

APBI 200 - LAB 5 ASSIGNMENT

Please answer the following questions:

1. Fill in the following table highlighting the key properties of glacial till, loess, colluvial, alluvial and lacustrine parent materials.

Property	Glacial Till	Loess	Colluvium	Alluvium	Lacustrine
Mode of transport and deposition					
Degree of sorting (i.e. the uniformity of particle sizes)					
Texture					
Presence or absence of coarse fragments (with diameter > 2mm)					
Angularity of coarse fragments (angular, sub-rounded, rounded)					
Presence / absence of stratification (i.e., layers)					

[12 points]

2. In which soil parent material type are varves common?

- a) Alluvium
- b) Lacustrine
- c) Glacio-lacustrine
- d) Glacio-fluvial
- e) Loess

Briefly explain your answer.

[2 points]

3. Briefly describe the differences between basal till and ablation till.

[1 point]

4. Go to the UBC's Virtual Soil Monolith collection featured at <http://soilweb.landfood.ubc.ca/monoliths/> and find a monolith with

- (i) an alluvial parent material and
- (ii) a glacio-fluvial parent material.

Specify their UBC numbers.

Describe the differences between the two parent materials and identify the most important feature(s) allowing you to tell them apart.

[4 points]

Required attachments:

- Your answers regarding the three “mystery” parent material examples observed and described during the lab

[6 points]

Total for lab 5 assignment

[25 points]