

LEGEND

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

SURFICIAL DEPOSITS QUATERNARY

ALLUVIAL DEPOSITS: stream deposited material within modern active drainage systems is defined in relation to the present extent of the sea, proglacial lakes, or glacial ice

A1: Alluvial silt, sand, and gravel deposited in channels and on floodplains; may include alluvium in terraces which formed as streams cut to present level in glacial and marine sedimentary fill

A2: Deltasic sediments: sand, gravel, and boulders deposited where modern streams enter lakes or Hudson Bay

A3: Alluvium and marine sand or silt, undifferentiated; occurs in flat areas consisting of modern stream silt and sand and sand that was laid down in the sea by meandering streams. R/M, deposit: veneer bedrock or surface comprises 20 to 80% bedrock outcrop

A4: Alluvium and outwash gravel, undifferentiated; occurs in flat areas in stream valleys or R/M, deposit: veneer bedrock or surface comprises 20 to 80% bedrock outcrop

LACUSTRINE DEPOSITS: materials deposited in glacial lakes; provide on the western side of the Keweenaw, the Riding, and glacial deposits modified by lacustrine processes

L5: Nearshore sediments: generally well sorted sand, gravel, cobbles, or boulders deposited as beaches, bars, spits, and ice-pushed ridges

MARINE DEPOSITS: materials deposited in the Frenay Sea and glacial deposits modified by marine processes

M1: Deltasic sediments: sand, pebbly sand, and gravel deposited in the Frenay Sea by glacial or nonglacial streams

M2: Nearshore sediments: generally well sorted sand, gravel, cobbles, or boulders deposited as R/M, deposit: veneer bedrock or surface comprises 20 to 80% bedrock outcrop

M3: Offlap sediments: thin sheet of sand deposited by a migrating shoreline; probably a lag deposited by wave reworking of margin sand or silty sand or glacial till

C1: Outwash sediments: laminated and silty sand deposited in a deep water environment may occur anywhere below marine limit of distribution in patches above 40 m b.s.l.; silt and sand deposited generally occur in water covered valleys with major eskers

R2: R/M, deposit: veneer bedrock or surface comprises 20 to 80% bedrock outcrop. This prominent striped pattern on outwash: thin, mottled pattern on outwash

GLACIOFLUVIAL DEPOSITS: water-carried sediments deposited in, around, or near a glacier, largely as a result of meltwater stream flow

G1: Escarpment terraces: silt, sand and gravel deposited near ice margins in, over, or around ice or in the form of, commonly an esker; but includes isolated hummocky deposits of uncertain origin

G2: Outwash sand, gravel, and silt with terraced, hummocky, and levelled surfaces

G3: Outwash sand and gravel deposited by subglacial meltwater through a floor of glacial till or level of proglacial lakes; includes 1) sediment deposited between the esker, ridge, and valleys, commonly over stagnant ice that forms temporary lakes; 2) network of flow channels (leach) and 3) materials on the floor of till basins, and 4) materials on the floor of the meltwater channels

G4: Disintegration moraines: till, sand, and gravel, undifferentiated; occurs as short ridges or hummocks; probably deposited in lakes and stream-wash in staglens; low ridge orientation may form a tricolour pattern

TILL DEPOSITS: poorly sorted sediments with distinctive forms deposited directly by glacial ice

T1: Till plains: generally sandy, silty, noncalcareous till with 25% to 50% clay particles; includes areas of clay-rich red till

T2: Hummocky till: till without significant boulder cover occurs at terrace levels and on slopes of 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

T3: Hummocky till: till without significant boulder cover occurs at terrace levels and on slopes of 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

T4: Till and marine silt, undifferentiated: (silt-covered) landforms blanketed by marine sediments or marine deposits in depressions among till landforms

RI: Ribbed (diapir) moraine: generally bouldery till, in place sand and gravel, forming hummocks and straight to rounded ridges; generally 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

R2C: Hummocky till: till without significant boulder cover occurs at terrace levels and on slopes of 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

R3C: Hummocky till: till without significant boulder cover occurs at terrace levels and on slopes of 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

R4C: Hummocky till: till without significant boulder cover occurs at terrace levels and on slopes of 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

R5C: Hummocky till: till without significant boulder cover occurs at terrace levels and on slopes of 1 km long and 2 to 10 m high; ridges generally oriented at right angles to flow from parallel to direction of ice flow

RI: Surface comprises more than 80% outcrop, but surface completely covered by tillstones

RI: Surface comprises 20 to 80% outcrop, or bedrock is dusted with an average of less than 1 m of the surficial deposit instead

Geological boundary:

Small bedrock outcrop

Division or flowing direction of ice flow known, unknown

Crag and tail direction of ice flow known

Glacial strike direction of ice movement known, unknown; location of measurement at centre of reach; other stations shown with broken staff

Linear feature related to ice flow but obscured by sedimentation

Trend of ribbed or minor moraine ridges

Deflexed moraine, straight, approximately 2 m high and moraine ridges built parallel to an ice front possibly deposited entirely by flowing ice submerged in a sea or lake

Hummocky moraine

Lake: direction of flow known, unknown; may be combined with or oriented by moraine features projected beneath water surface; where known or inferred

Meltwater channels: steep-sided channel (common) cut in bedrock or till

Limit of marine submergence

Trend of moraine ridges originating as beaches, bars, megapiles, and abandoned ridges

Escarpment generally in unconsolidated sediments

Area of ridges formed by back ice advance

Permanently drained proglacial lake basin that includes deposits of silt sediment with up to 1% of organic carbon

Terminal lake contains continual load of suspended sediments during free periods; rarely occurs after marine limit and indicates instability or alternation of the active layer due to wave washing or subsidence

Talus deposits: commonly formed where ice retreat or bank failures have disrupted the vegetation mat over alluvial sand

Radiocarbon date

Geology by J.M. Aylworth, based on airphoto interpretation, 1983-84

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Colour separation by camera of hand coloured manuscript

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

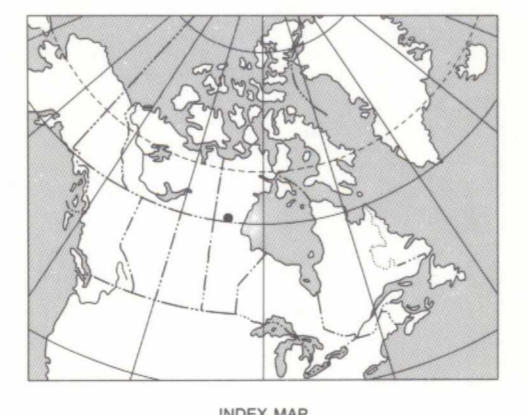
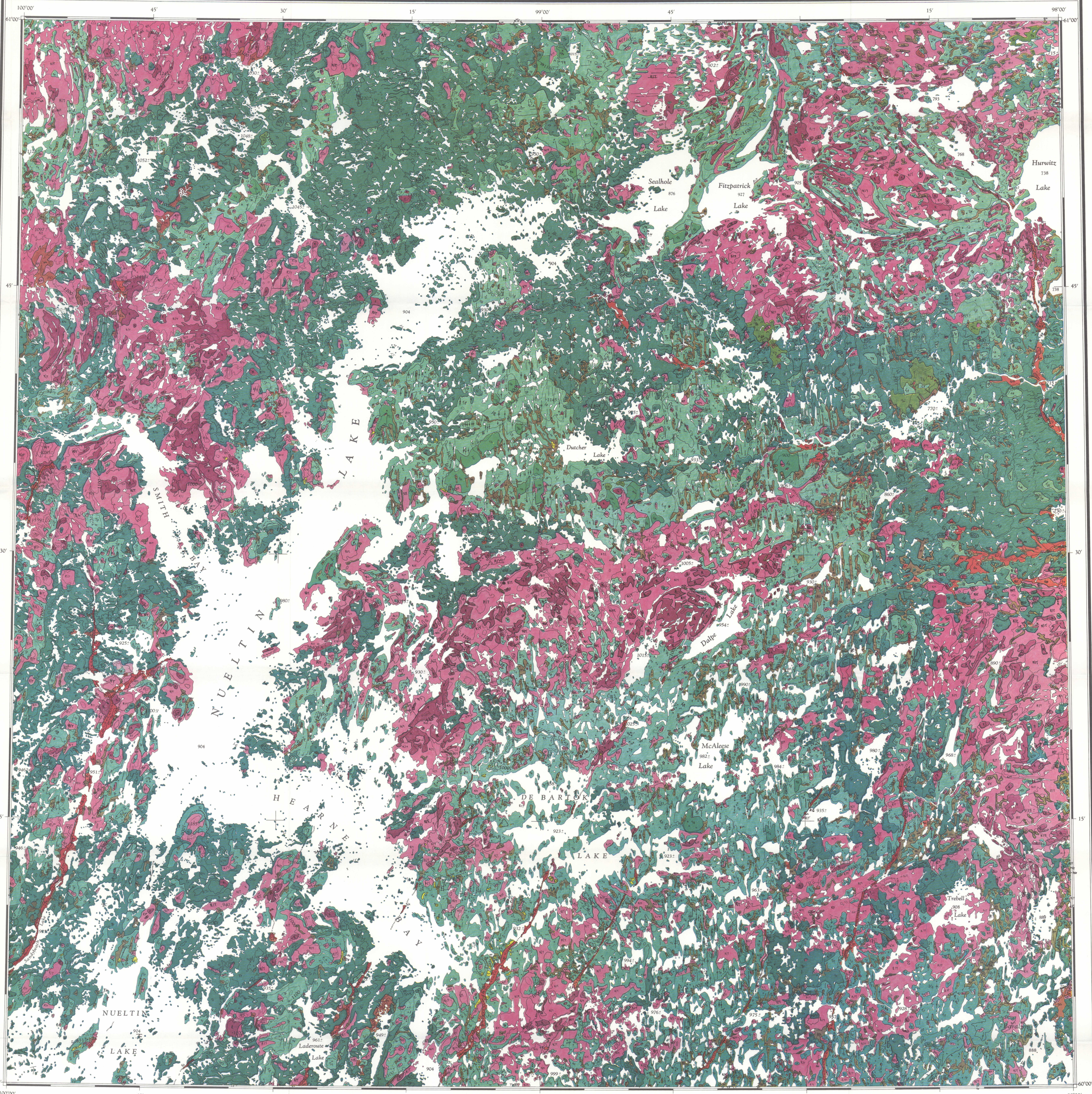
Base map, enlarged from 1:250 000 scale, published by the Mapping and Charting Establishment, Department of National Defence in 1966

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, K1A 0S9

Mean magnetic declination 1985, 9°42' East, decreasing 1" annually. Readings vary from 12°15' to 18°38' at corner by 2°27' in the NE corner of the map area.

Elevations in feet above mean sea level

Recommended citation:
 Aylworth, J.M.
 1986. Surficial geology, Nueltin Lake, District of Keewatin, Northwest Territories. Geological Survey of Canada, Map 6-1985, scale 1:125 000



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