



GEOLOGICAL SURVEY OF CANADA  
DEPARTMENT OF ENERGY, MINES AND RESOURCES

117A

LEGEND

- |              |                                                                                                        |                                                                                                                                                                                                                                                                                     |
|--------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I            | ORGANIC TERRAIN<br>(including muskeg)                                                                  | Peat, fen; peat-fen complex; commonly occurring as a cover on Units II, IX and X; flat to moderately sloping.                                                                                                                                                                       |
| II           | SILT-CLAY PLAINS<br>(marine and lake deposits)                                                         | Clay and silt, commonly surfaced by sand or silty sand, with discontinuous organic cover (see Unit I). Principally forming plains bordering rivers and Coastal areas. Highly unstable in eroded slopes.                                                                             |
| III          | THERMOKARST LAKE BEDS                                                                                  | Clay, silt, peat, and local sand on low flat areas formerly occupied by tundra ponds. These materials generally less than ten feet thick over till or sand. Pingos generally confined to this unit.                                                                                 |
| IV           | BEACHES<br>(marine and lake)                                                                           | Gravel and/or sand ridges or flat areas along present or former shorelines.                                                                                                                                                                                                         |
| V            | RIVER DEPOSITS-FINE                                                                                    | Silt and silty sand in river channels, floodplains, low terraces adjoining rivers, and alluvial fans; includes organic silt, peat and minor gravel.                                                                                                                                 |
| VI           | RIVER DEPOSITS-COARSE                                                                                  | Gravel and sand in river channels, floodplains, low terraces adjoining rivers, and alluvial fans. Includes some silt, peat, and organic silt.                                                                                                                                       |
| VII          | GRAVEL-SAND HILLS,<br>RIDGES AND TERRACES                                                              | Gravel, sand and some silt. Includes eskers, and other glaciofluvial deposits, river terraces, sand dunes, and moraines consisting of deformed gravelly-sandy strata.                                                                                                               |
| VIII         | SILT-CLAY HILLS AND RIDGES                                                                             | Mainly silt and clay with minor sand and gravel in moraines, strata tilted and folded.                                                                                                                                                                                              |
| IX           | TILL PLAIN                                                                                             | Till, occurring as ground moraine with low rolling relief or parallel drumlin ridges. Large areas are clayey to silty till as a thin veneer on shale; locally forms a thin veneer on other kinds of bedrock. Includes undifferentiated areas of Unit I.                             |
| X            | HUMMOCKY TILL                                                                                          | Clayey to gravelly-sand till, local gravel, forming rolling to hilly moraine composed of individual and coalescent hummocks. Local contrasts in material and ground ice between well drained hills and poorly drained depressions. Includes small undifferentiated areas of Unit I. |
| XI           | UPLAND AND PIEDMONT COMPLEXES                                                                          | Areas of moderate to low slope, in part hilly, surfaced by till, disintegrated bedrock, and local clay, silt, sand, or gravel. Unconsolidated deposits generally form a thin veneer over rock but in places they are thick (>100 feet).                                             |
| XII          | MOUNTAINOUS AND ROCKY AREAS                                                                            | Rock outcrop or rock thinly covered by rubble or drift. Moderate to steep slopes.                                                                                                                                                                                                   |
| XIII<br>     | ERODED AND/OR ERODING RIVER<br>BANKS, COASTAL CLIFFS, AND<br>VALLEY WALLS (UNCONSOLIDATED<br>MATERIAL) | Various unconsolidated materials on moderate to steep slopes, generally with surface veneer of slope debris; includes unstable areas.                                                                                                                                               |
| XIII<br>++++ | ERODED AND/OR ERODING RIVER<br>BANKS, COASTAL CLIFFS, AND<br>VALLEY WALLS (BEDROCK)                    | Bedrock outcrops or bedrock partly covered by rock detritus or unconsolidated materials; slopes commonly steep; includes unstable areas.                                                                                                                                            |

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

SOURCES OF INFORMATION

- Rampton, V.N., 1970: Surficial Geology Maps of Demarcation Point (1170), Herschel Island (1170), Blow River (117A), and Alavik West (107B), Geological Survey of Canada Open File 21.
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- Jelitsky, J.A., 1958: "Uppermost Jurassic and Cretaceous Rocks of Alavik Range, Northwestern Richardson Mountains N.W.T.", *Geological Survey of Canada Paper 58-2*.
- Unpublished bedrock geology maps and data by D.K. Norris Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada, 1972.

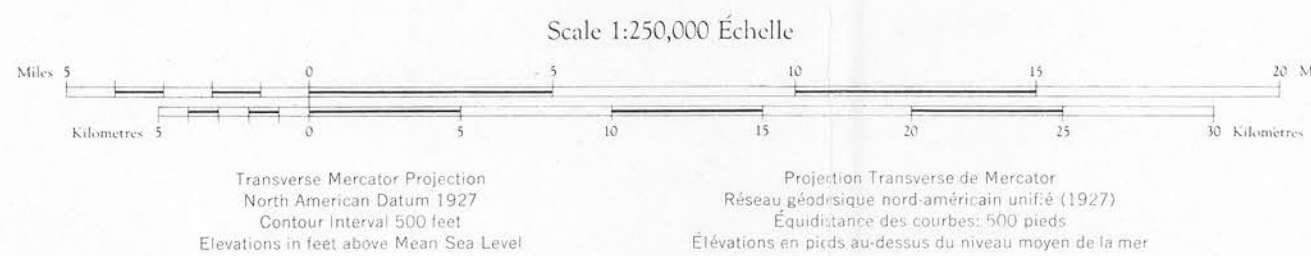
Compiled by R.L. Monroe 1972

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TERRAIN CLASSIFICATION AND SENSITIVITY SERIES

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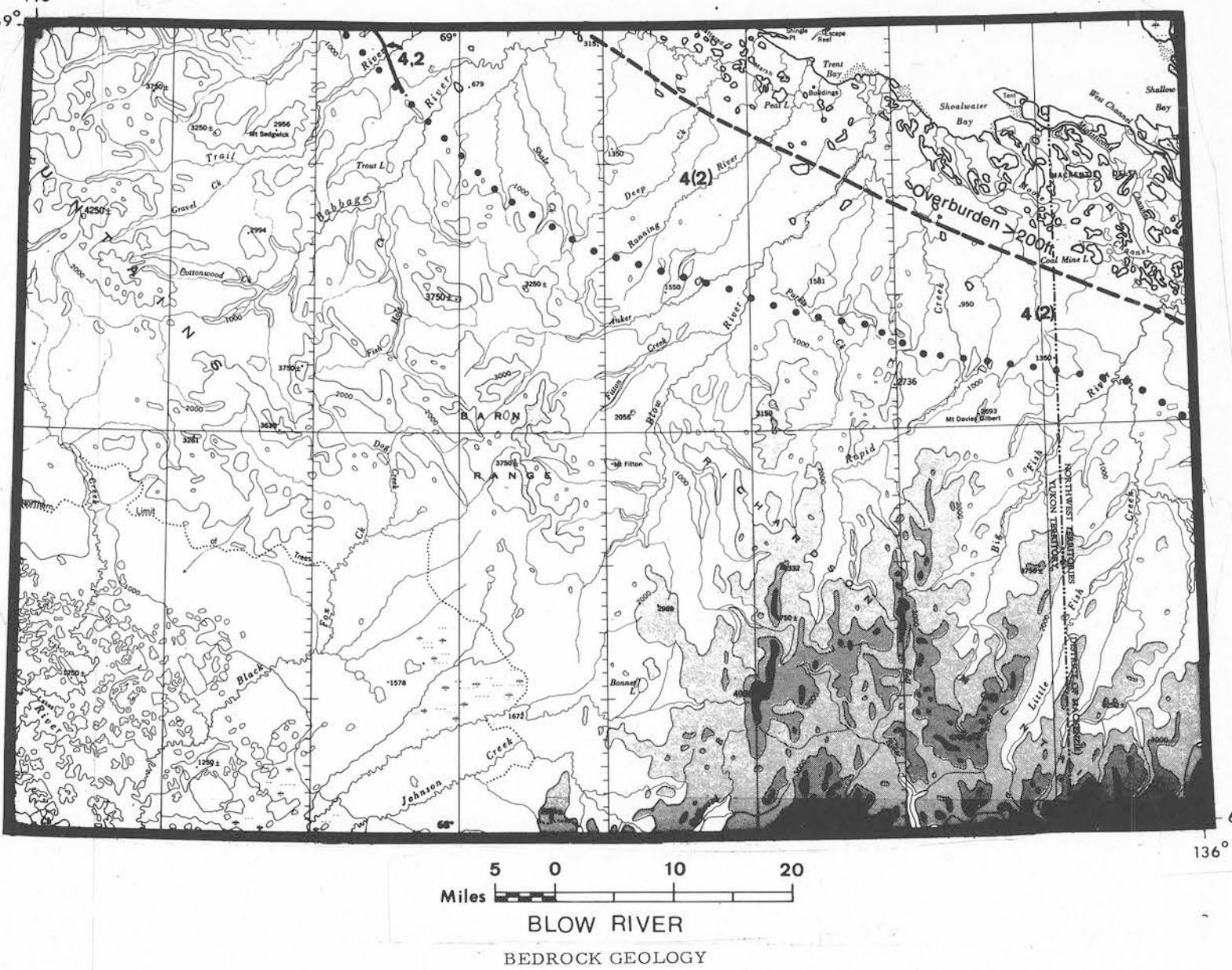
BLOW RIVER  
YUKON TERRITORY - NORTHWEST TERRITORIES



River, all weather ..... Chemin, toute saison  
Road or winter road ..... Chemin de terre ou d'hiver  
Trail or path ..... Sentier ou sentier  
Fence ..... Clôture  
Village or settlement ..... Village ou hameau  
Post office ..... Bureau de poste  
Hatched contour point ..... Point de contour hachuré  
Four-way intersection ..... Carrefour à quatre voies

Channel ..... Cours d'eau  
Intermittent or dry ..... Intermittent ou à sec  
Waterfall ..... Cascade  
Rapids ..... Rapières  
Marsh or swamp ..... Marais ou tourbière  
Shallow or tidal lake ..... Lac peu profond ou à marée  
Deep or cold lake ..... Lac profond ou froid  
Spring ..... Source  
Spot elevation, in feet ..... Hauteur ponctuelle en pieds

- BEDROCK LEGEND
- 1 Resistant, competent quartz sandstone, and volcanic rocks, potentially suitable for use as rip-rap. Mid Jurassic Bag Creek Formation, and Lower Cretaceous Upper Berrianian and Valanginian formation, both comprise resistant quartz sandstone units in the Richardson Mts.
  - 2 Coherent or moderately competent rocks; fairly resistant to erosion but not strongly cemented; probably would break down under heavy traffic (i.e. if crushed and used for road surfacing). In British Mts. includes Carboniferous Lisburne Group consisting of limestone and dolomitic limestone with highly shattered beds.
  - 3 Moderately coherent rocks; more resistant than 4 and less easily eroded; capable of maintaining a steep face 150 ft. high. Includes Precambrian argillite as found in the Neruokpak Formation. For the most part the argillite is interbedded with limestone, dolomite and/or sandstone.
  - 4 (2) Mainly incoherent rocks; soft easily eroded, subject to slumping. Includes Jurassic Kingak Formation which is highly fissile, soft and recessive shale and siltstone, and the Cretaceous shale and siltstone recessive units of the Richardson Mts. and the Arctic Coastal Plain. Bedrock high commonly of fine-grained sandstone occur interspersed within this unit and display a coherence rating of 2.
  - 3,2 Undivided Precambrian Neruokpak Formation. Argillite interbedded with limestone, dolomite and/or sandstone.
  - 4,2 Undivided shale, sandstone and/or limestone. This unit includes the Permian Salsarashit Formation and the Jurassic Husky Formation in the Richardson Mts., and the undivided Jurassic unit in the British Mts.



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