

Coal Seam Natural Gas Potential of Paleocene and Cretaceous Coals of the Desha Basin, Southeastern Arkansas.

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Preliminary research of subsurface Tertiary and Cretaceous coals in the Desha Basin of southeastern Arkansas indicate that coal seam natural gas may be present. Existing gas pipeline infrastructure in the Desha Basin is conducive to both exploration and exploitation of coal seam natural gas resources. The Paleocene-Eocene Wilcox Group contains the thickest and most widespread horizons of lignite across southern Arkansas and is the primary Tertiary unit of interest for the evaluation of coal seam natural gas. Vitrinite reflectance data from selected well samples indicate that Wilcox lignite has been converted to subbituminous coal at depth. Coal horizons of lower Cretaceous age (Trinity Group/Hosston Formation equivalent) have also been identified from well logs and drill cuttings in the Desha Basin and vitrinite reflectance data indicate a rank of subbituminous to high volatile C bituminous. Current research is aimed at developing 3-D models of Tertiary and Cretaceous coal basins in southeastern Arkansas and this will facilitate the identification of suitable drill sites for testing the coals.