

GENERAL GEOLOGY

The FOXE and COMMITTEE FOLD BELTS extend in an east-northeast direction from southern MELVILLE PENINSULA to central BAFFIN ISLAND. They are composed of granitoid gneissic rocks...

The ARCHAEOUS ROCKS form a basement complex predominantly of granitoid gneiss (Aggn), layered quartz-feldspathic gneiss (Agn) and foliated granitic rocks (Ag1, Ag2, Ag3)...

Amongst the gneissic rocks of the complex are presumed to be some that form the basement to the PRINCE ALBERT GROUP but UNCONFORMABLE relations...

The PENNYN GROUP consists of PARANEISS (Apm, Apc) and MARBLE (Am) with some QUARTZ-FELDSPATHIC GNEISS (Aq) and CALCIO-SILICATE GNEISS (Arcs)...

The PENNYN GROUP appears to lie UNCONFORMABLY on the BASEMENT COMPLEX. Tectonism has obliterated any angular discordance and UNCONFORMABLE relationships are inferred because of the clear LITHOLOGICAL CONTRAST...

Polyphase structures indicating numerous episodes of DEFORMATION of the basement complex, the PRINCE ALBERT GROUP and the PENNYN GROUP exist throughout the two fold belts...

In numerous places gneissic bodies of the basement complex can be seen to lie on and possibly within the PENNYN GROUP...

North to northeasterly trending broad transverse flexures alter the plunges of pre-existing folds. Few mesoscopic structures associated with this phase were observed...

Available results of radiometric analyses indicate formation of the basement complex prior to 2500 Ma ago, with some events occurring possibly as long as 2900 Ma ago...

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DATE OF ABOUT 2700 Ma (R.K. MANLESS, PERSONAL COMMUNICATION, 1977). DEFORMATION OF THE BASEMENT COMPLEX and the PENNYN GROUP MAY HAVE TAKEN PLACE 2124 Ma AGO...

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LEGEND

- OSc Buff and light grey dolomite
LATE(?) PROTZOZOIC HADRYANIAN
Hid Brown weathering, dark green to black, fine to medium grained Proterozoic diabase.

- Ag Orange and buff weathering, white, tan and grey, massive and foliated, medium to coarse grained, biotite and hornblende...

- Apn Brown, rusty and tan weathering, buff and grey, fine to medium grained, quartz-biotite-feldspar...

- Arcs Grey and grey-green, medium to coarse grained thin bedded, calcic to grey calcic and accessory scapolite, actinolite...

- Apm Grey, fine to medium grained, thin to thick bedded, quartz-feldspar paragneiss...

- Apc White, grey and grey-blue, medium to coarse grained, massive and foliated, biotite-garnet amphibolite...

- Amif Rusty, massive pyrite, magnetite iron formation.

- Ag1 Foliated, massive and porphyritic granite and granitoid gneiss.
Ag2 Foliated feldspar augen granite; minor granitoid gneiss.
Ag3 Foliated hornblende granodiorite and amphibolite granitoid gneiss.

- Agn Layered biotite and/or muscovite paragneiss and metagreywacke.
Ang Migmatite of units Ag1, Ag2 and/or Agn.
Aggd Orange, grey and tan, medium to coarse grained, layered and foliated gneiss and minor marble.

- An Dark green foliated amphibolite, meta-gabbro and hornblende-plagioclase gneiss.
Aam2 Foliated amphibolite dykes.
Aam1 Layered amphibolite.

- Aab Foliated and massive, dark grey, coarse grained anorthositic gabbro; minor amphibolite.
Aaub Layered, serpyllitic, calcic, mafic rock.
Aan Quartz-biotite-feldspar paragneiss, some hornblende-bearing.
Aamm Muscovite-quartz-feldspar paragneiss.

- Aaif White, medium to coarse grained, massive orthoquartzite; muscovite- and rarely fuchsite-bearing.
Aaq Light grey, fine grained layered acid volcanic rocks.

- Geological boundary (defined, approximate).
Boundary of areas extensively drift-covered.
Geological boundary gradational, poorly-exposed, imprecisely located or not observed.

- Planar structures: Bedding and compositional layering (horizontal, inclined, vertical).
Foliation, schistosity, gneissic layering and cleavage (horizontal, inclined, vertical, dip unknown); earliest or only observed.
Axial planes (inclined, vertical) associated with folds deforming bedding and compositional layering; earliest or only observed.

- Linear structures: Lineation (plunging, horizontal); formed by fold axes, bedding foliation, intersection (X), mineral growth or rodding (R), and/or other (O).
Lineation (plunging, horizontal); formed by bedding-foliation and foliation-foliation intersection (X), mineral growth or rodding (R), and/or other (O) and fold axes associated with folds observed to have deformed bedding or early foliation.

- Faults: High angle fault (defined, approximate); arrows indicate apparent relative movement.
Low angle fault (defined, approximate); teeth in direction of dip.

CANADA



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- NOTE: Additional information, etc.
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- QUADRILLAGE DE MILLE METRES: Grid system, etc.
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