921/2W Extracts 921-6

Zeballos, B. C.

June 23rd, 1939.

"Сору"

R. Campbell, Esq., c/o Tagore Mines Limited, Zeballos. B. C.

The current workings consist of a 6 x 12 foot shaft; sunk to a depth of 65 feet below bed-rock and 25 feet of tunneling at the lower level of the shaft (see accompanying sketch).

The shaft is sunk on a well-defined quartz filled fissure; striking southwest and dipping from vertical to 84 degrees north-westerly. The fissure in vertical section varies from 2 inches in the upper 30 feet of the shaft, where it penetrates limestone, to 18 inches in the more competent sections of volcanics below. The average width is about 5 inches.

Sulphide mineralization consists of pyrrhotite, pyrite, and lesser amounts of chalcopyrite, sphalerite and galena.

Gold is visible in many hand specimens and occurs both associated with the sulphides and in the quartz gangue.

The only gangue minerals appear to be quartz and rare amounts of calcite. The quartz is very white and varies in granularity from aphanitic to phaneric, in which case a comb texture results.

Mineralization appears to be concentrated by changes in dip. A kidney in the shaft at "Collar plus 43 feet" gave 18.88 ounces of gold and 10.12 ounces of silver across a width of 1.5 feet, while 2.68 ounces of gold across 5 inches was obtained at the bottom of the shaft where the dip is more nearly vertical.

Immediately northeast of the present shaft the vein had been developed by an old shaft to a depth of 15 feet.

- 2 -It has been unofficially reported that extremely high-grade ore was taken from this section. Mines Limited made a shipment of 2,900 pounds of ore which gave smelter returns of 2.35 ounches of gold a ton. Unfortunately the collar of this shaft is below the high water level of the Zeballos River, so that further development in a northeasterly direction must be carried on from the lower level of the new shaft. An extremely interesting vein, called the Campbell vein, was intersected 20 feet northeasterly from the shaft (see accompanying sketch) while crosscutting. This vein occupies a strong shear which strikes south 80 degrees west and dips 78 degrees northerly. The vein filling consists of crushed, leached rock, talcose gouge, calcite and friable quartz, with heavy aggregates of sulphides, pyrrhotite, pyrite, sphalerite and minor amounts of chalcopyrite and galena. A channel sample across 3 feet on this vein gave 0.74 ounces in gold. Recommendations: -By referring to the accompanying sketch it may be noted that the Shaft Vein appears to pinch out near the Campbell vein, but has been picked up beyond the intersection and is increasing in width. It would be advisable to drift northeasterly about 20 feet on this vein to see if it regains its normal size. Further drifting in this direction is not advisable at the present depth of the shaft, as it means crossing under the Zeballos River and appreciable backs would not be possible in the flat country which lies north-east of the river. 2. Drift westerly on the Campbell vein for 125 feet. 3. Drift southwesterly on the Shaft vein for 125 feet. W. A. Lammers, Geological Engineer in Training.

