



GEOLOGICAL SURVEY BRANCH  
DEPARTMENT OF MINES AND ENERGY  
GOVERNMENT OF NEWFOUNDLAND AND LABRADOR  
**GEOLOGY OF THE REGION  
AROUND LEWISPORTE (PARTS  
OF 2 E/2,3,6,7), NORTH-CENTRAL  
NEWFOUNDLAND**

Scale 1:50 000  
BRIAN H. O'BRIEN

LEGEND

- SILURIAN OR DEVONIAN**
- 22 granophyre, porphyritic microgranite; biotite granite
  - Mount Peyton Intrusive Suite
  - 21 hornblende-bearing diorite and gabbro; unsparsated granite (locally with maficitic texture)
  - Porterville Gabbro
  - 20 variably sheared, altered and mineralized gabbro; minor diorite; post-tectonic diabase
  - Long Island Gneiss/diorite
  - 19 hornblende-biotite granodiorite; granite porphyry; gneissic granite
- SILURIAN**
- LLANDOVYER-LUDLOW (?)**
- Wiggins Formation**
- 18 red, crossbedded, ripple-marked sandstone with detrital mica; minor, buff-weathered, quartzitic sandstone; rare, thin, purplish red basalt
  - 17 grey, crossbedded, ripple-marked sandstone with detrital mica; locally reddened variety contains secondary ferrous carbonate and pyrite near fault; rare microconglomerate with distinctive green-grey and black shale clasts
- Lawrenceton Formation**
- 16 purplish grey, vesicular, porphyritic basalt; minor mafic tuff and subvolcanic basalt; minor red conglomerate with abundant, intrabasinal basalt clasts; rare, crevasse-fill, basalt-hosted red sandstone (with baked margins)
  - 15 pink, flow-banded rhyolite; poorly stratified, crystal/litic tuff and felsic agglomerate; minor later units containing large blocks of ignimbrite and basalt
- ORDOVICIAN**
- ASHGILL-LLANDOVYER**
- Upper Black Island Greywackes**
- 14 calcilicite-rich, rose-coloured argillite interbedded with graded calcareous sandstone; hornblende pebbly wacke; minor chert; rare limestone breccia
- Lewisporte Conglomerate**
- 13 grey, red and green, cobble-to-boulder, polymictic conglomerate with distinctive clasts of Jasper, metatonite, green chert, and porphyritic basalt; pebbly wacke interstratified with conglomerate lenses; rare megablocks of coralline limestone
- Campbellton Greywackes**
- 12 interstratified, light green and light grey, siliceous argillite (locally mottled, slumped or interbedded with dark grey to black shale); minor, light grey laminated chert; light grey shale with intervals of thin-bedded, graded, concretionary sandstone; rare debris flows containing extrabasinal and intrabasinal detritus; light green shale and dark green argillite rhythmites; dark green and dark red intervals of sandstone and siliceous argillite; chert-pebble microconglomerate
  - 11 basal, greenish grey, siliceous argillite interbedded with greenish grey shale; thin, light grey beds of sandstone (locally nodular grading to cherty siltstone with dark grey to black shale laminae; thick-bedded, sandy to pebbly wacke interstratified with thin beds of graded, light grey sandstone and dark grey shale; minor polymictic conglomerate lenses; rare thin-bedded limestone
- ORDOVICIAN**
- LLANDEILO-CARADOC**
- Lawrence Harbour/Lacombe Shale**
- 10 black carbonaceous shale; black pyritic silty siltstone with black shale partings; brown-weathered manganese chert, siliceous argillite and rare tuff; grey chert with bioturbated, black shale laminae
- LLANVIRN-LLANDEILO**
- Strong Island Chert**
- 9 thin-bedded, grey, ribboned chert interbedded with thin-bedded, graded, calcilicite wacke; minor, red, siliceous argillite and laminated chert interbeds; rare pillow breccia
- Purbeck Cove Volcanics**
- 8 basaltic pillow lava and pillow breccia; minor intervals of dark green chert and grey epiclastic sandstone; diabase dykes
- Loon Bay Volcanics**
- 7 basaltic pillow lava; graded intervals of pillow breccia; minor mafic, polyolithic tuff; red, green and grey inter-pillow chert
- ARENIG-LLANVIRN (?)**
- Theriot Island Gabbro**
- 6 cumulate-layered gabbro sills; hornblende- and quartz-bearing gabbro pegmatites; vesicular diorite and diabase
- New Bay Formation (upper)**
- 5 basal interval of laminated, dark grey, pyritic shale with subordinate siltstone beds; light grey, nodular, siliceous argillite interbedded with thin, slump-folded sandstone; interstratified, red and green, cherty argillite rhythmites; grey and red oolitic sandstone containing medioterminal cobble conglomerate and detached slump-folds of epiclastic sandstone beds; conglomerate-to-pebbly, graded wacke with distinctive clasts of tonalite, limestone and basalt
- New Bay Formation (lower)**
- 4 medium-bedded, graded, grey sandstone and interbedded, greenish grey shale; minor, pebbly-to-sandy wacke containing common rip-up clasts of dark grey shale and slump-folded argillite; abundant sandstone dykes
- Saunders Cove Formation**
- 3 thin red chert interstratified with red and green, siliceous argillite; minor interval of light grey shale interbedded with thin graded sandstone; rare pebbly wacke
- ARENIG (?)**
- Tea Arm Volcanics**
- 2 basaltic pillow lava; pillow breccia and graded agglomerate; minor interval of felsic to intermediate tuff; rare epiclastic sandstone
- TREMADOC-LLANDEILO (?)**
- Damage Melange**
- 1 pebbly mudstone locally with outsized blocks of sedimentary, volcanic and metamorphic rocks; black pyritic shale; calcilicite-rich and oolitic-bearing argillite; light grey siltstone interstratified with thick-bedded, graded wacke

KEY

- geological boundary (defined, approximate, assumed)
- bedding (inclined, overturned)
- anticline (upright, overturned)
- syncline (upright, overturned)
- antiform
- synform
- fold axial trace (plunge direction indicated)
- reverse fault (barbs on upthrown side; approximate, assumed)
- strike-slip fault (sense of displacement indicated)
- alteration zone

**NOTES**

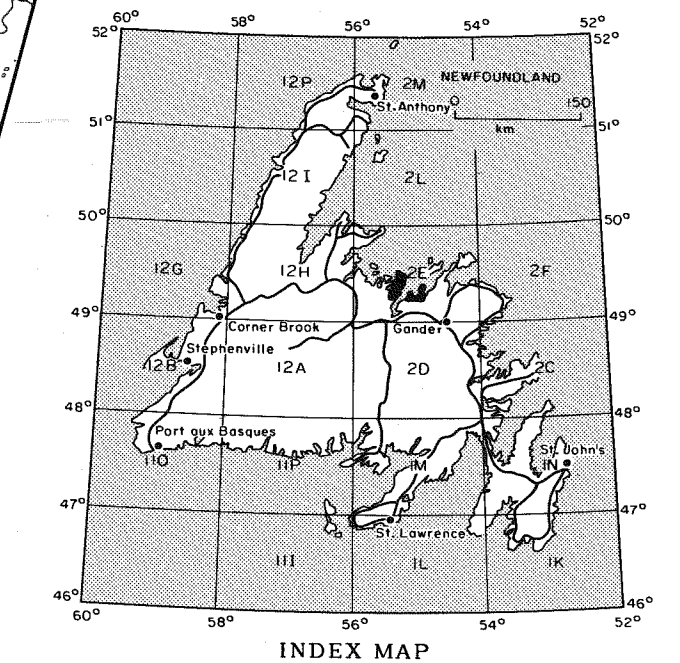
This preliminary open file map is subject to revision and correction. Approximate mean declination (1992) for centre of map is 25 degrees 12 minutes west.

Elevation in feet above mean sea level; contour interval 50 feet.

Copies of this map are available from Publication and Information Section, Geological Survey Branch, Department of Mines and Energy, P.O. Box 8700, St. John's, Newfoundland, Canada A1B 4J6.

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Geological cartography by Cartographic Section, Geological Survey Branch, Department of Mines and Energy, Government of Newfoundland and Labrador.



MAP 92 - 25

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2E / 852  
Map # 92-25  
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