

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV091619\  
 Data File : VV012829.D  
 Acq On : 16 Sep 2019 10:51  
 Operator : SY/MD  
 Sample : VSTD02031  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Sep 16 16:39:39 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR091619WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Sep 16 16:35:54 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 468851   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 455788   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 231866   | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |        |      |      |
|--------------------------------|-------|-----|---------|--------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 585891  | 17.93  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.58  | 69  | 450096  | 16.91  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.13  | 63  | 940019  | 17.77  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.97  | 46  | 1027118 | 142.33 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.40  | 84  | 938045  | 16.31  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 429159  | 15.72  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.09  | 84  | 1969840 | 18.06  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.12  | 67  | 573917  | 16.76  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.36  | 98  | 1877577 | 19.14  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.66  | 79  | 205038  | 17.52  | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.14  | 63  | 763073  | 179.27 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 346304  | 14.62  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 614351  | 15.83  | ug/L | 0.00 |

## Target Compounds

|                                |      |     |         |               | Qvalue |
|--------------------------------|------|-----|---------|---------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 631791  | 15.931 ug/L   | 100    |
| 3) Chloromethane               | 1.25 | 50  | 598259  | 15.031 ug/L   | 97     |
| 5) Vinyl chloride              | 1.32 | 62  | 680844  | 16.478 ug/L   | 99     |
| 6) Bromomethane                | 1.53 | 94  | 353773  | 15.838 ug/L   | 99     |
| 8) Chloroethane                | 1.60 | 64  | 361595  | 15.082 ug/L   | 99     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 837153  | 16.236 ug/L   | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 481469  | 15.613 ug/L   | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 435855  | 14.945 ug/L   | 97     |
| 13) Acetone                    | 2.24 | 43  | 726243  | 160.943 ug/L  | 91     |
| 14) Carbon disulfide           | 2.31 | 76  | 981932  | 12.979 ug/L   | 99     |
| 15) Methyl Acetate             | 2.47 | 43  | 249929  | 20.548 ug/L # | 89     |
| 16) Methylene chloride         | 2.53 | 84  | 491467  | 13.678 ug/L   | 99     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 1212468 | 17.349 ug/L   | 98     |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96  | 484583  | 14.923 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 1045120 | 16.788 ug/L   | 99     |
| 21) 2-Butanone                 | 4.06 | 43  | 1569568 | 203.924 ug/L  | 97     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 591657  | 16.650 ug/L   | 99     |
| 23) Bromochloromethane         | 4.30 | 128 | 247477  | 16.255 ug/L   | 97     |
| 25) Chloroform                 | 4.42 | 83  | 1088952 | 15.833 ug/L   | 99     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 626439  | 17.406 ug/L   | 98     |
| 29) 1,1,1-Trichloroethane      | 4.65 | 97  | 870534  | 17.200 ug/L   | 99     |
| 30) Cyclohexane                | 4.72 | 56  | 856354  | 17.420 ug/L   | 99     |
| 31) Carbon tetrachloride       | 4.87 | 117 | 743339  | 16.779 ug/L   | 100    |
| 33) Benzene                    | 5.14 | 78  | 2243391 | 16.877 ug/L   | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 608313  | 16.464 ug/L   | 100    |
| 35) Methylcyclohexane          | 6.17 | 83  | 893675  | 17.485 ug/L   | 97     |
| 37) 1,2-Dichloropropane        | 6.22 | 63  | 613989  | 18.340 ug/L   | 98     |
| 38) Bromodichloromethane       | 6.55 | 83  | 756504  | 17.387 ug/L   | 99     |
| 39) cis-1,3-Dichloropropene    | 7.07 | 75  | 845025  | 19.380 ug/L   | 100    |
| 40) 4-Methyl-2-pentanone       | 7.28 | 43  | 3894323 | 208.237 ug/L  | 97     |

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 Data File : VV012829.D  
 Acq On : 16 Sep 2019 10:51  
 Operator : SY/MD  
 Sample : VSTD02031  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 6 Sample Multiplier: 1

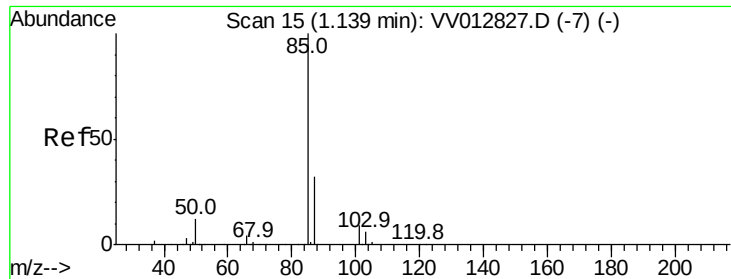
Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: Sep 16 16:39:39 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR091619WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Mon Sep 16 16:35:54 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 42) Toluene                    | 7.43  | 91   | 2440358  | 17.669  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 657931   | 19.797  | ug/L  | 100      |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 424756   | 18.143  | ug/L  | 96       |
| 47) Tetrachloroethene          | 8.02  | 164  | 466316   | 16.254  | ug/L  | 98       |
| 48) 2-Hexanone                 | 8.19  | 43   | 2832990  | 209.782 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.29  | 129  | 504350   | 18.131  | ug/L  | 97       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 365630   | 17.765  | ug/L  | 99       |
| 51) Chlorobenzene              | 8.92  | 112  | 1598136  | 17.439  | ug/L  | 99       |
| 52) Ethylbenzene               | 9.05  | 91   | 2786259  | 18.762  | ug/L  | 100      |
| 53) m,p-xylene                 | 9.18  | 106  | 1050939  | 18.777  | ug/L  | 100      |
| 54) o-xylene                   | 9.59  | 106  | 1046440  | 19.444  | ug/L  | 100      |
| 55) Styrene                    | 9.60  | 104  | 1810879  | 20.144  | ug/L  | 100      |
| 56) Isopropylbenzene           | 9.97  | 105  | 2824111  | 19.758  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 432250   | 18.709  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 351304   | 17.691  | ug/L  | 100      |
| 61) Bromoform                  | 9.77  | 173  | 275147   | 17.562  | ug/L  | 99       |
| 62) 1,3-Dichlorobenzene        | 11.22 | 146  | 1312573  | 18.032  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 1310911  | 17.812  | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene        | 11.68 | 146  | 1238076  | 17.974  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 63254    | 17.998  | ug/L  | 89       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 1029660  | 18.689  | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 853740   | 19.642  | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 1417949  | 21.844  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 815919   | 19.833  | ug/L  | 99       |

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





#2

Dichlorodifluoromethane

Concen: 15.931 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

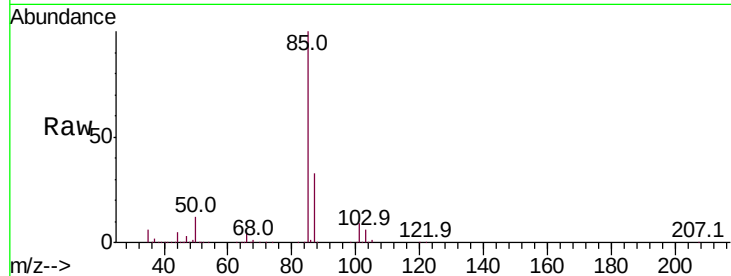
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 85 Resp: 631791

Ion Ratio Lower Upper

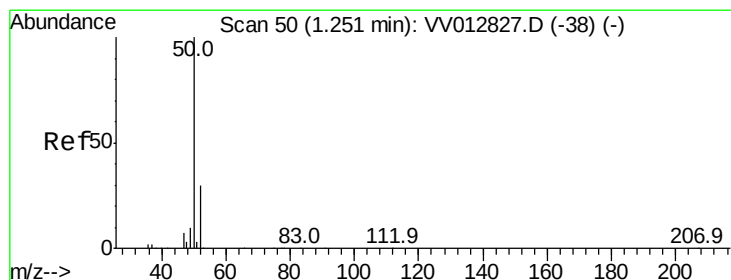
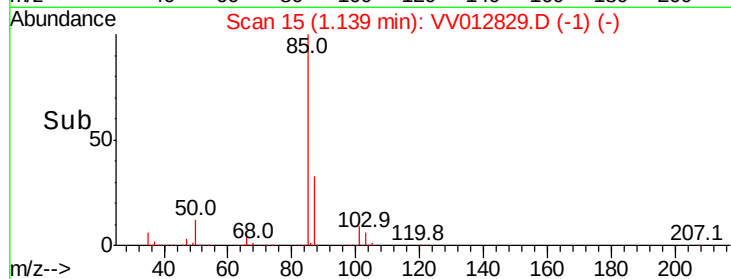
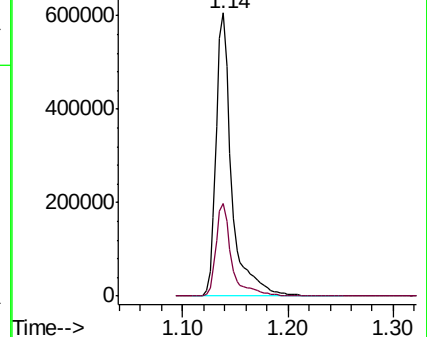
85 100

87 32.7 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 15.031 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV012829.D

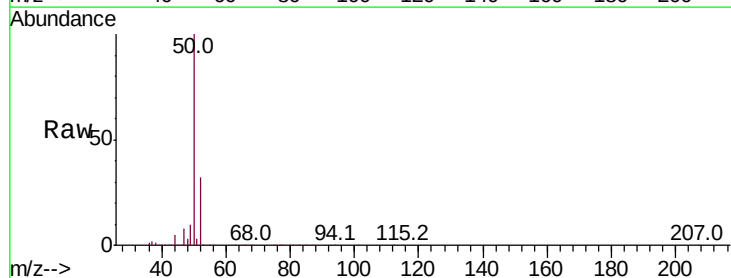
Acq: 16 Sep 2019 10:51

Tgt Ion: 50 Resp: 598259

Ion Ratio Lower Upper

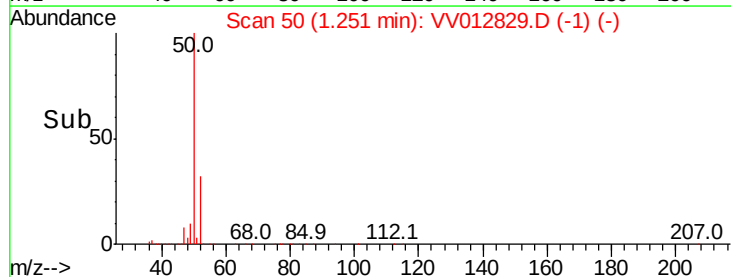
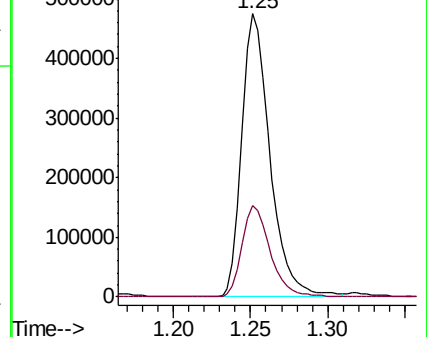
50 100

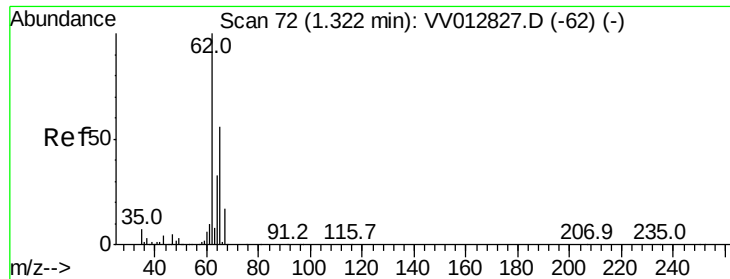
52 32.1 21.3 39.6



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0





#5

Vinyl chloride

Concen: 16.478 ug/L

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

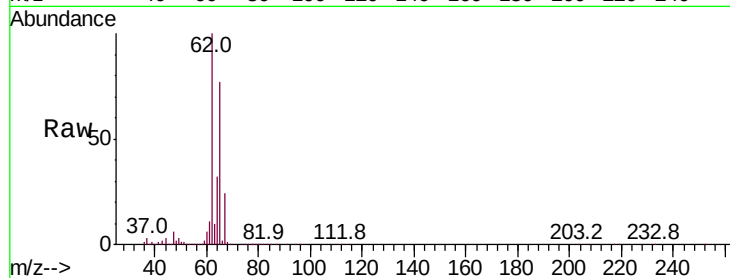
ClientSampleId :

Tot Ion: 62 Resp: 680844

Ion Ratio Lower Upper

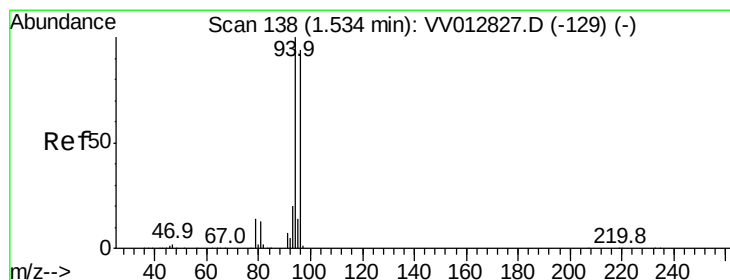
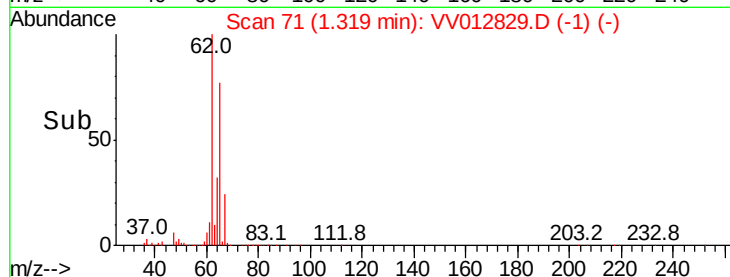
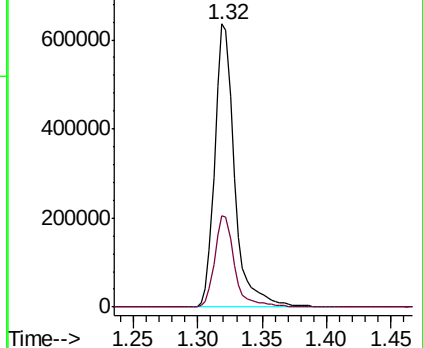
62 100

64 32.5 23.2 43.0



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.10 (63.80 to 64.80): VV0



#6

Bromomethane

Concen: 15.838 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV012829.D

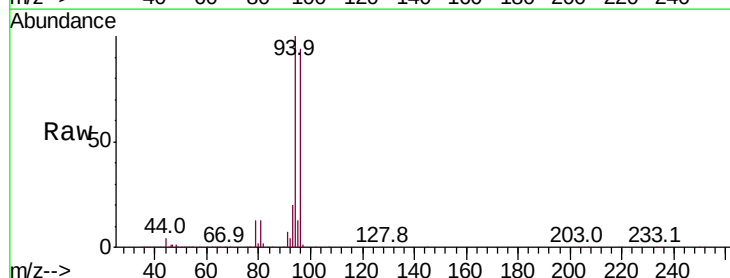
Acq: 16 Sep 2019 10:51

Tgt Ion: 94 Resp: 353773

Ion Ratio Lower Upper

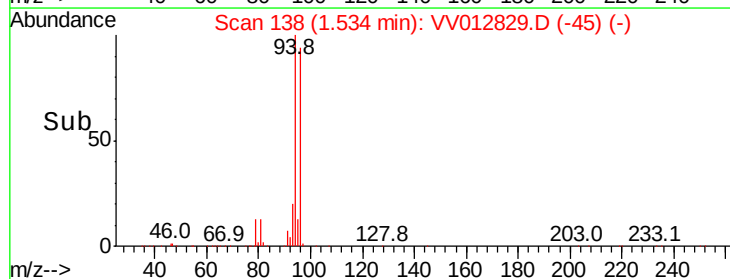
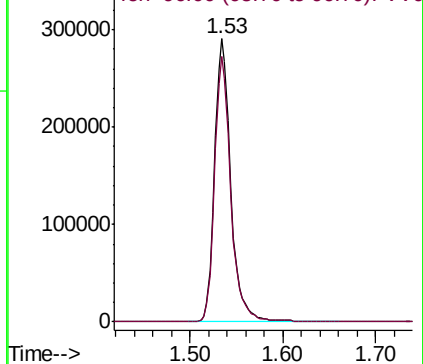
94 100

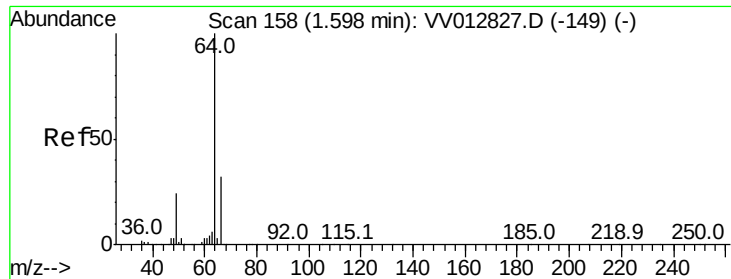
96 93.9 66.1 122.7



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0





#8

Chloroethane

Concen: 15.082 ug/L

RT: 1.60 min Scan# 158

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

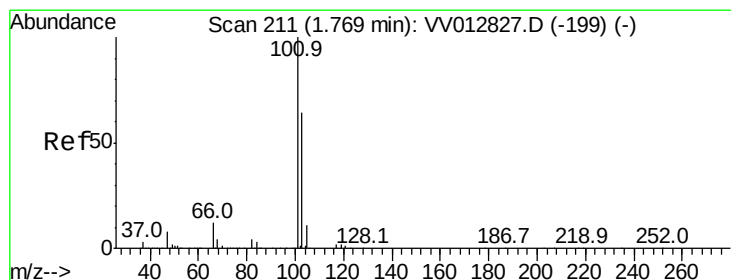
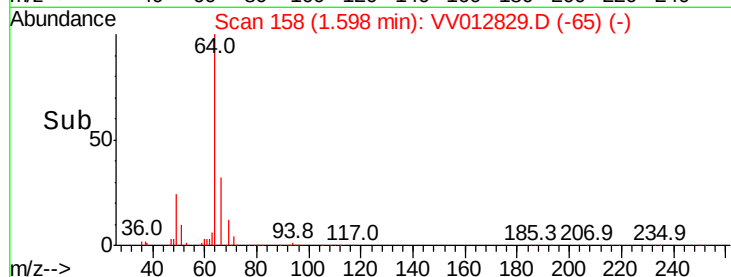
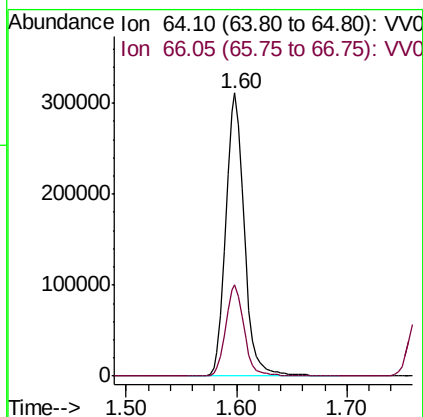
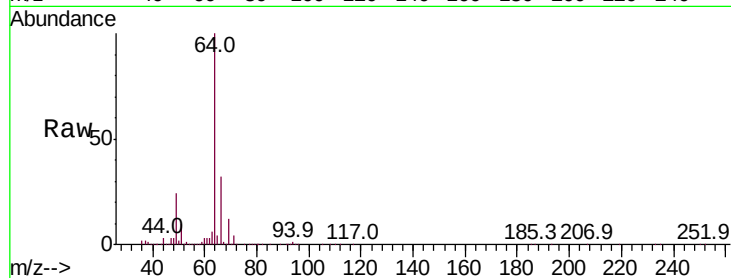
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 64 Resp: 361595

Ion Ratio Lower Upper

64 100

66 32.4 22.3 41.5



#9

Trichlorofluoromethane

Concen: 16.236 ug/L

RT: 1.77 min Scan# 210

Delta R.T. -0.00 min

Lab File: VV012829.D

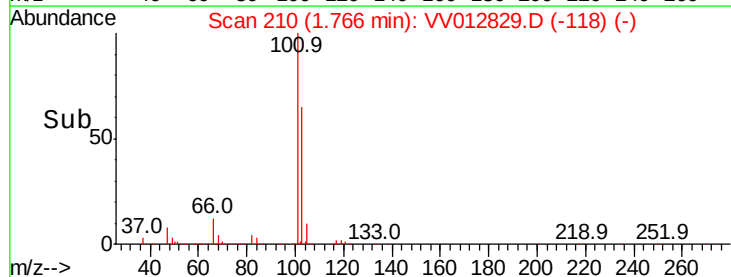
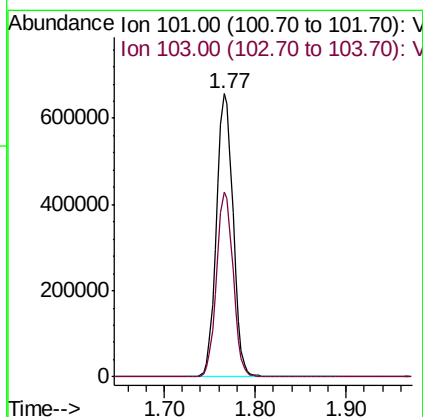
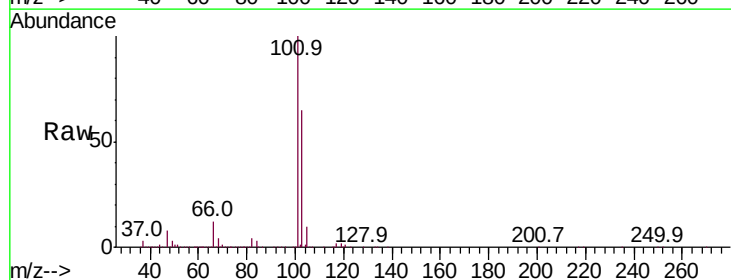
Acq: 16 Sep 2019 10:51

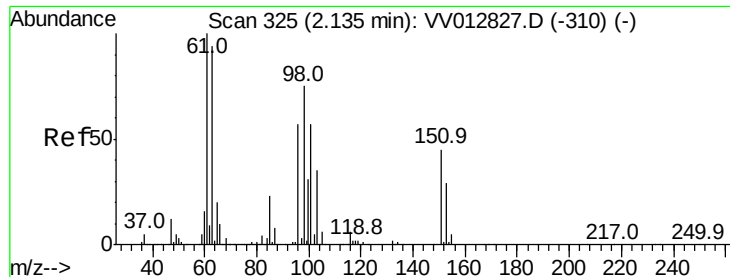
Tgt Ion:101 Resp: 837153

Ion Ratio Lower Upper

101 100

103 65.2 51.2 76.8





#10

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

Concen: 15.613 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

ClientSampleId :

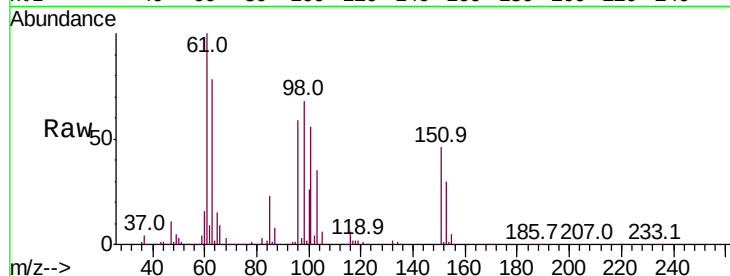
Tot Ion:101 Resp: 481469

Ion Ratio Lower Upper

101 100

85 41.4 32.9 49.3

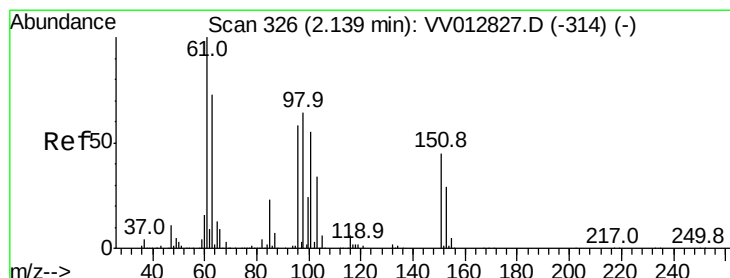
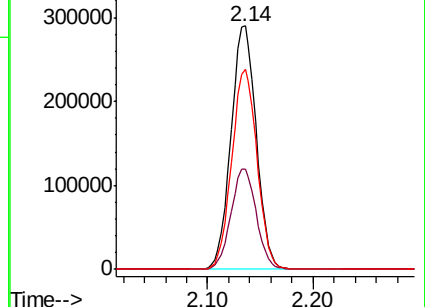
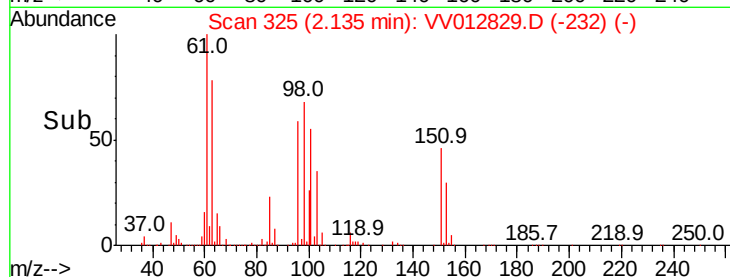
151 82.1 65.0 97.6



Abundance Ion 101.00 (100.70 to 101.70): VV012827.D (-310) (-)

Ion 85.00 (84.70 to 85.70): VV012829.D (-232) (-)

Ion 151.00 (150.70 to 151.70): VV012829.D (-233) (-)



#12

1,1-Dichloroethene

Concen: 14.945 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

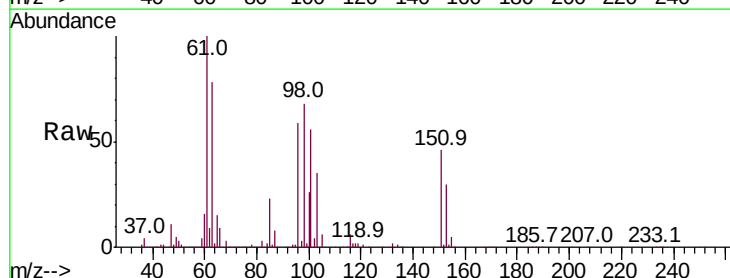
Tgt Ion: 96 Resp: 435855

Ion Ratio Lower Upper

96 100

61 168.5 120.1 223.1

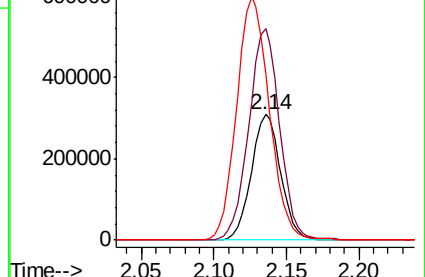
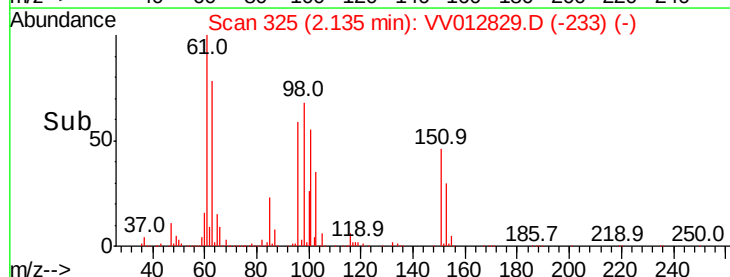
63 131.6 88.3 164.1

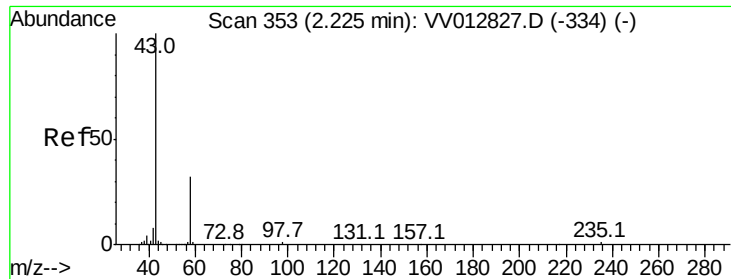


Abundance Ion 96.00 (95.70 to 96.70): VV012827.D (-314) (-)

Ion 61.05 (60.75 to 61.75): VV012829.D (-233) (-)

Ion 63.00 (62.70 to 63.70): VV012829.D (-233) (-)





#13

Acetone

Concen: 160.943 ug/L

RT: 2.24 min Scan# 357

Delta R.T. 0.01 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

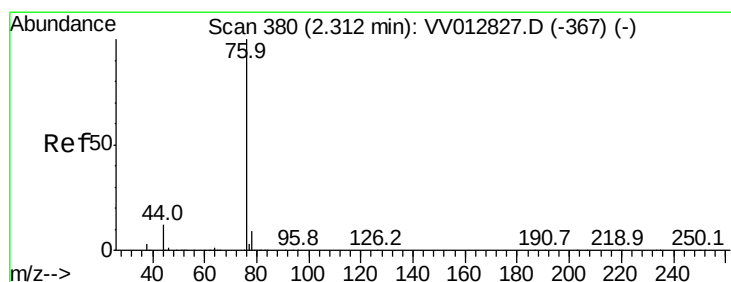
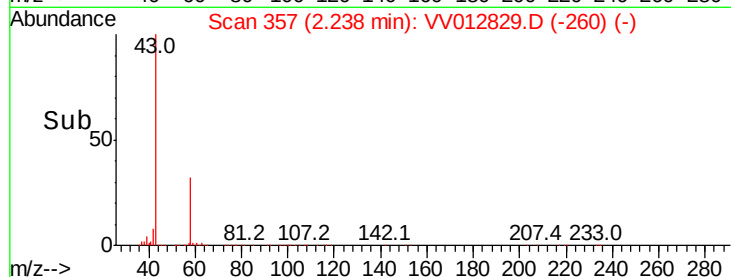
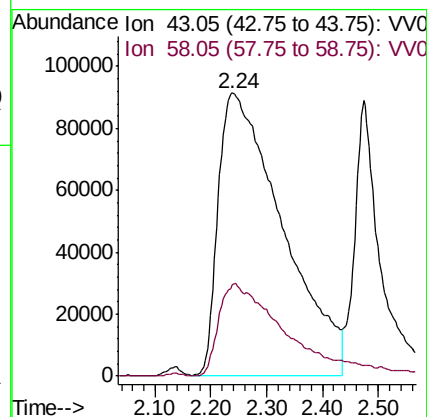
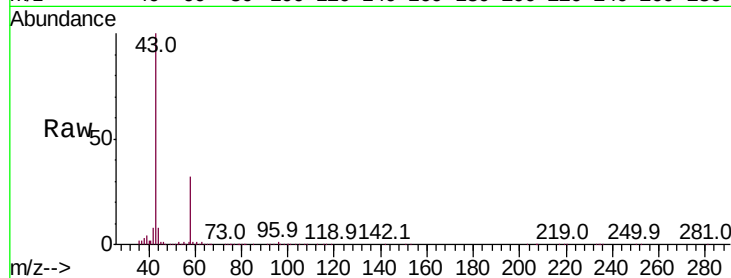
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 726243

Ion Ratio Lower Upper

43 100

58 33.3 0.0 56.6



#14

Carbon disulfide

Concen: 12.979 ug/L

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VV012829.D

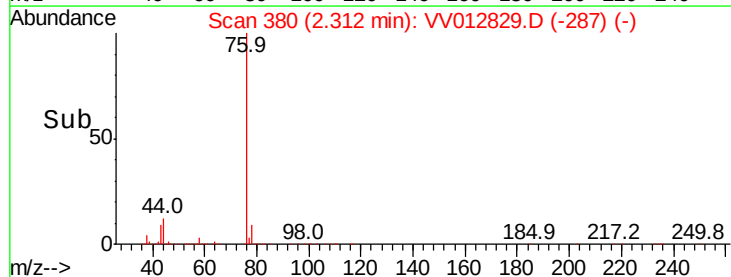
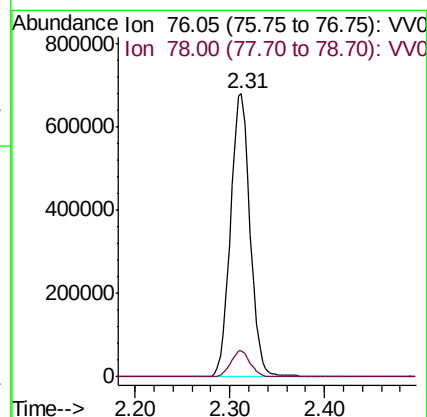
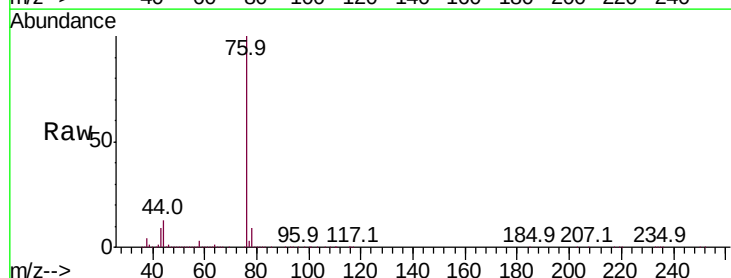
Acq: 16 Sep 2019 10:51

Tgt Ion: 76 Resp: 981932

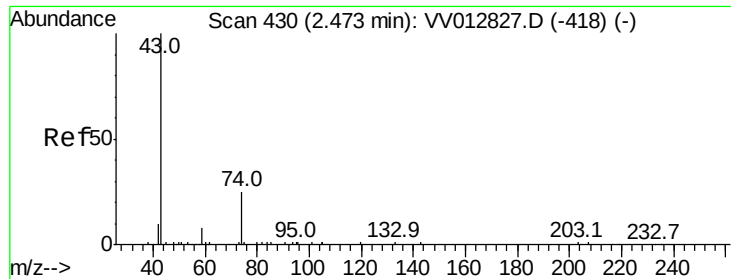
Ion Ratio Lower Upper

76 100

78 9.1 7.6 11.4







#15

Methvl Acetate

Concen: 20.548 ug/L

RT: 2.47 min Scan# 430

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

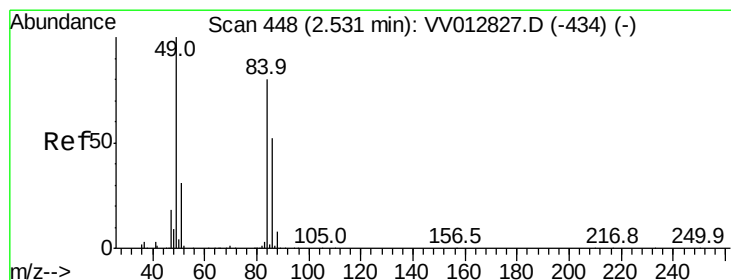
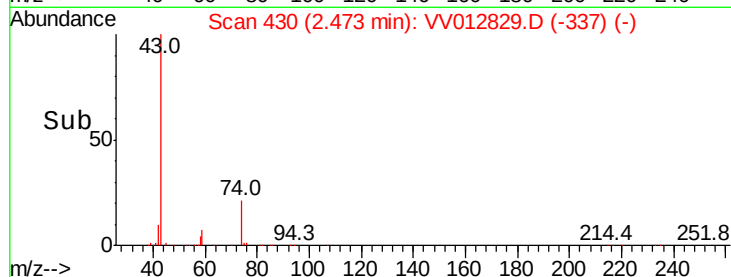
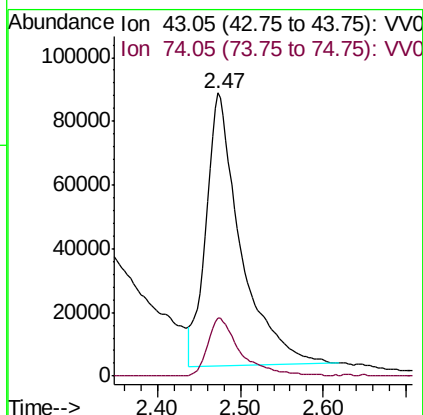
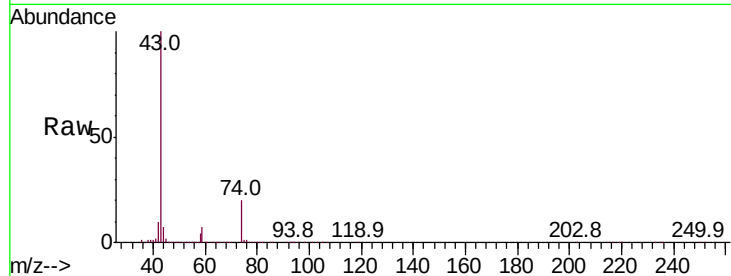
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 249929

Ion Ratio Lower Upper

43 100

74 20.2 20.7 31.1#



#16

Methylene chloride

Concen: 13.678 ug/L

RT: 2.53 min Scan# 448

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

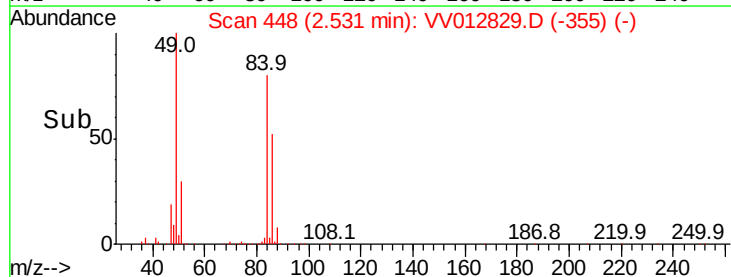
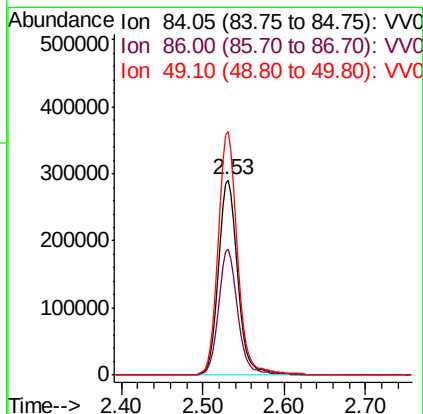
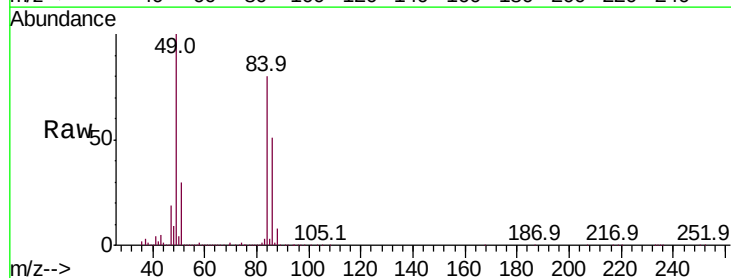
Tgt Ion: 84 Resp: 491467

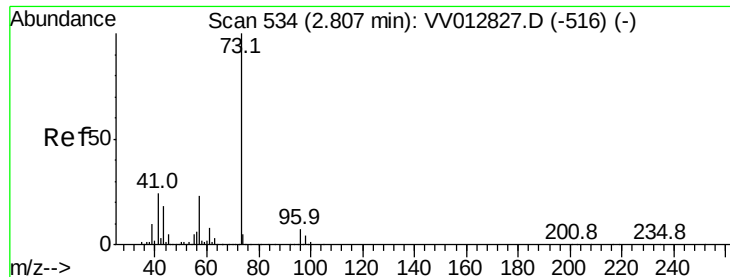
Ion Ratio Lower Upper

84 100

86 64.2 45.4 84.4

49 124.7 88.0 163.4





#17

Methyl tert-butyl Ether

Concen: 17.349 ug/L

RT: 2.81 min Scan# 534

Delta R.T. 0.00 min

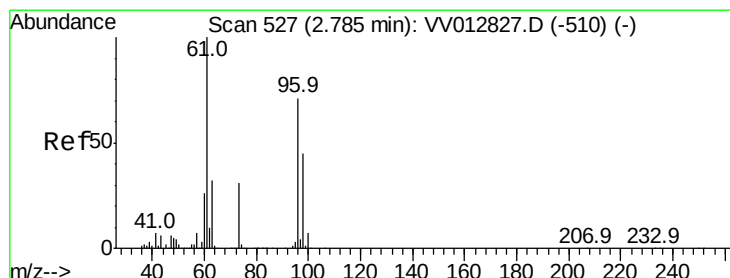
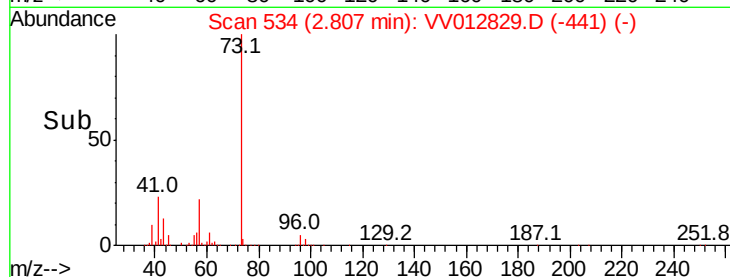
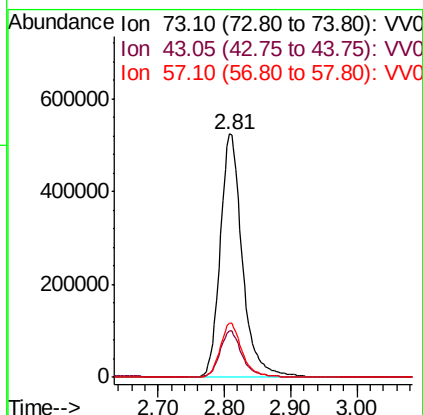
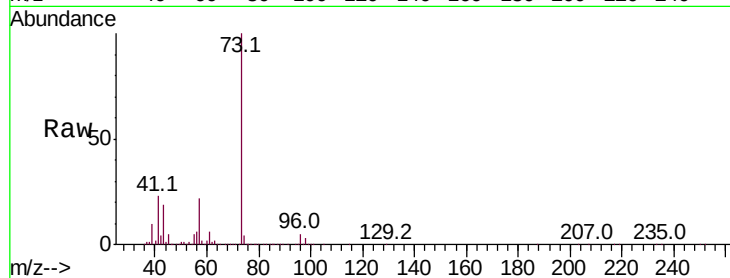
Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 73 Resp: 1212468

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 73  | 100   |       |       |
| 43  | 19.2  | 14.5  | 21.7  |
| 57  | 22.1  | 18.2  | 27.4  |



#18

trans-1,2-Dichloroethene

Concen: 14.923 ug/L

RT: 2.78 min Scan# 526

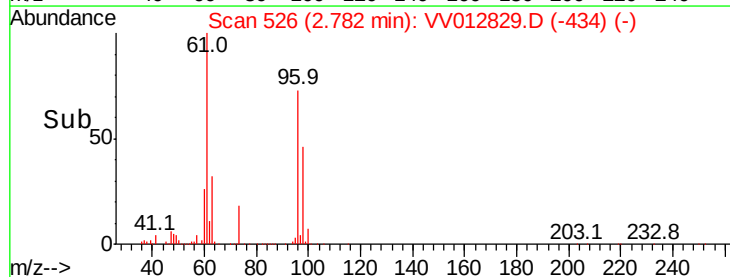
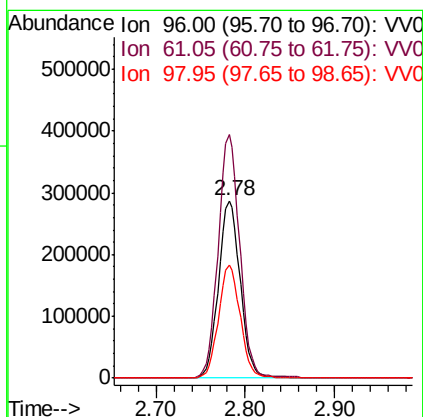
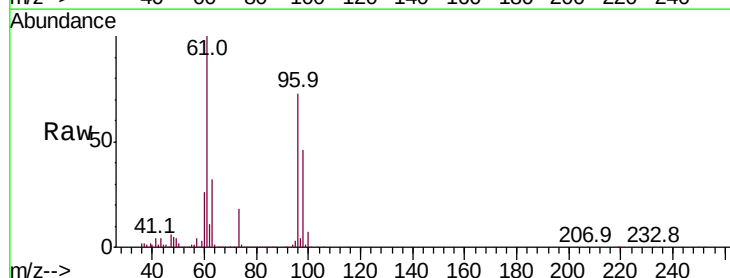
Delta R.T. -0.00 min

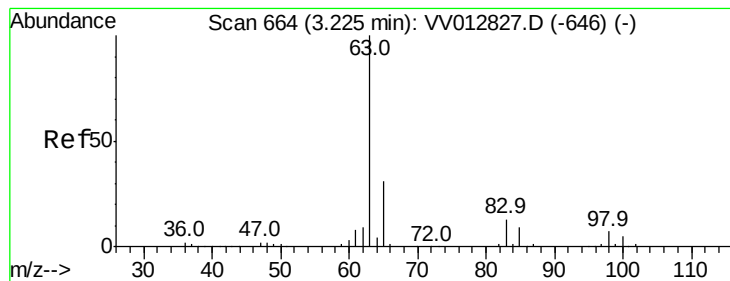
Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Tgt Ion: 96 Resp: 484583

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 137.2 | 98.2  | 182.4 |
| 98  | 63.8  | 44.6  | 82.8  |





#19

1,1-Dichloroethane

Concen: 16.788 ug/L

RT: 3.22 min Scan# 663

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :  
MSVOA\_V  
ClientSampleId :

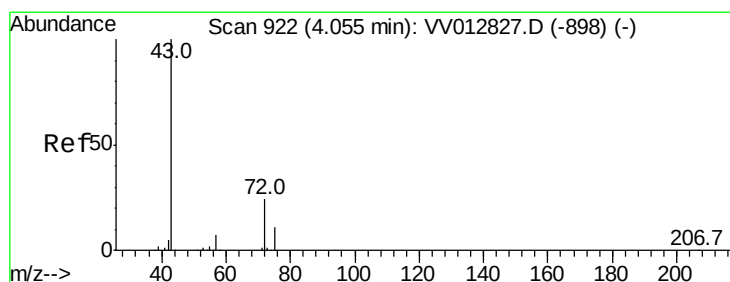
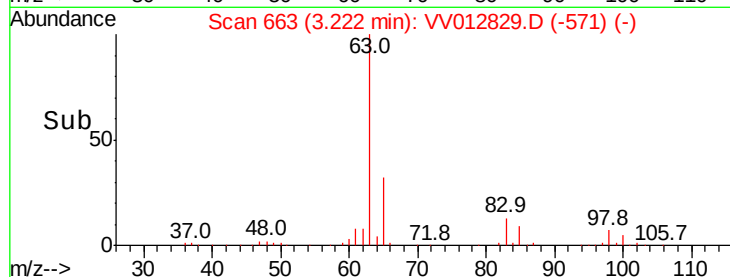
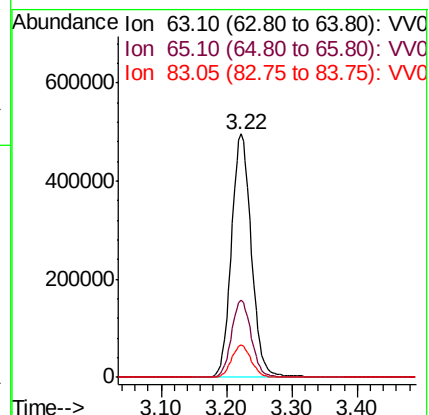
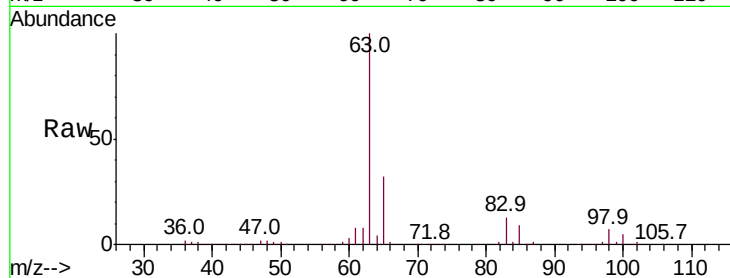
Tot Ion: 63 Resp: 1045120

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 65  | 31.6  | 21.8  | 40.4  |
| 83  | 13.3  | 9.2   | 17.0  |

63 100

65 31.6 21.8 40.4

83 13.3 9.2 17.0



#21

2-Butanone

Concen: 203.924 ug/L

RT: 4.06 min Scan# 923

Delta R.T. 0.00 min

Lab File: VV012829.D

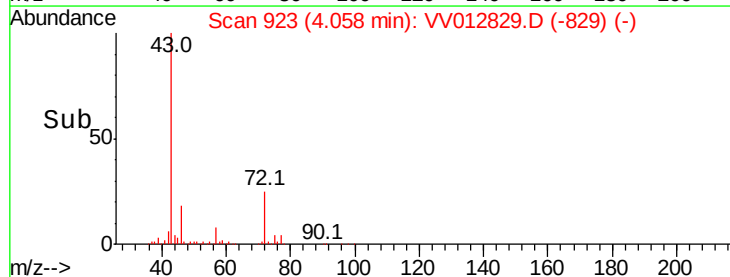
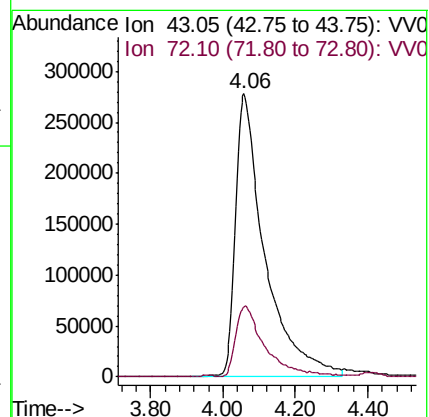
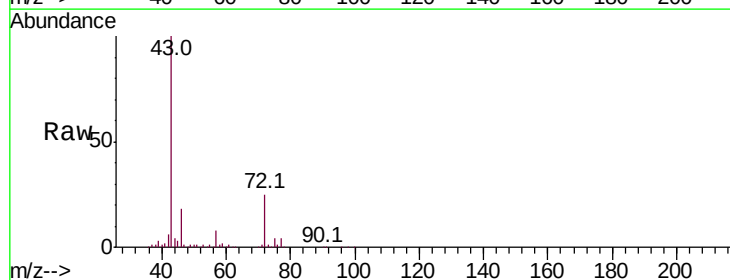
Acq: 16 Sep 2019 10:51

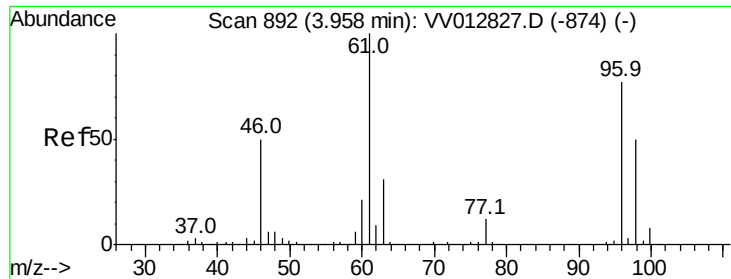
Tgt Ion: 43 Resp: 1569568

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 23.7  | 12.6  | 37.6  |

43 100

72 23.7 12.6 37.6



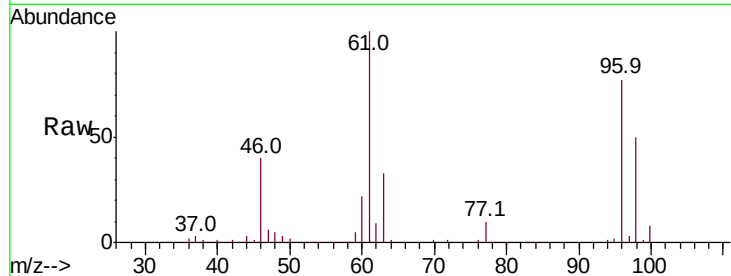


#22

cis-1,2-Dichloroethene  
Concen: 16.650 ug/L  
RT: 3.96 min Scan# 891  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Instrument :  
MSVOA\_V  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 129.5 | 91.2  | 169.4 |
| 68      | 0.0   | 0.0   | 0.0   |

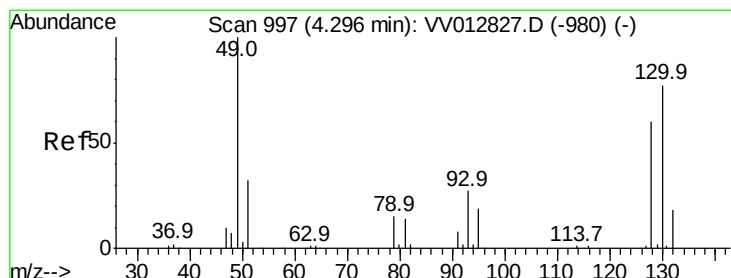
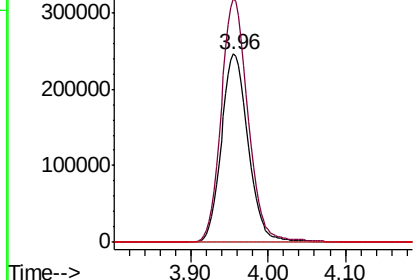
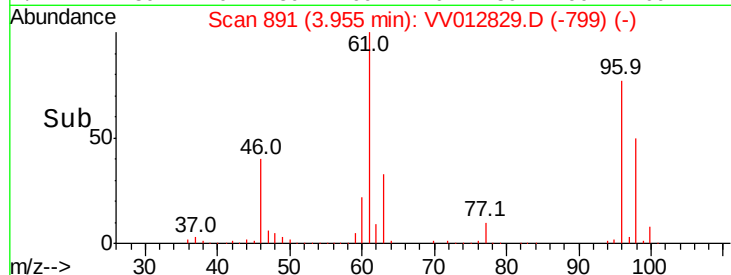


Abundance

Ion 96.00 (95.70 to 96.70): VV012829.D (-799) (-)

Ion 61.05 (60.75 to 61.75): VV012829.D (-799) (-)

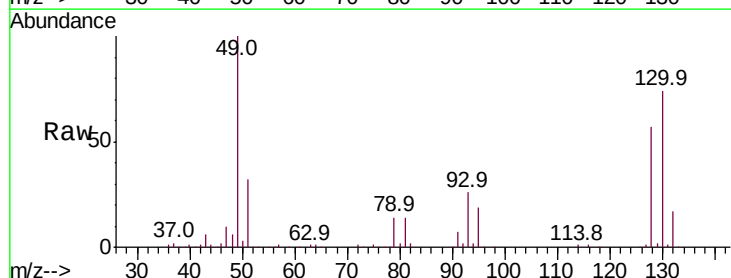
Ion 68.15 (67.85 to 68.85): VV012829.D (-799) (-)



#23

Bromochloromethane  
Concen: 16.255 ug/L  
RT: 4.30 min Scan# 997  
Delta R.T. 0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 49      | 175.0 | 117.5 | 218.3 |
| 130     | 128.9 | 89.9  | 167.0 |
| 51      | 55.6  | 42.7  | 64.1  |



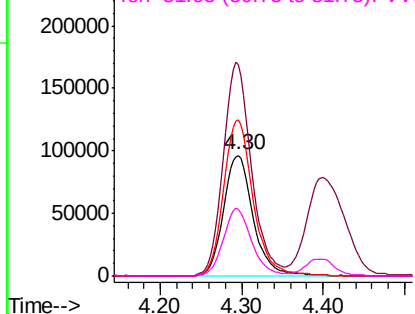
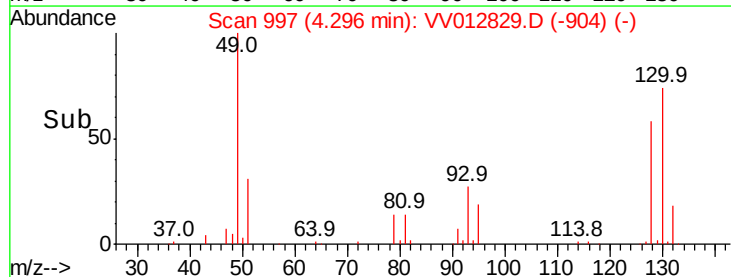
Abundance

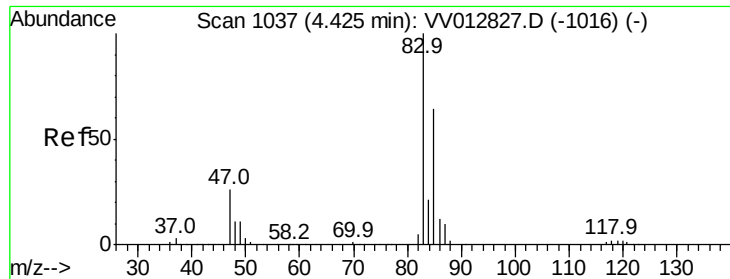
Ion 127.90 (127.60 to 128.60): VV012829.D (-904) (-)

Ion 49.10 (48.80 to 49.80): VV012829.D (-904) (-)

Ion 129.95 (129.65 to 130.65): VV012829.D (-904) (-)

Ion 51.05 (50.75 to 51.75): VV012829.D (-904) (-)

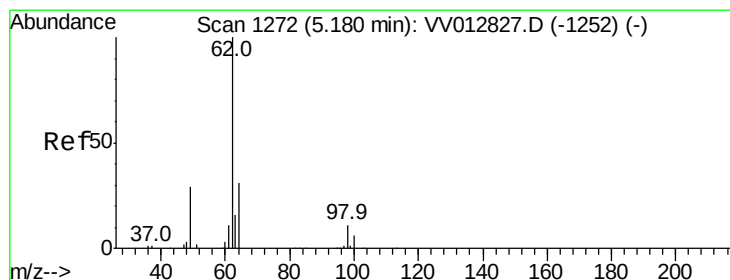
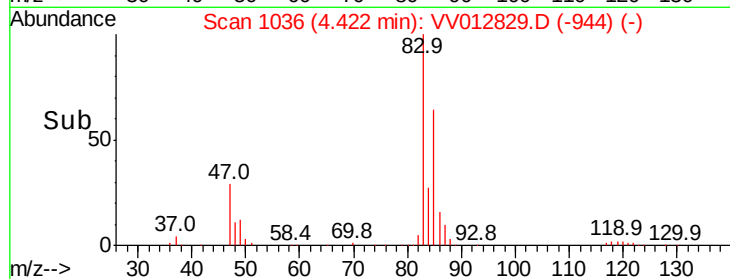
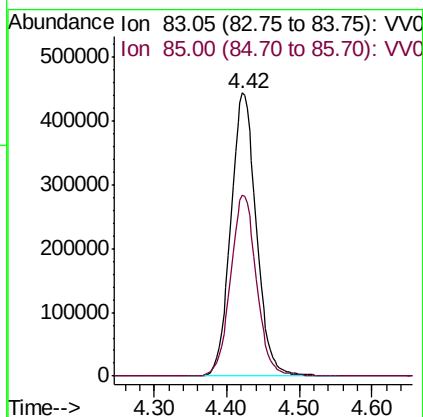
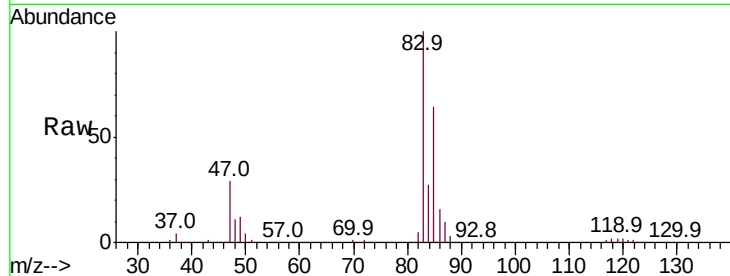




#25  
Chloroform  
Concen: 15.833 ug/L  
RT: 4.42 min Scan# 1036  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

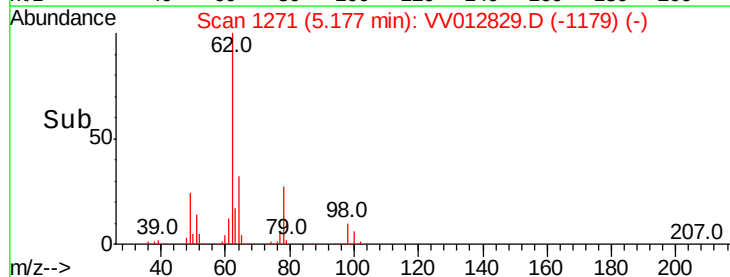
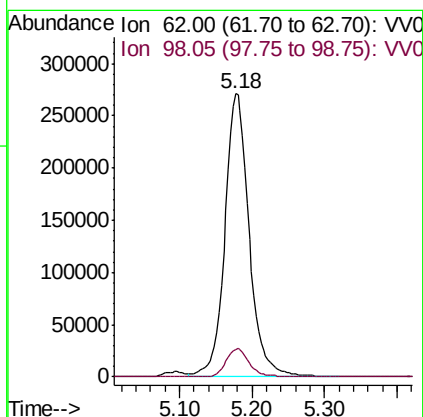
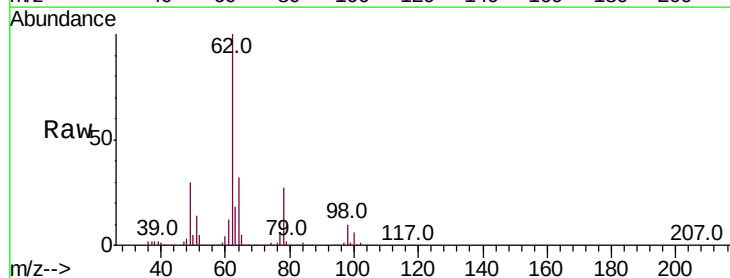
Instrument :  
MSVOA\_V  
ClientSampleId :

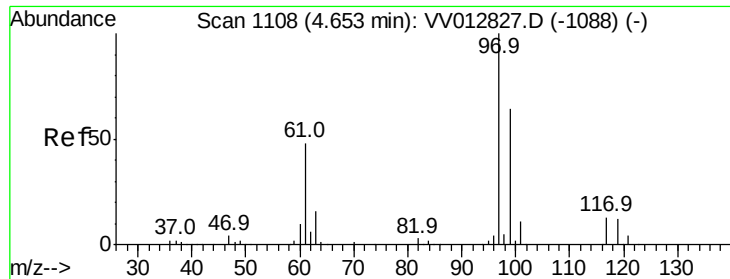
Tot Ion: 83 Resp: 1088952  
Ion Ratio Lower Upper  
83 100  
85 64.0 44.4 82.5



#27  
1,2-Dichloroethane  
Concen: 17.406 ug/L  
RT: 5.18 min Scan# 1271  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Tgt Ion: 62 Resp: 626439  
Ion Ratio Lower Upper  
62 100  
98 9.7 8.3 12.5

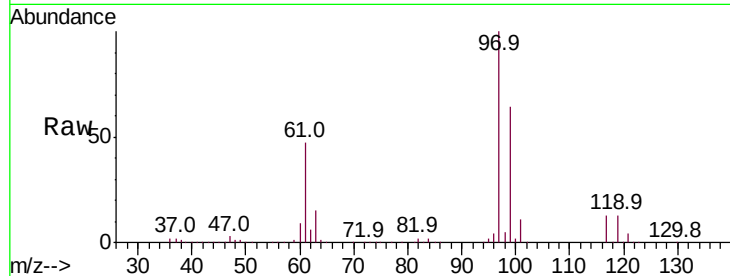




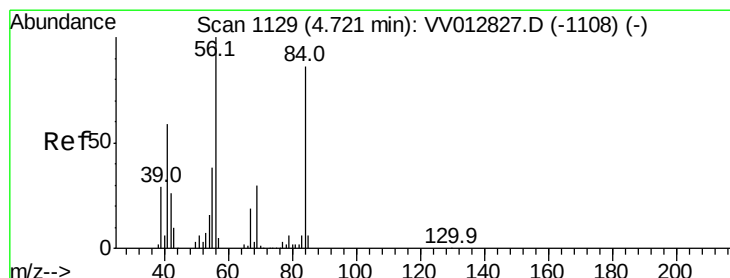
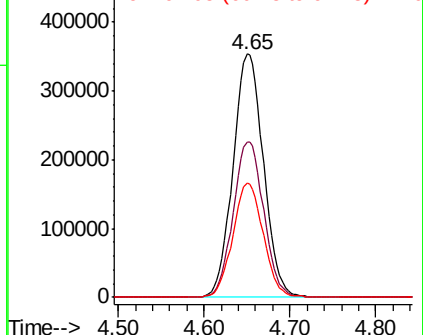
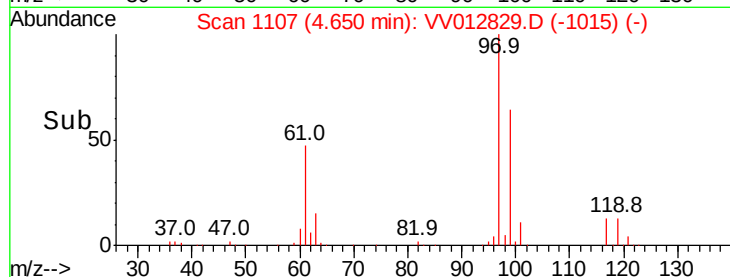
#29  
1,1,1-Trichloroethane  
Concen: 17.200 ug/L  
RT: 4.65 min Scan# 1107  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 97 Resp: 870534  
Ion Ratio Lower Upper  
97 100  
99 64.2 50.9 76.3  
61 47.0 38.2 57.4

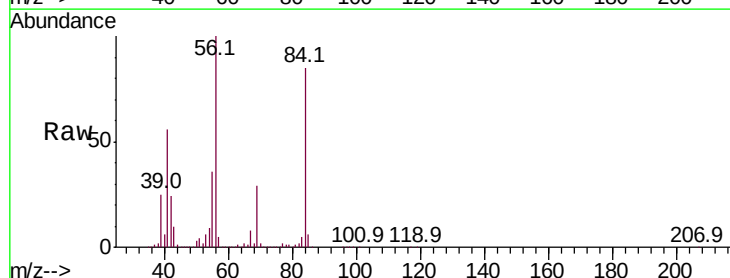


Abundance Ion 96.95 (96.65 to 97.65): VV0  
Ion 99.05 (98.75 to 99.75): VV0  
Ion 61.05 (60.75 to 61.75): VV0

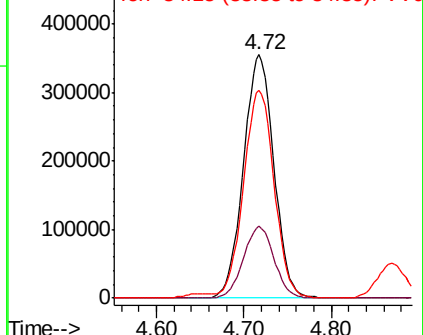
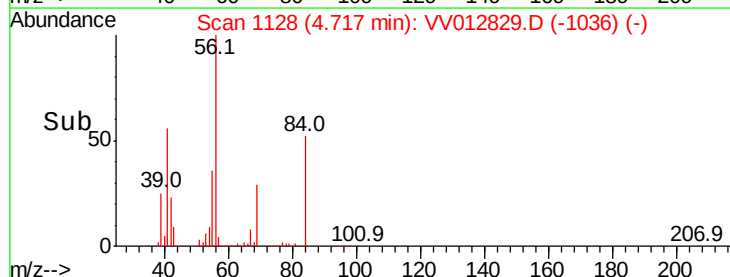


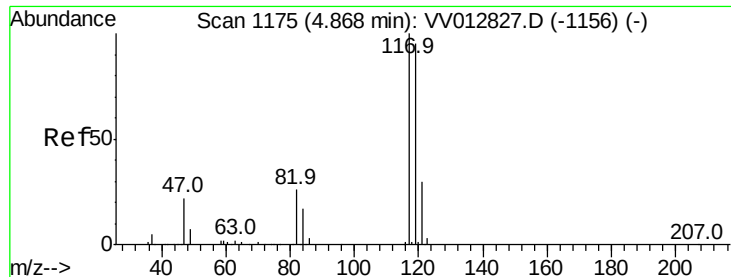
#30  
Cyclohexane  
Concen: 17.420 ug/L  
RT: 4.72 min Scan# 1128  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Tgt Ion: 56 Resp: 856354  
Ion Ratio Lower Upper  
56 100  
69 29.8 23.9 35.9  
84 86.2 67.9 101.9



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





#31

Carbon tetrachloride

Concen: 16.779 ug/L

RT: 4.87 min Scan# 1175

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

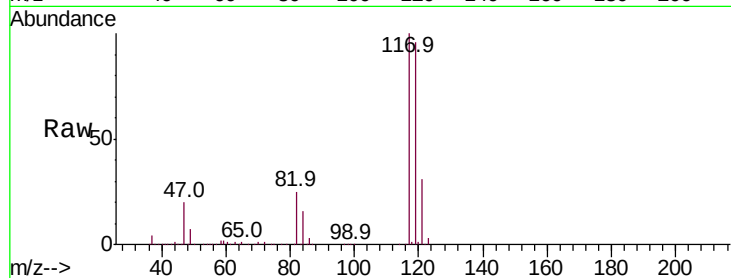
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion:117 Resp: 743339

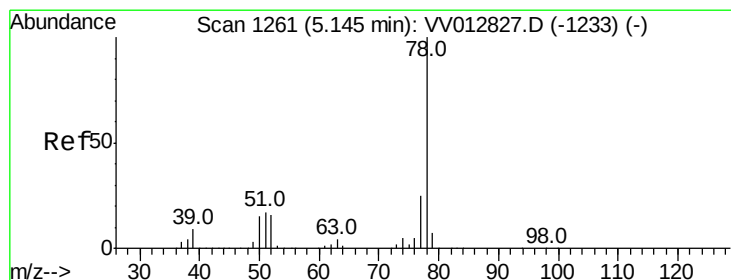
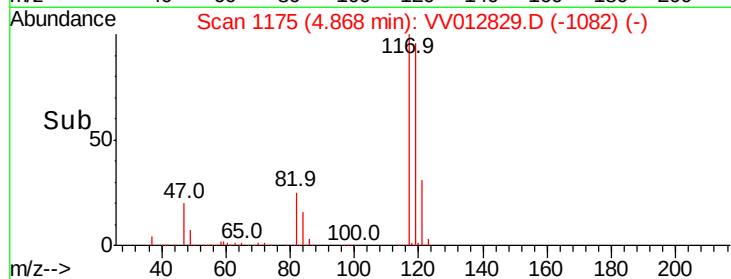
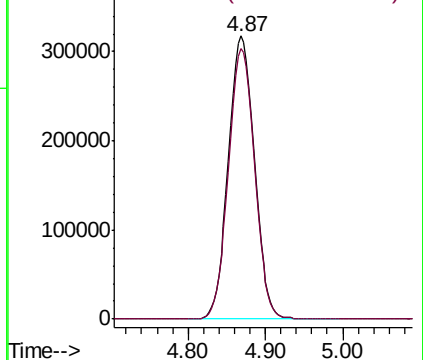
Ion Ratio Lower Upper

117 100

119 95.8 76.4 114.6



Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 118.90 (118.60 to 119.60): V



#33

Benzene

Concen: 16.877 ug/L

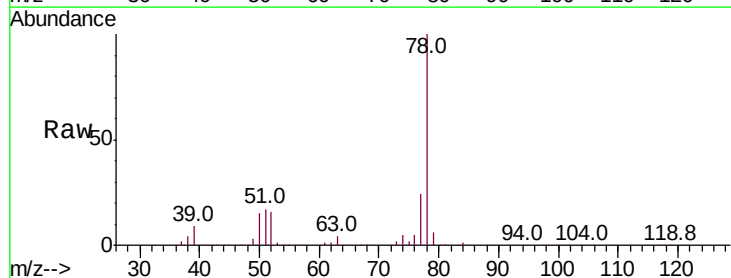
RT: 5.14 min Scan# 1260

Delta R.T. -0.00 min

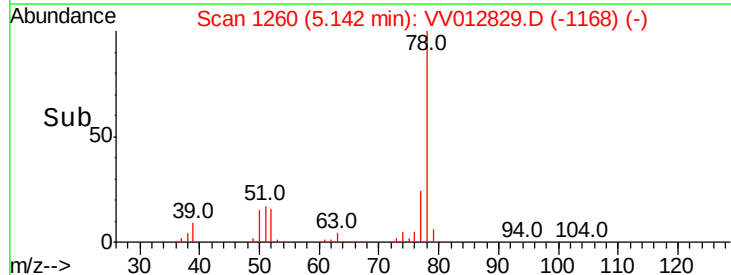
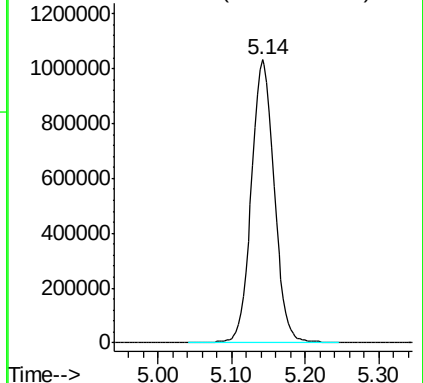
Lab File: VV012829.D

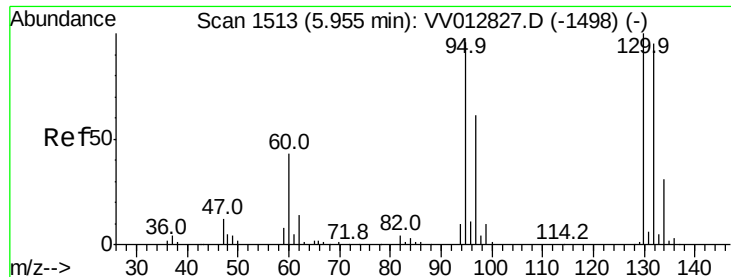
Acq: 16 Sep 2019 10:51

Tgt Ion: 78 Resp: 2243391



Abundance Ion 78.10 (77.80 to 78.80): VV0





#34

Trichloroethene

Concen: 16.464 ug/L

RT: 5.96 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 95 Resp: 608313

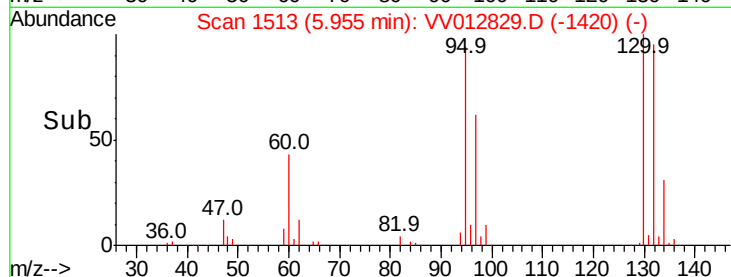
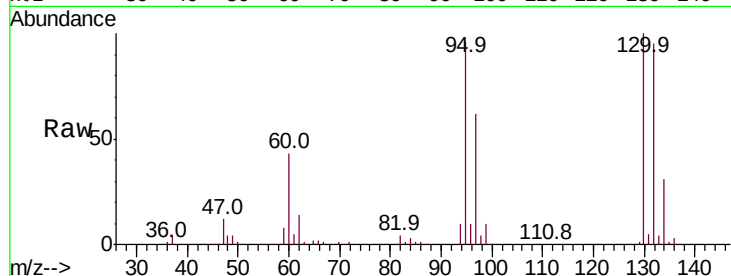
Ion Ratio Lower Upper

95 100

97 64.5 44.4 82.4

132 98.5 69.0 128.1

130 103.7 72.8 135.2



Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0

5.96

300000

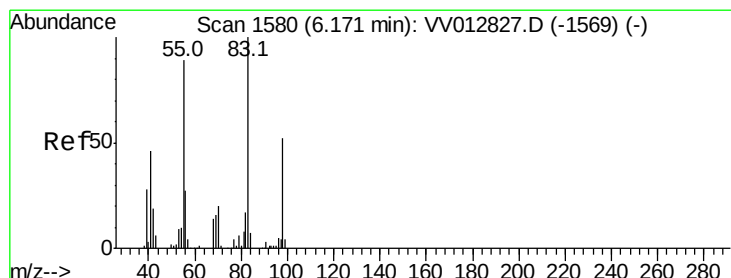
200000

100000

0

Time-->

5.90 6.00 6.10



#35

Methylcyclohexane

Concen: 17.485 ug/L

RT: 6.17 min Scan# 1580

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

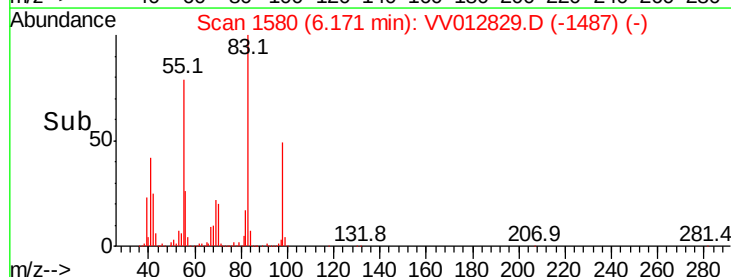
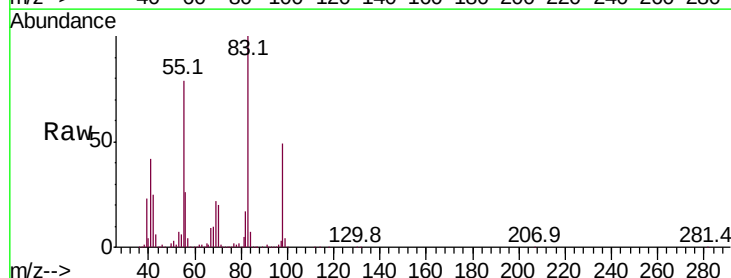
Tgt Ion: 83 Resp: 893675

Ion Ratio Lower Upper

83 100

55 78.5 65.4 98.2

98 49.3 39.0 58.4



Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0

6.17

600000

500000

400000

300000

200000

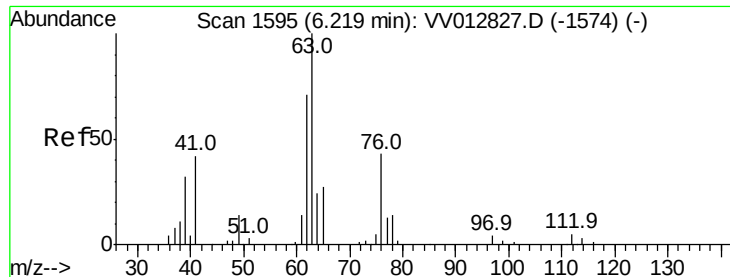
100000

0

Time-->

6.10 6.15 6.20 6.25 6.30

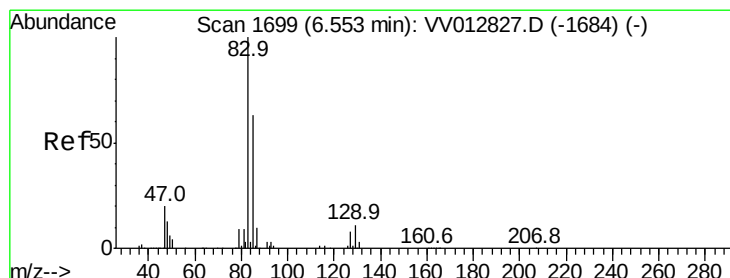
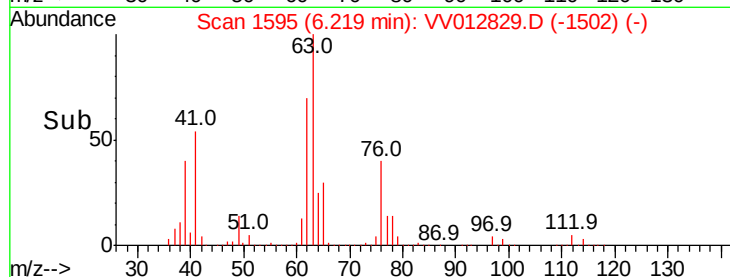
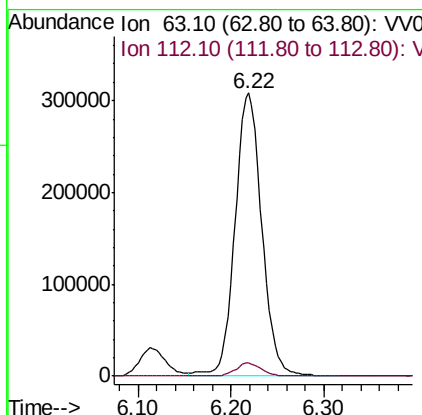
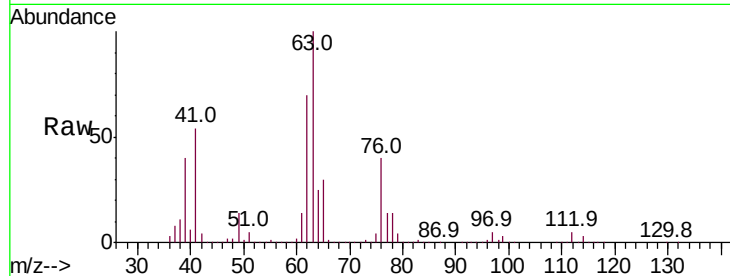




#37  
 1,2-Dichloropropane  
 Concen: 18.340 ug/L  
 RT: 6.22 min Scan# 1595  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

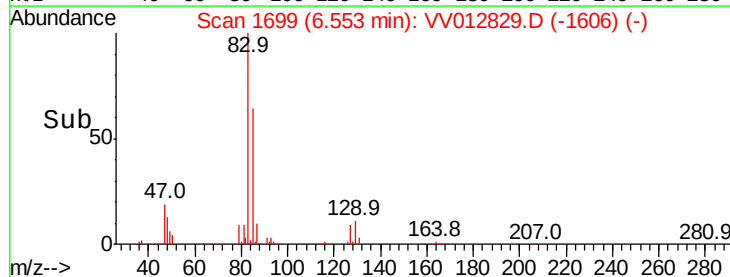
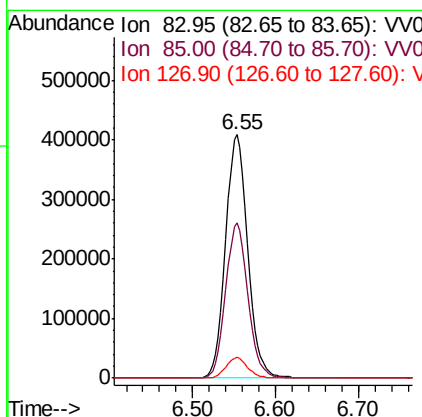
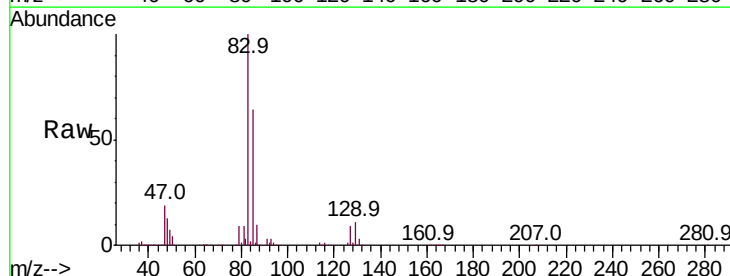
Instrument :  
 MSVOA\_V  
 ClientSampleId :

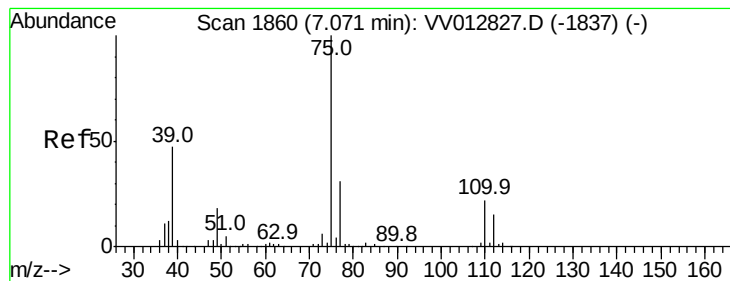
Tot Ion: 63 Resp: 613989  
 Ion Ratio Lower Upper  
 63 100  
 112 4.5 4.2 6.2



#38  
 Bromodichloromethane  
 Concen: 17.387 ug/L  
 RT: 6.55 min Scan# 1699  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

Tgt Ion: 83 Resp: 756504  
 Ion Ratio Lower Upper  
 83 100  
 85 63.8 44.2 82.0  
 127 8.6 6.7 10.1



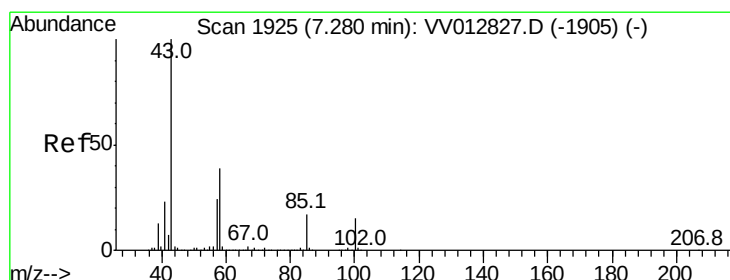
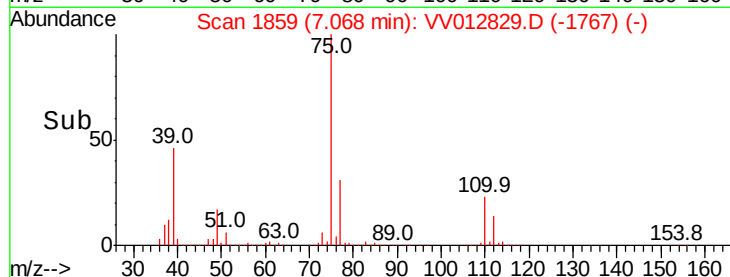
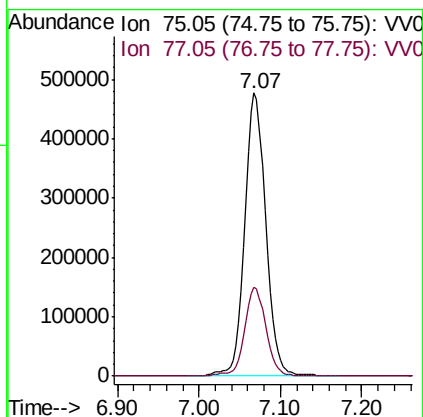
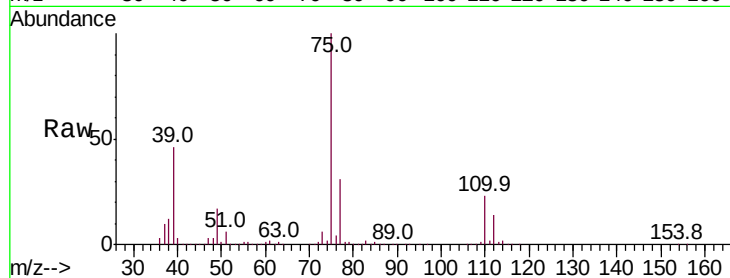


#39

cis-1,3-Dichloropropene  
Concen: 19.380 ug/L  
RT: 7.07 min Scan# 1859  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Instrument :  
MSVOA\_V  
ClientSampleId :

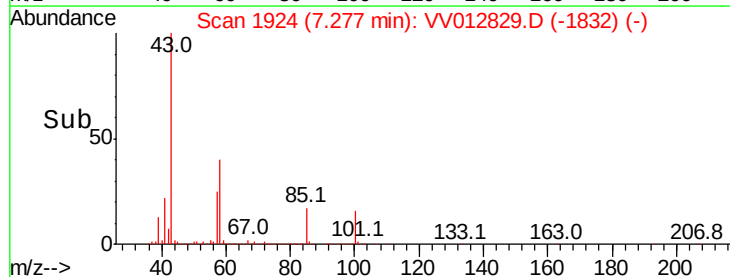
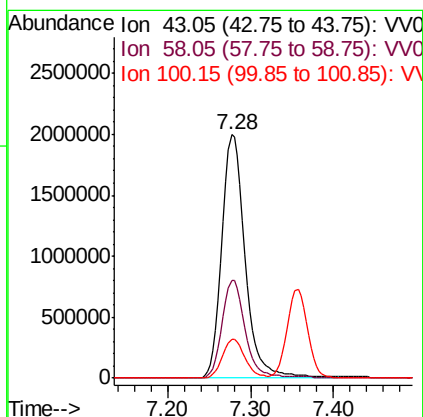
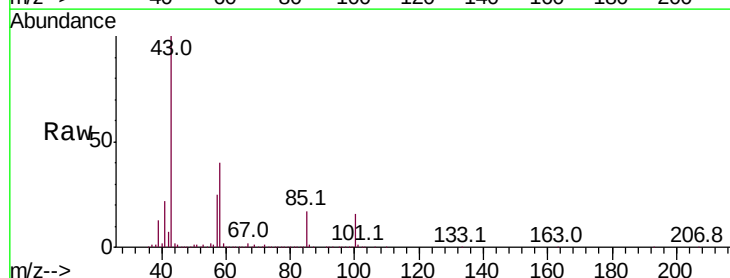
Tot Ion: 75 Resp: 845025  
Ion Ratio Lower Upper  
75 100  
77 31.2 21.8 40.6

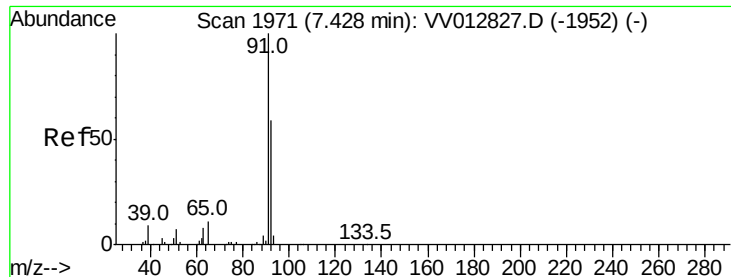


#40

4-Methyl-2-pentanone  
Concen: 208.237 ug/L  
RT: 7.28 min Scan# 1924  
Delta R.T. -0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Tgt Ion: 43 Resp: 3894323  
Ion Ratio Lower Upper  
43 100  
58 39.4 32.9 49.3  
100 15.3 11.6 17.4





#42

Toluene

Concen: 17.669 ug/L

RT: 7.43 min Scan# 1971

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

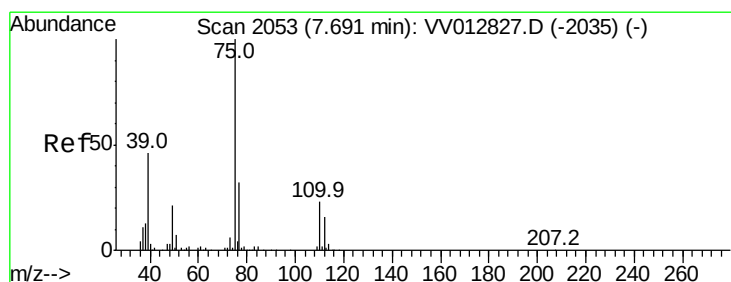
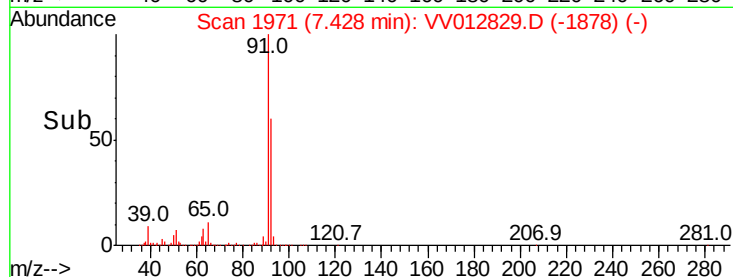
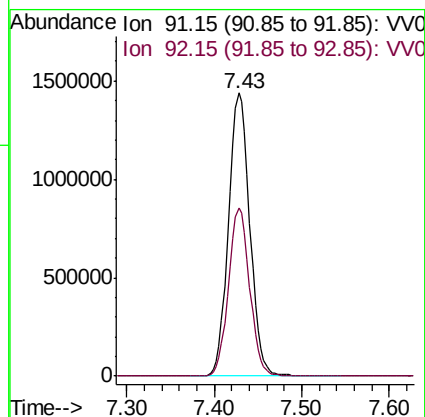
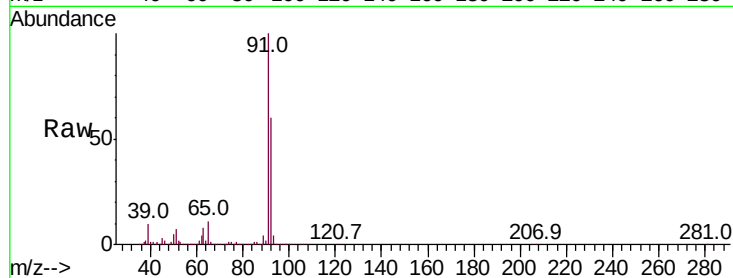
ClientSampleId :

Tot Ion: 91 Resp: 2440358

Ion Ratio Lower Upper

91 100

92 59.6 41.0 76.2



#44

trans-1,3-Dichloropropene

Concen: 19.797 ug/L

RT: 7.69 min Scan# 2053

Delta R.T. 0.00 min

Lab File: VV012829.D

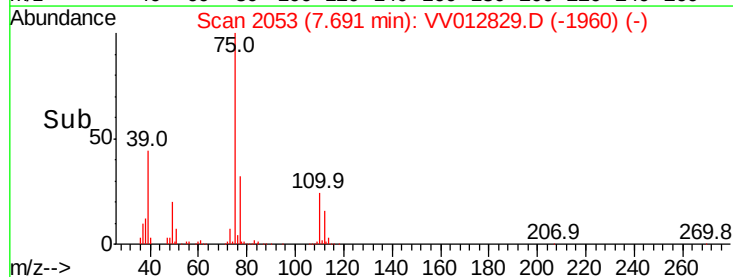
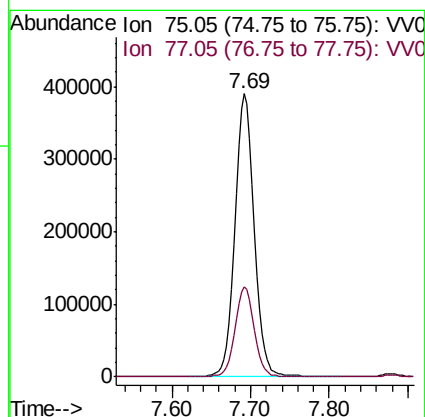
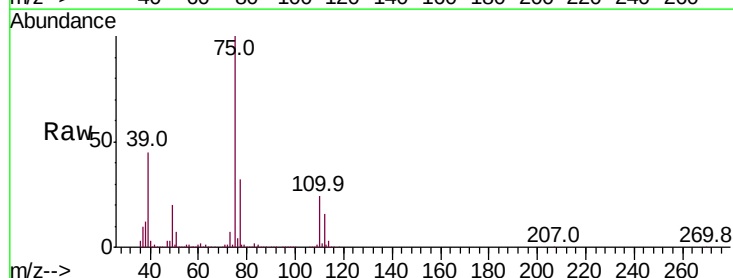
Acq: 16 Sep 2019 10:51

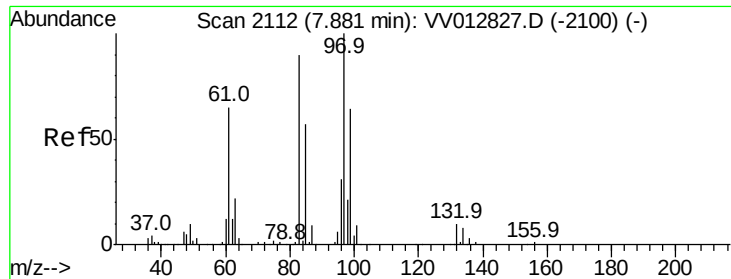
Tgt Ion: 75 Resp: 657931

Ion Ratio Lower Upper

75 100

77 32.0 22.3 41.3





#45

1,1,2-Trichloroethane

Concen: 18.143 ug/L

RT: 7.88 min Scan# 2112

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

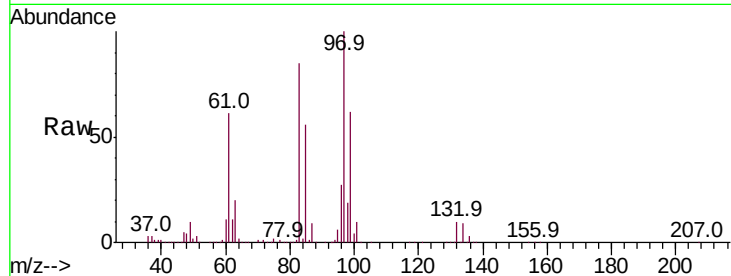
Instrument :

MSVOA\_V

ClientSampleId :

Tot Ion: 97 Resp: 424756

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 99  | 61.8  | 45.2  | 84.0  |
| 83  | 85.4  | 63.0  | 117.0 |
| 85  | 55.6  | 39.6  | 73.6  |

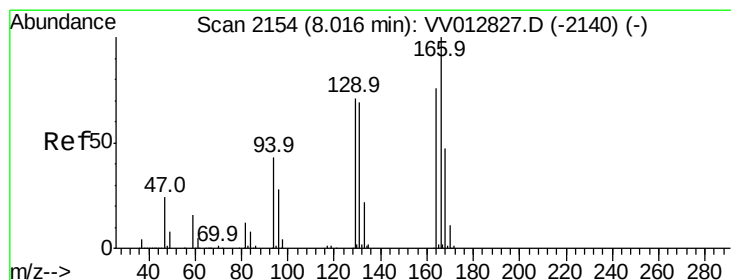
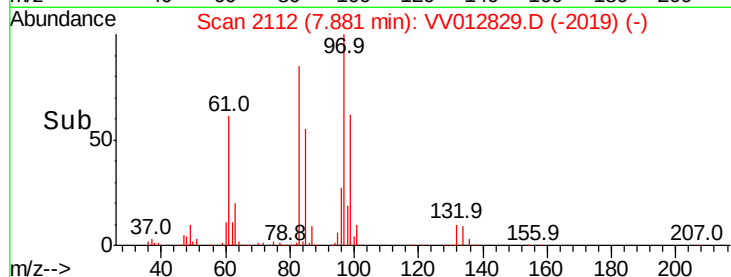
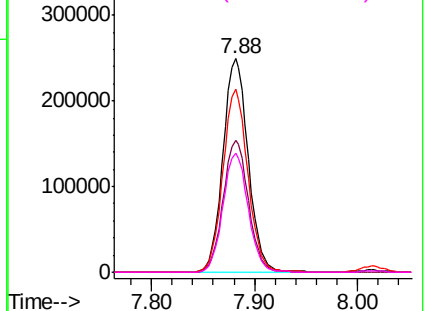


Abundance Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0



#47

Tetrachloroethene

Concen: 16.254 ug/L

RT: 8.02 min Scan# 2154

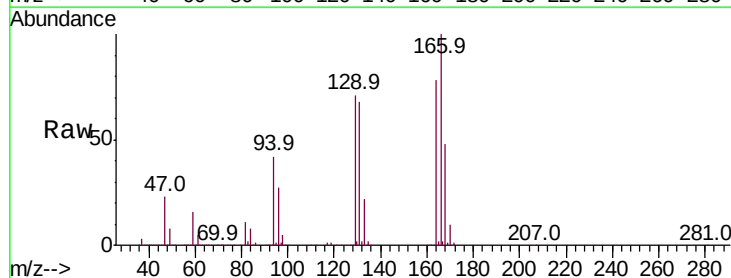
Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Tgt Ion:164 Resp: 466316

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 129 | 91.7  | 65.0  | 120.8 |
| 131 | 87.3  | 63.6  | 118.0 |
| 166 | 128.5 | 91.8  | 170.6 |

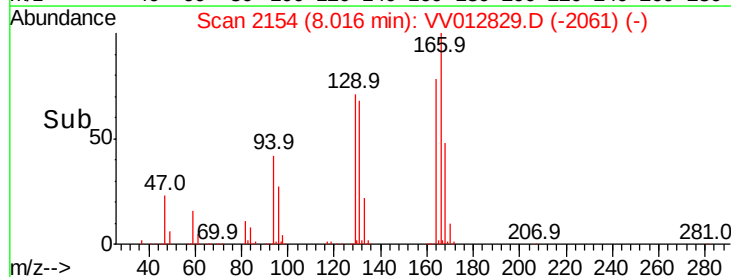
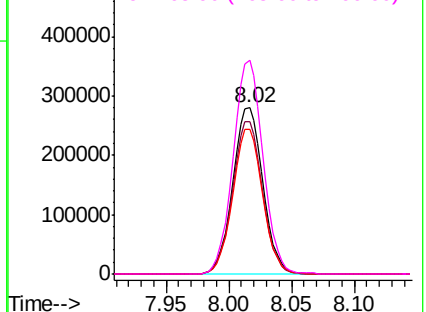


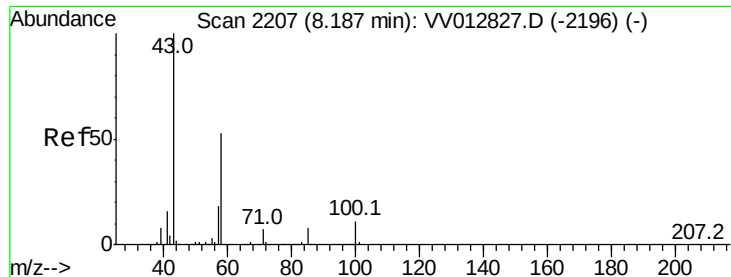
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

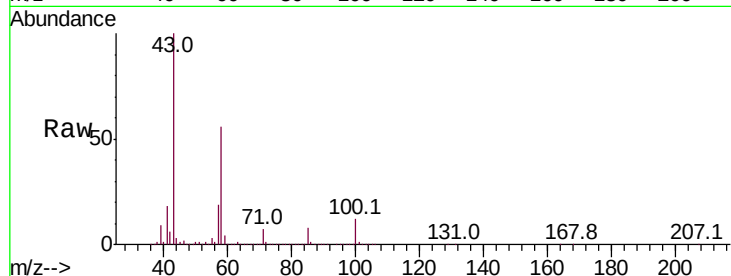




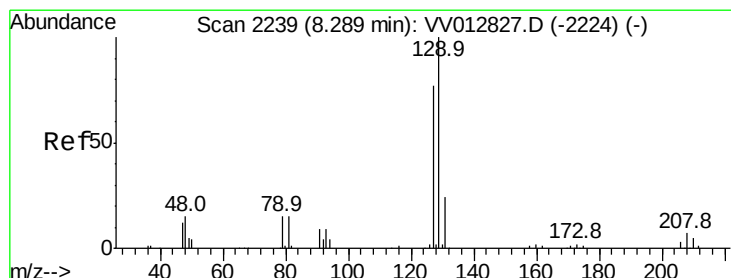
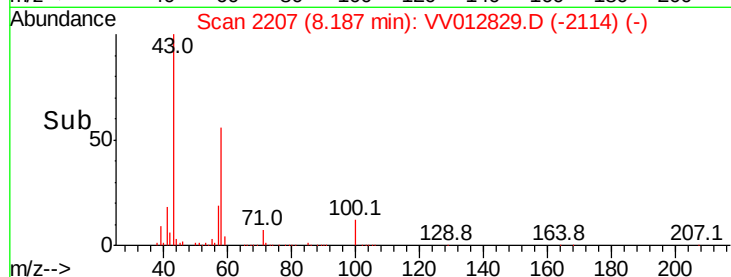
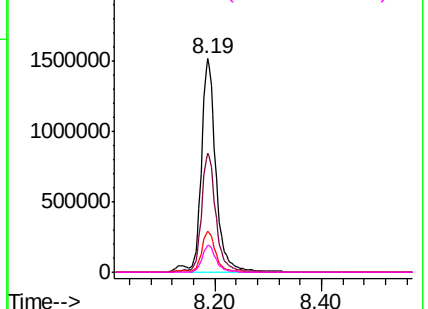
#48  
2-Hexanone  
Concen: 209.782 ug/L  
RT: 8.19 min Scan# 2207  
Delta R.T. 0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 43 Resp: 2832990  
Ion Ratio Lower Upper  
43 100  
58 56.4 44.8 67.2  
57 18.8 15.0 22.6  
100 12.2 8.8 13.2

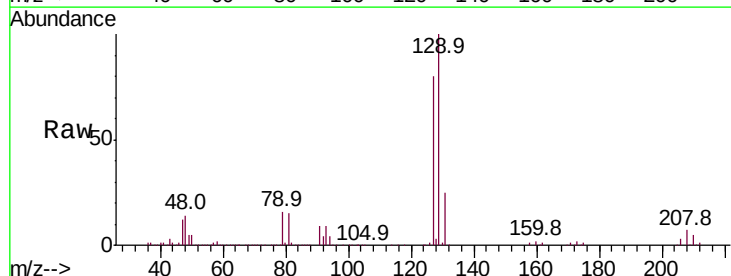


Abundance Ion 43.05 (42.75 to 43.75): VV0  
Ion 58.05 (57.75 to 58.75): VV0  
Ion 57.20 (56.90 to 57.90): VV0  
Ion 100.15 (99.85 to 100.85): VV0

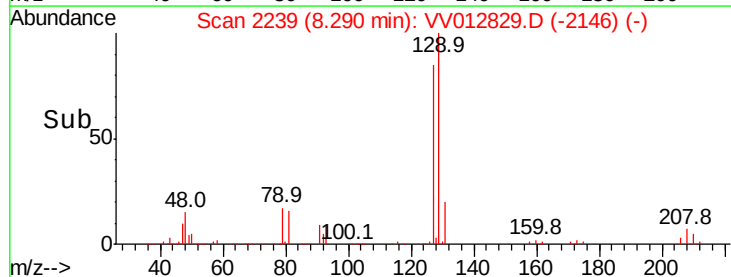
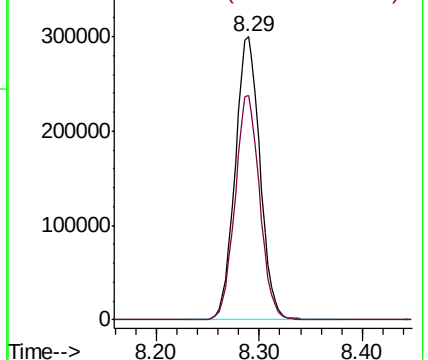


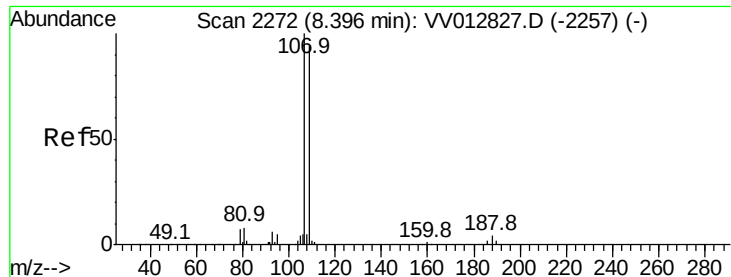
#49  
Dibromochloromethane  
Concen: 18.131 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. 0.00 min  
Lab File: VV012829.D  
Acq: 16 Sep 2019 10:51

Tgt Ion: 129 Resp: 504350  
Ion Ratio Lower Upper  
129 100  
127 79.5 53.9 100.1



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V

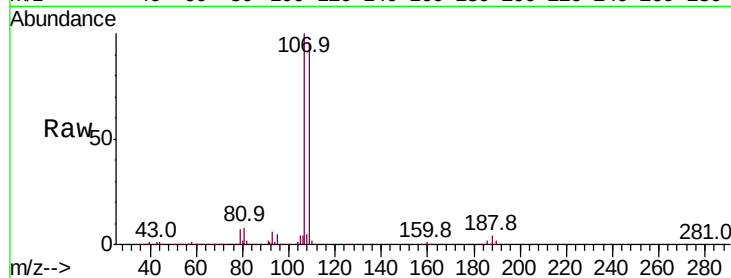




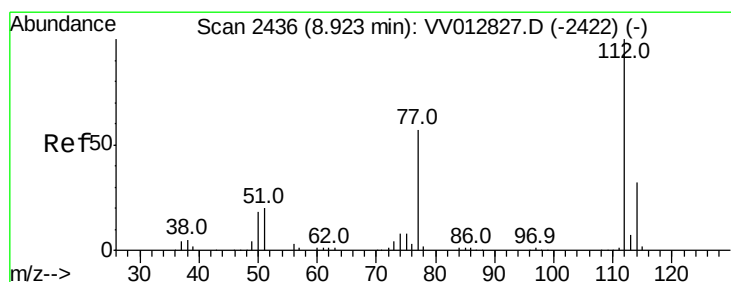
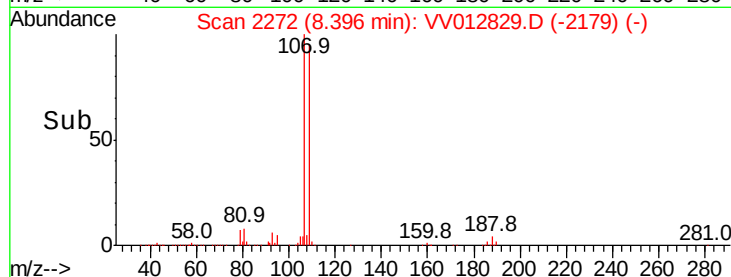
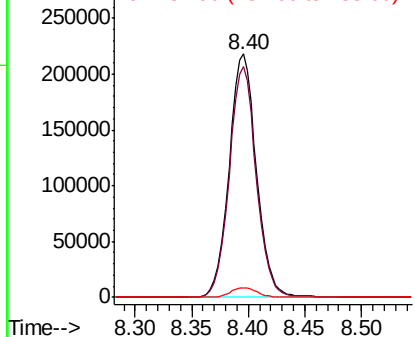
#50  
 1,2-Dibromoethane  
 Concen: 17.765 ug/L  
 RT: 8.40 min Scan# 2272  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

Instrument :  
 MSVOA\_V  
 ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 94.8  | 65.5  | 121.6 |
| 188     | 4.0   | 3.0   | 4.4   |

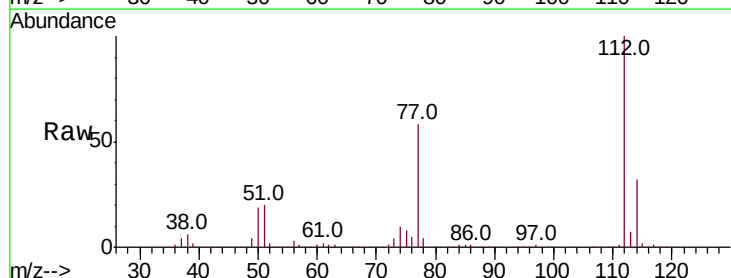


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

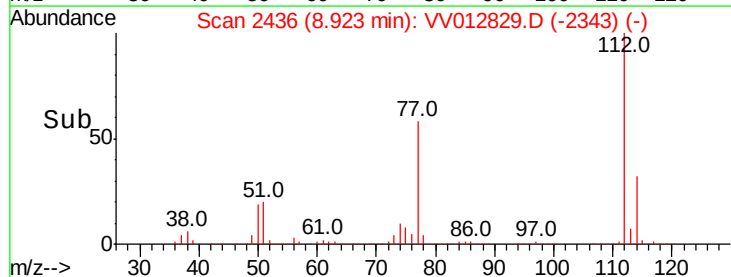
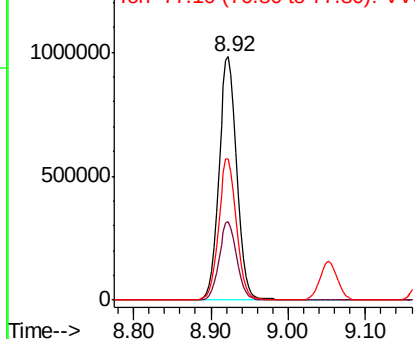


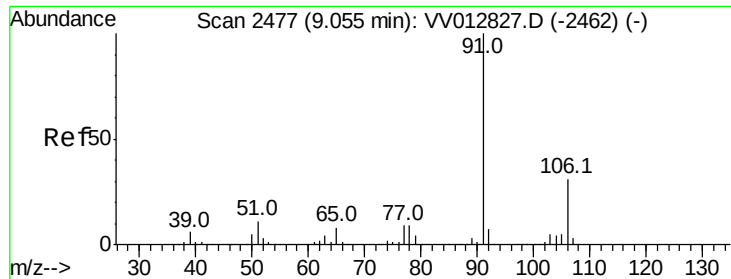
#51  
 Chlorobenzene  
 Concen: 17.439 ug/L  
 RT: 8.92 min Scan# 2436  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 32.1  | 22.0  | 41.0  |
| 77      | 57.8  | 45.7  | 68.5  |



Abundance Ion 112.10 (111.80 to 112.80): V  
 Ion 114.05 (113.75 to 114.75): V  
 Ion 77.10 (76.80 to 77.80): VV0





#52

Ethylbenzene

Concen: 18.762 ug/L

RT: 9.05 min Scan# 2476

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

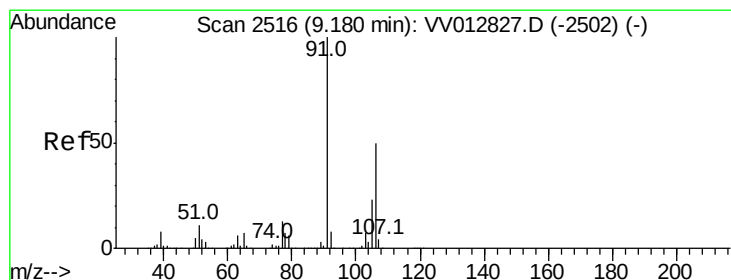
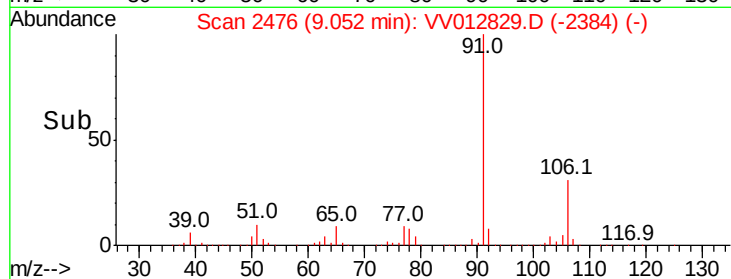
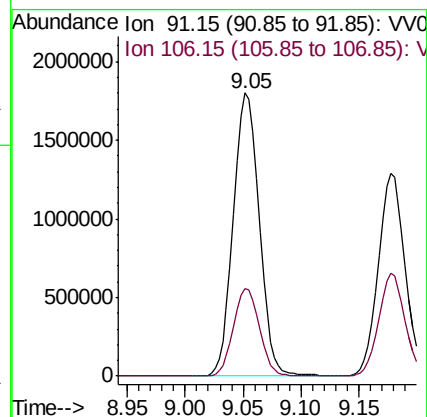
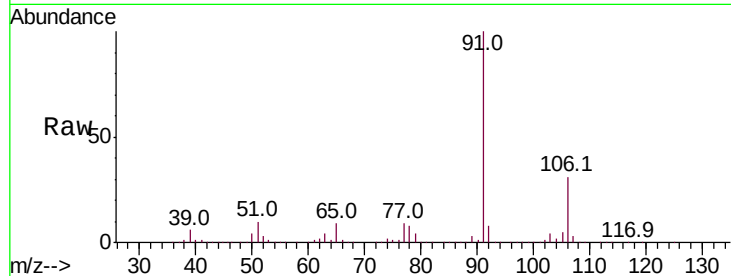
Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion: 91 Resp: 2786259

Ion Ratio Lower Upper

91 100

106 31.0 21.7 40.3



#53

m,p-xylene

Concen: 18.777 ug/L

RT: 9.18 min Scan# 2515

Delta R.T. -0.00 min

Lab File: VV012829.D

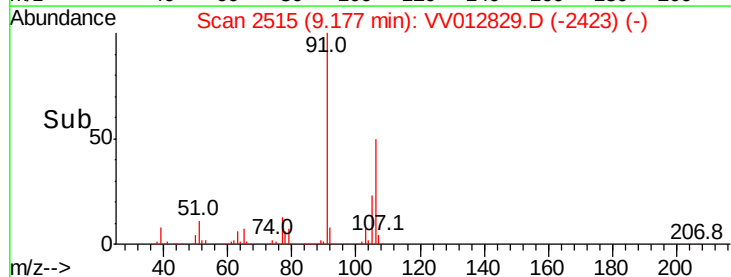
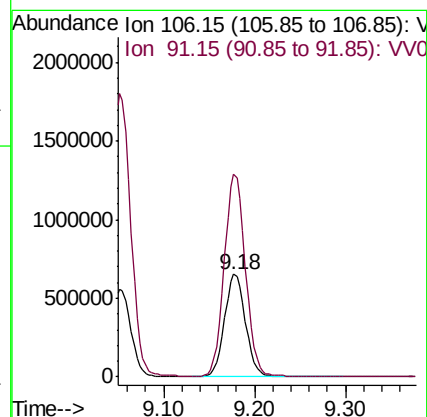
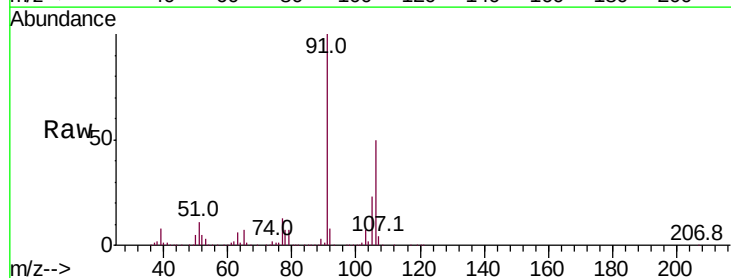
Acq: 16 Sep 2019 10:51

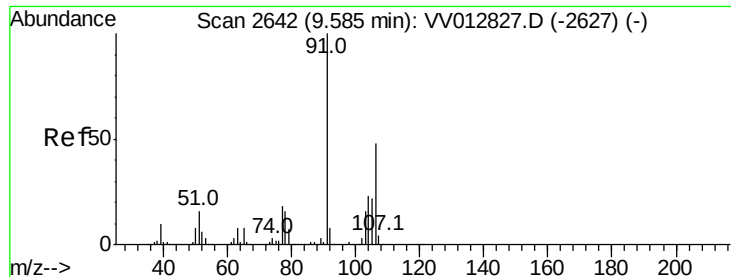
Tgt Ion:106 Resp: 1050939

Ion Ratio Lower Upper

106 100

91 198.6 138.9 258.1





#54

o-xylene

Concen: 19.444 ug/L

RT: 9.59 min Scan# 2642

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

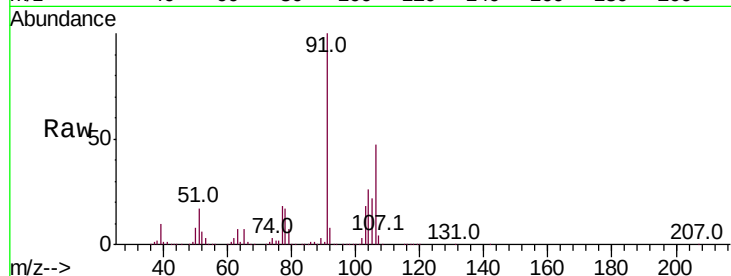
ClientSampled :

Tot Ion:106 Resp: 1046440

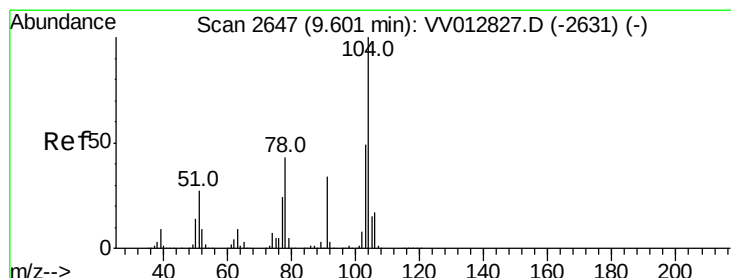
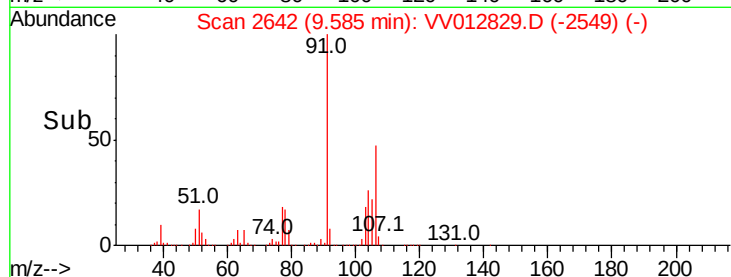
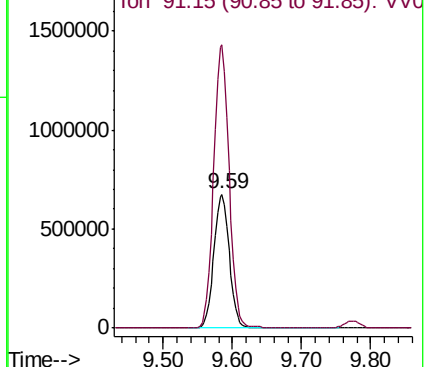
Ion Ratio Lower Upper

106 100

91 211.3 147.4 273.8



Abundance Ion 106.15 (105.85 to 106.85): V



#55

Styrene

Concen: 20.144 ug/L

RT: 9.60 min Scan# 2647

Delta R.T. 0.00 min

Lab File: VV012829.D

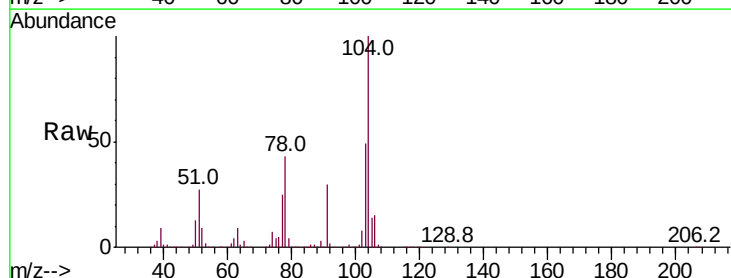
Acq: 16 Sep 2019 10:51

Tgt Ion:104 Resp: 1810879

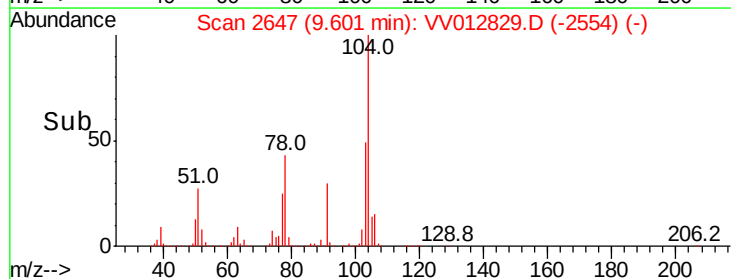
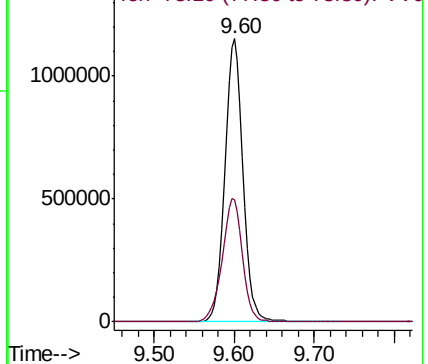
Ion Ratio Lower Upper

104 100

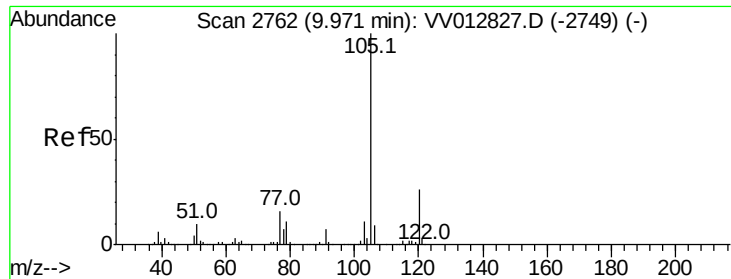
78 43.3 30.2 56.0



Abundance Ion 104.10 (103.80 to 104.80): V







#56

Isopropylbenzene

Concen: 19.758 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

ClientSampleId :

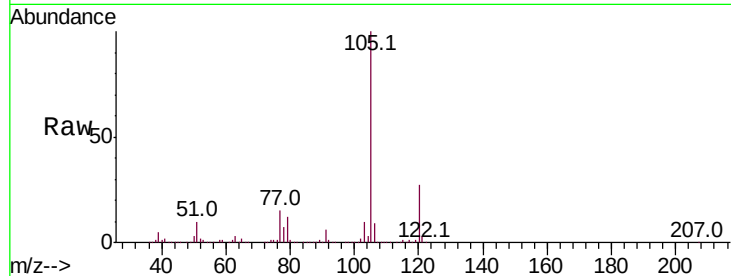
Tot Ion:105 Resp: 2824111

Ion Ratio Lower Upper

105 100

120 26.9 21.0 31.4

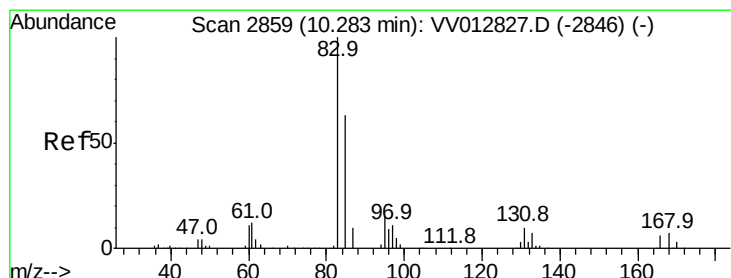
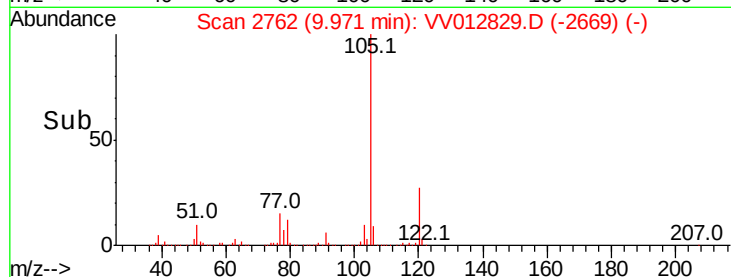
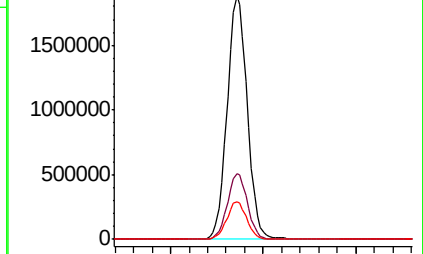
77 15.4 12.8 19.2



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 18.709 ug/L

RT: 10.28 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

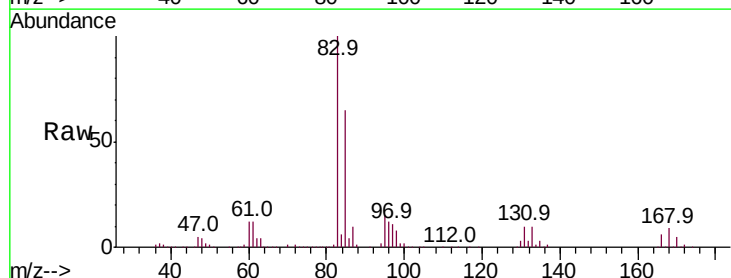
Tgt Ion: 83 Resp: 432250

Ion Ratio Lower Upper

83 100

85 65.0 44.1 81.9

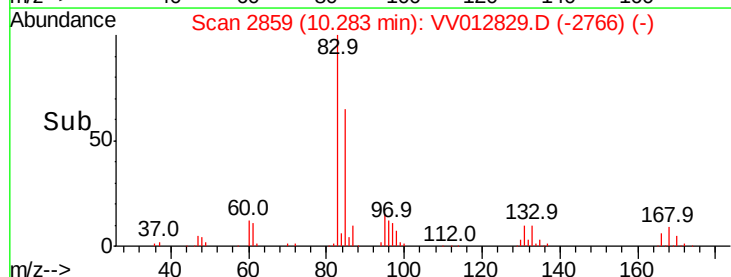
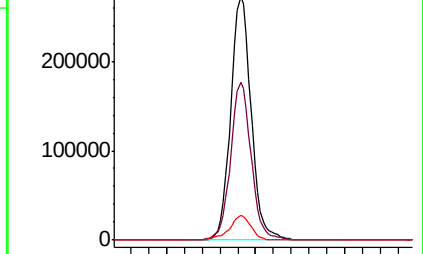
131 10.0 8.2 12.2

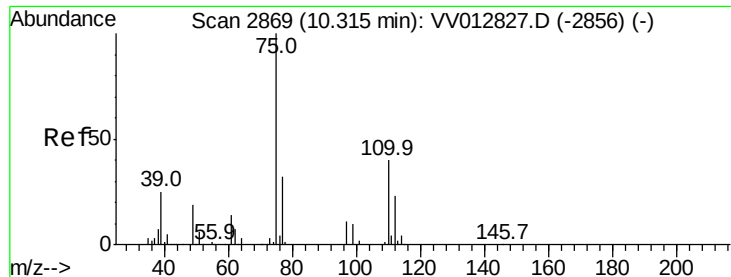


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 17.691 ug/L

RT: 10.32 min Scan# 2869

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

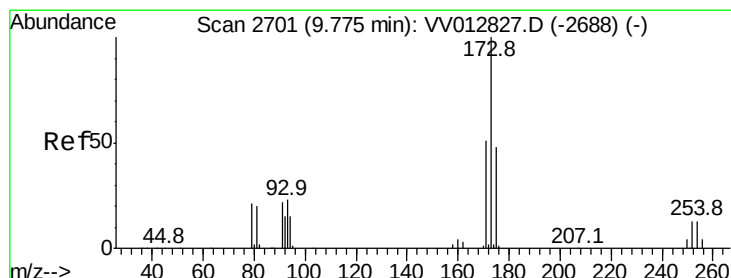
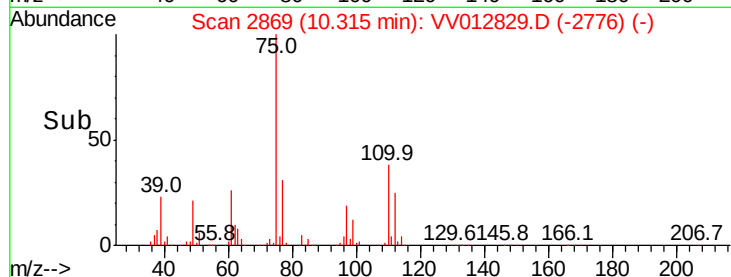
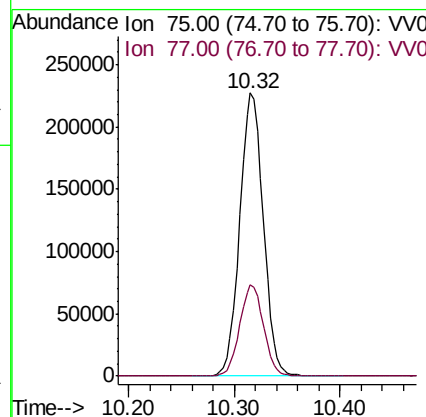
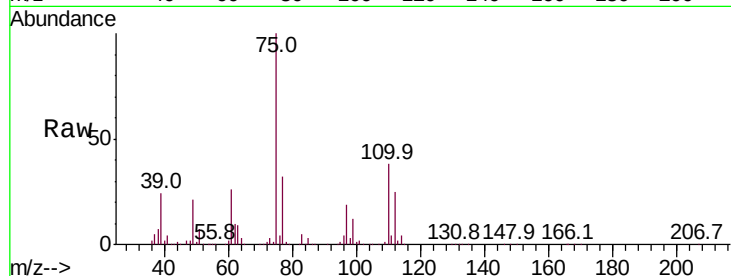
ClientSampled :

Tot Ion: 75 Resp: 351304

Ion Ratio Lower Upper

75 100

77 32.1 25.5 38.3



#61

Bromoform

Concen: 17.562 ug/L

RT: 9.77 min Scan# 2700

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

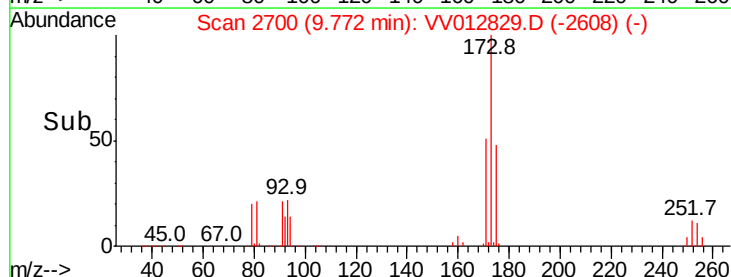
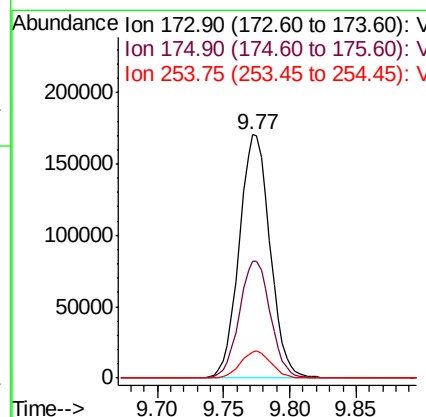
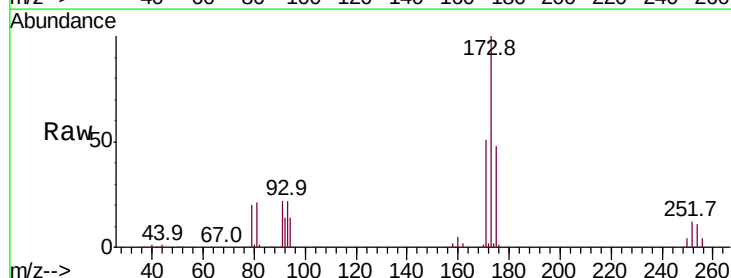
Tgt Ion: 173 Resp: 275147

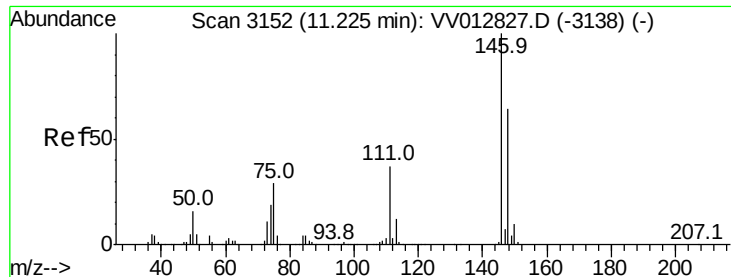
Ion Ratio Lower Upper

173 100

175 48.7 39.4 59.0

254 11.1 9.9 14.9





#62

1,3-Dichlorobenzene

Concen: 18.032 ug/L

RT: 11.22 min Scan# 3151

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

ClientSampled :

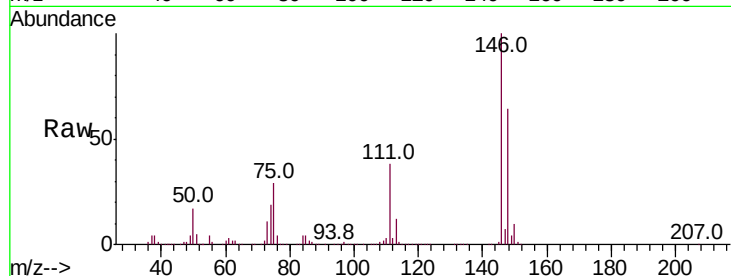
Tot Ion:146 Resp: 1312573

Ion Ratio Lower Upper

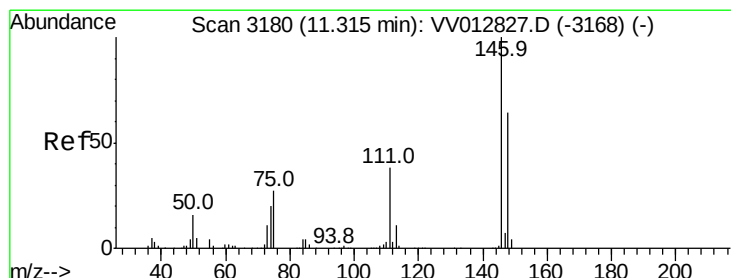
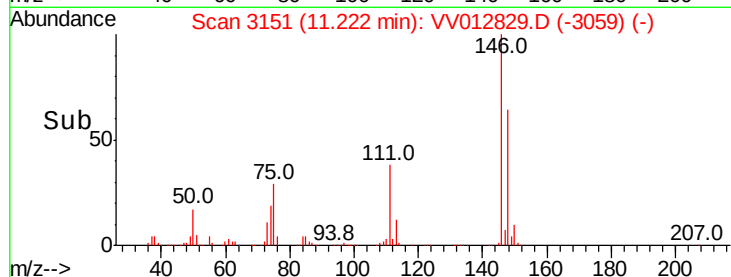
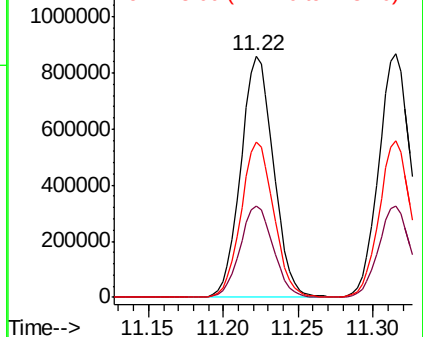
146 100

111 38.0 26.0 48.4

148 64.5 45.0 83.6



Abundance Ion 145.95 (145.65 to 146.65): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 17.812 ug/L

RT: 11.32 min Scan# 3180

Delta R.T. 0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

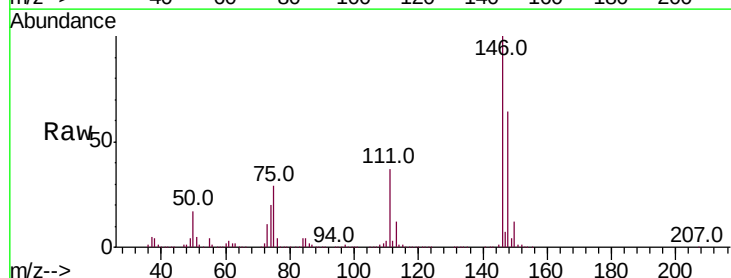
Tgt Ion:146 Resp: 1310911

Ion Ratio Lower Upper

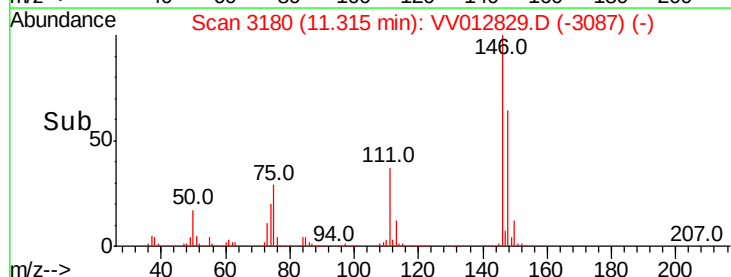
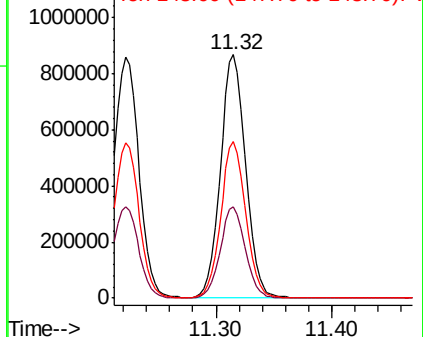
146 100

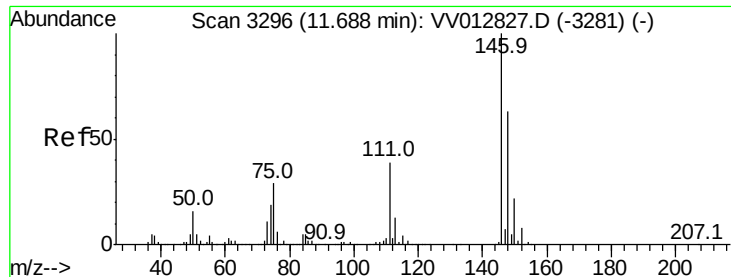
111 37.4 26.6 49.4

148 64.3 45.0 83.6



Abundance Ion 145.95 (145.65 to 146.65): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V

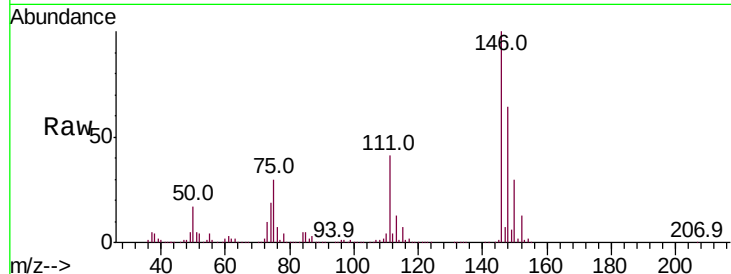




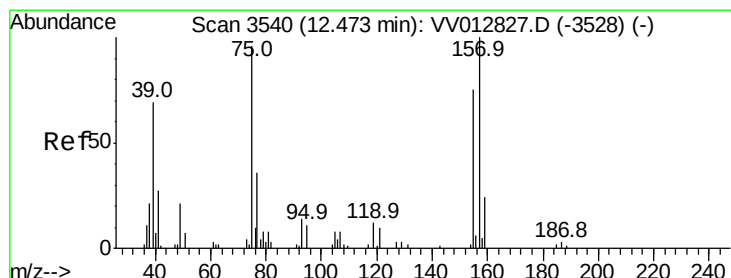
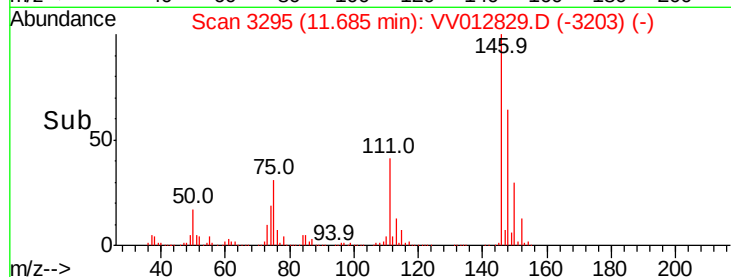
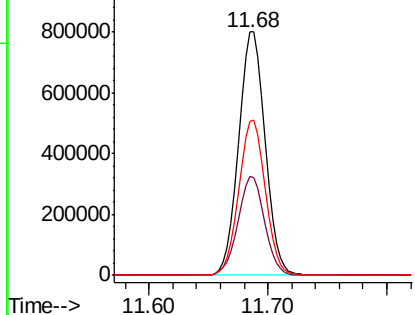
#65  
 1,2-Dichlorobenzene  
 Concen: 17.974 ug/L  
 RT: 11.68 min Scan# 3295  
 Delta R.T. -0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

Instrument :  
 MSVOA\_V  
 ClientSampled :

Tot Ion:146 Resp: 1238076  
 Ion Ratio Lower Upper  
 146 100  
 111 40.7 31.4 47.2  
 148 63.5 50.6 75.8

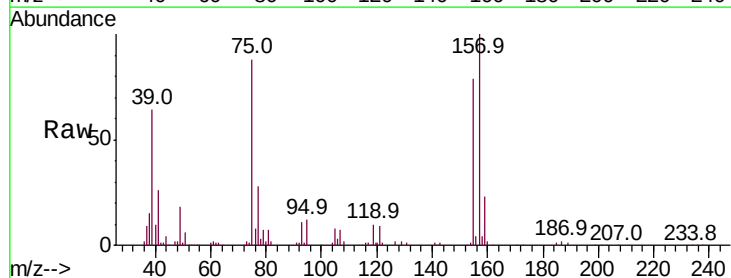


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

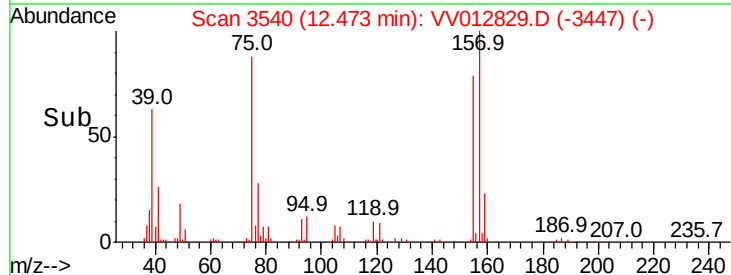
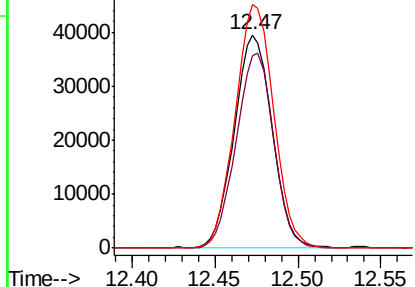


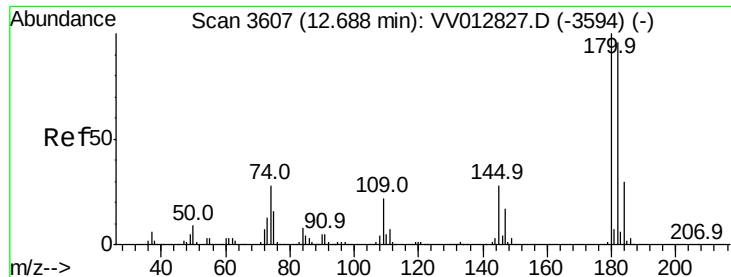
#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 17.998 ug/L  
 RT: 12.47 min Scan# 3540  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

Tgt Ion: 75 Resp: 63254  
 Ion Ratio Lower Upper  
 75 100  
 155 90.2 63.0 94.4  
 157 114.2 83.7 125.5



Abundance Ion 75.05 (74.75 to 75.75): VV0  
 Ion 154.95 (154.65 to 155.65): V  
 Ion 156.90 (156.60 to 157.60): V

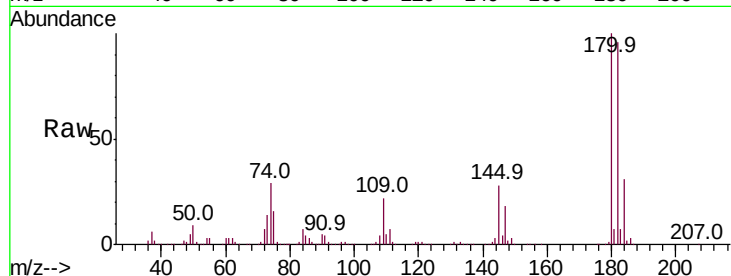




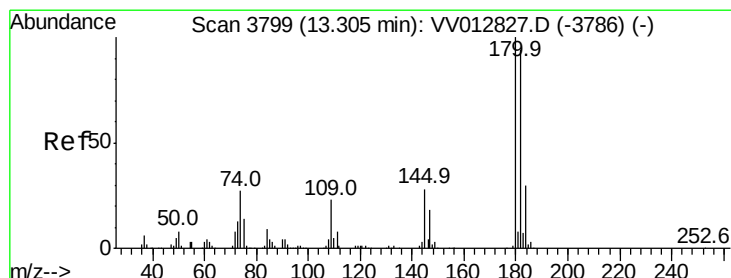
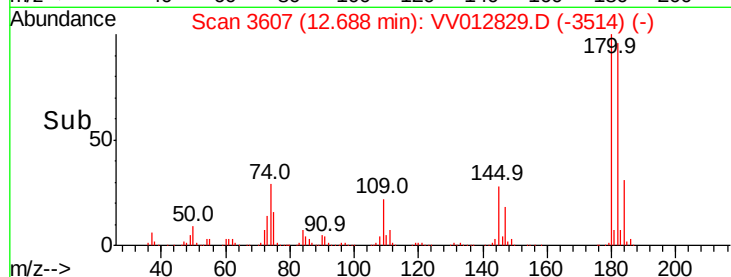
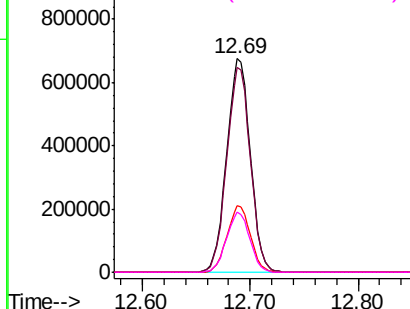
#67  
 1,3,5-Trichlorobenzene  
 Concen: 18.689 ug/L  
 RT: 12.69 min Scan# 3607  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Tot Ion:180 Resp: 1029660  
 Ion Ratio Lower Upper  
 180 100  
 182 95.8 76.7 115.1  
 184 30.8 24.4 36.6  
 145 27.9 22.3 33.5

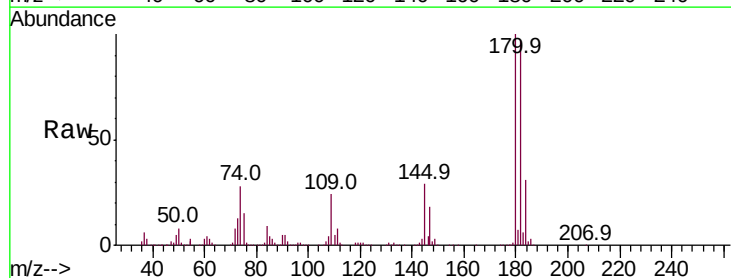


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

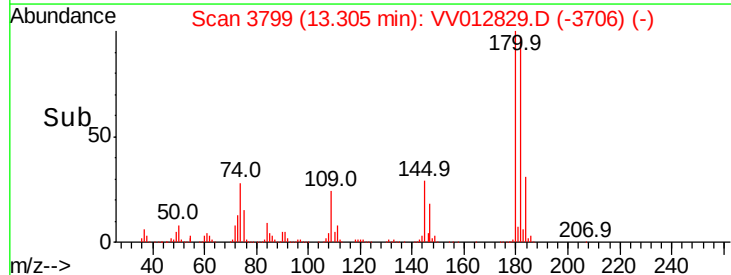
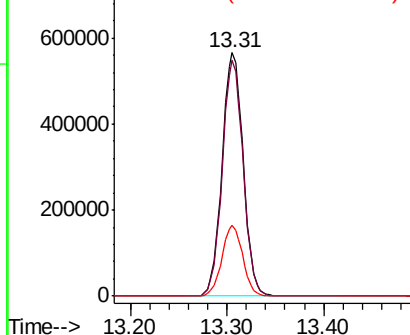


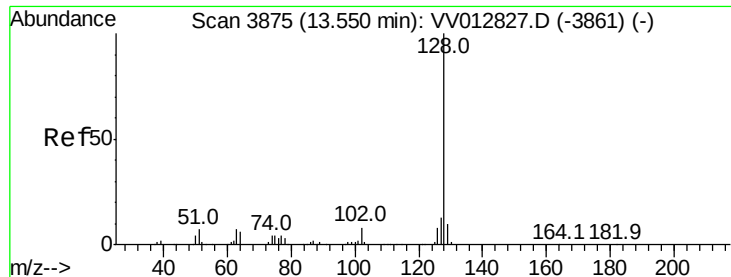
#68  
 1,2,4-trichlorobenzene  
 Concen: 19.642 ug/L  
 RT: 13.31 min Scan# 3799  
 Delta R.T. 0.00 min  
 Lab File: VV012829.D  
 Acq: 16 Sep 2019 10:51

Tgt Ion:180 Resp: 853740  
 Ion Ratio Lower Upper  
 180 100  
 182 95.9 76.2 114.4  
 145 28.7 22.2 33.4



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





#69

Naphthalene

Concen: 21.844 ug/L

RT: 13.55 min Scan# 3874

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

Instrument :

MSVOA\_V

ClientSampleId :

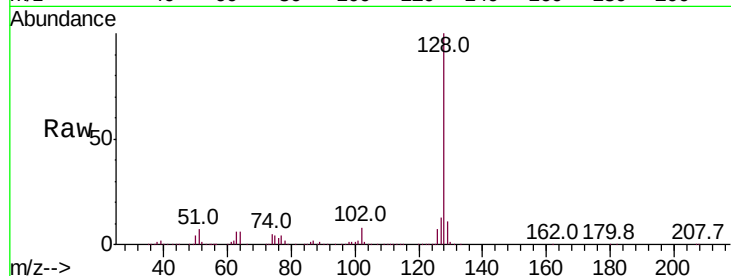
Tot Ion:128 Resp: 1417949

Ion Ratio Lower Upper

128 100

129 10.9 8.3 12.5

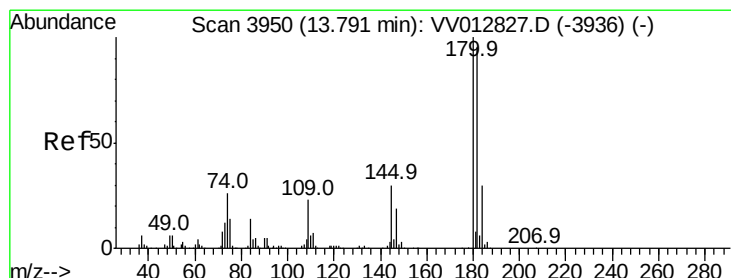
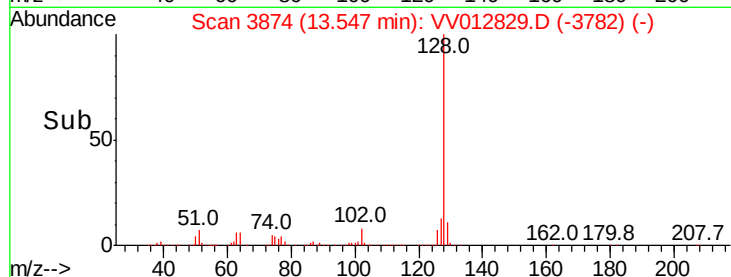
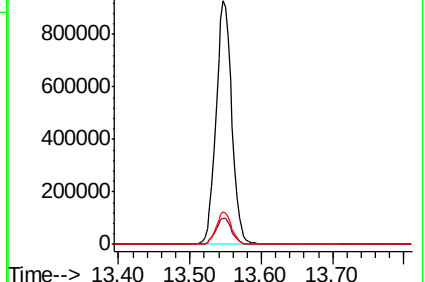
127 13.0 10.5 15.7



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: 19.833 ug/L

RT: 13.79 min Scan# 3949

Delta R.T. -0.00 min

Lab File: VV012829.D

Acq: 16 Sep 2019 10:51

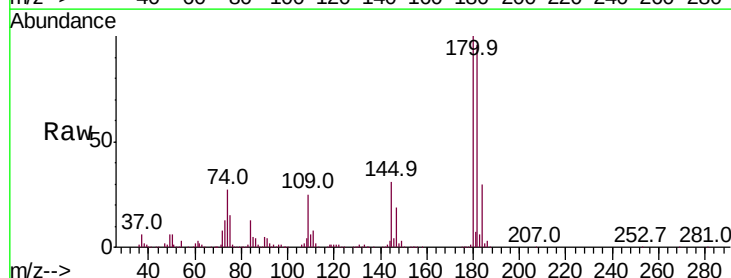
Tgt Ion:180 Resp: 815919

Ion Ratio Lower Upper

180 100

182 95.5 76.2 114.4

145 30.1 24.9 37.3



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

