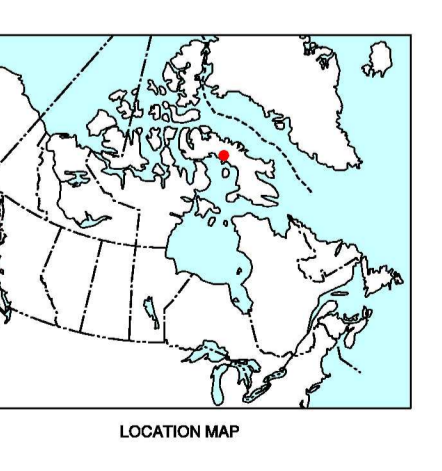


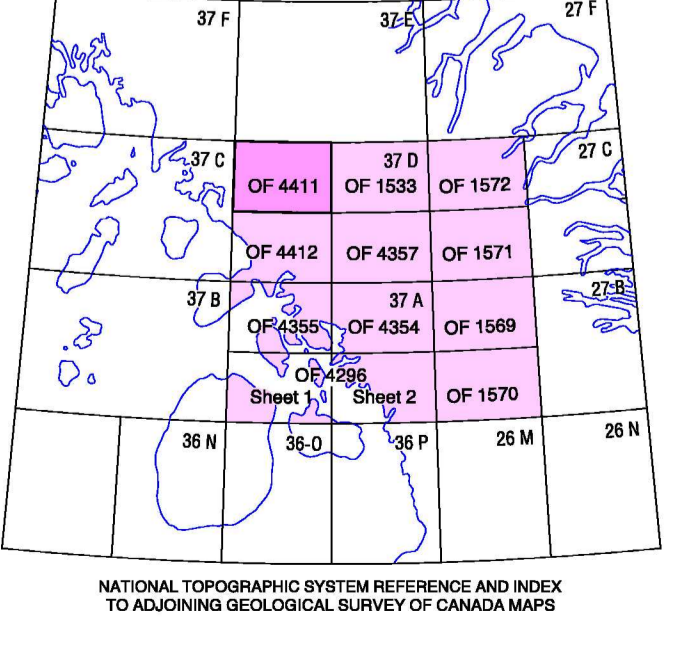
- SURFICIAL DEPOSITS**
- QUATERNARY**
- HOLOCENE**
- ICE:** Glacier ice: 5-800 m thick; forming ice caps and outlet glaciers.
 - A** **FLUVIAL DEPOSITS:** (proglacial alluvial floodplain sediments and active proglacial outwash); gravel, sand, and boulders; 1-5 m thick; forming terraces and valley bottom deposits.
 - MARINE DEPOSITS:** sediments deposited during regression of a high postglacial sea.
 - Mr** Beach sediments: gravel and sand; 1-5 m thick; forming ridges with intervening swales.
 - Md** Deltaic sediments: sand and gravel topsets, grading downwards to forests of fine sand or silt; 2-15 m thick; sparsely fossiliferous; forming terraces and plains where meltwater streams emptied into the regressing sea.
 - Mb** Marine blanket deposits: sand and silt with some sea-ice rafted debris; 2-10 m thick; forming continuous cover of sublittoral and offshore sediments.
 - Mv** Marine veneer: sand, silt, and gravel; 0.5-2 m thick; discontinuous cover of littoral and offshore sediment including beach ridges and sea-ice rafted debris; mimicking surface of underlying till or rock.
 - GM** Glaciomarine blanket: diamictic stony sand and mud with ice-rafted dropstones; 2-10 m thick; forming undulating plains ridged with small moraines that have been reworked by marine processes; deposited in an ice-contact environment.
 - GLACIOLACUSTRINE DEPOSITS:** sediments deposited in glacier- or moraine-dammed lakes fringing the ice margin.
 - Lb** Glaciolacustrine blanket deposits: sand and mud with ice-rafted dropstones; 2-10 m thick; forming flat to undulating plains interspersed with small moraine ridges.
 - Lv** Glaciolacustrine veneer: sandy sediments; 0.5-2 m thick; forming plains interspersed with silt or rock.
 - GLACIOFLUVIAL DEPOSITS:** gravel and sand; 2-20 m thick; deposited behind, at, and in front of the ice margin.
 - Gp** Glaciofluvial outwash: stratified gravel and sand; 2-15 m thick; locally kettled; grading to deltas; deposited near marine limit; deposited in a proglacial environment as glacial trains, braided plains, terraces, and fans.
 - Gr** Ice-contact deposits: eskers and kames; poorly stratified or sorted sandy to bouldery gravel; 5-20 m thick; forming ridges and hummocks; deposited in a subglacial environment along meltwater corridors.
- EARLY HOLOCENE AND WISCONSINAN**
- Tm** Till: stony diamictic deposits with a pebbly sand or silty sand matrix; generally unsorted; deposited in subglacial and ice-marginal environments. Litho composition generally reflects underlying bedrock type.
 - Th** Massive and moraine: glacial diamict; 5-50 m thick; extensively kettled in places; forming broadly arcuate ridges that were deposited along ice margins. Near glaciers and ice caps this unit may contain or overlie remnant glacial ice.
 - Tb** Hummocky till: glacial diamict which may contain remnant glacial ice; 2-30 m thick; forming rolling to hummocky terrain.
 - Td** Till blanket: glacial diamict; 2-10 m thick; forming undulating plains with fluted or drumlinoid areas, and areas of boulder fields; deposited mainly in a subglacial environment by basal melt-out.
 - Tv** Till veneer: glacial diamict; 0.5-2 m thick; discontinuous cover mimicking topography of underlying bedrock.
- PALEOZOIC AND PRECAMBRIAN**
- RC** Limestone and dolomite of Paleozoic age; commonly forming ledges and bluffs; weathers into play fragments or to sandy silt.
 - RF** Marble of the Flint Lake Formation; commonly forming small outcrops in valleys; weathers to gray and silt.
 - RA** Sulphide-bearing black pelite, with oxidized pelite, psammite and iron formation of the Asarte River Formation; forming rolling plains and some ridge and valley topography. Overlying till has a silty sand matrix.
 - RL** Clastic metasedimentary rocks, chiefly psammite, pelite, waste and quartzite of the Langstaff Bluff and Dewar Lake Formations; commonly forming plains or ridge and valley topography. Overlying till commonly has a silty sand matrix.
 - RB** Mafic and ultramafic rocks, chiefly of the Bravo Lake Formation.
 - RG** Granite and gneiss; forming resistant hills commonly overlain by bouldery till with a sandy matrix.
- Geological boundary**
- Areas of lichen kill by Little Ice Age snowbanks and snowfields (indicated by a white pattern)
 - Seepage or river icing
 - Boulder fields
 - Holocene fossil locality
 - Gossan
 - Prominent ice wedge polygons
 - Isolated bedrock outcrop
 - Perched delta (elevation in metres)
 - Soft-sediment lobes
 - Landslide or rockslide
 - Kame or conical gravel hill
 - Kettle (large, small)
 - Drumlinoid ridge
 - Rock-crag and till-tail form
 - Glacially plucked bedrock
 - Striation (ice flow direction known, unknown)
 - Crossed striae (numbers indicate relative ages, 1 being the oldest)
 - Glacially shaped bedrock, undifferentiated
 - Ground observation and sample site
 - Ice-marginal meltwater channel; barb on upslope side
 - Subglacial and proglacial meltwater channel (small, ephemeral)
 - Beach ridge crests
 - Marine washing limit; with elevation in metres
 - Glacial lake shoreline
 - Overflow channel or spillway from glacial lake
 - Esker
 - End moraine
 - DeGeer or sublacustrine moraine
 - Ice-contact face
 - Cliff face in bedrock



Geology based on fieldwork by L.A. Dredge, B. Chouhvard, J. Severin, P. Toole, 2001
Geological compilation by L.A. Dredge, 2002
Digital cartography by D. Vines, Earth Sciences Sector Information Division (ESS Info)
This map was produced from processes that conform to the ESS Info Publishing Services Subdivision Quality Management System, registered to the ISO 9001:2000 standard
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OPEN FILE 4411
SURFICIAL GEOLOGY
LAKE GILLIAN
BAFFIN ISLAND
NUNAVUT
Scale 1:100 000 / Échelle 1/100 000
Universal Transverse Mercator Projection
North American Datum, 1983
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Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada
Digital base map from data compiled by Geomatics Canada, modified by ESS Info
Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area
Mean magnetic declination 2003, 44°07' W, decreasing 33.0' annually. Readings vary from 42°53' W in the SW corner to 45°14' W in the NE corner of the map
Elevations in feet above mean sea level



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GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA
2003

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