

Gas Potential of Devonian Reservoirs in the Western Canada Sedimentary Basin

Gregory R. Davidson
AEC Oil & Gas, Calgary
Canadian Gas Potential Committee
GregDavidson@aec.ca

The Devonian System in the Western Canada Sedimentary Basin (WCSB) has an undiscovered gas potential of 21 Tcf (gas in place) as estimated by the Canadian Gas Potential Committee in their 2001 report.

Half of this potential is expected in pools between 80 and 800 Bcf. Recent 10 year exploration efforts have discovered 4.3 Tcf (OGIP) in the Devonian. One half of this occurs in the largest pools, between 33 and 301 Bcf.

The recent discoveries are surprisingly small when compared with the expected remaining potential. Why are we finding the smaller pools, and leaving the larger ones behind?

This paper examines the discovery history of the Devonian reservoirs and the estimate of undiscovered gas potential. The Devonian potential and discovery history is compared with the other WCSB plays, individual plays within the Devonian are ranked, and expectations for gas supply from these reservoirs are addressed.

This review of the Devonian potential is based largely on the data provided in the 2001 report of the Canadian Gas Potential Committee.