

occur in the northeastern part of the area. Dawson¹ described the geology of an area of 6,400 square miles whose northwestern portion includes the southern part of the district here dealt with from Lil'ooet to a point 75 miles northwest. North of the limits of Dawson's sheet the work of the present writer dealt only with small scattered areas of mineral deposits that are in most cases many miles apart. Such facts as were gathered relating to areal geology, are assembled in the following chapter. Time available was not sufficient to permit obtaining a comprehensive and accurate idea of the geological formations underlying the whole district. The table of formations given below is based partly on Dawson's account and is tentative. Except in the case of the Fraser River formation, thicknesses are as given by Dawson for the formations as developed in the southern part of the area.

Table of Formations.

Formation.	Age.	Character.	Maximum thickness in feet.
	Recent and Glacial.	River and talus deposits. White silts. Boulder clay, gravels, sands.	
	Early Pliocene.	Conglomerates, sandstones.	100+
	Later Miocene.	Chiefly basaltic lavas.	3, 100
Fraser River formation.		Bedded gravels, sands, clays with infusorial earth, and lignite.	700+
	Earlier Miocene.	Basalts, andesites, dacites, dacitic tuffs, etc.	5, 300
Coldwater group.	Oligocene.	Conglomerates, shales.	5, 000
	Eocene?	Granite, quartz, diorite.	
Queen Charlotte Islands formation (in part).	Early Cretaceous.	Conglomerates, sandstones, volcanic tuffs.	7, 000
	Jurassic?	Quartz diorite in large batholithic masses, dykes of pegmatite, aplite, etc.	
Cache Creek series.	Devono-Carboniferous.	Upper part—Marble Canyon formation. Limestone with some argillite, quartzite, and igneous rocks. Lower part—quartzites, argillites, altered lavas, schists, some bands of serpentine, and limestones.....	3, 00' 6, 500
	Unknown.	Mica schists, phyllites, etc.	

¹Dawson, G. M., "Report on the area of the Kamloops map-sheet, British Columbia." Geol. Surv., Can., Ann. Rept., vol. VII, pt. B, 1895.