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 Hawes, R.J., 1980. Surficial geology and geomorphology, Camsell Bend, District of Mackenzie; Geological Survey of Canada, Map 9-1978, scale 1:125 000. https://doi.org/10.4095/108865 Rutter, N.W., Boydell, A.N., Savigny, K.W., and van Everdingen, R.O., 1973. Terrain evaluation with respect to pipeline

construction, Mackenzie Transportation Corridor, southern part, lat. 60 to 64 N.; Task Force on Northern Oil

Development, Report No. 73-36, Information Canada, Cat. No. R7210373, QS-1532-000-EE-A1.

This new surficial geology map product represents the

conversion of Preliminary Map 9-1978 (Hawes, 1980)

and its legend, using the Geological Survey of Canada's

al., 2018). All geoscience knowledge and information

from Preliminary Map 9-1978 that conformed to the

current SDM were maintained during the conversion

process. Additional material on the original map,

consisting of an extended legend, is not included here. Supplementary, limited legacy information was added to

complement the converted geoscience data. This

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.

Catalogue No. M183-1/370-2018E-PDF

Natural Resources Ressources naturelles
Canada Canada

**CANADIAN GEOSCIENCE MAP 370** 

RECONNAISSANCE SURFICIAL GEOLOGY

**CAMSELL BEND** 

Northwest Territories

NTS 95-J

1:125 000

ISBN 978-0-660-26914-6 https://doi.org/10.4095/308483

consists of drillhole and stratigraphic data (Rutter et al., légende détaillée de la carte originale n'est pas incluse 1973). It is identified in the accompanying Map ici. Une quantité limitée de données existantes a été

Information Document. The purpose of converting ajoutée en complément aux données géoscientifiques

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

Surficial Data Model (SDM version 2.3.14) (Deblonde et

Ce nouveau produit cartographique de la géologie des

la Carte préliminaire 9-1978 (Hawes, 1980) et de sa

légende, en se servant du Modèle de données pour les

2018). Toutes les connaissances et l'information de

nature géoscientifique de la Carte préliminaire 9-1978

qui sont en conformité avec le modèle de données ont

été conservées pendant le processus de conversion.

De l'information supplémentaire contenue dans la

données stratigraphiques tirées de Rutter et al. (1973).

Ces données sont identifiées dans le document

informatif sur la carte qui accompagne ce produit. Le

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

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but de la conversion de cartes publiées antérieurement

formations superficielles (MDFS version 2.3.14) de la Commission géologique du Canada (Deblonde et al.,

formations superficielles correspond à la conversion de

PRE-QUATERNARY R1 with siltstone members; rounded to sharp summits; may be covered by 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. Ap.C designates an area of alluvial plain sediments with colluvial deposits). Stratigraphic relationship: two map-unit designators separated by a slash (/) are used where a stratigraphic relationship is observed or confidently inferred (e.g. GLv/T indicates glaciolacustrine veneer overlying till). Gullied, channelled terrain Approximate Inferred Landslide escarpment, potential slumping Terrace scarp, escarpment Beach crest, depositional ------ Minor, paleocurrent direction unknown Minor, paleocurrent direction known Minor, unspecified ● ● ● ● Major, end or lateral <><><><> Paleocurrent direction unknown >>>>>> Paleocurrent direction known ---- Drumlinoid Owb.Tp GLv/T GLb.GFp 74 76 78 80 82 84 86 88 90 92 94 96 98 500 02 04 06 08 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 550000 m E. 30' 20' 10'

Geological Survey of Canada **Canadian Geoscience Maps** 

Author: Geological Survey of Canada Geology by N.W. Rutter, G.V. Minning, and J.A. Netterville, 1971 Geological compilation by by R.J. Hawes, 1975 Geology conforms to Surficial Data Model v. 2.3.14 (Deblonde et al., 2018). Geological data conversion by D.E. Kerr, 2016, 2017 Geology has been spatially adjusted to fit the updated base.

Geomatics by S. Eagles, J. Kingsley, and C.D. Stevens Cartography by E. Everett Scientific editing by A. Weatherston 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

**CANADIAN GEOSCIENCE MAP 370 RECONNAISSANCE SURFICIAL GEOLOGY CAMSELL BEND Northwest Territories** NTS 95-J 1:125 000 2 0 2 4 6 8 10 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 2019, 19°14'E, decreasing 22.2' annually Readings vary from 19°32'E in the NW corner to 18°54'E in the SE corner of the map. This map is not to be used for navigational purposes.

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 (https://geoscan.nrcan.gc.ca/).

The Geological Survey of Canada welcomes corrections or additional

Geological Survey of Canada, 2019. Reconnaissance surficial geology, Camsell Bend, Northwest Territories, NTS 95-J; Geological Survey of Canada, Canadian Geoscience Map 370 (Surficial Data Model v.

2.3.14 conversion of Map 9-1978), scale 1:125 000. https://doi.org/10.4095/308483

QUATERNARY

NONGLACIAL ENVIRONMENT Fen deposits: dominantly moderately decomposed fen peat derived from Owf sedge, tamarack, and mosses; 2–3 m thick; flat to very gently sloping; water at surface through summer months; unfrozen to at least 3 m, various saturated

undecomposed sphagnum peat derived from black spruce, Cladonia, feather-

mosses, and ericaceous and/or Sphagnum vegetation; 1.5-7 m thick; flat to

gently sloping areas with scattered mounds, with 1-6 m relief; frozen at 0.3–0.5 m; contains segregated ice in peat and in underlying mineral soil, various saturated soil patterns from the topographic base may appear in this unit.

**Dune sediments:** fine to medium sand; 1–20 m thick; dune ridges, usually

Landslide deposits: silt and sand to rubble and diamicton, derived mainly from glaciolacustrine silts and clays, till, and shale bedrock; variable thickness; unspecified landslide deposits, includes debris avalanches as thin narrow tongues, earthflows, mudflows, and slump deposits as blocks; fine-grained

Colluvial deposits, undifferentiated: material derived from underlying surficial sediments or bedrock; 1–6 m thick; forming complexes with gently to steeply sloping surfaces, less than 5–20 degrees; silty clay colluvium contains

Alluvial floodplain sediments: silt, sand, and gravel; 1–8 m thick; floodplain and low bordering terraces; floodplains within mountain regions commonly scarred by braided channels; floodplains within plains region commonly with meander scars; may include small units of Av when overlying till; permafrost and segregated ice may be present in areas where overlying bog is more than 1.5 m thick, various saturated soil patterns from the topographic base may

Alluvial fan sediments: mostly gravel, some sand; 3–25 m thick; gently to moderately sloping fans and coalescent fans; may include one or more

Alluvial terraced sediments: silt, sand, and gravel; 1–30 m thick; may be overlain by unit Owb; may be channelled; terraces may be associated with units Ap, GFp, and GFt; level to slightly sloping surfaces, various saturated

Alluvial veneer: silt, sand, and gravel; less than 1.5 m thick; may include

Alluvial sediments, undifferentiated: silt, sand, and gravel; 1-30 m thick; may include terrace, fan, and floodplain sediments; appears only as secondary unit

PROGLACIAL AND GLACIAL ENVIRONMENT Glaciolacustrine beach sediments: mainly gravel with minor sand, locally includes silt; 0.5–2 m thick; may form parallel to subparallel beach ridges

Glaciolacustrine veneer: silt and sand; 0.5–1.5 m thick; reflects topography of underlying material; if in a complex unit, it may overlie primary unit, various saturated soil patterns from the topographic base may appear in this unit.

Glaciolacustrine blanket: silt and sand; 1.5–50 m thick; flat to gently sloping plain; may contain segregated ice in various forms and amounts; may be overlain by organic deposits with thermokarst; may include glaciolacustrine

Glaciofluvial outwash-plain sediments: silt, sand, and gravel; 1–30 m or more thick; flat to gently sloping plain; may include other minor glaciofluvial units and minor organic deposits; surface may be channelled; may include veneer when overlying till; if overlain by organic deposits greater than 1.5 m thick,

Glaciofluvial terraced sediments: silt, sand, and gravel; 1–30 m or more thick; flat to gently sloping plain; surface may be channelled; if overlain by organic

Glaciofluvial outwash-fan sediments: silt, sand, and gravel; 1–10 m thick; flat

Glaciofluvial hummocky sediments: mainly gravel with sand; 1–10 m thick; hummocks with local relief up to 10 m; segregated ice may be present in silt

Glaciofluvial esker sediments: mainly gravel with sand; 1–30 m thick; long sinuous esker ridges and esker complexes, up to 30 m high; segregated ice

Glaciofluvial sediments, undifferentiated: silt, sand, and gravel; 1–10 m or more thick; complexes which may include plains, fans, hummocks, and ridges; if overlain by organic deposits greater than 1.5 m thick, permafrost may be present. GLACIAL ENVIRONMENT Hummocky till: sand, gravel, and diamicton; 1–20 m thick; individual to coalescent glacial hummocks, with slopes up to 20 degrees; hummocky terrain

Ridged till: sand, gravel, and diamicton; 1–10 m thick; crevasse fillings or ridge moraine consisting of glacial individual, parallel to subparallel, straight to sinuous ridges within a moraine plain, 0.5–5 m relief, slopes of 5–30 degrees; may include minor unit Th; moderately to strongly calcareous; appears only as

Streamlined till: sand, gravel, and diamicton; 2–30 m thick; area consisting largely of parallel drumlins and or flutings which may be rock cored;

Till veneer: sand, gravel, and diamicton; less than 1.5 m thick; reflects

**Till blanket:** sand, gravel, and diamicton; 5–30 m thick; subdued hummocks and rolling terrain, slopes of 5–30 degrees; moderately to strongly calcareous.

Till, undifferentiated: sand, gravel, and diamicton; 1–10 m or more thick; includes other minor till units; may include minor organic deposits; appears only as secondary unit in stratigraphic relationships within polygons.

Sedimentary bedrock: hills or mountains developed on sandstone and shale

discontinuous patches of colluvium and rubble, reworked till with bare rock on

topography of underlying material, generally bedrock.

Fill plain: clay, silt, sand, pebbles, boulders, and diamicton; 1.5–50 m thick; flat o uniformly sloping morainal plain, from 2–15 degrees; may include other ninor till units and organic deposits; moderately to strongly calcareous.

Glaciofluvial veneer: mainly gravel and sand; 0.5–1.5 m thick; reflects topography of underlying material; appears only as secondary unit in

may include minor ridges; moderately to strongly calcareous.

secondary unit in complex polygons.

moderately to strongly calcareous.

slopes of summits.

Geological contact:

Meltwater channel:

Moraine ridge:

Major, paleocurrent direction known

Station location, drillhole location, stratigraphic section, with number (see Map

deposits greater than 1.5 m thick, permafrost may be present.

may be present in silt layers beneath depressions.

to gently sloping fan; surface may be channelled; if overlain by organic deposits greater than 1.5 m thick, permafrost may be present.

soil patterns from the topographic base may appear in this unit.

soil patterns from the topographic base may appear in this unit.

Bog deposits: dominantly moderately decomposed forest and/or

parallel to subparallel; subject to wind erosion.

material may contain segregated ice.

terrace, fan, and floodplain sediments.

appear in this unit.

shifting streams.

in complex polygons.

veneer when overlying till.

lavers beneath depressions.