

MAP 1677A SURFICIAL MATERIALS AND LANDFORMS

LITTLE HYLAND RIVER

YUKON TERRITORY - NORTHWEST TERRITORIES

Scale 1:100 000 - Échelle 1/100 000 Universal Transverse Mercator Projection Projection transverse universelle de Mercator © Droits de la Couronne réservés © Crown copyrights reserved

105-I/sw 105-I/SE 105 G/NE 105 H/NW 105 H/NE 1676A 105 G/SE 105 H/sw 105 H/SE 1675A 1674A NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS LEGEND

This legend is common to maps 1674A, 1675A, 1676A, 1677A, coloured legend blocks indicate map units that appear on this map SURFICIAL DEPOSITS

GLACIAL ENVIRONMENT

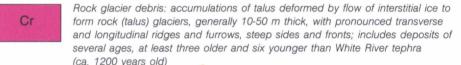
ICE AND SNOW

QUATERNARY

TILL: nonsorted debris, commonly bouldery, 0.5-20 m thick, forming discontinuous veneers, fluted, hummocky, or channelled blankets, and lateral and end moraine ridges; distinguished from older till by its general lack of vegetation; includes deposits of six advances, oldest of which postdates White River tephra (ca. 1200

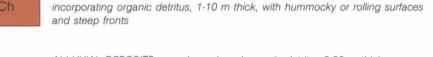
NONGLACIAL ENVIRONMENT

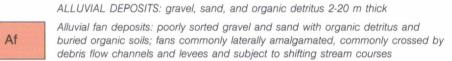
COLLUVIAL DEPOSITS: block accumulations and landslide debris, 1-50 m thick Talus (scree): accumulations of blocks, commonly exceeding 3 m in diameter, as much as 50 m thick, forming aprons and fans below cliffs; commonly crossed by debris flow channels and levees. Most slopes active



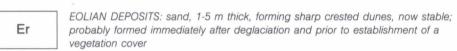
form rock (talus) glaciers, generally 10-50 m thick, with pronounced transverse and longitudinal ridges and furrows, steep sides and fronts; includes deposits of several ages, at least three older and six younger than White River tephra (ca. 1200 years old)

Landslide debris: rock avalanches more than 10 m thick and slumped and slid till









PROGLACIAL AND GLACIAL ENVIRONMENT GLACIOLACUSTRINE DEPOSITS: fine sand, silt, and clay, 10-30 m thick, forming terraces deeply dissected by postglacial erosion where thick or plains where thin;

deposited in glacier dammed lakes

GLACIOFLUVIAL DEPOSITS: gravel and sand, 2-30 m thick, deposited on,

beneath, and in front of the marginal zone of a glacier Proglacial outwash: gravel and sand forming distal outwash terraces Gt, plains Gp, and fans Gf, and proximal kettled outwash terraces Gtk, and plains Gpk;

Ice contact stratified drift: gravel and sand, with clasts commonly 10-100 cm across, commonly faulted, forming lateral kame terraces and delta terraces It, with ice contact escarpments and kettle holes Ik, hummocky moulin kame fields, or ice block disintegration terrain Ih, and eskers or crevasse fillings Ir

GLACIAL ENVIRONMENT

characterized by abandoned braided channel patterns

TILL: nonsorted debris, 0.5-20 m thick, ranging widely in grain size and petrological composition but including deposits locally derived almost entirely from black shale, red shale, serpentine, marble, limestone, granite, and schist

Till veneer: 0.5-2 m thick; surface mimics underlying rock surface, fluted in places, commonly channelled by meltwater

Till blanket: 2-20 m thick; much of surface lineated by flutings and drumlins or Tbh channelled by meltwater Tb, distinctly hummocky Tbh, where composed mostly or

PRE-QUATERNARY

ROCK: rock of various lithologies and ages forming alpine valley walls and ridges extensively modified by glacial erosion R1, and high plateau remnants of restricted extent showing little or no sign of glacial erosion R2, high plateaus and other low to moderate slopes commonly mantled by felsenmeer; patches of till and glacial erratics occur throughout

| Geological boundary (defined, gradational) |
|---|
| Cirque; cirques and arêtes; alpine escarpment formed by glacial oversteepening of bedrock |
| Drumlins (ice flow direction known, unknown) |
| Crag and tail (till tail) |
| Roche moutonnée or rock drumlin |
| End moraine |
| Lateral moraine, ornamented on glacier side |
| Medial moraine |
| Ice contact face in stratified drift |
| Esker (direction of flow known) |
| Crevasse filling |
| Kame ⊗ |
| Subglacial and proglacial meltwater channel (wide, narrow) |
| Sidehill (lateral) meltwater channel; barb on upslope side |
| Escarpment in unconsolidated sediment |
| Avalanche track, avalanche slope $\ldots \sim \mathscr{P} \mathscr{D}$ |
| Ground observation point |
| Till sample with anomalously high levels of Zn,Pb, etc |
| |

MINERALS

| Arsenic | Molybdenum |
|-------------|------------|
| Chromium Cr | Nickel |
| CopperCu | Silver Ag |
| Iron Fe | Uranium |
| Lead Ph | Zinc 7r |

Geology by A.S. Dyke 1981, 1983

Geological cartography by Y.F. St. Pierre Savard, Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map assembled by the Geological Survey of Canada from monochrome maps published at 1:50 000 scale by the Surveys and Mapping Branch in 1985

Copies of the topographical editions covering this map area may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario, K1A 0E9

Mean magnetic declination 1990, 30°31' East, decreasing 14.7' annually. Readings vary from 30°16'E in the SW corner to 30°46'E in the NE corner of the map area

Elevations in metres above mean sea level

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GFOLOGICAL SURVEY COMMISSION GEOLOGIQUE

Recommended citation:

1990: Surficial materials and landforms, Little Hyland River, Yukon Territory and Northwest Territories; Geological Survey of Canada, NOT TO BE TAKEN FROM LIBRARY



Copies of this map may be obtained

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