CANADA-DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS

MINING, METALLURGICAL AND CHEMICAL BRANCH!

REPORT ON THE PROPERTY OF THE

# MINERAL PRODUCTION OF CANADA

DURING THE SIX MONTHS ENDING

JUNE, 1932

(With Revised Statistics for the Calendar Year 1931)

Published by Authority of the Hon. H. H. Stevens, M.P., Minister of Trade and Commerce



PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

# LIST OF PUBLICATIONS

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# MINING, METALLURGICAL AND CHEMICAL BRANCH DOMINION BUREAU OF STATISTICS

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COAL-

### Monthly and Quarterly Reports on Coal and Coke Statistics for Canada.

A condensed report on production, imports and exports of coal and coke is issued monthly, publication being made about the twentieth of the next following month.

A more general review is published quarterly, showing statistics for each month, for the quarter, and for the year to date on the output by coal-mining districts and by provinces, imports and exports by ports and by kinds of coal, employment in coalmining, and tonnage lost. There is also a section on coke showing production, imports, exports, distribution and consumption by months and by provincial groups.

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#### ANNUAL BULLETINS-

Metals—The Gold Mining Industry in Canada which includes Alluvial Gold Mining, Auriferous Quartz Mining, Copper-Gold-Silver Mining, and tables showing Canadam and world production of Gold.—The Silver Mining Industry in Canada, which includes Silver-Cobalt-Arsenic Mining, Silver-Lead-Zinc Mining, and tables showing Canadian and world production of Arsenic, Cobalt, Lead, Silver and Zinc.—The Nickel-Copper Mining, Smelting and Refining Industry, which includes Canadian and world production of Nickel.—The Canadian and World Production of Copper.—Metals of the Platinum Group.—The Production of Miscellaneous Metals including Antimony, Beryl, Bismuth, Cadmium, Chromite, Lithium, Manganese, Mercury, Molybdenite, Radium, Selemium, Tin, Titanium, Tungsten.—The Non-Ferrous Smelting and Refining Industry.

Non-Metals.—Abrasives—Asbestos—Coal—Feldspar—Gypsum—Iron Oxides—Mica—Natural Gas—Petroleum—Quartz—Salt—Tale and Soapstone—Miscellaneous Non-Metallic Minerals including Actinolite, Barytes, Bituminous Sands, Fluorspar, Graphite, Magnesite, Bog Manganese, Mineral Waters, Phosphate, Silica Brick, Sodium Carbonate, Sodium Sulphate, Sulphur (Pyrites).

Structural Materials.—Cement—Clay and Clay Products—Lime—Sand and Gravel—Stone.

#### PREFACE

The present statistical report on the Canadian production of metals, fuels and non-metallic minerals is issued in continuance of a half-yearly series which is designed to give a picture of the progress of the Canadian mining industry for the first six months of the year. In addition, final figures of Canada's mineral production for the previous year are given in tabular form. Except for stone production the final statistics are not greatly different from those issued in the preliminary report in April. It is very difficult to obtain complete figures on stone and sand and gravel early in the year and estimates must necessarily be made.

Data which have been assembled indicate the effect of the lower prices for silver and base metals and the falling off in demand for fuels and non-metallics, while on the other hand the rate of gold production has never before been as great. The continuous operations of many of the old established mining and smelting companies in these times demostrate the firm foundations on which they were established.

As in former years, the Bureau has continued to co-operate with the provinces of Nova Scotia, New Brunswick, Saskatchewan, Alberta and British Columbia in the collection of coal statistics. Co-operative collection of general mineral production reports for the joint use of the Bureau and the provincial governments of Quebec, Ontario, Manitoba and British Columbia has also been continued on a mutually satisfactory basis. The Bureau desires to acknowledge its indebtedness in this respect and to thank the several provincial governments and other Dominion departments for the valuable assistance rendered from time to time in connection with this report on the mining industry in Canada.

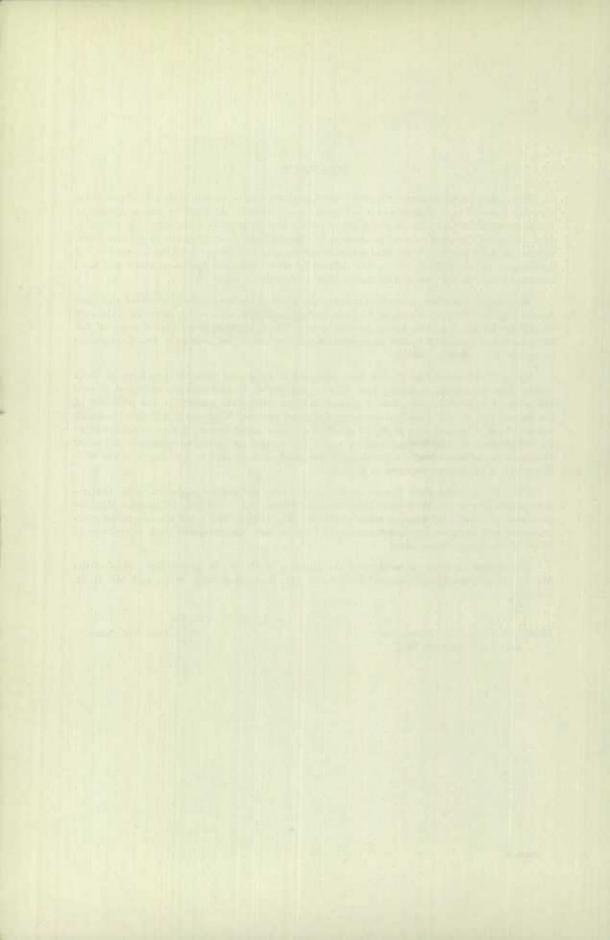
The cordial thanks of the Bureau are tendered to mine and smelter operators, to the Department of the Interior, to the federal Department of Mines, and to the Royal Canadian Mint for assistance given and information made available. The railway and other transportation companies, as well as smelter operators outside of Canada, have also furnished data, the receipt of which is gratefully acknowledged.

This report has been prepared under the direction of Mr. W. H. Losee, B.Sc., chief of the Mining, Metallurgical and Chemical Branch, by Mr. R. J. McDowall, B.Sc., and Mr. B. R. Havden.

R. H. COATS,

Dominion Statistician.

Dominion Bureau of Statistics, Ottawa, August 30, 1932.



## DOMINION BUREAU OF STATISTICS

R. H. COATS, B.A., F.S.S.. (Hon). F.R.S.C., Dominion Statistician

W. H. LOSEE, B. Sc., Chief of the Mining, Metallurgical and Chemical Branch

# PRELIMINARY REPORT

ON THE

# MINERAL PRODUCTION OF CANADA

DURING THE SIX MONTHS ENDING JUNE 30, 1932

Production of metals, fuels and non-metals in Canada reached a total value of \$83,384,705 during the first six months of 1932 as compared with a total of \$95,689,288 during the same period of 1931, a decline of 12·9 per cent. The decrease was caused by the lower prices prevailing for the base metals, and the lessened demand for nearly all mineral products except gold which metal is the monetary measure of all other values, so that at the present time a fixed weight of gold exchanges for a larger amount of other commodities than formerly; consequently gold is more desirable than in other recent years, and we find Canada at the present time producing gold at a greater rate than ever before. In addition, prospecting for gold is greatly stimulated and the probabilities are that the results of the intensified field work of the present summer will be beneficially felt in the next few years.

The half-yearly report on Canada's mineral production does not include figures for clay products, cement, lime, stone and sand and gravel. Production of these materials during the first six months is much less than during the latter half of the year and any published figures would not be representative of half the output of this group.

#### METALS

The total value of metals produced during the period amounted to \$54,092,915 as compared with \$61,717,841 during the first six months of 1931. Copper, lead, zinc, nickel, and the platinum group metals all showed reduced outputs but gold production at 1,496,078 fine ounces worth \$30,926,683, when calculated at the standard rate of \$20-671834, was greater than ever before for a similar period. The value of the gold produced was greater than the combined value of all the other metals, and in addition the gold mines of Canada received some \$3,417,443 in premium payments due to the present exchange situation. Many of the older gold mines have improved and enlarged both mining and milling facilities to such an extent that production by them is showing a distinct increase and in addition several new properties have either started actual production or will be producing before the end of the present year.

Ontario with an output of 1,127,801 fine ounces worth \$23,313,715 produced 75 per cent of the total for the Dominion. Kirkland Lake was the leading camp with an output of 580,054 ounces as against 507,532 ounces during the period January to June, 1931. Porcupine produced 502,228 ounces as compared with 457,761 last year. The remainder of the provincial output was from the Howey in the Red Lake district, from Sudbury copper-nickel ores and from smaller properties in various parts of the province. Prospecting for gold has been quite active during the present season, and at the Ashley property in Bannockburn township it is expected that gold will be produced early in the autumn. Activity in Quebec was equally as marked. The Noranda mine has been able to decrease its copper production and increase its gold output. Granada and Siscoe produced steadily during the period; the Beattie gold mines operated jointly by the Nipissing Mining Company of Cobalt and Ventures Limited, proceeded with the erection of a 600 ton mill; the Treadwell Yukon is constructing a test milling plant for treating development ore on their Bussière property in the Pascalis district; and the mill at the O'Brien-Cadillac gold mine which has been completed is expected to start production in August. Encouraging results are also being reported from other prospects which are under development. Gold production

in British Columbia totalled 89,685 fine ounces worth \$1,853,953, an increase of 29 per cent over last year. Both lode and placer gold outputs were higher but owing to the reduction in the output of copper ores gold production from this latter source was less. The Premier mine is the largest gold producer in the province, the Pioneer, second in importance, showed an increase over last year. The Bralorne is a new producer. The Reno mill was destroyed by fire last February and the company has purchased the Motherlode mine and mill. Ore from the Reno mine will be transported by tram some 12,500 feet to the Motherlode mill. Manitoba output of gold also showed an increase from 52,788 fine ounces to 56,732 fine ounces; a large part of this is recovered with the blister copper made at the Flin Flon smelter. Output was steady at Central Manitoba; the San Antonio, a new mine, came into production in May and the Cryderman property also reported an initial production in the same month. Results of diamond drilling in the Island Lake district of the province are reported as encouraging. Yukon production was slightly greater than last year but only a small amount was recovered from Nova Scotia ores.

Silver production totalled 9,451,611 fine ounces as against 11,701,718 during the first half of 1931. The output from British Columbia mines, principally the Sullivan and the Premier, totalled 3,699,652 ounces as against 4,382,239 last year. Ontario produced 3,377,700 fine ounces, a drop of 13.5 per cent from 1931. The Yukon contributed 1,466,404 fine ounces; Manitoba, 572,649 fine ounces and Quebec, 335,186 fine ounces. The low price for this metal was responsible for the closing down of several mines in the Dominion, particularly in the old Cobalt camp.

Since the last half-yearly report was written, another promising source of silver in Canada has been discovered. A deposit of high-grade silver-radium ore was located at Echo Bay on Great Bear Lake in the North West Territories. During the present season hand sorted silver ore will be sent out to the smelter. In addition the Canadian Department of Mines' chemical and metallurgical staff has been developing a process for the recovery of the radium from these ores. A plant is now being built at Port Hope, Ontario, by Eldorado Gold Mines Limited, to treat these ores for the recovery of this rare element. As a result of the finds during 1931 many prospecting parties are in the Great Bear Lake field during the present season.

Copper production during the period declined considerably on account of the low prices which prevailed. Output totalled 129,206,453 pounds worth \$8,235,826 as against 149,277,041 pounds worth \$13,705,822 during the corresponding period of 1931. Much credit is due the personnel of the copper mining companies who have made every effort to cut costs and continue operations notwithstanding the lowest prices in the commercial history of the metal. The Granby Company's mines at Anyox, and the Britannia mine on Howe Sound, are the chief producers on the Pacific slope. Britannia concentrates were shipped to Tacoma; blister copper from Anyox is sold to United States refineries. The 4 cents per pound duty imposed on copper entering the United States may have a serious effect on the output from British Columbia copper mines unless other markets can be secured. However, it is rather difficult to predict the outcome at the present time. In Manitoba, the Flin Flon smelter operated continuously on Flin Flon and Sherritt Gordon ores but the management of the latter mine found it necessary to close down in June and await improvement in copper prices. Ontario copper production totalled 42,333,941 pounds as against 65,777,279 pounds during the first six months of 1931 and was derived from the nickel-copper ores of the Sudbury district. The International Nickel Company produces blister copper at Copper Cliff. This is refined in close proximity to the smelter by the Ontario Refining Company Limited, a company jointly owned by the International Nickel Company, the American Metal Company, and the Consolidated Mining and Smelting Company. Blister copper made at Flin Flon, Manitoba, from Sherritt Gordon ores was also refined by this company. The Falconbridge nickel-copper matte is exported to Norway for further treatment. In Quebec, Noranda produced copper steadily though at a reduced rate and at the same time increased the gold output. Blister copper from Noranda is refined by the Canadian Copper Refineries Limited, at Montreal East. The Eustis mine continued to export copper concentrates during the period.

Nickel production at 21,162,786 pounds showed a decrease of 48 per cent when compared with the same period during 1931. Much research work has been done during recent years in developing new uses for this metal but the general business conditions prevailing at the present time are reflected in the marked falling-off in output.

British Columbia is Canada's chief lead producing province and the Sullivan mine which is owned by the Consolidated Mining and Smelting Company Limited is the main source. Small

amounts are recovered in foreign smelters from Premier and Britannia mine ores. The silver-lead properties of the Treadwell Yukon Company in the Yukon Territory contribute annually to the Dominion total; the low prices prevailing for these two metals and the long haul to the smelter have rendered profitable operations by this company increasingly difficult and only the highest grade of ore can now be shipped. A small amount of lead is recovered with silver-lead-bismuth bullion which is shipped to United States smelters by an Ontario company smelting silver-cobalt ores. Production of lead in Canada during the period totalled 127,699,578 pounds, a drop of 13 per cent when compared with the first six months of 1931.

Zinc is recovered principally from the Sullivan mine ores in British Columbia and from Flin Flon and Sherritt Gordon ores in Manitoba. British Columbia's production totalled 68,496,549 pounds as against 115,971,064 pounds during the first half of 1931, while Manitoba showed an increase to 20,568,600 pounds from 17,708,712 for corresponding periods.

Production of platinum, palladium and other metals of this group was valued at \$1,363,865. Refining of practically all the Canadian output of these metals (which occur with the nickel-copper ores of Ontario) is carried on by the International Nickel Company at Acton near London, England. Arsenic output was less than during 1931. Cadmium was reported from Manitoba for the first time. Bismuth, in silver-lead-bismuth bullion exported was greater than last year; cobalt in ores exported, in metallic form and in the form of oxide was less in both quantity and value.

#### FUELS

The Canadian coal production during the first six months of 1932 declined 4 per cent to a total of 5,655,801 tons as compared with 5,891,588 tons produced in the corresponding period of 1931. New Brunswick's output advanced 6.8 per cent to 101,008 tons, Saskatchewan's production rose 41.0 per cent to 377,608 tons; and Alberta's 10.7 per cent to 2,193,177 tons. Nova Scotia mines showed an output decline of 20 per cent to 2,094,840 tons and British Columbia mines 4.3 per cent to 887,946 tons.

Imports during the period amounted to 4,390,878 tons or 18·2 per cent below the total for the first six months of the previous year. Receipts of anthracite coal were recorded at 1,263,276 tons, made up of \$49,358 tons from the United States, 407,575 tons from Great Britain, 5,693 tons from Germany and 650 tons from Belgium. Imports of anthracite coal from the United States during the period declined 26·2 per cent, while Great Britain anthracite coal brought into Canada increased 27·5 per cent. During May and June Great Britain supplied 55·2 per cent of the Canadian imports of anthracite coal. Bituminous coal importations into Canada decreased 19·3 per cent to 3,125,875 tons as compared with 3,875,792 tons in the six months ending June, 1931. Exports of Canadian coal declined 21·5 per cent to 132,961 tons from the total for the corresponding months of 1931.

Shipments of peat from the St. Hyacinthe bog in Quebec amounted to 31 tons as compared with 660 tons during the six months ending June 30, 1931.

A considerable decline was recorded in the output of natural gas in Canada during the period January to June, 1932. This falling-off was due principally to decreased production in the Turner Valley field in Alberta. Output during the period totalled 14,518,385 thousand cubic feet of which Alberta produced 66·4 per cent, Ontario 30·6 per cent, and New Brunswick 3·0 per cent. In June, a new well with an estimated flow of 11,000 thousand cubic feet was brought into production in the Viking field, Alberta.

Petroleum production in Canada amounted to 570,141 barrels as against 937,779 barrels in the first half of 1931. Decreased production in the Turner Valley field, Alberta, due to lessened demand for crude naphtha and to natural gas conservation regulations introduced by the provincial government, was responsible for the decline in the Canadian petroleum output. Oil in storage at the Turner Valley field on December 31, 1931, totalled 41,255 barrels; on June 30, 1932, approximately 16,500 barrels of oil remained in storage. The announcement on April 22nd of increased prices for crude naphtha and crude oil in Alberta was an interesting feature of the period. Reports in circulation during the period indicated that the Fort Norman oil wells in the North West Territories will be put in operation this year to produce engine fuel for the use of operating companies in the Great Bear Lake mining field.

#### NON-METALS

The value of non-metal production totalled \$3,848,305 as compared with \$5,313,580 during the first six months of 1931. Among the principal non-metallic minerals in which increases in output occurred were: diatomite, bituminous sands, iron oxides, magnesite, salt, sulphur, and volcanic dust and tale but the quantity of asbestos, feldspar, graphite, gypsum, mica, mineral waters, and sodium sulphate was less.

Asbestos sales dropped from \$2,447,617 during the first six months of 1931 to \$1,356,851 during the corresponding period of 1932.

Gypsum is produced in Nova Scotia, New Brunswick, Ontario, Manitoba and British Columbia. Production for these provinces during the period under review totalled 143,108 tons worth \$681,600 as against 293,131 tons valued at \$992,418 for the same period last year.

Salt production, including salt in brine produced by chemical companies, totalled 127,677 tons worth \$956,280, a gain of 10 per cent in quantity and 5 per cent in value over the first six months of 1931. Magnesite output increased 19 per cent in quantity and 10 per cent in value; production for the period was 5,890 tons worth \$149,129.

Sulphur output in Canada is computed as the estimated quantity of sulphur in sulphuric acid made in British Columbia and Ontario from waste smelter gases together with the sulphur contained in pyrites concentrates shipped. Several Canadian copper properties are now shipping an iron pyrites concentrate which is largely obtained as a by-product in treating copper ores. Production totalled 31,097 tons valued at \$276,420 as against 14,431 tons worth \$123,958 last year.

Feldspar and mica production showed a marked falling off from last year. Exports of feldspar totalled 1,705 tons as against 4,150 tons during the first six months of 1931. With grinding mills situated at Buckingham, Quebec and Kingston, Ontario, the Canadian demand for ground feldspar can be readily supplied. A mica grinding mill in Quebec can also supply the Canadian market for ground mica.

Tale production was 9 per cent greater than last year though the value was slightly less.

#### PRICES

The low prices for silver and the base metals have seriously affected Canada's metal mining industry. Many mines carried on for a time in the hope that an improvement in prices would take place; unfortunately during the first six months of the present year no encouragement was in evidence and several properties were forced to suspend operations or curtail output. Silver at the average price of 28.874 cents, New York market, showed very little change from last year. Copper averaged 5.789 cents per pound in New York as against 9.250 cents during the first six months of 1931. The average quotation for lead in London during the period under review was £12.249 per long ton as compared with £12.649 during the first six months of the previous year. Zinc averaged £12.759 per long ton as against £11.724 for the first half of 1931. The average price for zinc on the St. Louis market for the first six months of 1932 was 2.775 cents per pound as compared with 3.748 cents during the same period of 1931.

When transposed to Canadian funds the average prices during the period under review for these metals were as follows: silver, 32·8853 cents per fine ounce; copper, 6·6004 cents per pound; lead, 2·2334 cents per pound and zinc, 2·3303 cents per pound. Silver and copper prices were based on the New York market and lead and zinc on the London market.

#### EMPLOYMENT

Monthly records of employment are collected by the Bureau and issued in the form of index numbers based on the monthly average for the calendar year 1926=100. On this basis general mining during the half-year ending June, 1932, stood at 99·3 as against 107·4 during the first six months of 1931. Coal mining showed an average employment index of 90·9 as compared with 95·8 in the first half of last year. Metal mining stood at 133·2 as against 138·6 during the same period of 1931. Non-metal mining, exclusive of coal, was recorded at 71·5 whereas during the first six months of the preceding year the figure was 99·0.

### FINAL 1931 FIGURES

Final figures for 1931 as given in the first table of this report show that the mineral production in that year was \$228,029,018 as compared with \$279,873,578 in 1930. Preliminary figures given out in April of this year showed the production to be \$227,456,365. The only revision of any magnitude was that for stone, the complete figure for this material being very difficult to obtain early in the year.

Mineral Production of Canada for the Twelve Months ending December 31, 1931, and also for the Period January 1 to June 30, 1931 and 1932

		31 onthe	January 1		January 1	
	Quantity	Value	Quantity	Value	Quantity	Value
METALLICS		\$		8		
Arsenic (As <sub>7</sub> O <sub>4</sub> )   lb.  Bismuth   lb.  Cadmium   lb.	3,575,936 118,207		2,108,076 7,331	82,224 4,089 129,376	1,628,733 10,939	65.149 9.626 51,716
Cobalt         lb.           Copper         lb.           Gold         fine os.           Titanium ore         tons	521,051 292,304,390 2,693,892 1,509	651,179 24,114,065	205,822 149,277,041 1,273,303	361,600 13,705,822 26,321,508	210,283 129,206,453 1,496,078	238, 268 8, 235, 826 30, 926, 683
Manganese ore	207,342,482 117 1,222	7,200,183 2,893 280	146,419,830	4,034,971	127,699,578	2,852,043
Nickel lb. Palladium, Rhodium, Iridium, etc. fine oz. Platinum fine oz. Selenium lb. Silver fine oz.	65,666,320 46,918 44,775 21,500	1,217,717 1,596,900 40,850	8,335	9,047,131 610,879 712,100 15,835	21,162,786 24,169 17,613	5,166,063 668,151 695,714
Zine lb.	20,562,247 237,245,451	6,141,943 6,059,249	11.701.718 133,679,776	3,287,481 3,404,824	1,451,611 89,065,149	3,108,191 2,075,485
Total	***	118,524,439		61,717,841	-	54,092,915
Non-Metallics-Fuels						
Coal tons Natural gas M cu. ft Pent tons Petroleum, crude brls.	12,243,211 25,874,723 1,674 1,542,573	41,207,682 9,020,754 7,033 4,211,674	5,891,588 14,972,342 660 937,779	20,519,520 5,541,078 3,454 2,593,815	5,655,801 14,518,385 31 570,141	18,302,657 5,562,149 140 1,578,539
Total	-	54,453,143	-	28,657,867	-	25,443,495
OTHER NON-METALLICS						
A salination	35 164, 296	4,812,886	76, 145	80 2,447,617	55, 469	1,356,851
Asbestos tons Barytos tons Barytos tons Bituminous sands tons Distomite tons Feldspar tons Graphite tons Graphite tons Graphite tons	1,015 1,610	363 4,060 32,789	16 166	3,983	253 766	1,012 15,698
Feldspar tons Fluorspar tons Graphite tons	18,343 40 548	186,961 620 32,149	6,227	62, 449 21, 198	3,045 - 255	34,690 12,930
Gypsumtons	863.752 5.520 11.411	38, 103 2, 111, 517 49, 205 295, 579	293, 131 1, 638 4, 949	992,418 15,120 135,175	143, 108 2, 703 5, 890	681,600 24,272 149,129
Manganese (bog) tons Mica tons Mineal waters Imp. guls. Ouartz	77 1,339 217,408 195,724	462 54,066 13,324 303,158	665 146, 855 85, 618	37,176 11,120 153,030	82 38,422 80,622	3,749 3,833 113,492
Iron oxides (ochres)	259.047 900 712	1,904,149 35,746 34,430	115, 906 459 220	910,876 21,832 19,896	127,677	956, 280 22, 493
sodium carcenate tons Solibun sulphate tons Sulphur* (Pyrites) tons Tale tons Voicanic dust tons	50, 107 11, 836	7,351 421,097 429,457 122,644	14.431 5,856	2,535 294,589 123,958 59,625	31,097 6,366	1,500 132,049 276,420 59,107
Total tons	128	2,560	27	5,313,580	160	3,209

See next pape for the remainder of this table.

Mineral Production of Canada for the Twelve Months ending December 31, 1931, and also for the Period January 1 to June 30, 1931 and 1932—Concluded

	193 12 mg	nths		to June 30	January 1	32 to June 30	
	Quantity	Value	Quantity	Value	Quantity	Value	
		\$		\$		\$	
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS							
Clay Products		14 (14 )					
Brick—Soft mud process— Face	5,476 41,177	116,316 619,357					
Face. M Common M	77,135 81,930	1,752,947 1,205,464	products	and other st		erials for the	
Dry press— Face M Common M Fancy or ornamental brick M Scower brick M Paving brick M Fireclay tons Bentonite tons Fireclay blocks and shapes Hollow blocks tons Roofing tile No Floor tile (quarries) sq ft Drain tile M Sewer pipe, copings, flue linings, etc. Pottery, glazed or unglazed Other clay products  Total	20,149 8,688 335 2,253 19 2,248 1,233 187 105,635 6,935 107,499 12,518	423,357 107,213, 20,773; 43,092 882; 107,597 14,857, 935, 83,039 1,040,634, 720 31,415, 328,410 1,508,803, 247,125, 171,952 7,841,288	half year ending June, owing to the reco seasonal nature of operations in this field 3 3 2 2 2 7 7 1 3 4 9 4 0 5 5 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Other Structural Materials							
Cement. brls. Lime. tons Sand and gravel tons Slate. tons Stone. tons	10, 161, 658 344, 785 21, 748, 586 250 8, 397, 860	15,826,243 2,764,415 6,651,165 5,000 11,070,184					
Total	-	36,317,007					
Grand Total		228,029,018					

<sup>\*</sup>Sulphur content of pyrites shipped and estimated sulphur contained in sulphuric acid made from waste smelter gases.

# Comparative Table of Mineral Production of Canada, January 1 to June 30, 1931 and 1932

	Increase Decreas		Increase Decreas	
	Quantity	Per cent	Vulue	Per cent
Metallics	- 479,343 + 3,608 - 85,539 -20,070,588 + 222,775 -18,720,252 -19,527,776 - 5,116 - 8,335 - 2,250,107 -44,614,627	-22·7 + 49·2 - 29·0 - 13·5 + 17·5 - 12·8 - 48·0 + 8·6 - 22·5 - 19·2 - 33·4	** -17,075 + 5,537 - 77,606 - 123,332 - 5,499,996 + 4,695,175 - 1,182,928 - 3,881,068 + 5,7,272 - 16,386 - 15,836 - 15,836 - 179,290 - 1,329,330 - 7,624,\$26	-20·8 + 135·4 - 60·0 - 34·1 - 40·0 + 17·5 - 29·3 - 42·9 - 5·5 - 39·0 - 12·4
Non-Metallics  Fuels  Coal. tons Natural gas. M cu.ft. Peat. tons Petroleum, crude. brl.  Total.	- 235,787 - 453,957 - 629 - 367,638	- 4·0 - 3·0 - 95·3 - 39·2	- 2,216,863 + 21,071 - 3,314 - 1,015,276 - 3,214,382	- 10·8 + 0·4 - 05·9 - 39·1 - 11·2
Other Non-Metallics	- 7 - 20,676 - 16 + 253 + 600 - 3,182 - 128 - 150,023 + 1,065 + 941 - 20 - 4,996 + 11,771 - 459 - 18,666 + 11,771 - 10,656 - 11,711 - 10,656 - 11,711 - 11,7	- 27.2 + 361.4 - 51.2 - 33.4 - 51.2 - 33.4 - 51.2 - 65.0 + 19.0 - 87.7 - 74.0 - 5.8 + 10.1 - 9.1 + 115.5 + 8.7 + 492.6	+ 13.954 - 33.427 - 7.287 - 39.538 + 45.404 - 21.832 + 2.597 - 1.035 - 162.540 + 152.462 - 518	- 44·6

## MONTHLY PRODUCTION STATISTICS

The Mining, Metallurgical and Chemical Branch of the Bureau publishes monthly production statistics on Canada's sixteen leading minerals. In order that there may be the least possible delay in publishing the monthly bulletins the figures are to some extent estimated and therefore the totals of the months as shown in the following table do not necessarily agree with the figures shown in the first table of this report. The differences in lead and silver are due in large part to the fact that the monthly figures for the Yukon show the actual output during the period and the half-yearly totals are for shipments.

Monthly Production of Leading Minerals in Canada, January 1 to June 30, 1932

Month	Asbestos	Cement	Clay Products	Coal	Copper	Feldspar	Gold	Gypsum
	tons	brls.	8	tons	lb.	tons	fine oz.	tons
January February March April May June	10, 190 7, 706 8, 937 8, 830 9, 942 7, 977	270, 764 235, 895 276, 172 427, 320 530, 504 566, 992	296, 239	962,401 1,050,187 898,406 911,777	19,675,016 22,428,571 23,662,648 22,077,843 21,356,879 20,669,800	800 945 1,160 415 423 479	233,826 225,891 255,675 246,359 268,543 270,526	5,762 5,454 11,858 23,087 66,139 39,452
Total	53,582	2,307,647	2, 135, 280	5,891,588	129,870,757	4,222	1,500,820	151,752
Month	Lend	Lime	Natural Gas	Nickel	Petro- leum	Salt	Silver	Zinc
	1b,	tons	M cu.ft.	1ь,	brls.	tons	fine os.	lb.
	21,467,045	23,685 23,632	3,043.967	3,187,687 4,202,036		9,435 12,477	1.600.501	15,110,952 14,224,278
April		29,108 26,744 30,014 27,290	2,353,619	3,754,829 3,384,620 3,471,304 3,162,310	97,484 95,585 95,222 89,533	14,185 16,078 15,324 16,696	1,645,094	15,165,791 14,650,218 15,247,980 14,665,930
Total	127,185,712	168,473	14,518,385	21, 162, 786	565,877	84, 195	9,207,530	89.065.149

### Mineral Production of Canada, by Provinces, 1929-1931

	192	29	193	0	1 93	1
Province	Value of production	Per cent of total	Value of production	Per cent of total	Value of production	Per cent of total
	\$		\$		\$	
Nova Scotia <sup>e</sup> New Brunswick Quebec	30,904,453 2,439,072 46,358,285	9·94 0·79 14·93	2,191,425	9-65 0-76 14-73	21,080,746 2,176,910 35,696,563	9-2-
Ontario Manitoba Saskatchewan	117,662,505 5,423,825	37.85 1.75 0.72	113,530,976 5,453,182	40·57 1·95	96,113,235 9,965,854	15 · 63 42 · 13 4 · 33
Alberta British Columbia. Yukon	34,739,986 68,162,878	11-17 21-92	30,619,888 54,953,320	0·85 10·95 19·64	1,931,880 23,580,727 35,337,756	0 · 88 10 · 34 15 · 50
Total	2,905,736 310,850,246	100.00	2,521,588	100-00	2,145,347 228,029,918	100-00

<sup>\*</sup>Includes a small production from Prince Edward Island for 1929 and 1930.

Finally Revised Statistics on the Mineral Production of Canada, by Provinces, 1931

							09 1 700		
	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon
METALLICS								-	
Arsenic (As <sub>1</sub> 0 <sub>3</sub> ), , lb.	-		-	3,575,936 135,170		_	-	-	-
Bismuth lb.	-	-	_	7,331	-	-	-	110,876 154,118	
Cadmium lb.	-	-	-	-	_	-	-	180,958	-
Cobaltlb.	-	-	-	521.051 651.179		***	_	100,900	-
Copperlb.	-	-	68,376,985 5,723,154	112,882,625	45,821,432	-	-	65, 223, 348	I
Goldfine oz.	9,509		300,075	2,085.814	102.969	_	195		44,310
Leadlb.	9,000	_	-	43, 117, 600 985, 633	-	-	4,031	3,308,820 261,902,236	915,069 4,454,613
Manganese oretons		57	_	41,647	-	-		7.097.812	120,724
Molybdenite (con-	2,400	493			-	-	-	-	-
centrates)lh.	_	_	-	1.222	-	1		-	-
Nickellb.	_	_	-	65,666,320 15,267,453	-	-		-	-
Palladium, Rhodi- um, Iridium, etc.	101								
fine on	-	-	-	46,918 1,217,717	-	-	-	-	-
Platinum	-	-	-	44,725 1,595,117	-		=	60	_
Seleniumlb.	-		-	(6,899)	3,870	1	-	1.783	
Silver	48	-	530,345	32,108 7,438,951	7,353 836,547	-	29	1,389 8,061,509	3,694,728
Titanium oretons	14	-	158,414 1,509	2,222,014	249,877	-	-0	2,408,000	1,103,615
Zînelb.	-	-	10,261	-	35, 173, 749		_	202.071,702	-
8		-			898,338	-	-	5,160,911	
Total \$	11,923	493	12,094,930	73,380,280	7,119,380	-	4,040	23,773,085	2,140,308
Non-Metallica Fuela									
Coaltons	4,955,563 19,016,720	182, 181 743, 196	-	-	1,306		4,564,015		904
Natural gas M cu. ft.	10,010,120	655,891		7,419,534	3,797 600	940.200	13,342,675 17,798,608	7,150,996	5,039
Peattons		323, 184	1,170	4,635,497	180		4,067,893	-	-
Petroleum, crude bri	_	6,577	5,937	1.096 122.365	-	-	1,413,631	-	-
5 70-4-1		15,461		219,993		-	3,976,220	-	-
	19,016,720	1,081,841	5,937	4,856,586	3,977	945,259	21,386,788	7,150,996	5,039
OTHER NON-METALLICS Actinolitetons	-	-	-	35. 456	-		-	-	4
Asbestos tons	-	2	164,298 4,812,886	-	-	-	-	I	
Barytestons	16	-	1,012,000	_	-	_	_	-	-
Bituminous sandstons	363	_	_		-	-	1,015		-
Diatomitetons	1,484		-	60	~	_	4,060	66	-
Feldspartons	29, 679		10,381	7, 962	-		-	2,270	-
Fluorspartons	1	-	86,842	100, 119	-	-	-	-	-
Graphitetons	-	-	-	620 548	-	-	-	-	-
Grindstones	-	299	-	32,149	-	-	_		_
Gypsum tons	707 017	12,308 58,957	-	FO 0 FO	-	-	-	322 25,795	-
\$	707,817 878,487	451,264		53,358 374,409	23,076 231,124	_		20, 544 176, 173	
Iron oxides tons	_	-	5,410 48,205	-	-	_	-	1,000	-
Magnesitetons	-	-	295,579	-	_			-	-
Manganese (bog)tons	-	77 462	_		-	-	-	-	-
Micatons	-	-	290 30,601	1,049 23,465	-	-	11-1	-0	-
Mineral water. Imp. gal	-	-	19,868	197,540	-	-	1	-	-
Pyrites (sulphur) tons	-	-	4,746 14.586	8,578 6,508		_	-	29.013	_
Quartztons	3,116	-	108, 617 26, 987	65,080 97,888	87,214	-	-	255,760 519	10
Salttons	6,836	-	69,759	148,642 231,329	76,624		**	1,297	
"See footnote page 10.	143,761	-	-	1,760,388	-1	-	-	-	-

<sup>&</sup>quot;See footnote page 10.

Finally Revised Statistics on the Mineral Production of Canada, by Provinces, 1931-Concluded

	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon
Other Non-Metallics-con				870					
Siliea brick M	621 22,044	-	-	279 13,702	-	=	-	-	-
Soapstonetons	-	-	34,439	-	-	-	-	712	10
Sodium carbonatetons	_		-	-	-	-	-	7,351	-
Sodium sulphatetons	_	-	bu .	11.806	-	421,097	-	30	-
Talctons		-	-	122,044	-	128	-	600	0.0
Volcanic dusttons		-	-	-		2,560			-
Total \$	1,081,170	464,034	5,491,674	2,650,552	307,748	423,657	4,060	470,246	
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS									
Clay Products Brick—									
Soft mud process— Face	120	100	_	4,954	_	_	302	-	-
Common M	1,560 780 10,660	2,200 3,134 42,671	]	105,006 24,478 373,130	5,209 76,688	415 5,451	7,550 1,734 22,280	5,427 88,477	60
Stiff mud process— Face M	349	910	32,113	40,935	794	576	675	783	-
(wire cut) \$ Common M	9,970 3,728 54,573	25,669 1,778 26,311	766,988 56,464 841,868	873,334 17,009 249,880	30	20,233 1,831 18,095	12,328 379 3,267	26,848 712 11,110	-
Dry press—	-	-	2,894	13,991		27	2,779	458	
Common M	_	_	74,970 250	300,614 2,719	-	720	28,937 3,797	18,116	44
Fancy or ornamental	-	-	2,500	39,767	-	40	36,179	28,767	
brick M		_	76 3,944	259 16.829	-	-	_	207	
Sewer brick M	_	_	_	1.946 33.321	-	-	-	10,371	-
Paving brick M	-E	_	_	_	_	-	-	19 682	-
Firebrick M	7 240		-			415 24.568	24 1,193	1,802 81,596	
Fireclaytons	65 650		-		_	484 3,915	-	8,362	
Bentonitetons	-	_	_	_	-	_		187 935	
Fireclay blocks and shapes \$	825			-	1 000	63,603	5.360	18,076 3,313	
Hollow blockstons	7,372 86,632		41,585 477,720	41.774 346.079	15.703	3,177 28,299			
Roofing tileNo.	1	-	_	6,932 720	-	-	_	_	
Floor tiles (quarries)			-	107.418	-	81 20	-	-	
Drain tile	159		696	31,394 10,216	248	-	55 1,721		
Sewer pipe, copings,	6,611		24,864				227,305		
flue linings, etc \$ Pottery, glazed or	205,405		168,054			1.031			
Other clay products, \$	_	27, 199	_	73,86 167,53		822			
Total \$	467,136	143,348	2,369,908	3,552,89	122,628	166,257	529,716	498,505	
OTHER STRUCTURAL MATERIALS									
Cementbrls	-	-	4,942,323 7,092,895			_	626,483 1,286,080	1,172,549	
Limeton	s 18,430 79,418	11.241 127,054	111.496	147,66	0 21,014	-	5,118	29,820 277,269	
Sand and gravelton		183,475		7,465,01	7 871,986	1,388,594		3 2.726.704 914,322	
Slateton		-	-		_	_	_	250 5,000	
Stoneton	83,18 225,633		4,265,529 5,893,043	3,359,36 2,881,44			2,496 9,645		
Total 8	593,80	1	15,743.11					3,414,924	
Grand Total 8	21,089,74	2,176,910	35,696,56	96,113,23	5 9,965,854	1,931,880	23,580,72	35,337,756	2,145,8

Mineral Production of Canada (Exclusive of Clay Products and Other Structural Materials), by
Provinces, January 1 to June 30, 1931

	Nova	New	1			0.1.		7	
	Scotia	Bruns- wick	Quebec	Ontario	Manitoha	Saskat- chewan	Alberta	British Columbia	Yukon
METALLICS									
Arsenic (As <sub>1</sub> O <sub>2</sub> ) lb.	_	_	-	2,108,076		_			
Bismuth lb.	-	-	_	82,224 7,331		-		-	-
Cadmium 1b.	-	_	-	4,089	-		-	-	
\$		-	_		-	-	-	129,376	-
Cobalt lb.	_		_	295,822 361,600		_		_	_
Copper.* lb.	_	_	34,814,415	65,777,279 5,982,094		-	_	33,110,093	\$10 4
Goldfine oz.	279 5, 767		147,420 3,047,442	996,922 20,608,206		-	_	69,496 1,436,610	6,39
Lead lb.	_	-	_	684,444 30,162	-	-	-	142,644,598	3,090,78
Nickel lb.	-	**	-	40,690,562	-	-	-	3,919,874	84,93
Palladium, rhodium.	-	-	-	9,047,131		-	_		-
etc	-	-	-	22,259 610,879		-		-	-
Platinum fine oz.	-	-	_	22,729 712,100		-	-	-	_
Selenium lb.	-	_	-	5,835 11,086			_	2,500	-
Silver fine oz.	20	-	263.966	3,901,763	382.283	_	_	4,750	2,771,447
Zinelb.	6		74,159	1,096,161	107,399 17,708,712	-	_	1,231,146	778,610
	-			-	451,041			2,953,783	
Tetal \$	5,773		6,341,931	38,545,732	3,090,376			12,738,223	995,803
Non-Metallics									
Fuels									
Coaltons	2,619,696	94.615	-	-	-	267.778			251
Natural gas M cu. ft.	10,332,448	391,026 423,429	-	4,355,000	300	390,574	10, 193, 613	3,576,049	1,147
Peattons	***	208,395	660	2,613,000	90	-	2.719.593	-	_
Petroleum, crude. brls	-	3.709	3,454	62,070	-	_	872,000		-
8	-	8,850	-	112,401	40	-	2,472,564	-	-
Total \$	10,332,448	609,171	3,454	2,725,401	90	390,574	11,019,533	3,576,049	1,147
OTHER NON-METALLICS									
Actinolitetons		_	-	7	-		-		_
Asbestostons	-	-	76,145	80	-	-		-	dn.
Barytestons	16	-	2,447,617	-	-	_		-	_
	863	-	-	_	-	-	_	40. 40.	-
Bituminous sandstons	-	-	-	-	_	-	_	-	-
Diatomite tons	2,150	-	_	6 84	-	-		1,749	-
Feldspartons		-	4,252 38,915	1.975	-	-	-	-	-
Graphite tons		-	-	383		-	-	-	-
Gypsum tons	229,845	19.863	-	21, 198	11,798		-	9.267	-
Iron oxidestons	274, 105	278,020	1,638	227,546	127,498	-	***	85,249	_
Magnesitetons	-	-	15,120 4,949	_	_	-	-	_	_
Micatons	-	-	135,175 280	385	-	-	-		-
Mineral water imp. gal.	-	-	21,906 4,155	15,270 142,700	=	-	_	-	-
e	-	***	1,549	9,571	-	-	-		-
Dhombata					-	-			-
Phosphate,tons	-	_	_	-		***		-	_
Phosphatetons \$ Pyrites (sulphur)*tons \$ Quartstons			6,618 49,172	3,821 38,210				3,992 36,576	-

Mineral Production of Canada (Exclusive of Clay Products and Other Structural Materials), by Provinces, January 1 to June 30, 1931—Concluded

	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon
Other Non-Metallics-on									
Salttons	11,314		-	104.592		-	-	-	240
	72,539	90	-	838.337		-	-		_
Silica brickM.	-	-	_	459 21.832	-				
Consideration to the same			_	24.002	-	-	_		
Soapstonetons			19.896	-			-	-	_
Sodium carbonatetons			10,000	-	_	_	_	220	
g g	-	-	-		94	-	-	2,535	***
Sodium sulphate tons	-	100	-	-	-	bo.	-	-	-
\$			-	-	-	294,589	-	-	
Talctons	-			5,856		240	645	-	-
\$	-	-	240	59,625		-		-	-
Volcanic dust tons	-	-	_	-	-	27 540	-		_
\$	-	-	_	_	_	040			
Total \$	349, 157	278,020	2,780,673	1,337,244	145,951	295, 129	-	127, 406	-
Grand total \$	10,687,378	887, 191	9,126,061	12,608,377	3, 236, 417	685,703	11,019,533	16,441,678	996,95

<sup>&</sup>quot;See footnote page 10.

Mineral Production of Canada (Exclusive of Clay Products and Other Structural Materials), by Provinces, January 1 to June 30, 1932

	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitobs	Saskat- chewan	Alberta	British Columbia	Yukon
Metallics		A 1		4 000 Pag					
Arsenic (Ass Oa) lb.	-	-	_	1,628,733 45,149	-	-	-	do do	
Bismuth lb.	~	64 100	-	10,939 9,626	_	_		_	-
Cadmium lb.	-			_	10,162	**		41.554	-
Cobalt lb.	-	-	_	210,283	-	10	-	-	
Copperlb		-	31,406,483				40	27.143,755	
Goldfine oz.	267	***	2,072,954 214,290	2,501,893	1,869,383 56,732	-	-00	1,791,596	7.303
Lend	5,528	44		23,313.715		-	-	1,853,953 125,727,824	150,986 1,914,998
4	_	_	Ĩ	56,756 1,268		-	-	2,808,005	42,770
Nickel lb.	-		-	21,162,786 5,166,063	-	-	_		91
Palladium, rhodium, fine oz.	-	_	_	24.169		_		-	44
Platinum fine oz	-	44		688,151 17,593		-	In	20	-
8	-	_	-	694,924		-	_	790	4 400 404
Silver	20	-	335,186 110,227	3,377,700	572,649 188,317		-	3,699,652 1,216,642	1,466,404 482,231
Zinclb.	_	_	-	1	20,568,600 479,310	-		68,496,549 1,596,175	-
Total \$	5,535		6,612,948	33,76),824	3,719,926	-	-	9,308,715	675,967
Non-Metallica									
Fuels									
Cosltons	2,094,840	101,008	-	-	865	377,608			357
Natural gas M cu.ft.	7,717,048	395,428 429,085		4,445,000		487,214	6,123,956 9,644,000	-	1,912
Peattoas	-	212,059	31	2,750.000	90	-	2,600,000	_	
8	_	-	140	62,683	-	-	504.598	-	-
Petroleum, crude. brls.	-	2,860 6,526		116,664		-	1,455,349		-
Total 8	7.717.048	614,913	140	2,566,661	2.044	497 914	18 179 705	3,575,145	1,913

Mineral Production of Canada (Exclusive of Clay Products and Other Structural Materials), by Provinces, January 1 to June 30, 1932—Concluded

	Nova Scotia	New Bruns- wick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon
OTHER NON-METALLICS									
Actinolitetons		-	_	-	t	-	-	-	
Asbestostons	-	-	55.469	_	-		-	-	
Barytestons	_	-	1.356.851	-	-	_	-	-	-
8	-		-	_	-	-	-		-
Bituminous sandstons	-	-	_		-	-	253		-
Diatomite tons	742			9	-	_	1.012	15	
Feldspartons	14,839	-	1.186	360 1,859	-	-	-	499	-00
8		-	13.054	21,636	_			-	-
Gruphite tons	-	-		255	-	-	-	-	-
Gypsumtons	91,779	17,039	_	12,930 20,389	7.978	_	-	5,923	-
Fron oxides tons	122,989	241,289	2.703	188,778	70,811	-	-	57,783	
3	_	_	24.272		-	-			-
Magnesitetons	-	-	5,890				-		_
Micatons		810	149,129	50	-	_	-	-	-
Mineral water imp. gal.		-	3,078	671	-	-	-	_	-
\$	-		4,005 1,932	34.117			-	-	**
Pyrites (sulphur*)tons	-	-	8.571	2,005	-	-	_	20,521	-
Quartstons		-	65,894	20,050 32,769	41.546	-	-	190,476	-
\$	-	-	19,699	46,440	47.362		_	-	_
Salttons	15,290 73,928	-	-	112,387 882,352	tro.	-	-	-	**
Soapstonetons	-	-		002,002	-	**	_		_
Sodium carbonate . tons	-	- 1	22, 493	-	-	-	4	-	-
S	-			-	-		200	1.800	_
Sodium sulphatetons	Dis.	-		-	-	179 040	-	-	-
Taletons	40	-		6,366	-	132,049	-	~	_
Volcanie dusttons	-	_	-	59, 107	Dir.	**		-	-
8		-	-	200	-	3,200		-	_
Total \$	211,758	241,289	1,656,393	1,234,225	118,173	135,248	1,012	250,208	-
Grand Total \$	7,934,339	855,302	8,269,481	37,870,713	3,849,143	622, 463	10, 180, 317	13,134,068	677.879

<sup>\*</sup>See footnote page 10.

## Metal Prices, 1927-1932

Metal	Market	Unit	1927	1928	1929	1930	1931	January 1 to June 30 1932
			\$	8	- 8	8	8	
Platinum Silver Tin	New York. New York. New York. New York. Montreal. New York Montreal. Toronto. London. New York New York	Pound Found Long ton Found Fine oz Fine oz Pound Pound Pound Pound Pound Pound Pound Pound	0·36 84·636 0·56370 0·02747 0·06242 0·07710	0.10305 0.04 2.03 2.10 0.14570 0.16402 0.06305 0.0608 0.06206 21.060 0.38 75.58 0.58176 0.50427 0.06027 0.07144 25.284	0.08956 0.04 2.52 2.10 0.18107 0.19978 0.06833 0.06878 0.06775 23.246 0.35 67.655 0.52903 0.45155 0.061512 0.0687 24.793	0·07667 0·04 2·50 2·00 0·12982 0·1498 0·05517 0·05496 0·056 18·077 0·36 45·358 0·38154 0·31694 0·05584 16·570	0·06720 0·045 2·50 1·75 0·08116 0·10006 0·04213 0·04169 0·04238 12·958 0·38 35·665 0·28700 0·24447 0·0364 0·03961 12·215	0.05767 0.040 2.50 1.35 0.05789 0.07844 0.03267 0.03770 12.249 0.35 39.50 0.28874 0.20922 0.02775 0.3776

Note.—All prices in dollars per unit excepting London lead and zine prices which are quoted in pounds sterling per long ton.

Exports of Certain Canadian Metals and Minerals January 1 to June 30, 1931 and 1932

	1931		193	2
	Quantity	Value	Quantity	Value
Metallics		\$		\$
Arsenic	1,578,800	59,590	1,145,400	41,130
Cobalt, in ore 10. Cobalt, metallic 1b. Cobalt alloys 1b.		381.777		260,551
Cobnit oxides and cobnit saits.  Copper, fine, in ore, matte, etc.   1b. Copper, blister.   1b. Copper bars, rods, strips, sheets plates and tubing.   1b. Copper ingots, bars, cakes, slabs and billets.   1b. Copper in rule, strips, sheets, plates, and tubing.   1b.	23,355,600 19,467,200 20,170,300	1,844.128 2,308,442 1,971,790	25, 181, 100 11, 829, 100 *62, 346, 700 50, 053, 400 3, 800, 700	1,531.583 705,592 *4,673.447 3,066.736 231.122 75,241
Gold-bearing quartz, dust, nuggets and bullion exported from the mines and smelters. Lead, metallic, in ore, etc. lb. Lead, in pig and block lb. Nickel, fine, in ore, matter or speiss. lb. Nickel, fine. lb. Nickel in oxide lb. Nickel in oxide lb. Nickel in oxide fine oz. Silver ore, concentrates, etc. fine oz. Silver bullion. fine oz. Zinc speiter lb.		7,791,773 900 2,191,551 3,924,237 4,541,273 453,991 469,846 308,673 2,177,548 2,792,622	93,619,700, 9,689,500, 8,957,800, 539,500, 9,941, 553,330, 7,733,496	1,474,887 1,628,603 1,774,475 2,354,141 147,346 794,613 161,424 2,335,325 2,148,707
Non-Metallics				
Asbeetos, crude.  Asbestos, sand and waste.  Feldspar.  Graphite or plumbage, crude or refined.  Graphite or Plumbage, crude or refined.  By laster of Paris, ground or prepared wall plaster  tons Magnesite, calcined.  Mica splittings  Mica, scrap and waste.  Mineral pigments, iron oxides, ochres, etc.  Lons Pyrites (sulphur contained in)  Salt.  tons  Tale.  tons  Tale.	18 396 356 8,308	1,934,123 603,649 32,713 19,655 192,524 25,200 7,166 13,067 18,196 23,905 57,307	33,904 1,705 339 101,314 417 174 2 84 394 14,344 1,605	928,741 485,037 12,565 13,473 135,068 7,560 8,302 2,037 923 28,861 63,731 13,296 43,701

<sup>\*</sup>January, February, March, 1932. †April, May, June, 1932.

Note.—In the following tables more detailed information is given on some of the more important minerals.

(Arranged in alphabetical order.)

Asbestos

Output and Sales of Asbestos in Canada, January 1 to June 30, 1931 and 1932

			shipped 931				or shipped		
	Total Quantity		Total sales value at mill	Average Total Quantity		Total sales   value at mill	A verage value		
	tons	tons	tons \$		tons	tons	\$	-	
Crude No. 1. Crude No. 2. Other crudes Spinning stocks Shingle stocks Millboard and paper stocks.	205 1,128 75 5,266 3,206 21,604		281,998		28 306 4 4.694 3.814	50 147 4 2,820 4,244		139.00 90.85	
Fillers, floats and other short fibres. Paper stocks. Waste, stucco or plaster. Refuse or shorts.	35,483	41,950	614,106	14.63	10,536 3,133 33,353	3,327	53,106		
Total	66,967	76,145	2,447,617	33.14	55,868	55,469	1,356,851	24.4	
Sand and gravel	2.979			0.76	1,994	1,994	1,841	0.9	

## Coal and Coke

Output and Value of Canadian Coal by Provinces and Grades, January 1 to June 30, 1931 and 1932
(Short tons)

Province	193	1	193	12
	Output	Total value	Output	Total value
Nova Scotia (Bituminous)	2,619,696	\$ 10,332,448	2,094,840	8 7,717,048
New Brunswick (Bituminous)	94,615	391,926	101,008	395,428
Manitoba (Lignite)	-	-	865	1,954
Saskatchewan (Lignite)	267,778	390.574	377,608	487,214
Alberta— Bituminous, Sub-bituminous Lignite	982,988 188,951 809,341	3,336,746 467,226 2,023,404	865, 152 250, 910 1,077, 115	2,867,678 590,353 2,665,925
Total for Alberta	1,981,280	5,827,376	2,193,177	6,123,956
BRITISH COLUMBIA (Bituminous)	927, 968	3,576,049	887,946	3,575,145
Yukon (Bituminous)	251	1,147	357	1,912
CANADA— Bituminous Suh-bituminaus Lignite Total	4,625,518 188,951 1,077,119 5,891,588	17,638,316 467,226 2,413,978 20,519,520	3,919,303 250,910 1,455,588 3,655,801	14,557,211 599,353 3,155,093

# Exports of Canadian Coal by Provinces, January 1 to June 30, 1931 and 1932 (Shorttons)

Province	1931	1932
rince Edward Island		
OVA SCOUR	64.415	35.48
Civi and district and the contract of the cont	29,141	29,68
***************************************	-	
ntario anitoba	59	t i
skatchewan	716	91
iberta	320	24
ritish Columbia	74,228	66, 43
ukon	-	-
Total	169, 293	122 94

# Imports of Anthracite, Bituminous and Lignite Coal into Canada January 1 to June 30, 1932 (Short tons)

- 11	Anthracite				1	Bituminous	Lignite			
Month	United States	Great Britain	Belgium	Germany	Total	United States	Great Britain	Total	United States	Total
January February March April May June	142,095 119,495 214,150 122,000 150,802 100,816	15, 903 8, 916 8, 103 57, 029 170, 967 146, 657	650 - -	5,693	157,998 129,061 222,253 179,029 321,769 253,166	471,155 376,126 483,718 357,788 664,478 471,034	2,722 5,329 5,530 53,605 84,391	471,155 378,848 489,046 363,318 718,083 705,425	480 787 223 51 35 151	629, 631 588, 686 241, 523 542, 388 4, 039, 582 968, 742
Total	849,358	407,575	650	5,693	1,263,276	3,024,299	101,576	3,125,875	1,727	4,390,87

Coal Made Available for Consumption in Canada, January 1 to June 30, 1931 and 1932
(Short tons)

		193	1		1932			
Month	Output	Imports	Exports	Coal made available for use	Output	Imports	Exports	Coal made available for use
January February March April May June	1,178,826 962,401 1,050,187 898,406 911,777 889,991	792.826 830,609 815,429 537,530 1,191,017 1,198,479	37,017 21,341 32,251 12,431 27,887 38,066	1,771,369 1,833,365 1,423,505 2,074,907	1,188,382 1,230,248 1,048,552 739,368 697,462 751,789	629,633 508,696 711,522 542,398 1,039,887 958,742	34.017 26.948 27.380 12.576 18.209 13.771	1,711,990 1,732,694 1,269,190
Total	5,891,588	5,365,899	169, 293	11,088,185	5,655,891	4,390,878	132,961	9,913,71

# Coke Production in Canada, January 1 to June 30, 1932

(Short tons)

Month	Bituminous coal used for coke making			Coke	Disposition of coke by makers				
	Canadian	Imported	Total	made	Used in makers' coke plants	Used in makers' smelters	Sold to other smelters	Sold for domestic use, etc.	Total
Junuary February March April May June	43,330 40,116	168, 548 153, 061 169, 472 155, 088 146, 882 133, 346		151, 111 143, 915 156, 108 142, 606 129, 194 118, 719	21,903 23,135 21,811 22,912	36,289 34,075	12,011 9,458 7,736	139,447 121,060 64,288	175,555 197,624 192,495 129,632 84,257 72,343
Total	226,792	926, 397	1,153,189	841.653	132,799	173,278	53,197	492,532	851,866

# Production in Canada, Imports and Exports of Coke, by Provinces, January 1 to June 30, 1931 and 1932

(Short tons)

	Year	Nova Scotia, New Brunswick and Quebec	Ontario	Manitoba, Saskat- chewan, Alberta and British Columbia	Canada
Production	1931 1932	307,008 196,094	606,890 563,152		1,008,583 841,653
Imports	1931 1932	15,780 5,529	394,384 214,634		416,372 222,331
Exports	1931 1932	242 159	96	10,056 8,918	19,394 9,077
Apparent Consumption	1931 1932	322,546 201,464	1,001,178 777,786		1,414,561 1,954,907

Coke used in iron blast furnaces, in Canada, during the period January 1, to June 30, 1932, was 80,499 tons.

## Copper

Production of Copper in Canada, by Provinces and by Sources, January 1 to June 30, 1931 and 1932

	193	31	193	32
	Quantity	Value	Quantity	Value
Production— By Provinces—	Pounds	8	Pounds	\$
Quebec Ontario Manitoba British Columbia	34,814,418 65,777,279 15,575,254 33,110,093	3,220,333 5,982,094 1,440,711 3,062,684	42,333,941	2.072.954 2.501.893 1.869.383 1.701.596
Total	149,277,841	13,705,822	129, 296, 453	8,235,826
By Sources— In blister copper produced. In ores, copper matte and concentrates exported. In copper nickel matte exported.	126, 211, 455 19, 346, 563 3, 719, 023	11,674,560 1,789,527 241,735		7,086,107 769,629 380,090
Total	149,277,041	13,705,822	179,206,453	8,235,826

## Gold

Production of Gold in Canada, by Provinces and by Sources. January 1 to June 30, 1931 and 1933

<u> </u>	193	31	19	32
	Fine ounces	Value	Fine ounces	Value
Nova Scotta-		8		8
In gold bullion	279	5,767	267	5,528
QUERIX— In blister copper, gold bullion and in ores exported	147, 420	3,047,442	214,290	4,429,767
Ontanto— Porcupine Area—				
In gold bullion.  Kirkland Lake Area—	457,761	9,462,759	502,228	10,381,974
In gold bullion. Other gold mines and in matte and blister copper	507,532 31,629	10,491,617 653,830	580,054 45,519	11,990,780 940,961
Total Ontario.	996,922	20,608,206	1,127,801	23,313,718
Manitoba— In gold bullion and in blister copper	52,788	1,091,224	56,732	1,172,754
ALBERTA		-		
BRITISH COLUMBIA—				
In alluvial gold In gold bullion from gold mines In blister copper In base bullion and in ores exported	4,706 15,354 12,405 37,031	97, 282 317, 395 256, 434 765, 499	3,294 27,725 12,518 46,148	68,093 573,127 258,770 953,963
Total	69,496	1,436,610	89.685	1.853.953
YURON— In alluvial gold and in ores exported	6,398	132, 258	7,303	150,966
Canada	1,273,303	26,321,597	1,496,078	30,926,683

## Gypsum

Production of Gypsum in Canada, January 1 to June 30, 1931 and 1932

	1931		1932	
	Tons	Value	Tons	Value
Crude—		8		8
Lump or mine run. Crushed Fine ground alcined gypeum	5,871 221,455 589 65,216	15,553 248,681 4,189 723,995	10,567 83,804 1,607 47,130	16,00 96,08 9,33 560,17
Total sold or used	293,131	992,418	143,108	691.60

## Iron and Steel

Praduction of Pig Iron and Ferro-Alloys in Canada, January 1 to June 30, 1931 and 1932

		1931		1932			
_	In blast fu	irnaces		In blast furnaces			
	For own use	For sale	Total	For own use	For sale	Total	
Pig Iron— Basic Foundry Malleable	241,984 647	81 33,659 22,851	242,065 34,306 22,851	48, 221	15,043 13,826	48,221 15,154 13,826	
Total Pig Iron	242,631	56,591	299,222	48,332	28,869	77,201	
FERRO-ALLOYS	_	22,884	22.884	-	8,759	8,759	

Production of Steel Ingots and Castings in Canada, January 1 to June 30, 1931 and 1932 (Long tons)

	1931			1932		
	For own use	For sale	Total production	For own use	For sale	Total production
STEEL INGOTS— Open-hearth—Basic. Electric. Other	420,616 14,786	146	420.762 14.786	163, 695 10, 149	512 	164, 207 10, 148
Total steel ingots	435, 402	146	435,548	173.844	512	174,350
STEEL CASTINGS— Open-hearth—Busic	942	10,596	11,538	308	1.367	1.67
AcidBessemerElactric.	25 130	775 13,861	800 13.991	66 233	435 3,723	50: 3,95
Total direct steel castings	1,097	25.232	26,329	607	5,525	6, 13
Grand Total	436,499	25,378	461,877	174, 451	6,032	180,48

#### Nickel

Production of Nickel in Canada, January 1 to June 30, 1931 and 1932

	1931		1952	
	Quantity	Value	Quantity	Value
Nickel in matte and speiss exported.  Refined and electrolytic nickel produced.  Nickel in oxides and salts sold.	1b. 22,768,912 16,018,479 1,903,171	\$ 4,098,404 4,285,456 663,271	1b. 10,088,727 10,309,372 764,687	1,815,971 3,107,533 242,559
Total	49,698,562	9,047,131	21,162,786	5,166,063

#### Petroleum

Production of Crude Petroleum in Canada, January 1 to June 30, 1931 and 1932

	1931		1932	
Province	Barrels	Total value	Barrels	Total value
New Brunswick	3,709	\$ 8,850	2,860	8 6,526
Ontario— Petrolia and Enniskillen Oil Springs	29, 212 15, 363	52,184 28,958	29,279 15,585	53, 761 30, 179
Moore Township. Sarnia Township. Plympton Township.	1,829 836 148	3, 265 1, 492 264	1,941 738 131	3,565 1,355 243 17,93
Bothwell. West Dover. Onondaga.	9,099 444 15	16, 241 793 57	9,764	7.76
Mosa Township Dutton Thamesville	4.378 335 299	7, 815 598 534	4,226 285 290	523 533
Euphemia Total for Ontario	62,070	112,401	62,683	116,66
Alberta	872,000	2,472,564	504,598	1.455,34
Canada	937,779	2,593,815	570,141	1,578,53

Salt Production of Salt in Canada, by Grades, January 1 to June 30, 1931 and 1932

Grade	1931			1932		
	Manu- factured	Sold	Value of salt sold (not including containers)	Manu- factured	Sold	Value of salt sold (not including containers)
	tons	tons	8	tons	tons	3
Table, dairy and pressed blocks	26, 851 27, 391 21, 123 13 39	26,398 27,405 20,714 13 39	540, 297 164, 057 164, 253 65 205	28, 285 28, 873 22, 536 24 22	28, 809 27, 586 23, 274 24 22	574,662 175,252 158,187 110
sold or used)	41,337	41.337	41,999	47,968	47.968	47, 968
Total	116,754	115,906	918,876	127,708	127,677	956,2%0
Value of containers	-	-	249,539	-	-	237,398
Grand Total		-	1, 160, 415		-	1,193,678

Silver Production of Silver in Canada, by Provinces and by Sources, January 1 to June 30, 1931 and 1932

1932 Quantity Value Quantity Value fine oz. Nova Scotla-In gold bullion-Total. fine oz. 20 In gold cres, in blister copper and in cres exported-Total..... 263,966 74, 159 335, 186 110,227 ONTABIO-In silver bullion.
In gold bullion.
In matte, blister copper and in ores, concentrates and residues 3,008,247 2,651,954 215,408 872,103 70,838 exported.... 200,202 510,338 167 826 3,901,763 1,096,161 3,377,700 1, 110, 767 In gold bullion and in blister copper—Total..... 382,283 107,399 572,649 188,317 BRITISH COLUMBIA-Tible COLUMBIA—
In alluvial gold.
In gold bullion
In blister copper
In buse bullion and in ores exported. 1,059 244 2,106 119,319 1,094,973 1,004 128,211 1,101,633 6,405 362,834 3,329,672 456,366 3,921,239 4.382.239 1,231,146 3,699,652 1,216,642

1931

1,440 2,770,007

2,771,447

11,701,718

405 778, 205

778,610

3,287,481

1,614 1,464,790

1,466,404

9,451,611

530 481,701

482.231

3,108,191

Canada.....

Total....

<sup>\*</sup>Contains silver in ores shipped to British Columbia smelters in 1932.



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PREPARED IN THE

# MINING, METALLURGICAL AND CHEMICAL BRANCH DOMINION BUREAU OF STATISTICS

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