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CANADIAN GEOSCIENCE MAP 28

GEOLOGY

TECTONIC ASSEMBLAGE

MAP OF SVERDRUP

ISLANDS AREA

Northwest Territories–Nunavut



Map Information
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Preliminary

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ABSTRACT

This map and the related geodatabase illustrate the bedrock geology of the Sverdrup Islands including Brock, Borden, and Mackenzie King islands, Loughheed Island, the northern part of Prince Patrick Island, and a small portion of Ellef Ringnes Island. Major features of the area include little-deformed Triassic and younger strata of the western Sverdrup Basin, and unconformable cover of unconsolidated post-tectonic Neogene sediments.

RÉSUMÉ

Cette carte et la géodatabase qui s'y rapporte documentent la géologie du substratum rocheux dans les parties suivantes des îles Sverdrup : les îles Brock, Borden et Mackenzie King, l'île Lougheed, la partie nord de l'île Prince Patrick et une petite partie de l'île Ellef Ringnes. Les principales entités géologiques de la région comprennent des strates triasiques et plus récentes peu déformées du bassin de Sverdrup occidental, et une couverture discordante de sédiments post-tectoniques néogènes non consolidés.

ABOUT THE MAP

General Information

Authors: J.C. Harrison, M. Le, H.R. Balkwill, D.F. Stott, and E.T. Tozer

Geological compilation by J.C. Harrison

Source map geology (senior authors) by H.R. Balkwill, J.C. Harrison, D.F. Stott, and E.T. Tozer

GIS development by M. Le and T. Lynds

Spatial data capture by Gismo Solutions Ltd. (Edmonton)

Cartography by M.J. Baldock

Critical review by L. Currie

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 79°30'N and 77°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, 1°06'E, decreasing 66.8' annually. Readings vary from 19°01'E in the SW corner to 34°07'W in the NE corner of the map.

This map is not to be used for navigational purposes.

Title photograph: Pliocene Beaufort Formation overlying Jurassic Deer Bay Formation, Prince Patrick Island, Northwest Territories. Photograph by J.C. Harrison. 2013-064

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

Thrust fault: approximate, teeth indicate upthrust side

Thrust fault: assumed, teeth indicate upthrust side

ABOUT THE GEOLOGY

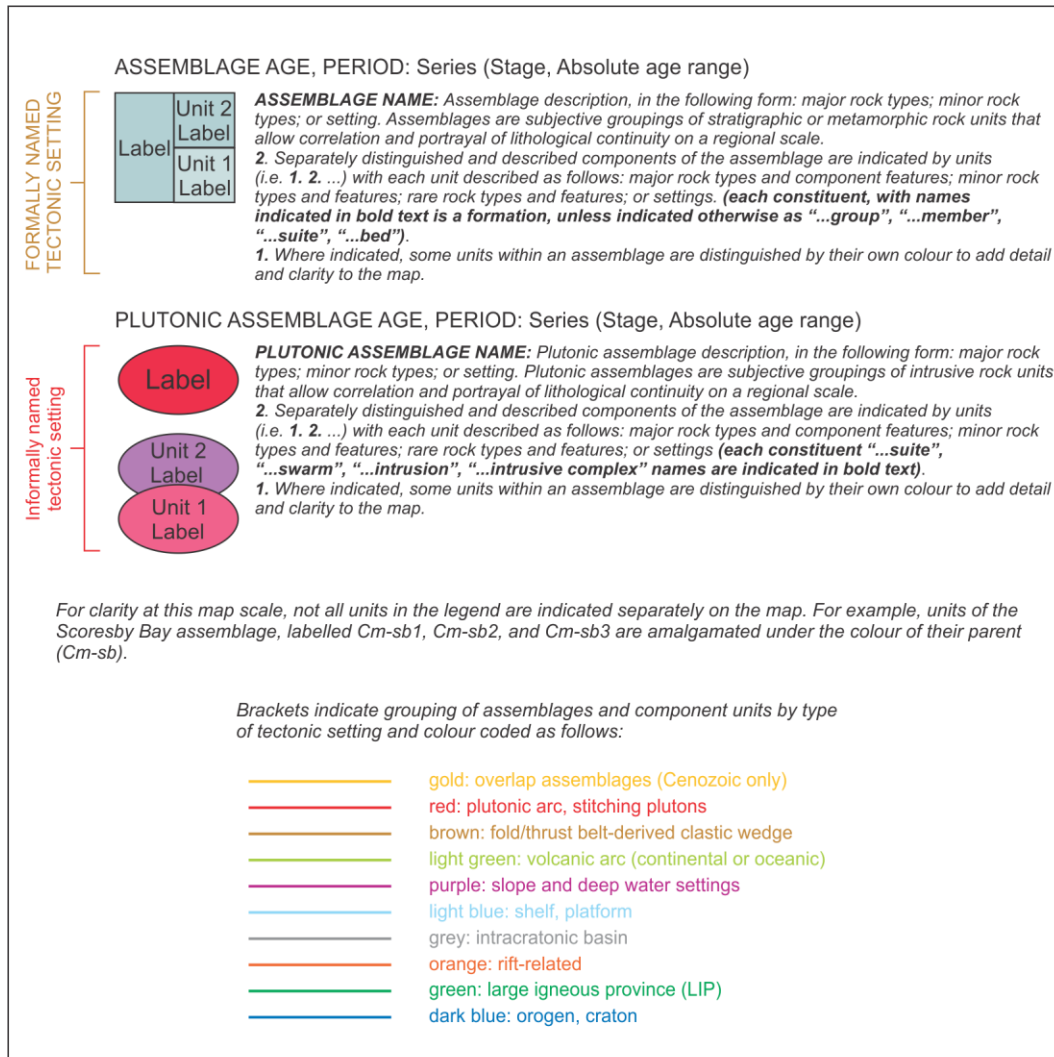


Figure 1. Explanation of map unit features.

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Coordinate System

Projection: Lambert Conformal Conic
False Easting: 0.0°
False Northing: 0.0°
Central Meridian: -112.0°
Standard Parallel 1: 79.5°
Standard Parallel 2: 77.5°
Latitude Of Origin: 40.0°
Units: metres
Horizontal Datum: NAD83
Vertical Datum: mean sea level

Bounding Coordinates

Western longitude: 120°00'00"W
Eastern longitude: 104°00'00"W
Northern latitude: 80°00'00"N
Southern latitude: 77°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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