

Increase in 1918 Canadian Mineral Production

Increase in 1918 Canadian Mineral Production—Advance due to high production as well as high prices—Eighteen products attain maximum production as to quantity during 1918 and 1917.

That the total value of the metal and mineral production of the Dominion during 1918 was \$210,204,970, an increase of \$20,558,149, or 10.8 per cent., over the value of the output of Canadian mines and smelters in 1917, which was \$189,646,821, is shown in the "Preliminary Report of the Mineral Production of Canada" for the calendar year 1918, prepared by John McLeish, B.A., chief of the division of Mineral Resources and Statistics, and just issued by the Mines Branch, Department of Mines.

It is stated in the report that "out of about 45 products, included in the mineral record, treating clay products and stone quarries each as a single item, no less than eighteen products have reached their highest production in actual quantity during 1918 or 1917."

The report points out that "more than half the total increase has been due to the higher prices obtained for coal and a considerable proportion of the balance of the increase to the higher price of silver, cobalt and asbestos, though each of these products, with the exception of silver, was also produced in greater quantity than in the previous year."

The value of the metal production in 1918 was \$113,563,111, an increase of \$7,107,964, or 6.7 per cent. There was an increase in production of the metals cobalt, lead, molybdenum, nickel, silver and zinc. There was a small decrease in the output of gold and silver from that of 1917, while in total value gold and silver also showed a decline.

The non-metallic production, including clay and quarry products, in 1918, was worth \$96,641,859, as compared with \$83,191,674 in 1917, an increase of \$13,450,185, or 16.2 per cent. "Excluding clay and stone quarry products an increased production of which was hardly expected, almost every product on the list," the report states, "was obtained in greater quantity and value than during 1917. The principal exceptions were natural gas, mica, gypsum, and graphite."

Copper production in 1918 amounted to 118,415,829 pounds, which at the average price in New York of 24.628 cents per pound, was worth \$29,163,450 as compared with 109,227,332 pounds, valued at \$29,687,989, at the average price of 27.180 cents per pound in 1917, an increase of 8.4 per cent. in quantity, but a decrease of 1.8 per cent. in value, says the report, which adds that the 1918 production was thus greater than the record output of 1916, which was 117,150,028 pounds.

"The electrolytic copper refinery installed at Trail, B. C., by the Consolidated Mining and Smelting Company, began operations about November, 1916, with a capacity of ten tons refined copper per day, which was increased to 20 tons per day in 1917, and it is to be enlarged to 50 tons per day in 1919," says the report.

"Of the total production, 92,769,167 pounds were contained in blister copper and in matte produced in Canada, part of which was refined at Trail, B. C., and 25,646,662 pounds estimated as recovered from ores exported.

"The production in Quebec from pyritic ores was 5,869,649 pounds valued at \$1,445,577, as against 5,015,560 pounds valued, \$1,363,229 in 1917.

"The production in Ontario amounted to 47,047,801 pounds valued at \$11,586,932, as against 42,867,774 pounds valued at \$11,651,461 in 1917, an increase of 9.7 per cent. in quantity.

The production in Ontario, according to the report, is derived principally "from the nickel-copper ores of the

Sudbury district, and of the Alexo mine in Timiskaming, supplemented by a small recovery from the silver ores of the Cobalt district, and by shipments from a few copper properties under development."

The Pas mining district of Manitoba produced over 2,000,000 pounds, and British Columbia produced 62,858,628 pounds, worth \$15,480,823, as against 57,730,959 pounds, worth \$15,691,275, in 1917, an increase in quantity of about 9.0 per cent. The output included 43,429,172 pounds recovered in matte, blister and as refined copper, and 19,429,456 pounds estimated to have been recovered from ores exported to United States smelters.

The Yukon produced 300,000 pounds, valued at \$73,884, as against 2,460,879 pounds, valued at \$668,650, in 1917. "This great falling off," the report states, "is due to the closing up of the Pueblo mine and also the high cost of labour and supplies."

The total production of gold in 1918 amounted to 710,526 fine ounces, valued at \$14,687,875, as against 738,831 fine ounces, valued at \$15,272,992, in 1917. Of this, \$2,411,245, or 16.4 per cent. was derived from placer or alluvial mining; \$9,080,826, or 61.8 per cent was in the form of bullion and refined gold; and \$3,195,804, or 21.8 per cent. contained in matte, blister copper, residues and ores exported. The Ontario production was 411,270 ounces, or about 57.8 per cent. of the total production of Canada.

The output of lead in 1918 is estimated in the report at 43,846,260 pounds, which at the average price of lead in Montreal, 9.250 cents per pound, would be worth \$4,055,779. The production in 1917 was 32,576,281 pounds, valued at \$3,628,020, an average price of 11.137 cents, showing an increase of 34 per cent. in quantity and 12 per cent. in total value.

The total output of nickel in 1918 was 92,076,034 pounds, valued at \$36,830,414 at 40 cents per pound. The production in 1917 was 84,330,280 pounds, valued at \$33,732,112. The output was derived from the ores of the Sudbury district, and from the silver-cobalt-nickel ores of the Cobalt district, from which a small quantity of metallic nickel, nickel oxides and other nickel salts are recovered.

The nickel exports of Canada during 1918 were: fine nickel, 1,710,800 pounds, valued at \$707,206, or an average of 41.3 cents per pound; nickel in ore, matte, speiss, 85,767,700 pounds, worth \$10,556,040, or 12.3 cents per pound, as compared with a total of 81,272,400 pounds, valued at \$8,708,650, or 10.72 cents per pound, in 1917.

"Previous to 1916, all zinc ores mined in Canada were exported for both smelting and refining," the report states, "but during the last three years much of the ore has been treated in Canada following the establishment of the electrolytic zinc refinery at Trail, B. C., by the Consolidated Mining and Smelting Company. The production of refined zinc was 2,974 tons in 1916, 9,985 tons in 1917, and about 12,278 tons in 1918.

"The total production of zinc in 1918 from Canadian ores—including in addition to the above refined production, the estimated recovery from ores exported (20 per cent. allowed for smelter losses) amounted to 33,633,690 pounds, which at the average price of spelter in New York, 8.159 cents per pound would have a total value of \$2,746,620, as against 29,668,764 pounds, valued at \$2,640,817, or an average price of 8.901 cents per pound in 1917.

"The total shipments of iron ore from Canadian mines show a further falling off in 1918, being only 206,820 short tons, valued at \$863,186, or an average of \$4.17 per ton as compared with shipments in 1917 of 215,302 tons, worth \$758,621 or an average of \$3.52 per ton. The 1918 shipments included 8,153 tons from Quebec, 197,637 tons from Ontario, and about 900 tons mined in British