

References and additional ice flow data from:

Blake, W. 1962. Glacial features, northeastern District of Mackenzie, Northwest Territories, Geological Survey of Canada, Unpublished field manuscript map, scale 1:500 000.

Cocking, R.B., Delabande, C., Kerr, D.E., Campbell, J.E., Eagles, S., Everett, D., Hurttley, D.J., Inglis, E., Laviolette, A., Parent, M., Plouffe, A., Robertson, L., St-Onge, D.A., and Wisharston, A. 2015. Surficial Data Model, version 2.1.0: Revisions to the science language of the integrated Geological Survey of Canada data model for surficial geology maps, Geological Survey of Canada, Open File 7741, 276 p., doi:10.4095/065658

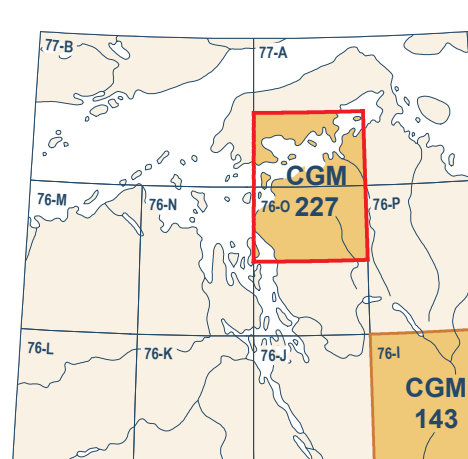
Kerr, D.E. and Knight, R.D. 2001. Surficial geology, Kogruuk River, Nunavut, Geological Survey of Canada, Map 1968A, scale 1:125 000, doi:10.4095/021983

Abstract

This new surficial geology map product represents the conversion of Map 1968A and its legend, using the Geological Survey of Canada Surficial Data Model (SDM version 2.1) which can be found in Open File 7741. All geoscience knowledge and information from Map 1968A that conformed to the current 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 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 1968A et de sa légende, en se servant du Modèle de données pour les formations superficielles (MDFS version 2.1) de la Commission géologique du Canada, lequel peut être consulté dans le Dossier public 7741. Toutes les connaissances et l'information de nature géoscientifique de la Carte 1968A qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. Le but de cette conversion de cartes publiées antérieurement suivant un langage scientifique connu 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 autour 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 and index to adjoining published Geological Survey of Canada maps


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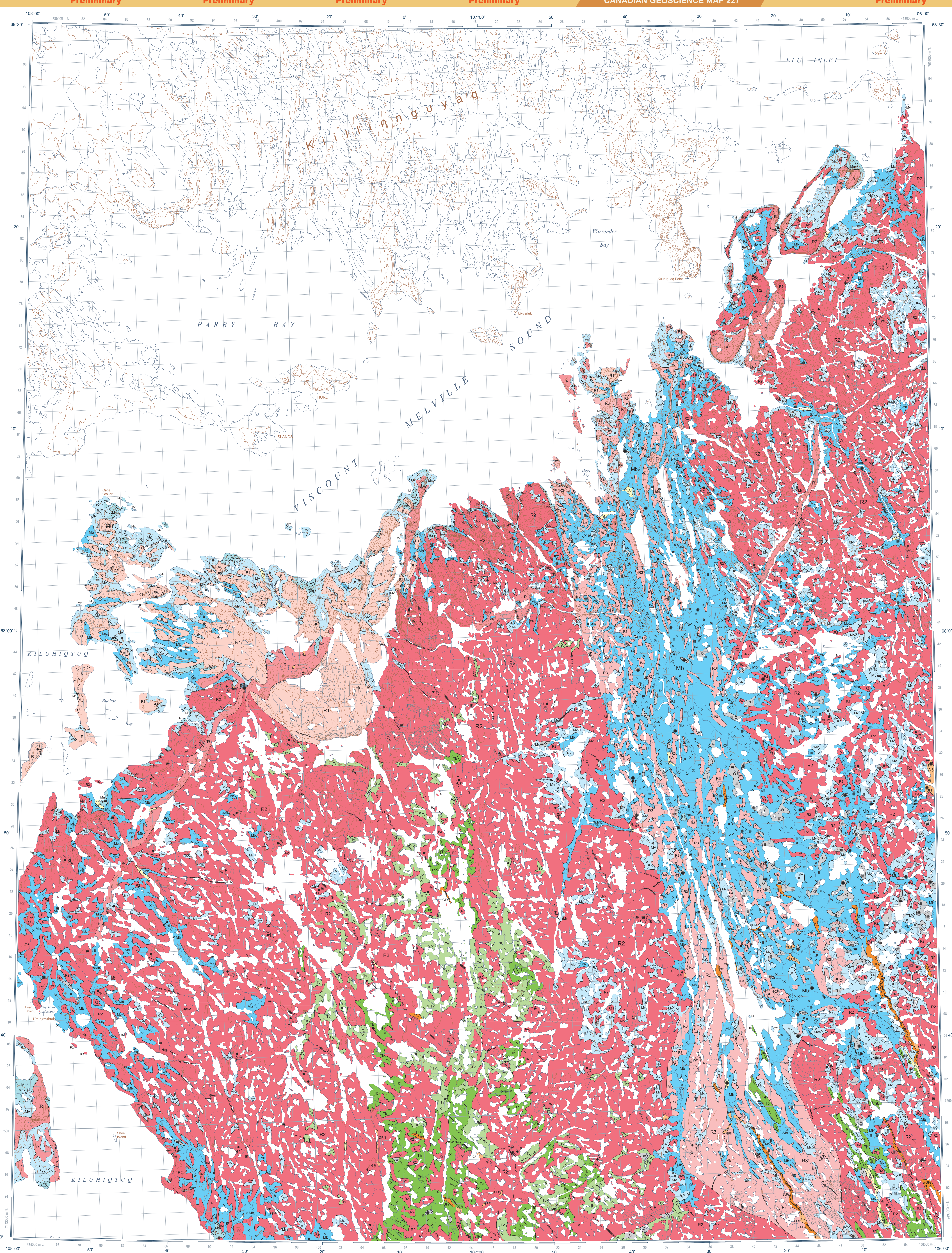
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Natural Resources Canada Ressources naturelles du Canada

CANADIAN GEOSCIENCE MAP 227
SURFICIAL GEOLOGY
KOIGNUK RIVER
Nunavut
NTS 76-O north and part of 77-A southwest
1:125 000





QUATERNARY

HOLOCENE

D Organic deposits, undifferentiated: peat and muck, up to 2 m thick but commonly less than 1 m thick, formed progressively by the accumulation of vegetative material in bogs, occurs in depressions, along valley bottoms, and on marine silt and clay; may contain fine-grained glauconitic sediments exposed at the base of stratigraphic sections; may contain segregated and disseminated ground ice; rounded pebbles and cobble gravel form raised beaches indicated by symbols; commonly fossiliferous.

A Alluvial sediments, undifferentiated: coarse sand and gravel; 3 to 10 m thick; veneer of pebble and boulder lag common on surface.

Mn Littoral sediments: medium to coarse sand with pebbles; may also consist of small cobbles and shingles; 1 to 3 m thick, blanket deposits, with flat to gently undulating surfaces; in places overlies fine-grained sediments; may contain beach ridges and ice-wedge polygons indicated by symbols.

Mv Marine veneer: undifferentiated sediment, consisting of a clay to sand matrix containing pebbles, cobbles, and boulders but predominantly silt and sand; less than 2 m thick, occurs as sediments infilling depressions between bedrock outcrops and as a lag on washed bedrock and gl surfaces below marine limit.

Mb Marine blanket: clay and silt with minor sand and rare cobbles; commonly occurs as a coarsening-upward sequence from 2 to 20 m thick, with flat to gently undulating surface; contains segregated ice; may be gullied and exhibits retrogressive thaw flow slides and ice-wedge polygons indicated by symbols.

PLEISTOCENE (WISCONSIN GLACIATION)

GM Glaciomarine and marine detritic sediments: sand, gravel, and cobbles; massive to cross-stratified, up to 15 m thick, exhibits channelled surfaces, ice-wedge polygons, and beach ridges.

GF1 Subaerial outwash sediments: sand to rounded gravel; massive to cross-stratified; 2 to 20 m thick; deposited at or beyond the ice margin; occurs as braided fans and channel plains with ice-wedge polygons; may exhibit raised beaches indicated by symbols.

GF2 Esker sediments: silt, sand, and gravel; in planar, cross-stratified, and massive beds; 1 to 20 m thick, forms ridges with both sharp crests and flat-topped segments, mounds, and flanking aprons; formed subglacially or in subaerially exposed ice-walled channels; may exhibit raised beaches and ice-wedge polygons indicated by symbols.

GLACIAL SEDIMENTS (TILL) Unsorted glacial debris (clast) consisting of a silt to sand matrix with pebbles, cobbles, and boulders; deposited beneath, or along the margin of, glacier as lodgment till, meltout till, and gravity flow deposits; commonly fossiliferous below marine limit.

Tv Till veneer: dimension: less than 2 m thick, occurs as a discontinuous layer where rock structure is generally visible on outcrops, and as a lag on washed bedrock below marine limit; may include bedrock outcrop, till buried, and marine sediments below marine limit.

Tb Till blanket: dimension: from 2 to 10 m thick; occurs as till plains mimicking bedrock topography or as drumlins; small rock outcrops in this unit are shown by symbols.

PRE-QUATERNARY

R1 Sedimentary rocks: Sedimentary rocks.

R2 Granitic and gneissic rocks: granites, granitic gneisses, and basic metavolcanics, rocks of Archean Slave Province.

R3 Metavolcanic rocks: metasediments, basic metavolcanics, and granites, rocks of Early Proterozoic Wopmay Orogen.

R Undifferentiated gabbro and dike: sedimentary and volcanic successions, gabbro and diabase sills, rocks of Middle to Late Proterozoic Cape Henry Formation.

F Felsenmeer, frost heaved and shattered rock.

Area of meltwater scour

Lag concentration of glacially abraded boulders

Geological contact, defined

Beach crest

Meltwater channel:

Minor subglacial or proglacial, direction unknown

Minor subglacial or proglacial, direction known

Esker:

Direction unknown

Direction known

Drumlinoid

Crag-and-tail

Fluted bedrock, direction known

Retrogressive thaw flow

Patterned ground, ice-wedge polygons

Kern

Glacial stratifications:

Direction unknown

Direction known

Crossed stratifications (1 = older, 2 = younger)

Gossan

Small outcrop

Sample location

Recommended citation
Geological Survey of Canada, 2016. Surficial geology, Koignuk River, Nunavut, NTS 76-O north and part of 77-A southwest, Geological Survey of Canada, Canadian Geoscience Map 227 (Preliminary, Surficial Data Model v. 2.1 conversion of Map 1968A), scale 1:125 000, doi:10.4095/021983