



THE YORK RIVER PROJECT New light oil play in Eastern Gaspé (Québec, Canada)

Quebec's Leader in Petroleum Exploration

FAULTED TRAPS WITH MULTI-LAYER RESERVOIRS IN THE LOWER DEVONIAN YORK RIVER FORMATION AND INDIAN COVE FORMATION

AVAILABLE DATA

2010 data

- 55 km of 2D seismic
- surface geochemical survey
- aeromagnetic survey

Pre-2010 data

- oil discovery (Haldimand)
- 5 exploration wells
- 105 km vintage 2D seismic
- geological, gravity & mag database

Location: the project is located in the Eastern Gaspé Peninsula. It belongs to the northern margin of the Siluro-Devonian Gaspé Belt of the Northern Appalachians.

Prize: new light-oil unconventional play. Success will allow Pétrolia and the joint venture partner(s) to further develop a 3590 km² prospective area.

Source rock: numerous oil seeps and micro-seeps are documented in the project area. All the wells drilled in the project area are oil charged. Thermal maturity studies indicate that the project area is in the « oil window » up to depths exceeding 2000 meters. The best regional source rock is an Upper Ordovician, organic rich, oil prone black shale with TOC up to 4% (Utica equivalent). The lower Devonian York River bituminous sandstones are also considered a fair source rock in the project area.

Reservoirs: the York River bituminous sandstones are considered the main objective of the project. The Haldimand N°1 well drilled in 2006 produced light oil from York River sandstones. Haldimand N°2, an appraisal well drilled in 2009, intersected a gross interval of 474 meters of highly fractured oil saturated bituminous sandstones and siltstones. The Tar Point N°1 well, drilled in 2009 in the central part of the project area, has produced light oil on a DST from a gross interval of 100 m of highly fractured Lower Devonian Indian Cove limestone and is considered as an objective.

Trap: the project area follows a major faulted zone that was tectonically active during the Lower Devonian sedimentation. Faults acted initially as normal faults and were, later on, reactivated as strike slip faults. Only two structures have been drilled, with success, in the project area; others are suspected but need to be properly imaged by seismic before proceeding with drilling.

Work program: the primary objective is to test and to prove the oil potential of the Lower Devonian York River sandstones and Indian Point limestones and to demonstrate the applicability of modern drilling and completion techniques, including multi-stage fracturing. The joint venture partner(s) will participate in the funding of a pilot project to verify the efficacy of fracturing operation and will have the opportunity to participate in the development of these new emerging light oil plays.

Infrastructure/market: the York River project is in close proximity to the town of Gaspé with its deep harbour, railroad and road facilities to transport oil to Quebec or the Eastern Coast refineries.

LICENCE TERMS & WORK OBLIGATIONS

Initial 5-year period

- Annual rental fees (\$0.04 / acre)
- Annual minimum work obligations (\$0.20 to \$1.00 / acre)

After 5 years

- Renewable annually, 5 times
- Annual rental fees (\$0.20 / acre)
- Annual minimum work obligations (\$1.00 / acre)

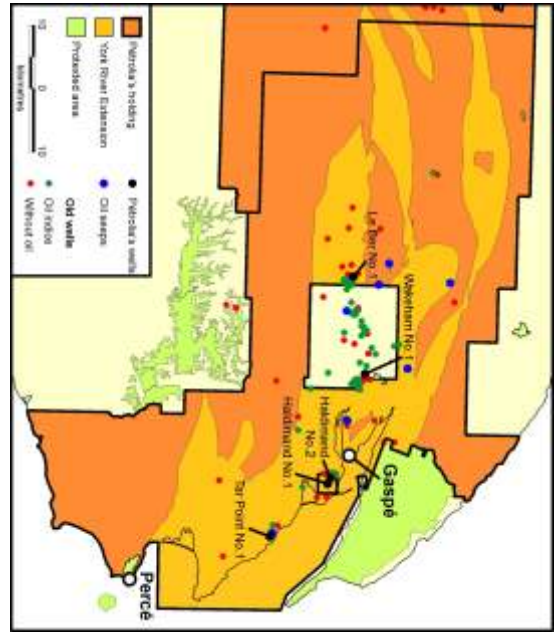
ROYALTIES

Production lease: 20-year period
Annual rent is \$ 1.00 / acre
Oil royalty varies from 5 to 12.5%
Gas royalty varies from 10 to 12.5%

CONTACT INFORMATION

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Oil microseepage geochemical survey

