Chemical Lime’s introduction to XRF spectroscopy of limestone and quicklime products started in the late 1980’s with the acquisition of the lime division of Allied Products in the Birmingham, Alabama area. Shortly thereafter, Chemical Lime committed to this technology with the purchase of three wavelength dispersive XRF units for routine production quality control and geologic exploration. This technology has continued to expand throughout the company. Today, the classical wet chemical methods for determining chemical constituents of our limestone and lime products as outlined in ASTM C-25 analytical methods are no longer employed as routine production QC methods. Development of fused, borate beads has been added to our XRF systems and combined, are now the standard instrumentation for quicklime production QC. Highlights from this multi-year XRF development proceeded by a brief introduction to the lime industry and company overview will be the topic of this presentation.