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- LEGEND**
- PALEOZOIC**
- 12 Gabbro, olivine gabbro dikes, ophitic texture, coarse grained, generally north-northeast trending.
- HADRYNIAN**
- 11a 11a Double Mer Formation
- 11a Ophiolites: rounded, subrounded and locally angular clasts of (mostly) gabbroid and gneissic rocks, in poorly unsorted matrix.
- 11b Shale and arkose, well bedded, characteristically red and maroon weathering.
- 10 Fault and shear zone breccia and other calcareous rocks. Extensively postdated, hematitised, commonly interlayered mafic rocks and microgabbro. Postdates Double Mer Formation in part.
- NECHELIKIAN-HADRYNIAN**
- 9a 9a Equisgranular diabase/metaslab, gabbro/metagabbro dikes, medium and coarse grained, ophitic texture preserved.
- 9b Rhyolite porphyritic rhyolite/metaslab dikes, medium grained, ophitic texture commonly well preserved.
- 8 Microgranite, quartz and pegmatite dikes, and irregular intrusions; various ages.
- HELIKIAN (cf. ELSONIAN but probably includes earlier intrusions)**
- 7a 7a 7b 7c 7d 7e Includes Michal Gabbro
- 7a Amphibolite or granulite associated with metabasoidal rocks, commonly gneissiferous, medium grained, foliated to gneissic.
- 7b Leucogabbro, leucocratic, minor anorthosite, medium and coarse grained.
- 7c Monzonite grading into monodiorite, medium and coarse grained.
- 7d Gabbro, norite, commonly olivine-bearing, minor ultramafite, medium to coarse grained.
- 7e Syenite grading into monzonite, quartz-bearing in part, medium to coarse grained.
- 6a 6b 6c 6d Includes Mealy Mountains Intrusive Suite
- 6a Alkali feldspar granite, grading into quartz monzonite, coarse grained.
- 6b Leucogabbro, leucocratic, anorthosite, fine grained to very coarse grained.
- 6c Monzonite to monogabbro, coarse to very coarse grained.
- 6d Leucocratic, layered plagioclase-rich rock with minor garnet, pyroxene, hornblende and quartz, medium to coarse grained.
- 5a 5b 5c 5d 5e
- 5a Diorite, quartz diorite, grading into monzonite, hornblende-bearing, medium to coarse grained.
- 5b Monzonite, quartz monzonite grading into diorite, granitic or syenitic varieties, clinopyroxene- (and rarely orthopyroxene-) bearing, medium to coarse grained.
- 5c Alkali feldspar granite, quartz syenite, syenite and monzonite, clinopyroxene-bearing in part, medium to coarse grained, characteristically pink weathering.
- 5d K-feldspar megacrystic granite to granodiorite, medium to coarse grained.
- 5e Biotite-bearing granite to alkali-feldspar granite, medium to coarse grained.
- HELIKIAN (cf. KETILIDIAN)**
- 4a 4b 4c 4d 4e 4f
- 4a Amphibolite, diorite, tonalite and gabbro, possibly remnants of former mafic dikes.
- 4b Biotite ± hornblende granodiorite, medium to coarse grained, weak to strongly foliated, generally not gneissic, includes granodiorite associated with 3d.
- 4c Biotite granite, medium to coarse grained, weak to strongly foliated, not gneissic.
- 4d Hornblende granite, grading into quartz syenite, medium to coarse grained, weak to strongly foliated.
- 4e Granodiorite to granite with K-feldspar megacrysts, medium to coarse grained, augen fabric in part.
- 4f Granodiorite to granite with Unit 2 mafic, rare sillimanite and/or kyanite, extremely gneissic. Usually with K-feldspar megacrysts; equivalent to 4p in part.
- HELIKIAN and/or APHEBIAN**
- 3a 3b 3c 3d
- 3a Amphibolite, metadiorite, minor quartzofeldspathic leucosome, fine to coarse grained, foliated.
- 3b Diorite, quartz diorite, hornblende ± biotite, commonly with irregular quartz-feldspathic leucosome patches.
- 3c Monzonite, monodiorite, quartz-bearing with hornblende ± biotite, irregular quartz-feldspathic leucosome patches.
- 2a 2b 2c 2d 2e 2f 2g 2h 2i 2j 2k 2l 2m 2n 2o 2p 2q 2r 2s 2t 2u 2v 2w 2x 2y 2z
- 2a Amphibolite with quartz-feldspar layers; schistose or gneissic.
- 2b Calc-silicate rock, marble. Grossularite ± calcite ± diopside ± forsterite ± plagioclase assemblage, fine to coarse grained.
- 2c Kyanite-bearing quartz-feldspar schist and gneiss, fine to coarse grained, grades into muscovite schist.
- 2d Quartzite, meta-arkose, thin to thick bedded. Thin phyllosilicate parting. Fine to coarse grained.
- 2e Sillimanite ± orthopyroxene-bearing quartz-feldspar schist and gneiss, pegmatitic in part, rusty weathering. Fine to coarse grained.
- 2f Muscovite-rich quartz-feldspar schist; pelitic. Fine to medium grained, rusty weathering.
- 2g Biotite-rich quartz-feldspar schist; pelitic. Fine to medium grained; some could be reclassified as gneiss.
- 2h Quartz-feldspar schist, psammite, metapelite, fine to medium grained, some fragmental fabrics suggesting derivation from pyroclastic protolith in part.
- 2i Diatexite; coarse grained to pegmatitic, white weathering quartzofeldspathic monzonite with mafic relicts. Inhomogeneous varieties have abundant relict lenses and schlieren; homogeneous varieties have relict more uniformly dispersed. Uraniferous locally.
- 2j Cordierite-bearing schist and gneiss, fine to medium grained.
- APHEBIAN-HELIKIAN (includes many of above units reworked during Grenville Orogeny, as well as earlier gneiss remnants)**
- 1a 1b 1c 1d 1e 1f 1g 1h 1i 1j 1k 1l 1m 1n 1o 1p 1q 1r 1s 1t 1u 1v 1w 1x 1y 1z
- 1a Amphibolite, commonly with quartz-feldspar veins and segregations, fine to medium grained, massive, foliated or gneissic.
- 1b Biotite granodiorite, minor hornblende, fine to coarse grained, foliated to gneissic.
- 1c Biotite-hornblende diorite to quartz diorite, fine to coarse grained, foliated to gneissic.
- 1d Biotite granite, minor muscovite, fine to coarse grained, foliated to gneissic.
- 1e Biotite-hornblende quartz diorite to granodiorite, fine to coarse grained, foliated to gneissic.
- 1f Biotite granodiorite with K-feldspar phenocrysts, porphyroblasts or augen, relict to core in part, foliated to gneissic.
- 1g Biotite tonalite, minor hornblende, fine to coarse grained, foliated to gneissic.



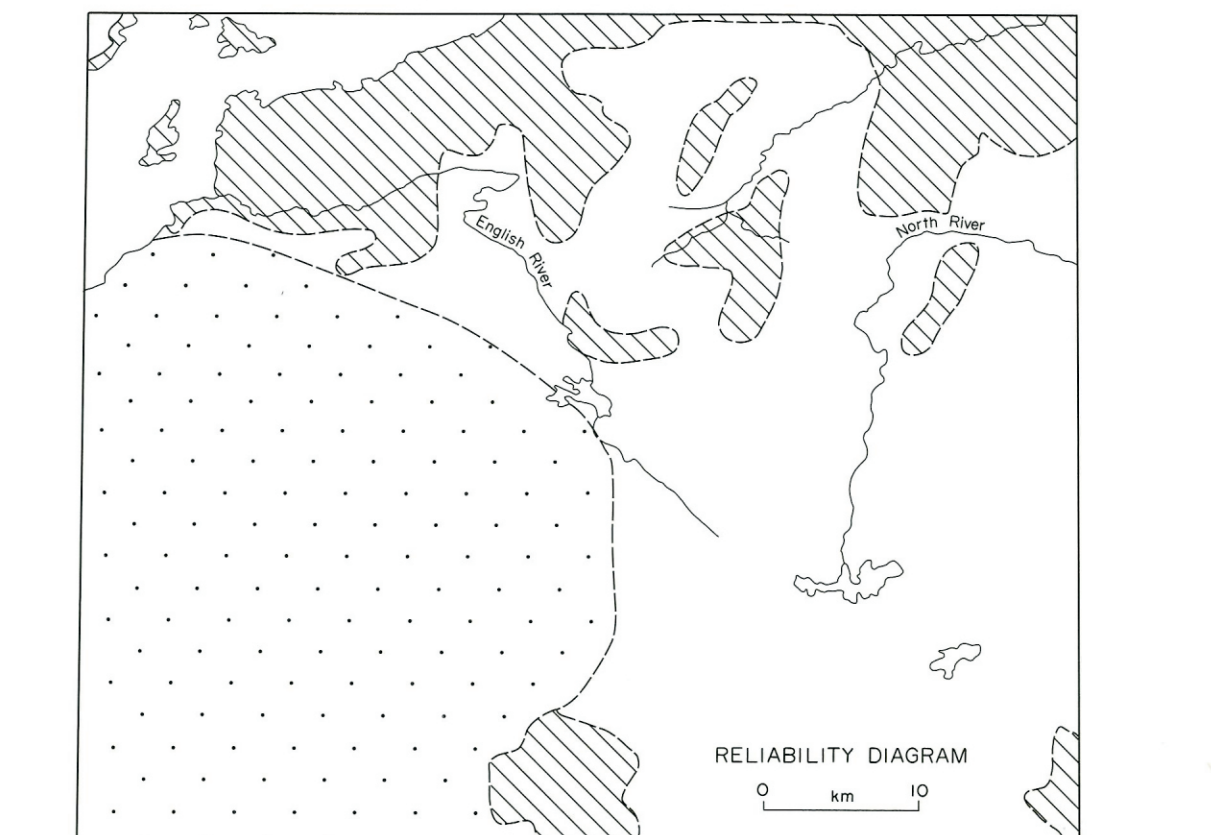
- SYMBOLS**
- Geological boundary: defined, approximate, assumed
- Assumed unconformity
- Bedding: inclined, vertical
- Inferred primary igneous layering
- Foliation: horizontal, inclined, vertical, dip unknown
- Foliation to discontinuous gneissosity: horizontal, inclined, vertical, dip unknown
- Gneissosity: horizontal, inclined, vertical, dip unknown
- Lineation: horizontal, inclined, inclined but plunge unknown
- Combined planar and linear measurements
- S, Z, M and W folds, axial trace indicated by fold limbs, plunge direction by arrow
- As above, plunge unknown
- Fold style reflecting individual structures
- Refolded folds
- Fault approximate, assumed
- Thrust or thrust assumed
- Thrust defined, approximate, assumed
- Shear zone
- Antiform, synform; plunge indicated by arrow
- Overtuned antiform, overturned synform
- Area of thick overburden
- Esker
- Mineral occurrence
- Data station

Geochronology Abbreviations

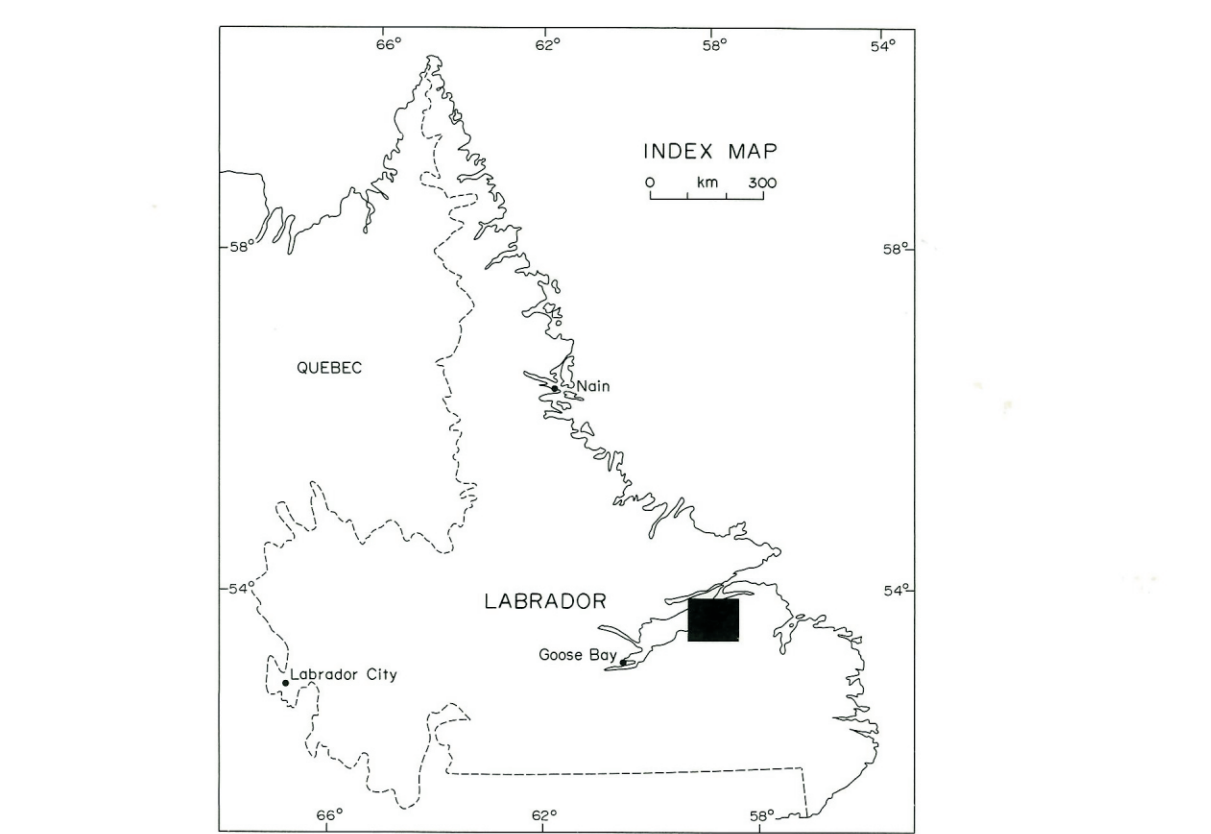
Rb-Sr	Rubidium-Strontium isochron	Cu	Chalcocopyrite, malachite
Sr	Initial strontium ratio	Mo	Molybdenite
K-Ar	Potassium-argon date	Pyr	Pyrite
W.R.	Whole rock age	U	High radioactivity and/or secondary uranium mineralization
Musc.	Muscovite age		
Biot.	Biotite age		
Age	Age interpreted as anomalously old		
*	Age interpreted as reset during metamorphism		

Mineral Abbreviations

- 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 within each group, and are poorly documented between groups.
 - This is a combined legend for 13J SE, 13I SW, 13G NE, 13H NE and 13H NW.
 - Units are indicated in order of decreasing abundance at each data station.
 - Unit symbols measured by slash, e.g. 3d/1d, indicate alternative designations, preferred unit given first.
 - Map users are encouraged to reinterpret map units with the same letter as possible equivalents, e.g. 2a = 1a.



- Ground traverses, including shoreline foot traverses
- Helicopter supported reconnaissance mapping
- Compiled from Emalie R. F. (in preparation)

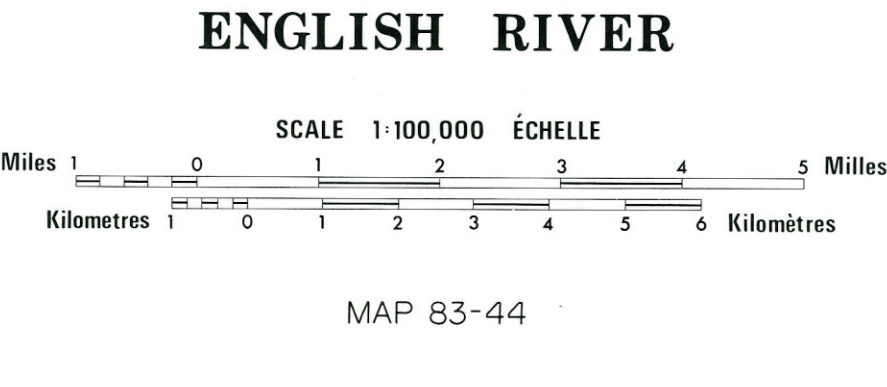


Geology of northern half of sheet by N. Noel, R.T. Gillespie and C.F. Gover, 1980.
Geology of southern half by C.F. Gover and G. Finn, 1981, with Mealy Mountains region compiled from Emalie (in prep.).

This preliminary map may be subject to revision and correction.

Geological cartography by Drafting Section, 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, A1C 5T7.



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 longitude 58° 00' in 1983 was 33° 05' westerly; annual magnetic change 4.1' westerly.

Elevations in feet above mean sea level.

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