The energy industry is responding to market demands by revisiting Pennsylvania's oil and gas fields. Oil and gas drilling activity in Pennsylvania has increased significantly in recent years.

ARM's logging services allow cost effective determination of rock and fluid properties (e.g., porosity, formation thickness, fluid saturation, etc.) that are key to characterizing and understanding an oil and gas reservoir. These data allow geologists and engineers to determine potential hydrocarbon reserves and reservoir producibility, decide where to complete the well, how to stimulate production, and where to drill the next well.

ARM's slimhole tools are ideally suited to meet the challenging needs of CBM exploration. They can be run inside hollow drill stem reducing time and drilling costs. Since coal beds are characterized by high resistivity and low density, our combination compensated density, guard resistivity, gamma ray and caliper tool provides essential data in a single run.

Neutron and sonic logs are also commonly run to further characterize beds. Imaging technologies such as acoustic and optical televiewers can be used to determine the orientation of fractures and bedding planes.

ARM scientists apply their well logging, geophysical, and geological expertise to design and implement effective logging suites to characterize CBM resources and optimize field development.

Natural gas contained in coal, called coalbed methane (CBM), is also becoming of greater interest. Most well logging methods now used for CBM evaluation were developed many years ago in the search for oil and gas.