

LEGEND

SURFICIAL DEPOSITS
QUATERNARY
HOLOCENE

FLUVIAL SEDIMENTS: alluvium; gravel and sand, 2–20 m thick.

- Ap Alluvial plains: active braided floodplains; includes active proglacial outwash.
- At Alluvial terraces
- Af Alluvial fans

MARINE AND GLACIAL MARINE SEDIMENTS: gravel, sand, silt, and clay, 1–20 m thick, deposited in deep-water, deltaic and beach environments during regression of the postglacial sea.

- Mr Beach sediments: gravel and sand, 1–5 m thick, forming ridges and swales.
- Mt Deltaic sediments: clay, silt, sand, and gravel, 5–20 m thick, forming coarsening upward sequences under dissected terraces.
- Mv Deepwater proglacial silt veneers: silt, clay silt, and fine sand with dropstones, 1–2 m thick.
- Mb Deepwater proglacial silt blankets: silt, clay silt, and fine sand with dropstones and minor gravel, 2–10 m thick.

GLACIAL LACUSTRINE SEDIMENTS: clay, silt, sand, and gravel deposited in glacier-dammed lakes in deep-water, beach, and deltaic environments.

- Lr Beach sediments: sand and gravel, 1–5 m thick, forming beach ridges.
- Lt Deltaic sediments: clay, silt, sand, and gravel, 5–20 m thick, forming coarsening-upward sequences under dissected terraces.
- Lv Deepwater proglacial silt veneers: silt, clay silt, and fine sand with dropstones, 1–2 m thick.
- Lb Deepwater proglacial silt blankets: silt, clay silt, and fine sand with dropstones, 2–5 m thick.

GLACIOFLUVIAL SEDIMENTS: gravel and sand, 1–10 m thick, deposited behind, at, and in front of the ice margin.

- Gp, Gt, Gf Proglacial outwash: gravel and sand, 1–10 m thick, forming braided floodplains; Gp: terraces; Gt: fans; Gf: fans.
- Gr, Gh Ice contact stratified drift: gravel and sand, 1–5 m thick, forming eskers; Gr: eskers; Gh: kames.

EARLY HOLOCENE AND WISCONSINAN

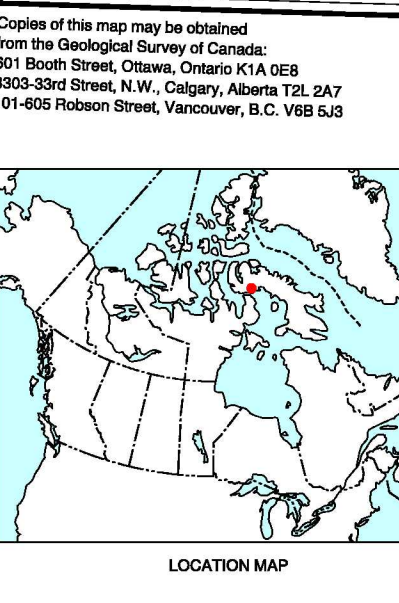
TILL: nonsorted stony muds, 0.5–80 m thick, deposited in subglacial and ice-marginal environments; lithic composition generally reflects underlying bedrock.

- Tm End moraine: 5–80 m high, composed of or mantled by till, extensively kettled in places; large features mainly covered by debris-rich, retreating glacier ice.
- Tv Till veneer: 0.5–2 m thick and discontinuous.
- Tvw Till veneer: 0.5–2 m thick, surface armoured by stones due to washing by subglacial meltwater.
- Tb Till blanket: 2–10 m thick forming an undulating blanket with drumlins and ribbed moraines in places.
- Tbr Till blanket: 2–10 m thick forming ribbed (Rogen) moraines.

BEDROCK
PRE-QUATERNARY

- R ROCK: rock of various compositions and ages (Jackson and Sangster, 1987) variously modified by glacial erosion during the Quaternary and with patchy till cover; hilly and hummocky surfaces, ice moulded in places, with lake basins in subglacially scoured regions; smooth surfaces exhibiting little or no sign of glacial erosion in peninsular interiors (Dyke, 1993); cliffs resulting from glacial over-steepening; in places veneered by thin silt, commonly bouldery.

Geological boundary (defined, assumed)
 Areas covered by perennial icefields during the Little Ice Age (indicated by a white pattern)
 Glacial lake spillway
 Glacial lake limit
 Marine limit
 Escarpment
 Lateral meltwater channel; barb on upslope side
 Subglacial and proglacial meltwater channel
 Esker
 Ice-contact face
 Ribbed moraine
 Lateral moraine
 End moraine
 Margin of dispersal train; teeth toward axis, steep side of teeth face down-ice direction
 Drumlinoid hill
 Crag-and-tail feature
 Ice-moulded bedrock
 Striae (ice-flow direction known, unknown)
 Crossed striae (numbers indicate relative age, 1 being the oldest)
 Marine limit elevation (metres) 88



MAP 2066A
SURFICIAL GEOLOGY
ERICHSEN LAKE
BAFFIN ISLAND
NUNAVUT

Geology by A.S. Dyke, 2002
 Field data provided by De Beers Canada Inc., 2002
 Digital cartography by M.M. Proulx, Earth Sciences Sector Information Division (ESS Info)

This map was produced from processes that conform to the ESS Info Publishing Services Subdivision Quality Management System, registered to the ISO 9001: 2000 standard

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

Scale 1:250 000/Échelle 1/250 000

Kilomètres 0 5 10 15 20 Kilomètres

Universal Transverse Mercator Projection
North American Datum 1983
© Her Majesty the Queen in Right of Canada 2004

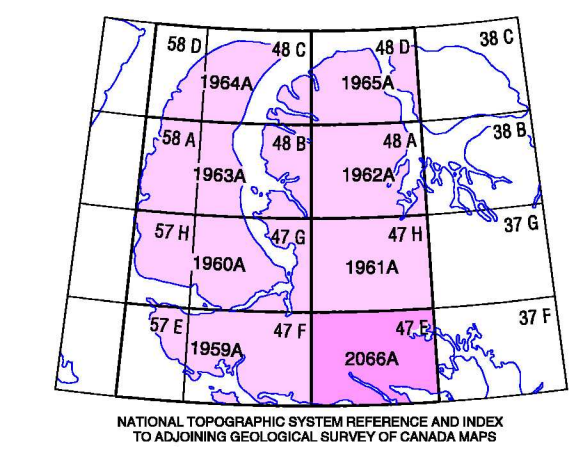
Projection transversale universelle de Mercator
Système de référence géodésique nord-américain, 1983
© Sa Majesté la Reine du chef du Canada 2004

Digital base map from data compiled by Geomatics Canada, modified by ESS Info

Locational accuracy of the base appears to be ±100 m based on plotting of GPS measured field site locations

Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area
 Mean magnetic declination 2004, 40°30'W, decreasing 43.6' annually. Readings vary from 44°16'W in the NE corner to 36°10'W in the SW corner of the map

Elevations in metres above mean sea level



REFERENCES

Dyke, A.S.
1983: Landscapes of cold-centred Late Wisconsinan ice caps, Canadian Arctic; Progress in Physical Geography, v. 17, p. 223–247.

Jackson, G.D. and Sangster, D.F.
1987: Geology and resource potential of a proposed national park, Bylot Island and northwest Baffin Island, Northwest Territories; Geological Survey of Canada, Paper 87-17, 51 p.