

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL051223\  
 Data File : VL040425.D  
 Acq On : 12 May 2023 19:31  
 Operator : SY/MD  
 Sample : 02785-01 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 05/16/2023  
 Supervised By :Mahesh Dadoda 05/16/2023

Quant Time: May 15 00:48:26 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL041323AIR.M

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

QLast Update : Thu Apr 13 14:37:02 2023

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.182  | 49    | 1078630  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 6.645  | 114   | 2685589  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5        | 11.468 | 117   | 2480029  | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.774 | 95    | 1975363  | 9.632    | ppbv   | -0.01    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 96.300%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane  | 2.713  | 85    | 30257    | 0.156    | ppbv   | 92       |
| 4) Chloromethane            | 2.796  | 50    | 11647    | 0.131    | ppbv   | 96       |
| 7) Chloroethane             | 3.179  | 64    | 3305m    | 0.119    | ppbv   |          |
| 9) Propene                  | 2.678  | 41    | 345124   | 6.198    | ppbv   | 97       |
| 10) Heptane                 | 7.571  | 43    | 19177m   | 0.152    | ppbv   |          |
| 13) Ethanol                 | 3.227  | 45    | 56931    | 12.247   | ppbv   | 99       |
| 15) Acetone                 | 3.449  | 43    | 1947339  | 12.747   | ppbv   | 95       |
| 17) tert-Butyl alcohol      | 3.870  | 59    | 50078    | 0.357    | ppbv # | 91       |
| 19) Isopropyl Alcohol       | 3.568  | 45    | 58187    | 0.835    | ppbv # | 90       |
| 20) Methylene Chloride      | 3.922  | 84    | 118053   | 1.935    | ppbv   | 95       |
| 23) Vinyl Acetate           | 4.616  | 43    | 170899   | 4.394    | ppbv # | 93       |
| 26) Hexane                  | 5.205  | 57    | 244237   | 2.254    | ppbv # | 34       |
| 27) Carbon Disulfide        | 4.108  | 76    | 25610    | 0.183    | ppbv # | 59       |
| 29) Chloroform              | 5.263  | 83    | 295083   | 1.528    | ppbv   | 96       |
| 34) 2-Butanone              | 4.777  | 43    | 530389   | 3.663    | ppbv   | 98       |
| 36) Benzene                 | 6.362  | 78    | 97240    | 0.444    | ppbv # | 90       |
| 50) 4-Methyl-2-Pentanone    | 8.185  | 43    | 39521m   | 0.180    | ppbv   |          |
| 51) 2-Hexanone              | 9.555  | 43    | 62641    | 0.386    | ppbv # | 98       |
| 52) Tetrachloroethene       | 10.613 | 164   | 17711m   | 0.258    | ppbv   |          |
| 53) Toluene                 | 9.221  | 91    | 119779   | 0.516    | ppbv   | 98       |
| 59) m/p-Xylene              | 12.346 | 91    | 35895m   | 0.128    | ppbv   |          |
| 74) 1,2,4-Trimethylbenzene  | 16.105 | 105   | 47154m   | 0.150    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

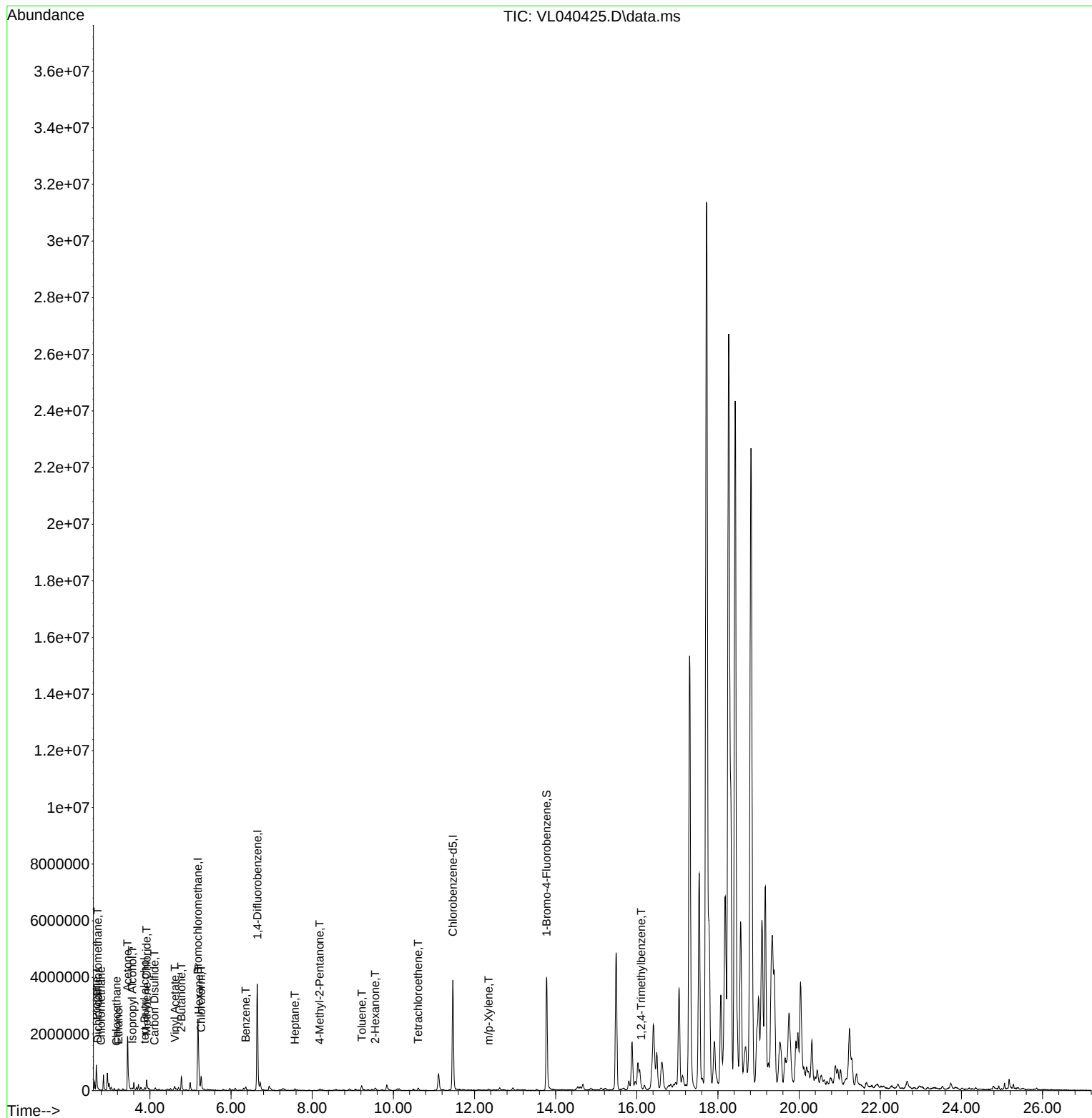
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL051223\  
Data File : VL040425.D  
Acq On : 12 May 2023 19:31  
Operator : SY/MD  
Sample : 02785-01 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

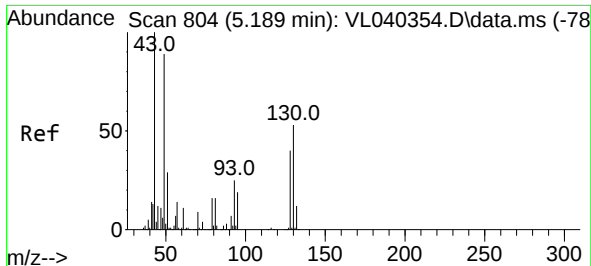
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Quant Time: May 15 00:48:26 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL041323AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Apr 13 14:37:02 2023  
Response via : Initial Calibration

Manual Integrations  
APPROVED

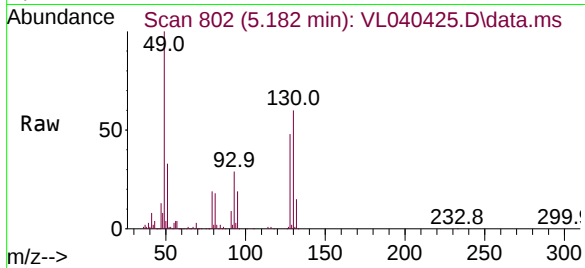
Reviewed By : Semsettin Yesilyurt 05/16/2023  
Supervised By : Mahesh Dadoda 05/16/2023





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.182 min Scan# 80  
Delta R.T. -0.007 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

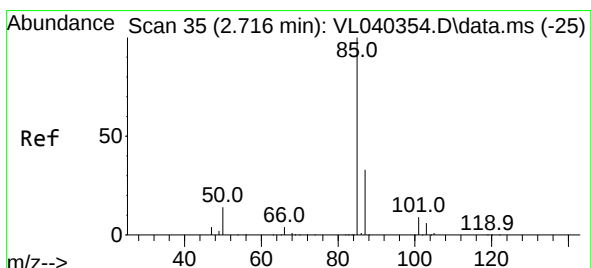
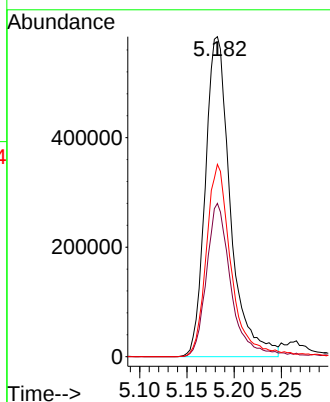
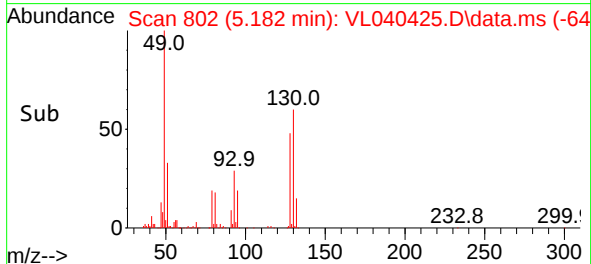
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 49 Resp: 1078630  
Ion Ratio Lower Upper  
49 100  
128 48.2 23.7 71.1  
130 61.4 29.9 89.8

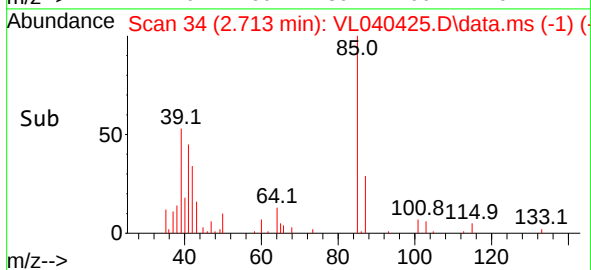
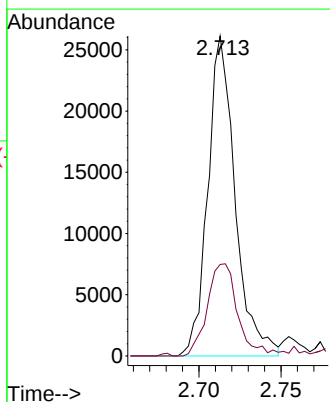
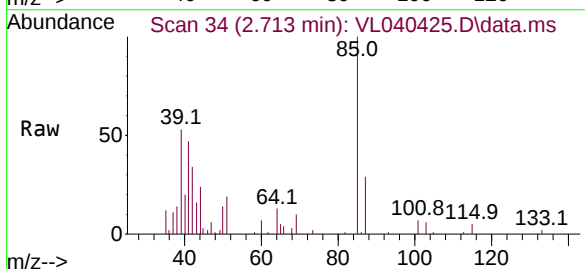
Manual Integrations  
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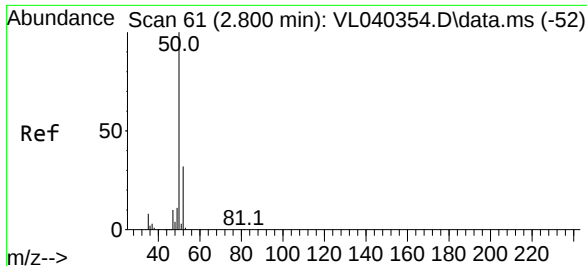
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#2  
Dichlorodifluoromethane  
Concen: 0.156 ppbv  
RT: 2.713 min Scan# 34  
Delta R.T. -0.003 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

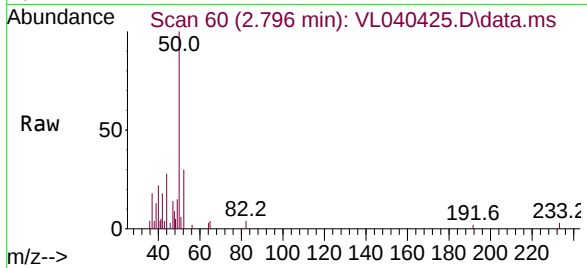
Tgt Ion: 85 Resp: 30257  
Ion Ratio Lower Upper  
85 100  
87 28.6 26.6 40.0





#4  
Chloromethane  
Concen: 0.131 ppbv  
RT: 2.796 min Scan# 60  
Delta R.T. -0.004 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

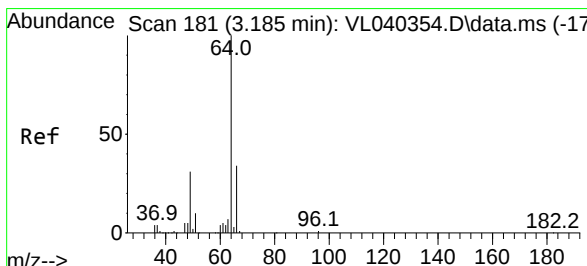
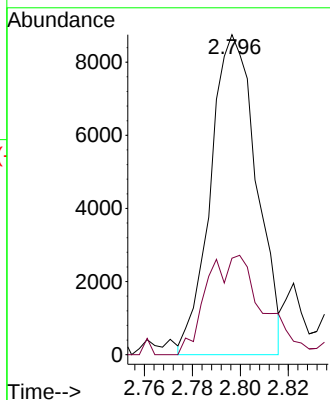
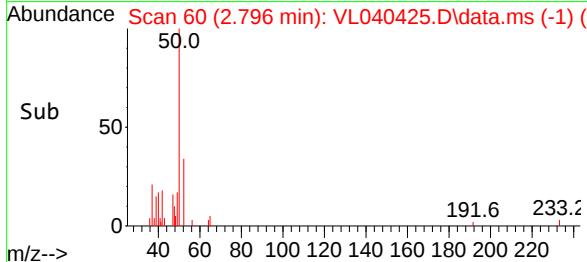
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 50 Resp: 1164  
Ion Ratio Lower Upper  
50 100  
52 29.2 25.3 37.9

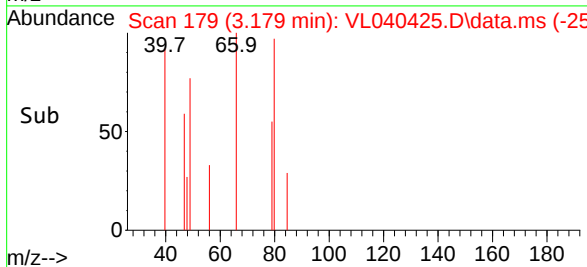
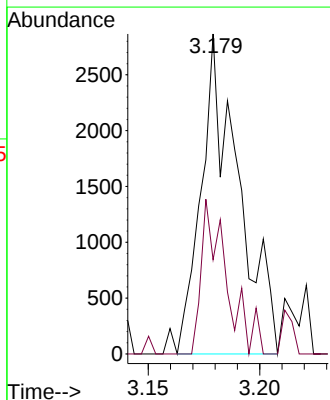
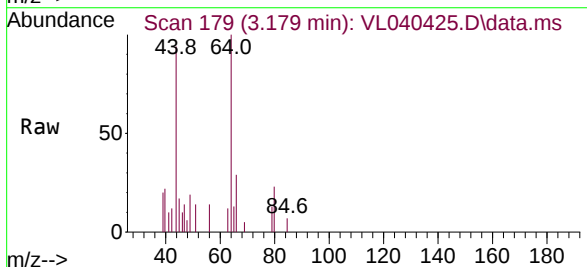
Manual Integrations  
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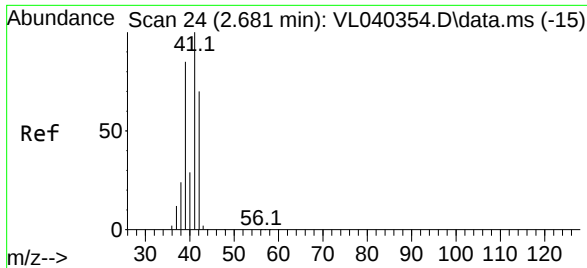
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#7  
Chloroethane  
Concen: 0.119 ppbv m  
RT: 3.179 min Scan# 179  
Delta R.T. -0.006 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

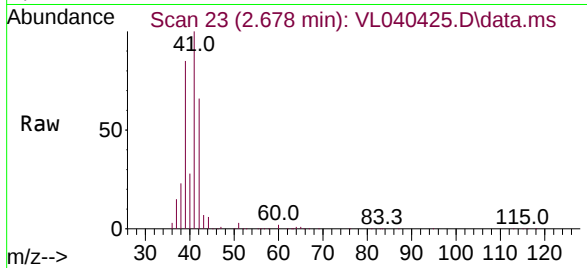
Tgt Ion: 64 Resp: 3305  
Ion Ratio Lower Upper  
64 100  
66 29.4 27.5 41.3





#9  
 Propene  
 Concen: 6.198 ppbv  
 RT: 2.678 min Scan# 21  
 Delta R.T. -0.003 min  
 Lab File: VL040425.D  
 Acq: 12 May 2023 19:31

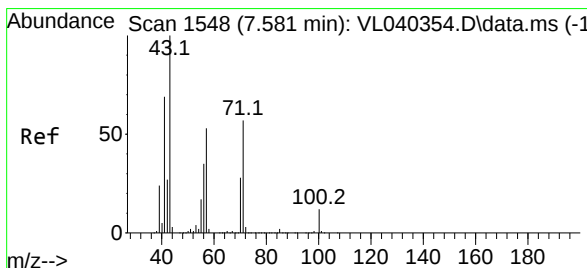
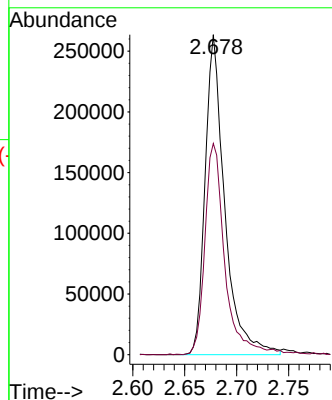
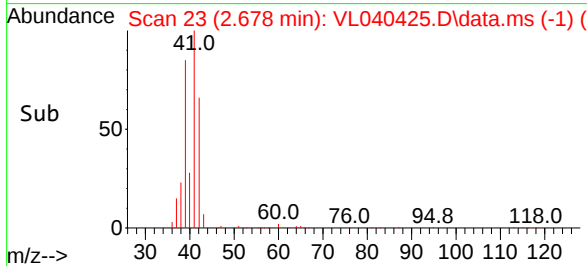
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1



Tgt Ion: 41 Resp: 345124  
 Ion Ratio Lower Upper  
 41 100  
 42 67.8 56.5 84.7

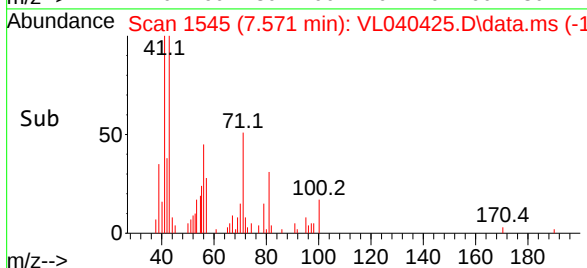
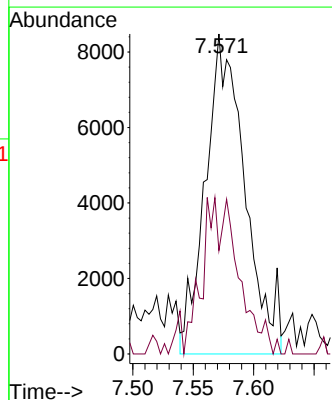
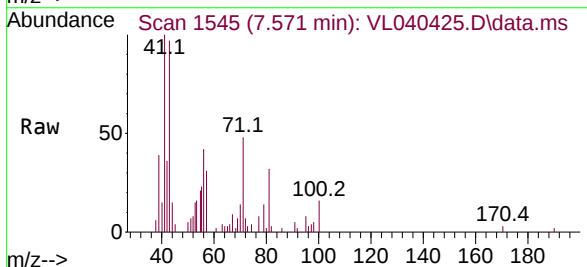
Manual Integrations  
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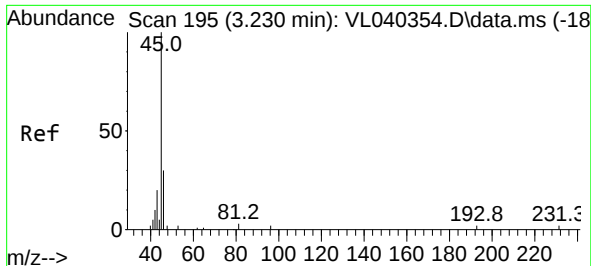
Reviewed By :Semsettin Yesilyurt 05/16/2023  
 Supervised By :Mahesh Dadoda 05/16/2023



#10  
 Heptane  
 Concen: 0.152 ppbv m  
 RT: 7.571 min Scan# 1545  
 Delta R.T. -0.010 min  
 Lab File: VL040425.D  
 Acq: 12 May 2023 19:31

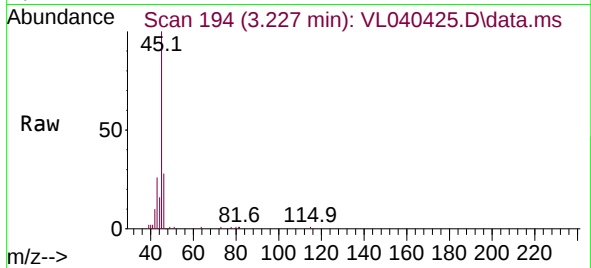
Tgt Ion: 43 Resp: 19177  
 Ion Ratio Lower Upper  
 43 100  
 57 48.6 42.2 63.4





#13  
Ethanol  
Concen: 12.247 ppbv  
RT: 3.227 min Scan# 194  
Delta R.T. -0.003 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

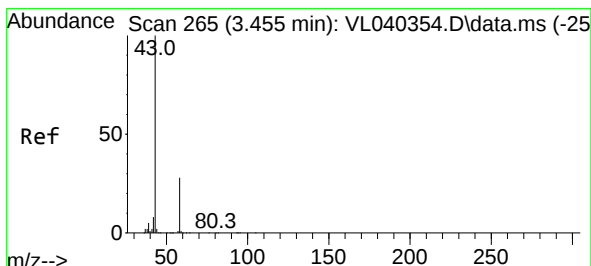
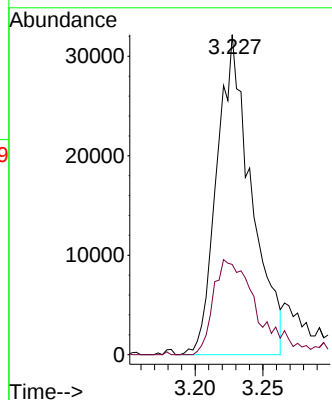
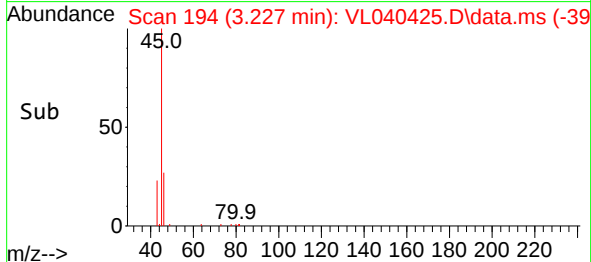
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



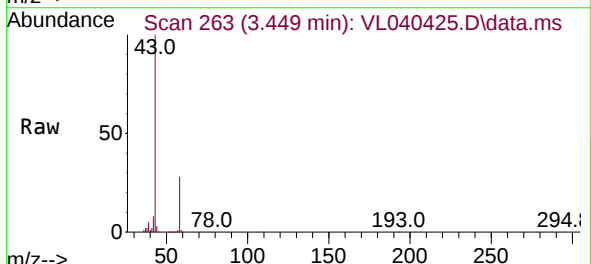
Tgt Ion: 45 Resp: 5693  
Ion Ratio Lower Upper  
45 100  
46 37.7 15.3 61.3

Manual Integrations  
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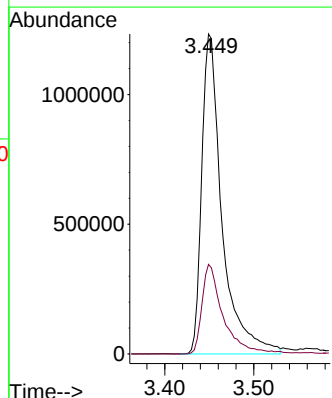
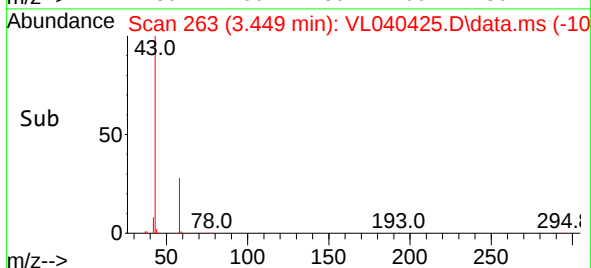
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023

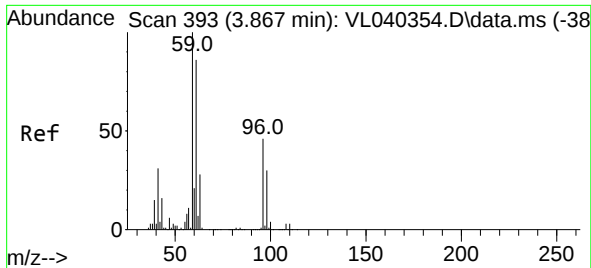


#15  
Acetone  
Concen: 12.747 ppbv  
RT: 3.449 min Scan# 263  
Delta R.T. -0.006 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31



Tgt Ion: 43 Resp: 1947339  
Ion Ratio Lower Upper  
43 100  
58 30.1 22.2 33.2





#17

tert-Butyl alcohol

Concen: 0.357 ppbv

RT: 3.870 min Scan# 393

Delta R.T. 0.003 min

Lab File: VL040425.D

Acq: 12 May 2023 19:31

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion: 59 Resp: 50078

Ion Ratio Lower Upper

59 100

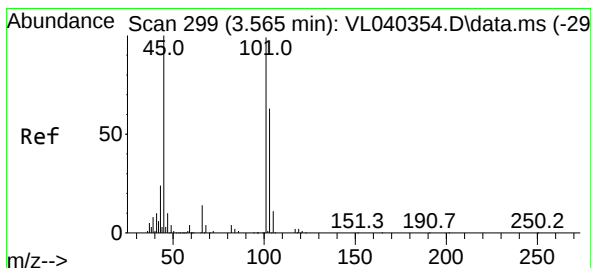
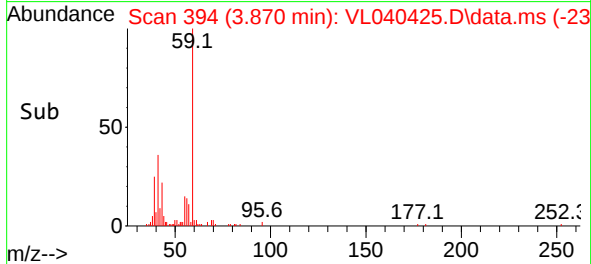
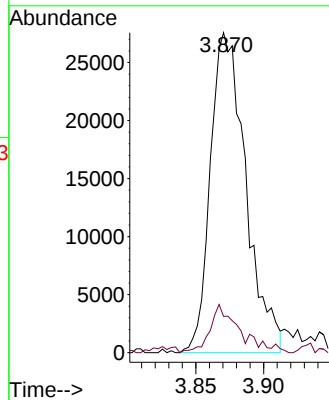
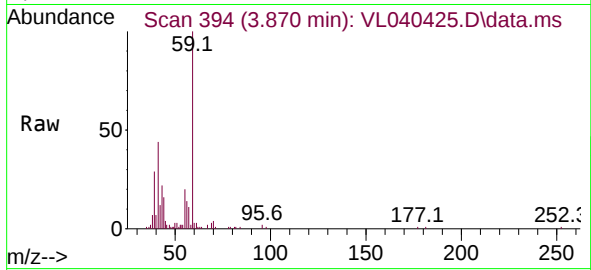
57 13.8 8.5 12.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/16/2023

Supervised By :Mahesh Dadoda 05/16/2023



#19

Isopropyl Alcohol

Concen: 0.835 ppbv

RT: 3.568 min Scan# 300

Delta R.T. 0.003 min

Lab File: VL040425.D

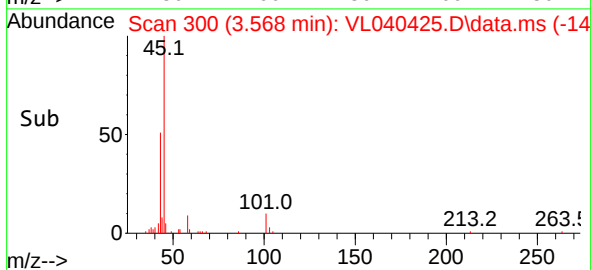
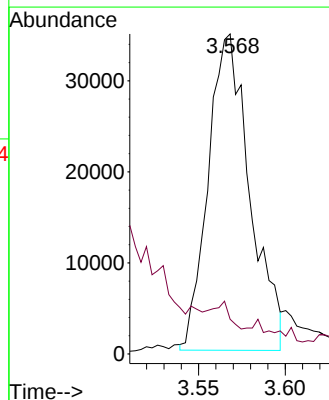
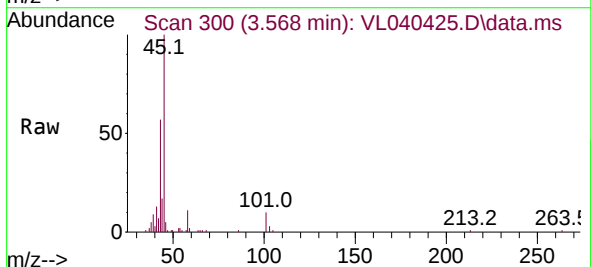
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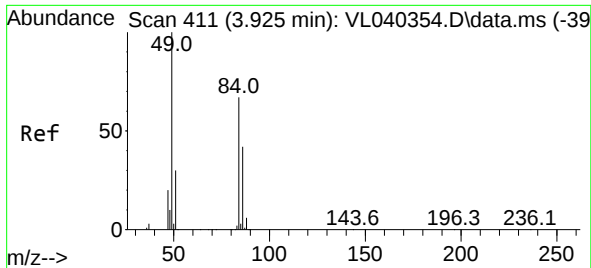
Tgt Ion: 45 Resp: 58187

Ion Ratio Lower Upper

45 100

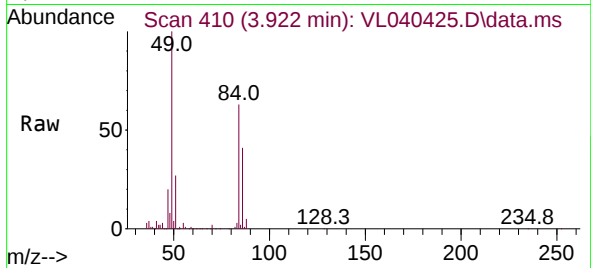
58 0.0 2.6 4.0





#20  
Methylene Chloride  
Concen: 1.935 ppbv  
RT: 3.922 min Scan# 411  
Delta R.T. -0.003 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

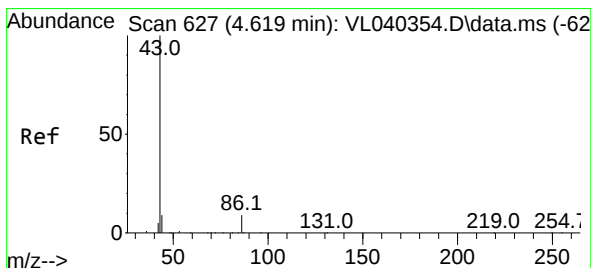
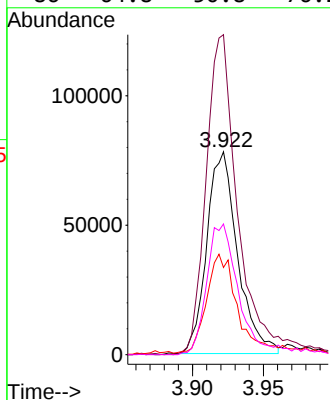
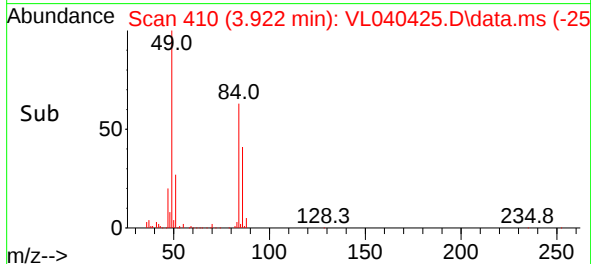
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



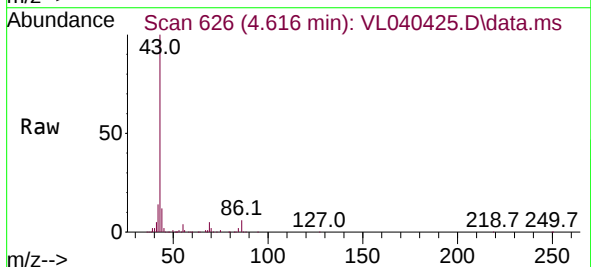
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Ion Ratio Lower Upper  
84 100  
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51 42.1 36.3 54.5  
86 64.8 50.8 76.2

Manual Integrations  
APPROVED

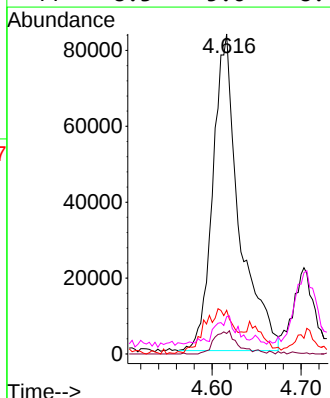
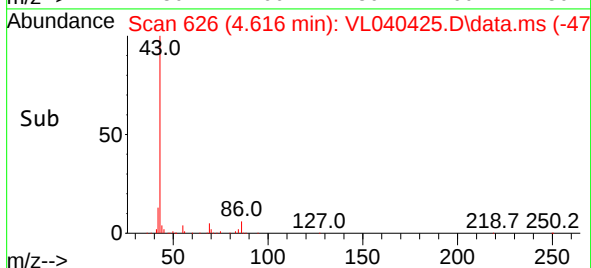
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023

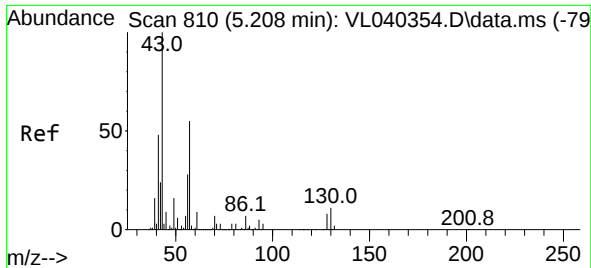


#23  
Vinyl Acetate  
Concen: 4.394 ppbv  
RT: 4.616 min Scan# 626  
Delta R.T. -0.003 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31



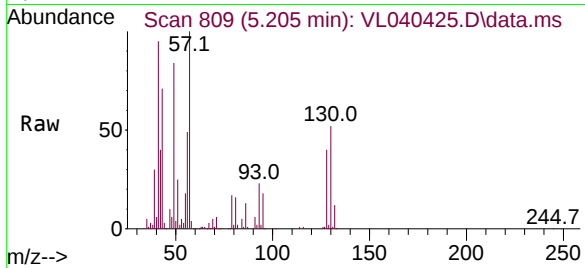
Tgt Ion: 43 Resp: 170899  
Ion Ratio Lower Upper  
43 100  
86 6.5 6.0 9.0  
42 13.0 6.4 9.6#  
44 8.3 5.6 8.4





#26  
Hexane  
Concen: 2.254 ppbv  
RT: 5.205 min Scan# 809  
Delta R.T. -0.003 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

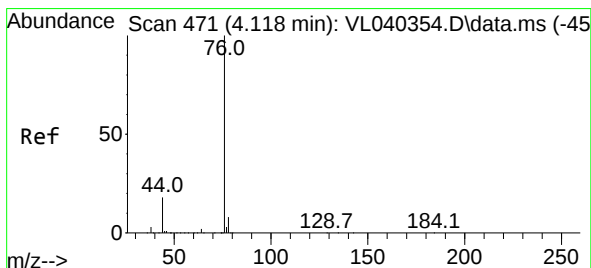
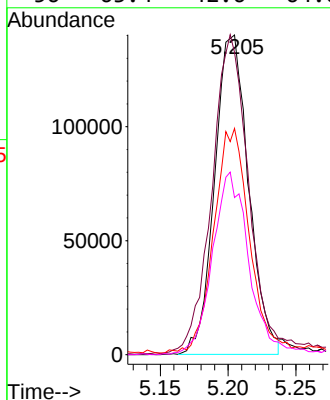
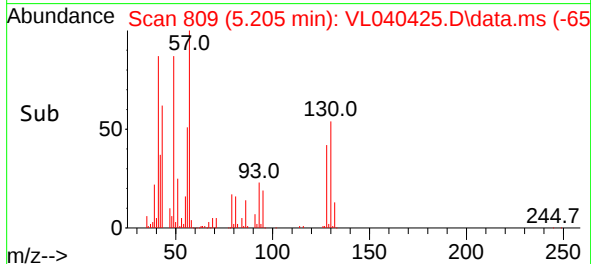
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 57 Resp: 244237  
Ion Ratio Lower Upper  
57 100  
41 112.1 74.8 112.2  
43 76.7 192.7 289.1  
56 63.4 42.6 64.0

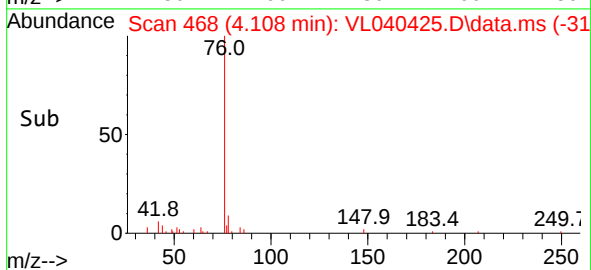
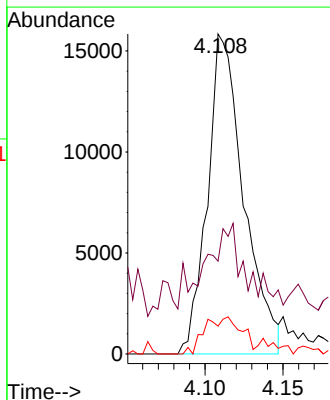
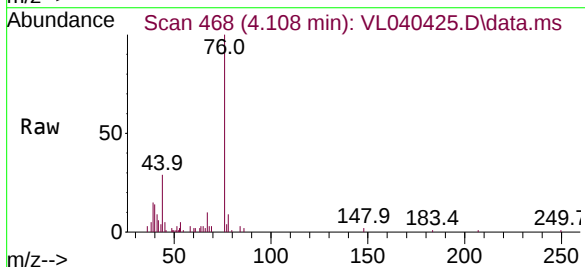
Manual Integrations  
APPROVED

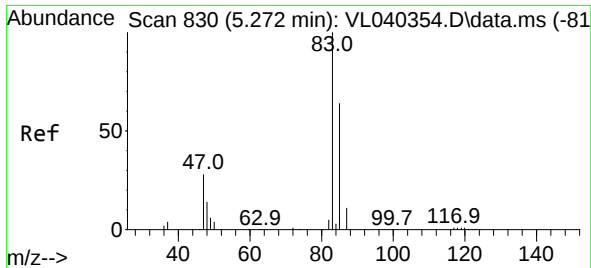
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#27  
Carbon Disulfide  
Concen: 0.183 ppbv  
RT: 4.108 min Scan# 468  
Delta R.T. -0.010 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

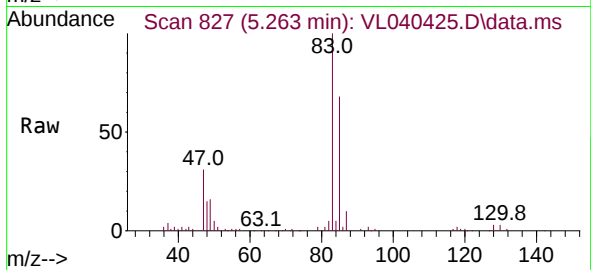
Tgt Ion: 76 Resp: 25610  
Ion Ratio Lower Upper  
76 100  
44 41.8 14.7 22.1#  
78 16.8 7.7 11.5#





#29  
Chloroform  
Concen: 1.528 ppbv  
RT: 5.263 min Scan# 81  
Delta R.T. -0.009 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

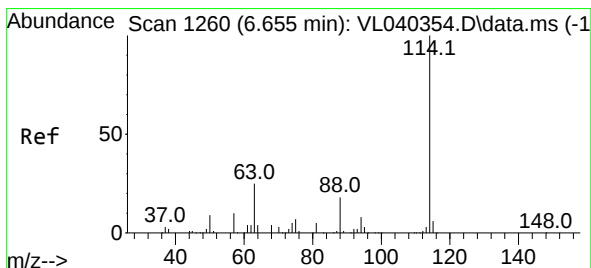
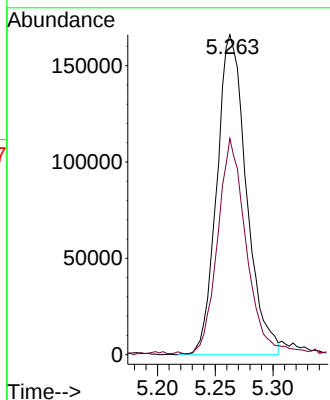
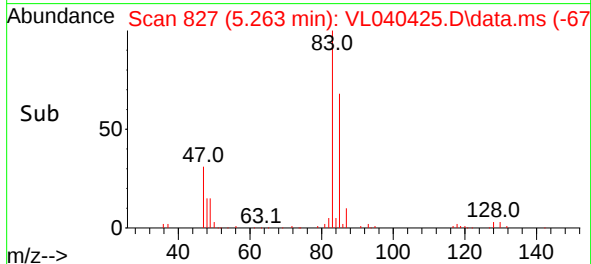
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 83 Resp: 295083  
Ion Ratio Lower Upper  
83 100  
85 66.7 51.0 76.4

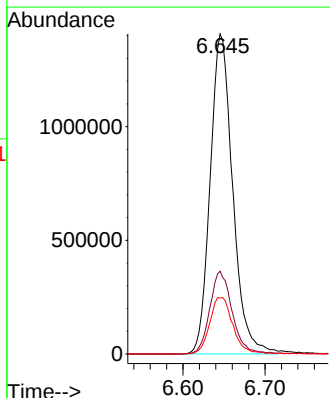
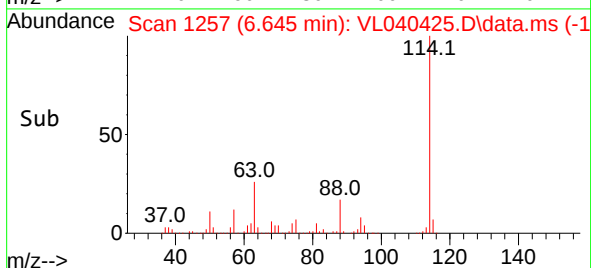
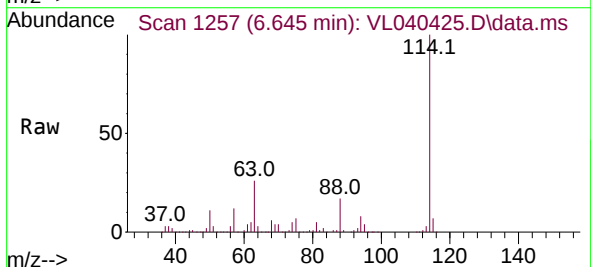
Manual Integrations  
APPROVED

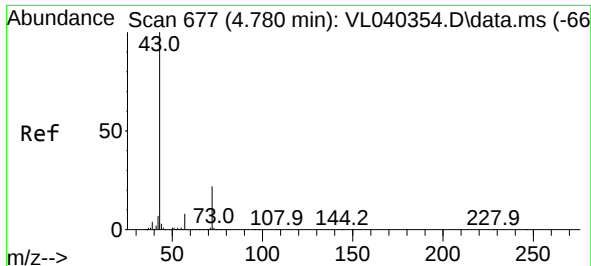
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 6.645 min Scan# 1257  
Delta R.T. -0.010 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

Tgt Ion:114 Resp: 2685589  
Ion Ratio Lower Upper  
114 100  
63 25.9 21.4 32.0  
88 18.2 14.6 22.0





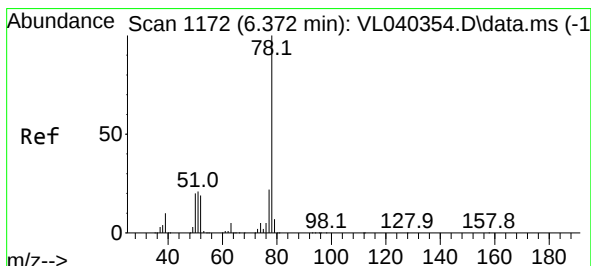
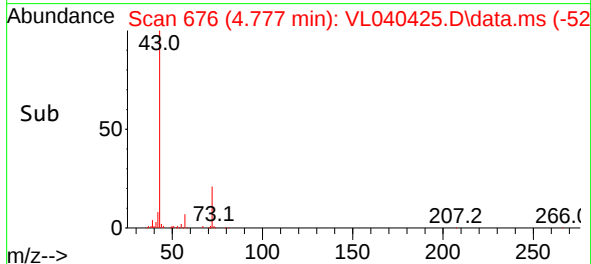
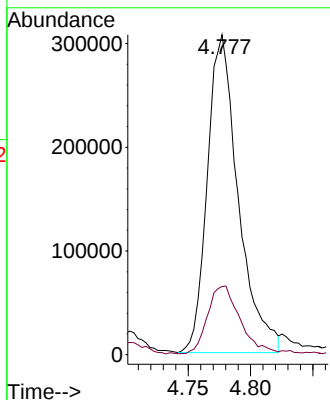
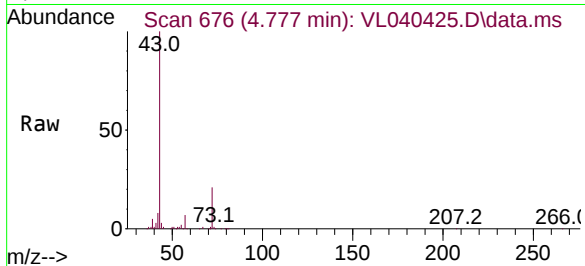
#34  
2-Butanone  
Concen: 3.663 ppbv  
RT: 4.777 min Scan# 61  
Delta R.T. -0.003 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 43 Resp: 530389  
Ion Ratio Lower Upper  
43 100  
72 23.9 18.4 27.6

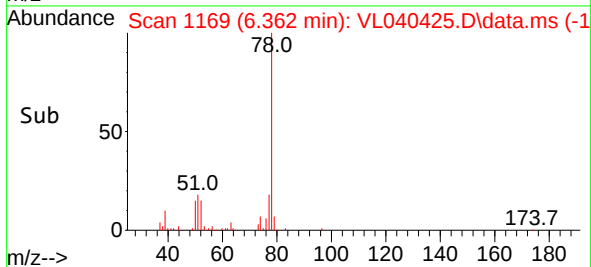
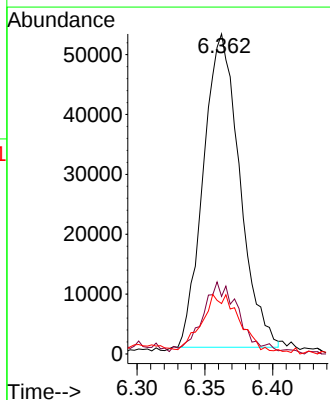
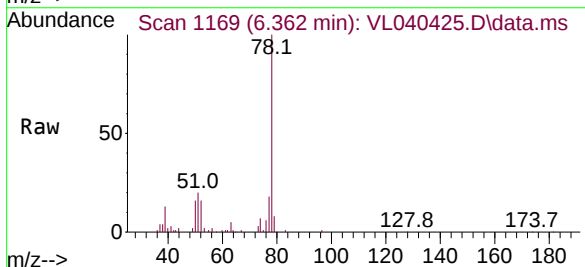
Manual Integrations  
APPROVED

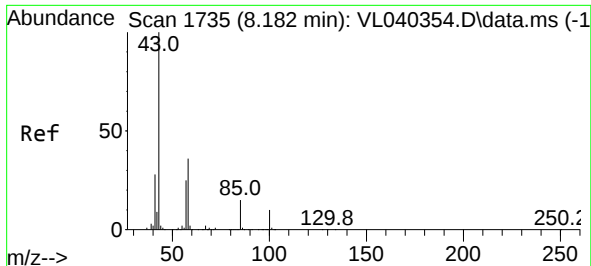
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#36  
Benzene  
Concen: 0.444 ppbv  
RT: 6.362 min Scan# 1169  
Delta R.T. -0.010 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

Tgt Ion: 78 Resp: 97240  
Ion Ratio Lower Upper  
78 100  
77 17.4 17.8 26.8#  
50 14.7 15.6 23.4#





#50

4-Methyl-2-Pentanone

Concen: 0.180 ppbv

RT: 8.185 min Scan# 1735

Delta R.T. 0.003 min

Lab File: VL040425.D

Acq: 12 May 2023 19:31

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion: 43 Resp: 3952

Ion Ratio Lower Upper

43 100

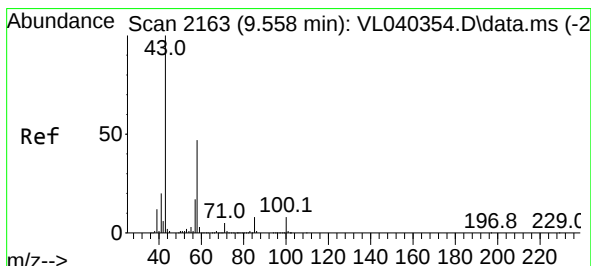
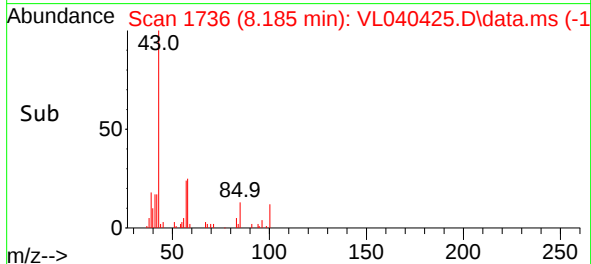
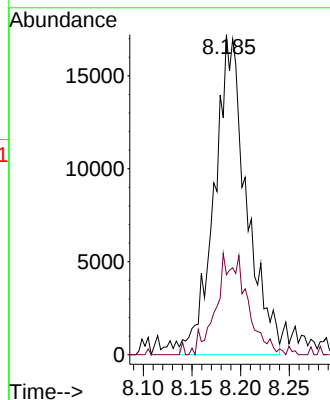
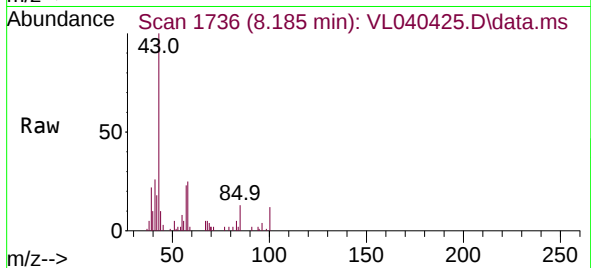
58 0.0 28.6 43.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/16/2023

Supervised By :Mahesh Dadoda 05/16/2023



#51

2-Hexanone

Concen: 0.386 ppbv

RT: 9.555 min Scan# 2162

Delta R.T. -0.003 min

Lab File: VL040425.D

Acq: 12 May 2023 19:31

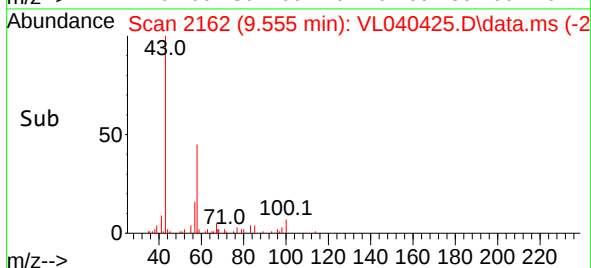
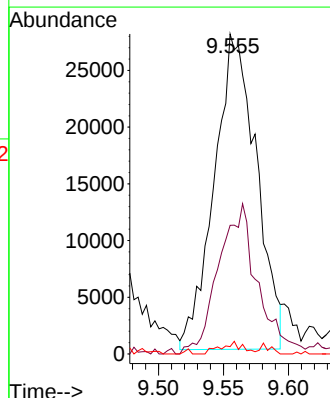
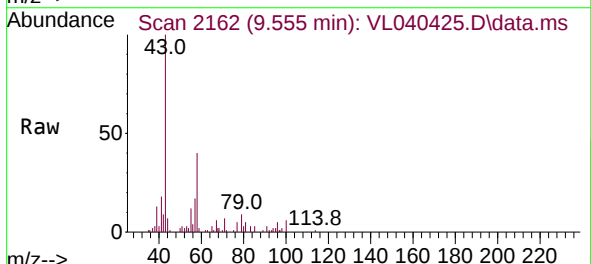
Tgt Ion: 43 Resp: 62641

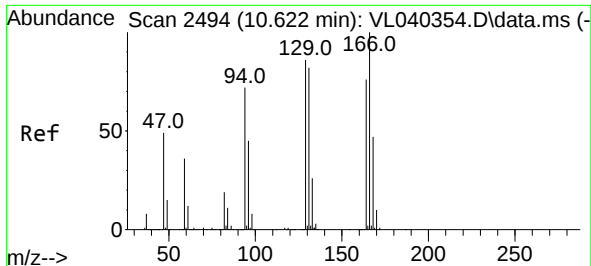
Ion Ratio Lower Upper

43 100

58 46.6 38.3 57.5

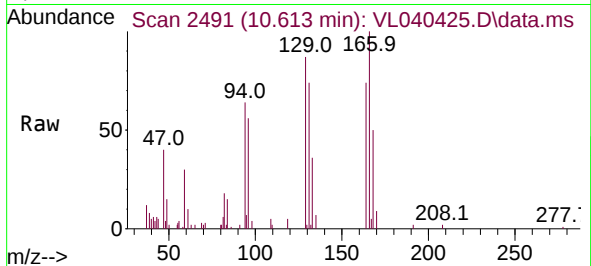
98 2.8 0.4 0.6





#52  
Tetrachloroethene  
Concen: 0.258 ppbv m  
RT: 10.613 min Scan# 2491  
Delta R.T. -0.009 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

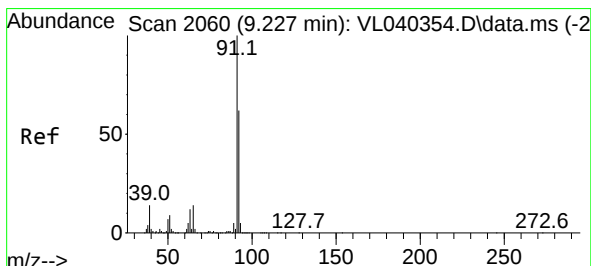
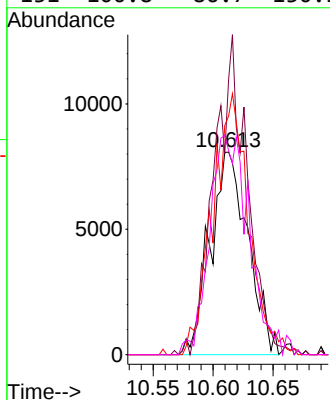
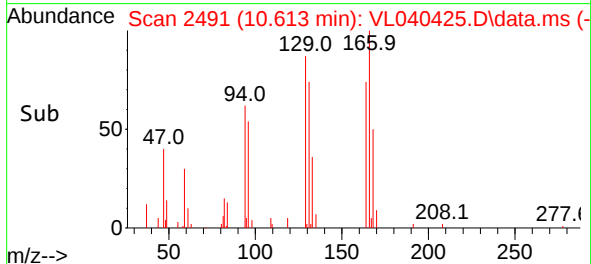
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion:164 Resp: 1771  
Ion Ratio Lower Upper  
164 100  
166 135.7 105.2 157.8  
129 117.8 90.3 135.5  
131 100.8 86.7 130.1

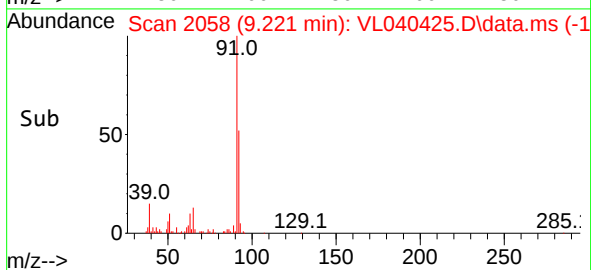
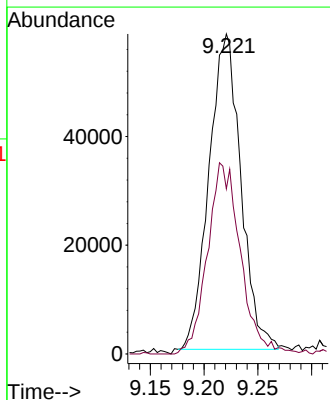
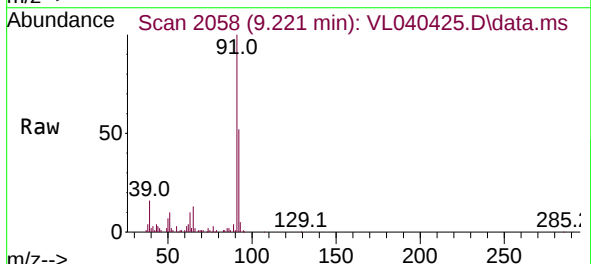
Manual Integrations  
APPROVED

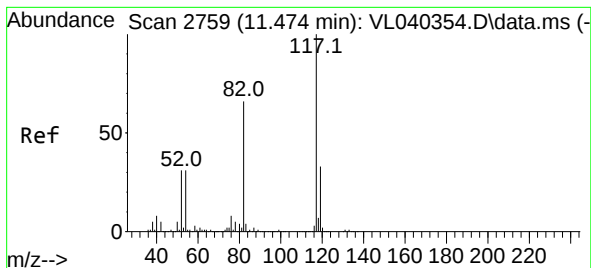
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#53  
Toluene  
Concen: 0.516 ppbv  
RT: 9.221 min Scan# 2058  
Delta R.T. -0.006 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

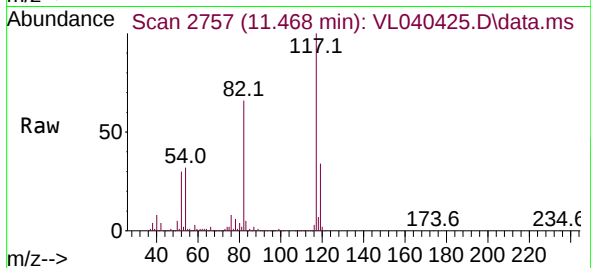
Tgt Ion: 91 Resp: 119779  
Ion Ratio Lower Upper  
91 100  
92 62.6 48.9 73.3





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.468 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

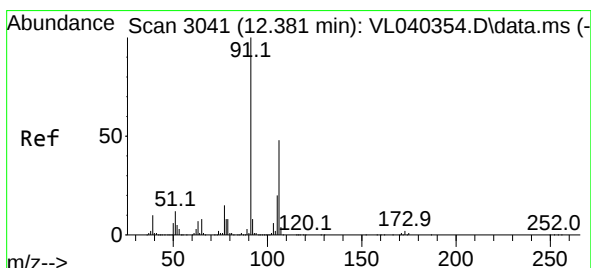
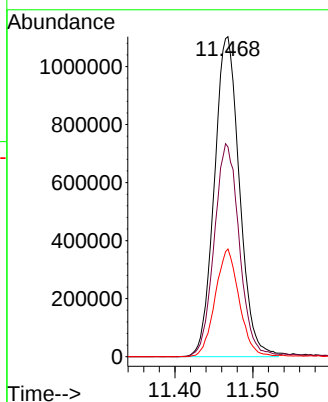
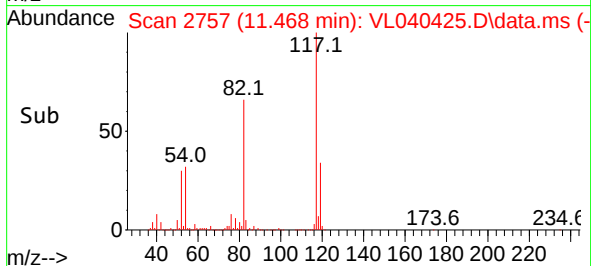
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion:117 Resp: 2480029  
Ion Ratio Lower Upper  
117 100  
82 67.6 52.5 78.7  
119 32.4 24.3 36.5

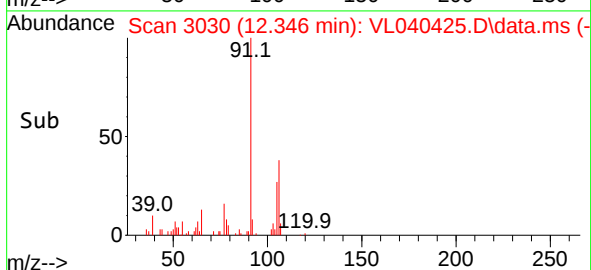
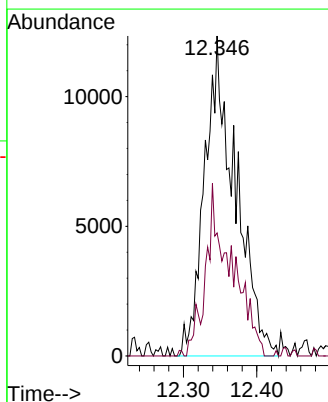
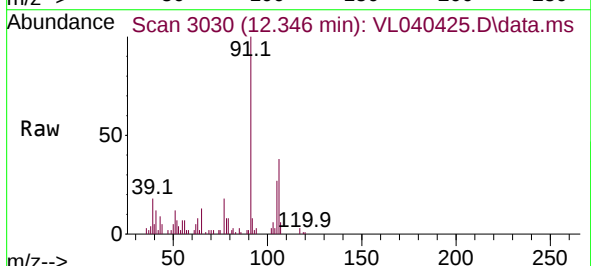
Manual Integrations  
APPROVED

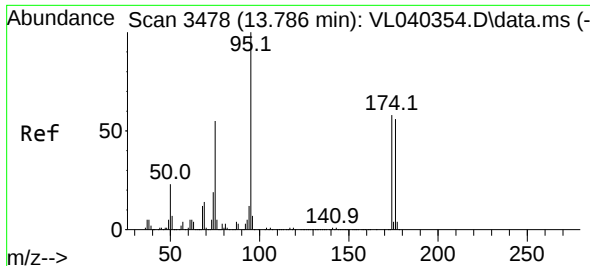
Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#59  
m/p-Xylene  
Concen: 0.128 ppbv m  
RT: 12.346 min Scan# 3030  
Delta R.T. -0.035 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

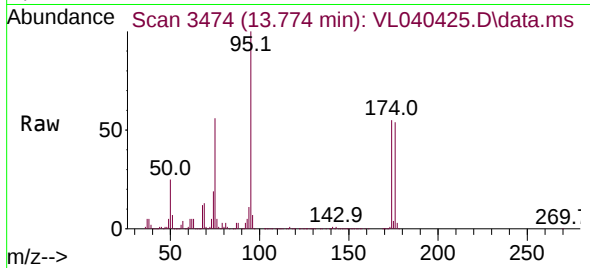
Tgt Ion: 91 Resp: 35895  
Ion Ratio Lower Upper  
91 100  
106 0.0 34.7 52.1#





#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.632 ppbv  
RT: 13.774 min Scan# 3478  
Delta R.T. -0.012 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31

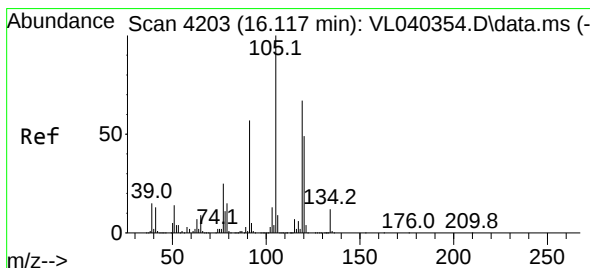
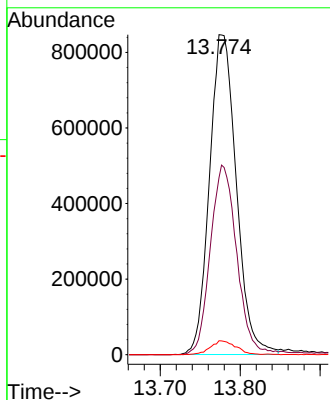
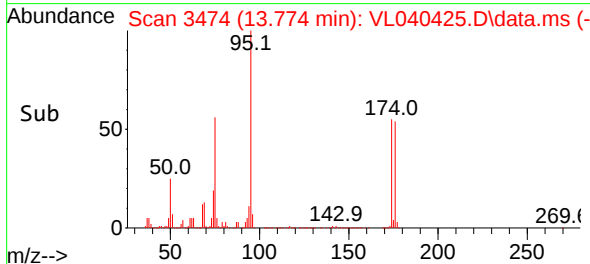
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



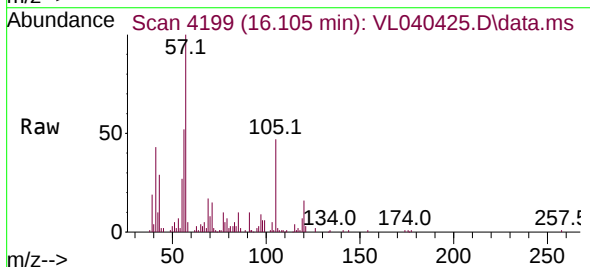
Tgt Ion: 95 Resp: 197536  
Ion Ratio Lower Upper  
95 100  
174 59.5 47.2 70.8  
175 4.3 3.5 5.3

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 05/16/2023  
Supervised By :Mahesh Dadoda 05/16/2023



#74  
1,2,4-Trimethylbenzene  
Concen: 0.150 ppbv m  
RT: 16.105 min Scan# 4199  
Delta R.T. -0.012 min  
Lab File: VL040425.D  
Acq: 12 May 2023 19:31



Tgt Ion:105 Resp: 47154  
Ion Ratio Lower Upper  
105 100  
120 33.8 38.9 58.3#  
91 21.4 46.0 69.0#  
77 21.1 20.0 30.0

