

- 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
    - pFO** 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**
    - diamicton and rubble derived from bedrock and/or surficial material through a variety of colluvial and landslide processes
    - Cv** COLLUVIAL VENEER: discontinuous veneer of diamicton and rubble that conforms to local topography; < 2 m thick
    - Cx** COLLUVIAL COMPLEX: slope complex consisting of diamicton and rubble; may include minor landslides (Cz) and/or alluvial fan (Af) units; > 2 m thick
    - Cz** LANDSLIDE: bedrock, rubble and/or diamicton occurring as stepped or fan-shaped deposits; formed by rotational slumping, retrogressive flow 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 deltaic or glaciolacustrine deposits in association with deglacial 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 diamicton; 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
      - Lp-k** LACUSTRINE PLAIN WITH THERMOKARST DEPRESSIONS: flat to gently sloping cover; locally overlain by eolian sand, commonly associated with glacial Lake Mackenzie; 1-10 m thick
      - Lb** LACUSTRINE BLANKET: deposit conforming to local topography up to 25 m of relief; locally overlain by eolian sand, commonly associated with glacial Lake Mackenzie; 2-30 m thick
      - Lbv** LACUSTRINE BLANKET TO VENEER: locally overlain by eolian sand, commonly associated with glacial Lake Mackenzie; < 3 m thick
      - Lm** LACUSTRINE PLAIN, ROLLING: rolling, occurring as low ridges; locally overlain by eolian sand; 2-15 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
    - Glacioluvial 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-k** GLACIOFLUVIAL PLAIN WITH THERMOKARST DEPRESSIONS: flat to gently sloping; 2-20 m thick
      - Gp-t** GLACIOFLUVIAL PLAIN TO TERRACE: glacioluvial plain dominant; flat to gently sloping, with no visible boundaries between them; these units occur only along major rivers or interbedded with other drift types; < 10 m thick
      - Gp-p** GLACIOFLUVIAL TERRACE TO PLAIN: glacioluvial terrace dominant; flat to gently sloping, with no visible boundaries between them; these units occur only along major rivers or interbedded with other drift types; < 10 m thick
      - gt** GLACIOFLUVIAL TERRACE: 10-50 m thick
      - gd** GLACIOFLUVIAL DELTA: gently sloping, deposited in a glacial lake; 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
    - Glacioluvial deposits, ice contact**
      - sand and gravel locally with a veneer of eolian silt and/or sand; deposited as ice-contact sediment by glacial meltwater
      - Gx** GLACIOFLUVIAL COMPLEX: includes eskers, kames and plains, commonly with thermokarst ponds in places; 2-30 m thick
      - Gx-g** GLACIOFLUVIAL COMPLEX, GULLIED: containing ridges, hummocks and kettled plains, affected by Holocene gullying; 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
      - Tvb** TILL VENEER TO BLANKET: conforming to underlying topography
      - Tvb-g** TILL VENEER TO BLANKET, GULLIED: affected by Holocene gullying, conforming to underlying topography
      - Tv** TILL VENEER: with slopes conforming to underlying topography; < 2 m thick
      - Tv-g** TILL VENEER, GULLIED: with slopes conforming to underlying topography, affected by gullying processes; < 2 m thick
      - Td** TILL, DRUMLINOID: hilly till plain with individual drumlins or extensive flutes; 3-15 m thick
      - Tr** TILL, RIDGED: plain of generally coarse silt (20-50% pebbles) deposited as ridges; commonly lateral and frontal moraines and hummocks; < 9 m thick
      - Tm** TILL PLAIN, ROLLING: till plain with broad hummocks 10-20 m high (5-20% pebbles and larger); typically bouldery silt in mountains; < 10 m thick
      - Tx** TILL COMPLEX: largely hummocky, ridged, and/or hilly with patches of gravel; in some places Tx forms veneer over bedrock
      - Te** TILL, ERODED: gently to moderately sloping till plain, highly modified by landsliding

- unrelated**
- Colluvial deposits, talus**
    - diamicton and rubble derived from bedrock and surficial material through cryoplanation
    - Ct** CRYOPLANATION TERRACE: mantle over shallow bedrock terraces on mountain slopes; 1-2 m thick
  - Paleozoic to Mesozoic**
    - Bedrock**
      - primarily prominent ridges, escarpments and hills associated with Devonian rocks
      - cretaceous shale (various colours) and limestone mostly in plains area; Paleozoic limestone, dolomite, shale (various colours), siltstone, mudstone and sandstone mostly in mountainous areas
    - 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, Cx, Ev
      - Discontinuous veneer (<1m) mainly fine sand and silt covering other surficial units and bedrock
    - Colluvial Deposits**
      - This pattern is used when colluvial veneer appears as a second or third component in a polygon, eg. Tv, Cx, TvLb, Cx
      - Discontinuous veneer (<1m) mainly diamicton and rubble that conforms to local topography
  - Geological boundary (defined)**
  - Paleo-drainage scar**
  - Moraine ridge, unconsolidated sediments (fill, sand and gravel) deposited in ridges at terminal, recessional, lateral and medial positions with respect to ice margins**
  - Drumlin, drumlinoid ridge or flute (direction uncertain); streamlined hill or ridge of till with long axis parallel to direction of iceflow**
  - Drumlin, drumlinoid ridge or flute (direction certain); streamlined hill or ridge of till with long axis parallel to direction of iceflow; elliptical base and arched profile with long gentle slope pointing in downstream direction**
  - Cirque (Late Pleistocene): steep-walled, half bowl-like basins situated high on mountainsides; horseshoe or semi-circular in planform and produced by glacial erosion of valley headwalls**
  - 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**
  - Esker (direction uncertain): sinuous, low ridge composed of sand and gravel; formed by deposition from meltwater running through a channel beneath or within glacier ice**
  - Tension cracks**
  - Shoreline of former lake: low, ridged beach deposits of sand and gravel**
  - Kame**
  - Landslide**
  - Debris flow**
  - Sinkhole**
  - Ground Station**
- \* Water mask is standard throughout the map. It has not been adapted to reflect changes of water levels for consequent years, therefore certain stations appear to be under water.

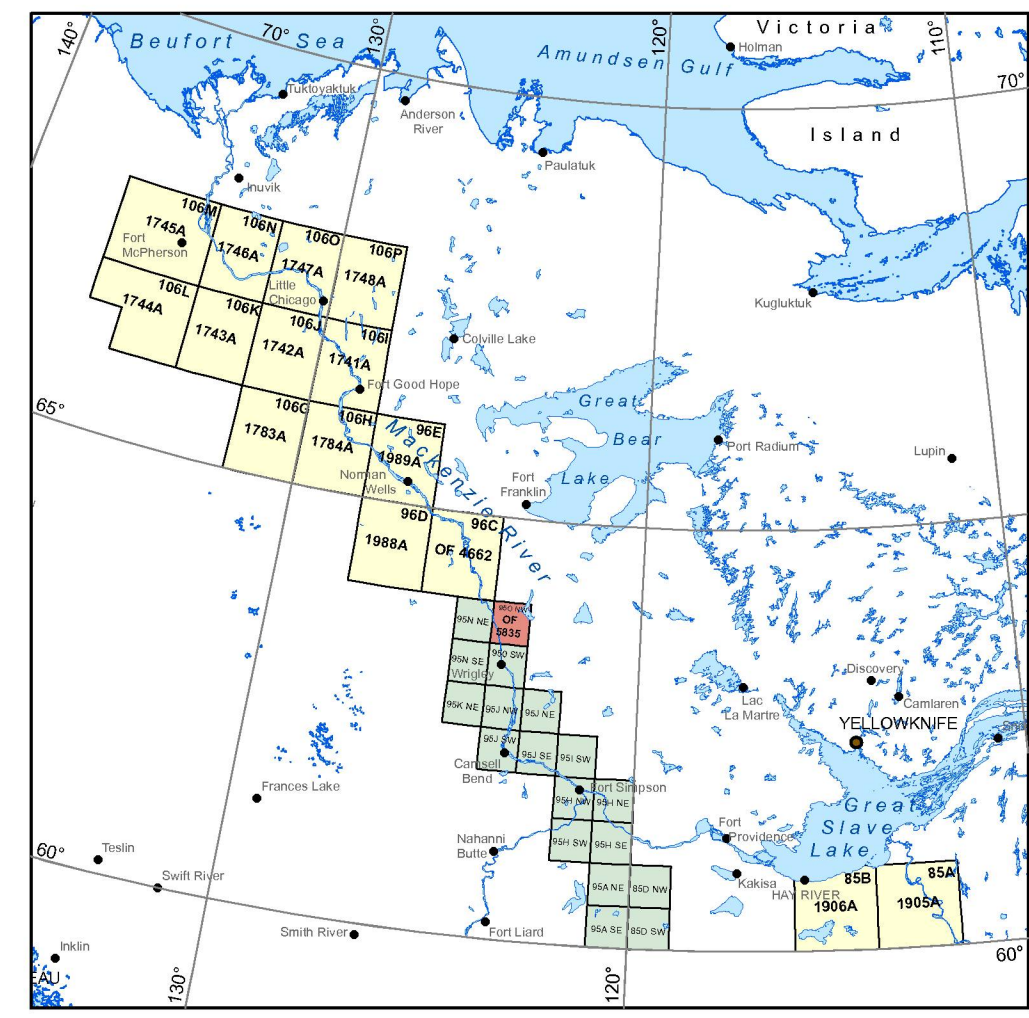
UNDERSTANDING THE LEGEND

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

Geology by A. Duk-Rodkin, 2005  
 Digital cartography by F. Harjoto 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

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 GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA  
 2009



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LOCATION MAP

OPEN FILE 5835  
 SURFICIAL GEOLOGY  
**WRIGLEY (950/NW)**  
 NORTHWEST TERRITORIES  
 Scale 1:100 000/Echelle 1/100 000

kilometres 2 0 2 4 6 8 kilometres

Universal Transverse Mercator Projection / Projection transversale universelle de Mercator  
 North American Datum 1983 / Système de référence géologique nord-américain, 1983  
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90C	90B	90A
95N	95O	95P
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95K	95J	95I

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