

Data File : VV011211.D  
Acq On : 04 Jun 2019 17:56  
Operator : SY/MD  
Sample : K3081-10MS  
Misc : 25ML/MSVOA\_V/WATER  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
GALD9MS

Quant Time: Jun 05 01:45:08 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR060419WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Jun 05 01:41:25 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 177991   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 162907   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 70735    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 61618    | 4.57     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 91.40%  |
| 7) Chloroethane-d5             | 1.56   | 69    | 48890    | 4.36     | ug/L | -0.02   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 87.20%  |
| 11) 1,1-Dichloroethene-d2      | 2.12   | 63    | 125449   | 4.66     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 93.20%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 155526   | 51.22    | ug/L | -0.03   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 102.44% |
| 24) Chloroform-d               | 4.40   | 84    | 104248   | 4.39     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 87.80%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 61920    | 4.83     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.60%  |
| 32) Benzene-d6                 | 5.09   | 84    | 233679   | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 95.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 71978    | 4.79     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 95.80%  |
| 41) Toluene-d8                 | 7.36   | 98    | 216631   | 4.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.80%  |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 26520    | 4.63     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 92.60%  |
| 46) 2-Hexanone-d5              | 8.13   | 63    | 128199   | 53.03    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 106.06% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 50570    | 4.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 98.80%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 71150    | 5.10     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 102.00% |

#### Target Compounds

|                                |      |     |        |        | Qvalue |     |
|--------------------------------|------|-----|--------|--------|--------|-----|
| 5) Vinyl chloride              | 1.32 | 62  | 1652   | 0.101  | ug/L # | 1   |
| 6) Bromomethane                | 1.51 | 94  | 1375   | 0.161  | ug/L   | 91  |
| 8) Chloroethane                | 1.32 | 64  | 8051   | 0.769  | ug/L   | 89  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 3523   | 0.305  | ug/L   | 96  |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 51768  | 4.616  | ug/L   | 95  |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 11091  | 0.798  | ug/L   | 97  |
| 25) Chloroform                 | 4.42 | 83  | 9226   | 0.361  | ug/L   | 88  |
| 33) Benzene                    | 5.14 | 78  | 246652 | 4.758  | ug/L   | 100 |
| 34) Trichloroethene            | 5.96 | 95  | 352784 | 26.344 | ug/L   | 99  |
| 35) Methylcyclohexane          | 6.12 | 83  | 18174  | 0.821  | ug/L # | 16  |
| 37) 1,2-Dichloropropane        | 6.12 | 63  | 8990   | 0.697  | ug/L # | 86  |
| 39) cis-1,3-Dichloropropene    | 7.03 | 75  | 2135   | 0.113  | ug/L # | 59  |
| 42) Toluene                    | 7.43 | 91  | 267177 | 4.836  | ug/L   | 98  |
| 44) trans-1,3-Dichloropropene  | 7.66 | 75  | 1677   | 0.117  | ug/L   | 90  |
| 47) Tetrachloroethene          | 8.02 | 164 | 4386   | 0.453  | ug/L   | 91  |
| 49) Dibromochloromethane       | 8.02 | 129 | 4015   | 0.428  | ug/L # | 11  |
| 51) Chlorobenzene              | 8.92 | 112 | 161878 | 4.805  | ug/L   | 99  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV060419\  
Quantitation Report (Not Reviewed)

Data File : VV011211.D  
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Sample : K3081-10MS  
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Instrument :  
MSVOA\_V  
ClientSampleId :  
GALD9MS

Quant Time: Jun 05 01:45:08 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR060419WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Jun 05 01:41:25 2019  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

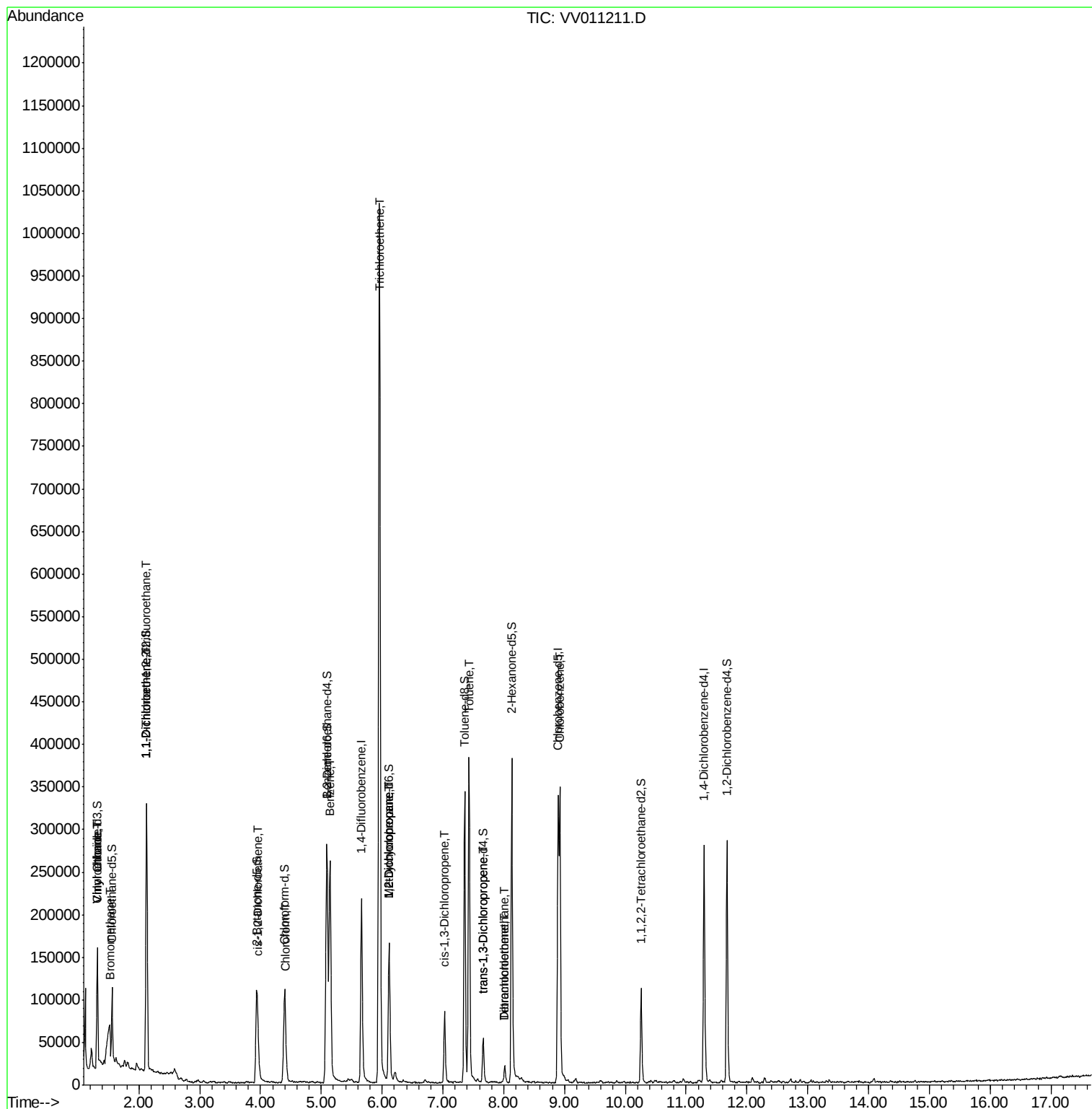
|       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- |

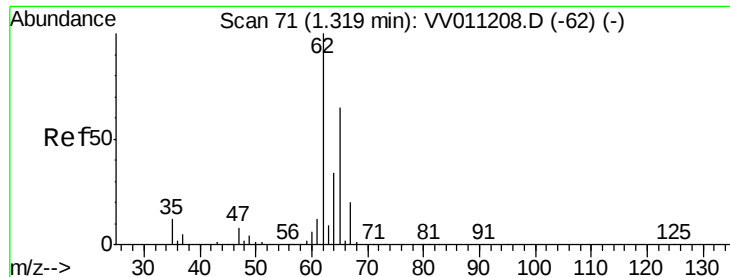
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#5

Vinyl chloride

Concen: 0.101 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV011211.D

Acq: 04 Jun 2019 17:56

Instrument :

MSVOA\_V

ClientSampleId :

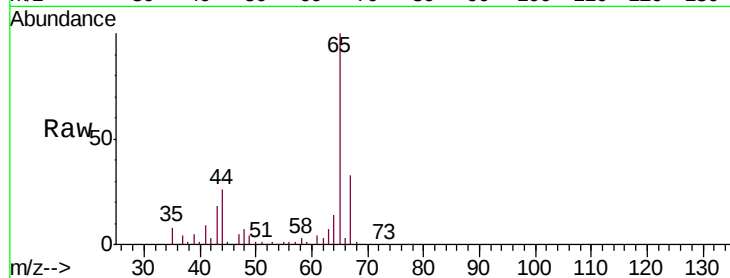
GALD9MS

Tgt Ion: 62 Resp: 1652

Ion Ratio Lower Upper

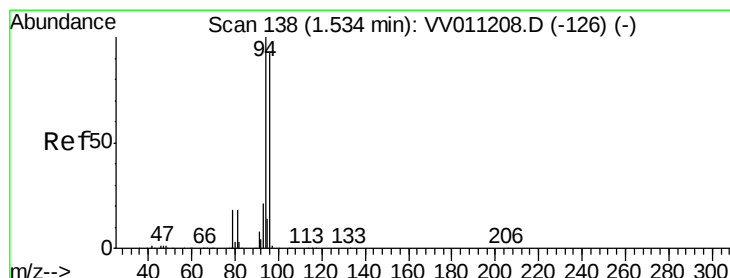
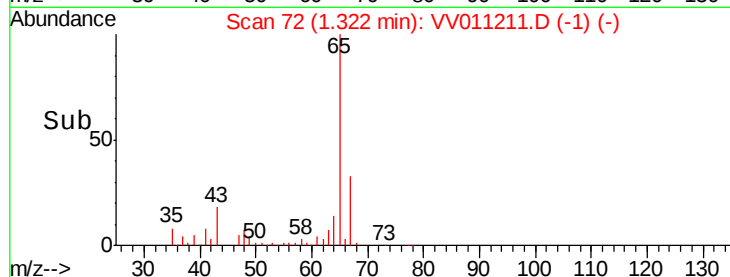
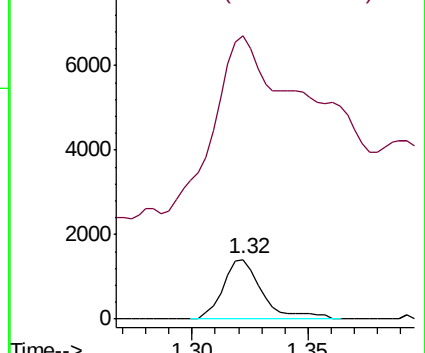
62 100

64 473.0 25.9 48.1#



Abundance Ion 62.00 (61.70 to 62.70): VV011208.D (-62) (-)

Ion 64.10 (63.80 to 64.80): VV011211.D (-1) (-)



#6

Bromomethane

Concen: 0.161 ug/L

RT: 1.51 min Scan# 132

Delta R.T. -0.02 min

Lab File: VV011211.D

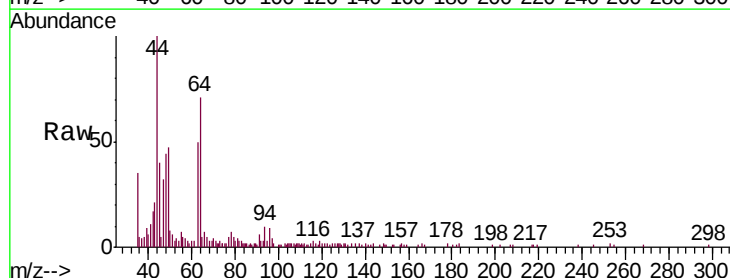
Acq: 04 Jun 2019 17:56

Tgt Ion: 94 Resp: 1375

Ion Ratio Lower Upper

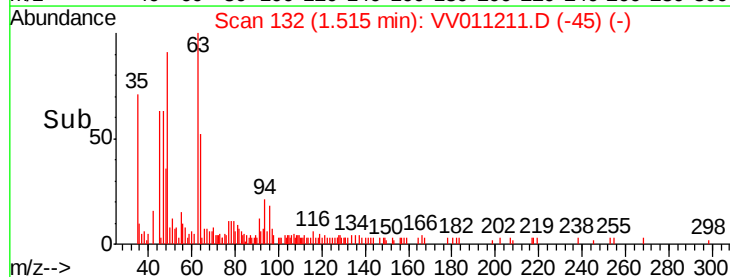
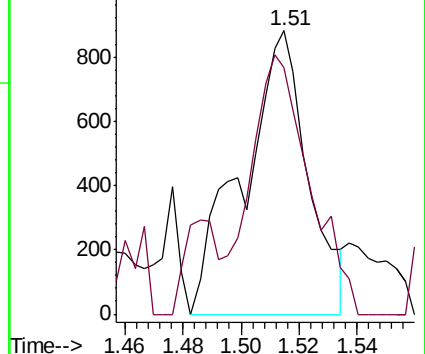
94 100

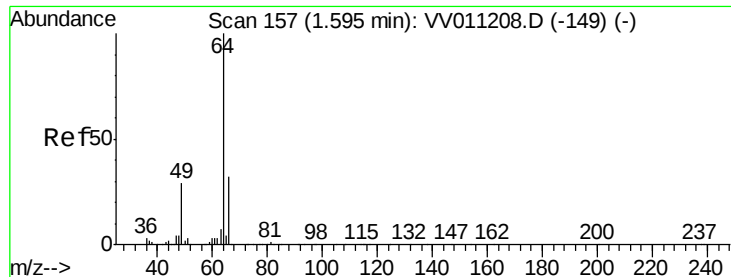
96 87.2 67.0 124.4



Abundance Ion 94.00 (93.70 to 94.70): VV011208.D (-126) (-)

Ion 96.00 (95.70 to 96.70): VV011211.D (-45) (-)





#8

Chloroethane

Concen: 0.769 ug/L

RT: 1.32 min Scan# 72

Delta R.T. -0.27 min

Lab File: VV011211.D

Acq: 04 Jun 2019 17:56

Instrument :

MSVOA\_V

ClientSampleId :

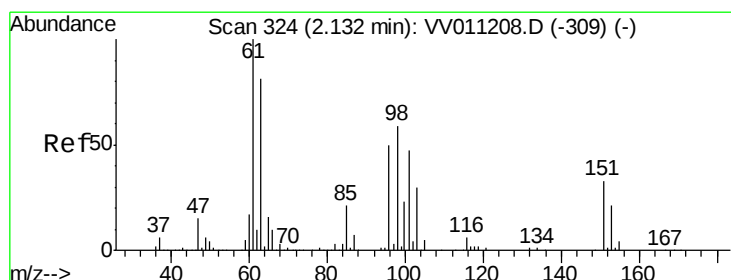
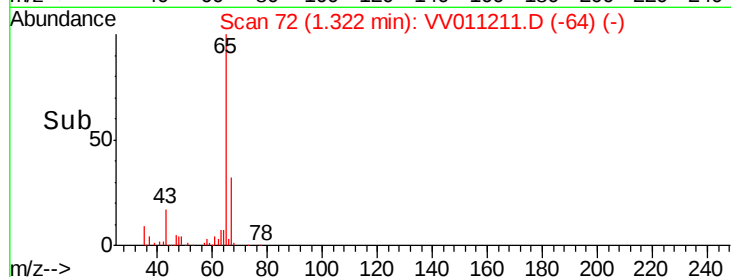
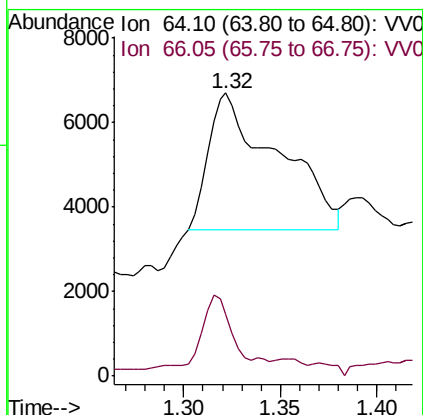
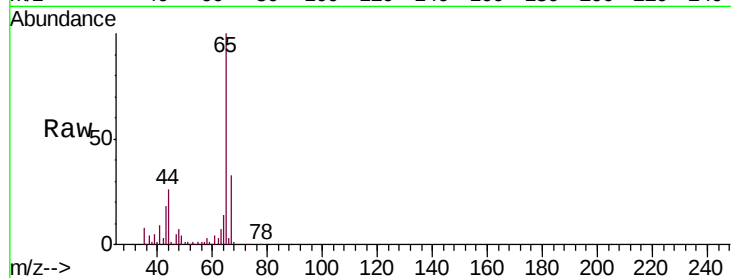
GALD9MS

Tgt Ion: 64 Resp: 8051

Ion Ratio Lower Upper

64 100

66 21.8 19.4 36.0



#10

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

Concen: 0.305 ug/L

RT: 2.13 min Scan# 323

Delta R.T. -0.00 min

Lab File: VV011211.D

Acq: 04 Jun 2019 17:56

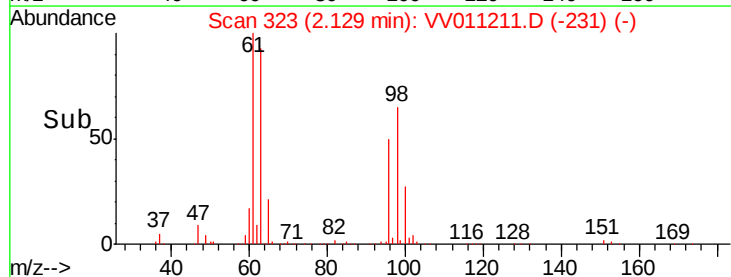
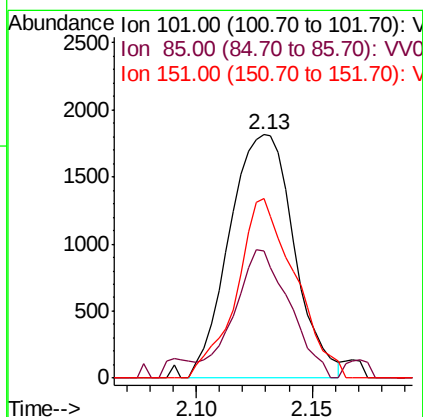
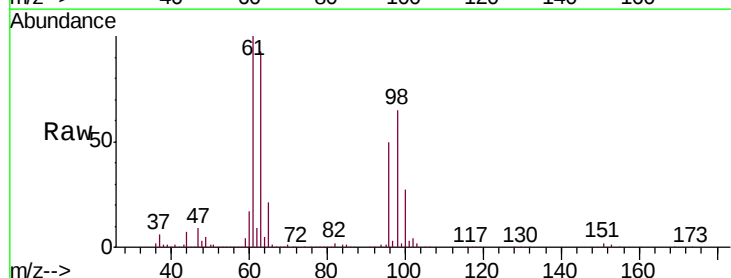
Tgt Ion: 101 Resp: 3523

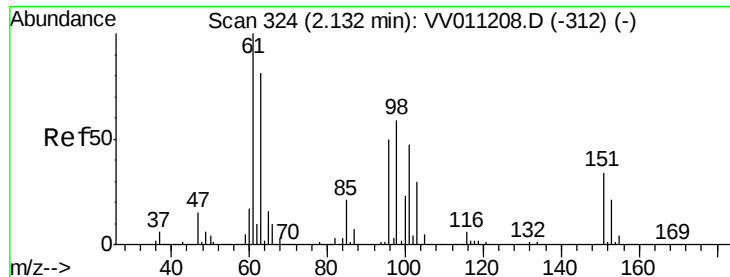
Ion Ratio Lower Upper

101 100

85 45.2 35.5 53.3

151 66.7 56.9 85.3





#12

1,1-Dichloroethene

Concen: 4.616 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV011211.D

Acq: 04 Jun 2019 17:56

Instrument :

MSVOA\_V

ClientSampleId :

GALD9MS

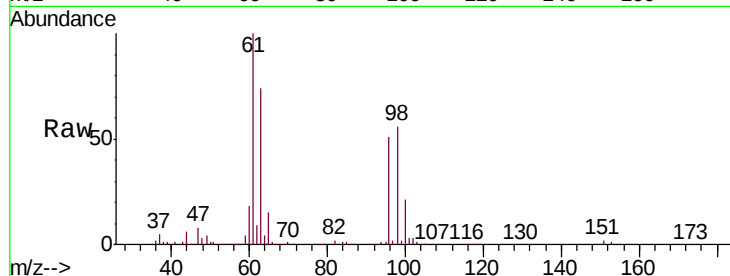
Tgt Ion: 96 Resp: 51768

Ion Ratio Lower Upper

96 100

61 194.5 139.8 259.6

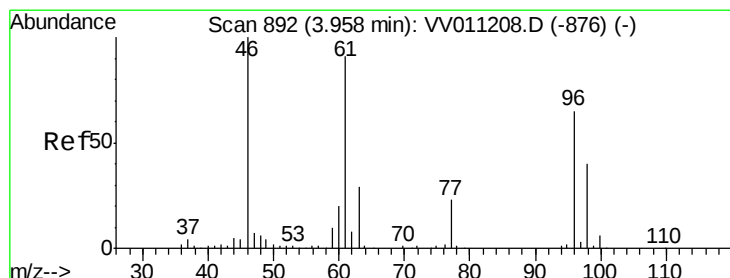
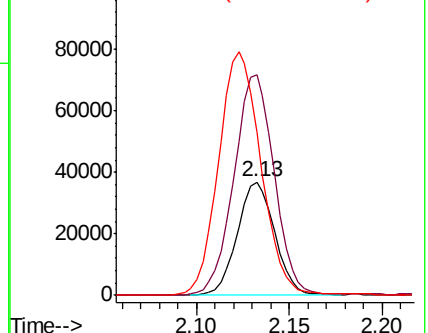
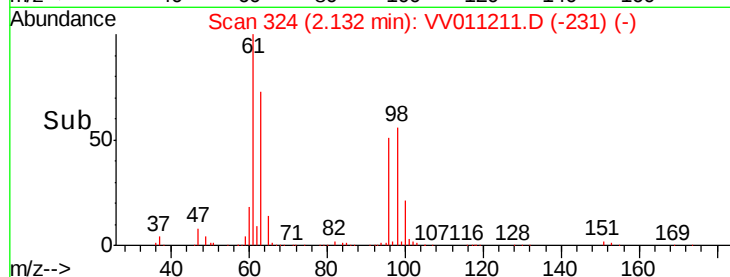
63 143.4 94.3 175.1



Abundance Ion 96.00 (95.70 to 96.70): VV011211.D (-231) (-)

Ion 61.05 (60.75 to 61.75): VV011211.D (-231) (-)

Ion 63.00 (62.70 to 63.70): VV011211.D (-231) (-)



#22

cis-1,2-Dichloroethene

Concen: 0.798 ug/L

RT: 3.96 min Scan# 892

Delta R.T. 0.00 min

Lab File: VV011211.D

Acq: 04 Jun 2019 17:56

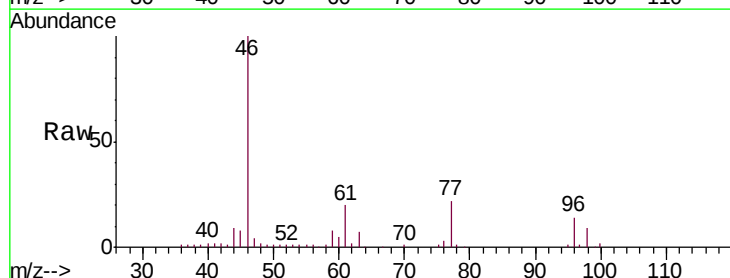
Tgt Ion: 96 Resp: 11091

Ion Ratio Lower Upper

96 100

61 140.9 100.8 187.2

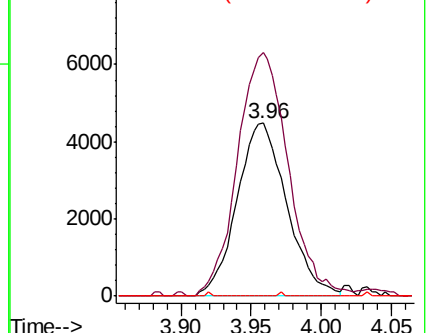
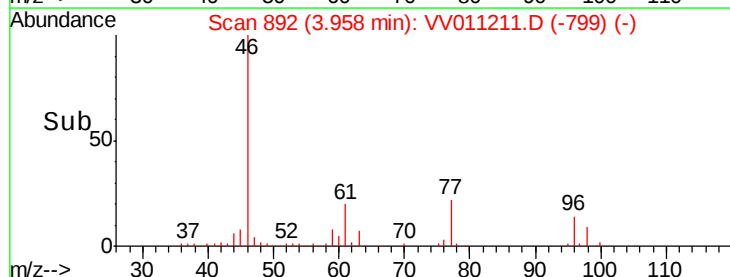
68 0.0 0.0 0.0

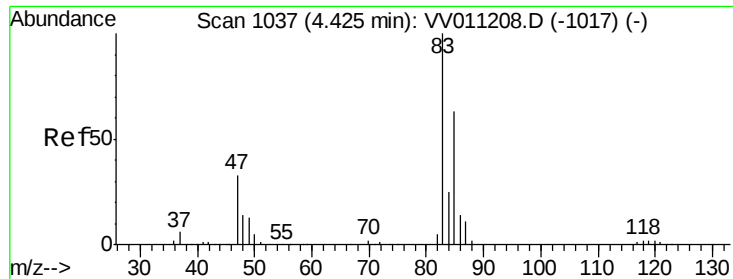


Abundance Ion 96.00 (95.70 to 96.70): VV011211.D (-799) (-)

Ion 61.05 (60.75 to 61.75): VV011211.D (-799) (-)

Ion 68.15 (67.85 to 68.85): VV011211.D (-799) (-)

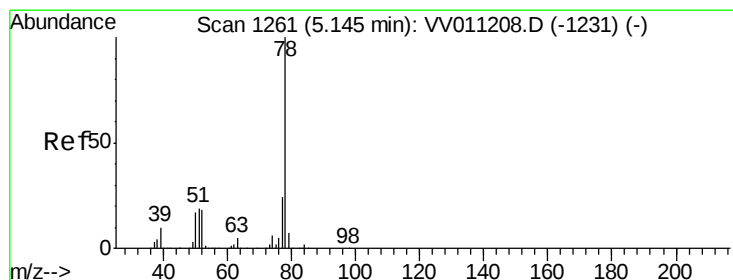
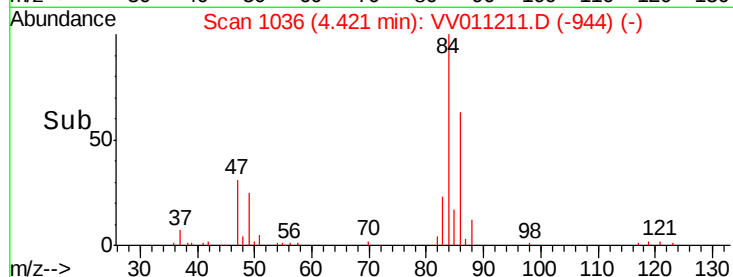
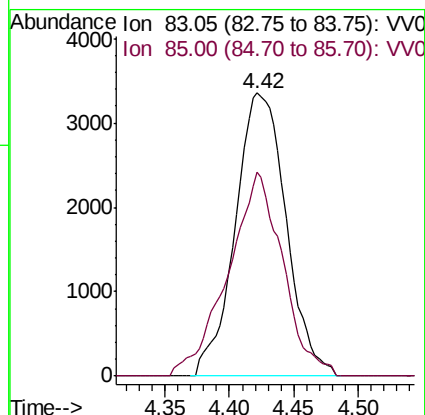
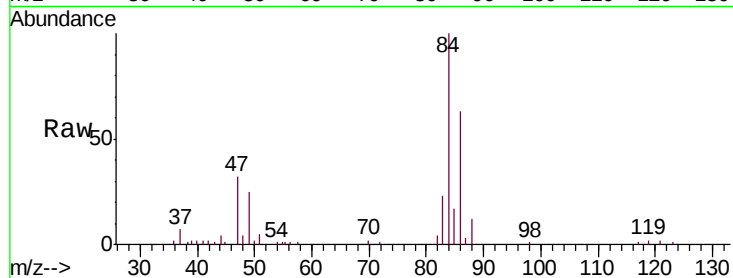




#25  
Chloroform  
Concen: 0.361 ug/L  
RT: 4.42 min Scan# 1036  
Delta R.T. -0.00 min  
Lab File: VV011211.D  
Acq: 04 Jun 2019 17:56

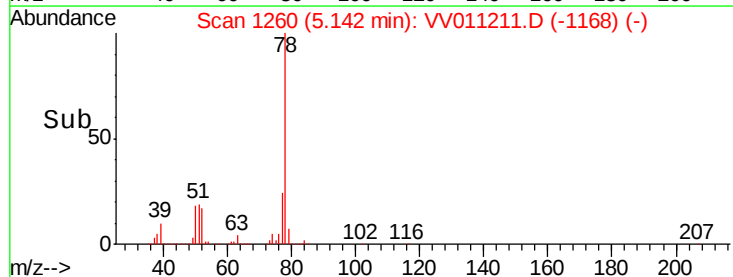
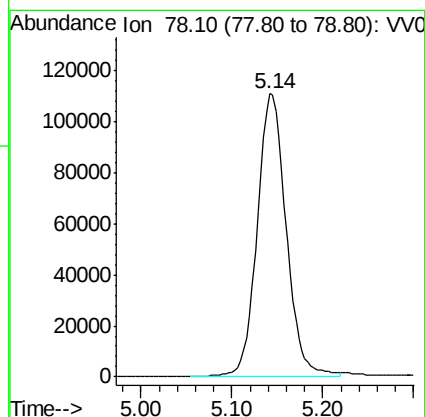
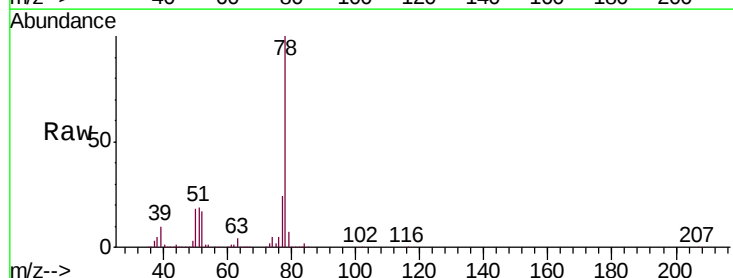
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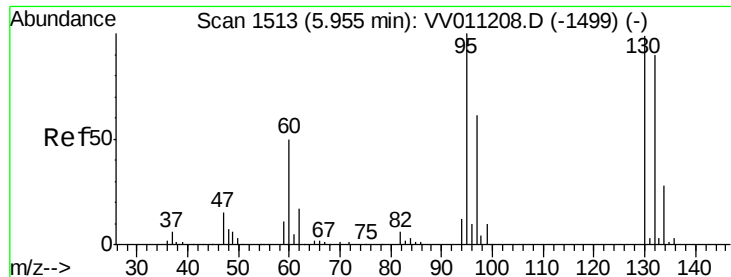
Tgt Ion: 83 Resp: 9226  
Ion Ratio Lower Upper  
83 100  
85 72.0 44.1 81.9



#33  
Benzene  
Concen: 4.758 ug/L  
RT: 5.14 min Scan# 1260  
Delta R.T. -0.00 min  
Lab File: VV011211.D  
Acq: 04 Jun 2019 17:56

Tgt Ion: 78 Resp: 246652

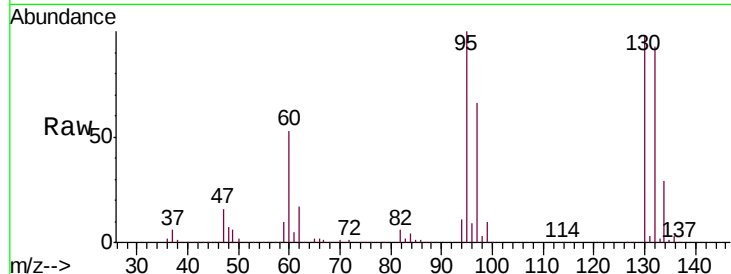




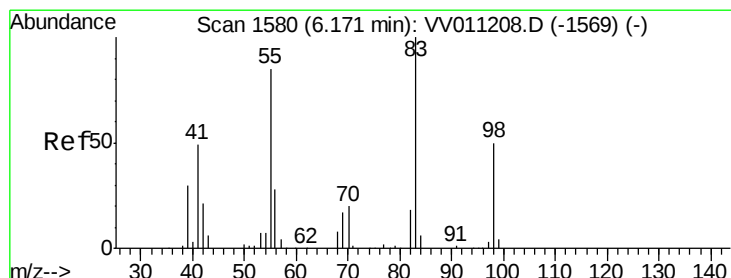
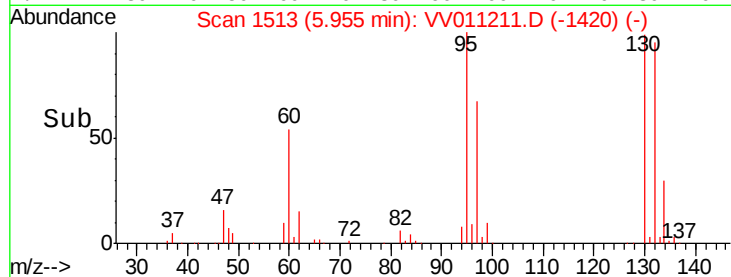
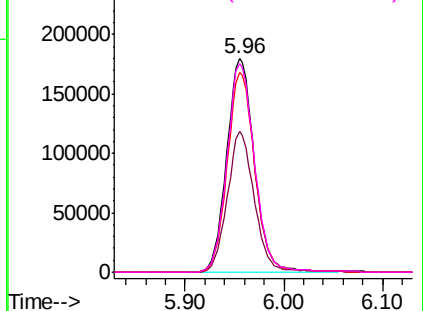
#34  
 Trichloroethene  
 Concen: 26.344 ug/L  
 RT: 5.96 min Scan# 1513  
 Delta R.T. -0.00 min  
 Lab File: VV011211.D  
 Acq: 04 Jun 2019 17:56

Instrument :  
 MSVOA\_V  
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 GALD9MS

Tgt Ion: 95 Resp: 352784  
 Ion Ratio Lower Upper  
 95 100  
 97 65.7 45.8 85.2  
 132 93.5 66.4 123.2  
 130 97.9 68.3 126.8

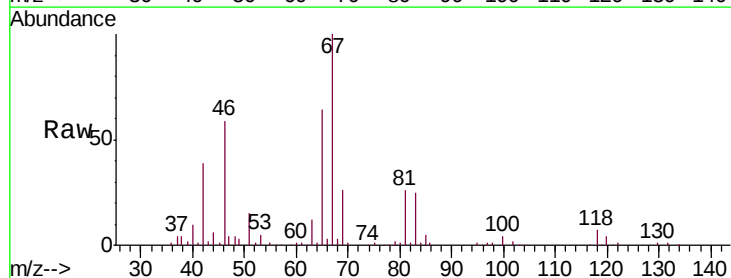


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 96.95 (96.65 to 97.65): VV0  
 Ion 131.95 (131.65 to 132.65): VV0  
 Ion 129.95 (129.65 to 130.65): VV0

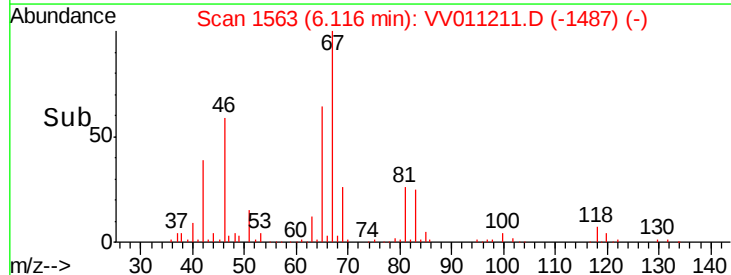
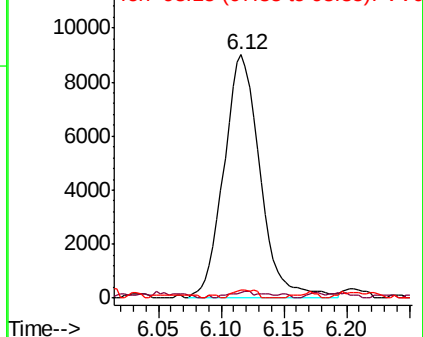


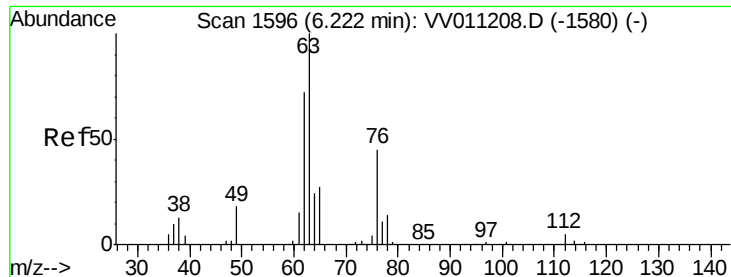
#35  
 Methylcyclohexane  
 Concen: 0.821 ug/L  
 RT: 6.12 min Scan# 1563  
 Delta R.T. -0.05 min  
 Lab File: VV011211.D  
 Acq: 04 Jun 2019 17:56

Tgt Ion: 83 Resp: 18174  
 Ion Ratio Lower Upper  
 83 100  
 55 1.8 67.0 100.6#  
 98 0.0 40.0 60.0#



Abundance Ion 83.15 (82.85 to 83.85): VV0  
 Ion 55.10 (54.80 to 55.80): VV0  
 Ion 98.15 (97.85 to 98.85): VV0

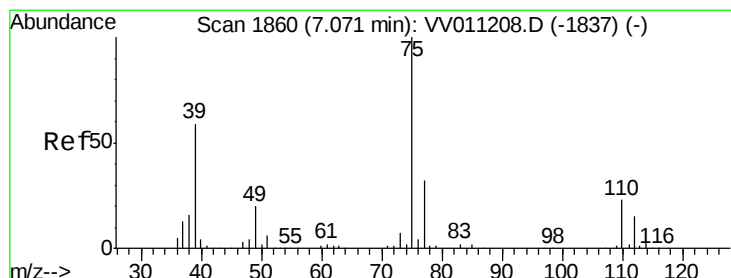
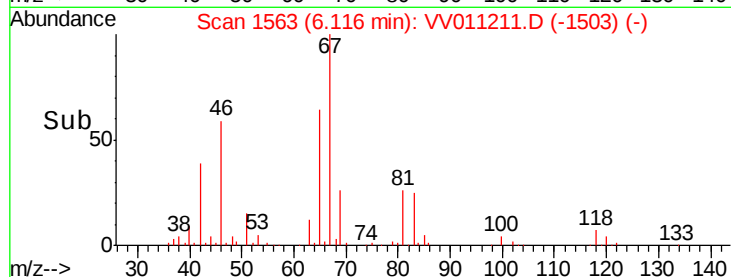
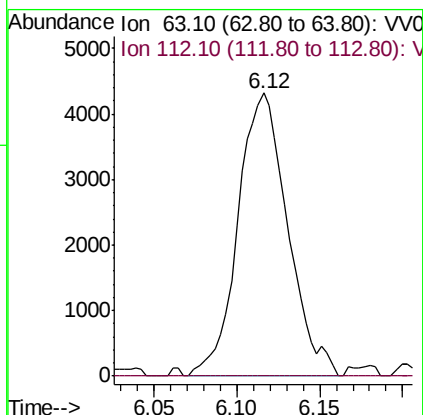
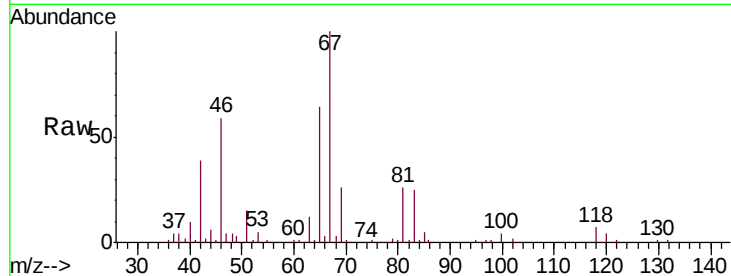




#37  
 1,2-Dichloropropane  
 Concen: 0.697 ug/L  
 RT: 6.12 min Scan# 1563  
 Delta R.T. -0.11 min  
 Lab File: VV011211.D  
 Acq: 04 Jun 2019 17:56

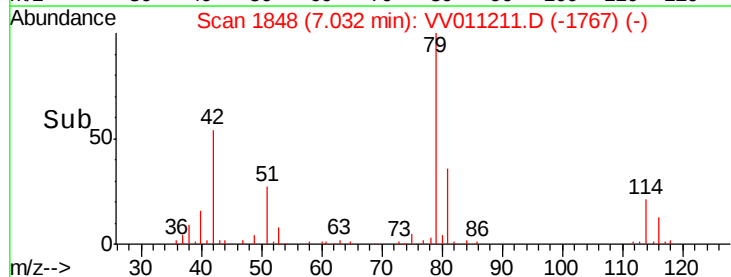
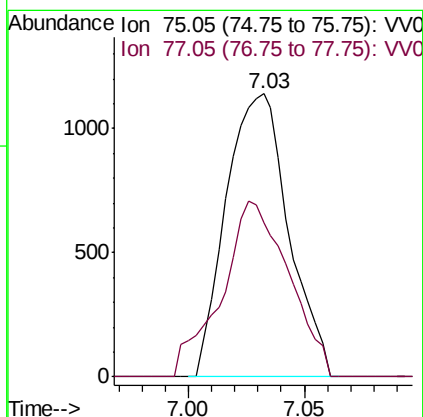
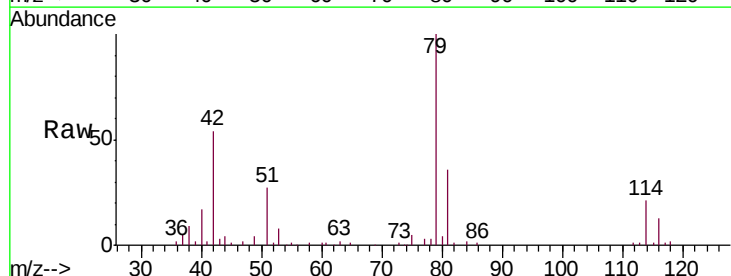
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 GALD9MS

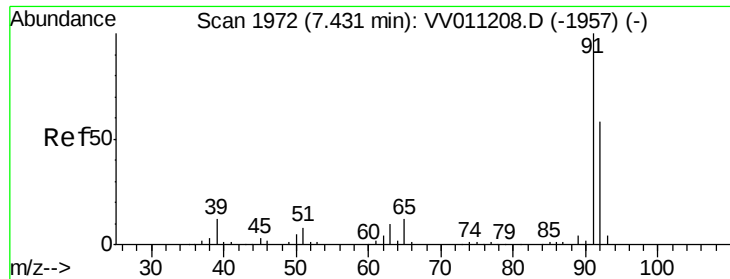
Tgt Ion: 63 Resp: 8990  
 Ion Ratio Lower Upper  
 63 100  
 112 0.0 3.6 5.4#



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.113 ug/L  
 RT: 7.03 min Scan# 1848  
 Delta R.T. -0.04 min  
 Lab File: VV011211.D  
 Acq: 04 Jun 2019 17:56

Tgt Ion: 75 Resp: 2135  
 Ion Ratio Lower Upper  
 75 100  
 77 54.6 22.2 41.2#





#42

Toluene

Concen: 4.836 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VV011211.D

Acq: 04 Jun 2019 17:56

Instrument :

MSVOA\_V

ClientSampleId :

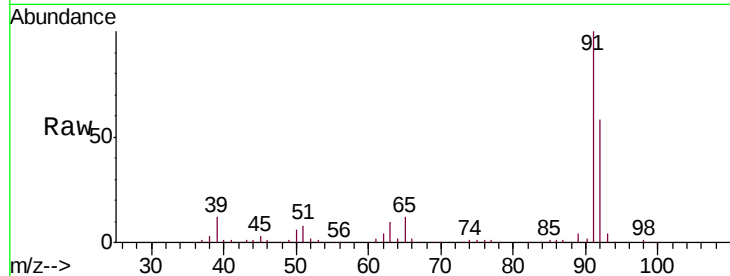
GALD9MS

Tgt Ion: 91 Resp: 267177

Ion Ratio Lower Upper

91 100

92 58.4 39.9 74.1



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0

7.43

150000

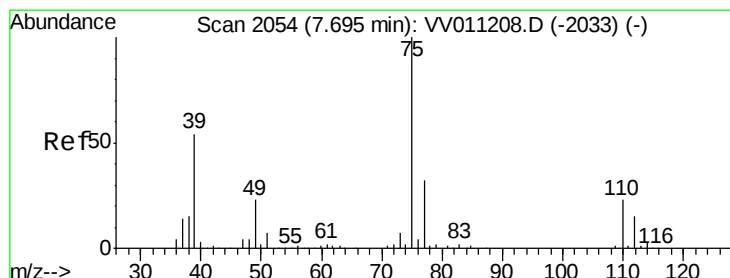
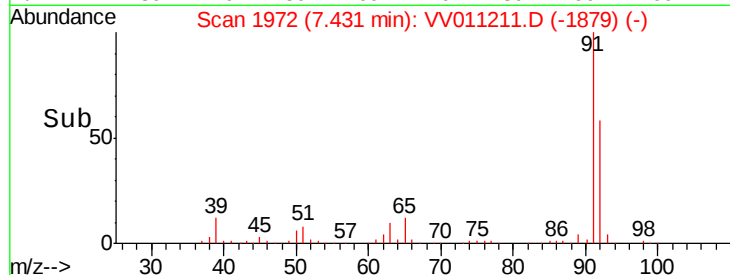
100000

50000

0

7.40 7.50

Time-->



#44

trans-1,3-Dichloropropene

Concen: 0.117 ug/L

RT: 7.66 min Scan# 2043

Delta R.T. -0.04 min

Lab File: VV011211.D

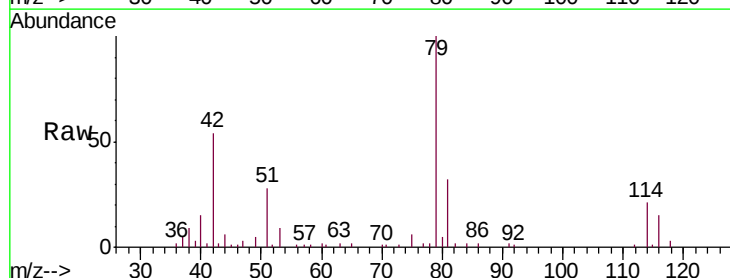
Acq: 04 Jun 2019 17:56

Tgt Ion: 75 Resp: 1677

Ion Ratio Lower Upper

75 100

77 38.8 23.1 42.9



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

7.66

1000

800

600

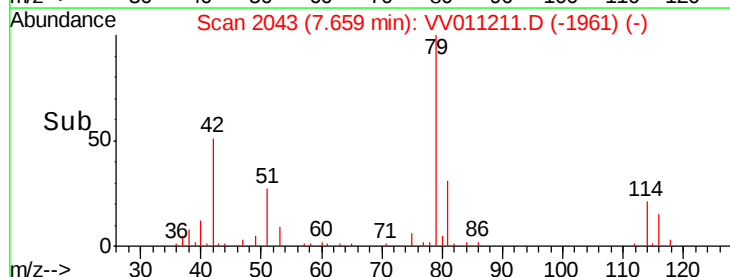
400

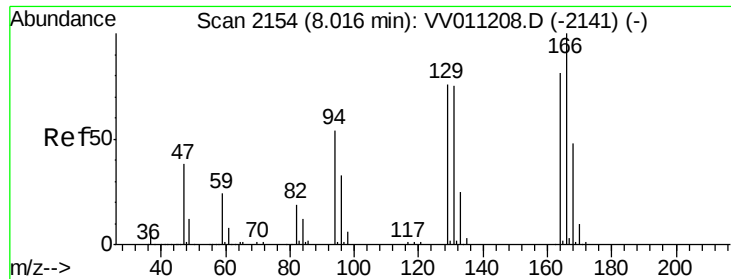
200

0

7.65 7.70

Time-->

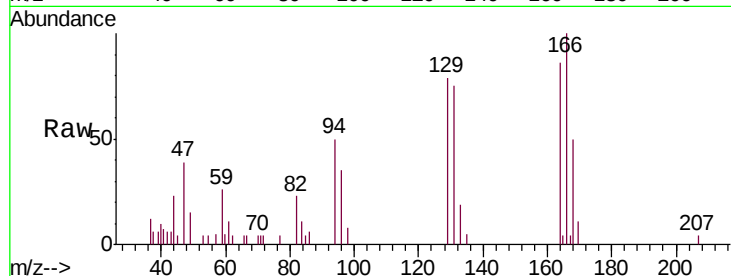




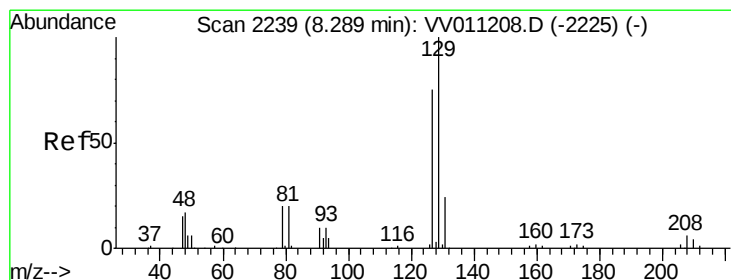
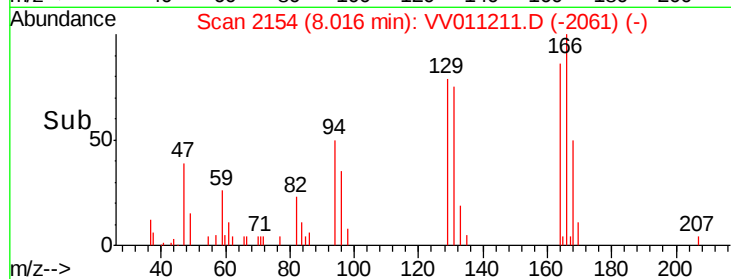
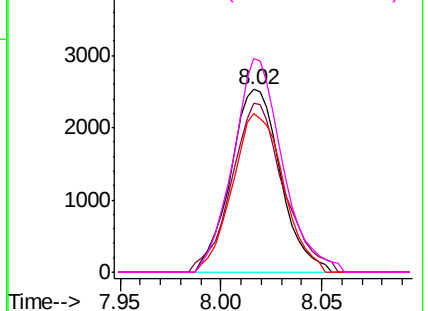
#47  
Tetrachloroethene  
Concen: 0.453 ug/L  
RT: 8.02 min Scan# 2154  
Delta R.T. 0.00 min  
Lab File: VV011211.D  
Acq: 04 Jun 2019 17:56

Instrument :  
MSVOA\_V  
ClientSampleId :  
GALD9MS

Tgt Ion:164 Resp: 4386  
Ion Ratio Lower Upper  
164 100  
129 92.2 69.9 129.9  
131 87.0 66.8 124.2  
166 116.8 90.2 167.6

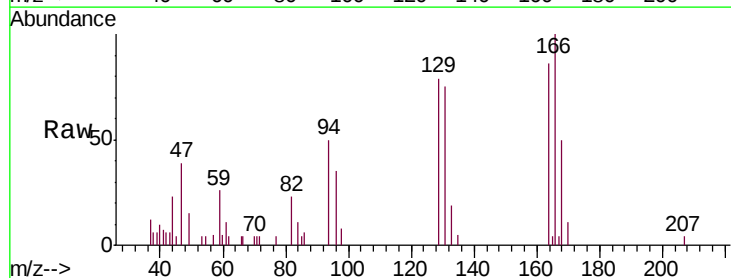


Abundance Ion 163.90 (163.60 to 164.60): V  
Ion 128.95 (128.65 to 129.65): V  
Ion 130.95 (130.65 to 131.65): V  
Ion 165.90 (165.60 to 166.60): V

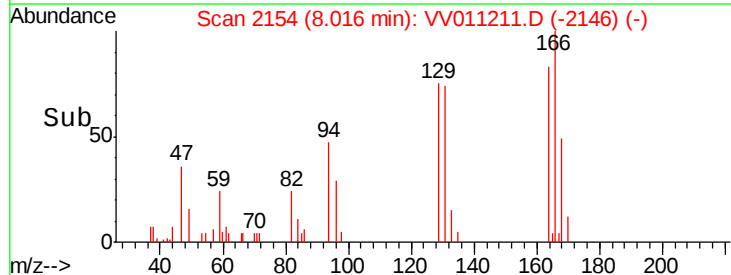
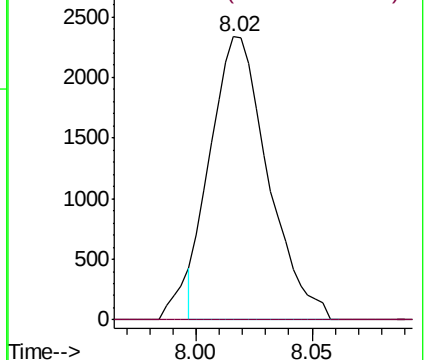


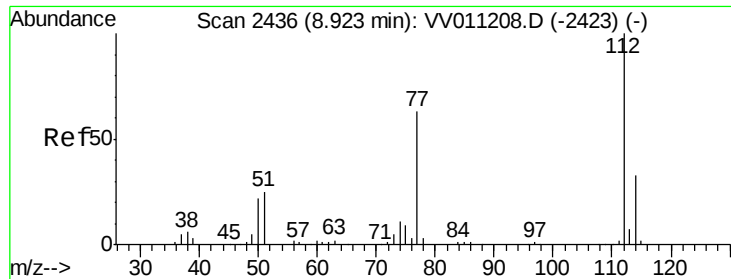
#49  
Dibromochloromethane  
Concen: 0.428 ug/L  
RT: 8.02 min Scan# 2154  
Delta R.T. -0.27 min  
Lab File: VV011211.D  
Acq: 04 Jun 2019 17:56

Tgt Ion:129 Resp: 4015  
Ion Ratio Lower Upper  
129 100  
127 0.0 53.7 99.7#



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

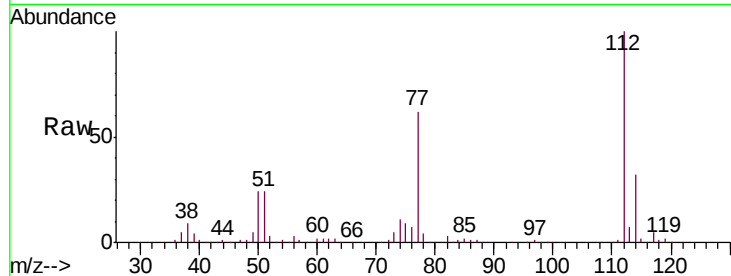




#51  
 Chlorobenzene  
 Concen: 4.805 ug/L  
 RT: 8.92 min Scan# 2436  
 Delta R.T. 0.00 min  
 Lab File: VV011211.D  
 Acq: 04 Jun 2019 17:56

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 GALD9MS

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 112   | Resp: | 161878 |
| Ion      | Ratio | Lower | Upper  |
| 112      | 100   |       |        |
| 114      | 31.9  | 22.6  | 42.0   |
| 77       | 62.0  | 50.1  | 75.1   |



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

