

LEGEND

Note: This legend is common for Regional Geochemical Reconnaissance Map 71-1984, Open File 1106

- NEOHELMIAN/ADIRONDAKAN**
 - [Gd] Gabbroic gneiss, fine to coarse grained, massive to weakly foliated; gabbro + olivine + biotite + hypersthene
- PALEOHELMIAN**
 - [MF] Middle Felsite Formation: sandstone and conglomerate. Microcline-hornblende member, locally pebbly. GfO; quartzite member
- ATLABASCA GROUP**
 - [MF] Middle Felsite Formation: sandstone and conglomerate. Microcline-hornblende member, locally pebbly. GfO; quartzite member
- LATE APHEBIAN (HUDSONIAN)**
 - [X] Gabbroic gneiss and gabbro rocks of the Hazle Falls Group. Zone derived from rocks of the Hudsonian and later domains
- WOLLASTON DOMAIN**
 - [Wag] Gabbroic gneiss: variable grain size; generally massive to foliated; biotite + muscovite + garnet contacts with megacrystic megacrystic gneiss; commonly gradational
 - [Wg] Gabbro and gabbro: fine to coarse grained, massive to weakly foliated; biotite + hornblende + magnetite + clinopyroxene; gabbroic gneiss with megacrystic megacrystic gneiss commonly gradational
 - [Wgd] Gabbroic gneiss: medium to coarse grained, massive to foliated, grey to buff, local xenoliths and outcrops of amphibole, orthopyroxene and perthite gabbro
- ROTTENSTONE DOMAIN**
 - [Rg] Megacrystic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Megacrystic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Quartz megacrystic, biotite and gabbro: fine to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Gabbroic gneiss: massive to foliated + biotite + muscovite + hornblende + garnet
 - [Rg] Tonalite, granodiorite and megacrystic gneiss: variably crystalline, locally massive to coarse grained; locally megacrystic; massive to foliated + biotite + muscovite + garnet + hornblende; local amphibole and orthopyroxene
- LATE APHEBIAN (HUDSONIAN) WITH POSSIBLE ARCHAEAN ELEMENTS**
 - [Rg] Megacrystic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Quartz megacrystic, biotite and gabbro: fine to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Gabbroic gneiss: massive to foliated + biotite + muscovite + hornblende + garnet
 - [Rg] Tonalite, granodiorite and megacrystic gneiss: variably crystalline, locally massive to coarse grained; locally megacrystic; massive to foliated + biotite + muscovite + garnet + hornblende; local amphibole and orthopyroxene
- LATE APHEBIAN (HUDSONIAN) WITH POSSIBLE ARCHAEAN ELEMENTS**
 - [Rg] Megacrystic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Quartz megacrystic, biotite and gabbro: fine to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Gabbroic gneiss: massive to foliated + biotite + muscovite + hornblende + garnet
 - [Rg] Tonalite, granodiorite and megacrystic gneiss: variably crystalline, locally massive to coarse grained; locally megacrystic; massive to foliated + biotite + muscovite + garnet + hornblende; local amphibole and orthopyroxene
- LATE APHEBIAN (HUDSONIAN) WITH POSSIBLE ARCHAEAN ELEMENTS**
 - [Rg] Megacrystic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Quartz megacrystic, biotite and gabbro: fine to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Rg] Gabbroic gneiss: massive to foliated + biotite + muscovite + hornblende + garnet
 - [Rg] Tonalite, granodiorite and megacrystic gneiss: variably crystalline, locally massive to coarse grained; locally megacrystic; massive to foliated + biotite + muscovite + garnet + hornblende; local amphibole and orthopyroxene
- PROBABLY 'HUDSONIAN' s.l. (L740 Ma)**
 - [Lgd] Gabbroic and quartz megacrystic gneiss: medium to coarse grained, massive to foliated; biotite + hornblende + orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Lgm] Quartz megacrystic: fine to coarse grained, massive to foliated; biotite + hornblende + orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
- WASHAMAM BATHOLITH (c. 1080 Ma)**
 - [X] Gabbroic gneiss and gabbro: massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
- PETER LAKE DOMAIN**
 - [Px] Gabbroic gneiss: medium grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Pn] Gabbroic gneiss: medium grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Pn] Gabbroic gneiss: medium grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [Pn] Gabbroic gneiss: medium grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
- ARCHAEAN DEFORMED AND METAMORPHOSED WITH APHEBIAN SUPRACRUSTAL ROCKS DURING THE HUDSONIAN OROGENY**
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
- UNCONFORMITY**
 - [Pg] Megacrystic gneiss: indistinguishable in places from unit [Rg]; gabbroic gneiss
- ARCHAEAN DEFORMED AND METAMORPHOSED WITH APHEBIAN SUPRACRUSTAL ROCKS DURING THE HUDSONIAN OROGENY**
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
- PROBABLY EARLY APHEBIAN (LATE ARCHAEAN)**
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
 - [W] Gabbroic gneiss: medium to coarse grained, massive to foliated, with local strongly foliated megacrystic megacrystic gneiss; locally abundant perthite and orthopyroxene; locally abundant amphibole and orthopyroxene; locally abundant megacrystic gneiss; locally abundant megacrystic gneiss
- PROBABLY MAINLY ARCHAEAN**
 - [Pg] Megacrystic gneiss: indistinguishable in places from unit [Rg]; gabbroic gneiss
- PROBABLY MAINLY ARCHAEAN**
 - [Pg] Megacrystic gneiss: indistinguishable in places from unit [Rg]; gabbroic gneiss
- PROBABLY MAINLY ARCHAEAN**
 - [Pg] Megacrystic gneiss: indistinguishable in places from unit [Rg]; gabbroic gneiss

Mean magnetic declination 1985, 15°06' East, decreasing 23.1' annually. Readings vary from 13°05' in the SE corner to 17°06' in the NW corner of the map area

Geological Survey of Canada
Resource Geophysics and Geochemistry Division
and
Saskatchewan Energy and Mines
Saskatchewan Geological Survey

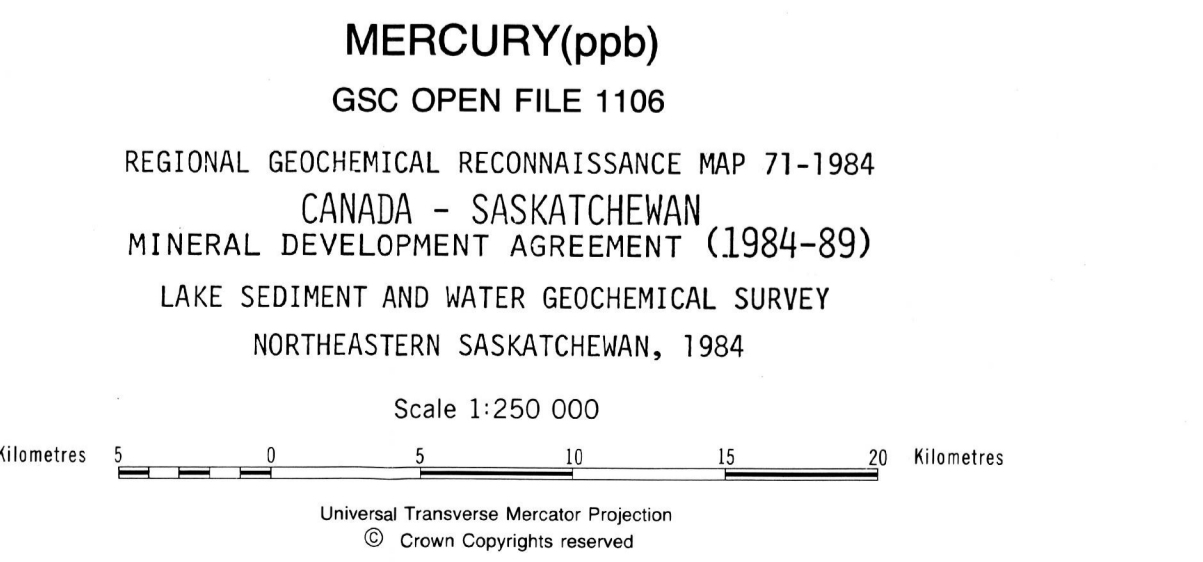
CONTRACTORS
Sample collection by Marshall Macklin Monaghan Ltd., Toronto
Sample preparation by Golder Associates, Ottawa
Sediment chemical analysis by Barringer Magenta Ltd., Rexdale, Ontario
Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at users expense by application to:

K.G. Campbell Corporation
880 Wellington St.
Box 238
Ottawa, Ontario
K1R 6K7

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



* A mnemonic name recorded as rock types as part of field observations

This legend was modified and the geology derived for these geochemical maps from Compilation Bedrock Geology Series 2284, 2294 and 2324, Saskatchewan Energy and Mines, Saskatchewan Geological Survey

This map forms one of a series of maps released by the Geological Survey of Canada, Open File 1106. The Open File consists of maps of various geochemical variables: 16 for lake sediment, 3 for lake water and 1 sample site location