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DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS

MINING, METALLURGICAL AND CHEMICAL BRANCH
OTTAWA - CANADA

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# PRELIMINARY ESTIMATE OF CANADA'S MINERAL PRODUCTION, 1935.

## (FOR RELEASE BY THE PRESS - WEDNESDAY, JANUARY 1st, 1936)

Canada's mineral production was valued at \$308,164,000 in 1935, according to a report issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics at Ottawa. This is an increase of 11 per cent over 1934 and was exceeded only by the peak year of 1929 when the production was valued at \$310,850,246.

New records were established in the outputs of gold, copper, nickel, zinc, selenium, tellurium and sulphur.

Considered by groups and compared with corresponding totals for 1934, metals showed an advance of 14 per cent to a total of \$221,728,000; fuels including coal, natural gas, crude petroleum and peat, amounted in value to \$54,280,000, a slight gain; non-metallic minerals other than fuels increased 16 per cent in value to \$12,130,000; and structural materials including cement, lime, clay products, stone and sand and gravel advanced 4 per cent to \$20,026,000.

OFFICIAL ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, 1935, WITH COMPARATIVE FIGURES FOR 1934.

		FUR 1934.			
		1 9	3 4	1 9	3 5
Item		Quantity	Value	Quantity	Value
METALLICS			4		\$
Gold	fine oz.	2,972,074	61,438,220	3,290,664	68,024,000
Estimated exchange on gold			41,098,333	***	47,774,000
Silver		16, 115, 282	7,790,840	16,413,482	10,346,000
Nickel		128,687,340	32, 139, 425	139, 194, 348	35,450,000
Copper		364,761,062	26,671,438	418,753,148	32,322,000
Lead		346,275,576	8,436,658	337,459,472	10,620,000
Zinc		298,579,683	9,087,571	316,250,769	9,825,000
Platinum metals		200,162	6,190,045	186,981	5,326,000
Cobalt		594,671	592,497	637,847	514,000
Other metals		• • •	665,941		1,527,000
TOTALS	XX		194,110,968		221,728,000
NON-METALLICS FUELS					
Coal	ton	13,810,193	42,045,942	14,108,718	42,499,000
Natural gas		23,162,324	8,759,652	22,567,700	8,367,000
Petroleum, crude		1,410,895	3,449,162	1,430,200	3,406,000
Peat		1,878	7,343	2,000	8,000
TOTALS			54,262,099	• • •	54,280,000
OTHER NON-METALLICS					
asbestos	ton	155,980	4,936,326	212,857	6,972,000
Feldspar		18,302	147,281	15,934	128,000
Gypsum		461,237	863,776	556,140	920,000
Magnesitic-dolomite			382,927		474,000
Quartz		272,563	482,265	228,488	421,000
Salt		321,753	1,954,953	354,517	1,723,000
Sodium sulphate		• • •	587,986		341,000
		51,537	515,502	60,466	585,000
Sulphur		01,001	180,777	• • •	156,000
Talc and soapstone Other non-metallics			449,969		410,000
		0 6 6	10,501,762		12,130,000
TOTALS			20,002,100		
MATERIALS					1
Clay products (brick, tile,			0 600 410		2,800,000
pipe, pottery, etc.)		2 707 000		g 507 013	5,583,000
Cement		3,783,226	5,667,946	3,587,913	
Lime		368,113	2,745,797	426,372	3,061,000
Stone, sand and gravel	XX	0.6.4	8,192,608	• • •	8,582,000
TOTALS	XX		19,286,761		20,026,000
GRAND TOTALS	xx		278,161,590	•••	308,164,000

### METALS

GOLD - In no previous year in Canadian mining history did Canada produce as much gold as in 1935. Output totalled 3,290,664 fine ounces which, when valued at \$35.19 per fine ounce, the average price of gold for the year in Canadian funds, amounted to \$115,798,000 as compared with 2,972,074 fine ounces valued at \$102,536,553 in 1934 when the average price was \$34.50 per fine ounce. The previous record year in the quantity output of gold was 1929 when Canadian mines yielded 3,044,387 fine ounces. The recent rise in the price of gold has permitted operating mines to treat, at a profit, ores of lower grade; this tended for a time to reduce the amount produced. It also intensified the search for gold properties and has resulted in many new finds. As it takes from two to three years to bring a raw prospect to the production stage the real effect was not felt until this year when the output from the new producing mines has made up for the drop in quantity production by some of the older operators.

Gains in gold production were recorded in all gold producing provinces except Alberta, in which province only a minor amount is recorded annually.

Nova Scotia output at 7,967 fine ounces was more than double that of 1934. Quebec production at 474,746 fine ounces exceeded the previous year's record by 22 per cent. The Noranda copper-gold mine is the largest gold producer in the pro ince. During recent years several gold mines of considerable merit have been brought to the production stage in Quebec and promising development work is being carried on at numerous properties. During the past year Lamaque, Arntfield, and Canadian-Malartic have been added to the list of producers and a mill is being built at Shawkey.

Ontario, with an output of 2,225,082 fine ounces, produced 68 per cent of the total for Canada. Mining and development work was widespread throughout the province including extensive operations in the Patricia and Lake of the Woods districts in the western part of the province, in the Little Long Lac and Sturgeon sections, Porcupine and Kirkland Lake, Sudbury area, and even extending to the Marmora and Madoc areas in the older settled parts of the province where the first discovery of gold in the Canadian Pre-Cambrian shield was reported in 1866.

Manitoba and Saskatchewan combined produced 158,469 fine ounces as against 137,726 fine ounces in the preceding year. A large proportion of this came from the ores of the Flin Flon mine where it occurs in association with copper and zinc. In southeastern Manitoba the largest gold producer is the San Antonio; during april the mine tonnage was stepped up to 300 tons per day. Central Manitoba operated steadily throughout the year; Diana ran continuously and plans have been formulated for the erection of a 150 ton mill at Gunnar Gold. God's Lake gold mine was brought into production during the fall, a considerable achievement in the face of great transportation difficulties.

Gold output from British Columbia mines also marked an improvement. Production totalled 384,797 fine ounces as compared with 296,196 fine ounces in 1934. The Premier in the Portland Canal area and the Pioneer and Bralorne in the Bridge River district are the three leading producers. The leasing of the old Rossland properties by the Consolidated Mining and Smelting Company Limited resulted in a considerable output from that once famous camp; the old Nickel Plate mine at Hedley is again in production and the Sheep Creek-Ymir camp is developing well; the Cariboo Gold Quartz produced steadily throughout the year, an initial dividend will be paid on January 1st, 1936. Placer gold output was greater than in 1934. Placer gold production from the Yukon Terkitory at 39,452 fine ounces was also higher than in the preceding year.

PRODUCTION OF GOLD IN CANADA FOR THE CALENDAR YEAR 1934 AND ESTIMATED PRODUCTION FOR 1935.

PRODUCTION OF GOLD IN CHARDA TOT THE	1 9	3 4	1	9 3 5
Provinces	Fine ounc	es 🐫	Fine ou	nces 0
Nova Scotia	3,525 390,097	121,613 13,458,347	7,967 474,746	280,359 16,70 <b>6</b> ,312
Ontario - Forcupine Kirklane Lake	949,799 988,046 167,494	32,768,065 34,087,587 5,778,543	966,950 951,636 306,496	34,026,970 33,488,071 10,785,594
Total Ontario		72,634,195 4,565,075	2,225,082	78,300,635 5,156,883
Saskatchewan	5,405 393 296,196 38,798	186,472 13,558 10,218,762 1,338,531	11,925 151 384,797 39,452	419,641 5,314 13,541,006 1,388,316
Yukon	0 000 000	102,536,553	3,290,664	115,798,466

In 1934 gold was valued at \$34.50 per fine ounce. In 1935 gold was valued at \$35.19 per fine ounce.

SILVER - Silver production at 16,413,482 fine ounces was only slightly under the output of 1934. The average price for the year at 63.0325 cents per fine ounce as against an average of 47.4609 cents in the preceding year resulted in a gain in the total value of 33 per cent. British Columbia is Canada's largest silver producing province and the Sullivan silver-lead-zinc mine, owned and operated by the Consolidated Mining and Smelting Company Limited, is Canada's largest single producer of silver. Production from British Columbia mines totalled 9,099,242 fine ounces, an increase of 4 per cent over 1934. The other large silver producing mine in British Columbia is the Premier which appeared a year or two ago to be approaching an end, but its amalgamation with the B.C. Silver will add considerably to the life of the operation.

Ontario silver production totalled 4,925,616 fine ounces, a drop of 7 per cent. Production from Cobalt and Gowganda was lower but the output from the nickel-copper ores marked an increase.

Silver is also produced in association with copper and gold in the mines of Quebec, Manitoba and Saskatchewan. Output from the silver-radium ores of the Great Bear Lake district was considerably in excess of 1934. Yukon production was less.

COPPER - Copper at 418,753,148 pounds was a record. Increases were reported in all copper producing provinces except British Columbia. Production from Ontario mines (nickel-copper) totalled 253,404,661 pounds. Quebec production, which includes Noranda in the western part of the province and the old Eustis property in the Eastern townships, totalled 77,555,112 pounds. Manitoba and Saskatchewan combined recorded an output of 49,638,500 pounds and British Columbia, 38,154,875 pounds. The Granby mine at Anyox which has been in operation for so many years was forced to close cown in August and the Britannia on Howe Sound is the only copper mine in the province producing at present. It has been announced recently in the press that the plants of the Granby Consolidated have been purchased by the Consolidated Mining and Smelting Company Limited and "it is thought that the Consolidated Company has purchased the equipment and especially the power plant with a view to the future development of the Big Missouri mine situated about 60 miles north of Anyox and in which the Consolidated has a controlling interest."

NICKEL - Nickel output consisting of electrolytic nickel, nickel in nickel oxide produced, and nickel in copper-nickel matte exported, totalled 139,194,348 pounds, an increase of 8 per cent over the preceding year.

It has been announced recently that the International Nickel Company Limited has decided to spend \$6,000,000 upon the enlargement of their Copper Cliff smelter. The Falconbridge Nickel Company Limited continued to ship copper-nickel matte to Norway for refining.

LEAD - Lead output at 337,459,472 pounds was slightly under that for 1934 but owing to the increase in the average price for the year the total value of the production at \$10,620,000 was 26 per cent higher. Average monthly quotations on the London market, transposed to Canadian funds, rose from 2.25 cents per pound in January to 4.05 cents in October. November and December averages were slightly lower. The average for the year was 3.147 cents per pound as against an average of 2.436 cents in 1934. The Sullivan mine in British Columbia, owned and operated by the Consolidated Mining and Smelting Company Limited is the source of the major part of the Canadian lead output. Lead is also contained in the cres of the Britannia and Premier mines, which are exported for treatment. The Monarch mine at Field, B.C., ceased production towards the close of the year and will concentrate on development work. The Mayo camp in the Yukon was responsible for the production of 114,693 pounds and the Tetreault property in Quebec began production in June after having been shut down for several years.

ZINC - Zinc output was the greatest on record. Production, including the refined zinc made at Trail, B,C., and Flin Flon, Manitoba, and the recoverable zinc in concentrates exported from the Britannia mine in British Columbia and the Tetreault mine in Quebec totalled 316,250,769 pounds valued at \$9,826,000 as against 298,579,683 pounds worth \$9,087,571 in 1934.

An interesting development has taken place in northwestern Untario in the production of chromite. The ore is mined at Obonga Lake and is shipped to Sault Ste. Marie for treatment. A small production was also reported from the Thetford district of Quebec.

Cadmium is produced as a by-product in the refining of the zinc ores at Trail; production was considerably in excess of the preceding year. The metals of the platinum group which are recovered in the refining of the nickel-copper ores were reported at a slightly reduced figure from 1934. Selenium and tellurium were recovered at the works of the Ontario Refining Company Limited, Copper Cliff, and at the Canadian Copper Refiners, Montreal East. Arsenic was produced by the Deloro Smelting and Refining Company Limited in larger quantities. Cohalt including cobalt metal, cobalt in oxide and in ores and residues exported also marked a gain.

The Eldorado Gold Mines which operate a silver-radium mine in the North West Territories reported a busy season. The mill handles 65 to 70 tons of ore daily making around 1,000 pounds of pitchblende-silver concentrates and it was expected to ship out in excess of 100 tons of concentrates and high grade ore for the Port Hope refinery before the close of navigation and to continue shipments by plane after the freeze-up.

#### FUELS

COAL - Total coal production in Canada during 1935 at 14,108,718 tons worth 42,498,712 marked a slight increase over the preceding year. Output from the mines of Nova Scotia and British Columbia registered a decrease but New Brunswick, Saskatchewan, and Alberta mines produced more coal than in 1934. Canadian coal moved under federal government assisted rates in 1935 is estimated to be about 2,000,000 net tons.

OUTPUT OF COAL IN CANADA,	BY PROVINCE	S, DURING 19	34 and 1935.		
	1 9	3 4	1 9 3 5		
Provinces	short tons	Value	short tons	Value	
		<u> </u>		\$	
Nova Scotia	6,341,625	21,860,093	5,822,180	20,161,403	
New Brunswick	314,750	1,026,343	333,559	1,095,255	
Manitoba	4,113	8,952	3,284	7,226	
Saskatchewan	909,288	1,241,130	934,096	1,319,051	
Alberta -					
Bituminous	1,915,800	6,116,513	2,287,701	6,788,680	
Sub-bituminous	537,508	1.256,936	579,038	1,441,783	
Lignite	2,300,502	5,182,650	2,813,286	6,587,121	
Total Alberta	4,753,810	12,556,099	5,680,025	14,817,584	
British Columbia	1,485,969	5,351,108	1,334,739	5,094,710	
Yukon	638	2,217	835	3,483	
CANADA	13,810,193	42,045,942	14,108,718	42,498,712	

Canadian imports of coal during the eleven months ending November, 1934, totalled 10,099,869 tons, an 8.2 per cent decrease from the corresponding period of 1934.

IMPORTS OF ANTHRACITE COAL INTO CANADA, BY MONTHS, FROM THE UNITED STATES, GREAT BRITAIN, GERMANY, BELGIUM AND FRENCH INDO CHINA.

		CENTIMEL		short tor						
-	UNITED	STATES				MANY	BELGI	UM	INDO	CHINA
Month	1934	1935	1934	1935	1934	1935	1934	1935	1934	1935
January.	171,847	161,808	10,067	5,826	200	2 2 0				
February	129,584	179,913	35,889	11,166	6 7 6					
March	195,997	121,452	20,061	14,998	6 1 0					
April	79,512	112,013	5,811	23,010	9 4 5	0 0 0				
May	158,027	131,589	302,019	260,182		20,242				
June	163,399	187,513	213,083	156,072	0 0 9	22,898		7,202		
July	129,671	127,911	199,947	208,908		37,722		6,472		2,014
August .	104,813	91,301	195,218	185,484		20,949	5,937	8,389		8,062
September		122,316	213,490	209,362	17,802	32,067				8,727
October.	168,243	210,143	204,762	198,751	12,430	34,131	5,964	24,303		10,237
November	185,382	80,511	228,357	158,283	30,671	31,773	5,656	7,800		25,407
December	152,488		14,812		11,200					
	ALENDAR									
YEAR1			1,643,516		72,103		17,557			
	LEVEN MONT	THS ENDING								

BER.... 1,651,639 1,526,470 1,628,704 1,432,042 60,903 199,782 17,557 56,166 ... 54,447

IMPORTS OF BITUMINOUS COAL INTO CANADA BY MONTHS FROM THE UNITED STATES, GREAT BRITAIN AND OTHER COUNTRIES

		(short ton	s)			
	UNIT	ED STATES	GREAT	BRITAIN	OTHER	COUNTRIES
Month	1934	1935	1934	1935	1934	1935
January	355,091	302,074	4,217	8,728		
February	248,826	297,473	5,606	5,271		
March	477,452	379,300	13,406	12,922		40
April	359,757	509,841	6,092	7,090		
May	1,035,287	994,117	52,921	78,779		1
June	1,131,576	1,111,413	24,269	20,933		165
July	1,189,068	982,609	27,045	64,880	50	40
hugust	1,126,836	1,173,539	29,268	40,485	300	51
September	1,151,823	996,398	45,407	57,865		56
October	1,112,112	797,764	57,004	38,182		
November	1,157,957	1,024,777	57,461	30,692	319	31
December	595,586		8,821			
TOTAL - CALENDAR YEAR .	9,941,371		331,517		669	
TOTAL - ELEVEN MONTAS ENDING NOVEMBER	9,345,785	8,569,305	322,696	365,827	669	384

NATURAL GAS - Natural gas production in 1935 was estimated at 22,567,700 thousand cubic feet as compared with 23,162,324 thousand cubic feet a year ago. Ontario's output was recorded at 6,950,000 thousand cubic feet. Production from Alberta wells amounted to 14,933,300 thousand cubic feet, an increase of 0.6 per cent over 1934. New Brunswick's production of 608,600 thousand cubic feet was slightly lower than that of the preceding year. Saskatchewan recorded an output of 75,200 thousand cubic feet.

CRUDE PETROLEUM - The Canadian output of crude petroleum totalled 1,430,200 barrels, a slight increase over 1934. Production from Ontario wells at 161,600 barrels was approximately 20,000 barrels higher; New Brunswick's production at 10,900 barrels was slightly less, and output from Alberta wells was about the same as in the preceding year.

#### NON-METALS (EXCEPT FUELS)

Non-metallic minerals (other than fuels) produced in Canada in 1935 were valued at \$12,130,000, an increase of 16 per cent over 1934. Some of Canada's non-metallic minerals are exported in large quantities, notably asbestos and gypsum, and it is gratifying to note that asbestos output showed an increase of 37 per cent over 1934; gypsum production was greater by 21 per cent. Magnesitic-dolomite at \$474,341 was 24 per cent higher and salt, including salt for chemical purposes, at 354,500 tons marked an increase of 10 per cent. Feldspar production was 13 per cent less; mica sales were slightly under those of 1934; talc and soapstone was produced in lesser quantities also.

Sulphur production consisting of sulphur contained in sulphuric acid made from waste smelter gases, sulphur in pyrites shipped by the Britannia mine in British Columbia and the Eustis property in Quebec, and elemental sulphur made at Trail, British Columbia, totalled 60,466 tons, an increase of 17 per cent over 1934. In addition to the above, several other non-metallic minerals of economic importance were produced during the year.

#### STRUCTURAL MATERIALS

Sales of cement at 3,587,913 barrels were some 200,000 barrels less than ini1934. Lime production totalled 426,372 tons, an increase of 16 per cent. Clay products showed relatively little change from the output of the preceding year. The output of stone and sand and gravel was estimated to be slightly higher than in 1934.

