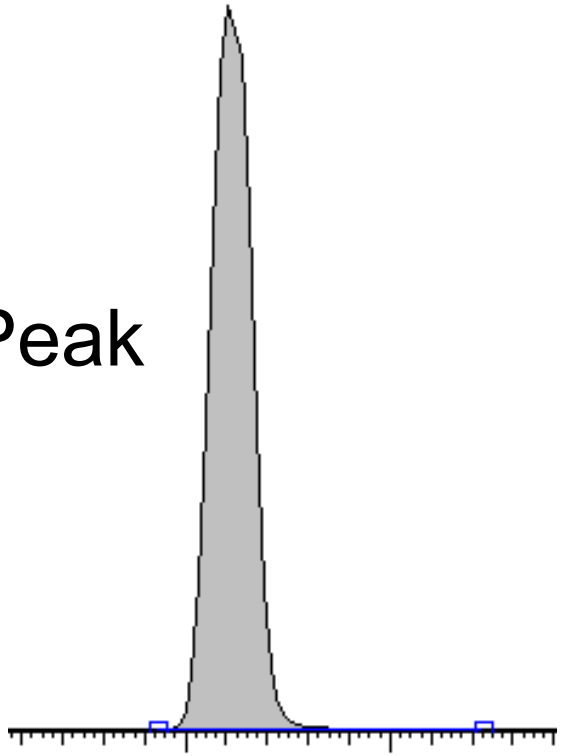
Data Interpretation – Understanding Results

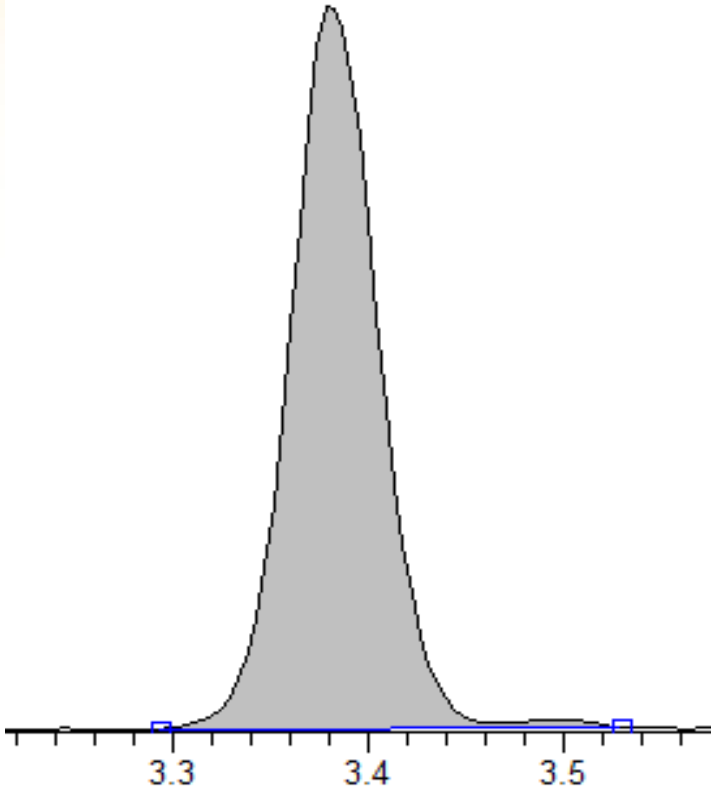
What does analytical data look like?

Integrated Chromatographic Peak



Quantifiable Peak

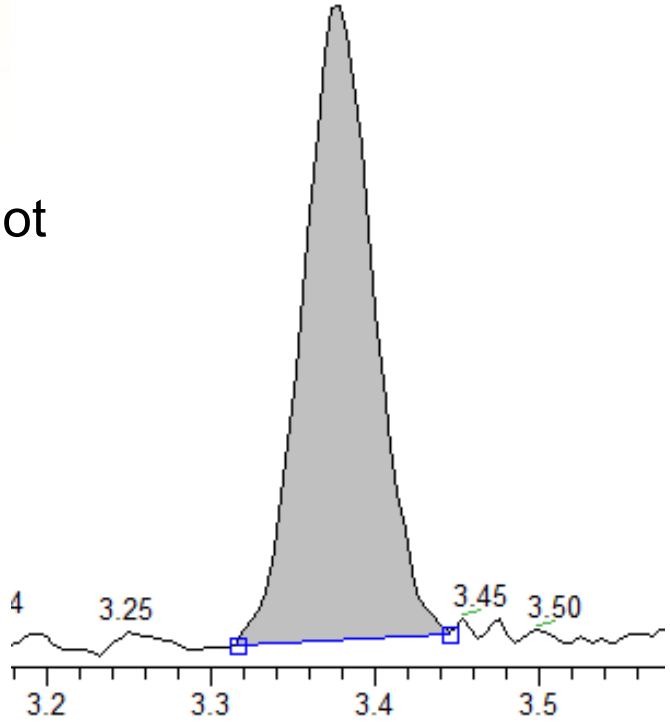
Compound of interest is within the quantitation range of the method



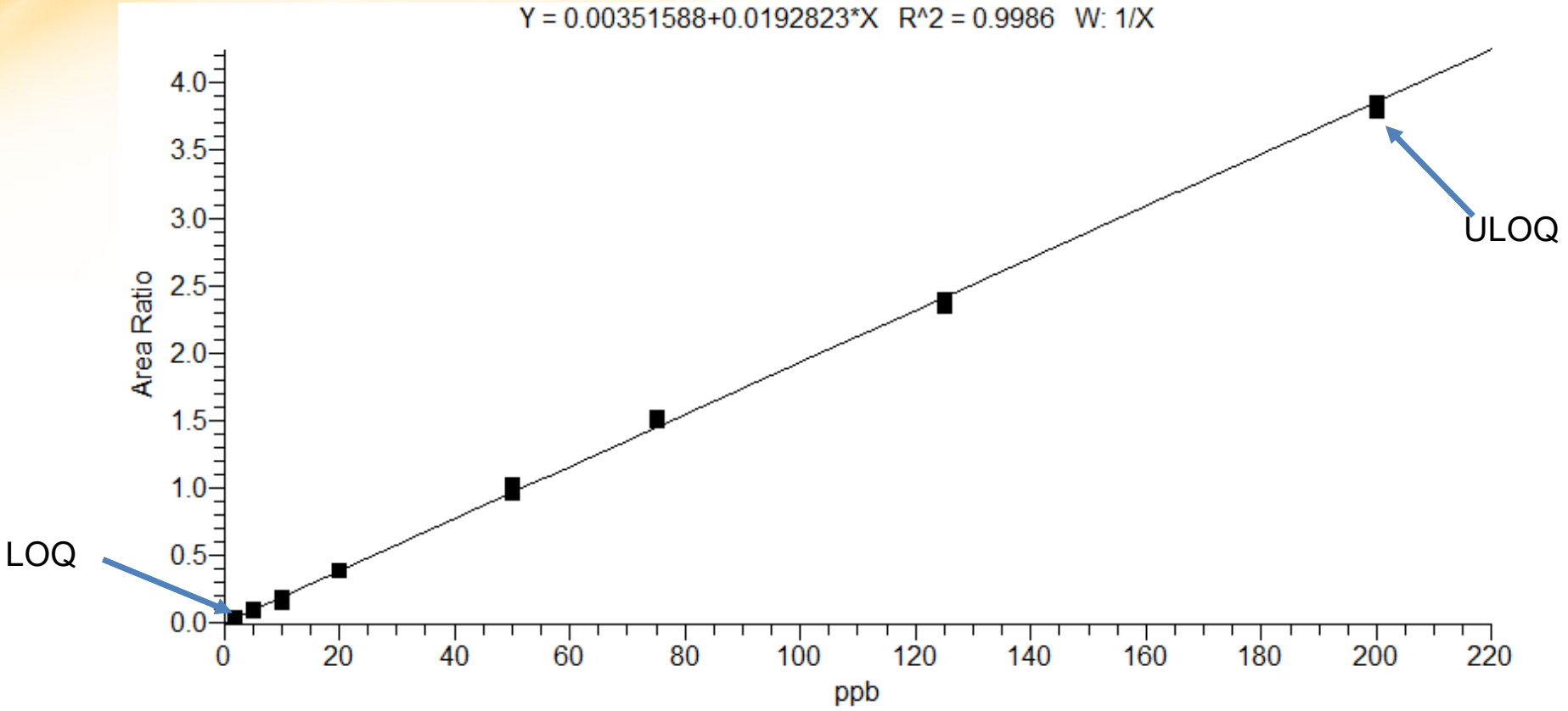
Limit of Quantitation (LOQ)

Limit of Quantitation (LOQ) – the lowest number where data is precise and accurate

Data is not reliable if it is not precise and accurate

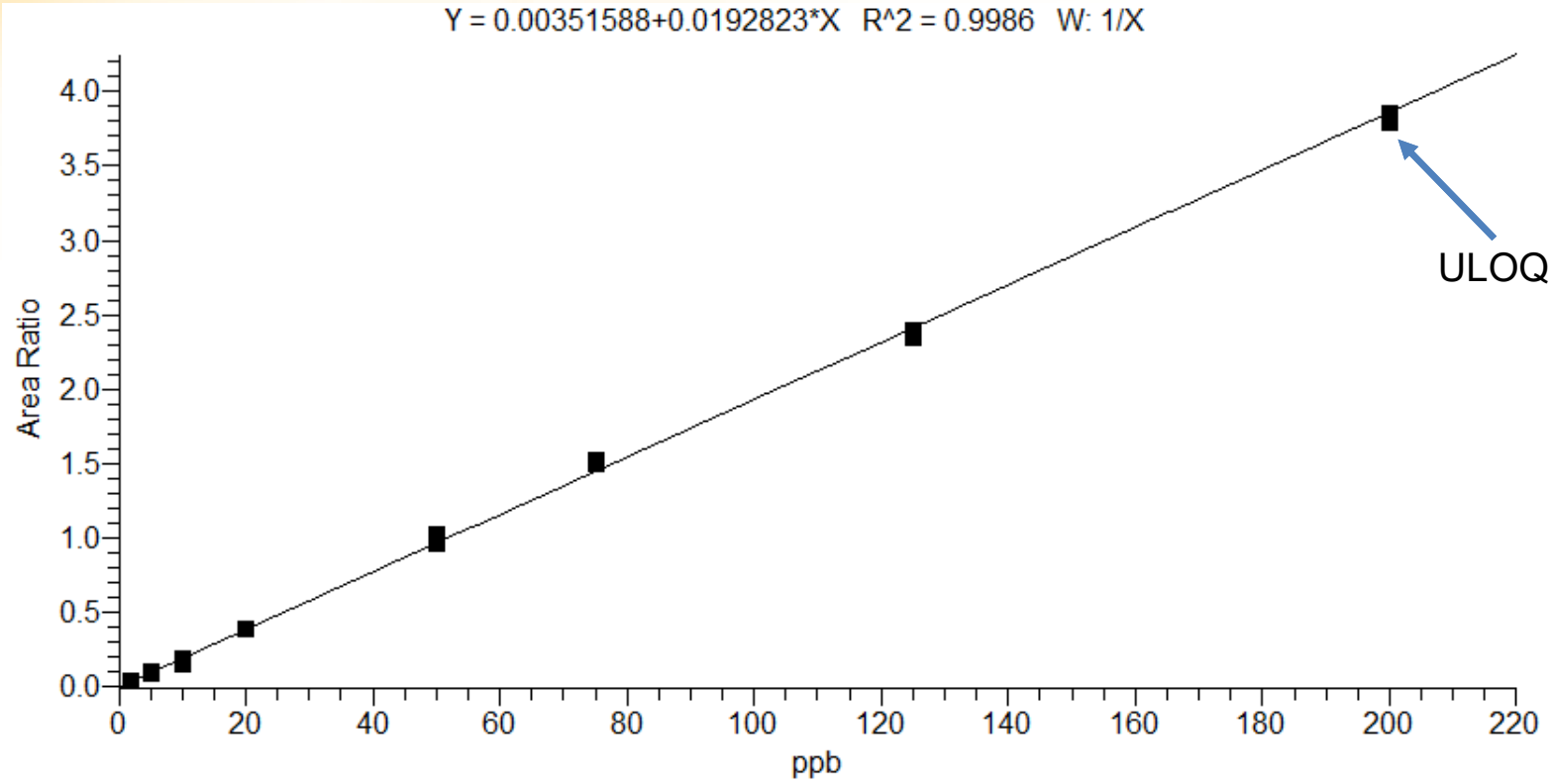


Linear Range of an Analytical Method



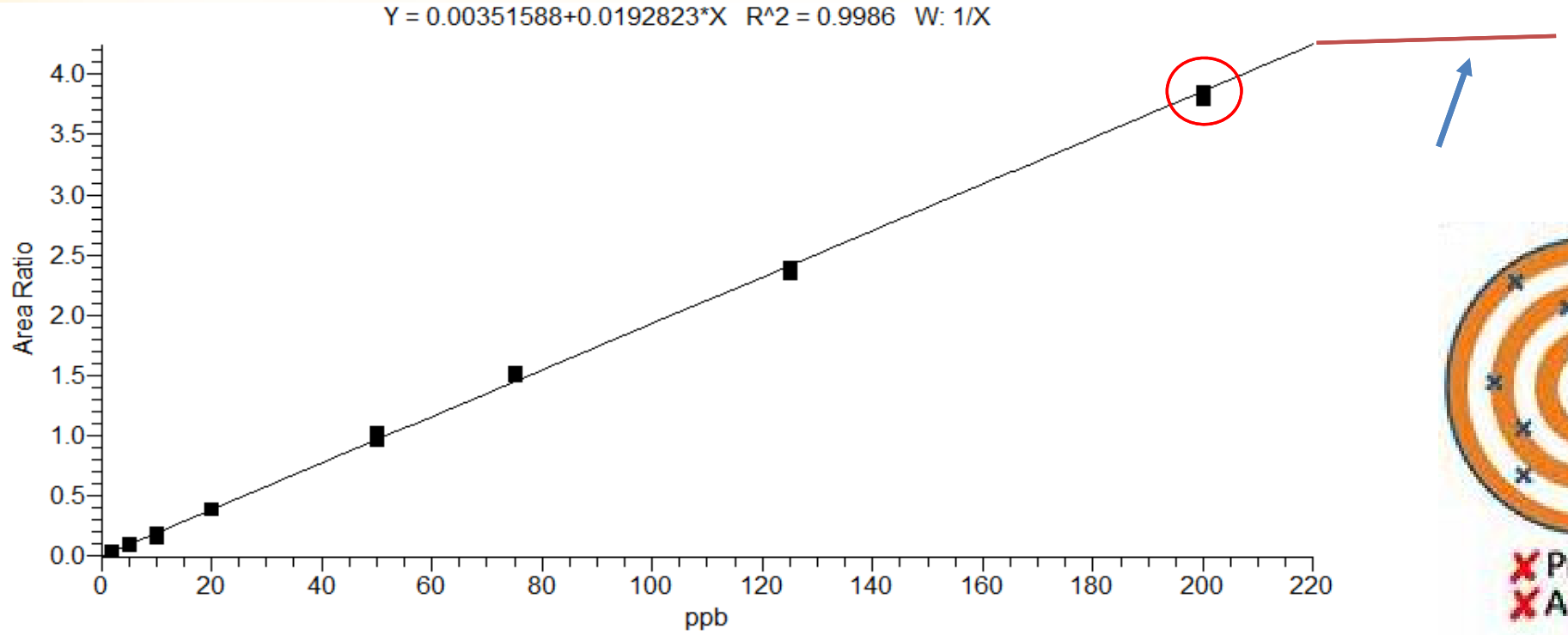
Upper Limit of Quantitation (ULOQ)

Upper limit where data is precise and accurate; limited by linearity



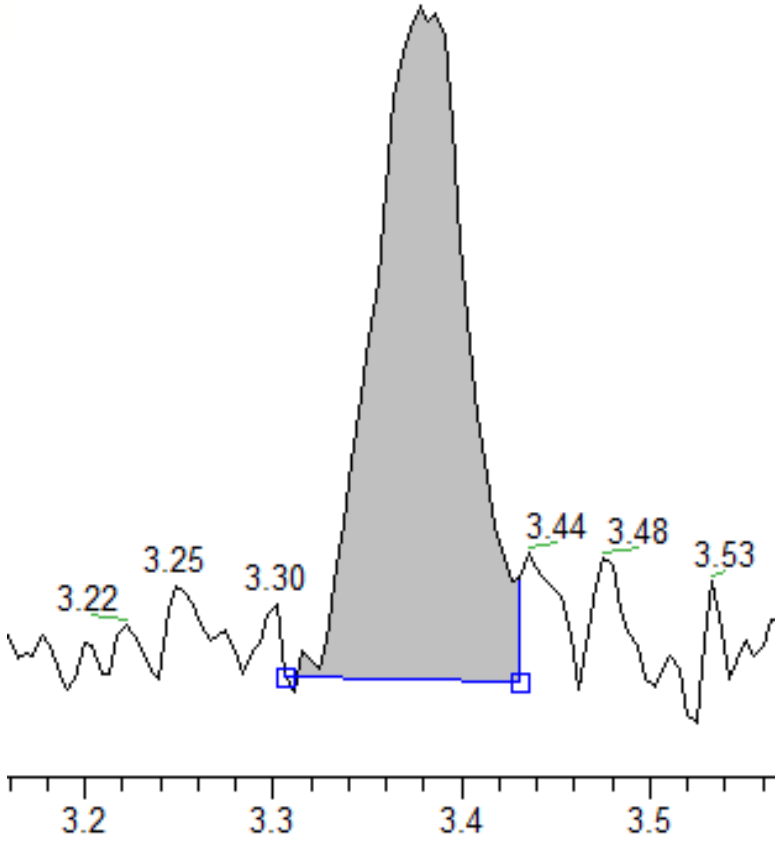
Above Upper Limit of Quantitation (> ULOQ)

Compound of interest is above the limit where data is reliable and accurate; limited by linearity



< LOQ Result

Compound of interest is present in a sample but not quantifiable



None Detected (ND)

No compound of interest is identifiable in sample by a given analytical method

- This does not mean the sample is completely negative for a compound of interest

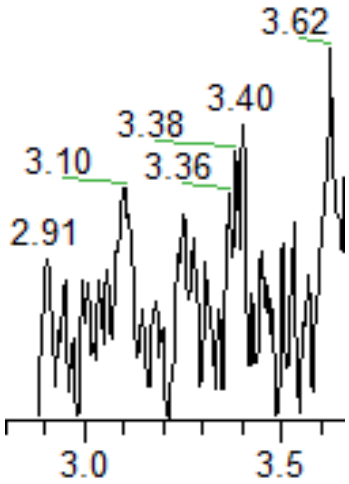
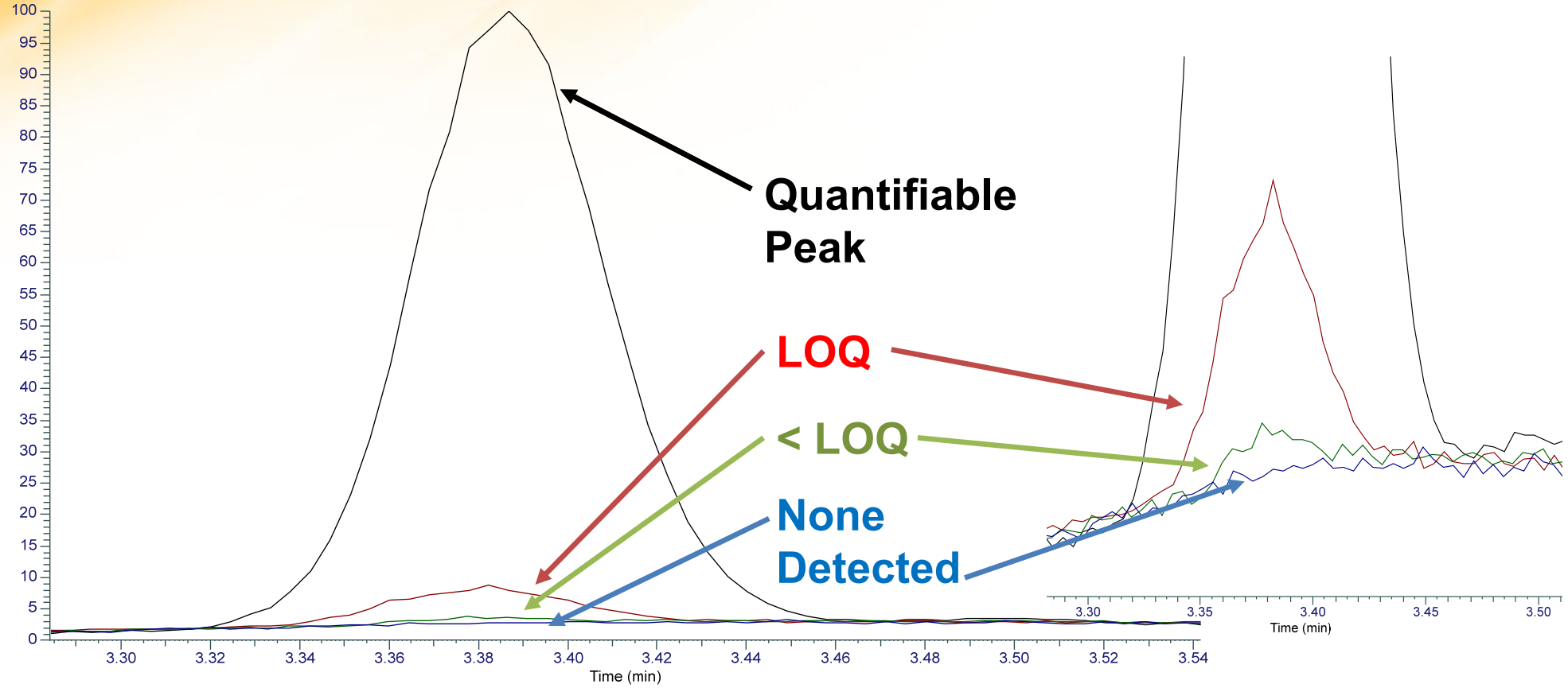


Image Showing All Possible Results



Reporting Options

- None Detected
- < LOQ – compound of interest is present is the sample but below the method's ability to quantify it
- Quantifiable Number
- > ULOQ – compound of interest is present in the sample but above the method's ability to quantify it