

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
1.11 TO 2.18	99TH TO MAX.
.97 TO 1.10	98TH TO 99TH
.72 TO .96	95TH TO 98TH
.58 TO .71	90TH TO 95TH
.38 TO .57	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.

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CONTRACTORS

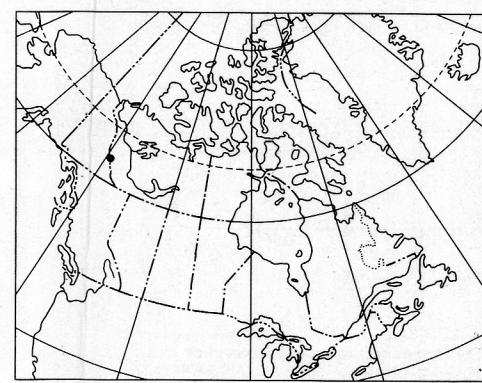
Sample collection by Marshall Macklin Monaghan Ltd.,
Toronto. Uranium in sediment chemical analysis by Nova Track
Ltd., Vancouver. Other sediment chemical analysis by
Bondar-Clegg and Company, Ottawa

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.

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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
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Mean magnetic declination 1982, 32°58.1' East,
decreasing 8.8 annually. Readings vary
from 32°44.2' in the SE corner to 33°5.6'
in the NW corner of the map.

P₂₀₅ (%)
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)

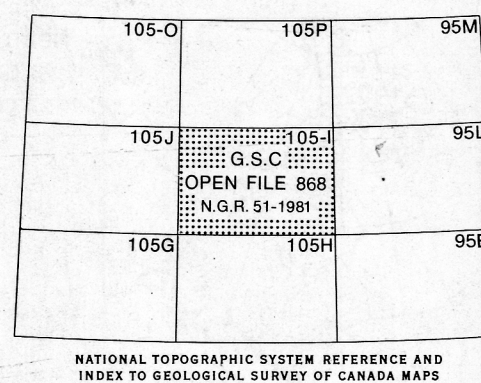
Scale 1:250,000

Kilometres 6 0 6 12 18 Kilometres

Miles 4 0 4 8 Miles

Universal Transverse Mercator Projection
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Elevation in feet above mean sea level
Base map drawn and printed by the
Army Survey Establishment R.C.E. 1949-54



LEGEND	
CRETACEOUS	Kgm Grey weathering, resistant, medium-to coarse-grained, megacrystic (K-feldspar), biotite quartz monzonite
Mf	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
PERMIAN	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
CARBONIFEROUS	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
u0mfs	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
mu0pt	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
mu0dt	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
mm012	Black weathering, thin- to medium-bedded, black chert; minor black weathering, black, siliceous shale
m01	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
mm011	Light grey weathering, resistant, thin- to thick-bedded, fine- to medium crystalline, dark grey limestone
m011	Orange-weathering, thin- to medium-bedded, finely crystalline, light- to dark-grey limestone
l0d11	Light grey weathering, resistant, thin- to thick-bedded, fine- to medium crystalline, dark grey limestone, in part crinoidal
l0d1	Dark grey weathering, recessive, thin bedded, platy, finely crystalline, black limestone; minor grey weathering, medium bedded, finely crystalline, grey limestone
m0d	Dark grey weathering, thick bedded, finely crystalline black dolomite; white dolomite filling veins and vugs; sparse chert nodules
l0d	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
u0d1	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
s01	Dark grey weathering, thin- to medium-bedded, finely crystalline, black limestone
DEVONIAN, SILURIAN AND ORDOVICIAN	
OSpt	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
u0s4	Blue-grey weathering, thin bedded, finely crystalline, porcellaneous, black or dark blue-grey limestone
u0s5	Orange weathering, resistant, thick bedded, dolomitic, silty, grey mudstone characterized by discontinuous wavy black lamination and locally by abundant small pyrite cubes
u0s6	Black, gun-blue or silvery white weathering, recessive, black slate; minor thin interbeds of finely crystalline, black limestone and black chert; merges with OS to southwest by increase in proportion of chert, and with upper part of u0s1 to east by increase in proportion of limestone
u0s7	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
u0s8	White to grey weathering, thick- to very thick-bedded, massive, medium crystalline, grey dolomite, locally containing abundant nodules of black or grey chert
u0s9	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
u0d6	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
u0d7	White to orange weathering, massive, fine- to medium crystalline, grey dolomite
u0d8	Rust-brown weathering, resistant, pyritic, amygdaloidal basalt; grey and rust-grey weathering, fissile, green tuff; minor dolomite
u0d9	Buff to grey weathering, recessive, thin bedded, finely crystalline, dark grey to black limestone
u0d10	Blue-grey weathering, thin bedded, finely crystalline, porcellaneous, black limestone, minor grey weathering, thin bedded, finely crystalline, grey dolomite
u0d11	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
u0d12	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
u0d13	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
m6d	Light grey weathering, resistant, thick bedded, massive, fine- to medium crystalline, grey dolomite
m61	Tan to brown weathering, recessive, thin bedded, finely crystalline, grey limestone
l6d5	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
CAMBRIAN	
l6d6	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
l6d7	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 l6d7 is white weathering, massive, finely crystalline, grey dolomite
l6d8	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
l6d9	Brown to orange brown weathering, recessive, thin bedded, blue-grey slate and siltstone; minor fine grained subarkose to quartz arenite
l6d10	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 archaeocyaths; matrix is orange to grey weathering, fine grained, locally sandy limestone
Hl6ps	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
Hl6p	Buff weathering massive dolomite
Hl6q	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
Hl6r	Orange, grey or tan weathering, thin- to medium-bedded, fine grained, pale green, quartz arenite to subarkose and interbedded pale green to tan slate
Hl6s	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

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))
List of outcrop:
Geological boundary (defined, approximate, assumed or extrapolated)
Fault, steeply dipping (defined, approximate, assumed or extrapolated beneath overburden)
No analytical result
Geology by S.P. GORDEY (1981), Geological Survey of Canada, Open File 780