

Saskatchewan Exploration and Development Plays – More than Just the Bakken!

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Oil and gas activity in Saskatchewan has remained brisk, despite the recent world economic downturn and depressed crude oil prices. While the main focus in Saskatchewan over the past few years has been on the Bakken, this presentation will also highlight key exploration trends involving other units.

It is undeniable that the Bakken play in the southeast continues to dominate exploration and development in Saskatchewan. During 2008, approximately 280 wells were drilled in the Bakken, taking the total of completed Bakken producers to more than 670, over 600 of which were drilled in the past four years. Bakken production has increased from approximately 100m³/day in 2004 to over 6000m³/day in late 2008.

Mississippian development has been predominantly focused on infill drilling within existing fields. Some new work has found that the Souris Valley subcrop edge lies farther to the northeast than previously thought, and has resulted in some new production.

Since 2007, over 30 horizontal wells drilled into the Viking in the Dodslund area have been completed using multi-stage-fracturing techniques. These wells are currently producing at rates significantly higher than adjacent vertical wells. The productive interval here is predominantly shaly sandstone.

The Shaunavon Formation in southwestern Saskatchewan remains active after initial interest began in 2007. In 2008, 91 wells – 66 of which were horizontal – were drilled into the formation in the Rapdan, Leon Lake, Leitchville, and Clintonville fields. Of these wells, 88 are currently on production.

Mannville heavy oil in the Lloydminster region remain, as always, an enticing target. During 2008, over 400 wells were drilled in this area. While land sales in the oilsands region have been relatively slow, 128 new cored strata-test holes have been drilled on existing crown leases, bringing the total number of such holes to nearly 350.

Gas exploration and drilling continue at a steadfast pace, up 5% over last year and only slightly below the drilling rates of the previous three years. The vast majority of gas wells were drilled into the shallow-gas pools of the Hatton-Liebenthal and Abbey-Lacadena areas of southwestern Saskatchewan. The Cretaceous geology in the eastern half of the province continues to generate some interest from industry, with over a dozen wells, many of which are standing cased, drilled in the Pasquia Hills-Yorkton area in the past year.

This oil and gas activity, combined with extraordinary levels of interest in coal and potash, indicate that resource exploration and development within Saskatchewan's Phanerozoic section will reap high rewards for years to come.

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