

# NICKEL (ppm)

G.S.C. OPEN FILE 868  
YUKON AND NORTHWEST TERRITORIES, 1981  
NAHANNI MAP (NTS 1051)

## Geochemical Symbol and Data Presentation

The concentration of each element is represented by the actual value plotted adjacent to the sample site represented by a "•" symbol. In addition to enhance visual impact, values over the 75th percentile are designated by grey solid squares which are symmetrically arranged so that they increase in size from the 75th to the 99th percentile. The actual concentration range represented by each symbol is illustrated below with a histogram.

In addition to 25 geochemical maps, each Open File contains an appendix consisting of a short discussion of the geochemistry, survey and analytical methodologies, listing of field and analytical data, and statistical data. The statistical data is provided for the total data set as well as for data subsets grouped on the basis of major stratigraphic units.

CONCENTRATION	PERCENTILES
401. TO 745.	99TH TO MAX.
341. TO 400.	98TH TO 99TH
215. TO 340.	95TH TO 98TH
149. TO 214.	90TH TO 95TH
80. TO 148.	75TH TO 90TH

## SELECTED MINERAL DEPOSITS AND OCCURRENCES

- Stratabound Zn-Pb (Lower Silurian Age)
- ▲ Stratabound Zn-Pb-Ba (Devonian Age)
- Stratabound Barite (Devonian Age)
- ◆ Replacement Zn, Pb (age unknown)
- Vein Zn, Pb, Ag, Au, Sb (age unknown)
- ▼ Skarn W, Zn (Cretaceous)

Note: Further information on each occurrence or deposit is given in the Appendix which accompanies this open file.

Geochemistry by W.D. Goodfellow  
Geological Survey of Canada  
Resource Geophysics and Geochemistry Division

## CONTRACTORS

Sample collection by Marshall Macklin Monaghan Ltd., Toronto. Uranium in sediment chemical analysis by Nova Track Ltd., Vancouver. Other sediment chemical analysis by Bondar-Clegg and Company, Ottawa

This map forms one of a series of 26 maps released by the Geological Survey of Canada on Open File 868. Each Open File consists of maps for 19 elements for stream sediments, 5 elements for stream waters, and 1 each for water pH and sample site location.

The Director  
Geological Survey of Canada  
601 Booth Street  
Ottawa, Ontario  
K1A 0E8

The data are also available in digital form. For further information please contact:

The Director  
Computer Science Centre  
Department of Energy, Mines and Resources  
Ottawa, Ontario  
K1A 0E4



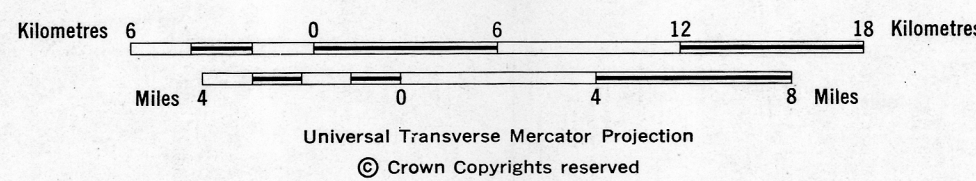
Mean magnetic declination 1982, 32°58.1' East, decreasing 8.8 annually. Readings vary from 32°44.2' in the SE corner to 33°05.6' in the NW corner of the map.

NICKEL (ppm)  
G.S.C. OPEN FILE 868  
NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 51-1981

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY

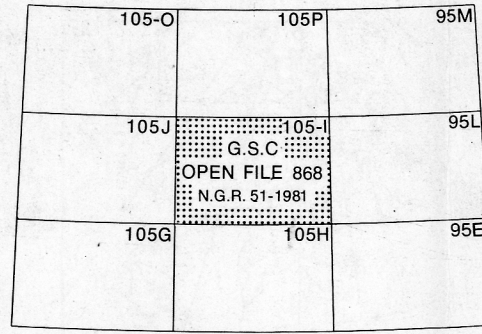
YUKON AND NORTHWEST TERRITORIES, 1981  
NAHANNI MAP (NTS 1051)

Scale 1:250,000



Elevation in feet above mean sea level

Base map drawn and printed by the  
Army Survey Establishment R.C.E. 1949-54



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO GEOLOGICAL SURVEY OF CANADA MAPS

LEGEND	
CRETACEOUS	Kgm Grey weathering, resistant, medium to coarse-grained, megacrystic (K-feldspar), biotite quartz monzonite
	Hf Pelitic hornfels; red-rust to brown weathering, extremely well indurated, massive, fine grained
TRIASSIC	Ts Tan weathering, thin bedded, ripple cross-laminated siltstone, fine grained sandstone, and shale
	Pt Orange to grey weathering, thin bedded, locally lenticular, pale green to blue-grey chert; minor dark green to brown weathering, pale green, splintery shale
PERMIAN	Cp Brown weathering, recessive, thin bedded, blue-grey shale, black laminated quartz siltstone, and pale green shale; minor fine- to medium-grained quartz arenite
	Cs Grey weathering resistant, massive, fine- to medium-grained quartz arenite
CARBONIFEROUS	uMns Grey weathering, resistant, thin- to very thick-bedded, massive, chert pebble conglomerate, and medium- to coarse-grained, thin- to dark-grey, chert-quartz arenite and wacke; minor brown weathering, blue-grey to black shale, siltstone, and slate
	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
DEVONIAN	mdPt Black weathering, thin- to medium-bedded, black chert; minor black weathering, black, siliceous shale
	Black, gun-blue or silvery white weathering, thin bedded, siliceous, black shale, chert, and slate; merges with mud to southwest by increase in proportion of chert
DEVONIAN	md12 Light grey weathering, resistant, thin- to thick-bedded, fine- to medium crystalline, dark grey limestone
	md1 Orange weathering, recessive, thin bedded, finely crystalline, dark blue-grey limestone
DEVONIAN	md11 Orange-brown weathering, thin- to medium-bedded, finely crystalline, light- to dark-grey limestone
	md10 Light grey weathering, resistant, thin- to thick-bedded, fine- to medium crystalline, dark grey limestone, in part crinoidal
DEVONIAN	101 Dark grey weathering, recessive, thin bedded, platy, finely crystalline, black limestone; minor grey weathering, medium bedded, finely crystalline, grey limestone
	md6 Dark grey weathering, thick bedded, finely crystalline black dolomite; white dolomite filling veins and vugs; sparse chert nodules
DEVONIAN	10d 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
	u101 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
DEVONIAN	SD1 Dark grey weathering, thin- to medium-bedded, finely crystalline, black limestone
	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
DEVONIAN	Blue-grey weathering, thin bedded, finely crystalline, porcellaneous, black or dark blue-grey limestone
	Orange weathering, resistant, thick bedded, dolomitic, silty, grey mudstone characterized by discontinuous wavy black lamination and locally by abundant small pyrite cubes
DEVONIAN	09pt Black, gun-blue or silvery white weathering, recessive, black slate; minor thin interbeds of finely crystalline, black limestone and black chert; merges with 10d to southwest by increase in proportion of chert, and with upper part of u601 to east by increase in proportion of limestone
	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
DEVONIAN	u60d White to grey weathering, thick- to very thick-bedded, massive, medium crystalline, grey dolomite, locally containing abundant nodules of black or grey chert
	u60sd 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
DEVONIAN	u60d Brick red weathering, thin- to thick-bedded, maroon mudstone; orange to grey weathering, thick bedded, fine- to medium crystalline, light coloured dolomite; medium- to coarse-grained, dolomitic, grey quartz arenite; thick bedded, finely crystalline, blue-grey limestone
	White to orange weathering, massive, fine- to medium crystalline, grey dolomite
DEVONIAN	u601 Rust-brown weathering, resistant, pyritic, amygdaloidal basalt; grey and rust-grey weathering, fissile, green tuff; minor dolomite
	Buff to grey weathering, recessive, thin bedded, finely crystalline, dark grey to black limestone
DEVONIAN	u60d1 Blue-grey weathering, thin bedded, finely crystalline, porcellaneous, black limestone, minor grey weathering, thin bedded, finely crystalline, grey dolomite
	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
DEVONIAN	u60101 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
	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
DEVONIAN	md Light grey weathering, resistant, thick bedded, massive, fine- to medium crystalline, grey dolomite
	Tan to brown weathering, recessive, thin bedded, finely crystalline, grey limestone
DEVONIAN	md1 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
	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
DEVONIAN	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 field is white weathering, massive, finely crystalline, grey dolomite
	Tan weathering, resistant, medium bedded, variably calcareous and dolomitic, blue-grey siltstone and mudstone; parallel lamination in grey to black disrupted to discontinuous wavy lamination
DEVONIAN	Brown to orange brown weathering, recessive, thin bedded, blue-grey slate and siltstone; minor fine grained subarkose to quartz arenite
	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 archedagabas matrix is orange to grey weathering, fine grained, locally sandy limestone
DEVONIAN	Hi6ps 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
	Buff weathering massive dolomite
DEVONIAN	Hi6p 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
	Orange, grey or tan weathering, thin- to medium-bedded, fine grained, pale green, quartz arenite to subarkose and interbedded pale green to tan slate
DEVONIAN	Hsp Grey to tan 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
	Geology by S.P. Gordey 1977, 1979, 1980 (with contributions from previous work by S.L. Blusson, J.A. Roddick, and L.H. Green (1967))
DEVONIAN	Limit of outcrop.....
	Geological boundary (defined, approximate, assumed or extrapolated).....
DEVONIAN	Fault, steeply dipping (defined, approximate, assumed or extrapolated) beneath overburden.....
	Fault, steeply dipping (defined, approximate, assumed or extrapolated) beneath overburden.....
DEVONIAN	No analytical result.....
	Geology by S.P. Gordey (1981), Geological Survey of Canada, Open File 780

# NICKEL (ppm)

G.S.C. OPEN FILE 868  
YUKON AND NORTHWEST TERRITORIES, 1981  
NAHANNI MAP (NTS 1051)

This document was produced by scanning the original publication. Ce document est le produit d'une numérisation par balayage de la publication originale.