

THE CARIBOO SEASON OF 1902

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THE following is a summary of mining operations in Cariboo District during the season of 1902.

The season as a whole has not been a favourable one owing to the great scarcity of water for mining purposes.

In a placer mining country like Cariboo the gold is obtained almost altogether from the immense alluvial deposits of the district as found in the ancient channel systems, the more modern benches and terraces and in the beds of the present rivers, creeks and gulches. To say that these deposits are immense is no exaggeration. The writer knows of many instances in which the gravel banks are over 400 feet in height and several cases in which they are from 600 to 800 feet.

The gold is separated from the gravel by washing with water through flumes, sluices, etc., and a plentiful supply of water is an absolute necessity. As an instance of this it may be stated that the daily water supply of a town of, say, 40,000 inhabitants would be from 100 to 125 miner's inches of water. Such a supply of water would be sufficient to irrigate a good sized ranch or for supplying a drift mine or small open gravel mine, while a large hydraulic mine would take from ten to fifty times as much. When this water supply fails, the output is proportionately decreased, and such was the case in Cariboo last season.

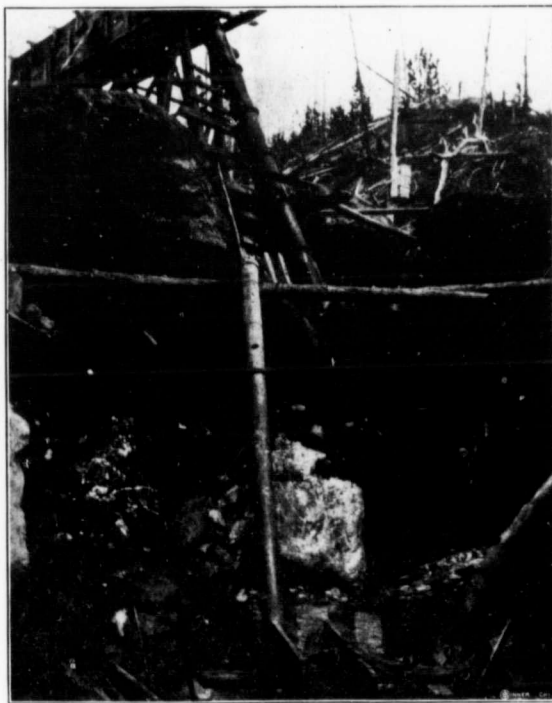
The main source of the water supply is from the annual snowfall, which was unusually light last winter, and this with the long continued warm, dry weather of last summer, causing an unusual amount of evaporation, and the lack of rain to replenish the supply resulted in a record year for drought. This more especially affected the country along the Quesnel River, where it practically stopped active mining operations. Barkerville and vicinity being at a higher elevation, did not suffer so severely.

In Barkerville District the majority of the mines

operate with a supply of water lasting about three months, and with this partial supply of water they have an annual output of from \$4,000 to \$20,000 or more for each in the case of hydraulic and much higher results in the case of drift mines working upon the rich old channel deposits of the country.

The Cariboo Gold Fields, Ltd., operating upon Williams Creek just below the town of Barkerville had a fairly successful year. The work was more or less of an experiment, practically prospecting work to test their ground, which consists of a top deposit of tailings from Williams Creek underlaid by the older and richer deposits of the creek which have

been partially worked by the drift mines of the earlier days. This mine was opened at first by a water elevating plant, which did not work satisfactorily, mainly because of the wear in machinery and the great hoister. They then installed a new plant of the bucket elevator type, which was successfully operated last season. The power is furnished by a 24-inch Pelton wheel with a head of about 460 feet. The chain of buckets is 246 feet in length and carries 82 buckets of two and a half yards capacity each, and it has a capacity of 2,000 cubic yds. in 24 hours. The gravel in the pit, by means of monitors, is washed to a central hopper over a grizzly which screens the large stones, which are hoisted separately



Elevator Pit, Omineca.

to the surface. The finer material is taken to the surface by the elevator, passes over grizzlies, screens, etc., and is treated on tables, etc., to recover the gold. The hoist is about 100 feet.

The Mount claim, also on Williams Creek, have this season installed an hydraulic plant which worked very satisfactorily and the claim is likely to be a good dividend payer in the future.

On Stout's Gulch, which is a tributary of Williams Creek, the Butts and Wintrip claims, both hydraulics, worked very successfully during the season and paid good dividends.

The Cariboo Consolidated, Limited, operating on Lowhee Creek, have done well this season. To insure a full supply of water for the whole season this