

of gold and 3,116 ozs. of silver have been saved theoretically although the actual results, which are not yet obtainable, will undoubtedly be considerably less.

The operation of cyaniding has naturally been attended at the outset with many minor difficulties, and the average cost per ton of the tailings treated, viz., \$0.63, is high, and should still be reduced.

Ore in Sight.—In calculating the amount of ore blocked out, 11 cubic feet have been taken as equivalent to one ton of 2,000 lbs.

	Ore in sight. Tons.
Between the surface and No. 1 level.....	100
Level Nos. 1 and 2	6,400
Levels Nos. 2 and 3	32,540
Levels Nos. 3 and 4	41,152
Levels Nos. 4 and 5	26,116

Total amount of ore blocked out..... 106,368

In calculating the above mentioned quantities, an allowance of from 10 per cent. to 30 per cent. has been made for the waste or poor rock, which should be eliminated from the ore before being sent to the mill.

The ore blocked out can safely be computed to have a value of \$7.50 per ton, and should, by the aid of further development work at No. 6 level, and possibly also at No. 7 level, be considerably augmented, although it cannot be denied that the work done at Nos. 4 and 5 levels points to a shortening of the chute in depth, but whether this is of local occurrence or not future developments must show.

Value of the Ore.—The average gross value of the metals recovered has fallen from \$11.94 in 1899 to \$6.84 per ton during 1902. This decrease in values was rendered more apparent than real by the extraction and shipment to smelters during 1899 of a considerable quantity of rich carbonates and crude ores. At the same time it cannot be denied that a lower grade of ore is being worked than hitherto.

During the past six months the falling off in the values has been most marked, and this may be partly attributed to the milling of ore from Nos. 5, 6, and 7 levels without any previous assorting thereof, for it is plain from the sampling that the whole of the vein as mined will not pay to treat.

The importance of sampling is demonstrated by that done for the purpose of the present investigation. Not only does a "horse" of slate exist in the centre of the ore body at No. 4 level, but that for the most part the ore on the hanging wall is much poorer than that on the foot wall side of the vein.

With the observance of greater care in mining much of the poor and sterile rock in the ore could be prevented from being sent to the mill as at present, and so maintain an average value of at least \$7.50 per ton in the ore milled.

Working Costs.—The expenses per ton milled during the past six months were higher than those in the previous year. This is, to a great extent, due to the lessened output, but the figures are also swelled by the construction and operation of the cyanide plant, as well as by the increased amount of development work accomplished. At the same time, owing to the natural advantages for working the property economically, the actual costs of mining and milling are still low, and will compare favourably with other mines working under similar conditions.

Conclusions.—It is obvious that the bold policy which was adopted in concentrating almost all the available time and capital towards the cutting of the vein at the 1,000 feet or No. 10 level, and thereby neglecting the development of the ore body step by step in a downward direction, has failed in its object, for the single reason that where intersected the vein was not payable. However, much valuable information has been gained, and the management will soon be able, by the connection of the Ymir shaft to No. 10 level, to secure, what is most important, good ventilation, besides doing away with the expense of pumping.

The proved continuity of the vein in depth, and so highly mineralised, is undoubtedly a favourable feature, and engenders confidence for a recurrence of the gold and silver values, although this is a fact which only further development can demonstrate.

This development should primarily consist of the following work, viz.:

- (1) To continue the work of upraising from level No. 10 to connect with Ymir shaft.
- (2) To continue driving level No. 10 to the east.

(3) The extension of Levels Nos. 6 and 7 to the west as well as to the east.

LILLOOET FRASER RIVER AND CARIBOO GOLDFIELDS (LTD.)

At an extraordinary general meeting of the members of the Lillooet Fraser River and Cariboo Goldfields (Limited) held on Wednesday at College Hill Chambers, College Hill, E.C., a resolution for the voluntary winding up of the company, passed at the extraordinary general meeting held on August 6 last, was confirmed. It was stated that from the amount in hand a first dividend of 5s. or 5s. 6d. would be paid about November, and that the final dividend would depend upon the realization of some small properties owned by the company in British Columbia.

3 per cent.

MINING RETURNS AND STATISTICS.

CARIBOO.

THE gold output for the Quesnel Forks division of Cariboo will not, it is reported, be as large as was expected, owing to a shortage of water by hydraulicing, but in the Barkerville section the results of the season's work are reported as best for many years.

It is reported officially on behalf of the management of the Cariboo Consolidated Hydraulic Mining Company, that recent partial clean-ups of the gravels on the property of the undertaking have realized 405 ounces of gold in all, 115 of these coming from the well known Ah Quay claim.

ATLIN.

The opinion is expressed that the gold output from this district this year will exceed that of last season, the value of the yield being estimated at approximately \$500,000.

YUKON.

A despatch from Dawson City states that the August gold exports bring the Yukon shipments for the season to the total of \$8,060,000, in round figures. It is expected the grand total for the season will reach approximately \$10,000,000. This is the last month in which heavy exports of gold are likely to be made. However, if the season should remain mild, shipments may be made the first two weeks of October.

BOUNDARY DISTRICT.

The following table gives ore shipments from this district for the year 1902 to the week ending September 27.

	Tons.
Granby Mines, Phoenix	230,401
Snowshoe, "	6,448
Mother Lode, Deadwood	84,268
Sunset, "	4,520
B. C. Mine, Summit	4,658
Emma, "	16,117
Winnipeg, Wellington	785
Golden Crown, "	625
No. 7 Mine, Central	482
Jewel, Long Lake	2,175
Providence, Providence	43
Total, tons	336,989
Granby Smelter treatment, tons	217,610

ROSSLAND.

Our Rossland correspondent telegraphs on Sept. 27th: Shipments from August 24th to date (inclusive) are: Le Roi, 19,545 tons; Le Roi No. 2, 5,562 tons; Centre Star, 7,322 tons; War Eagle, 4,686 tons; Giant, 895; Velvet, 300 tons. Production for the year to date aggregates 241,544 tons.

The Rossland Daily World publishes the following table of 1902 shipments to September 20th:—

	Tons.
Le Roi	165,835
Le Roi No. 2	47,694
Centre Star	11,148
War Eagle	4,201
Great Western	2,315
Giant	2,149
Velvet	750
Cascade	306
Bonanza	60
Kootenay	50
Spitzee	20
White Bear	20
Total	233,523