

Horn River Basin/Cordova Embayment, Northeastern British Columbia; Shale units of the Horn River Formation

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Summary

The Horn River Basin (HRB) and Cordova Embayment (CE) of northeastern British Columbia are filled with basinal sediments flanked by reef margins of the Middle Devonian Keg River and Slave Point formations. The laterally-equivalent shales of the Evie, Klua, Otter Park Member, and the Muskwa are collectively known as the Horn River Formation. Shales of the Evie and Muskwa Members are highly siliceous with high organic contents, and are the principal targets of a developing shale gas play.

Exploration activity for these shales in these lightly developed areas has increased dramatically over the past year. Total bonus paid for rights to the Devonian shales exceeded \$400 million in 2007. Experimental schemes, which allow an operator to hold well data confidential for 3 years, have been granted to several companies within the HRB and CE and 44 wells have been licensed or drilled to test these targets since 2004. Few results are available, but one recompletion of an older well in the HRB flowed 13e3m3/d.

Although continuous non-confidential core of the shale units is rare, several cores (mainly the result of missed core points!) can be used to demonstrate the different stratigraphic units within the basin. This display will highlight the main stratigraphic units being targeted for shale gas within the Horn River Basin and Cordova Embayment using non-confidential cores and data available from the British Columbia Ministry of Energy, Mines and Petroleum Resource.