**GG70**

**Lithology:** Schist

**General structure:**  This outcrop is at the top of a line of low cliffs running steeply down the hill to the south. The schist has abundant 1-5 cm thick layers of light gray to brown quartzite. The alternating layers of schist and quartzite appear to be relict bedding. However, the schistosity in adjacent mica-rich layers is penetrative so the main layering is also a tectonic foliation. Additionally, there are numerous dm- to cm-scale upright and shallowly plunging folds of the bedding/schistosity. Several measurements of fold geometries are listed below. On the surface of the foliation, a mineral and stretching lineation is visible and defined by streaks of quartz, white mica flakes, and a tiny black needle-like mineral that could be tourmaline. These lineations are oblique to the hinges of the upright folds and so they have variable orientations depending on which limb of a fold they occur. Several of these lineation measurements are reported below.

**Measurements:** A typical orientation for the bedding/schistosity is strike,dip 037,45. The stretching lineation on this surface has plunge -> trend of 22 -> 183. Three more measurements of this same lineation on different surfaces is (2) 26 -> 193, (3) 10 -> 010, and (4) 53 -> 015. The axial surface of one of the folds has strike,dip of 078,85 and a hinge plunge -> trend of 12 -> 069. A second axial surface has strike,dip of 048,80. Two more hinges have plunge->trend of 19->091 and 18 -> 074.



**Photo 1.** View looking East at schist with numerous folds of the schistosity. This is a fold profile view of the folds (looking down plunge of the hinges) and the pencil on the center left is oriented parallel to the hinges.