References

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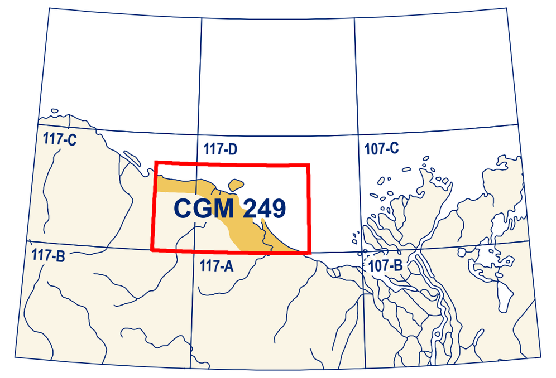
Rampton, V. and Fulton, R.J. 1970. Surficial geology maps, Arctic coast, District of Mackenzie. Geological Survey of Canada, Open File 21, Map 1, scale 1:250 000. https://doi.org/10.4095/129599

Abstract

This new surficial geology map product represents the conversion of Open File 21, Map 1 and its legend only, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.2) which can be found in Open File 8041. All geoscience knowledge and information from Open File 21, Map 1 that conformed to the current SDM were maintained during the conversion process. Additional material such as marginal notes or figures which may exist on the original map, are not included here. 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 geologic map information in a structured and consistent manner. This provides an effective knowledge management tool designed around a geo-database which 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 1 du Dossier public 21 et de sa légende uniquement, en se servant du Modèle de données pour les formations superficielles (MDFS version 2.2) de la Commission géologique du Canada, lequel peut être consulté dans le Dossier public 8041. Toutes les connaissances et l'information de nature géoscientifique de la Carte 1 du Dossier public 21 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. 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.



National Topographic System reference

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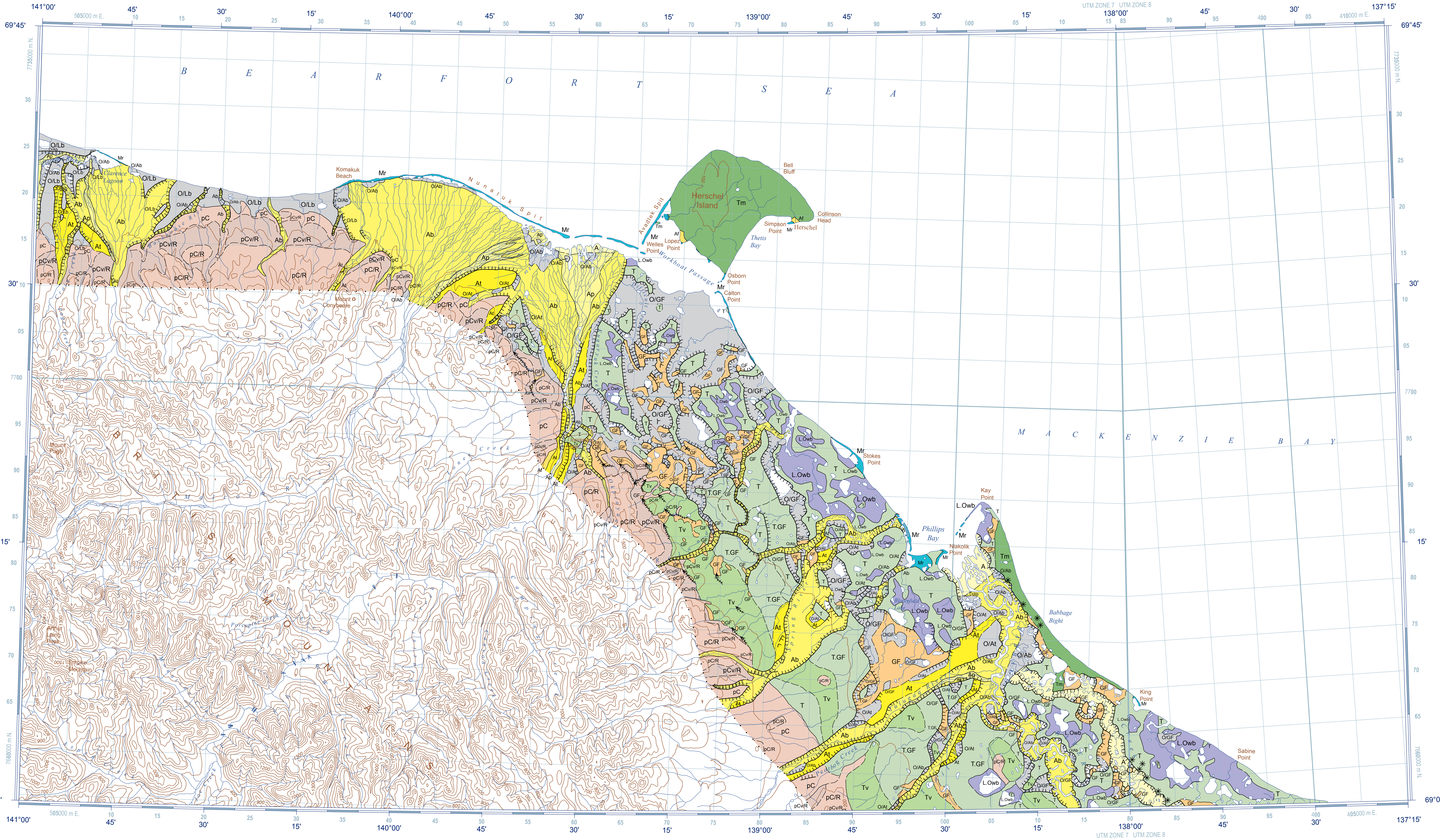
Natural Resources Canada | Ressources naturelles Canada

CANADIAN GEOSCIENCE MAP 249
RECONNAISSANCE SURFICIAL GEOLOGY
DEMARCATION POINT–HERSCHEL ISLAND AREA

Yukon
parts of NTS 117-C and 117-D
1:250 000



QUATERNARY
RECENT

Unit	Description
Owb	**Organic bog deposits:** muck and peat; variable thickness; appears only as secondary unit in complex polygons.
O	**Organic deposits, undifferentiated:** organic cover greater than 1 m thick.
Ap	**Alluvial floodplain sediments:** gravel and sand; variable thickness; lacking vegetation; modern.
Ab	**Alluvial blanket:** gravel and sand; variable thickness; includes low gradient alluvial fans; may be covered by organic deposits (muskeg) less than 1 m thick.
Lb	**Lacustrine blanket:** silt, variable thickness; appears only as secondary unit in complex polygons; may be covered by organic deposits (muskeg) less than 1 m thick.
Mr	**Marine beach sediments:** gravel, variable thickness.

RECENT AND PLEISTOCENE

Unit	Description
Af	**Alluvial fan sediments:** silt and sand, minor gravel; variable thickness; may be covered by organic deposits (muskeg) less than 1 m thick.
At	**Alluvial terraced sediments:** gravel and sand; variable thickness; partly covered by silt; may be covered by organic deposits (muskeg) less than 1 m thick.
A	**Alluvial sediments, undifferentiated:** fine sand, silt, clay, organic detritus, and peat; variable thickness; includes Mackenzie Delta sediments; may be covered by organic deposits (muskeg) less than 1 m thick.
L	**Lacustrine sediments, undifferentiated:** clay, silt, sand, muck, and peat; variable thickness; may be covered by organic deposits (muskeg) less than 1 m thick.
GF	**Glaciofluvial sediments, undifferentiated:** gravel, minor sand; variable thickness; mainly kame terraces and outwash; may be covered by organic deposits (muskeg) less than 1 m thick.
Tm	**Moraine complex:** fluvial and marine clay, silt, sand and gravel; locally covered by till, glaciofluvial gravel and sand, and colluvium; variable thickness; glacially deformed; may be covered by organic deposits (muskeg) less than 1 m thick.
Tv	**Till veneer:** diamicton; generally less than 2–3 m thick; mantles bedrock; includes undifferentiated areas of colluvium and bedrock; may be covered by organic deposits (muskeg) less than 1 m thick.
T	**Till, undifferentiated:** diamicton (morainal sediments), minor glaciofluvial gravel and sand; variable thickness; may include small undifferentiated areas of lacustrine and organic bog deposits; may be covered by organic deposits (muskeg) less than 1 m thick.

PLEISTOCENE AND EARLIER

Unit	Description
pCv	**Colluvium veneer:** silt to gravel; less than 2 m thick; may inlude minor areas of alluvial sediments; may be covered by organic deposits (muskeg) less than 1 m thick.
pC	**Colluvium deposits, undifferentiated:** gravel cover, locally a surface veneer of silt; variable thickness; partly covers pediment of bevelled bedrock; may be covered by organic deposits (muskeg) less than 1 m thick.
R	**Bedrock, undifferentiated:** appears only as secondary unit in complex polygons.

Complex units: two map-unit designators are used in cases where the surficial cover forms a complex area and the map units are too small to be mapped individually, yet constitute a significant areal extent of the total polygon (e.g. T.GF designates an area of till with numerous small deposits glaciofluvial sediments). In such instances a dot ('.') is used to separate the map-unit designator.

Stratigraphic relationship: a stratigraphic relationship is shown with two map-unit designators separated by a slash ('/') (e.g. O/Lb designates organic deposits overlying lacustrine blanket).

Geological contact:

Defined

Approximate

Limit of mapping

Stream-cut escarpment

Minor meltwater channel, paleocurrent known, incised in bedrock

Kame, gravel

Recommended citation
Geological Survey of Canada, 2017. Reconnaissance surficial geology, Demarcation Point–Herschel Island area, Yukon, parts of NTS 117-C and 117-D; Geological Survey of Canada, Canadian Geoscience Map 249 (preliminary, Surficial Data Model v. 2.2 conversion of Open File 21, Map 1), scale 1:250 000. https://doi.org/10.4095/302767

Celebrating 175 yrs

Geological Survey of Canada
Canadian Geoscience Maps

Canada

Author: Geological Survey of Canada

Geology based on airphoto interpretation by V. Rampton, supplemented by widely scattered field checks by R.J. Fulton, 1968.

Geology conforms to Surficial Data Model v. 2.2

Data conversion by D.E. Kerr, 2015

Geomatics by J. Kingsley

Cartography by E. Everett

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 7. North American Datum 1983

RECONNAISSANCE SURFICIAL GEOLOGY
DEMARCATION POINT–HERSCHEL ISLAND AREA
Yukon
parts of NTS 117-C and 117-D
1:250 000

5 0 5 10 15 20 km

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, 21°08'E, decreasing 34.3' annually. Readings vary from 20°37'E in the SW corner to 21°36'E 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.

CANADIAN GEOSCIENCE MAP 249
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DEMARCATION POINT–HERSCHEL ISLAND AREA
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