



TERRAIN CLASSIFICATION  
AND SENSITIVITY SERIES (PRELIMINARY)

**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. Pings 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   | 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 R | 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.

**BEDROCK GEOLOGY - MALLOCH HILL**

The bedrock exposed in this map-area is shale of Late Cretaceous Age. The shale is flat-lying and relatively non-resistant. It forms steep banks along rivers and the coast (map unit XIII R) and rolling silty uplands mapped as unit XI. Coal in the shale is burning in the coastal cliff known as the Smoking Mountains.

**SOURCES OF INFORMATION**

- Rampton, V.N., *Surface Geology and Landforms, Mackenzie Delta* (1976), Stanton (197D), Cape Dalhousie (197E), and Malloch Hill (97F) 1:125,000, Geological Survey of Canada, Open File 96, 1972.
- Yorath, G.J., et al. *Geology of the Eastern Part of the Northern Interior and Arctic Coastal Plains, Northwest Territories*; Geological Survey of Canada, Paper 68-27, 1969.

Compiled by R. L. Monroe, 1972

Preliminary map prepared for open file, August, 1972.  
Subject to revision and correction.

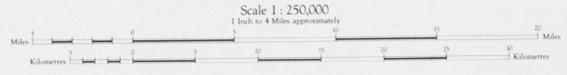
**TERRAIN CLASSIFICATION AND SENSITIVITY SERIES**  
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**REFERENCE**

|         |            |                |
|---------|------------|----------------|
| Route   | Power line | Telephone line |
| Highway | Highway    | Highway        |
| ...     | ...        | ...            |

**MALLOCH HILL**

DISTRICT OF MACKENZIE  
NORTHWEST TERRITORIES



**REFERENCE**

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OTTAWA

