

## **Seismic Reflection Geophysical Survey Val-Brillant (Western Gaspé Peninsula - Québec)**

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### **ABSTRACT**

The Gaspé peninsula is known for its oil-bearing potential. After 140 years of sporadic exploration work, the peninsula is still under evaluation. Government for a better understanding of this wide territory is now using Modern technology.

Recently, significant oil showings were discovered in the Val-Brillant Area. In the summer of 1999 and 2000, Géologie-Québec and the Energy Sector completed the geological surface mapping of western part of the Gaspé Area. With its new geological compilation in hand, and in order to visualise geological structures in 3 dimensions, 8 geophysical seismic reflection profiles totalling 98 kilometres were acquired in October 2001 by the Energy Sector.

This new basic geophysical information will help to establish a global picture and a better understanding of the subsurface geological features, namely concerning the orientation of the major Shickshock South fault, which was intersected in 5 different locations, and Causapsal and Ste-Florence faults, intersected once each.

This 3D view will lead to better understanding of the regional geology and will help to recognise the relative importance of geological structures and the emplacement mechanism of the dynamic hydrocarbon system. Consequently, this acquisition of geophysical seismic data will provide a new impetus for the exploration of all mineral resources (oil, gas and metals) in the western Gaspé Area, and will favour additional private investments in these fields of activity.