



# Newfoundland Labrador

... it's happening here.



**Larry Hicks**

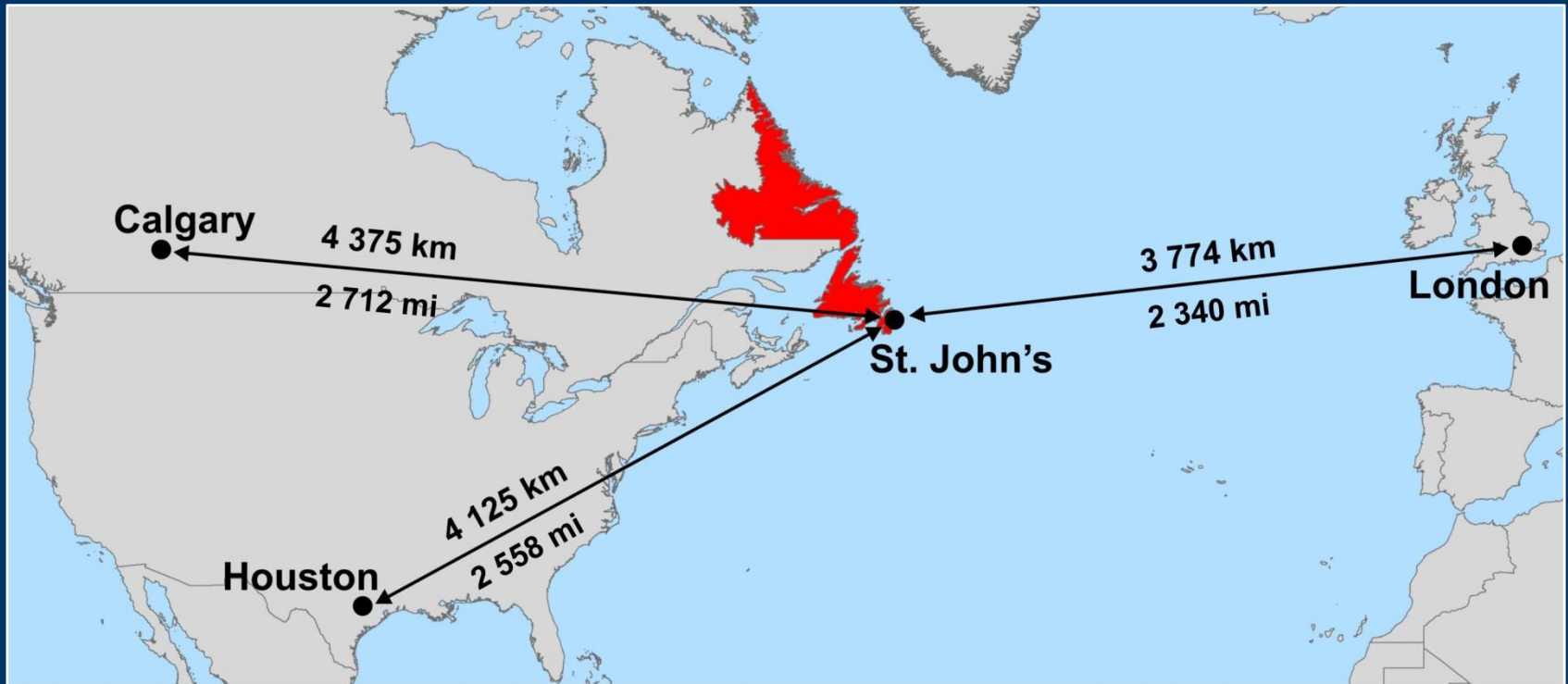
Manager, Petroleum Geoscience

Department of Natural Resources - Energy

Government of Newfoundland & Labrador, Canada 

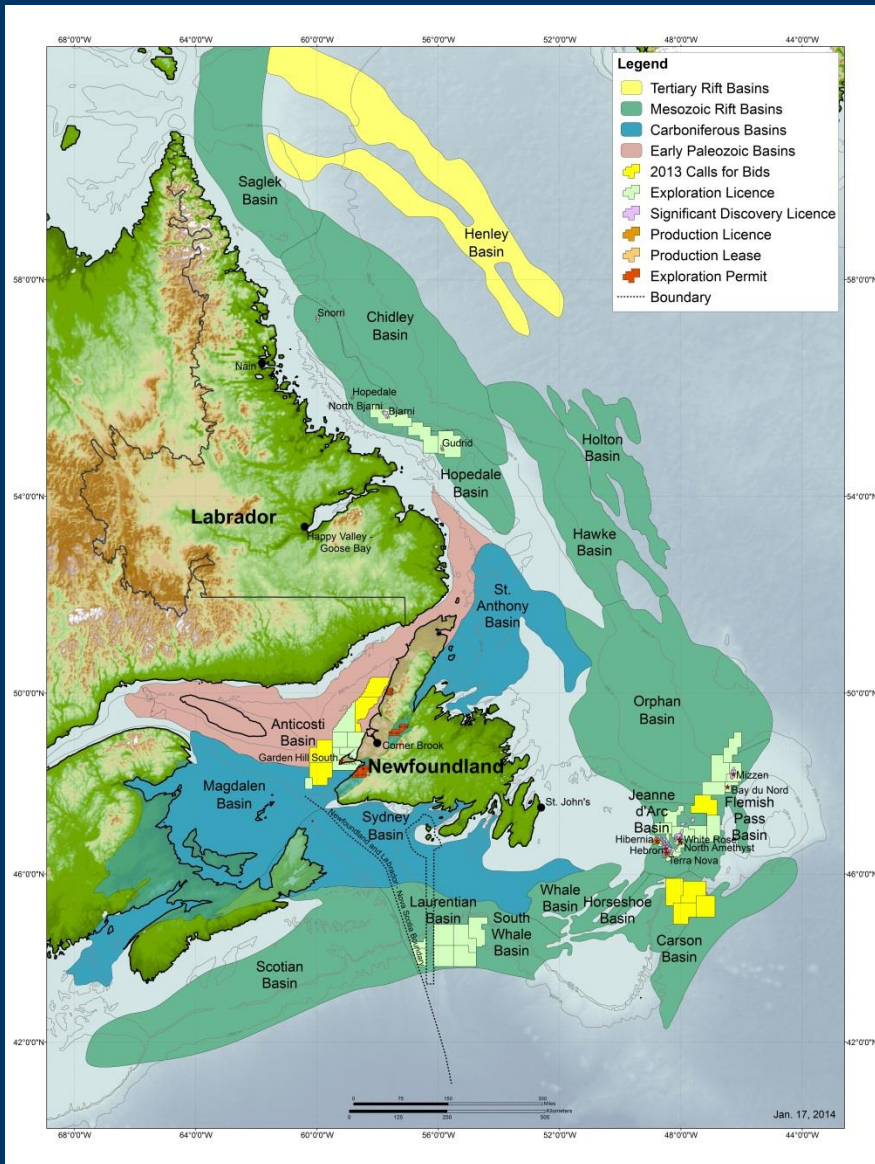
**APPEX 2014**

# Newfoundland and Labrador



- ✓ Most easterly Province in Canada
- ✓ More than 4000 km of coastline and water depth up to 4000 meters
- ✓ Population ~ 500,000
- ✓ Financially and Politically Stable
- ✓ Adjacent to Northeast US energy market
- ✓ Access to EU markets

# Energy Warehouse



- ✓ Home to some of the largest unexplored basins in the world
- ✓ Area of petroleum potential greater than 1 million km<sup>2</sup>
- ✓ Four offshore projects producing ~ 25% of Canada's conventional light crude oil
- ✓ Light crude production of ~100 million barrels annually
- ✓ Total cumulative oil production in excess of 1.4 billion barrels

**< 6% held  
under licence**

# Regulatory Framework

## OFFSHORE



- ✓ Administered by joint Federal / Provincial Board
- ✓ Canada – Newfoundland & Labrador Offshore Petroleum Board (**C-NLOPB**)
- ✓ Office – St. John's, NL
- ✓ Maintains Data Repository, Core Storage Facilities, etc.
- ✓ Web: [www.cnlopb.nl.ca](http://www.cnlopb.nl.ca)



## ONSHORE



- ✓ Administered by Province
- ✓ Department of Natural Resources (**DNR**) – Energy Branch
- ✓ Office – St. John's, NL
- ✓ Maintains Data Repository, Core Storage Facilities, etc.
- ✓ Web: [www.nr.gov.nl.ca/nr](http://www.nr.gov.nl.ca/nr)



# Activity Summary

## Wells Drilled Offshore

Exploration	155
Delineation	57
Development	186

## Discoveries

Oil	18
Gas	8

## Current Holdings

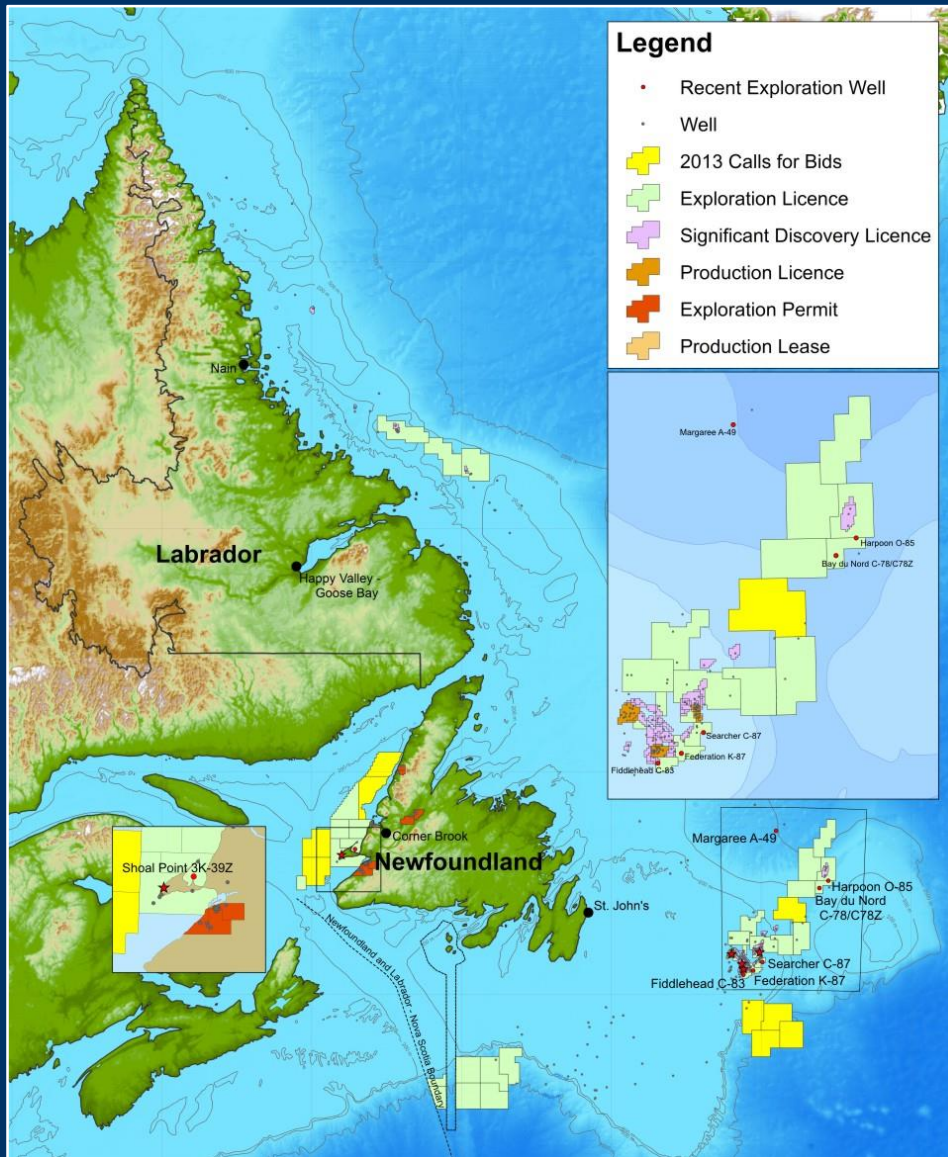
Exploration Licences	38
Significant Discovery Licences	54
Production Licences	11

**1 in 6 success ratio**



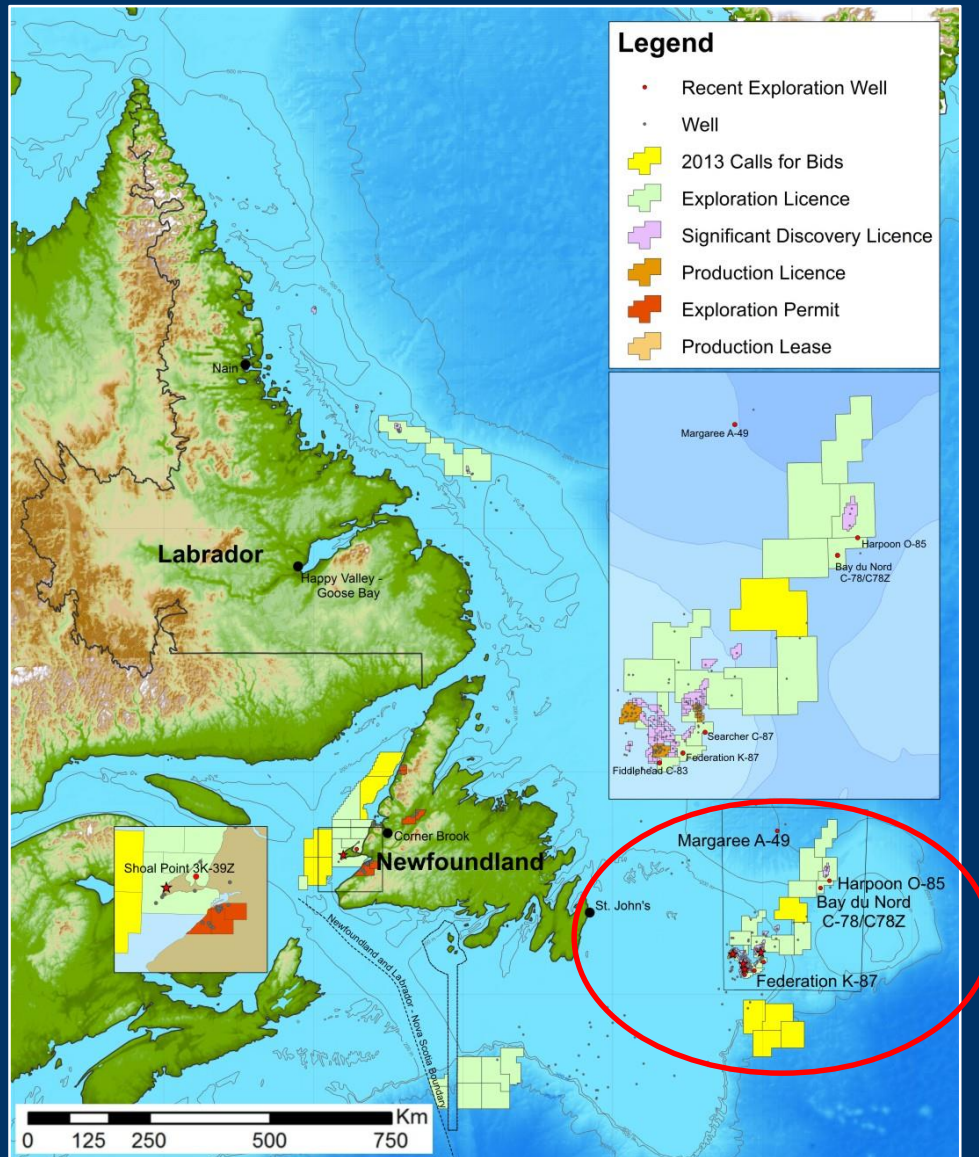
(to December 31, 2013)

# Recent Exploration Activity



- ✓ Large scale seismic programs have been completed
- ✓ Significant exploration drilling activity
- ✓ Avg. of \$272 mm/year spent for exploration over past 5 years, ending 2012
- ✓ \$1.2 billion in outstanding work commitments
- ✓ Recent discoveries in the Flemish Pass Basin

# 2013 Drilling Activity

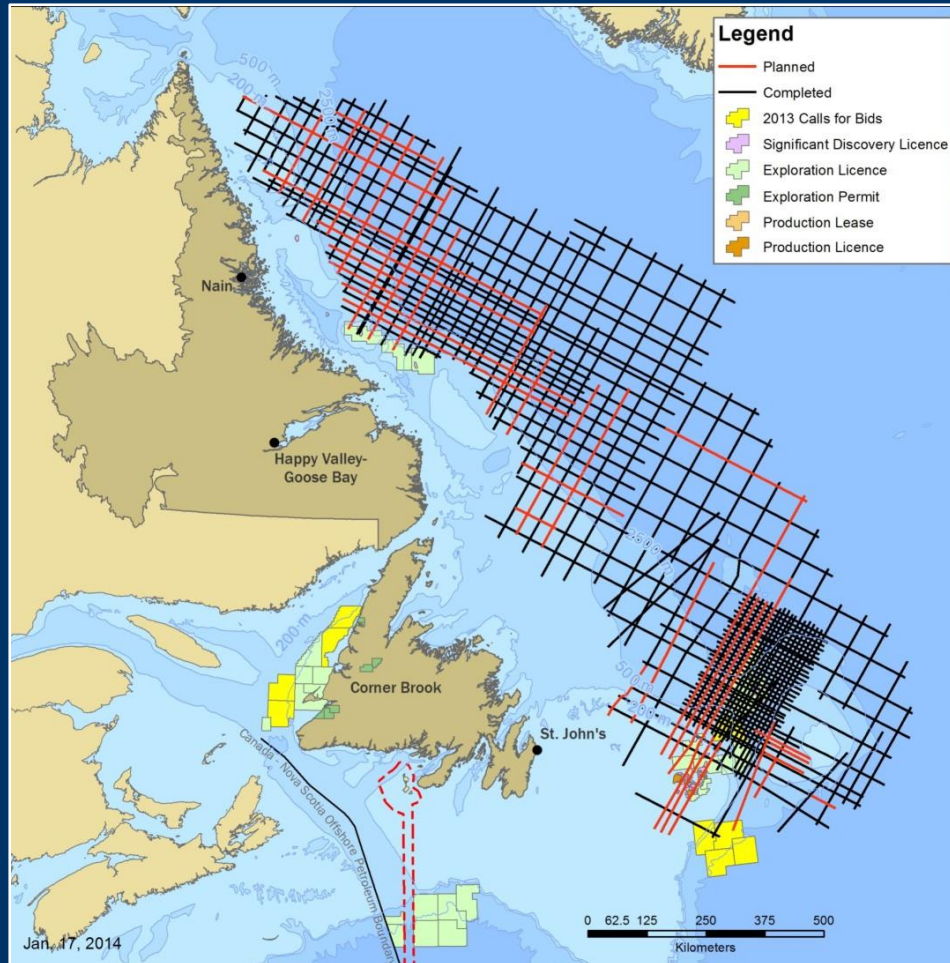


## Wells drilled:

- ✓ Margaree A-49 (Chevron)
- ✓ Harpoon O-85 (Statoil)
- ✓ Federation K-87 (Statoil)
- ✓ Bay du Nord C-78 & C-78Z (Statoil)

# Offshore Geoscience Data Program

\$20 Million Government Funded Program





# Basin Discoveries



## Seismic survey results:

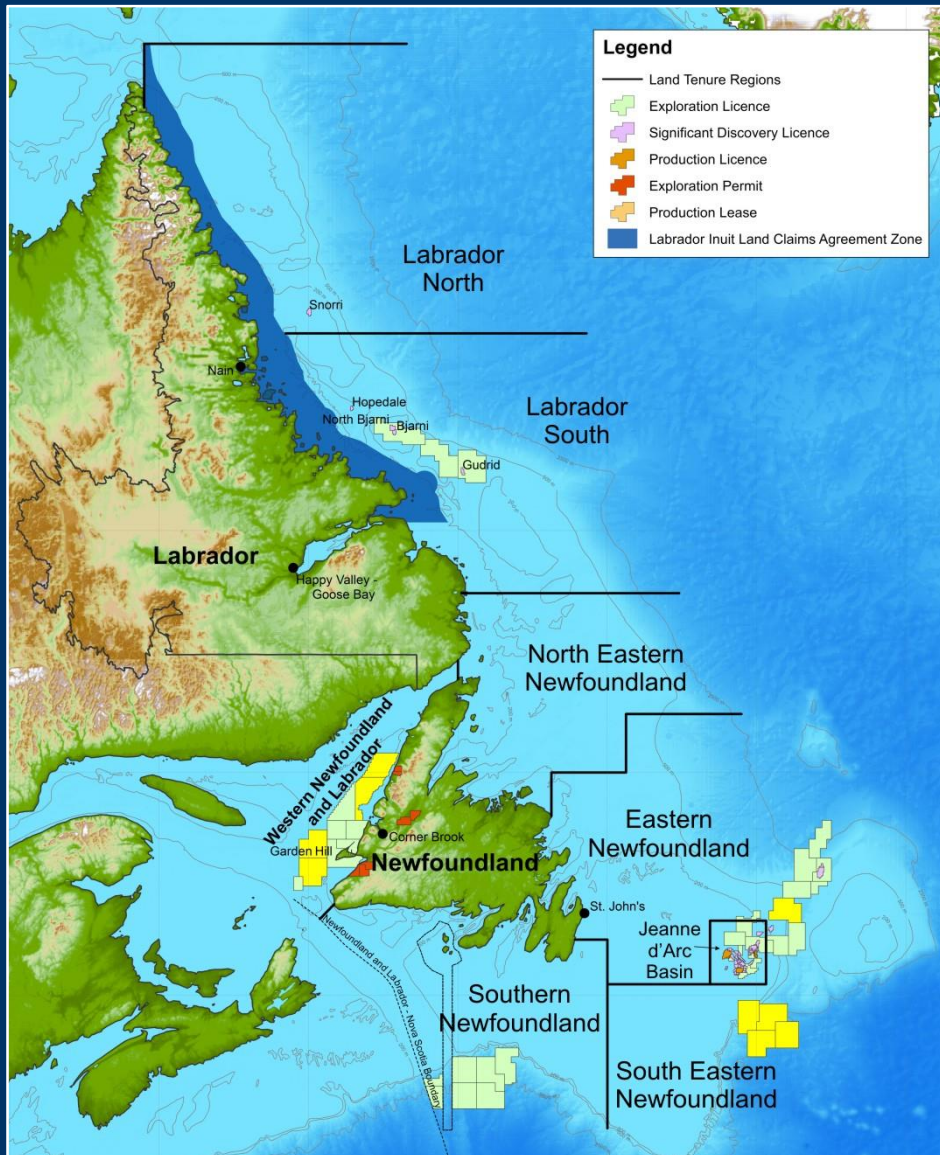
- ✓ Discovery of three new basins: Henley, Chidley and Holton
- ✓ Also significantly increased the size of the Hawke Basin

# Offshore Rights Issuance



- ✓ Managed by the Canada – Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB)
- ✓ Federal and Provincial Entity
- ✓ Open and transparent bidding process

# New Scheduled Land Tenure



## Divided into 8 Regions

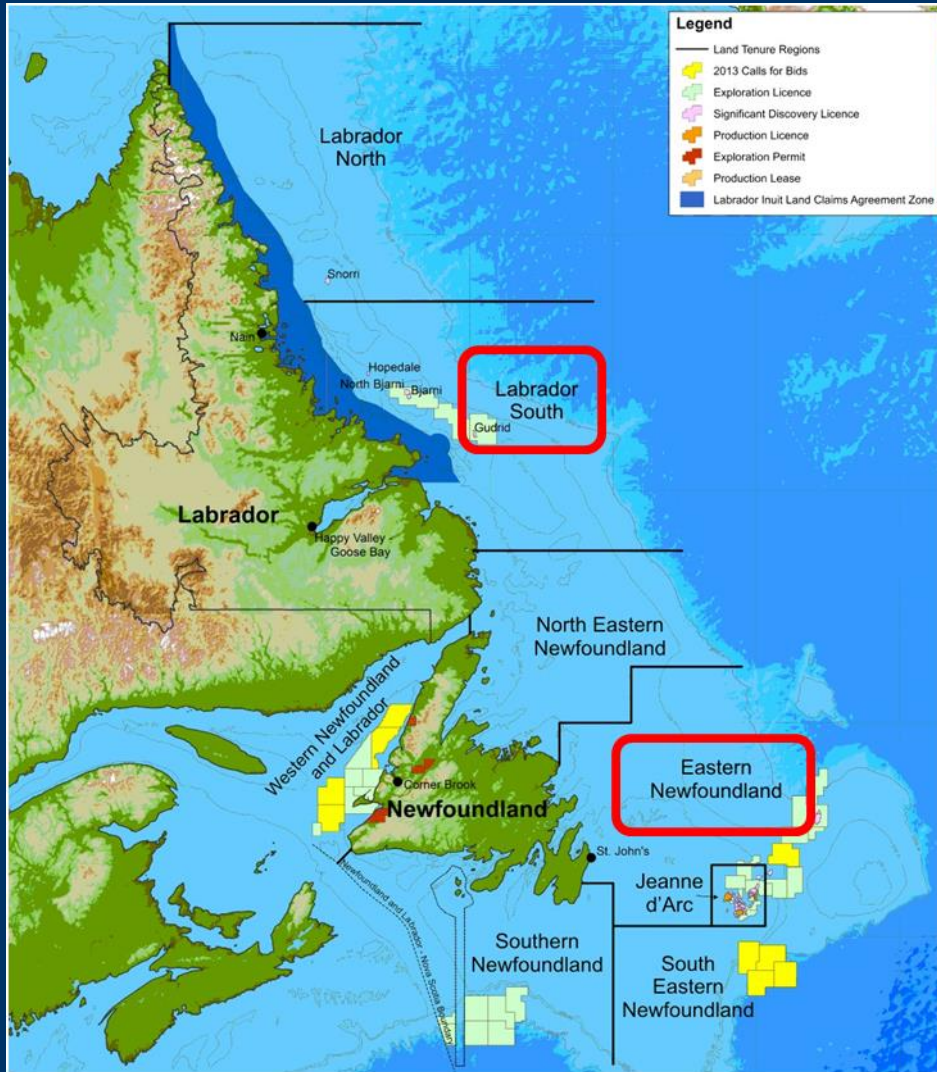
- ✓ Labrador North
- ✓ Labrador South
- ✓ North Eastern Newfoundland
- ✓ Eastern Newfoundland
- ✓ Jeanne d'Arc
- ✓ South Eastern Newfoundland
- ✓ Southern Newfoundland
- ✓ Western Newfoundland

Low Activity (4)

High Activity (2)

Mature (1)

# Calls for Nominations



Two regions have Areas of Interest open for nominations:

1/ **Labrador South**

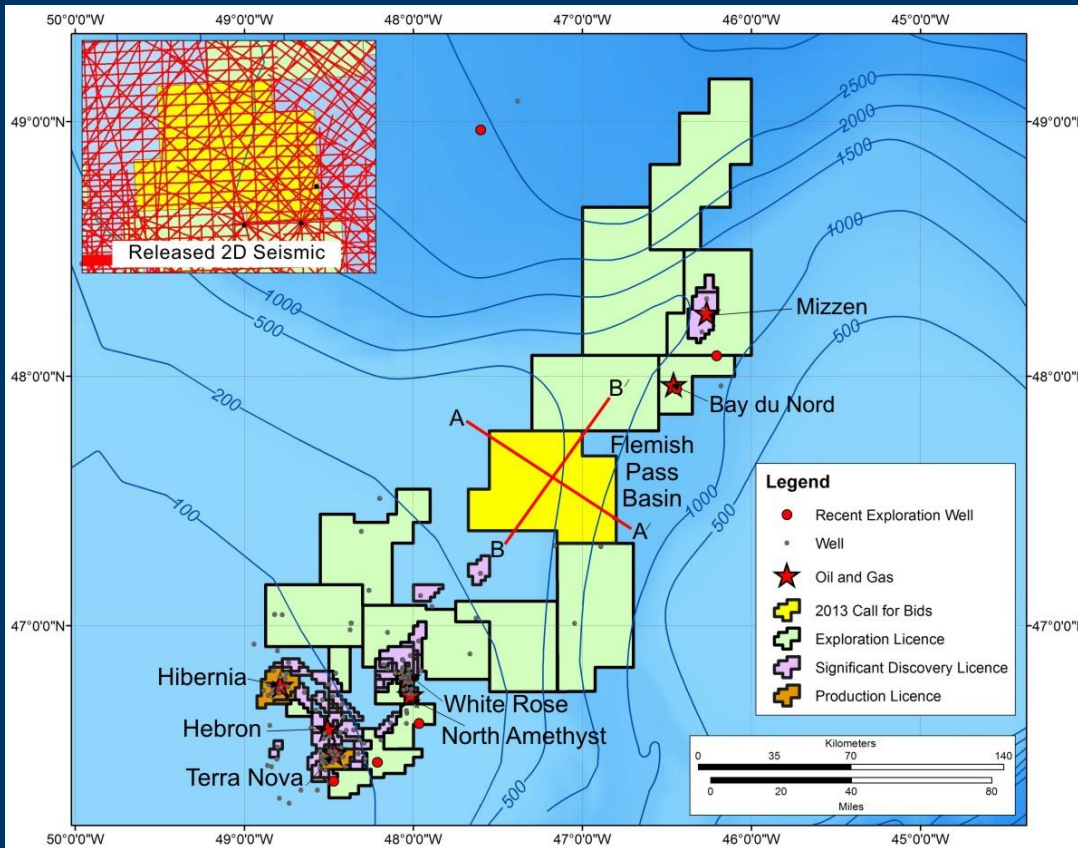
- 4 year cycle (2017)

2/ **Eastern Newfoundland**

- 2 year cycle (2015)

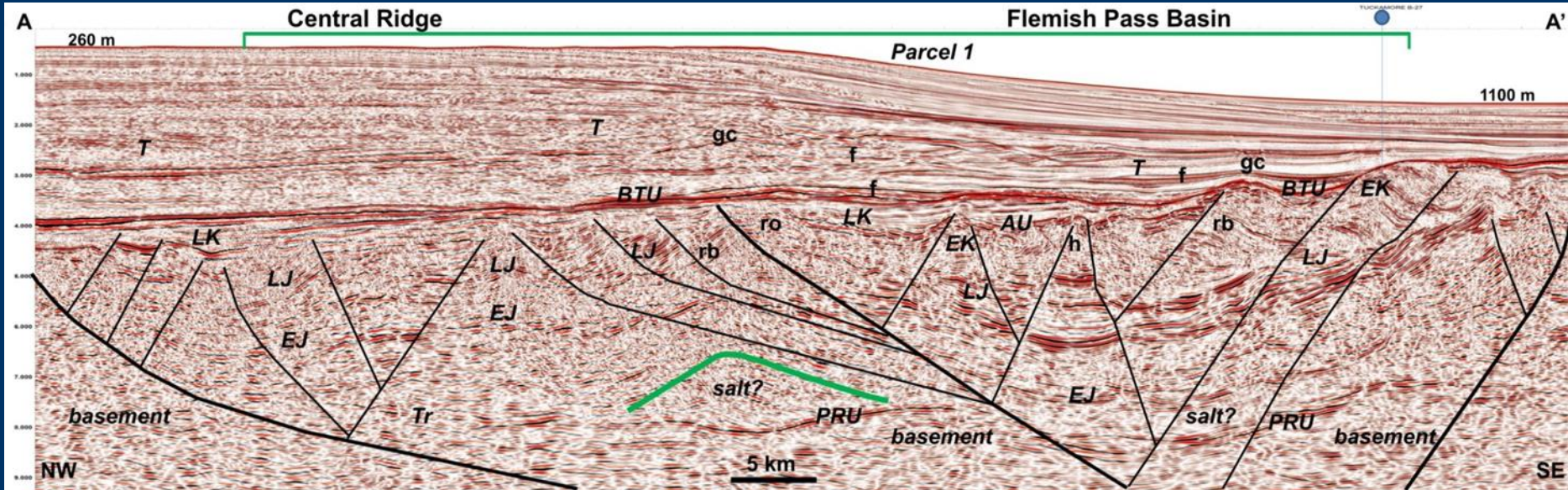
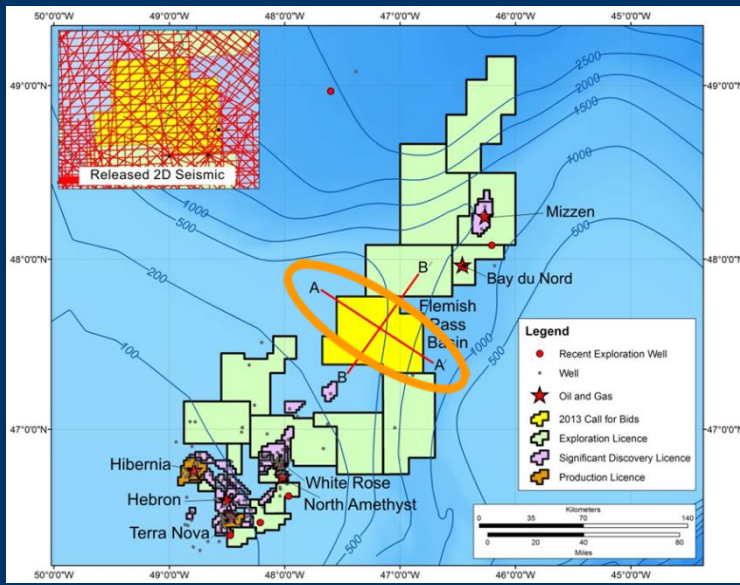
**Current  
Offshore  
Land Sale**  
(Parcel Descriptions)

# NL 13-01 Flemish Pass

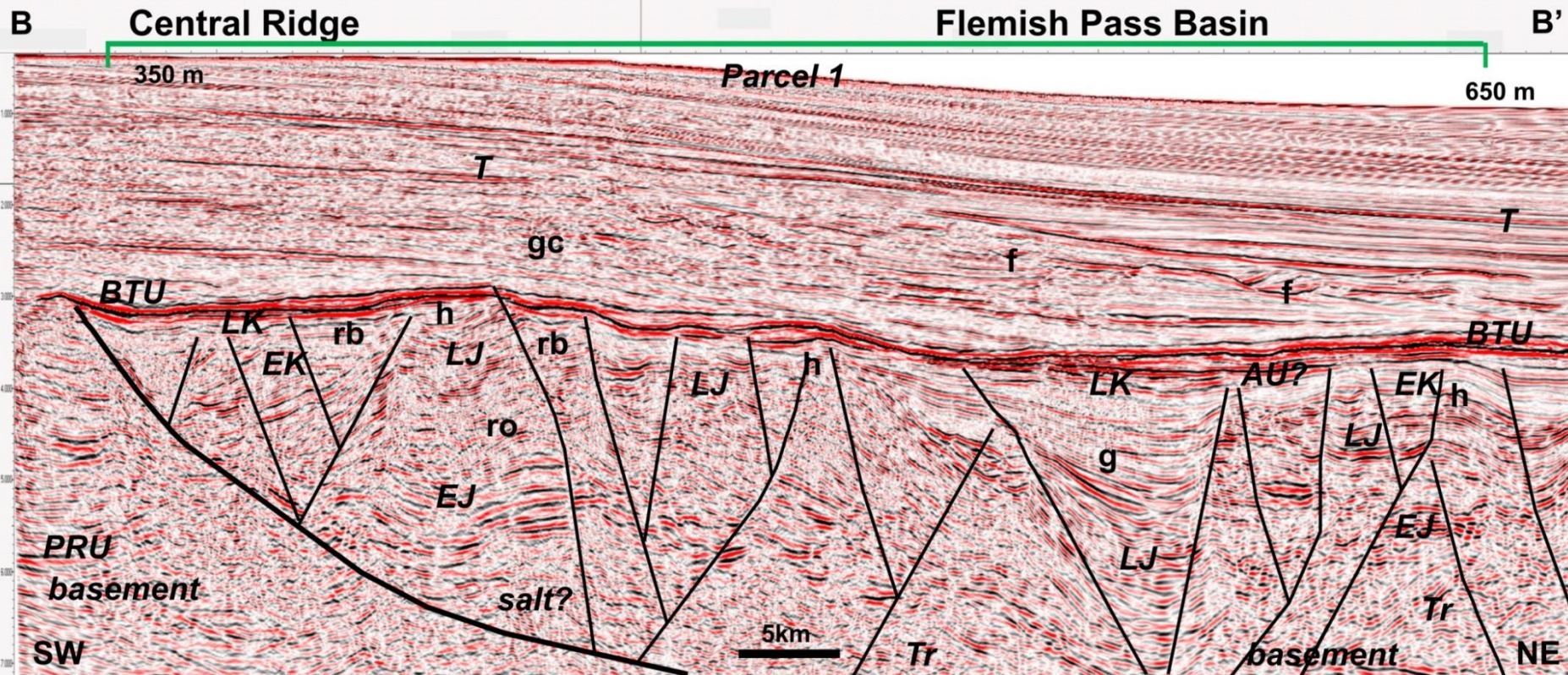
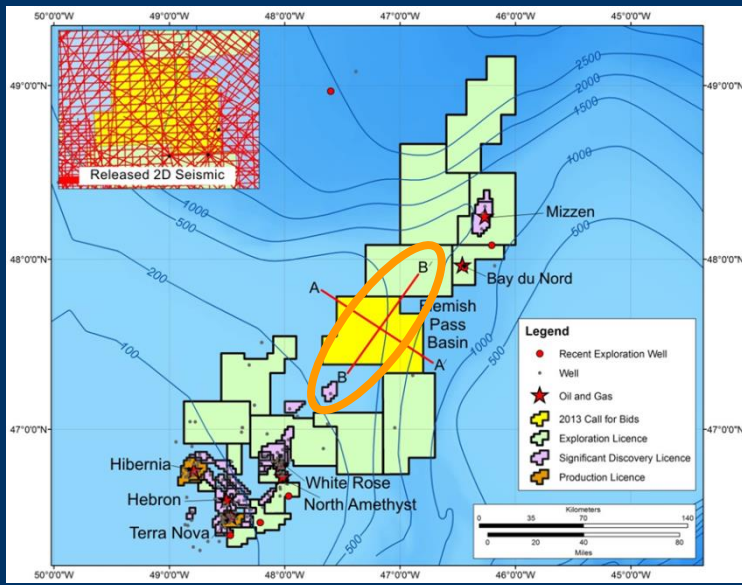


- ✓ One large parcel totaling ~266,000 hectares
- ✓ Water depth ranging from 240 to 1150 meters
- ✓ Proven Late Jurassic source; situated between producing Jeanne d'Arc basin and recent oil discoveries in the Flemish Pass basin

# NL 13-01 Flemish Pass

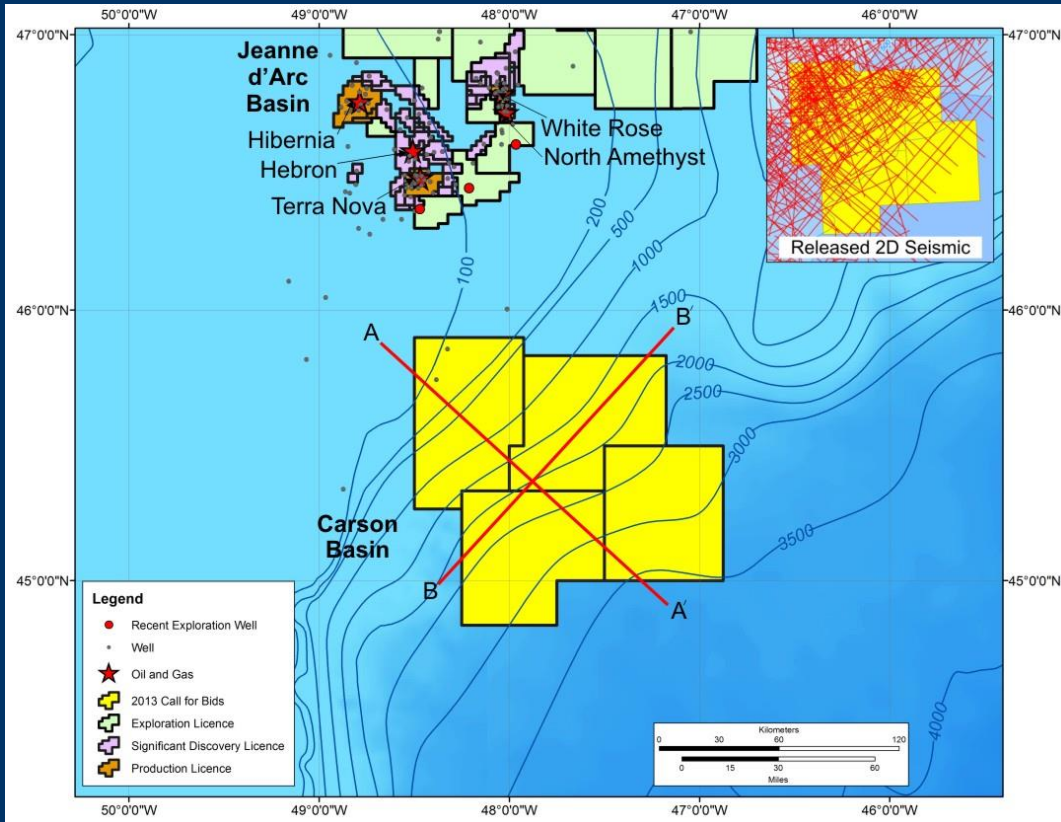


# NL 13-01 Flemish Pass



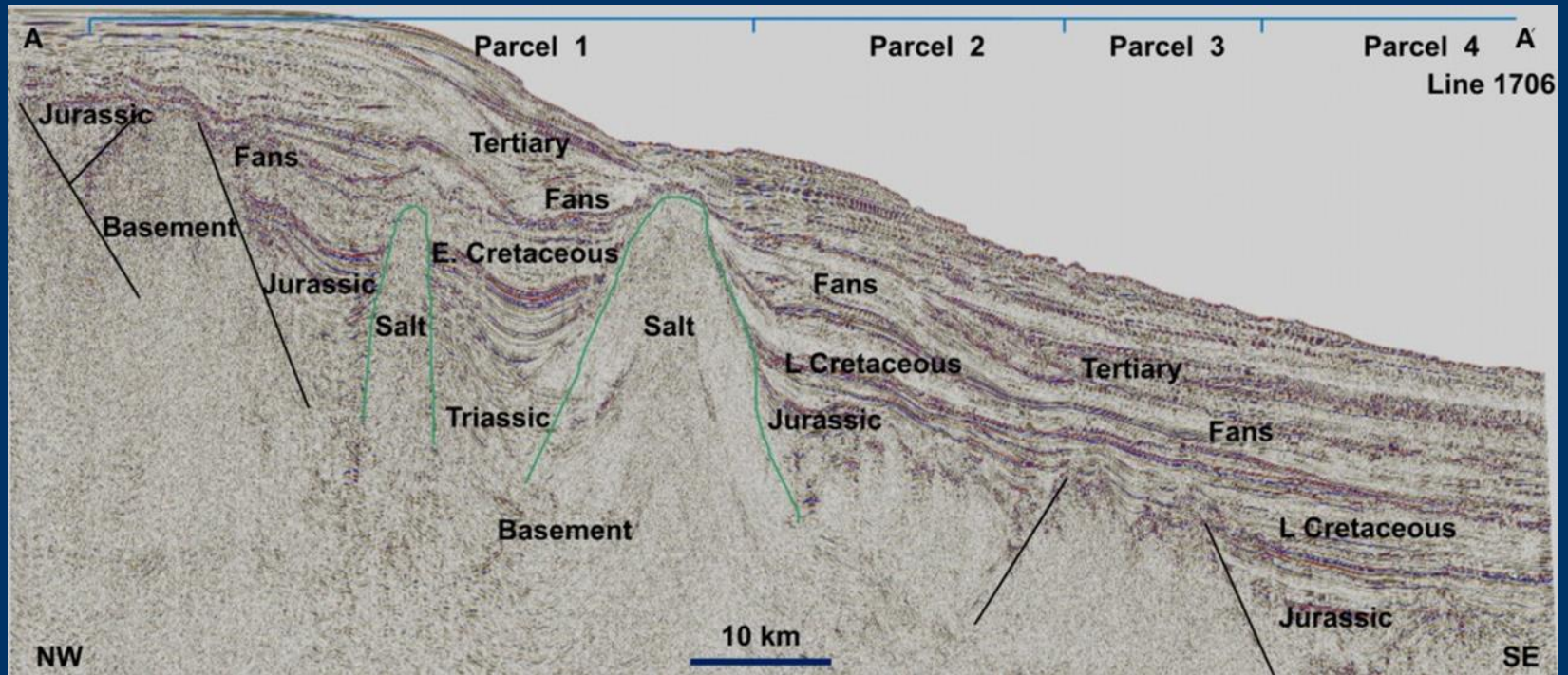
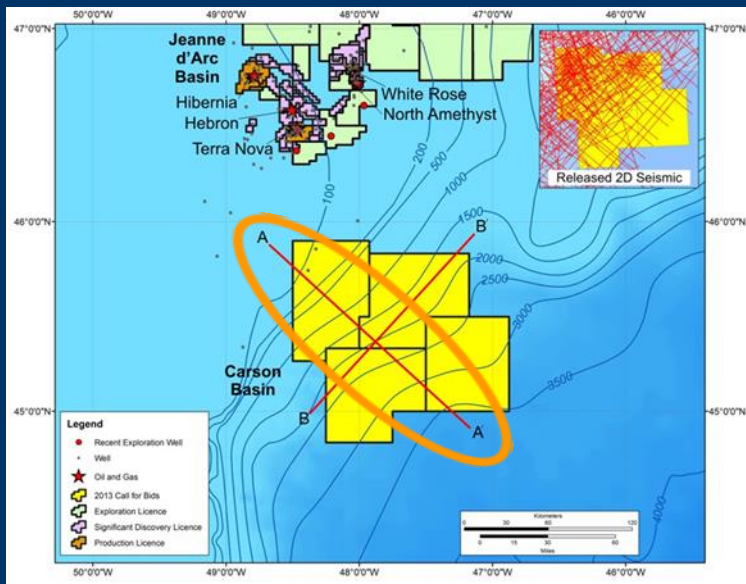


# NL 13-02 Carson Basin

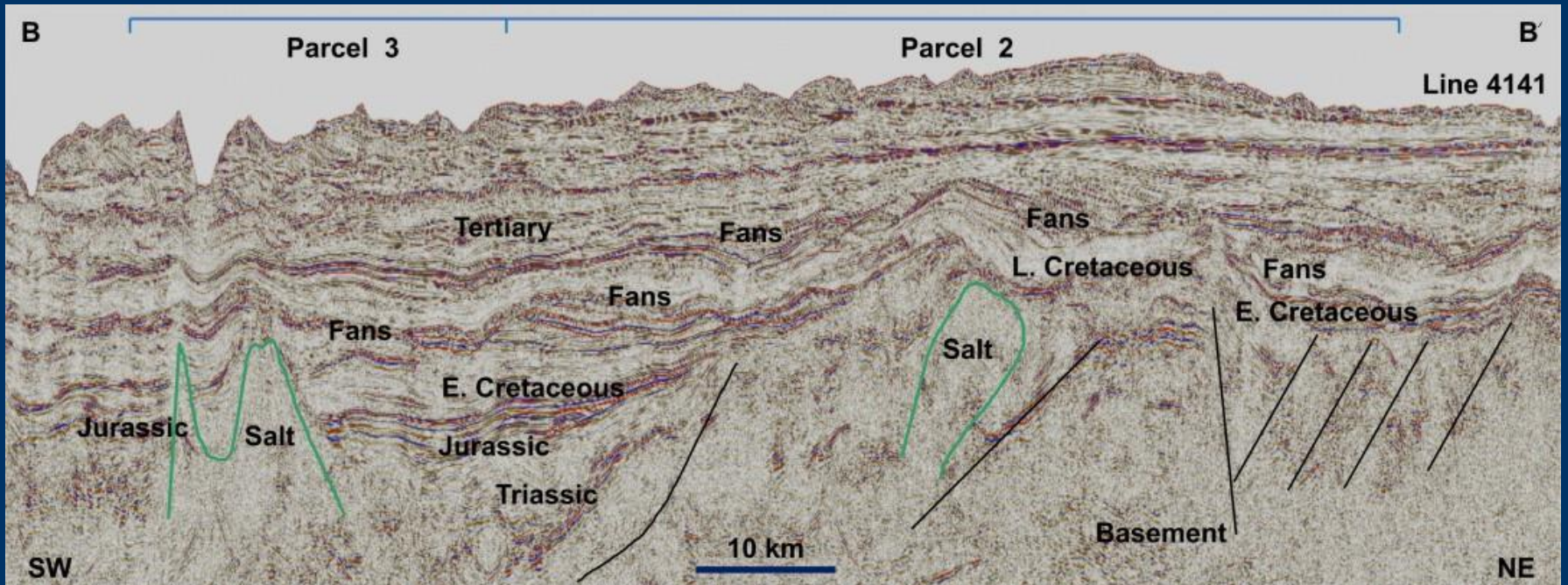
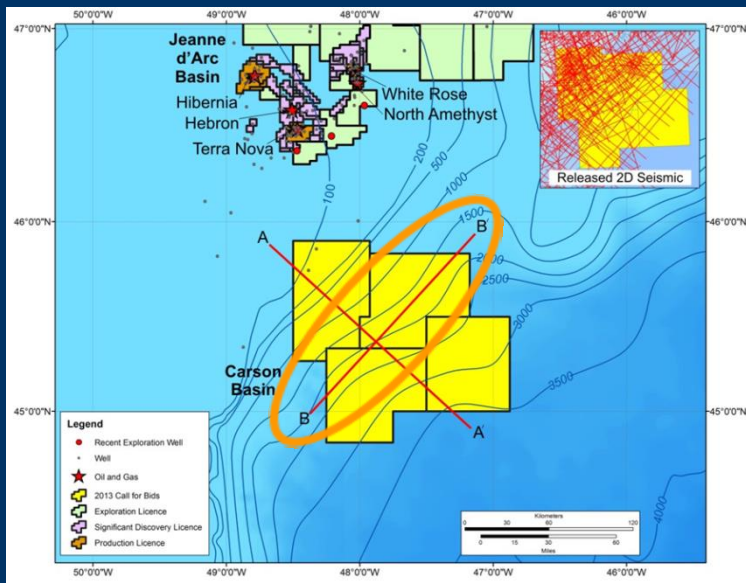


- ✓ Four large parcels totaling ~1.1 million hectares
- ✓ Water depth ranging from 90 to 3600 meters
- ✓ No deepwater wells (only 4 shelf wells); based on seismic data, Jurassic section interpreted across all parcels

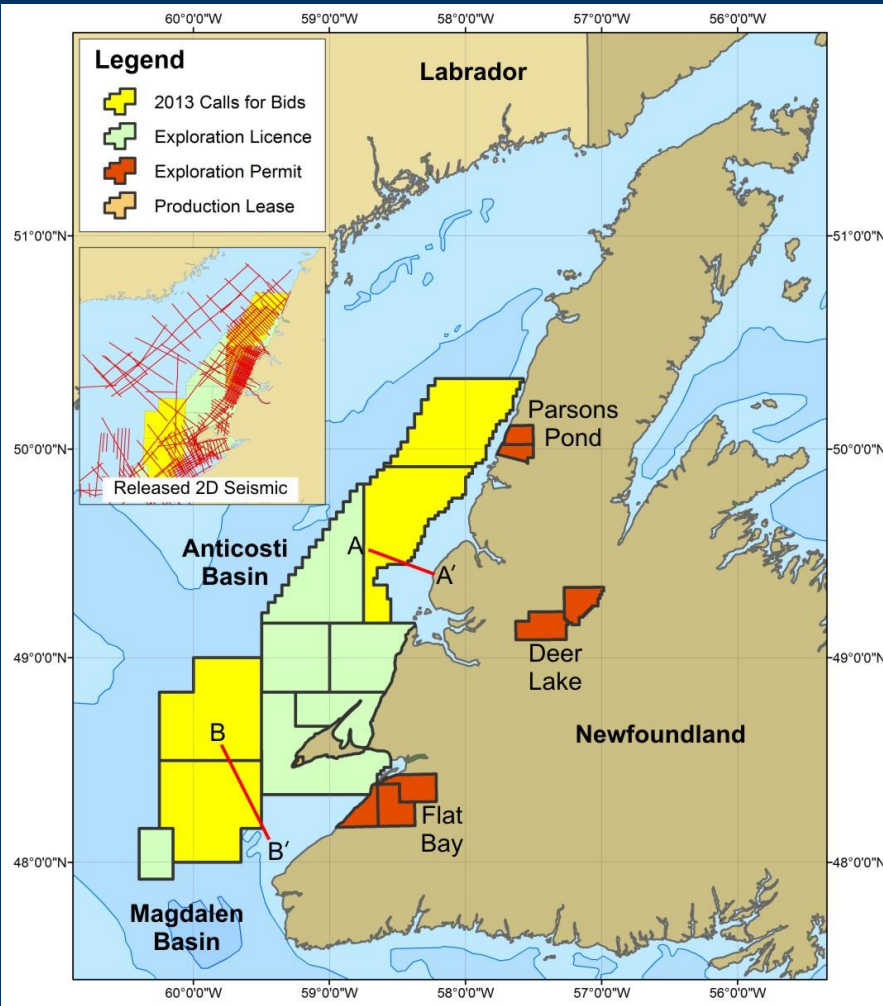
# NL 13-02 Carson Basin



# NL 13-02 Carson Basin



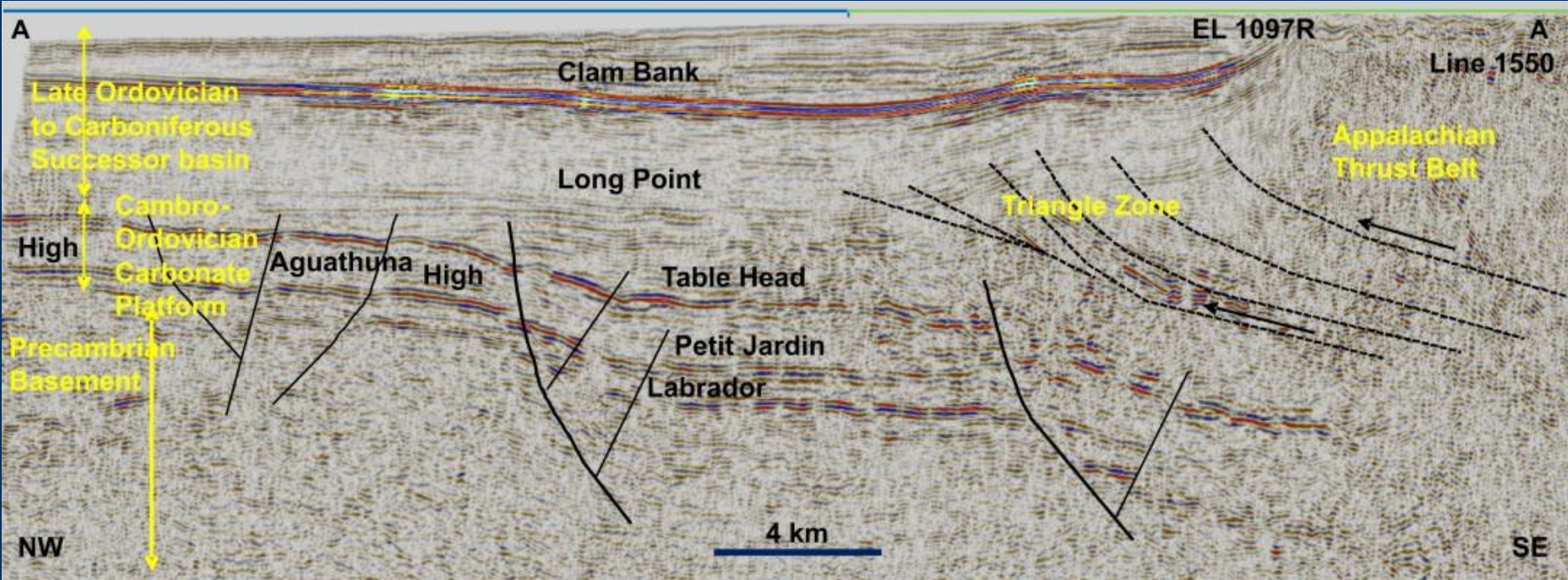
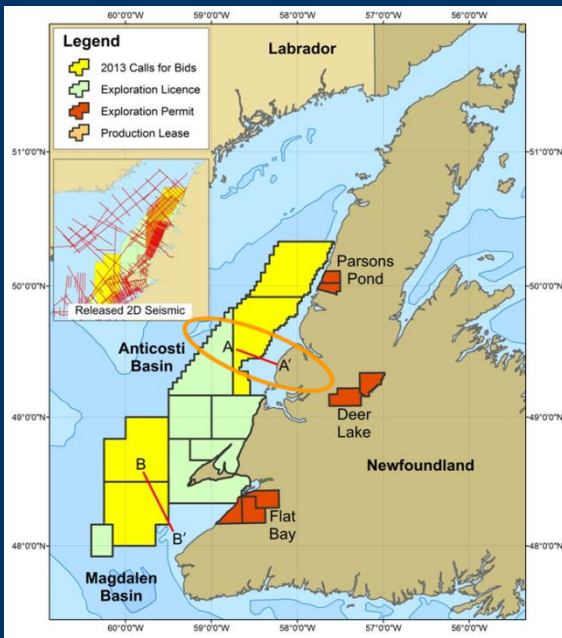
# NL 13-03 Western NL



- ✓ Four large parcels totaling ~1.0 million hectares
- ✓ Water depth ranging from 90 to 330 meters
- ✓ Northern parcel spans boundary between Anticosti foreland basin & west NL triangle zone
- ✓ Southern parcel spans boundary between Anticosti basin and Magdalen basin.

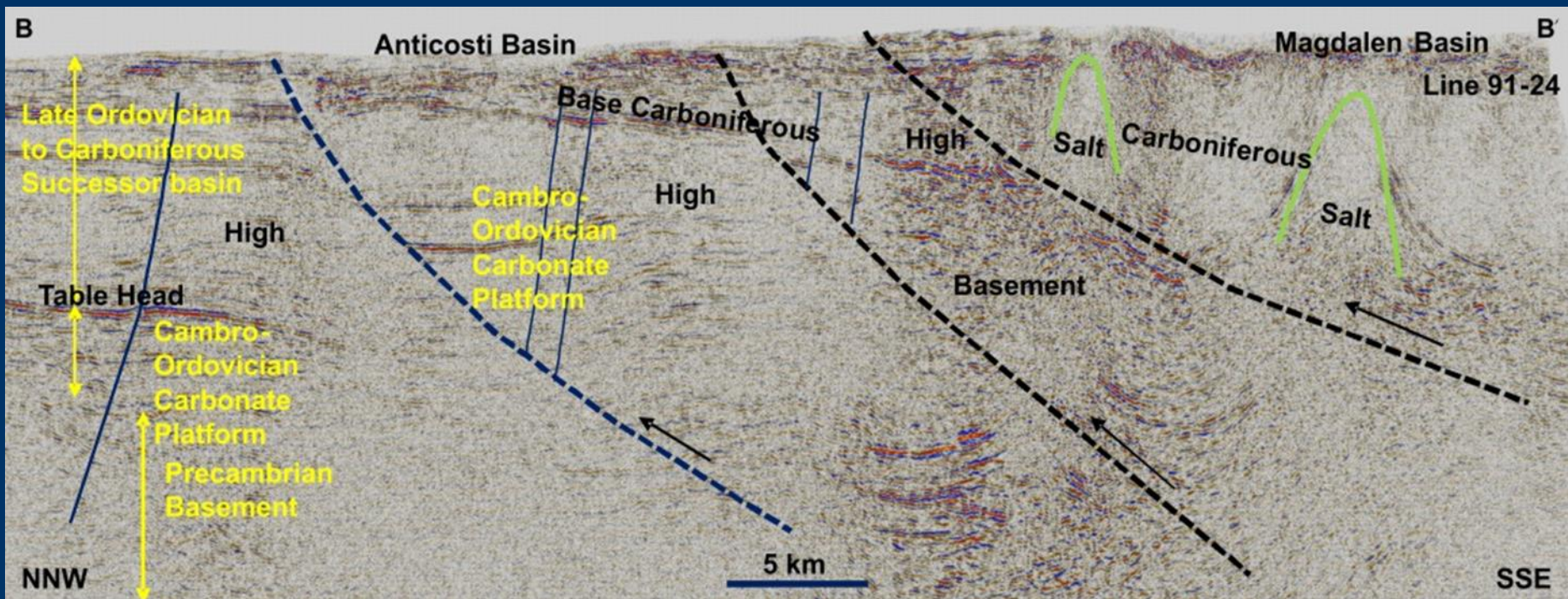
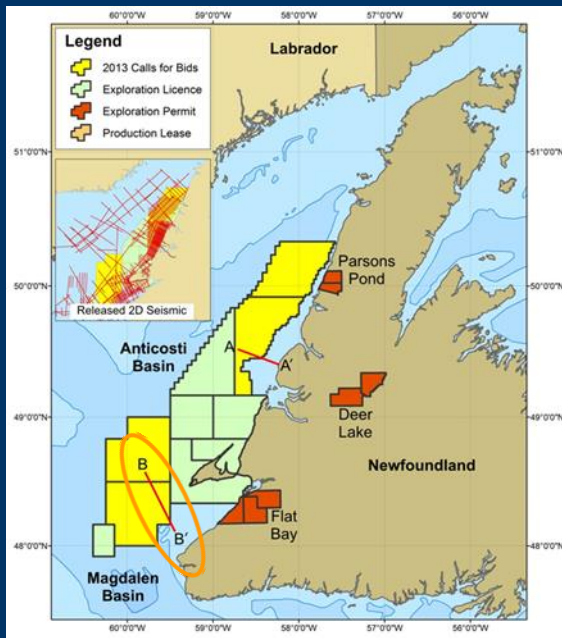
# NL 13-03

## Western Newfoundland



# NL 13-03

## Western Newfoundland



# Summary



## What we have to offer:

- ✓ New modern seismic data availability
- ✓ New discoveries proving excellent prospectivity
- ✓ New opportunities with offshore Calls for Bids
- ✓ New flexible scheduled land tenure system

