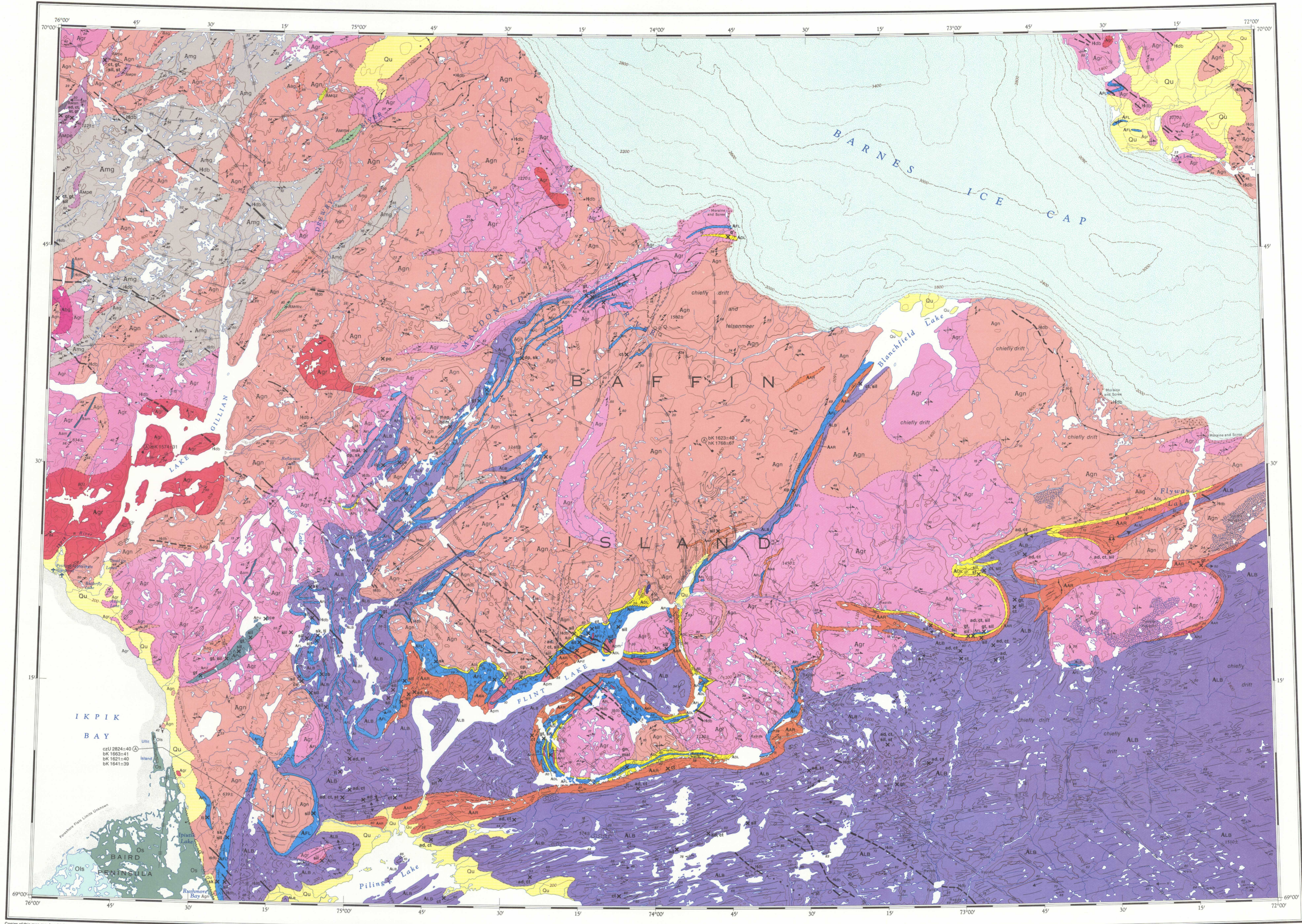
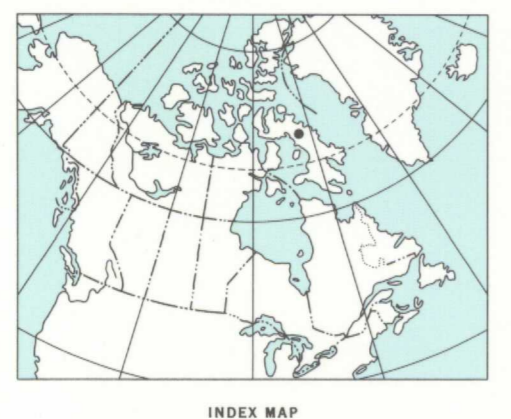


CENOZOIC
PALEOZOIC
PROTEROZOIC
ARCHEAN

LEGEND

- QUATERNARY**
PLEISTOCENE-RECENT
Qu Unconsolidated glacial drift with associated marine, lake, river and bog deposits. Chiefly marine muds on coastal areas. Includes some *feisenmeer*
- ORDOVICIAN**
UPPER MIDDLE AND UPPER ORDOVICIAN
Ols Dolomitic limestone; minor calcareous dolostone
- UPPER LOWER AND LOWER MIDDLE ORDOVICIAN**
SHIP POINT FORMATION: dolostone, in part sandy, silty, argillaceous; dolomitic flat-pebble conglomerate; minor dolomitic sandstone, siltstone, breccia, quartz-cemented sandstone
- HADRYNIAN**
Hdb FRANKLIN INTRUSIONS: tholeiitic diabase dykes
- APHEBIAN**
Agr Massive, fine- to coarse-grained, pink granite-granodiorite; chiefly quartz monzonite; abundant crosscutting veins and sheets of apilite and pegmatite; local weak foliation
Abg Massive, white muscovite-biotite granite-quartz monzonite
Apm Pegmatite; white to light grey; massive; includes some apilite and granite; may contain muscovite, biotite, garnet, tourmaline and beryl; chiefly sills and dykes but also crosscutting veins and sheets; local deformation and foliation; mapped and schematic bodies
- PILING GROUP (AdL-APu)**
APu Undivided Piling Group
APiF Metamorphosed iron formation; chiefly oxide facies with silicate facies; metallic grey; fine- to coarse-grained; laminated to bedded; includes quartzite, paragneiss, amphibolite and basic metavolcanic horizons
- ALB LONGSTAFF BLUFF FORMATION: greywacke, psammite, slate and metamorphic equivalents (schist, paragneiss, migmatitic paragneiss); interbedded; thin to thick bedded, light to dark grey; graded beds and typical turbidite structures; some rusty schists; minor calcareous rocks**
- AAR ASTARTE RIVER FORMATION: sulphide schist; rusty weathering; graphitic, pyrrhotite-pyrite schist and slate; sulphide facies iron formation**
- AFL FLINT LAKE FORMATION: dolomite, marble and calcareous gneiss; chiefly white to grey or buff weathering; minor paragneiss, quartzite, and rusty schist**
- ADL DEWAR LAKES FORMATION: quartzite and feldspathic quartzite; grey, white and black; laminated, bedded and massive; includes muscovite schist, commonly with sillimanite, and paragneiss; some rusty horizons**
- ARCHEAN**
MAY RIVER GROUP (Amqz-Amn)
Amn Meta-anorthosite-metagabbro; white to grey; banded to massive; foliated; fine- to coarse-grained; megacrystic with local footwall anorthosite; cumulate textures; layers of amphibolite and hornblende; foliated amphibolite dykes
Ampe Slate, greywacke and metamorphic equivalents (schist, paragneiss, migmatitic paragneiss); laminated to thick bedded; light to dark grey; rusty; minor impure quartzite, conglomerate, amphibolite and volcaniclastic rocks
Ammv Mafic metavolcanics; chiefly migmatized amphibolite; dark grey, brown, green, black; fine- to medium-grained; foliated, banded or massive
Amqz Quartzite; white to pale grey; thin bedded to massive; fine grained to very fine grained; sheared; cherty; minor schist and paragneiss horizons; amphibolite sills; includes coarse cobble conglomerate with acid metavolcanic clasts and some quartzite with green mica (fuchsite)
Aam Amphibolite and hornblende gneiss dykes; medium- to coarse-grained; dark grey green to black; commonly foliated and banded
Aum Ultramafic rocks; serpentized peridotite and hornblende; foliated to schistose; dark green or brown weathering
Agr Weakly mineral foliated quartz monzonite-granodiorite; minor granite; pale pink to grey; medium- to coarse-grained
Aag Potash feldspar augen gneiss; quartz monzonite-granodiorite; grey to pink; streaky appearance; medium- to coarse-grained; pervasive mineral lineation
Agn Quartz monzonite-granodiorite gneiss; banded and foliated; medium- to coarse-grained; light grey to pink granitic bands alternate with darker more mafic bands
Amg Migmatite and nebulitic migmatite; chiefly massive, foliated, thin bedded, fluidal or streaky granitic to granodioritic gneiss; grey to pink; fine- to medium-grained; amphibolite and metasedimentary schlieren and nebulae common; local well banded gneisses, mixed rocks and agmatite; may include some Apehbian 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)
 - Geological boundary (gradational)
 - Bedding: tops unknown (inclined, vertical)
 - Bedding: general trend (dip and top unknown; dip known, top unknown)
 - Schistosity, cleavage (inclined, vertical)
 - Gneissosity, foliation; general trend (inclined)
 - Gneissic banding (horizontal, inclined, vertical)
 - Mineral foliation (horizontal, inclined)
 - Undifferentiated foliation; chiefly airborne and airphoto determinations (horizontal, inclined, vertical, dip unknown)
 - Linear structures
Mesoscopic fold axis (inclined)
 - Mullion structure (inclined)
 - Mineral lineation (inclined)
 - Lineament
 - Fault (defined, approximate, assumed; solid circle indicates downthrow side)
 - Dyke (defined, approximate-assumed, inferred from aeromagnetic data)
 - Antiform (upright-inclined, overturned-recumbent)
 - Synform (arrow indicates direction of plunge (upright-inclined, overturned-recumbent)
 - Rusty zone
 - Glacial striae (direction of ice movement undetermined)
 - End and lateral moraines
 - Esker (direction of flow known or assumed)
 - Intense quartz net veining
 - Location of age determination sample (mineral, dating method, age in millions of years)
 - Minerals: b, biotite; h, hornblende; m, muscovite; z, zircon
Dating methods: K, Potassium-Argon; U, Uranium-Lead; c, concordia intersection
Mineral occurrence (andalusite)



Copies of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8, 3939-32nd Street, N.W., Calgary, Alberta T2L 2A7, 100 West Pender Street, Vancouver, B.C. V6B 1R6

MINERALS			
Andalusite	ad	Scapolite	sk
Chalcopyrite	cp	Sillimanite	sil
Chert	ce	Sphalerite	zb
Cordierite	ct	Sphene	ti
Diopside	dp	Staurolite	st
Fluorite	fl	Sulphide facies iron formation	sif
Galena	gn	Quartz (rose)	q
Garnet	gt		
Hematite	hem		
Humite	hu		
Magnetite	mag		
Malachite	mal		
Pyrrhotite	po		

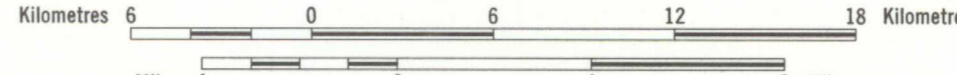
Geology by W.C. Morgan, 1974, 1975; J. Bourne, R.K. Herd, J.W. Pickett and C.R. Tippett, 1974; A.V. Okulitch and P.H. Thompson, 1975; reconnaissance by G.D. Jackson, S.L. Blusson, W.J. Crawford, A. Davidson, W.C. Morgan, 1968. Paleozoic geology from report by H.P. Trettin (Geological Survey of Canada, Map 1406A, Bulletin 251); drift cover not shown

Compilation and interpretation by W.C. Morgan, 1981

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MAP 1560A
GEOLOGY
LAKE GILLIAN
DISTRICT OF FRANKLIN

Scale 1:250 000



Universal Transverse Mercator Projection
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To accompany Memoir 406 by W.C. Morgan

Geological cartography by F.J. Heney, Geological Survey of Canada

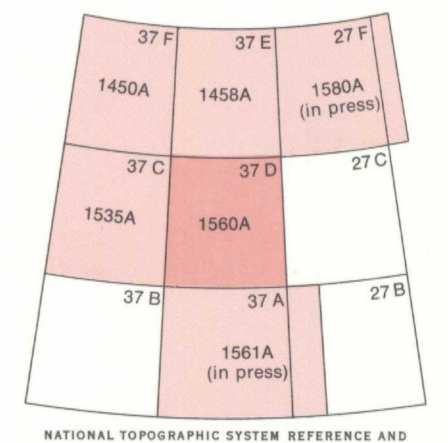
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Surveys and Mapping Branch in 1966

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

Mean magnetic declination 1983, 52°14.1' West, decreasing 30.1' annually. Readings vary from 51°34.2' in the SE corner to 53°03.4' in the NW corner of the map area

Elevations in feet above mean sea level



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

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