

Geomorphology Lab

Alpine and Continental Glaciation

Answer Key:

1. See attached map with color coded key.
- 1.1 The glaciers on the west side of the ridge are larger than the eastern side glaciers. This is likely a result of the rain shadow effect – with the west side glaciers receiving higher amounts of precipitation.
- 1.2 The streams draining the east side of the Sierra Nevada flow into glacial drift.
2. See attached sketch map.
- 2.2 The direction of movement is from NW to SE. The evidence is the drumlins lining Stink Lake – tapered in the down ice direction.
- 2.3 The change in elevation marks the extent of the ice, from a knob and kettle landscape to an outwash plain.
- 3.1 Continental ice sheets shaped this area. Evidence includes knobs and kettles as well as the low relief.
- 3.2 A contorted drainage pattern exists in this area.
- 3.3 The gravel pits are areas where the glacial drift is being mined – material transported and deposited by the ice.

C - cirque

-A- Arête

H - Horn

C - col

T - Tarn

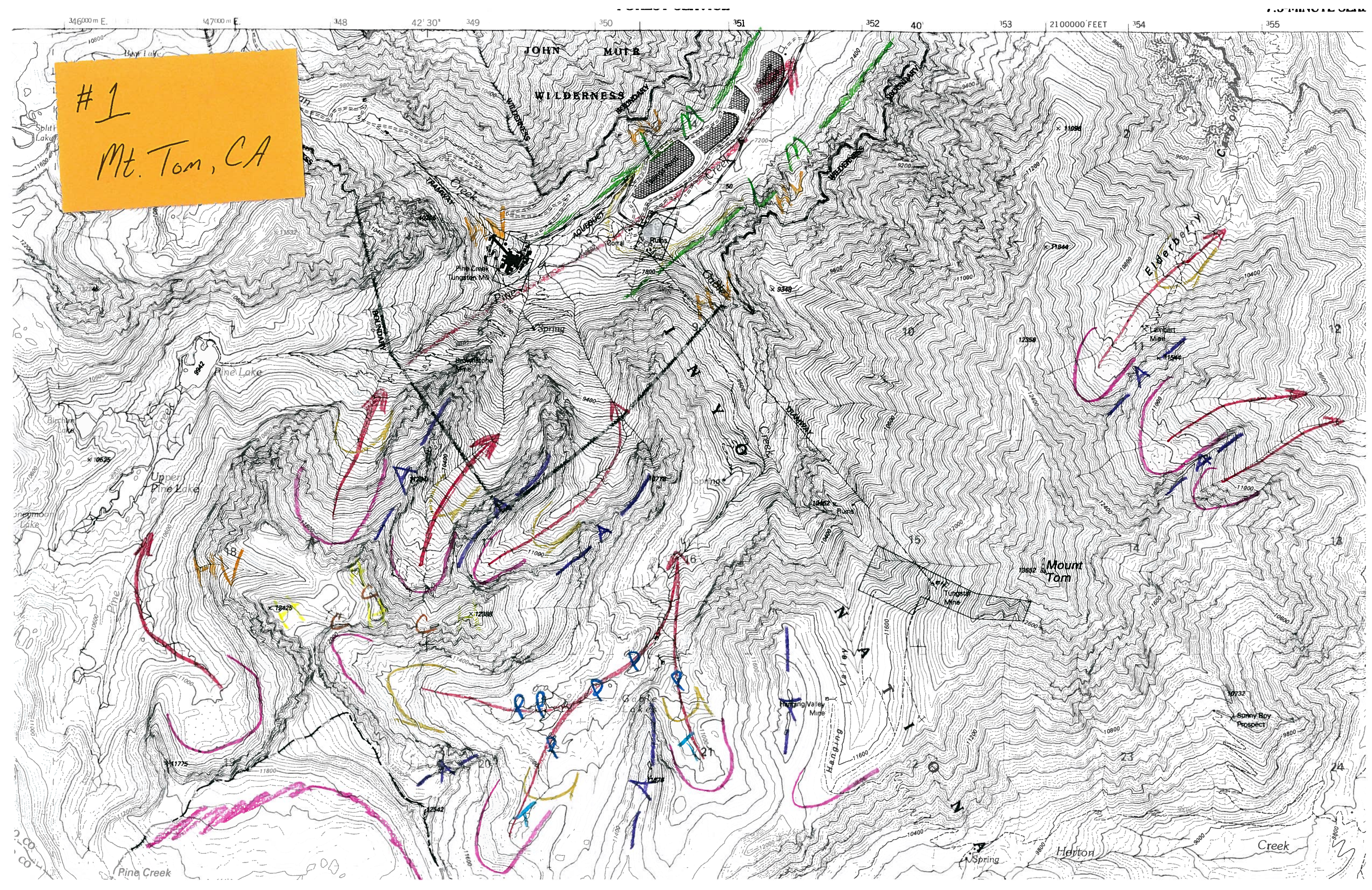
P - Paternoster lake

U - Trough - U-shaped

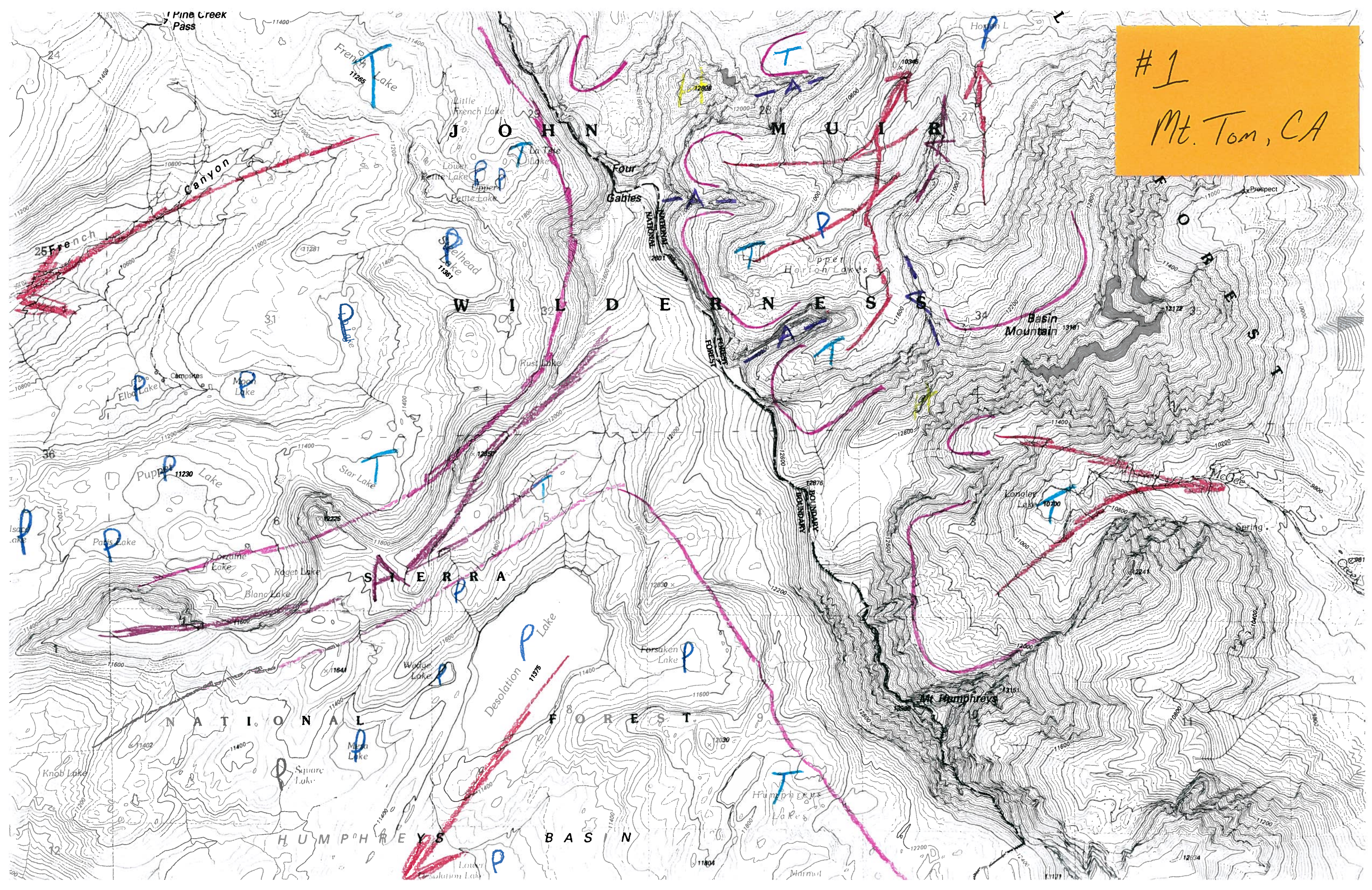
LM - lateral moraine

HV - Hanging Valley

#1
Mt. Tom, CA



#1
Mt. Tom, CA



#2 - Voltaire, ND

Souris River

direction of flow (river) →

drumlins

Stink Lake

Moulin
kame(?)

Lake
Hester

Direction
of ice
flow

Knob
+
kettle

kettles

Erickson
Lake

outwash

Extent of ice

