

**LEGEND**

This legend is common to Open File 4356, 4356, 4357, 4411, 4412, 1533, 1569, 1572. Coloured legend blocks indicate map units that appear on this sheet. Not all map symbols shown in the legend necessarily appear on this sheet.

**SURFICIAL DEPOSITS**

**QUATERNARY**

**HOLOCENE**

- ICE: Glacier ice: 5-800 m thick; forming ice caps and outlet glaciers.
- A** FLUVIAL DEPOSITS (nonglacial alluvial floodplain sediments and active proglacial outwash): gravel, sand, and silt; 1-5 m thick; forming terraces and valley bottom deposits.
- MR** MARINE DEPOSITS: sediments deposited during regression of a high postglacial sea.
- Mv** Beach sediments: gravel and sand, 1-5 m thick; forming flights of ridges with intervening swales.
- Md** Deltaic sediments: sand and gravel facies, 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 ice-rafted debris; 2-10 m thick; forming continuous cover of subtidal and shallow sediments.
- Mv** Marine veneer: sand, silt, and gravel; 0.5-2 m thick; discontinuous cover of littoral and offshore sediments including beach ridges and sea-ice-rafted debris; mimicking surface of underlying till or rock.
- GM** Glaciomarine blanket: clastic silt 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 glacial- or moraine-dammed lakes forming 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 till 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 kilted; grading to deltaic sediments near marine limit; deposited in a proglacial environment as valley trains, braidplains, terraces, and fans.
- Gr** Ice-contact deposits: eskers and kames; poorly stratified or sorted sand to bouldery gravel; 5-20 m thick; forming ridges and hummocks; deposited in a subglacial environment along meltwater corridors.

**EARLY HOLOCENE AND WISCONSINAN**

- TLL** Tilly clay: clayey deposits with a pebbly sand or silty sand matrix; generally unsorted; deposited in subglacial and ice-marginal environments; lithic composition generally reflects underlying bedrock type.
- Tm** Massive and moraine: glacial diamict; 5-60 m thick; extensively kilted 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.
- Th** Hummocky till: glacial diamict which may contain remnant glacial ice; 2-30 m thick; forming rolling to hummocky terrain.
- Tb** Till blanket: glacial diamict; 2-10 m thick; forming undulating plains with fluted or hummocked 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.

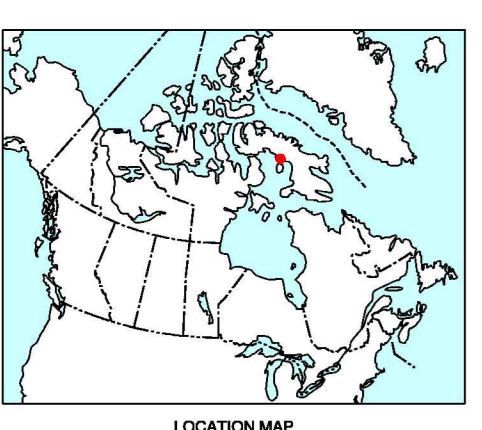
**PALEOZOIC AND PRECAMBRIAN**

**BEDROCK: intact and frost-riven outcrop of several compositions and ages, variously modified by glacial erosion; ranging to hills topography with numerous ridges and scarps; some streamlined landforms; surfaces range from rough and weathered to glacially polished.**

- RC** Limestone and dolomite of Paleozoic age; commonly forming ledges and bluffs; weathers to gray and silty.
- RF** Marble of the Filt Lake Formation; commonly forming small outcrops in valleys; weathers to gray and silty.
- RA** Suphite-bearing black pelite, with oxidized pelite, psammite and iron formation of the Aulavik 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, wacke and quartzite of the Longstaff Bluff and Lower Lakes 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
- Patched delta (elevation in metres)
- Solifluction lobes
- Landslide or rockslide
- Kame or conical gravel hill
- Kettle (large, small)
- Drumlinoid ridge
- Rock-creep and till-fall form
- Glacially placied bedrock
- Striation (ice flow direction known, unknown)
- Crossed striae (numbers indicate relative ages, 1 being the oldest)
- Glacially shaped bedrock, unformulated
- 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
- DeGler or sublacustrine moraine
- Ice-contact face
- Cliff face in bedrock



Geology based on fieldwork by L.A. Dredge, B. Chouhnd, J. Severin, P. Toole, 2001  
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 Digital cartography by M.J. Coulthart, Earth Sciences Sector Information Division (ESS Info)  
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OPEN FILE 4356  
**SURFICIAL GEOLOGY**  
**PILING LAKE**  
 NUNAVUT

Scale 1:100 000/Echelle 1/100 000

kilometres 2 0 2 4 6 8 kilometres

Universal Transverse Mercator Projection  
 North American Datum 1983  
 © Her Majesty the Queen in Right of Canada 2003

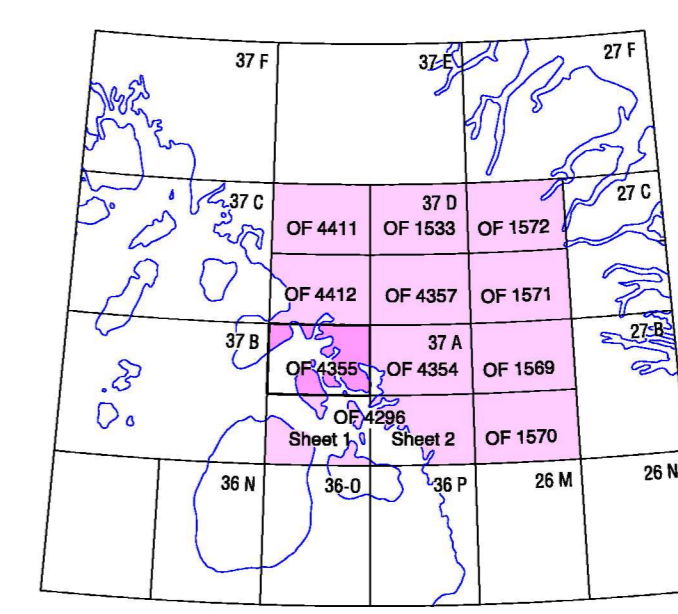
Projection transversale universelle de Mercator  
 Système de référence géodésique nord-américain, 1983  
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Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

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, 41°20' W, decreasing 36.3' annually. Readings vary from 40°07' W in the SW corner to 42°29' W in the NE corner of the map

Elevations in feet above mean sea level



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 4356  
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 2003

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