Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110122\
Data File : VX032517.D
Acq On : 01 Nov 2022 16:45
Operator : JC/MD
Sample : N4955-07
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Quant Time: Nov 02 05:31:55 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102622W.M
Quant Title : SW846 8260
QLast Update : Thu Oct 27 08:28:06 2022
Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| **Internal Standards** | | | | | | |
| 1) Pentafluorobenzene | 5.556 | 168 | 109711 | 50.000 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 6.763 | 114 | 175095 | 50.000 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 10.055 | 117 | 155149 | 50.000 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 12.024 | 152 | 73546 | 50.000 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.958 | 65 | 73605 | 48.284 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 78 - 117 | | Recovery = | 96.560% | | |
| 35) Dibromofluoromethane | 5.391 | 113 | 59875 | 47.939 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 75 - 124 | | Recovery = | 95.880% | | |
| 50) Toluene-d8 | 8.653 | 98 | 200531 | 46.174 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 92 - 112 | | Recovery = | 92.340% | | |
| 62) 4-Bromofluorobenzene | 11.079 | 95 | 74945 | 44.177 | ug/l | 0.00 |
| Spiked Amount 50.000 | Range 83 - 123 | | Recovery = | 88.360% | | |
| **Target Compounds** | | | | | | Qvalue |
| 5) Bromomethane | 1.612 | 94 | 275 | 0.292 | ug/l | 89 |
| 10) Methyl Iodide | 2.453 | 142 | 221 | 2.079 | ug/l # | 37 |
| 11) Tert butyl alcohol | 2.953 | 59 | 520 | 2.344 | ug/l # | 72 |
| 13) Acrolein | 2.239 | 56 | 195 | 0.880 | ug/l | 84 |
| 15) Acrylonitrile | 3.075 | 53 | 412 | 0.684 | ug/l # | 82 |
| 16) Acetone | 2.386 | 43 | 547 | 0.987 | ug/l | 90 |
| 20) Methylene Chloride | 2.794 | 84 | 623 | 0.490 | ug/l | 91 |
| 23) Vinyl Acetate | 3.739 | 43 | 2146 | 0.700 | ug/l # | 72 |
| 25) 2-Butanone | 4.581 | 43 | 638 | 0.743 | ug/l # | 47 |
| 29) Tetrahydrofuran | 5.013 | 42 | 112 | 0.205 | ug/l # | 68 |
| 36) 1,1-Dichloropropene | 5.544 | 75 | 8401 | 4.830 | ug/l # | 50 |
| 38) Carbon Tetrachloride | 5.550 | 117 | 11507 | 5.965 | ug/l # | 16 |
| 41) Methacrylonitrile | 5.019 | 41 | 310 | 0.336 | ug/l # | 34 |
| 42) 1,2-Dichloroethane | 6.099 | 62 | 449 | 0.223 | ug/l # | 77 |
| 51) 4-Methyl-2-Pentanone | 8.574 | 43 | 1294 | 0.739 | ug/l | 88 |
| 58) 2-Chloroethyl Vinyl ether | 8.257 | 63 | 600 | 0.640 | ug/l | 98 |
| 59) 2-Hexanone | 9.439 | 43 | 889 | 0.684 | ug/l | 83 |
| 68) m/p-Xylenes | 10.299 | 106 | 711 | 0.295 | ug/l | 94 |
| 76) 1,2,3-Trichloropropane | 11.079 | 75 | 40986 | 25.049 | ug/l # | 37 |
| 81) trans-1,4-Dichloro-2-b... | 11.079 | 75 | 40986 | 79.707 | ug/l # | 6 |

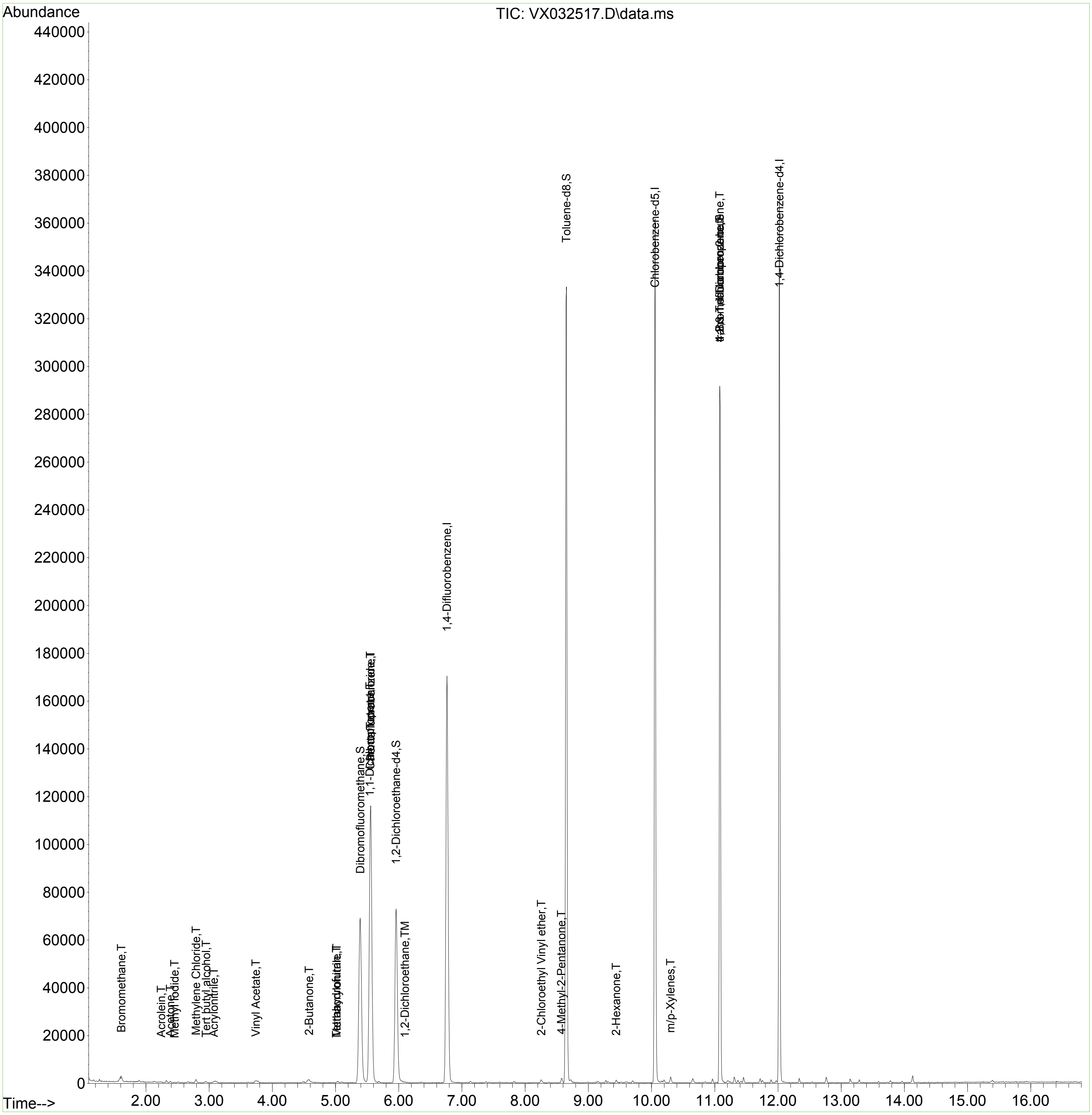
(#) = qualifier out of range (m) = manual integration (+) = signals summed

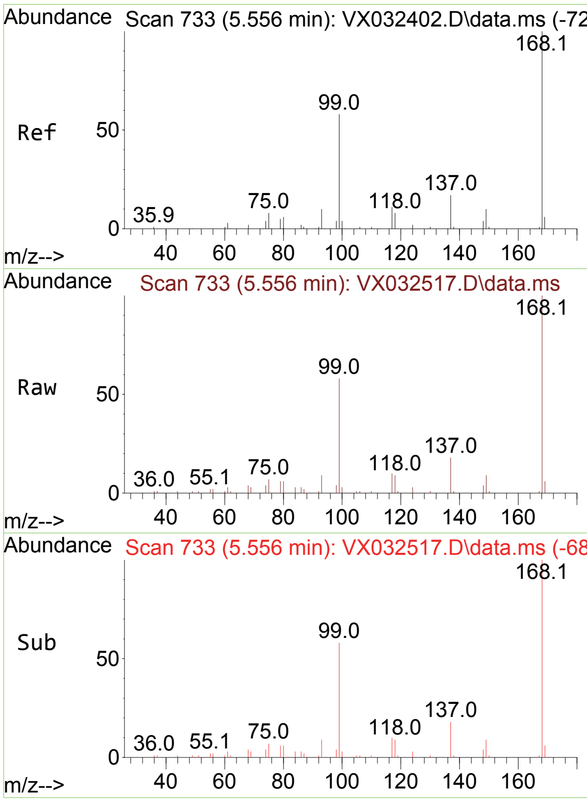
Quantitation Report    (Not Reviewed)

```
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110122\
Data File : VX032517.D
Acq On    : 01 Nov 2022  16:45
Operator  : JC/MD
Sample    : N4955-07
Misc      : 5.0mL/MSVOA_X/WATER
ALS Vial  : 18   Sample Multiplier: 1

Quant Time: Nov 02 05:31:55 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102622W.M
Quant Title  : SW846 8260
QLast Update : Thu Oct 27 08:28:06 2022
Response via : Initial Calibration
```

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022



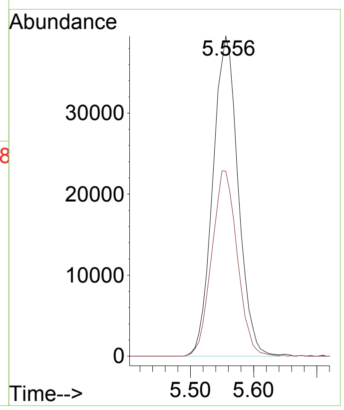


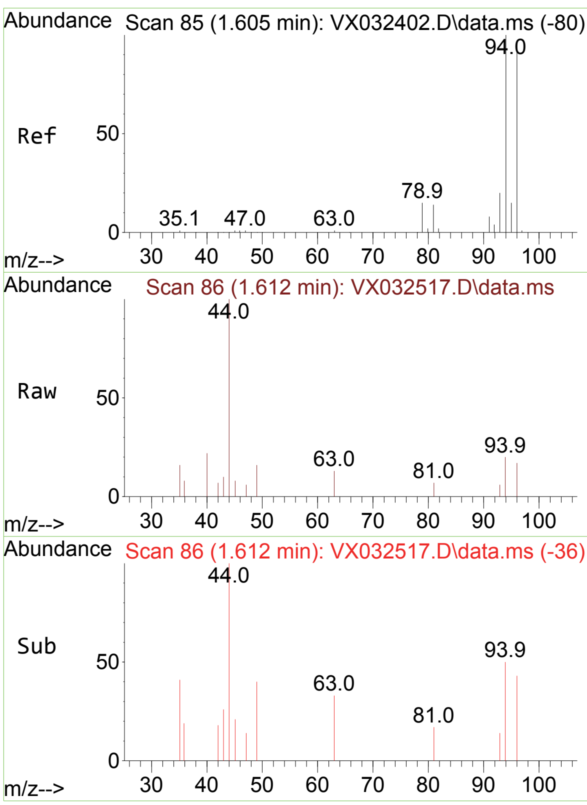

#1
Pentafluorobenzene
Concen:   50.000 ug/l
RT:   5.556 min   Scan# 7
Delta R.T.   -0.000 min
Lab File:   VX032517.D
Acq: 01 Nov 2022   16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion:168 Resp:   109711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 57.8 | 46.1 | 69.1 |

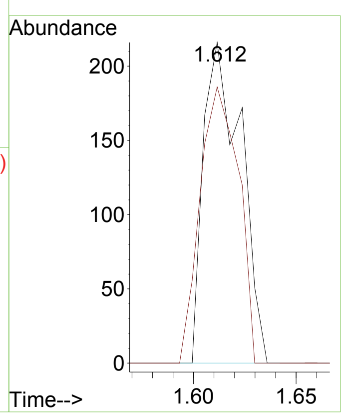


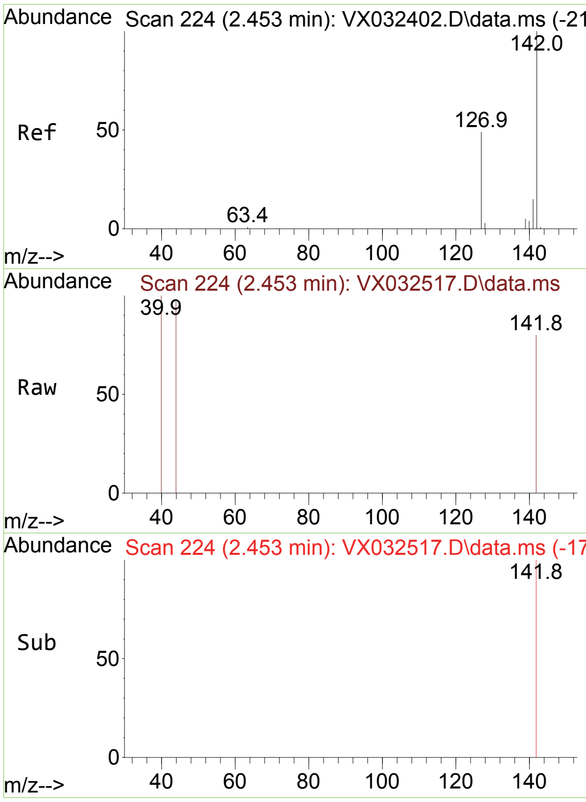




#5
Bromomethane
Concen:    0.292 ug/l
RT:   1.612 min   Scan# 86
Delta R.T.   0.006 min
Lab File:   VX032517.D
Acq: 01 Nov 2022   16:45

Tgt Ion: 94 Resp:     275

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 94 | 100 | | |
| 96 | 86.1 | 77.6 | 116.4 |



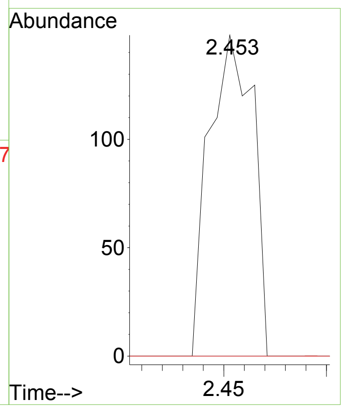


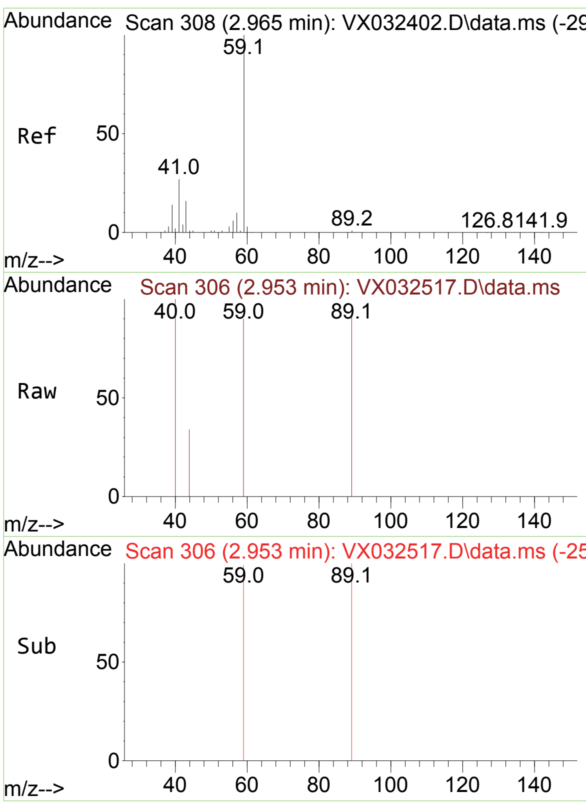

#10
Methyl Iodide
Concen:    2.079 ug/l
RT:   2.453 min  Scan# 2
Delta R.T.   -0.000 min
Lab File:    VX032517.D
Acq: 01 Nov 2022  16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion:142 Resp:     221

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 142 | 100 | | |
| 127 | 0.0 | 38.6 | 57.8# |
| 141 | 0.0 | 11.4 | 17.2# |

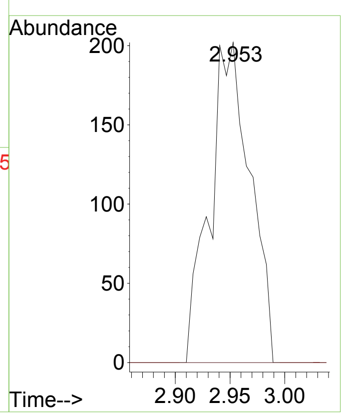


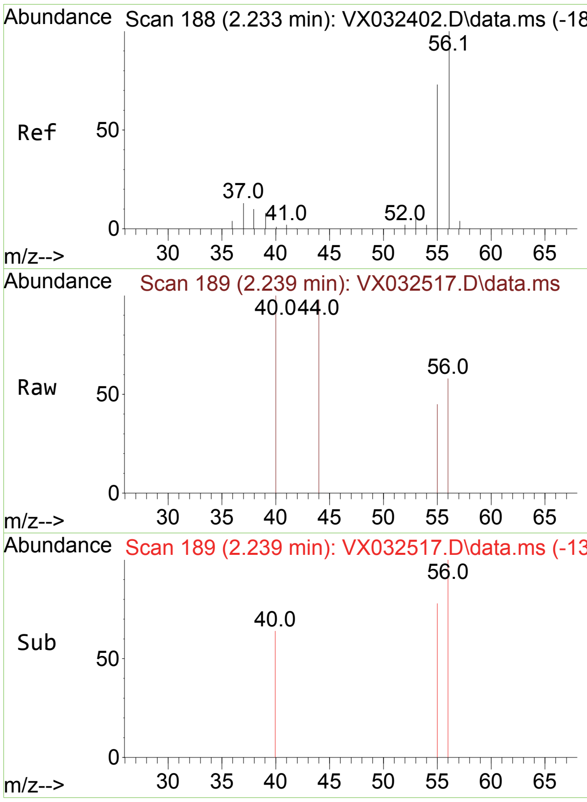




#11
Tert butyl alcohol
Concen:    2.344 ug/l
RT:   2.953 min  Scan# 306
Delta R.T.   -0.012 min
Lab File:    VX032517.D
Acq: 01 Nov 2022  16:45

Tgt Ion: 59 Resp:     520

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 0.0 | 8.2 | 12.4# |



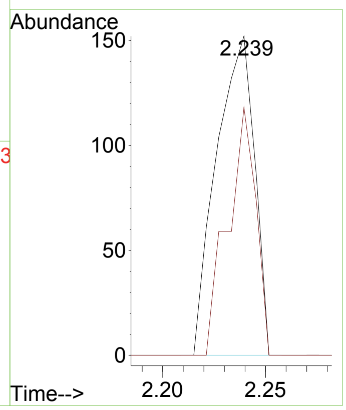


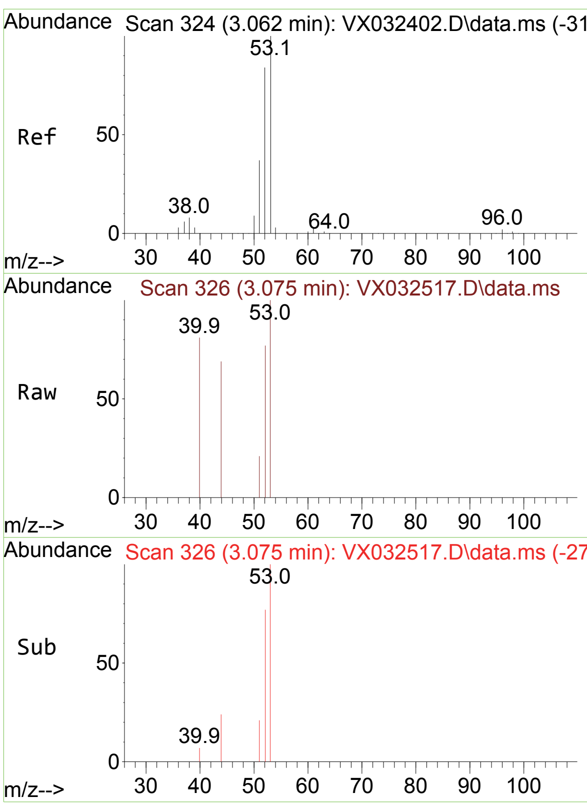

#13
Acrolein
Concen: 0.880 ug/l
RT: 2.239 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 56 Resp: 195

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 56 | 100 | | |
| 55 | 57.9 | 56.9 | 85.3 |

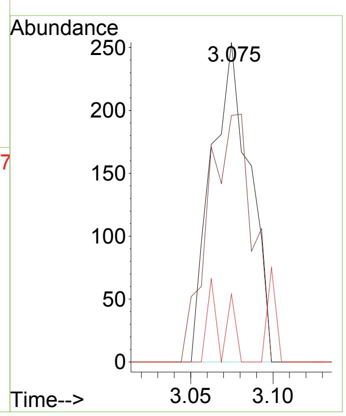


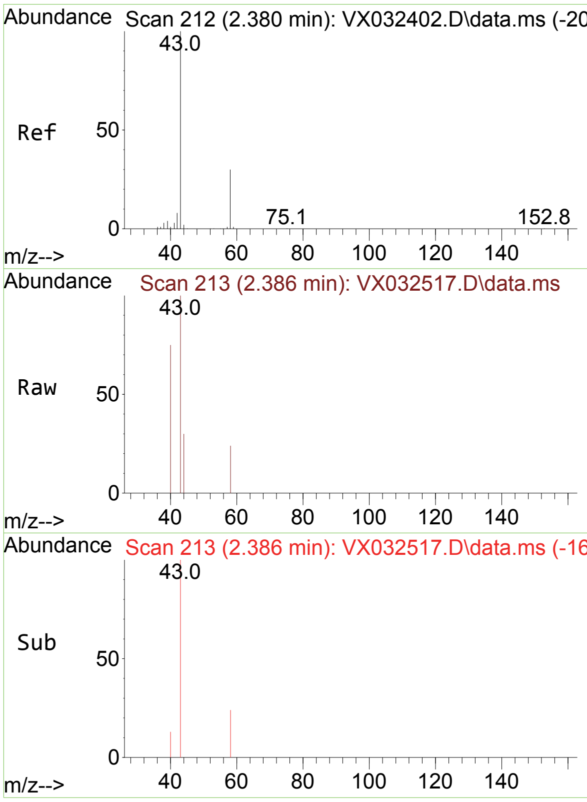




#15
Acrylonitrile
Concen: 0.684 ug/l
RT: 3.075 min Scan# 326
Delta R.T. 0.012 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 53 Resp: 412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 53 | 100 | | |
| 52 | 89.8 | 67.4 | 101.0 |
| 51 | 10.7 | 30.3 | 45.5# |



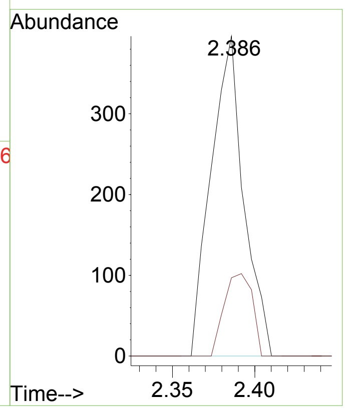


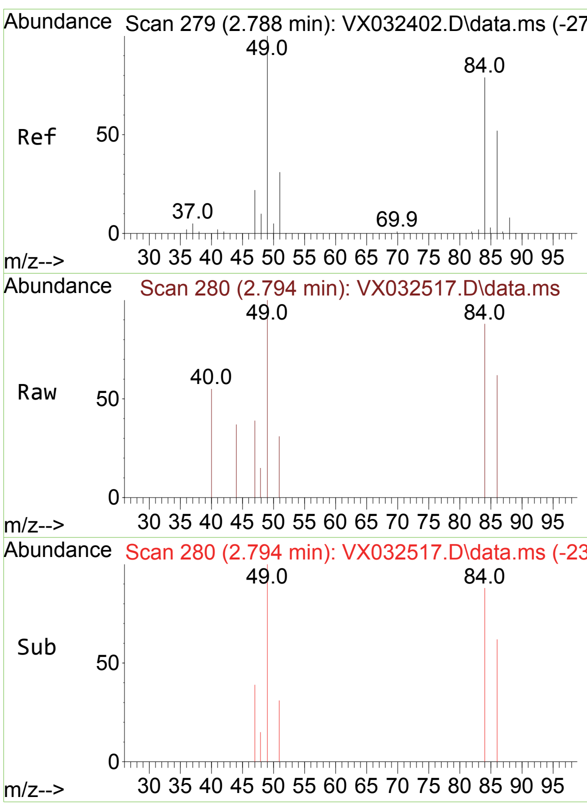

#16
Acetone
Concen: 0.987 ug/l
RT: 2.386 min Scan# 2
Delta R.T. 0.006 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 43 Resp: 547

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 24.5 | 23.8 | 35.8 |

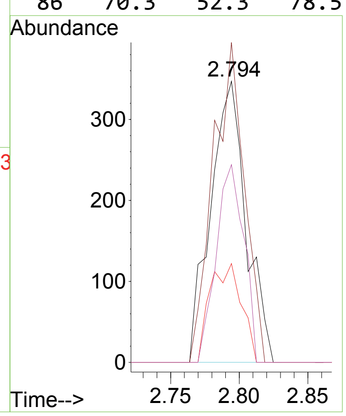


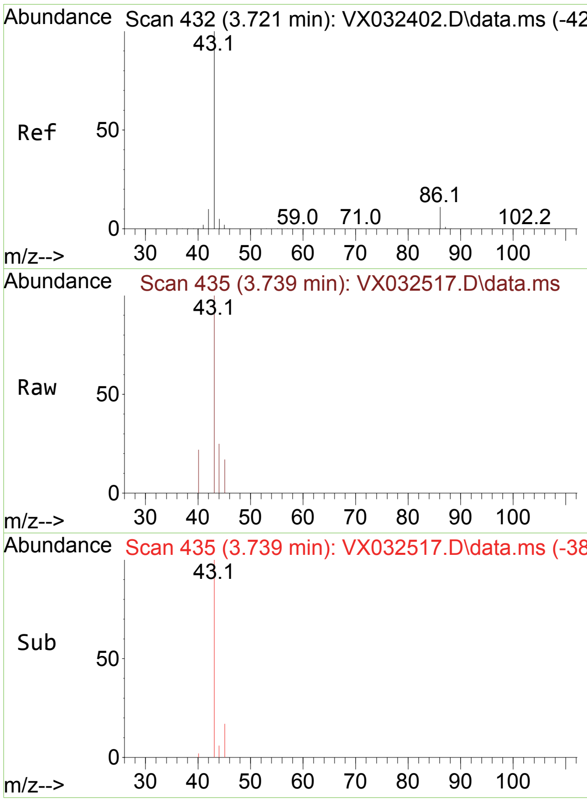




#20
Methylene Chloride
Concen: 0.490 ug/l
RT: 2.794 min Scan# 280
Delta R.T. 0.006 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 84 Resp: 623

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 113.8 | 101.0 | 151.6 |
| 51 | 35.2 | 31.1 | 46.7 |
| 86 | 70.3 | 52.3 | 78.5 |



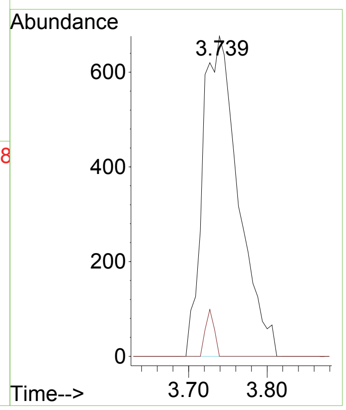


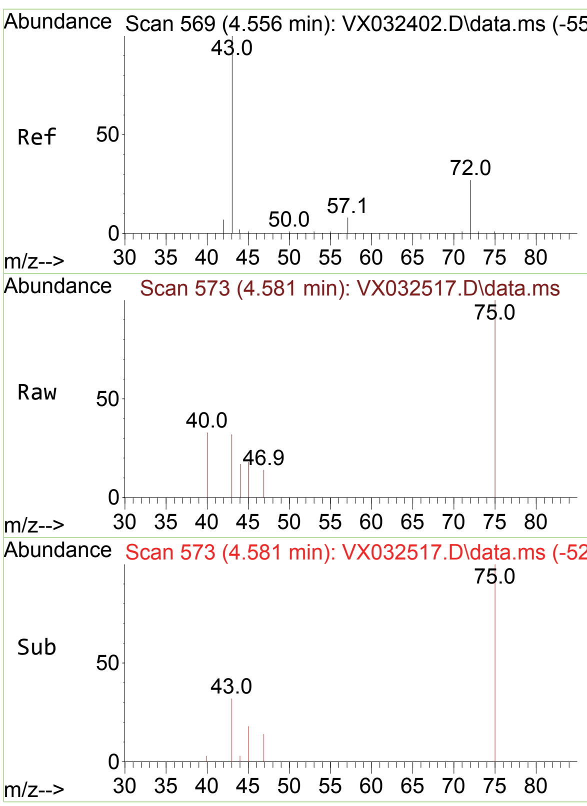

#23
Vinyl Acetate
Concen:    0.700 ug/l
RT:   3.739 min  Scan# 4
Delta R.T.  0.018 min
Lab File:   VX032517.D
Acq: 01 Nov 2022  16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 43 Resp:    2146

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 0.0 | 8.6 | 12.8# |

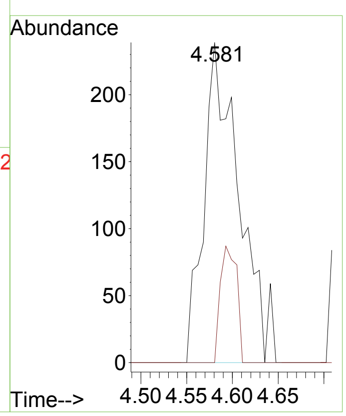


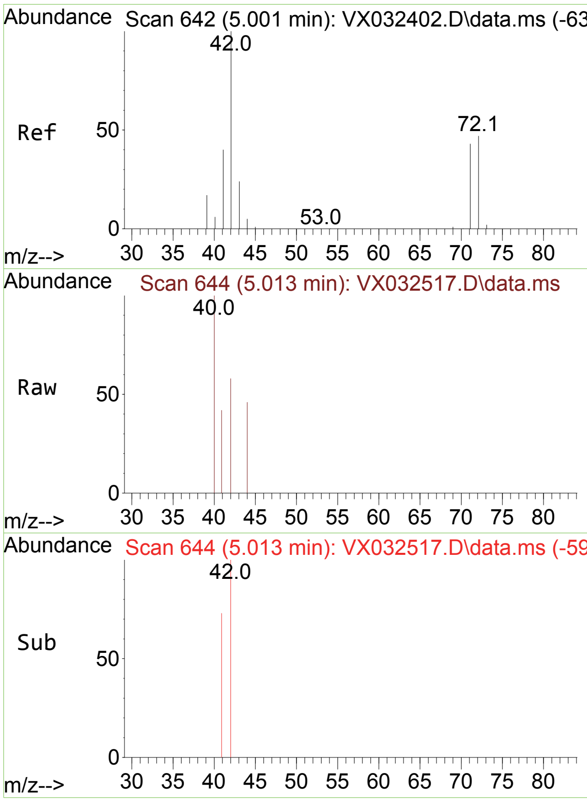




#25
2-Butanone
Concen:    0.743 ug/l
RT:   4.581 min  Scan# 573
Delta R.T.  0.025 min
Lab File:   VX032517.D
Acq: 01 Nov 2022  16:45

Tgt Ion: 43 Resp:     638

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 22.2 | 33.2# |



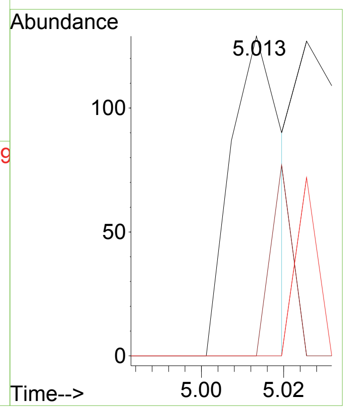


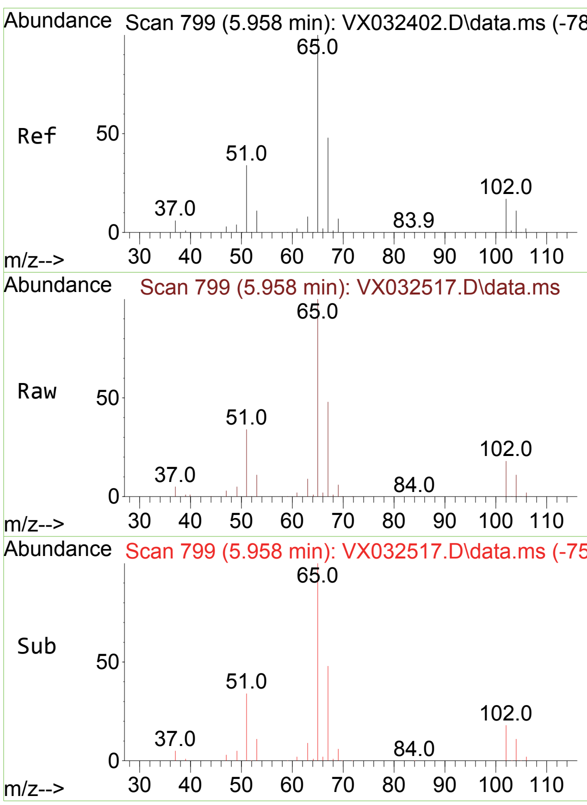

#29
Tetrahydrofuran
Concen: 0.205 ug/l
RT: 5.013 min Scan# 64
Delta R.T. 0.012 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 42 Resp: 112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 25.0 | 37.6 | 56.4# |
| 71 | 23.2 | 34.7 | 52.1# |

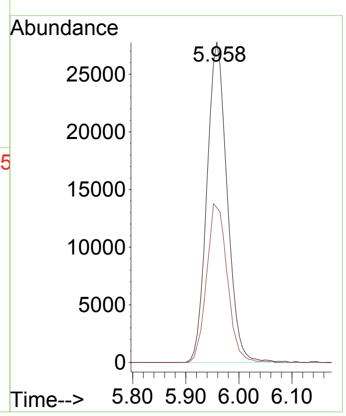


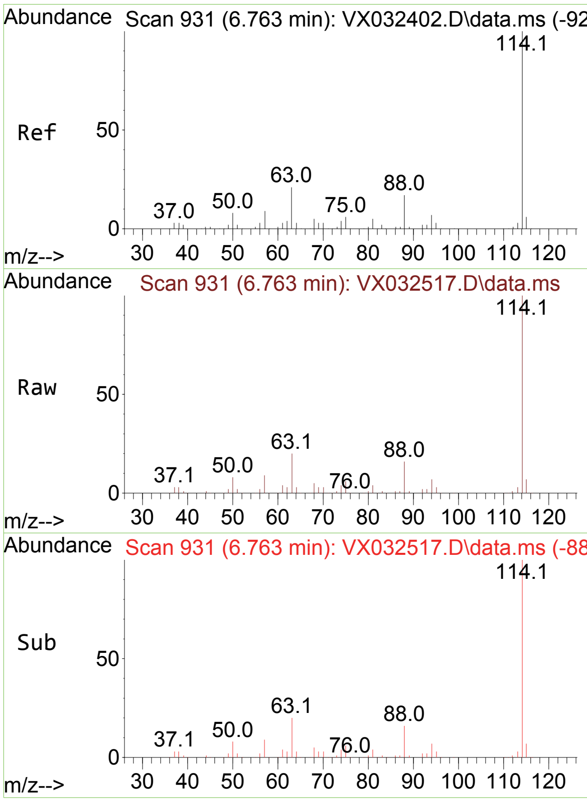




#33
1,2-Dichloroethane-d4
Concen: 48.284 ug/l
RT: 5.958 min Scan# 799
Delta R.T. 0.000 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 65 Resp: 73605

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 50.7 | 0.0 | 101.8 |



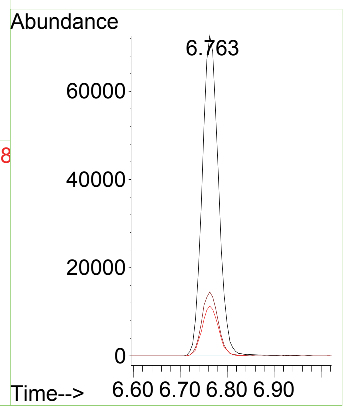


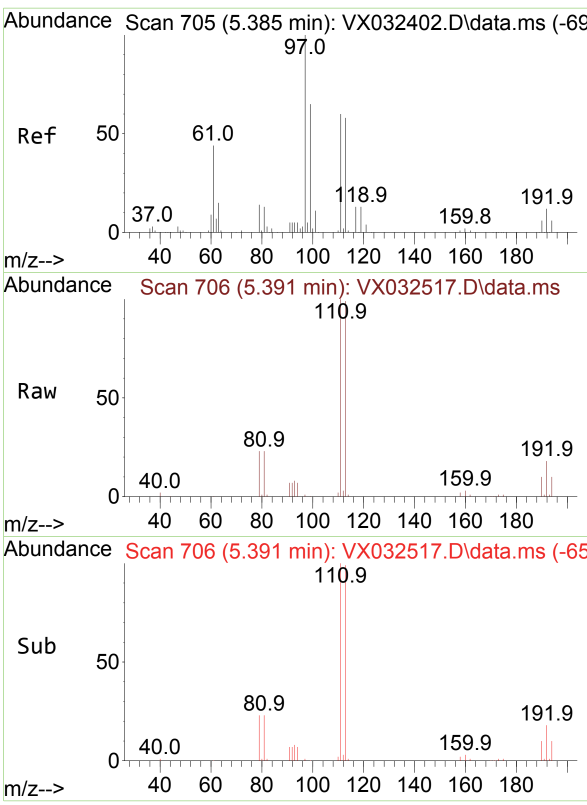

#34
1,4-Difluorobenzene
Concen:   50.000 ug/l
RT:   6.763 min   Scan# 9
Delta R.T.   0.000 min
Lab File:    VX032517.D
Acq: 01 Nov 2022   16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion:114 Resp:   175095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 20.0 | 0.0 | 41.6 |
| 88 | 15.6 | 0.0 | 33.4 |

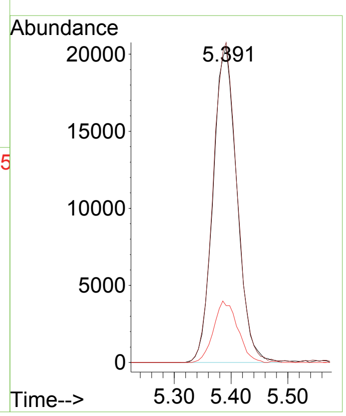


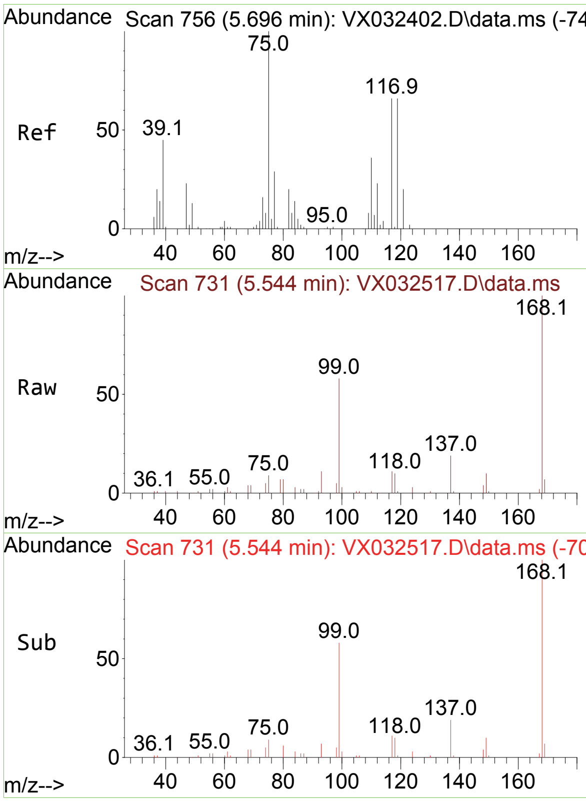




#35
Dibromofluoromethane
Concen:   47.939 ug/l
RT:   5.391 min   Scan# 706
Delta R.T.   0.006 min
Lab File:    VX032517.D
Acq: 01 Nov 2022   16:45

Tgt Ion:113 Resp:    59875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 101.6 | 82.4 | 123.6 |
| 192 | 19.6 | 15.4 | 23.2 |



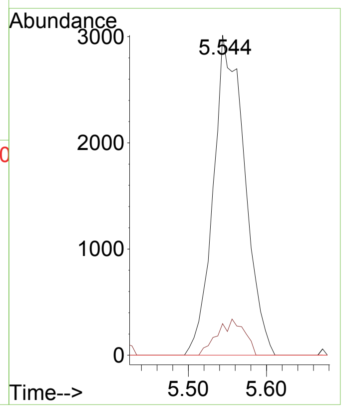


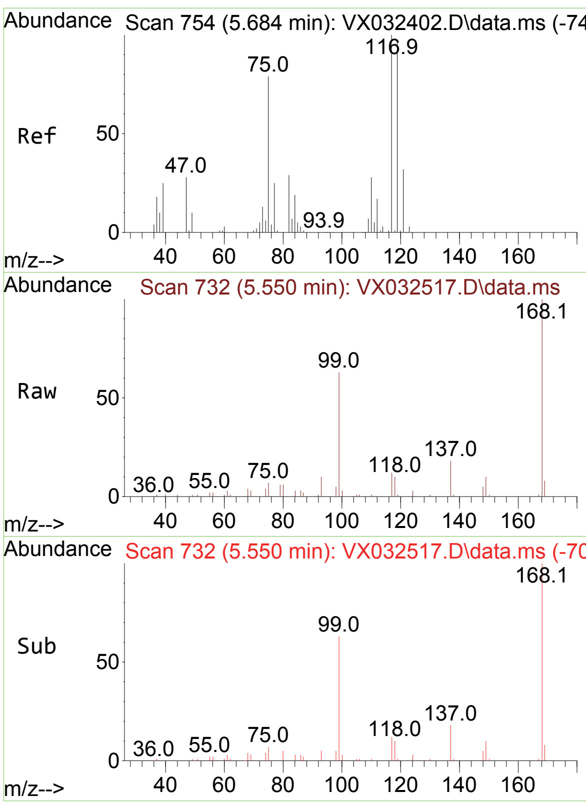

#36
1,1-Dichloropropene
Concen: 4.830 ug/l
RT: 5.544 min Scan# 7
Delta R.T. -0.152 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 75 Resp: 8401

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 110 | 9.7 | 18.4 | 55.2# |
| 77 | 0.0 | 24.5 | 36.7# |

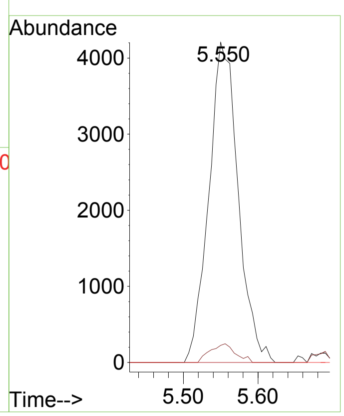


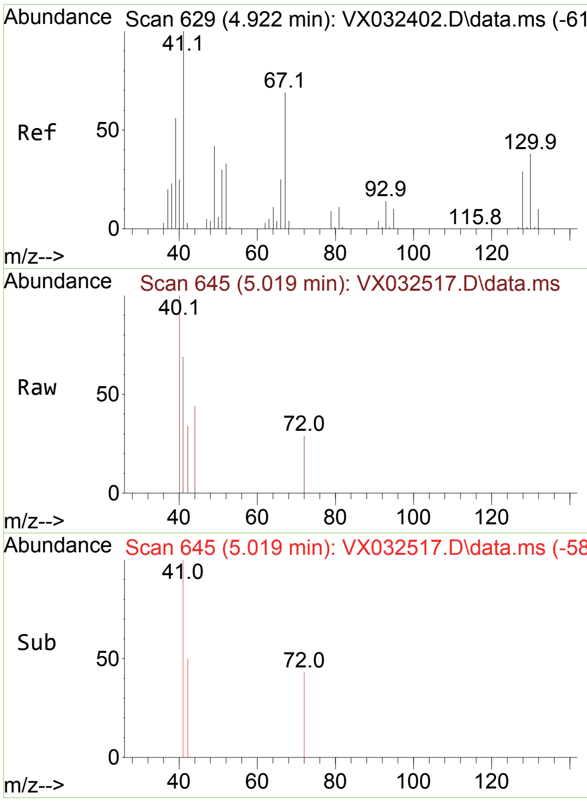




#38
Carbon Tetrachloride
Concen: 5.965 ug/l
RT: 5.550 min Scan# 732
Delta R.T. -0.134 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion:117 Resp: 11507

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 5.4 | 77.2 | 115.8# |
| 121 | 0.0 | 25.8 | 38.6# |



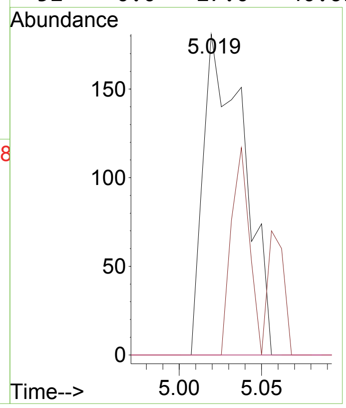


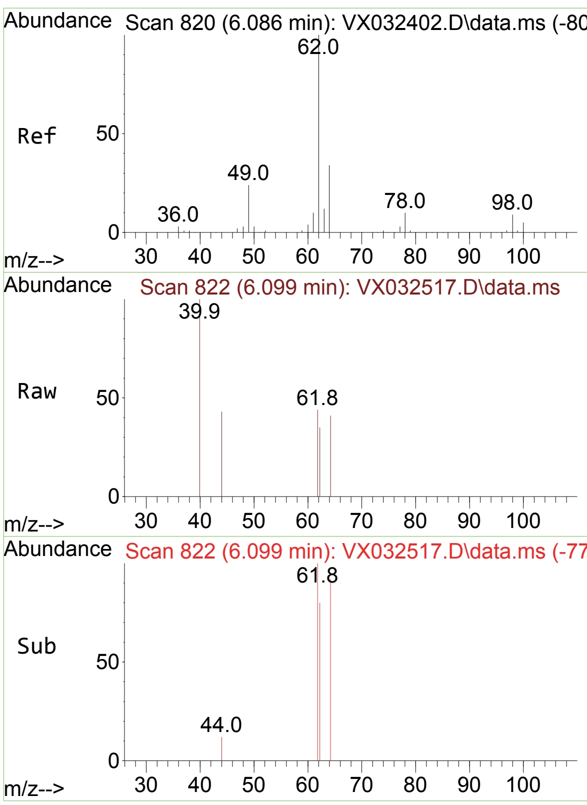

#41
Methacrylonitrile
Concen:    0.336 ug/l
RT:   5.019 min   Scan# 64
Delta R.T.   0.098 min
Lab File:    VX032517.D
Acq: 01 Nov 2022   16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 41 Resp:     310

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 29.0 | 47.5 | 71.3# |
| 67 | 0.0 | 60.5 | 90.7# |
| 52 | 0.0 | 27.0 | 40.6# |

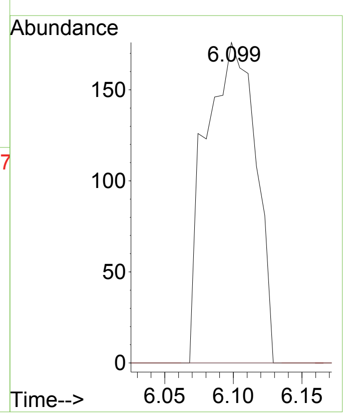


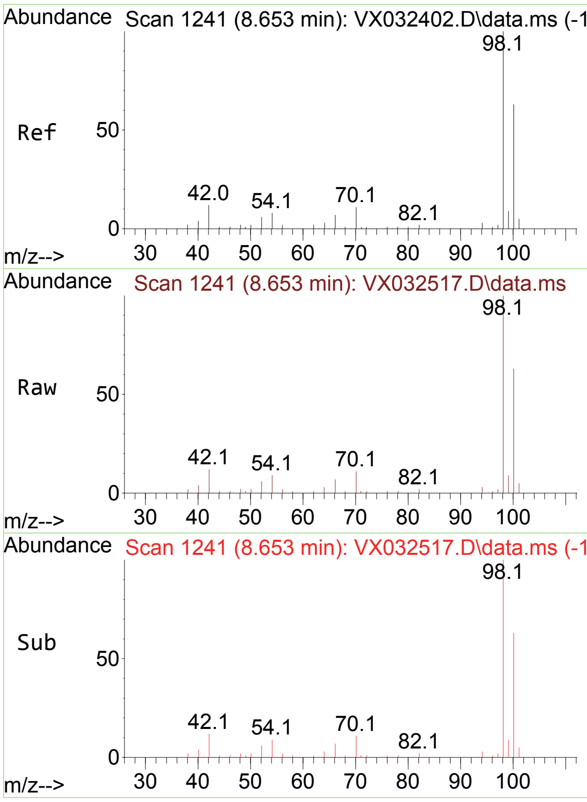




#42
1,2-Dichloroethane
Concen:    0.223 ug/l
RT:   6.099 min   Scan# 822
Delta R.T.   0.012 min
Lab File:    VX032517.D
Acq: 01 Nov 2022   16:45

Tgt Ion: 62 Resp:     449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 0.0 | 0.0 | 16.0 |





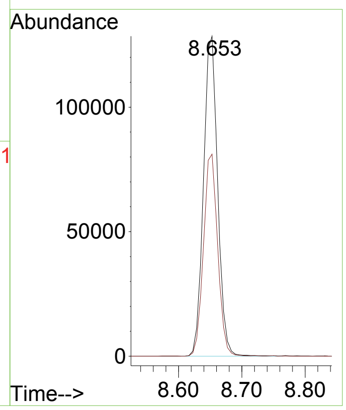

#50
Toluene-d8
Concen: 46.174 ug/l
RT: 8.653 min Scan# 1

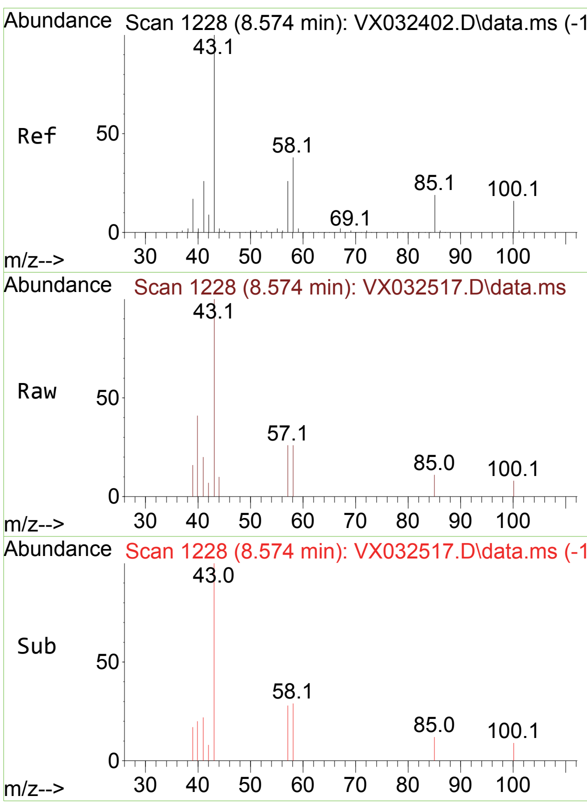
**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Delta R.T. 0.000 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 98 Resp: 200531

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 63.3 | 50.9 | 76.3 |

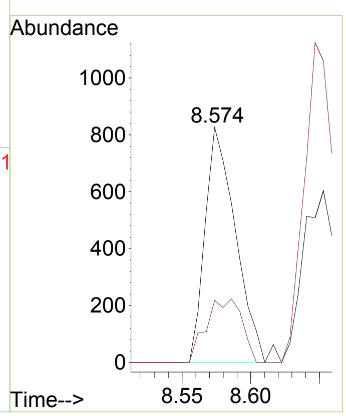


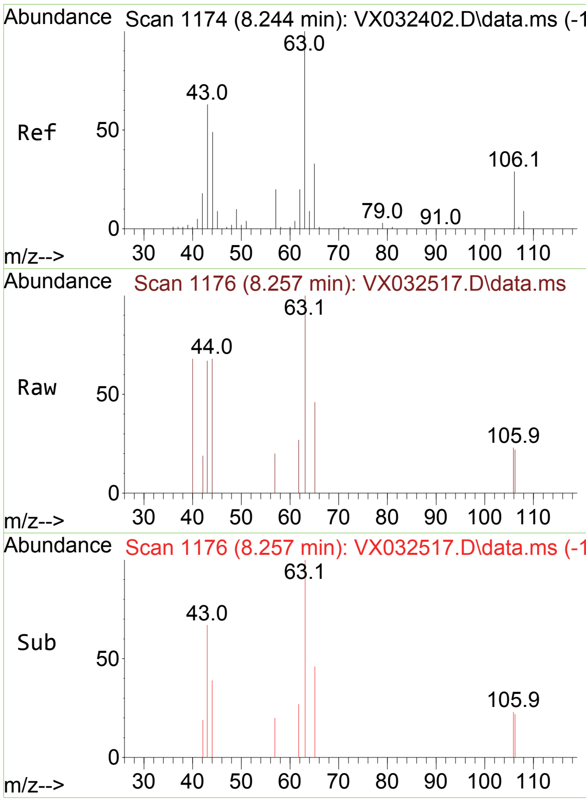




#51
4-Methyl-2-Pentanone
Concen: 0.739 ug/l
RT: 8.574 min Scan# 1228
Delta R.T. 0.000 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 43 Resp: 1294

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 31.1 | 30.9 | 46.3 |



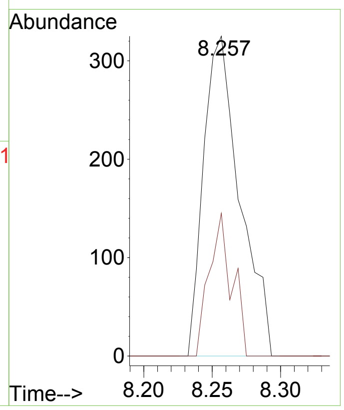


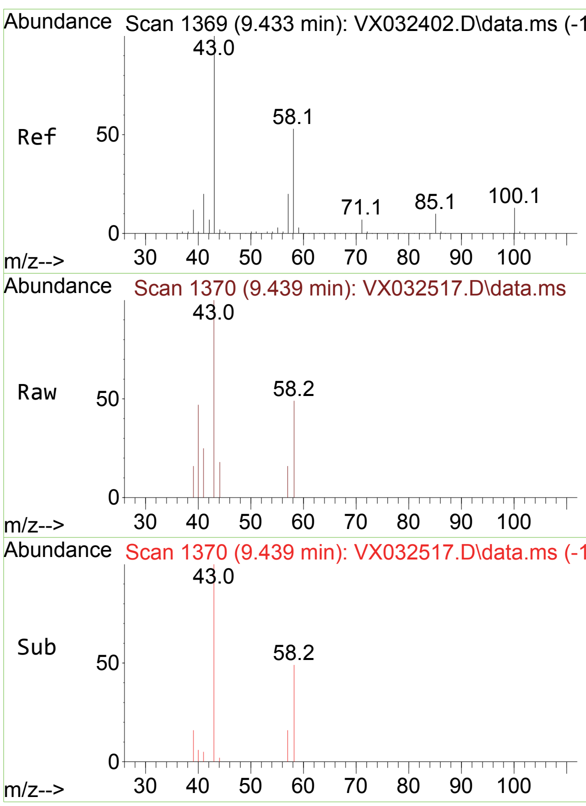

#58
2-Chloroethyl Vinyl ether
Concen:    0.640 ug/l
RT:   8.257 min   Scan# 1
Delta R.T.   0.012 min
Lab File:    VX032517.D
Acq: 01 Nov 2022  16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 63 Resp:     600

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 106 | 28.0 | 23.3 | 34.9 |

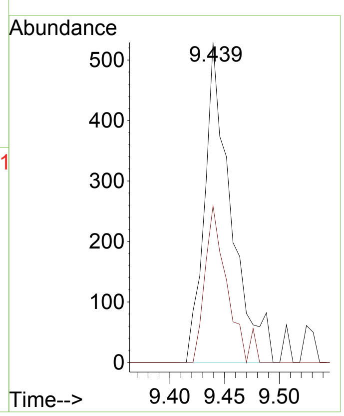


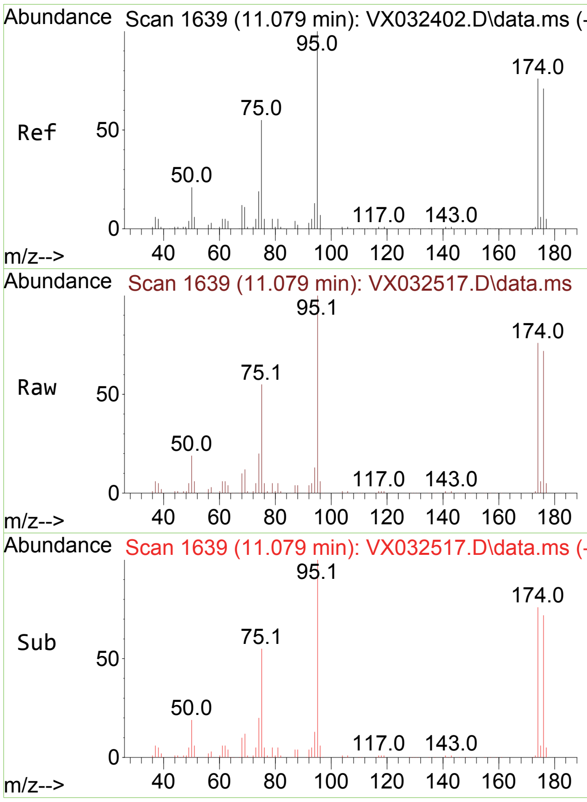




#59
2-Hexanone
Concen:    0.684 ug/l
RT:   9.439 min   Scan# 1370
Delta R.T.   0.006 min
Lab File:    VX032517.D
Acq: 01 Nov 2022  16:45

Tgt Ion: 43 Resp:     889

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 41.1 | 26.5 | 79.5 |





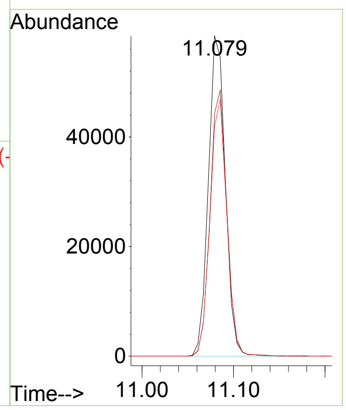

#62
4-Bromofluorobenzene
Concen: 44.177 ug/l
RT: 11.079 min Scan# 1

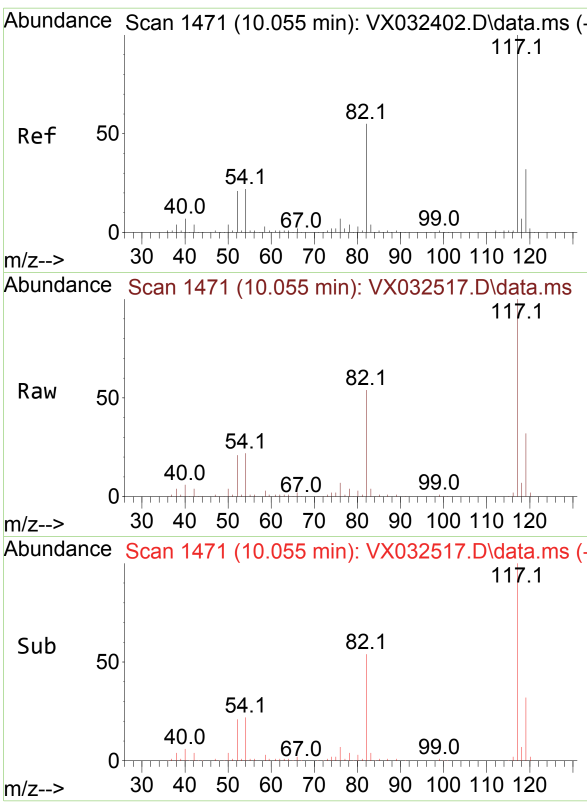
**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Delta R.T. 0.000 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 95 Resp: 74945

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 82.6 | 0.0 | 164.0 |
| 176 | 79.6 | 0.0 | 154.4 |

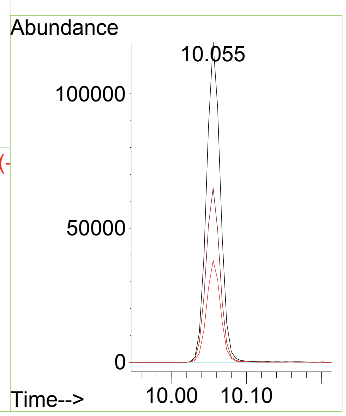


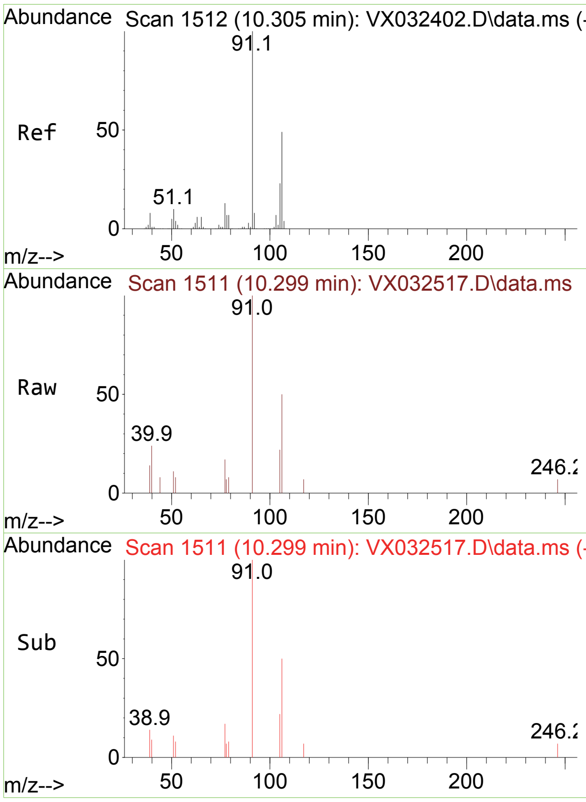




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion:117 Resp: 155149

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 54.5 | 44.3 | 66.5 |
| 119 | 31.8 | 25.7 | 38.5 |

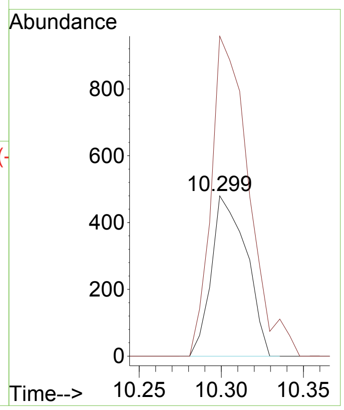


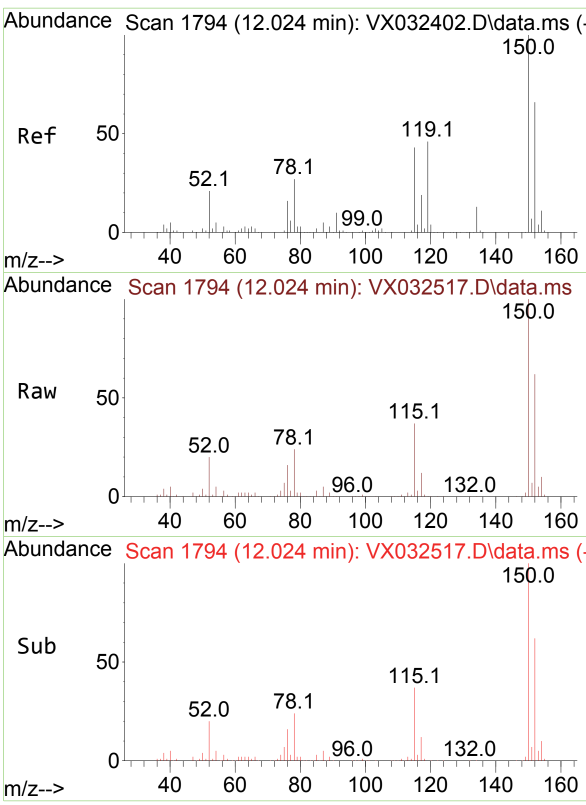



```
#68
m/p-Xylenes
Concen:    0.295 ug/l
RT:  10.299 min  Scan# 1
Delta R.T.   -0.006 min
Lab File:    VX032517.D
Acq: 01 Nov 2022  16:45

Tgt Ion:106 Resp:     711
Ion  Ratio  Lower  Upper
106  100
 91  214.6  164.5  246.7
```

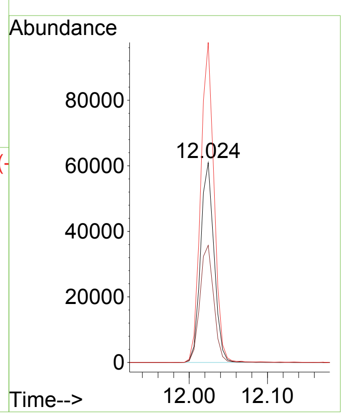
**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

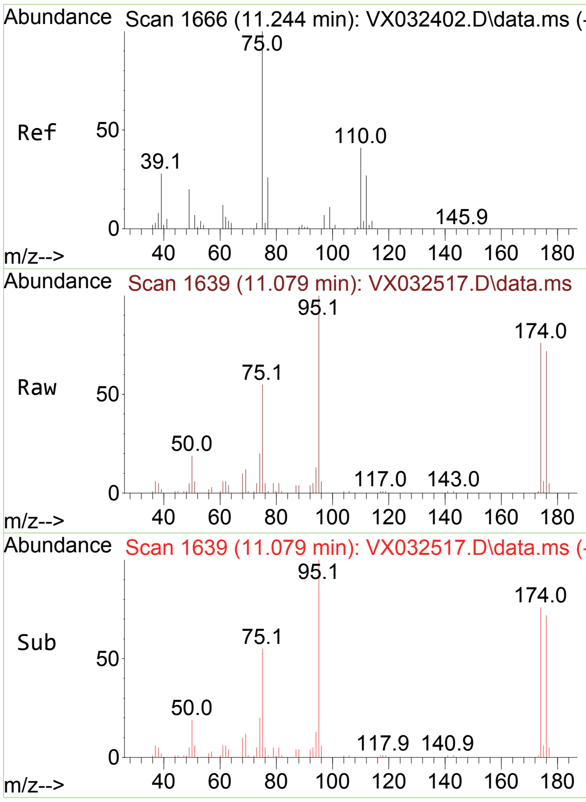



```
#72
1,4-Dichlorobenzene-d4
Concen:   50.000 ug/l
RT:  12.024 min  Scan# 1794
Delta R.T.  0.000 min
Lab File:    VX032517.D
Acq: 01 Nov 2022  16:45

Tgt Ion:152 Resp:   73546
Ion  Ratio  Lower  Upper
152  100
115   59.9   44.0  132.0
150  158.1    0.0  351.8
```



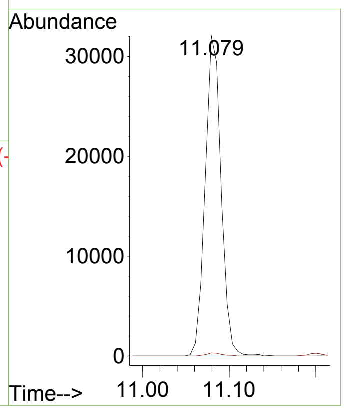


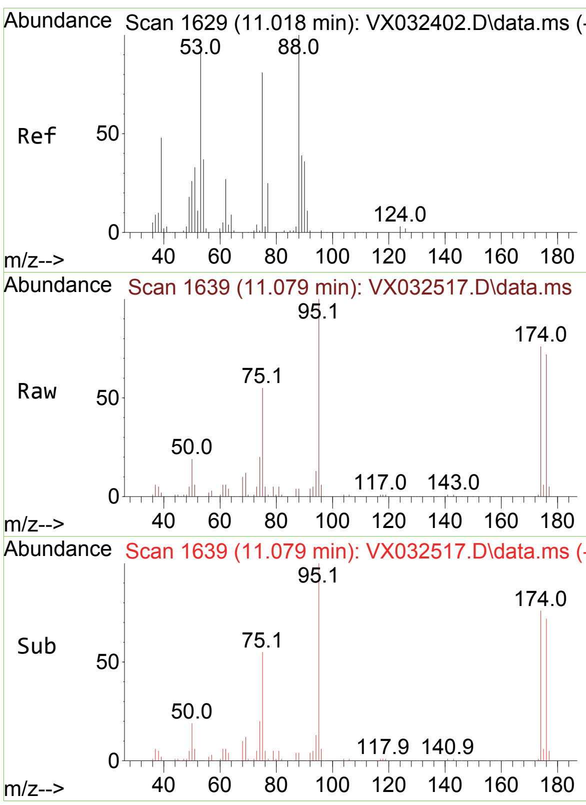

#76
1,2,3-Trichloropropane
Concen: 25.049 ug/l
RT: 11.079 min Scan# 1
Delta R.T. -0.164 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

**Instrument :**
MSVOA_X
**ClientSampleId :**
LOD-MDL-WATER-01-QT4-2022

Tgt Ion: 75 Resp: 40986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 77 | 1.0 | 20.0 | 60.0# |




#81
trans-1,4-Dichloro-2-butene
Concen: 79.707 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.061 min
Lab File: VX032517.D
Acq: 01 Nov 2022 16:45

Tgt Ion: 75 Resp: 40986

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 53 | 0.0 | 86.9 | 130.3# |
| 89 | 0.0 | 38.3 | 57.5# |