

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL073021\  
 Data File : VL037305.D  
 Acq On : 31 Jul 2021 5:59  
 Operator : SY/AP  
 Sample : M3121-04  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-BEDROOM-4

Manual Integrations  
 APPROVED

MMDadoda  
 8/2/2021 8:58:42 AM

Quant Time: Jul 31 07:59:13 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL073021AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jul 31 2021  
 QLast Update : Fri Jul 30 23:19:30 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1125520  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 3514361  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.08 | 117  | 3086118  | 10.00 | ppbv  | -0.02    |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 14.41  | 95    | 2251564  | 10.03    | ppbv | -0.02   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.30% |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 3.04  | 85   | 56096    | 0.346  | ppbv   | 100    |
| 3) Chlorodifluoromethane   | 2.98  | 51   | 1009957  | 4.478  | ppbv   | 96     |
| 4) Chloromethane           | 3.14  | 50   | 46790m   | 0.595  | ppbv   |        |
| 9) Propene                 | 3.02  | 41   | 64590m   | 0.851  | ppbv   |        |
| 11) Trichlorofluoromethane | 3.94  | 101  | 51527    | 0.256  | ppbv   | 89     |
| 13) Ethanol                | 3.60  | 45   | 1588057  | 95.235 | ppbv   | 96     |
| 15) Acetone                | 3.85  | 43   | 1506447  | 7.431  | ppbv   | 95     |
| 17) tert-Butyl alcohol     | 4.31  | 59   | 15896m   | 0.123  | ppbv   |        |
| 19) Isopropyl Alcohol      | 3.97  | 45   | 3299306  | 42.065 | ppbv # | 98     |
| 20) Methylene Chloride     | 4.34  | 84   | 358435   | 4.569  | ppbv   | 94     |
| 26) Hexane                 | 5.68  | 57   | 157618m  | 1.003  | ppbv   |        |
| 29) Chloroform             | 5.75  | 83   | 45709    | 0.203  | ppbv   | 93     |
| 34) 2-Butanone             | 5.25  | 43   | 105427   | 0.699  | ppbv   | 95     |
| 35) Carbon Tetrachloride   | 7.01  | 117  | 12266m   | 0.055  | ppbv   |        |
| 36) Benzene                | 6.89  | 78   | 47785    | 0.161  | ppbv   | 98     |
| 52) Tetrachloroethene      | 11.22 | 164  | 53040m   | 0.404  | ppbv   |        |
| 53) Toluene                | 9.80  | 91   | 566205   | 1.619  | ppbv   | 100    |
| 59) m/p-Xylene             | 12.96 | 91   | 80551m   | 0.221  | ppbv   |        |
| 60) o-Xylene               | 13.69 | 91   | 37805m   | 0.108  | ppbv   |        |
| 72) 4-Ethyltoluene         | 15.83 | 105  | 43286m   | 0.105  | ppbv   |        |
| 73) 1,3,5-Trimethylbenzene | 16.00 | 105  | 60507m   | 0.158  | ppbv   |        |
| 74) 1,2,4-Trimethylbenzene | 16.76 | 105  | 143204   | 0.340  | ppbv # | 68     |
| 76) 1,4-Dichlorobenzene    | 17.13 | 146  | 59576m   | 0.228  | ppbv   |        |

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

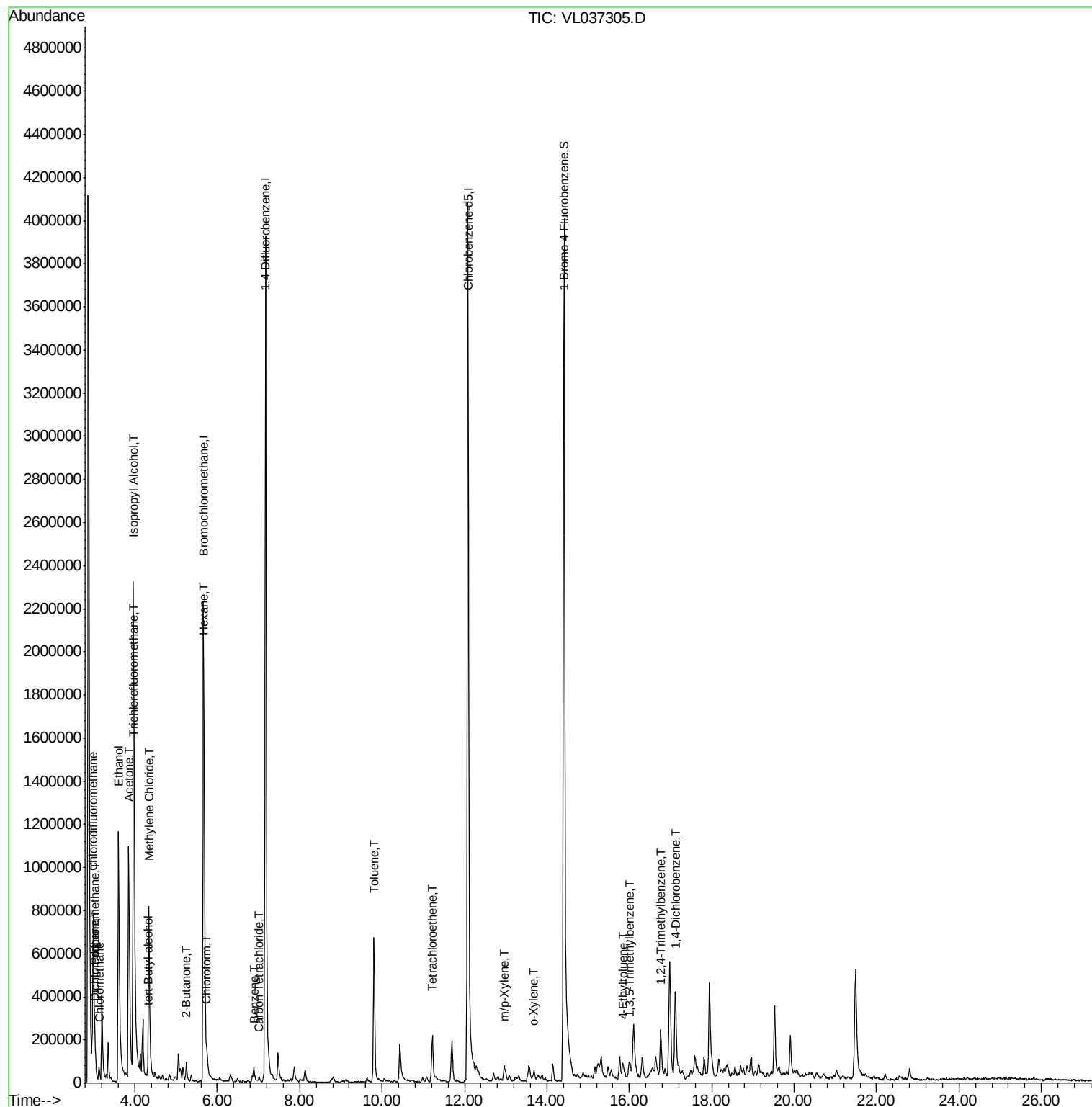
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL073021\  
Data File : VL037305.D  
Acq On : 31 Jul 2021 5:59  
Operator : SY/AP  
Sample : M3121-04  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

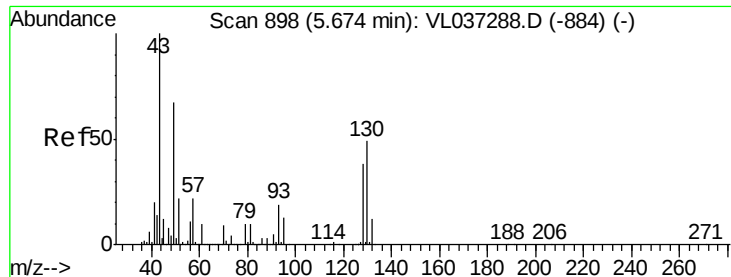
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-BEDROOM-4

Manual Integrations  
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8/2/2021 8:58:42 AM

Quant Time: Jul 31 07:59:13 2021  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL073021AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Jul  
QLast Update : Fri Jul 30 23:19:30 2021  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.01 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Instrument :

MSVOA\_L

ClientSampleId :

IA-BEDROOM-4

Tot Ion: 49 Resp: 1125520

Ion Ratio Lower Upper

49 100

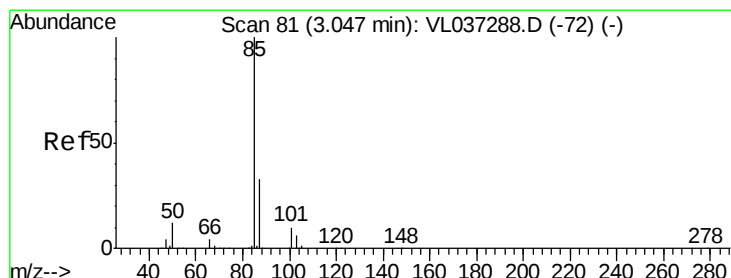
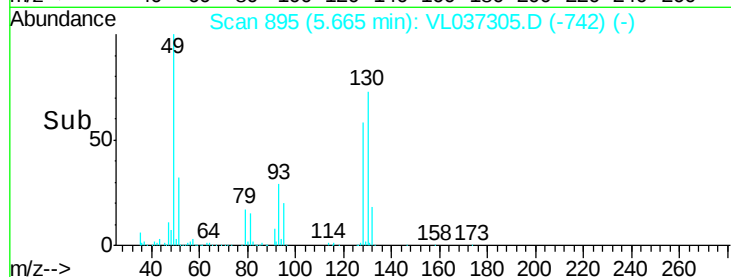
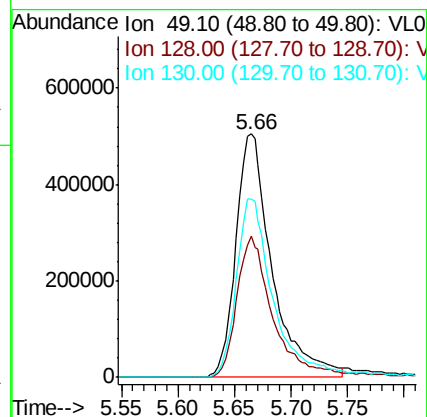
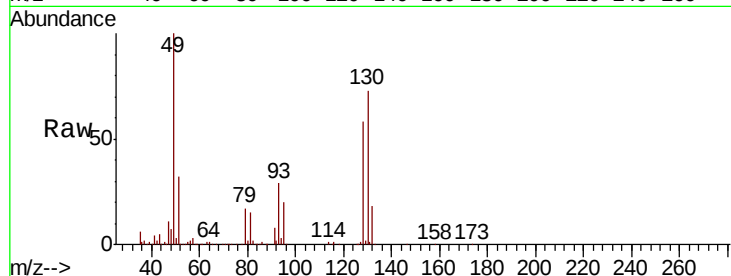
128 59.6 30.6 92.0

130 77.3 37.8 113.4

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#2

Dichlorodifluoromethane

Concen: 0.346 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.00 min

Lab File: VL037305.D

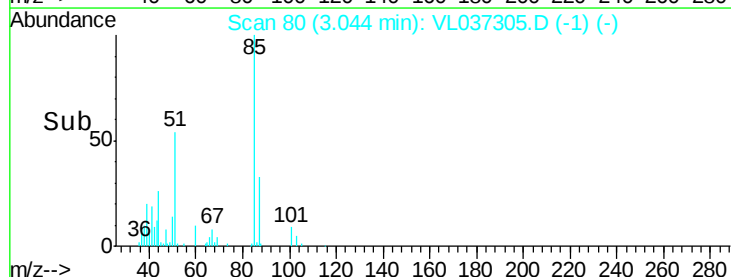
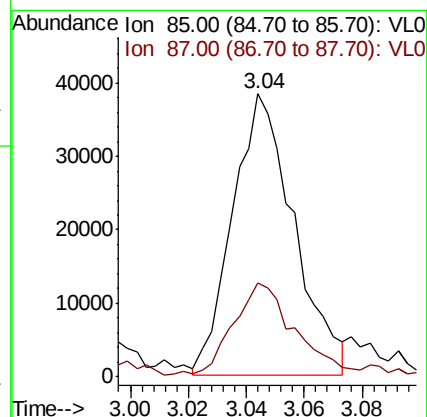
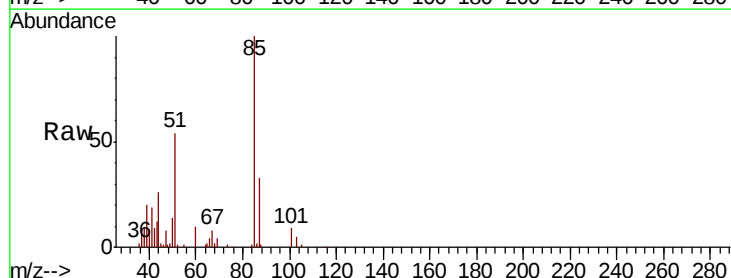
Acq: 31 Jul 2021 5:59

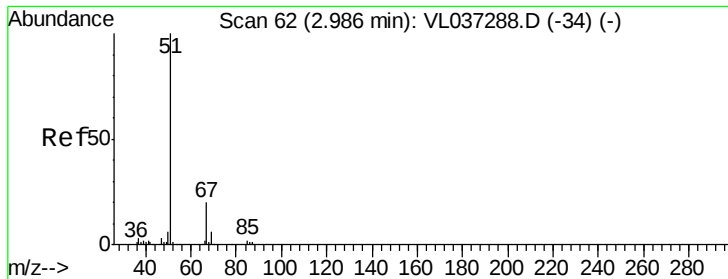
Tgt Ion: 85 Resp: 56096

Ion Ratio Lower Upper

85 100

87 33.1 26.6 40.0





#3

Chlorodifluoromethane

Concen: 4.478 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.00 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Instrument :

MSVOA\_L

ClientSampleId :

IA-BEDROOM-4

Tot Ion: 51 Resp: 1009957

Ion Ratio Lower Upper

51 100

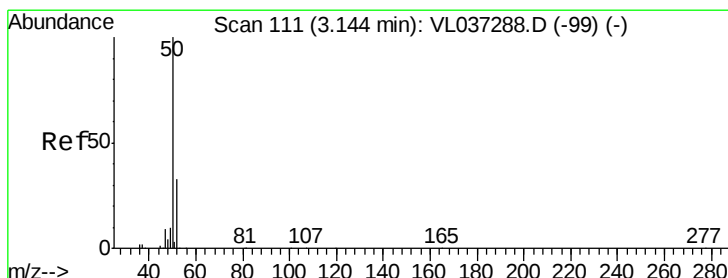
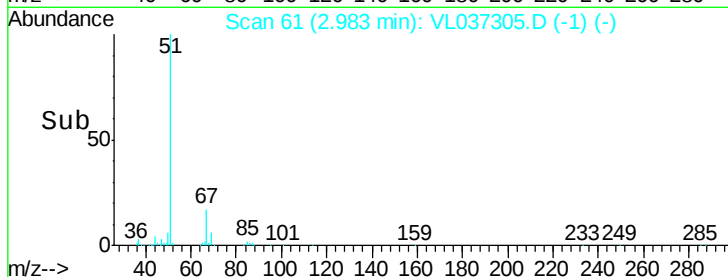
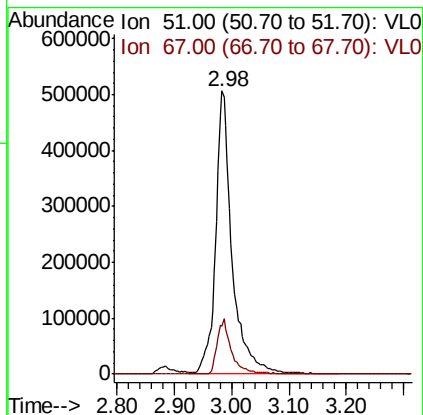
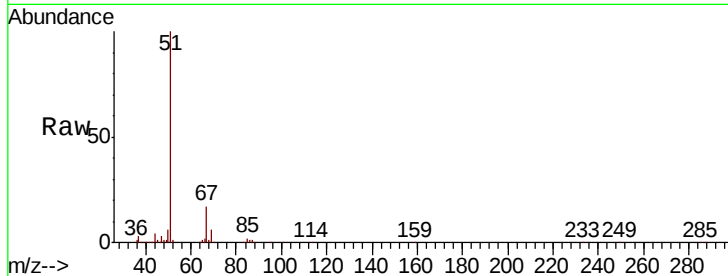
67 17.1 15.2 22.8

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#4

Chloromethane

Concen: 0.595 ppbv m

RT: 3.14 min Scan# 109

Delta R.T. -0.01 min

Lab File: VL037305.D

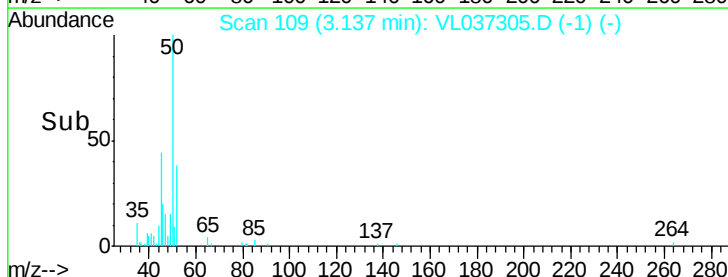
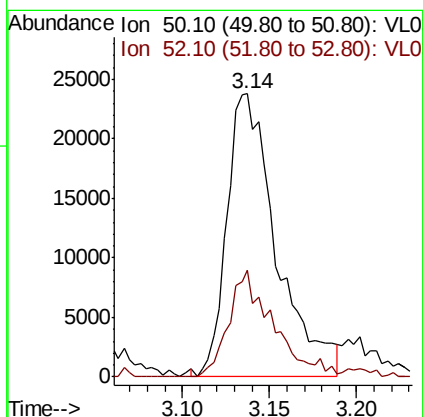
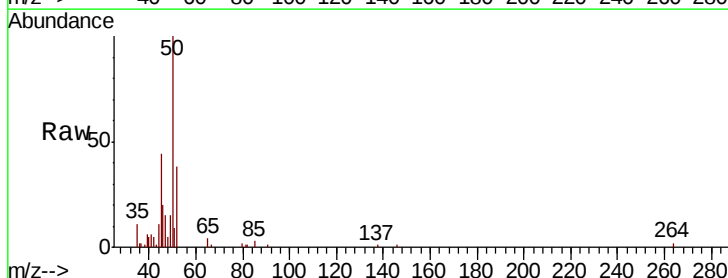
Acq: 31 Jul 2021 5:59

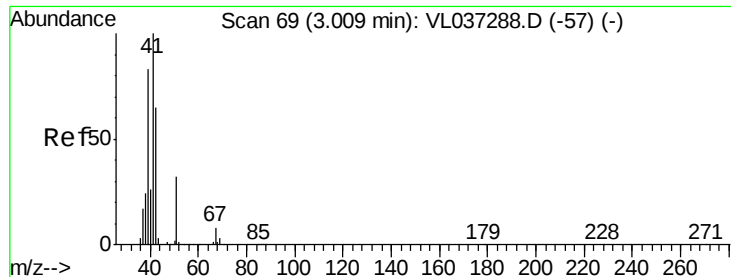
Tgt Ion: 50 Resp: 46790

Ion Ratio Lower Upper

50 100

52 37.5 26.2 39.4





#9

Propene

Concen: 0.851 ppbv m

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Instrument :

MSVOA\_L

ClientSampleId :

IA-BEDROOM-4

Tot Ion: 41 Resp: 64590

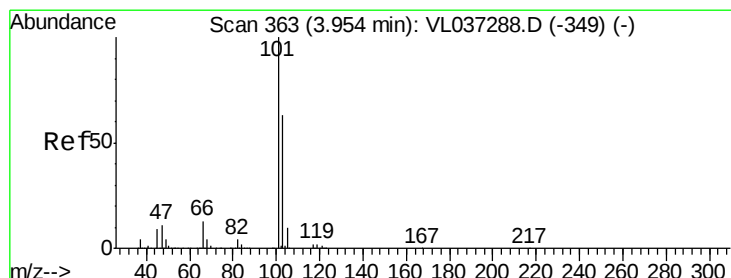
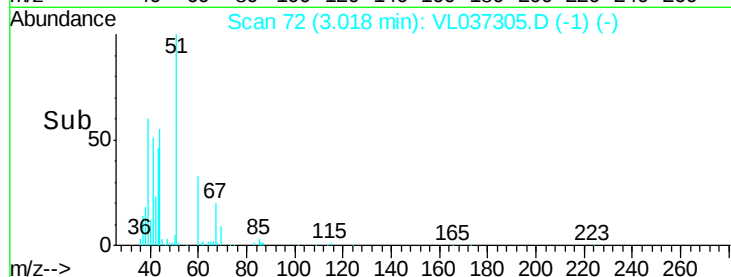
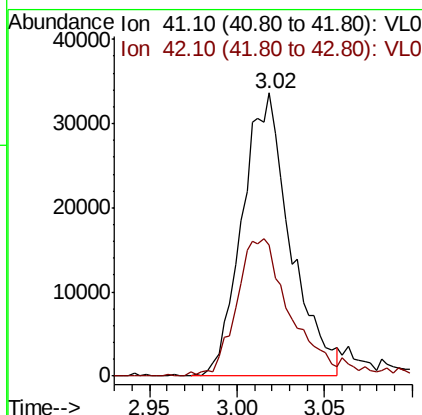
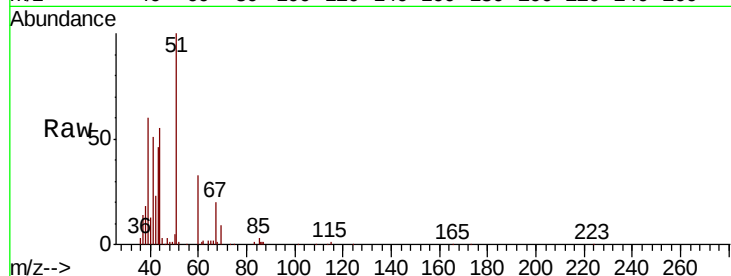
Ion Ratio Lower Upper

41 100

42 0.0 54.0 81.0#

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#11

Trichlorofluoromethane

Concen: 0.256 ppbv

RT: 3.94 min Scan# 360

Delta R.T. -0.01 min

Lab File: VL037305.D

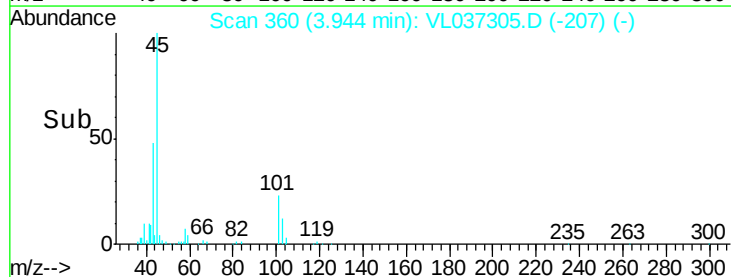
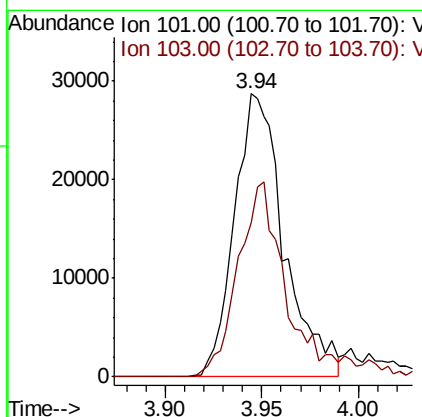
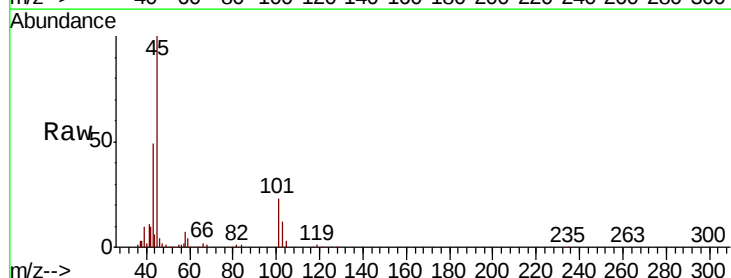
Acq: 31 Jul 2021 5:59

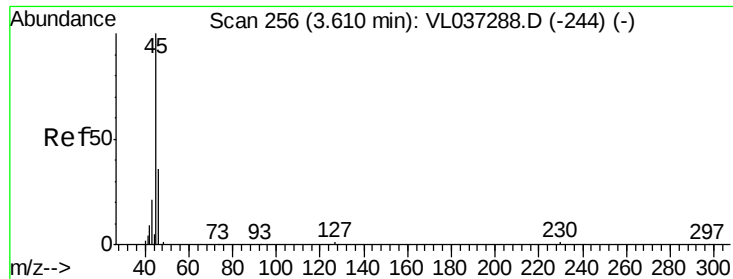
Tgt Ion: 101 Resp: 51527

Ion Ratio Lower Upper

101 100

103 54.5 50.6 75.8





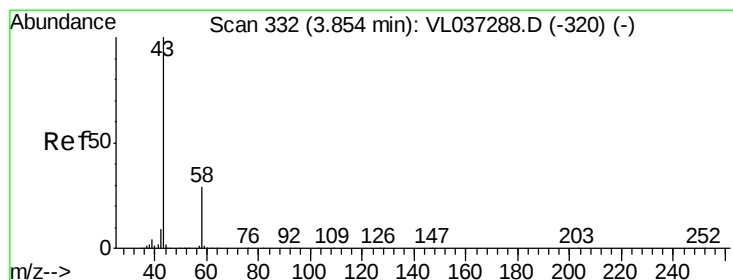
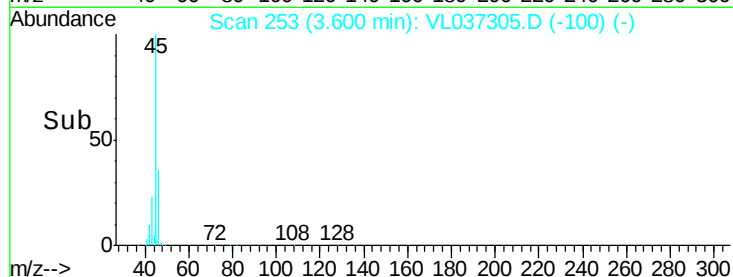
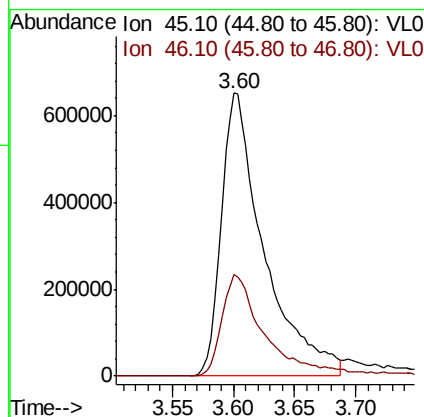
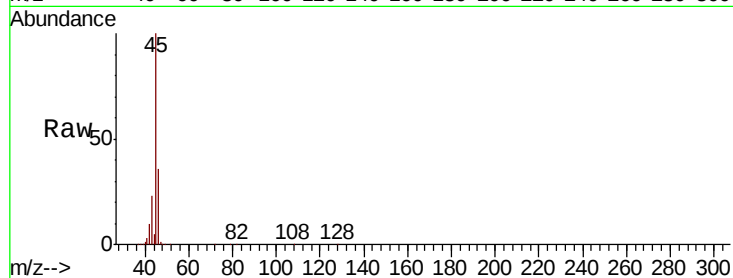
#13  
Ethanol  
Concen: 95.235 ppbv  
RT: 3.60 min Scan# 253  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-BEDROOM-4

Tot Ion: 45 Resp: 1588057  
Ion Ratio Lower Upper  
45 100  
46 38.2 16.2 64.8

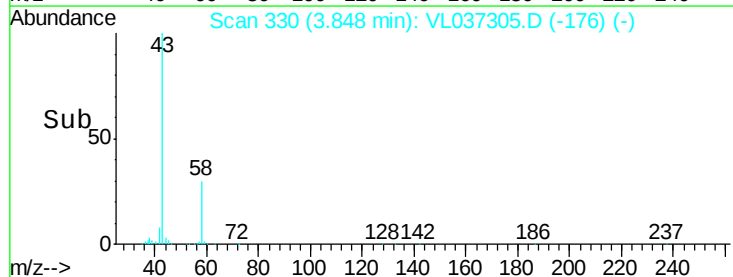
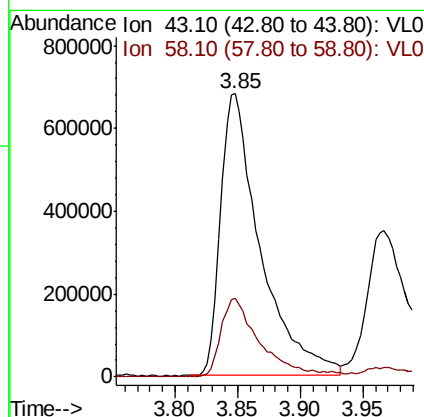
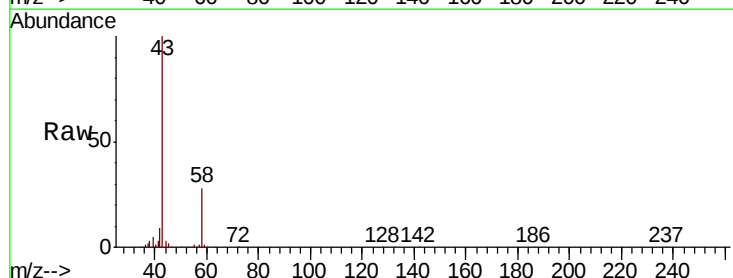
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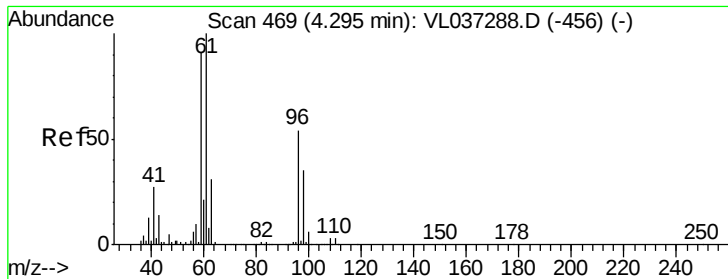
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#15  
Acetone  
Concen: 7.431 ppbv  
RT: 3.85 min Scan# 330  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Tgt Ion: 43 Resp: 1506447  
Ion Ratio Lower Upper  
43 100  
58 27.5 24.2 36.4





#17

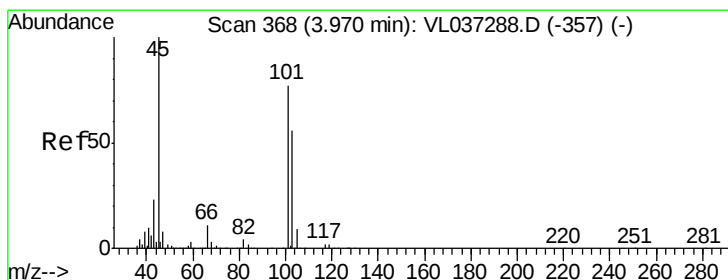
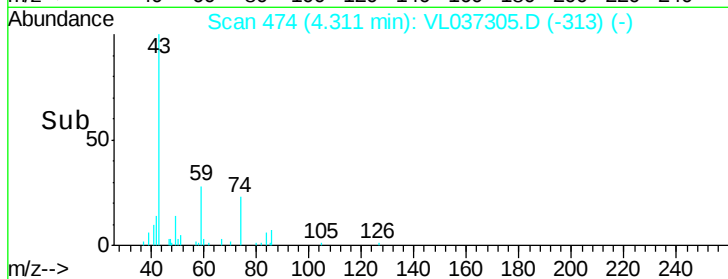
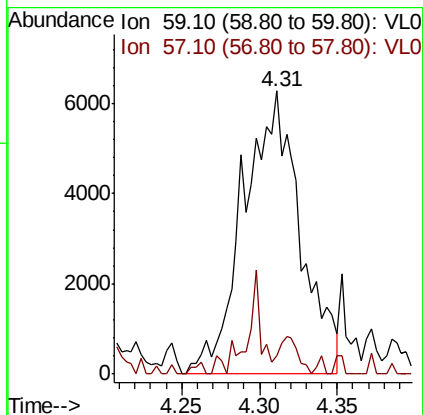
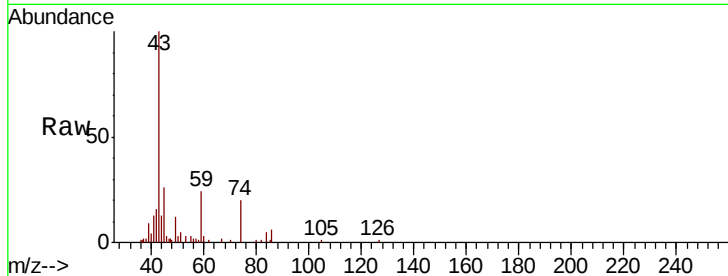
tert-Butyl alcohol  
 Concen: 0.123 ppbv  
 RT: 4.31 min Scan# 474  
 Delta R.T. 0.02 min  
 Lab File: VL037305.D  
 Acq: 31 Jul 2021 5:59

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-BEDROOM-4

| Tot Ion | 59    | Resp  | 15896 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 59      | 100   |       |       |
| 57      | 84.6  | 8.6   | 13.0# |

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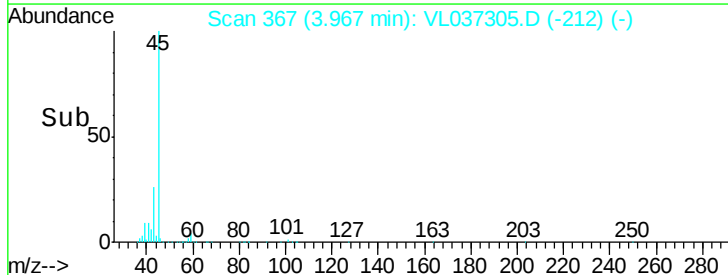
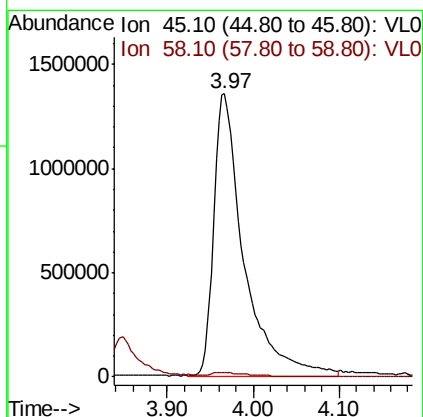
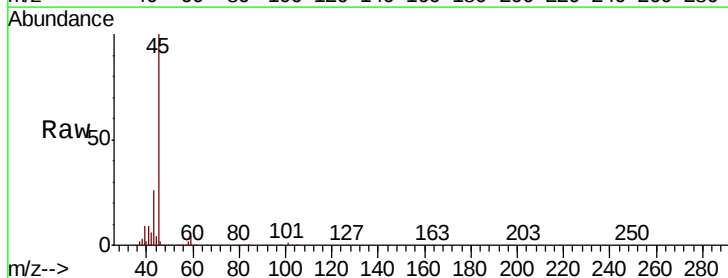
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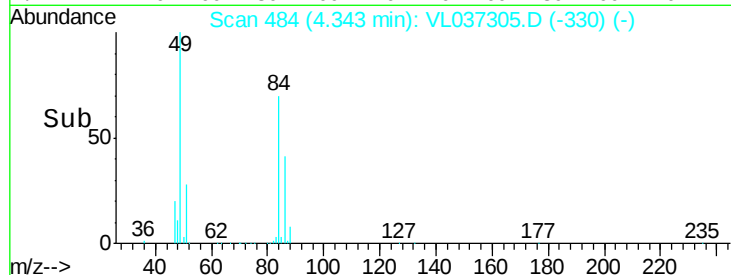
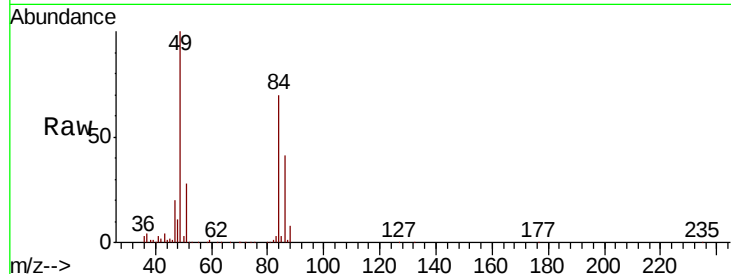
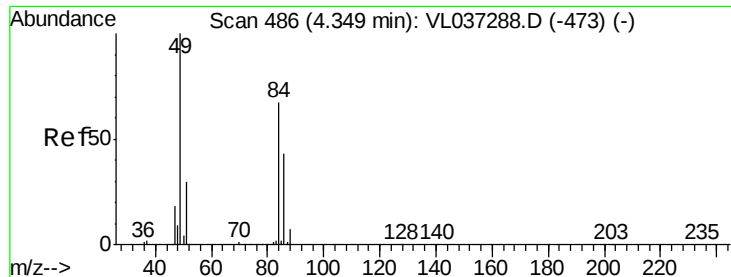


#19

Isopropyl Alcohol  
 Concen: 42.065 ppbv  
 RT: 3.97 min Scan# 367  
 Delta R.T. -0.00 min  
 Lab File: VL037305.D  
 Acq: 31 Jul 2021 5:59

| Tgt Ion | 45    | Resp  | 3299306 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 45      | 100   |       |         |
| 58      | 2.0   | 2.2   | 3.2#    |





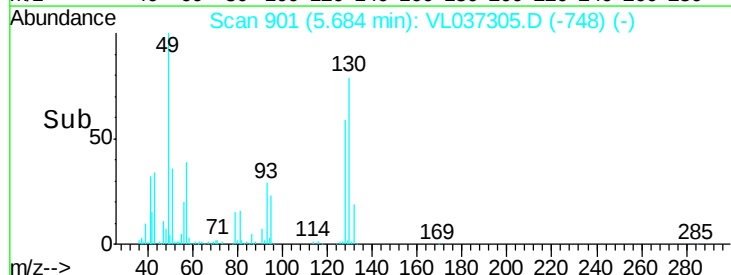
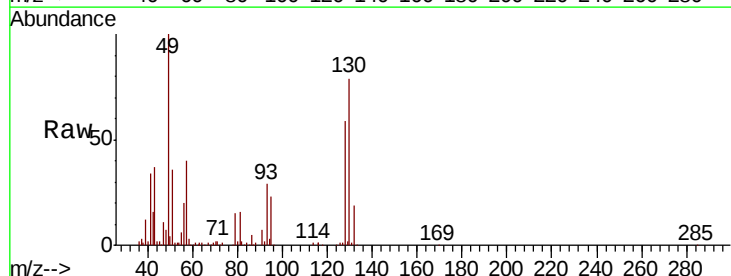
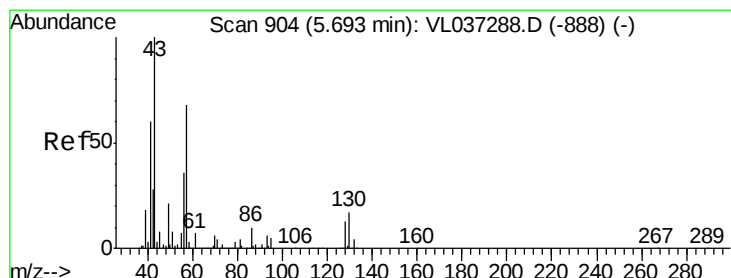
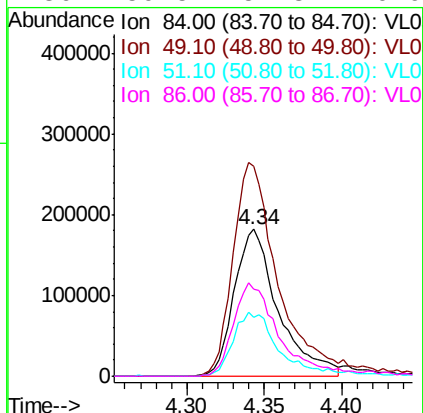
#20  
Methvlene Chloride  
Concen: 4.569 ppbv  
RT: 4.34 min Scan# 484  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

| Tot Ion | Ion   | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|-------|
| 84      | 100   |       |       |       |       |
| 49      | 143.5 |       | 120.2 | 180.4 |       |
| 51      | 40.4  |       | 36.5  | 54.7  |       |
| 86      | 59.5  |       | 51.3  | 76.9  |       |

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-BEDROOM-4

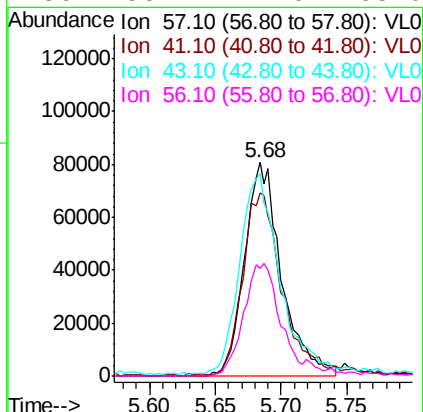
Manual Integrations  
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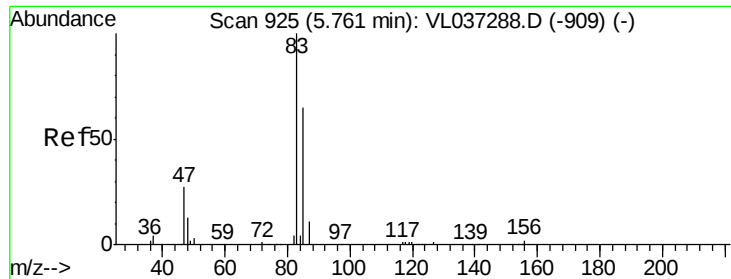
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#26  
Hexane  
Concen: 1.003 ppbv m  
RT: 5.68 min Scan# 901  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

| Tgt Ion | Ion   | Ratio | Resp  | Lower  | Upper |
|---------|-------|-------|-------|--------|-------|
| 57      | 100   |       |       |        |       |
| 41      | 94.9  |       | 71.0  | 106.6  |       |
| 43      | 106.0 |       | 155.0 | 232.4# |       |
| 56      | 56.4  |       | 42.0  | 63.0   |       |





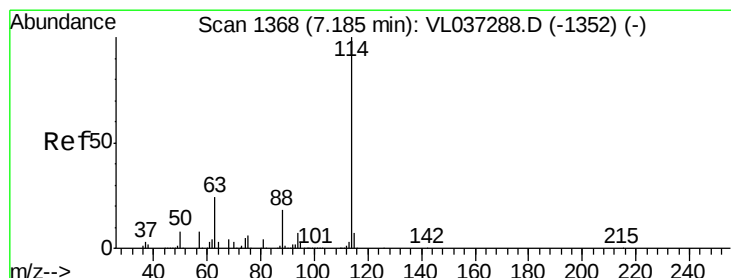
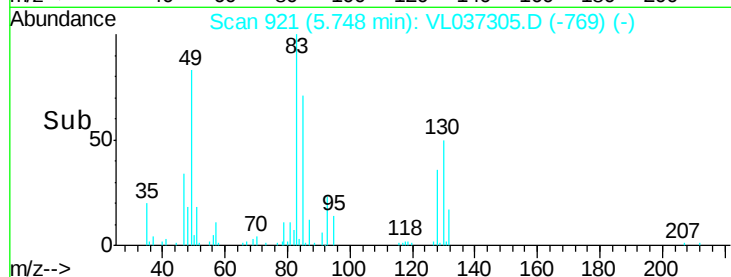
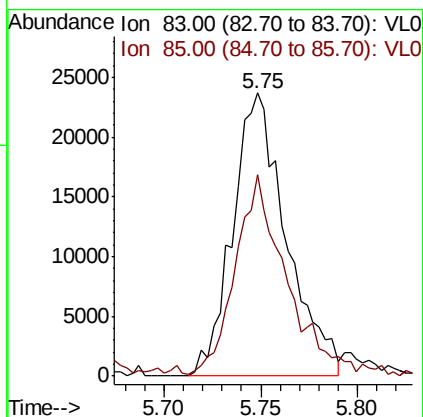
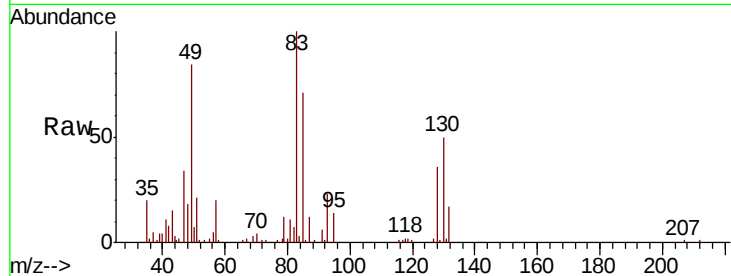
#29  
Chloroform  
Concen: 0.203 ppbv  
RT: 5.75 min Scan# 921  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-BEDROOM-4

Tot Ion: 83 Resp: 45709  
Ion Ratio Lower Upper  
83 100  
85 70.6 51.9 77.9

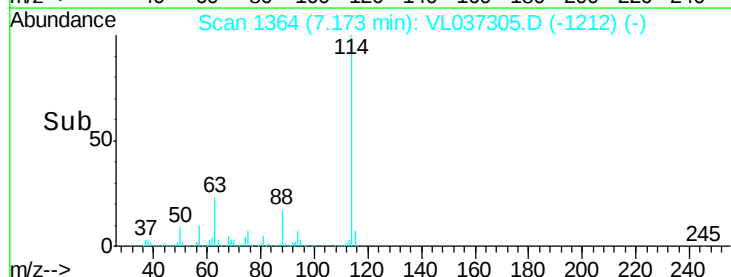
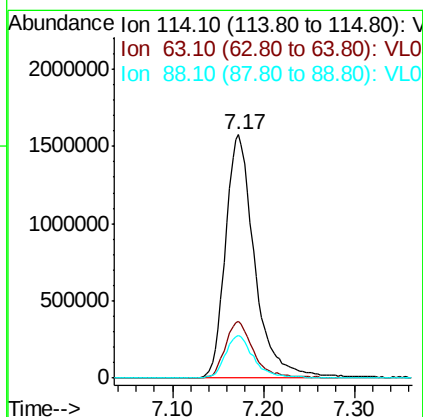
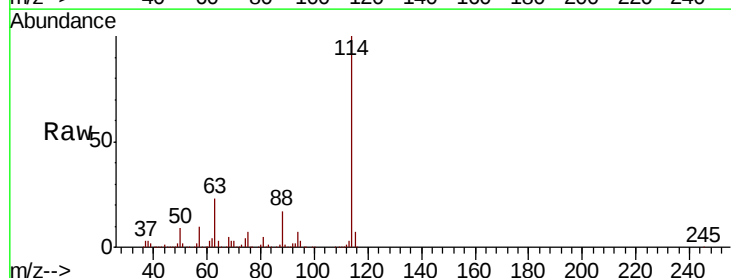
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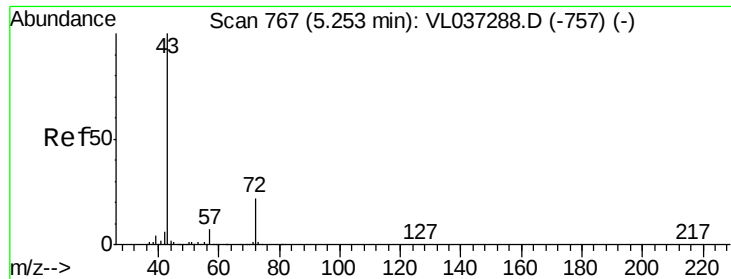
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#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.17 min Scan# 1364  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Tgt Ion: 114 Resp: 3514361  
Ion Ratio Lower Upper  
114 100  
63 23.0 19.0 28.4  
88 17.2 14.0 21.0





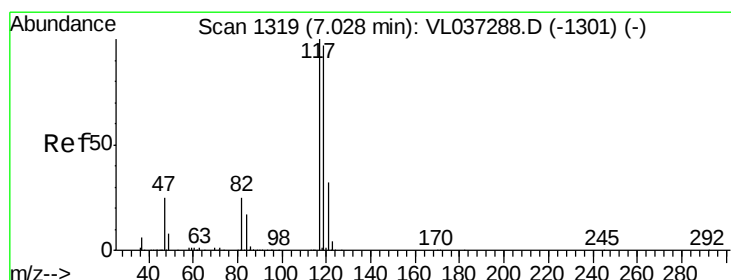
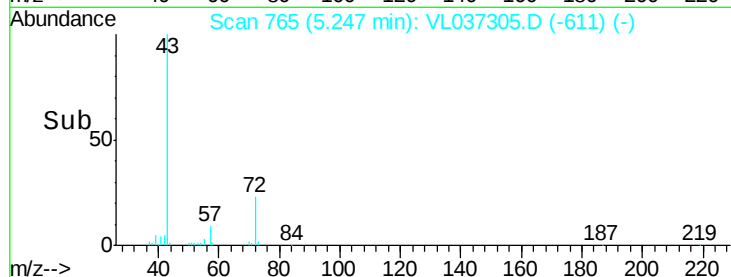
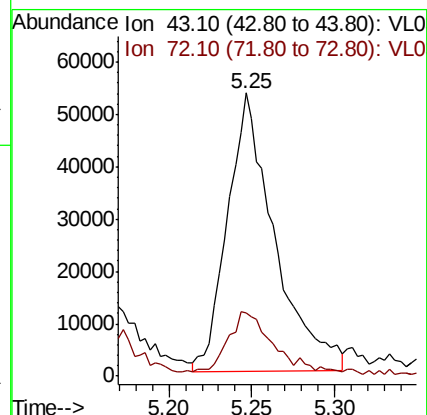
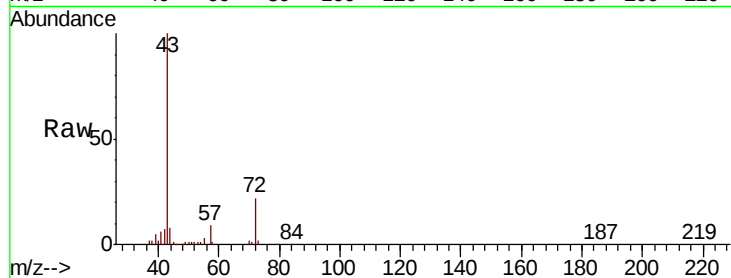
#34  
2-Butanone  
Concen: 0.699 ppbv  
RT: 5.25 min Scan# 765  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-BEDROOM-4

| Tot Ion   | 43    | Resp  | 105427 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 43        | 100   |       |        |
| 72        | 25.3  | 18.5  | 27.7   |

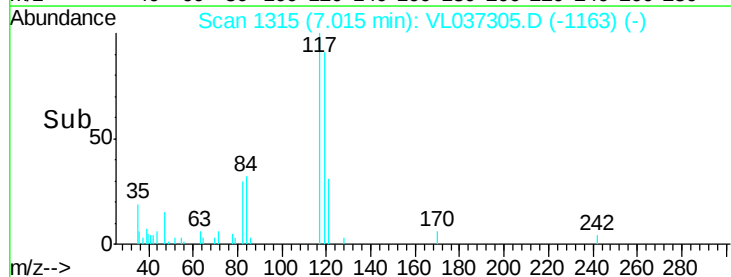
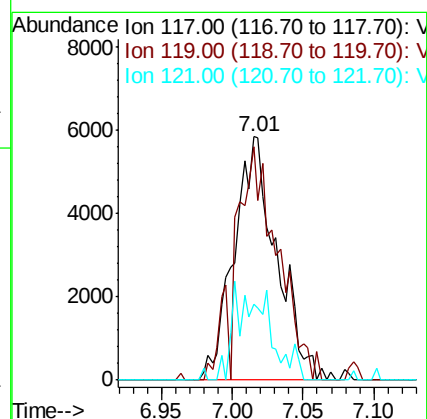
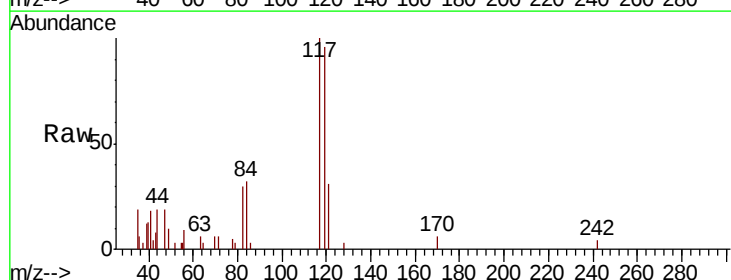
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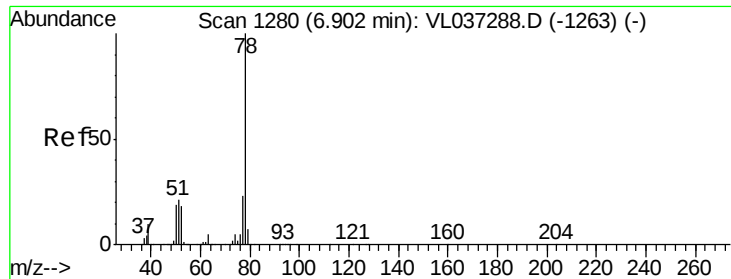
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#35  
Carbon Tetrachloride  
Concen: 0.055 ppbv m  
RT: 7.01 min Scan# 1315  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

| Tgt Ion   | 117   | Resp  | 12266 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 117       | 100   |       |       |
| 119       | 95.6  | 77.4  | 116.2 |
| 121       | 31.3  | 25.8  | 38.8  |





#36

Benzene

Concen: 0.161 ppbv

RT: 6.89 min Scan# 1275

Delta R.T. -0.02 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Instrument :

MSVOA\_L

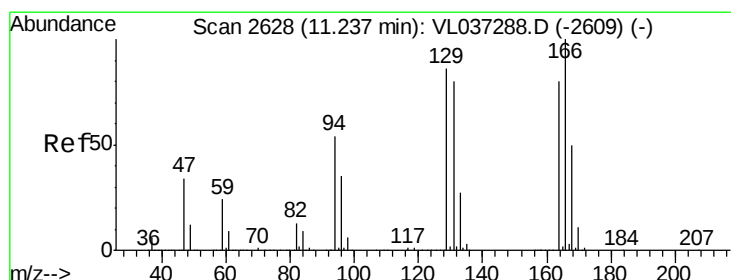
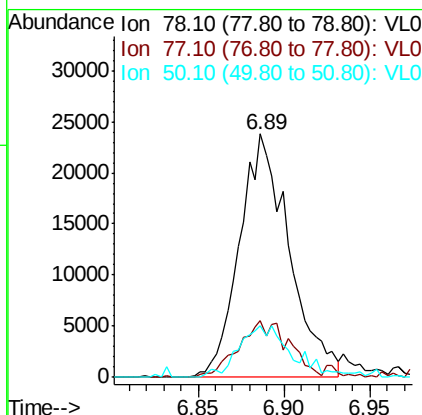
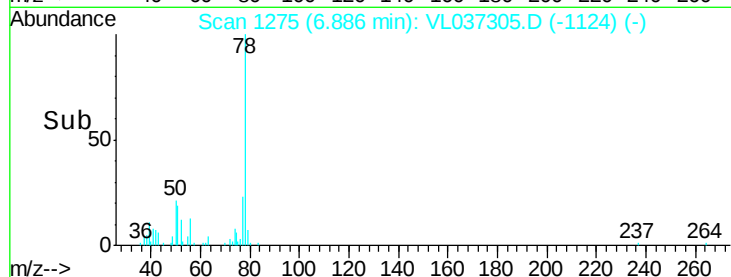
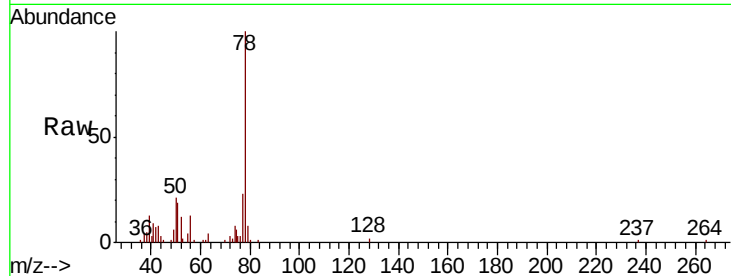
ClientSampleId :

IA-BEDROOM-4

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 78    | Resp: | 47785 |
| Ion      | Ratio | Lower | Upper |
| 78       | 100   |       |       |
| 77       | 23.2  | 18.3  | 27.5  |
| 50       | 21.4  | 15.5  | 23.3  |

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#52

Tetrachloroethene

Concen: 0.404 ppbv m

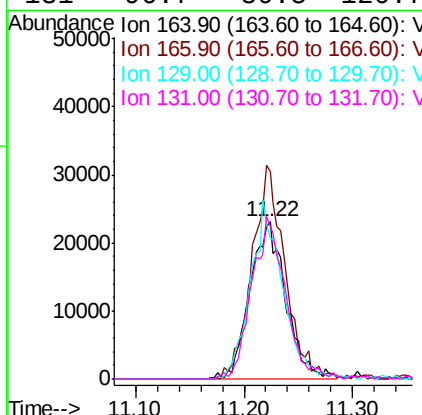
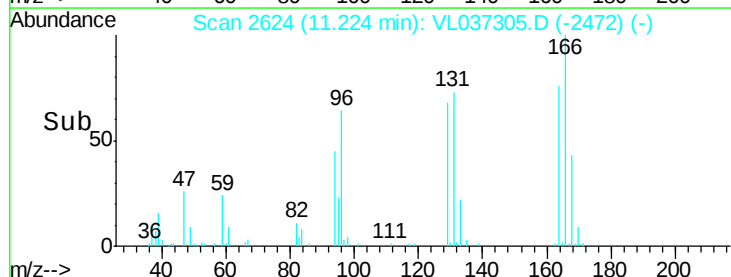
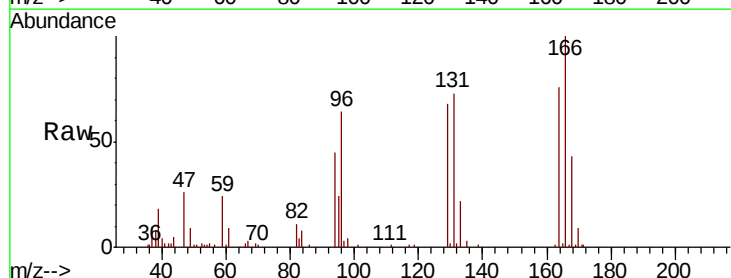
RT: 11.22 min Scan# 2624

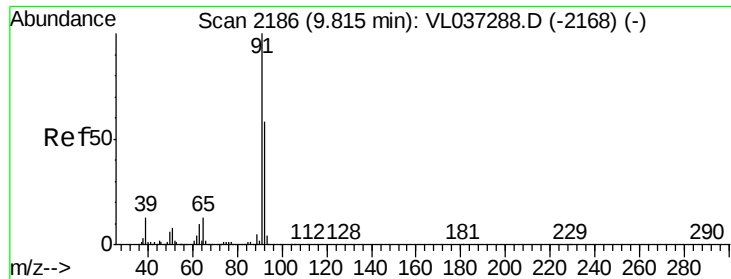
Delta R.T. -0.01 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 53040 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 166      | 132.0 | 100.4 | 150.6 |
| 129      | 89.4  | 86.2  | 129.4 |
| 131      | 96.7  | 80.5  | 120.7 |





#53

Toluene

Concen: 1.619 ppbv

RT: 9.80 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Instrument :

MSVOA\_L

ClientSampleId :

IA-BEDROOM-4

Tot Ion: 91 Resp: 566205

Ion Ratio Lower Upper

91 100

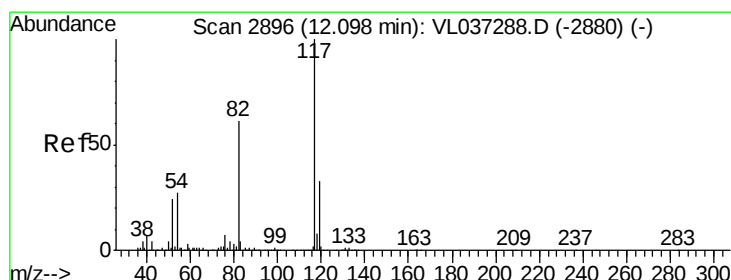
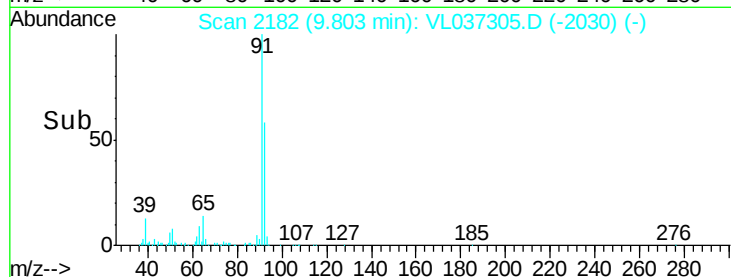
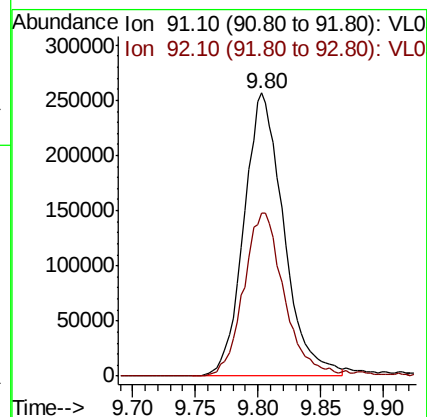
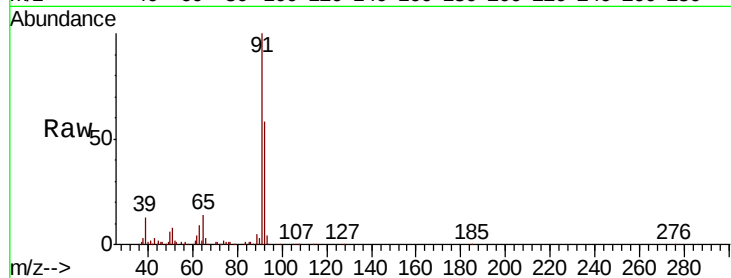
92 60.3 48.2 72.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.02 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

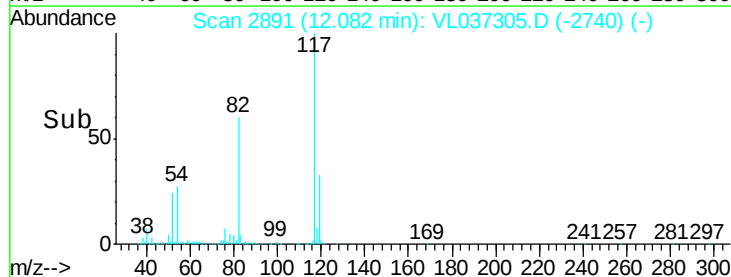
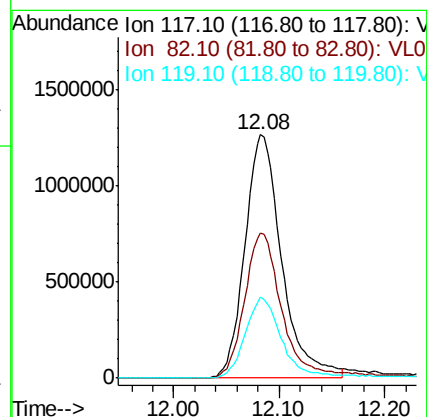
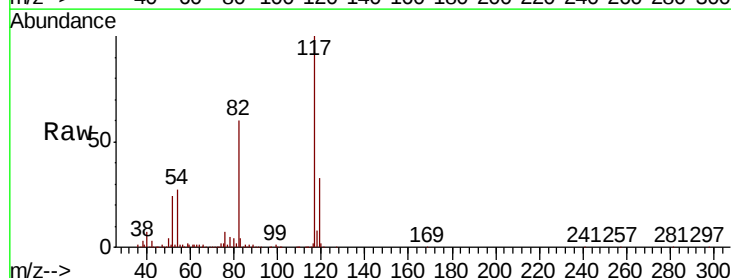
Tgt Ion: 117 Resp: 3086118

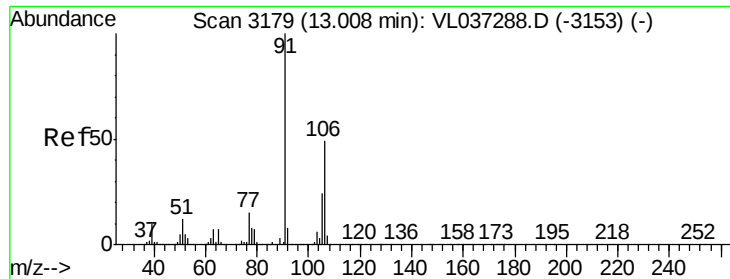
Ion Ratio Lower Upper

117 100

82 63.4 47.2 70.8

119 34.3 45.8 68.8#





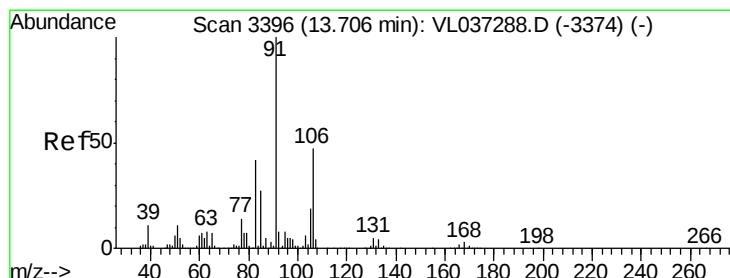
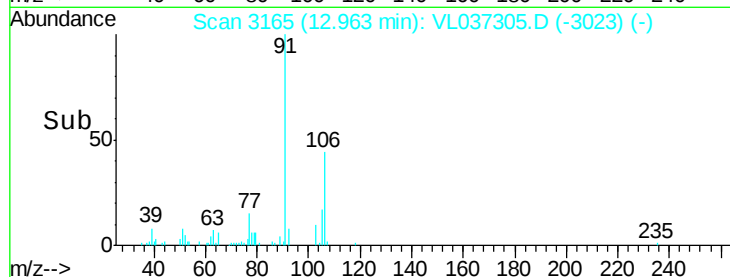
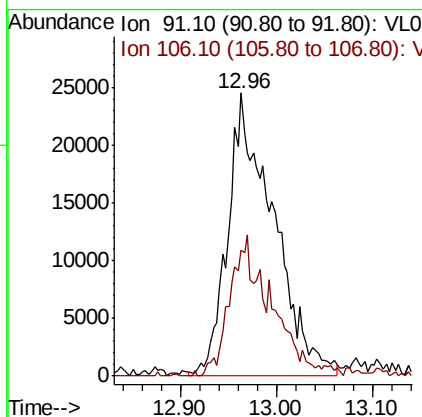
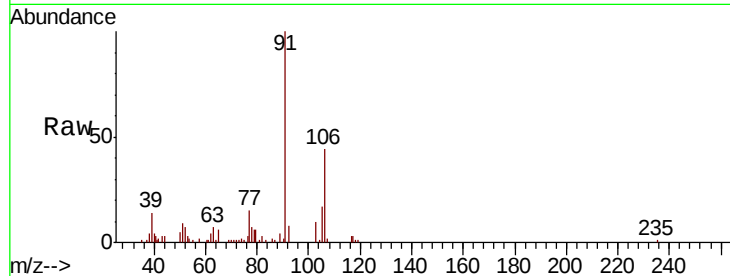
#59  
m/p-Xylene  
Concen: 0.221 ppbv m  
RT: 12.96 min Scan# 3165  
Delta R.T. -0.04 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-BEDROOM-4

Tot Ion: 91 Resp: 80551  
Ion Ratio Lower Upper  
91 100  
106 0.0 37.3 55.9#

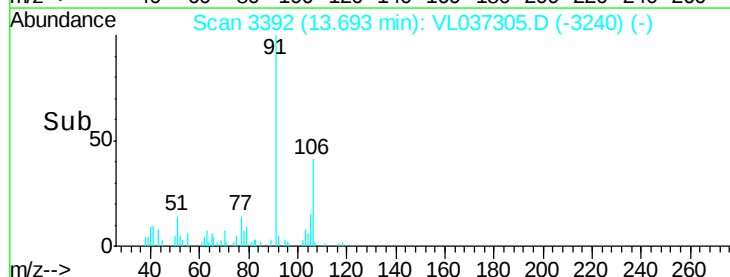
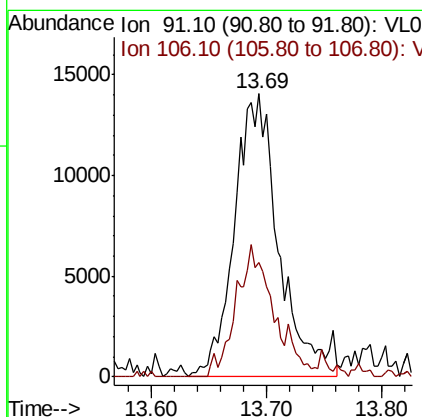
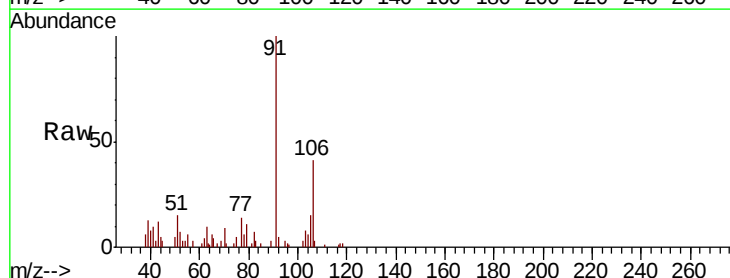
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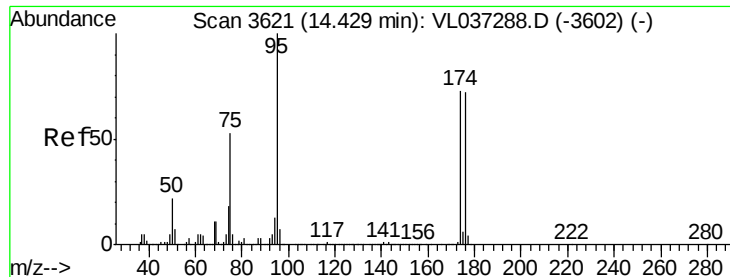
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#60  
o-Xylene  
Concen: 0.108 ppbv m  
RT: 13.69 min Scan# 3392  
Delta R.T. -0.01 min  
Lab File: VL037305.D  
Acq: 31 Jul 2021 5:59

Tgt Ion: 91 Resp: 37805  
Ion Ratio Lower Upper  
91 100  
106 39.4 23.4 70.0





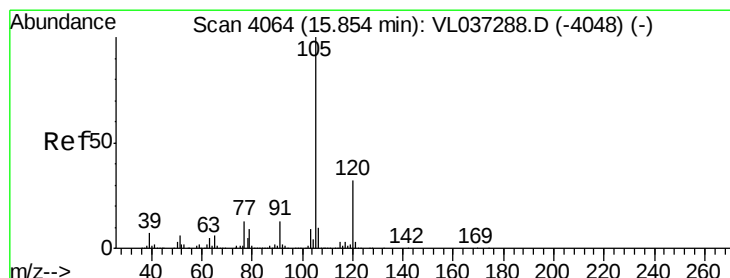
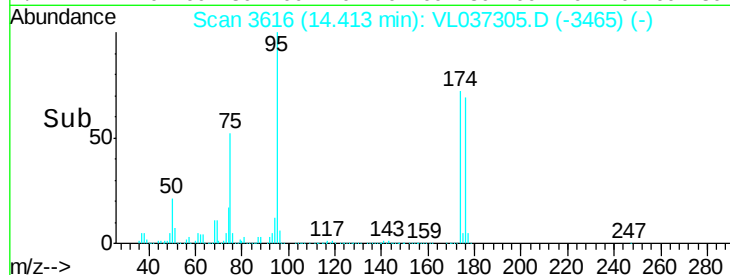
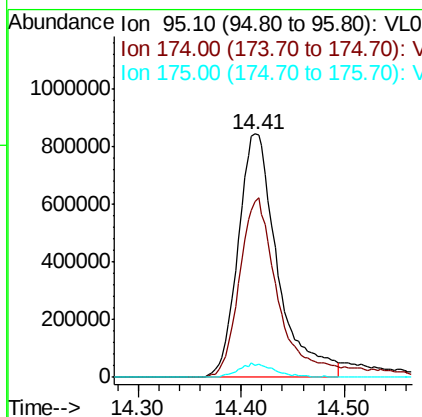
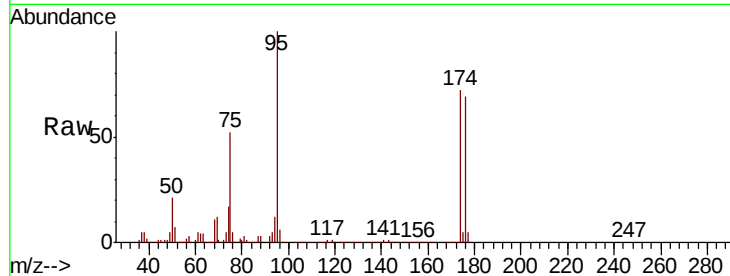
#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.028 ppbv  
 RT: 14.41 min Scan# 3616  
 Delta R.T. -0.02 min  
 Lab File: VL037305.D  
 Acq: 31 Jul 2021 5:59

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-BEDROOM-4

Tot Ion: 95 Resp: 2251564  
 Ion Ratio Lower Upper  
 95 100  
 174 77.9 59.8 89.6  
 175 5.5 4.5 6.7

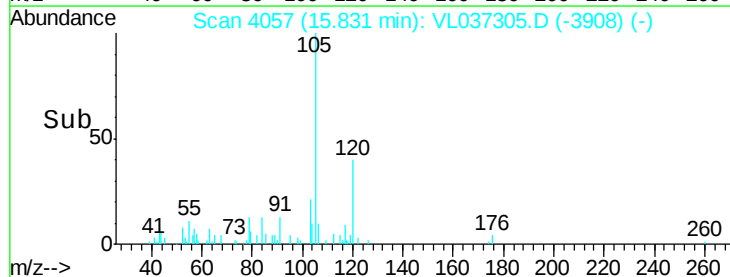
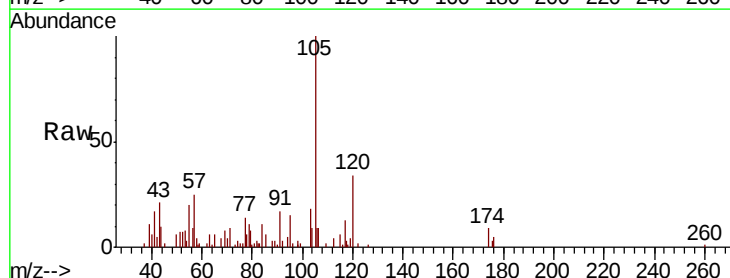
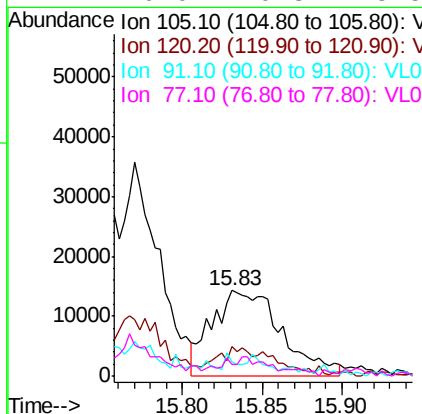
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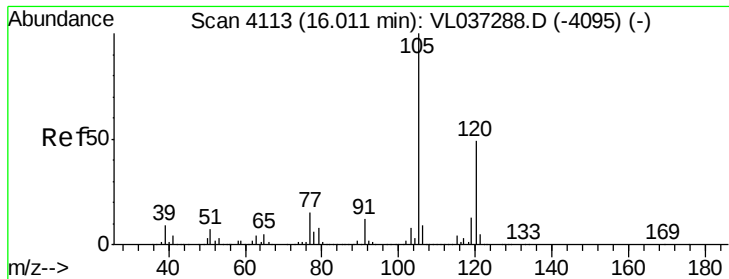
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#72  
 4-Ethyltoluene  
 Concen: 0.105 ppbv m  
 RT: 15.83 min Scan# 4057  
 Delta R.T. -0.02 min  
 Lab File: VL037305.D  
 Acq: 31 Jul 2021 5:59

Tgt Ion: 105 Resp: 43286  
 Ion Ratio Lower Upper  
 105 100  
 120 29.5 24.3 36.5  
 91 0.0 9.6 14.4#  
 77 0.0 10.3 15.5#





#73

1,3,5-Trimethylbenzene

Concen: 0.158 ppbv m

RT: 16.00 min Scan# 4109

Delta R.T. -0.01 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Instrument :

MSVOA\_L

ClientSampleId :

IA-BEDROOM-4

Tot Ion:105 Resp: 60507

Ion Ratio Lower Upper

105 100

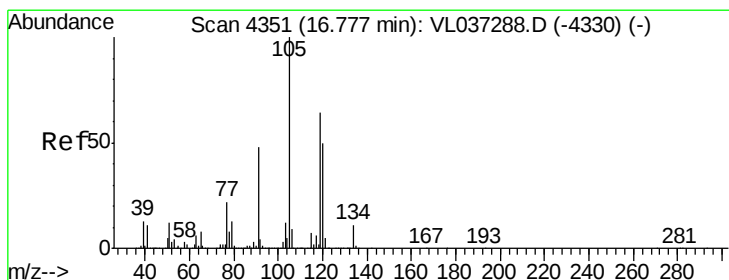
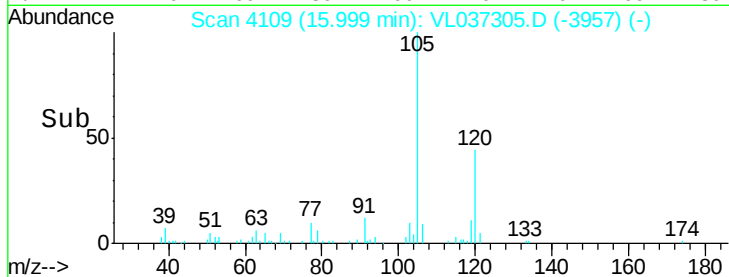
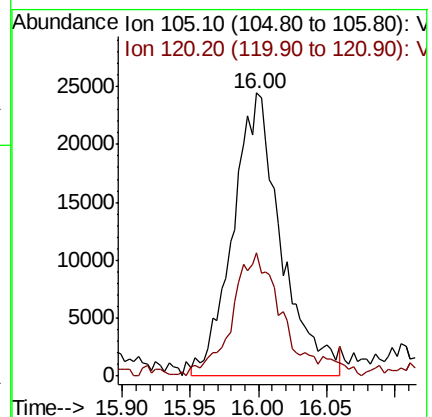
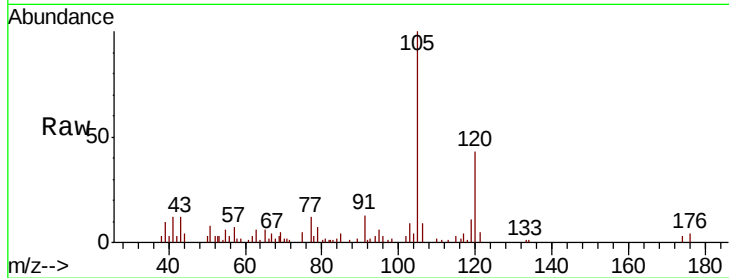
120 43.4 39.0 58.6

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#74

1,2,4-Trimethylbenzene

Concen: 0.340 ppbv

RT: 16.76 min Scan# 4346

Delta R.T. -0.02 min

Lab File: VL037305.D

Acq: 31 Jul 2021 5:59

Tgt Ion:105 Resp: 143204

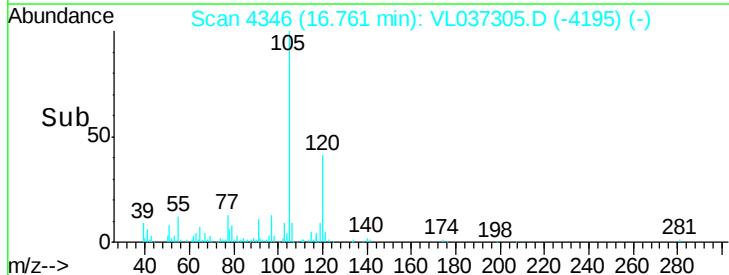
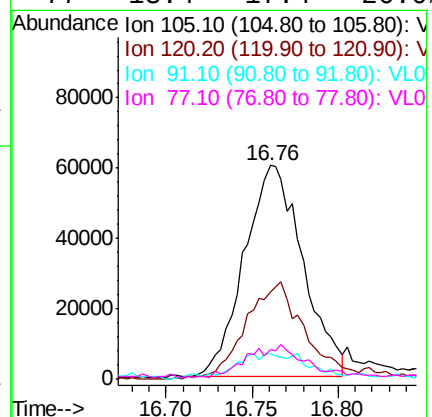
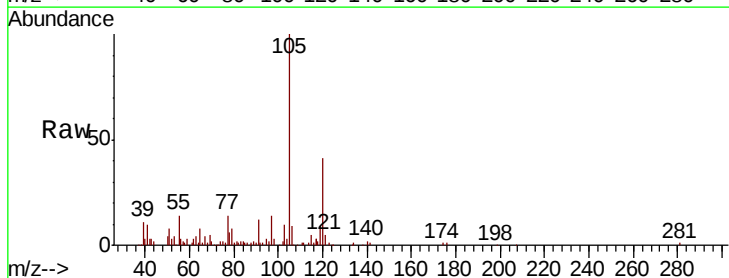
Ion Ratio Lower Upper

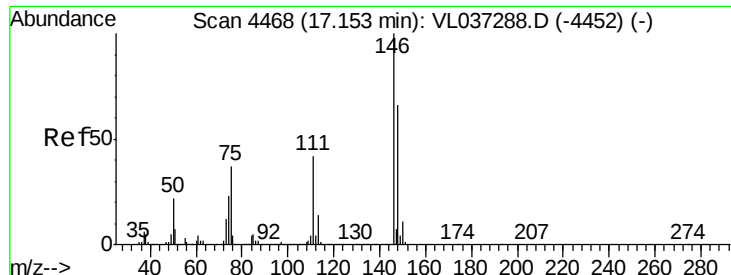
105 100

120 40.0 40.2 60.4#

91 10.1 39.0 58.6#

77 13.4 17.4 26.0#





#76  
 1,4-Dichlorobenzene  
 Concen: 0.228 ppbv m  
 RT: 17.13 min Scan# 4461  
 Delta R.T. -0.02 min  
 Lab File: VL037305.D  
 Acq: 31 Jul 2021 5:59

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-BEDROOM-4

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 146     | 100   |            |       |
| 111     | 50.5  | 21.2       | 63.6  |
| 148     | 0.0   | 32.9       | 98.6  |

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