



SURFICIAL GEOLOGY

SURFICIAL DEPOSITS QUATERNARY

7 ORGANIC DEPOSITS: lichenous, sedge, and woody peat; thickness variable; includes both bog peat and fen peat; occupies most topographic lows within the landscape.

6 ALLUVIAL DEPOSITS: silt, sand and rounded gravel, commonly stratified; thickness variable, ranging from 100 metres, up to several metres deposited by streams within active drainage systems.

NONGLACIAL AND GLACIAL ENVIRONMENT

MAKIN-GIACOMARINI DEPOSITS: well sorted sand, stratified sand to silt, commonly capped by 100 cm, fine glacial deposits modified by marine processes during drift; commonly overlain by peat.

7b Nanticoke Sediments: well sorted silt, sand and gravel; up to 1 m thick; occurs as a series of ridges in the form of benches, bars, spurs, and/or graded ridges, or as a fan plain.

7c Chert Sediments: poorly sorted heavy silt, sandy silt, and sand with pebbles of interbedded sand and gravel and sandstone sand; probably a fill plain located by rising of the sea level; may be present by water erosion; thickness of up to 10 metres; may contain marine fossils and is commonly overlain by organic material; Bay: may contain marine fossils and is commonly overlain by organic material.

GLACIOFLUVIAL DEPOSITS: massive to laminated sand, silt and clay, commonly overlain by a veneer of organic material; deposited in glacial Lake Agassiz; thickness variable; deposits may form a thin veneer overlying underlying glacial and bedrock topography; thick organic sand marking topography and from planar surfaces commonly marked with peat.

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GLACIAL ENVIRONMENT

GLACIOFLUVIAL DEPOSITS: well sorted, stratified sand and gravelly sand and silt, deposited in, around, or near a glacier, largely as a result of meltwater flow.

3 Ice-contact stratified drift: composed of stratified sand, gravel, silt and clay, commonly overlain by a veneer of organic material; deposited in, around, or near a glacier, largely as a result of meltwater flow.

2 Outwash sediments: well rounded, cross-stratified sands and gravels, 5 m to 20 m thick, characterized by bedded channels and local depressions; may form valley floors or terraces; thickness commonly 100 m and thinner.

GLACIAL DEPOSITS: all ice-related sediments, commonly unsorted to poorly sorted debris deposited at the foot of or beneath glaciers, or under ice shelves. Glacial deposits in the western part of the province (SOUTH, OSC and GAT) are sandy and contain a large proportion of debris derived from crystalline igneous lithologies. Further east (LAK and GAT), glacial deposits are silty and contain a large proportion of clastic debris derived from Palaeozoic carbonate lithologies (Pebble Bay and adjacent lowlands).

1b Till Blanks: form a continuous cover, 1 to several metres in thickness, marking underlying bedrock topography; surface commonly flat, and may be covered by a veneer of Lake Agassiz clay.

1a Till Blanks: form a continuous cover, ranging from 0.5 to 1 metre in thickness; under some conditions fill isolated bedrock depressions; surface morphology reflects underlying bedrock structure.

BEHIND PRE-QUATERNARY

R2 PALEOZOIC ROCK: sedimentary carbonate rocks, dolomitic limestone and dolomite.

R1 PRECAMBRIAN ROCK: east-west trending belts of metasedimentary and metavolcanic rocks and associated folia; to the west, massive igneous rocks.

SYMBOLS

small bedrock outcrop
 siltar (ice flow direction known, unknown)
 Bluff face
 crossed siltar (1 = older)
 fluting
 long and tall (direction of ice flow known)
 bench table
 * meander, end or distributary meander
 * siltar (direction of flow known, unknown)
 * meadow channel (large, small)
 beach ridge
 thermokarst depression
 dates
 ice-contact delta
 * flooded area

* unit or symbol does not appear on this map sheet

Geology by R. N. Wilton, C. A. Kazyski, 1984, and V. J. Way Noe, 1985.
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SURFICIAL GEOLOGY BROCHET MANITOBA

Scale 1:125 000 - Échelle 1/125 000

Universal Transverse Mercator Projection Projection Transverse universelle de Mercator
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