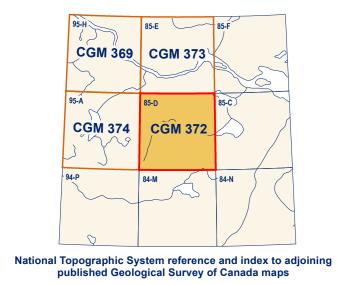
Complex units: two map-unit designators separated by a dot (.) are used where the surficial cover forms a complex area and the units are too small to be mapped individually (e.g. Ap.C designates an area of alluvial plain sediments with colluvial deposits). The map-unit polygon is coloured according to the dominant unit and labeled in descending order of cover. stratigraphic relationship is observed or confidently inferred (e.g. Tv/GL indicates till veneer • • • • • • Major, end or lateral <><><><> Paleocurrent direction unknown

This new surficial geology map product represents the Ce nouveau produit cartographique de la géologie des conversion of Preliminary Map 14-1978 (Rutter and formations superficielles correspond à la conversion de Boydell, 1979) and its legend, using the Geological Survey of Canada's Surficial Data Model (SDM version et de sa légende, en se servant du Modèle de données 2.3.14) (Deblonde et al., 2018). All geoscience knowledge and information from Preliminary Map 14-1978 that conformed to the 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 consists of drillhole and supplémentaire contenue dans la légende détaillée de stratigraphic data (Rutter et al., 1973). It is identified in la carte originale n'est pas incluse ici. Une quantité geodatabase. The purpose of converting legacy map data to a common science complément aux données géoscientifiques converties. language and common legend is to enable and facilitate II s'agit de données de sondages et de données the efficient digital compilation, interpretation, management, and dissemination of geological map données sont identifiées dans la géodatabase du information in a structured and consistent manner. This présent produit cartographique. Le but de la conversion provides an effective knowledge-management tool de cartes publiées antérieurement suivant un langage designed around a geodatabase that can expand, scientifique commun et une légende commune est de following the type of information to appear on new surficial geology maps.

la Carte préliminaire 14-1978 (Rutter et Boydell, 1979) pour les formations superficielles (MDFS version 2.3.14) de la Commission géologique du Canada (Deblonde et al., 2018). Toutes les connaissances et modèle de données ont été conservées pendant le processus de conversion. De l'information stratigraphiques tirées de Rutter et al. (1973). Ces 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.



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.

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Natural Resources Ressources naturelles
Canada Canada **CANADIAN GEOSCIENCE MAP 372** RECONNAISSANCE SURFICIAL GEOLOGY **KAKISA RIVER** Northwest Territories NTS 85-D



Geology by N.W. Rutter and A.N. Boydell, 1972 Geological compilation 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 and 2017

Geology has been spatially adjusted to fit the updated base.

Geomatics by B. Luptak, J. Kingsley, and C.D. Stevens Cartography by M.J. Baldock 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 11

North American Datum 1983

CANADIAN GEOSCIENCE MAP 372 RECONNAISSANCE SURFICIAL GEOLOGY **KAKISA RIVER** Northwest Territories NTS 85-D 1:125 000 2 0 2 4 6 8 10 km

334000 m E. 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 400 02 04 06 08 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 442000 m E. 30'

10'
119°00'
10'
10'
10'
119°00'

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, 17°36'E, decreasing 9.5' annually Readings vary from 18°01'E in the NW corner to 17°10'E in the SE corner of the map. This map is not to be used for navigational purposes.

information from users (gscpuclications-cgcpublications@nrcan-rncan.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. This publication is available for free download through GEOSCAN (https://geoscan.nrcan.gc.ca/).

Recommended citation Geological Survey of Canada, 2022. Reconnaissance surficial geology, Kakisa River, Northwest Territories, NTS 85-D; Geological Survey of Canada, Canadian Geoscience Map 372 (Surficial Data Model v. 2.3.14 conversion of Map 14-1978), scale 1:125 000. https://doi.org/10.4095/308493

NONGLACIAL ENVIRONMENT

at surface throughout summer months; unfrozen to at least 3 m.

Fen deposits: dominantly moderately decomposed fen peat derived from

Owf sedge, tamarack, and mosses; 2 to 3 m thick; flat to very gently sloping; water

Bog deposits: dominantly moderately decomposed forest and/or

undecomposed sphagnum peat derived from black spruce, Cladonia, feather-mosses, and ericaceous and/or Sphagnum vegetation; 1.5 to 7 m thick; flat to gently sloping areas with scattered mounds, with 1 to 6 m relief;

frozen at 0.3 to 0.5 m; contains segregated ice in peat and in underlying

Colluvial veneer: varied material, clay, silt, sand, and gravel, derived from Cv underlying surficial sediments, poorly graded; less than 1.5 m thick; gently to

C sediments or bedrock; 1 to 6 m thick; forming complexes with gently to steeply sloping surfaces, less than 5 to 20 degrees; silty clay colluvium contains

And low bordering terraces; floodplains within mountain regions commonly scarred by braided channels; floodplains within plains regions commonly with meander scars; may include small units of alluvial deposits less than 2 m thick

Af moderately sloping fans and coalescent fans; may include one or more

thick; appears only as secondary unit in complex polygons.

thick; flat to gently sloping plain; may include other minor glaciofluvial units and minor organic deposits; surface may be channelled; may include glaciofluvial veneer when overlying till; if overlain by organic deposits greater than 1.5 m thick, permafrost may be present.

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

sinuous esker ridges and esker complexes, up to 30 m high.

GF thick; complex that may include other glaciofluvial units; appears only as

may include minor ridges; moderately to strongly calcareous.

GLACIAL ENVIRONMENT

may include minor unit Th; moderately to strongly calcareous. Streamlined till: sand, gravel, and diamicton, moderately to strongly calcareous, may include lenses of gravel or sand; 2 to 30 m thick; consisting largely of parallel drumlins and/or fluting which may be bedrock cored; various saturated soil patterns from the topographic base may appear in this unit. Till plain: clay, silt, sand, pebbles, boulders, and diamicton; 1.5 to 50 m thick; flat to uniformly sloping morainal plain, from 2 to 15 degrees; may be channelled; may include other minor till units and organic deposits; moderately to strongly calcareous; various saturated soil patterns from the topographic

Till veneer: sand, gravel, and diamicton; less than 1.5 m thick; reflects topography of underlying material; various saturated soil patterns from the

Stratigraphic relationship: two map-unit designators separated by a slash (/) are used where a

overlying glaciolacustrine sediments). The map-unit polygon is coloured according to the

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

hummocks with local relief up to 10 m.

secondary unit in complex polygons.

base may appear in this unit.

Landslide escarpment: Potential slumping

Beach crest, depositional, erosional Meltwater channel: Minor, paleocurrent direction unknown Minor, paleocurrent direction known

Major, paleocurrent direction known

R-55-I_O Station location, drillhole location, stratigraphic section (*see* geodatabase)

Terrace scarp, escarpment

Moraine ridge: Minor, unspecified

>>>>>> Paleocurrent direction known

---- Drumlinoid

topographic base may appear in this unit.

PROGLACIAL AND GLACIAL ENVIRONMENT

where overlying bog is more than 1.5 m thick.

shifting streams.

steeply sloping surfaces, less than 5 to 20 degrees; may include minor organic

Colluvial deposits, undifferentiated: material derived from underlying surficial

Alluvial floodplain sediments: silt, sand, and gravel; 1 to 8 m thick; floodplain

when overlying till; permafrost and segregated ice may be present in areas

Alluvial fan sediments: mostly gravel, some sand; 3 to 25 m thick; gently to

Glaciolacustrine beach sediments: mainly gravel with minor sand, locally includes silt; 1.5 to 2 m thick; parallel to subparallel beach ridges arranged in belts.

Glaciolacustrine sediments, undifferentiated: silt, sand, and gravel; 1.5 to 50 m

Glaciofluvial outwash plain sediments: silt, sand, and gravel; 1 to 30 m or more

Glaciofluvial terraced sediments: silt, sand, and gravel; 1 to 30 m or more

Glaciofluvial hummocky sediments: mainly gravel with sand; 1 to 10 m thick;

Glaciofluvial esker sediments: mainly gravel with sand; 1 to 30 m thick; long

Glaciofluvial sediments, undifferentiated: mainly gravel with sand; 1 to 10 m

Hummocky till: sand, gravel, and diamicton; 1 to 20 m thick; individual to coalescent glacial hummocks, with slopes up to 20 degrees; hummocky terrain

Ridged till: sand, gravel, and diamicton; 1 to 10 m thick; crevasse fillings or ridge moraine consisting of individual glacial, parallel to subparallel, straight to sinuous ridges within a moraine plain, 0.5 to 5 m relief, slopes of 5 to 30 degrees;

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