

History of Nunavut Oil and Gas Production

- Bent Horn oil field, on Cameron Island, began producing oil in 1986 and was capable of producing 1000 barrels per day. Bent Horn is estimated to hold another 3 million barrels or more.

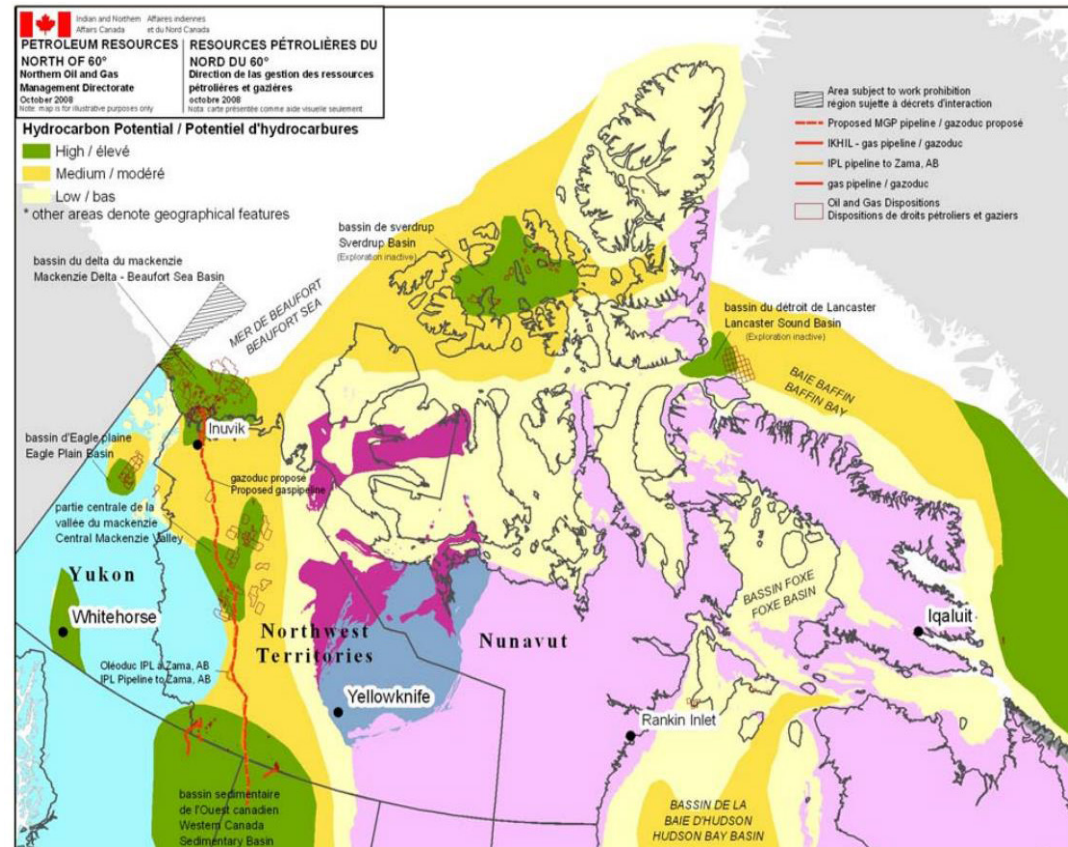


Pictures above: Bent Horn Oil Production Well on Cameron Island, and the M/V Arctic. Source: Panarctic Oil Ltd. annual summaries.

- Three million barrels from the Bent Horn field were shipped on the icebreaker M/V Arctic until production ended in 1996.
- Changes in the petroleum market forced the closure of the Bent Horn oil field in 1996.

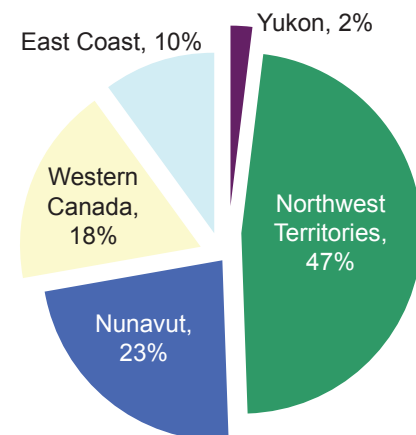
Nunavut Petroleum Potential and Interesting Facts

- Estimates of undiscovered and discovered conventional resources range from 18 to 267 billion barrels of oil and 180 to 1228 trillion cubic feet of gas.
- Nunavut remains vastly under-explored.
- Petroleum exploration began in 1962 and occurred throughout the territory until the last exploration well was drilled in 1986.

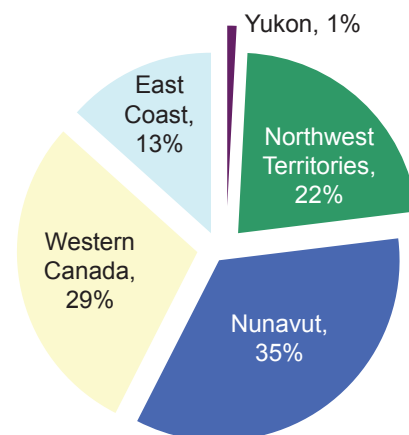


This map shows the different areas in Canada's North and their petroleum potential. The fields' colours indicate the different potential for petroleum resources, with dark green representing high, dark yellow medium, and pale yellow low potentials. Source: Indigenous and Northern Affairs Canada.

Oil Potential per Canadian region



Gas Potential per Canadian region



The blue field shows Nunavut's petroleum potential put in perspective against the rest of Canada (Meyerhoff, 1982) (Srivastava et al, 1982) (Okulutch, 1988) (Trettin, 1989) & (Harrison et al, 2006).

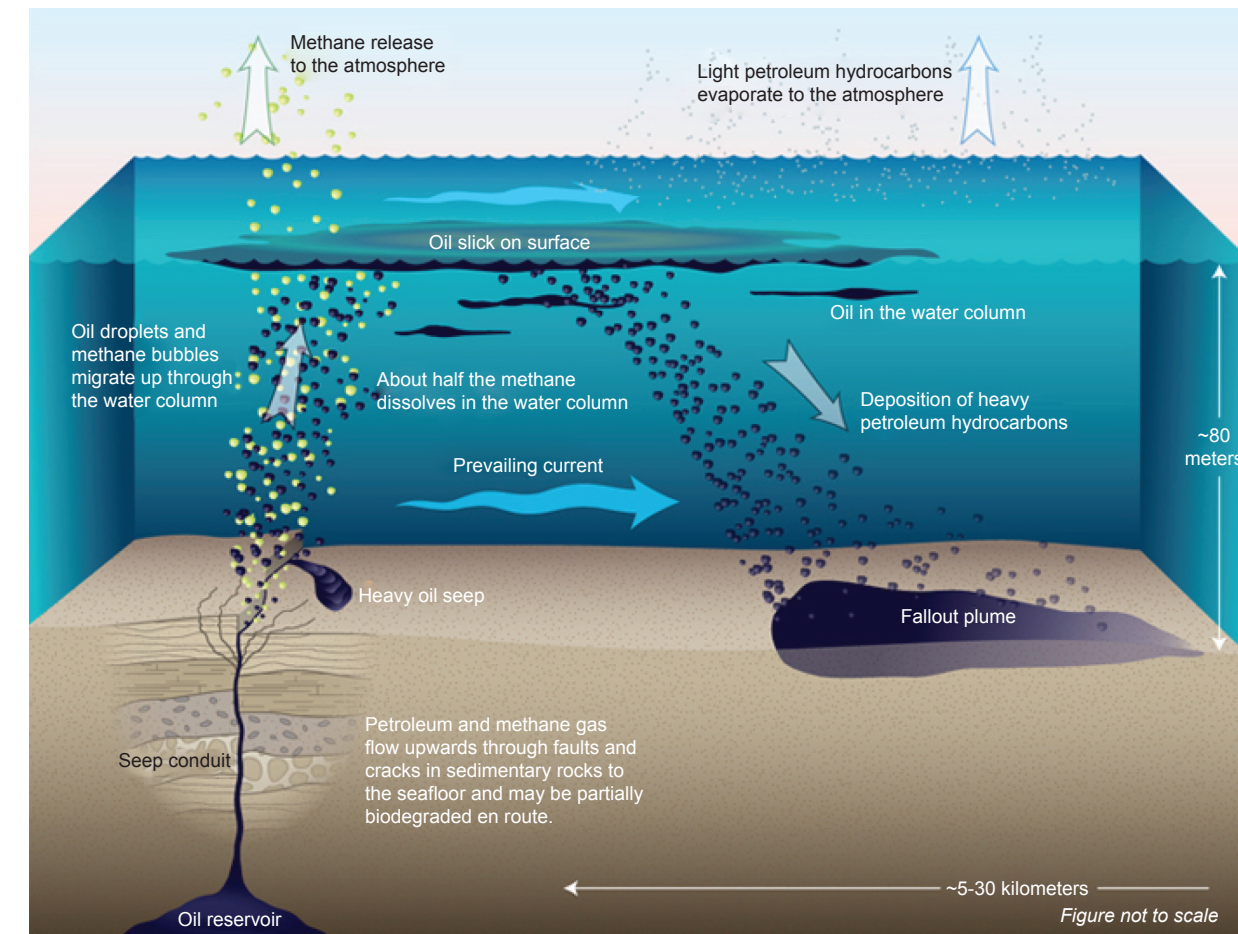
Active Petroleum System in the Baffin Bay/Davis Strait Area

- Natural oil seeps exist in several locations throughout Nunavut waters and the most prominent seep is located in Scott Inlet.
- Oil seeps indicate the presence of an active petroleum system in an area.
- Preliminary studies have identified large slicks in Scott Inlet (near Clyde River) exceeding 250 square kilometers in size.
- The Geological Survey of Canada is studying seep occurrences in the region.
- The GN will study the seeps from the oil slicks seen from satellite images.
- More research is needed on the petroleum systems of the Davis Strait/Baffin Bay area, as well as in the whole territory to better understand the oil and gas systems present.



Oil coated rock sampled from the bottom of Scott Inlet, Nunavut. Source: P.N. Noir et al., 2011, Natural Oil seeps on the Baffin Shelf, Nunavut, Canada: Geology and Geochemistry of the Scott Inlet Seep, poster presentation.

How Does Natural Seepage Work?



Source: www.whoi.edu.