

Offshore Exploration in the Anticosti Basin Gulf of St. Lawrence, Quebec, Canada - A Case Study

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Abstract/Excerpt

An offshore exploration program was carried out on two separate blocks in the Gulf of St. Lawrence between Quebec and Newfoundland, see Figure 1. The exploration method relied upon a regional airborne geochemistry survey to identify areas with a geochemical high, similar to the productive geochemical anomalies in Australia. Once the land was licensed, seismic and potential field methods were used to construct an integrated geologic model.

The exploration target was the productive Ordovician carbonates, which trend from Texas (Ellenberger), through New York (Beekmantown) to southwestern Newfoundland (St. George/Romaine). An airborne geochemistry survey, owned by Sky Hunter Exploration Ltd., (www.skyhunter.ca), measuring hydrocarbon from microseeps, was used to select two exploration blocks. An integrated geologic model was constructed from interpretation of seismic reflection, seismic refraction, and bathymetrics data, together with gravity and magnetics data owned by the GSC.