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### **Coal Stratigraphy of the Southern Powder River Basin: Converse County, Wyoming**

A series of regional cross sections review the Paleocene Fort Union coal stratigraphy in the southern Powder River Basin.

The Wyodak coal mined at North Antelope in T41N-R70W reaches its depositional limit to the south in T39N-R71W. In this area, a 30 foot thick coal lies approximately 1000 feet below the Wyodak coal zone. Moving southwest from T41N-R70W, the Wyodak ceases to be a single thick coal and becomes a series of thin, laterally continuous coals.

On the west side of the project area in T40N-R75W, a series of thin coals between 500 and 700 feet below the surface correlate northward to the thick Big George coal interval. They extend southward to T36N-R75W, where referred to as the School and Badger seams at the Dave Johnson mine near Glenrock.

The area of T40N-R72W exhibits an abundance of thin, discontinuous sands. This sand-rich environment correlates with a Paleocene fluvial system mapped to the north and separates the Big George to the west from the Wyodak to the east. Directly to the north of the study detailed cross section work shows that the Big George lies stratigraphically above the Wyodak.

In the project area the coal stratigraphy can be summarized from youngest to oldest as follows: Big George (Badger and School) being the youngest, Wyodak (both 80 ft. single seam in T41N-R70W and equivalent thin coals southwest of T41N-R70W) of intermediate age, and the 30 ft. seam lying 1000 ft. below the Wyodak in T39N-R71W being the oldest coal studied.