



Natural Resources
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2nd
EDITION

CANADIAN GEOSCIENCE MAP 34

GEOLOGY

TECTONIC ASSEMBLAGE

MAP OF GRISE FIORD

eastern Devon and southern Ellesmere islands,
Nunavut



Map Information
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ABSTRACT

This map and the related geodatabase illustrate the bedrock geology of eastern Devon Island, Coburg Island, and southern Ellesmere Island. Major features of the area include: high-grade Neoarchean and Paleoproterozoic metasedimentary and granitoid rocks of the Rae craton(?) and Inglefield Orogen, unconformable and mostly flat-lying Cambrian to Lower Devonian platformal strata, and (on Ellesmere Island) the Middle and Upper Devonian foreland clastic wedge associated with the Ellesmerian Orogen.

RÉSUMÉ

Cette carte et la géodatabase qui s'y rapporte documentent la géologie du substratum rocheux dans l'est de l'île Devon, l'île Coburg et le sud de l'île d'Ellesmere. Les principales entités géologiques de la région comprennent : des roches métasédimentaires et granitoïdes néoarchéennes et paléoprotérozoïques à degré élevé de métamorphisme du craton de Rae(?) et de l'orogène d'Inglefield; des strates de plate-forme discordantes et généralement horizontales (Cambrien au Dévonien inférieur); et, sur l'île d'Ellesmere, le prisme de roches clastiques d'avant-pays du Dévonien moyen et supérieur associé à l'orogène ellesmérien.

ABOUT THE MAP

General Information

Authors: J.C. Harrison, R. Thorsteinsson, T. Frisch, U. Mayr, C. Gilbert, T. Lynds, and A. Ford

Geological compilation by J.C. Harrison

Source map geology (senior authors) by R. Thorsteinsson, U. Mayr, and T. Frisch

GIS development by T. Lynds

Spatial data capture by Gismo Solutions Ltd. (Edmonton)

Cartography by M.J. Baldock

Critical review by K. Dewing

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

Map projection Lambert Conformal Conic, standard parallels 74°30'N and 76°30'N.
North American Datum 1983

Base map at the scale of 1:250 000 from Natural Resources Canada, with modifications.

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

Mean magnetic declination 2015, 43°43'W, decreasing 61.7' annually.

Readings vary from 34°00'W in the SW corner to 48°49'W in the NE corner of the map.

This map is not to be used for navigational purposes.

Title photograph: Cambro-Ordovician strata overlying basement gneiss, Lancaster Sound adjacent to Eastern Devon Island, Nunavut. Photograph by T. Frisch. 2013-070

The Geological Survey of Canada welcomes corrections or additional information from users.

Data may include additional observations not portrayed on this map.
See documentation accompanying the data.

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

Preliminary publications in this series have not been scientifically edited.

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:

Fault: approximate, showing downthrown side
Fault: assumed, showing downthrown side
Fault: inferred, showing downthrown side
Thrust fault: approximate, teeth indicate upthrust side
Thrust fault: inferred, teeth indicate upthrust side
Diabase dyke

ABOUT THE GEOLOGY

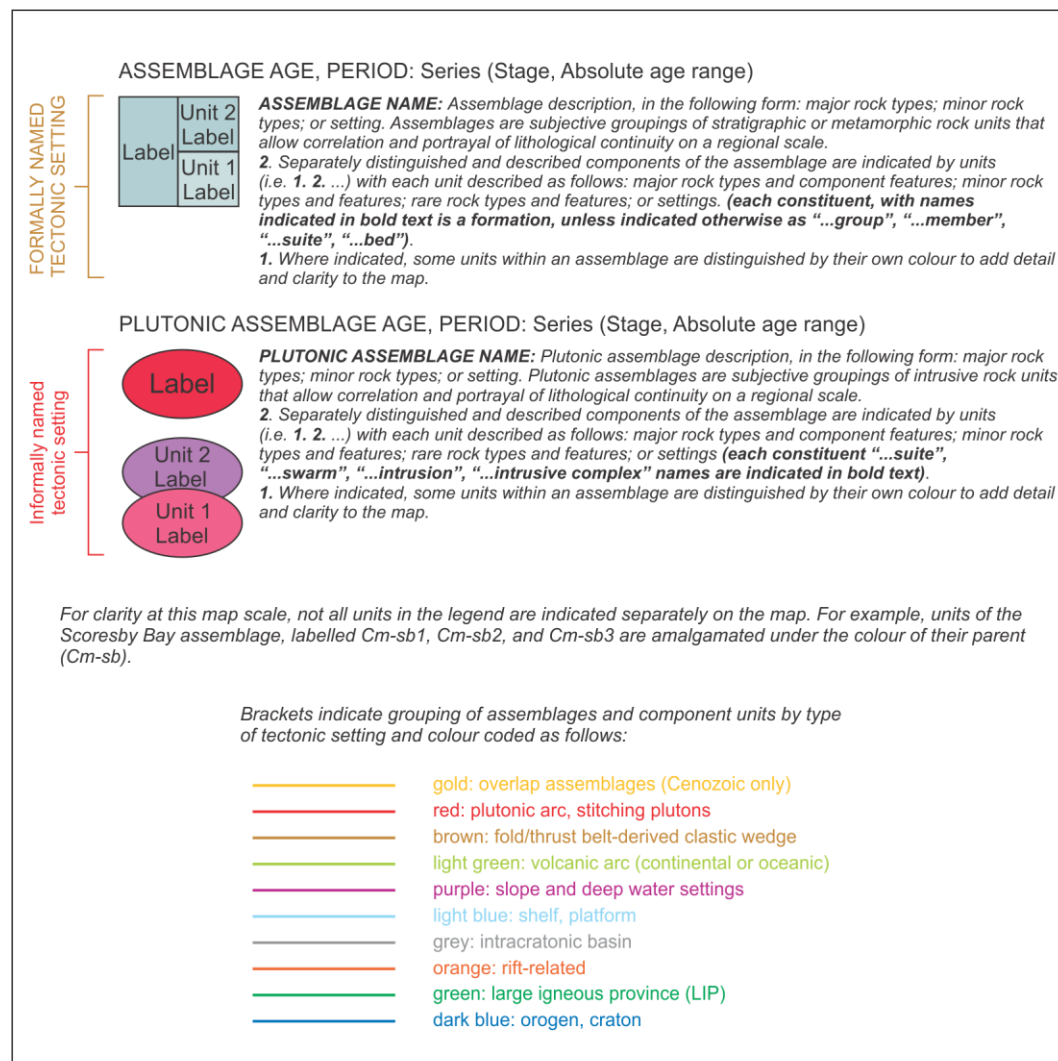


Figure 1. Explanation of map unit features.

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Coordinate System

Projection: Lambert Conformal Conic
False Easting: 0.0
False Northing: 0.0
Central Meridian: -82.0
Standard Parallel 1: 74.5
Standard Parallel 2: 76.5
Latitude of Origin: 40.0
Linear Unit: Meter (1.0)

Bounding Coordinates

Western longitude: 88°00'00"W

Eastern longitude: 76°00'00"W

Northern latitude: 77°00'00"N

Southern latitude: 74°00'00"N

Data Model Information

This Canadian Geoscience Map does not conform to the Bedrock Mapping Geodatabase Data Model v.3.1. Therefore, some of the feature classes and feature attributes require explanation. Consult "Explanation_of_attributes.rtf" in Data folder for complete description of the feature classes and feature attributes.

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