

The Penobscot prospect offshore Nova Scotia, Canada: a New Look at an Old Opportunity

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The Penobscot B-41 well targeted Early Cretaceous deltaic sands which drape over the Jurassic Abenaki carbonate bank margin. It encountered oil and gas zones totaling 60 feet of net pay. There are similar aged deltaic sands present offshore Morocco. This minor discovery is very similar to the Cohasset-Panuke oil discovery which produced 44 million barrels of light crude oil. Nova Scotia Resources Ltd conducted a 3D seismic survey in 1992 which encompasses both the Penobscot B-41 and L-30 wells. Within this survey, several other structures across different geologic formations are mapped but still remain undrilled. Potential hydrocarbon reservoirs may exist in both the Jurassic carbonate and in Cretaceous aged Mid-Mississauga sands, both of which are proven reservoirs offshore Nova Scotia. Although the size of this prize is unproven, its proximity to infrastructure of the currently producing Sable Offshore Energy Project may make it an economically feasible play. Analogous structural closures similar to the Cohasset- Panuke discovery and the Penobscot prospect may exist throughout both the Scotian margin and the Moroccan succession.