

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121322\  
 Data File : VL040012.D  
 Acq On : 13 Dec 2022 19:33  
 Operator : SY/MD  
 Sample : N5971-12  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-3

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/14/2022  
 Supervised By :Mahesh Dadoda 12/14/2022

Quant Time: Dec 14 02:39:39 2022

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL111822AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 12 2022

QLast Update : Fri Dec 02 23:21:36 2022

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.173  | 49    | 1037262  | 10.000   | ppbv   | 0.02     |
| 33) 1,4-Difluorobenzene     | 6.635  | 114   | 2827926  | 10.000   | ppbv   | 0.02     |
| 55) Chlorobenzene-d5        | 11.449 | 117   | 2366292  | 10.000   | ppbv   | 0.02     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.761 | 95    | 1744914  | 9.654    | ppbv   | 0.02     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 96.500%  |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          |        | Qvalue   |
| 2) Dichlorodifluoromethane  | 2.713  | 85    | 38457    | 0.259    | ppbv   | 95       |
| 3) Chlorodifluoromethane    | 2.658  | 51    | 73269    | 0.512    | ppbv   | 93       |
| 4) Chloromethane            | 2.793  | 50    | 37115    | 0.406    | ppbv # | 88       |
| 9) Propene                  | 2.677  | 41    | 96998    | 1.439    | ppbv   | 83       |
| 11) Trichlorofluoromethane  | 3.546  | 101   | 40552    | 0.224    | ppbv   | 89       |
| 13) Ethanol                 | 3.218  | 45    | 2287578  | 444.396  | ppbv   | 100      |
| 15) Acetone                 | 3.446  | 43    | 1276306  | 9.277    | ppbv   | 98       |
| 20) Methylene Chloride      | 3.915  | 84    | 684340   | 10.267   | ppbv   | 96       |
| 26) Hexane                  | 5.192  | 57    | 458195   | 4.152    | ppbv # | 40       |
| 35) Carbon Tetrachloride    | 6.471  | 117   | 13649m   | 0.085    | ppbv   |          |
| 36) Benzene                 | 6.353  | 78    | 55618    | 0.231    | ppbv # | 89       |
| 38) Trichloroethene         | 7.279  | 130   | 3466m    | 0.026    | ppbv   |          |
| 44) 2,2,4-Trimethylpentane  | 7.304  | 57    | 134506   | 0.335    | ppbv # | 87       |
| 52) Tetrachloroethene       | 10.594 | 164   | 4391m    | 0.049    | ppbv   |          |
| 53) Toluene                 | 9.201  | 91    | 189375   | 0.692    | ppbv   | 97       |
| 59) m/p-Xylene              | 12.327 | 91    | 73983m   | 0.275    | ppbv   |          |
| 60) o-Xylene                | 13.044 | 91    | 37070m   | 0.145    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

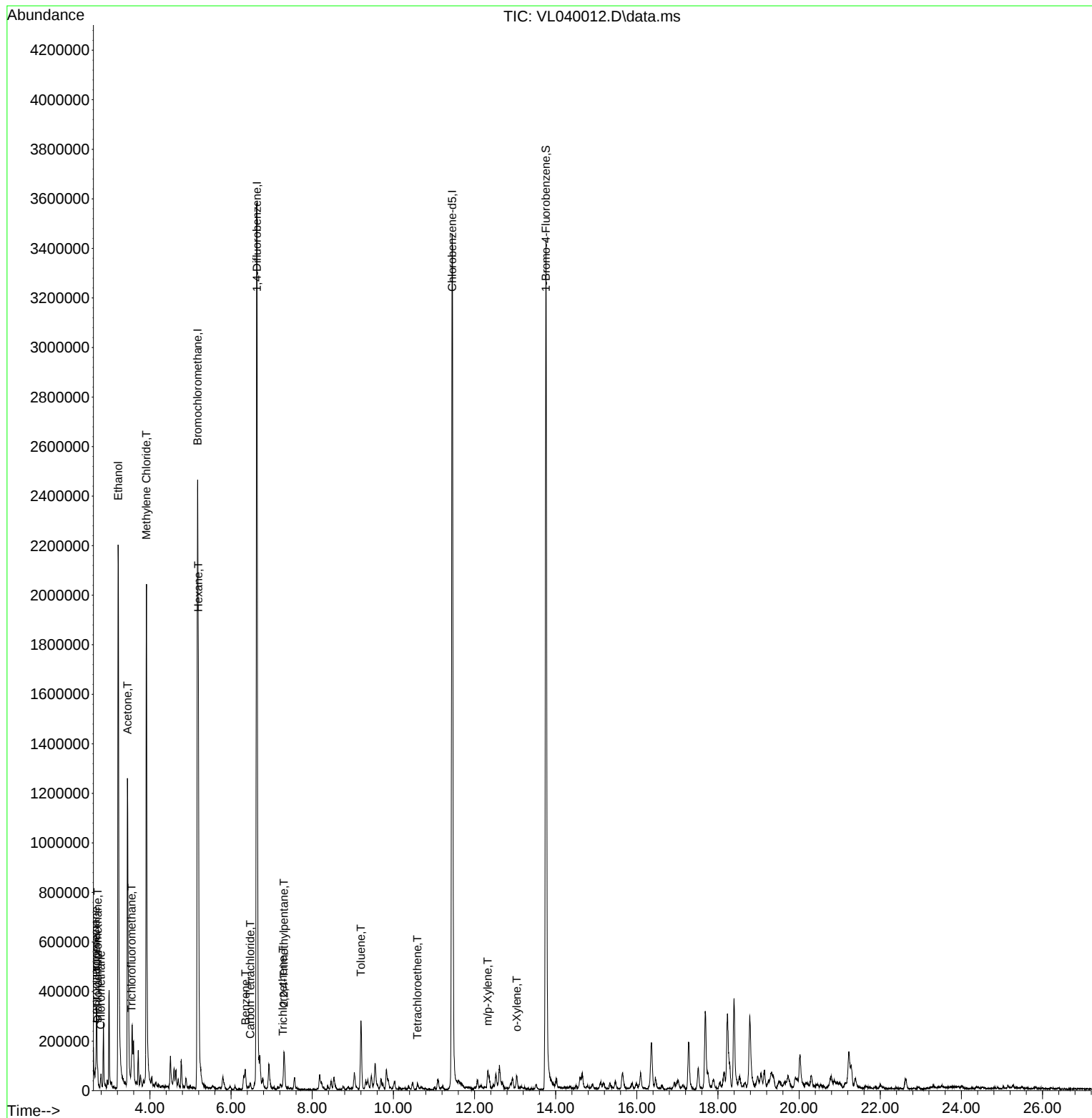
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL121322\  
Data File : VL040012.D  
Acq On : 13 Dec 2022 19:33  
Operator : SY/MD  
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Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3

Quant Time: Dec 14 02:39:39 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL11822AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Fri Dec 02 23:21:36 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

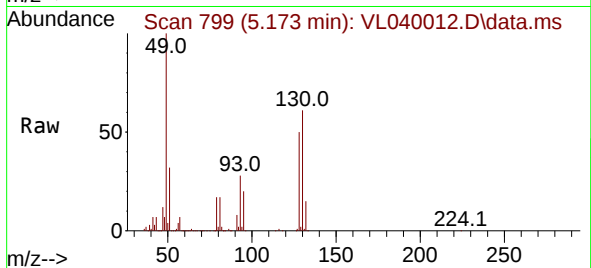
Reviewed By : Semsettin Yesilyurt 12/14/2022  
Supervised By : Mahesh Dadoda 12/14/2022





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.173 min Scan# 79  
Delta R.T. 0.017 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

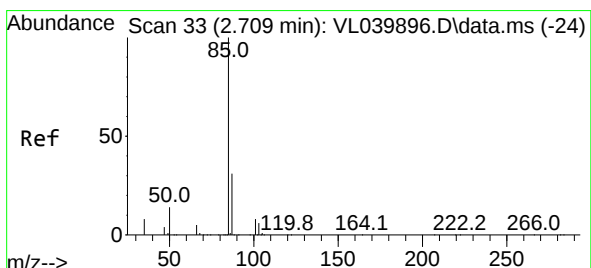
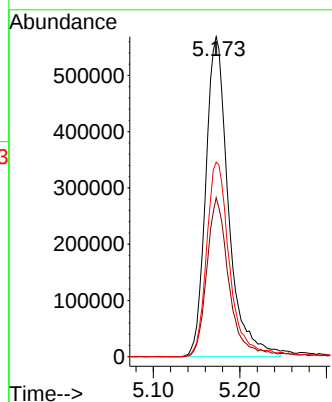
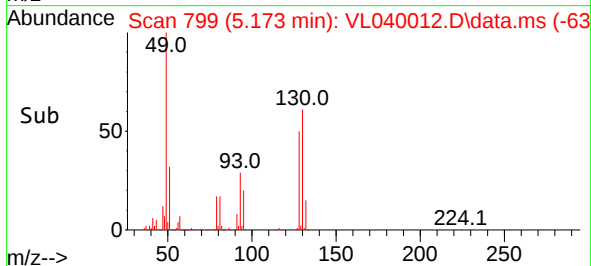
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3



Tgt Ion: 49 Resp: 103726  
Ion Ratio Lower Upper  
49 100  
128 49.5 22.1 66.3  
130 63.2 27.7 83.1

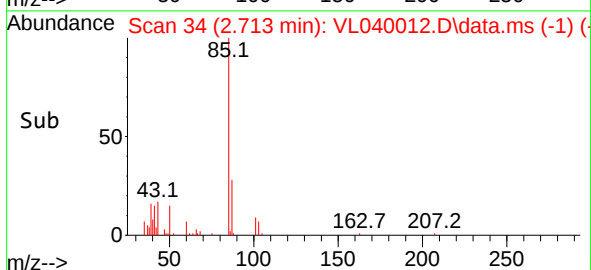
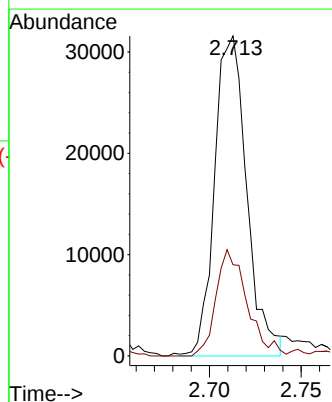
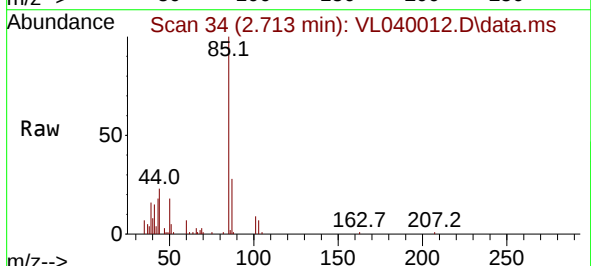
Manual Integrations  
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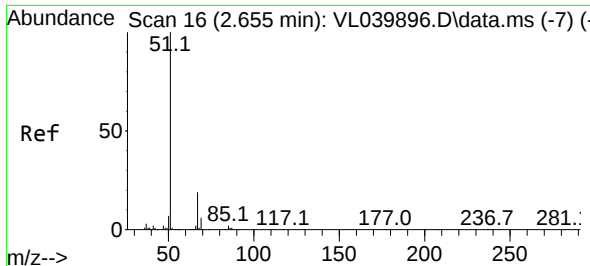
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022



#2  
Dichlorodifluoromethane  
Concen: 0.259 ppbv  
RT: 2.713 min Scan# 34  
Delta R.T. 0.016 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

Tgt Ion: 85 Resp: 38457  
Ion Ratio Lower Upper  
85 100  
87 28.7 25.0 37.4





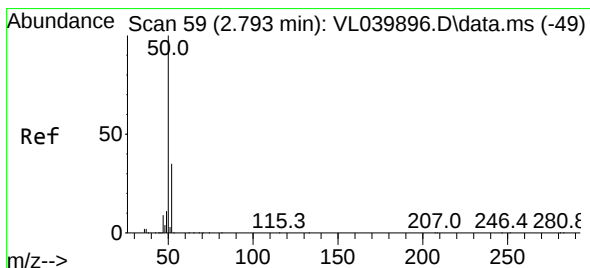
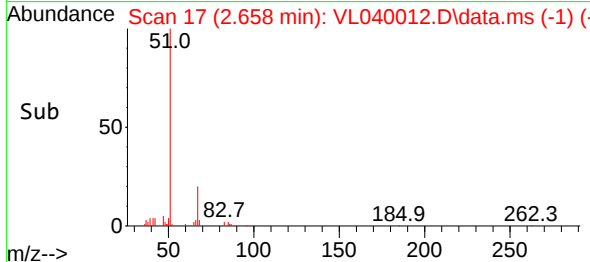
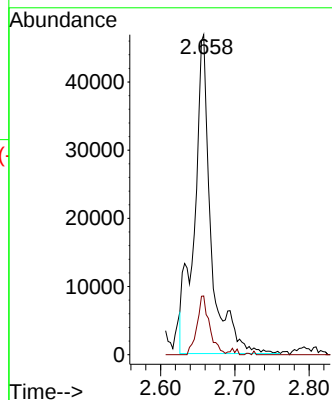
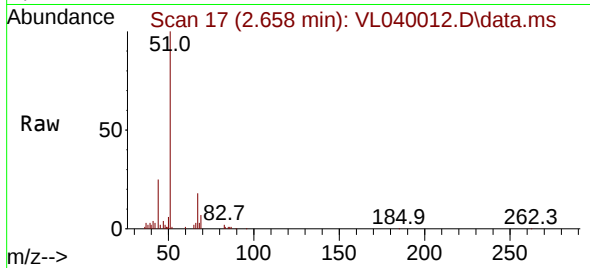
#3  
Chlorodifluoromethane  
Concen: 0.512 ppbv  
RT: 2.658 min Scan# 11  
Delta R.T. 0.016 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3

Tgt Ion: 51 Resp: 73269  
Ion Ratio Lower Upper  
51 100  
67 14.8 14.2 21.4

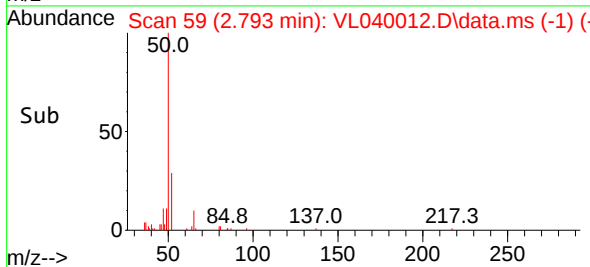
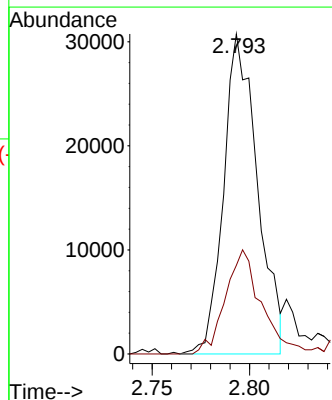
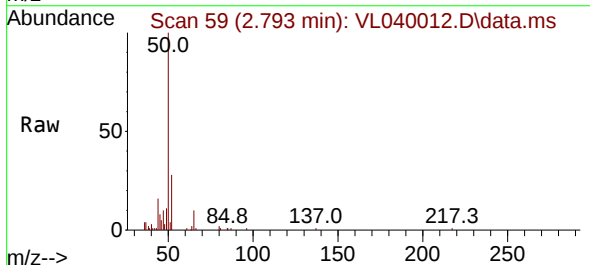
Manual Integrations  
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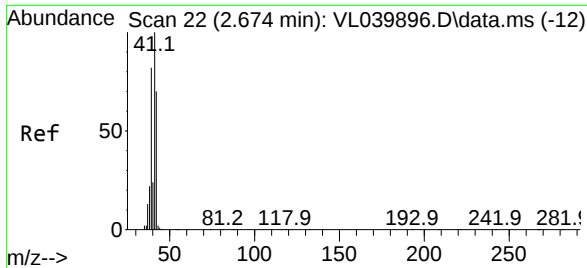
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022



#4  
Chloromethane  
Concen: 0.406 ppbv  
RT: 2.793 min Scan# 59  
Delta R.T. 0.013 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

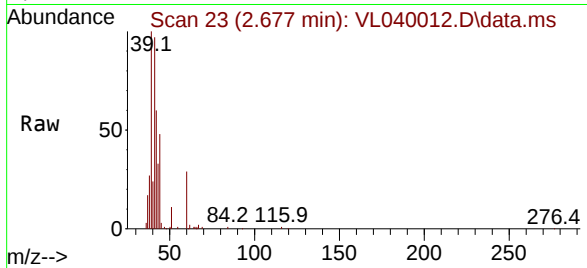
Tgt Ion: 50 Resp: 37115  
Ion Ratio Lower Upper  
50 100  
52 27.7 27.8 41.8#





#9  
 Propene  
 Concen: 1.439 ppbv  
 RT: 2.677 min Scan# 21  
 Delta R.T. 0.016 min  
 Lab File: VL040012.D  
 Acq: 13 Dec 2022 19:33

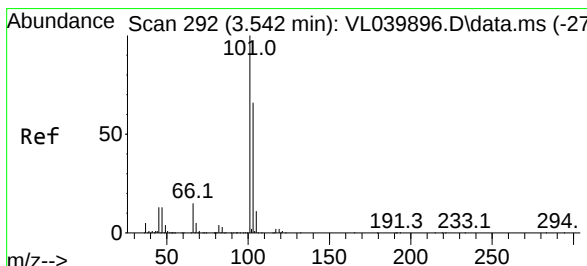
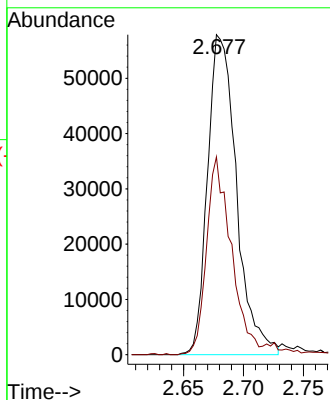
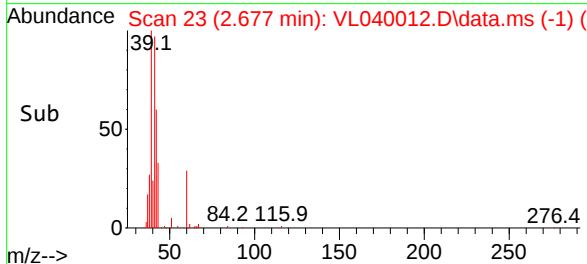
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-3



Tgt Ion: 41 Resp: 9698  
 Ion Ratio Lower Upper  
 41 100  
 42 55.8 55.8 83.6

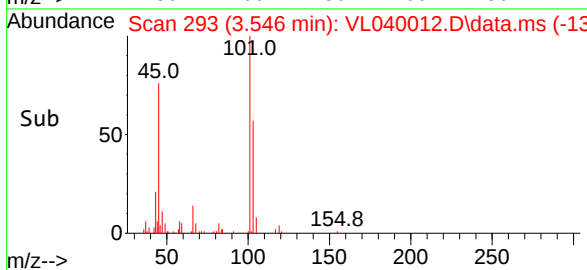
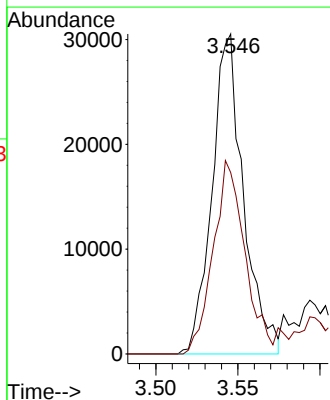
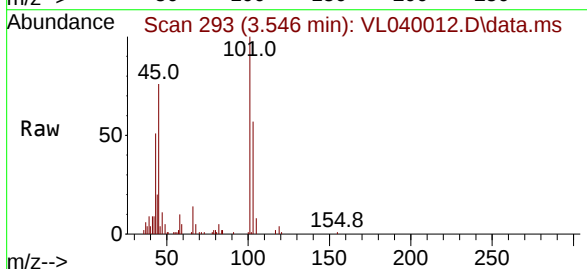
Manual Integrations  
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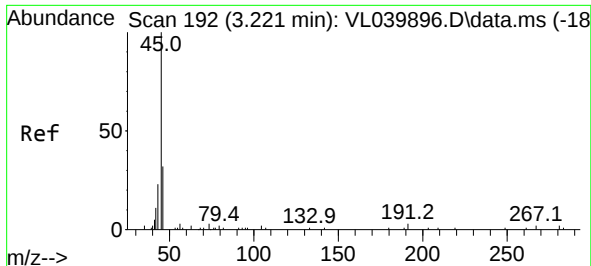
Reviewed By :Semsettin Yesilyurt 12/14/2022  
 Supervised By :Mahesh Dadoda 12/14/2022



#11  
 Trichlorofluoromethane  
 Concen: 0.224 ppbv  
 RT: 3.546 min Scan# 293  
 Delta R.T. 0.016 min  
 Lab File: VL040012.D  
 Acq: 13 Dec 2022 19:33

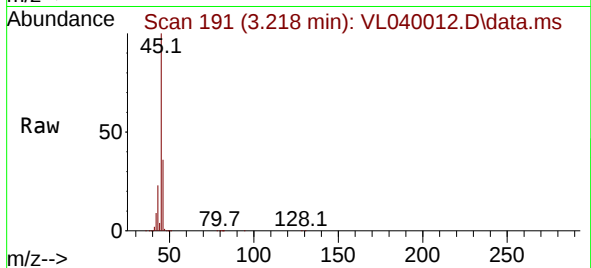
Tgt Ion:101 Resp: 40552  
 Ion Ratio Lower Upper  
 101 100  
 103 56.7 52.6 78.8





#13  
Ethanol  
Concen: 444.396 ppbv  
RT: 3.218 min Scan# 191  
Delta R.T. 0.003 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

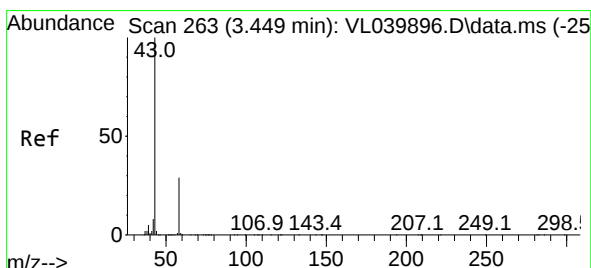
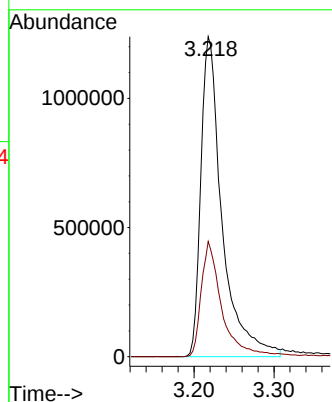
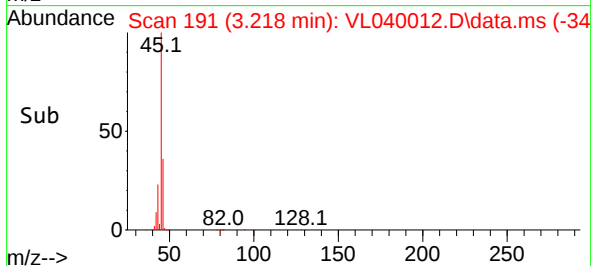
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3



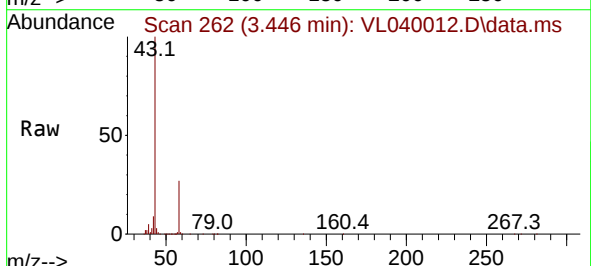
Tgt Ion: 45 Resp: 2287578  
Ion Ratio Lower Upper  
45 100  
46 36.2 14.6 58.2

Manual Integrations  
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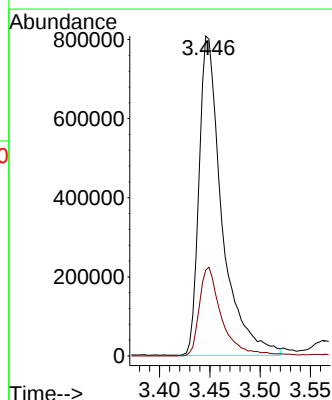
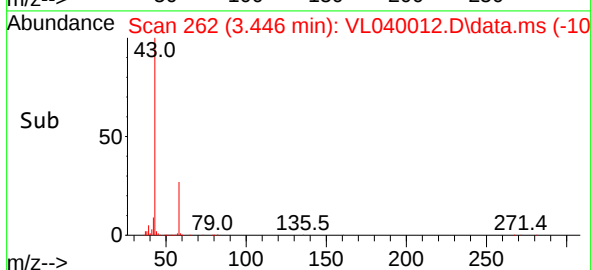
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022

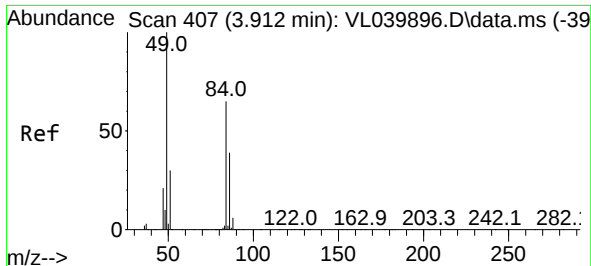


#15  
Acetone  
Concen: 9.277 ppbv  
RT: 3.446 min Scan# 262  
Delta R.T. 0.013 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33



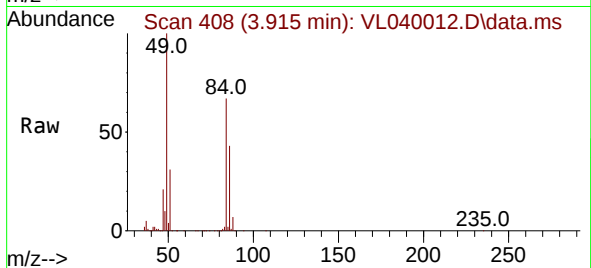
Tgt Ion: 43 Resp: 1276306  
Ion Ratio Lower Upper  
43 100  
58 27.4 22.9 34.3





#20  
Methylene Chloride  
Concen: 10.267 ppbv  
RT: 3.915 min Scan# 407  
Delta R.T. 0.019 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

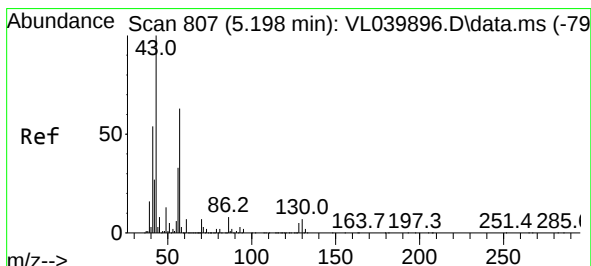
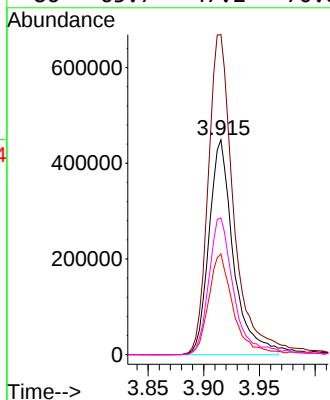
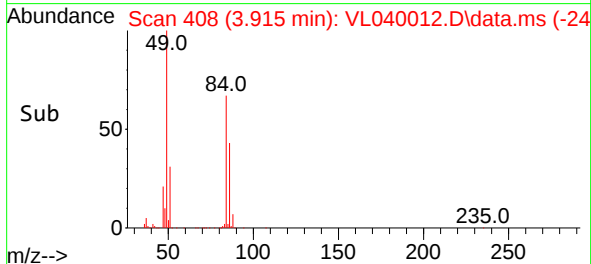
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3



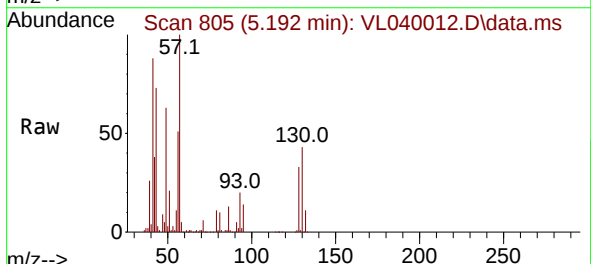
Tgt Ion: 84 Resp: 684340  
Ion Ratio Lower Upper  
84 100  
49 148.8 122.2 183.4  
51 46.8 36.3 54.5  
86 63.7 47.2 70.8

Manual Integrations  
APPROVED

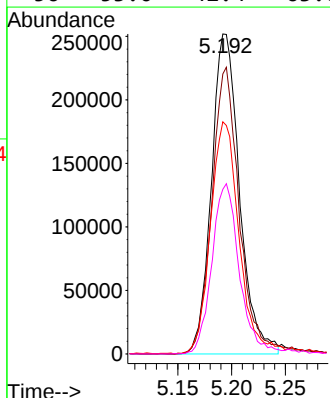
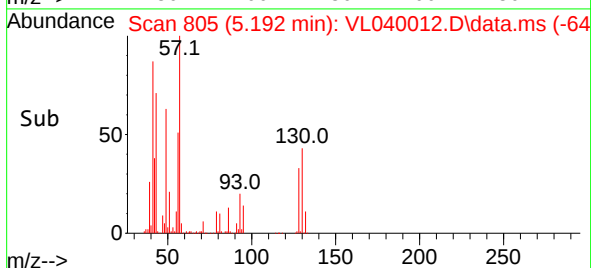
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022

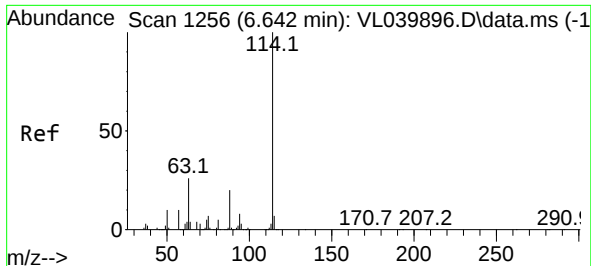


#26  
Hexane  
Concen: 4.152 ppbv  
RT: 5.192 min Scan# 805  
Delta R.T. 0.016 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33



Tgt Ion: 57 Resp: 458195  
Ion Ratio Lower Upper  
57 100  
41 89.2 72.3 108.5  
43 74.9 188.7 283.1#  
56 53.0 42.4 63.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.635 min Scan# 1

Delta R.T. 0.016 min

Lab File: VL040012.D

Acq: 13 Dec 2022 19:33

Instrument :

MSVOA\_L

ClientSampleId :

IA-3

Tgt Ion:114 Resp: 2827920

Ion Ratio Lower Upper

114 100

63 24.3 21.4 32.0

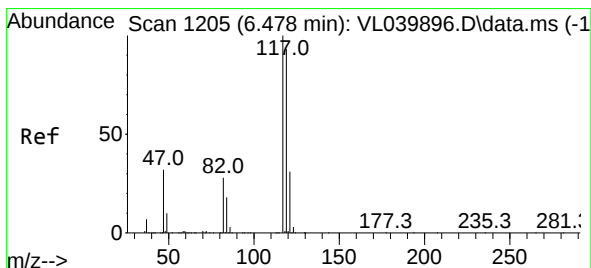
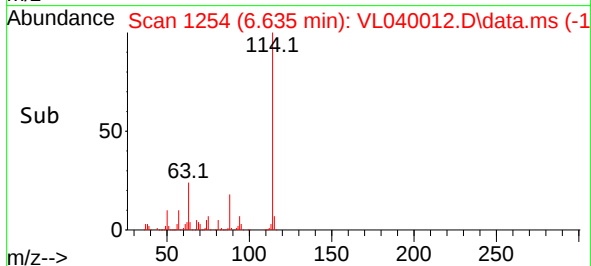
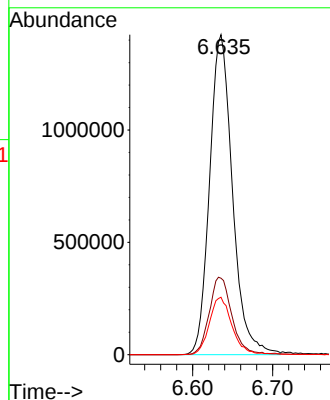
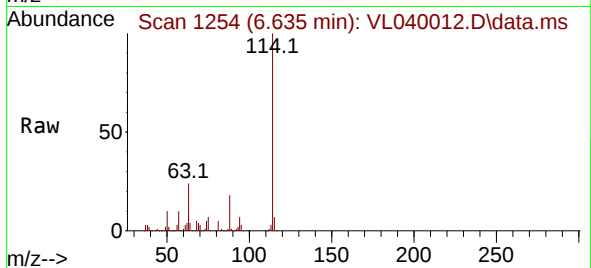
88 18.0 15.3 22.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/14/2022

Supervised By :Mahesh Dadoda 12/14/2022



#35

Carbon Tetrachloride

Concen: 0.085 ppbv m

RT: 6.471 min Scan# 1203

Delta R.T. 0.016 min

Lab File: VL040012.D

Acq: 13 Dec 2022 19:33

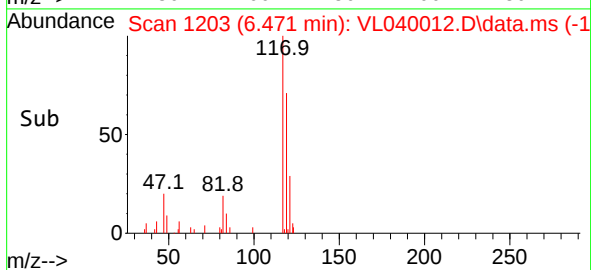
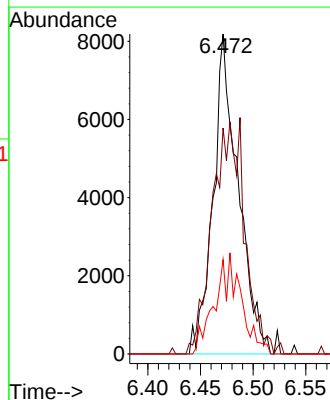
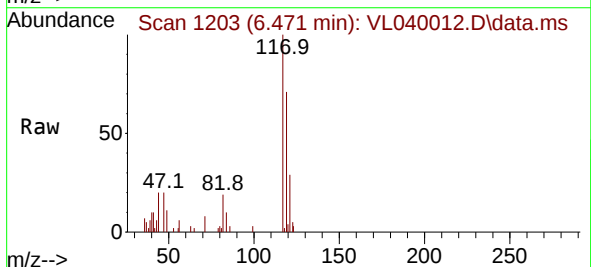
Tgt Ion:117 Resp: 13649

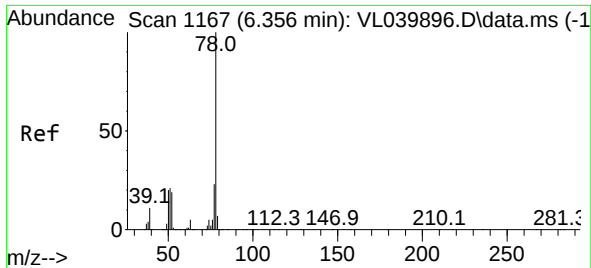
Ion Ratio Lower Upper

117 100

119 70.6 74.7 112.1#

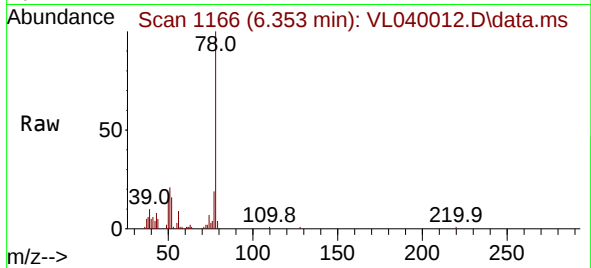
121 29.5 24.5 36.7





#36  
Benzene  
Concen: 0.231 ppbv  
RT: 6.353 min Scan# 1166  
Delta R.T. 0.019 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

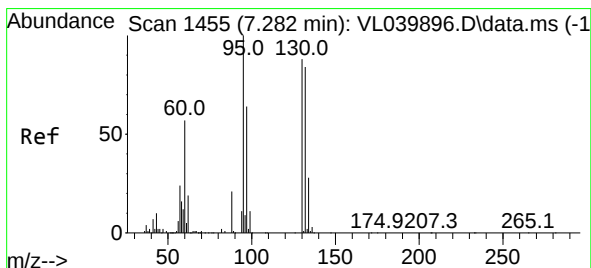
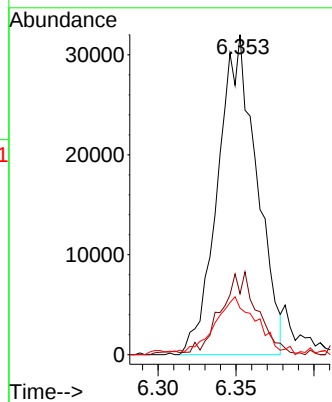
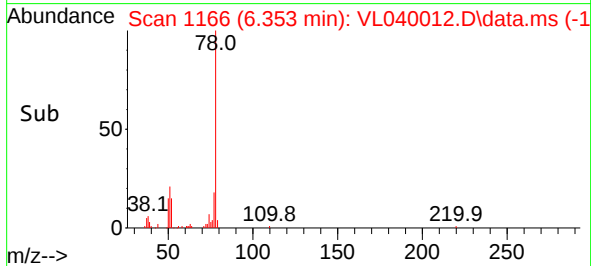
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3



Tgt Ion: 78 Resp: 55618  
Ion Ratio Lower Upper  
78 100  
77 18.4 18.2 27.2  
50 13.2 15.8 23.8

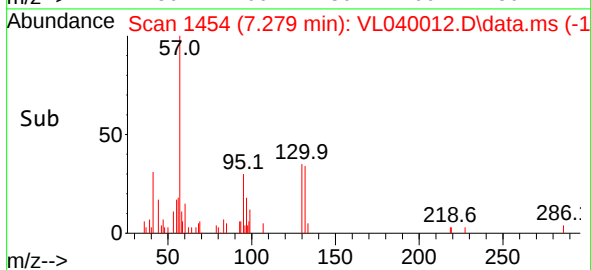
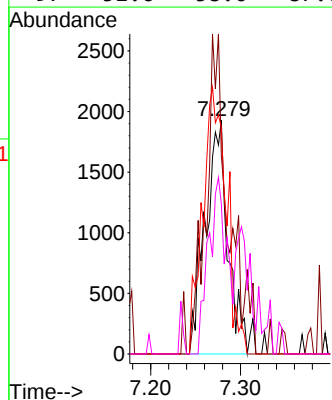
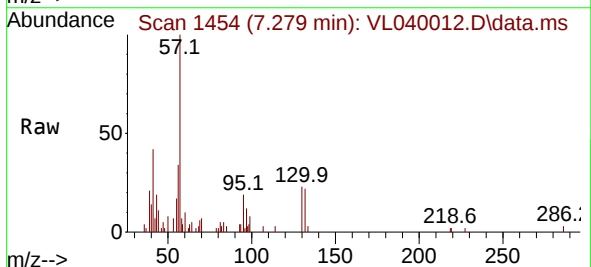
Manual Integrations  
APPROVED

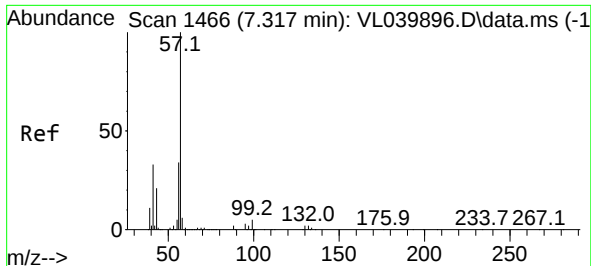
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022



#38  
Trichloroethene  
Concen: 0.026 ppbv m  
RT: 7.279 min Scan# 1454  
Delta R.T. 0.023 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

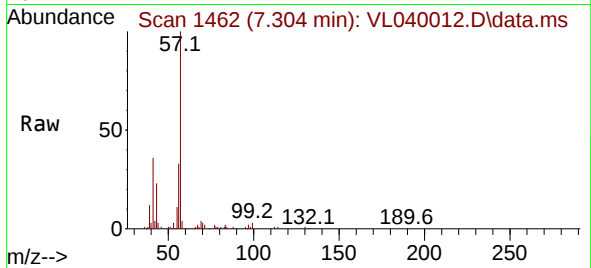
Tgt Ion:130 Resp: 3466  
Ion Ratio Lower Upper  
130 100  
95 85.1 90.6 135.8#  
132 97.0 76.2 114.4  
97 51.6 58.0 87.0#





#44  
2,2,4-Trimethylpentane  
Concen: 0.335 ppbv  
RT: 7.304 min Scan# 1466  
Delta R.T. 0.013 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

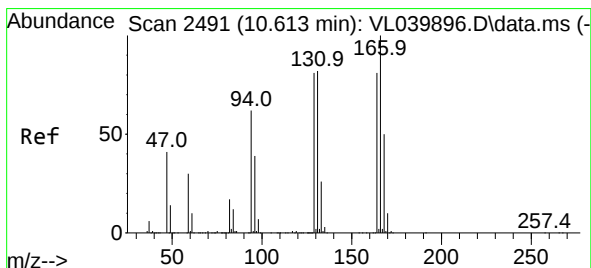
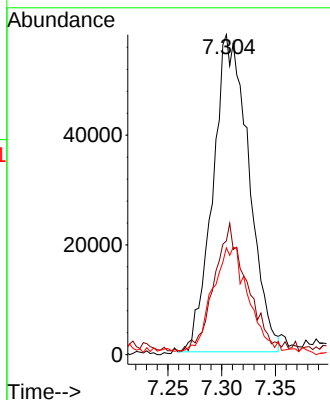
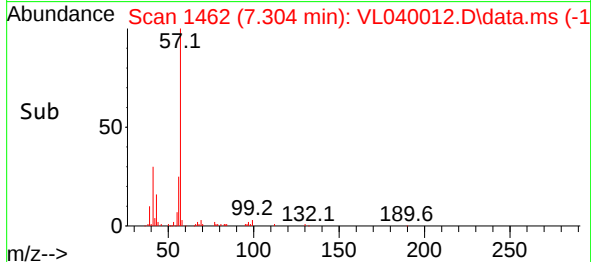
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3



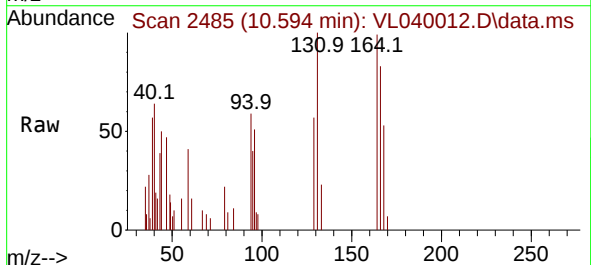
Tgt Ion: 57 Resp: 134500  
Ion Ratio Lower Upper  
57 100  
41 42.7 26.2 39.2  
56 36.6 25.5 38.3

Manual Integrations  
APPROVED

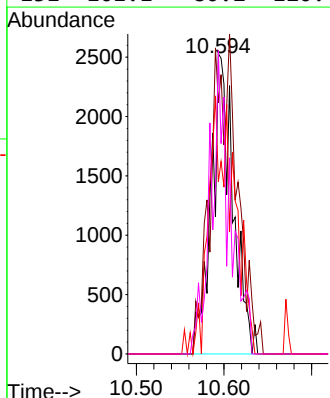
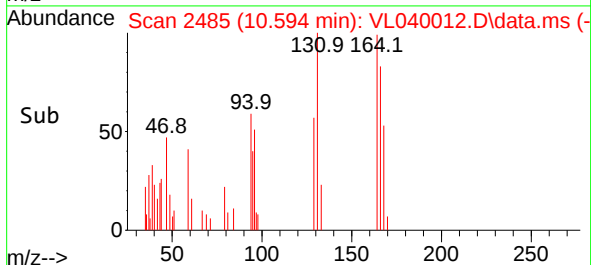
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022

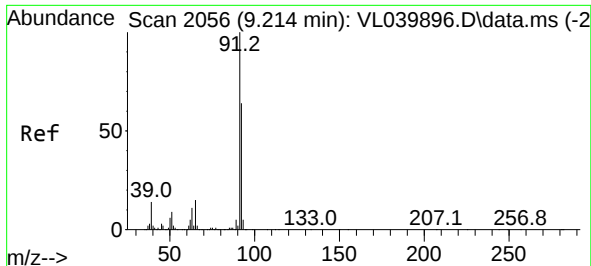


#52  
Tetrachloroethene  
Concen: 0.049 ppbv m  
RT: 10.594 min Scan# 2485  
Delta R.T. 0.013 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33



Tgt Ion:164 Resp: 4391  
Ion Ratio Lower Upper  
164 100  
166 83.6 98.3 147.5#  
129 57.4 79.7 119.5#  
131 101.1 80.2 120.4





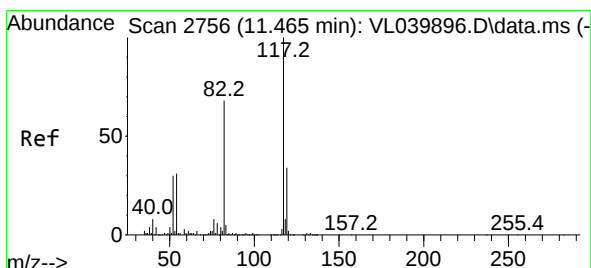
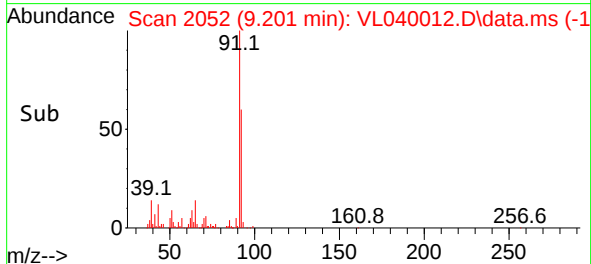
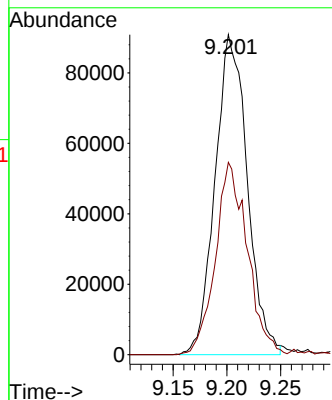
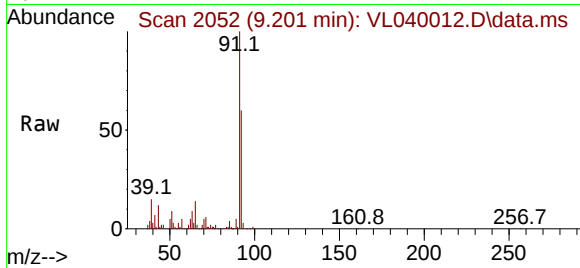
#53  
Toluene  
Concen: 0.692 ppbv  
RT: 9.201 min Scan# 2056  
Delta R.T. 0.016 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3

Tgt Ion: 91 Resp: 189375  
Ion Ratio Lower Upper  
91 100  
92 59.6 49.8 74.6

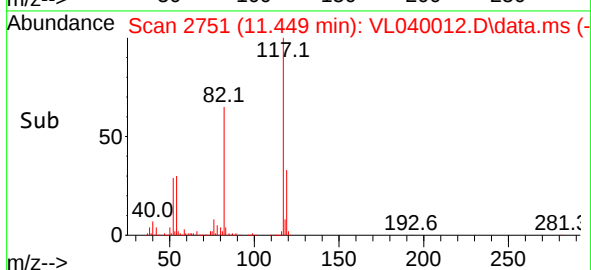
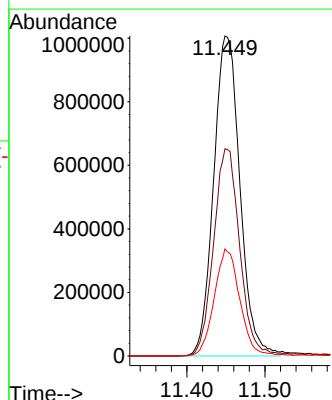
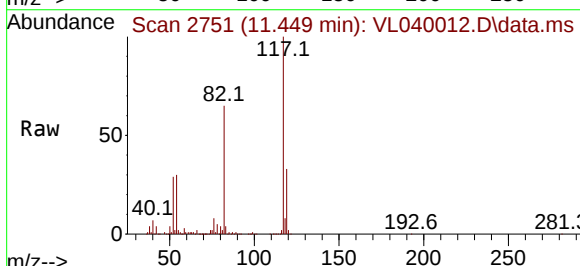
Manual Integrations  
APPROVED

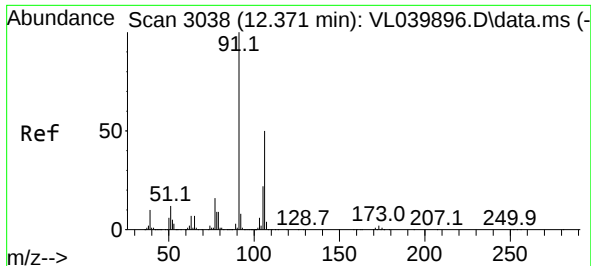
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022



#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.449 min Scan# 2751  
Delta R.T. 0.016 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

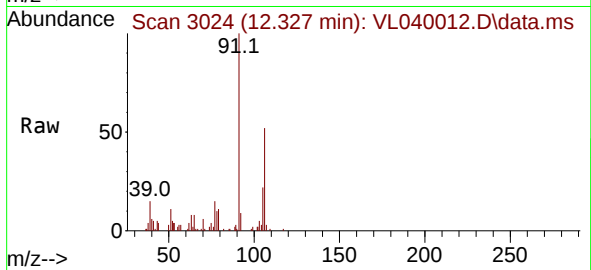
Tgt Ion:117 Resp: 2366292  
Ion Ratio Lower Upper  
117 100  
82 64.9 52.3 78.5  
119 32.9 25.7 38.5





#59  
m/p-Xylene  
Concen: 0.275 ppbv m  
RT: 12.327 min Scan# 3038  
Delta R.T. -0.013 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

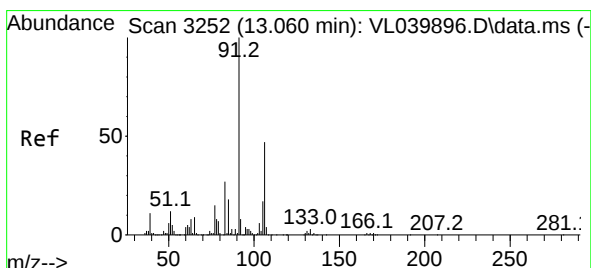
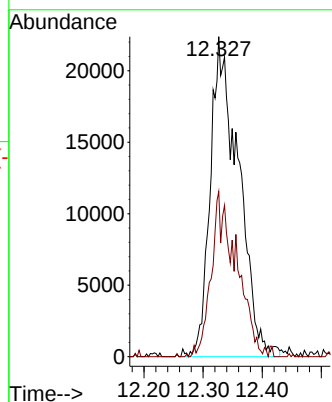
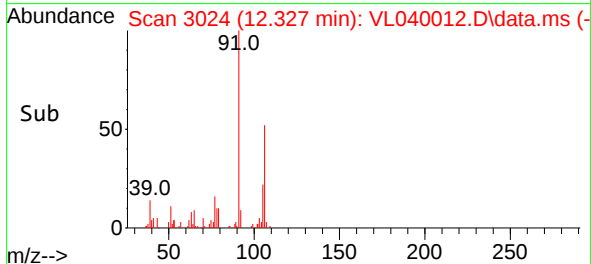
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3



Tgt Ion: 91 Resp: 7398  
Ion Ratio Lower Upper  
91 100  
106 0.0 37.0 55.6

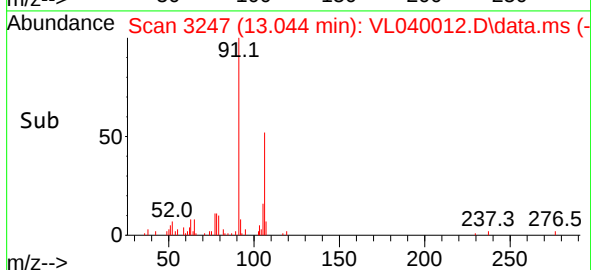
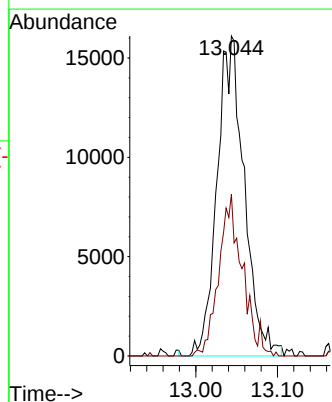
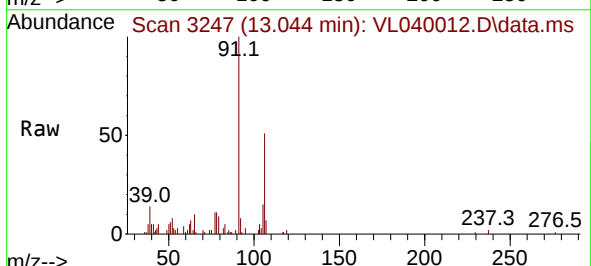
Manual Integrations  
APPROVED

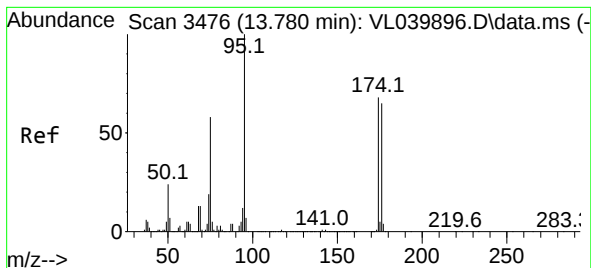
Reviewed By :Semsettin Yesilyurt 12/14/2022  
Supervised By :Mahesh Dadoda 12/14/2022



#60  
o-Xylene  
Concen: 0.145 ppbv m  
RT: 13.044 min Scan# 3247  
Delta R.T. 0.016 min  
Lab File: VL040012.D  
Acq: 13 Dec 2022 19:33

Tgt Ion: 91 Resp: 37070  
Ion Ratio Lower Upper  
91 100  
106 0.0 23.2 69.6





#68

1-Bromo-4-Fluorobenzene

Concen: 9.654 ppbv

RT: 13.761 min Scan# 34

Delta R.T. 0.019 min

Lab File: VL040012.D

Acq: 13 Dec 2022 19:33

Instrument :

MSVOA\_L

ClientSampleId :

IA-3

Tgt Ion: 95 Resp: 1744914

Ion Ratio Lower Upper

95 100

174 63.0 53.7 80.5

175 4.6 4.0 6.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 12/14/2022

Supervised By :Mahesh Dadoda 12/14/2022

