

ASHCROFT MINING DIVISION

Criss Creek

A little placer mining was done near the mouth of Criss Creek, a tributary of Deadman River, but was abandoned after one season's work (Dawson, 1887-88, part R, page 135). A sample concentrated from the gravels in a pit at the junction of Criss Creek and Deadman River was submitted to the Dominion Assay Office by Mr. Charles Camsell in 1918, and assayed 12.24 ounces of gold and 0.12 ounce of platinum a ton of 2,000 pounds of concentrates.

YALE MINING DIVISION

Coquihalla Area

Placer gold and some platinum have long been known to occur in the gravels of Coquihalla River and some of its tributaries. Gold colours can be obtained by panning the gravels or sand of the Coquihalla at almost any place below Ladner, and some coarse gold and platinum nuggets have been found on bedrock. Information concerning platinum has been derived principally from placer operations on Sowaqua Creek, which drains into Coquihalla River $1\frac{1}{2}$ miles below Jessica. Captain J. D. Fullbrook and associates, of New Westminster, were working on a series of low benches in 1923 and had sunk two shallow shafts. The following tests were made by the Resident Engineer in December, 1923 (B.C., 1923, page 163).

"No. 1 Test. Ground sluice on No. 3 lease ($\frac{1}{4}$ yard put through rocker): riffle concentrates, 19 cents a yard in gold; blanket concentrates, 16.6 cents a yard in gold, and 1.1 cents in platinum; total value of gravel 36.7 cents a yard.

"No. 2 Test. Windlass shaft on right side of creek on bench ($\frac{1}{8}$ yard put through rocker): riffle concentrates 13.3 cents a yard in gold and 0.6 cent in platinum; blanket concentrates, 437 cents a yard in gold, 1.3 cents in silver, and 1.3 cents in platinum; total value 453.5 cents a yard.

"No. 3 Test. From 10-foot shaft near left bank of creek ($\frac{1}{4}$ yard put through rocker): all concentrates together, 2.4 cents a yard in gold.

"In making the above tests it was assumed that, for every yard of material such as was handled above, half a yard exists as boulders."

Considerably higher values, reported by the owners, are given in the same report. In 1929 C. E. Cairnes (1929, page 174) reported that exploration work on the property included three or more shafts, a number of shallow pits, and some surface sluicing. These operations were reported to have yielded some \$4,400 in gold and \$600 in platinum. The deepest shaft had been sunk for 60 feet below the water-level of Sowaqua Creek without reaching bedrock. Values were reported to be encouraging, but sufficient testing to indicate the possibilities of the property had not been carried out, although Cairnes was of the opinion that a careful program of boring and sampling was justified. The placer gold and platinum are believed to have been derived by concentration of glacial debris that contained some values in these metals, but the original source may have been in rocks drained by

Sowaqua Creek. This stream cuts across the so-called "Serpentine Belt" of the district which includes sill-like masses of serpentized peridotite or olivine-rich pyroxenite. This rock contains disseminated magnetite, chromite, and nickeliforous silicates, but the few tests that have been made have not revealed any platinum. Chromite may occur in segregations in it and it is possible that platinum may be present either in the rock or, if segregations of chromite do occur, in association with that mineral.

SIMILKAMEEN MINING DIVISION

Tulameen District

History

Placer gold was discovered in upper Similkameen River, near the mouth of the Tulameen, in 1860. It was soon recognized that platinum occurred with the gold, but no attempt was made to save it and no important developments took place until 1885. In August of that year coarse gold was discovered in the bed of Granite Creek and a rush ensued. Eighteen hundred and eighty-six saw great activity on the Tulameen and its tributaries and during that year \$193,000 in gold and platinum was won from the gravels, the greatest production the district has ever achieved. Although some platinum was saved in these and earlier years the production of this metal was not recorded officially until 1887 when 2,000 ounces valued at \$5,600 are noted, along with \$118,000 of gold. Gold production waned rapidly in the following years, but platinum to amounts between 1,000 and 2,000 ounces was saved annually until 1891. Since then the productivity of the area has gradually fallen. Some work has been done every year, however, and there have been several attempts at large scale hydraulic operations, but it cannot be said that any of these were very successful.

G. M. Dawson (1877-78, part B, pages 50, 156) contributed the first geological notes on the area, but these, apparently, were not the result of personal examination. In 1888, however, he visited the Tulameen and discussed the placer deposits (1887-88, page 62). In 1900 J. F. Kemp spent three months investigating the platinum resources of the district and in 1902 published his results in Bulletin 193 of the United States Geological Survey. Camsell (1913) spent two seasons (1909 and 1910) studying the geology and mineral deposits and his report is the last complete one on the area. In 1918 bench and river gravels along Tulameen River were tested by the Munition Resources Commission, Canada (1920), under the direction of Mr. G. C. Mackenzie, and during the same year Eugene Poitevin investigated the ultrabasic intrusives of the area (1923). Additional information is contained in the Annual Reports of the British Columbia Minister of Mines.

General Character of the District

Tulameen district lies at the western border of the Interior Plateau of British Columbia and exhibits the physical features common to much of the border belt of the plateau. Immediately west, the rugged Hope Mountains rise to heights of over 7,500 feet. Within the district, plateau features are preserved, however, in the form of broadly rounded summits that, viewed from a higher peak, present an almost level, rolling skyline. The valleys,