LEGEND

1:50 000		1:125 000 (Formation names based on correlation with units of Gabrielse et al (1973) and Douglas (1974))
Kqm	Grey weathering, resistant, medium-to coarse-grained, megacrystic (K-feldspar), biotite quartz monzonite	Kqm
hf	Pelitic hornfels: red-rust to brown weathering, extremely well indurated, massive, fine grained Carbonate hornfels: white to grey weathering, extremely well indurated, fine-to coarse crystalline; large tremolite porphyroblasts abundant in hornfelsed uEOL	hf
Xs	Tan weathering, thin bedded, ripple cross-laminated siltstone, fine grained sandstone, and shale	Xs :-
Pt	Orange to grey weathering, thin bedded, locally lenticular, pale green to blue-grey chert; minor dark dreen to brown weathering, pale green, splintery shale	Pt :Fantasque
Cp	Brown weathering, recessive, thin bedded, blue-grey shale, black laminated quartz siltstone, and pale green shale; minor fine- to medium-grained quartz arenite	Cp :Mattson
Cs	Grey weathering resistant, massive, fine-to medium-grained quartz arenite	Cs
uDMps	Grey weathering, resistant, thin- to very thick-bedded, massive, chert pebble conglomerate, and medium- to coarse-grained, light- to dark-grey, chert-quartz arenite and wacke; minor brown weathering, blue-grey to black shale, siltstone, and slate	uDMps :'black clastic'
uDMps	Brown weathering, recessive, thin bedded, laminated, blue-grey to black shale, siltstone, and slate; minor grey brown weathering, thin- to medium-bedded, fine- to medium-grained, chert-quartz arenite and wacke	
uDMcg	Black to gun-blue weathering, massive, chert and shale clast granule to pebble conglomerate with mud matrix; contains minor quartz sand; clasts commonly matrix supported	
muDt	Black weathering, thin- to medium-bedded, black chert; minor black weathering, black, siliceous shale	muDpt :'siliceous shale'
muDpt	Black, gun-blue or silvery white weathering, thin bedded, siliceous, black shale, chert, and slate; merges with muDt to southwest by increase in proportion of chert	
mmDl2	Light grey weathering, resistant, thin- to thick-bedded, fine- to medium crystalline, dark grey limestone	mmDl2 :Nahanni
mDl	Orange weathering, recessive, thin bedded, finely crystalline, dark blue-grey limestone	mDl :Funeral
mmDl1	Orange-brown weathering, thin- to medium-bedded, finely crystalline, light- to dark-grey limestone	mmDl1 :Headless
lmDl1	Light grey weathering, resistant, thin- to thick-bedded, fine- to medium crystalline, dark grey limestone, in part crinoidal	lmDl1 :Landry
lDl	Dark grey weathering, recessive, thin bedded, platy, finely crystalline, black limestone; minor grey weathering, medium bedded, finely crystalline, grey limestone	lDl :Natla
mlDd	Dark grey weathering, thick bedded, finely crystalline black dolomite; white dolomite filling veins and vugs; sparse chert nodules	mlDd :Arnica
lDd	Light grey weathering, medium bedded, fine- to medium crystalline light- to dark-grey dolomite; member in middle part of unit of dark grey weathering, medium-to thick-bedded, fine- to medium crystalline, in part crinoidal, dark grey dolomite; top of unit marked by alternating light and dark grey dolomite;	lDd :Sombre
uIDl	Blue-grey weathering, resistant, thin- to very thick-bedded, grey crinoidal limestone characterized by abundant crinoid stem fragments with twin axial canals; massive fine- to medium crystalline, grey limestone; minor limestone breccia	uIDl :Grizzly Bear
ImDl2	Dark grey weathering, thin- to medium-bedded, finely crystalline, black limestone	SDl :Road River (northeast)
SlDl	Tan, buff or dark grey weathering, recessive, thin bedded, laminated, argillaceous, finely crystalline, black limestone; in the northeast, black weathering, finely crystalline, black, crinoidal limestone with crinoid stem fragments having twin axial canals occurs near top of unit	
Sl	Blue-grey weathering, thin bedded, finely crystalline, porcellaneous, black or dark blue-grey limestone	
Sp	Orange weathering, resistant, thick bedded, dolomitic, silty, grey mudstone characterized by discontinuous wispy black lamination and locally by abundant small pyrite cubes	OSpt :Road River (southwest)
OSp	Black, gun-blue or silvery white weathering, recessive, black slate; minor thin interbeds of finely crystalline, black limestone and black chert; merges with OSt to southwest by increase in proportion of chert, and with upper part of uEOl to east by increase in proportion of limestone	
OSt	Black weathering, thin- to medium-bedded, dark grey to black chert; rare black siliceous shale; minor tan to brown weathering, recessive dark grey shale at base	
uOSd	White to grey weathering, thick- to very thick-bedded, massive, medium crystalline, grey dolomite, locally containing abundant nodules of black or grey chert	uOSd :Whittaker
uEOSd	Grey to white weathering, medium- to thick-bedded, massive, fine- to medium crystalline, grey dolomite; in upper part minor thick beds of medium crystalline, black dolomite	uEOSd :Broken Skull (minor? Sunblood and Whittaker?)
uEds	Brick red weathering, thin- to thick-bedded, maroon mudstone; orange to grey weathering, thick bedded, fine- to medium crystalline, light coloured dolomite; medium bedded, medium- to coarse-grained, dolomitic, grey quartz arenite; thick bedded, finely crystalline, blue-grey limestone	
uEOd	White to orange weathering, massive, fine- to medium crystalline, grey dolomite	uEOd :-
Ov	Rust-brown weathering, resistant, pyritic, amygdaloidal basalt; grey and rust-grey weathering, fissile, green tuff; minor dolomite	uEOl :-
uEOl	Buff to grey weathering, recessive, thin bedded, finely crystalline, dark grey to black limestone	
lOl	Blue-grey weathering, thin bedded, finely crystalline, porcellaneous, black limestone, minor grey weathering, thin bedded, finely crystalline, grey dolomite	uEOdl :Broken Skull
uEIOd	Grey to white weathering, thick bedded, massive, fine- to medium crystalline, grey to black dolomite; local dolomite breccia with large blocks of finely crystalline, grey dolomite in matrix of coarsely crystalline, white dolomite	
uEIOl	White to buff weathering, laminated or thin bedded, finely crystalline, blue-grey limestone; includes in upper part northeast of Howard's Pass, thin bedded, finely crystalline, nodular, silty limestone; local thin bedded to massive, pale green, lapilli tuff	uEIOl :Rabbitkettle
uEl	Tan to orange brown weathering, thin bedded, finely crystalline, blue-grey limestone, locally nodular; at base is minor thin bedded, fine grained, grey quartz arenite	uEl :Rabbitkettle
mEd	Light grey weathering, resistant, thick bedded, massive, fine- to medium crystalline, grey dolomite	mEd :Avalanche
mEl	Tan to brown weathering, recessive, thin bedded, finely crystalline, grey limestone	mEl :Rockslide
lElds	Orange weathering, thin- to thick-bedded, finely crystalline, locally sandy, cream, orange, or grey dolomite; minor medium- to thick-bedded, medium grained, white quartz arenite; minor purple weathering, thin bedded, purple siltstone	lElds :Sekwi
lEds	upper - bright orange weathering, thin- to thick-bedded, finely crystalline light coloured dolomite middle - purple weathering, recessive, thin- to thick-bedded, brown to purple siltstone and dolomitic siltstone, minor thin bedded, orange weathering dolomite lower - light orange to brown weathering, resistant, medium- to thick-bedded, medium grained, grey quartz arenite and interbedded brown siltstone; thin to thick interbeds of orange weathering dolomite towards top	
lEld	Grey to buff weathering, thin bedded, locally wavy bedded and nodular, finely crystalline blue-grey to black limestone; minor limestone conglomerate with rounded to subangular clasts of blue-grey weathering grey limestone and oolitic limestone in orange weathering, locally sandy, limestone matrix; upper 1/3 of lEld is white weathering, massive, finely crystalline, grey dolomite	
lmEp	Tan weathering, resistant, medium bedded, variably calcareous and dolomitic, blue-grey siltstone and mudstone; parallel lamination in grey to black disrupted to discontinuous wispy lamination	lmEp :-
lEp	Brown to orange brown weathering, recessive, thin bedded, blue-grey slate and siltstone; minor fine grained subarkose to quartz arenite	
lEcg	Lenticular bodies of white weathering limestone conglomerate and minor blue-grey finely crystalline limestone; conglomerate clasts include fine grained blue-grey limestone, oolitic limestone, and archeocyatha; matrix is orange to grey weathering, fine grained, locally sandy limestone	
HlEps	Dark brown to rust weathering, thin- to thick-bedded, greenish grey siltstone; very fine grained quartz arenite and/or subarkose; slate; southwest of South Nahanni River - dark brown weathering, pale green to blue-grey slate and siltstone, and minor greenish grey, very fine grained, quartz sandstone	HlEps :Backbone Ranges
Hd	Buff weathering massive dolomite	
HlEp	Maroon, purple or green weathering, recessive slate, thin bedded or laminated in like colours; minor thin intervals of thin- to medium-bedded, fine grained, pale green, quartz arenite to subarkose and interbedded pale green to tan slate	HlEp :'Grit Unit' (upper part)
HlEs	Orange, grey or tan weathering, thin- to medium-bedded, fine grained, pale green, quartz arenite to subarkose and interbedded pale green to tan slate	
Hsp	Grey to brown weathering, thin- to thick-bedded, coarse grained, calcareous, grey quartz arenite and subarkose; quartz pebble conglomerate; brown to pale green slate; minor thin bedded grey or white finely crystalline limestone; sandstone contains conspicuous blue quartz, minor plagioclase and orthoclase	Hsp :'Grit Unit' (lower part)

Geology by S.P. Gordey 1977, 1978, 1979, 1980 (with contributions from previous work by S.L. Blusson, J.A. Roddick, and L.H. Green (1967))

O.F. 780

EXPLANATION

e.g. ImDl - mnemonic signifying age and main lithology
ImDl = lower Middle Devonian limestone
but,
ImDl = Lower and Middle Devonian limestone

Limit of outcrop
Geological boundary (defined, approximate, assumed or extrapolated beneath overburden)
Bedding (horizontal, inclined, vertical, overturned .tops unknown)
Slaty cleavage (inclined, vertical)
Intersection of slaty cleavage and bedding (inclined, horizontal)
Axis of small scale fold (inclined, horizontal)
Fault, steeply dipping (defined, approximate, assumed or extrapolated beneath overburden; barb on downthrown side)
Anticline (defined, approximate, extrapolated beneath overburden)
Syncline (defined, approximate, extrapolated beneath overburden)
Monocline (defined, approximate, extrapolated beneath overburden)
Anticline, syncline (overturned)
Fossil locality (not all localities shown)
Mineral occurrence

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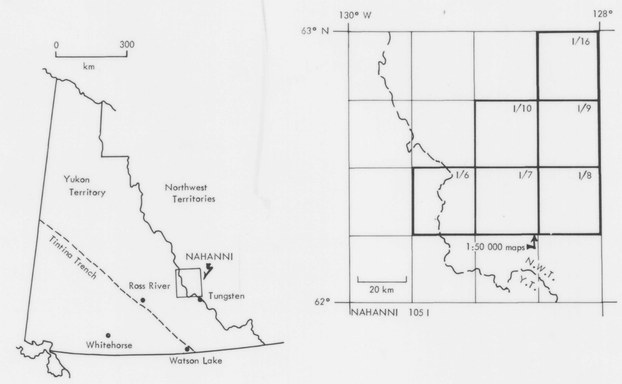
LOCATION



STRATIGRAPHIC POSITION OF IMPORTANT MINERAL OCCURRENCES

A) Scheelite in skarn at contact of Cretaceous quartz monzonite (Kqm) and:
- I. Cambro-Ordovician limestone (uEOl)
  - 1) LENED
  - 2) RHODES
  - 3) RUDI
- II. Lower Paleozoic carbonate of uncertain age (uEIOl ? or within OSpt ?)
  - 4) CLEA

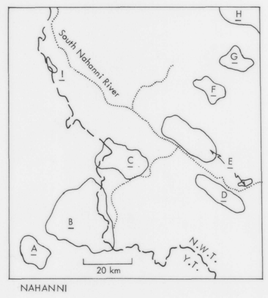
B) Stratiform sphalerite-galena in Ordovician-Silurian shale (OSp)
- 5) XY (Howard's Pass)
- 6) ANNIV
- 7) OP
- 8) PAS
- 9) GRAND
- 10) CINQUE
- 11) COMINCO

C) Massive to bedded pyrite-sphalerite in Silurian ? shale (SIDI)
- 12) VULCAN

D) Stratiform barite (± sphalerite and galena) in Devonian siliceous shale (muOpt)
- 13) GHMS
- 14) COMINCO
- 15) ORO

E) Red sphalerite as vug fillings near base of upper Lower Devonian crinoidal limestone (uIDl)
- 16) BIG RED

STRATIGRAPHIC RELATIONS



Location of composite sections on which stratigraphic cross-section is based

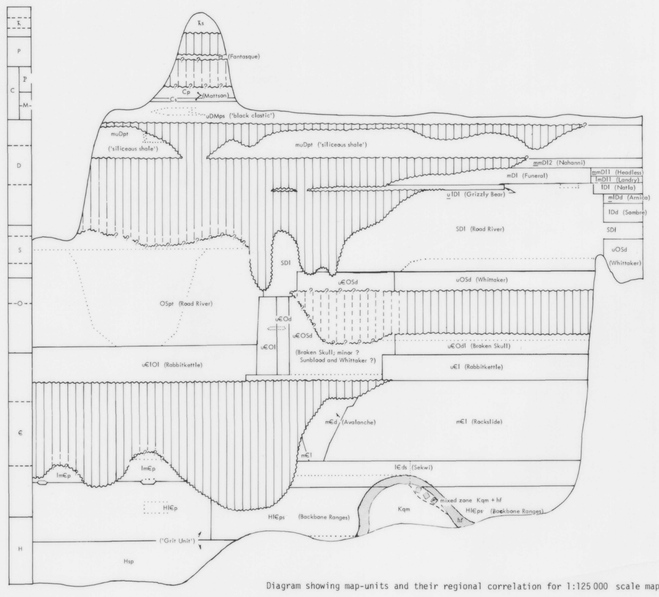
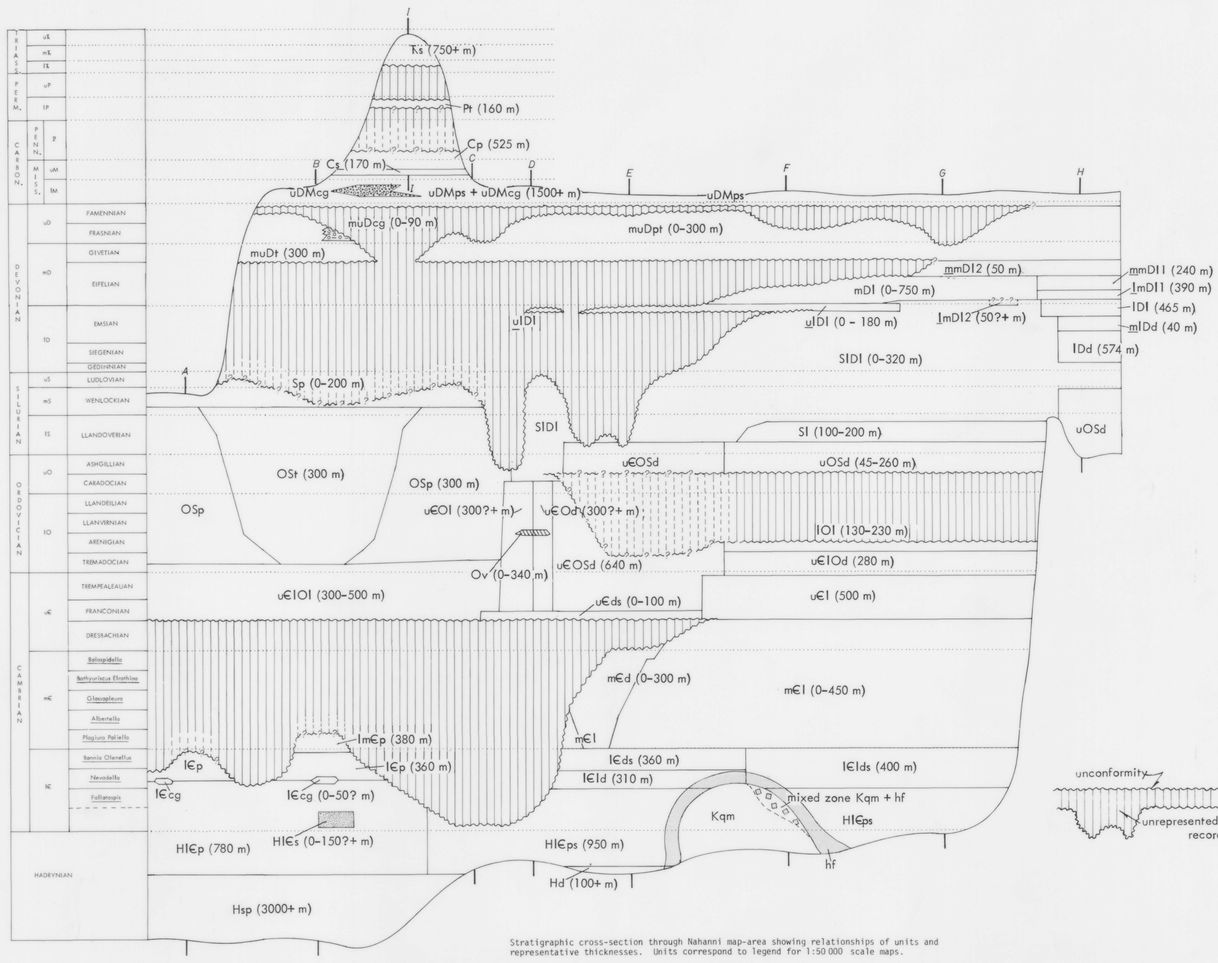


Diagram showing map-units and their regional correlation for 1:125 000 scale map



Stratigraphic cross-section through Nahanni map-area showing relationships of units and representative thicknesses. Units correspond to legend for 1:50 000 scale maps.