

- SURFICIAL GEOLOGY**
- Op** Organics, peatland deposits
  - OL** Glaciolacustrine and glaciomarine deepwater deposits, clay, silt
  - OF** Glacioluvial 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, Jollicoe, 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.
  - Hollard, D.G. 1979. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Manistowickia, Ontario Geological Survey Map 5045, Scale 1:100,000.
  - Hollard, D.G. 1979. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Heaven Lake, Ontario Geological Survey Map 5051, Scale 1:100,000.
  - Hollard, D.G. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Marmion Lake, Ontario Geological Survey Map 5071, Scale 1:100,000.
  - Hollard, D.G. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Lac des Mille Lacs, Ontario Geological Survey Map 5072, 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.

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

**GEOLOGICAL SURVEY OF CANADA**  
**MINERAL RESOURCES DIVISION**  
**EXPLORATION GEOCHEMISTRY SUBDIVISION**

**CONTRACTORS**

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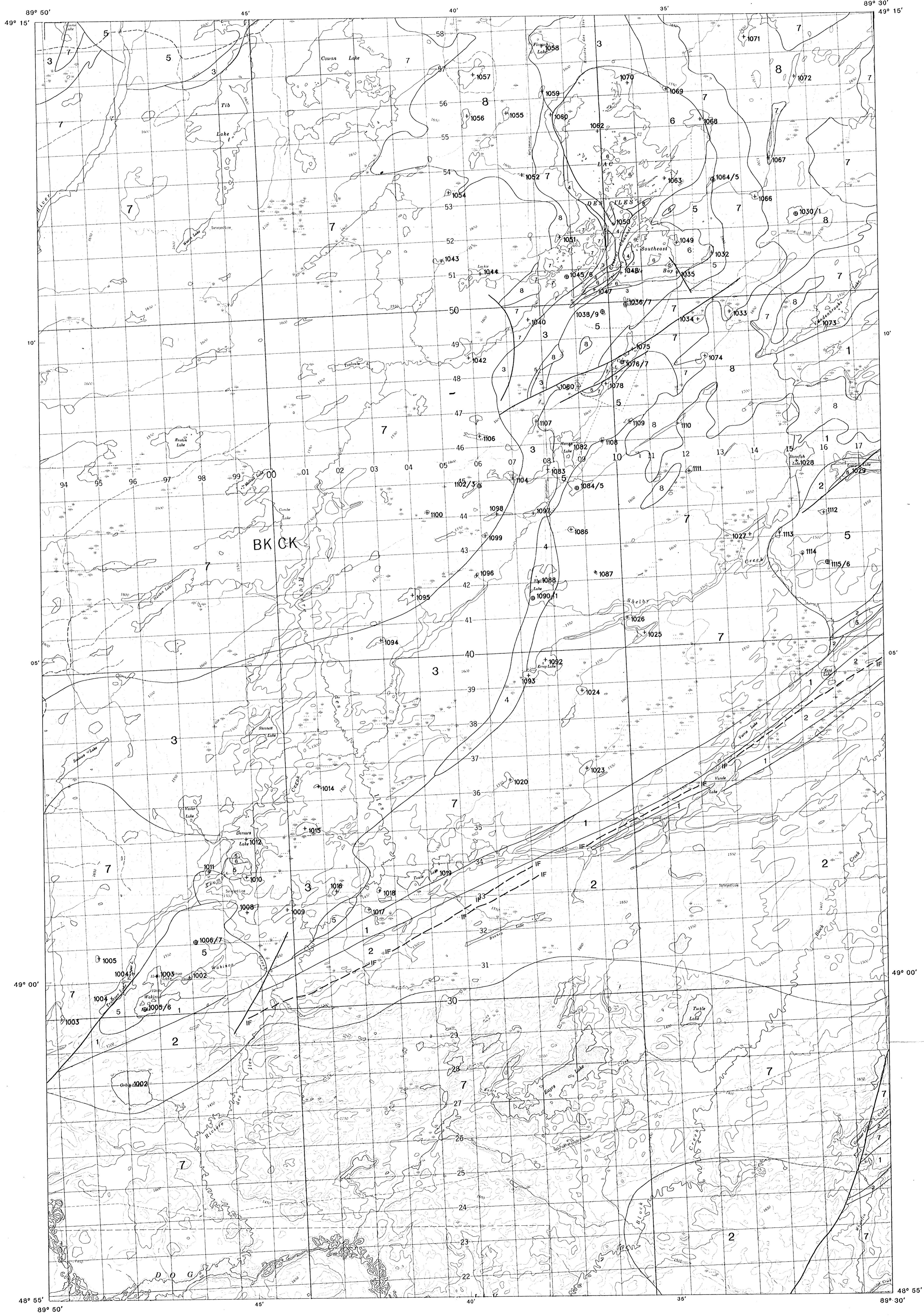
Contribution to Canada - Ontario Mineral Development Agreement 1985 - 1990, a subsidiary agreement under the Economic and Regional Development Agreement. Project funded by the Geological Survey of Canada.

Contribution à l'Entente auxiliaire Canada/Ontario sur l'exploitation minière 1985-1990 dans le cadre de l'Entente de développement économique et régional. Ce projet a été financé par la Commission géologique du Canada.



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- LEGEND**
- PRECAMBRIAN**
  - MIDDLE PROTEROZOIC**
  - 8\*** PDD 04\*\* Diabase dykes and sills
  - ARCHAIC**
  - 7** PLFP 02 Late felsic plutonic rocks: tonalite, diorite, granodiorite, granite, granite pegmatite, migmatite
  - 6** PU 02 Ultramafic rocks: serpentinite, wehrlite, clinopyroxene, olivine clinopyroxene, olivine melagabbro, wehlerite, hornblende, pyroxene hornblende, olivine hornblende
  - 5** PG 02 Gabbroic rocks: gabbro, gabbro-norite, norite, melagabbro, melagabbro-norite, leucogabbro, leucogabbro-norite, anorthositic gabbro, hornblende gabbro, pegmatitic and brecciated gabbro
  - 4** PD 02 Dioritic rocks: hornblende diorite, hornblende quartz diorite
  - 3** PEFP 02 Early felsic plutonic rocks: tonalite, gneissic tonalite, granulite, granite, pegmatite
  - 2** PMSR 02 Supracrustal metasediments: conglomerate, siltstone, arenite, biotite schist
  - 1F** PIF 02 Supracrustal metasediment: chert magnetite ironstone
  - 1** PMW 02 Supracrustal mafic metavolcanics: pillowed massive and schistose flows; amphibolite
- \* Map unit identifier assigned to rock type.  
 \*\* A mnemonic code assigned to rock types.

**SYMBOLS**

- Geological boundary
- Fault
- No data
- Field duplicate site

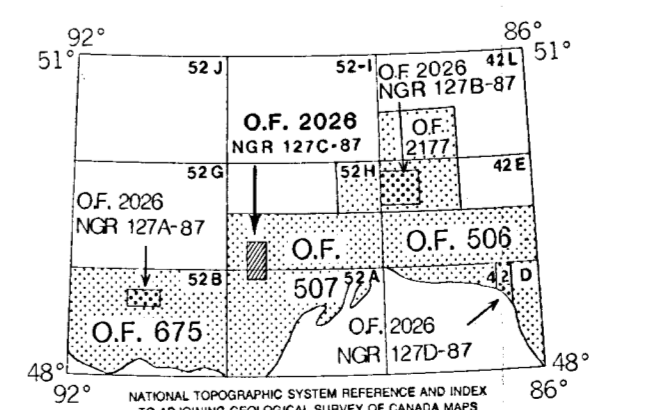
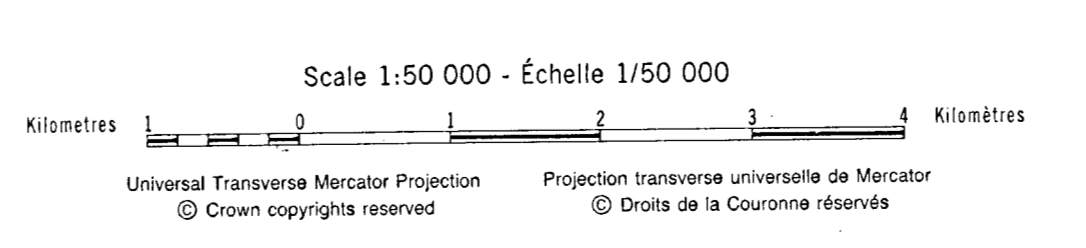
**Geology base derived from:**

- Kaye, L. 1969. Geology of the Eayra Lake - Skarnes Lake Area, District of Thunder Bay, Ontario Department of Mines, Geological Report 77, 89 p. Accompanied by Map 2172, Scale 1:63,360 or 1 inch to 1 mile.
- Sutcliffe, R.H. and Smith, A.R. 1988. Precambrian Geology of the Plutonic Rocks in the Lac des Iles - Tib Lake Area, District of Thunder Bay, Ontario Geological Survey Map, P 3098, Geological Series - Preliminary Map, Scale 1:50,000. Geology 1987, 1988.

Elevation in feet above mean sea level

Magnetic declination at the centre of the map area (49°05'N; 89°40'W) in 1989 is 1°09'W increasing 6.9' annually. Magnetic declination ranges from 0°50'W increasing 6.9' annually, in the southwest corner of the map area, to 1°24'W increasing 6.8' annually, in the northeast corner of the map area.

**SAMPLE LOCATION**  
**LAKE SEDIMENTS**  
 GSC OPEN FILE 2026  
 LAC DES ILES AREA  
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 127C-87  
**CANADA - ONTARIO**  
**MINERAL DEVELOPMENT AGREEMENT**  
 (1985-1990)  
 LAKE SEDIMENT AND WATER GEOCHEMICAL INFILL SURVEY  
 NORTHWESTERN ONTARIO, 1987



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