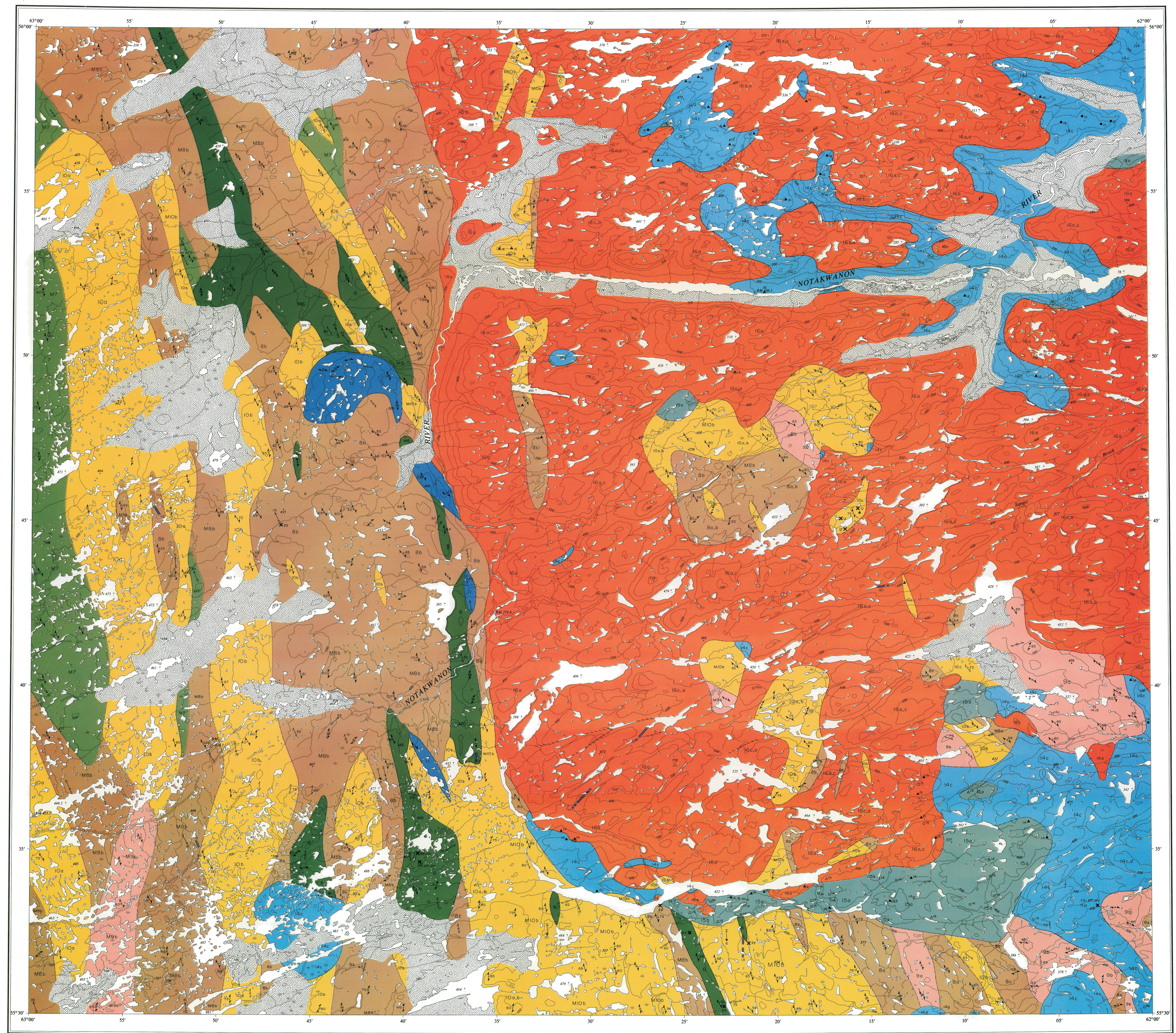
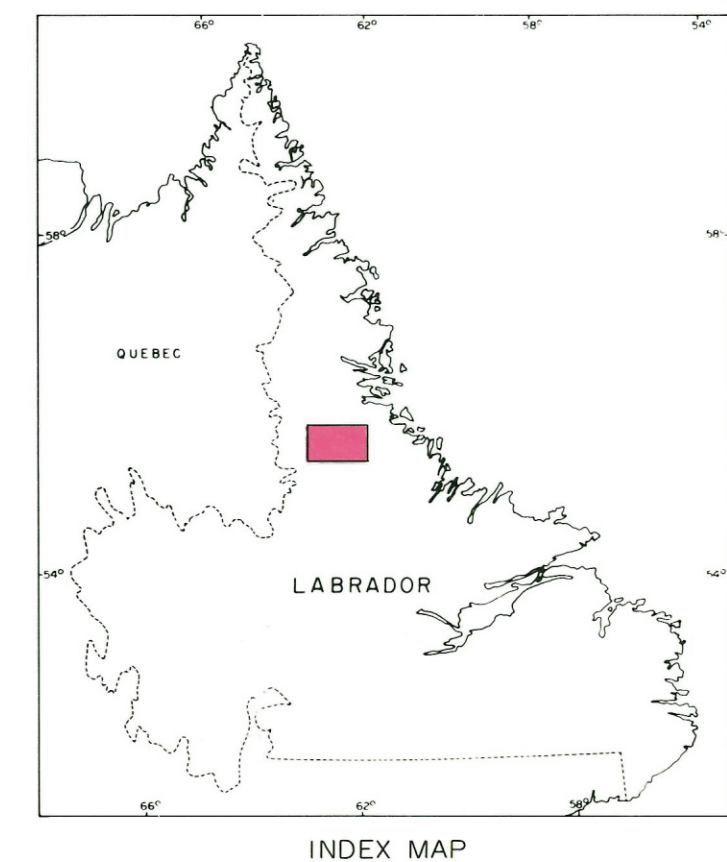


- PROTEROZOIC**
- NEOHELKIAN**
- Flowers River Igneous Suite (18, 19)
- 18a Parahallur granite: 18a, medium to coarse grained equigranular phase; 18b, aphanitic to fine grained aphyric phase.
 - 18c Felsic volcanic rocks: 18c, quartz and quartz-feldspar porphyry; 18d, massive to flow-banded felsite, locally containing a few quartz phenocrysts; 18e, welded ash-flow tuff; 18f, volcanic breccia and agglomerate.
 - 19 Olivine diabase dikes, may be equivalent to the Hagg dikes.
- PALEOHELKIAN**
- Nain Igneous Complex (14 to 16)
- 14 Pyroxene-amphibole-fayalite granitoid plutons; 14a, medium grained granite and minor granodiorite; 14b, medium grained quartz granite, quartz monzonite; 14c, fine grained psamphyric equivalents of units 14a and 14b; 14d, hornblende-biotite and biotite granite, granodiorite.
 - 15 Intermediate plutons; 15a, diorite, monzonite, quartz monzonite; 15b, monzonite, quartz monzonite; 15c, quartz syenite; 15d, altered plagioclase cumulate.
 - 16 Gabroïd plutons; 16a, Outer Border Zone - plagioclase-phyric olivine gabro, gabbro-monzonite, monzonite; 16b, Inner Border Zone - olivine leucogabbro; 16c to 16d, Cumulate Zone - cumulate plutons are plagioclase (14a), plagioclase-olivine (14d), plagioclase-olivine-clinopyroxene (14e), plagioclase-orthopyroxene (14f), olivine-oxide (14g), plagioclase-olivine-quartz (14h); 14i, micaceous gabbro and norite dikes and sills.
- APHEBIAN (and older?)**
- Churchill Structural Province (8 to 13)
- 8 Altered diabase dikes, may be early Paleohelkian in age.
 - 9 Metatuffite, metagranodiorite.
 - 10 Metasandstone.
 - 11 Leucocratic biotite-hornblende granite and granodiorite orthogneiss; 11a, medium to coarse grained granite to granodiorite augen gneiss; 11b, fine to medium grained mylonitic granite to granodiorite gneiss; 11c, medium grained mylonitic biotite-muscovite granite gneiss.
 - 12 Leucocratic biotite-garnet tonalite to granite orthogneiss; 12a, coarse grained biotite-garnet tonalite to granite augen gneiss; 12b, fine to medium grained biotite-garnet tonalite gneiss.
 - 13 Banded tonalite gneiss; 13a, biotite-garnet tonalite gneiss, contains minor thin bands of quartzite and biotite schist; 13b, biotite-hornblende tonalite gneiss, contains bands of amphibolite, diorite schist and minor marble; 13c, medium grained unbande tonalite to granodiorite gneiss.
 - 14 Diorite to quartz diorite gneiss and schist, includes bands of tonalite gneiss and amphibolite.
 - 15 Amphibolite, includes minor bands of diorite and tonalite gneiss and schist.
 - 16 Banded and veinlike migmatite, formed by pre-tectonic injection of numerous dikes and stringers of leucogranite (correlated with Units 9 and 10) into Unit 6 to 8.
- ARCHEAN**
- Nain Structural Province (1 to 5)
- 1 Diabase dikes, includes dikes of Aphenbian age and younger.
 - 2 Metagabbro and metagranodiorite.
 - 3 Banded pyroxene-hornblende-biotite tonalite gneiss, locally grading to granite gneiss. Typically intruded by dikes and lenses of leucogranite pegmatite; 3a, tonalite gneiss without inclusions of mafic gneiss; 3b, coarse gneiss containing numerous rafts and inclusion trains of mafic gneiss.
 - 4 Amphibolite, locally intruded by leucogranite pegmatite.
 - 5 Finely banded, fine grained gabbro to tonalite gneiss; 5a, pyroxene-hornblende-biotite gabbro to diorite gneiss; 5b, pyroxene-hornblende-biotite tonalite gneiss, locally containing bands of Unit 1a. May be in part equivalent to Unit 2a; 5c, biotite-garnet tonalite gneiss, intruded by biotite-garnet leucogranite.
- NOTE: THIS IS A COMPOSITE LEGEND FOR MAPS 81-136 AND 81-137 AND ALL UNITS DO NOT APPEAR ON EACH MAP.**

- SYMBOLS**
- Geologic boundary (observed, approximate, assumed, dip indicated, gradational) ...
 - Primary igneous mineral lamination (horizontal, inclined, vertical) ...
 - Primary igneous layering (horizontal, inclined, vertical) ...
 - Primary igneous flow banding (horizontal, inclined, vertical) ...
 - Primary igneous mineral lamination (inclined) ...
 - Schistosity, slaty cleavage (inclined, vertical, S_1, S_2, S_3) ...
 - Augen gneissosity, mylonitic foliation (inclined, vertical, S_1, S_2, S_3) ...
 - Ogneiss banding (inclined, vertical, S_1, S_2) ...
 - Plunge of minor fold axis (F_1, F_2, F_3) ...
 - Metamorphic mineral lamination (L_1, L_2) ...
 - Minor shear planes (inclined, vertical, sense of movement indicated) ...
 - Fault plane, shear zone (observed, assumed, movement direction indicated) ...
 - Dike or sill (unit number and dip indicated, observed, assumed) ...
 - Outcrop containing xenoliths (unit number of xenoliths indicated) ...
 - Intrusive agneiss (number of exotic unit indicated) ...
 - Outcrop containing outcrops ...
 - Volcanic and intrusive breccia ...
 - Single outcrop of one unit in another (unit number indicated) ...
 - Roof pendant (unit number indicated) ...
 - Mineral occurrence ...
 - Drift covered area ...

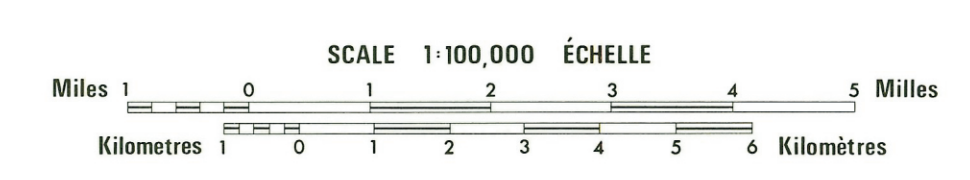
- Abbreviations**
- uranium ... ur
 - metalliferous ... mf
 - fluorite ... fl
 - chalcocyanite ... cp
 - garnet ... gn
 - apatite ... ap
 - pyrite ... py
 - pyrrhotite ... pr
 - total count scintillation anomaly ... ra



MAP 81-137

Geology by J.D. Hill, R.S. Egan, B.M. Munn, A. Kerr, J.M. Hill and C.A. White; compiled by J.D. Hill, 1981.
To accompany report 82-6.
This map is 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 4760, St. John's, Newfoundland, A1C 5T7.

NOTAKWANON RIVER AREA
LABRADOR



Base map at scale 1:50,000 published by the Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa, 1971.
Approximate magnetic declination 1981, 31° 17', decreasing about 5.6' annually.
Elevations in metres above mean sea level.