



- LEGEND**
- CENOZOIC-QUATERNARY**
- POST-CHAMPLAIN SEA DEPOSITS**
- 7** **ORGANIC DEPOSITS:** mainly muck and peat in bogs, fens, swamps, and poorly drained areas; generally < 4 m thick.
- CHAMPLAIN SEA SEDIMENTS**
- NEARSHORE SEDIMENTS:** gravel, sand, and coarser material; generally well sorted.
- 5a** Gravel, sand, and boulders; beaches commonly fossiliferous; nature of sediment controlled by underlying material (gravel, sand, and boulders where developed from till and glacioluvial deposits; silts and shingles where developed from sedimentary bedrock); generally < 2 m thick.
- 5b** Fine- to medium-grained sand, calcareous and commonly fossiliferous; nearshore sand generally occurs as a sheet or as bars or spits associated with glacioluvial materials; generally < 2 m thick.
- 4** **DELTAIC AND ESTUARINE DEPOSITS:** medium- to fine-grained sand, in some places fossiliferous; lies outside abandoned channels; most common deposit is a combined silt-sand plain that developed as water levels fell; generally < 4 m thick.
- 3** **OFFSHORE MARINE DEPOSITS:** clay, silty clay, and silt commonly calcareous and fossiliferous; locally overlain by thin sands. Upper parts are generally mottled or laminated reddish brown and bluish grey and may contain lenses and pockets of sand, but at depth the clay is uniform and blue-grey; generally < 30 m thick.
- GLACIAL DEPOSITS**
- GLACIOLUVIAL DEPOSITS:** gravel and sand, poorly to well sorted and bedded, mainly coarse- to medium-grained with numerous cobbles, boulders, and lenses of till.
- 2** Gravel and sand in the form of outwash plains, valley trains, kame terraces, outwash fans, and ridges; surface commonly pitted by closed depressions; occurs at or above marine limit (> 200 to 250 m); subaqueous outwash sediments: sand, gravel, boulder gravel, and river diamict; locally fossiliferous; commonly capped by a discontinuous fossiliferous gravel and sand < 2 m thick; interpreted as ice contact stratified drift deposited below wave base in the Champlain Sea.
- TILL:** sandy and silty compact diamict; grey at depth but brown where oxidized; calcareous where derived from sedimentary rocks and not leached; consists dominantly of lodgment till. In areas that lie below marine limit (approx. 198 m a.s.l.) it is overlain by a discontinuous lag consisting of gravel, sand, and boulders; generally < 5 m thick.
- 1a** Till, plain; local relief < 5 m.
- 1b** Till, drumlinized.
- 1c** Till, hummocky to rolling; local relief 5 to 25 m.
- PALEOZOIC**
- Pa** **BEDROCK**
Limestone, dolomite, sandstone, and locally shale; relatively flat lying; mainly occurring as bare, tabular outcrops; includes areas thinly veneered by unconsolidated Quaternary sediments up to 1 m thick.
- Geological boundary (defined) ————

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QUATERNARY GEOLOGY OF THE CORNWALL AREA
ONTARIO

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Geology by D.A. St-Onge, 2006

Geological compilation and interpretation by D.A. St-Onge, completed 2006

Digital cartography by J.D. Narraway, Data Dissemination Division (DDD)

This map was produced from processes that conform to the Scientific and Technical Publishing Services Subdivision (DDD) Quality Management System, registered to the ISO 9001:2000 standard

Scale 1:50 000 / Echelle 1/50 000
Kilometres 0 1 2 3 4 Kilometres

Universal Transverse Mercator Projection
North American Datum 1983
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Projection transversale universelle de Mercator
Système de référence géodésique nord-américain, 1983
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Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Digital base map from data compiled by Geomatics Canada, modified by DDD

Mean magnetic declination 2006, 14°18'W, increasing 2.9" annually

Elevations in metres above mean sea level

31 G6 OF3104	31 G7 OF3479	31 G8 OF3479
31 G9 OF3101	31 G2 OF5013	31 G1 OF3485
31 B14	U.S.A.	U.S.A.

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