

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL041923\  
 Data File : VL040384.D  
 Acq On : 19 Apr 2023 17:54  
 Operator : SY/MD  
 Sample : 02332-07DL 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV-15-20230413DL

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/20/2023  
 Supervised By :Mahesh Dadoda 04/22/2023

Quant Time: Apr 20 05:12:20 2023

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

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

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    | 1086211  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 6.645  | 114   | 2779714  | 10.000   | ppbv   | -0.01    |
| 55) Chlorobenzene-d5        | 11.465 | 117   | 2530835  | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.776 | 95    | 2067043  | 9.877    | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 98.800%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane  | 2.709  | 85    | 29072    | 0.148    | ppbv # | 73       |
| 9) Propene                  | 2.677  | 41    | 911167   | 16.249   | ppbv   | 94       |
| 10) Heptane                 | 7.574  | 43    | 62837    | 0.493    | ppbv   | 91       |
| 13) Ethanol                 | 3.224  | 45    | 98829m   | 21.112   | ppbv   |          |
| 15) Acetone                 | 3.449  | 43    | 1659685  | 10.788   | ppbv # | 79       |
| 17) tert-Butyl alcohol      | 3.870  | 59    | 179097   | 1.268    | ppbv   | 95       |
| 20) Methylene Chloride      | 3.918  | 84    | 369310   | 6.013    | ppbv   | 98       |
| 26) Hexane                  | 5.201  | 57    | 628458   | 5.759    | ppbv # | 37       |
| 27) Carbon Disulfide        | 4.114  | 76    | 43286    | 0.306    | ppbv # | 80       |
| 34) 2-Butanone              | 4.777  | 43    | 276944   | 1.848    | ppbv   | 96       |
| 36) Benzene                 | 6.359  | 78    | 107305   | 0.473    | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone    | 8.188  | 43    | 35947    | 0.158    | ppbv   | 96       |
| 52) Tetrachloroethene       | 10.616 | 164   | 8827m    | 0.124    | ppbv   |          |
| 53) Toluene                 | 9.217  | 91    | 278618   | 1.159    | ppbv   | 98       |
| 58) Ethyl Benzene           | 12.085 | 91    | 60430m   | 0.194    | ppbv   |          |
| 59) m/p-Xylene              | 12.336 | 91    | 201097m  | 0.702    | ppbv   |          |
| 60) o-Xylene                | 13.056 | 91    | 83086    | 0.302    | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene  | 15.352 | 105   | 25778m   | 0.092    | ppbv   |          |
| 74) 1,2,4-Trimethylbenzene  | 16.104 | 105   | 83170m   | 0.260    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

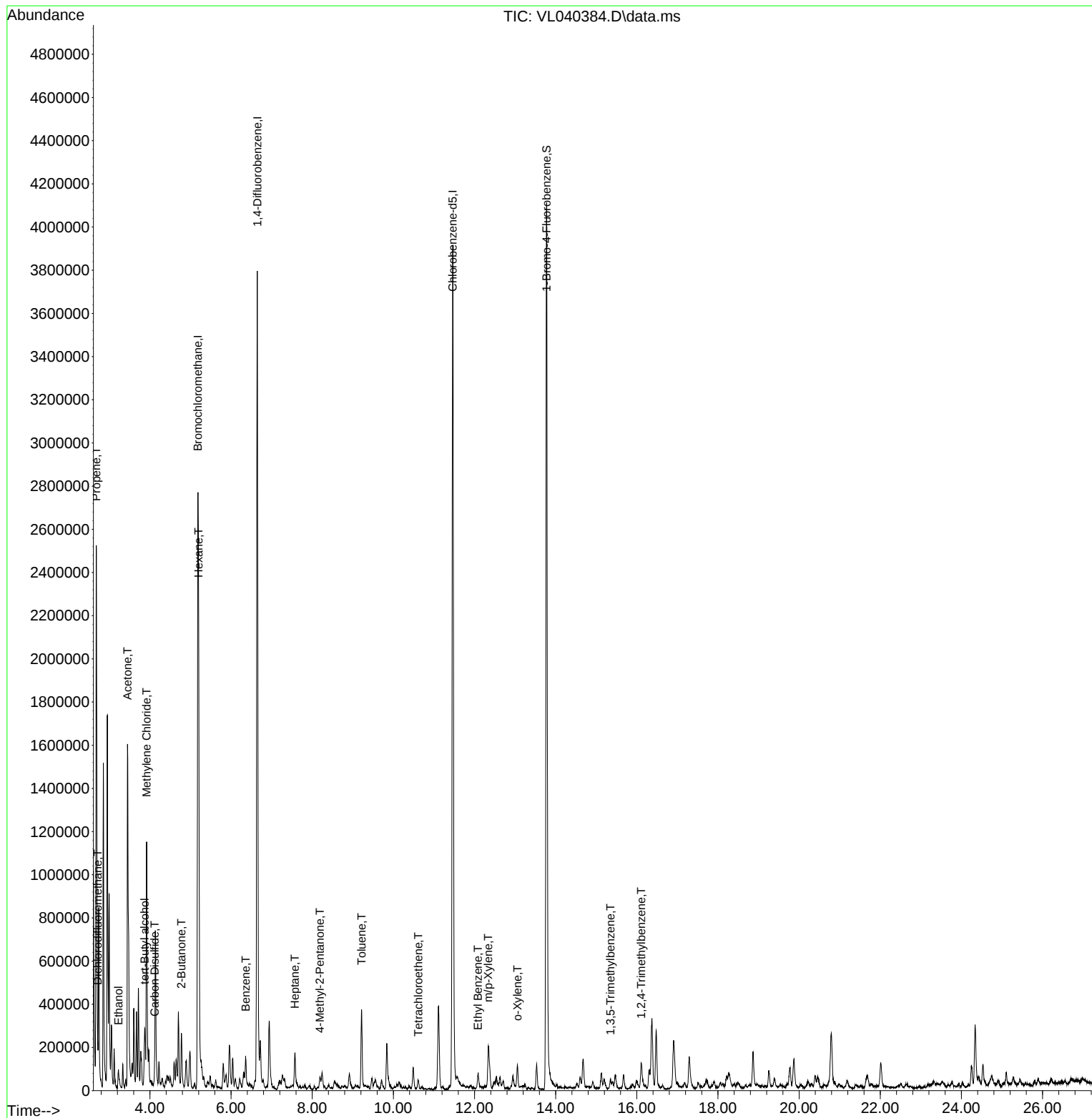
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL041923\  
Data File : VL040384.D  
Acq On : 19 Apr 2023 17:54  
Operator : SY/MD  
Sample : 02332-07DL 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

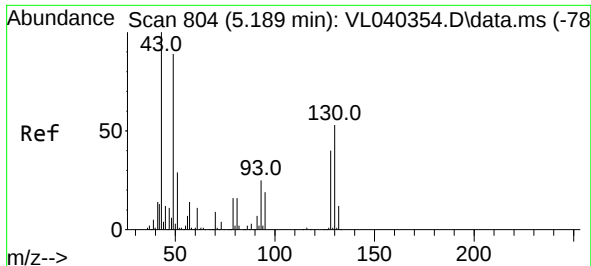
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL

Quant Time: Apr 20 05:12:20 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

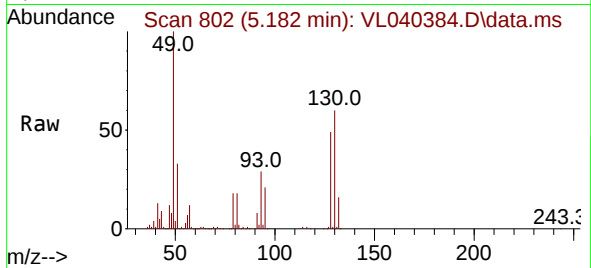
Reviewed By : Semsettin Yesilyurt 04/20/2023  
Supervised By : Mahesh Dadoda 04/22/2023





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.182 min Scan# 80  
Delta R.T. -0.007 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

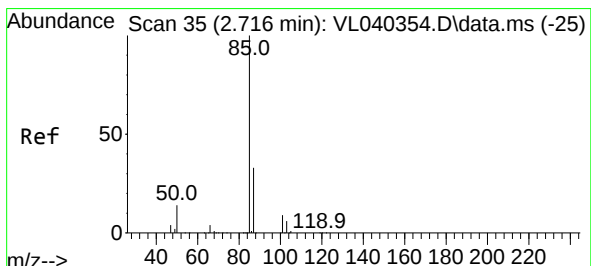
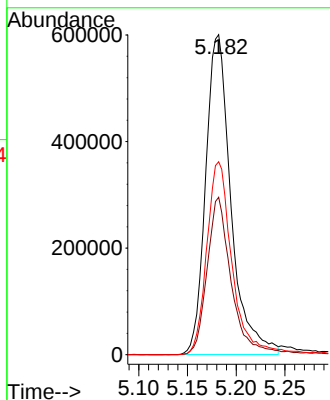
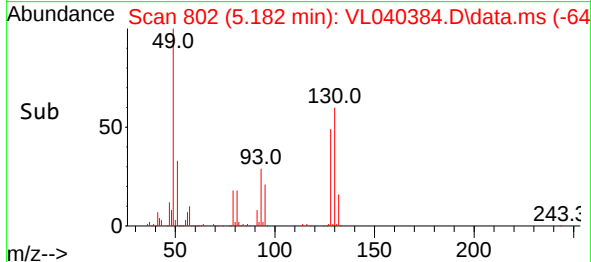
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



Tgt Ion: 49 Resp: 108621  
Ion Ratio Lower Upper  
49 100  
128 47.9 23.7 71.1  
130 62.5 29.9 89.8

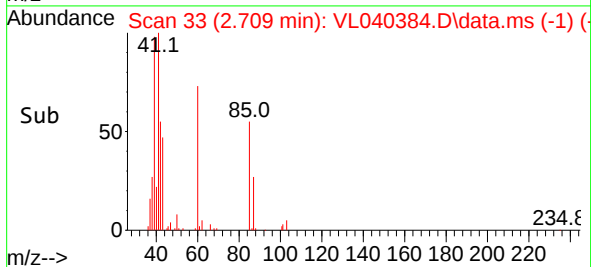
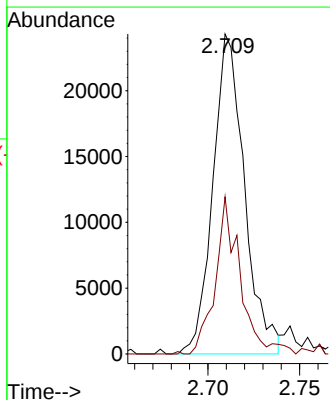
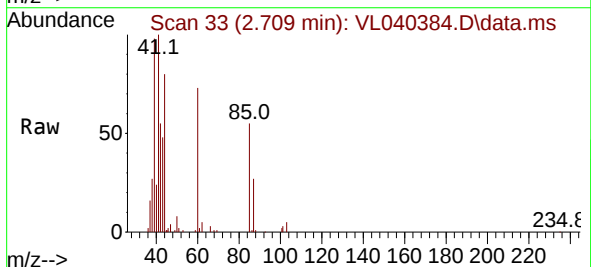
Manual Integrations  
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Supervised By :Mahesh Dadoda 04/22/2023

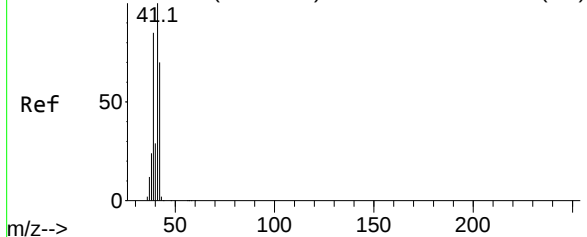


#2  
Dichlorodifluoromethane  
Concen: 0.148 ppbv  
RT: 2.709 min Scan# 33  
Delta R.T. -0.007 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

Tgt Ion: 85 Resp: 29072  
Ion Ratio Lower Upper  
85 100  
87 48.4 26.6 40.0#



Abundance Scan 24 (2.681 min): VL040354.D\data.ms (-15)



#9

Propene

Concen: 16.249 ppbv

RT: 2.677 min Scan# 21

Delta R.T. -0.004 min

Lab File: VL040384.D

Acq: 19 Apr 2023 17:54

Instrument :

MSVOA\_L

ClientSampleId :

SV-15-20230413DL

Tgt Ion: 41 Resp: 91116

Ion Ratio Lower Upper

41 100

42 65.4 56.5 84.7

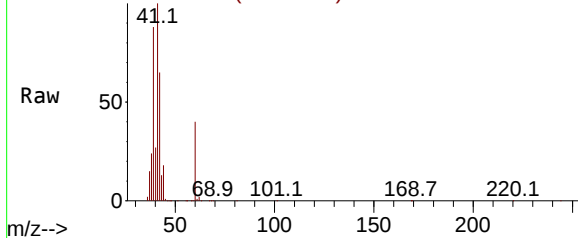
Manual Integrations

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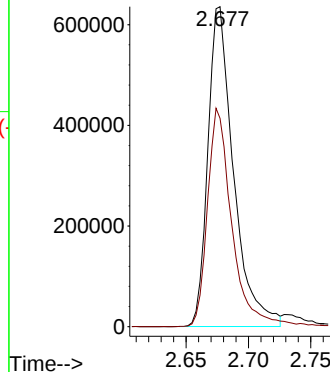
Reviewed By :Semsettin Yesilyurt 04/20/2023

Supervised By :Mahesh Dadoda 04/22/2023

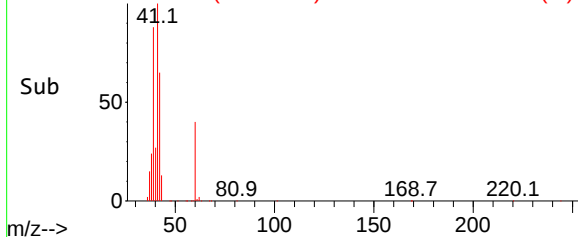
Abundance Scan 23 (2.677 min): VL040384.D\data.ms



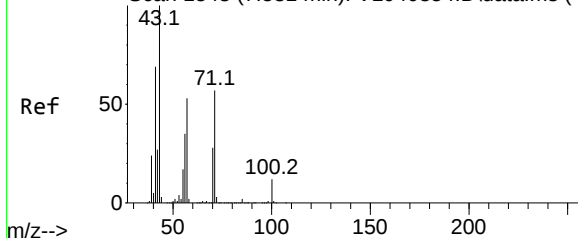
Abundance



Abundance Scan 23 (2.677 min): VL040384.D\data.ms (-1)



Abundance Scan 1548 (7.581 min): VL040354.D\data.ms (-1)



#10

Heptane

Concen: 0.493 ppbv

RT: 7.574 min Scan# 1546

Delta R.T. -0.007 min

Lab File: VL040384.D

Acq: 19 Apr 2023 17:54

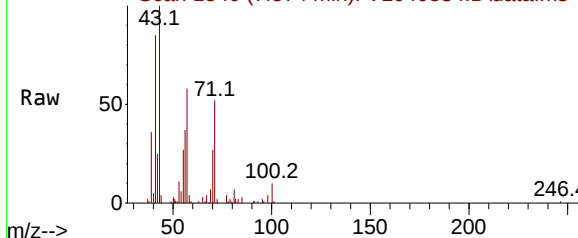
Tgt Ion: 43 Resp: 62837

Ion Ratio Lower Upper

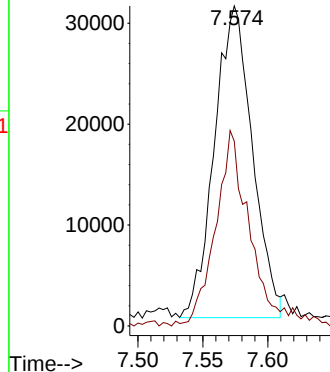
43 100

57 58.9 42.2 63.4

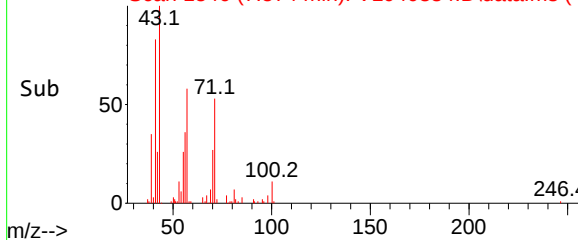
Abundance Scan 1546 (7.574 min): VL040384.D\data.ms

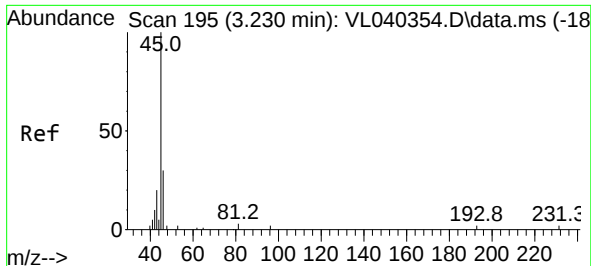


Abundance



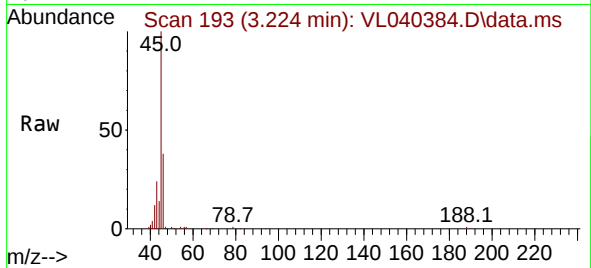
Abundance Scan 1546 (7.574 min): VL040384.D\data.ms (-1)





#13  
Ethanol  
Concen: 21.112 ppbv m  
RT: 3.224 min Scan# 195  
Delta R.T. -0.006 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

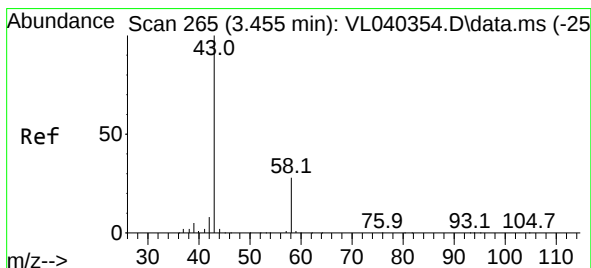
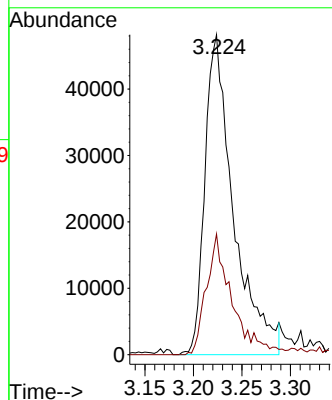
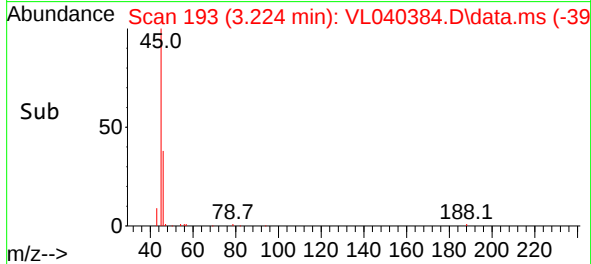
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



Tgt Ion: 45 Resp: 98829  
Ion Ratio Lower Upper  
45 100  
46 36.5 15.3 61.3

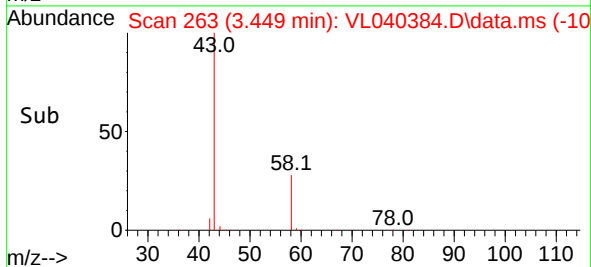
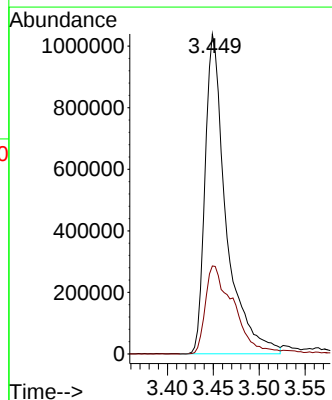
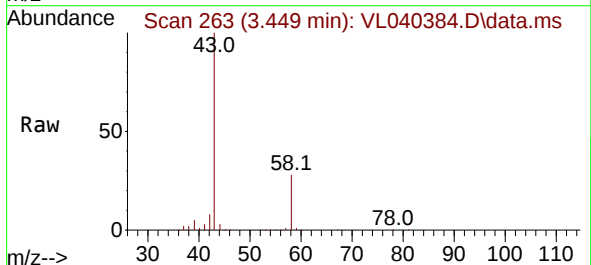
Manual Integrations  
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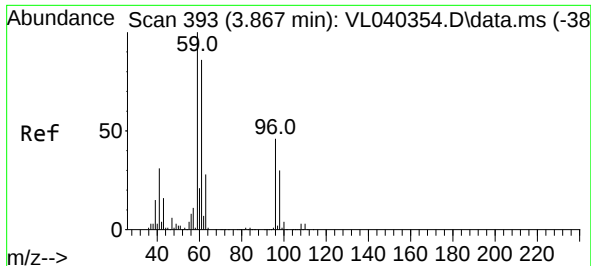
Reviewed By :Semsettin Yesilyurt 04/20/2023  
Supervised By :Mahesh Dadoda 04/22/2023



#15  
Acetone  
Concen: 10.788 ppbv  
RT: 3.449 min Scan# 263  
Delta R.T. -0.006 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

Tgt Ion: 43 Resp: 1659685  
Ion Ratio Lower Upper  
43 100  
58 38.7 22.2 33.2#





#17

tert-Butyl alcohol

Concen: 1.268 ppbv

RT: 3.870 min Scan# 393

Delta R.T. 0.003 min

Lab File: VL040384.D

Acq: 19 Apr 2023 17:54

Instrument :

MSVOA\_L

ClientSampleId :

SV-15-20230413DL

Tgt Ion: 59 Resp: 17909

Ion Ratio Lower Upper

59 100

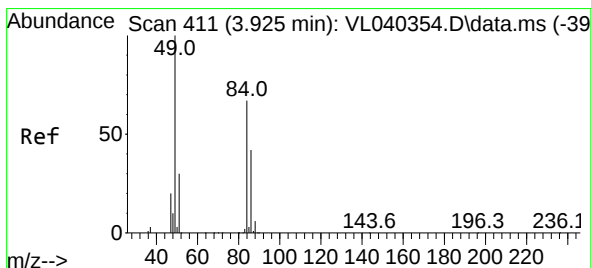
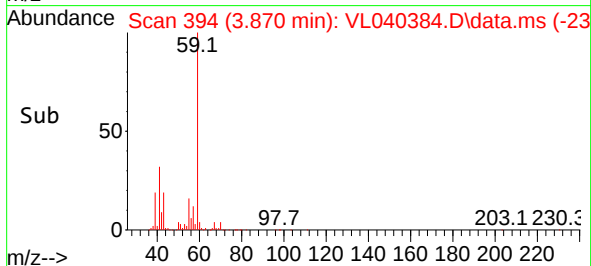
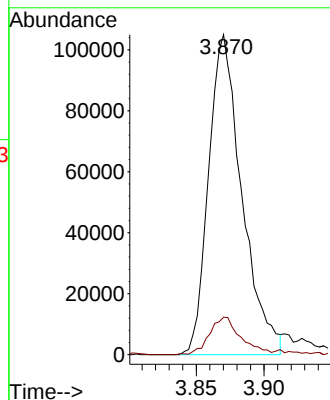
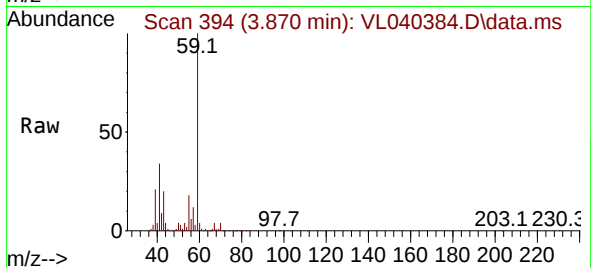
57 12.5 8.5 12.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/20/2023

Supervised By :Mahesh Dadoda 04/22/2023



#20

Methylene Chloride

Concen: 6.013 ppbv

RT: 3.918 min Scan# 409

Delta R.T. -0.007 min

Lab File: VL040384.D

Acq: 19 Apr 2023 17:54

Tgt Ion: 84 Resp: 369310

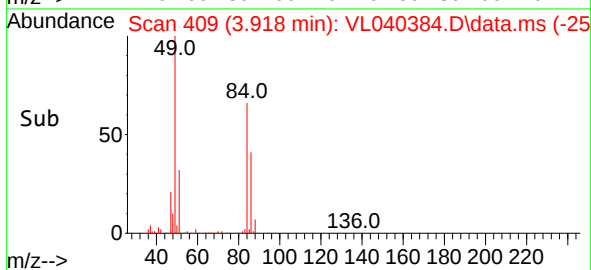
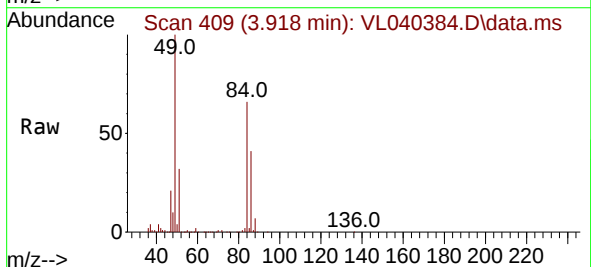
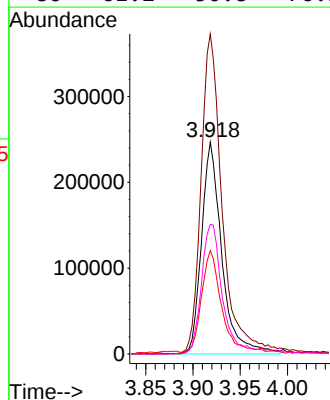
Ion Ratio Lower Upper

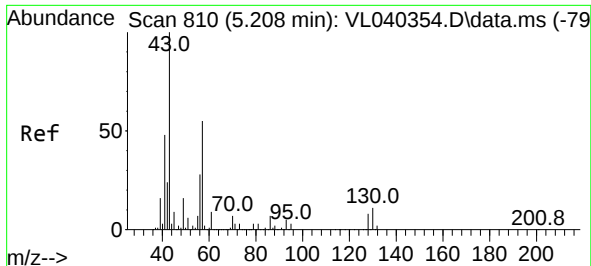
84 100

49 150.6 120.1 180.1

51 48.0 36.3 54.5

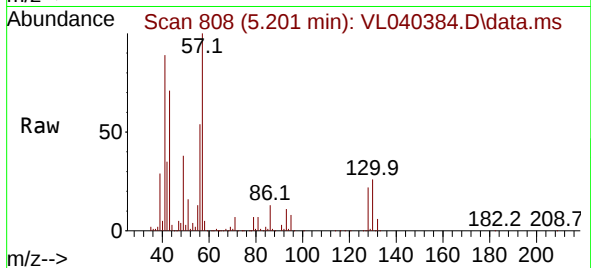
86 61.2 50.8 76.2





#26  
Hexane  
Concen: 5.759 ppbv  
RT: 5.201 min Scan# 808  
Delta R.T. -0.007 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

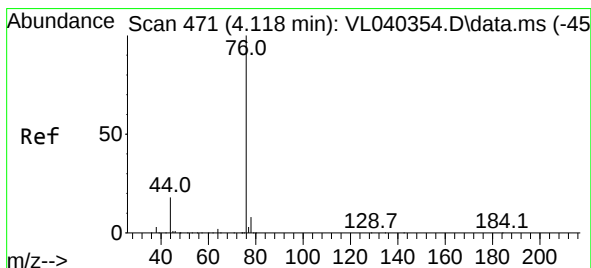
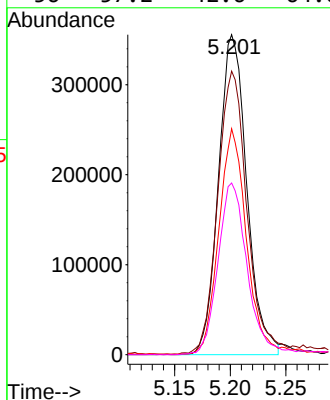
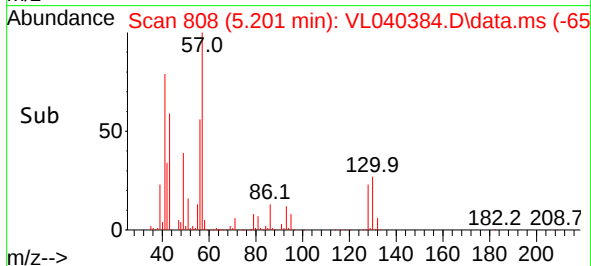
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



Tgt Ion: 57 Resp: 628458  
Ion Ratio Lower Upper  
57 100  
41 95.5 74.8 112.2  
43 70.7 192.7 289.1  
56 57.2 42.6 64.0

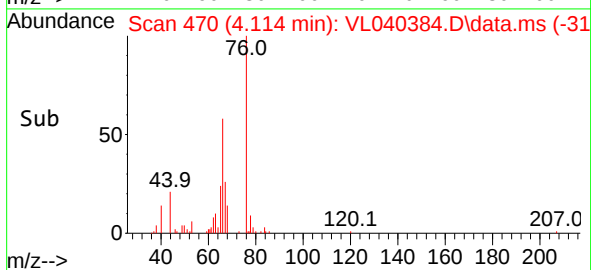
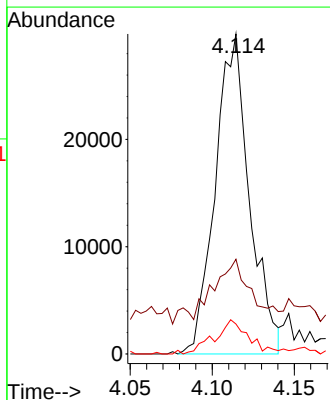
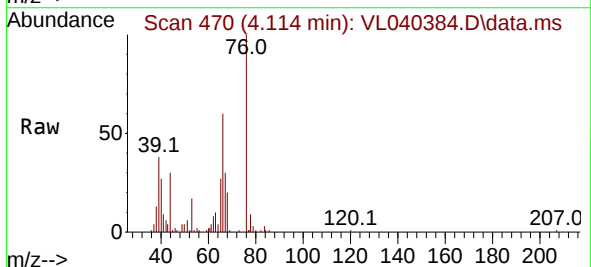
Manual Integrations  
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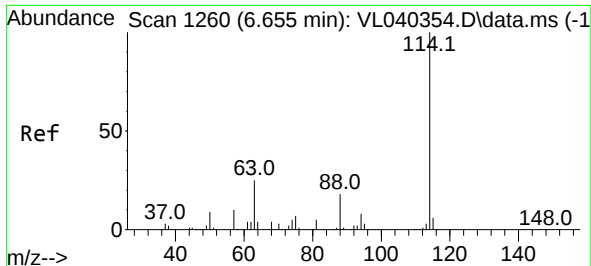
Reviewed By :Semsettin Yesilyurt 04/20/2023  
Supervised By :Mahesh Dadoda 04/22/2023



#27  
Carbon Disulfide  
Concen: 0.306 ppbv  
RT: 4.114 min Scan# 470  
Delta R.T. -0.004 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

Tgt Ion: 76 Resp: 43286  
Ion Ratio Lower Upper  
76 100  
44 29.9 14.7 22.1#  
78 12.4 7.7 11.5#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.645 min Scan# 114

Delta R.T. -0.010 min

Lab File: VL040384.D

Acq: 19 Apr 2023 17:54

Instrument :

MSVOA\_L

ClientSampleId :

SV-15-20230413DL

Tgt Ion:114 Resp: 2779714

Ion Ratio Lower Upper

114 100

63 25.5 21.4 32.0

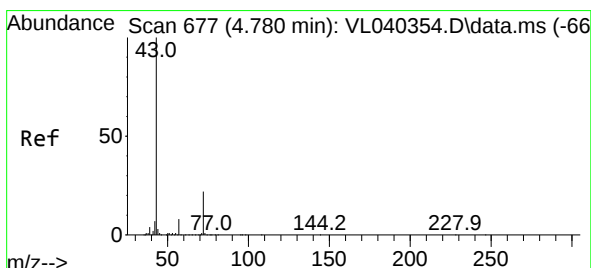
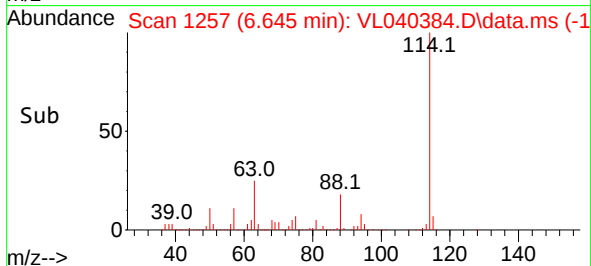
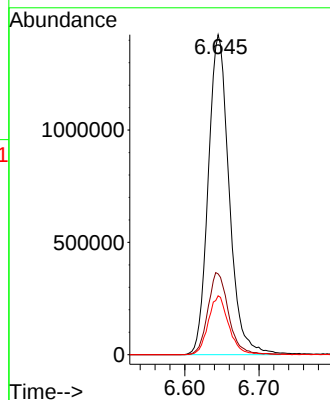
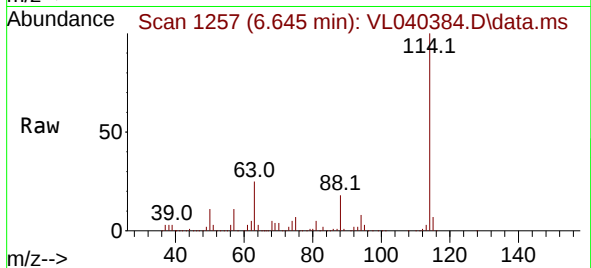
88 18.1 14.6 22.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/20/2023

Supervised By :Mahesh Dadoda 04/22/2023



#34

2-Butanone

Concen: 1.848 ppbv

RT: 4.777 min Scan# 676

Delta R.T. -0.003 min

Lab File: VL040384.D

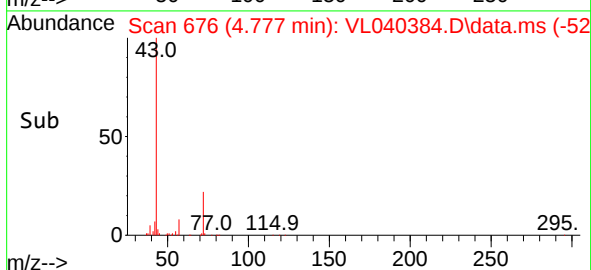
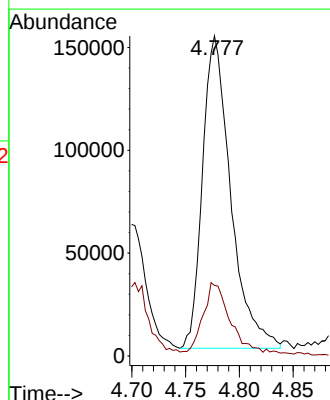
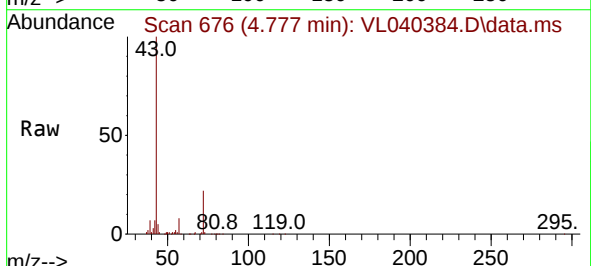
Acq: 19 Apr 2023 17:54

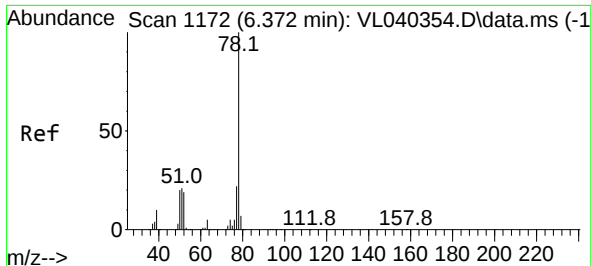
Tgt Ion: 43 Resp: 276944

Ion Ratio Lower Upper

43 100

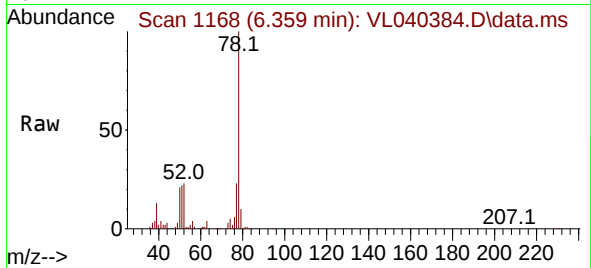
72 24.9 18.4 27.6





#36  
Benzene  
Concen: 0.473 ppbv  
RT: 6.359 min Scan# 1168  
Delta R.T. -0.013 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

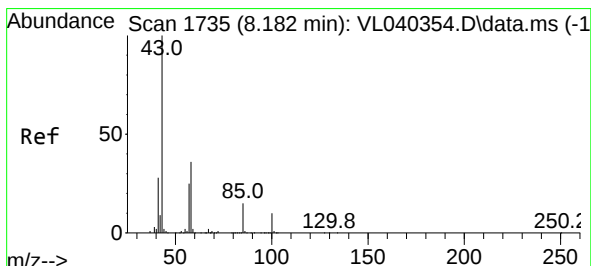
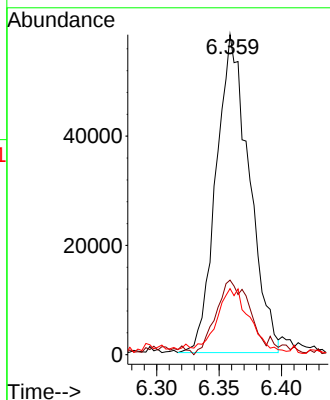
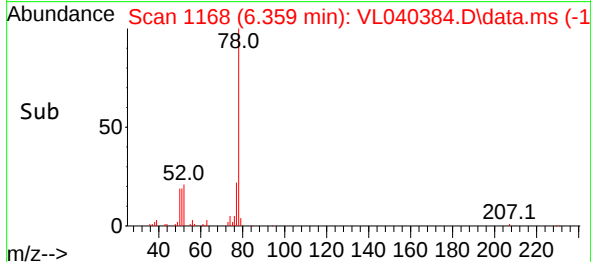
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



Tgt Ion: 78 Resp: 107309  
Ion Ratio Lower Upper  
78 100  
77 21.9 17.8 26.8  
50 19.2 15.6 23.4

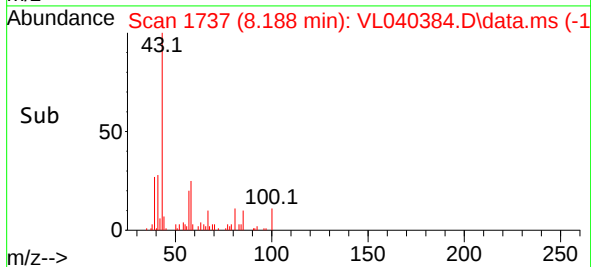
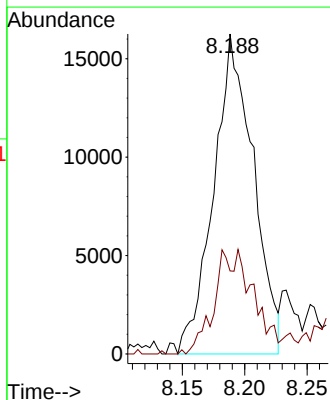
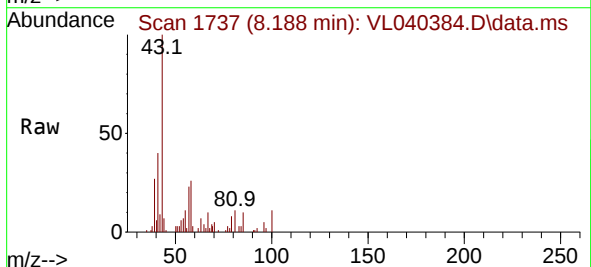
Manual Integrations  
APPROVED

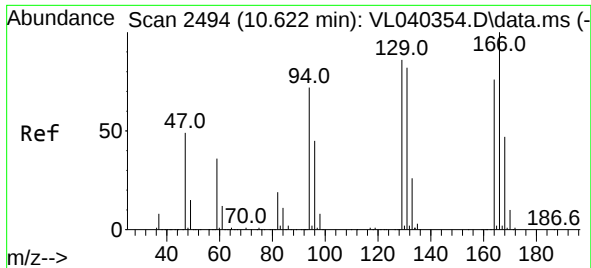
Reviewed By :Semsettin Yesilyurt 04/20/2023  
Supervised By :Mahesh Dadoda 04/22/2023



#50  
4-Methyl-2-Pentanone  
Concen: 0.158 ppbv  
RT: 8.188 min Scan# 1737  
Delta R.T. 0.006 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

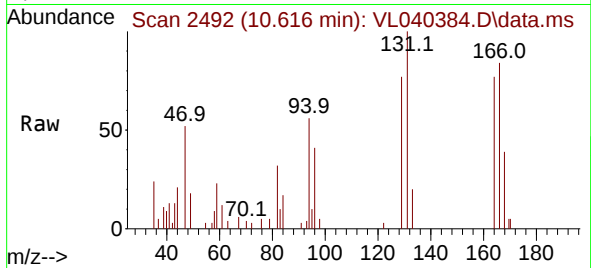
Tgt Ion: 43 Resp: 35947  
Ion Ratio Lower Upper  
43 100  
58 33.7 28.6 43.0





#52  
Tetrachloroethene  
Concen: 0.124 ppbv m  
RT: 10.616 min Scan# 2494  
Delta R.T. -0.006 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

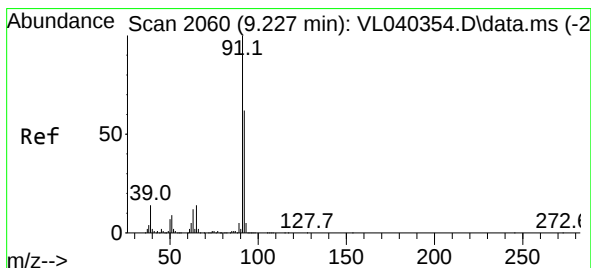
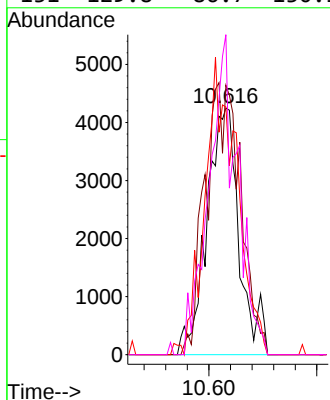
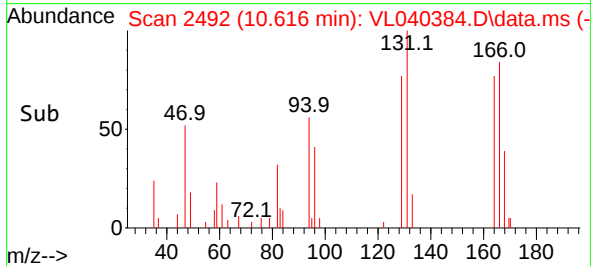
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



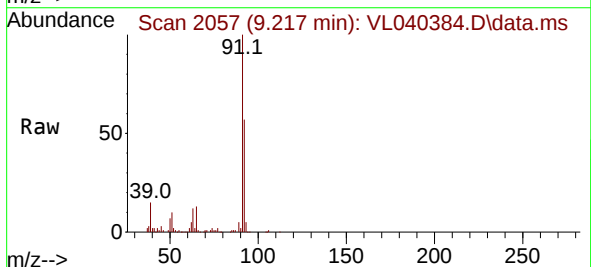
Tgt Ion:164 Resp: 882  
Ion Ratio Lower Upper  
164 100  
166 109.3 105.2 157.8  
129 100.5 90.3 135.5  
131 129.8 86.7 130.1

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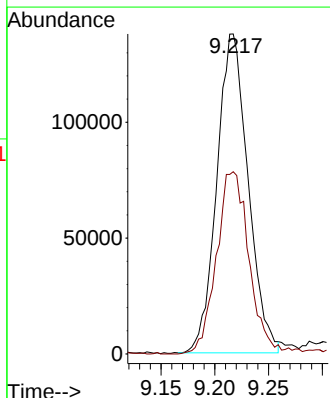
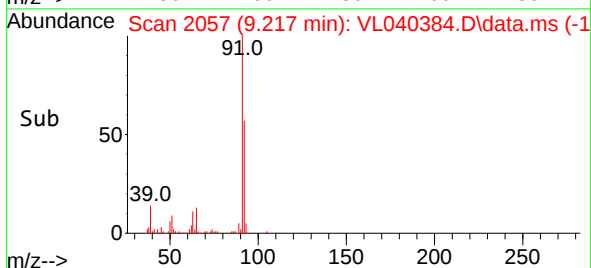
Reviewed By :Semsettin Yesilyurt 04/20/2023  
Supervised By :Mahesh Dadoda 04/22/2023

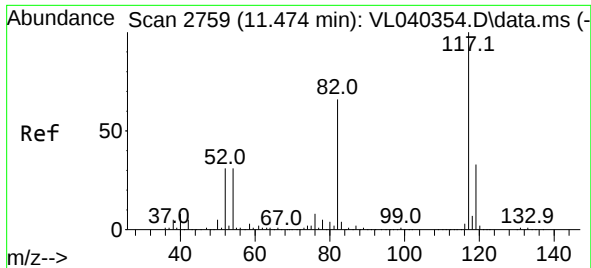


#53  
Toluene  
Concen: 1.159 ppbv  
RT: 9.217 min Scan# 2057  
Delta R.T. -0.010 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54



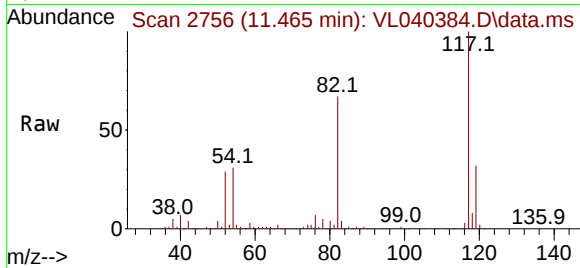
Tgt Ion: 91 Resp: 278618  
Ion Ratio Lower Upper  
91 100  
92 59.9 48.9 73.3





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.465 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

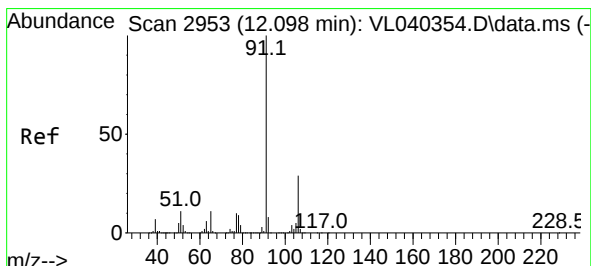
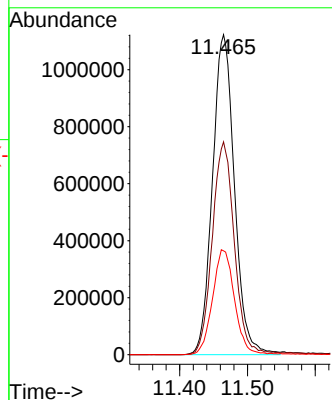
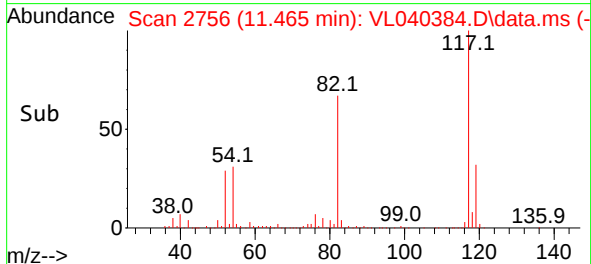
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



Tgt Ion: 117 Resp: 253083  
Ion Ratio Lower Upper  
117 100  
82 67.8 52.5 78.7  
119 33.1 24.3 36.5

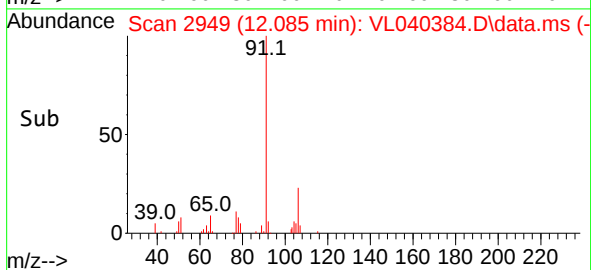
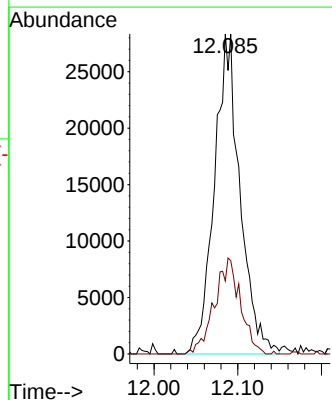
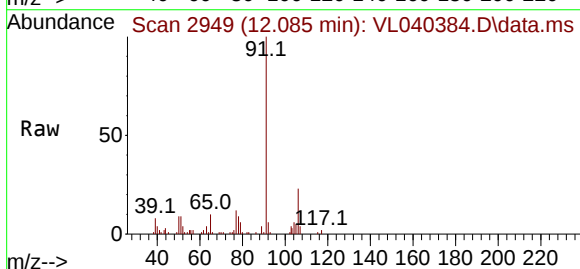
Manual Integrations  
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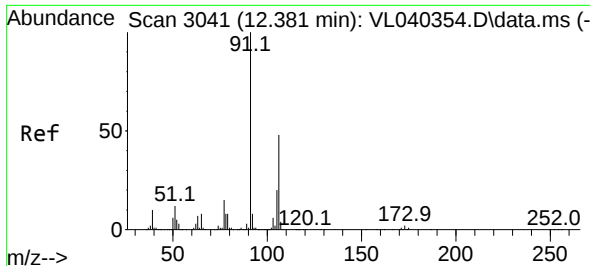
Reviewed By :Semsettin Yesilyurt 04/20/2023  
Supervised By :Mahesh Dadoda 04/22/2023



#58  
Ethyl Benzene  
Concen: 0.194 ppbv m  
RT: 12.085 min Scan# 2949  
Delta R.T. -0.013 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

Tgt Ion: 91 Resp: 60430  
Ion Ratio Lower Upper  
91 100  
106 22.8 23.5 35.3#





#59

m/p-Xylene

Concen: 0.702 ppbv m

RT: 12.336 min Scan# 3041

Delta R.T. -0.045 min

Lab File: VL040384.D

Acq: 19 Apr 2023 17:54

Instrument :

MSVOA\_L

ClientSampleId :

SV-15-20230413DL

Tgt Ion: 91 Resp: 20109

Ion Ratio Lower Upper

91 100

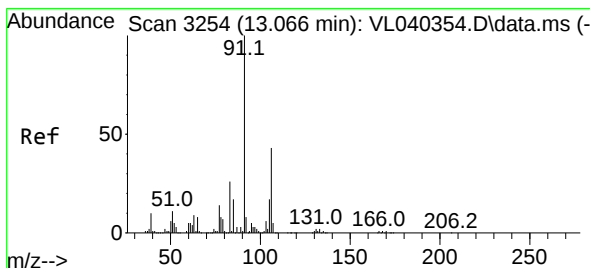
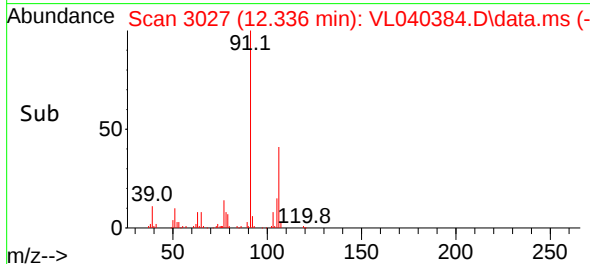
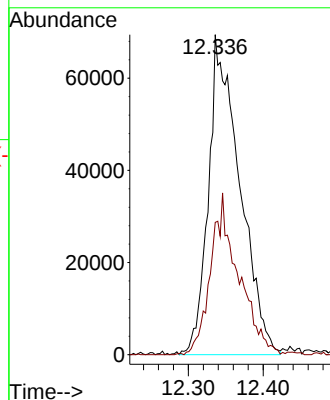
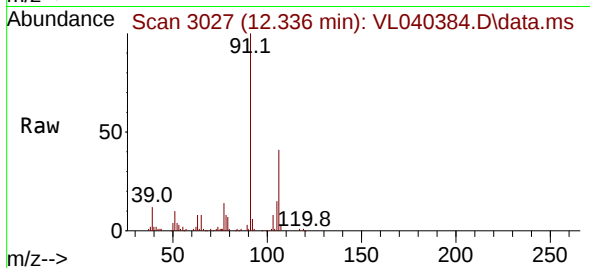
106 45.2 34.7 52.1

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/20/2023

Supervised By :Mahesh Dadoda 04/22/2023



#60

o-Xylene

Concen: 0.302 ppbv

RT: 13.056 min Scan# 3251

Delta R.T. -0.010 min

Lab File: VL040384.D

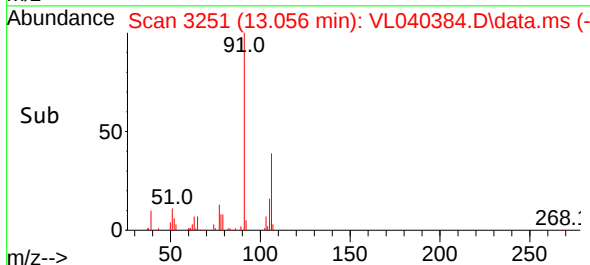
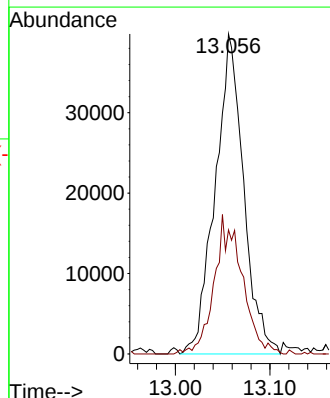
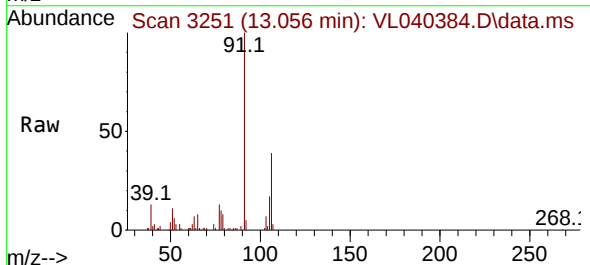
Acq: 19 Apr 2023 17:54

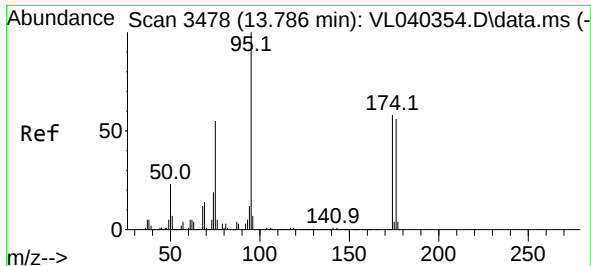
Tgt Ion: 91 Resp: 83086

Ion Ratio Lower Upper

91 100

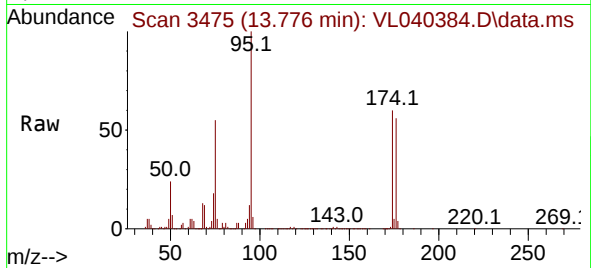
106 42.9 21.9 65.8





#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.877 ppbv  
RT: 13.776 min Scan# 3478  
Delta R.T. -0.010 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

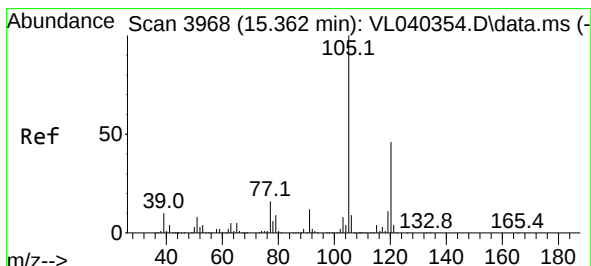
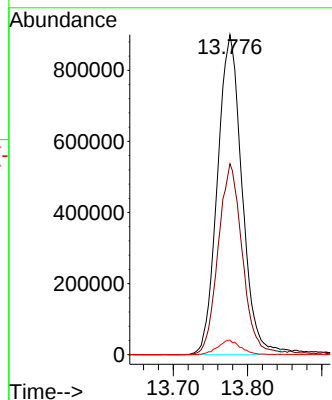
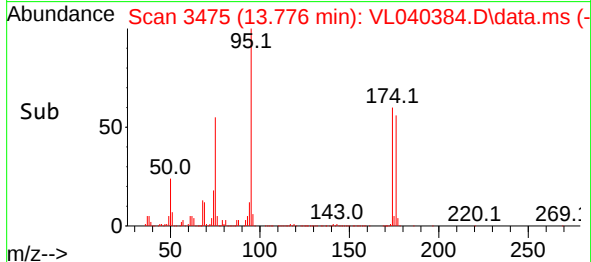
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-15-20230413DL



Tgt Ion: 95 Resp: 206704  
Ion Ratio Lower Upper  
95 100  
174 59.5 47.2 70.8  
175 4.3 3.5 5.3

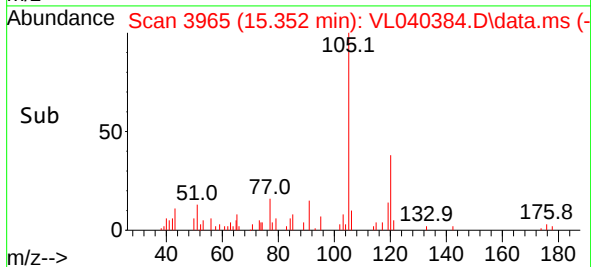
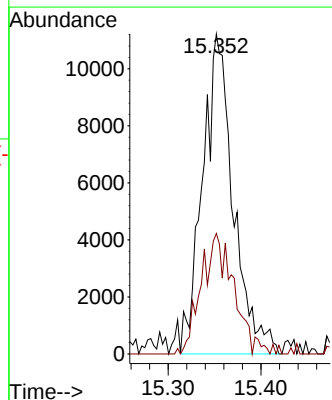
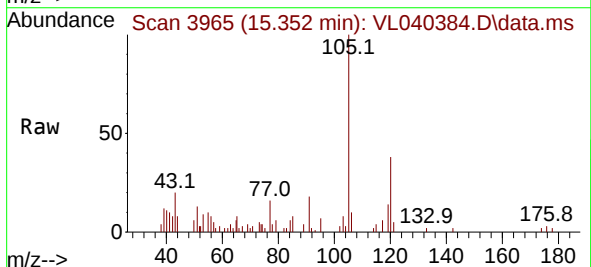
Manual Integrations  
APPROVED

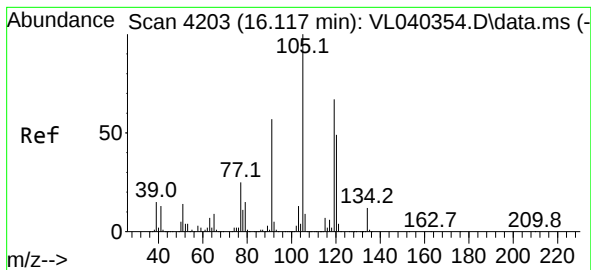
Reviewed By :Semsettin Yesilyurt 04/20/2023  
Supervised By :Mahesh Dadoda 04/22/2023



#73  
1,3,5-Trimethylbenzene  
Concen: 0.092 ppbv m  
RT: 15.352 min Scan# 3965  
Delta R.T. -0.010 min  
Lab File: VL040384.D  
Acq: 19 Apr 2023 17:54

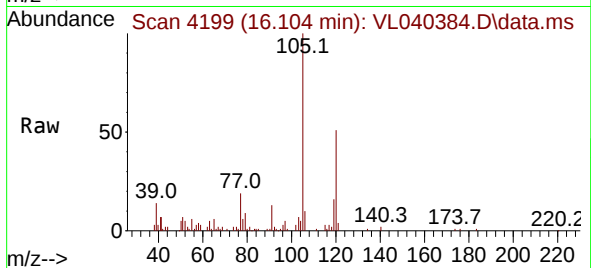
Tgt Ion:105 Resp: 25778  
Ion Ratio Lower Upper  
105 100  
120 37.7 36.9 55.3





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.260 ppbv m  
 RT: 16.104 min Scan# 4199  
 Delta R.T. -0.013 min  
 Lab File: VL040384.D  
 Acq: 19 Apr 2023 17:54

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV-15-20230413DL



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 83170 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 120       | 51.0  | 38.9  | 58.3  |
| 91        | 12.9  | 46.0  | 69.0  |
| 77        | 19.3  | 20.0  | 30.0  |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 04/20/2023  
 Supervised By :Mahesh Dadoda 04/22/2023

