

Sedimentology and Stratigraphy of a Complex Succession of Deltaic to Marginal-Marine Deposits, Grand Rapids Formation, East-Central Alberta

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Abstract

The Upper Mannville Grand Rapids Formation in east-central Alberta is composed of a complex succession of deltaic to marginal-marine deposits. Integration of well data, core description, core analysis data, and published seismic slices reveals an intricate network of channels at various stratigraphic levels. Dense well data allows for confident delineation of channel belts in the area and for generation of detailed facies distribution maps at multiple depth intervals used to predict rapid lateral and vertical facies changes in 3D space.