

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040722\  
 Data File : VL038849.D  
 Acq On : 7 Apr 2022 20:12  
 Operator : SY/AP  
 Sample : N2273-03DL 4X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA L  
 ClientSampleId :  
 1160-1-1A-3DL

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 04/09/2022  
 Supervised By : Mahesh Dadoda 04/11/2022

Quant Time: Apr 08 08:20:13 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522A  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
 QLast Update : Wed Apr 06 06:12:53 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.70  | 49   | 1233233  | 10.00 | ppbv  | 0.03     |
| 33) 1,4-Difluorobenzene | 7.20  | 114  | 2988941  | 10.00 | ppbv  | 0.03     |
| 55) Chlorobenzene-d5    | 12.12 | 117  | 2688792  | 10.00 | ppbv  | 0.04     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.44  | 95    | 2158138  | 10.58    | ppbv | 0.04    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 105.80% |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 3.07  | 85   | 32945m   | 0.188  | ppbv   |        |
| 3) Chlorodifluoromethane   | 2.99  | 51   | 35918m   | 0.239  | ppbv   |        |
| 4) Chloromethane           | 3.17  | 50   | 12258m   | 0.157  | ppbv   |        |
| 9) Propene                 | 3.05  | 41   | 156696m  | 1.968  | ppbv   |        |
| 10) Heptane                | 8.14  | 43   | 45286m   | 0.226  | ppbv   |        |
| 13) Ethanol                | 3.63  | 45   | 56806    | 11.739 | ppbv # | 100    |
| 15) Acetone                | 3.88  | 43   | 604045   | 4.920  | ppbv   | 93     |
| 19) Isopropyl Alcohol      | 4.00  | 45   | 159044   | 2.534  | ppbv # | 100    |
| 20) Methylene Chloride     | 4.37  | 84   | 35714    | 0.802  | ppbv   | 86     |
| 25) Ethyl Acetate          | 5.71  | 43   | 315962   | 1.014  | ppbv # | 93     |
| 34) 2-Butanone             | 5.28  | 43   | 222253   | 1.882  | ppbv   | 93     |
| 36) Benzene                | 6.93  | 78   | 38558m   | 0.142  | ppbv   |        |
| 50) 4-Methyl-2-Pentanone   | 8.78  | 43   | 124408m  | 0.468  | ppbv   |        |
| 52) Tetrachloroethene      | 11.26 | 164  | 6475m    | 0.068  | ppbv   |        |
| 53) Toluene                | 9.83  | 91   | 828437   | 2.639  | ppbv   | 100    |
| 58) Ethyl Benzene          | 12.74 | 91   | 139044   | 0.346  | ppbv   | 99     |
| 59) m/p-Xylene             | 12.99 | 91   | 424819m  | 1.259  | ppbv   |        |
| 60) o-Xylene               | 13.72 | 91   | 122836   | 0.389  | ppbv   | 95     |
| 61) Styrene                | 13.56 | 104  | 520218   | 2.703  | ppbv   | 95     |
| 74) 1,2,4-Trimethylbenzene | 16.79 | 105  | 71857m   | 0.201  | ppbv   |        |

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

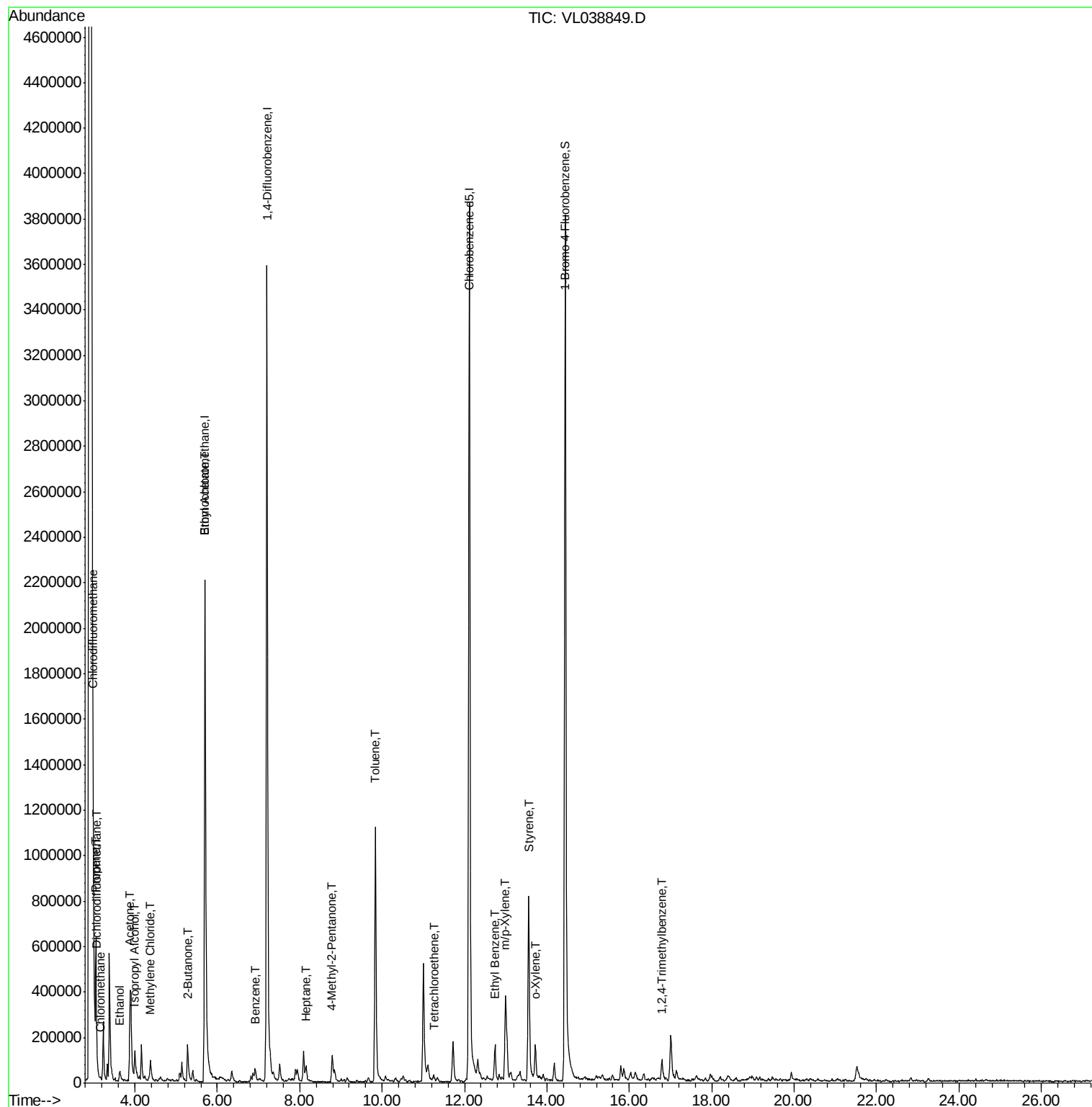
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040722\  
Data File : VL038849.D  
Acq On : 7 Apr 2022 20:12  
Operator : SY/AP  
Sample : N2273-03DL 4X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

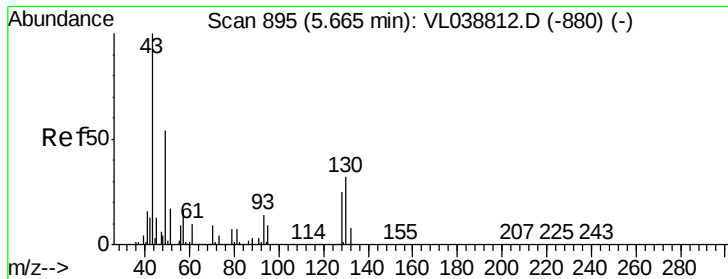
Instrument :  
MSVOA\_L  
ClientSampleId :  
1160-1-1A-3DL

Quant Time: Apr 08 08:20:13 2022  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL040522  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
QLast Update : Wed Apr 06 06:12:53 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 Instrument: MSVOA\_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 7 Apr 2022 20:12

Tot Ion:

Ion Ratio

49 100

128 45.

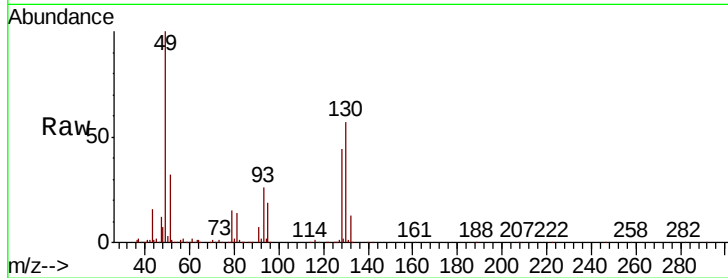
130 58.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/09/2022

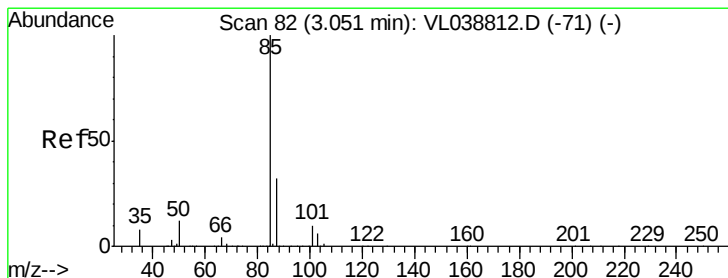
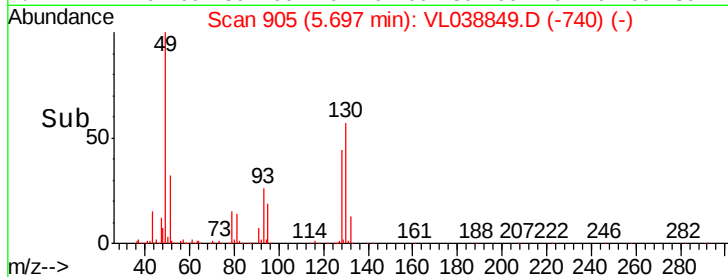
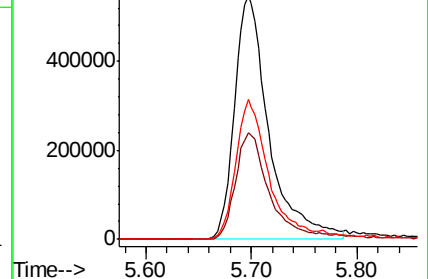
Supervised By :Mahesh Dadoda 04/11/2022



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: 0.188 ppbv m

RT: 3.07 min Scan# 88

Delta R.T. 0.02 min

Lab File: VL038849.D

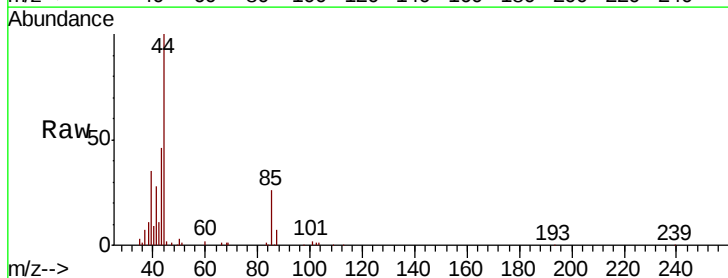
Acq: 7 Apr 2022 20:12

Tgt Ion: 85 Resp: 32945

Ion Ratio Lower Upper

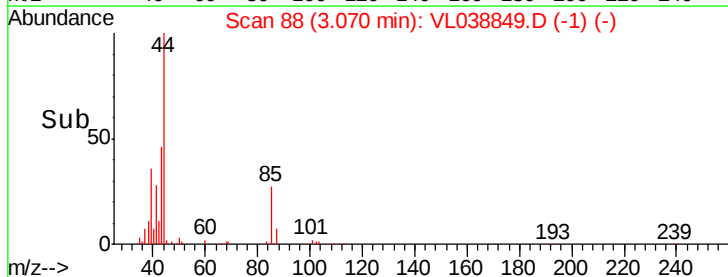
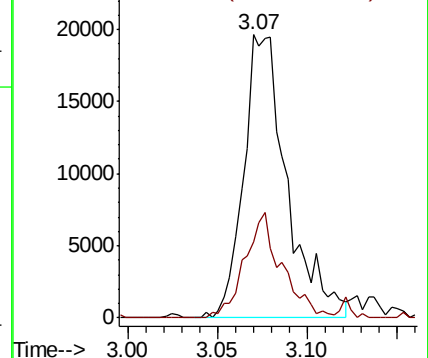
85 100

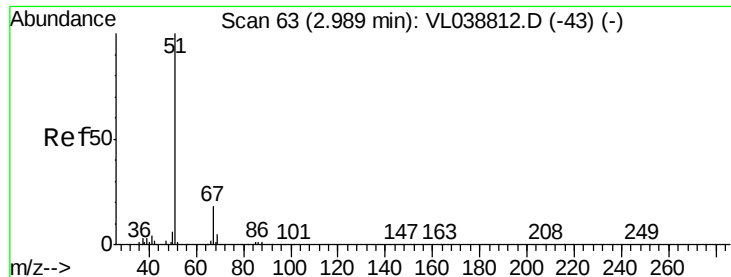
87 27.0 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.239 ppbv m

RT: 2.99 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 7 Apr 2022 20:12

Tot Ion:

Ion Ratio

51 100

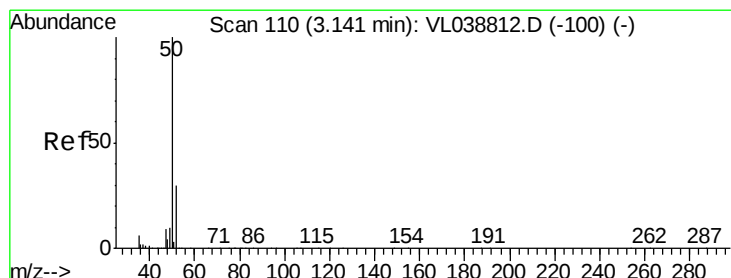
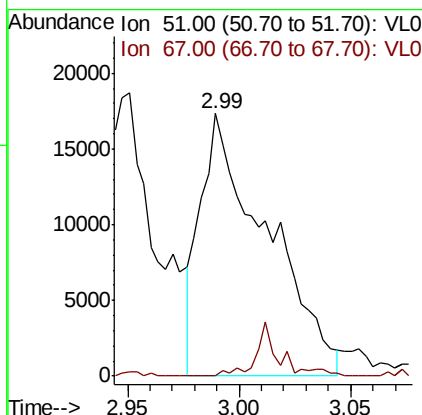
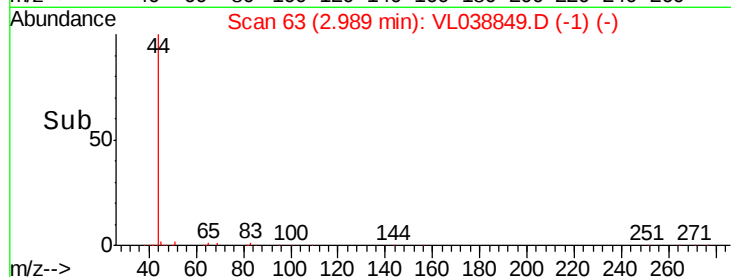
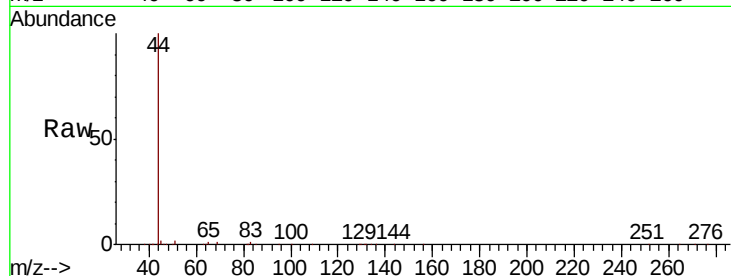
67 0.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/09/2022

Supervised By :Mahesh Dadoda 04/11/2022



#4

Chloromethane

Concen: 0.157 ppbv m

RT: 3.17 min Scan# 118

Delta R.T. 0.03 min

Lab File: VL038849.D

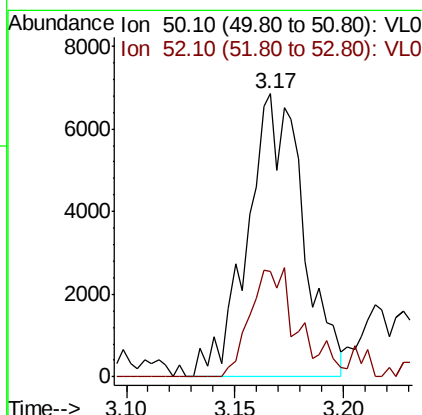
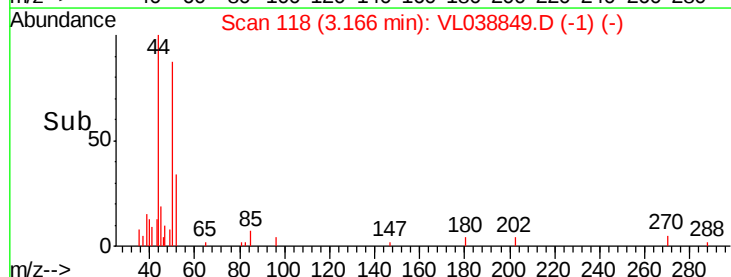
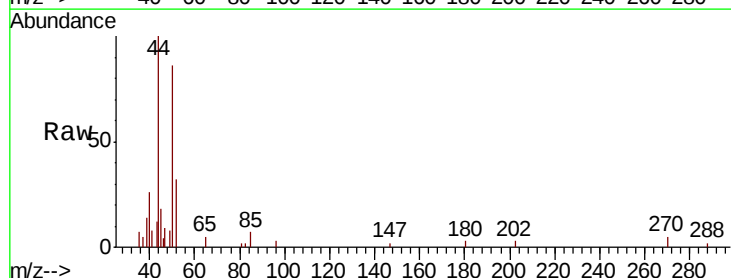
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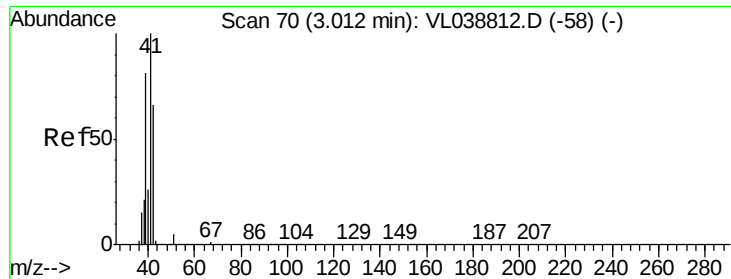
Tgt Ion: 50 Resp: 12258

Ion Ratio Lower Upper

50 100

52 37.2 24.3 36.5#





#9

Propene

Concen: 1.968 ppbv m

RT: 3.05 Instrument :

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 7 Apr 2022 20:12

Tot Ion:

Ion Ratio

41 100

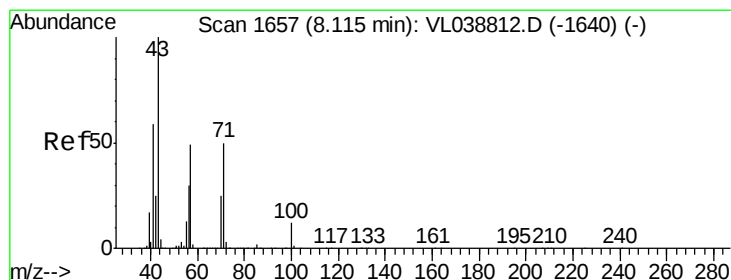
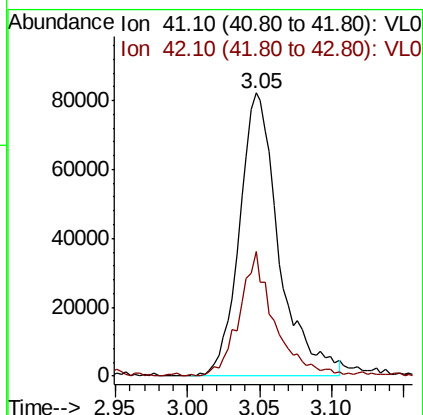
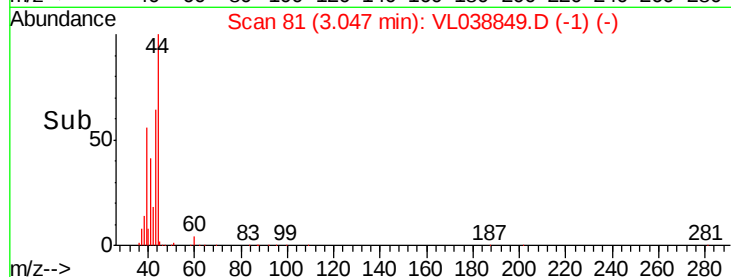
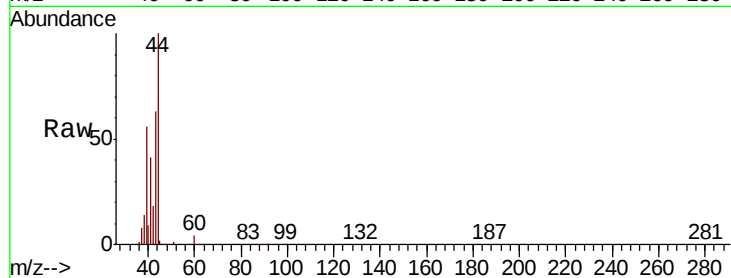
42 42.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/09/2022

Supervised By :Mahesh Dadoda 04/11/2022



#10

Heptane

Concen: 0.226 ppbv m

RT: 8.14 min Scan# 1666

Delta R.T. 0.03 min

Lab File: VL038849.D

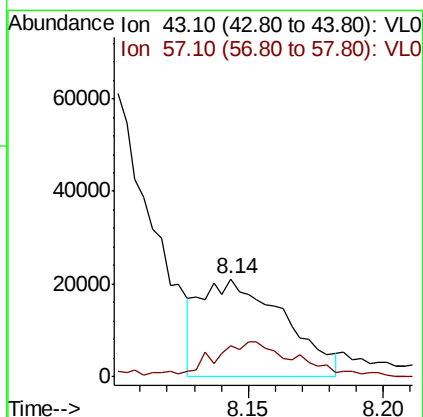
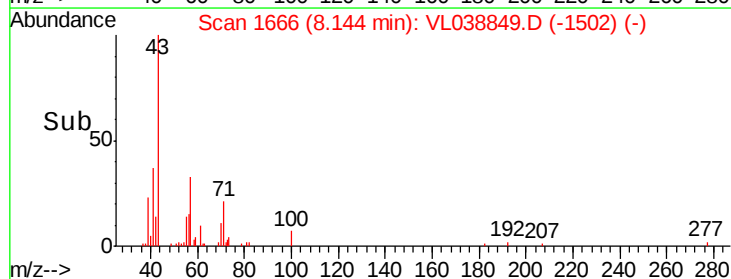
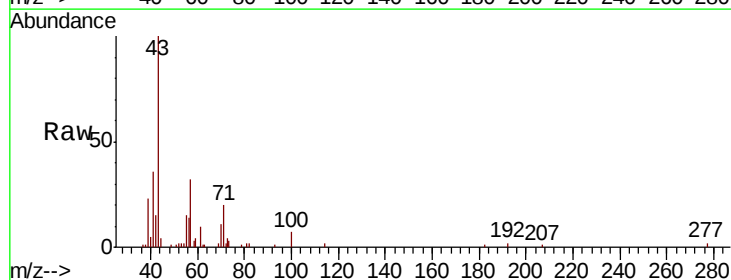
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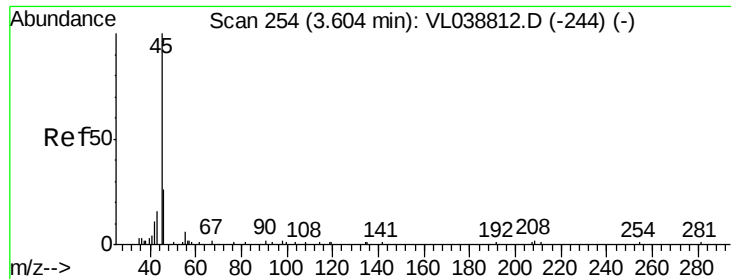
Tgt Ion: 43 Resp: 45286

Ion Ratio Lower Upper

43 100

57 37.2 39.3 58.9#



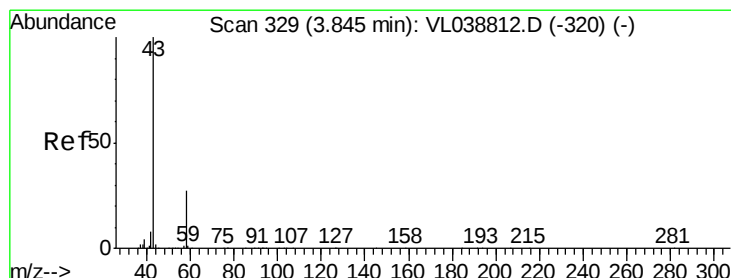
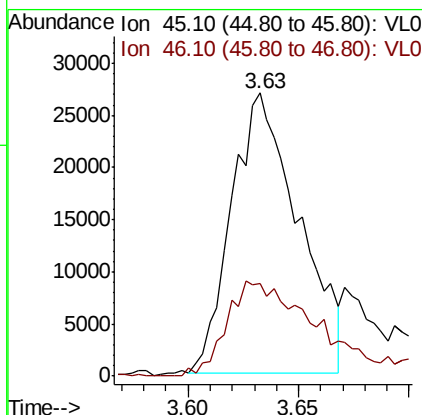
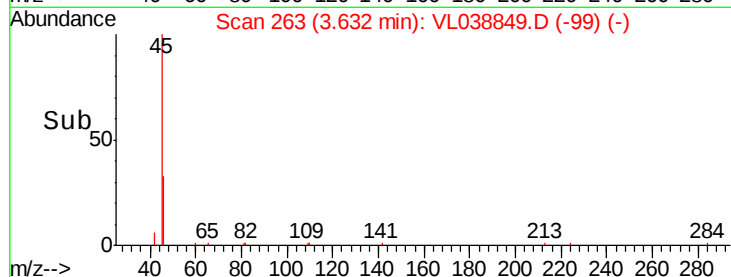
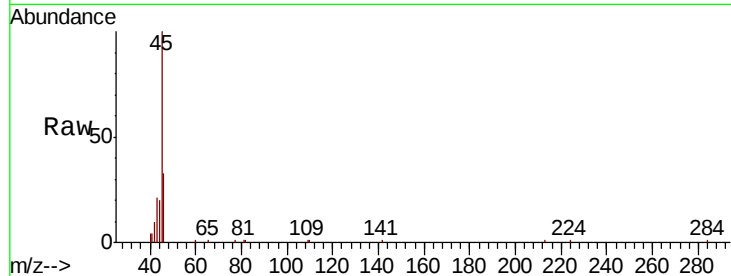


#13  
 Ethanol  
 Concen: 11.739 ppbv  
 RT: 3.63  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 7 Apr 2022 20:12

Tot Ion:  
 Ion Ratio  
 45 100  
 46 51.

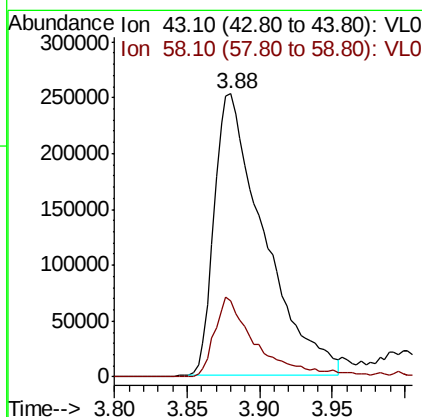
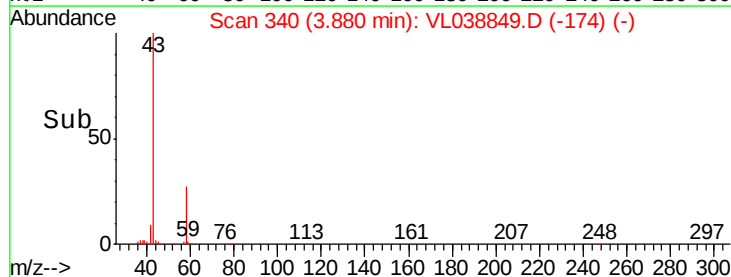
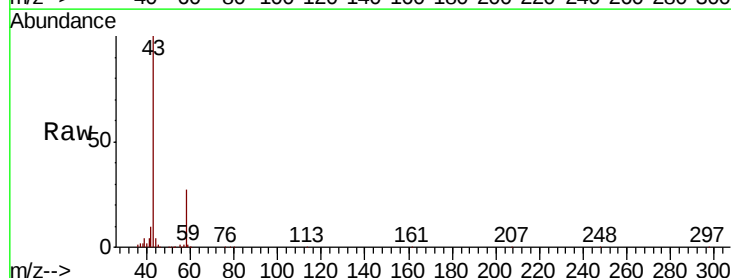
Manual Integrations  
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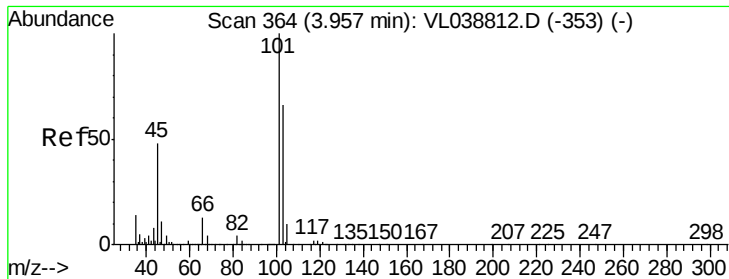
Reviewed By :Semsettin Yesilyurt 04/09/2022  
 Supervised By :Mahesh Dadoda 04/11/2022



#15  
 Acetone  
 Concen: 4.920 ppbv  
 RT: 3.88 min Scan# 340  
 Delta R.T. 0.04 min  
 Lab File: VL038849.D  
 Acq: 7 Apr 2022 20:12

Tgt Ion: 43 Resp: 604045  
 Ion Ratio Lower Upper  
 43 100  
 58 24.3 22.5 33.7



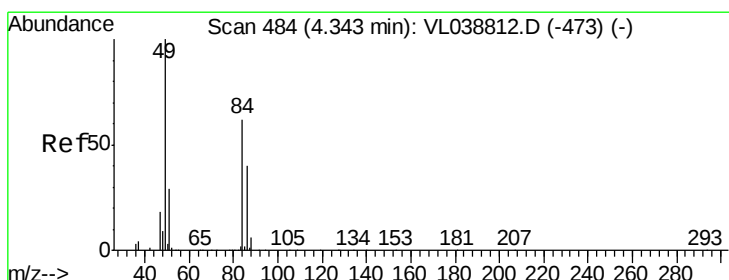
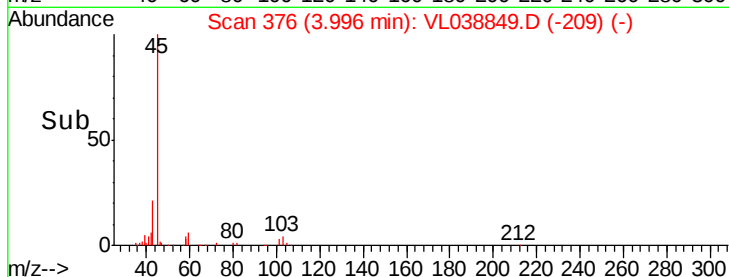
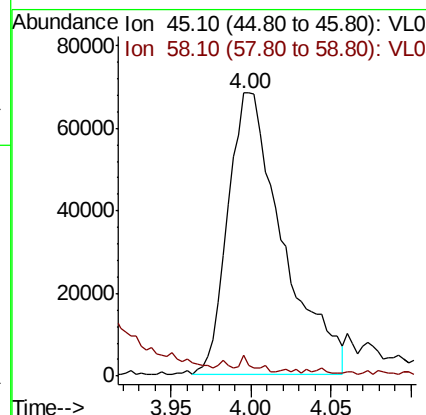
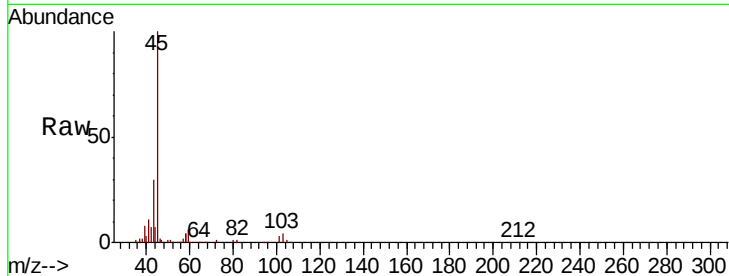


#19  
Isopropyl Alcohol  
Concen: 2.534 ppbv  
RT: 4.00  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 7 Apr 2022 20:12

Tot Ion:  
Ion Ratio  
45 100  
58 3.

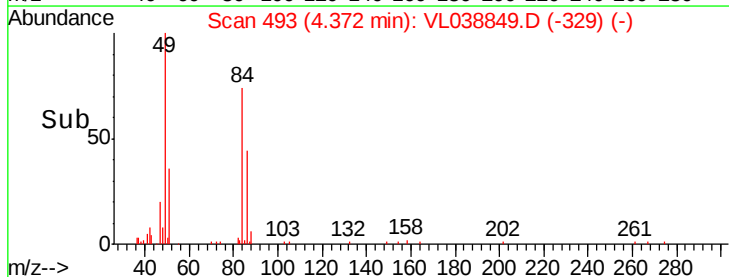
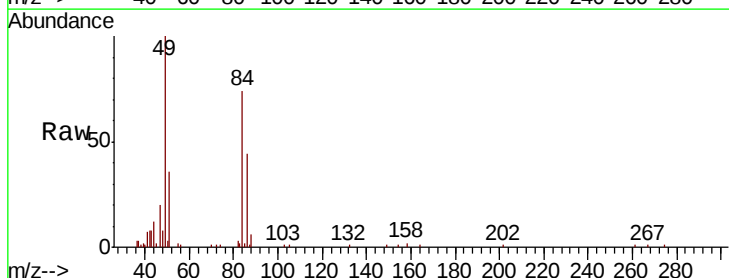
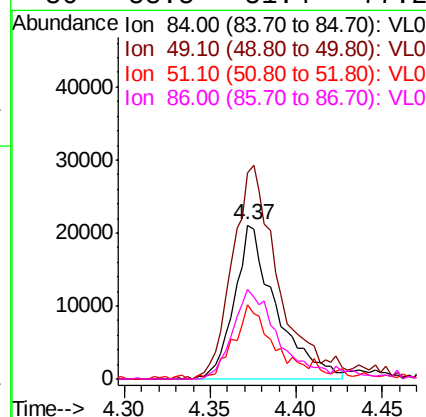
Manual Integrations  
APPROVED

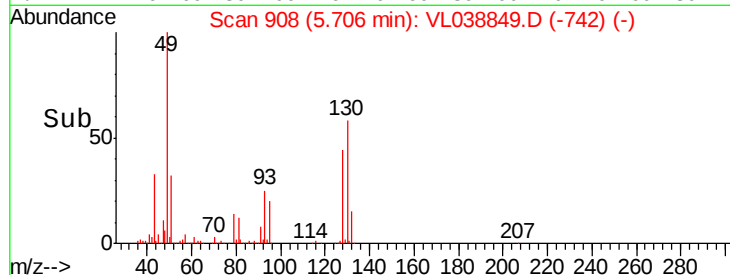
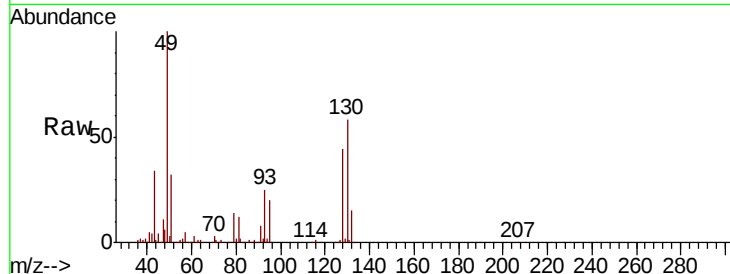
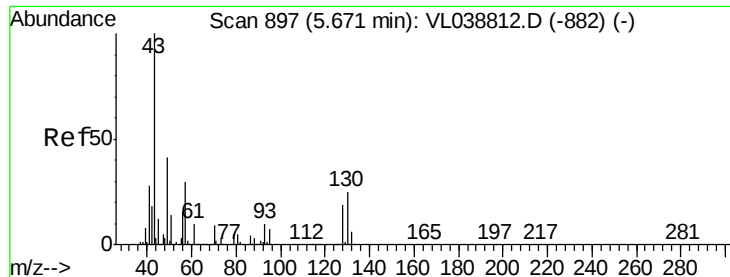
Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022



#20  
Methylene Chloride  
Concen: 0.802 ppbv  
RT: 4.37 min Scan# 493  
Delta R.T. 0.03 min  
Lab File: VL038849.D  
Acq: 7 Apr 2022 20:12

Tgt Ion: 84 Resp: 35714  
Ion Ratio Lower Upper  
84 100  
49 134.3 129.4 194.0  
51 48.4 37.4 56.2  
86 58.5 51.4 77.2



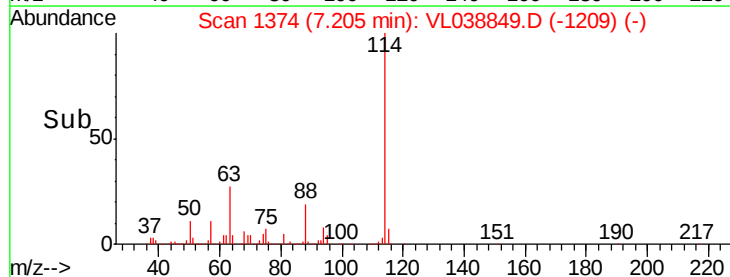
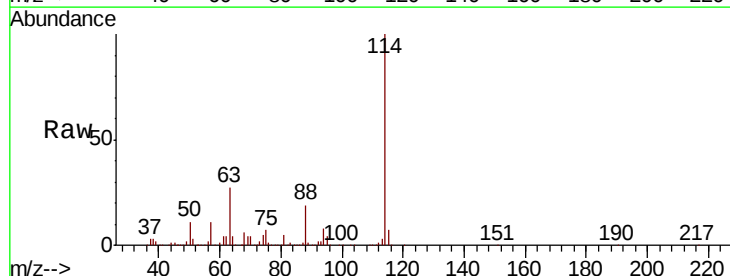
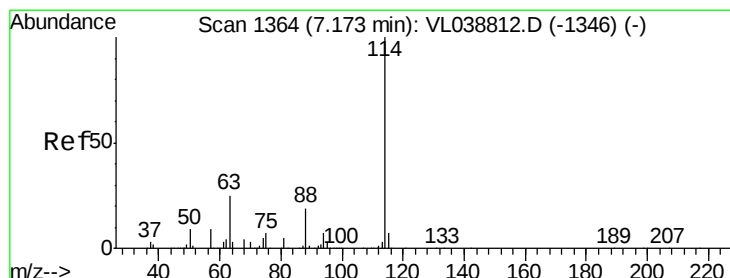
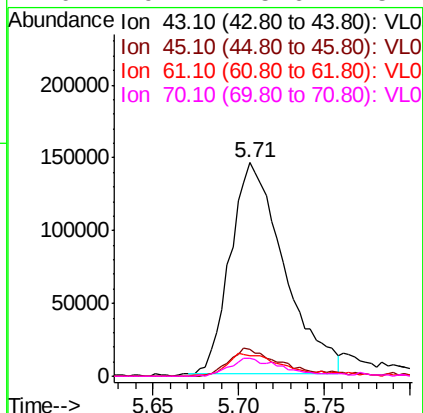


#25  
Ethyl Acetate  
Concen: 1.014 ppbv  
RT: 5.71 min  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId : 1160-1-1A-3DL  
Acq: 7 Apr 2022 20:12

Tot Ion:  
Ion Ratio  
43 100  
45 13.  
61 12.  
70 9.2 5.6 8.4#

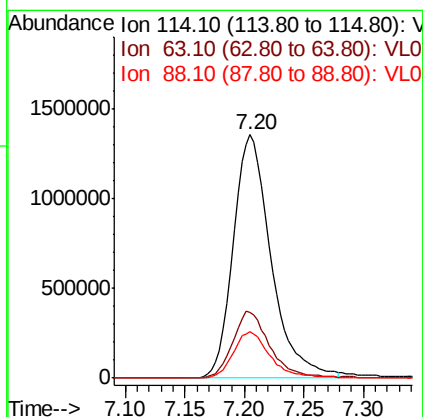
Manual Integrations  
APPROVED

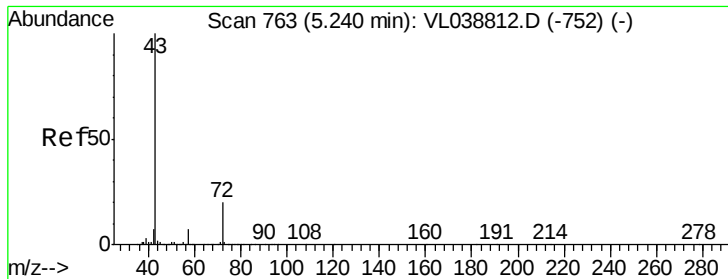
Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.20 min Scan# 1374  
Delta R.T.: 0.03 min  
Lab File: VL038849.D  
Acq: 7 Apr 2022 20:12

Tgt Ion:114 Resp: 2988941  
Ion Ratio Lower Upper  
114 100  
63 27.5 19.8 29.8  
88 19.2 14.2 21.4



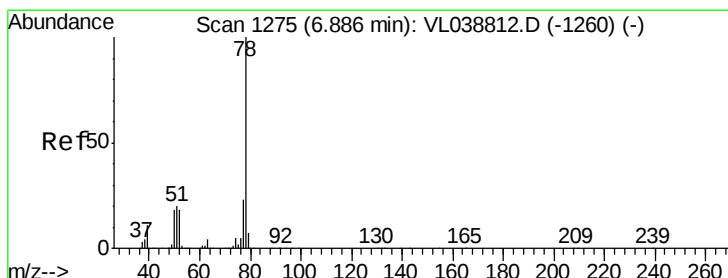
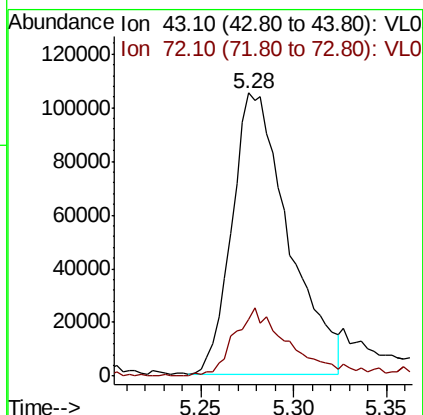
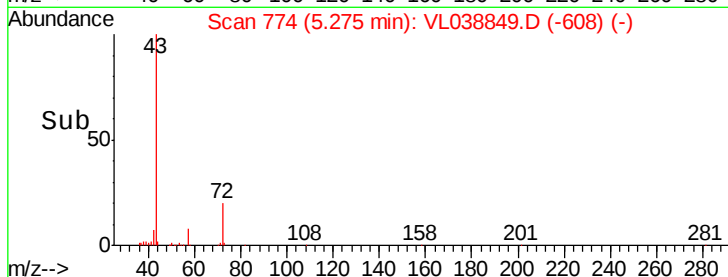
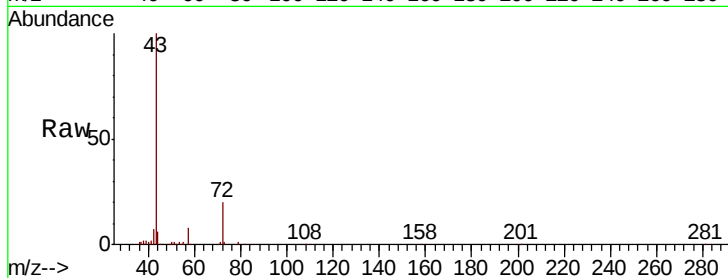


#34  
2-Butanone  
Concen: 1.882 ppbv  
RT: 5.28  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 7 Apr 2022 20:12

Tot Ion:  
Ion Ratio  
43 100  
72 24.

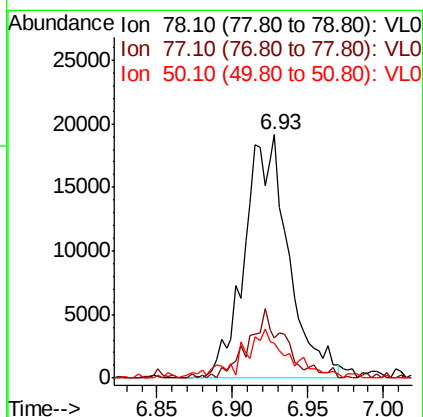
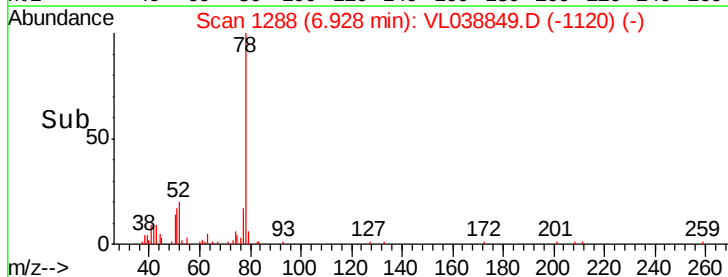
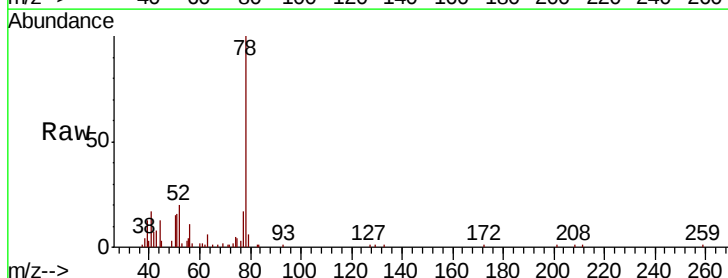
Manual Integrations  
APPROVED

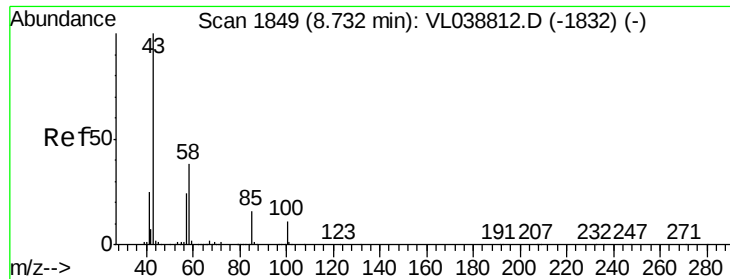
Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022



#36  
Benzene  
Concen: 0.142 ppbv m  
RT: 6.93 min Scan# 1288  
Delta R.T. 0.04 min  
Lab File: VL038849.D  
Acq: 7 Apr 2022 20:12

Tgt Ion: 78 Resp: 38558  
Ion Ratio Lower Upper  
78 100  
77 16.6 18.2 27.2#  
50 14.5 14.0 21.0



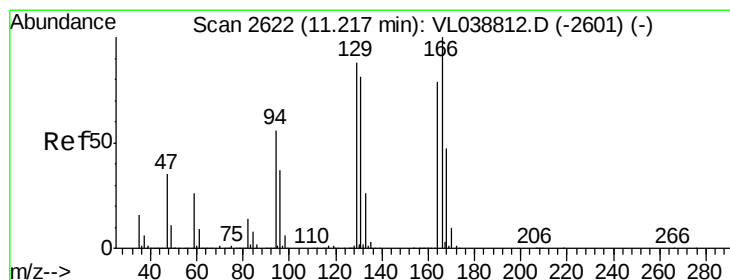
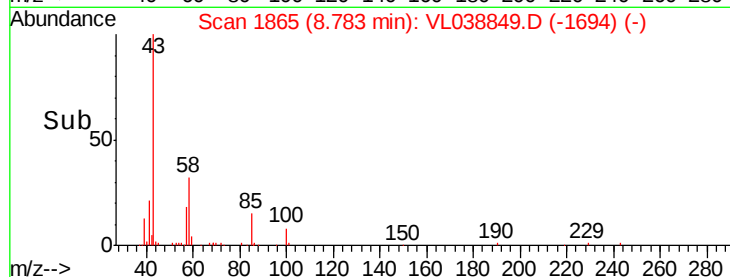
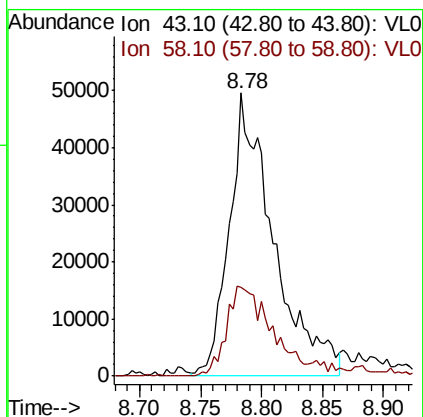
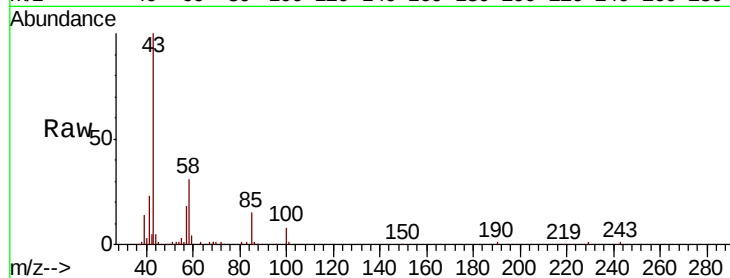


#50  
4-Methyl-2-pentanone  
Concen: 0.468 ppbv m  
RT: 8.78  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId : 1160-1-1A-3DL  
Acq: 7 Apr 2022 20:12

Tot Ion:  
Ion Ratio  
43 100  
58 37.

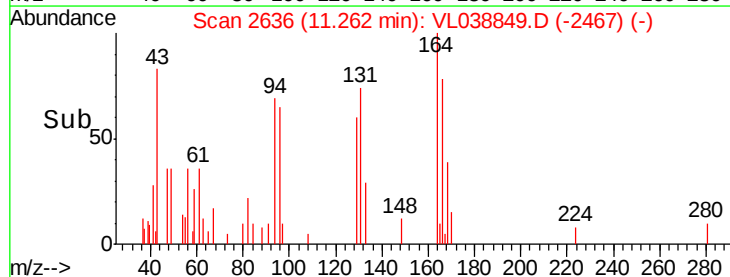
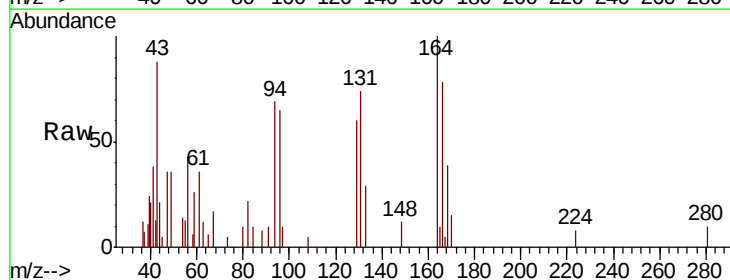
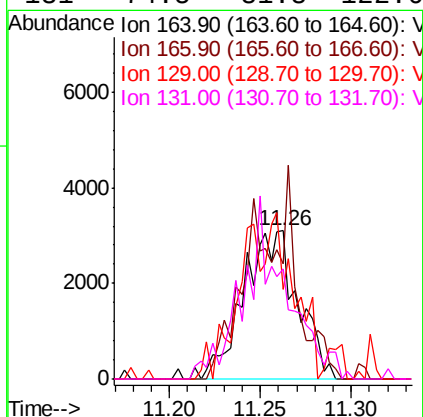
Manual Integrations  
APPROVED

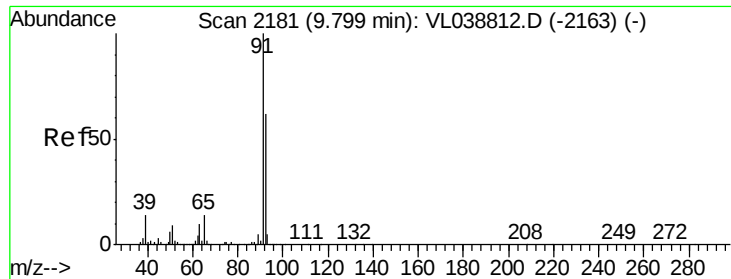
Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022



#52  
Tetrachloroethene  
Concen: 0.068 ppbv m  
RT: 11.26 min Scan# 2636  
Delta R.T. 0.04 min  
Lab File: VL038849.D  
Acq: 7 Apr 2022 20:12

Tgt Ion:164 Resp: 6475  
Ion Ratio Lower Upper  
164 100  
166 77.5 101.0 151.6#  
129 60.2 88.7 133.1#  
131 74.5 81.8 122.6#





#53

Toluene

Concen: 2.639 ppbv

RT: 9.83

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 7 Apr 2022 20:12

Tot Ion:

Ion Ratio

91 100

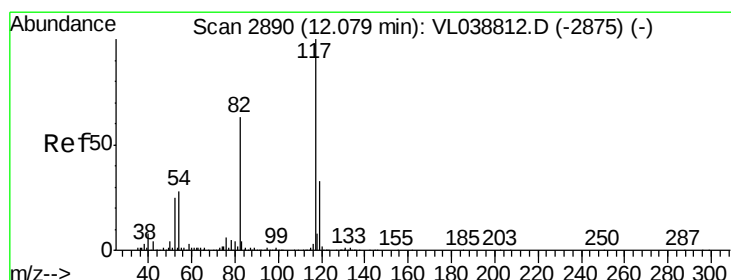
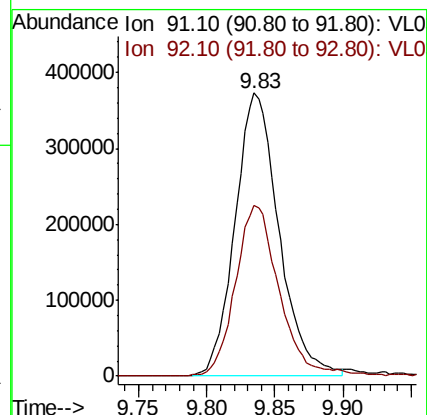
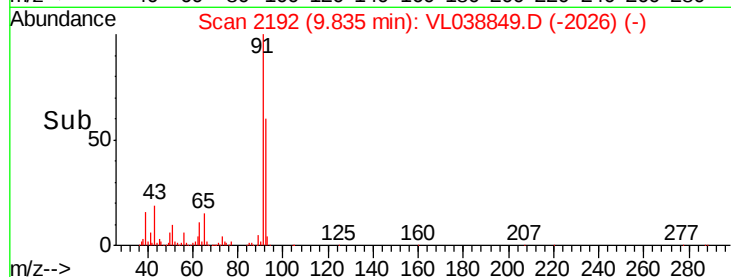
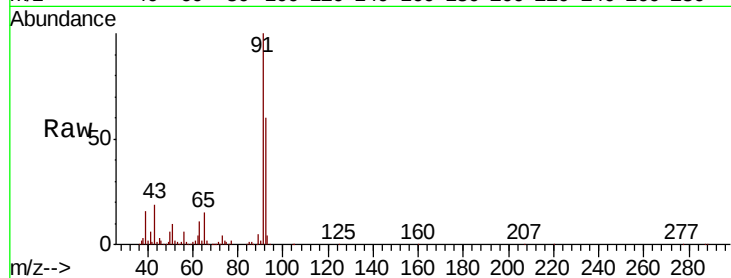
92 61.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/09/2022

Supervised By :Mahesh Dadoda 04/11/2022



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2902

Delta R.T. 0.04 min

Lab File: VL038849.D

Acq: 7 Apr 2022 20:12

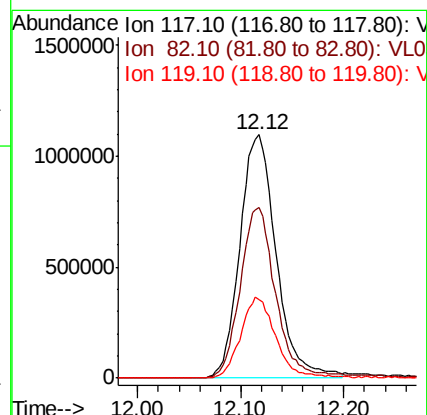
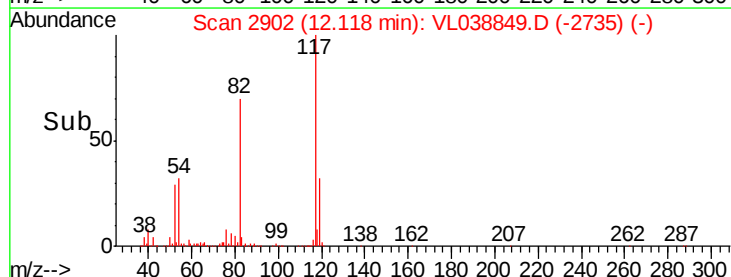
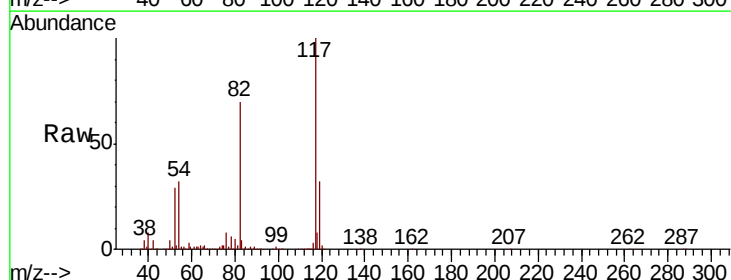
Tgt Ion:117 Resp: 2688792

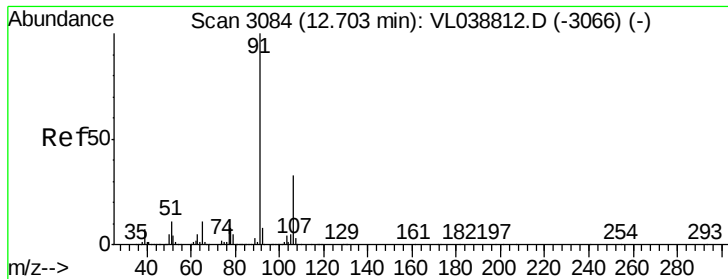
Ion Ratio Lower Upper

117 100

82 69.7 53.0 79.6

119 32.4 24.9 37.3



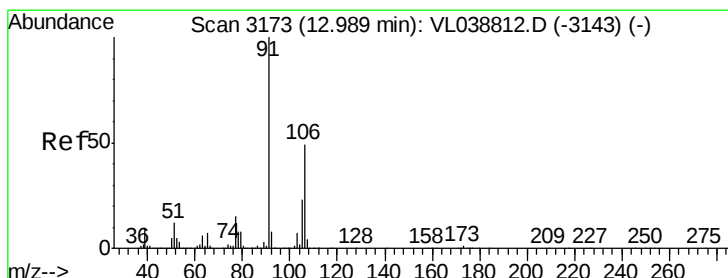
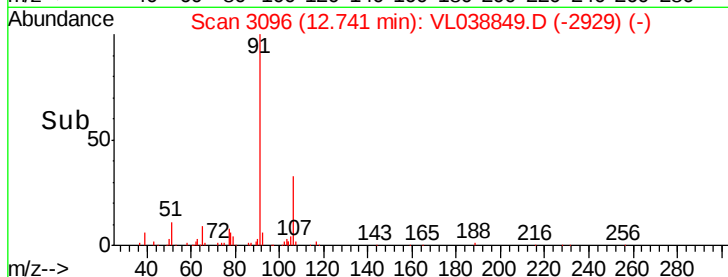
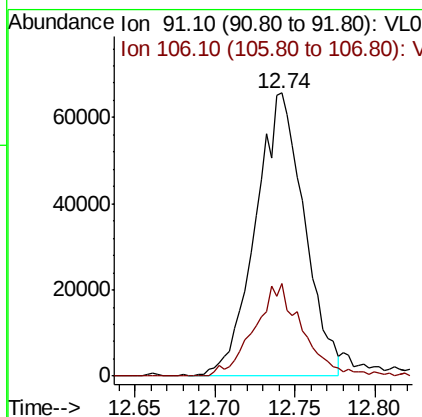
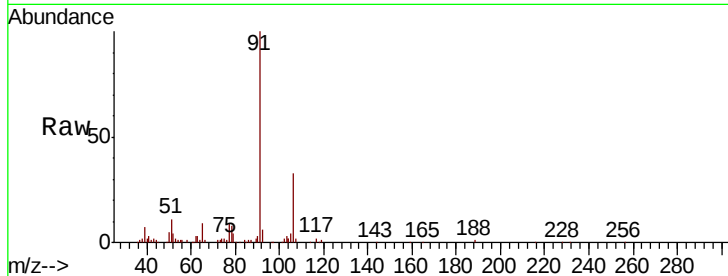


#58  
Ethyl Benzene  
Concen: 0.346 ppbv  
RT: 12.74  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId :  
Acq: 7 Apr 2022 20:12

Tot Ion:  
Ion Ratio  
91 100  
106 32.

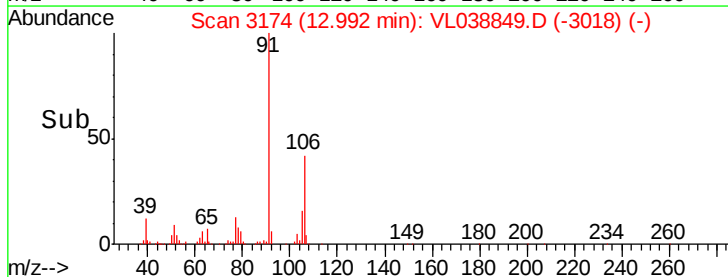
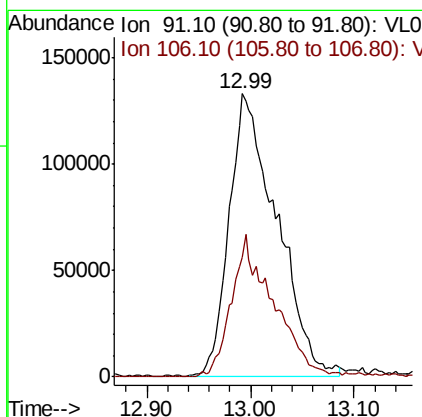
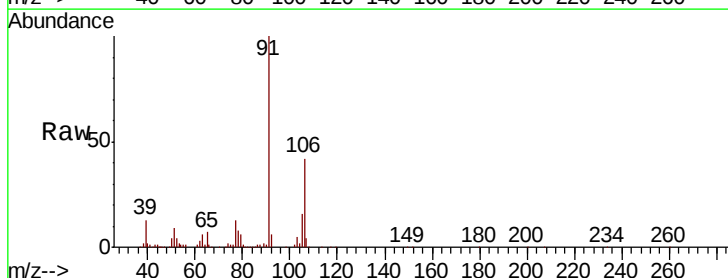
Manual Integrations  
APPROVED

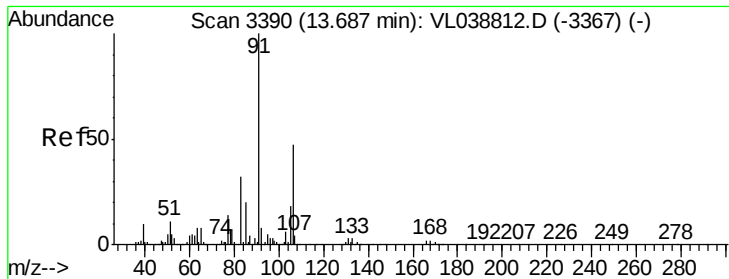
Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022



#59  
m/p-Xylene  
Concen: 1.259 ppbv m  
RT: 12.99 min Scan# 3174  
Delta R.T. 0.00 min  
Lab File: VL038849.D  
Acq: 7 Apr 2022 20:12

Tgt Ion: 91 Resp: 424819  
Ion Ratio Lower Upper  
91 100  
106 45.0 37.1 55.7



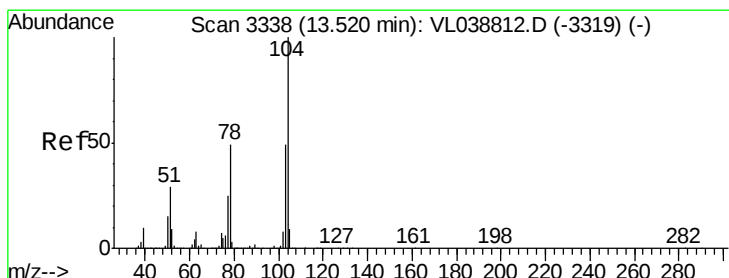
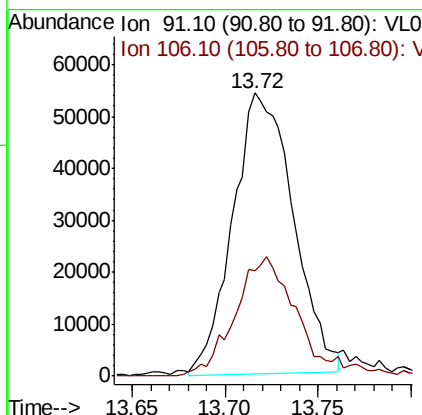
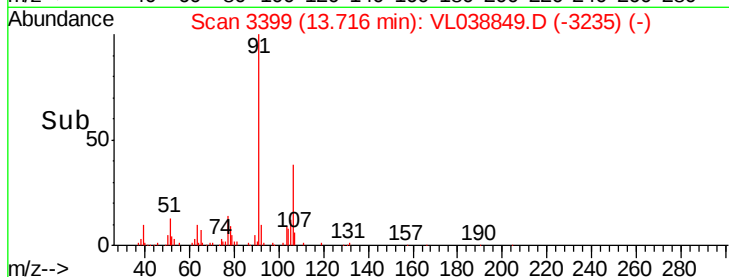
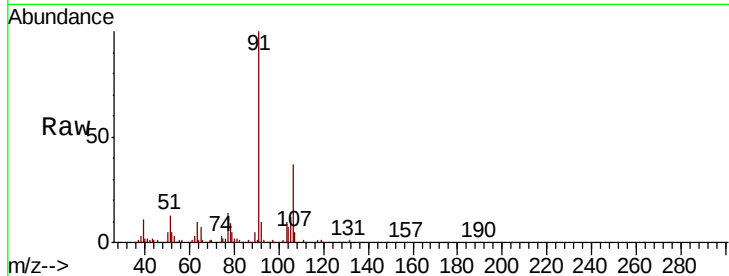


#60  
o-Xylene  
Concen: 0.389 ppbv  
RT: 13.72  
Delta R.T. MSVOA\_L  
Lab File: ClientSampled :  
Acq: 7 Apr 2022 20:12

Tot Ion:  
Ion Ratio  
91 100  
106 44.

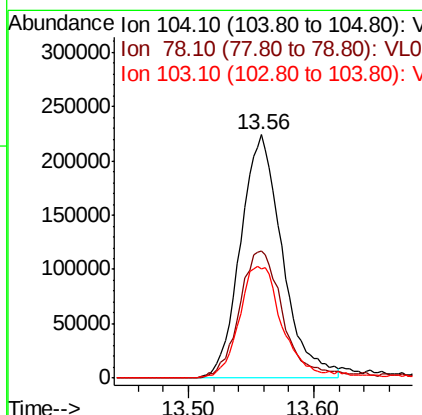
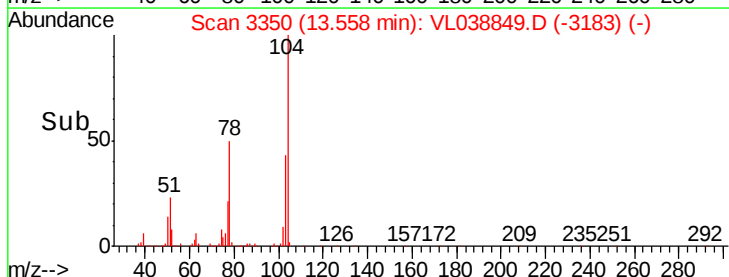
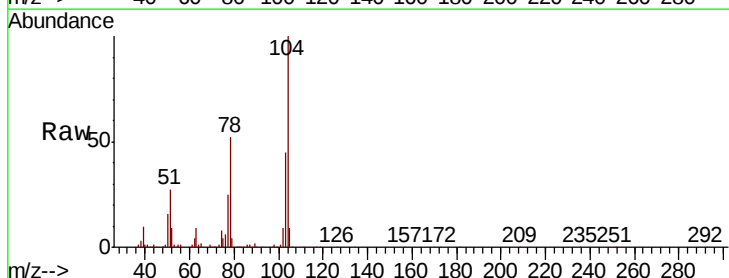
Manual Integrations  
APPROVED

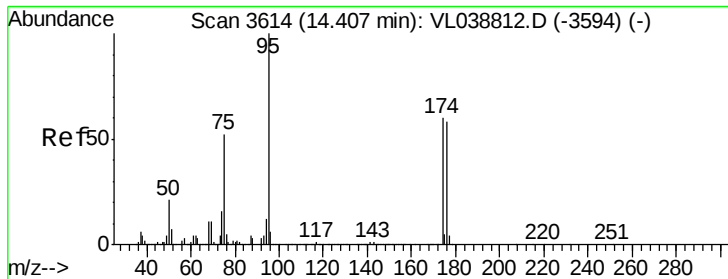
Reviewed By :Semsettin Yesilyurt 04/09/2022  
Supervised By :Mahesh Dadoda 04/11/2022



#61  
Styrene  
Concen: 2.703 ppbv  
RT: 13.56 min Scan# 3350  
Delta R.T. 0.04 min  
Lab File: VL038849.D  
Acq: 7 Apr 2022 20:12

Tgt Ion:104 Resp: 520218  
Ion Ratio Lower Upper  
104 100  
78 56.5 40.5 60.7  
103 48.9 39.0 58.4



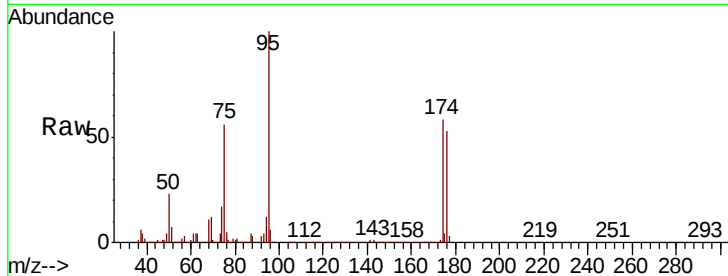


#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.582 ppbv  
 RT: 14.44 min  
 Delta R.T.: 0.04 min  
 Lab File: VL038812.D  
 Acq: 7 Apr 2022 20:12

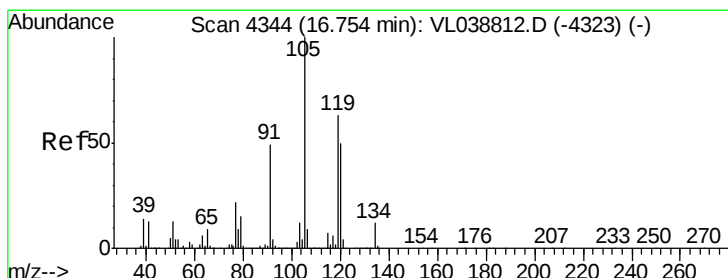
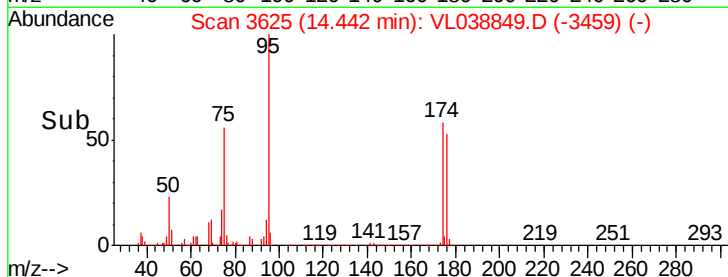
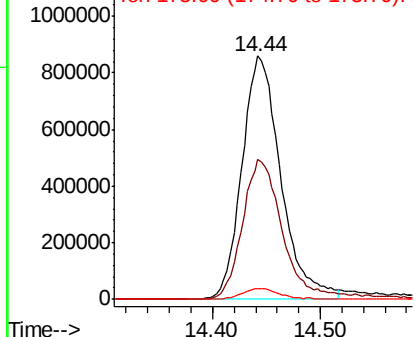
Tot Ion:  
 Ion Ratio  
 95 100  
 174 61.1  
 175 4.1

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 04/09/2022  
 Supervised By :Mahesh Dadoda 04/11/2022



Abundance Ion 95.10 (94.80 to 95.80): VL0  
 Ion 174.00 (173.70 to 174.70): VL0  
 Ion 175.00 (174.70 to 175.70): VL0



#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.201 ppbv m  
 RT: 16.79 min Scan# 4355  
 Delta R.T.: 0.04 min  
 Lab File: VL038849.D  
 Acq: 7 Apr 2022 20:12

Tgt Ion:105 Resp: 71857  
 Ion Ratio Lower Upper  
 105 100  
 120 50.5 39.8 59.8  
 91 12.4 39.4 59.0#  
 77 12.5 17.3 25.9#

Abundance Ion 105.10 (104.80 to 105.80): VL0  
 Ion 120.20 (119.90 to 120.90): VL0  
 Ion 91.10 (90.80 to 91.80): VL0  
 Ion 77.10 (76.80 to 77.80): VL0

