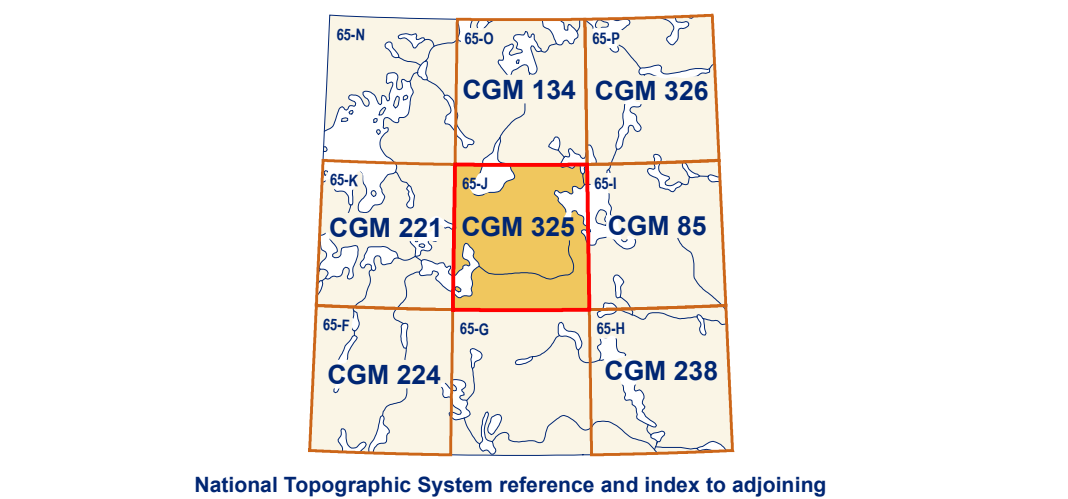


References and additional citation data from:
 Aywemth, J.M., 1989. Surficial geology, Tulemalu Lake, District of Keewatin, Northwest Territories, Geological Survey of Canada, Map 37-1989, scale 1:125 000. <https://doi.org/10.4095/121878>
 DeLoraine, C., Cocking, R., Ken, D., Campbell, J.F., Eagles, J., Everett, D., Hurley, D.H., Inglis, E., Parent, M., Proulx, A., Robertson, L., Soren, J.R., and Westbrooke, A., 2017. Surficial Data Model, version 2.3.0: revisions to the science language of the integrated Geological Survey of Canada data model for surficial geology maps. Geological Survey of Canada, Open File 8258, 1, 26 pp. <https://doi.org/10.4095/825817>
 Lee, H.A., 1959. Surficial geology of southern district of Keewatin and the Keewatin Ice Divide, Northwest Territories, Geological Survey of Canada, Bulletin 51, 1, 26 pp. <https://doi.org/10.4095/10673>
 Wright, G.M., 1967. Surficial geology, southern Barren Grounds, District of Keewatin and District of Mackenzie, Geological Survey of Canada, Map 37-1A, scale 1:100 000. <https://doi.org/10.4095/10950>

Abstract
 This new surficial geology map product represents the conversion of Map 37-1989 and its legend, using the Geological Survey of Canada Surficial Data Model (SDM) version 2.3.0 which can be found in Open File 8258. All geoscience knowledge and information from Map 37-1989 that conformed to the current SDM were maintained during the conversion process. Additional material such as marginal notes or figures which exist on the original map, are not included here. Supplemental, limited legacy information was added to complement the converted geoscience data. This consists of glacial divisions from Lee (1959) and Wright (1967), as well as the accompanying generalizations. The purpose of converting legacy metadata to a common science language and common legend is to enable and facilitate the efficient digital compilation, integration, management and dissemination of geologic map information in a structured and consistent manner. This provides an effective knowledge management tool designed around a geodatabase which can expand following the type of information to appear on new surficial geology maps.

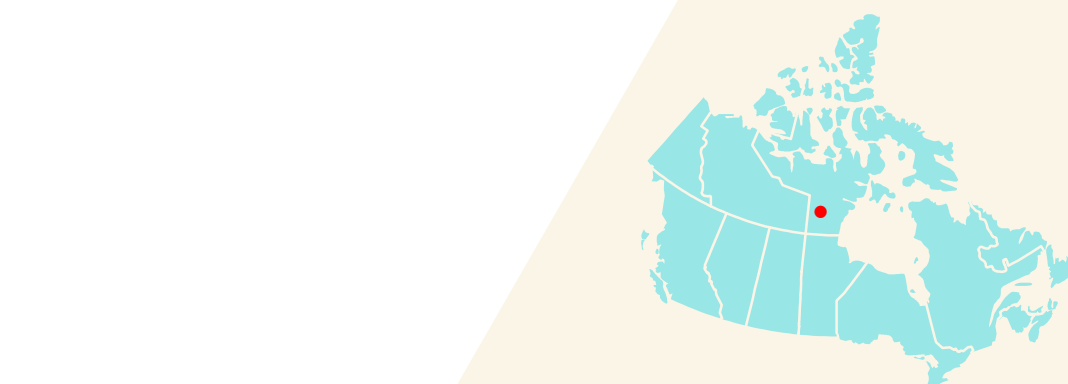
Résumé
 Ce nouveau produit dérivé de la carte de formations superficielles 37-1989 a été produit avec le Modèle de données de formation superficielles (MDF) version 2.3.0 de la Commission géologique du Canada qui est le même que celui de l'Open File 8258. La connaissance et toutes les données de la carte 37-1989 ont été maintenues pendant le processus de conversion. Des éléments supplémentaires des notes marginales ou des figures sur la carte originale ne sont pas incluses ici. Des données complémentaires limitées ont été ajoutées pour compléter les données géoscience converties. Le but de convertir les données géoscience existantes dans une langue scientifique commune et un légende commune est de permettre la diffusion numérique efficace d'information de cartes géologiques de façon structurée et cohérente. Cette base de données géologiques est un outil de gestion qui pourra évoluer suivant le type d'information à paraître sur les nouvelles cartes des formations superficielles.



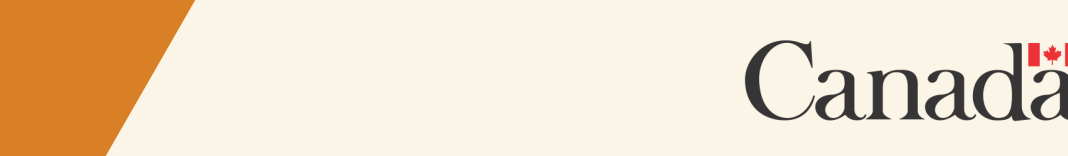
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 https://doi.org/10.4095/825817

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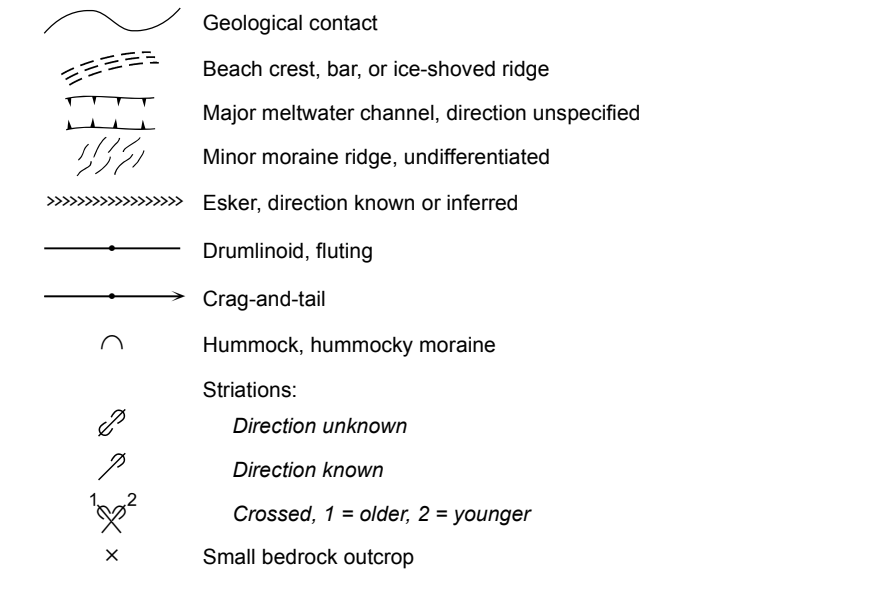
CANADIAN GEOSCIENCE MAP 325
RECONNAISSANCE SURFICIAL GEOLOGY
TULEMALU LAKE
 Nunavut
 NTS 65-J
 1:125 000



Geological Survey of Canada
Canadian Geoscience Maps



QUATERNARY	
HOLOCENE	
Ap	ALLUVIAL SEDIMENTS: stream-deposited material within modern active channel systems. "Underlain" by the period since arrival of the last glacial maximum. Of glacial ice deposited in channels and on floodplains; may include alluvium in bedrock with an exposure of its present level in glacial and marine sediments.
A	Alluvial sediments, undifferentiated: silt, sand and gravel; variable thickness; occur as flat areas consisting of recent alluvium mixed with more silt and sand that were deposited by river action or deposited in the sea by meltwater streams; surface generally composed of a mixture of silt and sand; may be covered by a surface of peat or other organic matter.
Ld	Lacustrine deltaic sediments: sand, gravel, and boulders; variable thickness; deposited as deltas where modern streams enter lakes.
L	Lacustrine sediments, undifferentiated: silt and sand; variable thickness; permanently saturated lacustrine lake basins; may include deposit of silt sediment with up to 15% organic carbon.
M	MARINE SEDIMENTS: materials deposited in the Tyned Sea and general deposits modified by marine processes.
Mv	Beach and nearshore sediments: sand, gravel, cobbles, or boulders; generally well sorted; variable thickness; deposited as beaches, bars, spits, and ice-marginal ridges; surface characterized by sparse vegetation and extensive frost cracks.
M	Marine sediments, undifferentiated: silt, sand, gravel; variable thickness; appears as secondary unit in complex polygons.
GLACIAL ENVIRONMENT	
GLd	GLACIOLACUSTRINE SEDIMENTS: materials deposited in glacial lakes ponded on the western side of the Keewatin Ice Divide and general deposits modified by glaciolacustrine processes.
GLv	Beach and nearshore sediments: sand, gravel, cobbles, or boulders; generally well sorted; variable thickness; deposited as beaches, bars, spits, and ice-marginal ridges; surface characterized by sparse vegetation and extensive frost cracks.
GLd	Deltaic sediments: sand, pebbly sand, and gravel; variable thickness; deposited in glacial lakes by glacial or nonglacial streams and subsequently abandoned as glacial lake drained surface.
GLp	GLACIOLACUSTRINE SEDIMENTS: well-sorted sediments deposited in, or around, or near a glacier, largely as a result of meltwater stream flow.
GLp	Outwash plain sediments: well-sorted sediments deposited by meltwater streams in areas adjacent to sea level or level of proglacial lakes; includes 1) sediment deposited between the outer ridge and valley axis, commonly on a flat or gently sloping floor; 2) outwash fans; 3) outwash plains; and 4) materials on the floor or at the mouth of meltwater channels; sparsely vegetated.
GLp	Ice-contact sediments: sand and gravel, stratified; variable thickness; deposited in meltwater channels; may include hummocky deposits of silt and sand; may be deposited in areas adjacent to the outer ridge and valley axis; commonly on a flat or gently sloping floor; may be covered by a surface of peat or other organic matter.
GLp	Glaciolacustrine sediments, undifferentiated: silt, sand and gravel; variable thickness; deposited in or near a glacier; appears as secondary unit in complex polygons.
GLp	GLACIAL SEDIMENTS (TILL): poorly sorted sediments with clast sizes limited directly by glacier ice.
Th	Hummocky till: clast-free; variable thickness; without significant clast cover; occurring as low, rounded hummocks; includes ridge of till that are minor and irregular or erosion remnants between adjacent irregular stratified sediments; some are present in the region of the Keewatin Ice Divide; exact origin unknown; may have formed in association with stagnant ice and in some places from erosion of till surfaces by streams in anastomosing meltwater channels; vegetation and correlative features similar to those on till plain (Tp).
Tm	Meltwater complex: clast-free; sand and gravel; variable thickness; deposition occurs as short ridges or hummocks; probably deposited in meltwater channels in marginal ice; ridge orientation may form a reticulate pattern; sparsely vegetated; periglacial features vary from mudflats to fill frost cracks in sorted sediments.
Tp	Till plain: generally sandy, silt; clast-free; nonconformable; grey till; variable thickness; includes areas of clay-rich till; surface characterized by 1-2 m diameter patches of bare or better-sorted mud (mudflats) surrounded by elevated peaty mounds which grow shrubs, mosses and grasses; soil mounds characterized by colluvial cones; 2 m wide ridges separated by 2 m wide broader flat troughs; generally trending downslope to a water depth of about 2 m; may include prominent stepped pattern on slope.
Tv	Till veneer: generally sandy, silt; clast-free; less than 1 m thick.
PRE-QUATERNARY	
K	Bedrock, undifferentiated: Proterozoic intrusive igneous and metamorphic rocks; not indicated rocks, and unmetamorphosed sediments; surface comprises more than 80% outcrop; vegetation sparse; surface may be locally modified or covered by lacustrine, beach, or ice-marginal deposits during periods of lowest ice extent.

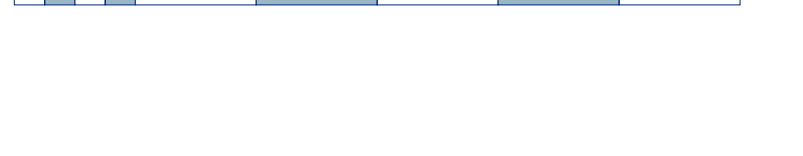


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This publication has been scientifically reviewed, but it has not undergone a formal edit.

CANADIAN GEOSCIENCE MAP 325
RECONNAISSANCE SURFICIAL GEOLOGY
TULEMALU LAKE
 Nunavut
 NTS 65-J

CANADIAN GEOSCIENCE MAP 325
RECONNAISSANCE SURFICIAL GEOLOGY
TULEMALU LAKE
 Nunavut
 NTS 65-J
 1:125 000



Author: Geological Survey of Canada
 Geology by J.M. Aywemth and M.D. Clarke, based on airborne interpretation. Station measurements by J.G. Fries, J.C. Daniels, and J.A. Fraser, 1954.
 Geology conforms to Surficial Data Model v. 2.3
 Date conversion by D.E. Kerr, 2012, 2015, 2016

Cartography: by E. Kinglley
 Cartography by A. Noad and J. Kinglley
 Initial use of the Geological Survey of Canada, conducted under the auspices of Natural Resources Canada's Geomapping for Energy and Minerals (GEM) Program.
 Map projection: Universal Transverse Mercator, zone 14, North American Datum 1983

Base map: at the scale of 1:250 000 from Natural Resources Canada, with modifications.
 Elevations in metres above mean sea level.
 Mean magnetic declination 2017, 2° 10'E, decreasing 0° annually. Readings vary from 0° 38'E in the NE corner to 2° 25'E in the SW corner of the map.
 This map is not to be used for navigational purposes.

The Geological Survey of Canada welcomes corrections or additional information from users.
 Data may include additional observations not portrayed on the map. See map info document accompanying the download data for more information about this publication.
 This publication is available for free download through GEDICAN (<http://geoscan.mcg.ca/>)