Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_F\DATA\VF082418\
Data File : VF060106.D
Acq On : 24 Aug 2018 18:07
Operator : VA/AP
Sample : J4608-02
Misc : 7.51g/5mL/MSVOA_F/SOIL
ALS Vial : 13 Sample Multiplier: 1

**Instrument :** MSVOA_F
**ClientSampleId :** CLIFFWOOD-EMBANKMENT-FILL

Quant Time: Aug 25 03:46:58 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F082118S.M
Quant Title : SW846 8260
QLast Update : Wed Aug 22 04:43:43 2018
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 5.03 | 168 | 870 | 50.00 | ug/l | -0.01 |
| 34) 1,4-Difluorobenzene | 5.74 | 114 | 1058 | 50.00 | ug/l | -0.03 |
| 63) Chlorobenzene-d5 | 9.90 | 117 | 497 | 50.00 | ug/l | -0.02 |
| 72) 1,4-Dichlorobenzene-d4 | 12.63 | 152 | 80 | 50.00 | ug/l | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 33) 1,2-Dichloroethane-d4 | 5.00 | 65 | 59 | 4.96 | ug/l | -0.03 |
| Spiked Amount 50.000 | | | Recovery = 9.92% | | | |
| 35) Dibromofluoromethane | 4.29 | 113 | 112 | 13.48 | ug/l | -0.01 |
| Spiked Amount 50.000 | | | Recovery = 26.96% | | | |
| 50) Toluene-d8 | 7.70 | 98 | 584 | 24.75 | ug/l | -0.02 |
| Spiked Amount 50.000 | | | Recovery = 49.50% | | | |
| 62) 4-Bromofluorobenzene | 0.00 | 95 | 0 | 0.00 | ug/l | |
| Spiked Amount 50.000 | | | Recovery = 0.00% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 3) Chloromethane | 1.14 | 50 | 63 | 5.16 | ug/l # | 40 |
| 4) Vinyl Chloride | 1.19 | 62 | 67 | 9.42 | ug/l # | 40 |
| 6) Chloroethane | 1.41 | 64 | 399 | 142.33 | ug/l # | 45 |
| 12) 1,1-Dichloroethene | 1.66 | 96 | 60 | 10.85 | ug/l # | 1 |
| 14) Allyl chloride | 2.15 | 41 | 67 | 6.82 | ug/l # | 1 |
| 16) Acetone | 2.17 | 43 | 72 | 23.01 | ug/l # | 63 |
| 19) Methyl tert-butyl Ether | 2.57 | 73 | 66 | 3.72 | ug/l # | 1 |
| 22) Diisopropyl ether | 2.92 | 45 | 64 | 2.91 | ug/l # | 38 |
| 23) Vinyl Acetate | 3.46 | 43 | 98 | 8.41 | ug/l # | 80 |
| 25) 2-Butanone | 4.57 | 43 | 70 | 17.22 | ug/l # | 58 |
| 27) cis-1,2-Dichloroethene | 3.67 | 96 | 80 | 9.12 | ug/l | 1 |
| 29) Tetrahydrofuran | 4.16 | 42 | 241 | 157.03 | ug/l # | 37 |
| 37) Ethyl Acetate | 4.39 | 43 | 60 | 10.09 | ug/l # | 1 |
| 41) Methacrylonitrile | 4.92 | 41 | 60 | 19.95 | ug/l # | 2 |
| 42) 1,2-Dichloroethane | 5.11 | 62 | 79 | 6.78 | ug/l | 83 |
| 43) Isopropyl Acetate | 7.06 | 43 | 65 | 8.69 | ug/l # | 45 |
| 48) Methyl methacrylate | 6.83 | 41 | 91 | 18.38 | ug/l # | 15 |
| 49) 1,4-Dioxane | 6.80 | 88 | 62 | 1304.15 | ug/l # | 18 |
| 74) N-amyl acetate | 11.51 | 43 | 64 | 42.76 | ug/l # | 49 |
| 75) 1,1,2,2-Tetrachloroethane | 11.62 | 83 | 62 | 58.95 | ug/l # | 26 |
| 83) tert-Butylbenzene | 12.33 | 119 | 71 | 17.35 | ug/l # | 32 |
| 92) 1,2-Dibromo-3-Chloropropan | 13.69 | 75 | 67 | 311.75 | ug/l # | 1 |
| 95) Naphthalene | 14.60 | 128 | 69 | 24.42 | ug/l # | 1 |

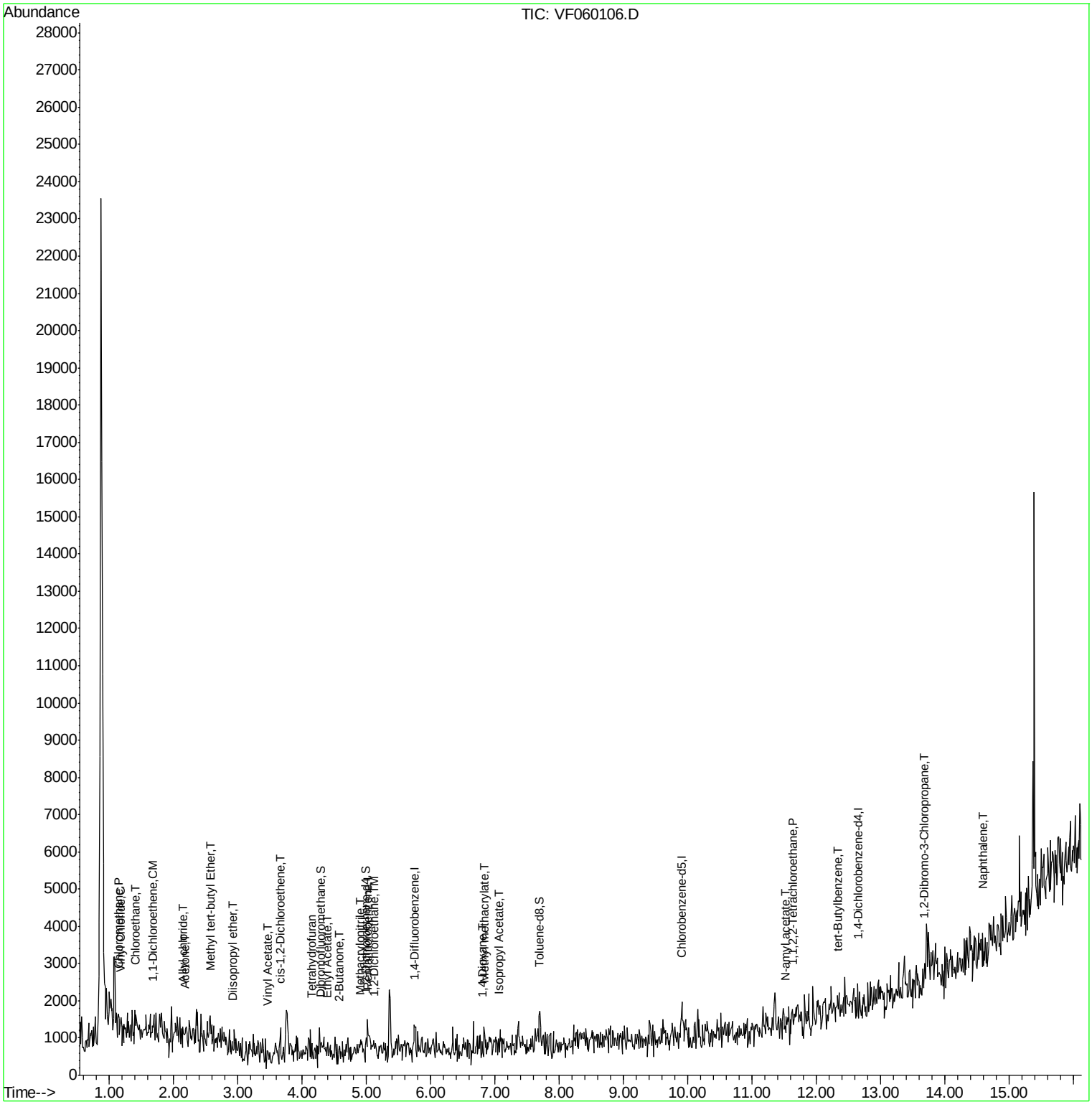
(#) = qualifier out of range (m) = manual integration (+) = signals summed

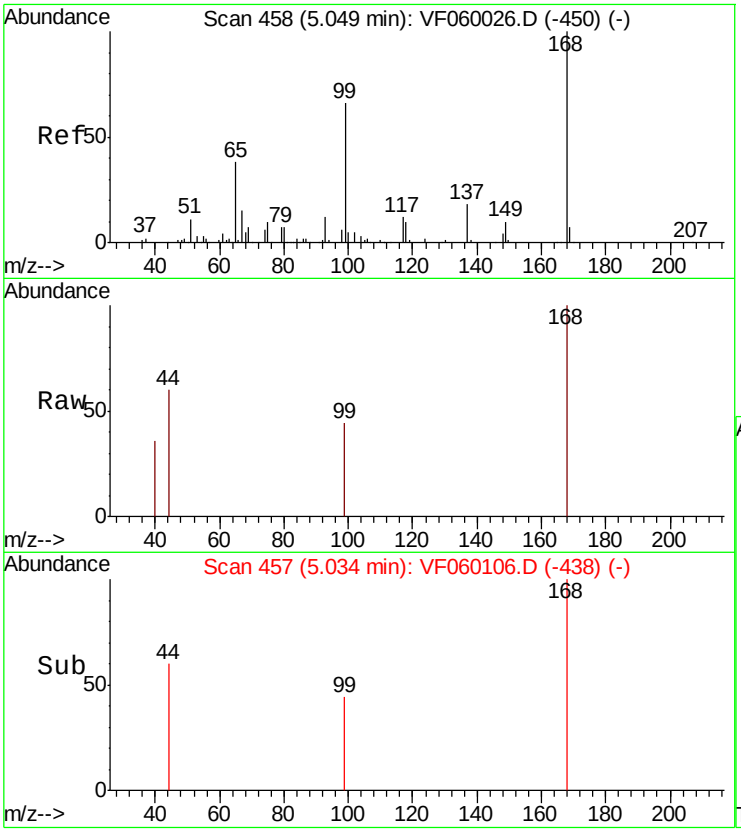
Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF082418\
Data File : VF060106.D
Acq On : 24 Aug 2018 18:07
Operator : VA/AP
Sample : J4608-02
Misc : 7.51g/5mL/MSVOA F/SOIL
ALS Vial : 13 Sample Multiplier: 1

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Quant Time: Aug 25 03:46:58 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F082118S.M
Quant Title : SW846 8260
QLast Update : Wed Aug 22 04:43:43 2018
Response via : Initial Calibration



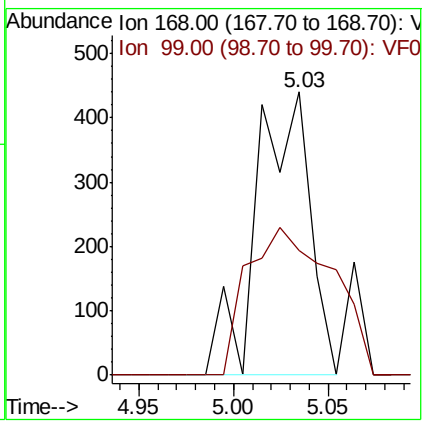


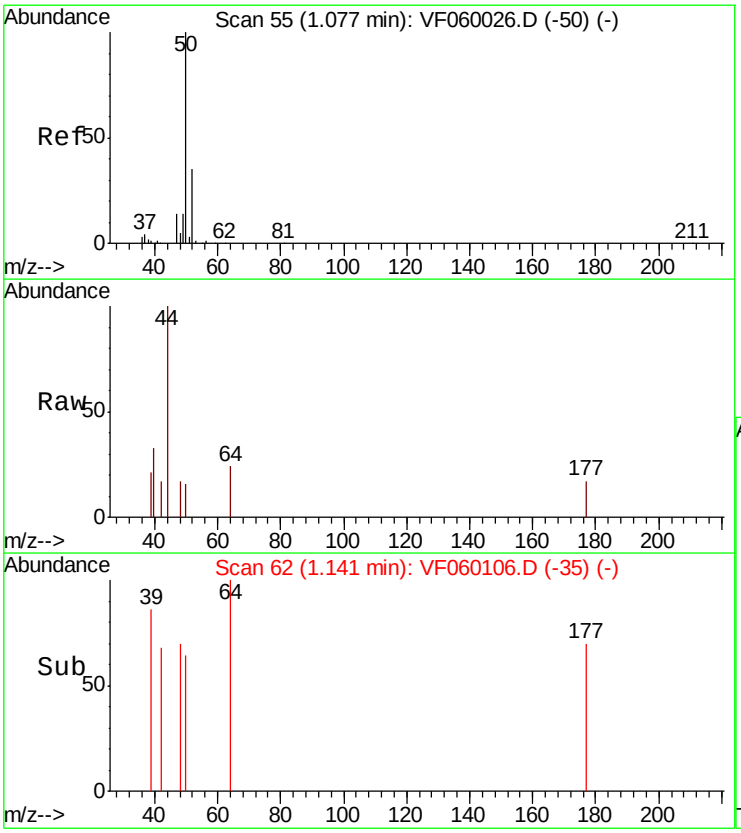

#1
Pentafluorobenzene
Concen: 50.00 ug/l
RT: 5.03 min Scan# 457
Delta R.T. -0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion:168 Resp: 870

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 168 | 100 | | |
| 99 | 43.9 | 52.6 | 79.0# |

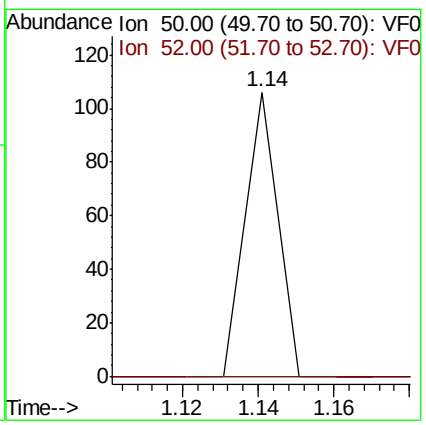


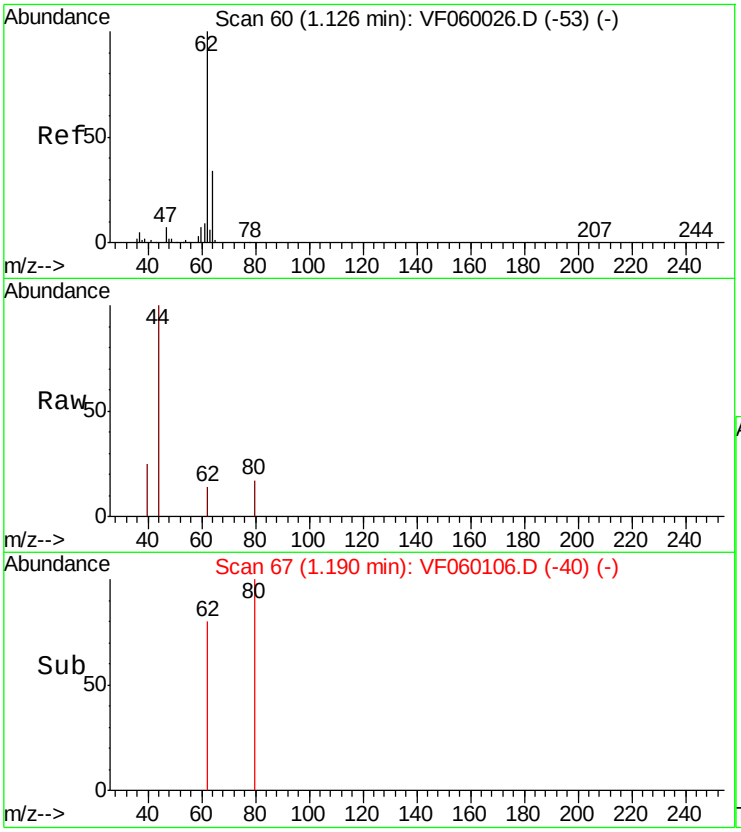




#3
Chloromethane
Concen: 5.16 ug/l
RT: 1.14 min Scan# 62
Delta R.T. 0.06 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 50 Resp: 63

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 0.0 | 27.6 | 41.4# |



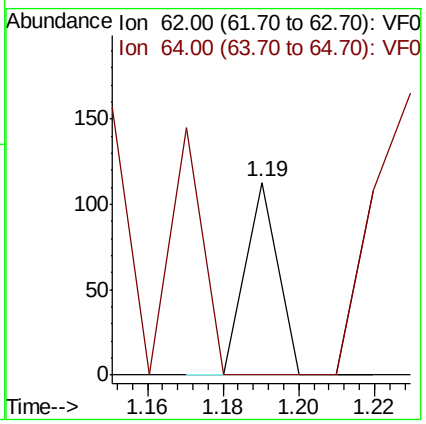


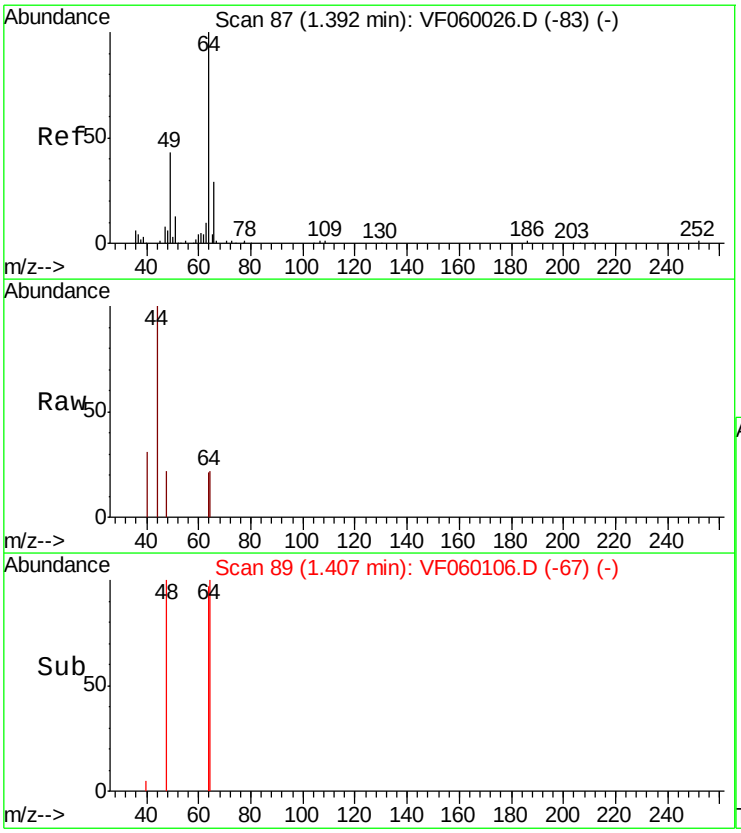

#4
Vinyl Chloride
Concen: 9.42 ug/l
RT: 1.19 min Scan# 67
Delta R.T. 0.06 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 62 Resp: 67

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 64 | 0.0 | 27.4 | 41.2# |

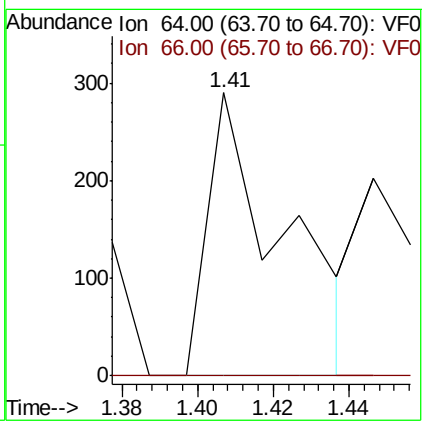


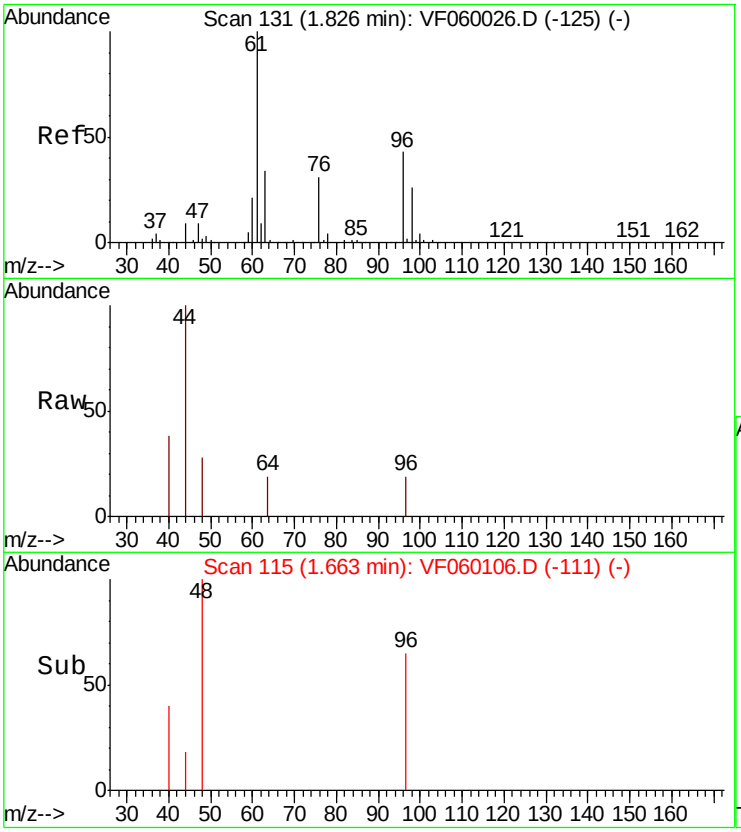




#6
Chloroethane
Concen: 142.33 ug/l
RT: 1.41 min Scan# 89
Delta R.T. 0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 64 Resp: 399

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 0.0 | 24.1 | 36.1# |



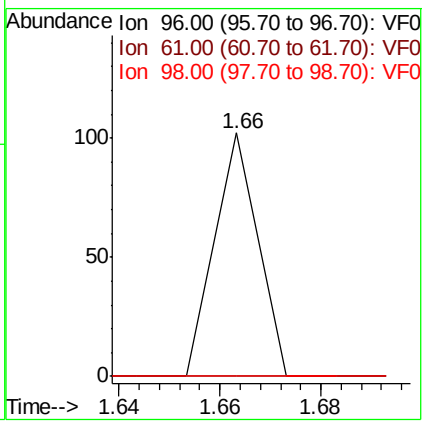


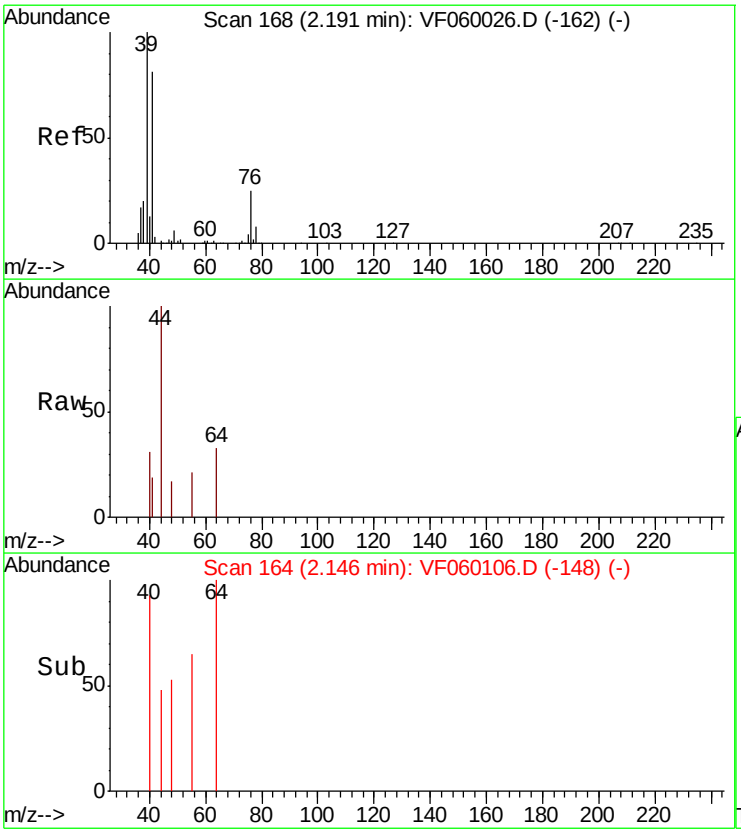

#12
1,1-Dichloroethene
Concen: 10.85 ug/l
RT: 1.66 min Scan# 115
Delta R.T. -0.16 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 96 Resp: 60

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 0.0 | 185.0 | 277.6# |
| 98 | 0.0 | 47.8 | 71.8# |

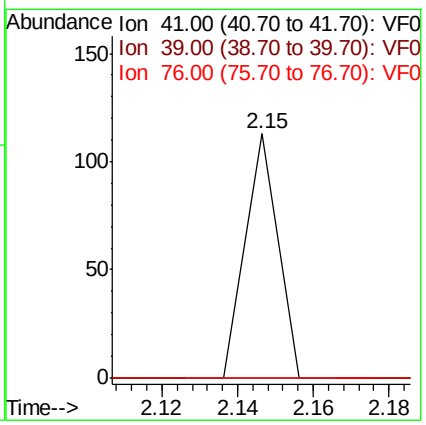


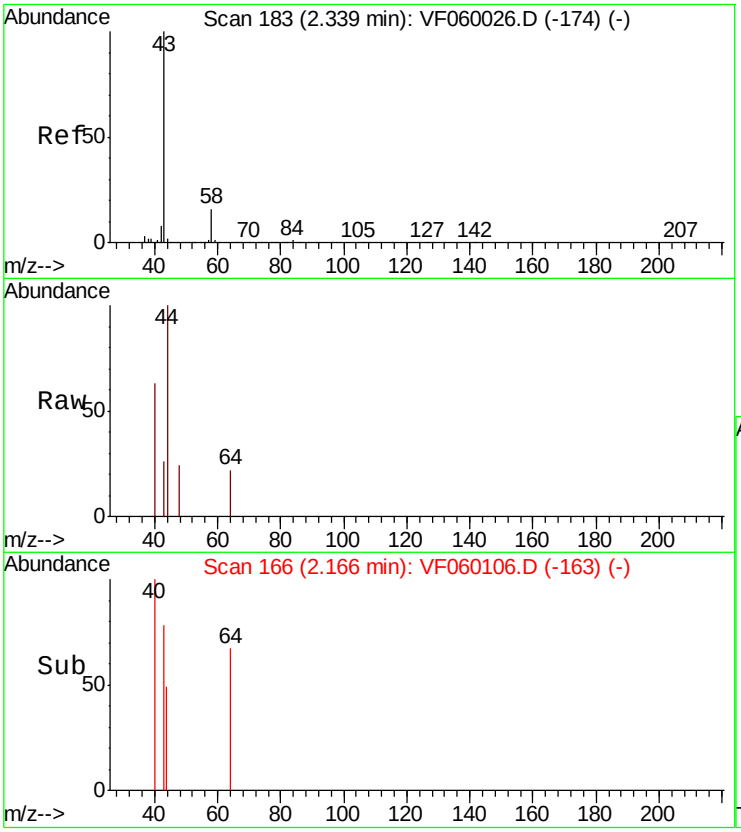




#14
Allyl chloride
Concen: 6.82 ug/l
RT: 2.15 min Scan# 164
Delta R.T. -0.04 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 41 Resp: 67

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 0.0 | 99.3 | 148.9# |
| 76 | 0.0 | 24.3 | 36.5# |



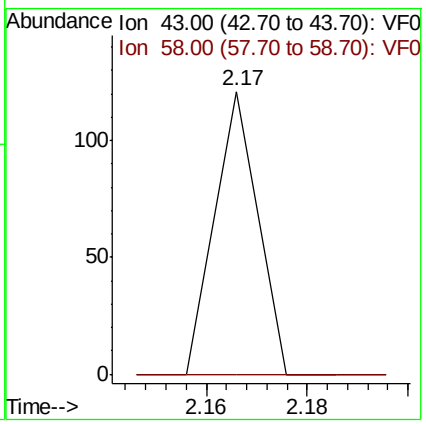


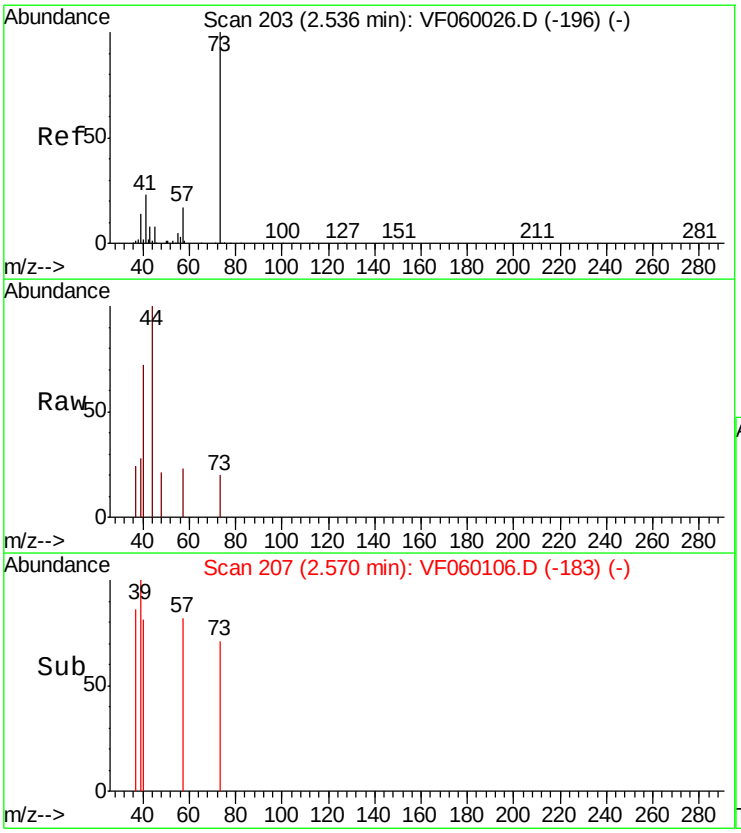

#16
Acetone
Concen: 23.01 ug/l
RT: 2.17 min Scan# 166
Delta R.T. -0.17 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 43 Resp: 72

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 0.0 | 12.6 | 19.0# |

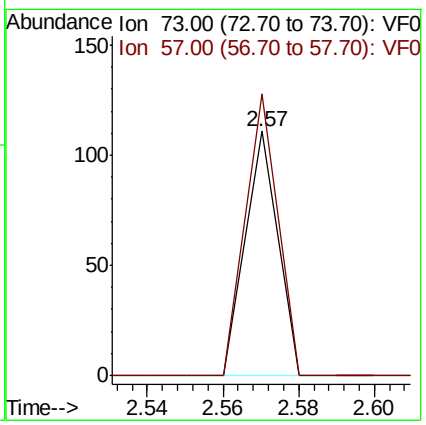


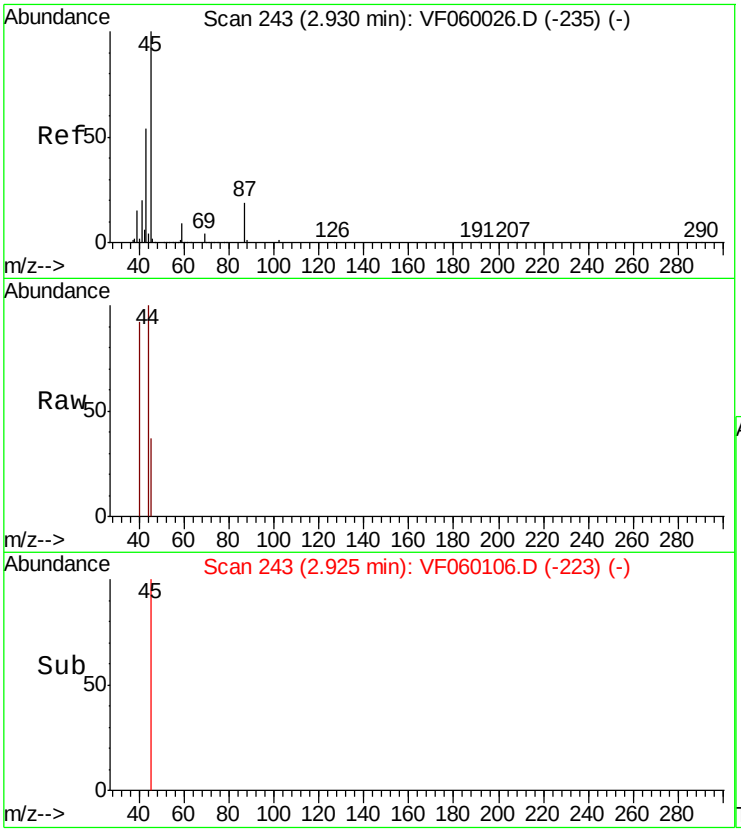




#19
Methyl tert-butyl Ether
Concen: 3.72 ug/l
RT: 2.57 min Scan# 207
Delta R.T. 0.03 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 73 Resp: 66

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 73 | 100 | | |
| 57 | 115.3 | 13.7 | 20.5# |



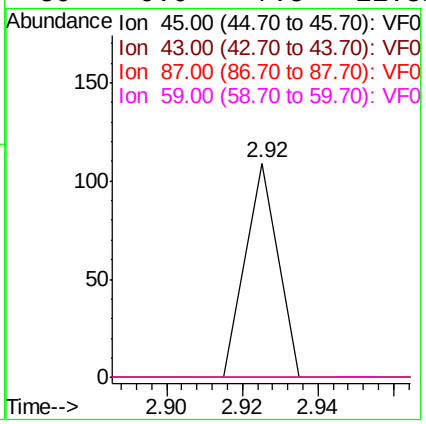


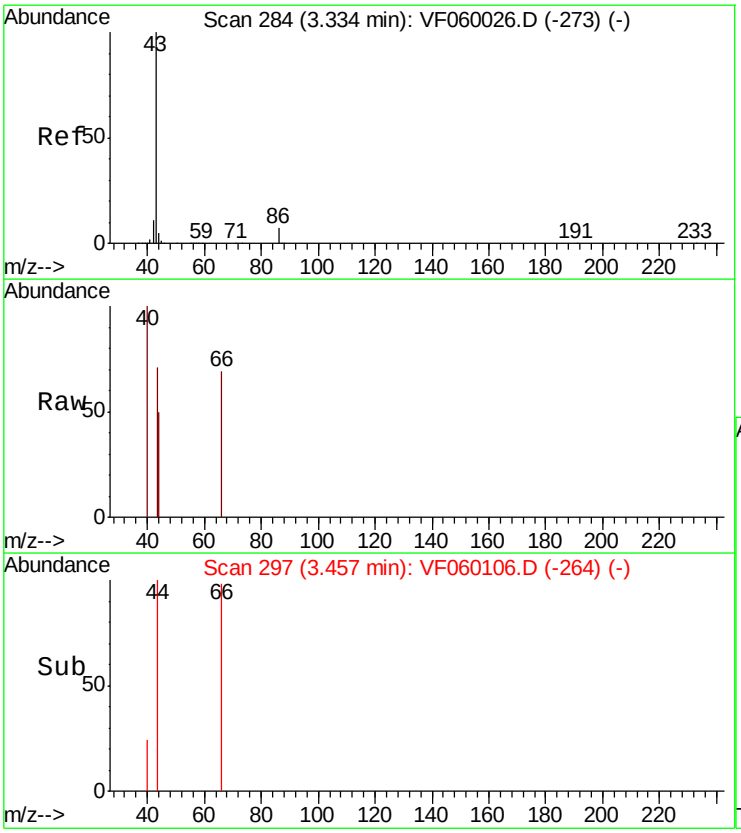

#22
Diisopropyl ether
Concen: 2.91 ug/l
RT: 2.92 min Scan# 243
Delta R.T. -0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :** MSVOA_F
**ClientSampleId :** CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 45 Resp: 64

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 43 | 0.0 | 43.4 | 65.2# |
| 87 | 0.0 | 15.4 | 23.2# |
| 59 | 0.0 | 7.5 | 11.3# |

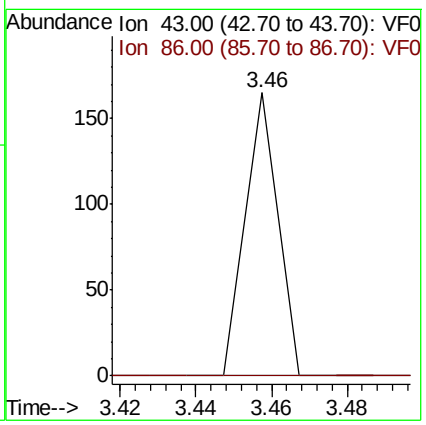


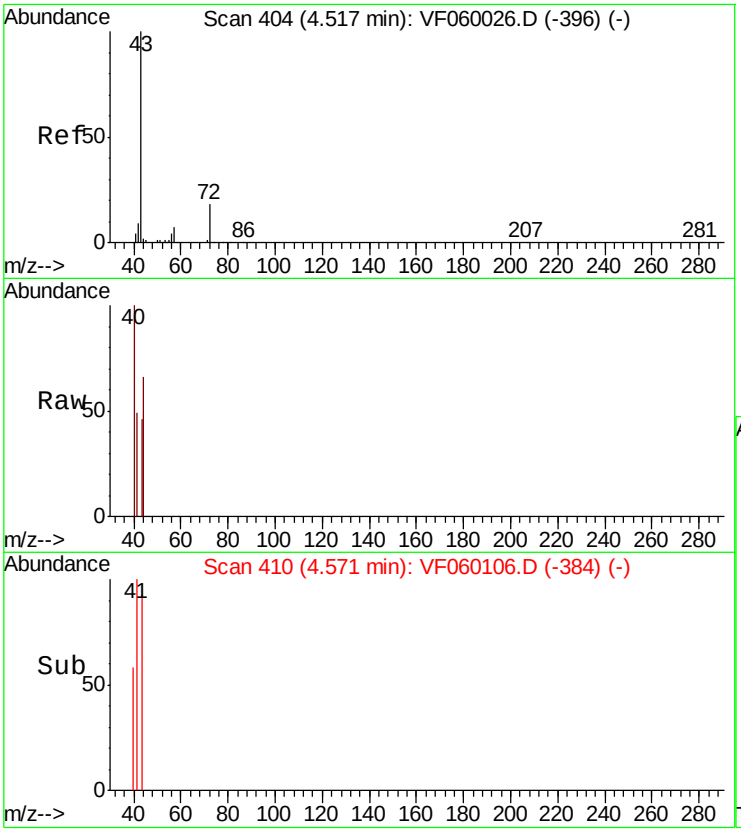




#23
Vinyl Acetate
Concen: 8.41 ug/l
RT: 3.46 min Scan# 297
Delta R.T. 0.12 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 43 Resp: 98

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 0.0 | 5.6 | 8.4# |



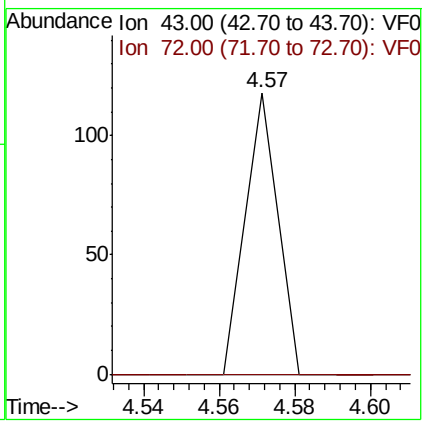


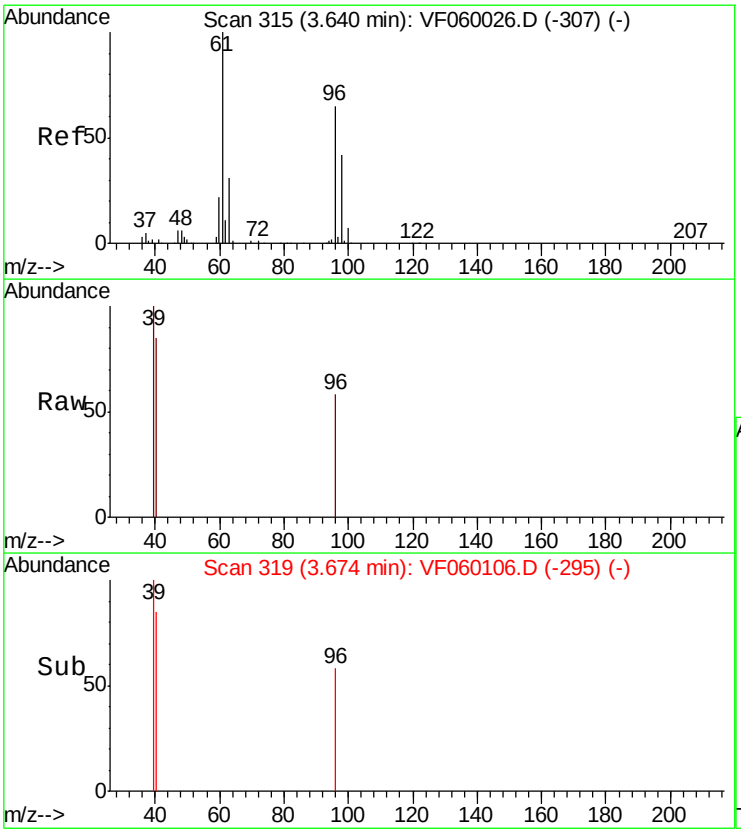

#25
2-Butanone
Concen: 17.22 ug/l
RT: 4.57 min Scan# 410
Delta R.T. 0.05 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 43 Resp: 70

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 15.0 | 22.6# |

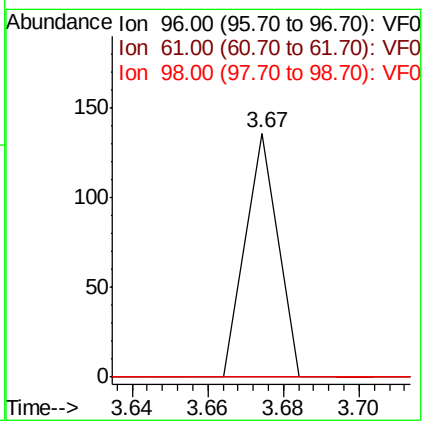


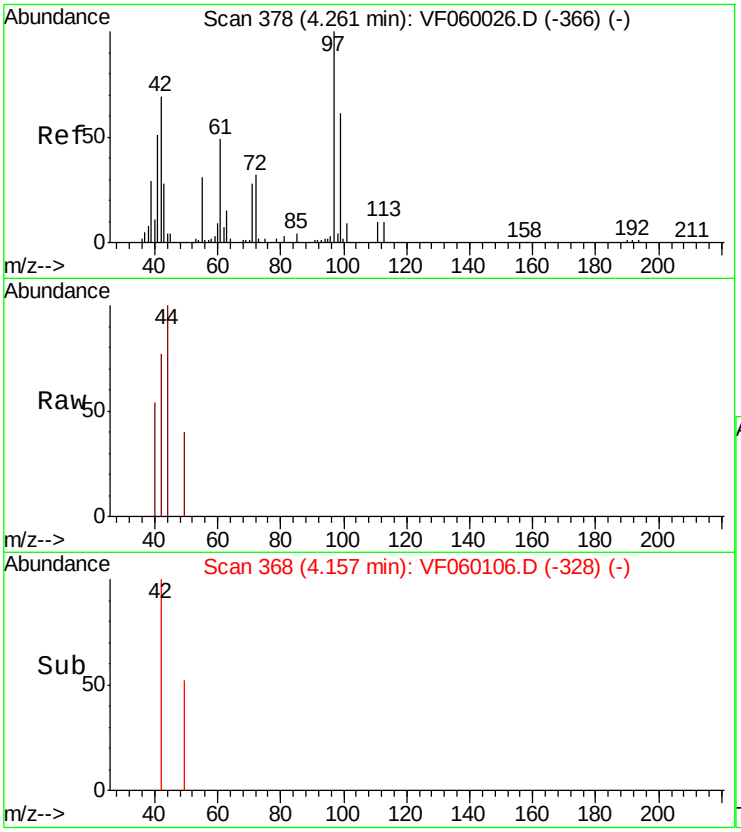




#27
cis-1,2-Dichloroethene
Concen: 9.12 ug/l
RT: 3.67 min Scan# 319
Delta R.T. 0.03 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 96 Resp: 80

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 96 | 100 | | |
| 61 | 0.0 | 0.0 | 307.6 |
| 98 | 0.0 | 0.0 | 128.4 |



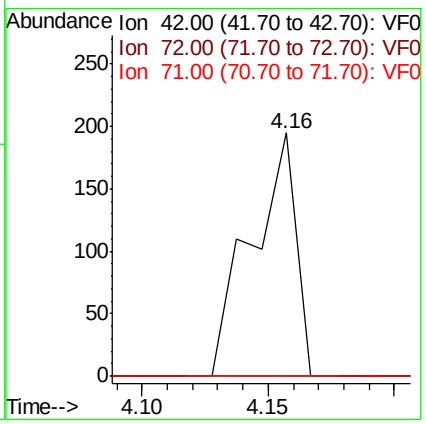


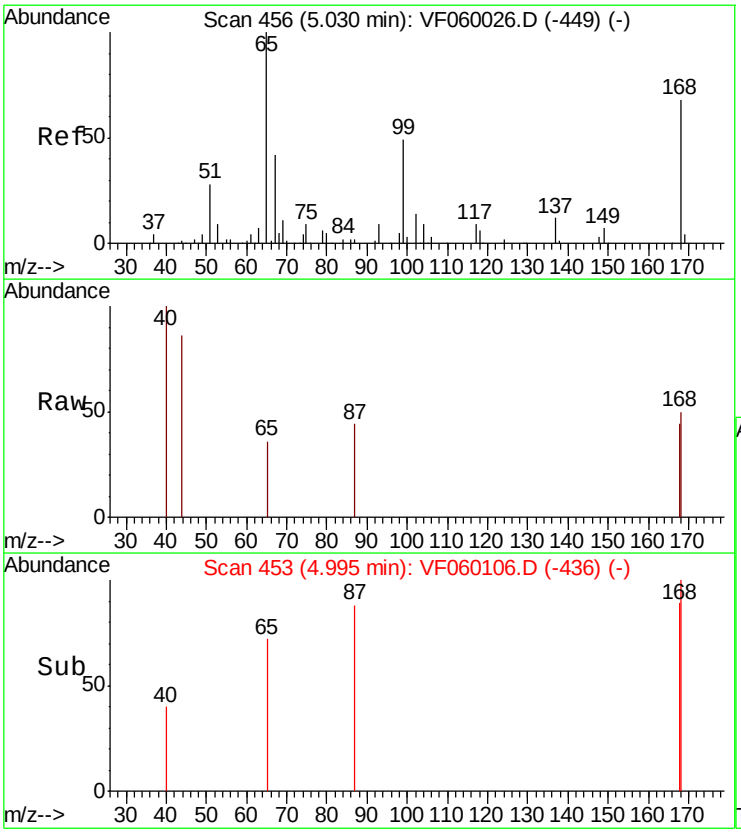

#29
Tetrahydrofuran
Concen: 157.03 ug/l
RT: 4.16 min Scan# 368
Delta R.T. -0.10 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 42 Resp: 241

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 0.0 | 31.4 | 47.2# |
| 71 | 0.0 | 29.7 | 44.5# |

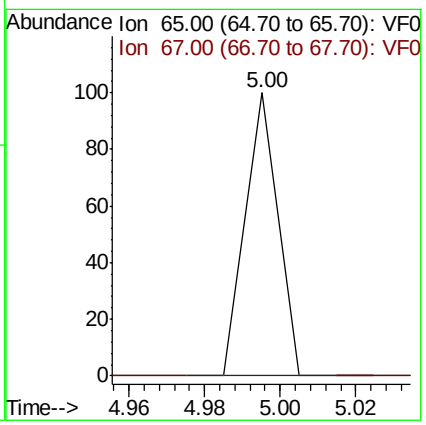


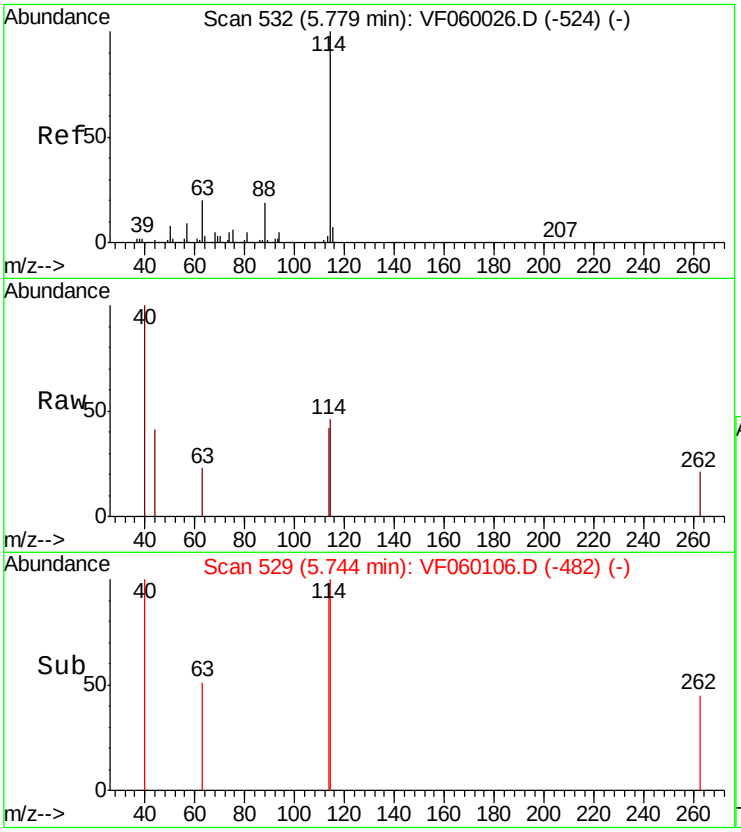




#33
1,2-Dichloroethane-d4
Concen: 4.96 ug/l
RT: 5.00 min Scan# 453
Delta R.T. -0.03 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 65 Resp: 59

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 65 | 100 | | |
| 67 | 0.0 | 0.0 | 92.0 |



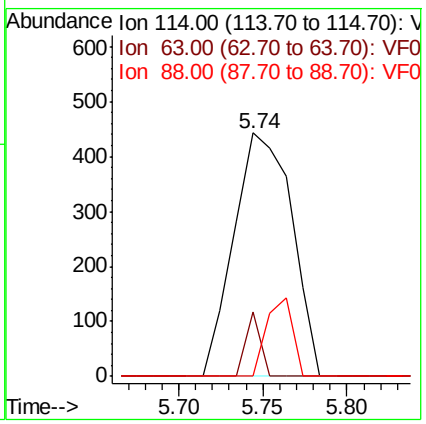


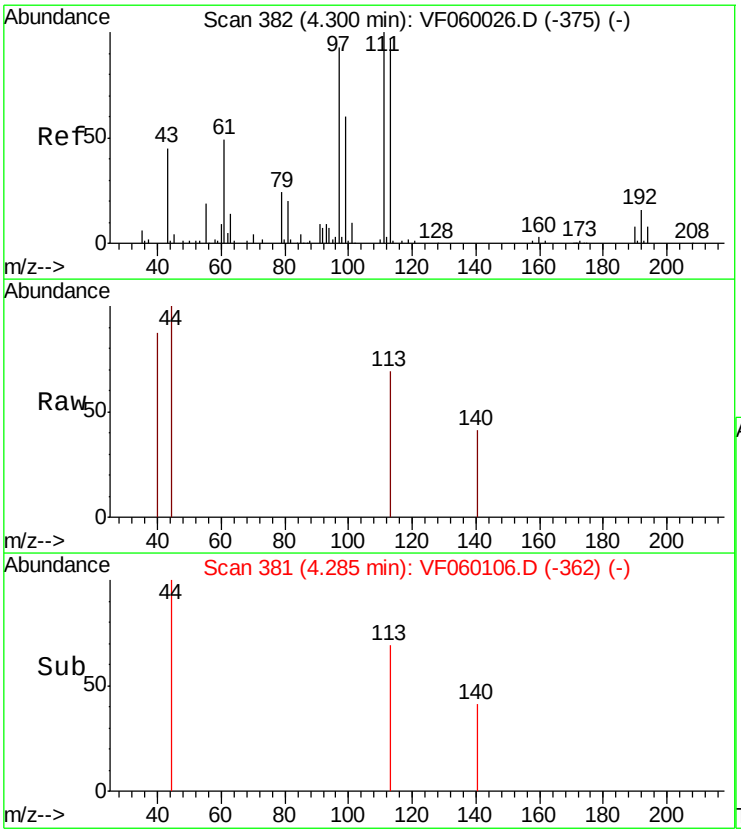

#34
1,4-Difluorobenzene
Concen: 50.00 ug/l
RT: 5.74 min Scan# 529
Delta R.T. -0.03 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion:114 Resp: 1058

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 26.4 | 0.0 | 40.4 |
| 88 | 0.0 | 0.0 | 38.6 |

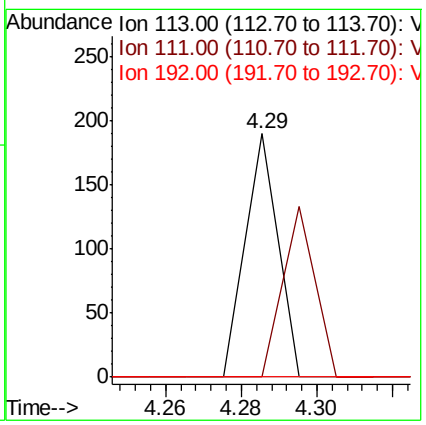


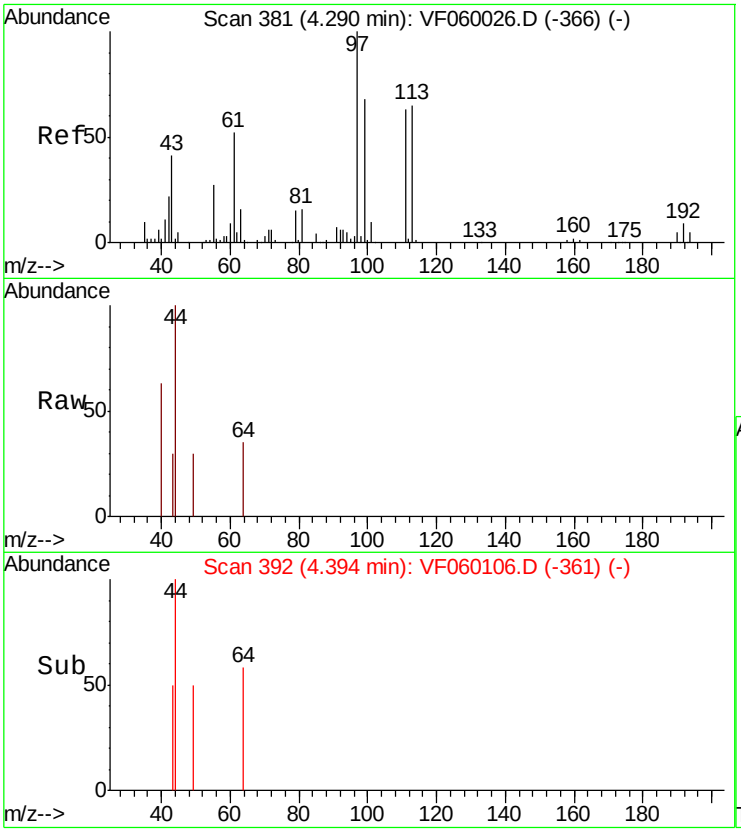




#35
Dibromofluoromethane
Concen: 13.48 ug/l
RT: 4.29 min Scan# 381
Delta R.T. -0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion:113 Resp: 112

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 113 | 100 | | |
| 111 | 0.0 | 82.7 | 124.1# |
| 192 | 0.0 | 13.0 | 19.4# |



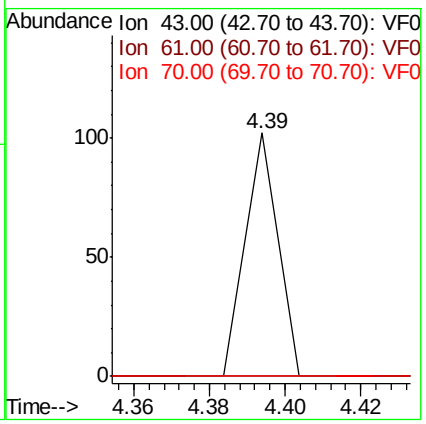


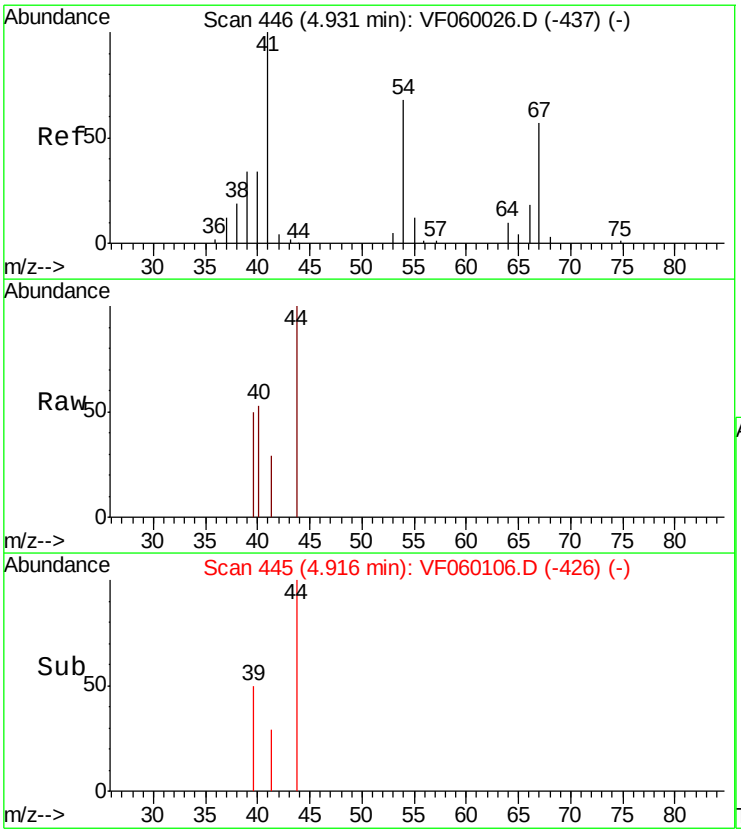

#37
Ethyl Acetate
Concen: 10.09 ug/l
RT: 4.39 min Scan# 392
Delta R.T. 0.10 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :** MSVOA_F
**ClientSampleId :** CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 43 Resp: 60

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 0.0 | 101.5 | 152.3# |
| 70 | 0.0 | 6.4 | 9.6# |

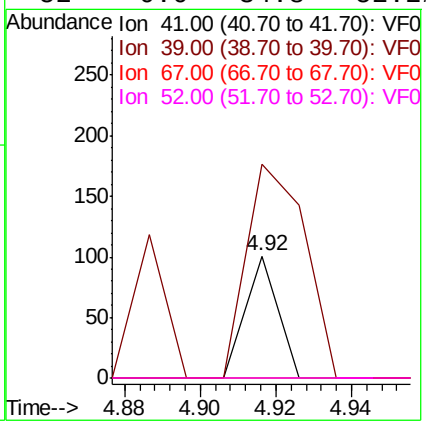


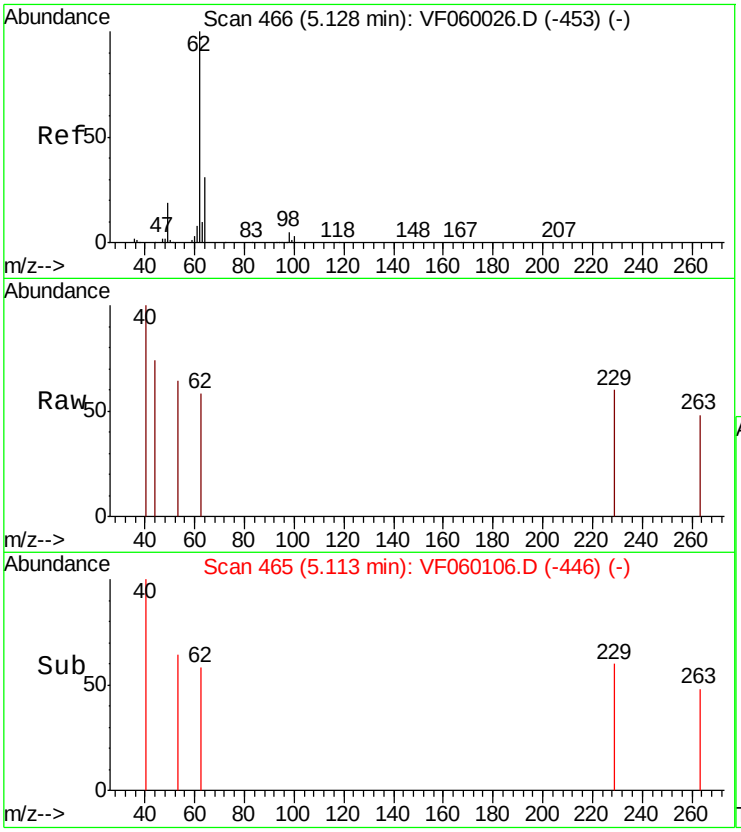




#41
Methacrylonitrile
Concen: 19.95 ug/l
RT: 4.92 min Scan# 445
Delta R.T. -0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 41 Resp: 60

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 39 | 174.3 | 52.9 | 79.3# |
| 67 | 0.0 | 45.3 | 67.9# |
| 52 | 0.0 | 34.8 | 52.2# |



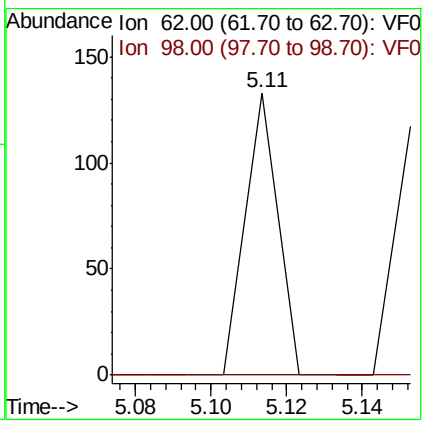


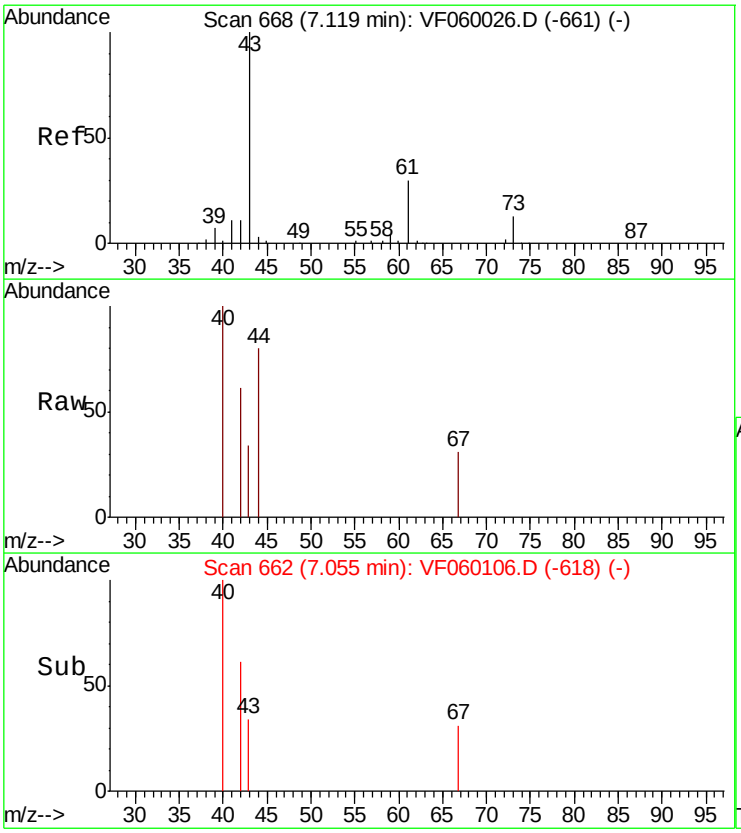

#42
1,2-Dichloroethane
Concen: 6.78 ug/l
RT: 5.11 min Scan# 465
Delta R.T. -0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :** MSVOA_F
**ClientSampleId :** CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 62 Resp: 79

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 0.0 | 0.0 | 11.2 |

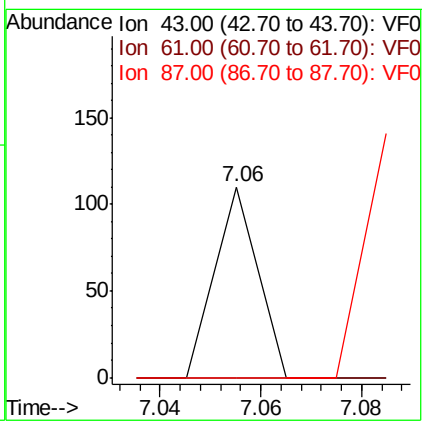


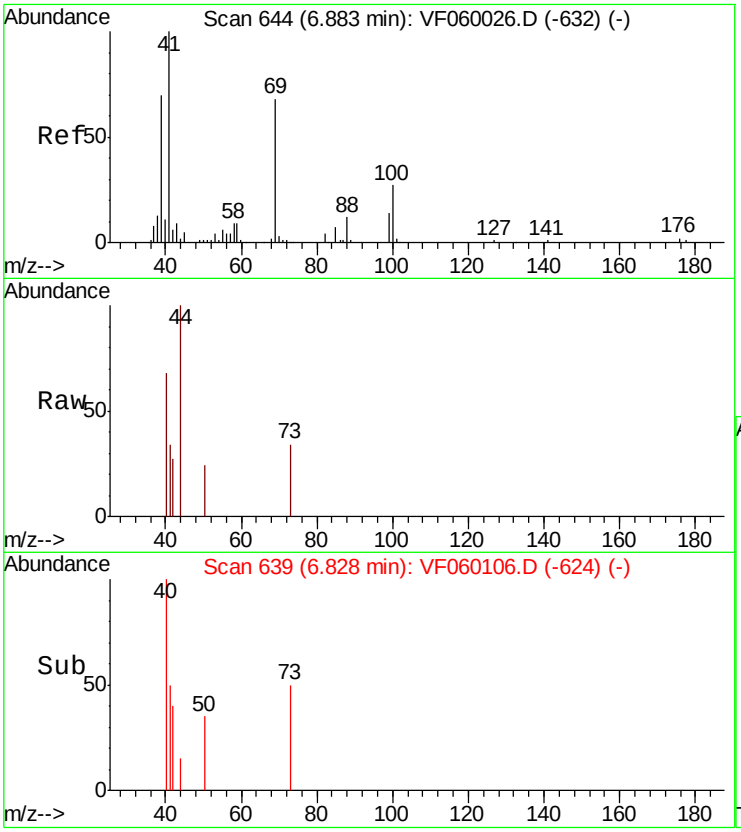




#43
Isopropyl Acetate
Concen: 8.69 ug/l
RT: 7.06 min Scan# 662
Delta R.T. -0.06 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 43 Resp: 65

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 61 | 0.0 | 23.8 | 35.6# |
| 87 | 0.0 | 0.2 | 0.4# |



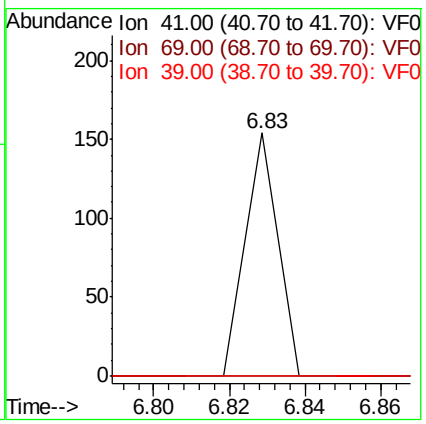


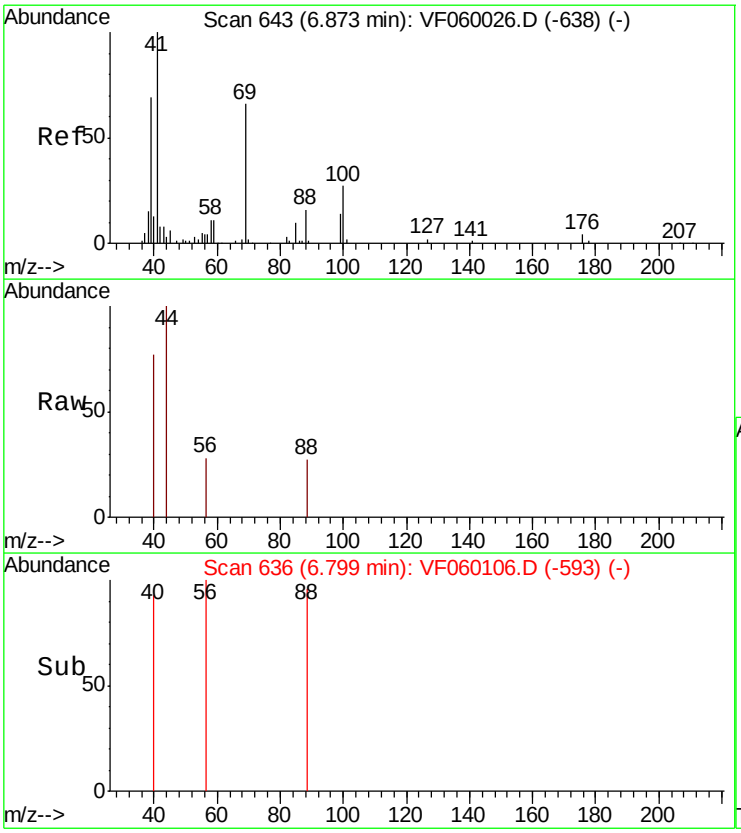

#48
Methyl methacrylate
Concen: 18.38 ug/l
RT: 6.83 min Scan# 639
Delta R.T. -0.05 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 41 Resp: 91

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 69 | 0.0 | 54.6 | 81.8# |
| 39 | 0.0 | 56.5 | 84.7# |

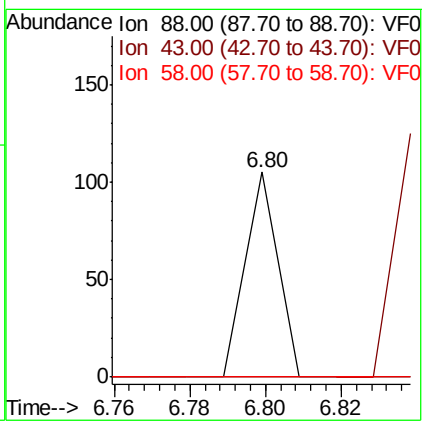


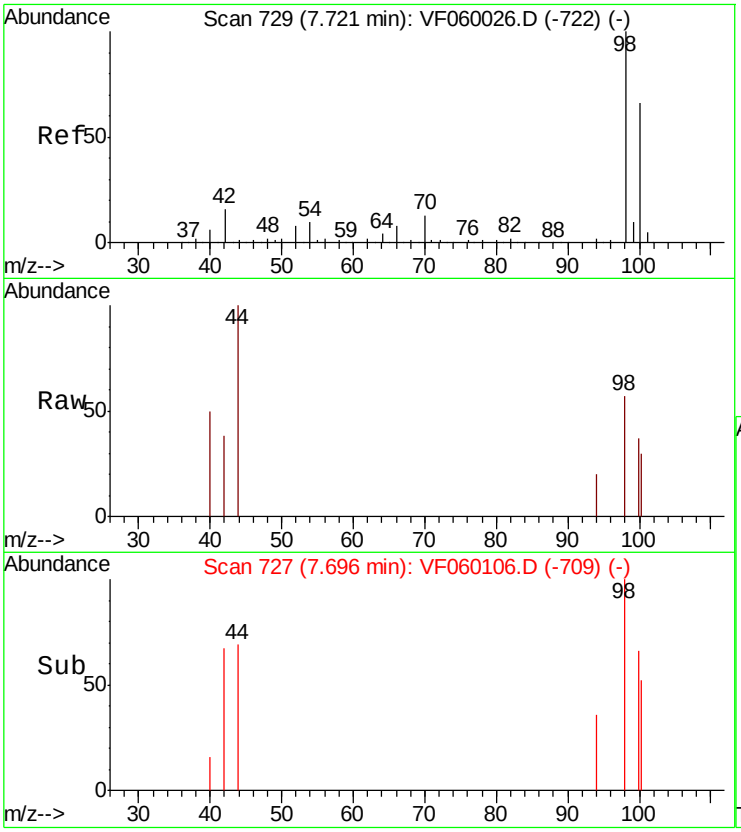




#49
1,4-Dioxane
Concen: 1304.15 ug/l
RT: 6.80 min Scan# 636
Delta R.T. -0.07 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 88 Resp: 62

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 88 | 100 | | |
| 43 | 0.0 | 46.5 | 69.7# |
| 58 | 0.0 | 54.8 | 82.2# |



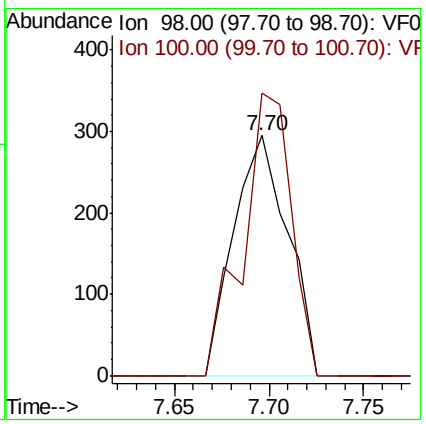


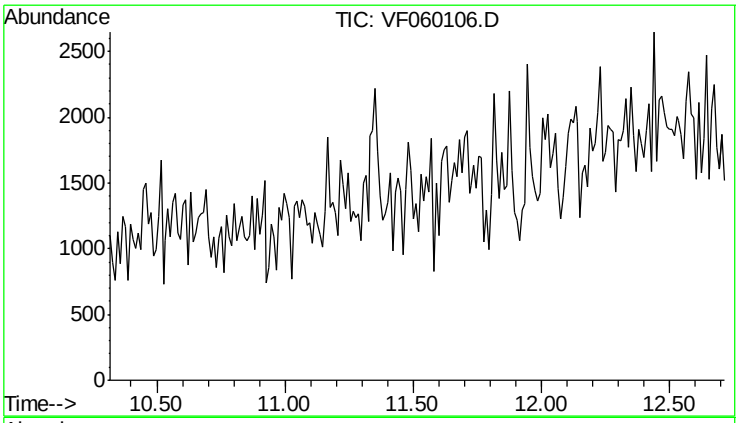

#50
Toluene-d8
Concen: 24.75 ug/l
RT: 7.70 min Scan# 727
Delta R.T. -0.02 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 98 Resp: 584

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 98 | 100 | | |
| 100 | 118.0 | 53.2 | 79.8# |



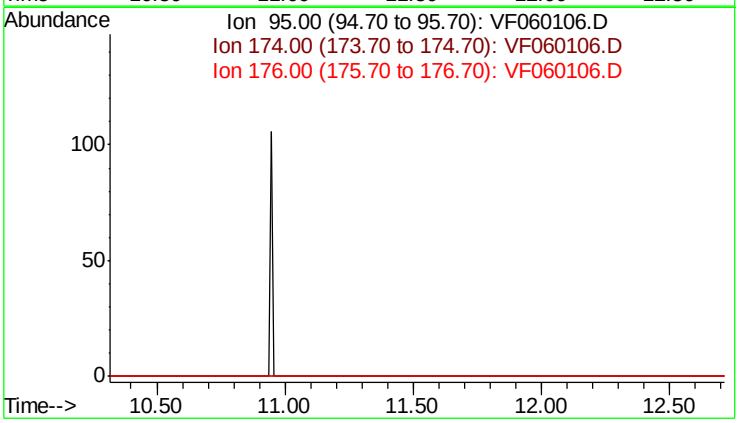



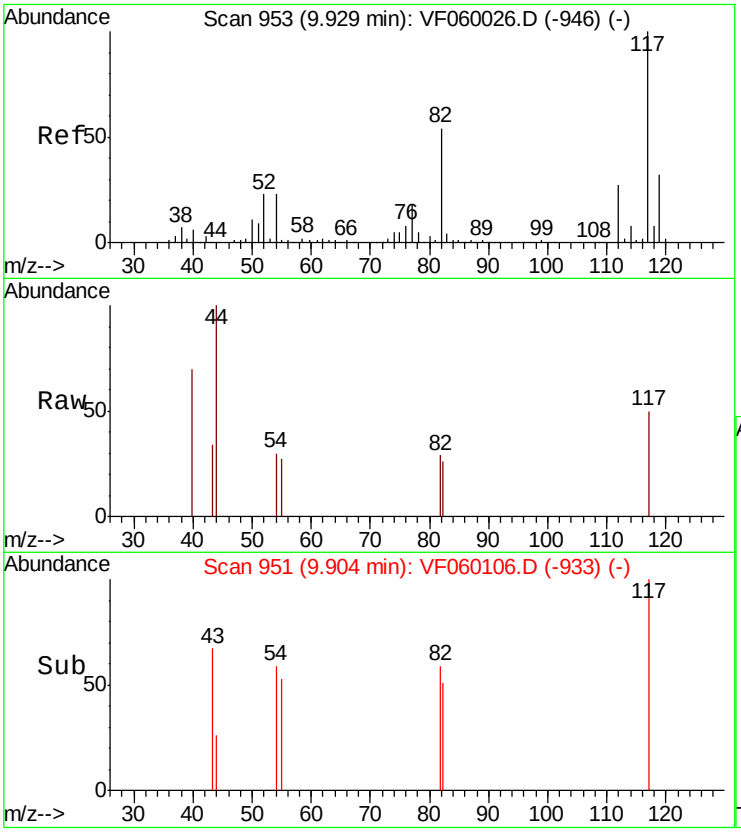

#62
4-Bromofluorobenzene
Concen: 0.00 ug/l
Expected RT: 11.52 min

Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 95

| Sig | Exp Ratio |
|---|---|
| 95 | 100 |
| 174 | 79.2 |
| 176 | 76.5 |



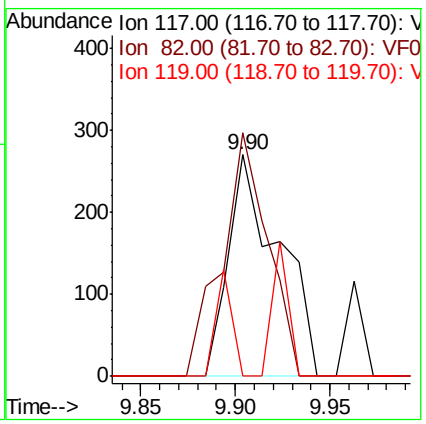


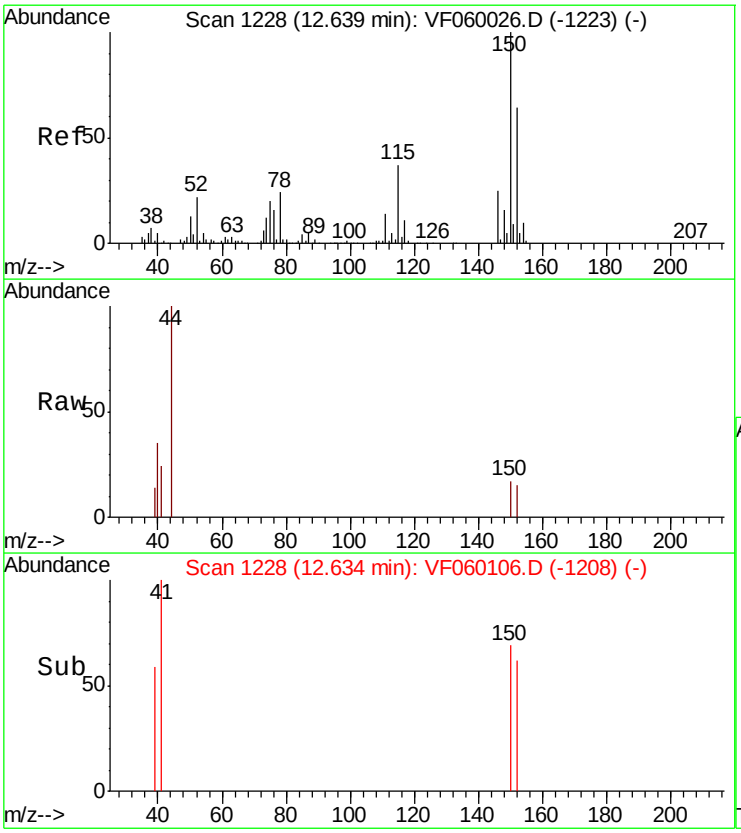

#63
Chlorobenzene-d5
Concen: 50.00 ug/l
RT: 9.90 min Scan# 951
Delta R.T. -0.02 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion:117 Resp: 497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 110.0 | 43.6 | 65.4# |
| 119 | 0.0 | 25.6 | 38.4# |

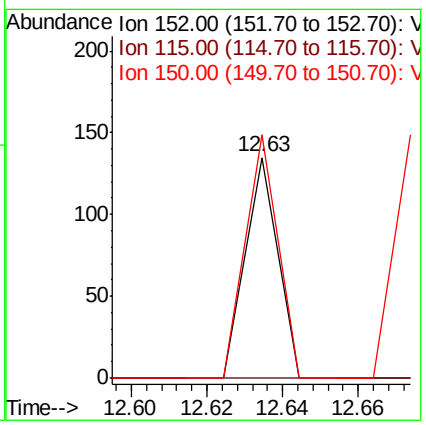


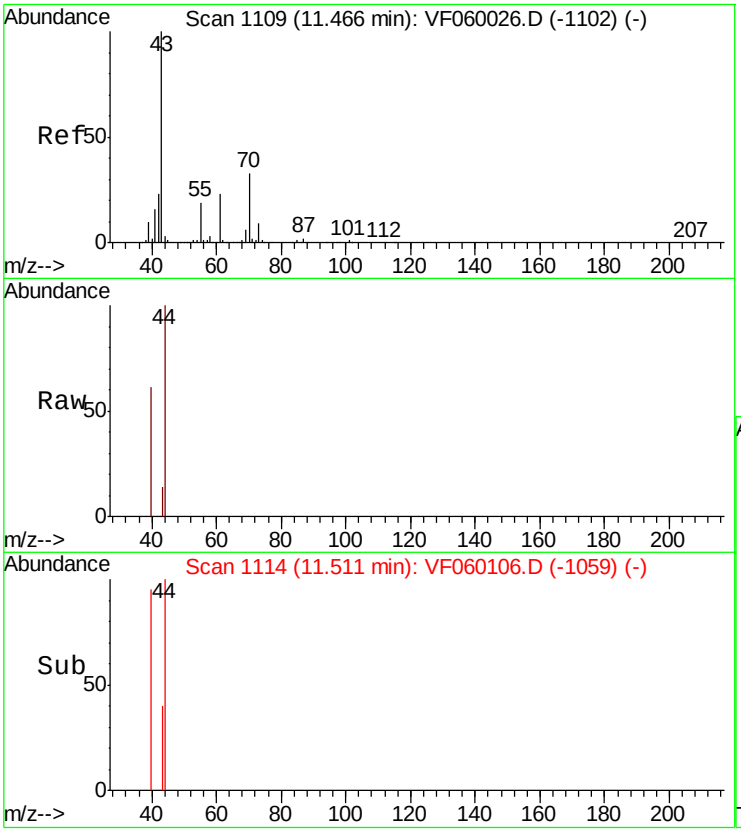




#72
1,4-Dichlorobenzene-d4
Concen: 50.00 ug/l
RT: 12.63 min Scan# 1228
Delta R.T. -0.01 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion:152 Resp: 80

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 152 | 100 | | |
| 115 | 0.0 | 28.6 | 85.9# |
| 150 | 110.4 | 0.0 | 312.0 |



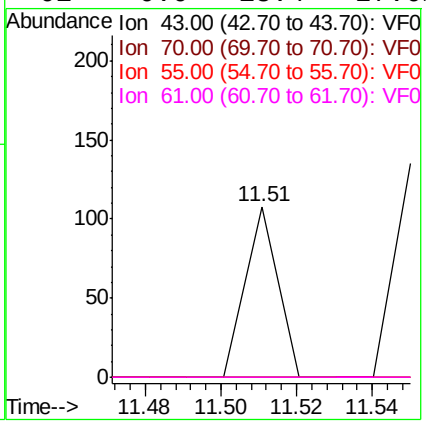


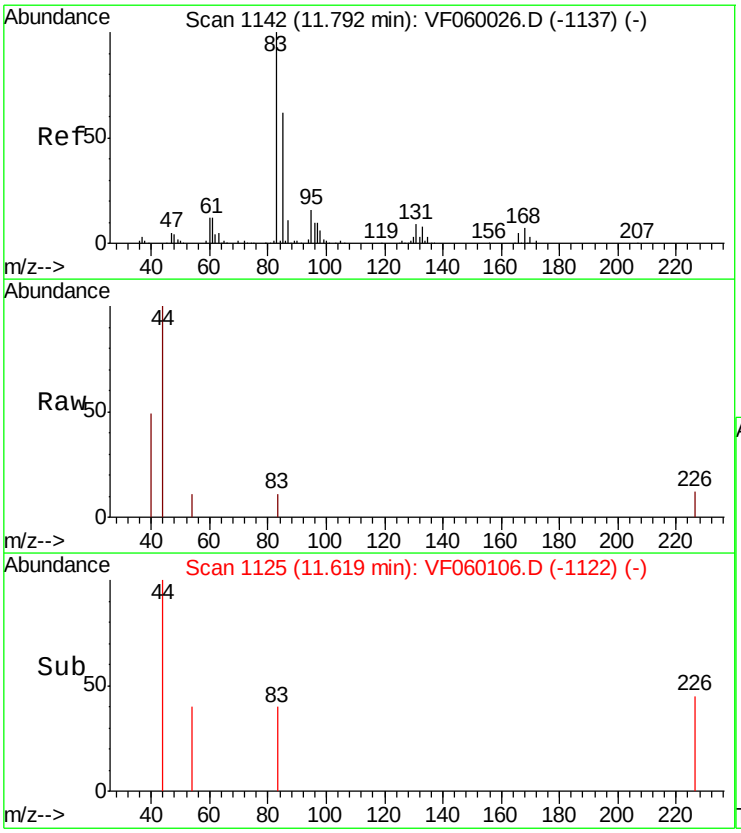

#74
N-amyl acetate
Concen: 42.76 ug/l
RT: 11.51 min Scan# 1114
Delta R.T. 0.04 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :** MSVOA_F
**ClientSampleId :** CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion: 43 Resp: 64

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 70 | 0.0 | 26.4 | 39.6# |
| 55 | 0.0 | 15.0 | 22.4# |
| 61 | 0.0 | 18.4 | 27.6# |

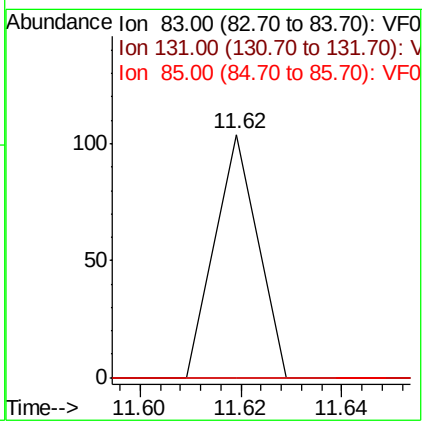


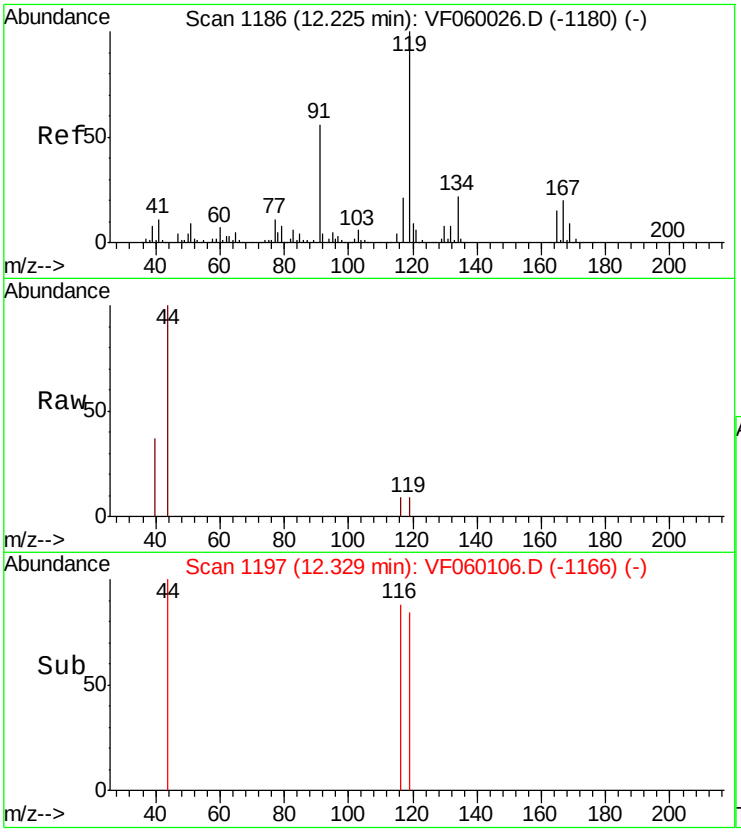




#75
1,1,2,2-Tetrachloroethane
Concen: 58.95 ug/l
RT: 11.62 min Scan# 1125
Delta R.T. -0.17 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 83 Resp: 62

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 131 | 0.0 | 4.5 | 13.7# |
| 85 | 0.0 | 31.3 | 93.9# |



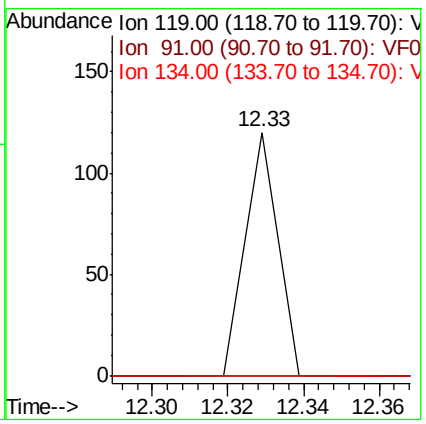


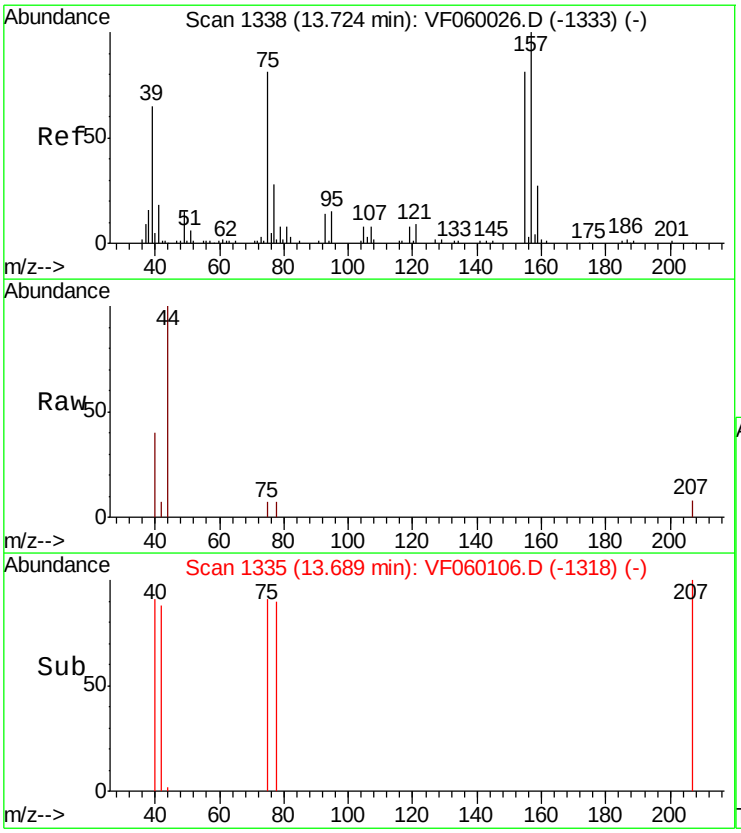

#83
tert-Butylbenzene
Concen: 17.35 ug/l
RT: 12.33 min Scan# 1197
Delta R.T. 0.10 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion:119 Resp: 71

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 119 | 100 | | |
| 91 | 0.0 | 28.1 | 84.3# |
| 134 | 0.0 | 11.1 | 33.3# |

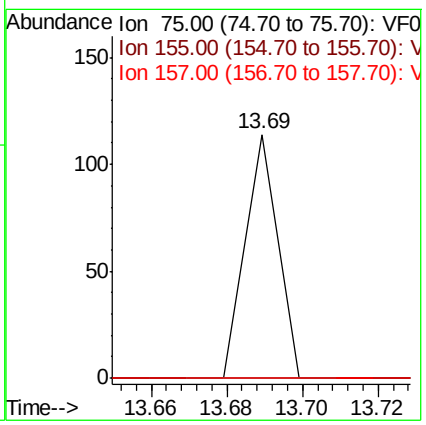


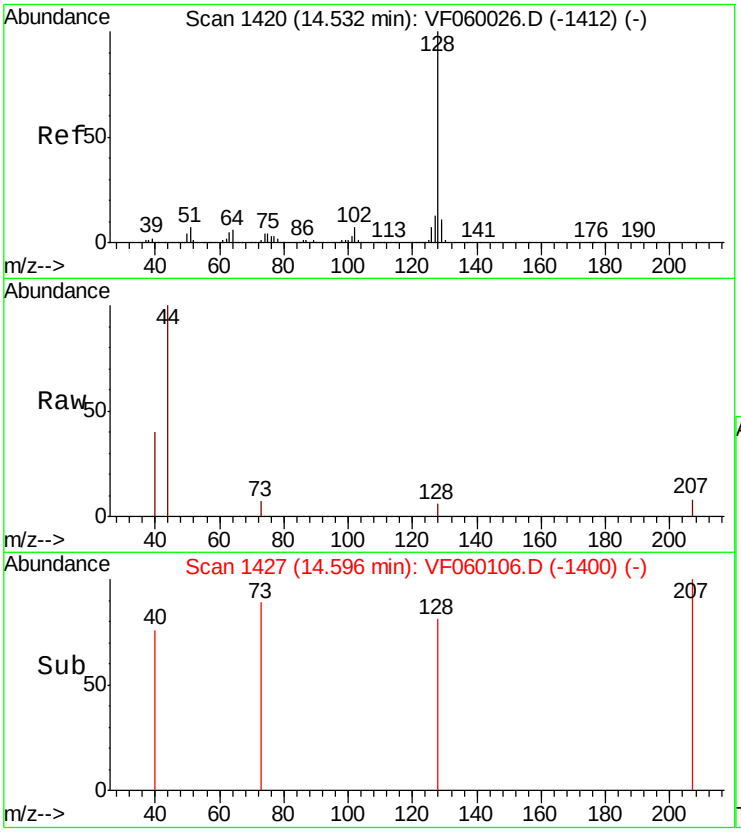




#92
1,2-Dibromo-3-Chloropropane
Concen: 311.75 ug/l
RT: 13.69 min Scan# 1335
Delta R.T. -0.03 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

Tgt Ion: 75 Resp: 67

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 75 | 100 | | |
| 155 | 0.0 | 49.8 | 149.3# |
| 157 | 0.0 | 61.6 | 184.7# |






#95
Naphthalene
Concen: 24.42 ug/l
RT: 14.60 min Scan# 1427
Delta R.T. 0.06 min
Lab File: VF060106.D
Acq: 24 Aug 2018 18:07

**Instrument :**
MSVOA_F
**ClientSampleId :**
CLIFFWOOD-EMBANKMENT-FILL

Tgt Ion:128 Resp: 69

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 128 | 100 | | |
| 127 | 100.0 | 10.4 | 15.6# |
| 129 | 0.0 | 8.5 | 12.7# |