

LOCALITY

The portion of Atlin district surveyed during the summer of 1910, as previously mentioned, is a northerly trending belt that extends about equal distances on both sides of Taku arm from the south parallel south to past the upper end of this water, and includes the upper portion of Atlin lake. Since the main physiographic terranes of northern British Columbia trend northwesterly, and Taku arm runs almost due north, the southern portion of the area mapped includes part of the Coast range, while the northern limit reaches well into the Yukon Plateau region (Diag. 2). The transition from the plateau to the mountain portions of Atlin district is very gradual, so much so, that it is, in places, difficult to determine where one ends and the other begins.

The plateau topography is characterized by two striking features, the numerous, irregularly-distributed, wide, deep, steep-walled valleys, and the elevated and in places slightly undulating, inter-valley upland areas. The upland-surfaces in spite of dissection and erosion are in many places extensively preserved, and there, as elsewhere in the Yukon plateau, bear no relation to rock structures, but, instead, the sandstones, shales, granites, schists, limestones, volcanics, etc., have been truncated, regardless of their respective degrees of hardness, structural features, etc. (Fig. 1).

Standing on one of these upland tracts, well back from the edges of any valley-wall, and so situated that his field of vision includes the uplands and not the deeply-trenched valleys, an observer sees these areas as portions of one plain, and it is easy to picture it a continuous undissected surface, as it once probably was. The topography, as seen from such a viewpoint, has but slight relief, and obviously was produced by a long-continued period of erosion, at the end of which a mature to old stage in the physiographic cycle was reached. Nearer the edges of the present depressions, topographic unconformities are everywhere in evidence at the intersection of the abrupt valley-walls with the plateau-surface. Near the lower end of Taku arm the upland is approximately 3,300 feet above the lake level, or 5,460 feet above the sea, and towards the southern end of the arm the plateau-surface is somewhat higher.

Occasional hills rise above the general level, and represent the