

## **Preliminary Results of a Shale Gas Assessment Project in Ontario, Canada**

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Shale gas plays have recently been proven in various states and provinces of northeastern North America bordering on Ontario. Only one shale gas exploration well has been drilled to date in Ontario despite the presence of the same organic-rich shales. Consequently, the Ontario Geological Survey (OGS) has initiated a multi-year project to assess the shale gas potential of southern Ontario.

Potential shale gas units include the Ordovician Collingwood Mb, Eastview Mb, Blue Mountain, Billings, Georgian Bay and Carlsbad formations as well as the Devonian Marcellus and Kettle Point formations. The main objective of the project is to examine the potential of these strata by obtaining new crucial data. The first component of the project in 2009 involved the compilation of existing information and data, followed by Rock-Eval analysis of rock samples from outcrops and from drill core and cuttings samples stored at the Oil, Gas & Salt Resources Library of the Ministry of Natural Resources. In April 2010 two diamond drill holes were completed in the Kettle Point Formation to obtain samples for desorption, gas composition, permeability, porosity, mineralogy, total organic carbon and maturity analyses. Both wells intercepted shale thicknesses of more than 80 meters. Gas shows were observed in both wells, mostly concentrated in the lower member of the unit. Additional testing is currently underway. Geophysical logs were run in both holes.

To date, the research has focussed on the Kettle Point Formation; however, the OGS plans to examine all potential shale units.