



LEGEND

LATE PROTEROZOIC OR PALEOZOIC

12 Gabbro, olivine gabbro, dioritic dikes, characterized by ophitic texture; coarse grained and generally north-northeast trending

No Unit 11 on this map (See Note 7)

LATE PROTEROZOIC AND EARLIER

10c Fault and shear zone breccia; extensively hematized, epidotized, chloritized and silicified
10m Mylonitic rocks; fine grained, intensely foliated and lineated

9e 9p Minor mafic dikes; medium grained and equigranular, deformed and metamorphosed
9p Minor mafic dikes; medium grained and plagioclase porphyritic, deformed and metamorphosed

8 Microgranite, aplite and pegmatite dikes, and irregular intrusions; various ages

MIDDLE PROTEROZOIC

7a Amphibolite and retrograded metagabbro; commonly garnetiferous, medium grained and foliated to gneissic
7i Two-pyroxene granite, leuconortite; fine grained (rectilinear shape of outcrops suggests these rocks are dikes in part)

7g Granite to alkali-feldspar granite; medium to coarse grained
7l Leucogabbro and leuconortite; medium to coarse grained (similar to 7i but lower color index)

7m Monzonite, monzodiorite, syenite and quartz-bearing varieties; medium to coarse grained
7n Anorthosite, leucogabbro; medium grained

7p Quartz monzonite to alkali-feldspar granite containing K-feldspar megacrysts; medium to coarse grained
7r Gabbro, norite, troctolite characteristically olivine bearing; medium to coarse grained, commonly coronitic and locally layered

6a 6l 6n Metagabbroid rocks; amphibolite to granulite facies
6l Leucogabbroid rocks; fine to very coarse grained
6n Anorthosite and leucogabbroid rocks; fine to very coarse grained

No Unit 5 on this map (see Note 7)

4a 4b 4d 4f 4g 4h 4m 4p Amphibolite skiliths, lenses and layers (possibly remnants of former mafic dikes)
4b Granodiorite; medium to coarse grained
4d Diorite to quartz diorite; medium to coarse grained
4f Granodiorite to granite; fine grained
4g Biotite granite; medium to coarse grained
4h Hornblende quartz monzonite; coarse grained
4m Biotite monzonite characterized by seriate to megacrystic texture; coarse grained
4p Granodiorite to granite containing K-feldspar megacrysts; medium to coarse grained

MIDDLE OR EARLY PROTEROZOIC

3a 3b 3d 3g 3m 3p Amphibolite, meladiorite, minor quartzofeldspathic leucosome; fine to coarse grained and foliated
3b Quartz diorite to granodiorite containing hornblende ± biotite; medium to coarse grained; irregular quartzofeldspathic leucosome layers
3d Diorite to quartz diorite containing hornblende ± biotite; medium to coarse grained; irregular quartzofeldspathic leucosome layers
3g Granite to granodiorite containing biotite ± muscovite; medium to coarse grained; quartzofeldspathic leucosome in places
3m Monzonite, monzodiorite, quartz-bearing with hornblende ± biotite; medium to coarse grained; irregular quartzofeldspathic leucosome patches
3p K-feldspar megacrystic quartz diorite to granodiorite containing hornblende ± biotite; medium to coarse grained; irregular quartzofeldspathic leucosome patches

2a 2c 2k 2s 2u 2w 2x 2z Amphibolite containing quartz-feldspar layers and calc-silicate pods; schistose or gneissic (probably supracrustal in part)
2c Calc-silicate rocks, compositionally layered; medium grained
2k Kyanite-bearing quartz-feldspar schist and gneiss; medium grained
2s Quartzite, meta-arkose(?); thin to thick bedded; pelitic gneiss layers
2u Silimanite-bearing quartz-feldspar schist and gneiss; medium grained and rusty weathering
2w Muscovite-rich quartz-feldspar schist; pelitic and semipelitic; medium grained and rusty weathering
2x Quartz-feldspar ± hornblende psammitic schist and gneiss, meta-graywacke(?); medium grained and rusty weathering in places
2z Metasedimentary diatexite; coarse grained to pegmatitic and white weathering
2z Cordierite-bearing schist and gneiss; fine to medium grained

MIDDLE OR EARLY PROTEROZOIC (includes many of above units mobilized during Grenville (or earlier) Orogeny)

1a 1b 1d 1g 1h 1p 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
1p Biotite granodiorite gneiss containing K-feldspar megacrysts, seriate texture in part; medium to coarse grained

GEOCHRONOLOGY ABBREVIATIONS

A-Ar Argon-argon date
P-Neu Plateau age - with parentheses
K-Ar Potassium-argon date
U-Pb Uranium-lead date
W.R. whole rock
bl biotite
hb hornblende
mz muscovite
sph sphene
zr zircon

MINERAL ABBREVIATIONS

Cu chalcocyanite, malachite
py pyrite
U anomalous radioactivity
mu muscovite
sgr sapphirine
osm osmium

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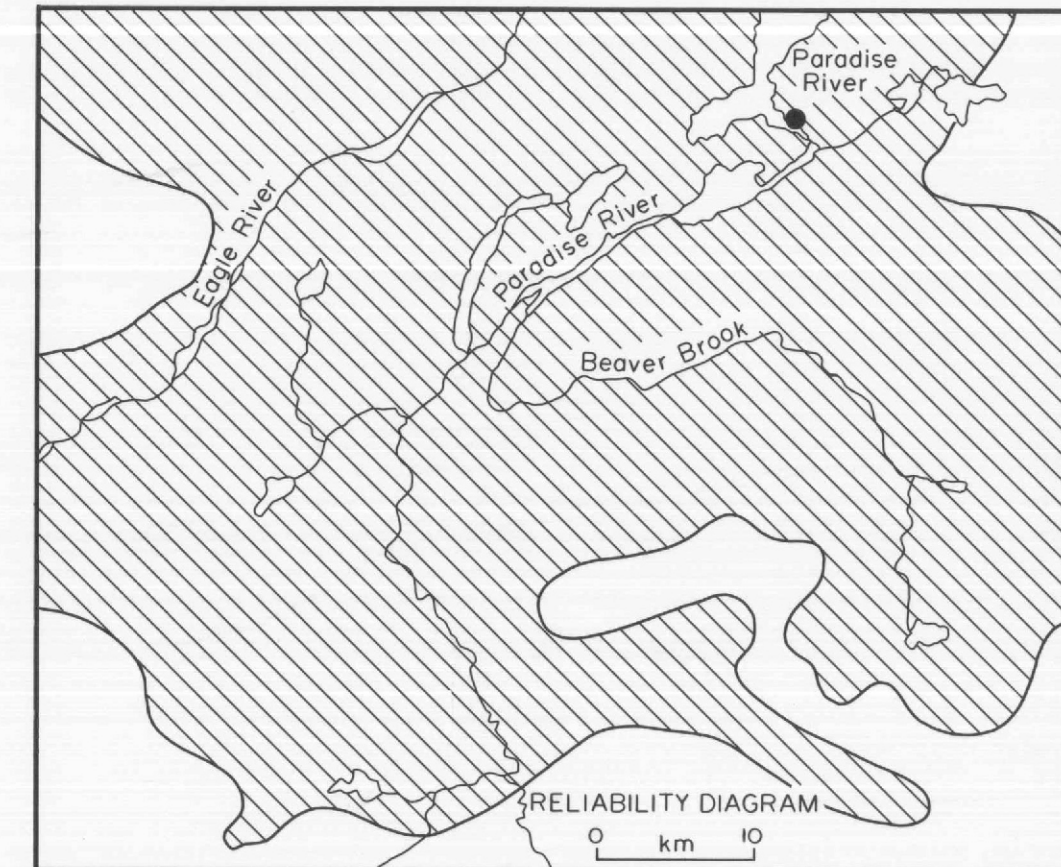
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SYMBOLS

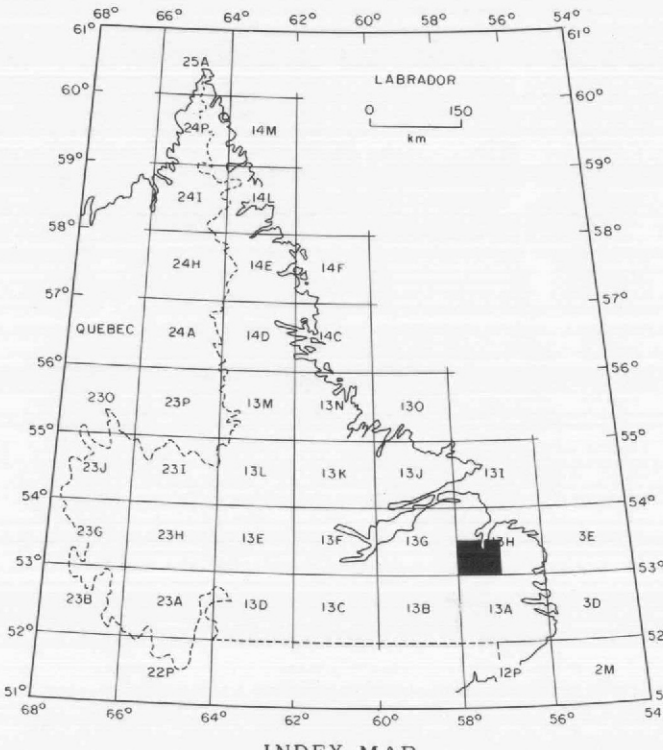
- Geological boundary (approximate, assumed, inferred from aeromagnetic data in areas of thick overburden)
Inferred primary igneous layering (inclined)
Foliation (horizontal, inclined, vertical, dip unknown)
Gneissosity (horizontal, inclined, vertical, dip unknown)
Lineation (horizontal, inclined, combined 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, type unspecified)
Thrust (defined, assumed)
Shearing and dip
Antiform, synform; arrow indicates plunge
Lineament, interpreted from aerial photographs
Mineral occurrence
Data station
Area of thick overburden
Glacial striae

NOTES

- 1. Granitoid terminology follows IUGS recommendations (Streckeisen, 1976; Earth Science Reviews, Volume 12, pages 1-33)
2. Age relationships are not implied by the order in which units are presented within each group, and are not completely known between groups
3. This is a combined legend for 13H5W, 13H5E and 3E5W; not all units are present on each map
4. Units are indicated in order of decreasing abundance at each data station
5. Unit symbols separated by slash, e.g. 7h/4h, indicate alternative designations, preferred unit given first
6. Map users are encouraged to reinterpret map units with the same letter as possible equivalents, e.g. 1g = 4g
7. Units 5 and 11 do not occur on this map. Unit 5 consists of syenitic, monzonitic and granitic plutons with lesser diorite and gabbroites. Unit 11 is Double Mer Formation. Both units occur farther north and west in eastern Labrador (see Newfoundland Department of Mines and Energy Maps 83-43, 44, 45, 46)



Reliability Diagram showing ground traverses, 3-4 km spacing and helicopter supported reconnaissance mapping.



Geology by C.F. Gower, N. Noel and T. Van Nostrand, 1984. Data of Chery (1978, Newfoundland Department of Mines and Energy, Map 78176) have also been incorporated into the map. 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 4760, 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 centre of map was 31°15' westerly in 1986, annual decrease 3.9' easterly. Elevations in feet above mean sea level. This project was financed under the Canada/Newfoundland subsidiary agreement on Mineral Development (1984-1989) by contributions from the Government of Newfoundland and Labrador (50 percent) and from the Department of Energy, Mines and Resources (50 percent) of the Government of Canada.

MAP 86-73
PARADISE RIVER

