

Potential Sequence Boundary Oil Plays within the Mississippian of Southeast Saskatchewan

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Most of the Mississippian Subcrop Plays in the Williston Basin of southeast Saskatchewan have reached maturity in terms of development. There are several potential carbonate stratigraphic traps related to sequence boundaries within the Mississippian section, rather than along the Post-Mississippian unconformity. The first is related to erosion on the top of the Alida Beds. Oil will be trapped in the truncated Alida carbonates in addition to the Post-Alida clastics of the overlying Kisbey. The second play predicts hydrocarbon trapping at the angular unconformity/sequence boundary on top of the Lower Midale Beds (Midale Vuggy of oilfield terminology). The prospective area is south of the current Midale producing trend.