Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL032719\
Data File : VL033479.D
Acq On : 27 Mar 2019 22:08
Operator : SY/AP
Sample : K2042-14
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_L
**ClientSampleId :**

Quant Time: Mar 28 07:30:33 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar 26 16:00:50 2019
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Bromochloromethane | 5.75 | 49 | 732716 | 10.00 | ppbv | | -0.01 |
| 33) 1,4-Difluorobenzene | 7.28 | 114 | 1669252 | 10.00 | ppbv | | -0.01 |
| 55) Chlorobenzene-d5 | 12.23 | 117 | 1707478 | 10.00 | ppbv | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 68) 1-Bromo-4-Fluorobenzene | 14.57 | 95 | 1342215 | 10.03 | ppbv | | 0.00 |
| Spiked Amount 10.000 | Range 65 - 135 | | Recovery = 100.30% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 3.07 | 85 | 31995 | 0.299 | ppbv | | 90 |
| 3) Chlorodifluoromethane | 2.98 | 51 | 2316012 | 27.456 | ppbv | # | 58 |
| 4) Chloromethane | 3.17 | 50 | 23895 | 0.535 | ppbv | | 94 |
| 9) Propene | 3.23 | 41 | 334904 | 9.454 | ppbv | | 92 |
| 10) Heptane | 8.23 | 43 | 9045 | 0.096 | ppbv | # | 67 |
| 11) Trichlorofluoromethane | 3.99 | 101 | 31029 | 0.236 | ppbv | | 99 |
| 12) 1,1,2-Trichlorotrifluoroet | 4.54 | 101 | 2868 | 0.032 | ppbv | # | 14 |
| 13) Ethanol | 3.66 | 45 | 5236452 | 571.226 | ppbv | | 66 |
| 15) Acetone | 3.89 | 43 | 613619 | 6.965 | ppbv | | 100 |
| 16) 1,3-Butadiene | 3.34 | 39 | 3259 | 0.093 | ppbv | # | 71 |
| 17) tert-Butyl alcohol | 4.37 | 59 | 13203 | 0.815 | ppbv | # | 77 |
| 19) Isopropyl Alcohol | 4.03 | 45 | 978179 | 17.554 | ppbv | # | 99 |
| 20) Methylene Chloride | 4.40 | 84 | 19937 | 0.533 | ppbv | # | 79 |
| 21) Allyl Chloride | 4.37 | 41 | 8105 | 0.146 | ppbv | # | 85 |
| 23) Vinyl Acetate | 5.14 | 43 | 15608 | 0.124 | ppbv | # | 63 |
| 25) Ethyl Acetate | 5.76 | 43 | 46173 | 0.282 | ppbv | # | 93 |
| 26) Hexane | 5.77 | 57 | 30772 | 0.423 | ppbv | # | 67 |
| 29) Chloroform | 5.84 | 83 | 4034 | 0.032 | ppbv | | 98 |
| 30) Cyclohexane | 7.24 | 84 | 1342 | 0.023 | ppbv | # | 1 |
| 34) 2-Butanone | 5.32 | 43 | 16641 | 0.166 | ppbv | # | 54 |
| 35) Carbon Tetrachloride | 7.12 | 117 | 4639 | 0.039 | ppbv | # | 74 |
| 36) Benzene | 6.99 | 78 | 38740 | 0.277 | ppbv | | 98 |
| 37) 1,2-Dichloroethane | 6.40 | 62 | 2569 | 0.027 | ppbv | # | 84 |
| 39) 1,2-Dichloropropane | 7.28 | 63 | 450620 | 8.213 | ppbv | # | 23 |
| 44) 2,2,4-Trimethylpentane | 7.98 | 57 | 6872 | 0.028 | ppbv | # | 9 |
| 53) Toluene | 9.94 | 91 | 266632 | 1.638 | ppbv | | 97 |
| 58) Ethyl Benzene | 12.86 | 91 | 42312 | 0.186 | ppbv | | 99 |
| 59) m/p-Xylene | 13.14 | 91 | 16652 | 0.082 | ppbv | # | 100 |
| 60) o-Xylene | 13.84 | 91 | 37024 | 0.188 | ppbv | | 99 |

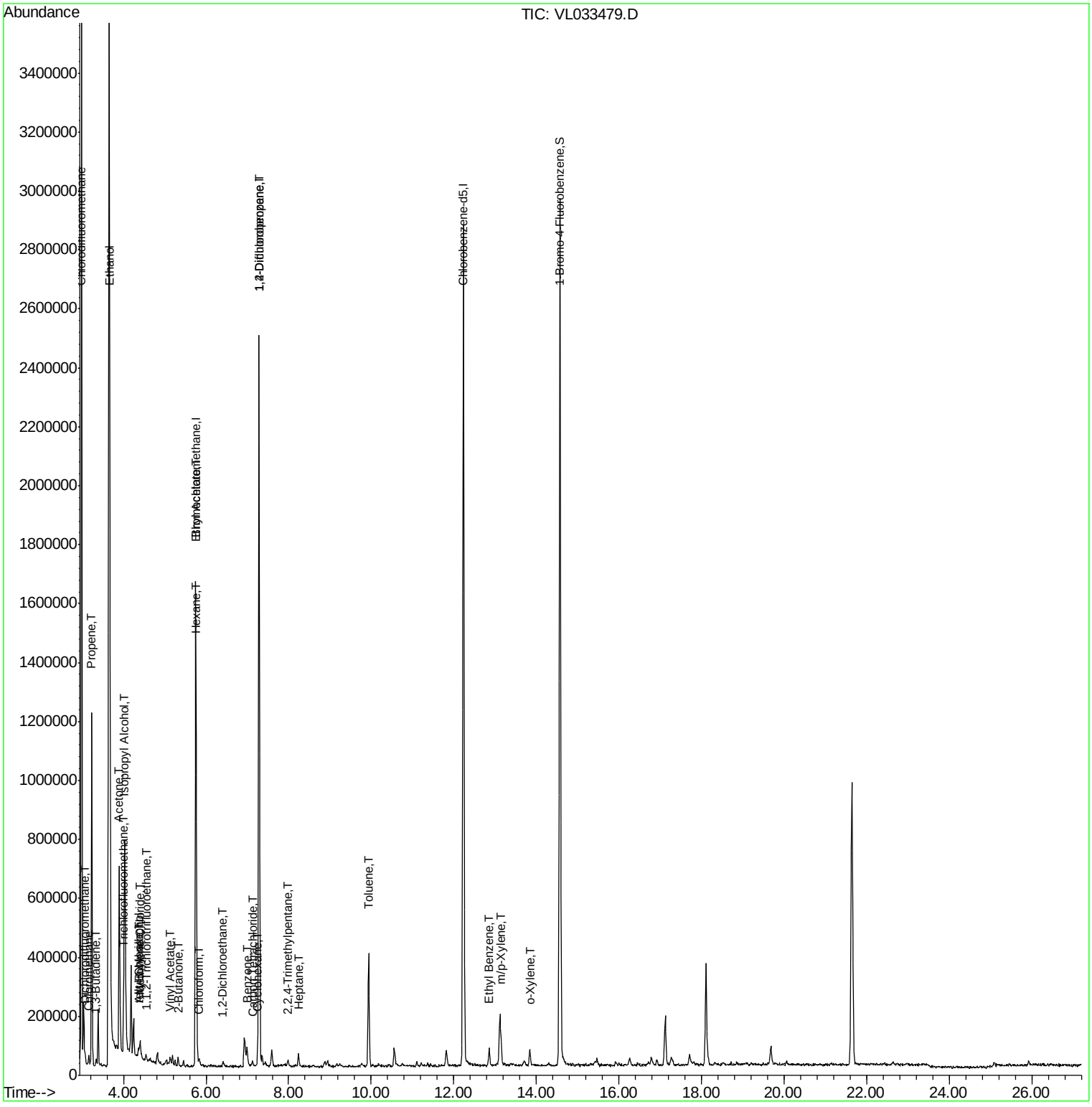
(#) = qualifier out of range (m) = manual integration (+) = signals summed

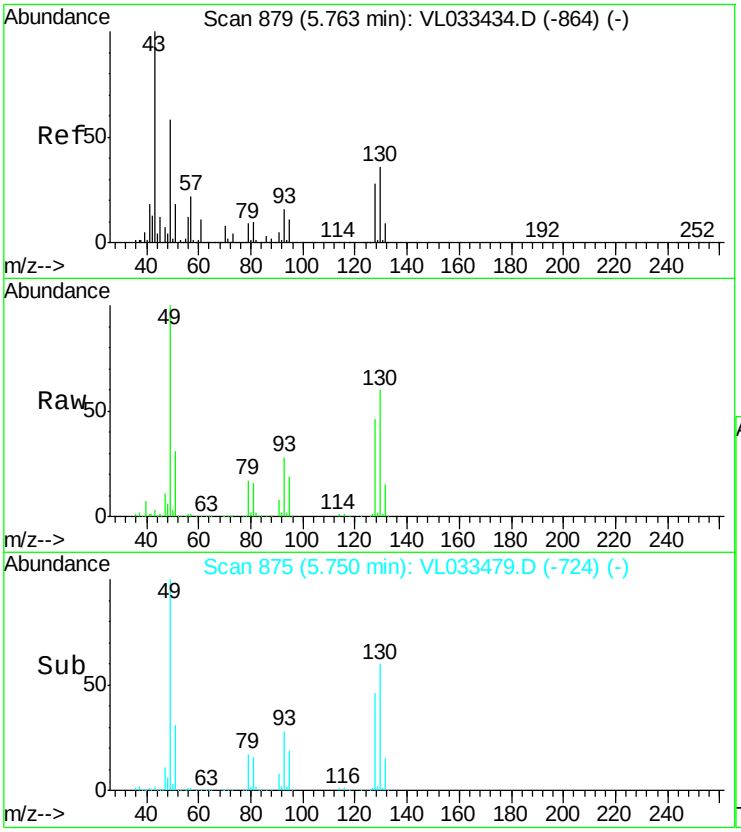
Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL032719\
Data File : VL033479.D
Acq On : 27 Mar 2019 22:08
Operator : SY/AP
Sample : K2042-14
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

**Instrument :**
MSVOA_L
**ClientSampleId :**

Quant Time: Mar 28 07:30:33 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar 26 16:00:50 2019
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration



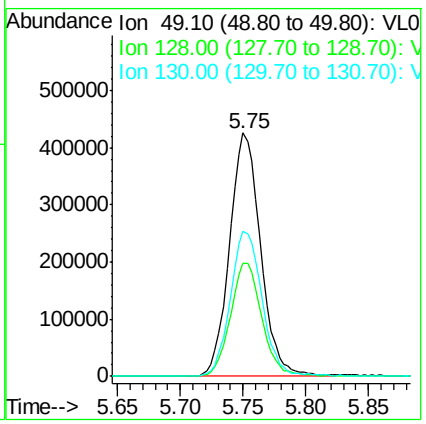


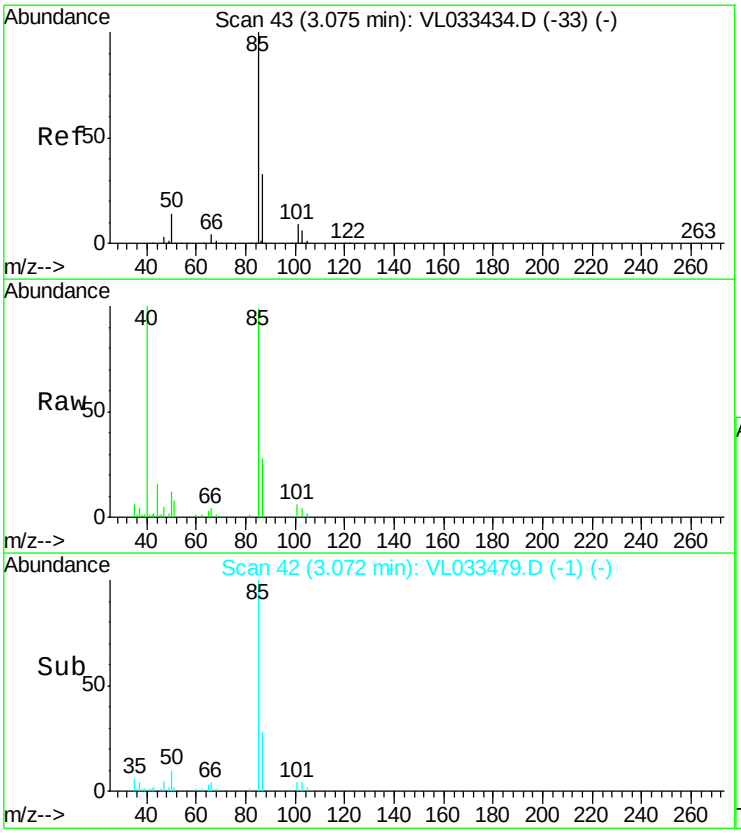

#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.75 min Scan# 875
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 49 Resp: 732716

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 128 | 47.1 | 24.0 | 72.0 |
| 130 | 61.0 | 31.2 | 93.6 |

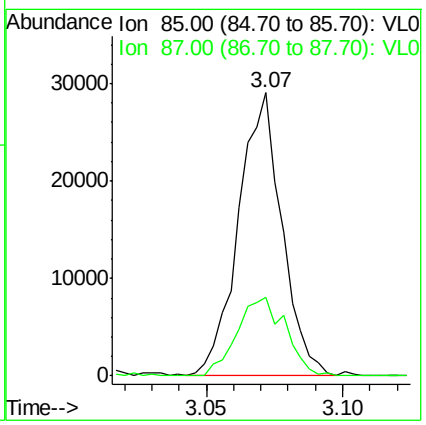


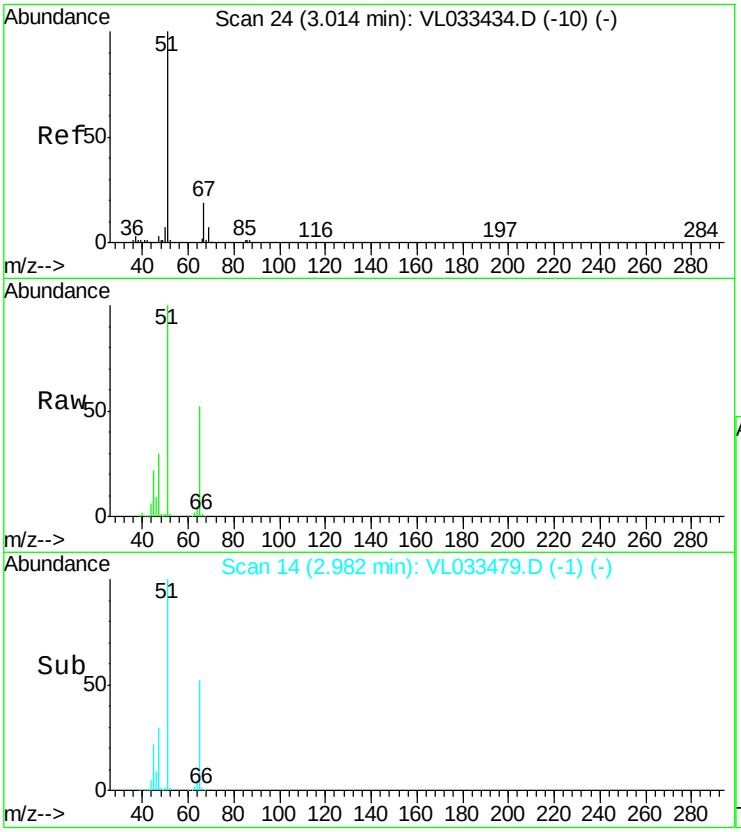




#2
Dichlorodifluoromethane
Concen: 0.299 ppbv
RT: 3.07 min Scan# 42
Delta R.T. -0.00 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 85 Resp: 31995

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 27.9 | 26.7 | 40.1 |



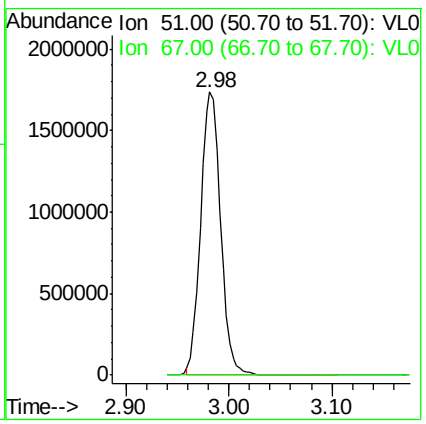


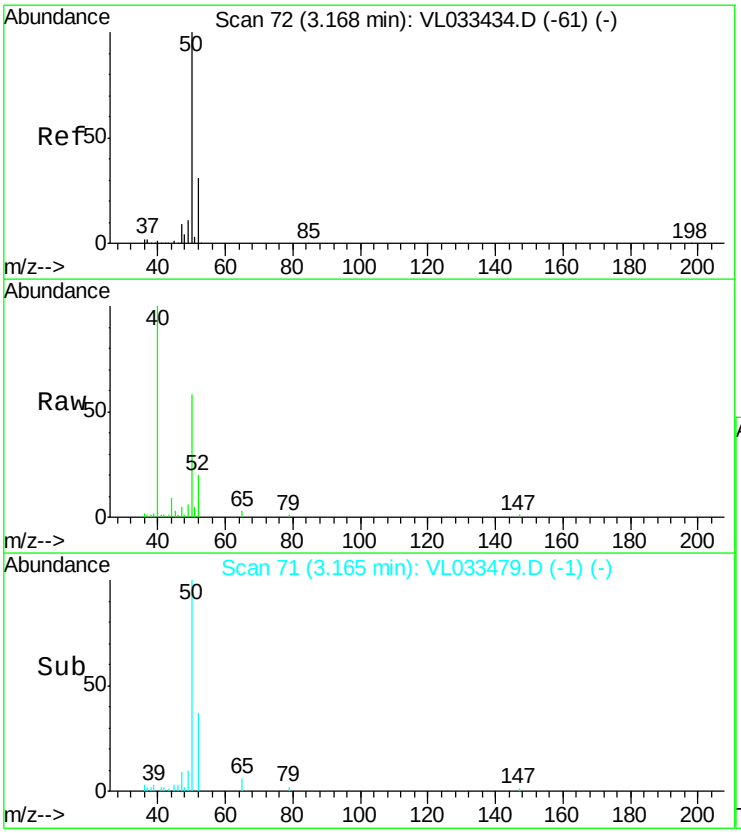

#3
Chlorodifluoromethane
Concen: 27.456 ppbv
RT: 2.98 min Scan# 14
Delta R.T. -0.03 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 51 Resp: 2316012

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 51 | 100 | | |
| 67 | 0.2 | 15.7 | 23.5# |

**Instrument :**
MSVOA_L
**ClientSampleId :**

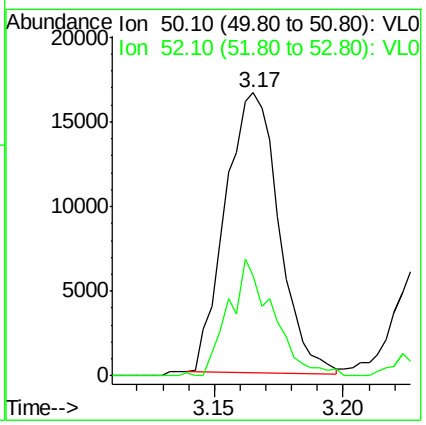


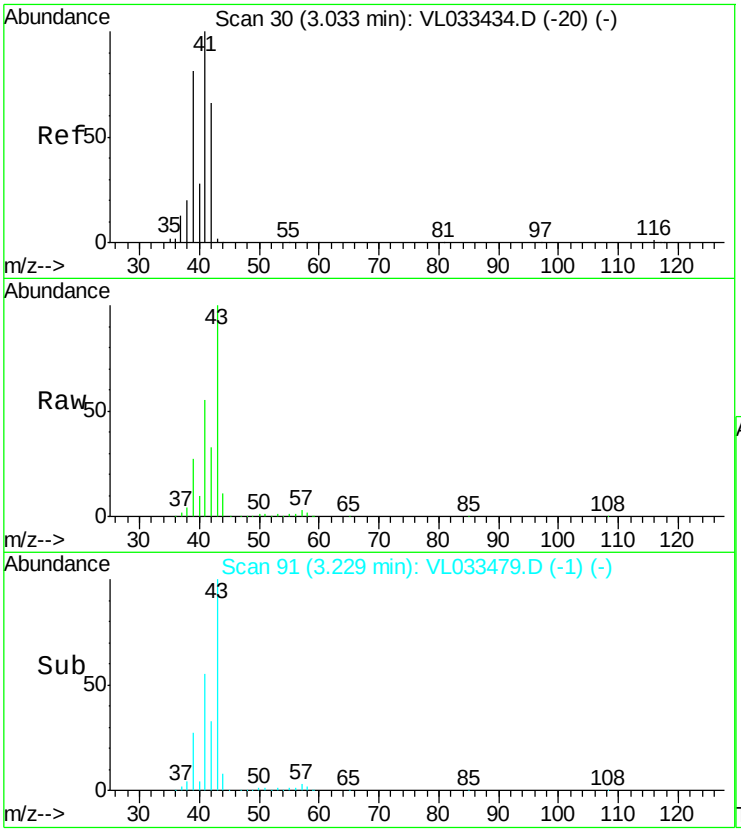




#4
Chloromethane
Concen: 0.535 ppbv
RT: 3.17 min Scan# 71
Delta R.T. -0.00 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 50 Resp: 23895

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 34.8 | 25.0 | 37.6 |



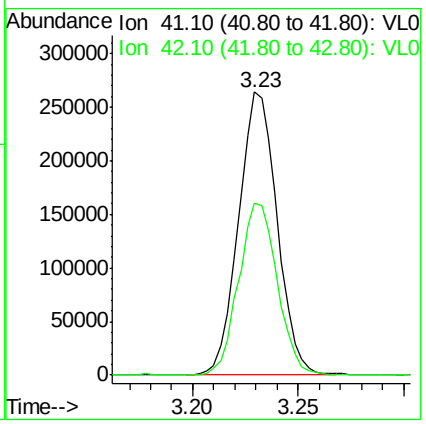


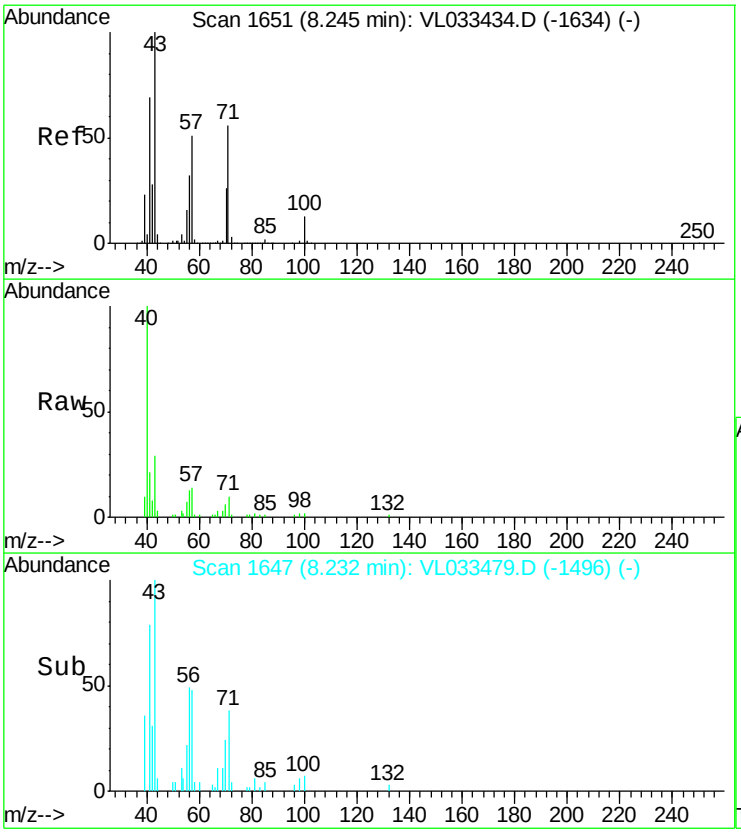

#9
Propene
Concen: 9.454 ppbv
RT: 3.23 min Scan# 91
Delta R.T. 0.20 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 41 Resp: 334904

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 60.7 | 53.9 | 80.9 |

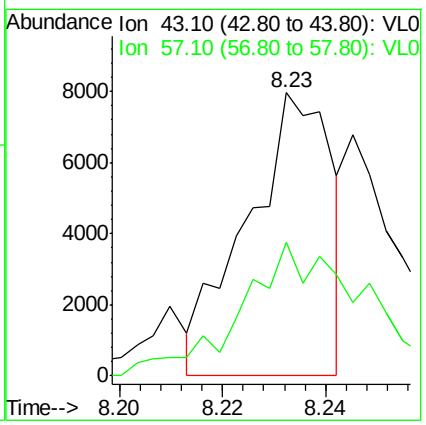


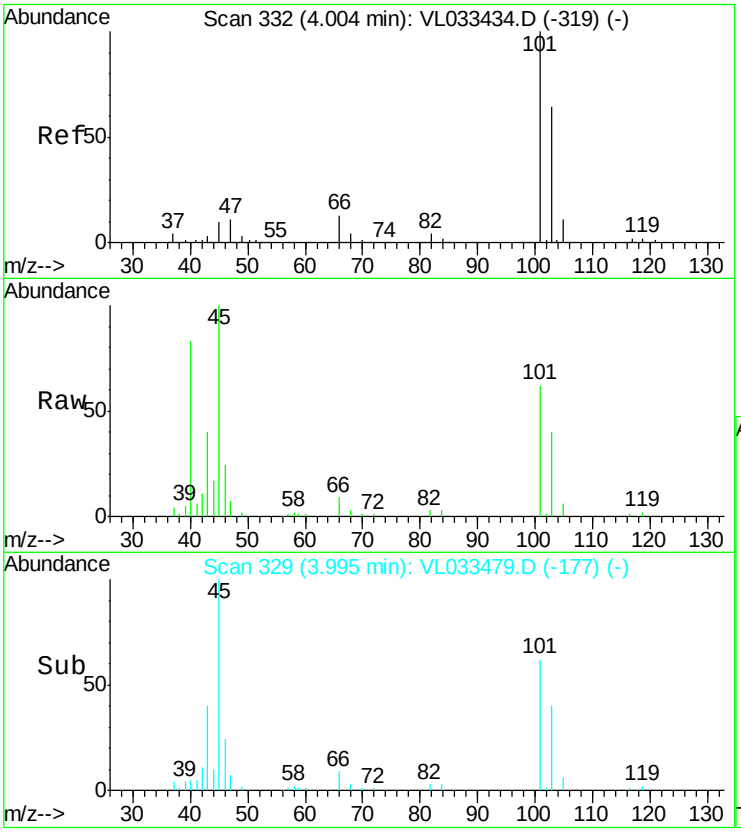




#10
Heptane
Concen: 0.096 ppbv
RT: 8.23 min Scan# 1647
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 43 Resp: 9045

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 73.3 | 40.6 | 60.8# |



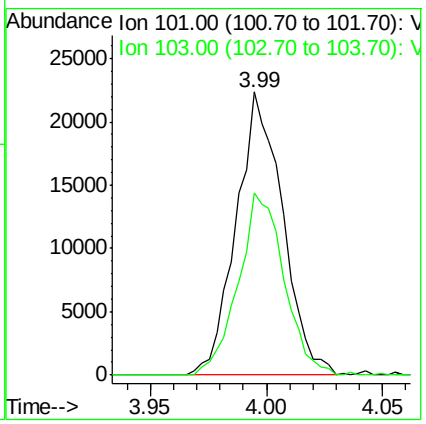


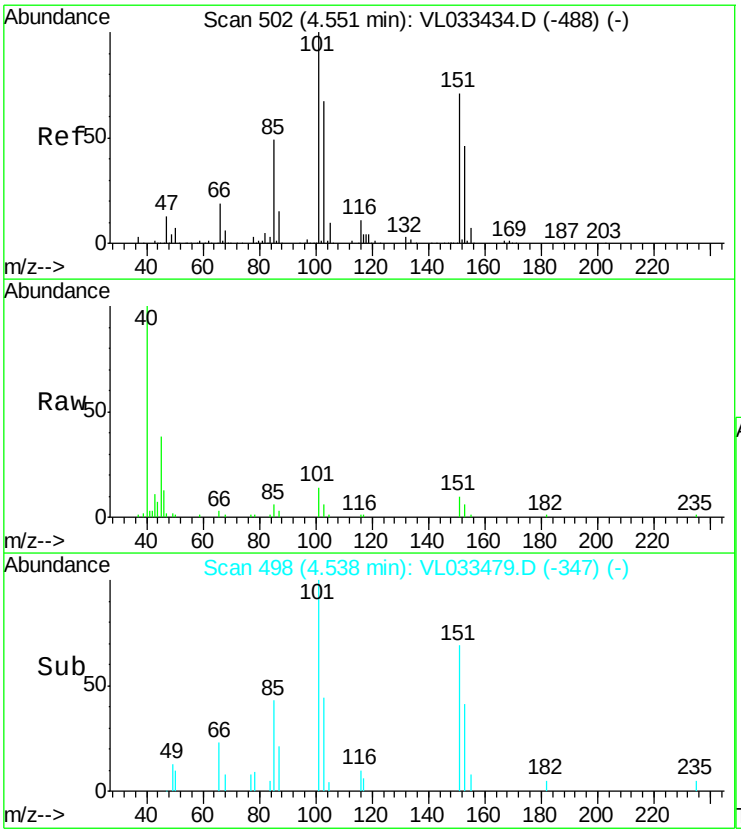

#11
Trichlorofluoromethane
Concen: 0.236 ppbv
RT: 3.99 min Scan# 329
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion:101 Resp: 31029

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 64.6 | 51.3 | 76.9 |

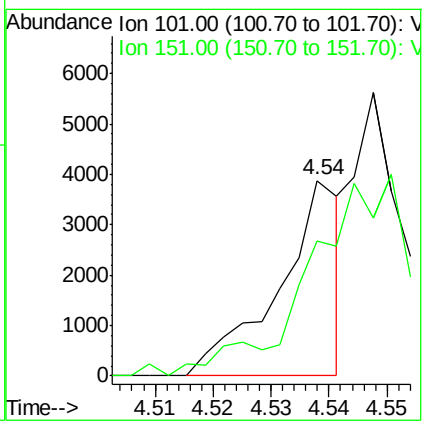


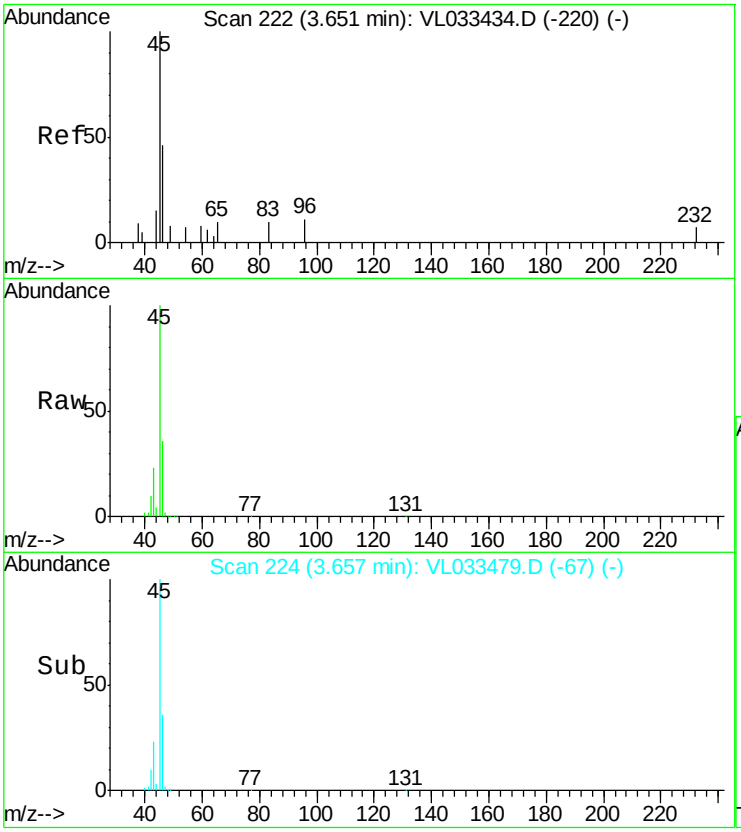




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.032 ppbv
RT: 4.54 min Scan# 498
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion:101 Resp: 2868

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 0.0 | 57.7 | 86.5# |



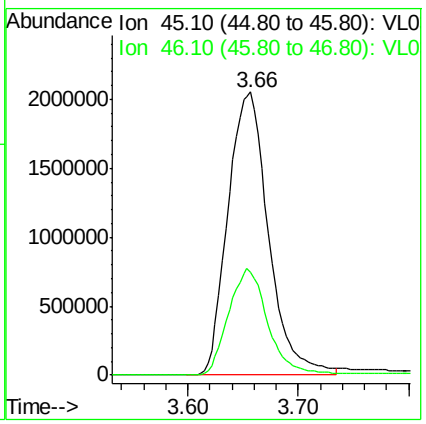


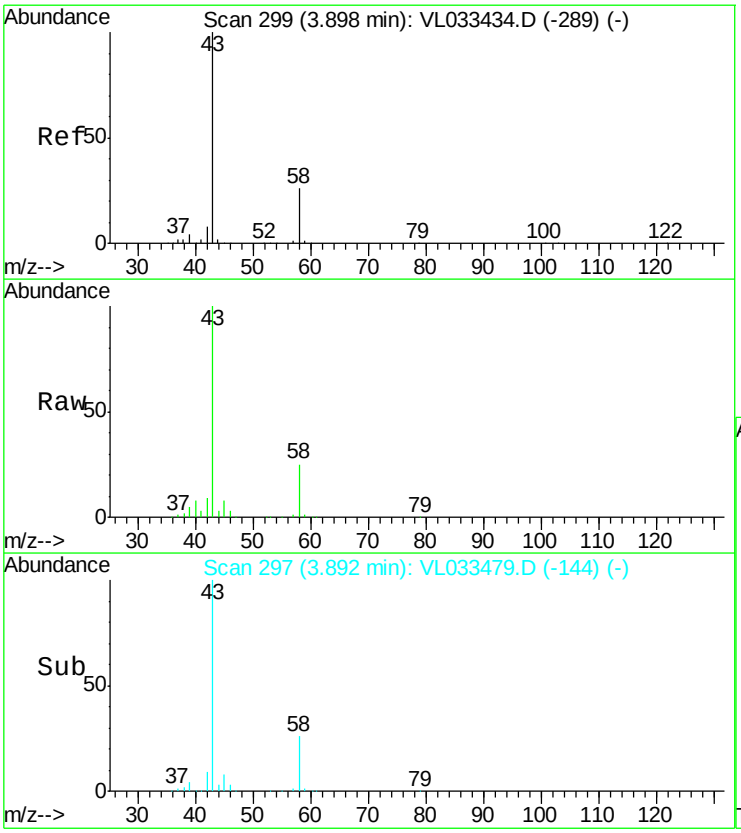

#13
Ethanol
Concen: 571.226 ppbv
RT: 3.66 min Scan# 224
Delta R.T. 0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 45 Resp: 5236452

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 46 | 37.0 | 25.4 | 101.8 |

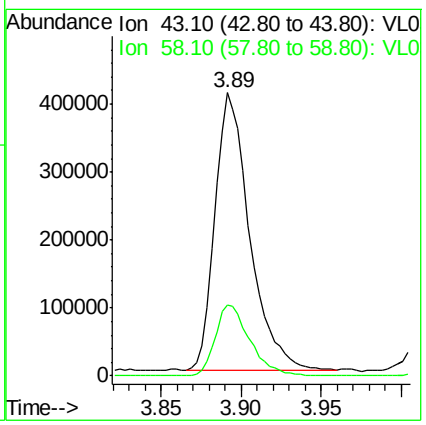


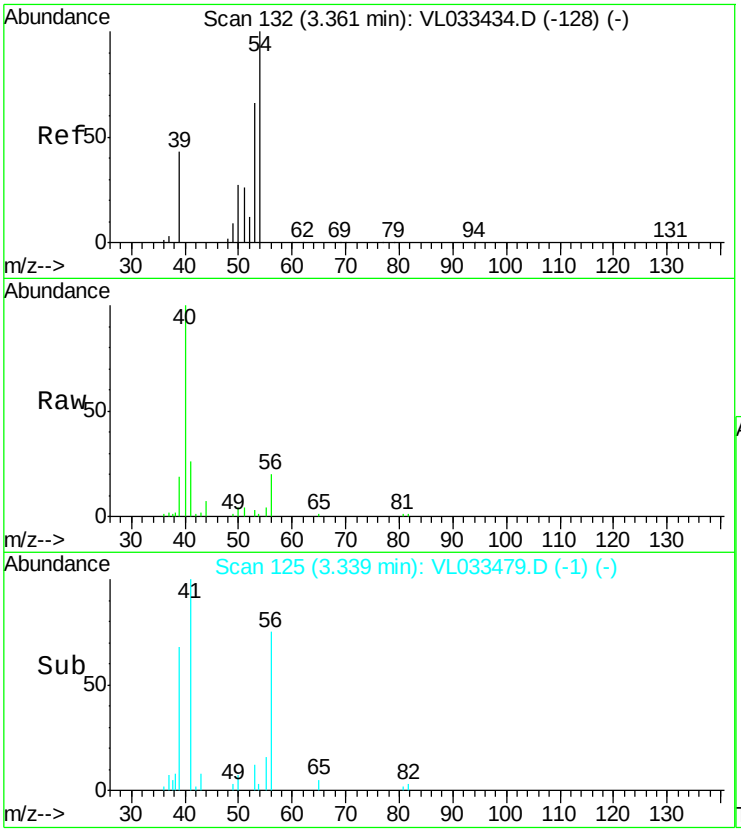




#15
Acetone
Concen: 6.965 ppbv
RT: 3.89 min Scan# 297
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 43 Resp: 613619

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 25.6 | 20.5 | 30.7 |



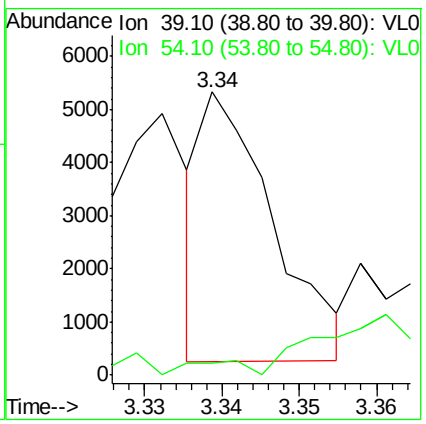


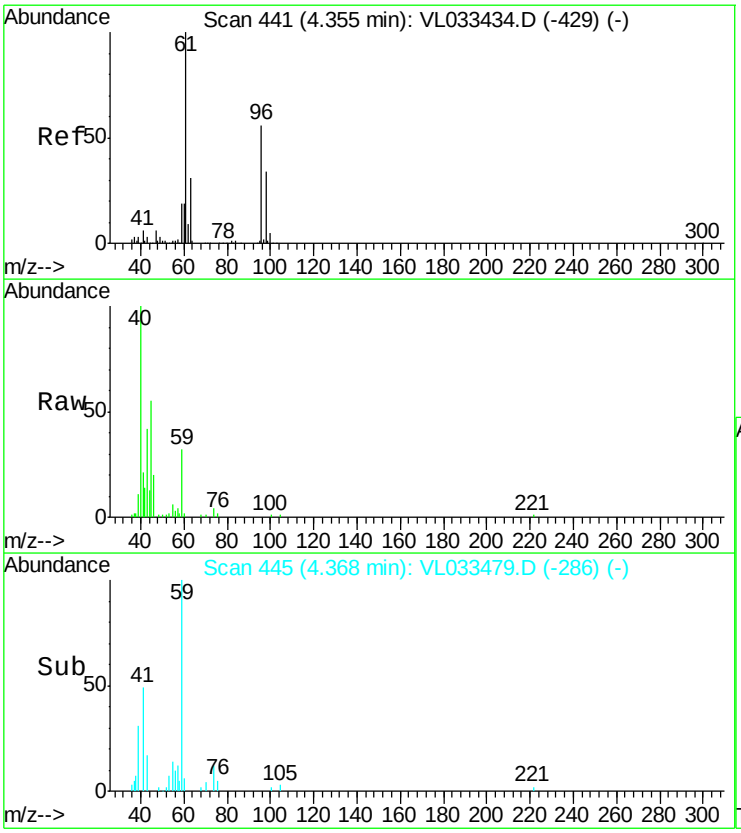

#16
1,3-Butadiene
Concen: 0.093 ppbv
RT: 3.34 min Scan# 125
Delta R.T. -0.02 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 39 Resp: 3259

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 39 | 100 | | |
| 54 | 60.4 | 69.4 | 104.2# |

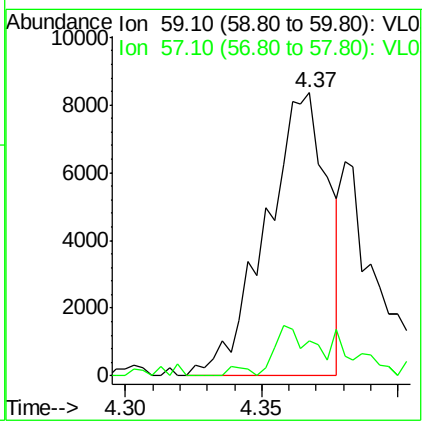


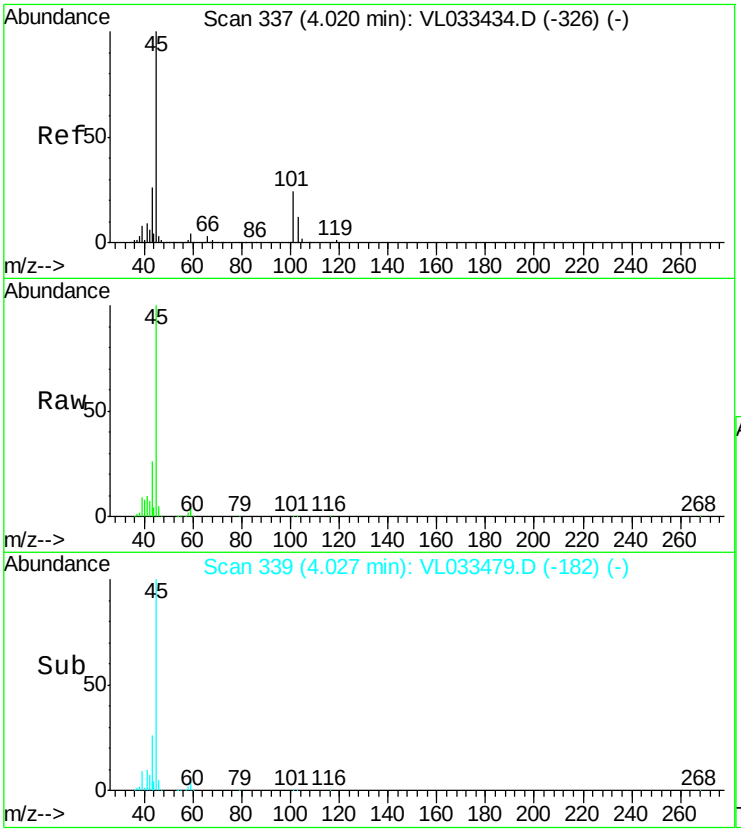




#17
tert-Butyl alcohol
Concen: 0.815 ppbv
RT: 4.37 min Scan# 445
Delta R.T. 0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 59 Resp: 13203

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 18.4 | 7.8 | 11.8# |



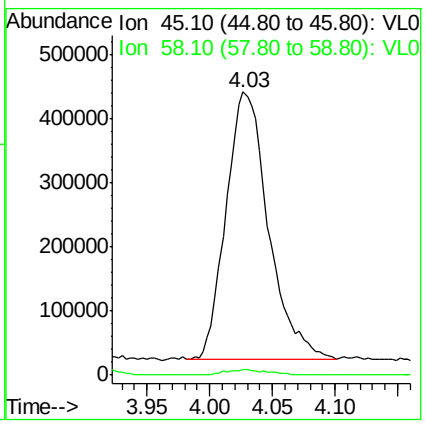


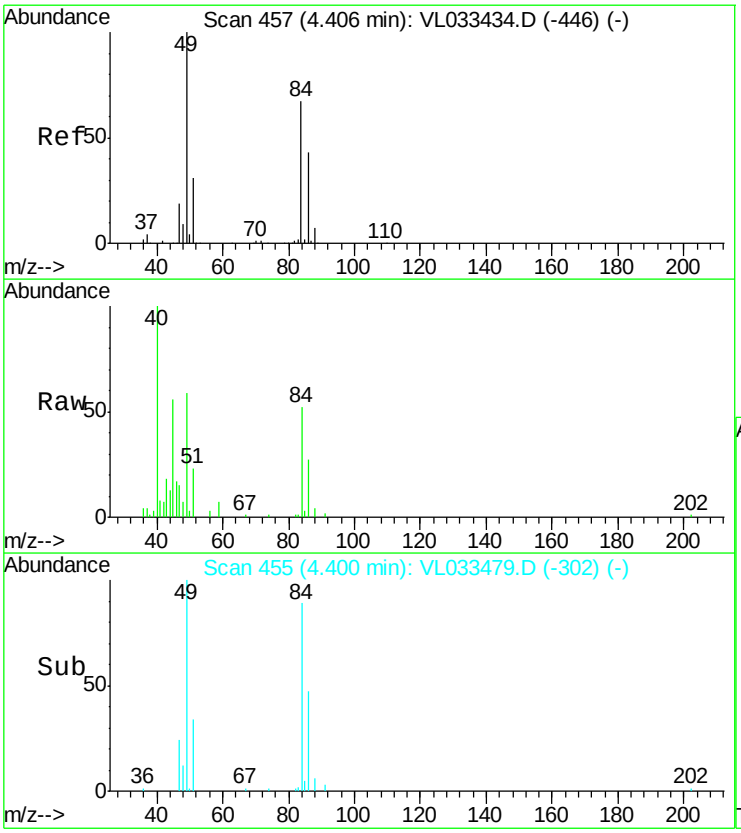

#19
Isopropyl Alcohol
Concen: 17.554 ppbv
RT: 4.03 min Scan# 339
Delta R.T. 0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 45 Resp: 978179

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 58 | 2.2 | 1.4 | 2.2# |

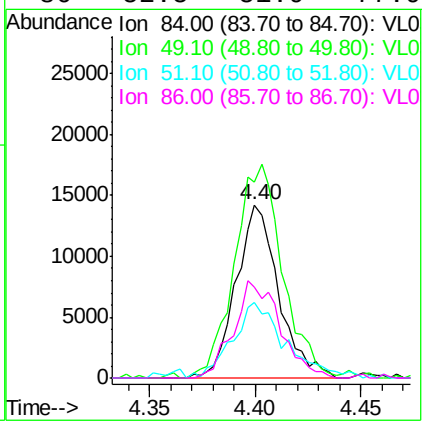


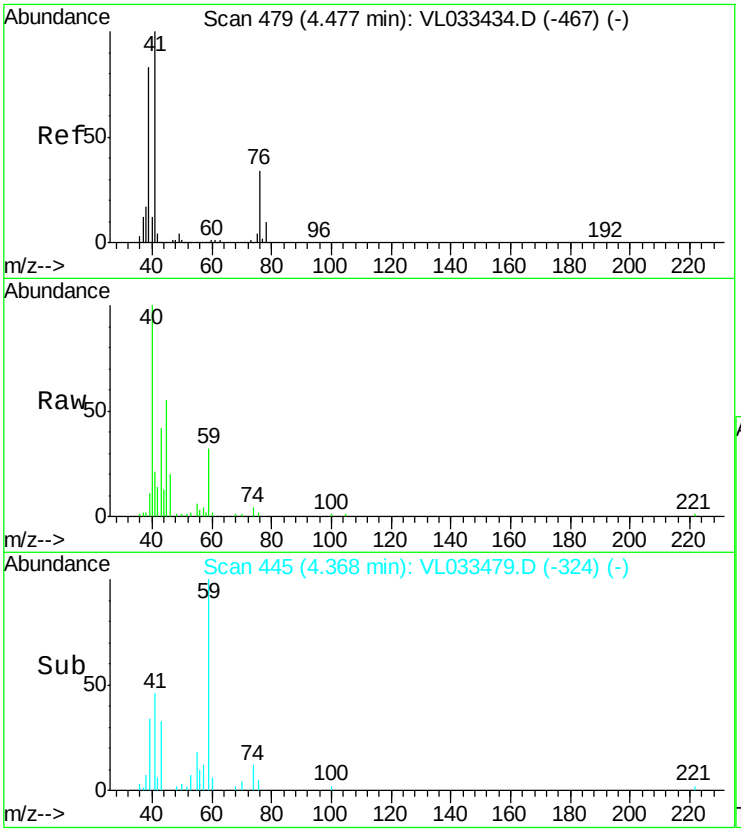




#20
Methylene Chloride
Concen: 0.533 ppbv
RT: 4.40 min Scan# 455
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 84 Resp: 19937

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 113.4 | 120.0 | 180.0# |
| 51 | 42.7 | 36.7 | 55.1 |
| 86 | 52.5 | 51.9 | 77.9 |



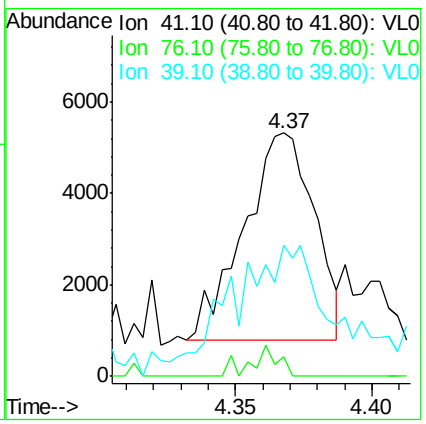


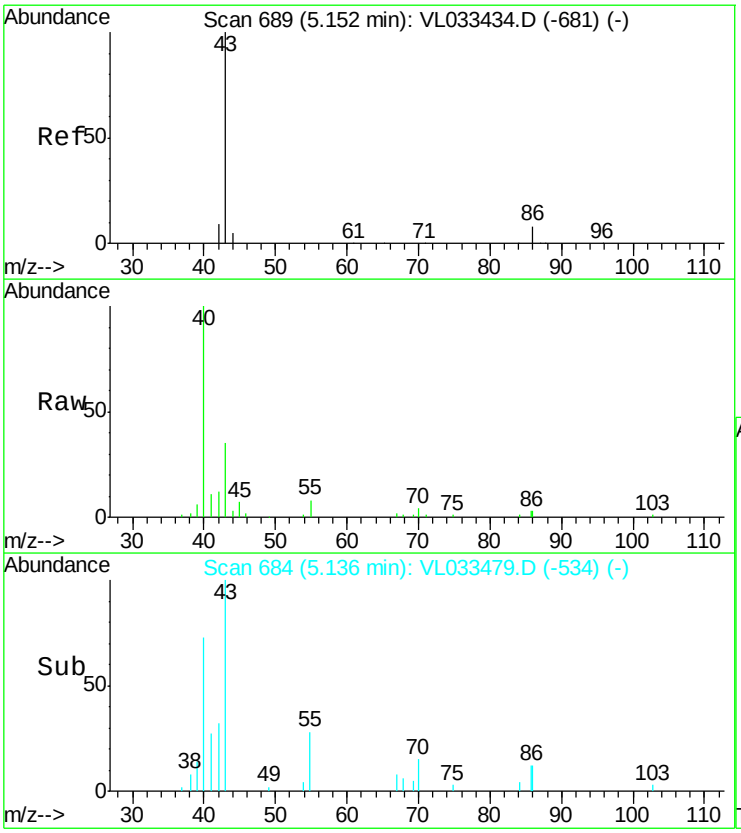

#21
Allvl Chloride
Concen: 0.146 ppbv
RT: 4.37 min Scan# 445
Delta R.T. -0.11 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :** MSVOA_L
**ClientSampleId :**

Tgt Ion: 41 Resp: 8105

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 76 | 5.6 | 25.4 | 38.2# |
| 39 | 84.3 | 65.3 | 97.9 |

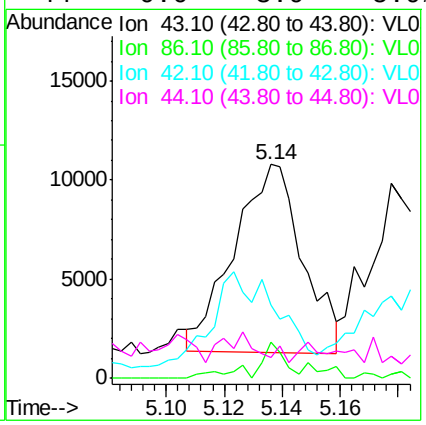


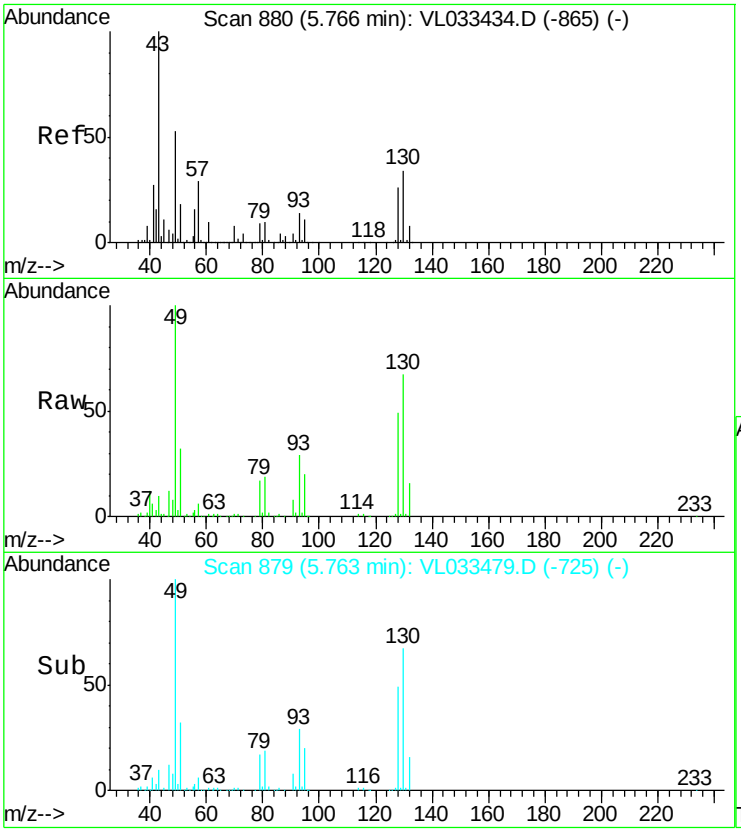




#23
Vinyl Acetate
Concen: 0.124 ppbv
RT: 5.14 min Scan# 684
Delta R.T. -0.02 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 43 Resp: 15608

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 21.6 | 5.6 | 8.4# |
| 42 | 26.5 | 8.0 | 12.0# |
| 44 | 0.0 | 3.9 | 5.9# |



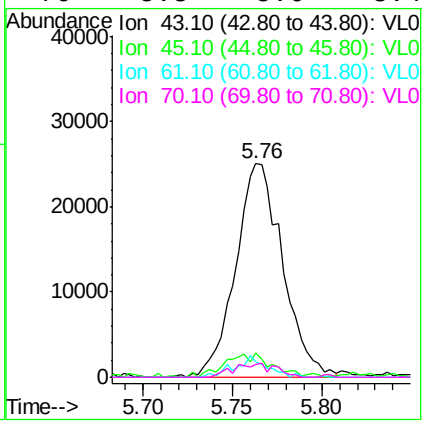


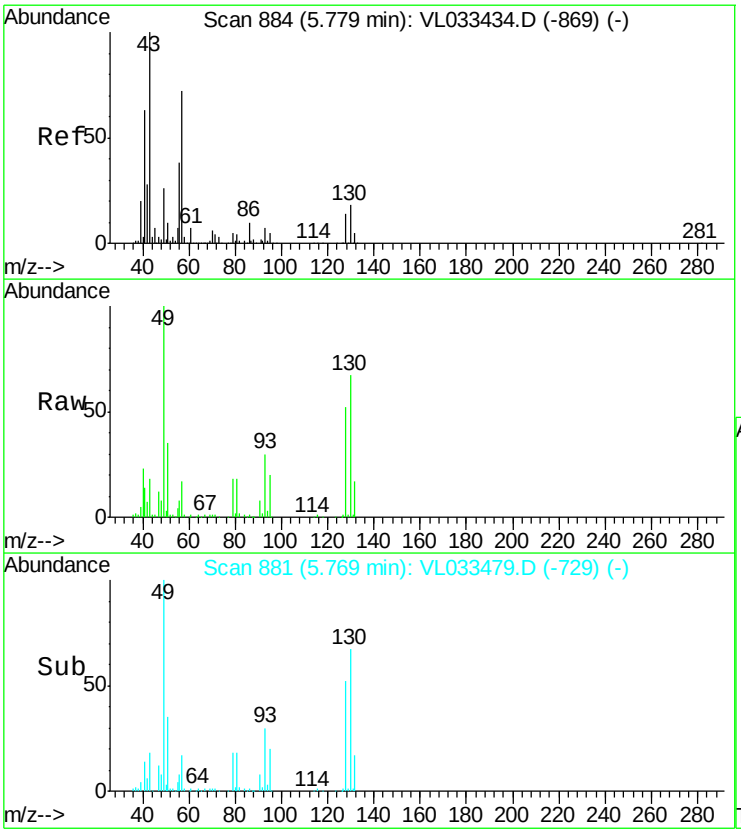

#25
Ethyl Acetate
Concen: 0.282 ppbv
RT: 5.76 min Scan# 879
Delta R.T. -0.00 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :** MSVOA_L
**ClientSampleId :**

Tgt Ion: 43 Resp: 46173

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 45 | 13.8 | 7.8 | 11.6# |
| 61 | 6.9 | 7.3 | 10.9# |
| 70 | 5.8 | 5.6 | 8.4 |

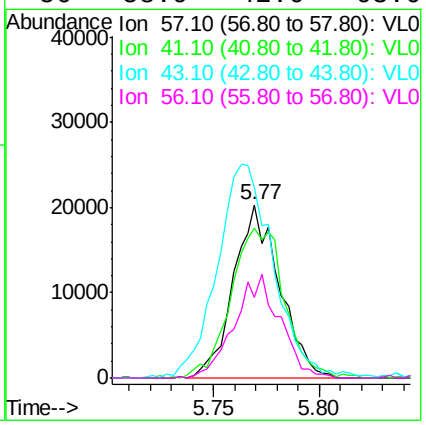


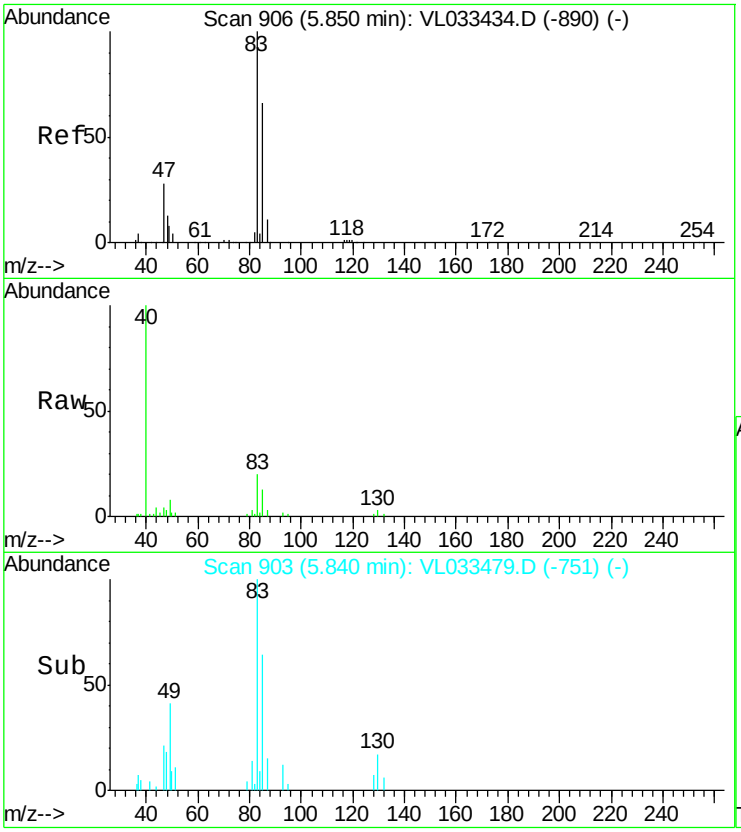




#26
Hexane
Concen: 0.423 ppbv
RT: 5.77 min Scan# 881
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 57 Resp: 30772

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 101.6 | 70.7 | 106.1 |
| 43 | 151.9 | 182.6 | 274.0# |
| 56 | 58.9 | 42.0 | 63.0 |



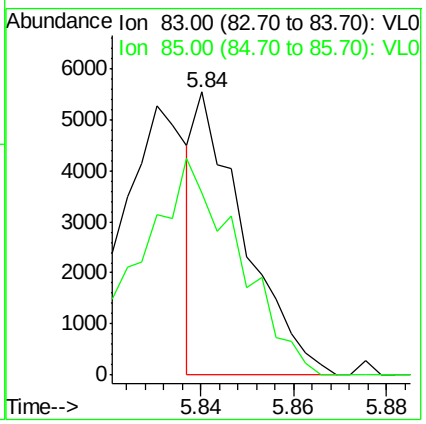


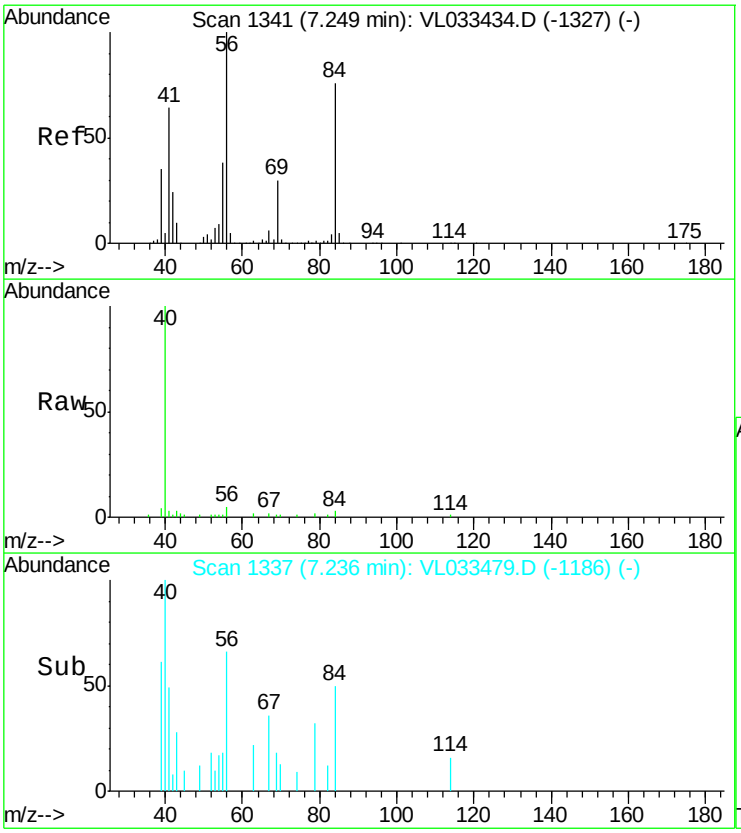

#29
Chloroform
Concen: 0.032 ppbv
RT: 5.84 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 83 Resp: 4034

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 64.4 | 52.6 | 79.0 |

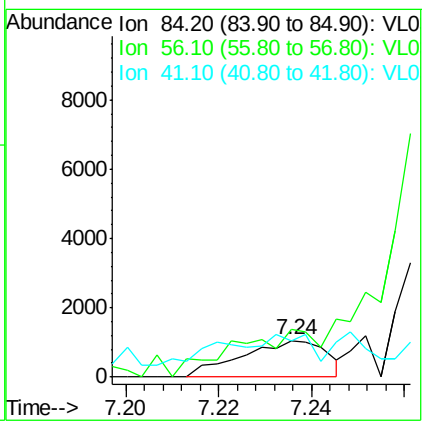


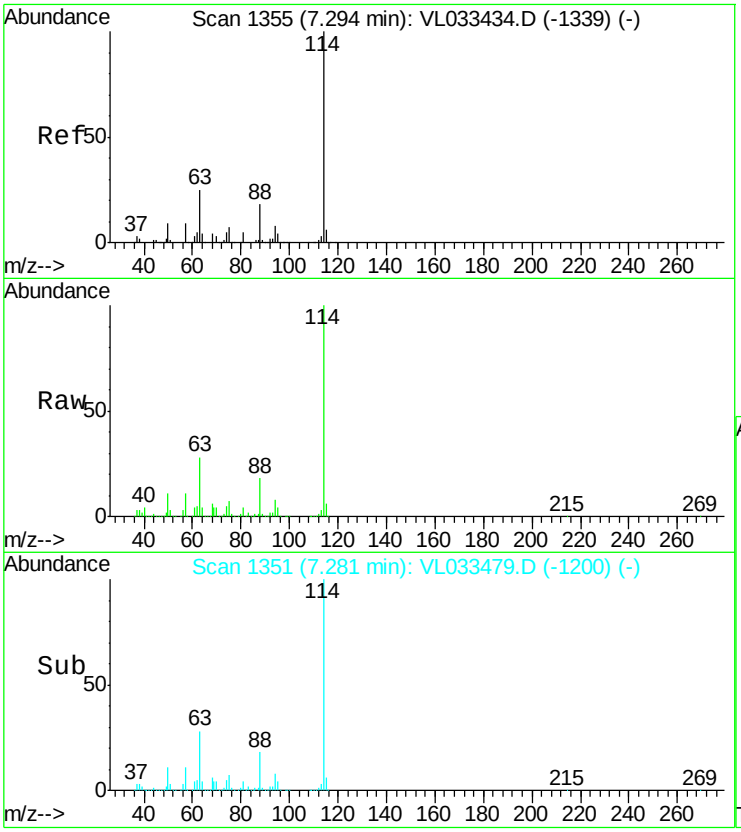




#30
Cyclohexane
Concen: 0.023 ppbv
RT: 7.24 min Scan# 1337
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 84 Resp: 1342

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 56 | 0.0 | 109.7 | 164.5# |
| 41 | 0.0 | 68.2 | 102.2# |



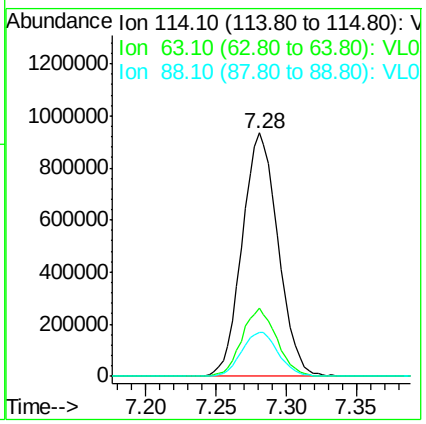


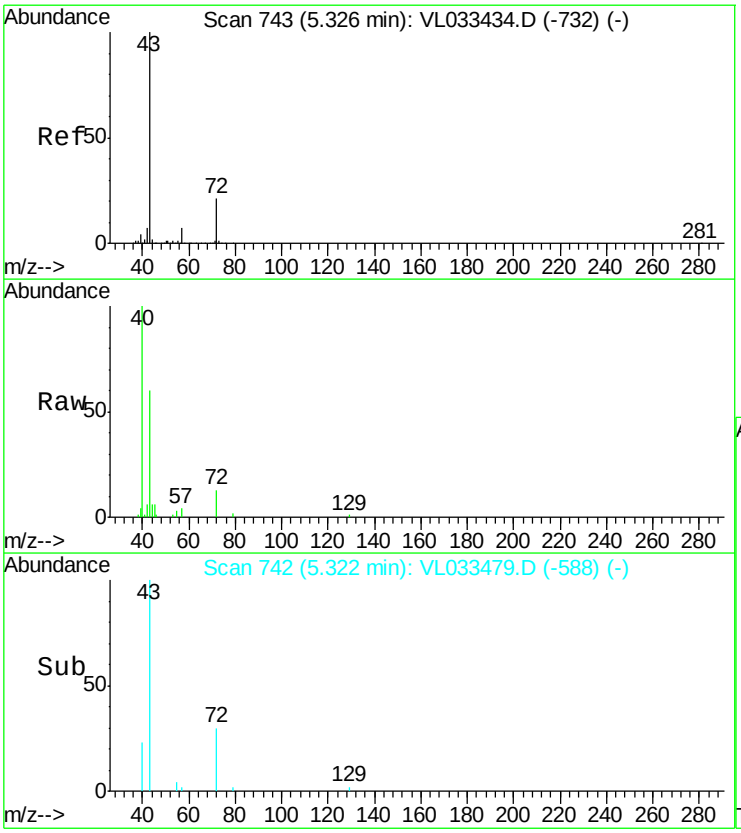

#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.28 min Scan# 1351
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion:114 Resp: 1669252

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 27.2 | 21.5 | 32.3 |
| 88 | 18.4 | 14.5 | 21.7 |

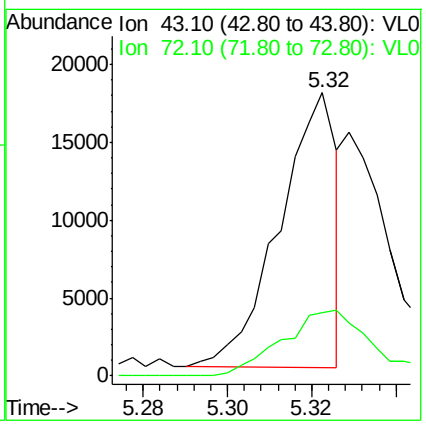


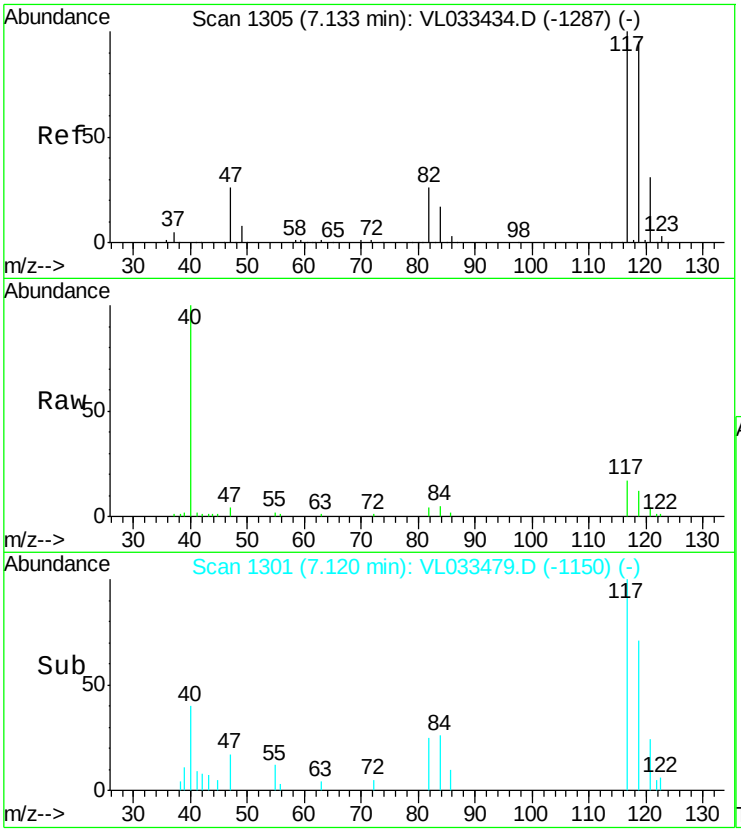




#34
2-Butanone
Concen: 0.166 ppbv
RT: 5.32 min Scan# 742
Delta R.T. -0.00 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 43 Resp: 16641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 17.4 | 26.2# |



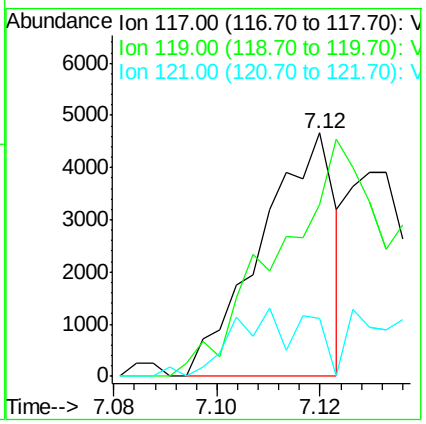


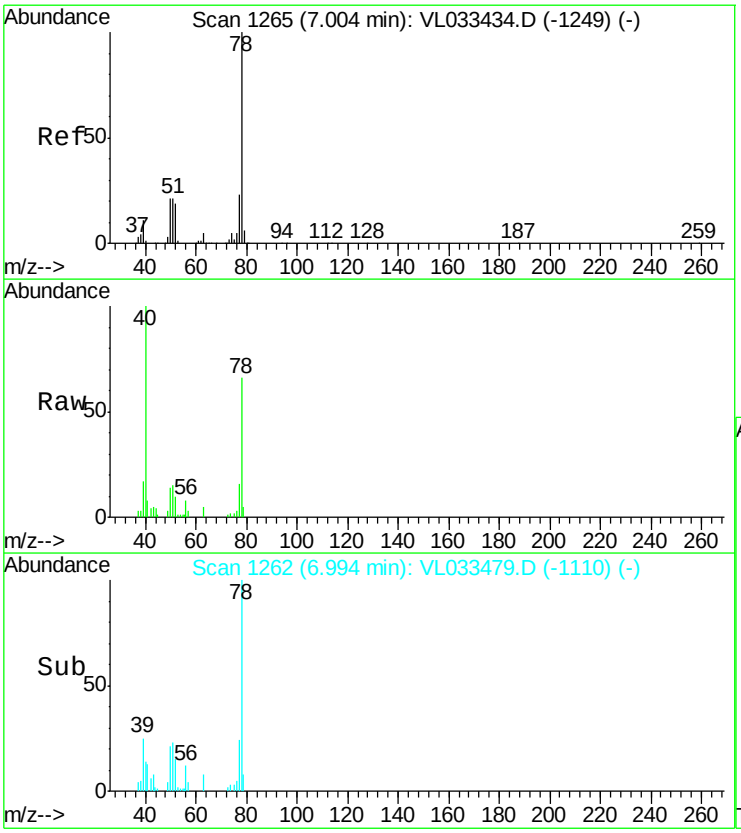

#35
Carbon Tetrachloride
Concen: 0.039 ppbv
RT: 7.12 min Scan# 1301
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion:117 Resp: 4639

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 119 | 65.2 | 75.8 | 113.8# |
| 121 | 23.8 | 24.7 | 37.1# |

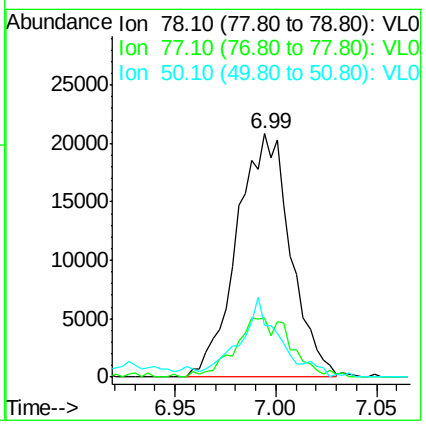


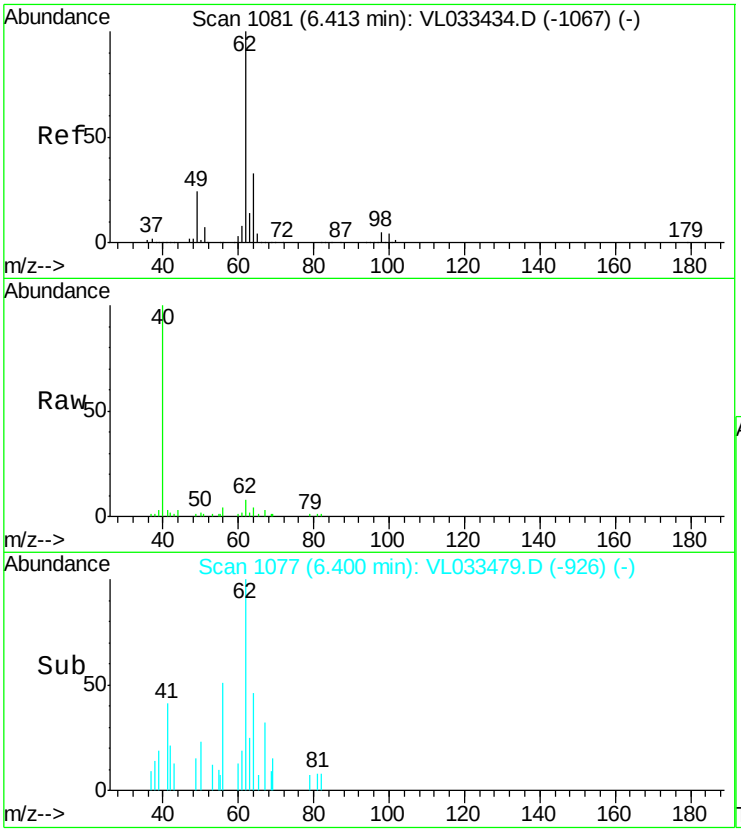




#36
Benzene
Concen: 0.277 ppbv
RT: 6.99 min Scan# 1262
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 78 Resp: 38740

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.2 | 18.1 | 27.1 |
| 50 | 20.3 | 16.7 | 25.1 |



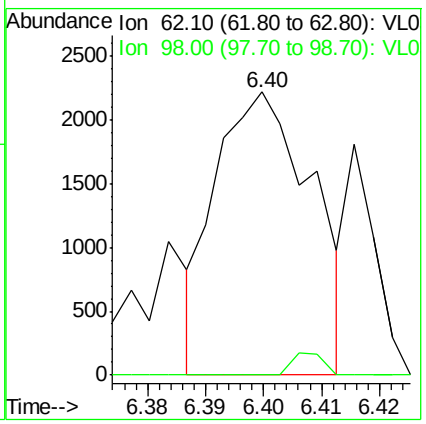


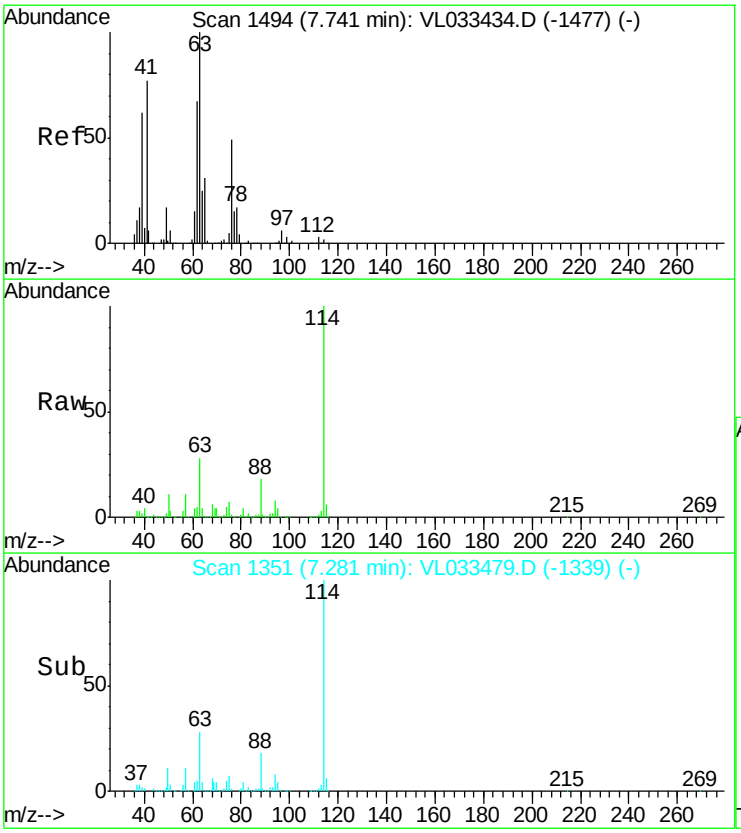

#37
1,2-Dichloroethane
Concen: 0.027 ppbv
RT: 6.40 min Scan# 1077
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :** MSVOA_L
**ClientSampleId :**

Tgt Ion: 62 Resp: 2569

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 62 | 100 | | |
| 98 | 0.0 | 4.4 | 6.6# |

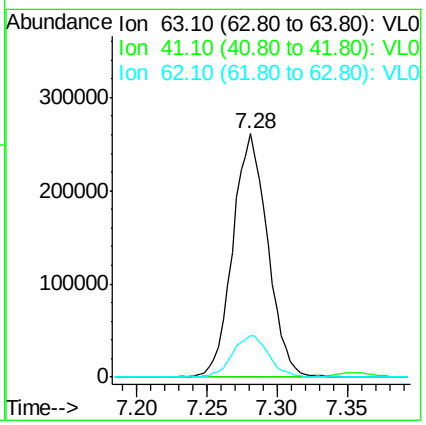


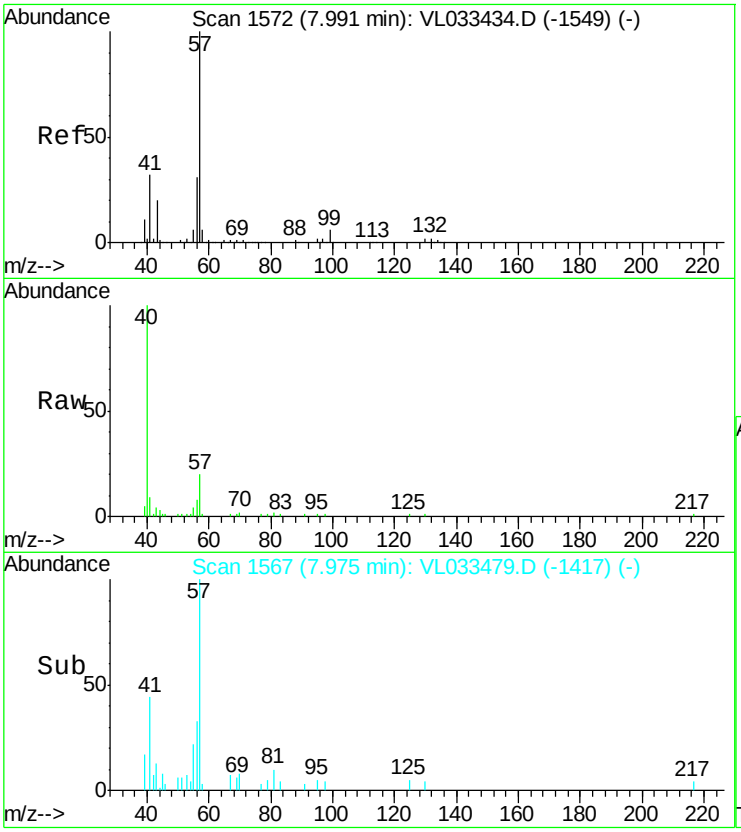




#39
1,2-Dichloropropane
Concen: 8.213 ppbv
RT: 7.28 min Scan# 1351
Delta R.T. -0.46 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 63 Resp: 450620

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 41 | 0.0 | 61.2 | 91.8# |
| 62 | 16.9 | 54.0 | 81.0# |



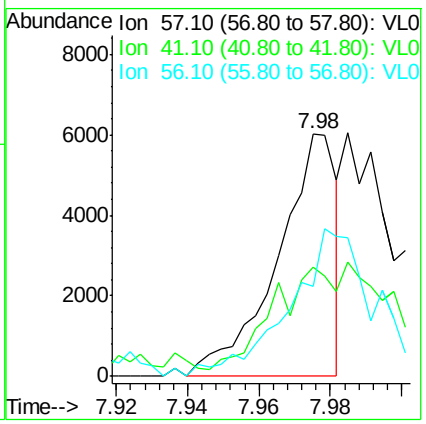


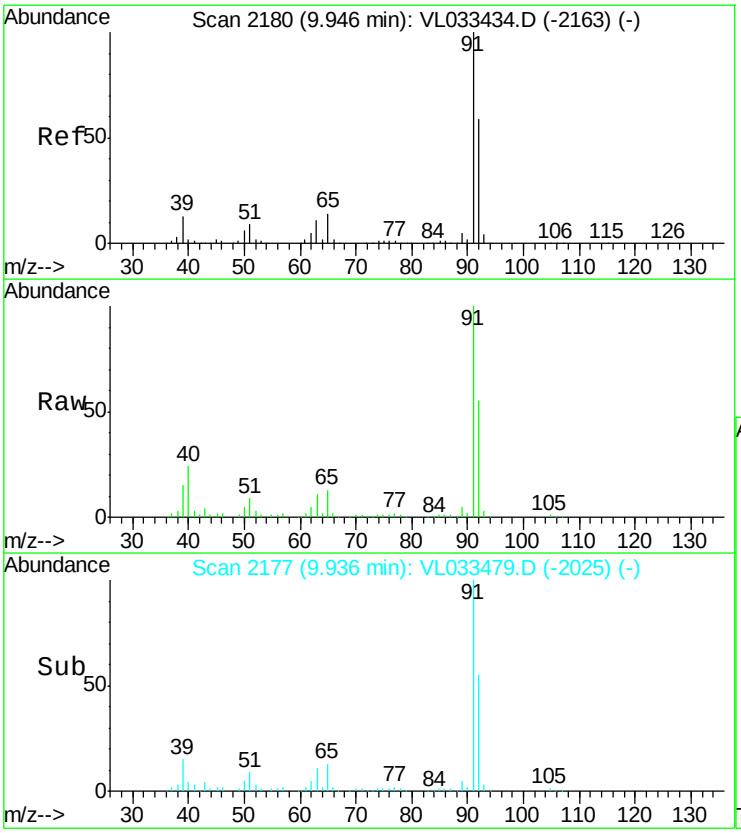

#44
2,2,4-Trimethylpentane
Concen: 0.028 ppbv
RT: 7.98 min Scan# 1567
Delta R.T. -0.02 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :** MSVOA_L
**ClientSampleId :**

Tgt Ion: 57 Resp: 6872

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 0.0 | 26.0 | 39.0# |
| 56 | 100.1 | 24.6 | 37.0# |

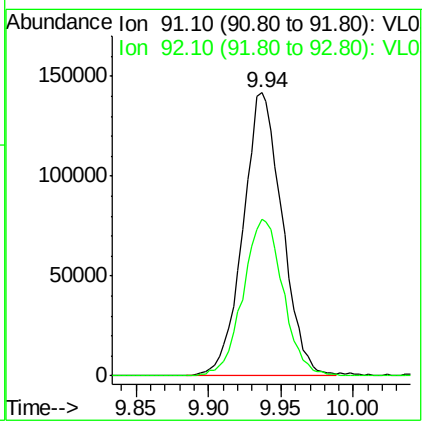


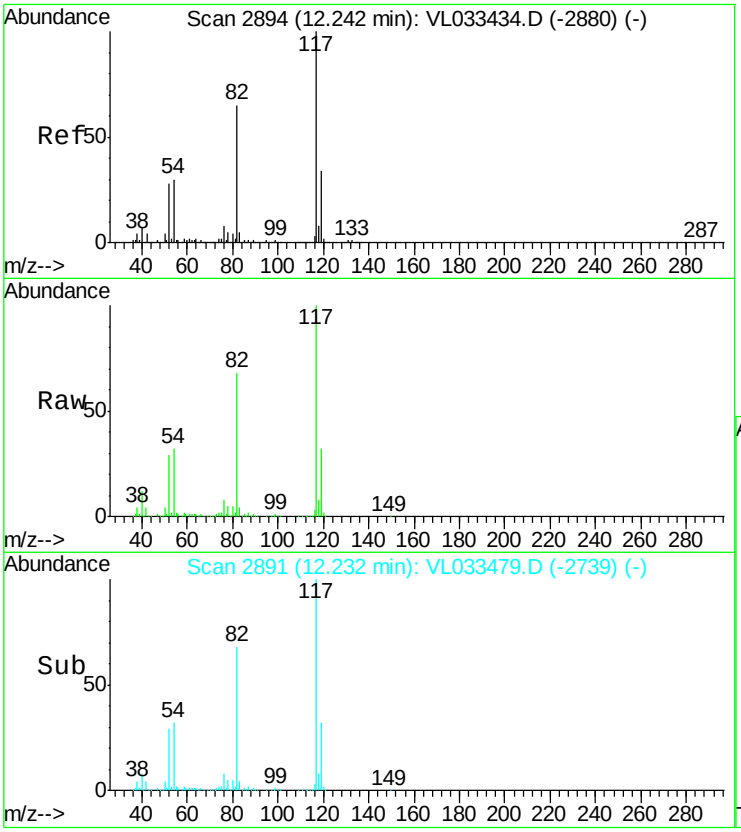




#53
Toluene
Concen: 1.638 ppbv
RT: 9.94 min Scan# 2177
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 91 Resp: 266632

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 56.7 | 47.4 | 71.0 |



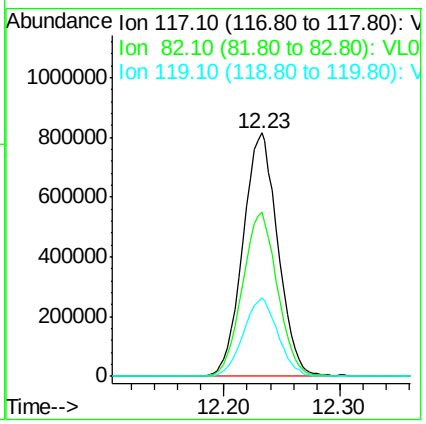


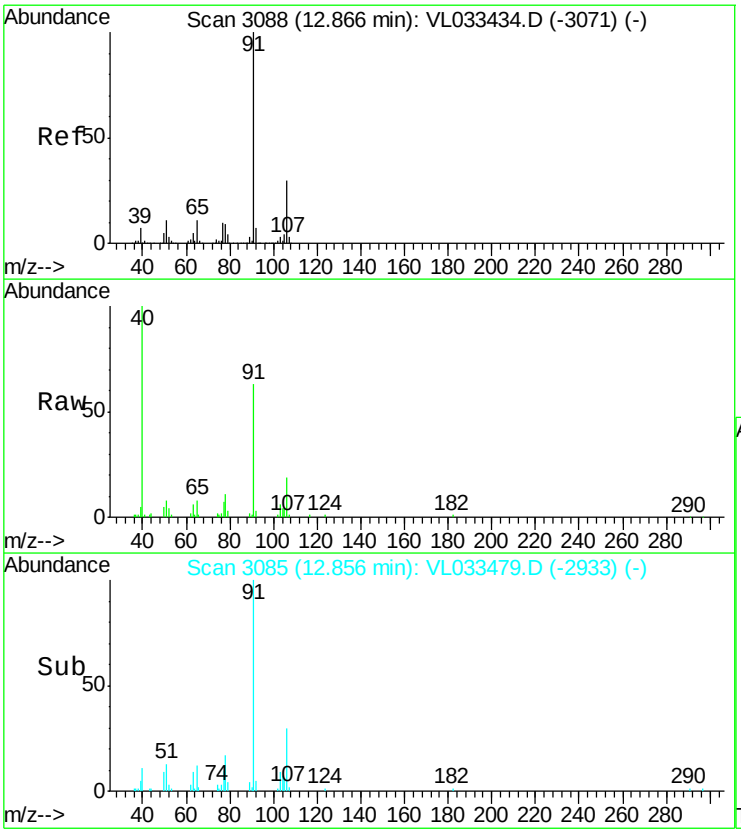

#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2891
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion:117 Resp: 1707478

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 67.9 | 51.5 | 77.3 |
| 119 | 31.9 | 25.5 | 38.3 |

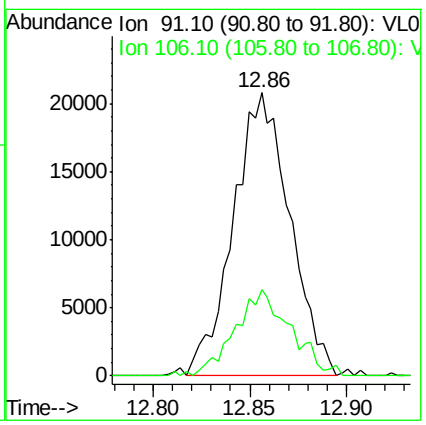


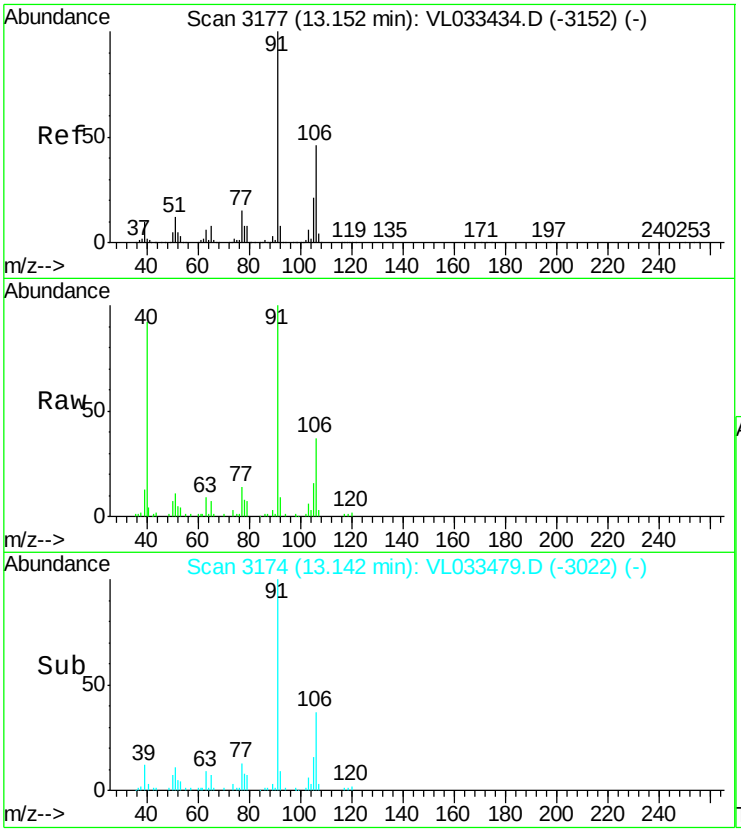




#58
Ethyl Benzene
Concen: 0.186 ppbv
RT: 12.86 min Scan# 3085
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 91 Resp: 42312

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 29.0 | 23.8 | 35.6 |



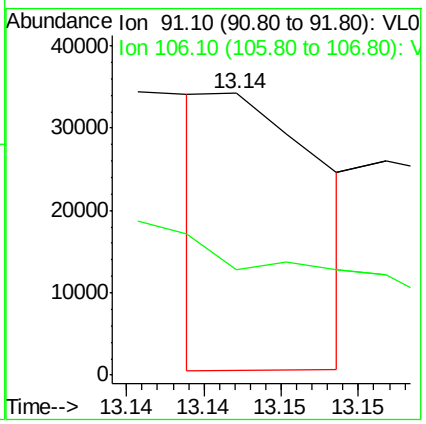


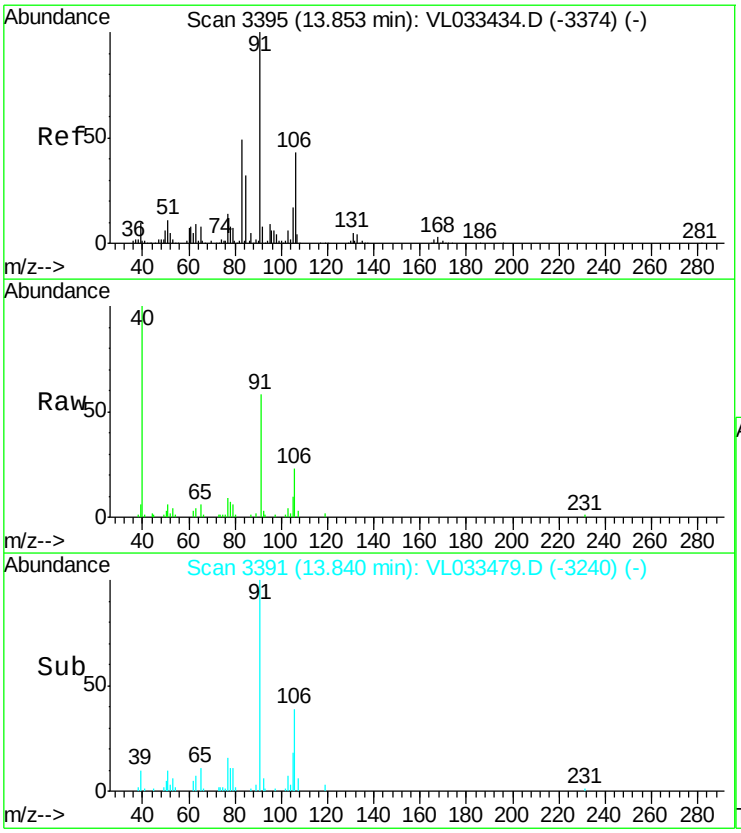

#59
m/p-Xylene
Concen: 0.082 ppbv
RT: 13.14 min Scan# 3174
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 91 Resp: 16652

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 0.0 | 0.0 |

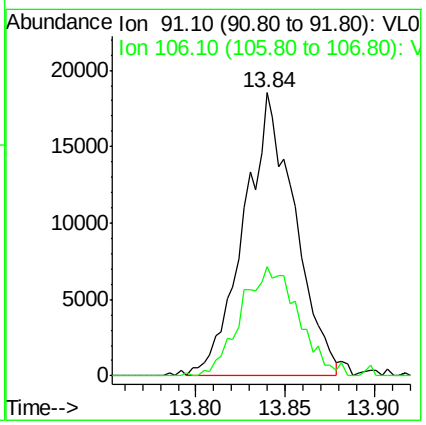


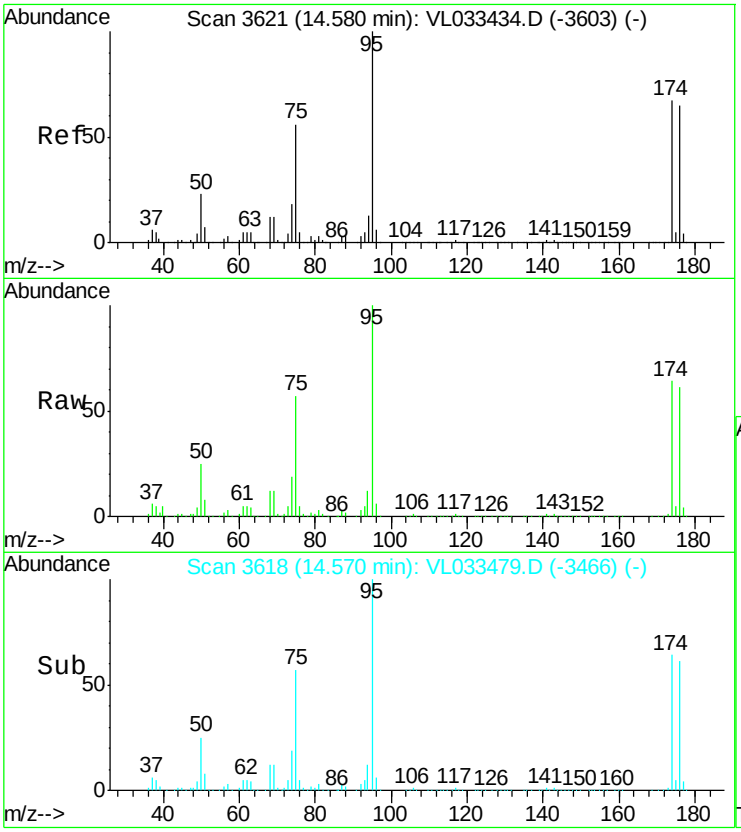




#60
o-Xylene
Concen: 0.188 ppbv
RT: 13.84 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

Tgt Ion: 91 Resp: 37024

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 43.6 | 21.4 | 64.3 |






#68
1-Bromo-4-Fluorobenzene
Concen: 10.027 ppbv
RT: 14.57 min Scan# 3618
Delta R.T. -0.01 min
Lab File: VL033479.D
Acq: 27 Mar 2019 22:08

**Instrument :**
MSVOA_L
**ClientSampleId :**

Tgt Ion: 95 Resp: 1342215

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 65.7 | 52.9 | 79.3 |
| 175 | 4.8 | 3.8 | 5.6 |