

SURFICIAL GEOLOGY
COLUMBIA RIVER VALLEY - DONALD TO REVELSTOKE

R.A. Achard - 1969-70

LEGEND

Fluvial and alluvial deposits (postglacial to present)

- A Alluvium: floodplain deposits, deltas; mainly sand with minor gravel, silt and organic materials.
- At Stream terrace: dominantly gravel but in many places terrace surface is overlain by <2 m of sand and silty sand.
- Af Fan (active): generally coarse bouldery and blocky gravel near fan apex and finer poorly sorted gravel near fan toe.
- Afi Fan (inactive): as above but no longer subject to sediment deposition.
- Avf Debris-avalanche fan: cone of angular debris at bottom of an avalanche-chute, with levee banks and avalanche-chute locally included.

Organic deposits

- O Peat, muck, calcareous mud, >1 m thick.

Landslide and Rockfall deposits

Scr Area of creep, solifluction, surficial slope instability:
 blocks, boulders, gravel, sand, silt.

Sf Rockfall-slide: blocks, rubble, breccia (scar and
 transported debris outlined).

Slope deposits (postglacial to present)
Formed by weathering action, frost, growth of vegetation

Cr Colluvium: loose materials (boulder to silt size)
 accumulated on bedrock, topography controlled by under-
 lying bedrock (25% outcrop).

C Colluvium: loose materials (boulder to silt size)
 accumulated on other unconsolidated deposits by
 surface waters, avalanche, creep, solifluction, etc.

T Talus: an apron of blocks and angular rubble, accumulated
 on and at the base of a steep bedrock slope.

Tu Talus: same as above but presumably on unconsolidated
 deposits of glacial or non-glacial origin.

Glacial deposits
Materials deposited directly from the ice (under, within or over
the glacier), by the melting of the ice: deposits generally consist
of a mixture of sand, silt and gravel referred to as till where
massive and as drift where stratified.

M Till, locally drift: topography not controlled by
 underlying bedrock.

Mv Till, locally drift: veneer, topography controlled by
 underlying bedrock (> 25% outcrop).

Mt Terraced till or drift: depositional or erosional.

Glaciofluvial deposits

Fluvial materials deposited on, within, below or against glacier-ice or dead-ice: boulders, gravel, sand, silt, clay, lenses of till, outwash in general.

Gt Glaciofluvial terrace.

Gtw Kame terrace, valley-wall terrace.

Gtk Kettled terrace.

Gh Hummocky, ridged (Gr), kettled (Gk) outwash deposits.

Gf Glaciofluvial fan.

Gd Glaciofluvial delta.

Glaciolacustrine deposits

Silt, clay, (gravel, sand)

Lt Terraced.

L Thick, > 2.50 m.

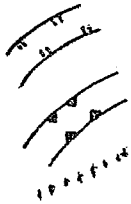
Lv Thin, < 2.50 m.

Beach gravel, sand, on top of ...

x Bedrock outcrop in area of overburden

X Gravel pit, active, abandoned

R Rock



Buried valley

Abandoned channel

Escarpment (in unconsolidated deposits)