

LEGEND

- CEANOZOIC**
- QUATERNARY**  
**PLEISTOCENE-RECENT**  
 Qu Unconsolidated glacial drift with associated marine, lake, river and bog deposits. Chiefly marine muds on coastal areas and on islands in Foxe Basin. Includes some tselsemmer
- ORDOVICIAN (?) AND SILURIAN**  
**UPPER-UPPER ORDOVICIAN (?) AND LOWER SILURIAN (LLANDOVERIAN)**  
 OScb Calcareous dolostone, dolostone, dolomitic limestone; minor calcareous and dolomitic breccia and flat-pebble conglomerate
- ORDOVICIAN**  
**UPPER MIDDLE AND UPPER ORDOVICIAN**  
 Ols Dolomitic limestone; minor calcareous dolostone
- UPPER LOWER AND LOWER MIDDLE ORDOVICIAN**  
 Os **SIP POINT FORMATION**: dolostone, in part sandy, silty, argillaceous; dolomitic flat-pebble conglomerate; minor dolomitic sandstone, siltstone, breccia, quartz-cemented sandstone  
 Os\*: may include outliers of map unit Ols
- HADRYNIAN**  
 Hdb FRANKLIN INTRUSIONS: tholeiitic diabase dykes
- HELIKIAN**  
 HFH FURY AND HECLA FORMATION: sandstone and quartzite with interbedded shale; minor pebble conglomerate and grit horizons
- APHEBIAN**  
 Agr Massive, fine- to coarse-grained, pink granite-granodiorite; chiefly quartz monzonite; abundant crosscutting veins and sheets of apite and pegmatite; local weak foliation; mapped and schematic bodies
- PROTEROZOIC**
- ABg** Massive, white, muscovite-biotite granite-quartz monzonite
- AMg** Potash feldspar megacrystic, massive to foliated, grey to pink quartz monzonite-granodiorite; minor granite and quartz diorite
- Aqd** Massive to foliated, medium grained, grey to pink quartz diorite; minor granodiorite
- PLING GROUP (Apl-Ap)**  
**FLINT LAKE FORMATION**: dolomite, marble and calcisilicate gneiss; chiefly white to grey or buff weathering; some white pegmatite; minor paragneiss and quartzite
- ADL** DEWAR LAKES FORMATION: quartzite and feldspathic quartzite; grey and white; laminated, bedded and massive; minor paragneiss; white pegmatite
- ARCHEAN**
- Ahr** Hybrid rocks: intimately mixed zone of Mary River Group rocks, chiefly paragneiss (Ampe) and amphibolite (AMmv) with foliated and gneissic granitoid rocks (Agr, Agn); migmatitic; may in part include an Aphebian component
- AMu** MARY RIVER GROUP (Amqz-AMu)  
 Undivided Mary River Group: chiefly paragneiss (Ampe) and amphibolite (AMmv), but may include other lithologies
- AMam** Amphibolite dykes and sills; fine grained; dark grey to black; foliated; commonly very thin
- AMan** Meta-anorthositic-metagabbro: white to grey; banded to massive; foliated; fine- to coarse-grained; megacrystic with local footwall anorthositic; cumulate textures; layers of amphibolite and hornblende; foliated amphibolite dykes (AMam)
- 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 volcanoclastic rocks; locally includes other Mary River Group lithologies
- AMit** Metamorphosed iron formation; chiefly oxide facies with abundant silicate facies and rare carbonate facies; fine- to coarse-grained; thin laminated to bedded, thick bedded and massive; metallic grey, black, buff, brown; local thick horizons of very pure metallic blue black magnetite-hematite rock; mapped and inferred from aeromagnetic data
- AMum** Metamorphosed ultramafic rocks; pyroxenite, hornblende, serpentinite; thin banded to massive; foliated; green, brown, black; may include both volcanic flows and intrusive sills
- AMav** Acid metavolcanics; rhyolite to dacite; pale blue grey and green; very fine grained; commonly porphyritic with quartz and feldspar phenocrysts; fine banded to massive, poor cleavage; includes volcanoclastic horizons
- AMmv** Mafic metavolcanics; andesite to basalt; chiefly greenstone and amphibolite; dark grey, brown, green, black; fine- to medium-grained; cleaved, foliated, banded or massive; local pillow structures and vesicles; minor interbedded metagreywacke and volcanoclastic rocks; includes some acid metavolcanics (AMav), ultramafic rocks (AMum) and iron formation (AMit)
- 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; serpentinitized peridotite and hornblende; foliated to schistose; dark green or brown weathering
- Agp** 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
- Agm** Potash feldspar megacrystic quartz monzonite-granodiorite gneiss; banded
- 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 nebulite common; local well banded gneisses, mixed rocks and agmatite; 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) .....
- Geological boundary (gradational) .....
- Granulite facies in Archean and Aphebian rocks, defined chiefly by the presence of hypersthene (triangles point towards granulite facies) .....
- Bedding; tops known (horizontal, inclined) .....
- Bedding; tops unknown (inclined) .....
- Bedding; general trend (dip unknown, dip and top known) .....
- Schistosity, cleavage (inclined) .....
- Gneissosity, foliation, general trend .....
- Gneissic banding (inclined, vertical) .....
- Mineral foliation (inclined, vertical) .....
- Undifferentiated foliation; chiefly airborne and airphoto determinations (inclined; dip unknown) .....
- Linear structures
- Mesoscopic fold axis (inclined) .....
- Mullion structure (inclined) .....
- Mineral lineation (inclined) .....
- Lineament .....
- Fault (defined, assumed) .....
- Dykes (defined, approximate-assumed, inferred from aeromagnetic data) (inclined; dip unknown) .....
- Antiform (arrow indicates plunge) .....
- Syncline .....
- Synform .....
- Antiform (overturned) .....
- Glacial striae (direction of ice movement known) .....
- End and lateral moraines .....
- Esker .....
- Conglomerate horizon .....
- Diatreme breccia locality .....
- Intense quartz net veining .....
- Location of age determination sample (mineral, dating method, age in millions of years) .....
- Minerals: b, biotite; m, muscovite; z, zircon
- Dating methods: K, Potassium-Argon; R, Rubidium-Strontium; U, Uranium-Lead; c, concordia intersection; l, leachron
- Mineral occurrence (andalusite) .....

MINERALS		
Andalusite .....	Humite .....	Sillimanite .....
Beryl .....	Iron formation .....	Sphalerite .....
Chalcopyrite .....	Kyanite .....	Sphene .....
Chloritoid .....	Magnetite .....	Spinel .....
Cordierite .....	Malachite .....	Staurolite .....
Dioptase .....	Pyrite .....	Sulphide facies
Galena .....	Pyrrhotite .....	Iron formation .....
Garnet .....	Scapolite .....	Tourmaline .....

Geology by W.C. Morgan, 1974, 1975; J. Bourne and R.K. Herd, 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; reports by R.G. Blackadar (Geol. Surv. Can., Map 4-1968) and Patino Mining Corporation, 1970; Paleozoic geology of Baird Peninsula and islands in Foxe Basin from report by H.P. Trettin (Geol. Surv. Can., Map 1406A, Bulletin 251); drift cover not shown

To accompany Memoir 406 by W.C. Morgan

Compilation and interpretation by W.C. Morgan, 1979

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

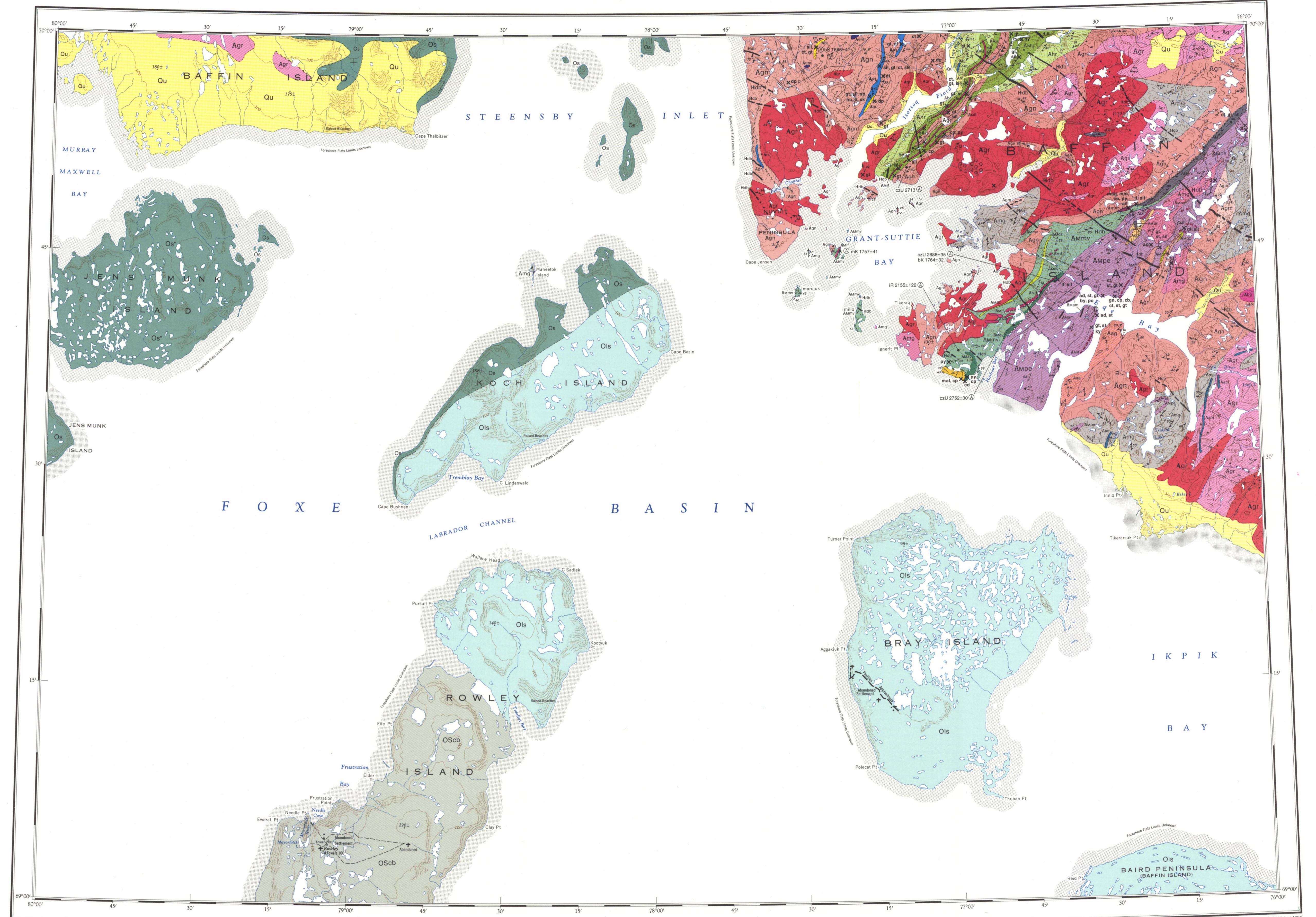
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Surveys and Mapping Branch in 1968

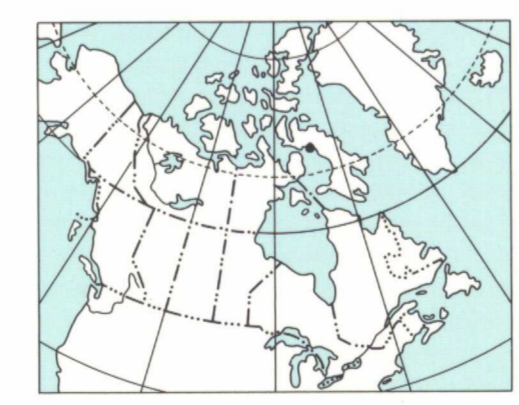
Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, K1A 0E9

Mean magnetic declination 1981, 5°16.6' West, decreasing 32.0' annually. Readings vary from 50°46.9' in the SE corner to 53°11.7' in the NW corner of the map area

Elevations in feet above mean sea level



Copies of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E9, 3303-33rd Street, N.W., Calgary, Alberta T2L 2A7



MAP 1535A  
 GEOLOGY  
**KOCH ISLAND**  
 DISTRICT OF FRANKLIN  
 Scale 1:250 000

Kilometres 0 6 12 18  
 Miles 0 4 8

Universal Transverse Mercator Projection  
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