**Simplified Dichotomous Key for Differentiation of Surficial Materials**

Created by Darrell Hoffman

1. a. All particle sizes occur together with no size class ---------- go to 2.

having been removed

b. Some size class(es) of particles has been removed ---------- go to 5.

or deposited (for example clay and fine silt may be

missing in fluvial material and end up in lacustrine)

1. a. Material consist of rock in angular blocks of ----------------- go to 3.

various sizes

b. Presence of sub-angular material with rounded -------------- Morainal (Till)

edges/abrasions not occurring in layers in matrix of

sand, silt and clay on irregular/bumpy terrain

c. Rounded gravel that does not occur in layers (is ------------- go to 4.

not stratified)

1. a. Material displaced to below or on slope >35° --------------- Colluvium

b. Material not apparently displaced and fragments ----------- Weathered Bedrock

<10cm

1. a. Near an active modern water drainage network ------------- Fluvial

b. Distance from or elevation above modern drainage -------- Glaciofluvial

networks enough that deposition by a modern

stream or river is unlikely

1. a. Well rounded gravel (2mm-7cm) with sand and silt -------- go to 6.

sand and silt (clay removed)

b. Clay, silt and fine sand ------------------------------------------ go to 8.

1. a. Site is near an active modern drainage network, ------------- go to 7.

such as streams, lakes, rivers, etc.

b. Distance from or elevation above modern drainage --------- Glaciofluvial

networks is enough that deposition by a modern

stream, river, or lake is unlikely

1. a. Near a river or stream --------------------------------------------- Fluvial

b. Near a lake --------------------------------------------------------- Littoral Lacustrine

c. Near an ocean, remnants of marine organisms ---------------- Littoral Marine

1. a. Site is near an active modern drainage network, -------------- go to 9.

such as streams, lakes, rivers, etc.

b. Distance from or elevation above modern drainage ----------- go to 10.

networks is enough that deposition by a modern

stream, river, or lake is unlikely

1. a. Near a lake, occurs in layers (stratified) ---------------------- Lacustrine

b. Near ocean, not layered, marine shells or other ------------- Marine

remains of marine organisms

1. a. Bumpy irregular terrain, no marine organism --------------- Glaciolacustrine

remains

b. Presence of marine shells or other marine ------------------- Glaciomarine

organism remains

REFERENCE

Ministry of Environment (1997) Terrain Classification System for British Columbia Version 2. *Fisheries Branch, Ministry of Environment and Surveys and Resource Mapping Branch, Ministry of Crown Lands Province of British Columbia,* 10-25.

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