Review of the Mayes Group (Mississippian) of Oklahoma - Lithostratigraphy and Biostratigraphy

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The Mayes Group, as defined by Huffman in 1958, has been relatively ignored in the literature over the past several decades. As a result the Meramecian and lower Chesterian strata of the southern Ozark region are poorly understood in terms of depositional and tectonic evolution despite oil and gas production from time-equivalent strata in the subsurface. As part of a comprehensive study of the Mississippian System in Arkansas, Kansas, Missouri, and Oklahoma the Mayes Group is being re-evaluated. The initial work includes the detailed examination and description of the type sections used to define the formal lithostratigraphic nomenclature within the Mayes Group and upon which previous studies have been based. The preliminary lithostratigraphic and biostratigraphic results are presented here and suggest a much more complex stratigraphic architecture than previously thought. The data suggest that deposition of Mayes Group strata were heavily influenced by incipient Ouachita tectonism and the onset of Late Paleozoic glaciation.