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**The Stratigraphy of the Gypsum Spring Formation (Middle Jurassic),  
Northwestern Bighorn Basin, Wyoming**

The Gypsum Spring Formation exposed in the northwestern Bighorn Basin was studied in order to determine depositional environments and regional stratigraphic relationships.

Surface and subsurface correlations have demonstrated the lateral continuity of the three members of the Gypsum Spring Formation throughout the Bighorn Basin. Correlations indicate that the Gypsum Spring in the Bighorn Basin contain more strata than the type section in the Wind River Basin.

The formation consists of gypsum, dolomite, limestone, and claystone deposited subaqueously in a variety of environments. Paleotectonic features such as Belt Island in Montana and the Sheridan Arch in Wyoming greatly influenced deposition. The petrology and distribution of *chert pebbles* indicates the unconformity at the base of the Gypsum Spring in the study area is distinct from the unconformity within the middle member in the southeastern part of the Bighorn Basin.

An unnamed siltstone unit containing the fish *Lepidotes(?)* is interpreted to be late Lower or early Middle Jurassic based on its position between the Red Peak and Gypsum Spring Formations.