

Data Path : Y:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\  
 Data File : VL037460.D  
 Acq On : 16 Aug 2021 13:37  
 Operator : SY/AP  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Manual Integrations  
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 8/19/2021 5:59:14 PM

Quant Time: Aug 16 14:30:15 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Aug 16 2021  
 QLast Update : Mon Aug 16 11:33:04 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.65  | 49   | 1516557  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.16  | 114  | 4355246  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.07 | 117  | 3718874  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.39  | 95    | 2661193  | 9.98     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.80% |

| Target Compounds              | R.T.  | QIon | Response | Conc  | Units | Ovalue |
|-------------------------------|-------|------|----------|-------|-------|--------|
| 5) Vinyl Chloride             | 3.26  | 62   | 3813m    | 0.032 | ppbv  |        |
| 32) 1,1,1-Trichloroethane     | 6.50  | 97   | 9641m    | 0.034 | ppbv  |        |
| 35) Carbon Tetrachloride      | 7.01  | 117  | 9030m    | 0.034 | ppbv  |        |
| 38) Trichloroethene           | 7.83  | 130  | 5128m    | 0.032 | ppbv  |        |
| 52) Tetrachloroethene         | 11.19 | 164  | 5864m    | 0.038 | ppbv  |        |
| 63) 1,1,2,2-Tetrachloroethane | 13.67 | 83   | 10230m   | 0.033 | ppbv  |        |

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

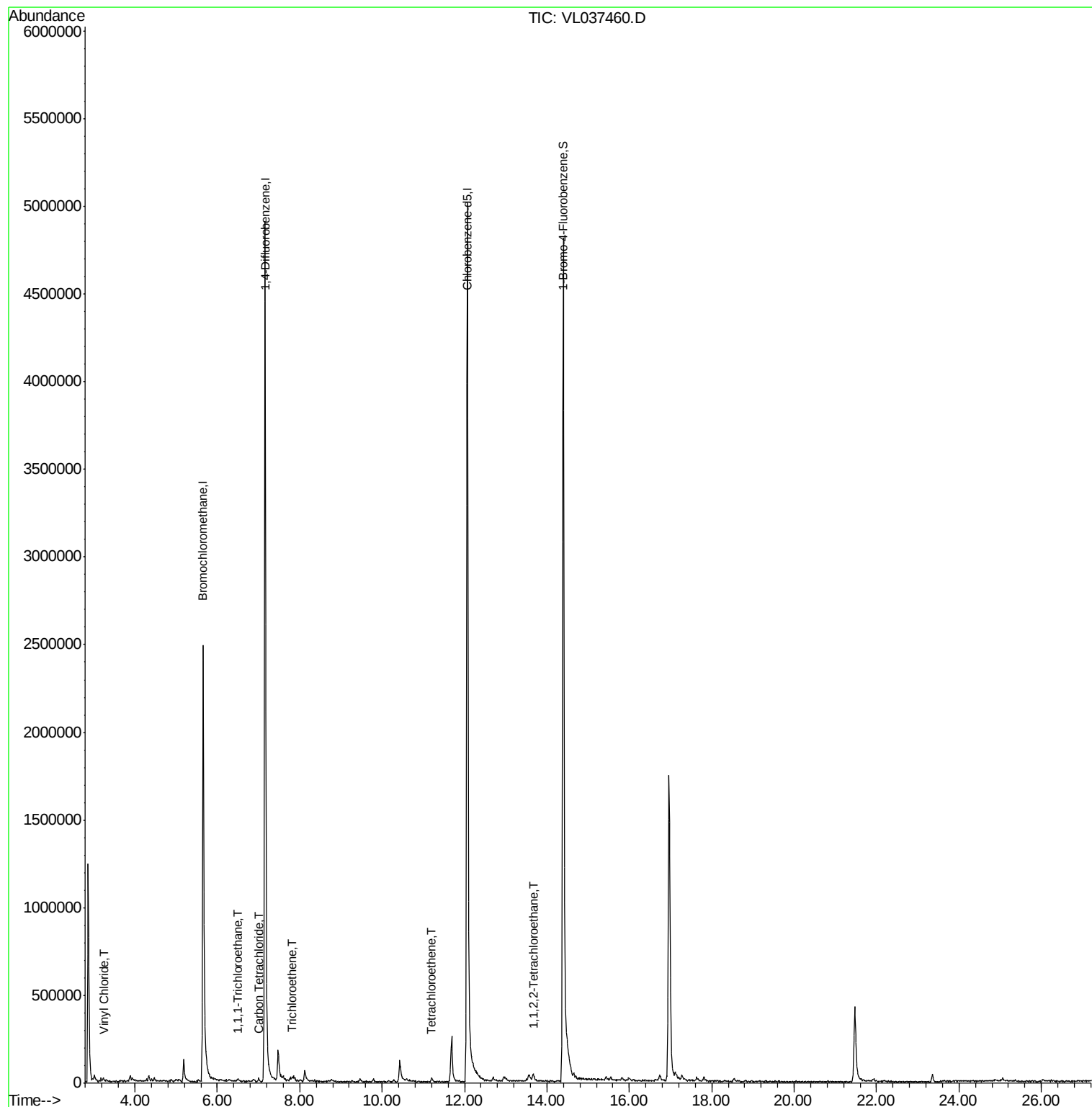
Data Path : Y:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081621\  
Data File : VL037460.D  
Acq On : 16 Aug 2021 13:37  
Operator : SY/AP  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

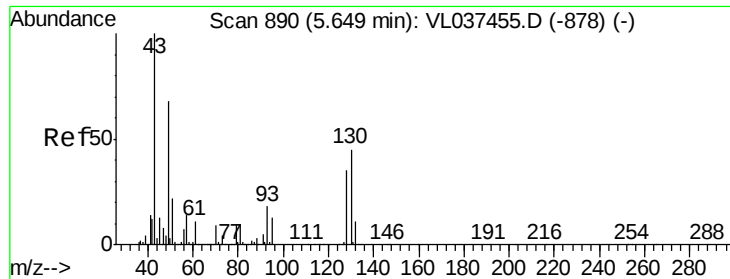
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Manual Integrations  
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Quant Time: Aug 16 14:30:15 2021  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Aug  
QLast Update : Mon Aug 16 11:33:04 2021  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. 0.01 min

Lab File: VL037460.D

Acq: 16 Aug 2021 13:37

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC0.03

Tot Ion: 49 Resp: 1516557

Ion Ratio Lower Upper

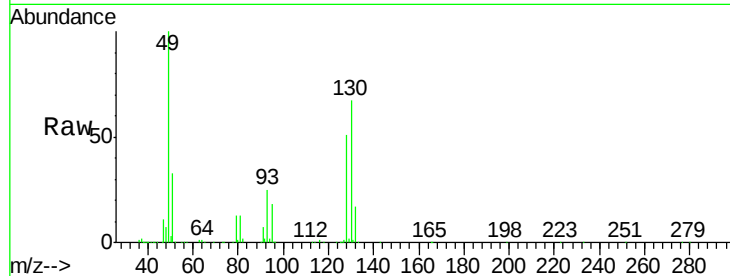
49 100

128 53.6 27.5 82.4

130 68.7 34.0 101.8

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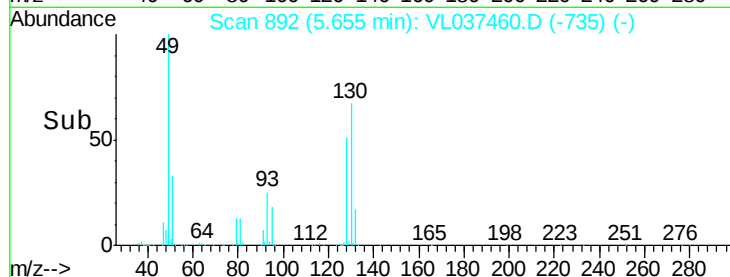
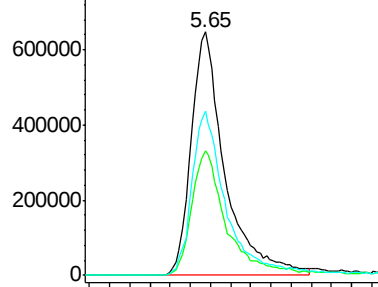
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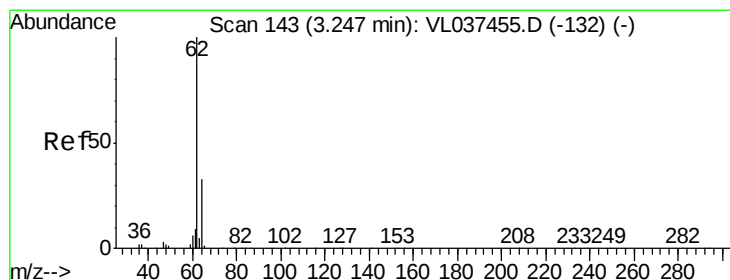
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



Time-->



#5

Vinyl Chloride

Concen: 0.032 ppbv m

RT: 3.26 min Scan# 146

Delta R.T. 0.01 min

Lab File: VL037460.D

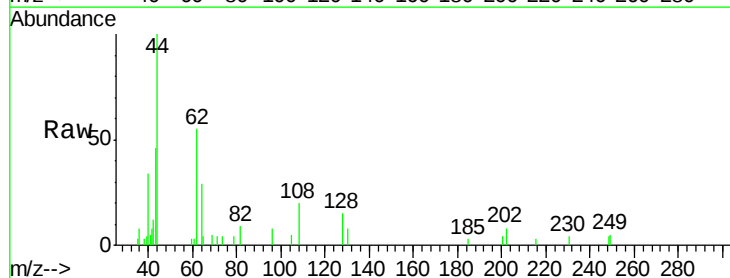
Acq: 16 Aug 2021 13:37

Tgt Ion: 62 Resp: 3813

Ion Ratio Lower Upper

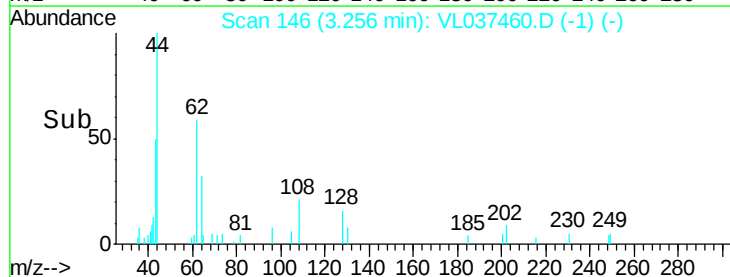
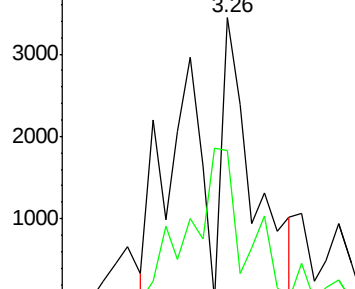
62 100

64 53.1 26.5 39.7#

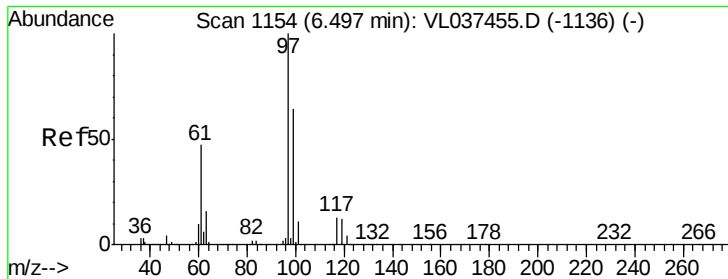


Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



Time-->



#32

1,1,1-Trichloroethane

Concen: 0.034 ppbv m

RT: 6.50 min Scan# 1154

Delta R.T. -0.00 min

Lab File: VL037460.D

Acq: 16 Aug 2021 13:37

Instrument :

MSVOA\_L

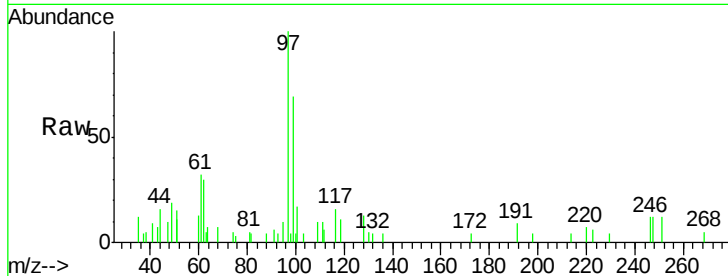
ClientSampleId :

VSTDIC0.03

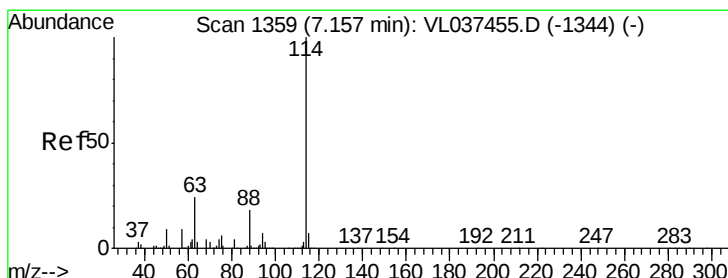
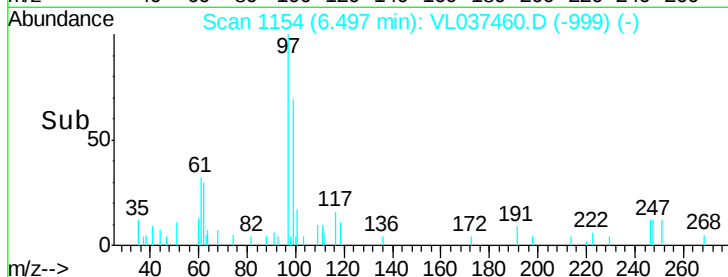
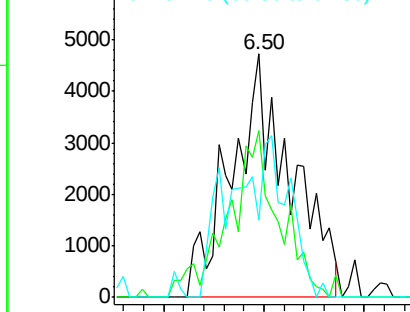
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 9641  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 59.2  | 51.8  | 77.6  |
| 61       | 65.1  | 39.6  | 59.4# |

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Abundance Ion 97.00 (96.70 to 97.70): VL0  
Ion 99.00 (98.70 to 99.70): VL0  
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

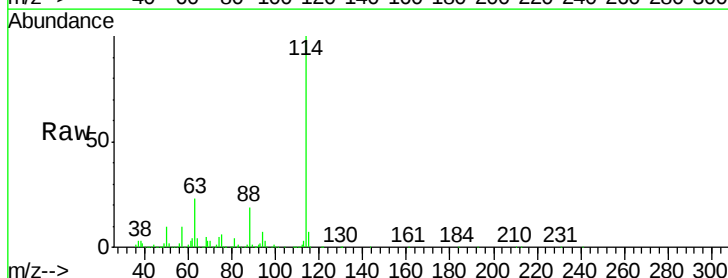
RT: 7.16 min Scan# 1360

Delta R.T. 0.00 min

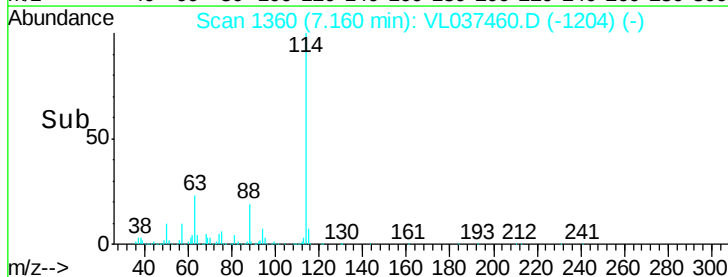
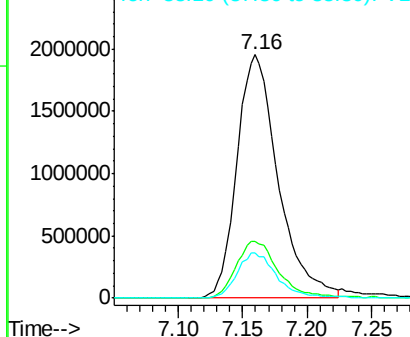
Lab File: VL037460.D

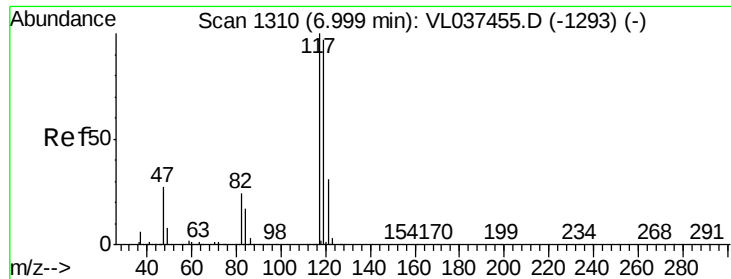
Acq: 16 Aug 2021 13:37

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 114   | Resp: | 4355246 |
| Ion      | Ratio | Lower | Upper   |
| 114      | 100   |       |         |
| 63       | 24.5  | 19.3  | 28.9    |
| 88       | 18.3  | 14.2  | 21.4    |



Abundance Ion 114.10 (113.80 to 114.80): V  
Ion 63.10 (62.80 to 63.80): VL0  
Ion 88.10 (87.80 to 88.80): VL0





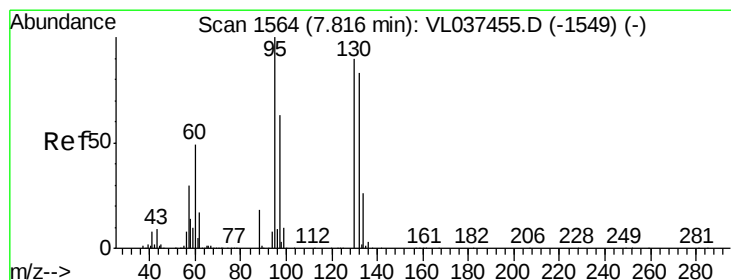
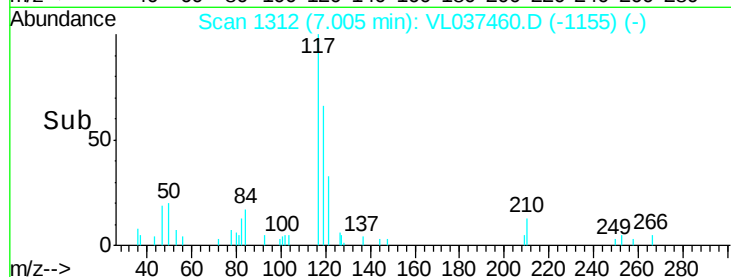
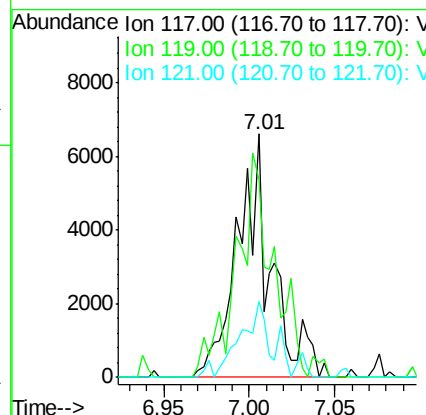
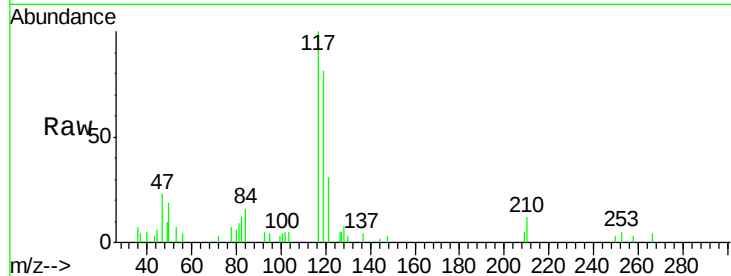
#35  
Carbon Tetrachloride  
Concen: 0.034 ppbv m  
RT: 7.01 min Scan# 1312  
Delta R.T. 0.01 min  
Lab File: VL037460.D  
Acq: 16 Aug 2021 13:37

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 119     | 81.0  | 77.3  | 115.9 |
| 121     | 31.4  | 25.2  | 37.8  |

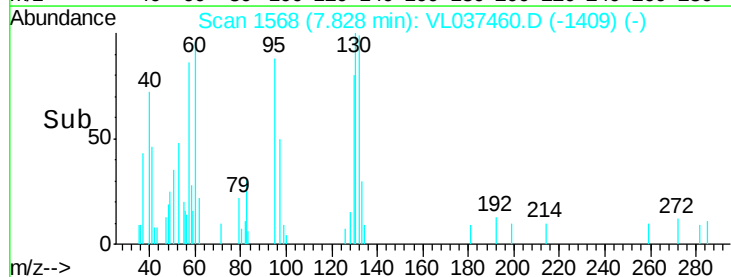
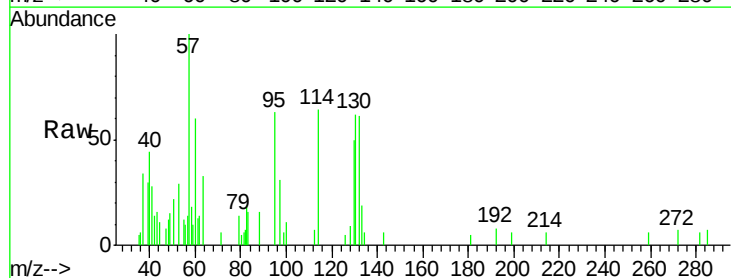
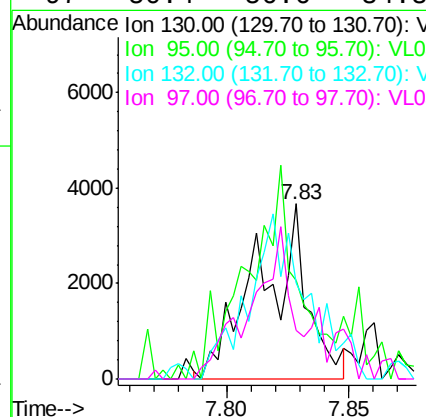
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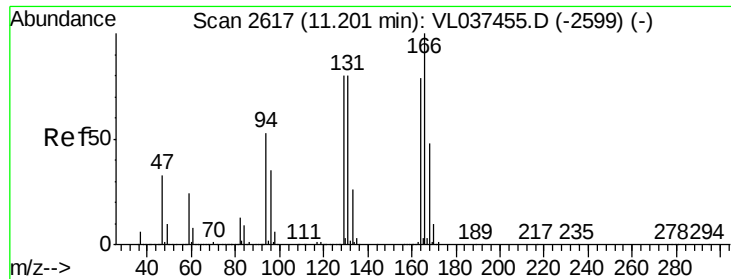
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#38  
Trichloroethene  
Concen: 0.032 ppbv m  
RT: 7.83 min Scan# 1568  
Delta R.T. 0.01 min  
Lab File: VL037460.D  
Acq: 16 Aug 2021 13:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 130     | 100   |       |       |
| 95      | 101.3 | 89.2  | 133.8 |
| 132     | 99.1  | 74.0  | 111.0 |
| 97      | 50.4  | 56.6  | 84.8# |





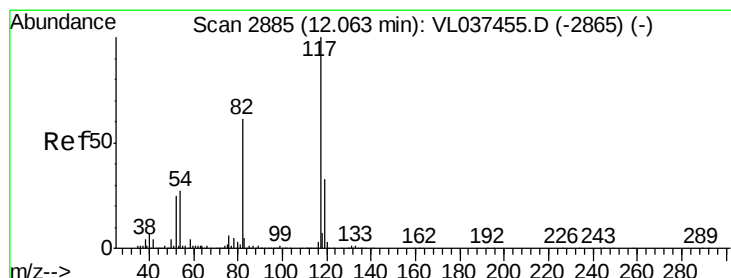
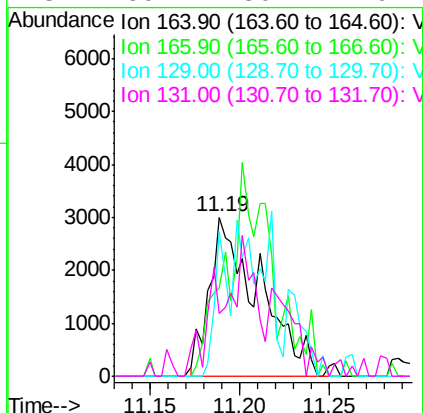
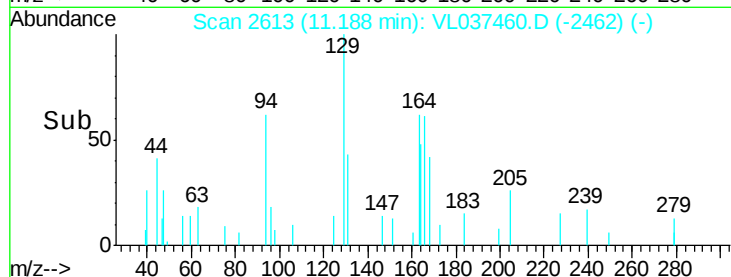
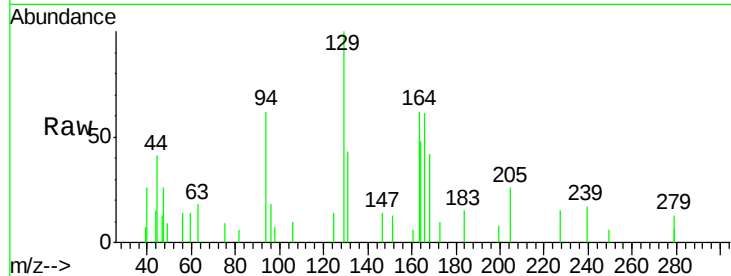
#52  
Tetrachloroethene  
Concen: 0.038 ppbv m  
RT: 11.19 min Scan# 2613  
Delta R.T. -0.01 min  
Lab File: VL037460.D  
Acq: 16 Aug 2021 13:37

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC0.03

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 164     | 100   |       |        |
| 166     | 97.8  | 100.7 | 151.1# |
| 129     | 160.6 | 80.9  | 121.3# |
| 131     | 69.2  | 80.2  | 120.4# |

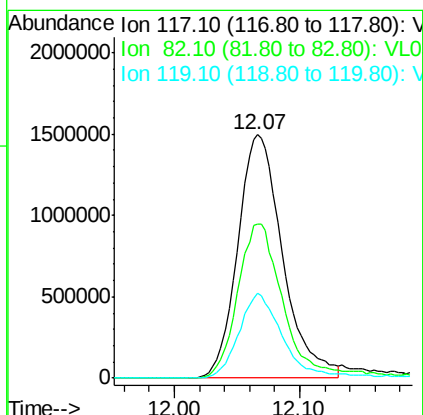
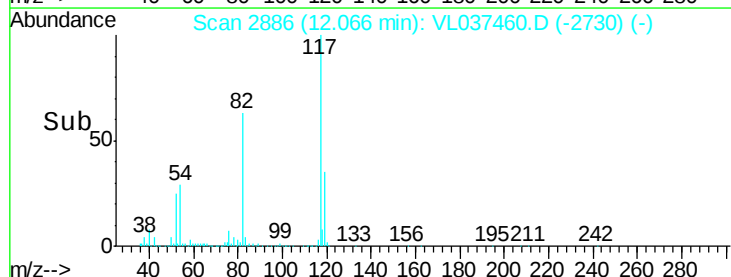
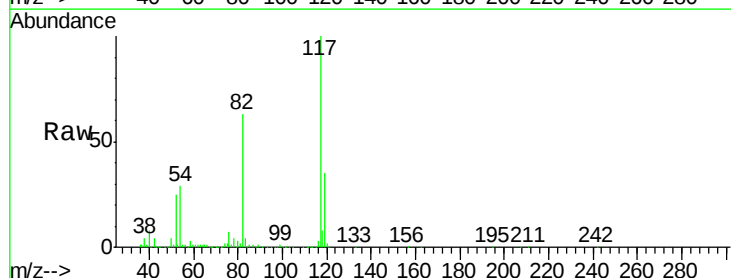
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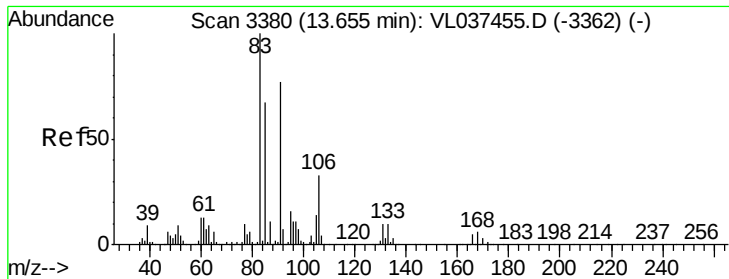
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#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.07 min Scan# 2886  
Delta R.T. 0.00 min  
Lab File: VL037460.D  
Acq: 16 Aug 2021 13:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 67.3  | 52.9  | 79.3  |
| 119     | 35.6  | 24.8  | 37.2  |





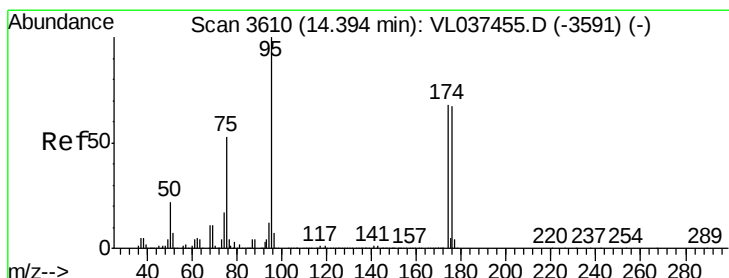
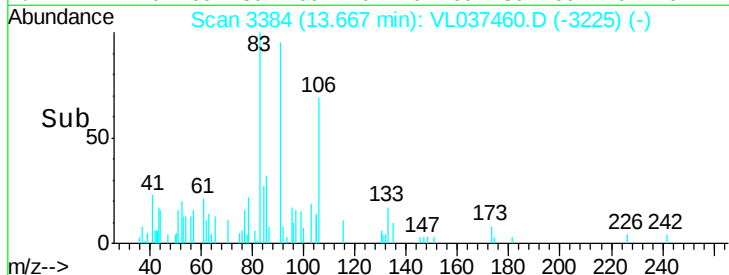
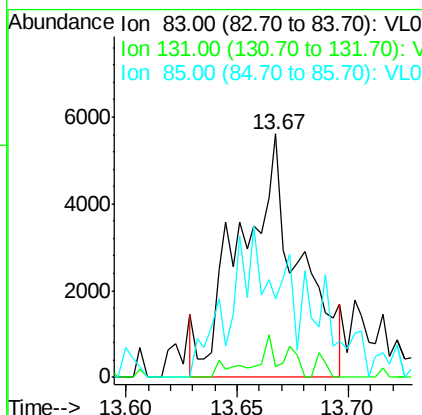
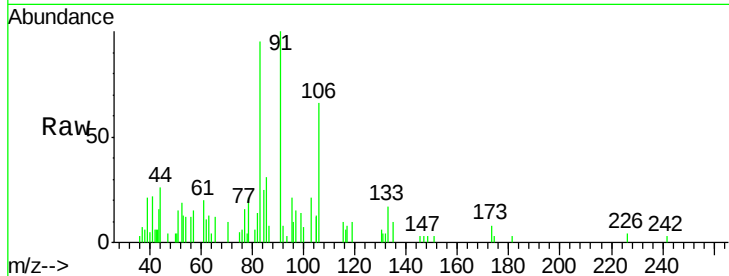
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 0.033 ppbv m  
 RT: 13.67 min Scan# 3384  
 Delta R.T. 0.01 min  
 Lab File: VL037460.D  
 Acq: 16 Aug 2021 13:37

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC0.03

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 83      | 100   | 10230 |       |       |
| 131     | 10.4  | 5.0   | 15.0  |       |
| 85      | 78.2  | 33.8  | 101.3 |       |

Manual Integrations  
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#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.976 ppbv  
 RT: 14.39 min Scan# 3610  
 Delta R.T. -0.00 min  
 Lab File: VL037460.D  
 Acq: 16 Aug 2021 13:37

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 95      | 100   | 2661193 |       |       |
| 174     | 76.2  | 59.6    | 89.4  |       |
| 175     | 5.6   | 4.6     | 7.0   |       |

