This map subdivides the terrain of the Finlayson Lake map area according to the genesis of the earth materials that directly underlie the surface, the morphology of these materials, and the ongoing geomorphic processes that are actively modifying them.

The map unit notation system is built around a genetic designator as illustrated below: Genetic category ____ Activity modifier Textural modifier Morphologic modifier This notation indicates a plain composed of lacustrine sediments which are undergoing thermokarsting. Compound units Areas where two or more map units cannot be mapped separately due to resolution limitations posed by the map scale and/or the gradational nature of the units are designated by separating the constituent units with a / . For example: This unit consists of a thin covering of colluvium and till. Stratigraphically stacked units Where the stratigraphy is known, the map unit is designated as follows: This unit consists of a continuous cover of till over glaciofluvial gravels. Genetic Category A- Alluvial deposits: Sand and gravel with local silt, clay, and organic sediments. Alluvial fans may contain significant deposits of debris flow diamictons. C- Colluvium: Unsorted sediments ranging from clay to boulders derived by the physical and chemical weathering processes and gravitational reworking from bedrock and glacial sediments. M- Till: Stony diamicton formed by direct deposition from ice. Much of the till in the map area has undergone redeposition by gravitational processes immediately following initial deposition. G- Glaciofluvial deposits: Sand and gravel with minor amounts of silt and clay deposited by water flowing on, along the margins of, beneath, and away from glacial ice. L- Lacustrine and glaciolacustrine deposits: Sand, silt, and clay with local deposits of gravel. E- Eolian deposits: Wind blown accumulations of fine sand and silt. O- Accumulations of peat and organic silts and clays. I- Glacial ice R- Bedrock: Highly folded and faulted rocks of several autochthonous and allocthonous terranes including Precambrian to Mesozoic clastics and carbonates, schists and gneisses locally intruded by Mesozoic felsic plutons. Eocene flows and tuff-breccias of olivine basalt occur locally north of the Tintina Trench. Textural Modifers s - sandy s - silty c - clayey b - bouldery Morphologic Modifiers a - apron
b - blanket (continuous covering greater than lm in thickness assumed to overlie bedrock).
c - channelled d - delta f - fan h - hummocky h - hummocky
k - pitted
m - undulating
n - streamlined by ice flow
p - floodplain, plain
s - areas of vertical or near vertical slopes (used only with r - ridge or ridged
v - veneer (discontinuous covering generally less than lm in thickness assumed to overlie bedrock).
t - terrace(s) Activity Modifiers A - Avalanching S - Soliflucted K - Thermokarsting V - Gulleying Geological boundary (defined, approximate, gradational). Streamlined landform (former ice flow direction unknown. Streamlined landform (arrowhead indicates the direction of former ice flow). Esker (former water flow direction established, not established). Lateral or end moraines of McConnell or Neoglacial age. (major, minor). Meltwater channel (large, small; may form a map unit boundary). Landslide: major, minor (arrows indicate the direction of movement; serrated pattern indicates the head of the landslide scarp). Rock glacier -Arete Geology by L.E. Jackson, Jr., 1981, 1982, 1985 The Finlayson Lake map area was intensely glaciated during the McConnell glaciation. Only the highest peaks in the Pelly Mountains projected above glacial ice at its climax. Two regional ice divides existed in this area. A roughly north-south divide was approximately coincident with the eastern border of the map area. North of Pelly Mountains, it marked the divergence of ice flowing south into Liard River drainage along the eastern flank of Pelly Mountains from ice flowing northwest into Pelly River drainage along the northern flank of Pelly Mountains. South of Pelly Mountains, the divide shifted to near the middle of the map sheet. It separated ice flowing east into Liard River drainage from ice flowing west into Yukon River drainage. A second divide trended approximately east-west along the summit of Pelly Mountains and separated north and south ice flow. Ice flow direction was controlled by underlying topography; most flow occurred along valleys while flow was sluggish over intervening hills or mountains. Deglaciation was marked by widespread stagnation in many valleys giving rise to extensive complexes of glaciofluvial deposits. Extensive deposits of glaciolacustrine sediments occur along Pelly River. These contain lenses of massive ice and are subject to collapse (thermokarsting). Along river bends, they often fail through retrogressive thaw and flow. TERRAIN INVENTORY FINLAYSON LAKE YUKON TERRITORY Scale 1:125 000 Universal Transverse Mercator Projection
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