

12 H/10
57'00"

1:50,000

MINERAL DEVELOPMENT DIVISION
DEPARTMENT OF MINES AND ENERGY
GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

12 H/10
56'30"



WEST OF WHITE BAY

- CARBONIFEROUS OR YOUNGER**
- 16 Fine grained mafic dikes.
- CARBONIFEROUS**
- Anguille Group
- C4 Cape Rouge Formation: Interbedded reddish brown siltstone and tan-orange dolomite, carbonate concretions, and minor sandstone, intertongues with unit C3 near Upper Head.
 - C3 Dark gray siltstone and mudstone, medium to coarse grained sandstone, and pebbly conglomerate.
 - C2 Gray and red sandstone, gray and red conglomerate, gray, green, and red siltstone, carbonate nodules and calcrites.
- DEVONIAN OR YOUNGER**
- 14 Dikes: 14a, mafic; 14b, felsic.
 - 13 Quartz porphyry plugs.
 - 12 Quartz monzonite sills.
 - 11 Gales Brook stock: 11a, Pink microcline-biotite granite; 11b, quartz diorite, diorite, and gabbro.
- SILURIAN (MIDDLE TO LATE)**
- Sops Arm Group
- 10 Natlins Cove Formation: 10a, Fine grained argillaceous sandstone, conglomerate, gray siltstone, black mudstone, and calcareous siliciclastics; 10b, felsic volcanic rocks, including flows, flow breccias, ignimbrites, lahatic breccias, and ash-fall tuffs; 10c, mafic volcanic rocks.
 - 9 Simms Ridge Formation: Gray siltstone and mudstone, calcareous mudstone, and bioclastic calcarenite.
 - 8 Jackson's Arm Formation: Massive, pebbly to boulder, tuffaceous conglomerate.
 - 7 Stony Hill Formation: 7a, Felsic volcanic rocks (mainly ignimbrites); 7b, mafic volcanic rocks.

DEVONIAN

- 15 Sandy Lake stock: Mainly porphyritic biotite granite.

CAMBRIAN TO ORDOVICIAN

- Coney Arm Group
- 6 Taylors Pond Formation: Mudstones, phyllites, schists, and metasandstone.
 - 5 Doucens Formation: Marble, limestone, limestone breccia, and dolomite.
 - 3 Beaver Brook Formation: Basal orthoquartzite and mudstones; calcareous mudstones and limestones near top.
- PRECAMBRIAN**
- 1 Long Range Complex: 1a, Granite gneiss; 1b, hornblende gneiss and amphibolite.

PRECAMBRIAN (?)

- 2 2a, Granitoid rock; 2b, mafic dikes (?) 2c, quartzite.

ROCKS OF UNKNOWN AGE, BUT PRE-CARBONIFEROUS

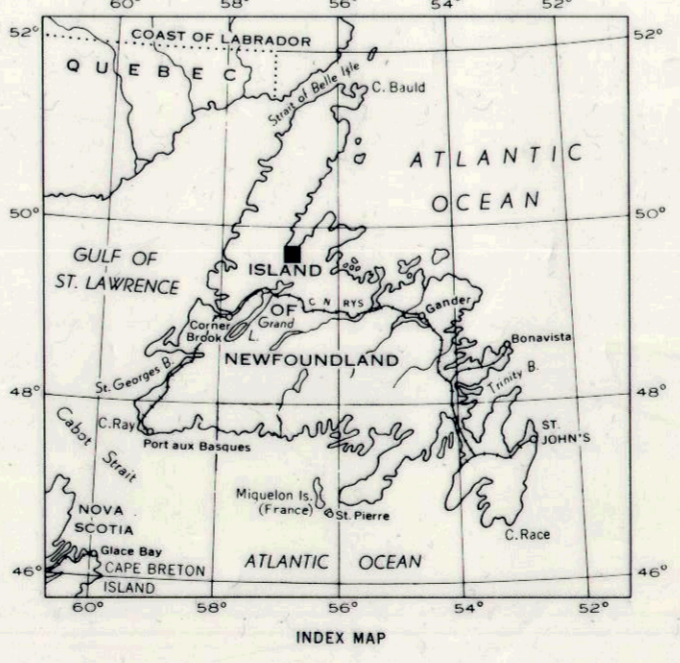
- A Gabbro, carbonatized gabbro, and carbonatized sedimentary rocks.
- B Melange-like rocks with sheared shaly matrix; mafic to intermediate flows and/or dikes.

EAST OF WHITE BAY

- 4 Fleur de Lys Supergroup: 4a, Greenschist and amphibolite; 4b, gray and pink marble, breccia, and pelitic schist; 4c, biotite muscovite schist, minor graphitic schist and marble.

LATE PRECAMBRIAN TO ORDOVICIAN

- 4 Fleur de Lys Supergroup: 4a, Greenschist and amphibolite; 4b, gray and pink marble, breccia, and pelitic schist; 4c, biotite muscovite schist, minor graphitic schist and marble.



LEGEND

- WEST OF WHITE BAY**
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- PRECAMBRIAN (?)**
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- ROCKS OF UNKNOWN AGE, BUT PRE-CARBONIFEROUS**
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SYMBOLS

- Geologic boundary (approximate, assumed)
- Unconformity
- Bedding, tops known (inclined, vertical, overturned)
- Bedding, tops unknown (inclined, vertical)
- Foliation (inclined, vertical)
- Anticline
- Syncline
- Inclined axial plane of minor fold (arrow shows plunge of fold axis)
- Fault (defined, approximate, assumed)
- Inclined fault
- Fault (solid circle indicates downthrown side, arrows indicate relative movement)
- Thrust or reverse fault (teeth in direction of dip)
- Fault zone
- Dike
- Invertebrate fossil locality
- Plant fossil locality
- Outcrop
- Float
- Mineral occurrence
- Gossan
- Abandoned mine
- Abandoned shaft

Notes

Not all the Carboniferous units in the Deer Lake Basin occur in this map area. However, the numbering of the Carboniferous units is consistent between maps 792, 793, 7942, 7943, and 7944.

Individual outcrops not shown for western coastline of White Bay, exposures are numerous.

Carboniferous geology and outcrops shown in pre-Carboniferous areas are based on work by R.S. Hyde (party chief), B.A. Alexander (senior assistant), D. Bragg, and W. Jacobs (1977, 1978).

Geology east of White Bay compiled from:

- Betz, F., Jr. 1948. Geology and mineral deposits of southern White Bay. Geological Survey of Newfoundland, Bulletin 24, 26 pages, with 1:31,680 scale map.
- Neale, E.R.W. and Nash, W. 1962. Geology, Sandy Lake (east half). Geological Survey of Canada, Report 62-28, with map 40-1962, scale 1:253,440.
- Williams, H. and Hibbard, J. 1977. Geology, Baie Verte Peninsula and western White Bay. Newfoundland Department of Mines and Energy, Mineral Development Division, Map 7729, scale 1:125,000.

Geology west of White Bay compiled from:

- Betz, F., Jr. 1948. Geology and mineral deposits of southern White Bay. Geological Survey of Newfoundland, Bulletin 24, 26 pages, with 1:31,680 scale map.
- Heyl, G.R. 1937. The geology of the Sops Arm area, White Bay, Newfoundland. Geological Survey of Newfoundland, Bulletin 8, 42 pages, with 1:63,360 scale map.
- Lock, B.E. 1969. The Lower Paleozoic geology of western White Bay, Newfoundland. Ph.D. thesis, Cambridge University, Cambridge, England, with maps at approximately 1:84,000 and 1:21,000 scales.
- Neale, E.R.W. and Nash, W. 1962. Geology, Sandy Lake (east half). Geological Survey of Canada, Report 62-28, with map 40-1962, scale 1:253,440.
- Williams, H. 1977. Unpublished compilation map of parts of the Hampden (12H/10) map area, scale 1:50,000.

This map may be subject to revision and correction.

Geological cartography by Mineral Development Division, Department of Mines and Energy, Government of Newfoundland and Labrador.

Copies of this map may be obtained from the Publications and Information Section, Mineral Development Division, Department of Mines and Energy, P.O. Box 4750, St. John's, Newfoundland A1C5T7.

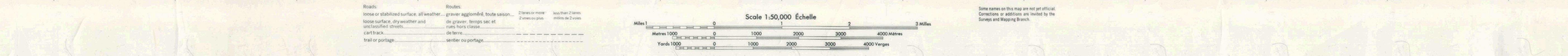
Base map at same scale published by the Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa, 1972.

Elevation in feet above mean sea level.

Approximate magnetic declination, 1969, for center of map, 28° 58' west, decreasing 3.1' annually.

This project was financed under the Canada/Newfoundland Mineral Development Subsidiary Agreement (1977-1981). This Agreement (a subsidiary of the Canada/Newfoundland General Development Agreement) is financed by contributions from the Government of Newfoundland and Labrador (10 percent) and from the Departments of Regional Economic Expansion (45 percent) and Energy, Mines, and Resources (45 percent) of the Government of Canada.

MAP 79-2
HAMPDEN
NEWFOUNDLAND



12 H/10