# LABORATORY SERVICES - COAL

## ANALYTICAL CAPACITIES

The performance of analytical procedures on energy materials and minerals at any point in the production chain must be completed with the utmost attention to accuracy, reputable methodology, and reliable operating procedures. Impartial, independent analysis is critical to the continuation of the international energy materials and minerals trade.

SGS provides the complete range of laboratory analysis procedures to meet the requirements of the producers, transporters and consumers of energy materials and minerals. Our Laboratories are focused on the requirements of the local coalfields, trade shipment points and major consuming facilities.

Analytical work is performed in accordance with recognized standards such as ASTM, ISO, JIS, and other accepted industry standards.

Our laboratories feature state of the art instrumentation to provide accurate results with the optimum turn around time.

## MAJOR ANALYTICAL INSTRUMENTATION INCLUDES:

- X-Ray Fluorescence (XRF)
- Simultaneous and Sequential Inductively Couple Plasma Spectrometry
- Graphite Furnace and Flame Atomic Absorption Spectrometry
- Automated Ion Analyzer
- Carbon, Hydrogen, Nitrogen and Sulfur Analyzers
- Thermo Gravimetric Analyzers
- Micron Particle Size Analyzers

## A PARTIAL LIST OF ANALYTICAL CAPABILITES INCLUDES:

- Proximate (moisture, ash, sulfur, volatile matter, calorific content)
- Ultimate (moisture, ash, sulfur, carbon, hydrogen, nitrogen, oxygen (by difference))
- Fusion Temperature of Ash
- Free Swelling Index
- Mineral Analysis of Ash
- Trade Element Analysis
- Forms of Sulfur
- Equilibrium Moisture
- Hardgrove Grindability Index
- Specific Gravity
- Oxidation Index
- Micron Particle Size Distribution
- Sieve Analysis
- Metallurgical Coke Physical and Chemical Analysis
- Metallurgical Coke Rheological and Petrographic Testing


**CONTACT INFORMATION**

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