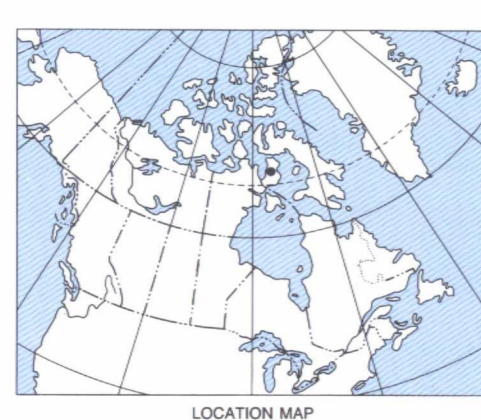


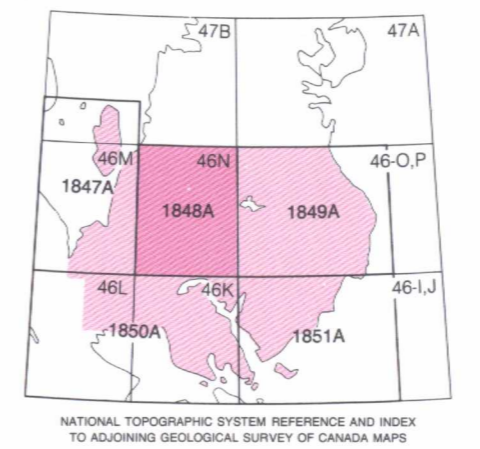
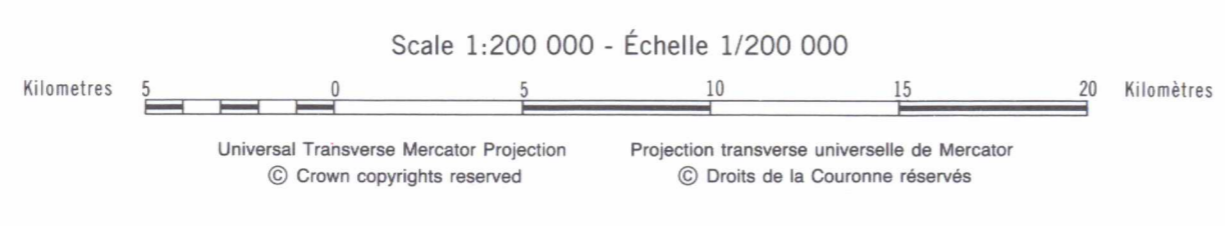
LEGEND

- This legend is common for maps 1847A to 1851A
 * Some units or symbols may not appear on this map
- QUATERNARY HOLOCENE**
- NONGLACIAL ENVIRONMENT**
- 14** ALLUVIUM: sand and gravel with detrital organic beds; commonly less than 5m thick; occurs as braided floodplains
 - MARINE SEDIMENTS:** gravel, sand, silt and clay in coarsening upward sequences; 1-30m thick; deposited in littoral, deltaic and offshore environments during regression of the postglacial sea
 - 13** Littoral deposits: bouldery and flaggy gravel; 2-6m thick; occurs as flights of emerged beach ridges. West coast flights of boulder beaches developed on end moraines; some east coast flights of gravel and shingle beaches are derived from shattered limestone
 - 12** Deltaic deposits: planar and cross-bedded sand and silt locally containing organic detritus and algal mats; occurs as a coarsening upwards sequences 5-30m thick; fossiliferous; forms terraces where debris from the glacier snout and glacioluvial sediments emptied into the sea
 - 11a 11b** Offshore and sub-littoral deposits: stratified sand and silt with few ice rafted boulders and dropstones, in some places gravelly near the surface; sparsely fossiliferous. 11a, blanket deposits 1-10m thick; forming plains, extensively covered by mudblots. 11b, veneer deposits, less than 1m thick, mimicking the surface form of underlying rock
- PROGLACIAL AND GLACIAL ENVIRONMENT**
- 10** GLACIOMARINE DEPOSITS and MARINE VENEER/TILL: stony sandy silt or stony clay with ice rafted boulders and dropstones; poorly sorted, locally massive; contains shell fragments; 1-5m thick; mantles and mimics underlying till surfaces
 - 9** GLACIOLACUSTRINE DEPOSITS: silt and fine sand; 1-3m thick; deposited in valleys occupied by temporary glacier- or moraine-dammed lakes; forms veneers over till
 - GLACIOFLUVIAL DEPOSITS: poorly stratified sand and gravel; 1-10m thick; deposited behind, at, and in front of the ice margin by glacial meltwater
 - 8** Outwash: cross-stratified sand and rounded gravel; 1-10m thick; occurs as kettled terraces and braided fans
 - 7** Kame and esker deposits: poorly sorted sand and gravel with rounded boulders; 5-15m thick; forms isolated hummocks and sinuous ridges. Below marine limit, eskers have been intensively modified by wave action
- EARLY HOLOCENE AND LATE PLEISTOCENE (WISCONSINAN)**
- GLACIAL ENVIRONMENT**
- TILL:** chiefly unsorted glacial debris (diamiction); 1-30m thick; deposited by basal meltout and lodgment. Boulder till deposited by local ice caps covers much of the area, and merges with the sandy till of the Laurentide (Foxe) ice regime
 - Sandy Laurentide till:** olive grey stony granitic till with a sandy matrix; up to 20m thick; occurs as veneers, blankets, and hummocky deposits
 - *6** Hummocky till: chiefly granitic till; 5-30m thick; forms a prominent hummocky ridge marking a major recessional ice margin, and diffuse zones marking boundaries between ice regimes
 - 5** Till blanket: 1-10m thick; forms gently rolling plains; some areas have large frost fissures
 - 4** Till veneer: less than 1m thick; occurs in patches over rock and is interspersed with rock outcrop; deposits are thin enough to reveal details of underlying rock structure
 - Bouldery local till:** bouldery till consisting of blocky clasts in a sandy gross matrix, together with a small number of far-travelled erratics
 - 3** Till blanket: 1-5m thick; forms a nearly flat plain with zones of shallow, ephemeral ice-marginal channels
 - 2** Till veneer: less than 1m thick; overlies bedrock as a distinct unit, or grades laterally and vertically into outcrop and broken rock
- PERIGLACIAL AND GLACIAL ENVIRONMENT**
- 1** BROKEN ROCK/FELSENMEER: blocky rubble derived from the disaggregation of bedrock by frost riving and by hydration or chemical weathering along microfractures; blocks are 0.5-2m across and have unweathered surfaces; unit grades downwards into coherent bedrock
- PRE-QUATERNARY**
- ROCK, Precambrian:** bare, coherent outcrop of various lithologies and ages; locally glacially polished and striated, scoured into streamlined bedforms, and deeply eroded into U-shaped troughs in the western highlands
- A** Aphebian deformed and metamorphosed sedimentary rocks of the Pentryn Group, including marble, quartzite, and pelitic gneiss; forms glacially eroded valleys
 - A** Archean granitoid and other rocks including tonalite, granite, gneiss, metavolcanics, and banded iron formations; forms rugged highlands and uplands
- Geological boundary
 Gossan
 Small outcrop
 Striation (ice flow direction known, unknown)
 Crag and tall
 Till flute, drumlin
 Roche moutonnée
 Moraine (end, lateral; minor)
 Drift dispersal plume
 Outcrop scoured by meltwater
 Esker, (direction of flow known, unknown), washed esker
 Shallow, subglacial drainage way
 Lateral meltwater channel
 Proglacial channel
 Glacial lake trimline
 Beach ridge
 Marine limit
 Delta
 Solifluction megalobes
 Large ice wedge polygons
 Frost-heaved joint lineation
 Sample site
 * Fossil locality
 * Archaeological sites
 * Radiocarbon date locality
 Date Material
 Lab no Elevation (m)

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



MAP 1848A
 SURFICIAL GEOLOGY
MIERTSCHING LAKE
 DISTRICT OF FRANKLIN
 NORTHWEST TERRITORIES



GEOLOGICAL SURVEY OF CANADA
 COMMISSION GÉOLOGIQUE DU CANADA
 APR 20 1995
 CGIC / CCIG

Geology by L.A. Dredge, 1990, 1991
 The author acknowledges the field assistance of M. Coyle, P. Mikiyungak, and D. Russell, and logistical support from Polar Continental Shelf Project
 Geological cartography by L. Daley, Geological Survey of Canada
 Colour separations were produced using digital methods
 Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada
 Base map at the scale of 1:250 000 published by the Surveys and Mapping Branch in 1986
 Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Natural Resources, Canada, Ottawa, Ontario, K1A 0E9
 The proximity of the North Magnetic Pole causes the magnetic compass to be erratic in this area
 Mean magnetic declination 1994, 34°29' W, decreasing 13.4' annually. Readings vary from 31°08' W in the SW corner to 37°44' W in the NE corner of the map
 Elevations in metres above mean sea level

NOT TO BE TAKEN FROM LIBRARY
 NE PAS SORTIR DE LA BIBLIOTHÈQUE

1848A