

BOUNDARY DISTRICT.

LACK of space prevents particulars of the extensions of development work and additions to machinery and plant at the mines of the Boundary district being given this month, so they are unavoidably held over.

In no other part of the province, save in the Fort Steele division of East Kootenay alone, where the St. Eugene added so largely to the mineral production of the district, was there in 1905 so much progress in connection with the mining industry as in the Boundary section of the big Yale district. Even admitting that Fort Steele made a larger showing in point of value of its mineral products than did the Boundary, the comparison is certainly largely in favour of the latter when tonnage of metalliferous minerals is taken into account. Yet with more than \$1,500,000 in lode gold to its credit, and about \$4,000,000 in silver and copper—chiefly the latter—the Boundary occupies the pride of place in the production of metalliferous minerals in British Columbia. And the advance is along lines that make for permanence, which is so much more in favour of the district than if it were short lived. The tonnage of ore produced is indeed large, about 930,000 tons, with the output steadily increasing, so that the yearly output should not hereafter be less than 1,000,000 tons, which is the goal many had hoped to see the district reach in 1905.

The following table will serve to show the approximate tonnage of the mines for 1905:

	Tons.
Granby Co.'s mines	650,000
B. C. Copper Co.'s mines—	
Mother Lode	175,000
Emma	9,000
	<hr/> 184,000
Dominion Copper Co.'s mines	86,000
Oro Denoro	3,000
Sundry small shippers	7,000
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Total	930,000

Year by year the Boundary becomes better known among mining men and metallurgists accustomed to big operations and successful achievements, and never to its discredit. Last summer its visitors included many members of the American Institute of Mining Engineers, among them men skilled in the various branches of geology, mineralogy and metallurgy. Their stay was necessarily a brief one, for they were *en route* to the Yukon Territory and could not devote much time to visiting any one place no matter what its merits or attractions. The editor of the *Bi-Monthly Bulletin* of the Institute, in the course of his account of the excursion made to British Columbia, Yukon and Alaska, made this observation in his brief notes on the visit paid to the Granby Co.'s big mines at Phoenix, Boundary district: "Without attempting here a complete scientific account of these remarkable deposits, it may be said that they contain immense

masses of sulphide ore, carrying a small percentage of copper, with values in gold and silver which become important when large quantities of ore are economically treated. The weight of ore shipped by the company's mines during the year, ending June 30, 1904, was (after deducting moisture) 514,387 tons. A rough calculation indicates that this ore yields somewhat less than 1.5 per cent. of copper, 30 cents worth of silver and \$2 in gold per ton. It is self evident that such an ore could not be mined, transported and metallurgically treated with profit except by a complete combination of engineering and metallurgical skill, mechanical systems of handling, etc., and thorough, systematic executive management and economical control, aided by exceptionally low rates of railroad transportation."

The striking features of the year's progress in the Boundary are the extension of the scale—already large—upon which mining is carried on in the chief copper-gold mines, and the considerable additions to power machinery and plant both at the mines and at the smelters. The most modern machines and economical methods of mining, treating and handling the ores are adopted, and the general results achieved are a surprise to many who do not expect to find mining and smelting done neither so extensively nor cheaply as is the case at the leading mines in the Boundary district.

The aggregate tonnage of ore produced by the Boundary mines is now in excess of 3,400,000 tons. Yet up to the end of the first half of the year 1900, the total of ore shipped was less than 5,000 tons. The district has indeed made advances in its mineral production since then. With the enormous tonnage available for shipment, and the increasing enlargement of smelting capacity, it is not surprising that the Great Northern Railway Co. has constructed a branch line to the Granby mines, nor is it likely that much time will elapse ere the same company also makes connections with the two smelters in the Boundary Creek valley, those at Greenwood and Boundary Falls respectively. So favourable a field from a freight point of view, was one that the United States company, with its lines already at its gateways, quickly entered when the time became ripe to compete with the Canadian Pacific railway for a share of the traffic that is obtainable.

To others besides railway companies the Boundary offers inducements to make large expenditures of money, for the purpose of eventually sharing in its industrial prosperity. Next to railway construction the most important recent undertaking is that of the West Kootenay Power & Light Co., which is hastening on the completion of two electric transmission lines from Bonnington Falls to Greenwood, so that it may soon be in a position to deliver power to mines and smelters in the Boundary. Each of these lines will be capable of delivering 7,000 h.p. at Greenwood, and to make ample provision for the probable increased requirements of the future, the new generating station on the Kootenay River is to be equipped