Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V



#49

2-Hexanone

Concen: 4.205 ug/L

RT: 8.19 min Scan# 2207

Delta R.T. 0.01 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Tgt Ion: 43 Resp: 32027

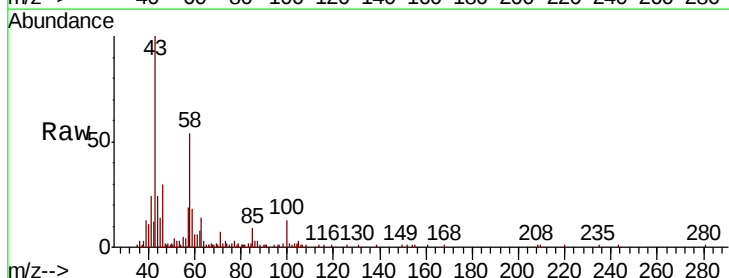
Ion Ratio Lower Upper

43 100

58 52.2 43.8 65.8

57 16.8 15.0 22.4

100 12.0 9.4 14.2



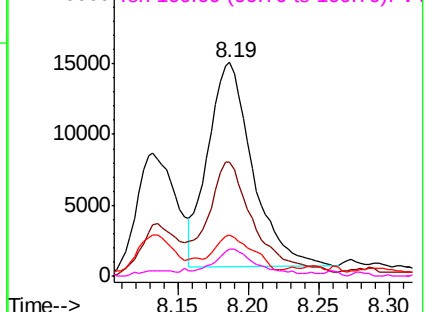
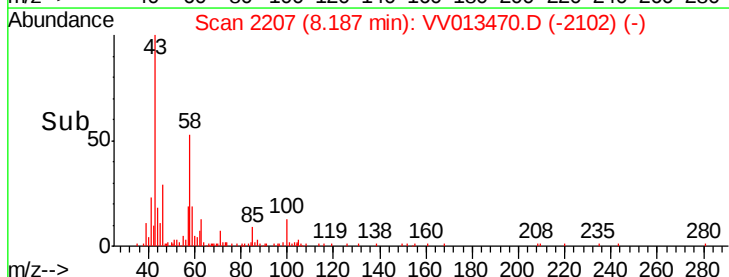
Abundance

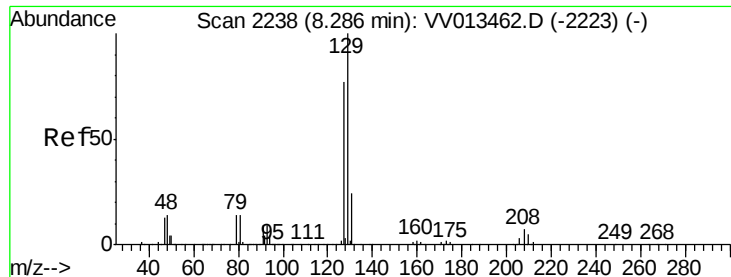
Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

Ion 100.00 (99.70 to 100.70): VV0





#50

Dibromochloromethane

Concen: 0.954 ug/L

RT: 8.29 min Scan# 2238

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

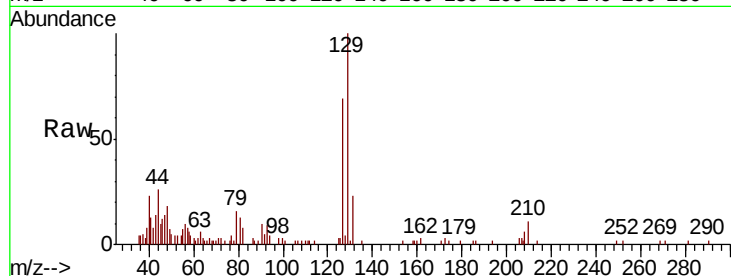
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:129 Resp: 10364

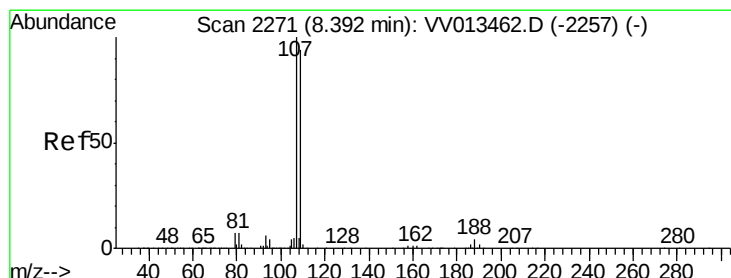
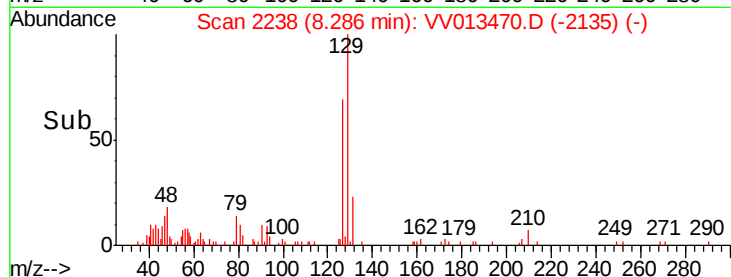
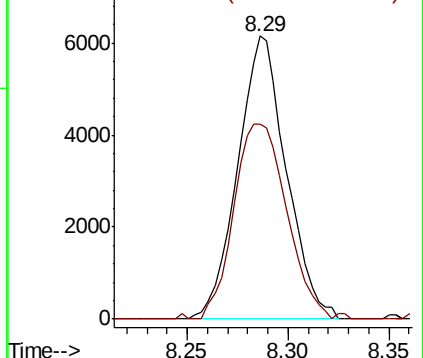
Ion Ratio Lower Upper

129 100

127 73.2 53.9 100.1



Abundance Ion 129.00 (128.70 to 129.70): V  
Ion 127.00 (126.70 to 127.70): V



#51

1,2-Dibromoethane

Concen: 0.986 ug/L

RT: 8.40 min Scan# 2272

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

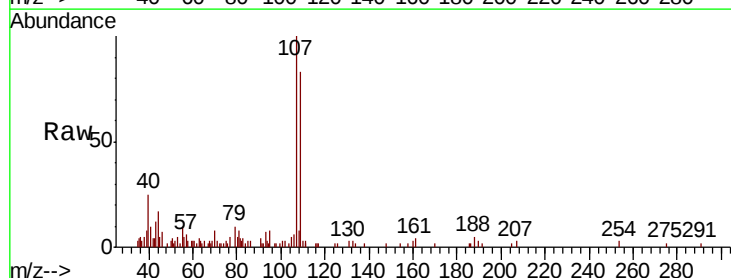
Tgt Ion:107 Resp: 9253

Ion Ratio Lower Upper

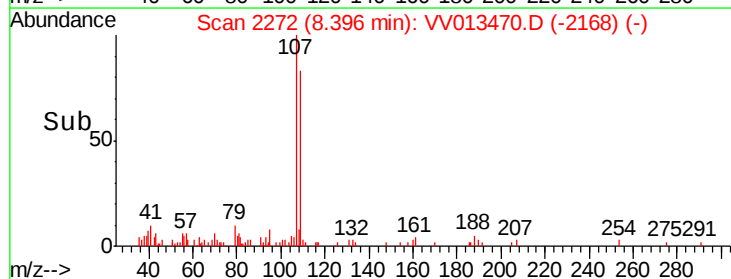
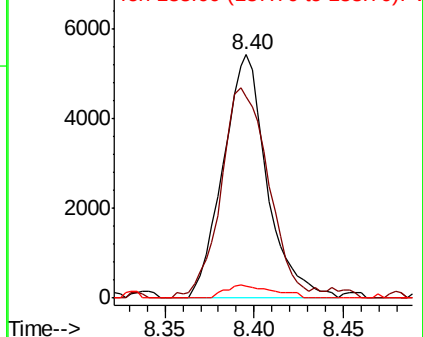
107 100

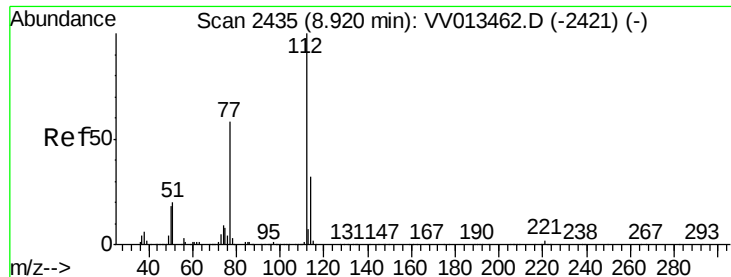
109 82.7 65.6 121.8

188 5.1 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: 0.929 ug/L

RT: 8.92 min Scan# 2436

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :

MSVOA\_V

ClientSampleId :

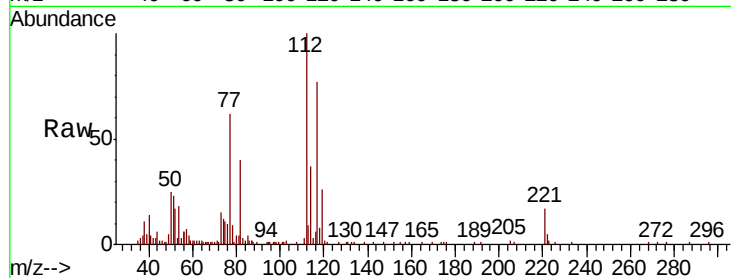
Tot Ion: 112 Resp: 28913

Ion Ratio Lower Upper

112 100

77 62.0 46.6 70.0

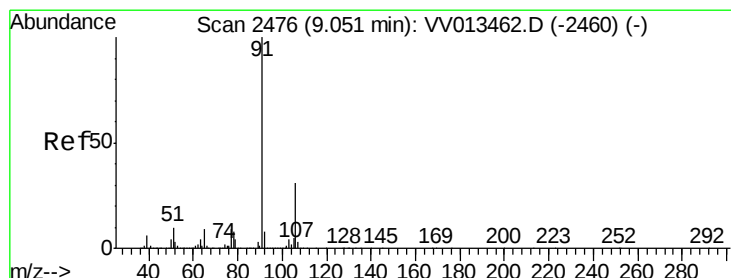
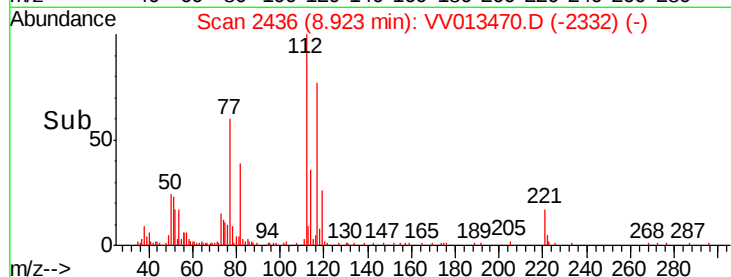
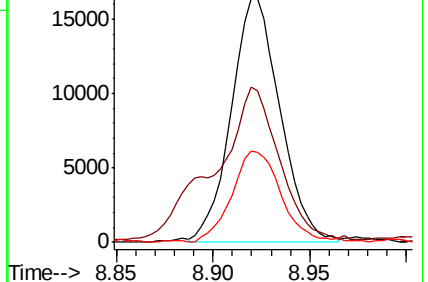
114 36.9 22.5 41.9



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: 0.889 ug/L

RT: 9.05 min Scan# 2476

Delta R.T. 0.00 min

Lab File: VV013470.D

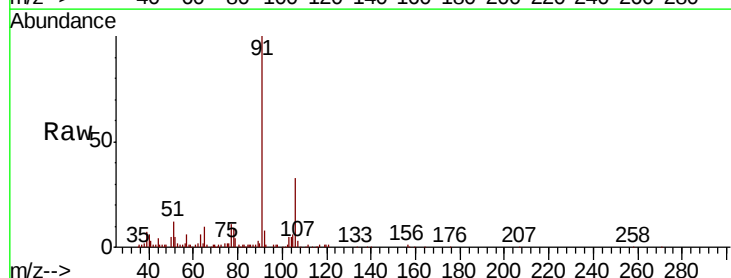
Acq: 01 Nov 2019 15:51

Tgt Ion: 91 Resp: 45054

Ion Ratio Lower Upper

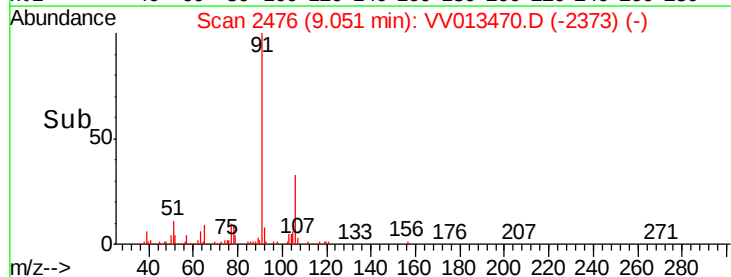
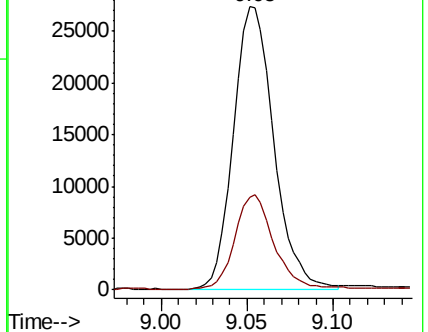
91 100

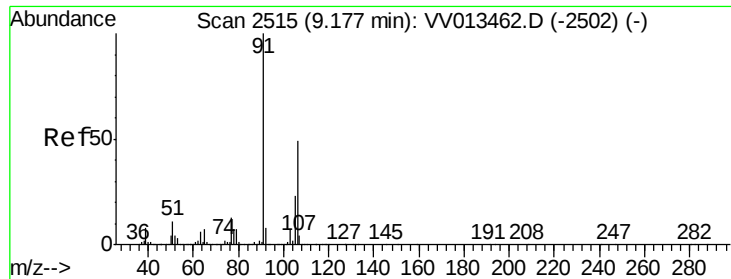
106 32.8 21.5 39.9



Abundance Ion 91.00 (90.70 to 91.70): VV0

Ion 106.00 (105.70 to 106.70): V





#54

m,p-Xylene

Concen: 0.880 ug/L

RT: 9.18 min Scan# 2515

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

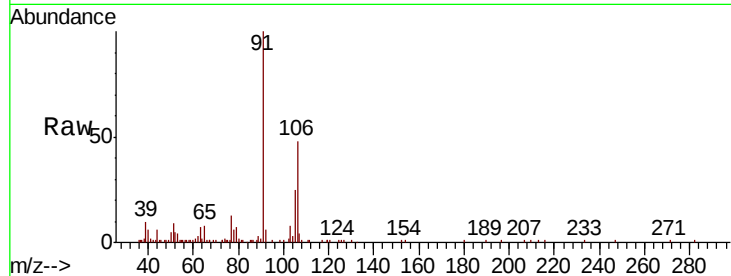
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:106 Resp: 16767

Ion Ratio Lower Upper

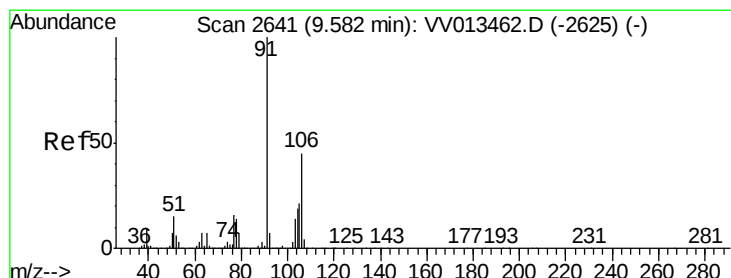
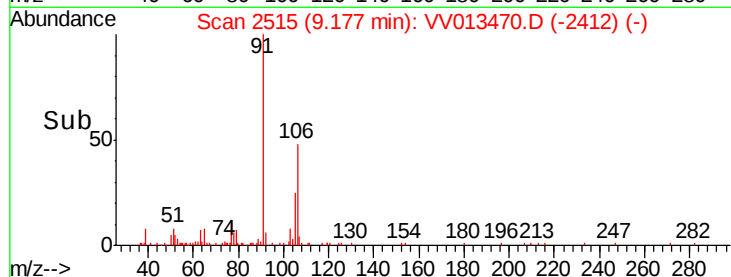
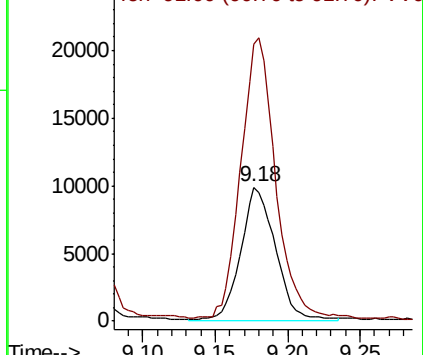
106 100

91 207.0 141.7 263.1



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#55

o-xylene

Concen: 0.886 ug/L

RT: 9.58 min Scan# 2641

Delta R.T. 0.00 min

Lab File: VV013470.D

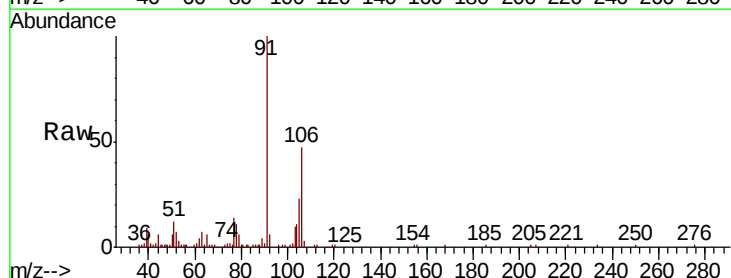
Acq: 01 Nov 2019 15:51

Tgt Ion:106 Resp: 15971

Ion Ratio Lower Upper

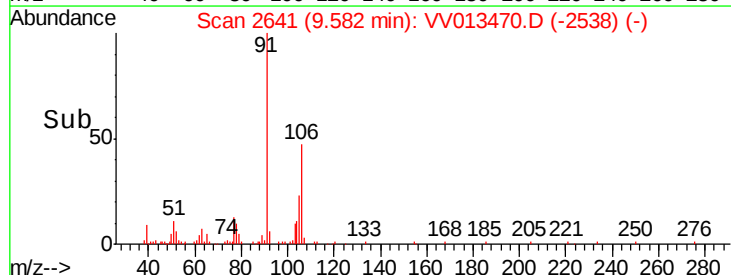
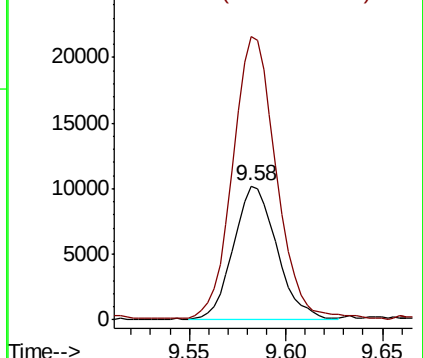
106 100

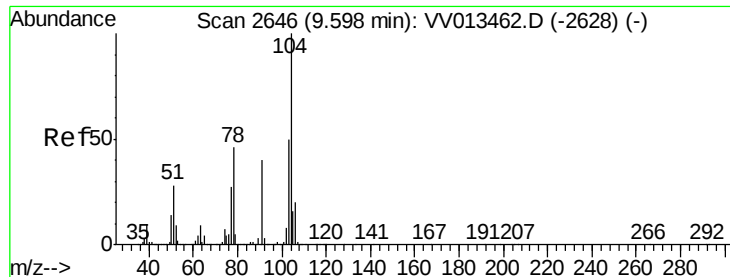
91 211.6 154.2 286.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0





#56

Stvrene

Concen: 0.761 ug/L

RT: 9.60 min Scan# 2647

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

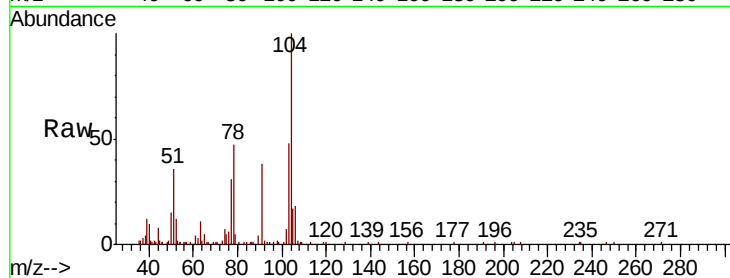
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:104 Resp: 23782

Ion Ratio Lower Upper

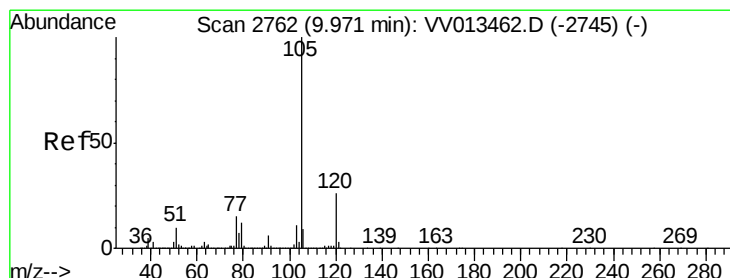
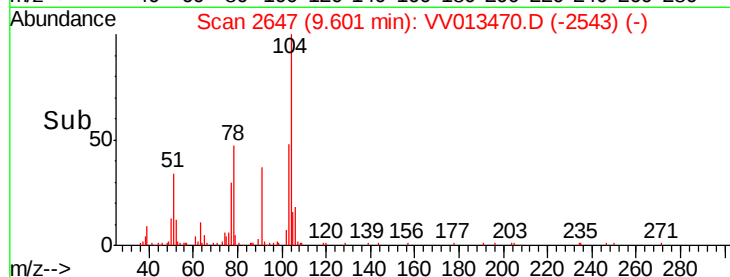
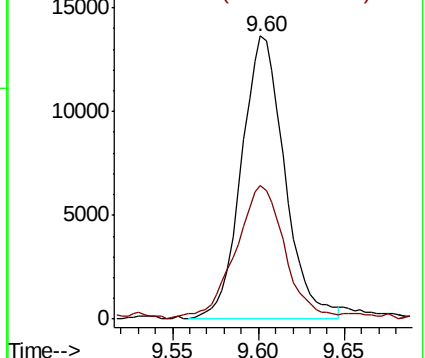
104 100

78 47.1 32.1 59.5



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VV0



#57

Isopropylbenzene

Concen: 0.812 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

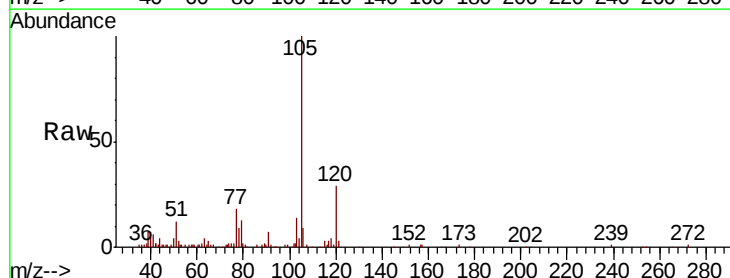
Tgt Ion:105 Resp: 39492

Ion Ratio Lower Upper

105 100

120 29.7 21.1 31.7

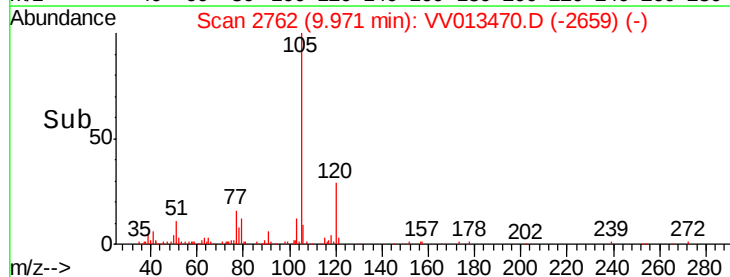
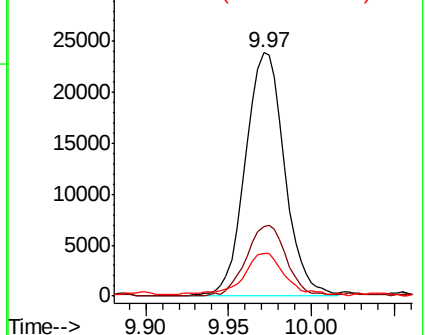
77 17.2 12.3 18.5

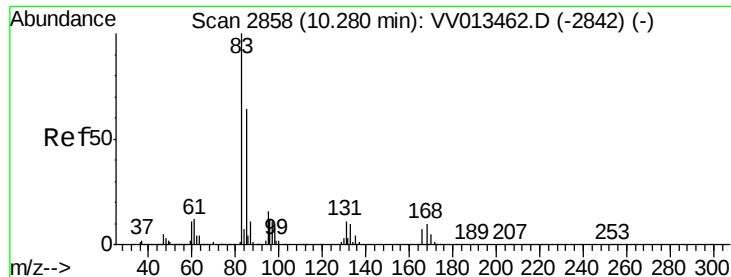


Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): VV0





#58

1,1,2,2-Tetrachloroethane

Concen: 1.176 ug/L

RT: 10.28 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :

MSVOA\_V

ClientSampleId :

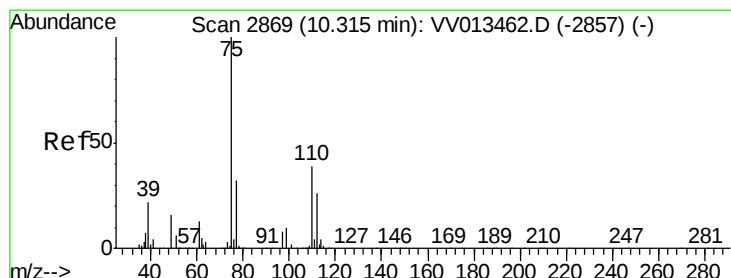
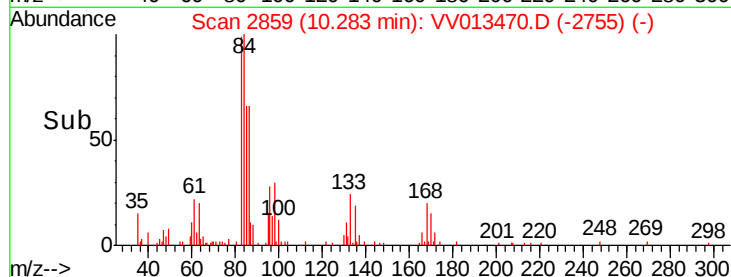
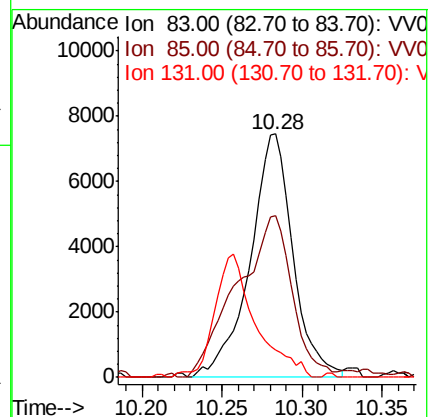
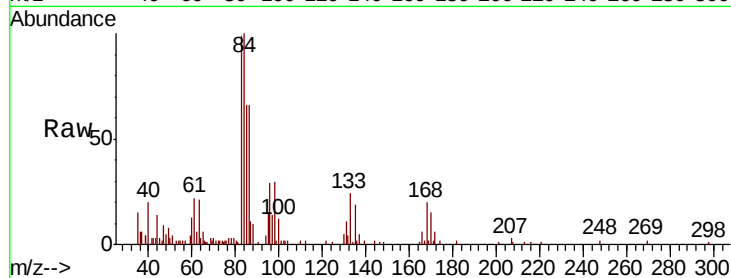
Tot Ion: 83 Resp: 13696

Ion Ratio Lower Upper

83 100

85 66.4 45.1 83.7

131 11.3 8.5 12.7



#59

1,2,3-Trichloropropane

Concen: 1.049 ug/L

RT: 10.31 min Scan# 2868

Delta R.T. -0.00 min

Lab File: VV013470.D

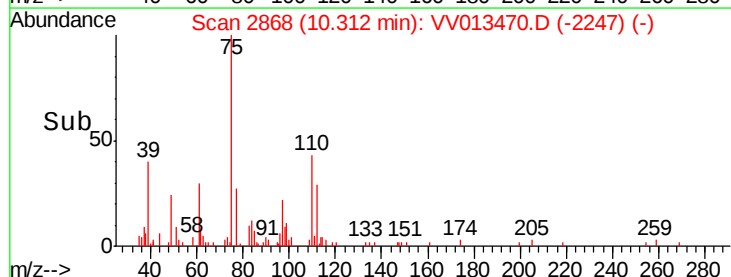
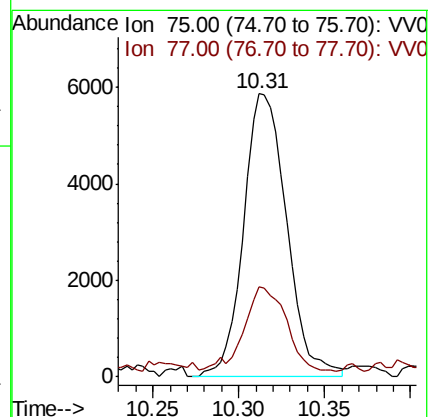
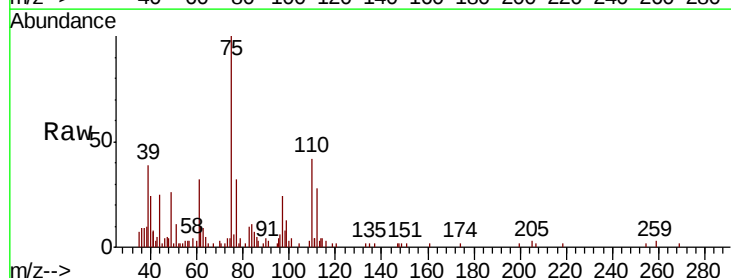
Acq: 01 Nov 2019 15:51

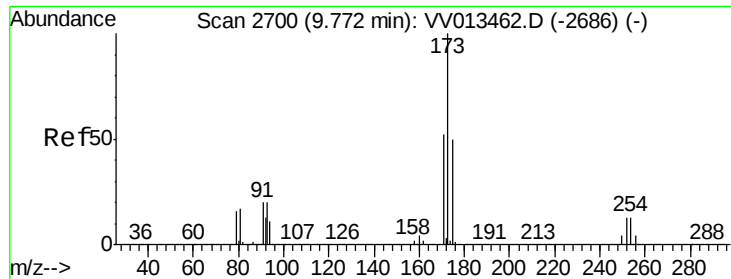
Tgt Ion: 75 Resp: 10241

Ion Ratio Lower Upper

75 100

77 26.9 25.7 38.5





#62

Bromoform

Concen: 0.908 ug/L

RT: 9.77 min Scan# 2699

Delta R.T. -0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

Instrument :  
MSVOA\_V  
ClientSampleId :

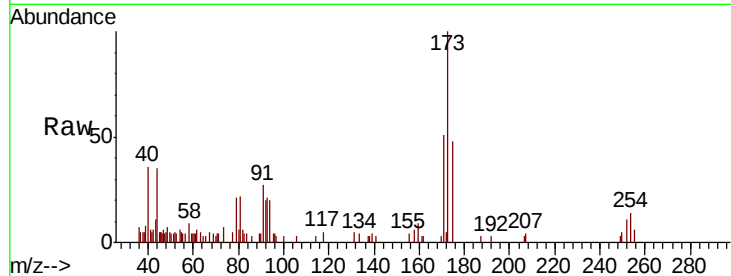
Tot Ion:173 Resp: 6256

Ion Ratio Lower Upper

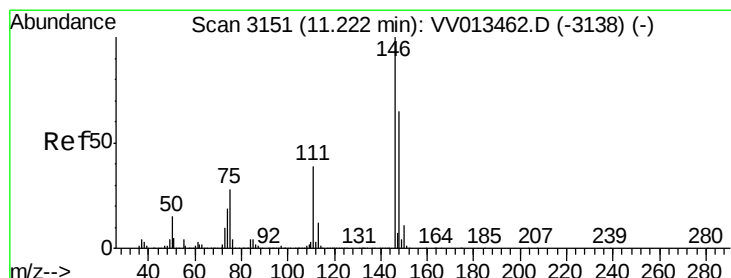
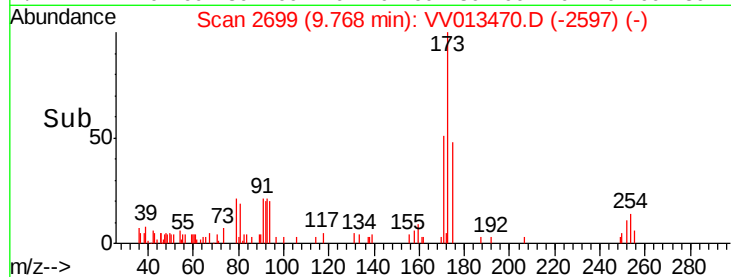
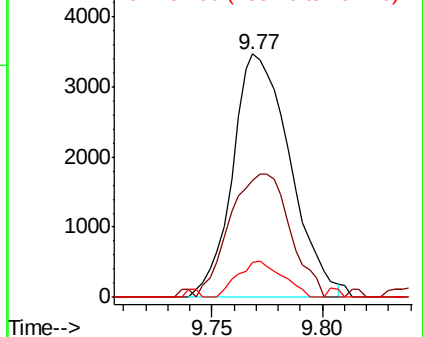
173 100

175 53.1 39.4 59.0

254 11.7 10.1 15.1



Abundance Ion 173.00 (172.70 to 173.70): V  
Ion 175.00 (174.70 to 175.70): V  
Ion 254.00 (253.70 to 254.70): V



#63

1,3-Dichlorobenzene

Concen: 1.071 ug/L

RT: 11.22 min Scan# 3152

Delta R.T. 0.00 min

Lab File: VV013470.D

Acq: 01 Nov 2019 15:51

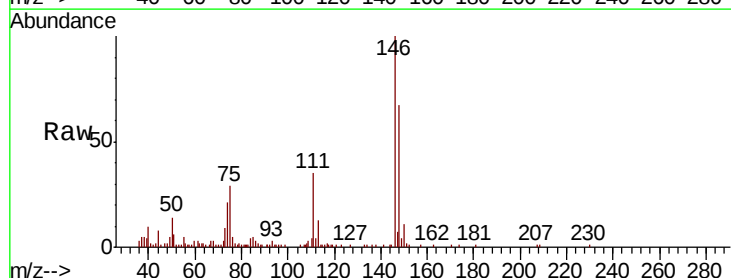
Tgt Ion:146 Resp: 25692

Ion Ratio Lower Upper

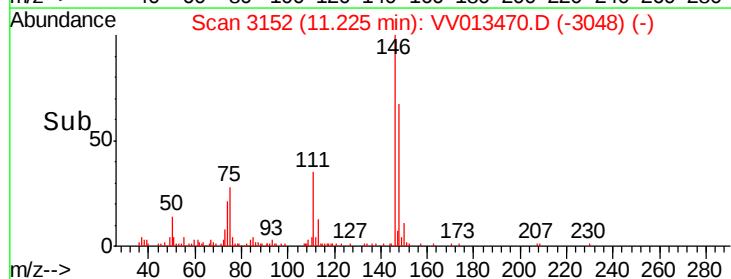
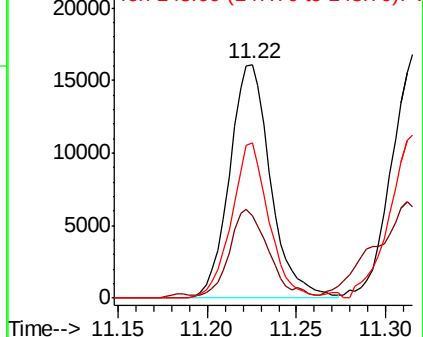
146 100

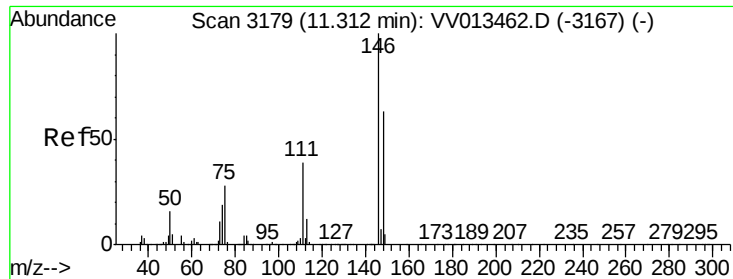
111 35.4 27.1 50.3

148 66.6 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

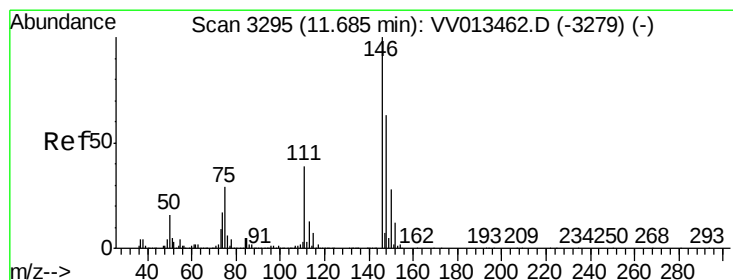
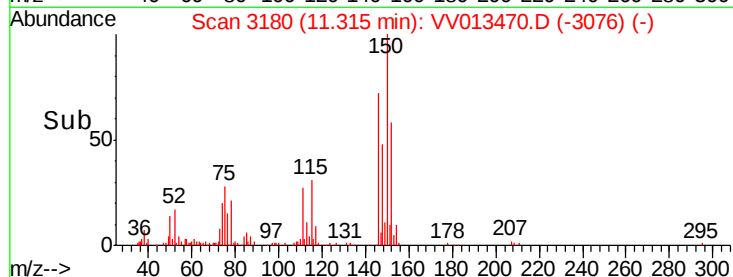
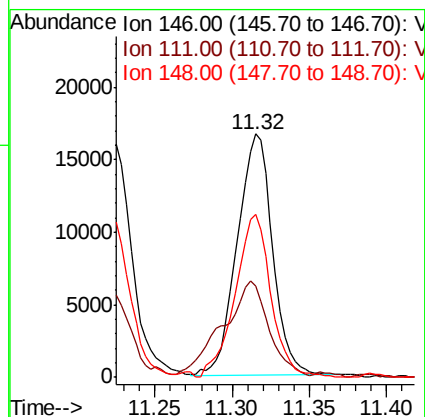
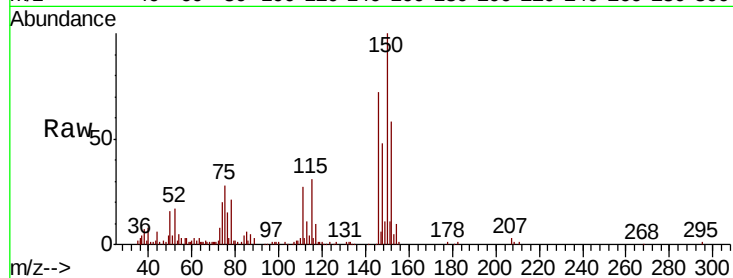




#64  
1,4-Dichlorobenzene  
Concen: 1.081 ug/L  
RT: 11.32 min Scan# 3180  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

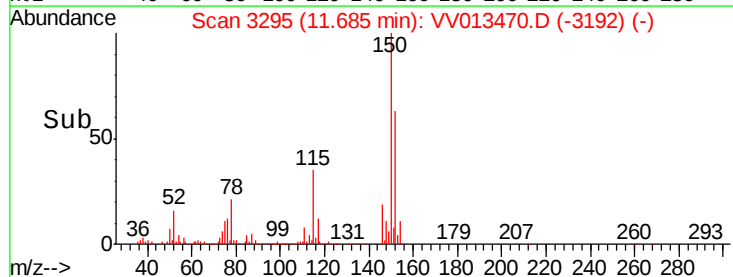
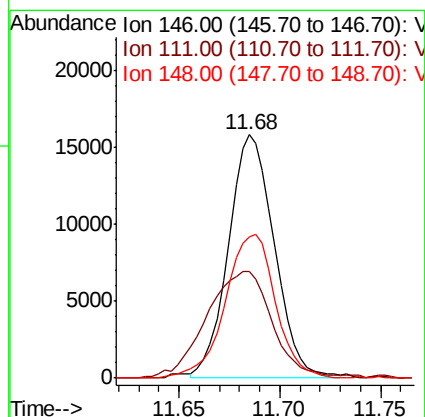
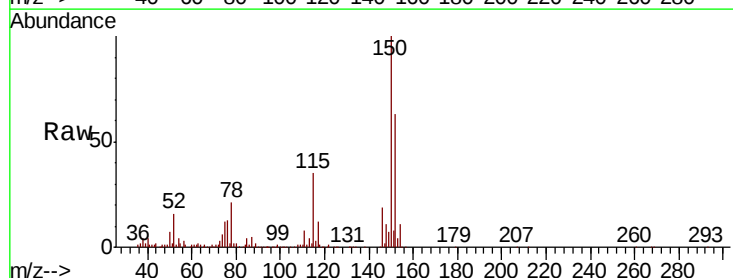
Instrument :  
MSVOA\_V  
ClientSampleId :

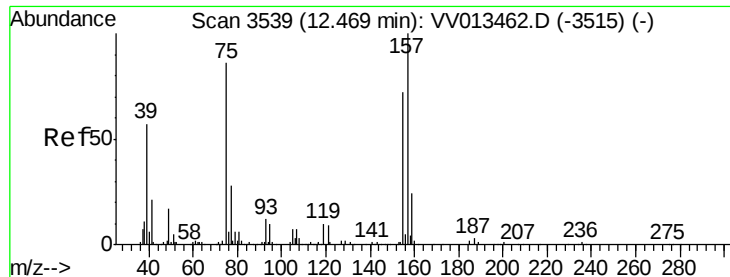
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 37.5  | 27.2  | 50.6  |
| 148     | 66.8  | 44.4  | 82.5  |



#65  
1,2-Dichlorobenzene  
Concen: 1.130 ug/L  
RT: 11.68 min Scan# 3295  
Delta R.T. 0.00 min  
Lab File: VV013470.D  
Acq: 01 Nov 2019 15:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 43.7  | 31.4  | 47.2  |
| 148     | 58.0  | 50.5  | 75.7  |

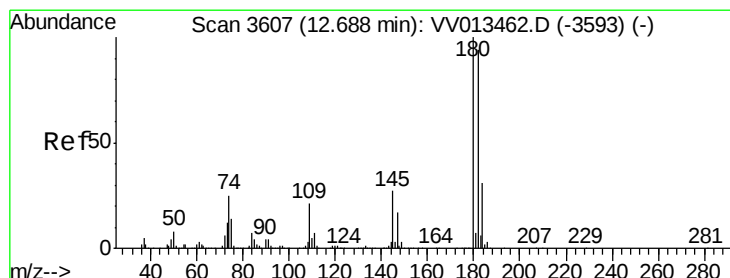
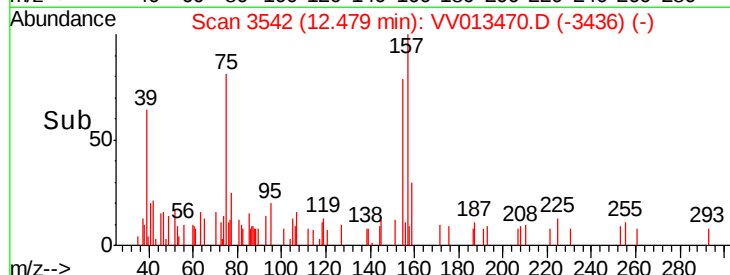
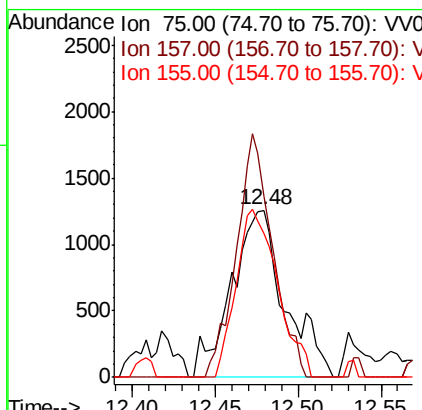
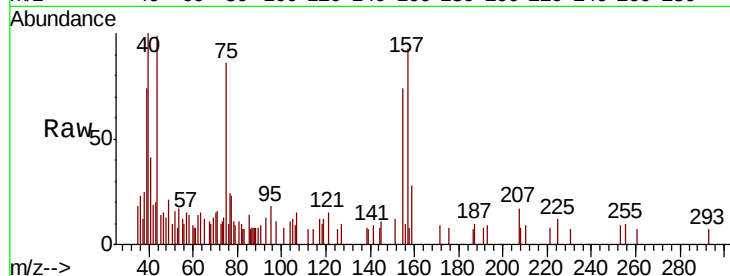




#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 1.370 ug/L  
 RT: 12.48 min Scan# 3542  
 Delta R.T. 0.01 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

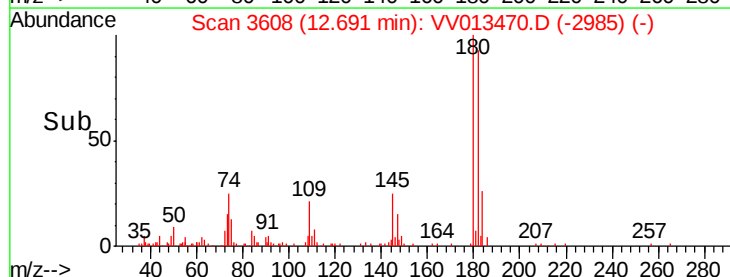
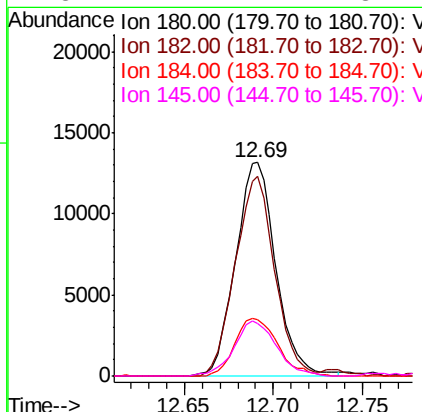
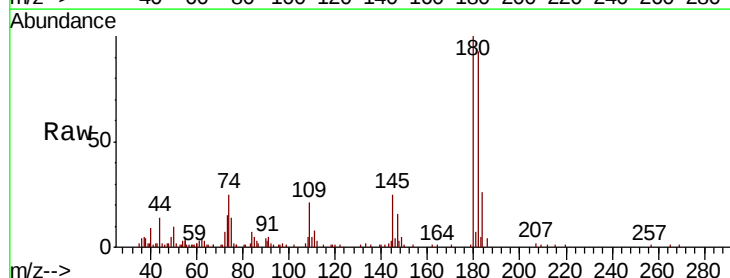
Instrument :  
 MSVOA\_V  
 ClientSampled :

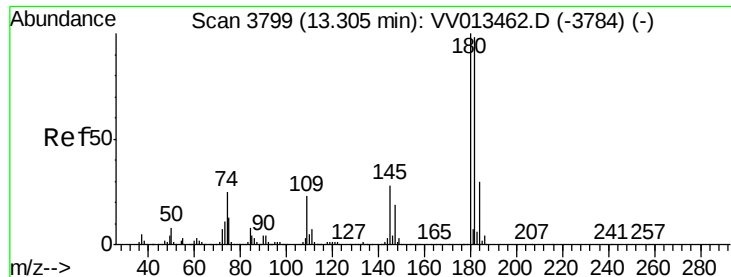
Tot Ion: 75 Resp: 2811  
 Ion Ratio Lower Upper  
 75 100  
 157 108.4 93.2 139.8  
 155 86.1 66.9 100.3



#67  
 1,3,5-Trichlorobenzene  
 Concen: 1.093 ug/L  
 RT: 12.69 min Scan# 3608  
 Delta R.T. 0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

Tgt Ion: 180 Resp: 20736  
 Ion Ratio Lower Upper  
 180 100  
 182 91.3 74.8 112.2  
 184 28.5 24.3 36.5  
 145 27.2 21.1 31.7

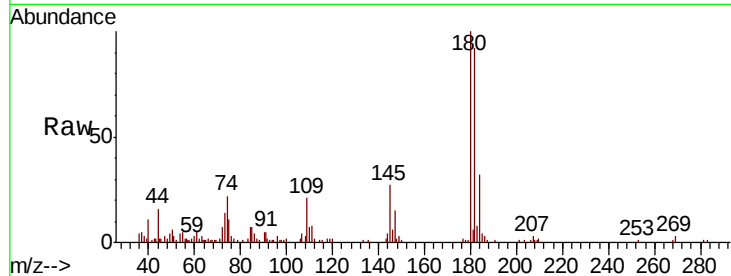




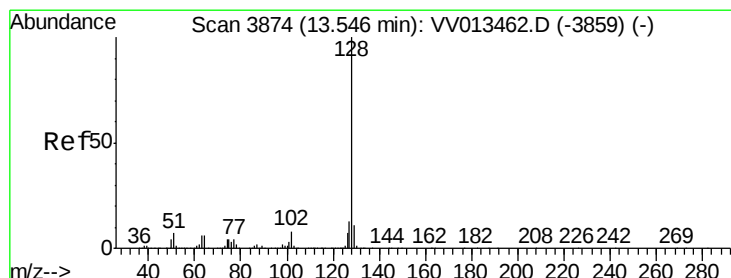
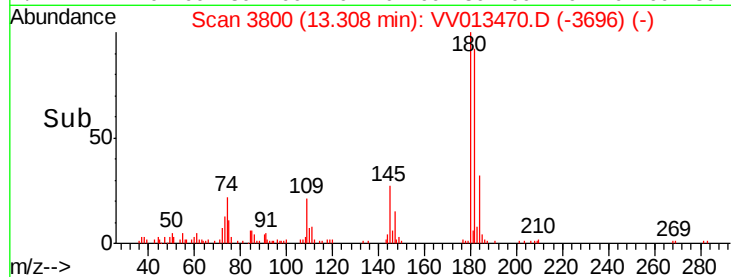
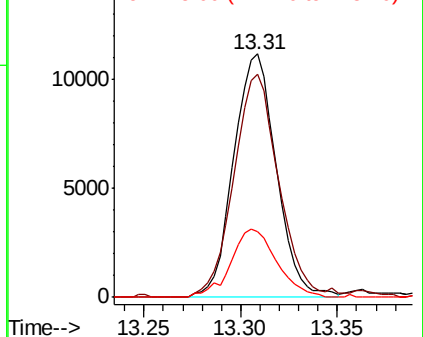
#68  
 1,2,4-trichlorobenzene  
 Concen: 1.063 ug/L  
 RT: 13.31 min Scan# 3800  
 Delta R.T. 0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

Instrument :  
 MSVOA\_V  
 ClientSampleId :

| Tot Ion   | 180  | Resp  | 17189 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 182       | 95.6 | 77.4  | 116.0 |
| 145       | 30.1 | 22.3  | 33.5  |

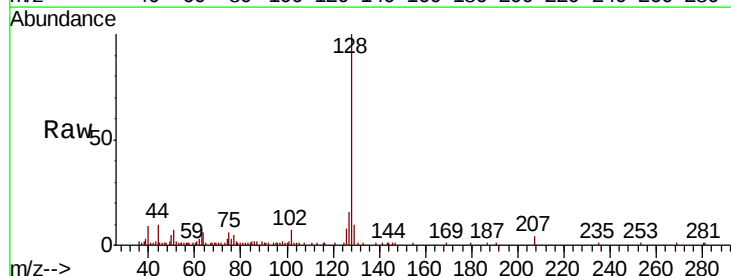


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V

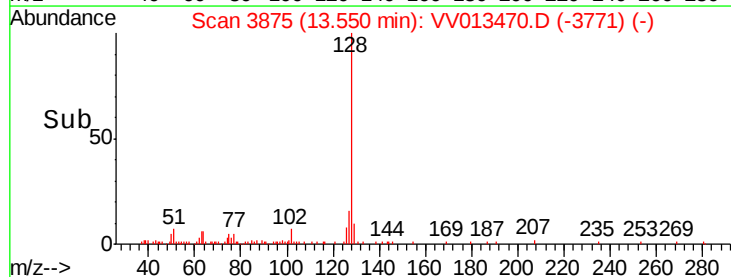
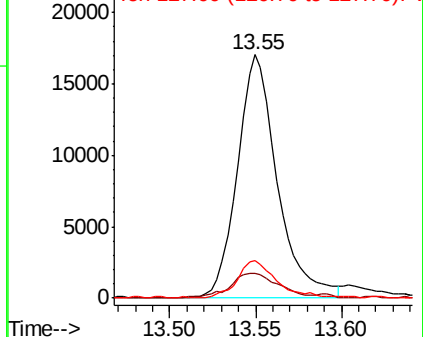


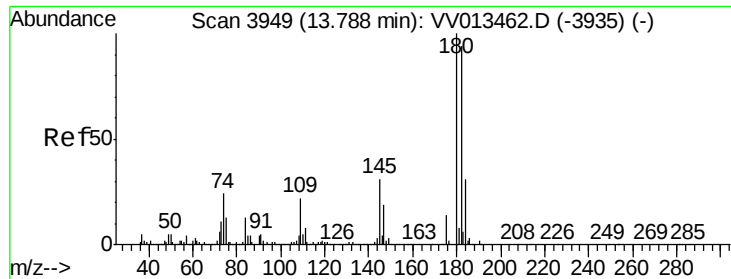
#69  
 Naphthalene  
 Concen: 0.882 ug/L  
 RT: 13.55 min Scan# 3875  
 Delta R.T. 0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

| Tgt Ion   | 128  | Resp  | 27597 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 129       | 10.0 | 8.6   | 13.0  |
| 127       | 14.5 | 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

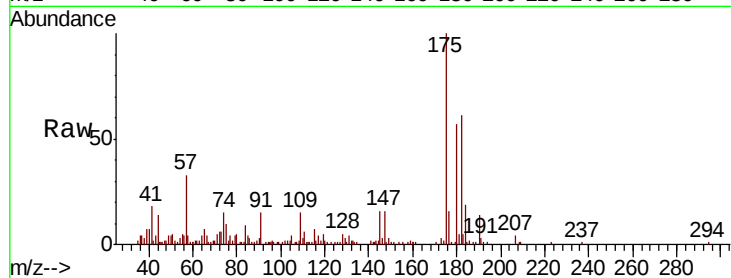




#70  
 1,2,3-Trichlorobenzene  
 Concen: 1.033 ug/L  
 RT: 13.79 min Scan# 3950  
 Delta R.T. 0.00 min  
 Lab File: VV013470.D  
 Acq: 01 Nov 2019 15:51

Instrument :  
 MSVOA\_V  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.2  | 75.2  | 112.8 |
| 145     | 32.7  | 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

