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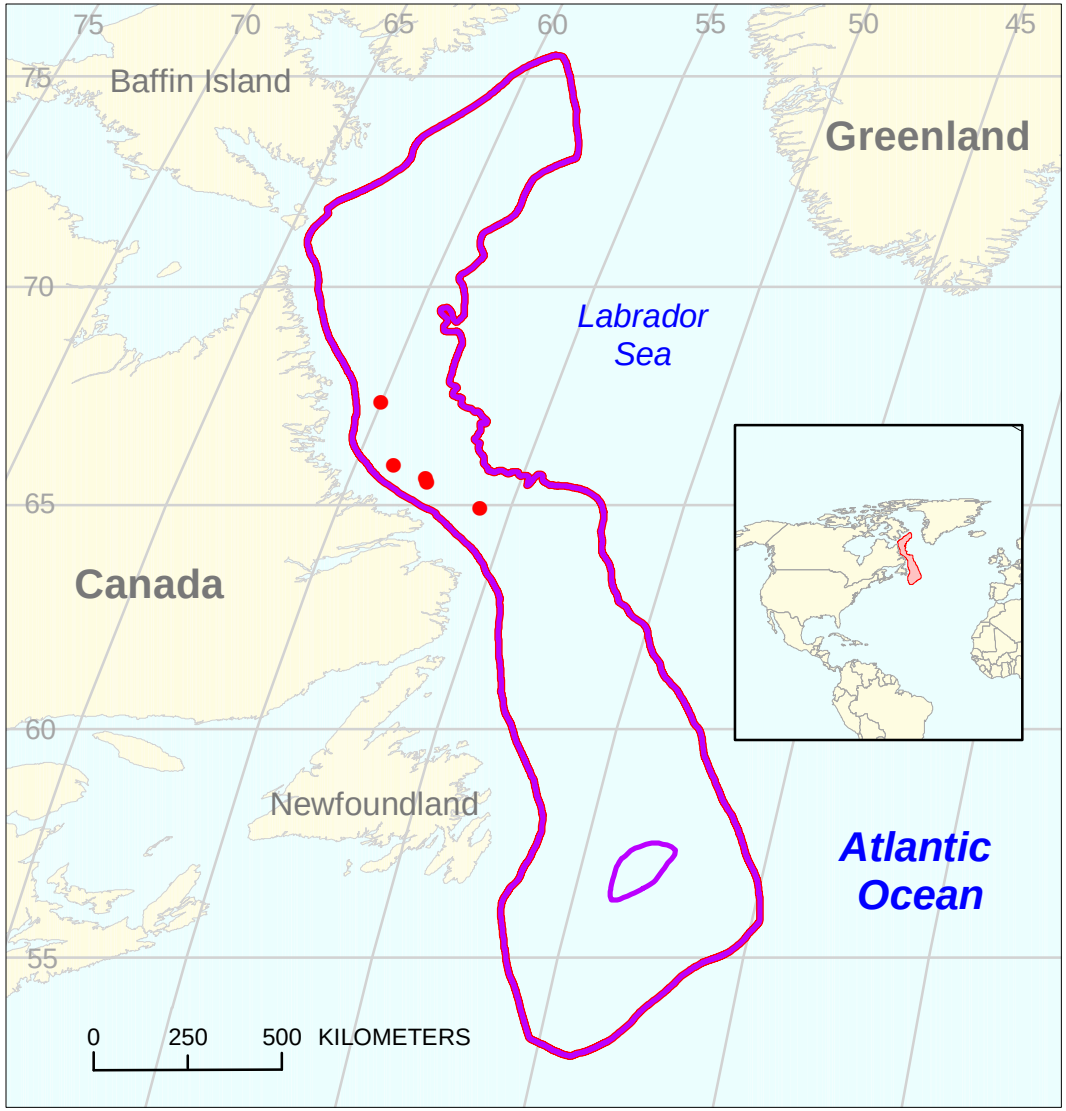
# Graben Systems Exclusive of Jeanne d'Arc Assessment Unit 52150201




Graben Systems Exclusive of Jeanne d'Arc Assessment Unit 52150201
Labrador-Newfoundland Shelf Geologic Province 5215

Geologic Summary

Detailed map of this assessment unit

Assessment Input Data

Assessment Results

- This assessment unit was not
- assessed quantitatively.

**USGS PROVINCE:** Labrador-Newfoundland Shelf (5215) **GEOLOGIST:** L.B. Magoon III

**TOTAL PETROLEUM SYSTEM:** Mesozoic Composite (521502)

**ASSESSMENT UNIT:** Graben Systems Exclusive of Jeanne d'Arc (52150201)

**DESCRIPTION:** This Mesozoic Composite total petroleum system covers the Labrador-Newfoundland Shelf (5215) exclusive of the Egret-Hibernia total petroleum system in the Jeanne d'Arc basin. The area of the Graben Systems Exclusive of Jeanne d'Arc coincides with the Mesozoic Composite total petroleum system. Very little is known about this area except that rift basins similar to the Jeanne d'Arc basin occur, such as the Saglek, Hopedale, East Newfoundland (Orphan), Flemish Pass, Carson, Horshoe, and Whale basins (Balkwill and Legall, 1989; Bell and Campbell, 1990; Creany and Allison, 1987; and Welsink and others, 1989). Each rift basin could include a pod of active source rock; however, except for a significant volume of gas tested from a few wells in the Hopedale basin (Petroconsultants, 1996), there are no indications that oil or gas occurs in commercial quantities. For this reason, this assessment unit was not assessed.

**REFERENCES:**

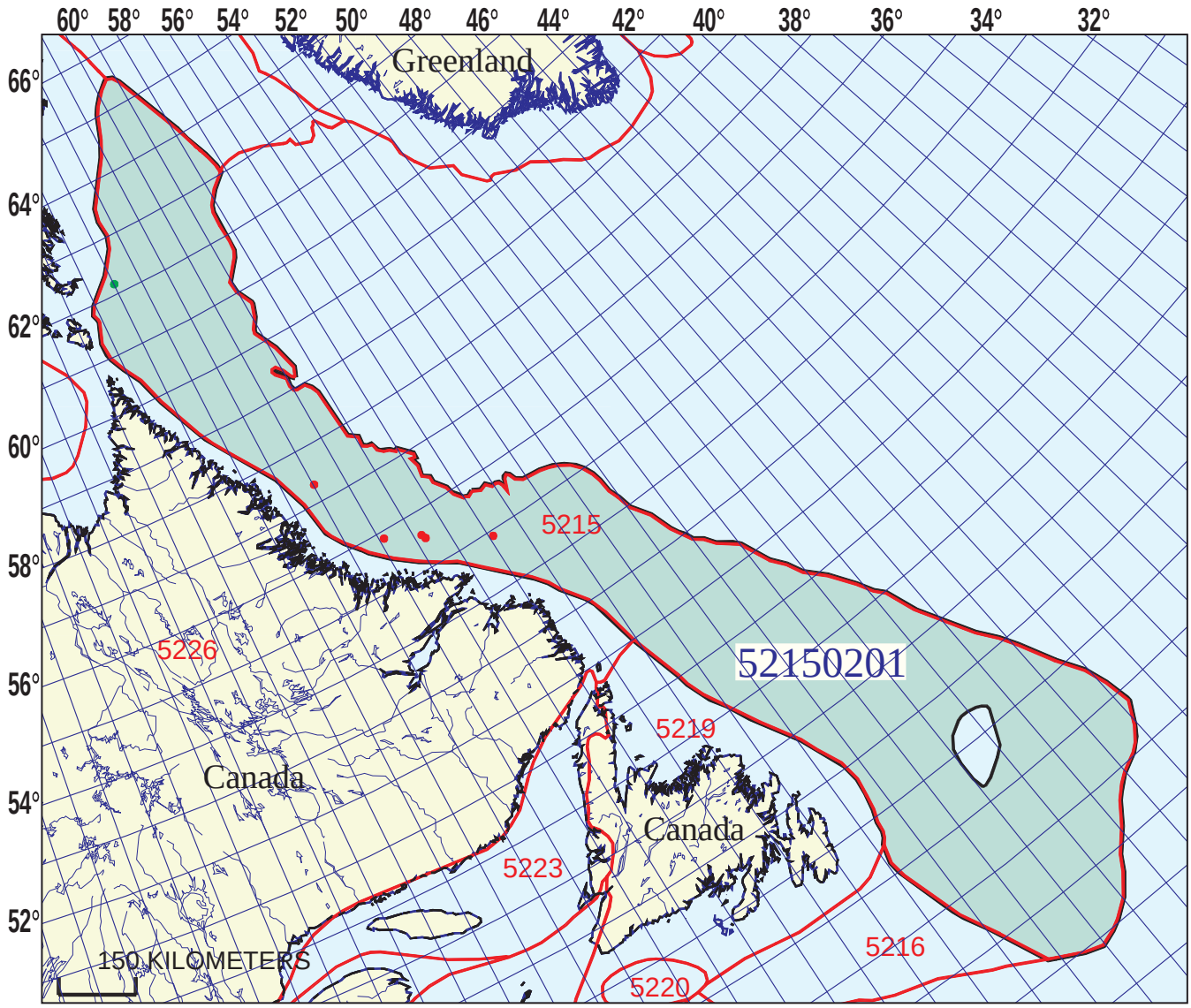
Balkwill, H.R., and Legall, F.D., 1989, Whale basin, offshore Newfoundland; extension and salt diapirism *in*, Tankard, A.J., and Blackwell, H.R., eds., Extensional tectonics and stratigraphy of the North Atlantic margins: American Association of Petroleum Geologists Memoir 46, p. 233-245.

Bell, J.S., and Campbell, G.R., 1990, Petroleum resources *in*, Keen, M.J., and Williams, G.L., eds., Geology of the continental margin of eastern Canada: Geological Survey of Canada, Geology of Canada, no. 2, p. 677-720.

Creaney, S., and Allison, B.H., 1987, An organic geochemical model of oil generation in the Avalon/Flemish Pass sub-basins, east coast Canada: Bulletin of Canadian Petroleum Geology, v. 35, p. 12-23.

Petroconsultants, 1996, Petroleum exploration and production database, Houston, Texas, Petroconsultants, Inc.; database available from Petroconsultants, Inc., P.O. Box 740619, Houston, Texas 77274-0619.

Welsink, H.J., Srivastava, S.P., and Tankard, A.J., 1989, Basin architecture of the Newfoundland continental margin and its relationship to ocean crust fabric during extension *in*, Tankard, A. J., and Blackwell, H. R., eds., Extensional tectonics and stratigraphy of the North Atlantic margins: American Association of Petroleum Geologists Memoir 46, p. 197-213.




# Graben Systems Exclusive of Jeanne d'Arc Assessment Unit - 52150201

EXPLANATION

- Hydrography
- Shoreline
- 5215 Geologic province code and boundary
- Country boundary
- Gas field centerpoint
- Oil field centerpoint
- 52150201 Assessment unit code and boundary

Projection: Lambert. Standard parallels: 49 and 77. Central meridian: -92

**SEVENTH APPROXIMATION**
**NEW MILLENNIUM WORLD PETROLEUM ASSESSMENT**
**DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS**

Date:…….. 12/13/99
Assessment Geologist:…….. L.B. Magoon
Region:…….. North America Number: 5
Province:…….. Labrador-Newfoundland Shelf Number: 5215
Priority or Boutique…… Priority
Total Petroleum System:…… Mesozoic Composite Number: 521502
Assessment Unit:…… Graben Systems Exclusive of Jeanne d'Arc Number: 52150201
* Notes from Assessor Hypothetical Assessment Unit

## CHARACTERISTICS OF ASSESSMENT UNIT

Oil (<20,000 cfg/bo overall) **or** Gas (≥20,000 cfg/bo overall):… _____

What is the minimum field size?……. _____ mmboe grown (≥1mmboe)
(the smallest field that has potential to be added to reserves in the next 30 years)

Number of discovered fields exceeding minimum size:…… Oil: _____ Gas: _____
Established (>13 fields) _____ Frontier (1-13 fields) _____ Hypothetical (no fields) _____

Median size (grown) of discovered oil fields (mmboe):
1st 3rd _____ 2nd 3rd _____ 3rd 3rd _____
Median size (grown) of discovered gas fields (bcfg):
1st 3rd _____ 2nd 3rd _____ 3rd 3rd _____

**Assessment-Unit Probabilities:**

| Attribute | Probability of occurrence (0-1.0) |
|---|---|
| 1. **CHARGE:** Adequate petroleum charge for an undiscovered field ≥ minimum size…… | |
| 2. **ROCKS:** Adequate reservoirs, traps, and seals for an undiscovered field ≥ minimum size…… | |
| 3. **TIMING OF GEOLOGIC EVENTS:** Favorable timing for an undiscovered field ≥ minimum size | |

***Assessment-Unit GEOLOGIC Probability*** (Product of 1, 2, and 3):…….. _____

4. **ACCESSIBILITY:** Adequate location to allow exploration for an undiscovered field ≥ minimum size…… _____

## UNDISCOVERED FIELDS

**Number of Undiscovered Fields:** How many undiscovered fields exist that are ≥ minimum size?:
(uncertainty of fixed but unknown values)

Oil fields:……min. no. (>0) _____ median no. _____ max no. _____
Gas fields:……min. no. (>0) _____ median no. _____ max no. _____

**Size of Undiscovered Fields:** What are the anticipated sizes (**grown**) of the above fields?:
(variations in the sizes of undiscovered fields)

Oil in oil fields (mmbo)……min. size _____ median size _____ max. size _____
Gas in gas fields (bcfg):……min. size _____ median size _____ max. size _____

Assessment Unit (name, no.)

_____

## AVERAGE RATIOS FOR UNDISCOVERED FIELDS, TO ASSESS COPRODUCTS

(uncertainty of fixed but unknown values)

| Oil Fields: | minimum | median | maximum |
|---|---|---|---|
| Gas/oil ratio (cfg/bo)…… | | | |
| NGL/gas ratio (bngl/mmcfg)…… | | | |

| Gas fields: | minimum | median | maximum |
|---|---|---|---|
| Liquids/gas ratio (bngl/mmcfg)…… | | | |
| Oil/gas ratio (bo/mmcfg)…… | | | |

## SELECTED ANCILLARY DATA FOR UNDISCOVERED FIELDS

(variations in the properties of undiscovered fields)

| Oil Fields: | minimum | median | maximum |
|---|---|---|---|
| API gravity (degrees)…… | | | |
| Sulfur content of oil (%)…… | | | |
| Drilling Depth (m) …… | | | |
| Depth (m) of water (if applicable)…… | | | |

| Gas Fields: | minimum | median | maximum |
|---|---|---|---|
| Inert gas content (%)…… | | | |
| $CO_2$ content (%)…… | | | |
| Hydrogen-sulfide content (%)…… | | | |
| Drilling Depth (m)…… | | | |
| Depth (m) of water (if applicable)…… | | | |

Assessment Unit (name, no.)

_____

**ALLOCATION OF UNDISCOVERED RESOURCES IN THE ASSESSMENT UNIT TO COUNTRIES OR OTHER LAND PARCELS** (uncertainty of fixed but unknown values)

1. _____ represents _____ areal % of the total assessment unit

| Oil in Oil Fields: | minimum | median | maximum |
|---|---|---|---|
| Richness factor (unitless multiplier):…… | | | |
| Volume % in parcel (areal % x richness factor):… | | | |
| Portion of volume % that is offshore (0-100%)…… | | | |

| Gas in Gas Fields: | minimum | median | maximum |
|---|---|---|---|
| Richness factor (unitless multiplier):…… | | | |
| Volume % in parcel (areal % x richness factor):… | | | |
| Portion of volume % that is offshore (0-100%)…… | | | |