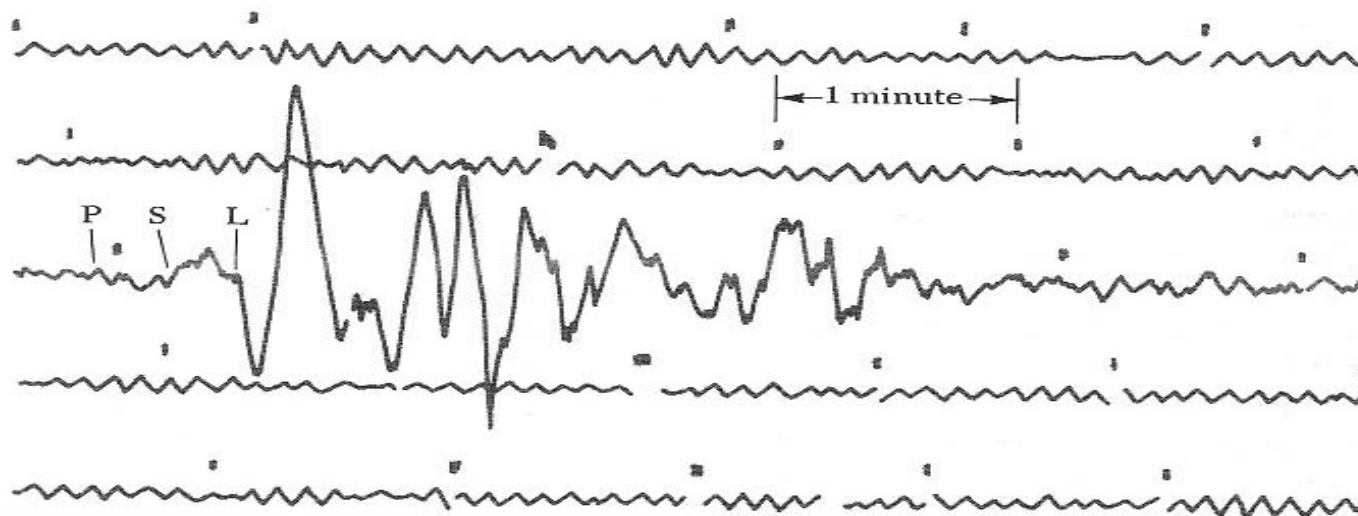# **Assignment For Richter Magnitude** (Homework from Brigham Young University (BYU), Prof. T. L. Youd course notes):

1. Assume that the seismogram below for the Rio Montaro landslide is a true size seismogram recorded by a Wood-Anderson Seismograph. Determine the equivalent Richer magnitude for the seismic disturbance caused by the landslide.

Seismogram showing east-west ground motion at Nana seismographic station, Peru, caused by the Rio Mantaro landslide, 240 kilometers away. The station reader has marked the arrival of the P, S, and surface (L) waves. Time increases from left to right on each trace. (From Earthquakes, by Bruce Bolt, 4th Ed., Chapter 6, Figure 6.1.)

Assignment For Richter Magnitude

2. Assume that the seismograph shown below is at true scale and was recorded by a Wood-Anderson instrument. Determine the approximate Richter magnitude and epicentral distance of the earthquake.

(a)   5 sec