

when the roads are improved sufficiently to admit of heavy traffic, but at present nothing but light packing can be done on the track, and that with difficulty.

There will be no necessity for steam-power in any part of the district, for the rivers send down a constant and very considerable supply of water. The fall is great, being 3ft. per chain in the vicinity of the mines, and good machine-sites can be had in plenty.

There is plenty of timber for mining purposes, brown birch chiefly, with an occasional black pine and totara; light birch covers the spurs, and heavy timber, with dense undergrowth, the hollows and slopes.

The hills are very steep, and in all the claims taken up 700ft. or 800ft. of backs can be had to the mines, excepting the Enterprise Reef, which would give, perhaps, 300ft. on the northern boundary.

Nothing came under my notice that would lead me to think other minerals than gold are present in sufficient extent or value to pay for the working. There is coal, galena, and antimony; but nothing like a bed of the one or lodes of the other have been met with. The Owen River is a receptacle for all the rocks and minerals in the district: blocks of granite, quartz, limestone, sandstone, slate, marble, iron ore, rubies, and some gold are to be found in it, and the latter has been worked to some extent, but the immense boulders of granite which exist all along its bed makes the work costly, and it has not hitherto been profitable.

Plan No. 1.—There is a considerable area of land fit for settlement between the Buller and the head of the valley, probably 4,000 acres, which could be leased and occupied so as in no way to interfere with mining; and there is an excellent site for a township on Flower Flat, two miles south of Bulmer Creek.

The line of road laid off by Mr. Jackson, of the Public Works Department, is the best in every way for grade, shortness of route, and economy of construction, and it will open a considerable extent of land for settlement, which the Owen River line would not. About two miles at either end require to be thoroughly made, when traffic could pass over the remainder with a little clearing without difficulty.

The only thing I see against the district is the peculiar disposition of the quartz in the reefs, being in huge masses and not continuous; and I would strongly advocate a system of extended claims, so that in the event of a block being worked out the companies will have others to fall back upon; but, if the other blocks exposed prove, on being opened up, as big as the Enterprise appears to be, I see no reason why they should not be made to pay, for I have never seen lodes that could be worked at so little cost.

The section of the Enterprise as given in this report, supposing it to continue in depth 200ft., would give 500 tons of quartz for every foot in length, and 100ft. along the line of reef would give 50,000 tons in the block, and this could be proved by three months' work, in three shifts, easily. The other blocks on the same reef may be equally as large, but the river has prospected and exposed this to view, and in fact opened a mine.

Ten head of stamps will do more to open this field than all the mining, for it will enable the companies to obtain trial-crushings as the work proceeds. At present to stack quartz without a knowledge of its value might be attended with considerable loss. A road and a battery are necessary before any of the mines can be thoroughly prospected.

The limestone which occurs at the summit of the Bonanza spur covers the whole of that hill to the westward; it appears on Mount Owen, and extends across the gorge of the left-hand branch. I did not go beyond this, but Mr. Bulmer, who has been there informs me that the slate appears again to the westward of the limestone, and that there are outcrops of quartz. I regret that the weather prevented me from examining this.

An extension of the field as at present occupied may be looked for in this direction, and also in a line parallel to the granite, both up and down the valley; but I observed no reefs down the Owen below the left-hand branch, where the rocks change to sandstone.

A few specimens of the rocks accompany this report.

The Chief Surveyor, Nelson.

I have, &c.,

W. C. WRIGHT, Surveyor.

Memorandum.

The Chief Surveyor, Nelson.

WITH reference to that portion of this report describing the reefs and workings of the Wakatu United Quartz-mining Company, I have, since writing it, received a copy of a telegram sent by the Mine Manager to Mr. Reeves, of Nelson, to the following effect: "10th July, 1886.—Just touched reef in top of drive, payable, cannot say more till cut through; it will take a few days." From another source I find this to be correct, and that the reef has been driven through for 10ft. without reaching the hanging-wall. This, in position, corresponds with the No. 5 lode marked on plan, and which is mentioned as likely to pass through the eastern portion of the surface-blocks.

17th July, 1886.

W. C. WRIGHT.

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