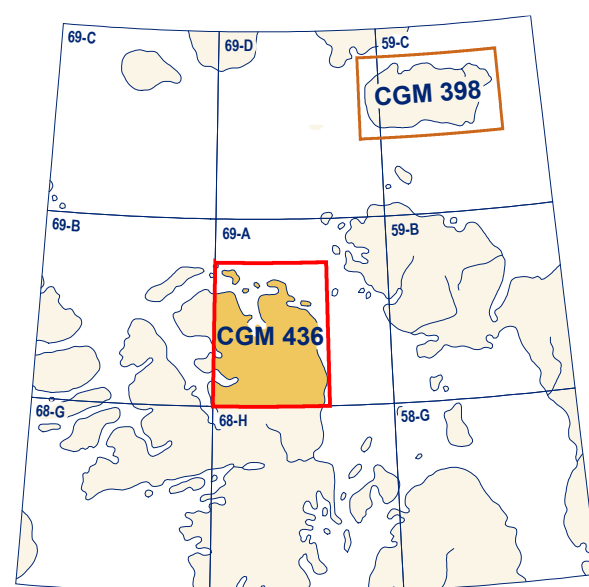


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Bednarski, J., 2002. Surficial geology, northeast Bathurst Island, Nunavut. Geological Survey of Canada, Map 2011A, scale 1:100 000. <https://doi.org/10.4095/31370>
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Abstract
This new surficial geology map product represents the conversion of Map 2011A (Bednarski, 2002) and its legend, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.3.14) (Deblonde et al., 2018). At geoscience knowledge and information from Map 2011A 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.

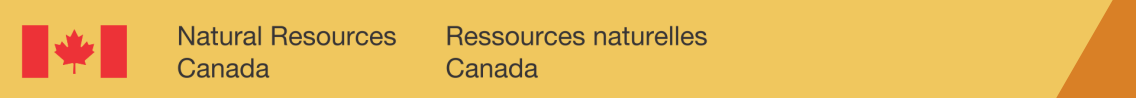
Résumé
Ce nouveau produit cartographique de la géologie des formations superficielles correspond à la conversion de la Carte 2011A (Bednarski, 2002) et de sa légende, en se servant du Modèle de données pour les formations superficielles (MDPS version 2.3.14) de la Commission géologique du Canada (Deblonde et al., 2018). Toutes les connaissances et l'information de nature géoscientifique de la Carte 2011A, qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. Le but de la conversion de cartes publiques antérieurement suivait 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 relative à l'aide d'un géodatabase qui pourra évoluer suivant le type d'information à paraître sur les nouvelles cartes de la géologie des formations superficielles.



National Topographic System reference and index to adjoining published Geological Survey of Canada maps

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CANADIAN GEOSCIENCE MAP 436
SURFICIAL GEOLOGY
NORTHEASTERN
BATHURST ISLAND
Nunavut
parts of NTS 69-A
1:100 000



Geological Survey of Canada
Canadian Geoscience Maps



| QUATERNARY | |
|--|---|
| POST-LAST GLACIATION | NONGLACIAL ENVIRONMENT |
| O | Organic deposits, undifferentiated: organic matter, 1 to 3 m thick; formed by the accumulation of vegetation in poorly drained depressions; hummocky surfaces defined by a network of ice-wedge polygons are common; may contain lenses of ground ice. |
| Ca | Colluvial deposits: diamict deposited chiefly by gravity at the foot of slopes or cliffs; include suffocation within the active layer, common on gentle, poorly drained slopes. |
| Cv | Apron or talus slope deposits: diamict; varied thickness; deposited chiefly by gravity at the foot of slopes or cliffs. |
| C | Colluvial veneer: diamict; less than 1 m thick; discontinuous veneer of colluvium over bedrock. |
| Al | Colluvial deposits, undifferentiated: diamict; varied thickness; generally sheets, terraces, or lobes; represent a thin discontinuous veneer of suffocation material where it overlies bedrock. |
| Al | Aluvial fan sediments: gravel and sand; greater than 1 m thick; forming terraces along valley sides and coast during recent drops in base level. |
| Al | Aluvial terraced sediments: gravel and sand; greater than 1 m thick; forming terraces along valley sides and coast during recent drops in base level. |
| Av | Aluvial veneer: gravel and sand; less than 1 m thick; discontinuous veneer of alluvium over bedrock. |
| A | Aluvial sediments, undifferentiated: gravel and sand; greater than 1 m thick; consisting of braided channel floodplains, fans, meander scars, and point bars on valley floors. |
| Ld | LACUSTRINE SEDIMENTS: alluvium associated with modern lakes. |
| Ld | Lacustrine deltaic sediments: alluvium with coarse-grained topset beds; greater than 1 m thick; forming deltas where streams enter lakes. |
| Ms | MARINE SEDIMENTS: gravel, sand, silt and clay; deposited in deltaic and beach environments during regression of the postglacial sea. |
| Ms | Deltaic sediments: clay, sand, silt, and gravel; coarsening-upward sequences with coarse-grained topset beds, 5 to 20 m thick; forming deltas where streams enter the sea; may include dissected terraces. |
| LAST GLACIATION | |
| POSTGLACIAL AND GLACIAL ENVIRONMENT | |
| GMv | Beach sediments: gravel and sand; veneer 1 to 2 m thick; forming single ridges or flights or raised ridges. |
| GMd | Deltaic sediments: gravel, sand, and minor sandy diamict; coarse topset beds, may contain detrital plant material; varied thickness but less than 30 m; may grade from braided outwash to raised deltaic and terrace where the valleys meet the coast; formed during recent drops in base level. |
| GMh | Nearshore, neritic sediments: fine sand, silt, and clay; 1 to 5 m thick; emerged subtidal sediments; may be gullied. |
| GMv | Glaciomarine veneer: silt, sand, and minor gravel; less than 1 m thick; discontinuous, underlying bedrock structure is clearly discernible; may be gullied. |
| GMd | Glaciomarine blanket: silt, sand, and minor gravel; greater than 1 m thick; forming terraces. |
| GM | Glaciomarine sediments, undifferentiated: silt, sand, and minor gravel; greater than 1 m thick; may include littoral, nearshore, and terrace sediments. |
| GLo | GLACIOLACUSTRINE SEDIMENTS: silt and fine sand; usually less than 1 m thick; deposited in lake basins during deglaciation. |
| GLv | Offshore sediments: silt and clay; fine grained, laminated; less than 1 m thick; deposited in quiet water environments. |
| GL | Glaciolacustrine veneer: silt and fine sand; less than 1 m thick; discontinuous veneer of sediments over bedrock. |
| GL | Glaciolacustrine sediments, undifferentiated: silt and fine sand; usually less than 1 m thick; includes littoral and offshore environments. |
| GL | GLACIOLUVIAL SEDIMENTS: gravel, sand, and minor sandy diamict; 1 to 30 m thick; deposited by glacial meltwater behind, at, or in front of glacial margin. |
| GF1 | Terraced sediments: gravel, sand, and minor sandy diamict; varied thickness; commonly form isolated outwash deposits in valley trains in front of retreating ice margins or as terraces along valley sides. |
| GFc | Ice-contact sediments: gravel, sand, and minor sandy diamict; stratified; varied thickness but less than 30 m; deposited behind or at the ice margin as eskers and kames terraces. |
| GFv | Glacioluvial veneer: gravel, sand, and minor sandy diamict; less than 1 m thick; discontinuous veneer of glacioluvial sediment over bedrock. |
| GF | Glacioluvial sediments, undifferentiated: gravel, sand, minor sandy diamict; varied thickness; may include outwash sediments, eskers, kames, and terraces. |
| GLACIAL ENVIRONMENT | |
| GL | GLACIAL SEDIMENTS: silt, sand, and minor gravel; greater than 1 m thick; deposited by glacial ice. |
| Th | Hummocky till: silty diamict; greater than 1 m thick; forming irregular hummocks. |
| Tv | Till veneer: silty diamict; less than 1 m thick; discontinuous; underlying bedrock structure is clearly discernible; may be gullied and exhibit suffocation. |
| Tb | Till blanket: silty diamict; greater than 1 m thick; forming undulating topography that may be fluted or drumlinized in places; may contain redeposited marine sediments, including boulders far above the marine limit; may be gullied and exhibit suffocation. |
| T | Till, undifferentiated: large bedrock blocks and erratics, up to tens of metres across, 5 m thick; transported by glaciers. |
| NONGLACIAL (PERIGLACIAL) ENVIRONMENT | |
| W | Weathered bedrock, undifferentiated: residual, in situ weathered bedrock; varied thickness; obscuring the underlying structure or bedding of bedrock; may be gullied and exhibit suffocation. |
| TERTIARY OR PREGLACIAL (UNCERTAIN AGE) | |
| unA | Aluvial terraced sediments: gravel; may contain beds of detrital organic material considered to be Tertiary; up to 30 m thick; in many places, crosscut by glacial meltwater channels and partially overlain by till veneer; may be gullied. |
| unGF1 | Glacioluvial terraced sediments: gravel, sand, and minor sandy diamict; may contain beds of detrital organic material considered to be Tertiary; varied thickness; commonly form isolated outwash deposits in valley trains in front of retreating ice margins or as terraces along valley sides. |
| unGF | Glacioluvial sediments, undifferentiated: gravel, sand, and minor sandy diamict; may contain beds of detrital organic material considered to be Tertiary; varied thickness; may include outwash sediments, eskers, kames, and terraces. |
| PRE-QUATERNARY | |
| R | Bedrock, undifferentiated: Ordovician to Jurassic sedimentary rocks, forming outcrops with distinct structural and bedding; minor Ordovician to Tertiary sediments and igneous rocks at the head and west of Freeman's Cove. |
| Complex units: two map-unit designators separated by a dot (.) are used where the surficial cover forms a complex area and the units are too small to be mapped individually (e.g. GF Tb designates an area of glacioluvial sediments with till blanket). The map-unit polygon is coloured according to the dominant unit and labelled in descending order of cover. | |
| Stratigraphic relationship: two map-unit designators separated by a slash (/) are used where a stratigraphic relationship is observed or confidently inferred (e.g. CR/GF indicates colluvial deposits overlying bedrock). The map-unit polygon is coloured according to the overlying unit. | |
| Lichen-free area | |
| Network of ice-wedge polygons | |
| Extensive gullied terrain | |
| Kettle | |
| Large | |
| Small | |
| Geological contact | |
| Defined | |
| Approximate | |
| Direction of suffocation flow | |
| Retrospective thaw flow | |
| Beach crest | |
| Limit of marine submergence, defined | |
| Meltwater channel | |
| Minor meltwater channel, direction unspecified | |
| Lateral meltwater channel | |
| Major and moraine | |
| Esker, direction of flow inferred | |
| Drumlinoid or fluting parallel to ice flow, direction of flow not inferred, length not mapped to scale | |
| Drumlin parallel to ice flow, direction of flow inferred, length not mapped to scale | |
| Fluted, ice-moulded bedrock | |
| Direction of flow not inferred, length not mapped to scale | |
| Direction of flow inferred, length not mapped to scale | |
| Cirque headwall | |
| Bedrock scarp, gorge | |
| Dated sample location, radiocarbon | |
| Sample location, drift | |
| Recommended citation Geological Survey of Canada, 2022. Surficial geology, northeastern Bathurst Island, Nunavut, parts of NTS 69-A. Geological Survey of Canada, Canadian Geoscience Map 436 (Surficial Data Model v. 2.3.14 conversion of Map 2011A), scale 1:100 000. https://doi.org/10.4095/32943 | |

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Map projection: Universal Transverse Mercator, zone 14
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 (geoscientists-geopublications@nrc.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 GEOCAN (<https://geocan.nrcan.gc.ca/>).

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