



**LEGEND**

This legend is common to maps 2042A, 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**

- Fp** FLUVIAL DEPOSITS (nonglacial alluvial floodplain, terrace, fan, and delta deposits): gravel, sand, boulders, minor silt, and mud; 1–10 m thick; deposited in braided plains.
- Mv** Marine veneer: sand, silt, and gravel; 0.5–2 m thick; discontinuous cover of littoral and offshore sand including beach ridges and dune-adjacent dunes; minor surface of underlying silt or rock. Fine-grained sediment bears a continuous vegetation cover patterned with subparallel ribs.
- Gmd** Glacial marine delta: sand, silt, boulders, and gravel; 2–20 m thick; massive to unconsolidated sediments that coarsen upwards in ice-contact deposits or at termination of outwash trains or meltwater channels.
- Gmb** Glacial marine blanket: sand, silt, minor gravel, and drifstones; 2–30 m thick; deposited from suspension and seabed ridges 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 (reshers and kames): poorly stratified to sorted gravel, sand, and boulders; 5–20 m thick; forming ridges and hummocks.

**EARLY HOLOCENE AND WISCONSINAN**

- Th** Hummocky silt: diamiction which may be underlain by remnant glacial ice; 1–20 m thick; rolling to hummocky; mainly in Frobisher Bay moraines.
- Tb** Till blanket: diamiction; 1–10 m thick; undulating plain with minor ridges; hummocky, ridged, ribbed, or channelled areas; soft-sediment lobes on steeper slopes; thick and moraines; minor till veneer or glaciofluvial outwash; rare glaciofluvial lines.
- Tv** Till veneer: diamiction; 0.5–2 m thick; >60% of area is silt; <40% of area is rock ridges and knolls; and fans; includes same textures, minor scopol and subaqueous; colluvium, including talus, colluvial fans, soft-sediment lobes, and undifferentiated talus from deposits; minor stratified boulder beds.

**QUATERNARY AND PRE-QUATERNARY**

**BEDROCK AND ROCK WEATHERING PRODUCTS:** intact and frost-riven outcrops; discontinuous cover of rubble, boulders, gravel, sand, and minor silt; glacially scoured to frost-riven or disorganized surfaces; <40% of area is silt; <40% of area is rock ridges and knolls; and fans; includes same textures, minor scopol and subaqueous; colluvium, including talus, colluvial fans, soft-sediment lobes, and undifferentiated talus from deposits; minor stratified boulder beds. Topography variable from rolling to rough with some major and numerous ridges and scapes. Vegetation continuous to absent. Low Arctic to mid-Arctic; depending on substrate, exposure, and elevation. Subdivided into Ql, Pc, APt, and Pg by resistance to weathering, west to east: units Ql, Pc, APt, and Pg.

- Ql** Ordovician limestone.
- Ps** Classic metamorphic rocks of Paleoproterozoic Sugluk and Lake Harbour groups and Standard Bay assemblage.
- Pc** Metite of Paleoproterozoic Lake Harbour Group.
- APt** Tonalite-monzogranite orthogneiss of Archean Superior Province and of Paleoproterozoic Narajuk am and Ramsey River.
- Pg** Monzogranite of Paleoproterozoic Cumberland batholith.

**Surficial materials contact**

- Clay
- Ice-moulded rock
- Spillion (seam known, unknown)
- Till (massive/stratified/linear)
- Diamict
- Ear
- Intracomb moraine
- End and/or lateral moraine
- Assumed ice margin (subaerial/retreating); thin silt on proximal side
- Subaqueous push moraine (Dr. Geer moraine)
- Subglacial or proglacial meltwater outlet (flow direction known, unknown)
- Lateral (push) meltwater channel; bath upstage
- Parished delta, marine or glaciofluvial
- Glacial lake shoreline
- Limit of marine inundation, observed
- Limit of marine inundation, interpolated where data permits
- Beach ridge, prostrate
- Solifluction terrace
- River cut
- 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, 34°10' W, decreasing 2.4" annually. Readings vary from 33°33' W in the SW corner to 34°44' W in the NE corner of the map.  
 Elevations in metres above mean sea level.

**REFERENCE**

St-Onge, M.R., Scott, D.J., and Wedekin, N., 1999. Geology, Frobisher Bay, Nunavut, Geological Survey of Canada, Map 1979A, scale 1:100 000.

Map no.	Age <sup>1</sup>	Lab. identification	Elev. (m)	Material
1	8450 ± 190	GX-6159	39	Molluscs
2	8225 ± 450	GX-6696	1	Bulk organics
3	7950 ± 70	AA-19123	16	Molluscs
4	7910 ± 150	QC-905	5	Molluscs
5	7510 ± 320	QC-502	34	Molluscs
6	7380 ± 220	GSC-2771	11	Molluscs
7	7340 ± 125	QC-291	13	Molluscs
8	7080 ± 175	GX-6160	16	Molluscs
9	7080 ± 120	GSC-5903	1	Molluscs
10	6750 ± 170	GSC-464	15	Molluscs
11	6440 ± 160	GSC-633	3	Molluscs
12	6430 ± 225	GX-6965	2	Bulk organics
13	6140 ± 170	GSC-503	15	Molluscs
14	4905 ± 100	AA-6526	15.5	Humic acids
15	4140 ± 130	GSC-646	19	Charcoal
16	3605 ± 75	AA-6525	15.5	Humic acids
17	2575 ± 140	GX-6385	<30	Peat
18	2035 ± 70	Beta-1087	<30	Peat
19	1480 ± 70	Beta-1022	<30	Peat
20	1345 ± 135	GX-6384	<30	Peat
21	955 ± 130	GX-6380	17	Peaty sand
22	905 ± 100	Beta-1086	<30	Peat
23	605 ± 150	GX-6383	<30	Peat
24	580 ± 50	AECV-1708C	10	Bone
25	740 ± 70	AECV-1349C	16	Bone
26	740 ± 60	AECV-1350C	16	Wood
27	610 ± 150	AA-6524	15.5	Humic acids
28	550 ± 60	AECV-1348C	6	Bone
29	490 ± 70	AECV-1351C	8	Bone
30	475 ± 125	GX-6381	17	Peaty sand
31	445 ± 150	GX-6387	21	Molluscs
32	420 ± 125	GX-6382	<30	Peat

**Table 1. Summary of radiocarbon dates.** <sup>1</sup>For nonmarine material, the normalized age (machine age corrected to a δ<sup>13</sup>C = -25‰) is given where available; otherwise the uncorrected age is given. For marine organics, where the radiocarbon is known to be in contact following GSC convention to a δ<sup>13</sup>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 2042A SURFICIAL GEOLOGY FROBISHER BAY BAFFIN ISLAND NUNAVUT**  
 Scale 1:100 000 / Échelle 1/100 000

United Transverse Mercator Projection / Projection transversale universelle de Mercator  
 North American Datum 1927 / Système de référence géodésique nord-américain, 1927  
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