

LEGEND

- I ORGANIC TERRAIN
II SILT-CLAY PLAINS
III THERMOKARST LAKE BEDS
IV BEACHES
V RIVER DEPOSITS-FINE
VI RIVER DEPOSITS-COARSE
VII GRAVEL-SAND HILLS, RIDGES AND TERRACES
VIII SILT-CLAY HILLS AND RIDGES
IX TILL PLAIN
X HUMMOCKY TILL
XI UPLAND AND PIEDMONT COMPLEXES
XII MOUNTAINOUS AND ROCKY AREAS
XIII ERODED AND/OR ERODING RIVER BANKS, COASTAL CLIFFS, AND VALLEY WALLS (UNCONSOLIDATED MATERIAL)
XIII R ERODED AND/OR ERODING RIVER BANKS, COASTAL CLIFFS, AND VALLEY WALLS (BEDROCK)

Note: Detailed unit descriptions of terrain sensitivity, climatically significant zones, and the performance rating table are presented on a separate sheet which accompanies this map.

SOURCES OF INFORMATION

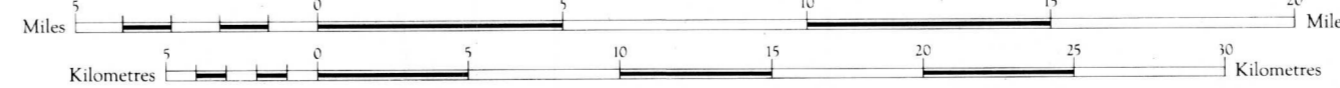
- Rutter, N.W., Boydell, A.N., Minning, G.V., Netterville, J.A., March 1973: Unpublished preliminary Surficial Geology Maps of NTS 95N (Dahadinni River), NTS 95O (Wrigley), NTS 95K (Root River), NTS 95J (Cassell Band), NTS 95I (Sulmer Lake), NTS 95G (Sibbeston Lake), NTS 95H (Fort Simpson), NTS 95B (Fort Liard), NTS 95A (Trout Lake), NTS 85E (Mills Lake), and NTS 85D (Kakisa River).
Douglas, R.J.W., MacLean B. 1963: "Geology, Yukon Territory and Northwest Territories", Map 30-1963 Geological Survey of Canada.
Tarnocai, C., 1972: Soils of the Mackenzie River Area, Canada Soil Survey, Winnipeg Manitoba.

Compiled by R.L. Monroe 1973

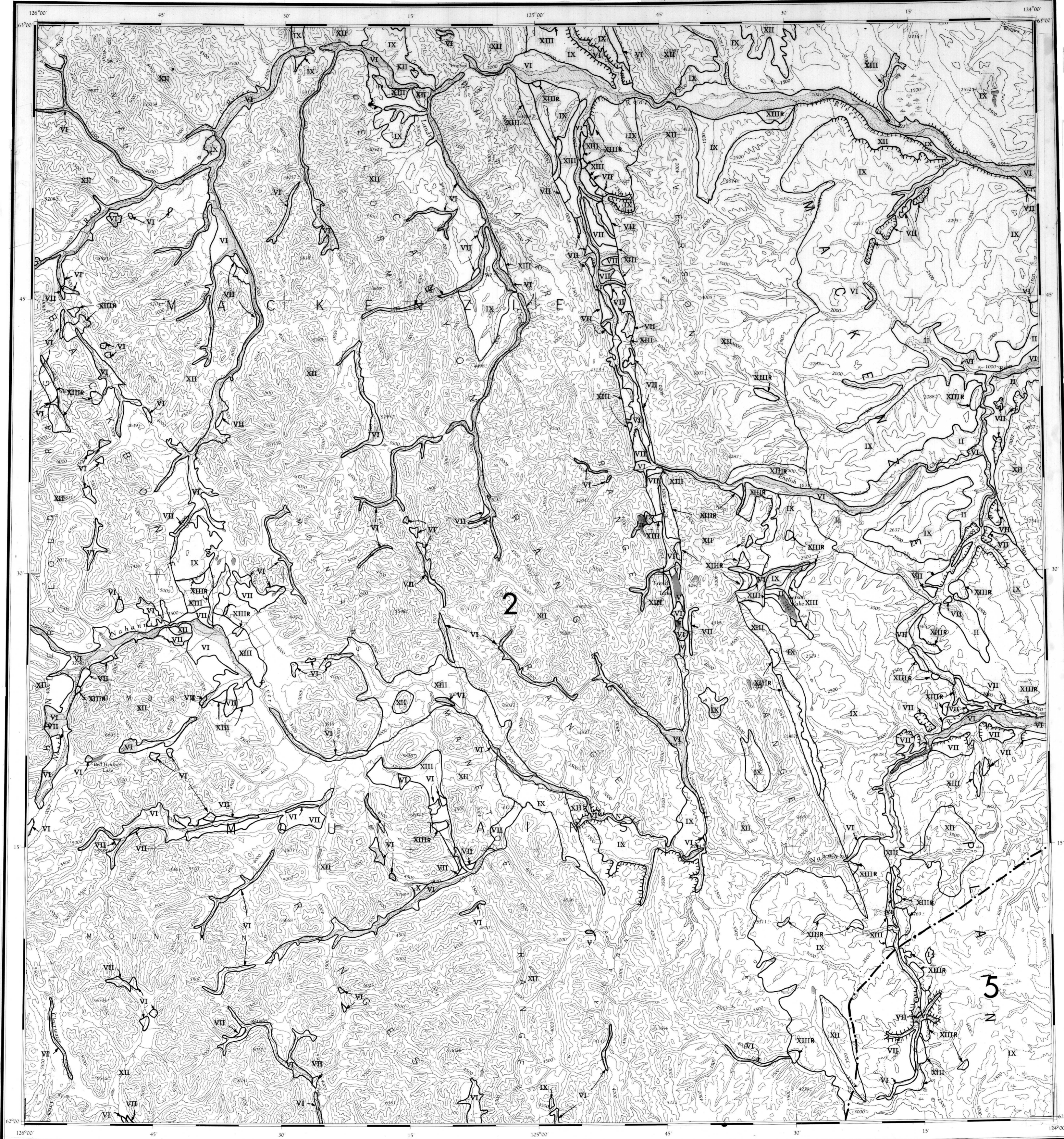
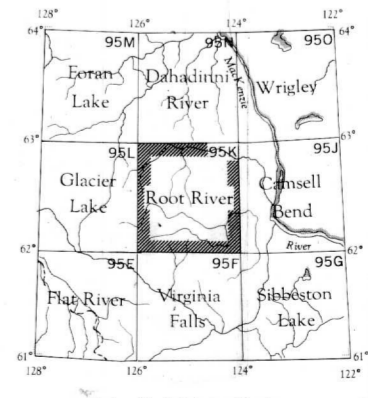
Preliminary map prepared for open file, June 1973 Subject to revision and correction.

TERRAIN CLASSIFICATION AND SENSITIVITY SERIES Produced for Indian and Northern Affairs by Department of Energy, Mines and Resources as part of the Environmental-Social Program, Task Force on Northern Oil Development

REFERENCE table with symbols for Road, Hand Surface, All Weather, etc.

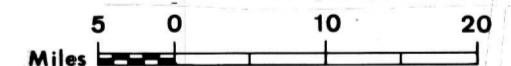


REFERENCE table with symbols for Church, School, Horizontal Control Point, etc.



BEDROCK LEGEND

- 1 Resistant and competent rocks; potentially suitable for use as rip-rap. Comprised of Precambrian quartzite and argillite, Ordovician and Silurian limestone and dolomite; also included are Upper Devonian carbonate reefs and beds that border the Mackenzie River on the south side between Hay River and Fort Simpson (Escarpment, Twin Falls, and Kakisa Formations).
2 Coherent or moderately competent rocks; fairly resistant to erosion but not strongly cemented; probably would break down rapidly under heavy traffic (e.g., if crushed and used for road surfacing). Devonian, Carboniferous and Cambrian sandstones.
3 Moderately coherent rocks; more resistant than 4 and less easily eroded; capable of maintaining a steep cliff face 150 feet high. Not represented within this mapping area.
4 Incoherent rocks; soft, easily eroded, subject to slumping; mostly Devonian shale and siltstone (Tahlina, Hay River, Funeral, Fort Simpson, and Horn River Formations), but includes extensive areas of Cretaceous shale.
1,2 Undivided Precambrian argillite, quartzite, and dolomite.
1,4 Areas of mixed coherence; resistant competent, carbonate rocks consisting of Upper Devonian and Carboniferous (Mississippian) limestone and dolomite (rating 1); occurring with mainly incoherent and easily eroded shale and siltstone of the same ages (rating 4).
2,4 Undivided Devonian sandstone, siltstone, and shale (unnamed) Carboniferous and Permian (mainly Pennsylvanian) sandstone, shale, limestone, and Cambrian sandstone, shale and dolomite.
4,2 Undivided Upper and Lower Cretaceous shale, sandstone, and conglomerate (rated 4, 2, in Liard Plateau only).
0 Surficial deposits (where obscuring bedrock relationships).



ROOT RIVER BEDROCK GEOLOGY

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OPEN FILE 131 June 1973 GEOLOGICAL SURVEY OTTAWA

ROOT RIVER DISTRICT OF MACKENZIE NORTHWEST TERRITORIES

Scale 1:250,000 1 inch to 4 Miles approximately

Contour Interval 400 Feet Elevation in Feet above Mean Sea Level

Transverse Mercator Projection North American Datum 1927