## Detailed Reservoir Characterization of the Middle Member Bakken Formation - Viewfield Pool, SE Saskatchewan

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## **Abstract**

The Bakken Formation is a prolific self-sourced oil reservoir within the Williston Basin occurring over Saskatchewan, Manitoba, North Dakota and Montana. The Middle Bakken Member consists of coarser silt and sand facies that are sandwiched between two organic rich black shales of the Upper and Lower Bakken. The Middle Bakken has been the focus of massive horizontal drilling programs in recent years with highly variable success. This study aims to characterize reservoir properties of the Viewfield Pool in SE Saskatchewan, located between TWP6-12, and R12W2- 5W2. Previous studies focused on more regional areas and have been unable to determine the factors causing the highly variable fluid production within the Viewfield Pool. In order to better understand this pool a detailed reservoir characterization study integrating a variety of datasets will be conducted to evaluate the main controls on both production and the efficacy of enhanced oil recovery.

## **References Cited**

Angulo, S. and Buatois, L., 2009, Sedimentological and ichnological aspects of a sandy low-energy coast: Upper Devonian-Lower Mississippian Bakken Formation, Williston Basin, southeastern Saskatchewan; in Summary of Investigations 2009, Volume 1: Saskatchewan Geological Survey, Saskatchewan Ministry of Energy and Resources, Miscellaneous Report 2009-4.1, Paper A-5, 17p.

Kohlruss, D., and Nickel, E., 2009, Facies analysis of the Upper Devonian-Lower Mississippian Bakken Formation, southeastern Saskatchewan; in Summary of Investigations 2009, Volume 1: Saskatchewan Geological Survey, Saskatchewan Ministry of Energy and Resources, Miscellaneous Report 4.1, Paper A-6, 11p.

Kreis, L. K., Costa, A., and Osadetz, K.G., 2006, Hydrocarbon potential of Bakken and Torquay formations, southeastern Saskatchewan, in C. F. Gilboy and S. G. Whittaker, eds., Saskatchewan and Northern Plains Oil & Gas Symposium: Saskatchewan Geological Society, Special Publication No. 19, 118-137.

Staruiala, A., Qing, H., and Chi, G., 2013, Preliminary analysis of lithology and facies in the Bakken Formation, southeastern Saskatchewan, Canada; in Summary of Investigations 2012, Volume 1: Saskatchewan Geological Survey, Saskatchewan Ministry of Energy and Resources, Miscellaneous Report 2012-4.1, Paper A-6, 9p.