Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL072920\
Data File : VL035257.D
Acq On : 29 Jul 2020 22:11
Operator : SY/AP
Sample : L3463-03
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

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

Quant Time: Jul 30 02:53:17 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL072920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 29 07:14:29 2020
QLast Update : Wed Jul 29 07:14:29 2020
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Bromochloromethane | 5.66 | 49 | 1153131 | 10.00 | ppbv | | 0.00 |
| 33) 1,4-Difluorobenzene | 7.18 | 114 | 2750819 | 10.00 | ppbv | | 0.00 |
| 55) Chlorobenzene-d5 | 12.11 | 117 | 2575677 | 10.00 | ppbv | | 0.00 |
| **System Monitoring Compounds** | | | | | | | |
| 68) 1-Bromo-4-Fluorobenzene | 14.45 | 95 | 2111832 | 10.26 | ppbv | | 0.00 |
| Spiked Amount 10.000 | Range 65 - 135 | | Recovery = 102.60% | | | | |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 3.01 | 85 | 48235 | 0.350 | ppbv | | 98 |
| 3) Chlorodifluoromethane | 2.94 | 51 | 90097 | 0.706 | ppbv | # | 85 |
| 4) Chloromethane | 3.10 | 50 | 41334 | 0.575 | ppbv | | 96 |
| 7) Chloroethane | 3.52 | 64 | 946 | 0.035 | ppbv | # | 43 |
| 9) Propene | 2.97 | 41 | 30711 | 0.690 | ppbv | | 85 |
| 10) Heptane | 8.13 | 43 | 7410 | 0.062 | ppbv | # | 24 |
| 11) Trichlorofluoromethane | 3.92 | 101 | 54067 | 0.292 | ppbv | | 84 |
| 12) 1,1,2-Trichlorotrifluoroet | 4.46 | 101 | 4850 | 0.037 | ppbv | # | 14 |
| 13) Ethanol | 3.58 | 45 | 2119763 | 117.054 | ppbv | | 96 |
| 15) Acetone | 3.81 | 43 | 3856161 | 25.070 | ppbv | | 98 |
| 16) 1,3-Butadiene | 3.27 | 39 | 10349 | 0.172 | ppbv | # | 53 |
| 17) tert-Butyl alcohol | 3.94 | 59 | 385959 | 2.600 | ppbv | | 95 |
| 19) Isopropyl Alcohol | 3.94 | 45 | 8898734 | 87.721 | ppbv | # | 97 |
| 20) Methylene Chloride | 4.32 | 84 | 640957 | 9.154 | ppbv | | 99 |
| 21) Allyl Chloride | 4.16 | 41 | 67083 | 0.766 | ppbv | # | 1 |
| 23) Vinyl Acetate | 5.08 | 43 | 6412 | 0.041 | ppbv | # | 1 |
| 25) Ethyl Acetate | 5.67 | 43 | 214880 | 0.895 | ppbv | # | 85 |
| 26) Hexane | 5.68 | 57 | 251502 | 2.321 | ppbv | # | 46 |
| 34) 2-Butanone | 5.23 | 43 | 110456 | 0.789 | ppbv | | 97 |
| 36) Benzene | 6.90 | 78 | 15449 | 0.081 | ppbv | # | 92 |
| 39) 1,2-Dichloropropane | 7.18 | 63 | 753382 | 9.877 | ppbv | # | 23 |
| 41) Tetrahydrofuran | 6.02 | 42 | 2596 | 0.038 | ppbv | # | 45 |
| 44) 2,2,4-Trimethylpentane | 7.87 | 57 | 45978 | 0.136 | ppbv | # | 33 |
| 51) 2-Hexanone | 9.83 | 43 | 9925 | 0.065 | ppbv | # | 30 |
| 52) Tetrachloroethene | 11.26 | 164 | 13247 | 0.182 | ppbv | | 95 |
| 53) Toluene | 9.83 | 91 | 322891 | 1.589 | ppbv | | 94 |
| 59) m/p-Xylene | 13.03 | 91 | 9213 | 0.036 | ppbv | # | 34 |
| 60) o-Xylene | 13.73 | 91 | 9095 | 0.036 | ppbv | # | 31 |
| 74) 1,2,4-Trimethylbenzene | 16.80 | 105 | 14223 | 0.044 | ppbv | # | 65 |

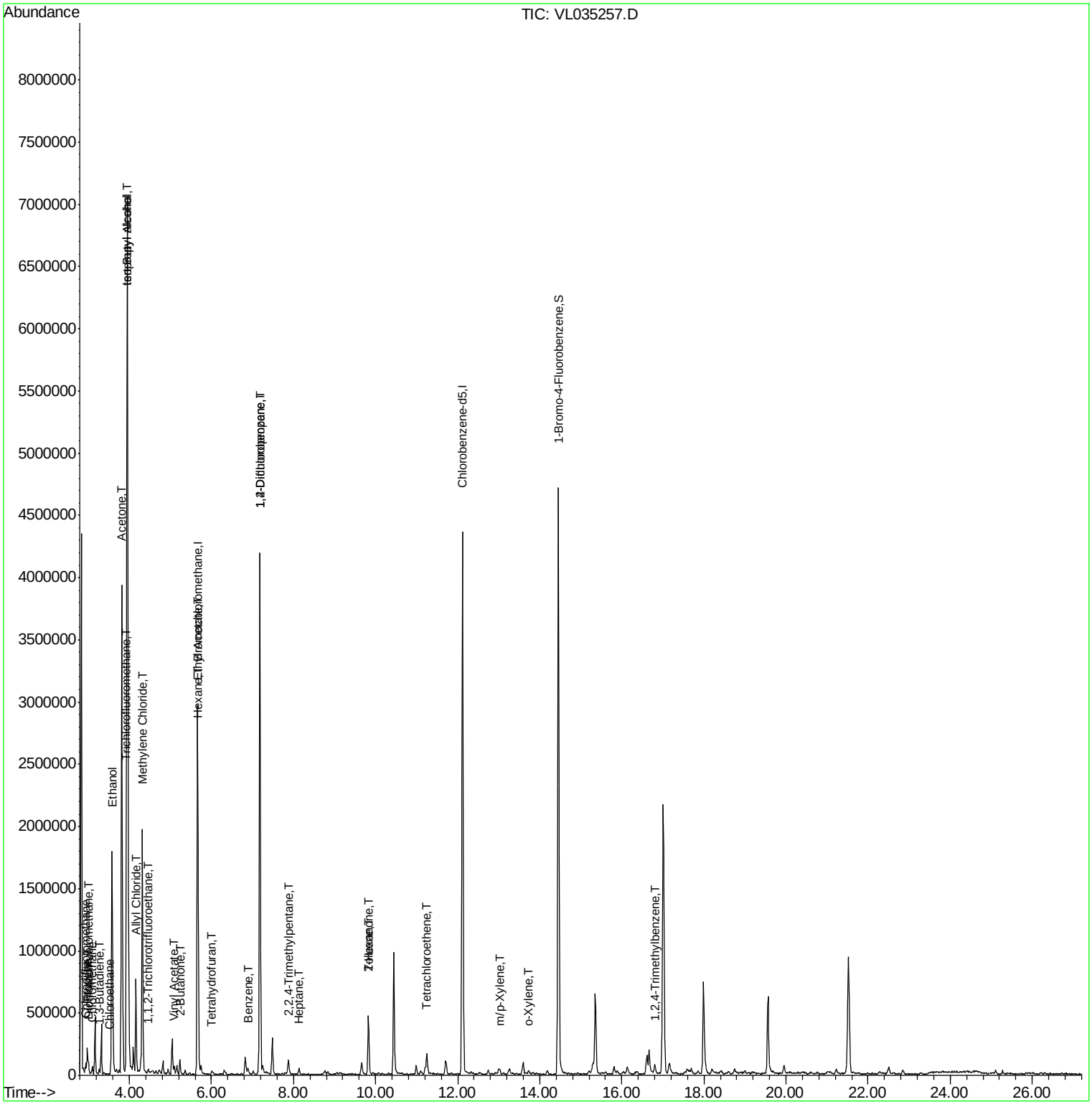
(#) = qualifier out of range (m) = manual integration (+) = signals summed

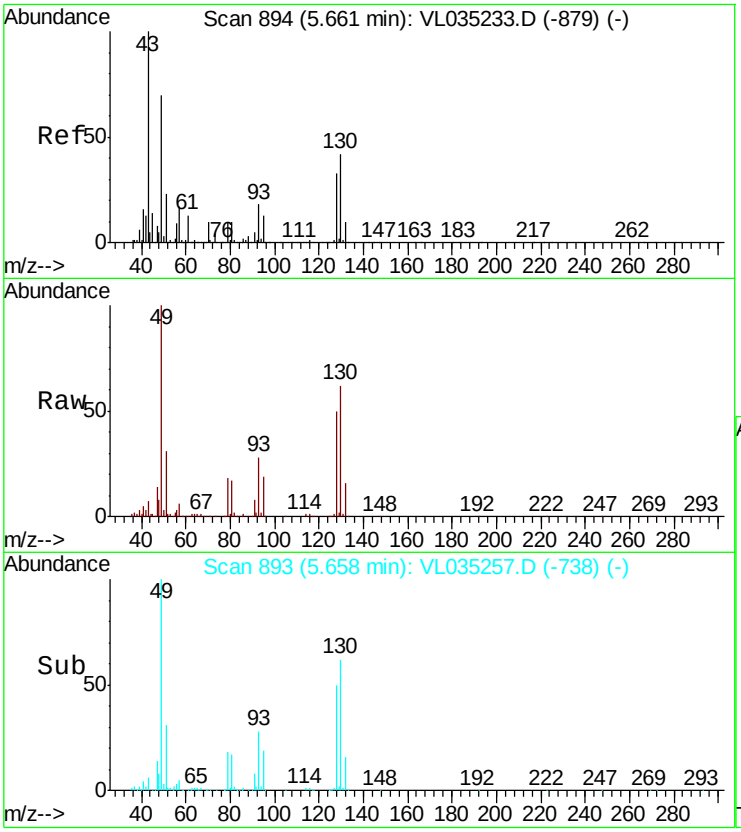
Quantitation Report (Not Reviewed)

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL072920\
Data File : VL035257.D
Acq On : 29 Jul 2020 22:11
Operator : SY/AP
Sample : L3463-03
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

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

Quant Time: Jul 30 02:53:17 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL072920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 29 07:14:29 2020
QLast Update : Wed Jul 29 07:14:29 2020
Response via : Initial Calibration



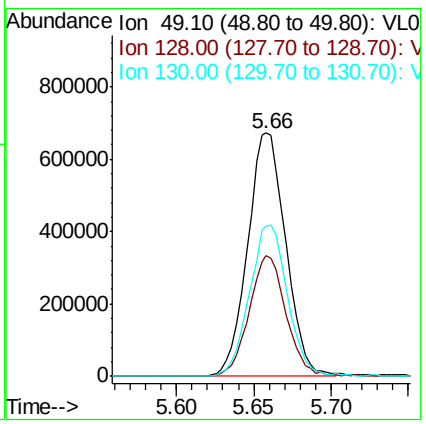


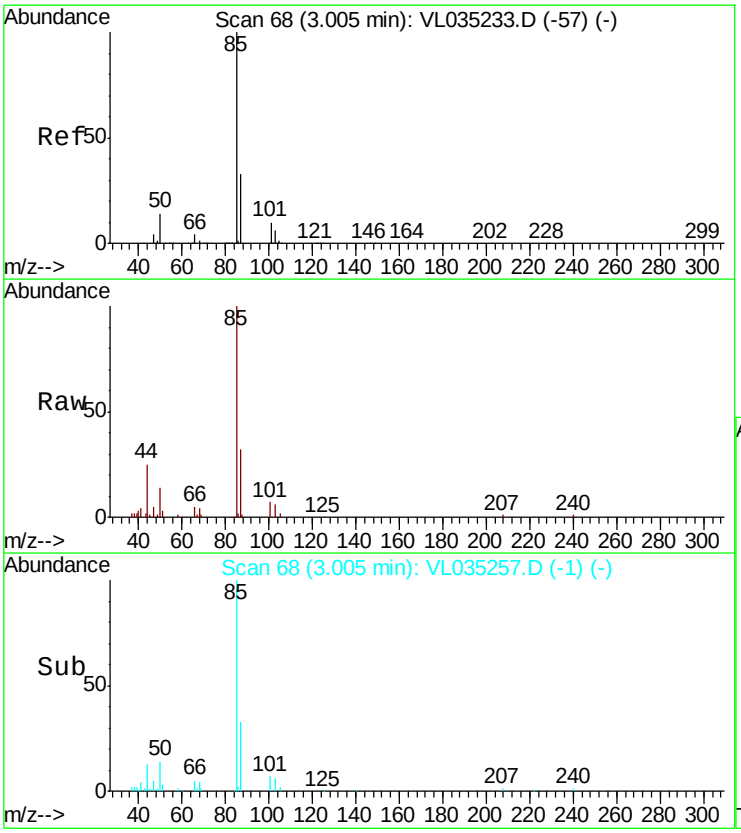

#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.66 min Scan# 893
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 49 Resp: 1153131

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 49 | 100 | | |
| 128 | 48.6 | 24.0 | 72.0 |
| 130 | 62.6 | 30.7 | 92.1 |

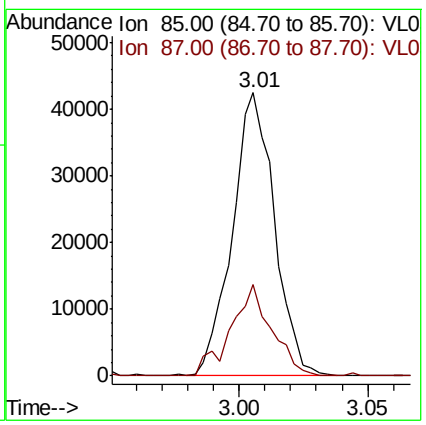


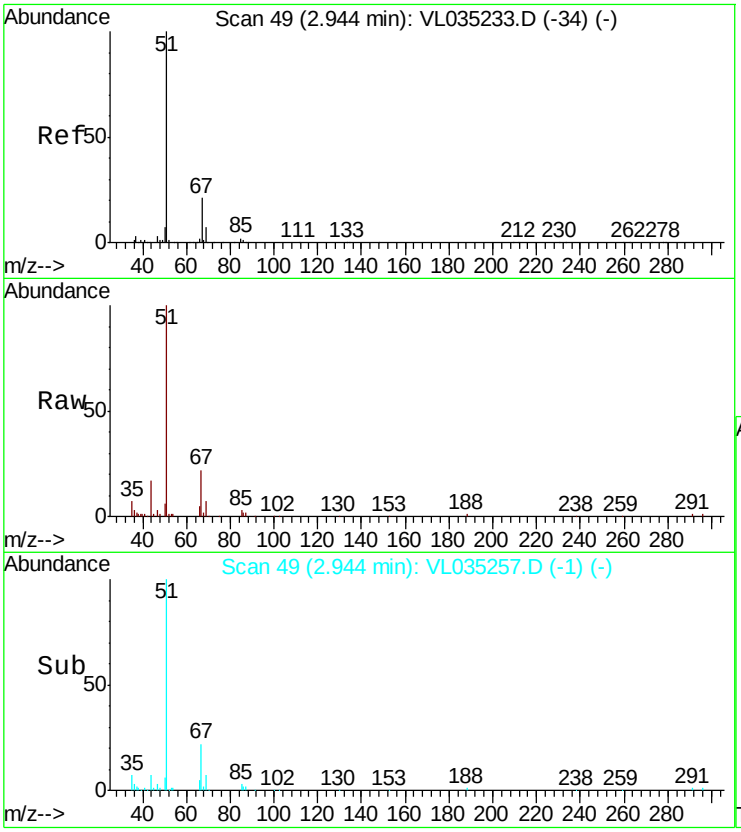




#2
Dichlorodifluoromethane
Concen: 0.350 ppbv
RT: 3.01 min Scan# 68
Delta R.T. 0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 85 Resp: 48235

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 85 | 100 | | |
| 87 | 32.4 | 26.7 | 40.1 |

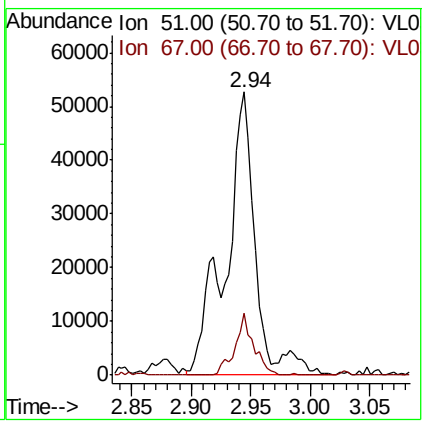




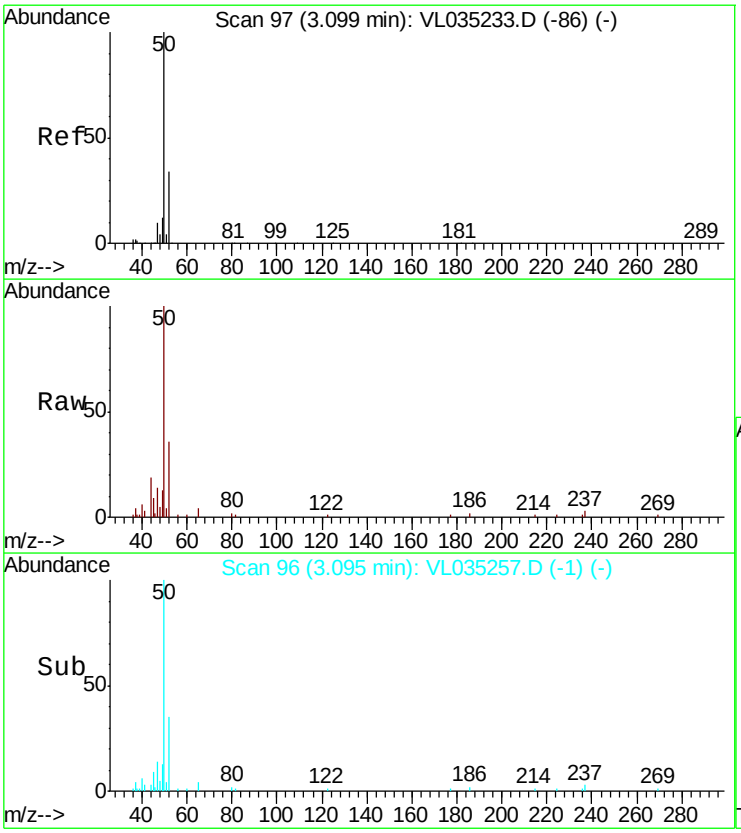

#3
Chlorodifluoromethane
Concen: 0.706 ppbv
RT: 2.94 min Scan# 49
Delta R.T. 0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 51 Resp: 90097

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 51 | 100 | | |
| 67 | 13.7 | 16.6 | 25.0# |



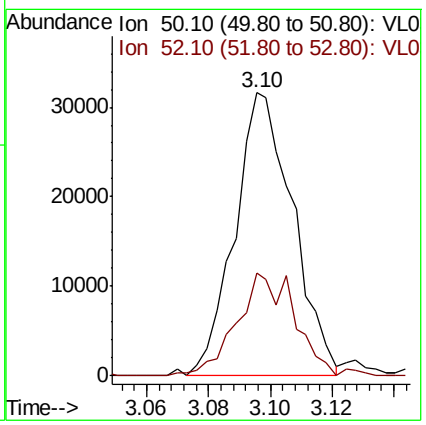

**Instrument :**
MSVOA_L
**ClientSampleId :**

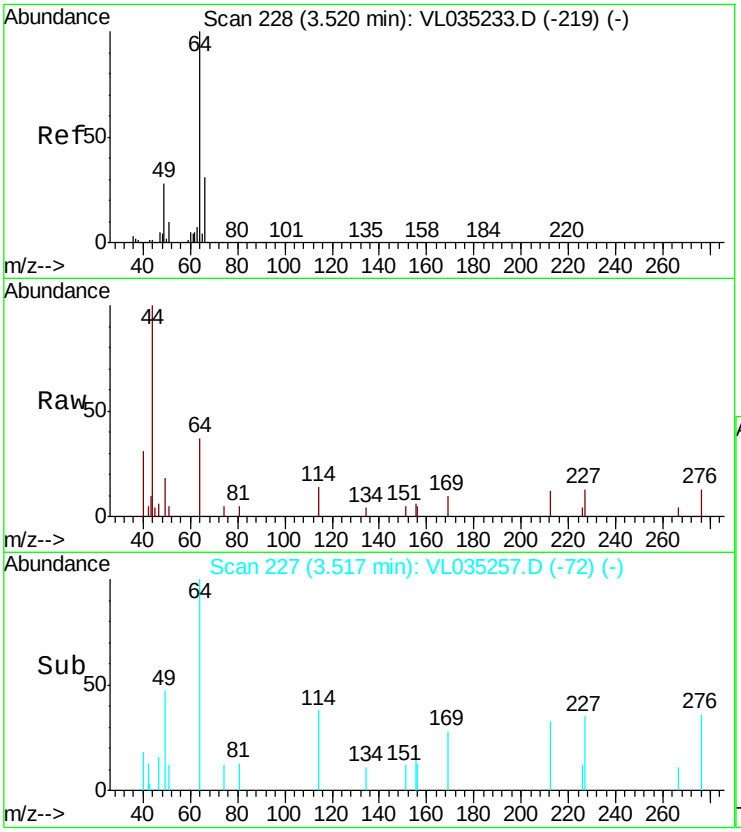



#4
Chloromethane
Concen: 0.575 ppbv
RT: 3.10 min Scan# 96
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 50 Resp: 41334

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 50 | 100 | | |
| 52 | 36.3 | 27.1 | 40.7 |



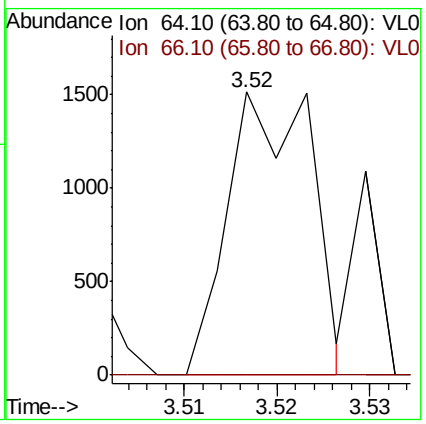


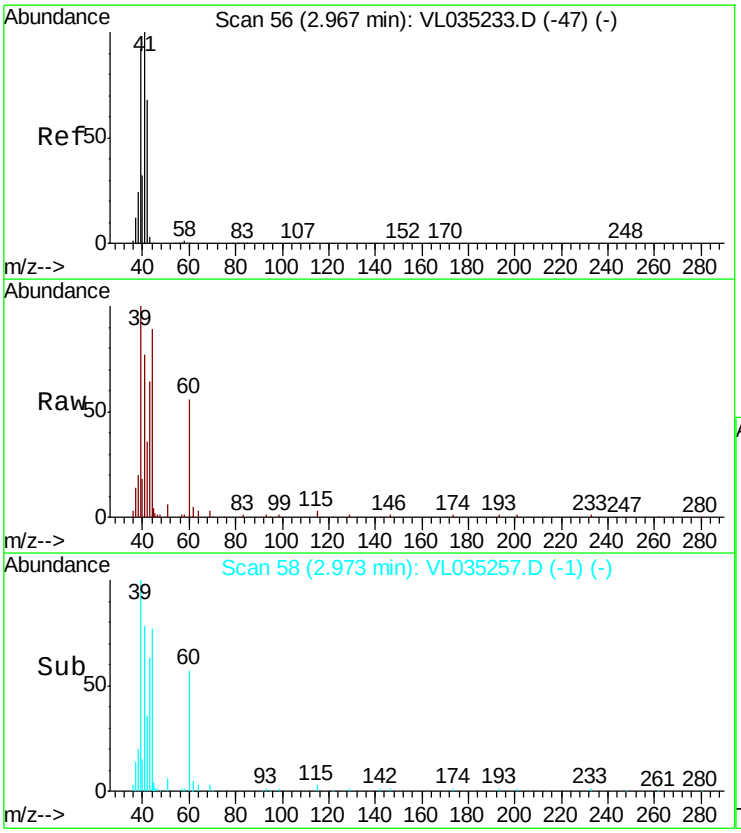

#7
Chloroethane
Concen: 0.035 ppbv
RT: 3.52 min Scan# 227
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 64 Resp: 946

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 64 | 100 | | |
| 66 | 0.0 | 25.6 | 38.4# |

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

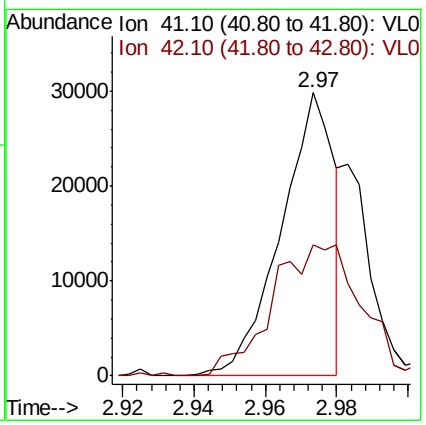


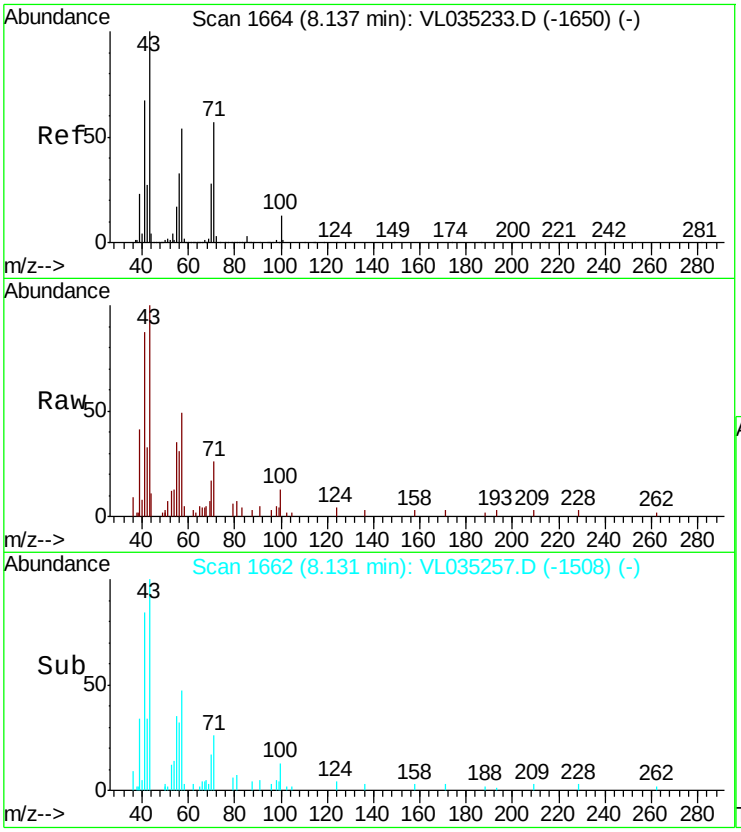




#9
Propene
Concen: 0.690 ppbv
RT: 2.97 min Scan# 58
Delta R.T. 0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 41 Resp: 30711

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 42 | 81.2 | 55.0 | 82.6 |



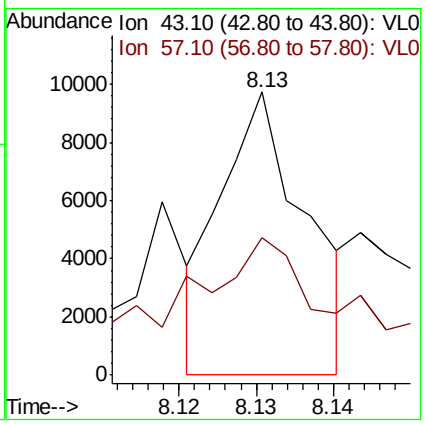


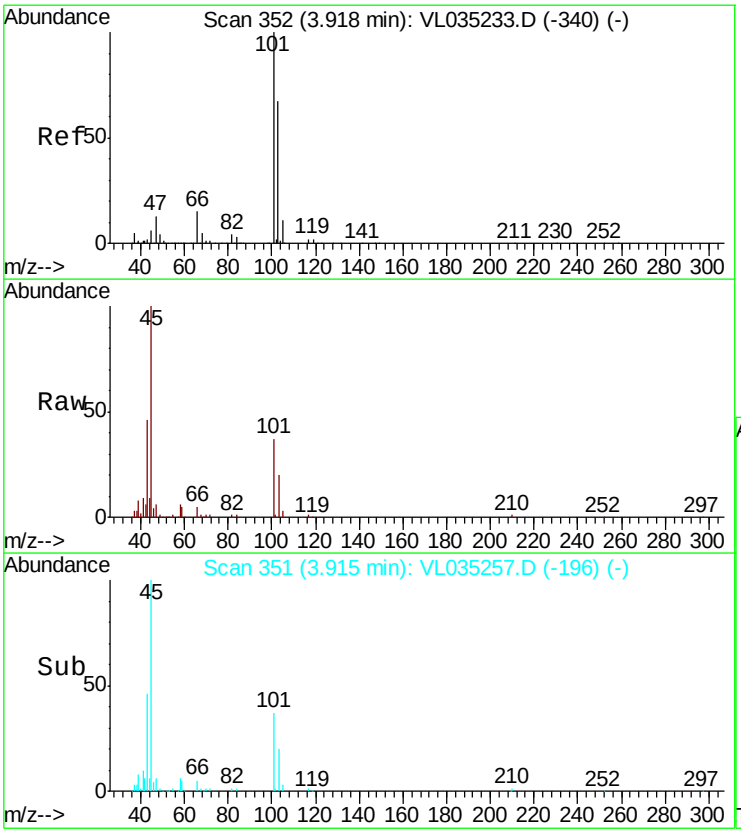

#10
Heptane
Concen: 0.062 ppbv
RT: 8.13 min Scan# 1662
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 43 Resp: 7410

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 57 | 108.0 | 43.0 | 64.4# |

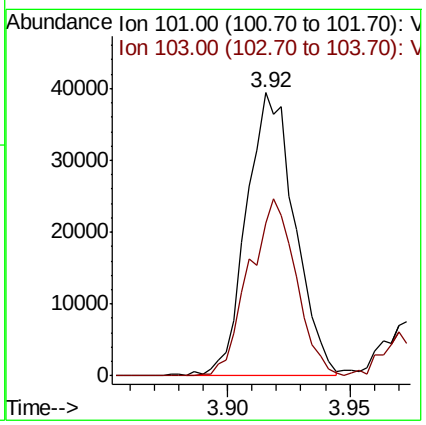


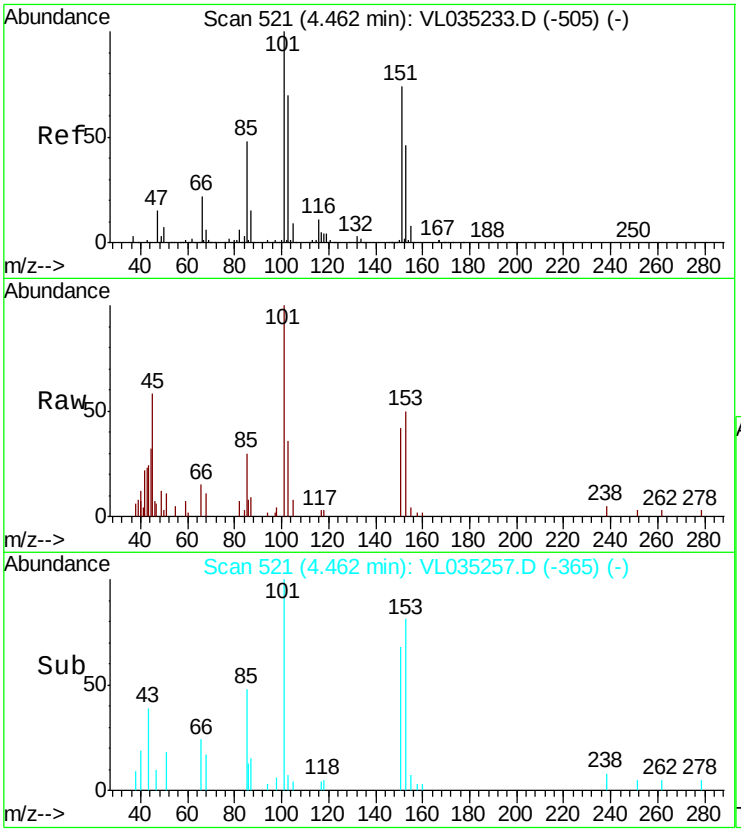




#11
Trichlorofluoromethane
Concen: 0.292 ppbv
RT: 3.92 min Scan# 351
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion:101 Resp: 54067

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 103 | 54.1 | 53.4 | 80.0 |



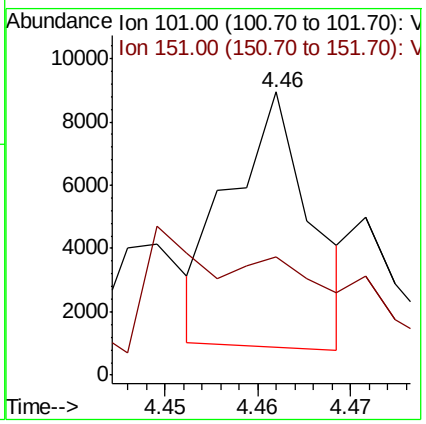


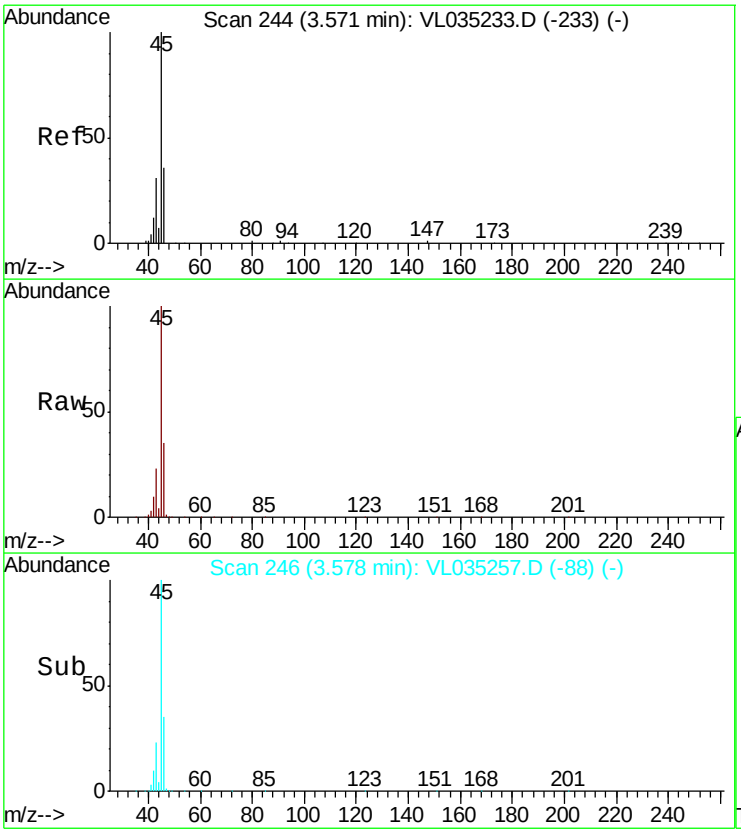

#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.037 ppbv
RT: 4.46 min Scan# 521
Delta R.T. 0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion:101 Resp: 4850

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 101 | 100 | | |
| 151 | 0.0 | 56.6 | 85.0# |

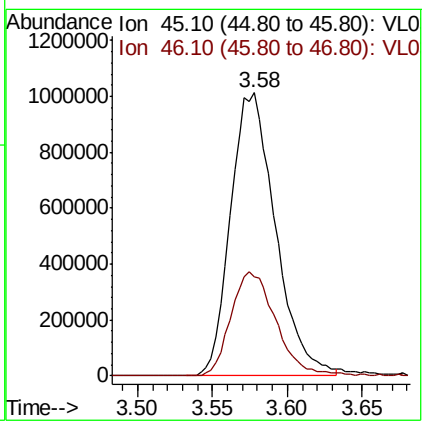


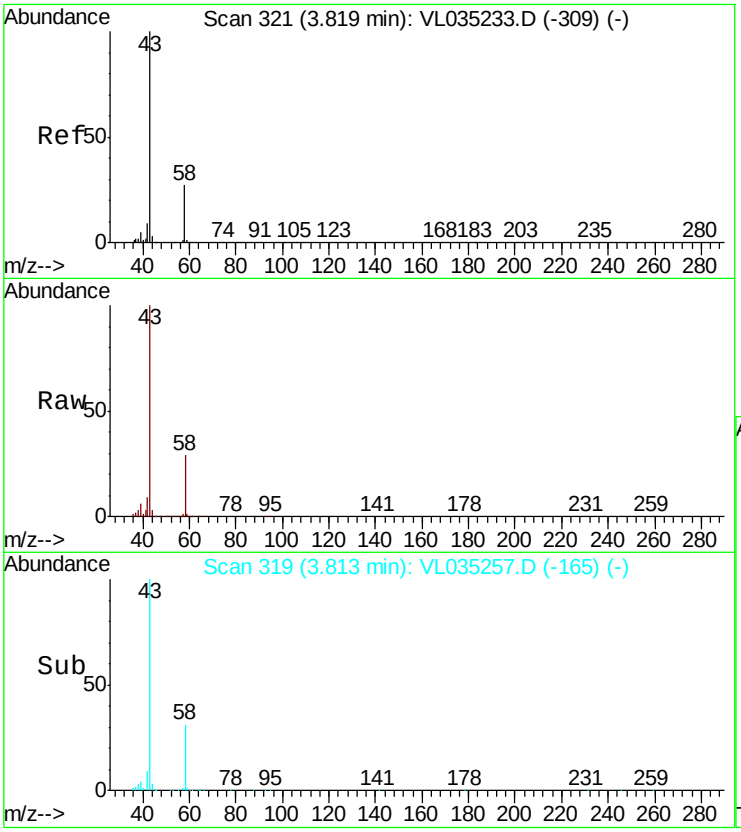




#13
Ethanol
Concen: 117.054 ppbv
RT: 3.58 min Scan# 246
Delta R.T. 0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 45 Resp: 2119763

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 46 | 37.2 | 15.8 | 63.4 |



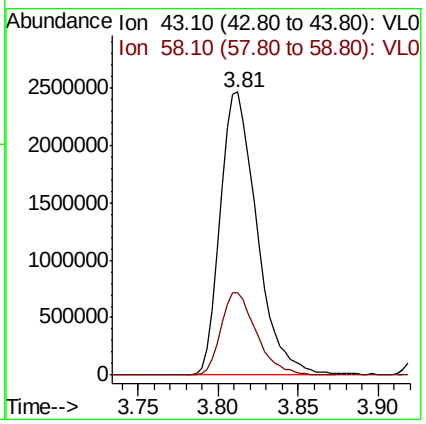


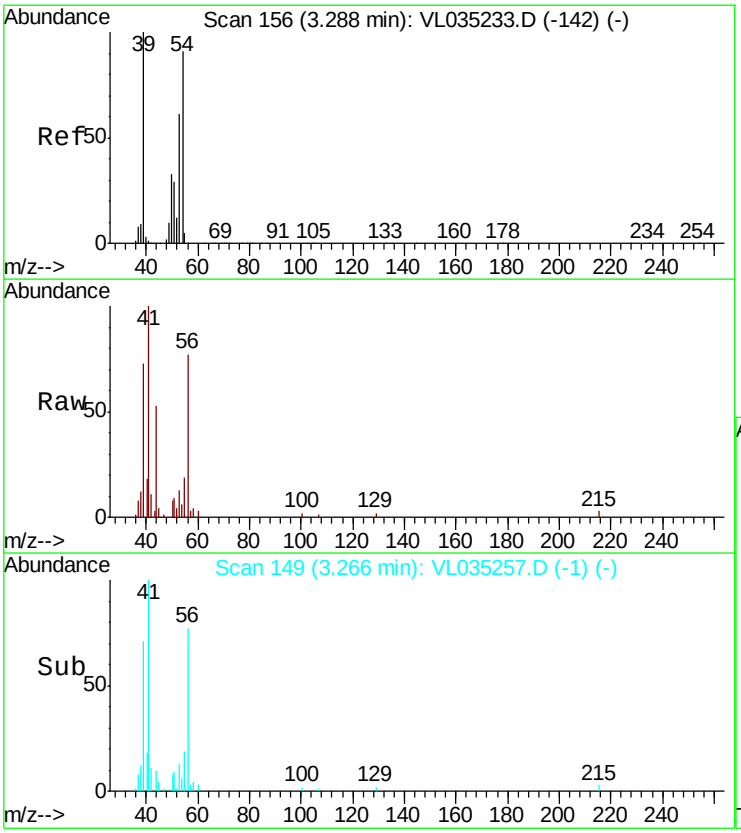

#15
Acetone
Concen: 25.070 ppbv
RT: 3.81 min Scan# 319
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 43 Resp: 3856161

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 28.5 | 21.8 | 32.6 |

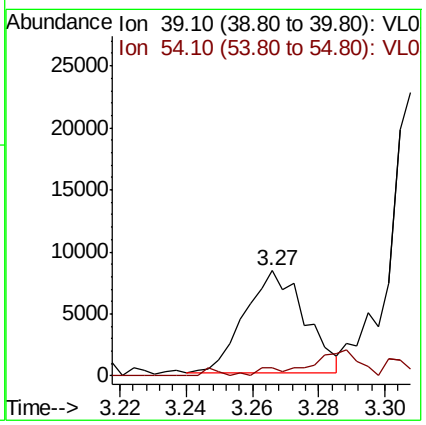


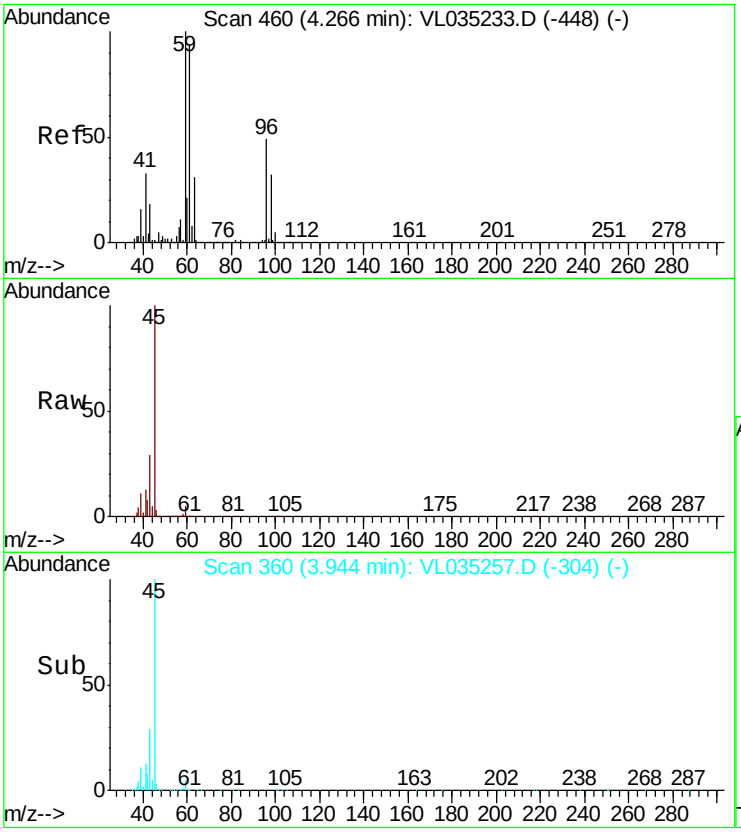




#16
1,3-Butadiene
Concen: 0.172 ppbv
RT: 3.27 min Scan# 149
Delta R.T. -0.02 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 39 Resp: 10349

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 39 | 100 | | |
| 54 | 42.0 | 68.2 | 102.2# |



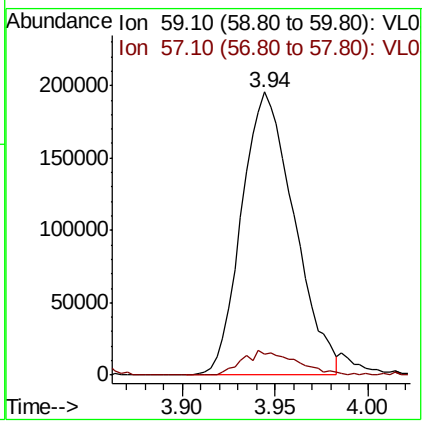


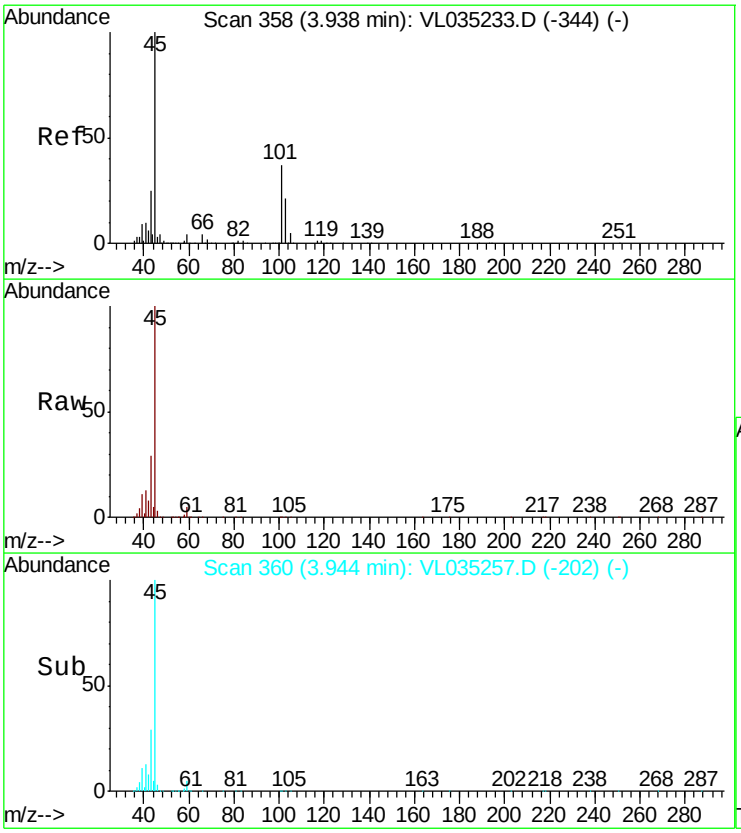

#17
tert-Butyl alcohol
Concen: 2.600 ppbv
RT: 3.94 min Scan# 360
Delta R.T. -0.32 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 59 Resp: 385959

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 59 | 100 | | |
| 57 | 9.0 | 8.6 | 12.8 |

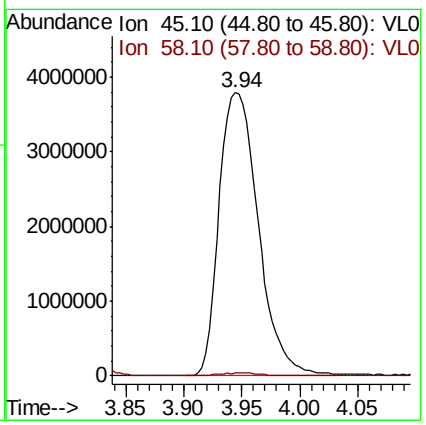


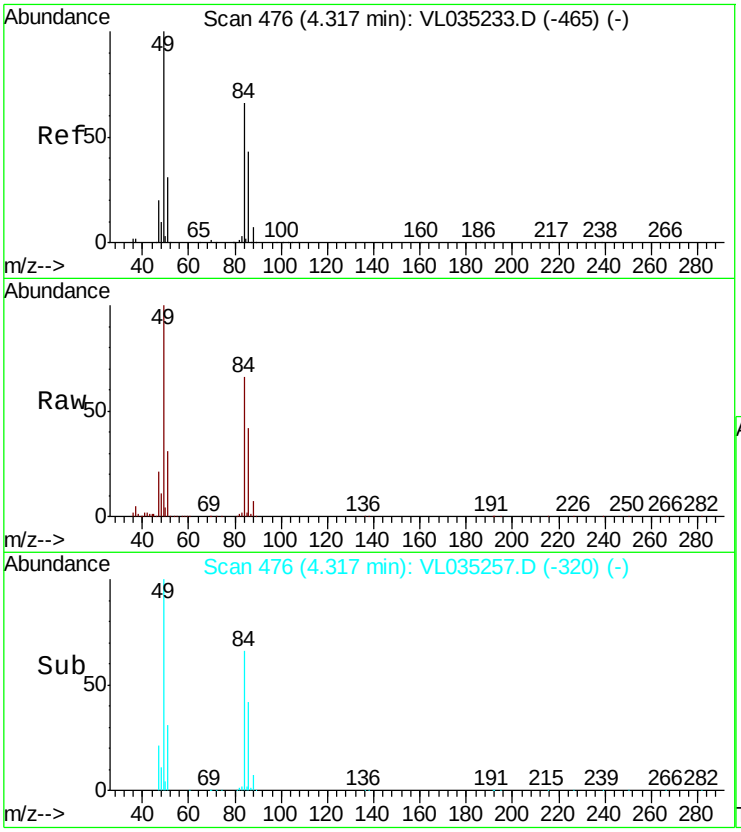




#19
Isopropyl Alcohol
Concen: 87.721 ppbv
RT: 3.94 min Scan# 360
Delta R.T. 0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 45 Resp: 8898734

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 45 | 100 | | |
| 58 | 1.3 | 1.9 | 2.9# |



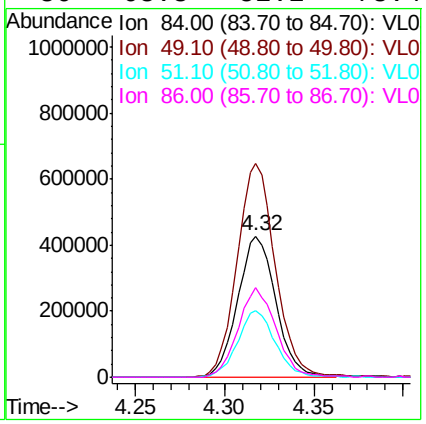


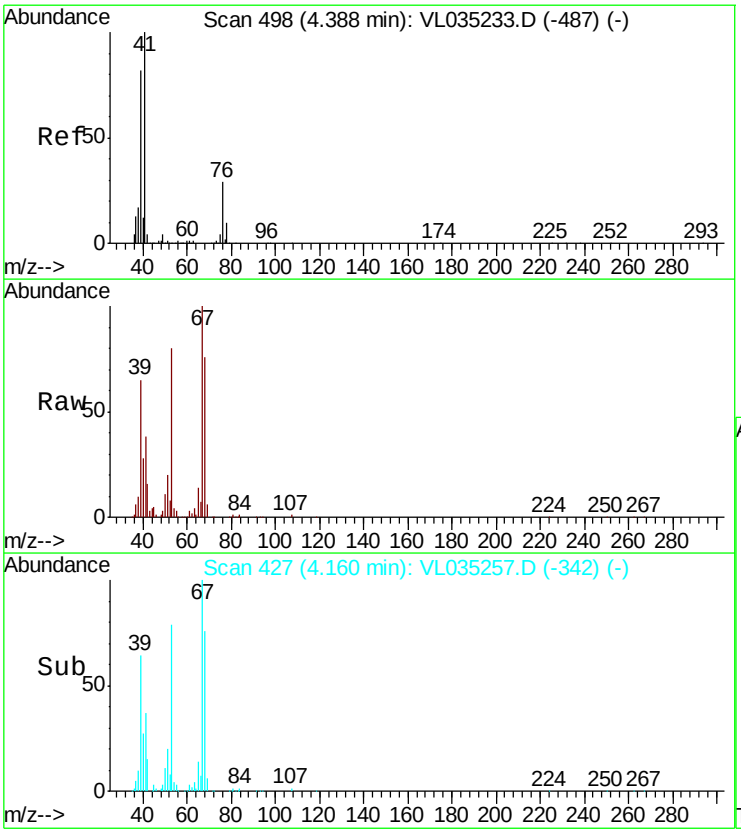

#20
Methylene Chloride
Concen: 9.154 ppbv
RT: 4.32 min Scan# 476
Delta R.T. 0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 84 Resp: 640957

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 84 | 100 | | |
| 49 | 151.1 | 121.0 | 181.4 |
| 51 | 47.3 | 37.7 | 56.5 |
| 86 | 63.3 | 52.2 | 78.4 |

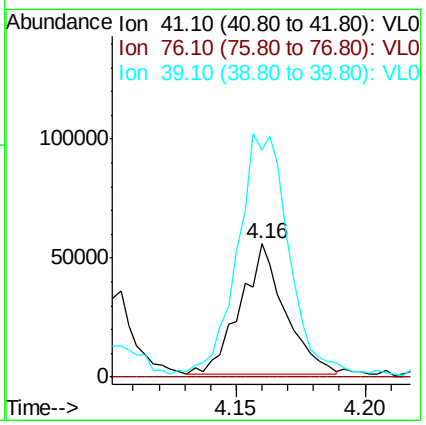


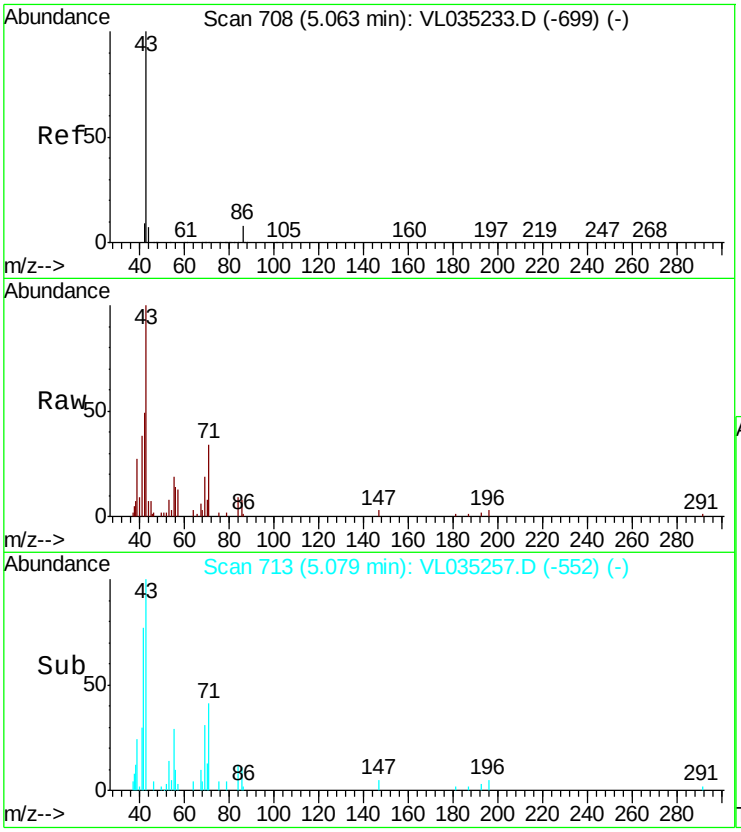




#21
Allyl Chloride
Concen: 0.766 ppbv
RT: 4.16 min Scan# 427
Delta R.T. -0.23 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 41 Resp: 67083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 41 | 100 | | |
| 76 | 0.3 | 24.4 | 36.6# |
| 39 | 211.5 | 63.8 | 95.8# |



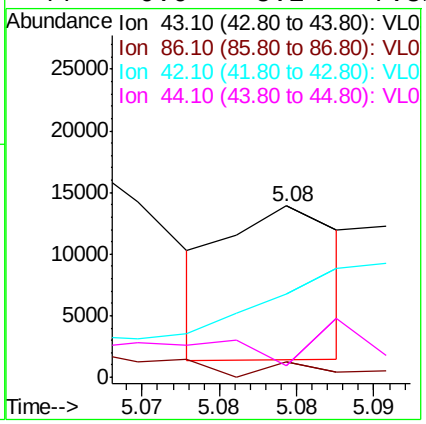


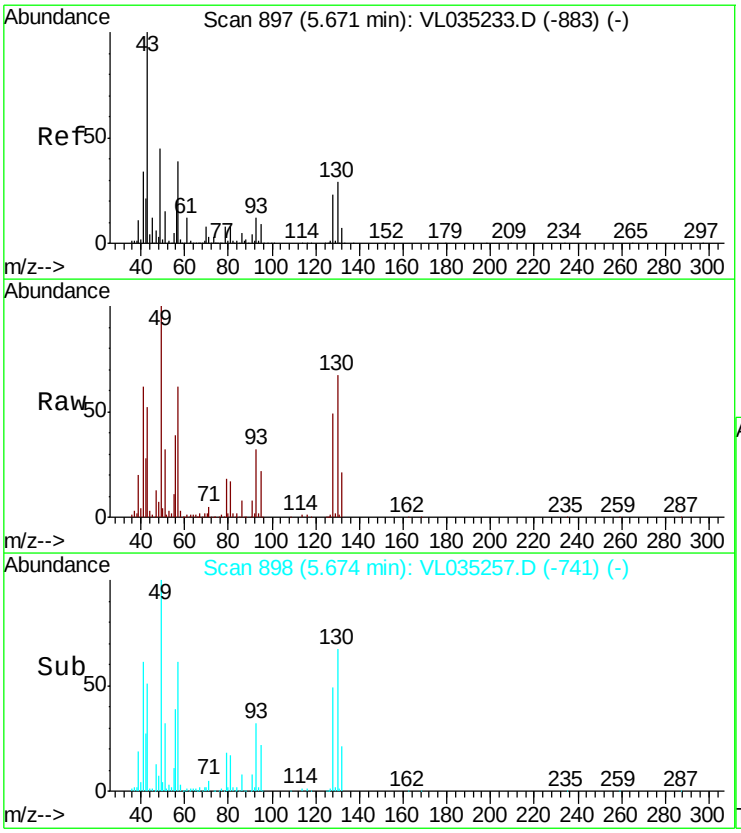

#23
Vinyl Acetate
Concen: 0.041 ppbv
RT: 5.08 min Scan# 713
Delta R.T. 0.02 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 43 Resp: 6412

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 86 | 22.3 | 6.2 | 9.2# |
| 42 | 88.5 | 8.0 | 12.0# |
| 44 | 0.0 | 5.2 | 7.8# |

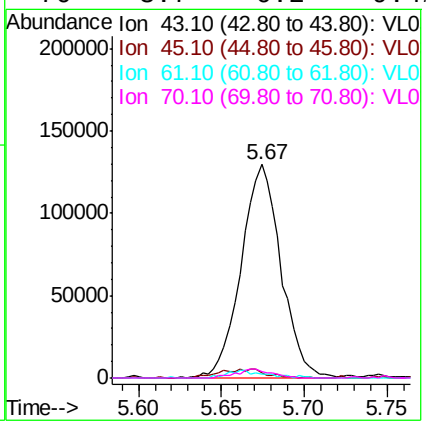


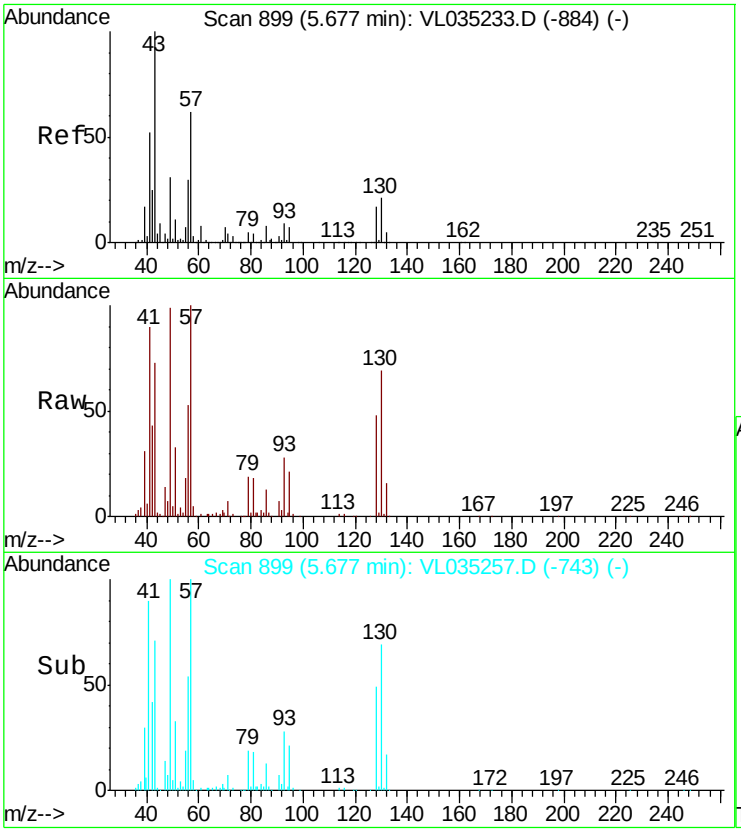




#25
Ethyl Acetate
Concen: 0.895 ppbv
RT: 5.67 min Scan# 898
Delta R.T. 0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 43 Resp: 214880

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 45 | 5.3 | 8.5 | 12.7# |
| 61 | 3.5 | 8.1 | 12.1# |
| 70 | 3.7 | 6.2 | 9.4# |



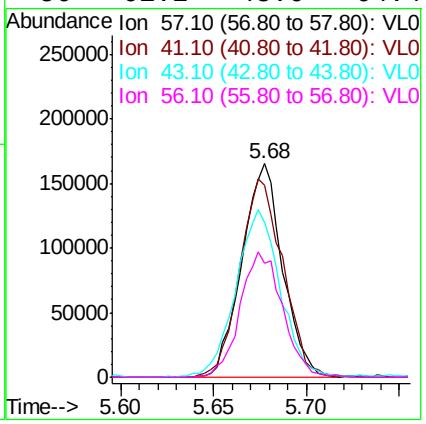


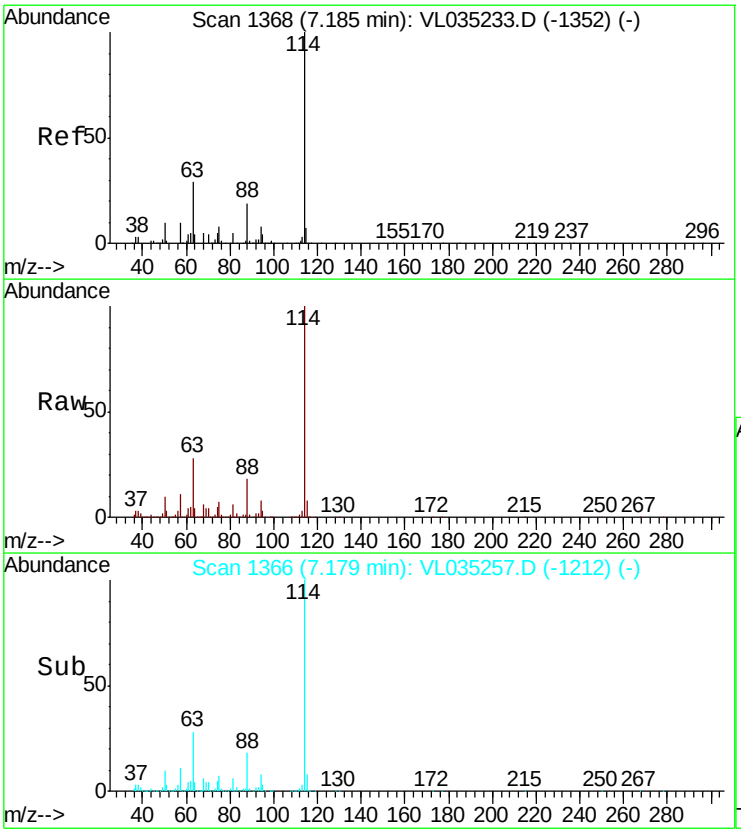

#26
Hexane
Concen: 2.321 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 57 Resp: 251502

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 98.9 | 73.9 | 110.9 |
| 43 | 86.0 | 177.6 | 266.4# |
| 56 | 61.2 | 43.0 | 64.4 |

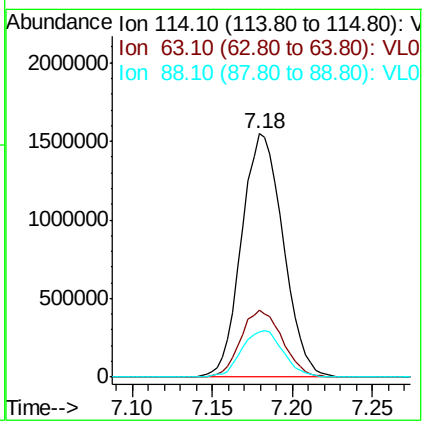


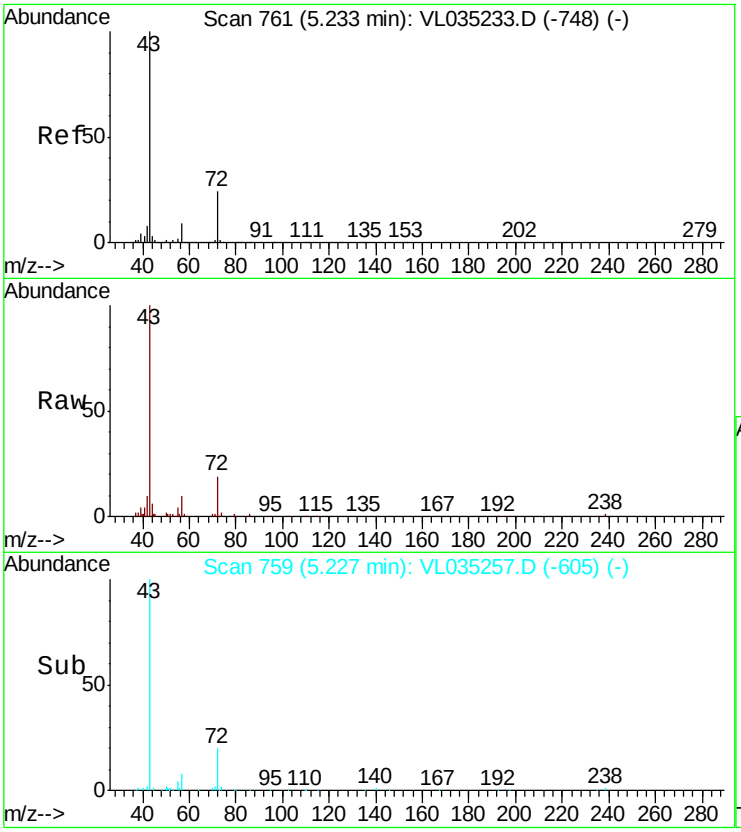




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion:114 Resp: 2750819

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 114 | 100 | | |
| 63 | 27.4 | 22.2 | 33.2 |
| 88 | 19.2 | 15.4 | 23.0 |



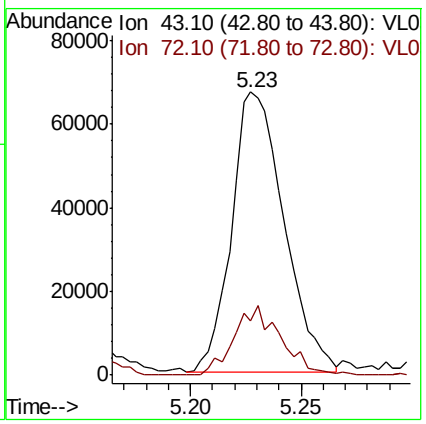


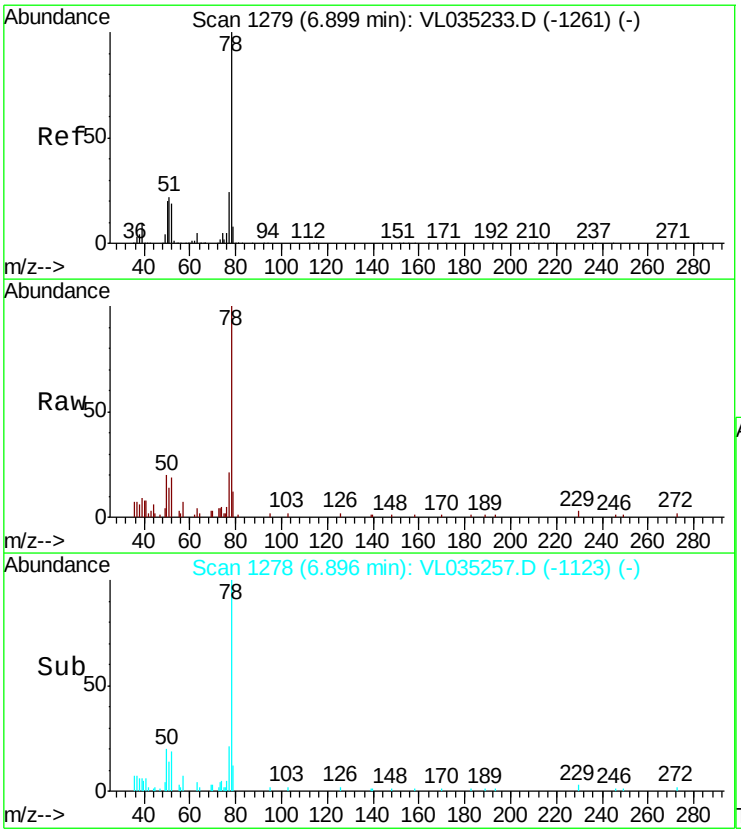

#34
2-Butanone
Concen: 0.789 ppbv
RT: 5.23 min Scan# 759
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 43 Resp: 110456

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 22.4 | 19.2 | 28.8 |

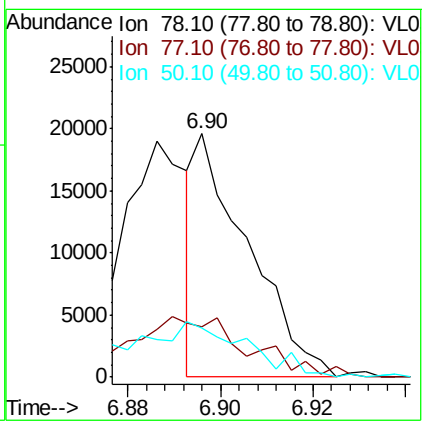


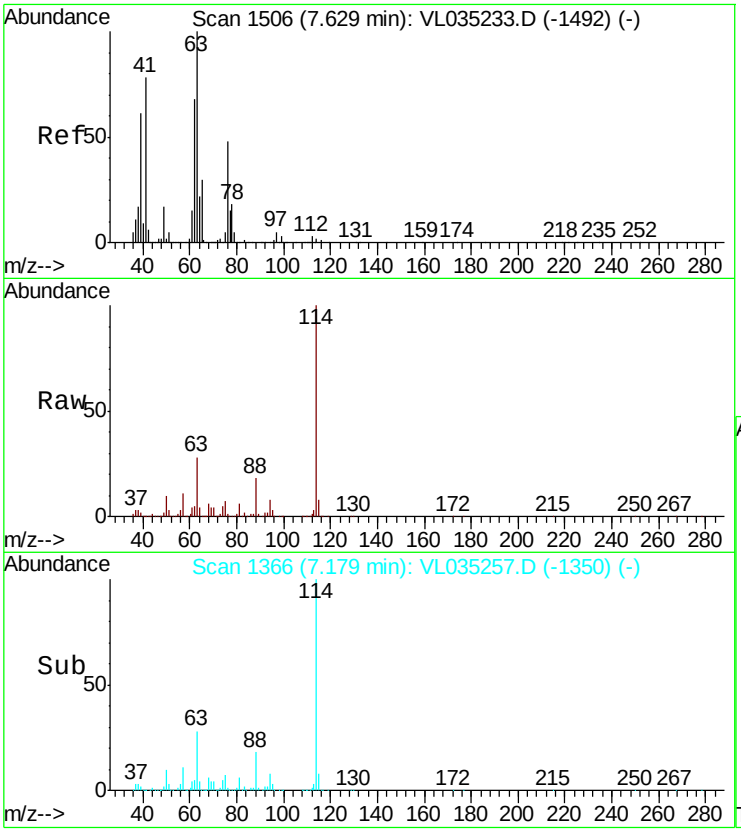




#36
Benzene
Concen: 0.081 ppbv
RT: 6.90 min Scan# 1278
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 78 Resp: 15449

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 78 | 100 | | |
| 77 | 16.4 | 18.9 | 28.3# |
| 50 | 20.4 | 16.1 | 24.1 |



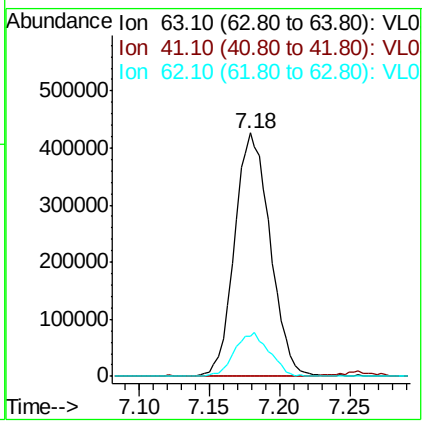


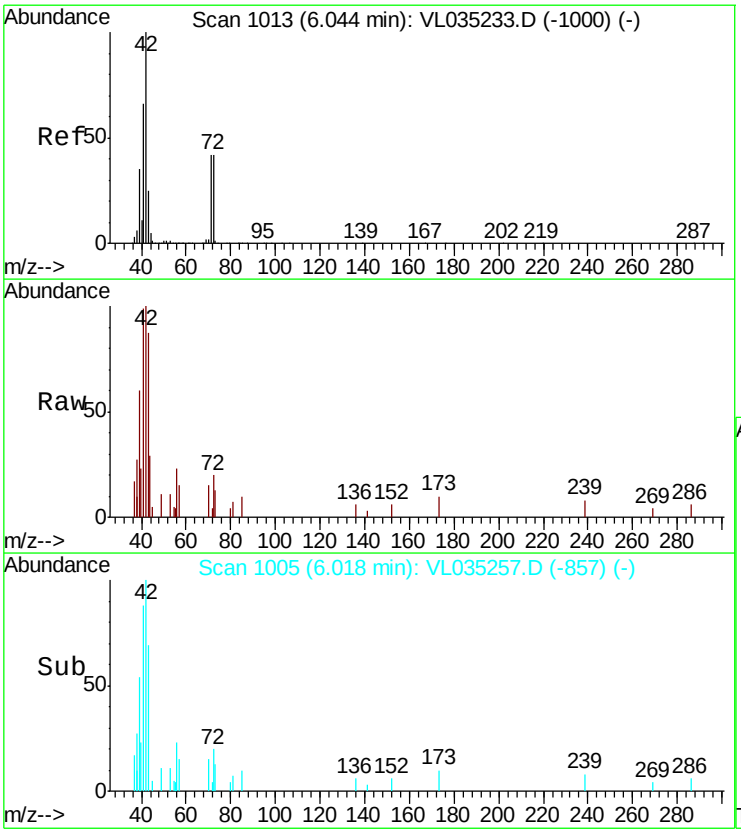

#39
1,2-Dichloropropane
Concen: 9.877 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. -0.45 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 63 Resp: 753382

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 63 | 100 | | |
| 41 | 0.0 | 62.2 | 93.4# |
| 62 | 16.7 | 54.2 | 81.2# |

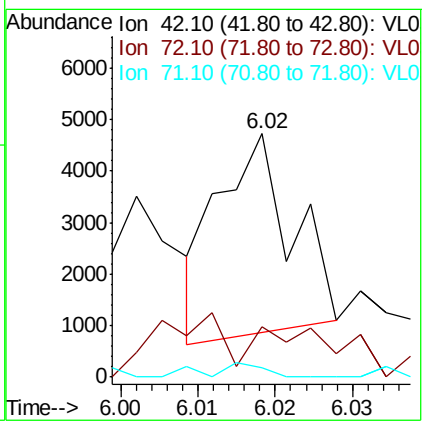


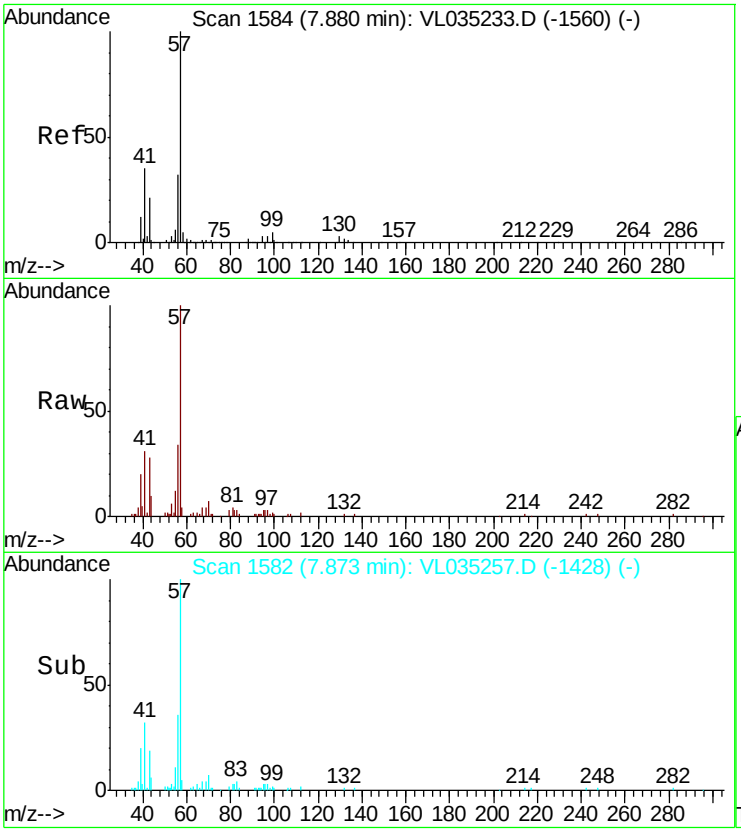




#41
Tetrahydrofuran
Concen: 0.038 ppbv
RT: 6.02 min Scan# 1005
Delta R.T. -0.03 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 42 Resp: 2596

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 42 | 100 | | |
| 72 | 70.6 | 34.2 | 51.2# |
| 71 | 0.0 | 33.2 | 49.8# |



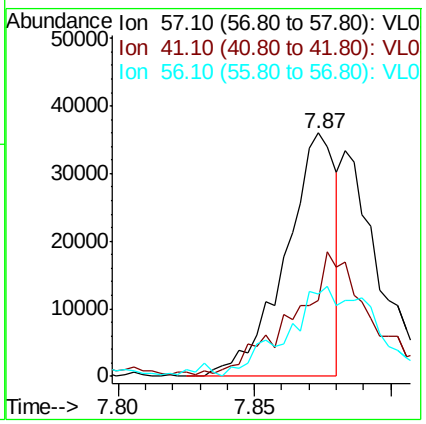


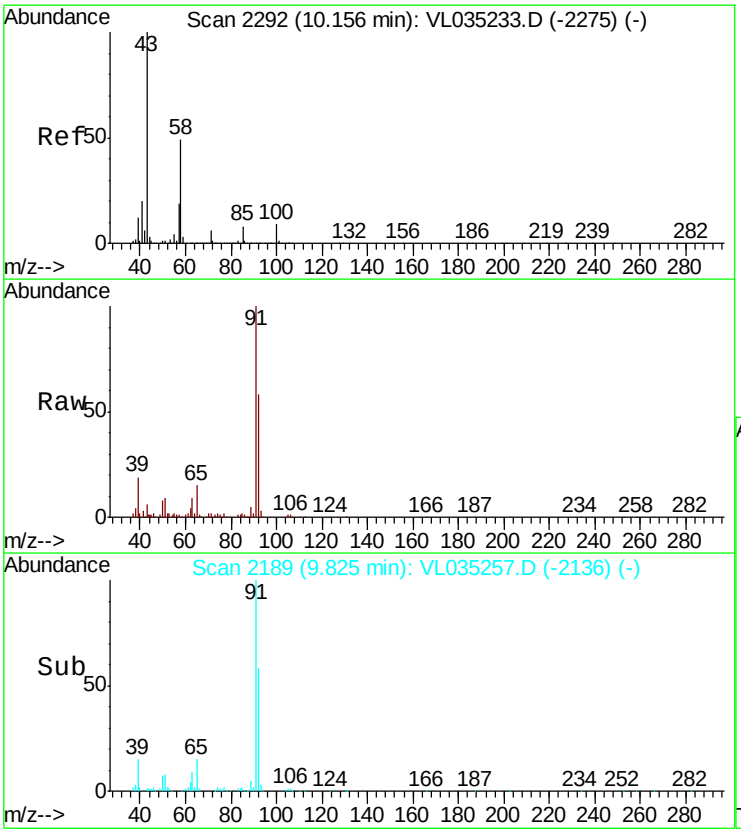

#44
2,2,4-Trimethylpentane
Concen: 0.136 ppbv
RT: 7.87 min Scan# 1582
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 57 Resp: 45978

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 57 | 100 | | |
| 41 | 75.0 | 27.0 | 40.4# |
| 56 | 66.8 | 25.6 | 38.4# |

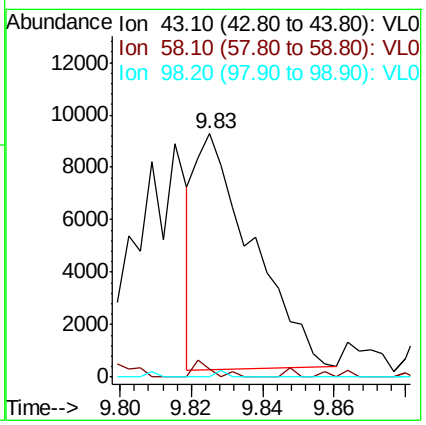


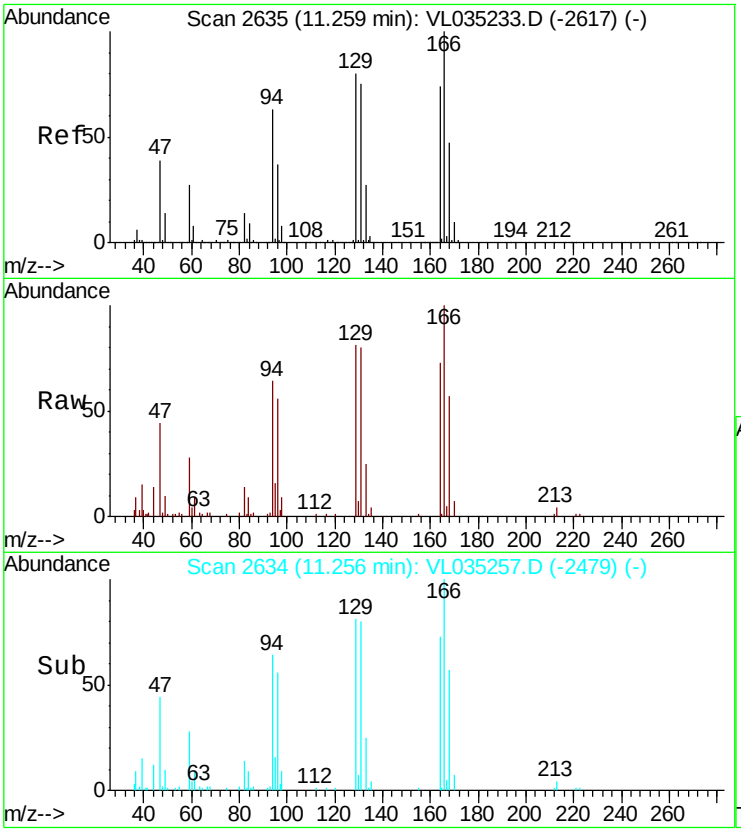




#51
2-Hexanone
Concen: 0.065 ppbv
RT: 9.83 min Scan# 2189
Delta R.T. -0.33 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 43 Resp: 9925

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 0.0 | 38.8 | 58.2# |
| 98 | 1.4 | 0.6 | 0.8# |



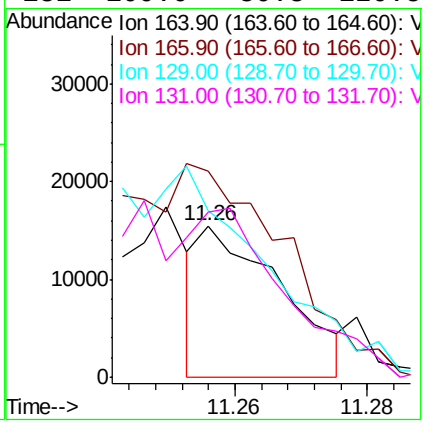


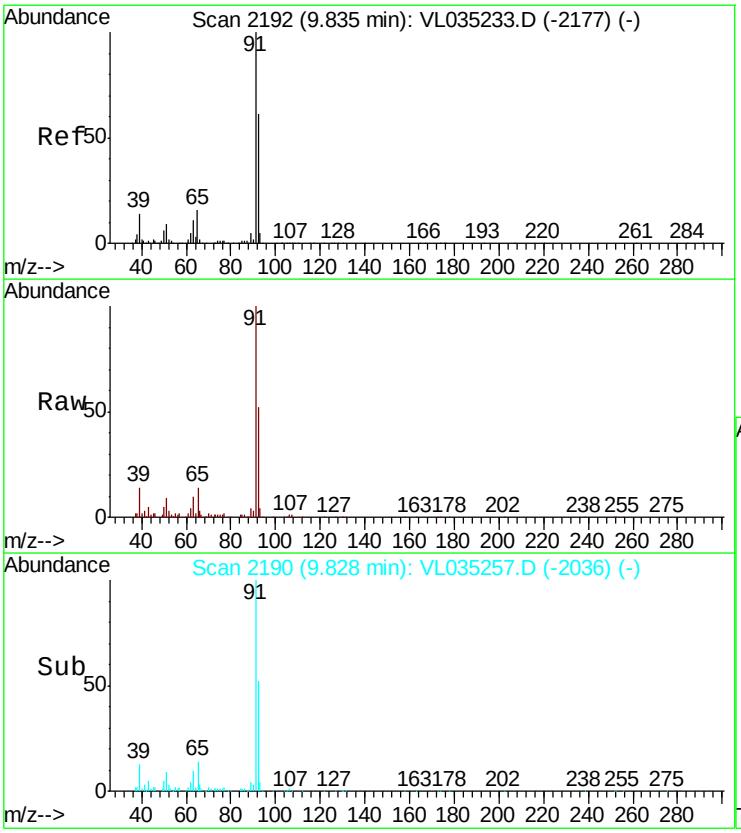

#52
Tetrachloroethene
Concen: 0.182 ppbv
RT: 11.26 min Scan# 2634
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion:164 Resp: 13247

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 164 | 100 | | |
| 166 | 138.2 | 107.5 | 161.3 |
| 129 | 113.2 | 86.0 | 129.0 |
| 131 | 109.0 | 80.3 | 120.5 |

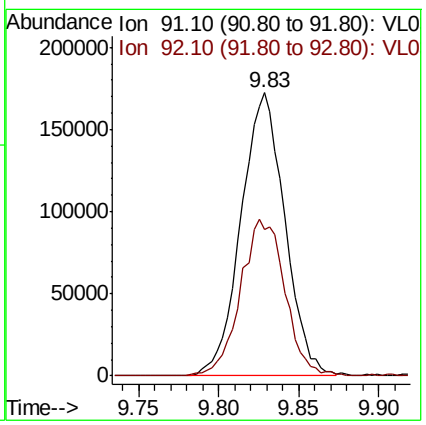


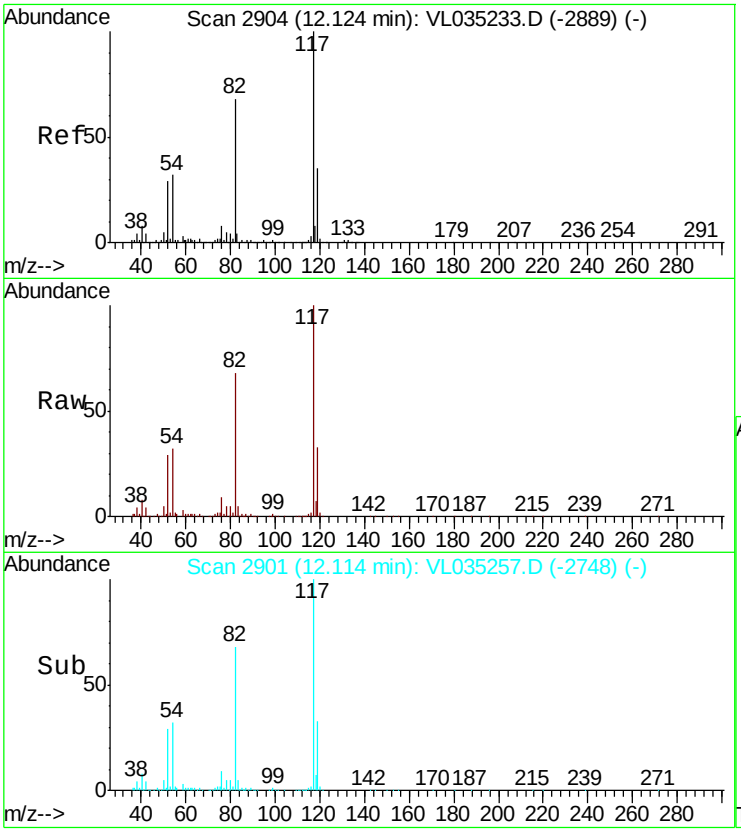




#53
Toluene
Concen: 1.589 ppbv
RT: 9.83 min Scan# 2190
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 91 Resp: 322891

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 92 | 56.2 | 48.5 | 72.7 |



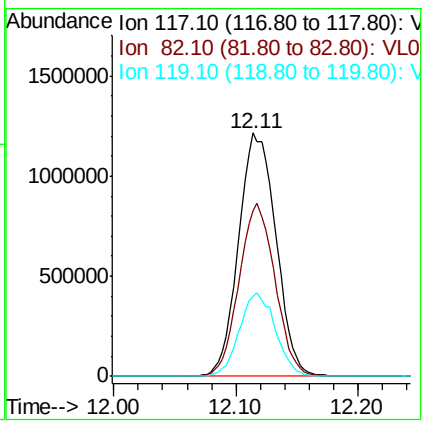


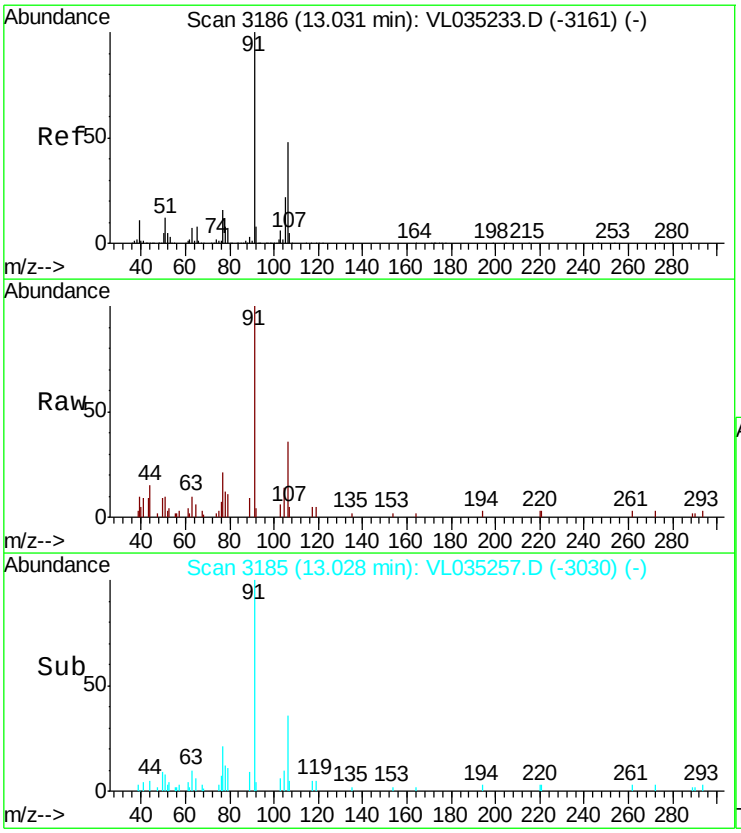

#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2901
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion:117 Resp: 2575677

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 117 | 100 | | |
| 82 | 68.5 | 52.4 | 78.6 |
| 119 | 33.0 | 24.6 | 36.8 |

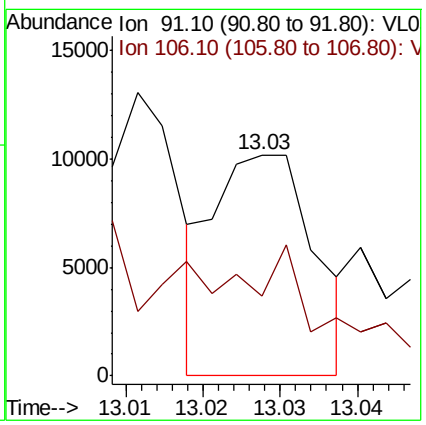


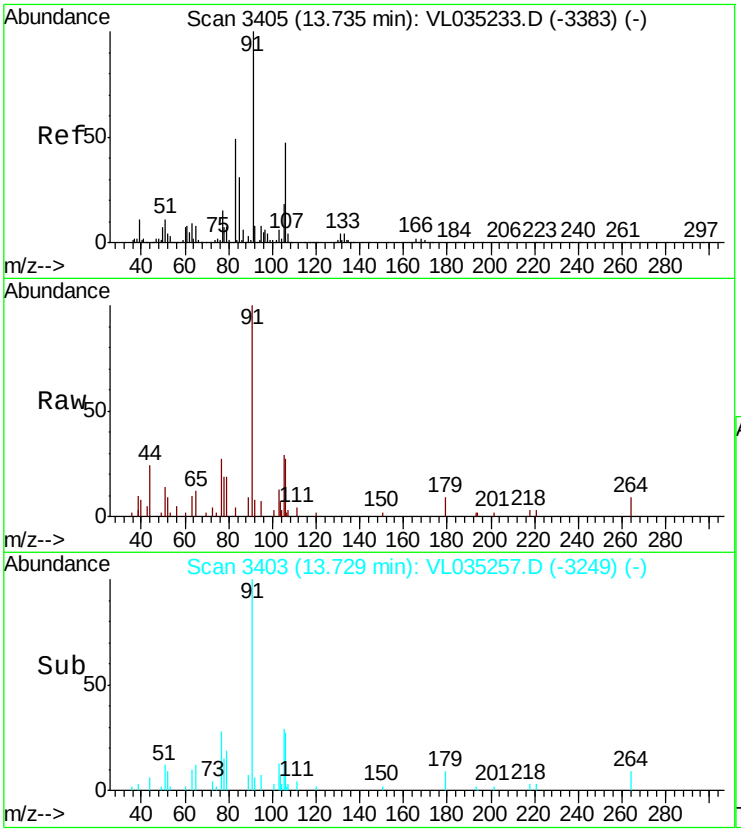




#59
m/p-Xylene
Concen: 0.036 ppbv
RT: 13.03 min Scan# 3185
Delta R.T. -0.00 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 91 Resp: 9213

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 90.4 | 37.2 | 55.8# |



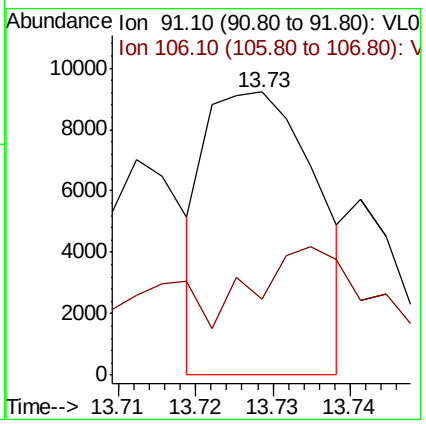


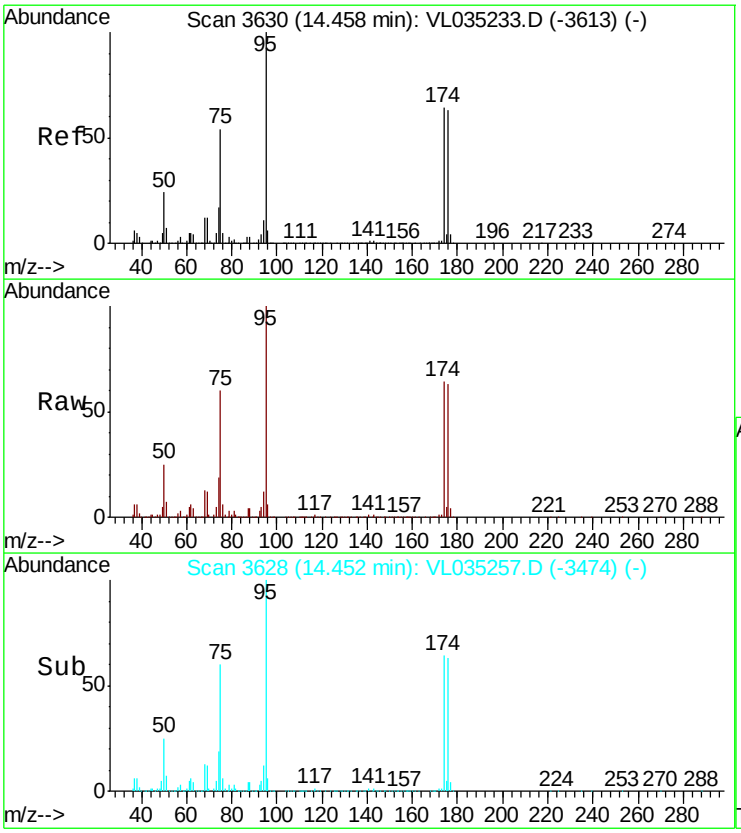

#60
o-Xylene
Concen: 0.036 ppbv
RT: 13.73 min Scan# 3403
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion: 91 Resp: 9095

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 91 | 100 | | |
| 106 | 0.0 | 22.4 | 67.0# |

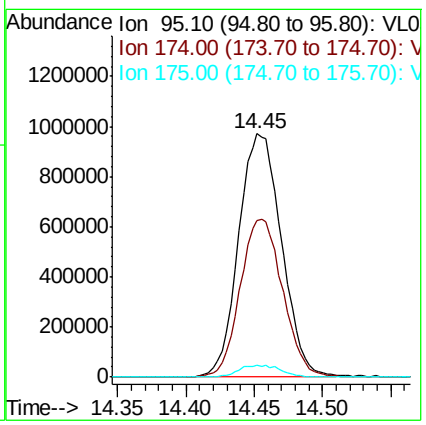


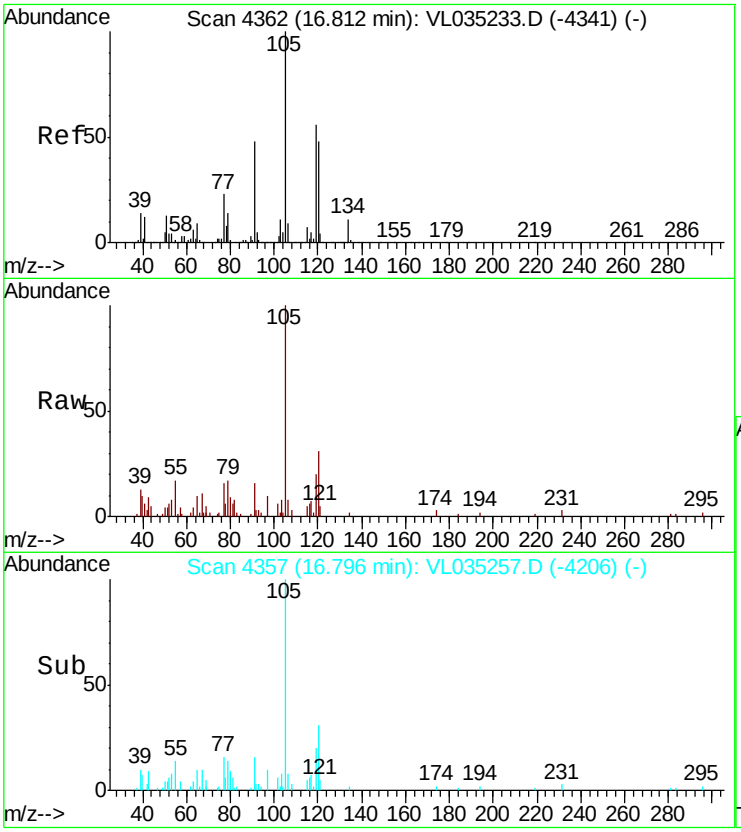




#68
1-Bromo-4-Fluorobenzene
Concen: 10.261 ppbv
RT: 14.45 min Scan# 3628
Delta R.T. -0.01 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

Tgt Ion: 95 Resp: 2111832

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 95 | 100 | | |
| 174 | 64.7 | 52.7 | 79.1 |
| 175 | 4.8 | 3.9 | 5.9 |






#74
1,2,4-Trimethylbenzene
Concen: 0.044 ppbv
RT: 16.80 min Scan# 4357
Delta R.T. -0.02 min
Lab File: VL035257.D
Acq: 29 Jul 2020 22:11

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

Tgt Ion:105 Resp: 14223

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 105 | 100 | | |
| 120 | 30.3 | 38.8 | 58.2# |
| 91 | 12.2 | 38.9 | 58.3# |
| 77 | 16.1 | 18.4 | 27.6# |