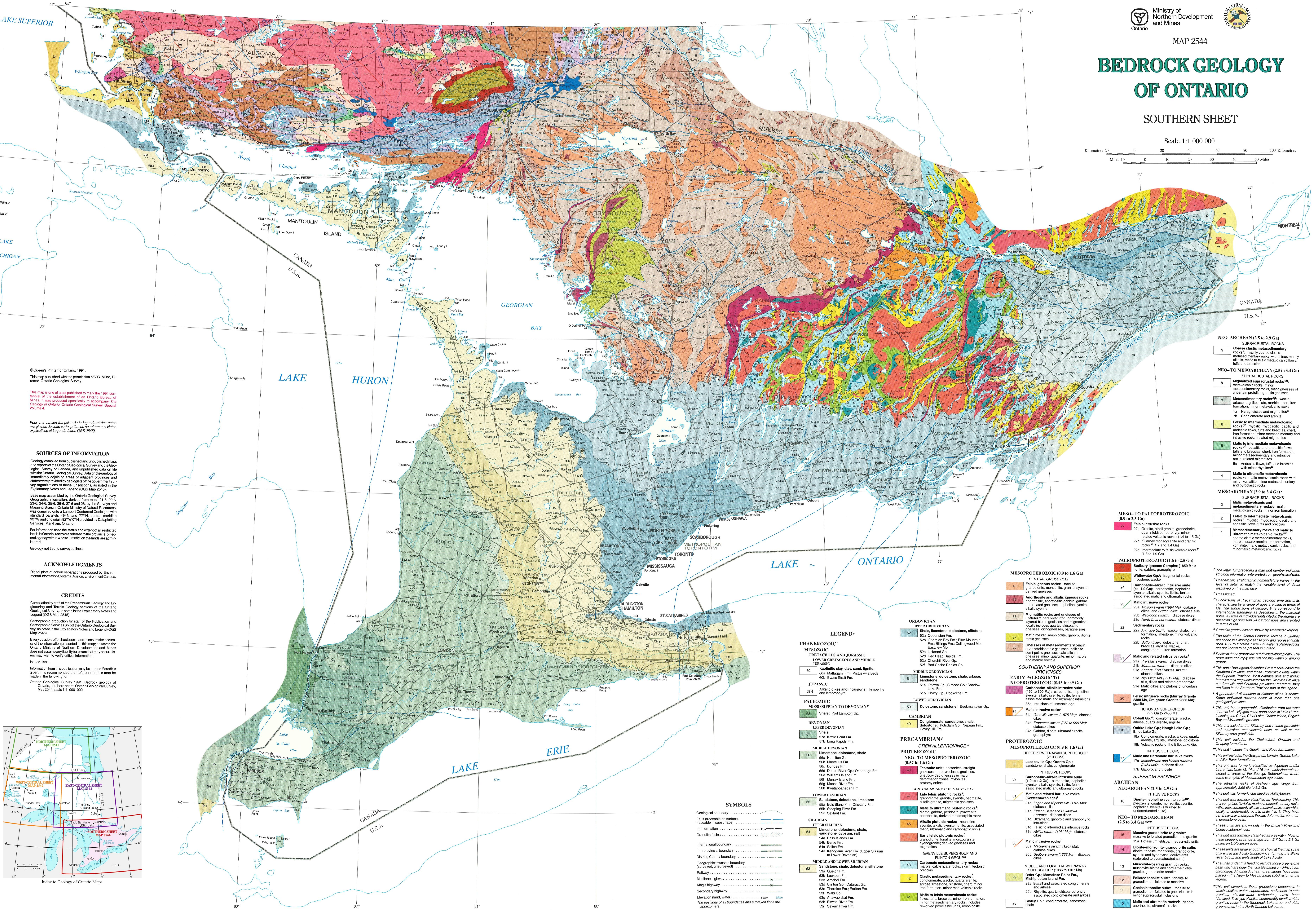


# BEDROCK GEOLOGY OF ONTARIO

## SOUTHERN SHEET

Scale 1:1 000 000

Kilometres 0 20 40 60 80 100  
Miles 0 10 20 30 40 50



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This map is one of a set published to mark the 1991 centennial of the establishment of an Ontario Bureau of Mines. It was produced specifically to accompany *The Geology of Ontario*, Ontario Geological Survey, Special Volume 4.

Pour une version française de la légende et des notes marginales de cette carte, prière de se référer aux Notes explicatives et Légende (carte OGS 2545).

### SOURCES OF INFORMATION

Geology compiled from published and unpublished maps and reports of the Ontario Geological Survey and the Geological Survey of Canada, and published data on file with the Ontario Geological Survey. Data on the geology of immediately adjoining areas of adjacent provinces and states were provided by geologists of the government survey organizations of those jurisdictions, as noted in the Explanatory Notes and Legend (OGS Map 2545).

Base map assembled by the Ontario Geological Survey, Geographic Information, derived from maps 21-6, 22-6, 23-6, 24-6, 25-6, 26-6, 27-6 and 28-6, by the Survey and Mapping Branch, Ontario Ministry of Natural Resources, was compiled onto a Lambert Conformal Conic grid with standard parallels 40°N and 77°N, central meridian 82°W and grid origin 82°W. Provided by Datapointing Services, Markham, Ontario.

For information as to the status and extent of all restricted lands in Ontario, users are referred to the provincial or federal agency within whose jurisdiction the lands are administered.

Geology not filed to surveyed lines.

### ACKNOWLEDGMENTS

Digital plots of colour separations produced by Environmental Information Systems Division, Environment Canada.

### CREDITS

Compilation by staff of the Precambrian Geology and Engineering and Terrain Geology sections of the Ontario Geological Survey, as noted in the Explanatory Notes and Legend (OGS Map 2545).

Cartographic production by staff of the Publication and Cartographic Services Unit of the Ontario Geological Survey, as noted in the Explanatory Notes and Legend (OGS Map 2545).

Every possible effort has been made to ensure the accuracy of the information presented on this map; however, the Ontario Ministry of Northern Development and Mines does not assume any liability for errors that may occur. Users may wish to verify critical information.

Issued 1991.  
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:

Ontario Geological Survey 1991. Bedrock geology of Ontario, southern sheet Ontario Geological Survey, Map 2544, scale 1:1 000 000.

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NEO-ARCHAIC (2.5 to 2.9 Ga)

9 Coarse clastic metasedimentary rocks<sup>9</sup>; mainly coarse clastic metasedimentary rocks, with minor, mainly alkalic, mafic to felsic metavolcanic flows, tuffs and breccias.

NEO-TO MESOARCHAIC (2.5 to 3.4 Ga)

8 Migmatized supracrustal rocks<sup>8</sup>; mafic metasedimentary rocks, mafic gneisses of uncertain protolith, granitic gneisses and orthogneisses, minor metasedimentary and mafic rocks.

7a Metasedimentary rocks<sup>7a</sup>; wackes, arkoses, argillites, siltstones, chert, iron formation, minor metasedimentary and mafic rocks.

7b Conglomerates and migmatites<sup>7b</sup>; conglomerates and migmatites.

6 Felsic to intermediate metavolcanic rocks<sup>6</sup>; rhyolitic, rhyodacitic, dacitic and andesitic flows, tuffs and breccias, chert, iron formation, minor metasedimentary and mafic rocks.

5 Mafic to intermediate metavolcanic rocks<sup>5</sup>; basaltic and andesitic flows, tuffs and breccias, chert, iron formation, minor metasedimentary and mafic rocks.

4 Mafic to ultramafic metavolcanic rocks<sup>4</sup>; mafic metavolcanic rocks with minor orthogneisses, minor metasedimentary and mafic rocks.

MESOARCHAIC (2.9 to 3.4 Ga)<sup>4</sup>

3 Mafic metavolcanic and metasedimentary rocks<sup>3</sup>; mafic metavolcanic rocks, mafic metasedimentary and mafic rocks.

2 Felsic to intermediate metavolcanic rocks<sup>2</sup>; rhyolitic, rhyodacitic, dacitic and andesitic flows, tuffs and breccias.

1 Metasedimentary rocks and mafic to ultramafic metavolcanic rocks<sup>1</sup>; mafic metasedimentary rocks, mafic gneisses of uncertain protolith, granitic gneisses and orthogneisses, minor metasedimentary and mafic rocks.

MESO-TO PALEOPROTEROZOIC (0.9 to 2.5 Ga)

27a Granite, alkali granite, granodiorite, quartz felsic plutonic rocks (1.4 to 1.5 Ga)

27b Kilmoryn monzogranite and granitic rocks (1.7 and 1.4 Ga)

27c Intermediate to felsic volcanic rocks<sup>27c</sup> (1.5 to 1.9 Ga)

PALEOPROTEROZOIC (1.6 to 2.5 Ga)

28 Sudbury Igneous Complex (1850 Ma)

29 Whitewater Gp. (1.8 Ga); fragmental rocks, mudstones, wackes

24 Carbonate-alkalic intrusive suite (ca. 1.8 Ga); carbonates, nepheline syenite, alkalic syenite, jolite, leucite; associated mafic and ultramafic rocks

23a Mafic intrusive rocks<sup>23a</sup>; diorite, gabbro, andesite, quartz diorite, diabase dikes (2.2 Ga to 2.45 Ga)

23b Quaternary Gp. (2.2 Ga to 2.45 Ga); diabase dikes

22a Annapolis Gp. (2.2 Ga to 2.45 Ga); diabase dikes

22b Quaternary Gp. (2.2 Ga to 2.45 Ga); diabase dikes

21a Precambrian swarm: diabase dikes

21b Marathon swarm: diabase dikes

21c Kilmoryn-Cort Francon swarm: diabase dikes

21d Mafic and related plutonic rocks of uncertain age

20 Felsic intrusive rocks (Murray Granite 2580 Ma, Croydon Granite 2555 Ma); granites

19a Cobalt Gp.; conglomerate, wackes, arkoses, quartz arenite, argillite

19b Quirke Lake Gp.; Hough Lake Gp.; Elliot Lake Gp.

18a Conglomerate, wackes, arkoses, quartz arenite, argillite, limestone, dolostone

18b Volcanic rocks of the Elliot Lake Gp.

17a Mafic and ultramafic intrusive rocks

17b Mafic and ultramafic intrusive rocks

17c Mafic and ultramafic intrusive rocks

17d Mafic and ultramafic intrusive rocks

17e Mafic and ultramafic intrusive rocks

17f Mafic and ultramafic intrusive rocks

17g Mafic and ultramafic intrusive rocks

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17v Mafic and ultramafic intrusive rocks

17w Mafic and ultramafic intrusive rocks

17x Mafic and ultramafic intrusive rocks

17y Mafic and ultramafic intrusive rocks

17z Mafic and ultramafic intrusive rocks

17aa Mafic and ultramafic intrusive rocks

17ab Mafic and ultramafic intrusive rocks

17ac Mafic and ultramafic intrusive rocks

17ad Mafic and ultramafic intrusive rocks

17ae Mafic and ultramafic intrusive rocks

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17cn Mafic and ultramafic intrusive rocks

17co Mafic and ultramafic intrusive rocks

17cp Mafic and ultramafic intrusive rocks

17cq Mafic and ultramafic intrusive rocks

17cr Mafic and ultramafic intrusive rocks

17cs Mafic and ultramafic intrusive rocks

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17cw Mafic and ultramafic intrusive rocks

17cx Mafic and ultramafic intrusive rocks

17cy Mafic and ultramafic intrusive rocks

17cz Mafic and ultramafic intrusive rocks

17da Mafic and ultramafic intrusive rocks

17db Mafic and ultramafic intrusive rocks

17dc Mafic and ultramafic intrusive rocks

17dd Mafic and ultramafic intrusive rocks

17de Mafic and ultramafic intrusive rocks

17df Mafic and ultramafic intrusive rocks