

SURFICIAL MATERIALS, KAGLORYUAK RIVER,
VICTORIA ISLAND, NORTHWEST TERRITORIES (77 F)

Scale 1:125 000

5 0 5 10 15 Kilometres
5 0 5 10 15 Miles

OPEN FILE
DSM-2983
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA

1994

This map has been reprinted from a larger sheet. The original sheet contains additional information.

National Resources Canada
Ressources naturelles Canada

1994

LEGEND 77F & 77G

HOLOCENE NONGLACIAL ENVIRONMENTS

F EULUVIAL DEPOSITS: bouldery gravel to silty sand; 1 to 10 m thick; channel, floodplain and terrace deposits

L LACUSTINE DEPOSITS: silt and sand, locally peaty; 1 to 2 m thick; lacustrine, fluvial, colluvial, glaciolacustrine or organic deposits in minor valleys or basins; commonly numerous ponds.

HOLOCENE - LATE PLEISTOCENE NONGLACIAL AND PROGLACIAL ENVIRONMENTS

EMERGED MARINE DEPOSITS: boulders to silty sand; exposed after shoreline regression; maximum elevation rises to 110 m in the northeast to 160 m in the south.

Wb Raised beach deposits; bouldery to silty and over 1 m; rarely to silty gravel over rock.

W Nearshore and offshore deposits; sandy silty sand; 10 m+ thick; locally clavate; proglacial.

Wv Glaciolacustrine veneer deposits; sandy silty sand; generally <1 m thick; proglacial marine or brackish sediments, discontinuously veneered over or less commonly rock.

LG Glaciolacustrine deposits; silt or fine sand; 1 to 10 m+ thick; deposited in lakes mainly impounded by sc.

Lv Glaciolacustrine veneer; silt or fine sand; 0-1 m+ thick; deposited proglacially as a veneer, commonly discontinuous, over ill rock.

FG OUTWASH DEPOSITS: bouldery to gravelly sand; 1-20 m thick; proglacial floodplains, fans and terraces; may contain large blocks, minor kame terraces.

LATE PLEISTOCENE GLACIAL ENVIRONMENT

G ICE CONTACT GLACIOFLUVIAL DEPOSITS: bouldery gravel to gravelly sand; locally silty sand (rhizites); 2-10 m+ thick; in ridges, knobs and hummocky complexes, including eskers, deposited in subglacial or marginal environments.

TILL: calcarous, brown, yellowish tan, containing 10-90% angular boulders, often slightly calcareous over centre of Proterozoic Minto Igneous Complex; thickness 1-10 m.

TW Marine wash till; till <1 m+ thick; washed by regressing shoreline.

T Undifferentiated till; till 1-10 m+ thick; locally moulded into elongate drumlins.

Tm Hammock till; till >10-40 m thick; numerous gravel knolls and till ridges; probably includes massive bodies of glacial ice; scattered flowlines.

TV Till veneer; till <2 m+ thick; too thin to mask underlying rock relief and structure; areas of exposed rock, pockets of thick till; steep colluvial slopes are included in this class.

PRE-QUATERNARY AND QUATERNARY ROCK, CLASTIC, AND GLACIAL DEPOSITS

R ROCK: mostly dolomitic marine limestone, chert and dolomitic dolomite; part of Paleozoic Minto Igneous Complex; clastic and carbonate rocks; basal flows, gabbro dykes and sills of Proterozoic Minto Igneous Complex underlying Shaler Mountains and west shore of Hayley Bay. Rock fragments are scattered throughout glaciolacustrine and glaciogenic deposits; polished bedrock locally exposed where streamlined till cover has been recently removed.

B Glaciogenic bedrock; bedrock locally exposed where streamlined till cover has been recently removed.

Geological Boundary

Flowline

Pingo

Marine limit

Promontory delta

In margin, well defined

Abandoned meltwater channel (stabilized, ice front, col, major spillway channel)

Ice margin, well defined

Esker

Kame, gravel knoll

Minor transverse moraine or crevasse filling

Drumlin ridge, flute (length to scale)

Drumlin (length to scale)

Ice-circumlined bedrock

Till analysis; numbered sites described in Nixon (1988)

Radiocarbon dated material

Field observations by J.G. Pyle, 1959; D.A. Hodgson and J. Bednarick, 1982. Airphoto interpretation by J.G. Pyle, 1959 to 1982 by J. Bednarick and 1994 by D.A. Hodgson. Compilation and drafting by N. Giroux. Compiled initially on 1:50 000 scale topographic maps. Data from till sample sites published in Nixon (1988).

Bibliography

1963: Surficial geology of Victoria and Stefansson Islands, District of Franklin; Geological Survey of Canada, Map 1070.

1993: Geophysical survey of Stefansson Island and Shaler Peninsula, District of Franklin; Geological Survey of Canada, Map 1517A, scale 1:250 000.

Hodgson, D.A.: 1982, Surficial geology of Wyman Bay Victoria Island, Northwest Territories (NTS 78B), 1 map, scale 1:250 000. Geological Survey of Canada, Open File 2718.

McNeely, R. and Jorgenson, P.K.: 1991, Surficial geology of Victoria Island, Geological Survey of Canada, Paper 89-7, p. 78.

1993, Geological Survey of Canada compilation data XXXI, Geological Survey of Canada, Paper 91-7, p. 78.

Vance, J.: 1993, Geological Survey of Canada compilation data XXXII, Geological Survey of Canada, Paper 91-7, p. 78.

1993: Geological Survey of Canada compilation data XXXIII, Geological Survey of Canada, Paper 91-7, p. 78.

Duthie, A.J.: 1988, Geology of the Canadian Archipelago and North Greenland, Figure 2 in Geology of the Insular Oceans and Arctic Platform of Canada and Greenland, Volume 1: Geology of the Canadian Archipelago and Greenland, Geological Survey of Canada, Paper 88-13, p. 6.

1988: Till sampling program and interpretation of tilligraphic data from western Victoria Island, Northwest Territories, Geological Survey of Canada, Paper 88-13, p. 6.

1988: Geology of the Canadian Archipelago and North Greenland, Volume 2: Geology of North America, v. E, scale 1:2 000 000.

Sharp, D.B. and Nixon, M.A.: 1988, Geology of the Victoria Peninsula, Victoria Island, District of Franklin, Northwest Territories; Geological Survey of Canada, Map 1650A, Scale 1:250 000.

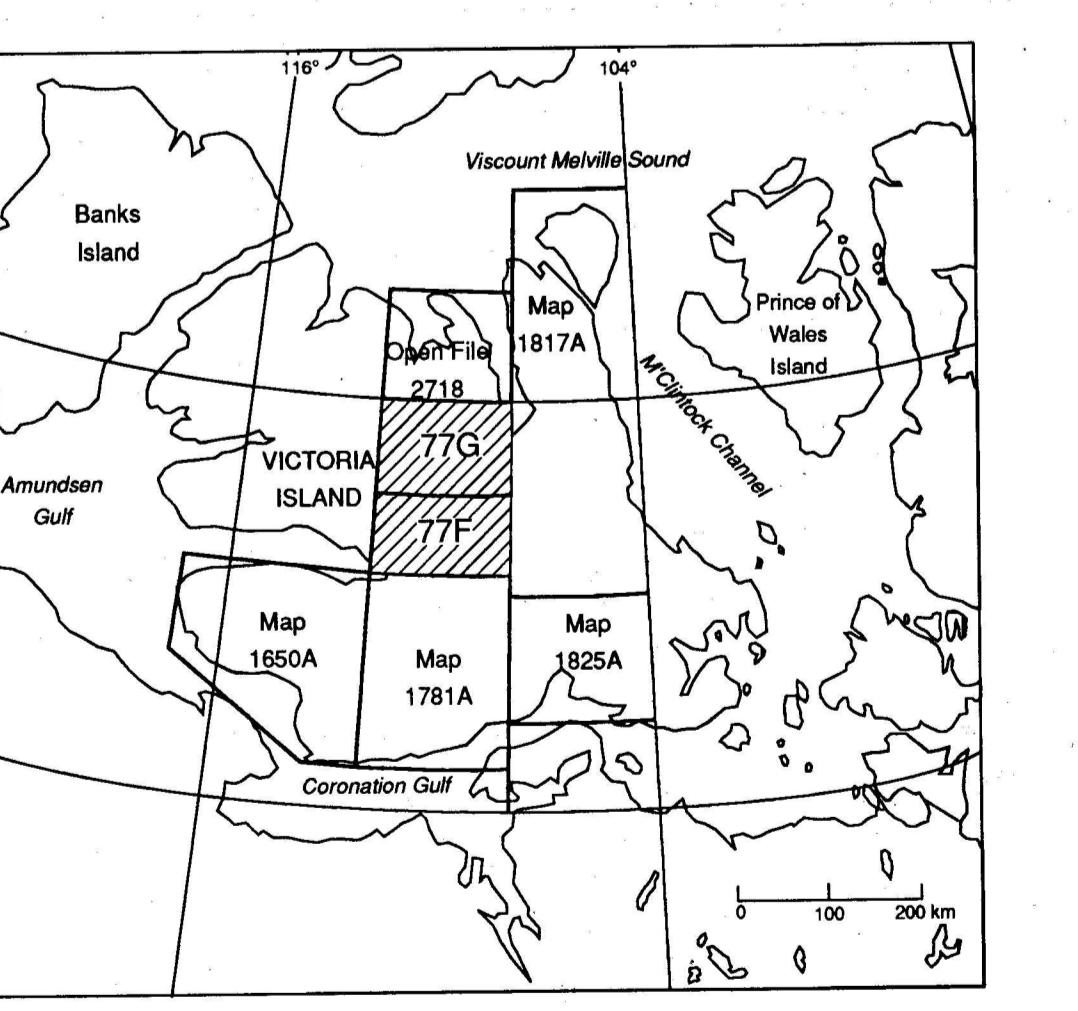
1992: Surficial geology, Burnside Lake Area, District of Franklin, Northwest Territories; Geological Survey of Canada, Map 1825A, Scale 1:250 000.

Sharp, D.B.: 1992, Geology, Cambridge Bay Area, District of Franklin, Northwest Territories; Geological Survey of Canada, Map 1825A, Scale 1:250 000.

Recommended citation:

Hodgson, D.A. and Bednarick, J., 1994, Preliminary surficial geology of Kagleyuak River (77F) and Burns Lake (77G), Northwest Territories; 1:125 000 scale topographic maps; 2 maps; scale 1:125 000; Geological Survey of Canada, Open File 2883.

The Geological Survey of Canada wishes to acknowledge the contribution of Monopros Ltd. to the completion of this map.



Index of published Quaternary geology maps of Victoria Island