

LEGEND

This legend is common to maps 2043A, 2043A, 2044A, 2045A, 2046A, 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, boulders, minor silt, and muck; 1–10 m thick; deposited in broadplains.
- Mv** **MARINE VEENER:** sand, silt, and gravel; 0.5–2 m thick; discontinuous cover of littoral and offshore sediment including beach ridges and sea-ice-rafter debris; mimics surface of underlying till or rock. Fine-grained sediment bears a continuous vegetation cover patterned with supralittoral rills.
- GMd** **GLACIAL MARINE DELTA:** sand, silt, gravel, and boulders; 2–30 m thick; deposited in the high proglacial sea.
- Gmb** **GLACIAL MARINE BLANKET:** sand, silt, minor gravel, and dropstones; 2–30 m thick; deposited from suspension and iceberg 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.
- Gr** **GLACIOFLUVIAL ICE-CONTACT DEPOSITS (eskers and kames):** poorly stratified to sorted gravel, sand, and boulders; 5–20 m thick; forming ridges and hummocks.

EARLY HOLOCENE AND WISCONSINAN

- Th** **TILL:** clast-supported silty sand, dominantly cobble- and boulder-size igneous and metamorphic clasts; 0.5–20 m thick; deposited in subglacial and ice-marginal environments of local ice caps (Mata Inopina Peninsula) and of the Foxe Ice Dome (Amadjuak Ice Divide). Minor silt till deposited on Hudson Strait coast by Labrador (i.e. trans-strait) and central Laurentide (i.e. down-strait continental outlet) ice.
- Tb** **TILL BLANKET:** diamictic; 1–10 m thick; undulating plain with minor fluted, hummocky, ridged, ribbed, or channelled areas; soft-sediment lobes on steeper slopes; thick end moraines; minor till veneer or glaciofluvial outwash; rare glaciofluvial lines.
- Tv** **TILL VENEER:** diamictic; 0.5–2 m thick; >40% of area is till, <60% of area is rock ledges and knobs, and rubble; bedrock topography is evident; minor till blanket, minor colluvium, including talus, colluvial fans, soft-sediment lobes, and undifferentiated valley-bottom deposits; minor washed-till boulder fields.

QUATERNARY AND PRE-QUATERNARY

BEDROCK AND ROCK WEATHERING PRODUCTS: intact and frost-riven outcrop, discontinuous cover of rubble, boulders, gravel, sand, and minor silt; glacially scoured to frost-riven or disaggregated outcrop; <40% till and boulder fields (including till from which finer fraction was washed by glacial meltwater or a higher sea), and colluvium; very minor fluvial deposits, muck, or raised marine nearshore and shoreline deposits. Topography variable from rolling to rough with some major and numerous minor ridges and scarps. Vegetation continuous to absent, low acute to mid-acute depending on substrate, exposure, and elevation. Subdivided by M.R. St-Onge by resistance to weathering, least to most: units OI, Ps, Pc, APT, and Pg.

- OI** Ordovician limestone.
- Ps** Clastic metasedimentary rocks of Paleoproterozoic; Sugsik and Lake Harbour groups and Blandford Bay assemblage.
- Pc** Marble of Paleoproterozoic Lake Harbour Group.
- APT** Tonalite-monzogranite orthogneiss of Archean Superior Province and of Paleoproterozoic Narsajuaq arc and Ramsey River.
- Pg** Monzogranite of Paleoproterozoic Cumberland batholith.

Surficial materials contact

- Cirque
- Ice-moulded rock
- Striation (sense known, unknown)
- Till lineation/streamline/smear
- Drumlin
- Esker
- Interlobate moraine
- End and/or lateral moraine
- Assumed ice margin (readvance/recession); thick till on proximal side
- Subaqueous push moraine (De Geer moraine)
- Subglacial or proglacial meltwater outlet (flow direction known, unknown)
- Lateral (sidehill) meltwater channel; barb upslope
- Perched delta; marine or glaciofluvial
- Glacial lake shoreline
- Limit of marine inundation, observed
- Limit of marine inundation, interpolated where data permits
- Beach ridges, prominent
- Soft-sediment terrace
- River icing
- Elevation (m): w - washing limit, d - delta top, b - beach
- ¹³C date location (see Table 1)
- Ground observation
- Till sample

REFERENCE

St-Onge, M.R., Scott, D.J., and Wodicka, N. 1999. Geology, White Strait, Nunavut. Geological Survey of Canada, Map 1995A, scale 1:100 000.

Copies of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0S8, 3935-33rd Street, N.W., Calgary, Alberta T2L 2A7, 101-605 Nelson Street, Vancouver, B.C. V6B 5S2.

LOCATION MAP

MAP 2048A
SURFICIAL GEOLOGY
WHITE STRAIT
BAFFIN ISLAND
NUNAVUT

Author: D.A. Hodgson
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. Citava, registered to the ISO 9001:2000 standard.

Scale 1:100 000 / Échelle 1/100 000

Universal Transverse Mercator Projection / Projection transverse universelle de Mercator
North American Datum 1927 / Système de référence géodésique nord-américain, 1927
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Elevations in metres above mean sea level

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, 32°19' W, decreasing 22.0' annually. Readings vary from 31°44' W in the SW corner to 32°51' W in the NE corner of the map.

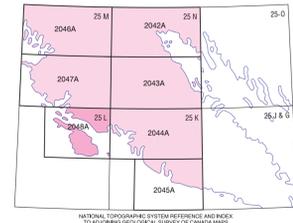


Table 1. Summary of radiocarbon dates. For nonmarine material, the normalized age (machine age corrected to a 0°C = -25‰) is given where available, otherwise the uncorrected age is given. For marine organisms, where the isotopic ratio is known the age is corrected following GSC convention to a 0°C = 0‰, which is equivalent to subtracting a marine reservoir effect of 400 years from a normalized age; otherwise the uncorrected age (which incorporates the marine reservoir effect) is given.

Map no.	Age ¹	Lab. identification	Elev. (m)	Material
1	43 350 ± 2100	AA-12605	114	Mollusc
2	37 360 ± 1050	AA-12606	114	Mollusc
3	34 390 ± 710	AA-7899	15	Mollusc
4	8155 ± 95	AA-12609	55	Mollusc
5	7980 ± 220	GSC-425	75	Mollusc
6	7845 ± 75	AA-13050	34	Mollusc
7	7775 ± 95	AA-12607	58	Mollusc
8	7710 ± 190	GSC-5699	49	Mollusc
9	7540 ± 130	GSC-5677	45	Mollusc
10	7410 ± 70	AA-7900	-11	Mollusc
11	7330 ± 200	GSC-5698	39	Mollusc
12	6255 ± 65	AA-7898	-1	Mollusc

Recommended citation:
Hodgson, D.A.
2003. Surficial geology, White Strait, Baffin Island, Nunavut; Geological Survey of Canada, Map 2048A, scale 1:100 000.