GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA

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

LEGEND

SURFICIAL DEPOSITS

Note: All map units and symbols in the legend may not appear on this map

NONGLACIAL ENVIRONMENT

POST LAST GLACIATION

7 — EOLIAN DEPOSITS: silt and fine sand, less than 2 m thick; moderately sorted and laminated, in places with cross-stratification and ripple marks; in places contains finely disseminated organic material; deposits too small to be mapped are generally included with units 2, 3, and 6.
7a: unvegetated, presently active

FLUVIAL DEPOSITS: silt, sand, and fine gravel, up to 5 m thick; moderately to well sorted but commonly interstratified with beds of distinctly different grain sizes; crossbedding, scour-and-fill structures, and ripple marks common

6b — Modern floodplain deposits, seasonally flooded, unvegetated

6a — Raised terrace deposits above present flood zone, vegetated

PROGLACIAL AND GLACIAL ENVIRONMENT

LACUSTRINE DEPOSITS: silty fine sand to gravelly coarse sand, generally 1 to 2 m but up to 10 m thick; poorly sorted and stratified; deposited in proglacial lakes

5b — SHORE AND NEARSHORE DEPOSITS: sand, with well developed cross-stratification; occurs as beaches and terraces

5a — OFFSHORE DEPOSITS: silty sand, with poorly developed sub-horizontal stratification; occurs as blanket or veneer in depressions

MARINE DEPOSITS: silt, sand, and in places clay or gravel, generally less than 10 m but up to 75 m thick; deposited in high stand of the sea during glacial retreat

LAST GLACIATION

4b — SHORE AND NEARSHORE DEPOSITS: sand and silt or gravel, horizontal and cross-stratified; occurs as beaches and terraces

4a — OFFSHORE (DEEP WATER) DEPOSITS: silt and clay, commonly rhythmically bedded

3 — FLUVIAL DEPOSITS: sand and gravel, up to 70 m thick, massive to well stratified and sorted with smooth, flat to inclined surfaces; occurs as deltas, fans, or terraced valley fill deposits

2 — ICE-CONTACT DEPOSITS: sand and gravel, up to 30 m thick, irregular to cross-stratified with poor to moderate sorting; occurs as ice-contact deltas, sinuous ridges, issolated hummocks, local blanket deposits, and esker and kame complexes

GLACIAL ENVIRONMENT

1 — TILL: silty, gravelly sand with less than 10% clay, generally 7 m but up to 20 m thick; boulders up to 2 m long common on the surface; nonsorted, nonstratified, compact but unlithified; occurs mainly as a blanket on underlying bedrock or as hummocks and ridges (moraines).
1a: till in which the upper metre is abnormally sandy due to either removal of fines by wave action or intermixing of marine, lacustrine, or glaciofluvial sand

ROCK

R — Precambrian igneous and metamorphic crystalline rocks of variable composition and structure

COMPOSITE UNITS: Where two units are separated by a colon (e.g. 1a:2a), the first unit comprises at least 70% of the total area; where one dot is used (1a·2a), the first unit comprises 50 to 70% of the area. Two units separated by a horizontal line ($\frac{1a}{R}$) denotes that a veneer, commonly less than 1 m thick, overlies another unit

Depressional lineament following a structural feature
Striae (ice flow direction known, unknown)
Crag and tail
Drumlinoid ridge
Moraine ridges (major, minor)
Lateral moraine
Ice-contact face
Esker (direction of flow known or assumed, unknown)
Abandoned channel (valley bottom, on slope)
Kettle
Ice-contact delta
Delta
Limit of marine submergence (observed, inferred)
Beaches
Dunes
Direction of recent eolian movement of sand
Steep-walled gully
Pingo
Fossil locality
Shallow drill site
Observation made from the air
Ground observation point
Geological boundary

Geology by R.D. Thomas (east half) and A.S. Dyke (west half), 1976, 1977

Compiled by R.D. Thomas

Thematic information on this map is, in part, reproduced directly from author's copy

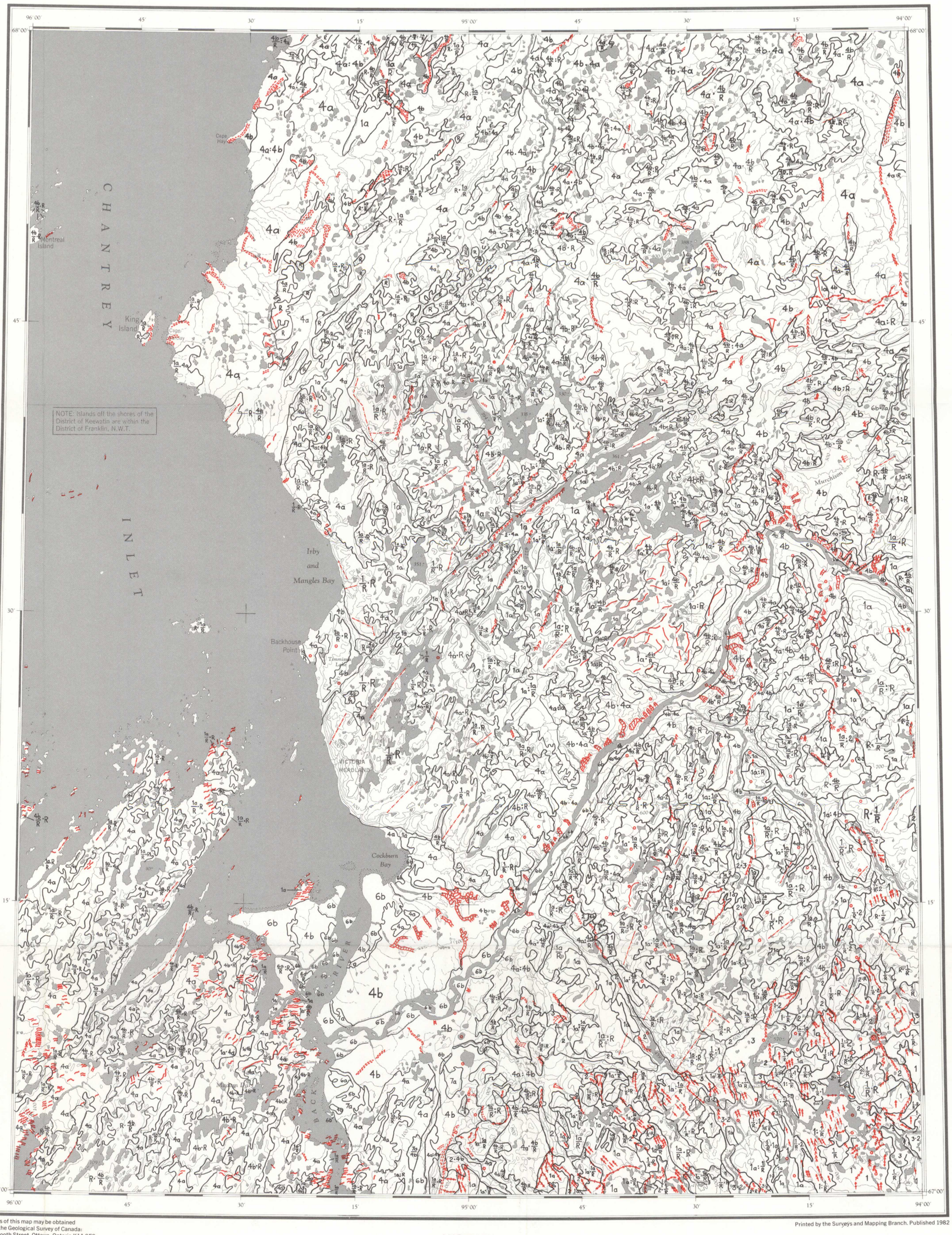
Any revision or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Army Survey Establishment, R.C.E. in 1956

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

Mean magnetic declination 1981, 30°55' West, decreasing 05.1' annually. Readings vary from 8°23.3' in the NE corner to 0°33.2' in the SW corner of the map area

Elevations in feet above mean sea level



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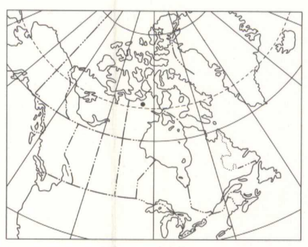


INDEX MAP

Printed by the Surveys and Mapping Branch. Published 1982

MAP 7-1981

SURFICIAL GEOLOGY

LOWER HAYES RIVER

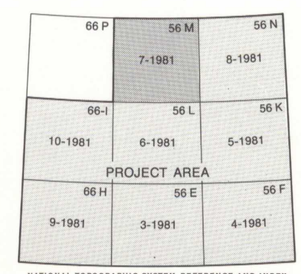
DISTRICT OF KEEWATIN

Scale 1:250 000

Kilometres 6 0 6 12 18 Kilometres

Miles 4 0 4 8 Miles

Universal Transverse Mercator Projection



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

MAP 7-1981
LOWER HAYES RIVER
DISTRICT OF KEEWATIN

Canada