

LEGEND

This legend is common to maps 1798A, 1799A, 1800A and 1801A. Coloured legend blocks indicate map units that appear on this map.

QUATERNARY

POSTGLACIAL DEPOSITS

- 7** ORGANIC DEPOSITS: mainly muck and peat; 1 to 5 m thick; occurs in bogs, fens, swamps and poorly drained areas
- 6** ALLUVIAL DEPOSITS: silt, sand, and gravel with minor organic material; 1 to 5 m thick; modern floodplain or deltaic deposits; surfaces commonly scarred by abandoned channels

PROGLACIAL AND GLACIAL DEPOSITS

MARINE DEPOSITS: stratified to massive, clay to gravel deposited in deltaic, littoral, estuarine, nearshore, and deep water environments of the Champlain Sea; rarely fossiliferous; in many places overlain by glaciolacustrine sediments

- 5b** Littoral and nearshore sediments: gravel, gravely sand, sand, minor silt, generally well sorted; 1 to 25 m thick; occurs as beaches, bars, or sheets; includes deltaic and estuarine deposits
- 5a** Offshore sediments: silt, silty clay, and clay, locally overlain by thin sand; 1 to 10 m thick

GLACIOLACUSTRINE DEPOSITS: stratified to massive, clay to gravel deposited in deltaic, littoral, nearshore, and deep water environments of glacial lakes

- 4b** Littoral and nearshore sediments: gravel, gravely sand, sand, minor clay, generally well sorted; 1 to 25 m thick; includes nearshore and deltaic deposits; generally occurs as fills in topographic depressions
- 4a** Offshore sediments: silt, silty clay, clay, minor sand; 1 to 10 m thick; laminated to massive

GLACIOLACUSTRINE DEPOSITS: stratified sediments deposited at or near the glacier margin by meltwater streams

- 3** Proglacial sediments: gravel, gravely sand, and sand; 1 to 10 m thick; includes outwash; occurs as terrace remnants that are generally graded to former glacial lake or sea levels
- 2** Ice contact sediments: boulder and/or cobble gravel, gravely sand, sand, minor silt and diamict; 5 to 30 m thick; includes ice marginal subaqueous fan, esker and delta deposits

GLACIAL DEPOSITS: sandy or in places silty diamict; minor lenses or stringers of sand or silt; deposited directly by the ice as fill

- 1b** Till veneer: discontinuous cover over rock; average thickness less than 1 m on interfluvies; thicker locally in small depressions and on the lee sides of bedrock knobs; may include discontinuous, thin (less than 1 m) pockets of sand and gravel or silty clay in low lying areas
- 1a** Till blanket: generally continuous cover which masks bedrock morphology, few outcrops; greater than 1 m thick on interfluvies, where streamlined, thickness commonly exceeds 2 m; small deposits of stratified sand, gravel, and boulders commonly occur on the down-ice end of streamlined features

PRE-QUATERNARY

BEDROCK: rock, locally with a thin (less than 0.5 m) and discontinuous cover of surficial sediments

- R** Paleozoic rock, undivided: includes limestone, dolomite, sandstone, and locally shale; relatively flat-lying; occurring as bare tabular outcrops
- R** Precambrian rock, undivided: medium to high grade gneiss, carbonate metasediments, metachert, felsic intrusives, mafic intrusives; and noncarbonate metasediments; structurally complex; mainly forming rolling or hilly rock knob uplands

Rock outcrop x

Geological boundary wavy line

Striae (direction of ice flow assumed) parallel lines

Drumlin or other streamlined feature parallel to ice flow direction; length of symbol proportional to length of feature

Esker zigzag line

Assumed marine limit dashed line

Former strandline position of the Champlain Sea dashed line

Bedrock quarry star symbol

Pit in unconsolidated materials; mainly in gravel and sand but in places in clay or fill circle with dot

Fossil locally, freshwater species*, marine species** circle with cross

*Freshwater ostracods: *Cardinia subtriangulata* (C. Rodrigues University of Windsor, personal communication, 1989)

**Marine shells, *Macoma balica* (E.P. Henderson, personal communication, 1990)

Geology by I.M. Kettles 1986, 1989. Assisted in the field by J. Cousineau 1988, 1989

The author acknowledges information obtained from field notes of E.P. Henderson 1966 and W.W. Shils 1986

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Geological cartography by the Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Surveyors and Mapping Branch in 1978

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario, K1A 0E9

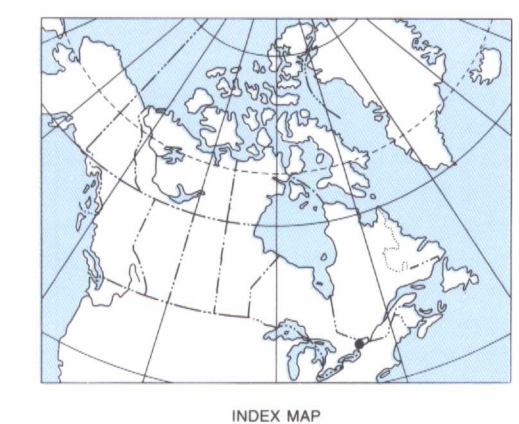
Magnetic declination 1991, 13°22' West, increasing 2.1' annually

Elevations in feet above mean sea level

Copies of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E9, 3303-33rd Street, N.W., Calgary, Alberta T2L 2A7

Contribution to Canada Ontario 1985 Mineral Development 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 dans le cadre de l'Entente de développement économique et régional. Ce projet a été financé par la Commission géologique du Canada.



MAP 1800A
SURFICIAL GEOLOGY
PERTH
ONTARIO

Scale 1:50 000 - Échelle 1/50 000

Kilometres / Kilomètres

Universal Transverse Mercator Projection / Projection transverse universelle de Mercator

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31F03	31F02	31F11	31G14
1798A			
31C14	31C15	31C16	31B13
	1798A	1800A	
31C11	31C10	31C09	31B12
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Recommended citation: Kettles, I.M. 1992. Surficial Geology, Perth, Ontario, Geological Survey of Canada, Map 1800A, scale 1:50 000

1800A