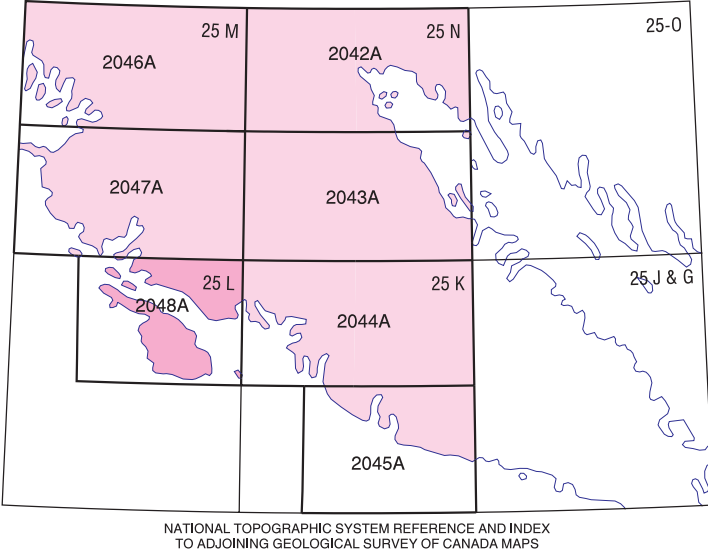


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Geology by D.A. Hodgson, 1995–1997, 1999
Digital map compilation by D.A. Hodgson, 1997–2002
Digital cartography by E. Everett, Earth Sciences Sector Information Division (ESS Info)
This map was produced from processes that conform to the ESS Info Publishing Services Subdivision Quality Management System, Ottawa, registered to the ISO 9001:2000 standard

MAP 2048A
SURFICIAL GEOLOGY
WHITE STRAIT
BAFFIN ISLAND
NUNAVUT
Scale 1:100 000/Échelle 1/100 000
kilomètres 2 4 6 8 kilomètres
Universal Transverse Mercator Projection
North American Datum 1927
© Her Majesty the Queen in Right of Canada 2003
Projection transversale universelle de Mercator
Système de référence géodésique nord-américain, 1927
© Sa Majesté la Reine du chef du Canada 2003
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 23.0' annually. Readings vary from 31°44' W in the SW corner to 32°51' W in the NE corner of the map



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 mud; 1–10 m thick; deposited in braided channels.

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 rafted debris; mimics surface of underlying till or rock. Fine-grained sediment bears a continuous vegetation cover patterned with subparallel rills.

Gfpt GLACIOFLUVIAL DEPOSITS: gravel and sand; 1–30 m thick; deposited by meltwater channels.

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 Hummocky till: diamiction which may be underlain by remnant glacier ice; 1–20 m thick; rolling to hummocky; mainly in Frobisher Bay moraines.

Td Till blanket: diamiction; 1–10 m thick; undulating plain with minor fluted, hummocky, ridged, ribbed, or channelled areas; suffocation lobes on steeper slopes; thick end moraines; minor till veneer or glaciofluvial outwash; rare glaciofluvial fans.

Tv Till veneer: diamiction; 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, suffocation 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, mud, 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 arctic to mid-arctic 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: Sugluk 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

Suffocation terrace

River icing

Elevation (m): w - washing limit, d - delta top, b - beach

°C 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 1965A, scale 1:100 000.

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-7599	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	7390 ± 200	GSC-5696	39	Mollusc
12	6255 ± 65	AA-7898	-4	Mollusc

Table 1. Summary of radiocarbon dates. ¹For nonmarine material, the normalized age (machine age corrected to a $\delta^{13}\text{C}$ = -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 $\delta^{13}\text{C}$ = 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.