
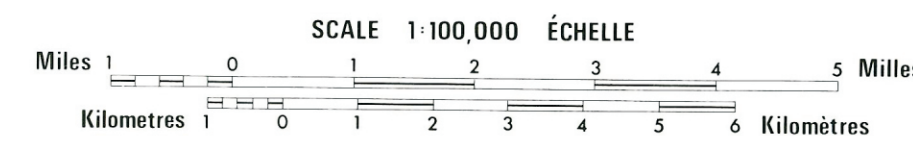


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GEOLOGICAL SURVEY BRANCH
 DEPARTMENT OF MINES AND ENERGY
 GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
GEOLOGY OF THE ALEXIS RIVER REGION, GRENVILLE PROVINCE, SOUTHEASTERN LABRADOR



LEGEND

PALEOZOIC

- 13 Mafic dykes, fine grained, unmetamorphosed

LATE PRECAMBRIAN

- 12q Gabbro, olivine gabbro, coarse grained, ophitic texture, northeast trending
- 12q Quartz veins, fault breccia, northeast trending

MIDDLE PROTEROZOIC

- 10c Fault breccia; extensive epidote, hematite, chlorite and quartz alteration
- 10m Mylonite, strong foliation and lineation
- 8 Pegmatite, microgranite, fine to very coarse grained

MIDDLE TO LATE PROTEROZOIC

MAFIC ROCKS

- | 7a | 7i | 7j | 7r | 6a | 6n | 6i |
|----|----|----|----|----|----|----|
| 7a | 7i | 7j | 7r | 6a | 6n | 6i |
- 7a Amphibolite dykes, medium grained
 - 7i Two-pyroxene granulate, leucogabbro, fine grained
 - 7j Leucogabbro, leuconorite, medium to coarse grained
 - 7r Gabbro, norite, troctolite, medium to coarse grained
 - Alexis River Anorthosite
 - 6a Amphibolite dykes and lenses
 - 6i Anorthosite, massive to strongly foliated, medium to very coarse grained
 - 6n Leucogabbro, massive to gneissic, medium to coarse grained

GRANITOID ROCKS

- Upper Paradise River Pluton
- | 5a | 5m | 5mp | 5y | 5yp |
|----|----|-----|----|-----|
| 5a | 5m | 5mp | 5y | 5yp |
- 5a Mafic dykes, fine to medium grained
 - 5m Biotite-hornblende monzonite to quartz monzonite, massive to moderately foliated, medium to coarse grained
 - 5mp Feldspar megacrystic biotite ± hornblende monzonite to quartz monzonite, massive to weakly foliated, medium to coarse grained
 - 5y Biotite-hornblende syenite to alkali-feldspar syenite, weak to moderately foliated, medium to coarse grained
 - 5yp K-feldspar megacrystic biotite ± hornblende alkali-feldspar syenite to quartz syenite, strongly foliated, medium to coarse grained

UNASSIGNED GRANITOID ROCKS

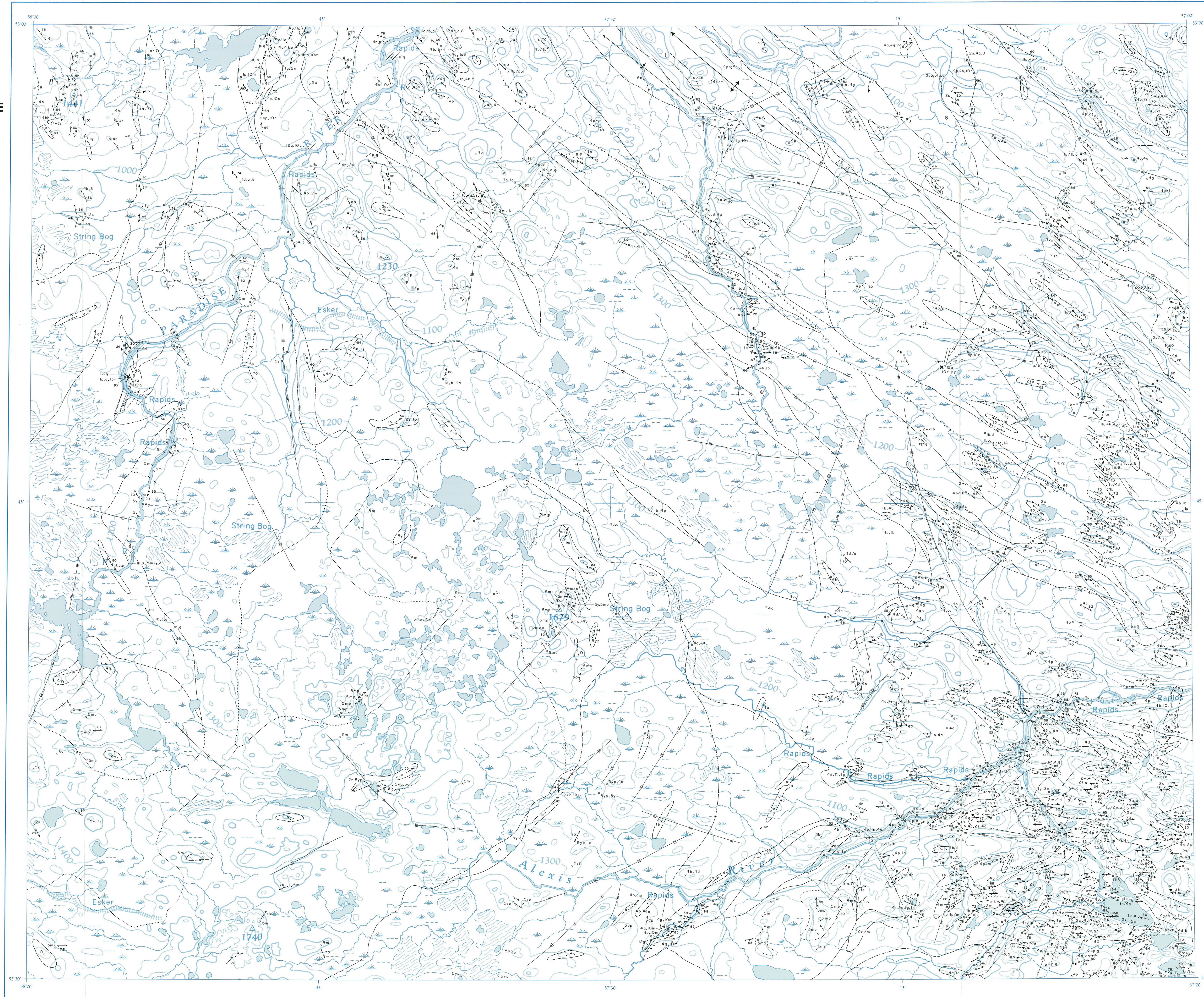
- | 4a | 4b | 4d | 4g | 4h | 4m | 4p |
|----|----|----|----|----|----|----|
| 4a | 4b | 4d | 4g | 4h | 4m | 4p |
- 4a Amphibolite lenses, layers and dykes
 - 4b Biotite ± hornblende granodiorite, weak to strongly foliated, medium to coarse grained
 - 4d Hornblende ± biotite diorite to quartz diorite, weak to strongly foliated, fine to medium grained
 - 4g Biotite ± hornblende granite to alkali-feldspar granite, weak to strongly foliated, medium to coarse grained
 - 4h Hornblende ± biotite granite to quartz monzonite, strongly foliated, medium grained
 - 4m Biotite ± hornblende monzonite to quartz monzonite, moderately to strongly foliated, medium to coarse grained
 - 4p K-feldspar megacrystic biotite ± hornblende granodiorite to granite, massive to strongly foliated

PARAGNEISS

- | 2a | 2c | 2s | 2u | 2w | 2x | 2z |
|----|----|----|----|----|----|----|
| 2a | 2c | 2s | 2u | 2w | 2x | 2z |
- 2a Amphibolite lenses, layers and dykes
 - 2c Calc-silicate gneisses, compositionally banded, medium grained
 - 2s Sillimanite-bearing, semipelitic paragneiss, banded to schlieric textured, medium grained
 - 2u Muscovite-bearing pelitic to semipelitic paragneiss, banded to schlieric textured, medium grained
 - 2w Psammitic gneiss, banded to strongly foliated, medium to coarse grained
 - 2x Diatexitic rocks, metasedimentary derivation
 - 2z Cordierite-bearing pelitic paragneiss, schlieric textured, medium grained

ORTHOgneiss

- | 1a | 1b | 1d | 1g | 1m | 1p |
|----|----|----|----|----|----|
| 1a | 1b | 1d | 1g | 1m | 1p |
- 1a Amphibolite gneiss, banded to lenticular, fine to medium grained
 - 1b Biotite ± hornblende granodiorite gneiss, banded, fine to medium grained
 - 1d Hornblende ± biotite diorite to quartz-diorite gneiss, banded to lenticular, medium to coarse grained
 - 1g Biotite ± hornblende granite to quartz monzonite gneiss, banded, fine to medium grained
 - 1m Biotite ± hornblende monzonite to quartz monzonite gneiss, diffusely banded, recrystallized, medium to coarse grained
 - 1p K-feldspar megacrystic biotite ± hornblende granodiorite to granite gneiss, banded to lenticular, medium to coarse grained



SYMBOLS

- Geological boundary (approximate, assumed).....
- Inferred primary igneous layering.....
- Foliation (horizontal, inclined, vertical, dip unknown).....
- Gneissosity (horizontal, inclined, vertical, dip unknown).....
- Lineation (horizontal, inclined).....
- Minor folds (plan view of fold and fold axis plunge).....
- Undifferentiated faults.....
- Sense of shear (from rotated porphyroblasts).....
- Antiform, synform (plunge indicated by arrow).....
- Lineament (interpreted from aerial photographs).....
- Data station.....
- Mineral occurrence..... X y X m

NOTES

1. Granitoid rock classification follows IUGS classifications (Streckeisen, 1976).
2. Units are indicated in order of proportion of exposed outcrop at each data station.
3. Unit symbols separated by slash, eg. 104b indicates alternative designation (preferred unit first).
4. Age relations are not implied by the order in which units are presented within each group, and are not completely known between units.
5. Units 3 & 11 are not present on this map. Unit 3 consists of rocks associated with intrusions to the north (eg. Earl Island diorite). Unit 9 includes minor metamorphosed and deformed dykes. Unit 11 includes intrusive rocks of Grenvillian age. Dykes in the region are included as amphibolite rocks (eg. 4a).

REFERENCES

- Eade, K.E.
1962. Geology, Battle Harbour-Carwright, Labrador. Geological Survey of Canada, Map 1962-22.
- Streckeisen, A.L.
1976. Classifications of the common igneous rocks by means of their chemical composition: a provisional attempt. Neues Jahrbuch für Mineralogie, Monatshefte, H.1, pages 1-15.

Geology by T.S. van Nostrand, D. Dunphy, D. Eddy and C.F. Gower, 1991. Data of Eade (1962) have been incorporated into the map.

The preliminary map may be subject to revision and correction.
Base map enlarged from 1:250,000 scale map published by Surveys and Mapping Branch, Department of Energy, Mines and Resources, Canada.

Magnetic declination at centre of map was 29°20' westerly in 1991, annual decrease 4.8', easterly.
Elevations in feet above mean sea level.

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

