

A Mixed Carbonate-Siliciclastic Tidal Inlet in the Upper Shaunavon Formation, Eastbrook Area of South West Saskatchewan

Michael J. Blair

Crescent Point Energy, 585 8 Avenue Southwest #2000, Calgary, AB T2P 1G1

Abstract

The Upper Shaunavon Formation in southwest Saskatchewan was deposited along a Middle Jurassic shoreline, consisting of mixed carbonate and clastic sediment. The Shaunavon trend is situated on the northwestern corner of the Williston Basin. The hydrodynamically trapped, regionally oil charged Upper Shaunavon coincides with the easternmost extent of the prograding Upper Shaunavon shoreline complex. The productive portion of the Upper Shaunavon in the Rapdan/Eastbrook area is a barrier bar shoreline trend, which has been extensively cored and exhibits many great examples of the components of barrier bar systems. In the Township 5 Range 19&20W3 area there is a well preserved flood tidal delta and ebb tidal delta associated with a tidal inlet (channel). This core display will highlight the various facies of the very productive Upper Shaunavon formation in the Rapdan area, and explain how these interpretations aid in the exploration and development of the Upper Shaunavon in the greater Rapdan area.