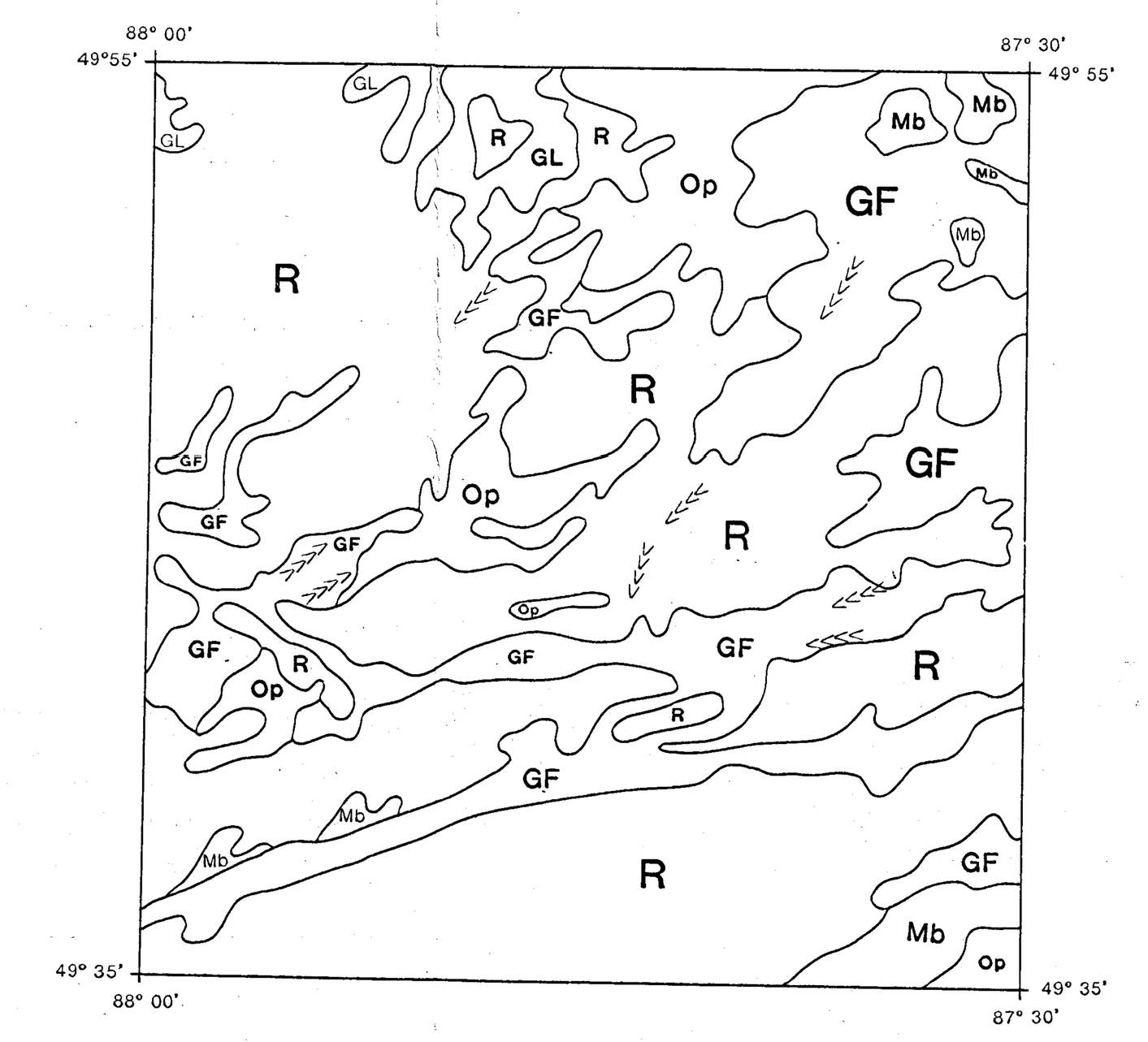
Energy, Mines and Resources Canada — Énergie, Mines et Ressources Canada

GEOLOGICAL SURVEY OF CANADA — COMMISSION GÉOLOGIQUE DU CANADA

SAMPLE LOCATION
LAKE SEDIMENTS

GSC OPEN FILE 2026
BEARDMORE-JELLICOE AREA
NORTHWESTERN ONTARIO, 1987

PARTS OF NTS 42E/12 AND 42E/13



0 5 10 15
KILOMETERS - SCALE 1:250,000

SURFICIAL GEOLOGY[1]

Op	Organics, peatland deposits
GL	Glaciolacustrine and glaciomarine deepwater deposits, clay, silt
GF	Glaciofluvial deposits, includes shallow water, glaciolacustrine and glaciomarine deposits of predominantly sand and gravel
Mb	Till, unsorted mixture of boulders, sand, silt, and clay sufficiently thick to mask bedrock topography
Mv	Shallow drift, thin glacial sediments, mostly overlying bedrock
R	Bedrock, predominantly bare rock with thin glacial sediment cover

SYMBOLS

Major moraines (includes end, recessional and interlobate types) . . . .

Crag and tail forms . . . .

Esker . . . .

Relict, beach and bar forms . . . .

Sources of information:

Gartner, J.F. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Jellicoe, Ontario Geological Survey Map 5077, Scale 1:100,000.

Gartner, J.F. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Heron Bay, Ontario Geological Survey Map 5093, Scale 1:100,000.

Mollard, D.G. 1979. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Kaministikwia, Ontario Geological Survey Map 5045, Scale 1:100,000.

Mollard, D.G. 1979. Northern Ontario Engineering Geology Terrain Study, Data Base Map Heaven Lake, Ontario Geological Survey Map 5051, Scale 1:100,000.

Mollard, D.G. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Marmion Lake, Ontario Geological Survey Map 5073, Scale 1:100,000.

Mollard, D.G. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Lac Des Mille Lacs, Ontario Geological Survey Map 5074, Scale 1:100,000.

Sado, E.V. and Carswell, B.F. 1987. Surficial Geology of Northern Ontario, Ontario Geological Survey Map 2518, Scale 1:1,200,000.

[1] This legend is common for all maps in this Open File.

GEOLOGICAL SURVEY OF CANADA
MINERAL RESOURCES DIVISION
EXPLORATION GEOCHEMISTRY SUBDIVISION

CONTRACTORS

Collection:	SIAL Geophysique Inc., Montreal
Preparation:	Golder Associates, Ottawa
Sediment Analysis:	Bondar-Clegg and Company Ltd., Ottawa Chemex Labs Limited, Vancouver (Au only)
Water Analysis:	Chemex Labs Limited, Vancouver
Cartography:	GSC – Geological Information Division Terra Surveys Ltd., Ottawa
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Contribution to Canada – Ontario Mineral Development Agreement 1985 – 1990, a subsidiary agreement under the Economic and Regional Development Agreement. Project funded by the Geological Survey of Canada.

CANADA ONTARIO Mineral Development Exploitation Minérale

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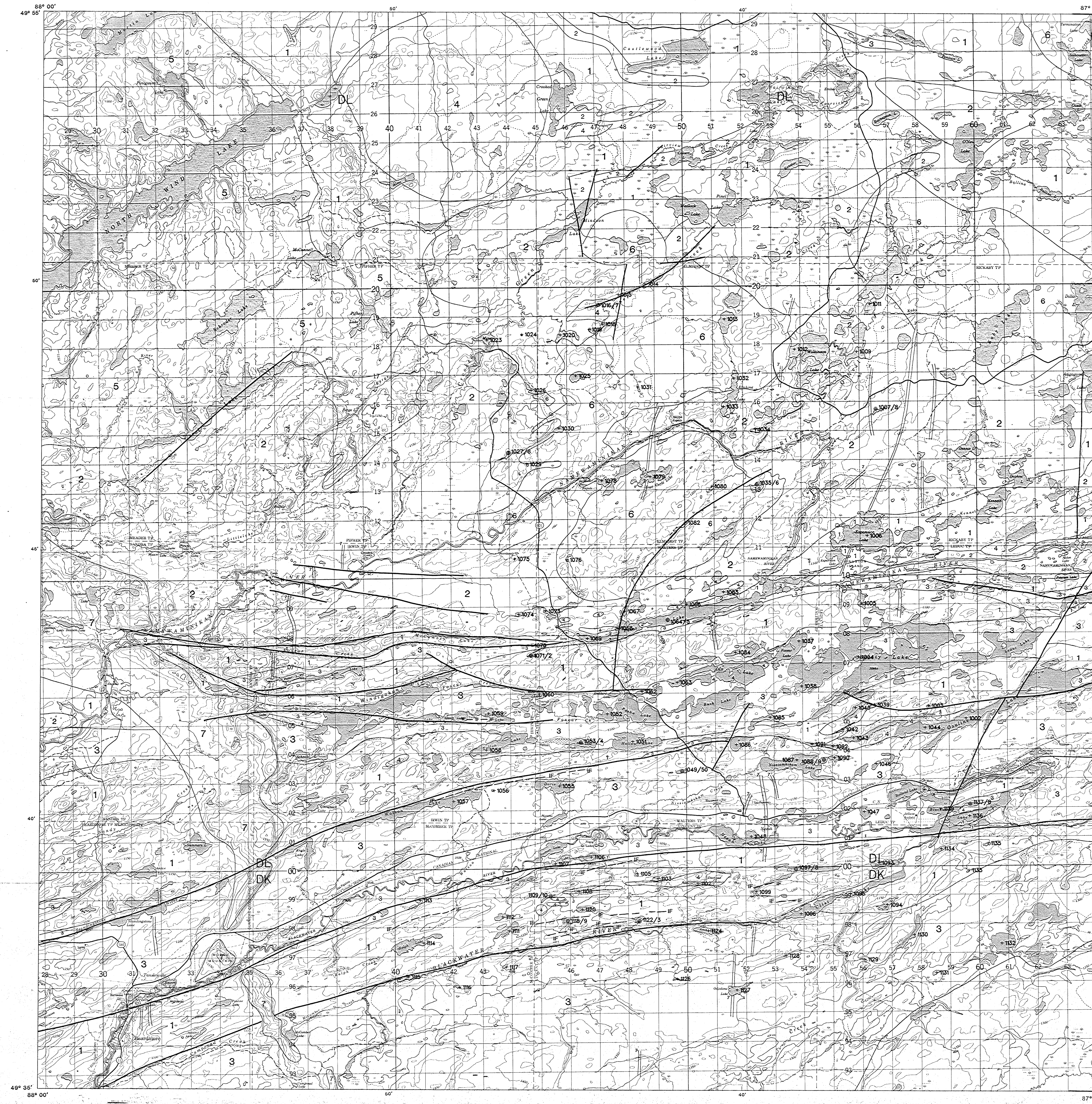
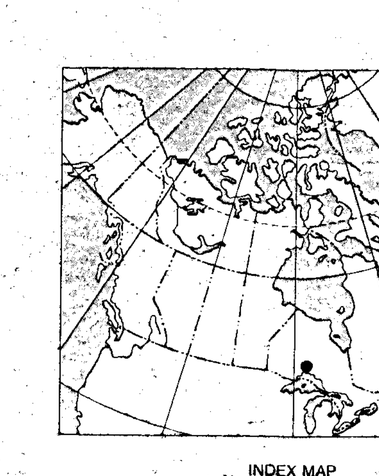
Canadä





SAMPLE LOCATION
LAKE SEDIMENTS

GSC OPEN FILE 2026
BEARDMORE-JELLICOE AREA
REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 127B-87

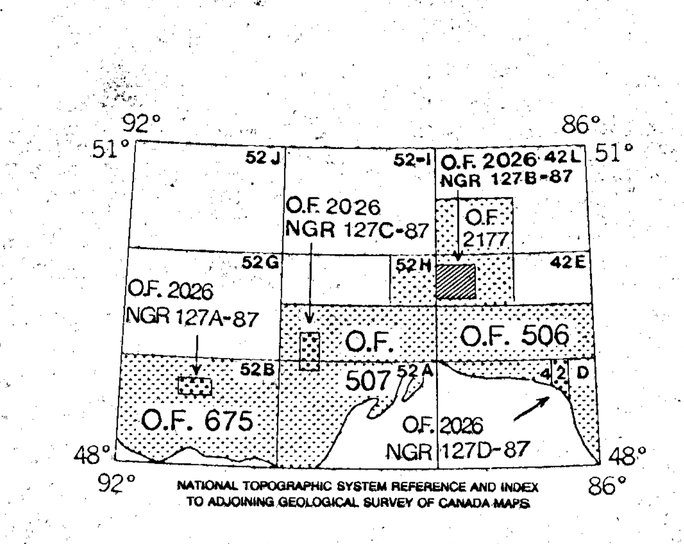
CANADA - ONTARIO
MINERAL DEVELOPMENT AGREEMENT
(1985-1990)

LAKE SEDIMENT AND WATER GEOCHEHICAL INFILL SURVEY
NORTHWESTERN ONTARIO, 1987

Scale 1:50 000 - Échelle 1/50 000

Kilometres 1 0 1 2 3 4 Kilomètres

Universal Transverse Mercator Projection — Projection transverse universelle de Mercator



LEGEND

PRECAMBRIAN

MIDDLE TO LATE PRECAMBRIAN (PROTEROZOIC)

7*	PMI 04**	Mafic intrusive rocks; diabase dykes and sills

EARLY PRECAMBRIAN (ARCHEAN)

6	PUFI 02	Unmetamorphosed felsic to intermediate intrusive rocks; biotite and hornblende-biotite tonalite to granodiorite, syenite, monzonite, monzodiorite, diorite
5	PMFI 02	Metamorphosed felsic to intermediate intrusive rocks; diorite, tonalite, granodiorite, quartz feldspar porphyry
4	PMMI 02	Metamorphosed mafic to intermediate intrusive rocks; gabbro, norite, diorite, quartz diorite
3	PCLM 02	Clastic metasediments; conglomerate, mudstone, siltstone, argillite, slate, wacke, arenite and metamorphosed equivalents
IF	PIF 02	Chemical metasediments; magnetite chert ironstone
2	PFMV 02	Felsic to intermediate metavolcanics; fine pyroclastic rocks (tuffs, lapillistone), coarse pyroclastic rocks (tuff breccia, pyroclastic breccia) both with some intermixed flows, dacite to rhyolite; quartz feldspar porphyritic flows
1	PMMV 02	Mafic and intermediate metavolcanics; basalt to andesite flows, massive; pillowed flows

* Map unit identifier assigned to rock type.

** A mnemonic code assigned to rock type.

SYMBOLS

Geological boundary . . . .

Fault . . . .

No data . . . . +*

Field duplicate site . . . . *

Geology base derived from:

Mackasey, W.O. 1974. Dorothea, Sandra and Irwin Townships, Thunder Bay District; Ontario Geological Survey Map 2294. Scale 1:31,680 or 1 inch to 1/2 mile.

Mackasey, W.O. 1976. Walters and Leduc Townships, Thunder Bay District; Ontario Geological Survey Map 2356. Scale 1:36,680 or 1 inch to 1/2 mile.

Mackasey, W.O. and Wallace, H. 1977. Elmhirst and Rickaby Townships, Thunder Bay District; Ontario Geological Survey Map 2373. Scale 1:31,680 or 1 inch to 1/2 mile.

Scott, G.M. 1984. Geraldton Sheet, Thunder Bay and Cochrane Districts; Ontario Geological Survey, Map P.241 (Rev.), Compilation Series - Preliminary Map, Scale 1:126,720 or 1 inch to 2 miles. Compilation 1984.

Scott, G.M. 1984. Lake Nipigon Sheet, Thunder Bay District; Ontario Geological Survey, Map P.257 (Rev.), Compilation Series - Preliminary Map, Scale 1:126,720 or 1 inch to 2 miles. Compilation 1984.

Elevation in feet above mean sea level

Magnetic declination at the centre of the map area (49°45'N; 87°45'E) in 1989 is 3°38'W increasing 6.4' annually. Magnetic declination ranges from 3°16'W increasing 6.5' annually in the southwest corner of the map area, to 4°01'W increasing 6.3' annually, in the northeast corner of the map area.

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