

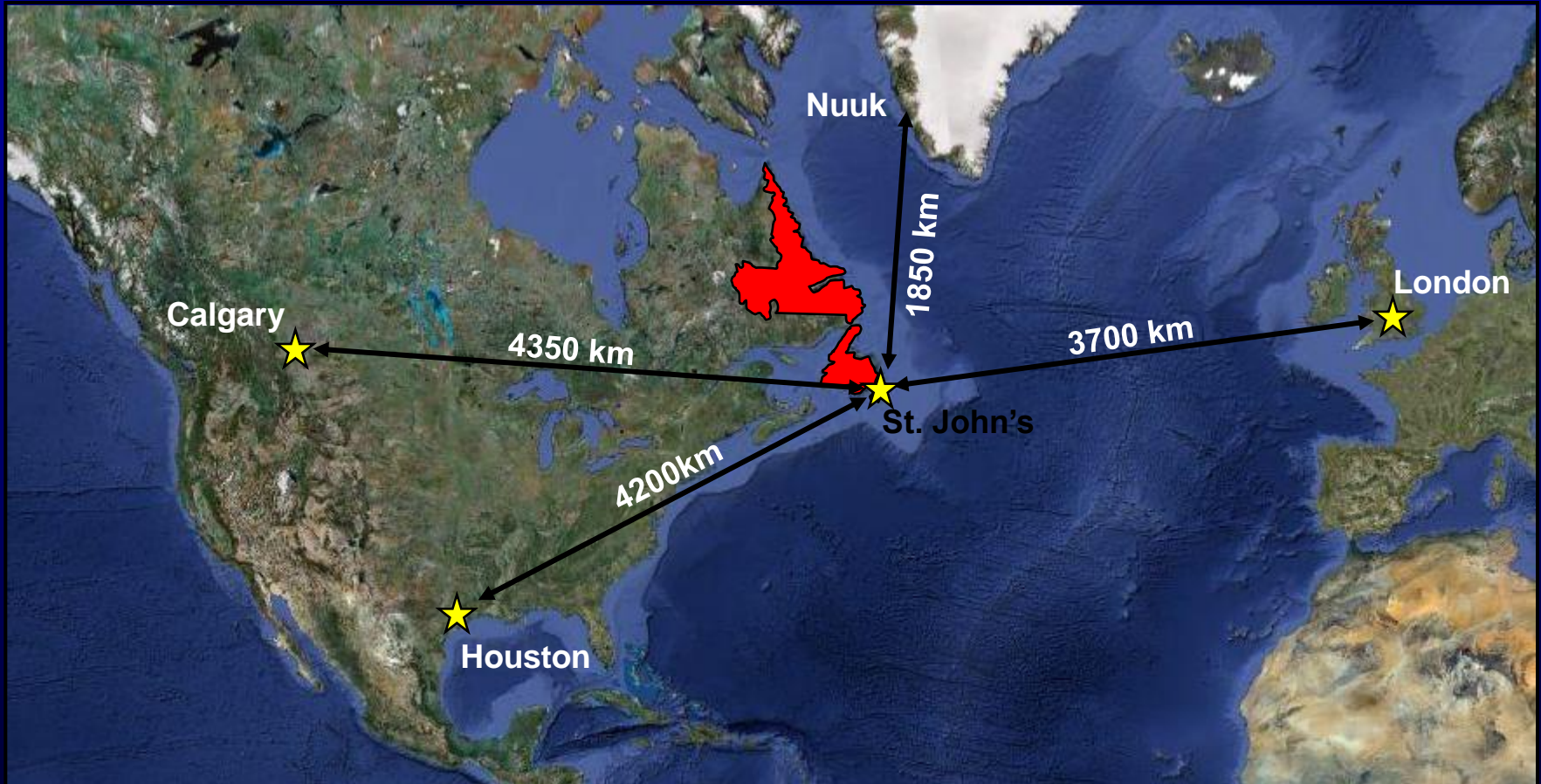


Newfoundland Labrador

CANADA

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Location



Location



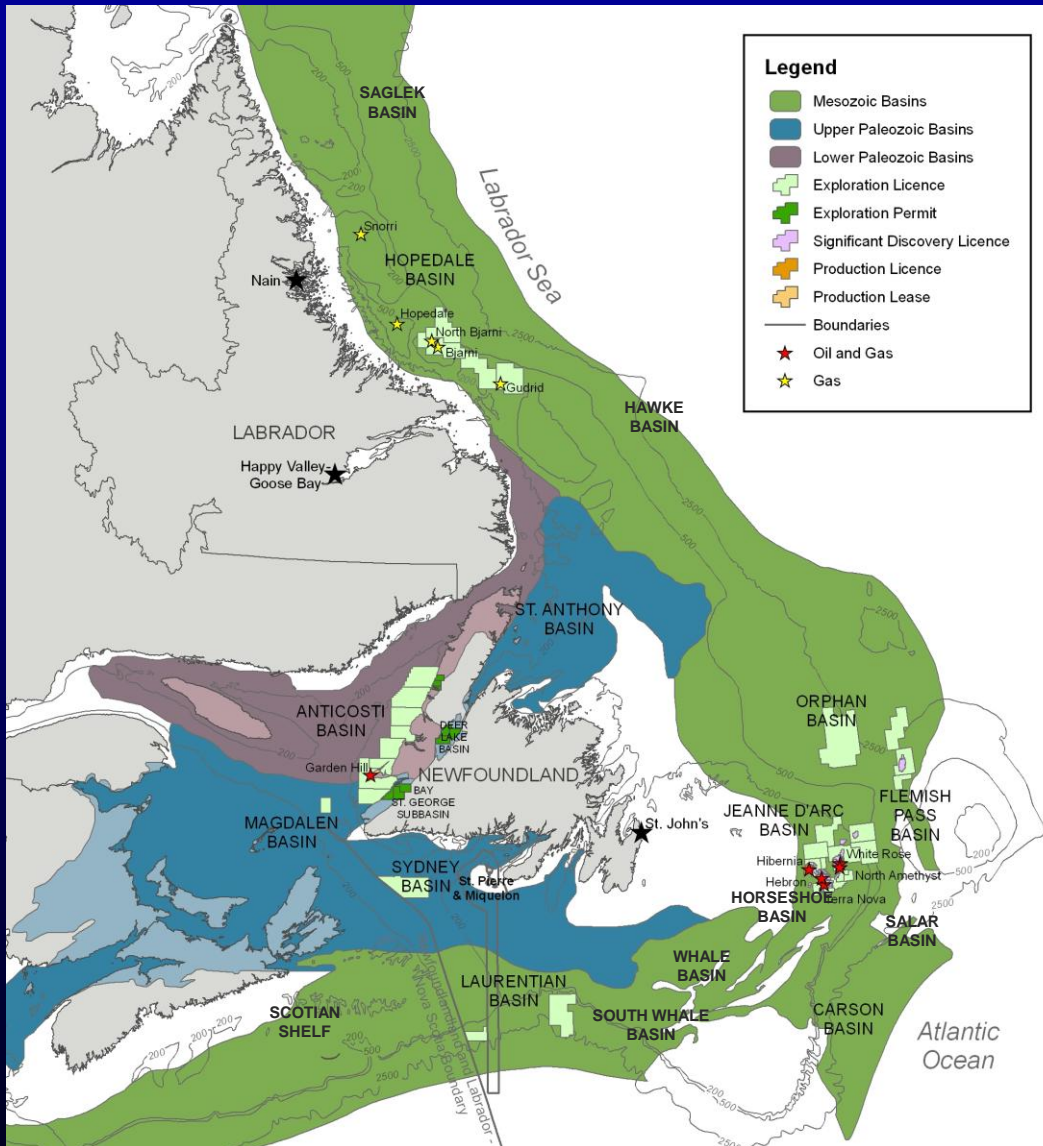
Overview



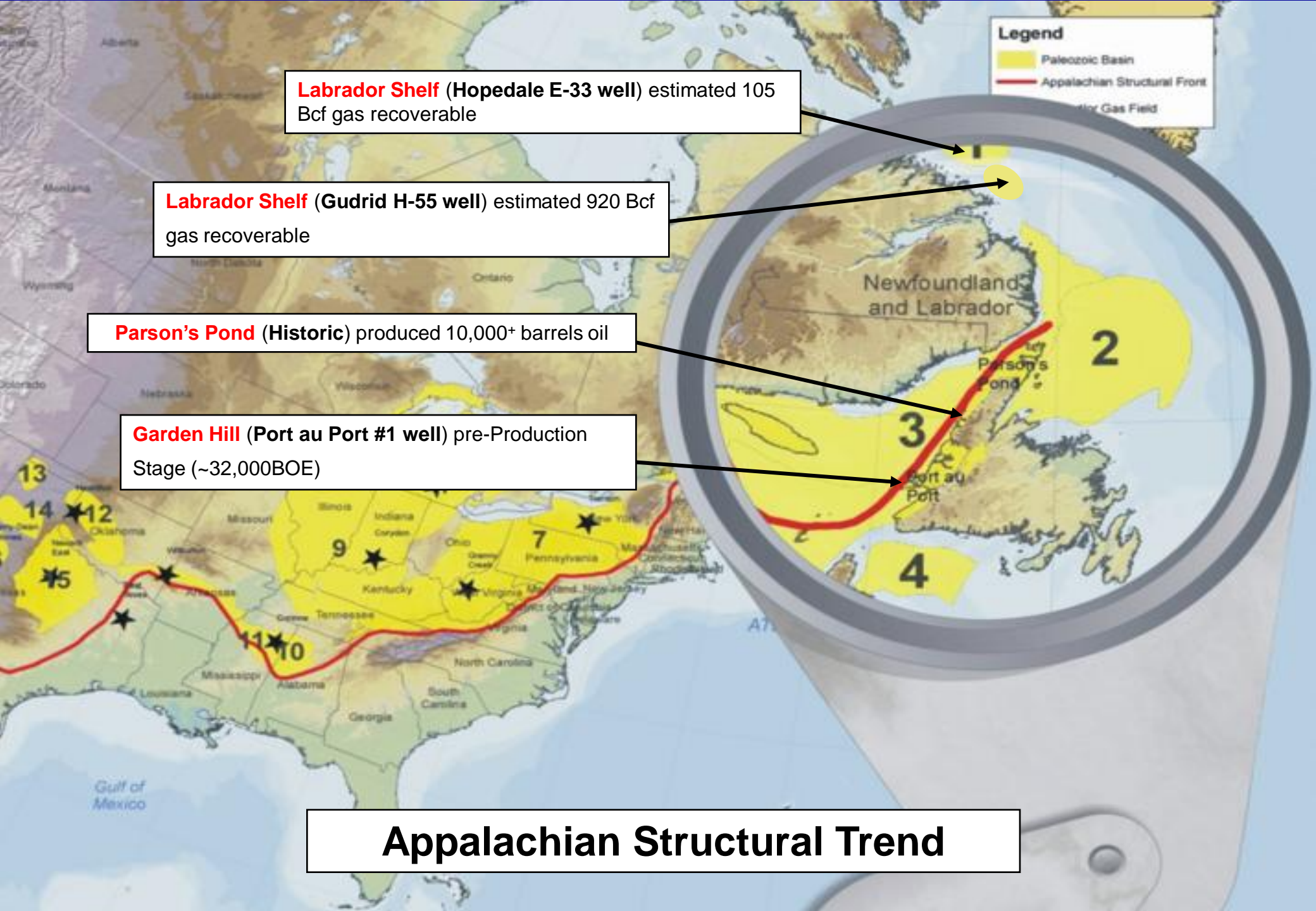
- Total Land Area in excess of 800,000km² (200 Million acres).
- Average Block size 100x the size of US Gulf of Mexico Blocks.
- Numerous sedimentary basins, very lightly explored.
- >3 Billion barrels oil, >11 Tcf gas & >500MM barrels NGLs discovered so far. Undiscovered estimated at 6 Bbbl oil and 60 Tcf. 1.2 Billion barrels produced to date.
- One producing basin so far, Jeanne d'Arc, averaging 275,000 bopd production. Significant Discovery now in Flemish Pass.

**< 10% currently held
under licence**

Prospective Sedimentary Basins



- Numerous sedimentary basins with proven petroleum systems and significant volumes.
- Tertiary, Mesozoic and Palaeozoic Basins.
- Hugely underexplored region.



Labrador Shelf (Hopedale E-33 well) estimated 105 Bcf gas recoverable

Labrador Shelf (Gudrid H-55 well) estimated 920 Bcf gas recoverable

Parson's Pond (Historic) produced 10,000+ barrels oil

Garden Hill (Port au Port #1 well) pre-Production Stage (~32,000BOE)

Legend

- Paleozoic Basin
- Appalachian Structural Front
- Offshore Gas Field

Appalachian Structural Trend



GEOLOGY OF THE ISLAND OF NEWFOUNDLAND

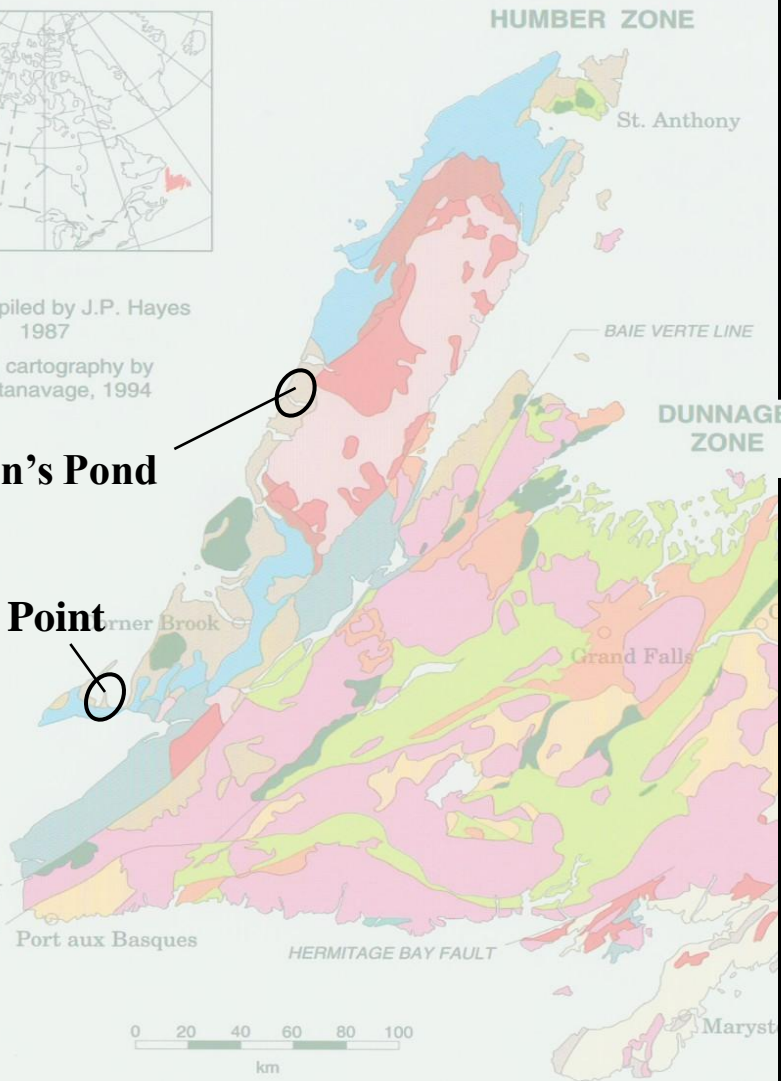


Map compiled by J.P. Hayes
1987


Digital cartography by
T. Paltanavage, 1994

Parson's Pond

Shoal Point




Parson's Pond

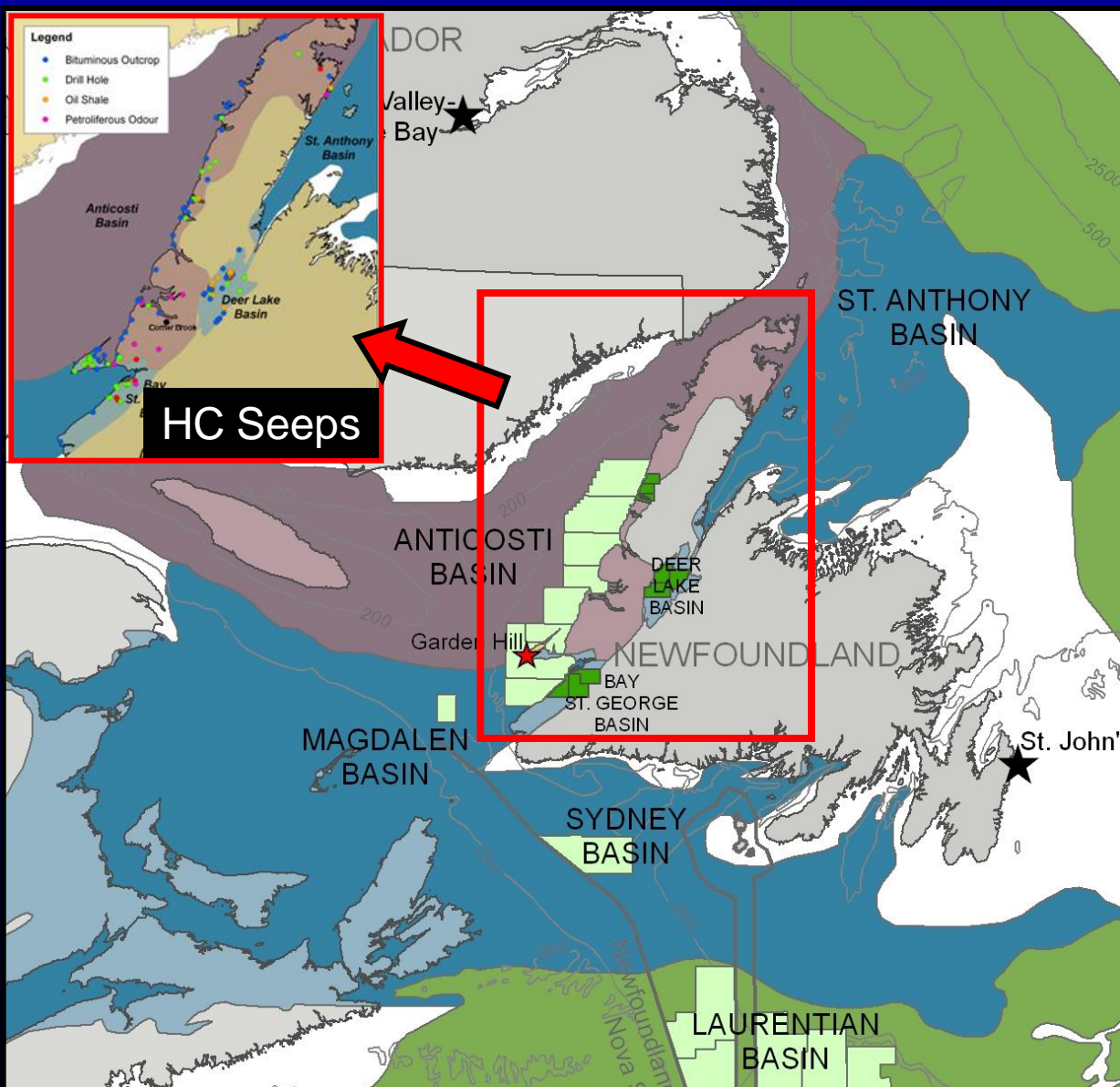
 Clastic metasedimentary rocks and migmatitic equivalents



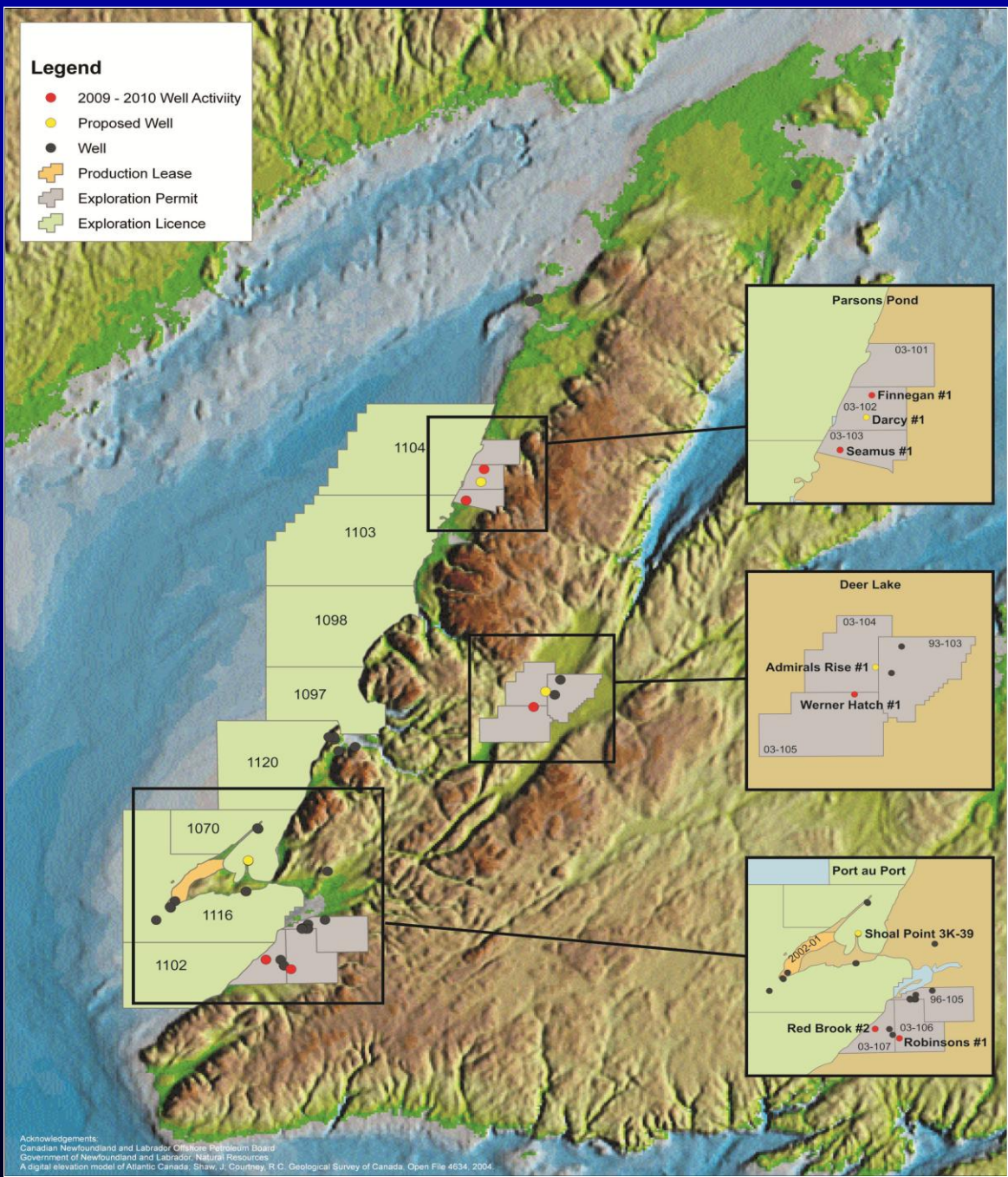
Shoal Point

 Igneous and felsic volcanic and volcanoclastic rocks

Western Newfoundland: Onshore and Offshore Potential



- Numerous small to medium size Independents active in Western Newfoundland.
- Prolific Onshore seeps recorded, working Petroleum System.
- Conventional and Unconventional hydrocarbon plays, including deep sub-thrust carbonate platform targets, large 4-Way Dip Closures, Shale Gas and Basin Centered Gas being targetted.



Land Tenure

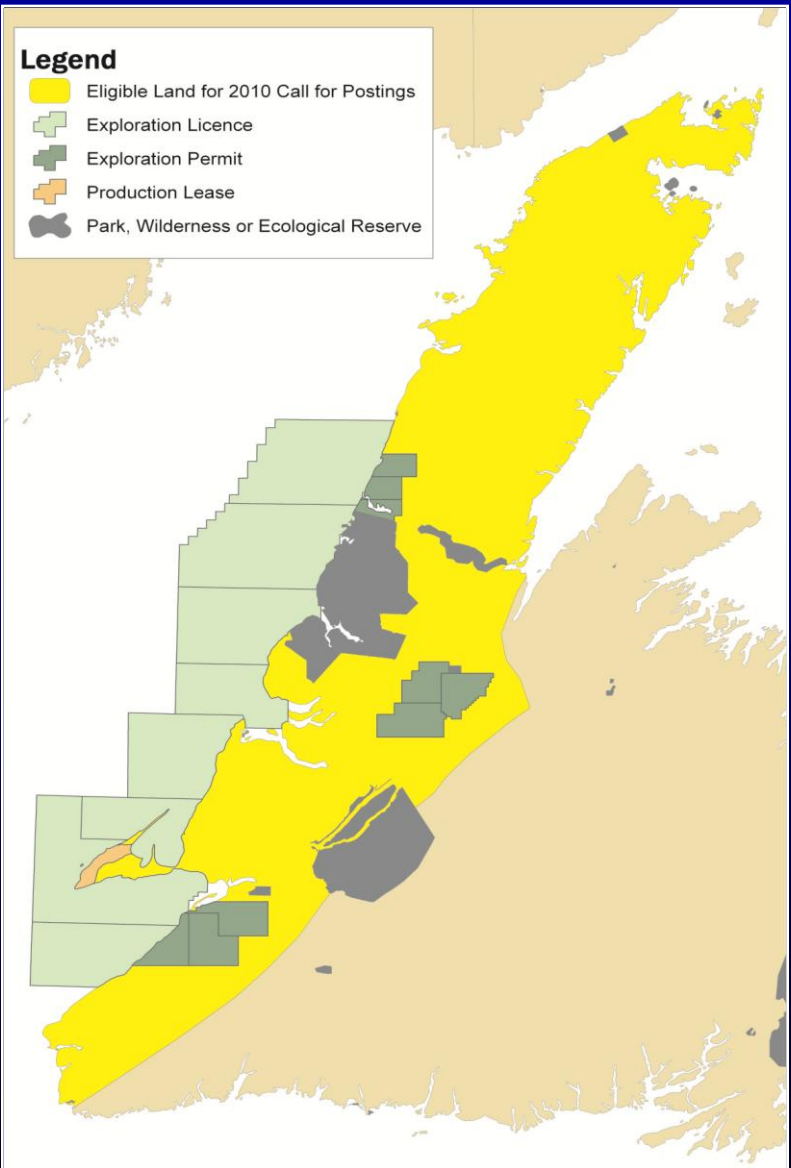
- 9 Licenses (offshore)
- 9 Permits (onshore)
- 1 Production Lease (onshore)

Drilling Summary

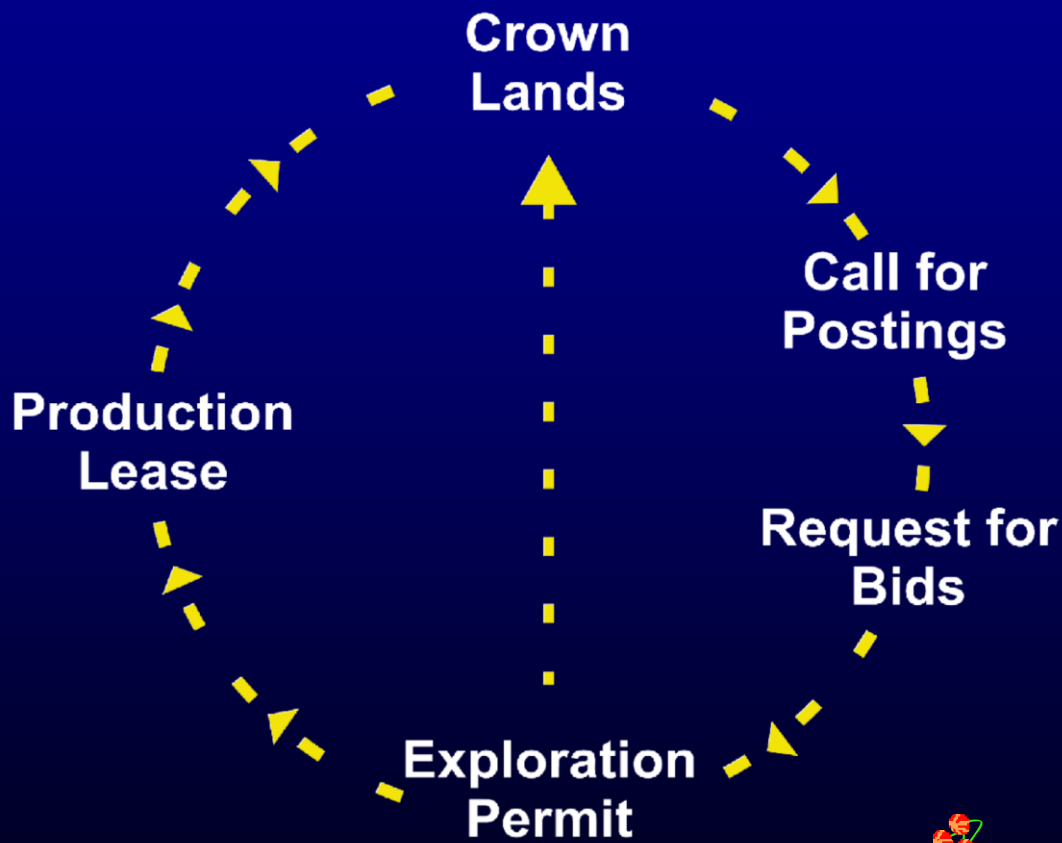
- 30 Exploration Wells
- 4 Stratigraphic Holes

Acknowledgements:
 Canadian Newfoundland and Labrador Offshore Petroleum Board
 Government of Newfoundland and Labrador, Natural Resources
 A digital elevation model of Atlantic Canada. Shaw, J. Courtney, R.C. Geological Survey of Canada. Open File 4634. 2004.

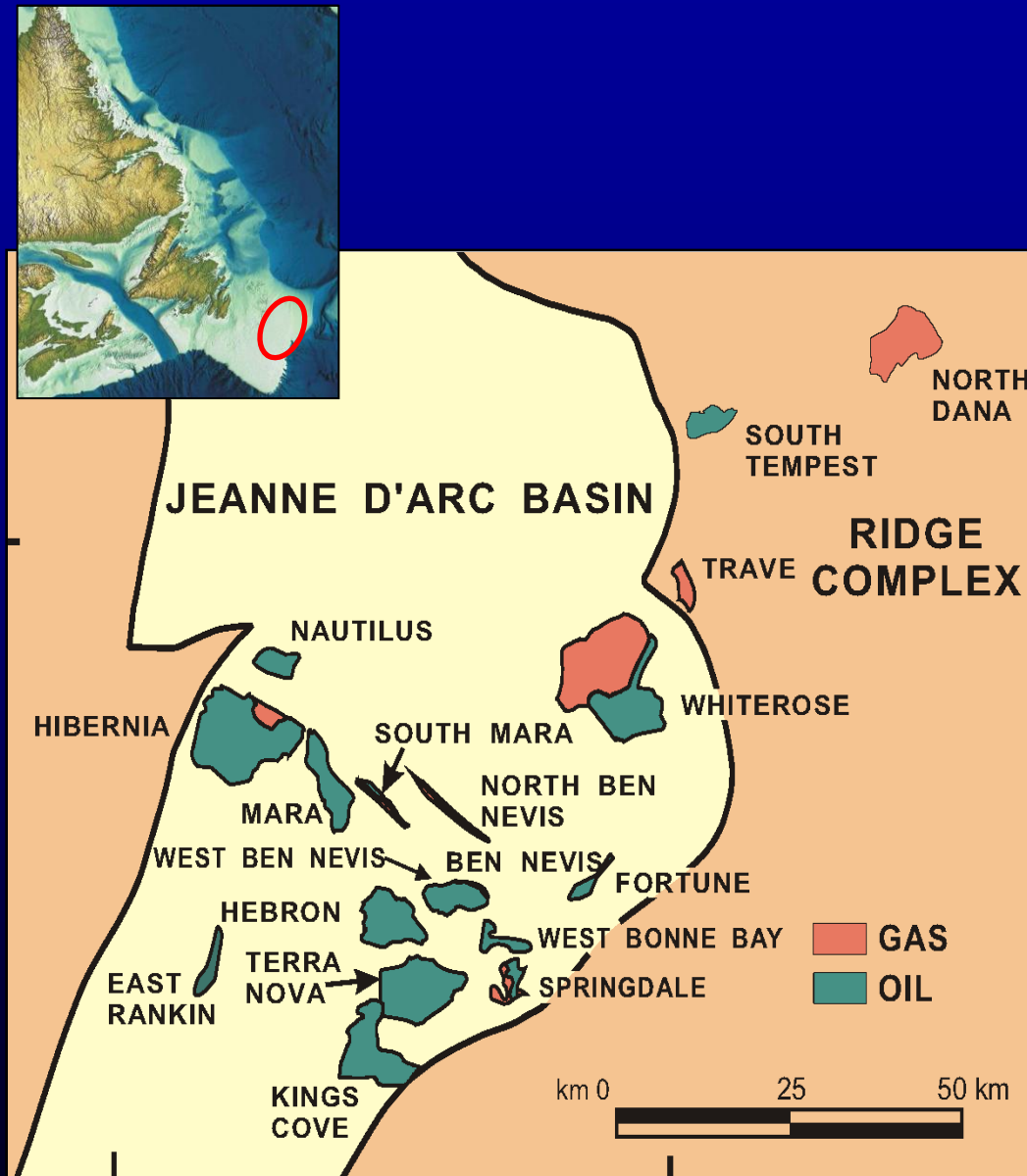
Onshore Bid Round 2011



Onshore Land Rights – Issuance Process



Significant Discoveries: Grand Banks

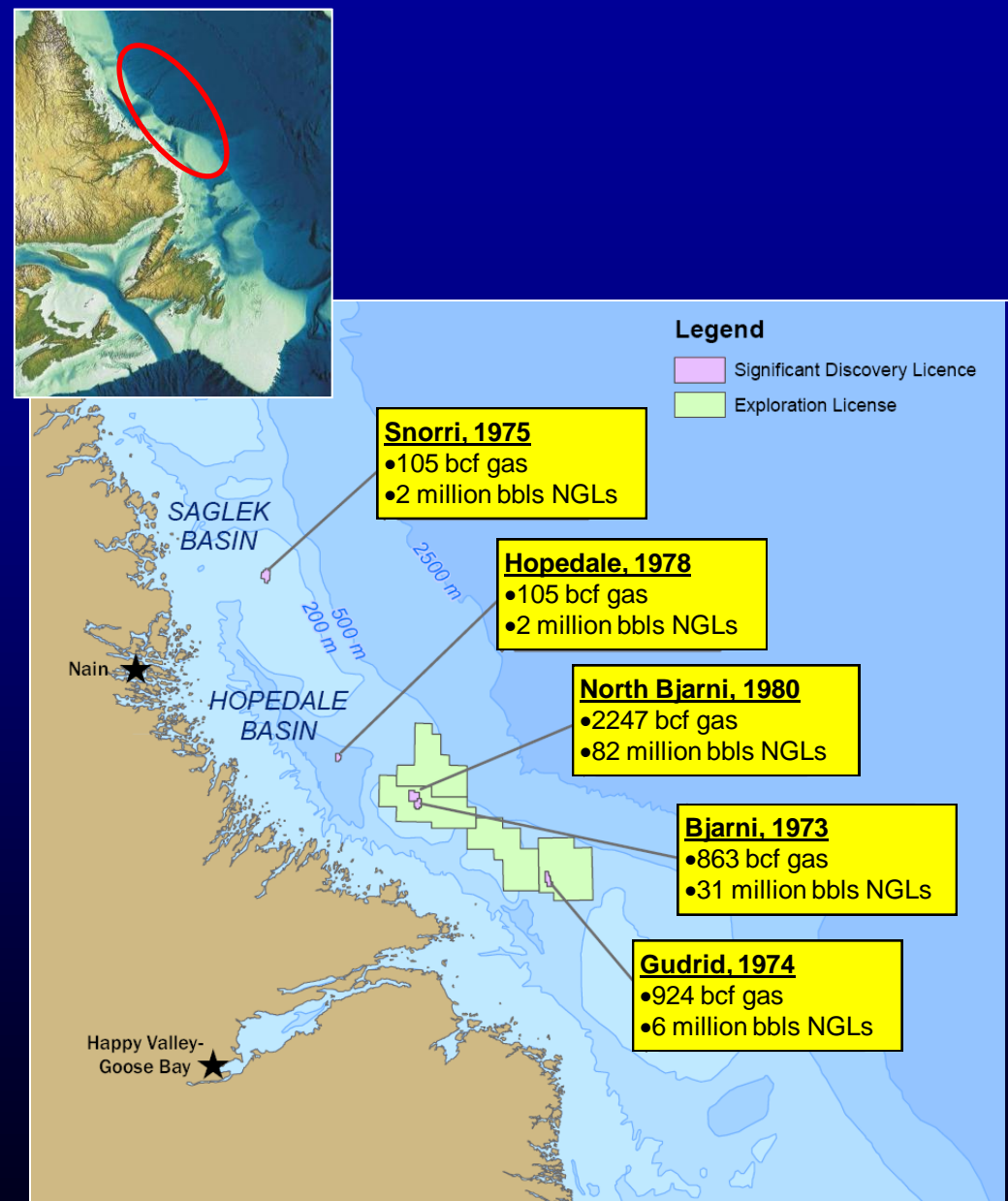


Four Major Oil Projects:

- **Hibernia:** 1395 mmbbls; 2 tcf
- **Terra Nova:** 419 mmbbls; 45 bcf
- **White Rose:** 373 mmbbls; 3.3 tcf
- **Hebron:** 581 mmbbls; 0.4 tcf (first oil expected 2017)
- **Total Discovered:** 3 Bbbls oil, 6.8TCF gas, 380 MMbbls NGLs
- **Production:** Jeanne d'Arc Basin alone accounts for 40% of Canada's conventional light crude production, around 275,000 bopd.



Offshore Labrador: Overview



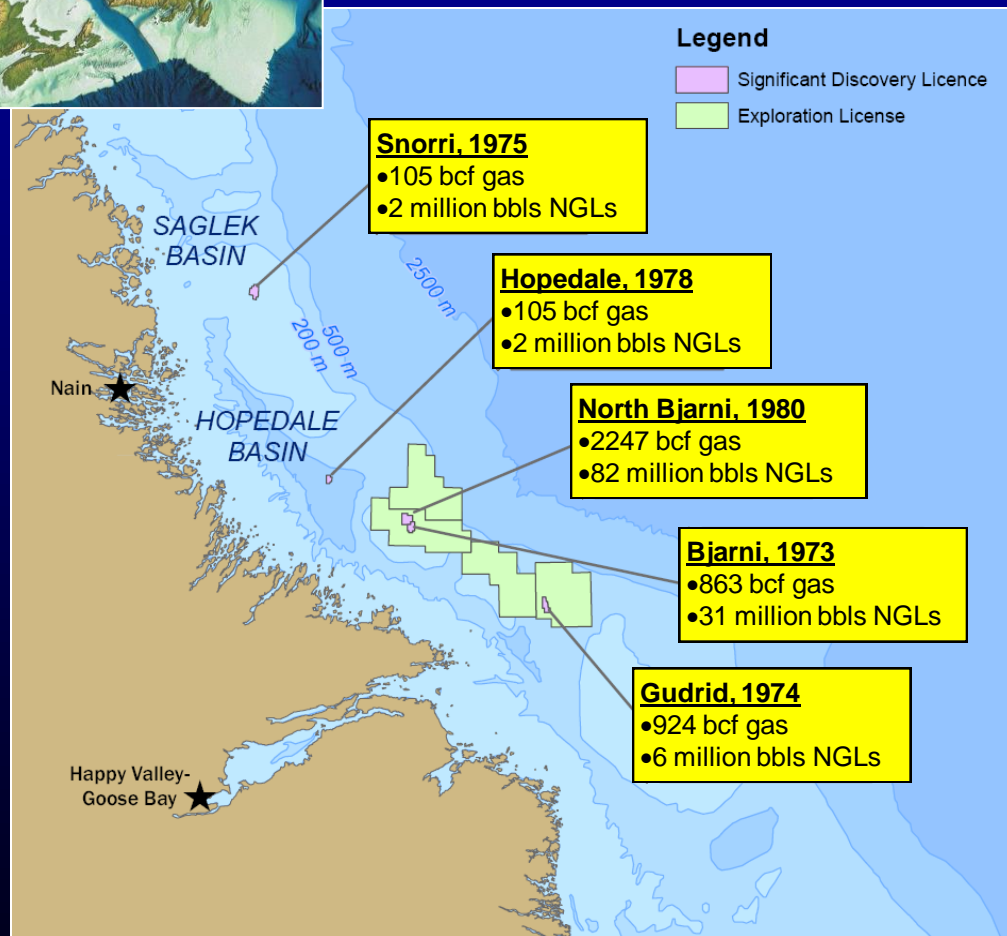
➤ Hopedale Basin and Saglek Basins approx 300,000km². Lightly explored in 70's and 80's with 2D seismic, 28 wells drilled.

➤ 5 large gas discoveries made while searching for oil 1973-1980. 4.2 Tcf gas & 123MMbbls NGLs.

➤ Additional large discovery made in North Saglek Basin (outside Labrador territory), Hekja (1979), 2.3Tcf.

➤ Undiscovered gas potential estimated at 22Tcf (Hopedale Basin, Drummond 1998, Bell & Campbell 1990, Enachescu 2006).

Offshore Labrador: Exploration History

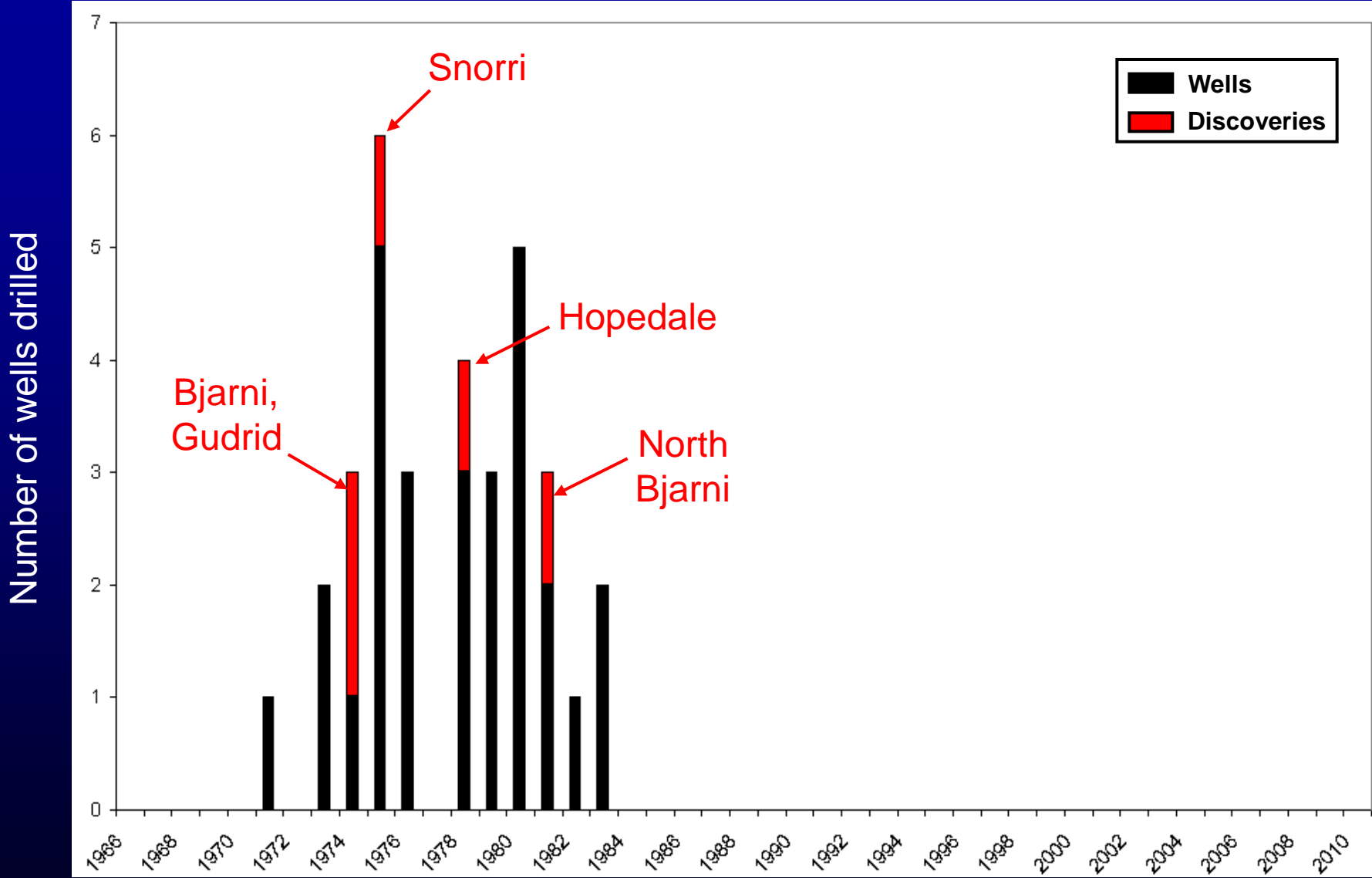


➤ 16 valid wells drilled in Hopedale Basin to date (last well 1983), leading to **5** significant discoveries.

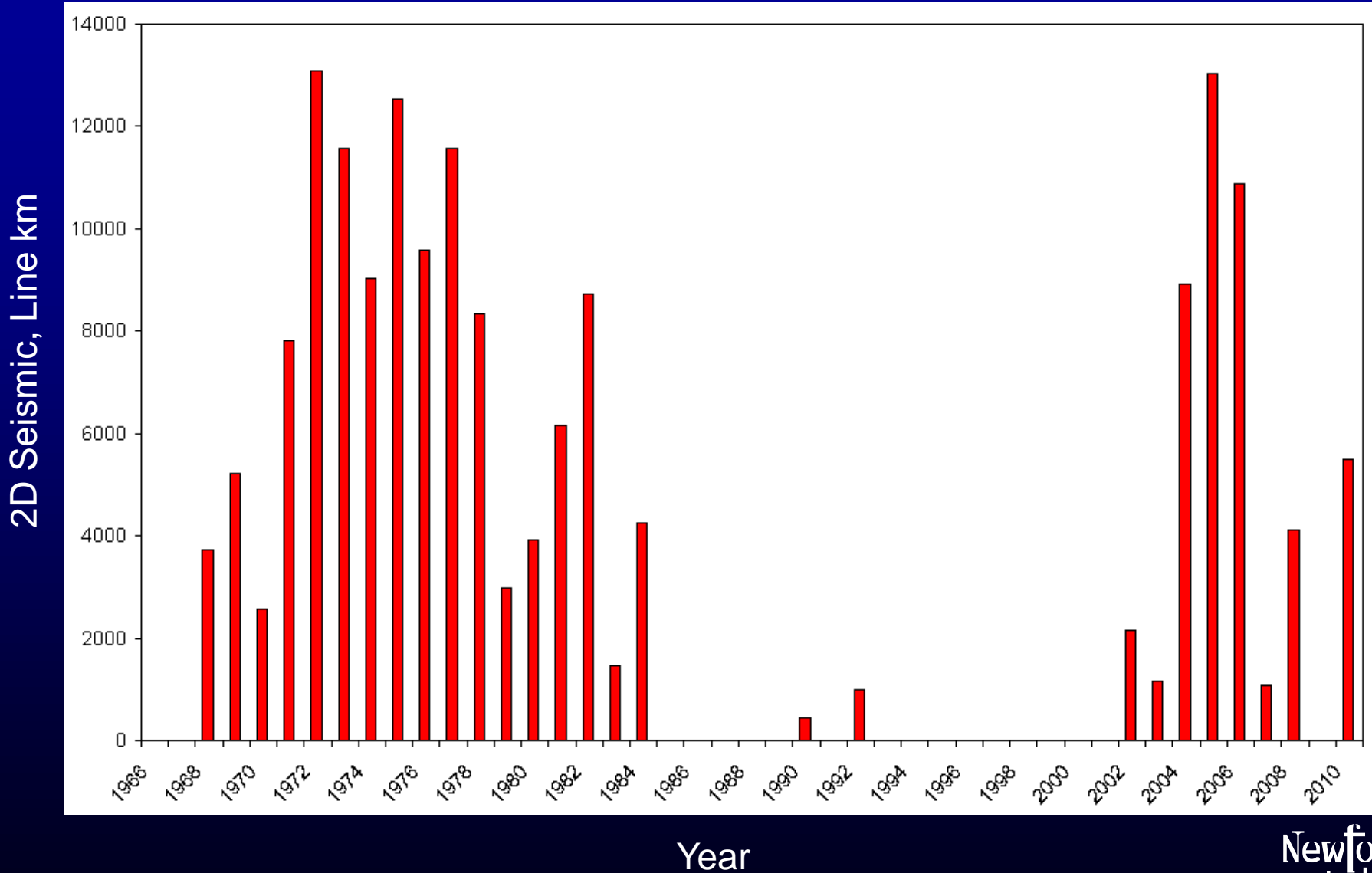
➤ Success rate **31%**, very high for frontier basin.

➤ Success rate (notwithstanding exploration exclusively for oil) would be significantly better if using modern seismic technology – vintage seismic, no application of seismic inversion, 3D seismic, AVO analysis, search for subtle strat-traps, play fairway analysis CSEM surveying. Historic “Drill the bumps” approach.

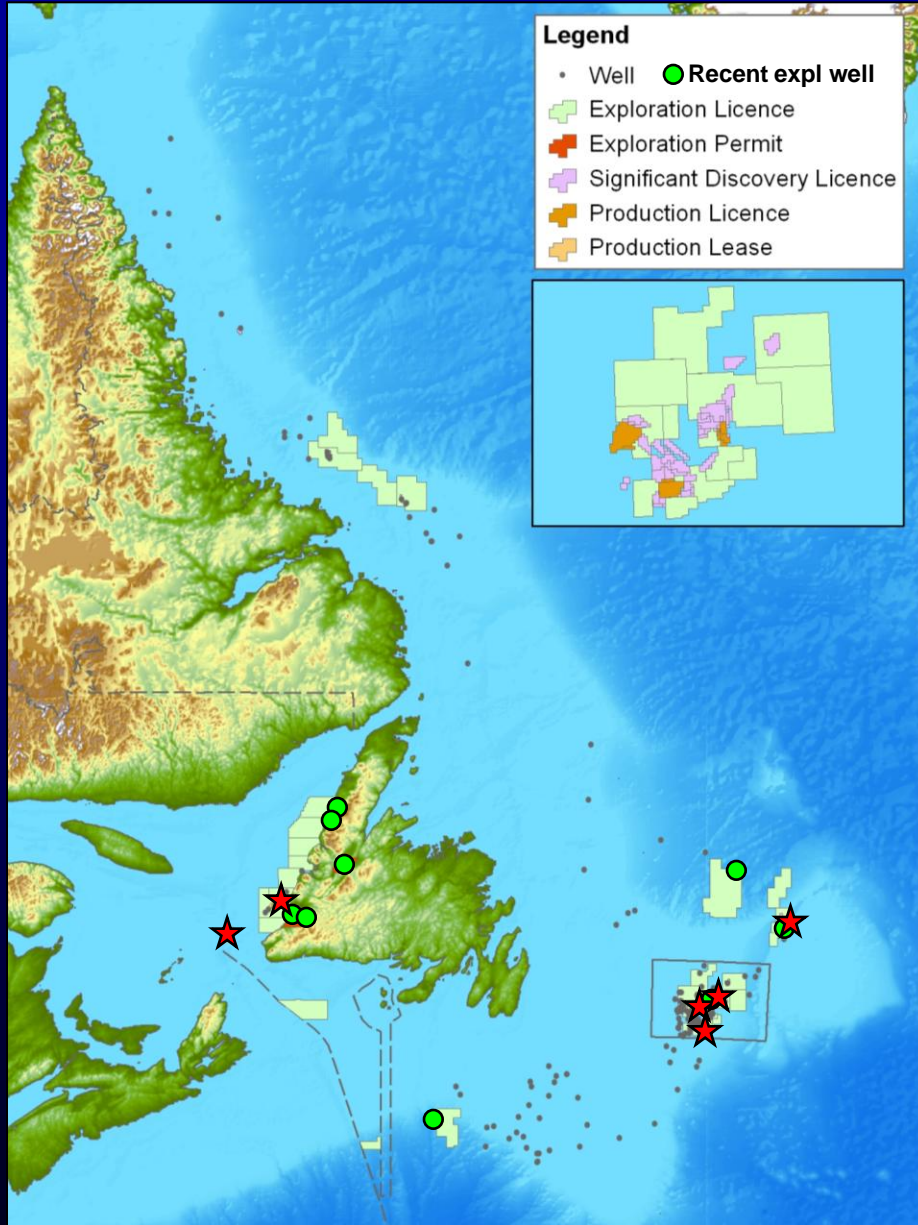
Offshore Labrador: Wells & Discoveries



Offshore Labrador: Seismic Acquisition

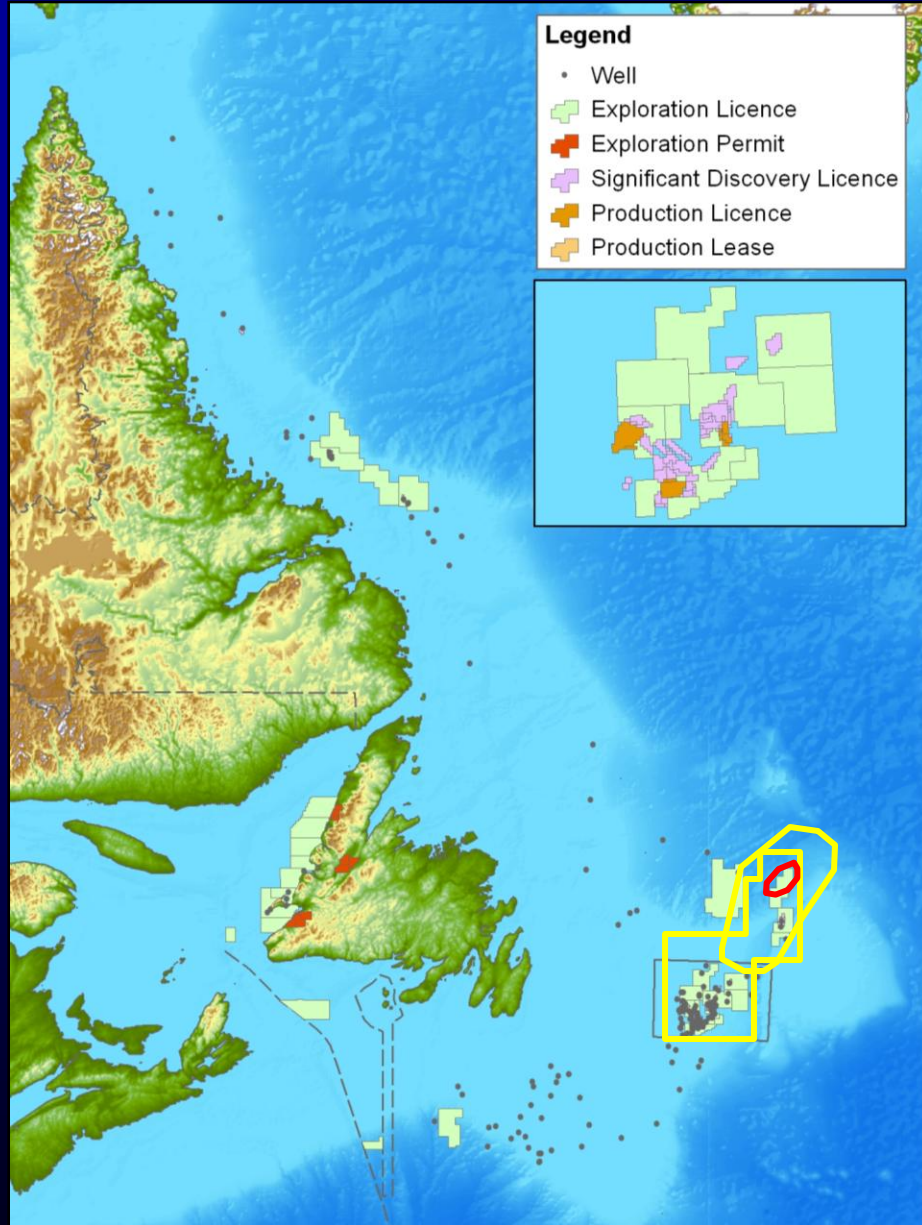


Exploration Activity 2011-2012: Wells



- Dragon Lance *et al* Shoal Point 3K-39, Port au Port Peninsula drilling ahead. Oil-in-shale play targeting Green Point Shale Fm.
- Suncor Ballicatters M-96z, Jeanne d'Arc Basin drilling ahead, nearing completion. Sidetrack of Ballicatters M-96.
- Corridor Resources submitted project description for EA for drilling of "Old Harry" Prospect following geohazard survey, Gulf of St. Lawrence.
- Statoil Exploration well targeting LKK & UJJ, Jeanne d'Arc Basin.
- Statoil Delineation well on Mizzen Significant Discovery, Flemish Pass Basin.
- Husky assumed planning re-entry on Glenwood prospect. Extended EL by year by making drilling deposit.

Exploration Activity 2011-2012: Seismic



- Statoil submitted EA for project area covering Jeanne d'Arc Basin, Flemish Pass and southern East Orphan Basin, in which they expect to conduct seismic surveys and other geophysical activities over the next 9 years. First survey is proposed 3D seismic survey Flemish Pass in 2011.
- Chevron seismic program in Northern Grand Banks to Orphan Knoll area.
- TGS & PGS to acquire multi-year seismic program offshore Labrador.

Summary & Conclusions

- >3 Billion bbls Oil and >11 Tcf Gas discovered to date.
- Daily production around 275,000 bopd (2010).
- 1.2 Billion bbls light crude Oil produced since first oil in 1997.
- Vast area, very lightly explored to date. Numerous prospective basins.
- Active exploration in offshore area, open to new entrants. New discovery in Flemish Pass Basin. First bid round since 2002 in onshore area and new offshore bid round to expected to be announced imminently.
- Favourable fiscal regime, geopolitically stable.
- Proximity to North American and European markets.



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THANK YOU





Newfoundland
Labrador
CANADA