

Diagrammatic rock stratigraphic cross-section

LEGEND

- CENOZOIC**  
**PLEISTOCENE AND RECENT**  
 Q Unconsolidated glacial and alluvial deposits
- PALEOZOIC**  
**DEVONIAN AND MISSISSIPPIAN**  
**UPPER DEVONIAN TO MID MISSISSIPPIAN**  
 EARLY GROUP (Dp - DMP)  
 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: Dp1, (patterned) black to gun-blue weathering, chert-quartz wacke; and massive pebbly mudstone; Dp2 black, gun-blue and bluish-white weathering, black, siliceous shale; thin to medium-bedded, black chert
- ORDOVICIAN AND SILURIAN**  
**UPPER SILURIAN**  
 ROAD RIVER GROUP (OS0 - SS)  
 SS STEEL FORMATION: orange weathering, resistant, thick bedded, dolomitic, silty, grey burrowed mudstone with locally abundant small pyrite cubes
- LOWER ORDOVICIAN TO MIDDLE SILURIAN**  
 OSD DUO LAKE FORMATION: OSD1, black, gun-blue, or silvery-white weathering, recessive, black shale and minor thin interbeds of fine crystalline black limestone and black chert; OSD2, black weathering, thin to medium-bedded, dark grey to black chert and minor black siliceous shale; minor tan to brown weathering, recessive dark grey shale at base
- CAMBRIAN AND ORDOVICIAN**  
**UPPER CAMBRIAN AND LOWER ORDOVICIAN**  
 RABBINKETLE FORMATION: COR1, white to buff weathering, laminated or thin bedded, fine crystalline, locally nodular, blue-grey limestone; local volcanic tuff
- LOWER AND MIDDLE? CAMBRIAN**  
 GULL LAKE FORMATION: CG1, local basal limestone conglomerate (member) white weathering limestone conglomerate and minor blue-grey weathering, recessive shale; thin bedded or laminated in similar calcareous; minor thin to medium-bedded, fine grained, pale green, quartz arenite to subarkose and pale green to tan shale; PCN2, orange, grey or tan weathering, thin to medium-bedded, fine grained, pale green, quartz arenite and pale green to tan shale
- PROTEROZOIC AND PALEOZOIC**  
**UPPER PROTEROZOIC AND LOWER CAMBRIAN**  
 HYLAND GROUP (PY - PCN)  
 NARCHILLA FORMATION: PCN1, maroon, dark blue-grey, or green weathering, recessive shale, thin bedded or laminated in similar calcareous; minor thin to medium-bedded, fine grained, pale green, quartz arenite to subarkose and pale green to tan shale; PCN2, orange, grey or tan weathering, thin to medium-bedded, fine grained, pale green, quartz arenite and pale green to tan shale
- UPPER PROTEROZOIC**  
 YUSEZYU FORMATION: grey to brown weathering, thin to thick-bedded, fine- to coarse-grained, gritty quartz sandstone and quartz-pebble conglomerate; brown to pale green shale; minor limestone
- PROTEROZOIC AND PALEOZOIC**  
**UPPER PROTEROZOIC AND LOWER CAMBRIAN**  
 VAMPIRE FORMATION: PCV, dark brown to rust weathering, thin to thick-bedded, greenish grey shale, siltstone, and very fine grained quartz sandstone

Property	Mineralization	Host
5 HOWARDS PASS	stratiform Pb,Zn	Duo Lake Fm.
6 SHIELD	stratiform Pb, Zn	Duo Lake Fm.
9 WINKIE	stratiform? Pb, Zn	Duo Lake Fm.
10 NESS	vein Cu	Prevost? Fm.
a3 unnamed	stratiform Ba	Portrait Lake Fm.
a4 unnamed	stratiform Ba	Portrait Lake Fm.
a5 unnamed	stratiform Ba	Portrait Lake Fm.
<b>Northwest Territories</b>		
G FERN	skarn Pb, Zn	Rabbinkettle Fm.
H CING	stratiform Zn, Pb, Cu	Duo L. or Portrait L. Fm.
X CRNQ	stratiform Pb, Zn	Duo Lake Fm.?
Y GRMC	Stratiform Ba, Pb, Zn	Portrait Lake Fm.

MINERALS		
Barium	Ba	Lead
Copper	Cu	Zinc

- Geological boundary (defined, approximate, assumed, extrapolated beneath overburden)
- Bedding, top known (horizontal, inclined, vertical, overturned)
- Bedding top unknown (inclined)
- Staty cleavage (inclined, vertical)
- Lineation, intersection of stately 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, extrapolated beneath overburden)
- Syncline (defined, approximate, extrapolated beneath overburden)
- Fossil locality
- Location of measured section
- Mineral occurrence

Geology by S.P. Gordey 1977-78, with contributions by S.L. Blusson, L.H. Green and J.A. Roddick 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, Ontario, K1A 0E9

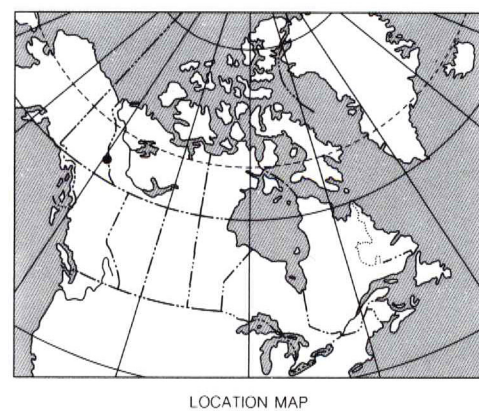
Magnetic declination 1992, 30°36' East, decreasing 12.8' annually

Elevations in feet above mean sea level

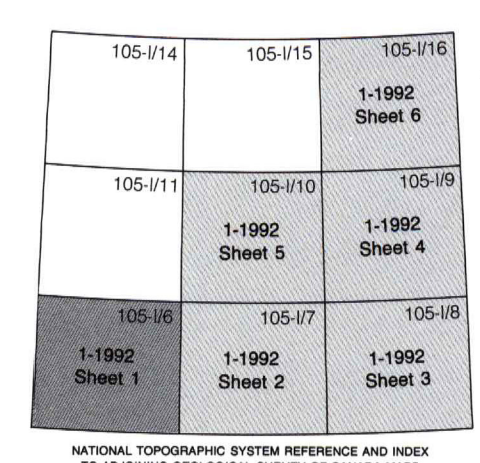
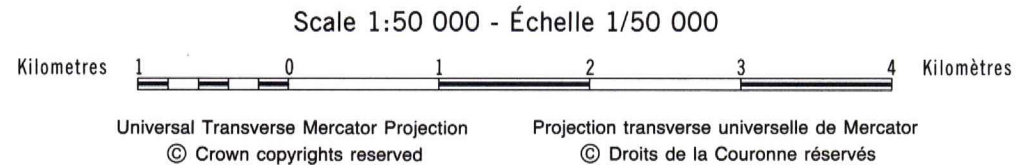
REFERENCE

Green, L.H., Roddick, J.A., and Blusson, S.L.  
 1968: Geology, Nahanni, District of Mackenzie and Yukon Territory, Geological Survey of Canada, Map 6-1967

Copies of the map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8, 3900-136th Street, N.W., Calgary, Alberta T2L 2A7, 100 West Pender Street, Vancouver, B.C. V6B 1R8



MAP 1-1992  
 SHEET 1 OF 6  
 GEOLOGY  
**SOUTH NAHANNI RIVER AREA**  
 NORTHWEST TERRITORIES - YUKON TERRITORY  
 Scale 1:50 000 - Échelle 1/50 000



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