

Diagrammatic rock stratigraphic cross-section

LEGEND

- CENOZOIC**
PLEISTOCENE AND RECENT
Q Unconsolidated glacial and alluvial deposits
- MESOZOIC**
CRETACEOUS
Ks SELWYN PLUTONIC SUITE: undivided; Ks1, hornblende-biotite granite and granodiorite; Ks2, biotite granite and granodiorite; shading of country rock adjacent pluton shows extent of hornfels
- PALEOZOIC**
DEVONIAN AND MISSISSIPPIAN
UPPER DEVONIAN TO MID-MISSISSIPPIAN
EARN GROUP (DP - DMP)
PREVOST FORMATION: DMP1, (patterned) chert quartz sandstone, chert pebble conglomerate, minor shale; DMP2, brown weathering shale, minor chert-quartz sandstone
LOWER TO UPPER DEVONIAN
PORTRAIT LAKE FORMATION: DP2, black, gun-blue and bluish-white weathering, black, siliceous shale; thin- to medium-bedded, black chert

- LOWER DEVONIAN**
DGB GRIZZLY BEAR FORMATION: blue-grey weathering, resistant, thin- to very thick-bedded, grey crystalline limestone characterized by abundant crinoid stem fragments with twin axial canals
- SILURIAN TO LOWER DEVONIAN**
SDS SAPPER FORMATION: SDs2, (sally limestone member - upper Sapper) tan, buff, or dark grey weathering, recessive, thin bedded, laminated, argillaceous, fine crystalline limestone

- ORDOVICIAN AND SILURIAN**
UPPER SILURIAN
ROAD RIVER GROUP (OSd - Ss)
Ss STEEL FORMATION: not present
- LOWER ORDOVICIAN TO MIDDLE SILURIAN**
DUO LAKE FORMATION: OSd1, black, gun-blue, or silvery white weathering, recessive, black shale; minor thin interbeds of fine crystalline black limestone and black chert
- UPPER CAMBRIAN AND LOWER ORDOVICIAN**
RABBITTLE FORMATION: COR1, white to buff weathering, laminated or thin bedded, fine crystalline, locally nodular, blue-grey limestone; minor volcanic tuff

- UPPER CAMBRIAN TO LOWER SILURIAN**
CSH3 HAYWIRE FORMATION: CSH1, (sandy carbonate member - local basal Haywire) maroon mudstone, thick bedded, fine- to medium-crystalline, light coloured dolomite, and medium bedded, medium- to coarse-grained quartz arenite; CSH2, white to dark grey weathering, thick to very thick-bedded, massive, grey, locally cherty dolomite; CSH3, (volcanic member) dark grey-green weathering amygdaloidal basalt and tuff; CSH4, (white dolomite member) white to light grey weathering, thin- to thick-bedded light grey dolomite; CSH5, (massive dolomite member) massive, light to dark grey dolomite

- MINERAL OCCURRENCES**
Mineralization: Hoast
P VULCAN: Ba Uranium
T BIG RED: vein Pb-Zn Sapper Fm.
AD unnamed: stratum U, P, Pb, Zn, Ba Grizzly Bear Fm., Haywire Fm., Duo Lake or Portrait Lake fm.

- MINERALS**
Barium Ba Uranium U
Lead Pb Zinc Zn
Phosphorus P

- MIDDLE CAMBRIAN**
CA AVALANCHE FORMATION: light grey weathering, thick bedded, fine to medium crystalline, grey dolomite

- CR** ROCKSLIDE FORMATION: tan to brown weathering, recessive, thin bedded, fine crystalline, grey limestone

- LOWER CAMBRIAN**
CS SEKWU FORMATION: CS1, (carbonate member - lower Sekwu) grey to buff weathering, thin bedded, locally wavy bedded and nodular, fine crystalline, blue-grey to black limestone; upper one-third of unit is white weathering, massive, fine crystalline grey dolomite; CS2, (clastic member - upper Sekwu) light orange to brown weathering, medium- to thick-bedded, medium grained, grey quartz sandstone; purple weathering, purple siltstone and diatomite siltstone; bright orange weathering, thin- to thick-bedded, fine crystalline dolomite

- PROTEROZOIC AND PALEOZOIC**
UPPER PROTEROZOIC AND LOWER CAMBRIAN
PCV VAMPIRE FORMATION: dark brown to rust weathering, thin- to thick-bedded, greenish grey shale siltstone, and very fine grained quartz sandstone

- UPPER PROTEROZOIC**
PB BACKBONE RANGES FORMATION: dolomite

- Geological boundary (defined, approximate, assumed, extrapolated beneath overburden)
Facies boundary (schematic and approximate)
Bedding, top known (horizontal, inclined, vertical)
Bedding top unknown (inclined)
Slaty cleavage (inclined, vertical)
Lineation, intersection of slaty cleavage and bedding (inclined)
Fault, steeply dipping (defined, approximate, assumed or extrapolated beneath overburden; solid circle indicates downthrow side)
Thrust fault (defined, approximate, assumed or extrapolated beneath overburden; teeth indicate upthrust side)
Anticline (defined, approximate)
Syncline (defined, approximate, extrapolated beneath overburden)
Fossil locality
Location of measured section
Mineral occurrence
Hornfels
Glacier

Geology by S.P. Gordey 1977-78, with contributions by B.L. Slusson, L.H. Green and J.A. Rodick 1968

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

Base map enlarged from part of map 105-1 published at 1:250 000 scale by the Army Survey Establishment R.C.E. in 1954

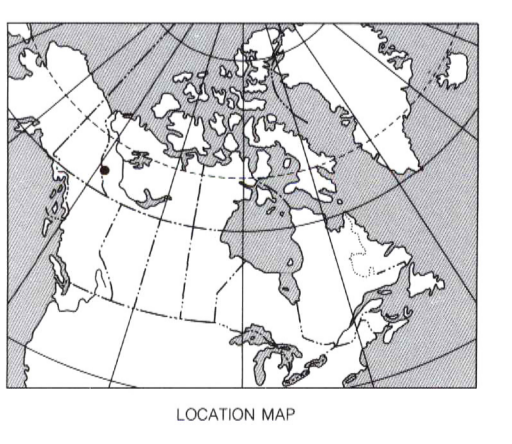
Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, K1A 0G9

Magnetic declination 1992, 30°42' East, decreasing 13.0' annually
Elevations in feet above mean sea level

REFERENCE

- Green, L.H., Rodick, J.A., and Slusson, S.L.
1968: Geology, Nahanni, District of Mackenzie and Yukon Territory, Geological Survey of Canada, Map 8-1967

Copies of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0G8, 3303 33rd Street, N.W., Calgary, Alberta T2C 2A7, 100 West Pender Street, Vancouver, B.C. V6B 1R6



MAP 1-1992
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GEOLOGY
SOUTH NAHANNI RIVER AREA
DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES
Scale 1:50 000 - Échelle 1/50 000

Kilometres
Universal Transverse Mercator Projection
Projection transverse universelle de Mercator
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