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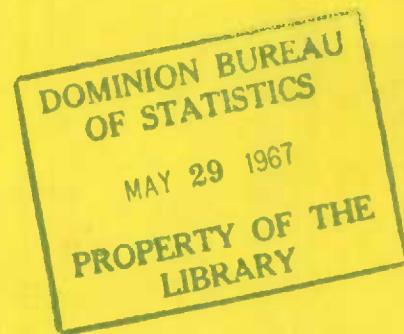
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GENERAL REVIEW OF THE MINERAL INDUSTRIES

(MINES, QUARRIES AND OIL WELLS)

1963



DOMINION BUREAU OF STATISTICS



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Manufacturing and Primary Industries Division

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INTRODUCTION

The shipments of mineral commodities by Canadian mine operators were valued at \$3,050,428.547 in 1963 compared with \$2,850,986,179 in 1962. This was an increase of 7.0 per cent. Each of the four groups increased in value. The metals group increased 0.9 per cent to \$1,509 million from \$1,496 million. Nonmetals were up 16.5 per cent to \$253.4 million from \$217.4 million. Mineral or fossil fuels rose 16.3 per cent to \$908.4 million from \$780.9 million. The value of structural materials materials increased 6.4 per cent from \$356.2 million to \$379.0 million.

The quantity index of mineral production was 294.4 in 1963 compared with 287.4 in the preceding year. The index base year was 1949=100. The volume of ore or rock mined or quarried in 1963 amounted to 257,330,706 tons compared with 228,728,595 tons in 1962. Excluded from these figures were the tonnages of coal mined and the tonnages of sand, gravel, sodium sulphate and similar materials not actually mined or blasted.

Ten leading mineral commodities in order of total value were, in 1963; petroleum, nickel, iron ore, copper, gold, natural gas, asbestos, uranium, sand and gravel, and zinc. Each of these commodities exceeded \$100 million in value.

All the provinces, except Ontario and the Northwest Territories, recorded gains in output. Ontario's output of \$873.8 million was 28.1 per cent of the Canadian total. Alberta increased the value of minerals to \$669.3 million which was 21.9 per cent of all Canada. Although Quebec produced \$21.1 million more in 1963 than in 1962, the percentage of Canada's total declined to 17.7. Gains in the other provinces were as follows: Saskatchewan, 13.2 per cent to \$272.4 million; British Columbia, 10.9 percent to \$261.1 million; Manitoba, 6.7 per cent to \$169.6 million; Newfoundland, 35.3 per cent to \$137.8 million; Nova Scotia, 7.6 per cent to \$66.3 million; New Brunswick, 29.9 per cent to \$28.3 million; Yukon, 9.4 per cent to \$14.4 million; Prince Edward Island, 17.8 per cent to \$0.8 million. There was a decline of 9.3 per cent to \$15.9 million in the Northwest Territories.

Nickel remained the leading metal although the shipments were \$23 million less than in 1962. The nickel-copper mines reduced production in October 1963, which lowered the output of copper in Ontario.

but there was more copper produced in New Brunswick and British Columbia. Iron ore exceeded 30 million tons, with a larger portion of the shipments composed of pelletized concentrates. Three new mines in the Matagami Lake area of northwestern Quebec; New Hosco Mines Ltd., Mattagami Lake Mines Ltd. and Orchan Mines Ltd. commenced production of zinc, copper, gold and silver. A new zinc refinery at Valleyfield, Quebec was brought into operation by Canadian Electrolytic Zinc Ltd. The stretch-out program permitted the uranium mines to continue to operate at a lower rate. Labor strikes had adverse affects on the output of the Quebec Iron and Titanium Corporation.

Nonmetals were valued at \$253,452,413 in 1963. Asbestos producers shipped 1,275,530 tons valued at nearly \$137 million. Advocate Mines Ltd. at Baie Verte, Newfoundland started production of asbestos. Potash shipments from the Saskatchewan deposits were seven times as great as in 1962. Sales of elemental sulphur, which was recovered from sour natural gas, amounted to 1.2 million tons. Salt shipments increased to 3.7 million tons, of which 47 per cent was rock salt. Over 82 per cent of the gypsum shipments were from Nova Scotian deposits. Natural sodium sulphate from the Saskatchewan lakes showed an increase in tonnage and value.

Mineral or fossil fuels were valued at \$908.4 million. The coal industry which has been ailing for many years showed a slight recovery. Alberta crude petroleum amounted to 168.2 million barrels, while 71.3 million barrels came from Saskatchewan wells. Oil from British Columbia, Northwest Territories, Manitoba, Ontario and New Brunswick was included in the Canadian total valuation of \$615.2 million. Natural gas and natural gas by-products, such as butane, propane, etc., has a combined value of \$221.4 million.

The demand for structural materials increased to \$379 million. The value of brick, tile, and other clay products shipped during 1963 was \$38.1 million. Cement increased in tonnage and the value rose to \$118.6 million. Cement plants expanded their manufacturing capacities and more expansion was in the planning stages. The upward trend continued for stone, sand and gravel used for highways, dams and other construction programs.

EXPLANATORY NOTES

Establishment

The reporting unit in the Census of Mines, Quarries and Oil Wells is the **establishment**. Beginning with the 1961 Census, the establishment is defined as follows:

The smallest unit which is a separate operating entity capable of reporting all the following:

Materials and supplies used,
Goods purchased for resale as such,
Fuel and power consumed,
Number of employees and their pay,
Inventories,
Shipments or sales.

The establishment is to be distinguished from smaller subdivisions or departments which do not have records which permit them to report all items required of an establishment. Prior to 1961, some establishments were required to submit two or more separate reports when they were engaged in operations which were classifiable to different industries. Beginning with 1961, separate reports for such operations will be required only in cases where accounting records can provide all the elements of principal statistics enumerated above. Special reporting arrangements were made with respondents when the acceptance of combined reports would

have seriously affected the statistics for particular industries or areas. Where continuity of industry statistics was affected by this change in reporting procedures, adjustments to the data were made back to 1957 in order to maintain comparability of the series for recent years.

A mining establishment is typically a mine, mine/mill, quarry, pit or bog principally engaged in mining operations. Prior to 1961, the Census of Mines, Quarries and Oil Wells attempted to cover the mining activities of all establishments, whether or not they were principally engaged in mining operations. Beginning with the 1961 Census, establishments (accounting entities) which are not primarily engaged in mining are no longer included as mining establishments in the basic industry statistics. Again adjustments to the industry statistics were made to reflect the removal of such reporting units for the period 1957-1960. These reporting units are now listed as establishments in other Bureau industry surveys, such as Wholesale Trade, Construction, etc. In order, however, to maintain complete coverage of certain commodity items produced mainly in mining establishments, many non-mining establishments are now surveyed for commodity information only and the latter are included in the appropriate tables of industry reports.

SYMBOLS

The following standard symbols are used in Dominion Bureau of Statistics publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- p preliminary figures.
- r revised figures.

TABLE I. Mineral Production, by Kinds, 1962 and 1963

		1962		1963	
		Quantity	Value	Quantity	Value
Metals:					
Antimony	lb.	1,931,397	748,223	1,601,253	624,489
Bismuth	"	425,102	839,912	359,125	704,103
Cadmium	"	2,604,973	4,730,957	2,475,485	5,941,164
Calcium	"	123,511	124,412	98,673	117,247
Cobalt	"	3,481,922	6,345,205	3,024,965	6,122,169
Columbium (Cb_2O_5)	"	1,016,514	1,006,349	1,393,444	1,300,009
Copper	troy oz.	914,770,211	282,732,696	905,117,779	284,403,710
Gold	troy oz.	4,178,396	156,313,794	4,003,127	151,118,045
Indium	"				
Iron ore	ton	27,359,676	263,004,217	30,143,649	313,182,963
Iron, remelt	"		9,845,669		9,246,713
Lead	lb.	430,658,673	42,721,341	402,329,071	44,251,199
Magnesium	"	17,631,310	4,821,823	17,814,348	5,357,816
Molybdenum	"	817,705	1,261,451	833,867	1,344,004
Nickel	"	464,483,999	383,784,622	434,059,725	360,392,658
Platinum group	troy oz.	470,787	28,848,637	357,651	22,585,205
Selenium	lb.	487,066	2,800,630	468,772	2,273,545
Silver	troy oz.	30,422,972	35,442,761	2,993,200	41,425,891
Tellurium	lb.	58,725	352,350	76,842	499,473
Thorium	"				
Tin	"	650,941	442,640	927,062	648,943
Tungsten (WO_3)	"	3,580	1,611		
Uranium (U_3O_8)	"	16,859,169	158,183,669	16,703,066	136,909,119
Zinc	"	926,289,098	112,080,981	947,444,960	121,083,466
Total metals			1,496,433,950		1,509,536,931
Non-metals:					
Arsenious oxide	lb.	160,750	6,832	187,450	7,498
Asbestos	ton	1,215,814	130,281,966	1,275,530	136,956,180
Baile	"	226,600	2,123,964	173,503	1,693,119
Dolomite	"	211	10,228	798	26,830
Gypsum	"	9,994	222,460	8,608	197,031
Flintspar	"		1,870,184		1,976,006
Garnet stones	lb.				
Sandstone	ton	10	2,000	10	2,000
Gypsum	"	5,332,809	9,349,775	5,955,266	11,237,952
Helium	Mcf.				
Iron oxides	ton	771	58,363	978	74,505
Lithia	lb.	499,736	558,654	644,354	682,029
Magnesite-dolomite and brucite	ton		3,431,873		3,439,890
Mica	lb.	1,204,034	84,598	1,183,041	44,284
Mineral waters	gal.	377,248	207,325		
Nepheline syenite	ton	254,418	2,605,421	254,000	2,699,202
Nitrogen	Mcf.				
Peat moss	ton	238,035	7,480,396	243,311	8,680,228
Potash (K_2O)	"		3,000,000	626,860	22,500,000
Pozzolan	"		4,927		17,994
Pyrite, pyrrhotite	"	517,308	1,879,584	476,438	1,643,629
Quartz	"	2,085,620	3,817,445	1,836,612	3,687,979
Salt	"	3,638,778	21,927,135	3,721,994	22,316,565
Soapstone, talc ²	"	46,161	625,208	54,250	757,878
Sodium sulphate	"	246,672	3,954,273	256,914	4,121,114
Sulphur in smelter gas	"	292,728	3,089,537	353,243	3,488,181
Sulphur, elemental	"	695,098	9,286,999	1,249,887	13,380,182
Titanium dioxide, etc.	"		11,573,862		13,806,608
Total non-metals			217,453,009		253,452,413
Fuels:					
Coal	ton	10,284,769	69,160,213	10,575,694	71,756,581
Natural gas	Mcf.	946,702,727	108,641,159	1,117,425,217	150,458,714
Natural gas by-products	bbl.		50,778,506		70,997,795
Petroleum, crude	"	244,115,152	552,352,509	257,661,777	615,204,997
Total fuels			780,932,387		908,428,087
Structural materials:					
Clay products (brick, tile, etc.)	ton		37,816,878		38,154,294
Cement	"	6,878,729	113,233,726	7,013,662	118,614,929
Lime	"	1,424,459	17,646,588	1,450,731	18,504,220
Sand and gravel	"	181,245,762	118,603,283	189,570,503	123,854,254
Stone	"	50,553,485	68,866,358	62,655,329	79,883,419
Total structural materials			336,166,833		379,011,116
Grand totals			2,850,986,179		3,050,428,547

¹ Not classified to the mineral industry.² Includes pyrophyllite.

TABLE 2. Mineral Production of Canada, by Provinces, 1963

No.		Newfound-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	
Metals							
1	Antimony	lb. \$	— —	— —	— —	— —	
3	Bismuth	lb. \$	— —	— —	— —	201,961 355,197	
5	Cadmium	lb. \$	— —	— —	— —	43,546 104,510	
7	Calcium	lb. \$	— —	— —	— —	— —	
9	Cobalt	lb. \$	— —	— —	— —	90,289 175,160	
11	Columbium (Cb_2O_5)	lb. \$	— —	— —	— —	1,393,444 1,300,009	
13	Copper	lb. \$	28,024,753 8,827,797	474,268 149,394	17,927,959 5,647,307	282,799,924 89,081,976	
15	Gold	oz. \$	12,318 465,004	— —	1,128 42,582	917,229 34,625,395	
17	Indium	oz. \$	— —	— —	— —	— —	
19	Iron ore	ton \$	9,683,004 99,601,987	— —	— —	11,650,787 122,800,862	
21	Iron, remelt	ton \$	— —	— —	— —	9,246,713 —	
23	Lead	lb. \$	46,784,221 5,146,264	2,800,480 308,053	3,566,150 392,277	8,673,195 954,051	
25	Magnesium	lb. \$	— —	— —	— —	— —	
27	Molybdenum	lb. \$	— —	— —	— —	833,867 1,344,004	
29	Nickel	lb. \$	— —	— —	— —	5,011,649 4,209,785	
31	Platinum group	oz. \$	— —	— —	— —	— —	
33	Selenium	lb. \$	— —	— —	— —	286,343 1,387,304	
35	Silver	oz. \$	981,005 1,357,711	423,189 585,694	332,472 460,141	4,441,644 6,147,235	
37	Tellurium	lb. \$	— —	— —	— —	64,590 419,835	
39	Thorium	lb. \$	— —	— —	— —	— —	
41	Tin	lb. \$	— —	— —	— —	— —	
43	Titanium ore	ton \$	— —	— —	— —	— —	
45	Tungsten (WO_3)	lb. \$	— —	— —	— —	— —	
47	Uranium (U_3O_8)	lb. \$	— —	— —	— —	— —	
49	Zinc	lb. \$	68,970,834 8,814,473	— —	21,228,005 2,712,939	150,168,758 19,191,567	
51	Total metals	\$	124,213,236	— —	1,043,141 —	9,255,246 —	291,343,603 —
Non-metallics							
52	Arsenious oxide	lb. \$	— —	— —	— —	— —	
54	Asbestos	ton \$	20,390 3,320,064	— —	— —	— —	
56	Barite	ton \$	— —	161,007 1,572,063	— —	— —	
58	Diatomite	ton \$	— —	— —	— —	— —	
60	Feldspar	ton \$	— —	— —	— —	— —	
62	Fluorspar	ton \$	— —	— —	— —	— —	
64	Gem stones	lb. \$	1,976,006	— —	— —	— —	
66	Grindstone	ton \$	— —	— —	— —	10 —	
67						2,000	

TABLE 2. Mineral Production of Canada, by Provinces, 1963

Ontario	Manitoba	Saskat-chewan	Alberta	British Columbia	Yukon	Northwest Territories	Canada	No.
—	—	—	—	1,601,253 624,489	—	—	1,601,253 624,489	1 2
65	—	—	—	157,099	—	—	359,125	3
146	—	—	—	348,760	—	—	704,103	4
—	183,110	132,940	—	1,980,004 4,752,010	135,885 326,124	—	2,475,485 5,941,164	5 6
—	439,464	319,056	—	—	—	—	98,673 117,247	7 8
98,673	—	—	—	—	—	—	—	98,673
117,247	—	—	—	—	—	—	—	117,247
2,156,732	777,944	—	—	—	—	—	3,024,965	9
4,409,262	1,537,747	—	—	—	—	—	6,122,169	10
—	—	—	—	—	—	—	1,393,444	11
—	—	—	—	—	—	—	1,300,009	12
357,919,536	33,960,338	59,542,946	—	124,435,417	—	32,638	905,117,779	13
112,048,454	10,697,506	18,756,028	—	39,184,967	—	10,281	284,403,710	14
2,338,854	53,084	64,813	132	159,473	55,211	400,885	4,003,127	15
88,291,739	2,003,921	2,446,691	4,983	6,020,106	2,084,215	15,133,409	151,118,045	16
—	—	—	—	—	—	—	—	..
—	—	—	—	..	—	—	..	18
6,749,617	—	—	—	2,060,241	—	—	30,143,649	19
70,033,690	—	—	—	20,746,424	—	—	313,182,963	20
—	—	—	—	—	—	—	—	..
—	—	—	—	—	—	—	9,246,713	21
3,077,814	5,474,570	—	—	314,974,034	16,978,607	—	402,329,071	23
338,560	602,203	—	—	34,647,144	1,867,647	—	44,256,199	24
17,810,348	—	—	—	—	—	—	17,810,348	25
5,357,816	—	—	—	—	—	—	5,357,816	26
—	—	—	—	—	—	—	833,867	27
—	—	—	—	—	—	—	1,344,004	28
298,178,570	127,170,104	—	—	3,699,402	—	—	434,059,725	29
246,252,488	106,822,887	—	—	3,107,498	—	—	360,392,658	30
357,649	..	—	—	2	—	—	357,651	31
32,585,055	..	—	—	150	—	—	22,585,205	32
95,100	15,436	72,194	—	—	—	—	468,772	33
461,235	74,865	350,141	—	—	—	—	2,273,545	34
9,601,621	766,976	746,683	12	6,451,158	6,106,037	81,206	29,932,003	35
13,288,643	1,061,495	1,033,409	17	8,928,402	8,450,755	112,389	41,425,891	36
7,705	796	3,751	—	—	—	—	76,842	37
50,082	5,174	24,382	—	—	—	—	499,473	38
..	—	—	—	—	—	—	..	39
..	—	—	—	—	—	—	..	40
—	—	—	—	927,062	—	—	927,062	41
—	—	—	—	648,943	—	—	648,943	42
—	—	—	—	—	—	—	—	43
—	—	—	—	—	—	—	—	44
—	—	—	—	—	—	..	..	45
—	—	—	—	—	—	..	..	46
12,770,421	—	3,932,645	—	—	—	—	16,703,066	47
102,951,146	—	33,957,973	—	—	—	—	136,909,119	48
132,939,970	92,784,466	66,639,117	—	402,863,104	11,850,706	—	947,444,960	49
16,989,728	11,857,855	8,516,479	—	51,485,905	1,514,520	—	121,083,466	50
683,175,291	135,103,117	65,404,159	5,000	170,494,798	14,243,261	13,256,079	1,509,536,931	51
187,450	—	—	—	—	—	—	187,450	52
7,498	—	—	—	—	—	—	7,498	53
33,715	—	—	—	63,215	—	—	1,275,530	54
5,372,645	—	—	—	11,681,337	—	—	136,956,180	55
—	—	—	—	12,496	—	—	173,503	56
—	—	—	—	121,056	—	—	1,693,119	57
—	—	—	—	798	—	—	798	58
—	—	—	—	26,830	—	—	26,830	59
—	—	—	—	—	—	—	8,608	60
—	—	—	—	—	—	—	197,031	61
—	—	—	—	—	—	—	1,976,006	62
—	—	—	—	16,000	—	—	16,000	64
—	—	—	—	15,529	—	—	15,529	65
—	—	—	—	—	—	—	10	66
—	—	—	—	—	—	—	2,000	67

TABLE 2. Mineral Production of Canada, by Provinces, 1963 - Concluded

TABLE 2. Mineral Production of Canada, by Provinces, 1963 — Concluded

Ontario	Manitoba	Saskat-chewan	Alberta	British-Columbia	Yukon	Northwest Territories	Canada	No.
439,206 1,225,301	131,767 395,301	—	—	160,954 482,862	—	—	5,955,266 11,237,952	1 2
—	—	..	—	—	—	—	..	3
—	—	..	—	—	—	—	..	4
—	—	—	—	—	—	—	978	5
—	—	—	—	—	—	—	74,505	6
—	—	—	—	—	—	—	644,354	7
—	—	—	—	—	—	—	682,029	8
—	—	—	—	—	—	—	..	9
342,185 5,114	—	—	—	—	—	—	3,439,890	10
254,000 2,699,202	—	—	—	—	—	—	1,183,041 44,284	11 12
—	—	..	—	—	—	—	254,000	13
—	—	..	—	—	—	—	2,699,202	14
30,659 610,784	27,195 1,070,850	—	780 27,906	70,397 3,623,661	—	—	243,311 8,680,228	17 18
—	—	626,860	—	—	—	—	626,860	19
—	—	22,500,000	—	—	—	—	22,500,000	20
—	—	—	—	17,994	—	—	17,994	21
—	—	—	—	—	—	—	476,438	22
—	—	—	—	11,004	—	—	1,643,629	23
952,166 644,287	279,641 468,867	160,398 86,615	—	40,483 178,937	—	—	1,836,612 3,687,979	25 26
3,187,491 16,793,161	24,883 618,533	56,301 1,364,490	96,417 1,496,577	—	—	—	3,721,994 22,316,565	27 28
6,903 107,986	—	—	—	—	—	—	54,250 757,878	29 30
—	—	256,914	—	—	—	—	256,914	31
—	—	4,121,114	—	—	—	—	4,121,114	32
1,406,694	—	—	—	1,868,399	—	—	353,243 3,428,181	33 34
53,744	14,777	589	11,516,478	1,794,594	—	—	1,249,889 13,380,182	35 36
—	—	—	—	—	—	—	..	37
—	—	—	—	—	—	—	13,806,608	38
26,926,416	2,568,328	28,072,808	13,040,961	19,822,203	—	—	253,452,413	39
—	—	1,873,556 3,713,988	2,289,943 9,864,890	962,684 6,128,805	8,231 123,675	—	10,575,694 71,756,681	40 41
15,920,055 6,049,621	—	39,936,193 2,364,223	943,354,973 129,428,302	118,058,994 12,495,718	—	51,478 21,330	1,117,425,217 150,468,714	42 43
—	—	1,875,948	66,679,857	2,441,990	—	—	70,997,795	44 45
1,205,376 3,459,429	3,771,163 9,188,635	71,303,893 160,226,978	168,214,054 416,844,350	12,528,681 24,841,518	—	631,229 633,754	257,661,777 615,204,997	46 47
9,509,050	9,188,635	168,181,137	622,817,399	45,908,031	123,675	655,084	908,428,087	48
21,819,687	594,072	1,044,721	3,452,835	2,337,603	—	—	38,154,294	49
2,552,665	455,325	217,545	727,122	476,071	—	—	7,013,662	50
39,551,719	9,684,760	5,672,084	13,713,527	8,546,768	—	—	118,614,929	51
952,945	54,879	—	54,826	12,961	—	—	1,450,731	52
11,434,223	908,952	—	970,673	221,168	—	—	18,504,220	53
80,259,750	9,653,471	7,368,017	16,139,744	17,451,950	—	—	189,570,503	54
56,338,204	6,947,039	3,980,098	14,894,547	9,850,800	—	—	123,854,254	55
20,402,614	3,693,144	—	138,894	2,935,268	—	—	62,655,329	56
35,073,707	4,643,636	—	416,426	3,964,712	—	—	79,883,419	57
154,217,540	22,778,459	10,696,903	33,448,008	24,921,049	—	—	379,011,116	58
873,828,297	169,638,539	272,355,007	669,311,368	261,146,081	14,366,936	15,911,163	3,050,428,547	59
913,342,174	158,932,169	240,653,502	566,502,703	235,428,135	13,137,730	17,537,066	2,850,986,179	60

TABLE 3. Annual Values of the Mineral Production of Canada since 1900

Year	Metallics	Non-metallics	Fuels	Structural materials	Total	Value per capita
dollars						
1900	40,521,807	1,914,690	15,311,479	6,372,901	64,420,877	12.15
1901	41,939,500	2,713,621	14,047,654	6,803,836	65,804,611	12.25
1902	35,924,651	2,730,425	16,359,722	7,896,836	63,211,634	11.51
1903	33,210,147	2,589,302	17,197,317	8,443,747	61,740,513	10.93
1904	30,924,897	2,807,995	17,858,902	8,182,103	60,073,897	10.31
1905	36,946,212	3,468,408	18,756,112	9,608,267	69,078,999	11.51
1906	41,949,563	4,424,882	21,081,724	11,530,528	79,286,697	12.79
1907	42,426,607	5,021,384	26,254,162	12,863,049	86,865,202	13.55
1908	41,774,362	5,188,269	26,954,515	11,339,955	85,557,101	12.91
1909	44,156,841	4,593,142	26,548,109	16,533,349	91,831,441	13.50
1910	49,438,873	5,109,754	32,647,404	19,627,592	106,823,623	15.29
1911	46,105,423	5,659,746	28,746,214	22,709,611	103,220,994	14.32
1912	61,172,753	6,570,980	38,729,694	28,794,869	135,048,296	18.28
1913	66,361,351	7,402,849	41,060,860	30,809,752	145,634,812	19.08
1914	59,366,619	6,165,107	37,302,122	26,009,227	128,863,075	16.36
1915	75,814,841	7,254,732	36,118,839	17,920,759	137,109,171	17.18
1916	106,319,365	10,245,689	43,169,294	17,467,185	177,201,534	22.15
1917	106,455,147	14,566,995	48,787,368	19,837,311	189,646,821	23.53
1918	114,549,152	17,192,967	60,428,379	19,130,799	211,301,897	25.93
1919	73,262,793	16,676,377	59,325,710	27,421,510	176,686,390	21.26
1920	77,939,630	22,260,697	85,767,250	41,892,088	227,859,665	26.63
1921	49,343,232	10,148,665	77,694,017	34,737,428	171,923,342	19.56
1922	61,785,707	10,986,120	71,990,674	39,534,741	184,297,242	20.66
1923	83,764,403	14,097,925	78,465,622	37,751,381	214,079,331	23.76
1924	102,058,235	12,374,278	59,770,024	35,380,869	209,583,406	22.92
1925	116,951,996	14,628,048	57,354,055	37,649,234	226,583,333	24.38
1926	115,090,770	16,643,022	68,743,933	39,959,398	240,437,123	25.44
1927	113,349,051	17,771,709	71,426,516	44,809,419	247,356,695	25.57
1928	131,819,402	19,019,744	74,413,160	49,737,181	274,989,487	27.98
1929	154,282,736	21,245,279	76,787,397	58,534,834	310,850,246	31.00
1930	142,614,237	15,347,391	68,184,485	53,727,465	279,873,578	27.42
1931	120,794,977	11,028,311	54,453,143	44,158,295	230,344,726	22.71
1932	111,943,049	7,839,551	49,047,342	22,398,283	191,228,225	18.38
1933	147,206,959	10,061,071	47,778,436	16,696,687	221,743,153	20.85
1934	194,213,956	10,558,174	54,262,099	19,286,761	278,320,990	25.91
1935	222,139,223	12,579,334	54,824,200	23,215,400	312,758,157	28.84
1936	259,988,203	16,782,608	59,983,320	25,770,741	362,524,872	33.11
1937	335,000,751	22,536,303	65,828,879	34,869,699	458,235,632	41.48
1938	324,064,074	20,122,661	64,803,294	33,878,666	442,868,695	39.71
1939	343,453,866	25,114,106	70,671,328	35,362,759	474,602,059	42.12
1940	382,440,214	26,074,296	78,837,874	42,472,651	529,825,035	46.55
1941	395,193,386	34,532,635	85,141,997	45,373,272	560,241,290	48.69
1942	391,540,411	37,329,163	92,169,291	45,729,807	566,768,672	48.63
1943	356,558,751	38,970,577	92,514,384	42,010,254	530,053,966	44.94
1944	308,111,295	37,431,875	97,291,007	42,984,937	485,819,114	40.67
1945	316,962,810	39,841,422	93,531,276	48,419,673	498,755,181	41.31
1946	290,386,425	43,792,717	102,516,888	66,120,221	502,816,251	40.91
1947	395,140,994	54,670,989	110,481,207	84,576,785	644,869,975	51.38
1948	488,287,835	67,097,524	159,736,260	105,127,246	820,248,865	63.97
1949	538,967,258	64,585,216	183,654,473	113,903,079	901,110,026	67.01
1950	617,238,340	94,721,564	201,193,957	132,296,212	1,045,450,073	76.24
1951	745,877,561	115,418,150	232,854,093	151,333,791	1,245,483,595	88.90
1952	728,458,160	124,493,256	263,582,319	168,808,618	1,285,342,353	88.90
1953	709,920,510	124,999,607	314,181,168	187,202,218	1,336,303,503	90.02
1954	802,401,423	128,038,507	352,959,465	204,982,696	1,488,382,091	97.36
1955	1,007,839,501	144,920,841	414,318,015	228,232,439	1,795,310,796	114.37
1956	1,146,349,595	160,341,599	518,761,191	259,453,169	2,084,905,554	129.65
1957	1,159,579,226	169,061,110	564,776,791	296,905,265	2,190,322,392	131.87
1958	1,130,160,395	150,354,802	510,768,681	309,455,160	2,100,739,038	122.99
1959	1,370,648,535	178,216,641	535,577,823	324,577,512	2,409,020,511	137.79
1960	1,406,558,061	197,505,783	565,851,829	322,594,308	2,492,509,981	139.48
1961	1,387,159,036	210,467,786	653,327,802	331,345,763	2,582,300,387	141.59
1962	1,496,433,950	217,458,009	780,932,387	356,166,833	2,850,988,179	153.53
1963	1,509,536,931	253,452,413	908,428,087	379,011,116	3,050,428,547	164.00

Notes: In representing a total valuation of the mineral production as is here given, it should be explained that the production of the metals, copper, gold, lead, nickel, silver, zinc, etc., is given as far as possible on the basis of the quantities of metals recovered in smelters, and the total quantities in each case are valued chiefly at the average market price of the refined metal in a recognized market. There are thus included in some cases the values that have accrued in the smelting or refining of metals outside of Canada.

1900-1908 total includes \$300,000 estimated value of unreported products, mostly structural materials.

TABLE 4. Quantity Index of Mineral Production since 1924
(1949=100)

Year	Index	Year	Index	Year	Index
1924	34.3	1938	83.7	1951	123.4
1925	36.5	1939	90.3	1952	131.0
1926	40.9	1940	96.2	1953	142.1
1927	43.6	1941	101.0	1954	158.7
1928	47.2	1942	99.1	1955	185.2
1929	49.7	1943	88.8	1956	212.3
1930	47.0	1944	79.7	1957	227.8
1931	43.6	1945	77.2	1958	227.0
1932	43.7	1946	74.3	1959	251.1
1933	45.6	1947	78.5	1960	253.3
1934	54.4	1948	90.0	1961	266.9
1935	60.8	1949	100.0	1962	287.4
1936	68.3	1950	109.5	1963	294.4
1937	79.4				

TABLE 5. Value of Mineral Production, by Provinces, since 1944

Year	Newfound- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	dollars					
1944 .....	...	..	33,981,977	4,133,902	90,182,553	210,706,307
1945 .....	...	..	32,220,659	4,182,100	91,518,120	216,541,856
1946 .....	...	..	35,350,271	4,813,166	92,785,148	191,544,429
1947 .....	...	..	34,255,560	5,812,943	115,151,635	249,797,671
1948 .....	...	..	56,400,245	7,003,285	152,038,867	294,239,673
1949	27,583,615	..	56,092,830	7,134,009	165,021,513	323,368,644
1950	25,824,047	..	59,482,173	12,756,975	220,176,517	366,801,525
1951	32,410,443	..	59,727,256	9,564,617	255,530,071	444,667,203
1952	32,512,313	..	64,552,383	11,298,960	270,483,962	444,669,412
1953	33,780,622	..	67,364,408	11,663,618	251,881,781	465,877,093
1954	42,898,033	..	73,450,898	12,468,322	278,818,070	496,747,571
1955	68,462,956	..	67,133,539	15,759,744	357,010,045	583,954,682
1956	84,349,006	..	66,092,274	18,258,302	422,464,410	650,823,362
1957	82,682,263	..	68,058,743	23,120,689	406,055,757	748,824,322
1958	64,994,754	..	62,706,891	16,275,971	365,706,489	789,601,868
1959	72,156,996	4,559,171	62,879,647	18,133,290	440,897,186	970,762,201
1960	86,637,123	1,172,587	65,453,531	17,072,739	446,202,726	983,104,412
1961	91,618,709	606,644	61,693,156	18,804,385	455,522,933	943,669,456
1962	101,858,960	677,906	61,651,093	21,811,575	519,453,166	913,342,174
1963	137,796,707	798,345	66,317,617	28,343,419	540,615,068	873,828,297
	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories ¹
	dollars					
1944	13,830,406	22,291,848	51,066,662	57,246,071	939,319	1,440,069
1945	14,429,423	22,336,074	51,753,237	64,063,842	1,239,058	470,812
1946	16,403,549	24,480,900	60,082,513	74,622,846	1,693,904	1,039,525
1947	18,236,763	32,594,016	67,432,270	116,772,621	2,095,508	2,720,988
1948	26,081,349	34,517,208	93,211,299	148,223,614	4,265,910	4,267,485
1949	23,839,638	36,054,536	113,728,425	136,385,911	5,099,176	6,801,729
1950	32,691,173	35,983,923	135,758,940	138,888,205	9,035,696	8,050,899
1951	30,045,992	51,032,953	168,144,211	176,278,932	9,793,170	8,288,747
1952	25,105,045	49,506,094	196,811,654	170,071,244	11,386,451	8,944,835
1953	25,264,112	48,081,970	248,863,295	158,487,812	14,738,562	10,300,230
1954	35,106,922	68,216,009	279,042,735	158,630,867	16,588,664	26,414,000
1955	62,018,231	85,150,128	294,239,673	189,524,574	14,724,750	25,597,821
1956	67,309,407	122,744,698	411,171,898	203,277,828	15,656,434	22,157,935
1957	63,464,286	173,461,037	410,211,763	178,931,120	14,111,798	21,400,615
1958	57,217,569	209,940,966	345,933,248	151,149,136	12,310,756	24,895,290
1959	55,512,410	210,042,051	376,215,593	159,395,092	12,592,378	25,874,496
1960	58,702,697	212,093,225	395,344,010	186,261,646	13,330,198	27,135,087
1961	101,489,787	215,977,233	473,480,540	188,542,078	12,750,304	18,145,162
1962	158,932,169	240,653,502	566,502,703	235,428,135	13,137,730	17,537,066
1963	169,638,539	272,355,007	669,311,368	261,146,081	14,366,936	15,911,163

¹ Values of pitchblend products not included from 1941 to 1953.

MINERAL STATISTICS

TABLE 6. Mineral Production of Newfoundland, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Copper	lb.	31,503,313	9,195,817	34,616,626	10,731,154	28,024,753
Gold	troy oz.	14,429	511,652	13,966	522,468	12,318
Iron ore	short ton	7,611,340	59,889,125	7,986,910	67,753,153	9,683,004
Lead	lb.	43,936,710	4,485,938	50,660,572	5,025,529	48,784,221
Silver	troy oz.	1,145,105	1,079,376	1,181,648	1,376,620	981,005
Zinc	lb.	69,277,362	8,722,020	65,081,560	7,874,869	68,970,834
Non-metallics:						
Asbestos	ton	—	—	—	—	20,390
Fluor spar	“	—	1,951,800	—	—	3,320,064
Gypsum	ton	40,699	101,896	83,992	284,564	232,259
Pyrophyllite (talc)	“	24,425	404,059	22,794	343,210	31,783
Structural materials:						
Cement	“	86,549	1,789,980	96,916	1,985,524	92,460
Clay products	“	—	75,890	—	142,000	—
Sand and gravel	ton	3,383,724	2,777,393	4,250,942	3,504,594	4,640,993
Stone	“	322,820	633,963	227,707	445,091	382,260
Totals .....		... 91,618,709	...	... 101,858,960	...	... 137,796,707

TABLE 7. Mineral Production of Prince Edward Island, 1961-63

Products	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Structural materials:		\$		\$		\$
Sand and gravel	ton	544,497	381,644	531,196	452,906	629,475
Stone	“	225,000	225,000	225,000	225,000	225,000
Totals .....	...	606,644	...	677,906	...	798,345

TABLE 8. Mineral Production of Nova Scotia, 1961-63

Products	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Copper	lb.	—	—	407,418	126,300	474,268
Gold	troy oz.	—	—	—	—	—
Lead	lb.	—	—	5,363,377	532,047	2,800,480
Silver	troy oz.	—	—	724,245	843,745	423,189
Zinc	lb.	—	—	1,513,140	183,090	—
Non-metallics:						
Barite	ton	175,926	1,647,731	220,089	2,066,902	161,007
Gypsum	“	4,113,188	5,693,653	4,451,072	7,113,517	4,910,536
Peat moss	“	4,954	217,319	4,734	132,866	1,475
Quartz	“	1,044	5,772	2,502	45,036	2,861
Salt	“	225,875	2,659,119	312,519	3,112,753	356,902
Fuels:						
Coal	“	4,300,758	41,716,107	4,204,779	41,713,202	4,554,944
Structural materials:						
Clay products	ton	—	1,582,153	—	1,712,503	—
Sand and gravel	“	5,574,377	6,513,612	4,375,842	2,738,424	6,633,581
Stone	“	1,021,880	1,657,690	548,834	1,330,708	437,525
Totals .....	...	61,693,156	...	61,631,093	...	66,317,617

TABLE 9. Mineral Production of New Brunswick, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Copper	lb.	—	—	7,347,949	2,277,864	17,927,959
Gold	troy oz.	—	—	553	20,688	1,128
Lead	lb.	—	—	3,758,717	372,865	3,566,150
Silver	troy oz.	—	—	178,521	207,977	332,472
Zinc	lb.	—	—	4,996,488	604,575	21,228,005
Non-metallics:						
Grindstone	ton	10	2,000	10	2,000	10
Gypsum	“	85,330	136,856	91,835	161,649	80,544
Peat moss	“	32,688	1,240,479	35,010	1,407,433	31,643
Sulphur, in sulphides	“	—	—	—	—	—
Fuels:						
Coal	ton	887,903	7,526,647	815,529	6,752,042	886,336
Natural gas	Mcf.	96,318	143,215	95,750	134,476	103,524
Petroleum, crude	bbl.	12,024	16,833	10,333	14,466	7,381

TABLE 9. Mineral Production of New Brunswick, 1961-63 - Continued

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Structural materials:		\$		\$		\$
Cement	ton	170,953	2,754,052	169,823	2,774,908	161,833
Clay products	"	..	744,293	..	822,400	..
Lime	ton	13,820	308,027	17,341	389,876	16,919
Sand and gravel	"	5,014,234	2,776,139	5,128,365	2,790,933	4,417,611
Stone	"	2,957,886	3,155,844	2,950,906	3,077,423	4,416,799
Totals .....		...	18,804,385	...	21,811,575	...
						28,343,419

TABLE 10. Mineral Production of Quebec,¹ 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Bismuth	lb.	174,832	297,670	196,501	332,418	201,961
Cadmium	"	-	-	66,293	114,024	43,546
Cobalt	"	-	-	-	-	90,289
Columbium (Cb ₂ O ₅)	"	62,229	65,619	1,016,514	1,006,349	1,393,444
Copper	troy oz.	298,013,711	86,990,202	294,861,820	91,407,164	282,799,924
Gold	ton	1,054,029	37,375,868	993,560	37,169,080	917,229
Iron ore	ton	5,639,931	53,627,608	11,163,982	112,444,643	11,650,787
Iron (re melt)	"	..	14,720,064	..	9,845,669	..
Lead	lb.	6,784,464	692,694	9,432,012	935,656	8,673,195
Molybdenum	"	771,358	1,092,201	817,705	1,261,451	833,867
Nickel	"	-	-	3,080,117	2,571,898	5,011,649
Selenium	"	214,998	1,397,478	276,409	1,589,352	286,042
Silver	troy oz.	4,315,844	4,068,115	4,603,019	5,362,517	4,441,644
Tellurium	lb.	63,904	309,934	45,724	274,344	64,590
Titanium ore	ton	-	-	-	-	-
Zinc	lb.	108,010,062	13,598,467	141,473,544	17,118,299	150,168,758
Non-metallics:						
Asbestos	ton	1,103,545	115,944,729	1,125,131	114,297,886	1,158,210
Feldspar	"	10,507	229,626	9,994	222,460	8,608
Graphite	"	1	146	-	-	-
Iron oxides (ochre)	"	808	68,199	771	58,363	978
Lithia	lb.	536,190	392,871	499,736	558,654	644,354
Magnesitic dolomite and brucite	ton	..	3,064,403	..	3,431,873	..
Mica	"	687	102,390	351	75,350	840,856
Natural mineral waters	Imp. gal.	357,948	205,923	372,048	204,545	..
Peat moss	ton	75,741	1,788,349	77,889	1,968,483	81,182
Pyrite	"	..	1,729,140	..	1,813,785	..
Quartz	"	302,432	1,717,502	392,395	2,037,944	401,063
Soapstone and talc	"	16,274	178,911	15,285	154,086	15,564
Sulphur in smelter gases	"	..	127,178	..	167,860	..
Titanium dioxide, etc.	"	..	16,723,743	..	11,573,862	..
Structural materials:						
Cement	"	2,029,159	31,412,617	2,242,591	33,330,630	2,330,641
Clay products	"	..	8,195,790	..	7,450,131	..
Lime	ton	407,427	5,086,976	365,473	4,431,612	358,201
Sand and gravel	"	44,126,199	21,793,232	44,000,000	23,000,000	42,375,911
Stone	"	22,648,010	32,525,279	24,173,016	33,242,778	30,003,825
Totals .....		...	455,522,933	...	519,453,166	...
						540,615,068

¹ There is also in this province an important production of aluminum from imported ores.

TABLE 11. Mineral Production of Ontario, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Bismuth	lb.	19,923	22,388	-	-	65
Calcium	"	99,355	100,881	123,511	124,412	98,673
Cobalt	"	2,884,420	4,309,912	2,649,193	4,765,808	2,156,732
Copper	"	423,293,547	122,421,860	377,990,690	116,347,723	357,919,536
Gold	troy oz.	2,637,720	93,533,551	2,421,249	90,578,924	2,338,854
Iron ore	short ton	5,772,664	62,350,773	6,414,936	64,479,510	6,749,617
Lead	lb.	1,670,535	170,562	2,287,087	226,879	3,077,814
Magnesium	"	15,270,618	4,307,570	17,631,310	4,821,823	17,810,348
Nickel	"	392,435,773	295,423,149	333,163,344	274,219,955	298,178,570
Platinum group	troy oz.	418,278	24,534,349	470,782	28,848,262	357,649
Selenium	lb.	164,800	1,071,200	142,915	821,761	95,100
Silver	troy oz.	8,870,402	8,361,240	9,383,445	10,931,713	9,601,621
Tellurium	lb.	8,050	39,043	7,011	42,066	7,705
Thorium .....	"	..	..	..	..	..
Uranium (U ₃ O ₈)	"	14,970,594	151,060,610	12,805,203	118,283,081	12,770,421
Zinc	"	103,874,146	13,077,755	126,264,684	15,278,027	132,939,970
						102,951,146
						16,989,728

TABLE 11. Mineral Production of Ontario, 1961-63 - Concluded

Product		1961		1962		1963	
		Quantity	Value	Quantity	Value	Quantity	Value
Non-metallics:			\$		\$		\$
Arsenic (A_2O_3)	lb.	419,300	16,772	160,750	6,832	187,450	7,498
Asbestos	ton	25,047	4,362,668	35,551	5,686,720	33,715	5,372,645
Fluorspar	"	38,400	-	-	-	-	-
Garnet	"	80	3,200	-	-	-	-
Gypsum	"	425,287	991,944	435,140	1,007,818	439,206	1,225,301
Mica	"	192,960	14,962	251	9,248	342,185	5,114
Natural mineral waters	Imp. gal.	6,985	2,786	5,200	2,780	-	-
Nepheline syenite	ton	240,320	2,572,169	254,418	2,605,421	254,000	2,699,202
Peat moss	"	15,113	251,352	24,801	455,826	30,659	610,784
Quartz ¹	"	1,540,016	827,061	1,352,613	1,077,784	952,166	644,287
Salt	"	2,861,705	13,586,373	3,155,589	15,387,911	3,187,491	14,793,161
Sulphur, in smelter gas	"	..	823,682	..	915,442	..	1,406,694
Sulphur, elemental	"	..	31,376	..	37,435	..	53,744
Talc	"	7,417	107,660	8,082	127,912	6,903	107,986
Fuels:							
Natural gas	Mcf.	14,544,165	5,614,048	15,648,294	5,802,387	15,920,055	6,049,621
Petroleum, crude	bbls.	1,149,087	3,546,740	1,134,534	3,661,174	1,205,376	3,459,429
Structural materials:							
Cement	ton	2,226,923	35,671,569	2,510,783	38,704,090	2,552,665	39,551,719
Clay products	"	19,036,556	-	20,146,786	-	21,819,687	-
Lime	ton	865,130	11,548,132	910,930	10,527,910	952,945	11,434,223
Sand and gravel	"	70,208,199	40,344,071	76,600,813	52,365,204	80,259,750	56,338,204
Stone	"	18,361,843	23,493,092	18,797,648	25,043,550	20,402,614	25,073,707
Totals		...	943,669,456	...	913,342,174	...	873,828,297

¹ Includes low-grade silica sand for fluxing purposes.

TABLE 12. Mineral Production of Manitoba, 1961-62

Product		1961		1962		1963	
		Quantity	Value	Quantity	Value	Quantity	Value
Metallics:			\$		\$		\$
Cadmium	lb.	182,622	292,195	189,272	325,548	183,110	439,464
Cobalt	"	298,477	441,631	832,729	1,579,397	777,944	1,537,747
Copper	"	24,908,723	7,271,252	25,475,004	7,897,714	33,960,338	10,697,506
Gold	troy oz.	57,747	2,047,709	68,259	2,553,569	53,084	2,003,921
Lead	lb.	6,107,331	623,558	7,584,246	752,357	5,474,570	602,203
Nickel	"	65,957,008	50,039,745	122,963,069	102,586,082	127,170,104	106,822,887
Platinum group	troy oz.	..	..	..	..	..	..
Selenium	lb.	9,544	62,036	11,477	65,993	15,436	74,865
Silver	troy oz.	767,543	723,486	847,879	987,779	766,976	1,061,495
Tellurium	lb.	1,059	5,136	1,008	6,048	796	5,174
Zinc	"	93,017,677	11,710,925	99,840,226	12,080,667	92,784,466	11,857,855
Non-metallics:							
Gypsum	ton	122,233	366,699	122,870	338,527	131,767	395,301
Peat moss	"	18,370	731,896	19,720	812,724	27,195	1,070,850
Quartz	"	165,247	339,730	120,541	322,806	279,641	468,867
Salt	"	23,103	629,129	25,010	634,538	24,883	618,533
Sulphur, elemental	"	-	-	..	56,990	..	14,777
Fuels:							
Petroleum, crude	bbls.	4,480,348	10,156,000	3,926,683	9,435,819	3,771,163	9,188,635
Structural materials:							
Cement	ton	395,134	7,768,334	432,079	8,715,034	455,325	9,684,760
Clay products	"	..	623,966	..	621,275	..	594,072
Lime	ton	48,791	833,238	46,348	800,418	54,879	908,952
Sand and gravel	"	7,402,385	5,817,415	9,692,025	6,770,210	9,653,471	6,947,039
Stone	"	594,921	1,005,707	943,765	1,588,674	3,693,144	4,643,636
Totals		...	101,489,787	...	158,932,169	...	169,638,539

TABLE 13. Mineral Production of Saskatchewan, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
	\$		\$		\$	\$
Metallics:						
Cadmium	lb.	125,135	200,216	128,223	220,544	132,940
Copper	"	66,957,929	19,545,019	64,033,759	19,850,465	59,542,946
Gold	troy oz.	70,784	2,510,000	66,034	2,470,332	64,813
Selenium	lb.	41,270	268,255	56,265	323,524	72,194
Silver	troy oz.	876,450	826,142	762,215	887,980	746,683
Tellurium	lb.	4,596	22,291	4,982	29,892	3,751
Uranium (U_3O_8)	"	4,310,871	44,631,014	4,053,966	39,900,588	3,932,645
Zinc	"	56,719,653	7,141,004	61,799,241	7,477,708	66,639,117
Non-metallics:						
Helium	Mcf.	-	-	-	-	..
Nitrogen	"	-	-	-	-	..
Potash (K_2O)	ton	-	-	..	3,000,000	626,860
Quartz ¹	lb.	144,348	90,940	172,219	137,775	160,398
Salt	"	51,964	1,322,311	54,931	1,337,471	56,301
Sodium sulphate	ton	250,996	4,036,625	246,672	3,954,273	256,914
Sulphur, elemental	"	..	31,244	..	21,674	..
Fuels:						
Coal	ton	2,208,851	3,769,357	2,256,306	4,553,900	1,873,556
Natural gas	Mcf.	37,192,595	4,050,274	38,845,732	2,295,783	39,936,193
Natural gas by-products	bbl.	..	1,476,478	..	1,878,643	..
Petroleum, crude	"	55,860,104	115,719,791	64,432,411	141,783,520	71,303,893
Structural materials:						
Cement	ton	201,950	4,985,021	230,072	5,830,227	217,545
Clay products	"	..	1,115,474	..	1,354,635	..
Sand and gravel	ton	7,626,197	4,235,777	5,317,336	3,344,568	7,368,017
Totals		...	215,977,233	...	240,653,502	...
						272,355,007

¹ Low-grade silica sand for fluxing purposes.

TABLE 14. Mineral Production of Alberta, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
	\$		\$		\$	\$
Metallics:						
Gold	troy oz.	171	6,064	186	6,958	132
Silver	"	17	16	17	20	12
Non-metallics:						
Peat moss	ton	-	-	-	-	780
Salt	"	83,880	1,355,074	90,729	1,454,462	96,417
Sulphur	"	..	6,133,261	..	8,308,209	..
Fuels:						
Coal	ton	2,027,826	10,472,978	2,087,310	9,969,608	2,289,943
Natural gas	Mcf.	500,843,900	48,882,365	770,963,122	88,660,759	943,354,973
Natural gas by-product	bbl.	..	23,059,867	..	46,190,893	..
Petroleum, crude	"	157,811,712	355,530,845	165,124,967	379,830,363	168,214,054
Structural materials:						
Cement	ton	677,914	12,420,025	799,030	14,780,423	727,122
Clay products	"	..	3,517,473	..	3,445,687	..
Lime	ton	47,506	838,365	48,138	842,615	54,826
Sand and gravel	"	12,591,944	10,927,057	13,469,848	12,644,098	16,139,744
Stone	"	96,753	337,150	105,695	368,608	138,894
Totals		...	473,480,540	...	566,502,703	...
						669,311,368

TABLE 15. Mineral Production of British Columbia,¹ 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
Metallics:						
Antimony	lb.	1,331,297	469,948	1,931,397	748,223	1,601,253
Bismuth	"	283,363	637,567	228,601	507,494	157,099
Cadmium	"	1,771,508 ²	2,834,413 ³	2,086,692	3,839,513	1,980,004
Copper	"	31,690,608	9,205,938	108,979,144	33,766,394	124,435,417
Gold	troy oz.	164,467	5,832,000	159,492	5,966,596	159,473
Indium .....	"	..	..	..	..	..
Iron ore	ton	1,335,068	12,082,541	1,793,848	18,326,911	2,060,241
Lead	lb.	385,600,537	39,369,815	335,282,537	33,260,028	314,974,034
Molybdenum	"	-	-	-	-	-
Nickel	"	4,180,677	3,194,037	3,476,467	2,902,850	3,699,402
Platinum group	troy oz.	-	-	5	375	2
Silver	"	8,391,640	7,909,960	6,186,937	7,207,782	6,451,158
Tin	lb.	1,119,350	727,578	650,941	442,640	927,062
Zinc	"	388,972,266	48,971,608	413,431,339	50,025,192	402,863,104
Non-metallics:						
Asbestos	ton	45,103	8,648,503	55,132	10,297,360	63,215
Barite	"	15,478	151,388	6,511	57,062	12,496
Diatomite	"	214	8,817	211	10,228	798
Fluorspar	"	-	-	-	-	-
Gemstones	lb.	..	..	..	..	16,000
Gypsum	ton	153,300	459,900	147,900	443,700	160,954
Mica (schist)	"	250,000	8,025	-	-	-
Peat moss	"	77,165	3,065,692	75,881	2,703,064	70,397
Pozzolan	"	..	2,000	..	4,927	..
Pyrite	"	..	101,426	..	65,799	..
Quartz	"	40,967	171,877	45,350	196,100	40,483
Sulphur, in smelter gas	"	..	1,757,250	..	2,006,235	..
Sulphur, elemental	"	..	1,092,000	..	862,691	..
Fuels:						
Coal	ton	964,663	6,453,373	913,196	6,056,263	962,684
Natural gas	Mcf.	103,018,988	9,714,690	121,093,122	11,724,236	118,058,994
Natural gas by-products	bbi.	..	2,756,614	..	2,708,970	..
Petroleum, crude	"	1,017,826	1,859,873	8,914,220	16,872,122	12,528,681
Structural materials:						
Cement	ton	417,366	7,122,046	397,435	7,112,890	476,071
Clay products .....	..	..	2,091,353	..	2,121,461	..
Lime	ton	32,616	602,633	36,229	654,157	12,961
Sand and gravel	"	14,279,191	9,087,792	17,879,395	10,992,346	17,451,950
Stone	"	2,709,691	3,533,943	2,580,914	3,544,526	2,935,268
Totals .....	..	188,542,078	..	235,428,135	..	261,146,081

¹ There is also in this province an important production of aluminium from imported ores.² Cadmium production data were revised to 1,771,508 pounds, value \$2,834,413. Revision was not incorporated in the total.

TABLE 16. Mineral Production of Yukon, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
Metallics:						
Cadmium	lb.	142,685	228,296	134,493	231,328	135,885
Copper	"	880,773	257,098	429,000	132,990	—
Gold	troy oz.	66,878	2,371,494	54,805	2,050,255	55,211
Lead	lb.	16,769,815	1,712,198	16,290,125	1,615,980	16,978,607
Platinum group	troy oz.	—	—	—	—	—
Silver	"	6,937,086	6,538,897	6,482,244	7,551,814	6,106,037
Tungsten (WO ₃)	lb.	—	—	3,580	1,611	—
Zinc	"	12,137,418	1,528,100	11,888,876	1,438,554	11,850,706
Fuels:						
Coal	ton	7,703	114,221	7,649	115,196	8,231
Totals .....		...	12,750,304	...	13,137,730	...
						14,366,936

TABLE 17. Mineral Production of the Northwest Territories, 1961-63

Product	1961		1962		1963	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
Metallics:						
Copper	lb.	926,480	270,440	626,801	194,928	32,638
Gold	troy oz.	407,474	14,449,028	400,292	14,974,924	400,885
Nickel	lb.	3,409,410	2,604,789	1,801,002	1,503,837	—
Silver	troy oz.	77,890	73,419	72,802	84,614	61,206
Tungsten (WO ₃)	lb.	—	—	—	—	—
Uranium (U ₃ O ₈)	"	—	—	—	—	—
Fuels:						
Natural gas	Mcf.	41,678	17,326	56,707	23,518	51,478
Petroleum crude	bbl.	516,979	730,160	572,004	755,045	631,229
Totals .....		...	18,145,162	...	17,537,066	...
						15,911,163

TABLE 18. Tonnage of Ore Mined and Rock Quarried in the Canadian Mining Industry, 1922-63

	1922	1923	1924	1925	1926
Gold-quartz ores	2,431,340	2,478,912	3,096,290	3,646,460	4,031,035
Copper-gold-silver ores	1,004,097	1,690,073	2,232,085	2,518,849	3,210,321
Silver-cobalt ores	426,445	437,222	433,176	357,029	336,066
Silver-lead-zinc ores	505,774	636,498	1,200,039	1,474,764	1,565,158
Nickel-copper ores	259,569	1,187,355	1,411,978	1,264,748	1,322,050
Miscellaneous metals	—	—	—	—	—
Asbestos	2,562,933	3,768,542	3,323,505	4,120,214	4,483,261
Feldspar and nepheline syenite	24,210	—	44,804	25,542	35,951
Quartz	125,245	272,070	150,896	197,224	238,343
Gypsum	484,629	558,853	703,733	705,852	931,193
Talc and soapstone	—	10,235	11,240	15,390	16,650
Iron oxides	19,203	—	—	13,225	6,626
Other non-metals	—	—	—	—	—
Stone, all kinds, quarried ¹	3,639,081	4,111,334	4,768,014	5,706,119	6,397,590
Stone used for the manufacture of cement	1,600,000	1,900,000	1,900,000	1,900,000	2,200,000
Estimated rock for the manufacture of lime	561,000	625,000	570,000	637,000	715,700
Totals (other than coal)	13,643,526	17,676,094	19,845,760	22,582,446	25,490,044
	1927	1928	1929	1930	1931
Gold-quartz ores	4,605,190	4,601,628	4,354,744	4,472,803	5,565,426
Copper-gold-silver ores	3,636,759	4,262,822	5,134,824	5,768,664	6,002,865
Silver-cobalt ores	303,134	260,644	242,591	223,432	200,729
Silver-lead-zinc ores	1,763,660	2,097,179	2,208,270	2,244,970	1,710,731
Nickel-copper ores	1,305,917	1,457,910	1,991,910	2,127,043	1,714,071
Miscellaneous metals	—	—	—	—	1,630
Asbestos	4,834,761	5,171,060	6,208,970	4,901,206	2,274,045
Feldspar and nepheline syenite	31,484	31,897	37,527	26,796	13,807
Quartz	245,318	290,721	265,949	226,200	180,110
Gypsum	1,105,704	1,311,642	1,211,689	1,070,968	882,830
Talc and soapstone	16,521	17,076	—	11,841	21,916
Iron oxides	7,767	10,841	—	6,596	12,465
Other non-metals	—	—	—	—	120,205
Stone, all kinds, quarried ¹	7,306,436	8,253,804	9,622,424	9,994,656	8,398,110
Stone used for the manufacture of cement	2,400,000	2,800,000	3,000,000	2,925,399	2,489,147
Estimated rock for the manufacture of lime	790,000	905,000	1,203,000	874,000	610,000
Totals (other than coal)	28,352,651	31,472,224	35,481,898	34,874,574	30,198,213
	1932	1933	1934	1935	1936
Gold-quartz ores	6,072,665	6,528,854	7,846,854	8,832,901	10,694,208
Copper-gold-silver ores	5,453,173	5,448,690	6,065,692	5,650,665	5,052,222
Silver-cobalt ores	70,442	60,317	54,498	57,287	59,592
Silver-lead-zinc ores	1,532,628	1,457,452	1,856,256	2,134,749	2,196,482
Nickel-copper ores	826,041	1,533,887	2,989,988	3,699,845	4,666,554
Miscellaneous metals	77	3,000	3,618	4,970	9,440
Asbestos	1,145,340	1,566,919	2,320,750	2,852,118	4,692,004
Feldspar and nepheline syenite	4,903	10,658	18,302	15,706	29,189
Quartz	207,031	185,783	272,563	226,857	249,960
Gypsum	437,153	370,591	488,066	562,471	841,116
Talc and soapstone	13,275	16,626	15,050	13,909	25,052
Iron oxides	14,262	4,379	6,182	6,152	7,223
Other non-metals	52,154	129,514	173,669	128,415	233,894
Stone, all kinds, quarried ¹	4,691,172	2,939,824	4,077,754	4,317,947	4,982,911
Stone used for the manufacture of cement	1,141,376	616,364	806,546	818,443	1,180,355
Estimated rock for the manufacture of lime	569,500	573,726	600,000	700,000	800,500
Totals (other than coal)	22,231,192	21,446,584	27,595,788	30,022,435	35,720,206

See footnote at end of table.

TABLE 18. Tonnage of Ore Mined and Rock Quarried in the Canadian Mining Industry, 1922-63 - Continued

	1937	1938	1939	1940	1941
Gold-quartz ores	12,388,489	14,749,649	17,105,744	18,986,306	20,031,736
Copper-gold-silver ores	6,749,809	7,929,434	8,474,855	8,931,291	9,263,071
Silver-cobalt ores	56,878	59,408	60,431	43,245	11,507
Silver-lead-zinc ores	2,524,548	2,387,167	2,195,138	2,640,973	2,816,974
Nickel-copper ores	6,322,062	6,282,799	7,859,496	8,361,532	9,974,272
Iron ores	-	-	186,705	659,581	758,416
Miscellaneous metals	17,509	1,307	4,949	23,735	125,435
Asbestos	6,477,805	5,816,368	6,650,416	7,612,150	7,707,367
Feldspar and nepheline syenite	53,901	50,768	79,346	101,645	57,861
Quartz	450,740	450,246	231,843	228,065	335,085
Gypsum	1,151,064	1,084,057	1,532,423	1,494,576	1,532,228
Talc and soapstone	7,271	10,366	14,111	20,514	38,067
Iron oxides	7,665	8,919	10,049	15,623	15,917
Other non-metals	243,670	179,932	216,253	306,765	412,159
Stone, all kinds, quarried ¹	6,935,612	5,116,022	5,443,522	7,447,665	7,940,801
Stone used for the manufacture of cement	1,465,168	1,344,868	1,379,858	1,765,944	2,086,781
Estimated rock for the manufacture of lime	976,900	867,583	900,000	1,280,949	1,530,200
Totals (other than coal)	45,829,091	46,338,893	52,345,139	59,920,559	64,637,877
	1942	1943	1944	1945	1946
Gold-quartz ores	17,722,866	12,853,610	10,790,495	9,780,555	10,712,615
Copper-gold-silver ores	8,575,626	8,251,579	7,395,608	5,914,580	5,009,490
Silver-cobalt ores	25,550	39,184	27,184	30,519	32,841
Silver-lead-zinc ores	2,951,480	3,252,657	2,911,824	3,086,683	2,805,658
Nickel-copper ores	12,081,545	12,925,590	12,954,201	10,854,735	8,224,751
Iron ores	804,476	694,319	788,728	1,494,625	2,035,955
Miscellaneous metals	316,002	664,689	462,072	110,889	95,736
Asbestos	8,233,516	7,929,471	7,778,805	8,765,370	9,127,859
Feldspar and nepheline syenite	77,049	90,416	84,089	91,535	81,214
Quartz, exclusive of sand (shipments)	487,664	947,195	988,755	807,002	879,310
Gypsum and anhydrite	794,886	430,822	536,356	830,723	2,027,045
Talc and soapstone	30,376	22,128	30,553	26,599	28,624
Iron oxides	15,629	12,648	15,519	8,189	8,823
Other non-metals	457,251	529,326	497,560	614,286	589,036
Stone, all kinds, quarried ¹	7,978,066	7,222,950	5,994,992	6,205,555	8,050,260
Stone used for the manufacture of cement	2,155,750	1,918,742	1,865,597	1,849,258	2,525,653
Estimated rock for the manufacture of lime	1,518,435	1,568,730	1,511,803	1,426,753	1,445,891
Totals (other than coal)	64,226,167	59,354,056	54,634,144	51,897,856	53,686,761
	1947	1948	1949	1950	1951
Gold-quartz ores	11,632,841	13,630,705	15,999,866	16,984,524	16,548,264
Copper-gold-silver ores	5,462,233	6,496,499	8,245,402	8,758,607	7,380,966
Silver-cobalt ores	10,572	8,905	38,798	69,437	129,077
Silver-lead-zinc ores	2,857,461	3,147,849	3,915,405	4,826,992	6,317,545
Nickel-copper ores	11,137,609	11,688,146	10,923,823	10,777,859	12,885,445
Iron ores	2,109,724	1,812,820	4,207,327	4,345,278	5,093,326
Miscellaneous metals	133,019	91,863	1,083	153,181	439,117
Asbestos	9,837,045	10,759,016	8,218,045	12,210,780	12,623,529
Feldspar and nepheline syenite	142,296	139,680	123,785	133,845	232,092
Quartz, exclusive of sand (shipments)	1,315,427	1,341,914	1,212,562	952,093	1,259,791
Gypsum and anhydrite	2,604,075	3,487,964	3,157,114	3,780,211	3,928,377
Talc and soapstone	25,834	30,319	28,935	33,685	27,047
Iron oxides	20,664	22,935	22,443	20,622	20,505
Other non-metals	685,704	754,668	488,549	522,135	671,974
Stone, all kinds, quarried ¹	10,889,388	11,696,643	13,928,039	18,087,064	18,676,706
Stone used for the manufacture of cement	3,057,675	3,449,947	3,985,407	4,119,216	4,246,501
Estimated rock for the manufacture of lime	1,730,819	1,792,700	1,737,508	1,928,127	2,164,298
Totals (other than coal)	63,652,386	70,352,573	76,224,091	87,703,656	92,644,560

See footnote at end of table.

TABLE 18. Tonnage of Ore Mined and Rock Quarried in the Canadian Mining Industry, 1922-63 - Concluded:

	1952	1953	1954	1955
Gold-quartz ores	16,496,218	15,247,337	16,178,273	16,404,660
Copper-gold-silver ores	7,773,341	7,438,500	8,501,569	9,911,751
Silver-cobalt ores	180,534	268,837	289,101	302,821
Silver-lead-zinc ores	6,759,454	7,539,882	7,272,011	7,526,352
Nickel-copper ores	14,380,684	15,004,102	16,748,709	17,022,067
Iron ores	6,239,265	8,475,237	9,400,517	17,220,376
Miscellaneous metals ²	514,188	459,312	624,176	800,764
Asbestos	12,989,320	13,912,839	14,793,760	17,696,357
Feldspar and nepheline syenite	100,663	173,934	175,856	215,660
Quartz, exclusive of sand (shipments)	1,274,196	1,107,999	933,588	945,398
Gypsum and anhydrite	3,553,917	3,839,040	4,184,178	4,539,660
Talc and soapstone	25,728	28,638	28,120	29,273
Iron oxides	20,048	24,388	13,985	11,789
Rock salt	85,520	71,034	80,652	275,104
Other non-metals	736,550	665,473	748,839	1,032,913
Stone, all kinds, quarried ¹	18,726,196	19,849,017	32,767,925	30,512,920
Stone used for the manufacture of cement	4,513,625	5,330,778	5,566,198	5,964,433
Estimated rock for the manufacture of lime	2,131,563	2,163,427	2,154,987	2,274,211
Totals (other than coal)	96,501,810	101,599,774	120,462,449	132,686,509
	1956	1957	1958	1959
Gold-quartz ores	14,589,230	14,472,724	14,766,582	14,246,860
Copper-gold-silver ores	10,422,648	10,570,801	11,484,960	12,436,105
Silver-cobalt ores	205,013	186,294	223,609	197,449
Silver-lead-zinc ores	7,651,006	6,714,538	5,889,872	5,708,625
Nickel-copper ores	18,453,360	19,289,516	12,861,918	18,964,310
Iron ores	23,950,943	26,417,572	20,357,239	32,398,067
Miscellaneous metals ²	2,119,476	6,689,383	13,171,208	15,129,395
Asbestos	21,922,874	22,610,743	22,443,060	23,105,341
Feldspar and nepheline syenite	286,022	306,337	332,265	413,304
Quartz, exclusive of sand (shipments)	1,296,431	1,313,490	737,088	1,039,021
Gypsum and anhydrite	4,900,265	4,706,524	3,976,714	5,983,365
Talc and soapstone	28,500	40,083	37,314	43,762
Iron oxides	11,152	12,560	2,822	2,633
Rock salt	638,651	790,986	780,094	1,244,906
Other non-metals	1,235,686	746,925	803,635	1,418,454
Stone, all kinds, quarried ¹	33,257,318	40,282,081	38,156,647	46,439,535
Stone used for the manufacture of cement	7,152,693	8,741,863	8,473,596	7,963,129
Estimated rock for the manufacture of lime	2,278,836	2,562,740	2,831,886	3,062,152
Totals (other than coal)	150,398,104	166,455,160	157,069,182	189,796,763
	1960	1961	1962	1963
Gold-quartz ores	14,725,586	14,353,022	13,659,916	12,618,059
Copper-gold-silver ores	13,973,786	15,008,993	17,744,713	19,764,023
Silver-cobalt ores	220,753	233,781	234,621	307,095
Silver-lead-zinc ores	5,831,613	5,872,303	8,234,523	6,385,357
Nickel-copper ores	20,835,188	21,639,948	17,970,652	17,624,435
Iron ores	32,957,009	32,712,955	49,876,311	60,071,192
Miscellaneous metals ²	13,036,867	9,602,346	8,542,671	7,693,024
Asbestos	33,226,170	38,444,213	42,212,705	45,738,901
Feldspar and nepheline syenite	331,136	337,641	343,905	367,664
Quartz, exclusive of sand (shipments)	1,279,762	946,430	1,112,129	743,008
Gypsum and anhydrite	5,093,162	5,059,758	5,398,527	6,082,297
Talc and soapstone	51,487	68,229	67,069	64,712
Iron oxides	3	3	3	3
Rock salt	1,320,718	1,348,728	1,867,584	1,751,436
Other non-metals	695,367	843,449	1,218,142	3,376,023
Stone, all kinds, quarried ¹	45,359,449	48,938,804	50,553,485	62,655,320
Stone used for the manufacture of cement	7,768,119	8,145,376	9,023,162	9,384,413
Estimated rock for the manufacture of lime	2,669,574	2,592,831	2,668,480	2,703,790
Totals (other than coal)	199,377,746	206,148,807	228,728,595	257,330,706

¹ Excludes stone used to manufacture cement and lime.² Uranium ore is not included prior to 1956.³ Included in "Other non-metals".

TABLE 19. Tonnage of Ore Mined and Rock Quarried,¹ by Provinces, 1922-63

Province	1922	1923	1924	1925	1926	1927	1928
Nova Scotia	375,923	467,946	545,859	665,624	856,749	992,734	1,250,741
New Brunswick	103,719	124,997	126,985	57,794	99,764	127,842	147,633
Quebec	4,334,681	5,801,621	5,888,667	7,422,939	8,156,859	8,837,325	10,170,889
Ontario	6,540,851	8,170,834	9,090,836	9,699,085	10,673,134	11,955,635	12,525,513
Manitoba	236,503	199,540	187,124	198,704	324,950	477,311	549,472
Saskatchewan	-	-	-	-	-	-	-
Alberta	88,554	109,400	125,753	112,979	131,561	161,367	217,010
British Columbia	1,957,743	2,793,890	3,879,772	4,396,932	5,200,329	5,734,859	6,563,900
Yukon	5,552	7,866	764	28,389	46,698	65,578	47,066
Northwest Territories	-	-	-	-	-	-	-
Canada (excluding coal)	13,643,526	17,676,094	19,845,760	22,582,446	25,490,044	28,352,631	31,472,224
	1929	1930	1931	1932	1933	1934	1935
Nova Scotia	1,308,997	1,059,530	824,319	379,473	347,532	561,718	755,176
New Brunswick	125,528	216,286	150,313	76,637	75,605	100,812	147,203
Quebec	11,811,455	11,487,408	9,324,252	5,589,625	5,550,147	6,751,835	7,897,900
Ontario	13,445,831	13,596,023	11,531,228	9,184,305	9,050,716	12,702,505	13,575,752
Manitoba	885,780	811,560	1,757,496	1,968,665	1,640,141	1,431,826	1,738,880
Saskatchewan	-	-	90,874	46,861	316,105	528,729	488,015
Alberta	318,891	135,329	154,762	47,863	21,854	53,998	66,443
British Columbia	7,542,291	7,519,822	6,317,150	4,897,588	4,438,110	5,461,377	5,338,342
Yukon	45,125	48,616	47,819	40,119	6,374	2,988	14,702
Northwest Territories	-	-	-	56	-	-	22
Canada (excluding coal)	35,481,898	34,874,574	30,198,213	22,231,192	21,446,584	27,595,788	30,022,435
	1936	1937	1938	1939	1940	1941	1942
Nova Scotia	1,171,572	1,464,900	1,221,602	1,657,002	1,673,093	1,536,178	902,522
New Brunswick	132,308	138,503	90,900	143,370	262,124	238,675	193,932
Quebec	10,804,762	14,021,992	14,513,479	16,579,849	18,880,089	21,184,690	22,432,566
Ontario	16,211,145	20,674,550	20,047,916	22,781,330	26,606,352	28,796,910	28,988,558
Manitoba	1,534,972	1,758,094	1,714,752	2,343,130	2,377,074	2,429,929	1,712,432
Saskatchewan	798,149	840,429	836,807	925,652	1,272,634	1,626,993	2,360,689
Alberta	90,110	106,305	82,793	137,411	110,607	146,765	170,916
British Columbia	4,925,225	6,741,193	7,724,157	7,625,970	8,612,306	8,563,355	7,310,899
Yukon	51,963	83,125	89,131	55,614	24,741	23,419	300
Northwest Territories	-	-	17,356	95,811	101,539	90,963	153,353
Canada (excluding coal)	35,720,206	45,829,091	46,338,893	52,345,139	59,920,559	64,637,877	64,226,167

See footnote at end of table.

TABLE 19. Tonnage of Ore Mined and Rock Quarried,¹ by Provinces, 1922-63 — Concluded

Province	1943	1944	1945	1946	1947	1948	1949
Newfoundland ²	..	..	..	..	..	..	2,399,273
Nova Scotia	494,707	550,356	838,593	2,007,040	2,668,572	3,297,583	2,853,006
New Brunswick	129,845	154,385	190,348	210,151	342,804	264,749	359,599
Quebec	20,886,724	18,751,555	18,776,018	19,644,962	21,374,126	24,530,022	24,397,690
Ontario	27,358,636	26,108,154	23,749,464	23,983,245	28,897,304	30,340,213	32,693,186
Manitoba	1,571,200	1,576,141	1,495,262	1,472,911	1,410,880	1,731,380	2,153,953
Saskatchewan	2,292,464	1,934,900	1,716,841	1,755,641	1,875,252	1,962,994	1,790,990
Alberta	200,813	206,485	185,704	220,464	222,975	335,477	400,655
British Columbia	6,293,072	5,330,060	4,934,079	4,345,142	6,705,656	7,613,071	8,874,097
Yukon	37,371	101	93	—	20,934	37,830	30,226
Northwest Territories	89,224	22,007	11,454	47,205	133,883	239,254	271,416
Canada (excluding coal)	59,354,056	54,634,144	51,897,856	53,686,761	63,652,386	70,352,573	76,224,091
	1950	1951	1952	1953	1954	1955	1956 ³
Newfoundland	2,041,185	2,654,713	2,617,399	3,699,509	5,438,153	7,940,676	9,593,643
Nova Scotia	3,519,562	3,653,600	3,648,167	3,722,578	13,688,431	4,636,728	4,906,251
New Brunswick	3,207,796	1,027,016	455,804	1,328,120	1,048,177	1,484,410	2,475,039
Quebec	29,807,825	32,103,438	33,679,910	34,972,673	40,338,566	50,624,193	57,611,004
Ontario	34,965,824	38,800,085	40,327,014	41,312,894	43,828,925	49,206,738	56,231,433
Manitoba	2,731,787	2,736,240	2,013,792	2,257,143	2,514,433	2,921,792	3,181,811
Saskatchewan	1,547,411	1,646,504	1,489,463	1,065,509	1,230,987	1,228,285	1,511,292
Alberta	442,398	436,489	542,283	779,817	780,744	792,055	1,013,726
British Columbia	9,008,240	9,118,240	11,183,604	11,785,831	10,782,055	13,090,597	13,009,058
Yukon	77,670	87,074	133,829	192,183	236,549	163,765	184,652
Northwest Territories	353,958	381,161	410,545	483,517	575,429	597,270	675,083
Canada (excluding coal)	87,703,656	92,644,560	96,501,810	101,599,774	120,462,449	132,686,509	150,398,104
	1957	1958	1959	1960	1961	1962	1963
Newfoundland	10,541,432	7,378,993	7,484,035	9,813,738	10,798,351	11,573,044	20,723,570
Prince Edward Island	...	...	1,700,000	750,000	225,000	225,000	225,000
Nova Scotia	4,651,545	3,813,655	6,716,003	5,501,198	5,640,601	5,512,903	5,894,406
New Brunswick	1,963,614	2,541,459	2,445,856	2,218,264	3,318,923	3,651,628	5,280,287
Quebec	63,806,273	63,308,929	76,233,819	84,103,471	92,136,307	112,716,364	124,366,982
Ontario	64,686,691	62,871,982	76,170,363	77,205,171	72,098,791	69,754,183	68,563,606
Manitoba	3,417,325	2,905,751	2,878,546	3,072,092	5,006,332	5,172,910	7,835,624
Saskatchewan	2,524,231	2,895,002	3,175,234	2,640,733	2,448,097	2,949,468	5,108,186
Alberta	1,087,703	940,827	1,448,604	1,016,705	1,040,269	1,160,396	1,169,728
British Columbia	12,840,216	9,473,193	10,548,299	12,045,516	12,425,387	15,091,604	17,310,687
Yukon	187,925	177,222	176,081	176,107	189,184	186,977	185,598
Northwest Territories	748,205	762,169	819,923	834,751	821,565	734,118	667,033
Canada (excluding coal)	166,455,160	157,069,182	189,796,763	199,377,746	206,148,807	228,728,595	257,330,706

¹ Sand and gravel, sodium sulphate, etc., which are not actually mined or blasted are not included.² Newfoundland joined Confederation March 1949.³ Uranium ore included, but it was excluded prior to 1956.

TABLE 20. Yearly Average Prices of Copper, Lead, Zinc and Silver, 1944-63
(Copper, lead and zinc in U.S. cents per pound; silver, U.S. cents per ounce)

Year	Yearly average				Year	Yearly average			
	New York		St. Louis	New York		New York		St. Louis	New York
	Copper	Lead	Zinc ¹	Silver ¹		Copper	Lead	Zinc ¹	Silver ¹
1944.....	11.775	6.500	8.250	44.750	1954.....	29.694	14.054	10.681	85.250
1945.....	11.775	6.500	8.250	51.928	1955.....	37.491	15.138	12.299	89.099
1946.....	13.820	8.109	8.726	80.151	1956.....	41.818	16.013	13.494	90.826
1947.....	20.958	14.673	10.500	71.820	1957.....	29.576	14.658	11.399	90.820
1948.....	22.038	18.043	13.589	74.361	1958.....	25.764	12.109	10.309	89.044
1949.....	19.202	15.364	12.144	71.930	1959.....	31.182	12.211	11.448	91.202
1950.....	21.235	13.296	13.866	74.169	1960.....	32.053	11.948	12.946	91.375
1951.....	24.200	17.500	18.000	89.368	1961.....	29.921	10.871	11.542	92.449
1952.....	24.200	16.467	16.215	84.941	1962.....	30.600	9.631	11.625	108.521
1953.....	28.798	13.489	10.855	85.188	1963.....	30.600	11.137	11.997	127.912

¹ Prime western grade.² 1937-59 for other than newly-mined domestic.

Source: American Bureau of Metal Statistics.

TABLE 21. Average Annual Metal Prices, in Canadian Dollars, 1944-63

Year	Troy oz.		Pound			Year	Troy oz.		Pound		
	Gold	Silver	Copper	Lead ¹	Zinc ¹		Gold	Silver	Copper	Lead ²	Zinc ²
dollars										dollars	
1944.....	38.50	0.430	0.120	0.045	0.043	1954.....	34.07	0.8326	0.2916	0.1333	0.1198
1945.....	38.50	0.470	0.1255	0.050	0.0644	1955.....	34.52	0.8818	0.3687	0.1438	0.1365
1946.....	36.75	0.8365	0.128	0.0675	0.0781	1956.....	34.45	0.8968	0.4141	0.1551	0.1484
1947.....	35.00	0.72	0.2039	0.1367	0.1123	1957.....	33.55	0.8737	0.2895	0.1396	0.1209
1948.....	35.00	0.75	0.2235	0.1804	0.1393	1958.....	33.98	0.8681	0.2542	0.1136	0.1088
1949.....	36.00	0.7425	0.1997	0.158	0.1325	1959.....	33.57	0.8778	0.2961	0.1061	0.1224
1950.....	38.05	0.8082	0.2342	0.1445	0.1565	1960.....	33.95	0.8891	0.3029	0.1068	0.1335
1951.....	36.85	0.9455	0.277	0.184	0.199	1961.....	35.46	0.9426	0.2919	0.1021	0.1259
1952.....	34.27	0.8352	0.2854	0.1619	0.1746	1962.....	37.41	1.1650	0.3100	0.0992	0.1210
1953.....	34.42	0.8401	0.2994	0.1293	0.1196	1963.....	37.75	1.3840	0.3150	0.1100	0.1278

¹ Based on New York; 1933-42 based on London.² Based on London; prices controlled by Government 1939-47. Based on New York 1947-50. Montreal prices in 1951-63.

TABLE 22. Production of Leading Mineral Products, by Months, 1961-63

No.		Asbestos	Cement	Clay products	Coal	Copper	Gold	Gypsum
		tons	tons	\$	tons	pounds	ounces	tons
1961								
1	January	60,505	191,375	1,573,507	1,021,777	71,992,150	382,665	286,484
2	February	60,839	202,144	1,933,447	904,918	64,841,677	365,034	146,543
3	March	70,688	291,953	2,360,586	759,976	69,589,549	398,139	266,809
4	April	96,254	369,489	2,480,355	743,738	68,526,997	380,088	372,180
5	May	114,305	635,762	3,689,959	842,766	71,671,294	389,978	460,206
6	June	104,330	747,350	3,682,011	746,551	75,383,945	371,340	525,118
7	July	102,128	720,295	3,964,459	654,888	74,715,359	361,847	569,618
8	August	119,034	801,085	4,760,257	460,309	74,372,521	362,015	511,966
9	September	102,003	713,742	3,733,471	919,688	74,633,960	349,322	500,019
10	October	120,981	706,922	3,629,747	1,130,756	80,663,622	366,589	535,848
11	November	147,428	527,435	3,253,581	1,126,525	79,162,102	373,523	392,276
12	December	75,200	298,396	1,921,568	1,085,812	72,621,908	373,159	372,970
13	Totals	1,173,695	6,205,948	36,982,948	10,397,704	878,175,084	4,473,699	4,940,037
1962								
14	January	73,996	199,127	1,414,565	1,132,473	68,225,235	359,910	276,461
15	February	67,234	201,360	1,385,323	907,515	65,703,311	326,896	160,154
16	March	75,735	328,591	2,640,849	970,935	74,641,585	368,006	310,310
17	April	102,201	437,613	2,975,461	610,575	68,659,620	356,968	430,364
18	May	117,618	704,510	3,900,269	746,792	75,109,824	354,118	428,620
19	June	108,124	824,728	3,943,152	711,051	76,508,536	337,972	554,670
20	July	96,856	795,534	4,011,709	726,941	80,346,451	340,802	582,184
21	August	117,544	881,220	4,270,528	536,484	86,310,975	344,897	511,657
22	September	106,635	747,394	3,676,673	786,818	81,703,414	342,627	570,578
23	October	116,269	789,066	3,909,740	1,088,814	77,145,040	359,376	543,860
24	November	148,927	567,027	3,659,184	1,054,954	82,963,339	348,712	589,385
25	December	84,675	402,559	2,029,425	1,011,417	77,452,881	338,112	374,556
26	Totals	1,215,814	6,878,729	37,816,878	10,284,169	914,770,211	4,178,396	5,332,809
1963								
26	January	64,016	216,443	1,652,431	1,200,344	70,019,988	339,869	317,280
27	February	64,537	216,312	1,642,575	992,461	63,330,469	315,012	267,557
29	March	74,984	321,990	2,383,664	843,300	74,181,702	331,669	364,925
30	April	110,684	438,396	3,003,647	774,622	72,440,325	337,679	352,042
31	May	116,612	735,854	3,833,954	807,148	73,071,925	354,051	590,170
32	June	112,029	785,140	3,885,956	671,750	79,376,266	331,143	629,112
33	July	113,224	826,213	4,199,332	698,944	71,608,296	311,876	599,057
34	August	129,906	846,314	3,761,370	538,977	79,099,128	342,326	651,037
35	September	110,769	824,697	3,987,925	833,590	81,858,005	334,847	533,625
36	October	125,255	903,712	4,262,412	1,028,921	84,085,993	351,914	664,939
37	November	148,395	585,464	3,257,554	1,085,713	83,749,443	336,865	558,223
38	December	105,119	313,127	2,283,474	1,099,924	72,296,239	315,876	427,293
39	Totals	1,275,530	7,013,662	38,154,294	10,575,694	905,117,779	4,003,127	5,955,266

TABLE 22. Production of Leading Mineral Products, by Months, 1948-62

Iron ore	Lead	Lime	Natural gas	Nickel	Petroleum	Salt	Silver	Zinc	No.
tons	pounds	tons	Mcf.	pounds	barrels	tons	ounces	pounds	
475,094	45,290,717	104,466	61,608,928	36,428,081	17,619,010	274,240	2,597,485	71,103,300	1
289,969	41,478,310	100,629	55,918,811	33,736,670	16,495,653	242,793	2,605,595	60,398,844	2
268,762	41,864,266	117,197	59,174,030	34,194,477	16,352,133	240,714	2,972,546	66,403,815	3
352,531	36,336,952	118,259	53,517,011	33,202,355	16,854,799	200,578	2,516,521	62,192,698	4
1,535,469	35,510,507	128,075	49,619,491	38,915,446	18,852,293	226,225	2,570,788	68,873,338	5
2,716,698	39,838,232	119,577	44,012,421	38,584,055	17,943,874	214,095	2,893,800	65,806,369	6
3,000,335	36,811,028	109,600	43,160,296	40,379,500	18,979,577	240,509	2,410,226	67,362,012	7
3,419,335	38,667,912	116,532	45,616,930	39,742,813	19,680,640	263,580	2,240,105	71,463,034	8
3,031,926	37,876,137	115,647	47,781,138	41,843,638	19,646,535	268,227	2,389,225	77,451,276	9
3,162,549	39,051,487	137,646	54,927,952	43,815,082	18,204,436	351,224	3,070,234	75,827,543	10
1,147,361	34,682,103	126,774	62,320,289	44,611,798	19,701,517	396,057	2,659,863	72,931,992	11
958,974	35,461,741	120,888	78,080,347	40,528,953	20,517,613	328,285	2,455,589	72,194,363	12
20,359,003	460,869,392	1,415,290	655,737,644	465,982,868	220,848,080	3,246,527	31,381,977	832,008,584	13
461,526	37,464,506	119,714	85,314,599	41,883,882	22,031,995	384,676	2,551,394	76,192,416	14
520,718	32,654,516	105,947	82,864,677	36,057,198	20,327,201	380,942	2,065,971	64,445,043	15
500,054	34,325,850	124,980	84,151,375	42,733,015	21,846,225	252,644	2,532,930	71,518,866	16
1,093,006	35,622,401	119,097	72,941,856	37,946,808	18,593,186	221,841	2,272,855	74,966,113	17
3,548,111	37,155,514	133,188	72,717,573	40,848,760	20,008,658	207,355	2,217,612	82,610,390	18
4,234,517	40,431,794	127,717	68,036,230	36,910,480	18,163,964	281,599	2,683,932	82,435,040	19
3,933,577	39,568,378	126,492	69,318,357	37,444,816	20,066,840	274,815	2,848,662	81,561,520	20
3,508,577	34,500,896	119,283	71,971,184	39,494,145	20,831,002	300,864	2,408,070	91,386,407	21
3,852,341	29,339,027	99,967	74,454,154	37,932,543	20,671,116	306,826	2,836,669	77,437,046	22
3,508,087	40,996,728	116,948	82,667,911	32,770,069	20,621,203	334,180	2,737,110	86,471,490	23
1,265,232	32,706,246	120,281	85,534,912	40,619,803	19,671,793	344,011	2,502,287	67,891,717	24
926,930	35,892,817	110,845	96,729,899	39,842,480	21,281,969	349,025	2,765,480	69,373,048	25
27,359,676	430,658,673	1,424,459	946,702,727	464,483,999	244,115,152	3,638,778	30,422,972	926,289,098	26
756,518	31,838,772	105,486	108,006,082	35,877,669	22,711,354	345,020	2,289,478	72,900,253	27
713,735	30,450,704	110,722	94,670,304	34,520,933	21,255,941	321,064	2,232,734	67,890,354	28
825,270	35,760,683	123,064	98,476,919	38,165,108	23,323,858	248,824	2,574,882	75,916,217	29
1,235,253	34,966,225	125,460	91,136,216	39,288,071	18,916,967	198,268	2,392,732	75,056,642	30
3,506,599	36,639,246	135,154	87,281,644	39,784,269	20,701,355	280,231	2,672,495	82,986,303	31
3,800,374	34,889,764	117,582	78,857,619	34,921,103	20,875,633	263,528	2,408,273	82,651,780	32
3,835,226	30,029,215	126,205	79,910,003	28,842,146	21,000,292	287,731	2,216,299	90,864,879	33
3,649,078	37,540,851	118,160	81,013,404	36,404,785	21,540,234	359,989	2,898,512	73,302,791	34
3,989,474	30,889,758	116,503	85,867,285	36,074,980	21,352,419	321,404	2,304,911	78,255,775	35
3,544,102	35,371,130	136,468	92,562,779	36,798,413	22,048,316	334,752	2,721,581	80,071,472	36
3,650,779	35,896,294	117,621	104,376,921	35,493,306	21,101,316	361,283	2,820,473	87,696,010	37
1,637,241	28,056,429	118,306	115,266,041	37,888,942	23,834,092	399,900	2,399,633	79,852,484	38
30,143,649	402,329,071	1,450,731	1,117,425,217	434,059,725	257,661,777	3,721,994	29,932,003	947,444,960	39

MINERAL STATISTICS

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1959-63

Basis: Revised Standard Industrial Classification and New Establishments Concept

Year	Establishments ¹	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products ²	Net value added by processing ³							
	number		dollars											
Metal mining industries														
Placer gold mines														
1959	112	239	1,194,713	74,536	355,837	2,462,727	1,989,431							
1960	32	213	1,224,907	77,498	344,379	2,758,284	2,285,126							
1961	47	243	1,326,147	108,452	47,822	2,465,811	2,254,746							
1962	39	231	1,340,953	101,676	13,817	2,160,801	1,989,696							
1963	30	210	1,221,942	71,513	121,064	2,201,967	1,950,329							
Gold-quartz mines														
1959	139	16,777	65,519,112	7,161,054	20,901,136	130,097,538	100,519,397							
1960	146	16,542	66,552,906	7,216,027	22,686,326	135,349,183	103,748,507							
1961	140	15,876	65,465,515	7,360,085	19,396,214	135,033,500	106,879,129							
1962	133	15,220	64,578,944	6,981,932	18,495,257	129,495,909	102,318,033							
1963	122	15,120	63,095,590	6,733,920	19,147,272	126,902,669	99,259,218							
Copper-gold-silver mines														
1959	310	9,682	43,460,641	4,948,483	12,948,618	147,752,990	90,660,009							
1960	277	10,549	48,950,982	6,546,557	17,989,123	172,254,034	103,754,616							
1961	276	10,901	51,459,158	5,932,106	14,709,403	175,463,232	109,047,866							
1962	191	11,046	53,489,185	6,873,189	16,233,410	218,036,064	142,916,627							
1963	176	11,536	58,514,522	7,009,704	19,881,714	229,873,310	150,193,178							
Silver-cobalt mines														
1959	11	486	1,647,687	185,883	229,554	5,006,541	4,118,972							
1960	7	520	2,077,281	253,243	297,067	5,643,143	4,526,714							
1961	20	560	2,216,805	295,788	375,186	4,515,717	3,424,136							
1962	21	611	2,517,012	305,341	292,566	6,107,978	5,011,401							
1963	21	705	3,003,602	345,897	412,612	6,956,626	5,591,771							
Silver-lead-zinc mines														
1959	52	4,241	19,843,990	1,992,494	6,244,399	101,873,270	53,554,292							
1960	47	4,215	21,304,035	2,245,901	8,517,725	111,986,518	61,377,333							
1961	73	4,352	22,098,610	2,446,827	6,628,804	111,172,237	61,422,497							
1962	59	4,532	23,545,985	2,790,474	7,947,054	111,258,068	59,098,858							
1963	61	4,636	24,885,947	3,720,769	8,689,242	125,777,854	70,252,882							
Nickel-copper mines														
1959	55	11,025	57,210,303	3,456,926	15,234,554	110,332,077	84,745,910							
1960	39	12,709	67,504,099	6,334,892	18,746,564	127,212,418	99,161,815							
1961	50	13,697	74,754,694	4,636,241	17,876,804	134,732,176	109,350,212							
1962	37	13,342	74,049,980	4,478,914	16,753,050	115,549,381	90,942,558							
1963	26	12,110	68,080,256	4,219,792	17,414,590	112,121,434	85,523,703							
Iron mines														
1959	59	7,776	41,450,834	7,708,322	10,043,867	192,666,101	125,208,070							
1960	62	7,754	45,985,190	7,916,476	20,812,978	175,082,523	106,722,156							
1961	55	8,049	47,107,661	8,331,530	21,643,625	186,332,963	124,588,726							
1962	55	9,215	60,354,409	10,836,920	23,706,663	257,965,925	185,452,101							
1963	48	9,993	65,646,688	14,150,608	32,620,631	305,372,105	215,043,674							
Miscellaneous metal mines ⁴														
1959	84	13,645	76,604,136	9,023,750	57,982,723	333,770,291	265,835,151							
1960	68	9,380	54,453,208	7,570,803	40,059,514	273,409,628	224,482,268							
1961	43	5,919	34,332,063	5,856,827	22,992,059	201,214,250	170,664,295							
1962	29	5,120	30,354,642	4,989,168	22,129,854	164,135,270	135,816,670							
1963	35	4,468	27,924,566	4,755,070	19,752,181	144,412,912	118,642,123							
Totals, metal mining industries														
1959	822	63,871	306,931,416	34,551,448	123,940,688	1,023,961,535	726,631,232							
1960	678	61,882	308,042,608	38,161,397	129,453,676	1,003,695,731	706,058,535							
1961	704	59,597	298,760,653	34,967,856	103,669,917	950,929,886	687,631,629							
1962	564	59,317	310,231,110	37,357,614	105,571,671	1,004,709,396	723,546,036							
1963	519	58,778	312,373,113	41,007,273	118,039,306	1,053,618,877	746,456,880							

See footnotes at end of table.

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1959-63 - Continued

Year	Establishments ¹	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of product ²	Net value added by processing ³
		number		dollars			
Nonmetal mining industries							
Asbestos							
1959	23	6,653	31,448,638	5,951,664	13,729,736	110,996,692	91,315,292
1960	24	6,688	33,057,847	6,133,788	14,887,770	125,236,902	104,215,344
1961	23	6,875	35,093,133	6,666,383	14,645,395	133,407,157	112,095,379
1962	18	6,997	36,072,604	7,184,372	16,700,356	135,065,565	111,180,837
1963	17	6,823	35,507,888	7,638,031	16,274,404	141,998,121	118,085,686
Feldspar, quartz and nepheline syenite							
1959	30	429	1,685,867	386,190	583,378	5,773,221	4,577,424
1960	23	364	1,400,559	292,827	450,055	5,205,978	4,378,979
1961	23	339	1,312,770	224,025	397,379	4,795,170	3,820,235
1962	20	380	1,559,605	261,515	543,634	5,528,543	4,574,332
1963	20	381	1,564,114	343,299	686,380	6,332,183	5,302,504
Gypsum							
1959	11	755	2,691,420	313,342	529,297	7,245,486	6,402,847
1960	9	685	2,431,729	300,623	446,594	8,340,568	7,593,351
1961	9	613	2,272,477	312,798	1,450,653	6,597,398	4,833,947
1962	10	608	2,407,662	353,821	1,883,670	8,151,601	5,914,110
1963	9	680	2,876,245	448,527	2,267,523	9,845,729	7,129,679
Iron oxides (ochres)							
Included in miscellaneous nonmetal mines							
Mica							
1959	14	16	37,106	3,810	4,090	64,029	56,129
1960	29	21	38,022	3,303	4,457	95,997	88,237
1961	30	34	58,258	9,623	7,694	128,296	110,979
1962	15	21	55,664	5,532	6,315	86,828	74,981
1963	9	12	37,660	3,909	4,708	45,553	36,936
Peat							
1959	38	1,333	2,659,836	238,878	1,732,682	7,908,662	5,937,102
1960	40	1,172	3,060,511	279,827	1,863,202	7,937,055	5,794,026
1961	42	1,332	3,528,474	303,976	2,246,064	9,551,831	7,001,791
1962	49	1,370	3,397,964	363,159	2,357,063	9,817,904	7,097,682
1963	56	1,482	3,952,334	401,690	2,301,369	11,040,347	8,337,288
Salt							
1959	12	838	3,452,829	1,168,186	3,114,737	19,081,974	14,799,051
1960	11	886	3,836,864	1,089,847	2,875,704	19,649,719	15,684,168
1961	9	912	3,950,358	1,153,724	3,023,969	19,567,945	15,390,252
1962	11	907	4,271,593	1,183,167	2,988,304	22,381,543	18,210,072
1963	11	955	4,566,868	1,199,245	3,256,366	22,441,139	17,985,528
Talc and soapstone							
1959	4	65	184,656	39,022	79,062	577,488	459,404
1960	4	70	235,373	35,985	63,274	565,519	466,260
1961	4	79	264,622	40,993	83,147	736,340	612,200
1962	4	82	269,268	42,649	90,124	672,600	539,827
1963	4	79	276,676	44,357	93,526	835,675	661,792
Miscellaneous nonmetal mines							
1959	39	1,425	5,756,818	1,876,804	1,564,067	13,965,675	10,456,674
1960	46	1,122	4,548,789	1,859,585	1,004,699	10,773,462	7,600,509
1961	35	1,098	4,682,743	1,768,707	1,525,703	11,457,737	7,863,064
1962	27	1,156	5,356,350	1,874,020	1,476,503	15,148,243	11,510,536
1963	23	1,361	6,985,473	2,597,484	2,519,236	35,028,521	29,594,554
Totals, nonmetal mining industries							
1959	171	11,514	47,917,170	9,977,896	21,337,049	165,613,227	134,003,923
1960	186	11,008	48,609,694	9,995,785	21,595,755	177,805,200	145,820,874
1961	175	11,282	51,162,835	10,480,229	23,380,004	186,241,874	151,727,847
1962	154	11,521	53,390,710	11,268,235	26,045,969	196,852,827	159,102,377
1963	149	11,773	55,767,258	12,676,542	27,403,512	227,567,268	187,133,967

See footnotes at end of table.

MINERAL STATISTICS

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1959-63 - Continued

Year	Establishments ¹	Employees numbers	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products ²	Net value added by processing ³							
Fuel industries														
Coal														
1959	121	11,485	37,122,895	4,281,690	10,705,703	73,875,895	58,888,502							
1960	120	11,587	38,734,884	4,313,868	11,720,197	74,676,240	58,642,175							
1961	113	10,461	35,607,905	4,062,543	10,079,645	72,209,962	58,067,774							
1962	101	9,470	34,384,876	3,817,918	10,044,625	68,259,558	54,397,015							
1963	97	8,903	35,624,266	3,730,779	13,010,951	71,295,077	54,553,347							
Petroleum and natural gas														
1959	618	4,765	25,506,916	6,260,848	8,710,879	451,197,257	436,225,530							
1960	612	4,349	23,576,753	6,122,389	10,780,762	467,616,813	450,713,662							
1961	581	4,157	23,647,883	6,160,125	8,343,324	569,567,414	555,063,965							
1962	499	3,978	23,275,754	6,839,836	7,369,889	690,571,608	676,361,883							
1963	634	5,840	36,396,790	10,533,364	10,784,779	811,100,931	789,782,788							
Natural gas processing														
1959	14	461	2,525,833	918,608	7,169,778	17,363,197	9,274,811							
1960	30	669	3,790,433	1,288,028	25,624,323	45,762,880	18,850,529							
1961	49	744	4,477,319	1,869,994	39,501,327	78,020,013	36,648,692							
1962	50	645	5,563,243	2,872,439	63,726,737	119,656,070	53,056,894							
Included in petroleum and natural gas industry														
Totals, fuel industries														
1959	753	16,711	65,155,644	11,461,146	26,586,360	542,436,349	504,388,843							
1960	762	16,605	66,102,070	11,724,285	48,125,282	588,055,933	528,206,366							
1961	743	15,362	63,733,107	12,092,662	57,924,296	719,797,389	649,780,431							
1962	650	14,293	63,223,873	13,530,193	81,141,251	878,487,236	783,815,792							
1963	731	14,743	72,021,056	14,264,143	23,795,730	882,396,008	844,336,135							
Structural materials														
Sand and gravel														
1959	482	2,738	10,229,651	2,899,356	525,298	42,542,701	39,118,047							
1960	486	2,704	10,374,485	2,912,450	552,711	43,470,043	40,004,882							
1961	493	2,513	9,898,545	3,110,456	607,022	39,437,982	35,720,504							
1962	511	2,722	10,142,949	3,436,089	576,222	45,795,051	41,782,740							
1963	331	2,266	9,249,454	3,169,869	486,432	42,536,977	38,880,676							
Stone														
1959	202	3,184	11,364,441	2,562,709	4,372,398	40,722,771	33,787,664							
1960	207	3,105	10,986,822	2,680,275	3,954,352	39,443,050	32,986,408							
1961	228	3,395	12,623,473	3,028,969	4,550,911	44,708,945	37,129,065							
1962	207	3,197	12,199,056	3,292,986	5,032,517	47,812,337	39,486,834							
1963	207	3,452	14,046,133	3,768,031	5,953,524	48,766,760	39,045,205							
Totals, structural materials														
1959	684	5,922	21,594,092	5,462,065	4,897,696	83,265,472	72,905,711							
1960	693	5,809	21,361,307	5,410,740	4,511,063	82,913,093	72,991,290							
1961	721	5,908	22,522,018	6,139,425	5,157,933	84,146,927	72,849,569							
1962	718	5,919	22,342,005	6,729,075	5,608,739	93,607,388	81,269,574							
1963	538	5,718	23,295,587	6,937,900	6,439,956	91,303,737	77,925,881							
Totals, mining industries														
1959	2,430	98,018	441,598,322	61,452,555	176,761,793	1,815,276,583	1,437,929,709							
1960	2,319	95,304	444,115,679	65,292,207	203,685,776	1,832,469,957	1,453,077,065							
1961	2,343	92,149	436,178,613	63,680,172	190,132,150	1,941,116,076	1,561,989,476							
1962	2,086	91,050	449,187,698	68,885,117	218,367,630	2,173,656,847	1,747,733,779							
1963	1,937	91,012	463,457,014	74,885,858	175,678,504	2,254,885,890	1,855,852,863							

See footnotes at end of table.

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1959-63 - Concluded

Year	Establishments ¹	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross output value of products ²	Net value added by processing ³							
Industries classified as manufacturing														
Smelting and refining														
1959	23	28,172	139,319,623	47,340,635	788,217,652 ^a	1,283,937,955	448,379,668							
1960	22	30,024	155,415,083	50,786,918	896,613,061 ^a	1,506,008,207	558,608,228							
1961	24	29,527	157,474,973	49,000,322	891,950,994 ^a	1,471,048,021	530,096,705							
1962	23	29,303	159,439,468	45,702,893	915,966,632 ^a	1,549,048,522	582,652,997							
1963	23	28,644	160,117,666	46,038,387	918,659,574 ^a	1,520,160,421	555,462,460							
Clay products														
1959	112	4,410	16,894,581	6,380,927	1,368,431	42,152,618	34,403,260							
1960	111	3,979	15,172,005	5,652,962	1,284,138	38,013,902	31,076,802							
1961	99	3,547	13,537,964	5,610,938	4,733,718	34,526,747	24,182,091							
1962	93	3,693	14,793,837	5,405,506	5,645,126	37,053,706	26,771,702							
1963	89	3,519	14,319,125	5,405,522	4,966,260	37,565,031	27,193,249							
Cement														
1960	19	3,516	17,174,256	17,309,329	13,269,944	96,645,659	66,066,386							
1960	20	3,398	17,122,742	15,965,171	11,294,254	95,510,331	68,250,906							
1961	20	3,123	16,697,185	16,262,241	14,358,880	107,044,107	76,422,986							
1962	20	3,320	18,225,588	17,718,744	16,221,481	116,706,149	83,621,996							
1963	20	3,566	20,558,384	17,919,747	16,291,930	122,028,048	87,816,371							
Lime														
1959	23	1,016	3,801,286	2,763,691	1,149,217	13,306,267	9,393,359							
1960	23	875	3,600,300	2,308,640	882,397	11,468,449	8,277,412							
1961	21	825	3,569,549	2,238,931	1,784,960	12,978,722	8,954,831							
1962	22	896	3,777,375	2,505,150	2,153,403	14,503,433	9,792,207							
1963	21	886	4,058,104	2,426,773	2,211,361	14,914,900	10,276,746							
Totals, industries classified as manufacturing														
1959	177	37,114	177,189,746	73,794,582	804,005,244	1,436,042,499	558,242,673							
1960	176	38,276	191,310,130	74,713,691	910,073,850	1,651,000,889	666,213,348							
1961	164	37,022	191,279,671	73,112,432	912,828,552	1,625,597,597	639,636,613							
1962	158	37,212	196,236,268	71,332,293	939,986,642	1,717,311,810	702,838,902							
1963	153	36,615	199,053,279	71,790,429	942,129,145	1,694,668,400	680,748,826							

¹ In the publications issued prior to 1960 the figures in this column included the number of mines, quarries, pits and wells. There is a noticeable reduction in the figures which may be explained by an example; an oil firm which operates several hundred wells is now recorded as only 1 unit. Reclassification has removed some of the operators to other industries. Example: former sand and gravel operators to the construction industry.

² In this table the compilations are on an industry basis, therefore will not necessarily agree with the commodity series shown in Tables 1 to 17. Comparisons should not be made. Because of the inclusion of figures for the non-ferrous smelting and refining industry, there would be considerable duplication of the overall gross value of production.

³ Gross value, less the cost of fuel, electricity, process supplies, containers, freight and treatment charges.

^a Includes data of uranium mines. Data not available for 1941-53.

^b Inventory adjustments are included in the manufacturing industries.

^c Cost of ores and concentrates are included in smelting and refining data.

Note: The number of producing metal mines was as follows: in 1958: 314; in 1959: 292; in 1960: 244; in 1961: 266; in 1962: 208.

TABLE 24. Principal Statistics of the Mineral Industry, by Provinces, 1959-63

Excluding the manufacturing group

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products	Net value added by processing ¹
Newfoundland							
1959	21	3,566	14,307,275	1,851,721	3,253,993	66,316,497	44,481,687
1960	19	4,001	19,023,157	2,489,728	7,178,381	78,400,300	49,053,221
1961	22	4,293	20,967,991	2,661,119	7,410,901	84,413,353	53,752,858
1962	23	4,268	20,612,908	4,251,642	7,086,046	93,151,850	59,828,746
1963	20	4,923	28,407,611	7,625,927	12,947,001	128,179,886	79,599,611
Prince Edward Island							
1959	5	10	32,181	8,327	2,937	94,642	83,378
1960	5	7	10,921	6,344	878	78,814	71,592
1961	4	2	1,972	1,849	500	126,912	124,563
1962	5	55	186,591	50,402	9,049	305,233	245,782
1963	3	37	123,106	37,425	8,516	342,387	296,446
Nova Scotia							
1959	45	8,742	27,957,768	2,997,538	8,998,936	56,120,291	44,123,817
1960	49	8,982	29,278,841	3,064,614	9,860,469	58,213,993	45,288,919
1961	54	8,322	27,298,520	3,105,054	9,702,664	58,297,039	45,489,371
1962	50	7,493	26,663,163	2,974,159	10,367,767	57,926,572	44,353,861
1963	43	7,195	28,853,678	2,889,355	12,215,241	61,026,484	45,808,223
New Brunswick							
1959	43	1,347	3,863,287	774,104	2,275,920	11,148,849	8,038,825
1960	58	1,299	4,013,831	771,876	2,575,473	11,281,884	7,934,535
1961	57	1,460	4,730,053	882,962	2,261,440	10,869,031	7,724,629
1962	45	1,536	5,024,153	1,090,484	2,148,000	13,011,755	9,061,945
1963	47	1,498	5,293,936	1,400,251	2,790,992	18,125,862	11,665,758
Quebec							
1959	687	21,845	94,935,063	15,819,111	34,024,250	358,747,211	247,543,928
1960	646	21,765	97,760,714	17,036,640	44,618,573	358,199,423	242,852,975
1961	665	22,795	104,389,513	17,657,085	40,845,420	361,759,540	256,962,472
1962	536	23,720	117,747,643	19,839,705	47,440,221	425,027,861	309,016,600
1963	467	23,750	119,170,934	21,196,205	48,345,499	447,531,080	326,158,566
Ontario							
1959	737	40,999	196,505,860	22,230,941	88,951,307	607,697,777	468,052,907
1960	694	38,517	189,213,218	21,645,108	76,922,208	565,895,811	443,551,662
1961	667	35,125	172,860,677	20,482,960	60,681,579	520,427,508	414,012,771
1962	639	33,204	166,593,030	20,039,400	55,668,140	487,577,301	382,598,304
1963	544	31,591	157,397,878	19,449,014	58,783,697	471,424,286	363,843,386
Manitoba							
1959	80	1,999	9,248,947	930,291	2,412,752	30,408,008	25,243,624
1960	97	2,645	12,745,429	3,440,524	2,904,905	32,694,778	24,745,780
1961	75	3,306	16,866,255	1,639,657	4,432,817	41,705,846	34,060,270
1962	83	4,021	20,669,013	1,728,604	4,603,570	42,425,665	34,631,011
1963	77	4,415	23,883,858	1,404,354	3,662,539	43,781,379	36,677,681

See footnote at end of table.

Table 24. Principal Statistics of the Mineral Industry, by Provinces, 1959-63 - Concluded
Excluding the manufacturing group

Year	Establishments	Employees	Salaries and Wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products	Net value added by processing ¹
		number			dollars		
Saskatchewan							
1959.....	185	5,094	26,864,252	4,897,820	10,966,910	176,495,577	180,500,790
1960.....	172	4,048	21,888,109	4,281,358	11,132,512	180,002,916 ²	164,587,213
1961.....	183	3,667	20,311,916	4,249,740	7,686,973	182,144,592 ²	170,207,879
1962.....	162	2,942	16,939,447	4,054,049	8,246,510	201,325,478 ²	189,024,919
1963.....	159	2,841	17,720,649	5,016,076	8,586,343	237,934,253	224,331,834
Alberta							
1959.....	319	5,482	26,331,372	6,331,899	14,576,967	358,106,408	337,197,528
1960.....	320	5,492	26,806,837	6,674,111	26,062,861	381,851,534 ²	349,114,562
1961.....	332	4,985	26,070,299	7,082,834	36,967,702	504,249,875 ²	460,199,339
1962.....	290	4,991	26,722,952	8,203,732	57,845,824	627,982,871 ²	561,933,315
1963.....	312	6,071	35,099,282	8,508,802	9,142,310	611,386,119	593,734,872
British Columbia							
1959.....	233	6,990	31,200,049	3,205,498	7,642,987	112,570,861	74,623,591
1960.....	215	6,756	32,704,248	3,669,373	18,704,863	148,606,605 ²	96,566,335
1961.....	243	6,500	32,716,341	3,828,078	18,492,463	147,676,612 ²	95,501,720
1962.....	204	7,075	37,239,874	4,717,318	22,568,678	196,023,963 ²	134,838,670
1963.....	212	6,938	37,273,515	5,498,221	15,609,128	205,614,601	150,768,746
Yukon							
1959.....	58	764	3,634,914	672,729	1,141,578	11,168,633	7,486,433
1960.....	28	736	4,326,159	732,831	1,771,005	11,264,023	6,864,372
1961.....	27	719	4,256,748	725,724	408,105	11,625,624	9,125,571
1962.....	33	813	4,929,898	880,649	1,191,145	12,003,469	8,592,850
1963.....	35	906	5,529,813	916,782	1,101,295	13,478,243	10,474,752
Northwest Territories							
1959.....	17	1,180	6,717,354	1,732,576	2,513,256	26,401,829	20,493,199
1960.....	16	1,056	6,344,215	1,479,700	1,953,648	25,979,876	22,445,908
1961.....	14	975	5,708,328	1,363,110	1,241,586	17,820,144	14,828,083
1962.....	16	932	5,859,026	1,054,973	1,192,680	16,894,829	13,607,769
1963.....	19	847	4,702,754	943,446	2,485,943	16,061,310	12,493,081
Canada							
1959.....	2,430	98,018	441,598,322	61,452,555	176,761,793	1,815,276,583	1,437,929,709
1960.....	2,319	95,304	444,115,679	65,292,207	203,685,776	1,852,469,957 ²	1,453,077,065
1961.....	2,343	92,149	436,178,613	63,680,172	190,132,150	1,941,116,076 ²	1,561,989,476
1962.....	2,086	91,050	449,187,698	68,885,117	218,367,630	2,173,656,847 ²	1,747,733,779
1963.....	1,937	91,012	463,457,014	74,885,858	175,678,504	2,254,885,890	1,855,852,863

¹ Gross value less cost of fuel, electricity, process supplies, containers, ores, freight and treatment charges.

² Figures have limited use, as they include duplication of natural gas at the well head and the products of natural gas processing plants. Data entered for arithmetical checking purposes.

TABLE 25. Employees and their Earnings in the Mineral Industry, by Industries, 1962
Excluding the manufacturing group

Industry	Employees						Man-hours worked (all employees)	Earnings			
	Office and administrative		Workmen		Total ¹	Office and administrative		Office and administrative	Workmen	Total	
	Male	Female	Male	Female				Office and administrative	Workmen	Total	
number										dollars	
Metal mining:											
Placer gold	17	5	204	5	231	608,943	148,485	1,192,468	1,340,953		
Gold-quartz	1,707	143	13,310	60	15,220	33,287,992	10,412,397	54,166,547	64,578,944		
Copper-gold-silver	1,550	206	9,239	51	11,046	22,849,287	9,798,255	43,690,930	53,489,185		
Silver-cobalt	85	6	515	5	611	1,297,556	398,006	2,119,006	2,517,012		
Silver-lead-zinc	693	53	3,738	48	4,532	9,601,866	4,646,078	18,899,907	23,545,985		
Nickel-copper	1,353	83	11,891	15	13,342	26,137,884	10,566,004	63,483,976	74,049,980		
Iron	2,479	449	6,263	24	9,215	20,824,021	18,121,190	42,233,219	60,354,409		
Miscellaneous metals	737	91	4,287	5	5,120	10,436,396	5,241,755	25,112,887	30,354,642		
Totals	8,621	1,036	49,447	213	59,317	125,043,945	59,332,170	250,898,940	310,231,110		
Non-metalliferous:											
Asbestos	977	156	5,831	33	6,997	15,046,076	7,034,170	29,038,434	36,072,604		
Feldspar and quartz	56	9	314	1	380	865,006	349,080	1,210,525	1,559,605		
Gypsum	99	11	497	1	608	1,248,424	571,584	1,836,078	2,407,662		
Mica	1	—	20	—	21	42,366	9,320	46,344	55,664		
Peat	53	22	1,267	28	1,370	2,570,828	329,792	3,068,172	3,397,964		
Salt	114	25	732	36	907	1,835,854	822,690	3,448,903	4,271,593		
Talc and soapstone	14	3	65	—	82	181,750	80,088	189,180	269,268		
Miscellaneous	214	24	917	1	1,156	2,514,435	1,343,528	4,012,822	5,356,350		
Totals	1,528	250	9,643	100	11,521	24,304,739	10,540,252	42,850,458	53,390,710		
Fuels:											
Coal	791	30	8,649	—	9,470	17,187,360	3,322,329	31,062,547	34,384,876		
Petroleum, natural gas	845	172	2,934	27	3,978	8,591,062	6,755,971	16,519,783	23,275,754		
Natural gas processing	174	18	653	—	845	1,761,105	1,332,315	4,230,928	5,563,243		
Totals	1,810	220	12,236	27	14,293	27,539,527	11,410,615	51,813,258	63,233,873		
Structural materials:											
Sand and gravel	320	60	2,330	12	2,722	6,213,961	1,684,837	8,458,113	10,162,843		
Stone	367	58	2,771	1	3,197	7,317,908	1,984,499	10,214,557	11,199,556		
Totals	687	118	5,101	13	5,919	13,531,869	3,669,336	18,672,669	22,342,005		
Totals, mineral industry	12,646	1,624	76,427	353	91,050	190,420,080	84,952,373	364,235,325	449,187,698		

¹ Data are not inclusive of all individuals or syndicates engaged in prospecting or general exploration.

TABLE 26. Employees and their Earnings in the Mineral Industry, by Provinces, 1962
Excluding the manufacturing group

Province	Employees						Man-hours worked (all employees)	Earnings			
	Office and administrative		Workmen		Total	Office and administrative		Office and administrative	Workmen	Total	
	Male	Female	Male	Female				Office and administrative	Workmen	Total	
number										dollars	
Newfoundland	1,200	167	2,865	36	4,268	8,504,898	6,491,620	14,121,288	20,612,908		
Prince Edward Island	2	—	51	2	55	154,351	13,200	173,391	186,591		
Nova Scotia	625	19	6,838	11	7,493	13,810,158	2,548,441	24,114,722	26,663,163		
New Brunswick	124	10	1,401	1	1,536	3,228,900	679,095	4,345,058	5,024,153		
Quebec	3,448	564	19,638	70	23,720	52,511,801	24,154,880	93,592,763	117,747,643		
Ontario	3,747	373	28,997	87	33,204	68,452,116	26,693,727	139,899,303	166,593,030		
Manitoba	553	98	3,329	41	4,021	8,562,531	3,709,218	16,959,795	20,669,013		
Saskatchewan	647	109	2,173	13	2,942	6,170,447	4,717,177	12,222,270	16,939,447		
Alberta	793	128	4,040	30	4,991	10,086,821	5,719,276	21,003,678	26,722,952		
British Columbia	1,211	122	5,688	54	7,075	14,600,342	8,072,128	29,167,746	37,239,874		
Yukon	97	16	696	4	813	1,946,323	696,365	4,233,533	4,929,893		
Northwest Territories	199	18	711	4	932	2,391,392	1,457,246	4,401,780	5,859,020		
Canada	12,646	1,624	76,427	353	91,050	190,420,080	84,952,373	364,235,325	449,187,698		

TABLE 27. Employees and their Earnings in the Mineral Industry, by Industries, 1963
Excluding the manufacturing group

Industry	Employees						Man-hours worked (all employees)	Earnings			
	Office and administrative		Workmen		Total ¹	Office and administrative		Office and administrative	Workmen	Total	
	Male	Female	Male	Female				Office and administrative	Workmen	Total	
number										dollars	
Metal mining:											
Placer gold	18	4	185	3	210	529,312	167,133	1,054,809	1,221,942		
Gold-quartz	1,940	155	12,935	90	15,120	31,199,318	11,523,317	51,572,273	63,095,590		
Copper-gold-silver	1,789	223	9,453	71	11,536	22,802,317	12,369,536	46,144,986	58,514,522		
Silver-cobalt	107	13	579	6	705	1,503,817	643,315	2,360,287	3,003,602		
Silver-lead-zinc	771	57	3,761	47	4,536	9,632,331	5,392,386	19,493,561	24,885,947		
Nickel-copper	1,357	104	10,631	18	12,110	22,950,727	11,195,313	56,884,943	68,080,256		
Iron	2,179	502	7,289	23	9,993	20,760,881	18,969,181	46,677,507	65,646,688		
Miscellaneous metals	731	77	3,658	2	4,468	9,025,354	5,500,460	22,424,106	27,924,566		
Totals	8,892	1,135	48,491	260	58,778	118,404,057	65,760,641	246,612,472	312,373,113		
Non-metallics:											
Asbestos	1,000	162	5,630	31	6,823	14,384,519	7,463,642	28,044,246	35,507,888		
Feldspar and quartz	57	6	318	—	381	779,136	361,144	1,202,970	1,564,114		
Gypsum	106	8	565	1	680	1,481,113	625,464	2,250,781	2,876,245		
Mica	1	—	11	—	12	26,224	6,037	31,623	37,660		
Peat	56	23	1,387	16	1,482	2,841,966	372,825	3,579,509	3,952,334		
Salt	146	26	754	29	955	2,060,352	959,629	3,607,239	4,566,868		
Talc and soapstone	14	3	62	—	79	182,527	82,651	194,025	276,676		
Miscellaneous	313	31	1,015	2	1,361	2,926,228	2,388,009	4,597,464	6,985,473		
Totals	1,693	259	9,742	79	11,773	24,682,065	12,259,401	43,507,857	55,767,258		
Fuels:											
Coal	733	26	8,144	—	8,903	17,915,328	3,262,470	32,361,796	35,624,266		
Petroleum, natural gas	1,774	397	3,589	80	5,840	11,341,735	15,852,340	20,544,450	36,396,790		
Natural gas, processing											
Totals	2,507	423	11,733	80	14,743	29,257,063	19,114,810	52,906,246	72,021,056		
Structural materials:											
Sand and gravel	263	58	1,935	10	2,266	5,133,209	1,537,091	7,712,363	9,249,454		
Stone	407	61	2,984	—	3,452	7,789,252	2,337,620	11,708,513	14,046,133		
Totals	670	119	4,919	10	5,718	12,922,461	3,874,711	19,420,876	23,295,587		
Totals, mineral industry	13,762	1,936	74,885	429	91,012	185,265,646	101,009,563	362,447,451	463,457,014		

¹ Data are not inclusive of all individuals or syndicates engaged in prospecting or general exploration.

TABLE 28. Employees and their Earnings in the Mineral Industry, by Provinces, 1963
Excluding the manufacturing group

Province	Employees						Man-hours worked (all employees)	Earnings			
	Office and administrative		Workmen		Total	Office and administrative		Office and administrative	Workmen	Total	
	Male	Female	Male	Female				Office and administrative	Workmen	Total	
number										dollars	
Newfoundland	820	179	3,896	28	4,923	10,621,177	6,186,098	22,221,513	28,407,611		
Prince Edward Island	1	1	35	—	37	91,678	3,556	119,550	123,106		
Nova Scotia	622	22	6,542	9	7,195	14,938,830	2,773,841	26,079,837	28,853,678		
New Brunswick	121	14	1,363	—	1,498	3,195,533	849,101	4,444,835	5,293,936		
Quebec	3,591	609	19,476	74	23,750	49,922,490	26,911,885	92,259,049	119,170,934		
Ontario	4,104	384	26,974	129	31,591	63,053,366	28,954,647	128,443,231	157,397,878		
Manitoba	678	128	3,567	42	4,415	8,723,811	4,888,606	18,995,252	23,883,858		
Saskatchewan	657	90	2,081	13	2,841	5,744,903	5,379,734	12,340,915	17,720,649		
Alberta	1,689	364	3,941	77	6,071	11,541,388	14,506,058	20,593,224	35,099,282		
British Columbia	1,186	111	5,592	49	6,938	13,633,713	8,412,000	28,861,515	37,273,515		
Yukon	120	19	764	3	906	2,016,286	1,018,577	4,511,236	5,529,813		
Northwest Territories	173	15	654	5	847	1,782,471	1,125,460	3,577,294	4,702,754		
Canada	13,762	1,936	74,885	429	91,012	185,265,646	101,009,563	362,447,451	463,457,014		

TABLE 29. Employees and their Earnings, by Provinces and by Mineral Classes, 1962 and 1963

Province	Metals		Non-metals		Fuels		Stone, sand and gravel	
	Employees	Earnings	Employees	Earnings	Employees	Earnings	Employees	Earnings
	No.	\$	No.	\$	No.	\$	No.	\$
1962								
Newfoundland	3,857	19,079,579	319	1,268,565	—	—	92	264,764
Prince Edward Island	—	—	—	—	—	—	55	186,591
Nova Scotia	47	142,499	864	3,390,425	6,408	22,583,423	174	546,816
New Brunswick	296	1,346,082	298	619,532	814	2,680,737	128	377,802
Quebec	14,058	74,115,584	7,459	35,750,303	—	—	2,203	7,881,756
Ontario	29,640	151,099,470	1,096	5,631,532	168	562,249	2,300	9,299,779
Manitoba	3,514	18,858,870	187	559,543	45	182,288	275	1,068,312
Saskatchewan	1,549	9,519,783	328	1,695,955	1,033	5,601,446	32	122,263
Alberta	—	—	65	256,310	4,610	25,530,313	316	936,329
British Columbia	4,631	25,402,315	905	4,218,545	1,195	5,961,421	344	1,657,593
Yukon	804	4,879,221	—	—	9	50,677	—	—
Northwest Territories	921	5,787,707	—	—	11	71,319	—	—
Canada	59,317	310,231,110	11,521	53,390,710	14,293	63,223,873	5,919	22,342,005
1963								
Newfoundland	4,377	26,030,172	453	2,090,940	—	—	93	286,499
Prince Edward Island	—	—	—	—	—	—	37	123,106
Nova Scotia	26	130,214	966	4,017,088	6,063	24,287,342	140	419,084
New Brunswick	231	1,171,608	317	785,398	829	3,015,475	121	321,455
Quebec	14,282	75,643,828	7,241	34,566,802	—	—	2,227	8,960,304
Ontario	28,135	141,581,610	1,040	5,525,331	159	519,543	2,257	9,771,304
Manitoba	3,842	21,663,120	254	817,862	81	410,800	238	992,076
Saskatchewan	1,337	9,332,195	586	3,534,674	882	4,721,668	36	132,112
Alberta	—	—	68	284,119	5,724	33,984,065	279	831,098
British Columbia	4,839	26,908,206	848	4,145,044	961	4,761,756	290	1,458,509
Yukon	870	5,239,195	—	—	36	290,618	—	—
Northwest Territories	839	4,672,965	—	—	8	29,789	—	—
Canada	58,778	312,373,113	11,773	55,767,258	14,743	72,021,056	5,718	23,295,587

TABLE 30. Wage-earners on the Surface, Underground and in the Mill, 1963

Province	Metal mines			Non-metals			Fuels		Stone, sand and gravel	
	Surface	Under- ground	Mill	Surface	Under- ground	Mill	Surface	Under- ground	Surface	Mill
number										
Newfoundland	1,737	957	772	232	93	52	—	—	81	—
Prince Edward Island	—	—	—	—	—	—	—	—	35	—
Nova Scotia	—	10	12	491	78	222	630	4,985	95	28
New Brunswick	65	62	50	265	—	42	474	304	73	29
Quebec	3,649	5,173	2,681	2,888	418	2,798	—	—	1,454	489
Ontario	6,016	15,433	2,751	215	262	381	138	—	1,797	109
Manitoba	1,213	1,655	237	108	7	115	62	—	166	46
Saskatchewan	268	533	195	126	21	234	686	—	31	—
Alberta	—	—	—	4	—	50	3,176	536	252	—
British Columbia	1,298	1,736	848	264	—	455	352	444	234	10
Yukon	176	411	159	—	—	—	14	6	—	—
Northwest Territories	187	366	101	—	—	—	5	—	—	—
Canada	14,611	26,334	7,806	4,393	879	4,349	5,537	6,276	4,218	711

TABLE 31. Cost of Prospecting Conducted by Metal Mining Companies, 1960-63

Province in which prospecting was conducted	By placer gold mines ¹	By gold-quartz mines ¹	By copper-gold-silver mines ¹	By silver-cobalt mines ¹	By silver-lead-zinc mines ¹	By nickel-copper mines ¹	By miscellaneous metal mines ^{1,2}	Total metal mining
dollars								
1960								
Newfoundland	—	28,092	385,623	—	354,094	—	686,499	1,454,308
Nova Scotia	16,686	91,703	186,350	—	17,057	—	2,587	314,383
New Brunswick	—	286,612	809,925	—	669,595	—	9,327	1,775,459
Quebec	—	1,525,247	7,696,468	—	3,068,141	590,134	2,103,458	14,983,448
Ontario	42,440	914,549	3,763,158	26,808	99,036	2,832,077	1,705,984	9,384,052
Manitoba	—	248,231	2,649,070	—	11,691	5,171,145	27,655	8,107,792
Saskatchewan	—	2,364	575,099	—	20,323	462,622	18,061	1,078,469
Alberta	31,865	—	904	—	64,643	—	630	98,042
British Columbia	5,319	228,824	2,508,003	—	845,280	2,465	230,801	3,820,692
Yukon	22,495	6,980	304,612	—	81,150	—	31,588	446,825
Northwest Territories	—	481,939	226,046	—	371,537	352,938	657,680	2,090,140
Canada	118,805	3,814,541	19,105,258	26,808	5,602,547	9,411,381	5,474,270	43,553,610
1961								
Newfoundland	—	7,794	588,297	—	476,305	—	484,443	1,556,839
Nova Scotia	—	12,997	184,268	—	48,404	—	28,119	273,788
New Brunswick	—	55,595	490,739	1,307	125,817	—	261,738	935,196
Quebec	52,134	1,300,112	7,450,734	12,016	5,101,504	1,771,332	3,135,387	18,823,219
Ontario	—	1,164,454	3,002,677	77,743	107,419	2,544,031	800,749	7,697,073
Manitoba	—	615,129	2,611,871	4,886	20,000	3,812,959	44,254	7,109,099
Saskatchewan	—	71,754	859,520	—	8,920	329,047	44,150	1,313,391
Alberta	3,209	—	892	—	10,655	—	10,000	24,756
British Columbia	11,771	263,003	2,666,130	6	696,468	4,650	352,319	3,994,347
Yukon	32,370	10,099	263,862	—	161,926	—	5,000	473,257
Northwest Territories	—	162,483	248,158	—	294,337	365,527	213,601	1,284,106
Canada	99,484	3,663,420	18,367,148	95,958	7,051,755	8,827,546	5,379,760	43,485,071
1962								
Newfoundland	—	13,000	499,436	—	535,779	606	136,230	1,185,051
Nova Scotia	—	4,379	77,152	—	86,543	297	124,655	293,026
New Brunswick	28,000	34,125	361,098	—	162,842	—	58,567	644,632
Quebec	32,100	2,158,699	5,055,025	—	6,725,228	1,542,879	1,100,316	16,614,247
Ontario	—	1,800,075	1,694,626	47,553	353,178	3,840,373	1,672,100	9,407,905
Manitoba	—	119,485	1,685,544	—	58,563	3,309,538	201,567	5,374,097
Saskatchewan	—	156,295	209,081	—	68,622	267,005	52,211	753,214
Alberta	1,400	467	—	—	161,000	—	39,000	201,867
British Columbia	3,445	377,016	2,957,805	—	985,502	835,968	1,029,958	6,189,694
Yukon	35,890	171,745	482,685	—	206,887	20,000	720,398	1,637,605
Northwest Territories	—	159,979	330,956	—	163,144	603,729	230,395	1,488,203
Canada	100,835	4,995,265	13,353,408	47,553	9,507,288	10,420,395	5,365,397	43,790,141
1963								
Newfoundland	3,304	84,625	88,601	—	483,702	—	237,870	898,102
Nova Scotia	—	12,201	117,184	—	58,142	—	88,881	276,408
New Brunswick	—	21,269	328,520	—	88,663	2,804	281,183	722,439
Quebec	3,299	2,787,178	7,925,089	1,925	493,307	2,408,984	2,171,730	15,791,512
Ontario	26,228	1,062,219	1,747,319	328,715	254,756	3,218,543	1,838,429	8,476,209
Manitoba	—	1,063	1,502,709	65,379	81,075	3,016,134	27,120	4,693,480
Saskatchewan	—	13,823	665,983	—	19,502	180,719	129,511	1,009,538
Alberta	—	18,850	55,892	—	201,204	—	88,433	364,379
British Columbia	174,989	285,223	4,442,302	114,572	1,928,269	659,548	925,283	8,530,186
Yukon	6,874	122,686	506,705	—	114,031	251,657	100,685	1,102,638
Northwest Territories	—	316,317	198,092	—	335,118	564,020	197,955	1,631,502
Canada	214,694	4,725,454	17,578,396	510,591	4,057,769	10,322,409	6,087,080	43,496,393

¹ Industry in which the companies' principal operations are conducted, but prospecting may be conducted for any mineral, i.e., a gold-quartz mining company may prospect for silver-lead-zinc.

² Includes iron, uranium, molybdenum, etc.

TABLE 32. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1962

No.	Industry	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Metal mining:									
2	Placer gold	23	—	—	—	—	—	68,644	705	199,294
3	\$ 945	—	—	—	—	—	—	20,509	643	61,935
4	Gold-quartz	1,930	7,385	1	377	—	12	395,427	6,026	3,760,906
5	\$ 37,407	122,568	28	7,203	—	—	417	153,722	2,109	763,381
6	Copper-gold-silver	974	812	48	—	—	44	622,773	6,469	7,268,337
7	\$ 15,215	15,452	687	—	—	—	1,058	246,637	2,069	1,354,770
8	Silver-cobalt	—	710	—	8	—	—	37,551	—	210,667
9	\$ —	20,172	—	258	—	—	—	15,942	—	42,710
10	Silver-lead-zinc	8,999	2,015	13,615	8	—	—	264,435	1,890	4,410,137
11	\$ 224,202	34,405	130,810	288	—	—	—	108,066	592	859,984
12	Nickel-copper	6,852	353	1,630	—	—	—	198,375	6,254	5,726,018
13	\$ 94,734	6,655	13,324	—	—	—	—	89,882	1,860	744,082
14	Iron	322	22	—	1	—	4,943	1,662,842	33,778	33,175,596
15	\$ 5,836	660	—	18	—	—	58,692	517,974	9,351	4,382,064
16	Miscellaneous metals	21	72,418	—	—	—	—	315,882	1,284	7,787,513
17	\$ 228	1,069,124	—	—	—	—	—	127,464	408	1,421,895
18	Totals	19,121	83,715	15,294	394	—	4,999	3,565,929	56,406	62,538,468
		\$ 378,567	1,269,036	144,849	7,767	—	60,167	1,280,196	17,032	9,630,821
Non-metal mining:										
19	Asbestos	4,487	—	—	110	—	—	503,055	4,293	22,009,338
20	\$ 62,568	—	—	1,863	—	—	—	172,533	1,499	3,285,823
21	Feldspar, quartz, nepheline	—	—	—	1	—	—	102,937	900	604,273
22	\$ —	—	—	36	—	—	—	36,628	185	96,826
23	Gypsum	—	—	—	—	—	—	45,561	85	1,093,810
24	\$ —	—	—	—	—	—	—	18,325	19	169,824
25	Mica	108	—	—	—	—	—	2,152	—	100
26	\$ 1,698	—	—	—	—	—	—	968	—	100
27	Peat	18	—	—	—	—	—	278,767	—	352,933
28	\$ 439	—	—	—	—	—	—	93,401	—	43,305
29	Salt	10,072	19,363	—	—	—	—	51,327	327	5,535,541
30	\$ 104,623	199,368	—	—	—	—	—	33,283	84	456,055
31	Talc, soapstone	—	—	—	—	—	—	12,202	—	21,648
32	\$ —	—	—	—	—	—	—	4,059	—	4,185
33	Miscellaneous	716	342	—	—	11,900	—	404,122	2,349	7,016,907
34	\$ 11,295	6,395	—	—	44,625	—	—	132,980	788	724,875
35	Totals	15,401	19,705	—	111	11,900	—	1,400,123	7,954	36,634,730
36	\$ 180,623	205,783	—	1,899	44,625	—	—	492,177	2,575	4,780,893
Mineral fuels:										
37	Coal	31,501	—	803	—	9,932	143	742,115	14,188	1,520,535
38	\$ 267,528	—	3,060	—	14,062	—	3,211	227,739	5,177	334,612
39	Petroleum, natural gas	—	—	—	—	—	—	6,454,100	2,008	1,402,897
40	\$ —	—	—	—	—	—	30	2,482,329	643	270,006
41	Natural gas processing	—	—	—	—	—	—	165,094	1,260	17,314
42	\$ —	—	—	—	—	—	—	57,971	351	3,388
43	Totals	31,501	—	803	—	9,932	144	7,361,309	17,456	2,940,746
44	\$ 267,528	—	3,060	—	14,062	—	3,241	2,768,039	6,171	608,006
Structural materials:										
45	Sand and gravel	164	16	—	7	—	—	6,307,035	1,619	4,131,541
46	\$ 2,684	274	—	192	—	—	—	1,876,296	441	837,043
47	Stone	987	28,841	147	—	—	—	2,135,379	914	3,611,271
48	\$ 17,561	336,624	1,862	—	—	—	204	711,155	256	858,841
49	Totals	1,151	28,857	147	7	—	—	11	8,442,414	2,533
50	\$ 20,245	336,898	1,862	192	—	—	204	2,587,451	697	7,742,812
51	Totals, mineral industries	67,174	132,277	16,244	512	21,832	5,154	20,769,775	84,349	109,856,756
52	\$ 846,963	1,811,717	149,771	9,858	58,687	63,612	—	7,127,863	26,475	16,715,604
Manufacturing group:										
53	Smelting and refining	478,165	183,638	6,527	93,342	—	238,607	928,942	—	58,911,405
54	\$ 6,112,379	2,275,269	51,895	1,263,074	—	5,244,433	—	261,215	—	4,982,520
55	Clay products	12,471	50,416	—	4,592	819	—	254	730,285	2,054
56	\$ 181,781	800,618	—	90,029	6,164	5,468	—	243,400	587	1,081,924
57	Cement	460,352	173,240	—	—	—	—	227,175	21,972	36,385,739
58	\$ 4,316,508	1,825,986	—	—	—	—	—	60,851	5,224	2,585,934
59	Lime	2,574	96,251	4,031	—	8,591	8	212,836	—	6,301,836
60	\$ 32,810	1,236,222	34,260	—	54,189	113	—	60,529	—	506,636
61	Totals, manufacturing group	983,362	503,545	10,558	97,934	9,410	238,869	2,099,238	24,026	113,794,279
62	\$ 10,643,478	6,138,095	86,155	1,353,103	60,353	5,250,014	—	625,995	5,811	9,157,160

TABLE 32. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1962

Wood	Gas			Other fuel	Electricity purchased		Steam purchased	Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes			For own use	For sale	
	cord	Imp. gal.	Mcf.	\$	kwh.	pounds	\$	kwh.	No.		
617	9,337	—	—	—	—	—	—	14,696,772	7,466,938	1	
14,653	2,991	—	—	—	—	—	—	101,676	... 116,962	2	
5,139	3,721	—	226,606	... 91,554	861,712,553 5,489,999	30,768,689 106,918	—	35,417,495	1,618,518	3	
68,230	2,718	—	135,678	—	—	—	—	6,981,932	... 43,461	4	
2	69,524	—	55,442	... 51,330	741,862,495 5,088,268	—	63,475,350 51,575	90,588,610 6,873,189	798,400 ... 88,516	5	
16	23,501	—	22,613	—	—	—	—	—	... 385,000	— 7	
—	1,960	—	—	—	21,382,059	—	—	—	... 305,341	— 8	
—	881	—	—	—	181,125	—	—	—	—	—	
40	23,961	—	—	—	171,098,723	20,130,207	—	168,100,797	194,655	9	
200	7,874	—	—	—	1,364,716	59,337	—	2,790,474	... 3,751	10	
15	575,418	—	398,692	... —	591,576,386	2,666,400	—	—	51,857,000	2,826,000	
144	125,968	—	184,869	—	3,212,063	5,333	—	4,478,914	... 65,019	11	
5,983	48,789	—	—	—	594,166,313	—	—	—	117,429,300	16,189,262	
86,231	14,585	—	—	—	5,781,509	—	—	10,836,920	... 242,838	13	
—	88,103	—	—	—	337,460,151	—	1,178,570	—	88,711,400	2,338,200	
—	16,622	—	—	—	2,352,236	—	1,191	4,989,168	... 15,167	15	
11,796	840,813	—	680,740	... 187,137	3,319,256,680 23,449,914	53,565,296 171,588	64,653,920 52,766	37,357,614	567,186,473 ... 575,714	31,431,973 ... 575,714	17
169,474	195,140	—	343,160	—	—	—	—	—	—	—	18
3,998	44,437	—	247,915	... —	464,581,995	—	—	—	14,797,975	— 19	
58,970	17,209	—	139,450	—	3,444,457	—	—	7,184,372	... —	20	
6	2,230	—	—	—	10,466,371	—	—	—	—	— 21	
60	590	—	—	—	127,190	—	—	261,515	... —	22	
—	—	—	—	—	9,010,747	—	—	—	—	— 23	
—	—	—	—	—	165,653	—	—	353,821	... —	24	
13	—	—	—	—	126,280	—	—	—	—	— 25	
162	—	—	—	—	2,604	—	—	5,532	... —	26	
35	35,840	—	203,187	... —	6,908,775	—	—	—	—	— 27	
386	6,462	—	108,062	—	111,204	—	—	363,159	... —	28	
—	2,997	—	781,377	... —	30,730,781	—	—	—	10,987,780	— 29	
—	1,218	—	98,183	—	290,333	—	—	1,183,167	... —	30	
60	60	—	—	—	1,524,800	—	—	—	—	— 31	
240	54	—	—	—	34,111	—	—	42,649	... —	32	
4	410,199	—	792,733	... —	49,252,279	—	—	—	6,431,933	72,322	
32	114,936	—	222,059	—	6 16,035	—	—	1,874,020	... 1,610	33	
4,116	495,763	—	2,025,212	... —	572,602,028	—	—	—	32,217,688	72,322	
59,850	140,469	—	567,754	—	4,791,587	—	—	11,218,235	... 1,610	35	
1,617	2,974	—	—	—	178,536,458	18,143,622	—	—	1,089,592	— 37	
39,366	869	—	—	—	2,656,091	266,203	—	3,817,918	... —	38	
—	619,665	—	1,241,930	... —	152,895,423	—	—	—	1,100,000	— 39	
—	117,478	—	97,706	—	3,871,644	—	—	6,839,836	... —	40	
—	149,349	—	19,525,535	... —	59,196,970	—	554,319,387	—	32,565,725	— 41	
—	18,933	—	1,944,001	—	765,400	—	82,395	2,872,439	... —	42	
1,617	771,988	—	20,767,465	... —	390,628,851	18,143,622	554,319,387	—	34,755,317	— 43	
39,366	137,280	—	2,041,707	—	7,293,135	266,203	82,395	13,530,193	... —	44	
14	14,149	—	254,453	... —	29,421,707	—	—	—	363,377	— 45	
144	3,588	—	68,417	—	647,010	—	—	3,436,089	... —	46	
178	13,599	—	9,015	... —	100,783,220	—	—	—	1,496,951	— 47	
1,559	4,399	—	4,297	—	1,356,228	—	—	3,292,986	... —	48	
192	27,748	—	263,468	... —	130,204,927	—	—	—	1,860,328	— 49	
1,703	7,987	—	72,714	—	2,003,238	—	—	6,729,075	... —	50	
17,721	2,136,312	—	23,736,665	... 187,137	4,412,694,486	71,708,918	618,973,307	—	636,019,806	31,504,295	51
270,393	480,876	—	3,025,335	—	37,537,874	437,791	135,161	68,885,117	... 577,324	52	
1,688	475,892	—	13,117,311	... 18,996	5,046,273,802	—	—	—	12,687,642,152	2,832,038,541	53
60,793	105,665	—	4,443,010	—	20,683,574	—	—	45,702,893	... 7,182,528	54	
11,004	72,449	—	4,751,586	... 5,614	73,820,649	—	—	—	50,000	— 55	
1,377	16,446	—	1,935,583	—	952,513	—	—	5,405,506	... —	56	
—	27,862	—	14,625,108	... 4,061,321	784,316,014	—	—	—	1,411,500	— 57	
—	7,813	—	—	—	4,855,087	—	—	17,718,744	... —	58	
1,709	3,896	—	397,478	... 10,149	34,329,326	—	—	—	—	— 59	
1,018	669	—	165,961	—	338,540	—	—	2,505,150	... —	60	
22,401	580,099	—	32,891,483	... 34,759	5,938,739,791	—	—	—	12,889,103,652	2,832,038,541	61
211,188	130,583	—	10,605,875	—	27,029,714	—	—	71,332,293	... 7,182,528	62	

TABLE 33. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1963

No.	Industry	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
										Imp. gal.
Metal mining:										
1	Placer gold	22	—	—	—	—	—	5,398	4,842	105,430
2		\$ 856	—	—	—	—	—	2,425	2,166	38,189
3	Gold-quartz	2,490	4,041	—	410	—	—	332,562	4,443	3,134,870
4		\$ 47,964	104,215	—	7,730	—	7	145,465	1,592	618,669
5	Copper-gold-silver	271	880	—	34	—	337	592,632	4,431	8,701,617
6		\$ 4,877	15,187	—	497	—	8,283	229,763	1,523	1,734,217
7	Silver-cobalt	514	—	—	169	—	—	34,370	270	238,087
8		\$ 11,858	—	—	4,261	—	—	14,586	80	45,125
9	Silver-lead-zinc	23,419	2,903	—	2	—	—	371,881	14,083	4,955,353
10		\$ 396,577	50,036	—	50	—	—	149,842	3,171	1,172,991
11	Nickel-copper	103	6,186	—	—	—	—	203,370	3,242	5,045,443
12		\$ 2,126	89,460	—	—	—	—	75,416	974	702,346
13	Iron	344	8	—	1	—	3,953	1,918,008	167,402	43,396,287
14		\$ 5,720	257	—	40	—	46,146	656,954	36,307	5,878,707
15	Miscellaneous metals	—	67,308	—	—	—	—	345,955	1,530	7,358,212
16		\$ —	992,559	—	—	—	—	133,864	402	1,390,019
17	Totals	27,163	81,326	—	616	—	4,290	3,804,176	200,243	72,935,299
18		\$ 469,978	1,251,714	—	12,578	—	54,436	1,408,315	46,215	11,580,263
Non-metal mining:										
19	Asbestos	4,136	—	—	130	—	—	524,214	2,980	23,091,869
20		\$ 58,652	—	—	2,200	—	—	190,254	743	3,563,066
21	Feldspar, quartz, nepheline	—	—	—	—	—	—	98,486	24	883,008
22		\$ —	—	—	—	—	—	35,061	10	120,977
23	Gypsum	—	—	—	—	—	—	50,598	—	1,434,302
24		\$ —	—	—	—	—	—	18,968	—	236,239
25	Mica	76	—	—	—	—	—	1,680	—	—
26		\$ 1,336	—	—	—	—	—	705	—	—
27	Peat	21	—	450	—	—	—	344,032	3,863	348,676
28		\$ 525	—	1,800	—	—	—	115,943	708	43,377
29	Salt	8,856	19,813	—	—	—	—	25,620	—	6,006,150
30		\$ 74,641	191,984	—	—	—	—	7,133	—	494,142
31	Talc, soapstone	—	—	—	—	—	—	12,359	45	25,315
32		\$ —	—	—	—	—	—	5,544	18	5,078
33	Miscellaneous non-metals	657	552	—	9	9,408	—	238,549	1,513	8,440,370
34		\$ 10,614	10,322	—	248	35,280	—	87,619	400	776,874
35	Totals	13,746	20,365	450	139	9,408	—	1,295,538	8,425	40,229,729
36		\$ 145,768	202,306	1,800	2,448	35,280	—	461,227	1,879	5,239,653
Mineral fuels:										
37	Coal	—	—	3,951	—	—	166	842,574	—	2,384,389
38		\$ —	—	30,146	—	—	3,818	260,756	—	426,157
39	Petroleum, natural gas	—	—	—	—	—	—	3,973,153	2,732,128	2,030,454
40		\$ —	—	—	—	—	—	1,494,381	595,134	444,656
41	Natural gas processing	—	—	—	—	—	—	—	—	—
42		\$ —	—	—	—	—	—	—	—	—
43	Totals	—	—	3,951	—	—	166	4,815,727	2,732,128	4,414,843
44		\$ —	—	30,146	—	—	3,818	1,755,137	595,134	870,813
Structural materials:										
45	Sand and gravel	—	—	—	3	—	—	5,236,509	52	4,272,599
46		\$ —	—	—	84	—	—	1,748,451	12	729,337
47	Stone	907	29,423	—	—	—	—	2,113,993	9,638	4,372,742
48		\$ 13,062	339,381	—	—	—	—	723,863	3,966	1,122,899
49	Totals	907	29,423	—	3	—	—	7,350,502	9,690	8,645,341
50		\$ 13,062	339,381	—	84	—	—	2,472,314	3,978	1,852,236
51	Totals, mineral industries	41,816	131,114	4,401	758	9,408	4,456	17,265,943	2,950,486	126,225,212
52		\$ 628,808	1,793,401	31,946	15,110	35,280	58,254	6,096,993	647,206	19,542,965
Manufacturing group:										
53	Smelting and refining	441,577	158,153	—	110,617	—	185,122	999,654	27,015	60,402,546
54		\$ 5,713,845	1,984,443	—	1,752,091	—	4,044,846	292,357	8,212	5,159,394
55	Clay products	9,201	48,685	—	3,670	204	167	771,891	610	8,636,982
56		\$ 132,636	784,277	—	63,516	1,226	4,034	260,481	164	818,000
57	Cement	434,875	179,766	—	—	—	—	219,318	15,263	38,859,186
58		\$ 4,128,034	1,853,556	—	—	—	—	62,924	3,714	2,821,906
59	Lime	880	89,364	602	—	9,026	—	194,466	—	7,163,155
60		\$ 11,894	1,127,191	5,117	—	55,569	—	54,385	—	559,075
61	Totals, manufacturing group	886,533	475,968	602	114,287	9,230	185,289	2,185,329	42,888	115,062,491
62		\$ 9,986,409	5,749,467	5,117	1,815,607	56,795	4,048,880	670,147	12,090	9,358,466

TABLE B3. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1963

MINERAL STATISTICS

TABLE 34. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and by Provinces, 1962
 Excluding the manufacturing group

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Newfoundland	2,182	—	—	—	—	—	448,855	10,909	9,576,441
2		\$ 51,843	—	—	—	—	—	209,011	3,461	1,310,097
3	Prince Edward Island	—	—	—	—	—	—	21,885	—	110,147
4		\$ —	—	—	—	—	—	8,900	—	40,332
5	Nova Scotia	30,572	—	—	—	—	143	327,716	1,425	2,174,813
6		\$ 312,984	—	—	—	—	3,211	119,856	356	344,537
7	New Brunswick	3,733	—	—	5	—	—	368,847	1,080	1,095,633
8		\$ 27,199	—	—	120	—	—	128,523	292	190,721
9	Quebec	7,461	4,690	—	112	—	13	3,473,214	19,885	51,420,002
10		\$ 115,734	85,175	—	1,944	—	305	1,210,430	5,657	7,128,997
11	Ontario	7,899	127,567	59	388	—	4,965	6,032,042	16,474	21,671,034
12		\$ 110,151	1,726,542	833	7,465	—	59,251	1,755,587	5,385	3,089,252
13	Manitoba	12	—	1,766	—	—	32	733,548	2,300	4,914,972
14		\$ 173	—	15,040	—	—	768	281,546	947	583,243
15	Saskatchewan	21	—	—	—	21,832	—	1,713,986	1,293	6,111,490
16		\$ 228	—	—	—	58,687	—	641,501	510	1,093,420
17	Alberta	7,463	—	803	—	—	—	5,571,080	12,835	1,394,376
18		\$ 40,188	—	3,060	—	—	—	2,064,981	4,801	247,438
19	British Columbia	1,043	—	13,615	7	—	1	1,602,181	17,323	8,991,093
20		\$ 13,393	—	130,810	329	—	77	554,089	4,330	1,994,654
21	Yukon	6,988	—	—	—	—	—	310,106	705	479,695
22		\$ 175,070	—	—	—	—	—	74,529	643	173,032
23	Northwest Territories	—	—	1	—	—	—	166,315	120	1,917,060
24		\$ —	—	28	—	—	—	78,910	93	519,891
25	Canada	67,174	132,277	16,244	512	21,832	5,154	20,769,775	84,349	109,856,756
26		\$ 846,963	1,811,717	149,771	9,858	58,687	63,612	7,127,863	26,475	16,715,604

TABLE 35. Fuel and Electricity Used in the Mineral (Manufacturing Group Only) Industry, by Kinds and by Provinces, 1962

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Newfoundland	—	—	—	—	—	—	6,563	—	3,149,016
2		\$ —	—	—	—	—	—	3,148	—	221,747
3	Prince Edward Island	—	—	—	—	—	—	—	—	—
4		\$ —	—	—	—	—	—	—	—	—
5	Nova Scotia	11,735	—	—	—	—	—	6,200	—	1,453,693
6		\$ 170,756	—	—	—	—	—	2,264	—	111,311
7	New Brunswick	35,022	—	—	—	—	—	17,979	180	1,452,007
8		\$ 399,799	—	—	—	—	—	7,015	46	121,924
9	Quebec	365,636	35,875	—	96,529	—	684	590,266	3,990	51,861,615
10		\$ 3,950,461	556,728	—	1,324,970	—	16,018	179,528	941	4,649,080
11	Ontario	289,977	463,786	—	1,405	145	178,543	877,001	7,084	33,262,771
12		\$ 3,144,268	5,513,765	—	28,133	2,118	4,146,445	273,689	1,648	2,659,870
13	Manitoba	29,840	3,884	6,527	—	9,265	6	75,821	903	5,286,339
14		\$ 426,413	67,582	51,895	—	58,235	113	27,224	257	657,773
15	Saskatchewan	108,308	—	—	—	—	—	10,712	3,805	477,197
16		\$ 1,547,722	—	—	—	—	—	2,891	1,074	52,323
17	Alberta	—	—	4,031	—	—	—	107,164	7,726	202,357
18		\$ —	—	34,260	—	—	—	26,070	1,746	37,868
19	British Columbia	113,044	—	—	—	—	59,634	407,532	338	6,649,284
20		\$ 1,004,059	—	—	—	—	1,087,438	104,166	99	645,264
21	Yukon	—	—	—	—	—	—	—	—	—
22		\$ —	—	—	—	—	—	—	—	—
23	Northwest Territories	—	—	—	—	—	—	—	—	—
24		\$ —	—	—	—	—	—	—	—	—
25	Canada	953,562	503,545	10,558	97,934	9,410	238,869	2,099,238	24,026	113,794,279
26		\$ 10,643,478	6,138,095	86,155	1,353,103	60,353	5,250,014	625,995	5,811	9,157,160

TABLE 34. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and By Provinces, 1962
Excluding the manufacturing group

Wood	Gas			Other fuel	Electricity purchased		Steam purchased	Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes			For own use	For sale	
	Imp. gal.	Mcf.	\$		kwh.				\$	kwh.	
cords											
	8,775	—	—	...	177,437,350	—	63,475,350	...	120,646,933	16,261,584	1
	1,490	—	—	—	2,624,165	—	51,575	4,251,642	...	244,448	2
	—	—	—	—	48,750	—	—	—	—	—	3
	—	—	—	—	1,170	—	—	50,402	—	—	4
918	—	—	—	—	146,393,375	276,000	—	—	5,017,760	—	5
34,747	—	—	—	—	2,154,168	4,300	—	2,974,159	—	—	8
	8,107	—	2,339	...	44,936,270	46,961	—	—	175,200	—	7
	3,086	—	2,339	—	736,807	1,397	—	1,090,484	—	—	8
359	58,354	—	—	—	1,454,383,238	—	—	—	37,599,273	101,655	9
3,200	19,799	—	—	89,712	11,178,752	—	—	19,839,705	—	3,039	10
9,267	85,635	—	970,756	97,250	1,887,949,103	17,251,229	1,178,570	1,191	6,275,012	—	11
127,756	30,719	—	542,572	—	12,435,019	50,427	20,039,400	—	...	—	12
1,456	78,755	—	3,773	...	167,656,325	4,880,800	—	—	51,797,000	2,826,000	13
17,792	14,483	—	2,552	—	799,858	12,202	—	1,728,604	—	65,019	14
	849,035	—	1,925,103	—	130,966,511	5,240,160	—	—	118,880,120	2,338,200	15
	190,405	—	338,464	—	1,643,130	87,704	—	4,054,049	—	15,167	16
696	316,609	—	20,153,303	—	180,592,259	2,770,870	554,319,387	82,395	10,277,752	—	17
4,559	58,122	—	1,966,006	—	3,695,391	36,791	8,203,732	—	—	—	18
4,091	157,546	—	681,611	—	163,175,407	9,809,631	—	—	247,234,804	1,469,439	19
59,954	37,703	—	173,402	175	1,612,391	136,011	—	4,717,318	—	117,829	20
617	996	—	—	—	15,910,097	13,794,171	—	—	14,003,308	7,466,938	21
14,653	948	—	—	—	395,469	46,305	—	880,649	—	116,962	22
317	572,500	—	—	—	43,245,801	17,639,096	—	—	24,112,644	1,040,479	23
7,732	124,121	—	—	—	261,554	62,654	—	1,054,973	—	14,860	24
17,721	2,136,312	—	23,736,885	187,137	4,412,694,486	71,708,918	618,973,307	437,791	636,019,806	31,504,295	25
270,393	480,876	—	3,025,335	—	37,537,874	135,161	68,885,117	—	—	577,324	26

TABLE 35. Fuel and Electricity Used in the Mineral (Manufacturing Group Only) Industry, by Kinds and by Provinces, 1962

Wood	Gas			Other fuel	Electricity purchased		Steam purchased	Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes			For own use	For sale	
	Imp. gal.	Mcf.	\$		kwh.				\$	kwh.	
cords											
	—	—	—	—	15,076,260	—	—	—	—	—	1
	—	—	—	—	95,385	—	—	320,280	—	—	2
	—	—	—	—	—	—	—	—	—	—	3
	—	—	—	—	—	—	—	—	—	—	4
	—	—	—	—	3,047,988	—	—	—	—	—	5
	—	—	—	—	41,930	—	—	328,261	—	—	6
3,598	926	—	—	—	21,463,790	—	—	—	—	—	7
28,256	463	—	—	—	233,532	—	—	791,035	—	—	8
4,621	194,792	—	5,114,705	—	3,250,004,124	—	—	—	11,524,486,706	2,832,038,541	9
85,590	50,131	—	1,664,460	11,607	13,006,750	—	—	25,496,264	—	7,182,528	10
11,855	60,329	—	12,041,037	—	1,420,391,149	—	—	—	6,671,100	—	11
78,727	20,382	—	5,285,916	12,913	7,970,811	—	—	29,138,705	—	—	12
1,390	2,118	—	2,596,875	—	875,626,911	—	—	—	411,500	—	13
9,500	402	—	917,453	—	3,763,487	—	—	5,980,334	—	—	14
196	17,143	—	1,418,265	—	172,438,242	—	—	—	—	—	15
1,795	3,058	—	380,216	—	597,065	—	—	2,586,144	—	—	16
	6,019	—	9,251,486	—	128,660,411	—	—	—	49,830,000	—	17
	800	—	1,348,267	—	850,810	—	—	2,299,821	—	—	18
741	298,772	—	2,469,115	—	52,030,916	—	—	—	1,107,704,346	—	19
7,320	55,357	—	1,009,563	10,239	469,944	—	—	4,393,449	—	—	20
	—	—	—	—	—	—	—	—	—	—	21
	—	—	—	—	—	—	—	—	—	—	22
	—	—	—	—	—	—	—	—	—	—	23
	—	—	—	—	—	—	—	—	—	—	24
22,401	580,099	—	32,891,483	34,759	5,938,739,791	—	—	71,332,293	12,689,103,652	2,832,038,541	25
211,188	130,593	—	10,605,875	—	27,029,714	—	—	—	—	7,182,528	26

TABLE 36. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1963
Excluding the manufacturing group.

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Newfoundland	2,168	—	—	—	—	—	962,297	2,032	27,099,751
2		\$ 49,805	—	—	—	—	—	386,578	593	3,344,524
3	Prince Edward Island	—	—	—	—	—	—	64,163	—	87,184
4		\$ —	—	—	—	—	—	25,277	—	11,535
5	Nova Scotia	9,742	—	—	—	—	166	277,787	—	4,093,046
6		\$ 88,218	—	—	—	—	3,818	96,405	—	480,911
7	New Brunswick	—	—	—	—	—	—	445,549	13,661	1,523,693
8		\$ —	—	—	—	—	—	156,736	2,682	271,349
9	Quebec	6,319	5,272	—	139	—	315	3,545,939	181,687	50,067,759
10		\$ 98,820	93,018	—	2,448	—	7,746	1,247,057	41,085	8,059,267
11	Ontario	1,913	125,628	—	579	—	3,953	4,803,960	13,498	19,489,897
12		\$ 37,611	1,697,791	—	11,954	—	46,153	1,548,795	4,551	2,736,687
13	Manitoba	43	214	—	34	—	22	733,143	1,529	3,697,469
14		\$ 624	2,592	—	497	—	537	274,297	530	463,453
15	Saskatchewan	—	—	—	—	9,408	—	1,704,104	1,558	6,085,681
16		\$ —	—	—	—	35,280	—	641,860	448	1,071,121
17	Alberta	—	—	4,401	—	—	—	2,925,880	2,690,000	1,844,339
18		\$ —	—	31,946	—	—	—	1,034,042	578,526	325,975
19	British Columbia	11,163	—	—	5	—	—	1,713,822	1,679	9,954,675
20		\$ 91,590	—	—	130	—	—	642,491	570	2,131,901
21	Yukon	10,468	—	—	—	—	—	44,546	4,842	565,929
22		\$ 262,140	—	—	—	—	—	24,822	2,166	233,332
23	Northwest Territories	—	—	—	1	—	—	44,753	40,000	1,715,789
24		\$ —	—	—	81	—	—	18,633	16,055	412,910
25	Canada	41,816	131,114	4,401	758	9,408	4,456	17,265,943	2,950,486	126,225,312
26		\$ 628,808	1,793,401	31,946	15,110	35,280	58,254	6,096,993	647,206	19,542,965

TABLE 37. Fuel and Electricity Used in the Mineral (Manufacturing Group Only) Industry, by Kinds and by Provinces, 1963

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Newfoundland	—	—	—	—	—	—	6,118	—	3,354,093
2		\$ —	—	—	—	—	—	2,926	—	239,043
3	Prince Edward Island	—	—	—	—	—	—	—	—	—
4		\$ —	—	—	—	—	—	—	—	—
5	Nova Scotia	7,698	—	—	—	—	—	4,000	—	1,401,400
6		\$ 119,316	—	—	—	—	—	1,726	—	132,775
7	New Brunswick	33,837	—	—	—	—	—	18,202	66	1,263,186
8		\$ 380,507	—	—	—	—	—	7,153	17	100,186
9	Quebec	358,683	16,657	—	114,282	—	531	607,726	15,638	64,324,004
10		\$ 3,972,164	292,219	—	1,815,467	—	13,009	199,925	4,244	4,999,313
11	Ontario	229,099	454,889	—	5	—	129,591	886,946	9,753	32,729,742
12		\$ 2,407,285	5,376,989	—	140	—	3,005,251	285,434	2,456	2,661,747
13	Manitoba	30,022	4,422	—	—	9,230	—	91,886	2,138	4,149,449
14		\$ 431,416	80,259	—	—	56,795	—	30,172	640	448,613
15	Saskatchewan	106,443	—	—	—	—	—	31,785	1,368	583,516
16		\$ 1,529,586	—	—	—	—	—	11,311	382	61,146
17	Alberta	—	—	602	—	—	—	106,627	4,001	211,357
18		\$ —	—	5,117	—	—	—	25,799	949	40,030
19	British Columbia	120,751	—	—	—	—	55,167	432,039	9,924	7,035,044
20		\$ 1,146,135	—	—	—	—	1,030,620	105,701	3,402	675,612
21	Yukon	—	—	—	—	—	—	—	—	—
22		\$ —	—	—	—	—	—	—	—	—
23	Northwest Territories	—	—	—	—	—	—	—	—	—
24		\$ —	—	—	—	—	—	—	—	—
25	Canada	886,533	475,968	602	114,287	9,230	185,289	2,185,329	42,888	115,062,391
26		\$ 9,986,409	5,749,467	5,117	1,815,607	56,795	4,048,880	670,147	12,090	9,358,465

TABLE 36. Fuel and Electricity Used in the Mineral Industry, In Canada, by Kinds and By Provinces, 1963
Excluding the manufacturing group

Wood	Gas			Other fuel	Electricity purchased		Steam purchased	Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes			For own use	For sale	
	Imp. gal.	Mcf.	\$		kwh.	pounds			\$	kwh.	
cords											
—	2,384	—	—	—	458,990,280	—	—	122,730,252	16,812,784	1	
—	781	—	—	—	3,843,646	—	—	7,625,927	... 283,723	2	
—	300	—	—	—	11,670	—	—	20,000	—	3	
—	32	—	—	—	581	—	—	37,425	... —	4	
971	22	—	—	—	147,784,027	—	—	4,757,520	—	5	
35,524	11	—	—	—	2,184,468	—	—	2,889,355	... —	6	
—	3,124	—	2,800	—	65,397,592	—	—	1,400,251	110,000	7	
—	1,398	—	1,407	—	966,679	—	—	—	... —	8	
2,717	52,538	—	47,646	—	1,533,240,121	3,000	—	53,000,723	1,768,160	9	
23,918	16,564	—	23,823	60,762	11,521,664	33	—	21,196,205	... 15,000	10	
1,867	136,722	—	1,028,447	102,594	1,780,071,793	30,577,706	237,560	19,449,014	6,539,331	— 11	
29,255	42,233	—	588,074	—	12,489,798	113,278	240	—	... —	12	
1,139	108,644	—	4,485	—	148,605,821	466,750	—	—	57,634,794	3,361,206	
13,610	24,265	—	2,950	57	611,607	9,335	—	1,404,354	... 67,224	14	
—	663,291	4,776	3,086,852	—	246,905,854	1,435,640	—	—	103,597,600	3,017,400	
—	124,191	167	709,886	17,410	2,395,614	20,099	—	5,016,076	... 51,762	16	
434	309,694	—	22,564,282	—	287,769,867	7,482,083	598,961,260	8,508,802	14,077,830	— 17	
22,934	52,545	—	2,509,010	190,470	3,587,079	89,785	86,490	—	... —	18	
4,357	175,223	—	546,199	—	371,677,473	—	—	—	5,498,221	105,574,967	
63,619	65,555	—	142,085	9,782	2,350,498	—	—	—	... —	19	
501	29,968	—	—	—	15,895,427	12,822,281	—	—	18,683,579	7,131,717	
11,777	16,100	—	—	—	320,177	46,268	—	916,782	... 48,266	22	
663	2,560	—	—	—	44,175,634	20,233,402	—	—	27,471,000	1,000,000	
12,213	835	—	—	—	401,703	68,122	—	943,446	... 12,018	24	
12,649	1,484,470	4,776	27,280,711	—	5,100,525,559	73,020,862	599,198,820	—	314,197,596	33,091,267	
212,850	344,510	167	3,977,235	393,969	40,673,514	346,920	86,730	74,885,858	... 477,993	25	

TABLE 37. Fuel and Electricity Used in the Mineral (Manufacturing Group Only) Industry, by Kinds and by Provinces, 1963

Wood	Gas			Other fuel	Electricity purchased		Steam purchased	Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes			For own use	For sale	
	Imp. gal.	Mcf.	\$		kwh.	pounds			\$	kwh.	
—	—	—	—	—	15,776,651	—	—	336,157	—	—	1
—	—	—	—	—	94,188	—	—	—	—	—	2
—	—	—	—	—	—	—	—	—	—	—	3
—	—	—	—	—	—	—	—	—	—	—	4
—	—	—	—	—	2,441,060	—	—	294,423	—	—	5
—	—	—	—	—	40,606	—	—	—	—	—	6
2,914	1,330	—	—	—	21,733,160	—	—	—	—	—	7
19,401	669	—	—	—	230,206	—	—	738,139	—	—	8
4,691	241,257	—	4,848,318	5,386	567,332,266	2,817,851,639	—	—	9,124,581,200	3,322,428,742	9
88,309	63,902	—	1,612,572	—	3,135,962	10,549,538	—	26,752,010	... 7,812,592	—	10
9,274	82,522	—	13,606,460	—	1,093,119,947	232,399,052	—	—	—	—	11
74,909	21,344	—	6,146,696	15,612	6,470,855	1,590,961	—	28,059,679	—	—	12
1,199	74,880	—	2,941,282	—	463,139,865	539,348,000	—	—	437,800	—	13
7,865	12,250	—	1,039,962	—	1,555,369	2,391,526	—	6,054,867	... —	—	14
195	17,405	—	1,350,733	—	172,330,700	—	—	2,551,468	—	—	15
1,997	3,073	—	365,087	—	578,886	—	—	—	—	—	16
—	3,901	—	9,667,774	—	137,852,416	—	—	—	1,000,000	—	17
—	517	—	1,437,756	—	912,917	—	—	2,423,085	... —	—	18
—	368,646	—	2,620,417	1,442	56,339,142	—	—	—	4,610,122,433	57,922,400	19
—	67,600	—	1,079,876	—	468,403	—	—	4,580,601	... 561,000	—	20
—	—	—	—	—	—	—	—	—	—	—	21
—	—	—	—	—	—	—	—	—	—	—	22
—	—	—	—	—	—	—	—	—	—	—	23
—	—	—	—	—	—	—	—	—	—	—	24
18,516	789,941	—	35,034,984	22,440	2,530,065,207	3,589,604,691	—	71,790,429	13,736,141,433	3,380,351,142	25
194,291	169,355	—	11,681,949	—	13,487,392	14,532,025	—	—	... 8,373,592	—	26

APPENDIX

MINERAL STATISTICS

The publication of statistics on the mineral production of Canada was instituted by the Geological Survey of Canada as early as 1886. The Department of Mines carried on this compilation through the early part of the twentieth century. Subsequent to the transfer of this work, the Dominion Bureau of Statistics published the data for the year 1921 and the succeeding issues.

The construction of new metallurgical plants and the development of new types of ore have resulted in changes in methods of compilation over the period but in general the following principles have been followed.

For the non-metallic minerals such as asbestos, talc, barite, etc., and for the structural materials such as stone, portland cement, etc., the mine or quarry shipments are taken to represent production. Usually there is little difference between actual output and mine shipments and it is more convenient and more practical to measure the product at the latter point. Values are computed on the f.o.b. shipping point basis and they represent, therefore, the amounts actually received by the producers.

Production data for certain simple metallic ores such as chromite, iron ore, etc. are compiled in the same way, that is, mine shipments at f.o.b. values, but for some metals this is not practical and an attempt is made to measure output in terms of recoverable metals which are then valued at current market prices. The principal metal mining companies in Canada also operate smelters at or close to the mine site and they do not usually value the ores at the mine head or at the concentrator; if they do it is only at nominal values for accounting purposes and not representative of actual market values. For these oper-

ations, which account for a very large percentage of the total production of the country, the smelter is the first point at which it is practical to assign a value to production. Furthermore it is the more accurate point at which to measure actual recoveries according to province or origin. The operators which ship customs ores to smelters do not always know what the recoveries will be as this depends on smelter practice. The amount paid for customs ore is the result of bargaining between the smelter and the mine operator and the smelter may in fact, by means of blending certain ores or by more efficient methods recover more metal than it actually paid for, or by treating large tonnages of ores it may recover minor metals which were not paid for at all. Most of Canada's metallic ores are quite complex, usually containing several metals.

Of course, not all Canadian ores and concentrates are treated in home smelters. Large quantities of concentrates are exported to foreign smelters. The recoverable metals in such concentrates are estimated by making certain deductions (as determined by usual smelter practice) from the assayed contents to allow for losses in smelting. Similarly certain adjustments are made in arriving at quantities and values of unfinished smelter products. Metals recovered in Canadian smelters from the treatment of foreign ores are not included in the commodity figures.

The value for metals production calculated in this manner does not coincide with the amounts actually received by the producers. An entirely separate compilation is made on an industry basis which represents very closely the actual return to the metal mining industry.

Note: Monthly production figures (quantities only) are available for all metals and for most of the non-metals.

DETAILS OF THE METHODS USED IN COMPUTING THE MINERAL PRODUCTION OF CANADA

METALLIC MINERAL PRODUCTION

Aluminum—Canada does not produce aluminum ores but smelters are operated at Arvida, Isle Maligne, Shawinigan, and Beauharnois in Quebec and Kitimat, British Columbia by the Aluminum Company of Canada. The Canadian British Aluminum Co. Ltd., operates a smelter at Baie Comeau, Quebec. Bauxite or alumina for these smelters is imported from South America and Jamaica. Smelter operations are included in statistics for the Smelting and Refining Industry, that is, the figures are included in the industry statistics. However, data on aluminum production are not included in the commodity compilation on the Mineral Production of Canada.

Antimony—At the Trail smelter of the Consolidated Mining and Smelting Co. of Canada, antimony is recovered in the form antimonial lead and in flue dust, and slags. The antimony content of these products is considered as the production of antimony. Antimony in antimonial lead is valued at the average New York price for antimony metal. Antimony in flue dust and slags is valued at an arbitrary price.

Bismuth—No Canadian ores are mined for bismuth only. Bismuth occurs in the silver-lead-zinc ore at Kimberley, British Columbia; in the silver-cobalt ores which are shipped to Cobalt Refinery Ltd., in molybdenite ores of the Molybdenite Corporation at Lacome, Quebec, and in the copper-gold-silver ores at Gaspe, Quebec.

Production is calculated as follows:

(a) Bismuth metal produced at Canadian smelters, valued as reported by producer.

(b) Bismuth content of silver-lead-bismuth bullion shipped to smelters, Canadian or foreign, value as reported by firm.

(c) Bismuth content of impure metal shipped, value as reported by firm.

Cadmium—Cadmium is associated with zinc. It is recovered in the refining of zinc by the Consolidated Mining and Smelting Co. of Canada at Trail, British Columbia and by the Hudson Bay Mining and Smelting Co. Limited at Flin Flon, Manitoba.

Production consists of cadmium metal recovered at these smelters and the recoverable content of cadmium in the zinc-lead concentrates exported, valued at the average New York price for the year.

Calcium—The only producer is the Dominion Magnesium Limited at Haley, Ontario. Output figures represent calcium metal, plus calcium content of alloys, value is that reported by the firm.

Chromite—Production in Canada has been small, consisting usually of a few hundred tons in the Province of Quebec. Output figures represent the quantity and value of ores shipped as reported by producers.

METALLIC MINERAL PRODUCTION—Continued

Pento-chromite is produced in Canada in substantial quantities, but since it is made from imported ores it is not counted as part of the mineral production of the country.

Cobalt—Production includes:

(a) Cobalt metal produced at Canadian smelters, plus the cobalt content of salts and oxides made at these smelters. Recoveries from imported concentrates are excluded. The value is the total sales value of these products as reported by the smelters.

(b) Cobalt content of ores and concentrates shipped for export at the gross value received by shippers. For exported concentrates the producer is paid for the cobalt content only.

Columbium—Production is the columbium pentoxide (Cb_2O_5) contained in the concentrates shipped by the producers. The value is reported by the shipper.

Copper—Production includes:

(a) Recoverable copper in ores and concentrates shipped for export valued at the average Montreal price for the year. Recoverable copper is computed as total copper content, less ten pounds of copper per ton of concentrates as an allowance for smelter losses.

(b) Copper content of blister copper made at Canadian smelters, valued at the average Montreal price for the year.

(c) Copper content of nickel-copper matte shipped for export by Canadian smelters, valued at an arbitrary price agreed upon by the Ontario Department of Mines and the Dominion Bureau of Statistics. This price is usually about three cents under the Canadian price for the metal and represents as close an approximation as possible to a fair value for the copper in the matte after allowing a margin for treatment of this matte in refineries outside Canada. No allowance is made in this instance for losses in treatment of the matte, as practically all of the copper is recovered.

Since all of the blister copper is now treated in Canadian refineries, it might be considered more convenient to use the figures on production of refined metal rather than the content of blister copper. However, the inclusion of secondary copper (made from scrap) in the refinery figures complicates the situation, and, at any rate, it is more satisfactory to use the smelter figures in making the allocation of production on a provincial basis.

Gold—Production includes:

(a) Gold in crude bullion obtained direct from placer workings.

(b) Gold in crude bullion obtained direct from lode gold mines.

(c) Gold in blister copper made at copper smelters.

(d) Gold in base bullion made by Consolidated Mining and Smelting Company, Limited, at Trail, British Columbia.

(e) Gold in all types of ores shipped for export.

(f) Gold in nickel-copper matte shipped for export.

(g) Gold in platinum-palladium concentrates shipped for export.

Gold production is valued at the average price set by the United States Treasury, transposed to Canadian funds.

Indium—Small quantities are recovered by the Consolidated Mining and Smelting Company of Canada, Limited, Trail, British Columbia, in the smelting of lead-zinc-silver ores. The output is valued by the shipper. No data on indium are published and the figures are excluded from the Mineral Production of Canada.

Iron ore—Production figures represent mine shipments at the values shown by the shippers.

Iron (Remelt)—This is sometimes called pig iron or Sorel iron. It is a co-product in the smelting of ilmenite ores by the Quebec Iron and Titanium Corporation at Sorel, Quebec.

Quantity and value figures are those reported by the producer.

Lead—Production includes:

(a) Recoverable lead in ores and concentrates shipped for export. Recoverable lead is computed as total lead content, less five per cent of content as an allowance for smelter losses.

(b) Lead in base bullion made by the Consolidated Mining and Smelting Company, Limited, at Trail, British Columbia.

Refined lead is produced at Trail, but, from time to time, imported ores and concentrates are treated at this smelter, and it has been found advantageous to calculate the lead at the base bullion stage, since it is easier at this stage to estimate the amount that should be credited to imported ores.

The value is computed at the average Montreal price for the year.

Magnesium—The Dominion Magnesium Company, Limited, Haley, Ontario, is the only Canadian producer. Output figures represent magnesium metal, plus magnesium content of alloys, values are those shown by the shipper.

Manganese—Production in Canada has been small and spasmodic because of the limited number of known deposits. Output figures represent the tonnage of ore shipped at the value received by the shippers.

Large tonnages of ferro-manganese alloys are made in Canada, but since imported ores are used, this output is not included in the mineral production of the country.

Molybdenum—Production figures are molybdenum content of the oxides and sulphides shipped, value is that shown by the shipper.

Mercury—There has been little production in Canada since 1944. Production figures for past years represent actual output valued at the prevailing market price, that is, at the average New York price for the year, in Canadian funds.

Nickel—Production includes:

(a) Refined and electrolytic nickel produced at Canadian refineries, valued at the average price obtained for such products sold during the year.

(b) Nickel in nickel oxides and in nickel salts sold from Canadian smelters and refineries during the year at the total selling value of these products.

(c) Nickel in matte shipped for export from Canada valued at an arbitrary figure agreed upon by the Ontario Department of Mines and the Dominion Bureau of Statistics. This price is a few cents under the Canadian price for the metal and represents as close an approximation as possible to a fair value of nickel in the matte form after allowing a margin for treatment of this matte in refineries outside Canada.

(d) Recoverable nickel in concentrates shipped from other provinces to smelters in Ontario or refinery in Saskatchewan valued at an arbitrary price.

Platinum group metals—Production includes:

(a) Recoverable metals in smelter and refinery products shipped for export.

(b) Platinum recovered from placer workings.

Beginning with 1946, the platinum metals production is the assay content of concentrates and refinery residues shipped for export, plus the platinum group metal content of the matte shipped for export. Quantities as reported are valued at average New York price.

METALLIC MINERAL PRODUCTION — Concluded

Selenium and tellurium—Selenium and tellurium are produced as by-products at the Canadian Copper Refiners, Montreal East, Quebec, and by the International Nickel Company of Canada, Ltd., at Copper Cliff, Ontario. The quantities as reported by the refining companies are valued at the average New York price for the year.

Silver—Production includes:

- (a) Silver bullion produced from treatment of cobalt-silver ores by the Cobalt Refinery Ltd.
- (b) Silver in base bullion made by Consolidated Mining and Smelting Company of Canada, Limited, Trail, British Columbia.
- (c) Recoverable silver in ores and concentrates shipped for export.
- (d) Silver in crude gold bullion produced.
- (e) Silver in blister copper made at Canadian smelters.

Total silver, as computed from above, is valued at the average of Montreal quotations for the year.

Thorium—At Elliot Lake, Ontario, the by-products of the uranium plant are treated to produce thorium salts. Production is considered as the thorium content of the salts shipped at a value reported by the producer. No data on thorium are published and the figures are excluded from the Mineral Production of Canada.

Tin—Canada has no commercial tin deposits. A small tonnage is recovered as a by-product by the Consolidated

Mining and Smelting Company of Canada, Limited, at Kimberley, British Columbia, from the treatment of the Sullivan lead-zinc-silver ore.

Titanium ore—Included in this item are the titanium ores exported for processing elsewhere. The value is that reported by the shipper. Ilmenite ore treated at the Sorel smelter is excluded, as the measurement is made of the smelter products, i.e., titanium dioxide, iron (remelt) and Sorelflux.

Tungsten ore—Production in Canada is very small. Output is computed in terms of WO₃ content of tungsten concentrates shipped, valued by the shipper.

Uranium—Producers of uranium precipitates or concentrates report the U₃O₈ content of the shipments and the value received by the shipper.

Zinc—Production includes:

(a) Recoverable zinc in ores shipped for export from Canada. Recoverable zinc is computed as the total zinc content, less 160 pounds of zinc per ton of concentrates as an allowance for smelter losses.

(b) Refined zinc made by the Consolidated Mining and Smelting Company Ltd., Trail, British Columbia, and by the Hudson Bay Mining and Smelting Company, Ltd., at Flin Flon, Manitoba.

The total zinc, computed as above, is valued at the average Montreal price for the year.

NON-METALLIC MINERAL PRODUCTION

Owing to the fact that it is difficult to obtain figures of actual production of non-metallic minerals in Canada, and since the first actual measurement is when the product is sold, the plant shipments have been taken to represent production in all cases.

Abrasives, natural—Includes corundum, garnets, grinding pebbles, grindstones, pulpstones and sharpening stone, diatomite and volcanic dust. Corundum, garnets and grinding pebbles have been produced in Canada in small quantities. Shipments of these materials represent the production, and the value is the amount received by the shippers, f.o.b. shipping points.

Arsenic—No Canadian ores are mined for arsenic only. White arsenic (As₂O₃) is recovered as a by-product in the treatment of silver-cobalt-nickel ores of the Cobalt district in Ontario at the smelter of Cobalt Refinery Ltd.

Production is computed as shipments of refined arsenic, plus any crude arsenic shipped for export at the f.o.b. plant values reported by the shippers.

Asbestos—Production figures represent shipments of the various grades at the total selling value, f.o.b. shipping points.

Barite—Production is the shipments at the selling value f.o.b. shipping point.

Bituminous sands—Production is on an experimental scale only. Figures not included in production records.

Feldspar—Part of the crude feldspar is shipped for export, and part is shipped to Canadian grinding plants. Production includes the quantity shipped from the mine for export at its sales value, plus the quantity of ground feldspar shipped from the domestic grinding plants at its sales value, f.o.b. the mill.

Fluorspar—Production represents the quantity shipped from the quarries at its selling value, f.o.b. works.

Graphite—Production is quantity shipped from the mill at its selling value, f.o.b. the mill.

Gypsum—Production is taken as the tonnage of crude gypsum shipped from quarries or mines in the lump, crushed, or fine ground forms. The value is that reported by the operators.

Iron oxides (ochre)—Production is the tonnage of crude and treated (dried or calcined) ochres shipped by primary producers at the total selling value, f.o.b. works.

Lithia—Spodumine concentrates are produced in north-Western Quebec by the Quebec Lithium Corporation. Production represents the lithia or lithium oxide content of the concentrates shipped and the value is that reported by the producer.

Magnesite-dolomite (magnesite)—Production is the tonnage of crude material sold by primary producers, plus the tonnage of calcined or dead-burned material sold or consumed by primary producer. The value is that reported by the producers.

Magnesium sulphate—Production is the tonnage of crude or refined natural magnesium sulphate shipped at its selling value, f.o.b. shipping points.

Mica—Mine production in this industry comes largely from small operators (farmers) whose mining activities are only of a casual nature. Practically all of these operators sell their crude mica to domestic dressing works, and to prevent duplication, production is recorded as shipments from plants dressing new mica, plus any shipments for export direct from the mines. The value of shipments is taken as reported by operator.

Natural mineral waters—Production represents shipments of natural mineral waters as reported by owner or lessor of well or spring at the total selling value, f.o.b. shipping points.

NON-METALLIC MINERAL PRODUCTION — Concluded

Nepheline syenite — Production of crude and ground nepheline syenite is the amount of the various grades shipped at the total selling value, f.o.b. works.

Peat moss — Production is taken as the shipments at the sales value, f.o.b. works, less the value of containers.

Phosphate — Production represents shipments for sale of crude phosphate rock by mine operators, plus the tonnage of phosphate rock consumed by producer of the crude mineral in the manufacture of chemicals. The value is that reported by producers.

Potash — Near Saskatoon, Saskatchewan, the Potash Company of America mined potassium chloride. The quantity of potash was measured as the K₂O equivalent. Quantity data are not published. Value of shipments f.o.b. plant are reported by the producer.

Pozzolan — Values are those received by the shippers.

Pyrite, pyrrhotite — In the milling of sulphide ores by some base metal mines pyrite and pyrrhotite is produced as a by-product. Shipments and values of pyrite are reported by the producers. Pyrrhotite was valued by applying the average price of the sulphur content of pyrite in Eastern Canada. Calcined pyrrhotite is measured as by-products iron ore.

Pyrophyllite — Statistics for pyrophyllite are included with soapstone and talc. Quantity and value of crude or ground are reported f.o.b. shipping point by the producer.

Quartz — Production represents the tonnage of crude or silverized quartz, quartzite, pure silica sand, or other natural silica material shipped for sale, plus the tonnage of any of these materials consumed by the producers. The value is taken as reported by producers.

Salt — Production is taken as the tonnage of various grades of dry salt shipped by primary producers, plus salt content of brine used by producers for industrial (chemical) purposes. The value is that reported by producers.

Sodium sulphate — Production is the tonnage of crude or refined natural sodium sulphate shipped at its selling value, f.o.b. shipping points.

Soapstone — Production represents the tonnage of crude, ground or sawn soapstone shipped at the total selling value, f.o.b. shipping points.

Sodium carbonate — Production represents the tonnage of crude or purified natural sodium carbonate shipped at its total selling value, f.o.b. shipping points.

Sulphur, in smelter gas — In Ontario and British Columbia sulphur dioxide is recovered from the smelting of sulphide ores. The larger portion of the gas is used in making sulphuric acid. Production is the sulphur content of sulphuric acid made and sulphur dioxide marketed. Value is arbitrary.

Included in this item is the sulphur in the sulphuric acid made by roasting zinc sulphide concentrates at the acid plants of the Aluminum Company of Canada, Ltd., Arvida, Quebec and Sherbrooke Metallurgical Ltd., Dunnville, Ontario. This sulphur is valued at the average price for the sulphur contained in pyrite concentrates.

Sulphur, elemental — In the western provinces sour natural gas is processed to remove the hydrogen sulphide which is further reduced to yellow elemental sulphur. Elemental sulphur is produced in the refining of nickel. Shipments and values are reported by the producers. Elemental sulphur made from imported crude petroleum is not included in the Mineral Production of Canada.

Talc — Production represents the tonnage of any crude talc shipped, plus any milled or refined talc shipped from mills operated in conjunction with the mines. The value is taken as reported by the mine and mill operators.

Titanium dioxide, etc. — Ilmenite ore is smelted at Sorel, Quebec, to produce a slag containing titanium dioxide. Production is the titanium dioxide content valued by the producer. Included in this item are other titanium products such as Sorelflux. Quantities are not published and the values are for the combined commodities.

FUELS

Coal — Production represents the output tonnage, valued at the average realization from sales.

Natural gas — Production is taken as the natural gas output less the gas which is wasted or flared. Deductions are made for gas withdrawn from storage. Data for the Western provinces are supplied by the Oil and Gas Conservation Boards. Alberta natural gas is valued by calculating the average price from the data shown on the producers' reports. Ontario natural gas is valued at an arbitrary wholesale price. Reports of the provincial

governments of British Columbia and Saskatchewan show the price of natural gas. Firms in New Brunswick and the Northwest Territories report the value of natural gas.

Crude petroleum — The output is measured on a provincial basis and the average price received for the oil sold is applied to the production. In the Northwest Territories, the production is valued by the gross realization of sales. New Brunswick firms report the quantity and value.

STRUCTURAL MATERIALS

Canadian mining statistics include the production of structural materials, such as cement, stone, sand and gravel and bricks made from clay. There is very little production in Canada of clay for sale to brick works, or stone to cement works, and since the raw material has no value until turned into a saleable product, it has been the practice, since mineral production statistics have been compiled in Canada, to count the production of structural materials as part of the mineral production of the country.

Portland cement — Production represents quantities shipped, plus amounts used by producers. Value is computed on basis of selling values, f.o.b. works.

Clay products — Production represents shipments of brick and other clay products made from domestic clays and the shipments of unmanufactured clays at the total selling value, f.o.b. works as reported by the operators. Data relating to clay products manufactured from imported clays are not included.

STRUCTURAL MATERIALS - Concluded

Lime - Production represents the tonnage of hydrated and quicklime shipped (sold by the producer) together with the tonnage of these limes produced and consumed by the producers of chemicals and allied products. The values taken are as reported by the producer. If waste or "spent" lime is "recalcined" or utilized again in the manufacture of such products as calcium carbide, the necessary deductions are made to prevent duplication.

Sand and gravel - Production represents shipments at the values reported by operators of sand and gravel pits or dredges. Special forms are utilized in the collection of data for sands produced by provincial, municipal and other governments employed on highway, construction or other public works.

Stone - Production represents quarry shipments of crude or undressed stone, crushed stone, and dressed stone, if the latter is prepared by the quarry operators at values as reported by the operators. The figures include data for both private and public or municipally-owned properties and special questionnaires are sometimes prepared for the collection of statistics from municipalities. Production figures do not include dressed stone prepared from imported stone or prepared from domestic stone in works not at the quarries.

To avoid duplication in computing a total value for Canadian mineral production, the quantity and value of stone consumed in the manufacture of lime and cement are not included in the totals for stone production. These particular data are recorded separately and are published in conjunction with data for the lime and cement industries.

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