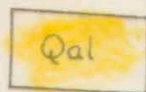
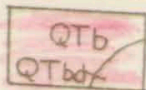


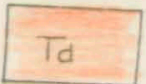
EXPLANATION



Quaternary alluvium (flood plain deposits)

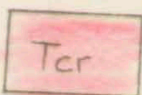


Pleistocene or Pliocene olivine basalt (QTb, flows: QTbd, low lava cones)



Pliocene Dallas formation (semi-consolidated tuffaceous sandstone, siltstone and conglomerate)

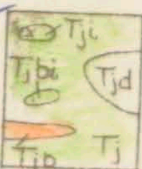
---unconformity---



Miocene Columbia River basalt

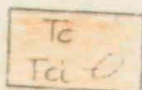
---unconformity---

*Note added symbols on map*



Lower Miocene and upper Oligocene John Day formation (tuffs and welded tuffs--dacitic and/or rhyolitic, Tj; flows of dense black basalt with sparse olivine, Tjb; dacite dome, Tjd; Tji, rhyolite and dacite plugs; Tjbi, basalt plug, feeder for Tjb flows.

---unconformity---

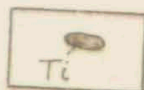


Eocene Clarno formation (andesitic flows, breccia and tuff, Tc; andesite plug, Tci)

---unconformity---

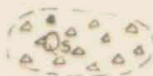


Pre-Clarno rocks (Ms, dark gray phyllite and some graywacke, chert pebble conglomerate and greenstone near Hay Creek; MPs, mica schist near Muddy Ranch)



Intrusive Rocks, relation to specific extrusive rocks unknown

Basalt plug



Landslide



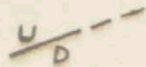
Contact, dashed where inferred or very approximately located (should be dashed at 1:500,000 scale), dotted where concealed by landslide.



Anticline, showing trace of axial plane, dashed where approximately located



Syncline, showing trace of axial plane, dashed where approximately located



Fault, showing relative movement, dashed where inferred