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Préfontaine, S. and Mumford, T. 2007. Precambrian geology of the McInnes Lake greenstone belt, Northwestern Ontario—north sheet; Ontario Geological Survey, Preliminary Map P.3589, scale 1:20 000.

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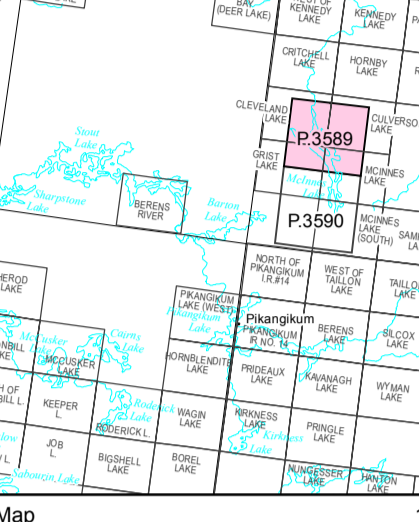


Table with 2 columns: Abbreviation and Full Name. Includes Cu (copper), Pt (platinum), Ni (nickel), and Zn (zinc).

- 1. 1626 ppm Ni (UTM 579829E 451566N)
2. 1125 ppm Ni (UTM 577987E 454246N)
3. 6440 ppm Cu, 187% Zn (UTM 577048E 453081N)

\* Preliminary assays; samples analyzed at the Geoscience Laboratories, Sudbury, Ontario.
† This list is common to maps P.3589 (McInnes Lake Greenstone Belt—North Sheet) and P.3590 (McInnes Lake Greenstone Belt—South Sheet). All occurrences are not present on this map.

Base map information is derived from the Ontario Land Information Warehouse, Land Information Ontario, Ontario Ministry of Natural Resources, scale 1:50 000, with modifications by staff of the Ministry of Northern Development and Mines.
Mapping conducted using Universal Transverse Mercator (UTM) coordinates in North American Datum 1983 (NAD83), Zone 15.

Curtis, T. 1980. Geology of McInnes Lake area, Ontario Geological Survey, unpublished maplet.
Ontario Geological Survey 2003. Single master gravity and aeromagnetic data for Ontario, Ontario Geological Survey, Geophysical Data Set 1036.

Stone, D., Atkinson, B., Crawford, J. and Halstead, J. 1993. Precambrian geology, Cribbell Lake area, Ontario Geological Survey, Preliminary Map P.3219, scale 1:50 000.

Stone, D. and Crawford, J. 1993. Precambrian geology, McInnes Lake area, Ontario Geological Survey, Preliminary Map P.3217, scale 1:50 000.

Assessment files of the Red Lake Resident Geologist's office, Ministry of Northern Development and Mines, and the Geology Ontario Web site.

Magnetic declination for this map area approximately 0°11'W in 2006.

Geology not tied to survey lines.

Metric conversion factor: 1 foot = 0.3048 m.

Geology by S. Préfontaine, T. Mumford and assistants.
Digital drafting by M. Nevelis and S. Préfontaine.

Cartographic production by A. Evers.

To enable the rapid dissemination of information, this map has not received a technical edit. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Users should verify critical information.

Issued 2007.

Information from this publication may be quoted if credit is given. It is recommended that reference to this map be made in the following form: Préfontaine, S. and Mumford, T. 2007. Precambrian geology of the McInnes Lake greenstone belt, northwestern Ontario—north sheet, Ontario Geological Survey, Preliminary Map P.3589, scale 1:20 000.

It is good practice to contact the First Nations communities located within and adjacent to this geological survey if you intend to carry out any work in these areas. Early contact enables all parties to establish a strong business relationship and address respective needs.

LEGEND<sup>a</sup>

PHANEROZOIC

CENOZOIC

QUATERNARY

RECENT

PLEISTOCENE

UNCONFORMITY

PRECAMBRIAN

ARCHEAN

UNCONFORMITY

18 Frame Lake Pluton

INTRUSIVE CONTACT

17 Granite

INTRUSIVE CONTACT

16 Granite

INTRUSIVE CONTACT

15 Gabbro

INTRUSIVE CONTACT

14 Granite to Granodiorite

INTRUSIVE CONTACT

13 Diorite

INTRUSIVE CONTACT

12 Granite to Granodiorite

INTRUSIVE CONTACT

11 Biotite Tonalite to Granodiorite

INTRUSIVE CONTACT

10 Hornblende Tonalite

INTRUSIVE CONTACT

9 Granodiorite to Tonalite

INTRUSIVE CONTACT

8 Gabbro

INTRUSIVE CONTACT

7 Tonalite to Granodiorite

INTRUSIVE CONTACT

6 Peridotite and Hornblende

INTRUSIVE CONTACT

5 Clastic and Chemical Metasedimentary Rocks<sup>b</sup>

INTRUSIVE CONTACT

4 Felsic Metavolcanic Rocks

INTRUSIVE CONTACT

3 Intermediate Metavolcanic Rocks

INTRUSIVE CONTACT

2 Mafic Metavolcanic Rocks

INTRUSIVE CONTACT

1 Ultramafic and Mafic Metavolcanic Rocks (Komatiites)

INTRUSIVE CONTACT

COMPOSITION

TEXTURE, MINERALS

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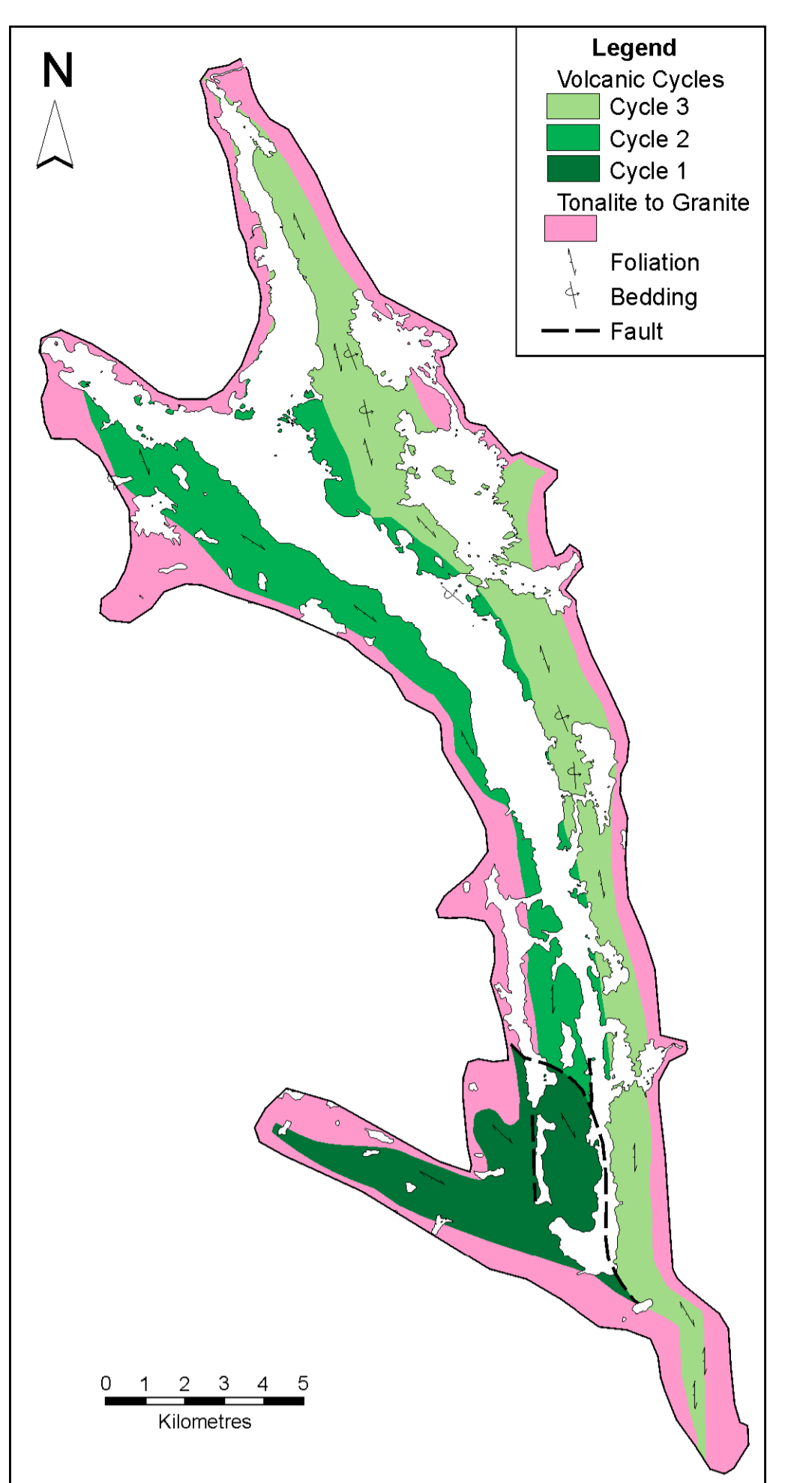
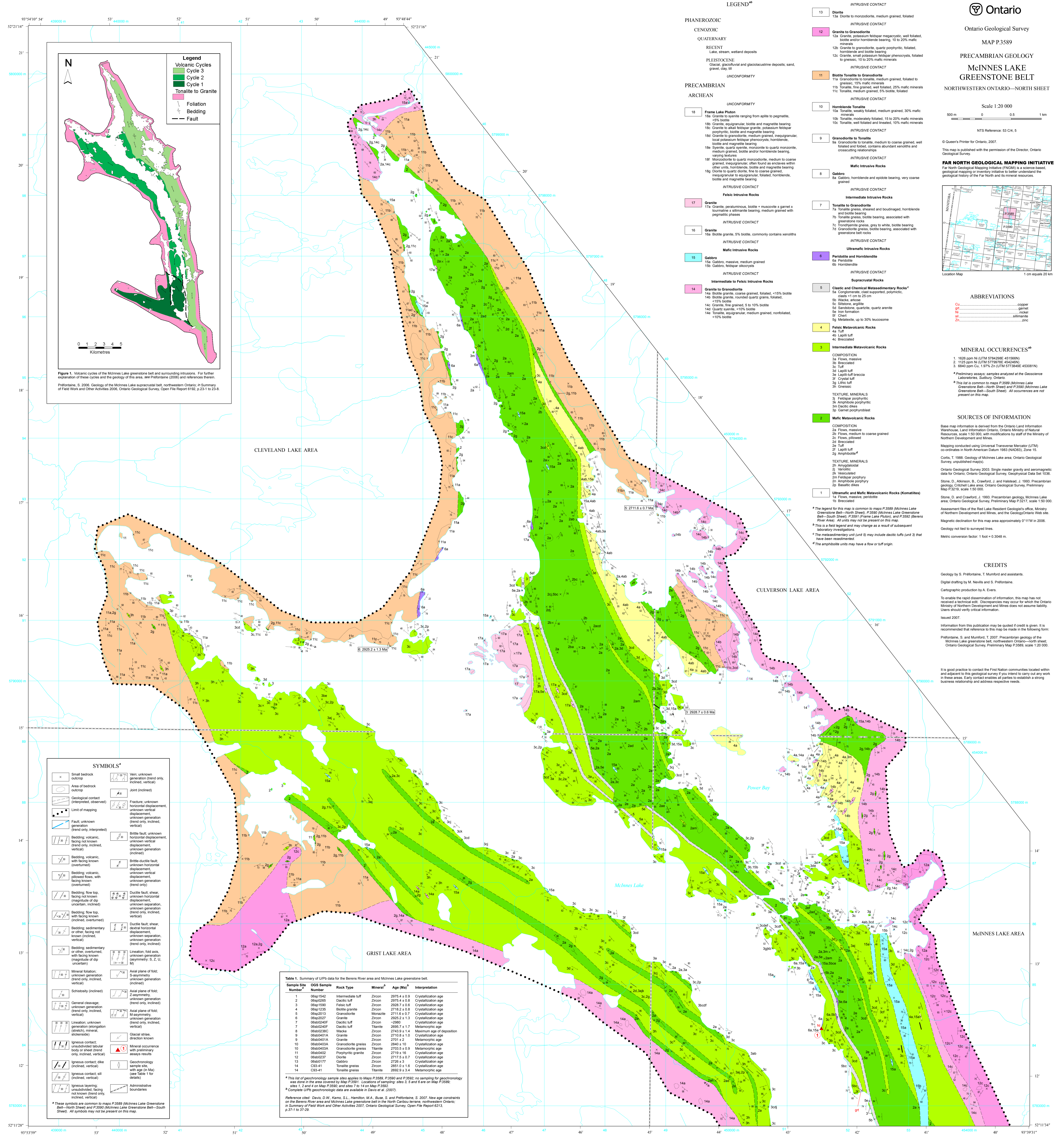


Figure 1. Volcanic cycles of the McInnes Lake greenstone belt and surrounding intrusions. For further explanation of these cycles and the geology of this area, see Préfontaine (2006) and references therein.

Préfontaine, S. 2006. Geology of the McInnes Lake supracrustal belt, northwestern Ontario, in Summary of Field Work and Other Activities 2006, Ontario Geological Survey, Open File Report 6182, p.23-1 to 23-8.

Table 1. Summary of U/Pb data for the Berens River area and McInnes Lake greenstone belt. Columns include Sample No., OGS Sample Number, Rock Type, Minerals, Age (Ma), and Interpretation.

\* This list of geochronology sample sites applies to Maps P.3589, P.3590 and P.3592; no sampling for geochronology was done in the area covered by Map P.3581. Locations of sampling sites 3, 5 and 6 are on Map P.3589.
† Complete U/Pb geochronologic data are available in Davis et al. (2007).
Reference cited: Davis, D.W., Kamo, S.L., Hamilton, M.A., Buse, S. and Préfontaine, S. 2007. New age constraints on the Berens River area and McInnes Lake greenstone belt in the North Carolin terrane, northwestern Ontario, in Summary of Field Work and Other Activities 2007, Ontario Geological Survey, Open File Report 6213, p.37-1 to 37-29.

SYMBOLS\* table with 2 columns: Symbol and Description. Includes symbols for small bedrock outcrop, area of bedrock outcrop, geological contact, limit of mapping, fault, bedding, and various types of faults and folds.

\* These symbols are common to maps P.3589 (McInnes Lake Greenstone Belt—North Sheet) and P.3590 (McInnes Lake Greenstone Belt—South Sheet). All symbols may not be present on this map.