

319 ft.; and the average costs per lineal foot have been: drifting \$9.15; cross-cutting, \$6.77; sinking, \$13.31, and upraising, \$11.59.

The costs of stoping are also very small, being only an average of \$1.359 per ton, for stoping and raising to the surface, which of course includes timbering, supplies, etc.

The following table gives the costs which can be charged against the ore, and their total amounts to the small sum of \$2.173 per ton of ore, shipped.

Stoping.....	\$1.359 per ton.
Proportion for exploration.....	.499 "
Surface work.....	.124 "
Ore sorting.....	.041 "
Transporting to railway.....	.15 "
Total.....	\$2.173 per ton.

The total tonnage delivered to the smelter during the year has been 21,565½ tons, of which 20,65½ tons was first-class ore, and 577 tons copper-bearing schists. Of the ore 2,930 tons was sent from the dump, and 17,75½ tons from the mine.

The only test of values, besides the actual smelter test has been a number of assays taken from the roast piles during the last three months, and the average of these has been; copper, 5 per cent; silver, 3.2 oz.; and gold, .15 oz.

This grade of ore has been secured by mixing all grades from the highest to the lowest, and thus instead of following up the rich ore and taking it out, and being then left with a very large proportion of low-grade ore, it is possible, by mixing the ore, to work the mine more economically, and thus to get a greater profit on the low-grade ore than could be done if it were taken out and shipped separately. By this method the ore is broken out from wall to wall, and while the absolute waste is eliminated on the sorting belt, all the ore is shipped.

COMPANY NOTES.

Costs of Aerial Transmission at the Tyee Mine.—Mr. E. C. Musgrave, Superintendent of the Tyee Mine, Mount Sicker, B.C., gives in his annual report to the shareholders some particulars of the aerial tramway installed last September. It is a double-rope system, and consists of a standing cable 1 in. diameter on the loaded side and ¾ in. diameter on the light side; and a hauling cable ¾ in. diameter, supported on fifty-two derricks or towers. There are fifty-four buckets, each having a capacity of half a ton, which travel on small trolleys on the standing cable, and are fastened to the hauling cable at regular intervals. The tramway works practically by gravity, receiving only a small amount of assistance from a small engine at the upper terminal. The buckets, after being dumped automatically at the lower terminal, travel up to the mine inverted, to prevent their getting filled with snow or rain, and at the upper terminal are righted and locked automatically; then go round the terminal, and take their load automatically, and without stopping. The costs of transporting the ore from the mine to the railway, a distance of 3½ miles has been 15 cents per ton, which includes all working expenses, repairs, and loading it on to the railway cars. This works out at 4½ cents per ton per mile.

Velvet Rossland.—The manager cables:—"Have received the following returns from smelters, namely:—187 tons first-class ore yielded 197 ozs. gold, 8,706 lbs. copper; net returns from smelters, \$3,750 or an average of £4 2s. 10d. per ton. 46 tons 'fines' yielded 17 ozs. gold, 2,250 lbs. copper; net returns from smelters, \$292, or an average of £1 6s. 3d. per ton."

Le Roi No. 2.—The following report has been received from the mine manager for the month of May:—"Josie Mine; 500 ft. level.—Instead of drifting we widened out towards the footwall, following the streak of ore hitherto left behind on account of its low values.—It has proved much better than anticipated. 300 ft. level.—13 ft. were driven, and we again broke through, for the second time, into the main drift, nothing but stringers being encountered. In an eastward direction 18 ft. were driven; but the ore there pinched out, and we abandoned the drift. We raised on a good showing of ore about 9 ft. west of our cross-cut. Here we got occasionally very good assays, but the ore was broken up, and we had to abandon this also. (Height of rise, 22 ft. above sill floor.) 700 ft. level.—96 ft. were driven on route of diamond-drill hole No. 27, with a view to undercut Annie No. 3 ore body. 500 ft. level.—Hanging-wall drift driven 18 ft. Some good values were encountered, but average grade of ore is second-class. Diamond-drill work.—Hole No. 27 advanced from 243 ft. to 363½ ft. but nothing met with. 900 ft. level.—Hole No. 28 run 270 ft. Nothing met with so far. No. 1 mine, 200 ft. level, west drift—20 ft. were driven. There were occasional good showings of ore, but they were hardly so good as anticipated. East drift—17 ft. were driven to meet west drift. About 5 ft. of this were in ore of milling grade. This is now spoken of as stope 11. We widened out on footwall side about 3 ft., where a streak of mixed ore occurred. 300 ft. level.—The cross-cut shown on plan v is driven 11 ft. in very good ore. Ore production.—Ore has been taken from the stopes in the following proportions: Josie Mine: Stope 19, 300 ft. level, 558 tons; stope 20, 500 ft. level, 1,845 tons; stope 5, 400 ft. level, 354 tons; stope 6, 600 ft. level, 203 tons; stope 11, 700 ft. level, 175 tons; total, 3,135 tons. No. 1: Stope 10, 200 ft. level, 26 tons; stope 11, 200 ft. level, 137 tons; stope 2a, 200 ft. level, 66 tons; stope 4, 300 ft. level, 487 tons; stope 5, 300 ft. level, 12 tons; total, 728 tons; total, Josie Mine and No. 1 Mine 3,863 tons. General remarks on above stopes: Josie: Stope 19.—Back of this stope has again become badly

broken up; ore penetrating into dyke on third floor. Stope 20.—This is very good, and has improved greatly during last month. Stope 5.—We stopped shipping from here early on in the month; there is a large tonnage of ore broken, which we can draw from at any time. Stope 11.—We have also stopped shipments from here as value became very low grade. No. 1 Mine: Stope 4 is giving very good ore; another streak has been found in footwall giving very high values, and we are now following this up. Cross-cut previously mentioned is very good-looking stuff, and promises to be an important find."

Cariboo Consolidated.—The following report has been received by the secretary of the company, dated 25th May, from the resident manager: "I am very glad to be able to give you most encouraging information in regard to the Lightning Creek work. In sinking borehole No. 4 we encountered highly auriferous gravel having a thickness of about three feet immediately above the bedrock. The total depth of this hole to bedrock was 129 ft. In this strata of gravel we recovered between four and five hundred small colours or fine particles of gold, the largest being a flake about 1-16 in. square. As this gold is forced from the bottom to the surface through a three-inch pipe by a small stream of water, it is, of course, impossible to secure heavier colours, the velocity of the water not being sufficient to do this. It is a most remarkable showing under the circumstances, and proves that the ground we propose drifting is very rich. We are now preparing to sink borehole No. 5, distant 100 ft. from borehole No. 4, towards the south rim. In this hole we will endeavour to secure heavier gold by means of a pipe fitted with a valve in end of same, acting as a sandpump. This borehole No. 4 was the first hole in which we have struck gravel on the bedrock, showing that we must now be into the channel. By next mail I will send you the cross section developed to date, of this Lightning Creek Channel."

POGSON, PELOUBET & CO.

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Sale of Valuable Zinc Mine IN CANADA

Pursuant to the order of the High Court of Justice, for the winding up of the Grand Calumet Mining Company, there will be offered for sale by Public Auction at the Local Master's Office, in the Court House, in the City of Ottawa, in the Dominion of Canada,

On the Sixth day of October, 1903,

AT 2.30 P.M.

Mining Location 30 T, in the District of Thunder Bay, in the Province of Ontario, containing 160 acres, and known as "The Zenith Zinc Mine." The property is about twelve miles from Rossport Station on the C. P. Railway. A considerable amount of development has been done, and about 2,000 tons of ore have been extracted.

The property will be offered for sale subject to a reserve bid, and to a royalty of \$3.00 per ton on all ore to be mined thereon. With it will be put up for sale, a quantity of mining plant and machinery, consisting of engine, derricks, cables, drills, carpenter's tools, blacksmith's tools, bar steel and iron, rope, saws, stoves, &c.

A detailed inventory of the chattels, an expert analysis of the ore, and any other information may be obtained from the liquidator.

Ten per cent. of the purchase money must be paid at the time of sale, and the balance in thirty days.

Dated the 13th day of June, 1903.

E. A. LARMONTH,
Liquidator,
48 Elgin St., Ottawa, Canada.

W. L. SCOTT,
Local Master
at Ottawa.