

Cadomin Tight Gas Reservoirs Along the Updip Margin of the WCSB Deep Basin

Brad J. Hayes
Petrel Robertson Consulting Ltd., Calgary, Alberta
bhayes@petrelrob.com

Abstract/Excerpt

The Cadomin is the best-defined and most widespread tight gas play in western Canada. Deep Basin sandstones and conglomerates blanket the western margin of the WCSB, and large gas fields are being developed in several areas. These projects are based upon occurrence of the best reservoir quality along the updip margin of the Deep Basin. This core display highlights variations upon this overall theme:

Cutbank Ridge: Pervasive fracturing develops economic reservoir quality in low-porosity, very poorly-sorted siliceous conglomerates.

Wild River: A large gas resource base in Cadomin conglomerates and sandstones is exploited through commingling with uphole zones, as Cadomin reservoir quality is not sufficient to support independent production.

Hooker / High River: Better sorting in finer-grained sandstones creates reservoir quality sufficient to support standalone development of the Cadomin reservoir. As in the areas to the north, its highly predictable mappability reduces development risk to acceptable levels.