

LEGEND

- PROTEROZOIC**
- 17 Late gabbro and basalt dykes and sills, 17a, light green and altered, 17b, porphyritic
 - 16 Gabbro sill and dyke
 - GOULBURN GROUP (9-15)**
 - 15 KUVIUK FORMATION: calcareous and dolomitic rocks; minor siliceous and argillaceous layers
 - 14 PEACOCK HILLS FORMATION: red, grey, green and black argillites; pink quartzite
 - 13 BURNSIDE RIVER FORMATION: pink quartzite; 13a, minor quartz-pebble conglomerate layers; 13b, with minor milky white quartz veins; 13c, minor white quartzite
 - 12 WESTERN RIVER FORMATION (9-12) Upper Argillite Member: undifferentiated grey and red argillites; 12a, grey argillite and greyswacke; 12b, red argillite
 - 11 Quartzite Member: 11a, pink quartzite and siltstone; 11b, white quartzite
 - 10 Red Siltstone Member: 10a, concretionary red argillite; 10b, red argillite; 10c, grey argillite and greyswacke; 10d, red argillite
 - 9 Basal Conglomerate and Lower Argillite Member: 9a, quartz-pebble conglomerate; 9b, grey and green argillites, greyswacke; 9c, white glassy quartzite; 9d, red, grey and green argillites, greyswacke, locally silty; 9e, thin beds of carbonate rocks; 9f, grey argillite; 9g, red argillite
 - 8 Biotite-muscovite granite, mainly coarse-grained and pegmatitic; 8a, fine-grained; 8b, biotite-rich; 8c, remnants of nodular schist; 8d, remnants of amphibolitic garnet-granulite gneiss; 8e, pegmatite; 8f, hornblende syenite, coarse; 8g, hybrid, mafic-rich
 - 7 Amphibolite, in part dioritic and gabbroic, locally hornblende-andesine gneiss and schist; 7a, porphyritic and very coarse; 7b, gabbroic, in part altered; 7c, dioritic; 7d, hornblende-quartz-feldspar gneiss and schist
 - YELLOWKNIFE SUPERGROUP (1-6)**
 - 4 Argillite, siltstone, slate, greyswacke, grey impure quartzite, minor white quartzite, minor white quartzite
 - 5 Metamorphic equivalents of 4-5, nodular quartz-biotite schist and gneiss, cordierite-bearing
 - 6 Amphibolitic garnet-granulite gneiss in layers, locally massive and coarse-grained; 6a, isograd nodular schist
 - 2, 3 Fine-grained well layered quartz-feldspar-biotite gneiss; 2a, fine-grained massive granular quartz-feldspar-biotite gneiss; gradational to 4; 2b, quartzite; 2c, narrow amphibolite and hornblende schist layers; 2d, cut by pegmatite
 - 3 Amphibolite-garnet-cordierite-quartz gneiss, varying from plumose amphibolitic rock to granulitic gneiss, minor medium-grained granular gneiss similar to 1 and 1a; 3a, cut by pegmatite; 3b, garnetiferous granulitic gneiss, locally carrying some amphibole and carbonate
 - 1 Leucocratic medium- to fine-grained granular quartz-feldspar biotite gneiss, in part massive coarse-grained red granite; 1a, mainly fine-grained; 1b, mainly coarse-grained red granite; 1c, pegmatitic or with pegmatite; 1d, biotite-rich and fine-grained; 1e, wagen gneiss, layered and biotite-rich; 1f, amphibolite remnants

- Sand and gravel ridges, esters, delta, shore deposits and river bars
- Rocky island
- Geological boundary (defined, approximate, assumed)
- Isograd and geological boundary
- Bedding, tops known (horizontal, inclined, overturned, dip unknown)
- Bedding, tops unknown (inclined, vertical, dip unknown)
- Bedding, general trend or trace of
- Schistosity, bedding cleavage, early cleavage (inclined, vertical, dip unknown)
- Fracture cleavage, late cleavage (inclined, vertical, dip unknown)
- Foliation, layering, or bedding (inclined, vertical, dip unknown)
- Lamination (inclined, plunge unknown)
- Drop fold
- Fault (defined, approximate)
- Anticline
- Syncline
- Rock trench, stripped area, drilling site
- Location of mineral deposits described in the text
- Glacial striae
- Intersecting glacial striae (numbers indicate relative age, 1 being the oldest)
- Isotopic age in millions of years, whole rock, Potassium-argon

- MINERALS**
- Andalusite
 - Arsenopyrite
 - Garnet
 - Gold
 - Apatite
 - Pyrite
 - Pyrrhotite
 - Tourmaline
 - Pegmatite
 - Quartz stringer

- LIST OF THE MINERAL DEPOSITS SHOWN ON THE MAP AND DESCRIBED IN THE TEXT**
- 1 Canadian Nickel Company Limited - main showing
 - 2 Falconbridge Nickel Mines Limited (a) At 111° 40' and 65° 42' 20" (b) Near SW shore of Contwoyto Lake (c) Small peninsula in Contwoyto Lake near east boundary of map
 - 3 Big Four Syndicate (a) 2,500 feet east of north end of Bar Lake. (b) At 111° 25' 12" and 65° 42' 27" (c) At 111° 19' 40" and 65° 42' 27"
 - 4 New Athona Mines Limited (a) Several hundred feet south and east of Post Lake. (b) 600 feet south of Bar Lake. (c) 6,500 feet south-southeast of Bar Lake
 - 5 Giant Yellowknife Mines Limited (a) At 111° 22' 00" and 65° 41' 12" (b) At 111° 22' 12" and 65° 42' 27"
 - 6 Roberts Mining Company, west of Gossan Lake
 - 7 East Jacks Syndicate (a) Southwest of Eaker Lake 65° 41' 30" and 111° 09' 47" (b) At 111° 24' 50" and 65° 44' 25"
 - 8 North Goldcrest Mines Limited at 111° 23' 00" and 65° 41' 05" and east of Concession Lake.

Geology by L.P. Tremblay 1964, 1965

To accompany GSC Memoir 381 by L.P. Tremblay

Geological cartography by William Gary Young, Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada.

Building

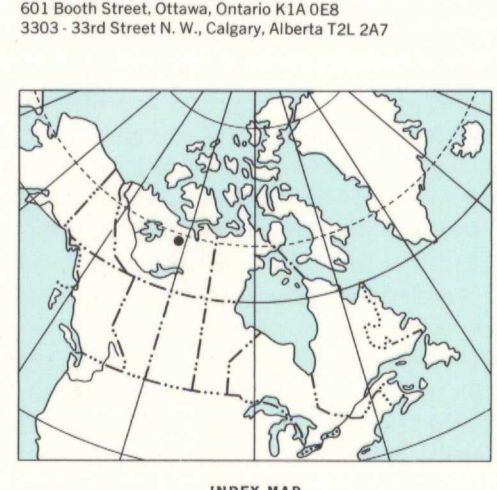
Stream (approximate)

Contours (interval 100 feet)

Base-map cartography by the Geological Survey of Canada from maps published at 1:63,360 by the Geological Survey of Canada in 1964 and 1965

Approximate magnetic declination 1976, 30° 35' 0" East, decreasing 3" annually

Elevations in feet above mean sea-level



MAP 1411A
GEOLOGY
CONTWOYTO LAKE
DISTRICT OF MACKENZIE

Scale 1:50,000

Kilometres 0 1 2 3 4

Miles 0 1 2

Universal Transverse Mercator Projection

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