PRELIMINARY SERIES

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

97 D

LEGEND

CENOZOIC

QUATERNARY

Q — Alluvium and delta deposits: gravel, sand, silt and clay

Qm — Thick moraines: gravel, sand, silt, clay and till

MESOZOIC

CRETACEOUS

LOWER CRETACEOUS

Kb — 'Bentonitic zone': black, soft, plastic shale; fossiliferous, orange ironstone concretions

Ks — 'Silty zone': upper division – argillaceous siltstone and mudstone; lower division – light grey, friable sandstone, and coal

PALEOZOIC

DEVONIAN

LOWER (?) AND MIDDLE DEVONIAN

Db — BEAR ROCK FORMATION: light brown-grey and green-grey dolomite; green, pink and maroon shale at base

CAMBRIAN AND ORDOVICIAN

MIDDLE (?) AND UPPER CAMBRIAN AND LOWER ORDOVICIAN

'RONNING GROUP'

€Or2b — Unit 2b: pale buff and pale grey dolomite with drusy quartz and stromatolitic and oolitic chert

€Or2a — Unit 2a: pale grey dolomite interbedded with pale orange dolomite

€Or1 — Unit 1: thin-bedded dolomite; cyclic repetitions of laminated beds, oolitic beds, stromatolitic beds and thin beds of dolomitic shale

CAMBRIAN

MIDDLE CAMBRIAN

€s — SALINE RIVER FORMATION: red and green shale; minor gypsum

LOWER (?) AND MIDDLE CAMBRIAN

€cp — MOUNT CAP FORMATION: glauconitic sandstone; green and grey shale

LOWER CAMBRIAN

€o — OLD FORT ISLAND FORMATION; white, grey, locally red and green, friable sandstone; crossbedded

PROTEROZOIC

NEOHELIKIAN OR HADRYNIAN

Pε / — Gabbro sills and dykes

SHALER GROUP

P5 — Unit B5: maroon and green dolomite and siltstone; minor gypsum

P4 — Unit B4: pink and buff dolomite; stromatolites

P3 — Unit B3: pink, buff and maroon quartz sandstone

P2 — Unit B2: buff, pink and grey dolomite

P1 — Unit B1: green shale, argillite and siltstone

Ground observation

Geological boundary (defined, approximate, assumed; includes contacts extended by air-photo interpretation)

Bedding, tops known (inclined)

Bedding, tops known, (estimated from air-photos or from aircraft; horizontal, dip 5°–15°)

Fault (approximate)

Fault, (defined, approximate, covered; solid circle indicates downthrow side)

Anticline (approximate)

Syncline (approximate)

Stratigraphic section studied

Stratigraphic Section References

R. W. Macqueen MQ-24

Geology by H. R. Balkwill, C. J. Yorath, R. W. Klassen and R. W. Macqueen, 1968

Compiled by H. R. Balkwill and C. J. Yorath, 1970

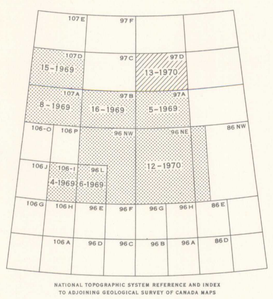
To accompany GSC Paper 70-32, by H. R. Balkwill and C. J. Yorath

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

Topographic base-map at the same scale published by the Army Survey Establishment R. C. E., 1962

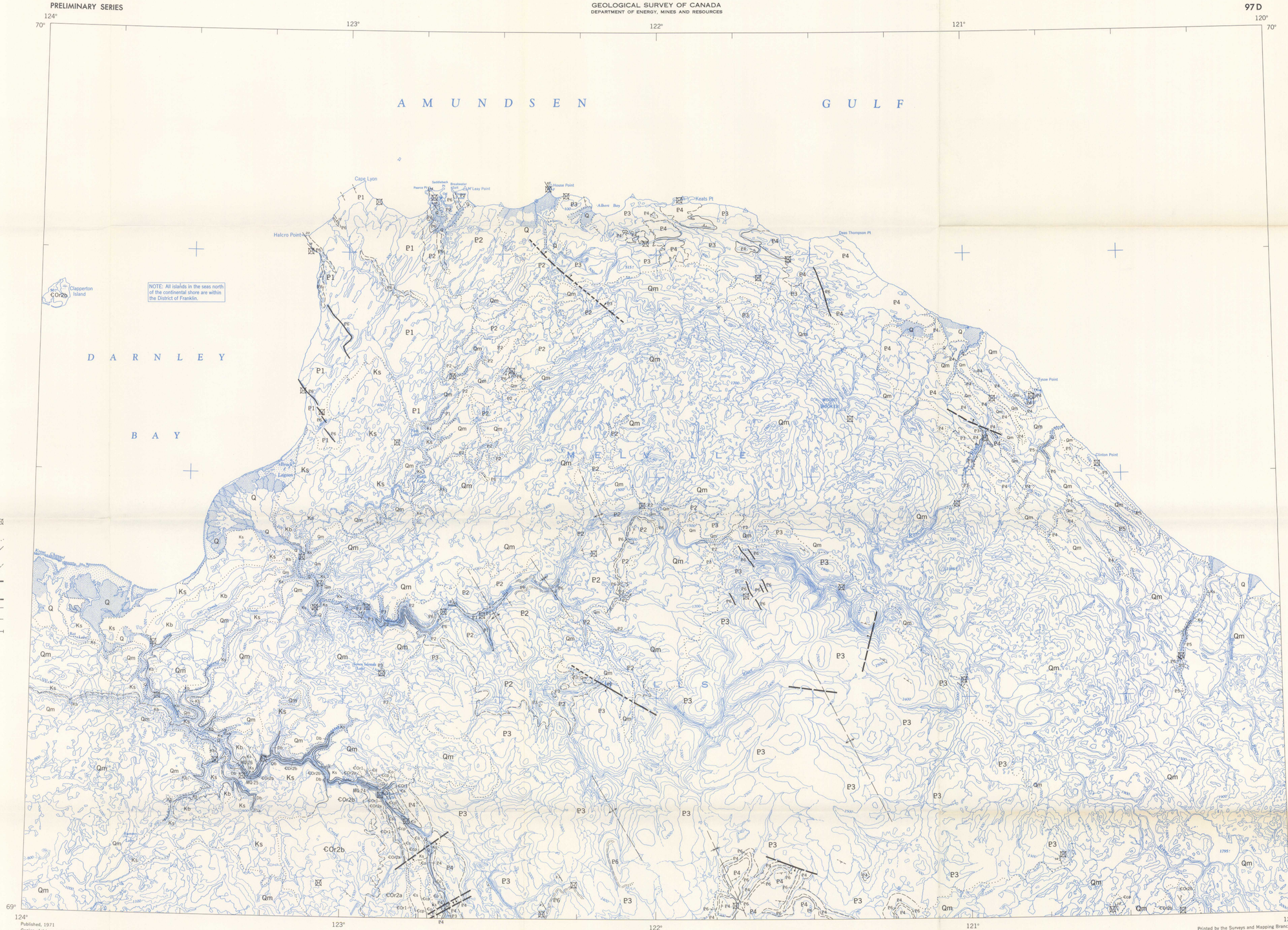
Magnetic declination 1970 varies from 44°30' easterly at centre of west edge to 45°18' easterly at centre of east edge. Mean annual change 9.8' westerly

Elevations in feet above mean sea-level



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

National Topographical System designations indicate other quadrangles mapped geologically during Operation Norman



Published, 1971

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

MAP 13-1970
PAPER 70-32

GEOLOGY

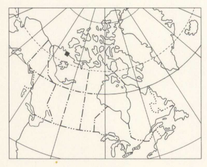
BROCK RIVER

DISTRICT OF MACKENZIE

Scale 1:250,000

Miles 4 0 4 8 12 Miles

Kilometres 6 0 6 12 18 Kilometres



INDEX MAP

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