



Natural Resources
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CANADIAN GEOSCIENCE MAP 428

SURFICIAL GEOLOGY

CARDIGAN STRAIT

Devon Island and Ellesmere Island, Nunavut
NTS 59-A

**Map Information
Document**

**Geological Survey of Canada
Canadian Geoscience Maps**

2023

Canada 



MAP NUMBER

Natural Resources Canada, Geological Survey of Canada
Canadian Geoscience Map 428

TITLE

Surficial geology, Cardigan Strait, Devon Island and Ellesmere Island, Nunavut,
NTS 59-A

SCALE

1:250 000

CATALOGUE INFORMATION

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Geological Survey of Canada, 2023. Surficial geology, Cardigan Strait, Devon Island and Ellesmere Island, Nunavut, NTS 59-A; Geological Survey of Canada, Canadian Geoscience Map 428 (Surficial Data Model v. 2.3.14 conversion of Map 1974A), scale 1:250 000. <https://doi.org/10.4095/326898>

ABSTRACT

This new surficial geology map product represents the conversion of Map 1974A (Dyke, 2001) 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 1974A 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 1974A (Dyke, 2001) 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 1974A 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.

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SHEET 1 OF 1, SURFICIAL GEOLOGY

GENERAL INFORMATION

Author: Geological Survey of Canada

Geology based on field work by A.S. Dyke, 1993 and 1994, and by C. Hattestrand and A. Stroven, 1994, and on airphoto interpretation

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

Geological data conversion by D.E. Kerr, 2015 and 2019

Geology has been spatially adjusted to fit the updated base.

Geomatics by S. Eagles, J. Kingsley, C.D. Stevens, and S.Y. Keskinler

Cartography by M.J. Baldock

Scientific editing by L. Ewert

Initiative of the Geological Survey of Canada, conducted under the auspices of the Information Management Project as part of Natural Resources Canada's Geo-mapping for Energy and Minerals (GEM) program

Map projection Universal Transverse Mercator, zone 16
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 useless in this area.

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:

- Bedrock scarp, cliff
- Minor meltwater channel, lateral
- Moraine, major, end

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., 2001. Surficial geology, Cardigan Strait, Devon Island and Ellesmere Island, Nunavut; Geological Survey of Canada, Map 1974A, scale 1:250 000.
<https://doi.org/10.4095/212706>

ADDITIONAL INFORMATION

The Additional Information folder of this product's digital download contains figures and tables that appear in the map surround as well as additional geological information not depicted on the map, nor this document, nor the geodatabase.

-PDF of Table 1 that appears in the CGM surround.

AUTHOR CONTACT

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: 16

Horizontal Datum: NAD83

Vertical Datum: mean sea level

BOUNDING COORDINATES

Western longitude: 92°00'00"W

Eastern longitude: 88°00'00"W

Northern latitude: 77°00'00"N

Southern latitude: 76°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>