

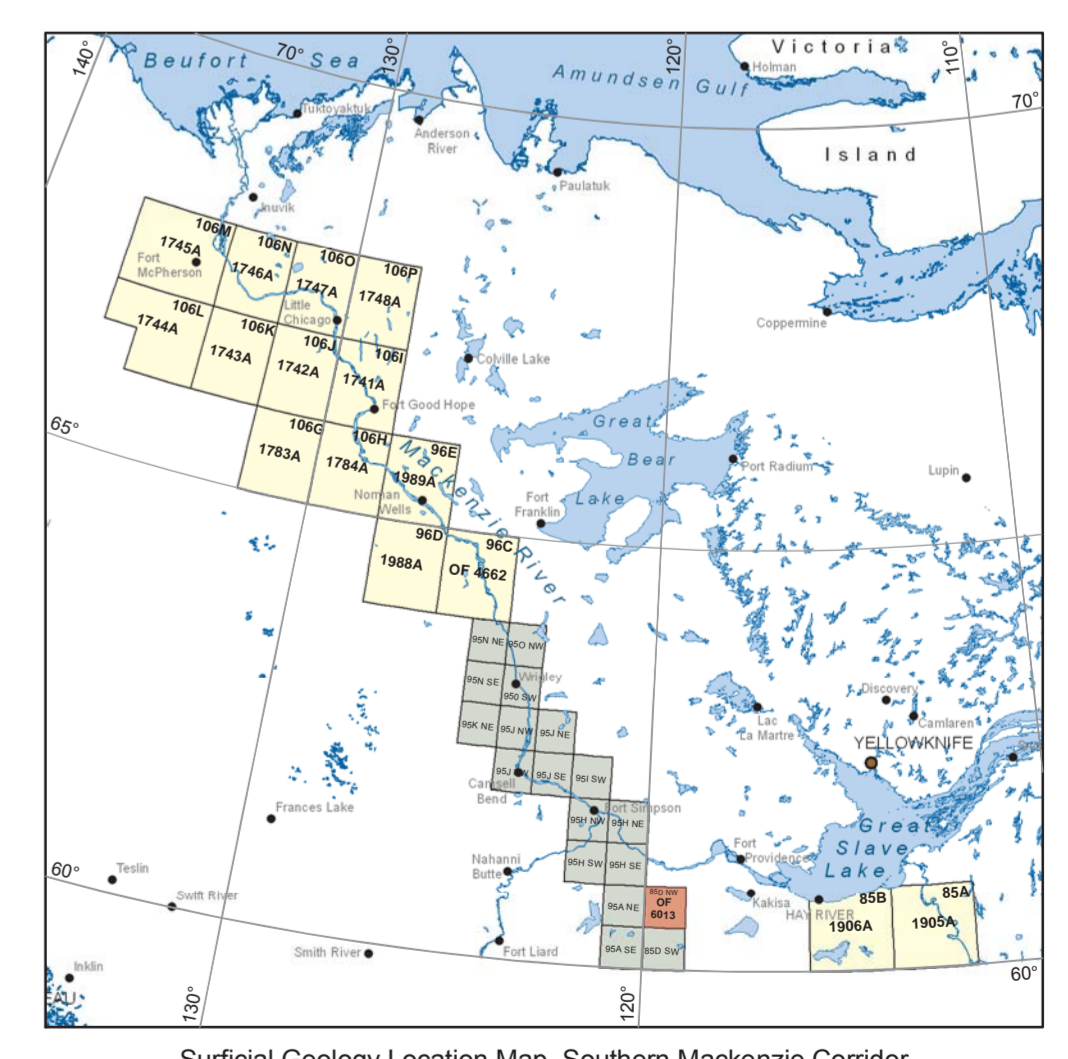
- Holocene**
- Organic deposits**
peat and muck, occurring as flat to gently sloping plains
- fo FENLAND: woody sedge peat; 1-2 m thick
 - pO PEATLAND: sphagnum peat generally underlain by woody sedge peat; 0.5-2 m thick
 - pO-k PEATLAND: contains thermokarst depressions
 - pIO PEATLAND (> 50%) AND FENLAND
 - fpO FENLAND (> 50%) AND PEATLAND
- Alluvial deposits**
sand, silt and minor gravel in association with modern drainage regime
- Ap ALLUVIAL PLAIN: coarse sand and gravel with silt and fine sand occurring as channel and overbank floodplain sediments or in-channel bars; 3-5 m thick
 - Af ALLUVIAL FAN: mainly sand and silt with minor gravel and discontinuous layers of peat occurring as fan deposits
 - Ax ALLUVIAL COMPLEX: floodplain and fan deposits; may contain small areas of colluvium
- Colluvial and landslide deposits**
diamict and rubble derived from bedrock and/or surficial material through a variety of colluvial and landslide processes
- Cx COLLUVIAL COMPLEX: slope complex consisting of diamict and rubble; may include minor landslides (Cz) and alluvial fan (Af) units; > 2 m thick
 - Cz LANDSLIDE: bedrock, rubble and/or diamict occurring as stepped or fan-shaped deposits; formed by rotational slumping, retrogressive flow, debris flows, rock topple and translational slides in surficial sediments and/or bedrock; they are prominent along former meltwater channels
- Late Pleistocene**
- Eolian deposits**
fine to medium sand, minor silt derived from detritic or glaciolacustrine deposits in association with glacial wind direction
- Ev EOLIAN VENEER: discontinuous cover of mainly fine sand and silt over other surficial units and bedrock; < 1 m thick
 - Ex EOLIAN COMPLEX: veneer to blanket deposited over other surficial materials particularly lacustrine and till plains; may include parabolic dunes
 - Er PARABOLIC DUNES: sand; < 15 m thick
- Glaciolacustrine deposits**
silt and clay with minor sand and diamict; sediments deposited in a glacial lake
- Lp LACUSTRINE PLAIN: flat to gently sloping cover; locally overlain by eolian sand, commonly associated with glacial Lake Mackenzie; 1-10 m thick
 - Ls SHORELINE DEPOSITS: low, ridged beach deposits of sand and gravel; the deposits may be intercalated with till deposits, commonly deposited locally along the margins of glacial Lake Mackenzie; < 5 m thick
 - Lx LACUSTRINE COMPLEX: deltaic sediments transitional between glaciolacustrine and glaciolacustrine deposits with upper 0-5 m consisting of sand; locally overlain by eolian sand; < 20 m thick
- Glaciolacustrine deposits, outwash**
sand and gravel locally with a veneer of eolian silt and/or sand; deposited as proglacial sediment by glacial meltwater
- Gp GLACIOFLUVIAL PLAIN: flat to gently sloping; 2-20 m thick
 - Gp-c GLACIOFLUVIAL PLAIN, CHANNELLED: flat to gently sloping
 - Gt GLACIOFLUVIAL TERRACE: 10-50 m thick
 - Gd GLACIOFLUVIAL DELTA: gently sloping, deposited in a glacial lake; 5-15 m thick
 - Gd-c GLACIOFLUVIAL DELTA, CHANNELLED: gently sloping, deposited in a glacial lake; commonly channels cut into underlying till; 5-15 m thick
 - Gf 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
- Glaciolacustrine deposits, ice contact**
sand and gravel locally with a veneer of eolian silt and/or sand; deposited as ice-contact sediment by glacial meltwater
- gh GLACIOFLUVIAL HUMMOCKS: kames; < 5 m thick
 - Gx GLACIOFLUVIAL COMPLEX: includes eskers, kames and plains, commonly with thermokarst ponds in places; 2-30 m thick
 - Gx-c GLACIOFLUVIAL COMPLEX, CHANNELLED: containing ridges, hummocks and kettled plains, affected by glaciolacustrine channeling; common along Blackwater River; 2-50 m thick
- Glacial deposits**
unsorted silt, sand, and clay with clasts (pebbles, cobbles and some boulders) deposited by glacial ice in a variety of landforms
- Tp TILL PLAIN: flat to gently sloping; 3-5 m thick
 - Tb TILL BLANKET: gently to moderately sloping plain conforming to underlying topography; 2-8 m thick
 - Tbv TILL BLANKET TO VENEER: conforming to underlying topography; 2-8 m thick
 - Tbv-g TILL BLANKET TO VENEER, GULLED: conforming to underlying topography; 2-8 m thick
 - Tvb TILL VENEER TO BLANKET: conforming to underlying topography
 - Td TILL, DRUMINOID: hilly till plain with individual drumlins or extensive flutes; 3-15 m thick
 - Tr TILL, RIDGED: plain of generally coarse till (20-50% pebbles) deposited as ridges; commonly lateral and frontal moraines and hummocks; < 9 m thick
 - Tx TILL COMPLEX: largely hummocky, ridged, and/or hilly with patches of gravel; in some places Tx forms veneer over bedrock
 - Tx-c TILL COMPLEX, CHANNELLED
 - Tc TILL, CREVASSE FILL: coarse diamict (>30% pebbles) deposited as crevasse fills forming highly compacted ridges; 2-15 m thick
- Organic Deposits**
This pattern is used when organic deposits appear as a second or third component in a polygon
- 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
- Eolian Deposits**
This pattern is used when eolian sand veneer appears as a second or third component in a polygon, eg. Tp.Gx.Ev
- Discontinuous veneer (<1m) mainly fine sand and silt covering other surficial units and bedrock
- 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 silt-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 of within the basin area
 - Drumlin, drumlined 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 small lakes
 - 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 small lakes
 - 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
 - Crevasse filling
 - 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 gravel
 - Dune ridge
 - Deflation hollow
 - Landslide
 - Ground Station

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Geology by A. Duk-Rodkin, 2007
Digital cartography by F. Hrdjovirovica 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

UNDERSTANDING THE LEGEND

The genetic category of surficial material is indicated by the first upper case letter, e.g., G (glaciolacustrine). The morphologic category is indicated in lower case following the genetic category, e.g., Gp (glaciolacustrine plain). The modifying processes are indicated in lower case separated from the morphologic category by a (-) e.g., Gp-k (glaciolacustrine 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 patterned symbol, e.g., eolian sand cover, peatlands or fenlands.



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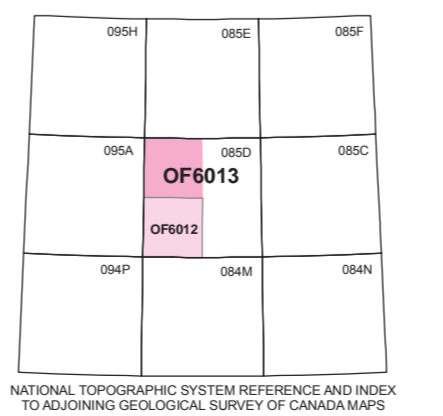


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SURFICIAL GEOLOGY
KAKISA RIVER (85D/NW)
NORTHWEST TERRITORIES
Scale 1:100 000/Echelle 1/100 000

Kilometres 2 0 2 4 6 8 Kilometres

Universal Transverse Mercator Projection
North American Datum 1983
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Projection transversale universelle de Mercator
Système de référence géodésique nord-américain, 1983
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