



Natural Resources
Canada

Ressources naturelles
Canada

CANADIAN GEOSCIENCE MAP 390

SURFICIAL GEOLOGY

ERICHSEN LAKE

Baffin Island, Nunavut

NTS 47-E

Map Information
Document

Geological Survey of Canada
Canadian Geoscience Maps

2023

Canada 



MAP NUMBER

Natural Resources Canada, Geological Survey of Canada
Canadian Geoscience Map 390

TITLE

Surficial geology, Erichsen Lake, Baffin Island, Nunavut, NTS 47-E

SCALE

1:250 000

CATALOGUE INFORMATION

Catalogue No. M183-1/390-2023E-PDF

ISBN 978-0-660-28873-4

<https://doi.org/10.4095/314541>

COPYRIGHT

© His Majesty the King in Right of Canada, as represented by the Minister of Natural Resources, 2023

Information contained in this publication or product may be reproduced, in part or in whole, and by any means, for personal or public non-commercial purposes, without charge or further permission, unless otherwise specified.

You are asked to:

- exercise due diligence in ensuring the accuracy of the materials reproduced;
- indicate the complete title of the materials reproduced, and the name of the author organization; and
- indicate that the reproduction is a copy of an official work that is published by Natural Resources Canada (NRCan) and that the reproduction has not been produced in affiliation with, or with the endorsement of, NRCan.

Commercial reproduction and distribution is prohibited except with written permission from NRCan. For more information, contact NRCan at nrcan.copyrightdroitdauteur.nrcan@canada.ca.

RECOMMENDED CITATION

Geological Survey of Canada, 2023. Surficial geology, Erichsen Lake, Baffin Island, Nunavut, NTS 47-E; Geological Survey of Canada, Canadian Geoscience Map 390 (Surficial Data Model v. 2.3.14 conversion of Map 2066A), scale 1:250 000. <https://doi.org/10.4095/314541>

ABSTRACT

This new surficial geology map product represents the conversion of Map 2066A (Dyke, 2004) and its legend, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.3.14) (Deblonde et al., 2018). All geoscience knowledge and information from Map 2066A that conformed to the SDM were maintained during the conversion process. 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 2066A (Dyke, 2004) et de sa légende, en se servant du Modèle de données pour les formations superficielles (MDFS version 2.3.14) de la Commission géologique du Canada (Deblonde et al., 2018). Toutes les connaissances et l'information de nature géoscientifique de la Carte 2066A qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. 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 de la géologie des formations superficielles.

LICENCE AGREEMENT

View the licence agreement at

<https://open.canada.ca/en/open-government-licence-canada>

ACCORD DE LICENCE

Voir l'accord de licence à

<https://ouvert.canada.ca/fr/licence-du-gouvernement-ouvert-canada>

SHEET 1 OF 1, SURFICIAL GEOLOGY

GENERAL INFORMATION

Author: Geological Survey of Canada

Geology by A.S. Dyke, 2002; field data by De Beers Canada Inc., 2002

Geology conforms to Surficial Data Model v. 2.3.14 (Deblonde et al., 2018).

Geological data conversion by D.E. Kerr, 2016 and 2018

Geomatics by S. Eagles and C.D. Stevens

Cartography by N. Côté

Scientific editing by L. Ewert

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 17
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

Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area.

Mean magnetic declination 2023, 25°29'W, decreasing 42.1' annually

Readings vary from 27°53'W in the NE corner to 22°48'W 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 (gscpublications-cgcpublishations@nrcan-rncan.gc.ca).

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 (<https://geoscan.nrcan.gc.ca/>).

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.

CARTOGRAPHIC REPRESENTATIONS USED ON MAP

This map utilizes ESRI Cartographic Representations in order to customize the display of standard GSC symbols for visual clarity on the PDF of the map only. The digital data still contains the original symbol from the standard GSC symbol set. The following legend features have Cartographic Representations applied:

- Meltwater channel
- Esker, paleoflow direction known
- Limit of submergence

DEFINITION QUERIES USED ON MAP

This map utilizes definition queries in order to customize the display for visualization on the PDF of the map only and does not affect the digital data. The following features have a definition query applied:

- Field stations

REFERENCES

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., 2018. Surficial Data Model: the science language of the integrated Geological Survey of Canada data model for surficial geology maps; Geological Survey of Canada, Open File 8236, ver. 2.3.14, 1 .zip file.
<https://doi.org/10.4095/308178>

Dyke, A.S., 1993. Landscapes of cold-centred Late Wisconsinan ice caps, Arctic Canada; *Progress in Physical Geography: Earth and Environment*, v. 17, no. 2, p. 223–247. <https://doi.org/10.1177/030913339301700208>

Dyke, A.S., 2004. Surficial geology, Erichsen Lake, Baffin Island, Nunavut; Geological Survey of Canada, Map 2066A, scale 1:250 000. <https://doi.org/10.4095/214884>

Jackson, G.D. and Sangster, D.F., 1987. Geology and resource potential of a proposed national park, Bylot Island and northwest Baffin Island, Northwest Territories; Geological Survey of Canada, Paper 87-17, 1 .zip file.
<https://doi.org/10.4095/122369>

AUTHOR CONTACT

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

Geological Survey of Canada
601 Booth Street
Ottawa ON
K1A 0E8

gscpublications-cqcpublishings@nrcan-rncan.gc.ca

COORDINATE SYSTEM

Projection: Universal Transverse Mercator

Units: metres

Zone: 17

Horizontal Datum: NAD83

Vertical Datum: mean sea level

BOUNDING COORDINATES

Western longitude: 84°00'00"W

Eastern longitude: 80°00'00"W

Northern latitude: 71°00'00"N

Southern latitude: 70°00'00"N

SOFTWARE VERSION

Data has been originally compiled and formatted for use with ArcGIS™ desktop version 10.8.2 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., 2018. Surficial Data Model: the science language of the integrated Geological Survey of Canada data model for surficial geology maps; Geological Survey of Canada, Open File 8236, ver. 2.3.14, 1 .zip file.
<https://doi.org/10.4095/308178>