

References

Deblonde, C., Cocking, R.B., Kerr, D.E., Campbell, J.E., Eagles, S., Everett, D., Huntley, D.H., Inglis, E., Parent, M., Plouffe, A., Robertson, L., Smith, I.R., and Weatherston, A., 2018. Surficial Data Model: the science language of the integrated Geological Survey of Canada data model for surficial geology maps; Geological Survey of Canada, Open File 8236, ver. 2.3.14, 1 .zip file. <https://doi.org/10.4095/308178>

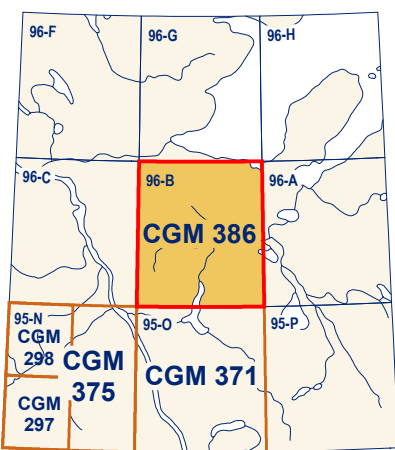
Monroe, R.L., 1972. Terrain classification and sensitivity, Blackwater Lake, Norman Wells, Maloney Lake, and Fort Franklin map areas, District of Mackenzie, Northwest Territories; Geological Survey of Canada, Open File 125, scale 1:250 000. <https://doi.org/10.4095/129184>

Abstract

This new surficial geology map product represents the conversion of Open File 125, Blackwater Lake (Monroe, 1972) and its legend, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.3.14) (Deblonde et al., 2018). All geoscience knowledge and information from Open File 125, Blackwater Lake that conformed to the current SDM were maintained during the conversion process. Supplementary legacy information (descriptive notes and extended legend) on the original map is 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 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 Blackwater Lake du Dossier public 125 (Monroe, 1972) et de sa légende, en se servant du Modèle de données pour les formations superficielles (MDFS 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 Blackwater Lake du Dossier public 125 qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. De l'information additionnelle (notes descriptives et légende détaillée) présente sur la carte originale n'est pas incluse 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 de la géologie des formations superficielles.



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

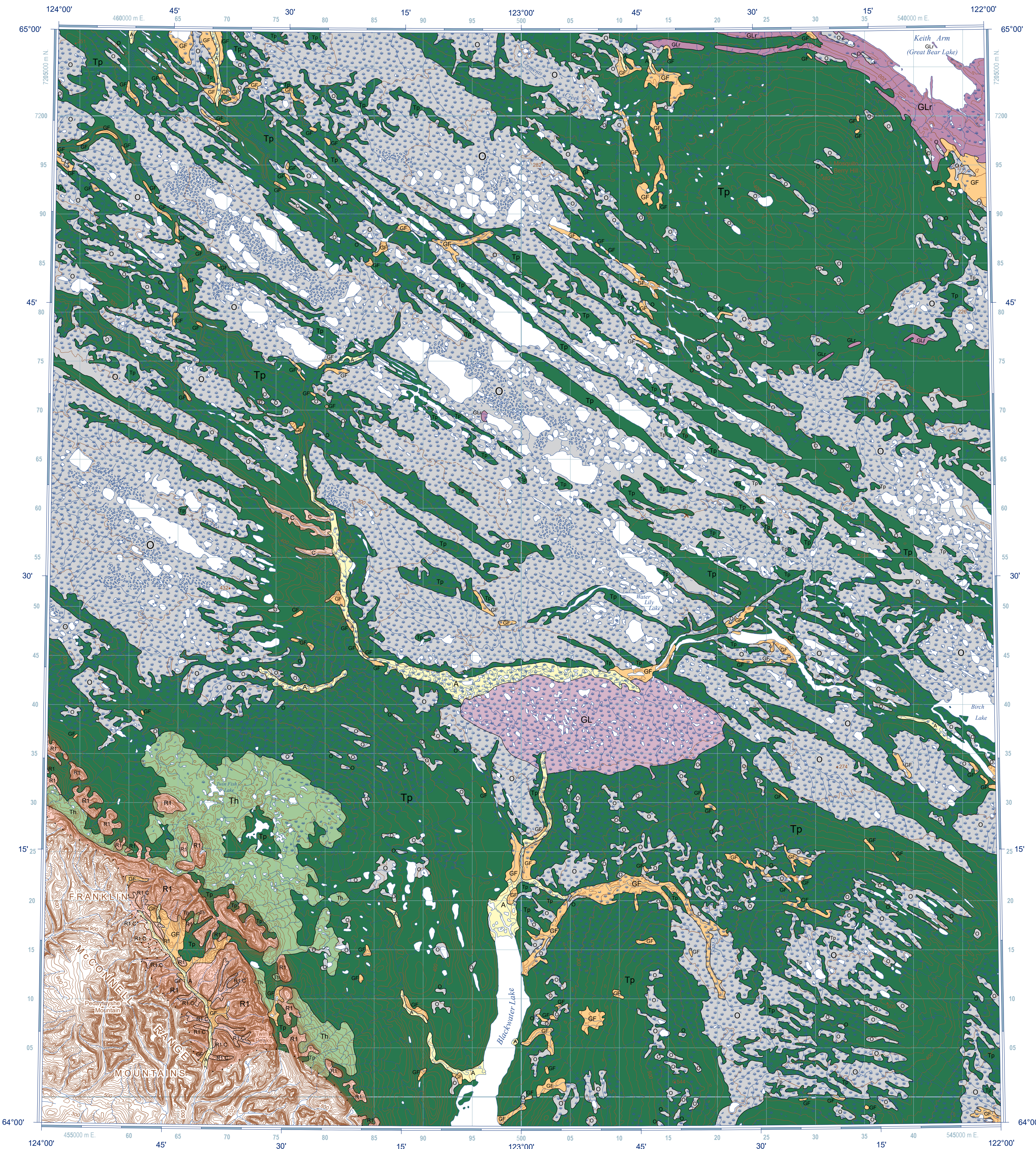
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CANADIAN GEOSCIENCE MAP 386  
RECONNAISSANCE SURFICIAL GEOLOGY  
BLACKWATER LAKE

Northwest Territories  
NTS 96-B  
1:250 000



QUATERNARY

- NONGLACIAL ENVIRONMENT**
- O Organic deposits, undifferentiated:** peat, fen, peat-fen complex, muskeg; variable thickness, but fens range from 1.5 to 3 m thick, and peat from 1.5 to 4.5 m thick; commonly occurring as cover on units A, GL, Tp, and Th; flat to moderately sloping; variable ground-ice content; various saturated soil patterns from the topographic base may appear in this unit.
  - C Colluvial deposits, undifferentiated:** various unconsolidated materials generally with surface veneer of slope debris; variable thickness up to 4.5 m; occurs on moderate to steep slopes; includes unstable areas of eroded and/or eroding river banks and valley walls; variable ground-ice content.
  - A Alluvial sediments, undifferentiated:** silt, silty sand, sand, and gravel, with organic silt and peat; 1.5 m to greater than 4.5 m thick; in river channels, floodplains, low terraces, adjoining rivers, and alluvial fans; some alluvial fans may reach 45 m thick; may include a veneer of silt up to 2 m thick; may be overlain by up to 3 m of organic deposits in abandoned channels and terraces; may include thermokarst ponds; various saturated soil patterns from the topographic base may appear in this unit.
- PROGLACIAL AND GLACIAL ENVIRONMENT**
- GLr Glaciolacustrine beach sediments:** gravel and/or sand; variable thickness; forming ridges or flat areas along former or present shorelines and bordering glaciolacustrine plains; relief less than 15 m.
  - GL Glaciolacustrine sediments, undifferentiated:** clay and silt, commonly surfaced by sand or silty sand, with discontinuous organic cover (see unit O); 1 to 18 m thick; locally overlain by glaciofluvial sand, up to 30 m thick, and peat, 1 to 3 m thick, with thermokarst topography; principally forming plains bordering rivers; highly unstable on eroded slopes; moderate to high ground-ice content; various saturated soil patterns from the topographic base may appear in this unit.
  - GF Glaciofluvial sediments, undifferentiated:** gravel, sand, and some silt; variable thickness, 1.5 to 15 m for outwash plains and terraces, and up to 30 m for hummocky and ridged areas; includes eskers and other glaciofluvial deposits forming hills and ridges; may also include river terraces, sand dunes, and moraines consisting of deformed gravely sand; variable ground-ice content.
- GLACIAL ENVIRONMENT**
- Th Hummocky till:** clayey to gravelly sand till, local gravel; 1.5 to 45 m thick; forming rolling to hilly moraine composed of individual and coalescent hummocks; local contrasts in material and ground ice between well drained hills and poorly drained depressions; includes small undifferentiated areas of unit O, up to 4.5 m thick in depressions; variable ground-ice content.
  - Tp Till plain:** diamictin; 0 to 6 m thick but locally up to 18 m; till occurring as drift; undifferentiated sedimentary lithologies; moderate to steep slopes; when combined with unit C in complex polygons, bedrock is partly covered by rock detritus or unconsolidated materials; includes unstable areas.

PRE-QUATERNARY

- R1 Sedimentary bedrock:** bedrock outcrop or bedrock thinly covered by rubble or drift; undifferentiated sedimentary lithologies; moderate to steep slopes; when combined with unit C in complex polygons, bedrock is partly covered by rock detritus or unconsolidated materials; includes unstable areas.

**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. R1.C designates an area of sedimentary bedrock with colluvial deposits). The map-unit polygon is coloured according to the dominant unit and labeled in descending order of cover.

- Geological contact, defined
- Limit of mapping

**Recommended citation**  
Geological Survey of Canada, 2022. Reconnaissance surficial geology, Blackwater Lake, Northwest Territories, NTS 96-B. Geological Survey of Canada, Canadian Geoscience Map 386 (Surficial Data Model v. 2.3.14 conversion of Open File 125, Blackwater Lake), scale 1:250 000. <https://doi.org/10.4095/313108>

RECONNAISSANCE SURFICIAL GEOLOGY  
BLACKWATER LAKE

Northwest Territories

NTS 96-B

1:250 000



**Author:** Geological Survey of Canada  
Geology by O.L. Hughes, fieldwork 1969, and air photo interpretation 1969 and 1970  
Geological compilation by R.L. Monroe, 1972  
Geology conforms to Surficial Data Model v. 2.3.14 (Deblonde et al., 2018).  
Geological data conversion by D.E. Kerr, 2017 and 2018  
Geology has been spatially adjusted to fit the updated base.  
Geomatics by S. Eagles, K. McNeil, and C.D. Stevens

Cartography by D. Viner  
Scientific editing by L. Ewert  
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 10 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

Mean magnetic declination 2022, 19°29'E, decreasing 14.3' annually  
Readings vary from 19°12'E in the SE corner to 19°44'E in the NW 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 ([gscpublications-cgcpublishations@nrcan-nrcan.gc.ca](mailto:gscpublications-cgcpublishations@nrcan-nrcan.gc.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.  
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