

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL111825\  
 Data File : VL043222.D  
 Acq On : 18 Nov 2025 20:29  
 Operator : SY/MD  
 Sample : Q3651-01 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025  
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 01:39:46 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL111825AIR.M

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

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 2.790  | 49    | 97422    | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 3.959  | 114   | 255477   | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5        | 8.875  | 117   | 197025   | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 10.370 | 95    | 147087   | 10.185   | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 101.800% |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        |          |
|                             |        |       |          |          | Qvalue |          |
| 2) Dichlorodifluoromethane  | 1.492  | 85    | 1653     | 0.120    | ppbv   | 93       |
| 9) Propene                  | 1.483  | 41    | 31623    | 5.511    | ppbv # | 1        |
| 10) Heptane                 | 4.978  | 43    | 16286m   | 0.954    | ppbv   |          |
| 15) Acetone                 | 1.835  | 43    | 387646   | 28.640   | ppbv   | 98       |
| 17) tert-Butyl alcohol      | 2.043  | 59    | 10185m   | 0.573    | ppbv   |          |
| 19) Isopropyl Alcohol       | 1.884  | 45    | 262922   | 34.376   | ppbv   | 96       |
| 20) Methylene Chloride      | 2.068  | 84    | 591192   | 160.005  | ppbv   | 91       |
| 25) Ethyl Acetate           | 2.836  | 43    | 215424   | 7.379    | ppbv   | 98       |
| 26) Hexane                  | 2.832  | 57    | 66477m   | 5.194    | ppbv   |          |
| 30) Cyclohexane             | 3.862  | 84    | 3485     | 0.325    | ppbv # | 82       |
| 34) 2-Butanone              | 2.560  | 43    | 8685     | 0.482    | ppbv   | 99       |
| 36) Benzene                 | 3.664  | 78    | 6086     | 0.249    | ppbv # | 92       |
| 40) 1,4-Dioxane             | 4.587  | 88    | 3574m    | 0.888    | ppbv   |          |
| 41) Tetrahydrofuran         | 3.062  | 42    | 3376m    | 0.339    | ppbv   |          |
| 52) Tetrachloroethene       | 8.221  | 164   | 399m     | 0.044    | ppbv   |          |
| 53) Toluene                 | 6.930  | 91    | 88387    | 3.051    | ppbv   | 97       |
| 58) Ethyl Benzene           | 9.351  | 91    | 11657    | 0.307    | ppbv # | 82       |
| 59) m/p-Xylene              | 9.529  | 91    | 25042    | 0.824    | ppbv   | 100      |
| 60) o-Xylene                | 9.956  | 91    | 12246    | 0.403    | ppbv   | 93       |
| 73) 1,3,5-Trimethylbenzene  | 11.199 | 105   | 4030     | 0.130    | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene  | 11.529 | 105   | 7787     | 0.230    | ppbv # | 48       |
| -----                       |        |       |          |          |        |          |

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

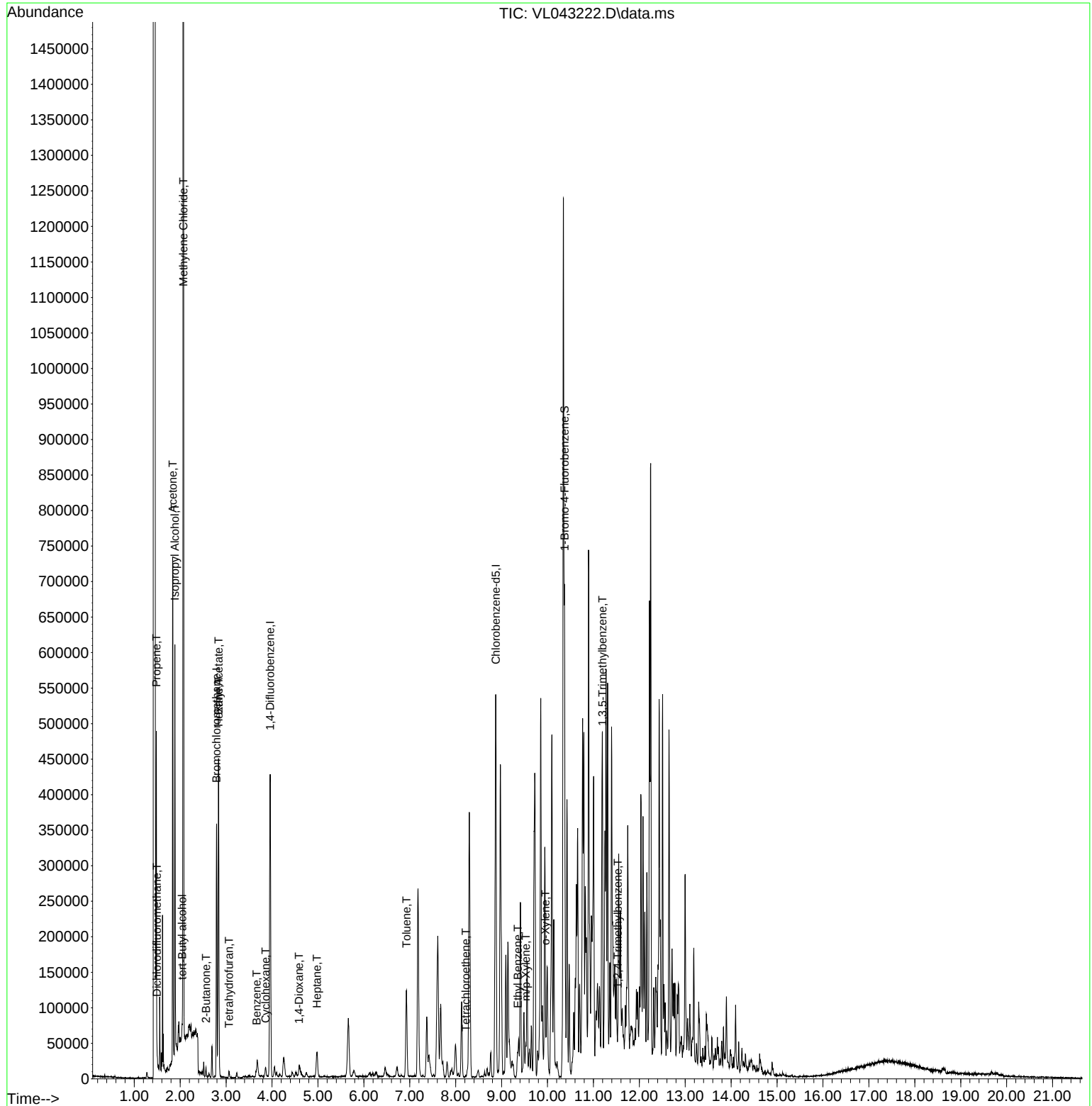
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Data File : VL043222.D  
Acq On : 18 Nov 2025 20:29  
Operator : SY/MD  
Sample : Q3651-01 4X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

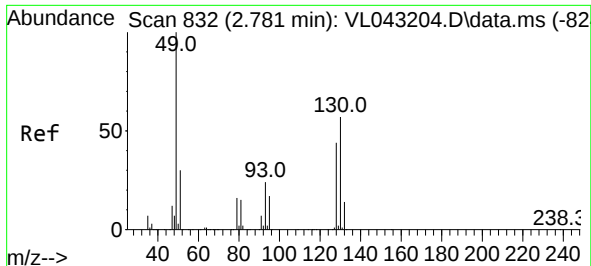
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Quant Time: Nov 19 01:39:46 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL111825AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Wed Nov 19 01:11:25 2025  
Response via : Initial Calibration

Manual Integrations  
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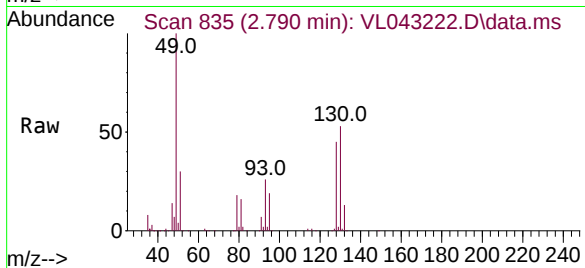
Reviewed By : Semsettin Yesilyurt 11/19/2025  
Supervised By : Mahesh Dadoda 11/19/2025





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 2.790 min Scan# 832  
Delta R.T. 0.009 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

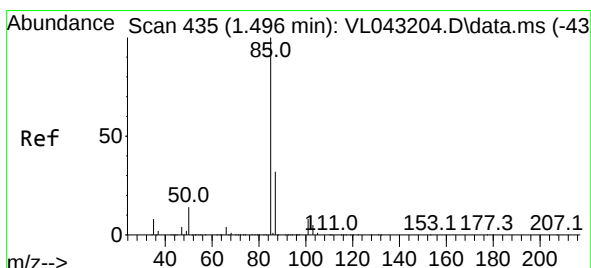
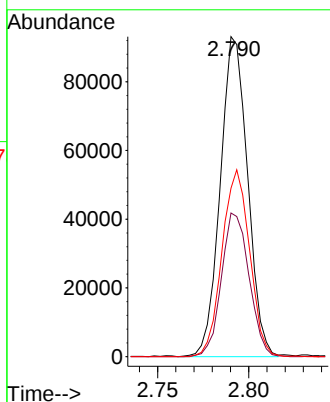
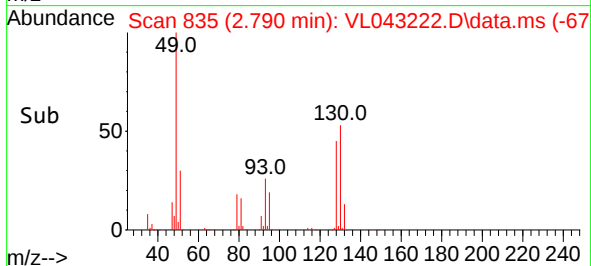
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



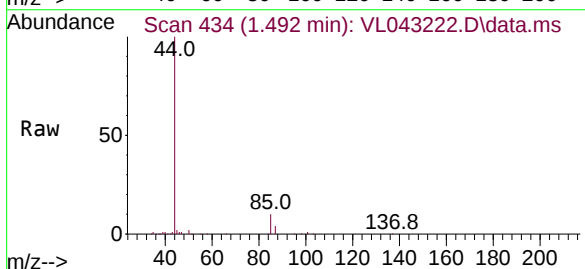
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Ion Ratio Lower Upper  
49 100  
128 45.2 23.0 69.0  
130 58.8 29.9 89.7

Manual Integrations  
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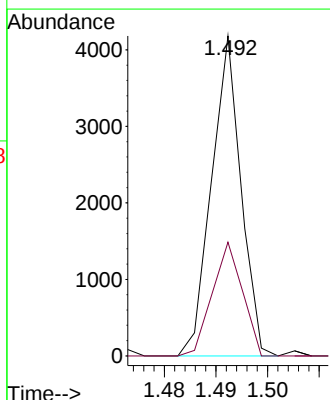
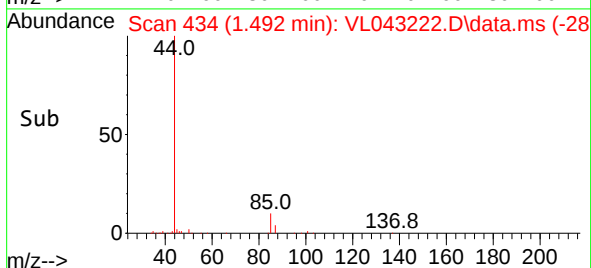
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025

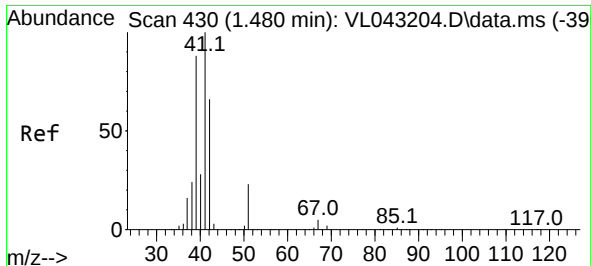


#2  
Dichlorodifluoromethane  
Concen: 0.120 ppbv  
RT: 1.492 min Scan# 434  
Delta R.T. -0.003 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29



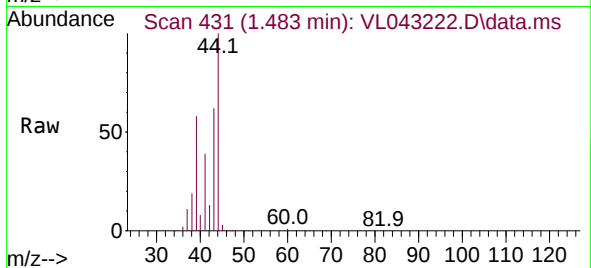
Tgt Ion: 85 Resp: 1653  
Ion Ratio Lower Upper  
85 100  
87 35.5 25.4 38.2





#9  
 Propene  
 Concen: 5.511 ppbv  
 RT: 1.483 min Scan# 431  
 Delta R.T. 0.003 min  
 Lab File: VL043222.D  
 Acq: 18 Nov 2025 20:29

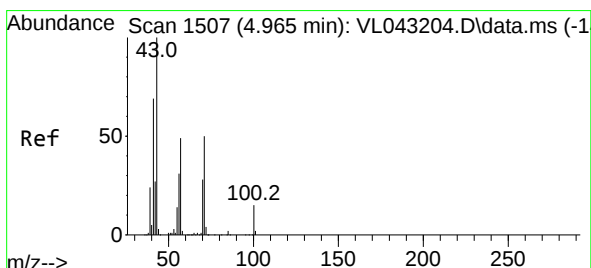
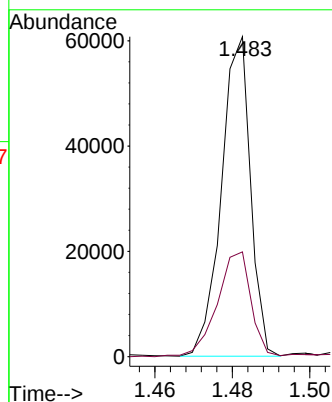
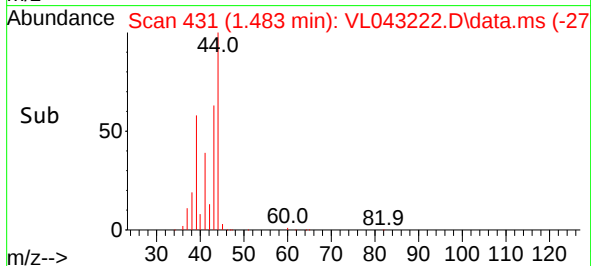
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1



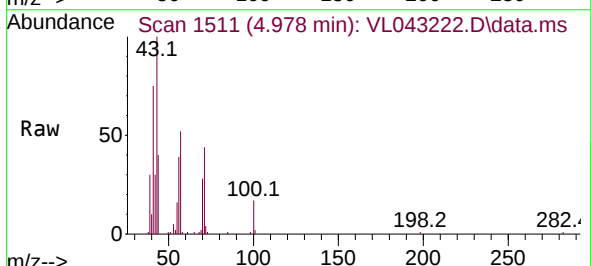
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 Ion Ratio Lower Upper  
 41 100  
 42 39.1 3.7 5.5

Manual Integrations  
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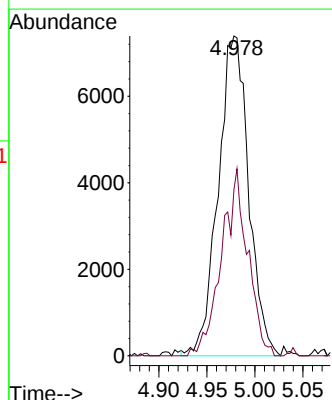
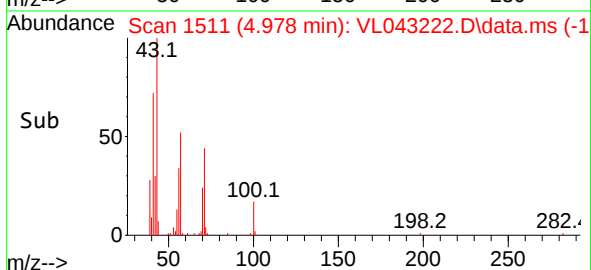
Reviewed By :Semsettin Yesilyurt 11/19/2025  
 Supervised By :Mahesh Dadoda 11/19/2025

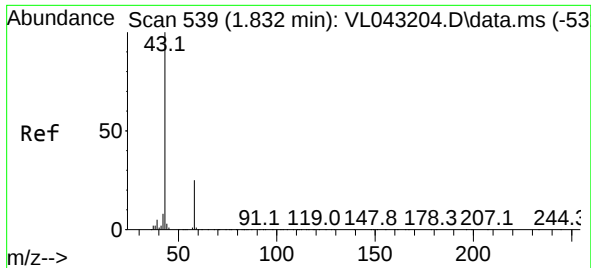


#10  
 Heptane  
 Concen: 0.954 ppbv m  
 RT: 4.978 min Scan# 1511  
 Delta R.T. 0.013 min  
 Lab File: VL043222.D  
 Acq: 18 Nov 2025 20:29



Tgt Ion: 43 Resp: 16286  
 Ion Ratio Lower Upper  
 43 100  
 57 51.1 39.7 59.5





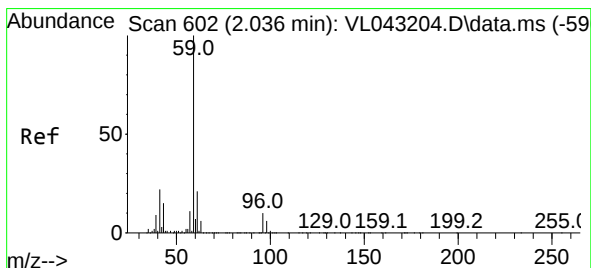
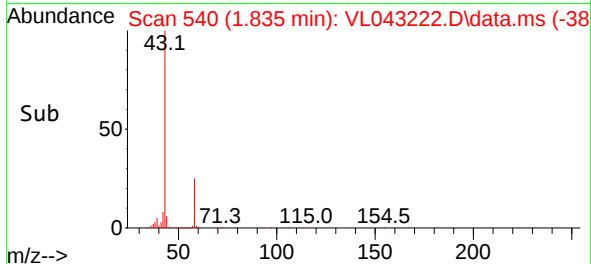
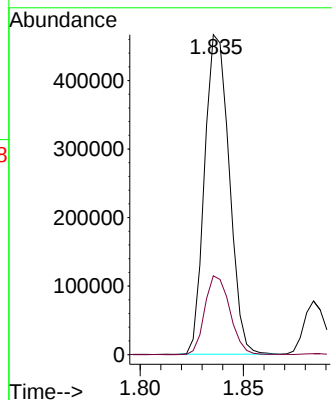
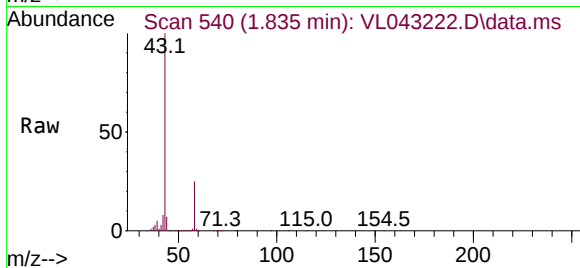
#15  
Acetone  
Concen: 28.640 ppbv  
RT: 1.835 min Scan# 54  
Delta R.T. 0.003 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 43 Resp: 387646  
Ion Ratio Lower Upper  
43 100  
58 25.0 20.7 31.1

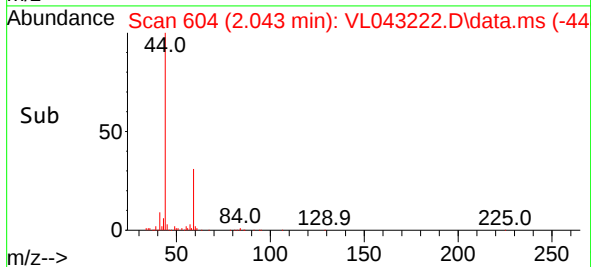
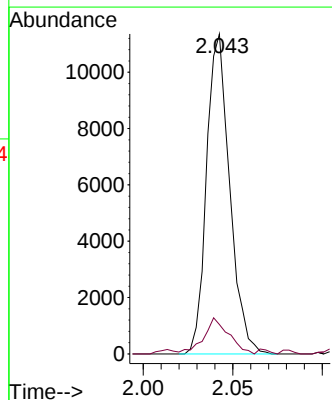
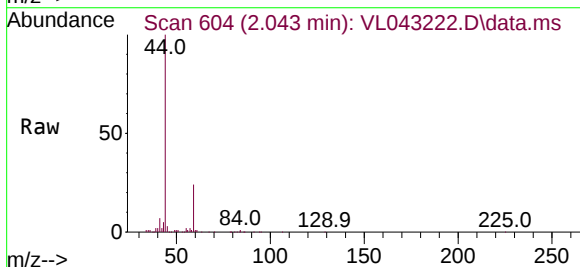
Manual Integrations  
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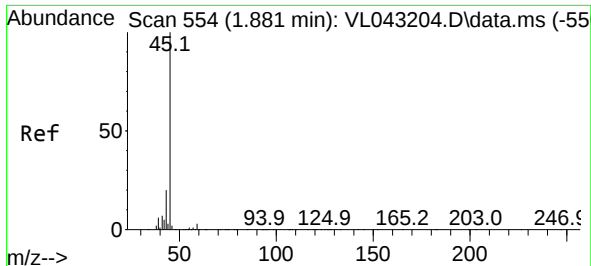
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#17  
tert-Butyl alcohol  
Concen: 0.573 ppbv m  
RT: 2.043 min Scan# 604  
Delta R.T. 0.006 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

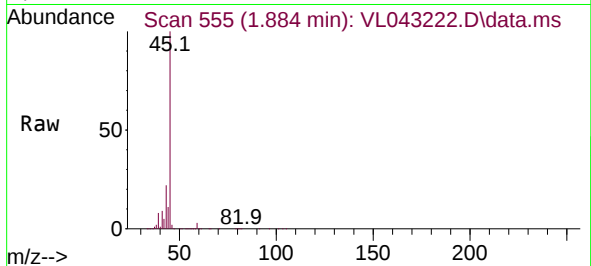
Tgt Ion: 59 Resp: 10185  
Ion Ratio Lower Upper  
59 100  
57 10.8 9.0 13.4





#19  
Isopropyl Alcohol  
Concen: 34.376 ppbv  
RT: 1.884 min Scan# 511  
Delta R.T. 0.003 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

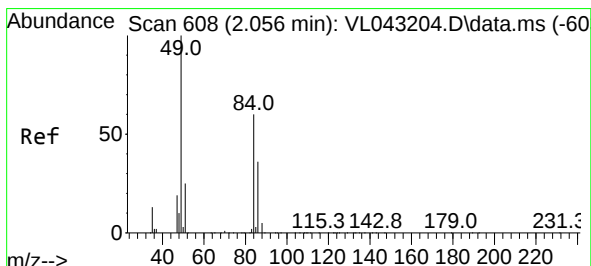
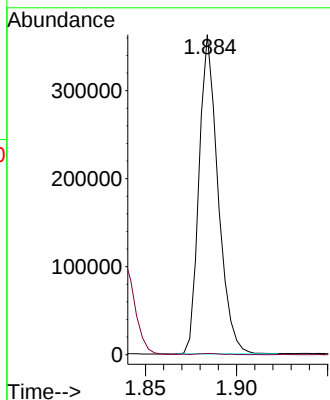
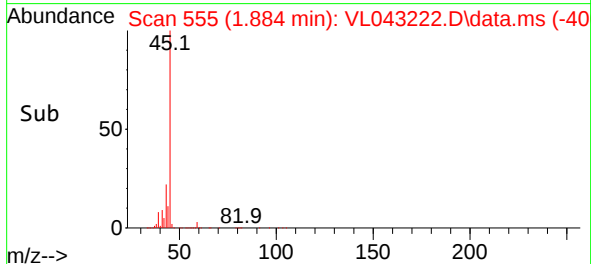
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



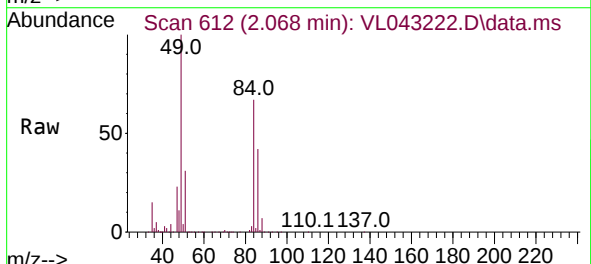
Tgt Ion: 45 Resp: 262922  
Ion Ratio Lower Upper  
45 100  
58 36.9 31.3 46.9

Manual Integrations  
APPROVED

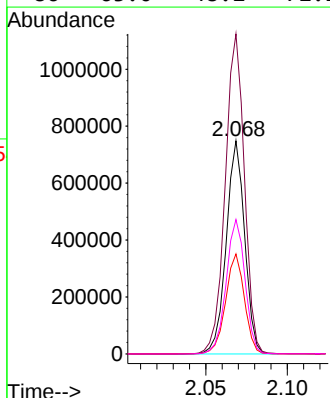
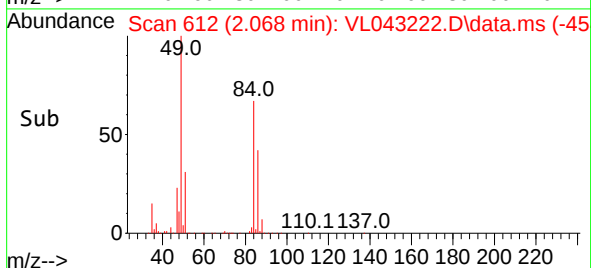
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025

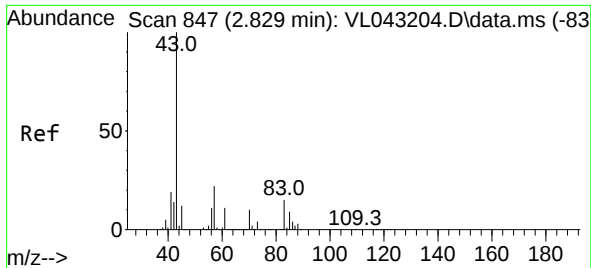


#20  
Methylene Chloride  
Concen: 160.005 ppbv  
RT: 2.068 min Scan# 612  
Delta R.T. 0.012 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29



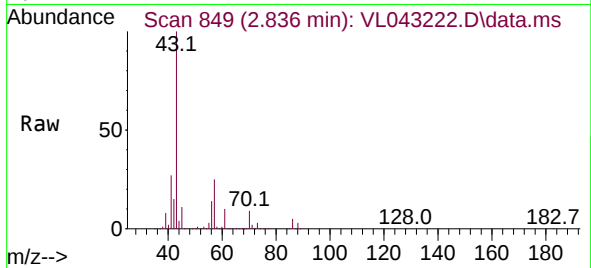
Tgt Ion: 84 Resp: 591192  
Ion Ratio Lower Upper  
84 100  
49 150.2 132.9 199.3  
51 46.9 34.8 52.2  
86 63.0 48.2 72.2





#25  
Ethyl Acetate  
Concen: 7.379 ppbv  
RT: 2.836 min Scan# 84  
Delta R.T. 0.006 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

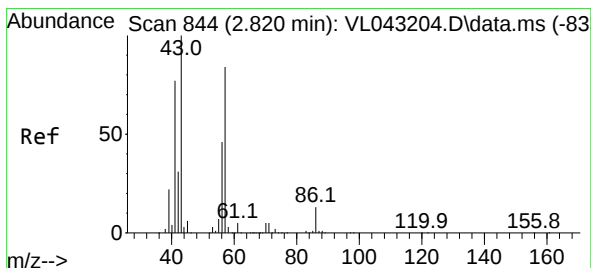
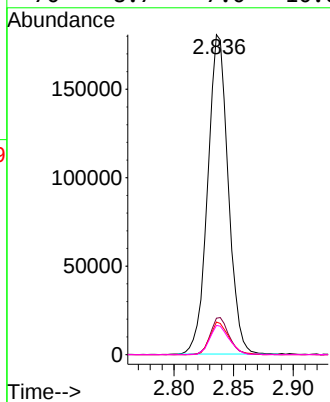
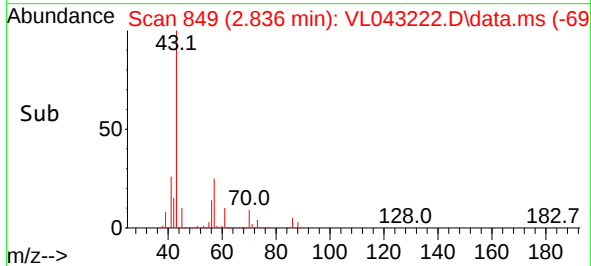
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



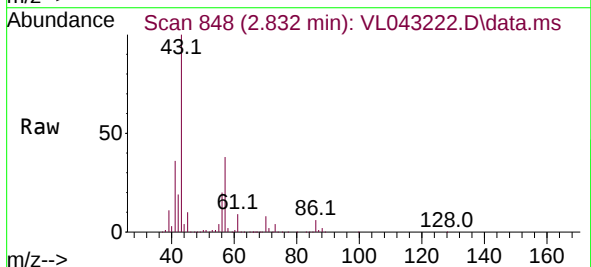
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Ion Ratio Lower Upper  
43 100  
45 10.8 8.1 12.1  
61 9.5 7.0 10.4  
70 8.7 7.0 10.6

Manual Integrations  
APPROVED

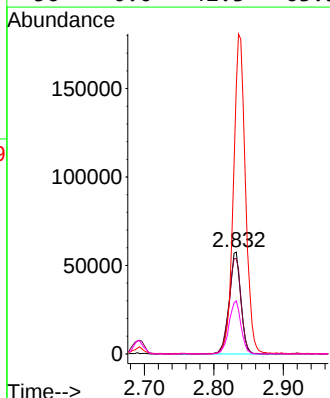
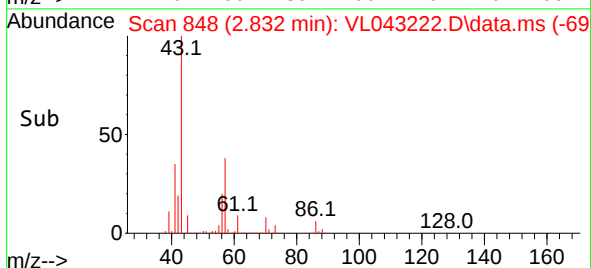
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025

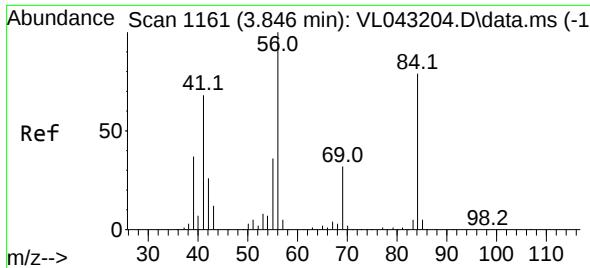


#26  
Hexane  
Concen: 5.194 ppbv m  
RT: 2.832 min Scan# 848  
Delta R.T. 0.013 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29



Tgt Ion: 57 Resp: 66477  
Ion Ratio Lower Upper  
57 100  
41 0.0 74.6 111.8#  
43 0.0 179.0 268.4#  
56 0.0 42.3 63.5#





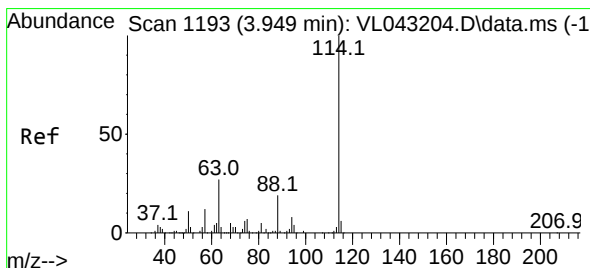
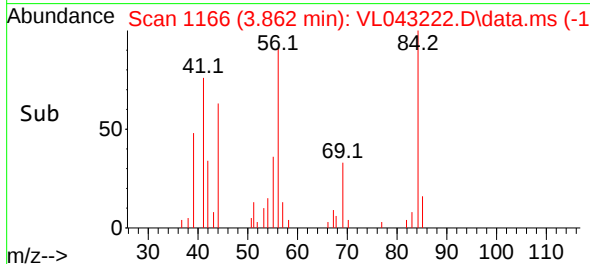
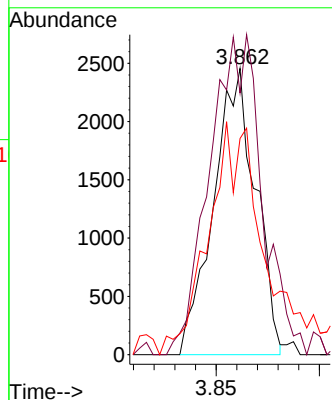
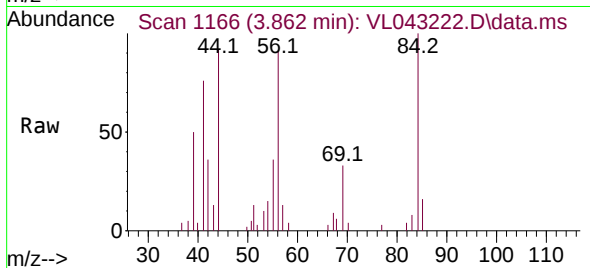
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Cyclohexane  
Concen: 0.325 ppbv  
RT: 3.862 min Scan# 1161  
Delta R.T. 0.016 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 84 Resp: 3485  
Ion Ratio Lower Upper  
84 100  
56 142.3 104.7 157.1  
41 115.2 69.0 103.6

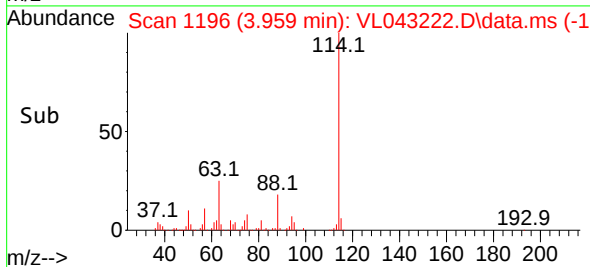
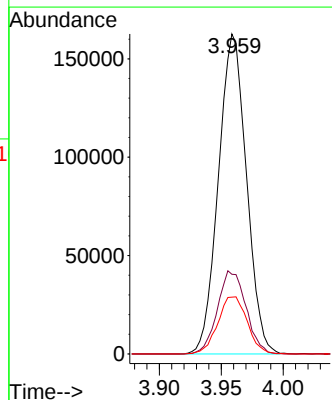
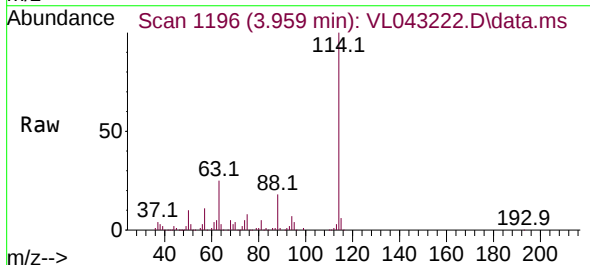
Manual Integrations  
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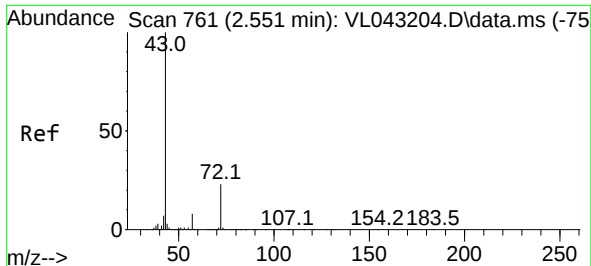
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 3.959 min Scan# 1196  
Delta R.T. 0.009 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

Tgt Ion:114 Resp: 255477  
Ion Ratio Lower Upper  
114 100  
63 26.4 21.0 31.6  
88 18.7 14.9 22.3





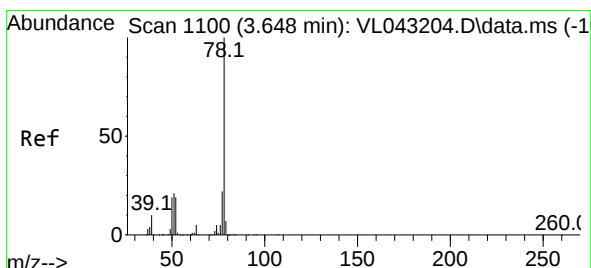
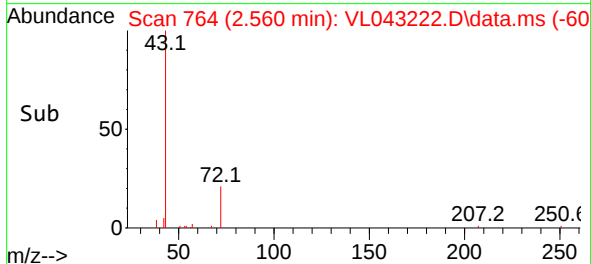
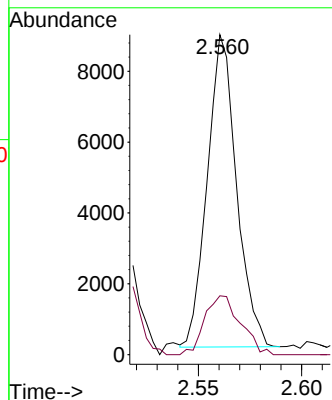
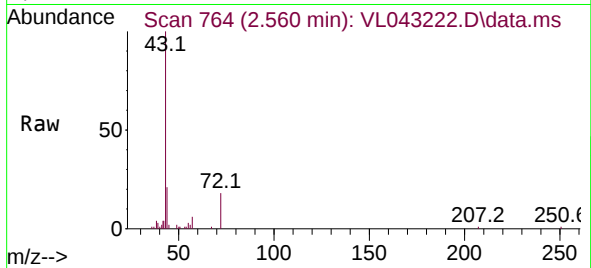
#34  
2-Butanone  
Concen: 0.482 ppbv  
RT: 2.560 min Scan# 70  
Delta R.T. 0.009 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 43 Resp: 8685  
Ion Ratio Lower Upper  
43 100  
72 23.0 18.1 27.1

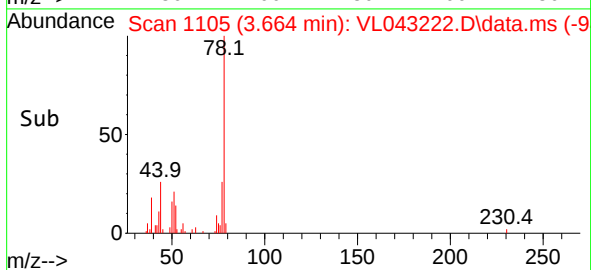
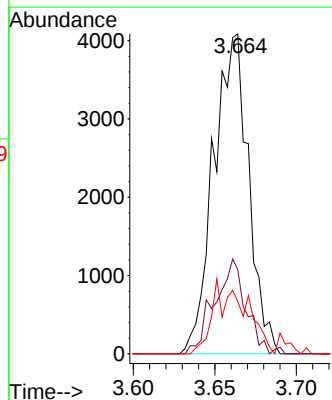
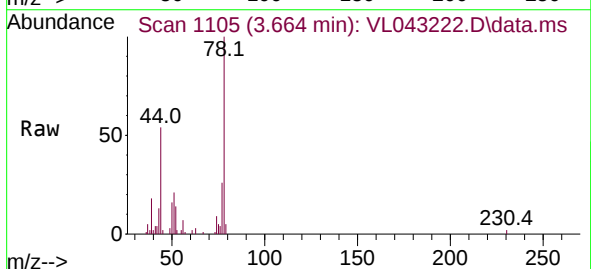
Manual Integrations  
APPROVED

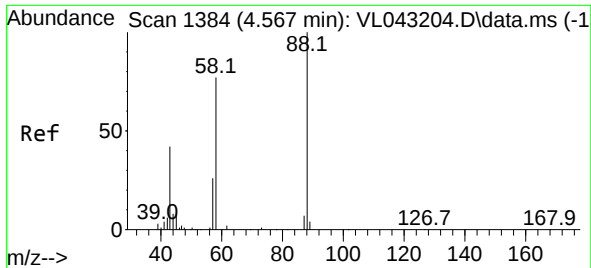
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#36  
Benzene  
Concen: 0.249 ppbv  
RT: 3.664 min Scan# 1105  
Delta R.T. 0.016 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

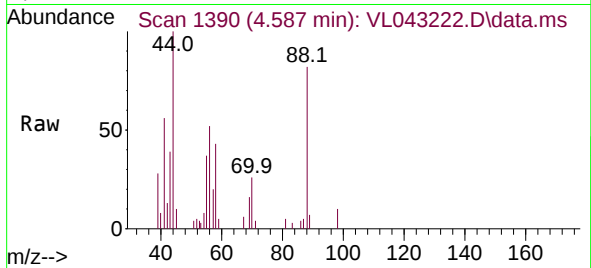
Tgt Ion: 78 Resp: 6086  
Ion Ratio Lower Upper  
78 100  
77 26.3 17.5 26.3#  
50 16.3 15.5 23.3





#40  
1,4-Dioxane  
Concen: 0.888 ppbv m  
RT: 4.587 min Scan# 1384  
Delta R.T. 0.019 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

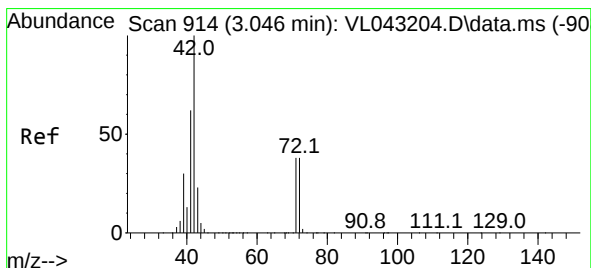
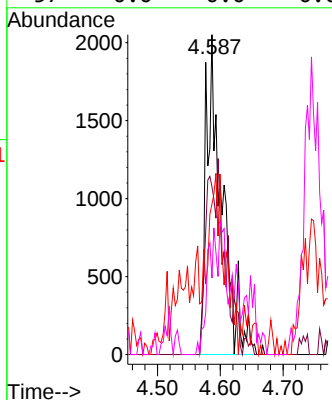
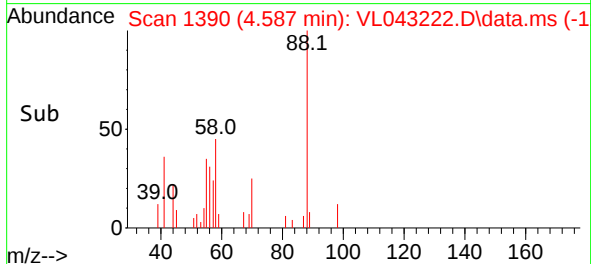
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion: 88 Resp: 3574  
Ion Ratio Lower Upper  
88 100  
58 0.0 63.0 94.6#  
43 0.0 32.5 48.7#  
57 0.0 0.0 0.0

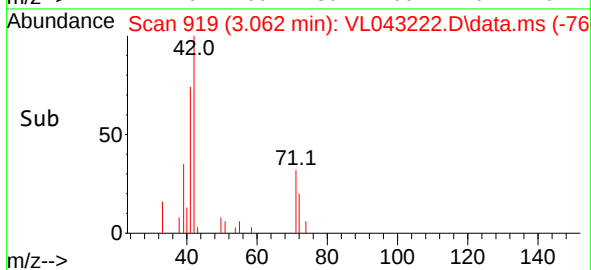
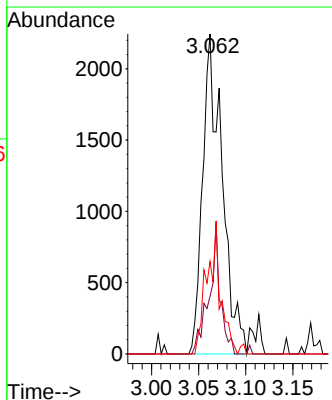
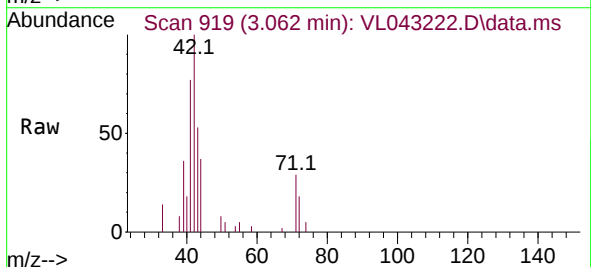
Manual Integrations  
APPROVED

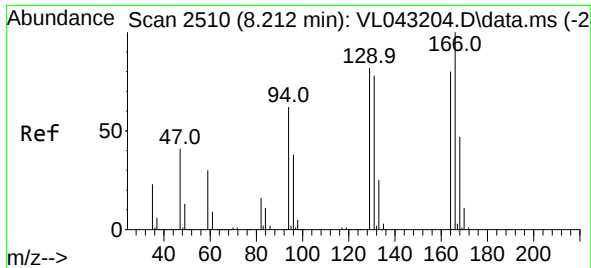
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#41  
Tetrahydrofuran  
Concen: 0.339 ppbv m  
RT: 3.062 min Scan# 919  
Delta R.T. 0.016 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

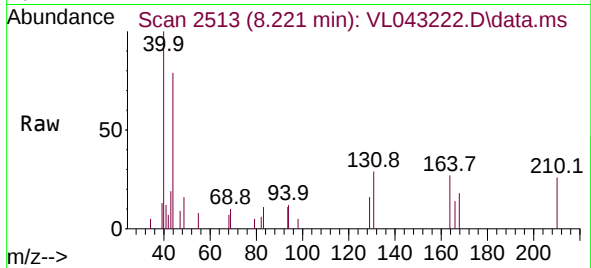
Tgt Ion: 42 Resp: 3376  
Ion Ratio Lower Upper  
42 100  
72 0.0 30.6 46.0#  
71 0.0 30.5 45.7#





#52  
Tetrachloroethene  
Concen: 0.044 ppbv m  
RT: 8.221 min Scan# 2113  
Delta R.T. 0.009 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

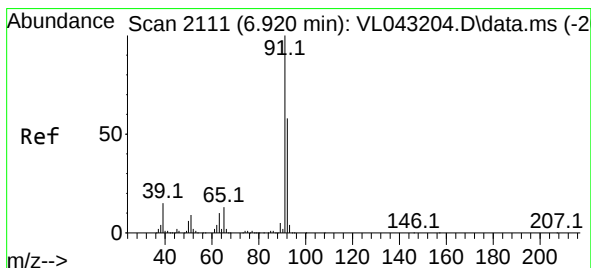
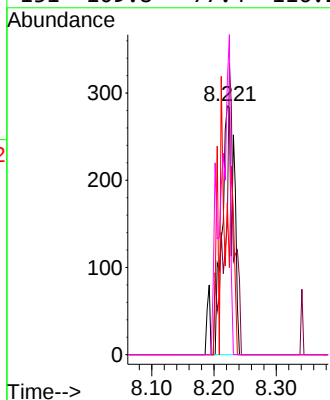
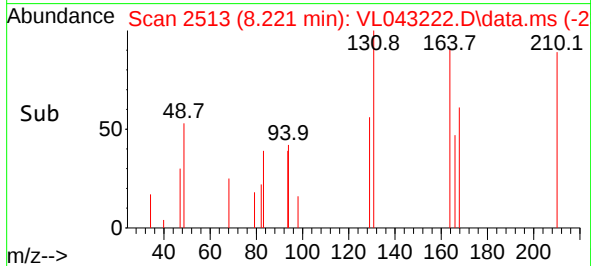
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion:164 Resp: 399  
Ion Ratio Lower Upper  
164 100  
166 51.6 99.4 149.2  
129 61.1 81.8 122.8  
131 109.8 77.4 116.2

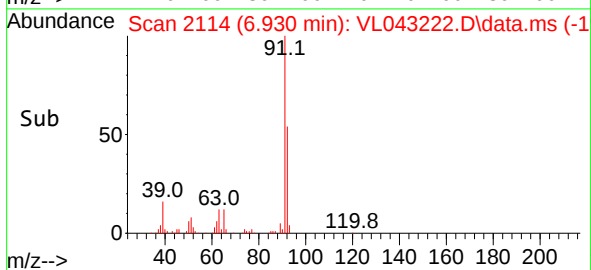
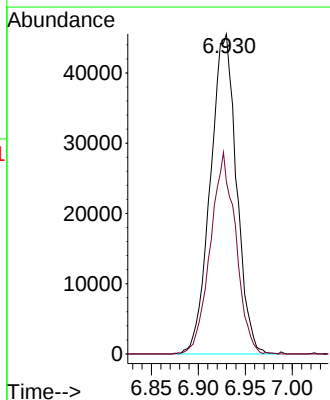
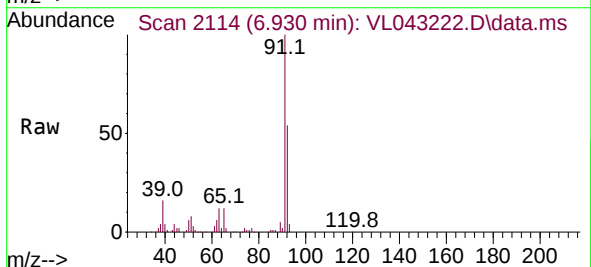
Manual Integrations  
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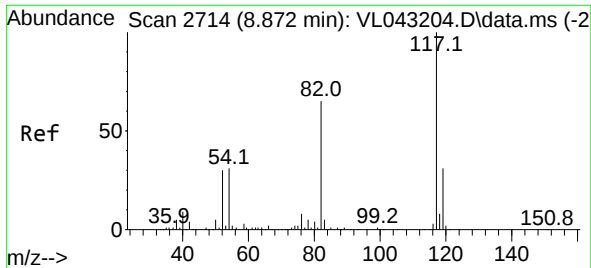
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#53  
Toluene  
Concen: 3.051 ppbv  
RT: 6.930 min Scan# 2114  
Delta R.T. 0.009 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

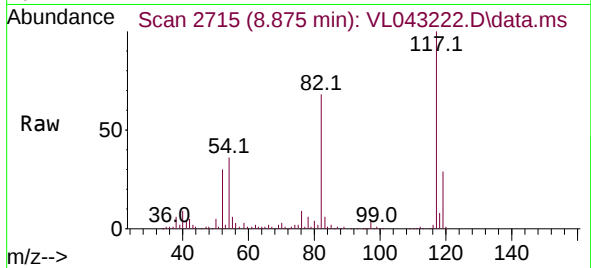
Tgt Ion: 91 Resp: 88387  
Ion Ratio Lower Upper  
91 100  
92 61.2 47.4 71.0





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 8.875 min Scan# 2715  
Delta R.T. 0.003 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

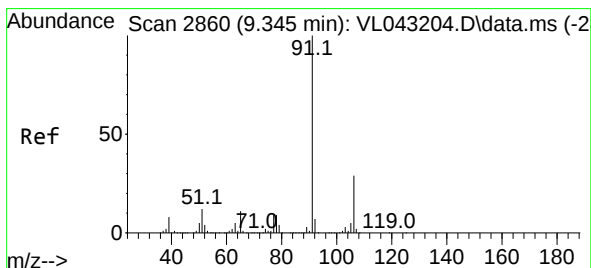
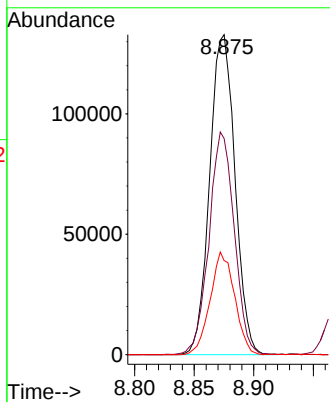
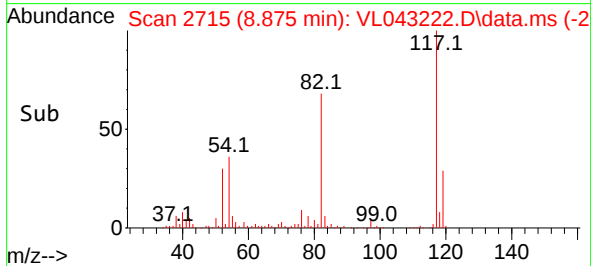
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1



Tgt Ion:117 Resp: 197025  
Ion Ratio Lower Upper  
117 100  
82 69.4 56.1 84.1  
119 30.9 25.0 37.6

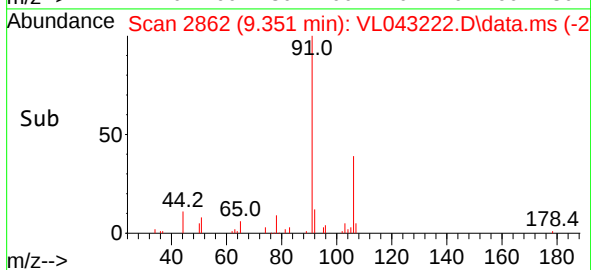
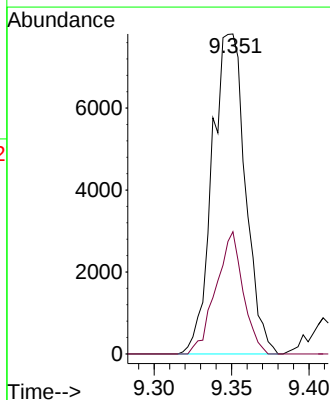
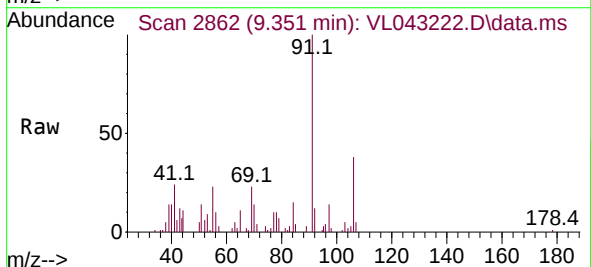
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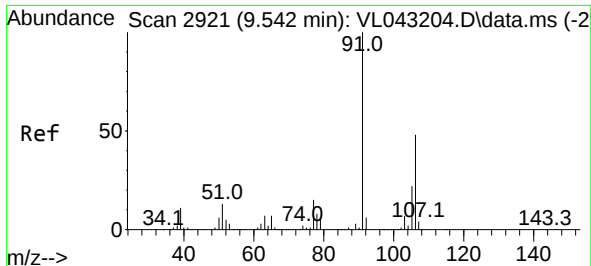
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#58  
Ethyl Benzene  
Concen: 0.307 ppbv  
RT: 9.351 min Scan# 2862  
Delta R.T. 0.006 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

Tgt Ion: 91 Resp: 11657  
Ion Ratio Lower Upper  
91 100  
106 38.2 22.8 34.2#





#59

m/p-Xylene

Concen: 0.824 ppbv

RT: 9.529 min Scan# 29

Delta R.T. -0.013 min

Lab File: VL043222.D

Acq: 18 Nov 2025 20:29

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion: 91 Resp: 25042

Ion Ratio Lower Upper

91 100

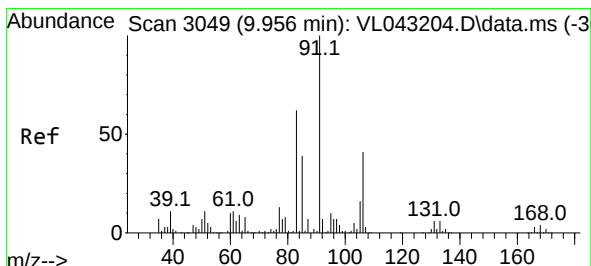
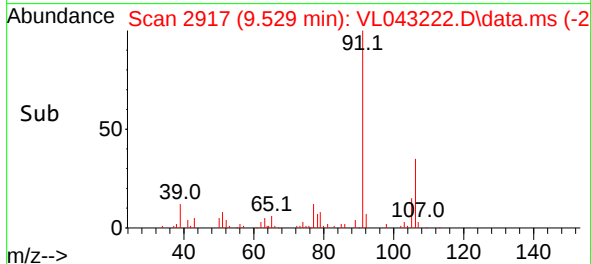
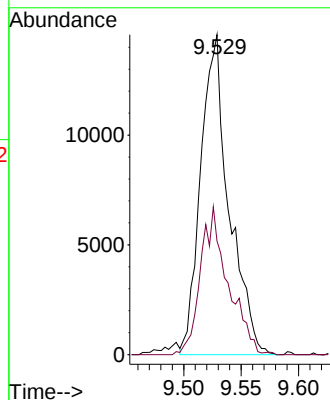
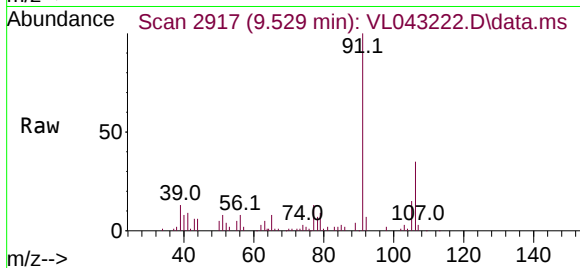
106 45.0 36.1 54.1

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/19/2025

Supervised By :Mahesh Dadoda 11/19/2025



#60

o-Xylene

Concen: 0.403 ppbv

RT: 9.956 min Scan# 3049

Delta R.T. -0.000 min

Lab File: VL043222.D

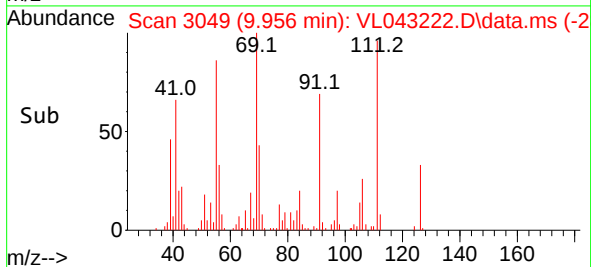
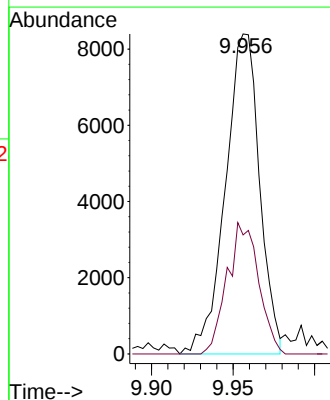
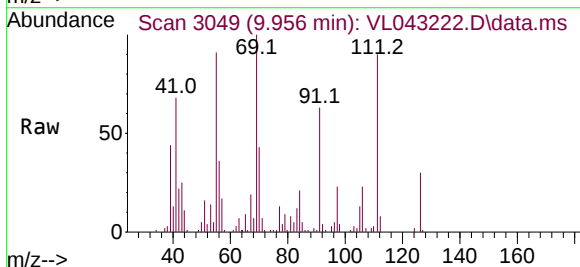
Acq: 18 Nov 2025 20:29

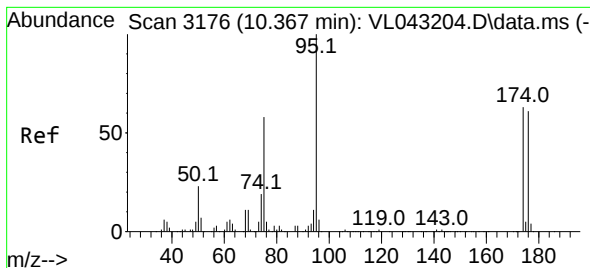
Tgt Ion: 91 Resp: 12246

Ion Ratio Lower Upper

91 100

106 37.7 20.9 62.8





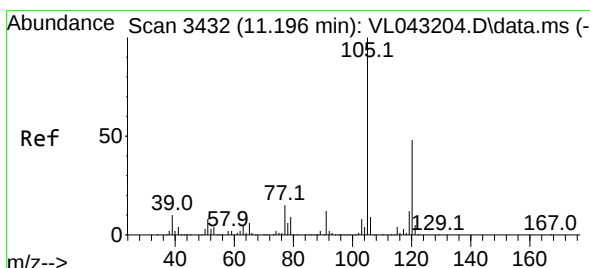
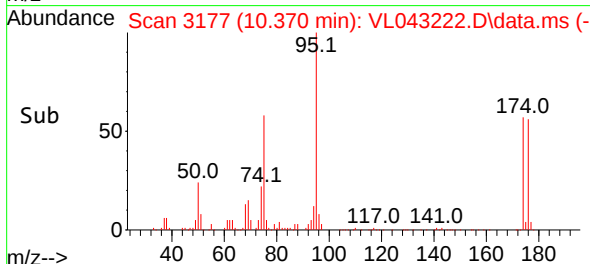
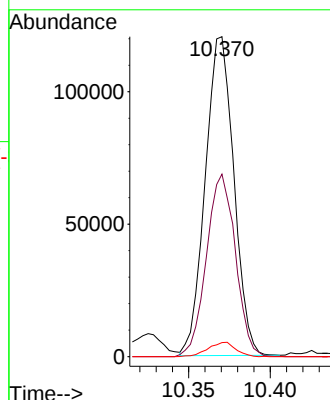
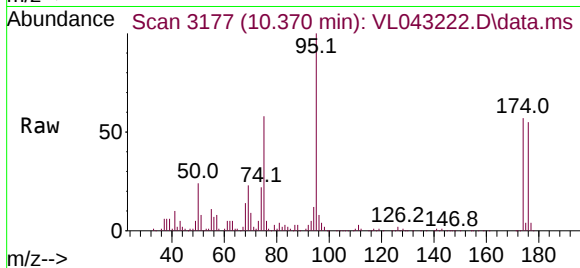
#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.185 ppbv  
RT: 10.370 min Scan# 3176  
Delta R.T. 0.003 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 95 Resp: 14708  
Ion Ratio Lower Upper  
95 100  
174 57.9 50.2 75.2  
175 4.3 4.1 6.1

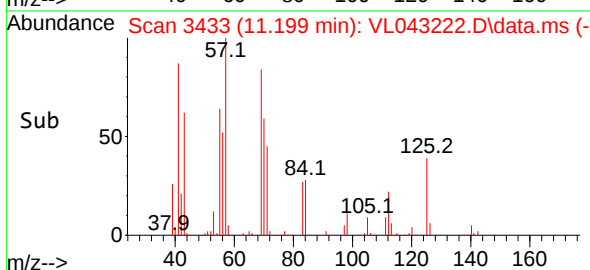
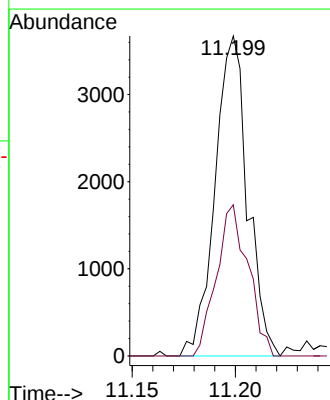
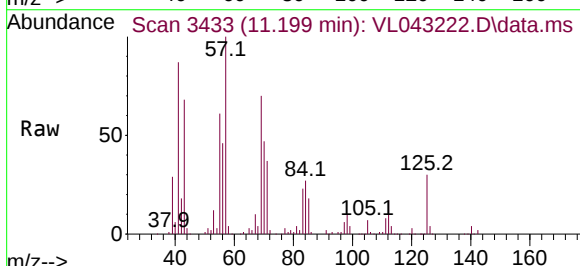
Manual Integrations  
APPROVED

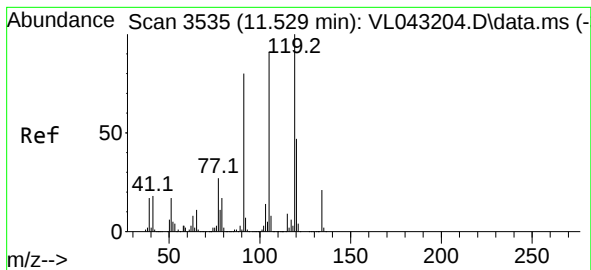
Reviewed By :Semsettin Yesilyurt 11/19/2025  
Supervised By :Mahesh Dadoda 11/19/2025



#73  
1,3,5-Trimethylbenzene  
Concen: 0.130 ppbv  
RT: 11.199 min Scan# 3433  
Delta R.T. 0.003 min  
Lab File: VL043222.D  
Acq: 18 Nov 2025 20:29

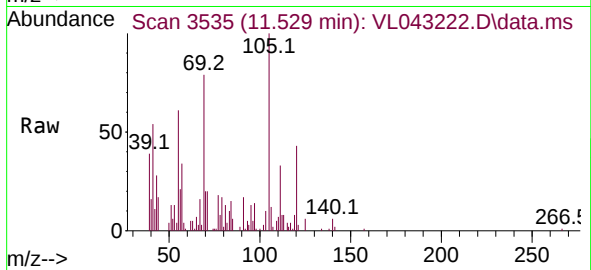
Tgt Ion:105 Resp: 4030  
Ion Ratio Lower Upper  
105 100  
120 47.3 38.6 57.8





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.230 ppbv  
 RT: 11.529 min Scan# 3535  
 Delta R.T. -0.000 min  
 Lab File: VL043222.D  
 Acq: 18 Nov 2025 20:29

Instrument : MSVOA\_L  
 ClientSampleId : SV1



|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 778   |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 42.4  | 41.7  | 62.5  |
| 91       | 13.6  | 70.0  | 105.0 |
| 77       | 9.4   | 23.8  | 35.8  |

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 11/19/2025  
 Supervised By :Mahesh Dadoda 11/19/2025

