FOR IMMEDIATE RELEASE

Contact:

Randy Dew, Marketing & Proposal Manager
Bowser-Morner, Inc.
Mail: PO Box 51 - Dayton, OH 45401
Delivery: 4518 Taylorsville Rd.
Dayton, OH 45424
Voice: (937) 236-8805 x289
Fax: (937) 233-2016
E-mail: jdew@bowser-morner.com
Web: www.bowser-morner.com

Bowser-Morner, Inc., headquartered in Dayton, Ohio, announces the X-Ray Fluorescence Unit (XRF) to increase data integrity and save clients time and money for limestone analysis and other testing requirements. The service is available to clients nationwide.

The XRF's capabilities are ideal for limestone analysis with thousands of samples tested to date. Most of these tests are "full" limestone elemental analyses for calcium as calcium carbonate, magnesium as magnesium carbonate, aluminum as aluminum oxide, iron as ferrous oxide, silicon as silicon dioxide, and sulfur.

Using XRF analytical methods, homogeneous samples of a standard size are bombarded directly by X-ray radiation. The reflected or scattered radiation is then evaluated as secondary emissions that are characteristic of the given elements. Since all chemical elements have unique secondary emissions, trace elemental concentrations can be quantitatively assessed, and the product compliance can be determined.

The XRF's capabilities also include testing to determine the geological makeup of rocks and soils using the XRF's special GEO-Quant and determining the makeup of petrochemicals using the Petro-Quant

software. Bowser-Morner has created several applications to analyze metals for "exotic" elements like yttrium and bismuth, or, occasionally, aluminum, copper, brass, and other metals.

The X-Ray Fluorescence instrument provides a safer, cleaner method of testing, saving the expenses and safety hazards of the reagents used in wet chemistry methods. With the recent increase in concern about the presence of hazardous materials in items used to make other products, the XRF is also ideally suited to help clients who want or need their materials pre-screened for lead, chromium, cadmium, and mercury.

That testing is in keeping with the "RoHS Directive" prepared by an appointed commission representing the member nations of the European community. Restrictions have been placed on the maximum amounts of lead, cadmium, mercury, hexavalent chromium, and polybrominated flame retardant (plastics and elastomers only) in the components under consideration.

The RoHS Directive and similar directives in China, Japan, and California as well as the prospect of more like them have companies working hard to address the trace elemental contents of new electrical and electronic equipment being produced for the importation, sale, and use in those areas. As a result, testing to meet the directive is critically important to the manufacturers of exported electronic equipment and devices.

For multiple subcomponents, the components can be physically separated, and each component can be evaluated for the hazardous elements. A final overall analysis is compiled by the weight fraction of each subcomponent. More complicated devices with varying types of subcomponents like wires and insulators, often require chemical or physical homogenization. The blended samples are then evaluated for the hazardous chemical entities. While all of the methods above are considered acceptable to the testing requirements of the RoHS Directive, the degree of expertise required increases with the use of each of the methods.

In continuous operation from 1911 to 2011, respected Dayton laboratory testing and engineering firm Bowser-Morner, Inc. celebrates its 100th Anniversary. The company's reputation for data integrity is known through many industries, including education, healthcare, manufacturing, municipal and institutional, commercial and industrial, transportation, and environmental. Today, Bowser-Morner has offices and operations in Ohio, Kentucky, and Illinois.