Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX082019\
Data File : VX011709.D
Acq On : 21 Aug 2019 01:35
Operator : JC/SP
Sample : K4387-33
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 42 Sample Multiplier: 1

**Instrument :** MSVOA_X
**ClientSampleId :** T4-A4-(0)

Quant Time: Aug 21 05:30:20 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X081519W.M
Quant Title : SW846 8260
QLast Update : Fri Aug 16 04:15:26 2019
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 5.66 | 168 | 358139 | 50.00 ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.85 | 114 | 491173 | 50.00 ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.11 | 117 | 486874 | 50.00 ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152 | 230638 | 50.00 ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | |
| 33) 1,2-Dichloroethane-d4 | 6.06 | 65 | 191743 | 57.73 ug/l | 0.00 |
| Spiked Amount 50.000 | | | Recovery = | 115.46% | |
| 35) Dibromofluoromethane | 5.49 | 113 | 158834 | 49.44 ug/l | 0.00 |
| Spiked Amount 50.000 | | | Recovery = | 98.88% | |
| 50) Toluene-d8 | 8.71 | 98 | 612315 | 61.17 ug/l | 0.00 |
| Spiked Amount 50.000 | | | Recovery = | 122.34% | |
| 62) 4-Bromofluorobenzene | 11.13 | 95 | 201846 | 47.77 ug/l | 0.00 |
| Spiked Amount 50.000 | | | Recovery = | 95.54% | |

| Target Compounds | R.T. | QIon | Response | Conc Units | Qvalue |
|---|---|---|---|---|---|
| 5) Bromomethane | 1.64 | 94 | 378 | 0.255 ug/l # | 30 |
| 11) Tert butyl alcohol | 3.01 | 59 | 4787 | 5.875 ug/l # | 88 |
| 13) Acrolein | 2.28 | 56 | 853 | 15.420 ug/l # | 57 |
| 16) Acetone | 2.43 | 43 | 8722 | 5.223 ug/l | 92 |
| 18) Methyl Acetate | 2.77 | 43 | 4131 | 0.798 ug/l | 97 |
| 20) Methylene Chloride | 2.85 | 84 | 4352 | 1.241 ug/l # | 83 |
| 25) 2-Butanone | 4.68 | 43 | 1258 | 0.480 ug/l # | 72 |
| 31) Cyclohexane | 5.66 | 56 | 7054 | 1.432 ug/l # | 7 |
| 36) 1,1-Dichloropropene | 5.65 | 75 | 21734 | 5.175 ug/l # | 53 |
| 38) Carbon Tetrachloride | 5.65 | 117 | 31628 | 6.836 ug/l # | 15 |
| 43) Isopropyl Acetate | 6.44 | 43 | 60160 | 7.981 ug/l | 98 |
| 48) Methyl methacrylate | 7.68 | 41 | 3209 | 0.860 ug/l # | 22 |
| 49) 1,4-Dioxane | 7.74 | 88 | 78 | 0.786 ug/l # | 1 |
| 51) 4-Methyl-2-Pentanone | 8.61 | 43 | 56765 | 11.505 ug/l # | 50 |
| 54) cis-1,3-Dichloropropene | 8.61 | 75 | 26086 | 5.289 ug/l # | 65 |
| 59) 2-Hexanone | 9.54 | 43 | 66173 | 17.392 ug/l # | 50 |
| 71) Bromoform | 10.87 | 173 | 91 | 3.314 ug/l # | 28 |
| 74) N-amyl acetate | 10.82 | 43 | 2161 | 0.340 ug/l # | 49 |
| 76) 1,2,3-Trichloropropane | 11.13 | 75 | 101514 | 23.212 ug/l # | 36 |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75 | 101514 | 61.723 ug/l # | 11 |

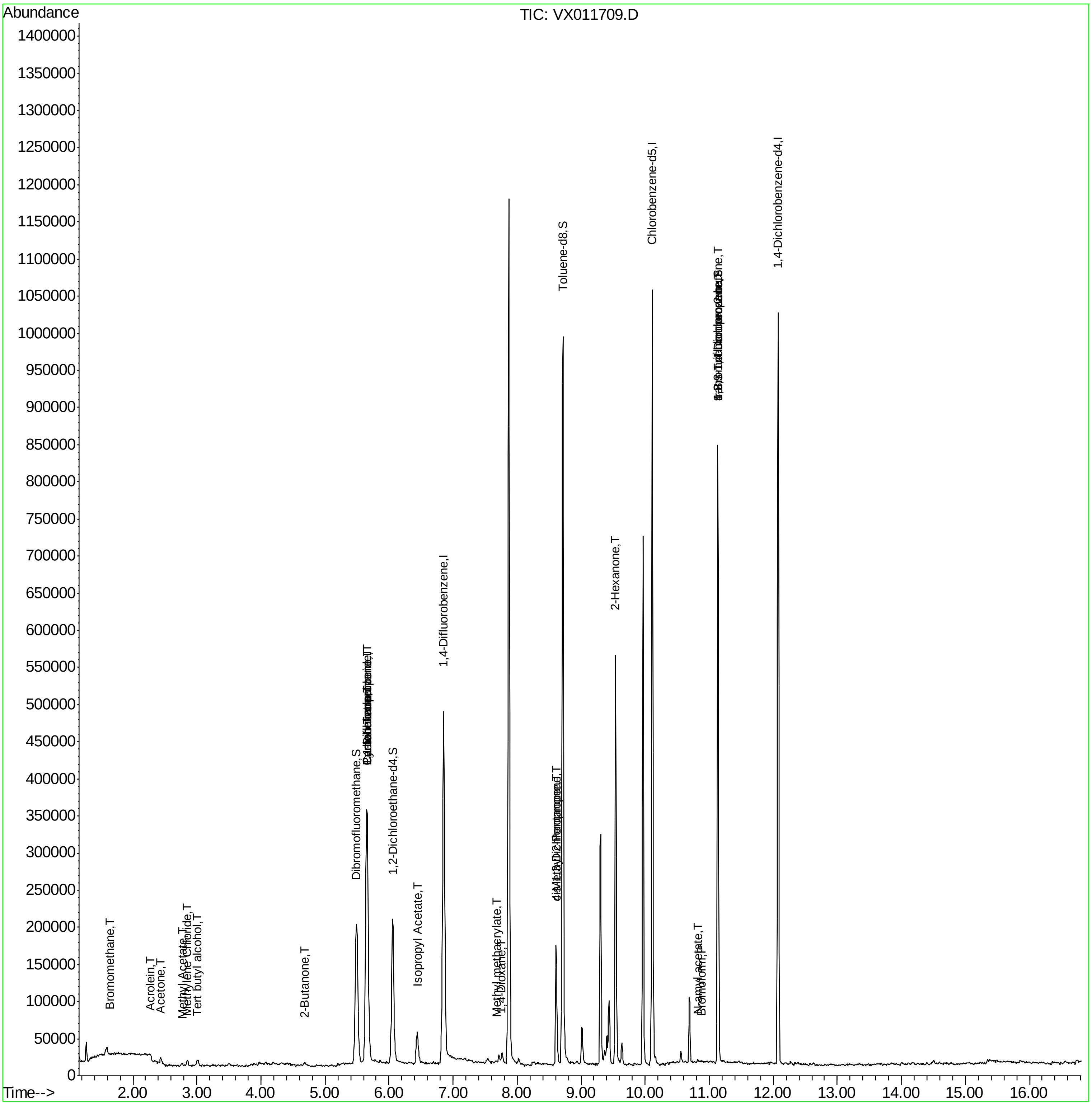
(#) = qualifier out of range (m) = manual integration (+) = signals summed

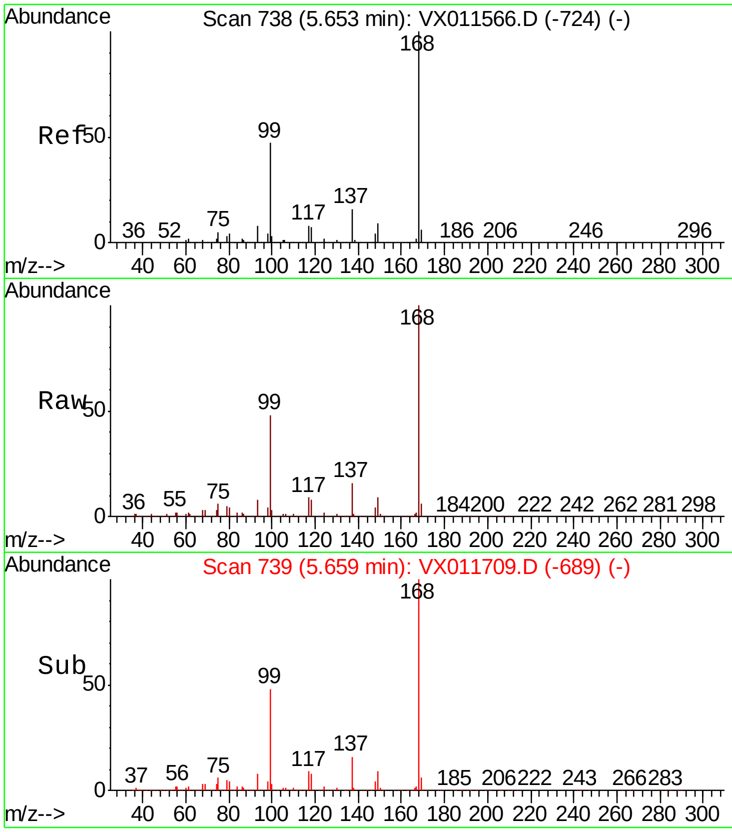
Quantitation Report    (Not Reviewed)

```
Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX082019\
Data File : VX011709.D
Acq On    : 21 Aug 2019  01:35
Operator  : JC/SP
Sample    : K4387-33
Misc      : 5.0mL/MSVOA_X/WATER
ALS Vial  : 42   Sample Multiplier: 1

Quant Time: Aug 21 05:30:20 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X081519W.M
Quant Title  : SW846 8260
QLast Update : Fri Aug 16 04:15:26 2019
Response via : Initial Calibration
```

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)



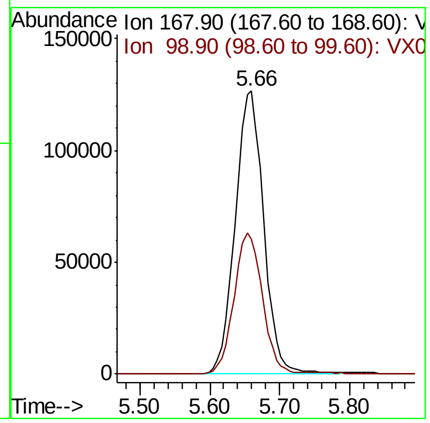


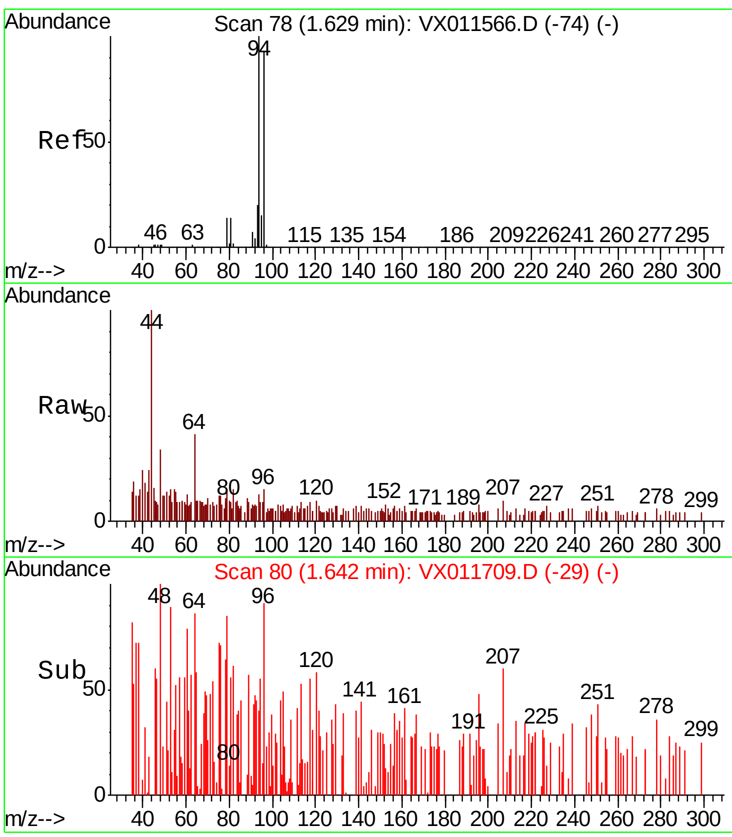

#1
Pentafluorobenzene
Concen:   50.000 ug/l
RT: 5.66 min  Scan# 739
Delta R.T.   0.01 min
Lab File:   VX011709.D
Acq: 21 Aug 2019  01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion:168 Resp:  358139

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 47.7 | 37.3 | 55.9 |

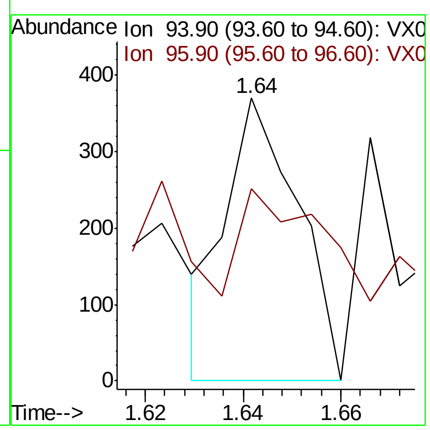



#5
Bromomethane
Concen:   0.255 ug/l
RT: 1.64 min  Scan# 80
Delta R.T.   0.01 min
Lab File:   VX011709.D
Acq: 21 Aug 2019  01:35

Tgt Ion: 94 Resp:     378

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 25.7 | 74.8 | 112.2# |

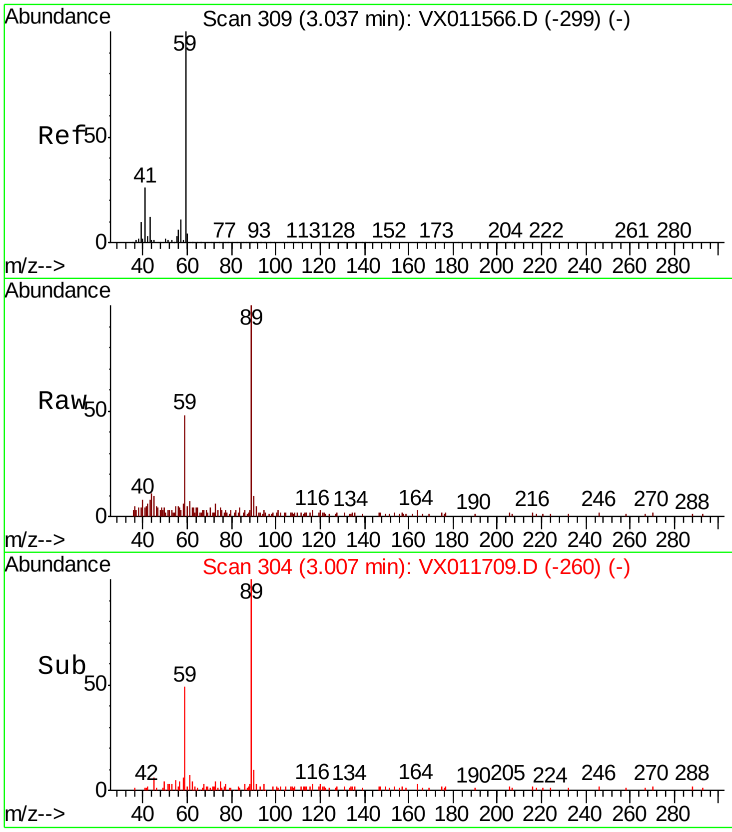


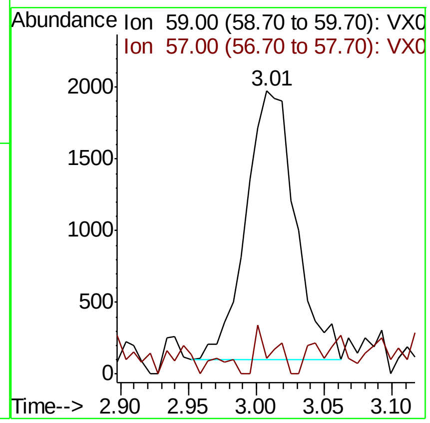
**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

#11
Tert butyl alcohol
Concen:    5.875 ug/l
RT: 3.01 min   Scan# 304
Delta R.T.    -0.03 min
Lab File:   VX011709.D
Acq: 21 Aug 2019   01:35

Tgt Ion: 59 Resp:     4787

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 6.5 | 8.7 | 13.1# |

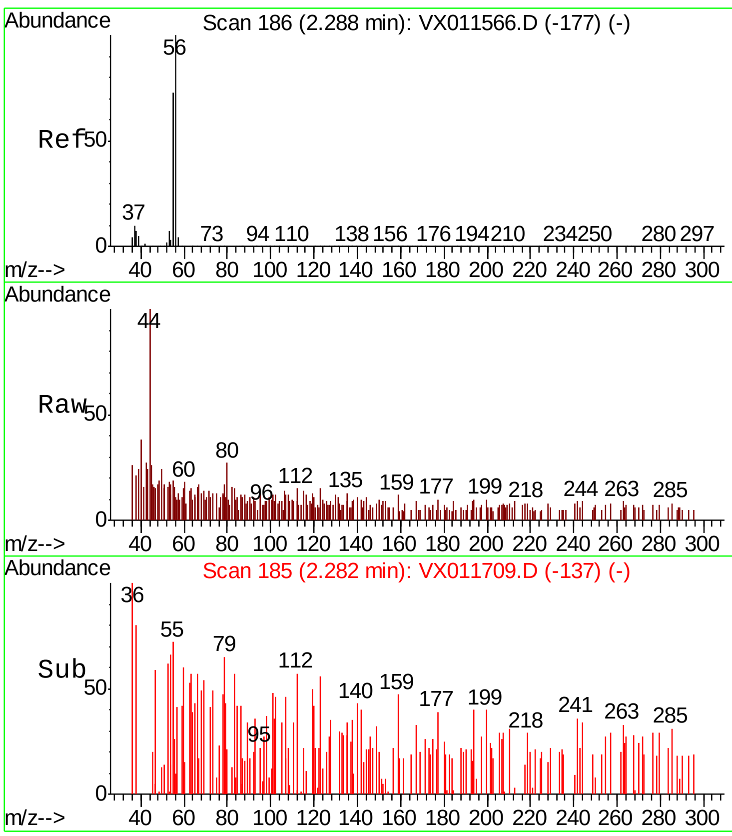


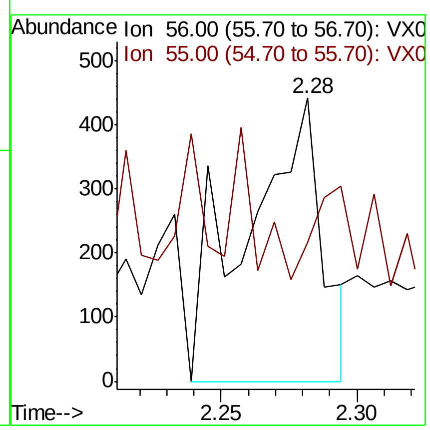



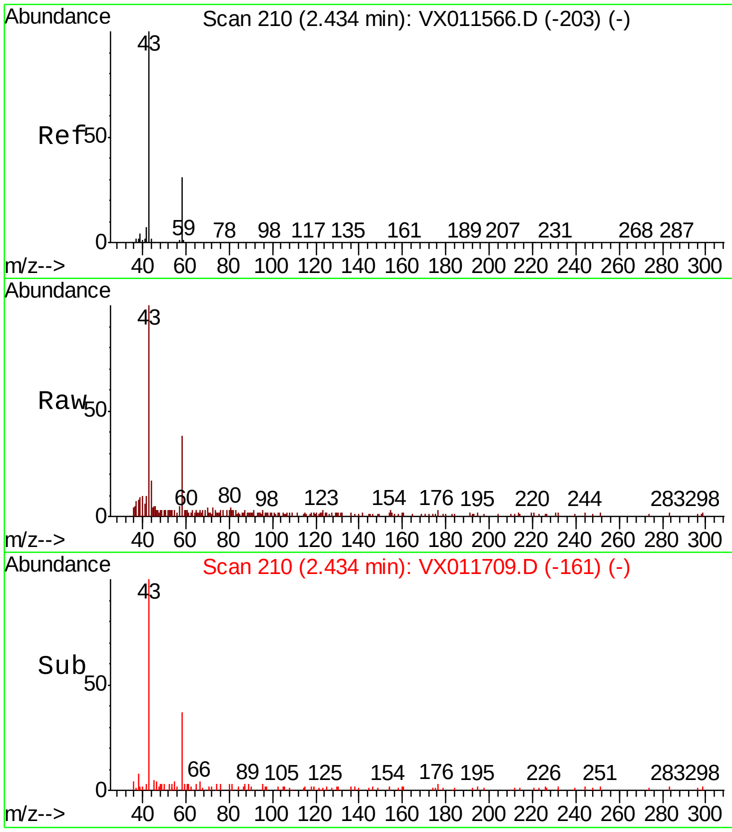

#13
Acrolein
Concen:   15.420 ug/l
RT: 2.28 min   Scan# 185
Delta R.T.    -0.01 min
Lab File:   VX011709.D
Acq: 21 Aug 2019   01:35

Tgt Ion: 56 Resp:      853

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 34.2 | 55.5 | 83.3# |



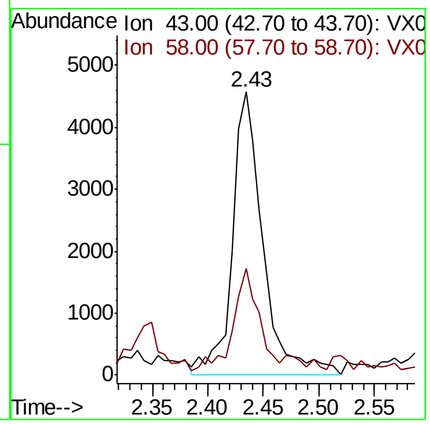


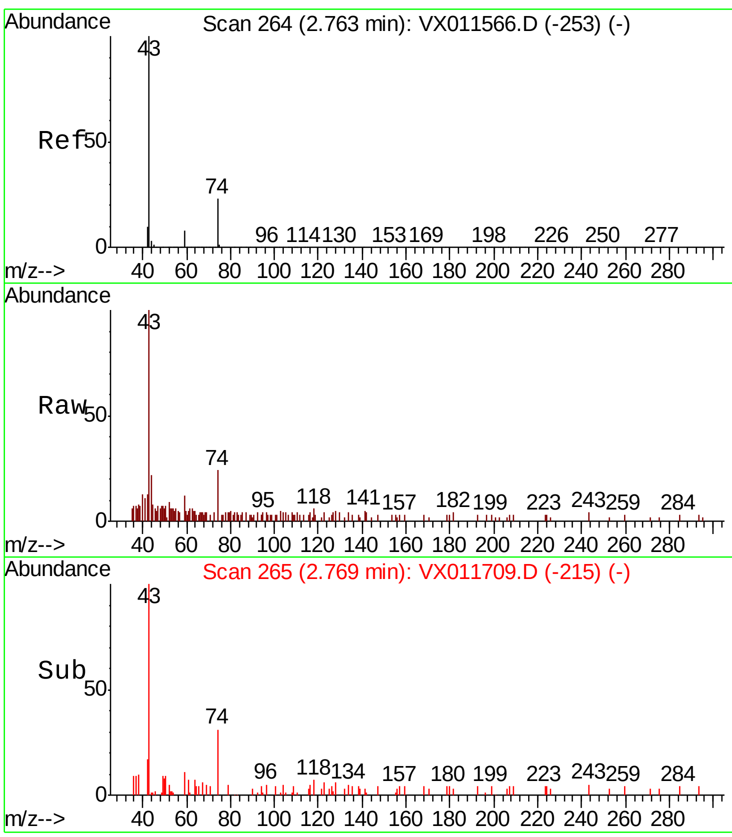

#16
Acetone
Concen:    5.223 ug/l
RT: 2.43 min  Scan# 210
Delta R.T.   0.00 min
Lab File:   VX011709.D
Acq: 21 Aug 2019  01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 43 Resp:    8722

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 35.9 | 25.2 | 37.8 |

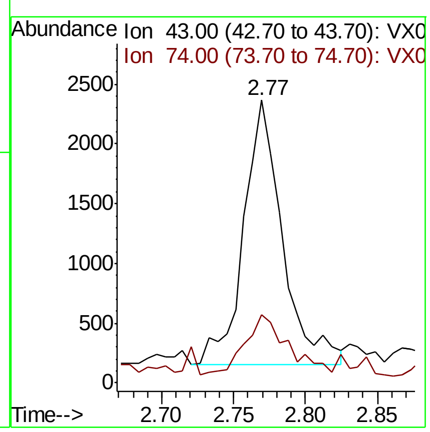


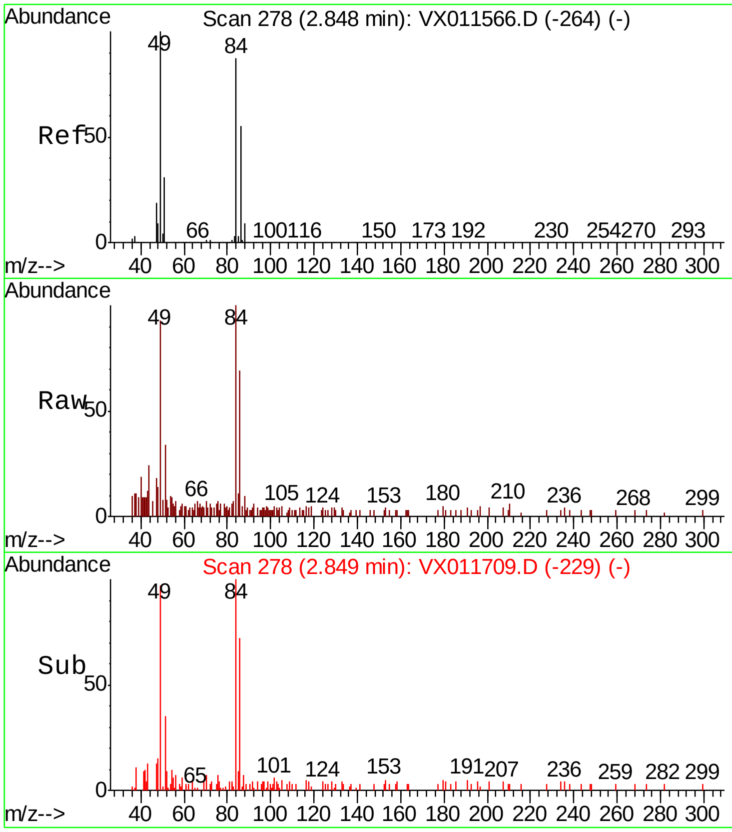




#18
Methyl Acetate
Concen:    0.798 ug/l
RT: 2.77 min  Scan# 265
Delta R.T.   0.01 min
Lab File:   VX011709.D
Acq: 21 Aug 2019  01:35

Tgt Ion: 43 Resp:    4131

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 74 | 26.2 | 19.7 | 29.5 |



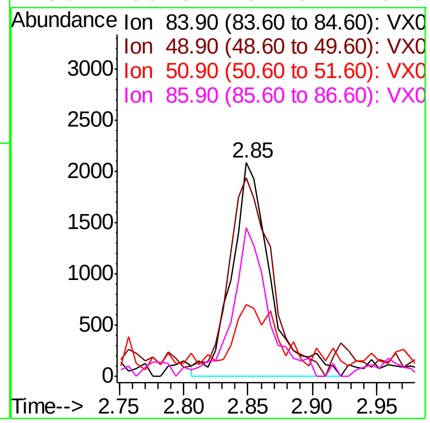


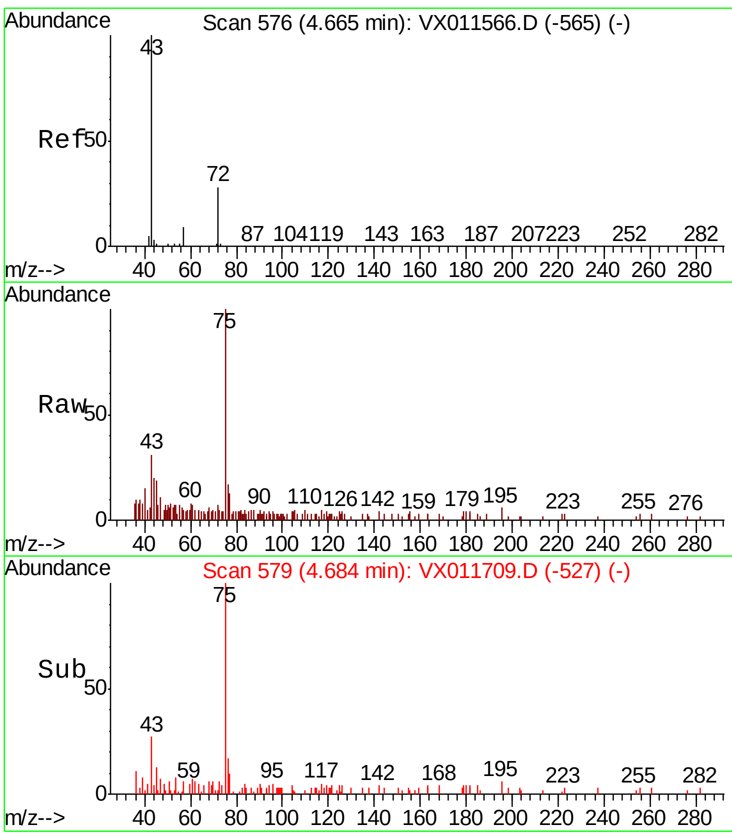

#20
Methylene Chloride
Concen:    1.241 ug/l
RT: 2.85 min   Scan# 278
Delta R.T.    0.00 min
Lab File:    VX011709.D
Acq: 21 Aug 2019   01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 84 Resp:    4352

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 87.8 | 92.4 | 138.6# |
| 51 | 26.6 | 28.5 | 42.7# |
| 86 | 66.3 | 51.0 | 76.6 |

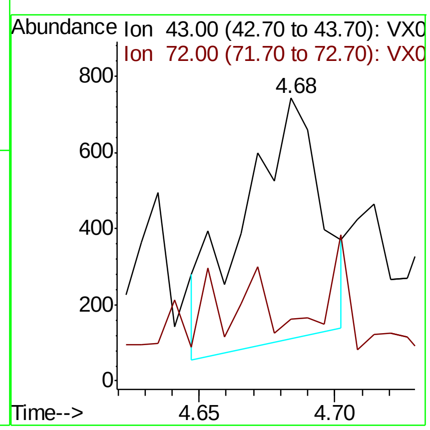


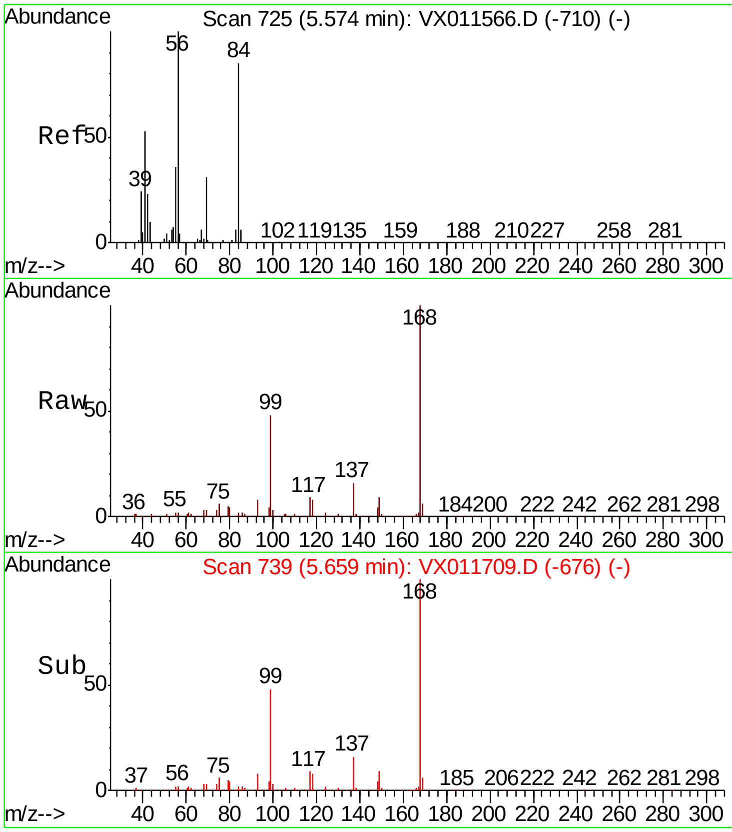




#25
2-Butanone
Concen:    0.480 ug/l
RT: 4.68 min   Scan# 579
Delta R.T.    0.02 min
Lab File:    VX011709.D
Acq: 21 Aug 2019   01:35

Tgt Ion: 43 Resp:    1258

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 42.7 | 22.2 | 33.4# |



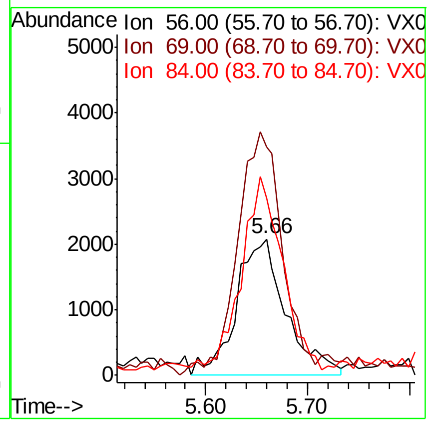


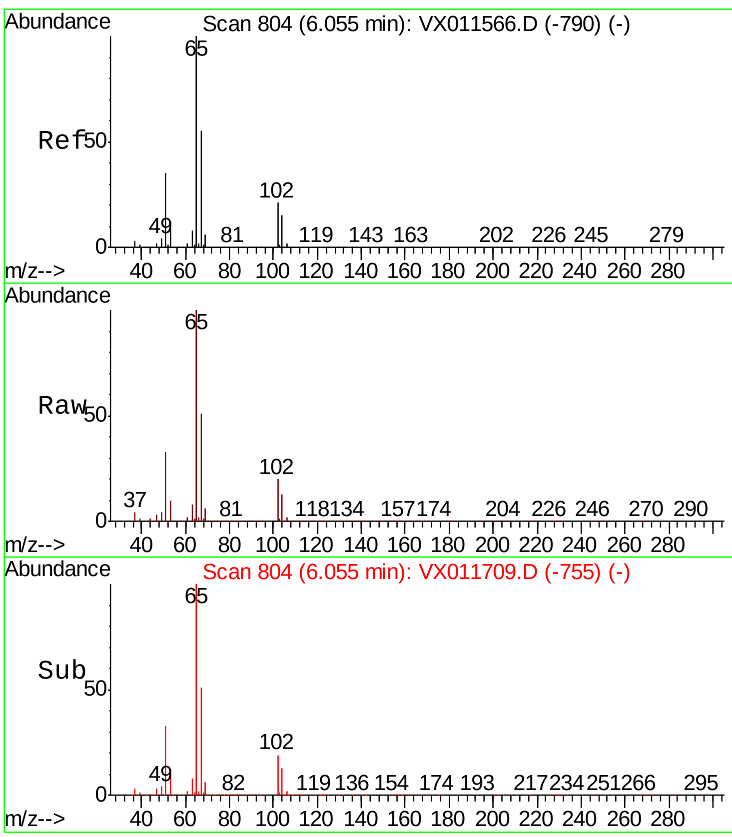

#31
Cyclohexane
Concen:    1.432 ug/l
RT: 5.66 min   Scan# 739
Delta R.T.    0.09 min
Lab File:    VX011709.D
Acq: 21 Aug 2019   01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 56 Resp:    7054

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 69 | 158.7 | 24.8 | 37.2# |
| 84 | 123.3 | 67.9 | 101.9# |

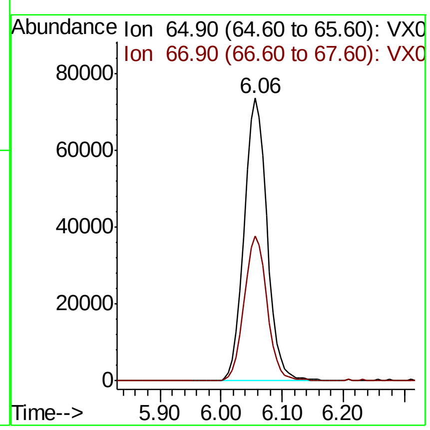


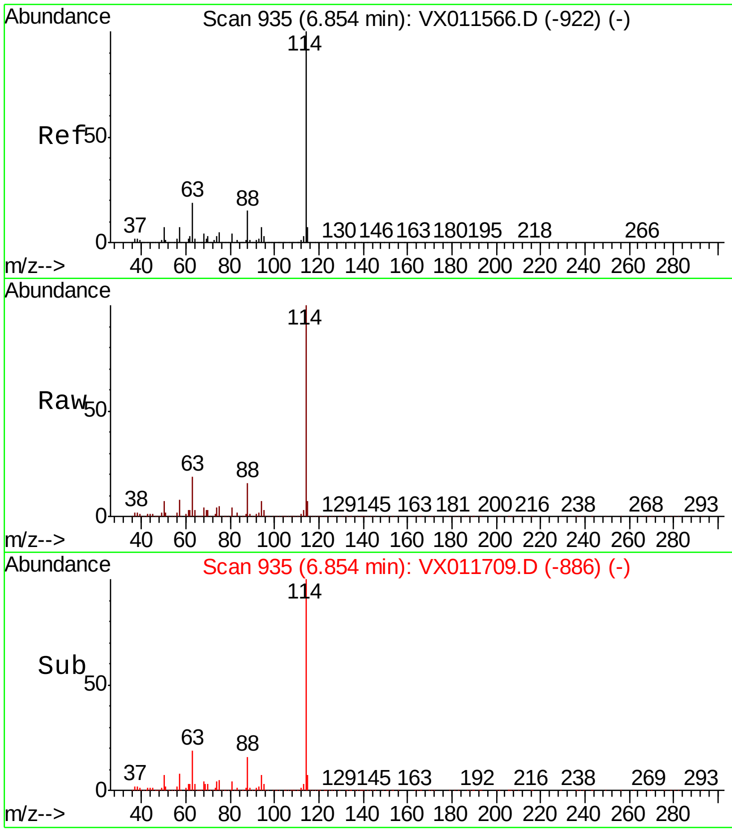




#33
1,2-Dichloroethane-d4
Concen:   57.732 ug/l
RT: 6.06 min   Scan# 804
Delta R.T.    0.00 min
Lab File:    VX011709.D
Acq: 21 Aug 2019   01:35

Tgt Ion: 65 Resp:   191743

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.4 | 0.0 | 107.6 |



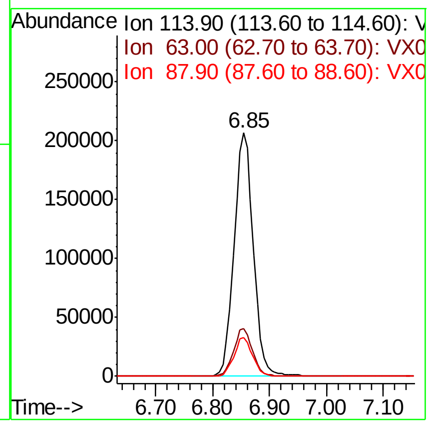


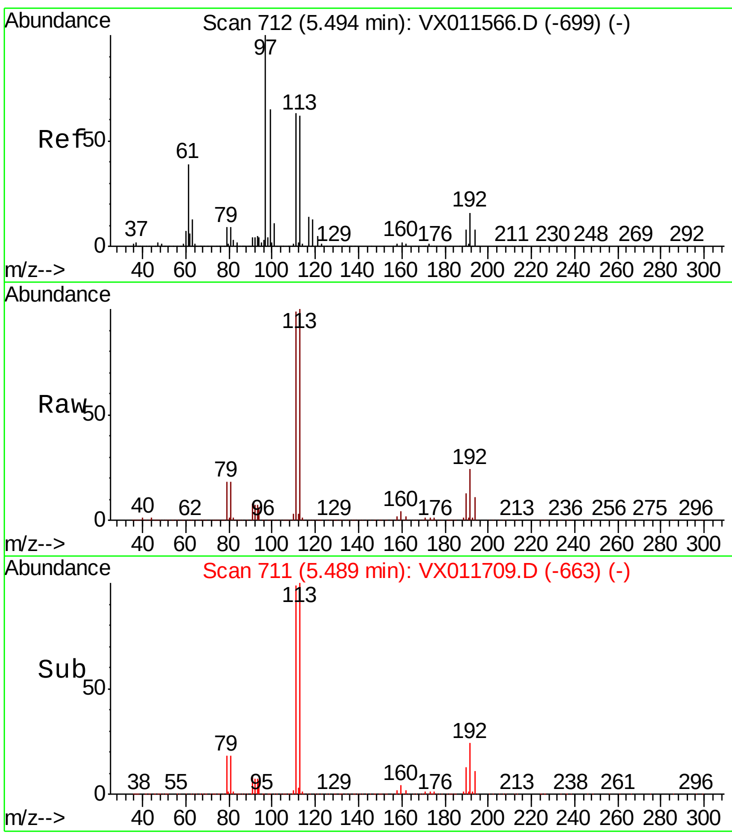

#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.85 min Scan# 935
Delta R.T. 0.00 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion:114 Resp: 491173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 19.3 | 0.0 | 37.8 |
| 88 | 15.9 | 0.0 | 30.2 |

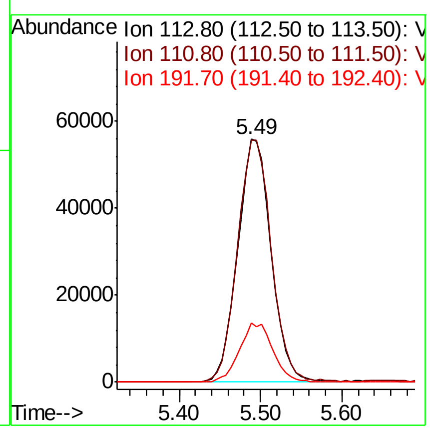


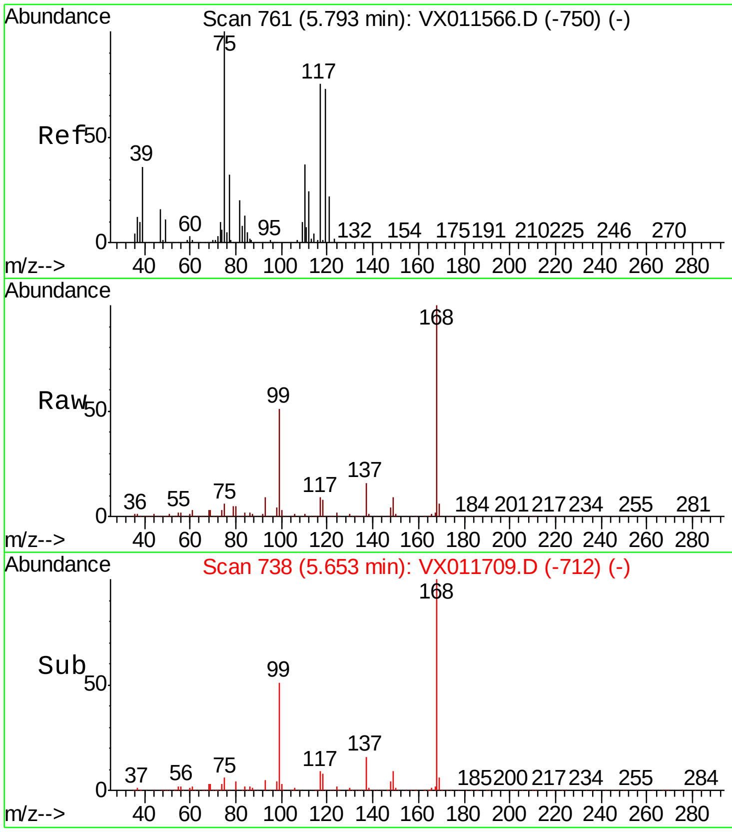




#35
Dibromofluoromethane
Concen: 49.441 ug/l
RT: 5.49 min Scan# 711
Delta R.T. -0.01 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion:113 Resp: 158834

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.6 | 81.1 | 121.7 |
| 192 | 24.2 | 20.8 | 31.2 |



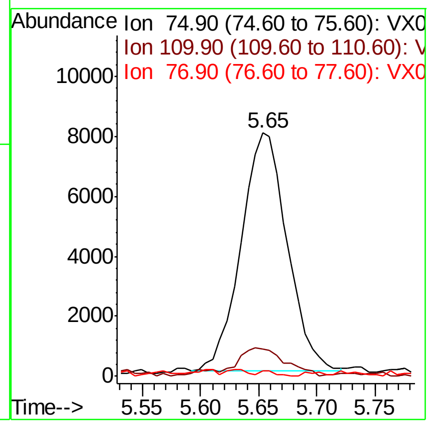


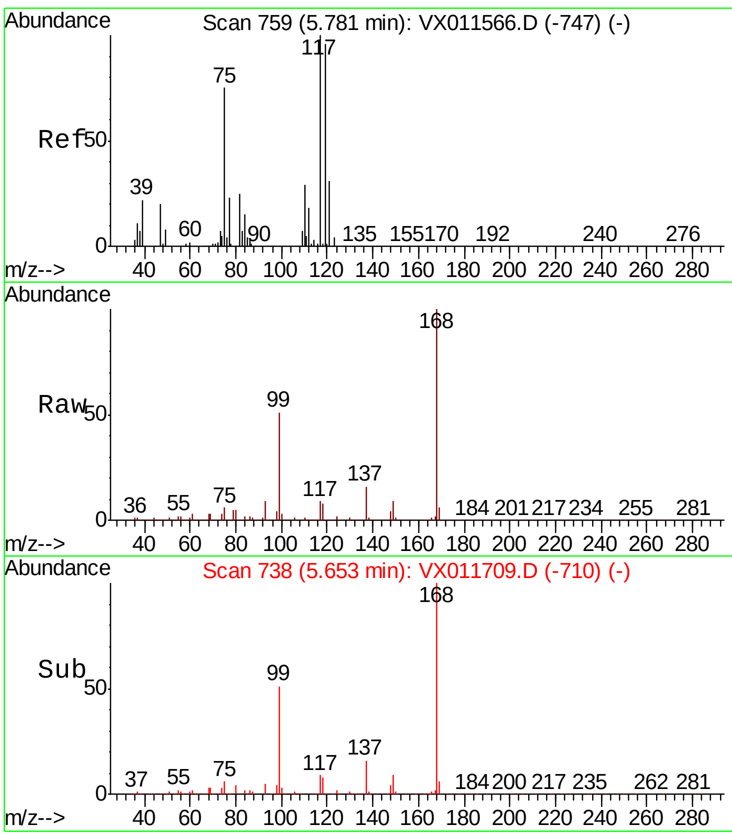

#36
1,1-Dichloropropene
Concen:    5.175 ug/l
RT: 5.65 min   Scan# 738
Delta R.T.    -0.14 min
Lab File:    VX011709.D
Acq: 21 Aug 2019   01:35

**Instrument :** MSVOA_X
**ClientSampleId :** T4-A4-(0)

Tgt Ion: 75 Resp:    21734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 13.7 | 19.4 | 58.1# |
| 77 | 0.8 | 25.1 | 37.7# |

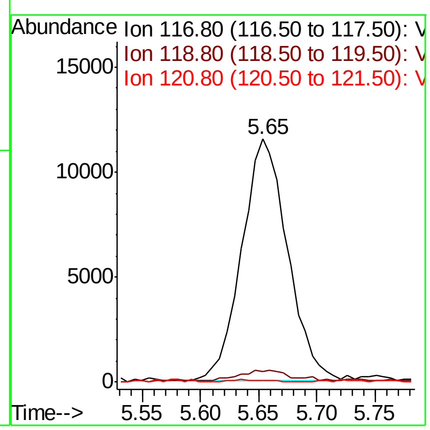


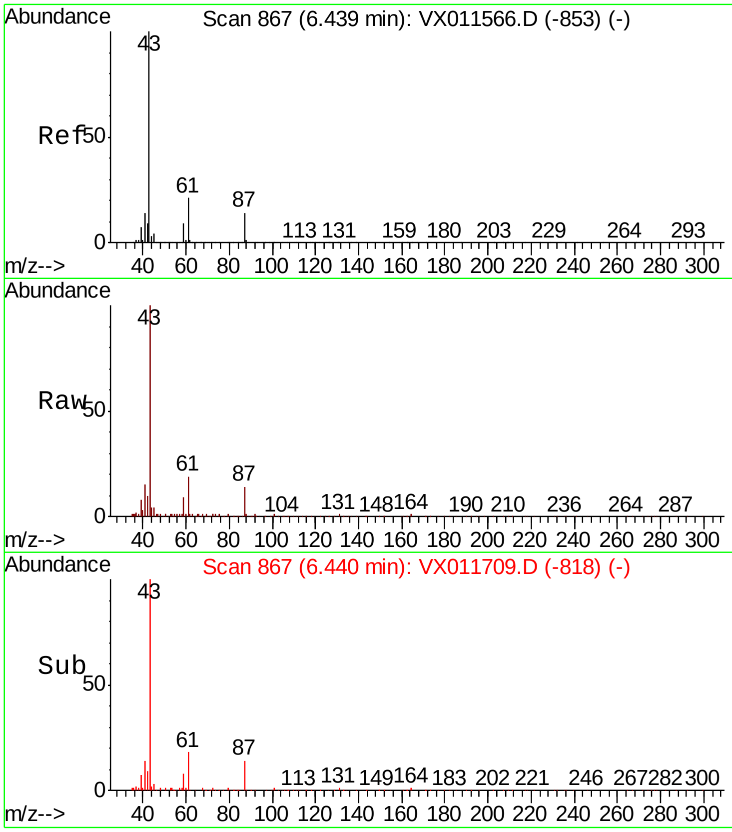




#38
Carbon Tetrachloride
Concen:    6.836 ug/l
RT: 5.65 min   Scan# 738
Delta R.T.    -0.13 min
Lab File:    VX011709.D
Acq: 21 Aug 2019   01:35

Tgt Ion:117 Resp:    31628

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 3.7 | 76.9 | 115.3# |
| 121 | 0.4 | 24.8 | 37.2# |



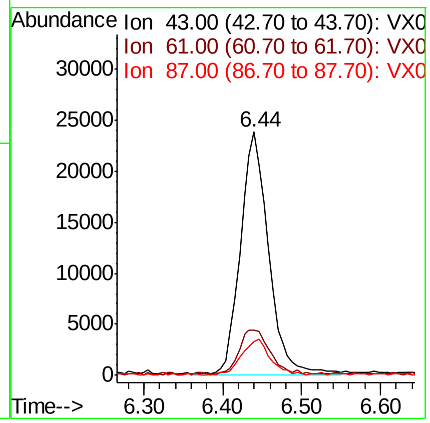


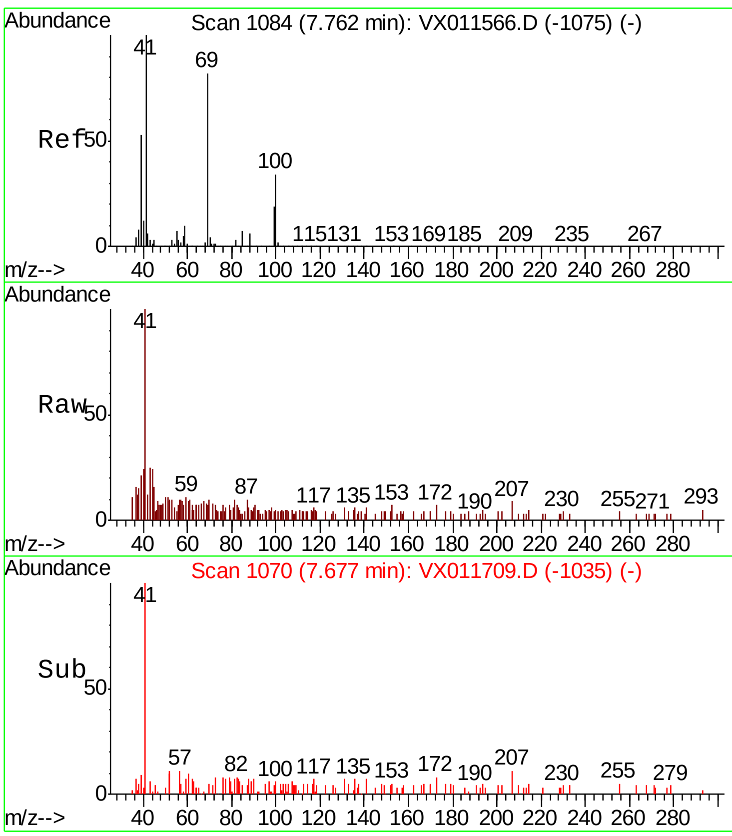

#43
Isopropyl Acetate
Concen: 7.981 ug/l
RT: 6.44 min Scan# 867
Delta R.T. 0.00 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 43 Resp: 60160

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 19.8 | 16.6 | 24.8 |
| 87 | 15.0 | 11.4 | 17.2 |

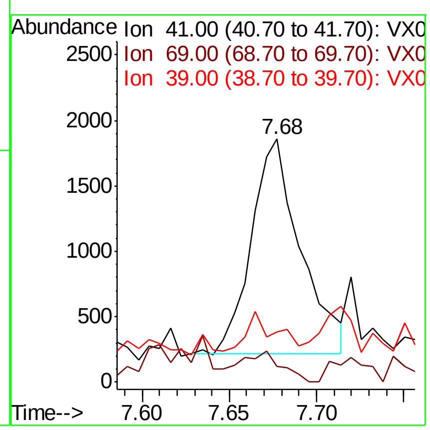


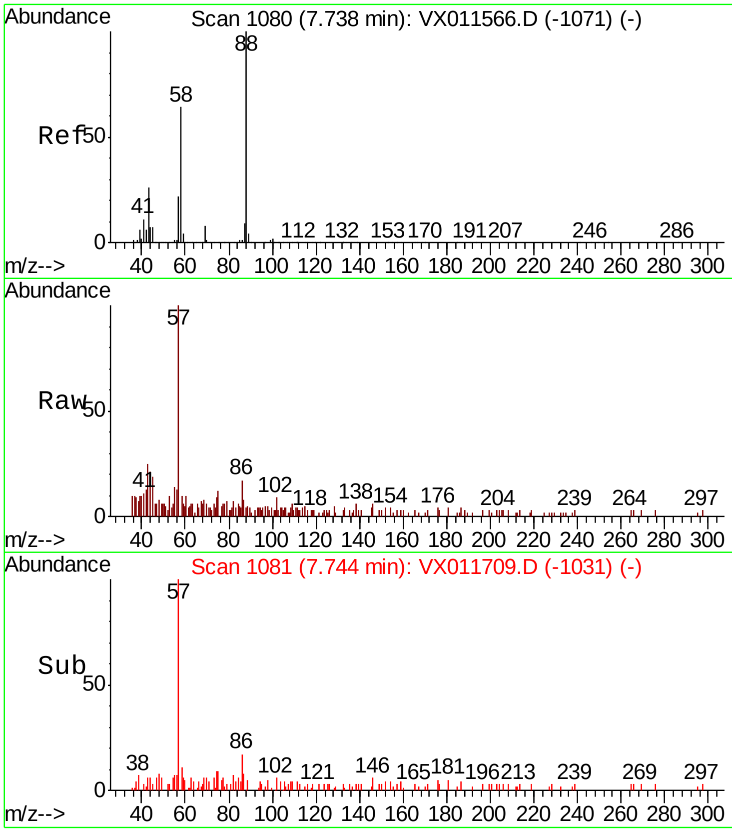




#48
Methyl methacrylate
Concen: 0.860 ug/l
RT: 7.68 min Scan# 1070
Delta R.T. -0.09 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion: 41 Resp: 3209

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 11.9 | 67.9 | 101.9# |
| 39 | 0.0 | 41.6 | 62.4# |



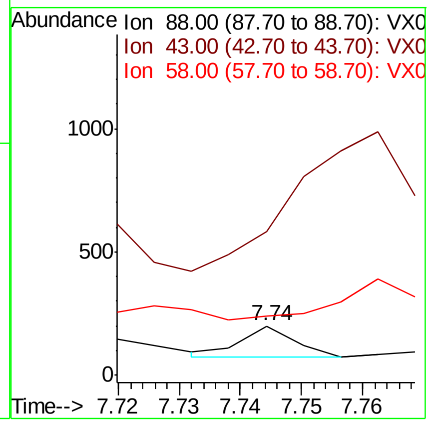


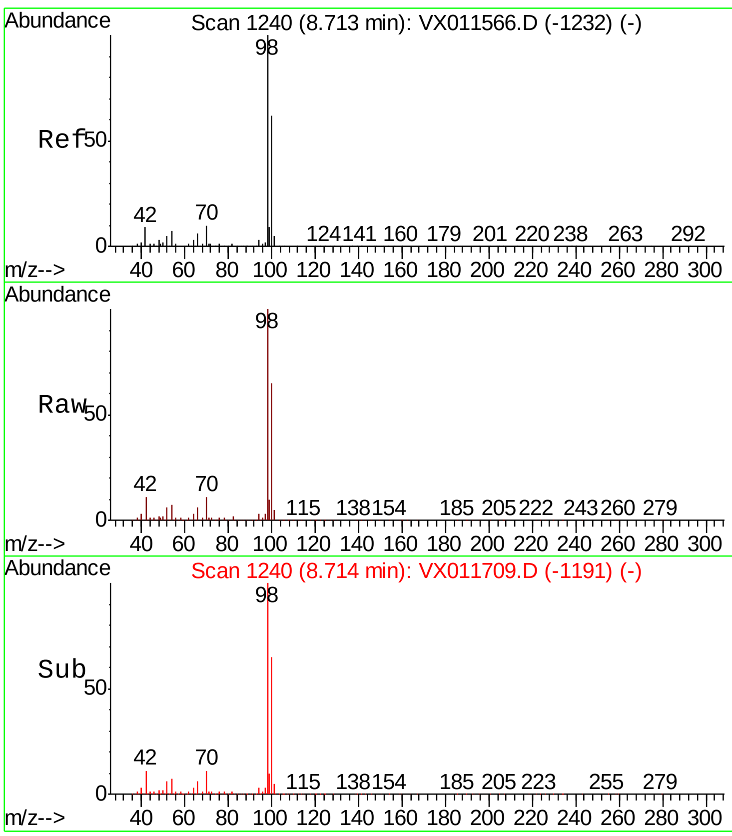

#49
1,4-Dioxane
Concen: 0.786 ug/l
RT: 7.74 min Scan# 1081
Delta R.T. 0.01 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 88 Resp: 78

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 23.4 | 35.0# |
| 58 | 1275.6 | 54.3 | 81.5# |

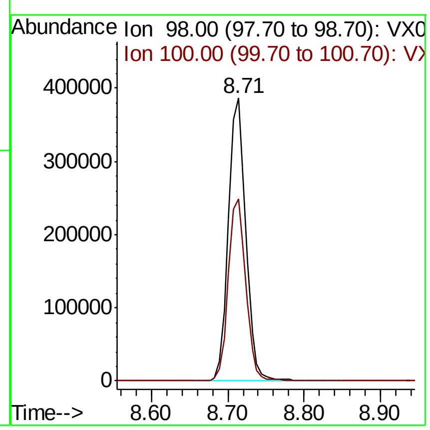


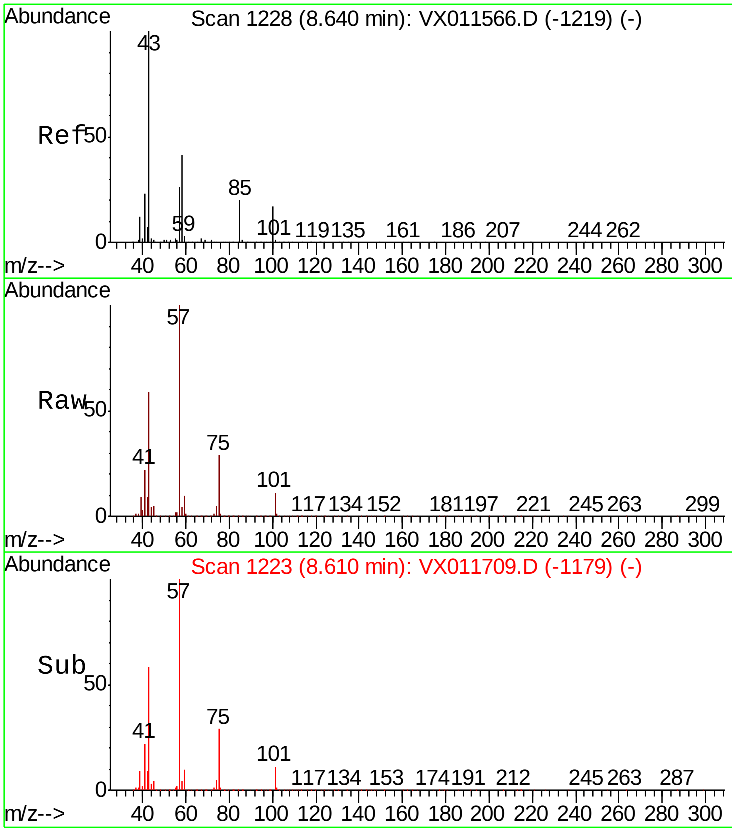




#50
Toluene-d8
Concen: 61.170 ug/l
RT: 8.71 min Scan# 1240
Delta R.T. 0.00 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion: 98 Resp: 612315

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 64.8 | 52.4 | 78.6 |



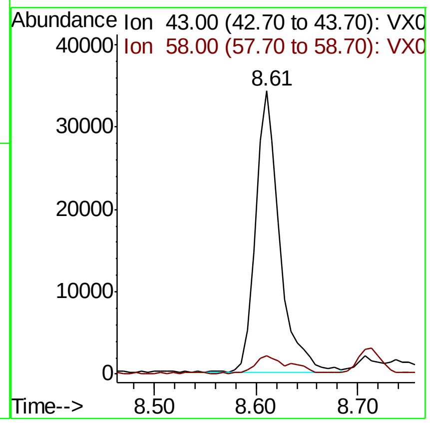


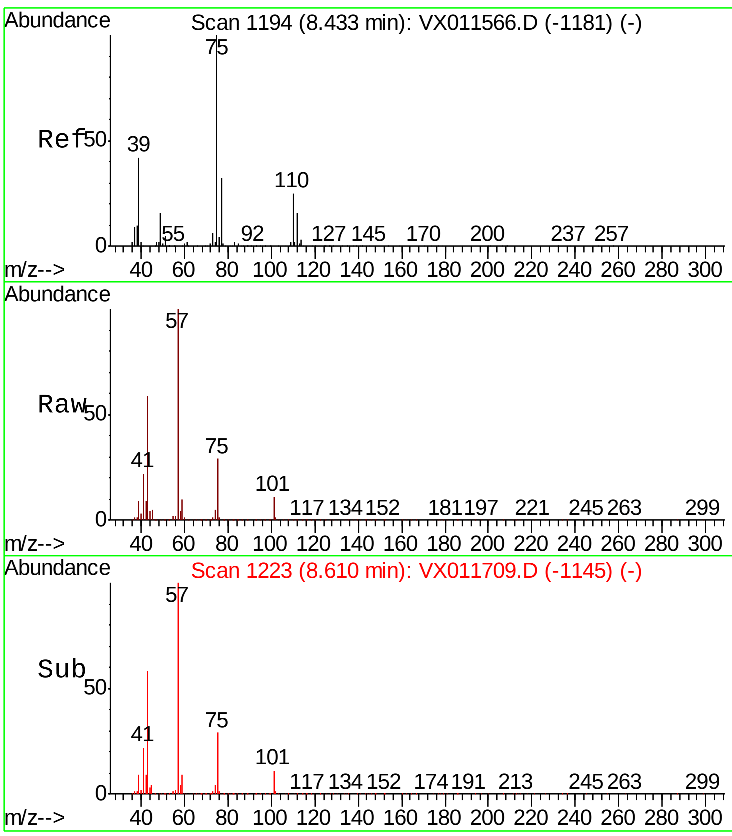

#51
4-Methyl-2-Pentanone
Concen: 11.505 ug/l
RT: 8.61 min Scan# 1223
Delta R.T. -0.03 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 43 Resp: 56765

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 8.9 | 31.8 | 47.6# |

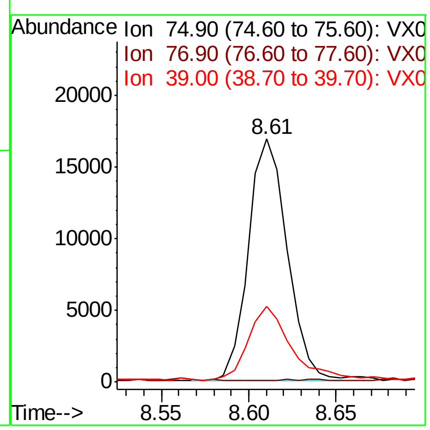


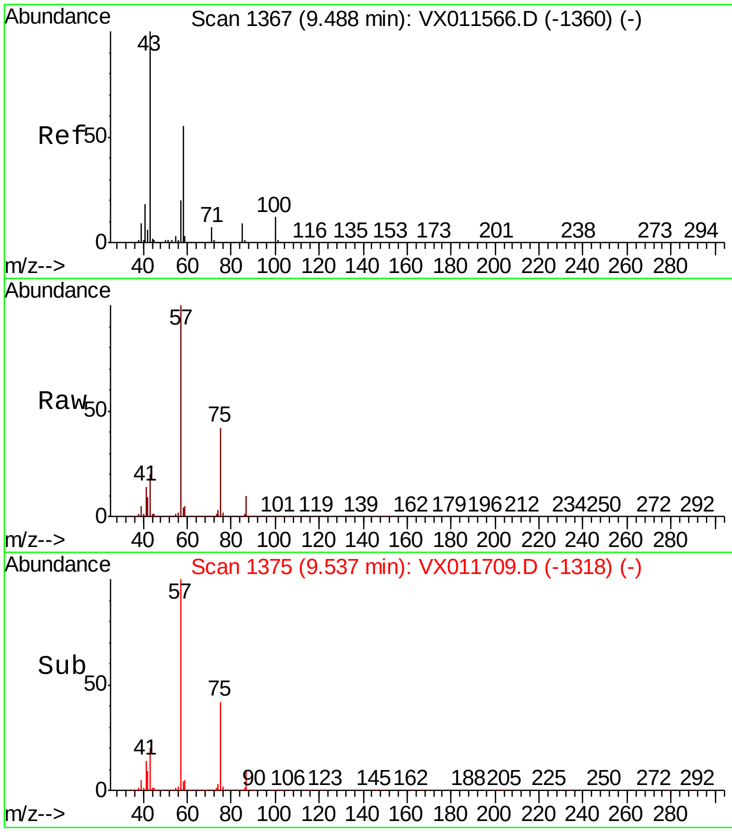




#54
cis-1,3-Dichloropropene
Concen: 5.289 ug/l
RT: 8.61 min Scan# 1223
Delta R.T. 0.18 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion: 75 Resp: 26086

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 0.9 | 25.5 | 38.3# |
| 39 | 30.4 | 33.6 | 50.4# |



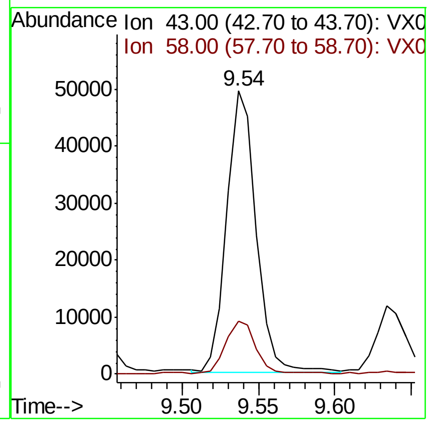


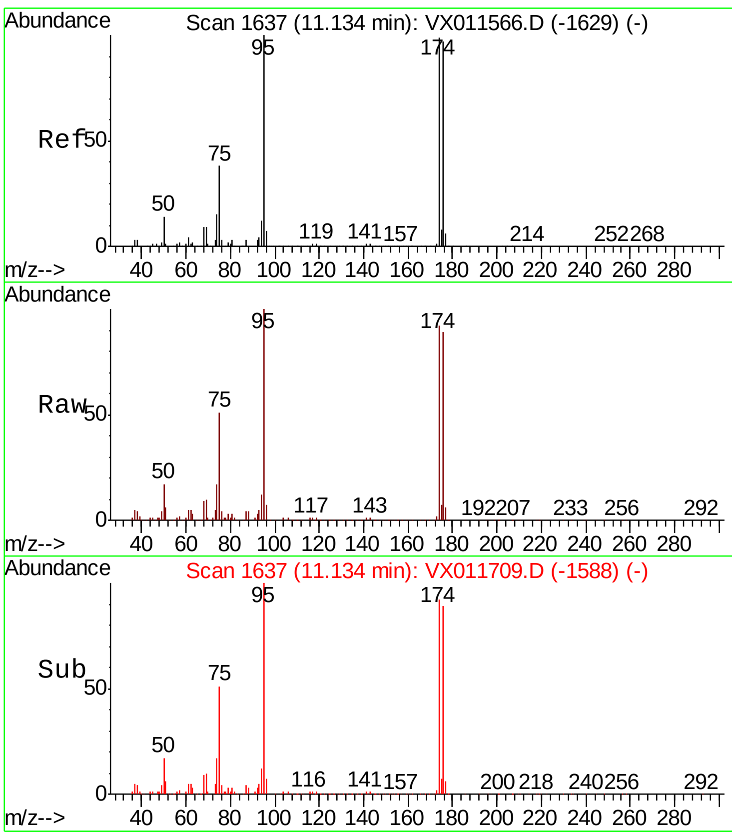

#59
2-Hexanone
Concen: 17.392 ug/l
RT: 9.54 min Scan# 1375
Delta R.T. 0.05 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 43 Resp: 66173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 18.6 | 27.5 | 82.4# |

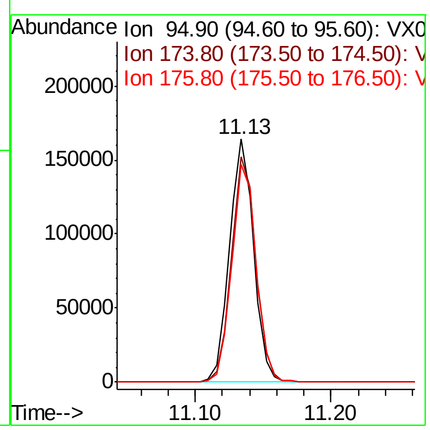


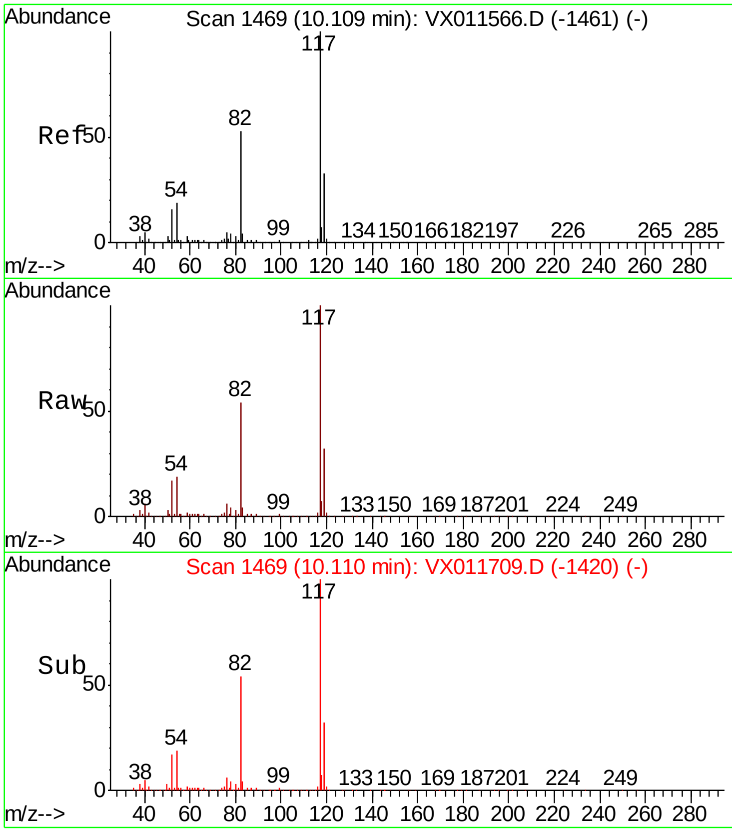



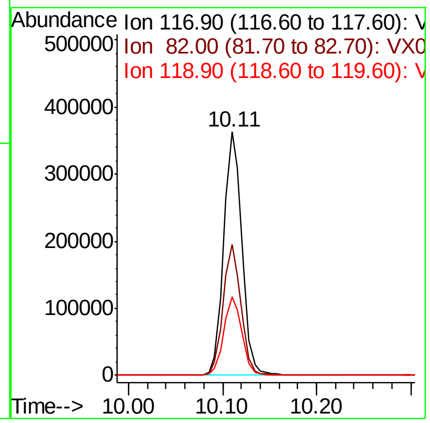

#62
4-Bromofluorobenzene
Concen: 47.774 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion: 95 Resp: 201846

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 94.1 | 0.0 | 200.6 |
| 176 | 90.9 | 0.0 | 196.6 |





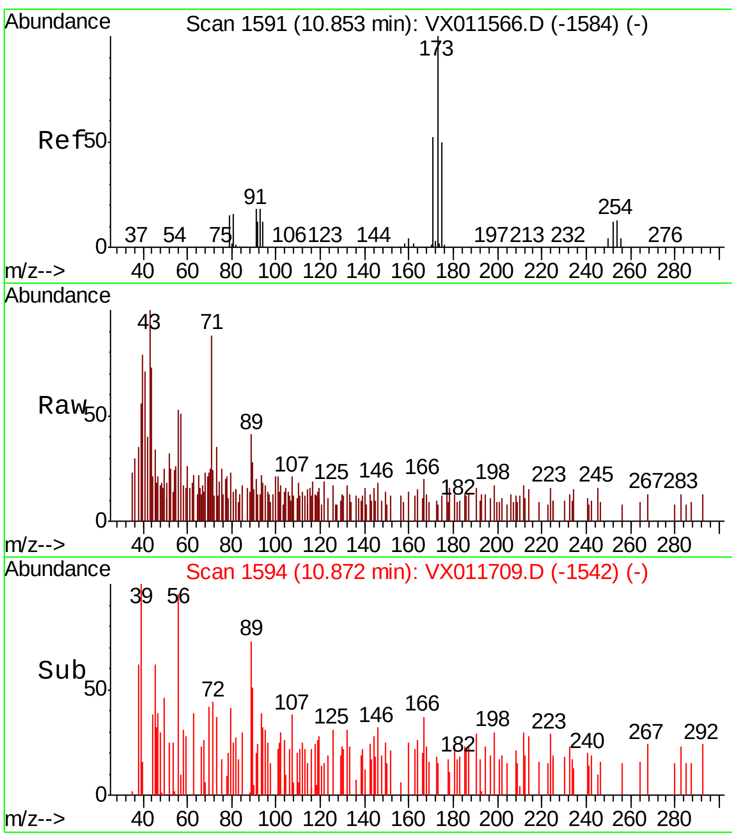



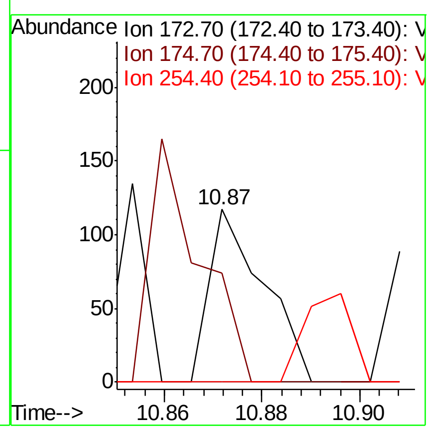

#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1469
Delta R.T. 0.00 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion:117 Resp: 486874

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 53.6 | 42.0 | 63.0 |
| 119 | 32.2 | 26.5 | 39.7 |

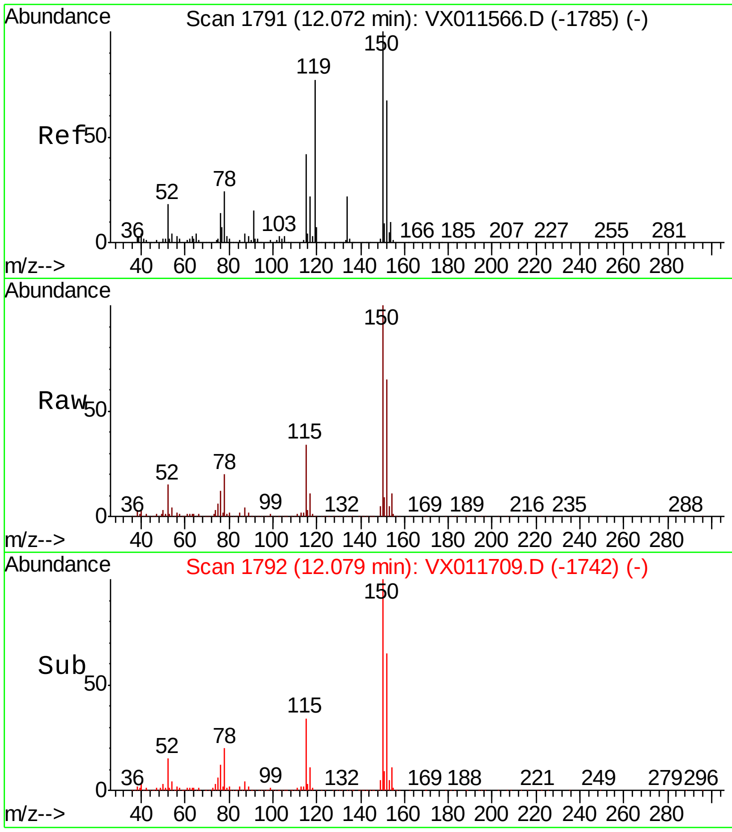



#71
Bromoform
Concen: 3.314 ug/l
RT: 10.87 min Scan# 1594
Delta R.T. 0.02 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion:173 Resp: 91

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 173 | 100 | | |
| 175 | 0.0 | 24.9 | 74.7# |
| 254 | 0.0 | 0.1 | 0.1# |

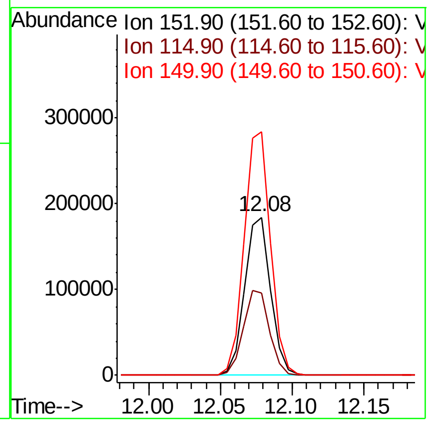


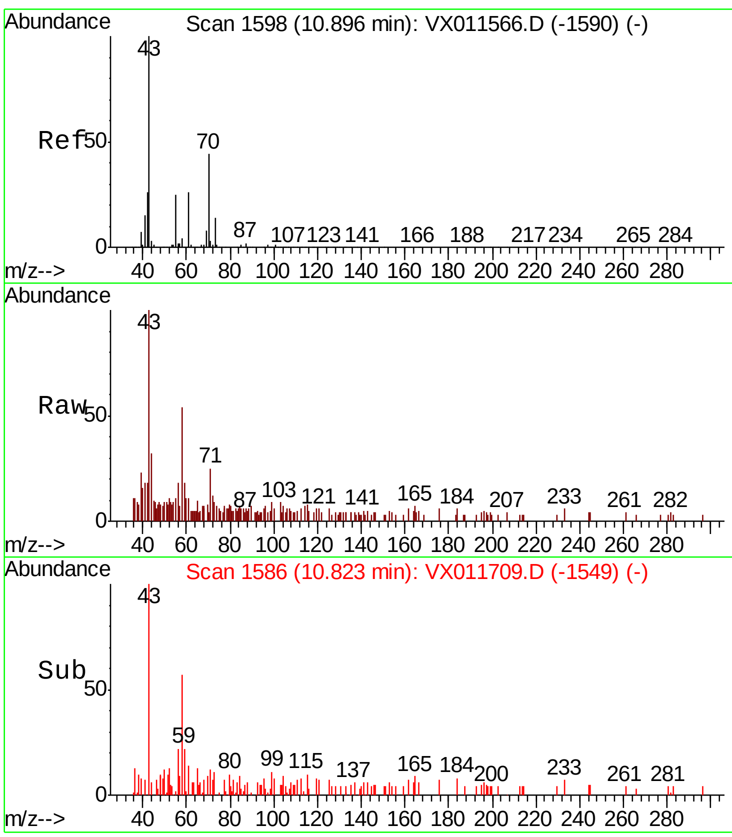

#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. 0.01 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion:152 Resp: 230638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 54.1 | 37.3 | 111.9 |
| 150 | 155.7 | 0.0 | 346.2 |

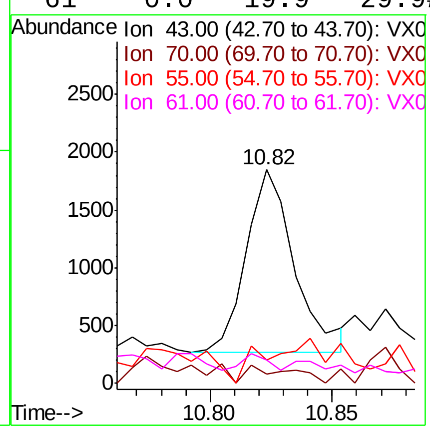


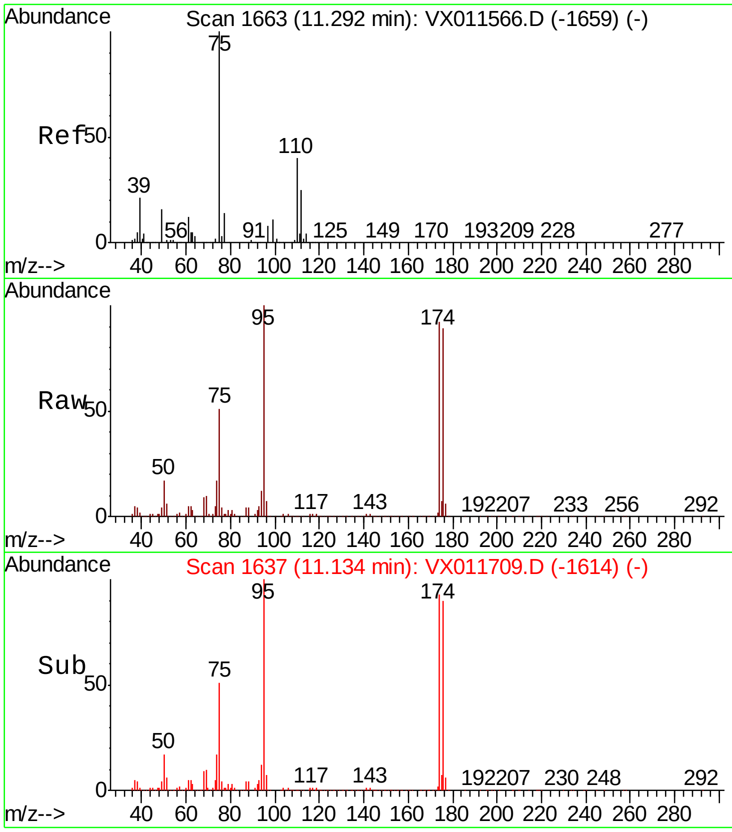




#74
N-amyl acetate
Concen: 0.340 ug/l
RT: 10.82 min Scan# 1586
Delta R.T. -0.07 min
Lab File: VX011709.D
Acq: 21 Aug 2019 01:35

Tgt Ion: 43 Resp: 2161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 9.1 | 34.7 | 52.1# |
| 55 | 0.0 | 19.6 | 29.4# |
| 61 | 0.0 | 19.9 | 29.9# |



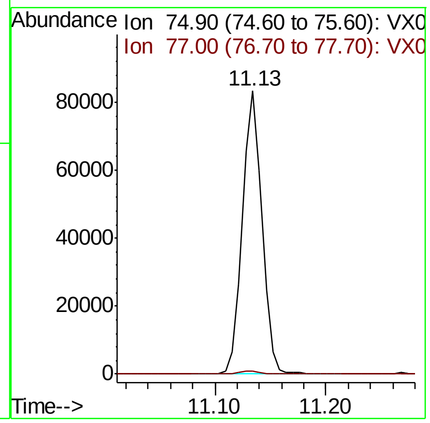


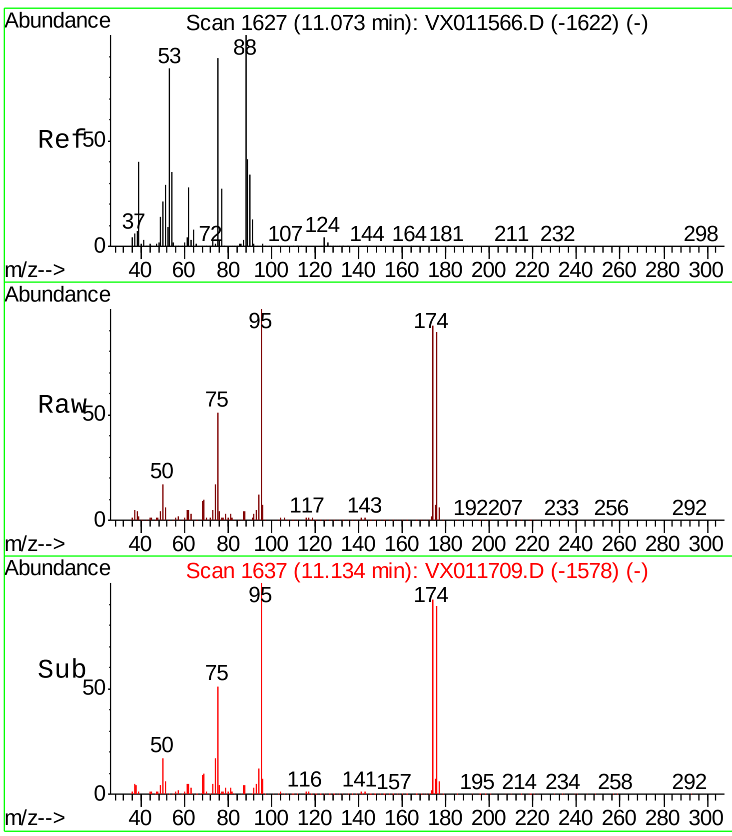

#76
1,2,3-Trichloropropane
Concen:   23.212 ug/l
RT: 11.13 min   Scan# 1637
Delta R.T.   -0.16 min
Lab File:   VX011709.D
Acq: 21 Aug 2019   01:35

**Instrument :**
MSVOA_X
**ClientSampleId :**
T4-A4-(0)

Tgt Ion: 75 Resp:   101514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 1.2 | 20.9 | 62.8# |




#81
trans-1,4-Dichloro-2-butene
Concen:   61.723 ug/l
RT: 11.13 min   Scan# 1637
Delta R.T.   0.06 min
Lab File:   VX011709.D
Acq: 21 Aug 2019   01:35

Tgt Ion: 75 Resp:   101514

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 0.2 | 77.4 | 116.0# |
| 89 | 0.0 | 37.3 | 55.9# |