

Skeena Mining Division.

The Skeena Mining Division has now become one of the important producing sections of the Province, owing to the operation of the *Hidden Creek* mine and the smelting-works of the Granby Company at Anyox, Observatory Inlet. The production of copper from this mine in 1915 was larger than that of any other group in the Province, and it is almost certain that in 1916 a still larger output will be made. The mine has been described in several of the Annual Reports of this Department, the last being in 1914.

The tonnage treated in 1915 was about 661,980 tons, from which it is estimated there was recovered, approximately, 4,900 oz. gold, 167,000 oz. silver, and 21,800,000 lb. copper. The annual report of the company for the fiscal year ended June 30th, 1915, contains much information, and from it the following notes have been taken:—

"The mining costs for the twelve months have been \$1.03 per dry ton landed in the cars on the railroad to the smelter. This amount includes the handling of 29,310 tons of waste and a development charge of 10 cents per dry ton. . . . The further exploration of the mineral area by diamond-drilling in and surrounding the mine was not attempted during the year. The ore reserves, with the deductions of shipments, remain at practically the same figures as reported for the previous year. To the reserves of the *Hidden Creek* mine should be added at this time the developed tonnage at the *Bonanza* mine. The latter mine is also in the immediate vicinity of the smelter and can be handled under the same organization. The following is then a summary of our ore reserves tributary to the smelter at Anyox:—

	High Grade.		Low Grade.		Total.	
	Tons.	Cu. %	Tons.	Cu. %	Tons.	Cu. %
Hidden Creek	9,205,837	2.17	8,628,000	0.63	17,833,837	1.43
Bonanza	414,775	2.66	489,580	0.70	904,355	1.60
Totals	9,620,612	2.19	9,117,580	0.63	18,738,192	1.45

"The development-work has consisted of 1,204 feet of drifting and crosscutting, with 1,732 feet of raising; a total of 2,936 linear feet. . . .

"Considerable construction was completed, including a new hunk-house, additional cottages, and a substantial electric sub-station. There is at the present time in process of erection a second crusher-station and ore-bins, which will enable us to introduce a more economical system of crushing and shipping. This plant also makes possible a large additional storage of crushed ore. The storage is much needed in order to more closely approach the ideal condition of handling with our mine haulage a fixed number of tons a day. We are now mining and shipping at the rate of 2,000 tons a day, which is our designed output. This we expect to increase to average 3,000 tons a day upon the blowing-in of the recently added fourth furnace."

The ore reserves were carefully estimated during the year by two independent engineers—C. M. Weld and F. B. Weekes—in order to check the company engineers' estimate. Their figures agree very closely with those worked out by the company.

The report dealing with the smelter at Anyox, by Superintendent A. J. Bone, details the various mechanical and metallurgical difficulties encountered during the first year of operation, but says everything is now running very smoothly. To quote from the report: "At the conclusion of the year, and barely fifteen and one-half months since the original start was made, it is apparent from all angles that we are approaching that condition of smooth, steady running which characterizes operations of long-established plants. The ores smelted covered a wide range in analysis, from low silica, low alumina, requiring quartz and a little coke to smelt, to the other extreme of high silica, high alumina, taking a basic flux and higher coke. Of late