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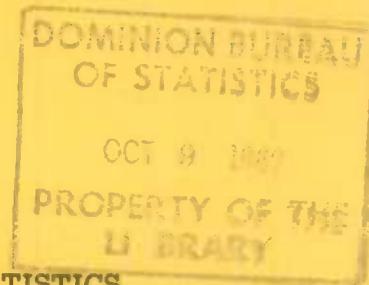
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CANADA

## GENERAL REVIEW OF THE MINING INDUSTRY

1960



DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division



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## **SYMBOLS**

The interpretation of the symbols used in the tables throughout this publication is as follows:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.

## GENERAL REVIEW OF THE MINING INDUSTRY

### 1960

The value of mineral commodities produced during 1960 amounted to \$2,492,509,981 compared with \$2,409,020,511 in the preceding year. This was an increase of 3.5 per cent. The metals group increased from \$1,370.6 million to \$1,406.6 million. The value on non-metallics rose from \$178.2 million to \$197.5 million. Mineral or fossil fuels was up from \$535.6 million to \$565.8 million. The total value of structural materials declined from \$324.6 million to \$322.6 million.

The index of physical volume was 253.3 in 1960 an increase from the index of 251.1 in 1959. The index base year was 1949=100. The tonnage of ore or rock mined or quarried in 1960 amounted to 199,377,746 tons compared with 189,796,763 tons in 1959. 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.

In the metal group nickel regained first place with a value of \$295.6 million up from \$257.0 million in 1959. Uranium declined from \$331.1 million to \$269.9 million to be in second place just ahead of copper which was valued at \$264.8 million. The platinum group metals had a combined value of \$28.9 million in 1960 compared to \$16.9 million in 1959. Copper production of 434,262 tons was worth \$264.8 million which was \$31.7 million higher than in 1959. The lessened demand for iron ore lowered the shipments by approximately 3 million tons to 21.5 million tons. At the average price of \$33.95 per troy ounce the output of 4,628,911 troy ounces were worth more than \$157.1 million. Over 406 thousand tons of zinc had a value of \$108.6 million.

New records were established by the asbestos industry when 1,118,456 tons were shipped which had a value of \$121,400,015. A large portion of the 3 million tons of salt shipments was mined rock salt, used for ice and snow removal on streets and highways. The export market for barite reduced the total shipments to 154,292 tons compared with 238,967 tons in 1959. Cancellation of contracts reduced the shipments of lithia to less than a tenth of the preceding year. The potash mine in Saskatchewan was suspended while alterations were made to the mine shaft. Magnesitic dolomite and brucite used to make refractories was valued at \$3.3 million which was slightly higher than in 1959. There was more nepheline syenite shipped in 1960 but a greater portion was in the lower grades, thus the total value was less. The peat moss industry depends on the foreign markets for the disposal of the \$6 million worth shipped during 1960. Although the shipments of elemental sulphur were nearly twice those of the preceding year, the stockpiles of sulphur at the producers continued to build up.

The coal industry paused in its decade of decline. There were over 11 million tons shipped which were valued at \$74.7 million. The installation of gas lines and other facilities increased the use of natural gas to about 523 billion cubic feet. Crude petroleum amounted to 189.5 million barrels valued at \$422.9 million.

Structural materials decreased in total value. The value of brick, tile, pottery and other clay products was \$38.2 million compared with \$42.5 in 1959.

The tonnage of cement shipments declined to 5,787,225 tons from 6,284,486 in the preceding year. There was less lime used by the uranium mines in 1960. The total value of quicklime and hydrated lime amounted to \$19.3 million. Stone quarries shipped approximately the same quantities of stone in 1960 as they did in the preceding year. Sand and gravel used for concrete, fill, roads etc. amounted to 192.1 million tons.

The following paragraphs were extracted from the Canadian Mineral Industry in 1960—a Summary, published by the Department of Mines and Technical Surveys, Ottawa:

"Canada's mineral industry depends greatly on export markets. The United States in recent years has taken about two thirds of the minerals exported. In 1960, however, this market accounted for little more than half the export total, while Canadian mineral products found greater outlets in the buoyant economies of western Europe. As the United States demand for Canadian minerals slackened, there were compensating increases in the European demand for aluminum, nickel, copper, zinc and asbestos. These gains were one of the industry's 1960 highlights."

"Canadian losses in United States mineral markets became more noticeable as the year progressed. Lead and zinc continued to face the quota restrictions in effect since October 1958. Uranium, nickel, and aluminum suffered as a result of changes in buyers' contracts. Copper sales declined because of oversupply and an import tax. Iron-ore shipments dropped sharply in September with the onset of a recession in the United States steel industry. The most significant market losses were those that affected iron ore and uranium. Canadian iron-ore producers had become so dependent on United States markets that the cutback could not be offset by market expansion overseas. Furthermore, Canadian suppliers suffered more severe cutbacks than suppliers in other countries. The full impact on the uranium industry of the decision made by the United States Atomic Energy Commission in November

1959 began to be felt by mid-1960. Because of this decision, options on the purchase of additional quantities of Canadian uranium after the expiry of sales contracts will not be renewed. Uranium output dropped 21 per cent in 1960, and the industry passed through an intensive period of consolidation. At the end of the year it had only 10 mines in operation instead of 23, as in 1959, when operations were at their height."

"In the fuels sector, the approval given by government agencies in both Canada and the United States to large-scale exports of natural gas to the growing markets of the United States west coast and mid-western areas was another of the year's highlights. The declaration of a National Oil Policy in the face of increasing difficulties in the marketing of crude oil indicated the beginning of a new era in oil-marketing. The most serious difficulties were those faced by the coal industry as it prepared for further mine closures. The Royal Commission on Coal completed its hearings during the year and recommended that the present transportation subventions be replaced by financial assistance in the form of direct subsidies."

"In the industrial-minerals sector, asbestos shipments, which account for about 60 per cent of nonmetallics production, increased in value by 10.5 per cent; but there is a threat of major competition from the Union of Soviet Socialist Republics, which now has a comparable output. Progress in potash-mining development gives promise of new mineral production based on the large resources of Saskatchewan. Sand and gravel and cement, which account for two thirds of the structural-materials output,

were kept close to their 1959 levels despite a cut-back in construction activity that occurred in the latter part of the year."

The methods of compilation of mineral statistics were changed in 1959 and further changes were made in 1960. The changes are noticeable in Table 23 and subsequent tables which show industry data. The salt industry has been reclassified to the mining industry and removed from the manufacturing group. Natural gas processing industry has been added to mineral fuels industry. Natural gas processing plants were formerly included in the compressed gases industry. In the principal statistics tables the "establishment" figures formerly indicated the number of mines, quarries, pits, bogs, wells, mills, or plants, now indicate "the smallest unit which is a separate operating entity capable of reporting all the following: Materials and used goods purchased for resale as such, fuel and power consumed, number of employees and their pay, inventories, shipments or sales." Some firms whose principal activity was in some other industry have been removed from the principal mineral statistics but their products have been retained in the commodity statistics. An example is a construction firm which operated sand and gravel pits.

The ten leading mineral commodities in order of total value were in 1960; petroleum, nickel, uranium, copper, iron ore, gold, asbestos, sand and gravel, zinc and cement. With the exception of cement each of these commodities exceeded \$100 million in value.

TABLE 1. Mineral Production, by Kinds, 1959 and 1960

		1959		1960	
		Quantity	Value	Quantity	Value
<b>Metallics</b>					
Antimony	lb.	1,657,797	540,278	1,651,786	538,482
Bismuth	"	334,736	590,212	423,827	762,048
Cadmium	"	2,160,363	2,765,265	2,357,497	3,347,646
Calcium	"	67,429	76,409	134,801	159,241
Cobalt	"	3,150,027	5,954,916	3,568,811	6,763,016
Copper	"	790,538,660	233,102,813	878,524,096	264,846,637
Gold	troy oz.	4,483,416	150,508,275	4,628,911	157,151,527
Indium		...	...	...	...
Iron ore	ton	24,488,325	192,666,101	21,550,830	175,082,523
Iron, remelt		7,187,434		10,972,979	
Lead	lb.	373,391,461	39,616,835	411,300,451	43,926,888
Magnesium	"	12,204,448	3,179,515	14,577,138	4,313,987
Molybdenum	"	748,566	940,596	767,621	1,015,380
Nickel	"	373,110,226	257,008,801	429,012,707	295,640,279
Palladium, iridium, rhodium, etc.	troy oz.	177,713	5,916,989		
Platinum	"	150,382	11,015,449	483,604	28,873,508
Selenium	lb.	368,107	2,576,749	521,638	3,651,468
Silver	troy oz.	31,923,989	28,022,860	34,016,829	30,244,363
Tellurium	lb.	13,023	27,999	44,682	156,388
Thorium	"	47,447	105,676		
Tin	"	741,443	630,094	621,718	522,243
Titanium ore	ton	26,777	129,585	2,947	16,265
Uranium ( $\text{U}_3\text{O}_8$ )	lb.	31,784,189	331,143,043	25,495,369	269,938,192
Zinc	"	792,015,223	96,942,663	813,745,341	108,635,003
<b>Total metallics</b>		...	<b>1,370,648,535</b>	...	<b>1,406,558,061</b>
<b>Non-metallics</b>					
Arsenious oxide	lb.	1,578,307	83,786	1,724,326	70,400
Asbestos	ton	1,050,429	107,433,344	1,118,456	121,400,015
Barite	"	238,987	2,254,582	154,292	1,462,212
Diatomite	"	5	100	44	1,430
Gypsum spar	"	17,953	301,372	13,862	239,273
Feldspar	"	...	1,850,497	...	1,921,820
Garnet	"	—	—	32	4,480
Grindstone	"	60	9,000	10	2,000
Gypsum	"	5,878,630	8,393,703	5,205,731	9,498,711
Iron oxides	"	1,235	108,286	909	78,780
Lithia	lb.	2,756,280	1,422,153	204,666	84,135
Magnesitic-dolomite and brucite		...	3,050,779		3,279,021
Mica	lb.	813,834	63,004	1,702,605	94,203
Mineral waters	gal.	369,113	202,989	375,425	201,764
Nepheline syenite	ton	228,722	2,930,932	240,638	2,891,095
Peat moss	"	184,049	6,226,888	185,784	6,088,138
Potash, ( $\text{K}_2\text{O}$ )		...	1,408,462	...	178,700
Pyrite, pyrrhotite	ton	1,099,564	3,433,095	1,032,288	3,318,378
Quartz	"	2,163,546	3,436,730	2,260,766	3,268,705
Salt	"	3,289,976	16,034,522	3,314,920	19,355,658
Silica brick	M	1,926	354,295	...	...
Soapstone and talc	ton	39,176	512,129	41,636	523,181
Sodium sulphate	"	179,535	2,881,861	214,208	3,449,155
Sulphur in smelter gas	"	277,030	2,718,416	289,620	2,854,623
Sulphur, elemental	"	145,656	2,620,787	274,359	4,298,908
Titanium dioxide, etc.	"	...	8,507,149	...	12,947,000
<b>Total non-metallics</b>		...	<b>178,216,641</b>	...	<b>197,505,783</b>
<b>Fuels</b>					
Coal	ton	10,626,722	73,675,895	11,011,138	74,676,240
Natural gas	M. cu. ft.	417,334,527	39,609,393	522,972,327	52,196,882
Nat. gas by-products		...	...	...	16,052,210
Petroleum, crude	bbl.	184,778,497	422,092,535	189,534,221	422,926,497
<b>Total fuels</b>		...	<b>535,577,823</b>	...	<b>565,851,829</b>
<b>Structural Materials</b>					
Clay products (brick, tile, etc.)	ton	...	42,515,448	...	38,226,538
Cement	"	6,284,486	95,147,798	5,787,225	93,261,473
Lime	"	1,685,725	21,304,021	1,529,568	19,301,790
Sand and gravel	"	185,123,746	104,651,461	192,074,498	111,163,886
Stone	"	46,439,535	60,958,784	45,359,449	60,640,621
<b>Total structural materials</b>		...	<b>324,577,512</b>	...	<b>322,594,308</b>
<b>Grand totals</b>		...	<b>2,409,020,511</b>	...	<b>2,492,509,981</b>

TABLE 2. Mineral Production of Canada, by Provinces, 1960

No.			Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
<b>Metals:</b>							
1	Antimony .....	lb. \$	— —	— —	— —	— —	— —
2	Bismuth .....	lb. \$	— —	— —	— —	— —	172,983 297,018
3	Cadmium .....	lb. \$	— —	— —	— —	— —	86,499 94,429
4	Calcium .....	lb. \$	— —	— —	— —	— —	— —
5	Cobalt .....	lb. \$	— —	— —	— —	— —	— —
6	Copper .....	lb. \$	27,726,518 8,398,362	— —	— —	— —	314,939,446 95,395,158
7	Gold .....	oz. \$	13,515 458,834	— —	3 102	— —	1,035,914 35,189,280
8	Indium .....	oz. \$	— —	— —	— —	— —	— —
9	Iron ore .....	ton \$	7,611,365 54,673,717	— —	— —	— —	7,457,971 61,752,485
10	Iron (remelt) .....	ton \$	— —	— —	— —	— —	10,972,979
11	Lead .....	lb. \$	48,043,928 5,131,091	— —	— —	— —	5,338,901 570,195
12	Magnesium .....	lb. \$	— —	— —	— —	— —	— —
13	Molybdenum .....	lb. \$	— —	— —	— —	— —	762,207 1,005,380
14	Nickel .....	lb. \$	— —	— —	— —	— —	— —
15	Platinum group .....	oz. \$	— —	— —	— —	— —	— —
16	Selenium .....	lb. \$	— —	— —	— —	— —	279,759 1,958,313
17	Silver .....	oz. \$	1,271,126 1,130,158	— —	— —	— —	4,115,105 3,658,740
18	Tellurium .....	lb. \$	— —	— —	— —	— —	29,925 104,738
19	Thorium .....	lb. \$	— —	— —	— —	— —	— —
20	Tin .....	lb. \$	— —	— —	— —	— —	— —
21	Titanium ore .....	ton \$	— —	— —	— —	— —	2,947 18,265
22	Tungsten ( $WO_3$ ) .....	lb. \$	— —	— —	— —	— —	— —
23	Uranium ( $U_3O_8$ ) .....	lb. \$	— —	— —	— —	— —	— —
24	Zinc .....	lb. \$	68,415,856 9,133,517	— —	— —	— —	99,614,995 13,298,602
25	Total metals .....	\$	78,925,679	— —	102	— —	224,294,082
<b>Non-metallics:</b>							
26	Arsenious Oxide .....	lb. \$	— —	— —	— —	— —	— —
27	Asbestos .....	ton \$	— —	— —	— —	— —	1,054,424 107,788,172
28	Barite .....	ton \$	— —	— —	130,719 1,241,624	— —	— —
29	Diatomite .....	ton \$	— —	— —	— —	— —	— —

TABLE 2. Mineral Production of Canada, by Provinces, 1960

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories	Yukon	Canada	No.	
—	—	—	—	1,651,786 538,482	—	—	1,651,786 538,482	1 2	
37,835 45,402	—	—	—	213,009 419,628	—	—	423,827 762,046	3 4	
—	110,138 156,396	256,498 364,227	—	1,778,866 2,525,990	—	145,496 206,604	2,357,497 3,347,646	5 6	
134,801 159,241	—	—	—	—	—	—	134,801 159,241	7 8	
3,258,401 8,312,921	310,410 450,095	—	—	—	—	—	3,568,811 6,763,016	9 10	
412,544,528 123,750,235	25,585,597 7,749,877	63,570,278 19,255,437	—	33,117,729 9,982,552	1,040,000 315,016	—	878,524,098 264,846,637	11 12	
2,732,673 92,774,248	52,762 1,791,270	84,775 2,878,111	191 6,484	212,859 7,226,563	418,104 14,194,631	78,115 2,652,004	4,628,911 157,151,527	13 14	
—	—	—	—	—	—	—	—	15 16	
5,325,197 48,399,442	—	—	—	1,156,297 10,256,879	—	—	21,550,830 175,082,523	17 18	
—	—	—	—	—	—	—	—	19 20	
1,661,896 177,490	2,074,860 221,574	—	—	333,894,197 35,659,900	—	20,286,871 2,166,638	411,300,451 43,926,866	21 22	
14,577,138 4,313,987	—	—	—	—	—	—	—	14,577,138 4,313,987	23 24
—	—	—	—	5,414 9,500	—	—	767,621 1,015,380	25 26	
403,300,283 277,924,234	18,118,768 12,400,485	—	—	3,779,878 2,645,915	3,813,778 2,669,645	—	429,012,707 295,640,279	27 28	
483,585 28,871,955	—	—	—	—	—	19 1,553	483,604 28,873,508	29 30	
144,500 1,011,500	24,358 170,506	73,021 511,147	—	—	—	—	521,636 3,651,466	31 32	
11,220,823 9,976,434	501,637 446,005	1,163,845 1,034,775	19 17	8,447,440 7,510,619	79,473 70,659	7,217,361 6,416,956	34,016,829 30,244,363	33 34	
7,450 26,075	1,825 6,388	5,482 19,187	—	—	—	—	44,682 156,388	35 36	
... ...	— —	— —	—	—	—	—	— —	37 38	
—	—	—	—	821,718 522,243	—	—	621,716 522,243	39 40	
—	—	—	—	—	—	—	2,947 16,265	41 42	
—	—	—	—	—	—	—	—	43 44	
19,793,727 211,983,533	—	4,624,431 48,722,961	—	—	1,077,211 9,231,698	—	25,495,369 269,938,192	45 46	
90,459,368 12,076,326	46,760,938 6,512,255	85,405,095 11,401,580	—	407,666,190 54,423,436	—	13,402,899 1,789,287	813,745,341 108,635,003	47 48	
817,803,023	29,804,851	84,187,425	6,501	131,721,707	26,481,649	13,233,042	1,406,558,061	49	
1,724,326 70,400	—	—	—	—	—	—	1,724,326 70,400	50 51	
23,284 4,128,920	—	—	—	40,748 9,482,923	—	—	1,118,456 121,400,015	52 53	
—	—	—	—	23,573 220,588	—	—	154,292 1,462,212	54 55	
—	—	—	—	44 1,430	—	—	44 1,430	56 57	

TABLE 2. Mineral Production of Canada, by Provinces, 1960 — Concluded

No.			Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
Non-metallics — Concluded:							
1	Feldspar	ton	—	—	—	—	13,862
2		\$	—	—	—	—	239,273
3	Fluorspar	ton	—	—	—	—	—
4		\$	1,820,769	—	—	—	—
5	Garnet	ton	—	—	—	—	—
6		\$	—	—	—	—	—
7	Grindstone	ton	—	—	—	10	—
8		\$	—	—	—	2,000	—
9	Gypsum	ton	34,346	—	4,490,427	90,892	—
10		\$	141,668	—	7,515,244	267,002	—
11	Iron Oxide	ton	—	—	—	—	809
12		\$	—	—	—	—	76,780
13	Lithia	lb.	—	—	—	—	204,666
14		\$	—	—	—	—	84,135
15	Magnesitic dolomite & brucite	ton	—	—	—	—	—
16		\$	—	—	—	—	3,279,021
17	Mica	lb.	—	—	—	—	1,234,828
18		\$	—	—	—	—	85,272
19	Mineral water	gal.	—	—	—	—	372,799
20		\$	—	—	—	—	199,874
21	Nepheline syenite	ton	—	—	—	—	—
22		\$	—	—	—	—	—
23	Peat moss	ton	—	—	1,657	21,062	56,731
24		\$	—	—	68,784	832,720	1,342,338
25	Potash (K <sub>2</sub> O)	ton	—	—	—	—	—
26		\$	—	—	—	—	—
27	Pyrrite, pyrrhotite	ton	—	—	—	—	1,854,386
28		\$	—	—	—	—	—
29	Quartz	ton	—	—	9,281	—	357,165
30		\$	—	—	52,813	—	1,835,960
31	Salt	ton	—	—	163,901	—	—
32		\$	—	—	2,256,423	—	—
33	Soapstone, talc <sup>1</sup>	ton	20,225	—	—	—	14,222
34		\$	262,925	—	—	—	157,611
35	Sodium sulphate	ton	—	—	—	—	—
36		\$	—	—	—	—	—
37	Sulphur, in smelter gas	ton	—	—	—	—	—
38		\$	—	—	—	—	83,273
39	Sulphur, elemental	ton	—	—	—	—	—
40		\$	—	—	—	—	—
41	Titanium dioxide, etc.	ton	—	—	—	—	—
42		\$	—	—	—	—	12,947,000
43	Total non-metallics	\$	2,225,362	—	11,134,888	1,101,722	129,973,075
Fuels:							
44	Coal	ton	—	—	4,570,240	1,028,064	—
45		\$	—	—	44,981,257	8,663,339	—
46	Natural gas	M.c.f.	—	—	—	98,701	—
47		\$	—	—	—	151,603	—
48	Nat. gas by-products	bbl.	—	—	—	—	—
49		\$	—	—	—	—	—
50	Petroleum, crude	bbl.	—	—	—	14,148	—
51		\$	—	—	—	19,807	—
52	Total fuels	\$	—	—	44,981,257	8,834,749	—
Structural materials:							
53	Clay products	\$	83,435	—	1,673,618	705,366	8,093,038
54	Cement	ton	93,160	—	—	163,245	1,875,997
55		\$	1,688,664	—	—	2,546,622	28,315,159
56	Lime	ton	—	—	—	16,727	399,874
57		\$	—	—	—	379,258	4,448,164
58	Sand & gravel	ton	3,912,533	474,184	6,717,693	6,184,924	46,255,963
59		\$	3,069,395	422,587	6,020,239	2,091,227	22,620,083
60	Stone	ton	380,843	750,000	914,937	1,883,867	20,394,509
61		\$	644,588	750,000	1,643,427	1,413,795	28,458,115
62	Total structural materials	\$	5,486,082	1,172,587	9,337,284	7,136,268	91,935,569
63	Grand totals, 1960	\$	86,637,123	1,172,587	65,453,531	17,072,739	446,202,726
64	Grand totals, 1959	\$	72,156,996	4,559,171	62,879,647	18,133,290	440,897,186

<sup>1</sup> Includes pyrophyllite.

TABLE 2. Mineral Production of Canada, by Provinces, 1960 — Concluded

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories	Yukon	Canada	No.
—	—	—	—	—	—	—	13,862	1
—	—	—	—	—	—	—	239,273	2
100,811	—	—	—	240	—	—	1,921,820	3
32	—	—	—	—	—	—	32	5
4,480	—	—	—	—	—	—	4,480	6
—	—	—	—	—	—	—	10	7
—	—	—	—	—	—	—	2,000	8
355,603	122,063	—	—	112,400	—	—	5,205,731	9
871,408	366,189	—	—	337,200	—	—	9,498,711	10
—	—	—	—	—	—	—	909	11
—	—	—	—	—	—	—	76,780	12
—	—	—	—	—	—	—	204,668	13
—	—	—	—	—	—	—	84,135	14
—	—	—	—	—	—	—	—	15
—	—	—	—	—	—	—	3,279,021	16
345,777	—	—	—	122,000	—	—	1,702,605	17
5,745	—	—	—	3,186	—	—	94,203	18
2,626	—	—	—	—	—	—	375,425	19
1,890	—	—	—	—	—	—	201,764	20
240,636	—	—	—	—	—	—	240,636	21
2,891,095	—	—	—	—	—	—	2,891,095	22
13,566	12,496	—	—	80,272	—	—	185,784	23
338,614	468,167	—	—	3,037,515	—	—	6,088,136	24
—	—	178,700	—	—	—	—	—	25
762,661	—	—	—	699,351	—	—	1,032,288	27
1,659,410	120	169,903	—	64,887	—	—	3,316,378	28
998,281	179	107,039	—	272,433	—	—	2,260,786	29
3,007,599	21,925	49,064	72,431	—	—	—	3,266,705	30
12,994,545	561,161	1,337,098	1,206,433	—	—	—	3,314,920	31
7,189	—	—	—	—	—	—	19,355,856	32
102,645	—	—	—	—	—	—	41,636	33
—	—	214,208	—	—	—	—	523,181	34
—	—	3,449,155	—	—	—	—	214,208	35
957,660	—	—	—	1,813,690	—	—	3,449,155	36
28,057	—	38,204	3,650,145	582,500	—	—	289,620	37
—	—	—	—	—	—	—	2,854,623	38
—	—	—	—	—	—	—	274,359	39
—	—	—	—	—	—	—	4,298,906	40
—	—	—	—	—	—	—	12,947,000	41
25,257,212	1,395,696	5,110,194	4,856,578	16,451,056	—	—	197,505,783	43
—	—	2,170,797	2,391,699	843,868	—	6,470	11,011,138	44
—	—	3,833,629	11,516,842	5,584,017	—	97,156	74,676,240	45
16,987,056	—	36,571,633	383,682,986	85,592,166	39,785	—	522,972,327	46
6,573,990	—	3,722,992	34,148,675	7,587,403	12,219	—	52,196,882	47
—	—	1,436,564	14,021,998	593,648	—	—	16,052,210	48
1,005,030	4,764,045	51,908,426	130,506,968	867,057	468,545	—	189,534,221	49
3,150,085	10,690,384	103,957,009	302,841,423	1,626,590	641,219	—	422,926,497	50
9,724,055	10,690,384	112,950,194	362,528,938	15,391,658	653,438	97,156	565,851,829	51
20,191,325	813,135	1,130,332	3,551,682	1,984,607	—	—	36,226,538	53
2,007,044	429,788	169,282	663,858	384,853	—	—	5,787,225	54
30,699,800	6,105,802	3,997,809	11,474,865	6,432,752	—	—	93,261,473	55
990,088	48,383	—	43,731	30,765	—	—	1,529,568	56
12,278,630	834,698	—	756,499	603,541	—	—	19,301,790	57
77,660,833	10,860,566	6,952,539	13,385,970	15,669,293	—	—	192,074,498	58
43,929,708	5,907,596	4,717,271	11,856,520	10,527,250	—	—	111,163,886	59
17,938,583	673,598	—	167,201	2,255,911	—	—	45,359,449	60
23,220,659	1,050,535	—	310,427	3,149,075	—	—	60,640,621	61
130,320,122	16,711,766	9,845,412	27,951,093	22,697,225	—	—	322,594,308	62
983,104,412	58,702,697	212,093,225	395,344,010	186,261,646	27,135,087	13,330,198	2,492,509,981	63
970,762,201	55,512,410	210,042,051	376,215,593	159,395,092	25,874,496	12,592,378	2,409,020,511	64

TABLE 3. Annual Values of the Mineral Production of Canada, since 1891

Year	Metallics	Non-metallics	Fuels	Structural materials	Total	Value per capita
dollars						
1891 .....	5,421,659	2,025,195	8,205,228	3,074,534	18,976,616	3.92
1892 .....	3,698,697	1,417,821	7,658,444	3,603,455	16,628,417	3.39
1893 .....	4,630,495	1,249,283	8,771,358	5,133,946	20,035,082	4.04
1894 .....	4,685,852	1,263,803	8,727,095	5,004,408	19,931,158	3.98
1895 .....	6,087,114	1,193,512	8,248,923	4,726,368	20,505,917	4.05
1896 .....	8,030,633	1,207,671	8,658,410	4,327,542	22,474,256	4.38
1897 .....	13,780,314	1,425,093	8,641,016	4,388,550	28,485,023	5.49
1898 .....	21,741,865	1,492,262	9,608,158	5,270,146	38,412,431	7.32
1899 .....	29,282,823	1,610,111	11,872,788	6,168,283	49,234,005	9.27
1900 .....	40,521,807	1,914,690	15,311,479	6,372,901	64,420,877	12.04
1901 .....	41,939,500	2,713,621	14,047,654	6,803,836	65,804,611	12.16
1902 .....	35,924,651	2,730,425	16,359,722	7,896,836	63,211,634	11.36
1903 .....	33,210,147	2,589,302	17,197,317	8,443,747	61,740,513	10.83
1904 .....	30,924,897	2,807,995	17,858,902	8,182,103	60,073,897	10.27
1905 .....	36,946,212	3,468,408	18,756,112	9,608,267	69,078,999	11.49
1906 .....	41,949,563	4,424,882	21,081,724	11,530,528	79,286,697	12.81
1907 .....	42,426,607	5,021,384	26,254,162	12,863,049	86,865,202	13.75
1908 .....	41,774,362	5,188,269	26,954,515	11,339,955	85,557,101	13.16
1909 .....	44,156,841	4,593,142	26,548,109	16,533,349	91,831,441	13.70
1910 .....	49,438,873	5,109,754	32,647,404	19,627,592	106,823,623	14.93
1911 .....	46,105,423	5,659,746	28,746,214	22,709,611	103,220,994	14.32
1912 .....	61,172,753	6,750,980	38,729,694	28,794,869	135,048,296	18.33
1913 .....	66,361,351	7,402,849	41,060,860	30,809,752	145,634,812	19.35
1914 .....	59,386,619	6,165,107	37,302,122	26,009,227	128,863,075	16.75
1915 .....	75,814,841	7,254,732	36,118,839	17,920,759	137,109,171	17.44
1916 .....	106,319,365	10,245,689	43,169,294	17,467,185	177,201,534	22.05
1917 .....	106,455,147	14,566,995	48,787,368	19,837,311	189,646,821	23.18
1918 .....	114,549,152	17,192,967	60,428,979	19,130,799	211,301,897	25.37
1919 .....	73,262,793	16,676,377	59,325,710	27,421,510	176,686,390	20.84
1920 .....	77,939,630	22,260,697	85,767,250	41,892,088	227,859,665	26.40
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	20.56
1923 .....	83,764,403	14,097,925	78,465,622	37,751,381	214,079,331	23.41
1924 .....	102,058,235	12,374,278	59,770,024	35,380,869	209,583,406	22.71
1925 .....	116,951,996	14,628,048	57,354,055	37,649,234	226,583,333	24.19
1926 .....	115,090,770	16,643,022	68,743,933	39,959,398	240,437,123	25.61
1927 .....	113,349,051	17,771,709	71,426,516	44,809,419	247,356,695	25.67
1928 .....	131,819,402	19,019,744	74,413,160	49,737,181	274,989,487	27.96
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	230,434,726	22.21
1932 .....	111,943,049	7,839,551	49,047,342	22,398,283	191,228,225	18.20
1933 .....	147,206,959	10,061,071	47,778,436	16,696,687	221,743,153	20.74
1934 .....	194,213,956	10,558,174	54,262,099	19,286,761	278,320,990	25.67
1935 .....	222,139,223	12,579,334	54,824,200	23,215,400	312,758,157	28.56
1936 .....	259,988,203	16,782,608	59,983,320	25,770,741	362,524,872	32.82
1937 .....	335,000,751	22,536,303	65,828,879	34,869,699	458,235,632	41.13
1938 .....	324,064,074	20,122,661	64,803,294	33,878,666	442,868,695	39.42
1939 .....	343,453,866	25,114,106	70,671,328	35,362,759	474,602,059	41.94
1940 .....	382,440,214	26,074,296	78,837,874	42,472,651	529,825,035	46.39
1941 .....	395,193,386	34,532,635	85,141,997	45,373,272	560,241,290	49.06
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	44.87
1944 .....	308,111,295	37,431,875	97,291,007	42,984,937	485,819,114	40.57
1945 .....	316,962,810	39,841,422	93,531,276	48,419,673	498,755,181	41.15
1946 .....	290,386,425	43,792,717	102,516,888	66,120,221	502,816,251	40.86
1947 .....	395,140,994	54,670,989	110,481,207	84,576,785	644,869,975	51.25
1948 .....	488,287,835	67,097,524	159,736,260	105,127,246	820,248,865	63.67
1949 .....	538,967,258	64,585,216	183,654,473	113,903,079	901,110,026	66.51
1950 .....	617,238,340	94,721,564	201,193,957	132,296,212	1,045,450,073	74.68
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	89.07
1953 .....	709,920,510	124,999,607	314,181,168	187,202,218	1,336,303,503	90.40
1954 .....	802,401,423	128,038,507	352,959,465	204,982,696	1,488,382,091	96.59
1955 .....	1,007,839,501	144,920,841	414,318,015	228,232,439	1,795,310,796	113.68
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	132.03
1958 .....	1,130,160,395	150,354,802	510,768,681	309,455,160	2,100,739,038	123.22
1959 .....	1,370,648,535	178,216,641	535,577,823	324,577,512	2,409,020,511	138.12
1960 .....	1,406,558,061	197,505,783	565,851,829	322,594,308	2,492,509,981	139.92

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.

1886-97 total includes \$250,000 estimated value of unreported products.

1898-1908 total includes \$300,000 estimated value of unreported products, mostly structural materials.

**TABLE 4. Physical Volume of Mineral Production since 1924**  
(1949 = 100)

Year	Index	Year	Index	Year	Index
1924	32.2	1937	79.4	1950	109.5
1925	35.2	1938	83.7	1951	123.4
1926	40.7	1939	90.3	1952	131.0
1927	43.5	1940	96.2	1953	142.1
1928	48.0	1941	101.0	1954	158.7
1929	50.1	1942	99.1	1955	185.2
1930	47.4	1943	88.8	1956	212.3
1931	43.9	1944	79.7	1957	227.8
1932	44.0	1945	77.2	1958	227.0
1933	45.0	1946	74.3	1959	251.1
1934	54.6	1947	78.5	1960	253.3
1935	60.8	1948	90.0		
1936	68.3	1949	100.0		

**TABLE 5. Value of Mineral Production, by Provinces, since 1941**

Year	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	dollars					
1941	...	..	32,569,867	3,690,375	99,651,044	267,435,727
1942	...	..	32,783,165	3,609,158	104,300,010	259,114,946
1943	...	..	29,979,837	3,676,834	101,610,678	232,948,959
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	42,888,033	..	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	583,054,682
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
	Manitoba	Saskatchewan	Alberta	British Columbia	Northwest Territories <sup>1</sup>	Yukon
	dollars					
1941	16,689,867	15,020,555	41,364,385	76,841,180	3,860,298	3,117,992
1942	14,345,046	20,578,749	47,359,831	77,247,932	3,976,287	3,453,568
1943	13,412,266	26,735,984	48,941,210	68,442,386	2,679,993	1,625,819
1944	13,830,406	22,291,848	51,066,662	57,246,071	1,440,069	939,319
1945	14,429,423	22,336,074	51,753,237	64,063,842	470,812	1,239,058
1946	16,403,549	24,480,900	60,082,513	74,622,846	1,039,525	1,693,904
1947	18,236,763	32,594,016	67,432,270	116,772,621	2,720,988	2,095,508
1948	26,081,349	34,517,208	93,211,229	148,223,614	4,267,485	4,265,910
1949	23,839,638	36,054,536	113,728,425	136,385,911	6,801,729	5,099,176
1950	32,691,173	35,983,923	135,758,940	138,888,205	8,050,899	9,035,696
1951	30,045,992	51,032,953	168,144,211	176,278,932	8,288,747	9,793,170
1952	25,105,045	49,506,094	196,811,654	170,071,244	8,944,835	11,386,451
1953	25,264,112	48,081,970	248,863,295	158,487,812	10,300,230	14,738,562
1954	35,106,922	68,216,009	279,042,735	158,630,867	26,414,000	16,588,664
1955	62,018,231	85,150,128	325,974,326	189,524,574	25,597,821	14,724,750
1956	67,909,407	122,744,698	411,171,898	203,277,828	22,157,935	15,656,434
1957	63,464,285	173,461,037	410,211,763	178,931,120	21,400,615	14,111,798
1958	57,217,569	209,940,966	345,939,248	151,149,136	24,895,390	12,310,758
1959	55,512,410	210,042,051	376,215,593	159,395,092	25,874,496	12,592,378
1960	58,702,697	212,093,225	395,344,010	186,261,646	27,135,087	13,330,198

<sup>1</sup> Values of pitchblende products not included from 1941 to 1953.

TABLE 6. Mineral Production of Newfoundland, 1958-60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Copper .....	lb.	29,501,858	7,499,372	29,978,282	8,876,570	27,726,518
Gold .....	troy oz.	13,381	454,686	13,411	450,207	13,515
Iron ore .....	short ton	5,390,775	38,226,828	6,105,819	42,974,837	7,611,365
Lead .....	lb.	47,960,729	5,448,339	44,913,551	4,765,328	48,043,926
Silver .....	troy oz.	1,267,078	1,099,950	1,125,110	987,622	1,271,126
Zinc .....	lb.	67,739,904	7,370,102	63,348,346	7,753,838	68,415,856
Non-metallics:						
Fluorspar .....	ton	...	1,483,368	...	1,749,903	...
Gypsum .....	"	36,307	144,510	37,720	148,617	34,346
Pyrophyllite (talc) .....	"	7,454	109,551	14,443	200,275	20,225
Structural materials:						
Cement .....	ton	50,992	1,079,071	71,253	1,291,516	93,160
Clay products .....		...	58,282	...	68,000	...
Sand and gravel .....	ton	4,062,985	1,484,160	4,825,724	2,306,864	3,912,533
Stone .....	"	282,439	536,535	352,231	583,419	380,843
Totals .....		...	64,994,754	...	72,156,996	...
						86,637,123

TABLE 7. Mineral Production of Prince Edward Island, 1959 and 1960

Product	1959		1960	
	Quantity	Value	Quantity	Value
Structural materials:		\$		\$
Sand and gravel .....	ton	5,244,968	2,859,171	474,184
Stone .....	"	1,700,000	1,700,000	750,000
Totals .....		...	4,559,171	...
				1,172,587

TABLE 8. Mineral Production of Nova Scotia, 1958-60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Gold .....	troy oz.	131	4,451	—	—	3
Silver .....	"	4	3	—	—	102
Non-metallics:						
Barite .....	ton	178,616	1,861,959	215,825	2,067,214	130,719
Gypsum .....	"	3,149,719	3,259,423	5,036,411	6,462,658	4,490,427
Peat moss .....	"	2,355	26,017	2,207	81,460	1,657
Quartz .....	"	...	...	1,151	6,338	9,281
Salt .....	"	125,872	2,026,551	120,225	1,897,708	163,901
Silica brick .....	M	1,075	285,285	803	239,611	...
Fuels:						
Coal .....	ton	5,269,879	50,347,951	4,391,829	43,730,600	4,570,240
Structural materials:						
Clay products .....	ton	2,333,392	1,509,536	...	1,638,789	...
Sand and gravel .....	"	435,047	2,377,246	8,032,122	5,022,575	8,717,693
Stone .....	"	...	1,008,469	1,393,668	1,732,694	914,937
Totals .....		...	62,706,891	...	62,879,647	...
						65,453,531

TABLE 9. Mineral Production of New Brunswick, 1958-60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Copper .....	lb.	655,717	166,683	—	—	—
Gold .....	troy oz.	52	1,767	—	—	—
Lead .....	lb.	188,179	21,377	—	—	—
Silver .....	troy oz.	51,139	44,394	—	—	—
Zinc .....	lb.	6,323,431	687,989	—	—	—
Non-metallics:						
Grindstone .....	ton	—	—	60	9,000	10
Gypsum .....	"	105,749	170,876	98,250	132,735	90,892
Peat moss .....	"	21,080	701,195	25,285	808,595	21,062
Sulphur, in sulphides .....	"	...	23,419	—	—	—
Fuels:						
Coal .....	ton	790,719	6,621,369	1,003,387	8,347,215	1,028,064
Natural gas .....	McF.	123,957	197,199	117,502	188,394	98,701
Petroleum, crude .....	bbl.	15,189	21,265	14,479	20,271	14,148
						8,663,339
						151,603
						19,807

TABLE 9. Mineral Production of New Brunswick, 1958-60 — Concluded

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
Structural materials:		\$		\$		\$
Cement .....	ton	180,166	2,934,058	170,793	2,606,301	163,245
Clay products .....	"	629,921		743,966	"	705,366
Lime .....	ton	17,614	394,239	18,231	416,815	16,727
Sand and gravel .....	"	4,015,976	1,750,657	5,093,496	2,895,642	6,184,924
Stone .....	"	2,100,687	1,909,563	2,119,136	1,964,356	1,883,867
Totals .....	"	16,275,971		18,133,290		17,072,739

TABLE 10. Mineral Production of Quebec,<sup>1</sup>, 1958-60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Bismuth .....	lb.	240,177	436,420	151,576	264,228	172,983
Cadmium .....	"	—	—	—	66,499	94,429
Copper .....	"	262,890,590	66,826,788	269,823,777	79,894,820	314,939,446
Gold .....	troy oz.	1,044,846	35,503,867	999,388	33,549,455	1,035,914
Iron (ore) .....	ton	..	5,120,620	..	7,187,434	..
Iron ore .....	"	6,060,325	46,859,490	11,515,169	92,497,012	7,457,971
Lead .....	lb.	6,299,475	715,620	5,819,148	617,412	5,338,901
Magnesium .....	"	4,504,343	1,317,070	4,059,508	977,123	—
Molybdenum .....	"	888,264	1,152,838	748,566	940,596	762,207
Selenium .....	"	179,397	1,345,478	194,233	1,359,631	278,759
Silver .....	troy oz.	3,908,361	3,392,848	4,108,241	3,606,214	4,115,105
Tellurium .....	lb.	29,457	50,077	1,662	3,573	29,925
Titanium ore .....	ton	—	—	26,777	129,565	2,947
Zinc .....	lb.	113,845,036	12,386,340	94,115,963	11,519,794	99,614,995
Non-metallics:						
Asbestos .....	ton	873,603	82,028,699	992,196	95,226,769	1,054,424
Feldspar .....	"	20,387	359,966	17,953	301,372	13,862
Iron oxides (ochre) .....	"	1,632	113,390	1,235	108,286	909
Lithia .....	lb.	3,853,322	2,047,880	2,756,280	1,422,153	204,666
Magnesian dolomite and brucite .....	"	..	2,529,161	..	3,050,779	..
Mica .....	ton	522	85,045	389	62,045	617
Natural mineral waters .....	Imp. gal.	314,294	170,622	366,088	201,033	372,799
Peat moss .....	ton	43,669	1,056,811	50,578	1,282,081	56,731
Pyrite .....	"	..	2,678,310	..	1,850,523	..
Quartz .....	ton	268,676	1,412,802	301,706	1,533,206	357,165
Soapstone and talc .....	"	19,226	194,074	15,937	185,951	14,222
Sulphur in smelter gases .....	"	..	101,913	..	76,586	..
Titanium dioxide, etc. ....	"	..	6,575,077	..	8,507,149	..
Structural materials:						
Cement .....	"	1,903,635	28,686,095	1,975,452	29,520,710	1,875,997
Clay products .....	"	..	10,675,463	..	10,374,162	8,093,038
Lime .....	ton	421,652	3,985,234	404,060	4,568,694	399,874
Sand and gravel .....	"	40,507,787	20,570,574	42,449,734	21,269,248	46,255,963
Stone .....	"	16,963,511	27,327,917	20,437,243	28,809,582	20,394,509
Totals .....	"	365,706,489		440,897,186		446,202,726

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

TABLE 11. Mineral Production of Ontario, 1958-60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
Metallics:		\$		\$		\$
Bismuth .....	lb.	18,581	26,779	31,457	37,748	37,835
Calcium .....	"	25,227	31,256	67,429	76,409	134,801
Cobalt .....	"	2,436,064	4,866,767	2,835,684	5,414,246	3,258,401
Copper .....	"	284,069,476	71,267,895	376,544,371	110,547,037	412,544,528
Gold .....	troy oz.	2,716,514	92,307,146	2,683,449	90,083,383	2,732,673
Iron ore .....	short ton	3,644,952	36,851,421	6,018,089	50,830,404	5,325,197
Lead .....	lb.	2,513,224	285,502	3,222,447	341,902	1,861,896
Magnesium .....	"	9,087,362	2,747,755	8,144,940	2,202,392	14,577,138
Nickel .....	"	254,286,784	177,168,918	347,929,183	240,053,265	403,300,283
Palladium, rhodium, etc .....	troy oz.	154,366	4,840,072	177,713	5,916,989	483,585
Platinum .....	"	146,092	9,481,371	150,378	11,015,189	..
Selenium .....	lb.	90,295	677,213	101,400	709,800	144,500
Silver .....	troy oz.	9,815,257	8,520,624	10,540,856	9,252,763	11,220,823
Tellurium .....	lb.	6,692	11,376	6,900	14,835	7,450
Thorium .....	"	..	..	47,447	105,676	..
Uranium ( $U_3O_8$ ) .....	"	19,970,136	210,149,700	25,492,171	268,529,993	19,793,727
Zinc .....	"	92,478,339	10,061,643	89,963,215	11,011,498	90,459,368

TABLE 11. Mineral Production of Ontario, 1958-60 — Concluded

Product	1958		1959		1960		
	Quantity	Value	Quantity	Value	Quantity	Value	
Non-metallics:		\$		\$		\$	
Arsenic ( $As_2O_3$ ) <sup>1</sup>	lb.	2,323,320	94,542	1,578,307	63,786	1,724,326	70,400
Asbestos	ton	21,650	3,849,370	24,350	4,327,628	23,284	4,128,920
Fluorspar	"	—	57,834	—	100,594	—	100,811
Garnet	"	—	—	—	—	32	4,480
Gypsum	ton	425,733	1,059,590	412,100	1,017,340	355,603	871,408
Mica	"	12	2,106	18	959	173	5,745
Natural mineral waters	Imp. gal.	2,433	1,946	3,025	1,936	2,626	1,890
Nepheline syenite	ton	201,306	2,613,446	228,722	2,930,932	240,636	2,891,095
Peat moss	"	6,123	216,055	10,925	295,390	13,566	338,614
Pyrrite, pyrrhotite	ton	—	655,589	—	632,140	—	762,661
Quartz <sup>2</sup>	ton	922,599	666,275	1,600,352	1,363,541	1,659,410	998,281
Salt	"	2,126,483	10,204,472	3,036,230	13,228,977	3,007,599	13,994,545
Silica brick	M	1,740	187,061	1,123	114,684	—	—
Sulphur, in smelter gas	—	—	585,700	—	964,700	—	957,660
Sulphur, elemental	—	—	36,919	—	77,157	—	28,057
Talc	ton	8,725	125,511	8,796	125,903	7,189	102,645
Fuels:							
Natural gas	Mcf.	16,147,986	5,974,755	16,839,236	6,516,784	16,987,056	6,573,990
Petroleum crude	bbl.	778,341	2,623,000	1,001,580	3,194,000	1,005,030	3,150,085
Structural materials:							
Cement	ton	2,400,158	35,195,552	2,386,334	31,731,767	2,007,044	30,699,800
Clay products	—	—	22,786,291	—	22,174,895	—	20,191,325
Lime	ton	1,009,916	12,644,925	1,130,055	14,006,532	990,088	12,278,630
Sand and gravel	"	67,469,084	40,055,031	73,981,703	39,695,802	77,660,833	43,929,708
Stone	"	15,756,560	20,670,480	17,288,796	22,053,425	17,938,583	23,220,659
Totals	—	—	789,601,868	—	970,762,201	—	983,104,412

<sup>1</sup> Includes some arsenic recovered from foreign ores.<sup>2</sup> Includes low-grade silica sand for filtering purposes.

TABLE 12. Mineral Production of Manitoba, 1958-60

Product	1958		1959		1960		
	Quantity	Value	Quantity	Value	Quantity	Value	
Metallics:		\$		\$		\$	
Cadmium	lb.	39,994	60,791	69,095	88,442	110,138	156,396
Cobalt	"	274,365	441,531	314,343	540,670	301,410	450,095
Copper	"	25,201,421	6,383,403	25,890,399	7,666,147	25,585,597	7,749,877
Gold	troy oz.	87,356	2,968,357	51,186	1,718,314	52,782	1,791,270
Lead	lb.	—	—	—	—	2,074,860	221,574
Nickel	"	19,555,689	13,328,056	20,277,741	13,523,225	18,118,768	12,400,485
Selenium	"	7,064	52,980	14,797	103,579	24,358	170,506
Silver	troy oz.	320,759	278,451	373,827	328,145	501,637	446,005
Tellurium	lb.	394	670	909	1,945	1,825	6,388
Zinc	"	23,024,389	2,505,054	31,405,044	3,843,977	48,780,938	6,512,255
Non-metallics:							
Gypsum	ton	176,123	343,266	200,139	350,323	122,063	366,189
Peat moss	"	8,347	344,096	18,239	649,539	12,496	468,167
Quartz	"	7,875	37,736	6,504	38,761	120	179
Salt	"	20,580	617,150	23,547	625,831	21,925	561,161
Fuels:							
Petroleum, crude	bbl.	5,829,226	14,415,676	5,056,075	11,619,672	4,764,045	10,690,384
Structural materials:							
Cement	ton	378,823	6,580,276	402,562	7,314,552	429,788	8,105,802
Clay products	—	—	682,943	—	618,550	—	813,135
Lime	ton	72,561	1,168,514	60,503	1,022,953	48,383	834,698
Sand and gravel	"	9,997,546	6,025,156	9,261,553	4,686,315	10,860,566	5,907,595
Stone	"	540,703	983,463	526,696	771,261	673,598	1,050,535
Totals	—	—	57,217,569	—	55,512,410	—	58,702,697

TABLE 13. Mineral Production of Saskatchewan, 1958-60

Product		1958		1959		1960	
		Quantity	Value	Quantity	Value	Quantity	Value
			\$		\$		\$
Metallics:							
Cadmium .....	lb.	302,593	459,941	253,697	324,732	256,498	364,227
Copper .....	"	75,020,217	19,070,139	71,072,523	21,044,574	63,570,278	19,255,437
Gold .....	troy oz.	86,590	2,942,328	78,588	2,638,199	84,775	2,878,111
Selenium .....	lb.	30,234	226,755	57,677	403,739	73,021	511,147
Silver .....	troy oz.	1,299,077	1,127,729	1,187,439	1,042,334	1,163,845	1,034,775
Tellurium .....	lb.	1,707	2,902	3,552	7,637	5,482	19,187
Uranium ( $U_3O_8$ ) .....	"	5,924,253	59,815,924	5,372,685	54,457,321	4,624,431	48,722,961
Zinc .....	"	96,655,609	10,516,130	93,753,079	11,475,377	85,405,095	11,401,580
Non-metallics:							
Potash ( $K_2O$ ) .....		-	-	...	1,408,462	...	178,700
Pyrite .....		...	165,400	-	-	-	-
Quartz <sup>1</sup> .....	lb.	187,360	134,899	188,515	114,994	169,903	107,039
Salt .....	"	46,511	1,157,729	48,776	1,189,675	49,064	1,337,096
Sodium sulphate .....	ton	173,217	2,862,915	179,535	2,881,861	214,208	3,449,155
Sulphur, elemental .....		-	-	...	14,815	...	38,204
Fuels:							
Coal .....	ton	2,253,176	4,379,481	1,947,380	3,746,044	2,170,797	3,833,629
Natural gas .....	Mcf.	18,819,795	1,881,980	33,612,966	3,327,684	36,571,633	3,722,992
Natural gas by-products .....		-	-	...	...	...	1,436,564
Petroleum, crude .....	bbl.	44,626,148	96,704,863	47,442,498	97,731,546	51,908,428	103,957,009
Structural materials:							
Cement .....	ton	194,734	4,506,803	161,057	3,954,737	169,282	3,997,809
Clay products .....		...	1,158,803	...	1,374,834	...	1,130,332
Sand and gravel .....	ton	5,380,151	2,826,245	5,898,136	2,903,486	8,952,539	4,717,271
<b>Totals</b> .....		...	<b>209,940,966</b>	...	<b>210,042,051</b>	...	<b>212,093,225</b>

<sup>2</sup> Low-grade silica sand for fluxing purposes.

TABLE 14. Mineral Production of Alberta, 1958-60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
Metallics:						
Gold .....	troy oz.	282	9,582	200	6,714	191
Silver .....	"	28	24	19	17	19
						17
Non-metallics:						
Salt .....	ton	55,766	983,640	61,198	1,092,331	72,431
Sulphur .....		...	1,815,100	...	1,841,473	...
						3,650,145
Fuels:						
Coal .....	ton	2,519,901	12,807,276	2,528,755	12,756,112	2,391,699
Natural gas .....	Mcf.	239,049,591	20,080,166	297,568,926	24,995,790	383,682,986
Natural gas by-products .....		...	...	...	...	...
Petroleum, crude .....	bbl.	113,277,847	283,262,592	129,967,312	306,917,803	130,506,968
						302,841,423
Structural materials:						
Cement .....	ton	635,516	10,676,668	689,854	11,676,577	663,856
Clay products .....		...	2,569,170	...	3,572,920	...
Lime .....	ton	47,112	767,612	43,709	741,837	43,731
Sand and gravel .....	"	13,226,668	12,717,750	13,271,695	11,949,099	13,385,970
Stone .....	"	91,882	249,866	528,961	662,915	167,201
		...	345,939,248	...	376,215,593	...
<b>Totals .....</b>		...				<b>395,344,010</b>

TABLE 15. Mineral Production of British Columbia, 1958-60

Product		1958		1959		1960	
		Quantity	Value	Quantity	Value	Quantity	Value
<b>Metallics:</b>							
Antimony .....	lb.	858,633	284,208	1,657,797	540,276	1,651,786	538,482
Bismuth .....	"	154,034	308,068	151,703	288,236	213,009	419,628
Cadmium .....	"	1,252,724	1,901,140	1,695,821	2,170,651	1,778,866	2,525,990
Copper .....	"	12,019,726	2,995,902	16,242,626	4,781,508	33,117,729	9,982,552
Gold .....	troy oz.	210,612	7,156,596	184,312	6,187,354	212,859	7,226,563
Indium .....	"	...	...	...	...	...	...
Iron ore .....	ton	630,271	4,193,442	849,248	6,363,848	1,156,297	10,256,879
Lead .....	lb.	294,833,185	33,493,047	297,843,859	31,601,233	333,894,197	35,659,900
Molybdenum .....	"	-	-	-	-	5,414	9,500
Nickel .....	"	1,408,490	996,507	1,061,532	743,072	3,779,878	2,645,915
Platinum .....	troy oz.	-	-	4	260	-	-
Silver .....	"	8,013,428	6,956,457	7,463,285	6,551,272	8,447,440	7,510,619
Tin <sup>1</sup> .....	lb.	795,496	625,260	747,443	630,094	621,718	522,243
Tungsten (WO <sub>3</sub> ) .....	"	690,976	1,898,455	-	-	-	-
Zinc .....	"	434,608,705	47,285,427	406,183,044	49,716,804	407,666,190	54,423,436
<b>Non-metallics:</b>							
Asbestos .....	ton	30,078	6,398,679	33,883	7,878,947	40,748	9,482,933
Arsenic (As <sub>2</sub> O <sub>3</sub> ) .....	"	2	3	2	2	2	2
Barite .....	ton	17,103	334,425	23,142	187,368	23,573	220,563
Diatomite .....	"	27	540	5	100	44	1,430
Fluorspar .....	"	...	1,387	-	-	...	240
Gypsum .....	ton	70,498	211,494	94,010	232,030	112,400	337,200
Mica (schist) .....	"	218	2,500	-	-	61	3,186
Peat moss .....	"	67,827	2,434,686	78,815	3,109,623	80,272	3,037,515
Pyrite .....	"	...	749,389	...	950,432	...	699,351
Quartz .....	ton	67,146	286,438	65,318	379,890	64,887	272,433
Sulphur, in smelter gas .....	"	...	1,650,220	...	1,675,130	...	1,813,690
Sulphur, elemental .....	"	...	20,813	...	687,337	...	582,500
<b>Fuels:</b>							
Coal .....	ton	849,091	5,750,871	751,492	5,237,724	843,868	5,584,017
Natural gas .....	Mcf.	63,638,297	3,915,239	69,128,708	4,558,023	85,592,166	7,587,403
Natural gas by-products .....	"	...	...	...	...	...	593,648
Petroleum, crude .....	bbl.	512,359	1,022,156	866,234	1,583,129	867,057	1,626,590
<b>Structural materials:</b>							
Cement .....	ton	409,397	6,755,619	427,181	7,049,638	384,853	6,432,752
Clay products .....	"	...	1,639,494	...	1,949,332	...	1,984,607
Lime .....	ton	27,567	505,299	29,167	547,190	30,765	603,541
Sand and gravel .....	"	13,216,976	8,475,544	17,064,615	11,063,459	15,669,293	10,527,250
Stone .....	"	1,985,818	2,896,834	2,092,804	2,681,132	2,255,911	3,149,014
<b>Totals</b> .....	"	...	151,149,136	...	159,395,092	...	186,261,646

<sup>1</sup> Tin content of concentrates and lead-tin alloy.

Considerable arsenic is contained in auriferous quartz ores exported. However this is not paid for and data relating to its possible recovery are unobtainable.

TABLE 16. Mineral Production of the Northwest Territories, 1958 - 60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
Metallics:						
Copper .....	lb.	868,403	220,748	986,682	292,157	1,040,000
Gold .....	troy oz.	343,838	11,683,615	405,922	13,626,802	418,104
Nickel .....	lb.	3,866,479	2,648,538	3,841,770	2,689,239	3,813,778
Silver .....	troy oz.	72,779	63,179	70,560	61,937	79,473
Uranium ( $\text{U}_3\text{O}_8$ ) .....	lb.	910,843	9,572,847	919,333	8,155,729	1,077,211
<b>Totals</b> .....		...	<b>24,895,390</b>	...	<b>25,874,496</b>	...
						<b>27,135,087</b>

TABLE 17. Mineral Production of Yukon, 1958 - 60

Product	1958		1959		1960	
	Quantity	Value	Quantity	Value	Quantity	Value
		\$		\$		\$
Metallics:						
Cadmium .....	lb.	160,739	244,323	141,750	181,440	145,496
Gold .....	troy oz.	67,745	2,301,975	66,960	2,247,847	78,115
Lead .....	lb.	21,566,194	2,449,920	21,592,456	2,290,960	20,286,871
Platinum group .....	troy oz.	—	—	—	—	19
Silver .....	"	6,415,560	5,569,348	7,054,632	6,192,556	7,217,361
Zinc .....	lb.	15,522,159	1,688,811	13,246,532	1,621,375	13,402,899
Fuels:						
Coal .....	ton	4,344	56,379	3,879	58,200	6,470
<b>Totals</b> .....		...	<b>12,310,756</b>	...	<b>12,592,378</b>	...
						<b>13,330,198</b>

TABLE 18. Tonnage of Ore Mined and Rock Quarried in the Canadian Mining Industry, 1956 - 60

	1956	1957	1958	1959	1960
Gold-quartz ores .....	14,589,230	14,472,724	14,766,582	14,246,860	14,725,586
Copper-gold-silver ores .....	10,422,646	10,570,801	11,484,960	12,436,105	13,873,786
Silver-cobalt ores .....	205,013	186,294	223,609	197,449	220,753
Silver-lead-zinc ores .....	7,651,006	6,714,538	5,889,872	5,708,625	5,831,613
Nickel-copper ores .....	18,453,360	19,289,516	12,861,918	18,964,386	20,835,186

TABLE 18. Tonnage of Ore Mined and Rock Quarried in the Canadian Mining Industry, 1956-60 - Concluded

	1956	1957	1958	1959	1960
Iron ores	23,950,943	26,417,572	20,357,239	32,398,057	32,957,009
Miscellaneous metals <sup>1</sup>	2,119,476	6,689,383	13,171,208	15,129,295	13,036,867
Asbestos	21,922,874	22,610,743	22,443,060	23,105,241	33,228,170
Feldspar and nepheline syenite	286,022	306,337	332,265	413,808	331,136
Quartz, exclusive of sand (shipments)	1,296,431	1,313,490	737,088	1,039,021	1,279,762
Gypsum and anhydrite	4,900,265	4,706,524	3,976,714	5,983,345	5,093,162
Talc and soapstone	28,500	40,083	37,314	43,762	51,467
Iron oxides	11,152	12,560	2,822	2,633	<sup>2</sup>
Rock salt	638,651	790,986	780,094	1,244,906	1,320,718
Other non-metals	1,235,686	746,925	803,635	1,418,454	695,367
Stone, all kinds, quarried <sup>3</sup>	33,257,318	40,282,081	38,156,647	46,439,535	45,359,449
Stone used for the manufacture of cement	7,152,693	8,741,863	8,473,596	7,963,129	7,768,119
Estimated rock for the manufacture of lime	2,276,836	2,562,740	2,831,886	3,062,152	2,669,574
<b>Totals (other than coal)</b>	<b>150,398,104</b>	<b>166,455,160</b>	<b>157,069,182</b>	<b>189,796,763</b>	<b>199,377,746</b>

<sup>1</sup> Uranium ore is not included prior to 1956.

Data for the years 1922-46 are shown in Mineral Production of Canada, 1946.

Data for the years 1947-51 are shown in General Review of the Mining Industry, 1951.

Data for the years 1952-56 are shown in General Review of the Mining Industry, 1956.

<sup>2</sup> Included in "Other non-metals".<sup>3</sup> Excludes stone used to manufacture cement and lime.TABLE 19. Tonnage of Ore Mined<sup>1</sup> and Rock Quarried,<sup>2</sup> by Provinces, 1956-60

Province	1956	1957	1958	1959	1960
Newfoundland	9,593,643	10,541,432	7,378,993	7,484,035	8,813,738
Prince Edward Island	...	...	...	1,700,000	750,000
Nova Scotia	4,906,251	4,651,545	3,813,655	6,716,003	5,501,198
New Brunswick	2,475,039	1,963,614	2,541,459	2,445,856	2,218,264
Quebec	57,611,096	63,806,273	83,308,929	76,233,819	84,103,471
Ontario	56,233,453	64,686,691	62,871,982	76,170,363	77,205,171
Manitoba	3,181,611	3,417,325	2,905,751	2,876,546	3,072,092
Saskatchewan	1,514,292	2,524,231	2,895,002	3,175,234	2,640,733
Alberta	1,013,726	1,087,703	940,827	1,448,604	1,016,705
British Columbia	13,009,058	12,840,216	9,473,193	10,548,299	12,045,516
Northwest Territories	675,083	748,205	762,169	819,923	834,751
Yukon	184,652	187,925	177,222	176,081	176,107
<b>Canada (excluding coal)</b>	<b>150,398,104</b>	<b>166,455,160</b>	<b>157,069,182</b>	<b>189,796,763</b>	<b>199,377,746</b>

<sup>1</sup> Excluding uranium ore prior to 1956.<sup>2</sup> Sand and gravel, sodium sulphate, etc., which are not actually mined or blasted are not included.

TABLE 20. Yearly Average Prices of Copper, Lead, Zinc and Silver, 1941-60  
(Copper, lead and zinc in U.S. cents per pound; silver, U.S. cents per ounce)

Year	Copper New York	Lead New York	Zinc St. Louis	Silver New York	Year	Copper New York	Lead New York	Zinc St. Louis	Silver New York
	Yearly average	Yearly average	Yearly average <sup>1</sup>	Yearly average <sup>2</sup>		Yearly average	Yearly average	Yearly average <sup>1</sup>	Yearly average <sup>2</sup>
1941 .....	11.797	5.793	8.474	34.783	1951 .....	24.200	17.500	18.000	89.368
1942 .....	11.775	6.481	8.250	38.333	1952 .....	24.200	16.467	16.215	84.941
1943 .....	11.775	6.500	8.250	44.750	1953 .....	28.798	13.489	10.855	85.188
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	69.044
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	12.948	91.375

<sup>1</sup> Prime western grade.<sup>2</sup> 1937-59 for other than newly-mined domestic.

Source: "American Bureau of Metal Statistics".

TABLE 21. Average Annual Metal Prices, in Canadian Dollars, 1941-60

Year	Gold	Silver	Copper	Lead	Zinc	Year	Gold	Silver	Copper	Lead	Zinc
	Troy oz.	Troy oz.	Pound	Pound <sup>1</sup>	Pound <sup>1</sup>		Troy oz.	Troy oz.	Pound	Pound <sup>2</sup>	Pound <sup>2</sup>
dollars											
1941 .....	38.50	0.3826	0.101	0.034	0.034	1951 .....	36.85	0.9455	0.277	0.184	0.199
1942 .....	38.50	0.4216	0.101	0.034	0.034	1952 .....	34.27	0.8352	0.2854	0.1619	0.1746
1943 .....	38.50	0.4525	0.1175	0.0375	0.040	1953 .....	34.42	0.8401	0.2994	0.1293	0.1196
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 .....	38.00	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

<sup>1</sup> Based on New York; 1933-42 based on London.<sup>2</sup> Based on London; prices controlled by Government 1939-47. Based on New York 1947-50. Montreal prices in 1951-60.

TABLE 22. Production of Leading Mineral Products, by Months, 1958-60

No.		Asbestos tons	Cement tons	Clay products \$	Coal tons	Copper pounds	Gold ounces	Gypsum tons
1958								
1	January .....	57,450	218,199	1,933,788	1,296,690	65,736,378	378,414	260,158
2	February .....	53,949	183,123	1,392,901	1,172,251	61,336,142	360,385	209,564
3	March .....	55,178	312,048	2,873,329	940,121	68,477,172	394,247	249,554
4	April .....	83,477	422,752	3,185,496	850,434	65,284,103	385,183	251,180
5	May .....	70,883	665,429	4,160,858	823,114	64,742,399	384,649	321,336
6	June .....	73,995	719,926	4,140,795	684,469	64,336,378	385,810	318,301
7	July .....	87,377	752,762	4,730,946	697,365	61,762,123	382,250	382,253
8	August .....	85,785	721,140	4,185,781	409,707	61,234,633	369,728	365,503
9	September .....	88,992	737,622	4,514,831	937,015	54,891,449	378,022	423,659
10	October .....	98,392	696,722	4,511,151	1,259,348	44,615,189	404,328	427,060
11	November .....	107,072	493,674	3,802,063	1,239,146	40,161,993	371,146	371,343
12	December .....	62,781	230,024	2,277,964	1,377,450	37,649,449	377,185	384,218
13	Totals .....	925,331	6,153,421	41,709,903	11,687,110	690,227,408	4,571,347	3,964,129
1959								
14	January .....	54,523	187,853	1,792,293	1,279,791	48,642,147	376,086	313,040
15	February .....	60,084	209,242	1,899,452	920,531	55,337,583	358,052	235,991
16	March .....	69,902	292,162	3,158,914	704,061	64,158,223	378,398	388,869
17	April .....	98,139	445,685	3,465,510	780,061	63,564,242	376,795	488,029
18	May .....	91,257	651,778	4,127,966	570,332	64,548,851	380,019	562,120
19	June .....	98,012	781,363	4,646,838	609,637	73,263,256	359,004	694,142
20	July .....	94,898	829,108	4,890,632	719,652	71,439,415	379,010	617,683
21	August .....	91,929	725,836	4,447,390	482,537	69,386,141	349,470	630,100
22	September .....	98,363	746,530	4,211,673	956,274	70,775,680	363,988	654,242
23	October .....	96,529	678,135	4,080,156	1,232,921	71,264,100	396,725	544,727
24	November .....	124,839	452,977	3,394,934	1,222,462	69,813,746	388,812	400,586
25	December .....	71,954	283,817	2,399,690	1,148,463	68,345,276	377,057	348,601
26	Totals .....	1,050,429	6,284,486	42,515,448	10,626,722	790,538,660	4,483,416	5,878,630
1960								
27	January .....	65,585	176,374	1,630,084	1,125,102	72,208,908	378,073	322,122
28	February .....	67,630	208,914	1,854,392	1,034,364	71,048,400	372,664	328,035
29	March .....	71,579	282,165	2,489,367	1,054,242	77,208,871	390,031	295,215
30	April .....	96,053	324,123	2,585,679	690,798	69,333,484	367,830	310,254
31	May .....	106,214	569,709	3,552,065	676,236	74,521,806	380,128	468,740
32	June .....	100,561	709,585	4,137,178	690,690	74,690,955	389,082	520,889
33	July .....	92,529	697,071	4,147,865	719,684	74,304,756	397,487	586,124
34	August .....	103,286	750,473	4,156,256	593,387	75,411,127	383,933	571,451
35	September .....	105,689	709,506	4,049,706	1,038,760	68,538,742	371,717	447,240
36	October .....	100,242	638,671	3,873,165	1,140,899	71,524,652	405,479	549,929
37	November .....	147,729	482,430	3,753,126	1,260,875	75,041,474	395,215	473,502
38	December .....	61,359	238,204	1,997,655	986,101	74,690,921	397,272	332,230
39	Totals .....	1,118,456	5,787,225	38,226,538	11,011,138	878,524,096	4,628,911	5,205,731

Notes: Data for the years 1929-49 are shown in General Review of the Mining Industry, 1949.  
 Data for the years 1950-52 are shown in General Review of the Mining Industry, 1952.

TABLE 22. Production of Leading Mineral Products, by Months, 1958-60

Iron ore	Lead	Lime	Natural gas	Nickel	Petroleum	Salt	Silver	Zinc	No.
tons	pounds	tons	Mcf.	pounds	barrels	tons	ounces	pounds	
181,203	34,134,753	120,954	30,937,476	33,309,588	15,317,635	162,627	2,530,583	75,790,860	1
79,005	29,815,854	118,918	29,196,932	31,681,113	14,463,517	154,303	2,305,655	68,259,259	2
94,186	30,741,918	132,331	31,528,723	31,595,453	14,458,269	139,360	2,459,698	75,507,526	3
232,613	31,708,743	125,492	27,103,366	30,115,976	12,041,659	120,322	2,574,958	69,667,129	4
1,468,395	30,693,692	140,165	22,845,606	30,352,950	12,560,841	195,234	2,656,665	69,983,441	5
2,258,660	31,690,563	122,993	19,833,422	29,096,809	12,452,465	183,473	2,536,018	68,975,483	6
2,484,919	28,551,140	133,974	20,341,023	25,592,033	14,682,674	192,977	2,390,687	70,478,151	7
2,477,418	24,919,231	127,014	21,753,125	25,034,292	13,818,523	195,853	2,889,154	70,899,396	8
2,337,390	31,302,473	131,848	24,917,691	23,512,369	13,152,510	226,010	2,841,304	70,426,675	9
2,361,979	29,528,644	152,450	30,162,501	6,739,472	13,415,155	274,735	2,375,156	70,215,356	10
1,238,254	33,841,886	151,052	36,816,586	5,778,365	13,525,248	244,529	2,649,515	70,404,431	11
512,301	36,432,069	139,231	42,367,275	6,308,502	15,607,700	285,769	2,954,077	69,589,865	12
15,726,323	373,360,966	1,596,422	337,803,726	279,117,422	165,496,196	2,375,192	31,163,470	850,197,572	13
381,456	35,161,473	130,613	43,671,883	16,143,671	16,913,268	305,030	3,094,440	70,626,336	14
237,904	32,772,058	126,170	36,891,926	25,281,073	15,775,074	297,970	2,264,903	59,559,393	15
190,601	35,703,185	134,082	36,802,903	29,893,110	15,866,089	228,131	2,782,307	68,165,472	16
790,732	33,400,819	136,421	32,714,238	31,036,580	13,391,619	200,961	2,691,503	66,153,874	17
2,252,136	34,551,579	141,467	30,963,341	33,294,227	13,765,094	225,516	2,499,149	67,184,455	18
2,537,649	30,862,266	137,855	27,033,535	33,248,177	14,935,902	217,561	2,676,937	65,941,889	19
2,595,378	31,148,739	138,334	26,184,271	32,437,693	15,233,140	264,581	2,867,957	69,240,343	20
3,240,846	39,133,508	129,847	28,359,136	33,607,103	15,875,560	266,872	2,519,033	67,369,063	21
4,139,555	25,766,722	150,140	29,907,261	32,450,942	16,461,754	276,110	2,446,846	64,179,386	22
3,754,282	28,842,228	163,943	36,127,423	34,464,418	15,123,550	366,281	3,072,219	66,646,859	23
2,696,274	26,989,253	153,381	41,877,469	33,831,177	14,324,835	343,662	2,334,137	61,329,498	24
671,512	29,059,631	143,472	46,801,144	37,422,055	17,112,612	297,301	2,674,538	65,618,655	25
24,488,325	373,391,461	1,685,725	417,334,527	373,110,226	184,778,497	3,289,976	31,923,969	792,015,223	26
509,762	32,568,482	131,122	50,535,935	34,797,564	18,182,262	329,734	2,800,069	69,959,942	27
299,023	32,793,483	129,967	46,141,890	32,870,647	15,740,455	291,254	2,879,074	64,619,056	28
219,619	33,774,201	141,438	49,469,928	35,561,076	17,165,544	265,312	2,754,583	72,798,095	29
352,924	32,538,044	126,463	41,296,338	35,048,813	14,490,211	197,347	2,603,829	70,581,996	30
2,706,842	33,116,345	128,499	39,443,048	34,413,239	16,541,558	241,374	2,369,657	66,723,556	31
3,394,329	35,067,377	124,851	35,680,979	36,763,682	15,729,200	243,040	2,996,473	67,349,040	32
3,689,827	36,078,462	122,179	34,057,816	34,997,568	16,025,491	246,461	2,944,664	63,421,597	33
3,671,885	33,600,855	126,214	34,457,225	38,284,934	15,082,841	264,054	2,675,109	66,251,360	34
2,764,404	33,618,181	129,880	36,448,582	36,477,877	15,396,659	280,286	2,494,268	70,193,257	35
2,435,336	32,494,531	131,195	44,166,193	36,010,839	14,273,656	322,421	2,904,221	71,014,047	36
966,019	34,664,772	127,962	50,934,633	35,357,748	14,754,804	343,262	3,082,228	66,219,053	37
540,860	40,785,718	109,798	60,319,760	38,428,720	16,151,540	290,375	3,512,654	64,614,342	38
21,550,830	411,300,451	1,529,568	522,972,327	429,012,707	189,534,221	3,314,920	34,016,829	813,745,341	39

Notes: Data for the years 1953-55 are shown in General Review of the Mining Industry, 1955.  
 Data for the years 1955-57 are shown in General Review of the Mining Industry, 1957.

## MINERAL STATISTICS

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1956-60

Year	Establishments <sup>1</sup>	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products <sup>2</sup>	Net value added by processing <sup>3</sup>						
							number						
Metal mining industries													
Placer gold mines													
1956	64	250	1,378,166	81,639	451,933	2,594,312	2,026,790						
1957	57	243	1,180,225	55,472	353,186	2,573,853	2,116,716						
1958	112	236	1,253,362	63,007	461,375	3,049,743	2,484,524						
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						
Gold quartz mines													
1956	133	17,031	62,701,494	6,830,676	22,725,750	127,983,495	97,011,062						
1957	147	16,911	63,708,680	6,771,686	22,705,425	127,055,902	95,991,241						
1958	127	16,811	64,205,042	7,134,399	18,013,121	133,988,004	107,140,993						
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						
Copper-gold-silver mines													
1956	314	10,533	43,929,096	4,620,541	15,594,327	147,187,431	98,941,696						
1957	261	10,359	46,694,352	4,942,600	15,297,346	119,013,141	68,694,057						
1958	244	8,875	39,745,243	4,428,653	15,968,361	133,778,148	77,993,264						
1959	310	9,682	43,460,641	4,948,483	12,948,618	147,752,990	90,660,009						
1960	277	10,549	46,950,982	6,546,557	17,989,123	172,254,034	103,754,616						
Silver-cobalt mines													
1956	15	694	2,415,545	252,055	339,767	4,563,402	3,502,093						
1957	12	598	2,209,805	256,694	353,026	4,314,088	3,105,688						
1958	12	570	2,115,670	241,027	320,403	4,792,545	3,633,390						
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						
Silver-lead-zinc mines													
1956	96	6,338	27,253,247	3,452,621	8,215,578	142,920,691	86,604,019						
1957	83	5,844	26,256,837	2,992,834	11,360,204	115,961,445	59,485,349						
1958	62	4,485	20,763,855	2,208,845	9,092,759	98,152,340	46,166,133						
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						
Nickel-copper mines													
1956	55	11,672	55,486,888	3,030,633	14,931,835	103,616,192	82,735,929						
1957	85	12,124	59,807,695	3,810,592	18,049,861	110,427,956	84,148,711						
1958	47	9,243	47,190,007	2,990,800	11,190,722	79,814,539	61,164,999						
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						
Iron mines													
1956	40	6,469	29,249,650	5,950,687	8,412,065	160,362,118	99,606,720						
1957	60	7,770	36,288,939	6,218,370	10,312,348	167,221,425	102,701,537						
1958	59	7,404	36,032,817	6,750,140	8,477,634	126,131,181	79,175,569						
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						
Miscellaneous metal mines <sup>4</sup>													
1956	169	4,377	20,532,485	4,191,314	8,638,200	54,494,426	40,781,866						
1957	139	8,705	42,386,402	6,539,935	20,949,018	144,689,661	115,788,076						
1958	91	14,375	78,320,507	9,293,152	50,827,573	284,367,777	223,484,942						
1959	84	13,645	76,604,136	9,023,750	57,982,723	333,770,291	285,835,151						
1960	68	9,380	54,453,208	7,570,803	40,059,514	273,409,628	224,482,268						
Totals, metal mining industries													
1956	886	57,564	242,946,571	28,410,166	79,309,475	743,722,067	509,210,175						
1957	844	62,554	278,532,935	31,588,383	99,380,414	791,257,471	532,031,375						
1958	754	61,999	289,629,503	32,110,023	114,351,948	864,084,277	601,243,814						
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	1,003,685,731	706,058,535						

See footnotes at end of table.

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1956-60 - Continued

Year	Establishments <sup>1</sup>	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of product <sup>2</sup>	Net value added by processing <sup>3</sup>						
							number						
Non-metal mining industries													
Asbestos													
1956	23	7,065	30,411,878	5,541,309	12,335,772	103,304,309	85,427,228						
1957	22	7,357	32,283,287	6,008,420	14,558,214	108,014,041	87,447,407						
1958	22	6,997	32,025,137	5,740,515	12,798,276	95,271,323	76,732,532						
1959	23	6,653	31,448,638	5,951,664	13,729,736	110,996,692	91,315,292						
1960	24	6,888	33,057,847	6,133,788	14,887,770	125,236,902	104,215,344						
Feldspar, quartz and nepheline syenite													
1956	30	502	1,792,484	352,067	309,799	6,017,744	5,258,255						
1957	28	450	1,737,907	373,304	556,356	6,495,258	5,310,235						
1958	35	450	1,804,827	389,008	617,720	5,555,582	4,382,352						
1959	37	509	2,079,284	421,623	753,378	6,798,366	5,397,136						
1960	34	450	1,815,822	344,866	615,133	6,519,961	5,396,568						
Gypsum													
1956	15	1,030	3,317,673	454,428	1,903,098	7,260,236	4,902,710						
1957	13	816	2,653,320	468,366	1,440,177	7,745,105	5,836,562						
1958	13	627	2,300,288	424,164	841,785	5,189,159	3,923,210						
1959	15	674	3,228,713	488,175	710,686	8,393,703	7,194,842						
1960	14	791	2,916,355	474,680	584,727	9,498,711	8,439,304						
Iron oxides (ochres)													
1956	3	29	49,669	6,055	5,465	191,145	152,400						
1957	3	26	64,011	22,402	5,627	192,388	141,288						
1958	3	17	31,918	14,718	3,228	116,343	98,397						
1959	1	16	45,275	18,400	3,527	111,388	89,461						
Included in miscellaneous non-metal mines													
Mica													
1956	23	23	37,673	4,796	4,045	97,049	88,208						
1957	25	45	66,283	5,585	7,411	113,458	100,462						
1958	25	28	44,848	5,039	4,483	90,643	81,121						
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						
Peat													
1956	38	1,274	2,538,885	175,351	1,251,702	5,451,305	4,024,252						
1957	35	1,168	2,542,210	182,987	1,283,093	5,898,696	4,432,616						
1958	38	1,447	2,484,732	180,976	1,445,196	6,185,375	4,559,203						
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						
Salt													
1956	13	785	2,740,685	988,301	2,465,982	14,007,188	10,552,905						
1957	12	800	3,118,482	1,141,665	2,501,549	15,842,049	12,198,835						
1958	13	795	3,183,245	1,069,615	2,748,081	16,957,157	13,139,481						
1959	15	844	3,484,430	1,193,656	3,419,626	20,224,407	15,843,873						
1960	14	892	3,873,168	1,124,189	3,297,803	21,394,099	16,972,107						
Talc and soapstone													
1956	4	67	169,120	30,490	83,043	429,335	315,802						
1957	4	77	222,287	35,427	107,298	512,724	369,999						
1958	4	76	213,576	36,033	105,097	519,781	378,651						
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						
Miscellaneous non-metal mines													
1956	60	1,773	6,069,934	2,073,573	1,936,327	15,813,812	11,692,288						
1957	50	1,571	5,673,243	1,909,893	1,597,660	14,278,289	10,723,739						
1958	40	1,223	4,806,084	1,681,441	1,087,514	11,942,125	9,110,412						
1959	38	1,409	5,711,543	1,658,404	1,560,540	13,834,287	10,367,213						
1960	46	1,122	4,548,789	1,859,585	1,004,699	10,773,462	7,600,509						
Totals, non-metal mining industries													
1956	209	12,548	47,128,001	9,631,370	20,295,233	152,572,123	122,414,048						
1957	192	12,310	48,361,030	10,148,049	22,057,385	159,092,008	126,561,143						
1958	193	11,660	46,894,653	9,541,309	19,651,380	141,827,488	112,405,339						
1959	186	11,719	48,879,481	10,213,632	21,993,327	168,929,022	136,427,704						
1960	205	11,206	49,545,887	10,256,225	22,321,065	182,021,706	148,972,355						

See footnotes at end of table.

## MINERAL STATISTICS

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1956-60 - Continued

Year	Establishments <sup>1</sup>	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products <sup>2</sup>	Net value added by processing <sup>3</sup>
	number				dollars		
Fuels industries							
Coal							
1956 .....	185	16,095	49,468,237	5,141,388	11,175,928	95,349,763	79,032,447
1957 .....	170	14,569	47,222,273	4,862,774	11,449,260	90,220,670	73,908,636
1958 .....	158	13,162	42,250,458	4,967,177	10,786,747	79,963,327	64,209,403
1959 .....	133	11,485	37,122,895	4,281,690	10,705,703	73,875,895	58,888,502
1960 .....	129	11,587	38,734,834	4,313,868	11,720,197	74,676,240	58,642,175
Petroleum and natural gas							
1956 .....	16,626	8,092	36,352,639	4,806,832	9,087,274	417,565,776	403,671,670
1957 .....	18,885	7,821	36,302,114	5,970,451	10,691,980	465,324,929	448,662,498
1958 .....	19,854	7,064	33,316,006	6,403,564	10,266,907	423,776,203	407,105,732
1959 .....	21,557	6,721	33,701,648	7,420,435	9,661,761	455,516,896	438,434,650
1960 .....	637	5,371	27,981,429	6,354,667	10,957,811	470,698,603	453,386,125
Natural gas processing							
1960 .....	30	669	3,790,433	1,288,028	25,624,323	45,762,880	18,850,529
Totals, fuels industries							
1956 .....	16,811	24,187	85,820,926	9,948,220	20,263,202	512,915,539	482,704,117
1957 .....	19,055	22,390	83,524,387	10,833,225	22,141,240	555,345,599	522,571,134
1958 .....	20,012	20,226	75,566,464	11,370,741	21,053,654	503,739,530	471,315,135
1959 .....	21,690	18,206	70,824,543	11,702,175	20,367,464	529,392,791	497,323,152
1960 .....	796	17,627	70,506,746	11,956,563	48,302,331	591,137,723	530,878,829
Structural materials							
Sand and gravel							
1956 .....	8,311	4,627	14,994,414	3,095,393	936,646	81,957,352	77,925,313
1957 .....	8,589	5,997	18,162,499	3,498,423	934,067	91,939,354	87,506,864
1958 .....	7,832	5,957	18,225,999	3,832,843	530,034	96,282,363	91,919,486
1959 .....	8,101	6,316	19,522,393	4,229,401	827,962	104,651,461	99,594,098
1960 .....	1,769	3,281	12,532,183	3,683,641	788,217	52,543,181	48,071,323
Stone							
1956 .....	523	4,142	13,513,965	2,463,126	3,945,537	48,809,918	42,401,255
1957 .....	583	4,331	14,552,950	2,949,437	4,201,890	59,197,662	52,046,335
1958 .....	583	4,067	14,014,488	2,945,744	5,164,672	55,582,929	47,472,513
1959 .....	613	3,873	13,936,905	3,090,530	5,129,431	60,958,784	52,738,823
1960 .....	265	3,575	13,275,183	2,987,639	4,965,599	44,379,079	36,425,851
Totals, structural materials							
1956 .....	8,834	8,769	28,508,379	5,558,519	4,882,183	130,767,270	120,326,568
1957 .....	9,175	10,318	32,715,449	6,447,860	5,135,957	151,137,016	139,553,199
1958 .....	8,415	10,024	32,240,487	6,778,587	5,694,706	151,865,292	139,391,999
1959 .....	8,714	10,189	33,459,298	7,319,931	5,957,393	165,610,245	152,332,921
1960 .....	2,034	6,856	25,807,366	6,671,280	5,753,806	96,922,260	84,497,174
Totals, mining industries							
1956 .....	26,740	103,068	404,403,877	53,548,275	124,750,093	1,539,976,999	1,234,654,908
1957 .....	29,263	107,572	443,133,801	58,987,517	148,714,996	1,657,032,094	1,320,716,851
1958 .....	29,374	103,909	444,331,107	59,800,860	160,751,688	1,661,516,587	1,324,356,287
1959 .....	31,412	103,985	460,094,738	63,787,186	172,258,872	1,887,593,593	1,512,715,009
1960 .....	3,713	97,571	453,902,607	67,045,465	205,830,878	1,873,777,420	1,470,406,803

See footnotes at end of table.

TABLE 23. Principal Statistics of the Mineral Industry, by Industries, 1956-60 - Concluded

Year	Establishments <sup>1</sup>	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Gross value of products <sup>2</sup>	Net value added by processing <sup>3</sup>
		number			dollars		
Industries classified as manufacturing							
Smelting and refining							
1956 .....	23	30,788	130,139,944	64,942,503	820,604,322 <sup>4</sup>	1,396,565,178	511,018,353
1957 .....	23	29,613	134,775,206	59,474,791	770,004,696 <sup>5</sup>	1,280,145,652	450,666,165
1958 .....	25	26,959	131,081,250	63,522,398	693,796,744 <sup>6</sup>	1,135,770,506	378,451,364
1959 .....	24	27,746	137,227,215	62,320,376	815,787,699 <sup>6</sup>	1,307,998,841	429,888,766
1960 .....	23	29,708	153,682,338	63,268,058	924,379,442 <sup>6</sup>	1,495,177,517	507,530,017
Clay products							
1956 .....	119	4,418	14,793,971	6,212,519	1,123,043	37,784,980	30,449,418
1957 .....	111	4,067	13,963,399	6,020,971	958,936	35,922,158	28,942,251
1958 .....	113	4,075	14,847,054	6,457,139	1,065,692	41,709,903	34,187,072
1959 .....	116	4,250	15,972,945	6,446,705	1,371,977	42,515,448	35,592,292
1960 .....	113	3,778	14,167,660	5,679,567	1,284,138	38,033,788	31,944,022
Cement							
1956 .....	17	3,186	12,856,855	15,763,605	12,784,027	78,605,846	50,058,214
1957 .....	17	3,465	15,317,388	19,692,658	16,193,942	97,079,041	61,192,441
1958 .....	19	3,428	15,891,560	19,009,008	14,758,308	99,943,850	66,176,534
1959 .....	19	3,421	16,435,823	17,309,329	13,269,944	98,777,937	67,612,521
1960 .....	20	3,306	16,463,617	15,965,171	11,294,254	96,769,665	69,616,378
Lime							
1956 .....	38	1,100	3,853,007	3,670,384	1,235,969	16,462,331	11,555,978
1957 .....	39	1,152	3,982,533	4,154,766	1,277,317	17,528,782	12,096,899
1958 .....	40	1,169	4,348,674	4,865,236	1,367,999	20,261,610	14,028,375
1959 .....	40	1,245	4,779,369	5,058,570	1,455,072	22,130,956	15,602,172
1960 .....	25	950	3,943,889	2,874,777	1,010,426	11,874,520	8,015,022
Totals, industries classified as manufacturing							
1956 .....	197	39,492	161,643,777	90,589,011	835,747,361	1,529,418,335	603,081,963
1957 .....	190	38,297	168,038,526	89,343,186	788,434,891	1,430,675,633	552,897,556
1958 .....	197	35,631	166,168,536	93,853,781	710,988,743	1,297,685,869	492,843,345
1959 .....	199	36,662	174,415,352	91,132,980	831,884,692	1,471,421,182	548,695,751
1960 .....	181	37,742	188,257,504	87,787,573	937,968,260	1,641,855,490	617,105,439
GRAND TOTALS, ALL MINERAL INDUSTRIES							
Recorded for reference purposes							
1956 .....	26,937	142,560	566,047,654	144,137,286	960,497,454		1,837,736,871
1957 .....	29,453	145,869	611,172,327	148,360,703	937,149,887		1,837,614,407
1958 .....	29,571	139,540	610,466,645	154,654,641	871,740,431		1,817,199,632
1959 .....	31,811	140,647	634,510,090	154,920,166	1,004,143,564		2,061,643,508
1960 .....	3,894	135,313	642,160,111	154,833,038	1,143,799,138		2,087,412,332

<sup>1</sup> 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.

<sup>2</sup> 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.

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

<sup>4</sup> Includes data of uranium mines. Data not available for 1941-53.

<sup>5</sup> Cost of ores and concentrates are included in smelting and refining data.

Note: The number of producing metal mines was as follows: in 1956: 252; in 1957: 265; in 1958: 314; in 1959: 292; in 1960: 244

## MINERAL STATISTICS

**TABLE 24. Principal Statistics of the Mineral Industry, by Provinces, 1956-60**  
 Excluding the manufacturing group

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Net value added by processing <sup>1</sup>
			number	dollars		
Newfoundland						
1956	970	4,859	18,534,748	1,755,663	4,039,747	51,332,044
1957	859	4,550	17,971,391	1,621,664	4,053,422	45,561,774
1958	374	4,379	17,899,856	1,935,732	4,465,906	36,854,535
1959	387	3,864	15,371,776	1,857,201	3,254,879	46,184,723
1960	21	4,001	19,023,157	2,489,728	7,178,381	49,118,525
Prince Edward Island						
1959	67	72	155,525	36,383	6,587	4,516,221
1960	5	21	41,081	16,786	4,253	95,676
Nova Scotia						
1956	639	11,670	34,142,361	3,519,881	10,053,958	51,542,674
1957	631	10,643	34,346,058	3,320,232	10,183,863	53,854,049
1958	645	10,074	32,867,868	3,589,214	9,590,313	48,563,334
1959	655	8,960	28,460,960	3,011,562	9,002,844	49,788,898
1960	65	9,075	29,652,324	3,157,260	10,110,488	45,820,142
New Brunswick						
1956	558	2,156	6,217,413	926,282	1,456,911	12,027,844
1957	544	1,925	6,161,829	1,153,280	2,930,783	12,856,330
1958	252	1,392	4,163,399	924,142	1,694,308	9,168,038
1959	238	1,421	4,083,577	788,235	2,206,380	11,621,998
1960	65	1,353	4,208,062	795,858	2,517,128	8,343,999
Quebec						
1956	4,258	22,813	86,786,675	13,371,063	31,373,145	243,073,543
1957	4,609	25,010	97,077,826	15,392,704	32,094,727	238,224,980
1958	4,389	23,377	93,701,498	14,637,565	31,614,693	220,238,245
1959	4,653	24,284	100,616,564	16,115,346	34,536,422	269,392,232
1960	1,923	21,860	98,492,413	17,219,002	45,197,551	246,062,291
Ontario						
1956	6,224	35,002	142,816,422	17,979,039	42,840,066	253,245,870
1957	6,816	39,262	170,654,047	20,454,808	59,640,511	317,712,877
1958	6,568	41,142	187,854,030	23,145,416	73,934,093	410,145,632
1959	6,435	42,403	201,996,103	23,918,310	90,005,829	496,097,370
1960	748	39,292	192,398,379	22,676,908	77,995,633	452,002,238
Manitoba						
1956	1,072	2,399	10,352,068	1,261,313	2,849,189	27,888,298
1957	1,203	2,378	10,575,605	1,235,212	4,035,200	28,069,791
1958	1,279	2,366	11,168,753	1,117,084	2,681,070	29,403,723
1959	1,237	2,146	9,693,142	1,005,053	2,446,508	26,162,962
1960	93	2,716	13,009,793	3,498,394	2,935,284	24,468,139

See footnote at end of table.

**TABLE 24. Principal Statistics of the Mineral Industry, by Provinces, 1956-60 — Concluded**  
Excluding the manufacturing group

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity <sup>2</sup>	Cost of process supplies, ores and containers	Net value added by processing <sup>1</sup>
						number
Saskatchewan						
1956 .....	3,047	4,171	19,961,741	4,011,939	6,598,830	77,282,056
1957 .....	3,767	4,994	24,982,237	4,507,701	9,163,760	131,270,147
1958 .....	4,067	5,038	26,296,412	4,512,917	13,378,151	160,069,661
1959 .....	4,664	5,194	27,309,697	4,950,409	10,958,830	161,616,197
1960 .....	186	4,077	22,004,589	4,289,613	11,165,671	164,567,975
Alberta						
1956 .....	6,794	8,461	35,638,286	4,492,368	7,347,363	381,904,338
1957 .....	9,632	7,580	31,837,222	5,334,458	6,416,027	379,175,874
1958 .....	10,503	6,939	29,494,064	5,592,291	8,578,802	310,109,979
1959 .....	11,679	6,493	30,137,516	6,360,033	8,627,203	337,600,286
1960 .....	315	6,537	31,286,347	6,943,963	26,082,992	353,401,720
British Columbia						
1956 .....	1,062	9,645	39,673,941	4,057,489	14,748,464	109,815,701
1957 .....	1,089	9,180	37,868,327	3,711,555	16,354,939	88,977,610
1958 .....	1,162	7,276	29,925,829	3,032,643	10,717,728	73,639,787
1959 .....	1,253	7,204	31,917,610	3,339,369	7,560,556	81,787,238
1960 .....	241	6,840	33,072,802	3,732,026	18,747,154	97,380,994
Northwest Territories						
1956 .....	81	1,111	5,679,522	1,386,024	2,346,839	18,244,965
1957 .....	80	1,255	7,239,682	1,536,319	1,709,536	18,311,041
1958 .....	80	1,203	6,862,291	1,688,916	2,337,278	19,490,095
1959 .....	86	1,180	6,717,354	1,732,576	2,513,256	20,493,199
1960 .....	16	1,056	6,344,215	1,479,700	1,953,648	22,445,908
Yukon						
1956 .....	35	781	4,600,700	787,234	1,095,581	8,297,575
1957 .....	33	795	4,419,577	749,584	2,132,228	6,702,488
1958 .....	55	723	4,097,107	624,940	1,758,715	6,673,258
1959 .....	58	764	3,634,914	672,729	1,141,578	7,486,433
1960 .....	35	743	4,369,445	746,227	1,942,695	6,679,286
Canada						
1956 .....	26,740	103,068	404,403,877	53,548,275	124,750,093	1,234,654,908
1957 .....	29,263	107,572	443,133,801	59,017,517	148,714,896	1,320,716,851
1958 .....	29,374	103,909	444,331,107	60,800,860	160,751,688	1,324,356,287
1959 .....	31,412	103,985	460,094,738	63,787,186	172,258,872	1,512,947,757
1960 .....	3,713	97,571	453,902,607	67,045,465	205,830,878	1,470,406,893

<sup>1</sup> Gross value less cost of fuel, electricity, process supplies, containers, ores, freight and treatment charges.<sup>2</sup> Includes fuel and electricity used for metallurgical purposes.

Note: Plants in the provinces do not add to Canada total, as a plant which is located on the Manitoba-Saskatchewan boundary is counted but once.

## MINERAL STATISTICS

**TABLE 25. Principal Statistics of the Mineral Industry, by Provinces, 1956-60**  
Including the manufacturing group

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies, ores and containers	Net value added by processing <sup>1</sup>
Newfoundland						
1956 .....	972	5,032	19,053,143	2,087,184	4,237,315	52,661,275
1957 .....	861	4,694	18,474,608	1,885,222	4,189,974	46,471,402
1958 .....	376	4,509	18,312,005	2,186,071	4,577,741	37,713,764
1959 .....	389	4,001	15,847,209	2,161,384	3,430,038	47,284,499
1960 .....	23	4,150	19,561,532	2,792,374	7,388,619	50,441,595
Prince Edward Island						
1959 .....	67	72	155,525	36,363	6,587	4,516,221
1960 .....	5	21	41,081	16,786	4,253	95,676
Nova Scotia						
1956 .....	645	11,897	34,753,648	3,896,193	10,082,506	52,334,682
1957 .....	637	10,827	34,924,921	3,677,795	10,226,192	54,799,518
1958 .....	652	10,223	33,326,405	3,925,702	9,597,098	49,729,597
1959 .....	661	9,129	28,979,644	3,368,161	9,010,574	51,132,974
1960 .....	70	9,226	30,124,520	3,458,075	10,117,816	47,199,604
New Brunswick						
1956 .....	565	2,456	7,166,887	1,917,575	1,809,042	14,638,724
1957 .....	551	2,222	7,136,701	2,108,384	2,319,156	15,501,549
1958 .....	259	1,683	5,177,279	1,812,887	1,953,614	12,014,056
1959 .....	245	1,733	5,164,218	1,593,151	2,585,649	14,309,750
1960 .....	72	1,649	5,317,040	1,608,411	2,888,849	11,069,269
Quebec						
1956 .....	4,296	36,976	143,450,586	55,640,510	427,318,028	456,301,953
1957 .....	4,646	37,540	150,599,715	52,969,621	323,464,111	412,047,336
1958 .....	4,429	37,017	158,048,309	58,011,234	373,866,652	396,436,065
1959 .....	4,694	36,954	162,161,262	54,289,916	407,402,542	437,407,511
1960 .....	1,959	35,747	170,161,179	54,525,891	493,818,254	447,876,323
Ontario						
1956 .....	6,314	49,308	202,904,431	47,167,413	347,302,902	523,509,563
1957 .....	6,904	54,252	237,322,355	53,616,842	420,083,408	597,907,855
1958 .....	6,658	53,581	244,564,865	52,089,970	327,034,294	627,266,446
1959 .....	6,524	57,253	270,896,058	57,783,985	438,601,174	762,156,665
1960 .....	835	54,020	263,231,207	54,156,031	435,605,348	745,583,481
Manitoba						
1956 .....	1,086	3,220	13,170,338	4,141,848	9,201,163	44,835,075
1957 .....	1,217	3,143	13,320,716	3,690,537	10,080,614	38,484,026
1958 .....	1,291	3,012	14,242,266	3,158,803	6,988,805	37,969,545
1959 .....	1,248	2,794	12,440,297	3,229,254	8,095,941	36,284,373
1960 .....	101	3,307	15,642,582	5,613,444	10,634,186	35,042,473

See footnote at end of table.

TABLE 25. Principal Statistics of the Mineral Industry, by Provinces, 1956-60 — Concluded  
Including the manufacturing group

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity <sup>2</sup>	Cost of process supplies, ores and containers	Net value added by processing <sup>1</sup>
Saskatchewan						
1956 .....	3,053	4,826	22,670,036	6,286,590	20,558,091	102,038,999
1957 .....	3,774	5,765	28,233,058	7,254,715	23,517,258	144,563,138
1958 .....	4,074	5,826	29,698,589	7,527,886	27,761,280	177,046,776
1959 .....	4,871	6,022	30,964,910	8,092,572	26,182,281	180,303,184
1960 .....	192	4,859	25,624,175	7,338,799	26,790,220	180,766,391
Alberta						
1956 .....	8,813	10,089	42,098,665	6,417,660	15,689,102	400,305,131
1957 .....	9,648	9,124	38,552,275	7,349,488	15,154,884	397,962,407
1958 .....	10,516	8,380	36,098,821	7,476,452	21,422,083	330,629,051
1959 .....	11,698	8,030	37,369,887	8,432,350	22,524,536	358,778,799
1960 .....	331	8,094	38,649,877	9,026,215	39,777,405	375,022,306
British Columbia						
1956 .....	1,078	16,864	70,494,703	14,409,055	120,856,885	164,568,929
1957 .....	1,103	16,252	70,948,719	13,522,196	122,272,526	140,863,635
1958 .....	1,179	13,383	60,071,708	16,151,780	94,442,871	122,230,976
1959 .....	1,271	12,715	60,178,812	13,527,725	82,649,408	141,489,898
1960 .....	258	12,441	63,093,258	14,071,085	112,877,845	165,289,621
Northwest Territories						
1956 .....	81	1,111	5,679,522	1,386,024	2,346,839	18,244,965
1957 .....	80	1,255	7,239,682	1,536,319	1,709,536	18,311,041
1958 .....	80	1,203	6,862,291	1,688,916	2,337,278	19,490,095
1959 .....	86	1,180	6,717,354	1,732,576	2,513,256	20,493,199
1960 .....	16	1,056	6,344,215	1,479,700	1,953,648	22,445,908
Yukon						
1956 .....	35	781	4,600,700	787,234	1,095,581	8,297,575
1957 .....	33	795	4,419,577	749,584	2,132,228	6,702,488
1958 .....	55	723	4,097,107	624,940	1,758,715	6,673,258
1959 .....	58	764	3,634,914	672,729	1,141,578	7,486,433
1960 .....	35	743	4,369,445	746,227	1,942,695	6,679,286
Canada						
1956 .....	26,837	142,560	566,047,654	144,137,286	960,497,454	1,837,738,871
1957 .....	29,453	145,869	611,172,327	148,360,703	937,149,887	1,873,614,407
1958 .....	29,571	139,540	610,499,645	154,654,641	871,740,431	1,817,199,632
1959 .....	31,611	140,647	634,510,090	154,920,166	1,004,143,564	2,061,643,508
1960 .....	3,894	135,313	642,160,111	154,833,038	1,143,799,138	2,087,512,332

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

<sup>2</sup> Includes fuel and electricity used for metallurgical purposes.

Note: Plants in the provinces do not add to Canada total, as a plant which is located on the Manitoba-Saskatchewan boundary is counted but once.

TABLE 26. Employees and their Earnings in the Mineral Industry, by Industries, 1960

Industry	Employees						Man-hours worked (all employees)	Earnings		
	Office and administrative		Workmen		Total <sup>1</sup>	Office and administrative		Workmen	Total	
	Male	Female	Male	Female						
number										
Metal mining:										
Placer gold .....	9	5	196	3	213	567,383	93,773	1,131,134	1,224,907	
Gold quartz .....	1,653	153	14,677	59	16,542	36,157,872	9,929,000	56,623,906	66,552,906	
Copper-gold-silver .....	1,313	219	8,969	48	10,549	22,541,084	8,512,429	40,428,553	48,940,982	
Silver-cobalt .....	62	5	447	6	520	1,186,773	336,534	1,740,747	2,077,281	
Silver-lead-zinc .....	635	52	3,478	50	4,215	8,984,756	4,198,509	17,105,526	21,304,035	
Nickel-copper .....	1,315	77	11,300	17	12,709	24,796,901	9,821,519	57,682,580	67,504,099	
Iron .....	1,441	229	6,010	74	7,754	17,799,204	10,985,357	34,999,833	45,985,190	
Miscellaneous metals .....	1,568	171	7,616	25	9,380	19,037,034	9,795,299	44,657,909	54,453,208	
Totals .....	7,996	911	52,693	282	61,882	131,071,007	53,672,420	254,370,188	308,042,608	
Non-metalliferous:										
Asbestos .....	946	151	5,557	34	6,688	14,045,314	6,370,096	26,687,751	33,057,847	
Feldspar and quartz .....	85	8	354	3	450	984,819	455,993	1,359,829	1,815,822	
Gypsum .....	117	11	661	2	791	1,611,500	626,591	2,289,764	2,916,355	
Mica .....	1	1	19	—	21	34,904	4,836	33,186	38,022	
Peat .....	47	23	1,073	29	1,172	2,417,903	300,699	2,759,812	3,060,511	
Salt .....	141	31	673	47	892	1,825,871	940,630	2,932,538	3,673,168	
Talc and soapstone .....	15	4	51	—	70	164,519	86,302	149,071	235,373	
Miscellaneous .....	194	22	905	1	1,122	2,283,721	1,144,583	3,404,206	4,548,789	
Totals .....	1,546	251	9,293	116	11,206	23,368,551	9,929,730	39,616,157	49,545,887	
Fuels:										
Coal .....	961	26	10,600	—	11,587	20,417,016	3,352,152	35,382,732	38,734,884	
Petroleum, natural gas .....	1,242	254	3,786	89	5,371	11,183,693	9,113,856	18,867,573	27,981,429	
Natural gas processing .....	152	20	496	1	669	1,404,606	1,010,143	2,780,290	3,790,433	
Totals .....	2,355	300	14,882	90	17,627	33,005,315	13,476,151	57,030,595	70,306,746	
Structural materials:										
Sand and gravel .....	408	73	2,789	11	3,281	7,741,115	1,930,178	10,602,005	12,532,183	
Stone .....	445	52	3,077	1	3,575	8,347,166	2,314,357	10,960,826	13,275,183	
Totals .....	853	125	5,866	12	6,856	16,088,281	4,244,535	21,562,831	25,807,366	
Totals, mineral industry .....	12,750	1,587	82,734	500	97,571	203,533,154	81,322,836	372,579,771	453,902,607	
Manufacturing industries:										
Smelting, refining .....	4,919	655	24,088	46	29,708	62,523,841	34,667,270	119,015,668	153,682,338	
Cement .....	470	79	2,754	3	3,306	6,941,457	3,348,713	13,114,904	18,463,617	
Clay products .....	381	49	3,274	74	3,778	8,274,374	2,178,761	11,988,899	14,167,660	
Lime .....	99	17	833	1	950	2,188,341	512,462	3,431,427	3,943,889	
Totals, manufacturing industries .....	5,869	800	30,949	124	37,742	79,928,013	40,707,206	147,550,298	188,257,504	

<sup>1</sup> Data are not inclusive of all individuals or syndicates engaged in prospecting or general exploration.TABLE 27. Employees and their Earnings in the Mineral Industry, by Provinces, 1960  
Excluding the manufacturing group

Province	Employees						Man-hours worked (all employees)	Earnings		
	Office and administrative		Workmen		Total	Office and administrative		Workmen	Total	
	Male	Female	Male	Female						
number										
Newfoundland .....	633	65	3,260	43	4,001	9,500,346	4,034,718	14,988,439	19,023,157	
Prince Edward Island .....	1	1	19	—	21	37,679	2,000	39,081	41,081	
Nova Scotia .....	791	27	8,239	18	9,075	16,291,451	2,799,919	26,852,405	29,652,324	
New Brunswick .....	76	10	1,267	—	1,353	2,891,358	405,319	3,802,743	4,208,062	
Quebec .....	2,874	471	18,446	69	21,860	47,187,186	18,704,268	79,788,145	98,492,413	
Ontario .....	4,561	444	34,146	141	39,292	81,882,661	30,015,925	162,382,454	192,398,379	
Manitoba .....	449	78	2,155	34	2,716	5,893,931	2,854,485	10,155,308	13,009,793	
Saskatchewan .....	855	137	3,064	21	4,077	8,665,295	5,855,593	16,148,996	22,004,589	
Alberta .....	1,147	200	5,097	93	6,537	13,022,720	7,541,273	23,745,074	31,286,347	
British Columbia .....	1,047	108	5,613	72	6,840	13,714,974	6,851,626	26,221,176	33,072,802	
Northwest Territories .....	241	30	779	6	1,056	2,642,554	1,614,968	4,729,247	6,344,215	
Yukon .....	75	16	649	3	743	1,802,999	642,742	3,726,703	4,369,445	
Canada .....	12,750	1,587	82,734	500	97,571	203,533,154	81,322,836	372,579,771	453,902,607	

TABLE 28. Employees and their Earnings, by Provinces and by Mineral Classes, 1959 and 1960

Province	Metals		Non-metals including salt		Fuels		Stone, sand and gravel		Manufacturing group excluding salt	
	Employees	Earnings	Employees	Earnings	Employees	Earnings	Employees	Earnings	Employees	Earnings
	No.	\$	No.	\$	No.	\$	No.	\$	No.	\$
<b>1959</b>										
Newfoundland .....	3,217	13,057,630	229	846,731	—	—	418	1,467,415	137	475,433
Prince Edward Island .....	—	—	—	—	—	—	72	155,525	—	—
Nova Scotia .....	—	—	1,065	3,701,749	7,535	23,768,542	360	990,669	169	518,684
New Brunswick .....	12	64,792	267	490,861	952	3,000,005	190	527,919	312	1,080,641
Quebec .....	12,584	56,561,004	7,243	31,841,368	—	—	4,457	12,214,192	12,670	61,544,698
Ontario .....	37,225	181,197,797	1,203	5,467,714	740	2,640,762	3,235	12,689,830	14,650	68,899,955
Manitoba .....	1,472	7,480,850	167	533,374	104	537,259	403	1,141,659	648	2,747,155
Saskatchewan .....	3,139	17,461,624	508	2,177,281	1,489	7,456,179	58	214,613	828	3,655,213
Alberta .....	—	—	55	205,810	6,054	28,347,324	384	1,584,382	1,537	7,232,371
British Columbia .....	4,294	20,839,685	982	3,614,593	1,318	4,990,028	612	2,473,094	5,511	28,261,202
Northwest Territories .....	1,169	6,657,527	—	—	11	59,827	—	—	—	—
Yukon .....	759	3,610,297	—	—	5	24,617	—	—	—	—
<b>Canada</b> .....	<b>63,871</b>	<b>306,931,416</b>	<b>11,719</b>	<b>48,879,481</b>	<b>18,206</b>	<b>70,824,543</b>	<b>10,189</b>	<b>33,459,298</b>	<b>36,662</b>	<b>174,415,352</b>
<b>1960</b>										
Newfoundland .....	3,564	17,475,559	330	1,208,793	—	—	107	338,805	149	538,375
Prince Edward Island .....	—	—	—	—	—	—	21	41,081	—	—
Nova Scotia .....	—	—	953	3,379,966	7,864	25,306,551	258	965,807	151	472,196
New Brunswick .....	45	201,788	260	533,913	871	2,987,715	177	464,646	296	1,108,978
Quebec .....	12,720	58,723,541	6,997	32,368,254	8	45,223	2,135	7,355,395	13,887	71,668,766
Ontario .....	35,002	174,618,518	1,183	5,591,627	226	666,345	2,881	11,521,889	14,728	70,832,828
Manitoba .....	2,100	10,878,796	164	516,153	96	476,657	356	1,138,187	591	2,632,789
Saskatchewan .....	2,480	14,183,402	296	1,321,814	1,191	6,041,373	110	458,000	782	3,619,586
Alberta .....	—	—	62	232,841	6,132	29,664,506	343	1,389,000	1,557	7,383,530
British Columbia .....	4,196	21,399,377	961	4,392,526	1,215	5,166,343	468	2,114,558	5,601	30,020,456
Northwest Territories .....	1,045	6,275,875	—	—	11	68,340	—	—	—	—
Yukon .....	730	4,285,752	—	—	13	83,693	—	—	—	—
<b>Canada</b> .....	<b>61,882</b>	<b>308,042,608</b>	<b>11,206</b>	<b>49,545,887</b>	<b>17,627</b>	<b>70,506,746</b>	<b>6,856</b>	<b>25,807,366</b>	<b>37,742</b>	<b>188,257,504</b>

TABLE 29. Wage-earners on the Surface, Underground and in the Mill, 1960

Province	Metal mines			Non-metals including salt			Fuels		Stone, sand and gravel		Manufacturing group excluding salt	
	Surface	Under- ground	Mill	Surface	Under- ground	Mill	Surface	Under- ground	Surface	Mill	Surface	Mill
	number											
Newfoundland .....	1,423	1,333	159	126	152	17	—	—	93	—	17	103
Prince Edward Island .....	—	—	—	—	—	—	—	—	19	—	—	—
Nova Scotia .....	—	—	—	510	96	194	866	6,347	139	85	8	124
New Brunswick .....	23	13	—	169	—	79	507	309	103	64	25	241
Quebec .....	4,124	5,208	1,464	2,820	632	2,434	6	—	1,452	375	124	11,063
Ontario .....	7,601	20,122	3,035	246	254	429	172	—	2,338	90	283	12,287
Manitoba .....	536	791	317	56	19	66	77	—	301	26	44	503
Saskatchewan .....	698	699	329	79	—	136	856	—	88	—	6	661
Alberta .....	—	—	—	—	—	50	3,900	951	289	—	63	1,116
British Columbia .....	1,096	1,741	640	475	11	359	301	648	402	14	46	4,359
Northwest Territories .....	235	373	173	—	—	—	4	—	—	—	—	—
Yukon .....	303	294	45	—	—	—	6	4	—	—	—	—
<b>Canada, 1960</b> .....	<b>16,039</b>	<b>30,774</b>	<b>6,162</b>	<b>4,481</b>	<b>1,164</b>	<b>3,764</b>	<b>6,715</b>	<b>8,257</b>	<b>5,224</b>	<b>654</b>	<b>616</b>	<b>30,457</b>
<b>1959</b> .....	<b>16,697</b>	<b>31,384</b>	<b>6,573</b>	<b>4,874</b>	<b>1,327</b>	<b>3,736</b>	<b>7,537</b>	<b>8,022</b>	<b>8,411</b>	<b>785</b>	<b>703</b>	<b>29,572</b>

TABLE 30. Mining Industry,<sup>1</sup> Administration and Office Employees at Places in Canada, Except at Mine or Plant, 1959 and 1960

Plant location	1959			Salaries and wages	1960			\$		
	Average number of employees				Male	Female	Total			
	Male	Female	Total							
Newfoundland .....	15	6	21	75,158	20	13	33	190,470		
Prince Edward Island .....	5	1	6	4,952	7	1	8	14,957		
Nova Scotia .....	1,412	74	1,486	5,520,616	1,374	77	1,451	5,506,981		
New Brunswick .....	19	9	28	155,581	56	14	70	400,894		
Quebec .....	863	222	1,085	5,861,345	1,458	298	1,756	9,632,437		
Ontario .....	471	188	659	3,555,510	352	122	474	2,920,716		
Manitoba .....	31	11	42	274,845	23	19	42	279,164		
Saskatchewan .....	880	164	1,044	5,956,198	849	214	1,063	7,156,735		
Alberta .....	4,479	1,454	5,933	37,694,379	4,974	1,649	6,623	43,733,983		
British Columbia .....	95	29	124	722,233	166	56	222	2,547,171		
Northwest Territories .....	4	3	7	33,390	7	2	9	62,015		
Yukon .....	93	7	100	624,420	105	8	113	787,097		
Canada .....	8,367	2,168	10,535	60,478,627	9,391	2,473	11,864	73,232,620		

<sup>1</sup> Including the salt industry

Note: Data in Tables 30, 31 and 32 are not included elsewhere in this report.

TABLE 31. Manufacturing Group,<sup>1</sup> Administration and Office Employees at Places in Canada, Except at Mine or Plant, 1959 and 1960

Plant location	1959			Salaries and wages	1960			\$		
	Average number of employees				Male	Female	Total			
	Male	Female	Total							
Newfoundland .....	2	—	2	24,000	—	—	—	—		
Nova Scotia .....	6	—	6	27,000	6	—	6	28,000		
New Brunswick .....	2	1	3	12,000	3	—	3	12,000		
Quebec .....	57	15	72	292,977	55	18	73	314,764		
Ontario .....	127	45	172	1,126,102	130	40	170	1,076,282		
Manitoba .....	23	13	36	129,834	8	1	9	53,025		
Saskatchewan .....	3	—	3	13,470	2	—	2	6,400		
Alberta .....	14	3	17	89,110	12	3	15	80,975		
British Columbia .....	25	13	38	337,867	22	11	33	211,399		
Northwest Territories .....	—	—	—	—	—	—	—	—		
Yukon .....	—	—	—	—	—	—	—	—		
Canada .....	259	90	349	2,052,360	238	73	311	1,782,845		

<sup>1</sup> Excluding the salt industry

Note: Data in Tables 30, 31 and 32 are not included elsewhere in this report.

TABLE 32. Administration and Office Employees at Places in Canada, Except at Mine or Plant, 1959 and 1960

Industry	1959			Salaries and wages	1960			\$		
	Average number of employees				Male	Female	Total			
	Male	Female	Total							
Metal mining .....	1,153	268	1,421	8,174,455	1,773	368	2,139	13,747,058		
Non-metallic mining <sup>1</sup> .....	152	71	223	1,297,588	159	75	234	1,537,577		
Fuels .....	6,871	1,771	8,642	49,935,990	7,254	1,973	9,227	56,880,066		
Stone, sand and gravel .....	191	58	249	1,070,594	205	59	264	1,067,919		
Totals .....	8,367	2,168	10,535	60,478,627	9,391	2,473	11,864	73,232,620		
Manufacturing groups <sup>2</sup> .....	259	90	349	2,052,360	238	73	311	1,782,845		
Grand total .....	8,628	2,258	10,884	62,530,987	9,629	2,546	12,175	75,015,465		

<sup>1</sup> Includes the salt industry<sup>2</sup> Excludes the salt industry

Note: Data in Tables 30, 31 and 32 are not included elsewhere in this report.

TABLE 33. Cost of Prospecting Conducted by Metal Mining Companies, 1957-60

Province in which prospecting was conducted	By placer gold mines <sup>1</sup>	By gold quartz mines <sup>1</sup>	By copper-gold-silver mines <sup>1</sup>	By silver-cobalt mines <sup>1</sup>	By silver-lead-zinc mines <sup>1</sup>	By nickel-copper mines <sup>1</sup>	By miscellaneous metal and mines <sup>1, 2</sup>	Total metal mining
dollars								
1957								
Newfoundland.....	2,717	120,575	100,497	—	444,576	3,183	1,608,984	2,280,532
Nova Scotia.....	—	20,024	17,671	—	15,020	—	102,999	155,714
New Brunswick.....	22,486	359,139	2,021,332	—	121,289	35,697	130,440	2,690,383
Quebec.....	20,485	887,087	3,061,593	—	522,831	2,029,306	10,505,068	17,026,370
Ontario.....	—	1,480,662	3,356,861	8,565	213,072	2,686,144	4,971,325	12,716,629
Manitoba.....	—	175,818	3,978,139	—	62,475	6,162,399	155,095	10,533,926
Saskatchewan.....	—	89,523	1,251,540	—	114,857	332,742	309,663	2,098,325
Alberta.....	—	—	—	—	175	—	350	525
British Columbia.....	1,430	98,858	1,913,743	—	1,040,941	9,410	255,788	3,320,170
Northwest Territories.....	—	106,912	1,300,856	500	110,954	920,113	378,672	2,818,007
Yukon.....	28,350	31,654	543,359	—	135,727	41,666	3,082	783,838
Canada.....	75,468	3,370,252	17,545,591	9,065	2,781,917	12,220,660	18,421,466	54,424,419
1958								
Newfoundland.....	—	51,330	19,786	—	321,269	—	380,039	772,424
Nova Scotia.....	—	24,065	33,563	—	50,430	—	3,860	111,918
New Brunswick.....	—	175,810	299,803	—	44,806	13,971	26,526	560,916
Quebec.....	—	671,523	2,140,416	—	203,955	114,873	2,957,702	6,088,469
Ontario.....	—	850,371	1,616,780	10,396	50,323	3,628,819	984,136	7,140,825
Manitoba.....	—	110,550	3,009,460	—	11,421	9,051,804	102,957	12,286,192
Saskatchewan.....	—	30,416	454,615	—	52,125	400,558	57,710	995,424
Alberta.....	—	—	52	—	30,287	—	—	30,339
British Columbia.....	8,004	221,837	1,965,080	—	384,890	2,060	44,433	2,627,304
Northwest Territories.....	—	83,929	488,649	—	65,932	673,862	116,247	1,428,619
Yukon.....	82,457	26,529	211,291	—	135,627	8,752	—	464,656
Canada.....	91,461	2,246,360	10,239,495	10,396	1,351,065	13,894,699	4,673,610	32,507,086
1959								
Newfoundland.....	—	49,646	33,117	—	251,038	—	568,805	902,606
Nova Scotia.....	468	54,283	90,232	—	2,007	—	8,680	155,670
New Brunswick.....	17,577	275,593	310,385	—	73,112	—	9,513	686,180
Quebec.....	—	1,707,344	13,966,818	42,202	205,736	626,542	4,077,469	20,626,111
Ontario.....	—	1,203,466	3,184,028	45,281	75,738	2,146,916	1,096,012	7,751,441
Manitoba.....	—	126,883	2,395,300	400	8,442	5,264,027	31,445	7,826,497
Saskatchewan.....	—	28,211	468,794	—	17,724	188,509	143,202	846,440
Alberta.....	32,500	—	2,605	—	44,348	—	—	79,453
British Columbia.....	3,413	76,945	1,436,069	—	737,916	1,043	280,293	2,535,679
Northwest Territories.....	—	112,491	172,440	—	66,458	285,227	698,730	1,335,346
Yukon.....	11,181	14,424	167,145	—	77,094	—	2,368	272,212
Canada.....	65,139	3,649,286	22,226,933	87,883	1,559,613	8,512,264	6,916,517	43,017,635
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
Northwest Territories.....	—	481,939	226,046	—	371,537	352,938	657,680	2,090,140
Yukon.....	22,495	6,980	304,612	—	81,150	—	31,588	446,825
Canada.....	118,805	3,814,541	19,105,258	26,808	5,602,547	9,411,381	2,648,604	43,553,610

<sup>1</sup> 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.

<sup>2</sup> Includes iron, uranium, molybdenum etc.

TABLE 34. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1959

No.	Industry	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene
		Canadian	Imported						
tons									
1	Metal mining:								
2	Placer gold	30	—	—	—	—	—	59,210	395
3	\$ 988							29,455	420
4	Gold quartz	2,272	19,230	13	1,208	—	—	347,473	20,375
5	\$ 36,473	311,475	644	20,824	—	—	322	152,906	6,711
6	Copper-gold-silver	7,562	1,063	45	462	—	154	398,758	12,506
7	\$ 125,855	17,895	658	5,334	—	—	4,403	149,201	3,557
8	Silver-cobalt	—	376	—	19	407	—	42,169	—
9	\$ —	7,573	—	589	8,750	—	—	17,175	—
10	Silver-lead-zinc	17,907	6,030	—	3	621	—	136,522	3,954
11	\$ 237,066	102,353	—	213	10,557	—	—	60,140	1,181
12	Nickel-copper	—	22,285	—	77	—	—	133,978	3,464
13	\$ —	284,987	—	2,276	—	—	—	49,258	989
14	Iron	1,921	18	—	1	—	6,557	1,310,221	12,240
15	\$ 34,576	478	—	33	—	—	63,724	552,716	4,635
16	Miscellaneous metals	35,369	90,442	—	12,000	—	—	639,827	1,193
17	\$ 556,766	1,300,820	—	201,236	—	—	—	244,569	531
18	Totals	65,061	139,444	58	13,770	1,028	6,717	3,068,158	54,127
	\$ 991,724	2,025,581	1,302	230,505	19,307	—	68,449	1,255,420	18,024
Imp. gal.									
Non-metal mining:									
19	Asbestos	5,865	5,335	—	21,092	—	—	454,037	10,427
20	\$ 85,268	84,100	—	356,591	—	—	—	170,848	2,739
21	Feldspar, quartz, nepheline	—	8	—	3	—	—	127,801	—
22	\$ —	173	—	85	—	—	—	46,929	—
23	Gypsum	244	6,130	—	—	—	—	28,442	—
24	\$ 3,366	78,640	—	—	—	—	—	8,846	—
25	Mica	58	—	—	—	—	—	1,809	—
26	\$ 1,024	—	—	—	—	—	—	775	—
27	Peat	5	—	4,608	—	—	—	219,987	807
28	\$ 106	—	45,624	—	—	—	—	71,060	177
29	Salt	16,410	25,336	—	—	—	—	22,744	304
30	\$ 180,514	234,342	—	—	—	—	—	6,213	77
31	Talc, soapstone	—	—	—	—	—	—	11,990	—
32	\$ —	—	—	—	—	—	—	4,769	—
33	Miscellaneous (includes iron oxides)	1,109	718	—	1	40,127	—	182,942	22,620
34	\$ 18,120	13,996	—	13	175,939	—	—	65,610	5,982
35	Totals	23,691	37,527	4,608	21,096	40,127	—	1,049,952	34,158
36	\$ 288,398	411,251	45,624	356,689	175,939	—	—	375,050	8,975
Mineral fuels:									
37	Coal	68,183	—	183	—	21,676	159	811,324	6,480
38	\$ 512,603	—	912	—	27,687	3,311	—	260,646	1,810
39	Petroleum, natural gas	690	—	1,996	—	2,100	2	5,964,642	19,856
40	\$ 14,743	—	6,445	—	12,600	46	—	2,310,332	5,183
41	Totals	68,873	—	2,179	—	23,776	161	6,775,966	26,336
42	\$ 527,346	—	7,357	—	40,287	3,357	—	2,570,978	6,993
Structural materials:									
43	Sand and gravel	648	252	427	44	—	2	6,547,897	1,631
44	\$ 10,101	3,960	707	1,201	—	—	49	2,309,917	449
45	Stone	1,391	918	214	5	—	701	2,358,296	831
46	\$ 22,718	14,439	3,305	118	—	—	9,881	852,403	199
47	Totals	2,039	1,170	641	49	—	703	8,906,193	2,462
48	\$ 32,819	18,399	4,012	1,319	—	—	9,930	3,162,320	648
49	Totals mining industries	159,664	178,141	7,486	34,915	64,931	7,581	19,800,069	117,083
50	\$ 1,840,287	2,455,231	58,295	588,513	235,533	—	81,736	7,363,768	34,640
Manufacturing group:									
51	Smelting and refining	415,737	454,939	—	77,547	—	267,558	684,155	37,632
52	\$ 5,608,760	5,987,558	—	1,005,441	—	—	6,041,528	233,082	11,109
53	Clay products	15,870	110,621	757	64	1,619	1,088	830,233	1,388
54	\$ 216,091	1,575,718	6,962	1,907	9,487	—	22,754	287,444	411
55	Cement	708,425	247,733	—	—	—	105	243,092	21,436
56	\$ 7,054,268	2,554,145	—	—	—	—	2,537	70,682	5,422
57	Lime	22,907	179,372	4,504	6,431	5,180	33,974	1,958,690	—
58	\$ 306,551	2,256,219	36,970	107,197	33,411	661,879	—	762,646	—
59	Totals, manufacturing group	1,162,939	992,665	5,261	84,042	6,799	302,725	3,716,170	60,456
60	\$ 13,185,670	12,373,640	43,932	1,114,545	42,898	6,728,698	—	1,353,854	16,942
61	Grand totals, 1959	1,322,603	1,170,806	12,747	118,957	71,730	310,306	23,516,239	177,539
62	\$ 15,025,957	14,828,871	102,227	1,703,058	278,431	6,810,434	—	8,717,622	51,582

TABLE 34. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1959

Fuel oil	Wood	Gas			Other fuel	Electricity purchased		Total	Electricity generated		No.
		Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes		For own use	For sale	
		Imp. gal.	cords	Imp. gal.	Mcf.	\$	kwh.	\$	kwh.		No.
79,443	806	—	—	—	—	3,900	—	—	18,586,304	6,626,700	1
25,757	17,877	—	—	—	—	39	—	74,536	... 114,987	... 114,987	2
3,365,108	11,785	23,603	—	59,814	—	929,951,654	14,582,624	—	41,350,126	4,483,444	3
682,264	145,582	6,729	—	32,190	97,174	5,627,611	40,149	7,161,054	... 89,681	... 89,681	4
6,732,769	40	159,633	—	—	—	547,848,901	—	—	77,373,108	747,691	5
1,347,070	387	42,040	—	—	32,860	3,219,223	—	4,948,483	... 14,304	... 14,304	6
114,710	—	1,340	—	—	—	12,947,584	—	—	—	—	7
25,153	—	670	—	—	24,702	101,271	—	185,883	—	—	8
1,905,446	126	8,523	—	—	—	120,269,851	—	—	144,755,527	65,000	9
340,846	2,820	3,490	—	—	—	1,233,828	—	1,992,494	... 416	... 416	10
6,330,400	24	4,267	4,100	—	—	446,187,979	—	—	44,144,242	2,277,101	11
876,371	162	1,455	1,591	—	—	2,230,837	—	—	3,456,926	... 53,259	12
15,830,605	—	90,337	—	—	—	633,141,389	—	—	60,621,874	—	13
2,598,617	—	38,753	—	—	—	4,414,790	—	—	7,708,322	... —	14
14,310,947	4,303	166,832	760	—	—	594,705,609	—	—	118,327,316	2,458,200	15
2,837,199	58,197	34,474	494	—	—	3,789,464	—	9,023,750	... 28,986	... 28,986	16
48,669,428	17,084	444,535	4,860	59,814	—	3,285,056,867	14,582,624	—	505,158,497	16,658,136	17
8,733,277	225,025	127,611	2,085	32,190	154,736	20,626,063	40,149	34,551,448	... 301,633	... 301,633	18
13,150,753	4,637	11,932	45,781	—	—	400,427,378	—	—	9,398,900	—	19
1,997,179	69,565	7,890	1,147	—	—	3,176,337	—	5,951,664	... —	... —	20
1,052,473	32	5,100	—	—	—	20,866,449	—	—	1,401,376	—	21
169,636	345	2,801	—	—	—	201,654	—	421,623	... —	... —	22
1,006,088	—	18,482	—	3,672	—	19,677,328	—	—	24,000	—	23
156,135	—	7,385	—	481	—	233,322	—	488,175	... —	... —	24
—	1	—	—	—	—	84,940	—	—	—	—	25
—	20	—	—	—	—	1,991	—	3,810	—	—	26
359,617	7	—	—	12,133	—	5,083,675	—	—	—	—	27
30,256	70	—	—	6,145	—	85,440	—	238,878	—	—	28
4,299,544	—	—	—	674,494	—	27,176,681	—	—	9,997,985	229,200	29
406,128	—	—	—	157,852	—	208,530	—	1,193,656	... 3,231	... 3,231	30
14,156	100	—	—	—	—	1,443,009	—	—	—	—	31
2,635	400	—	—	—	—	31,218	—	39,022	—	—	32
6,201,996	18	3,439	76,298	865,999	—	71,863,212	—	—	6,148,669	48,846	33
588,436	214	1,109	28,445	243,717	—	735,223	—	1,876,804	... 1,150	... 1,150	34
25,984,627	4,795	38,953	122,077	1,556,298	—	546,622,672	—	—	26,970,930	278,046	35
3,350,405	70,614	19,185	29,592	408,195	—	4,673,715	—	—	10,213,632	... 4,381	36
1,429,738	522	23,378	—	—	—	208,070,682	11,107,100	—	3,419,635	24,000	37
272,559	5,185	3,138	—	—	—	3,038,818	155,021	4,281,690	... 480	... 480	38
3,892,375	—	1,416,208	—	3,498,468	—	132,454,374	—	—	8,180,840	—	39
896,872	—	486,730	—	456,871	—	3,230,663	—	7,420,485	... —	... —	40
5,322,113	522	1,439,586	—	3,498,468	—	340,525,056	11,107,100	—	11,600,475	24,000	41
1,169,431	5,185	489,868	—	456,871	—	6,269,481	155,021	11,702,175	... —	... —	42
5,882,244	87	105,933	—	158,569	—	27,107,605	—	—	255,435	—	43
1,279,053	388	20,627	—	16,328	—	586,621	—	4,229,401	... —	... —	44
3,960,161	316	2,915	4,557	25,579	—	88,646,993	—	—	1,487,315	—	45
843,249	2,664	1,044	137	7,841	—	1,332,532	—	—	—	—	46
9,842,405	403	108,848	4,557	184,148	—	115,754,598	—	—	1,742,750	—	47
2,122,302	3,052	21,671	137	24,169	—	1,919,153	—	7,318,931	... —	... —	48
89,818,373	22,804	2,031,922	131,494	5,298,728	—	4,287,958,193	25,689,724	—	545,472,652	16,960,182	49
15,375,415	303,876	658,335	31,814	921,425	154,736	33,488,412	195,170	63,787,186	... —	... —	50
64,144,687	1,495	49,203	117,541	6,364,943	—	3,203,387,405	11,371,257,692	—	1,059,999,680	30,665,140	51
5,772,787	45,378	18,357	66,320	1,473,376	17,066	10,091,799	25,947,815	62,320,376	... 196,441	... 196,441	52
17,775,628	15,964	411,710	—	4,471,460	—	83,432,667	—	—	44,735	—	53
1,718,291	148,086	72,369	—	1,464,552	171	922,462	—	6,446,705	... —	... —	54
11,457,159	10	16,516	—	8,743,745	—	732,447,975	—	—	1,462,900	—	55
1,004,581	92	4,216	—	2,075,965	—	4,537,421	—	17,309,329	... —	... —	56
1,083,263	16,483	2,929	742,250	198,565	—	34,150,041	—	—	3,913,000	—	57
105,144	126,848	811	183,342	70,448	10,543	394,561	—	5,056,570	... —	... —	58
94,460,737	33,972	480,358	859,791	19,778,713	—	3,870,369,423	11,371,257,692	—	1,065,420,315	30,665,140	59
8,600,803	320,404	95,733	249,662	5,084,341	27,780	15,946,243	25,947,815	91,132,980	... —	... —	60
184,279,310	56,776	2,512,280	991,285	25,077,441	—	8,341,377,281	11,396,947,416	—	1,610,892,967	47,625,322	61
23,976,218	624,280	754,088	281,476	6,005,766	182,516	49,434,655	26,142,985	154,920,166	... —	... —	62

TABLE 35. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1960

No.	Industry	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene
		Canadian	Imported						
tons									
									Imp. gal.
<b>Metal mining:</b>									
1	Placer gold .....	40	—	—	—	—	—	71,657	448
2		\$ 1,261	—	—	—	—	—	33,203	400
3	Gold quartz .....	4,410	12,962	—	1,068	5	11	368,367	10,583
4		\$ 73,265	213,385	—	18,277	240	529	148,114	4,172
5	Copper-gold-silver .....	3,943	1,368	60	10	—	26	732,156	10,884
6		\$ 60,937	22,564	1,184	548	—	612	268,671	3,505
7	Silver-cobalt .....	93	343	—	413	—	—	37,185	—
8		\$ 1,926	6,785	—	9,137	—	—	15,445	—
9	Silver-lead-zinc .....	19,109	5,021	138	2	634	—	152,140	3,021
10		\$ 275,752	89,645	3,795	166	10,089	—	62,265	1,016
11	Nickel-copper .....	112	14,133	—	—	—	—	284,300	3,496
12		\$ 2,162	180,222	—	—	—	—	99,795	1,018
13	Iron .....	855	24	10	—	2	6,096	1,272,496	33,297
14		\$ 14,111	637	177	—	77	65,204	484,249	7,991
15	Miscellaneous metals .....	12,262	120,046	—	3,012	—	5	426,273	571
16		\$ 145,640	1,436,559	—	50,950	—	14	162,422	209
17	<b>Totals .....</b>	<b>40,824</b>	<b>153,897</b>	<b>238</b>	<b>4,505</b>	<b>641</b>	<b>6,138</b>	<b>3,344,579</b>	<b>62,300</b>
18		\$ 575,084	1,949,796	5,156	79,078	10,406	66,389	1,274,169	18,311
<b>Non-metal mining:</b>									
19	Asbestos .....	4,189	1,999	—	13,152	—	—	509,239	5,554
20		\$ 57,595	35,053	—	295,453	—	—	183,643	2,115
21	Feldspar, quartz, nepheline .....	—	—	—	5	—	10	113,977	—
22		\$ —	—	—	140	—	200	44,659	—
23	Gypsum .....	209	6,226	—	—	—	—	39,787	11
24		\$ 2,867	75,205	—	—	—	—	14,428	3
25	Mica .....	27	—	—	—	—	—	1,605	—
26		\$ 485	—	—	—	—	—	735	—
27	Peat .....	—	—	—	—	—	—	272,972	55
28		\$ —	—	—	—	—	—	35,789	10
29	Salt .....	14,525	19,070	—	—	—	—	28,468	1,701
30		\$ 158,525	171,249	—	—	—	—	7,500	678
31	Talc, soapstone .....	—	—	—	—	—	—	10,943	11
32		\$ —	—	—	—	—	—	4,215	7
33	Miscellaneous .....	777	606	—	—	40,311	—	184,239	11,167
34		\$ 13,146	10,968	—	—	176,383	—	64,808	3,077
35	<b>Totals .....</b>	<b>19,727</b>	<b>27,901</b>	<b>—</b>	<b>18,157</b>	<b>40,311</b>	<b>10</b>	<b>1,161,230</b>	<b>18,501</b>
36		\$ 232,618	295,475	—	295,593	176,383	200	405,782	5,644
<b>Mineral fuels:</b>									
37	Coal .....	59,094	—	466	—	18,823	187	733,473	49,023
38		\$ 531,401	—	7,143	—	22,300	3,926	230,815	10,441
39	Petroleum, natural gas .....	484	—	985	—	—	1	5,632,896	12,977
40		\$ 8,682	—	2,975	—	—	28	2,208,993	3,216
41	Natural gas processing .....	—	—	—	—	—	—	74,872	2,013
42		\$ —	—	—	—	—	—	16,509	554
43	<b>Totals .....</b>	<b>59,578</b>	<b>—</b>	<b>1,451</b>	<b>—</b>	<b>18,823</b>	<b>188</b>	<b>6,491,241</b>	<b>64,013</b>
44		\$ 540,083	—	10,118	—	22,300	3,954	2,456,317	14,211
<b>Structural materials:</b>									
45	Sand and gravel .....	580	124	87	23	—	1	5,909,753	2,245
46		\$ 8,908	1,911	277	646	—	36	2,048,621	627
47	Stone .....	1,037	702	318	18	—	731	2,122,298	11,857
48		\$ 16,637	11,033	4,702	499	—	10,975	753,169	2,884
49	<b>Totals .....</b>	<b>1,617</b>	<b>826</b>	<b>405</b>	<b>41</b>	<b>—</b>	<b>732</b>	<b>8,032,051</b>	<b>14,102</b>
50		\$ 25,445	12,944	4,979	1,145	—	11,011	2,801,790	3,521
51	<b>Totals, mining industries .....</b>	<b>121,746</b>	<b>182,624</b>	<b>2,114</b>	<b>22,703</b>	<b>59,775</b>	<b>7,068</b>	<b>19,029,101</b>	<b>158,916</b>
52		\$ 1,373,230	2,258,215	20,253	375,816	209,089	81,554	6,938,058	41,687
<b>Manufacturing group:</b>									
53	Smelting and refining .....	493,774	429,069	—	118,256	—	294,639	810,436	27,563
54		\$ 6,078,643	5,307,565	—	1,469,123	—	6,148,542	255,503	8,315
55	Clay products .....	20,184	73,375	390	5	952	1,048	898,758	1,878
56		\$ 284,164	1,050,104	3,388	134	5,712	21,779	302,251	445
57	Cement .....	535,847	241,709	—	—	—	1	225,666	18,349
58		\$ 5,025,684	2,507,135	—	—	—	7	66,163	4,669
59	Lime .....	9,925	139,376	3,611	—	8,527	640	254,290	—
60		\$ 124,447	1,679,347	29,790	—	53,449	9,123	74,237	—
61	<b>Totals, manufacturing group .....</b>	<b>1,058,630</b>	<b>883,529</b>	<b>4,001</b>	<b>118,261</b>	<b>9,479</b>	<b>296,378</b>	<b>2,189,150</b>	<b>47,790</b>
62		\$ 11,512,938	10,544,151	33,178	1,469,257	59,161	6,179,451	698,154	13,429
63	<b>Grand totals, 1960 .....</b>	<b>1,180,376</b>	<b>1,066,153</b>	<b>6,115</b>	<b>140,964</b>	<b>69,254</b>	<b>303,446</b>	<b>21,218,251</b>	<b>206,706</b>
64		\$ 12,886,168	12,802,366	53,431	1,845,073	268,250	6,261,005	7,636,212	55,116

TABLE 35. Fuel and Electricity Used in the Mineral Industry in Canada, by Kinds and Industries, 1960

Fuel oil	Wood	Gas			Other fuel	Electricity purchased		Total	Electricity generated		No.
		Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes		For own use	For sale	
		Imp. gal.	cords	Imp. gal.	Mcf.	\$	kwh.	\$	kwh.		
79,314	442	480	—	—	—	—	—	—	16,762,600	6,633,300	1
30,403	11,825	401	—	—	—	—	—	77,493	... ... 109,378	... ... 109,378	2
3,341,908	7,931	19,981	—	137,601	92,863	909,925,820 5,775,693	14,642,133 40,137	7,216,027	36,989,432 ... ... 108,430	5,736,832 ... ... 108,430	3
653,018	101,472	14,962	—	79,900	—	—	—	—	—	—	4
9,221,558	—	118,987	—	—	—	576,723,640	38,918,933 319,101	—	64,572,779 ... ... 14,894	804,770 ... ... 14,894	5
1,788,953	—	34,300	—	—	37,555	—	—	6,546,557	—	—	6
129,699	—	8,280	—	—	—	19,447,371	—	—	—	—	7
27,623	—	1,182	—	—	44,243	146,902	—	253,243	—	—	8
2,352,504	24	21,558	—	—	—	138,689,772	2,490,466	—	156,441,103 ... ... 185,000	185,000 ... ... 5,875	9
506,932	176	5,713	—	—	—	1,280,136	10,186	2,245,901	—	—	10
10,908,151	73	28,447	4,900	67,983	—	583,377,204	—	—	58,570,856 ... ... 2,695,000	2,695,000 ... ... 53,904	11
1,540,609	893	3,345	1,980	30,614	—	4,474,254	—	6,334,892	—	—	12
18,593,121	440	70,239	—	—	—	524,831,734	—	—	93,069,460 ... ... 13,606,250	13,606,250 ... ... 204,023	13
3,424,040	4,400	20,140	—	—	—	3,895,450	—	7,916,476	—	—	14
11,415,143	210	124,765	—	—	—	579,145,418	—	—	105,802,672 ... ... 3,097,297	105,802,672 ... ... 693,923	15
2,032,533	4,098	25,961	—	—	4,613	3,657,770	—	7,570,803	—	—	16
56,041,398	9,170	392,737	4,900	205,584	—	3,332,145,959	56,051,582	—	532,208,902 ... ... 32,808,949	32,808,949 ... ... 1,190,327	17
10,054,111	122,864	106,004	1,980	110,514	179,279	23,238,832	389,424	38,161,397	—	—	18
15,329,667	4,444	31,586	49,742	133,183	—	397,672,373 3,096,279	—	—	11,066,800 ... ... —	— ... — —	19
2,293,025	63,346	23,268	1,766	81,656	584	—	—	6,133,788	—	—	20
734,623	15	2,093	—	—	—	20,181,129	—	—	13,000 ... ... —	13,000 ... ... —	21
117,953	200	730	—	—	—	180,986	—	344,868	—	—	22
967,013	—	861	—	980	—	17,525,528	—	—	24,000 ... ... —	24,000 ... ... —	23
149,313	—	146	—	108	—	229,610	—	474,630	—	—	24
—	1	—	—	—	—	100,799	—	—	—	—	25
—	12	—	—	—	—	2,071	—	3,303	—	—	26
310,178	5	7,160	—	107,175	—	5,125,278	—	—	—	—	27
32,373	40	1,774	—	73,243	—	86,590	—	279,827	—	—	28
4,191,016	—	—	—	707,117	—	30,190,621	—	—	9,068,009 ... ... —	9,068,009 ... ... —	29
369,699	—	—	—	145,220	—	271,568	—	1,124,189	—	—	30
12,478	50	220	—	—	—	1,326,879	—	—	—	—	31
2,432	200	35	—	—	—	29,100	—	35,985	—	—	32
6,479,391	10	1,174	—	351,157	—	57,915,778	—	—	5,794,792 ... ... —	5,794,792 ... ... —	33
617,125	90	425	—	250,789	—	722,774	—	1,859,585	—	1,250	34
28,024,366	4,525	43,099	49,742	1,799,612	—	530,038,385	—	—	25,966,601 ... ... —	25,966,601 ... ... —	35
3,581,920	63,888	26,378	1,766	351,016	584	4,618,978	—	10,256,225	—	1,250	36
1,535,473	580	4,342	—	—	—	204,177,774	9,037,739 130,843	4,313,863	—	—	37
285,722	6,670	748	—	—	—	3,083,859	—	—	—	—	38
2,682,990	—	421,637	—	2,529,567	—	122,347,775	—	—	7,272,124 ... ... —	7,272,124 ... ... —	39
592,866	—	80,123	—	222,165	—	3,235,619	—	6,354,667	—	—	40
17,820	—	678,630	—	8,297,318	—	40,263,670	—	—	5,774,100 ... ... —	5,774,100 ... ... —	41
3,926	—	36,210	—	737,474	—	493,355	—	1,288,028	—	—	42
4,236,283	580	1,104,609	—	10,826,885	—	366,789,219	9,037,739 130,843	11,956,563	13,046,524 ... ... —	13,046,524 ... ... —	43
882,514	6,670	117,081	—	959,639	—	6,812,833	—	—	—	—	44
4,984,908	36	95,501	—	31,922	—	25,557,505	—	—	200,642 ... ... —	200,642 ... ... —	45
1,013,761	289	19,648	—	630	146	582,568	—	3,683,641	—	—	46
3,858,597	228	1,240	1,554	8,109	—	78,235,401	—	—	2,367,500 ... ... —	2,367,500 ... ... —	47
882,162	2,111	472	47	7,625	—	1,295,313	—	2,987,639	—	—	48
8,843,505	264	96,741	1,554	40,031	—	103,792,906	—	—	2,568,142 ... ... —	2,568,142 ... ... —	49
1,895,923	2,400	20,120	47	13,928	146	1,877,881	—	6,671,280	—	—	50
97,145,552	14,539	1,637,186	56,196	12,872,112	—	4,332,766,469	65,089,321 500,267	67,045,465	573,790,169 ... ... —	573,790,169 ... ... —	51
16,414,468	195,822	269,583	3,793	1,635,097	180,000	36,548,524	—	—	32,865,548 ... ... —	32,865,548 ... ... —	52
61,484,136	1,303	55,181	2,490	9,130,884	—	3,492,385,120	14,732,314,936 26,817,613	63,268,058	1,146,499,515 ... ... —	1,146,499,515 ... ... —	53
4,956,716	64,982	15,648	1,366	2,607,395	19,097	9,517,545	—	—	33,030,140 ... ... —	33,030,140 ... ... —	54
15,184,632	14,934	48,334	—	4,752,841	—	75,319,188	—	—	42,000 ... ... —	42,000 ... ... —	55
1,412,066	137,867	16,520	—	1,500,563	41	944,533	—	5,679,567	—	—	56
10,489,067	4	20,008	—	10,429,713	—	686,170,108	—	—	1,430,775 ... ... —	1,430,775 ... ... —	57
943,334	27	4,967	—	2,940,253	—	4,472,932	—	15,965,171	—	—	58
3,917,736	15,731	2,751	—	247,392	—	34,095,183	—	—	96,000 ... ... —	96,000 ... ... —	59
321,720	122,268	880	—	102,804	10,300	346,412	—	2,874,777	—	—	60
91,075,571	31,972	126,274	2,490	24,610,830	—	4,288,469,599	14,732,314,936 26,817,618	87,787,573	1,148,068,290 ... ... —	1,148,068,290 ... ... —	61
7,633,836	325,144	38,015	1,366	7,151,015	29,438	15,281,422	—	—	33,030,140 ... ... —	33,030,140 ... ... —	62
188,221,123	46,511	1,763,460	58,686	37,482,942	—	8,621,236,068	14,797,404,257 27,317,885	154,833,038	1,721,858,459 ... ... —	1,721,858,459 ... ... —	63
24,048,304	520,966	307,598	5,159	8,786,112	209,447	51,829,946	—	—	65,895,688 ... ... —	65,895,688 ... ... —	64

**TABLE 36. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1959**  
Excluding the manufacturing group; includes the salt industry

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Newfoundland .....	2,423	2,673	—	—	—	—	267,371	1,688	4,987,432
2		\$ 42,134	83,673	—	—	—	—	120,583	520	877,376
3	Prince Edward Island .....	—	—	—	—	—	—	39,112	—	83,533
4		\$ —	—	—	—	—	—	14,672	—	21,091
5	Nova Scotia .....	47,967	—	—	—	—	159	235,939	3,412	1,034,399
6		\$ 508,847	—	—	—	—	3,311	85,893	919	170,654
7	New Brunswick .....	3,218	—	—	—	—	—	432,635	270	821,833
8		\$ 26,840	—	—	—	—	—	149,728	69	156,191
9	Quebec .....	14,489	8,310	—	21,639	—	784	3,456,152	24,151	33,300,125
10		\$ 234,441	130,656	—	363,901	—	12,585	1,362,192	7,249	4,968,440
11	Ontario .....	36,277	166,928	3	13,273	407	6,567	6,913,119	25,530	22,431,539
12		\$ 566,050	2,255,994	30	224,399	8,750	64,094	2,501,868	8,498	3,662,959
13	Manitoba .....	—	77	222	—	—	13	603,953	1,013	2,936,705
14		\$ —	1,728	3,416	—	—	317	207,518	311	311,666
15	Saskatchewan .....	1,637	—	32	—	63,903	57	1,479,328	19,373	10,981,920
16		\$ 24,626	—	447	—	216,226	1,349	558,186	4,908	2,334,157
17	Alberta .....	22,374	—	2,603	—	—	—	4,826,227	20,018	3,754,665
18		\$ 101,598	—	8,034	—	—	—	1,792,730	5,253	799,931
19	British Columbia .....	26,901	153	4,623	3	621	1	1,372,979	20,765	5,278,077
20		\$ 227,889	3,182	45,927	213	10,557	80	484,716	6,125	1,175,953
21	Northwest Territories .....	—	—	3	—	—	—	90,553	468	4,073,453
22		\$ —	—	441	—	—	—	41,983	368	852,013
23	Yukon .....	4,378	—	—	—	—	—	82,701	395	134,892
24		\$ 109,862	—	—	—	—	—	43,699	420	44,984
25	Canada, 1959 .....	159,664	178,141	7,486	34,915	64,931	7,581	19,800,069	117,083	89,818,573
26		\$ 1,840,287	2,455,231	58,295	588,513	235,533	81,736	7,363,768	34,640	15,375,415

**TABLE 37. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1959**  
Including the manufacturing group

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
1	Newfoundland .....	2,423	2,673	—	—	—	105	275,651	1,688	7,910,113
2		\$ 42,134	83,673	—	—	—	2,537	124,137	520	1,091,387
3	Prince Edward Island .....	—	—	—	—	—	—	39,112	—	83,533
4		\$ —	—	—	—	—	—	14,672	—	21,091
5	Nova Scotia .....	58,727	—	—	—	—	—	159	242,739	3,412
6		\$ 653,353	—	—	—	—	—	3,311	88,211	334,827
7	New Brunswick .....	35,824	—	—	—	—	—	449,256	980	2,286,377
8		\$ 406,826	—	—	—	—	—	155,933	256	280,223
9	Quebec .....	575,264	55,653	—	105,617	—	2,387	4,070,735	33,241	87,865,611
10		\$ 6,197,310	840,470	—	1,476,539	—	48,047	1,575,741	9,577	9,368,114
11	Ontario .....	320,523	1,105,033	3	13,337	407	258,440	9,506,986	63,035	48,995,880
12		\$ 3,568,498	13,795,597	30	226,306	8,750	5,545,755	3,476,488	19,227	6,644,805
13	Manitoba .....	28,666	7,294	289	—	8,044	1,979	662,915	1,777	3,560,088
14		\$ 396,772	125,949	3,781	—	38,595	29,902	228,668	528	396,543
15	Saskatchewan .....	119,866	—	789	—	64,658	57	1,504,413	21,335	12,110,757
16		\$ 1,678,665	—	7,409	—	220,529	1,349	566,374	5,490	2,443,769
17	Alberta .....	22,374	—	7,040	—	—	—	4,957,067	25,905	3,906,276
18		\$ 101,598	—	44,639	—	—	—	1,829,859	6,666	824,265
19	British Columbia .....	154,558	153	4,623	3	621	47,179	1,634,111	25,303	10,347,221
20		\$ 1,868,939	3,182	45,927	213	10,557	1,179,533	571,857	7,611	1,674,217
21	Northwest Territories .....	—	—	3	—	—	—	90,553	468	4,073,453
22		\$ —	—	441	—	—	—	41,983	368	852,013
23	Yukon .....	4,378	—	—	—	—	—	82,701	395	134,892
24		\$ 109,862	—	—	—	—	—	43,699	420	44,984
25	Canada .....	1,322,603	1,170,806	12,747	118,957	71,730	310,306	23,516,239	177,539	184,279,310
26		\$ 15,025,957	14,828,871	102,227	1,703,058	278,431	6,810,434	8,717,622	51,582	23,976,218

TABLE 36. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1959  
Excluding the manufacturing group; includes the salt industry

Wood	Gas			Other fuel	Electricity purchased		Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes		For own use	For sale	
	cords	Imp. gal.	Mcf.	\$	kwh.	\$	kwh.	For own use	For sale	
—	9,070	—	—	—	69,951,458	—	41,178,811	48,846	1	
—	3,691	—	—	—	749,224	—	1,857,201	—	1,150	2
—	1,250	—	—	—	—	—	—	—	—	3
—	600	—	—	—	—	—	36,363	—	—	4
520	18,465	62,716	—	—	155,766,134	376,158	5,588,790	—	—	5
5,150	7,419	25,567	—	—	2,200,376	5,426	3,011,562	—	—	6
65	7,583	—	2,637	—	19,515,739	—	788,235	—	—	7
328	689	—	2,637	—	451,753	—	—	—	—	8
567	193,254	50,338	—	—	1,139,794,851	—	87,117,339	253,341	9	
5,053	58,876	1,284	—	86,229	8,884,444	—	16,115,346	—	5,240	10
7,782	299,765	14,340	297,028	68,507	2,315,296,968	5,086,244	23,918,310	6,282,531	—	11
91,672	77,961	3,372	212,628	—	14,150,765	20,763	—	—	—	12
1,075	27,608	—	—	—	123,958,718	7,893,500	1,005,053	37,836,499	2,277,101	13
12,802	6,555	—	—	—	448,569	12,173	—	—	53,259	14
—	232,326	—	1,418,798	—	168,137,672	—	108,058,840	2,458,200	—	15
—	42,953	—	294,322	—	1,473,235	—	4,950,409	—	28,986	16
—	1,211,427	—	3,567,443	—	116,001,541	4,370,362	6,360,033	11,838,875	253,200	17
—	445,037	—	405,482	—	2,737,762	64,206	—	—	3,711	18
6,499	29,320	4,100	12,822	—	114,930,036	6,360,580	3,339,369	190,805,602	1,298,060	19
93,581	13,736	1,591	6,356	—	1,184,074	85,389	—	—	38,988	20
3,553	1,854	—	—	—	48,966,872	1,602,880	—	38,179,065	3,744,734	21
73,867	818	—	—	—	755,873	7,213	1,732,576	—	60,173	22
2,743	—	—	—	—	15,639,204	—	672,729	18,586,300	6,626,700	23
21,423	—	—	—	—	452,341	—	—	—	114,987	24
22,804	2,031,922	131,494	5,298,728	—	4,287,959,193	25,689,724	63,787,186	545,472,652	16,960,182	25
303,876	658,335	31,814	921,425	154,736	33,488,412	195,170	—	—	306,494	26

TABLE 37. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1959  
Including the manufacturing group

Wood	Gas			Other fuel	Electricity purchased		Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes		For own use	For sale	
	cords	Imp. gal.	Mcf.	\$	kwh.	\$	kwh.	For own use	For sale	
—	9,070	—	—	—	84,397,598	—	41,178,811	48,846	1	
—	3,691	—	—	—	833,325	—	2,161,384	—	1,150	2
—	1,250	—	—	—	—	—	—	—	—	3
—	600	—	—	—	—	—	36,363	—	—	4
520	18,465	62,716	—	—	158,674,444	376,158	5,588,790	—	—	5
5,150	7,419	25,567	—	—	2,243,978	5,426	3,368,161	—	—	6
7,871	9,680	—	2,637	—	40,979,949	—	—	96,000	—	7
76,305	1,600	—	2,637	—	669,371	—	1,593,151	—	—	8
7,496	208,404	910,129	30,568	—	3,097,159,088	8,277,715,384	54,289,916	114,491,226	30,918,481	9
92,533	65,966	250,946	4,782	89,796	14,540,927	19,729,168	—	—	201,681	10
23,585	712,507	14,340	4,381,538	—	3,664,766,687	119,985,552	57,763,985	17,401,731	—	11
219,994	153,632	3,372	2,261,801	82,006	21,186,260	59,1,464	—	—	—	12
3,169	27,628	—	2,892,612	—	228,895,524	7,893,500	3,229,254	38,299,399	2,277,101	13
27,591	6,565	—	986,016	—	974,171	12,173	—	—	53,259	14
162	245,425	—	2,783,729	—	494,298,174	—	6,092,572	108,062,575	2,458,200	15
2,436	45,460	—	667,279	—	2,453,812	—	—	—	28,986	16
—	1,234,135	—	12,268,349	—	238,003,504	4,370,362	8,432,350	44,321,875	253,200	17
—	451,213	—	1,558,629	—	3,551,275	64,206	—	—	3,711	18
7,677	43,862	4,100	2,718,008	—	269,596,057	2,985,003,580	13,527,725	1,184,687,195	1,298,060	19
104,981	17,124	1,591	524,622	10,714	1,773,322	5,733,335	—	—	38,988	20
3,553	1,854	—	—	—	48,966,872	1,602,880	1,732,576	38,179,065	3,744,734	21
73,867	818	—	—	—	755,873	7,213	—	—	60,173	22
2,743	—	—	—	—	15,639,204	—	672,729	18,586,300	6,626,700	23
21,423	—	—	—	—	452,341	—	—	—	114,987	24
56,776	2,512,280	991,285	25,077,441	—	8,341,377,281	11,396,947,416	154,920,166	1,610,892,967	47,625,322	25
624,280	754,088	281,476	6,005,766	182,516	49,434,655	26,142,985	—	—	50,2,935	26

**TABLE 38. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1960**  
 Excluding the manufacturing group; includes the salt industry

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
										Imp. gal.
1	Newfoundland .....	1,307	2,271	—	—	—	—	410,079	1,920	5,297,242
2	\$	20,921	53,446	—	—	—	—	175,526	446	1,179,465
3	Prince Edward Island .....	—	—	—	—	—	—	18,316	—	29,991
4	\$	—	—	—	—	—	—	6,690	—	9,593
5	Nova Scotia .....	48,819	—	—	—	—	197	334,450	1,951	1,302,527
6	\$	514,352	—	—	—	—	4,126	124,317	892	226,496
7	New Brunswick .....	2,822	—	—	—	62	—	368,401	32,311	872,195
8	\$	23,277	—	—	—	1,282	—	127,671	6,855	173,403
9	Quebec .....	7,860	10,634	20	18,179	—	736	3,237,092	34,303	38,525,722
10	\$	115,308	173,928	615	296,230	—	11,022	1,232,408	10,327	6,075,829
11	Ontario .....	14,339	169,719	10	4,522	7	6,108	5,652,065	17,668	22,685,283
12	\$	218,813	2,030,841	177	79,420	317	65,737	1,961,998	5,393	3,470,485
13	Manitoba .....	112	—	331	—	—	—	773,480	1,215	6,783,099
14	\$	2,162	—	4,887	—	—	—	290,046	395	880,184
15	Saskatchewan .....	3,512	—	27	—	59,134	26	1,347,248	11,956	8,939,261
16	\$	16,970	—	384	—	198,683	609	489,358	3,404	1,621,883
17	Alberta .....	8,917	—	1,538	—	—	—	5,440,599	26,223	2,556,423
18	\$	71,206	—	10,395	—	—	—	2,009,901	5,547	521,252
19	British Columbia .....	27,896	—	188	2	572	1	1,234,269	30,579	6,160,808
20	\$	235,193	—	3,795	166	8,807	60	418,853	7,720	1,329,021
21	Northwest Territories .....	—	—	—	—	—	—	123,611	97	3,778,407
22	\$	—	—	—	—	—	—	60,368	82	853,713
23	Yukon .....	6,162	—	—	—	—	—	89,491	693	214,594
24	\$	155,028	—	—	—	—	—	40,922	626	73,144
25	Canada, 1960 .....	121,746	182,624	2,114	22,703	59,775	7,068	19,029,101	158,916	97,145,552
26	\$	1,373,230	2,258,215	20,253	375,816	209,089	81,554	6,938,058	41,687	16,414,468

**TABLE 39. Fuel and Electricity Used in the Mineral Industry, in Canada, by Kinds and by Provinces, 1960**  
 Including the manufacturing group

No.	Provinces	Bituminous coal		Sub-bituminous coal	Anthracite coal	Lignite coal	Coke	Gasoline	Kerosene	Fuel oil
		Canadian	Imported							
tons										
										Imp. gal.
1	Newfoundland .....	1,307	2,271	—	—	—	—	420,242	1,920	8,360,535
2	\$	20,921	53,446	—	—	—	—	180,020	446	1,394,092
3	Prince Edward Island .....	—	—	—	—	—	—	18,316	—	29,991
4	\$	—	—	—	—	—	—	6,690	—	9,593
5	Nova Scotia .....	56,724	—	—	—	—	197	341,250	1,951	3,117,177
6	\$	625,773	—	—	—	—	4,126	126,591	892	368,715
7	New Brunswick .....	35,031	—	—	—	62	—	385,694	33,079	2,152,116
8	\$	407,191	—	—	—	1,282	—	134,085	7,057	287,474
9	Quebec .....	440,802	59,933	20	136,435	—	2,073	3,660,180	40,404	99,879,917
10	\$	4,664,954	869,506	615	1,765,353	—	39,628	1,443,468	11,869	10,736,196
11	Ontario .....	324,328	1,000,430	10	4,527	7	232,368	6,614,958	44,309	41,106,527
12	\$	3,435,353	11,817,669	177	79,554	317	4,999,115	2,271,535	12,917	5,471,405
13	Manitoba .....	29,591	3,519	331	—	9,479	640	832,747	2,330	7,786,285
14	\$	415,788	61,745	4,887	—	59,161	9,123	308,512	712	987,836
15	Saskatchewan .....	114,343	—	417	—	59,134	26	1,378,764	14,296	10,257,673
16	\$	1,570,813	—	3,772	—	198,683	609	500,160	4,061	1,765,785
17	Alberta .....	8,917	—	5,149	—	—	—	5,575,528	33,598	2,707,719
18	\$	71,206	—	40,185	—	—	—	2,047,395	7,430	545,848
19	British Columbia .....	163,171	—	188	2	572	68,142	1,577,470	34,029	8,630,182
20	\$	1,519,141	—	3,795	166	8,807	1,208,404	516,466	9,024	1,554,503
21	Northwest Territories .....	—	—	—	—	—	—	123,611	97	3,778,407
22	\$	—	—	—	—	—	—	60,368	82	853,713
23	Yukon .....	6,162	—	—	—	—	—	89,491	693	214,594
24	\$	155,028	—	—	—	—	—	40,922	626	73,144
25	Canada, 1960 .....	1,180,376	1,066,153	6,115	140,964	69,254	303,446	21,218,251	206,706	188,221,123
26	\$	12,886,168	12,802,366	53,431	1,845,073	268,250	6,261,005	7,636,212	55,116	24,048,304

**TABLE 38. Fuel and Electricity Used in the Mineral Industry, In Canada, by Kinds and by Provinces, 1960**  
 Excluding the manufacturing group; includes the salt industry

Wood	Gas			Other fuel	Electricity purchased		Total	Electricity generated		No.
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes		For own use	For sale	
cords	Imp. gal.	Mcf.	\$		kwh.	\$		kwh.		No.
—	4,456	—	—	—	85,983,344	—	32,316,512	56,599	1	
—	2,117	—	—	—	1,057,807	—	—	... 1,250	2	
—	1,200	—	—	—	460	—	—	—	3	
—	480	—	—	—	23	—	—	—	4	
330	150	—	—	—	153,281,877	324,783	4,649,000	—	5	
4,025	92	—	—	—	2,277,888	5,072	3,157,260	... ...	6	
55	—	—	720	—	20,888,049	135,000	—	—	7	
275	—	—	720	—	459,577	2,798	795,858	— —	8	
350	98,659	—	—	—	1,136,071,757	34,547,076	107,128,686	14,234,654	9	
3,475	31,792	1,813	—	78,094	8,961,998	226,163	17,219,002	... 212,718	10	
5,731	270,405	—	408,763	—	2,293,894,237	7,976,366	13,936,109	—	11	
69,169	76,532	—	240,242	101,769	14,328,530	27,485	22,676,908	... ...	12	
562	92,371	—	5,000	—	146,422,570	7,484,000	54,636,800	2,695,000	13	
5,547	26,065	—	250	—	2,277,632	11,226	3,498,394	... 53,904	14	
—	190,239	—	1,925,669	—	149,949,281	—	95,365,130	3,097,297	15	
—	34,756	—	356,211	—	1,567,355	—	4,289,613	... 693,823	16	
250	873,768	—	10,424,785	—	156,566,352	2,066,496	12,795,257	—	17	
2,645	62,182	—	964,431	146	3,260,933	35,325	6,943,963	... ...	18	
5,853	93,731	—	107,175	—	121,934,622	12,555,600	206,184,928	1,463,324	19	
81,347	31,277	1,980	73,243	—	1,348,366	192,198	3,732,026	... 45,644	20	
981	10,637	—	—	—	37,074,920	—	29,491,069	4,634,874	21	
17,769	2,309	—	—	—	545,459	—	1,479,700	74,860	22	
427	1,570	—	—	—	30,699,000	—	17,286,680	6,683,800	23	
11,570	1,981	—	—	—	462,956	—	746,227	... 109,378,	24	
14,539	1,637,186	—	12,872,112	—	4,332,766,469	65,089,321	573,790,169	32,865,548	25	
195,822	269,583	3,793	1,635,097	160,009	36,548,524	500,267	67,045,465	... 1,191,577	26	

**TABLE 39. Fuel and Electricity Used in the Mineral Industry, In Canada, by Kinds and by Provinces, 1960**  
 Including the manufacturing group

Wood	Gas			Other fuel	Electricity purchased		Total	Electricity generated	
	Liquefied petroleum	Manufactured	Natural		For power and light	For other purposes		For own use	For sale
cords	Imp. gal.	Mcf.	\$	kwh.	\$	kwh.	No.		
—	4,456	—	—	—	100,164,164	—	32,316,512	56,599	1
—	2,117	—	—	—	1,141,332	—	—	1,250	2
—	1,200	—	—	—	460	—	—	—	3
—	480	—	—	—	23	—	16,786	—	4
330	150	—	—	—	156,163,597	324,783	4,649,000	—	5
4,025	92	—	—	—	2,322,789	5,072	3,458,075	—	6
7,289	787	—	720	—	41,944,179	135,000	96,000	—	7
71,307	346	—	720	—	696,151	2,798	1,608,411	—	8
6,801	119,740	—	2,227,346	—	3,239,326,586	11,153,526,011	134,196,868	47,264,794	9
110,243	36,650	3,179	766,111	83,387	13,557,277	20,437,455	54,525,891	—	10
20,258	316,586	—	7,179,602	—	3,645,967,691	164,148,367	21,749,309	—	11
186,853	94,373	—	3,287,750	115,573	21,580,678	802,762	54,156,031	—	12
3,278	92,371	—	2,611,641	—	256,568,955	7,484,000	55,067,575	2,695,000	13
24,133	26,065	—	918,859	—	2,785,397	11,226	5,613,444	—	14
221	208,540	—	2,945,539	—	500,635,166	—	95,365,130	3,097,297	15
3,311	37,874	—	640,959	—	2,612,772	—	—	693,823	16
250	891,240	—	19,019,886	—	268,868,890	2,066,496	62,472,257	—	17
2,645	66,069	—	2,166,941	146	4,043,025	35,325	9,026,215	—	18
6,676	116,183	—	3,498,206	—	343,820,460	3,469,719,600	1,269,168,059	1,463,324	19
89,110	39,242	1,980	1,004,772	10,341	2,082,087	6,023,247	14,071,085	—	20
981	10,837	—	—	—	37,074,920	—	29,491,069	4,634,874	21
17,769	2,309	—	—	—	545,459	—	1,479,700	—	22
427	1,570	—	—	—	30,699,000	—	17,286,680	6,683,800	23
11,570	1,981	—	—	—	462,956	—	746,227	—	24
46,511	1,763,460	—	37,482,942	—	8,621,236,068	14,797,404,257	1,721,858,459	65,895,688	25
520,966	307,598	5,159	8,786,112	209,447	51,829,946	27,317,885	154,833,038	—	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 operations, 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. At present there is no zinc smelter in eastern Canada nor is there a copper smelter on the western coast so large quantities of zinc and copper 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 production 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 Kimberly, British Columbia; in the silver-cobalt ores which are shipped to Deloro Smelting and Refining Co., in molybdenite ores of the Molydenite Corporation at Lacorne, 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.

## METALLIC MINERAL PRODUCTION - Continued

Output figures represent the quantity and value of ores shipped as reported by producers.

Ferro-chrome 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.

### 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 percent 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 Deloro Smelting and Refining Company, 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 Wo, content of tungsten concentrates shipped, valued by the shipper.

**Uranium** — Producers of uranium precipitates or concentrates report the U<sub>3</sub>O<sub>8</sub> 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 (As<sub>2</sub>O<sub>3</sub>) is recovered as a by-product in the treatment of silver-cobalt-nickel ores of the Cobalt district in Ontario at the smelter of Deloro Smelting and Refining Company, 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.

**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.

**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.

**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.

**Magnetic-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 producer.

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

## NON-METALLIC MINERAL PRODUCTION - Concluded

**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.

**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 is mining potassium chloride. The quantity of potash is measured as the K<sub>2</sub>O equivalent. Quantity data are not published. Value of shipments f.o.b. plant are reported by the producer.

**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 is valued by applying the average price of the sulphur content of pyrite in Eastern Canada.

**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 pulverized 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.

**Silica brick** — Production represents the number of bricks (9" equivalent) shipped at the total value reported by the 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 plant of the Aluminum Company of Canada, Ltd., Arvida, Quebec. 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 practically no 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 to 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.

## A BRIEF OUTLINE OF THE SYSTEM NOW IN USE IN COLLECTING AND COMPILING MINING STATISTICS BY INDUSTRIES

Forms are sent to all mines and smelters, the mining industry being classified into groups which are designated according to the principal product or products obtained.

For example, there is the Auriferous Quartz Mining Industry, the Copper-Gold-Silver Mining Industry, the Coal Mining Industry, the Asbestos Mining Industry, etc.

Each questionnaire varies according to the type of ore but in general the metal mining forms carry the following questions:

- Ore raised
- Ore treated
- Concentrates produced
- Concentrates shipped
- Metal content of concentrates shipped
- Value of concentrates shipped

In addition to collecting information on mineral production, certain other data are obtained which conform to all other industrial data collected by the Bureau. These include such items as salaried employees, salaries paid, wage-earners by months, wages paid, fuel and electricity used, process supplies, power equipment.

Each group is treated as a separate industry. Taking the industrial compilation of the Copper-Gold-Silver Mining Industry as an example, the typical properties falling under this heading include the Howe Sound Company, Britannia Beach, British Columbia, where a copper ore is mined, concentrated and exported for treatment, and the Noranda Mines Ltd., Quebec, which mines, concentrates, and smelts at the mine, the product being a blister copper cast in anode form for direct treatment by the refinery situated some 500 miles away at tide water.

Concentrates from the Britannia mine contain gold, silver, copper and zinc. The company is paid a certain amount, less cost of freight and treatment for the concentrates shipped, and that amount is credited to the Copper-Gold-Silver Mining Industry.

In the case of the Noranda, a nominal sum is placed on the concentrates transferred to the smelter, the smelting and refining industry being a separate industry.

When the compilation for the smelting and refining industry is made the amount of ore treated by the smelter is valued and deducted from the value of production of the smelter, the only amount being credited to the smelting and refining industry is the value added by smelting. Thus, we have the following production values by industries:

Copper-Gold-Silver Mining .....	Value of ores and concentrates sold .....	\$ .....
Silver-Lead-Zinc Mining .....	Value of ores and concentrates sold .....	\$ .....
Gold Mining, etc. ....	Value of bullion sold .....	\$ .....
	Value of concentrates shipped .....	\$ .....
Silver-Cobalt Mining .....	Value of ores and concentrates sold .....	\$ .....
Nickel-Copper Mining .....	Value of ores and concentrates sold .....	\$ .....
Others .....	Value of ores and concentrates sold .....	\$ .....
Smelting and Refining Industry .....	Value added by smelting and refining .....	\$ .....
<b>Total return to the metal mining industries .....</b>		<b>\$ .....</b>

**Note:** The smelting and refining of foreign ores is included in the Non-ferrous Smelting and Refining Industry.

## ERRATA

Some revisions have been made in the 1960 statistics on the mineral industries since the publication of the separate industry reports in this series. These are as follows:

### Cement manufacturers:

Page Q-3, paragraph 6, line 2 instead of "3,285" persons read "3,306" persons and instead of "\$16,337,796" read "\$16,463,617".

Page Q-3, Table 1, column 2 employees should read "3,306" instead of "3,285" and in column 3 earnings should read "\$16,463,617" instead of "\$16,337,796".

Page Q-4, Table 3, column 4, apparent consumption should read "5,628,586" tons instead of "5,728,586" tons.

Page Q-4 Table 4 last column, last figure should read "5,628,586" tons instead of "5,728,586" tons.

Page Q-6 Table 9 last line should be revised to, workmen "2,754" total "3,306" man-hours "\$6,941,457" workmen "\$13,114,904" total "\$16,463,617".

Page Q-7 Table 11. Liquefied petroleum gases, Imp. gal. "2,205,869" "\$764,670" should read "20,008" and "\$4,967". Natural gas M. cu. ft "8,243,852" "2,180,550" should read M. cu. ft. "10,429,713", "\$2,940,253".

### Lime Manufacturers:

Page S-3 Table 1 column 7 last figure should read "\$11,874,520" instead of "\$11,900,225".

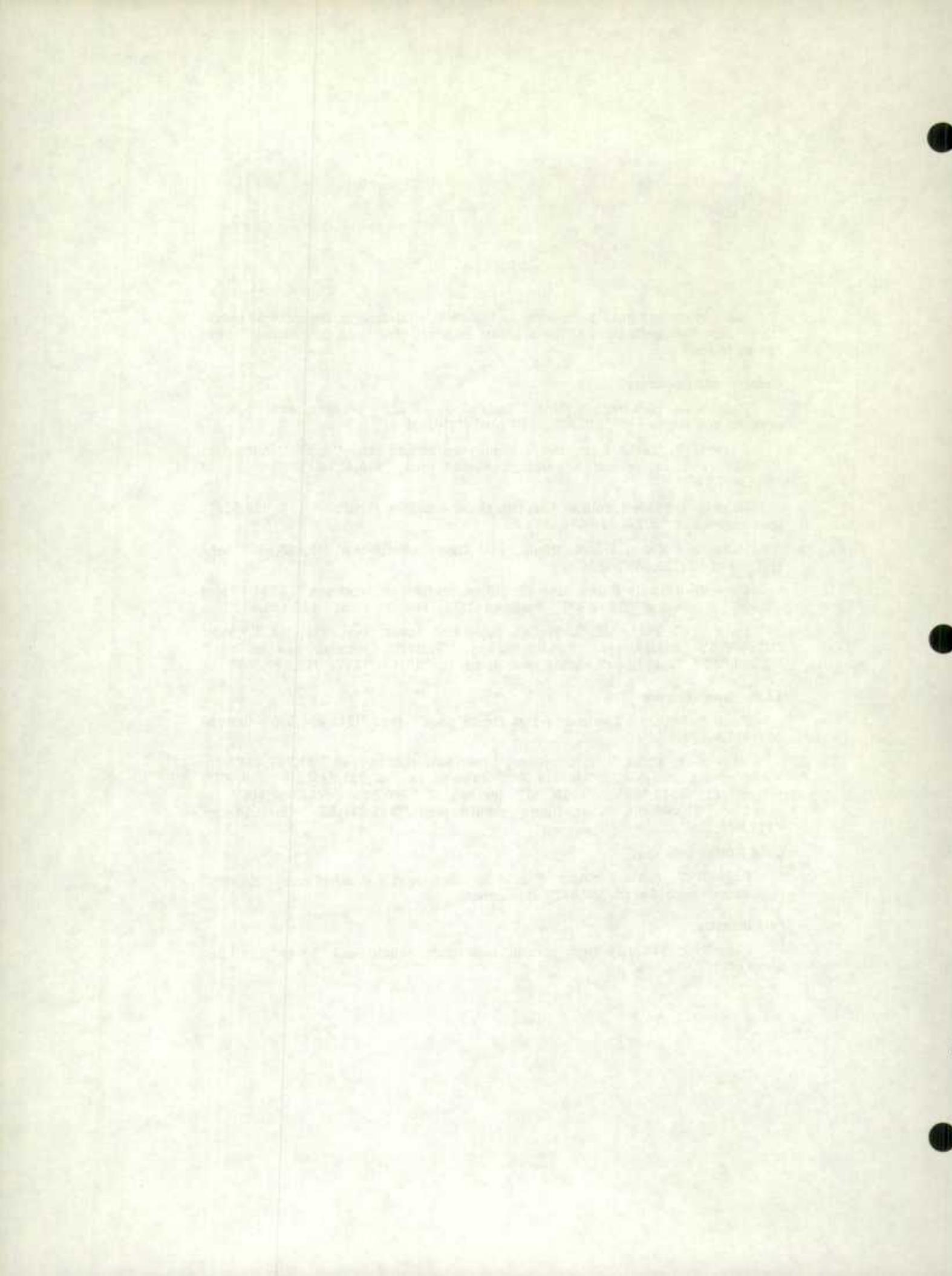
Page S-3, Table 2 right column, lower half should read "\$1,797,394" instead of "\$1,797,538", "\$7,914,200" instead of "\$7,927,845", "\$548,703" instead of "\$545,796", "\$560,357" instead of "560,552", "\$1,053,866" instead of "\$1,068,494" last figure should read "\$11,874,520" instead of "\$11,900,225".

### Gold Mining Industry:

Page B-7, Table 5 column 6 gold in Silver-lead and other ores "30,087" troy ounces should read "30,057" troy ounces.

### Salt Industry:

Page N-9, Table 10 right column, last figure should read "\$1,457,172" instead of "\$2,932,538".





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