



- LEGEND
(NORTHWESTERN MAGMATIC BELT AREA)
- Undivided Carboniferous, Permian, Mesozoic and Tertiary
- Unit 17
- sandstone, shale, coal
- Early Devonian and/or older
- Unit 16 (Trettin, 1981b)
- quartz monzonite and related granitic rocks; minor mafic and ultramafic rocks
- Unit 15 (McClintock Ultramafic Massifs; Frisch, 1974)
- serpentinite, se: pentinized peridotite, wehrlite, minor gabbro
- Late Silurian-Early Devonian
- Unit 14 (Trettin, 1981b)
- mainly mudrock, in part calcareous; minor sandstone, conglomerate
- Late Silurian
- Unit 13 (Marvin Fm; Trettin, 1969a)
- limestone, minor dolomite; in part sandy or argillaceous
- Silurian
- Unit 12 (Lands Løkk Fm.; Trettin, 1969b)
- quartz-mica sandstone; minor intraformational conglomerate
- Unit 11 (Inaina Fm; Trettin, 1969b)
- immature calcitic and dolomitic sandstone; mudrock; minor pebble conglomerate
- Ordovician and/or Silurian
- Unit 10 (Trettin, 1981b)
- radiolarian chert; felsic pyroclastics
- Late Ordovician to Early Silurian
- Unit 9 (Trettin, 1981b)
- pebble to cobble conglomerate; immature sandstone
- Late Ordovician
- Unit 8 (Zebra Cliffs, Taconite River, Ayles Fms; Trettin, 1969a; unnamed Fm; Trettin, 1981b)
- dolomites, immature sandstone, limestone
- Middle to Late Ordovician
- Unit 7 (McClintock Fm; Trettin, 1969a)
- pyroclastic and flow rocks (rhyolitic to basaltic); minor volcanic sandstone, conglomerate, pelite
- Middle Ordovician
- Unit 6 (Cape Discovery Fm; Trettin, 1969a)
- immature sandstones, carbonates; minor intermediate to felsic volcanic rocks
- Possibly Early Paleozoic
- Unit 5 (Trettin, 1981b)
- marble, chloritic phyllite (probably mafic volcanics)
- Unit 4 (Trettin, 1981b)
- carbonate rocks, slate, sandstone; abundant mafic sills
- Hadrynian (?)
- Unit 3 (Trettin, 1981b)
- variably metamorphosed dolostone and limestone with lesser amounts of mudrock, sandstone, and metamorphosed equivalents. Also includes minor amounts of volcanic rocks.
- Hadrynian and/or earlier
- Unit 2 (Trettin, 1981b)
- undifferentiated schists of greenschist to amphibolite facies, marble and minor amphibolite
- Neohelikian and (?) earlier
- Unit 1 (Frisch, 1974)
- gneissic granitic intrusions (syenites, pegmatites); associated amphibolites.
- Age uncertain
- Unit A (Trettin, 1981b)
- phyllite, mainly pelitic or volcanic; minor carbonate and quartzite
- Unit B (Trettin, 1981b)
- quartzite, slightly feldspathic, in part dolomitic; minor felsic volcanic rocks
- Unit C (Trettin, 1981b)
- limestone and metamorphic equivalents.

LEGEND
(HAZEN TROUGH AREA)

Undivided Carboniferous, Permian, Mesozoic, and Tertiary

CPMT

- sandstone, shale, coal

Ordovician and Silurian

OSi (Inaina Formation)

- calcareous greywacke, calcareous siltstone, calcareous shale

Cambrian and Ordovician

Oh (Hazen Formation)

- chert, shale, impure limestone; minor breccia, calcareous siltstone, dolomite

Cambrian or Ordovician to Silurian

OSh,i (Hazen and Inaina Formation undivided)

Cambrian and/or Ordovician

Egl (Grant Land Formation)

- sandstone, shale, phyllite; minor impure limestone; intraformational and pebble conglomerate

Geological boundary

Thrust fault

Fault

Outcrop boundary

Proposed park boundary

Area considered to have moderate potential for oil and gas; remainder of proposed park area considered to have low potential

Commodity location

Locations of known commodities
(except for the tennantite showing, symbols shown on the map each represent several small occurrences in the vicinity indicated)

Map Symbol	Occurrence	Area	Lat.	Long.
t	tennantite	12 km west of head of Disraeli Fiord	82°37'N	73°20'W
c	coal	Gilman River Watercourse Valley	81°59'N 81°45'N	69°30'W 64°15'W
g	gypsum	McClintock Inlet Clements Markham Inlet	82°55'N 82°35'N	76°30'W 68°25'W
ch	chalcedony	65 km NE Lake Hazen	82°12'N	67°50'W
a	amber	On beach, east end Lake Hazen Coal seam, Gilman River	81°59'N	69°30'W

MAP 1
GEOLOGY, MINERAL OCCURRENCES AND HYDROCARBON POTENTIAL
NORTHERN ELLESMERE ISLAND, DISTRICT OF FRANKLIN
NORTHWEST TERRITORIES

GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

Scale 1:500 000

Kilomètres 12 0 12 24 36 Kilomètres
Miles 6 0 6 12 Miles

Universal Transverse Mercator Projection
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