

# L E G E N D

Coloured legend blocks indicate map units that appear on this map

## QUATERNARY - SURFICIAL DEPOSITS

### NONGLACIAL ENVIRONMENT

**ORGANIC DEPOSITS:** peat, 1 to 3 m thick; commonly underlain by fine glacial lake deposits; mantles extensive areas on the Paleozoic terrain or occurs in more confined low-lying poorly drained parts of the Shield

- 7b

*Fen peat: wet, sedge and moss peat; includes string fen, delta and riverine marshes; occurs as flat grassy surfaces with few trees, and commonly visible surface waters; derived from sedge and moss vegetation; permafrost appears to be absent except in isolated palsa or peat plateau which occur within the fen bog*
- 7a

*Bog peat: moss and woody peat; occurs as raised irregular surfaces with an open to closed tree cover; derived from spruce forest vegetation; thermokarst depressions and ponds, wooded palsas and forested peat plateaus are common; contains some areas of collapse scar fens*
- 6

**ALLUVIAL DEPOSITS:** silt, sand, and gravel, up to 20 m thick; deposited by running water in both modern and old streams; occurs mostly in the drainageway of the Saskatchewan River, as floodplains, terraces, point bars, meander scars, and deltas

### PROGLACIAL ENVIRONMENT

**GLACIAL LAKE DEPOSITS:** massive to stratified clay, silt, sand, and gravel; thickness ranges from a thin veneer to tens of metres; deposited in glacial Lake Agassiz and carried to the basin in large part by glacial meltwater

- 5c

*Nearshore and littoral sediments: sand, gravel, and rock rubble, moderately sorted and commonly horizontally bedded; occurring either as a blanket of sand (commonly less than 2 m thick) grading basinward into finer sediments or as isolated or series of ridges, 1 to 3 m in height (includes beaches, bars, and spits), commonly well developed on glaciofluvial deposits; flights of rubble beach deposits occur on carbonate bedrock in the SE part of the study area*
- 5b

*Offshore sediments: clay, silt and silty sand; generally laminated, greyish, and weakly calcareous, or massive and brownish near surface; 2 to 18 m thick, up to 45 m thick in the Minago glaciolacustrine plain; may contain iceberg sediments, turbidites, and clayey diamictons deposited at the ice margin or under a floating ice shelf; forms flat plains in low relief areas, commonly mantled with peat; surfaces locally inscribed by iceberg scours*
- 5a

*Offshore sediment veneer: clay, silt and silty sand; forms a discontinuous blanket, less than 2 m thick; deposits mimicking underlying glacial and bedrock topography; also includes undifferentiated glaciolacustrine sediments deposited in deep water beyond or near the ice margin*

### GLACIAL ENVIRONMENT

**GLACIOFLUVIAL DEPOSITS:** water sorted, stratified sand, gravel, and cobbles; up to 25 m thick; deposited in, around, or near a glacier, largely as a result of meltwater flow

- 4

*Outwash sediments: sands and gravels, well rounded and commonly stratified; 2 to 20 m thick, broken by braided channels and kettle depressions; occurs either as valley trains and subaerial outwash fans, within or adjacent to meltwater channels or as subaqueous fans formed in glacial Lake Agassiz; surfaces are commonly terraced and hummocky*
- 3

*Ice contact stratified drift: interstratified sand, gravel, cobbles, and diamicton; thickness ranges from 3 to 25 m; forming eskers, kames, crevasse fillings, ice contact deltas, and recessional, end, and interlobate moraines*
- 2a 2b

*Till blanket: forms a continuous cover, 1 to several metres in thickness, masking underlying bedrock topography; surface commonly fluted and may be covered by a discontinuous blanket of Lake Agassiz clay; 2a - non calcareous till; 2b - calcareous till*
- 1a 1b

*Till veneer: forms a discontinuous cover, ranging from 0 to 1 m in thickness; commonly occurs on the lee side of bedrock highs; interspersed with isolated areas of thicker till in bedrock depressions; surface morphology reflects underlying bedrock structure; 1a - non-calcareous till; 1b - calcareous till*

## PRE-QUATERNARY - BEDROCK

- R<sub>2</sub>

*Paleozoic sedimentary carbonate rocks: primarily dolomite and dolomitic limestone, and some sandstones; surfaces are commonly pitted and frost shattered, but glacially polished and striated surfaces are preserved locally; occurs as flat-lying outcrops with patches of thin drift*
- R<sub>1</sub>

*Precambrian metavolcanic and metasedimentary rocks and associated intrusive bodies: metavolcanics, metasediments, granitic and gneissic lithologies, and some gabbroic intrusions; glacially scoured outcrops form abundant roches moutonnées and striated or grooved surfaces; gently rolling topography with thin patchy drift cover*

## SYMBOLS

- Geological boundary . . . . .
- Small bedrock outcrop . . . . .
- Rock escarpment . . . . .
- Striae (ice flow direction known, unknown; poorly defined) . . . . .
- Crossed striae (1 = oldest) . . . . .
- Streamlined landform . . . . .
- Crag and tail landform . . . . .
- Roches moutonnées . . . . .
- Iceberg scour . . . . .
- Moraine ridge (recessional, end or interlobate) . . . . .
- Esker (direction of flow known, unknown). . . . .
- Abandoned river channel (large, small) . . . . .
- Kettle hole (small, large) . . . . .
- Beach ridge, terrace, spit, or bar . . . . .
- Thermokarst depressions (small, large). . . . .
- Palsen and peat plateau . . . . .
- Gravel pit (active, abandoned) . . . . .
- Quarry . . . . .