

This legend is common to maps 1741A to 1748A

* Dominant map unit or symbol not present in this map (these materials may occur as subordinate part of a map unit)

QUATERNARY

- HOLOCENE**
- fo, pO, pO-k, pIO, pIO, pO
 - ORGANIC DEPOSITS: peat and muck, occurring as flat to gently sloping plains; fo, fenland consisting of woody sedge peat; 2-3 m thick; pO, peatland; sphagnum peat generally underlain by sedge and woody sedge peat, 2-4 m thick; pO-k, peatland containing thermokarst depressions; pIO, peatland and fenland undivided; pIO, fenland and peatland undivided
 - Fenlands constitute 10-50% of map unit
 - Peatlands constitute 10-50% of map unit
 - Peatlands and fenlands undivided make up 10-50% of map unit
 - Ap, Ap-k, Ap-k
 - ALLUVIAL DEPOSITS: sand, silt, and minor gravel in association with modern drainage regime; Ap, coarse sand and gravel with silt and fine sand, occurring as channel and overbank floodplain sediments, 3-5 m thick; Ap-k, floodplain sediments containing thermokarst depressions; At, sand and silt, in places underlain by gravel, occurring as terraces, 2-5 m thick; At, terrace deposits 1-2 m thick; At, mainly silt, sand, and minor gravel, locally with discontinuous layers of woody peat, occurs as fans and aprons; Ax, complexes of Ap, At, and At, undivided
 - COLLUVIAL AND SHEETWASH DEPOSITS: diamicton and rubble derived from bedrock and surficial materials by a variety of colluvial and sheetwash processes
 - Colluvium and sheetwash deposits: diamicton and rubble; Cb, blanket deposit that conforms to bedrock topography; >3 m thick; Ca, organic-rich silt and sand developed as a veneer or blanket on lacustrine sediments or soft bedrock, 1-2 m thick; Cv, discontinuous veneer overlying bedrock, 0-2 m thick
 - Cz
 - Landslide deposits: rubble and/or diamicton occurring as stepped or fan-shaped deposits, formed by rotational slumping or retrogressive thaw flow failure of glacial lacustrine sediments or shale
 - Ct
 - Cryoplanation terrace deposits: colluvial rubble, occurring as a 1-3 m thick mantle on a step or bench in a mountain slope
 - Cy
 - Pediment deposits: silty gravel or colluvium, 1-2 m thick, overlain by <1 m of silt; occurs as gently sloping (<6°) surface extending from valley axis to wall in unglaciated mountains
 - Cx
 - Slope complex: complex consisting of two or more of Cb, Cv, Ca, and At, undivided
- LATE WISCONSINAN**
- Lp, Lp-k, Lm, Lb, Lx, Lx-k, Lx-k
 - GLACIOLACUSTRINE DEPOSITS: silt and clay with minor sand, in many places overlain by discontinuous veneer of organic deposits and locally overlain by sand; sediments laid down in a glacial lake; Lp, thick sediments occurring as a flat to gently sloping plain, 2-15 m or more thick; Lp-k, lacustrine plain containing thermokarst depressions; Lm, thick sediments occurring as broad hummocks or low hills, 2-15 m or more thick; Lb, blanket of lacustrine sediments occurring as gently to moderately sloping plain, 2-8 m thick; Lx, littoral sediments occurring as low ridges of sand and gravel; Lx-k, lacustrine complex or transition, lacustrine deposits overlain by up to 3 m of sand; Lx-k, lacustrine complex containing thermokarst depressions; Lv, lacustrine veneer, surface conforms to underlying unit, 0-2 m thick
 - GLACIOFLUVIAL DEPOSITS: sand and gravel locally with a veneer of eolian silt or sand, deposited as proglacial or ice contact sediments by glacial meltwater
 - Outwash deposits: sand and gravel with silt and peat in some channels; Gp, flat to gently sloping plain, 2-30 m thick; Gt, deposits underlying a terrace, 2-30 m thick
 - Gh, Gr
 - Ice contact glaciofluvial deposits: gravel and sand; relief <25 m; 2-25 m thick; Gh, hummocks; Gr, ridges
 - Gx
 - Glaciofluvial complex: undivided Gh, Gr and kettled Gp and Gt
 - Mp, Mb, Mpv
 - GLACIAL DEPOSITS: nonsorted silt, sand, and clay with some coarser clasts (bll) deposited by glacier ice and occurring in a variety of different landforms
 - Moraine plain: till occurring as Mp, flat to gently sloping plain, 3-20 m thick; Mb, gently to moderately sloping plain controlled by bedrock, 3-6 m; Mpv, flat to gently sloping plain, 1-3 m thick
 - Md
 - Drumlinoid till: till occurring as Md, plain with individual drumlins or extensively ridged, 2-30 m thick
 - Mv, Mvd
 - Thin till and bedrock: Mv, veneer of till with slopes conforming to underlying bedrock topography, 0-2 m thick; Mvd, thin till over glacially eroded streambed bedrock ridges, 0-3 m thick
 - Mh, Mr, Mm
 - Hummocky, ridged and rolling moraine: generally coarse till (20-50% pebble size); Mh, individual and coalescent hummocks, locally contains hummocks of gravel, relief 15-50 m, up to 50 m thick; Mr, individual to compound, either straight or sinuous ridges 15 to 60 m high, up to 60 m thick; Mm, broad hummocks or low hills with 10-20 m of relief, up to 20 m thick
 - Mx
 - Glacial deposit complex: largely hummocky and ridged and rolling till undivided
- PRE-QUATERNARY**
- R, R't
 - BEDROCK: shale, sandstone and limestone of Paleozoic through Mesozoic age; R, primarily prominent ridges, escarpments and hills; R't, subhorizontal bedrock surfaces exposed as channel floors

LEGEND

- Geological boundary (defined, approximate)
- Limit of Laurentide ice (defined, approximate, assumed)
- Limit of Tuleita Lake Phase (defined, approximate)
- Limit of advance or at time of stillstand (defined, approximate, assumed)
- Erratic of Shield origin
- Terrace of preglacial origin
- Cryoplanation terrace
- Filled channel or buried valley
- Crque
- Crags and tal
- Drumlin or drumlinoid ridge (sense of ice flow determined, not determined)
- Moraine ridge
- Esker
- Karne
- Glacial meltwater channel (major, minor)
- Shoreline of former lake
- Rock glacier
- Pingo (open system; probable or collapsed)
- Slope failure (in most places, retrogressive - thaw flow slides)
- Dunes and windblown sand
- Eolian veneer mainly of fine sand
- Borrow pit
- Gravel pit

Final interpretation and compilation by A. Duk-Rodkin (1986-1987) and O.L. Hughes (1969-1973), with additional information from field observations of J. Pilon, 1971-1972

Geological cartography by P.P. Hermann, Geological Survey of Canada

Colour separations were produced using digital methods

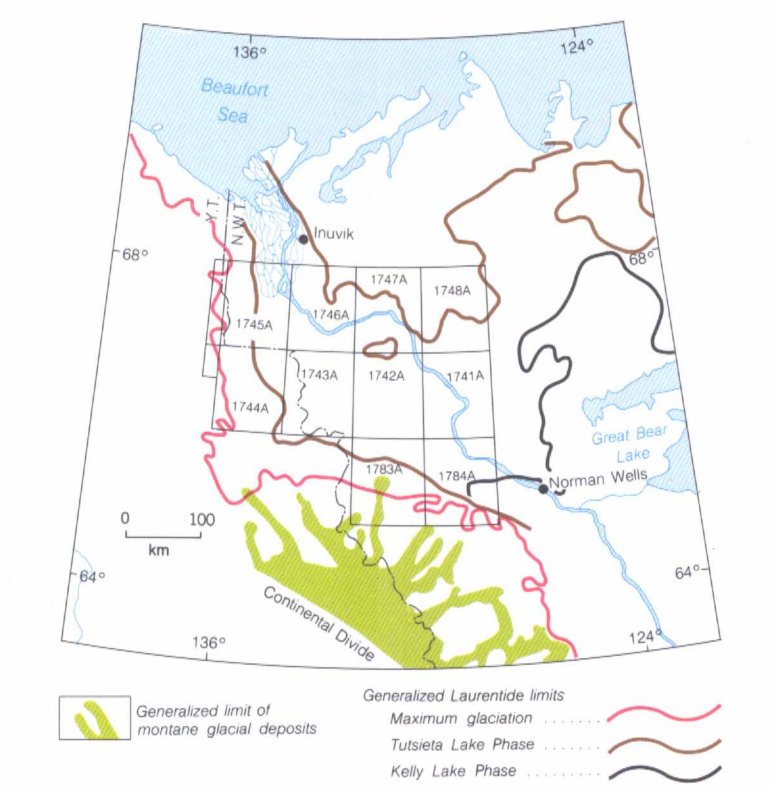
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map assembled by the Geological Survey of Canada from map 106 L (1959) and part of map 116 I (1958), published at the same scale by the Surveys and Mapping Branch

Copies of the topographical edition covering this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario, K1A 0G9

Mean magnetic declination 1992, 33°31' E, decreasing 12.3' annually. Readings vary from 32°35' E in the SW corner to 34°28' E in the NE corner of the map

Elevations in feet above mean sea level



ACKNOWLEDGMENTS

Additional information on surficial geology obtained from: Chevron, Imperial and Shell oil companies provided borehole data from seismic shotholes

This map supersedes 106 L, 116 I (part) in: Hughes, O.L. and Pilon, J., 1972: Surficial geology, Trail River, Bell River, and Old Crow, District of Mackenzie N.W.T., Geological Survey of Canada, Open File 167, scale 1:125 000, 106 L, 116 P, and parts of 116 N, O

REFERENCES

- Hughes, O.L., Rampton, V.N., Bamber, E.W., Mourjiny, E.W., Norford, B.S., Norris, A.W., Norris, D.K., Price, R.A., Procter, R.M., and Taylor, G.C., 1971: Surficial geology, northern Yukon Territory, and northern District of Mackenzie, Geological Survey of Canada, Map 1319A, Paper 69-36
- Hughes, O.L. and Pilon, J., 1972: Surficial geology, Trail River, Bell River, and Old Crow, District of Mackenzie N.W.T., Geological Survey of Canada, Open File 167, scale 1:125 000, 106 L, 116 P, and parts of 116 N, O

GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA

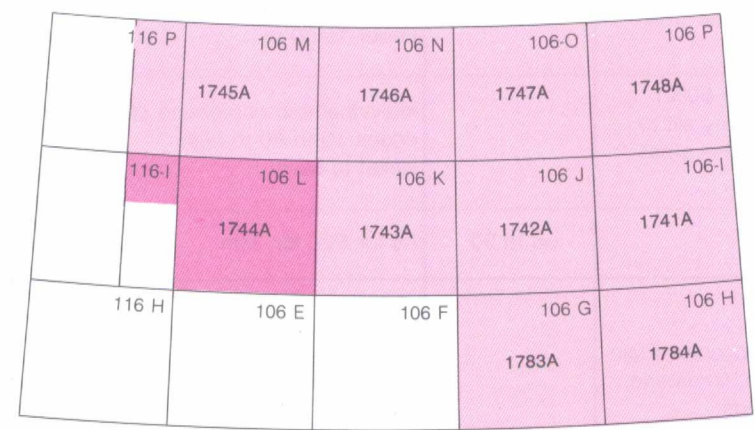
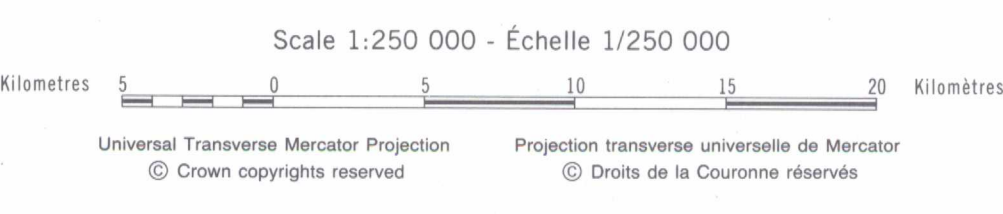
APR 20 1993

MAP LIBRARY / CARTOTHEQUE

CGIC / CCIG

NOT TO BE TAKEN FROM LIBRARY / NE PAS SORTIR DE LA BIBLIOTHÈQUE

MAP 1744A
SURFICIAL GEOLOGY
TRAIL RIVER - EAGLE RIVER
YUKON - NORTHWEST TERRITORIES



Copies of this map may be obtained from the Geological Survey of Canada: 601 Booth Street, Ottawa, Ontario K1A 0E8; 3303-33rd Street, N.W., Calgary, Alberta T2L 2A7; 100 West Pender Street, Vancouver, B.C. V6B 1R8

INDEX MAP