

Newfoundland and Labrador Offshore Petroleum Industry



Presented to Canadian Flaring and Venting Regulators
By Jeff O'Keefe P. Eng./P. Geo

June 13, 2008



Canada-Newfoundland and Labrador
Offshore Petroleum Board

Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)

- ❖ Established under Atlantic Accord Legislation as a Joint Federal/Provincial regulatory agency for the offshore.
- ❖ Pillars:
 - Safety
 - Environment
 - Resources (including Land)
 - Industrial Benefits



C-NLOPB Mandate

To interpret and apply the provisions of the Atlantic Accord and the Atlantic Accord Implementation Acts to all activities of operators in the Newfoundland and Labrador Offshore Area; and, to oversee operator compliance with those statutory provisions.



Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)

Government of Canada
Minister of Natural Resources

Government of Newfoundland and Labrador
Minister of Natural Resources

The Board

Chair and CEO – Max Ruelokke

Jointly Appointed by Government of Newfoundland and Labrador and Government of Canada

6 Board Members:

3 Appointed by Government of Canada – Hal Stanley, Herbert Clarke and Lorne Spracklin

3 Appointed by Government of Newfoundland and Labrador – Fred Way, Dr. Joan Whelan and Andy Wells

Public Relations

Environmental
Affairs

Operations &
Safety

Exploration

Resource
Management

Industrial Benefits,
Policy and Regulatory
Coordination

Legal &
Land

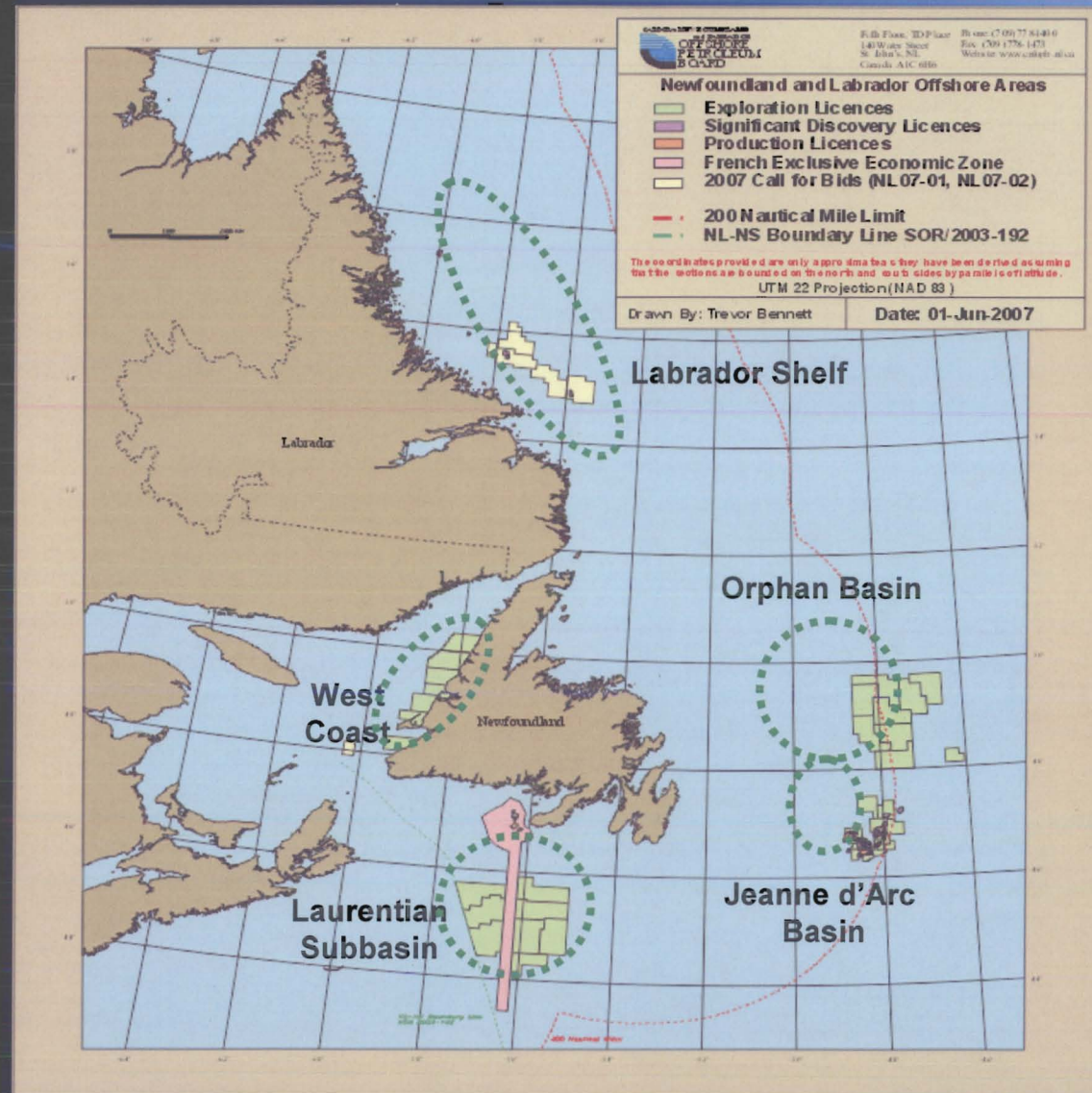
Support
Services



Canada-Newfoundland and Labrador

Offshore Petroleum Board

BASIN OUTLOOK



Canada-Newfoundland and Labrador
Offshore Petroleum Board

11

basin

①

Jean

D'Arc

②

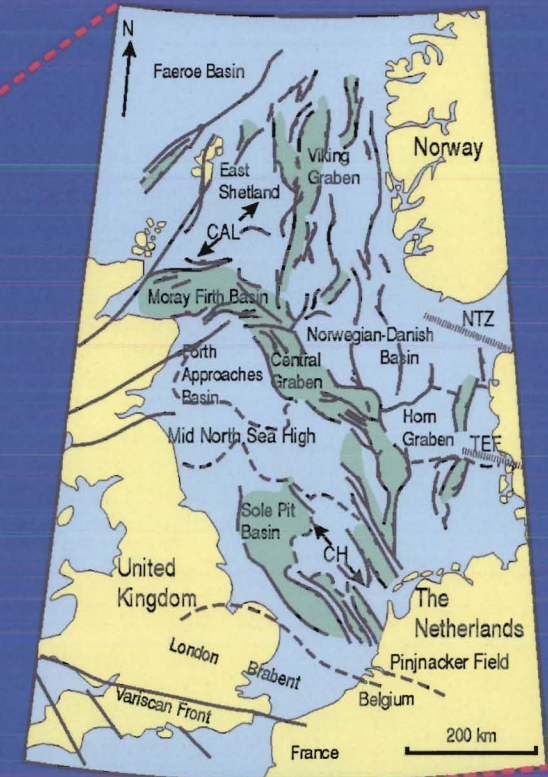
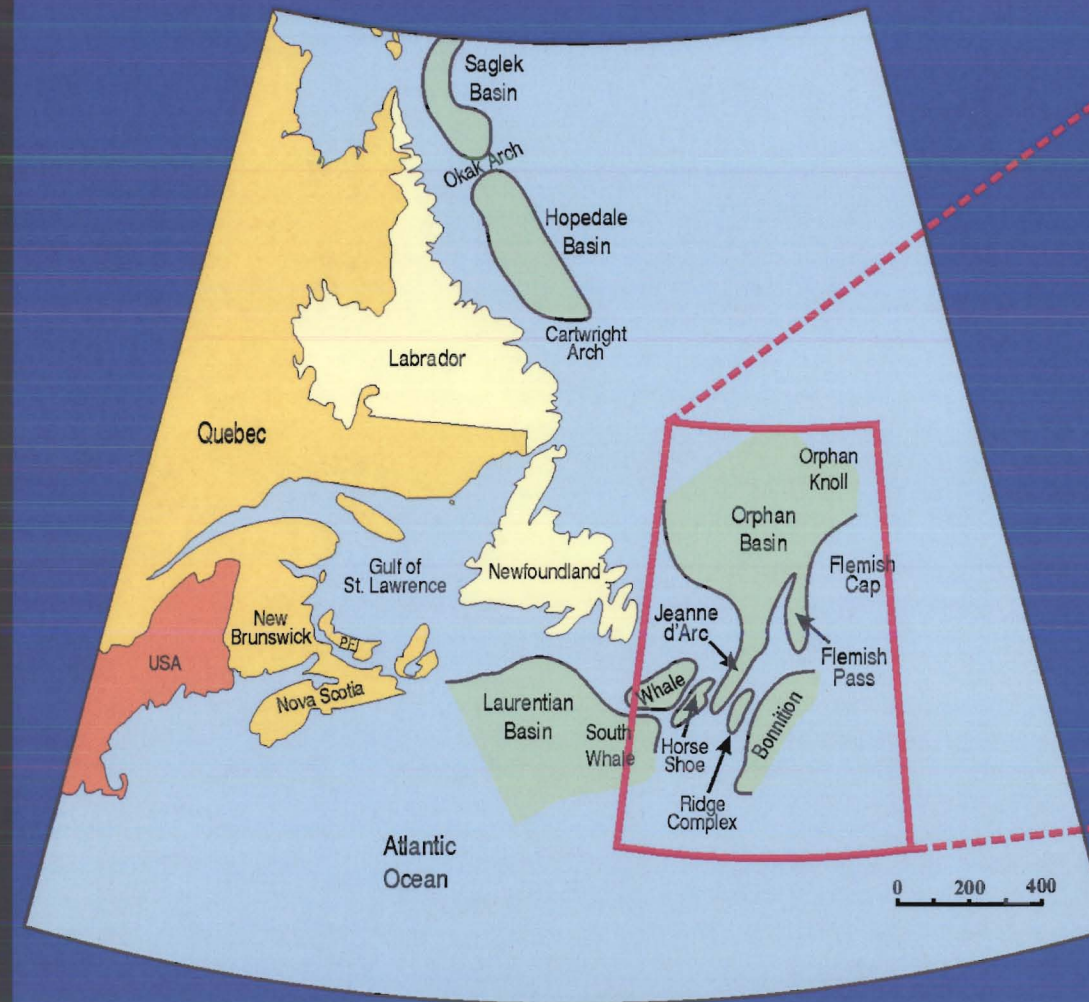
ORPHAN

Basin

③

Laurent

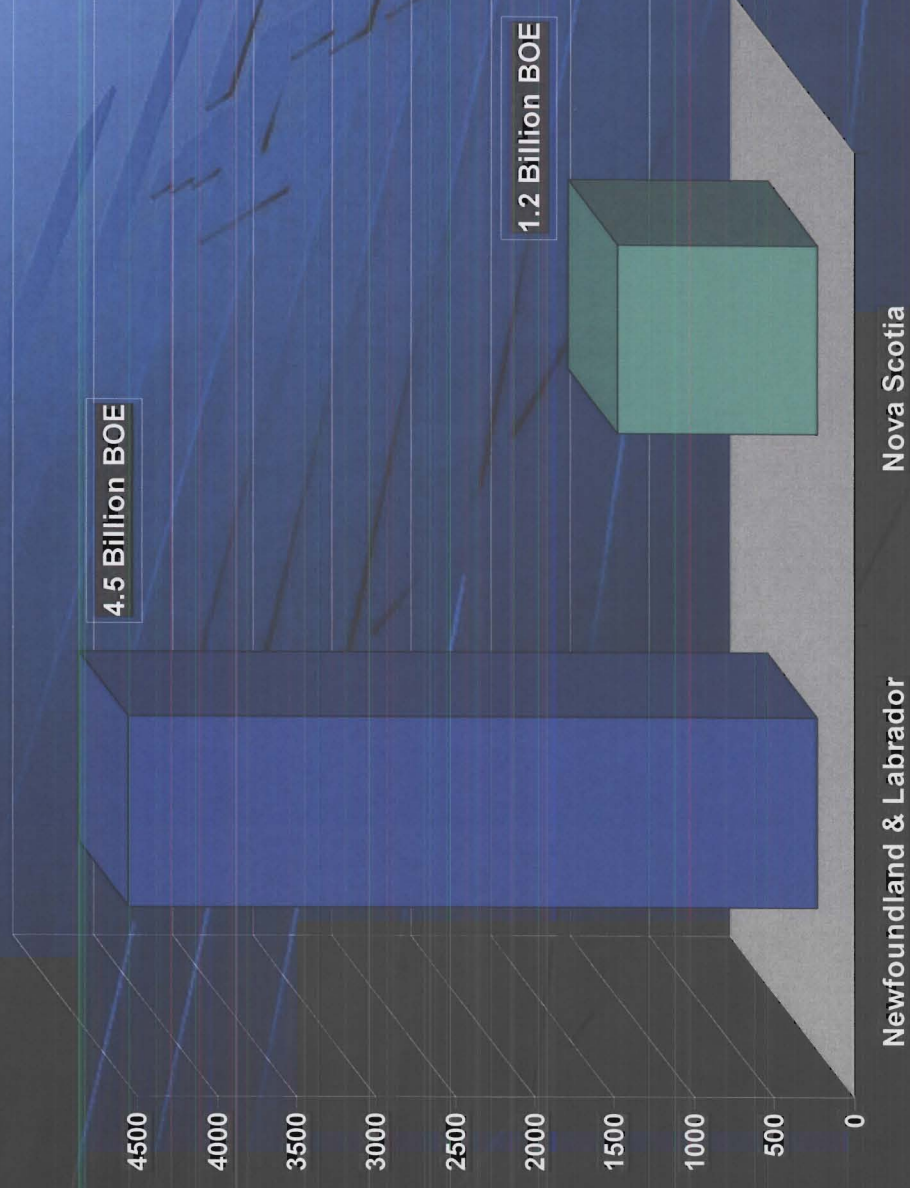
Comparison of Offshore Newfoundland and North Sea



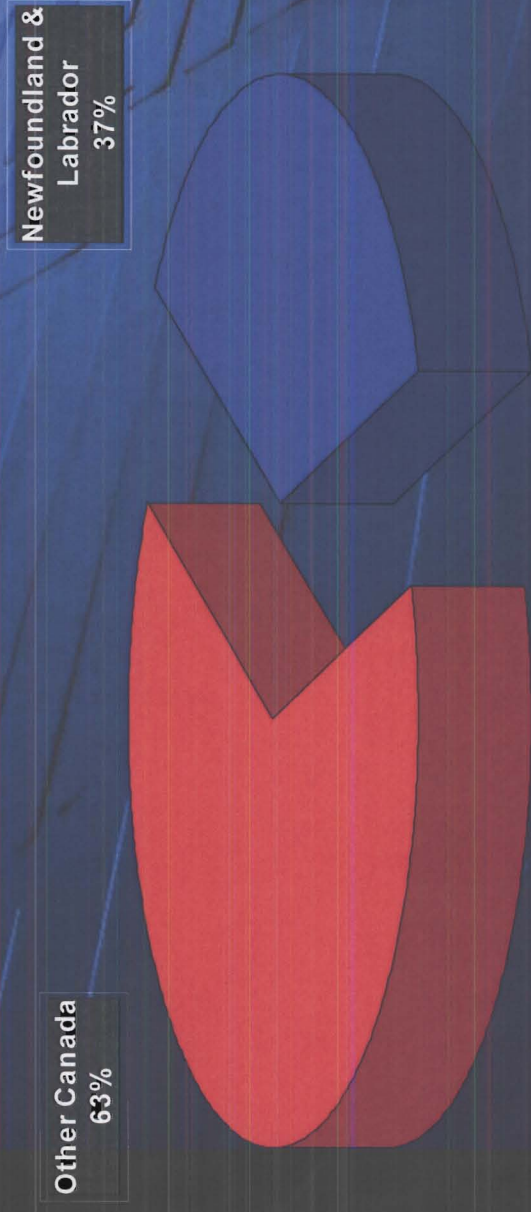
North Sea



East Coast Canada Discovered Offshore Petroleum Resources



Total Canadian Light Crude Production 2007



Canada-Newfoundland and Labrador
Offshore Petroleum Board

Hibernia

Discovered 1979

Development Cost: \$5.8 billion

First Oil in November 1997

Reserves:

- 1.244 million barrels of oil
- 202 million barrels of NGL's
- 1.794 trillion cubic feet of gas

Average Daily Production 2008:

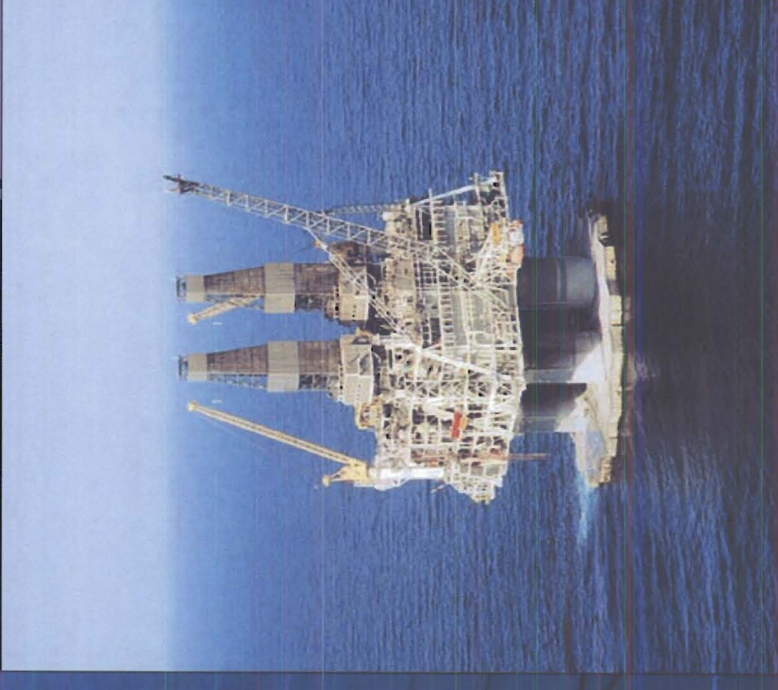
- 135,000 bbls/day

2007-08 Production:

- 51.36 million barrels

Cumulative Production as of Mar 31, 2008:

- 582.1 million barrels



Canada-Newfoundland and Labrador
Offshore Petroleum Board

Flared
2007-08
101
87
101
101
101
101
101

Terra Nova

Discovered: 1984

Development Cost: \$2.8 billion

First Oil: January 20, 2002

Recoverable Reserves

- Oil: 354 million bbls
- Gas: 0.045 tcf
- NGLs: 3 million bbls

Average Daily Production 2008:

- 122,000 bbls/day

2007-08 Production:

- 42.3 MMbbls

Cumulative Production as of Mar 31/08:

- 230.6 million barrels



Canada-Newfoundland and Labrador
Offshore Petroleum Board

White Rose

Discovered in 1984

Development Costs: \$2.3 billion

First oil November 12, 2005

Resources:

- 305 million bbls oil
- 2.7 tcf natural gas
- 96 million bbls NGL's

Average Daily Production 2008:

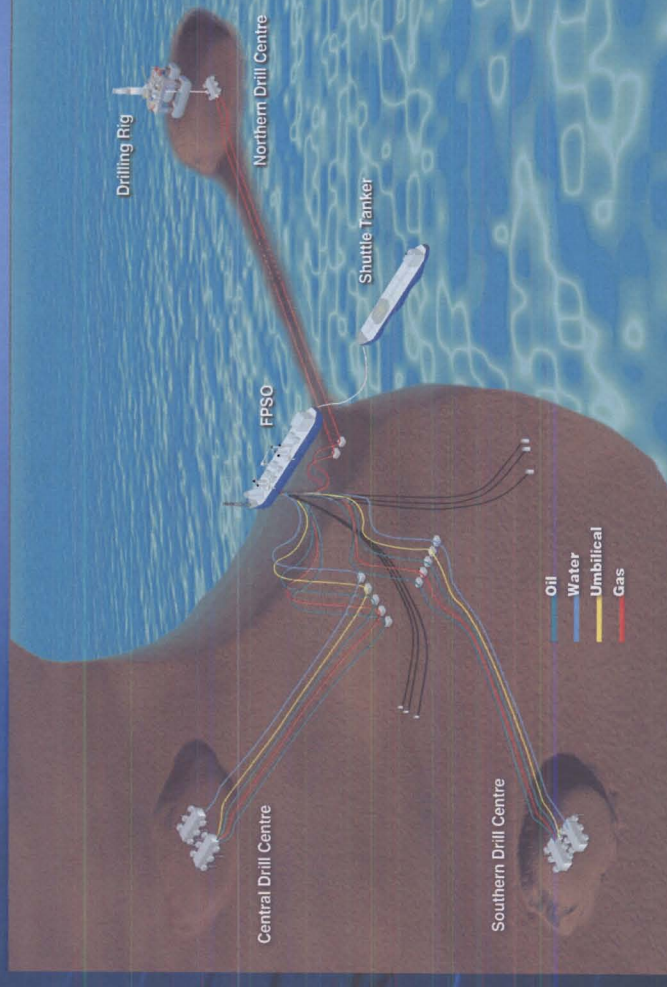
- 92,000 bbls/day

2007-08 Production:

- 40.1 MMbbls

Cumulative Production Mar 31, 2008:

- 85.8MMbbls



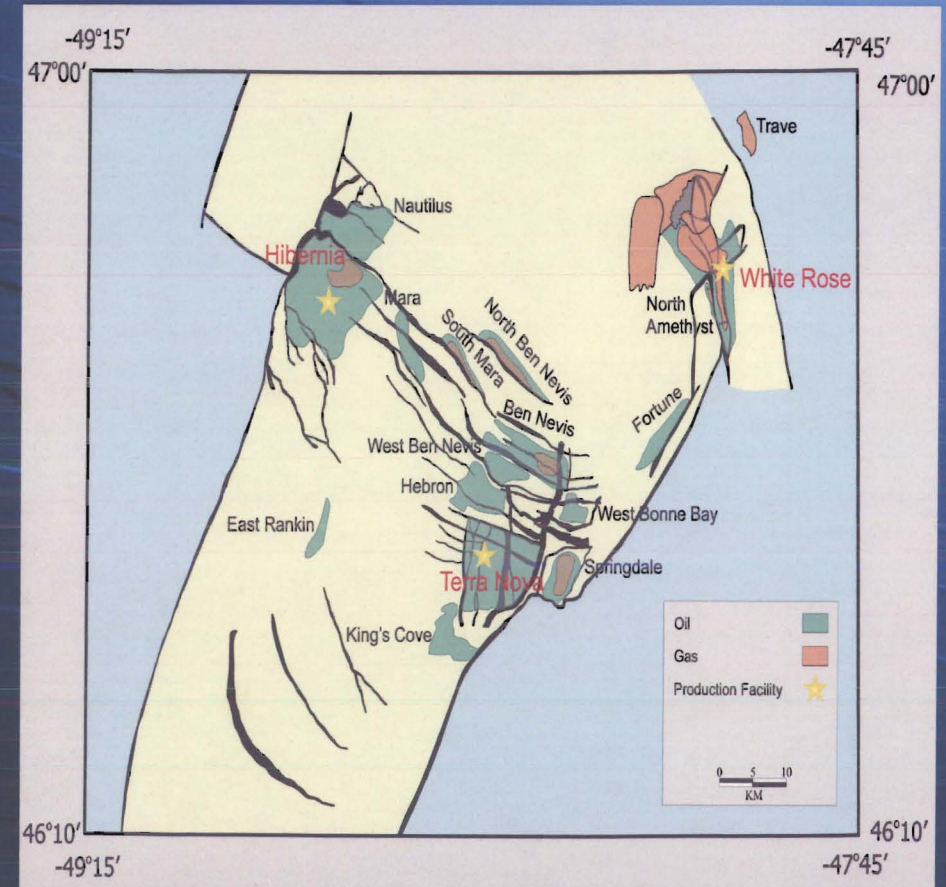
Oil production and reserves/resources

(as of March 2008)

❖ Oil production	
• Hibernia	582.1 million bbl
• Terra Nova	230.6 million bbl
• White Rose	<u>51.0 million bbl</u>
• Total production for three projects	863.7 million bbl
❖ Revised oil reserves	2823 million bbl
❖ Remaining oil reserves	1959.3 million bbl

DEVELOPMENT OPPORTUNITIES

- ❖ Within the Producing Fields
- ❖ Satellite Field/Pool Tie-ins
- ❖ Hebron Project
- ❖ Exploration
- ❖ Gas Development



EXPLORATION ACTIVITY

- ❖ \$731.2 million of exploration commitments as of March 31, 2008
- ❖ 2 Seismic Programs in Labrador
- ❖ Large Seismic Program in Jeanne d'Arc Basin
- ❖ Tri-Party Rig Sharing Agreement (Husky, Petro-Canada and Statoil Hydro) – Exploration Drilling in the Jeanne d'Arc Basin
- ❖ Orphan Basin - Chevron committed to doing further drilling
- ❖ Labrador Offshore Area – 1st Land Sale in Labrador in over 20 years (closes Aug 1st)
- ❖ West Coast –
 - 2007 Land Sale (1 parcel)
 - Drilling program at Shoal Point
- ❖ South Coast
 - Possible drilling by ConocoPhillips in St. Lawrence Basin



FUTURE CHALLENGES

EXPLORATION

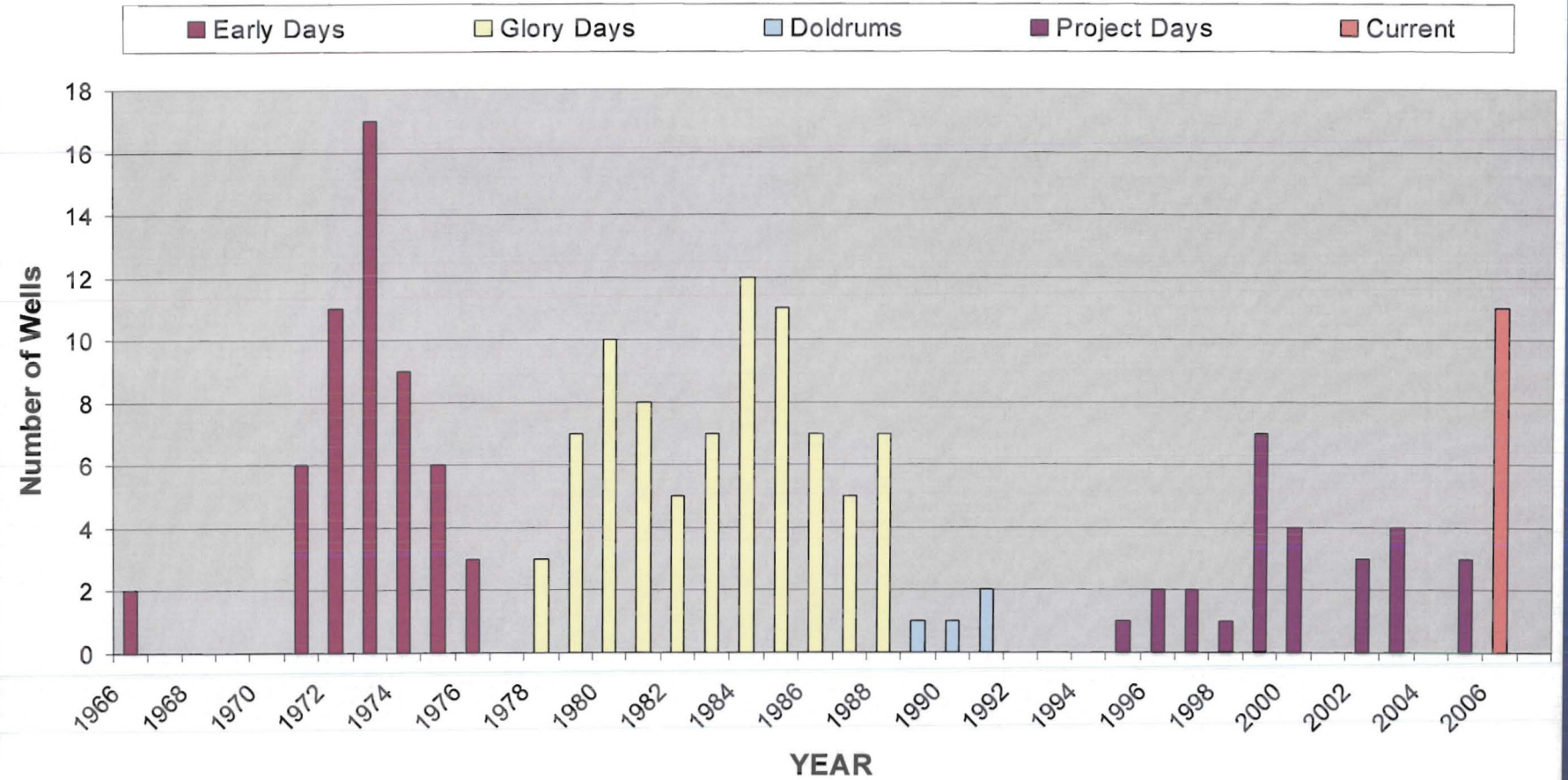


HUMAN RESOURCES

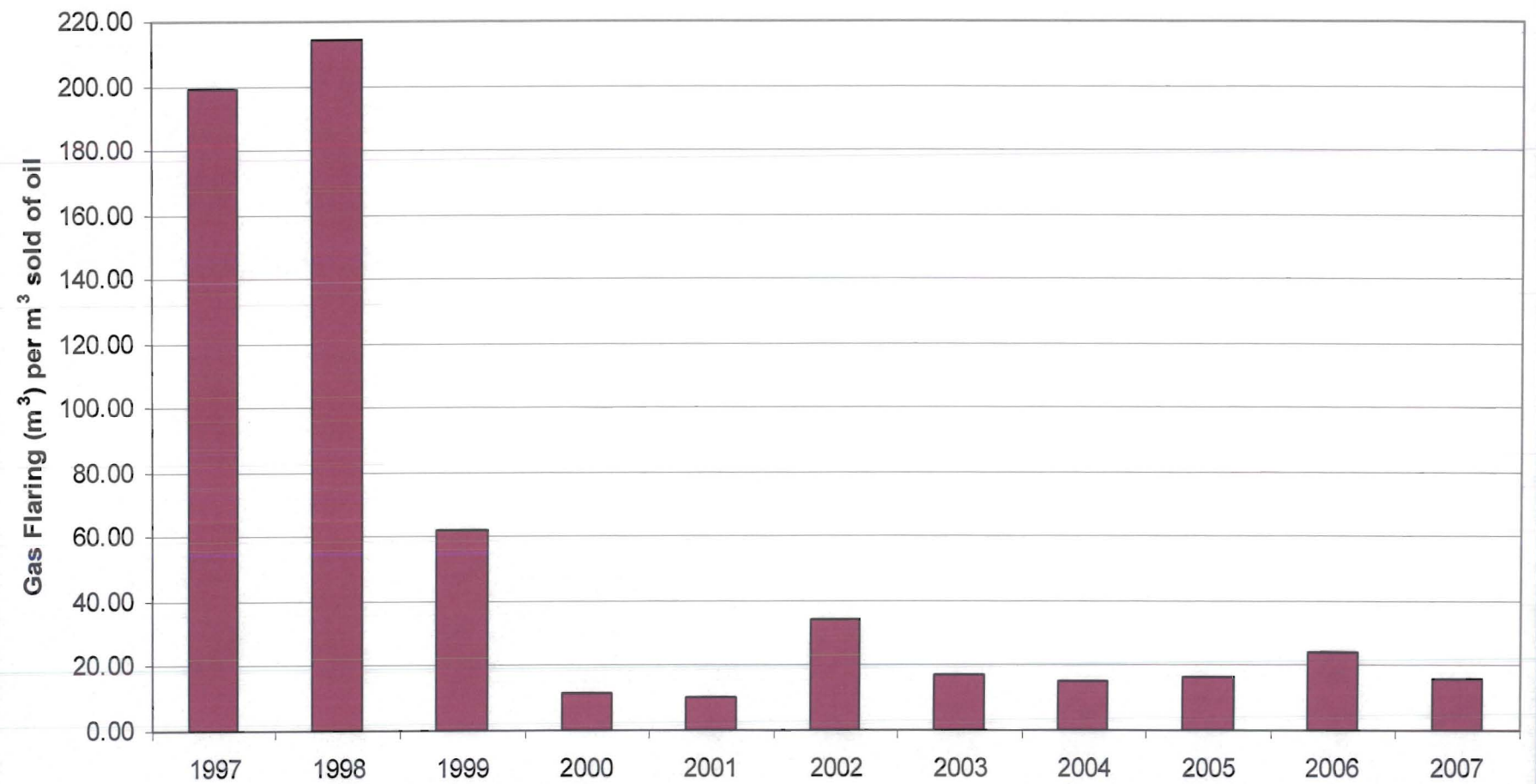


Canada-Newfoundland and Labrador
Offshore Petroleum Board

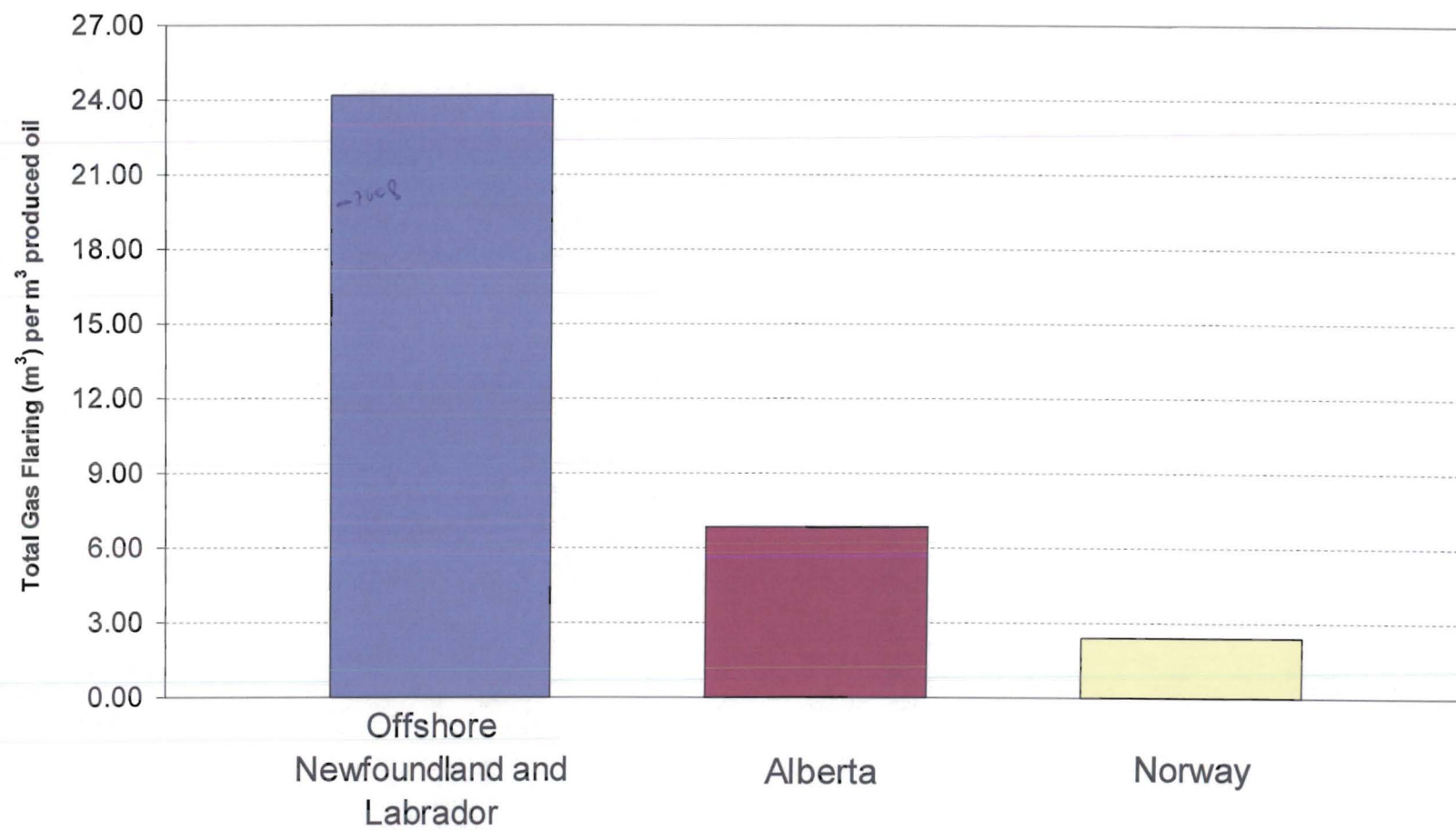
Exploration and Delineation Wells Spudded Offshore NL



Offshore Newfoundland and Labrador
Total Gas Flaring (m^3) per m^3 sold of oil equivalent

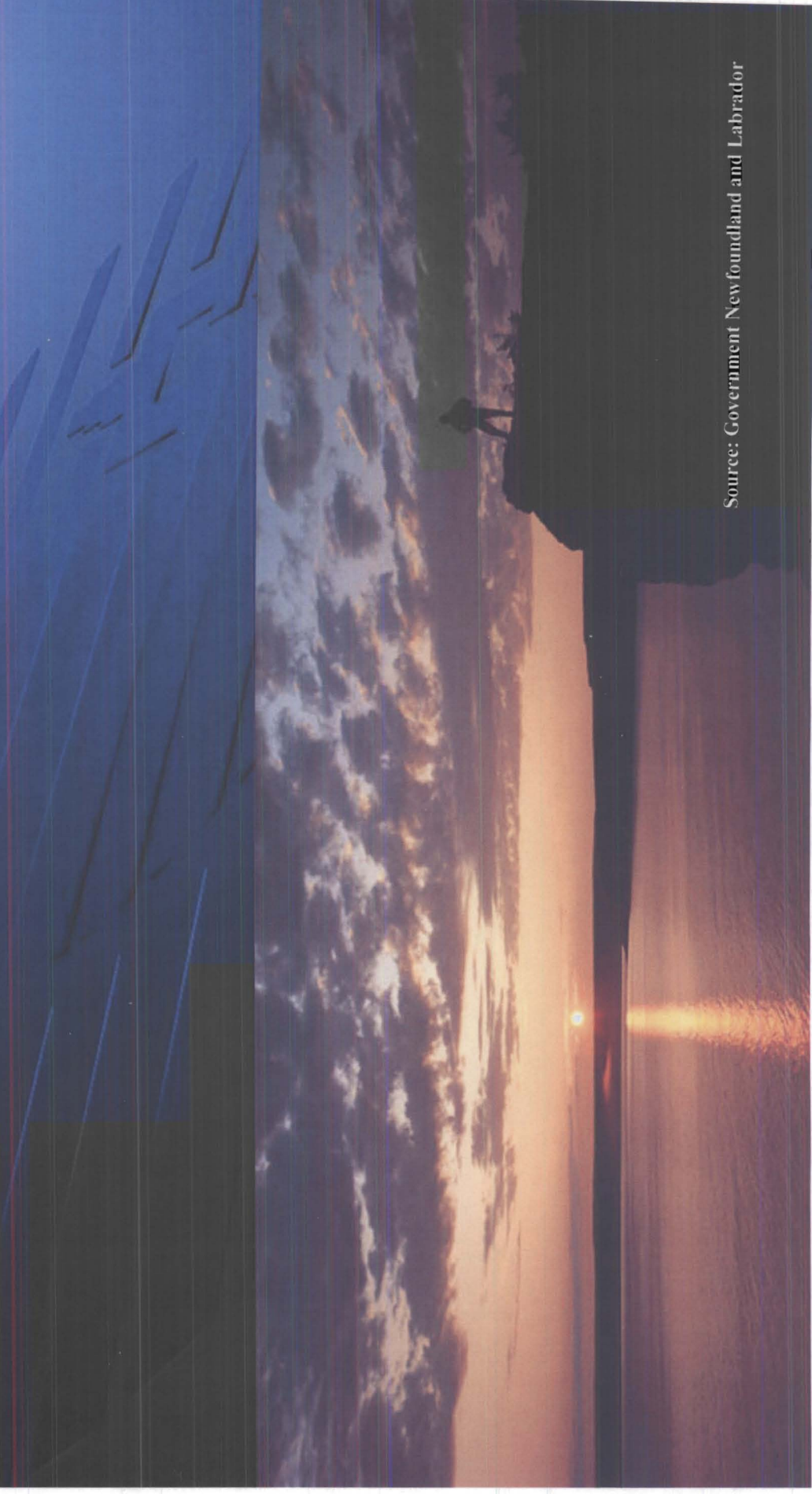


Region Comparison
Total Gas Flaring (m^3) per m^3 produced oil
2006



Gas Flaring Reduction

- ❖ We have more opportunities today than yesterday and less opportunities today as we will have tomorrow.



Source: Government Newfoundland and Labrador