GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

LEGEND

- *Glacier ice*
- 8 — *Colluvium (scree): extensive accumulations of blocks, averaging 0.5 to 1.5 m in diameter, with interstitial ice and sandy gravel at bases of bedrock cliffs. At many localities material has flowed downslope by plastic deformation of interstitial ice to form rock glaciers (rock-glacierized scree)*
- 7 — *Active proglacial alluvium (outwash): sorted and stratified gravels and sands forming large floodplains; seasonally flooded and characterized by shifting braided channels at low flow*
- 6 — *Inactive alluvium: predominantly terraced proglacial outwash gravels and sands; other areas are inactive to intermittently active alluvial fans composed of boulder gravel*
- 5 — *Areas inundated by former glacier-dammed lakes: materials include wave-modified till, beach sand and gravel, deltaic gravel, sand, and silt, and bedrock*
- 4 — *Emerged marine sediment: mainly thick (>10 m) accumulations of deltaic gravel, sand, and silt, with minor areas of beach gravel and wave-modified till; formed during several periods of higher relative sea level when the earth's crust was depressed by glacier ice*
- 3 — *Till (ground moraine): diamicton averaging 1 to 2 m thick; generally ice cored near margins of existing glaciers; typical composition 20 to 50 per cent gravel, 60 per cent or more sand, and less than 10 per cent clay; includes numerous small outcrops of ice-moulded bedrock; in some areas of steep slopes till, especially in lateral moraines, has flowed downslope by plastic deformation of ground ice to form rock glaciers (rock-glacierized till)*
- 2 — *Residuum: predominantly felsenmeer (blockfields) with interstitial grus (fine gravel and sand), about 1 m thick over bedrock on broad summits. In most areas glacial erratics and till are mixed with these materials by cryoturbation. Most small to medium scale glacially moulded forms have been obliterated by weathering processes*
- 1 — *Bedrock: in plateau areas: hilly and hummocky to gently rolling, ice moulded, and streamlined surfaces with numerous depressions occupied by lakes and ponds; overlain in many places by small, thin patches of till and by erratic boulders; in deeply dissected areas: steep cliffs, arêtes, and pyramidal peaks*

Geological boundary (defined, gradational)
Cirque
Striation, groove
Till fluting
Ridge of end and lateral moraine; composed of till commonly 20 to 30 metres thick; poorly vegetated moraines near active glaciers very unstable and underlain by stagnant glacier ice
Minor moraine ridges; mostly small end moraines formed subaqueously in glacier-dammed lakes
Esker
Ice-marginal meltwater channels on hillsides (barb indicates upslope side)
Proglacial lake spillway
Direction of flow of Laurentide ice (generalized)
Direction of flow of formerly expanded Penny Ice Cap (generalized)
Direction of flow of coalescent expanded Penny and alpine ice masses (generalized)
Direction of flow of formerly expanded alpine glaciers (generalized)

Geology from airphoto interpretation by A.S. Dyke, 1974 and 1978; based on field work by A.S. Dyke, 1973 and 1974 and by J.T. Andrews and G.H. Miller, 1970 to 1974

To accompany Memoir 403 by A.S. Dyke, J.T. Andrews and G.H. Miller

Geological cartography by A. King and R. Perron, Geological Survey of Canada

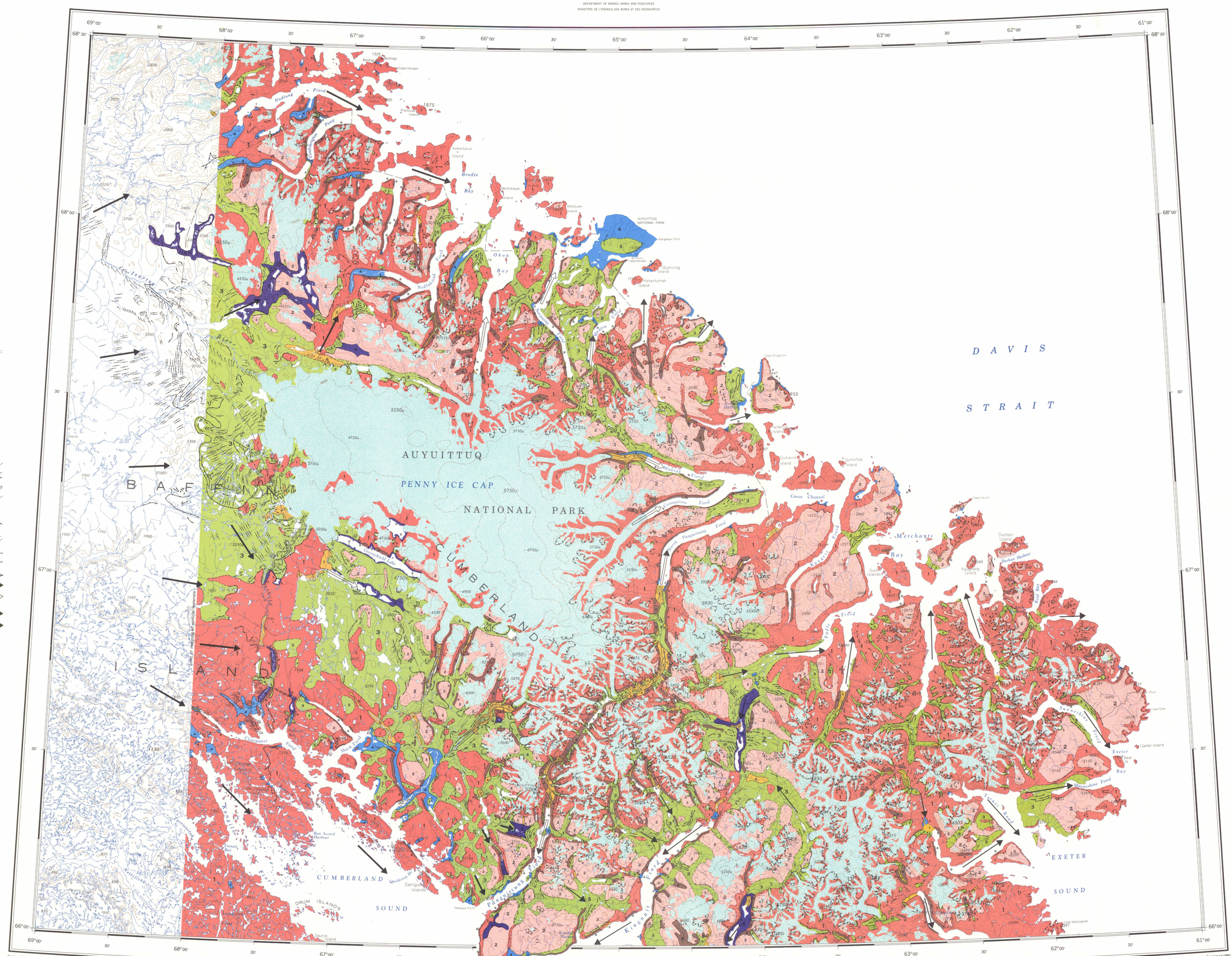
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Based map assembled by the Geological Survey of Canada from maps published at the same scale by the Surveys and Mapping Branch in 1967, 1975

Copies of the topographical editions covering this map area may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa K1A 0E9

Mean magnetic declination 1981, 48°39.9' West, decreasing 24.7' annually. Readings vary from 45°45.8' in the SE corner to 51°34.1' in the NW corner of the map area

Elevations in feet above mean sea level



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MAP 1536A

SURFICIAL MATERIALS AND LANDFORMS

CUMBERLAND PENINSULA, BAFFIN ISLAND

DISTRICT OF FRANKLIN

Scale 1:500 000

Kilometres 12 0 12 24 36 Kilometres
Miles 8 0 8 16 Miles

Transverse Mercator Projection

37 SW & SE	27 SW & SE	
36 NW & NE	26 NW & NE 1536A	16 NW & NE
36 SW & SE	26 SE & SE	16 SW & SE

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO GEOLOGICAL SURVEY OF CANADA MAPS

MAP 1536A
CUMBERLAND PENINSULA, BAFFIN ISLAND
DISTRICT OF FRANKLIN

1536A

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