

INCREASE IN MINERAL PRODUCTION DURING 1918.

PRELIMINARY REPORT SHOWS LARGE OUTPUT

Increase Due to High Production as well as Prices, Eighteen Products reaching Highest Production in Actual Quantity during 1918 or 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."

INCREASE IS SHOWN.

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."

PRODUCTION OF COPPER.

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 of 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.

PRODUCTION IN ONTARIO.

"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."

GOLD PRODUCTION.

"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.

LEAD OUTPUT IN 1918.

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.

NICKEL PRODUCTION.

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.

ZINC PRODUCTION.

"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 33,663,690 pounds, which at the average price of spelter in New York, 8.159 cents per pound would have a total

MINERAL PRODUCTION OF CANADA DURING 1918.

	Quantity.	Value.
METALLIC.		\$
Antimony ore (exports).....	*Tons 26	1,430
Cobalt metallic and contained in oxide, etc., at \$2.50 per lb.....	Lbs. 1,347,544	3,368,860
Copper, value at 24.628 cents per lb.....	118,415,829	29,163,450
Gold.....	Ozs. 710,526	14,687,875
Iron, pig, from Canadian ore.....	Tons 47,444	1,204,703
Iron ore, sold for export.....	" 112,886	469,352
Lead, value at 9.25 cents per lb.....	Lbs. 43,846,260	4,055,779
Molybdenite, (MoS ₂ , contents at \$1.15 per lb.).....	" 377,850	434,528
Nickel, value at 40 cents per lb.....	" 92,076,034	36,830,414
Platinum.....	Ozs. 39	2,560
Silver, value at 96.772 cents per oz.....	" 21,284,607	20,597,540
Zinc, value at 8.159 cents per lb.....	Lbs. 33,663,690	2,746,620
Total.....		113,563,111

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.

IRON ORE OUTPUT.

"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 Columbia. The ores comprised 170,907 tons of hematite and roasted hematite and siderite; 28,559 tons of magnetite, 6,324 tons of ilmenite titaniferous ores, and 900 tons (dry) of bog ores," says the report.

PIG IRON PRODUCTION.

"Subject to a possible slight variation when final returns shall have been received the total production of pig iron in Canada in 1918, excluding the production of ferro-alloys was 1,194,000 short tons (1,066,000 gross tons) having a value of \$3,000,000, as compared with a total production in 1917 of 1,170,480 short tons, (1,045,071 gross tons) valued at \$25,025,960," the report states. "Of the total production 1,163,520 short tons were made in blast furnaces and 30,425 tons were manufactured in electric furnaces from scrap steel, chiefly shell turnings.

"The production of blast furnace pig iron in Nova Scotia in 1918 was 415,870 tons as against 472,147 tons in 1917 and with the exception of the year 1914 was the smallest production in this province since 1911. In Ontario the production of blast furnace pig iron was 748,258 tons, as against 684,642 tons in 1917, and was the largest production made in this province.

"Pig iron was made from scrap in electric furnaces in three provinces: 7,449 tons in Quebec, and 22,976 tons in Ontario and British Columbia, the production in the latter province being a little over 1,000 tons," says the report.

The estimated production of steel ingots and castings in 1918 was 1,893,000 short tons (1,690,178 gross tons), of which 1,820,000 tons were ingots and 73,000 tons direct steel castings, according to the report. The total production in 1917 was 1,745,734 short tons (1,558,691 gross tons) of which 1,691,291 were ingots, and 54,443 tons were castings.

COAL AND COKE.

"The total production of marketable coal during 1918," continues the report, (comprising sales, colliery consumption and coal used in making coke, or used otherwise by colliery operators), was 14,979,213 short tons, valued at \$55,752,671, or an average of \$3.72 per ton, and was with the exception of the year 1913, the largest production obtained in any one year from Canadian coal mines. The production in 1917 was 14,046,759 tons valued at \$43,199,831, compared with which the 1918 production shows an increase of 932,454 tons, or 6.64 per cent, and \$12,552,840 or 29.06 per cent in value.

"The 1918 production included 115,405 tons of anthracite, all from one mine in Alberta; 11,532,592 tons of bituminous coal and 3,331,216 tons of lignite.

"The total output of oven coke during 1918 was 1,234,347 short tons made from 1,945,475 tons of coal.

OUTPUT OF SILVER.

"It is estimated that 21,284,607 fine ounces of silver valued at \$20,597,540 were produced in Canada in 1918, as compared with 22,221,274 ounces, valued at \$18,091,895, in 1917, a decrease of 4.2 per cent in quantity, but an increase of 13.8 per cent in value, and exceeded in value the previous maximum in 1912.

"The production in Ontario amounted to 17,109,389 ounces valued at \$16,557,098 or 80.4 per cent of the total silver production for Canada. In 1911, when the Cobalt district production was at its maximum, the percentage was 93.8."

Tenders for Power House.

Sealed tenders addressed to the undersigned, and endorsed "Tender for Alterations and Additions, Power House, etc., Military Hospital, Kingston, Sydenham, Ont.," will be received until 12 o'clock noon, Friday, March 21, 1919, for the alterations and additions to existing stone building, for conversion of same into power house, etc., Military Hospital, Kingston, Sydenham, Ont.

Plans and specification can be seen and forms of tender obtained at the office of the Chief Architect, Department of Public Works, Ottawa; the Overseer of Dominion Buildings, Central Post Office, Montreal; J. C. Newlands, Architect, Kingston; and of the Superintendent of Dominion Buildings, Postal Station "F," Toronto.

Tenders will not be considered unless made on the forms supplied by the Department and in accordance with the conditions set forth therein.

Each tender must be accompanied by an accepted cheque on a chartered bank payable to the order of the Minister of Public Works, equal to 10 per cent of the amount of the tender. War Loan Bonds of the Dominion will also be accepted as security, or war bonds and cheques if required to make up an odd amount.

By order.

R. C. DESROCHERS, Secretary,
Department of Public Works,
Ottawa, March 4, 1919.

Janitors' Supplies.

The Department of Public Works has now in stock for distribution to other departments the following Janitors' Supplies:—

"Liquid Soap at 95c. per imp. gal.
Brown Windsor Soap at \$4.25 per gross.
Hand Towels at \$3.25 per doz.
Brooms, Rattan Centre, at \$7 per dozen."

Departments should make use of this source of supply rather than purchasing in the town.

Requisitions should be addressed to the secretary, Department of Public Works.