

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX111219\  
 Data File : VX013378.D  
 Acq On : 12 Nov 2019 11:59  
 Operator : JC/SP  
 Sample : K5765-02  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TT-009-IDWGW-20191107

Quant Time: Nov 12 12:31:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\624X111119W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Nov 12 01:16:13 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.00  | 128  | 139971   | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 6.85  | 114  | 781393   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 10.10 | 117  | 673785   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 6.05   | 65    | 305237   | 29.53    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 98.43%  |
| 60) 4-Bromofluorobenzene  | 11.13  | 95    | 297661   | 27.49    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 91.63%  |
| 63) Toluene-d8            | 8.71   | 98    | 927693   | 30.45    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 101.50% |

## Target Compounds

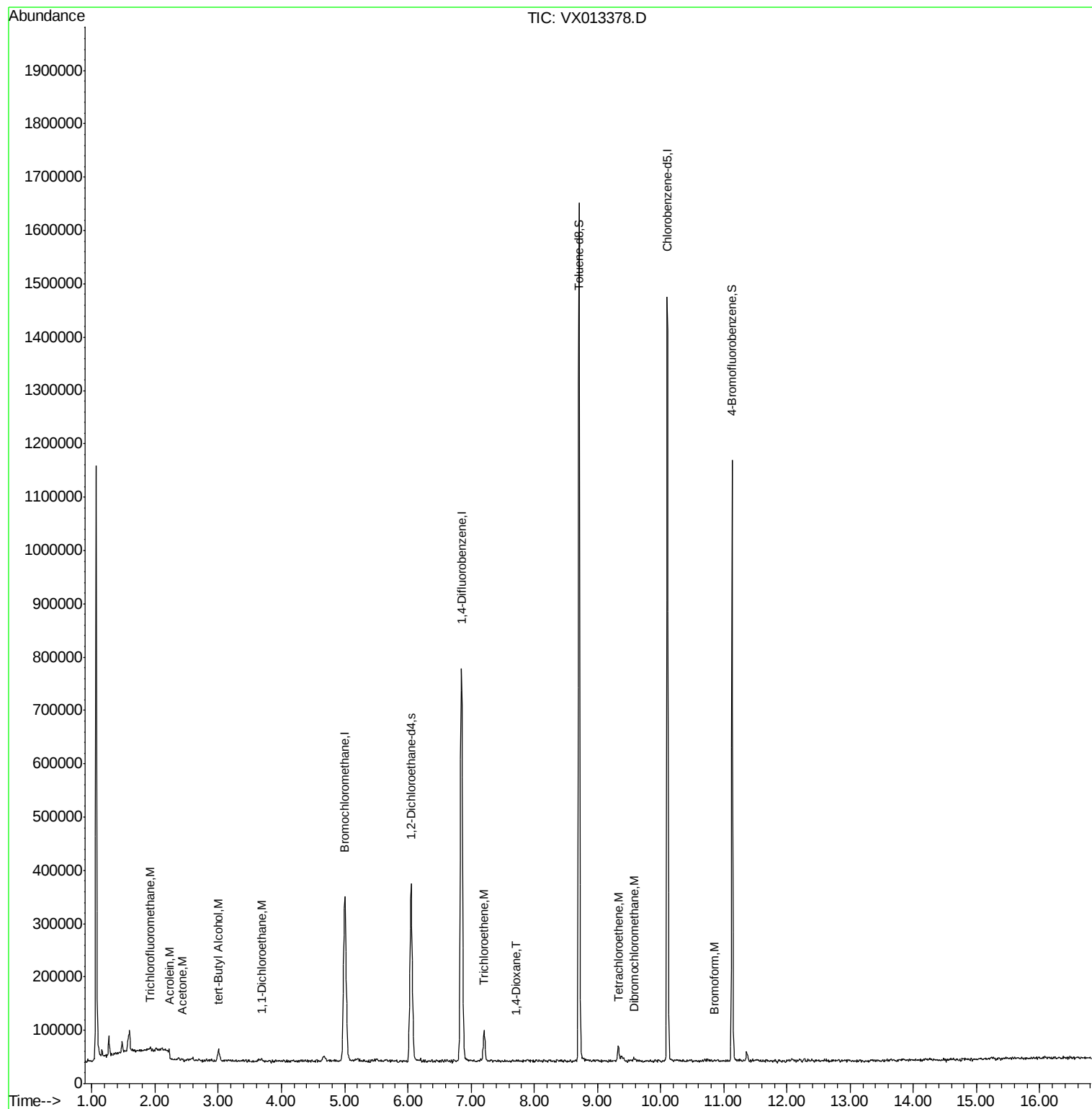
|                           |       |     |       |       | Qvalue |    |
|---------------------------|-------|-----|-------|-------|--------|----|
| 7) Trichlorofluoromethane | 1.92  | 101 | 3752  | 0.268 | ug/l   | 93 |
| 13) Acrolein              | 2.23  | 56  | 365   | 0.227 | ug/l   | 86 |
| 15) Acetone               | 2.43  | 58  | 1914  | 1.135 | ug/l   | 96 |
| 21) 1,1-Dichloroethane    | 3.69  | 63  | 5342  | 0.320 | ug/l   | 97 |
| 23) tert-Butyl Alcohol    | 3.00  | 59  | 12726 | 4.747 | ug/l # | 98 |
| 37) Trichloroethene       | 7.21  | 130 | 23726 | 2.446 | ug/l   | 97 |
| 45) 1,4-Dioxane           | 7.72  | 88  | 208   | 0.816 | ug/l # | 1  |
| 53) Dibromochloromethane  | 9.58  | 129 | 2690  | 0.275 | ug/l   | 88 |
| 56) Bromoform             | 10.85 | 173 | 1735  | 0.223 | ug/l # | 93 |
| 61) Tetrachloroethene     | 9.33  | 164 | 3713  | 0.447 | ug/l # | 82 |

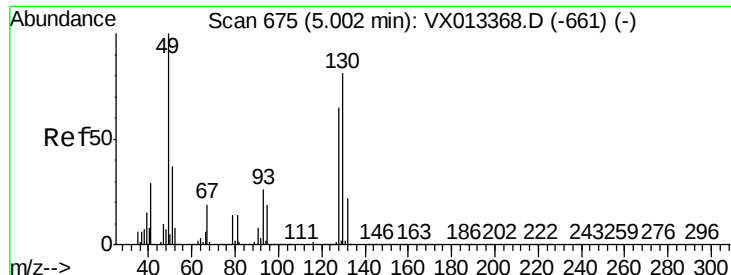
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX111219\  
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Sample : K5765-02  
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Instrument :  
MSVOA\_X  
ClientSampleId :  
TT-009-IDW/GW-20191107

Quant Time: Nov 12 12:31:29 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\624X111119W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Tue Nov 12 01:16:13 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 5.00 min Scan# 675

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

Instrument :

MSVOA\_X

ClientSampleId :

TT-009-IDW/GW-20191107

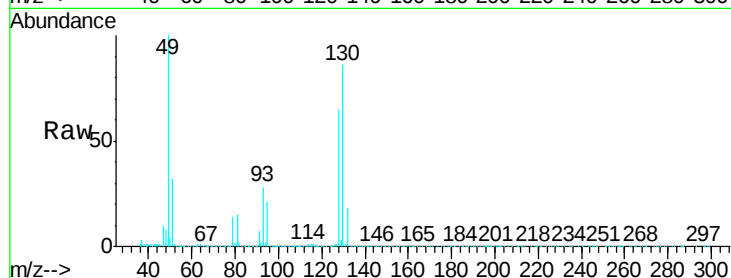
Tgt Ion:128 Resp: 139971

Ion Ratio Lower Upper

128 100

49 156.5 0.0 388.3

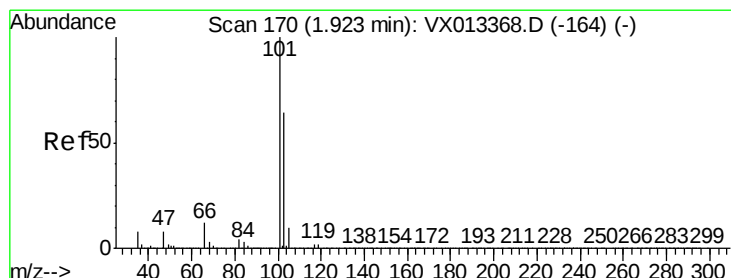
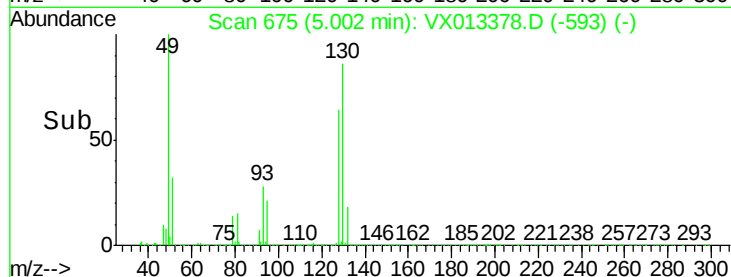
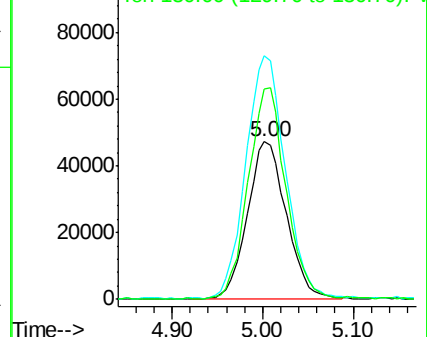
130 130.3 0.0 318.5



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VX0

Ion 130.00 (129.70 to 130.70): V



#7

Trichlorofluoromethane

Concen: 0.268 ug/l

RT: 1.92 min Scan# 170

Delta R.T. -0.00 min

Lab File: VX013378.D

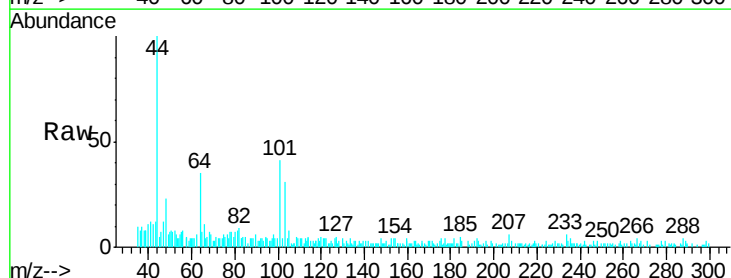
Acq: 12 Nov 2019 11:59

Tgt Ion:101 Resp: 3752

Ion Ratio Lower Upper

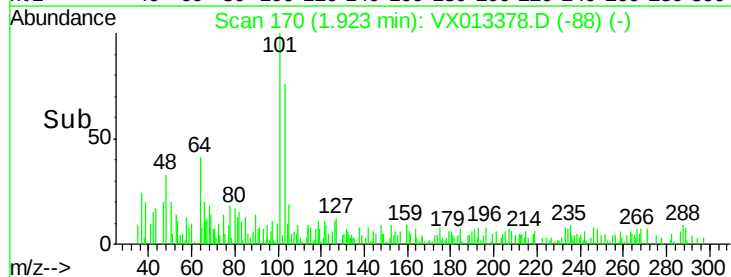
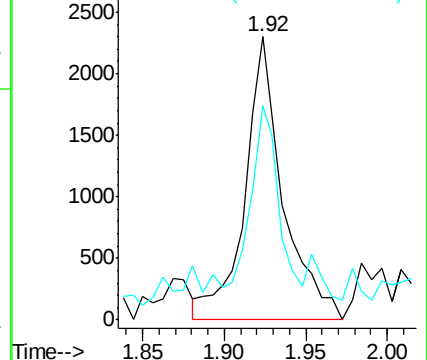
101 100

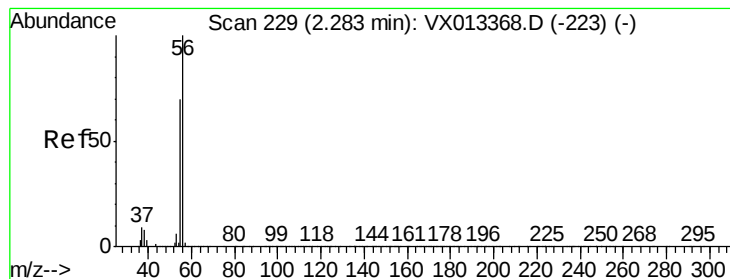
103 69.1 51.2 76.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#13

Acrolein

Concen: 0.227 ug/l

RT: 2.23 min Scan# 220

Delta R.T. -0.05 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

Instrument :

MSVOA\_X

ClientSampleId :

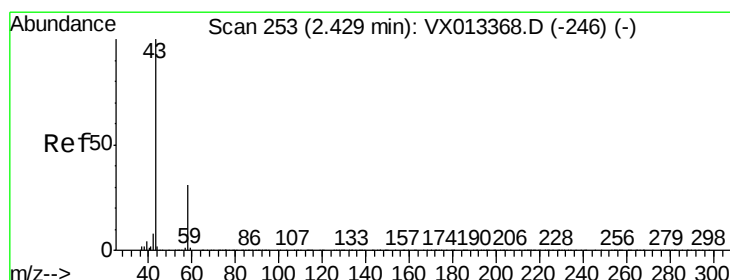
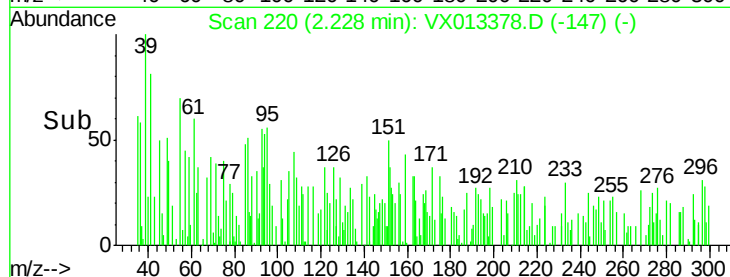
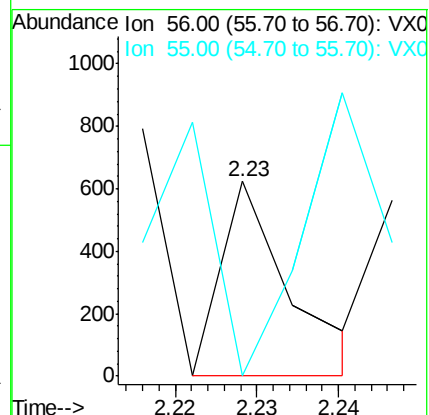
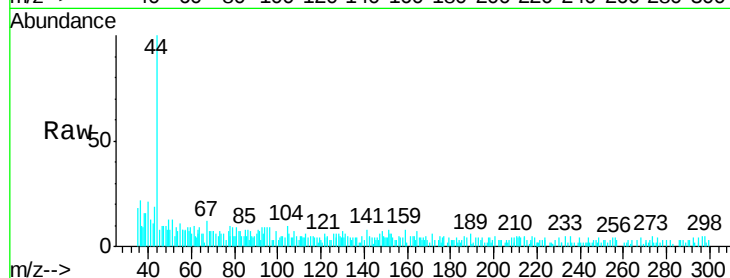
TT-009-IDW/GW-20191107

Tgt Ion: 56 Resp: 365

Ion Ratio Lower Upper

56 100

55 81.4 55.8 83.8



#15

Acetone

Concen: 1.135 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.00 min

Lab File: VX013378.D

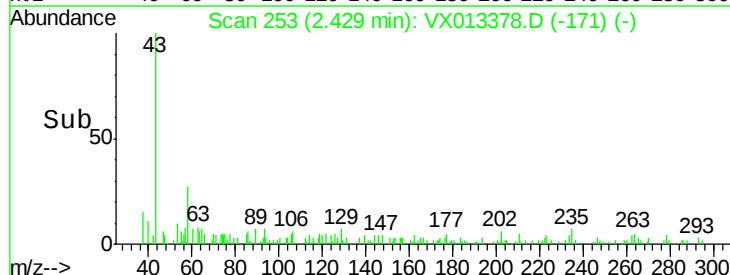
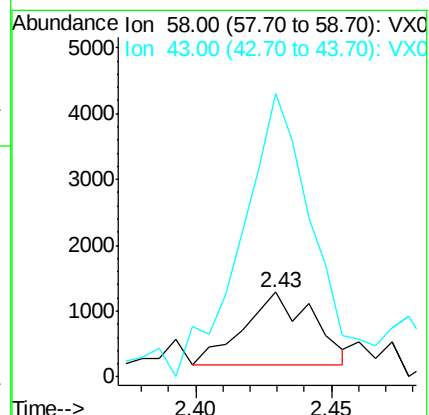
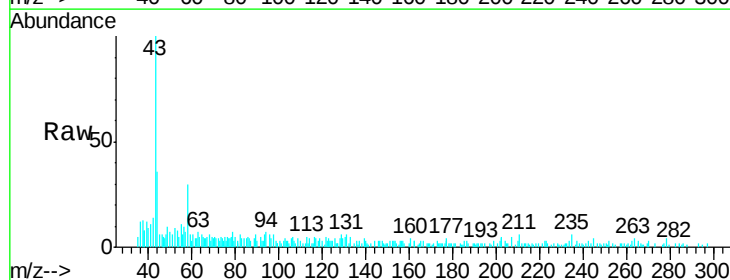
Acq: 12 Nov 2019 11:59

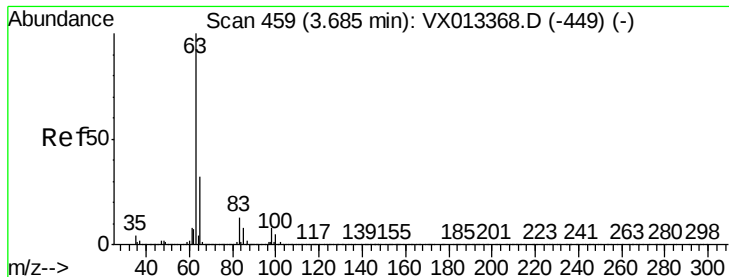
Tgt Ion: 58 Resp: 1914

Ion Ratio Lower Upper

58 100

43 335.1 261.4 392.2





#21

1,1-Dichloroethane

Concen: 0.320 ug/l

RT: 3.69 min Scan# 459

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

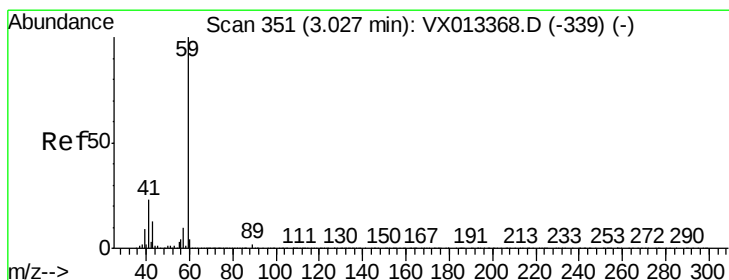
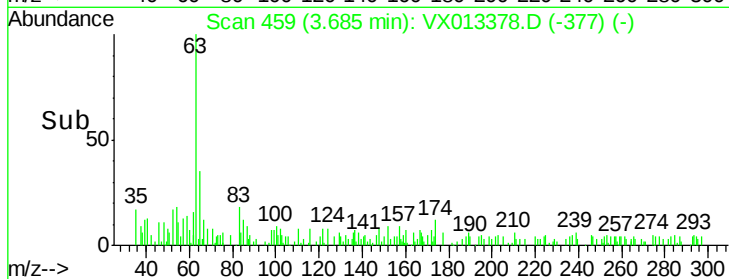
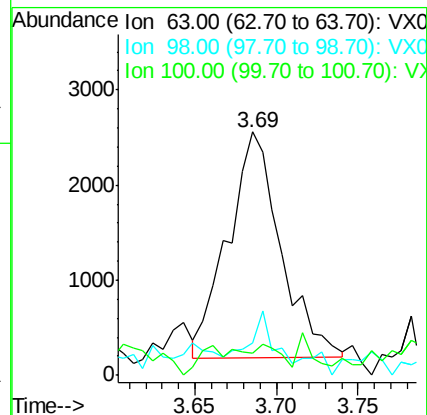
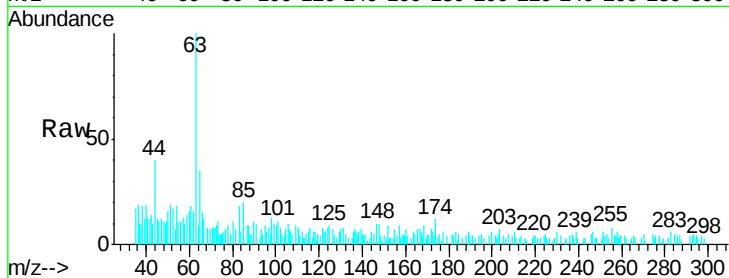
Instrument :

MSVOA\_X

ClientSampleId :

TT-009-IDW/GW-20191107

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 63    | Resp: | 5342  |
| Ion      | Ratio | Lower | Upper |
| 63       | 100   |       |       |
| 98       | 7.3   | 4.0   | 11.9  |
| 100      | 6.5   | 2.5   | 7.5   |



#23

tert-Butyl Alcohol

Concen: 4.747 ug/l

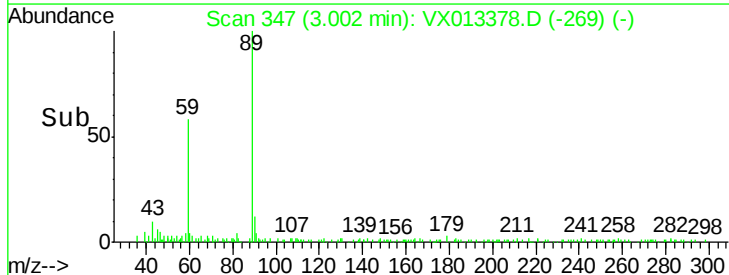
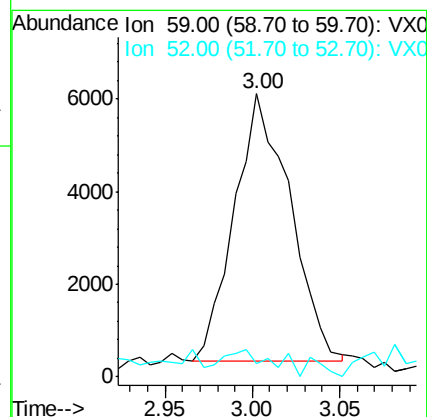
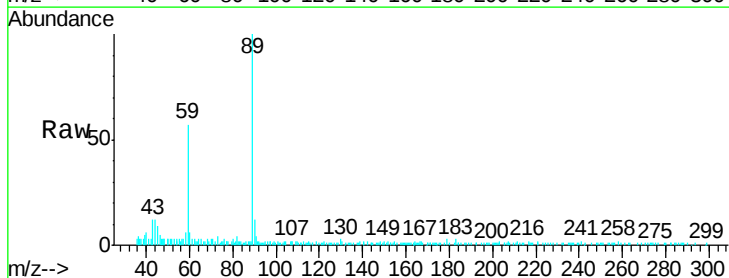
RT: 3.00 min Scan# 347

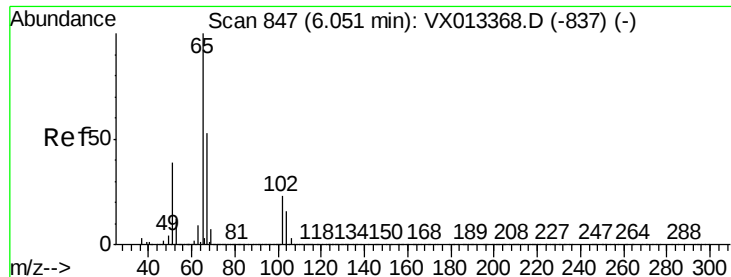
Delta R.T. -0.02 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 59    | Resp: | 12726 |
| Ion      | Ratio | Lower | Upper |
| 59       | 100   |       |       |
| 52       | 3.8   | 0.1   | 0.1#  |





#27

1,2-Dichloroethane-d4

Concen: 29.532 ug/l

RT: 6.05 min Scan# 847

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

Instrument :

MSVOA\_X

ClientSampleId :

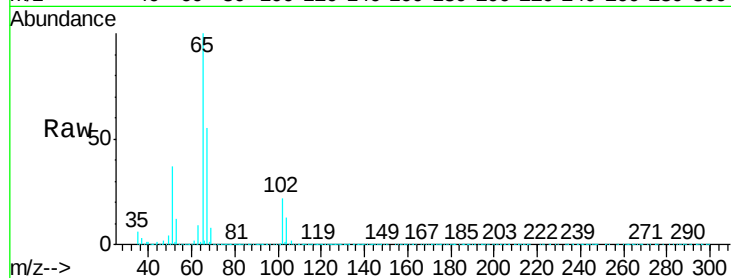
TT-009-IDW/GW-20191107

Tgt Ion: 65 Resp: 305237

Ion Ratio Lower Upper

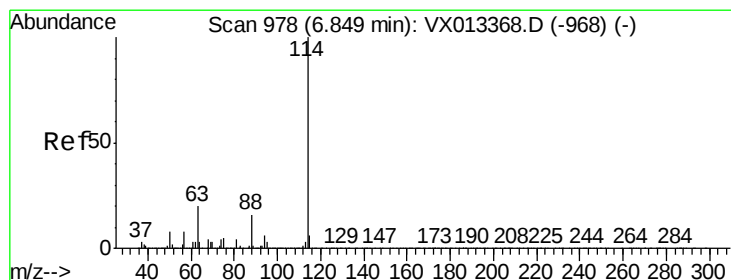
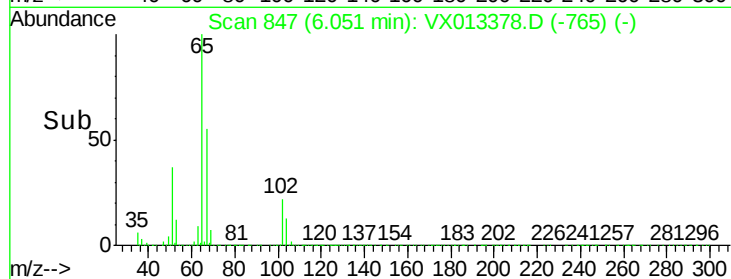
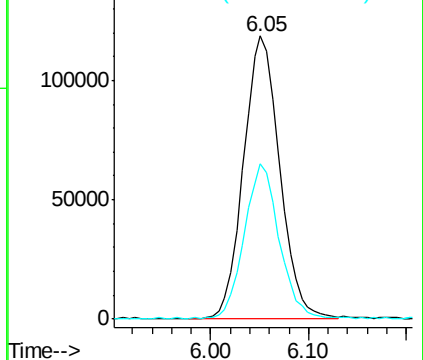
65 100

67 52.5 41.0 61.6



Abundance Ion 65.00 (64.70 to 65.70): VX0

Ion 67.00 (66.70 to 67.70): VX0



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

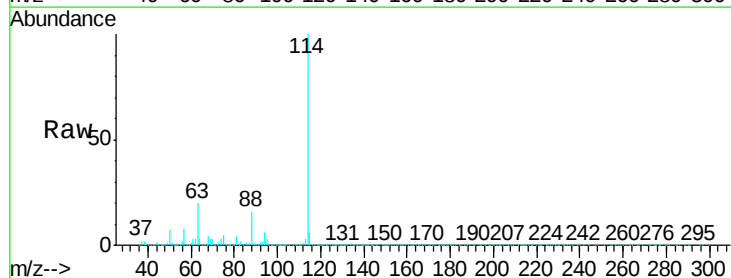
Tgt Ion: 114 Resp: 781393

Ion Ratio Lower Upper

114 100

63 19.5 16.1 24.1

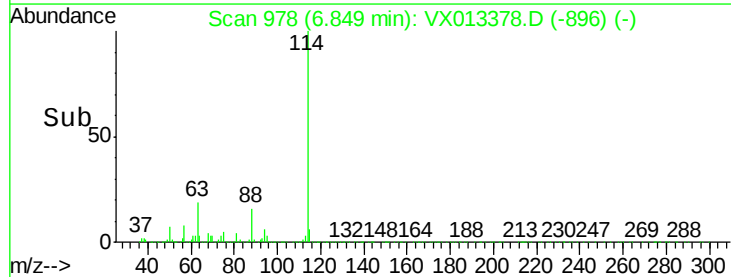
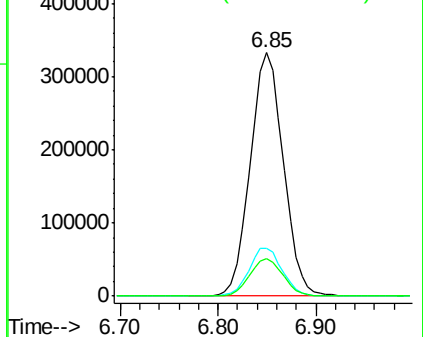
88 15.5 12.3 18.5

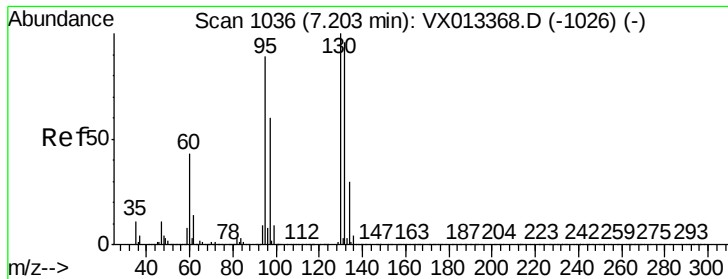


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 88.00 (87.70 to 88.70): VX0





#37

Trichloroethene

Concen: 2.446 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. 0.01 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

Instrument :

MSVOA\_X

ClientSampleId :

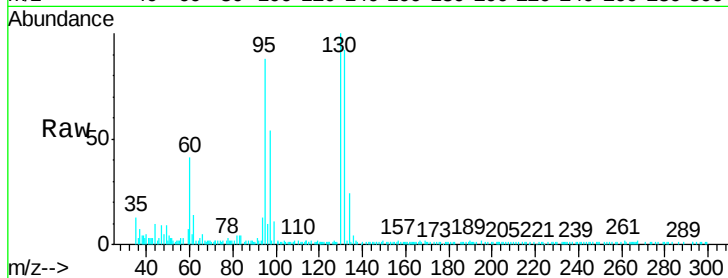
TT-009-IDW/GW-20191107

Tgt Ion: 130 Resp: 23726

Ion Ratio Lower Upper

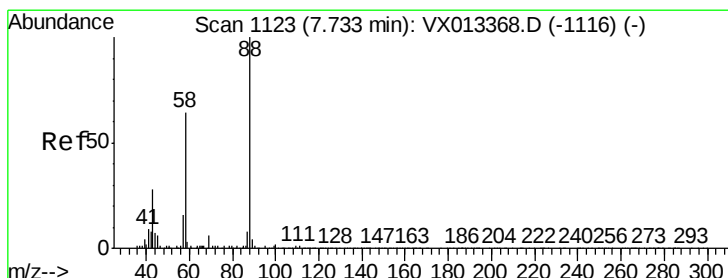
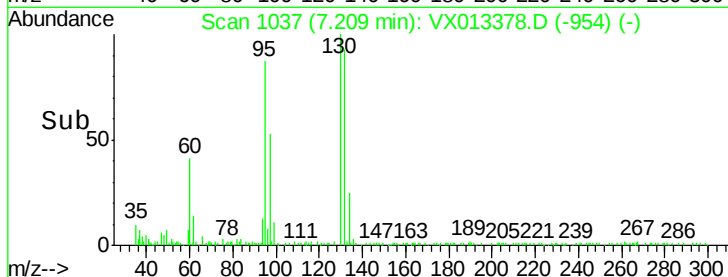
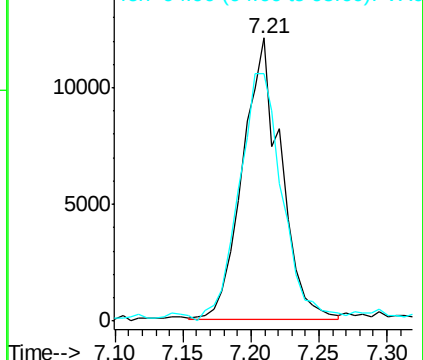
130 100

95 86.6 71.3 106.9



Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VX0



#45

1,4-Dioxane

Concen: 0.816 ug/l

RT: 7.72 min Scan# 1121

Delta R.T. -0.01 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

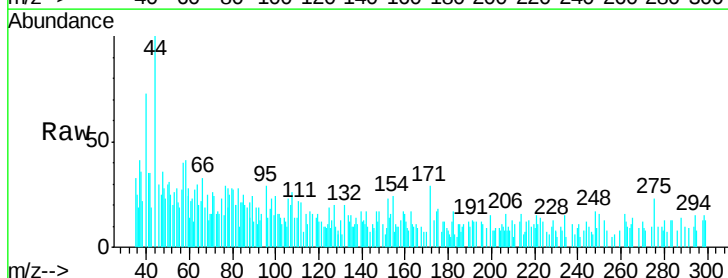
Tgt Ion: 88 Resp: 208

Ion Ratio Lower Upper

88 100

43 372.6 26.1 39.1#

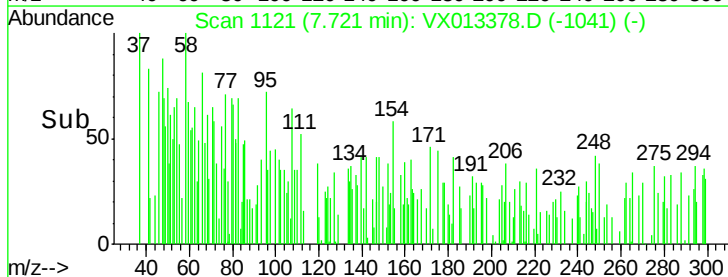
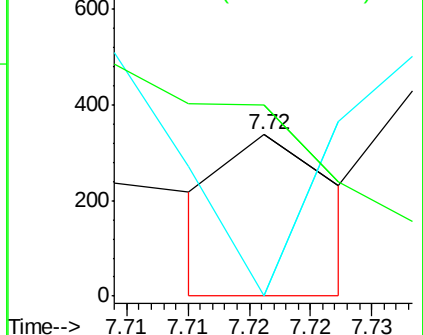
58 167.8 55.8 83.8#

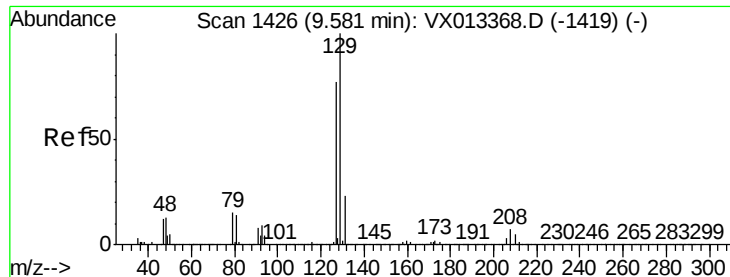


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#53

Dibromochloromethane

Concen: 0.275 ug/l

RT: 9.58 min Scan# 1426

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

Instrument :

MSVOA\_X

ClientSampleId :

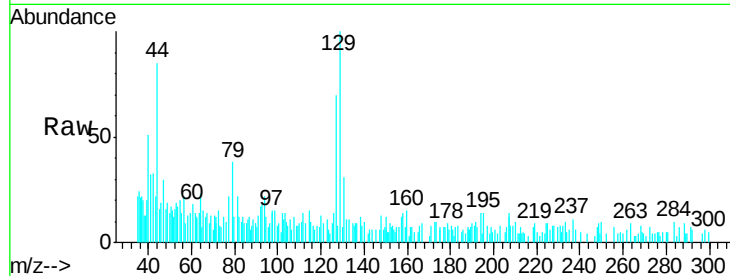
TT-009-IDW/GW-20191107

Tgt Ion:129 Resp: 2690

Ion Ratio Lower Upper

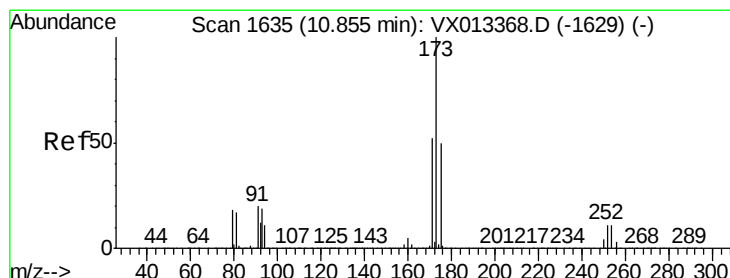
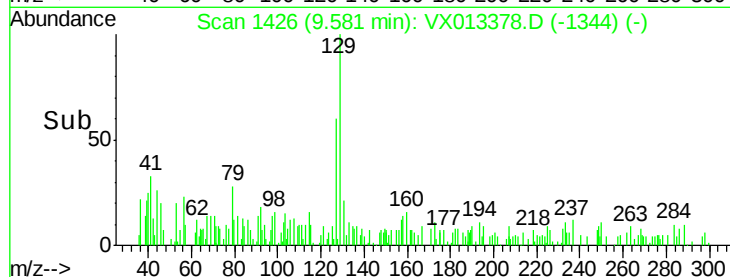
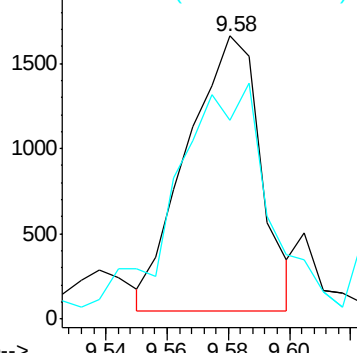
129 100

127 89.9 39.6 119.0



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#56

Bromoform

Concen: 0.223 ug/l

RT: 10.85 min Scan# 1634

Delta R.T. -0.01 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

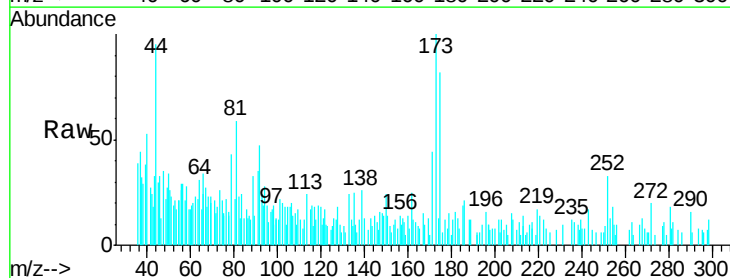
Tgt Ion:173 Resp: 1735

Ion Ratio Lower Upper

173 100

175 51.0 39.4 59.0

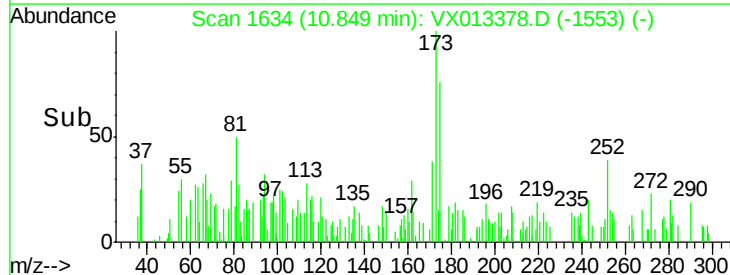
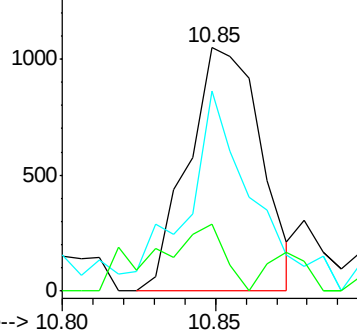
254 20.6 8.6 12.8#

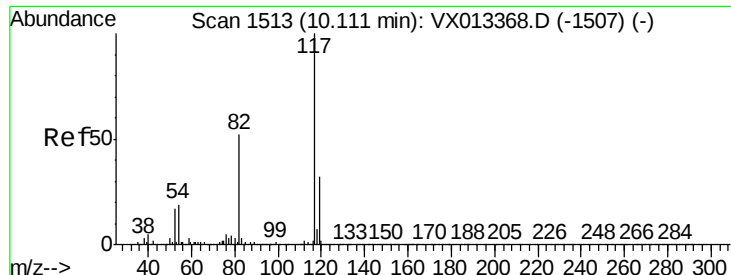


Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V

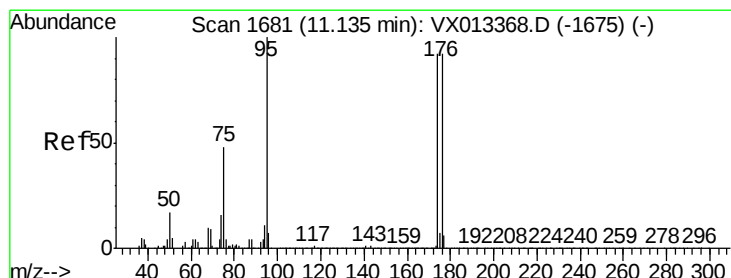
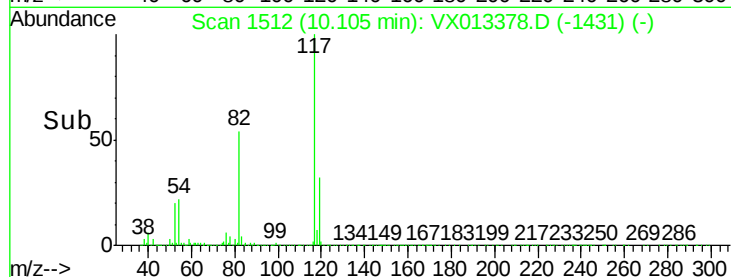
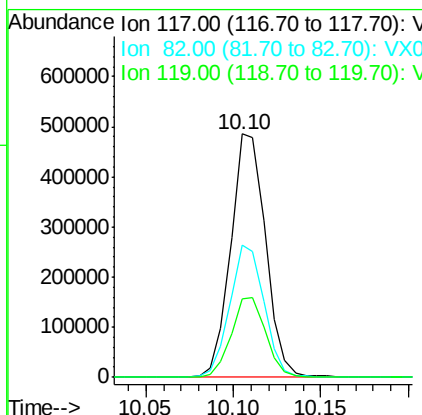
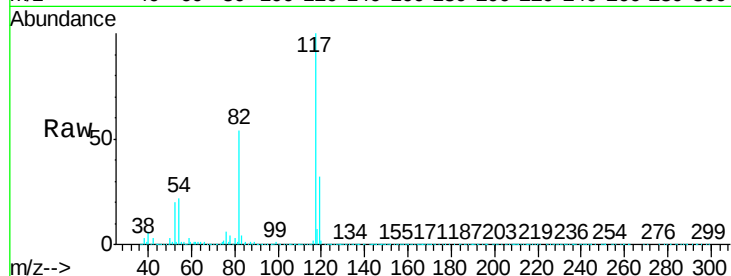




#57  
Chlorobenzene-d5  
Concen: 30.000 ug/l  
RT: 10.10 min Scan# 1512  
Delta R.T. -0.01 min  
Lab File: VX013378.D  
Acq: 12 Nov 2019 11:59

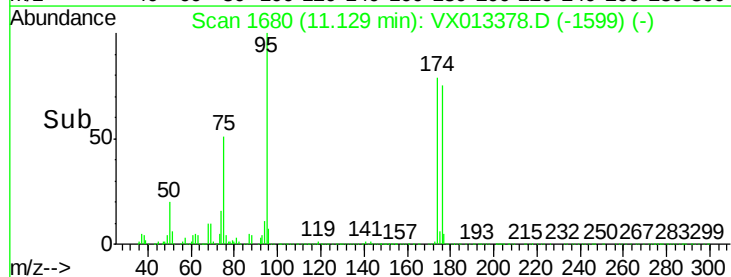
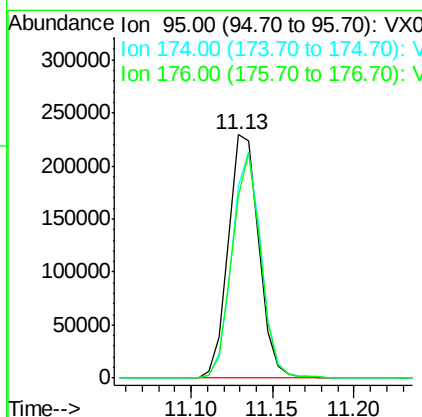
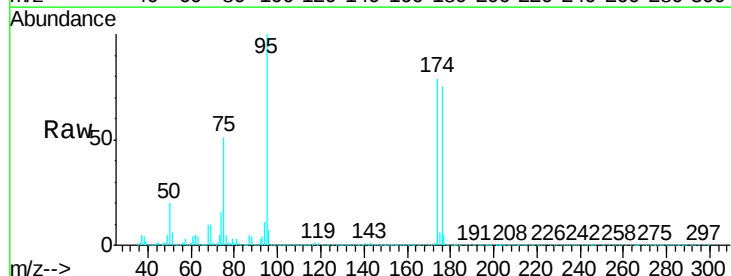
Instrument :  
MSVOA\_X  
ClientSampleId :  
TT-009-IDWGW-20191107

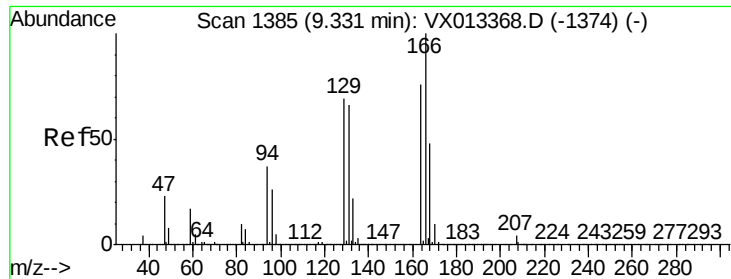
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.5  | 43.7  | 65.5  |
| 119     | 32.4  | 25.5  | 38.3  |



#60  
4-Bromofluorobenzene  
Concen: 27.486 ug/l  
RT: 11.13 min Scan# 1680  
Delta R.T. -0.01 min  
Lab File: VX013378.D  
Acq: 12 Nov 2019 11:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 174     | 89.0  | 70.2  | 105.2 |
| 176     | 86.7  | 68.3  | 102.5 |





#61

Tetrachloroethene

Concen: 0.447 ug/l

RT: 9.33 min Scan# 1385

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

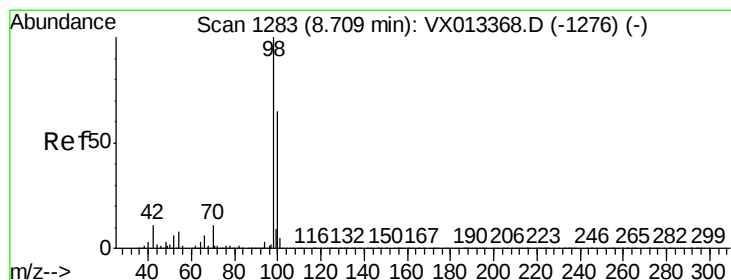
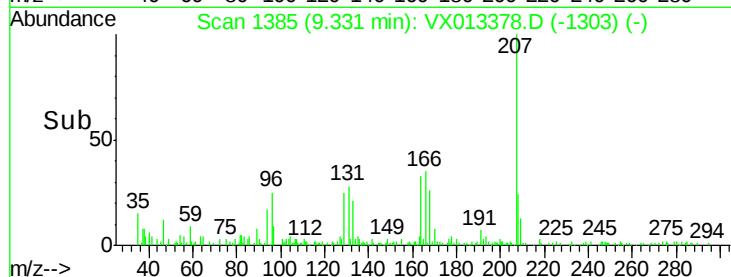
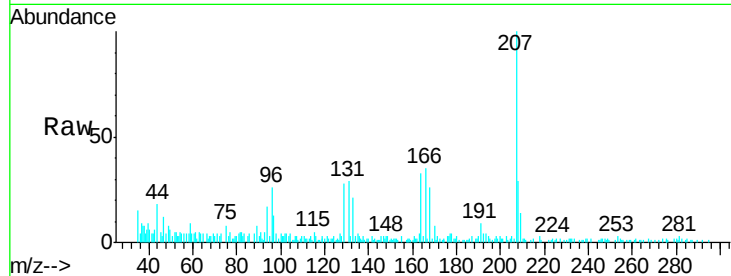
Instrument :

MSVOA\_X

ClientSampleId :

TT-009-IDW/GW-20191107

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 3713   |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 166      | 99.0  | 104.9 | 157.3# |
| 129      | 73.9  | 72.3  | 108.5  |
| 131      | 81.0  | 69.0  | 103.6  |



#63

Toluene-d8

Concen: 30.448 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX013378.D

Acq: 12 Nov 2019 11:59

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 98    | Resp: | 927693 |
| Ion      | Ratio | Lower | Upper  |
| 98       | 100   |       |        |
| 100      | 65.7  | 52.5  | 78.7   |

