

Shale Oil Potential of the Anticosti Basin

Green Point Formation at Green Point, Newfoundland

Western Newfoundland, Canada

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Regulatory Framework

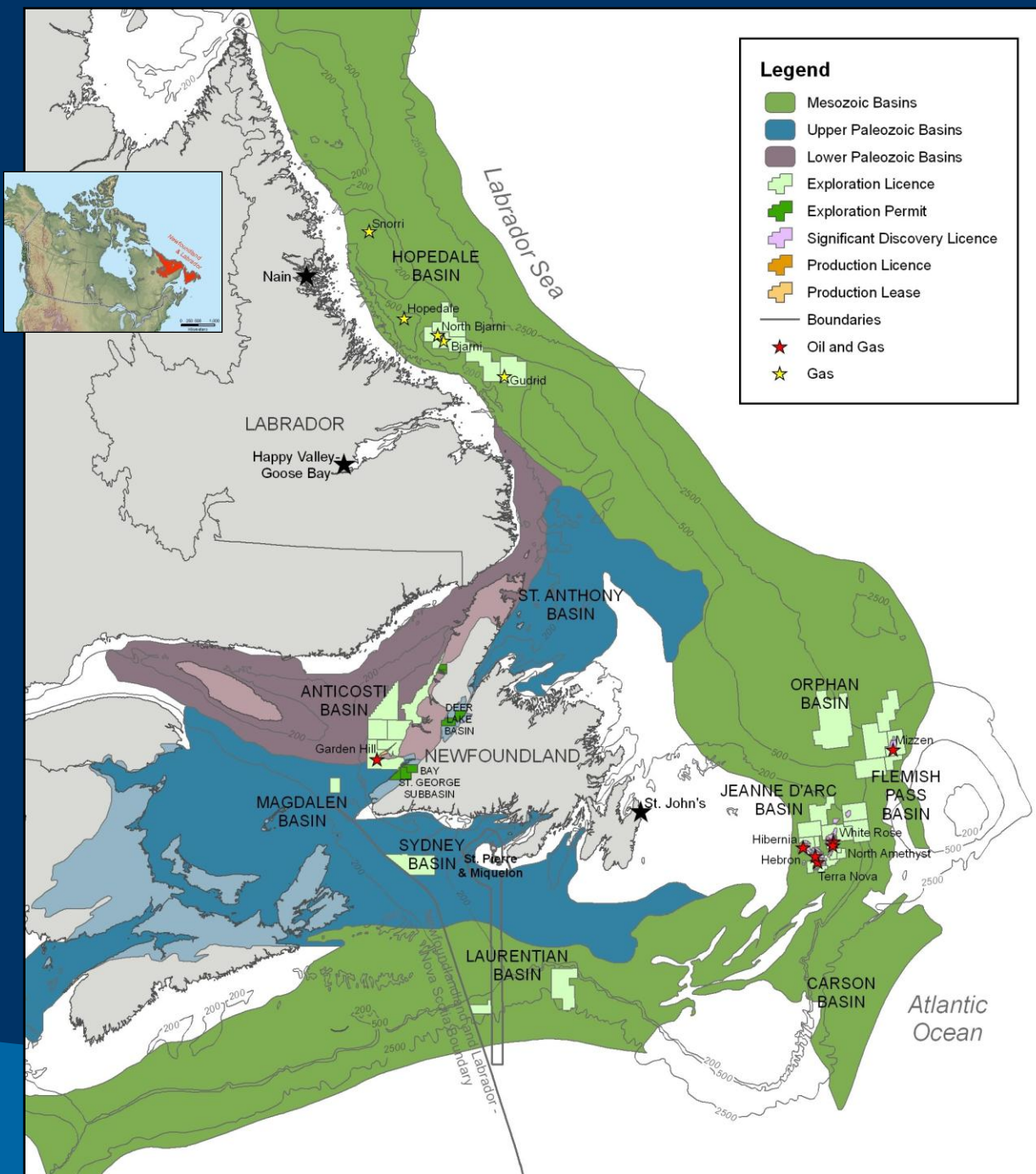
Onshore Western Newfoundland

- Department of Natural Resources (DNR)



Offshore Newfoundland & Labrador

- Canada-NL Offshore Petroleum Board (CNLOPB)

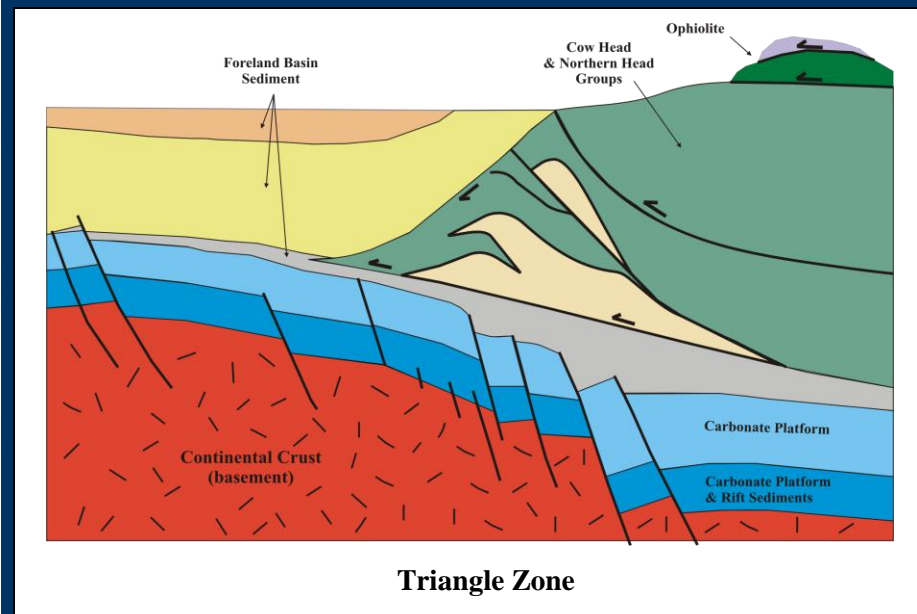
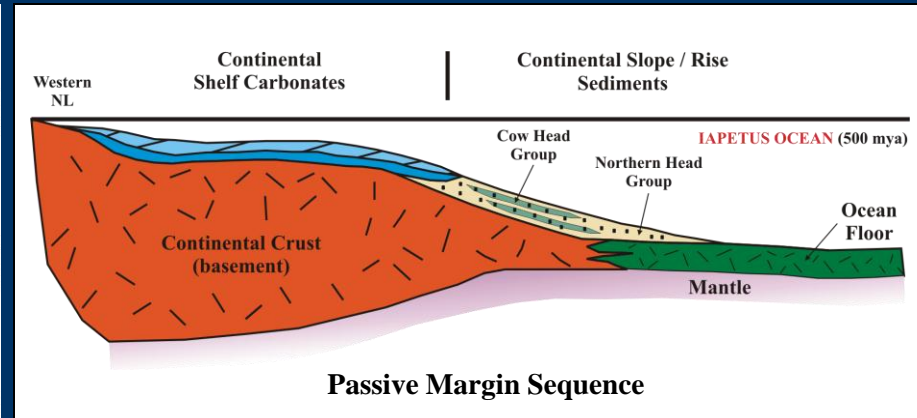
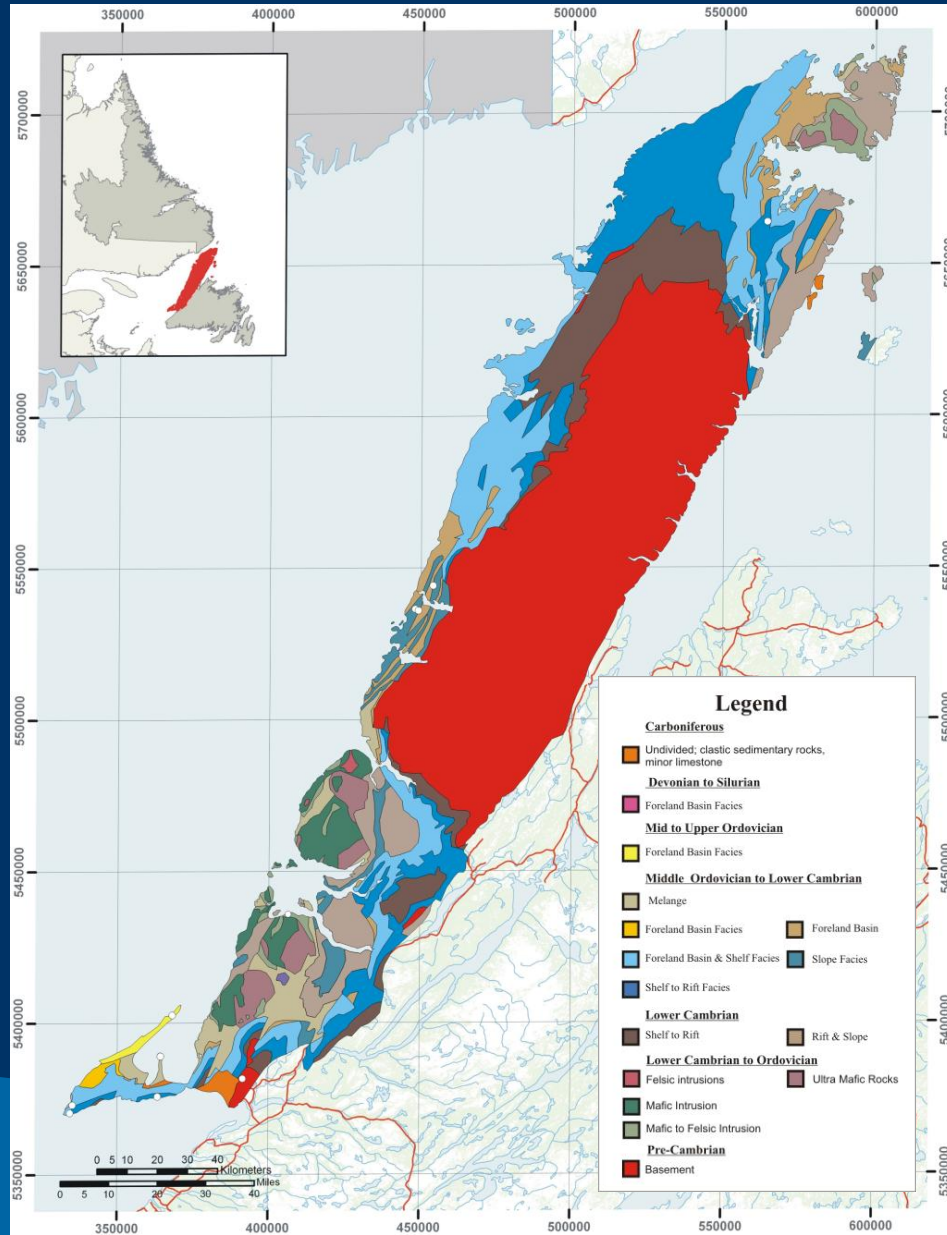


Legend

- Mesozoic Basins
- Upper Paleozoic Basins
- Lower Paleozoic Basins
- Exploration Licence
- Exploration Permit
- Significant Discovery Licence
- Production Licence
- Production Lease
- Boundaries
- Oil and Gas
- Gas

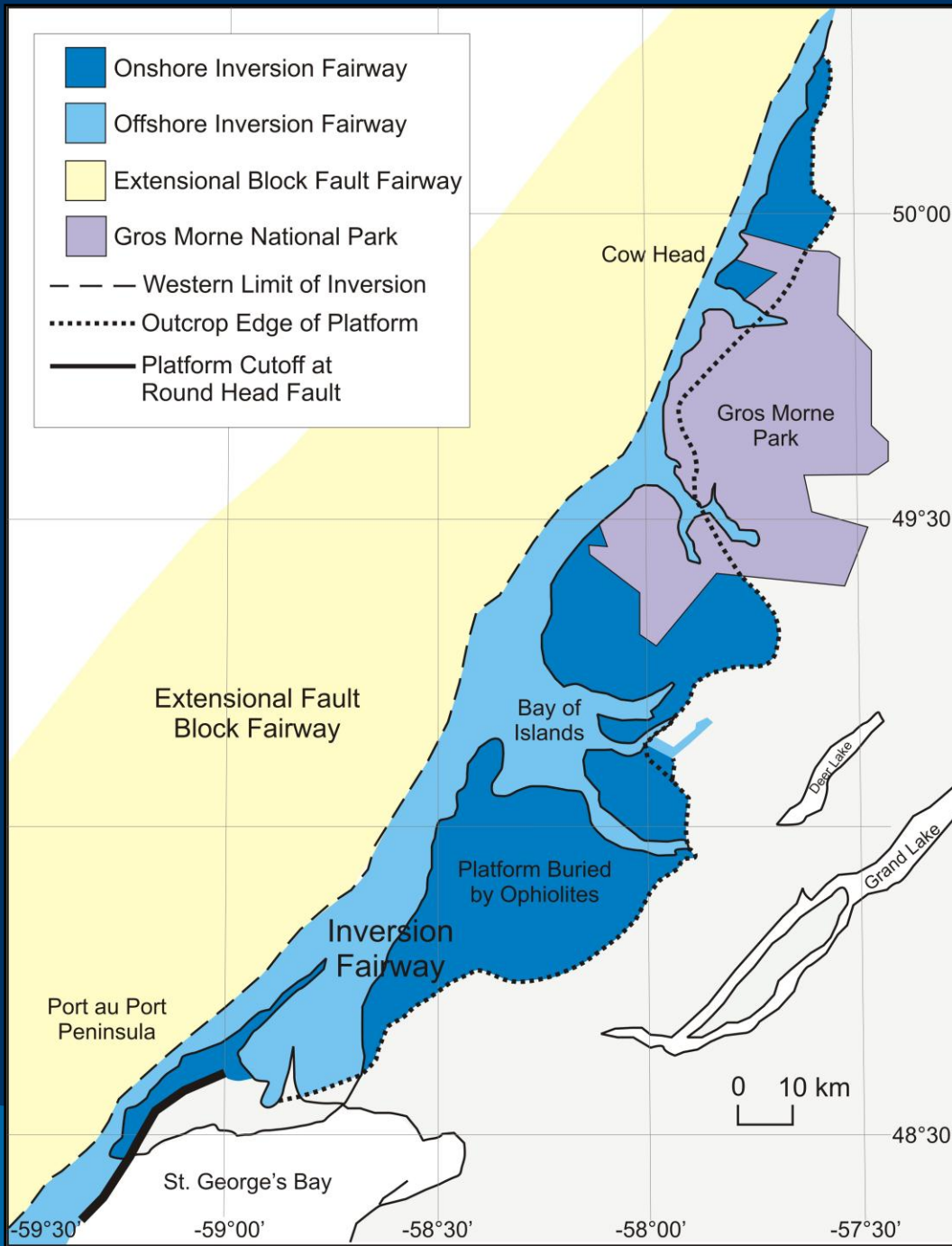


Geological Evolution – Anticosti Basin

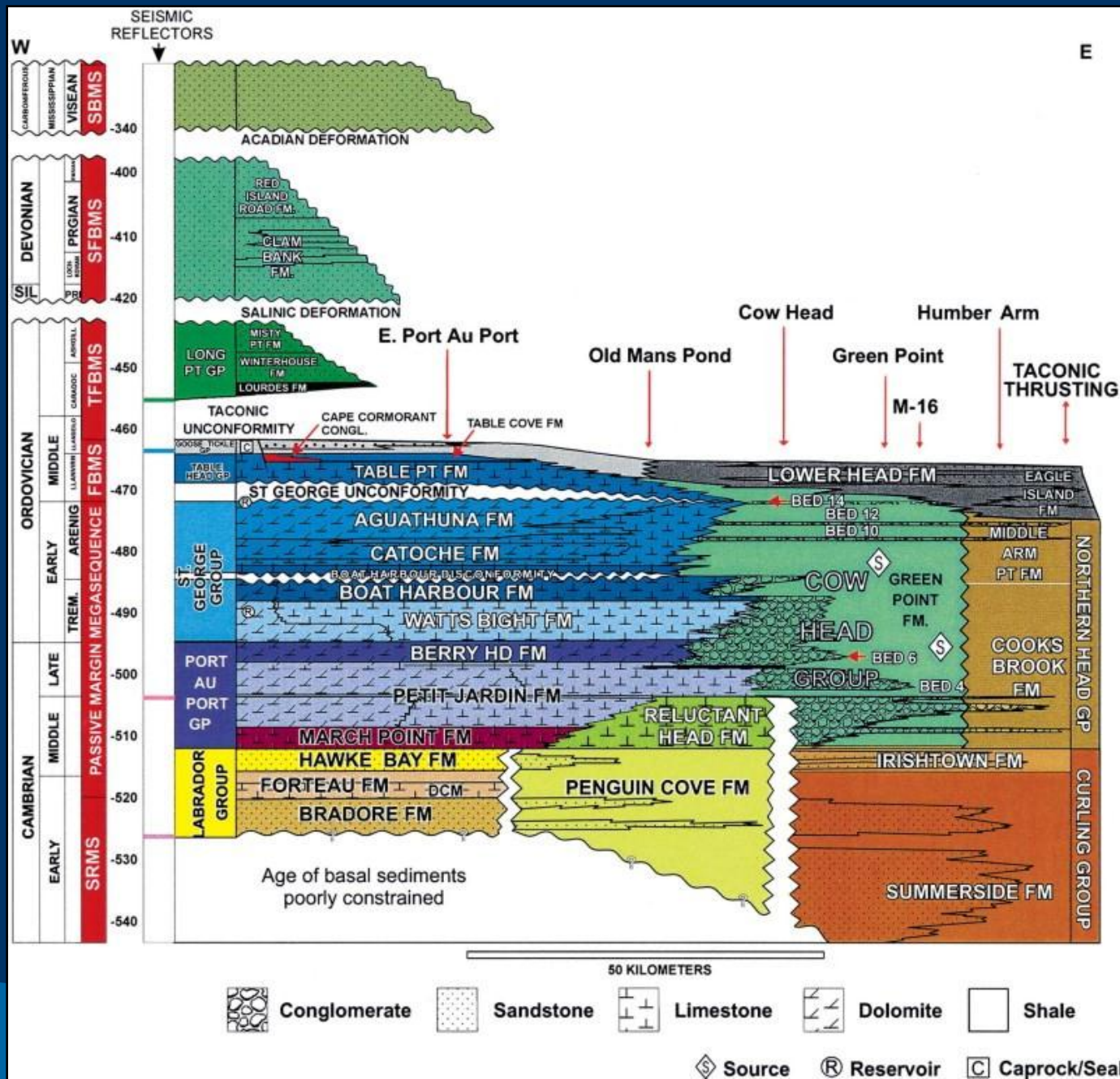


Anticosti Basin

Extensional / Inversion Fairway

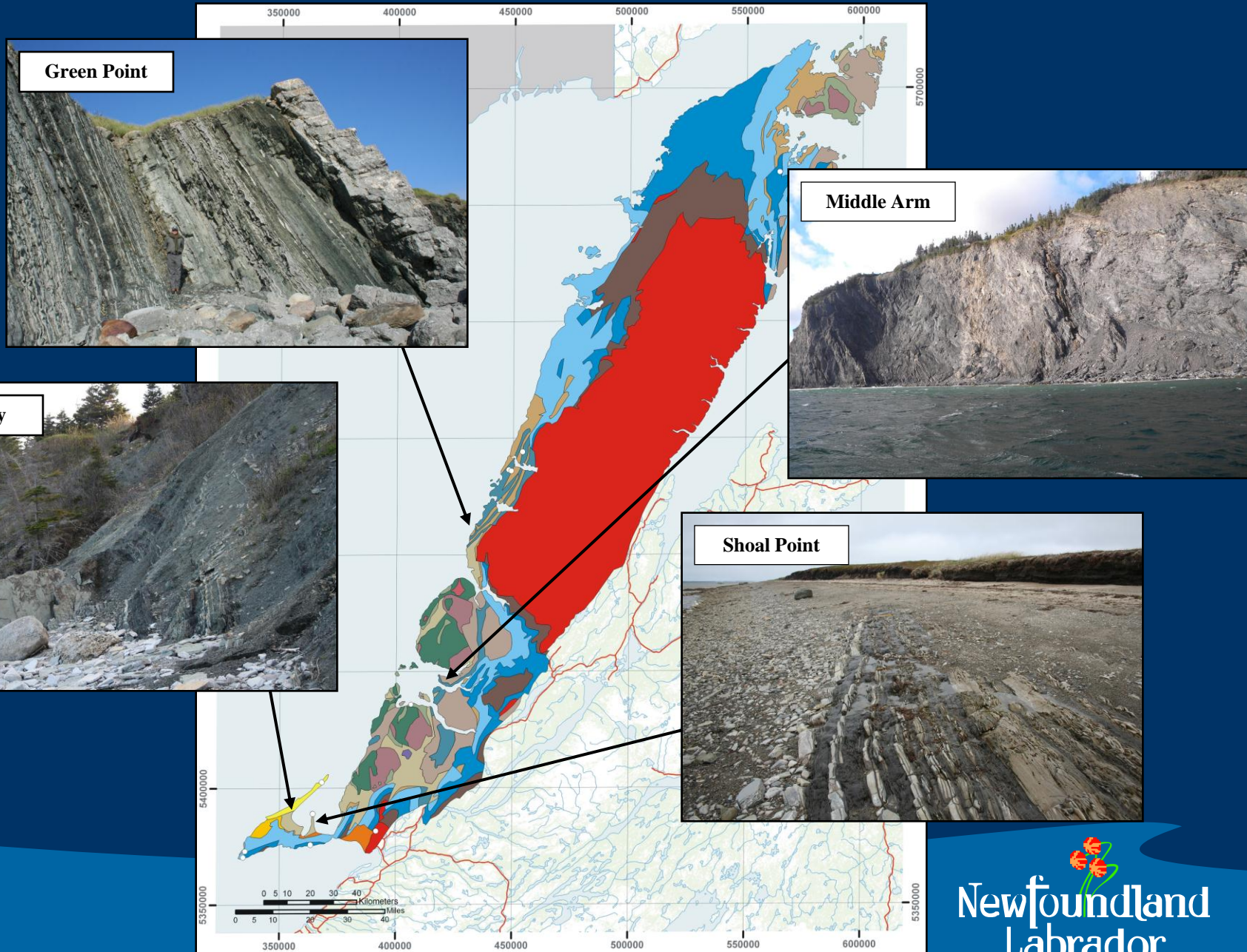


Anticosti Basin Stratigraphic Section

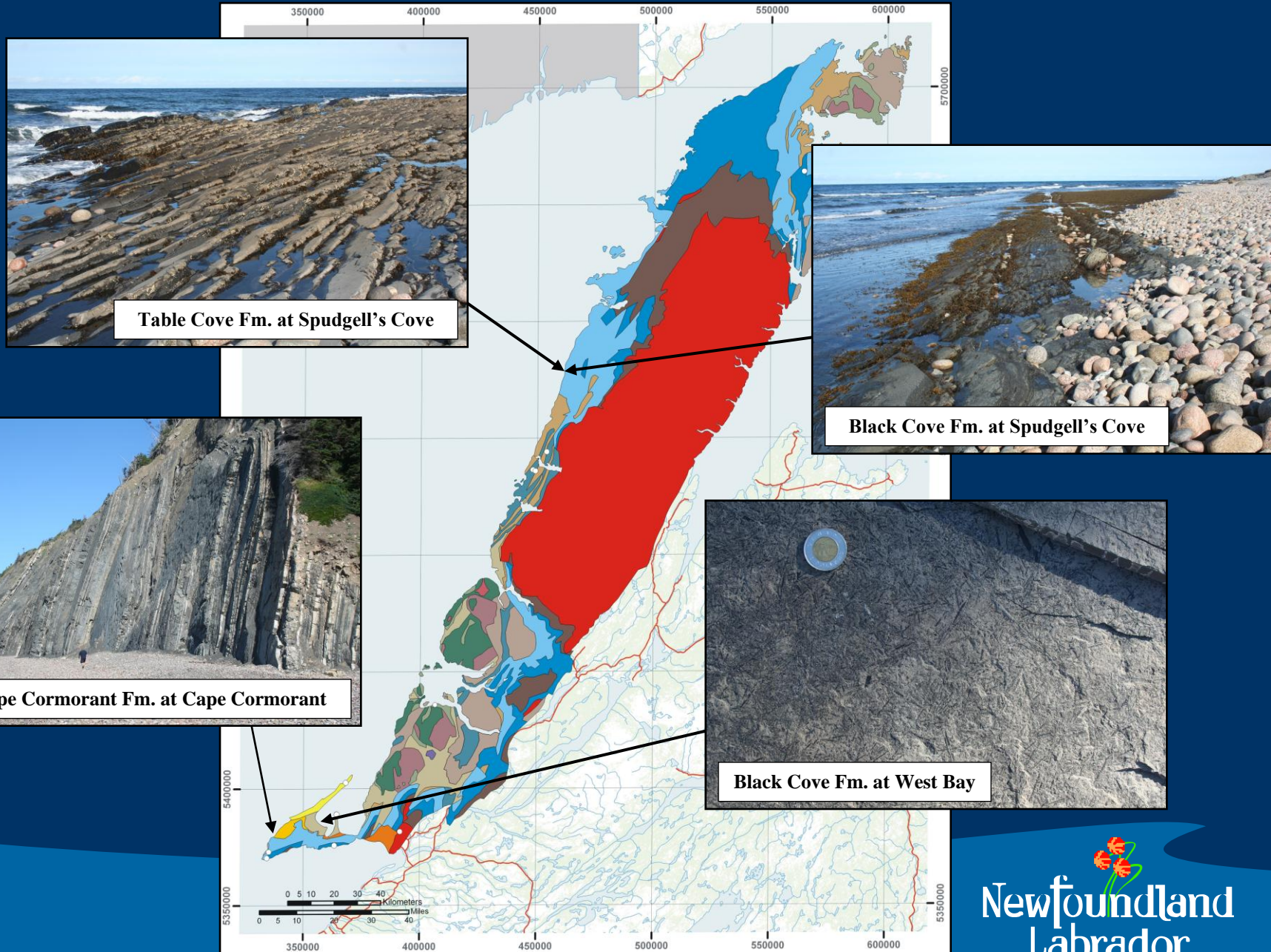


after Cooper et al., 2001

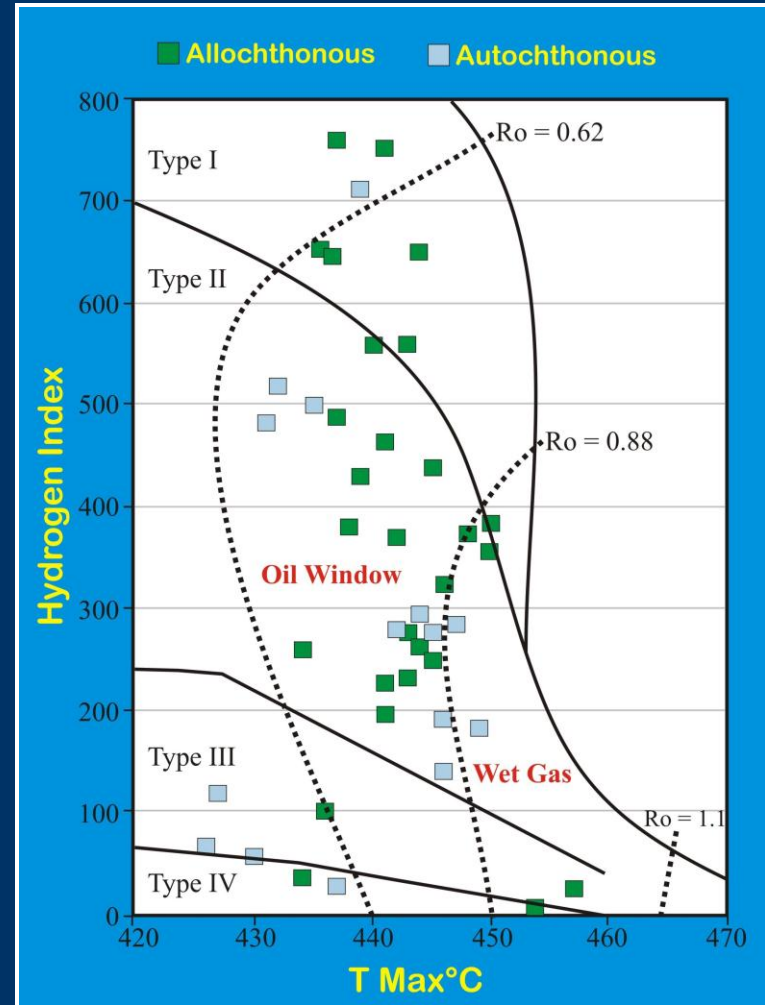
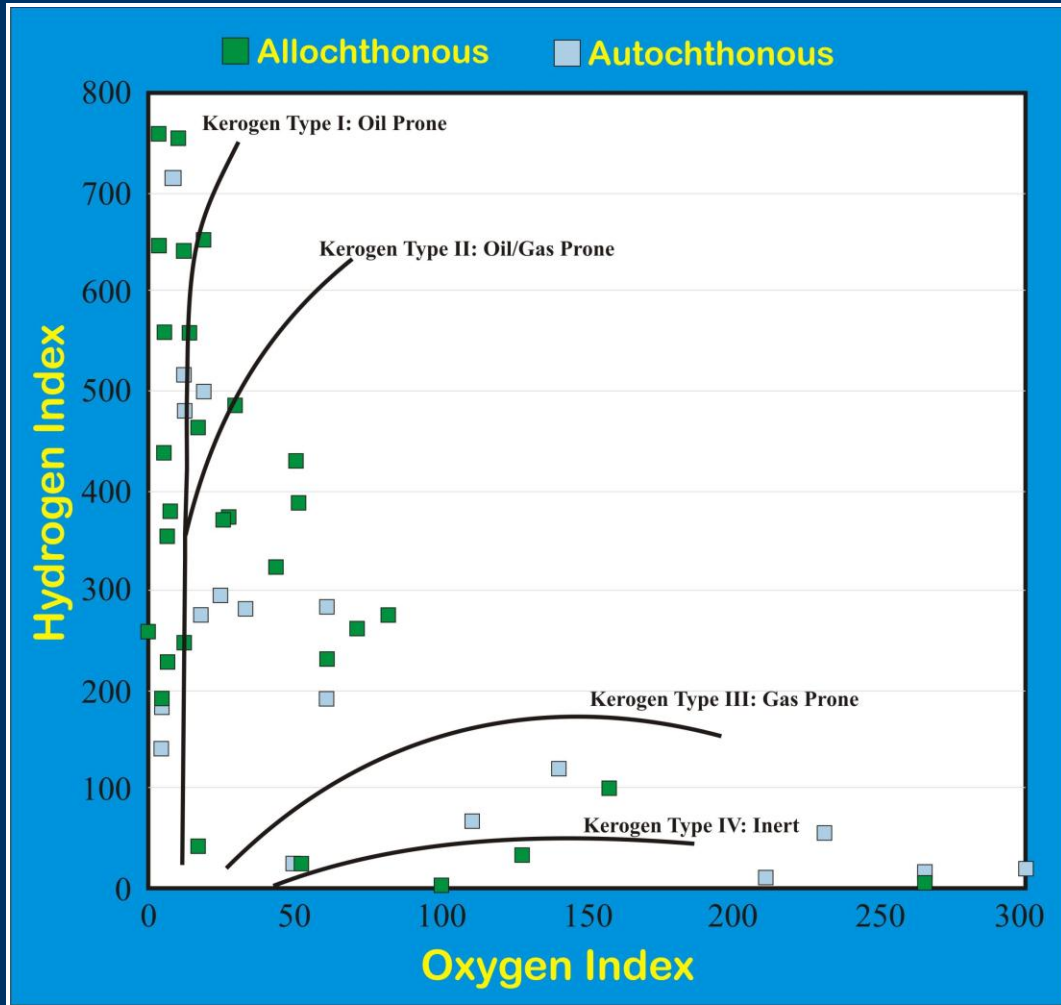
Allochthonous Slope / Rise Sediments – Cow Head & Northern Head Groups



Foreland Basin Source Rock – Table Head & Goose Tickle Groups

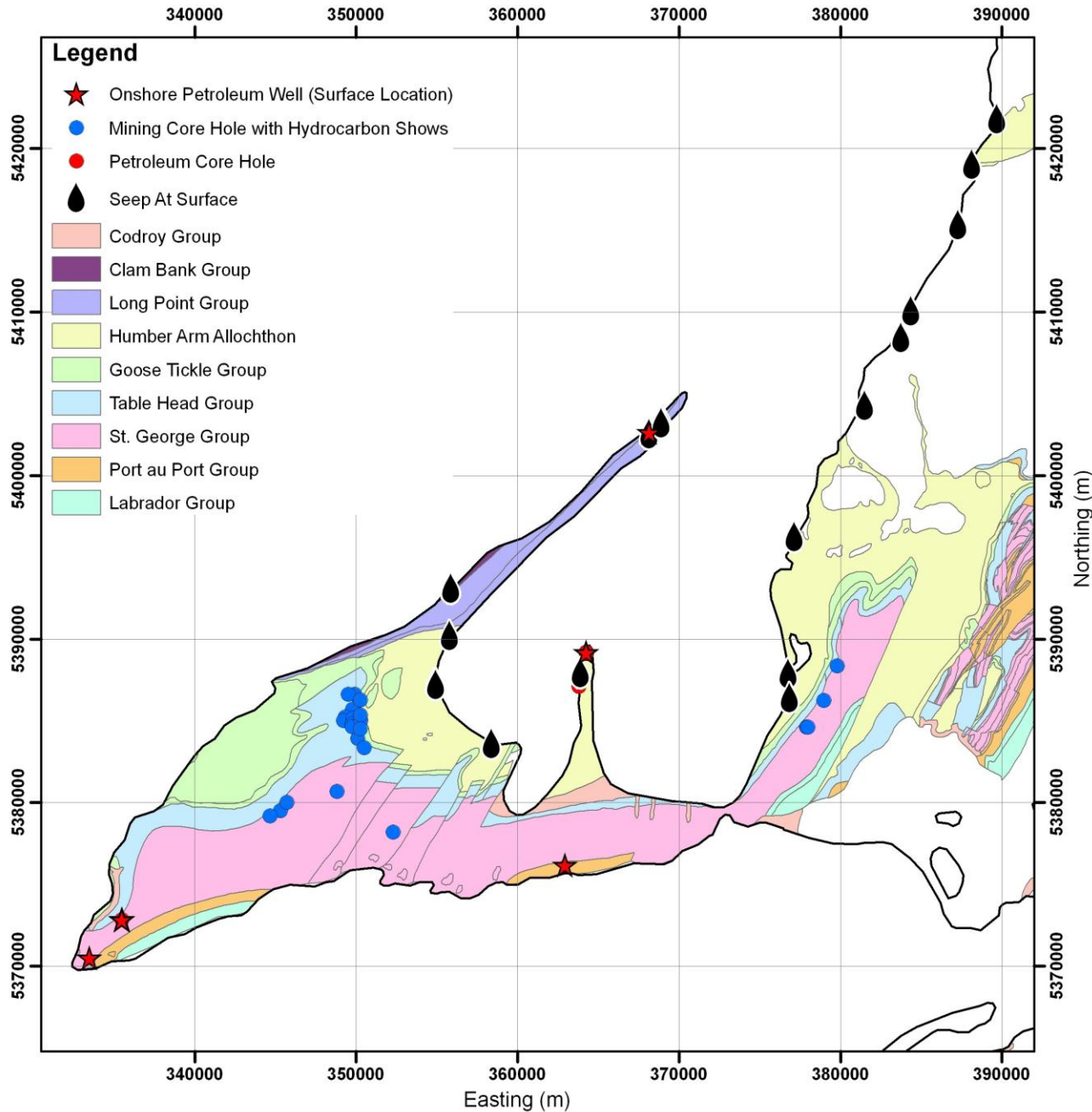


Geochemistry Data



Allochthonous / Autochthonous Source Rocks

Hydrocarbon Shows around Port au Port Bay



Hydrocarbon Shows in Allochthonous Cow Head & Northern Head Groups

Little Port



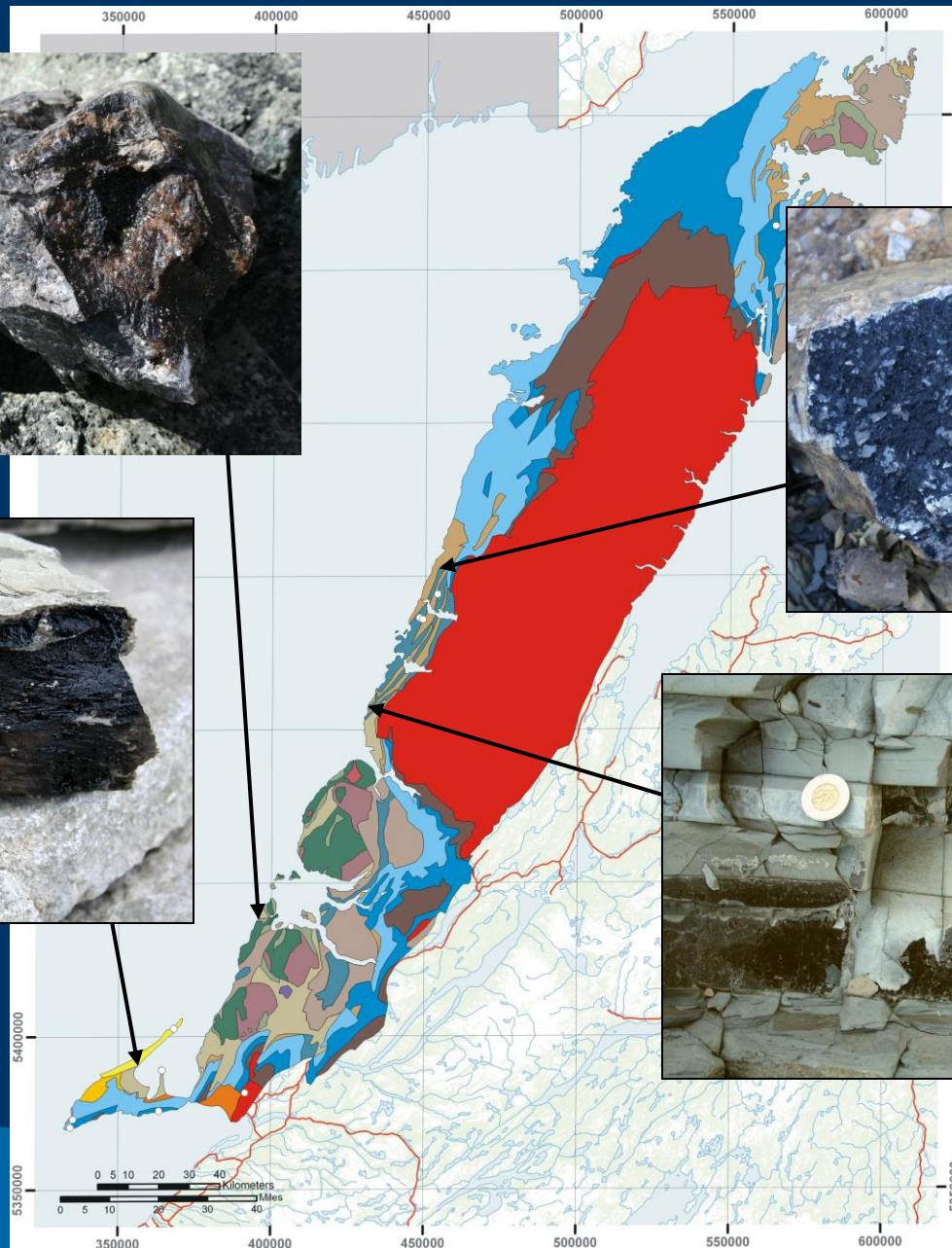
Portland Creek



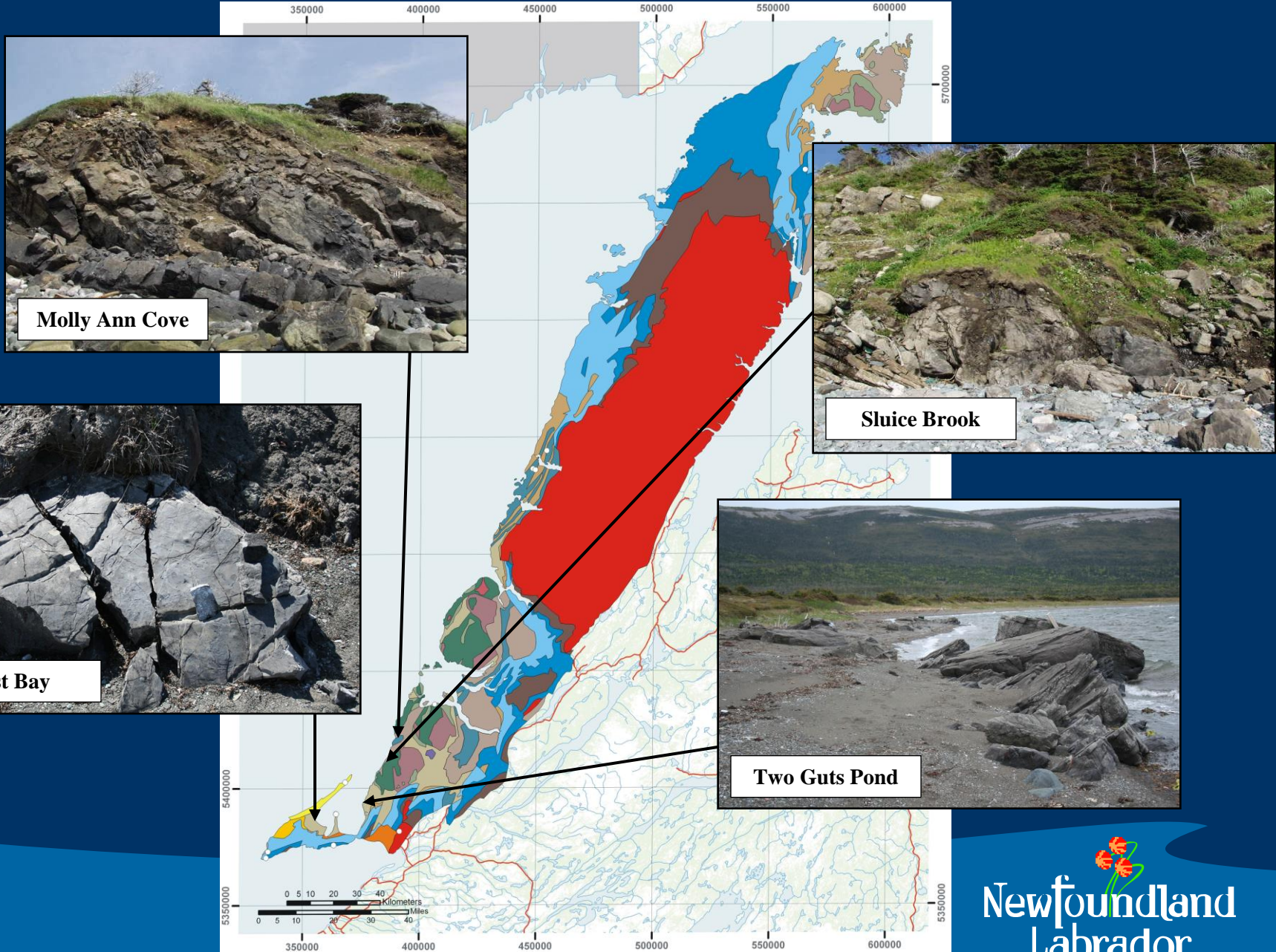
West Bay



Green Point



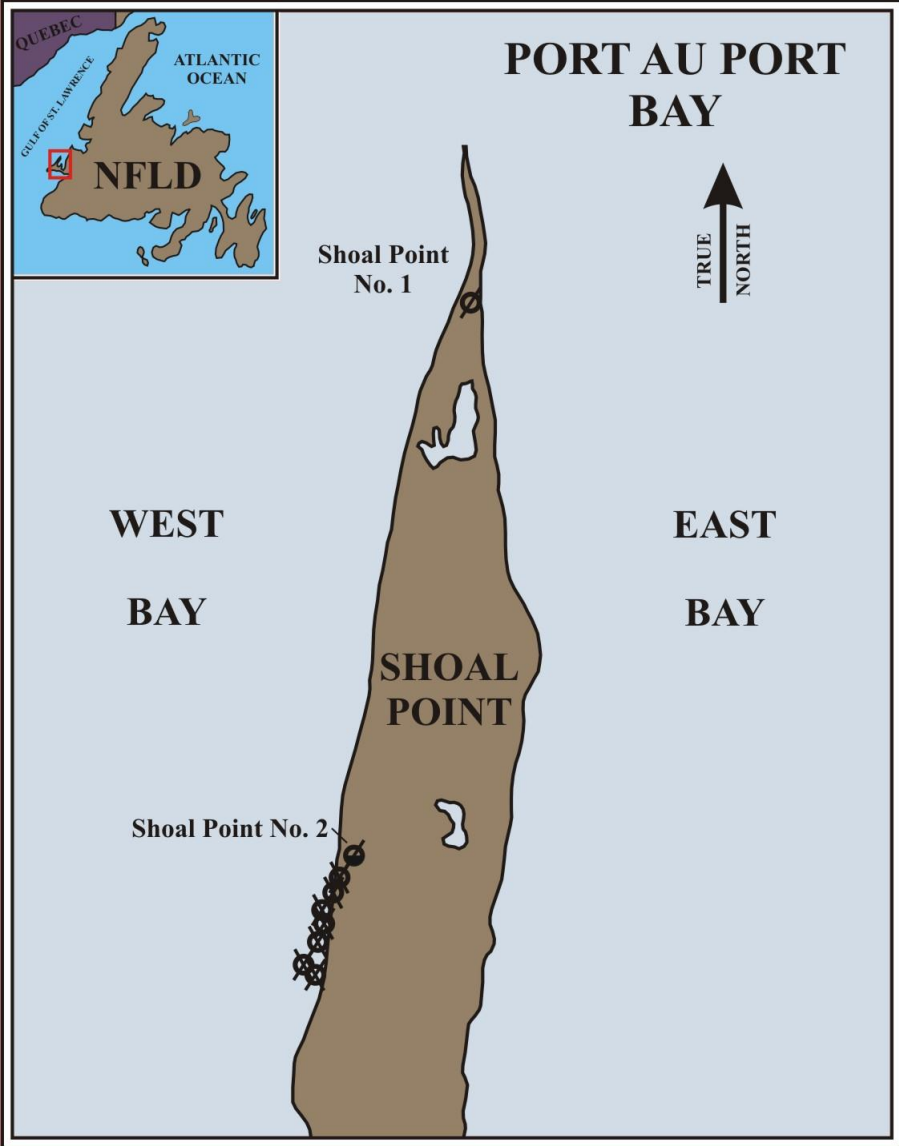
Hydrocarbon Saturated Allochthonous Reservoir Rock



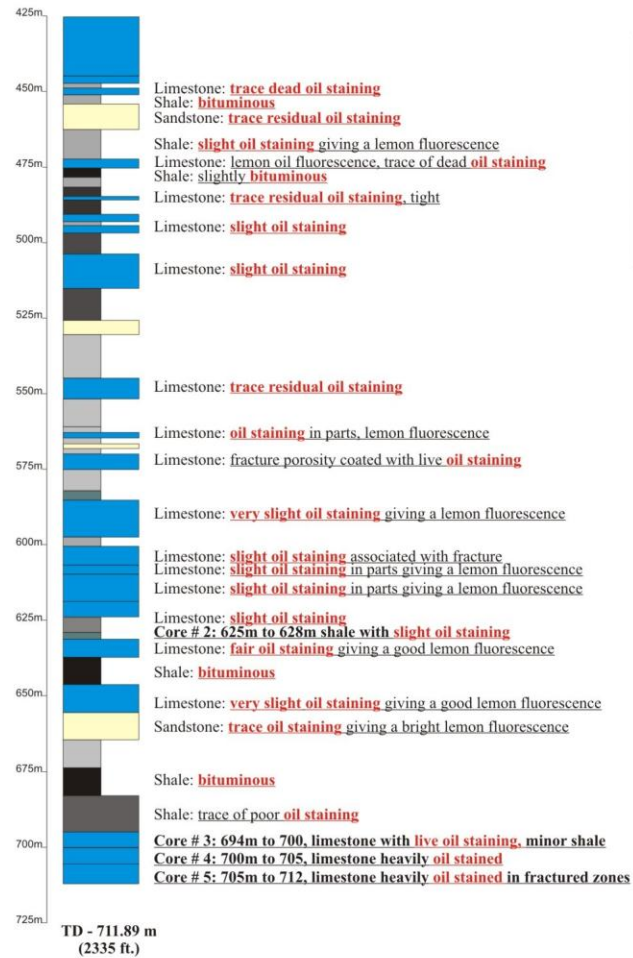
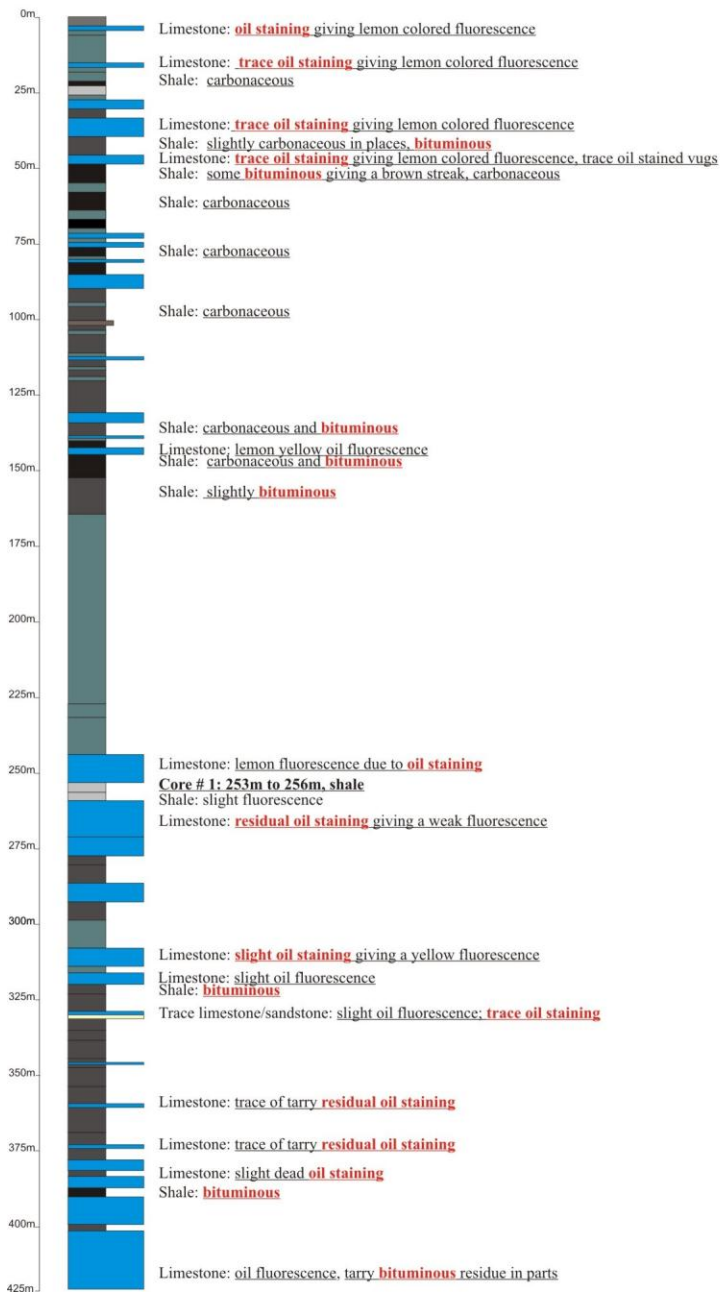
Allochthonous Cow Head and/or Northern Head Group Shale



Historic Exploration Activity at Shoal Point (1898 – 1965)



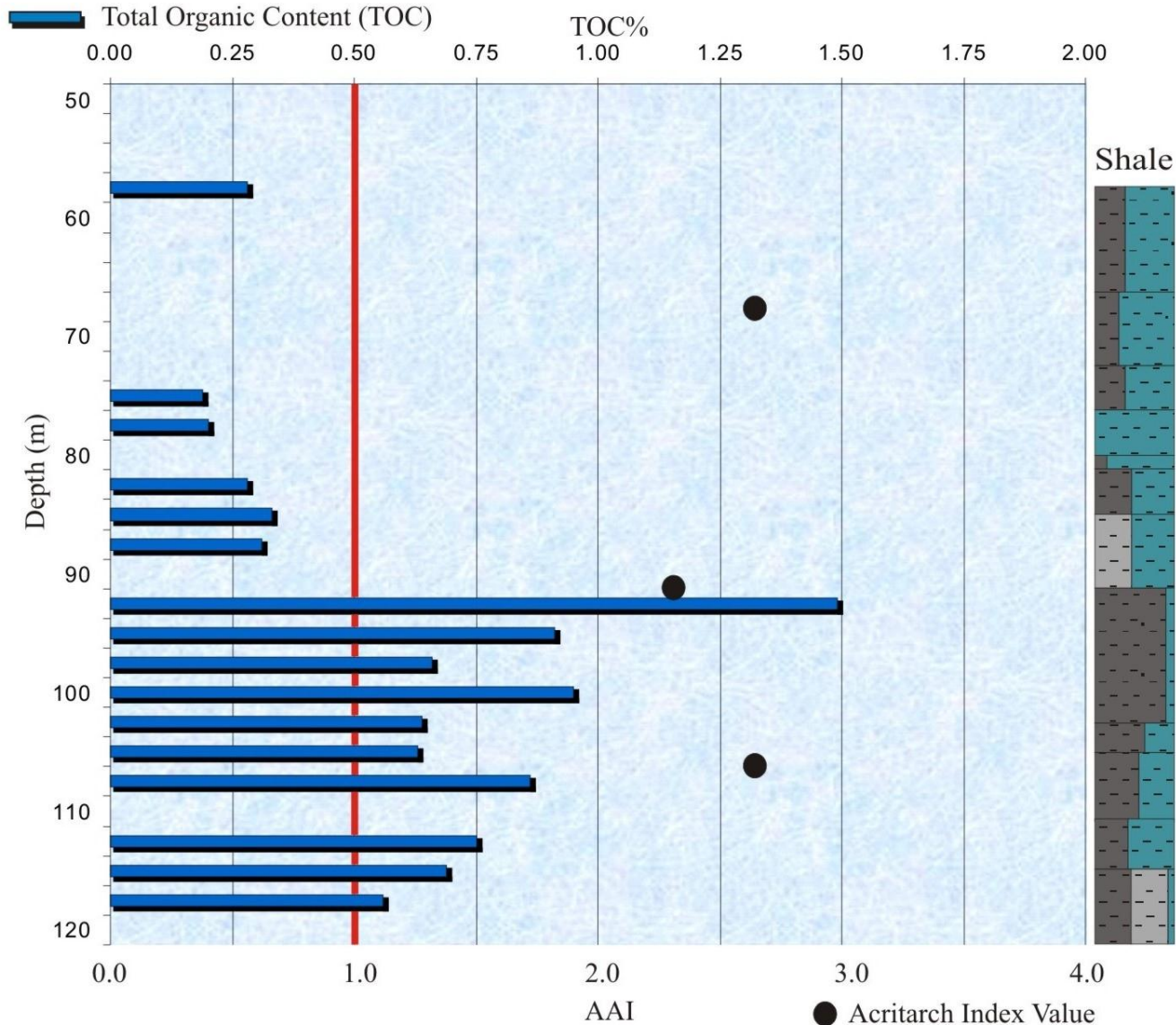
Golden Eagle Refining Co. of Canada – Shoal Point #2



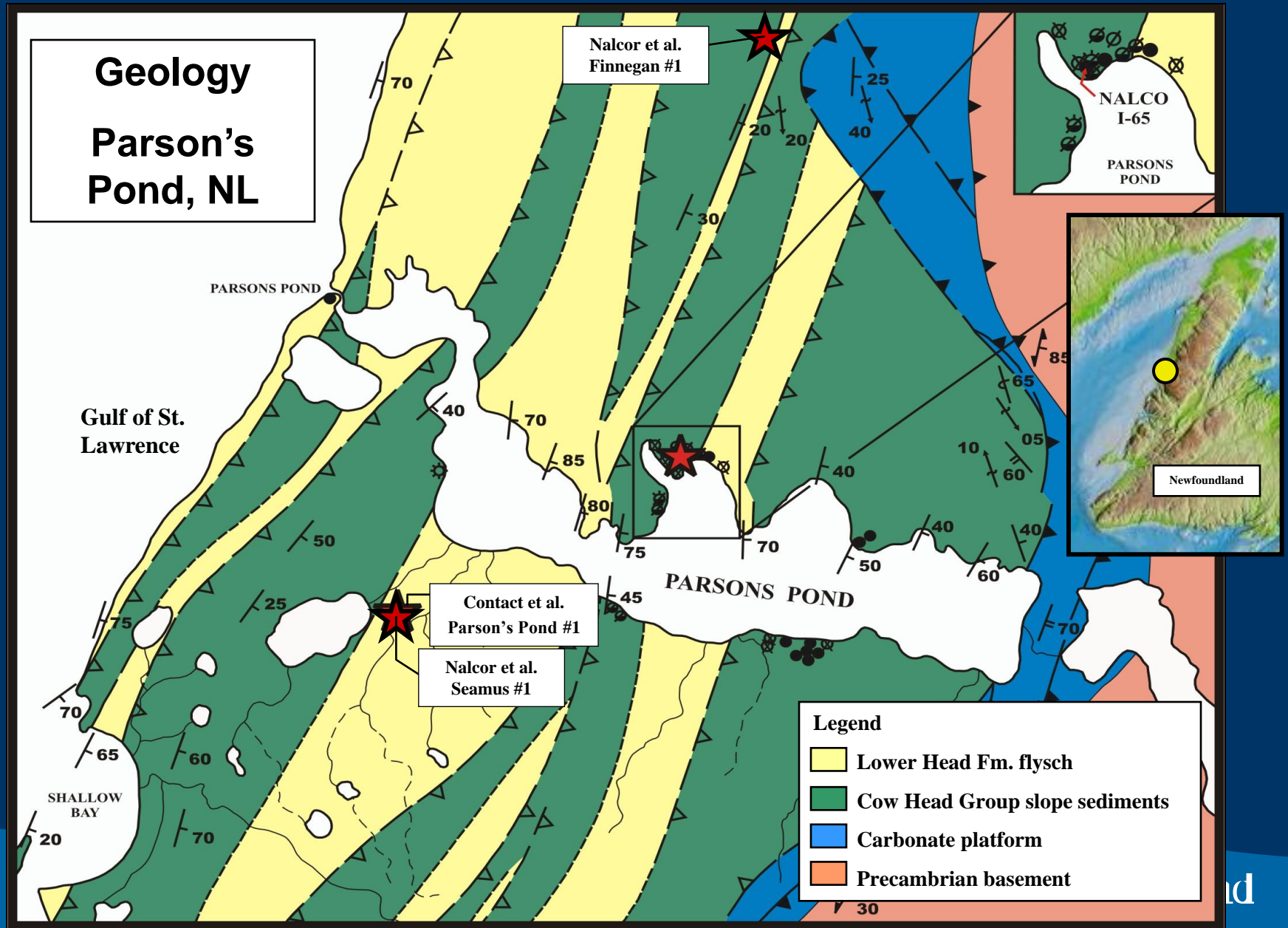
Drilled in 1965

Petroleum Activity at Bay of Islands (1996 – 97)

Lark Harbour WW2



Historic Exploration Activity at Parson's Pond (1867 – 1965)



Current Exploration Activity at Shoal Point, Port au Port Peninsula

Shoal Point Energy et al.

Green Point Formation, Cow Head Group Shale Oil Play at Shoal Point, Port au Port Peninsula

- K – 39
- 2K – 39
- 2K – 39Z
- 3K - 39

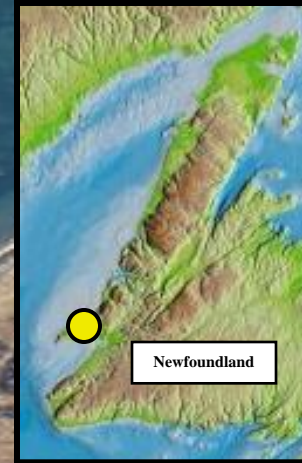
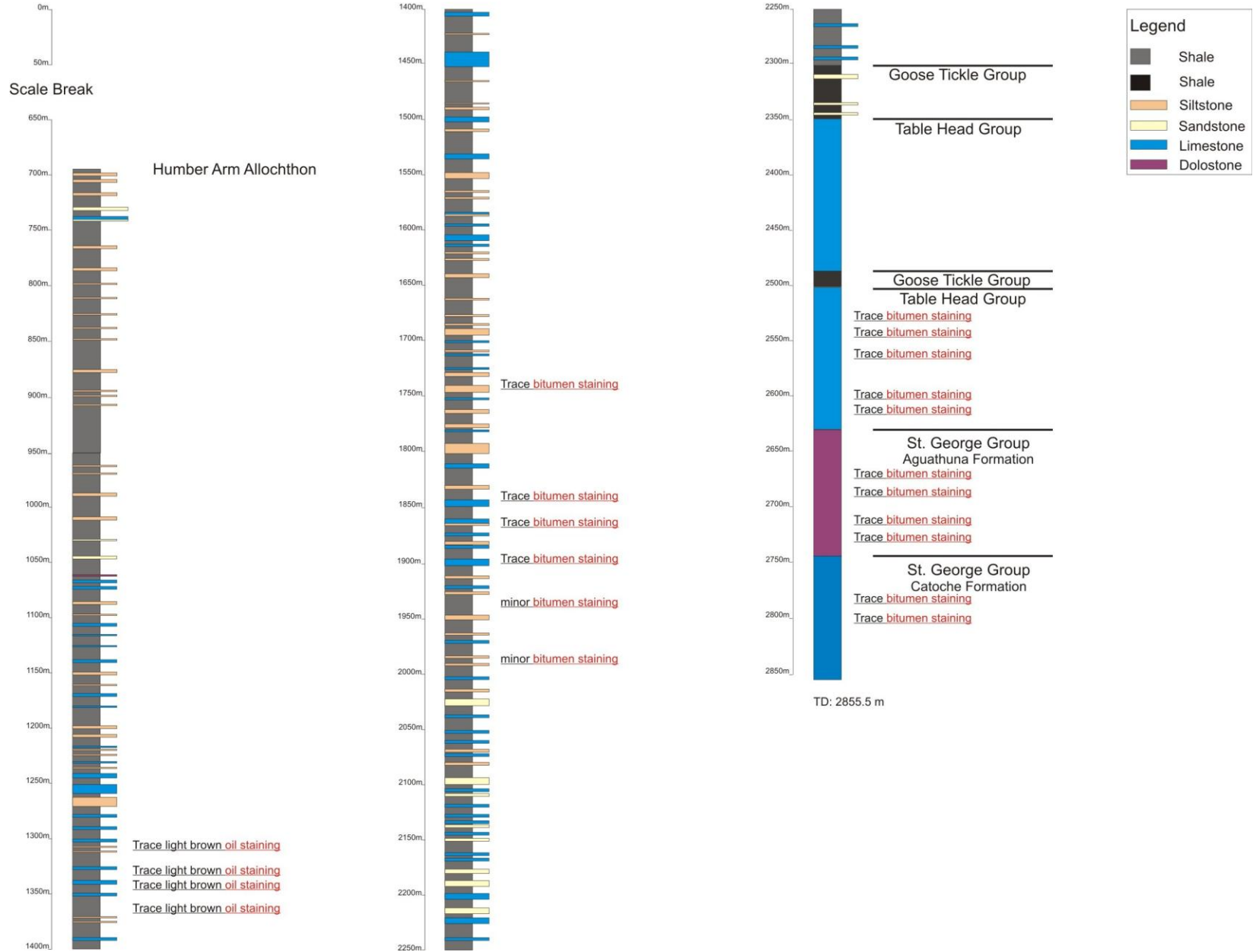


Photo Credit – Canadian Imperial Venture Corp. (CIVC)

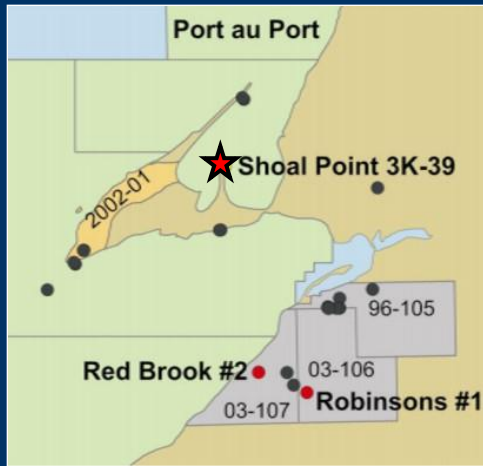
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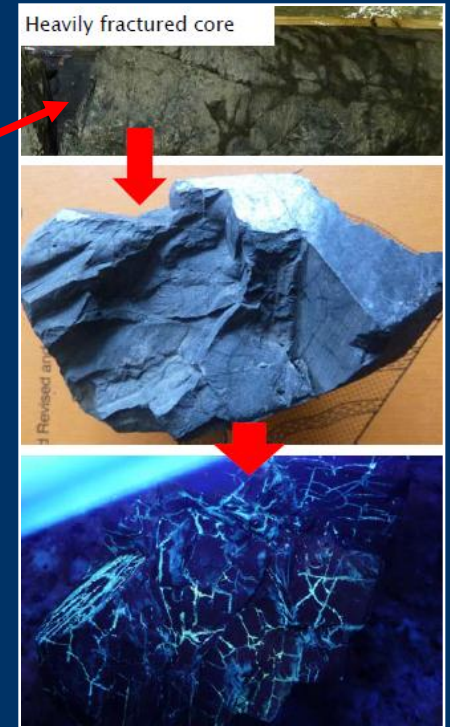
Shoal Point Energy et al., Shoal Point 2K - 39



Shoal Point et al., 3K – 39 Well



Oil fluorescence distinctly highlights natural fracture patterns in the core



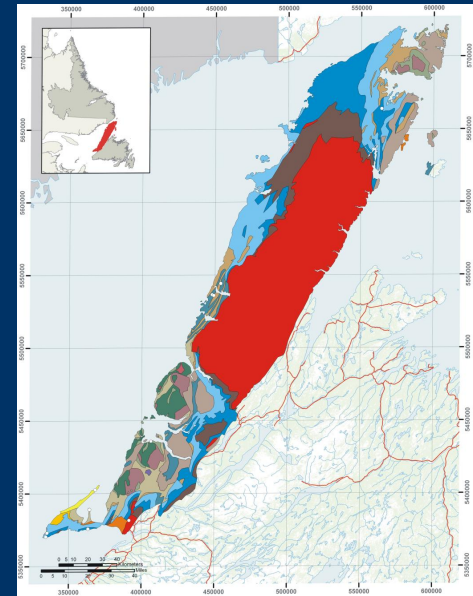
Core exhibits petroliferous odour upon extraction from core barrel



Core bottoms over time (days) exhibit faint to good oil staining

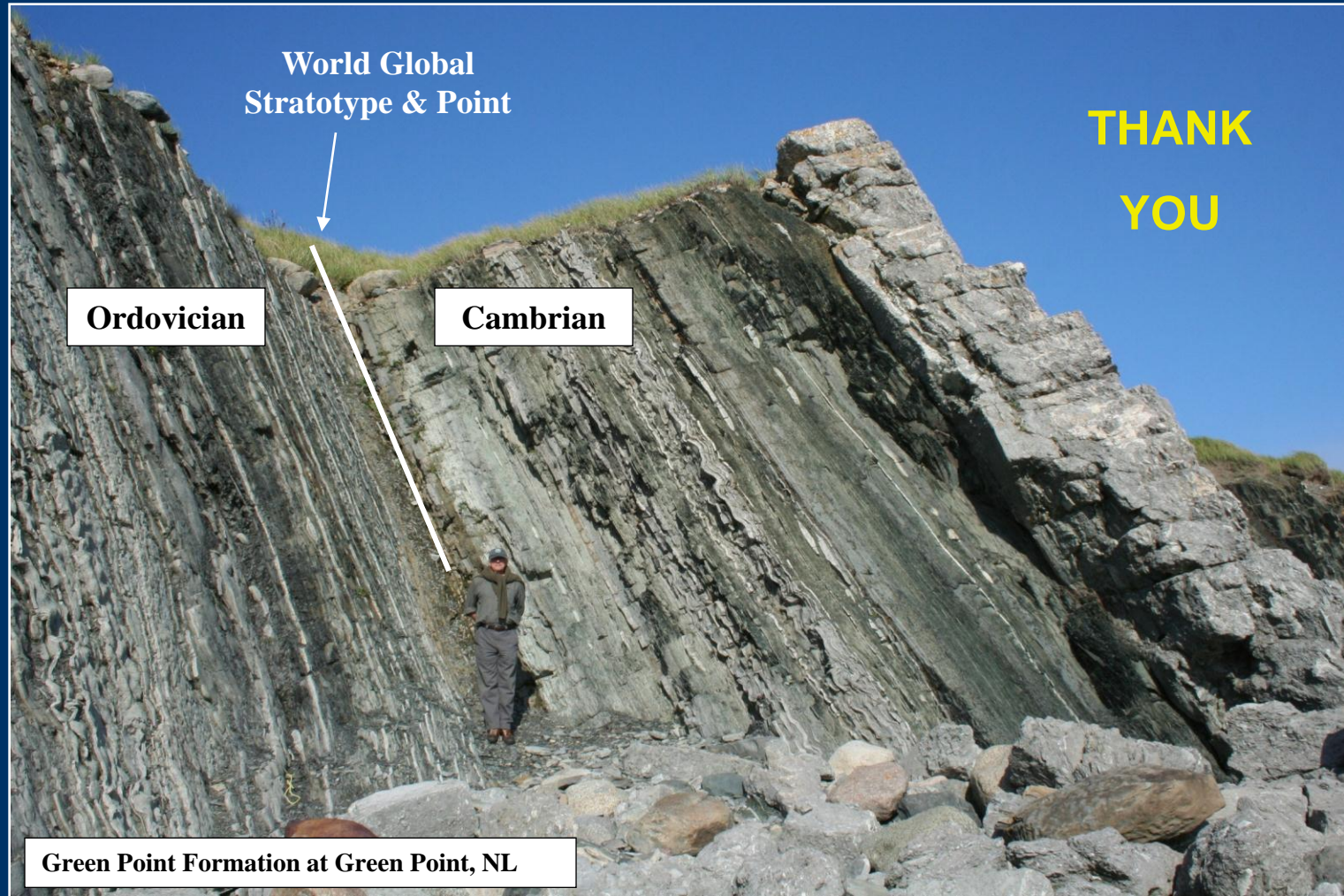
Summary – Lower Paleozoic Anticosti Basin

- Unconventional & Conventional resource plays
- Multiple, organic rich source rocks – variable maturity
- Multiple play types & associated reservoir rock
- Large land parcels (onshore – up to 40,000 ha; offshore – up to 80,000 ha)
- DNR finalizing details for a 2012 land sale
- Two onshore Upper Paleozoic basins (with proven petroleum systems)





Come Visit: **BOOTH # 1039**



**THANK
YOU**

Web Address (DNR): www.nr.gov.nl.ca/nr


Newfoundland
Labrador