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## GASTONGUAY PROJECT Central Gaspé, Quebec

### PLATFORM MARGIN REEF LIMESTONE AND CLEAN SANDSTONE RESERVOIRS

#### AVAILABLE DATA

5 old wells in the northern part of the property  
old seismic in the southern part of the property  
regional thermal maturity studies  
recent magnetic and gravity data base

**Location:** the property is located a 100 km west of the town of Gaspé, and is easily accessible. It covers 640 102 acres of land mostly on the central basin and northern margin of the Siluro-Devonian Gaspé Belt.

**Prize:** large gas fields

**Source rock:** regional surface thermal maturation studies show that most of the land is in the « condensates and dry gas windows » except for the cores of synclines filled with Gaspé Sandstones which are still in the « oil window ». Traces of oil and gas are documented in one exploration well drilled southeast of Murdochville. An Ordovician black shale that outcrops west of the property, with TOC of up to 2.7%, is considered a good oil and gas prone source rock. It is believed that the shale also underlies parts of the property. Hydrocarbon expulsion took place during the Lower Devonian.

**Reservoir:** two stratigraphic units at the base of the Siluro-Devonian sequence, on the northern margin of the Gaspé Belt, have good reservoir potential. The Val-Brillant Formation quartz arenite shows up to 10% intergranular matrix porosity locally filled with bitumen. This basal unit is broken up by a dense network of open fractures. The overlying Sayabec Formation limestone displays vuggy porosity development in thick massive hydrothermally dolomitized intervals. A 200 meters cumulative gross reservoir interval is estimated for those two lower units. Above, pinnacle reefs of the West Point Formation outcrops sporadically on the northern edge of the basin. Thick (several hundred meters) West Point shelf margin reefs are expected in subsurface along the reef fairway.

**Trap:** recent regional gravity and high resolution magnetic maps show that a 5 to 10 km wide zone at the northern margin of the Gaspé Belt is underlaid by rocks of higher density and magnetic susceptibility belonging to the Lower Palaeozoic basement. Magnetic inversion model suggests the presence, during the Lower Devonian, of a basement high flanked to the south by a deeper basin. A similar structural setup has been recognized East of Gastonguay Property where shelf edge reefs were recognized on recent seismic data. During the Lower Devonian, shelf margin reef reservoir and the underlying Val-Brillant and Sayabec reservoirs were well positioned to capture the gas generated from the black shale source rock.

**Infrastructure and market:** electrical power plants in Northern New Brunswick or the future pipeline that will link the proposed Cacouna LNG terminal Plant to Québec City are the closest potential markets.

#### FARMOUT TERMS

3-year work program starting with regional seismic and geochemistry followed by drilling.

#### LICENCE TERMS & WORK OBLIGATIONS

Initial 5-year period  
Renewable annually, 5 times  
Acreage can be reduced if necessary  
Annual rental fees (\$0.10/ hectare)  
Minimum work obligations

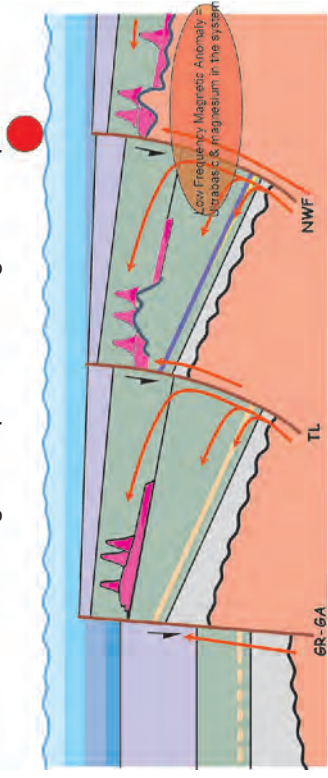
#### ROYALTIES

Production lease: 20-year period  
Annual rent is \$ 2.50/ hectare  
Oil royalty varies from 5 to 12.5%  
Gas royalty varies from 10 to 12.5%

#### CONTACT INFORMATION

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Schematic diagram of platform margin development



Modified from Bourque, 2001

Seismic signature of Devonian platform margin

