

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL100721\  
 Data File : VL037817.D  
 Acq On : 8 Oct 2021 4:55  
 Operator : SY/AP  
 Sample : M4079-11DL 10X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0P10DL

Quant Time: Oct 08 10:10:06 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL100421AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Mon 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   | 5.66  | 49   | 1380922  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.16  | 114  | 3987468  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.07 | 117  | 3388256  | 10.00 | ppbv  | -0.02    |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.40  | 95    | 2426027  | 10.24    | ppbv | -0.02   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 102.40% |

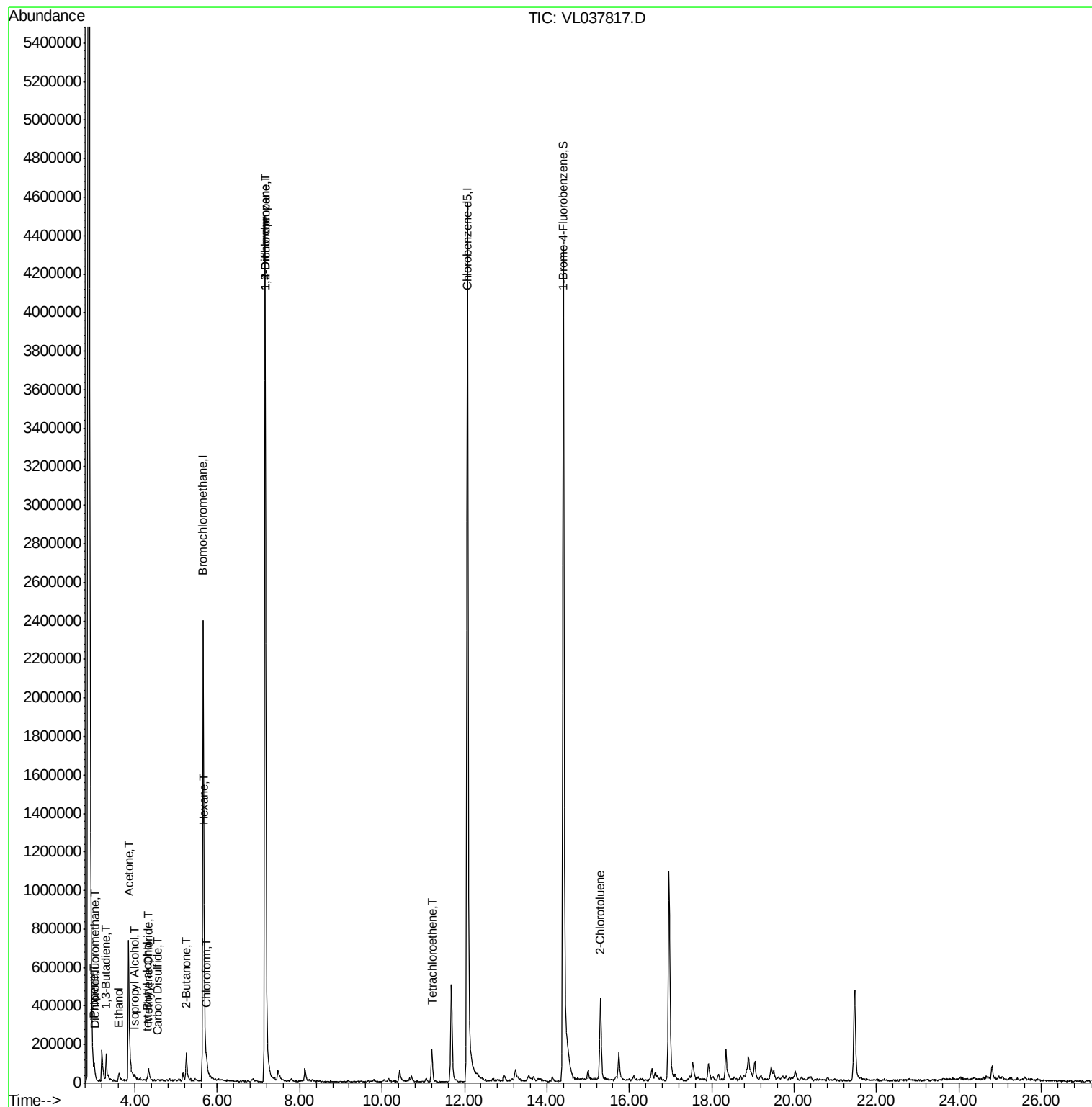
| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.04  | 85   | 6926     | 0.031 | ppbv # | 71     |
| 9) Propene                 | 3.01  | 41   | 11322    | 0.116 | ppbv # | 14     |
| 13) Ethanol                | 3.61  | 45   | 54183    | 6.786 | ppbv   | 98     |
| 15) Acetone                | 3.84  | 43   | 1015997  | 8.196 | ppbv   | 97     |
| 16) 1,3-Butadiene          | 3.30  | 39   | 39490    | 0.438 | ppbv # | 20     |
| 17) tert-Butyl alcohol     | 4.30  | 59   | 11539    | 0.090 | ppbv # | 69     |
| 19) Isopropyl Alcohol      | 3.98  | 45   | 10249    | 0.133 | ppbv # | 1      |
| 20) Methylene Chloride     | 4.34  | 84   | 9492     | 0.152 | ppbv # | 87     |
| 26) Hexane                 | 5.68  | 57   | 4483     | 0.026 | ppbv # | 1      |
| 27) Carbon Disulfide       | 4.54  | 76   | 4983     | 0.033 | ppbv # | 68     |
| 29) Chloroform             | 5.73  | 83   | 7224     | 0.030 | ppbv   | 98     |
| 34) 2-Butanone             | 5.25  | 43   | 190597   | 1.184 | ppbv   | 92     |
| 39) 1,2-Dichloropropane    | 7.16  | 63   | 939600   | 7.334 | ppbv # | 28     |
| 52) Tetrachloroethene      | 11.21 | 164  | 47065    | 0.355 | ppbv # | 79     |
| 71) 2-Chlorotoluene        | 15.30 | 91   | 103284   | 0.280 | ppbv # | 42     |

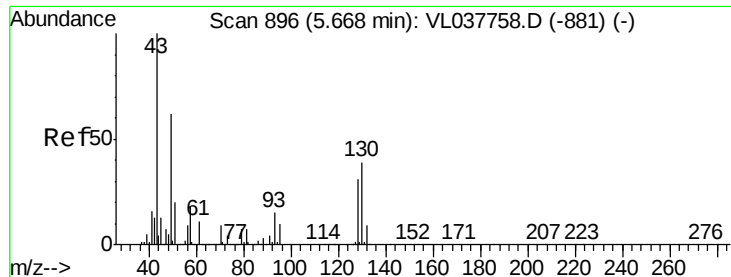
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Oct 08 10:10:06 2021  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_L\METHODS\VL100421AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon 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: 5.66 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL037817.D

Acq: 8 Oct 2021 4:55

Instrument :

MSVOA\_L

ClientSampleId :

C0P10DL

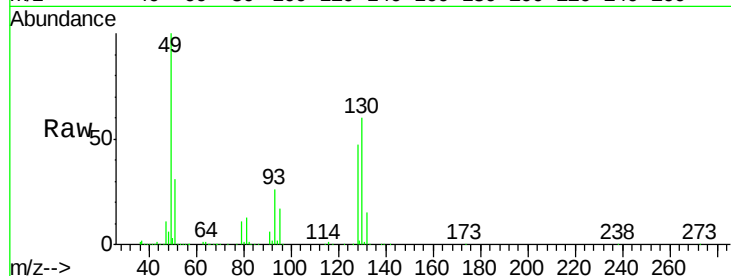
Tgt Ion: 49 Resp: 1380922

Ion Ratio Lower Upper

49 100

128 53.1 27.1 81.3

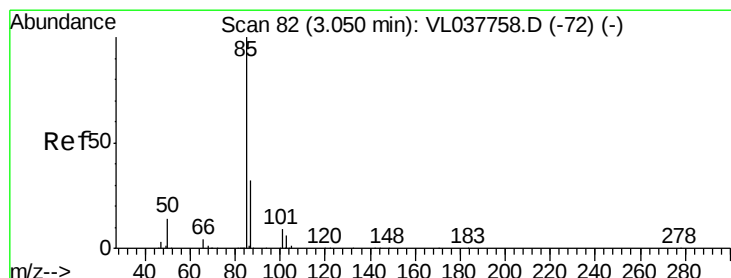
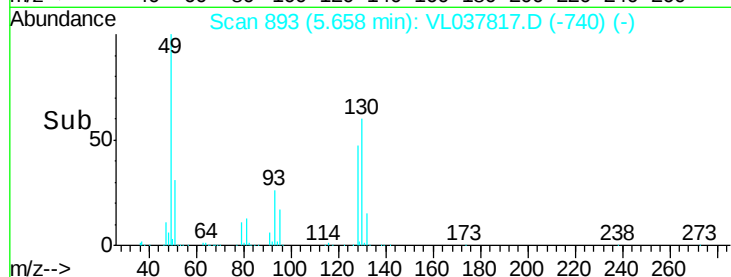
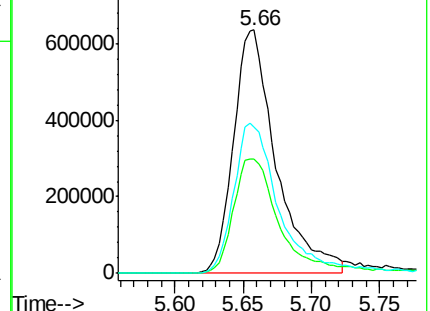
130 66.2 33.2 99.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.031 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.01 min

Lab File: VL037817.D

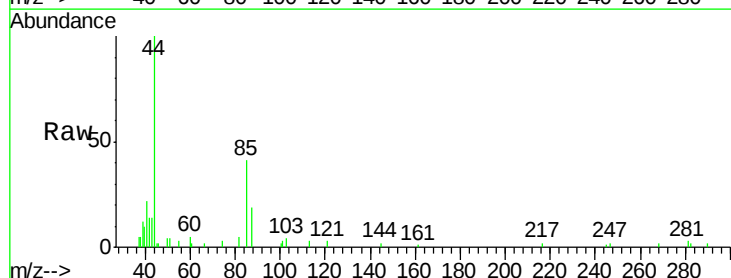
Acq: 8 Oct 2021 4:55

Tgt Ion: 85 Resp: 6926

Ion Ratio Lower Upper

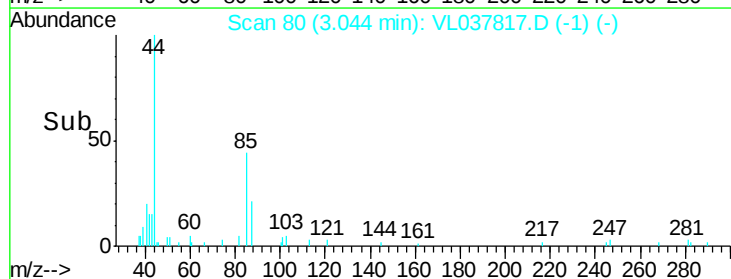
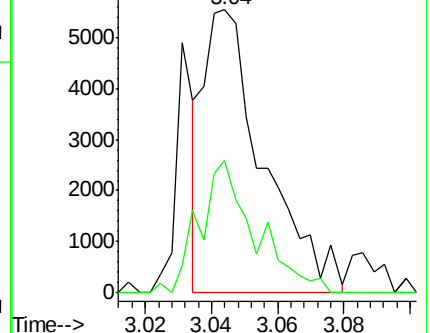
85 100

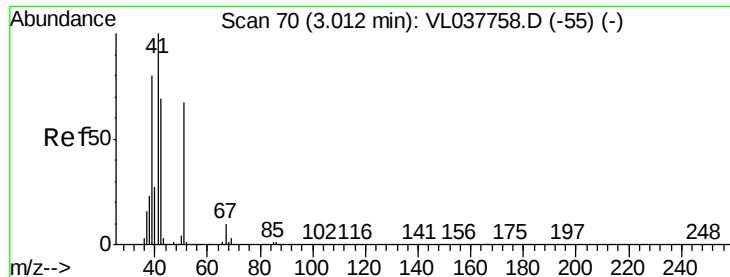
87 48.2 25.7 38.5#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#9

Propene

Concen: 0.116 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.01 min

Lab File: VL037817.D

Acq: 8 Oct 2021 4:55

Instrument :

MSVOA\_L

ClientSampleId :

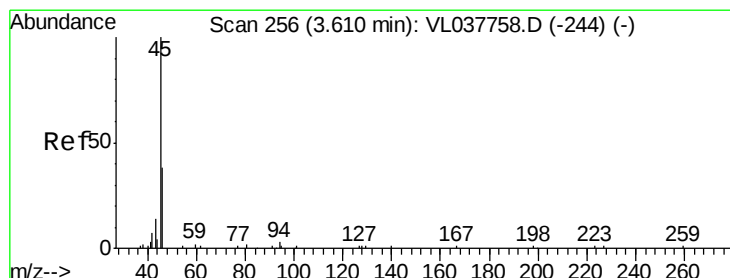
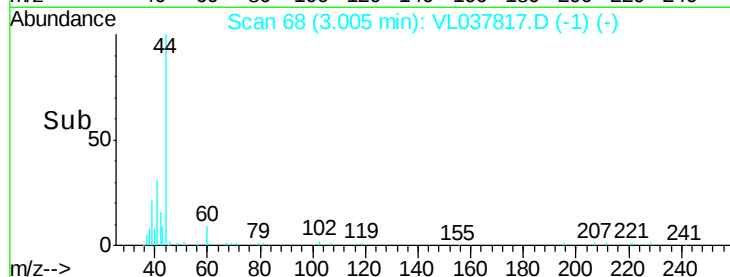
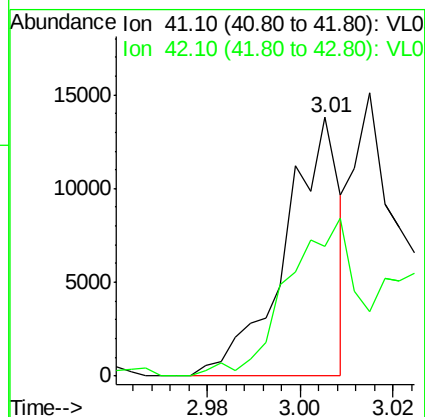
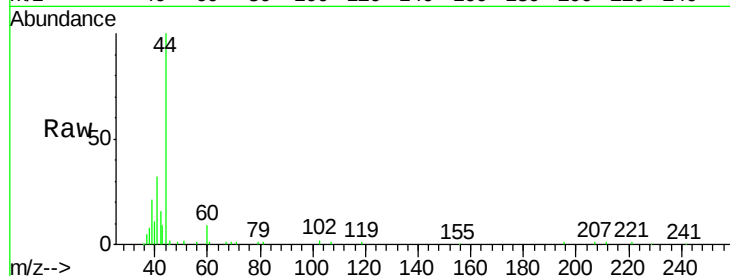
C0P10DL

Tgt Ion: 41 Resp: 11322

Ion Ratio Lower Upper

41 100

42 137.2 54.2 81.2#



#13

Ethanol

Concen: 6.786 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.00 min

Lab File: VL037817.D

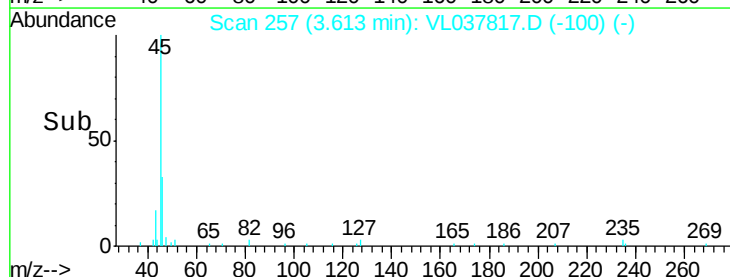
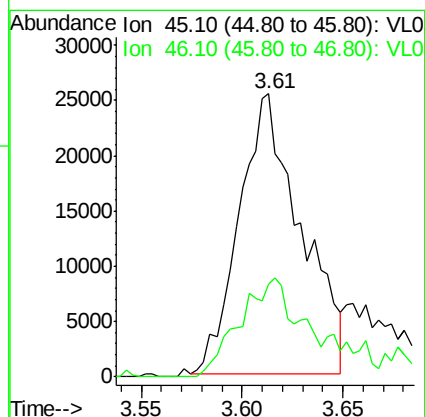
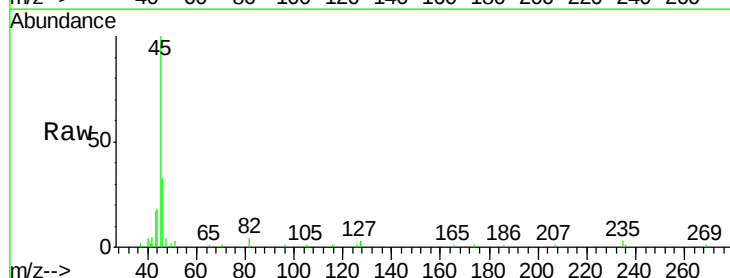
Acq: 8 Oct 2021 4:55

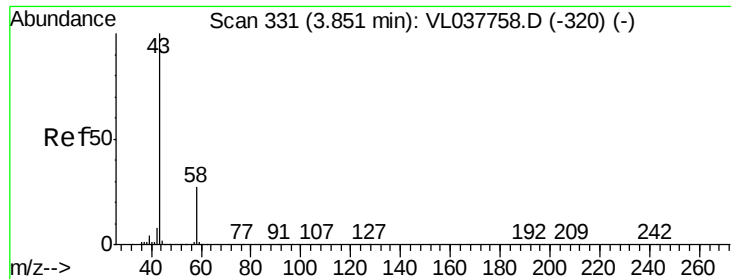
Tgt Ion: 45 Resp: 54183

Ion Ratio Lower Upper

45 100

46 48.9 20.2 81.0

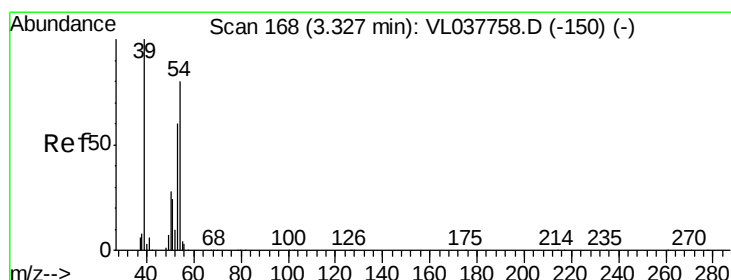
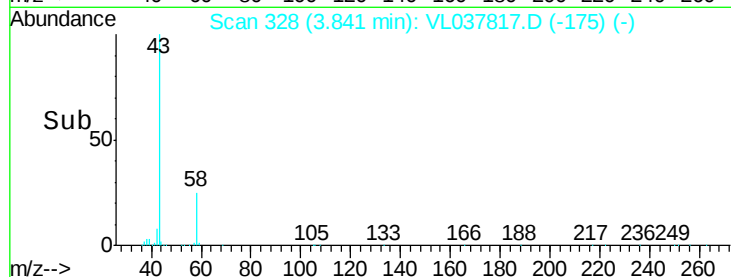
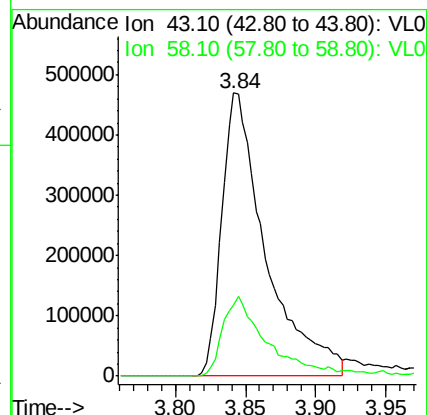
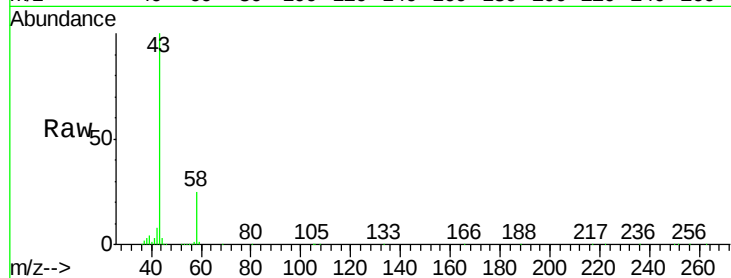




#15  
Acetone  
Concen: 8.196 ppbv  
RT: 3.84 min Scan# 328  
Delta R.T. -0.01 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

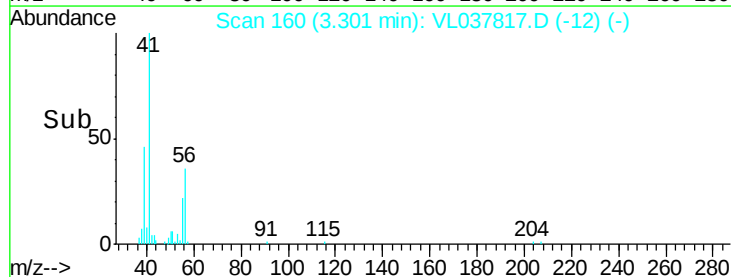
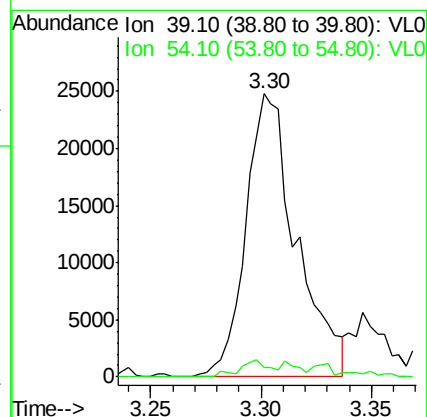
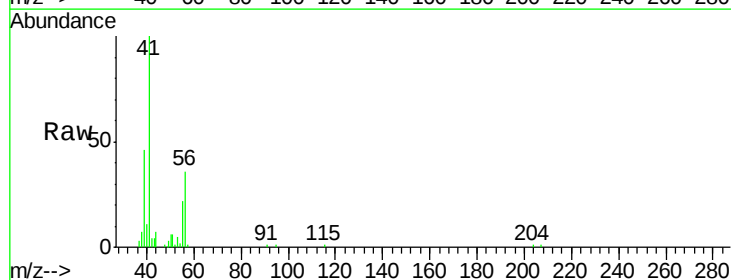
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0P10DL

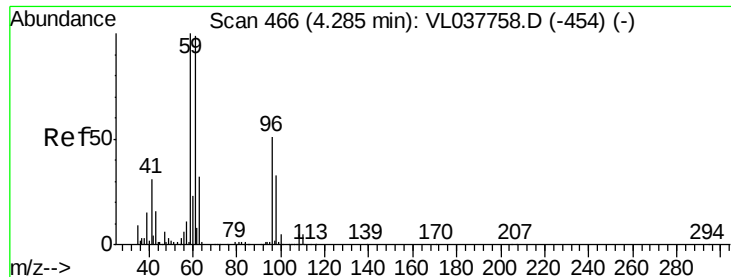
Tgt Ion: 43 Resp: 1015997  
Ion Ratio Lower Upper  
43 100  
58 30.4 23.0 34.6



#16  
1,3-Butadiene  
Concen: 0.438 ppbv  
RT: 3.30 min Scan# 160  
Delta R.T. -0.03 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

Tgt Ion: 39 Resp: 39490  
Ion Ratio Lower Upper  
39 100  
54 8.1 61.7 92.5#



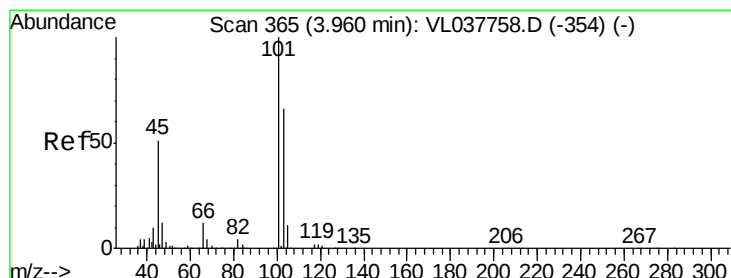
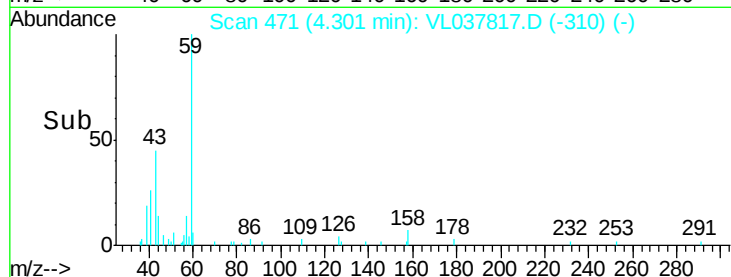
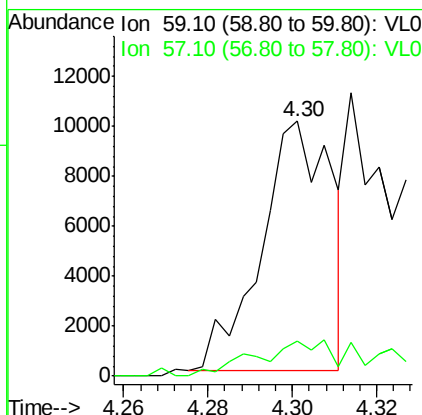
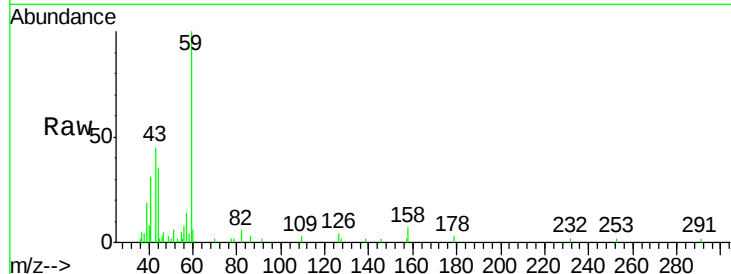


#17

tert-Butyl alcohol  
Concen: 0.090 ppbv  
RT: 4.30 min Scan# 471  
Delta R.T. 0.02 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

Instrument :  
MSVOA\_L  
ClientSampleId :  
C0P10DL

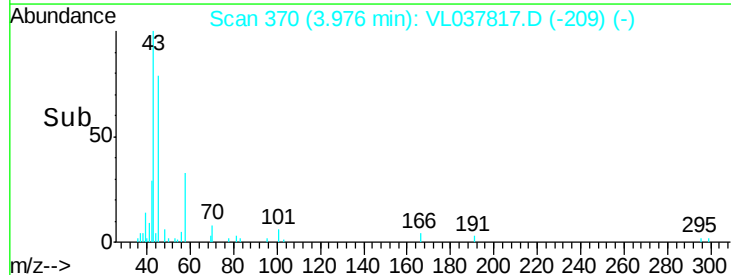
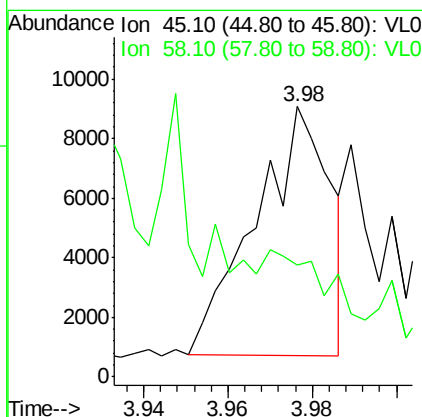
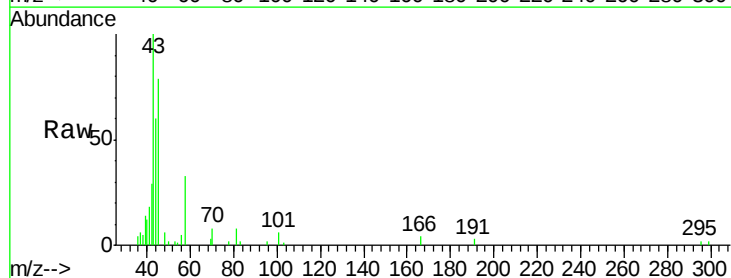
Tgt Ion: 59 Resp: 11539  
Ion Ratio Lower Upper  
59 100  
57 22.3 8.6 13.0#

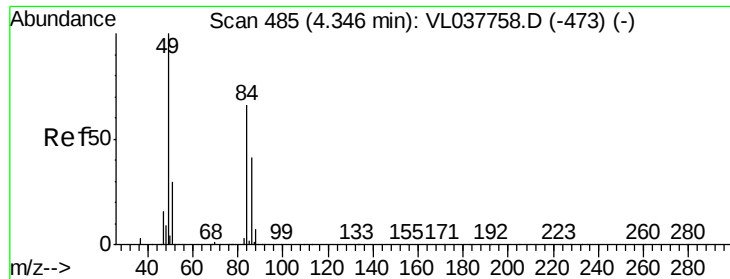


#19

Isopropyl Alcohol  
Concen: 0.133 ppbv  
RT: 3.98 min Scan# 370  
Delta R.T. 0.02 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

Tgt Ion: 45 Resp: 10249  
Ion Ratio Lower Upper  
45 100  
58 134.3 1.1 1.7#

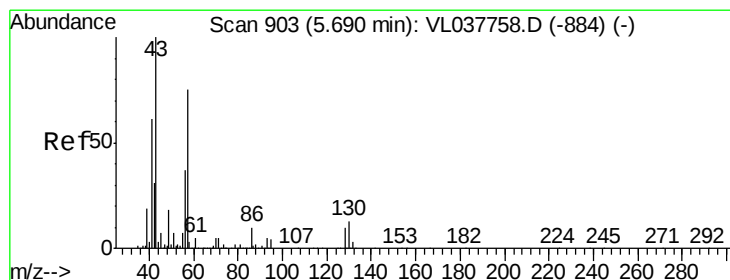
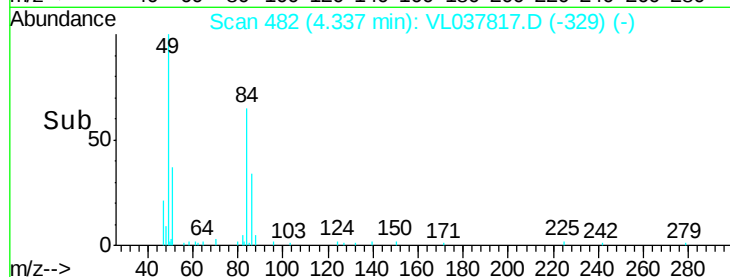
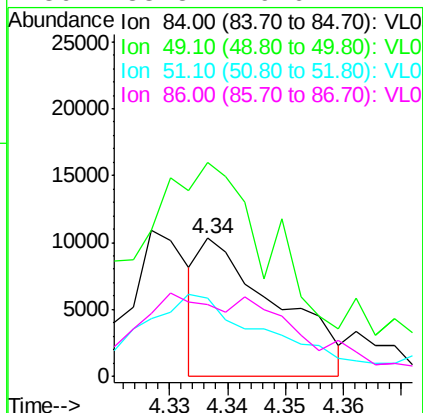
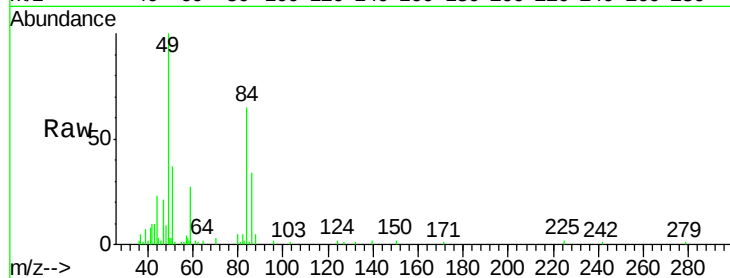




#20  
Methylene Chloride  
Concen: 0.152 ppbv  
RT: 4.34 min Scan# 482  
Delta R.T. -0.01 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

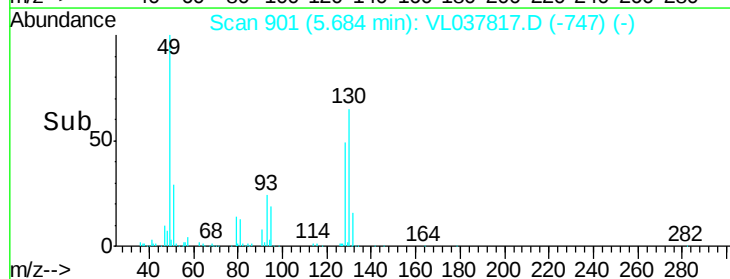
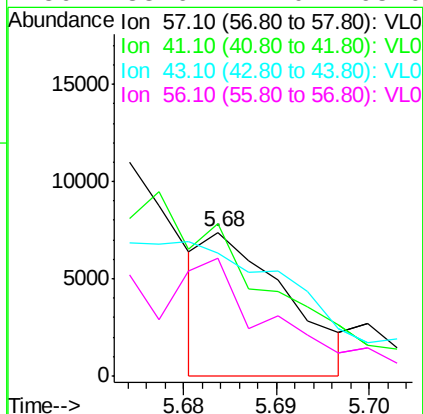
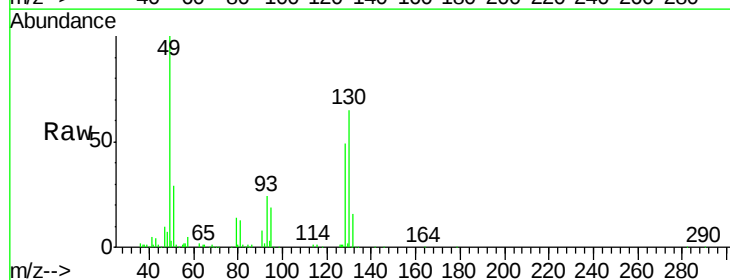
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0P10DL

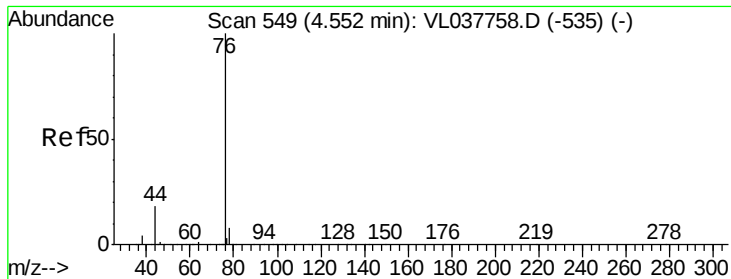
Tgt Ion: 84 Resp: 9492  
Ion Ratio Lower Upper  
84 100  
49 153.9 120.7 181.1  
51 56.2 36.2 54.4#  
86 33.8 49.6 74.4#



#26  
Hexane  
Concen: 0.026 ppbv  
RT: 5.68 min Scan# 901  
Delta R.T. -0.01 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

Tgt Ion: 57 Resp: 4483  
Ion Ratio Lower Upper  
57 100  
41 0.0 69.6 104.4#  
43 0.0 171.4 257.0#  
56 238.6 42.0 63.0#

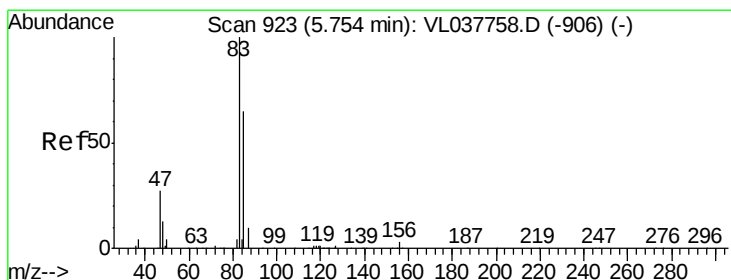
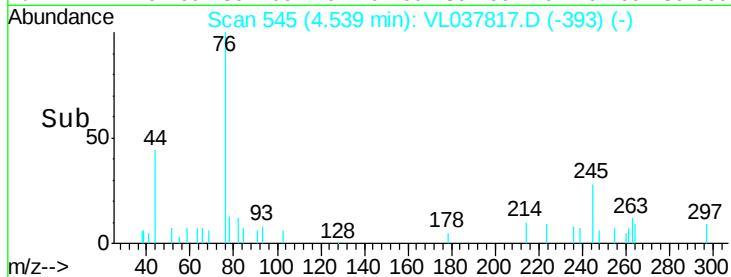
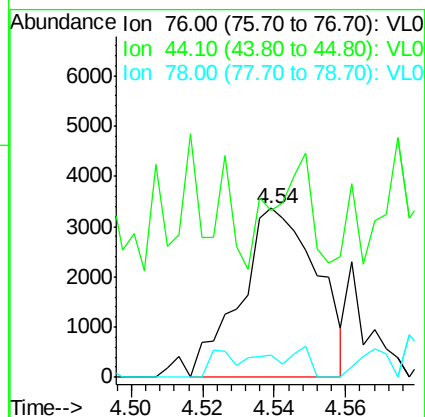
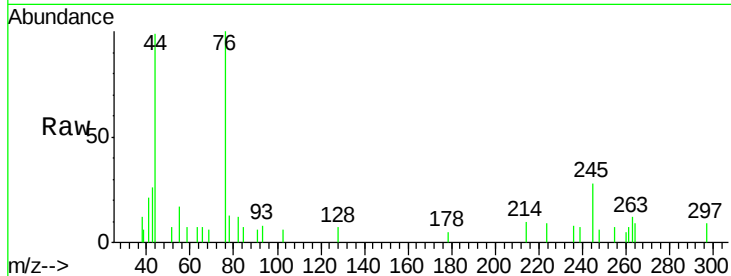




#27  
Carbon Disulfide  
Concen: 0.033 ppbv  
RT: 4.54 min Scan# 545  
Delta R.T. -0.01 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

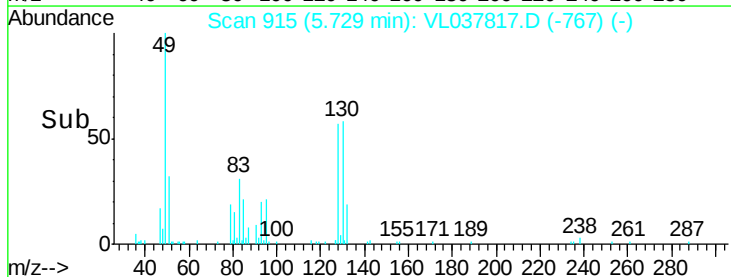
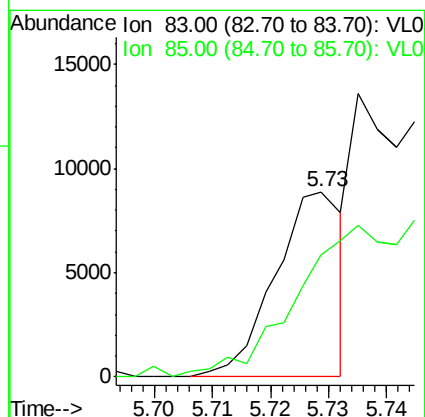
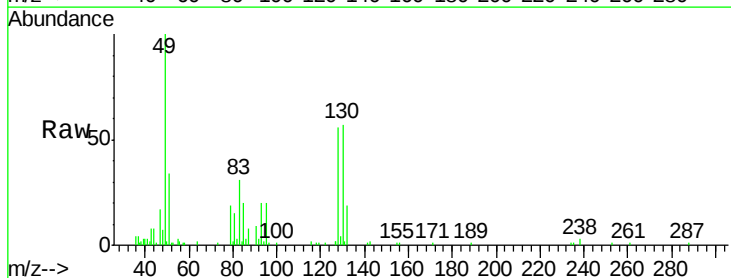
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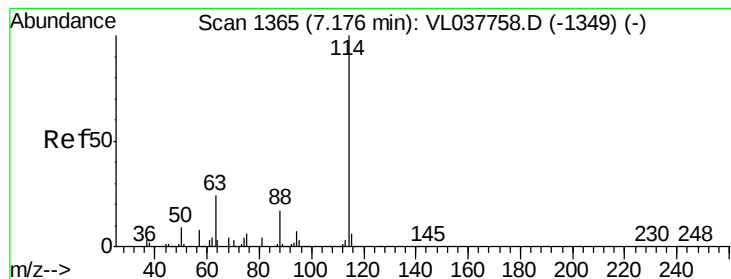
Tgt Ion: 76 Resp: 4983  
Ion Ratio Lower Upper  
76 100  
44 0.0 14.3 21.5#  
78 15.2 7.8 11.6#



#29  
Chloroform  
Concen: 0.030 ppbv  
RT: 5.73 min Scan# 915  
Delta R.T. -0.03 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

Tgt Ion: 83 Resp: 7224  
Ion Ratio Lower Upper  
83 100  
85 63.2 51.8 77.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1361

Delta R.T. -0.01 min

Lab File: VL037817.D

Acq: 8 Oct 2021 4:55

Instrument :

MSVOA\_L

ClientSampleId :

C0P10DL

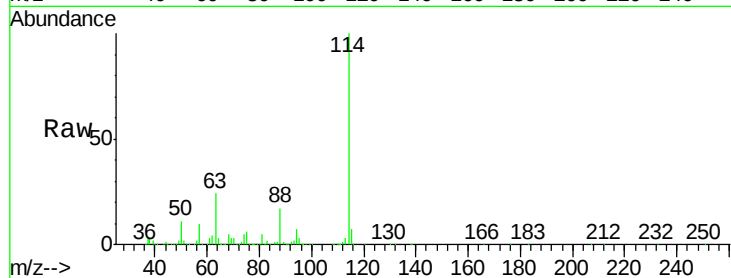
Tgt Ion:114 Resp: 3987468

Ion Ratio Lower Upper

114 100

63 24.2 19.4 29.2

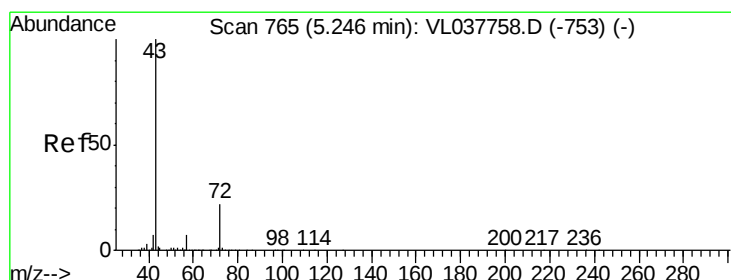
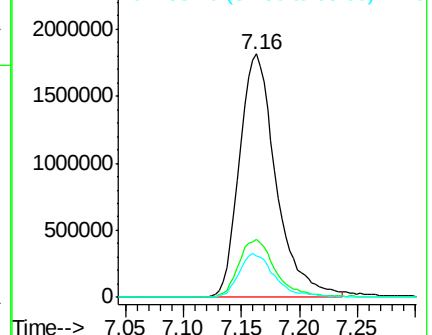
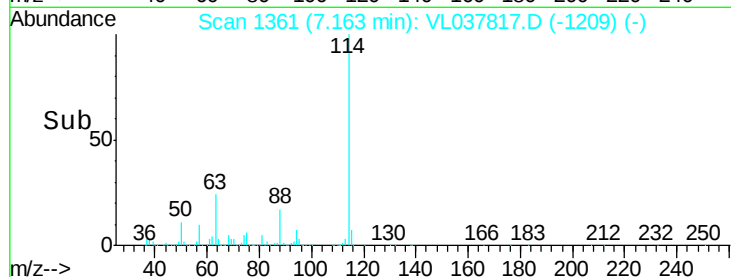
88 18.1 14.4 21.6



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.184 ppbv

RT: 5.25 min Scan# 765

Delta R.T. 0.00 min

Lab File: VL037817.D

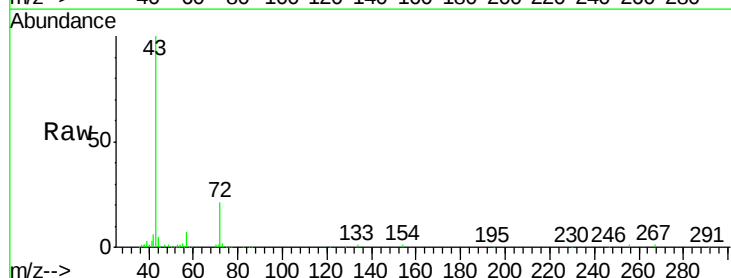
Acq: 8 Oct 2021 4:55

Tgt Ion: 43 Resp: 190597

Ion Ratio Lower Upper

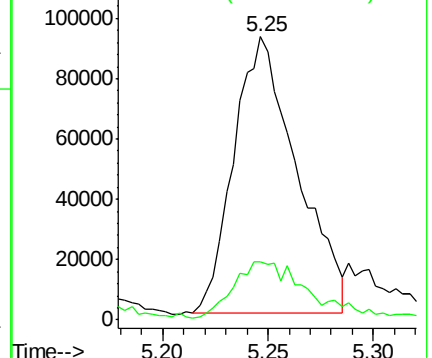
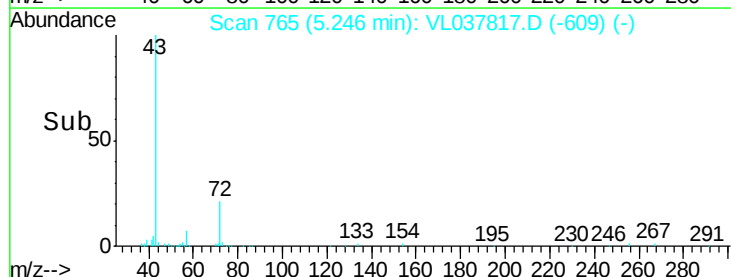
43 100

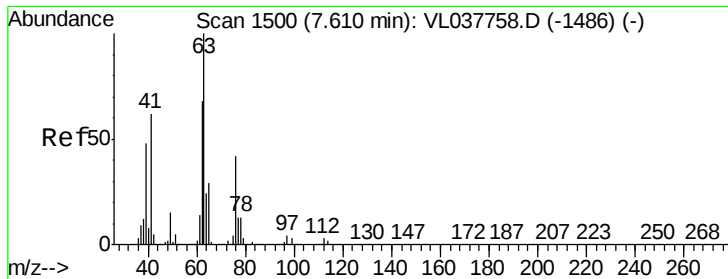
72 26.5 18.2 27.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#39

1,2-Dichloropropane

Concen: 7.334 ppbv

RT: 7.16 min Scan# 1361

Delta R.T. -0.45 min

Lab File: VL037817.D

Acq: 8 Oct 2021 4:55

Instrument :

MSVOA\_L

ClientSampleId :

C0P10DL

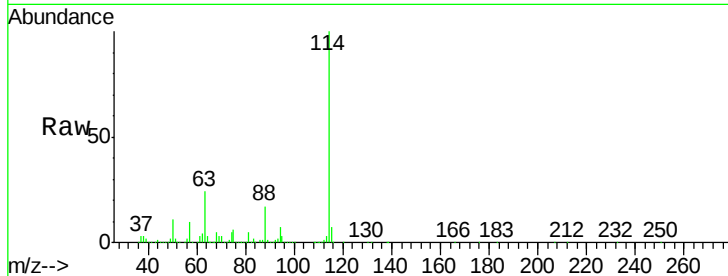
Tgt Ion: 63 Resp: 939600

Ion Ratio Lower Upper

63 100

41 0.1 49.8 74.6#

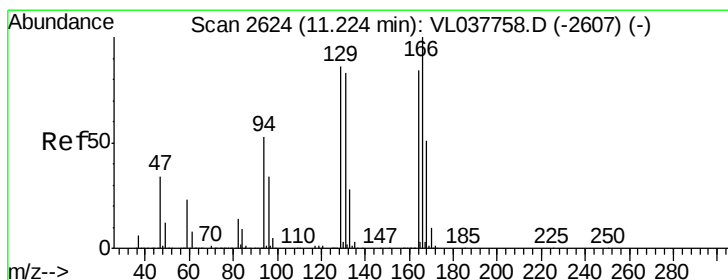
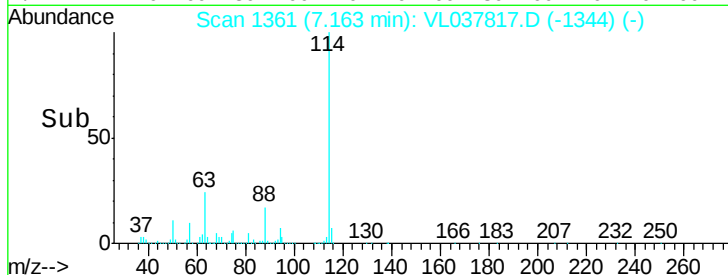
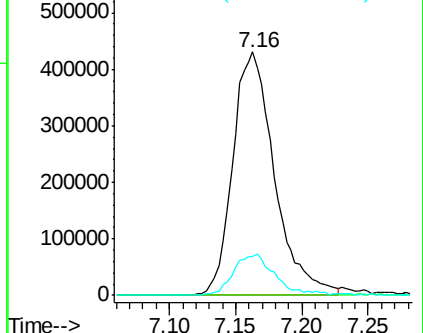
62 15.7 54.6 82.0#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#52

Tetrachloroethene

Concen: 0.355 ppbv

RT: 11.21 min Scan# 2621

Delta R.T. -0.01 min

Lab File: VL037817.D

Acq: 8 Oct 2021 4:55

Tgt Ion: 164 Resp: 47065

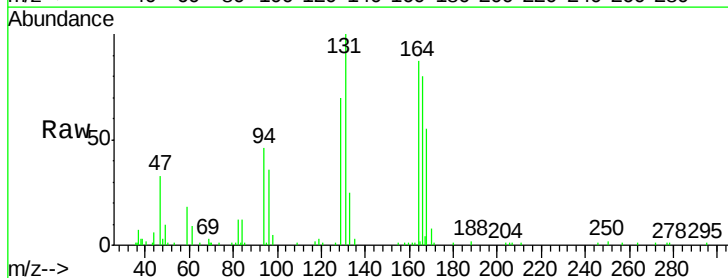
Ion Ratio Lower Upper

164 100

166 89.3 95.4 143.2#

129 80.1 82.2 123.4#

131 111.1 79.4 119.2

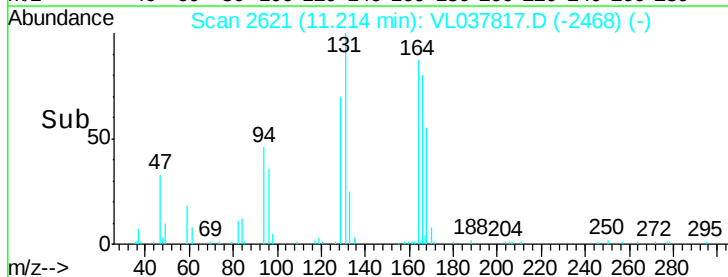
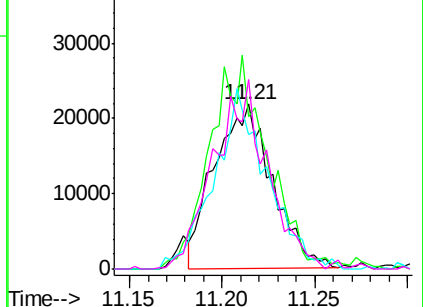


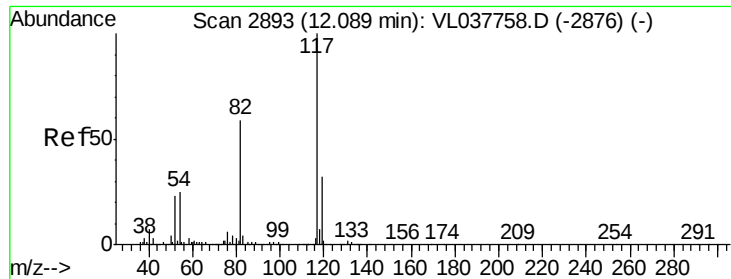
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

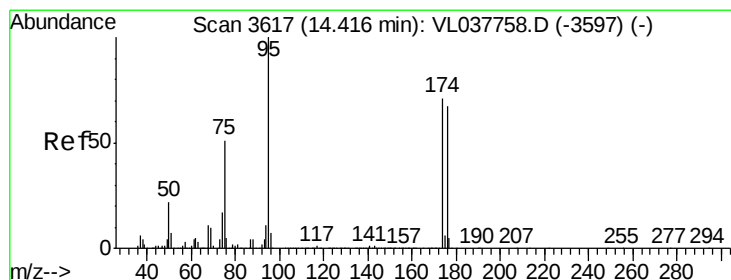
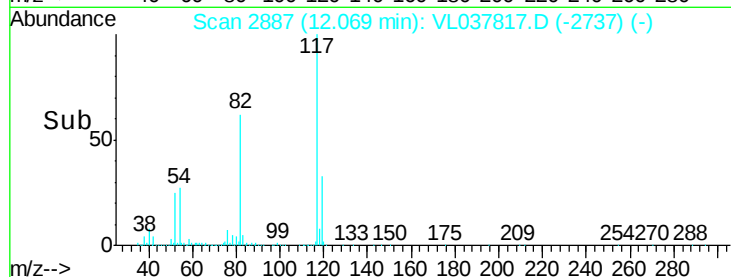
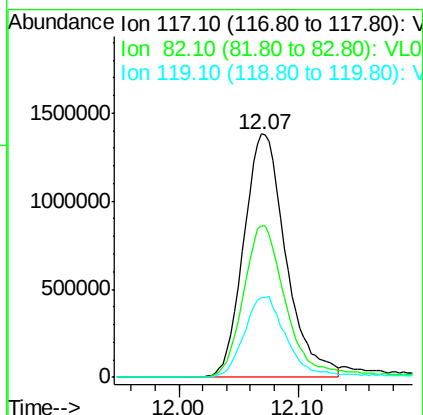
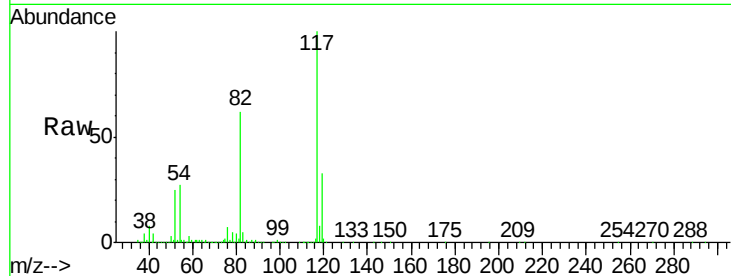




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.07 min Scan# 2887  
Delta R.T. -0.02 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

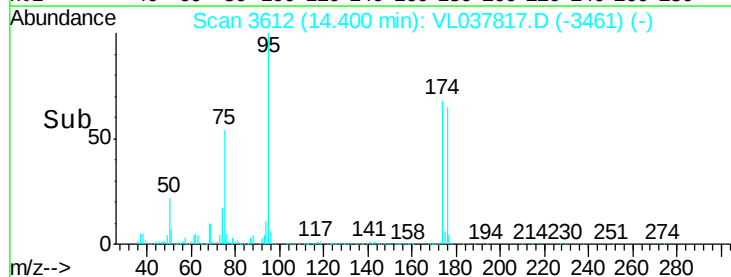
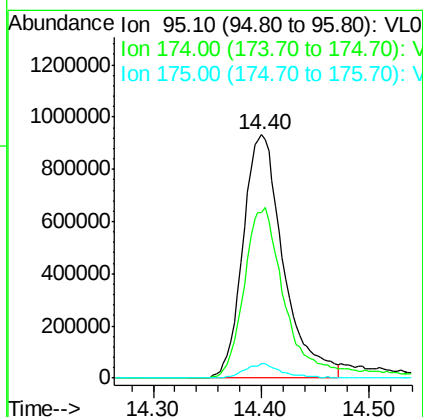
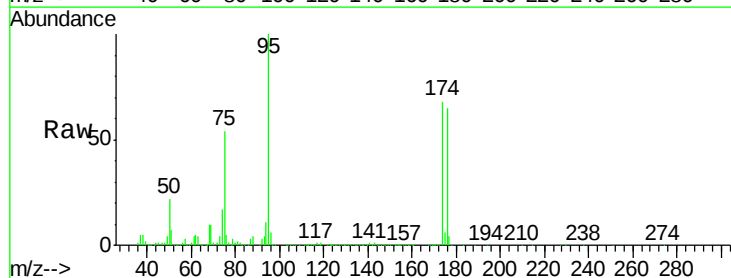
Instrument :  
MSVOA\_L  
ClientSampleId :  
C0P10DL

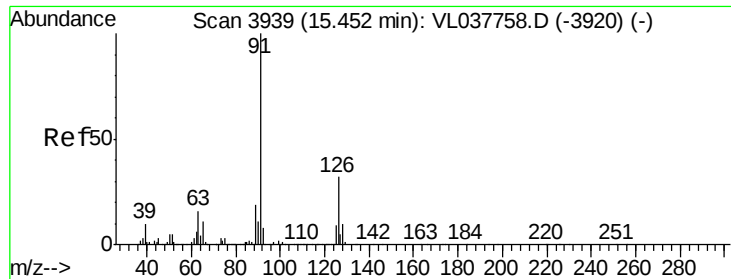
Tgt Ion: 117 Resp: 3388256  
Ion Ratio Lower Upper  
117 100  
82 65.6 52.2 78.2  
119 34.9 26.0 39.0



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.239 ppbv  
RT: 14.40 min Scan# 3612  
Delta R.T. -0.02 min  
Lab File: VL037817.D  
Acq: 8 Oct 2021 4:55

Tgt Ion: 95 Resp: 2426027  
Ion Ratio Lower Upper  
95 100  
174 74.8 57.8 86.6  
175 5.7 4.7 7.1





#71  
 2-Chlorotoluene  
 Concen: 0.280 ppbv  
 RT: 15.30 min Scan# 3891  
 Delta R.T. -0.15 min  
 Lab File: VL037817.D  
 Acq: 8 Oct 2021 4:55

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 C0P10DL

Tgt Ion: 91 Resp: 103284  
 Ion Ratio Lower Upper  
 91 100  
 126 0.6 13.6 54.6#

