

LEGEND

This legend is common to Open File 4693 and 4701. Coloured legend blocks indicate map units that appear on this map. Not all map symbols shown in the legend necessarily appear on this map.

SURFICIAL DEPOSITS
QUATERNARY HOLOCENE

- Ca** COLLUVIUM: block and rubble accumulations, 1-50 m thick.
- Cr** Talus: active block and rubble accumulations as much as 50 m thick forming talus (scree) aprons and fans below cliffs resulting from rock falls and debris flows; commonly crossed by debris flow channels and levees.
- Ap** Rock glacial debris: talus, generally 10-50 m thick, deformed by active flow of interstitial or buried ice to form rock (fall) glaciers with transverse ridges and furrows, and pits, and with steep, unstable sides and fronts.
- Fluvial sediments:** alluvium, gravel and sand, 2-20 m thick.
- Al** Alluvial plains: active braided floodplains; includes active proglacial outwash.
- At** Alluvial terraces: gravel and sand, 2-20 m thick.
- Al** Alluvial fans: gravel and sand, 2-20 m thick.
- Marine and glacial marine sediments:** gravel, sand, silt, and clay, 1-20 m thick, deposited in deltaic and beach environments during regression of the proglacial sea.
- Mr** Beach sediments: gravel and sand, 1-5 m thick, forming ridges and ovels.
- 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 glacial dammed lakes in deepwater, beach, and deltaic environments.
- 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, Lt** Proglacial outwash: gravel and sand, 1-10 m thick, forming broad floodplains, Gp: terraces, Gt: fans, Gf: fans.
- Gr, h** Ice contact stratified drift: gravel and sand, 1-5 m thick, forming eskers, G: and kames, Gh.

EARLY HOLOCENE AND WISCONSINAN

- Tm** Till: nonsorted stony muds, 0.5-60 m thick, deposited in subglacial and ice marginal environments; lithic composition generally reflects underlying bedrock.
- Tv** End moraine: 5-60 m high, composed of or mantled by till, extensively settled in places; large features mainly covered by debris-rich relict glacier ice.
- Tv** Till veneer: 0.5-2 m thick and discontinuous.
- Tvw** Washed till veneer: 0.5-2 m thick, surface armored by stones due to washing by supraglacial meltwater.
- Tb** Till blanket: 2-10 m thick forming an undulating blanket with drumlins and ribbed moraines in places.
- Tbr** Ribbed till blanket: 2-10 m thick forming ribbed (Rogen) moraines.

BEDROCK PRE-QUATERNARY

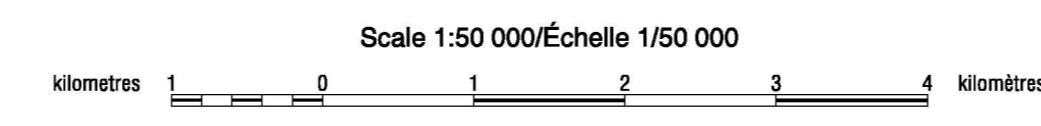
- R** ROCK: rock of various compositions and ages (Jackson and Sangster, 1987) variously modified by glacial erosion during the Quaternary and with patchy till cover; lithic and hummocky surfaces, ice moulded in places, with late basins in topographically accreted regions; smooth surfaces exhibiting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

Geological boundary (defined, assumed)
 Areas covered by periglacial icefields during the Little Ice Age (indicated by a white pattern)
 Glacial lake spillway
 Glacial lake limit
 Marine limit
 Marine limit elevation in metres 60
 Weakly developed strandline
 Cliff in bedrock
 Lateral meltwater channel; barb on upstoss side
 Subglacial and proglacial meltwater channel (large, small)
 Esker
 Kame
 Ice contact face
 Ribbed moraine
 Lateral moraine
 End moraine
 Margin of glacial dispersal train; level toward axis, steep side of teeth face down ice
 Lateral sliding boundary; tooth on sliding side
 Ice-based ice on other side, steep side of teeth face down ice
 Iceberg scour
 Drumlinoid hill
 Crag-and-tail
 Ice moulded bedrock
 Striae (ice flow direction known, unknown)
 Crossed striae (numbers indicate relative age, 1 being the oldest)
 Field observation site: boundary distinction (bd), boundary gravel (bg), diamiction (d), gravel (g), gravelly sand (gs), mud (m), muddy sand (ms), rock (r), sand (s), sandy gravel (sg), stony mud (sm), silt (t)
 Field observation site: material as above near rock outcrop
 Radiocarbon date
 Date
 Material
 Lab no
 Elevation (m)



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 Geology by A.S. Dyke, 2004
 Field data provided by De Beers Canada Corporation, 2003
 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

OPEN FILE 4693
 SURFICIAL GEOLOGY
COCKBURN LAKE
 BAFFIN ISLAND
 NUNAVUT



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 2005, 43°25'W, decreasing 42.3' annually
 Elevations in metres above mean sea level
 Contour interval 20 m
 Field altimetry and the placement and trend of raised shorelines may conflict significantly with the contours

37 113	37 114	37 115	37 116
OF4695	OF4696	OF4697	OF4698
37 117	37 118	37 119	37 120
OF4699	OF4700	OF4701	OF4702
37 121	37 122	37 123	37 124
OF4703	OF4704	OF4705	OF4706
37 125	37 126	37 127	37 128
OF4707	OF4708	OF4709	OF4710

REFERENCES

Dyke, A.S., 1993: Landscapes of cold-centred Late Wisconsinan ice caps, Canadian Arctic; Progress in Physical Geography, v.17, p.225-247.
 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, 81 p.

OPEN FILE DOSSIER PUBLIC 4693

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