${\tt SURFICIAL\ DEPOSITS}$  Note: All map units and symbols in the legend may not appear on this map  ${\tt NONGLACIAL\ ENVIRONMENT}$ 

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

LEGEND

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

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

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

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

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

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 <u>ICE-CONTACT DEPOSITS:</u> 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

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).

la: 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. la:2a), the first unit comprises at least 70% of the total area; where one dot is used (la·2a), the first unit comprises 50 to 70% of the area. Two units separated by a horizontal line (1a) 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...... Lateral moraine..... Ice-contact face..... Abandoned channel (valley bottom, on slope)..... Kettle...... Ice-contact delta..... Delta..... Limit of marine submergence (observed, inferred)..... Beaches.... 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

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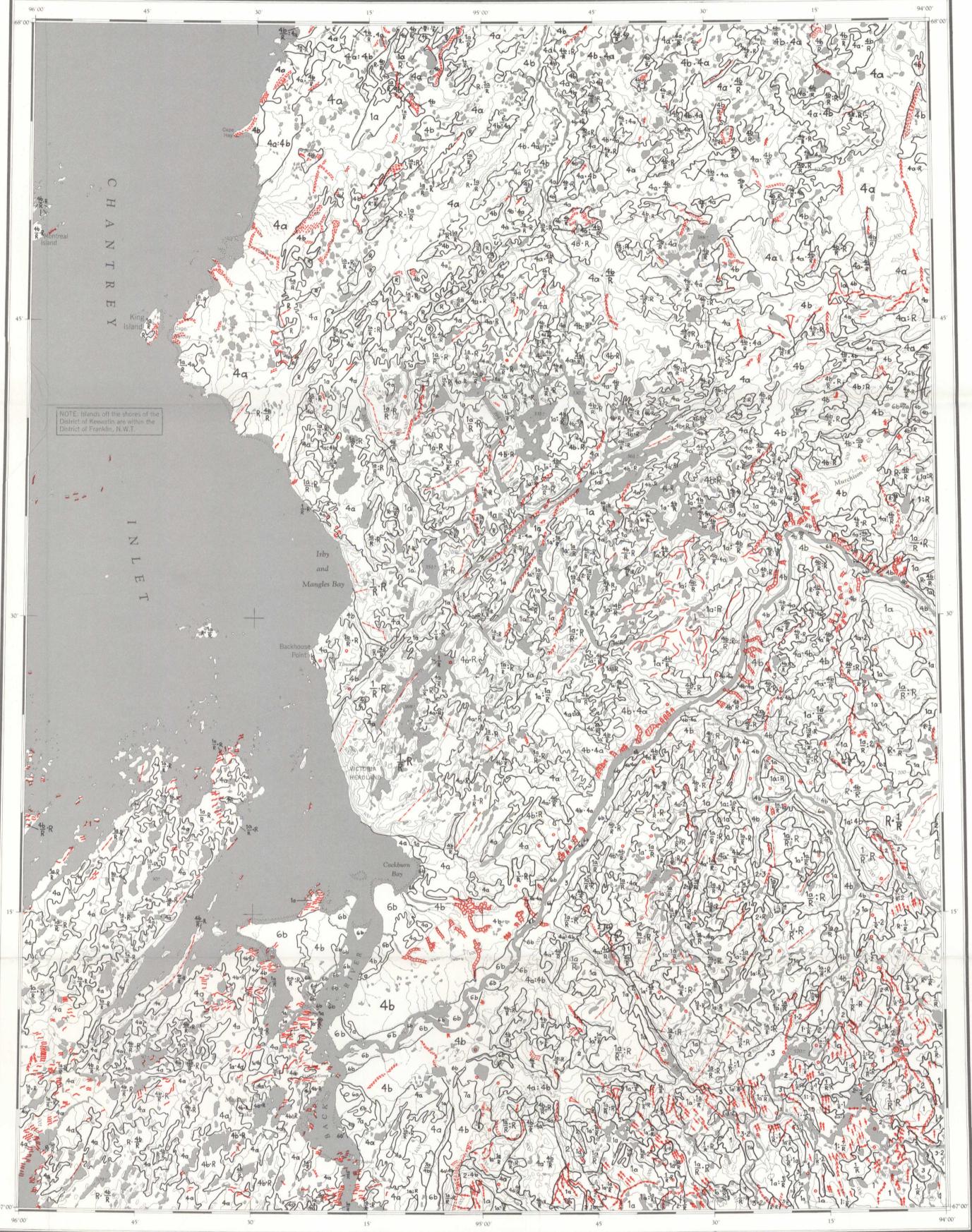
Any revision or additional geological information known to the user would be welcomed by the Geological Survey of Canada

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

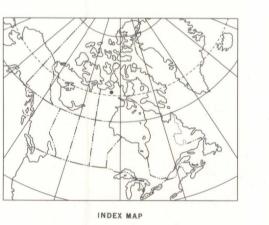
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Mean magnetic declination 1981,  $3^{\circ}55'$  West, decreasing 05.1' annually. Readings vary from  $8^{\circ}23.3'$  in the NE corner to  $0^{\circ}33.2'$  in the SW corner of the map area

Elevations in feet above mean sea level



Copies of this map may be obtained from the Geological Survey of Canada: 601 Booth Street, Ottawa, Ontario K1A 0E8 3303 - 33rd Street, N.W., Calgary, Alberta T2L 2A7



LOWER HAYES RIVER

MAP 7-1981

DISTRICT OF KEEWATIN

Scale 1:250 000

Kilometres 6 0 6 12 18 Kilometres

Miles 4 0 4 8 Miles

Universal Transverse Mercator Projection

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MAP 7-1981

LOWER HAYES RIVER

DISTRICT OF KEEWATIN

Canadä