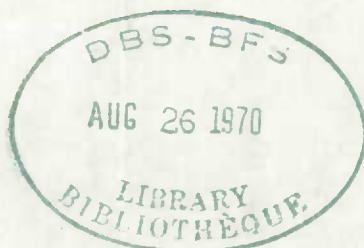


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# GOLD MINING INDUSTRY

1967

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# GOLD MINING INDUSTRY

(S.I.C. 051-053)

1967

## INTRODUCTION

This report includes statistics for industries:

- 051 – Placer Gold Mines
- 052 – Gold Quartz Mines
- 053 – Copper-Gold-Silver Mines

of the Standard Industrial Classification (S.I.C.) Manual (Catalogue No. 12-501).

### Definition of the Industry

Gold Mining in Canada is divided into three principal industries:

- (a) The recovery of gold from the gravels and sands of stream channels or beaches. For statistical purposes, this industry is defined as including establishments primarily engaged in mining gold by placer or hydraulic methods as well as the dressing and beneficiation of the ore and the production of bullion at the site of the mine. In the S.I.C. it corresponds to industry number 051 – Placer Gold Mines (see above).
- (b) The recovery of lode gold from ores in which gold is usually the most important economic constituent and quartz the predominant gangue mineral. For statistical purposes, this industry is defined as including establishments engaged in operating lode mines for gold as well as the dressing and beneficiating of the ore and the production of bullion at the site of the mine (see above).

- (c) Gold is often found in various other mineral deposits, more particularly in those of copper, and for this reason, the review of the Copper-Gold-Silver Mines industry is included here to complete a comprehensive survey of Canadian gold production. For statistical purposes, this industry is defined as including establishments primarily engaged in mining copper-gold-silver ores and in dressing and beneficiating such ores (see above).

During 1967 the production of gold amounted to 2,986,268 troy ounces valued at \$112,731,618 compared with 3,319,474 ounces valued at \$125,177,364 in 1966. The record production was in 1941 when 5,345,179 ounces were produced at a valuation of \$205,789,392.

Ontario continued to be the leading producer of gold with 50 per cent of the total. Quebec, in second position, produced 28 per cent and Northwest Territories accounted for 13 per cent of the total. The other provinces ranked in the following order: British Columbia, Manitoba, Saskatchewan, Newfoundland, Yukon, New Brunswick, Alberta and Nova Scotia.

The price of gold in Canadian funds averaged \$37.75 per troy ounce. It ranged from \$37.91 per troy ounce in April 1967 to \$37.54 per troy ounce in October. The fluctuations were due to foreign exchange rates. The Royal Canadian Mint purchased gold on the basis of \$(U.S.) 35.00 per troy ounce. The United States dollar rose above par value in June 1961. It had been discounted since March, 1952. In May 1962 the price of the Canadian dollar on foreign exchange was pegged.

### SYMBOLS

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

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- preliminary figures.
- ▴ revised figures.
- x confidential to meet secrecy requirements of the Statistics Act.



## PLACER GOLD MINES

This portion of the report includes statistics for industry 051—Placer Gold Mines of the Standard Industrial Classification Manual (Catalogue No. 12-501).

Most of the placer gold was produced in the Yukon and British Columbia; small quantities were recovered in Alberta.

In 1967 a total of 9,411 troy ounces of fine gold were recovered from crude gold obtained from Canadian alluvial deposits. This represented a decrease from the preceding year. Reviewing the past thirty years, it is noted that the peak of production of placer gold occurred in 1939, and that the lowest annual output was in 1967.

**Quebec.**—After many years of no production there was a recorded output of 38 ounces in 1951 and 39 ounces in 1952, none in 1953, 16 ounces in 1954, nil in 1955-1960, 478 ounces in 1961, 117 ounces in 1962, nil in 1963, 279 ounces in 1964, 442 ounces in 1965 and nil in 1966 and 1967.

**Saskatchewan and Alberta.**—The small amount of gold, considered as being placer in origin, received at the Royal Canadian Mint, Ottawa, is assumed to have come from along the North Saskatchewan River. There has been activity in this district, in the vicinity of Edmonton, dating from about 1860.

**British Columbia.**—It has been found impractical to obtain complete reports for each individual placer mining operation in British Columbia inasmuch as a considerable quantity of the crude placer gold is recovered annually by prospectors of no fixed abode who, in many instances, market their recoveries through local merchants and banks. Recoveries in 1967 were made chiefly from deposits located in the Atlin and Cariboo districts. Output was estimated at 679 troy ounces.

**Yukon.**—About 91 per cent of the placer gold recovered in Canada during 1967 was found in the creeks of the Yukon. Production in 1967 totalled 8,586 troy ounces.

TABLE 1. Principal Statistics, Placer Gold Mines,<sup>1</sup> 1963 - 67

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Estab- lish- ments	Mining activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of produc- tion	Value added	Working owners and partners		Employees		Value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
No.		'000	\$'000					\$'000		\$'000			
1963	24	204	510	1,101	112	508	2,558	1,946	18	75	231	1,297	2,042
1964	22	177	495	1,078	111	521	2,338	1,706	18	80	205	1,263	1,806
1965	21	152	380	889	101	407	1,863	1,355	17	60	176	1,075	1,447
1966	22	105	260	745	93	344	1,775	1,339	18	82	124	936	1,628
1967	22	15	27	76	24	79	360	257	19	43	16	77	260

<sup>1</sup> Refer to Explanatory Notes, in 1964 issue of this report, for description of concepts and definitions.

TABLE 2. Employment and Payroll, Placer Gold Mines, 1963 - 67

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Employees										Salaries and wages				
	Production and related workers		Other		Adminis- trative and office		Sales and distribution		Total		Production and related workers	Other	Adminis- trative and office	Sales and distrib- ution	Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Mining				
	number										\$'000				
1963 . . . . .	200	4	—	—	23	4	—	—	223	8	1,101	—	196	—	1,297
1964 . . . . .	173	4	—	—	23	5	—	—	196	9	1,078	—	184	—	1,263
1965 . . . . .	150	2	—	—	18	6	—	—	168	8	889	—	186	—	1,075
1966 . . . . .	103	2	—	—	14	5	—	—	117	7	745	—	191	—	936
1967 . . . . .	12	3	—	—	1	—	—	—	13	3	76	—	1	—	77

## GOLD QUARTZ MINES

This report includes statistics for industry 052—Gold Quartz Mines of the Standard Industrial Classification Manual (Catalogue No. 12-501).

The greater part of Canada's gold comes from the Canadian Shield, an immense area of precambrian rocks, extending from the Labrador Coast westward almost to the mouth of the Mackenzie River. The area of the Shield is roughly 1,825,000 square miles, almost half of Canada. The deposits of the Shield are of two main types, namely, quartz veins, from

which most of the gold, up to the present time, has been won, and sulphide deposits which produce a smaller but very considerable proportion. The second great source of gold in Canada has been the Western or Cordilleran section, comprising British Columbia and the Yukon Territory, the Gold production from this section including relatively large quantities obtained from alluvial deposits. In Nova Scotia gold was mined as early as 1862 but in late years the production in this province has dwindled to insignificance.

**TABLE 3. Principal Statistics, Gold Quartz Mines, 1963 - 67**  
Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Establishments	Mining							Total activity				
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of production	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1963	51	12,456	27,961	50,986	6,639	34,728	145,622	104,254	—	—	14,408	62,436	106,156
1964	49	11,843	26,990	51,096	6,868	35,811	142,703	100,025	—	—	13,807	63,192	102,398
1965	56	11,061	24,329	49,183	6,914	36,501	137,943	94,529	—	—	12,979	61,345	97,875
1966	54	9,730	20,834	46,905	6,348	32,914	132,290	93,028	4	24	11,532	58,133	94,123
1967	45	8,683	18,155	43,674	5,954	28,890	120,196	85,352	—	—	10,319	54,412	86,075

**TABLE 4. Employment and Payroll, Gold Quartz Mines, 1963 - 67**  
Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Employees										Salaries and wages				
	Production and related workers		Other		Adminis- trative and office		Sales and distribution		Total		Production and related workers	Other	Admin- istrative and office	Sales and distribution	Total
	Manufacturing														
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufacturing				
	number										\$'000				
1963	12,399	57	—	—	1,796	156	—	—	14,195	213	50,986	—	11,449	—	62,436
1964	11,775	68	—	—	1,805	159	—	—	13,580	227	51,096	—	12,096	—	63,192
1965	10,989	72	16	—	1,743	159	—	—	12,748	231	49,183	68	12,093	—	61,345
1966	9,708	50	46	21	1,560	175	—	—	11,314	246	46,905	331	10,897	—	58,133
1967	8,645	38	26	14	1,458	138	—	—	10,129	190	43,674	184	10,554	—	54,412

**TABLE 5. Production and Related Workers, Gold Quartz Mines, 1966 and 1967**

Year and month	Mine				Mill	
	Surface		Underground		Male	Female
	Male	Female	Male			
	number					
1966						
January	2,420	44	6,666		1,139	1
February	2,422	47	6,708		1,139	1
March	2,400	46	6,561		1,119	1
April	2,350	43	6,343		1,099	1
May	2,376	44	6,284		1,101	1
June	2,498	48	6,319		1,167	1
July	2,545	53	6,369		1,166	1
August	2,395	50	6,196		1,140	1
September	2,171	52	5,951		1,092	1
October	2,151	46	5,841		1,062	1
November	2,159	49	6,018		1,032	1
December	2,137	46	5,948		1,017	1
Averages	2,335	47	6,267		1,106	1
1967						
January	1,994	38	5,922		1,003	1
February	2,008	36	5,868		996	1
March	1,976	36	5,857		1,013	1
April	1,934	36	5,757		1,008	1
May	2,007	36	5,670		1,009	1
June	2,134	35	5,735		1,064	1
July	2,160	35	5,735		1,065	1
August	2,053	37	5,561		1,047	1
September	1,920	37	5,346		977	1
October	1,893	37	5,432		981	1
November	1,894	38	5,490		965	1
December	1,867	39	5,390		952	1
Averages	1,987	37	5,647		1,007	1

Basis: Revised Standard Industrial Classification and New Establishment Concept

TABLE 7. Materials and Supplies.<sup>1</sup> Gold Quartz Mines, 1966 and 1967

Basis: Revised Standard Industrial Classification and New Establishment Concept

<sup>1</sup> Refer to Explanatory Notes, in 1964 issue of this report, for explanation of differences in Tables 11 and 12 with data published in earlier years.

Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	Value	
	1966	1967
	\$'000	
Value of production	109,041	99,713
Amount received in payment for work done on materials and products owned by others	8,182	5,487
Subsidies received	15,067	14,996
Total value of production and work done	132,290	120,196



TABLE 9. Ores Mined and Treated by the Gold Quartz Mines, 1958 - 67

Year	Ore hoisted	Ore milled <sup>1</sup>	Crude ore shipped to smelters <sup>1</sup>	Low-grade sorted out	Tailings re-treated	Gold recovered as bullion	Gold in crude ore shipped	Gold in concentrates, slag, etc. shipped
	tons					troy ounces		
1958	14,751,991	14,223,343	273,204	175,069	465	3,829,460	40,516	51,499
1959	14,246,860	13,732,277	347,203	188,996	329	3,763,954	46,812	40,391
1960	14,726,094	14,167,243	281,077	262,990	276	3,837,743	49,105	50,364
1961	14,353,022	13,835,364	268,690	270,098	332	3,692,596	40,145	33,627
1962	13,659,916	13,217,174	230,946	204,809	30	3,436,481	27,893	25,793
1963	12,618,059	12,130,935	668,627	253,256	400	3,203,763	87,539	21,267
1964	12,757,627	12,468,340	105,730	176,342	—	3,111,651	13,156	28,603
1965	12,042,354	11,734,875	92,412	257,743	130,237	2,899,122	10,846	42,639
1966	11,187,827	10,930,311	41,591	228,763	98,962	2,636,832	5,407	49,227
1967	10,289,826	10,134,259	—	196,426	—	2,404,886	—	33,328

<sup>1</sup> Total crude ore treated.

TABLE 10. Shipments from Gold Quartz Mines, 1966 and 1967

	Quantity	Total gross metal content			
		Gold	Silver	Copper	Zinc
	tons	ounces		pounds	
1966					
To smelters and mills:					
Gold ore	41,591	5,407	118	—	—
Concentrates	20,213	34,293	213,164	11,745,480	121,091
Slags, precipitates, residues	137	14,934	38,462	13,832	—
Totals	61,941	54,634	251,744	11,759,312	121,091
1967					
To smelters and mills:					
Gold ore	—	—	—	—	—
Concentrates	21,367	27,787	166,322	12,400,270	61,123
Slags, precipitates, residues	124	5,541	14,241	10,672	—
Totals	21,491	33,328	180,563	12,410,942	61,123

TABLE 11. Gold and Silver Content, of Bullion Produced, of Ores, Concentrates, etc., Shipped, with Average Grade of Ore Shipped and Ore Milled at Gold Quartz Mines and the Average Price of Gold and Silver in Canadian Funds, 1958 - 67

Year	Tonnage treated <sup>1,2</sup>	Gold content <sup>3</sup>	Silver content <sup>3</sup>	Ounces of fine gold per ton	Ounces of fine silver per ton	Average price of gold	Average price of silver
		fine ounces				\$ per oz.	
1958	14,490,652	3,921,475	707,794	.27	.05	33.98	0.868
1959	14,079,480	3,851,157	629,465	.27	.04	33.57	0.878
1960	14,448,320	3,937,212	887,697	.27	.06	33.95	0.889
1961	14,104,054	3,766,368	643,931	.27	.05	35.46	0.943
1962	13,448,120	3,490,167	597,778	.26	.04	37.41	1.165
1963	12,799,562	3,312,569	572,501	.26	.04	37.75	1.384
1964	12,514,070	3,153,410	598,229	.25	.05	37.75	1.400
1965	11,827,287	2,952,607	550,717	.25	.05	37.73	1.400
1966	10,971,902	2,691,466	662,320	.25	.06	37.71	1.400
1967	10,134,259	2,438,214	346,975	.24	.05	37.15	1.733

<sup>1</sup> Does not include tailings re-treated, but includes ore milled plus crude ore shipped to smelters.<sup>2</sup> Material discarded by sorting not included.<sup>3</sup> Relatively small quantities of gold and silver contained in concentrates, slags, etc., shipped and in cyanide solution in circuit may have originated in ore treated during the previous year; represents metal content of total bullion produced plus metal in ores or concentrates shipped to smelters.



TABLE 12. Milling Capacity of Operating Canadian Gold Mines, 1958 - 67

Year and province	Nova Scotia	Quebec	Ontario	Manitoba	British Columbia	Northwest Territories	Yukon	Canada
	tons of 2,000 pounds per 24 hours							
1958	—	10,500	27,292	2,550	1,264	1,500	—	43,106
1959	—	10,100	28,057	550	1,275	1,650	—	41,632
1960	—	9,650	28,035	550	1,229	1,661	—	41,125
1961	—	10,150	27,602	550	850	1,681	—	40,833
1962	—	10,150	27,386	550	850	1,691	—	40,627
1963	—	10,530	25,870	550	850	1,750	—	39,550
1964	—	9,400	26,500	550	920	1,880	—	39,250
1965	—	11,050	25,345	550	900	1,950	125	39,920
1966	—	8,200	24,825	550	950	1,960	—	36,485
1967	—	7,800	23,325	550	550	1,820	—	34,045

TABLE 13. Drilling Completed on Gold Quartz Deposits, 1966 and 1967

	Footage drilled <sup>1</sup>	
	1966	1967
	feet	
Diamond drilling for exploration (testing):		
By companies with their own equipment and personnel	237,632	84,592
By contractors	887,154	841,667
Other drilling:		
Diamond drilling for breaking rock or ore:		
By companies with their own equipment and personnel	108,939	9,937
By contractors	217,873	347,751
Drilling by percussion and other machines <sup>2</sup>	26,355,993	23,437,127

<sup>1</sup> Subject to revision as drilling was not reported by some companies.<sup>2</sup> This is not complete as some companies do not compile these data.

Note: The value of diamonds in all forms (bits, etc.) purchased by gold mining companies in 1966 totalled \$50,131 and \$42,754 in 1967.

TABLE 14. Specified Taxes Paid by Companies engaged in Gold Quartz Mines Operations,<sup>1</sup> 1965 - 67

	1965	1966	1967
	dollars		
Federal income tax, including tax on non-operating revenue	1,769,344	2,632,659	2,375,906
Provincial tax	1,767,480	1,576,852	1,570,375
Municipal tax	903,339	961,501	924,711
Totals	4,440,163	5,171,012	4,870,992

<sup>1</sup> Includes related corporate activities associated with operations of gold-quartz mines.TABLE 15. Miscellaneous Expenditures Made by Companies engaged in Gold Quartz Mines Operations,<sup>1</sup> 1967

	\$'000
(a) Workmen's compensation	2,856
(b) Silicosis assessment	1,138
(c) Unemployment insurance	435
(d) Aggregate cost of structures, roads, machinery, equipment, etc., built by or purchased from outside contractors of suppliers and chargeable to Fixed Assets Account	836
(e) Book value of fixed assets (new structures, roads, machinery, equipment, etc., including major repairs and alterations) produced by own employees and chargeable to Fixed Assets Account	947
(f) Other capital expenditures not reported in (d) and (e)	—
(g) Cost of materials and supplies used in the production of machinery and equipment and in the construction of roads and new structures (including major repairs and alterations by own employees and chargeable to Fixed Assets Account)	727
(h) Cost of office supplies used during the year, not chargeable to Fixed Assets Account (excludes cost of stamps and meter expenses)	219

<sup>1</sup> Includes related corporate activities associated with Canadian operations of gold-quartz mines not allocable separately elsewhere.

## MINERAL STATISTICS

TABLE 16. Production of Gold in Canada, Fifty Years, 1918 - 67

Year	Troy ounces	Value	Year	Troy ounces	Value
		\$			\$
1918 . . . . .	699,681	14,463,689	1943 . . . . .	3,651,301	140,575,088
1919 . . . . .	766,764	15,850,423	1944 . . . . .	2,922,911	112,532,073
1920 . . . . .	765,007	15,814,098	1945 . . . . .	2,696,727	103,823,990
1921 . . . . .	926,329	19,148,920	1946 . . . . .	2,832,554	104,096,359
1922 . . . . .	1,263,364	26,116,050	1947 . . . . .	3,070,221	107,457,735
1923 . . . . .	1,233,341	25,495,421	1948 . . . . .	3,529,608	123,536,280
1924 . . . . .	1,525,382	31,532,443	1949 . . . . .	4,123,518	148,446,648
1925 . . . . .	1,735,735	35,880,826	1950 . . . . .	4,441,227	168,988,687
1926 . . . . .	1,754,228	36,263,110	1951 . . . . .	4,392,751	161,872,873
1927 . . . . .	1,852,785	38,300,464	1952 . . . . .	4,471,725	153,246,016
1928 . . . . .	1,890,592	39,082,005	1953 . . . . .	4,055,723	139,597,985
1929 . . . . .	1,928,308	39,861,663	1954 . . . . .	4,366,440	148,764,611
1930 . . . . .	2,102,068	43,453,601	1955 . . . . .	4,541,962	156,788,528
1931 . . . . .	2,693,892	58,093,396	1956 . . . . .	4,383,863	151,024,080
1932 . . . . .	3,044,387	71,479,373	1957 . . . . .	4,433,894	148,757,143
1933 . . . . .	2,949,309	84,350,237	1958 . . . . .	4,571,347	155,334,370
1934 . . . . .	2,972,074	102,536,553	1959 . . . . .	4,483,416	150,508,275
1935 . . . . .	3,284,890	115,595,279	1960 . . . . .	4,628,911	157,151,527
1936 . . . . .	3,748,028	131,293,421	1961 . . . . .	4,473,699	158,637,366
1937 . . . . .	4,096,213	143,326,493	1962 . . . . .	4,178,396	156,313,794
1938 . . . . .	4,725,117	166,205,990	1963 . . . . .	4,003,127	151,118,045
1939 . . . . .	5,094,379	184,115,951	1964 . . . . .	3,835,454	144,788,388
1940 . . . . .	5,311,145	204,479,083	1965 . . . . .	3,606,031	136,051,943
1941 . . . . .	5,345,179	205,789,392	1966 . . . . .	3,319,474	125,177,364
1942 . . . . .	4,841,306	186,390,281	1967 . . . . .	2,986,268	112,731,618

Note: The above and subsequent tables include data on commodities produced by operators, which are classified to other industries. As an example: gold is produced by firms classified as, placer gold, gold quartz, copper-gold-silver, nickel-copper, silver-lead-zinc, and other metal mines.

TABLE 17. Production of Gold from Auriferous Quartz and Base Metal Mines, by Months, 1965 - 67

	Gold production from base metal mines			Gold production from auriferous quartz mines and placer deposits			Gold production from all types of mines		
	1965	1966	1967	1965	1966	1967	1965	1966	1967
	troy ounces								
January . . . . .	50,100	50,544	40,485	259,942	230,388	210,418	310,042	278,280	250,903
February . . . . .	47,056	51,189	43,803	233,881	230,374	211,904	280,937	278,911	255,707
March . . . . .	54,015	49,681	44,861	257,399	247,837	217,291	311,414	294,866	262,152
April . . . . .	54,400	49,070	44,834	271,033	249,481	207,970	325,433	295,899	252,804
May . . . . .	51,559	50,312	42,063	247,183	249,818	214,510	298,742	297,478	256,573
June . . . . .	48,179	47,882	44,259	260,551	218,290	216,674	308,730	263,699	260,933
July . . . . .	48,778	44,567	45,165	238,107	223,358	195,546	286,885	266,273	240,711
August . . . . .	51,524	42,271	40,046	249,404	223,465	200,048	300,928	264,091	240,094
September . . . . .	47,471	41,993	43,431	244,481	225,233	187,610	291,952	271,574	231,041
October . . . . .	50,389	45,888	47,182	251,497	217,833	201,769	301,886	269,672	248,951
November . . . . .	50,925	41,520	44,344	246,471	210,410	191,434	297,396	259,751	235,778
December . . . . .	47,463	47,972	44,277	244,223	230,098	206,344	291,686	278,980	250,621
Totals . . . . .	601,889	562,889	524,750	3,004,172	2,756,585	2,461,518	3,606,031	3,319,474	2,986,268

See Note under Table 16.

TABLE 18. Production of Gold,<sup>1</sup> by Provinces, 1958 - 67

Year	Newfoundland		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
	\$		\$		\$		\$		\$		\$	
1958	13,381	454,686	131	4,451	52	1,767	1,044,846	35,503,867	2,716,514	92,307,146	87,356	2,968,357
1959	13,411	450,207	—	—	—	—	999,388	33,549,455	2,683,449	90,083,383	51,186	1,718,314
1960	13,515	458,834	3	102	—	—	1,035,914	35,169,280	2,732,673	92,774,248	52,762	1,791,270
1961	14,429	511,652	—	—	—	—	1,054,029	37,375,868	2,637,720	93,533,551	57,747	2,047,709
1962	13,966	522,468	—	—	553	20,688	993,560	37,169,080	2,421,249	90,578,924	68,259	2,553,569
1963	12,318	465,004	—	—	1,128	42,582	917,229	34,625,395	2,338,854	88,291,739	53,084	2,003,921
1964	16,717	631,067	63	2,378	1,623	61,268	934,769	35,287,530	2,155,370	81,365,217	69,986	2,641,972
1965	23,657	892,555	—	—	1,659	62,592	905,380	34,159,082	1,946,003	73,420,747	67,685	2,553,687
1966	25,667	967,903	20	754	1,953	73,648	935,459	35,276,158	1,660,750	62,626,883	64,565	2,434,746
1967	27,258	1,028,989	1	38	1,421	53,643	835,190	31,528,423	1,495,385	56,450,784	53,945	2,036,424
	Saskatchewan		Alberta		British Columbia		Yukon		Northwest Territories			
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
	\$		\$		\$		\$		\$		\$	
1958	86,590	2,942,328	282	9,582	210,612	7,156,596	67,745	2,301,975	343,838	11,683,615		
1959	78,588	2,638,199	200	6,714	184,312	6,187,354	66,960	2,247,847	405,922	13,626,802		
1960	84,775	2,878,111	191	6,484	212,859	7,226,563	78,115	2,652,004	418,104	14,194,631		
1961	70,784	2,510,000	171	6,064	164,467	5,832,000	66,878	2,371,494	407,474	14,449,028		
1962	66,034	2,470,332	186	6,958	159,492	5,966,596	54,805	2,050,255	400,292	14,974,924		
1963	64,813	2,446,691	132	4,983	159,473	6,020,106	55,211	2,084,215	400,885	15,133,409		
1964	46,185	1,743,484	59	2,227	139,959	5,283,452	57,844	2,183,611	412,879	15,586,182		
1965	46,173	1,742,061	200	7,546	117,764	4,443,118	45,031	1,698,975	452,479	17,071,580		
1966	42,678	1,609,387	182	6,863	120,705	4,551,786	43,466	1,639,103	424,029	15,990,133		
1967	47,895	1,808,036	146	5,512	126,823	4,787,568	17,900	675,725	380,304	14,356,476		

<sup>1</sup> From all sources in Canada.

TABLE 19. Production of Gold, by Provinces, according to Nature of Ores, 1967

Year and province	Placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead and other ores	Total
	troy ounces					
1967						
Newfoundland	—	—	20,160	—	7,098	27,258
Nova Scotia	—	1	—	—	—	1
New Brunswick	—	—	256	—	1,165	1,421
Quebec	—	561,461	257,873	3,058	12,798	835,190
Ontario	—	1,442,828	9,151	42,408	998	1,495,385
Manitoba	—	13,382	33,510	7,053	—	53,945
Saskatchewan	—	—	47,469	99	327	47,895
Alberta	146	—	—	—	—	146
British Columbia	679	54,192	51,316	—	20,636	126,823
Yukon	8,586	—	8,753	—	561	17,900
Northwest Territories	—	380,243	—	—	61	380,304
Canada	9,411	2,452,107	428,488	52,618	43,644	2,986,268



TABLE 20. Gold Production by Province and Principal Areas, 1965 - 67

Province and area	1965		1966		1967	
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
		\$		\$		\$
Newfoundland . . . . .	23,657	892,555	25,667	967,903	27,258	1,028,989
Nova Scotia . . . . .	—	—	20	754	1	38
New Brunswick . . . . .	1,659	65,592	1,953	73,648	1,421	53,643
Quebec:						
Gold mines . . . . .	526,636	19,869,450	595,708	22,464,148	561,461	21,195,153
Base metal mines . . . . .	378,744	14,289,632	339,751	12,812,010	273,729	10,333,270
Totals . . . . .	905,380	34,159,082	935,459	35,276,158	835,190	31,528,423
Ontario:						
Gold mines:						
Porcupine . . . . .	899,530	33,938,367	757,430	28,562,685	648,051	24,463,925
Kirkland Lake . . . . .	187,308	7,066,944	150,953	5,692,438	140,381	5,299,383
Larder Lake . . . . .	222,969	8,412,397	186,884	7,047,396	200,835	7,581,521
Matachewan . . . . .	1,511	57,009	2,062	77,758	—	—
Sudbury . . . . .	36,642	1,382,466	39,219	1,478,948	33,266	1,255,792
Thunder Bay . . . . .	80,963	3,054,653	61,916	2,334,852	57,174	2,158,318
Patricia . . . . .	451,390	17,030,493	398,285	15,019,327	363,121	13,707,818
Other mines . . . . .	65,690	2,478,418	64,001	2,413,479	52,557	1,984,027
Totals . . . . .	1,946,003	73,420,747	1,660,750	62,626,883	1,495,385	56,450,784
Manitoba:						
Gold mines . . . . .	25,132	948,205	22,808	860,090	13,382	505,171
Other mines . . . . .	42,553	1,605,482	41,757	1,574,656	40,563	1,531,253
Totals . . . . .	67,685	2,553,687	64,565	2,434,746	53,945	2,036,424
Saskatchewan:						
Base metal mines . . . . .	46,173	1,742,061	42,678	1,609,387	47,895	1,808,036
Alberta (placer) . . . . .	200	7,546	182	6,863	146	5,511
British Columbia:						
Gold mines (lode) . . . . .	73,756	2,782,740	71,733	2,705,052	54,192	2,045,748
Gold mines (placer) . . . . .	664	25,052	1,204	45,403	679	25,632
Other mines . . . . .	43,344	1,635,326	47,768	1,801,331	71,952	2,716,188
Totals . . . . .	117,764	4,443,118	120,705	4,551,786	126,823	4,787,568
Yukon (chiefly placer) . . . . .	45,031	1,698,975	43,466	1,639,103	17,900	675,725
Northwest Territories (chiefly gold mines) . . . . .	452,479	17,071,580	424,029	15,990,133	380,304	14,356,476
Totals, Canada . . . . .	3,606,031	136,051,943	3,319,474	125,177,364	2,986,268	112,731,618

TABLE 21. Gold Production according to Method of Computation and Recovery, 1958 - 67

Year	In alluvial gold	In crude gold bullion produced at mines <sup>1</sup>	In base bullion produced at lead smelters	In blister and anode copper produced <sup>2</sup>	In ores, matte, slags, etc., exported	Total gold produced
			per cent			fine ounces
1958 . . . . .	1.57	84.06	0.20	12.64	1.53	4,571,347
1959 . . . . .	1.63	84.47	0.21	12.52	1.17	4,483,416
1960 . . . . .	1.75	83.18	0.26	12.82	1.99	4,628,911
1961 . . . . .	1.55	83.08	0.22	13.25	1.90	4,473,699
1962 . . . . .	1.38	82.73	0.21	13.72	1.96	4,178,396
1963 . . . . .	1.45	82.89	0.26	13.24	2.16	4,003,127
1964 . . . . .	1.53	81.16	0.13	14.93	2.25	3,835,454
1965 . . . . .	1.24	80.90	0.15	15.00	2.71	3,606,031
1966 . . . . .	1.31	80.39	0.40	15.11	2.79	3,319,474
1967 . . . . .	0.32	81.09	0.32	14.73	3.54	2,986,268

<sup>1</sup> Includes a small quantity of gold contained in shipments of gold ores, slags, etc., to Canadian smelters.<sup>2</sup> Contains a small quantity of gold recovered from auriferous quartz ores.



TABLE 22. Estimated Average Monthly Mint Value of an Ounce of Fine Gold, Expressed in Canadian Funds, 1953 - 67

Month	1953	1954	1955	1956	1957	1958	1959	
	dollars							
January	33.97	34.05	33.81	34.95	33.62	34.46	33.84	
February	34.20	33.83	34.19	34.97	33.54	34.34	34.12	
March	34.44	33.98	34.45	34.95	33.46	34.21	33.93	
April	34.43	34.39	34.52	34.89	33.59	33.97	33.73	
May	34.79	34.45	34.51	34.71	33.45	33.84	33.70	
June	34.80	34.34	34.45	34.48	33.36	33.67	33.56	
July	34.72	34.10	34.46	34.37	33.29	33.60	33.51	
August	34.59	33.96	34.48	34.34	33.18	33.76	33.41	
September	34.45	33.94	34.57	34.22	33.56	34.19	33.31	
October	34.39	33.94	34.84	34.07	33.77	33.98	33.17	
November	34.22	33.93	34.98	33.75	33.67	33.89	33.26	
December	34.06	33.88	34.98	33.62	34.22	33.76	33.29	
Yearly averages	34.42	34.07	34.52	34.45	33.55	33.98	33.57	
	1960	1961	1962	1963	1964	1965	1966	1967
	dollars							
January	33.36	34.79	36.58	37.70	37.81	37.58	37.61	37.79
February	33.31	34.62	36.71	37.71	37.80	37.65	37.67	37.82
March	33.28	34.56	36.73	37.73	37.82	37.84	37.67	37.87
April	33.70	34.61	36.76	37.69	37.83	37.77	37.69	37.88
May	34.24	34.56	37.87	37.70	37.83	37.78	37.69	37.87
June	34.39	35.19	38.06	37.74	37.81	37.88	37.68	37.82
July	34.24	36.19	37.76	37.79	37.84	37.92	37.62	37.73
August	33.95	36.10	37.72	37.90	37.75	37.74	37.63	37.65
September	34.03	36.08	37.69	37.80	37.66	37.67	37.67	37.63
October	34.24	36.07	37.66	37.73	37.63	37.63	37.78	37.57
November	34.19	36.26	37.69	37.72	37.59	37.62	37.87	37.63
December	34.43	36.49	37.66	37.78	37.61	37.65	37.91	37.81
Yearly averages	33.95	35.46	37.41	37.75	37.75	37.73	37.71	37.75

TABLE 23. Precious Metals Consumed by the Jewellery and Silverware Industry, 1963 - 67

Material	Cost at works				
	1963	1964	1965	1966	1967
	\$'000				
Fine gold	6,197	7,229	8,324	8,993	10,006
Gold alloys	1,928	2,341	2,723	2,916	2,843
Fine silver	4,688	5,268	6,275	6,609	7,295
Silver alloys and sterling	2,853	2,402	2,519	2,856	3,238
Platinum	2,564	969	1,190	2,214	2,738
Palladium	965	1,045	942	1,665	2,007
Old gold, jewellers' findings, waste and scrap refining	1,807	2,120	2,141	2,094	1,218
Gold-filled wire and stock	172	336	297	317	264
Precious and semi-precious stone	3,816	4,626	5,128	5,602	5,818

TABLE 24. Gold Production of the World,<sup>1</sup> 1963 - 67

Country	1963	1964	1965	1966	1967
	fine ounces				
North America:					
United States <sup>2</sup>	1,468,750	1,469,000	1,675,500	1,801,600	1,525,500
Canada	3,972,047	3,810,738	3,587,168	3,273,905	2,961,999
Mexico	237,948	209,976	215,796	213,610	183,227
Totals, North America	5,678,745	5,489,714	5,478,464	5,289,115	4,670,726
Central America and West Indies	217,082	240,380	209,277	208,501	208,501
South America:					
Bolivia (exports)	153,033	50,053	84,927	16,237	11,494
Brazil <sup>3</sup>	136,000	145,000	162,000	177,000	179,700
Guyana	2,848	2,111	2,077	3,045	2,380
Chile	52,400	65,620	73,818	78,223	55,974
Columbia	324,514	364,991	319,362	280,823	258,186
Ecuador	21,041	16,905	11,458	10,892	6,738
French Guiana	6,993	4,823	...	632	...
Peru	101,019	92,503	105,183	94,978	82,606
Surinam	3,537	8,231	6,269	5,159	4,514
Venezuela	26,946	33,536	23,660	18,872	18,787
Totals, South America	828,331	783,773	788,754	685,861	...
Europe	700,000	800,000	800,000	800,000	...
Australia:					
New South Wales	11,395	10,569	9,640	9,078	10,093
Queensland	68,586	100,937	76,964	139,202	95,777
Victoria	24,668	21,284	19,246	21,005	10,996
Western Australia	802,860	715,481	656,355	627,052	573,837
Tasmania	36,422	34,381	32,897	36,502	37,485
Other Australia	80,039	81,182	82,541	84,126	72,821
Totals, Australia (Commonwealth)	1,023,970	963,834	877,643	916,985	801,009
Oceania, other:					
Fiji	107,262	100,493	109,095	112,567	111,108
New Guinea	43,599	38,978	32,494	28,106	27,671
New Zealand	14,206	8,948	12,136	8,964	10,703
Totals, Oceania, other	165,067	148,419	153,725	149,637	149,482
Asia:					
India	138,280	147,958	130,596	120,244	101,468
Japan	432,572	460,171	519,163	555,476	678,134
Korea, Republic of	90,086	75,779	62,823	60,765	63,337
Malaya	9,116	7,295	3,982	2,959	7,289
Philippines Republic	376,006	425,770	435,545	452,672	490,557
Saudi Arabia	...	...	...	...	...
Taiwan (Formosa)	31,710	17,660	32,148	41,805	32,414
Totals, Asia	1,077,770	1,134,633	1,184,257	1,233,921	1,367,199
Africa:					
Botswana	142	10	...	...	...
Cameroon	1,874	739	1,286	900	800
Congo, Republic of	2,958	3,567	3,718	4,080	5,074
Congo, Republic of the	214,574	188,339	90,408	159,821	152,973
Ethiopia	25,000	25,000	24,236	21,256	23,612
Gabon, Republic of	35,719	42,760	37,134	34,466	...
Ghana	921,255	864,917	755,191	684,394	762,609
Kenya	10,193	12,480	11,420	11,988	33,366
Liberia	1,960	1,824	1,701	4,351	6,025
Malagasy Republic	900	440	598	852	752
Nigeria	316	244	80	61	39
Republic of South Africa	27,431,573	29,111,524	30,553,874	30,879,700	30,532,880
Rhodesia	566,277	575,386	549,681	550,000	515,000 <sup>4</sup>
Tanzania (exports)	102,917	93,040	90,819	60,473	18,486
Uganda	16	24	36	3	...
Totals, Africa	29,315,674	30,920,294	32,120,182	32,412,345	...
U.S.S.R. <sup>4</sup>	5,100,000	5,600,000	5,030,000	5,370,000	5,700,000
Totals, World <sup>5</sup>	44,106,639	46,081,047	46,642,302	47,066,365	...

<sup>1</sup> In compiling this table, free use has been made of the reports of the Director of the Mint, the U.S. Bureau of Mines and other publications.<sup>2</sup> U.S. Bureau of the Mint.<sup>3</sup> Mined gold only; production of alluvial gold unknown.<sup>4</sup> Conjectural.<sup>5</sup> Other gold producing countries not listed in this table are included in the estimate for the totals.

Source: "Annual Report of the American Bureau of Metal Statistics".



## EMERGENCY GOLD MINING ASSISTANCE ACT

(Taken from the "Report on the Administration of the Emergency Gold Mining Assistance Act" of the Department of Energy, Mines and Resources)

## Summary of Operations for the Year 1967

The *Emergency Gold Mining Assistance Act* was amended by Chapter 17 of the statutes of 1967. The amending act, which received Royal Assent on December 21, 1967, extended the application of the Act for three years to the end of 1970 without change in the formula for computing the amount of assistance payable.

The Act was introduced in 1948 to provide the operators of marginal gold mines with financial assistance in meeting rising costs of production. The assistance has extended the operating life of many gold mines and has thereby allowed the communities dependent upon them to adjust gradually to diminishing economic support.

An amendment to the Act in 1963 contained a restriction limiting eligibility for assistance in the case of lode gold mines commencing production after June 30, 1965 to those providing direct economic support to an existing mining community. A gold mine is deemed to provide such support if more than 50 per cent of the persons employed at the mine reside in the established mining communities listed in a schedule to the Act.

The number of lode gold mines receiving assistance under the Act has declined from 87 in 1948 to 44 in 1960 and to 39 in 1967.

Three lode gold mines receiving assistance ceased operations in 1967 due to rising costs and the depletion of ore reserves. Two other mines merged under the management of one operator. Three new mines began operations and became eligible for assistance in 1967.

The amount of assistance payable to an operator is determined by a formula based on the average cost of production per ounce of gold and the number of ounces produced. Under the current formula the assistance payable to the operator of a gold mine is computed by adding 25 per cent to the product of two factors, the "rate of assistance" and the number of "assistance ounces". The number of assistance ounces is two thirds of the total ounces produced and sold to the Royal Canadian Mint by a mine in a calendar year. The rate-of-assistance factor is two thirds of the amount by which the average cost of production exceeds \$26.50. The rate-of-assistance factor is limited to a maximum of \$12.33 which is reached when the average cost of production rises to \$45 per ounce of gold produced.

When calculated on the basis of all eligible ounces produced, the maximum assistance payable amounts to \$10.27 per ounce.

The average cost of production is determined by dividing the total allowable costs by the total number of ounces produced in the form of bullion from the mine in a calendar year. Only those ounces of gold which have been sold to the Royal Canadian Mint are eligible for inclusion in the assistance-ounces factor.

The cost of production of gold from a mine includes mining, milling, smelting, refining, transportation, and administration costs. Allowances are made for depreciation, preproduction costs and expenditures on exploration and development on the mine property in accordance with the Regulations.

The amounts paid to gold-mine operators to March 31, 1968 for the years 1948 to 1967 inclusive totalled \$246,360,675.18 on a production of 55,369,122.298 fine ounces of gold produced and sold in accordance with the requirements of the Act.

The total assistance payable for gold produced and sold in the calendar year 1967 is estimated to be \$15.4 million. For the year 1967, the total assistance paid to March 31, 1967 was \$12,027,016.07. This sum is about 90 per cent of the assistance payable on applications received to that date. The remaining 10 per cent holdback is payable after an audit has been completed on the accounts of the applicants.

Payments amounting to \$14,620,449.55 have been made to March 31, 1968 on gold produced in the calendar year 1966. The addition of holdback payments is expected to bring the total for the year to approximately \$15.4 million.

Applications for assistance have been received from 37 lode gold mines for the calendar year 1967. In addition, applications from operators of placer gold mines in British Columbia and the Yukon Territory will be submitted. In 1966, seventeen operators of placer mines applied for assistance.

The Gold Export Act, passed in 1932, authorizes the Governor in Council to make regulations governing the export of gold from Canada. On March 21, 1956, the regulations which prohibited the export of gold in any form except under licence issued by the Minister of Finance were

revoked. Since that time, gold-mine operators have been free to sell their gold without restriction. However, only gold sold to the Royal Canadian Mint is eligible for assistance under the provisions of the Emergency Gold Mining Assistance Act.

The annual average of the weekly buying prices in Canadian funds by the Royal Canadian Mint in 1967 was \$37.75 per ounce of fine gold. In 1967 and prior years, the price of gold in Canadian funds was governed by the fixed buying price of \$35 per fine ounce in United States funds by the United States Treasury and the exchange rate between the Canadian and United States dollars. Since May 1962, the value of the Canadian dollar has been set at \$0.925 United States funds. At parity the Mint buying price for gold is \$37.84 per ounce in Canadian funds. The market value of the Canadian dollar is permitted to fluctuate by one per cent above or below parity. Thus the Mint buying price in Canadian funds may vary between \$37.46 and \$38.22 per ounce.

The governors of the central banks of Belgium, Germany, Italy, the Netherlands, Switzerland, Britain and the United States met in Washington on March 16-17, 1968 to consider problems related to the maintenance of exchange stability. The governors agreed to establish a two-price system for gold. Only gold then held in the official reserves of the seven countries would be bought or sold in transactions with monetary authorities at the existing price of \$US35 an ounce. It was agreed that gold in the official reserves would not be sold in any other gold market, nor would gold be purchased from the market by the central banks.

As a consequence of the agreement, Canada may sell newly mined gold only on the free market. The price of gold on the free market is determined by supply and demand.

Following the agreement by the central bankers, the Royal Canadian Mint continued to purchase gold from gold mine operators at a price of \$US35. Thus, gold newly mined in Canada continued to be eligible for assistance under the Emergency Gold Mining Assistance Act provided it was sold to the Mint. It should be noted that the amount of assistance payable to a gold-mine operator is based on the cost of production of the gold and is not related to its selling price.

## Conditions Governing Eligibility for Assistance

A mine, to be classified as a gold mine for purposes of the Act and Regulations, must fulfil the following conditions:

1. The value of gold produced must be 70 per cent or more of the total value of the output of the mine.
2. The mine must produce at least 50 troy ounces of fine gold in a designated year.
3. Ore reserves of commercial significance must be developed and there must be a reasonable possibility of attaining production of gold on a commercial basis within a reasonable time.

The operator of a mine must also conform to the following requirements to be eligible for assistance payments:

1. Application in prescribed form for assistance payments for a designated quarter or year must be received by the Department of Energy, Mines and Resources within six months after the end of the designated period. Advance payments may be made for a calendar year or for quarterly periods beginning with the first day of the months of January, April, July or October. Schedules I and II are to be used in making application for assistance.
2. The average cost of production per ounce of gold, computed on all ounces of gold produced from the mine during the designated period, must exceed \$26.50.
3. Assistance payments are made only for those ounces of gold produced from the mine during the designated period which are:
  - a. sold in the form of bullion to the Royal Canadian Mint by the operator; or
  - b. sold in the form of ore or concentrate to a domestic smelter, provided the smelter operator certifies that a number of ounces equivalent to those paid for by the smelter have been sold to the Royal Canadian Mint as soon as is practicable after the shipment of the ore or concentrate and the separation of the gold therefrom; or
  - c. exported and sold in the form of ore or concentrate to a foreign smelter.

4. The operator of a mine applying for assistance for the first time must submit a declaration of ownership of the mine on Schedule III.

5. A new gold mine, which is operated by an incorporated company, must be declared in production in accordance with Section 83(5) of the Income Tax Act. Status as a new mine may be obtained through application to the Taxation Division, Department of National Revenue, Ottawa.

#### Administration

The Act is administered under the direction of the Assistant Deputy Minister (Mineral Development), Department of Energy, Mines and Resources. Inspection engineers annually visit each mine receiving assistance for the purpose of determining the exploration and development expenditures which will be classified as capital expenditures for inclusion in allowable costs on a deferred basis, and for reporting upon the operations conducted at the mine insofar as they affect the payment of assistance.

Assistance applications are generally submitted at the end of each quarter. If found to be complete and in accordance with the Act and the Regulations, they are approved and an advance payment is forwarded to the operator. The Regulations provide that the advance payment shall not exceed 90 per cent of the assistance payable under the application. When the final audit of the accounts has been completed, the remaining holdback is approved for payment.

The Department has received the proficient assistance and co-operation of the Audit Services Branch, Office of the Comptroller of the Treasury, in the examination of applications and in the verification of information received by an audit of the accounts of the operators:

#### Act and Amendments

1. The Act received Royal Assent on May 14, 1948, and came into force by proclamation on June 15, 1948.
2. Chapter 20, 13 George VI (second session), received Royal Assent, December 10, 1949.
3. Chapter 49, 15 George VI (first session), received Royal Assent, June 30, 1951.
4. Chapter 25, 1 Elizabeth II, received Royal Assent, June 18, 1952.
5. Chapter 32, 1-2 Elizabeth II, received Royal Assent, May 14, 1953.
6. Chapter 26, 2-3 Elizabeth II, received Royal Assent, March 31, 1954.
7. Chapter 19, 3-4 Elizabeth II, received Royal Assent, May 26, 1955.
8. Chapter 20, 4-5 Elizabeth II, received Royal Assent, June 26, 1956.
9. Chapter 28, 7 Elizabeth II, received Royal Assent, September 6, 1958.
10. Chapter 28, 8-9 Elizabeth II, received Royal Assent, July 7, 1960.
11. Chapter 25, 12 Elizabeth II, received Royal Assent, December 12, 1963.
12. Chapter 17, 16 Elizabeth II, received Royal Assent, December 21, 1967.

#### Regulations and Amendments

1. The Regulations made by the Governor in Council under the Authority of Section 6 of the Act were approved by Order in Council, P.C. 2664, June 11, 1948.
2. Order in Council, P.C. 1753, April 12, 1950.
3. Order in Council, P.C. 3925, July 31, 1951.
4. Order in Council, P.C. 1954-379, March 19, 1954.
5. Order in Council, P.C. 1954-863, June 10, 1954.
6. Order in Council, P.C. 1956-11, January 5, 1956.
7. Order in Council, P.C. 1960-1162, August 24, 1960.
8. Order in Council, P.C. 1965-1889, October 25, 1965.

TABLE 25. Emergency Gold Mining Assistance Act — Estimated Assistance Payable, 1960 - 67

Province	1960	1961	1962	1963	1964	1965	1966	1967
	dollars							
Quebec	3,025,354	2,917,683	3,454,353	3,198,240	3,358,038	3,559,739	3,838,453	3,918,077
Ontario	8,713,404	9,105,418	9,903,925	9,766,710	10,391,535	10,138,365	9,989,960	9,810,448
Manitoba	209,027	250,232	164,268	246,771	295,642	256,559	222,253	137,627
British Columbia	360,557	319,395	417,290	573,070	750,554	726,637	655,060	537,593
Yukon	54,176	73,931	245,649	278,319	202,604	216,458	128,918	21,220
Northwest Territories	—	—	169,528	258,078	458,128	556,088	609,447	677,770
Canada	12,362,518	12,666,659	14,355,013	14,321,189	15,456,501	15,453,847	15,444,091	15,102,730

#### COPPER-GOLD-SILVER MINES

This portion of the report includes Statistics for industry 053—Copper-Gold-Silver mines of the Standard Industrial Classification Manual (Catalogue No. 12-501).

During the year "copper-gold-silver" mines operated in Newfoundland, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, British Columbia, Yukon and Northwest Territories. It is to be noted that, in addition to the copper recovered from ores of this type, there is a very large quantity of the metal obtained in the smelting and refining of the

copper-nickel ores mined in the Sudbury area of Ontario; important quantities of gold and silver are also being extracted from these copper-nickel ores. The lead-zinc-copper ores of Newfoundland also contribute to the production of copper, gold and silver.

The statistics as herein shown under the copper-gold-silver mining industry refer only to mines and mills and do not include data pertaining to the operation of smelters and refineries. Statistics relating to the reduction of non-ferrous ores are recorded under the smelting and refining industry.

TABLE 26. Principal Statistics, Copper-Gold-Silver Mines, 1963 - 67

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Estab-lish-ments	Mining activity						Total activity				
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of production	Value added	Working owners and partners		Employees	
		Number	Man-hours paid	Wages					Number	With-drawals	Number	Salaries and wages
	No.		'000			\$'000				\$'000		\$'000
1963	30	8,874	18,658	43,627	7,118	88,522	249,872	154,231	—	—	10,754	55,128
1964	30	8,815	18,478	44,671	7,384	96,985	282,031	177,662	—	—	10,716	56,534
1965	35	9,116	19,458	48,157	8,373	106,130	321,620	207,117	—	—	11,086	61,049
1966	43	9,986	21,502	57,442	9,535	121,532	408,082	277,015	—	—	12,467	73,461
1967	45	10,776	22,515	65,660	12,463	173,963	543,914	357,488	—	—	13,270	84,118



TABLE 27. Employment and Payroll, Copper-Gold-Silver Mines, 1963 - 67

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office		Sales and distribution		Total		Production and related workers		Admin- istrative and office	Sales and distribution	Total
	Mining		Other												
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Mining	Other			
number										\$'000					
1963	8,840	34	31	—	1,627	222	—	—	10,498	256	43,627	159	11,342	—	55,128
1964	8,779	34	58	—	1,623	220	—	—	10,460	254	44,671	259	11,604	—	56,534
1965	9,073	43	25	—	1,727	218	—	—	10,825	261	48,157	80	12,812	—	61,049
1966	9,947	39	141	3	2,074	261	2	—	12,164	303	57,442	518	15,490	11	73,461
1967	10,719	57	60	2	2,149	281	2	—	12,930	340	65,660	88	18,360	10	84,118

TABLE 28. Production and Related Workers, Copper-Gold-Silver Mines, 1966 and 1967

Year and month	Mine			Mill	
	Surface		Under-ground	Male	Female
	Male	Female	Male		
	number				
1966					
January . . . . .	2,562	17	4,910	1,866	19
February . . . . .	2,575	17	4,894	1,836	19
March . . . . .	2,588	17	4,887	1,855	19
April . . . . .	2,619	17	4,923	2,059	21
May . . . . .	2,767	17	5,072	2,127	22
June . . . . .	3,032	17	5,211	2,216	24
July . . . . .	3,166	18	5,298	2,249	25
August . . . . .	3,066	18	5,209	2,243	25
September . . . . .	2,870	18	4,982	2,127	21
October . . . . .	2,887	18	4,963	2,092	21
November . . . . .	2,936	18	5,047	2,189	21
December . . . . .	2,879	18	4,992	2,183	22
Averages . . . . .	2,829	18	5,032	2,087	22
1967					
January . . . . .	2,720	31	5,084	2,585	24
February . . . . .	2,664	31	5,184	2,633	24
March . . . . .	2,636	31	5,242	2,713	24
April . . . . .	2,596	35	5,273	2,726	24
May . . . . .	2,755	34	5,311	2,898	27
June . . . . .	2,883	34	5,357	3,007	28
July . . . . .	2,847	33	5,269	3,036	29
August . . . . .	2,796	33	5,230	2,958	29
September . . . . .	2,650	32	5,095	2,719	27
October . . . . .	2,663	32	5,059	2,744	23
November . . . . .	2,713	33	5,134	2,764	23
December . . . . .	2,720	34	5,104	2,767	23
Averages . . . . .	2,723	33	5,197	2,796	25

TABLE 29. Purchased Fuel and Electricity Used, Copper-Gold-Silver Mines, 1966 and 1967

Description	1966		1967		
	Quantity	Cost	Quantity	Cost	
		\$'000		\$'000	
Large establishments reporting commodity detail:					
Bituminous coal:					
(a) From Canadian mines . . . . .	ton	166	4	653	12
(b) Imported . . . . .	"	974	19	625	12
Sub-bituminous coal (from Alberta mines only) . . . . .		—	—	—	—
Anthracite coal . . . . .	ton	28	..	49	1
Lignite coal . . . . .	"	9	..	10	1
Coke . . . . .	"	35	1	40	1
Gasoline (including gasoline used in cars and trucks) . . . . .	Imp. gal.	840,588	326	1,110,511	295
Fuel oil including kerosene or coal oil . . . . .	"	10,609,041	1,985	16,330,756	3,020
Wood . . . . .		—	—	—	—
Gas:					
(a) Liquefied petroleum gases . . . . .	Imp. gal.	772,106	118	1,097,989	170
(b) Other manufactured gas . . . . .		...	8	...	12
(c) Natural gas . . . . .	M cu. ft.	62,268	38	652,916	360
Other fuel . . . . .		...	56	...	34
Electricity purchased . . . . .	kwh.	1,138,271,545	6,916	1,285,054,497	8,410
Steam purchased . . . . .		...	64	...	35
Total fuel and electricity used . . . . .		...	9,535	...	12,463
Electricity generated:					
(a) For own use . . . . .	kwh.	103,968,655	...	158,075,408	...
(b) For sale . . . . .	"	1,109,270	...	1,335,700	...

TABLE 30. Materials and Supplies, Copper-Gold-Silver Mines, 1966 and 1967

Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	Cost	
	1966	1967
	\$'000	
Ore or other semi-processed materials purchased and used in mine/mill operations . . . . .	1,838	1,846
Containers, shipping materials and supplies used . . . . .	45	47
Operating, maintenance and repair supplies used (excluding fuel) . . . . .	41,344	51,684
Amount paid out to others for work done on materials owned by establishments:		
To smelters and/or refineries . . . . .	63,136	101,635
To others (mining, milling, etc.) . . . . .	15,169	18,751
<b>Totals . . . . .</b>	<b>121,532</b>	<b>173,963</b>

Note: Refer to concepts and definitions, 1964 issue of this report, for explanation or differences in Tables 36 and 37 with data published in earlier years.

TABLE 31. Value of Production, Copper-Gold-Silver Mines, 1966 and 1967

Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	Value	
	1966	1967
	\$'000	
Value of production . . . . .	406,175	542,423
Amount received in payment for work done on materials and products owned by others . . . . .	1,907	1,491
Total value of production and work done . . . . .	408,082	543,914

TABLE 32. Shipments from Copper-Gold-Silver Mines, 1966 and 1967

	Quantity	Total metal content as determined by settlement assay <sup>1</sup>					
		Gold	Silver	Copper	Lead	Zinc	Sulphur
	tons	fine ounces			lb.		tons
1966							
To Canadian plants:							
Ores . . . . .	814,585	66,320	173,658	18,798,000	—	—	—
Copper concentrates . . . . .	1,300,809	324,985	6,605,890	518,159,308	—	20,894,082	—
Zinc concentrates . . . . .	189,977	9,826	257,118	3,455,542	—	152,447,121	—
Lead concentrates . . . . .	3,279	2,966	84,037	237,976	3,070,923	—	—
Molybdenum concentrates . . . . .	3	—	—	—	—	—	3,529 <sup>2</sup>
Pyrite concentrates . . . . .	2,457	—	—	—	—	—	1,150
Residues, bullion and gold precipitates . . . . .	51	27,822	163,890	43,951	—	10,483	—
Tailings . . . . .	65,915	—	—	—	—	—	—
To foreign plants:							
Copper concentrates . . . . .	252,665	43,919	1,649,867	131,030,382	1,323,865	2,827,297	—
Zinc concentrates . . . . .	218,821	231	89,823	49,577	—	217,467,749	—
Lead concentrates . . . . .	2,587	35	185,990	310,371	1,921,626	257,108	—
Molybdenum concentrates . . . . .	15	—	—	—	—	—	13,850 <sup>2</sup>
Pyrite concentrates . . . . .	324,497	—	—	—	—	—	161,150
Iron concentrates . . . . .	73,361	—	—	—	—	—	—
Silver concentrates . . . . .	220	—	649,724	—	—	—	—
Tailings . . . . .	30,100	—	—	—	—	—	—
Precipitates . . . . .	429	—	—	299,791	—	—	—
Totals . . . . .	3,279,771	476,104	9,859,997	672,384,898	6,316,414	393,903,840	179,679
1967							
To Canadian plants:							
Ores . . . . .	671,191	25,292	95,444	10,123,900	—	—	—
Copper concentrates . . . . .	1,464,499	303,116	8,665,840	617,436,124	2,218,315	54,630,043	—
Zinc concentrates . . . . .	195,928	3,809	122,466	1,158,222	—	195,105,757	—
Lead concentrates . . . . .	4,533	2,261	104,021	260,618	4,767,530	556,423	—
Molybdenum concentrates . . . . .	—	—	—	—	—	—	—
Pyrite concentrates . . . . .	—	—	—	—	—	—	—
Residues, bullion and gold precipitates . . . . .	221	29,695	868,214	42,205	—	9,578	—
Tailings . . . . .	81,972	—	—	—	—	—	—
To foreign plants:							
Ores . . . . .	3	—	29,500	—	—	—	—
Copper concentrates . . . . .	358,405	69,624	1,760,730	199,518,018	3,599,962	7,228,045	—
Zinc concentrates . . . . .	650,405	2,465	1,927,401	2,798,017	2,417,313	675,116,834	—
Lead concentrates . . . . .	30,604	63	2,186,375	3,946,671	9,805,100	5,552,857	—
Molybdenum concentrates . . . . .	472	—	—	—	—	—	507,519 <sup>2</sup>
Pyrite concentrates . . . . .	377,940	—	—	—	—	—	182,374
Other concentrates . . . . .	1,842	617	30,134	216,020	334,741	1,143,639	—
Silver concentrates . . . . .	217	—	545,914	—	—	—	—
Precipitates . . . . .	541	—	—	411,000	—	—	—
Tailings . . . . .	46,318	—	—	—	—	—	—
Totals . . . . .	3,885,091	436,942	16,336,039	835,910,795	23,142,961	939,343,176	689,893

<sup>1</sup> In addition cadmium, bismuth, tellurium and selenium are recovered from these ores.<sup>2</sup> Pounds of molybdenum content.

TABLE 33. Ores Mined, Milled, and Concentrates Produced, by the Copper-Gold-Silver Mines, 1958 - 67

Year	Ore mined	Ore milled	Copper concentrates produced <sup>1</sup>	Zinc concentrates produced	Iron pyrite concentrates produced	Lead concentrates produced
	tons					
1958	11,484,960	11,274,297	1,106,733	229,962	782,828	—
1959	12,436,105	11,577,414	1,135,190	231,959	674,450	—
1960	13,973,786	13,316,340	1,266,757	270,705	573,340	2,040
1961	15,008,993	14,411,758	1,259,871	299,806	508,854	6,762
1962	17,744,713	16,980,625	1,433,264	343,922	322,636	12,438
1963	19,640,423	18,745,756	1,389,336	317,923	476,899	16,535
1964	20,196,539	19,494,495	1,460,128	324,794	360,801	9,392
1965	20,016,849	19,586,915	1,470,264	360,073	461,410	7,619
1966	23,085,616	22,830,688	1,562,775	425,612	374,688	6,208
1967	31,279,288	29,815,114	1,808,059	855,731	398,451	49,064

<sup>1</sup> Exclusive of copper precipitates.TABLE 34. Specified Expenditures by Companies engaged in Copper-Gold-Silver Operations,<sup>1</sup> 1967

	\$'000
(a) Workmen's compensation	2,730
(b) Silicosis assessment	157
(c) Unemployment insurance	577
(d) Aggregate cost of structures, roads, machinery, equipment, etc., built by or purchased from outside contractors or suppliers and chargeable to Fixed Assets Account	1,138
(e) Book value of fixed assets (new structures, roads, machinery, equipment, etc., including major repairs and alterations) produced by own employees and chargeable to Fixed Assets Account	9,468
(f) Other capital expenditures not reported in (d) and (e)	13
(g) Cost of materials and supplies used in the production of machinery and equipment and in the construction of roads and new structures (including major repairs and alterations by own employees and chargeable to Fixed Assets Account)	7,499
(h) Cost of office supplies used during the year, not chargeable to Fixed Assets Account. Excludes cost of stamps and meter expenses	500

<sup>1</sup> Includes smelting and refining operations and other related corporate activities associated with Canadian copper-gold-silver mines not allocable separately elsewhere.

TABLE 35. Taxes Paid by Companies engaged in Copper-Gold-Silver Operations, 1967

Taxes paid	\$'000
Dominion income tax, including tax on non-operating revenue	25,512
Provincial tax	20,737
Municipal tax	3,080
Grand total taxes paid	49,329

TABLE 36. Drilling Completed on Copper-Gold-Silver Deposits, 1966 and 1967

	Footage drilled	
	1966	1967
Diamond drilling for exploration (testing only):		
By mining companies with their own personnel and equipment	—	43,612
By diamond drilling contractors	1,120,874	1,256,021
Other diamond drilling:		
Blast hole diamond drilling:		
By mining companies with their own personnel and equipment	131,411	195,687
By diamond drilling contractors	168,971	442,050
Drilling by percussion or other machines <sup>1</sup>	20,991,343	20,143,158

<sup>1</sup> Not complete as these data are not recorded by some operators.

Note: Value of diamonds in all forms (stones, bits, etc.) used during the year 1966 was \$170,540, and during the year 1967 was \$49,427.



TABLE 37. Copper Production (Recoverable) according to Nature of Ore, and by Provinces, 1966 and 1967

Province	From copper-gold-silver ores	From nickel-copper ores	From other ores	Total
tons				
1966				
Newfoundland	16,746	—	2,648	19,394
Nova Scotia	—	—	115	115
New Brunswick	5,183	—	1,906	7,089
Quebec	157,119	2,020	12,859	171,998
Ontario	53,926	140,425	8,625	202,976
Manitoba	22,490	8,825	—	31,315
Saskatchewan	19,549	12	—	19,561
British Columbia	49,812	774	2,294	52,880
Yukon	—	—	—	—
Northwest Territories	664	—	84	748
Canada	325,489	152,056	28,531	506,076
1967				
Newfoundland	19,028	—	2,937	21,965
Nova Scotia	—	—	28	28
New Brunswick	3,806	—	1,980	5,786
Quebec	153,076	1,505	11,804	166,385
Ontario	103,266	164,195	8,685	276,146
Manitoba	21,040	8,520	—	29,560
Saskatchewan	22,871	104	—	22,975
British Columbia	83,399	839	2,081	86,319
Yukon	3,584	—	—	3,584
Northwest Territories	472	—	94	566
Canada	410,542	175,163	27,609	613,314

TABLE 38. Production of Refined Copper,<sup>1</sup> 1958 - 67

Year	Short tons	Year	Short tons
1958	329,239	1963	380,075
1959	365,366	1964	407,942
1960	417,029	1965	434,133
1961	406,359	1966	433,004
1962	382,868	1967	499,846

<sup>1</sup> In all forms and from all sources, including scrap.

TABLE 39. Silver Production (Recoverable) according to Nature of Ore, by Provinces, 1967

Province	Crude placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead-zinc ores	Silver-cobalt and other ores	Total
troy ounces							
Newfoundland	—	—	79,972	—	993,181	—	1,073,153
Nova Scotia	—	—	—	—	89,238	—	89,238
New Brunswick	—	—	56,839	—	2,960,577	—	3,017,416
Quebec	—	77,885	3,537,686	18,468	1,019,427	5,766	4,659,232
Ontario	—	334,203	8,043,314	1,626,992	464,936	3,839,946	14,309,391
Manitoba	—	2,658	578,884	47,769	—	—	629,311
Saskatchewan	—	—	597,942	875	6,398	—	605,215
Alberta	14	—	—	—	—	—	14
British Columbia	123	92,510	928,757	—	5,061,227	—	6,082,617
Yukon	1,700	—	87,991	—	3,779,683	—	3,869,374
Northwest Territories	—	67,015	1,912,751	—	—	462	1,980,228
Canada	1,837	574,271	15,824,136	1,694,104	14,374,667	3,846,174	36,315,189

TABLE 40. Selenium and Tellurium Recoverable from Canadian Ores, 1958 - 67

Year	From copper-gold-silver ores		From nickel-copper ores		Total	
	Selenium	Tellurium	Selenium	Tellurium	Selenium	Tellurium
pounds						
1958	216,695	31,558	90,295	6,692	306,990	38,250
1959	266,707	6,123	101,400	6,900	368,107	13,023
1960	377,138	37,232	144,500	7,450	521,638	44,682
1961	265,812	69,559	164,800	8,050	430,612	77,609
1962	344,151	51,714	142,915	7,011	487,066	58,725
1963	373,672	69,137	95,100	7,705	468,772	76,842
1964	360,841	69,882	104,905	7,900	465,746	77,782
1965	388,902	60,479	123,175	9,315	512,077	69,794
1966	464,482	63,239	111,000	9,000	575,482	72,239
1967	589,773	66,719	134,800	6,500	724,573	73,219

TABLE 41. Zinc Production (Recoverable) according to Nature of Ore, and by Provinces, 1966 and 1967

Year and province	Recoverable from copper-gold-silver ores	Recoverable from silver-lead-zinc and other ores	Total
	tons (2,000 pounds)		
1966			
Newfoundland . . . . .	2,193	31,967	34,160
Nova Scotia . . . . .	—	678	678
New Brunswick . . . . .	—	142,395	142,395
Quebec . . . . .	85,190	207,957	293,147
Ontario . . . . .	58,713	23,682	82,395
Manitoba . . . . .	34,967	—	34,967
Saskatchewan . . . . .	28,910	—	28,910
British Columbia . . . . .	1,003	151,559	152,562
Yukon . . . . .	—	5,725	5,725
Northwest Territories . . . . .	—	189,167	189,167
Canada . . . . .	210,976	753,130	964,106
1967			
Newfoundland . . . . .	2,554	32,297	34,851
Nova Scotia . . . . .	—	23	23
New Brunswick . . . . .	—	151,357	151,357
Quebec . . . . .	85,248	160,636	245,884
Ontario . . . . .	247,762	20,770	268,532
Manitoba . . . . .	36,258	—	36,258
Saskatchewan . . . . .	26,657	1,755	28,412
British Columbia . . . . .	12,449	118,967	131,416
Yukon . . . . .	—	4,738	4,738
Northwest Territories . . . . .	—	209,982	209,982
Canada . . . . .	410,928	700,525	1,111,453

TABLE 42. Refined Zinc Produced, from all Sources, 1958 - 67

Year	Short tons	Year	Short tons
1958 . . . . .	252,093	1963 . . . . .	284,021
1959 . . . . .	255,306	1964 . . . . .	337,734
1960 . . . . .	260,968	1965 . . . . .	358,498
1961 . . . . .	268,007	1966 . . . . .	382,605
1962 . . . . .	280,159	1967 . . . . .	405,136

TABLE 43. World Copper Production by Countries of Origin of Ore<sup>1</sup>

Country	1963	1964	1965	1966	1967
	tons (2,000 pounds)				
United States . . . . .	1,208,197	1,251,216	1,356,275	1,407,937	950,000 <sup>6</sup>
Mexico . . . . .	61,576	57,877	76,237	82,007	69,028
Canada . . . . .	461,823	486,900	509,792	508,300	602,646
Cuba <sup>2</sup> . . . . .	6,600	6,600	6,600	6,600	7,000
Haiti . . . . .	6,553	6,208	6,500	11,007	8,700
Nicaragua . . . . .	8,028	10,185	10,881	10,763	11,259
Bolivia <sup>3</sup> . . . . .	3,300	5,160	5,215	6,285	6,991
Brazil . . . . .	1,700	3,100	3,100	3,100	3,000
Chile . . . . .	662,126	685,259	645,227	701,456	727,786
Peru . . . . .	195,608	192,328	198,784	194,439	211,612
Totals, America . . . . .	2,615,511	2,704,833	2,818,611	2,931,894	2,598,022
Austria . . . . .	2,078	1,725	1,678	2,043	2,101
Finland . . . . .	36,777	34,379	32,760	29,774	31,704
France . . . . .	441	331	441	670	660
Germany, Federal Republic . . . . .	2,515	1,759	1,184	1,386	1,369
Ireland . . . . .	—	—	—	1,743	3,881
Italy . . . . .	1,100	887	837	1,268	1,901
Norway . . . . .	15,724	16,439	16,574	16,333	15,932
Portugal . . . . .	3,627	4,812	4,187	4,117	4,038
Spain <sup>4</sup> . . . . .	26,275	28,698	27,054	30,767	36,141
Sweden . . . . .	19,029	17,846	17,402	16,736	16,781
Yugoslavia . . . . .	68,446	69,648	68,950	68,588	69,612
Totals, Europe . . . . .	176,012	176,524	171,067	173,425	184,120

See footnote(s) at end of table.

TABLE 43. World Copper Production by Countries of Origin of Ore<sup>1</sup> - Concluded

Country	1963	1964	1965	1966	1967
	tons (2,000 pounds)				
Japan	118,185	117,036	118,020	123,104	129,903
India	11,034	10,740	10,400	10,583	10,085
Israel	6,087	10,948	9,126	11,194	10,432
Korea, Republic of	542	536	978	929	1053
Turkey	32,189	34,925	35,000	37,000	34,162
Philippines	70,201	66,654	69,806	81,303	94,573
Cyprus <sup>4</sup>	29,000	18,514	21,515	27,269	16,755
<b>Totals, Asia</b>	<b>267,238</b>	<b>259,353</b>	<b>264,845</b>	<b>291,382</b>	<b>296,963</b>
Congo, Republic of the	297,537	304,877	318,128	349,098	352,931
Rhodesia	18,489	18,341	19,800	19,000	19,800
South West Africa	30,709	35,887	32,007	37,597	32,865
Uganda	17,875	20,129	18,894	18,800	15,902
South Africa, Republic of	60,792	65,579	66,640	137,400	140,583
Zambia	648,238	709,754	766,976	687,174	731,000
<b>Totals, Africa</b>	<b>1,073,640</b>	<b>1,154,567</b>	<b>1,222,445</b>	<b>1,249,069</b>	<b>1,293,081</b>
<b>Australia</b>	<b>119,470</b>	<b>110,350</b>	<b>95,785</b>	<b>116,484</b>	<b>94,465</b>
U.S.S.R. <sup>2</sup>	600,000	675,000	710,000	770,000	850,000
Bulgaria <sup>2</sup>	18,000	20,200	22,500	25,000	28,000
Germany, East <sup>2</sup>	30,000	30,900	30,900	31,000	31,000
Poland <sup>2</sup>	14,600	16,000	16,600	17,700	17,900
China <sup>2</sup>	60,000	80,000	85,000	85,000	85,000
<b>Totals, Soviet Sphere</b>	<b>722,600</b>	<b>822,100</b>	<b>865,000</b>	<b>928,700</b>	<b>1,011,900</b>
<b>World totals, as reported<sup>5</sup></b>	<b>4,974,471</b>	<b>5,227,727</b>	<b>5,437,753</b>	<b>5,690,954</b>	<b>5,478,551</b>

<sup>1</sup> Includes copper contents or recoverable contents of ores or concentrates smelted in country of origin and/or shipped to other countries for smelting.<sup>2</sup> Conjectural.<sup>3</sup> Exports.<sup>4</sup> Excludes copper content of iron pyrites which may or may not have been recovered.<sup>5</sup> In addition there is production in Argentina, Ecuador, Burma, Taiwan, Algeria and Morocco; the total of all these countries is estimated to be about 5,800 tons in 1966.<sup>6</sup> Estimated to take into account mine production normally smelted in the United States but which, because of the 1967-68 strike, was diverted to plants elsewhere.

Source: "American Bureau of Metal Statistics Yearbook".

TABLE 44. Cadmium Production (Recoverable) from Canadian Ores, 1958 - 67

Year	From copper-gold-silver ores	From silver-lead-zinc ores	Total
	pounds		
1958	355,602	1,400,448	1,756,050
1959	334,029	1,826,334	2,160,363
1960	466,200	1,891,297	2,357,497
1961	307,757	1,914,193	2,221,950
1962	405,317	2,199,656	2,604,973
1963	389,185	2,086,300	2,475,485
1964	673,317	2,099,667	2,772,984
1965	783,132	972,793	1,755,925
1966	802,449	2,434,413	3,236,862
1967	2,864,494	1,971,823	4,836,317

TABLE 45. Average Annual Metal Prices in Canadian Dollars, 1958 - 67

Year	Gold	Silver	Copper	Lead	Zinc
	Per troy ounce	Per troy ounce	Per pound	Per pound	Per pound
	dollars				
1958	33.98	0.8681	0.2542	0.1136	0.1088
1959	33.57	0.8778	0.2961	0.1061	0.1224
1960	33.95	0.8891	0.3029	0.1068	0.1335
1961	35.46	0.9426	0.2919	0.1021	0.1259
1962	37.41	1.1650	0.3100	0.0992	0.1210
1963	37.75	1.3840	0.3150	0.1100	0.1278
1964	37.75	1.4000	0.3340	0.1344	0.1417
1965	37.73	1.4000	0.3760	0.1550	0.1510
1966	37.71	1.3990	0.4490	0.1494	0.1510
1967	37.75	1.7320	0.4757	0.1400	0.1449



## TRANSACTIONS IN GOLD BULLION AT THE ROYAL CANADIAN MINT

(From the Annual Report of the Royal Canadian Mint)

## GOLD AND SILVER BULLION

Three thousand eight hundred and seventy-five deposits of gold bullion were received during the year from Canadian Mining Companies and Sundry Persons. In addition, twelve deposits of silver bullion were received from Crown Assets Disposal Corporation.

The net value paid to depositors was \$78,643,446.03. In addition the amount of fine gold issued to depositors was 349,204.769 ounces.

The following table shows the disposition of the fine gold produced in various forms (trade bars, granulated gold, gold coin, sweep, medals, etc.):

4,837 Trade bars transferred to Exchange Fund	<i>Ounces fine</i>
Account of Minister of Finance . . . . .	1,931,042.914
Depositors—granulated and bars:	
Gold Purchase 2,885.223 . . . . .	349,204.769
Gold Storage 346,319.546 . . . . .	
Sales of fine gold . . . . .	19,290
Trial plate for assay purposes . . . . .	2.116
Medals, etc. . . . .	19.743
Sweep . . . . .	7,397.892
	<b>2,287,686.724</b>
Gold coin . . . . .	102,759.390
Total . . . . .	<b>2,390,446.114</b>

This total shows a decrease of 240,954.068 ounces fine issued as compared with the year 1966.

## Comparative Statement Showing Details of Gold and Silver Deposits Received for 1966 and 1967

	Number of deposits received				Gross ounces			
	1966	1967	Increase	Decrease	1966	1967	Increase	Decrease
Sale to Her Majesty . . . . .	3,405	3,089	—	316	2,810,113	2,518,054	—	292,059
For storage . . . . .	552	576	24	—	452,667	469,154	16,487	—
Jewellery and miscellaneous . . . . .	206	210	4	—	14,565	17,732	3,167	—
Totals . . . . .	<b>4,163</b>	<b>3,875</b>	<b>—</b>	<b>288</b>	<b>3,277,345</b>	<b>3,004,940</b>	<b>—</b>	<b>272,405</b>
Silver deposits from:								
Crown Assets Disposal Corporation . . . . .	10	12	2	—	3,951	17,111	13,160	—
Department of Veterans Affairs . . . . .	883	—	—	883	724,122	—	—	724,122
Total received . . . . .	<b>5,056</b>	<b>3,887</b>	<b>—</b>	<b>1,169</b>	<b>4,005,418</b>	<b>3,022,051</b>	<b>—</b>	<b>983,367</b>
	Fine gold ounces				Fine silver ounces			
	1966	1967	Increase	Decrease	1966	1967	Increase	Decrease
Sale to Her Majesty . . . . .	2,321,664	2,078,092	—	243,572	342,937	315,337	—	27,600
For storage . . . . .	348,400	353,195	4,795	—	—	—	—	—
Jewellery and miscellaneous . . . . .	6,338	7,225	887	—	—	—	—	—
Totals . . . . .	<b>2,676,402</b>	<b>2,438,512</b>	<b>—</b>	<b>237,890</b>	<b>342,937</b>	<b>315,337</b>	<b>—</b>	<b>27,600</b>
Silver deposits from:								
Crown Assets Disposal Corporation . . . . .	—	—	—	—	3,686	8,183	4,497	—
Department of Veterans Affairs . . . . .	—	—	—	—	599,270	—	—	599,270
Total received . . . . .	<b>2,676,402</b>	<b>2,438,512</b>	<b>—</b>	<b>237,890</b>	<b>945,893</b>	<b>323,520</b>	<b>—</b>	<b>622,373</b>

Details of origin of the bullion deposited, for sale to Her Majesty, and for storing during the year 1967 are shown in the following table:

From Canadian mines and refineries	Sale to Her Majesty		Gold storage		Total		Total fine silver
	Gross weight	Fine gold	Gross weight	Fine gold	Gross weight	Fine gold	
	ounces						
Ontario	1,496,766.545	1,249,575.057	196,427.992	164,610.734	1,693,194.537	1,414,185.791	160,032.77
Quebec	668,816.010	554,077.757	10,954.030	9,115.827	679,770.040	563,193.584	76,167.07
British Columbia	77,017.000	64,323.573	—	—	77,017.000	64,323.573	9,683.92
Manitoba	16,425.980	12,095.634	—	—	16,425.980	12,095.634	2,397.12
Yukon Territory	10,822.970	8,484.062	—	—	10,822.970	8,484.062	1,699.98
Northwest Territories	248,029.480	189,388.513	261,772.050	179,468.691	509,801.530	368,857.204	63,345.39
Alberta	175.260	146.057	—	—	175.260	146.057	13.66
Nova Scotia	1.260	1.030	—	—	1.260	1.030	.04
Total from Canadian mines and refineries	2,518,054.505	2,078,091.683	469,154.072	353,195.252	2,987,208.577	2,431,286.935	313,339.95
From jewellery and miscellaneous	17,731.510	7,225.365	—	—	17,731.510	7,225.365	1,997.14
Totals	2,535,786.015	2,085,317.048	469,154.072	353,195.252	3,004,940.087	2,438,512.300	315,337.13
Silver deposits from:							
Crown Assets Disposal Corporation	17,111.060	—	—	—	17,111.060	—	8,182.53
Totals	2,552,897.075	2,085,317.048	469,154.072	353,195.252	3,022,051.147	2,438,512.300	323,519.65



The following table gives details of fine bullion produced during the year:

Produced	Number	Gross weight	Fine weight	Average assay
		ounces		
Fine gold trade bars . . . . .	5,145	2,059,204.375	2,053,966.158	997.5
Granulated gold . . . . .	—	3,126.780	3,126.468	999.9
Fine silver bars . . . . .	310	326,186.67	326,113.52	999.8
Granulated silver . . . . .	—	31,952.35	31,945.31	999.8
Gold trial plate . . . . .	—	—	2.116	—
Finishing and plating medals . . . . .	—	—	.702	—
Storage — Fine bars . . . . .	481	192,434.053	191,889.515	997.2
Granulated gold . . . . .	—	154,436.570	154,419.635	999.9
Sweeps sold — Gold . . . . .	—	—	7,397.892	—
Silver . . . . .	—	—	40,458.28	—
Medal bars — Gold . . . . .	—	—	198.986	—
Silver . . . . .	—	—	31.55	—

Special processes	Number	Gross weight
		ounces
Remelts . . . . .	60	23,071.260
Toughenings . . . . .	5	1,827.730
		pounds avoir du poids
Chloride reduction . . . . .	—	5,203
Sweeps . . . . .	—	64,173.5

### GOLD STORAGE

During the year four mines deposited gold bullion at the Mint under the terms of the Regulations prescribing the circumstances under which the conditions upon which gold will be accepted at the Royal Canadian Mint for storage.

The fine gold content of the bullion deposited under this heading during 1967 amounted to 353,195.252 ounces. Fine bullion amounting to 346,319.546 ounces was issued on behalf of the mines for export and to various processors for domestic use.

Summary of transactions in Gold Bullion of the Ottawa Branch of the Royal Mint from its opening on January 2, 1908, to its disestablishment on November 30, 1931, and of the Royal Canadian Mint from December 1, 1931, to December 31, 1967.

Year	Gold received		Gold issued	
	Gross weight	Fine gold	Coin	Bullion
	ounces		ounces fine	
1908-57 . . . . .	155,637,752.821	125,492,536.064	383,319.096	124,933,750.071
1958 . . . . .	4,868,066.405	3,958,458.747	—	4,088,706.348
1959 . . . . .	4,805,493.520	3,908,640.185	—	3,836,679.842
1960 . . . . .	4,970,726.079	4,024,625.964	—	4,014,771.105
1961 . . . . .	4,745,639.352	3,800,137.419	—	3,812,054.286
1962 . . . . .	4,363,972.339	3,488,974.332	—	3,520,405.598
1963 . . . . .	4,319,975.360	3,457,091.639	—	3,467,554.159
1964 . . . . .	3,959,021.466	3,188,867.542	—	3,173,572.886
1965 . . . . .	3,683,726.452	2,991,450.347	—	3,026,974.357
1966 . . . . .	3,277,345.090	2,676,402.306	—	2,631,400.182
1967 . . . . .	3,004,940.087	2,438,512.300	102,759.390	2,287,686.724
Totals . . . . .	197,636,658.971	159,425,696.845	486,078.486	158,793,555.558

## CURRENCY, MINT AND EXCHANGE FUND ACT

## Gold Bullion Regulations, 1959

AT THE GOVERNMENT HOUSE AT OTTAWA

P.C. 1959 - 100

Thursday, the 29th day of January, 1959.

Present:

His Excellency the Governor General in Council

His Excellency the Governor General in Council, on the recommendation of the Minister of Finance, pursuant to the Currency, Mint and Exchange Fund Act, is pleased hereby to revoke the Gold Bullion Regulations made by Order in Council P.C. 1954-1584 of 19th October, 1954,<sup>1</sup> and the Mint Custom Refining and Storing Regulations made by Order in Council P.C. 1956-450 of 22nd March, 1956,<sup>2</sup> and to make the annexed Regulations Respecting the Handling of Gold Bullion at the Royal Canadian Mint in Substitution thereof.

REGULATIONS RESPECTING THE HANDLING OF  
GOLD BULLION AT THE ROYAL CANADIAN MINT

## Short Title

1. These Regulations may be cited as the Gold Bullion Regulations, 1959.

## Interpretation

2. In these Regulations,

- (a) "deposit" means a parcel of bullion or other material containing gold;
- (b) "Master" means the Master of the Mint;
- (c) "Minister" means the Minister of Finance; and
- (d) "Mint" means the Royal Canadian Mint.

## Deposits

3. (1) The Master may accept for assaying, refining, storing or any other purpose, a deposit that is delivered free of all charges to the Mint if the deposit contains

- (a) newly mined Canadian gold,
- (b) old jewellery or dental scrap that has not been melted or otherwise treated to prevent its origin being readily recognized,
- (c) scrap resulting from processes carried out by manufacturers and refiners in the ordinary course of their business, or
- (d) gold coin that is not legal tender in Canada.

(2) The Master shall not accept

- (a) a deposit of a kind not described in subsection (1) unless he is authorized to do so by the Minister,
- (b) an ingot exceeding one thousand and two hundred ounces troy, gross weight, or
- (c) a deposit that appears to him to be unsuitable for treatment by the refining processes in use at the Mint.

(3) The Master is not obliged to accept any deposit and before accepting a deposit he may require the depositor to furnish evidence satisfactory to him as to the origin of the deposit.

4. (1) Where a deposit is delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty, the Minister may, on behalf of Her Majesty, buy the gold content of that deposit.

(2) It is a condition under which a deposit is accepted at the Mint that the silver content thereof belongs to Her Majesty, subject to payment by the Minister in accordance with these Regulations for that part of the silver content of the deposit that is in excess of one per cent of the weight of the deposit after melting.

5. (1) Each parcel of bullion for which a separate assay is required shall be regarded as a separate deposit and all deposits accepted by the Master shall be valued in the order in which they are received.

(2) As soon as possible after a deposit has been accepted by the Master, the content of the deposit shall be determined and valued on the report of the Assay Division of the Mint.

(3) Gold shall be reported on the Assay Division Report to the one-four-thousandth part (one-quarter millieme), except that when the gold millesimal fineness of the bullion exceeds nine hundred and ninety, the gold shall be reported to the one-ten-thousandth part (one-tenth millieme), and silver shall be reported to the one-thousandth part (1 millieme), but only that part of the silver content of the deposit that is in excess of one per cent of the weight of the deposit after melting shall be reported.

(4) Where it is determined that a deposit contains less than two hundred parts of gold in one thousand by assay, or that a deposit is unsuitable for treatment by the refining process in use at the Mint, the Master shall, upon payment by the depositor of the Mint charges for melting and assaying, deliver the deposit at the Mint counter to the depositor.

(5) On the completion of the valuation of a deposit the Master shall, unless the deposit is to be returned to the depositor in accordance with subsection (4), furnish the depositor with a memorandum in duplicate of the outturn of his deposit.

(6) The memorandum mentioned in subsection (5) shall state

- (a) the weight of the deposit before and after melting,
- (b) the assay report,
- (c) the fine gold and the fine silver content of the deposit,
- (d) the gross value of the fine content at the price applicable to the deposit calculated in accordance with sections 6 and 7,
- (e) the Mint charges applicable to the deposit,
- (f) where the deposit was delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty, the net value of the fine gold and fine silver contents of the deposit, being the gross value minus the Mint charges, and
- (g) where the deposit was delivered to the Mint for a purpose other than that of selling the gold content thereof to Her Majesty, the net value of the fine silver content of the deposit, being the gross value thereof minus the Mint charges.

(7) Where a deposit was delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty, the Minister shall, at the same time as the memorandum mentioned in subsection (5) is furnished to the depositor, pay to the depositor as the full purchase price of the fine gold and fine silver contents of the deposit an amount equal to the net value of the fine contents of the deposit as stated in the memorandum.

<sup>1</sup> SOR/54-181, CANADA GAZETTE PART II, Vol. 88, No. 21, Nov. 10, 1954, p. 1430 and Statutory Orders and Regulations Consolidation 1955, Vol. 1, p. 683.

<sup>2</sup> SOR/56-117, CANADA GAZETTE PART II, Vol. 90, No. 7, April 11, 1956.



(3) Where a deposit was delivered to the Mint for a purpose other than that of selling the gold content thereof to Her Majesty, the Minister shall, at the same time as memorandum mentioned in subsection (5) is furnished to the depositor, pay to the depositor, as the full purchase price of the silver content of the deposit, an amount equal to the net value of the fine silver content of the deposit as stated in the memorandum.

6. The price payable by the Minister for the gold content of a deposit is the market price of gold in the country to which the Government of Canada is, at the time the deposit is received, exporting gold, converted into Canadian funds at the average of the rates of exchange for the currency of that country, reported to the Minister by the Bank of Canada on the days Monday to Friday, inclusive, of the week in which the deposit is delivered to the Master such price hereinafter referred to as the "Mint buying price".

7. The price payable by the Minister for the silver content of a deposit is the price that is one quarter of one cent below the average of the official New York daily quotation for fine silver for the days Monday to Friday, inclusive, of the week in which the deposit is delivered to the Master, converted into Canadian funds at the average of the rates of exchange for United States funds reported to the Minister by the Bank of Canada on the days Monday to Friday, inclusive, of that week.

#### Mint Charges

8. (1) The Mint charge payable by a depositor to the Master in respect of a deposit shall be calculated as follows on the gross weight of the deposit after melting:

- (a) for melting and assaying, three dollars for the first one thousand ounces or part thereof and thirty cents for each additional one hundred ounces or part thereof; and
- (b) for refining,
  - (i) when the deposit contains not more than five per cent base metal, nine cents per ounce,
  - (ii) when the deposit contains over five per cent base metal but not over ten per cent base metal, ten cents per ounce,
  - (iii) when the deposit contains over ten per cent base metal but not over fifteen per cent base metal, eleven cents per ounce,
  - (iv) when the deposit contains over fifteen per cent base metal but not over twenty per cent base metal, twelve cents per ounce, and
  - (v) when the deposit contains over twenty per cent base metal, or requires toughening or other special treatment in order to obtain concordant assays, such charge, not exceeding eighteen cents per ounce, as determined by the Master after taking into account the cost of treatment.

(2) The charge for refining provided in paragraph (b) of subsection (1) applies in respect of all deposits containing, by assay, less than nine hundred and ninety-five parts fine gold in one thousand.

(3) To cover the cost of marketing outside Canada a depositor shall pay to the Master a handling charge of eleven cents per fine ounce of gold for every deposit that is delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty.

(4) In respect of every deposit that is delivered to the Mint for the purpose of storing the gold content thereof, the depositor shall pay the following charges:

- (a) a storage charge of five cents for each fine ounce of gold held in Mint storage for more than sixty days (including the day on which the deposit is received at the Mint) in respect of each additional thirty days or fraction thereof (excluding the day on which it is shipped from the Mint) payable upon application for the release of the gold or when billed, whichever is the earlier,
- (b) a service charge of two cents for each fine ounce of gold shipped from the Mint, payable at the time of application for the release of the gold, and

(c) a handling charge of eleven cents for each fine ounce of gold released from storage for sale to Her Majesty, payable at the time of sale.

(5) In respect of every deposit that is delivered to the Mint for a purpose not described in subsection (3) or (4), and packing of fine gold is involved, the depositor shall pay at the time of shipment one dollar for the first fifty ounces of fine gold or part thereof, and two cents for each additional ounce or part thereof that is packed at the Mint for shipment.

(6) It is a condition under which a deposit is accepted at the Mint that the Master may retain a portion of the fine gold content thereof in payment of the Mint charges in respect of that deposit.

#### Release of Gold

9. The fine gold content of a deposit held in storage at the Mint shall be released only upon application therefor in the form prescribed by the Minister.

10. Every deposit is accepted at the Mint subject to the condition that the fine gold content thereof shall be released in a form that is at least .995 fine.

#### Sale of Gold

11. (1) The Master may, with the approval of the Minister, sell fine gold from the Mint that belongs to Her Majesty.

(2) The price at which each fine ounce of gold shall be sold is the Mint buying price per fine ounce for the week immediately preceding the week in which the gold is sold plus ten cents.

#### General

12. (1) Deposits may be delivered to the Mint on Monday to Friday, inclusive, between the hours of 9:30 a.m. and 4:30 p.m. unless such a day is a holiday mentioned in or authorized pursuant to the Civil Service Act.

(2) Where a deposit is delivered to the Mint, it shall be withheld from treatment until an invoice setting out the description and weight of the contents thereof has been received by the Master, and where there is a discrepancy between the actual and invoice weights of a deposit, the deposit shall not be further dealt with until the Master has notified the depositor of the discrepancy and has received further instructions from the depositor.

(3) All gold shipped from the Mint shall be delivered at the Mint counter to the purchaser of the gold, to the depositor or his authorized agent.

13. It is a condition under which newly mined gold is accepted at the Mint for storage that the depositor prepare and mail to the Minister within thirty days of the last day of each month a report for that month in the form prescribed by the Minister showing, *inter alia*,

- (a) fine gold held by him or on his behalf at the beginning of the month
  - (i) at the Mint, and
  - (ii) at places other than the Mint and the location of those places;
- (b) refined gold produced during the month;
- (c) sales made during the month indicating,
  - (i) the name and address of the purchaser,
  - (ii) the amount in ounces sold to each purchaser,
  - (iii) the value, in Canadian funds, of the gold sold to each purchaser, and
  - (iv) the price paid, in Canadian funds, for each fine ounce of gold so sold; and
- (d) fine gold held by him or on his behalf at the end of the month
  - (i) at the Mint, and
  - (ii) at places other than the Mint and the location of those places.



## List of Establishments classified to this Industry, 1967

(Does not include establishments classified to other industries which recover Gold as a secondary activity)

Name	Head or executive office address	Location
<b>(a) Placer Gold Mines</b>		
<b>Alberta:</b>		
Parke, J.L. . . . .	4216-104A Ave., Edmonton . . . . .	Onoway
<b>British Columbia:</b>		
Rensch, Reinhold . . . . .	Kamloops . . . . .	Lillooet
Spanish Placers Ltd. . . . .	Likely . . . . .	Cariboo
Whittle, Raymond . . . . .	Garden Bay . . . . .	Cariboo
<b>Yukon:</b>		
Ballarat Mines Ltd. . . . .	Dawson . . . . .	Dominion Creek and Eldorado Creek
Bardusan Placers Ltd. . . . .	Mayo . . . . .	Mayo
Besner, Henry . . . . .	Whitehorse . . . . .	Burwash Creek
Bleiler, E. . . . .	Mayo . . . . .	Mayo
Boutillier, H.C. & D.F. . . . .	Dawson . . . . .	Bonanza Creek
Bremner, John . . . . .	Box 144, Dawson . . . . .	Dawson
Consolidated Mines (Yukon) Ltd. . . . .	Box 275, Dawson . . . . .	Dawson
Djukastein Placers . . . . .	Mayo . . . . .	Mayo
Franklin Enterprises Ltd. . . . .	Dawson . . . . .	Eldorado Creek
Fry, A.T. . . . .	Dawson . . . . .	Bonanza Creek
Gold Run Placers . . . . .	Dawson . . . . .	Gold Run Creek
Lintick & Berg . . . . .	Dawson . . . . .	Bonanza Creek
Lunde, Ole . . . . .	Dawson . . . . .	Dawson
Peret, F. . . . .	Dawson . . . . .	Victoria Gulch and Upper Bonanza
Gailer, Arthur . . . . .	Dawson . . . . .	Dawson
Spruce Creek Placers Ltd. . . . .	Mayo . . . . .	Haggart Creek
Taylor, Fred W. . . . .	Mayo . . . . .	Dublin Gulch
Thorsen, Harry . . . . .	Whitehorse . . . . .	Whitehorse
<b>(b) Gold Quartz Mines</b>		
<b>Quebec:</b>		
Barnat Mines Ltd. . . . .	112 King St. W., Toronto, Ontario . . . . .	Malaric
Camflo Mines Ltd. . . . .	11 King St. W., Toronto 1, Ontario . . . . .	Malaric and Fournière Twps.
Chimo Gold Mines Ltd. . . . .	11 King St. W., Toronto 1, Ontario . . . . .	Vauquelin Twp.
East Malaric Mines Ltd. . . . .	112 King St. W., Toronto, Ontario . . . . .	Fournière Twp.
Lamaque Gold Mines Ltd. . . . .	49 Toronto-Dominion Centre, Toronto, Ontario . . . . .	Bourlamaque
Little Long Lac Gold Mines Ltd. . . . .	400-112 King St. W., Toronto, Ontario . . . . .	Dubuisson Twp.
Malaric Goldfields (Quebec) Ltd. . . . .	112 King St. W., Toronto, Ontario . . . . .	Fournière and Dubuisson Twps.
Marban Gold Mines Ltd. . . . .	112 King St. W., Toronto, Ontario . . . . .	Dubuisson and Fournière Twps.
Norbeau Mines (Quebec) Ltd. . . . .	112 King St. W., Toronto, Ontario . . . . .	McKenzie Twp.
Sigma Mines (Quebec) Ltd. . . . .	360 Bay St., Toronto, Ontario . . . . .	Bourlamaque
Sullivan Consolidated Mines Ltd. . . . .	Sullivan . . . . .	Dubuisson Twp.
Wasamac Mines Ltd. . . . .	112 King St. W., Toronto 1, Ontario . . . . .	Amtfield
<b>Ontario:</b>		
<b>Porcupine District</b>		
Autor Gold Mines Ltd. . . . .	44 King St. W., Toronto . . . . .	Timmins
Dome Mines Ltd. . . . .	South Porcupine . . . . .	Tisdale Twp.
Hallnor Mines Ltd. . . . .	44 King St. W., Toronto . . . . .	Whitney Twp.
Hollinger Consolidated Gold Mines Ltd. . . . .	Timmins . . . . .	Hislop and Tisdale Twps.
McIntyre Porcupine Mines Ltd. . . . .	55 King St. W., Toronto 1 . . . . .	Schumacher
Pamour Porcupine Mines Ltd. . . . .	44 King St. W., Toronto . . . . .	Whitney Twp.
Preston Mines Ltd. . . . .	120 Adelaide St. W., Toronto 1 . . . . .	South Porcupine
<b>Kirkland Lake District</b>		
Lake Shore Mines Ltd. . . . .	112 King St. W., Toronto . . . . .	Kirkland Lake
Lamaque Mining Co. Ltd. (Teck-Hughes Mining Division) . . . . .	11 Adelaide St. W., Toronto 1 . . . . .	Teck Twp.
Macassa Gold Mines Ltd. (Macassa Division) . . . . .	112 King St. W., Toronto . . . . .	Kirkland Lake
Upper Beaver Mines Ltd. . . . .	250 University Ave., Toronto 1 . . . . .	Gauthier Twp.
Upper Canada Mines Ltd. . . . .	250 University Ave., Toronto 1 . . . . .	Gauthier Twp.
<b>Larder Lake District</b>		
Kerr-Addison Gold Mines Ltd. . . . .	44 King St. W., Toronto 1 . . . . .	McGarry Twp.
<b>Sudbury District</b>		
Renabie Mines Ltd. . . . .	112 King St. W., Toronto . . . . .	Sudbury
<b>Thunder Bay District</b>		
MacLeod-Cockshutt Gold Mines Ltd. . . . .	112 King St. W., Toronto . . . . .	Geraldton
<b>Patricia District</b>		
Anco Mines Ltd. . . . .	2200 Yonge St., Toronto 12 . . . . .	Red Lake
Campbell Red Lake Mines Ltd. . . . .	360 Bay St., Toronto . . . . .	Balmer Twp.
Cochenour Willans Gold Mines Ltd. . . . .	2200 Yonge St., Toronto . . . . .	Dome Twp.
Dickenson Mines Ltd. . . . .	25 Adelaide St. W., Toronto . . . . .	Balmer Twp.
Madsen Red Lake Gold Mines Ltd. . . . .	55 Yonge St., Toronto . . . . .	Heyson and Band Twps.
Wilmar Mines Ltd. . . . .	Cochenour . . . . .	Cochenour

## List of Establishments classified to this Industry, 1967 - Concluded

Name	Head or executive office address	Location
<b>(b) Gold Quartz Mines - Concluded</b>		
<b>Manitoba:</b>		
San Antonio Gold Mines Ltd. (Forty-Four Mines Ltd.)	67 Yonge St., Toronto	Bissett
<b>British Columbia:</b>		
Bralorne Pioneer Mines Ltd.	320-355 Burrard St., Vancouver	Bralorne
Silbak Premier Mines Ltd.	355 Burrard St., Vancouver 1	Stewart
<b>Northwest Territories:</b>		
Cominco Ltd. (Con Mine)	Trail, British Columbia	Yellowknife
Cominco Ltd. (Rycon Mines Ltd.)	Trail, British Columbia	Yellowknife
Discovery Mines Ltd.	2200 Yonge St., Toronto 7, Ontario	Discovery
Giant Yellowknife Mines Ltd.	7 King St. W., Toronto, Ontario	Yellowknife
Lolord Mines Ltd.	7 King St. W., Toronto, Ontario	Yellowknife
Supercrest Mines Ltd.	7 King St. W., Toronto, Ontario	Yellowknife
Tundra Gold Mines Ltd.	2200 Yonge St., Toronto, Ontario	Matthews Lake
Vol Mines Ltd.	Trail	Yellowknife
<b>(c) Copper-Gold-Silver Mines</b>		
<b>Newfoundland:</b>		
Atlantic Coast Copper Corp. Ltd.	330 Bay St., Toronto, Ontario	Springdale
British Newfoundland Exploration Ltd.	1 Westmount Square, Montreal, Quebec	Springdale
Consolidated Rambler Mines Ltd.	908-330 Bay St., Toronto 1, Ontario	White Bay
First Maritime Mining Corp., Ltd.	330 Bay St., Toronto, Ontario	Tilt Cove
Gullbridge Mines Ltd.	Box 67, Gullbridge	Gullbridge
<b>New Brunswick:</b>		
Cominco Ltd.	630 Dorchester Ave., Montreal, Quebec	Wedge Mine
<b>Quebec:</b>		
Bruneau Mines Ltd. c/o Rosario Exploration Co.	620 Cathcart St., Montreal 2	McKenzie Twp.
Campbell Chibougamau Mines Ltd.	55 Yonge St. Toronto, Ontario	Obalski Twp.
Cupra Mines Ltd.	1403-507 Place d'Armes, Montreal	Stratford Twp.
Gaspé Copper Mines Ltd.	44 King St. W., Toronto, Ontario	Murdochville
Iron Sullivan Joint Venture	80 Richmond St. W., Toronto 1, Ontario	Abitibi East
Joutel Copper Mines Ltd.	44 King St. W., Toronto 1, Ontario	Abitibi East
Lake Dufault Mines Ltd.	7 King St. W., Toronto, Ontario	Dufresnoy Twp.
Merrill Island Mining Corporation Ltd.	621 Craig St. W., Montreal 5	McKenzie Twp.
Mines de Poirier Inc.	120 Adelaide St. W., Toronto, Ontario	Poirier Twp.
New Hosco Mines Ltd.	44 King St. W., Toronto, Ontario	Daniel Twp.
Noranda Mines Ltd.	44 King St. W., Toronto, Ontario	Noranda
Normetal Mining Corp. Ltd.	1800-44 King St. W., Toronto, Ontario	Desmeloizes Twp.
Opemiska Copper Mines Ltd.	7 King St. E., Toronto, Ontario	Levy Twp.
Patino Mining Corp. (The)	7 King St. E., Toronto, Ontario	Chibougamau
Quemont Mining Corp. Ltd.	1700-44 King St. W., Toronto, Ontario	Rouyn-Noranda
Solbec Copper Mines Ltd.	1403-507 Place d'Armes, Montreal	Stratford Twp.
<b>Ontario:</b>		
Canadian Jamieson Mines Ltd.	Timmins	Timmins
Copperfields Mining Corp. Ltd.	11 Adelaide St. W., Toronto	Algoma
Geco Division (Noranda Mines Ltd.)	1715-44 Adelaide St. W., Toronto	Algoma
Kam Kotia Mines Ltd.	25 Adelaide St. W., Toronto	Robb Twp.
North Canadian Enterprises Ltd.	4 King St. W., Toronto 1	Batchawana Bay
North Coldstream Mines Ltd.	25 Adelaide St. W., Toronto	Burchell Lake
Rio Algoni Mines Ltd. (Pater Mine)	120 Adelaide St. W., Toronto	Spragge Twp.
Texas Gulf Sulphur Co.	Box 2002, Timmins	Porcupine
Tribag Mining Co. Ltd.	4900 Toronto-Dominion Centre, Toronto	Algoma
<b>Manitoba:</b>		
Hudson Bay Mining & Smelting Company Ltd.	4th Floor, 333 Broadway Ave., Winnipeg	Flin Flon, Snow Lake
<b>Saskatchewan:</b>		
Anglo-Rouyn Mines Ltd.	120 Adelaide St. W., Toronto, Ontario	La Ronge
Hudson Bay Mining & Smelting Co. Ltd.	4th Floor, 333 Broadway Ave., Winnipeg, Manitoba	Flin Flon, Phil Lake
<b>British Columbia:</b>		
Anaconda Company (Canada) Ltd. (The) (Britannia Mine)	260-8th Ave., Toronto 14, Ontario	Britannia Beach
Bethlehem Copper Corp. Ltd.	Ashcroft	Highland Valley
Coast Copper Company Limited	Trail	Benson Lake
Cowichan Copper Co. Ltd.	River Jordan	River Jordan
Craigmont Mines Ltd.	700 Burrard Bldg., Vancouver	Merritt
Granby Mining Company Ltd. (The) (Phoenix Copper Div.)	1111 West Georgia St., Vancouver	Phoenix
Granisle Copper Ltd.	1111 West Georgia St., Vancouver	Smithers
Minoca Mines Ltd.	311-543 Granville St., Vancouver	Comox
Western Mines Ltd.	505 Burrard St., Vancouver	Mvra Falls
<b>Yukon:</b>		
New Imperial Mines Ltd.	355 Burrard St., Vancouver	Whitehorse
<b>Northwest Territories:</b>		
Echo Bay Mines Ltd.	10015-103rd St., Edmonton, Alberta	Echo Bay

Note: Small quantities of gold and silver are produced by a few companies not counted as establishments in the Gold Mining Industry.





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