

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL062223\  
 Data File : VL040494.D  
 Acq On : 22 Jun 2023 20:46  
 Operator : SY/MD  
 Sample : 03300-02 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV-2

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 06/26/2023  
 Supervised By :Mahesh Dadoda 06/27/2023

Quant Time: Jun 23 01:32:19 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL060523AIR.M

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

QLast Update : Tue Jun 06 06:22:12 2023

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.179  | 49    | 973859   | 10.000   | ppbv   | -0.01    |
| 33) 1,4-Difluorobenzene     | 6.642  | 114   | 2463755  | 10.000   | ppbv   | -0.01    |
| 55) Chlorobenzene-d5        | 11.455 | 117   | 2481408  | 10.000   | ppbv   | -0.02    |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.764 | 95    | 2040579  | 9.964    | ppbv   | -0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 99.600%  |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane  | 2.722  | 85    | 23211    | 0.110    | ppbv   | 92       |
| 9) Propene                  | 2.693  | 41    | 154592m  | 3.143    | ppbv   |          |
| 10) Heptane                 | 7.568  | 43    | 80414    | 0.722    | ppbv   | 96       |
| 11) Trichlorofluoromethane  | 3.549  | 101   | 25062m   | 0.145    | ppbv   |          |
| 13) Ethanol                 | 3.227  | 45    | 1620214  | 159.068  | ppbv   | 99       |
| 15) Acetone                 | 3.455  | 43    | 1666112  | 14.184   | ppbv   | 100      |
| 17) tert-Butyl alcohol      | 3.873  | 59    | 60472    | 0.626    | ppbv   | 95       |
| 19) Isopropyl Alcohol       | 3.568  | 45    | 1976822  | 34.917   | ppbv # | 96       |
| 20) Methylene Chloride      | 3.922  | 84    | 33218    | 0.663    | ppbv   | 89       |
| 26) Hexane                  | 5.201  | 57    | 151247   | 1.501    | ppbv # | 52       |
| 27) Carbon Disulfide        | 4.111  | 76    | 32022    | 0.254    | ppbv # | 82       |
| 29) Chloroform              | 5.262  | 83    | 158127   | 0.921    | ppbv   | 99       |
| 34) 2-Butanone              | 4.777  | 43    | 361767   | 3.045    | ppbv   | 97       |
| 36) Benzene                 | 6.359  | 78    | 63497    | 0.324    | ppbv   | 96       |
| 41) Tetrahydrofuran         | 5.555  | 42    | 58389    | 0.899    | ppbv   | 92       |
| 50) 4-Methyl-2-Pentanone    | 8.175  | 43    | 75257    | 0.473    | ppbv   | 97       |
| 52) Tetrachloroethene       | 10.606 | 164   | 7436m    | 0.121    | ppbv   |          |
| 53) Toluene                 | 9.211  | 91    | 360578   | 1.747    | ppbv   | 99       |
| 58) Ethyl Benzene           | 12.079 | 91    | 150610   | 0.501    | ppbv   | 96       |
| 59) m/p-Xylene              | 12.333 | 91    | 539743   | 1.953    | ppbv   | 98       |
| 60) o-Xylene                | 13.043 | 91    | 184458   | 0.704    | ppbv   | 96       |
| 61) Styrene                 | 12.889 | 104   | 114005   | 1.011    | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene  | 16.101 | 105   | 62003m   | 0.202    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

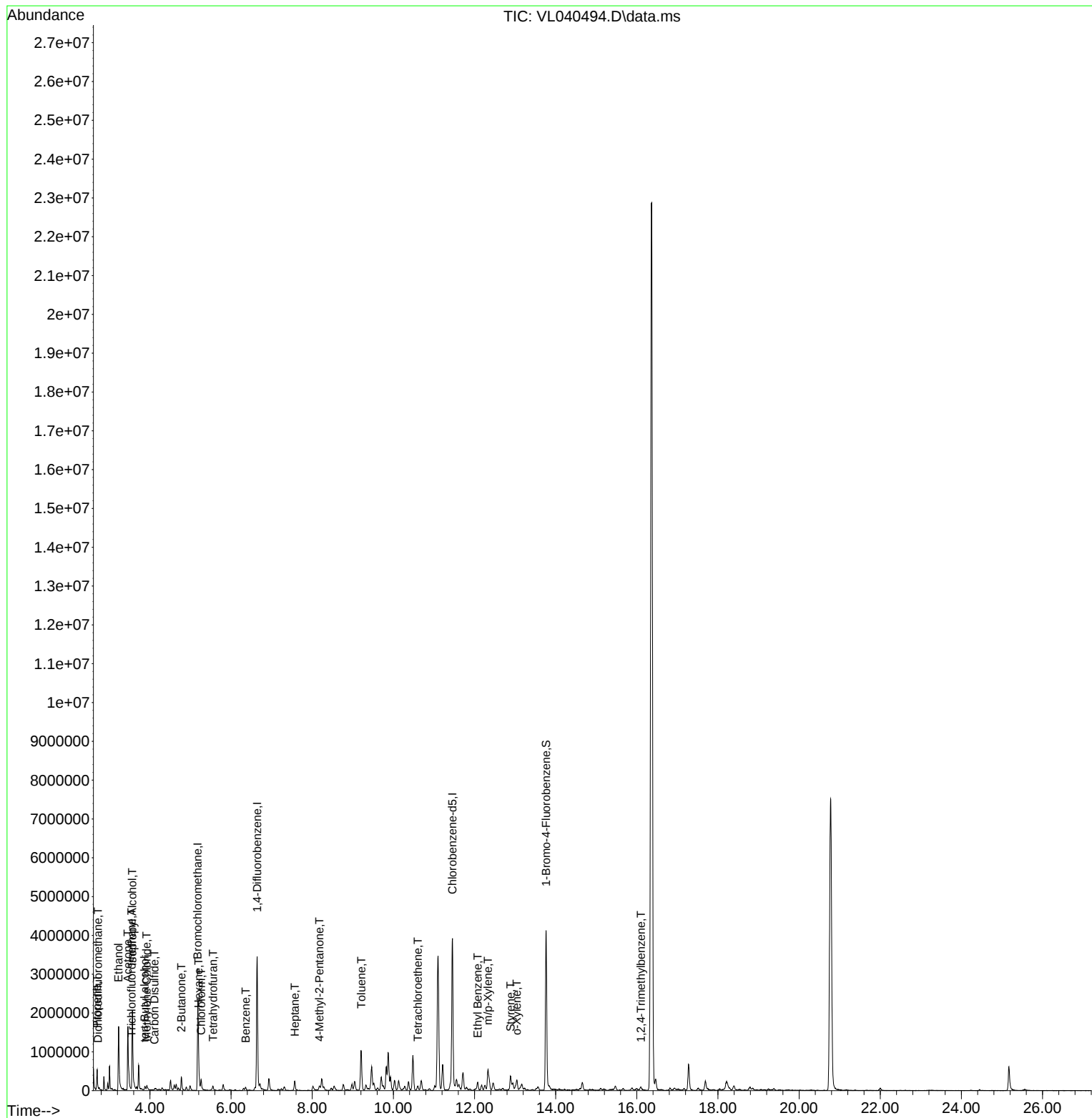
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL062223\  
Data File : VL040494.D  
Acq On : 22 Jun 2023 20:46  
Operator : SY/MD  
Sample : 03300-02 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

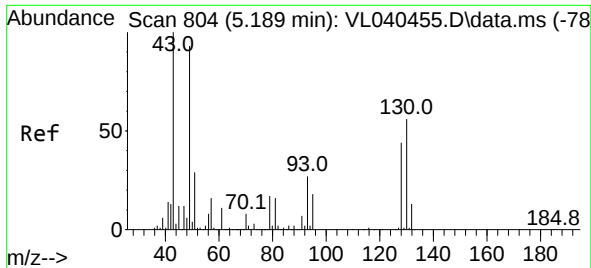
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2

Quant Time: Jun 23 01:32:19 2023  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL060523AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Tue Jun 06 06:22:12 2023  
Response via : Initial Calibration

Manual Integrations  
APPROVED

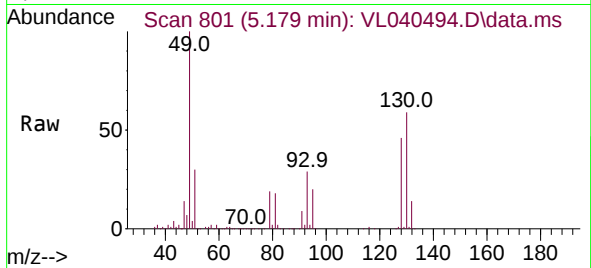
Reviewed By : Semsettin Yesilyurt 06/26/2023  
Supervised By : Mahesh Dadoda 06/27/2023





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.179 min Scan# 804  
Delta R.T. -0.010 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

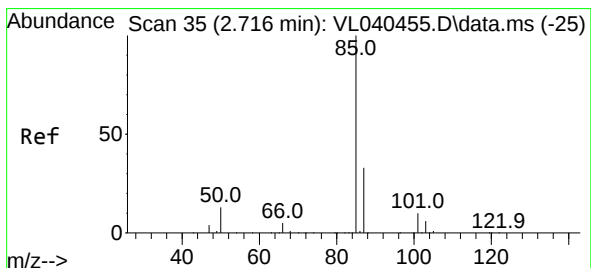
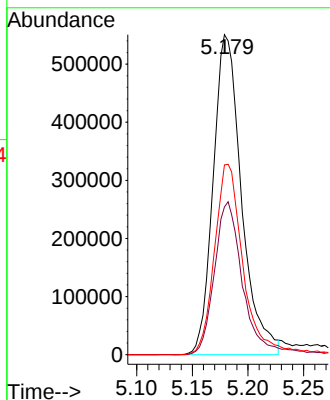
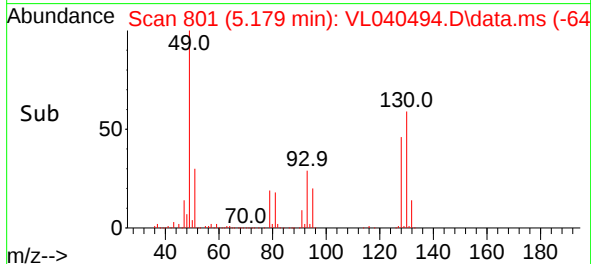
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion: 49 Resp: 97385  
Ion Ratio Lower Upper  
49 100  
128 48.8 24.7 74.1  
130 62.0 31.4 94.2

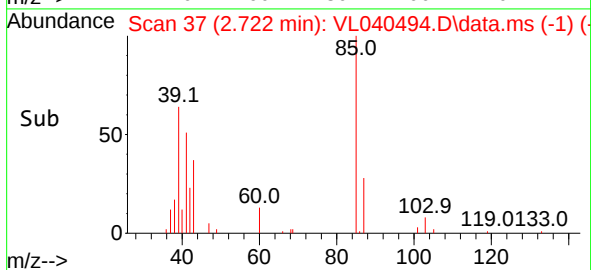
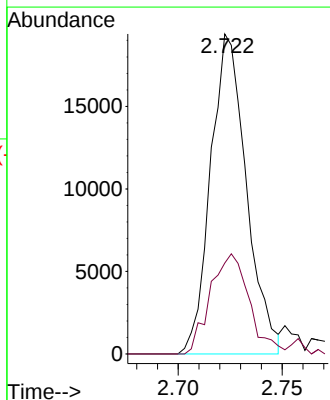
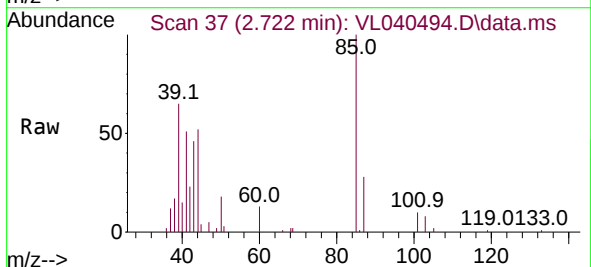
Manual Integrations  
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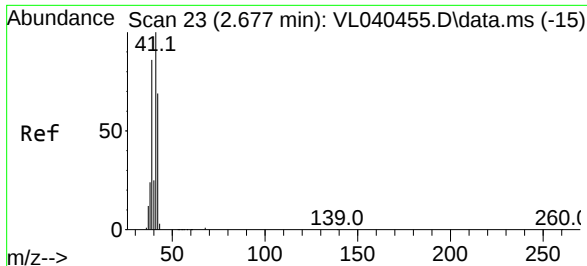
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#2  
Dichlorodifluoromethane  
Concen: 0.110 ppbv  
RT: 2.722 min Scan# 37  
Delta R.T. 0.006 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

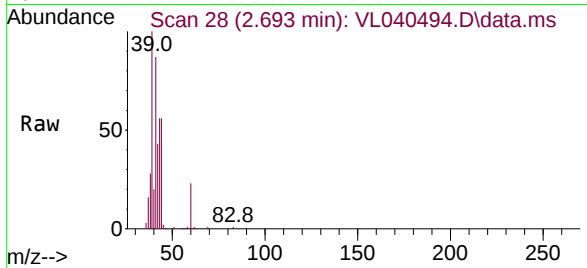
Tgt Ion: 85 Resp: 23211  
Ion Ratio Lower Upper  
85 100  
87 28.4 26.6 39.8





#9  
Propene  
Concen: 3.143 ppbv m  
RT: 2.693 min Scan# 21  
Delta R.T. 0.016 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

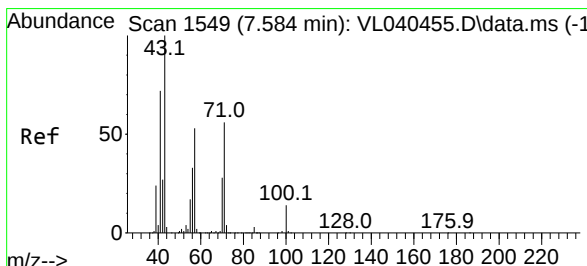
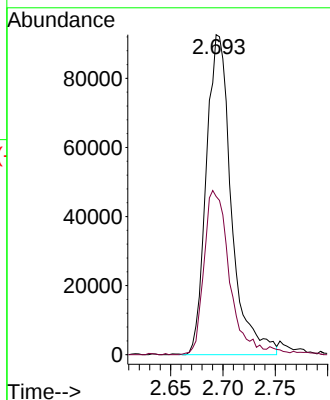
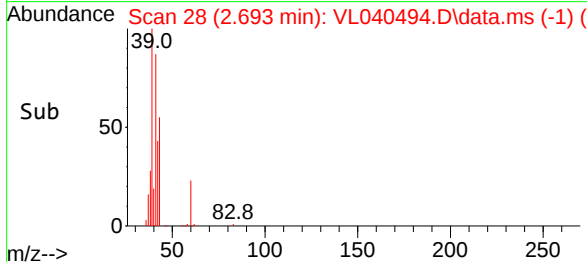
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion: 41 Resp: 154592  
Ion Ratio Lower Upper  
41 100  
42 37.5 56.2 84.23

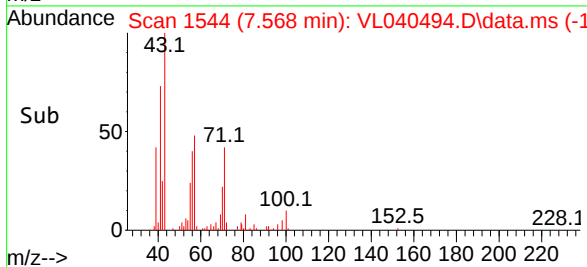
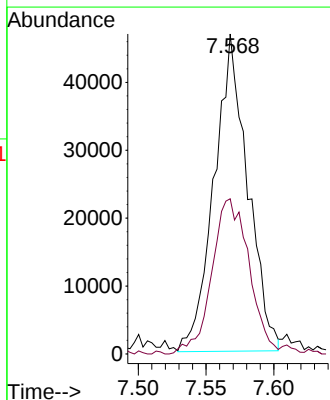
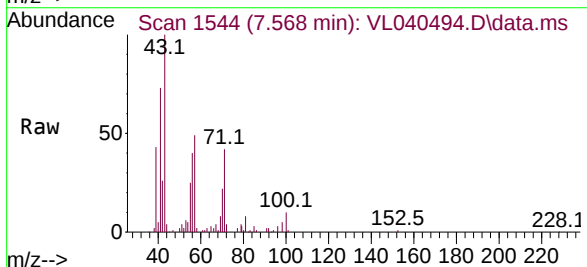
Manual Integrations  
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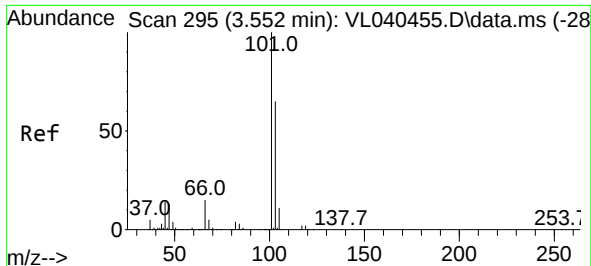
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#10  
Heptane  
Concen: 0.722 ppbv  
RT: 7.568 min Scan# 1544  
Delta R.T. -0.016 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

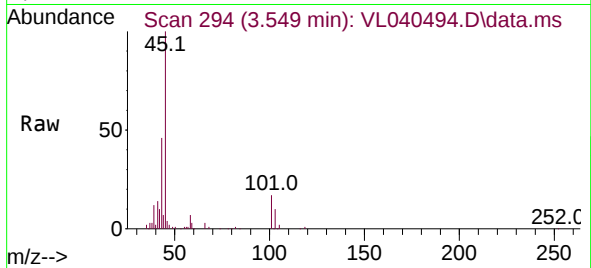
Tgt Ion: 43 Resp: 80414  
Ion Ratio Lower Upper  
43 100  
57 56.0 42.5 63.7





#11  
Trichlorofluoromethane  
Concen: 0.145 ppbv m  
RT: 3.549 min Scan# 295  
Delta R.T. -0.003 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

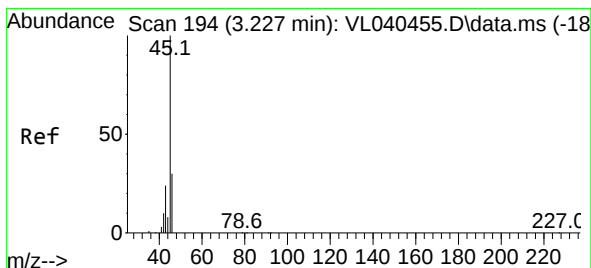
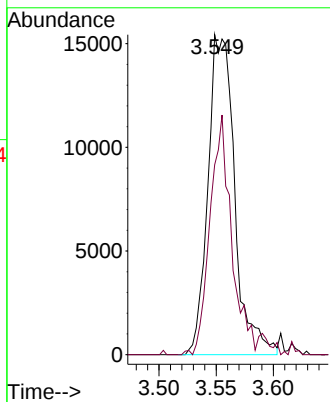
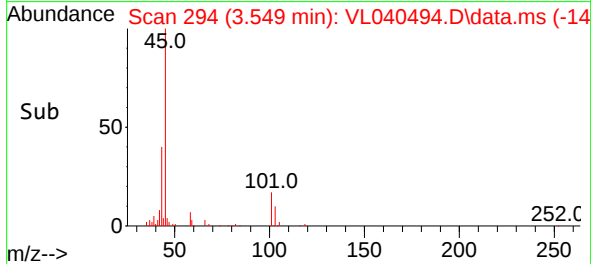
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion:101 Resp: 25062  
Ion Ratio Lower Upper  
101 100  
103 59.3 51.7 77.5

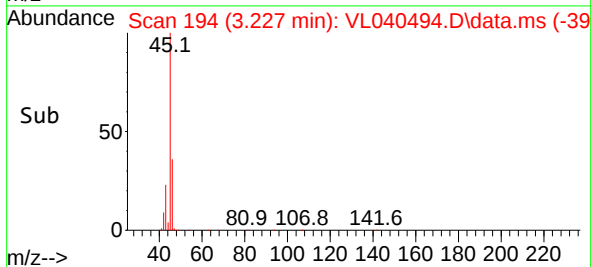
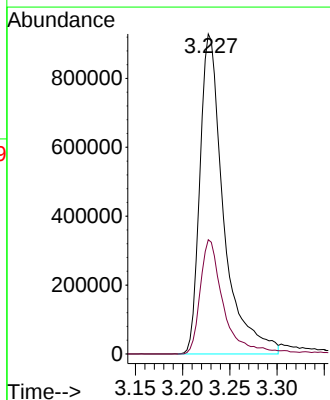
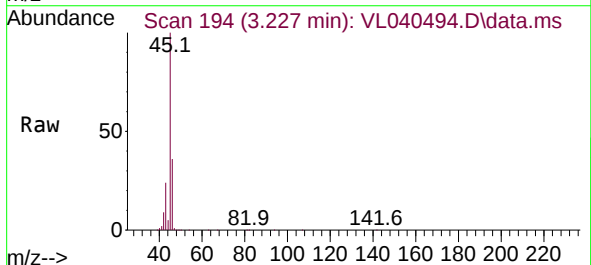
Manual Integrations  
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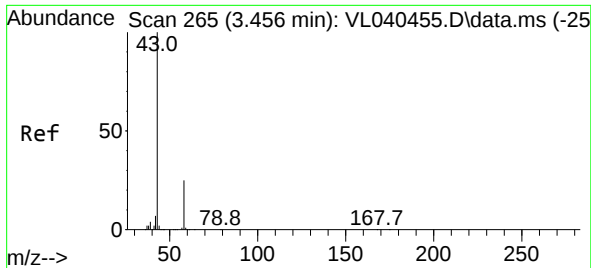
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#13  
Ethanol  
Concen: 159.068 ppbv  
RT: 3.227 min Scan# 194  
Delta R.T. -0.000 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

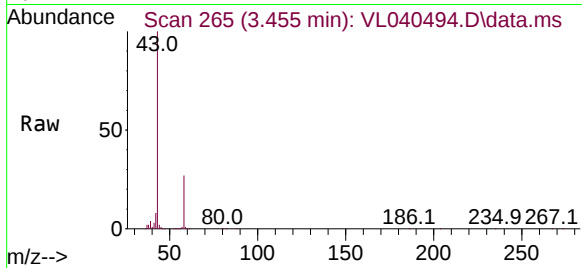
Tgt Ion: 45 Resp: 1620214  
Ion Ratio Lower Upper  
45 100  
46 35.8 14.5 58.1





#15  
Acetone  
Concen: 14.184 ppbv  
RT: 3.455 min Scan# 20  
Delta R.T. -0.000 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

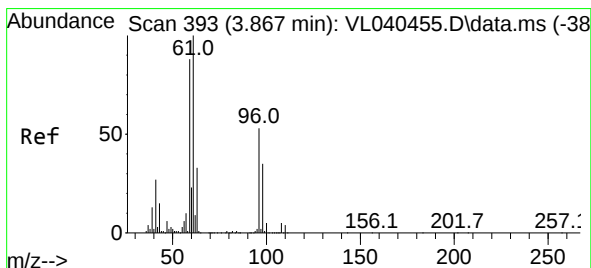
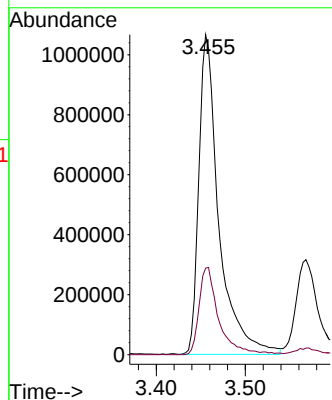
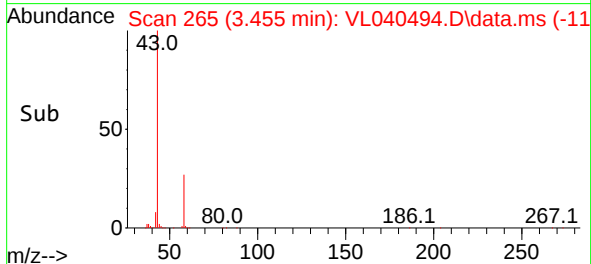
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



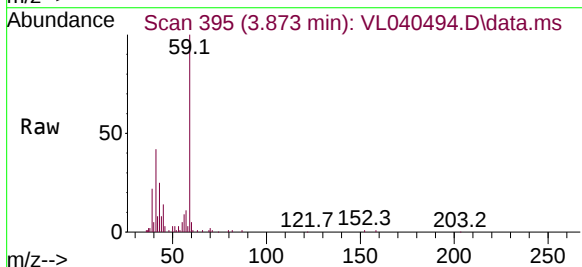
Tgt Ion: 43 Resp: 166611  
Ion Ratio Lower Upper  
43 100  
58 26.9 21.6 32.4

Manual Integrations  
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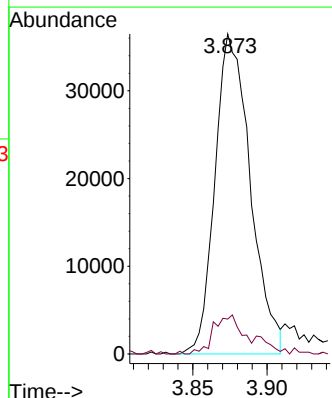
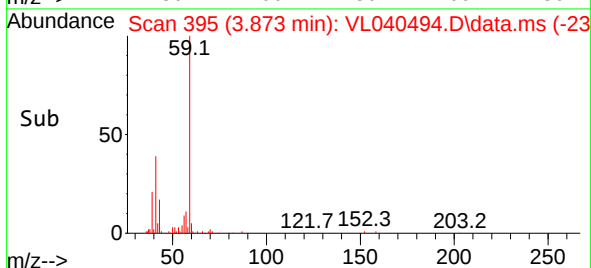
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023

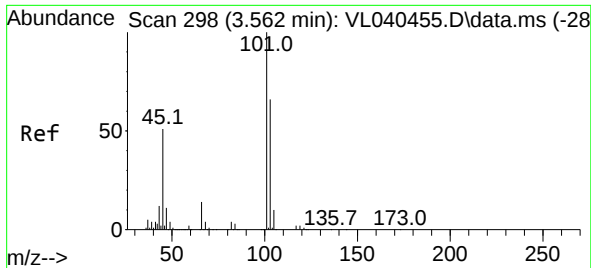


#17  
tert-Butyl alcohol  
Concen: 0.626 ppbv  
RT: 3.873 min Scan# 395  
Delta R.T. 0.006 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46



Tgt Ion: 59 Resp: 60472  
Ion Ratio Lower Upper  
59 100  
57 12.8 8.8 13.2





#19

Isopropyl Alcohol

Concen: 34.917 ppbv

RT: 3.568 min Scan# 300

Delta R.T. 0.006 min

Lab File: VL040494.D

Acq: 22 Jun 2023 20:46

Instrument :

MSVOA\_L

ClientSampleId :

SV-2

Tgt Ion: 45 Resp: 197682

Ion Ratio Lower Upper

45 100

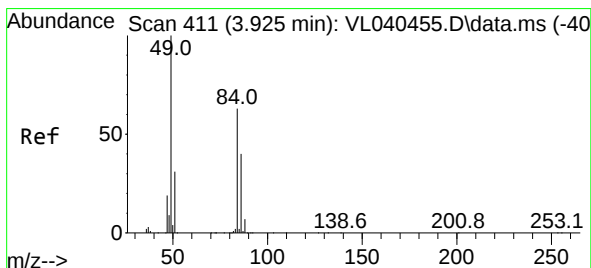
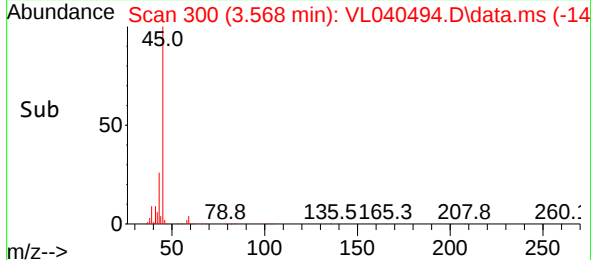
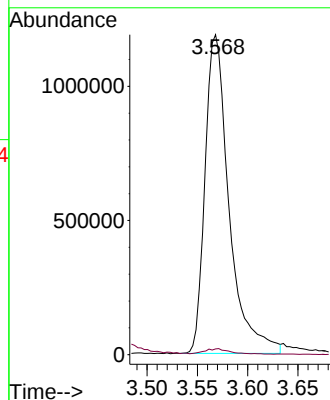
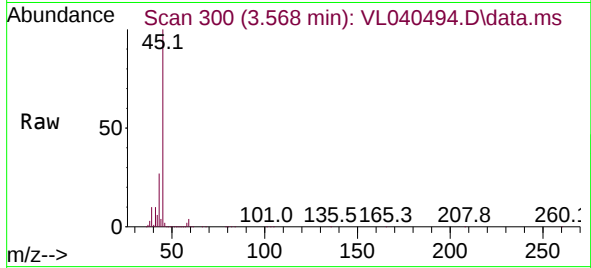
58 2.0 2.6 4.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 06/26/2023

Supervised By :Mahesh Dadoda 06/27/2023



#20

Methylene Chloride

Concen: 0.663 ppbv

RT: 3.922 min Scan# 410

Delta R.T. -0.003 min

Lab File: VL040494.D

Acq: 22 Jun 2023 20:46

Tgt Ion: 84 Resp: 33218

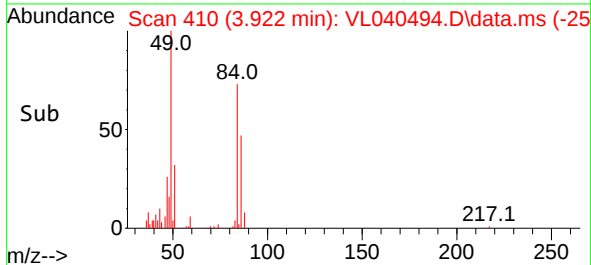
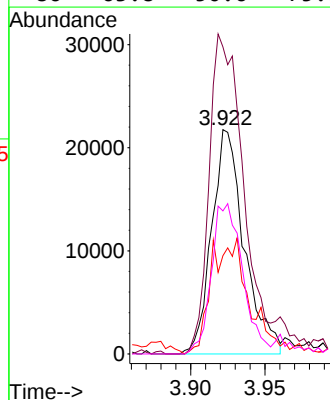
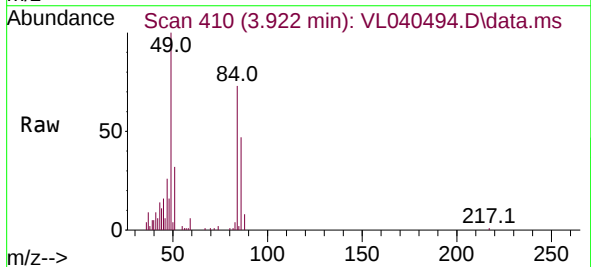
Ion Ratio Lower Upper

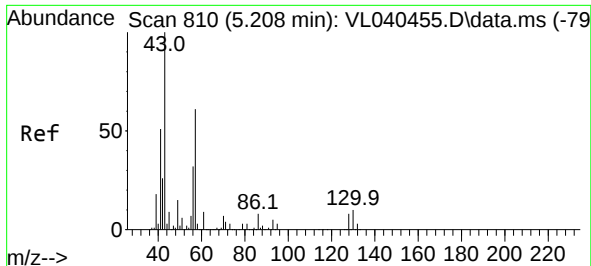
84 100

49 136.9 126.2 189.2

51 42.5 38.7 58.1

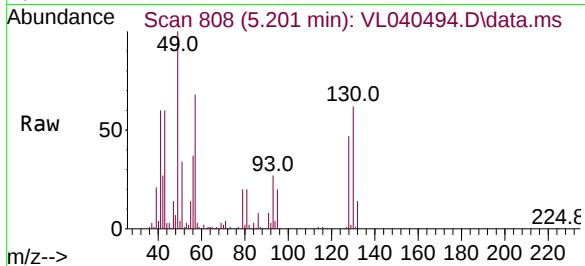
86 63.8 50.6 75.8





#26  
Hexane  
Concen: 1.501 ppbv  
RT: 5.201 min Scan# 808  
Delta R.T. -0.007 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

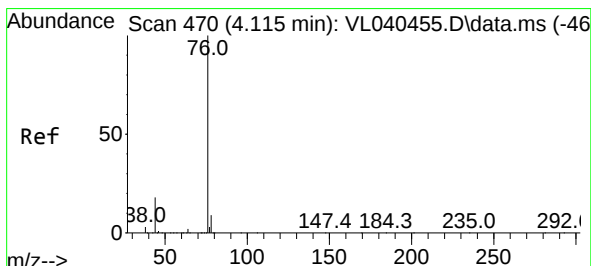
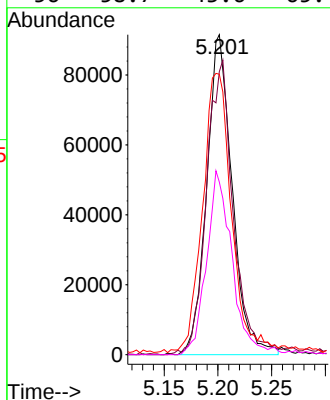
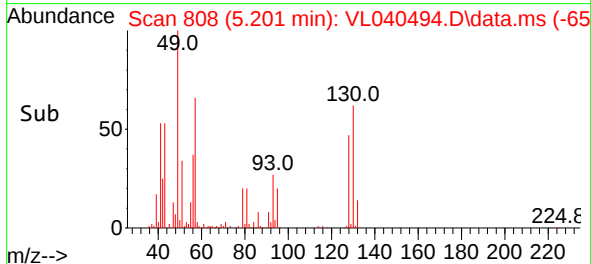
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion: 57 Resp: 15124  
Ion Ratio Lower Upper  
57 100  
41 98.7 73.0 109.6  
43 101.0 177.5 266.3  
56 58.7 43.6 65.4

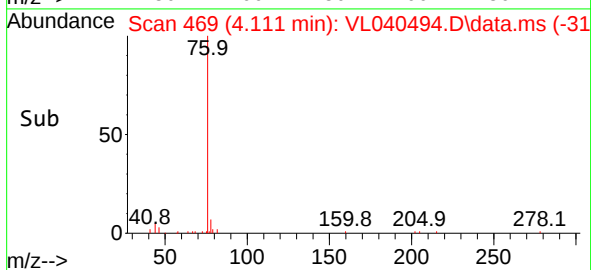
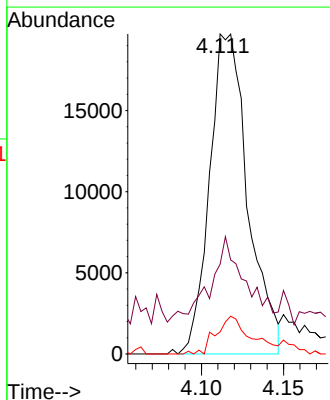
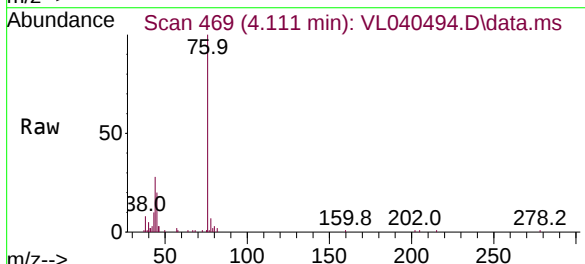
Manual Integrations  
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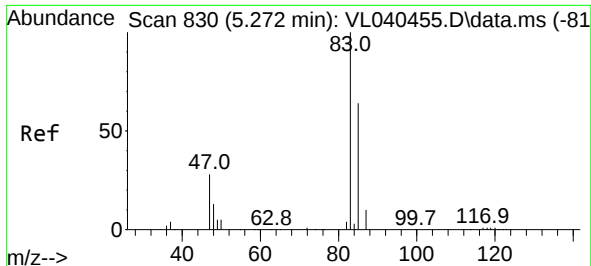
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#27  
Carbon Disulfide  
Concen: 0.254 ppbv  
RT: 4.111 min Scan# 469  
Delta R.T. -0.003 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

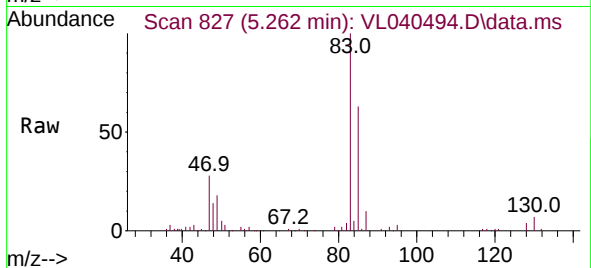
Tgt Ion: 76 Resp: 32022  
Ion Ratio Lower Upper  
76 100  
44 28.4 14.6 22.0#  
78 12.3 7.6 11.4#





#29  
Chloroform  
Concen: 0.921 ppbv  
RT: 5.262 min Scan# 81  
Delta R.T. -0.010 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

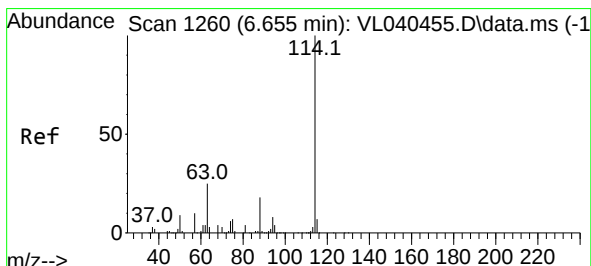
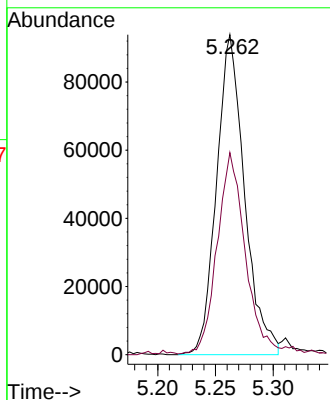
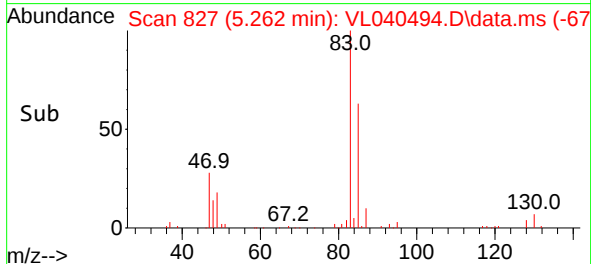
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion: 83 Resp: 15812  
Ion Ratio Lower Upper  
83 100  
85 62.9 51.1 76.7

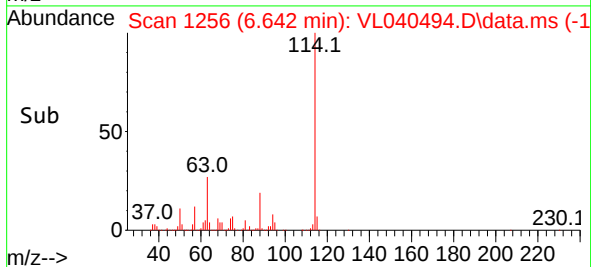
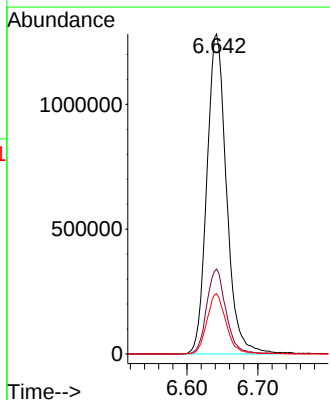
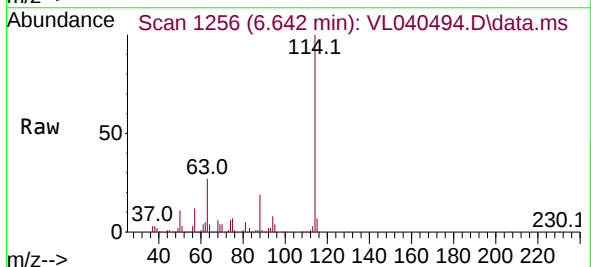
Manual Integrations  
APPROVED

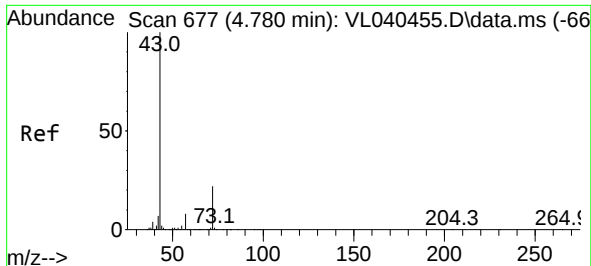
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 6.642 min Scan# 1256  
Delta R.T. -0.013 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

Tgt Ion:114 Resp: 2463755  
Ion Ratio Lower Upper  
114 100  
63 26.4 21.0 31.6  
88 18.5 14.5 21.7





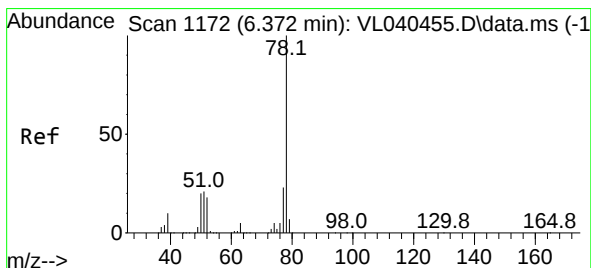
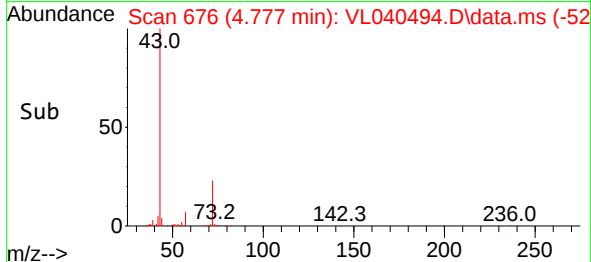
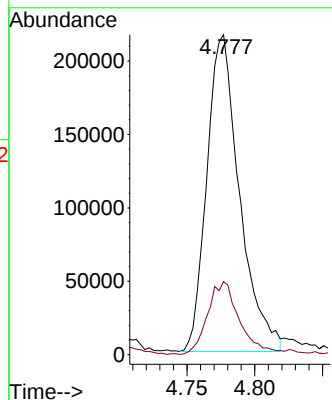
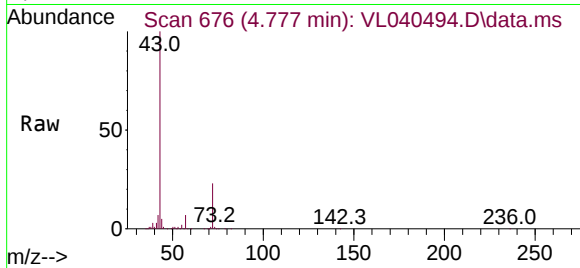
#34  
2-Butanone  
Concen: 3.045 ppbv  
RT: 4.777 min Scan# 61  
Delta R.T. -0.003 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2

Tgt Ion: 43 Resp: 36176  
Ion Ratio Lower Upper  
43 100  
72 23.9 18.1 27.1

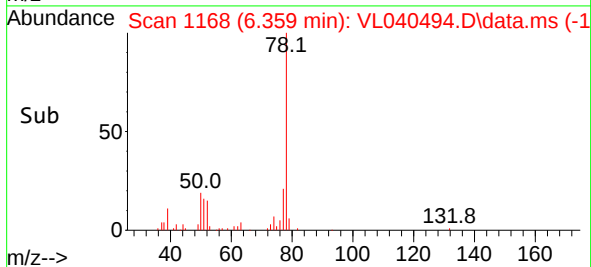
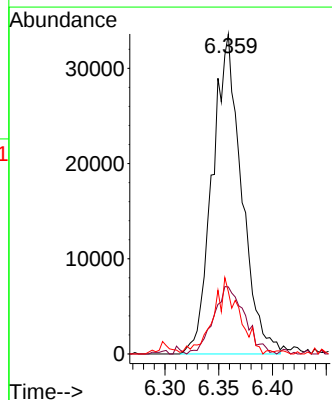
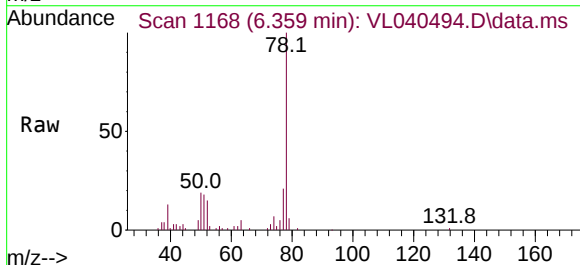
Manual Integrations  
APPROVED

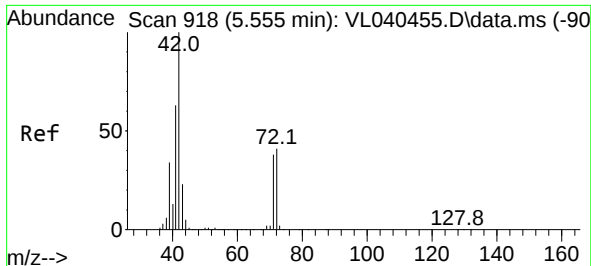
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#36  
Benzene  
Concen: 0.324 ppbv  
RT: 6.359 min Scan# 1168  
Delta R.T. -0.013 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

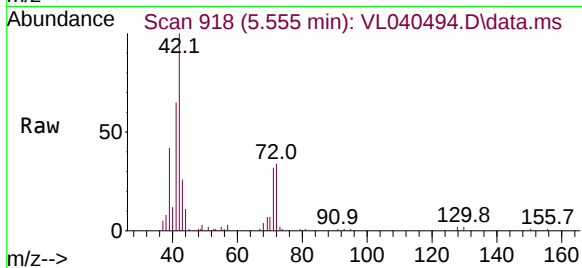
Tgt Ion: 78 Resp: 63497  
Ion Ratio Lower Upper  
78 100  
77 20.2 18.5 27.7  
50 18.9 16.1 24.1





#41  
Tetrahydrofuran  
Concen: 0.899 ppbv  
RT: 5.555 min Scan# 918  
Delta R.T. -0.000 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

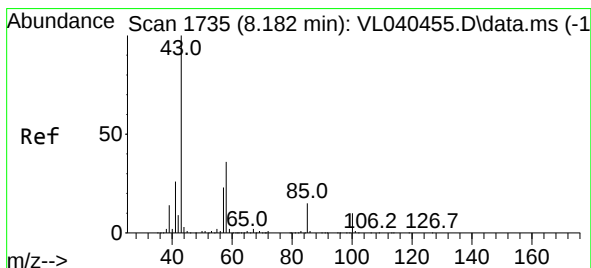
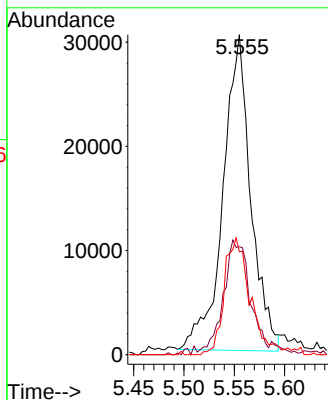
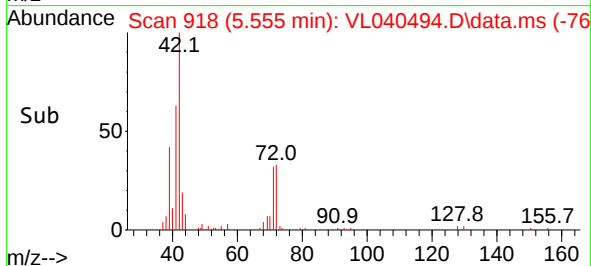
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion: 42 Resp: 58389  
Ion Ratio Lower Upper  
42 100  
72 37.8 33.8 50.8  
71 35.4 32.3 48.5

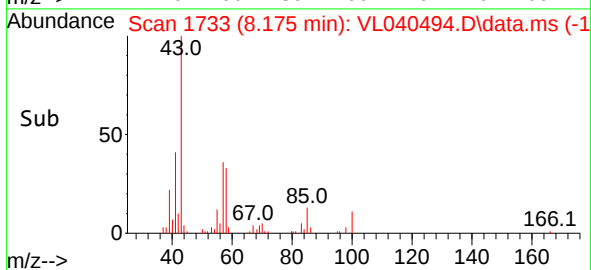
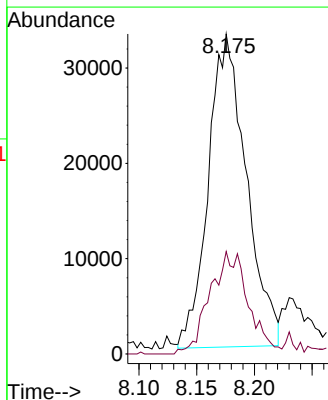
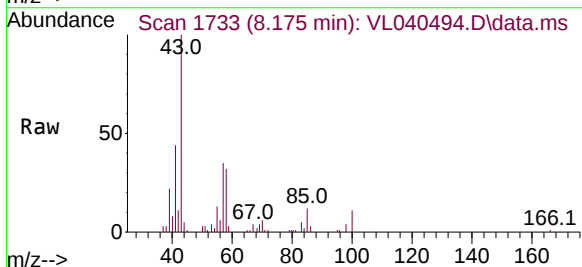
Manual Integrations  
APPROVED

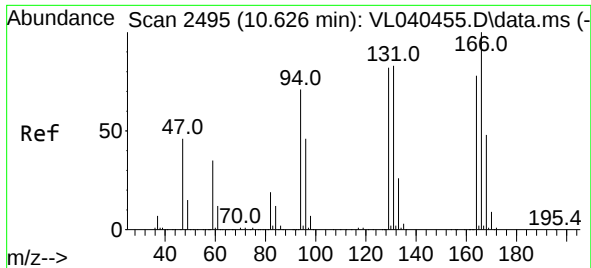
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#50  
4-Methyl-2-Pentanone  
Concen: 0.473 ppbv  
RT: 8.175 min Scan# 1733  
Delta R.T. -0.007 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

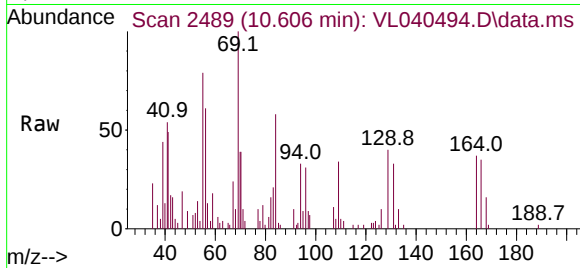
Tgt Ion: 43 Resp: 75257  
Ion Ratio Lower Upper  
43 100  
58 37.1 28.2 42.4





#52  
Tetrachloroethene  
Concen: 0.121 ppbv m  
RT: 10.606 min Scan# 2495  
Delta R.T. -0.019 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

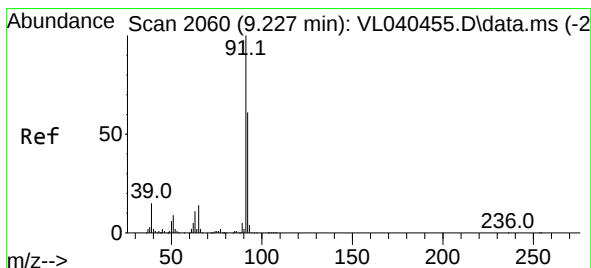
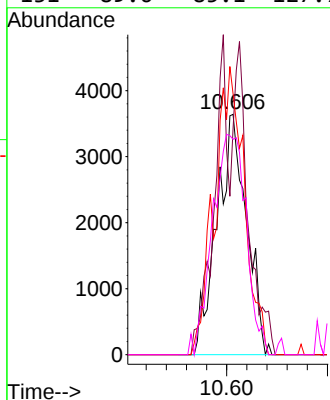
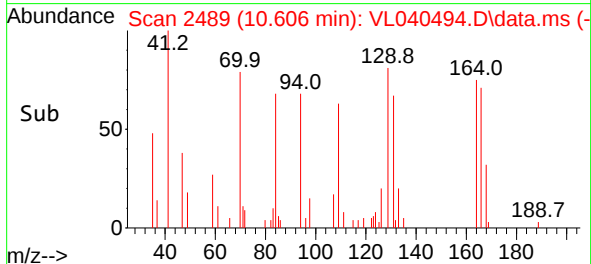
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion:164 Resp: 7430  
Ion Ratio Lower Upper  
164 100  
166 94.2 102.7 154.1  
129 108.5 84.6 126.8  
131 89.6 85.1 127.7

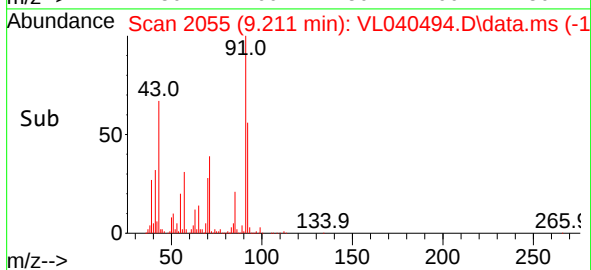
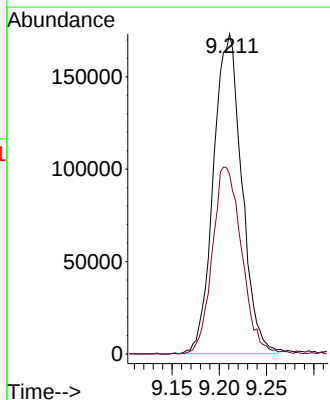
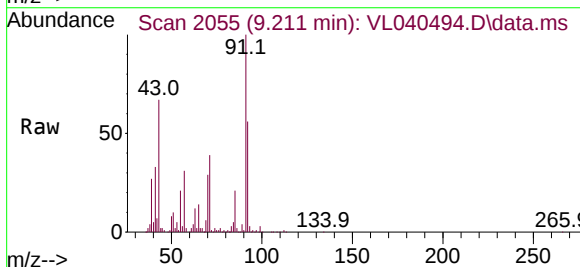
Manual Integrations  
APPROVED

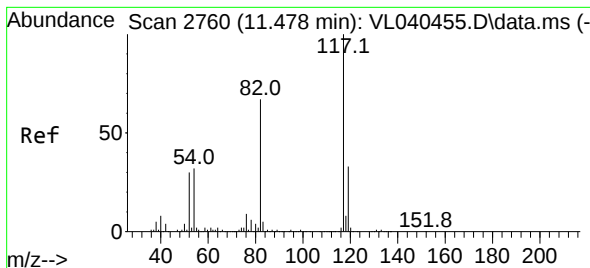
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#53  
Toluene  
Concen: 1.747 ppbv  
RT: 9.211 min Scan# 2055  
Delta R.T. -0.016 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

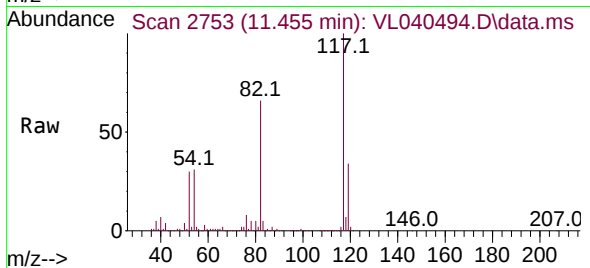
Tgt Ion: 91 Resp: 360578  
Ion Ratio Lower Upper  
91 100  
92 60.8 49.1 73.7





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.455 min Scan# 21  
Delta R.T. -0.023 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

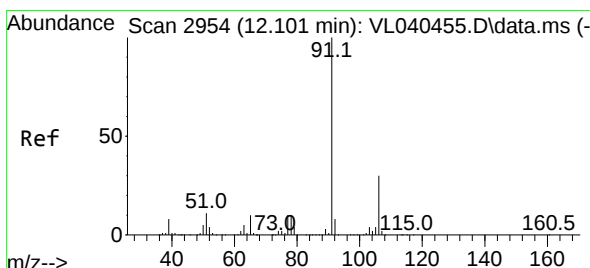
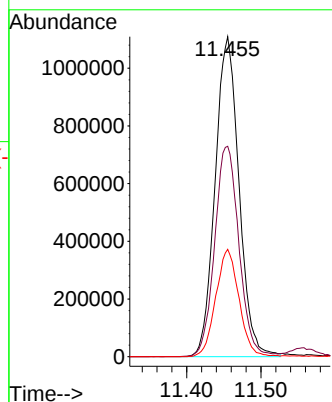
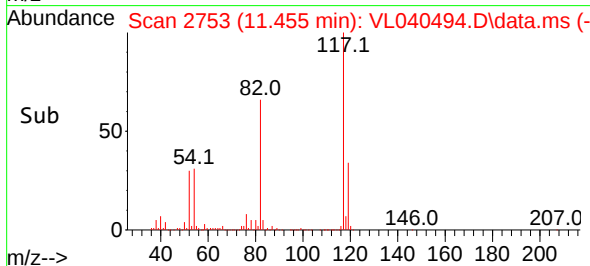
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



Tgt Ion: 117 Resp: 2481408  
Ion Ratio Lower Upper  
117 100  
82 66.8 53.0 79.4  
119 32.9 24.4 36.6

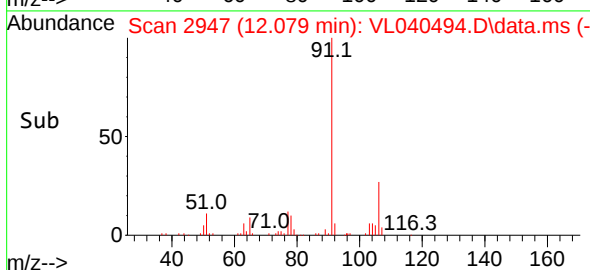
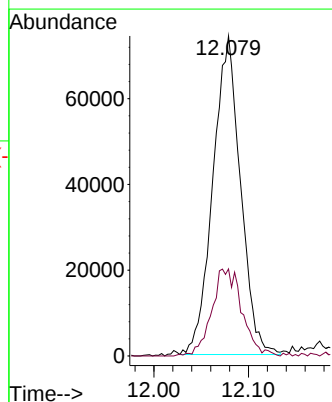
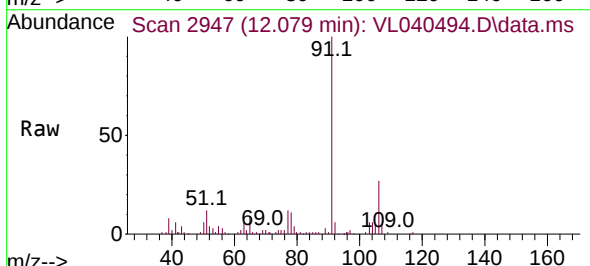
Manual Integrations  
APPROVED

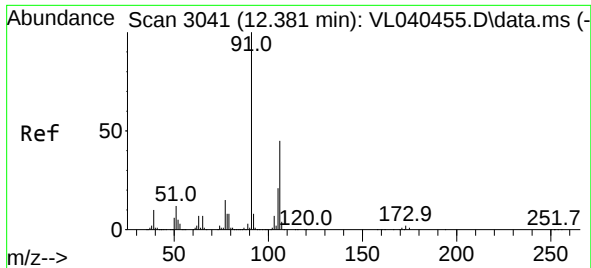
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#58  
Ethyl Benzene  
Concen: 0.501 ppbv  
RT: 12.079 min Scan# 2947  
Delta R.T. -0.023 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

Tgt Ion: 91 Resp: 150610  
Ion Ratio Lower Upper  
91 100  
106 27.3 23.7 35.5





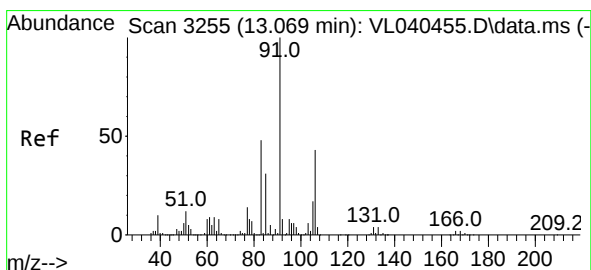
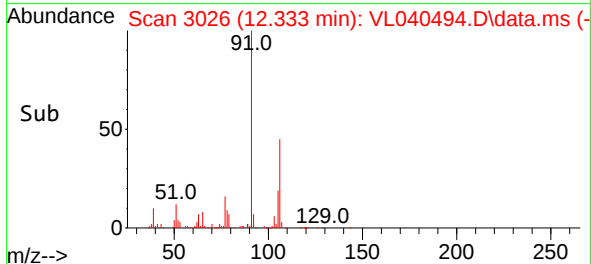
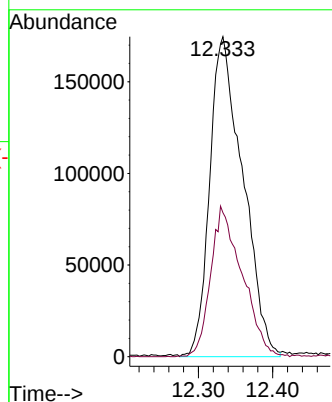
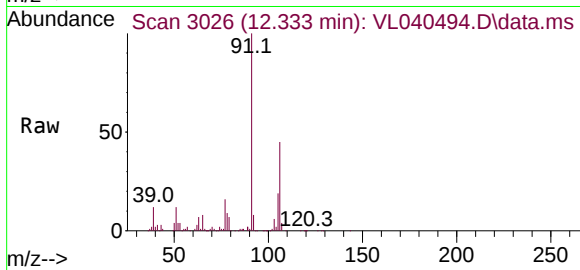
#59  
m/p-Xylene  
Concen: 1.953 ppbv  
RT: 12.333 min Scan# 3041  
Delta R.T. -0.048 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2

Tgt Ion: 91 Resp: 53974  
Ion Ratio Lower Upper  
91 100  
106 44.9 34.6 52.0

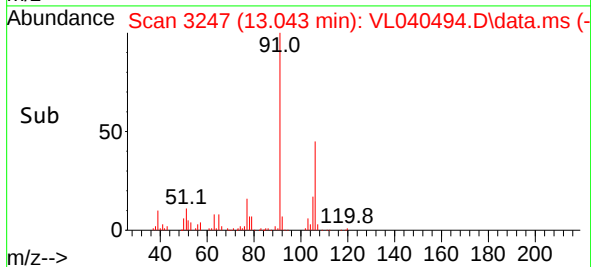
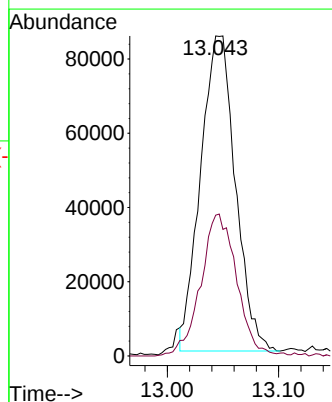
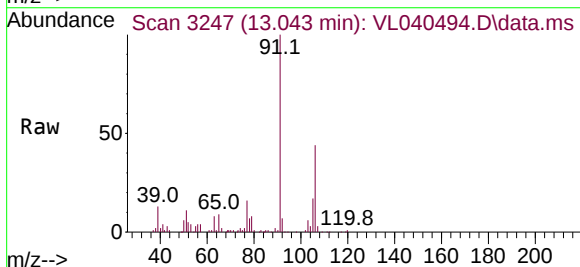
Manual Integrations  
APPROVED

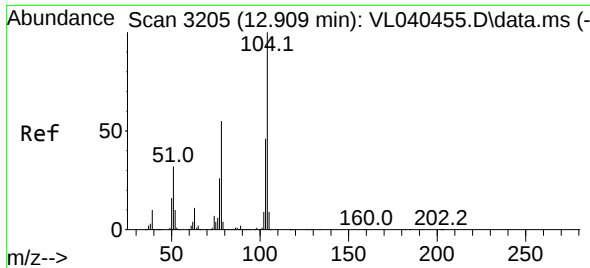
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023



#60  
o-Xylene  
Concen: 0.704 ppbv  
RT: 13.043 min Scan# 3247  
Delta R.T. -0.026 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

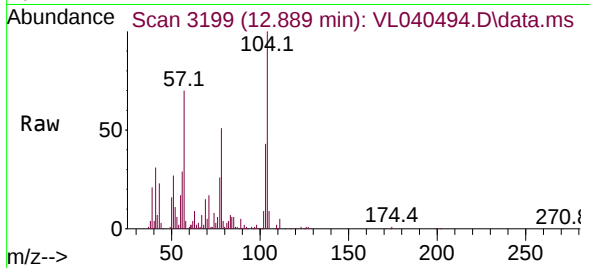
Tgt Ion: 91 Resp: 184458  
Ion Ratio Lower Upper  
91 100  
106 46.9 22.1 66.1





#61  
Styrene  
Concen: 1.011 ppbv  
RT: 12.889 min Scan# 3199  
Delta R.T. -0.019 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46

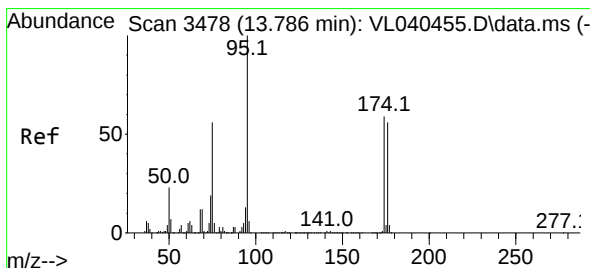
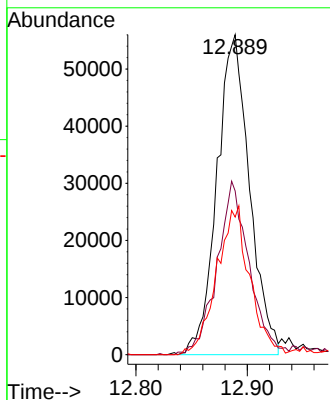
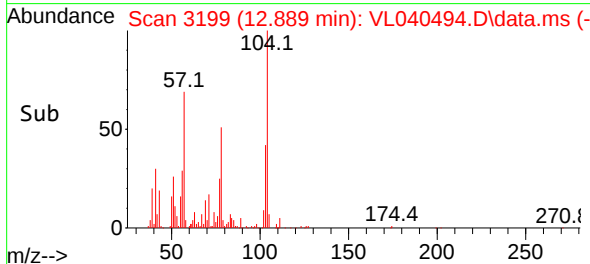
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-2



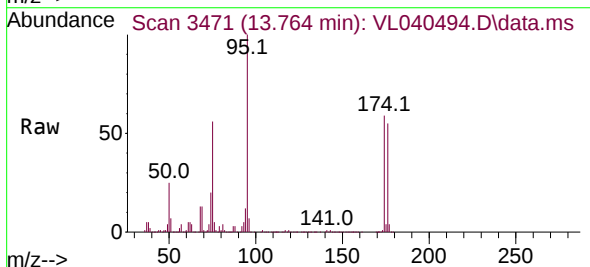
Tgt Ion:104 Resp: 11400  
Ion Ratio Lower Upper  
104 100  
78 55.4 43.1 64.7  
103 47.8 37.1 55.7

Manual Integrations  
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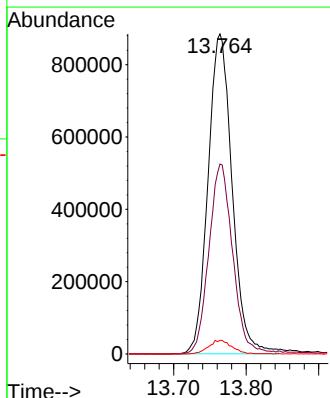
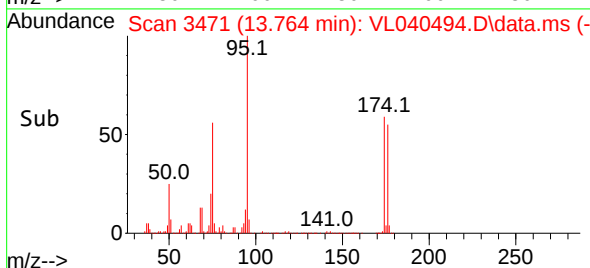
Reviewed By :Semsettin Yesilyurt 06/26/2023  
Supervised By :Mahesh Dadoda 06/27/2023

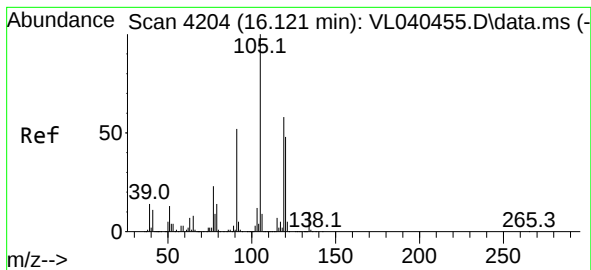


#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.964 ppbv  
RT: 13.764 min Scan# 3471  
Delta R.T. -0.023 min  
Lab File: VL040494.D  
Acq: 22 Jun 2023 20:46



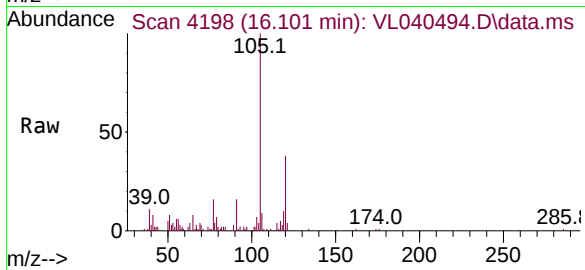
Tgt Ion: 95 Resp: 2040579  
Ion Ratio Lower Upper  
95 100  
174 59.7 47.7 71.5  
175 4.2 3.5 5.3





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.202 ppbv m  
 RT: 16.101 min Scan# 4198  
 Delta R.T. -0.019 min  
 Lab File: VL040494.D  
 Acq: 22 Jun 2023 20:46

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV-2



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 6200  |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 37.7  | 38.4  | 57.6  |
| 91       | 15.5  | 41.3  | 61.9  |
| 77       | 16.0  | 18.6  | 28.0  |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 06/26/2023  
 Supervised By :Mahesh Dadoda 06/27/2023

