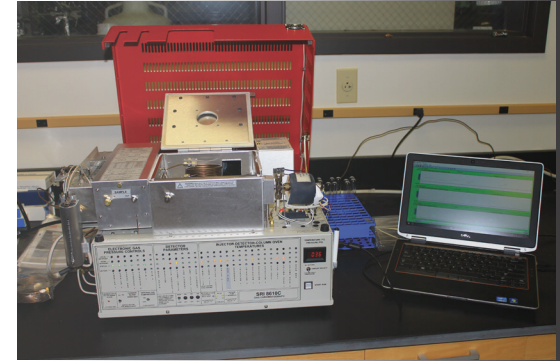
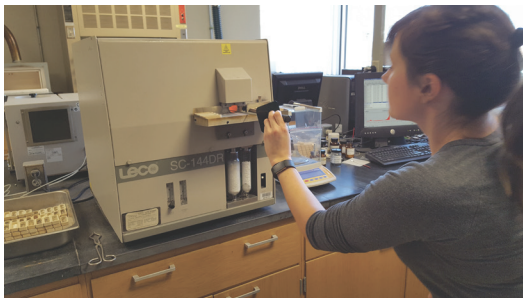


Analytical Geochemistry Laboratory Services

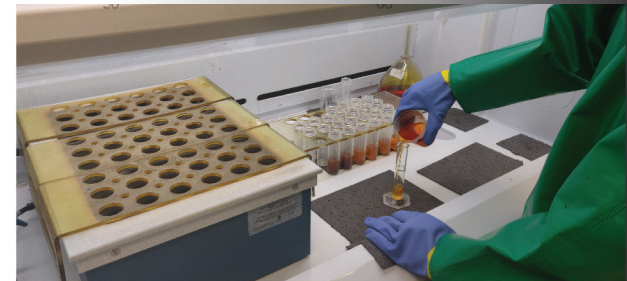
The KGS analytical geochemistry lab specializes in chemical and physical analyses of water, coal, minerals, and rocks. Trained professional scientists, using automated instruments and equipment and the latest techniques, efficiently and accurately analyze geological, environmental, and other samples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



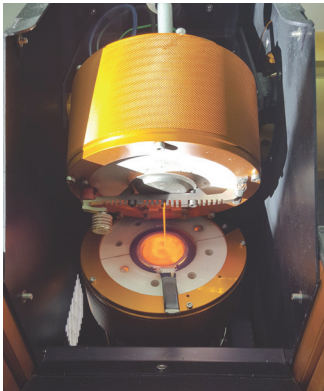
Jason Backus
jbackus@uky.edu
859-323-0555
www.uky.edu/KGS/lab



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 colormetric 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

