

LEGEND

QUATERNARY

NONGLACIAL ENVIRONMENTS

O-ORGANIC DEPOSITS: peat and muck up to two metres thick; formed predominantly by the accumulation of vegetative material in bogs and fens, in depressions and along valley bottoms; permafrost is commonly present; surface expression can be modified by thermokarst collapse and palsa growth.

Ap-ALLUVIAL FLOODPLAIN DEPOSITS: gravel to silt size sediment deposited by the modern streams and rivers; deposits generally are stratified and moderately sorted and range from 1 to 5 m thick; can include lacustrine deposits from small ponds; commonly covered with an organic veneer.

WISCONSINAN

GLACIAL ENVIRONMENTS

GLACIOFLUVIAL DEPOSITS: sand, gravel and minor silt >1 m thick; sorting ranges from good to poor and stratification from thin bedded to massive; deposited by water flowing from or in contact with glacier ice; short-lived proglacial lakes reworked some of these sediments into raised beaches that are indicated with a symbol.

Gr-Glaciofluvial esker sediments: from 1 to 10 m thick; forms a distinctive ridge shaped feature; deposited subglacially and at the ice margin; can include bead and apron deposits along the flanks of the ridge; in some areas the ridge has a flat top, occasionally pitted, likely formed by subaerial exposure in an ice walled channel.

G-Glaciofluvial (?) sediments: from 1 to 5 m thick; forms dune and sand wave shaped forms; usually associated with R-w; possibly formed by subglacial flow.

TILL DEPOSITS: unsorted glacial debris (diamicton) greater than 50 cm thick, generally consisting of a sandy matrix containing pebbles, cobbles and boulders with minor sorted sediments such as silt, sand and gravel; deposited along the margin of or beneath glaciers as lodgment and meltout till and gravity flow deposits; short-lived proglacial lakes reworked some of these sediments into raised beaches that are indicated with a symbol.

Tv-Till Veneer: from 0.5 to 2 m thick; surface mimics form of underlying bedrock; commonly includes patches of bedrock and till blanket.

Tb-Till Blanket: from 2 to 10 m thick; surface expression generally drumlins or flutings; may include patches of bedrock or morainal veneer.

Th-Hummocky Till: from 5 to 15 m thick; surface expression is hummocky, with relief up to 10 m; may include patches of till blanket and veneer and organic veneer in depressions.

R-Bedrock: Precambrian granitic, gneissic, metasedimentary and metavolcanic rocks, mafic dikes and minor, younger kimberlite; may be covered with up to 50 cm of surficial material and may include patches of till veneer.

R-w -Bedrock: bedrock that appears to have been washed of almost all of its surficial cover; usually occurring adjacent to eskers or in linear zones connecting esker segments.

SYMBOLS

Streamlined forms, drumlins and flutings Esker ridge, direction known, unknown >>>><> Moraine

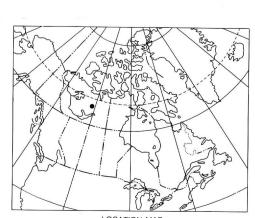
Striation Small meltwater channels Thermokarst depression

Aylsworth, J. M. (1992, updated version): Ice Flow Indicators, Aylmer Lake (NTS 76C) and Lac de Gras (NTS 76D), District of Mackenzie, Northwest Territories; Geological Survey of Canada, Open File 2521, Sheet 2, Version 2.

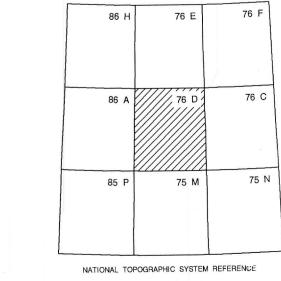
Airphoto interpretation by B. Ward. 1992-93

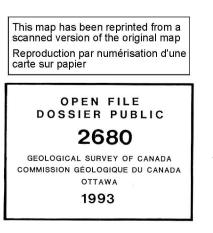
Drafting by B. Pierna and B. Ward

Ward, B. (1993): Surficial geology Lac de Gras (NTS 76D), Northwest Territories; Geological Survey of Canada, Open File 2680, scale



SURFICIAL GEOLOGY LAC DE GRAS NORTHWEST TERRITORIES





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