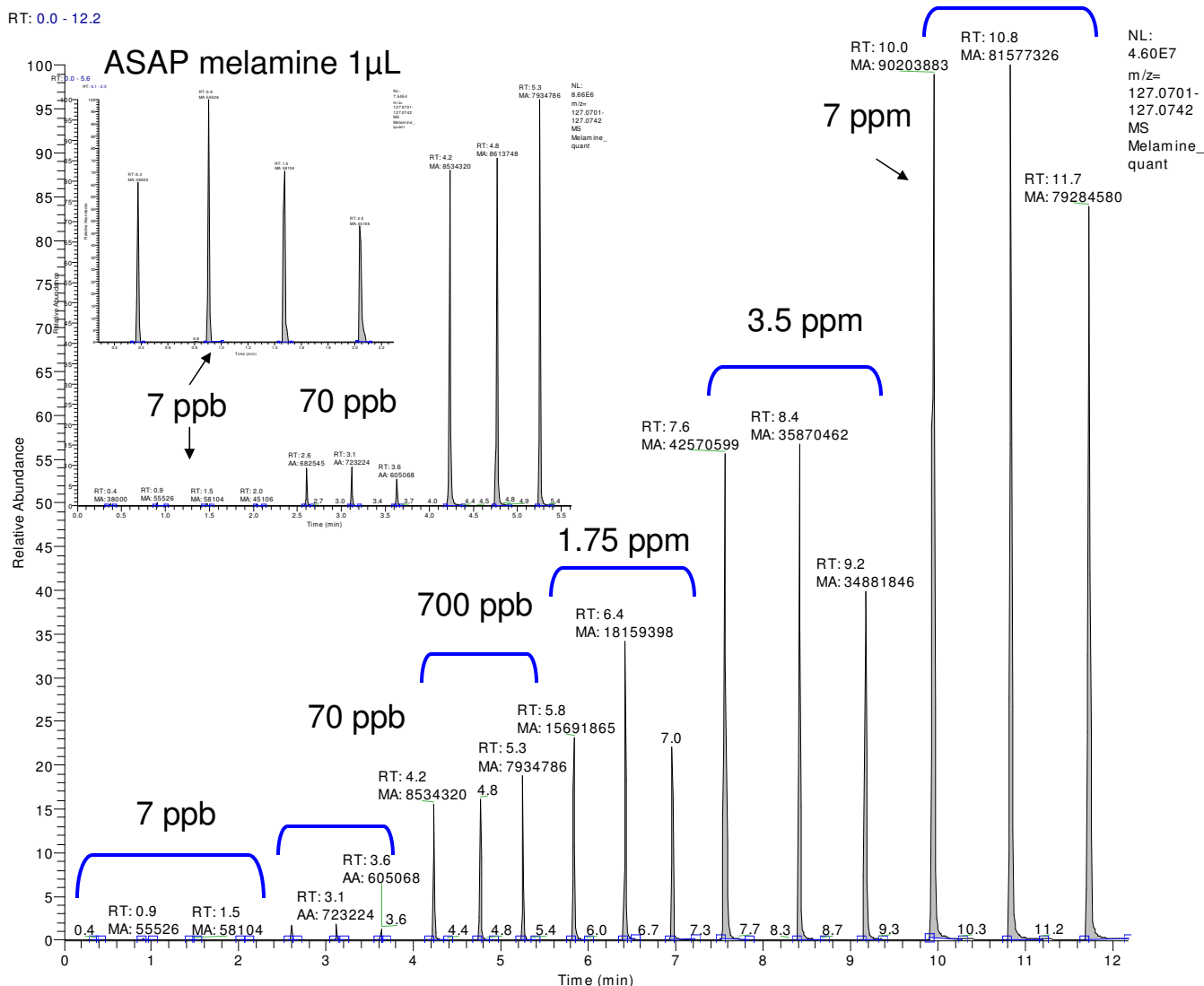


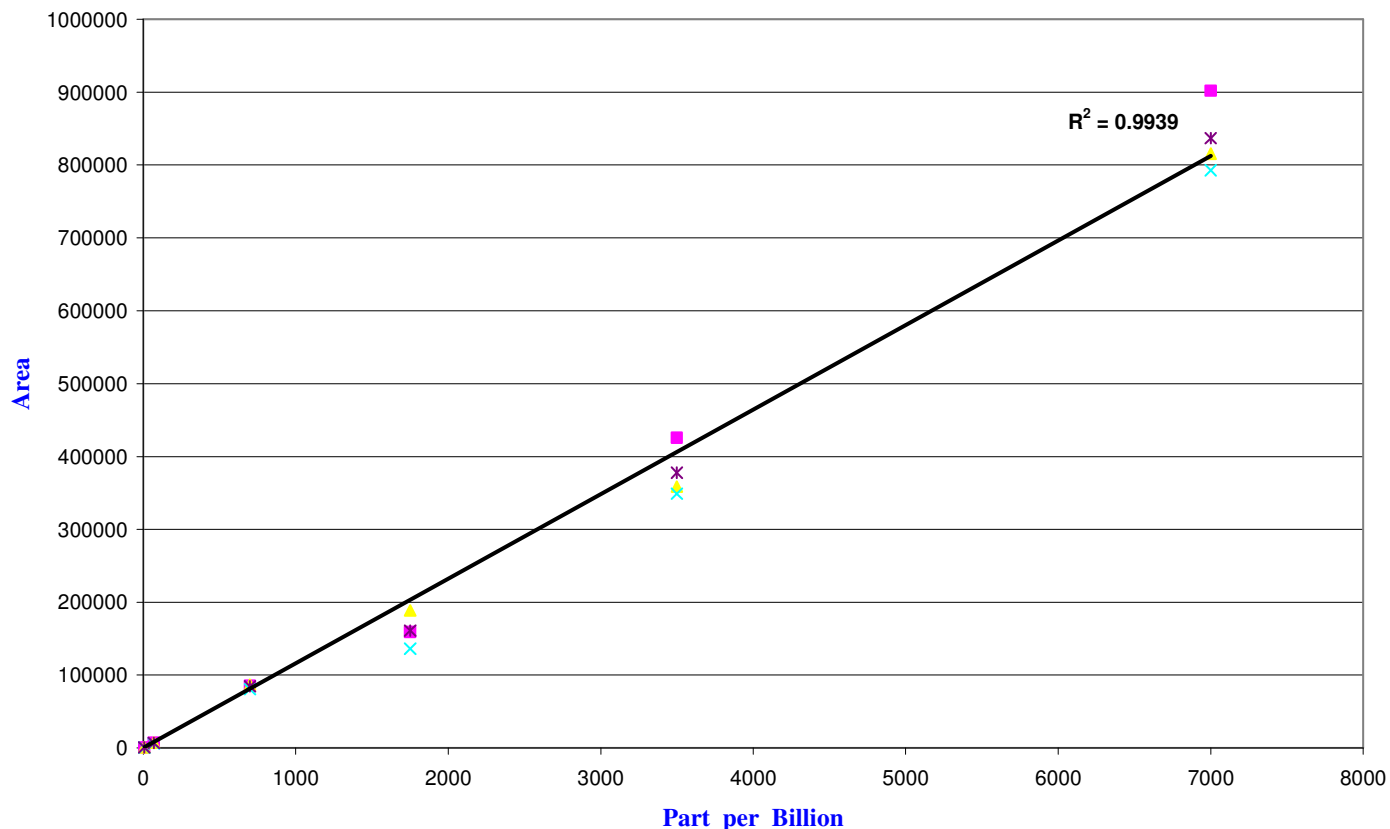
Sensitivity of Melamine

Melamine is a nitrogen enriched chemical which is used to make plastics and is sometimes used as fertilizer. Recently, however, it was found in cat and dog food and was believed to be the cause of pet deaths. The current theory is that melamine was added to wheat gluten used to make pet foods to fake an increased protein level. Wheat which has a high nitrogen content is considered high in protein and earns a higher price. Therefore, adding melamine is an inexpensive way to boost the nitrogen level. To determine the sensitivity of ASAP with melamine, 1 μL of solutions ranging from 7 ppb to 7 ppm were placed on the closed end of a melting point tube and each inserted into the API source using the ASAP probe. Solutions were run in triplicate. The results are shown below.



Calibration curve of melamine indicates results are semi quantitative based on low R² value. Linear trend line is average value for each data set.

Melamine Quantitation



All data was acquired on a Thermo Fischer LTQ Orbitrap FTMS hybrid mass spectrometer.