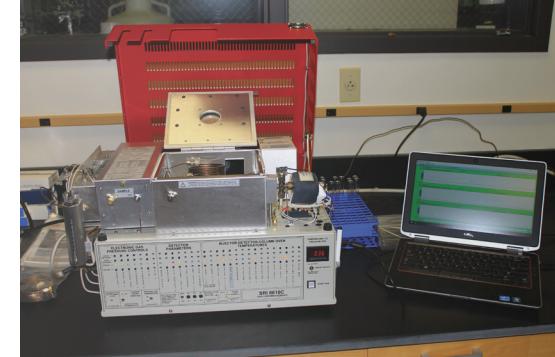




Analytical Geochemistry Laboratory Services

The KGS analytical geochemistry lab specializes in chemical and physical analyses of water, coal, minerals, and rocks. Trained professional scientists, using automated instruments and equipment and the latest techniques, efficiently and accurately analyze geological, environmental, and other samples for research in mineralogical and energy assessments.



We use a comprehensive quality-assurance protocol and employ certified standards and reference materials to ensure traceable, accurate results. The lab participates in several interlaboratory proficiency testing programs. Standard operating procedures for the methods are published and available upon request, as is our "Laboratory Assurance Plan." Please reach out to us with any question about our methods or instrumentation and about collaborating with us on your geological, environmental, or chemical analytical needs.



Jason Backus
jbackus@uky.edu
859-323-0555
www.uky.edu/KGS/lab



Analytical Geochemistry Laboratory Services

Analyses of Coal

Proximate
(moisture/ash/volatile/fixed
carbon)

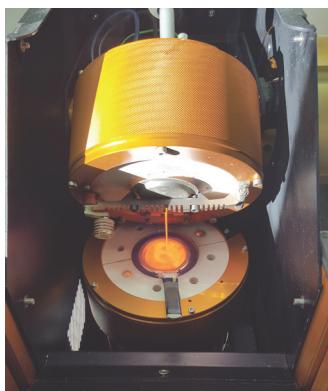
Calorific value

Total sulfur (coal & ash)

Total carbon

Major and minor elements in
coal ash

Trace elements in coal ash
(ICP-OES)



Analyses of Water

Inductively coupled argon plasma optical emission
spectroscopy (ICAP-OES) (dissolved and total metals)

Ion chromatography (anions)

Titrations and colorimetric nutrient testing

(ammonia, Kjeldahl Nitrogen, nitrite, nitrate,
total nitrogen, total phosphorus, ortho-
phosphate)

Total/dissolved organic and inorganic carbon

General wet chemistry parameters

Total and dissolved solids

Gas chromatography (low MW hydrocarbons)

Immunoassay enzyme-linked immunosorbent
assay organics testing



Analyses of Minerals

Major and Minor elements in limestone

Organic and inorganic carbon

Major and minor elements in rocks and shales

Trace elements in rocks and shales

Qualitative and semi-quantitative x-ray
diffraction

For more information on services and pricing,
contact:

**Jason Backus, Laboratory Manager Kentucky
Geological Survey**

228 Mining & Mineral Resources Building

University of Kentucky

Lexington, KY 40506-0107

Phone: (859) 323-0555