The Duvernay Formation (Devonian): Sedimentology and Reservoir Characterization of a Shale Gas/Liquids Play in Alberta, Canada

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Abstract

The Frasnian Duvernay Formation of Alberta Canada (Fig. 1) is a proven source rock which has sourced much of the oil and gas to the adjacent Devonian, conventional fields including the prolific Rimbey-Meadowbrook Reef Trend (Stoakes and Creaney, 1984). It is stratigraphically age equivalent to the Muskwa Formation of the Horn River dry shale gas play to the northwest (Fig.1). What makes the Duvernay particularly attractive as a "shale gas" play is its potential to produce liquids due to it's over pressured nature significantly above the bubble point.