

month 80 stamps ran 706 hours (29 days 10 hours). Estimated profit on operating is \$26,900 (£5,480).

LE ROI.—The manager cables:—"Smelter treated 10,500 tons of ore during month of August. Estimated value \$150,000, matte shipped \$130,000. We are now shipping 80 tons per day dump ore to the smelting works at Trail. Expect to have plenty of men within two weeks from this date to commence shipments from the mine."

HALL MINING AND SMELTING CO.—Output of smelting ore from the Silver King for four-weekly period ending 26th August, 2,586 tons, averaging 21.62 ounces silver and 4.75 per cent. copper.

KOOTENAY MINING COMPANY MANAGER'S REPORT.

The following is the Mine Manager's report on development work to June 30th:

"On assuming charge of this property as General Manager in December, 1899, I found the vein had been developed by five adit tunnels, known as Nos. 2, 3, 4, 5 and 6. These were driven on the vein for various lengths, ranging from 260 feet up to 1,200 feet. The vein being wide, these tunnels were driven within it, without any attempt being made to locate the ore bodies. However, in Nos. 2, 3 and 4 tunnels good ore is exposed. In No. 3 tunnel considerable stopping has been done by the original owners, and the openings made exposed a very extensive body of ore. A general sampling of this ore body, however, showed that, taken as a whole, it was low grade, my average samples indicating that an average value of \$9 per ton would be about the average grade of the ore if stoped out in its entirety. At this time the Le Roi smelter at Northport had not sufficient capacity to handle any ore in addition to that produced by the Le Roi mine. The custom rates charged at Trail and elsewhere would have left no margin of profit over the cost of mining and smelting. Owing to these conditions, it was decided that the vein should be developed to considerable depth in the hope of finding higher grade ore bodies, on the downward extension of the ore body already developed. Accordingly, in No. 6 tunnel, which is driven on the vein at a depth of 600 feet below its outcrop, at a point about 1,000 feet from its portal, a station was cut, and a three-compartment shaft sunk on the vein. It was hoped that the vein, which had been practically vertical from its outcrop down to the No. 6 tunnel, would at some point immediately below this tunnel, assume the regular dip of the other veins in the camp, in which event it was expected that as soon as it would do this a higher grade of ore would make in it. The shaft, however, had been sunk to the vertical depth of 600 feet, for which depth it continued in vein matter, which showed no signs of assuming the normal dip of pay-ore shoots elsewhere in the camp. However, at the bottom this shaft had attained a depth of 1,200 feet below the outcrop of the vein, it was decided to prospect the vein thoroughly to this depth without going any deeper. Therefore stations were cut in the shaft at depths of 400 feet and 600 feet below No. 6 tunnel, and drives have been started along the vein at these levels. In order to prospect the vein thoroughly, it is the intention to continue these tunnels westward in the vein, crosscutting to both walls at intervals of 200 feet, to locate whatever pay-ore bodies exist in the vein. The Spokane Falls and Northern Railway Company is prepared to extend a branch line to the mouth of the No. 6 tunnel as soon as we have sufficient ore in sight, and of such grade as will warrant the commencement of regular shipments. Having no smelting facilities for the treatment of this ore to date, the work of blocking out the ore bodies occurring in Nos. 3 and 4 tunnels, and preparing them for stoping has been postponed to allow the concentration of the mining force on deeper development, which has been carried on in the vertical shaft and the workings therefrom.

"Character and extent of workings:—Tunnelling and driving, 7,280 feet; crosscutting, 2,155 feet; raising, 1,199 feet; shafting, 600 feet; total, 11,234 feet.

"In detail these workings are classed as follows: No. 2 adit tunnel drive—Tunnelling 270 feet. No. 3 adit tunnel drive—Tunnelling, 1,590 feet; crosscutting, 470 feet; raising, 241 feet. No. 4 adit tunnel drive—Tunnelling, 1,920 feet; crosscutting, 540 feet; raising, 340 feet. No. 5 adit tunnel drive—Tunnelling, 1,280 feet; crosscutting 270 feet; raising 288 feet. No. 6 adit tunnel drive—Tunnelling, 1,680 feet; crosscutting, 875 feet; raising, 340 feet. Below No. 6 adit tunnel—three-compartment shaft—600 feet. 400-ft. level below No. 6 adit tunnel—Driving, 370 feet. 600-ft. level, below No. 6 adit tunnel—Driving, 170 feet; total, 11,234 feet.

"I regret to report that the result, so far, of the development work above described, has not been as encouraging as expected. It is hoped that the downward continuation of the ore bodies developed in the upper levels will be found in the deeper workings, and since the westward extension of the 600-ft level in the vertical shaft should cut the downward continuation or the ore shoots at the depth of 1200 feet below the outcrop of the vein on the surface, the ore body found at this depth would show sufficient dimensions to warrant an output at the rate of 1,200 to 1,500 tons daily, on which basis a small per tonnage profit would mean a large profit in the aggregate. If in position to guarantee an output of this kind, the Company could secure favourable rates for transportation and for smelting, and the profit on the ore correspondingly increased. At the

present time, the development, although extensive, has not reached a stage sufficient to warrant me in speaking with the degree of confidence I would like on the probability of finding the ore hoped for. Nevertheless, it is quite probable that the downward continuation of the large body of pay ore already developed in the upper workings will be found in the deeper levels when extended farther to the westward. If the ore shoot is developed in the deeper workings the mine will be in shape to begin a large and regular output; but until such time as the ore shoots are thus developed, it would not be possible to make rates for the mining and transportation of the ore from the property that would leave any considerable profit to the Company."

THE KITCHENER HEMATITE ORES.

WE are indebted to Mr. William Blakemore for the following analyses made at the Canadian Smelting Works laboratory. Trail, of samples of hematite iron ores from the occurrences at Kitchener, the acquisition of which by a Montreal syndicate has occasioned much interest.

Assays of Hematite iron ore, samples from Kitchener, B.C., made at the Canadian Smelter, Trail.

Claim.	Iron.	Silica.	Sulp.	Phos.
Rhodesia	60.5203
Rhodesia	24.2	63.2
Cynic	56.2	17.2	0.15	.01
Dakota	52.4	23.5	trace.	..
Rhodesia	36.1	46.8	.05	..
Dakota	56.3	16.7	trace.	..
Rhodesia	34.0	50.0	.05	..
Atlantic	47.2	30.1	.04	..
Idaho	64.0	6.2	.08	..
Cymric	45.4	33.0	trace.	..
Maple Leaf	64.0	6.2	.05	..
Rhodesia	58.5	11.8	.05	..
Dakota	52.3	23.5	.15	.02
Agnes	52.6	12.0	.03	nil
Niagara	59.4	12.6	.08	nil
Union Jack	44.5	35.0	.02	.02
Maple Leaf	64.0	5.7	.01	.06
Golden Cap	64.0	6.0	.03	.02
Union Jack	48.4	30.6	.03	.03
Rhodesia	32.4	52.4	.15	nil
Orey	62.3	5.6	.03	trace
Golden Flag	52.0	26.0	.03	nil
Maple Leaf	66.4	2.2	.07	trace
Maple Leaf	62.7	6.0	.05	.03
	1258.18	521.3	1.15	
Average	52.4	22.6	.05	.018
WHITE IRON.				
South	45.0	32.0
Idaho	43.8	33.8	1.21	.02
Idaho	43.5	33.0	1.17	.02
NOTE—The twelve best samples give:				
	61.4	8.6	.05	.010
Other samples gave	66.2	1.6	.03	nil
	66.7	1.0	.03	nil
	92.8	6.6	.04	nil

THE METAL MARKET.

THE market during the month has been nearly featureless, prices fluctuating within very narrow limits. Silver remains fairly stationary at from 58 1/8 to 58 3/8c. in New York. The average price of silver last month was 58.37.

COPPER

The consumption of copper in the United States continues good while the demand from abroad has also lately improved. American manufacturing are sold well ahead with finished material, and there is a disposition to cover copper requirements for some time to come. Lake copper is quoted in New York at from 16 1/2 @ 16 3/8, electrolytic in cakes, bars or ingots, 16 1/4; calliodes, 16, and casting copper, 15 3/4. The New York *Engineering and Mining Journal*, commenting on the discussion occasioned by the publication of a statement that the United Metals Selling Company was carrying extraordinarily large stocks of copper, which must sooner or later come on the market and break prices, remarks that it does not appear that this statement is made on any competent authority, or that any special importance should be attached to it. The United Company necessarily carries at all times large stocks, both in course of refining and ready for shipment. The quantity varies from time to time, but does not appear to be at present unusually large, nor has there been any accumulation of copper which need excite