

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL101123\  
 Data File : VL040766.D  
 Acq On : 11 Oct 2023 21:45  
 Operator : SY/MD  
 Sample : 04827-01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 10/12/2023  
 Supervised By :Mahesh Dadoda 10/16/2023

Quant Time: Oct 12 00:28:52 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL101123AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2023

QLast Update : Thu Oct 12 00:21:08 2023

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.208  | 49   | 950762   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.668  | 114  | 2638121  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.471 | 117  | 2345252  | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.780 95 1739183 10.078 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.800%

Target Compounds

|                            |        |     |        |        |        | Qvalue |
|----------------------------|--------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 2.761  | 85  | 87760  | 0.524  | ppbv   | 96     |
| 3) Chlorodifluoromethane   | 2.710  | 51  | 72952m | 0.522  | ppbv   |        |
| 4) Chloromethane           | 2.845  | 50  | 23939  | 0.434  | ppbv   | 95     |
| 9) Propene                 | 2.735  | 41  | 64940m | 1.251  | ppbv   |        |
| 10) Heptane                | 7.590  | 43  | 19864  | 0.152  | ppbv   | 88     |
| 11) Trichlorofluoromethane | 3.587  | 101 | 31640  | 0.245  | ppbv   | 94     |
| 13) Ethanol                | 3.266  | 45  | 830441 | 70.885 | ppbv   | 99     |
| 15) Acetone                | 3.494  | 43  | 561471 | 5.712  | ppbv   | 98     |
| 19) Isopropyl Alcohol      | 3.607  | 45  | 190114 | 3.005  | ppbv # | 35     |
| 20) Methylene Chloride     | 3.957  | 84  | 474850 | 11.598 | ppbv   | 97     |
| 26) Hexane                 | 5.230  | 57  | 456620 | 4.639  | ppbv # | 43     |
| 34) 2-Butanone             | 4.806  | 43  | 48226m | 0.404  | ppbv   |        |
| 35) Carbon Tetrachloride   | 6.494  | 117 | 12993m | 0.088  | ppbv   |        |
| 36) Benzene                | 6.378  | 78  | 55631m | 0.274  | ppbv   |        |
| 38) Trichloroethene        | 7.311  | 130 | 3783m  | 0.042  | ppbv   |        |
| 44) 2,2,4-Trimethylpentane | 7.336  | 57  | 35604m | 0.104  | ppbv   |        |
| 52) Tetrachloroethene      | 10.632 | 164 | 11551m | 0.140  | ppbv   |        |
| 53) Toluene                | 9.230  | 91  | 231431 | 0.958  | ppbv   | 98     |
| 59) m/p-Xylene             | 12.343 | 91  | 61251m | 0.252  | ppbv   |        |
| 60) o-Xylene               | 13.063 | 91  | 23022m | 0.099  | ppbv   |        |
| 61) Styrene                | 12.902 | 104 | 37563m | 0.293  | ppbv   |        |

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

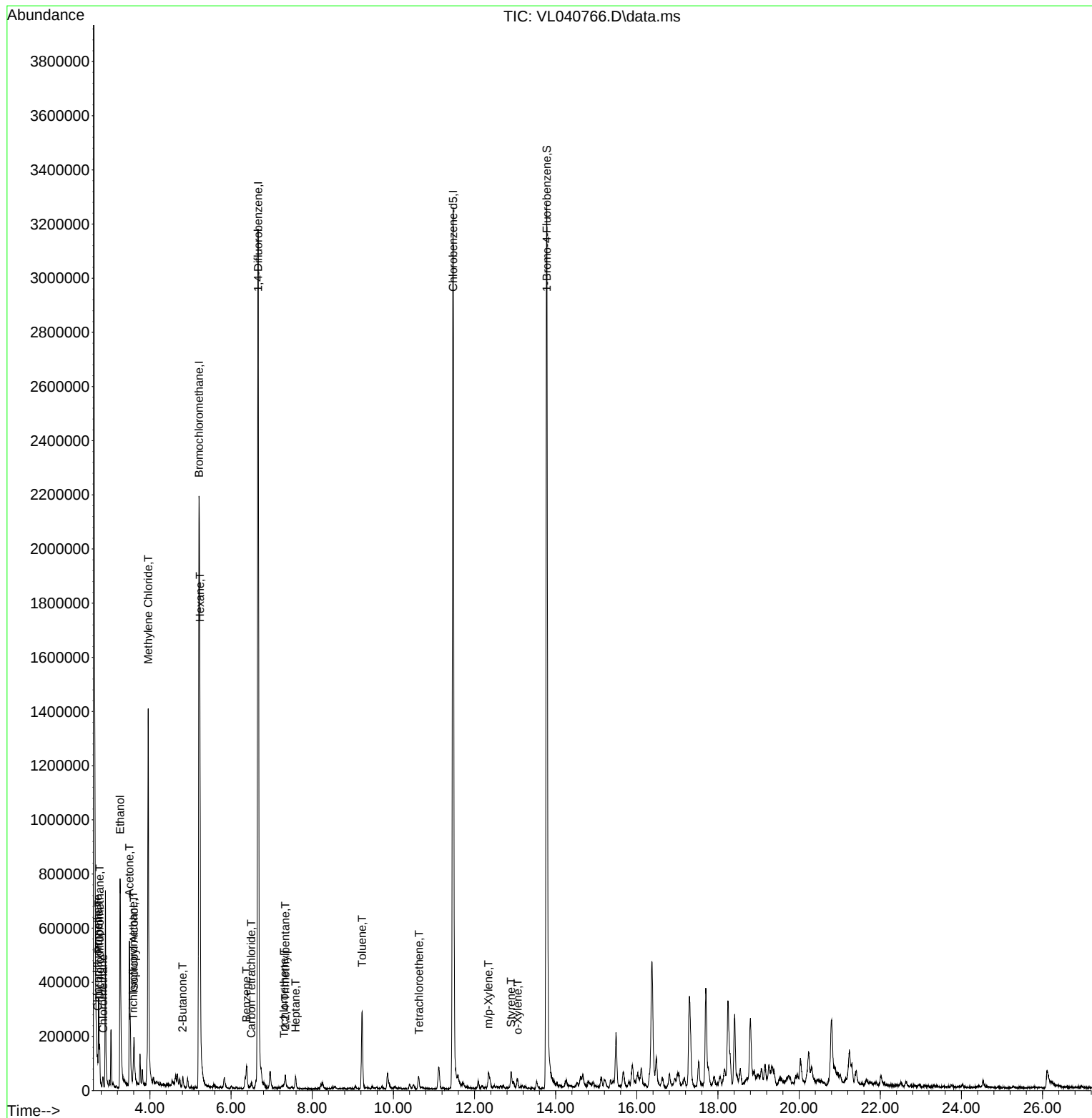
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL101123\  
Data File : VL040766.D  
Acq On : 11 Oct 2023 21:45  
Operator : SY/MD  
Sample : 04827-01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

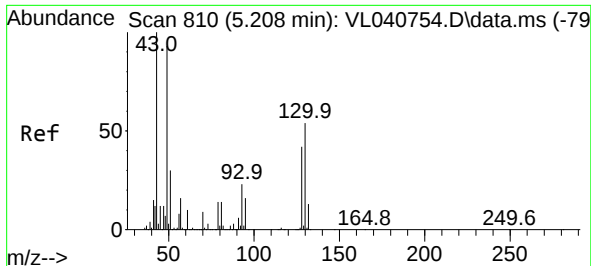
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1

Quant Time: Oct 12 00:28:52 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL101123AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Oct 12 00:21:08 2023  
Response via : Initial Calibration

Manual Integrations  
APPROVED

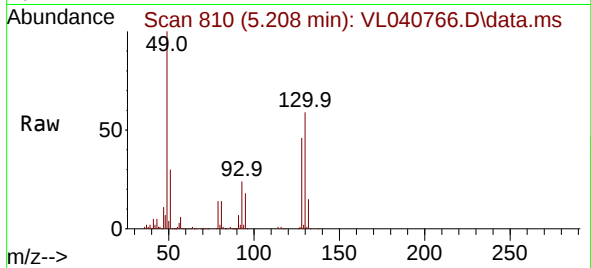
Reviewed By : Semsettin Yesilyurt 10/12/2023  
Supervised By : Mahesh Dadoda 10/16/2023





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.208 min Scan# 810  
Delta R.T. -0.000 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

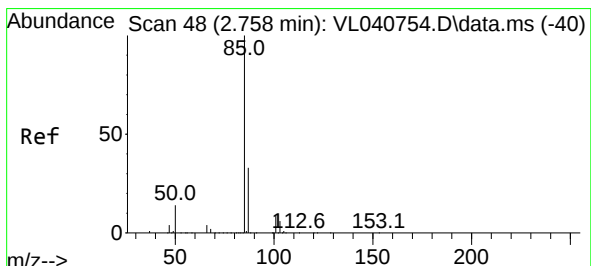
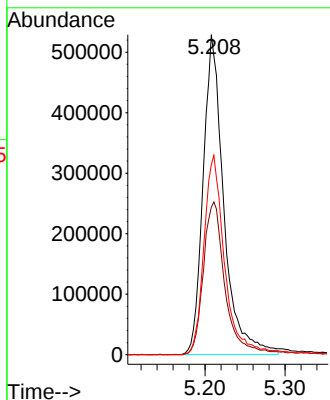
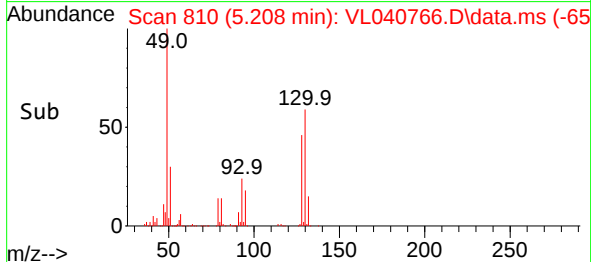
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



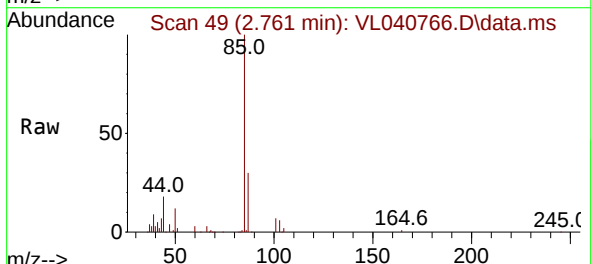
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Ion Ratio Lower Upper  
49 100  
128 51.6 23.9 71.7  
130 64.0 30.7 92.1

Manual Integrations  
APPROVED

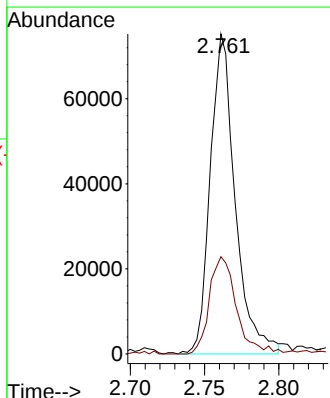
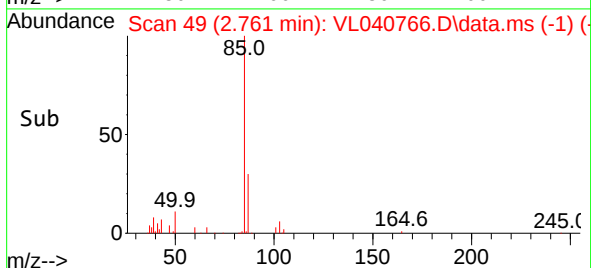
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023

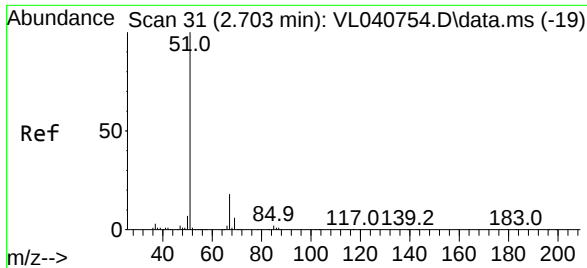


#2  
Dichlorodifluoromethane  
Concen: 0.524 ppbv  
RT: 2.761 min Scan# 49  
Delta R.T. 0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45



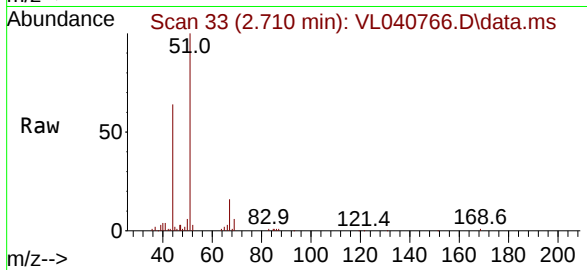
Tgt Ion: 85 Resp: 87760  
Ion Ratio Lower Upper  
85 100  
87 30.4 26.0 39.0





#3  
Chlorodifluoromethane  
Concen: 0.522 ppbv m  
RT: 2.710 min Scan# 31  
Delta R.T. 0.006 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

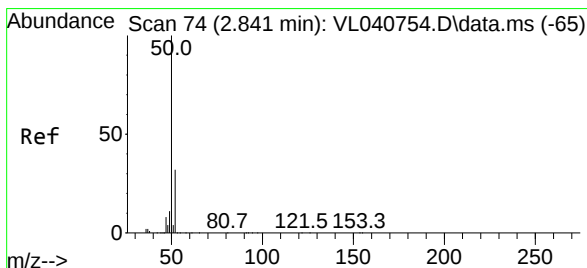
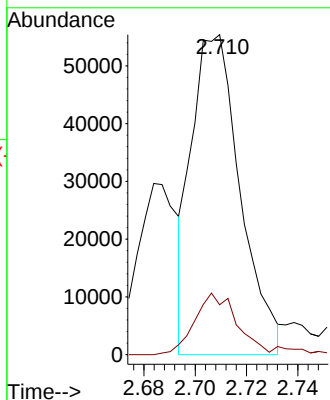
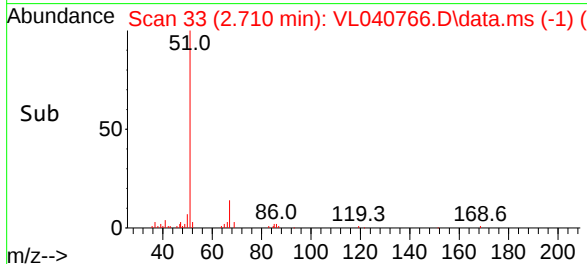
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion: 51 Resp: 72952  
Ion Ratio Lower Upper  
51 100  
67 18.8 13.8 20.6

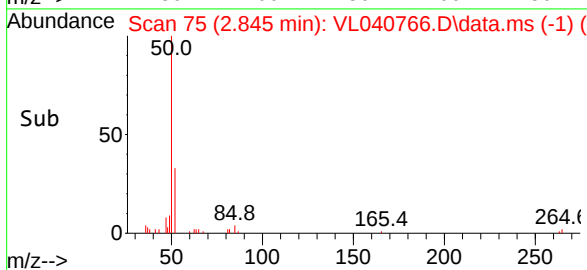
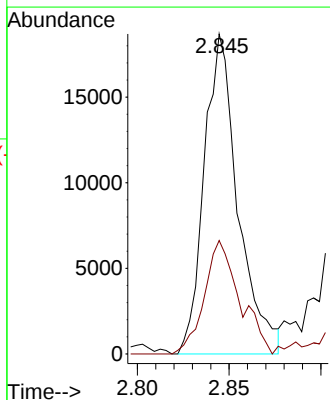
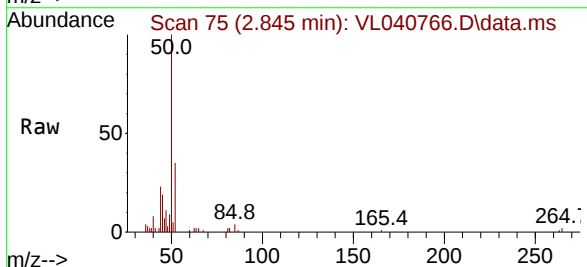
Manual Integrations  
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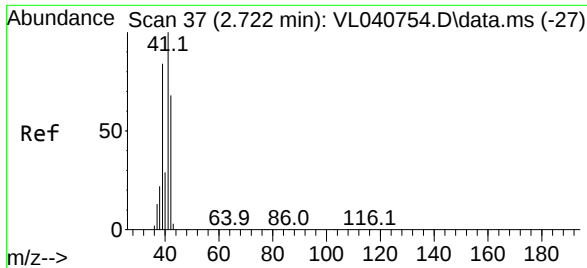
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#4  
Chloromethane  
Concen: 0.434 ppbv  
RT: 2.845 min Scan# 75  
Delta R.T. 0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

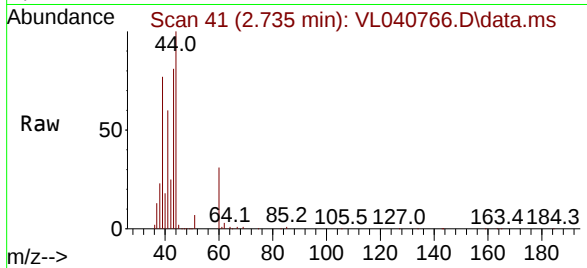
Tgt Ion: 50 Resp: 23939  
Ion Ratio Lower Upper  
50 100  
52 34.3 25.3 37.9





#9  
 Propene  
 Concen: 1.251 ppbv m  
 RT: 2.735 min Scan# 41  
 Delta R.T. 0.013 min  
 Lab File: VL040766.D  
 Acq: 11 Oct 2023 21:45

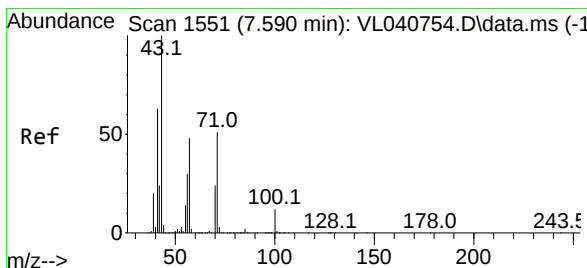
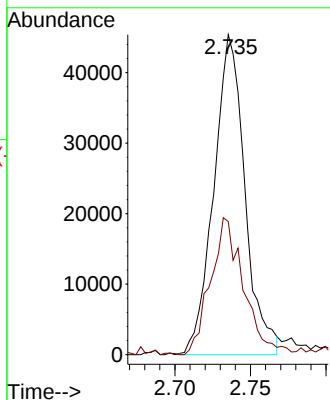
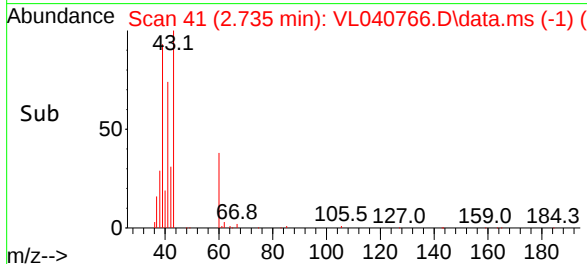
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA1



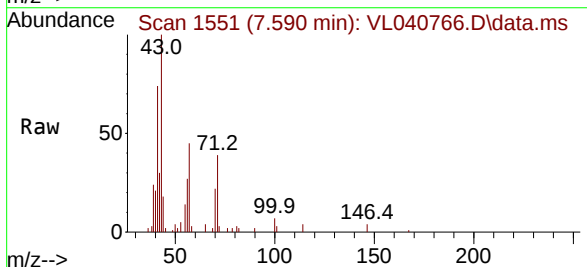
Tgt Ion: 41 Resp: 64940  
 Ion Ratio Lower Upper  
 41 100  
 42 191.1 57.1 85.7

Manual Integrations  
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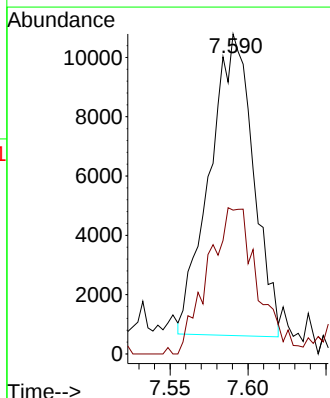
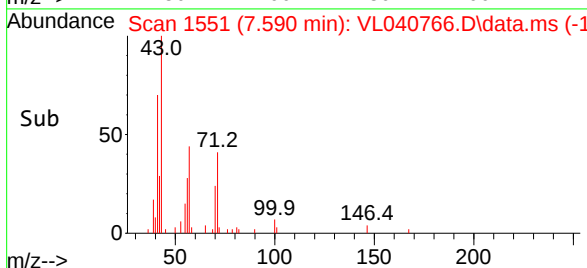
Reviewed By :Semsettin Yesilyurt 10/12/2023  
 Supervised By :Mahesh Dadoda 10/16/2023

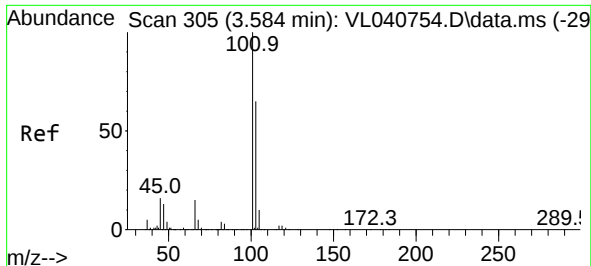


#10  
 Heptane  
 Concen: 0.152 ppbv  
 RT: 7.590 min Scan# 1551  
 Delta R.T. 0.000 min  
 Lab File: VL040766.D  
 Acq: 11 Oct 2023 21:45



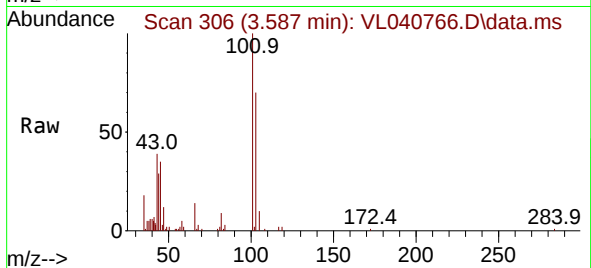
Tgt Ion: 43 Resp: 19864  
 Ion Ratio Lower Upper  
 43 100  
 57 58.6 40.0 60.0





#11  
Trichlorofluoromethane  
Concen: 0.245 ppbv  
RT: 3.587 min Scan# 305  
Delta R.T. 0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

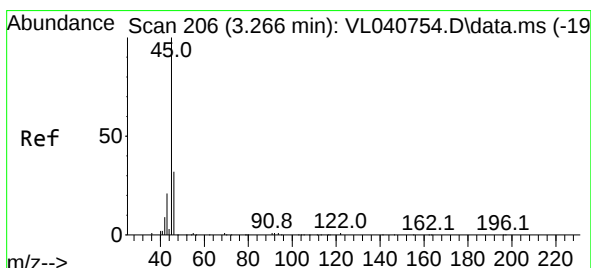
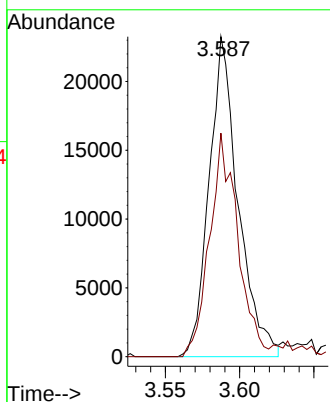
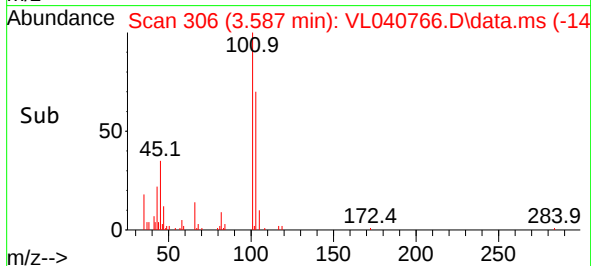
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion:101 Resp: 31640  
Ion Ratio Lower Upper  
101 100  
103 69.9 52.2 78.2

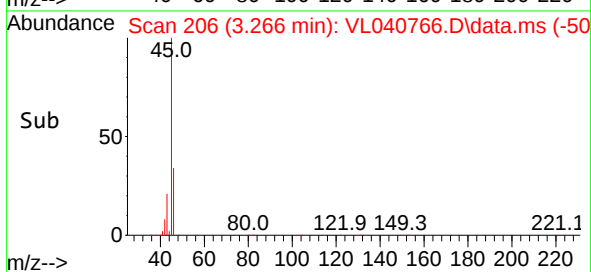
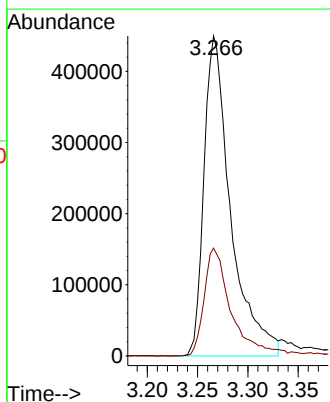
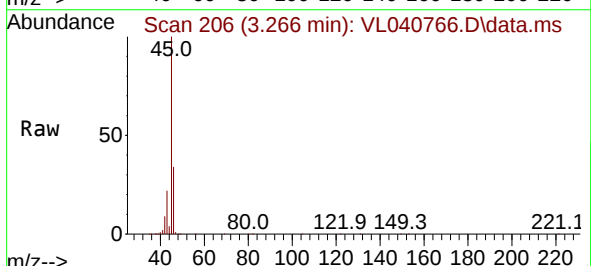
Manual Integrations  
APPROVED

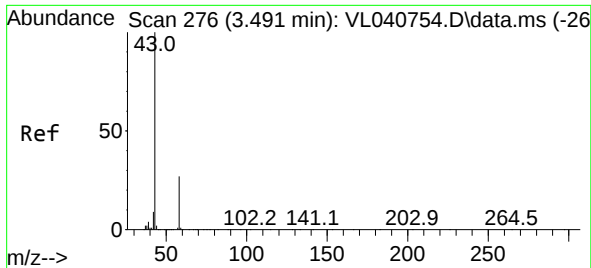
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#13  
Ethanol  
Concen: 70.885 ppbv  
RT: 3.266 min Scan# 206  
Delta R.T. 0.000 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

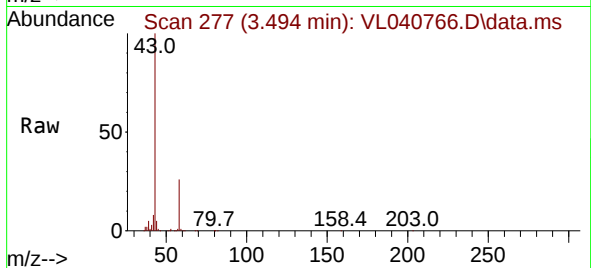
Tgt Ion: 45 Resp: 830441  
Ion Ratio Lower Upper  
45 100  
46 36.0 14.6 58.2





#15  
Acetone  
Concen: 5.712 ppbv  
RT: 3.494 min Scan# 21  
Delta R.T. 0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

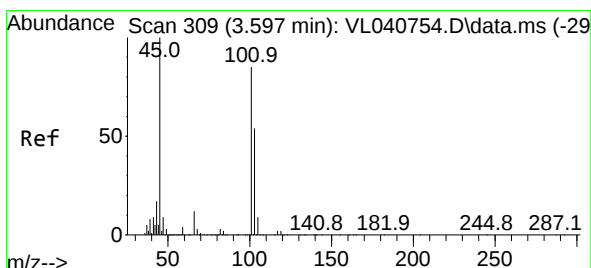
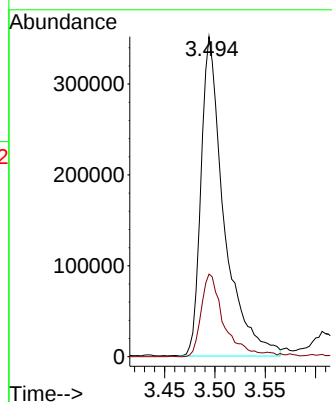
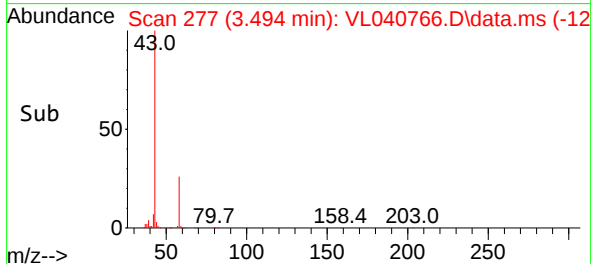
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion: 43 Resp: 56147  
Ion Ratio Lower Upper  
43 100  
58 26.1 21.6 32.4

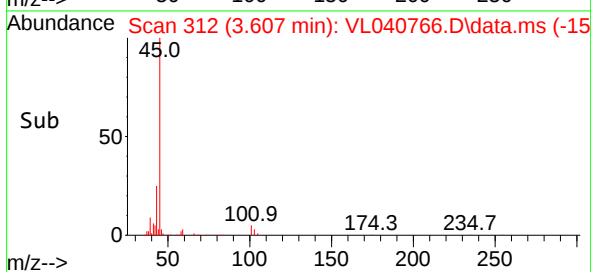
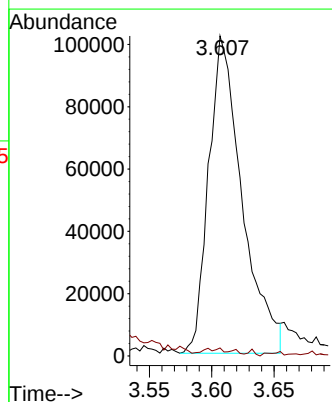
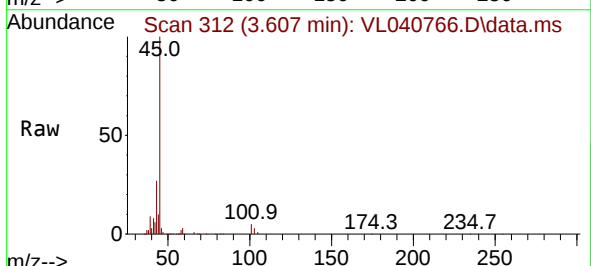
Manual Integrations  
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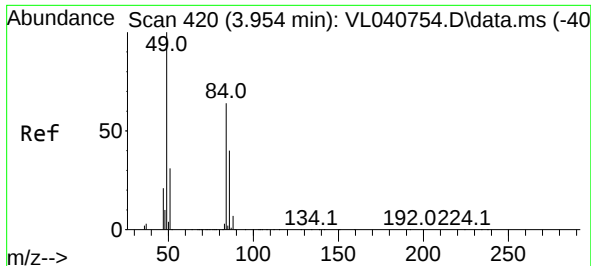
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#19  
Isopropyl Alcohol  
Concen: 3.005 ppbv  
RT: 3.607 min Scan# 312  
Delta R.T. 0.010 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

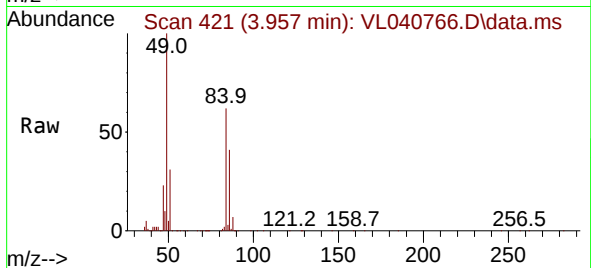
Tgt Ion: 45 Resp: 190114  
Ion Ratio Lower Upper  
45 100  
58 77.2 30.3 45.5#





#20  
Methylene Chloride  
Concen: 11.598 ppbv  
RT: 3.957 min Scan# 421  
Delta R.T. 0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

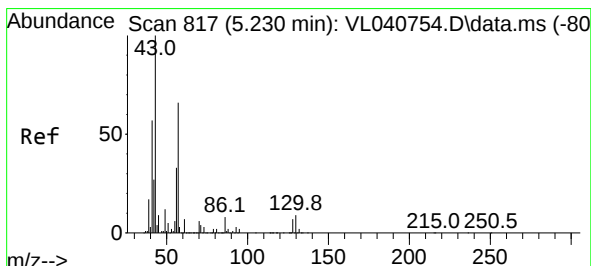
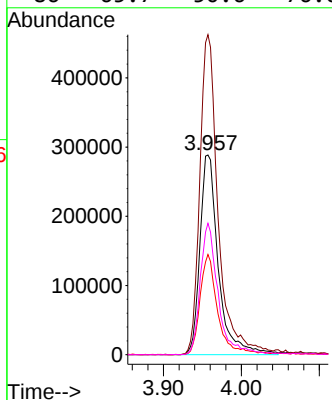
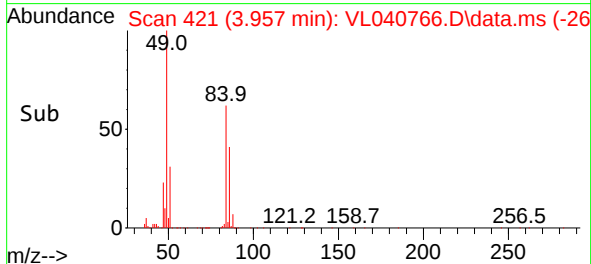
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion: 84 Resp: 474850  
Ion Ratio Lower Upper  
84 100  
49 160.2 125.6 188.4  
51 50.1 38.9 58.3  
86 65.7 50.6 76.0

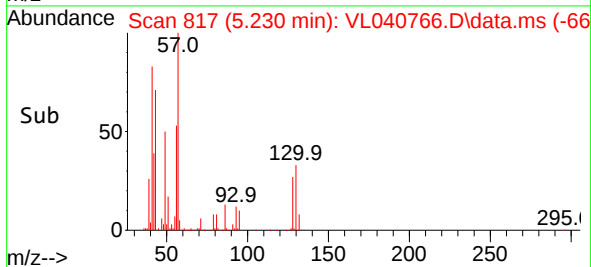
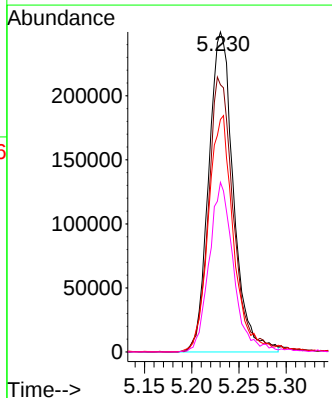
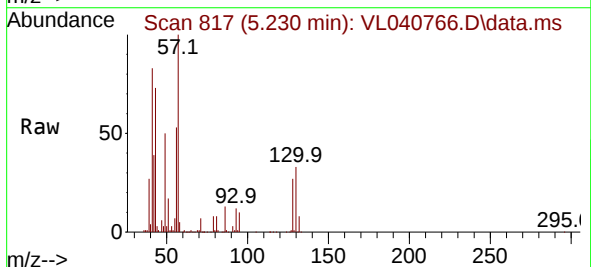
Manual Integrations  
APPROVED

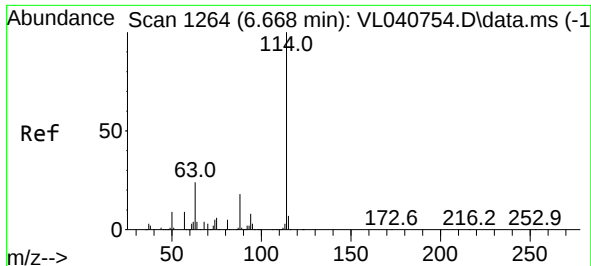
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#26  
Hexane  
Concen: 4.639 ppbv  
RT: 5.230 min Scan# 817  
Delta R.T. 0.000 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

Tgt Ion: 57 Resp: 456620  
Ion Ratio Lower Upper  
57 100  
41 87.8 71.4 107.2  
43 76.5 182.3 273.5#  
56 52.7 42.0 63.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.668 min Scan# 114

Delta R.T. 0.000 min

Lab File: VL040766.D

Acq: 11 Oct 2023 21:45

Instrument :

MSVOA\_L

ClientSampleId :

IA1

Tgt Ion:114 Resp: 263812

Ion Ratio Lower Upper

114 100

63 23.7 19.8 29.6

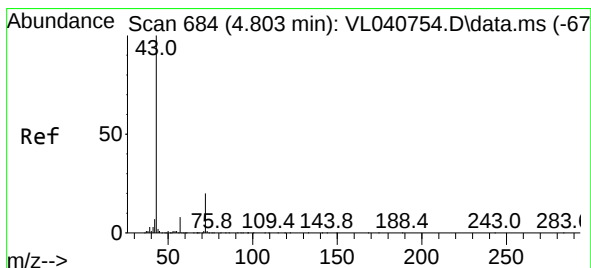
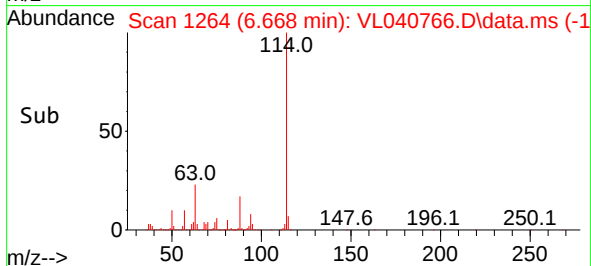
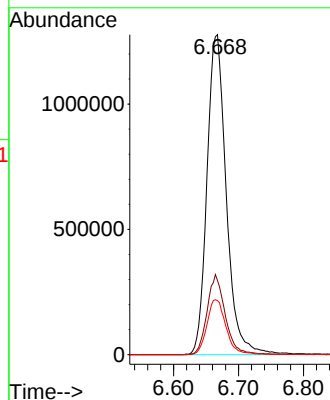
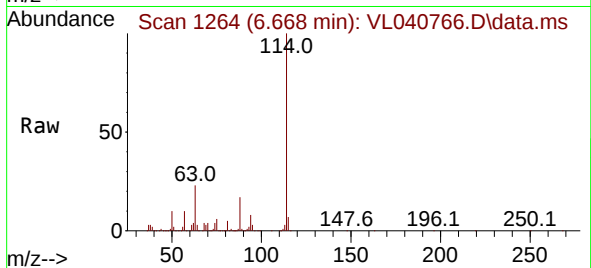
88 17.1 14.2 21.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/12/2023

Supervised By :Mahesh Dadoda 10/16/2023



#34

2-Butanone

Concen: 0.404 ppbv m

RT: 4.806 min Scan# 685

Delta R.T. 0.003 min

Lab File: VL040766.D

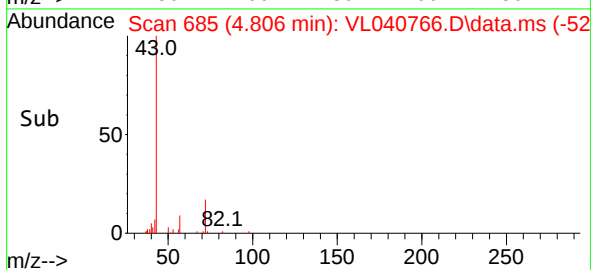
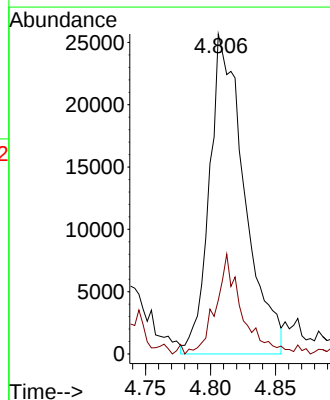
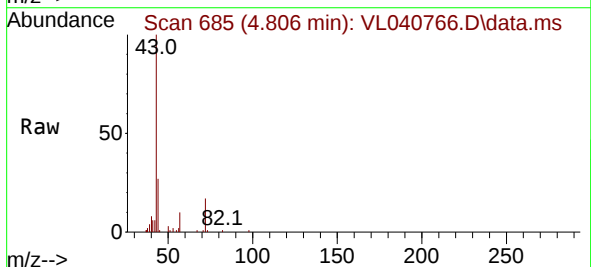
Acq: 11 Oct 2023 21:45

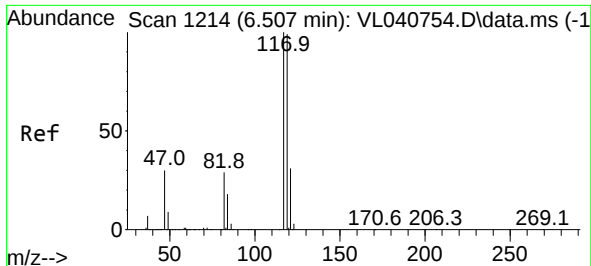
Tgt Ion: 43 Resp: 48226

Ion Ratio Lower Upper

43 100

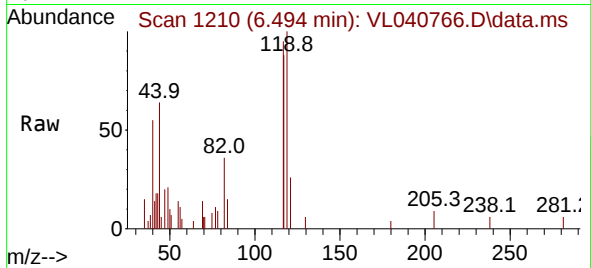
72 0.0 16.8 25.2#





#35  
Carbon Tetrachloride  
Concen: 0.088 ppbv m  
RT: 6.494 min Scan# 117  
Delta R.T. -0.013 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

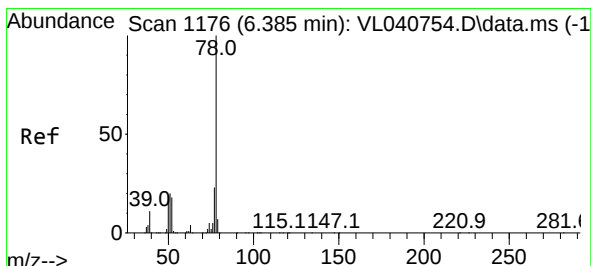
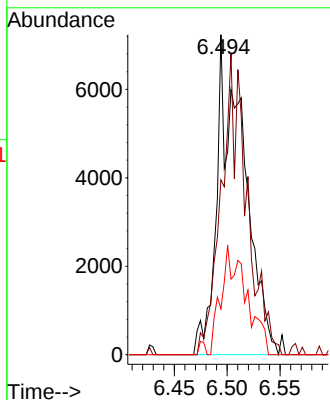
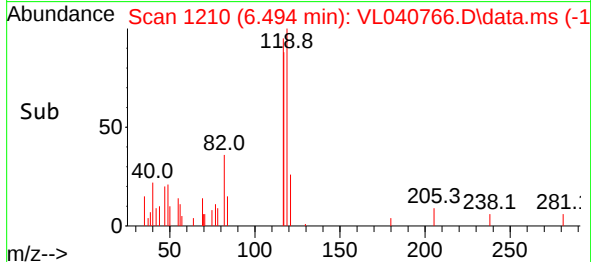
Instrument : MSVOA\_L  
ClientSampleId : IA1



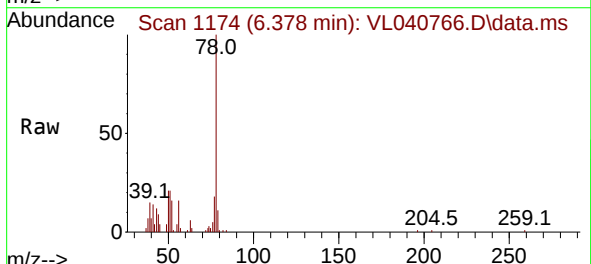
Tgt Ion: 117 Resp: 1299  
Ion Ratio Lower Upper  
117 100  
119 105.3 79.4 119.0  
121 27.6 25.0 37.4

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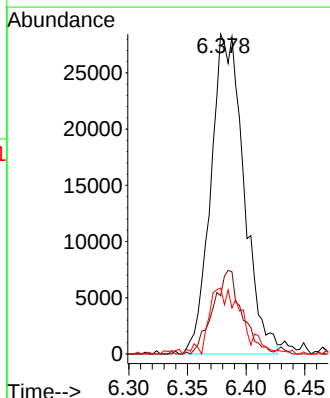
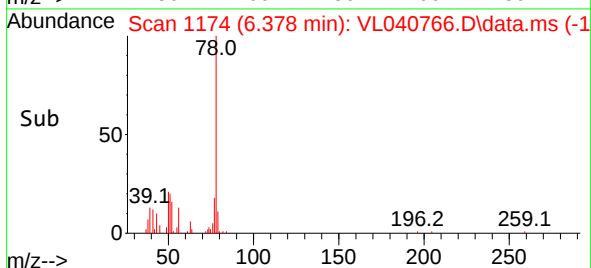
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023

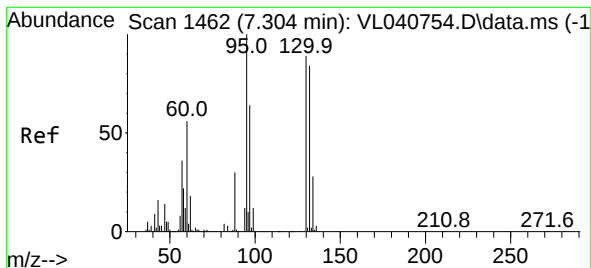


#36  
Benzene  
Concen: 0.274 ppbv m  
RT: 6.378 min Scan# 1174  
Delta R.T. -0.006 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45



Tgt Ion: 78 Resp: 55631  
Ion Ratio Lower Upper  
78 100  
77 18.2 18.4 27.6#  
50 20.6 15.0 22.4





#38

Trichloroethene

Concen: 0.042 ppbv m

RT: 7.311 min Scan# 1464

Delta R.T. 0.006 min

Lab File: VL040766.D

Acq: 11 Oct 2023 21:45

Instrument :

MSVOA\_L

ClientSampleId :

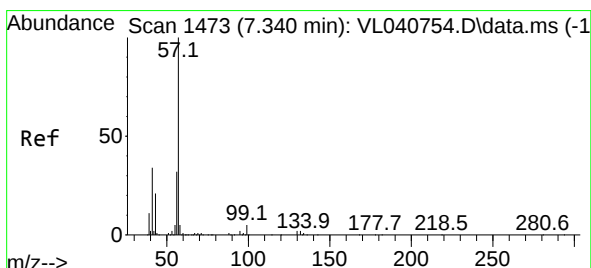
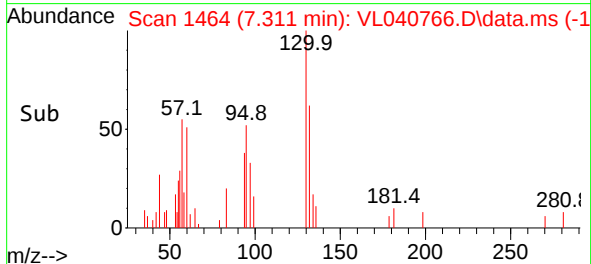
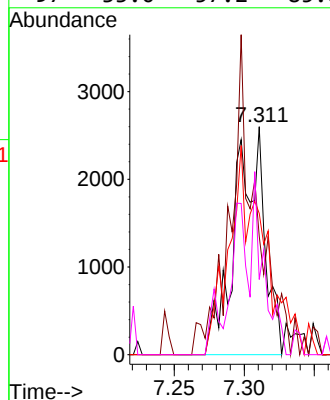
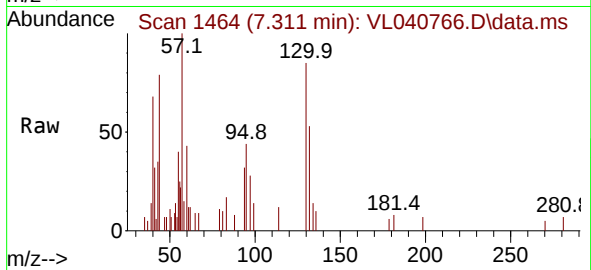
IA1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 130   | Resp: | 378   |
| Ion Ratio | Lower | Upper |       |
| 130       | 100   |       |       |
| 95        | 52.0  | 89.4  | 134.2 |
| 132       | 62.0  | 74.8  | 112.2 |
| 97        | 33.0  | 57.2  | 85.8  |

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#44

2,2,4-Trimethylpentane

Concen: 0.104 ppbv m

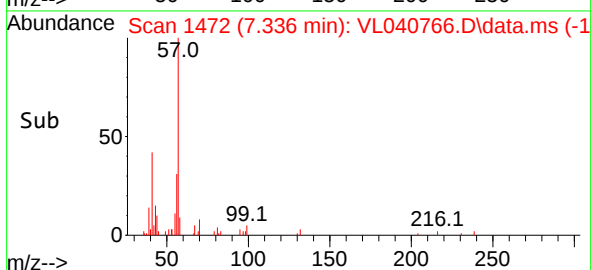
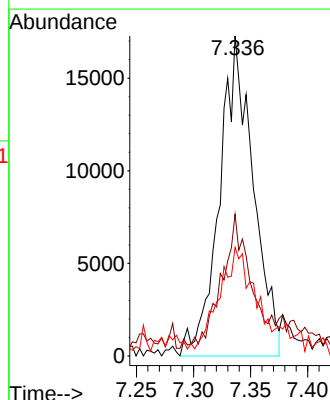
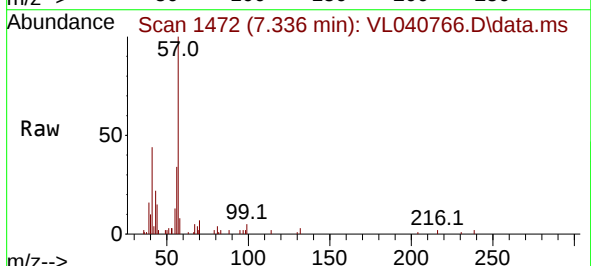
RT: 7.336 min Scan# 1472

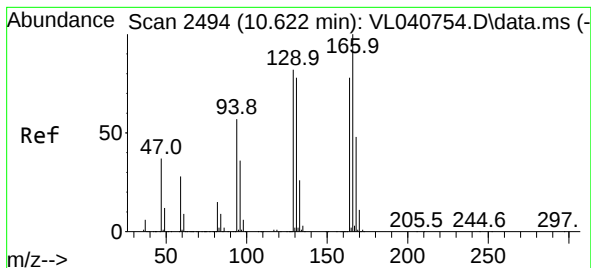
Delta R.T. -0.003 min

Lab File: VL040766.D

Acq: 11 Oct 2023 21:45

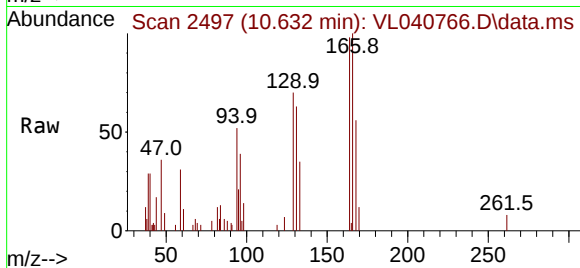
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 57    | Resp: | 35604 |
| Ion Ratio | Lower | Upper |       |
| 57        | 100   |       |       |
| 41        | 50.9  | 27.4  | 41.0  |
| 56        | 42.0  | 25.0  | 37.6  |





#52  
Tetrachloroethene  
Concen: 0.140 ppbv m  
RT: 10.632 min Scan# 2494  
Delta R.T. 0.010 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

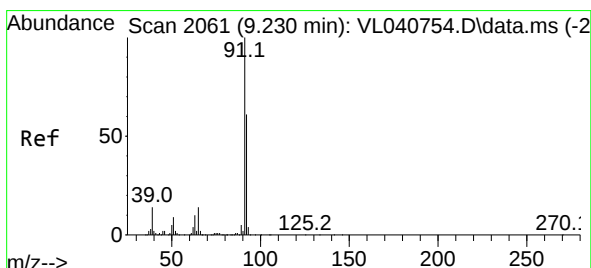
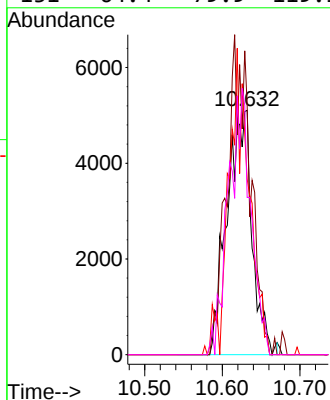
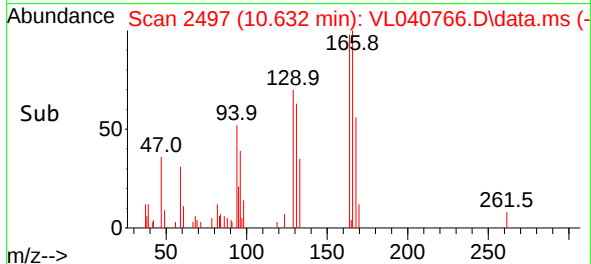
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion:164 Resp: 1155  
Ion Ratio Lower Upper  
164 100  
166 102.1 102.4 153.6  
129 71.9 84.2 126.4  
131 64.4 79.9 119.9

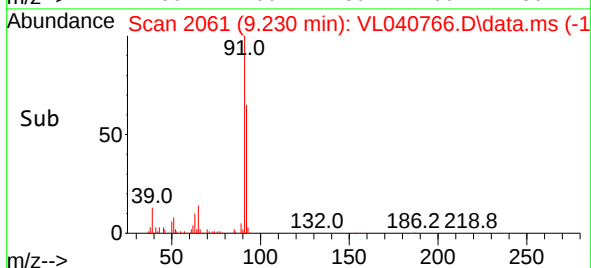
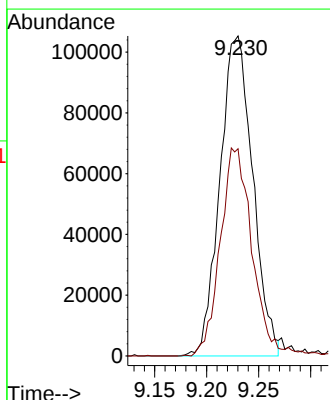
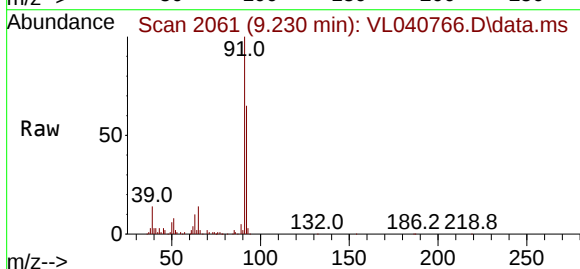
Manual Integrations  
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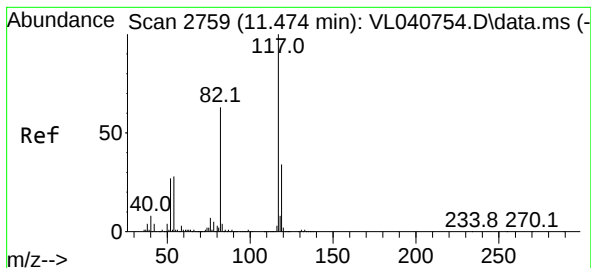
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#53  
Toluene  
Concen: 0.958 ppbv  
RT: 9.230 min Scan# 2061  
Delta R.T. 0.000 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

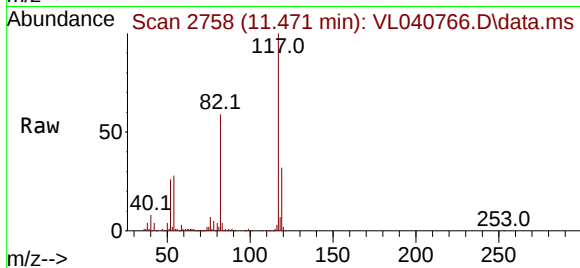
Tgt Ion: 91 Resp: 231431  
Ion Ratio Lower Upper  
91 100  
92 64.0 50.2 75.2





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.471 min Scan# 2759  
Delta R.T. -0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

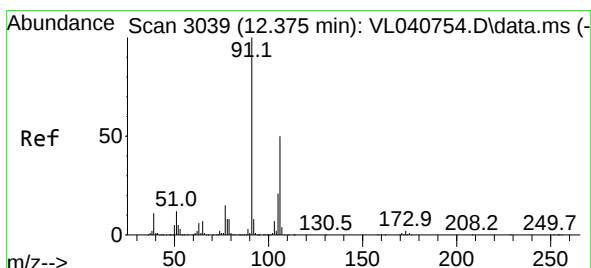
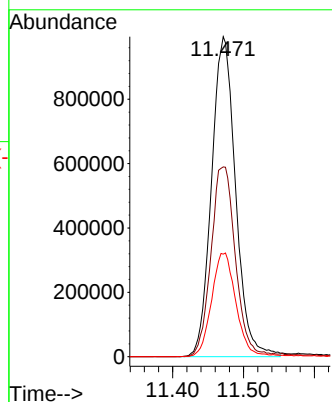
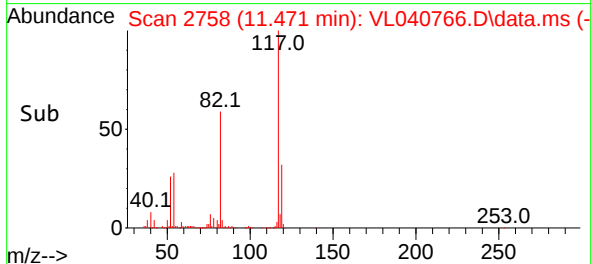
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion:117 Resp: 234525  
Ion Ratio Lower Upper  
117 100  
82 61.6 46.6 70.0  
119 33.2 26.0 39.0

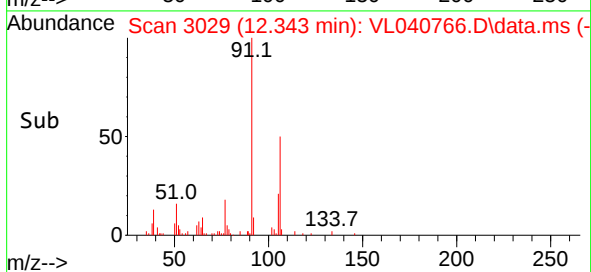
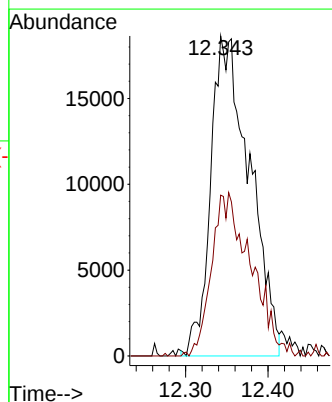
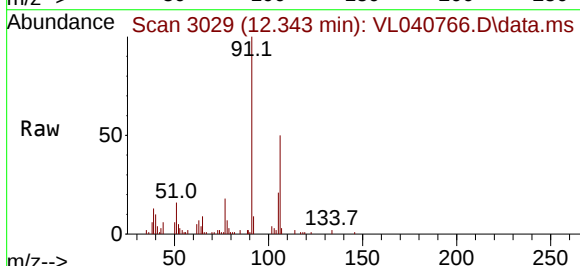
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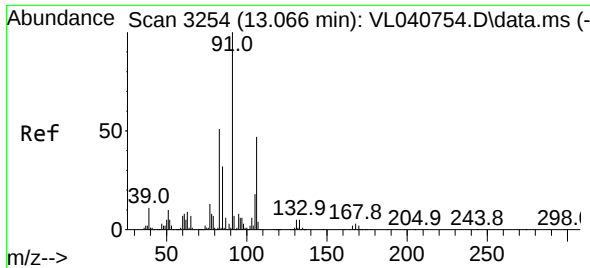
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#59  
m/p-Xylene  
Concen: 0.252 ppbv m  
RT: 12.343 min Scan# 3029  
Delta R.T. -0.032 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

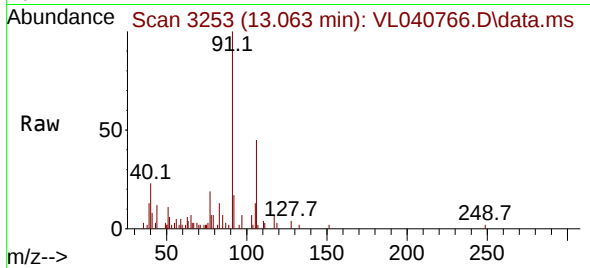
Tgt Ion: 91 Resp: 61251  
Ion Ratio Lower Upper  
91 100  
106 0.0 37.7 56.5#





#60  
o-Xylene  
Concen: 0.099 ppbv m  
RT: 13.063 min Scan# 31  
Delta R.T. -0.003 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

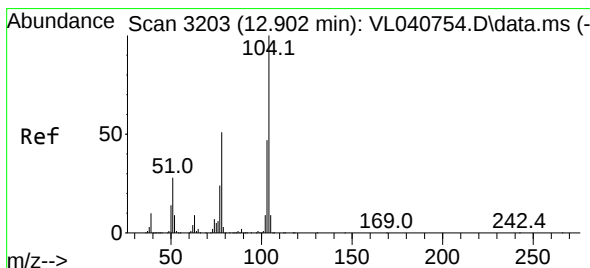
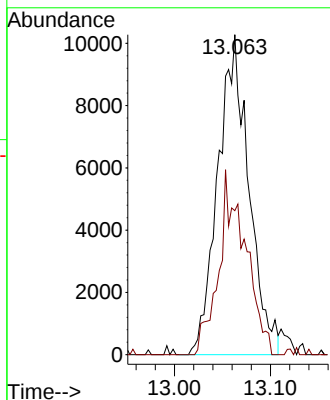
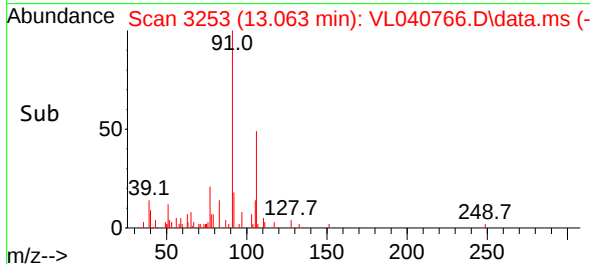
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA1



Tgt Ion: 91 Resp: 2302  
Ion Ratio Lower Upper  
91 100  
106 0.0 23.5 70.5

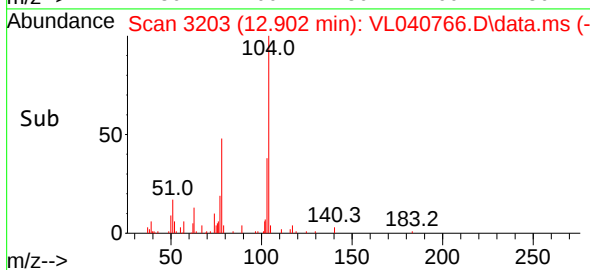
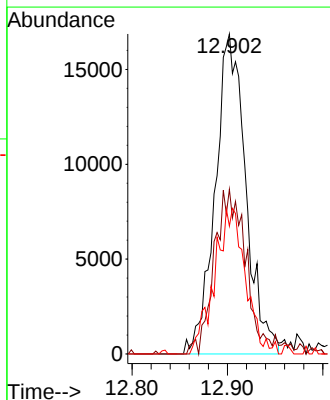
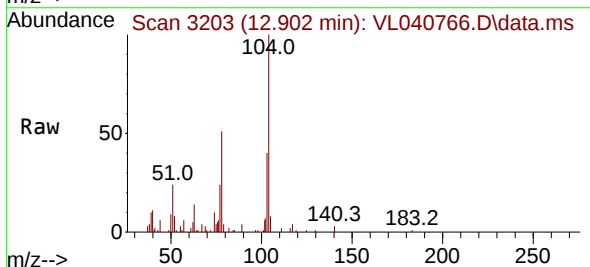
Manual Integrations  
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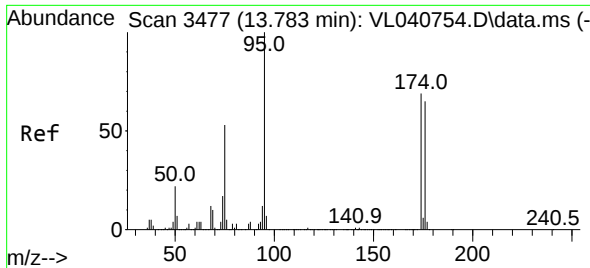
Reviewed By :Semsettin Yesilyurt 10/12/2023  
Supervised By :Mahesh Dadoda 10/16/2023



#61  
Styrene  
Concen: 0.293 ppbv m  
RT: 12.902 min Scan# 3203  
Delta R.T. 0.000 min  
Lab File: VL040766.D  
Acq: 11 Oct 2023 21:45

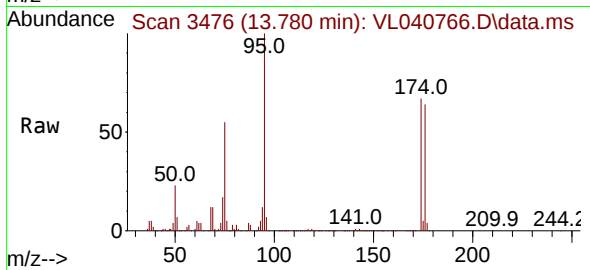
Tgt Ion:104 Resp: 37563  
Ion Ratio Lower Upper  
104 100  
78 53.8 39.8 59.6  
103 0.0 37.5 56.3





#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.078 ppbv  
 RT: 13.780 min Scan# 3476  
 Delta R.T. -0.003 min  
 Lab File: VL040766.D  
 Acq: 11 Oct 2023 21:45

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA1



Tgt Ion: 95 Resp: 173918

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 174 | 69.3  | 54.7  | 82.1  |
| 175 | 5.1   | 4.2   | 6.4   |

Manual Integrations  
 APPROVED

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