

LEGEND

Coloured legend blocks indicate map units that appear on this map

SURFICIAL DEPOSITS
QUATERNARY

NONGLACIAL ENVIRONMENT

ORGANIC DEPOSITS: peat, muck; 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, floodplain and riverine marshes; occurs as flat grassy surfaces with few trees, and commonly visible surface waters; permafrost present in isolated palsa or small peat plateaus which occur within the fen

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 palsa and forested peat plateaus are common; contains some areas of collapse scar fens

6

ALLUVIAL DEPOSITS: silt, sand, and minor gravel, 1 to 30 m thick; floodplain and channel-fill sediments deposited in the abandoned drainageway of Saskatchewan River within the Minago River channel

PROGLACIAL ENVIRONMENT

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

5c

Nearshore and littoral sediments: sand, gravel, or rock shingle, moderately well sorted and commonly horizontally bedded; occurs as isolated or series of ridges, 1 to 3 m in height, including beaches, bars, and spits; flights of shingle beach deposits occur along carbonate bedrock escarpments; blankets of sand, commonly less than 2 m thick, grade basinward into finer sediments

5b

Offshore sediment blanket: clay, silt, and silty sand, minor sand, gravel and diamicton; fine grained deep water sediments are noncalcareous to weakly calcareous and commonly massive near surface; 2 to 45 m thick; forms flat plains in low relief areas, mantled with peat; surfaces locally inscribed by iceberg scours

5a

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

GLACIAL ENVIRONMENT

GLACIOFLUVIAL DEPOSITS: stratified sand and gravel, minor diamicton; sorted coarse grained sediment deposited by flowing glacial meltwater in contact with or near the glacier

4

Subaqueous outwash sediments: well sorted fine sand; commonly rippled and/or crossbedded; interbedded with clay, gravel, and diamictic units of variable thicknesses; 1 to 20 m thick; deformation and faulting common; deposits occur as outwash fans or down-ice of bedrock highs; sediments deposited in glacial Lake Agassiz at or near the retreating ice front by meltwater turbidity currents

3

Proximal glaciofluvial sediments: moderately to well sorted and well rounded interstratified sand and gravel, minor diamicton; 3 to 25 m thick; forming eskers and crevasse fillings; deposited by subglacial or englacial meltwater streams

GLACIAL DEPOSITS: unsorted to poorly sorted diamictons deposited at the ice margin or beneath the glacier. The area has been glaciated by ice originating from two dispersal centres, the Keewatin Sector to the north, and the Labrador Sector to the east. Deposits have been subdivided into three units based on provenance and underlying bedrock: a) till of northern provenance overlying Precambrian rocks is generally sandy, permeable, noncalcareous to slightly calcareous, and locally derived; b) till of northern provenance but underlain by Paleozoic bedrock is sandy silty, moderately permeable, weakly to moderately calcareous, and moderately enriched in debris derived from Shield terrane; c) till of eastern provenance is silty sandy, weakly permeable, moderately to strongly calcareous, and contains few Shield clasts

2a

Till blanket: forms a continuous cover, 2 to several metres thick, locally up to 20 m thick in streamlined landforms, masking underlying bedrock topography; deposits form drumlinized till plain and minor DeGeer moraines; 2a - till of northern provenance underlain by Precambrian rocks; 2b - till of northern provenance underlain by Paleozoic rocks; 2c - till of eastern provenance

2b

2c

1a

Till veneer: forms a moderately discontinuous cover, 1 to 2 m thick, reflecting underlying bedrock structure; commonly occurs on the down-ice side of Precambrian bedrock outcrops or forms a thin but continuous cover over the Paleozoic bedrock, interspersed with isolated areas of drumlinized till plain; surface may be covered by a thin veneer of Lake Agassiz offshore sediments or littoral sand and gravel; 1a - till of northern provenance underlain by Precambrian rocks; 1b - till of northern provenance underlain by Paleozoic rocks; 1c - till of eastern provenance

1b

1c

Note: Till units labelled 1c-b or 2c-b are located in a zone of confluence between Keewatin and Labrador ice flows and have undetermined provenance

BEDROCK
PRE-QUATERNARY

R2

Paleozoic sedimentary rocks: primarily dolostone and dolomitic limestone, minor sandstone and shale; 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

R1

Precambrian rocks: metavolcanic and metasedimentary rocks, associated intrusive bodies; glacially scoured outcrops forming abundant roches moutonnées and striated or grooved surfaces; gently rolling topography with thin patchy drift cover

Geological boundary

Thermokarst depressions (small, large)

Palsen and peat plateau

Beach ridge, spit, or bar

Iceberg scour

Esker (direction of flow known)

Abandoned river channel (small, large)

DeGeer moraine

Paleocurrent direction

Drumlin, drumlinoid ridge, fluting; undifferentiated

Crag and tail landform

Roches moutonnées (where observed)

Striae (ice flow direction known, unknown, poorly defined, unknown and poorly defined)

Crossed striae (1 = oldest)

Small bedrock outcrop

Rock escarpment

Gravel pit (active)

Quarry

Ground observation point

Radiocarbon date

Date	Material
Lab no	Elevation (m)