

Cretaceous Shale Gas Prospects of Southwestern Manitoba: Preliminary Results

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High crude oil and natural gas prices, and the constant threat of declining world petroleum reserves, have industry looking for new, less traditional petroleum resources. In Manitoba, the two areas that are the least tested are the deep Devonian to Cambrian and the shallow Mesozoic formations. Shallow shale-gas occurrences have been recorded in Manitoba for decades, but understanding of and geoscientific data on this potential economic resource are limited. The goal of the Shallow Unconventional Shale Gas Project is to help address some of these issues by providing potential investors with the basic information needed to undertake exploration in the new and risky unconventional shallow shale-gas plays. The current project mostly targets the Mesozoic formations, including the Ashville, Favel, Carlile and Pierre formations.

Field investigations in the Pembina Hills region provided some early insight into the good potential for shale gas. Early results from this project prove that siltstone and sandstone beds occur within the organic shale sequences in Manitoba as beds up to two metres in thickness, and gas reports indicate that gas generation has already occurred and that the organic content of the shale is sufficient to generate large quantities of natural gas. While no commercial production of shale gas is yet reported in Manitoba, suitable geological conditions occur for this unconventional play to be further explored.

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