

Onshore and offshore petroleum activity update – 2013, Newfoundland and Labrador

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The province of Newfoundland and Labrador is home to some of the largest unexplored sedimentary basins in the world, encompassing an area of about one million square kilometres. From this total, <6% of the offshore and <9% of onshore acreage is currently held under license. The offshore is regulated by the conjoint federal / provincial Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) whereas all onshore activity falls under authority of the provincial Department of Natural Resources, Energy Branch (DNR).

In the offshore, the Jeanne d'Arc basin contains four producing fields – Hibernia, Terra Nova, White Rose and North Amethyst with total annual production in the 100 million barrel range. This production accounts for approximately 30% of Canada's conventional light crude and since first oil at Hibernia in 1997, the fields have produced in excess of 1.4 billion barrels. Total discovered recoverable resources are placed at 3.6 billion barrels oil, 12 trillion cubic feet of natural gas (tcf) and about 500 million barrels of natural gas liquids. These resource numbers are based on 26 oil/gas discoveries from a total of 155 exploration wells. This represents a drilling success ratio of 1 in 6 for the entire offshore region. Currently, the total hydrocarbon endowment for the province is estimated at 10 billion barrels oil and >72 tcf natural gas.

Over the past couple of years, a number of large scale offshore seismic programs have been completed and exploration drilling in 2013 has taken place in the Jeanne d'Arc, Flemish Pass and Orphan basins. Results released thus far indicate several major discoveries by Statoil and partner Husky Energy in the Flemish Pass basin. From a regulatory perspective, the C-NLOPB offered parcels in three offshore areas for inclusion in their upcoming offshore land sale. These parcels are situated in the Flemish Pass basin, Carson basin and Gulf of St. Lawrence. They also announced, in late December 2013, implementation of a new land tenure system, proposed changes to the terms of exploration licenses, and the 2013 Call for Nominations.

In western Newfoundland, onshore operators conducted minimal exploration activity in 2013, opting to step back and re-assess exploration strategies. A number of wells currently operated by Investcan Energy Inc. in the Bay St. George basin were re-entered for work over purposes and Hurricane #2 Whip #1 well was deepened to evaluate additional potential targets. Elsewhere in the region, Black Spruce Exploration has been engaged in negotiation with other onshore permit and offshore license holders with respect to farm-in opportunities.

As part of the provincial Energy Plan released in September 2007, policy actions were introduced to encourage and promote onshore and offshore exploration activity in the province. This translated into two funded programs – the Offshore Geoscience Data Program (OGDP) and the onshore Petroleum Exploration Enhancement Program (PEEP). The OGDP was funded to the tune of \$20 million dollars and accepted projects to date include a potential fields survey for offshore western Newfoundland, a satellite seeps survey for most of the offshore and a multi-client 2D seismic program targeting a vast expanse of the offshore, from northern Labrador to the southern Grand Banks. From the \$5 million allocated for PEEP, a large percentage of funding went towards source rock studies, regional mapping, aeromagnetic surveys and a data scoping study. The OGDP and PEEP initiatives are jointly administered by the Department of Natural Resources and Nalcor Energy – Oil and Gas Division.