

Data Path : Z:\voasrv\HPCHEM1\MSVOA L\Data\VL040522\  
 Data File : VL038817.D  
 Acq On : 5 Apr 2022 19:03  
 Operator : SY/AP  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/07/2022  
 Supervised By :Mahesh Dadoda 04/07/2022

Quant Time: Apr 05 20:03:26 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522A  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
 QLast Update : Tue Apr 05 17:22:42 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1473489  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 3924590  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.08 | 117  | 3426737  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.40  | 95    | 2634724  | 10.03    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.30% |

| Target Compounds              |       |     |       |       | Ovalue |
|-------------------------------|-------|-----|-------|-------|--------|
| 5) Vinyl Chloride             | 3.27  | 62  | 2536m | 0.029 | ppbv   |
| 32) 1,1,1-Trichloroethane     | 6.52  | 97  | 6450m | 0.029 | ppbv   |
| 35) Carbon Tetrachloride      | 7.01  | 117 | 7225m | 0.032 | ppbv   |
| 38) Trichloroethene           | 7.83  | 130 | 5059m | 0.040 | ppbv   |
| 52) Tetrachloroethene         | 11.21 | 164 | 3955m | 0.036 | ppbv   |
| 63) 1,1,2,2-Tetrachloroethane | 13.68 | 83  | 8038m | 0.031 | ppbv   |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA L\Data\VL040522\  
Data File : VL038817.D  
Acq On : 5 Apr 2022 19:03  
Operator : SY/AP  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Manual Integrations  
APPROVED

Quant Time: Apr 05 20:03:26 2022

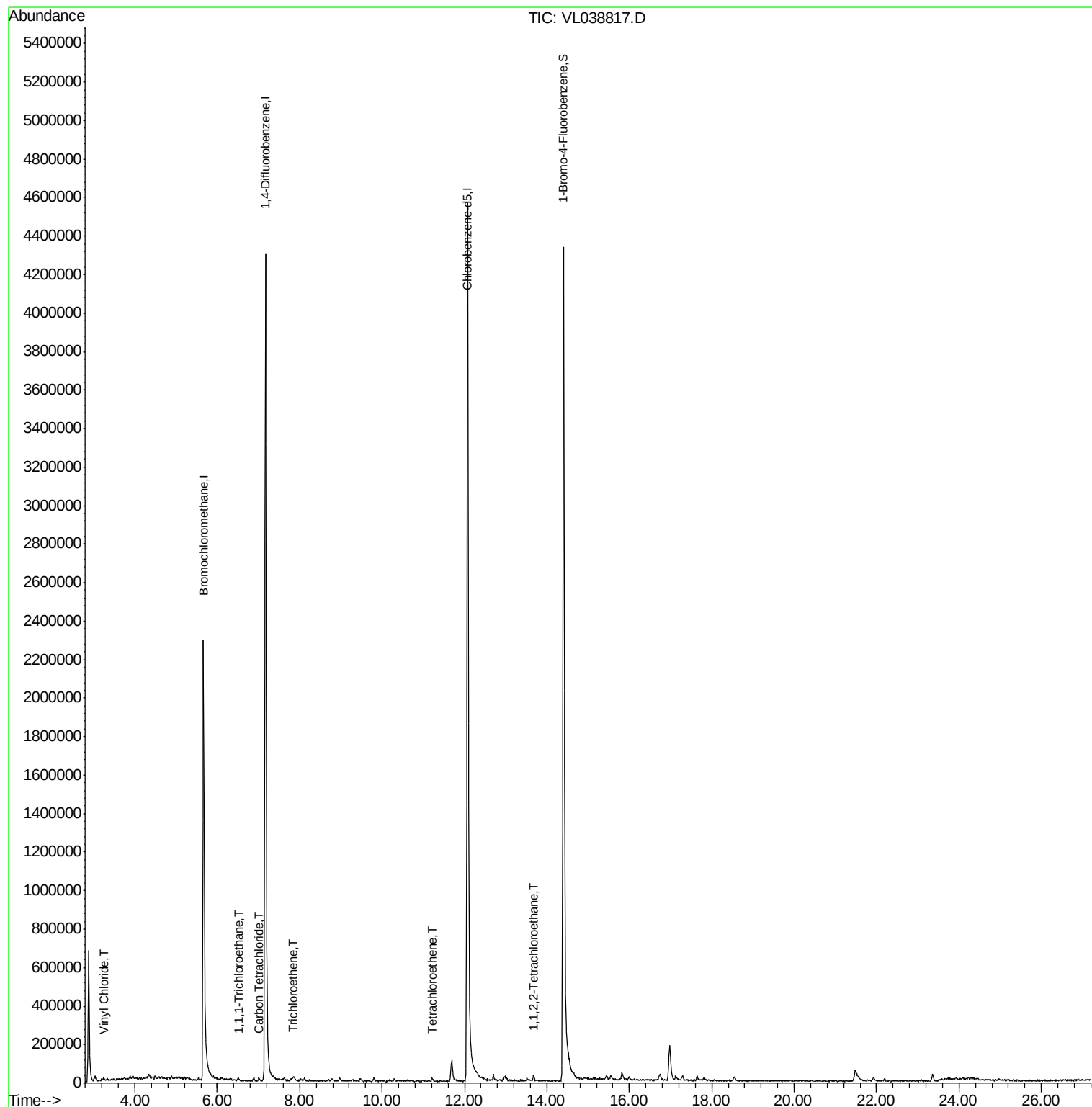
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522

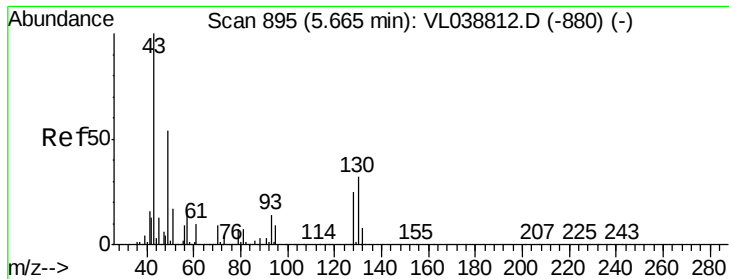
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:

QLast Update : Tue Apr 05 17:22:42 2022

Response via : Initial Calibration

Reviewed By :Semsettin Yesilyurt 04/07/2022  
Supervised By :Mahesh Dadoda 04/07/2022





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 5 Apr 2022 19:03

Tot Ion:

Ion Ratio

49 100

128 48.

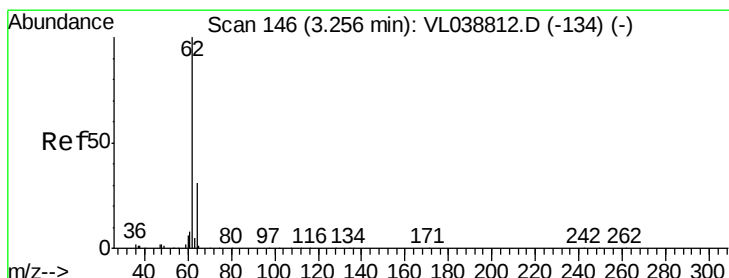
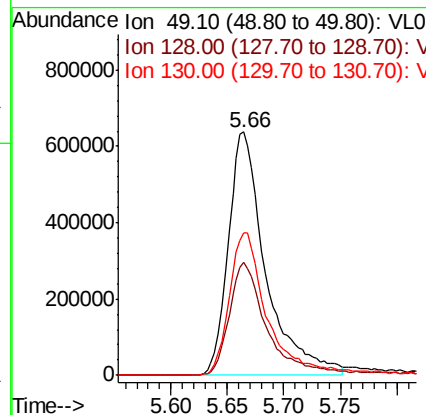
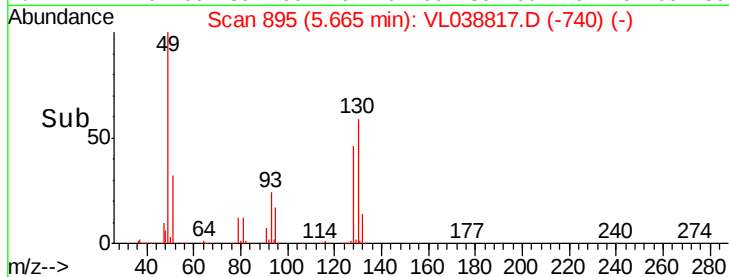
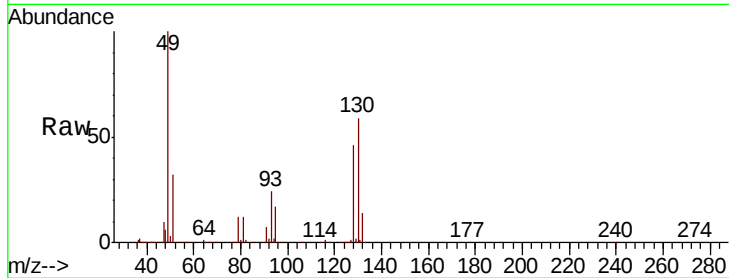
130 60.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/07/2022

Supervised By :Mahesh Dadoda 04/07/2022



#5

Vinyl Chloride

Concen: 0.029 ppbv m

RT: 3.27 min Scan# 149

Delta R.T. 0.01 min

Lab File: VL038817.D

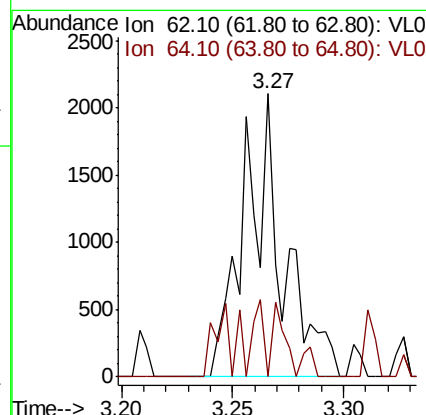
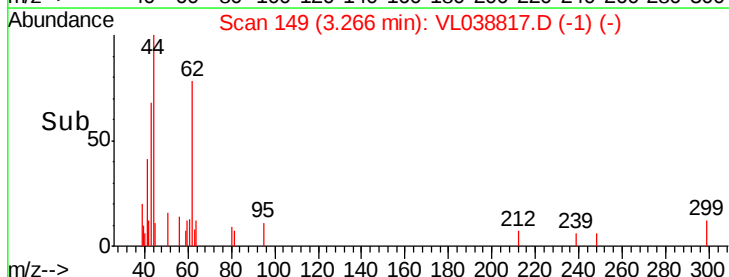
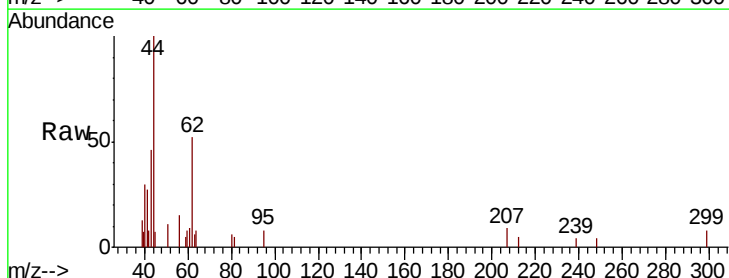
Acq: 5 Apr 2022 19:03

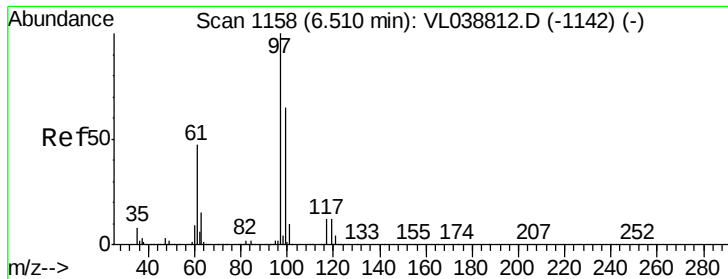
Tgt Ion: 62 Resp: 2536

Ion Ratio Lower Upper

62 100

64 0.0 24.6 37.0#



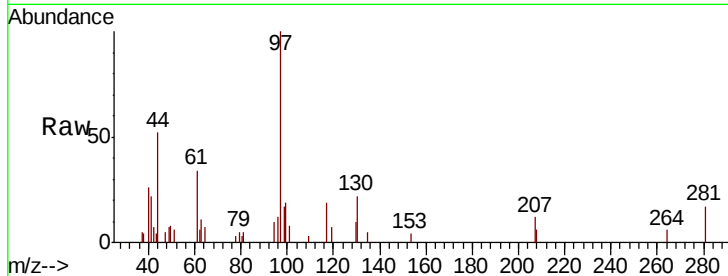


#32  
 1,1,1-Trichloroethane  
 Concen: 0.029 ppbv m  
 RT: 6.52 Instrument : MSVOA\_1  
 Delta R.T. :  
 Lab File: ClientSampleId :  
 Acq: 5 Apr 2022 19:03

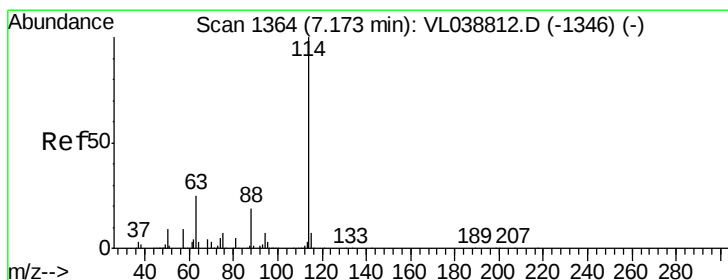
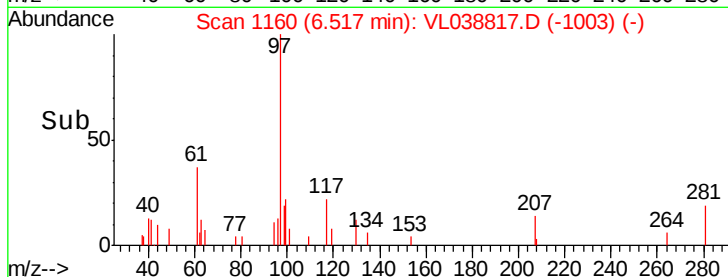
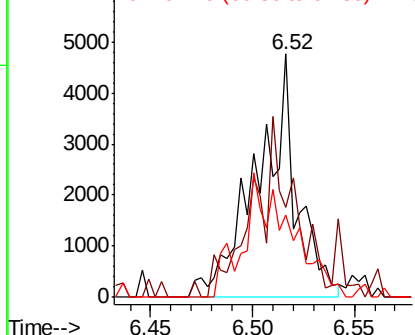
Tot Ion:  
 Ion Ratio  
 97 100  
 99 84.  
 61 61.

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/07/2022  
 Supervised By :Mahesh Dadoda 04/07/2022

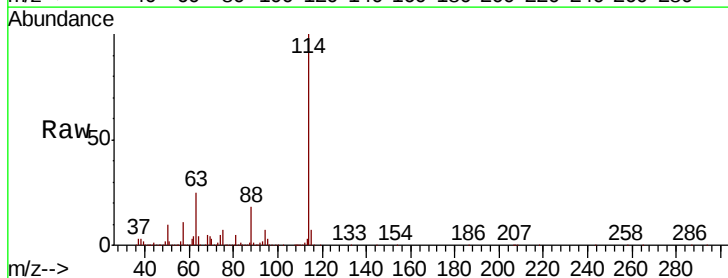


Abundance Ion 97.00 (96.70 to 97.70): VL0  
 Ion 99.00 (98.70 to 99.70): VL0  
 Ion 61.10 (60.80 to 61.80): VL0

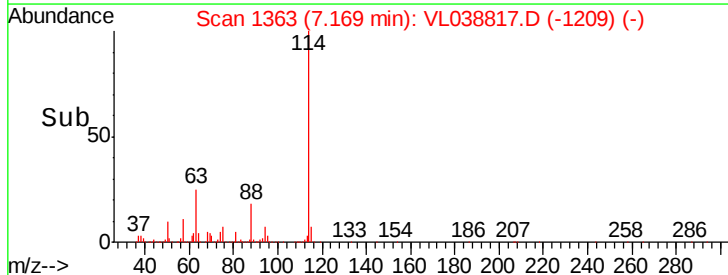
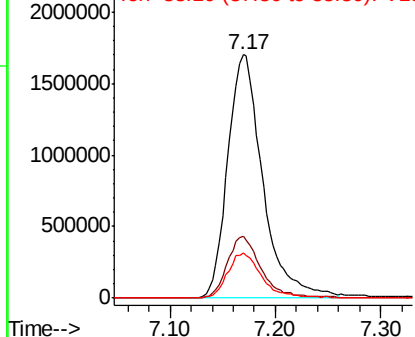


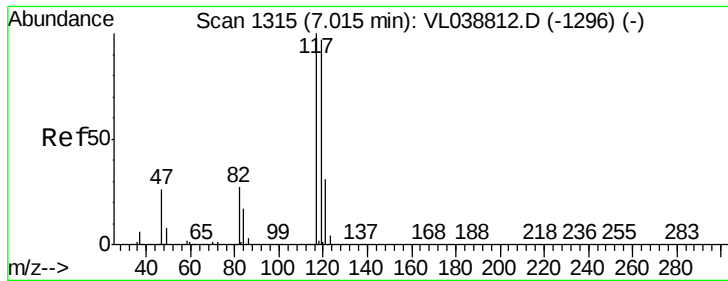
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.17 min Scan# 1363  
 Delta R.T. -0.00 min  
 Lab File: VL038817.D  
 Acq: 5 Apr 2022 19:03

Tgt Ion:114 Resp: 3924590  
 Ion Ratio Lower Upper  
 114 100  
 63 25.0 19.8 29.8  
 88 18.5 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: 0.032 ppbv m

RT: 7.01 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 5 Apr 2022 19:03 VSTDIC0.03

Tot Ion:1

Ion Rati

117 100

119 58.

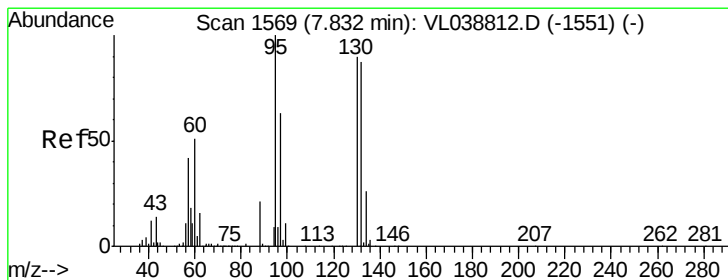
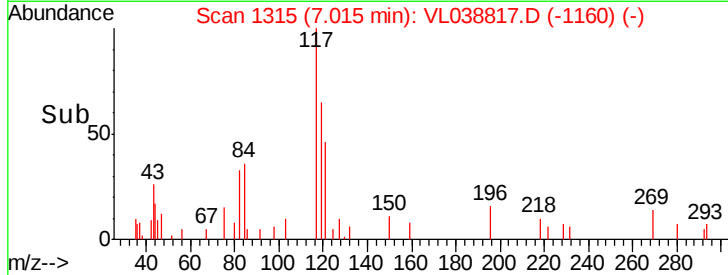
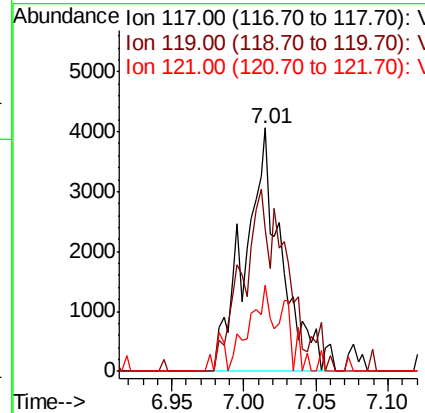
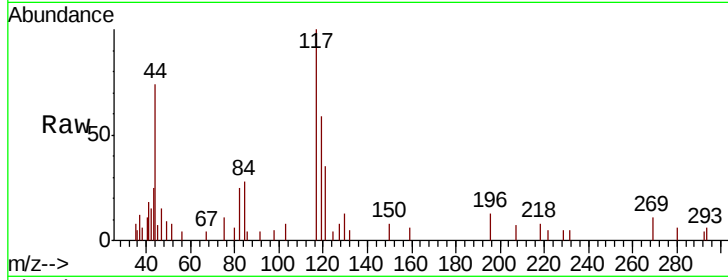
121 35.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/07/2022

Supervised By :Mahesh Dadoda 04/07/2022



#38

Trichloroethene

Concen: 0.040 ppbv m

RT: 7.83 min Scan# 1570

Delta R.T. 0.00 min

Lab File: VL038817.D

Acq: 5 Apr 2022 19:03

Tgt Ion:130 Resp: 5059

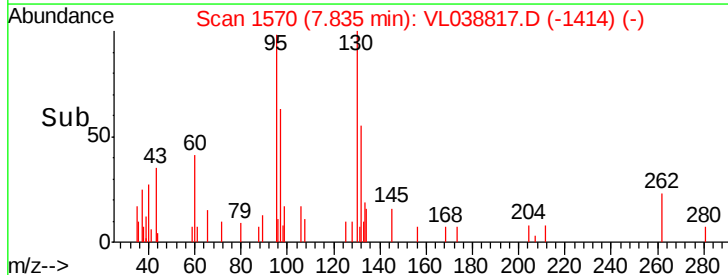
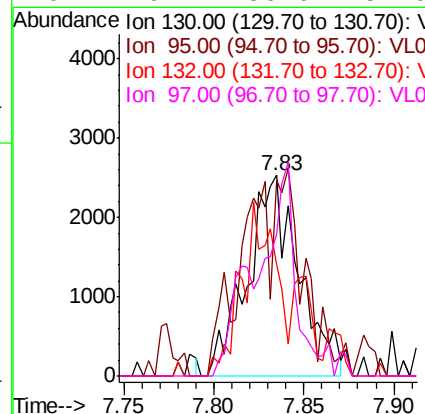
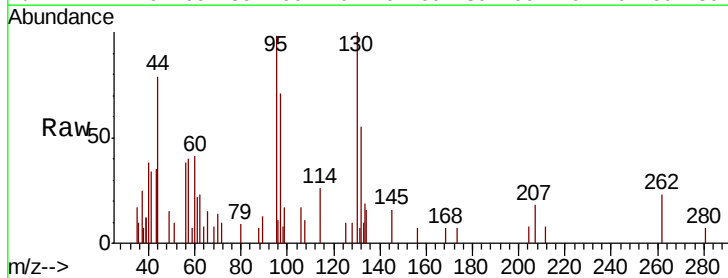
Ion Ratio Lower Upper

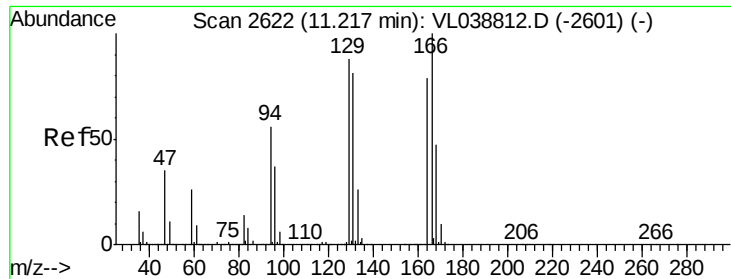
130 100

95 97.8 89.4 134.0

132 55.3 77.7 116.5#

97 70.7 56.0 84.0





#52

Tetrachloroethene

Concen: 0.036 ppbv m

RT: 11.21

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 5 Apr 2022 19:03

Tot Ion:1

Ion Ratio

164 100

166 105.

129 55.

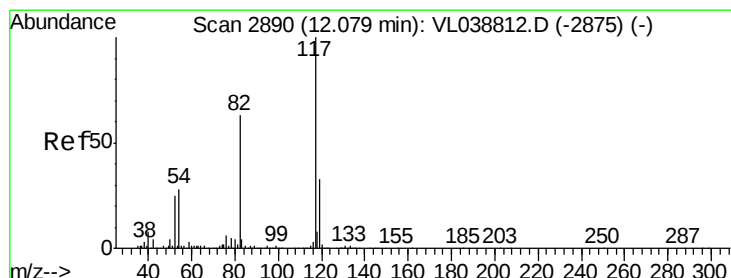
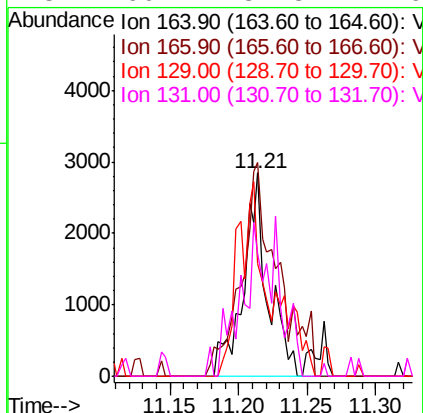
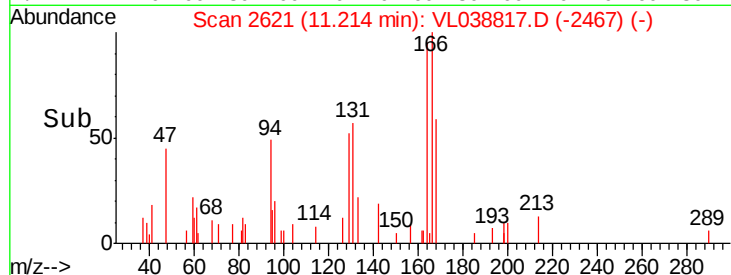
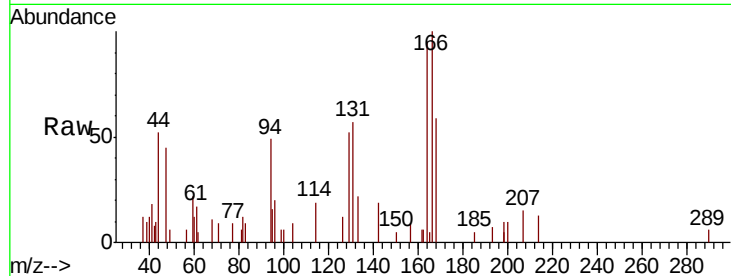
131 60.1 81.8 122.6#

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/07/2022

Supervised By :Mahesh Dadoda 04/07/2022



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2889

Delta R.T. -0.00 min

Lab File: VL038817.D

Acq: 5 Apr 2022 19:03

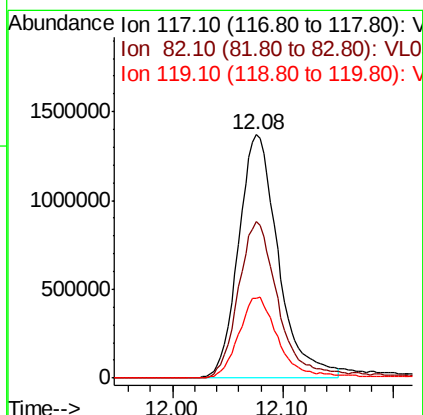
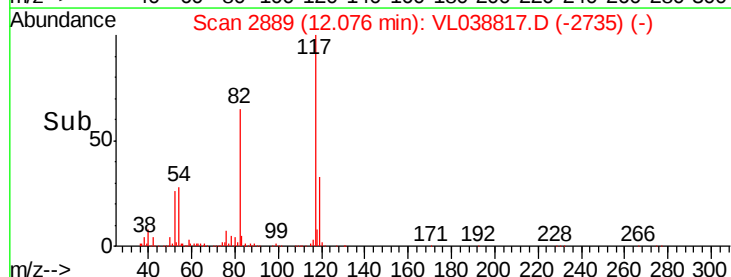
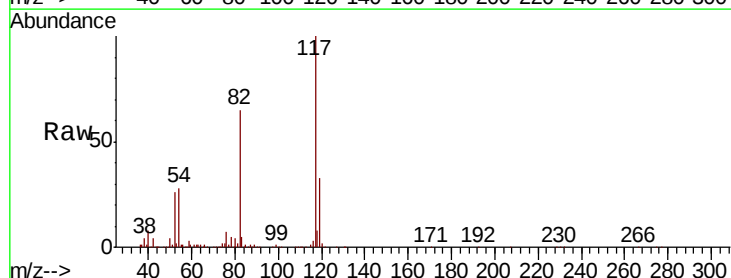
Tgt Ion:117 Resp: 3426737

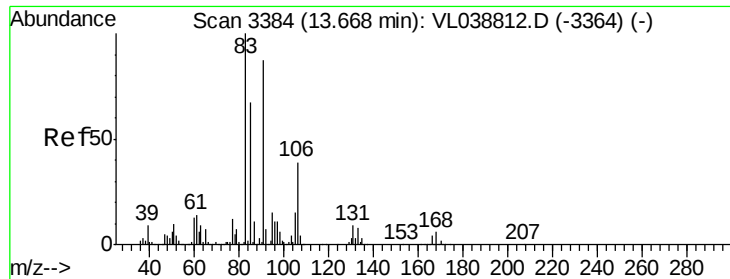
Ion Ratio Lower Upper

117 100

82 66.9 53.0 79.6

119 34.6 24.9 37.3



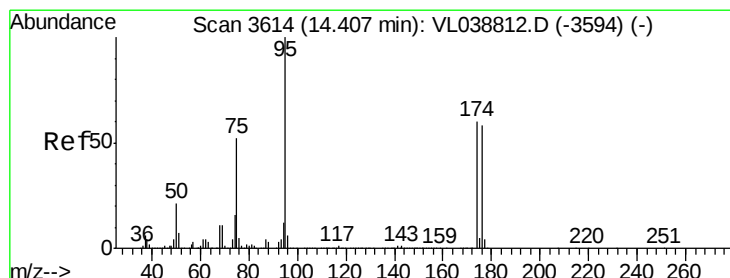
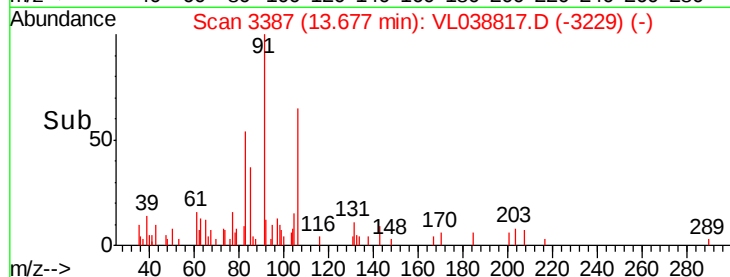
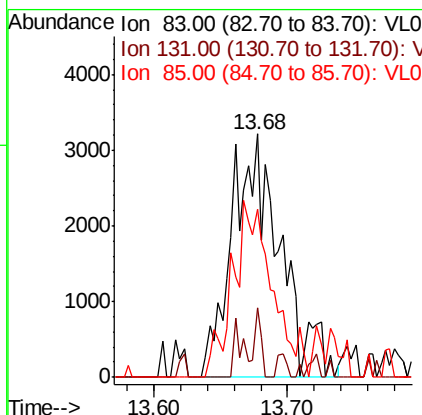
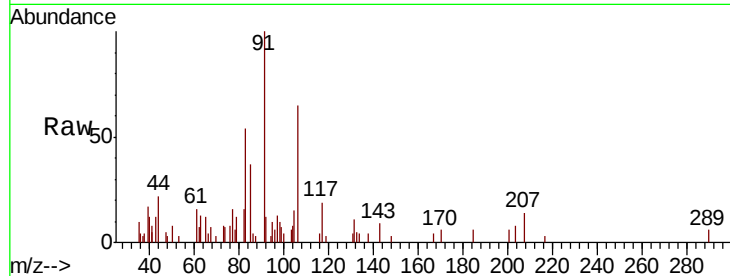


#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 0.031 ppbv m  
 RT: 13.68  
 Instrument: MSVOA\_L  
 Delta R.T.:  
 Lab File: ClientSampleId:  
 Acq: 5 Apr 2022 19:03

Tot Ion:  
 Ion Ratio  
 83 100  
 131 0.  
 85 0.

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/07/2022  
 Supervised By :Mahesh Dadoda 04/07/2022



#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.029 ppbv  
 RT: 14.40 min Scan# 3613  
 Delta R.T. -0.00 min  
 Lab File: VL038817.D  
 Acq: 5 Apr 2022 19:03

Tgt Ion: 95 Resp: 2634724  
 Ion Ratio Lower Upper  
 95 100  
 174 64.3 52.0 78.0  
 175 4.6 4.0 6.0

