GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

LEGEND

QUATERNARY

Qu — *Stream, deltaic, glacial and marine beach sediments*

CAMBRIAN AND ORDOVICIAN

P — *Sandstone, dolomite, limestone, conglomerate; generally flat lying to very gently dipping*

HADRYNIAN AND? OLDER

Hd — *Diabase dyke*

NEOHELIKIAN

BYLOT SUPERGROUP
NUNATSIAQ GROUP

Nss — *STRATHCONA SOUND FORMATION: siltstone, sandstone, minor dolomite; generally flat lying to very gently dipping*

ARCHEAN AND/OR APHEBIAN

mu — *Crystalline basement, undifferentiated*

ot — *Orthopyroxene tonalite, minor orthopyroxene granite and granodiorite; dark grey or greasy green, weathering brown or red; massive to crudely gneissic; commonly plagioclase-porphyroblastic and veined by granite and pegmatite; chief mafic minerals are orthopyroxene, biotite, hornblende and clinopyroxene; otv- with abundant granite and pegmatite veins, schlieren, sheets and layers*

am — *Pyribolite and amphibolite, commonly with clinopyroxene, orthopyroxene and biotite; includes metadykes*

pm — *Garnetiferous, pegmatitic, white granite*

qz — *Sillimanite-bearing quartzite, locally feldspathic and garnetiferous; minor diverse metasediments*

mb — *Marble and calc-silicate rocks with one or more of diopside, forsterite, wollastonite and humite group minerals; minor diverse metasediments*

tg — *Biotite-orthopyroxene tonalite gneiss, commonly veined by granite and pegmatite; generally greenish, allo grey; mafic minerals commonly include clinopyroxene and hornblende; subordinate biotite-orthopyroxene granite gneiss; tgv- with abundant granite and pegmatite veins, schlieren, sheets and layers*

gn — *Orthopyroxene-bearing gneiss of granitic to tonalitic composition and of sedimentary and igneous origin; commonly veined by granite or even migmatitic; locally (particularly west of Cape Hardy) only crudely gneissic; mafic minerals commonly include biotite and subordinate clinopyroxene, garnet and hornblende; locally includes rocks of units ms; gnv- with abundant granite and pegmatite veins, schlieren, sheets and layers; gnr- retrogrades, with pseudomorphs after pyroxene, secondary amphibole and chlorite, and microcline and /or incipient microcline, and commonly with abundant granitic veins, schlieren, sheets and layers*

mg — *Biotite-orthopyroxene quartzofeldspathic gneiss of granitic to tonalitic composition, associated with diverse gneisses of metasedimentary aspect, commonly with garnet, cordierite, sillimanite and biotite, and other pelitic and psammitic metasediments; locally cut by abundant granitic veins*

ms — *Metasedimentary rocks, commonly veined by granite or even migmatitic: mainly garnet ± biotite ± sillimanite ± cordierite gneiss, subordinate pyribolite, quartzite, pyroxene-bearing quartzofeldspathic gneiss and meta- ultramafite*

NOTE: relative ages of Archean and /or Aphebian map units are uncertain

Geological boundary (defined, approximate, assumed)
Gneissosity, schistosity (horizontal, inclined, vertical, dip unknown)
Gneissosity, schistosity, general trend
Fault (defined; solid circle indicates downthrow side)

Precambrian geology of Devon Island by T. Frisch, 1978, 1980, 1982, with local observations by J. Krupička (1973) and R.L. Christie (1978); geology of Coburg Island by W.C. Morgan, 1977; geology of Neohelikian and Paleozoic rocks (except on Philpots Island) simplified after R. Thorsteinsson and U. Mayr (1983)

Compilation and interpretation by T. Frisch, 1982

Geological cartography by M. Hudon, Geological Survey of Canada

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

Base map assembled by the Geological Survey of Canada with no attempt made to modify base contours or glacial areas from maps published at the same scale by the Surveys and Mapping Branch in 1967.

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

The daily change of the North Magnetic Pole causes the magnetic compass to be very erratic in this area. Approximate magnetic declination 1983, 73°18' West, decreasing 31.1' annually

Elevations in feet above mean sea level

References

Christie, R.L.
1978. A structural reconnaissance of eastern Devon Island. Geological Survey of Canada, Open File 537.

Krupička, J.
1973. Granulite facies rocks on northeastern Devon Island, Arctic Archipelago. Geological Survey of Canada, Paper 73-8.

Thorsteinsson, R. and Mayr, U.
1983. Sedimentary rocks of Devon Island, Canadian Arctic Archipelago.

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1984: Geology, Devon Ice Cap, District of Franklin, Northwest Territories; Geological Survey of Canada, Map 1574 A, scale 1:250 000

Copies of this map may be obtained from the Geological Survey of Canada 601 Booth Street, Ottawa, Ontario K1A 0E8 3303 33rd Street N.W., Calgary, Alberta T2L 2A7

INDEX MAP

MAP 1574A
GEOLOGY
DEVON ICE CAP
DISTRICT OF FRANKLIN
NORTHWEST TERRITORIES
Scale 1:250 000

Kilometres 6 3 0 6 12 18 Kilometres
Universal Transverse Mercator Projection

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

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