

LEGEND

- PALEOZOIC**
Early Carboniferous
14 Mafic dykes; fine grained, unmetamorphosed
- LATE PROTEROZOIC—EARLY CAMBRIAN**
13g Gabbro, olivine gabbro; coarse grained, ophiolite texture, generally north-northeast trending
13q Quartz (+ minor feldspar) veins
121 Lighthouse Cove Formation: fine grained, columnar-jointed basalt
122 Bateau Formation: conglomerate containing rounded, subrounded and angular clasts derived from underlying basement, includes diastrophic dykes
12a Bateau Formation and Gilbert arkose: crossbedded arkose and minor shale characteristically red and maroon weathering
- LATE PROTEROZOIC**
11f Granite; fine grained, massive, equigranular
11g Granite; coarse grained, massive, equigranular
10c Fault breccia: extensive alteration to epidote, hematite, chlorite and quartz
10m Mylonite, ultramylonite; intensely foliated and lineated
- MIDDLE PROTEROZOIC**
9a Minor mafic dykes; medium grained and equigranular, deformed and metamorphosed
9b Minor mafic dykes; medium grained and plagioclase porphyritic, deformed and metamorphosed
8 Microgranite, apolite and pegmatite dykes, and irregular-shaped intrusions
7a Amphibolite and retrograded metabasite; medium grained, commonly garnetiferous, foliated to gneissic
7f Two pyroxene granite, leucogabbro; fine grained (pesterplanar shape or outcrops suggests that these rocks are dykes in part)
7g Granite, grading into K-feldspar megacrystic granitoid rocks; medium to coarse grained
7i Leucogabbro, leucocrinite, minor anorthosite; medium and coarse grained (similar to 7b but lower colour index)
7m Monzonite, monodiorite, syenite and quartz bearing varieties; medium and coarse grained
7n Anorthosite, leucogabbro; medium and coarse grained
7p Gabbro, norite, troctolite; medium and coarse grained, characteristically olivine bearing, includes minor ultramafite
7r Syenite grading into monzonite (quartz bearing in part); medium to coarse grained
6a Metagabbro rocks; amphibolite to granulite facies
6j Alkali-feldspar granite, grading locally into monzonite; fine to coarse grained
6l Leucogabbro, minor anorthosite; fine to very coarse grained
6n Monzonite to monzogabbro; fine to very coarse grained
6s Anorthosite and leucogabbro; fine to very coarse grained
5f Ultramafite; fine to coarse grained
5g Biotite granite, alkali-feldspar granite; fine grained
5h Biotite granite, alkali-feldspar granite; coarse grained
5m Hornblende granite, alkali-feldspar granite; coarse grained
5n Monzonite, quartz monzonite grading into diorite, granite or syenite; medium and coarse grained
5y Alkali-feldspar quartz syenite, syenite and alkali-feldspar granite; medium and coarse grained
4a Biotite schists, lenses and layers (possible remnants of former mafic dykes)
4b Biotite and/or hornblende granodiorite; medium to coarse grained
4d Hornblende diorite to quartz diorite; medium to coarse grained
4f Biotite granodiorite to granite; fine grained
4g Biotite granite, alkali-feldspar granite; medium to coarse grained
4h Hornblende and/or biotite granite to quartz monzonite; medium to coarse grained
4m Hornblende and/or biotite quartz monzonite, grading into diorite or syenite; medium to coarse grained
4n Grandiorite to granite containing K-feldspar megacrysts; medium to coarse grained
4p Quartz syenite to alkali-feldspar granite; medium to coarse grained
(No Unit 3 on this map—see note 7)
2a Quartz-feldspar psammite schist and gneiss, metagreywacke?; medium grained and rusty weathering in places
2c Metasedimentary diastrophic; coarse grained to pegmatitic and white weathering
2x Cordierite-bearing schist and gneiss; fine to medium grained
1a Mafic to ultramafic gneissose rocks, commonly containing quartz-feldspar veins and segregations; fine to coarse grained
1b Biotite granodiorite gneiss containing minor hornblende; fine to coarse grained
1d Biotite—hornblende diorite to quartz diorite gneiss; fine to coarse grained
1g Biotite granite gneiss containing minor muscovite; medium to coarse grained
1h Hornblende—biotite quartz diorite to granodiorite gneiss; medium to coarse grained
1i Biotite granodiorite gneiss containing K-feldspar megacrysts, seriate texture in part; medium to coarse grained
1q Quartz-rich gneiss; medium to coarse grained (possibly derived from deformed quartz veins)



MAP 88-88
PORT HOPE SIMPSON
SCALE 1:100,000 ÉCHELLE
Miles 0 1 2 3 4 5
Kilometres 0 1 2 3 4 5

MINERAL ABBREVIATIONS

- Cu chalcopyrite, malachite
py pyrite
mu muscovite
cm corundum
ilm ilmenite

SYMBOLS

- Geological boundary (approximate, assumed, inferred from aeromagnetic data in areas of thick cover)
Inferred primary igneous layering (inclined)
Foliation (horizontal, inclined, vertical, dip unknown)
Gneissosity (inclined, vertical, dip unknown)
Lineation (horizontal, inclined, combined with foliation)
Minor folds, plan view and fold axis (the folds illustrated here are only examples of a wide range of fold styles depicted on the map)
Fault (normal, aeromagnetic extrapolation, type unspecified)
Thrust (defined, assumed)
Sense of displacement from kinematic indicator
Antiform, synform (arrow indicates plunge)
Lineament (interpreted from aerial photographs)
Mineral occurrence
Gossan layer
Data station

NOTES

- Granitoid terminology follows IUGS recommendations (Streckeisen, 1976; Earth Science Reviews, Volume 12, pages 1-33).
- Age relationships are not implied by the order in which units are presented in each group of units, and are not completely known between groups.
- The legend is combined for 13A1NE-3D1NW and 13A1SE-3D1SW; not all units are present on each map.
- Units are indicated in order of decreasing abundance at each data station.
- Unit symbols separated by a slash, e.g., 1p4g, indicate alternative designations, preferred unit given first.
- Map users are encouraged to reinterpret most map units designated by the same letter as possible equivalents, e.g., 4y = 5y.
- Unit 3 does not occur on this map. Unit 3 consists of dioritic to granitic rocks and minor amphibolite, and occurs farther north in eastern Labrador (see Newfoundland Department of Mines and Energy Maps 83-45, 83-46, 86-73, 86-74, 86-75).
- Units 11 and 12 on previous 1:100,000 scale geological maps for parts of eastern Labrador are equivalent to units 12 and 13 on this map.

Geology by C.F. Gower, S. Neuland, M. Newman and J. Smyth, 1988.
This preliminary map may be subject to revision and correction.
Geological cartography by Drafting Unit, Mineral Development Division, Department of Mines, Government of Newfoundland and Labrador.
Copies of this map may be obtained from the Publications and Information Section, Mineral Development Division, Department of Mines, P.O. Box 4750, St. John's, Newfoundland, A1C 3T1, Canada.
Base map enlarged from 1:250,000 scale map published by Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa.
Magnetic declination at centre of map was 30° 22' westerly in 1988, annual decrease 3.7' easterly.
Elevations in feet above mean sea level.
This project was funded under the Canada/Newfoundland Mineral Development Agreement (1984-1989) by contributions from the Department of Mines (50 percent), Government of Newfoundland and Labrador, and from the Department of Energy, Mines and Resources (50 percent), Government of Canada.

