

Coastline of this map may be different from the coastline of the map on which it is based. For more information, see the map on which it is based.

MAP 2043A
SURFICIAL GEOLOGY
HIDDEN BAY
BAFFIN ISLAND
NUNAVUT

Scale 1:100 000/Echelle 1/100 000

LEGEND

This legend is common to maps 2043A, 2043A, 2044A, 2045A, 2047A, and 2048A.
Coloured legend blocks indicate map units that appear on this map.
Not all map symbols shown in the legend appear on this map.

QUATERNARY HOLOCENE

Fpt FLUVIAL DEPOSITS (nonglacial alluvial floodplain, terrace, fan, and delta topsets): gravel, sand, boulder, minor silt, and rock; 1–10 m thick; deposited in broadpans.

Mv MARINE VENEER: sand, silt, and gravel; 0.5–2 m thick; discontinuous cover of littoral and offshore sediment including beach ridges and sea-ice-melted debris; mimics surface of underlying till or rock. Fine-grained sediment bears a continuous vegetation cover posterior with subparallel ribs.

Gmb GLACIAL MARINE DEPOSITS: sand, silt, gravel, and boulders; 2–30 m thick; deposited in the high proglacial seas.

Gmd GLACIAL MARINE DELTA: sand, silt, boulders, and gravel; 2–20 m thick; massive to cross-bedded sediments that coarsen upward in ice-contact deposits or at termination of outwash trains or meltwater channels.

Gmb GLACIAL MARINE BLANKET: sand, silt, minor gravel, and clasts; 2–30 m thick; deposited from suspension and seabed rafting; locally capped by Holocene marine regression sediments.

GFpt GLACIOFLUVIAL DEPOSITS: gravel and sand; 1–30 m thick; deposited by meltwater behind, at, and in front of ice margins.

GFpt GLACIOFLUVIAL OUTWASH: stratified gravel and sand; 1–30 m thick; proglacial floodplains, terraces, and fans; includes kame terraces, minor subglacial and subglacial deposits, glacial lacustrine channelled deltas and fans; locally bedded grade to glacial marine deltas at marine limit; may include washed till surfaces with few fines.

Gr GLACIOFLUVIAL ICE-CONTACT DEPOSITS (eskers and kames): poorly stratified to sorted gravel, sand, and boulders; 2–20 m thick; forming ridges and hummocks.

EARLY HOLOCENE AND WISCONSINAN

Th Till blanket: clayey silt, dominantly cobble- and boulder-size igneous and metamorphic clasts; 0.5–20 m thick; deposited in subglacial and ice-marginal environments of local ice (Mile Ingotite Peninsula) and of the Foxe Ice Dome (Anaktuvuk Ice Divide). Minor silt till deposited on Hudson Strait coast by Labrador (i.e. trans-shelf) and central Laurentide (i.e. down-drift continental outlet) ice.

Tb Till veneer: clayey silt, dominantly cobble- and boulder-size igneous and metamorphic clasts; 0.5–2 m thick; deposited in subglacial and ice-marginal environments of local ice (Mile Ingotite Peninsula) and of the Foxe Ice Dome (Anaktuvuk Ice Divide). Minor silt till deposited on Hudson Strait coast by Labrador (i.e. trans-shelf) and central Laurentide (i.e. down-drift continental outlet) ice.

TV Till veneer: clayey silt, dominantly cobble- and boulder-size igneous and metamorphic clasts; 0.5–2 m thick; >40% of area is till, <40% of area is rock ledges and inlets, and rubble bedrock topography is evident; minor till blanket, minor colluvium, including talus, colluvial fans, solifluction lobes, and unconfined valley-bottom deposits; minor washed-till boulder fields.

QUATERNARY AND PRE-QUATERNARY

Bedrock and rock weathering products: Intact and frost-ripen outcrops, discontinuous cover of rubble, boulders, gravel, sand, and minor silt; glacially scoured to frost-ripen or disaggregated outcrops; <40% of area is till, <40% of area is rock ledges and inlets, and rubble bedrock topography is evident; minor till blanket, minor colluvium, including talus, colluvial fans, solifluction lobes, and unconfined valley-bottom deposits; minor washed-till boulder fields.

CI Ordovician limestone.

Ps Classic metasedimentary rocks of Paleoproterozoic Sukuk and Lake Harbour groups and Baffin Bay assemblage.

Pc Marble of Paleoproterozoic Lake Harbour Group.

API Tonalite-monzogranite orthogneiss of Archean Superior Province and of Paleoproterozoic Narasauk arc and Ramsey River.

Pg Monzogranite of Paleoproterozoic Cumberland batholith.

Surficial materials contact
Cirque
Ice-moulded rock
Stratification (sense known, unknown)
Till (inverted/normal/unknown)
Drumlin
Esker
Interbedded moraine
End and/or lateral moraine
Assumed ice margin (readvance/recession); thick till on proximal side
Subglacial or proglacial meltwater outlet (flow direction known, unknown)
Lateral (sidehill) meltwater channel; bars uplope
Glacial delta, marine or glaciolacustrine
Glacial lake shoreline
Limit of marine inundation, observed
Limit of marine inundation, interpolated where data permit
Beach ridges, prominent
Solifluction terrace
River icing
Elevation (m); w – washing limit, d – delta top, b – beach
°C date location (see Table 1)
Ground observation
Till sample

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Geology by D.A. Hodgson, 1995–1997, 1999

Digital map compilation by D.A. Hodgson, 1997–2002

Digital cartography by E. Everett, 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, Ottawa, 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.

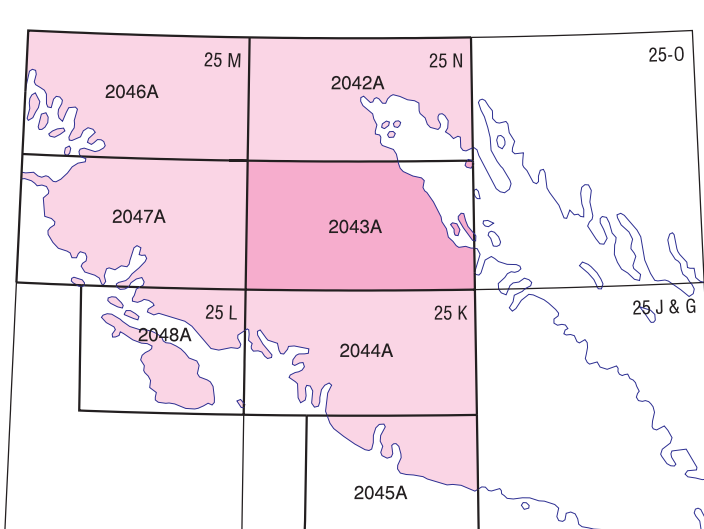
Digital base map from data compiled by Geomatics Canada, modified by ESS Info

Mean magnetic declination 2003, 33°28' W, decreasing 23.9' annually. Readings vary from 32°51' W in the SW corner to 34°02' W in the NE corner of the map.

Elevations in metres above mean sea level

REFERENCE

St-Onge, M.R., Scott, D.J., and Wodicka, N.
1999. Geological map of Baffin Island, Nunavut, Canada, 1:100 000.



NATIONAL TRANSCANTARIC SYSTEM REFERENCE AND ADJUSTED TO THE CANADIAN DATUM OF 1927



LOCATION MAP

| Map no. | Age ^a | Lab. identification | Elev. (m) | Material |
|---------|------------------|---------------------|-----------|----------------|
| 1 | 8675 ± 130 | QC-903 | 27 | Molluscs |
| 2 | 8995 ± 100 | AA-15125 | 52 | Molluscs |
| 3 | 8955 ± 75 | AA-17861 | 28 | Molluscs |
| 4 | 8855 ± 75 | AA-15131 | 28 | Molluscs |
| 5 | 8860 ± 110 | GSC-8895 | 66 | Molluscs |
| 6 | 8620 ± 75 | AA-15127 | 11 | Molluscs |
| 7 | 8710 ± 120 | GSC-3157 | 82 | Molluscs |
| 8 | 8700 ± 80 | AA-16403 | 4 | Molluscs |
| 9 | 8930 ± 75 | AA-15126 | 64 | Molluscs |
| 10 | 8590 ± 100 | GSC-3666 | 25 | Molluscs |
| 11 | 8230 ± 240 | GSC-462 | 87 | Molluscs |
| 12 | 7985 ± 130 | QC-904 | 32 | Molluscs |
| 13 | 7925 ± 75 | AA-15130 | 16 | Molluscs |
| 14 | 7760 ± 70 | AA-15128 | 38 | Molluscs |
| 15 | 7650 ± 70 | AA-15129 | 30 | Molluscs |
| 16 | 7595 ± 130 | Beta-1672 | 15 | Molluscs |
| 17 | 7420 ± 115 | Beta-1671 | 14 | Molluscs |
| 18 | 5420 ± 90 | GSC-4204 | 250 | Plant material |
| 19 | 4440 ± 70 | GSC-4208 | 250 | Plant material |
| 20 | 3660 ± 60 | GSC-4226 | 250 | Plant material |

Table 1. Summary of radiocarbon dates. The uncalibrated age (machine age corrected to a $\delta^{13}\text{C} = -25\text{‰}$) is given where available, otherwise the uncalibrated age is given. For marine organisms, where the isotopic ratio is known the age is corrected following GSC convention to a $\delta^{13}\text{C} = -20\text{‰}$, which is equivalent to subtracting a marine reservoir effect of 400 years from a normalized age; otherwise the uncalibrated age (which incorporates the marine reservoir effect) is given.