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G. Earl Norris¹, Debra H. Phillips¹ (1) BP America, Inc, Houston, TX

Rediscovering Bitter Creek Field as a Basin Centered Gas Play In The Washakie Basin Area Of The Greater Green River Basin, Wyoming, U.S.A

First discovered in 1973, Bitter Creek Field in the southeastern Greater Green River Basin of Wyoming, U.S.A. has produced approximately 0.527 BCF mainly from the Upper Cretaceous Almond Formation. This field was thought to be a structural trap containing uneconomic gas reserves. Recent drilling in this field indicates basin centered, over pressured, tight gas sandstone reservoirs are located across the top and flanks of this anticline. The Almond Formation consists of marine and pelagic sandstones, shales and coals that are approximately 500 feet thick and are a regressive/transgressive depositional sequence. The Almond Formation in Bitter Creek area looks similar to the over-pressured, basin centered gas play taking place in the Wamsutter area, 30 miles to the northeast. The Bitter Creek anticline appears to have been an active structure from the Pennsylvanian until the Tertiary. Thinning during Almond deposition is evident on the top of the structure as is the thickening off the edges of the anticline. Situated at the top of the Almond is a 50-foot marine sand deposited as a major back step of the Upper Cretaceous Lewis seaway, similar to, but younger than the large marine bar that is one of the major producing intervals in the Echo Springs/Standard Draw Field, 34 miles to the east. The Middle and Lower Almond intervals were deposited in prograding coastal plain and fluvial environments.