

KILOMETERS- SCALE 1:1000000

Geological Survey of Canada Resource Geophysics and Geochemistry Division Manitoba Department of Energy and Mines Mineral Resources Division

881 SAMPLES

Sample collection by Marshall Macklin Monaghan Ltd., Toronto Sample preparation by Golder Associates, Ottawa

CONTRACTORS

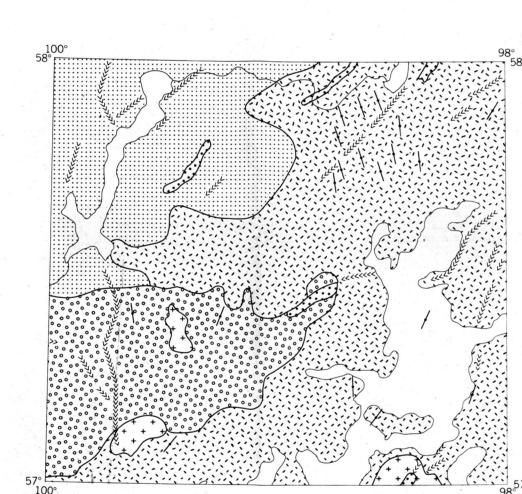
Sediment chemical analysis by Barringer Magenta Ltd., Rexdale, Ontario Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

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. Bay 238 Ottawa, Ontario K1R 6K7

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

The Director Computer Science Centre Department of Energy, Mines and Resources Ottawa, Ontario KIA OE4



SURFICIAL GEOLOGY 20 Scale 1:1 000 000

PROGLACIAL AND GLACIAL ENVIRONMENT

GLACIOLACUSTRINE DEPOSITS: beach and nearshore deposits: sand and gravel 1-4 m thick, forming distinct ridges GLACIOLACUSTRINE DEPOSITS: deep basin deposits: silt, clay and sand, 1-30 m thick GLACIOFLUVIAL DEPOSITS: gravel, sand and silt, 1-100 m thick GLACIAL ENVIRONMENT

NONGLACIAL ENVIRONMENT

GLACIAL DEPOSITS: till: 1-5 m thick, derived primarily from Precambrian bedrock

+ + BEDROCK ORGANIC DEPOSITS: marsh, fen, swamp and bog deposits up to 6 m thick, characterized by seasonal flooding Striations Flutings, drumlins, and drumlinoid ridges, oriented parallel to ice flow direction

Elevation in feet above mean sea level

2b,10

Mean magnetic declination 1985, 9006' East. decreasing 23.1' annually. Readings vary from 7035' in the NE corner to 10028' in the SW corner of the map area

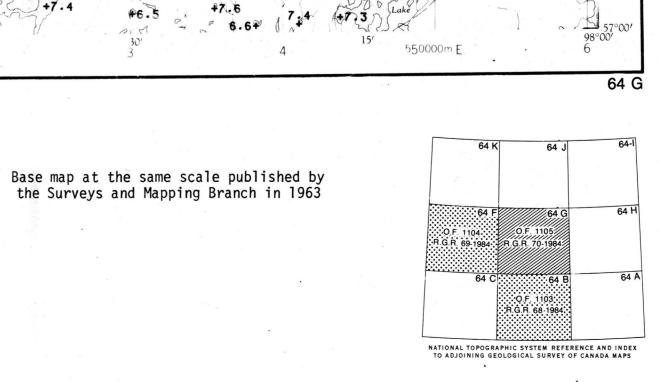
GSC OPEN FILE 1105 CANADA - MANITOBA

REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 70-1984 MINERAL DEVELOPMENT AGREEMENT (1984-89) LAKE SEDIMENT AND WATER GEOCHEMICAL SURVEY NORTH-WEST MANITOBA, 1984

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pH in water

Scale 1:250 000 Universal Transverse Mercator Projection



LEGEND Note: This legend is common for Regional Geochemical Reconnaissance Map 70-1984, Open File 1105 A* Metadiorite, hornblendite of possible Archean age 1 | Amphibolite, volcanic derived with locally preserved pillows 2a | Biotite-feldspar-quartz-paragneiss + garnet + granite + muscovite | 2b | Biotite metatexite + garnet + granite (25-75% white granitic lit) | 2c | Biotite metatexite + garnet + cordierite Light grey biotite (5-10%) quartz-feldspar-gneiss + magnetite + garnet with discontinuous diorite gneiss lenses 3b Light grey to dark grey biotite (5-15%) quartz-feldspar-gneiss interlayered with thin layers of amphibolite and/or hornblende-biotite bearing layers 4 | Calc-silicate rock 5 Amphibolite, metagabbro, locally agmatitic 6a Metaconglomerate 6b Thin interlayered amphibolite and hornblende biotite-bearing layers 6c Arkosic gneiss 6d Metavolcanic rocks 6e Metagreywacke 7 Gneissic diorite and leucodiorite | 7a | Biotite [±] hornblende granodiorite gneiss with white granitic lit Grey, medium to coarse grained biotite (5%) + magnetite-tonalite to quartz monzonite 8a | Hybrid gneiss of grey biotite-quartz monzonite and gneissic diorite 9 Foliated quartz diorite + magnetite Biotite (15-20%) - tonalite [±] garnet 11a Megacrystic biotite-granodiorite 11b Megacrystic biotite-hornblende + pyroxene-granodiorite

| 11c | Coarse grained leucocratic granodiorite | 12 | White leucocratic medium grained to pegmatitic monzogranite ± garnet

Coarse grained to megacrystic-pyroxene-hornblende-monzonite to monzogranite with olive-brown feldspar 13a Anorthositic gabbro

Hornblende-biotite-monzonite to quartz monzonite with varigated olive-brown and pink feldspar 14 Megacrystic-biotite-magnetite quartz monzonite

Biotite ± hornblende coarse grained to megacrystic pink granite to quartz

15a Biotite-hornblende granite gneiss 15b Leucocratic megacrystic pink granite

15c Fine grained quartz monzonite

16 Magnetite-biotite-hornblende quartz monzonite

17 Granite pegmatite

18 Diabase

Partridge)

27:00

12b R7.0

6a,6c 3 47.3

SOUTHERN

+7-6 3b

6a, 9

+7.5

15,3b

+7.0

Pyrite, chalcopyrite, galena, sphalerite, Iron Formation ▲Py; ▲Cp; ▲Pb; ▲Sp; ▲I.F. Geological boundary (approximate, assumed, gradational) Drift covered

* A four character mnemonic name recorded rock type as part of the 1984 field observations

> Provisional Compilation map by H.V. Zwanzig. Manitoba Department of Energy and Mines

This map forms one of a series of maps released by the Geological Survey of Canada, Open File 1103 to 1105. Each Open File consists of maps of various geochemical variables: 16 for lake sediment, 3 for lake water and I sample site location

> This map has been reprinted from a scanned version of the original map Reproduction par numérisation d'une

pH in water GSC OPEN FILE 1105 NORTH-WEST MANITOBA, 1984