



LEGEND

This legend is common to Open Files 1598 to 1612, and 1628 to 1631. 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

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 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 Deltic 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.

- Lr Beach sediments: sand and gravel, 1–5 m thick, forming beach ridges.
- Lt Deltic 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,l,f Proglacial outwash: gravel and sand, 1–10 m thick, forming braided floodplains. Gp: terraces; Gf: fans; Gf: fans.
- Gr,h Ice contact stratified drift: gravel and sand, 1–5 m thick, forming eskers; Gr: and Kames; Gh.

EARLY HOLOCENE AND WISCONSINAN

- Tm Till veneer: 0.5–2 m thick and discontinuous.
- Tv Till veneer: 0.5–2 m thick, surface armoured by stones due to washing by subglacial meltwater.
- Tw 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) variably modified by glacial erosion during the Quaternary and with peaty till cover; hilly and hummocky surfaces. Ice mounded 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 till, commonly bouldery.

Geological boundary (defined, assumed)
 Areas covered by perennial icefields during the Little Ice Age (indicated by a white pattern) [white pattern]
 Kettle (large) [circle with dot]
 Glacial lake spillway [wavy line]
 Glacial lake limit [dotted line]
 Marine limit [dashed line]
 Escarpment [stepped line]
 Lateral meltwater channel; barb on upslope side [line with barbs]
 Subglacial and proglacial meltwater channel (small) [dotted line]
 Esker [line with circles]
 Kame [circle]
 Ice contact face [line with triangles]
 Ribbed moraine [line with triangles]
 Lateral moraine [line with triangles]
 End moraine [line with triangles]
 Margin of dispersal train; teeth toward axis, steep side of teeth face down ice [line with triangles]
 Drumlinoid hill [line with triangles]
 Crag-and-tail [line with triangles]
 Ice mounded bedrock [line with triangles]
 Striae (ice flow direction known, unknown) [line with triangles]

Crossed striae (numbers indicate relative age, 1 being the oldest) [line with triangles]

Field observation site: boundary (b), boundary gravel (bg), clay (c), clay (cl), gravel (g), gravelly sand (gs), mud (m), muddy sand (ms), rock (r), sand (s), sandy gravel (sg), stony mud (sm), till (t) 1
 Field observation site: material as above near rock outcrop 10
 Marine limit elevation (metres) 85



Geology by A.S. Dyke, 2002
 Field data provided by De Beers Canada Inc., 2002
 Digital cartography by M.M. Prouk, 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

OPEN FILE 1607
SURFICIAL GEOLOGY
KUKALUK RIVER
 BAFFIN ISLAND
 NUNAVUT

Scale 1:50 000/Échelle 1/50 000
 Kilometres 1 2 3 4 Kilometres

Universal Transverse Mercator Projection
 North American Datum 1983
 © Her Majesty the Queen in Right of Canada 2003
 Projection transversale universelle de Mercator
 Système de référence géodésique nord-américain, 1983
 © Sa Majesté la Reine du chef du Canada 2003

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada.
 Digital base map from data compiled by Geomatics Canada, modified by ESS Info
 Locational accuracy of the base appears to be ±100m 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 2003, 41°20'W, decreasing 44.1' annually
 Elevations in metres above mean sea level

47 E/13 OF 1601	47 E/14 OF 1600	47 E/15 OF 1599	47 E/16 OF 1598
47 E/17 OF 1602	47 E/11 OF 1603	47 E/18 OF 1604	47 E/19 OF 1605
47 E/5 OF 1609	47 E/6 OF 1608	47 E/7 OF 1607	47 E/8 OF 1606
47 E/4 OF 1610	47 E/3 OF 1611	47 E/2 OF 1612	47 E/1 OF 1613
47 D/13 OF 1628	47 D/14 OF 1629	47 D/15 OF 1630	47 D/16 OF 1631



Recommended citation:
 Dyke, A.S.,
 2003: Surficial geology, Kukuluk River, Baffin Island, Nunavut;
 Geological Survey of Canada, Open File 1607, scale 1:50 000.