Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
Data File : VL037808.D
Acq On : 7 Oct 2021 23:02
Operator : SY/AP
Sample : M4079-14
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Quant Time: Oct 08 10:07:49 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LMon Oct 04 17:43:54 2021
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Bromochloromethane | 5.65 | 49 | 1168763 | 10.00 | ppbv | | -0.02 |
| 33) 1,4-Difluorobenzene | 7.16 | 114 | 3617698 | 10.00 | ppbv | | -0.02 |
| 55) Chlorobenzene-d5 | 12.07 | 117 | 3036242 | 10.00 | ppbv | | -0.02 |
| **System Monitoring Compounds** | | | | | | | |
| 68) 1-Bromo-4-Fluorobenzene | 14.40 | 95 | 2110379 | 9.94 | ppbv | | -0.02 |
| Spiked Amount 10.000 | Range 65 - 135 | | Recovery = 99.40% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 3.04 | 85 | 26039 | 0.139 | ppbv | | 96 |
| 3) Chlorodifluoromethane | 2.98 | 51 | 91396 | 0.407 | ppbv | # | 91 |
| 4) Chloromethane | 3.13 | 50 | 12892 | 0.157 | ppbv | # | 85 |
| 9) Propene | 2.90 | 41 | 1693 | 0.020 | ppbv | | 90 |
| 10) Heptane | 8.10 | 43 | 4987 | 0.027 | ppbv | # | 27 |
| 11) Trichlorofluoromethane | 3.94 | 101 | 23867 | 0.143 | ppbv | # | 84 |
| 12) 1,1,2-Trichlorotrifluoroet | 4.47 | 101 | 4041 | 0.032 | ppbv | # | 10 |
| 13) Ethanol | 3.59 | 45 | 274551 | 40.629 | ppbv | | 83 |
| 15) Acetone | 3.86 | 43 | 469595 | 4.476 | ppbv | # | 72 |
| 16) 1,3-Butadiene | 3.31 | 39 | 2306 | 0.030 | ppbv | # | 1 |
| 19) Isopropyl Alcohol | 3.96 | 45 | 31751 | 0.486 | ppbv | # | 15 |
| 20) Methylene Chloride | 4.33 | 84 | 122020 | 2.302 | ppbv | | 94 |
| 21) Allyl Chloride | 4.35 | 41 | 7890 | 0.085 | ppbv | # | 1 |
| 23) Vinyl Acetate | 5.06 | 43 | 7670 | 0.049 | ppbv | # | 34 |
| 25) Ethyl Acetate | 5.67 | 43 | 55825 | 0.190 | ppbv | # | 93 |
| 26) Hexane | 5.67 | 57 | 156863 | 1.082 | ppbv | # | 44 |
| 27) Carbon Disulfide | 4.54 | 76 | 10875 | 0.085 | ppbv | # | 59 |
| 29) Chloroform | 5.74 | 83 | 312856 | 1.510 | ppbv | | 95 |
| 34) 2-Butanone | 5.24 | 43 | 16495 | 0.113 | ppbv | # | 53 |
| 36) Benzene | 6.87 | 78 | 28621 | 0.093 | ppbv | # | 89 |
| 39) 1,2-Dichloropropane | 7.16 | 63 | 849385 | 7.308 | ppbv | # | 28 |
| 44) 2,2,4-Trimethylpentane | 7.85 | 57 | 27650 | 0.053 | ppbv | # | 9 |
| 52) Tetrachloroethene | 11.21 | 164 | 2582718 | 21.483 | ppbv | | 96 |
| 53) Toluene | 9.79 | 91 | 127612 | 0.373 | ppbv | | 96 |
| 58) Ethyl Benzene | 12.70 | 91 | 21497 | 0.053 | ppbv | | 96 |
| 59) m/p-Xylene | 12.96 | 91 | 81869 | 0.234 | ppbv | # | 30 |
| 60) o-Xylene | 13.67 | 91 | 34205 | 0.102 | ppbv | # | 30 |
| 74) 1,2,4-Trimethylbenzene | 16.74 | 105 | 22309 | 0.061 | ppbv | # | 74 |

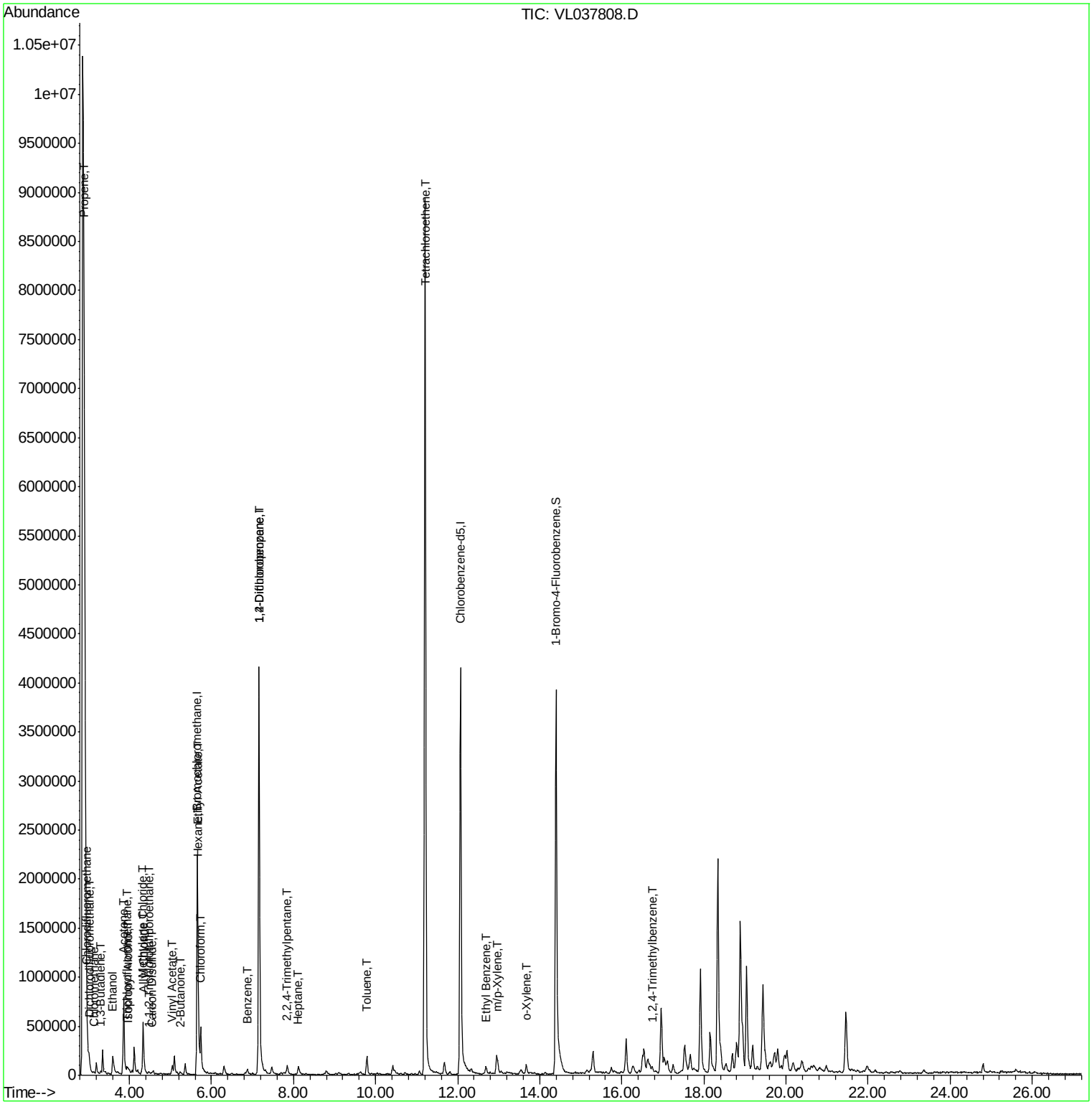
(#) = qualifier out of range (m) = manual integration (+) = signals summed

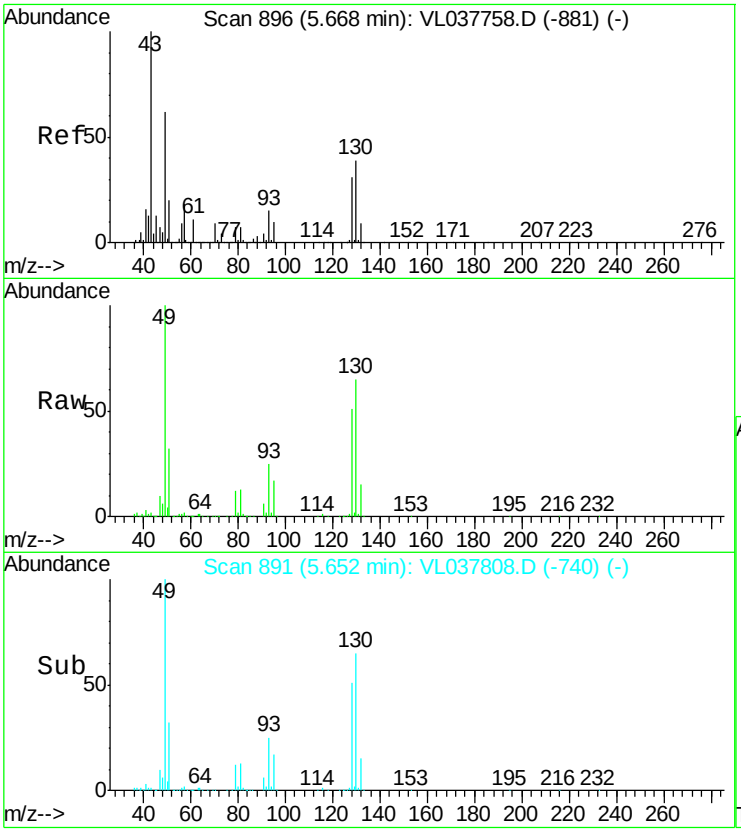
Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
Data File : VL037808.D
Acq On : 7 Oct 2021 23:02
Operator : SY/AP
Sample : M4079-14
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Quant Time: Oct 08 10:07:49 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LMon Oct 04 17:43:54 2021
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration



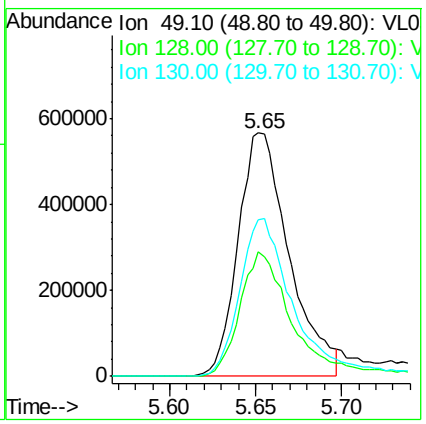


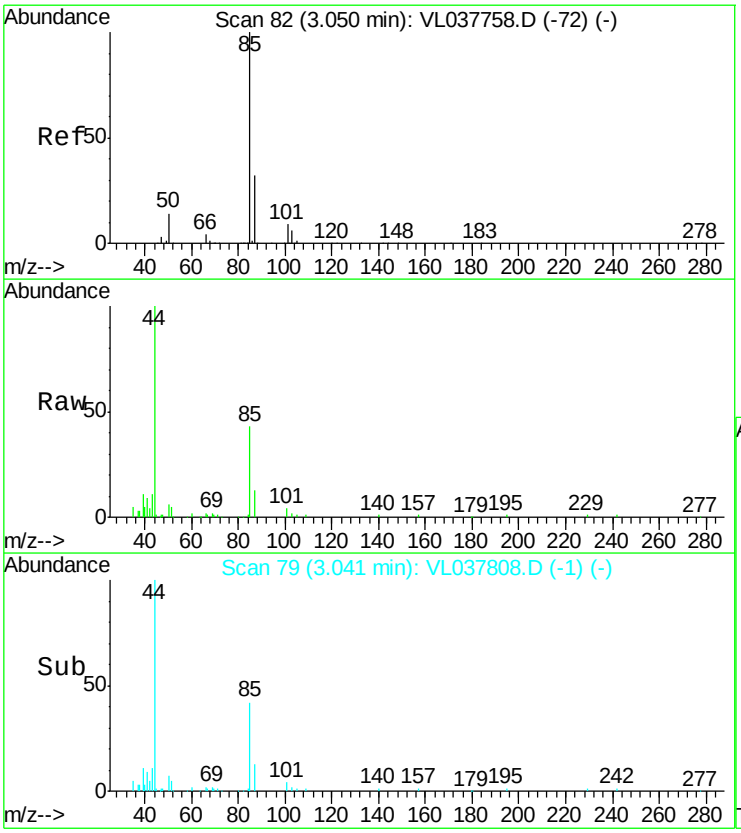

#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.65 min Scan# 891
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 49 Resp: 1168763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 128 | 53.9 | 27.1 | 81.3 |
| 130 | 70.3 | 33.2 | 99.6 |

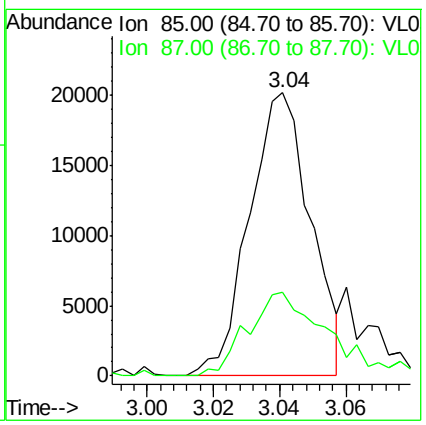


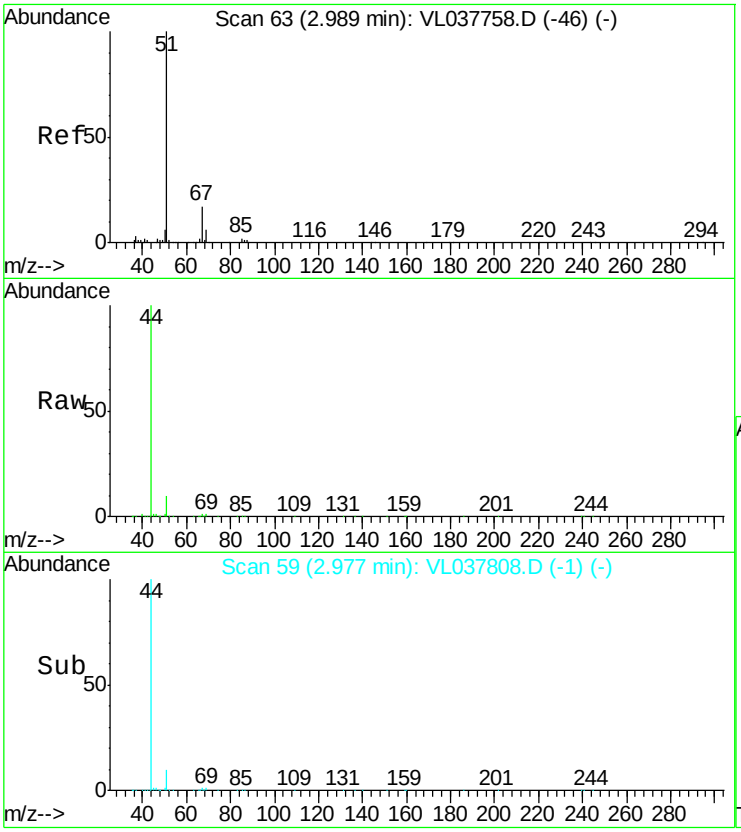




#2
Dichlorodifluoromethane
Concen: 0.139 ppbv
RT: 3.04 min Scan# 79
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 85 Resp: 26039

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 29.8 | 25.7 | 38.5 |



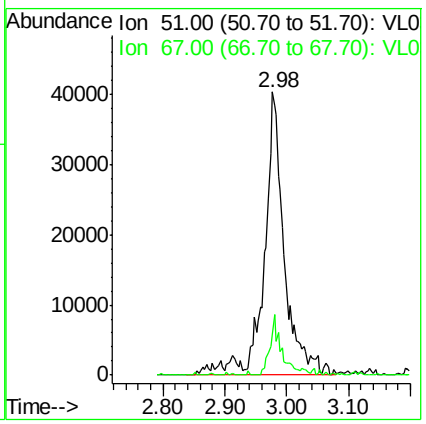


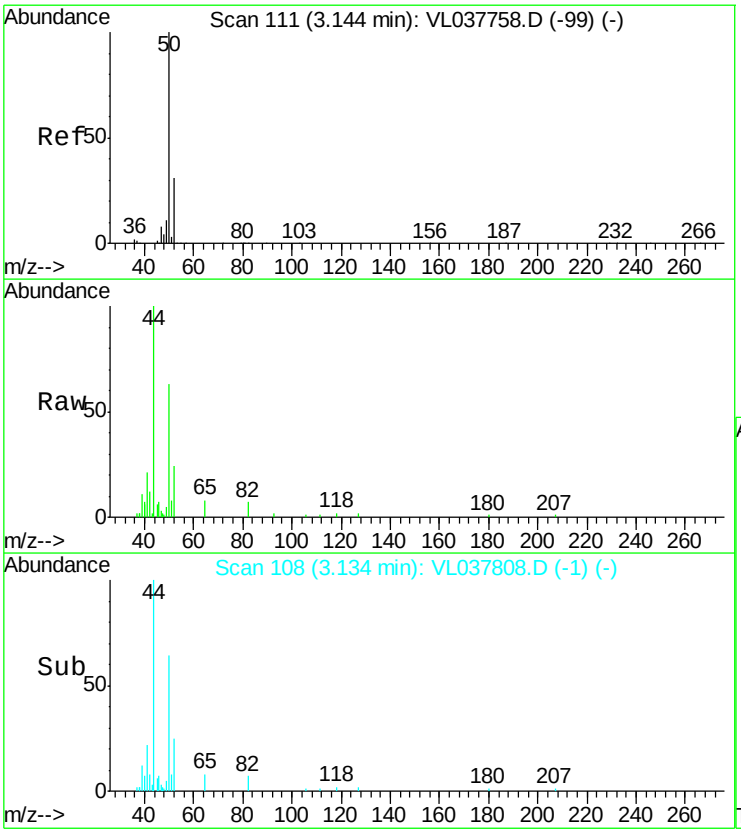

#3
Chlorodifluoromethane
Concen: 0.407 ppbv
RT: 2.98 min Scan# 59
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 51 Resp: 91396

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 51 | 100 | | |
| 67 | 13.2 | 13.5 | 20.3# |

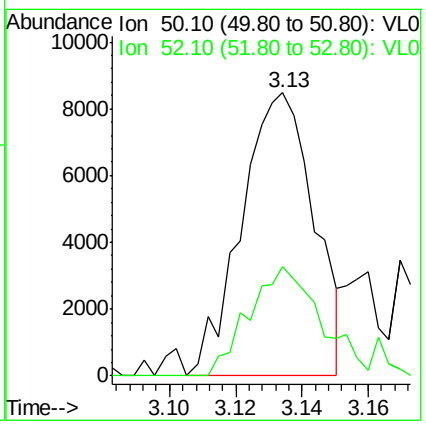


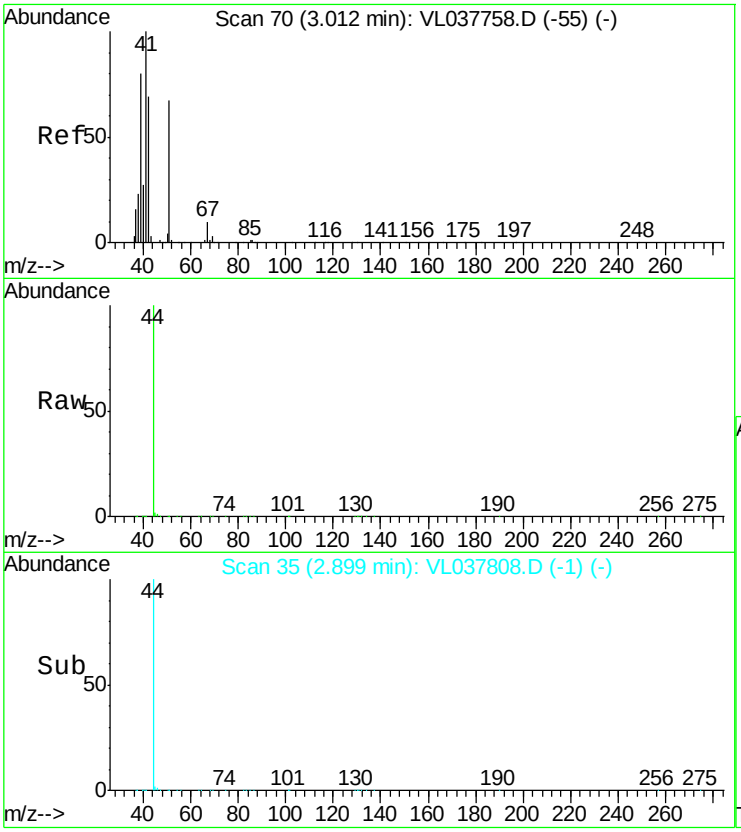




#4
Chloromethane
Concen: 0.157 ppbv
RT: 3.13 min Scan# 108
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 50 Resp: 12892

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 38.7 | 24.4 | 36.6# |



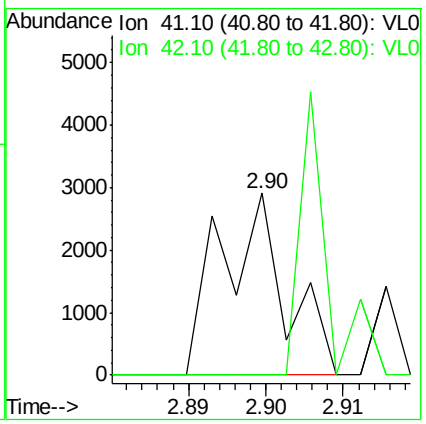


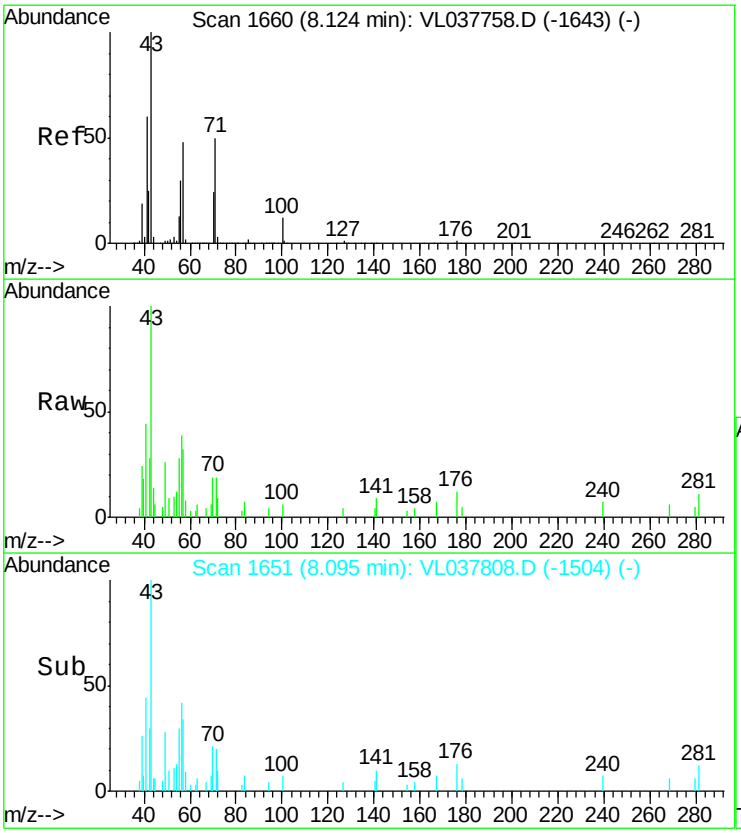

#9
Propene
Concen: 0.020 ppbv
RT: 2.90 min Scan# 35
Delta R.T. -0.11 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 41 Resp: 1693

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 75.6 | 54.2 | 81.2 |

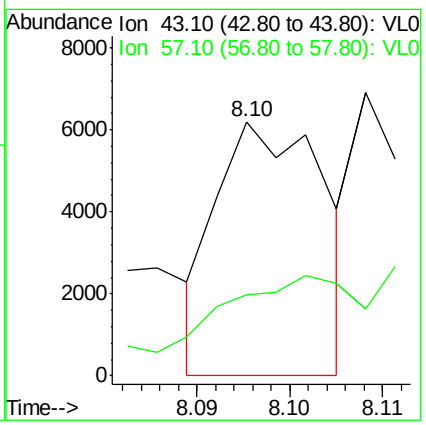


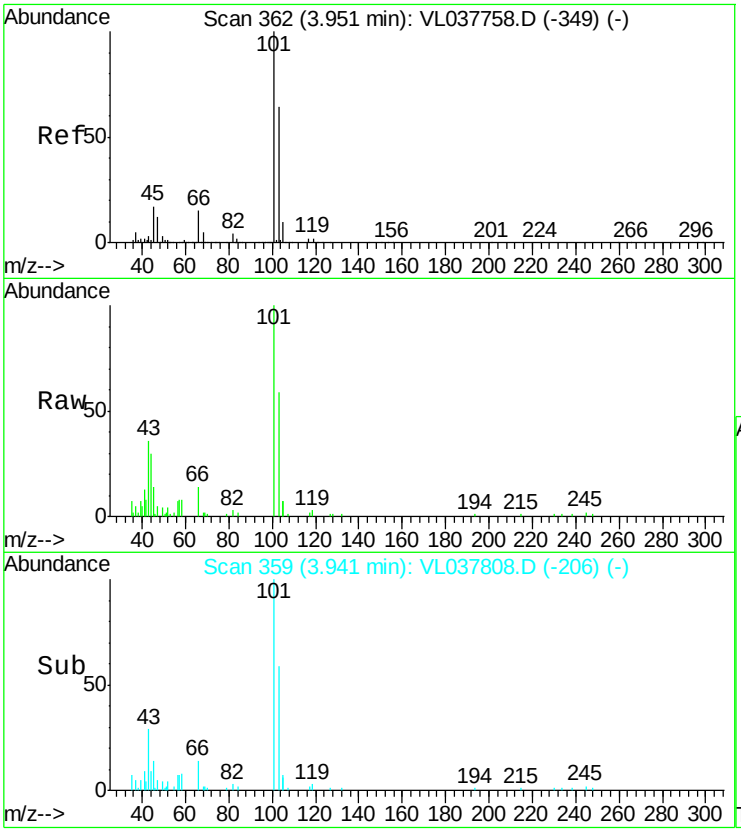




#10
Heptane
Concen: 0.027 ppbv
RT: 8.10 min Scan# 1651
Delta R.T. -0.03 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 43 Resp: 4987

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 0.0 | 40.0 | 60.0# |



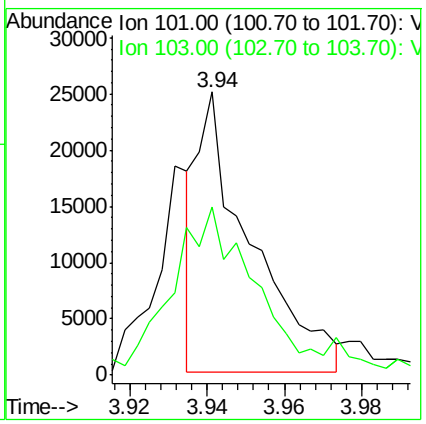


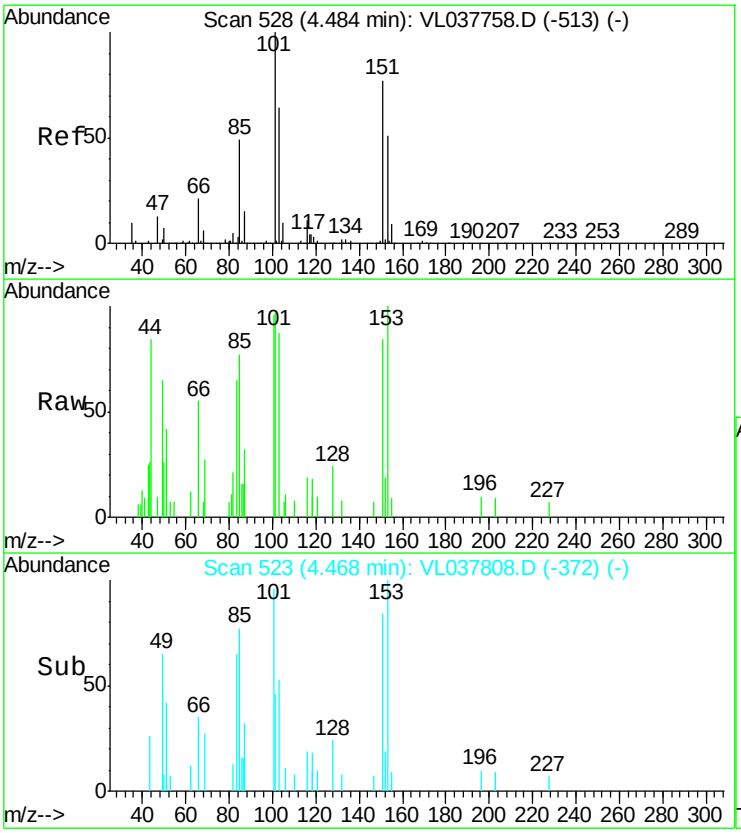

#11
Trichlorofluoromethane
Concen: 0.143 ppbv
RT: 3.94 min Scan# 359
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :**
MSVOA_L
**ClientSampleId :**
C0P08

Tgt Ion:101 Resp: 23867

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 51.5 | 51.5 | 77.3# |

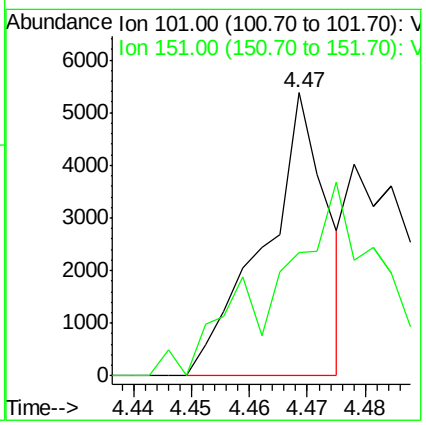


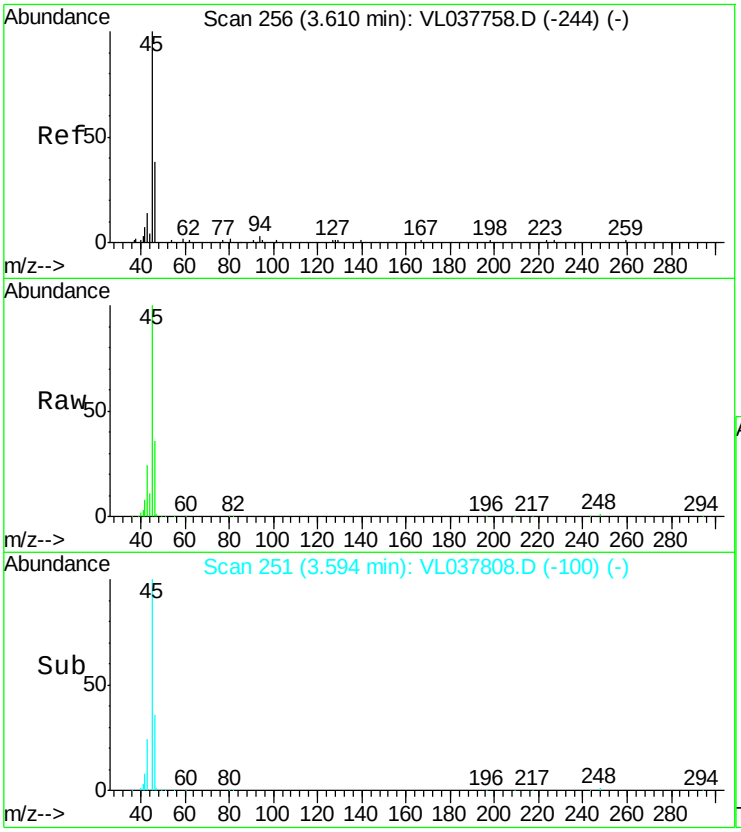




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.032 ppbv
RT: 4.47 min Scan# 523
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion:101 Resp: 4041

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 0.0 | 62.9 | 94.3# |



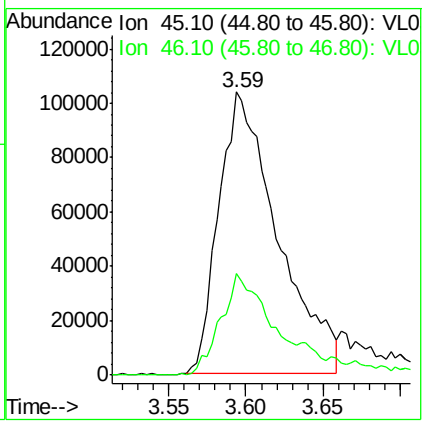


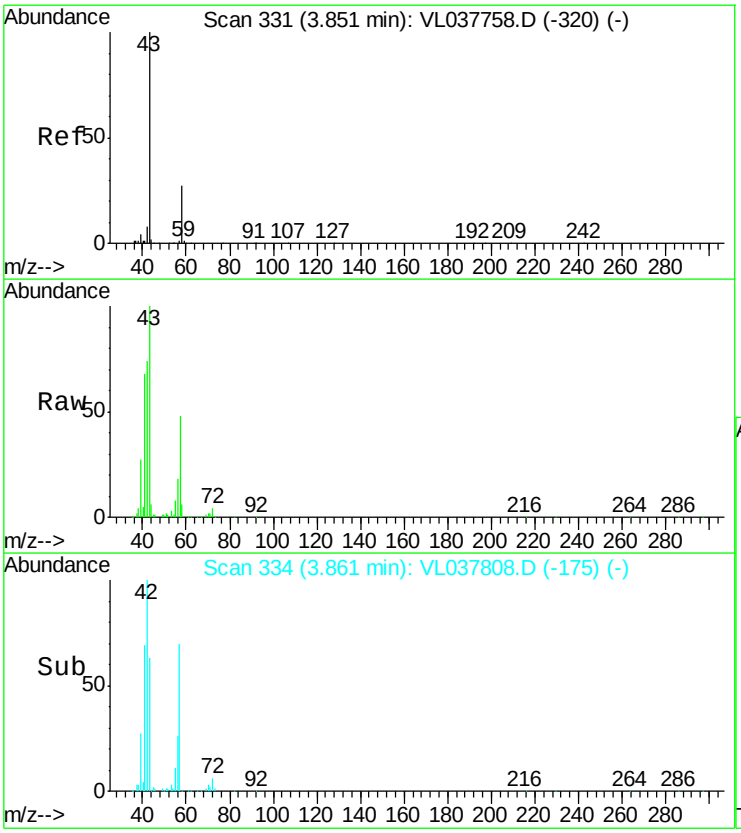

#13
Ethanol
Concen: 40.629 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 45 Resp: 274551

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 46 | 38.7 | 20.2 | 81.0 |

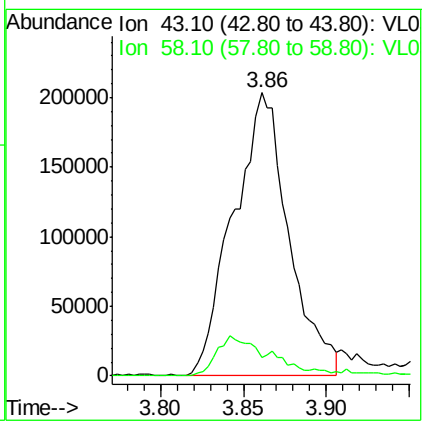


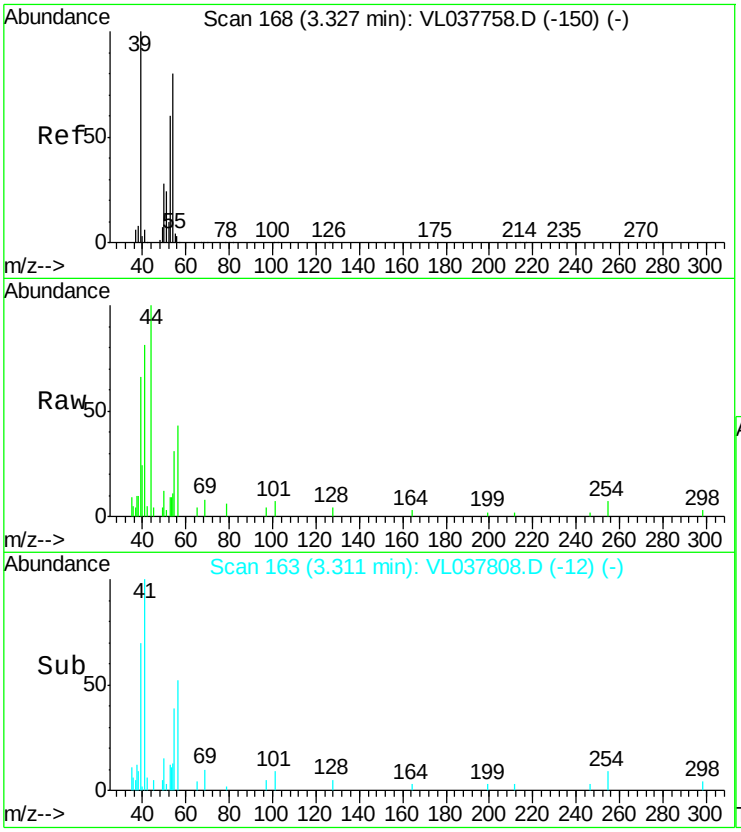




#15
Acetone
Concen: 4.476 ppbv
RT: 3.86 min Scan# 334
Delta R.T. 0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 43 Resp: 469595

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 13.6 | 23.0 | 34.6# |



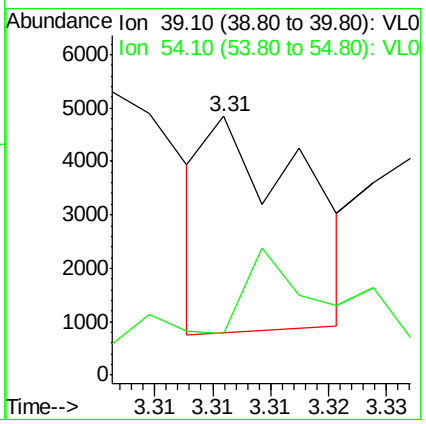


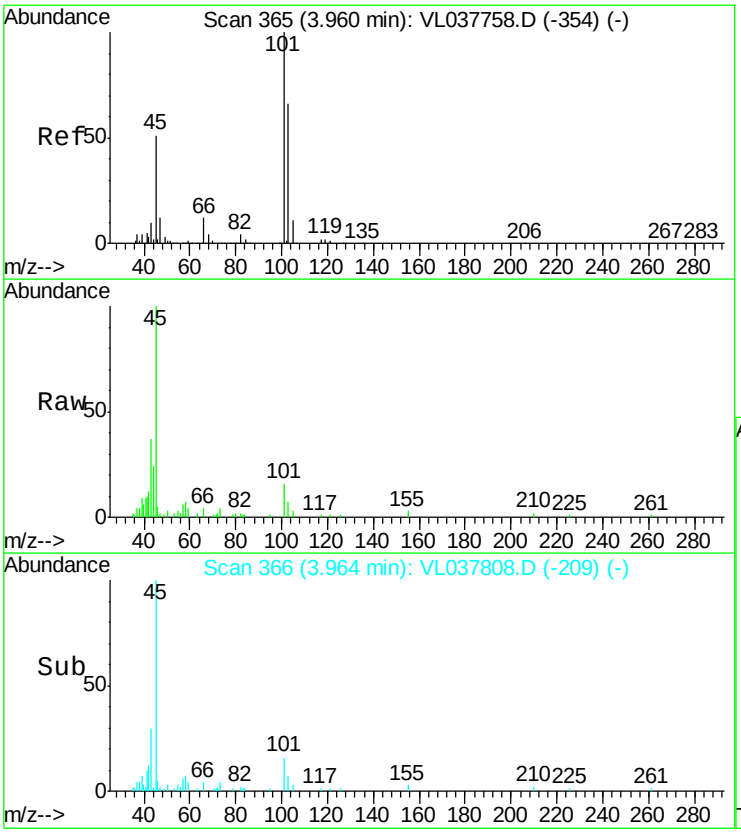

#16
1,3-Butadiene
Concen: 0.030 ppbv
RT: 3.31 min Scan# 163
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 39 Resp: 2306

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 39 | 100 | | |
| 54 | 171.2 | 61.7 | 92.5# |

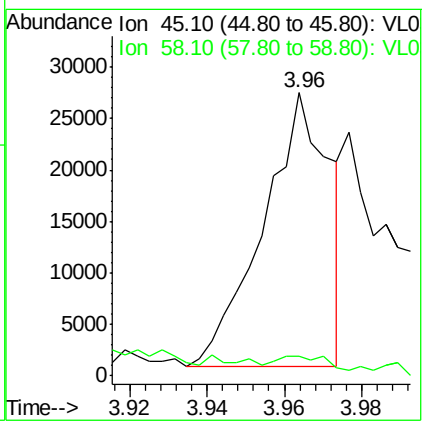


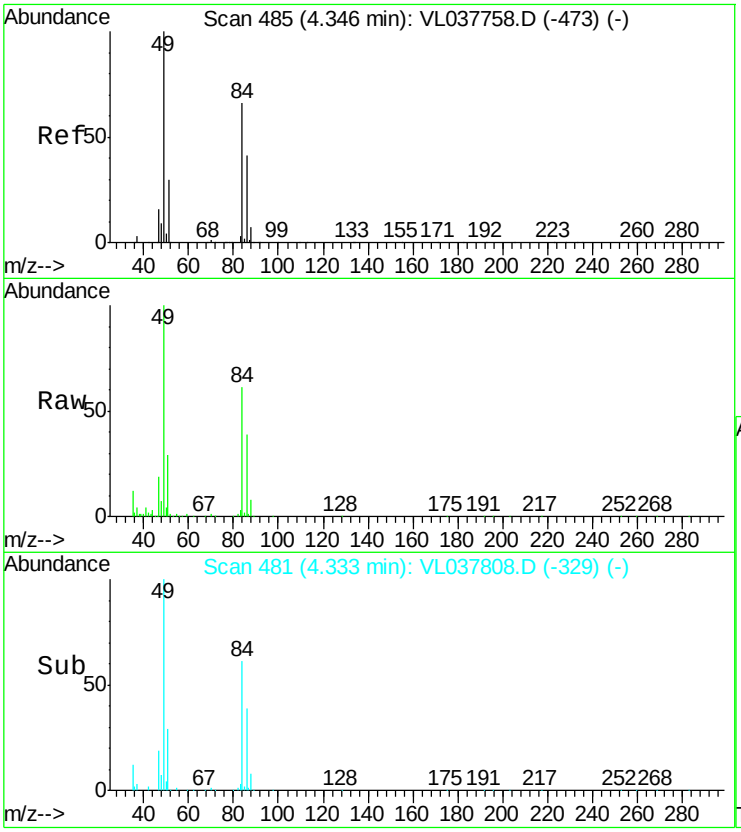




#19
Isopropyl Alcohol
Concen: 0.486 ppbv
RT: 3.96 min Scan# 366
Delta R.T. 0.00 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 45 Resp: 31751

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 58 | 34.3 | 1.1 | 1.7# |



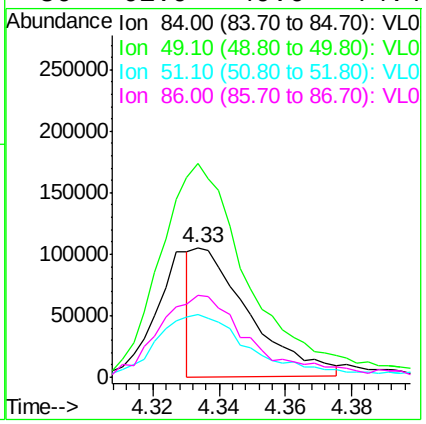


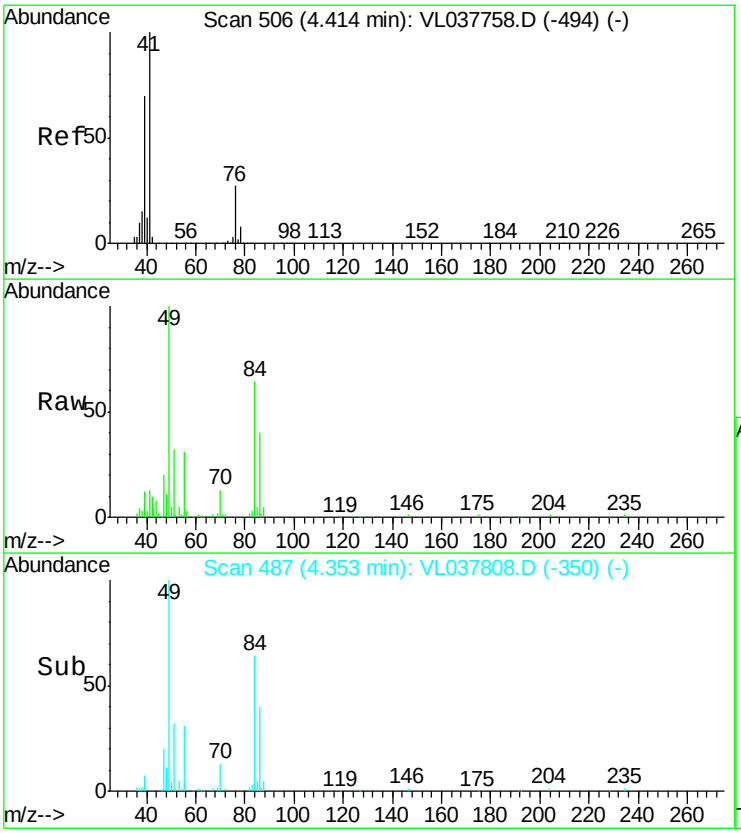

#20
Methylene Chloride
Concen: 2.302 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 84 Resp: 122020

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 163.1 | 120.7 | 181.1 |
| 51 | 46.6 | 36.2 | 54.4 |
| 86 | 61.9 | 49.6 | 74.4 |

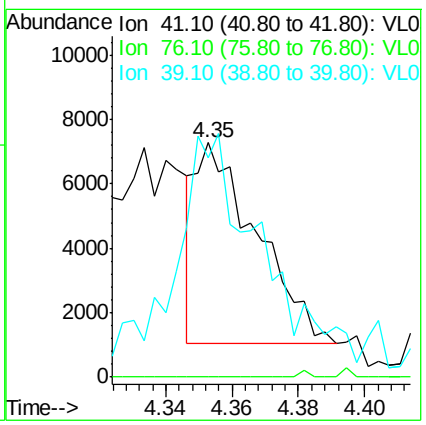


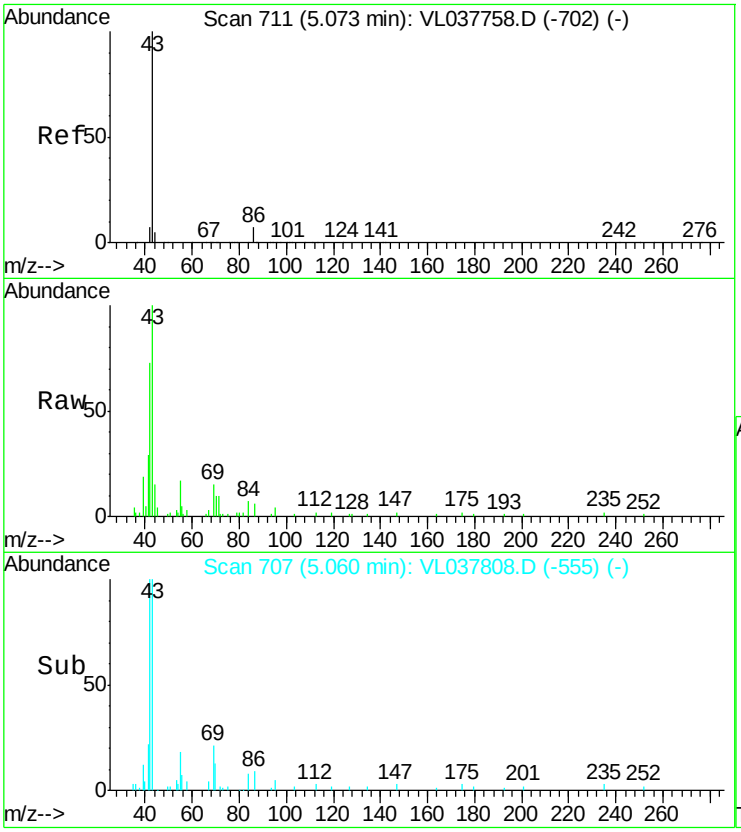




#21
Allyl Chloride
Concen: 0.085 ppbv
RT: 4.35 min Scan# 487
Delta R.T. -0.06 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 41 Resp: 7890

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 76 | 0.0 | 22.4 | 33.6# |
| 39 | 222.5 | 58.0 | 87.0# |



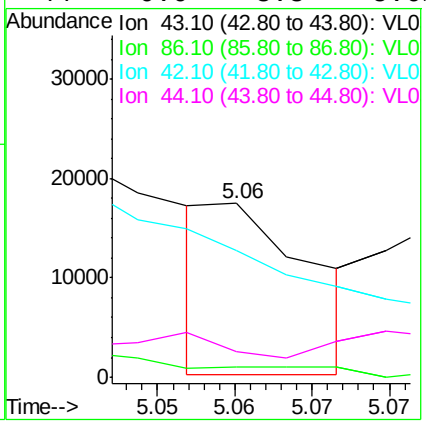


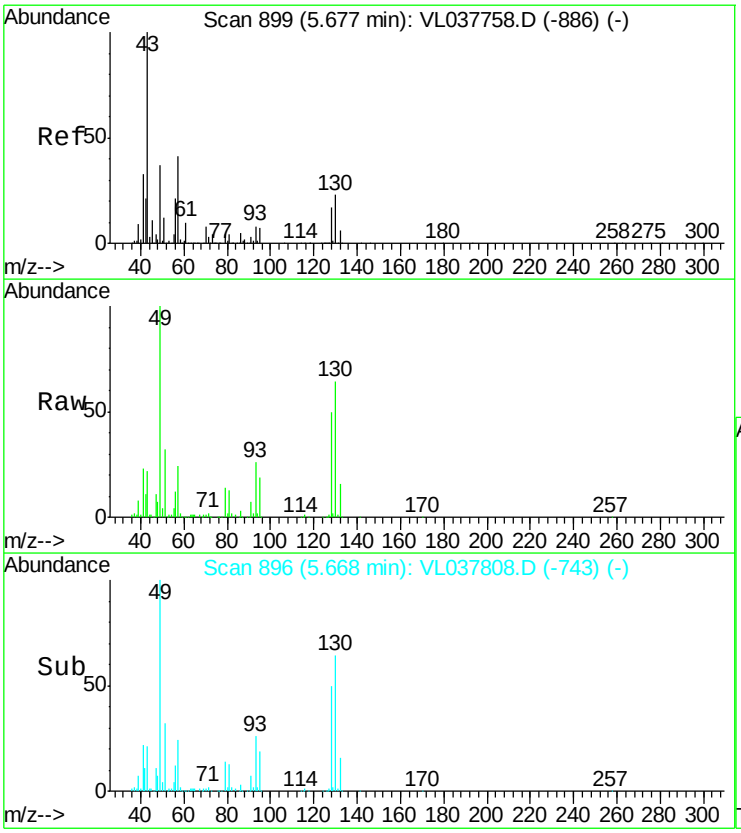

#23
Vinyl Acetate
Concen: 0.049 ppbv
RT: 5.06 min Scan# 707
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 43 Resp: 7670

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 1.5 | 5.0 | 7.4# |
| 42 | 55.8 | 7.4 | 11.0# |
| 44 | 0.0 | 3.8 | 5.6# |

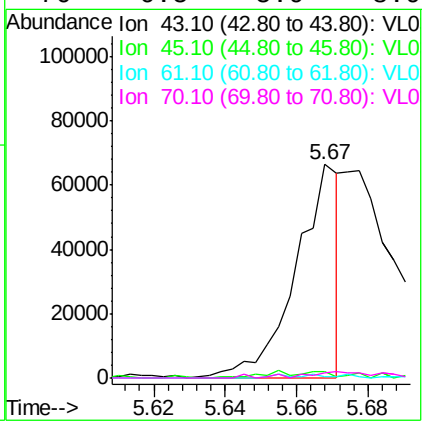


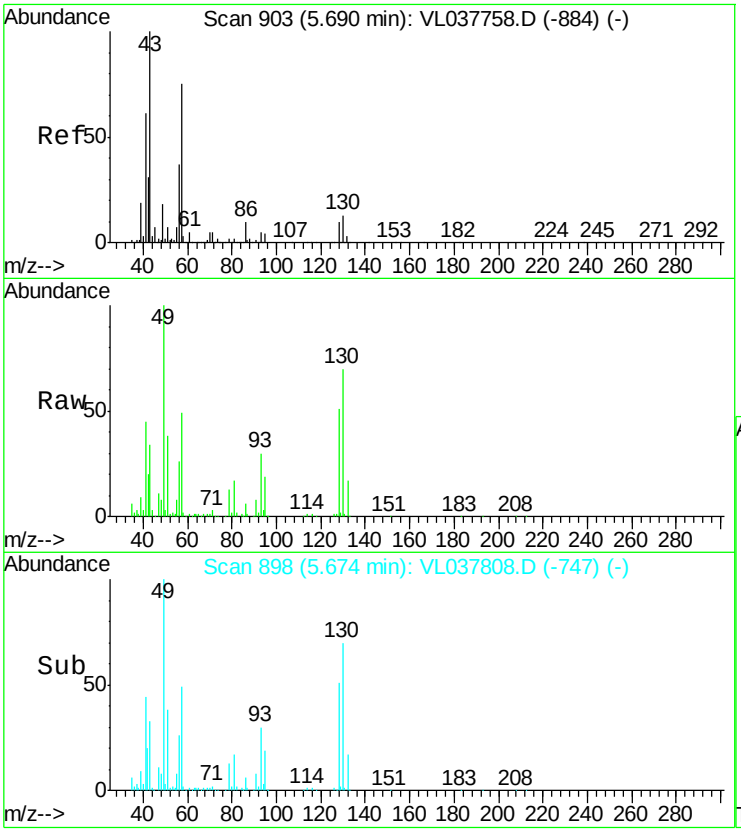




#25
Ethyl Acetate
Concen: 0.190 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 43 Resp: 55825

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 45 | 9.9 | 8.1 | 12.1 |
| 61 | 3.4 | 7.5 | 11.3# |
| 70 | 6.5 | 5.9 | 8.9 |



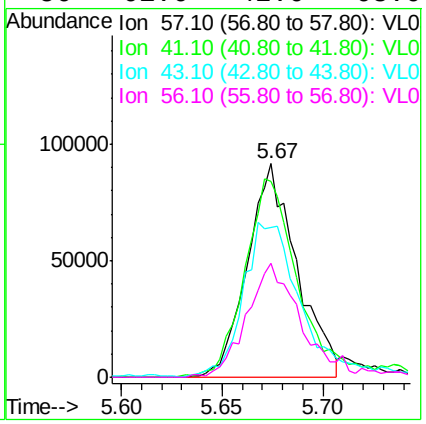


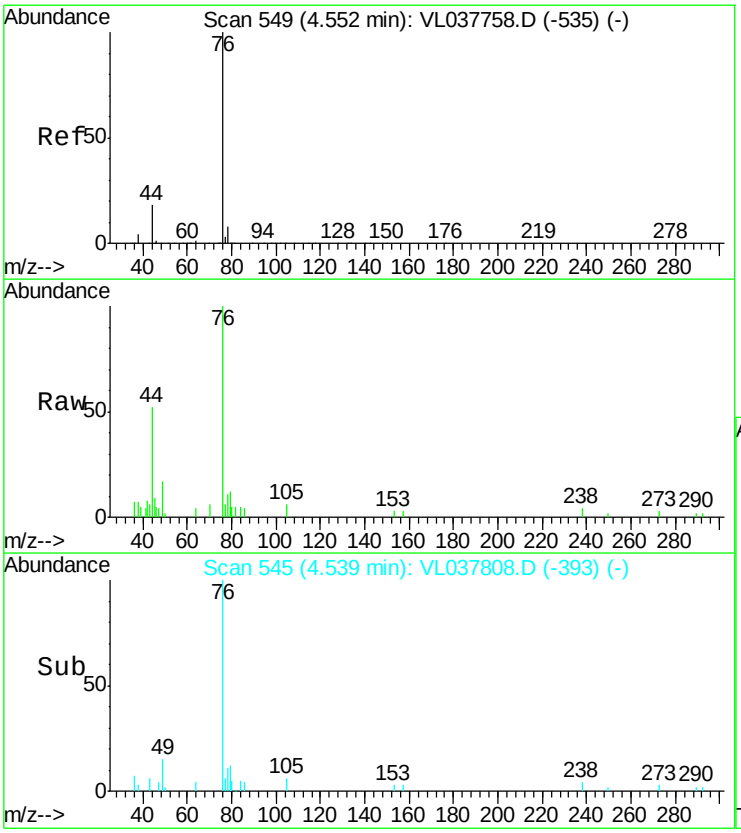

#26
Hexane
Concen: 1.082 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 57 Resp: 156863

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 106.4 | 69.6 | 104.4# |
| 43 | 85.4 | 171.4 | 257.0# |
| 56 | 61.6 | 42.0 | 63.0 |

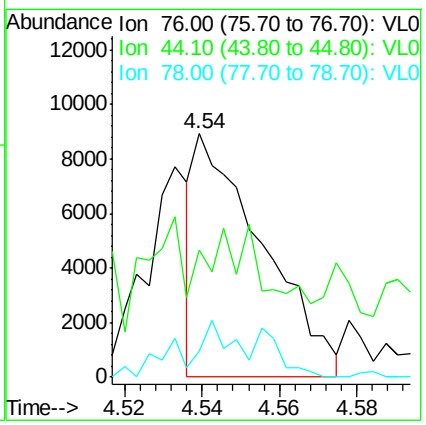


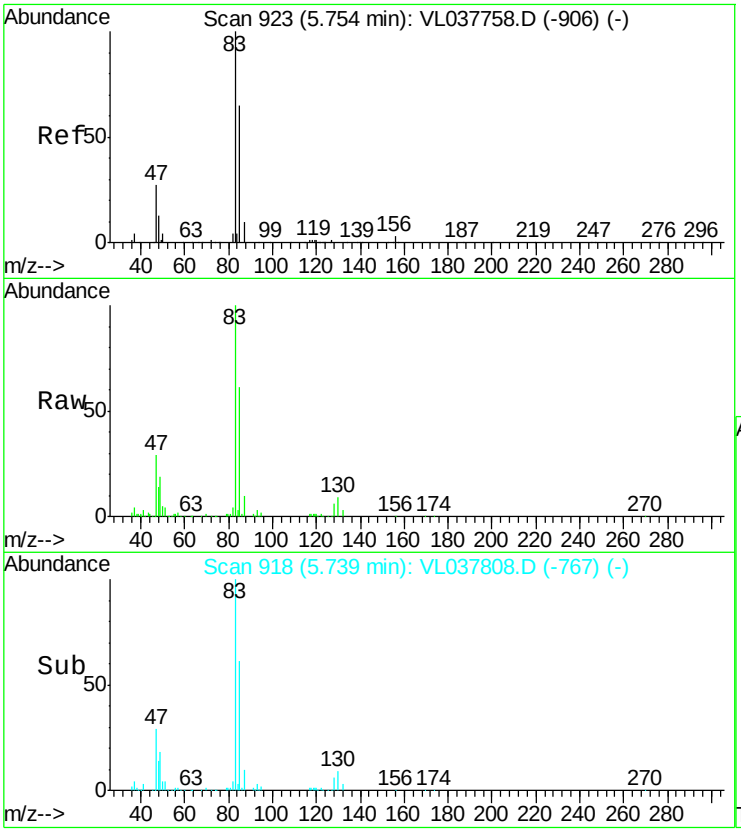




#27
Carbon Disulfide
Concen: 0.085 ppbv
RT: 4.54 min Scan# 545
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 76 Resp: 10875

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 76 | 100 | | |
| 44 | 0.0 | 14.3 | 21.5# |
| 78 | 25.3 | 7.8 | 11.6# |



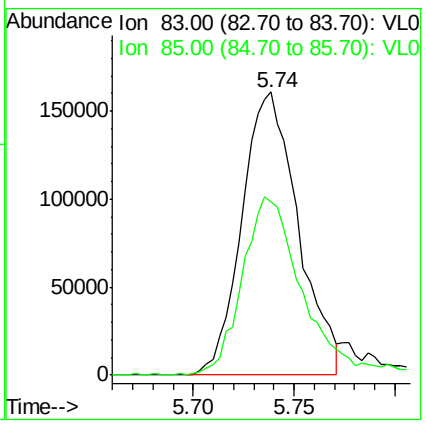


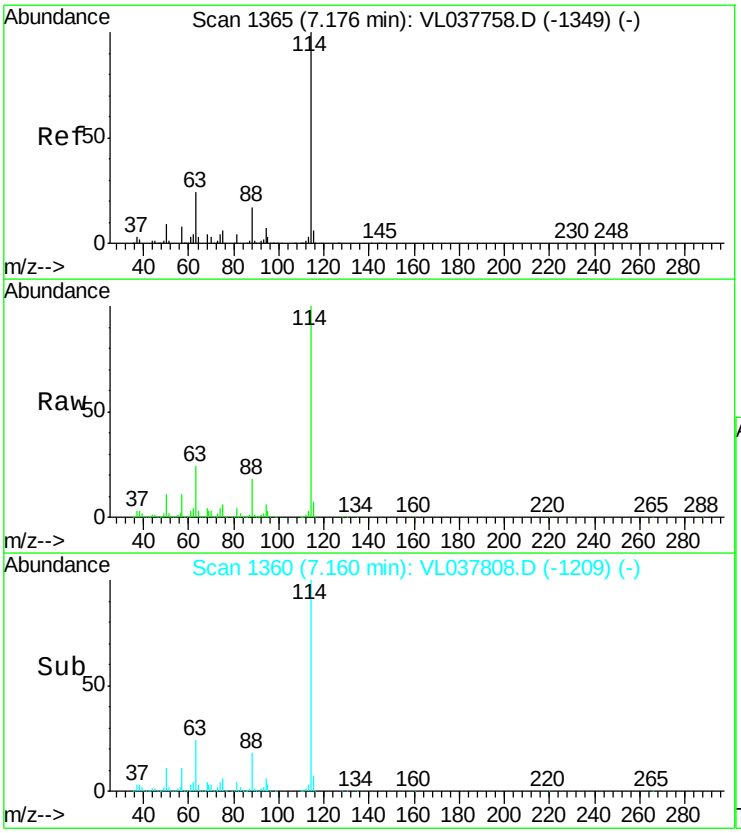

#29
Chloroform
Concen: 1.510 ppbv
RT: 5.74 min Scan# 918
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :**
MSVOA_L
**ClientSampleId :**
C0P08

Tgt Ion: 83 Resp: 312856

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 60.9 | 51.8 | 77.8 |

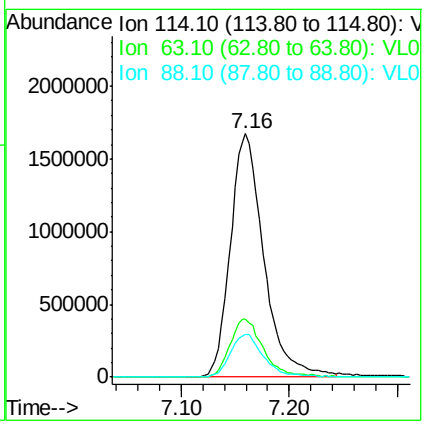


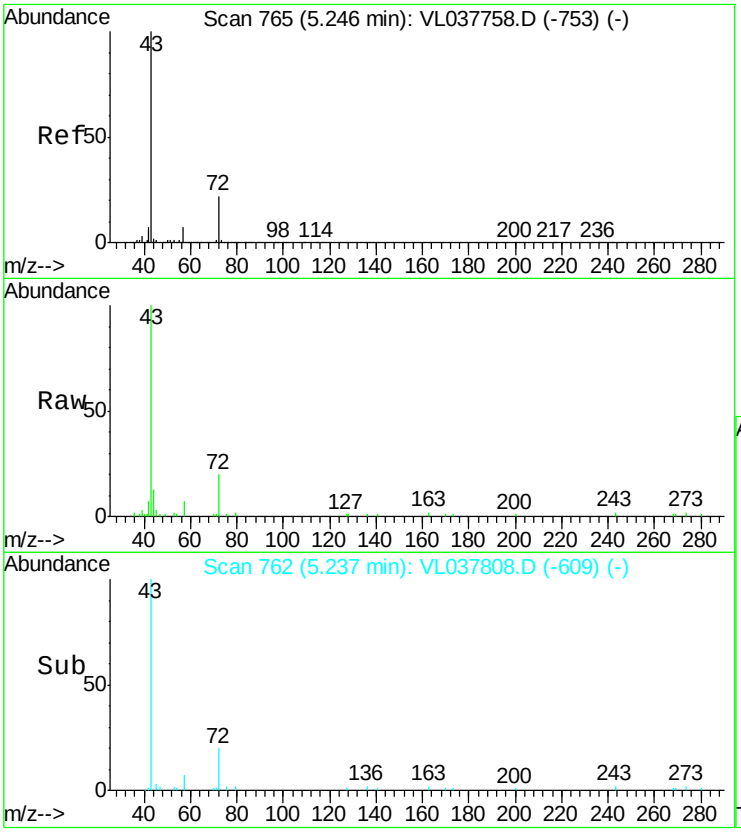




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1360
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion:114 Resp: 3617698

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 24.0 | 19.4 | 29.2 |
| 88 | 17.9 | 14.4 | 21.6 |



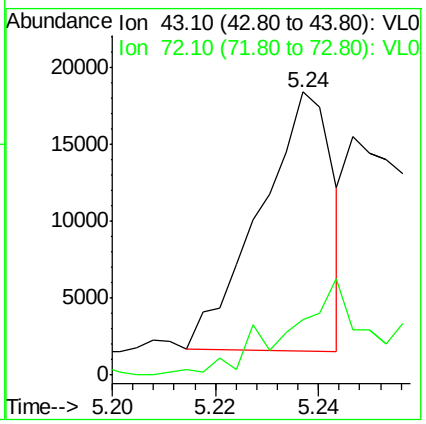


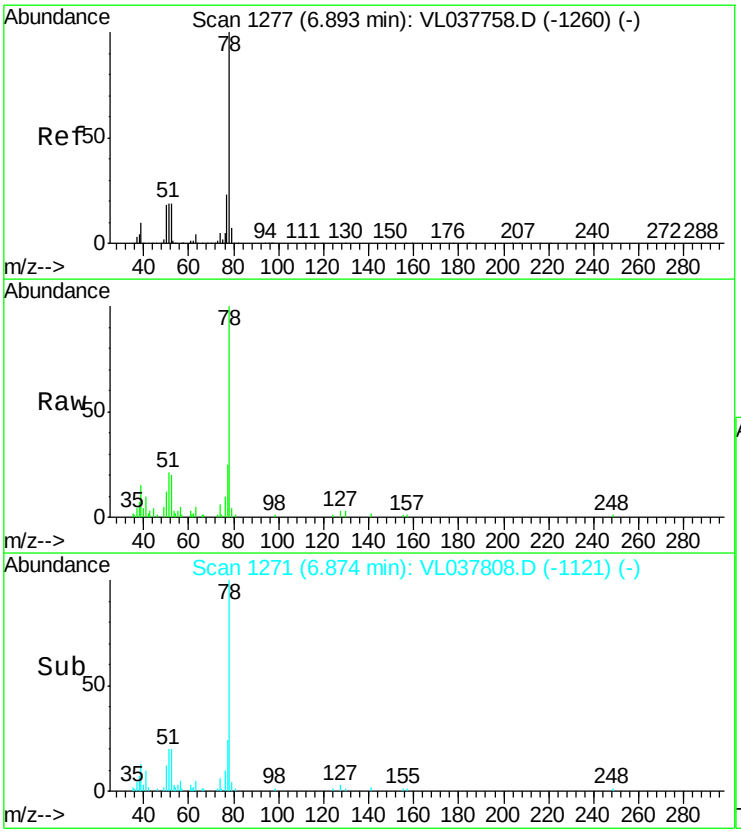

#34
2-Butanone
Concen: 0.113 ppbv
RT: 5.24 min Scan# 762
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :**
MSVOA_L
**ClientSampleId :**
C0P08

Tgt Ion: 43 Resp: 16495

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 0.0 | 18.2 | 27.2# |

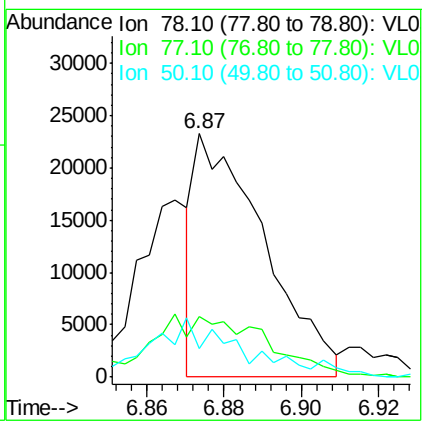


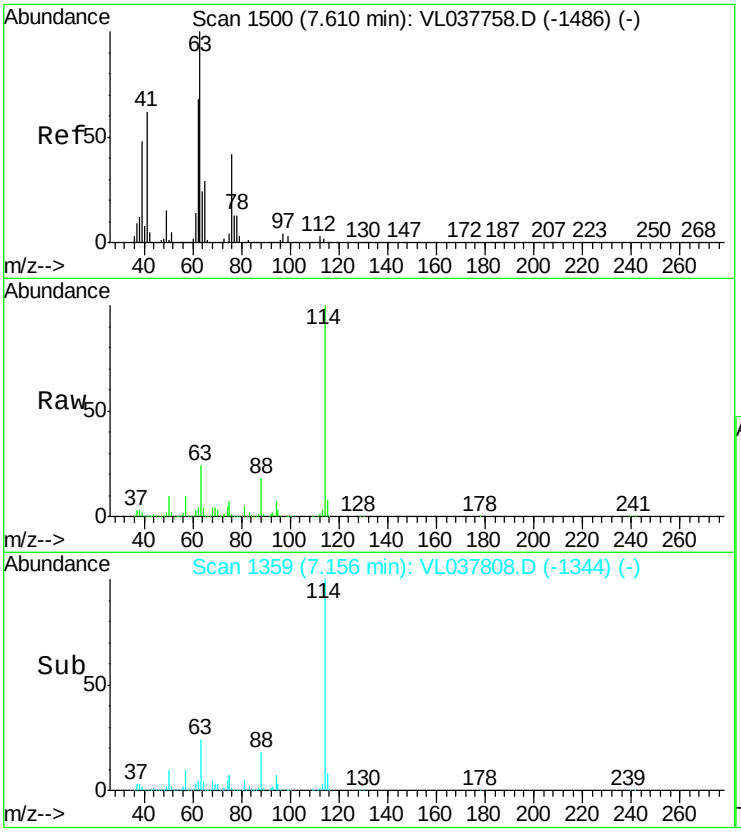




#36
Benzene
Concen: 0.093 ppbv
RT: 6.87 min Scan# 1271
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 78 Resp: 28621

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 24.3 | 18.8 | 28.2 |
| 50 | 8.3 | 14.7 | 22.1# |



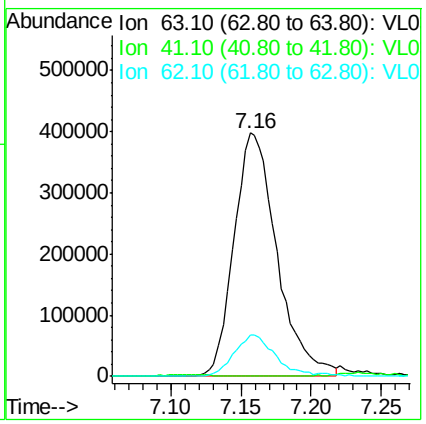


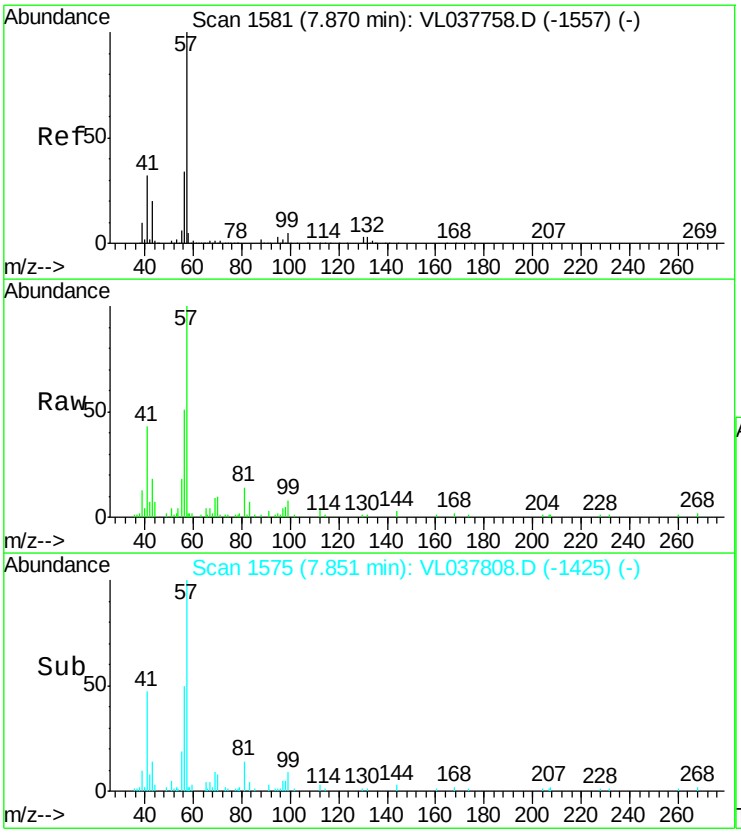

#39
1,2-Dichloropropane
Concen: 7.308 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.45 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 63 Resp: 849385

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 41 | 0.0 | 49.8 | 74.6# |
| 62 | 16.9 | 54.6 | 82.0# |

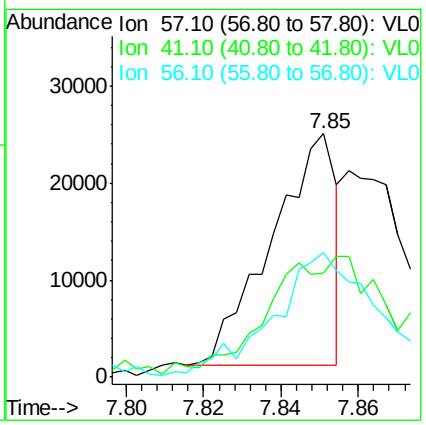


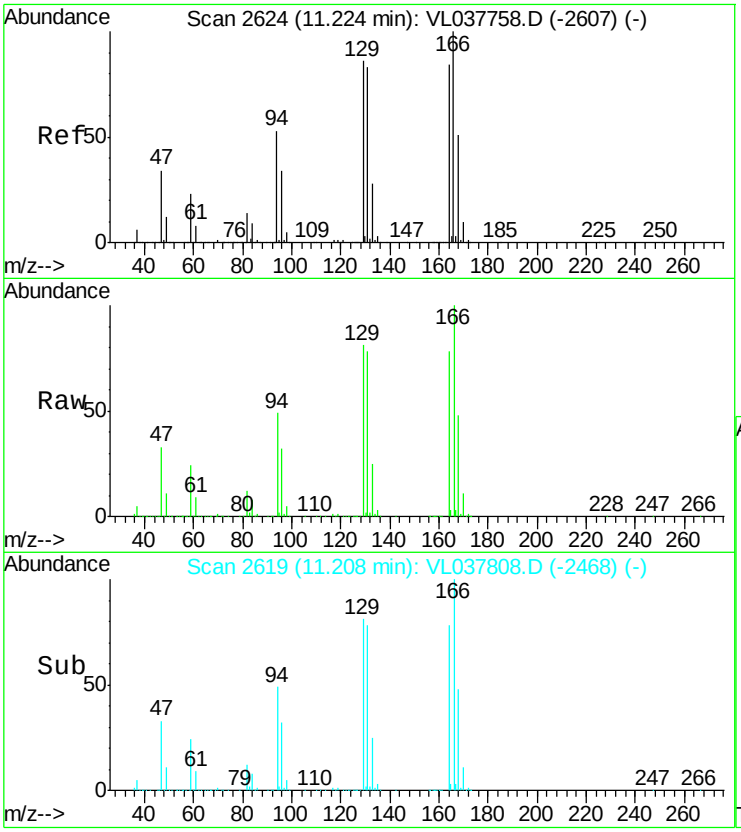




#44
2,2,4-Trimethylpentane
Concen: 0.053 ppbv
RT: 7.85 min Scan# 1575
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 57 Resp: 27650

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 0.0 | 25.6 | 38.4# |
| 56 | 101.3 | 25.5 | 38.3# |



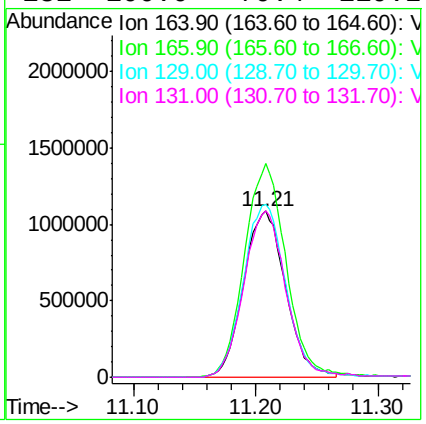


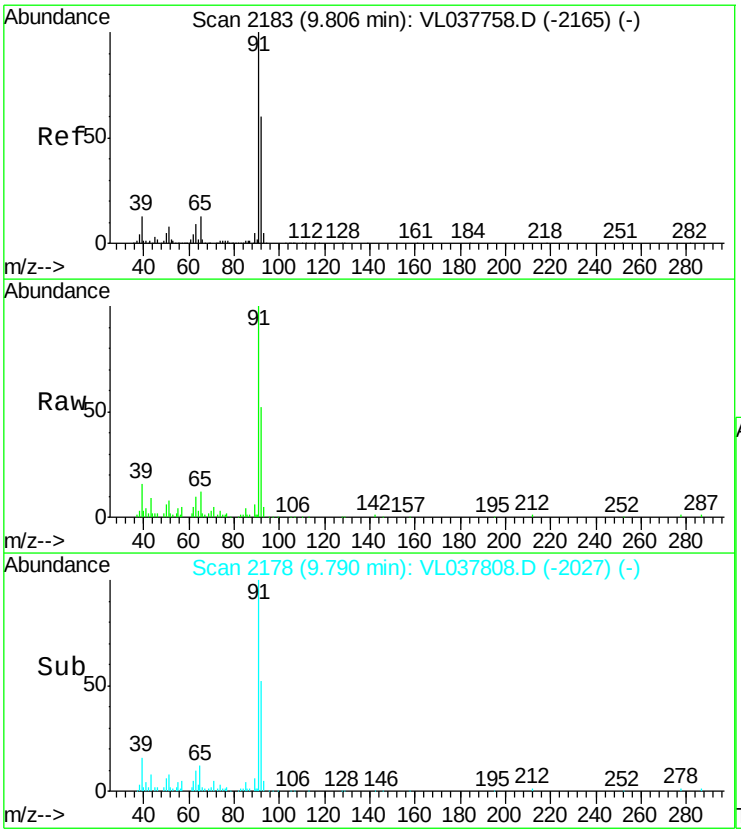

#52
Tetrachloroethene
Concen: 21.483 ppbv
RT: 11.21 min Scan# 2619
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion:164 Resp: 2582718

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 128.5 | 95.4 | 143.2 |
| 129 | 104.0 | 82.2 | 123.4 |
| 131 | 100.0 | 79.4 | 119.2 |

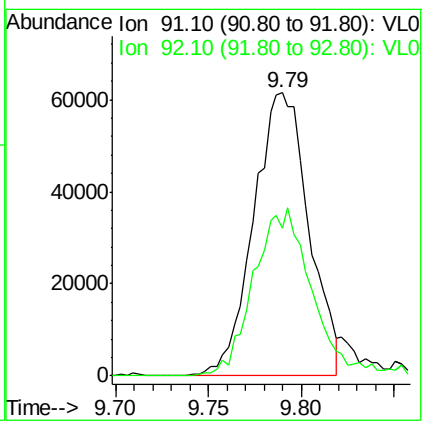


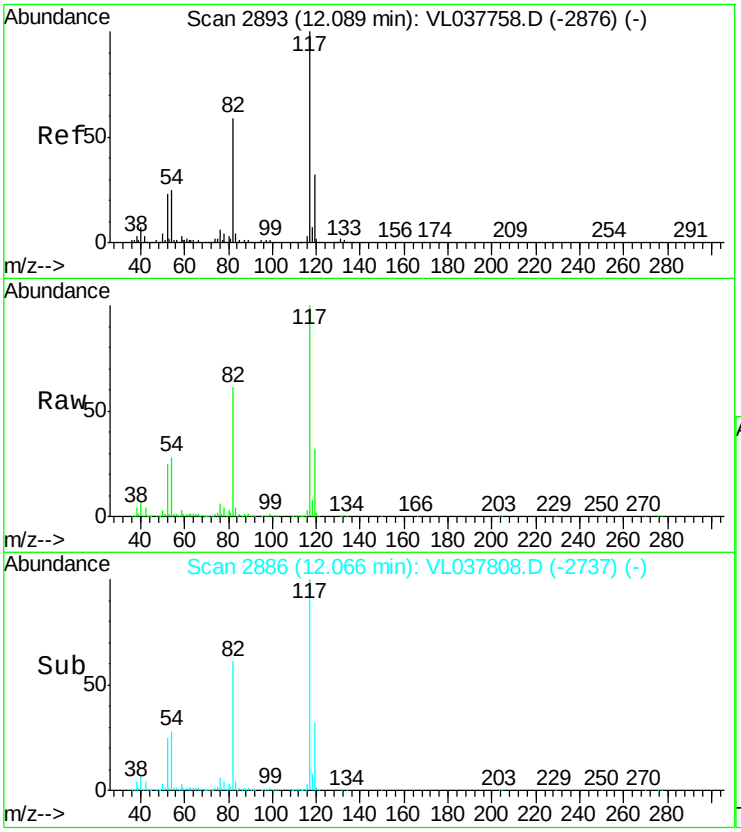




#53
Toluene
Concen: 0.373 ppbv
RT: 9.79 min Scan# 2178
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 91 Resp: 127612

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 63.6 | 48.4 | 72.6 |



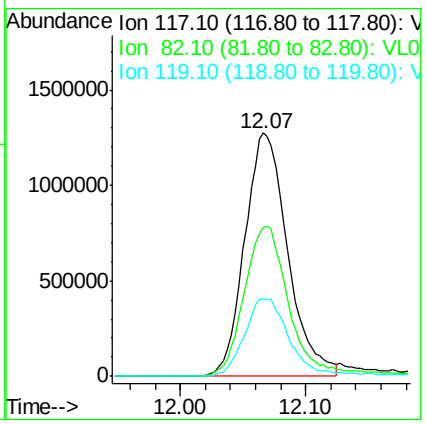


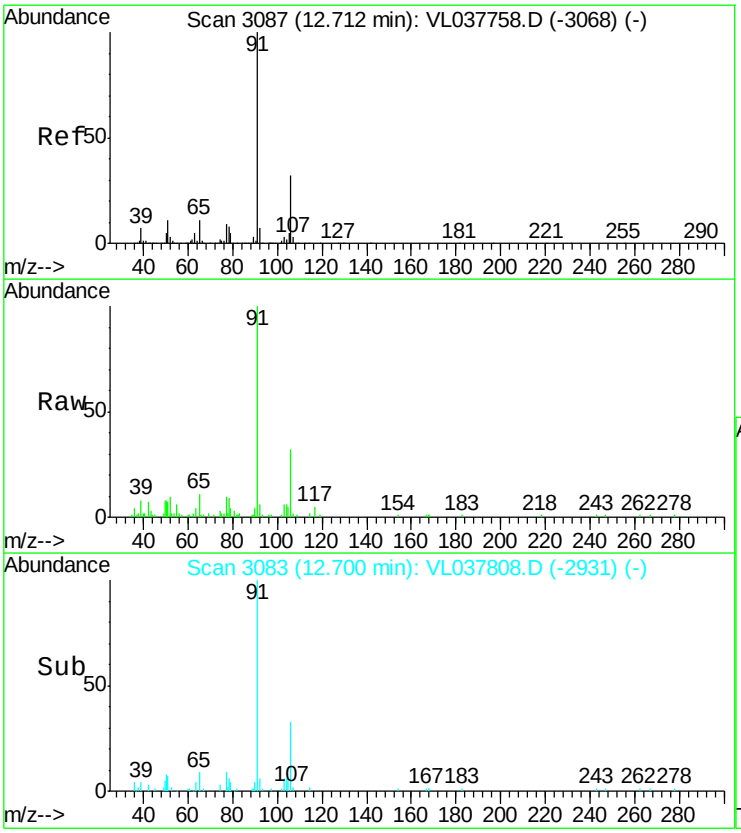

#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion:117 Resp: 3036242

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 66.9 | 52.2 | 78.2 |
| 119 | 34.6 | 26.0 | 39.0 |

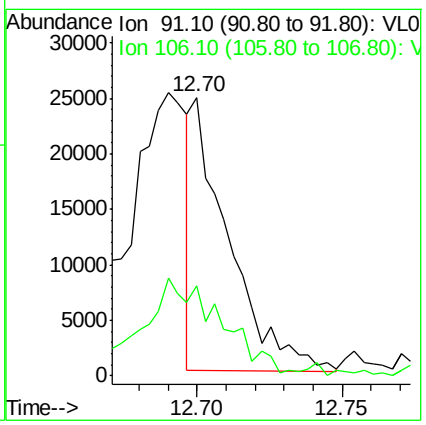


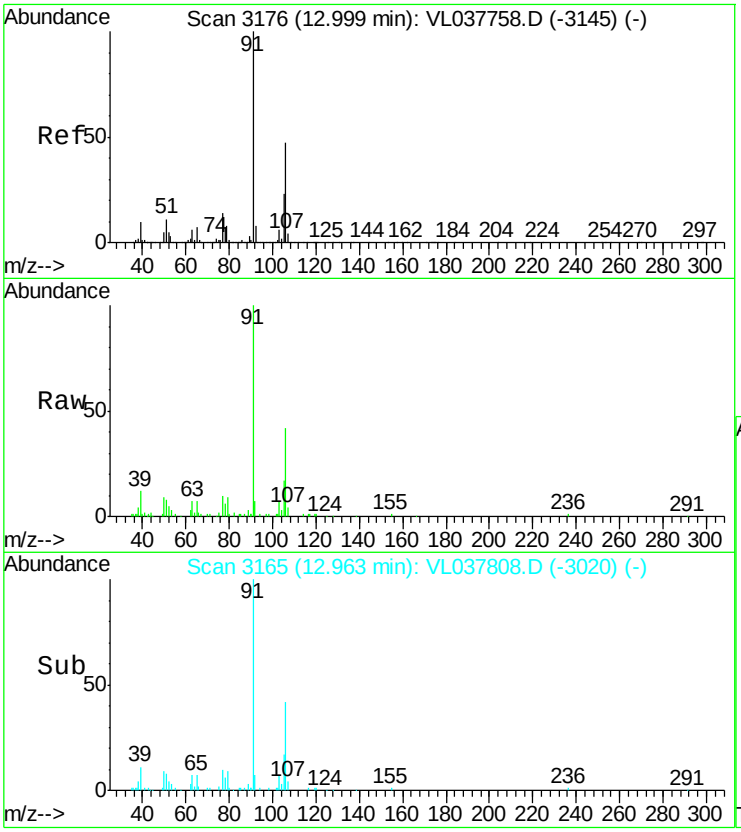




#58
Ethyl Benzene
Concen: 0.053 ppbv
RT: 12.70 min Scan# 3083
Delta R.T. -0.01 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 91 Resp: 21497

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 33.6 | 25.3 | 37.9 |



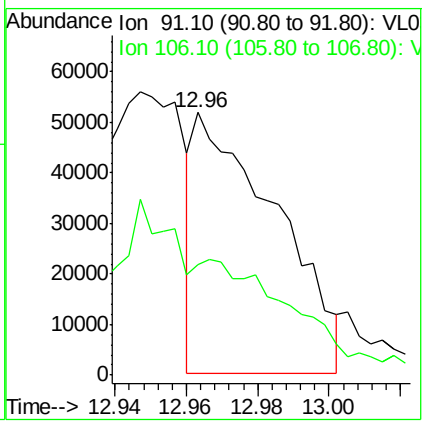


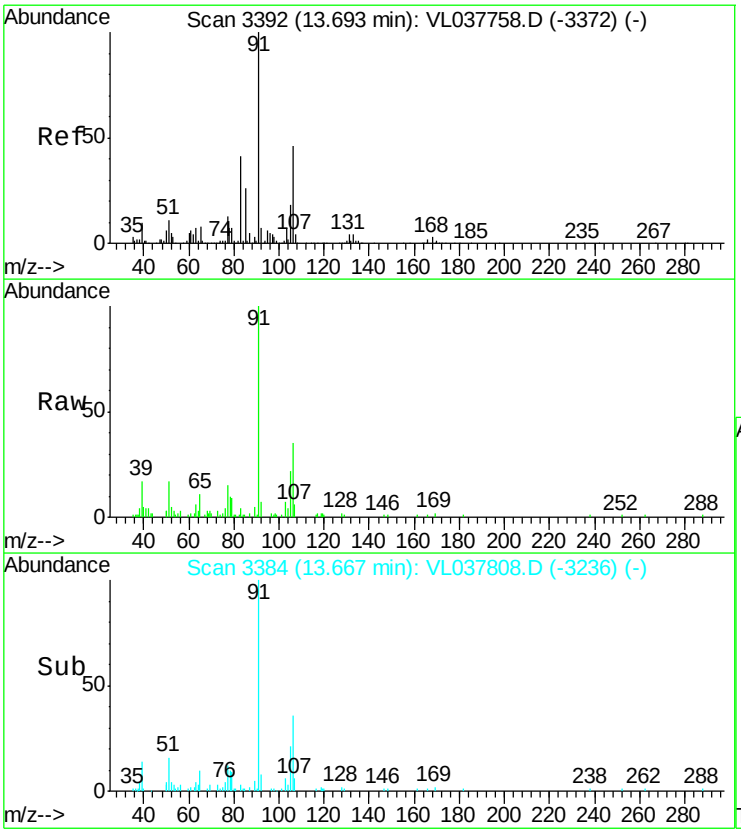

#59
m/p-Xylene
Concen: 0.234 ppbv
RT: 12.96 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :** MSVOA_L
**ClientSampleId :** C0P08

Tgt Ion: 91 Resp: 81869

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 36.7 | 55.1# |

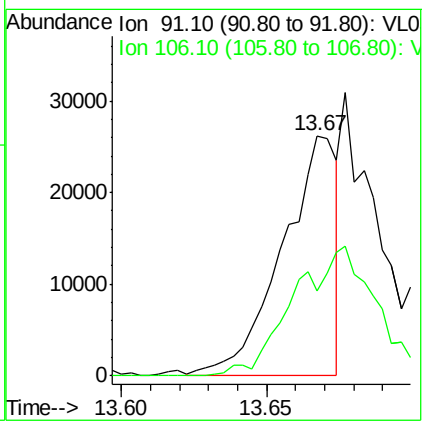


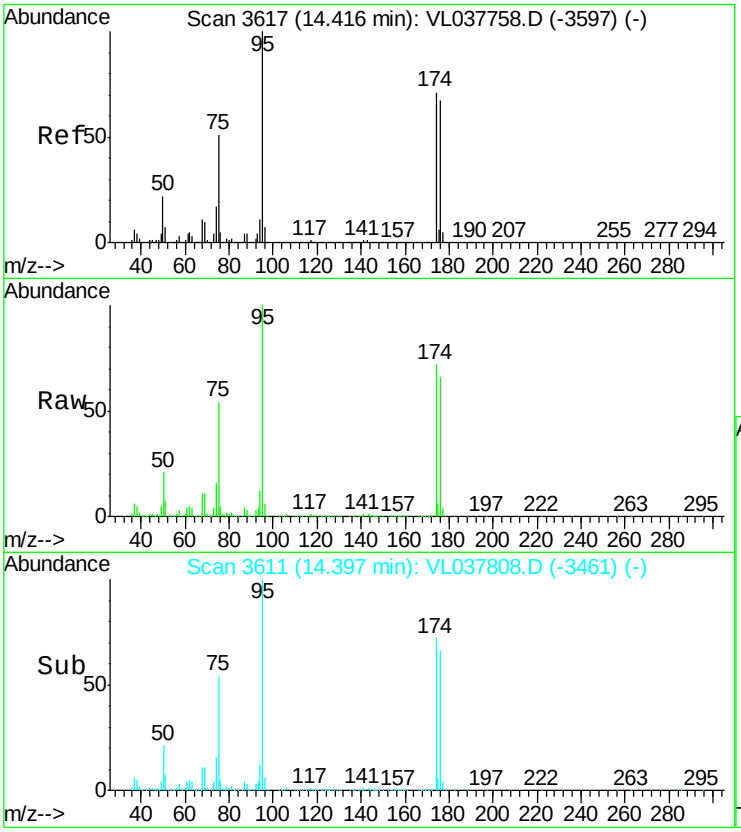




#60
o-Xylene
Concen: 0.102 ppbv
RT: 13.67 min Scan# 3384
Delta R.T. -0.03 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion: 91 Resp: 34205

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 23.5 | 70.5# |



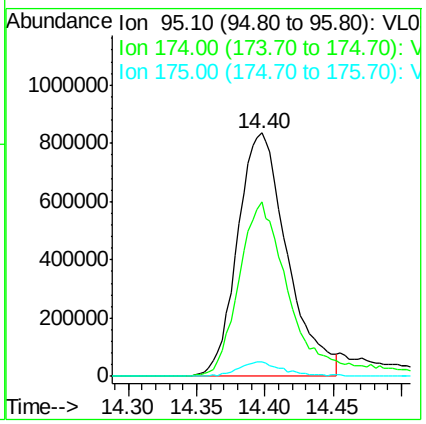


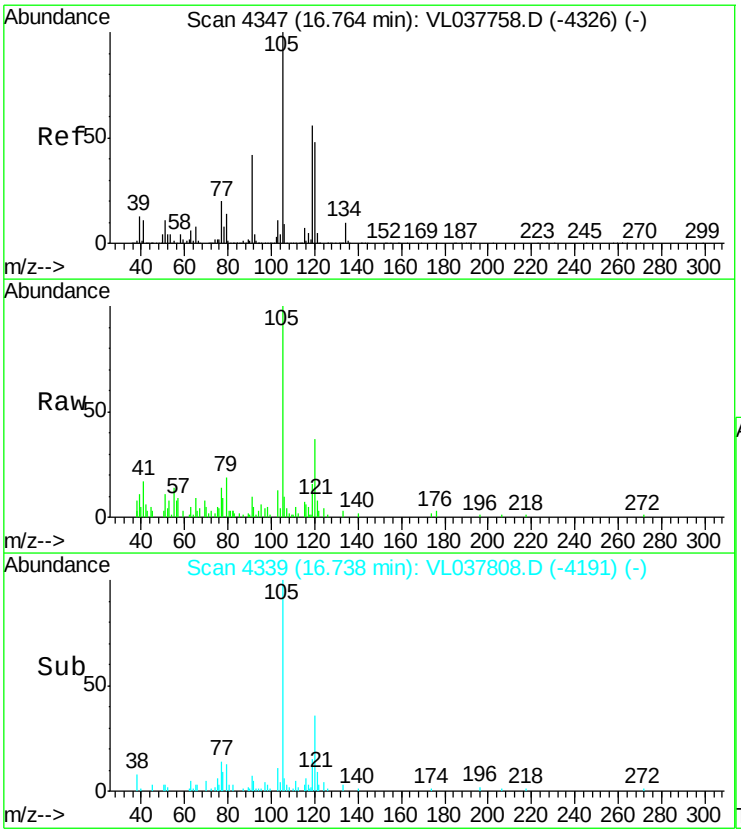

#68
1-Bromo-4-Fluorobenzene
Concen: 9.939 ppbv
RT: 14.40 min Scan# 3611
Delta R.T. -0.02 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

**Instrument :**
MSVOA_L
**ClientSampleId :**
C0P08

Tgt Ion: 95 Resp: 2110379

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 77.8 | 57.8 | 86.6 |
| 175 | 6.2 | 4.7 | 7.1 |




#74
1,2,4-Trimethylbenzene
Concen: 0.061 ppbv
RT: 16.74 min Scan# 4339
Delta R.T. -0.03 min
Lab File: VL037808.D
Acq: 7 Oct 2021 23:02

Tgt Ion:105 Resp: 22309

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 37.9 | 38.4 | 57.6# |
| 91 | 14.8 | 34.2 | 51.2# |
| 77 | 12.5 | 15.8 | 23.8# |