

FACT SHEET

PORTABLE XRF

A real-time geochemical advantage - portable XRF services now available in West Africa

Obtaining maximum geochemical information about an exploration project is a primary focus for geologists. Intertek provides a cost effective solution using Portable XRF technology under laboratory conditions which delivers reliable, semi quantitative scan data that will add confidence to your exploration project.



Critical preparation and controls

A marked improvement in Portable XRF scan data can be obtained by analysing prepared pulps in a controlled laboratory environment that minimizes process variability, compared to in field analysis of un-prepared materials using battery operated instruments.

Advantages of using Intertek for portable XRF scans

- Access to a range of fully maintained and supported instruments to match field equipment.
- Integration directly into Intertek's LIMS system eliminating potential sample mix ups.
- Consistent database compliant report format.
- QA/QC reported with data.
- Operated by trained laboratory technicians.
- Uninterrupted AC power supply to the instrument eliminates variances in data relating to battery charge and change over.
- Climate controlled environment.
- Operational and technical support from Portable XRF Geochemists.
- Non-destructive analytical technique.

Advantages of Intertek pre-scanning your samples using semi-quantitative portable XRF technology

- Minimal cost per sample.
- After sample preparation, all samples in a geochemical or drilling program can be scanned by Portable XRF enabling lithochemical interpretation of rock types.
- The Intertek LIMS system can automatically flag samples that have concentrations in economic range to target samples for further analysis by more accurate, conventional laboratory techniques.
- Provision of fast, preliminary data while quantitative analytical suites are conducted.

Applications and limitations

Portable XRF analysis is a semi quantitative scan encompassing an extremely wide range of matrix types, such as sulphides versus oxides and low to high Iron. Detection limits are not as low as quantitative analytical techniques such as WDXRF, ICP, ICPMS, CSA and AAS, however in our controlled laboratory environment you will receive fast, consistent data on key elements to make early decisions or supplement your primary analyses. We recommend that all significant or anomalous XRF scan data be checked by conventional methods.

Analytical bundles - adding value to portable XRF data

dataAnalytical Bundles – Adding value to Portable XRF data Portable XRF data can be seamlessly bundled with aqua regia ICP-OES and ICP- MS data in a customised analytical package. Portable XRF data is indicative of the total elemental content of a sample whereas aqua regia data is only the aqua regia soluble component. The differences have important geochemical implications for the interpretation of geochemical data. Geochemical vectors combining various element-method pairs from both Portable XRF and aqua regia data can be an invaluable tool in facilitating the identification of geochemical anomalies and targets for further work.

FOR MORE INFORMATION

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