

**Some Thoughts on Dakota Stratigraphy and Exploration,
Chama Basin, New Mexico**

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The Dakota Formation of the Chama Basin records the initial incursion of the Western Interior Seaway into the study area. Dakota outcrops on US Highway 84, northwest of the Ghost Ranch, and at Heron Dam, south of Chama, New Mexico correlate with each other and with subsurface logs. The outcrops contain three Dakota depositional sequences defined by unconformities. One of the sequence-bounding surfaces within the formation, S3, truncates and replaces the K2 unconformity between Lower and Upper Cretaceous units and, thus, has regional importance. Sequence stratigraphic variations in the Dakota have economic significance because they may control fluid distribution in the subsurface.