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## LEGEND

SURFICIAL DEPOSITS QUATERNARY

NONGLACIAL ENVIRONMENT ORGANIC DEPOSITS: peat, mucky peat, and muck occurring in bogs, fens, swamps, and shallow lakes; thickness <3 m; coastal areas locally contain minor permafrost

Dominantly organic terrain with the indicated inorganic deposit underlying or occurring as a minor component

Areas consisting of 15-50% organic terrain

ALLUVIAL DEPOSITS: sand and gravel, 1-15 m thick, beneath terraces and plains formed as stream floodplains and deltas; generally occurs in large valleys and commonly overlies a considerable thickness of finer grained lacustrine or marine sediment; includes modern floodplains; in places overlain by extensive bogs

NONGLACIAL AND PROGLACIAL ENVIRONMENT

MARINE DEPOSITS: well sorted and stratified gravel, sand, silt, and clay and poorly sorted stony silt deposited in marine water while relative sea level fell from marine limit (80-135 m) to present level; locally deposition occurred near the margin of the ice Littoral Deposits: gravel and sand, 1-4 m thick; generally in the form of beaches and strand plains; gravel, sand, and boulders with local pockets of finer material commonly developed by washing of till or by concentration of boulders due to the action of floating

Sublittoral Deposits: silt and clay with minor fine grained sand, commonly laminated; thickness can exceed 100 m; flat-surfaced, in places deeply dissected; commonly underlies up to several metres of alluvial sand and gravel; locally subject to landsliding which in many areas appears to be accompanied by liquefaction

LACUSTRINE DEPOSITS: silt, fine grained sand, not exposed in many places but probably underlies alluvial deposits in many large valleys LACUSTRINE OR MARINE DEPOSITS: silt, clay, and fine sand; commonly laminated; occurrence and thickness are similar to those of sublittoral and lacustrine deposits (W and L), but genesis of deposit is uncertain

PROGLACIAL AND GLACIAL ENVIRONMENT GLACIOFLUVIAL DEPOSITS: sand and gravel of variable thickness (1-15 m) deposited as ice-contact or glaciofluvial deposits; occurs as ridges, hummocks, terraces, and plains (eskers, kames, outwash plains, and deltas)

> GLACIAL ENVIRONMENT MORAINAL DEPOSITS: dominantly sandy and gravelly till; includes ablation till and minor amounts of other glacial sediments, Large boulders and blocks are a common component in several areas where they form a continuous to discontinuous ground cover ranging from a mantle to accumulations < 2 m thick

Till with sand and gravel; variable thickness; generally occurs as ridges and hummocks within broad depressions; linear elements are oriented transverse to the axis of the depressions, which generally parallels the direction of ice flow, and the features are in many places associated with small eskers; includes till ribs and appears to consist of complexes of ice thrust and ablation landforms which have been gullied by Till, generally < 5 m thick; gently rolling surface (ground moraine); symbols used for areas of streamlined features, of hummocks and mounds, and of short ridges and

ROCK: rock and rock thinly covered by drift, colluvium, and vegetation; generally hilly

M: till, generally 1-5 m thick; Mv: till, generally < 1 m thick, and including scattered outcrop; in many places morphology mimics underlying bedrock; locally contains other glacial deposits and colluvium; in some areas consists almost entirely of boulders which in places may overlie thicker till

and hummocky, steep slopes common; includes small areas of other units and small swampy hollows

PRE-QUATERNARY

Geological boundary . . Valley or trough controlled by bedrock structural feature . Drumlin, drumlinoid ridge, crag and tail (direction of ice movement known, unknown)\*. Areas of hummocks, mounds and short ridges . . 11/1 Esker (direction of flow known or assumed, unknown) . Glaciofluvial deposits too small to map as a unit . . . Abandoned river channel, spillway, or ice marginal channel with interpreted direction of flow (large, small). ronnon. Channel of probable subglacial origin . . Kettle holes . . Apparent limit of marine inundation . . Approximate elevation (m) of limit of moraine inundation Abandoned beach ridge or flight of beaches . Areas characterized by sand dunes . . Landslide scar... Areas characterized by palsas . Marine shell locality Radiocarbon date . Limits of Smallwood Reservoir .

Reservoir are probably relicts predating the last ice flow system. Geology by R.J. Fulton, D.A. Hodgson, G.V. Minning

\*Some of the disjunct ice flow features in the area east and south of Smallwood

and R.D. Thomas (1969-71)

Compiled by R.J. Fulton from Geological Survey of Canada maps: 1531A, 1-1978, 19-1979 to 29-1979 inclusive in 1982

> Geological cartography by T.L. Papps, Geological Survey of Canada

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

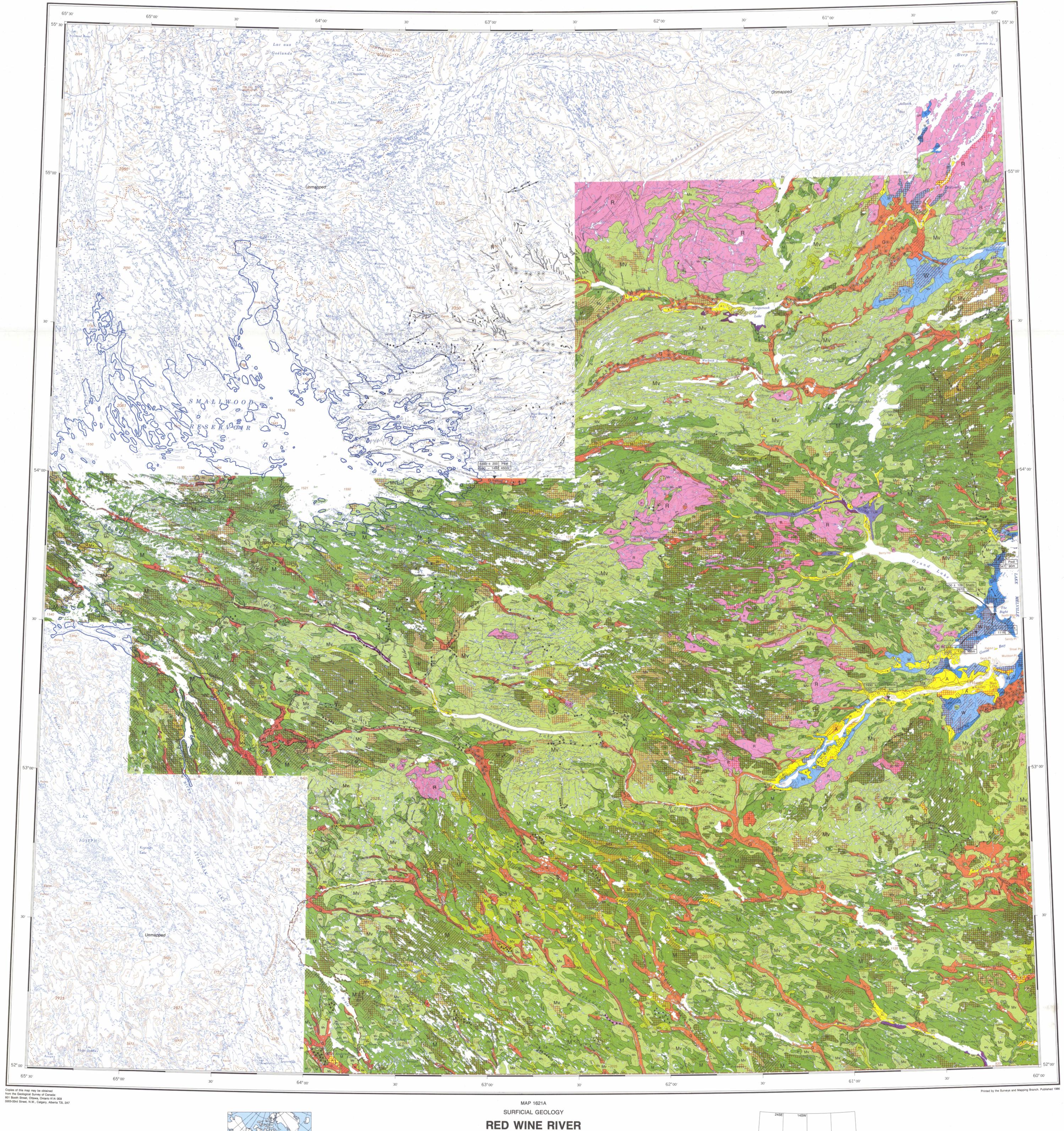
Base map from parts of maps published at the same scale by the Surveys and Mapping Branch in 1975, 1977, 1978 and 1979. Eskers were revised by the Geological Survey of Canada for this edition. Limits of Smallwood Reservoir from the International Map of the World, sheet NN20 at a scale of 1:1 000 000, 1973

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 1985, 28°18' West decreasing 7.4' annually. Readings vary from 27°43' in the SE corner to 29°31' in the NW corner of the map area

Elevations in feet above mean sea level

Recommended citation: Fulton, R.J. 1986: Surficial geology, Red Wine River, Labrador, Newfoundland; Geological Survey of Canada, Map 1621A, scale 1:500 000



LABRADOR **NEWFOUNDLAND** 

Scale 1:500 000

Transverse Mercator Projection

CM 62°, Scale Factor 0.9994

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1621A 13SW

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MAP 1621A