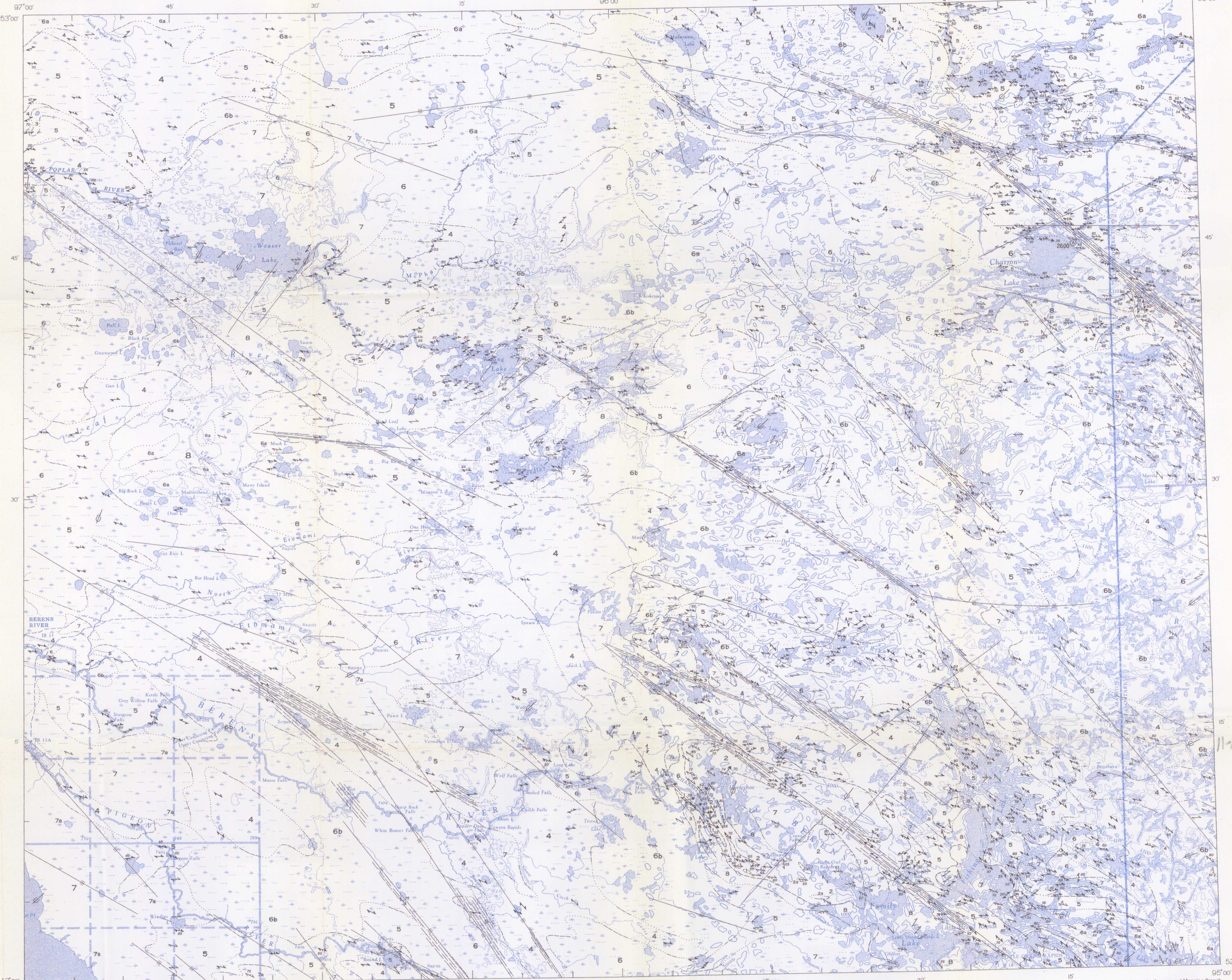




GEOLOGICAL SURVEY OF CANADA  
DEPARTMENT OF ENERGY, MINES AND RESOURCES

This map has been reprinted from a scanned version of the original map  
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PRELIMINARY SERIES



LEGEND

- 8 MIGMATITE: mixture of units 4 to 7; includes recrystallized metadacite (mafic quartz diorite and granodiorite) and amphibolitic and aluminous schlieren in granodiorite at Horseshoe Lake
  - 7 QUARTZ MONZONITE: leucocratic pink, massive, medium- to coarse-grained; 7a, porphyritic (microcline) quartz monzonite; 7b, medium-grained, pink, gneissic quartz monzonite; locally, includes coarse-grained brownish, antiperthitic oligoclase quartz monzonite
  - 6 GRANODIORITE, QUARTZ MONZONITIC GRANODIORITE: light grey, coarse-grained; 6a, granodiorite and minor quantities of quartz diorite; 6b, quartz monzonitic granodiorite
  - 5 QUARTZ MONZONITE AND GRANODIORITE GNEISS: foliated to stratiform layered quartz-feldspar and quartz-feldspar-biotite gneiss with mafic-rich bands; includes granodiorite gneiss of unit 4
  - 4 GRANODIORITE GNEISS: foliated to stratiform layered quartz plagioclase and quartz-feldspar biotite gneiss with abundant mafic layers (well-layered stratiform varieties contain sporadic mica, garnet and diopside); includes banded amphibolite
  - 3 LAYERED AMPHIBOLITE AND GREY GNEISS: coarse-grained, with intervening layers of quartz monzonite and granodiorite; minor amounts of coarse-grained, granular, mica-bearing grey granodiorite gneiss
- METAVOLCANIC-SEDIMENTARY ROCKS**
- 2 METAVOLCANIC ROCKS: metadacite, porphyritic metadacite, fragmental metavolcanic rocks, fine-grained, dense amphibolites, lenses of quartz diorite; 2a, small, irregular concentrations of metaquartz latite, bearing inclusions of metadacite; includes diaphoretic greenstones north and southeast of Mackay Lake
  - 1 METASEDIMENTARY ROCKS: varicoloured gneisses and schists comprising garnet + biotite + quartz + plagioclase, quartz + garnet + hornblende + plagioclase, biotite + quartz + tremolite/actinolite, quartz + plagioclase + hornblende, quartz + feldspar + diopside + hornblende

- Geological boundary (approximate, assumed) . . . . .
- Gneissosity, foliation (inclined, vertical, dip unknown) . . . . .
- Stratiform foliation (inclined, vertical, dip unknown) . . . . .
- Lineation and axis of small fold (horizontal, inclined) . . . . .
- Lineament (ground and airphoto observation) . . . . .
- Shear or schist zone (width indicated) . . . . .
- Glacial striae and chatter mark (direction of ice movement indicated) . . . . .
- Locality where K/Ar age on biotite has been determined in millions of years . . . . . 2600

Geology by A. W. Johnston (1936), L. D. Kirwan (1958) and I. F. Ermanovics (1969)

Compilation and interpretation by I. F. Ermanovics (1969)

To accompany GSC Paper 70-29 by I. F. Ermanovics

Geological cartography by the Geological Survey of Canada

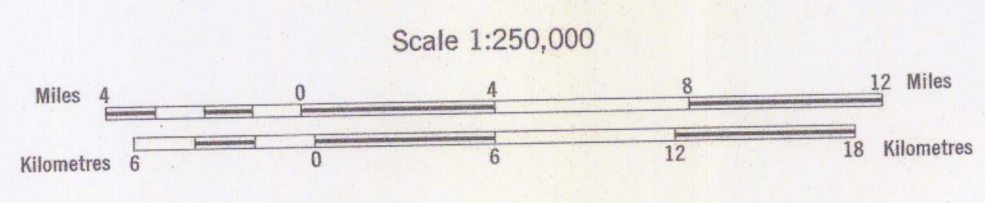
Base-map from parts of maps published at the same scale by the Surveys and Mapping Branch in 1963

Magnetic declination 1970 varies from 06° 49' easterly at centre of east edge to 09° 18' easterly at centre of west edge. Mean annual change decreasing 0.3' annually

Elevations in feet above mean sea-level



MAP 11-1970  
PAPER 70-29  
GEOLOGY  
BERENS RIVER AND DEER LAKE  
MANITOBA-ONTARIO



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| 427A | 11-1970 | 26-1958 | 53 U  | 53 C |
|      | 62 P    | 52 M    | 1201A | 52 R |
|      | 11-1969 | 25-1958 | 1200A |      |

BERENS RIVER AND DEER LAKE  
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