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GEOLOGICAL SURVEY OF CANADA

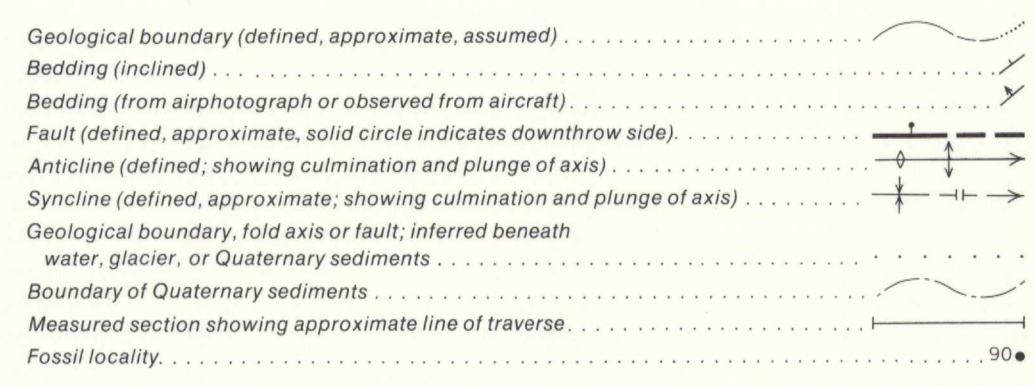
LEGEND

SEDIMENTARY AND VOLCANIC ROCKS

- CENOZOIC**
- QUATERNARY**
Q Stream, deltaic, glacial, and marine beach sediments (mapped only where underlying bedrock geology cannot be inferred with reasonable certainty)
- TERTIARY**
Te **EUREKA SOUND FORMATION:** sandstone, siltstone; minor shale, conglomerate and coal
- CRETACEOUS**
- UPPER CRETACEOUS**
KANGUK GROUP
Kk1 **KANGUK FORMATION:** dark coloured shale; minor sandstone, siltstone and mudstone; Kk, **KANGUK FORMATION** (see note 1)
STRAND FIORD FORMATION: basalt flows, agglomerate
BASTION RIDGE FORMATION: dark coloured shale; minor siltstone
- Kh **HASSEL FORMATION:** sandstone; minor siltstone and shale
- LOWER CRETACEOUS**
Kc **CHRISTOPHER FORMATION:** dark coloured shale; minor siltstone, sandstone, mudstone and pyroclastic rocks
- Ki **ISACHSEN FORMATION:** sandstone; minor shale, siltstone and conglomerate
- MESOZOIC**
- JURASSIC AND CRETACEOUS**
UPPER JURASSIC AND LOWER CRETACEOUS
JKd **DEER BAY FORMATION:** dark coloured shale; minor siltstone, sandstone and mudstone
- JURASSIC**
UPPER JURASSIC
Ja **AWINGAK FORMATION:** sandstone, siltstone; minor shale
- LOWER, MIDDLE AND UPPER JURASSIC**
Js **SAVIK FORMATION:** dark coloured shale; minor siltstone and sandstone
- TRIASSIC**
UPPER TRIASSIC
Th **HEIBERG FORMATION:** sandstone, siltstone; minor shale (see note 2)
- MIDDLE AND UPPER TRIASSIC
Tba **BLAA MOUNTAIN FORMATION:** dark coloured shale, siltstone; minor sandstone

INTRUSIVE ROCKS

- TERTIARY**
Co1 **OTTO FIORD FORMATION:** anhydrite, gypsum; minor limestone and shale (see note 3)
- CRETACEOUS**
Gabbro, diabase and basalt dykes (solid circle indicates downthrow side of fault intruded by dykes see note 4)



Geology by R. Thorsteinsson 1963, and E.T. Tozer 1957, 1961, 1962

Compilation by R. Thorsteinsson, 1970

NOTES

- Strand Fiord volcanic rocks are absent around the head of Glacier Fiord. There strata equivalent to the Bastion Ridge Formation are included in the Kanguk Formation (Kk).
 - The Lower Jurassic Borden Island Formation which consists of ferruginous sandstone, occurs intercalated between the Heiberg and Savik Formations on the peninsula between Wolf Fiord and Skaare Fiord. There the thickness of Borden Island strata is in the order of 100 feet. The formation is included with the Heiberg Formation on this map.
 - The Otto Fiord Formation crops out in normal stratigraphic successions in northwestern Ellesmere Island, and it is there that the formation has been dated as Late Carboniferous. Intrusive bodies of the Otto Fiord Formation are especially common on Axel Heiberg Island where they cut various formations including, in some instances, the Tertiary Eureka Sound Formation. The intrusions are generally related to faults and folds formed by Tertiary earth movements. They are accordingly dated as Tertiary.
 - Basic dykes and sills intrude upper Paleozoic and Mesozoic sediments of the Sverdrup Basin throughout much of Axel Heiberg Island and western Ellesmere Island. They intrude all formations older than, and including the Strand Fiord Formation, but have not been observed to intrude the Kanguk and Eureka Sound Formations. They are especially common in Mesozoic rocks that predate the Kanguk Formation, and while it is possible that more than one episode of intrusion is represented, it is probable that the vast majority of dykes and sills are Cretaceous in age.
- The larger and more conspicuous dykes are shown on the map but sills have not been mapped. Sills are particularly abundant and commonly thick (up to about 200 feet) in the Blaa Mountain and Heiberg Formations of the map-area. They are an insignificant constituent in the Christopher and Hassel Formations. Relatively rare and thin sills (up to about 50 feet) occur in the Savik, Awingak, Deer Bay and Isachsen Formations.

Geological cartography by the Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada, 1971



Topographic base-map at the same scale published by Surveys and Mapping Branch, 1966 with revisions by the Institute of Sedimentary and Petroleum Geology, 1971

The daily change of the North Magnetic Pole causes the magnetic compass to be very erratic in the area

N.W.T. GLACIER FIORD
1:250,000
MAP 1304A
1971

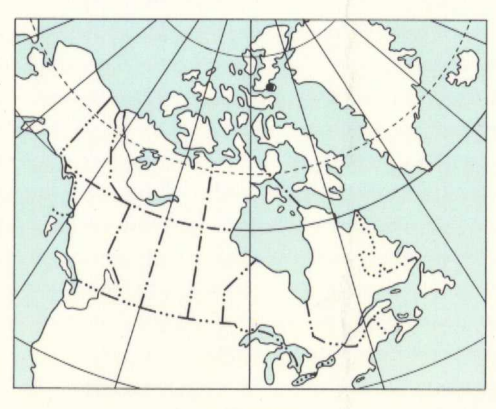
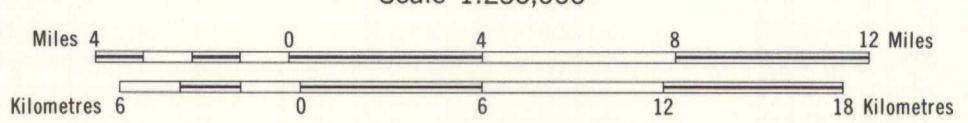


Published, 1972
Copies of this map may be obtained from the Geological Survey of Canada, Ottawa

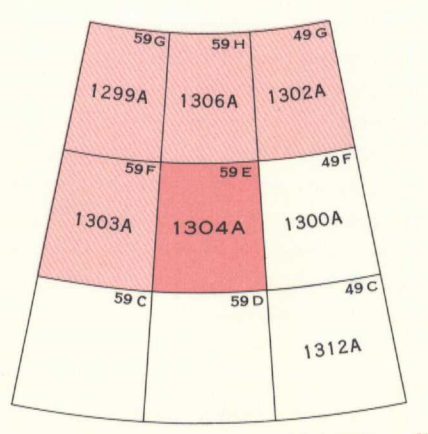
Printed by the Surveys and Mapping Branch

MAP 1304A
GEOLOGY
GLACIER FIORD
DISTRICT OF FRANKLIN

Scale 1:250,000



INDEX MAP



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

MAP 1304A
GLACIER FIORD
DISTRICT OF FRANKLIN

1304A

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