

SCHISTS OF UNKNOWN AGE.

East of Fraser river, toward the eastern edge of the Interior Plateau, schistose rocks were encountered whose age cannot be determined without more comprehensive areal work. Such are the mica schists at the muscovite occurrence north of Canim lake (Figure 2, locality 19), the country rock of the claims near Ahbau lake, on Willow river (Figure 1, locality 5), Hixon (Figure 1, locality 4), Government, and Stone creeks (Figure 1, locality 3) and at the silver-lead occurrence at the most northerly bend of Fraser river, northeast of Prince George (Figure 1, locality 1). The country rocks at the claim of W. Harper east of Ahbau lake, at the silver-lead occurrence on Willow river east of Ahbau lake, and on Stone creek, are schistose rocks composed mostly of quartz in rather small grains with a certain amount of colourless mica—muscovite, or sericite, and may be termed quartzite, phyllite, or quartz sericite schist according as the grains of quartz are coarser or finer, or as the proportion of sericite increases. On the silver-lead property of Oscar Eden, at the north bend of Fraser river, the country rock is schist and at the tunnel is a quartz sericite schist which has been much silicified by secondary quartz. At the old workings on Hixon creek there are fine-grained quartzites or phyllites and also andesites and other much altered fine-grained igneous rocks either interbedded with or intrusive into the quartzites. The country rock in the tunnel of C. H. Colgrove, about one-half mile east of Hixon creek, is a quartz sericite schist altered to red clay. Phyllites and quartzites occur near the camp of Donald Cameron on Government creek. The country rock at the tunnel of the Nechako River Mines, Incorporated, on Stone creek, is quartzite and phyllite, and in the creek are boulders of actinolite schist which must outcrop to the east.

The prevailing strike of these rocks is from north 20 degrees west to about northwest with steep dips to the northeast.

CACHE CREEK SERIES.

The Cache Creek series contains the chromite deposit at Scottie creek (Figure 2, locality 35), minor occurrences of gold, nickel, and manganese, and several deposits of residual clay. It is the original source also of the deposits of hydromagnesite and epsom salt. Dawson divided the series into an upper and lower portion and separately mapped these two divisions. In the southern part of the area the Lower Cache Creek outcrops in two long strips 4 to 12 miles wide. One of these strips follows the east side of Fraser valley from Elevenmile creek north of Lillooet, up the river past Kelly creek; the other runs from Clinton, south, along the bottom and the west side of the Bonaparte valley. The same strata were encountered again in the canyon of Fraser river from Chimney Creek bridge to Soda creek, and in Baker canyon west of Quesnel. The country rock containing gold on Hixon creek and silver lead on Willow river resembles the Cache Creek lithologically as do outcrops in the river between Quesnel and Fort George canyon visible from the deck of a steamer. The greater part of this lower portion of the series consists of fine quartzites, siliceous argillites or phyllites, metamorphosed lava flows, schists, and bands of serpentine and limestone, all of them apparently interbedded. The so-called quartzites