

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL071023\  
 Data File : VL040520.D  
 Acq On : 10 Jul 2023 23:59  
 Operator : SY/MD  
 Sample : 03535-01 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/11/2023  
 Supervised By :Mahesh Dadoda 07/11/2023

Quant Time: Jul 11 02:11:31 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL071023AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Mon Jul 10 16:32:00 2023

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.192  | 49    | 998500   | 10.000   | ppbv   | -0.01    |
| 33) 1,4-Difluorobenzene     | 6.652  | 114   | 2548328  | 10.000   | ppbv   | -0.01    |
| 55) Chlorobenzene-d5        | 11.468 | 117   | 2457388  | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.777 | 95    | 1979618  | 10.179   | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 101.800% |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane  | 2.732  | 85    | 26073    | 0.131    | ppbv   | 99       |
| 3) Chlorodifluoromethane    | 2.674  | 51    | 20533    | 0.130    | ppbv   | 96       |
| 9) Propene                  | 2.706  | 41    | 34437    | 0.636    | ppbv   | 94       |
| 10) Heptane                 | 7.581  | 43    | 355123   | 2.968    | ppbv   | 99       |
| 11) Trichlorofluoromethane  | 3.565  | 101   | 10192m   | 0.063    | ppbv   |          |
| 13) Ethanol                 | 3.243  | 45    | 17088m   | 1.450    | ppbv   |          |
| 15) Acetone                 | 3.465  | 43    | 2384524  | 20.747   | ppbv # | 84       |
| 17) tert-Butyl alcohol      | 3.877  | 59    | 7475927  | 62.887   | ppbv   | 98       |
| 20) Methylene Chloride      | 3.932  | 84    | 20919    | 0.428    | ppbv # | 80       |
| 26) Hexane                  | 5.214  | 57    | 1040478  | 10.236   | ppbv # | 41       |
| 28) Methyl tert-Butyl Ether | 4.594  | 73    | 64139m   | 0.784    | ppbv   |          |
| 30) Cyclohexane             | 6.603  | 84    | 76978    | 0.910    | ppbv   | 88       |
| 34) 2-Butanone              | 4.787  | 43    | 349013   | 2.772    | ppbv   | 99       |
| 36) Benzene                 | 6.372  | 78    | 396161   | 1.932    | ppbv   | 99       |
| 44) 2,2,4-Trimethylpentane  | 7.330  | 57    | 712225   | 2.159    | ppbv # | 67       |
| 52) Tetrachloroethene       | 10.619 | 164   | 214738   | 3.234    | ppbv   | 97       |
| 53) Toluene                 | 9.224  | 91    | 588619   | 2.643    | ppbv   | 99       |
| 58) Ethyl Benzene           | 12.092 | 91    | 82967    | 0.269    | ppbv   | 98       |
| 59) m/p-Xylene              | 12.346 | 91    | 466822   | 1.696    | ppbv   | 100      |
| 60) o-Xylene                | 13.057 | 91    | 202915m  | 0.774    | ppbv   |          |
| 73) 1,3,5-Trimethylbenzene  | 15.359 | 105   | 31463    | 0.116    | ppbv   | 88       |
| 74) 1,2,4-Trimethylbenzene  | 16.101 | 105   | 37116    | 0.118    | ppbv # | 58       |
| -----                       |        |       |          |          |        |          |

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

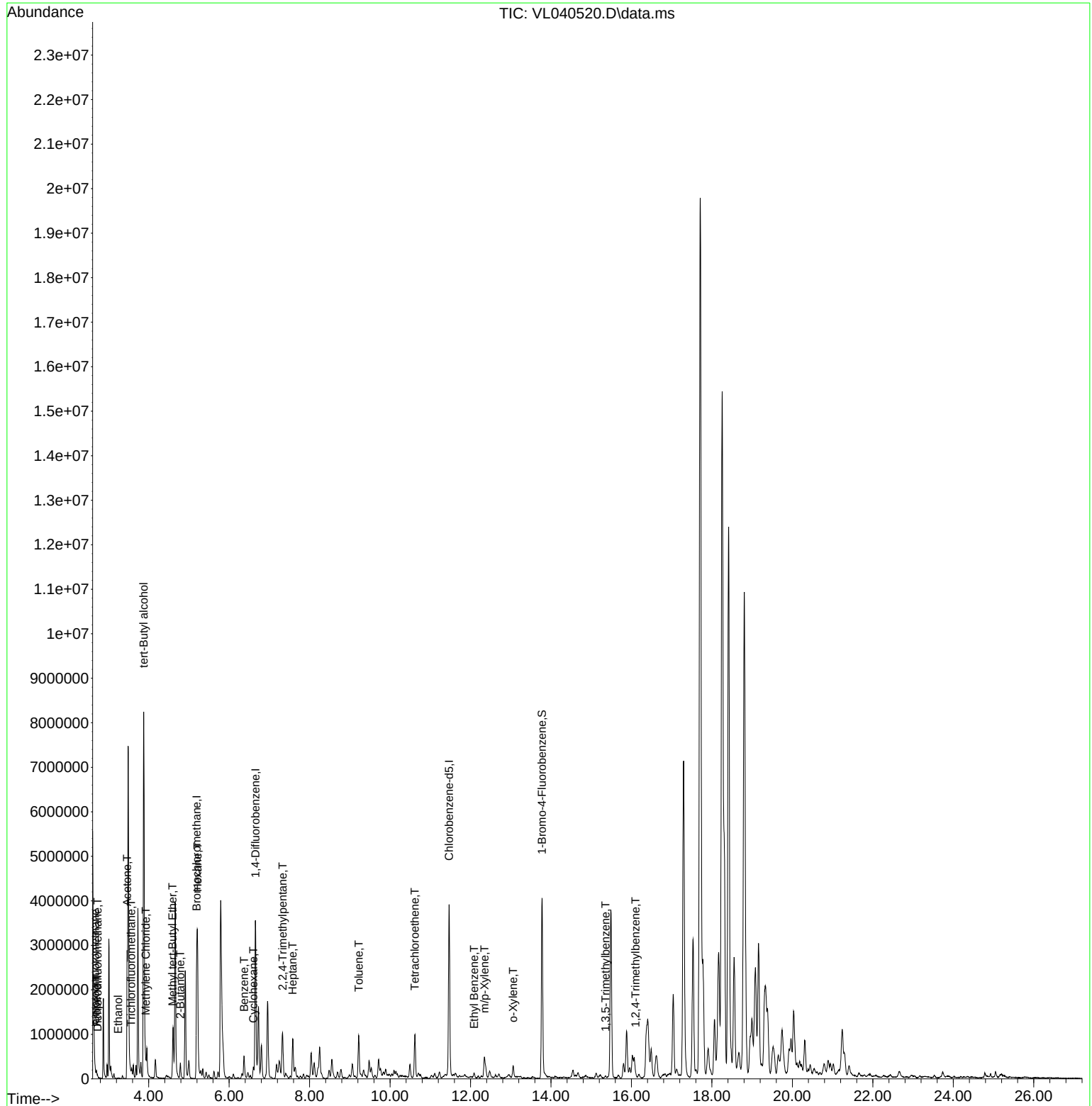
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL071023\  
Data File : VL040520.D  
Acq On : 10 Jul 2023 23:59  
Operator : SY/MD  
Sample : 03535-01 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

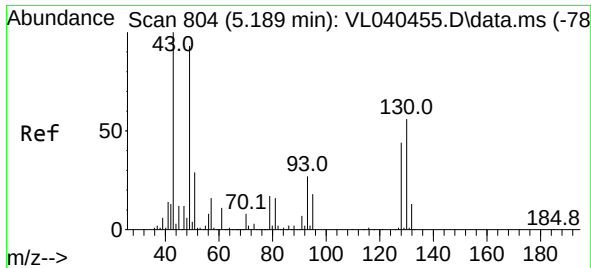
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Quant Time: Jul 11 02:11:31 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL071023AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Mon Jul 10 16:32:00 2023  
Response via : Initial Calibration

Manual Integrations  
APPROVED

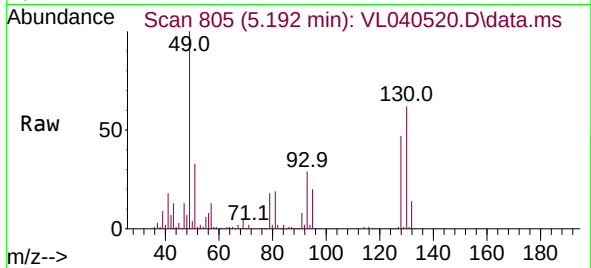
Reviewed By : Semsettin Yesilyurt 07/11/2023  
Supervised By : Mahesh Dadoda 07/11/2023





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.192 min Scan# 804  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

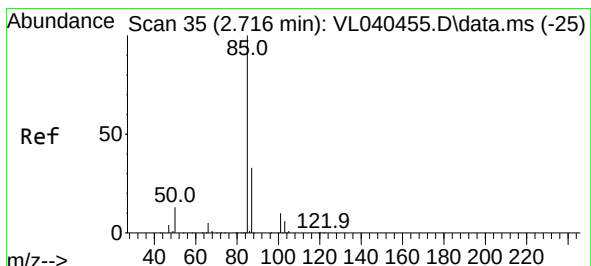
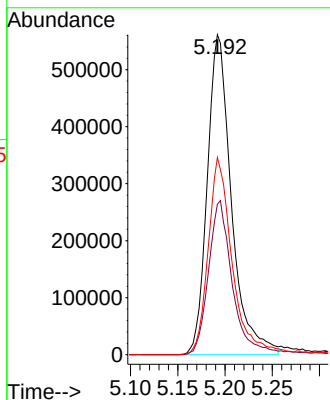
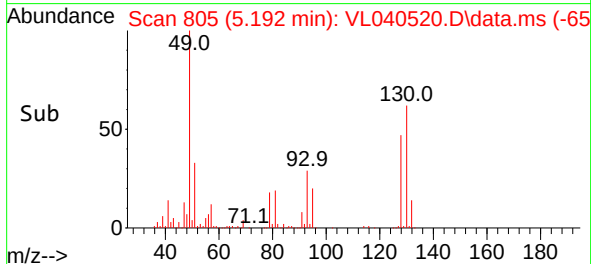
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 49 Resp: 998500  
Ion Ratio Lower Upper  
49 100  
128 49.4 25.1 75.4  
130 62.3 31.6 94.7

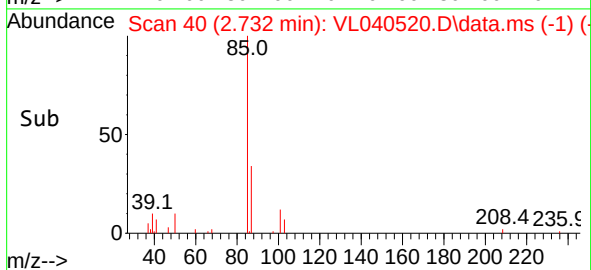
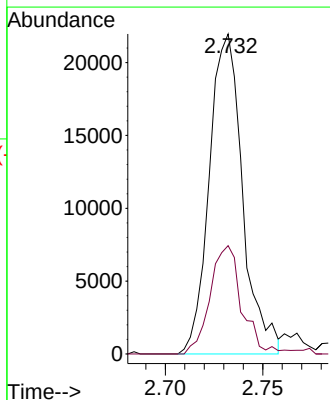
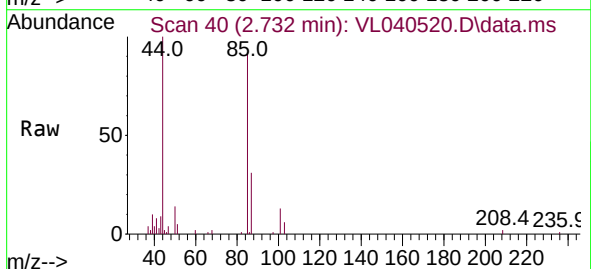
Manual Integrations  
APPROVED

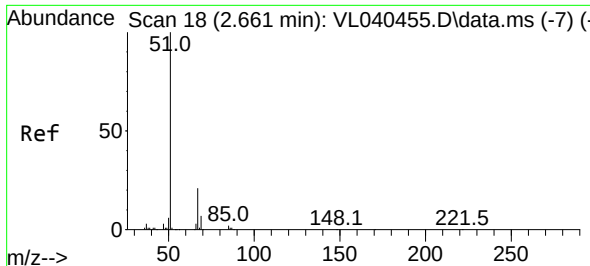
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#2  
Dichlorodifluoromethane  
Concen: 0.131 ppbv  
RT: 2.732 min Scan# 40  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion: 85 Resp: 26073  
Ion Ratio Lower Upper  
85 100  
87 33.8 26.8 40.2





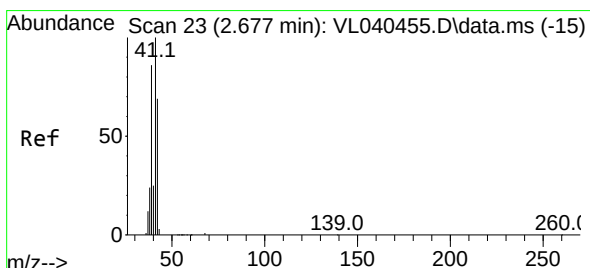
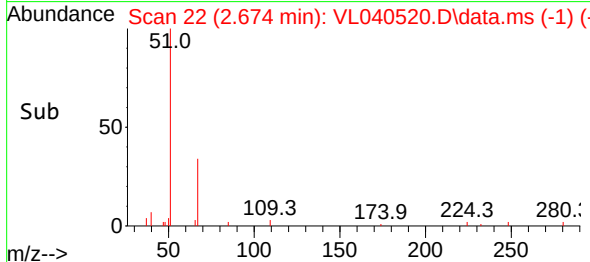
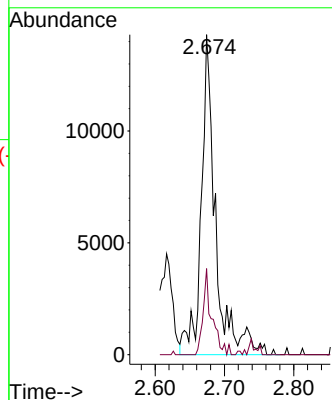
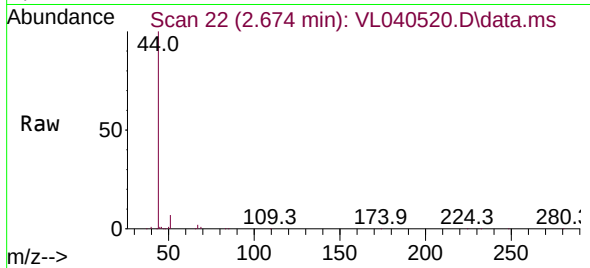
#3  
Chlorodifluoromethane  
Concen: 0.130 ppbv  
RT: 2.674 min Scan# 21  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 51 Resp: 2053  
Ion Ratio Lower Upper  
51 100  
67 16.6 14.6 21.8

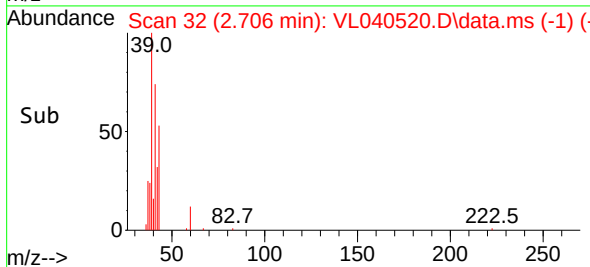
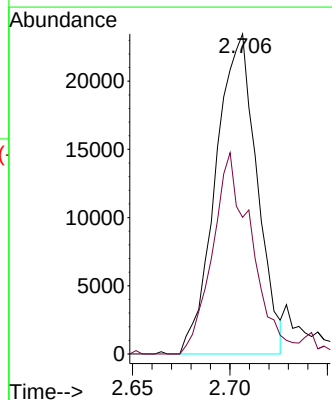
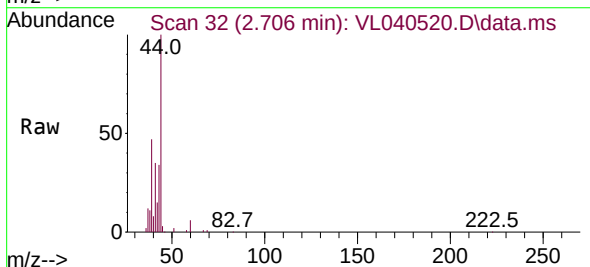
Manual Integrations  
APPROVED

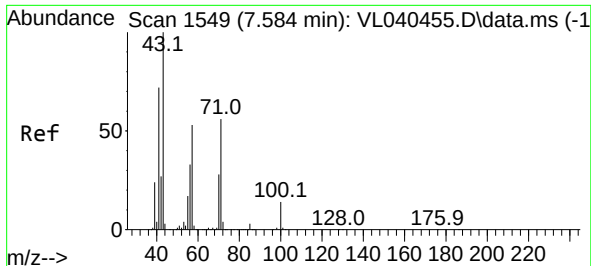
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#9  
Propene  
Concen: 0.636 ppbv  
RT: 2.706 min Scan# 32  
Delta R.T. 0.003 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

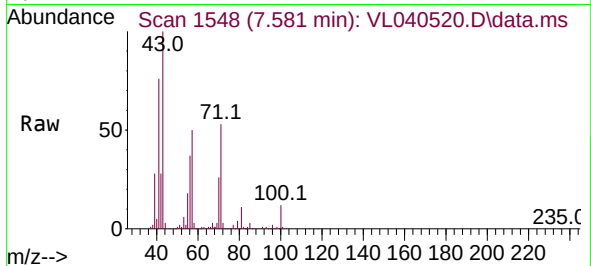
Tgt Ion: 41 Resp: 34437  
Ion Ratio Lower Upper  
41 100  
42 63.8 55.0 82.6





#10  
Heptane  
Concen: 2.968 ppbv  
RT: 7.581 min Scan# 1549  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

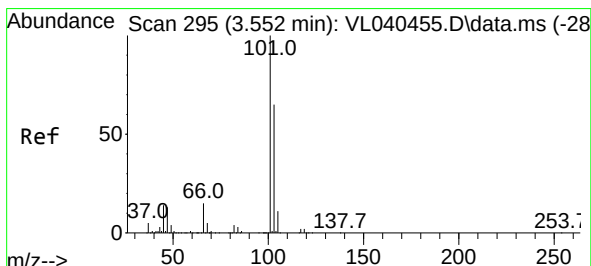
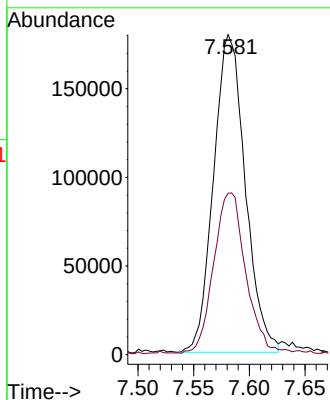
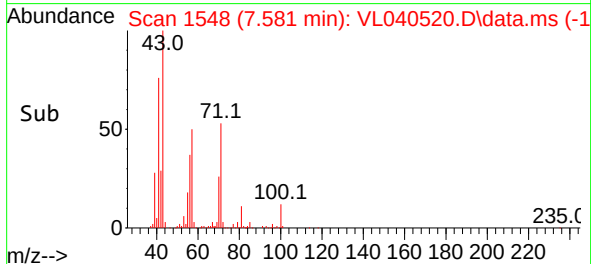
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



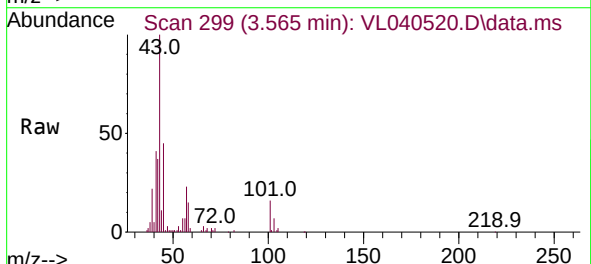
Tgt Ion: 43 Resp: 35512  
Ion Ratio Lower Upper  
43 100  
57 52.4 42.5 63.7

Manual Integrations  
APPROVED

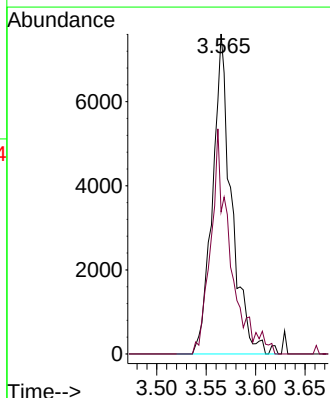
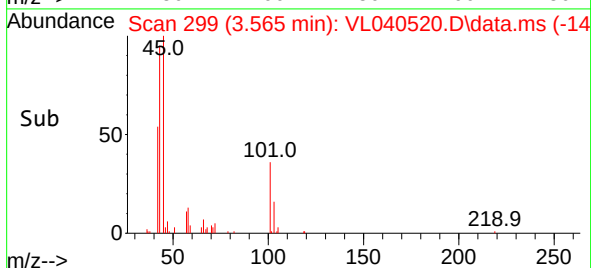
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023

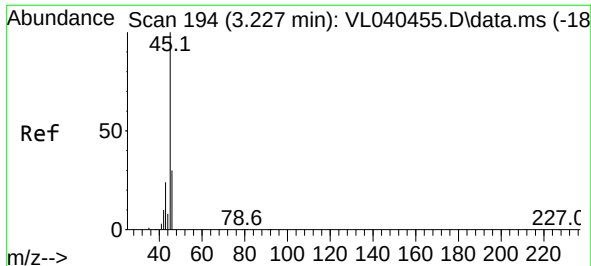


#11  
Trichlorofluoromethane  
Concen: 0.063 ppbv m  
RT: 3.565 min Scan# 299  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59



Tgt Ion:101 Resp: 10192  
Ion Ratio Lower Upper  
101 100  
103 44.4 53.4 80.0#





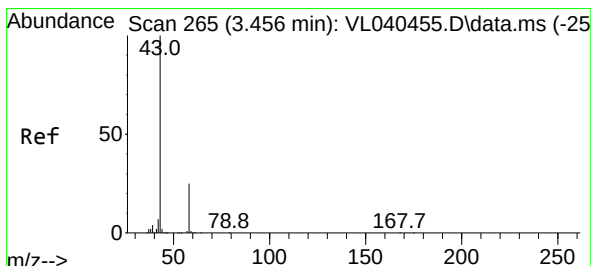
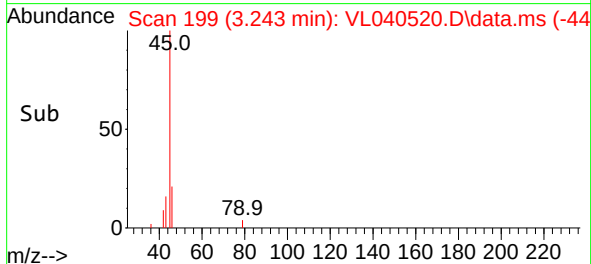
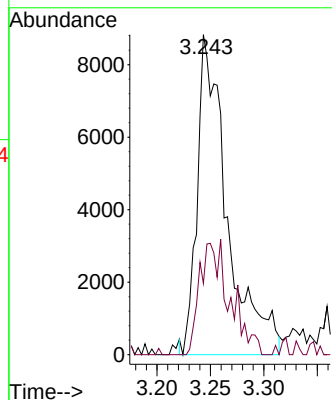
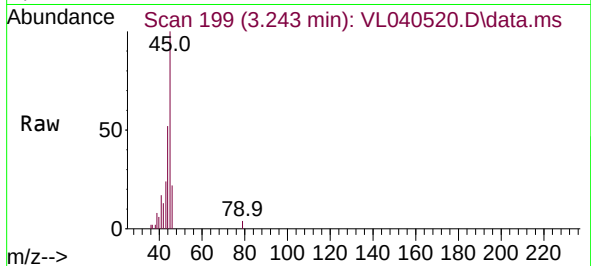
#13  
Ethanol  
Concen: 1.450 ppbv m  
RT: 3.243 min Scan# 194  
Delta R.T. -0.003 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 45 Resp: 17088  
Ion Ratio Lower Upper  
45 100  
46 0.0 15.3 61.1

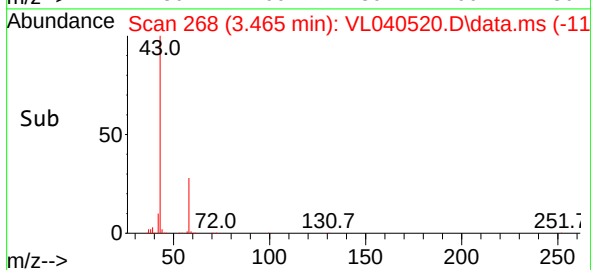
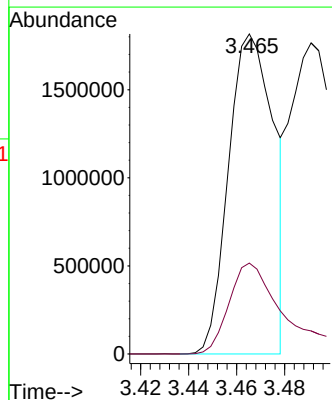
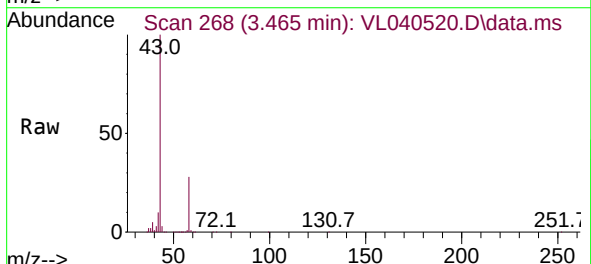
Manual Integrations  
APPROVED

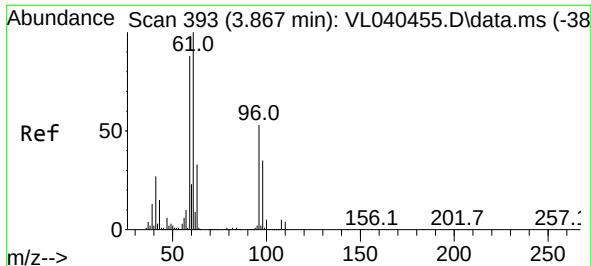
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#15  
Acetone  
Concen: 20.747 ppbv  
RT: 3.465 min Scan# 268  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion: 43 Resp: 2384524  
Ion Ratio Lower Upper  
43 100  
58 36.9 22.9 34.3





#17

tert-Butyl alcohol

Concen: 62.887 ppbv

RT: 3.877 min Scan# 396

Delta R.T. -0.006 min

Lab File: VL040520.D

Acq: 10 Jul 2023 23:59

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion: 59 Resp: 747592

Ion Ratio Lower Upper

59 100

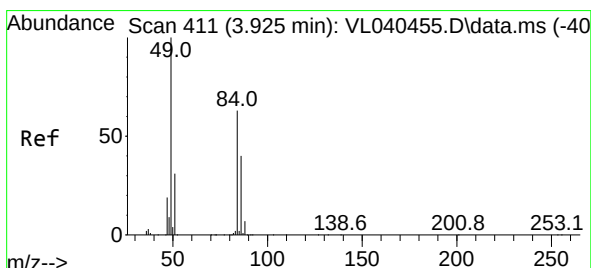
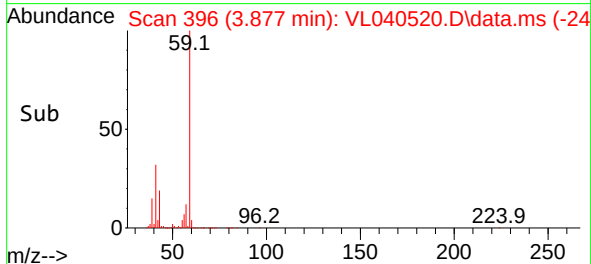
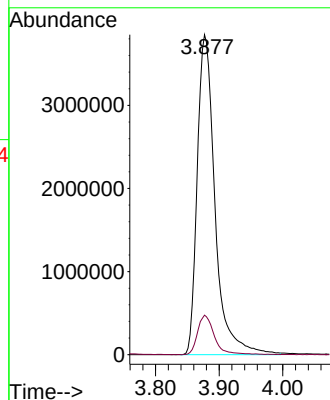
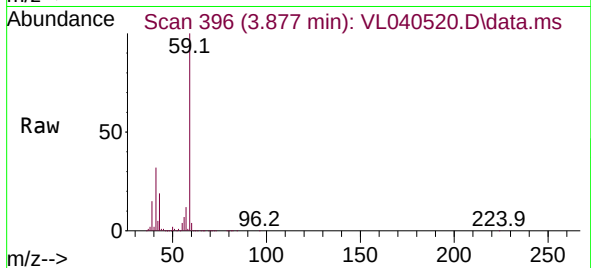
57 11.7 8.7 13.1

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 07/11/2023

Supervised By :Mahesh Dadoda 07/11/2023



#20

Methylene Chloride

Concen: 0.428 ppbv

RT: 3.932 min Scan# 413

Delta R.T. -0.010 min

Lab File: VL040520.D

Acq: 10 Jul 2023 23:59

Tgt Ion: 84 Resp: 20919

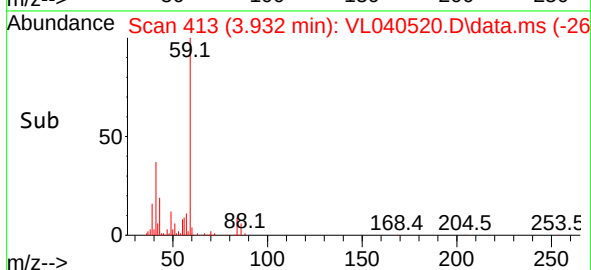
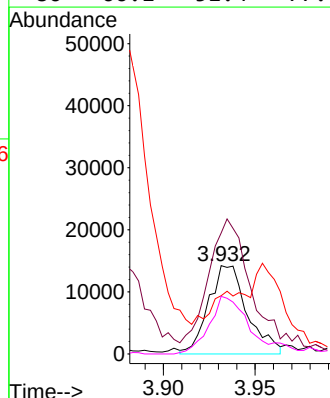
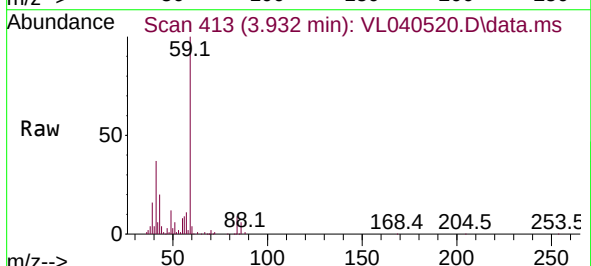
Ion Ratio Lower Upper

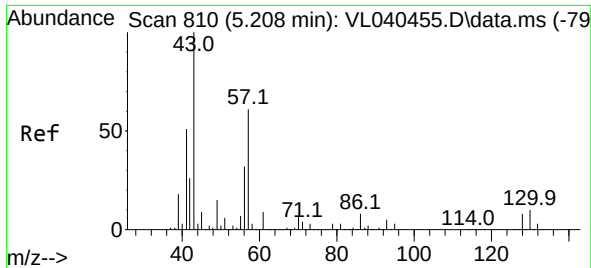
84 100

49 129.5 123.4 185.2

51 17.0 38.3 57.5#

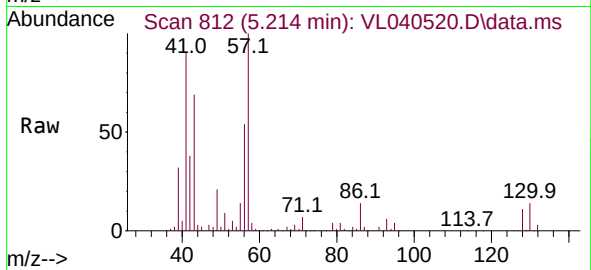
86 66.1 51.4 77.0





#26  
Hexane  
Concen: 10.236 ppbv  
RT: 5.214 min Scan# 810  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

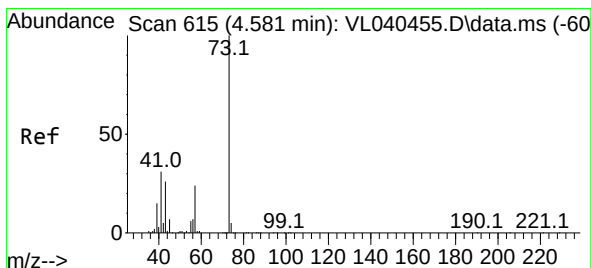
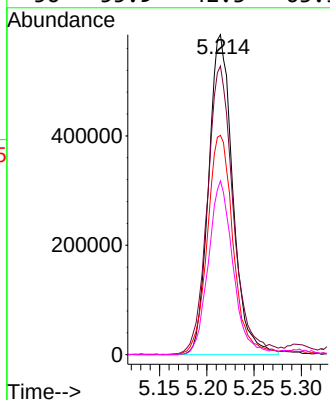
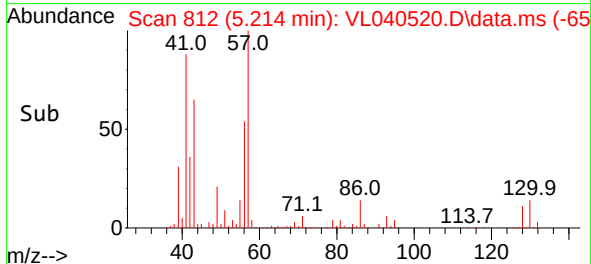
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 57 Resp: 1040478  
Ion Ratio Lower Upper  
57 100  
41 97.7 69.5 104.3  
43 74.1 177.1 265.7  
56 55.9 42.3 63.5

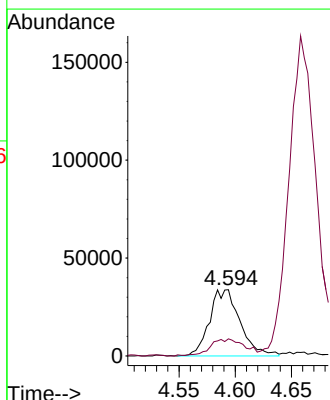
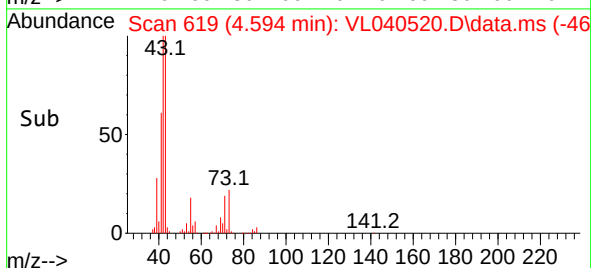
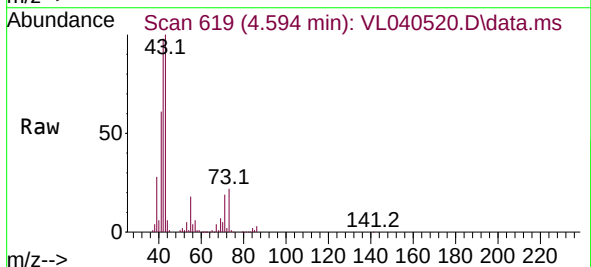
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023

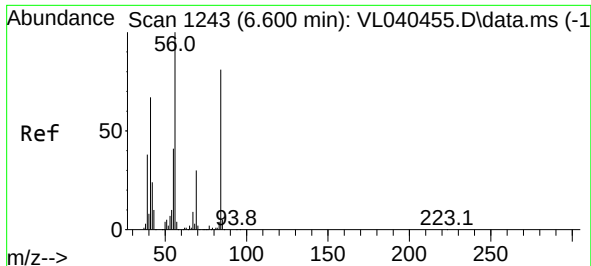


#28  
Methyl tert-Butyl Ether  
Concen: 0.784 ppbv m  
RT: 4.594 min Scan# 619  
Delta R.T. 0.000 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion: 73 Resp: 64139  
Ion Ratio Lower Upper  
73 100  
57 0.0 18.8 28.2#

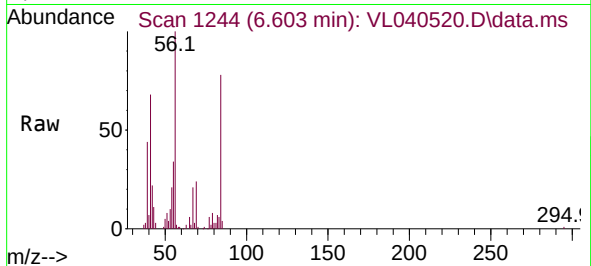






#30  
Cyclohexane  
Concen: 0.910 ppbv  
RT: 6.603 min Scan# 1243  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

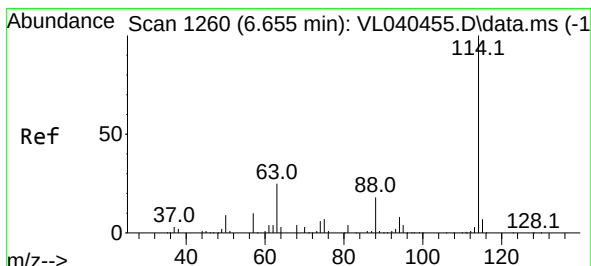
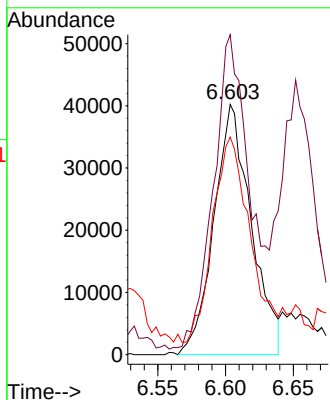
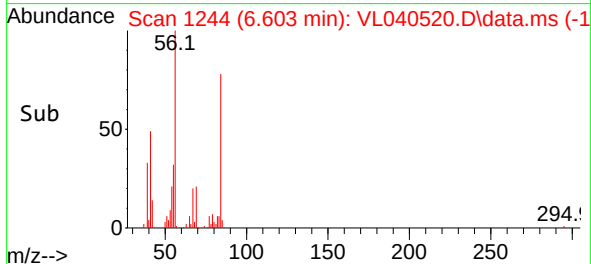
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



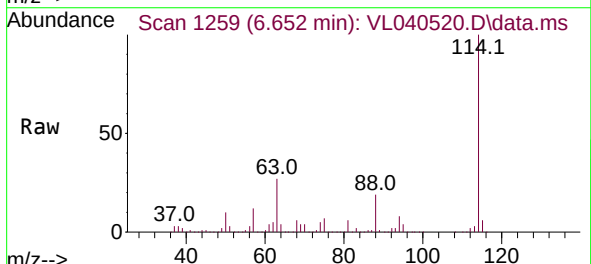
Tgt Ion: 84 Resp: 76978  
Ion Ratio Lower Upper  
84 100  
56 119.8 108.7 163.1  
41 88.7 64.5 96.7

Manual Integrations  
APPROVED

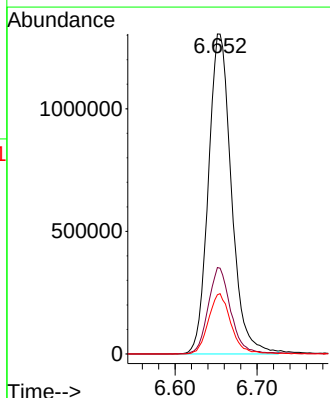
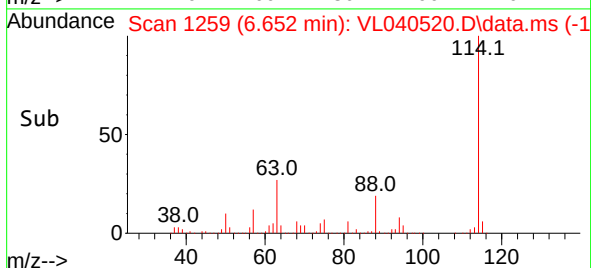
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023

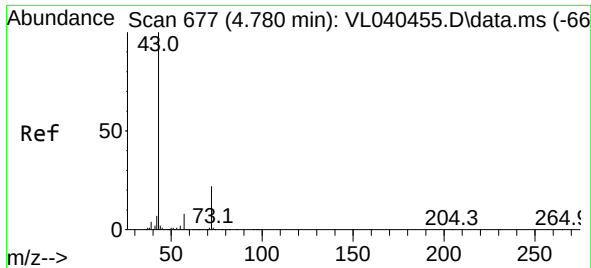


#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 6.652 min Scan# 1259  
Delta R.T. -0.013 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59



Tgt Ion:114 Resp: 2548328  
Ion Ratio Lower Upper  
114 100  
63 26.8 19.6 29.4  
88 18.6 14.2 21.2





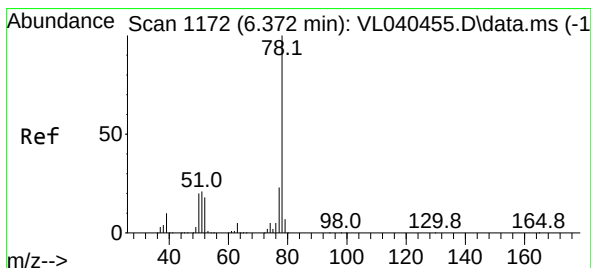
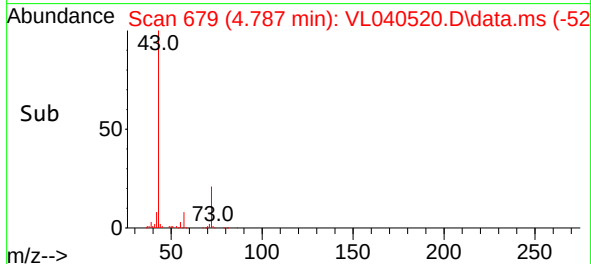
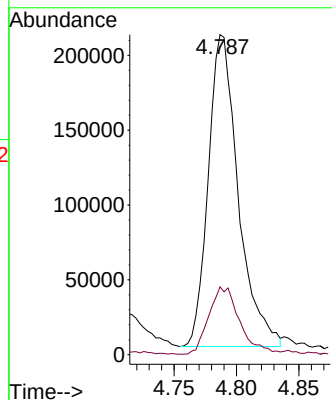
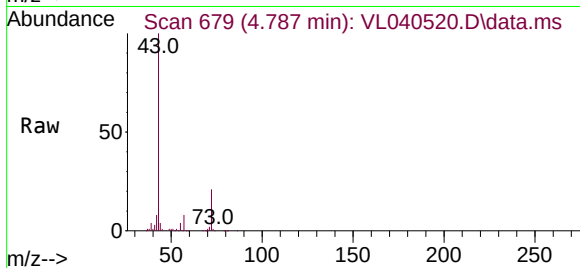
#34  
2-Butanone  
Concen: 2.772 ppbv  
RT: 4.787 min Scan# 61  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 43 Resp: 34901  
Ion Ratio Lower Upper  
43 100  
72 23.3 19.1 28.7

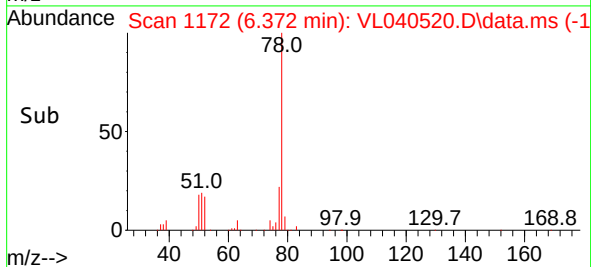
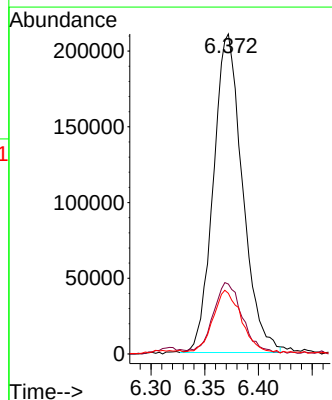
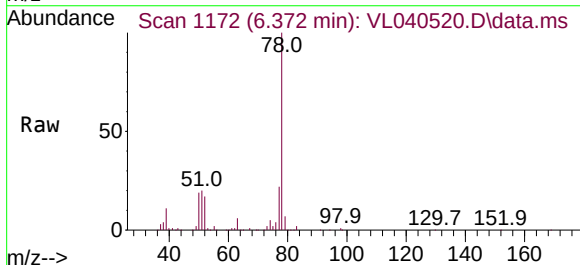
Manual Integrations  
APPROVED

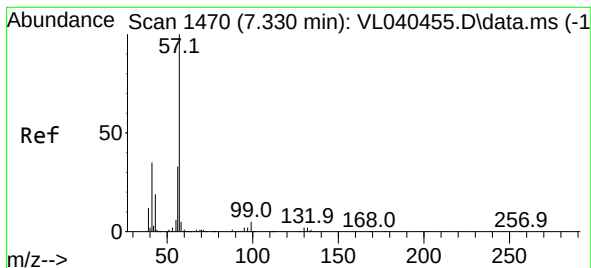
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#36  
Benzene  
Concen: 1.932 ppbv  
RT: 6.372 min Scan# 1172  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion: 78 Resp: 396161  
Ion Ratio Lower Upper  
78 100  
77 21.5 17.4 26.0  
50 18.7 14.4 21.6





#44

2,2,4-Trimethylpentane

Concen: 2.159 ppbv

RT: 7.330 min Scan# 1470

Delta R.T. -0.006 min

Lab File: VL040520.D

Acq: 10 Jul 2023 23:59

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion: 57 Resp: 71222

Ion Ratio Lower Upper

57 100

41 50.5 25.5 38.3

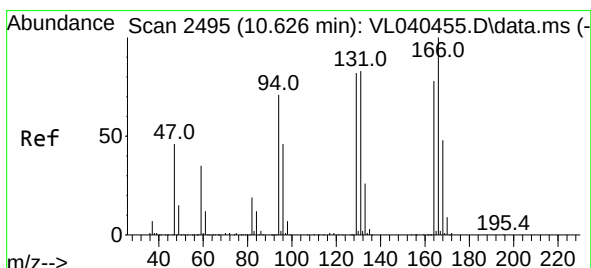
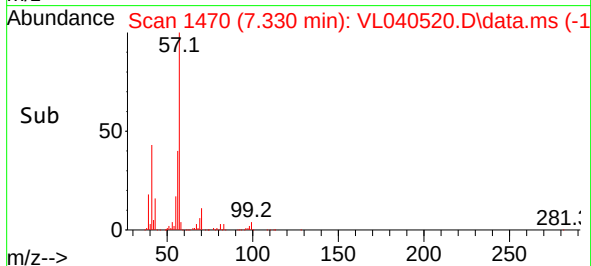
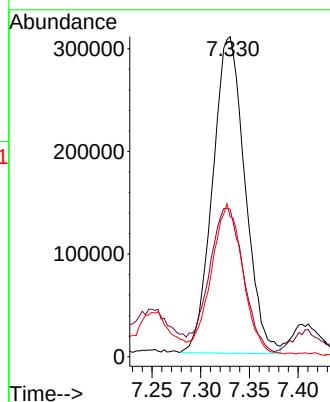
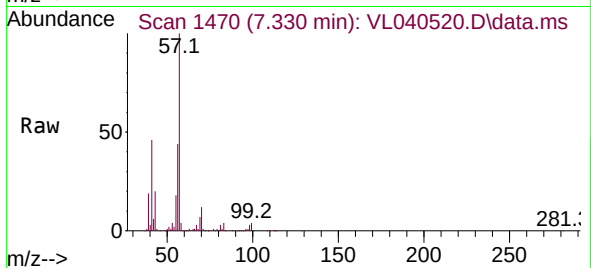
56 49.5 25.1 37.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 07/11/2023

Supervised By :Mahesh Dadoda 07/11/2023



#52

Tetrachloroethene

Concen: 3.234 ppbv

RT: 10.619 min Scan# 2493

Delta R.T. -0.006 min

Lab File: VL040520.D

Acq: 10 Jul 2023 23:59

Tgt Ion:164 Resp: 214738

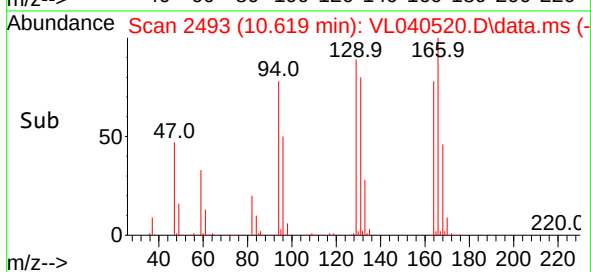
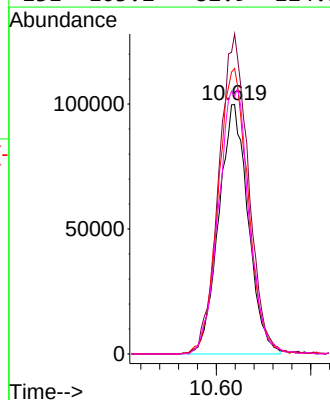
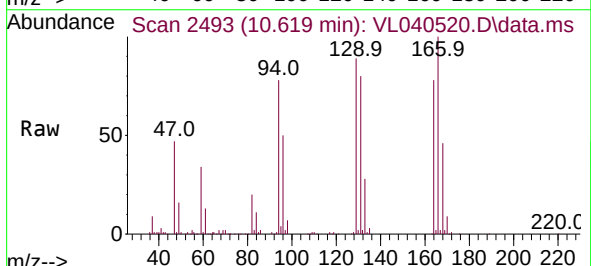
Ion Ratio Lower Upper

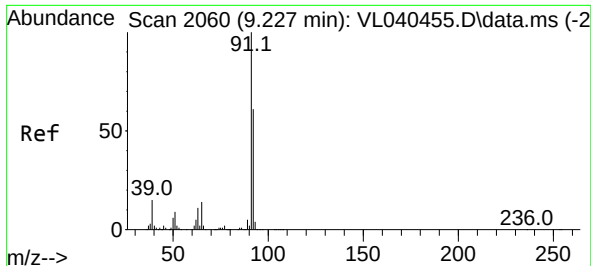
164 100

166 128.3 103.9 155.9

129 114.4 84.6 126.8

131 103.2 82.9 124.3





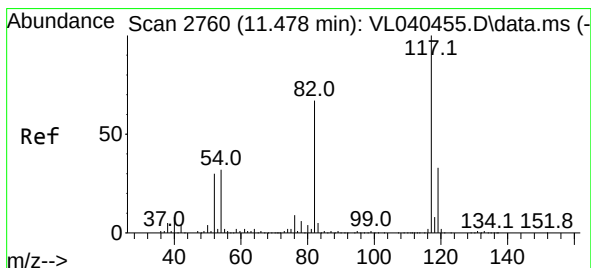
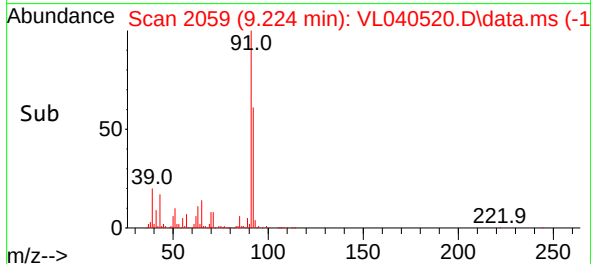
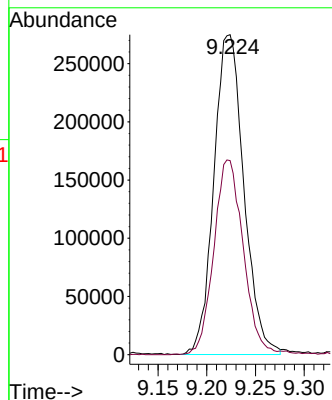
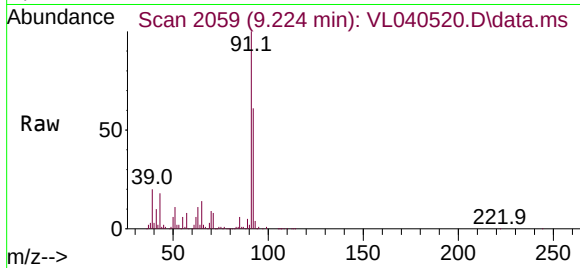
#53  
Toluene  
Concen: 2.643 ppbv  
RT: 9.224 min Scan# 2060  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 91 Resp: 588619  
Ion Ratio Lower Upper  
91 100  
92 60.6 49.1 73.7

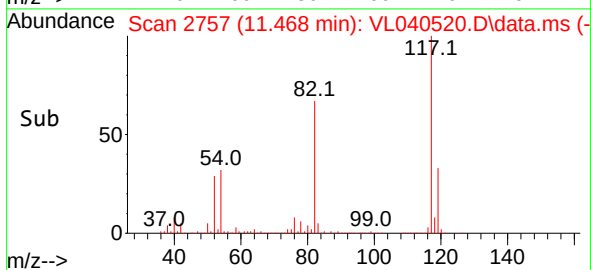
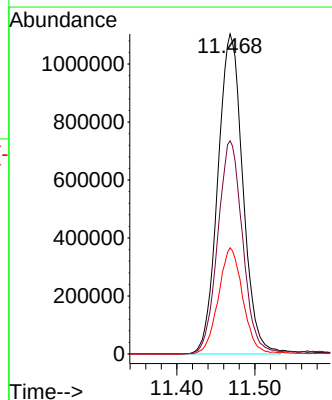
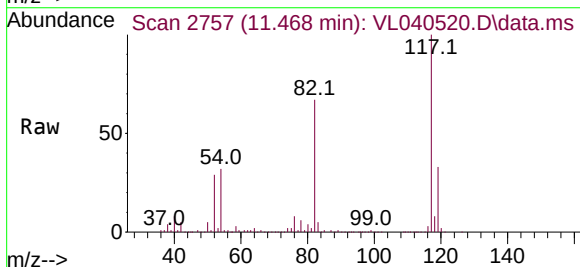
Manual Integrations  
APPROVED

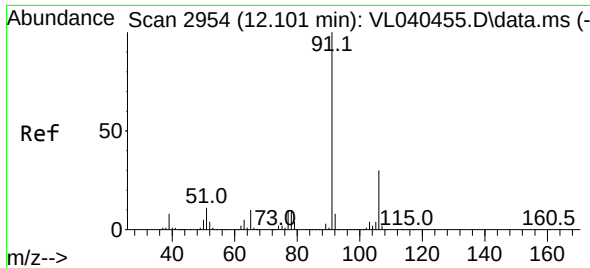
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.468 min Scan# 2757  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion:117 Resp: 2457388  
Ion Ratio Lower Upper  
117 100  
82 66.7 50.2 75.4  
119 32.7 26.9 40.3





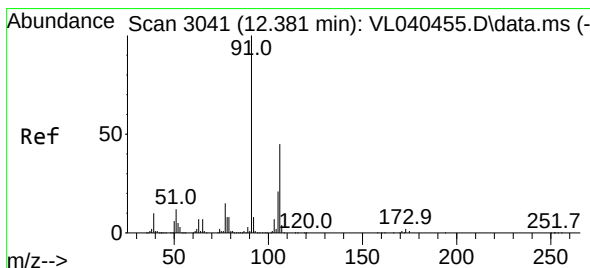
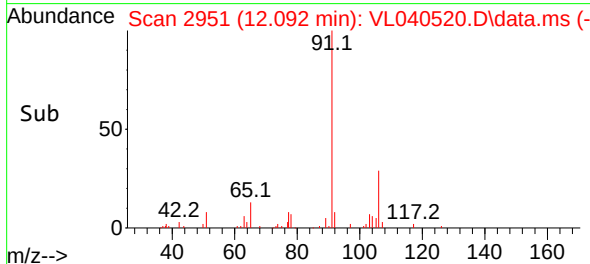
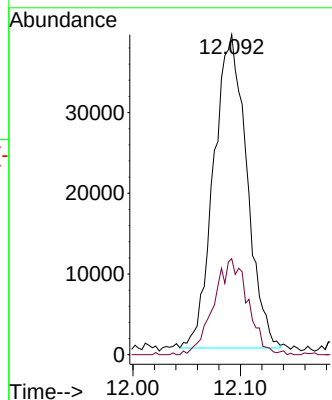
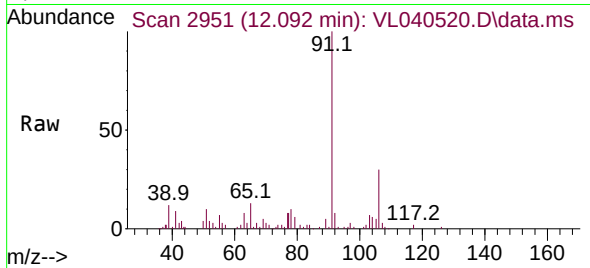
#58  
Ethyl Benzene  
Concen: 0.269 ppbv  
RT: 12.092 min Scan# 2954  
Delta R.T. -0.010 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 91 Resp: 8296  
Ion Ratio Lower Upper  
91 100  
106 30.7 25.4 38.0

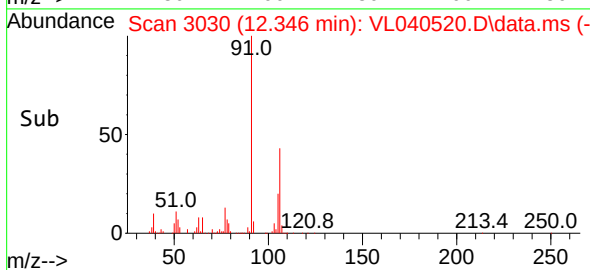
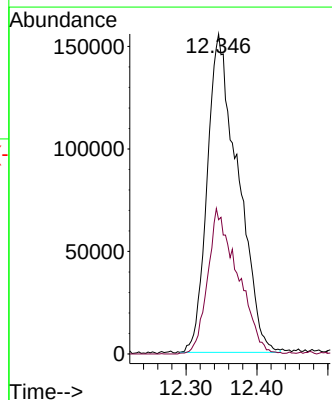
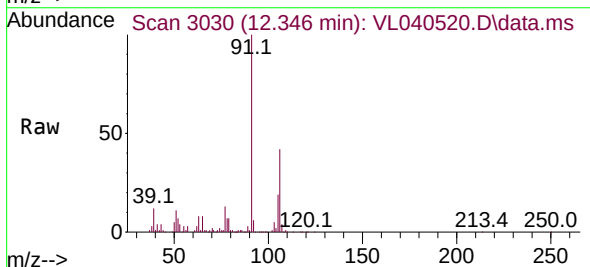
Manual Integrations  
APPROVED

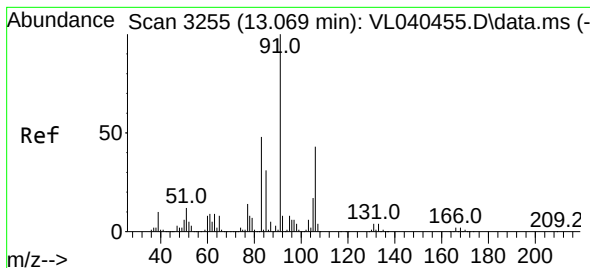
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#59  
m/p-Xylene  
Concen: 1.696 ppbv  
RT: 12.346 min Scan# 3030  
Delta R.T. -0.039 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion: 91 Resp: 466822  
Ion Ratio Lower Upper  
91 100  
106 44.7 35.9 53.9





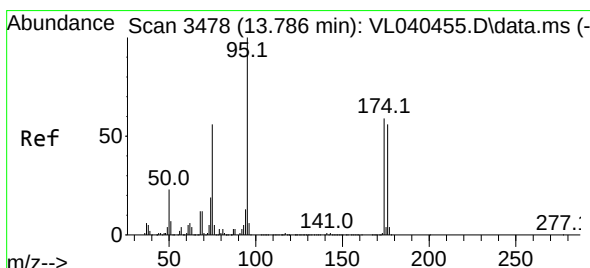
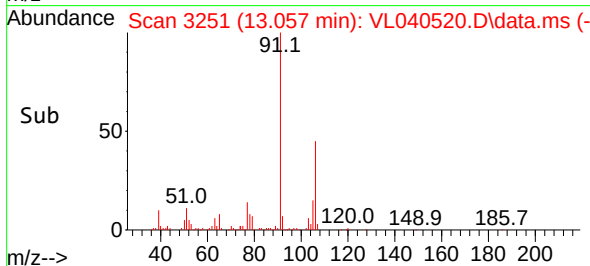
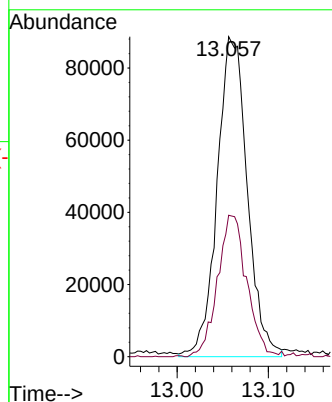
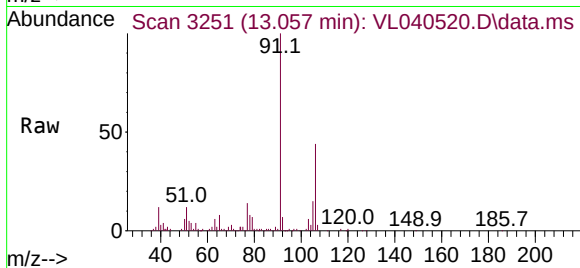
#60  
o-Xylene  
Concen: 0.774 ppbv m  
RT: 13.057 min Scan# 31  
Delta R.T. -0.013 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 91 Resp: 202915  
Ion Ratio Lower Upper  
91 100  
106 43.0 22.7 68.0

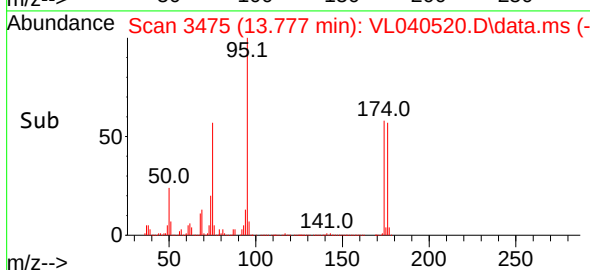
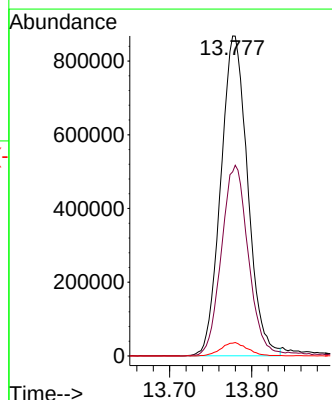
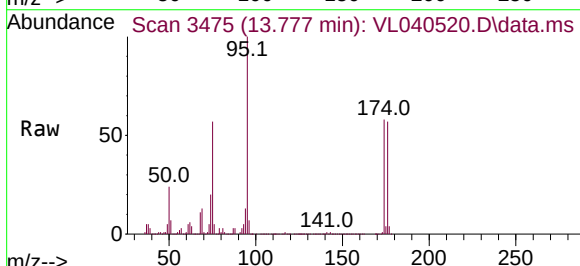
Manual Integrations  
APPROVED

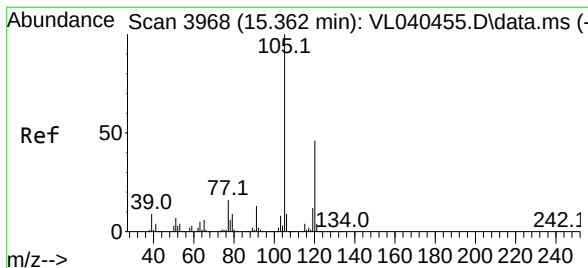
Reviewed By :Semsettin Yesilyurt 07/11/2023  
Supervised By :Mahesh Dadoda 07/11/2023



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.179 ppbv  
RT: 13.777 min Scan# 3475  
Delta R.T. -0.006 min  
Lab File: VL040520.D  
Acq: 10 Jul 2023 23:59

Tgt Ion: 95 Resp: 1979618  
Ion Ratio Lower Upper  
95 100  
174 60.7 50.6 75.8  
175 4.3 3.7 5.5





#73

1,3,5-Trimethylbenzene

Concen: 0.116 ppbv

RT: 15.359 min Scan# 3968

Delta R.T. -0.003 min

Lab File: VL040520.D

Acq: 10 Jul 2023 23:59

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion:105 Resp: 3146

Ion Ratio Lower Upper

105 100

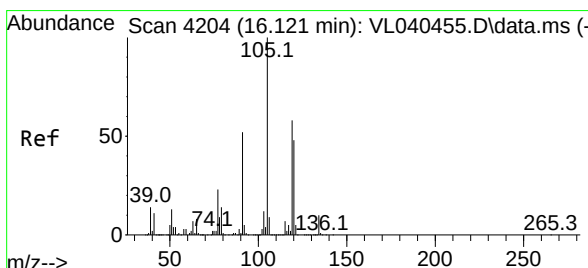
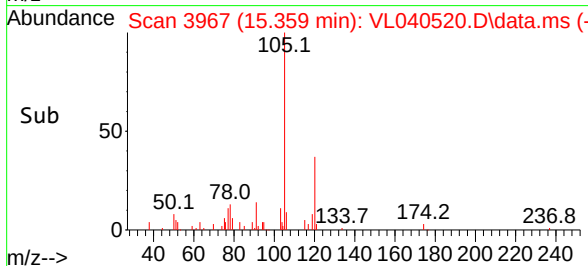
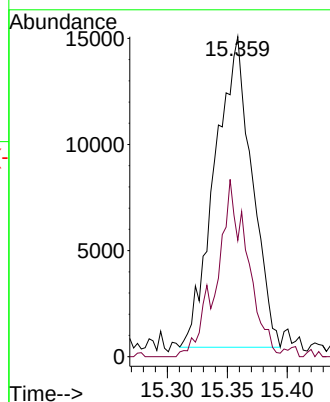
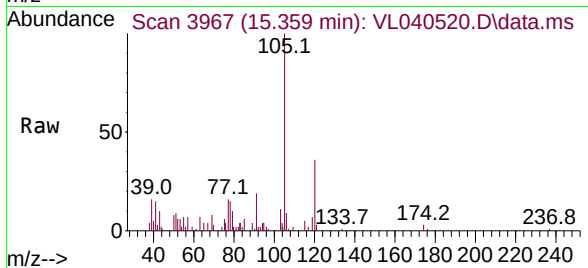
120 39.5 38.2 57.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 07/11/2023

Supervised By :Mahesh Dadoda 07/11/2023



#74

1,2,4-Trimethylbenzene

Concen: 0.118 ppbv

RT: 16.101 min Scan# 4198

Delta R.T. -0.016 min

Lab File: VL040520.D

Acq: 10 Jul 2023 23:59

Tgt Ion:105 Resp: 37116

Ion Ratio Lower Upper

105 100

120 28.5 40.3 60.5#

91 10.2 46.8 70.2#

77 18.8 18.6 28.0

