

Denver 2012 – Abstract

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TITLE: Using the micro-spot analysis function and mapping capability of a bulk WDXRF instrument for forensic industrial applications.

ABSTRACT:

Traditionally this type of elemental mapping has been carried out using scanning electron microscopes. For many small features in the 100 – 1000 micron range the addition of this micro analysis feature to a high powered Wavelength Dispersive Spectrometer adds an intermediary analysis capability without having to invest in a second instrument. The microanalysis performed is done without sacrificing any x-ray flux through collimation or the use of micro-focus optics. The functionality adds an additional feature to a standard bulk analysis Wavelength Dispersive X-ray allowing qualitative , semi-quantitative and full quantitative analysis of small features in homogeneous samples for the purpose of forensic analysis.