

**Supplemental Information for:**

**Phase Pure Triacetone Triperoxide –  
the Influence of Ionic Strength, Oxidant Source, and Acid Catalyst**

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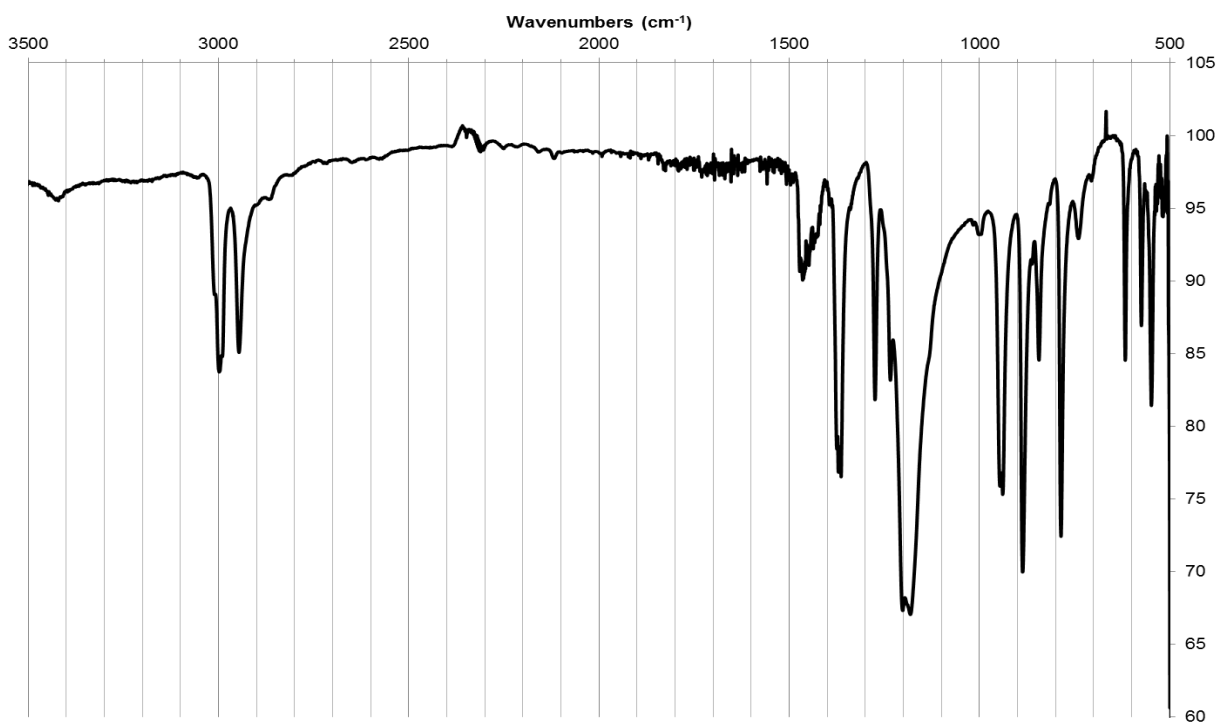
**FTIR of TATP**

**S2**

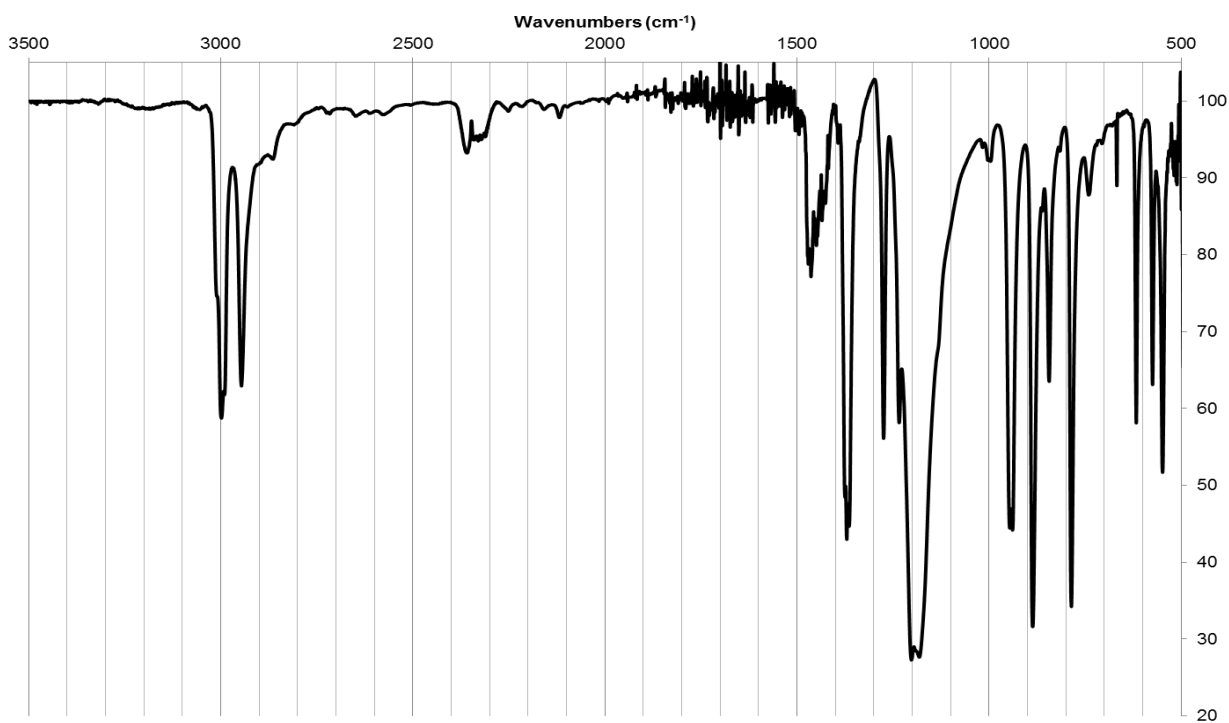
**GC-MS Chromatograms of TATP specimens**

**S3-S9**

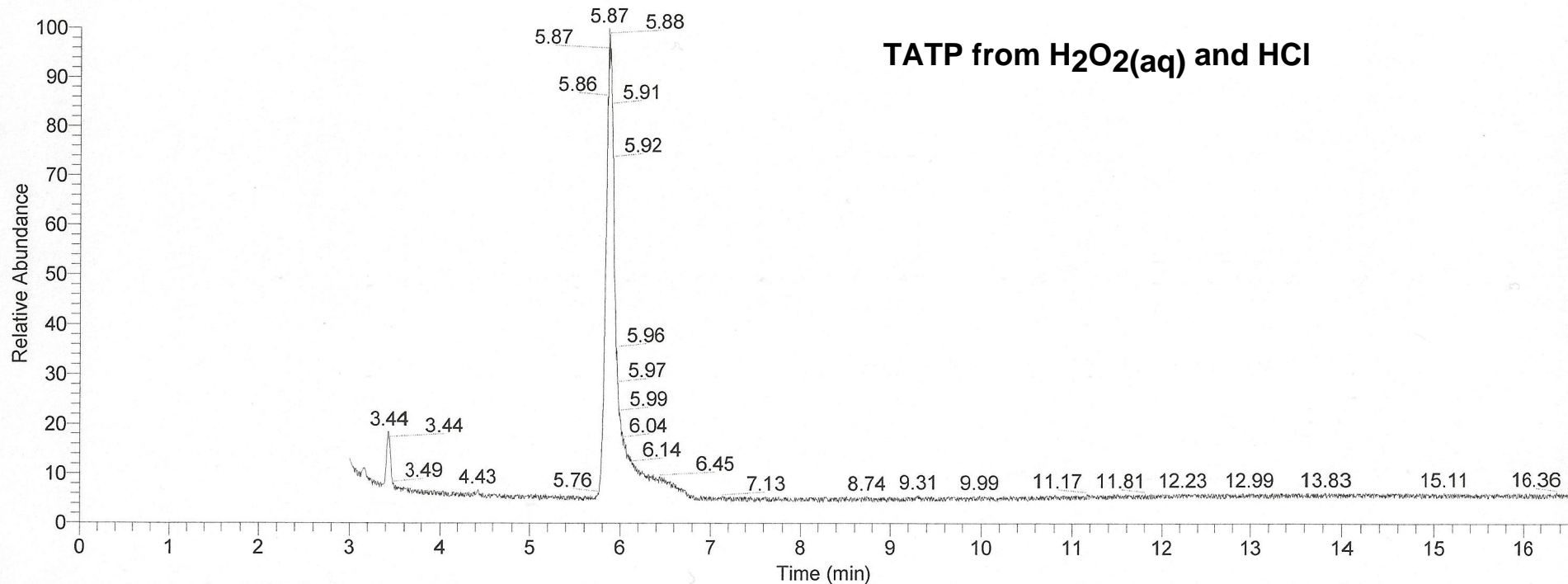
### TATP from $\text{H}_2\text{O}_{2(\text{aq})}$ using HCl



### TATP from $\text{H}_2\text{O}_{2(\text{aq})}$ using $\text{SnCl}_4$

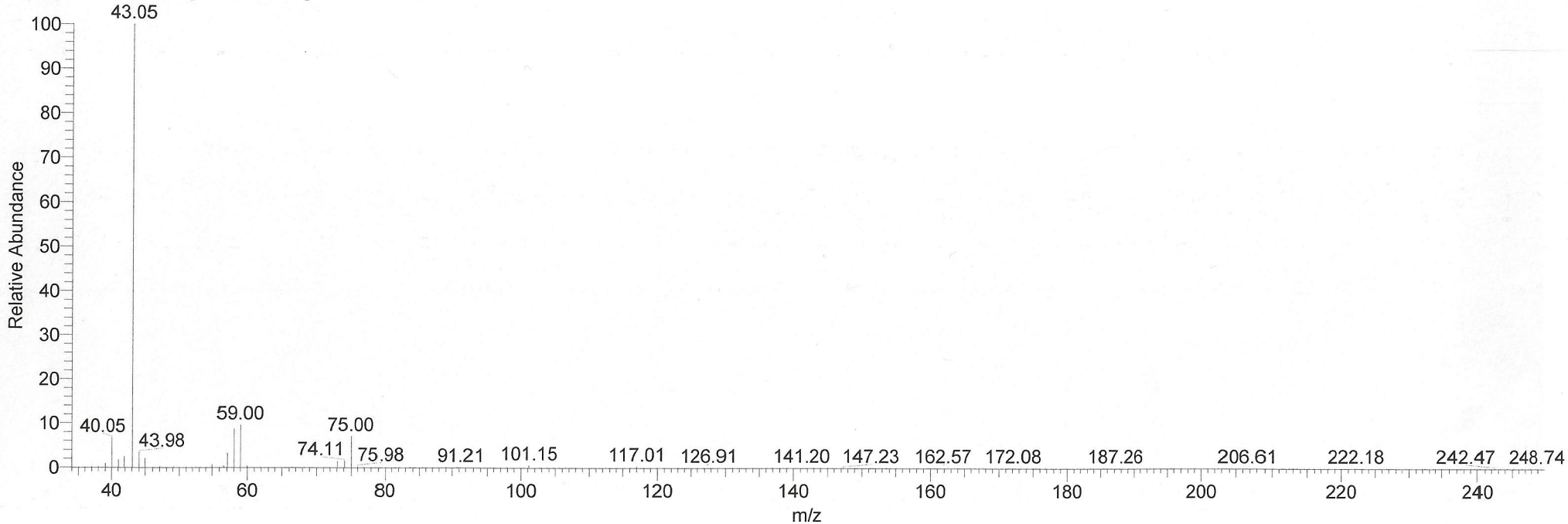


RT: 0.00 - 16.53

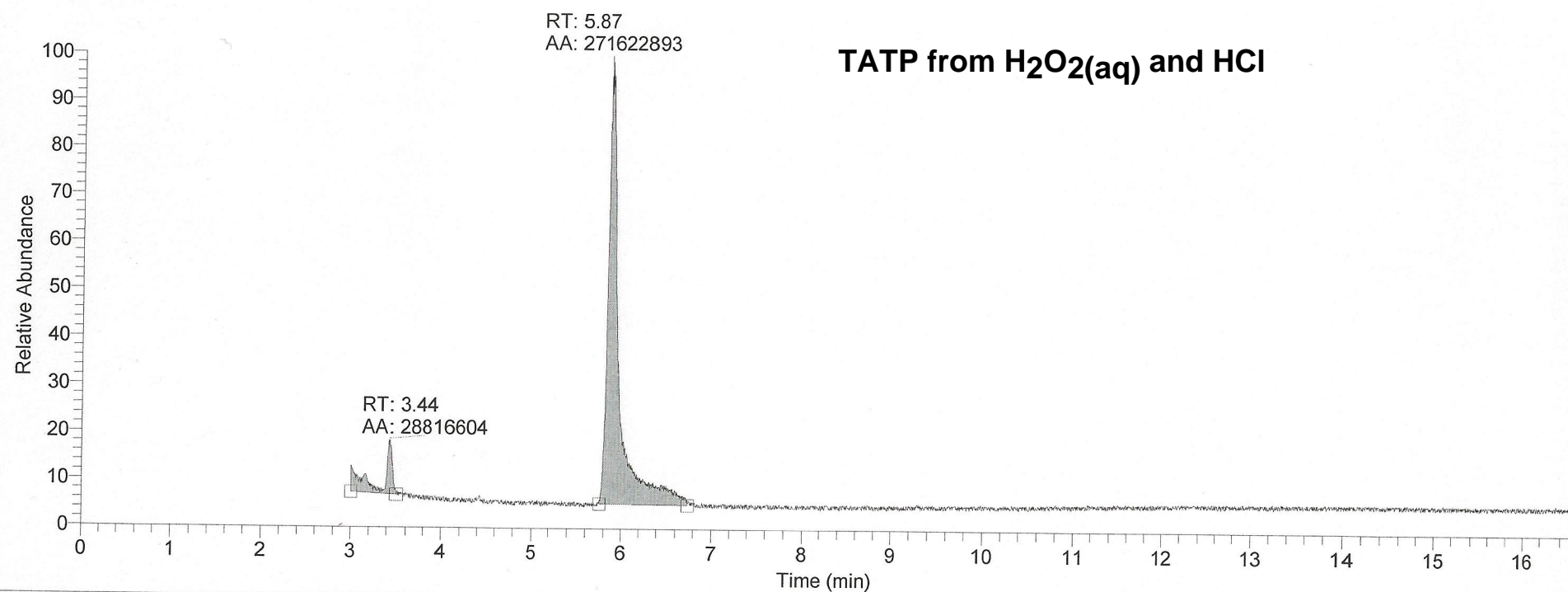


NL:  
3.25E7  
TIC MS  
130131\_W  
B01

130131\_WB01 #845 RT: 5.87 AV: 1 NL: 1.94E7  
T: {0,0} + c EI Full ms [34.00-250.00]

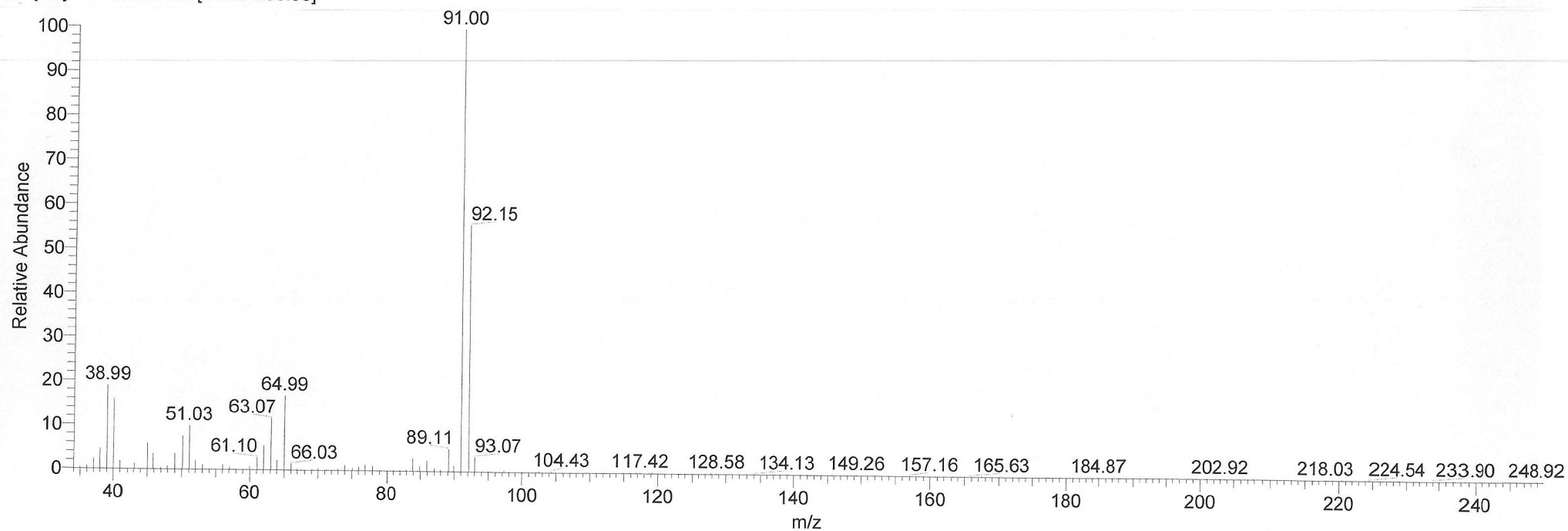


RT: 0.00 - 16.53

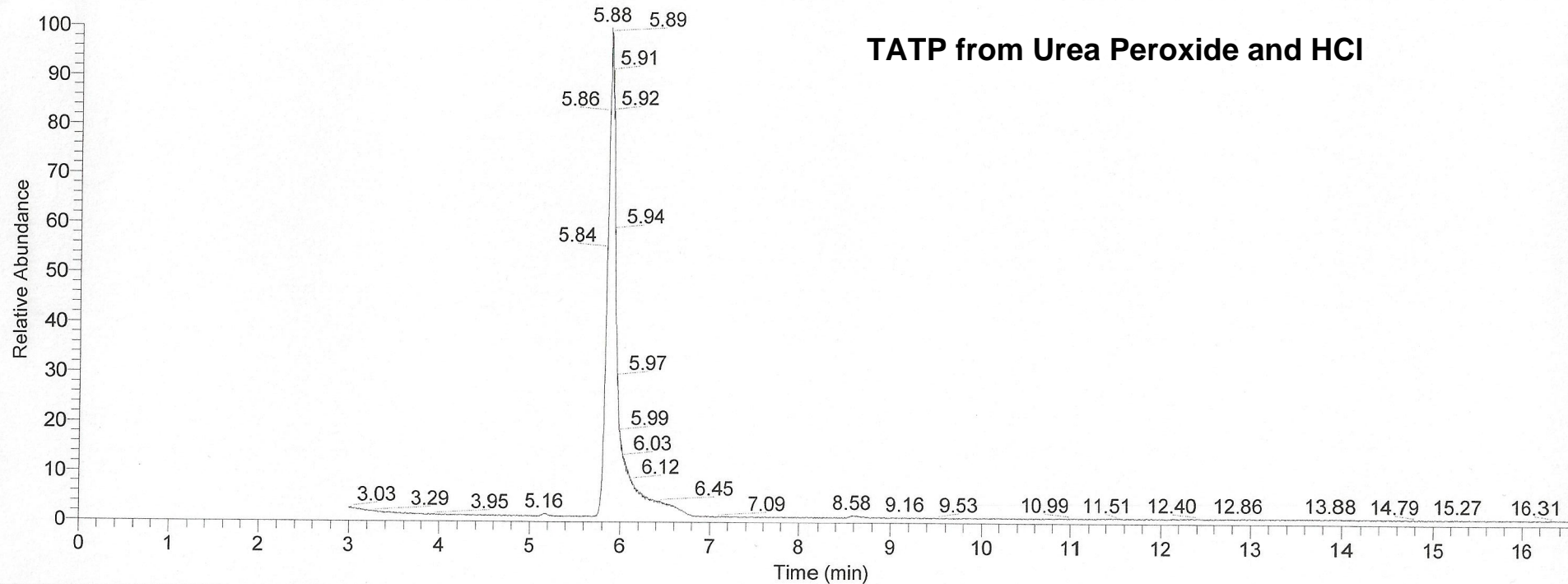


NL:  
3.25E7  
TIC MS  
Genesis  
130131\_W  
B01

130131\_WB01 #127 RT: 3.43 AV: 1 SB: 118 3.23-3.33, 3.65-3.95 NL: 1.27E6  
T: {0,0} + c EI Full ms [34.00-250.00]



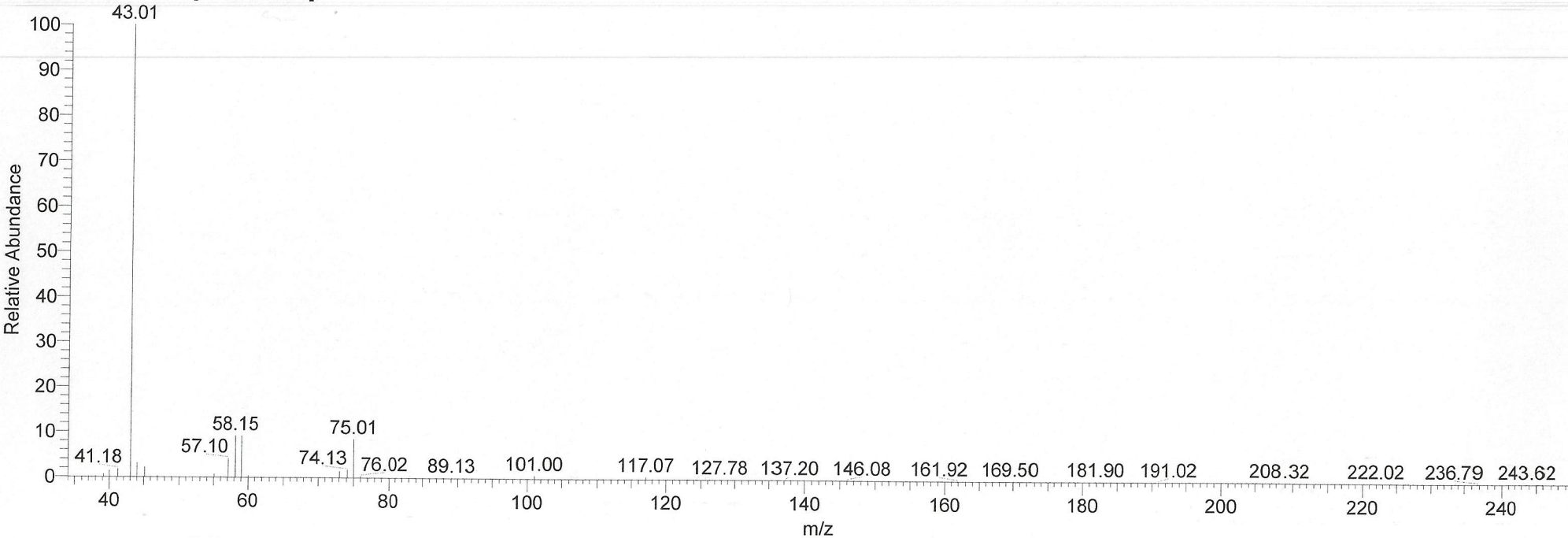
RT: 0.00 - 16.50



NL:  
1.50E8  
TIC MS  
130131\_W  
B02

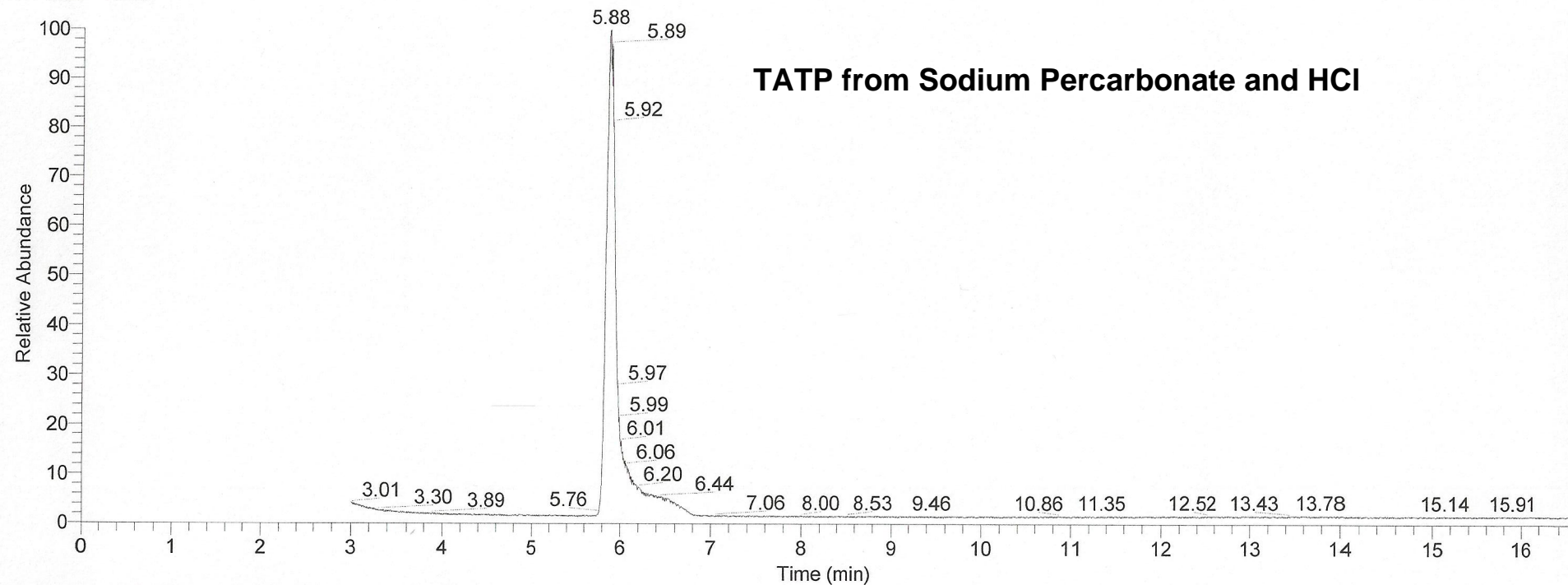
130131\_WB02 #849 RT: 5.88 AV: 1 NL: 9.37E7

T: {0,0} + c EI Full ms [34.00-250.00]



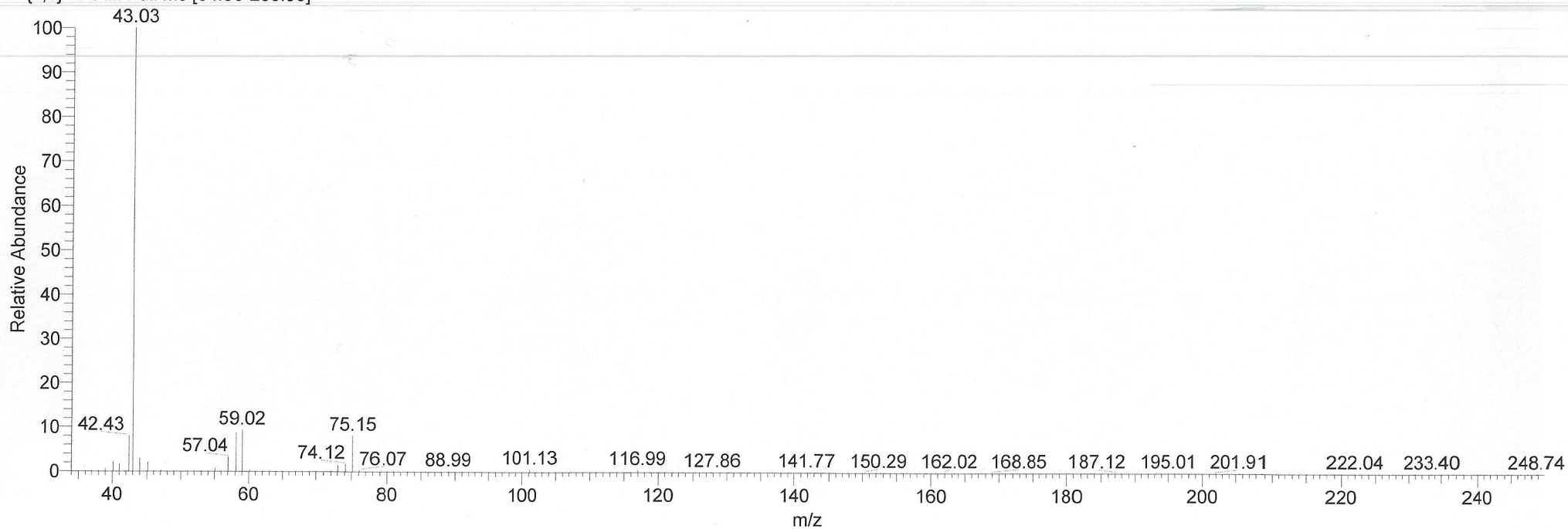


RT: 0.00 - 16.52

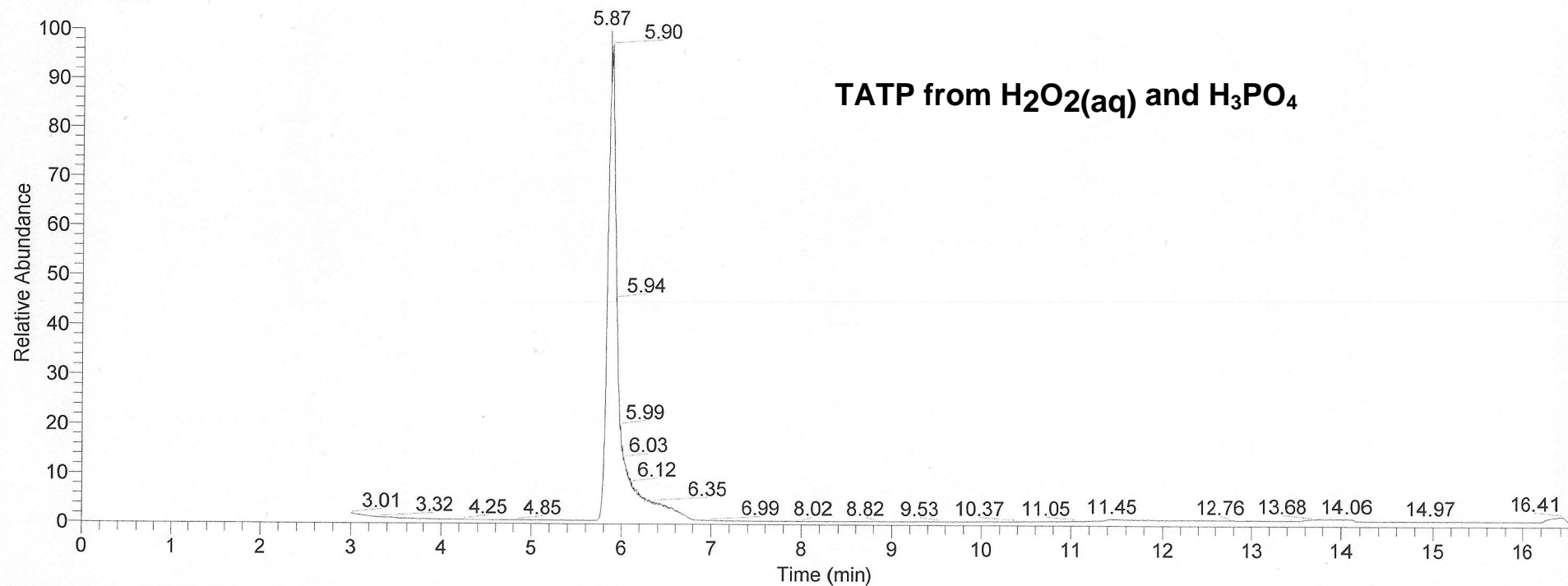


NL:  
9.66E7  
TIC MS  
130131\_W  
B03

130131\_WB03 #847 RT: 5.88 AV: 1 NL: 6.18E7  
T: {0,0} + c EI Full ms [34.00-250.00]



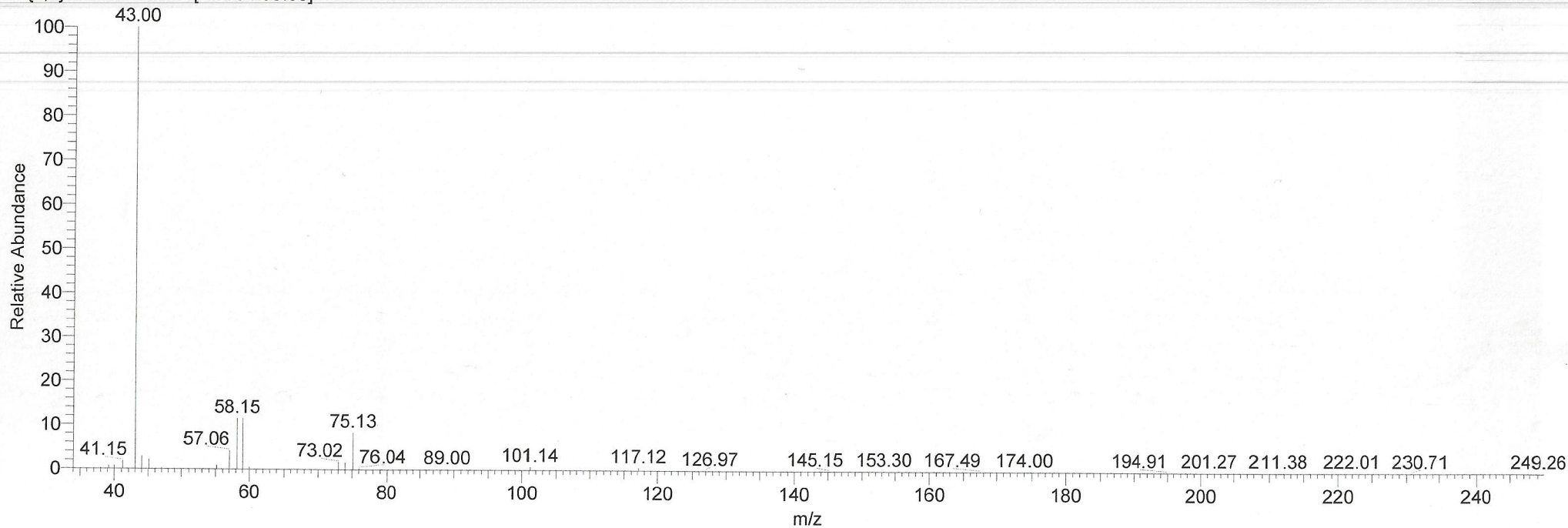
RT: 0.00 - 16.51



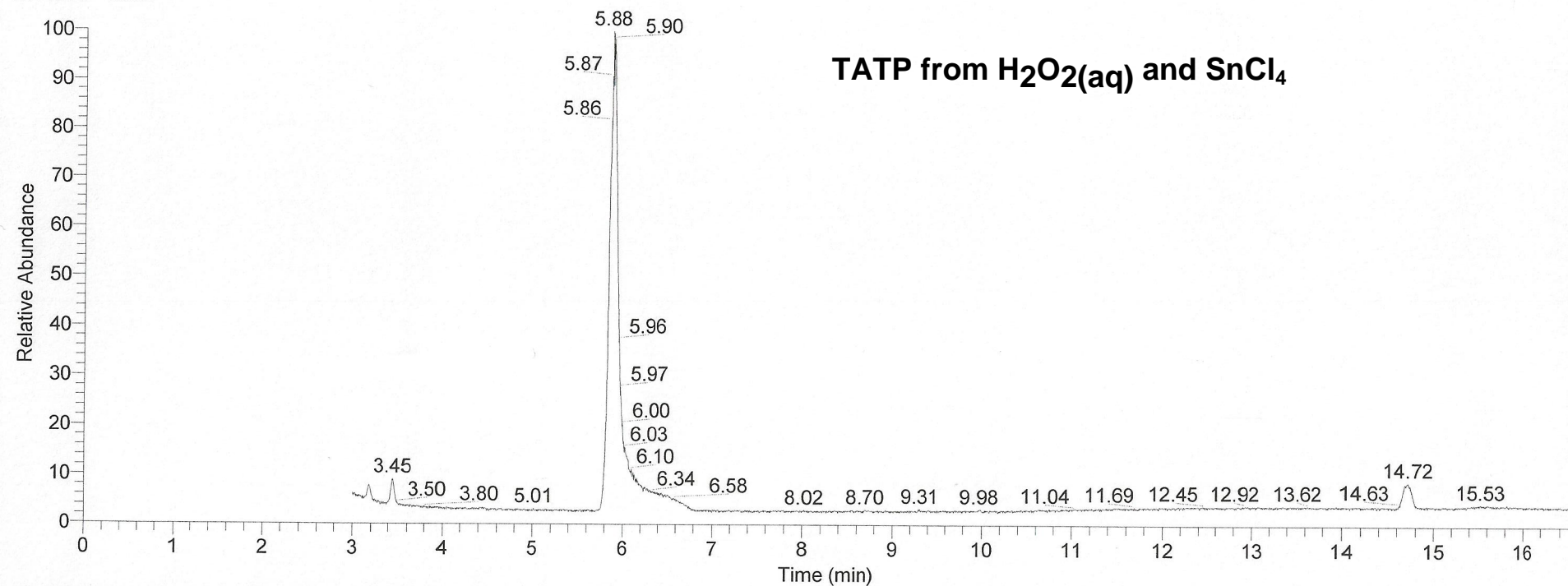
NL:  
1.39E8  
TIC MS  
130131\_W  
B04

130131\_WB04 #845 RT: 5.87 AV: 1 NL: 8.19E7

T: {0,0} + c EI Full ms [34.00-250.00]

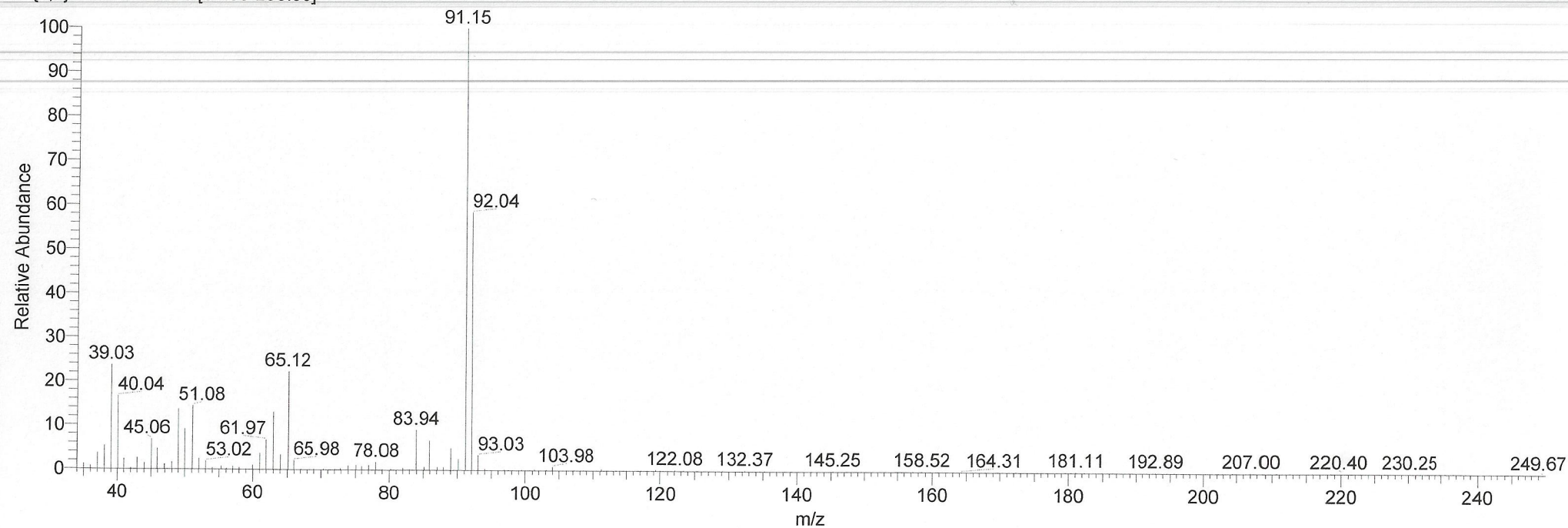


RT: 0.00 - 16.53



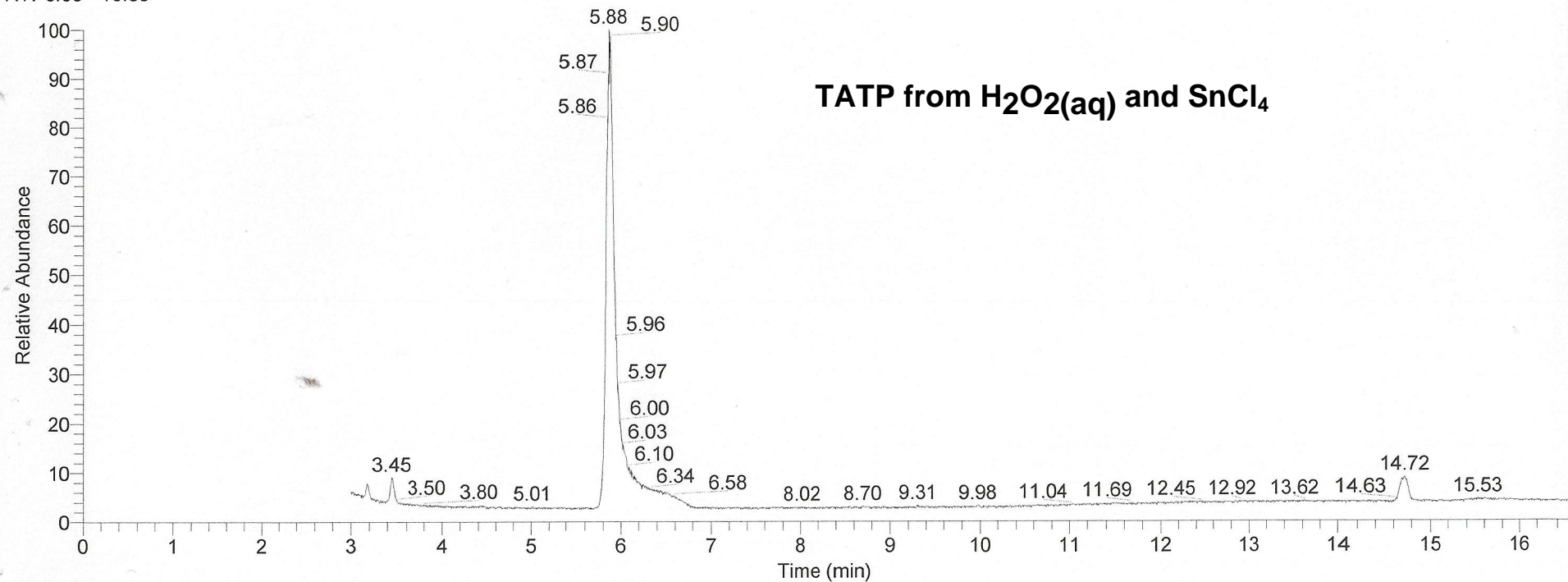
NL:  
3.21E7  
TIC MS  
130131\_W  
B06

130131\_WB06 #134 RT: 3.45 AV: 1 SB: 205 3.26, 3.68-4.37 NL: 5.06E5  
T: {0,0} + c EI Full ms [34.00-250.00]





RT: 0.00 - 16.53



NL:  
3.21E7  
TIC MS  
130131\_W  
B06

130131\_WB06 #51-57 RT: 3.17-3.19 AV: 7 SB: 55 3.01-3.10 , 3.25-3.33 NL: 4.29E5

T: {0,0} + c EI Full ms [34.00-250.00]

