

LEGEND

NOTE: Areas of outcrop are shown by deep colour; inferred extensions beneath drift or muskeg are shown by lighter tint. Uncoloured regions depict areas of drift or muskeg underlain by unknown geology.

- PROTEROZOIC**
- 10a Diabase, quartz diabase; 10b, granophytic diabase; 10c, amygdaloidal diabase
 - GRANITIC ROCKS (9)**
 - 9A Pink to cream-pink porphyritic (microcline) biotite granodiorite to adamellite
 - 9B White equigranular biotite-muscovite adamellite; pegmatite
 - 9C Grey to pinkish grey equigranular biotite granodiorite
 - 9D Grey to dark grey equigranular hornblende-biotite tonalite to biotite granodiorite
 - 6 Banded or migmatitic gneiss, undifferentiated; 6a, hornblende gneiss, migmatite, derived from unit 4; 6b, quartz-feldspar gneiss, migmatite, calc-silicate gneiss, derived from unit 5; 6c, quartz-feldspar-mica gneiss, migmatite, in part sillimanite-bearing, derived from unit 6
 - 7 Meta-diorite, amphibole schist
- ARCHEAN**
- 6 YELLOWKNIFE GROUP (4-6)
 - DIVISION C: greywacke, impure quartzite, slaty argillite, minor calcareous greywacke, graphitic slate, biotite spotted phyllite, cordierite and cordierite-andalusite knotted mica schist and hornfels, sillimanite mica schist; minor amphibole schist, graphitic chistolite biotite schist, 6a, crystal tuff
 - DIVISION B: felsic flow and pyroclastic rocks, undifferentiated; 5a, dacite, quartz latite, in part porphyritic; quartz-plagioclase crystal tuff; quartz-feldspar-sericite schist, quartz-feldspar-biotite-garnet schist, minor hornblende- and cummingtonite-bearing schists; 5b, felsic agglomerate, breccia, in part calcite-cemented; limestone; minor dacite, quartz latite, crystal tuff; quartz-feldspar and calc-silicate schist and granulite; 5c, quartz porphyry, quartz-plagioclase porphyry, as dykes, sills, and irregular bodies in unit 4; 5d, fine-grained quartz-feldspar-biotite granulites, in part with minor garnet, hornblende, and/or cummingtonite; minor intercalated bands and lenses of hornblende-garnet granulite, limestone, and felsic breccia
 - DIVISION A: massive or pillowed basalt, andesite; mafic breccia; amphibolite, hornblende-cummingtonite schist, in part garnet-bearing; 4a, amphibolite dykes and sills in unit 4
 - 3 Amphibolite dykes; may be the same as unit 4a
 - 2 Quartz-feldspar-mica schist and gneiss, in part hornblende- and/or cummingtonite-bearing; meta-conglomerate (?); may be lowest part of Yellowknife Group
 - 1 PRE-YELLOWKNIFE (?)
 - Meta-tonalite, quartz-feldspar-mica gneiss, in part granulitized

- Geological boundary (defined, approximate, assumed)
 Geological boundary (gradational)
 Bedding, tops known (inclined, vertical, overturned, dip unknown)
 Bedding, tops unknown (inclined, vertical, dip unknown)
 Schistosity, slaty cleavage, foliation (inclined, vertical, dip unknown)
 Gneissosity (inclined, vertical, dip unknown)
 Multiple fold (inclined, vertical, inclination of axial plane known)
 Multiple fold (plunge known)
 Lineation (horizontal, inclined, vertical)
 Fault (defined, approximate, assumed)
 Anticline (defined, approximate)
 Syncline (defined, approximate)
 Anticline, overturned (defined, approximate)
 Syncline, overturned (defined, approximate)
 Cordierite isograd
 Cummingtonite isograd
 Sillimanite isograd
 Mineral occurrence Ag X

MINERALS

- Beryl by Rusty zone Fe
 Chalcocyanite cp Silver Ag
 Galena Pb Sphalerite Zn
 Pyrite py Tantalite-columbite ta-cl
 Pyrrhotite po Tourmaline tl

Geology by W.W. Heywood and A. Davidson 1962, 1963

To accompany GSC Memoir 381 by W.W. Heywood and A. Davidson

Geological cartography by the Geological Survey of Canada, 1969

- Horizontal control point Δ
 Intermittent stream
 Reef, rock or small island
 Rapids, falls
 Marsh
 Contours (interval 50 feet)
 Height in feet above mean sea-level -1472

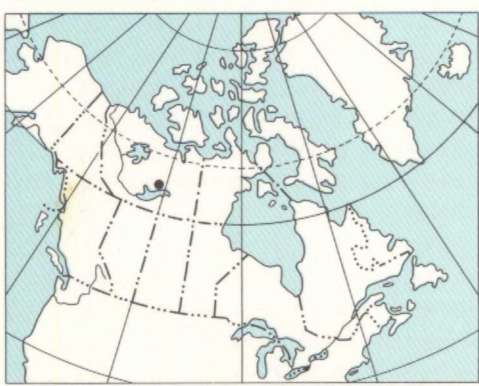
Topographic base-map at the same scale published by the Surveys and Mapping Branch, in 1957

Names in quotation marks are in local usage but are subject to revision

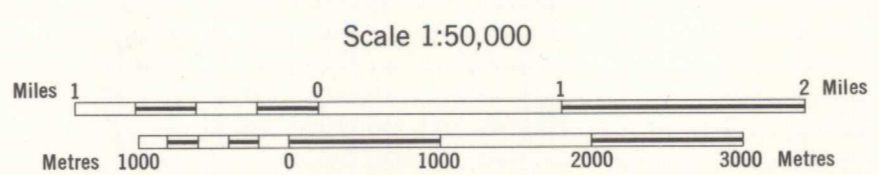
Approximate magnetic declination 1969, 30°37' East, decreasing 6.5' annually



Published 1969
Copies of this map may be obtained from the Geological Survey of Canada, Ottawa



MAP 1198A
GEOLOGY
BENJAMIN LAKE
DISTRICT OF MACKENZIE



75W6	75W7	75W8
75W5	75W4	75W3
75W14	75W15	75W16

3401-05
1910-
G4
BmmC

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

1198A