SPECIAL CORRESPONDENCE

PORCUPINE AND KIRKLAND LAKE

Dome.—The December returns for the Dome Mining Company, now officially made, complete the record for the year. The total for the twelve months of 1915 show that the Dome produced $1,468,272. The average grade for the year was $4.56 per ton. The recent grade during the last six months has considerably exceeded this, since ore has been mined from the new and higher grade orebody. It is a fact, however, of importance, that 70 to 71 per cent. of the total ore is still coming from the original Dome or Glory Hole. The mill and mine will not be in good shape to handle this new ore for a month or six weeks yet. After that it is probable that the grade will be slightly increased, though there is not any intention to use the higher grade of the ore to force production. Tonnage treated during the year was 317,873. The last month's crushing of 30,120 tons was considerably more than 21,000 tons higher than of any previous monthly period. Bullion produced had not a corresponding increase, it being less than $1,000 higher than in November. The production for the month of December was 30,120 tons milled, value $160,950.70, with an average per ton of $5.34.

The production this month will show a considerable increase as the new Hardinge mill has been installed. The manufacturers fully expect that the ball mill will treat over 300 tons a day, but it is not to be anticipated that it will reach this maximum until some months of trial. The ball mill is of the eight foot, thirty-inch type and has been installed alongside the stamps and will do almost the same work. Two more pachuca tanks have also been installed. These are nine feet in diameter instead of eight feet. The two extra sand tanks and Dorr Thickeners will be of the same size. It is the intention of the management to install more ball mills as the opportunity occurs and it is desired to still further raise tonnage. At the Dome and in the Porcupine Camp generally it is believed that the ball mills will handle Porcupine ore under certain conditions better than the stamps, therefore, not only will ball mills be introduced to take care of further tonnage, but as stamps are worn out they will be replaced by ball mills.

Excellent progress is being made with the new central shaft at the Dome. Raises have now been holed through from the 600 foot to the surface and it is confidently expected that the new shaft will be completed and ready for use before the date it was determined, namely, the first of March. Cross cuts from the present working shaft to the new central shaft have been opened up and a considerable body of ore indicated by diamond drilling, but not before actually put in sight. This orebody is 40 feet wide and 200 feet long as at present determined.

Hollinger.—The Hollinger production for the 12th period of the big mine in 1915 easily broke all records. The production of $210,558 gross profits was not less than $25,790 more than at any previous period of the Hollinger history. This very considerable increase was due to the fact that over 1,000 tons more ore was crushed and also that the grade was better by 65 cents a ton. Both mining and milling costs were higher, but general costs were lower, so that the total costs for the period ending December 2nd were $3,522, in which we include 0.882 milling costs per ton and 1.982 mining costs per ton. It is to be remarked that the total costs for the past seven periods average $3,574 a ton, whereas the average grade was $9,645 a ton, leaving a profit per ton of $6,701.

In the long cross-cut which is being run to connect the new central shaft with the shaft which is being sunk on the Gillies claim near the Vipond boundary, two promising veins have already been cut. As these veins were not previously on any Hollinger charts they give promise of yielding an increase in ore reserves above any estimate. The completion of the cross-cut will take much time as it is a distance of 2,500 feet between points and only one drill is operating in the face.

The McIntyre-Extension shaft has now reached the thousand-foot level, a depth only attained by one other company in the Porcupine. From it, it is proposed to carry on all development on the McIntyre group which now includes the McIntyre, McIntyre-Extension, and McIntyre-Jupiter. The next development will be to commence the cross-cut to the No. 5 shaft where work on the lower levels is already congested. It is a distance of about 800 feet, so that it will be some time before it is completed. To the north of No. 5 shaft drifting on the 500 and 600 ft. levels is confirming the diamond drill work done here early in the year. The orebody where first encountered was 20 ft. wide from the foot wall. It ran about thirty dollars to the ton for about ten feet, but the quartz in the remainder of the orebody ran quite low. Intrusions of schist are now beginning to appear in this quartz and as they do so, the values grow. The vein is also opened up on the 600 ft. level. The building to house the additional machinery to be installed at the McIntyre mill has been completed some time, also the Dorr machinery for the cyanide mill has arrived, but delivery of the tube mills and ball mills is not satisfactory and it may be some time before the addition to the mill is running, in consequence of this delay.

Jupiter.—Progress in making ready the Jupiter to be a producing mine once more is marked. In B shaft a raise has been holed through from the 300 to 200 ft. level. The mine is also being re-surveyed and there is no doubt that mining should be well under way by the first of February.

Dome Lake.—There is some interest among mill men in the new process of cyanidation to be used at the Dome Lake mill. Without going into details it might be stated that a Detroit company proposes to treat the tails from the present mill in a large rotary drum. They claim for this process that it will make good extraction in four hours instead of 17 to 18 hours, and that the costs will be low. The Dome Lake mill is not making any payment on machinery or under any obligation in any way until it has been shown to be successful. The company guarantees to obtain a 95 per cent. extraction, otherwise they will not claim anything for their installation.

Burns Claims.—The little two-stamp mill which has been erected on the Tommie Burns claims in Shaw is now running. The same syndicate of working miners which made a success of their lease on the Gold Reef formed a company known as the Excelsior Mining Company. After the expiry of their lease on the Gold Reef they took up the lease on the Burns claims in Shaw and have now been working them for some time. They are sinking two shafts, one on a vein of quartz in which there is remarkable values in gold. This vein