

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL101722\  
 Data File : VL039724.D  
 Acq On : 17 Oct 2022 18:06  
 Operator : SY/AP  
 Sample : N5169-06  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 OA1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 10/18/2022  
 Supervised By :Mahesh Dadoda 10/19/2022

Quant Time: Oct 18 05:28:18 2022

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091922AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 12

QLast Update : Tue Oct 18 05:23:57 2022

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.227  | 49    | 965757   | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 6.687  | 114   | 2497567  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5        | 11.497 | 117   | 2167105  | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.806 | 95    | 1616207  | 9.990    | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 99.900%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane  | 2.771  | 85    | 28245    | 0.252    | ppbv   | 98       |
| 3) Chlorodifluoromethane    | 2.716  | 51    | 40421m   | 0.353    | ppbv   |          |
| 4) Chloromethane            | 2.854  | 50    | 26960    | 0.390    | ppbv # | 77       |
| 9) Propene                  | 2.742  | 41    | 83238    | 1.590    | ppbv   | 90       |
| 10) Heptane                 | 7.616  | 43    | 17035m   | 0.139    | ppbv   |          |
| 11) Trichlorofluoromethane  | 3.603  | 101   | 29283    | 0.211    | ppbv   | 96       |
| 13) Ethanol                 | 3.279  | 45    | 112224m  | 28.139   | ppbv   |          |
| 15) Acetone                 | 3.510  | 43    | 415791   | 3.869    | ppbv   | 99       |
| 19) Isopropyl Alcohol       | 3.626  | 45    | 129189   | 2.358    | ppbv # | 92       |
| 20) Methylene Chloride      | 3.970  | 84    | 133399   | 2.685    | ppbv   | 98       |
| 26) Hexane                  | 5.250  | 57    | 164642   | 1.656    | ppbv # | 51       |
| 34) 2-Butanone              | 4.838  | 43    | 37119m   | 0.303    | ppbv   |          |
| 35) Carbon Tetrachloride    | 6.529  | 117   | 8292m    | 0.063    | ppbv   |          |
| 36) Benzene                 | 6.407  | 78    | 93003    | 0.487    | ppbv # | 94       |
| 44) 2,2,4-Trimethylpentane  | 7.365  | 57    | 90123m   | 0.274    | ppbv   |          |
| 52) Tetrachloroethene       | 10.645 | 164   | 12752m   | 0.175    | ppbv   |          |
| 53) Toluene                 | 9.256  | 91    | 271969   | 1.281    | ppbv   | 100      |
| 58) Ethyl Benzene           | 12.121 | 91    | 44021m   | 0.176    | ppbv   |          |
| 59) m/p-Xylene              | 12.381 | 91    | 149803m  | 0.674    | ppbv   |          |
| 60) o-Xylene                | 13.095 | 91    | 45158m   | 0.213    | ppbv   |          |
| 74) 1,2,4-Trimethylbenzene  | 16.143 | 105   | 27033m   | 0.109    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

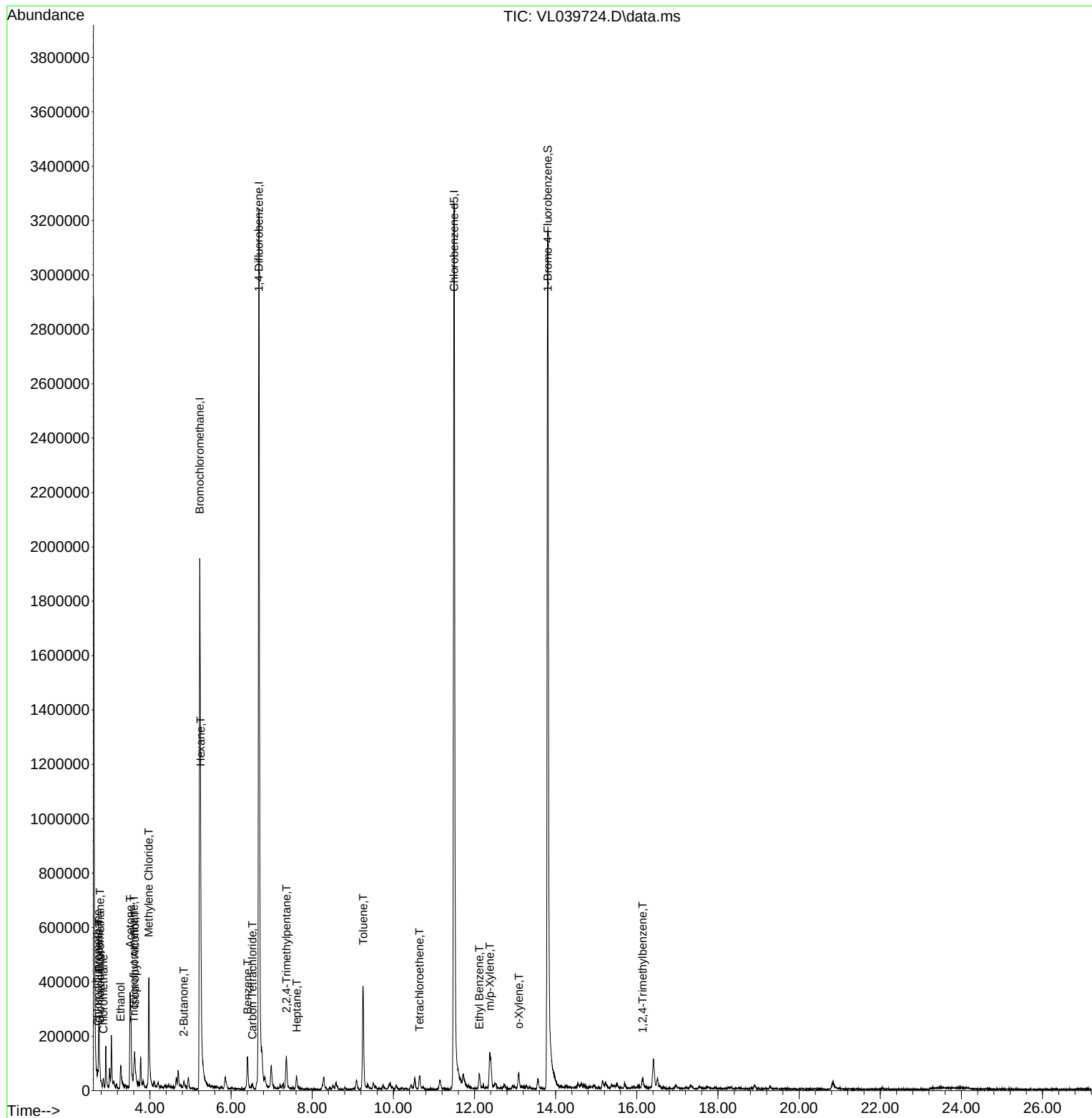
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL101722\  
Data File : VL039724.D  
Acq On : 17 Oct 2022 18:06  
Operator : SY/AP  
Sample : N5169-06  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

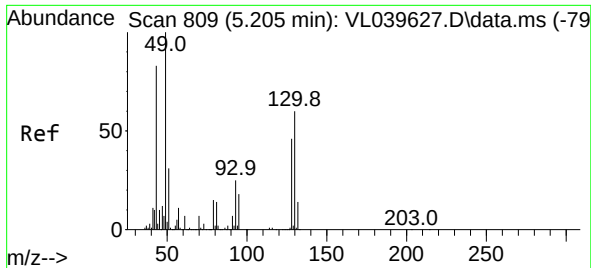
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1

Quant Time: Oct 18 05:28:18 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091922AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Tue Oct 18 05:23:57 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 10/18/2022  
Supervised By : Mahesh Dadoda 10/19/2022





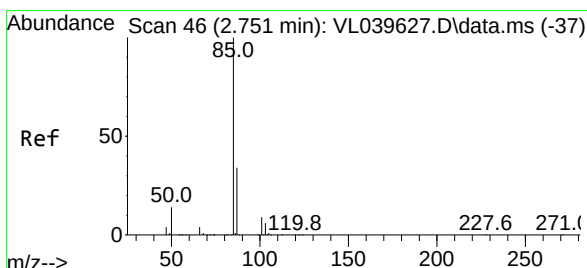
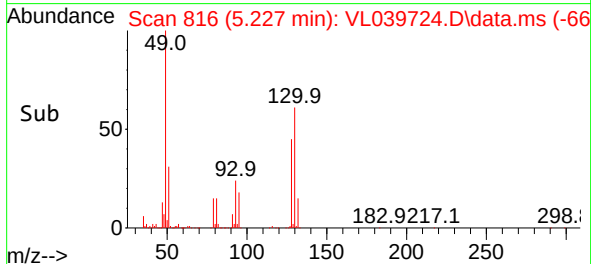
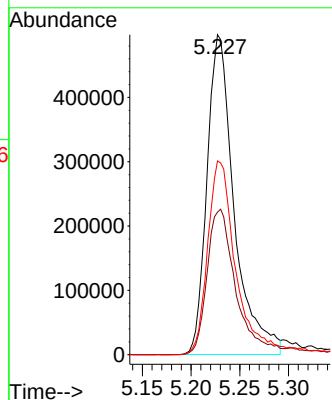
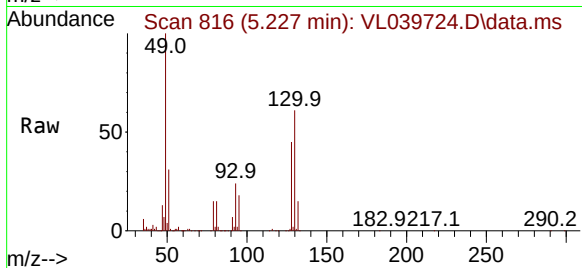
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Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.227 min Scan# 81  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1

Tgt Ion: 49 Resp: 96575  
Ion Ratio Lower Upper  
49 100  
128 51.0 26.7 80.0  
130 65.0 34.3 102.8

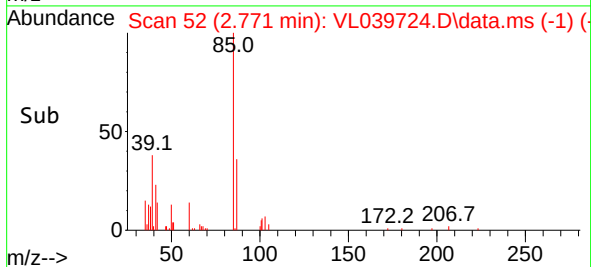
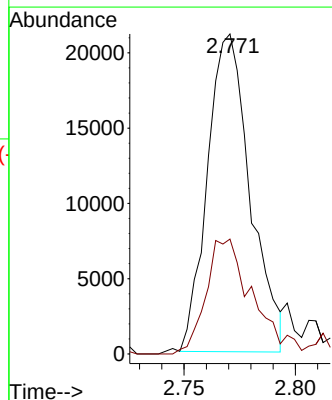
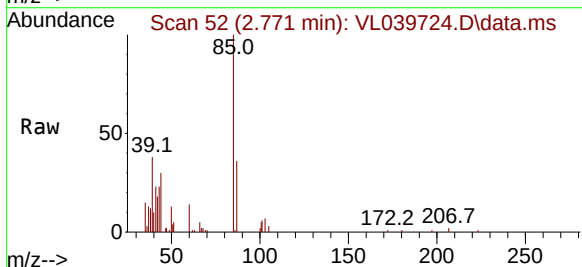
Manual Integrations  
APPROVED

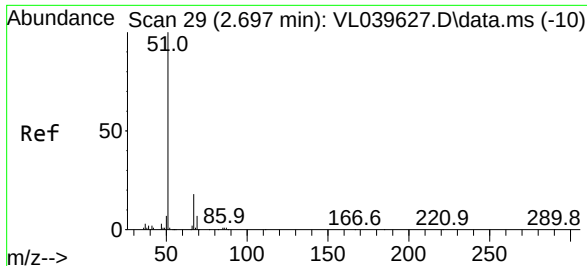
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022



#2  
Dichlorodifluoromethane  
Concen: 0.252 ppbv  
RT: 2.771 min Scan# 52  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

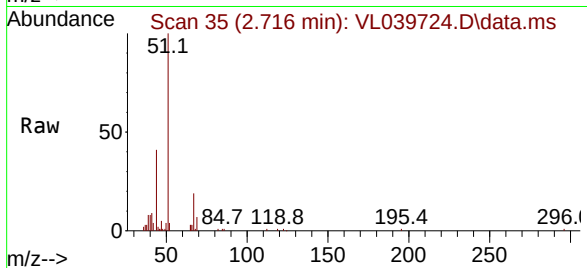
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Ion Ratio Lower Upper  
85 100  
87 34.8 26.7 40.1





#3  
Chlorodifluoromethane  
Concen: 0.353 ppbv m  
RT: 2.716 min Scan# 31  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

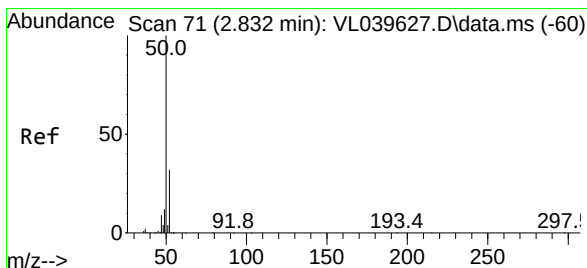
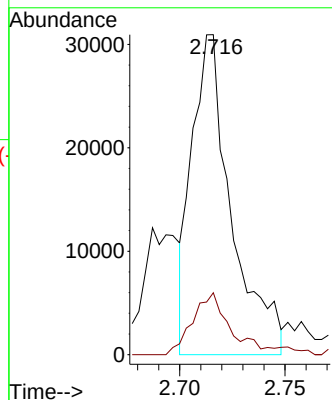
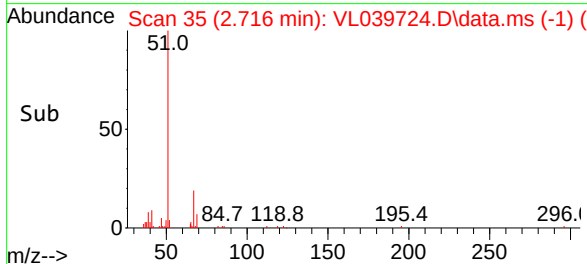
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



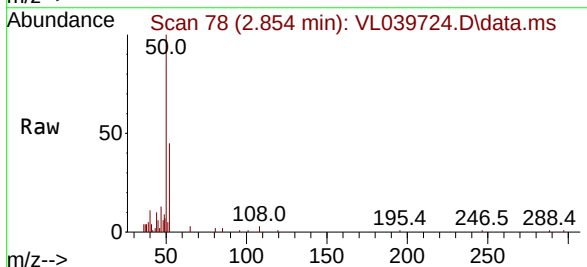
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Ion Ratio Lower Upper  
51 100  
67 20.3 15.7 23.5

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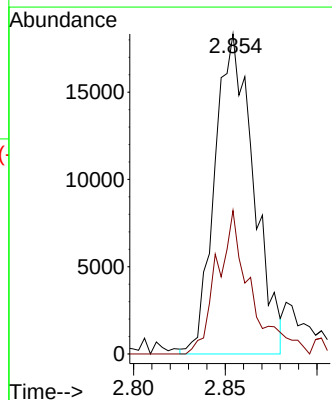
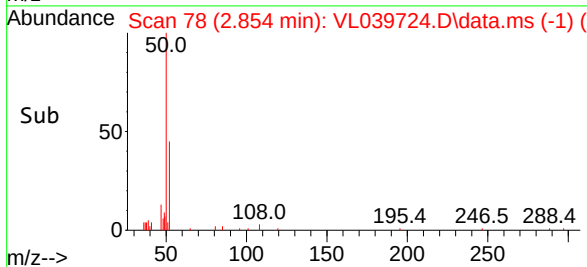
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022

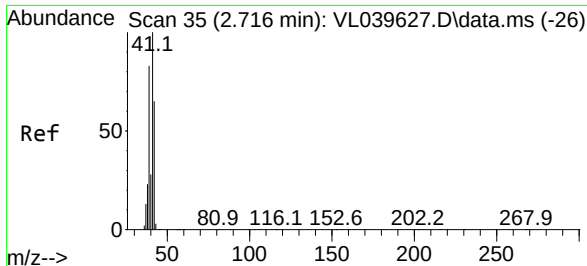


#4  
Chloromethane  
Concen: 0.390 ppbv  
RT: 2.854 min Scan# 78  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06



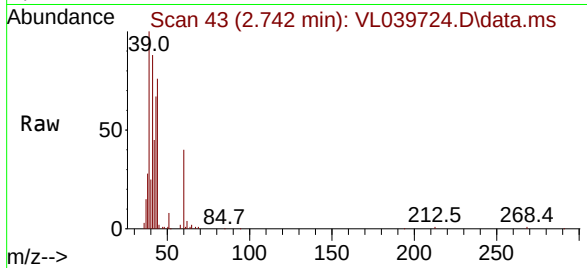
Tgt Ion: 50 Resp: 26960  
Ion Ratio Lower Upper  
50 100  
52 46.3 26.5 39.7#





#9  
 Propene  
 Concen: 1.590 ppbv  
 RT: 2.742 min Scan# 41  
 Delta R.T. 0.010 min  
 Lab File: VL039724.D  
 Acq: 17 Oct 2022 18:06

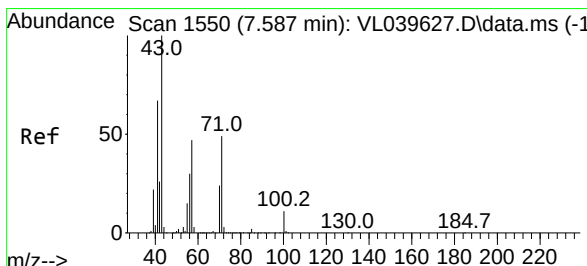
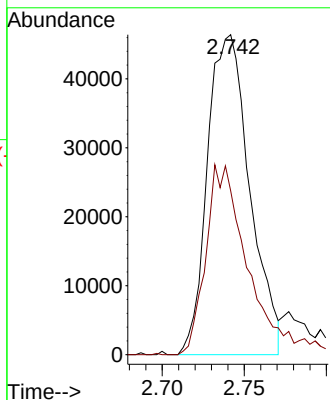
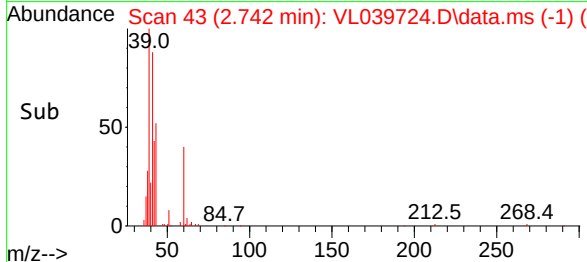
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 OA1



Tgt Ion: 41 Resp: 83238  
 Ion Ratio Lower Upper  
 41 100  
 42 61.1 55.2 82.8

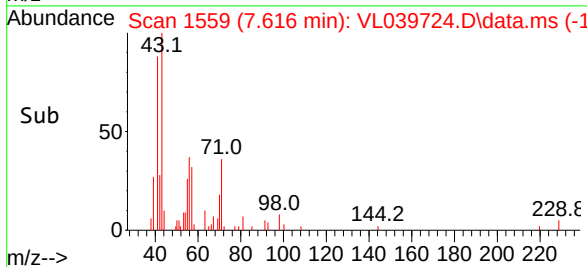
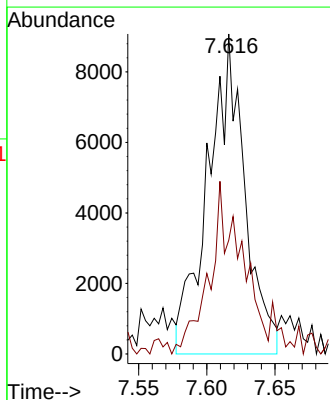
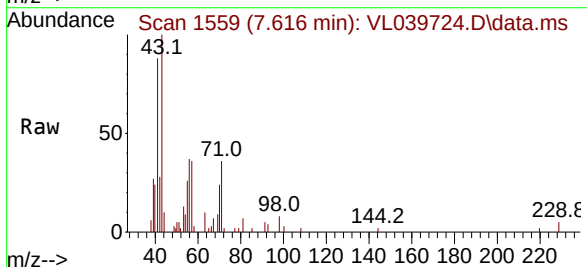
Manual Integrations  
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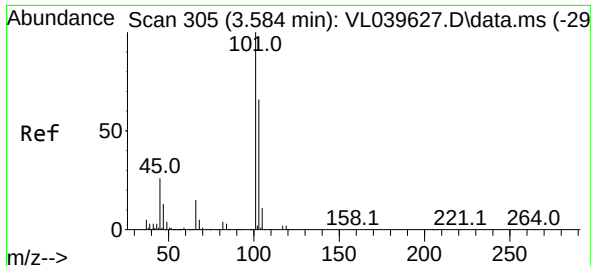
Reviewed By :Semsettin Yesilyurt 10/18/2022  
 Supervised By :Mahesh Dadoda 10/19/2022



#10  
 Heptane  
 Concen: 0.139 ppbv m  
 RT: 7.616 min Scan# 1559  
 Delta R.T. 0.006 min  
 Lab File: VL039724.D  
 Acq: 17 Oct 2022 18:06

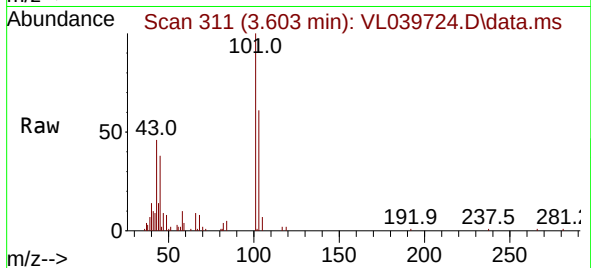
Tgt Ion: 43 Resp: 17035  
 Ion Ratio Lower Upper  
 43 100  
 57 0.0 40.5 60.7#





#11  
Trichlorofluoromethane  
Concen: 0.211 ppbv  
RT: 3.603 min Scan# 311  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

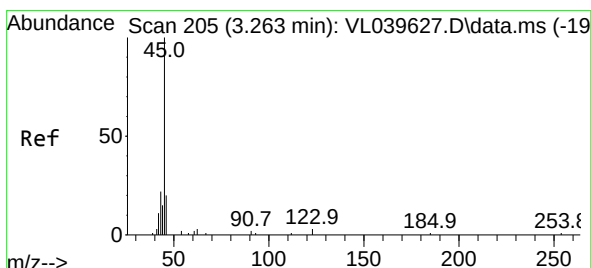
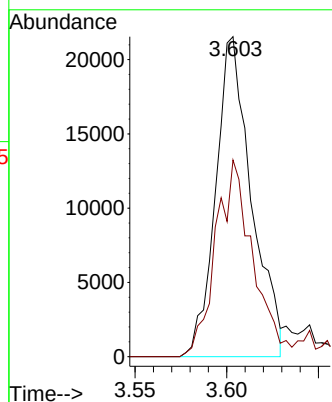
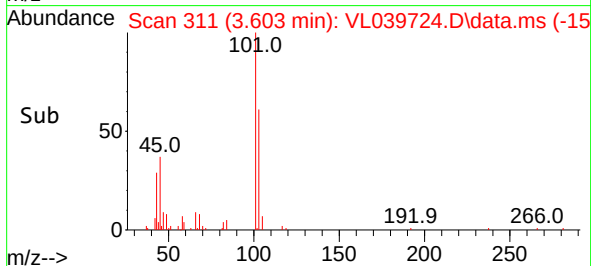
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



Tgt Ion:101 Resp: 2928  
Ion Ratio Lower Upper  
101 100  
103 61.5 51.8 77.8

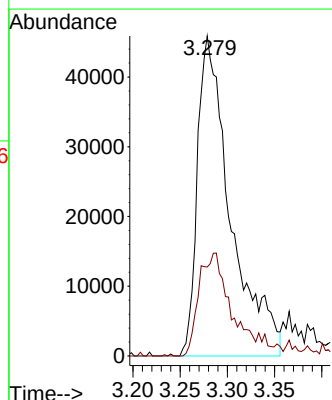
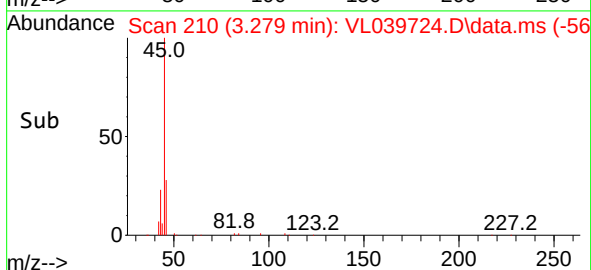
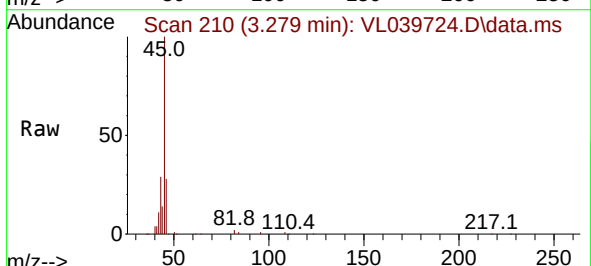
Manual Integrations  
APPROVED

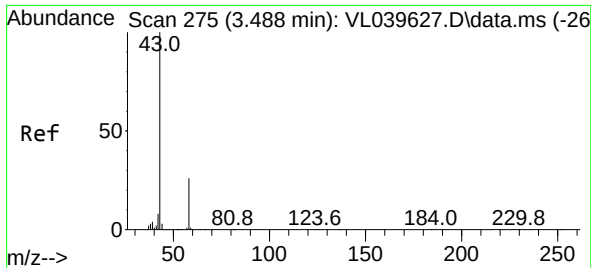
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022



#13  
Ethanol  
Concen: 28.139 ppbv m  
RT: 3.279 min Scan# 210  
Delta R.T. -0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

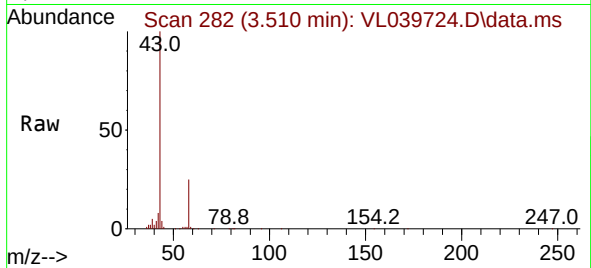
Tgt Ion: 45 Resp: 112224  
Ion Ratio Lower Upper  
45 100  
46 35.0 22.8 91.2





#15  
Acetone  
Concen: 3.869 ppbv  
RT: 3.510 min Scan# 21  
Delta R.T. 0.006 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

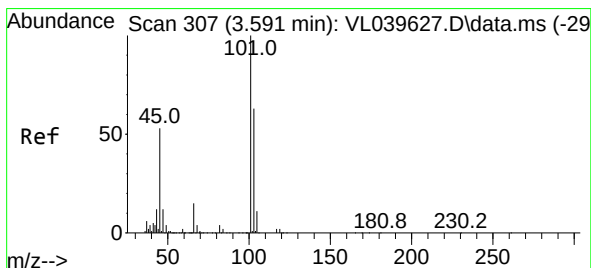
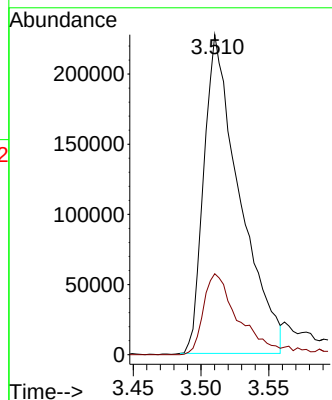
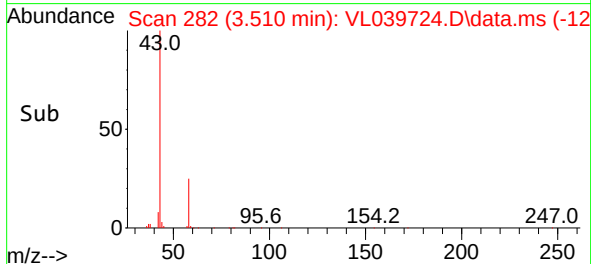
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



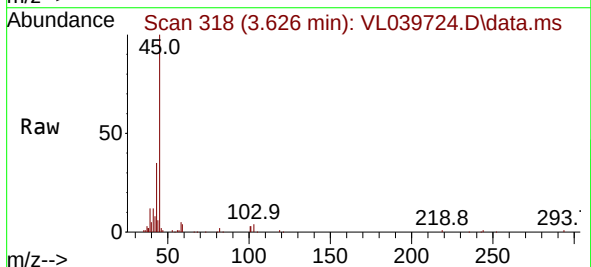
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Ion Ratio Lower Upper  
43 100  
58 26.7 21.0 31.6

Manual Integrations  
APPROVED

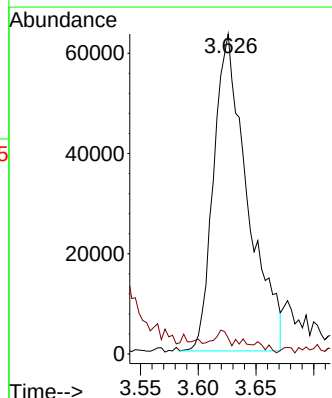
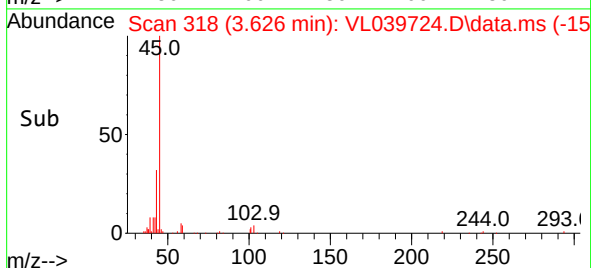
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022

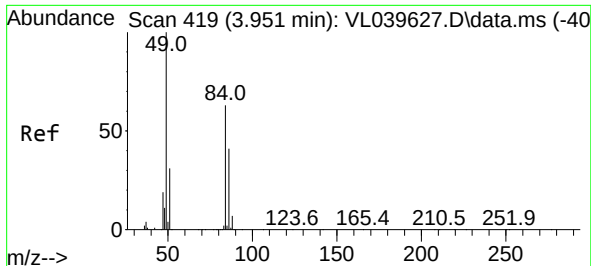


#19  
Isopropyl Alcohol  
Concen: 2.358 ppbv  
RT: 3.626 min Scan# 318  
Delta R.T. 0.013 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06



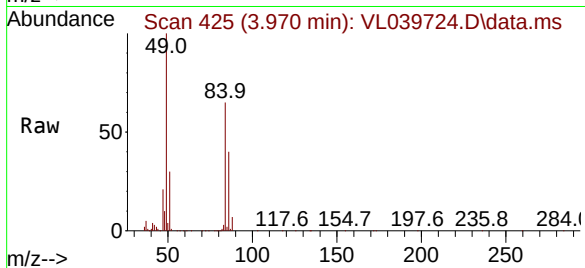
Tgt Ion: 45 Resp: 129189  
Ion Ratio Lower Upper  
45 100  
58 6.6 3.2 4.8#





#20  
Methylene Chloride  
Concen: 2.685 ppbv  
RT: 3.970 min Scan# 419  
Delta R.T. -0.000 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

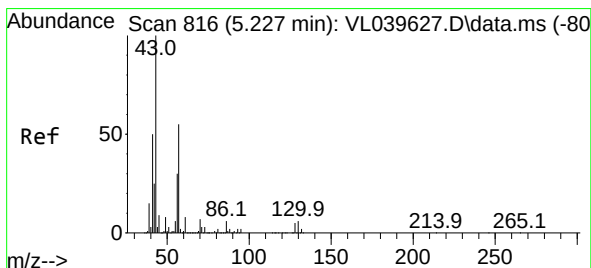
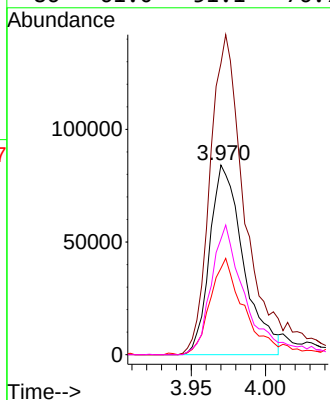
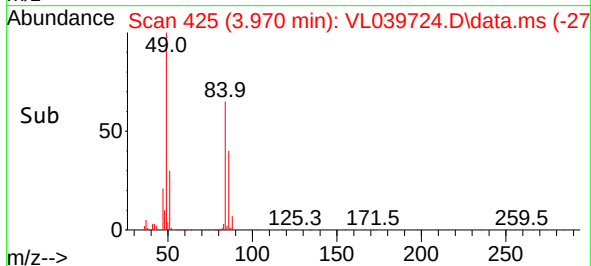
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



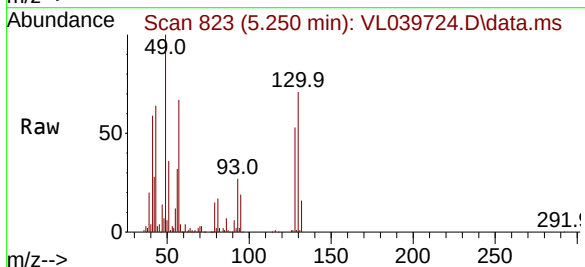
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Ion Ratio Lower Upper  
84 100  
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51 45.6 34.4 51.6  
86 61.0 51.1 76.7

Manual Integrations  
APPROVED

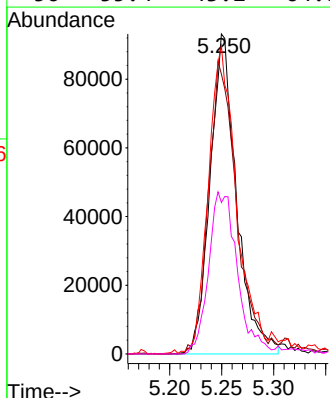
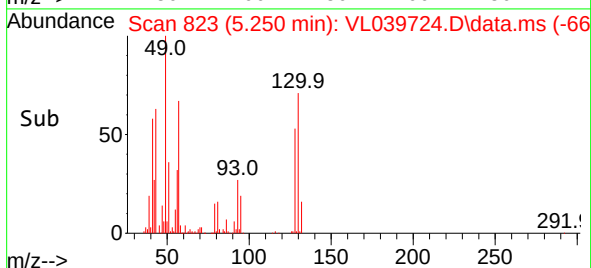
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022



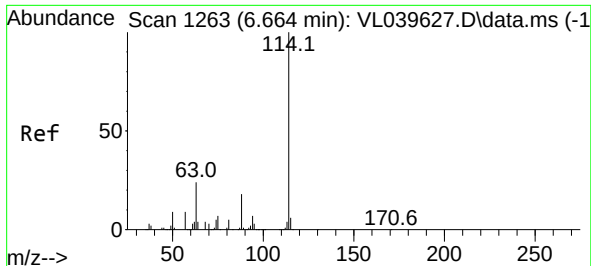
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Hexane  
Concen: 1.656 ppbv  
RT: 5.250 min Scan# 823  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06



Tgt Ion: 57 Resp: 164642  
Ion Ratio Lower Upper  
57 100  
41 102.2 76.9 115.3  
43 109.4 191.0 286.6#  
56 55.4 43.2 64.8







#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.687 min Scan# 114

Delta R.T. -0.000 min

Lab File: VL039724.D

Acq: 17 Oct 2022 18:06

Instrument :

MSVOA\_L

ClientSampleId :

OA1

Tgt Ion:114 Resp: 249756

Ion Ratio Lower Upper

114 100

63 25.9 20.2 30.4

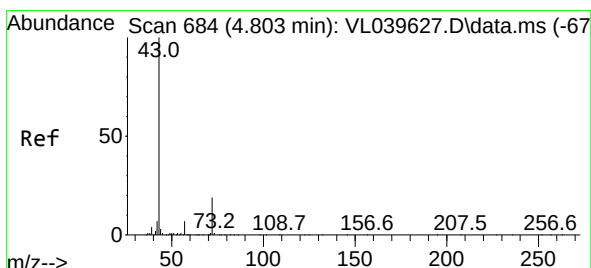
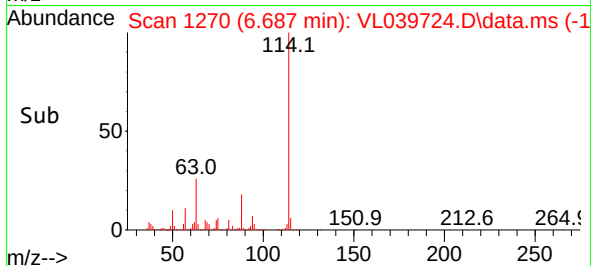
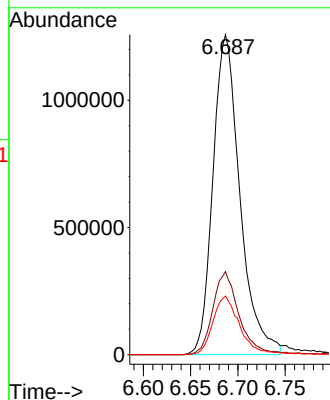
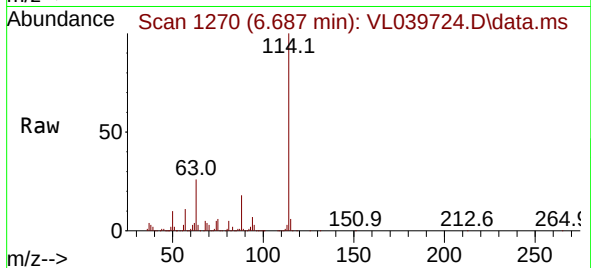
88 18.4 14.5 21.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/18/2022

Supervised By :Mahesh Dadoda 10/19/2022



#34

2-Butanone

Concen: 0.303 ppbv m

RT: 4.838 min Scan# 695

Delta R.T. 0.016 min

Lab File: VL039724.D

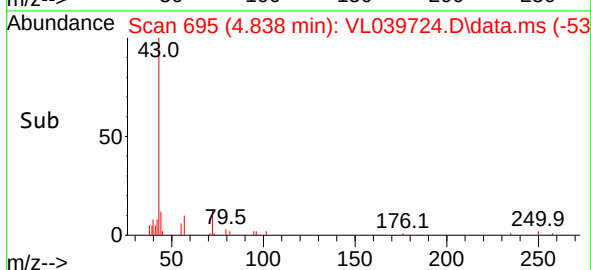
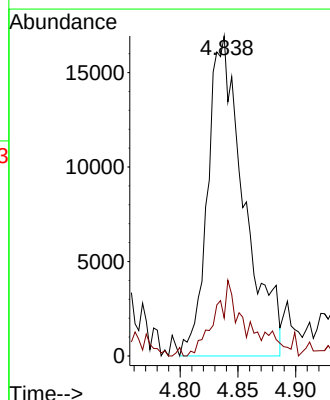
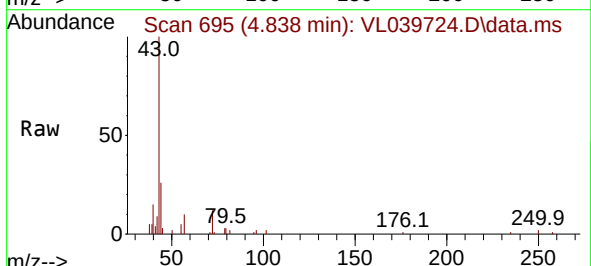
Acq: 17 Oct 2022 18:06

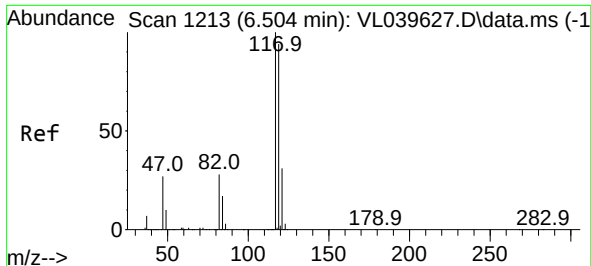
Tgt Ion: 43 Resp: 37119

Ion Ratio Lower Upper

43 100

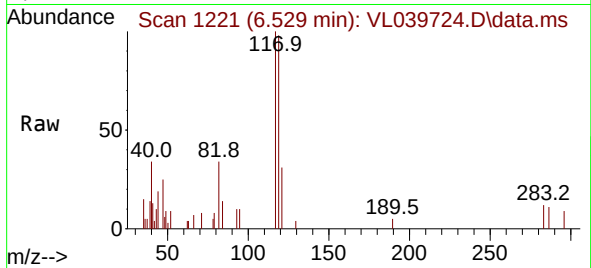
72 21.5 17.9 26.9





#35  
Carbon Tetrachloride  
Concen: 0.063 ppbv m  
RT: 6.529 min Scan# 117  
Delta R.T. 0.003 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

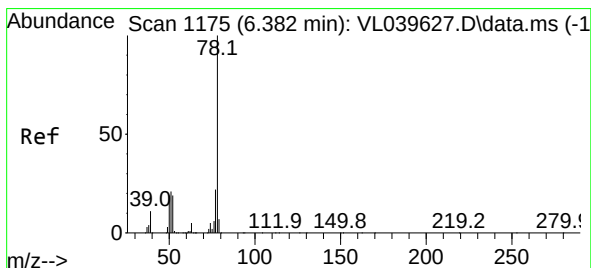
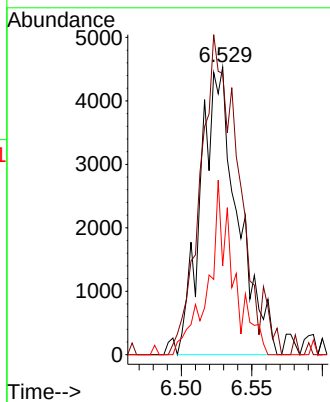
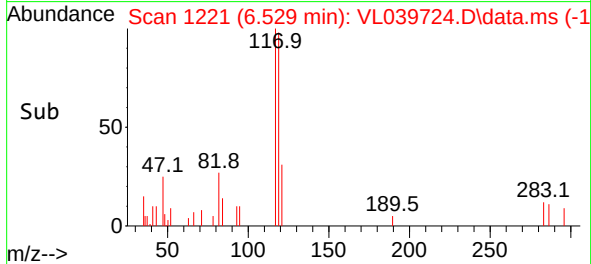
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



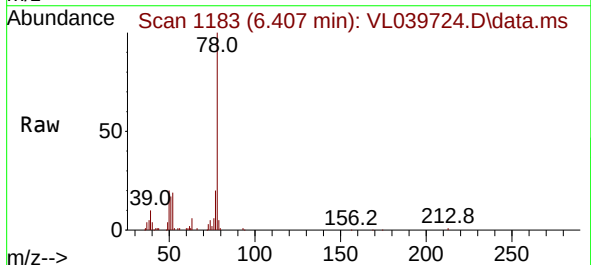
Tgt Ion: 117 Resp: 829  
Ion Ratio Lower Upper  
117 100  
119 97.8 75.4 113.2  
121 30.8 24.2 36.2

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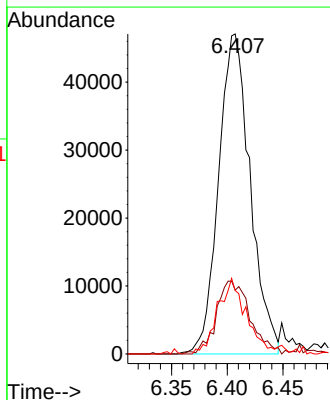
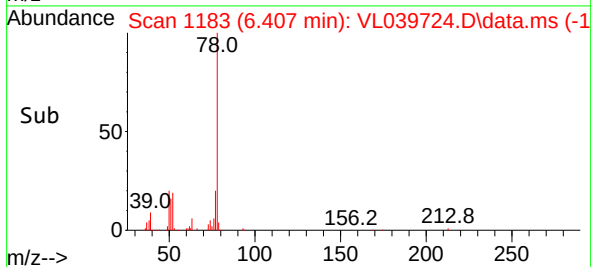
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022

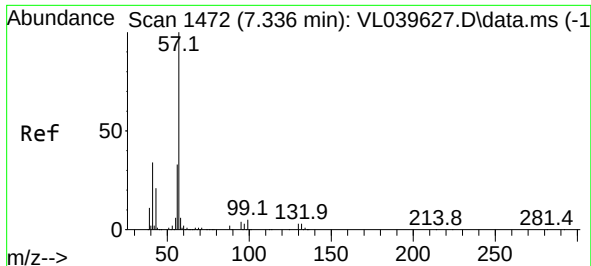


#36  
Benzene  
Concen: 0.487 ppbv  
RT: 6.407 min Scan# 1183  
Delta R.T. 0.006 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06



Tgt Ion: 78 Resp: 93003  
Ion Ratio Lower Upper  
78 100  
77 20.0 20.3 30.5#  
50 19.5 15.5 23.3





#44

2,2,4-Trimethylpentane

Concen: 0.274 ppbv m

RT: 7.365 min Scan# 1472

Delta R.T. 0.010 min

Lab File: VL039724.D

Acq: 17 Oct 2022 18:06

Instrument :

MSVOA\_L

ClientSampleId :

OA1

Tgt Ion: 57 Resp: 9012

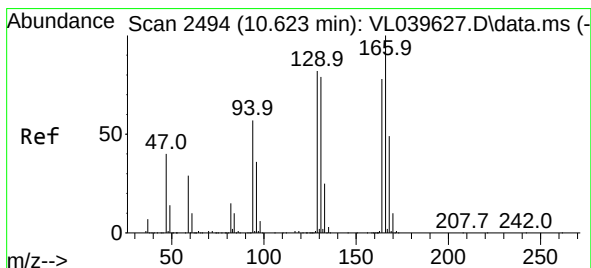
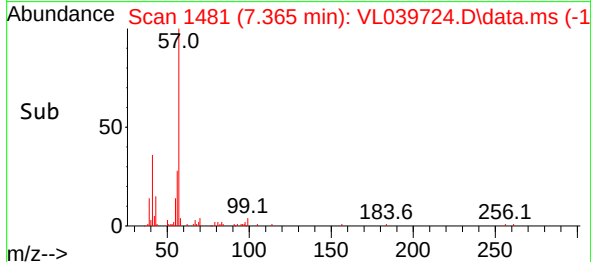
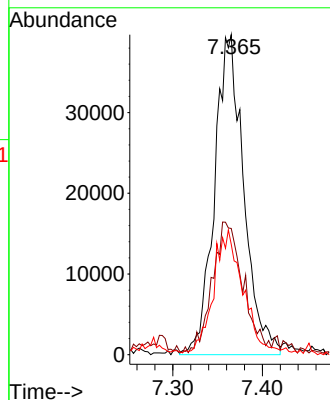
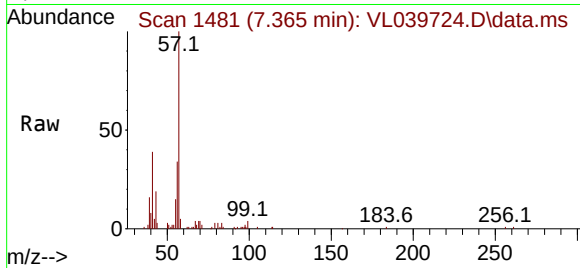
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 43.7  | 27.4  | 41.2  |
| 56  | 40.4  | 24.5  | 36.7  |

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/18/2022

Supervised By :Mahesh Dadoda 10/19/2022



#52

Tetrachloroethene

Concen: 0.175 ppbv m

RT: 10.645 min Scan# 2501

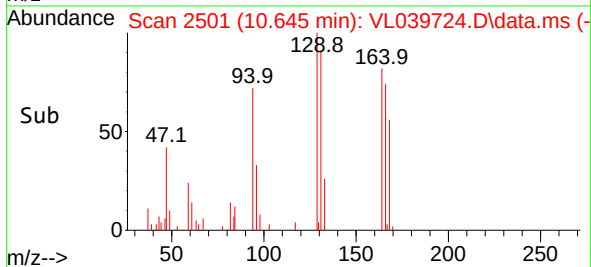
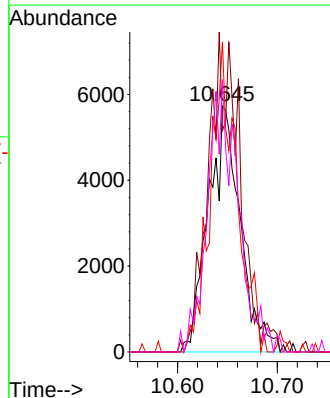
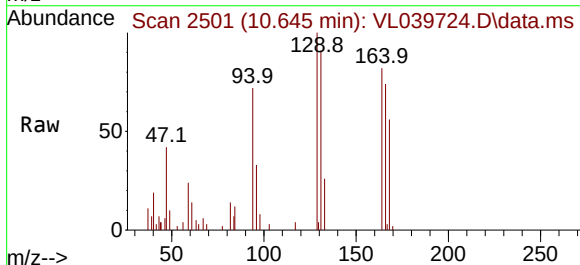
Delta R.T. -0.000 min

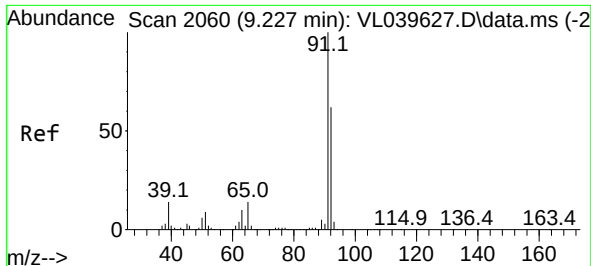
Lab File: VL039724.D

Acq: 17 Oct 2022 18:06

Tgt Ion:164 Resp: 12752

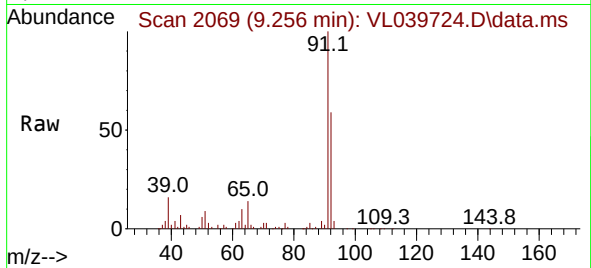
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 166 | 90.2  | 102.2 | 153.2 |
| 129 | 121.6 | 85.8  | 128.8 |
| 131 | 110.7 | 83.3  | 124.9 |





#53  
Toluene  
Concen: 1.281 ppbv  
RT: 9.256 min Scan# 2060  
Delta R.T. 0.006 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

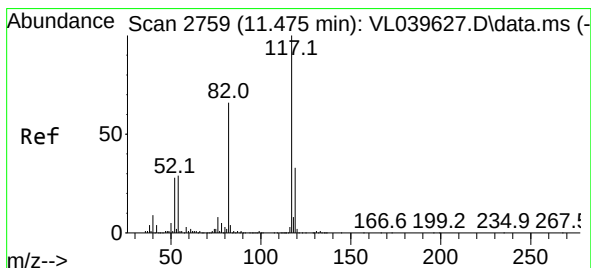
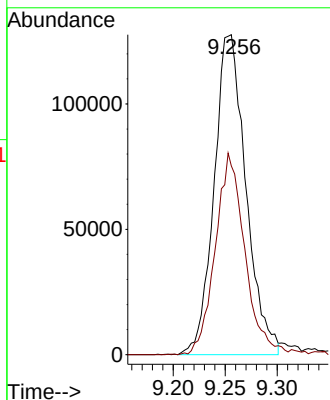
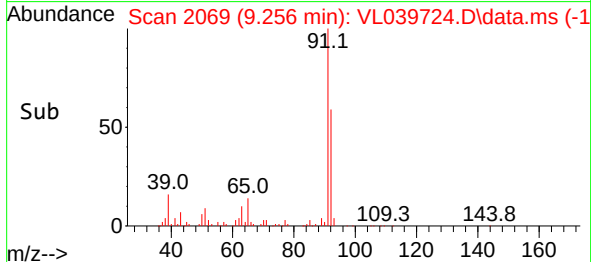
Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



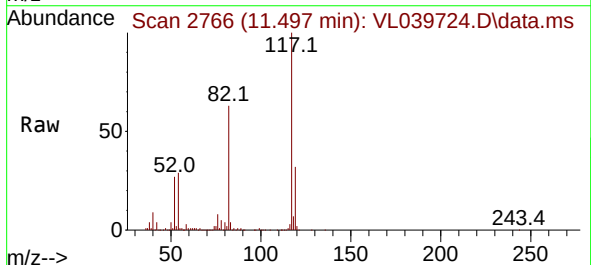
Tgt Ion: 91 Resp: 271969  
Ion Ratio Lower Upper  
91 100  
92 60.0 48.2 72.2

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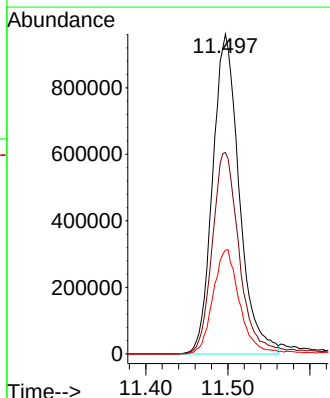
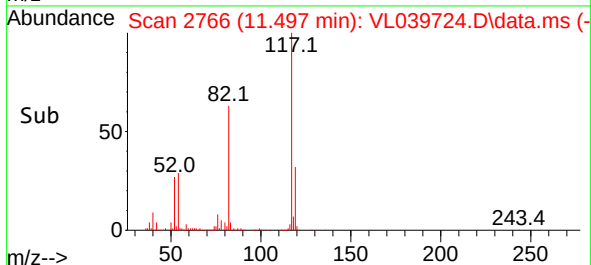
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022

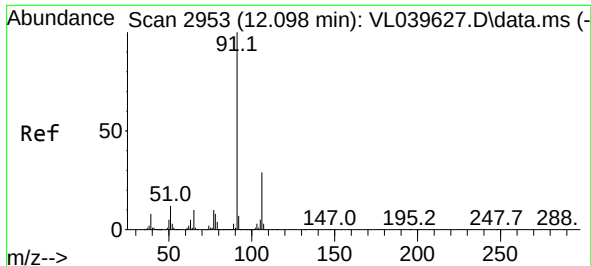


#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.497 min Scan# 2766  
Delta R.T. 0.006 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06



Tgt Ion:117 Resp: 2167105  
Ion Ratio Lower Upper  
117 100  
82 66.5 50.8 76.2  
119 33.8 24.1 36.1





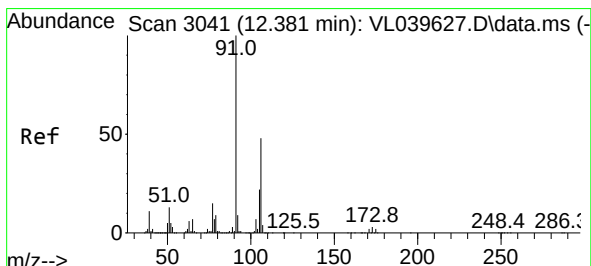
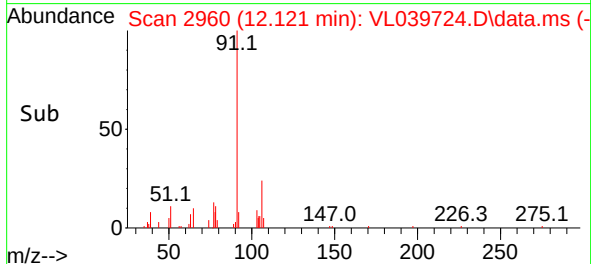
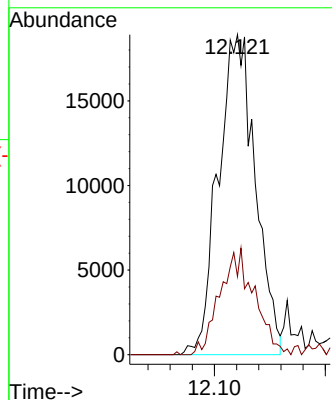
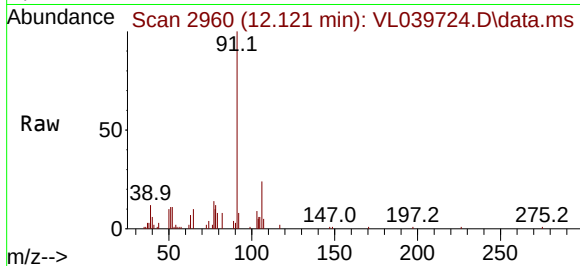
#58  
Ethyl Benzene  
Concen: 0.176 ppbv m  
RT: 12.121 min Scan# 2953  
Delta R.T. 0.006 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1

Tgt Ion: 91 Resp: 4402  
Ion Ratio Lower Upper  
91 100  
106 24.4 25.4 38.0

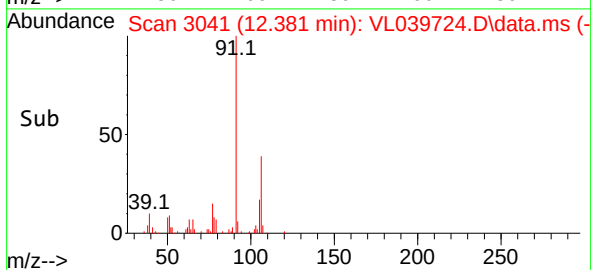
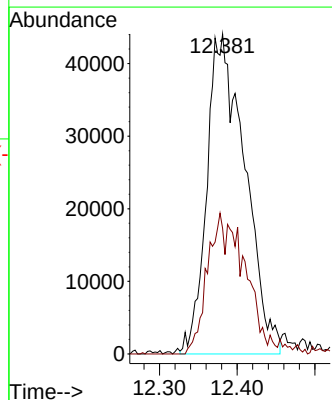
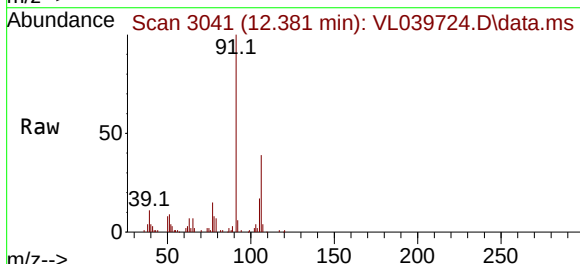
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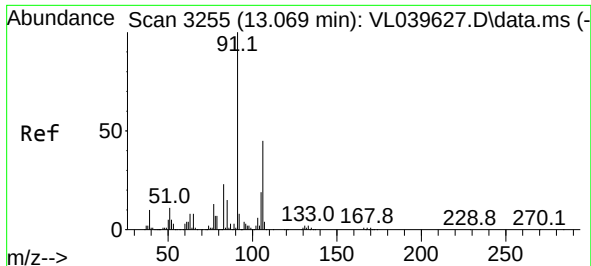
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022



#59  
m/p-Xylene  
Concen: 0.674 ppbv m  
RT: 12.381 min Scan# 3041  
Delta R.T. -0.019 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

Tgt Ion: 91 Resp: 149803  
Ion Ratio Lower Upper  
91 100  
106 0.0 35.4 53.2#





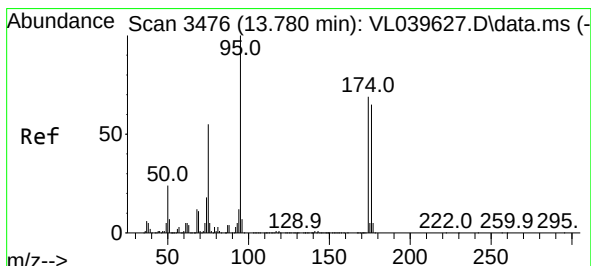
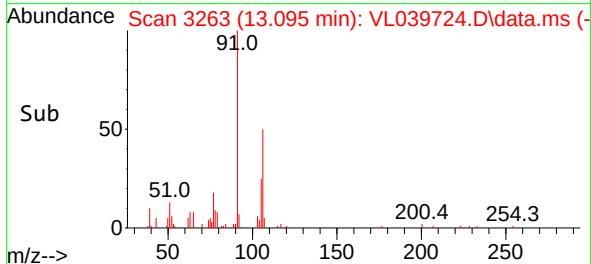
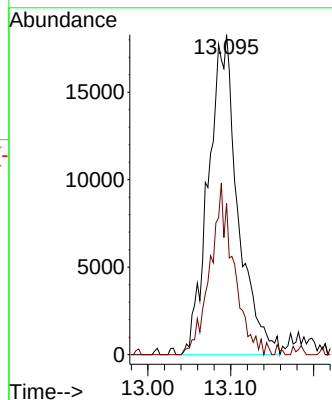
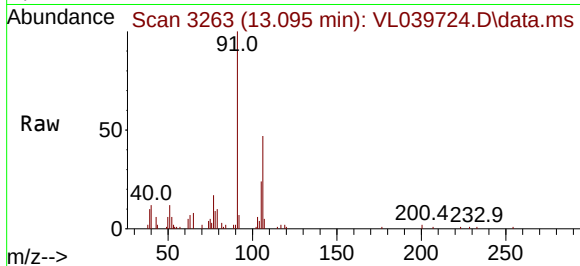
#60  
o-Xylene  
Concen: 0.213 ppbv m  
RT: 13.095 min Scan# 31  
Delta R.T. 0.010 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1

Tgt Ion: 91 Resp: 45158  
Ion Ratio Lower Upper  
91 100  
106 0.0 22.4 67.3

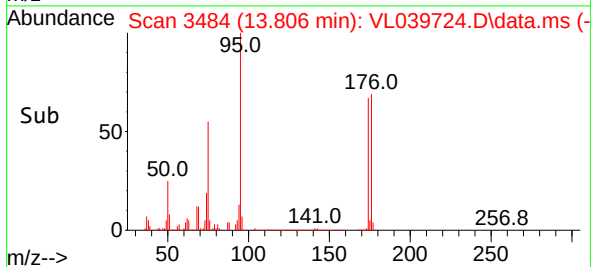
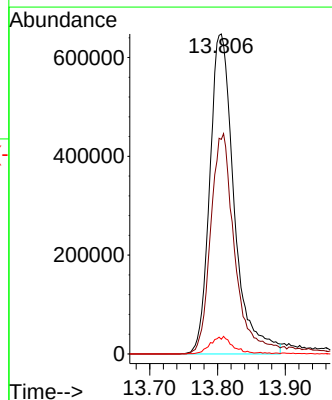
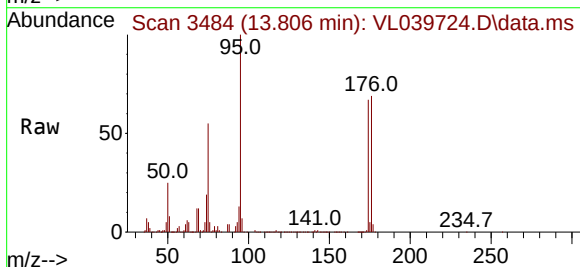
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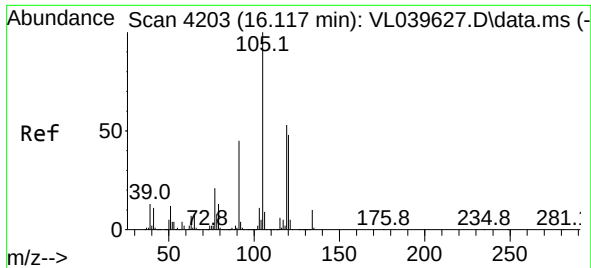
Reviewed By :Semsettin Yesilyurt 10/18/2022  
Supervised By :Mahesh Dadoda 10/19/2022



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.990 ppbv  
RT: 13.806 min Scan# 3484  
Delta R.T. 0.006 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

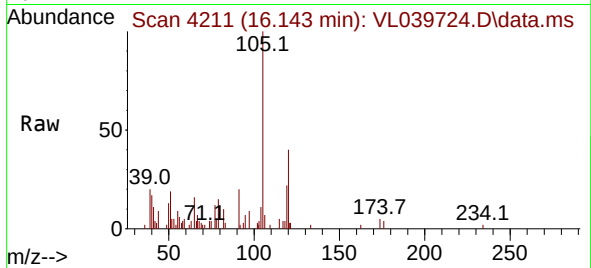
Tgt Ion: 95 Resp: 1616207  
Ion Ratio Lower Upper  
95 100  
174 71.6 55.9 83.9  
175 5.1 4.2 6.4





#74  
1,2,4-Trimethylbenzene  
Concen: 0.109 ppbv m  
RT: 16.143 min Scan# 41  
Delta R.T. 0.010 min  
Lab File: VL039724.D  
Acq: 17 Oct 2022 18:06

Instrument :  
MSVOA\_L  
ClientSampleId :  
OA1



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 2703  |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 40.1  | 39.5  | 59.3  |
| 91       | 20.5  | 39.2  | 58.8  |
| 77       | 11.8  | 17.2  | 25.8  |

Manual Integrations  
APPROVED

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