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unsorted silt, sand, and clay with clasts (pebbles, cobbles and some boulders) deposited by glacial ice in a variety of landforms TILL PLAIN: flat to gently sloping; 3-5 m thick TILL BLANKET: gently to moderately sloping plain conforming to underlying topography; 2-8 m thick TILL BLANKET TO VENEER: conforming to underlying topography; 2-8 m thick TILL BLANKET TO VENEER, GULLIED: conforming to underlying topography; 2-8 m TILL VENEER TO BLANKET: conforming to underlying topography TILL, DRUMLINOID: hilly till plain with individual drumlins or extensive flutes; 3-15 m TILL, RIDGED: plain of generally coarse till (20-50% pebbles) deposited as ridges; commonly lateral and frontal moraines and hummocks; < 9 m thick TILL COMPLEX: largely hummocky, ridged, and/or hilly with patches of gravel; in some places Tx forms veneer over bedrock TILL COMPLEX, CHANNELLED TILL, CREVASSE FILL: coarse diamicton (>30% pebbles) deposited as crevasse fills forming highly compacted ridges; 2-15 m thick This pattern is used when organic deposits appear as a second or third component in Fenland constituting 10 - 50% of the map unit Peatland constituting 10 - 50% of the map unit Peatlands and fenlands undivided constituting 10 - 50% of the map unit This pattern is used when eolian sand veneer appears as a second or third component Discontinous veneer (<1m) mainly fine sand and silt covering other surficial units and Geological boundary (defined) Moraine ridge: unconsolidated sediments (till, sand and gravel) deposited in ridges at terminal, recessional, lateral and medial positions with respect to ice margins Moraine plateau: commonly rimmed and mantled by glaciolacustrine sediments overlying a till core. The moraine plateaus in this area are characterized by rims up to 15 m high enclosing a basinal area. They contain silty-clay sediments to a depth of 2m; actual thickness of glaciolacustrine sediments are unknown. Moraine plateaus span 100 – 1400 metres in diameter. No till was found below the rims or within the Drumlin, drumlinoid ridge or flute (direction uncertain): streamlined hill or ridge of till with long axis paralleling direction of iceflow Meltwater channel (major): erosion and channel formation by meltwater flow along, beneath or in front of a glacier or ice sheet; range from broad, shallow channels to deeply incised, steep-sided, flat-bottomed valleys; channels may run across or along slope contours; may be presently dry, poorly drained or contains an underfit stream or Meltwater channel (minor): erosion and channel formation by meltwater flow along, beneath or in front of a glacier or ice sheet; range from broad, shallow channels to deeply incised, steep-sided, flat-bottomed valleys; channels may run across or along slope contours; may be presently dry, poorly drained or contains an underfit stream or >>>>>>> Esker (direction certain): sinuous, low ridge composed of sand and gravel; formed by deposition from meltwater running through a channel beneath or within glacier ice Shoreline of former lake: low, ridged beach deposits of sand and gravel

Shoreline of former lake common to two lakes: low, ridged beach deposits of sand and

Author: A. Duk-Rodkin Geology by A. Duk-Rodkin, 2007 Digital cartography by F. Hardjowirogo and D.A. Lemay Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada Digital base from Geomatics Canada, modified by the Geological Survey of Canada Elevations in feet above mean sea level

peat and muck, occurring as flat to gently sloping plains

PEATLAND: sphagnum peat generally underlain by woody sedge peat; 0.5-2 m thick

sand, silt and minor gravel in association with modern drainage regime

and overbank floodplain sediments or in-channel bars; 3-5 m thick

ALLUVIAL PLAIN: coarse sand and gravel with silt and fine sand occurring as channel

ALLUVIAL FAN: mainly sand and silt with minor gravel and discontinuous layers of

ALLUVIAL COMPLEX: floodplain and fan deposits; may contain small areas of

diamicton and rubble derived from bedrock and/or surficial material through a variety

ANDSLIDE: bedrock, rubble and/or diamicton occurring as stepped or fan-shaped

deposits; formed by rotational slumping, retrogressive thaw flow, debris flows, rock topple and translational slides in surficial sediments and/or bedrock; they are

fine to medium sand, minor silt derived from deltaic or glaciolacustrine deposits in

EOLIAN COMPLEX: veneer to blanket deposited over other surficial materials

silt and clay with minor sand and diamicton; sediments deposited in a glacial lake

LACUSTRINE PLAIN: flat to gently sloping cover; locally overlain by eolian sand, commonly associated with glacial Lake Mackenzie; 1-10 m thick

SHORELINE DEPOSITS: low, ridged beach deposits of sand and gravel; the deposits maybe intercalated with till deposits, commonly deposited locally along the margins of

LACUSTRINE COMPLEX: deltaic sediments transitional between glaciofluvial and glaciolacustrine deposits with upper 0-5 m consisting of sand; locally overlain by eolian

sand and gravel locally with a veneer of eolian silt and/or sand; deposited as proglacial

GLACIOFLUVIAL DELTA: gently sloping, deposited in a glacial lake; 5-15 m thick

GLACIOFLUVIAL DELTA, CHANNELLED: gently sloping, deposited in a glacial lake; commonly channels cut into underlying till; 5-15 m thick

GLACIOFLUVIAL FAN: mainly coarse gravel with minor sand, locally with mudflow deposits; commonly deposited in a meltwater channel or lake where no sudden water level changes had occurred; 5-7 m thick

GLACIOFLUVIAL COMPLEX: includes eskers, kames and plains, commonly with

GLACIOFLUVIAL COMPLEX, CHANNELLED: containing ridges, hummocks and kettled plains, affected by glaciofluvial channelling; common along Blackwater River;

sand and gravel locally with a veneer of eolian silt and/or sand; deposited as

GLACIOFLUVIAL PLAIN: flat to gently sloping; 2-20 m thick

GLACIOFLUVIAL PLAIN, CHANNELLED: flat to gently sloping

GLACIOFLUVIAL TERRACE; 10-50 m thick

ice-contact sediment by glacial meltwater

thermokarst ponds in places; 2-30 m thick

GLACIOFLUVIAL HUMMOCKS: kames; < 5 m thick

particularly lacustrine and till plains; may include parabolic dunes

EOLIAN VENEER: discontinuous cover of mainly fine sand and silt over other surficial

COLLUVIAL COMPLEX: slope complex consisting of diamicton and rubble; may include minor landslides (Cz) and/or alluvial fan (Af) units; > 2 m thick

FENLAND: woody sedge peat; 1-2 m thick

PEATLAND: contains thermokarst depressions

PEATLAND (> 50%) AND FENLAND

FENLAND (> 50%) AND PEATLAND

peat occurring as fan deposits

of colluvial and landslide processes

prominent along former meltwater channels

association with deglacial wind direction

PARABOLIC DUNES: sand; < 15 m thick

placial Lake Mackenzie; < 5 m thick

units and bedrock; < 1 m thick

Glaciolacustrine deposits

Glaciofluvial deposits, outwash

Glaciofluvial deposits, ice contact

sediment by glacial meltwater

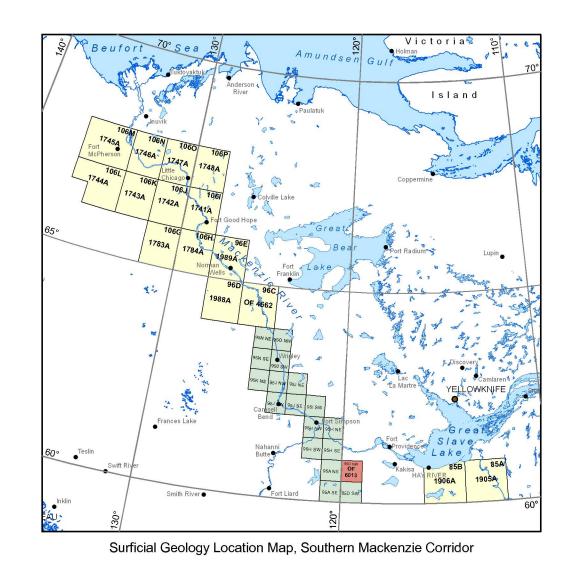
Colluvial and landslide deposits

Late Pleistocene

UNDERSTANDING THE LEGEND

The genetic category of surficial material is indicated by the first upper case letter, e.g., G (glaciofluvial). The morphologic category is indicated in lower case following the genetic category, e.g., Gp (glaciofluvial plain). The modifying processes are indicated in lower case separated from the morphologic category by a (-) e.g., Gp-k (glaciofluvial plain with thermokarst processes).

Combined units are used where, for reasons of scale, the units cannot be separated. The main unit, covering over 50% of the geologic polygon, is separated by a (.) from the secondary unit, e. g., Gp-k.Lp. In cases where the polygon has a third unit it is represented by a patterened symbol, e.g., eolian sand cover, peatlands or fenlands.



Dune ridge

Deflation hollow

Landslide ★ Ground Station

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