



Natural Resources  
Canada

Ressources naturelles  
Canada

# CANADIAN GEOSCIENCE MAP 326

## RECONNAISSANCE SURFICIAL GEOLOGY

# THIRTY MILE LAKE

Nunavut  
NTS 65-P

Map Information  
Document

Preliminary



Geological Survey of Canada  
Canadian Geoscience Maps

2017

Canada 



## **MAP NUMBER**

Natural Resources Canada, Geological Survey of Canada  
Canadian Geoscience Map 326 (Preliminary)

## **TITLE**

Reconnaissance surficial geology, Thirty Mile Lake, Nunavut, NTS 65-P

## **SCALE**

1:125 000

## **CATALOGUE INFORMATION**

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## **RECOMMENDED CITATION**

Geological Survey of Canada, 2017. Reconnaissance surficial geology, Thirty Mile Lake, Nunavut, NTS 65-P; Geological Survey of Canada, Canadian Geoscience Map 326 (preliminary, Surficial Data Model v. 2.3 conversion of Map 39-1989), scale 1:125 000. <https://doi.org/10.4095/305841>

## **ABSTRACT**

This new surficial geology map product represents the conversion of Map 39-1989 and its legend, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.3) (GSC Open File 8236). All geoscience knowledge and information from Map 39-1989 that conformed to the current SDM were maintained during the conversion process. Additional material, such as marginal notes or figures that exist on the original map, is not included here. Supplementary, limited legacy information was added to complement the converted geoscience data. This consists of glacial striations and ice-flow landforms from McMartin and Henderson (2004); these are identified in the accompanying geodatabase. The purpose of converting legacy map data to a common science language and common legend is to enable and facilitate the efficient digital compilation, interpretation, management, and dissemination of geological map information in a structured and consistent manner. This provides an effective knowledge management tool designed around a geodatabase that can expand, following the type of information to appear on new surficial geology maps.

## **RÉSUMÉ**

Ce nouveau produit cartographique de la géologie des formations superficielles correspond à la conversion de la Carte 39-1989 et de sa légende, en se servant du Modèle de données pour les formations superficielles (MDFS version 2.3) de la Commission géologique du Canada, lequel peut être consulté dans le Dossier public 8236. Toutes les connaissances et l'information de nature géoscientifique de la Carte 39-1989 qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. Des éléments additionnels tels que des notes marginales ou des figures qui pourraient être présents sur la carte originale ne sont pas inclus ici. Une faible quantité d'information ancienne a été ajoutée en complément aux données géoscientifiques converties. Il s'agit de stries glaciaires ainsi que de reliefs d'écoulement glaciaire tirés de McMartin et Henderson (2004). Ces entités sont identifiées dans la géodatabase du présent produit cartographique. Le but de la conversion de cartes publiées antérieurement suivant un langage scientifique commun et une légende commune est de permettre et de faciliter la compilation, l'interprétation, la gestion et la diffusion efficaces de l'information géologique cartographique en mode numérique de façon structurée et cohérente. Cette façon de faire offre un outil efficace de gestion des connaissances élaboré à l'aide d'une géodatabase qui pourra évoluer suivant le type d'information à paraître sur les nouvelles cartes des formations superficielles.

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# ***SHEET 1 OF 1, RECONNAISSANCE SURFICIAL GEOLOGY***

## ***GENERAL INFORMATION***

Author: Geological Survey of Canada

Geology by J.M. Aylsworth and M.D. Clarke, based on airphoto interpretation. Striation measurements by J.G. Fyles, R.C. Shields and J.A. Fraser, 1954.

Geology conforms to Surficial Data Model v. 2.3

Data conversion by D.E. Kerr, 2015, 2016

Geomatics by QSP Geographics Inc. and C. Lai

Cartography by M.J. Baldock

Initiative of the Geological Survey of Canada, conducted under the auspices of Natural Resources Canada's Geo-mapping 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, 0°59'W, increasing 2.8' annually. Readings vary from 0°37'E in the SW corner to 2°41'W in the NE 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 this map. See map info document accompanying the downloaded data for more information about this publication.

This publication is available for free download through GEOSCAN (<http://geoscan.nrcan.gc.ca/>).

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

## ***MAP VIEWING FILES***

The published map is distributed as a Portable Document File (PDF), and may contain a subset of the overall geological data for legibility reasons at the publication scale.

## **REFERENCES**

Aylsworth, J.M., Cunningham, C.M., and Shilts, W.W., 1989. Surficial geology, Thirty Mile Lake, District of Keewatin, Northwest Territories; Geological Survey of Canada, Map 39-1989, scale 1:125 000. <https://doi.org/10.4095/127680>

Deblonde, C., Cocking, R.B., Kerr, D.E., Campbell, J.E., Eagles, S., Everett, D., Huntley, D.H., Inglis, E., Parent, M., Plouffe, A., Robertson, L., Smith, I.R., and Weatherston, 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 8236, 1 .zip file. <https://doi.org/10.4095/302717>

McMartin, I. and Henderson, P. J., 2004. Ice flow history and glacial stratigraphy, Kivalliq Region, Nunavut (NTS 55 J, K, L, M, N, O; 65 I and P): complete datasets, maps and photographs from the Western Churchill NATMAP Project; Geological Survey of Canada, Open File 4595, 1 .zip file. <https://doi.org/10.4095/215057>

## **AUTHOR CONTACT**

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Questions, suggestions, and comments regarding the geological information contained in the data sets should be addressed to:

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## **COORDINATE SYSTEM**

Projection: Universal Transverse Mercator

Units: metres

Zone: 14

Horizontal Datum: NAD83

Vertical Datum: mean sea level

## **BOUNDING COORDINATES**

Western longitude: 98°00'00"W

Eastern longitude: 96°00'00"W

Northern latitude: 64°00'00"N

Southern latitude: 63°00'00"N

## **SOFTWARE VERSION**

Data has been originally compiled and formatted for use with ArcGIS™ desktop version 10.2.2 developed by ESRI®.

## ***DATA MODEL INFORMATION***

### **Surficial**

The Geological Survey of Canada (GSC) through the Geo-mapping for Energy and Minerals Program (GEM) has undertaken the Geological Map Flow to develop protocols for the collection, management (compilation, interpretation), and dissemination of surficial and bedrock geology data and map information. To this end, a data model has been created.

The Surficial Data Model (SDM) was designed using ESRI geodatabase architecture. The XML workspace document provided can be imported into a geodatabase, and the geodatabase will then be populated with the feature datasets, feature classes, tables, relationship classes, subtypes, and domains.

Shapefile and table (.dbf) versions of the data are included within the data. Column names have been simplified and the text values have been maintained within the shapefile attributes. The direction columns are numerical, to display rotation for points, and the symbol fields will hold the correct values to be matched to the appropriate style file.

For a more in depth description of the data model please refer to the official publication:

Deblonde, C., Cocking, R.B., Kerr, D.E., Campbell, J.E., Eagles, S., Everett, D., Huntley, D.H., Inglis, E., Parent, M., Plouffe, A., Robertson, L., Smith, I.R., and Weatherston, 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 8236, 1 .zip file.  
<https://doi.org/10.4095/302717>