

# THE BECKLEY SEAM – AN EXAMPLE OF A BACK-BARRIER COAL IN SOUTHERN WEST VIRGINIA

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## ABSTRACT

Although thick coal or peat beds are known to accumulate in many depositional environments, the exact factors contributing to accumulation of any particular bed are often obscure. A notable exception is the Beckley coal bed of southern West Virginia which has been so extensively prospected and mined that its mode of deposition, although complex, is readily apparent. The principal controlling factors for coal accumulation are (1) a deltaic wedge of sediment which prograded seaward onto a partially filled lagoon and provided a near sea level site for coal accumulation and (2) a large beach-barrier which formed seaward of the lagoon and provided a reducing environment in which peat could accumulate. Within this deltaic-back-barrier milieu, the primary back barrier drainage restricts the distribution of coal deposits to island-like patches whereas the thickness of the coal is apparently controlled by the secondary drainage system. Knowledge of these controlling factors enhances exploration and development of this and similar back barrier coals, as well as contributing to our understanding of Carboniferous peat-forming environments.