GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

LEGEND

MESOZOIC-CENOZOIC

QUATERNARY
PLEISTOCENE-RECENT

Qu — *Chiefly unconsolidated glacial drift; in part reworked by lakes, streams, and frost action; outwash plains (sandurs), bog deposits*

CRETACEOUS-PALEOGENE (?)

KT4 — *Undifferentiated sedimentary rocks, poorly consolidated, in part light coloured and quartzose*

PROTEROZOIC

HADRYNIAN

Hg — *FRANKLIN INTRUSIONS: Tholeiitic diabase*

APHEBIAN

Ag — *Massive granite–granodiorite; chiefly pink quartz monzonite; fine- to coarse-grained and pegmatitic; abundant aplite and pegmatite dykes*

Ack — *Charnockite to monzocharnockite (hypersthene granite to hypersthene quartz monzonite); minor granoenderbite (hypersthene granodiorite); chiefly light grey to greyish pink, massive, medium- to coarse-grained; potash feldspar phenocrysts common*

Agp — *Porphyritic quartz monzonite – granodiorite; minor granite, syenite-syenodiorite; light grey, greyish pink to pink, massive to foliated, medium grained; potash feldspar phenocrysts, commonly locally granulated*

Amp — *Porphyroblastic migmatite; commonly of granodioritic composition; abundant schlieren, nebulae, potash feldspar porphyroblasts; medium grained; pinkish grey, light to dark grey, pink, streaky laminated to thin banded, massive*

Amg — *Chiefly banded migmatite; white to light grey granitoid bands alternate with grey to black more mafic bands, some pink to red and reddish black. Bands characterized by diverse composition, origin and geometry. Granitoid bands commonly appear to have been introduced. Derived in part from Mary River Group, and may include some gneisses basement to this group*

ARCHEAN AND/OR PROTEROZOIC

ARCHEAN AND/OR APHEBIAN
MARY RIVER GROUP (Mq–M)

M — *Undivided Mary River Group* Mq–M; *chiefly* Ms, Mb
Ms: *Metasediments; chiefly mica-quartz-feldspar schists and gneisses (metashales and metagreywackes); fine- to medium-grained, light to dark grey, very thin bedded to massive. Minor hornblende-, garnet-, alumino-silicate-, pyroxene-, and cordierite-bearing gneisses; lit-par-lit gneiss, quartzite, basic metavolcanic rocks, local acid metavolcanics*
Mb: *Basic metavolcanic rocks; chiefly amphibolite and pyroxene gneiss; fine- to medium-grained, dark greyish green to black, laminated to massive; minor metasediments; local acid metavolcanics, metamorphosed ultrabasic and anorthositic rocks*

Mg — *Metagabbro, chiefly amphibolite, fine- to medium-grained, dark greenish grey, foliated to massive*

Mq — *Quartzite; fine- to medium-grained, white to pale pink, very thin bedded to massive; includes a vivid orange-weathering rusty zone*

gr — *Foliated quartz monzonite-granodiorite, local granite, light pink to light grey, medium-grained, massive, minor faint layering; schlieren, mafic lenses, potash feldspar augen. In part younger than Mary River Group*

b — *Amphibolite dykes, sills; fine- to medium-grained, dark green to black, massive, commonly foliated and/or lineated*

mu — *Undifferentiated gneisses, mixed rocks; chiefly undivided* Amg, Amp, gr; Amn; *minor supracrustal rocks, veined gneiss, agmatite, gneissic mafic plutonic rocks*

bg — *Homogeneous quartz-biotite-feldspar gneiss, chiefly of granodiorite composition; grey to locally grey-black, fine- to medium-grained; massive, foliated, indistinct thick layering in places*

ARCHEAN

ARCHEAN

Amn — *Fluidal nebulitic granodiorite migmatite; minor quartz monzonite-granodiorite; light grey, pinkish grey, pink; minor greyish black, greenish grey, brown; fine- to medium-grained, massive to finely foliated and thin banded; schlieren, lenses and boudined bands of amphibolite, pyroxene gneiss, metasedimentary and granitoid rocks are common; streaky appearance common; potash feldspar augen abundant locally. May include some Aphebian rocks*

Note: Relative ages of some map units are uncertain, and individual map units may include rocks belonging to other units

Geological boundary (defined, approximate, assumed, gradational)
Granulite facies in Aphebian and Archean rocks as defined mainly by the presence of hypersthene (triangles point toward granulite facies)
Bedding, tops unknown (inclined)
Foliation, general trend, dip unknown
Gneissic layering; mainly ground determinations (horizontal, inclined, vertical, inclination unknown, g-gentle, s-steep)
Undifferentiated foliation; mainly airborne and airphoto determinations (horizontal, inclined, vertical, inclination unknown, g-gentle, m-moderate)
Linear structures;
Microfold axis; microscopic to hand specimen (horizontal, plunging)
Mesoscopic fold axis; hand specimen to large outcrop (horizontal, plunging)
Recumbent fold axis (horizontal, plunging)
Rodding; mineral aggregate or segregation, elongated rock fragments (horizontal, plunging)
Mullion structure (horizontal)
Mineral lineation; individual crystals (horizontal, plunging)
Trend of complexly folded horizon (plunge unknown)
Lineament
Fault, tick indicates direction of dip (defined, approximate, assumed)
Thrust fault, teeth indicate direction of dip (approximate and assumed)
Dyke (defined – approximate, inferred from aeromagnetic data)
Rusty zone
Antiform (upright – inclined, overturned – recumbent; defined–approximate)
Synform (upright – inclined, overturned – recumbent; defined–approximate; arrow indicates direction of plunge)
Fold structure, nature uncertain
Glacial striae (direction of ice movement undetermined)
Older end and lateral moraines
Age determination in millions of years (K – potassium-argon, w – whole-rock, b – biotite) — 1665 ± 53
Inuit dwelling site (most have square outline)
Mineral locality — am

MINERALS

Atacamite	am	Hematite	hem
Cordierite (gem quality)	cd	Malachite	ma

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

Geology by G. D. Jackson 1967, 1968; S. L. Blusson, W. J. Crawford, A. Davidson, W. C. Morgan, 1968

Compilation and interpretation by G. D. Jackson, W. C. Morgan, A. Davidson, completed 1975

Geological cartography by J. A. King, Geological Survey of Canada

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

MAP 1449A

GEOLOGY

BUCHAN GULF-SCOTT INLET

DISTRICT OF FRANKLIN

Scale 1:250,000

Kilometres 6 0 6 12 18 Kilometres
Miles 4 0 4 8 Miles

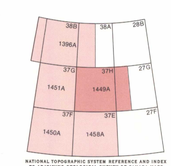
Universal Transverse Mercator Projection

Base-maps at the same scale published by the Surveys and Mapping Branch in 1966, 1967

Copies of the topographical edition of this map may be obtained from the Canada Map Office, 615 Booth Street, Ottawa, Ontario K1A 0E9

Mean magnetic declination 1977, 63°04.0' West, decreasing 15.9' annually. Readings vary from 61°01.8' in the SE corner to 65°18.0' in the NW corner of the map-area

Elevations in feet above mean sea-level



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

BUCHAN GULF-SCOTT INLET
DISTRICT OF FRANKLIN

Printed by the Surveys and Mapping Branch, 1978