

Other Occurrences.—Of the following minor outcrops the first three are probably referable to the Mount Radiant vein-formation.

On the northern slopes of a lateral spur from Mount Radiant, 25 chains south-east of the Mount Radiant reef, and at an elevation of 3,230 ft.,* is a 10 ft. vein-formation exposed along its strike for 28 ft. The formation shows many points of similarity to that of the Mount Radiant reef—the stockwork nature being evident, and both vein-material and country rock carrying more or less mineral. Molybdenite is very general, while chalcopyrite is frequently associated with it, though usually finely disseminated throughout the vein-stuff, and occasionally appearing in streaks and bunches. Melanconite is common in granular form, and crystals are occasionally seen, while stains of cuprite sometimes appear. A sample of ore gave on assay the following results:—

	Per Cent.
Copper ...	0.92
Molybdenum .	0.23

On Swag Saddle, a quarter of a mile to the north-west of Mount Radiant reef, a well-defined vein appears at an altitude of 3,635 ft.* It strikes south-east with steep north-easterly dip, and has a maximum width of about 30 ft. The vein-material is quartz, generally barren, with the exception of a 4 in. to 6 in. shoot of ore near the foot-wall. Chalcopyrite is present, with a little molybdenite and molybdite. A sample from the ore-shoot assayed—

	Per Cent.
Copper ...	0.51
Molybdenum	0.33

On the open country near the head of Piano Creek, and 16 chains north-west from the last outcrop, at an elevation of 3,500 ft.,* is a small exposure of mineralised quartz, carrying chalcopyrite in bunches, with minor quantities of molybdenite. A sample from this assayed as follows:

	Per Cent.
Copper ...	0.53
Molybdenum	0.09

At the head of Silver Creek, and 20 chains east of the Mount Radiant Trigonometrical Station, at an altitude of 3,500 ft.,* another vein is exposed. This has a width of about 15 ft., with a steep northerly dip, and is traceable along its west-north-westerly strike for 120 ft. The vein-material is quartz, generally of a bluish colour, and usually barren, mineralisation being mainly restricted to a band about 1 ft. wide near the foot-wall. This carries pyrite and chalcopyrite, with a little chalcocite, melanconite, and molybdenite. A general sample gave on assay the following results:—

	Per Cent.
Copper ...	0.34
Molybdenum	0.006

while a sample from the mineralised band gave—

Gold.	Silver.	Copper.	Molybdenum.
1 gr.	8 dwt. 4 gr.	0.78 per cent.	0.03 per cent.

In the right-hand branch of Copper Creek, at an elevation of 2,000 ft.,* a vein is exposed for 500 ft. in horizontal and 280 ft. in vertical extension. It has a north-easterly strike, with steep westerly dip, and has a maximum width of 2 ft. near the bottom, thinning out at the top to mere stringers. Several parallel stringers were noted in places, bringing the total width of the formation up to 20 ft. Occasional bunches of sulphides occur, mostly pyrite and chalcopyrite, with a little bornite, cuprite, and melanconite, but the vein-material is generally barren.

On the ridge, less than a quarter of a mile to the north of this outcrop, a large vein occurs at an elevation of 2,175 ft.* Its strike appears to be about north and south, its width indefinite, but probably exceeding 25 ft. It has somewhat the appearance of a pegmatite dyke, showing a series of parallel quartz stringers with feldspar associated. It is of a barren nature, with the exception of two veinlets, 6 in. and 2 in. in width respectively, which are highly impregnated with chalcopyrite and melanconite. Fragments of mineralised quartz appear on the ridge-top 5 chains to the west of this vein, while in the creek on the other side of the ridge two veins, 2 ft. and 6 in. in width respectively, carry more or less copper mineral.

Indications of copper, in a small stringer carrying a little chalcopyrite, bornite, and malachite, appear in the bed of the Little Wanganui River near the bridge, at an altitude of 890 ft.* above sea-level. Thirty chains to the north-east a 2 ft. vein appears in the bed of Sluice Creek, at an altitude of 1,650 ft.* This is exposed along its strike for 25 ft., but iron-sulphides appear to be the only metallic minerals present. On the eastern slopes of Mount Scarlett, at an elevation of 3,700 ft.* above sea-level, and distant a mile and a half from the river, there is exposed a vein-formation carrying both copper and iron pyrites, with oxidation-products, as well as some molybdenite. Practically no work has been done on this vein, the formation being merely exposed in four places in a distance of 3 chains along its strike. These exposures show it to be a stock-work, with a width of probably about 30 ft., though in no place is this entirely exposed.

* Barometric heights.