Example of accepted LA-ICP-MS analysis for the matrix.

The x-axis represents time acquisition in seconds, and the y-axis is the number of counts. The blue box delineates the window of time selected for data acquisition. Iron counts within the blue red box remain constant until increasing significantly after 75 s, suggesting that the laser has encountered a pyrite grain(s). In this example, only the data within the blue box would have been used for data reduction to avoid possible addition of pyrite to the matrix analysis.
Example of rejected LA-ICP-MS analysis for the matrix.

The x-axis represents time acquisition in seconds, and the y-axis is the number of counts. Iron counts increase significantly shortly after the ablation has started, suggesting that a pyrite grain was encountered shortly after data acquisition began. In this example, the entire analysis would have been rejected, as it would reflect the composition of an unconstrained mixture of pyrite and matrix.