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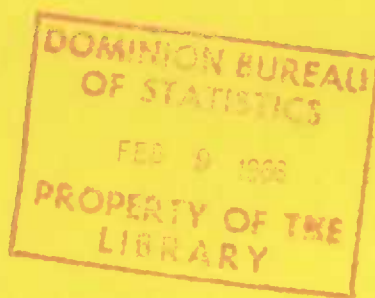
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ANNUAL



GOLD MINING INDUSTRY

1962



DOMINION BUREAU OF STATISTICS

Industry Division

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Published by Authority of
The Minister of Trade and Commerce

January 1966
6521-900

Price: 75 cents

THE JOURNAL OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE

THE JOURNAL OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE

1957

TABLE OF CONTENTS

PRODUCTION:	Table
Gold—Historical	1
By provinces and fields	4- 6
World	7
Cadmium	48
Copper	42, 43, 50
Silver	44
Selenium	45
Tellurium	45
Zinc	46, 47
 THE ALLUVIAL (PLACER) GOLD MINING INDUSTRY:	
Principal statistics	12, 12A
Materials handled and gold recovered	13
Employees and earnings	14
Fuel and electricity	15
 THE AURIFEROUS (GOLD) QUARTZ MINING INDUSTRY:	
Principal statistics	16, 16A 17
Employees and earnings	24-25
Fuel and electricity	26
Ores hoisted and milled, etc.	18-19
Mine shipments	20-21
Milling capacity	23
Expenditures for prospecting	27
Drilling completed	28
Taxes paid	29
Miscellaneous expenditures	30-31
 THE COPPER-GOLD-SILVER MINING INDUSTRY:	
Principal statistics	32, 32A
Ores milled and concentrates produced	34
Mine shipments	33
Employees, salaries and wages	35-36
Fuel and electricity	37
Miscellaneous expenditures	38
Taxes paid	39
Expenditures for prospecting	41
Drilling done	42
 Metal Prices	 49
 Emergency Gold Mining Assistance Act	 11

EXPLANATORY NOTES

Establishment

The reporting unit in the Census of Manufactures is the **establishment**. Beginning with the 1961 Census, the establishment is defined as follows:

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

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

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

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

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

SYMBOLS

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

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

GOLD MINING INDUSTRY

1962

This report includes statistics for industries:

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

of the Standard Industrial Classification 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, described as "Placer Gold Mines"; (b) the recovery of lode gold, which is designated "Gold Quartz Mines", and in which industry gold is usually the most important economic constituent of the ores mined and quartz the predominant gangue mineral; (c) gold is often found in various other mineral deposits, more particularly in those of copper, and for this reason, the review of Canada's "Copper-Gold-Silver Mines" is included here to complete a comprehensive survey of Canadian gold production.

During 1962 the production of gold amounted to 4,178,396 troy ounces valued at \$156,313,794 compared with 4,473,699 ounces valued at \$158,637,366 in 1961. 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 58 per cent of the total. Quebec, in second position, produced 24 per cent and Northwest Territories accounted for 10 per cent of the total. The other provinces ranked in the following order: British Columbia, Manitoba, Saskatchewan, Yukon, Newfoundland and Alberta.

The price of gold in Canadian funds averaged \$37.41 per troy ounce. It ranged from \$36.55 per troy ounce in January 1962 to \$38.15 per troy ounce in June. 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.

MINERAL STATISTICS

TABLE 1. Production of Gold, Fifty Years, 1913-62

Year	Troy ounces	Value	Year	Troy ounces	Value
		\$			\$
1913	802,973	16,598,923	1938	4,725,117	166,205,990
1914	773,178	15,983,007	1939	5,094,379	184,115,951
1915	918,056	18,977,901	1940	5,311,145	204,479,083
1916	930,492	19,234,976	1941	5,345,179	205,789,392
1917	738,831	15,272,992	1942	4,841,306	186,390,281
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

TABLE 2. Total (Cumulative) Recorded Production of Specified Metals to December 31, 1962

		Since	Quantity	Value
				\$
Gold	troy ounce	1858	161,795,340	5,112,420,454
Silver	"	1887	1,267,374,788	846,965,040
Copper	ton	1886	10,014,567	3,959,289,731
Nickel	"	1889	4,840,800	4,051,316,002
Lead	"	1887	7,410,173	1,174,403,550
Zinc	"	1898	...	1,834,854,028
Cobalt	ton	1904	33,700	101,879,438

TABLE 3. Production of Gold from Auriferous Quartz and Base Metal Mines, by Months, 1960-62

	Gold production from: base metal mines			Gold production from auriferous quartz mines and placer deposits			Gold production from all types of mines		
	1960	1961	1962	1960	1961	1962	1960	1961	1962
	troy ounces								
January	49,368	51,847	50,494	328,705	330,818	309,418	378,073	382,665	359,910
February	50,410	52,033	47,896	322,254	313,001	279,000	372,664	365,034	326,896
March	52,019	55,191	55,513	338,012	342,948	312,493	390,031	398,139	368,006
April	50,056	53,926	49,177	317,774	326,162	307,791	367,830	380,088	356,968
May	45,567	56,102	50,179	334,561	333,876	303,939	380,128	389,978	354,118
June	53,924	52,451	53,164	335,158	318,889	284,808	389,082	371,340	337,972
July	53,121	50,678	52,747	344,366	311,169	288,055	397,487	361,847	340,802
August	55,631	48,376	51,955	328,302	313,639	292,942	383,933	362,015	344,897
September	50,934	46,986	56,410	320,783	302,336	286,217	371,717	349,322	342,627
October	51,847	48,271	54,051	353,632	318,318	305,325	405,479	366,589	359,376
November	50,733	57,474	56,388	344,482	316,049	292,324	395,215	373,523	348,712
December	54,131	56,602	54,453	343,141	316,557	283,659	397,272	373,159	338,112
Totals	617,741	629,937	632,427	4,011,170	3,843,762	3,545,969	4,628,911	4,473,699	4,178,396

TABLE 4. Production of Gold,¹ by Provinces, 1953-62

Year	Newfoundland		Nova Scotia		Quebec		Ontario		Manitoba	
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
		\$		\$		\$		\$		\$
1953	7,654	263,451	3,248	111,796	1,021,698	35,166,845	2,182,437	75,119,481	131,309	4,519,656
1954	6,528	222,409	3,754	127,899	1,098,570	37,428,280	2,361,385	80,452,387	134,944	4,597,542
1955	6,337	218,753	3,880	133,938	1,154,522	39,854,099	2,523,040	87,095,340	123,888	4,276,614
1956	8,213	282,938	1,279	44,061	1,036,059	35,692,233	2,513,912	86,604,268	120,232	4,141,992
1957	9,755	327,280	45	1,510	1,006,895	33,781,327	2,578,206	86,498,811	120,008	4,026,268
1958	13,381	454,686	131	4,451	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	2,663,449	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	—	—	993,560	37,169,080	2,421,249	90,578,924	68,259	2,553,569
	Saskatchewan		Alberta		British Columbia		Yukon		Northwest Territories	
1953	88,327	3,040,215	65	2,237	264,976	9,120,474	66,080	2,274,474	289,929	9,979,356
1954	101,785	3,467,815	195	6,644	268,508	9,148,068	82,208	2,800,826	308,563	10,512,741
1955	83,580	2,885,182	214	7,367	252,979	8,732,835	72,201	2,492,379	321,321	11,092,001
1956	82,687	2,848,567	119	4,100	196,692	6,776,040	72,001	2,480,434	352,669	12,149,447
1957	75,236	2,524,168	416	13,957	229,113	7,686,741	73,962	2,481,425	340,018	11,407,604
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	164,312	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

¹ From all sources.

Note: New Brunswick gold in 1957, 240 ounces; in 1958, 52 ounces; in 1962, 553 ounces.

TABLE 5. Production of Gold, by Provinces, according to Nature of Ores, 1961 and 1962

Year and province	Placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead and other ores	Total
	troy ounces					
1961						
Newfoundland	—	—	5,663	—	8,766	14,429
Nova Scotia	—	—	—	—	—	—
New Brunswick	—	—	—	—	—	—
Quebec	478	631,759	408,863	—	12,929	1,054,029
Ontario	—	2,569,448	8,423	58,778	1,071	2,637,720
Manitoba	—	31,025	26,193	529	—	57,747
Saskatchewan	—	—	70,784	—	—	70,784
Alberta	171	—	—	—	—	171
British Columbia	2,484	134,816	16,182	—	10,985	164,467
Yukon	66,107	—	—	—	771	66,878
Northwest Territories	—	407,474	—	—	—	407,474
Canada	69,240	3,774,522	536,108	59,307	34,522	4,473,699

TABLE 5. Production of Gold, by Provinces, according to Nature of Ores, 1961 and 1962 - Concluded

Year and province	Placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead and other ores	Total
troy ounces						
1962						
Newfoundland	—	—	4,672	—	9,294	13,966
Nova Scotia	—	—	—	—	—	—
New Brunswick	—	—	144	—	409	553
Quebec	117	580,631	401,065	—	11,747	993,560
Ontario	—	2,349,813	14,085	55,922	1,429	2,421,249
Manitoba	—	37,194	29,905	1,160	—	68,259
Saskatchewan	—	—	66,034	—	—	66,034
Alberta	186	—	—	—	—	186
British Columbia	2,652	120,279	29,115	—	7,446	159,492
Yukon	54,805	—	—	—	—	54,805
Northwest Territories	—	400,292	—	—	—	400,292
Canada	57,760	3,488,209	545,020	57,082	30,325	4,178,396

TABLE 6. Gold Production by Provinces and Principal Areas, 1960-62

Province and area	1960		1961		1962	
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
		\$		\$		\$
Newfoundland	13,515	458,834	14,429	511,652	13,966	522,468
Nova Scotia	3	102	—	—	—	—
New Brunswick	—	—	—	—	553	20,688
Quebec:						
Gold mines	641,313	21,772,576	632,237	22,419,124	580,748	21,725,783
Base metal mines	394,601	13,396,704	421,792	14,956,744	412,812	15,443,297
Totals	1,035,914	35,169,280	1,054,029	37,375,868	993,560	37,169,080
Ontario:						
Gold Mines:						
Porcupine	1,084,537	36,820,031	1,075,161	38,125,209	1,006,700	37,660,647
Kirkland Lake	332,939	11,303,279	301,806	10,702,041	249,852	9,346,963
Larder Lake	592,244	20,106,684	520,868	18,469,979	422,263	15,796,859
Matachewan	80	2,716	111	3,936	10	374
Sudbury	39,035	1,325,238	37,934	1,345,140	35,735	1,336,846
Thunder Bay	106,358	3,610,854	110,081	3,903,472	132,728	4,965,354
Patricia	511,323	17,359,416	523,465	18,562,069	507,791	18,996,461
Other mines	66,157	2,246,030	68,294	2,421,705	66,170	2,475,420
Totals	2,732,673	92,774,248	2,637,720	93,533,551	2,421,249	90,578,924
Manitoba:						
Gold mines	31,172	1,058,289	31,025	1,100,147	37,194	1,391,427
Other mines	21,590	732,981	26,722	947,562	31,065	1,162,142
Totals	52,762	1,791,270	57,747	2,047,709	68,259	2,553,569
Saskatchewan:						
Gold mines	—	—	—	—	—	—
Other mines	84,775	2,878,111	70,784	2,510,000	66,034	2,470,332
Totals	84,775	2,878,111	70,784	2,510,000	66,034	2,470,332
Alberta (placer)	191	6,484	171	6,064	186	6,958
British Columbia:						
Gold mines (lode)	173,241	5,881,532	134,816	4,780,575	120,279	4,499,638
Gold mines (placer)	2,498	84,807	2,484	88,083	2,652	99,211
Other mines	37,120	1,260,224	27,167	963,342	36,561	1,367,747
Totals	212,859	7,226,563	164,467	5,832,000	159,492	5,966,596
Yukon (chiefly placer)	78,115	2,652,004	66,878	2,371,494	54,805	2,050,255
Northwest Territories:						
Gold mines	418,104	14,194,631	407,474	14,449,028	400,292	14,974,924
Totals, Canada	4,628,911	157,151,527	4,473,699	158,637,699	4,178,396	156,313,794

TABLE 7. Gold Production of the World,¹ 1958-62

Country	1958	1959	1960	1961	1962
	fine ounces				
North America:					
United States	1,759,000	1,635,000	1,679,800	1,566,800	1,277,332
Canada	4,571,347	4,483,416	4,628,911	4,473,699	4,156,233
Mexico	332,238	313,655	300,249	268,678	236,753
Totals, North America	6,662,585	6,432,071	6,608,960	6,309,177	5,670,318
Central America and West Indies	221,232	224,702	214,149	227,935	225,000
South America:					
Bolivia	19,115	35,246	45,457	80,184	35,052
Brazil ²	116,190	112,332	118,891	118,955	119,875
British Guiana	17,500	3,448	2,364	1,702	1,903
Chile	70,858	72,177	54,350	56,488	62,500
Colombia	371,715	397,928	433,947	401,064	396,825
Ecuador	19,311	18,177	15,061	15,210	20,591
French Guiana	20,000	16,100	18,936	7,944	
Peru	159,127	150,299	141,001	137,418	126,223
Surinam	4,244	5,819	4,932	4,019	2,604
Venezuela	89,654	53,740	46,867	30,071	28,774
Total South America, as reported	887,714	865,266	881,806	833,055	
Europe	500,000	500,000	600,000	700,000	
Australia:					
New South Wales	18,709	13,275	13,628	12,034	11,697
Queensland	74,568	91,687	78,267	64,786	67,841
Victoria	41,476	34,662	28,566	26,229	28,207
Western Australia	874,819	860,969	869,966	870,658	860,040
Tasmania	21,744	21,353	23,994	26,885	30,905
Other Australia	72,664	63,158	72,288	75,700	70,034
Total Australia (Commonwealth)	1,103,980	1,085,104	1,086,709	1,076,292	1,068,724
Oceania, other:					
Fiji	81,827	72,566	72,203	74,137	
New Guinea	43,812	46,820	45,151	41,820	39,052
New Zealand	24,932	37,662	33,326	28,294	21,742
Total Oceania other	150,571	157,048	150,680	144,251	
Asia:					
India	170,109	165,380	160,589	156,538	163,290
Japan	308,450	328,186	336,003	378,913	420,957
Korea, Republic of	73,163	65,688	65,810	84,013	84,104
Malaya	22,484	26,739	20,745	12,486	6,924
Philippines Republic	428,833	402,615	410,618	423,983	423,394
Saudi Arabia	20,265	13,497	17,207	17,490	
Taiwan (Formosa)					
Total Asia, as reported	1,017,304	1,002,105	1,010,972	1,073,423	
Africa:					
Botswana	215	198	203	261	
Cameroon	2,009	971	415	538	
Congo, Republic of	6,048	3,665	2,628	1,788	
Ethiopia	36,369	41,439	40,915	41,500	51,440
Gabon, Republic of	15,921	16,172	17,696	15,286	
Ghana	851,433	902,595	893,113	852,619	731,905
Katanga, State of	356,126	351,078	316,195	232,605	
Kenya	7,753	9,145	8,522	12,100	8,917
Liberia	400	1,355	1,119	2,088	2,184
Madagascar	804	193	273	347	
Nigeria	646	950	994	676	
Republic of South Africa	17,656,442	20,066,753	21,386,114	22,946,294	24,403,447
Southern Rhodesia	554,838	566,882	562,703	570,095	554,647
Tanganyika (export)	68,250	95,794	107,009	99,574	101,597
Uganda	292	384	780	470	
Total Africa, as reported	19,557,546	22,057,574	23,338,679	24,776,241	
U.S.S.R. ³	10,000,000	10,000,000	11,000,000	12,000,000	
Total world as reported	40,100,932	42,323,870	44,891,955	47,160,374	
Estimated world totals ⁴	40,600,000	42,800,000	45,400,000	47,000,000	

¹ 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.² Mined gold only; production of alluvial gold unknown.³ Conjectural.⁴ This estimate includes the following countries which also produce gold: Angola, Argentina, Austria, Bulgaria, Burma, Cambodia, China, Czechoslovakia, East Germany, Egypt, Eritrea, Hungary, Indonesia, Mozambique, North Korea, Northern Rhodesia, Papua, Rumania, Sarawak, Sudan and Thailand, from whom definitive figures are not available.

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

TABLE 8. Gold Production according to Method of Computation and Recovery, 1953-62

Year	In alluvial gold	In crude gold bullion produced at mines ¹	In base bullion produced at lead smelters	In blister and anode copper produced ²	In ores, matte, slags, etc., exported	Total gold produced
			per cent			fine ounces
1953	1.91	84.11	0.25	9.77	3.96	4,055,723
1954	2.05	83.14	0.34	11.18	3.29	4,366,440
1955	1.73	83.10	0.16	12.15	2.86	4,541,962
1956	1.71	83.66	0.17	12.88	1.58	4,383,863
1957	1.72	83.98	0.32	12.40	1.58	4,433,894
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

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

TABLE 9. Estimated Average Monthly Value of an Ounce of Fine Gold, Expressed in Canadian Funds, 1946-62

Month	1946	1947-48	1949 ¹	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
	dollars															
January	38.50	35.00	35.00	38.50	36.81	35.19	33.97	34.05	33.81	34.95	33.62	34.46	33.84	33.36	34.76	36.55
February	38.50	35.00	35.00	38.50	36.73	35.03	34.20	33.83	34.19	34.97	33.54	34.34	34.12	33.31	34.62	36.77
March	38.50	35.00	35.00	38.50	36.65	34.85	34.44	33.98	34.45	34.95	33.46	34.21	33.93	33.28	34.56	36.78
April	38.50	35.00	35.00	38.50	37.07	34.34	34.43	34.39	34.52	34.89	33.59	33.97	33.73	33.70	34.61	36.79
May	38.50	35.00	35.00	38.50	37.25	34.43	34.79	34.45	34.51	34.71	33.45	33.84	33.70	34.24	34.56	37.37
June	38.50	35.00	35.00	38.50	37.42	34.26	34.80	34.34	34.45	34.48	33.36	33.67	33.56	34.39	35.19	38.00
July	35.35	35.00	35.00	38.50	37.12	33.93	34.72	34.10	34.46	34.37	33.29	33.60	33.51	34.24	36.19	37.76
August	35.00	35.00	35.00	38.50	38.96	33.65	34.59	33.96	34.48	34.34	33.18	33.76	33.41	33.95	36.10	37.72
September	35.00	35.00	36.52	38.50	36.94	33.59	34.45	33.94	34.57	34.22	33.56	34.19	33.31	34.03	36.08	37.69
October	35.00	35.00	38.50	36.86	36.78	33.75	34.39	33.94	34.84	34.07	33.77	33.98	33.17	34.24	36.07	37.66
November	35.00	35.00	38.50	36.43	36.53	34.17	34.22	33.93	34.98	33.75	33.67	33.89	33.26	34.19	36.26	37.69
December	35.00	35.00	38.50	36.83	35.89	33.97	34.06	33.88	34.98	33.62	34.22	33.76	33.29	34.43	36.49	37.66
Yearly averages	36.75	35.00	36.00	38.05	36.85	34.27	34.42	34.07	34.52	34.45	33.55	33.98	33.57	33.95	35.46	37.41

¹ United States dollar equivalent to \$1.10 Canadian funds from September 18, 1949, to October 1, 1950.

TABLE 10. Precious Metals Consumed by the Jewellery and Silverware Industry, 1958-62

Material	Cost at works				
	1958	1959	1960	1961	1962
	dollars				
Fine gold	5,044,225	5,324,330	6,728,468	6,317,636	6,175,687
Gold alloys	1,633,143	1,662,361	1,417,360	1,396,311	1,610,321
Fine silver	2,801,283	3,258,106	3,045,685	3,133,995	4,178,785
Silver alloys and sterling	2,354,492	2,496,816	2,004,301	1,895,944	2,867,262
Platinum	3,258,208	2,549,125	759,035	668,224	715,275
Palladium	1,143,382	1,287,587	494,006	475,425	702,916
Old gold, jewellers' findings, waste and scrap refining	1,020,928	972,129	1,453,611	1,347,544	1,770,939
Gold-filled wire and stock	143,909	124,531	150,597	312,219	270,028
Precious and semi-precious stone	4,073,739	3,630,460	4,241,040	3,691,790	3,474,102

EMERGENCY GOLD MINING ASSISTANCE ACT

(Taken from the "Report on the Administration of the Emergency Gold Mining Assistance Act" of the Department of Mines and Technical Surveys)

Summary of Operations for the Year 1962

The *Emergency Gold Mining Assistance Act* was passed in 1948 to enable higher-cost gold mines to maintain operations and thus provide support for mining communities dependent principally upon them. The Act was last amended in 1960 at which time it was extended for three years to December 31, 1963.

The amounts paid to operators of gold mines to March 31, 1963, for the years 1948 to 1962 inclusive totalled \$171,634,510.64 on a production of 43,898,423.292 fine ounces of gold produced and sold under the provisions of the Act.

The assistance payable for the calendar year 1962 is estimated to be \$14,500,000. Advance payments to March 31, 1963 for the calendar year 1962 have been made in the amount of \$11,312,505.51. A holdback on each application is payable after the operator's books of account have been audited by the Comptroller of the Treasury.

Assistance payments totalling \$12,679,767.75 have been made on gold produced in 1961. Payment of holdbacks will bring the total to approximately \$12,850,000.

The amount of assistance payable to the operator of a gold mine is computed under the current formula by adding 25 per cent to the product of the rate of assistance and the number of assistance ounces. The number of assistance ounces is two thirds of the total number of ounces produced in the calendar year. The rate-of-assistance factor is two thirds of the amount by which the average cost of production per ounce of gold for the calendar year exceeds \$26.50. Ten lode gold mines operating in 1962 with an average cost of production less than \$26.50 received no assistance. The amount of assistance increases as the average cost of production per ounce increases from \$26.50 to \$45. A maximum rate of assistance of \$12.33 per ounce has the effect of precluding an increase in the amount of assistance as the average cost of production rises above \$45 per ounce.

The cost of production of gold from a mine is the cost properly attributable to the gold produced from the mine during the year and includes mining, milling, smelting, refining, transportation, and administration costs. The regulations set forth rules governing allowable costs of production particularly for depreciation, pre-production expenses and expenditures on exploration and development.

There were 42 lode gold mines in receipt of assistance in 1962. An application has been received from one placer gold mine for 1962. Twenty-seven placer operators received assistance for 1961. Additional applications will be received prior to June 30, 1963 for gold produced in 1962 from the operators of placer gold mines in British Columbia and the Yukon Territory.

One lode gold mine, receiving assistance, closed in 1962. A second suspended operations pending the completion of a shaft-deepening program. One lode gold mine commenced production in 1962. Two others also became eligible for assistance because the average cost of production rose above \$26.50 per ounce.

The annual average of the weekly buying prices in Canadian funds by the Royal Canadian Mint in 1962 was \$37.41 per fine ounce of gold compared with \$35.46 in 1961 and \$33.95 in 1960. The price of gold is governed by the fixed buying price of \$35 per fine ounce in United States funds by the United States Treasury. The Minister of Finance announced on May 2, 1962 that the value of the Canadian dollar had 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 may be permitted to fluctuate by one per cent

either side of parity. Thus, the Mint buying price in Canadian funds may vary between \$37.46 and \$38.22 per ounce. The Mint buying price for the week ending December 28, 1962 was \$37.668750.

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

The operator 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 Mines and Technical Surveys 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 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 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.

The Gold Export Act and Disposal of Canadian Gold

The Gold Export Act, passed in 1932, authorized the Governor in Council to make regulations regarding the export of gold from Canada. On March 21, 1956, the regulations, which prohibited the export in any form except under licence issued by the Minister of Finance, were revoked. Thus, since March 1956, producers have been free to sell their gold wherever they desire.

Administration

The Act is administered under the direction of the Deputy Minister by a senior officer of the Mineral Resources Division, Department of Mines and Technical Surveys. Inspection engineers annually visit each mine or operation receiving assistance for the purpose of ascertaining 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 allowable assistance payable under the application. When the final audit of the books of account has been completed and the audit deletions and additions have been made, the remaining holdback is approved for payment.

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

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. 2644, 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.

TABLE 11. Emergency Gold Mining Assistance Act—Estimated Assistance Payable

Province	1955	1956	1957	1958	1959	1960	1961	1962
	dollars							
Nova Scotia	—	—	—	1,085	—	—	—	—
Quebec	2,510,421	2,554,961	2,802,638	3,111,036	3,027,080	3,025,354	2,917,684	3,551,145
Ontario	4,532,956	4,569,086	5,430,897	6,565,596	7,814,793	8,713,404	9,281,279	9,539,032
Manitoba	654,801	722,087	712,029	463,210	217,106	209,027	250,232	238,361
British Columbia	600,710	605,950	397,774	658,035	718,641	360,557	324,924	191,362
Northwest Territories	330,532	14,013	284,030	435,520	37,656	—	—	176,824
Yukon	255,959	201,138	52,385	185,982	186,477	54,176	73,609	214,560
Canada	8,885,479	8,667,235	9,679,753	11,420,464	12,001,753	12,362,518	12,847,728	13,911,284

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 1962 a total of 57,760 troy ounces of fine gold were recovered from crude gold obtained from Canadian alluvial deposits. This represented a decrease of per cent from the preceding year. Reviewing the past twenty five years, it is noted that the peak of production of placer gold occurred in 1939, and that the lowest annual output was in 1944.

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 and 117 ounces in 1962.

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 to prospectors of no fixed abode who, in many instances, market their recoveries through local merchants and banks. Recoveries in 1962 were made chiefly from deposits located in the Atlin and Cariboo districts. Output was estimated at 2,652 troy ounces.

Yukon—Over 95 per cent of the placer gold recovered in Canada during 1962 was found in the creeks of the Yukon. Production in 1962 totalled 54,805 troy ounces.

Employees in the industry numbered 231 persons to whom \$1,340,953 were paid in wages and salaries. Fuel and electricity cost \$101,676 electricity generated for own use was 14,696,775 kwh. and the electricity for sale was 7,466,938 kwh. Process supplies were valued at \$13,817. Freight and express on shipments amounted to \$26,284 and \$29,328 were paid for treatment and marketing.

TABLE 12. Principal Statistics for Placer Gold Mines, Significant Years, 1921-59

Basis: Standard Industrial Classification prior to 1960

Year	Establish- ments	Employees	Salaries and wages	Cost of fuel and electricity	Process supplies and containers	Gross value of products	Net value of production ¹
	number				dollars		
1921	197	428	671,783	..	..	1,576,222	..
1929	68	488	586,193	2,969	..	836,006	..
1931	109	337	682,935	41,745	..	1,226,541	..
1933	74	454	704,151	35,165	..	1,218,250	..
1937	109	1,069	1,689,911	99,072	77,488	3,243,196	3,066,636
1939	104	830	1,439,765	119,692	90,610	4,523,587	4,204,974
1941	110	797	1,954,278	155,518	68,489	4,132,503	3,800,142
1944	47	211	598,558	43,591	13,703	1,281,125	1,197,021
1946	39	340	1,112,984	84,206	46,870	1,849,511	1,693,568
1949	56	398	1,509,423	88,614	455,371	3,499,823	2,920,290
1951	47	362	1,553,103	44,678	507,830	3,572,516	2,951,342
1954	62	351	1,619,460	146,300	253,128	3,051,665	2,575,038
1957	57	243	1,180,225	55,472	353,186	2,573,853	2,116,716
1958	112	236	1,253,362	63,007	461,375	3,049,743	2,484,524
1959	112	239	1,194,713	74,536	355,837	2,462,727	1,989,431

¹ Gross value less fuel, electricity, process supplies, freight and treatment charges.

TABLE 12 A. Principal Statistics for Placer Gold Mines, 1957-62

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Establish- ments	Employees	Salaries and wages	Cost of fuel and electricity	Process supplies and containers	Gross value of products	Net value of production ¹
	number				dollars		
1957	57	243	1,180,225	55,472	353,186	2,573,853	2,116,716
1958	112	236	1,253,362	63,007	461,375	3,049,743	2,484,524
1959	112	239	1,194,713	74,536	355,837	2,462,727	1,989,431
1960	32	213	1,224,907	77,498	344,379	2,758,284	2,285,126
1961	47	243	1,326,147	109,452	47,822	2,465,811	2,254,746
1962	39	231	1,340,953	101,676	13,817	2,160,801	1,989,696

¹ Gross value less fuel, electricity, process supplies, freight and treatment charges.TABLE 13. Alluvial Gold Recovered and Quantity of Material Handled,¹ 1953-62

Year	British Columbia				Yukon				Canada
	Material handled ²	Gold recovered ³	Ounces per cu. yd.	Value per cu. yd.	Material handled ²	Gold recovered ³	Ounces per cu. yd.	Value per cu. yd.	Gold recovered ³
	cu. yd.	fine ounces		\$	cu. yd.	fine ounces		\$	ounces
1953	597,073	11,360	0.0199	0.6850	5,155,826	66,080	0.0140	0.4832	77,505
1954	233,114	7,105	0.0305	1.0390	6,889,820	82,208	0.0119	0.4065	89,571
1955	110,594	6,206	0.0561	1.9365	6,379,755	72,201	0.0113	0.3907	78,621
1956	..	2,962	..	..	5,716,389	71,736	0.0125	0.4306	74,919
1957	..	2,105	..	..	7,559,882	73,709	0.0097	0.3271	76,303
1958	..	3,928	..	..	6,808,991	67,745	0.0099	0.3380	71,955
1959	..	5,814	..	..	6,824,062	66,960	0.0098	0.3294	72,974
1960	..	2,498	..	..	5,519,729	78,115	0.0141	0.4787	80,804
1961	..	2,484	..	..	4,672,554	66,107	0.0141	0.5018	69,240
1962	..	2,652	..	..	5,163,113	54,805	0.0112	0.4182	57,760

¹ In addition, relatively small amounts of alluvial gold have been recovered in Quebec, Saskatchewan and Alberta but complete data are not available; also, data relating to material handled, particularly those pertaining to small operations, are not complete and necessitate estimates in order to obtain totals.² Data partly conjectural and includes some overburden and barren material.³ Fine gold received at Royal Canadian Mint (Vancouver Assay Office).

TABLE 14. Employees and their Earnings in the Placer Gold Mines, 1957-62

Year	Employees ¹					Man-hours worked	Earnings		
	Administration		Workmen		Total		Admin- istration	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1957	14	6	218	5	243	661,202	92,833	1,087,392	1,180,225
1958	16	5	212	5	236	659,577	123,329	1,130,033	1,253,362
1959	20	5	211	3	239	621,299	114,224	1,080,489	1,194,713
1960	9	5	196	3	213	567,383	93,773	1,131,134	1,224,907
1961	18	6	214	5	243	646,618	156,352	1,169,795	1,326,147
1962	17	5	204	5	231	608,943	148,485	1,192,468	1,340,953

¹ Several placer deposits are operated by partnerships which have no employees.

TABLE 15. Fuel and Electricity Used by the Placer Gold Mines, 1962

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines	23 short ton	945
(b) Imported	—	—
Sub-bituminous coal (from Alberta Mines only)	—	—
Anthracite coal	—	—
Lignite coal	—	—
Coke (for fuel only)	—	—
Gasoline, (includes gasoline used in cars and trucks)	68,644 Imp. gal.	20,509
Kerosene or coal oil	705 "	643
Fuel oil	199,294 "	61,935
Wood (cords of 128 cubic feet piled wood)	617 cord	14,653
Gas (a) Liquefied petroleum gases (propane, etc.)	9,337 Imp. gal.	2,991
(b) Other manufactured gas	—	—
(c) Natural gas	—	—
Other fuel	—	—
Electricity purchased for power and lighting	—	—
Electricity purchased for other purposes	—	—
Total .....	...	101,676
Electricity generated (a) For own use	14,676,772 kwh.	...
(b) For sale	7,466,938 "	116,962

GOLD QUARTZ MINES

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

The gold quartz mining industry produced, during 1962 minerals valued at \$129,495,909 compared with \$135,033,500 in the preceding year. The total valuation included gold, silver, copper and other recoverable metals found in the gold ores.

The average number of employees was 15,220 whose earnings amounted to \$64,578,944. Fuel cost \$1,385,015 and 892,481,242 kwh. of electricity were purchased for \$5,596,917. Process supplies, which included explosives, chemicals, drill steel, etc., cost \$18,495,257. Electricity generated for own use was 35,417,594 kwh. and generated for sale was 1,618,518 kwh.

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 16. Principal Statistics for the Gold Quartz Mines, Significant Years, 1921-59

Basis: Standard Industrial Classification prior to 1960

	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies	Gross value of products	Net value added by processing ¹
	number				dollars		
1921	59	3,889	6,072,318	1,154,606	..	16,689,784	..
1929	85	8,660	14,258,733	2,579,481	..	37,276,986	..
1931	69	9,636	16,467,165	2,700,326	..	49,144,578	..
1933	216	12,823	20,536,012	3,330,137	..	69,151,535	..
1937	689	29,140	48,219,318	7,345,401	16,230,722	122,676,103	97,961,278
1939	474	30,622	53,206,225	7,952,580	19,484,870	160,014,172	129,633,245
1941	357	32,551	62,150,810	8,462,618	21,066,900	179,103,182	145,978,833
1944	262	17,226	37,023,505	5,895,117	11,174,746	94,263,416	75,234,384
1946	686	21,973	47,211,062	6,259,876	14,401,904	88,422,683	66,342,152
1949	247	22,358	61,293,334	7,307,153	23,251,874	129,550,461	96,580,304
1951	211	22,126	68,739,531	7,791,586	26,677,361	136,703,452	100,059,503
1954	157	18,479	63,578,156	6,987,528	23,639,788	127,644,959	95,627,104
1957	147	16,911	63,708,608	6,771,886	22,705,425	127,055,902	95,991,241
1958	127	16,811	64,208,042	7,134,399	18,013,121	133,998,004	107,140,993
1959	139	16,777	65,519,112	7,161,054	20,901,136	130,097,538	100,519,397

¹ Gross value less fuel, electricity, process supplies, freight and treatment charges.

TABLE 16A. Principal Statistics for the Gold Quartz Mines, 1957-62

Basis: Revised Standard Industrial Classification and New Establishment Concept

	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies	Gross value of products	Net value added by processing ¹
	number				dollars		
1957	147	16,911	63,708,608	6,771,886	22,705,425	127,055,902	95,991,241
1958	127	16,811	64,208,042	7,134,399	18,013,121	133,998,004	107,140,993
1959	139	16,777	65,519,112	7,161,054	20,901,136	130,097,538	100,519,397
1960	146	16,542	66,552,906	7,216,027	22,686,326	135,349,183	103,748,507
1961	140	15,876	65,465,515	7,360,085	19,396,214	135,033,500	106,879,129
1962	133	15,220	64,578,944	6,981,932	18,495,257	129,495,909	102,318,033

¹ Gross value less fuel, electricity, process supplies, freight and treatment charges.

TABLE 17. Principal Statistics for the Gold Quartz Mines, 1961 and 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept

	Estab- lish- ments ¹	Em- ployees	Salaries and wages	Cost of fuel and purchased electricity	Cost of process supplies used ²	Amount of freight etc., paid on ship- ments of ore, slag, etc.	Smelter and refinery treatment costs	Gross value of bullion, ore, concen- trates or residues shipped from mines ^{3,4}	Net value of bullion, ore, concentrates or residues shipped from mines ⁵
	number		dollars						
1961									
Quebec and Nova Scotia	63	3,011	11,617,795	1,365,040	3,898,132	102,010	387,540	22,532,314	16,779,592
Ontario	56	11,403	46,170,029	4,643,114	13,736,874	105,557	553,538	91,976,712	72,937,629
Manitoba and Saskatchewan	5	238	902,832	112,081	278,557	2,977	9,135	1,134,224	731,474
British Columbia	9	490	2,448,551	211,746	377,061	89,516	66,785	4,804,108	4,059,000
Northwest Territories	7	734	4,326,308	1,028,104	1,105,590	37,308	43,706	14,586,142	12,371,434
Totals	140	15,876	65,465,515	7,360,085	19,396,214	337,368	1,060,704	135,033,500	106,879,129
1962									
Quebec and Nova Scotia	62	2,974	11,718,206	1,373,290	3,510,431	97,712	783,704	19,881,459	14,116,322
Ontario	51	10,819	45,154,453	4,631,990	13,423,726	100,000	560,645	88,598,388	69,882,025
Manitoba and Saskatchewan	4	229	868,254	130,124	178,471	—	5,385	1,402,442	1,088,462
British Columbia	8	455	2,289,009	196,151	382,599	19,387	30,293	4,526,216	3,897,786
Northwest Territories	7	735	4,490,356	650,377	1,000,030	35,000	68,561	15,087,406	13,333,438
Totals	133	15,220	64,578,944	6,981,932	18,495,257	252,099	1,448,588	129,495,909	102,318,033

¹ Producing mines: in 1960, 69, in 1961, 60.² Explosives, chemicals, etc.³ In 1960; value of bullion produced, plus value of ore, concentrates, etc. shipped.⁴ In 1961; value of bullion shipped plus value of ore, concentrates, etc. shipped.⁵ Gross value less cost of supplies, fuel and electricity, treatment costs and freight.

TABLE 18. Ores Mined and Treated by the Gold Quartz Mines, 1953-62

Year	Ore hoisted	Ore milled ¹	Crude ore shipped to smelters ²	Low-grade sorted out	Tailings re-treated	Gold in recovered as bullion	Gold in crude ore shipped	Gold in concentrates slag, etc. shipped
	tons					troy ounces		
1953	15,247,337	14,842,517	198,535	233,813	800	3,412,964	28,105	76,422
1954	16,178,273	15,560,138	285,697	271,642	—	3,610,496	44,336	74,608
1955	16,404,660	15,660,528	333,783	221,077	634	3,764,817	50,516	58,343
1956	14,589,230	14,070,420	276,130	195,257	2,176	3,635,709	45,561	23,725
1957	14,354,879	13,894,311	253,607	215,397	1,212	3,695,666	43,601	26,712
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	13,835,384	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

¹ ² Total crude ore treated.

TABLE 19. Ores Mined and Milled, Crude Bullion Recovered and Crude Bullion and Concentrates Shipped, 1962

		Quebec, Nova Scotia	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
Number of producing mines		14	34	2	7	4	61
Ore mined	ton	4,080,097	8,412,981	183,199	192,067	685,441	13,659,916
Material discarded (sorted)	"	34,595	107,911	—	1,575	60,728	204,809
Ore milled (ground, etc.)	"	3,817,070	8,412,981	170,614	190,492	626,017	13,217,174
Tailings re-treated	"	—	30	—	—	—	30
Gold content of ores, slags, residues and con- centrates shipped:							
To foreign smelters	troy ounce	—	—	—	785	8,740	9,525
To Canadian smelters or mills	"	26,708	15,774	—	1,679	—	44,161
Bullion bars produced:							
Gold content	"	555,722	2,335,780	37,194	117,734	390,051	3,436,481
Silver content	"	111,392	370,552	6,452	23,317	70,148	581,861
Content of bullion bars shipped:							
Gold	"	554,292	2,339,193	37,194	117,734	391,552	3,439,965
Silver	"	111,261	384,738	6,452	23,317	70,698	596,466
Gold value	\$	18,745,879	87,576,950	1,394,941	4,409,685	14,690,274	126,817,729
Silver value	\$	129,278	445,082	7,501	26,875	82,431	690,967
Value of ores, concentrates, slags and residues sold (shipped)	\$	1,006,302	576,354	—	89,856	314,701	1,987,213
Gross value of shipments, etc.	\$	19,881,459	88,598,386	1,402,442	4,526,216	15,087,406	129,495,909
Value of fuel, electricity and process supplies used, also freight on shipments, marketing, smelter and refinery charges	\$	5,765,137	18,716,361	313,980	628,430	1,753,968	27,177,876
Net value added by processing	\$	14,116,322	69,882,025	1,088,462	3,897,786	13,333,438	102,318,033

TABLE 20. Ores, Concentrates, Slags, etc., Shipped to Smelters and Mills from Canadian Gold Mines, 1953-62

Year	Ores		Concentrates		Slags, residues, precipitates	
	Tons	Gold content-troy ounces	Tons	Gold content-troy ounces	Tons	Gold content-troy ounces
To Canadian plants						
1953	198,535	28,068	20	227	123	9,300
1954	282,331	44,276	—	—	404	8,647
1955	333,783	50,516	—	—	237	4,816
1956	276,130	45,561	28	379	294	8,566
1957	253,602	43,589	10	129	187	6,791
1958	267,309	40,516	2,583	18,883	290	9,109
1959	347,203	46,812	1,398	10,215	232	8,993
1960	280,005	42,913	1,353	9,572	176	8,561
1961	268,690	40,145	55	180	348	11,309
1962	230,946	27,893	100	4,356	409	11,912
To foreign plants						
1953	3	37	143	16,468	20	50,427
1954	2	60	2,938	14,931	22	51,230
1955	—	—	2,807	14,876	17	38,651
1956	—	—	2,388	14,655	12	125
1957	5	12	2,636	19,792	—	—
1958	—	—	3,009	23,305	13	202
1959	—	—	2,668	21,183	—	—
1960	1,072	6,192	3,409	27,662	62	3,835
1961	—	—	2,359	16,220	106	5,918
1962	—	—	—	—	56	9,525

TABLE 21. Shipments from Gold Quartz Mines, 1961 and 1962

	Quantity	Total gross metal content			
		Gold	Silver	Copper	Other ¹
	tons	ounces		pounds	
1961					
To Canadian smelters:					
Gold ore	268,690	40,145	6,732	23	81,297
Gold concentrates	55	180	36	145	—
Slags, precipitates, residues	348	11,309	13,482	1,241	—
To foreign smelters:					
Gold ore	—	—	—	—	—
Gold concentrates	2,359	16,220	6,895	—	—
Slags, precipitates, residues	106	5,918	1,336	—	—
Totals	271,558	73,772	28,481	1,409	81,297
1962					
To Canadian smelters:					
Gold ore	230,946	27,893	221	—	309
Gold concentrates	100	4,356	1,812	1,799	—
Slags, precipitates, residues	409	11,912	11,669	2,516	377
To foreign smelters:					
Gold ore	—	—	—	—	—
Gold concentrates	—	—	—	—	—
Slags, precipitates, residues	56	9,525	2,215	—	—
Totals	231,511	53,686	15,917	4,315	686

¹ Zinc.

TABLE 22. 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, 1953-62

Year	Tonnage treated ^{1,3}	Gold content ²	Silver content ²	Ounces of fine gold per ton	Ounces of fine silver per ton	Average price of gold	Average price of silver
		fine ounces				\$ per oz.	
1953	15,041,261	3,509,527	620,146	.23	.04	34.42	0.840
1954	15,842,471	3,729,640	660,259	.24	.04	34.07	0.832
1955	15,997,372	3,873,676	652,589	.24	.04	34.52	0.882
1956	14,349,272	3,704,995	623,995	.26	.04	34.45	0.897
1957	14,147,918	3,766,124	643,146	.27	.05	33.55	0.874
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

¹ Does not include tailings re-treated, but includes ore milled plus crude ore shipped to smelters.

² Relatively small quantities of gold and silver contained in concentrates, slags, etc., shipped and in cyanide solution in circuit may have originated in ores treated during the previous year: represents metal content of total bullion produced plus metal in ores or concentrates shipped to smelters.

³ Material discarded by sorting not included.

TABLE 23. Milling Capacity of Operating Canadian Gold Mines, 1953-62

Year	Nova Scotia	Quebec	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
	tons of 2,000 pounds per 24 hours						
1953	—	13,200	31,268	2,550	1,675	1,210	49,903
1954	—	12,650	29,168	2,550	1,700	1,375	47,443
1955	—	12,650	29,423	2,550	1,525	1,375	47,533
1956	48	12,000	27,778	2,550	1,200	1,500	45,076
1957	—	9,530	27,358	2,550	1,204	1,500	42,142
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

TABLE 24. Employees and Earnings in the Gold Quartz Mines, 1957-62

Year	Employees					Man-hours worked (all employees)	Earnings		
	Administrative and office		Workmen		Total		Administrative and office	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1957	1,601	158	15,066	86	16,911	36,996,927	8,975,888	54,732,792	63,708,680
1958	1,623	153	14,952	83	16,811	36,846,723	9,362,346	54,845,696	64,208,042
1959	1,658	152	14,884	83	16,777	36,320,320	9,806,239	55,710,873	65,519,112
1960	1,653	153	14,677	59	16,542	36,157,872	9,929,000	56,623,906	66,552,906
1961	1,702	141	13,966	67	15,876	34,342,805	10,548,850	54,916,665	65,465,515
1962	1,707	143	13,310	60	15,220	33,287,992	10,412,397	54,166,547	64,578,944

TABLE 25. Number of Workmen, by Months in the Gold Mines, 1961 and 1962

Month	1961	1962				
	Total	Mine			Mill	Total
		Surface		Underground	Male	
		Male	Female	Male		
January	14, 322	3, 043	59	9, 144	1, 146	13, 392
February	14, 270	3, 045	60	9, 101	1, 147	13, 353
March	14, 230	3, 047	60	9, 036	1, 157	13, 300
April	14, 172	3, 043	61	8, 909	1, 148	13, 161
May	14, 214	3, 144	61	8, 947	1, 188	13, 340
June	14, 281	3, 322	61	9, 023	1, 215	13, 621
July	14, 289	3, 425	62	8, 895	1, 235	13, 617
August	14, 115	3, 341	61	8, 928	1, 207	13, 537
September	13, 699	3, 221	58	8, 868	1, 164	13, 311
October	13, 668	3, 133	59	8, 934	1, 157	13, 273
November	13, 593	3, 145	58	8, 984	1, 161	13, 348
December	13, 486	3, 034	58	8, 829	1, 163	13, 084
Averages	14, 035	3, 186	60	8, 929	1, 175	13, 370
Man-hours worked	30, 389, 798					29, 466, 390

TABLE 26. Fuel and Electricity Used in the Gold Quartz Mines, 1962

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines	short ton 1,930	37,407
(b) Imported	7,385	122,568
Sub-bituminous coal (from Alberta mines only)	" 1	28
Anthracite coal	" 377	7,203
Lignite coal	—	—
Coke (for fuel only)	short ton 12	417
Gasoline, (includes gasoline used in cars and trucks)	Imp. gal. 395,427	153,722
Kerosene or coal oil	" 6,026	2,109
Fuel oil and diesel fuel	" 3,760,906	763,381
Wood (cords of 128 cubic feet of piled wood)	cord 5,139	68,230
Gas (a) Liquefied petroleum gases (propane, etc.)	Imp. gal. 3,721	2,718
(b) Other manufactured gas	—	—
(c) Natural gas	M. cu. ft. 226,606	135,678
Other fuel (shavings, sawdust etc.) .....	...	91,554
Electricity purchased for power and lighting	kwh. 861,712,553	5,489,999
Electricity purchased for other purposes	" 30,768,689	106,918
Total (cost only) .....	...	6,981,932
Electricity generated (a) For own use	kwh. 35,417,594	...
(b) For sale	" 1,618,518	43,461

TABLE 27. Cost of Prospecting Conducted by Canadian Gold Quartz Mining Companies, 1961 and 1962

Province in which prospecting was conducted ¹	By Nova Scotia and Quebec companies ²	By Ontario companies ²	By Manitoba and Saskatchewan companies ²	By British Columbia Companies ²	By Yukon and Northwest Territories companies	Total
	dollars					
1961						
Newfoundland	—	7,794	—	—	—	7,794
Nova Scotia	914	12,083	—	—	—	12,997
New Brunswick	11,911	40,068	—	3,616	—	55,595
Quebec	713,104	587,008	—	—	—	1,300,112
Ontario	87,286	1,070,229	1,643	5,296	—	1,164,454
Manitoba	33,489	70,101	43,362	—	468,177	615,129
Saskatchewan	26,568	41,686	3,500	—	—	71,754
British Columbia	3,681	190,973	—	68,349	—	263,003
Yukon	—	10,099	—	—	—	10,099
Northwest Territories	154,241	3,788	—	—	4,454	162,483
Totals	1,031,194	2,033,829	48,505	77,261	472,631	3,663,420
1962						
Newfoundland	619	12,381	—	—	—	13,000
Nova Scotia	698	3,681	—	—	—	4,379
New Brunswick	6,711	27,414	—	—	—	34,125
Quebec	1,394,596	760,879	—	3,224	—	2,158,699
Ontario	487,042	1,298,926	8,053	6,054	—	1,800,075
Manitoba	42,068	42,681	34,736	—	—	119,485
Saskatchewan	98,477	57,818	—	—	—	156,295
Alberta	340	127	—	—	—	467
British Columbia	90,037	173,179	—	113,800	—	377,016
Yukon	30,131	34,689	—	—	106,925	171,745
Northwest Territories	35,189	33,075	—	—	91,715	159,979
Totals	2,183,908	2,444,850	42,789	123,078	198,640	4,995,265

¹ Prospecting includes the search for new mineral deposits on the surface, and preliminary exploration.² Province in which the companies' principal operations are conducted.

TABLE 28. Drilling Completed on Gold Quartz Deposits, 1960-62

	Footage drilled ¹		
	1960	1961	1962
Diamond drilling for exploration (testing):			
By companies with their own equipment and personnel	415,721	552,128	127,348
By contractors	1,610,415	1,380,785	2,796,117
Other drilling:			
Dismond drilling for breaking rock or ore:			
By companies with their own equipment and personnel	16,445	6,161	27,614
By contractors	17,838	13,619	9,186
Drilling by percussion and other machines ²	38,161,529	36,632,556	35,157,376

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

Note: The value of diamond in all forms (bits, etc.) purchased by gold mining companies in 1961 totalled 259,838 and in 1962—220,715.

TABLE 29. Specified Taxes Paid by Active Gold Quartz Mines, 1961 and 1962 by Provinces¹

Nature of tax	Nova Scotia and Quebec	Ontario	Manitoba and Saskatchewan	British Columbia	Northwest Territories	Canada
	dollars					
1961						
Dominion income tax, including tax on non-operating revenue	128,320	3,299,772	—	—	216,000	3,644,092
Provincial tax	192,235	2,189,191	—	22,874	103,630	2,507,930
Municipal tax	268,443	420,617	—	15,560	147,418	852,038
Totals	588,998	5,909,580	—	38,434	467,048	7,004,060
1962						
Dominion income tax, including tax on non-operating revenue	315,019	2,505,247	—	—	83,000	2,903,266
Provincial tax	318,380	1,888,091	20	812	136,830	2,344,133
Municipal tax	267,812	408,675	—	15,788	149,696	841,971
Totals	901,211	4,802,013	20	16,600	369,526	6,089,370

¹ Does not include complete data relating to taxes that may have been paid by dormant firms.

TABLE 30. Certain Specified Expenditures Made by Gold Quartz Mining Companies, 1962

	1962
	\$
(a) Workmen's compensation	2,490,467
(b) Silicosis assessment	1,608,929
(c) Unemployment insurance	676,463
(d) Aggregate cost of structures, roads, machinery, equipment, etc., built by or purchased from outside contractors or suppliers and chargeable to Fixed Assets Account	1,666,719
(e) Book value of fixed assets (new structures, roads, machinery, equipment, etc., including major repairs and alteration) produced by own employees and chargeable to Fixed Assets Account	1,431,680
(f) Other capital expenditures not reported in (d) and (e)	733,895
(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)	1,285,282
(h) Cost of all other goods, materials and supplies (including office, medical, laboratory, cafeteria and store supplies) purchased and not chargeable to Fixed Assets Account	34,033,916

TABLE 31. Estimated Capital and Repair Expenditures, 1959-64

Year	Capital expenditures			Repair expenditures			Capital and repair expenditures		
	Construction	Machinery	Total	Construction	Machinery	Total	Construction	Machinery	Total
	thousands of dollars								
1959	4,556	4,245	8,801	1,456	7,691	9,147	6,012	11,936	17,948
1960	6,388	2,804	9,192	1,500	7,288	8,788	7,888	10,092	17,980
1961	5,746	2,495	8,241	1,149	8,079	9,228	6,895	10,574	17,469
1962	4,006	2,764	6,770	1,122	8,140	9,262	5,128	10,904	16,032
1963 ¹	3,692	2,328	6,020	1,217	7,777	8,994	4,909	10,105	15,014
1964 ²	2,757	1,978	4,735	1,198	7,615	8,813	3,955	9,593	13,548

¹ Preliminary estimates.² Reported intentions.

Source: Private and Public Investment in Canada, Outlook, 1964.

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 1962 the gross value of crude ore, concentrates, etc., shipped from the mines and mills in this industry to smelters was estimated at \$218,036,064. Fuel cost \$1,784,923 and 741,862,495 kwh. of electricity was purchased for \$5,088,266. Process supplies, freight and treatment charges amounted to 68,247,248. Employees numbered 11,046 to whom \$53,489,185 were distributed as salaries and wages. There were 41 producers or shippers in 1962.

During the year "copper-gold-silver" mines operated in Newfoundland, Quebec, Ontario, Manitoba, Saskatchewan and British Columbia. 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. General statistics relating to labor, etc., in the nickel-copper or the silver-lead-zinc industry are not included in this report.

The gross value of ores shipped by firms which both mine and smelt their own ores is sometimes not reported. This necessitates considerable estimating in determining gross and net values for mine shipments. However, possible abnormal evaluations resulting from this are largely compensated for in determining the value added at the smelters and refineries. This added value is credited to the smelting and refining industry and is also included in the total net value of production of the entire Canadian mining industry. This fact should be noted in making any statistical study of the annual production values shown for shipments from copper-gold-silver mines.

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 32. Principal Statistics of the Copper-Gold-Silver Mines, Significant Year, 1921-59

Basis: Standard Industrial Classification prior to 1960

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Process supplies and containers	Gross value of products ¹	Net value added ²
	number				dollars		
1921	18	1,222	1,573,221	177,052	..	2,589,314	..
1929	152	5,243	8,498,755	1,035,133	..	21,859,907	..
1931	56	3,351	4,958,317	726,502	..	15,951,103	..
1933	29	2,841	3,938,778	404,625	..	7,707,270	..
1937	38	5,164	8,240,614	901,088	4,851,845	40,735,801	24,902,851
1939	30	6,083	9,920,591	1,223,523	5,585,616	51,161,468	26,182,577
1941	22	5,866	10,695,023	1,264,567	5,505,955	64,829,073	30,220,331
1944	26	5,175	10,710,071	1,402,243	5,170,581	62,389,815	38,198,039
1946	43	4,958	10,243,487	1,152,925	4,022,508	54,304,549	37,433,982
1949	33	7,395	21,776,150	1,630,715	7,499,445	105,994,498	74,591,660
1951	82	6,223	21,545,660	2,085,608	8,257,819	123,162,228	92,331,995
1954	118	7,837	29,791,332	3,148,808	10,232,701	105,893,976	70,814,052
1957	261	10,359	45,622,452	4,942,600	15,297,346	119,013,141	68,694,057
1958	244	8,875	39,745,243	4,428,653	15,968,361	133,778,148	77,993,264
1959	310	9,682	43,460,641	4,961,920	12,948,618	147,752,990	90,660,009

¹ Value of ores and concentrates shipped from mines to smelters operated by the same companies are often of a nominal or conjectural nature.

² Gross value less fuel, electricity, process supplies, freight and treatment charges.

TABLE 32A. Principal Statistics of the Copper-Gold-Silver Mines, 1957-62

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Process supplies and containers	Gross value of products ¹	Net value added ²
	number				dollars		
1957	261	10,359	45,622,452	4,942,600	15,297,346	119,013,141	68,694,057
1958	244	8,875	39,745,243	4,428,653	15,968,361	133,778,148	77,993,264
1959	310	9,682	43,460,641	4,961,920	12,948,618	147,752,990	90,660,009
1960	277	10,549	48,940,982	6,546,557	17,989,123	172,254,034	103,754,616
1961	276	10,901	51,459,158	5,932,106	14,709,403	175,463,232	109,047,866
1962	191	11,046	53,489,185	6,873,189	16,233,410	218,036,064	142,916,627

¹ Value of ores and concentrates shipped from mines to smelters operated by the same companies are often of a nominal or conjectural nature.

² Gross value less fuel, electricity, process supplies, freight and treatment charges.

TABLE 33. Shipments from Copper-Gold-Silver Mines, 1961 and 1962

	Quantity	Value	Total metal content as determined by settlement assay ¹				
			Gold	Silver	Copper	Sulphur	Zinc
	tons	\$	fine ounces		lb.	tons	lb.
1961							
To Canadian plants:							
Ores	651,785	8,507,823	77,429	169,691	22,889,850	—	416,384
Copper concentrates	1,173,648	124,580,529	387,950	5,083,220	417,966,437	—	22,741,379
Zinc concentrates	147,685	9,746,210	8,372	271,287	3,124,522	—	143,770,245
Iron pyrite concentrates	198,056	798,021	—	—	—	95,201	—
Slags, residues, bullion and gold precipitates	31	1,152,637	29,718	96,564	818	—	—
Tailings	7,876	5,617	—	—	—	—	—
To foreign plants:							
Ores and tailings	1,926	268,286	2	4,014	930,662	—	—
Copper concentrates	58,154	10,549,131	16,069	153,056	34,533,327	—	—
Zinc concentrates	145,596	17,475,602	34	353	—	—	156,097,326
Iron pyrite concentrates	319,202	1,049,898	—	—	—	160,175	—
Precipitates	420	115,133	—	—	411,438	—	—
Lead concentrates	6,762	932,511	7,417	414,867	171,950	7,233,910 ²	694,942
Gold concentrates	14	4,745	139	103	98	—	—
Total shipments	2,711,155	175,186,143	527,130	6,193,155	480,029,102	255,376	323,720,276
Other operating revenue .....	...	277,089	...	...	...	...	...
Value of process supplies, etc. ³ .....	...	66,415,366	...	...	...	...	...
Net value added .....	...	109,047,866	...	...	...	...	...
1962							
To Canadian plants:							
Ores	652,460	8,793,568	78,927	170,508	20,466,821	—	245,866
Copper concentrates	1,199,574	130,283,821	365,434	5,664,306	457,168,151	—	24,396,667
Zinc concentrates	162,269	12,136,972	8,981	269,328	2,813,611	—	164,548,765
Iron pyrite concentrates	177,828	746,528	—	—	—	86,645	—
Slags and tailings	40,177	30,904	—	—	—	—	—
Residues, bullion and gold precipitates ..	6	1,358,781	30,572	107,821	658	—	—
Lead concentrates	4,554	709,735	3,377	160,917	351,696	4,549,789 ²	215,075
To foreign plants:							
Ores	1,100	134,750	—	2,750	440,000	—	—
Copper concentrates	229,442	37,412,742	28,724	188,737	123,249,069	604,790	1,728,217
Zinc concentrates	186,186	23,989,010	503	5,199	—	—	198,714,748
Iron pyrite concentrates	339,480	1,159,828	—	—	—	170,569	—
Precipitates	481	100,256	—	—	377,212	—	—
Lead concentrates	7,497	1,179,169	7,457	413,685	305,881	7,666,693 ²	—
Totals	3,001,054	218,036,064	523,975	6,983,251	605,173,099	1,207,264	389,849,338
Value of process supplies, etc. ³ .....	...	75,119,437	...	...	...	...	...
Net value added .....	...	142,916,627	...	...	...	...	...

¹ In addition, cadmium, bismuth, tellurium and selenium are recovered from these ores.² Lead content.³ Includes freight on ore shipments, smelter charges, purchased electricity and fuel.

TABLE 34. Ores Mined, Milled, and Concentrates Produced, by the Copper-Gold-Silver Mines, 1953-62

Year	Ore mined	Ore milled	Copper concentrates produced ¹	Zinc concentrates produced	Iron pyrite concentrates produced	Lead concentrates produced
tons						
1953	7,438,500	6,606,631	697,285	216,686	398,429	—
1954	8,501,569	7,982,320	806,157	234,364	505,504	—
1955	9,911,751	9,375,687	909,466	230,236	653,918	—
1956	10,422,648	10,442,164	931,328	230,220	578,923	—
1957	10,570,801	10,009,694	1,135,664	229,514	528,388	—
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

¹ Exclusive of copper precipitate.

TABLE 35. Employees and their Earnings in the Copper-Gold-Silver Mines, 1957-62

Year	Employees					Man-hours worked (all employees)	Earnings		
	Administration		Workmen		Total		Administration	Workmen	Total
	Male	Female	Male	Female					
	number									dollars
1957	1,493	219	8,570	77	10,359	22,946,894	9,134,100	37,560,252	46,694,352
1958	1,327	184	7,329	35	8,875	18,958,827	7,723,473	32,021,770	39,745,243
1959	1,339	187	8,116	40	9,682	20,429,780	7,867,882	35,592,759	43,460,641
1960	1,313	219	8,969	48	10,549	22,541,084	8,512,429	40,428,553	48,940,982
1961	1,482	209	9,160	50	10,901	22,564,843	9,143,395	42,315,763	51,459,158
1962	1,550	206	9,239	51	11,046	22,849,287	9,798,255	43,690,930	53,489,185

TABLE 36. Number of Workmen, by Months, 1961 and 1962

Month	1961	1962					
	Total	Mine			Mill		Total
		Surface		Underground	Male	Female	
		Male	Female	Male			
January	8,883	3,243	39	4,393	1,113	9	8,797
February	8,816	3,279	38	4,393	1,081	9	8,800
March	8,885	3,266	39	4,352	1,078	8	8,743
April	8,959	3,302	38	4,528	1,098	8	8,974
May	9,282	3,484	47	4,663	1,159	9	9,362
June	9,548	3,632	49	4,676	1,172	10	9,539
July	9,710	3,762	53	4,744	1,196	9	9,764
August	9,715	3,693	52	4,882	1,176	9	9,812
September	9,406	3,543	46	4,766	1,132	7	9,494
October	9,357	3,452	39	4,801	1,112	6	9,410
November	8,968	3,372	39	4,850	1,116	6	9,383
December	8,790	3,307	38	4,783	1,087	6	9,221
Averages	9,210	3,459	43	4,652	1,128	8	9,290
Man-hours worked	19,107,891						19,247,764

TABLE 37. Fuel and Electricity Used in the Copper-Gold-Silver Mines, 1962

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines.....	short ton 974	15,215
(b) Imported	" 765	14,978
Sub-bituminous coal (from Alberta mines only)	" 48	687
Anthracite coal	—	—
Lignite coal	short ton 47	474
Coke for fuel only	" 44	1,058
Gasoline, (includes gasoline used in cars and trucks)	Imp. gal. 622,773	246,637
Kerosene or coal oil	" 6,469	2,069
Fuel oil	" 7,268,337	1,354,770
Wood (cords of 128 cubic feet of piled wood)	cord 2	16
Gas (a) Liquefied petroleum gases (propane, etc.)	Imp. gal. 89,524	23,501
(b) Other manufactured gas	—	—
(c) Natural gas	M. cu. ft. 55,442	22,613
Other fuel .....	..	51,330
Electricity purchased for power and lighting	kwh. 741,862,495	5,088,266
Electricity purchased for other purposes	—	—
Steam purchased	pound 63,475,350	51,575
Totals .....	...	6,873,189
Electricity generated (a) For own use	kwh. 90,588,610	...
(b) For sale	" 798,400	88,516

TABLE 38. Specified Expenditures by the Copper-Gold-Silver Mines, 1962

	1962
(a) Workmen's compensation	1,529,070
(b) Silicosis assessment	172,166
(c) Unemployment insurance	508,121
(d) Aggregate cost of structures, roads, machinery, equipment, etc., built by or purchased from outside contractors or suppliers and chargeable to Fixed Assets Account	8,132,076
(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	3,485,548
(f) Other capital expenditures not reported in (d) and (e)	1,319,096
(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	2,720,430
(h) Cost of all other goods, materials and supplies (including office, medical, laboratory, cafeteria and store supplies) purchased and not chargeable to Fixed Assets Account	45,413,820

TABLE 39. Taxes Paid by the Copper-Gold-Silver Mines, 1960-62

	1960	1961	1962
	dollars		
Dominion income tax, including tax on non-operating revenue	11,953,865	11,313,497	8,285,599
Provincial tax	5,764,686	6,896,685	4,963,540
Municipal tax	1,945,961	1,876,876	1,973,590
Grand total taxes paid	19,664,512	20,087,058	15,222,729

TABLE 40. Cost of Prospecting¹ Conducted by the Copper-Gold-Silver Mines, by Provinces, 1961 and 1962

Conducted in	1961	1962	Conducted in	1961	1962
	dollars			dollars	
Newfoundland	588,297	499,436	Saskatchewan	859,520	209,081
Nova Scotia	184,268	77,152	Alberta	892	—
New Brunswick	490,739	361,098	British Columbia	2,666,130	2,957,805
Quebec	7,450,734	5,055,025	Yukon	263,862	482,685
Ontario	3,002,677	1,694,626	Northwest Territories	248,158	330,956
Manitoba	2,611,871	1,685,544	Totals	18,367,148	13,353,408

¹ Includes some development work.

TABLE 41. Drilling Completed on Copper-Gold-Silver Deposits, 1961 and 1962

	Footage drilled	
	1961	1962
Diamond drilling for exploration (testing only):		
By mining companies with their own personnel and equipment	96,889	81,950
By diamond drilling contractors	1,441,784	1,556,920
Other diamond drilling:		
Blast hole diamond drilling:		
By mining companies with their own personnel and equipment	630,342	798,797
By diamond drilling contractors	561,017	185,076
Drilling by percussion or other machines ¹	23,077,057	24,234,785

¹ Not complete as these data are not recorded by some operators.

Note: Value of diamonds in all forms (stones, bits, etc.) purchased during the year, \$98,790.

TABLE 42. Copper Production (Recoverable) according to Nature of Ore, and by Provinces, 1960-62

Province	From copper-gold-silver ores	From nickel-copper ores	From other ores	Total
	tons			
1960				
Newfoundland	10,797	—	3,066	13,863
Nova Scotia	—	—	—	—
New Brunswick	—	—	—	—
Quebec	154,094	—	3,376	157,470
Ontario	30,111	171,660	4,501	206,272
Manitoba	8,053	4,740	—	12,793
Saskatchewan	31,785	—	—	31,785
British Columbia	14,993	676	890	16,559
Northwest Territories	—	520	—	520
Canada	249,833	177,596	11,833	439,262

TABLE 42. Copper Production (Recoverable) according to Nature of Ore, and by Province, 1960-62 - Concluded

Province	From copper-gold-silver ores	From nickel-copper ores	From other ores	Total
tons				
1961				
Newfoundland	12,585	—	3,167	15,752
Nova Scotia	—	—	—	—
New Brunswick	—	—	—	—
Quebec	145,583	—	3,424	149,007
Ontario	34,269	172,506	4,872	211,647
Manitoba	5,981	6,473	—	12,454
Saskatchewan	33,479	—	—	33,479
British Columbia	13,485	737	1,624	15,846
Yukon	440	—	—	440
Northwest Territories	—	463	—	463
Canada	245,822	180,179	13,087	439,088
1962				
Newfoundland	14,331	—	2,977	17,308
Nova Scotia	—	—	204	204
New Brunswick	3,674	—	—	3,674
Quebec	2,830	87	144,514	147,431
Ontario	42,270	139,629	7,096	188,995
Manitoba	5,033	7,705	—	12,738
Saskatchewan	32,017	—	—	32,017
British Columbia	53,342	768	380	54,490
Yukon	214	—	—	214
Northwest Territories	—	314	—	314
Canada	153,711	148,503	155,171	457,385

TABLE 43. Production of Refined Copper,¹ 1953-62

Year	Short tons	Year	Short tons
1953	236,966	1958	329,239
1954	253,365	1959	365,366
1955	288,997	1960	417,029
1956	328,458	1961	406,359
1957	323,540	1962	382,868

¹ In all forms and from all sources, including scrap.

TABLE 44. Silver Production (Recoverable) according to Nature of Ore, by Provinces, 1962

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	—	—	—	—	1,181,648	—	1,181,648
Nova Scotia	—	—	—	—	724,245	—	724,245
New Brunswick	—	—	25,684	—	152,837	—	178,521
Quebec	15	113,452	2,839,020	—	1,650,532	—	4,603,019
Ontario	—	397,200	2,123,269	1,757,848	397,538	4,707,590	9,383,445
Manitoba	—	6,452	819,656	21,771	—	—	847,879
Saskatchewan	—	—	762,215	—	—	—	762,215
Alberta	17	—	—	—	—	—	17
British Columbia	471	24,971	160,038	—	6,001,457	—	6,186,937
Yukon	11,496	—	2,613	—	6,468,135	—	6,482,244
Northwest Territories	—	72,802	—	—	—	—	72,802
Canada	11,999	614,877	6,732,495	1,779,619	16,576,392	4,707,590	30,422,972

TABLE 45. Selenium and Tellurium Recoverable from Canadian Ores, 1953-62

Year	From copper-gold-silver ores		From nickel-copper ores		Total	
	Selenium	Tellurium	Selenium	Tellurium	Selenium	Tellurium
	pounds					
1953	188,648	149	82,868	4,525	262,346	4,694
1954	228,705	976	94,826	7,195	323,529	8,171
1955	332,644	2,559	94,465	6,455	427,109	9,014
1956	221,233	1,562	109,156	6,305	330,389	7,867
1957	234,933	24,609	86,459	6,915	321,392	31,524
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

TABLE 46. Zinc Production (Recoverable) according to Nature of Ore, and by Provinces, 1961 and 1962

Year and province	Recoverable from copper-gold-silver ores	Recoverable from silver-lead-zinc and other ores	Total
		tons (2,000 pounds)	
1961			
Newfoundland	—	34,638	34,638
Nova Scotia	—	—	—
New Brunswick	—	—	—
Quebec	31,358	22,647	54,005
Ontario	32,562	19,375	51,937
Manitoba	46,509	—	46,509
Saskatchewan	28,360	—	28,360
British Columbia	2,798	191,688	194,486
Yukon	—	6,069	6,069
Totals	141,587	274,417	416,004
1962			
Newfoundland	—	32,541	32,541
Nova Scotia	—	757	757
New Brunswick	2,498	—	2,498
Quebec	26,514	44,223	70,737
Ontario	45,039	18,093	63,132
Manitoba	49,920	—	49,920
Saskatchewan	30,900	—	30,900
British Columbia	3,291	203,425	206,716
Yukon	—	5,944	5,944
Totals	158,162	304,983	463,145

TABLE 47. Refined Zinc Produced, from all Sources, 1953-62

Year	Short tons	Year	Short tons
1953	250,961	1958	252,093
1954	253,365	1959	255,306
1955	256,542	1960	260,968
1956	255,564	1961	268,007
1957	247,316	1962	280,159

TABLE 48. Cadmium Production (Recoverable) from Canadian Ores, 1953-62

Year	From copper- gold-silver ores	From silver- lead-zinc ores	Total	Year	From copper- gold-silver ores	From silver- lead-zinc ores	Total
	pounds				pounds		
1953	157,997	960,288	1,188,285	1958	355,602	1,400,448	1,756,050
1954	154,596	932,184	1,086,780	1959	334,029	1,826,334	2,160,363
1955	191,691	1,727,390	1,919,081	1960	466,200	1,891,297	2,357,497
1956	208,327	2,131,094	2,339,421	1961	307,757	1,914,193	2,221,950
1957	286,044	2,082,086	2,368,130	1962	405,317	2,199,656	2,604,973

TABLE 49. Average Annual Metal Prices in Canadian Dollars, 1953-62

Year	Gold	Silver	Copper	Lead	Zinc
	Per troy ounce	Per troy ounce	Per pound	Per pound	Per pound
	dollars				
1953	34.42	0.8401	0.299	0.1293	0.1196
1954	34.07	0.8328	0.2916	0.1333	0.1198
1955	34.52	0.8818	0.3687	0.1438	0.1365
1956	34.45	0.8968	0.4141	0.1551	0.1484
1957	33.55	0.8737	0.2895	0.1396	0.1209
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	1.165	0.3100	0.0992	0.1210

TABLE 50. World Copper Production by Countries of Origin of Ore¹

Country	1958	1959	1960	1961	1962
	tons (2,000 pounds)				
United States	630,253	840,000	1,092,500	1,159,556	1,223,978
Mexico	71,609	63,133	66,502	54,359	51,945
Canada	345,114	395,269	439,262	439,088	465,446
Cuba	13,992	9,942	13,058	10,000	7,500
Bolivia ²	3,168	2,460	2,503	2,292	2,546
Chile	509,541	600,571	586,643	603,424	646,064
Peru	59,104	55,871	200,311	218,313	182,875
Totals, America	1,992,781	1,967,246	2,400,779	2,487,032	2,580,454
Austria	2,695	2,726	2,188	2,105	2,186
Finland	31,569	33,132	31,580	35,745	37,657
France	794	672	772	551	441
Germany, Federal Republic	1,156	2,256	2,454	2,389	2,073
Italy	761	665	561	691	1,001
Norway	17,501	15,828	16,965	15,379	16,094
Spain ³	7,466	12,137	8,786	20,029	20,580
Sweden	19,836	18,838	18,396	18,629	21,034
Yugoslavia	38,840	38,141	36,681	41,787	57,008
Totals, Europe	120,618	124,395	118,383	137,305	158,074
Japan	89,836	93,969	98,036	106,272	113,645
India	8,782	8,459	9,822	9,190	10,914
Korea, Republic of	842	529	649	584	700
Turkey	24,678	27,385	26,928	20,525	28,127
Philippines	51,841	54,587	48,512	57,182	60,327
Cyprus ³	36,614	39,978	39,096	31,585	27,735
Totals, Asia	212,591	224,907	223,043	225,338	241,448
Israel	—	4,723	6,143	6,969	5,768
Namibia, State of	261,865	310,952	332,900	324,422	322,974
Northern Rhodesia	441,072	598,834	635,326	633,534	619,856
Southern Rhodesia	8,430	12,016	15,128	14,979	15,146
South West Africa	32,065	31,695	21,692	23,377	25,873
Uganda	12,130	13,362	16,265	14,720	17,173
Union of South Africa	53,375	53,575	52,041	55,464	50,396
Totals, Africa	808,937	1,025,157	1,079,495	1,073,465	1,057,186
Australia	76,867	101,062	117,741	96,823	108,696
U.S.S.R.	463,000	485,000	507,000	523,600	550,000
Bulgaria	8,600	11,000	12,100	13,200	14,000
Germany, East	19,300	20,800	27,500	27,500	27,500
Poland	8,800	9,900	11,600	12,900	13,000
China	33,000	44,000	44,000	50,000	50,000
Soviet Sphere totals	532,700	570,700	602,200	627,200	654,500
World totals, as reported⁴	3,746,494	4,013,507	4,541,641	4,647,163	4,800,358

¹ Includes copper contents or recoverable contents of ores or concentrates smelted in country of origin and/or shipped to other countries for smelting.

² Exports.

³ Excludes copper content of iron pyrites which may or may not have been recovered.

⁴ In addition there is production in Brazil, Ireland, Portugal, Burma, Taiwan, Algeria, Angola, Southern Zone Morocco, Tanganyika; the total of all these countries is estimated to be about 17,000 tons in 1961.

Source: "American Bureau of Metal Statistics' Year Book".

TRANSACTIONS IN GOLD BULLION AT THE ROYAL CANADIAN MINT

(From the Annual Report of the Royal Canadian Mint)

Five thousand four hundred and forty-two deposits of gold bullion were received during the year from Canadian Mining Companies and Sundry Persons. The composition of the deposits was as follows:

Fine Gold:

299 deposits weighing 293,532,754 ounces with a mean fineness of 997.002.

Crude Bullion:

3,226 deposits weighing 2,581,498,440 ounces with an average fineness of 779.409 gold, 148.988 silver, and containing 7.1603% base metal.

Scrap (Jewellery and Dental):

209 deposits, 11,930.690 ounces of an average fineness of 469.994 gold and 82.509 silver.

Gold for Storage:

1,708 deposits weighing 1,477,010,455 ounces with an average fineness of 798.012 gold and 105.508 silver.

The net value paid to depositors was \$87,469,528.64. In addition the amount of fine gold issued to depositors was 1,157,021.592 ounces.

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

	Ounces fine
5,897 Trade bars transferred to Exchange Fund	
Minister of Finance	2,356,066.278
Depositors — granulated and bars	1,157,021.592
Sales of fine gold	22,035
Trial Plate for assay purposes	1.025
Medals, etc.	20.428
Sweep	7,274.240
	3,520,405.598

This total shows a decrease of 291,648.688 ounces fine issued as compared with the year 1961.

Comparative Statement Showing Details of Gold Deposits Received for 1961 and 1962

	Number of deposits received				Gross ounces			
	1961	1962	Increase	Decrease	1961	1962	Increase	Decrease
Sale to Her Majesty	3,801	3,525	—	276	3,020,841	2,875,031	—	145,810
For storage	2,003	1,708	—	295	1,707,953	1,477,010	—	230,943
Jewellery and miscellaneous	254	209	—	45	16,845	11,931	—	4,914
Total received	6,058	5,442	—	616	4,745,639	4,363,972	—	381,667
	Fine gold ounces				Fine silver ounces			
	1961	1962	Increase	Decrease	1961	1962	Increase	Decrease
Sale to Her Majesty	2,412,200	2,338,971	—	73,229	582,406	541,433	—	40,973
For storage	1,379,108	1,144,396	—	234,712	—	—	—	—
Jewellery and miscellaneous	8,829	5,607	—	3,222	—	—	—	—
Total received	3,800,137	3,488,974	—	311,163	582,406	541,433	—	40,973

Details of origin of the bullion deposited for sale to Her Majesty and for storing during the year 1962 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.....	1,851,546.724	1,506,072.980	920,510.545	802,471.719	2,772,057.269	2,308,544.699	280,397.41
Quebec.....	725,770.810	562,406.937	56,949.150	15,152.469	782,719.960	577,559.406	150,929.09
British Columbia.....	153,876.120	123,468.065	6,723.010	6,471.602	160,599.130	129,939.667	23,343.03
Manitoba.....	43,046.350	30,492.699	—	—	43,046.350	30,492.699	5,292.45
Yukon Territory.....	68,428.580	54,804.869	—	—	68,428.580	54,804.869	11,496.09
Northwest Territories.....	32,136.850	27,263.250	492,824.060	354,572.951	524,960.910	381,836.201	68,973.50
Alberta.....	225.760	186.421	—	—	225.760	186.421	17.08
Total from Canadian mines and refineries.....	2,875,031.194	2,304,695.221	1,477,006.765	1,178,668.741	4,352,037.959	3,483,363.962	540,448.65
From jewellery and mis- cellaneous.....	11,930.690	5,607.351	3.690	3.019	11,934.380	5,610.370	984.39
Totals.....	2,886,961.884	2,310,302.572	1,477,010.455	1,178,671.760	4,363,972.339	3,488,974.332	541,433.04
Fine gold released by mines from gold storage for sale to Her Majesty.....	—	34,276.089	—	34,276.089	—	—	—
Totals.....	2,886,961.884	2,344,578.661	1,477,010.455	1,144,395.671	4,363,972.339	3,488,974.332	541,433.04

The following tables give details of fine bullion produced during the year:

Produced	Number	Gross weight	Fine weight	Average assay
		ounces		
Fine gold bars	5,804	2,324,729.700	2,319,102.538	997.6
Granulated gold	—	4,355.970	4,355.537	999.9
Fine silver bars	516	569,149.22	569,030.74	999.8
Granulated silver	—	3,828.38	3,827.23	999.7
Gold trial plate	—	—	1.025	—
Gold medals	—	—	112.706	—
Silver medals	—	—	106.19	—
Finishing and plating medals	—	—	.247	—
Storage—Gold bars	2,700	1,081,908.917	1,079,313.001	997.6
Granulated gold	—	72,440.460	72,431.699	999.9
Special bar—Silver	3	51.51	51.50	—
Special bar—Silver nickel alloy	—	—	142.18	—
Special bar—Gold	2	—	22.035	—
Sweep sold—Gold	—	—	7,274.240	—
Sweep sold—Silver	—	—	39,683.91	—

Special processes	Number	Gross weight
		ounces
Remelts	155	90,697.740
Toughenings	3	627.210
		pounds avoirdupois
Chloride reduction	—	74,087.0
Scrap	—	99,498.0

GOLD STORAGE

During the year eleven mines deposited gold bullion at the Mint under the terms of the Regulations prescribing the circumstances under which and 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 1962 amounted to 1,144,395.671 ounces. Fine bullion amounting to 1,153,632.855 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, 1962

Year	Gold received		Gold issued	
	Gross weight	Fine gold	Coin	Bullion
	ounces		ounces fine	
1908 to 1952	131,856,191.727	106,333,522.931	383,319.096	105,804,343.148
1953	4,642,410.478	3,684,073.637	—	3,626,496.738
1954	4,768,451.365	3,829,430.609	—	3,998,835.566
1955	4,878,918.379	3,947,636.509	—	3,952,764.485
1956	4,693,484.529	3,801,788.815	—	3,774,599.457
1957	4,798,296.343	3,896,083.563	—	3,776,710.677
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
Totals	179,391,650.516	144,673,974.332	383,319.096	144,206,367.250

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, 1954,¹ and the Mint Custom Refining and Storing Regulations made by Order in Council P.C. 1956-450 of 22nd March, 1956,² 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, 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.

¹ 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.

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

(8) 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 day 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 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, one dollar for the first four hundred ounces or part thereof and twenty-five 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, three cents per ounce,
 - (ii) when the deposit contains over five per cent base metal but not over ten per cent base metal, three and one-half cents per ounce,
 - (iii) when the deposit contains over ten per cent base metal but not over fifteen per cent base metal, four and one-quarter cents per ounce,
 - (iv) when the deposit contains over fifteen per cent base metal but not over twenty per cent base metal, five 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 ten cents per ounce, as determined by the Master after taking into account the cost of treatment.

(2) Notwithstanding paragraph (b) of subsection (1), the minimum charge for refining is two dollars for each deposit, and the charge for refining applies in respect of all deposits containing, by assay, less than nine hundred and ninety-five parts fine gold in one thousand.

(3) A depositor shall pay to the Master for every deposit that is delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty, a handling charge to cover the cost of marketing outside Canada as follows:

- (a) for newly mined Canadian gold, twenty cents per fine ounce,
- (b) for bars of fine gold that the Master is authorized by the Minister to accept for that purpose, twenty cents per fine ounce, and
- (c) for all other gold, one dollar per fine ounce.

(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) one cent for every thirty days or fraction thereof (including the day on which the deposit is received at the Mint but excluding the day on which it is shipped from the Mint) for each fine ounce of gold so stored, payable at the time of

application for release of the gold or when billed, whichever is the earlier.

- (b) ten cents for each fine ounce packed at the Mint for shipment, payable at the time of application for the release of the gold, and
- (c) a handling charge of twenty 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 ten ounces of fine gold or part thereof, and ten 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.

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, 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 Operators of Gold Mines, 1962

Name	Head or executive office address	Location
(a) Placer Gold Mines		
Quebec:		
Archmond Mineral Exploration Partnership	7880 Des Vendeens Ave., Montreal	Moe River
Beauce Placer Mining Co. Ltd.	908-330 Bay St., Toronto, Ontario	Beauceville
British Columbia:		
Allied Mining Services	Vancouver	
Archibald, H.	Trail	
Ad. Astra Minerals Ltd.	526 Northern Hardware Bldg., Edmonton, Alberta	Squaw Creek
Bobier, E.L.	Quesnel	Cariboo
Butler, V.	Williams Lake	Cariboo
Cresswell, R.	Box 231 Quesnel	Cariboo
Craft, S.R. & G.R.	Atlin	Atlin
De Lorme, A.	Prince George,	Cariboo
Edell, Wm. & Arnold, Harry V.	Vernon	Osyoos
Ethier, C.S.	Vancouver	
Ferguson, Don S.	McBride	
Feyer, J.H.	Box 2018, Quesnel	Cariboo
Foreman, Mrs. L.	Quesnel	Cariboo
Foremost Miners & Developers Ltd.	617-837 West Hastings St., Vancouver	Hixon Creek
Fredericks, Fred	Likely	Cariboo
Fuson, Leo	Prince George	Cariboo
Garson Mitchell	Williams Lake	Lillooet
Gunn, J.J.	Wells	Cariboo
Hamilton, T.C.	Manson Creek	
Harris, H.	Box 335, Vernon	Vernon Mining District
Heap, M.A.	Princeton	Tulameen River
Henry, N.B.	Fort St. James	
Hixon Placers Inc.	2032 Third Ave., Seattle, Wash., U.S.A.	Cariboo
Jack, Gene	Prince George	Cariboo
Johnson, Fred W.	Quesnel	
Johnson, V.	Quesnel	
Kidd Russell	Williams Lake	Lillooet
Knudson, L.E.	Quesnel	Cariboo
Langevin, D.	Atlin	Atlin
Langley, Peter	Vancouver	
Lee, Frank	South Burnaby	
Lewis, Mylow	Vernon	
Lloyd, M.	Prince George	
Manson Creek Gold Mines	Prince George	
Mattson Bros.	Atlin	Atlin
McGannon, G.J.	228 Howe St., New Westminster	Choate
McJana Placers	Quesnel	Cariboo
McKittrick, H.	Richmond	
Morrison, D.L.	Williams Lake	
Nelson A.J.	Quesnel	Quesnel River
Ogden, Charles	Williams Lake	
Oslon, Edward	Prince George	
Pederson, Arthur	Box 74, Wells	Wells
Petty, Jack	Quesnel	Cariboo
Piccolo, Bros & Schroeder	Atlin	Atlin
Polischuk, Paul	Atlin	Atlin
Rollheiser, J.J.	Kimberley	Perry Creek
Schulz, Louis	Atlin	Atlin
Sheppard, R.	Quesnel	Cariboo
Sherwood Mines Ltd.	Great Central Lake	
Sissons, R.C.	Whitehorse, Yukon	
Smith, B.	Quesnel	Cariboo
Smith, David	Quesnel	Cariboo
Spruce Creek Placers	Atlin	Atlin
Storey, R.	Louis Creek	
Swanson, Carl	Quesnel	Cariboo
Trommell Mining	Quesnel	Cariboo
Troutline Creek Gold Ltd.	Edmonton, Alberta	
Williams, Rex	Quesnel	Cariboo
Williams, S.N.	Quesnel	Cariboo
Wildhorse Golds Ltd.	5504-109th St., Edmonton, Alberta	Fort Steele
Wingham & Lightning Creek Mining Co. Ltd.,	204-569 Howe St., Vancouver	Cariboo
Yukon:		
Action Mining Co. Ltd.	Mile 1054 Alaska Highway	Bullion Creek
Ballarat Mines Ltd.	Dawson	Dawson
Bardusan Placers Ltd.	Mayo	Mayo, Y.T.
Bleiler Placers	Whitehorse	Mayo
Bobcik A.	Mayo	Duncan Creek
Boutillier, H.C. & D.F.	Dawson	Bonanza Creek
Bratsberg, B.	Dawson	Bonanza Creek
Bremmer, John	Dawson	Last Chance Creek
Bremmer, Mrs. M.	Dawson	Cariboo Creek
Burgelman, Mrs. Nellie	Dawson	Cariboo Creek

List of Operators of Gold Mines, 1962 - Continued

Name	Head or executive office address	Location
(a) Placer Gold Mines—Concluded		
Yukon—Concluded:		
Burwash Mining Co.	Whitehorse	Burwash Creek
Canadian Creek Placers Ltd.	Vancouver, British Columbia	Canadian Creek, Yukon
Cariboo Placers	Dawson	Cariboo Creek
Christenson, R.	Dawson	Dawson
Dominion Placers	Box 4, Dawson	Quartz Creek
Double S. Placers Ltd.	Mayo	Mayo
Duncan Creek Placers	Mayo	Mayo
Eureka Placers (Yukon) Ltd.	Dawson	Eureka Creek
Fry, A.T.	Box 19, Dawson	Bonanza Creek
Gould, John	Dawson	Dawson
Heltmann-Janus	Dawson	Clear Creek
K & S Placers	Dawson	Gold Creek
Kinakin, Max	Dawson	Dublin Gulch
King Solomon Mine	Mayo	Bonanza Creek
Kingswell, Mrs. Edna	Dawson	
Kornlensky, S.	Dawson	Stewart River
Lamontagne, J.A.	Dawson	Bedrock Creek
La Saux & Perret	Dawson	Henderson Creek
Lentick & Berg	Mayo	Sourdough Hill
Malicky, Walter	Mayo	Mayo
Medby, Ole	Dawson	Dawson
Moen, O.	Dawson	Dawson
Netzel & Heltman Mining	Box 66 Dawson	Clear Creek
Northern Commercial Co.	Whitehorse	
Northern Yukon Services	Dawson	Eureka Creek
Paradise Hill Placers	Dawson	Eureka Creek
Peebler, R.R.	Whitehorse	
P. & G. Placers	Whitehorse	
Ross, L.M. (Kirkman Creek Placers)	Dawson	Dawson
Schink, E.	Dawson	Dawson
Sissons, Robert C.	Whitehorse	
Smashnuk, George	Mayo	Mayo
Spruce Creek Placers	Whitehorse	Atlin, B.C.
Strandberg, K.E.	Whitehorse	
Taylor, Fred W.	Mayo	Mayo
Vaillant, V.	Whitehorse	
Yukon Consolidated Gold Corp.	Dawson	Dawson
Yukon Placer Mining Co.	Dawson	Dawson
Alberta:		
Fester, Homer	12230-101 st. Edmonton	North Saskatchewan River
(b) Gold Quartz Mines		
Nova Scotia:		
East Hants Gold Mines Ltd.	Hants	Hants
MacMillan, MacKay	Issacs Harbour	Guysborough
Redden, Fred C.	Middle Musquodobit	Lindsay Lake
Smith, A.J.	East Chezzetcook	Lake Catcha
New Brunswick:		
Fundy Bay Copper Mines Ltd.	307-215 St. James St. W., Montreal, Quebec	Woodstock
Quebec:		
Akasaba Gold Mines Ltd.	112 King St. W., Toronto, Ontario	Louvicourt Twp.
Amalgamated Larder Mines Ltd.	1600-44 King St. W., Toronto, Ontario	Fort McKenzie
Ambassador Mining Developments Ltd.	372 Bay St., Toronto, Ontario	Malartic Twp.
American Chibougamau Mines Ltd.	265 Craig St. W., Montreal	Landrienne Twp.
Anacon Lead Mines Ltd.	330 Bay St., Toronto, Ontario	Rohault Twp.
Augustus Exploration Ltd.	1600-100 Adelaide St. W., Toronto, Ontario	Duncan Lake
Aumacho River Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Carpiquet Twp.
Aumaque Gold Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Bourlamaque Twp.
Ava Gold Mining Co. Ltd.	320 Bay St., Toronto, Ontario	Duparquet Twp.
Bargold Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Barraute Twp.
Barnat Mines Ltd.	199 Bay St., Toronto, Ontario	Malartic
Bellevue Quebec Mines, Ltd.	25 King St. W., Toronto 1, Ontario	Bellevue
Bevon Mines, Ltd.	112 King St. W., Toronto, Ontario	Louvicourt
Blackhawk Mining Ltd.	400 St. James St. W., Montreal	St. Magloire
Bourbeau Lake Mines, Ltd.	Noranda	McKenzie Twp.
British Ungava Explorations Ltd.	159 Bay St., Toronto, Ontario	Anderson Lake
Canadian Astoria Minerals Ltd.	607-80 Richmond St. W., Toronto, Ontario	Dufresnoy Twp.
Canadian Australian Exploration Ltd. (formerly Eldrich Mines Ltd.)	44 King St. W., Toronto, Ontario	Duprat Twp.
Canadian Malartic Gold Mines Ltd.	7 King St. E., Toronto 1, Ontario	Malartic
Canadian Thorium Corp. Ltd.	80 Richmond St. W., Toronto, Ontario	Destor
Cheskirk Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Rouyn Twp.
Chimo Gold Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Ewartand Carpentier Twps.
Courvan Mining Co. Ltd.	1403-507 Place d'Armes, Montreal	Louvicourt Twp.
Croinor Pershing Mines Ltd.	199 Bay St., Toronto, Ontario	Pershing Twp.

List of Operators of Gold Mines, 1962 - Continued

Name	Head or executive office address	Location
(b) Gold Quartz Mines - Continued		
Quebec - Concluded:		
D'Aragon Mines Ltd.	702-220 Bay St., Toronto, Ontario	Bourlamaque Twp.
D'Eldona Gold Mines Ltd.	67 Richmond St. W., Toronto, Ontario	Poirier Twp.
Dome Exploration Co. (Quebec) Ltd.	Bourlamaque	Louvicoourt Twp.
Dubuisson Goldfields Ltd.	302-355 St. James St. W., Montreal	Dubuisson Twp.
East Bay Gold Ltd.	14 C Avenue, Noranda	Vimy Area
Eastville Gold Mines Co. Ltd.	132 St. Jacques Ouest, Montreal	Courville
East Malartic Mines Ltd.	199 Bay St., Toronto, Ontario	Fourniere Twp.
Elder Mines & Developments Ltd.	44 King St. W., Toronto, Ontario	Noranda
Elk Lake Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Destor Twp.
Elvuc Mines Ltd.	121 Richmond St. W., Toronto, Ontario	Duprat
Francoeur Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Beauchastel Twp.
Gamma Mines (Quebec) Ltd.	Bourlamaque	Bourlamaque
Garnet Mines Ltd.	14-486 rue St. Jean, Montreal	Duparquet Twp.
Greek Canadian Mines Ltd.	807-1284 Danforth Rd., Toronto, Ontario	Pascal Twp.
Horne Fault Mines Ltd.	7 King St., Toronto, Ontario	Beauchastel Twp.
Kerr Addison Gold Mines Ltd.	44 King St. W., Toronto, Ontario	Daniel Twp.
Kider-Peel Ltd.	44 King St. W., Toronto, Ontario	Beauchastel Twp.
Kiena Gold Mines Ltd.	7 King St. E., Toronto, Ontario	Dubuisson Twp.
Lamaque Exploration Co. Ltd.	1000-11 Adelaide St. W., Toronto, Ontario	Druissac Twp.
Lamaque Mining Co. Ltd.	Bourlamaque	Bourlamaque
Leitch Gold Mines Ltd.	12 Richmond St. E., Toronto, Ontario	Wawagasic
Lencourt Gold Mines Ltd.	244 Bay St., Toronto, Ontario	Dubuisson Twp.
Lenmac Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Gand Twp.
Little Long Lac Gold Mines Ltd.	602-199 Bay St., Toronto, Ontario	Malartic
Louvicoourt Goldfields Corporation	100 Adelaide St. W., Toronto, Ontario	Bourlamaque
Malartic Hygrade Gold Mines Ltd.	608-80 Richmond St. W., Toronto, Ontario	Abitibi East
Malartic Goldfields Ltd.	Halet	Fourniere Twp.
Marban Gold Mines Ltd.	602-199 Bay St., Toronto, Ontario	Dubuisson Twp.
Marcoland Mines Ltd.	201-21ème Avenue Quebec	Landrienne Co.
McIntyre Porcupine Mines Ltd.	Schumacher	Ungava
McWatters Gold Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Blondeau Twp.
Mines Bern-Or Ltée. (Les)	Corleton-Sur-Mer	Fauvel Canton
Montclair Mining Corp. Ltd.	252 rue, Murdoch, Noranda	Laverlocher
Nealon Mines Ltd.	206-365 Bay St., Toronto, Ontario	Malartic and various Twp.
Nemrod Mining Co., Ltd.	132 St. James St. W., Montreal	Louvicoourt
New Hosco Mines Ltd.	906-357 Bay St., Toronto, Ontario	Joannes Twp.
Newbanks Gold & Copper Mines Ltd.	776-4ème ave. Val d'Or	Vaughelin Canton
Newrich Explorations Ltd.	403-62 Richmond St. W., Toronto, Ontario	Beauchastel
New Senator-Rouyn Ltd.	2014-44 King St. W., Toronto, Ontario	Noranda
Norbeau Mines Ltd.	199 Bay St., Toronto, Ontario	McKenzie Twp.
Norlantic Mines Ltd.	Halet	Malartic
Northeast Exploration Co.	574-1st St., Chibougamau	Bourbeau Lake
Northern Exploration Ltd.	265 Craig St. W., Montreal	Landrienne Twp.
Northern Quebec Explorers Ltd.	13 ave. Gouin, Amos	Fiedmont
North Sullivan Contact Mines Ltd.	200-485 rue McGill, Montreal	Dubuisson
O'Brien Gold Mines, Ltd.	36 Dussault St., Hull	Cadillac Twp.
Odyno Exploration & Development Ltd.	Noranda	Beauchastel
Opemisca Explorers Ltd.	132 St. James St. W., Montreal	L'Esperance
Paramaque Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Bourlamaque
Perron Gold Mines Ltd.	200 Bay St., Toronto, Ontario	Abitibi
Pitchvein Mines Ltd.	82 Government Road, Kirkland Lake	Dasserat
Porcupine Prime Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Fourniere Twp.
Portland Yellow Knife Gold Mines Ltd.	506-100 Adelaide St. W., Toronto, Ontario	Fourniere Twp.
Powell Rouyn Gold Mines Ltd.	602-199 Bay St., Toronto, Ontario	Rouyn Twp.
Quebec North Shore Mines Ltd.	2144 McKay St., Montreal	Lacoste Twp.
Quebelle Mines Ltd.	Cedar Rapids	Cedar Rapids
Rand Malartic Mines Ltd.	2014-44 King St. W., Toronto, Ontario	Malartic
Rocdor Mines Ltd.	Val d'Or	Dubuisson Twp.
Rock City Explorations Ltd.	608-80 Richmond St. W., Toronto, Ontario	Guerchville
Sigma Mines (Quebec) Ltd.	Bourlamaque	Bourlamaque
Standard Gold Mines Ltd.	1403-507 Place d'Armes, Montreal	Bourlamaque
Sturgeon River Mines Ltd.	903-330 Bay St., Toronto, Ontario	Leseur Twp.
Sullivan Consolidated Mines Ltd.	1403-Aldred Building, Montreal	Dubuisson Twp.
Teck Exploration Company Limited	Bourlamaque	Bourlamaque
Tribag Mining Co. Ltd.	44 King St. W., Toronto, Ontario	Rouyn
Twentieth Century Mining Company Limited	80 Richmond St. W., Toronto, Ontario	Pershing Twp.
Tyndall Explorations Ltd.	85 Richmond St. W., Toronto, Ontario	Beauchastel Twp.
Ultra Shawkey Mines Ltd.	80 King St. W., Toronto, Ontario	Godfrey Twp.
Union Mining Corp.	1374 Sherbrooke St. W., Montreal	Bourlamaque Twp.
Urban Quebec Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Urban Twp.
Valco Mines Co.	115 Rue, St. Pierre, Quebec	Malartic
Valiant Gold Mines Ltd.	294 Portage Ave., Winnipeg, Manitoba	Tiblemont Twp.
Verona Rock Products Ltd.	357 Bay St., Toronto, Ontario	Beauchastel Twp.
Villemaque Goldmines Ltd.	11 Adelaide St. W., Toronto, Ontario	Bourlamaque Twp.
Wasamac Mines Ltd.	199 Bay St., Toronto, Ontario	Beauchastel Twp.
Zolapa Mining Corporation Ltd.	1004-85 Richmond St. W., Toronto, Ontario	Destor Twp.
Ontario:		
Porcupine District		
Aunor Gold Mines Ltd.	44 King St. W., Toronto	Timmins
Broulan Reef Mines Ltd.	80 Richmond St. W., Toronto	Whitney Twp.
Buffalo Ankerite Gold Mines Ltd.	South Porcupine	Deloro Twp.

List of Operators of Gold Mines, 1962 - Continued

Name	Head or executive office address	Location
(b) Gold Quartz Mines—Continued		
Ontario—Continued:		
Porcupine District—Continued		
Carium Mines Ltd.	7 King St. E., Toronto	Tisdale Twp.
Delnite Mines Ltd.	Box 590, Timmins	Deloro Twp.
Dome Mines Ltd.	South Porcupine	Tisdale Twp.
Hallnor Mines Ltd.	44 King St. W.,	Whitney Twp.
Hollinger Consolidated Gold Mines Ltd.	Timmins	Hislop and Tisdale Twps.
Kenilworth Mines Ltd.	Box 945, Timmins	Ogden Twp.
Hugh-Pam Porcupine Mines Ltd.	80 Richmond St. W., Toronto	Whitney Twp.
McIntyre Porcupine Mines Ltd.	Schumacher	Schumacher
Pamour Porcupine Mines Ltd.	44 King St. W., Toronto	Whitney Twp.
Paymaster Consolidated Mines Ltd.	Box 100, South Porcupine	Deloro and Tisdale Twps.
Porcupine Prime Mines Ltd.	1024-85 Richmond St. W., Toronto	Tisdale Twp.
Preston Mines Ltd.	335 Bay St., Toronto	South Porcupine
Kirkland Lake District		
Kelkirk Mines Ltd.	1112 Star Building, Toronto	Kirkland Lake
Kirkland Minerals Corp., Ltd.	360 Bay St., Toronto	Teck Twp.
Lake Shore Mines Ltd.	Kirkland Lake	Kirkland Lake
Macassa Gold Mines Ltd. (Macassa Division)	85 Richmond St. W., Toronto	Kirkland Lake
Northgate Exploration Ltd.	25 Melinda St., Toronto	Kirkland Lake
Sylvanite Gold Mines Ltd.	Box 670, Kirkland Lake	Teck Twp.
Teck-Hughes Gold Mine Ltd., The	14 Finkle St., Woodstock	Kirkland Lake
Upper Canada Mines Ltd.	250 University St., Toronto	Gauthier Twp.
Wright-Hargreaves Mines Ltd.	199 Bay St., Toronto	Kirkland Lake
Larder Lake District		
Gandore Explorations Ltd.	25 Adelaide St. W., Toronto	Lander
Kerr-Addison Gold Mines Ltd.	44 King St. W., Toronto	McGarry Twp.
Tresdor Larder Mines Ltd.	24 King St. W., Toronto	McGarry Twp.
Valhalla Mines Ltd.	906-357 Bay St., Toronto	Harker Twp.
Sudbury District		
Renabie Mines Ltd.	85 Richmond St. W., Toronto	Sudbury
Tionaga Gold Mines	Kukatash	Horwood Lake
Algoma District		
Pick Mines Ltd.	100 Adelaide St. W., Toronto	Algoma
Thunder Bay District		
Consolidated Mosher Mines Ltd.	199 Bay St. W., Toronto	Long Lac
Lake Osu Mines Ltd.	418-25 Adelaide St. W., Toronto	Fort Hope
Leitch Gold Mines Ltd.	12 Richmond St. E., Toronto	Beardmore
Little Long Lac Gold Mines Ltd.	199 Bay St., Toronto	Errington Twp.
MacLeod-Cockshutt Gold Mines Ltd.	199 Bay St., Toronto	Geraldton
Northern Canada Mines Ltd.	330 Bay St. Toronto	Savant Lake
Kenora District		
Cone, R.C.	Mine Centre	Shoal Lake
Consolidated Golden Arrow Mines Ltd.	25 Adelaide St. W., Toronto	Dogpaw Lake
Lindsay Explorations Ltd.	4 Richmond St. E., Toronto	Sapawe
Purdex Minerals Ltd.	25 Adelaide St. W., Toronto	Euart Twp.
Pantan Mines Ltd.	73 Adelaide St. W., Toronto	Tabor Lake
Patricia District		
Abino Gold Mines Ltd.	25 Adelaide St. W., Toronto	Balmer Twp.
Ava Gold Mining Co. Ltd.	320 Bay St., Toronto	Red Lake
Campbell Red Lake Mines Ltd.	50 King St. W., Toronto	Balmer Twp.
Cochenour Wilans Gold Mines Ltd.	150 Eglinton Ave. E., Toronto	Dome Twp.
Consolidated Red Poplar Minerals Ltd.	55 Yonge St., Toronto	Red Lake
Craibbe-Fletcher Gold Mines Ltd.	25 Adelaide St. W., Toronto	Red Lake
Dickenson Mines Ltd.	25 Adelaide St. W., Toronto	Balmer Twp.
Jorsco Exploration Ltd.	85 Richmond St. W., Toronto	Red Lake

List of Operators of Gold Mines, 1962 — Continued

Name	Head or executive office address	Location
(b) Gold Quartz Mines—Concluded		
Ontario—Concluded:		
Patricia District—Concluded		
Juma Mining & Exploration Ltd.	272½ N. Christina St., Sarnia	Red Lake
Kostynuk, Alex	Red Lake	Red Lake
Lun Echo Gold Mines Ltd.	199 Bay St., Toronto	Kirkland Lake
McFinley Red Lake Gold Mines Ltd.	199 Bay St., Toronto	McKenzie Island
McKenzie Red Lake Gold Mines Ltd.	199 Bay St., Toronto	McKenzie Island
Madsen Red Lake Gold Mines Ltd.	55 Yonge St., Toronto	Heyson Twp.
Pickle Crow Gold Mines, Ltd.	11 Adelaide St. W., Toronto	Connell Twp.
Young, H.G., Mines Ltd.	80 Richmond St. W., Toronto	Balmer Twp.
Wilmar Mines Ltd.	150 Eglinton Ave. E., Toronto	Dome
Matachewan District		
Calverley, G.	Kirkland Lake	Powell Twp.
Stairs Exploration & Mining Company Ltd.	55 Yonge St., Toronto	Midlothian Twp.
Manitoba:		
Explorers Alliance Ltd.	100 Adelaide St. W., Toronto, Ontario	Herb Lake
Forty-Four Mines Ltd.	Bissett	Rice Lake
Lone Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Rice Lake
San Antonio Gold Mines Ltd.	Bissett	Bissett
Triple Strike Mines Ltd.	500 Western Savings Bldg., Winnipeg	Rice Lake
Saskatchewan:		
Contact Gold Mines Ltd.	1168 Albert St., Regina	La Ronge
Studer Mines Ltd.	201 Canada Bldg., Prince Albert	Sulphide Lake
British Columbia:		
Albion Mining Co. Ltd.	Box 434, Castlegar	Trail Creek
Allied Mining Services Ltd.	425 Howe St., Vancouver	Tofino
Amcana Gold Mines Ltd.	Box 124 Postal Station A, Vancouver	Greenwood
Bermah Mines Ltd.	850 W. Hastings St., Vancouver	Stewart
Bralorne—Pioneer Mines Ltd.	355 Burrard St., Vancouver	Bralorne
Cariboo Gold Quartz Mining Co. Ltd.	675 W. Hastings St., Vancouver	Cariboo
Consolidated Mining & Smelting Co. Ltd.	Trail	Skeena
Fairview Mining Co. Ltd.	Wallace, Idaho, U.S.A.	Osoyoos
French Mines Ltd.	675 W. Hastings St., Vancouver	Osoyoos
Graham, W.B.	Box 63, Hedley	Osoyoos
Hedley Mining Ltd.	4804-20th St., Vernon	Hedley
Hurley River Mines Ltd.	Lillooet	Lillooet
Kelowna Mines Hedley Ltd.	Hedley	Osoyoos & Slocan
Kootenay Belle Mining Co.	Shoteacres	Sheep Creek
McKinney Gold Mines	540 Burrard St., Vancouver	Greenwood
Rayrock Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Bridge River
White Lease, D.H., Norcross	Neison	Blewett
Northwest Territories:		
Akaiicho Yellowknife Gold Mines Ltd.	7 King St. W., Toronto, Ontario	Yellowknife
Consolidated Mining & S. Co. of Canada, Ltd.	Trail, British Columbia	Yellowknife
Cons. Discovery Yellowknife Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Discovery
Giant Yellowknife Gold Mines Ltd.	7 King St. W., Toronto, Ontario	Yellowknife
Ormsby Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Yellowknife
Taurcanis Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Matthews Lake
Yukon:		
Klondike Lode Gold Mines Ltd.	837 W. Hastings St., Vancouver	Klondike

List of Operators of Gold Mines, 1962 - Continued

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mines		
Newfoundland:		
Atlantic Coast Copper Corp. Ltd.	140 Wellington St. Ottawa 4, Ontario	Springdale
British Newfoundland Exploration Ltd.	173 Elizabeth Ave., St. John's	Labrador
Consolidated Rambler Mines Ltd.	908-330 Bay St., Toronto 1, Ontario	Baie Verte
Marlimes Mining Corp., Ltd.	330 Bay St., Toronto, Ontario	Tilt Cove
New Brunswick:		
Chesterville Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Northumberland
Clearwater Mines Ltd.	Box 520, Bathurst	Bathurst
Consolidated Mining & Smelting Co. Ltd.	Trall	Wedge Mine
Heath Steele Mines Ltd.	Box 280, Newcastle	Northumberland
Keneco Exploration (Canada) Ltd.	25 King St. W., Toronto, Ontario	Newcastle
Lucky Lake Mines Limited	302-215 St. James St. W., Montreal 1, Quebec	Bathurst
Mogul Mining Corp. Ltd.	25 Adelaide St. W., Toronto, Ontario	Gloucester
New Alger Mines Ltd.	80 Richmond St. W., Toronto, Ontario	Northumberland
Quebec Smelting & Refining Ltd.	215 St. James St. W., Montreal, Quebec	Gloucester
Roche Long Lac Gold Mines Ltd.	372 Bay St., Toronto, Ontario	Bathurst
Quebec:		
Acadia Uranium Mines Ltd.	62 Richmond St. W., Toronto Ontario	Chibougamau
Alcourt Mines Ltd.	1024-85 Richmond St. W., Toronto, Ontario	Joannes Twp.
Alsab Mines Ltd.	215 St. James St. W., Montreal	Denain Twp.
Amalgamated Larder Mines Ltd.	1615-44 King St. W., Toronto, Ontario	Garthby Twp.
Amalgamated Mining Development Corp.	132 St. James St. W., Montreal	Scott Twp.
Americ Mines	1255 Phillips Square, Montreal	Guercheville Twp.
American Chibougamau Ltd.	11 Cornwall Ave., Town of Mount Royal	Abitibi
Anacon Lead Mines Ltd.	908-330 Bay St., Toronto, Ontario	McGarry Twp.
Area Mines Limited	44 King St. W., Toronto, Ontario	Aloegny Twp.
Barry Copper Mines Ltd.	550 Sherbrooke St. W., Montreal	Montbray Twp.
Barry Explorations Ltd.	550 Sherbrooke St. W., Montreal	Montbray Twp.
Bidcop Mines Ltd.	906-357 Bay St., Toronto, Ontario	Daniel Twp.
Big Town Copper Mines Ltd.	132 St. James St. W., Montreal, Quebec	Abitibi Territory
Black Bay Uranium Ltd.	503-62 Richmond St. W., Toronto, Ontario	Dufresnoy and Joannes Twps
Black River Mining Ltd.	102-400 St. James St. W., Montreal 1	Duvernoy Twp.
Bornite Copper Corporation Limited	62 Richmond St. W., Toronto 1, Ontario	Cleveland Twp.
Bruneau Mines Ltd.	620 Cathcart St., Montreal	Bruneau Twp.
Campbell Chibougamau Mines Ltd.	Box 134, Chibougamau	Obalski Twp.
Canadian Shield Mining Corporation	700 Royal Bank Bldg., Place Ville-Marie, Montreal	Preissac Twp.
Canex Minerals Ltd.	8167 Birnam St. Montreal 15	Scott Twp.
Chesterville Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Joutel Twp.
Chib-Kayrand Copper Mines Ltd.	215 St. James St. W., Montreal 1	Obalski Twp.
Chiboug Copper Corp. Ltd.	302-215 St. James St. W., Montreal	Levy Twp.
Combined Metal Mines Ltd.	908-330 Bay St., Toronto, Ontario	Duncan Lake
Conagami Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Galinee
Coniska Copper Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Daubree
Consolidated Mogador Mines Ltd.	700 Royal Bank Bldg. Place Ville-Marie Montreal	Piedmont Twp.
Consolidated Mogul Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Broughton Twp.
Continental Dyno Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Long Lake
Conwest Exploration Company Ltd.	1001-85 Richmond St. W., Toronto, Ontario	Gaspe
Copper Rand Mines Division Patino Mining Corp.	301-215 St. James St. W., Montreal 1	McKenzie Twp.
Copper Stream Mines Ltd.	266 Notre Dame St. W., Montreal	Figueray Twp.
Copper Valley Mines Ltd.	403-3600 Ridgewood Ave., Montreal	Bolton Twp.
Corval Corporation Ltd.	302-215 St. James St. W., Montreal	Dunphy Lake
Cupra Mines Ltd.	1403-507 Place d'Armes, Montreal	Stratford Twp.
Cuvier Mines Ltd.	215 St. James St. W., Montreal 1	Cuvier Twp.
Daering Explorers Corp. Ltd.	714-62 Richmond St. W., Toronto, Ontario	Dufresnoy Twp.
Deibi Pacific Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Fort McKenzie
East Sullivan Mines Ltd.	507 Place d'Armes, Montreal, Quebec	Val d'Or
East Ventures Ltd.	750-630 Sherbrooke St. W., Montreal	Garthby Twp.
Estate Projects Ltd.	25 King St. W., Toronto, Ontario	Ste. Helene Twp.
Fab Metal Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Urban Twp.
Fundy Bay Copper Mines Ltd.	215 St. James St. W., Montreal	Frotet Lake
Gaspe Copper Mines Ltd.	44 King St. W., Toronto, Ontario	Murdochville
Gateway Uranium Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Duprat Twp.
Genex Mines Ltd.	906-357 Bay St., Toronto, Ontario	Dufresnoy Twp.
Giant Bachelor Mines Ltd.	550 Sherbrooke St. W., Montreal	Montbray Twp.
Grandroy Mines Ltd.	908-330 Bay St., Toronto, Ontario	Roy Twp.
Gulf Lead Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Riendeau Twp.
Hastings Mining & Development Co. Ltd.	507 Place d'Armes, Montreal, Que.	Stratford Twp.
Here Fault Copper Ltd.	3100-25 King St. W., Toronto, Ontario	Noranda
Hydra Explorations Ltd.	100 Adelaide St. W., Toronto, Ontario	Bousquet Twp.
Hygold Mines Ltd.	357 Bay St. Toronto, Ontario	Gand Twp.
Icon Syndicate	11 Adelaide St. W., Toronto, Ontario	Rasles Twp.
Iso Mines Ltd.	366 Bay St. Toronto, Ontario	Galinee Twp.
Joutel Copper Mines Ltd.	1600-44 King St. W., Toronto, Ontario	Joutel Twp.
Lake Dufault Mines Ltd.	205-1026 St. Jean St. Quebec	Dufresnoy Twp.
Lake Osu Mines Ltd.	418-25 Adelaide St. W., Toronto, Ontario	Dufresnoy Twp.
Larum Mines Ltd.	357 Bay St., Toronto, Ontario	Galinee Twp.

List of Operators of Gold Mines, 1962 - Continued

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mines - Continued		
Quebec - Continued:		
Lenmac Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Frolet Lake
Lucky Lakes Mines Ltd.	302-215 St. James St. W., Toronto, Ontario	New Quebec
Lullwitz-Kaepfeli Minera Explorations Partnership	2055 St. Marc St. Montreal	De Salles Twp.
Lyndhurst Mining Company Ltd.	Royal Bank Bldg. Place Ville-Marie, Montreal	Destor Twp.
Merrill Island Mining Corp.	302-215 St. James St. W., Montreal, Que.	Chibougamau Twp.
Mespi Mines Ltd.	1702-80 Richmond St. W., Toronto, Ont.	Dufresnoy Twp.
Meta Uranium Mines Ltd.	301-200 Bay St., Toronto, Ontario	East Main River
Mid Chibougamau Mines Ltd.	200 St. James St. W., Montreal	Chibougamau Twp.
Milado Mines (1957) Ltd.	302-215 St. James St. W., Montreal	Twp. 4953
Mile 18 Mines Ltd.	121 Richmond St. W., Toronto, Ontario	Berthiaume Twp.
Mining Corporation of Canada Ltd.	1715-44 King St. W., Toronto, Ontario	Chibougamau
New Athona Mines Ltd.	2200 Yonge St. Toronto 12, Ontario	Landrienne Twp.
New Bidlamaque Gold Mines Ltd.	710-60 Yonge St., Toronto, Ontario	Bourlamaque Twp.
Newconex Ltd.	8 King St. E., Toronto, Ont.	Preissac Twp.
New Hosco Mines Ltd.	908-357 Bay St., Toronto, Ont.	Daniel Twp.
New Inasco Mines Ltd.	605-355 St. James St. W., Montreal	Dufresnoy Twp.
New Jason Mines Ltd.	50-80 Richmond St. W., Toronto, Ontario	Galinee Twp.
New Lorie Mines Ltd.	1002-80 Richmond St. W., Toronto Ontario	Dufresnoy Twp.
Newlund Mines Ltd.	44 King St. W., Toronto, Ontario	Subercase Twp.
Newmont Mining Corp. of Canada Ltd.	906-211 Portage Ave., Winnipeg, Man.	Mattagami Area
New West Amulet Mines Ltd.	244 Bay St., Toronto, Ont.	Duprat Twp.
Nicupit Mines Ltd.	83W-1st Ave., Amos, Que.	Montauban
Nightlen Mines Ltd.	405-25 Adelaide St. W., Toronto, Ont.	Carpiquet Twp.
Nipiron Mines Ltd.	302 Bay St., Toronto, Ont.	Subercase Twp.
Nipissing Mines Co. Ltd.	55 Yonge St. Toronto, Ont.	Huguette Lake
Noranda Mines Ltd.	44 King St. W., Toronto, Ontario	Noranda
Normal Mining Corp. Ltd.	1715-44 King St. W., Toronto, Ontario	Desmeloizes Twp.
Norque Copper Mines Ltd.	1702-80 Richmond St. W., Toronto, Ontario	Duprat Twp.
Northcal Oils Ltd.	208-365 Bay St., Toronto, Ontario	Obamska River
Northern Exploration Ltd.	62 Main St. N., Magog	Discovery Lake
Northern Quebec Explorers Ltd.	Amos, Que.	Lac Mattagami
North Tech Exploration Ltd.	80 King St. W., Toronto, Ont.	Galinee Twp.
North Mattagami Mines Ltd.	56-1610 Sherbrooke St. W., Montreal, Que.	Isle-Dieu Twp.
Norvalie Mines Ltd.	505-80 Richmond St. W., Toronto, Ont.	Isle-Dieu Twp.
Odyno Exp. & Div. Ltée	115-7th St. Noranda, Que.	Montbeillard
Olympia Mining Exploration Ltd.	2075 Mansfield St. Montreal, Que.	Levy
O'Leary Malartic Mines Ltd.	Box 54, Noranda, Que.	Malartic
Opemiska Copper Mines (Quebec) Ltd.	Box 10, Chapais	Levy Twp.
Osisko Lake Mines Ltd.	1002-7 King St. W., Toronto, Ontario	Rouyn Twp.
Phelps Dodge Corp. of Can. Ltd.	300 Park Ave. New York 22, N.Y., U.S.A.	Lake Minto
Porcupine Prime Mines Ltd.	1024-85 Richmond St. W., Toronto, Ontario	Dufresnoy Twp.
Portage Island (Chibougamau) Mines Ltd.	1107-55 Yonge St. Toronto, Ontario	Roy Twp.
Prospectors Airways Company Ltd.	1600-44 King St. W., Toronto, Ontario	Abitibi
Proteus Minerals Ltd.	403-62 Richmond St. W., Toronto, Ontario	Vassan Twp.
Quebec Chibougamau Goldfields Ltd.	132 St. James St. W., Montreal	McKenzie Twp.
Quebec Mattagami Minerals Ltd.	1002-80 Richmond St. W., Toronto, Ontario	Mattagami
Quebec Smelting & Refining Ltd.	302-215 St. James St. W., Montreal	Lesperance Twp.
Quemont Mining Corp. Ltd.	1715-44 King St. W., Toronto, Ont.	Rouyn-Noranda
Regional Securities Corp. Ltd.	121 Richmond St. W., Toronto, Ontario	Morris Twp.
Rosario Exploration Ltd.	120 Broadway, New York, N.Y. U.S.A.	Roy Twp.
Rouanda Mining Company	360 St. James St. W., Montreal, Que.	Ligneris Twp.
Roxford Mining Corp.	4920 Western Ave., Westmount, Que.	Roxton Twp.
Rusty Lake Mining Corp.	132 St. James St. W., Montreal, Que.	La Pause Twp.
Selco Exploration Company Ltd.	600-77 York St. Toronto, Ont.	St. Helene Twp.
Solbec Copper Mines Ltd.	1403-507 Place d'Armes, Montreal	Stratford Twp.
Sogemines Development Co. Ltd.	1980 Sherbrooke St. W., Montreal	Ungava
Southern Union Oils Ltd.	365 Bay St. Toronto, Ontario	La Gauchetière Twp.
Springpole Mines Ltd.	1003-67 Yonge St., Toronto, Ontario	Duprat Twp.
Sterola Explorations Ltd.	Steep Rock Lake, Ont.	Newport
Strathcona Mines Ltd.	62 Richmond St. W., Toronto, Ont.	Franquet Twp.
Sullico Mines Ltd.	1403-507 Place d'Armes, Montreal	Gaspe
Sunburst Exploration Ltd.	320 Bay St. Toronto, Ontario	Duprat Twp.
Tache Lake Mines Ltd.	302-215 St. James St. W., Montreal	McKenzie Twp.
Tazin Mines Ltd.	215 St. James St. Montreal	Chibougamau
Terra Nova Explorations Ltd.	65 St. Anne St. Quebec	Barraute Twp.
Terra Nova Properties Ltd.	Grand Falls Newfoundland	Tibblemont Twp.
Three Brothers Mining Exploration Ltd.	360 Bay St., Toronto, Ont.	Compoite Twp.
Trade-Horn Limited	500-160 Bay St., Toronto, Ont.	Doyon Lake
Tribag Mining Co. Ltd.	2014-44 King St. W., Toronto, Ontario	Rouyn
Tri-Cor Mining Company Ltd.	608-80 Richmond St. W., Toronto, Ontario	Barraute Twp.
Triform Explorations Ltd.	100 Adelaide St. W., Toronto, Ontario	Lamorandiere Twp.
Trinity Chibougamau Mines Ltd.	403-62 Richmond St. W., Toronto, Ontario	Dufresnoy Twp.
Unisphere Explorers Ltd.	206-365 Bay St. Toronto, Ontario	Duncan Lake
United Buffadison Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Fort MacKenzie
United New Fortune Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Dufresnoy Twp.
Uranium Ridge Mines Ltd.	418-25 Adelaide St. W., Toronto, Ontario	Godfrey Twp.
Utopia Gold Mines Ltd.	305-100 Adelaide St. W., Toronto, Ontario	Beauchastel Twp.
Valray Explorations Ltd.	305-100 Adelaide St. W., Toronto, Ontario	Noranda
Vanguard Explorations Ltd.	725-132 St. James St. W., Montreal	Noranda
Vauze-Mines Ltd.	808 Dominion Square Bldg., Montreal	Noranda
Ventures Claims Ltd.	7 King St. E. Toronto, Ont.	Mattagami
Virginia Mining Corp.	405-1410 Stanley St., Montreal	Duprat Twp.
Waite Amulet Mines Ltd.	1100 Bank of Nova Scotia Bldg. Toronto	Duprat Twp.
Waite Lake Mines Ltd.	1245 Sherbrooke St. W., Montreal	Watson Lake
Watson Lake Mines Ltd.	225-12 Richmond St. E., Toronto, Ontario	Fontainebleau
Weedon Mining Corporation	302-215 St. James St. W., Montreal	

List of Operators of Gold Mines, 1962 - Continued

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mines - Continued		
Quebec - Concluded:		
Westfields Minerals Ltd.	3100-25 King St. W., Toronto, Ontario	Montbray Twp.
West Wasa Mines Ltd.	7 Adelaide St. E., Toronto, Ontario	Beauchastel Twp.
Wittsey-Coghlan Mines Ltd.	320 Bay St., Toronto, Ontario	Rouyn Twp.
Ontario:		
Accra Explorations Ltd.	305-100 Adelaide St. W., Toronto	Robb Twp.
Aumacho River Mines Ltd.	405-25 Adelaide St. W., Toronto	Cardiff Twp.
Chipman Lake Mines Ltd.	25 King St. W., Toronto	Kenora
Coppercorp. Limited	405-25 Adelaide St. W., Toronto	Algoma
Ethel Copper Mines Ltd.	80 Richmond St. W., Toronto	Tudhope Twp.
Geco Mines Ltd.	1715-44 King St. W., Toronto	Manitouwadge
Kam Kotia Porcupine Mines Ltd.	25 Adelaide St. W., Toronto	Robb Twp.
Kenlew Mines Ltd.	906-357 Bay St., Toronto	Pickle Crow
Kiro Explorations Ltd.	160 Bay St., Toronto	Robb Twp.
Kordol Explorations Ltd.	19 Melinda St. Toronto	Boston Creek
Lake Beaverhouse Mines Ltd.	1600-100 Adelaide St. W., Toronto	Larder Lake
Maple Bay Copper Mines Ltd.	357 Bay St., Toronto	Godfrey Twp.
Maralgo Mines Ltd.	906-11 Adelaide St. W., Toronto	Kenora
Maybrun Mines Ltd.	305-100 Adelaide St. W., Toronto	Rainy River
Mining Corp. of Canada, Ltd.	44 King St. W., Toronto	Larder Lake
Misema Lake Mining Corp. Ltd.	1112 Star Building, Toronto	Kashabowie
North Coldstream Copper Mines Ltd.	44 King St. W., Toronto	Matachewan
Pax International Mines Ltd.	607-80 Richmond St. W., Toronto	Spanish
Poly Ores Mining Company Ltd.	62 Richmond St. W., Toronto	Matachewan
Rio Algom Mines Ltd. (Pronto Division)	335 Bay St., Toronto	Tudhope Twp.
St. Lucie Exploration Co. Ltd.	443 University Ave., Toronto	Cunnigham Twp.
Shunshy Mines Ltd.	906-357 Bay St., Toronto	Temagami
Temagami Mining Company Ltd.	1000-11 Adelaide St. W., Toronto	Matachewan
Watt, G.S.	62 Richmond St. W., Toronto	
Manitoba:		
Canorama Explorations Ltd.	104-85 Richmond St. W., Toronto, Ontario	The Pas
Hudson Bay Mining & Smelting Company Ltd.	4th Floor, 333 Broadway Ave., Winnipeg	Flin Flon, Schist Lake
Stall Lake Mines Ltd.	2-193 Bannatyne Ave., Winnipeg	Stall Lake
Saskatchewan:		
Hudson Bay Mining & Smelting Co. Ltd.	4th Floor, 333 Broadway Ave., Winnipeg, Manitoba	Flin Flon
British Columbia:		
Anaconda Company (Canada) Ltd. (The)	8th Ave., New Toronto, Ontario	Britannia Beach
Belle Tahsis Mines Ltd.	1161 Melville St., Vancouver	Tahsis
Bennett, R.	Heriot Bay, Quadra Island	Quadra Island
Bethlehem Copper Corp. Ltd.	355 Burrard St., Vancouver	Highland Valley
Bethsaida Copper Mines Ltd.	1075 Melville St., Vancouver	Kamloops
Cadamet Mines Ltd.	600-250 University Ave., Toronto, Ontario	Kamloops
Canam Copper Company Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Hope
Coast Copper Company Limited	Trail	Port McNeill
Colonial Mines Ltd.	Box 4183, Vancouver	Pender Harbour
Consolidated Mining & Smelting Co. of Canada Ltd.	Trail, B.C.	Hope & Nanaimo
Consolidated Woodgreen Mines Ltd.	204-569 Howe St., Vancouver	Greenwood
Continental Consolidated Mines Ltd.	535 Howe St., Vancouver	Greenwood
Copper Mountain Mines Ltd.	1500 Marine Bldg., Vancouver	Deep Gulch
Copper Town Mines Ltd.	828-510 West Hastings St., Vancouver	Alberni
Cowichan Copper Co. Ltd.	620 Howe St., Vancouver	Lake Cowichan
Craigmont Mines Ltd.	700 Burrard Bldg., Vancouver	Merritt
Farwest Mining Ltd.	1075 Melville St., Vancouver B.C.	Kamloops
Fort Reliance Minerals Ltd.	3100-25 King St. W., Toronto	Lamb Mountain
Friday Creek Development Co. Ltd.	1030 West Georgia St., Vancouver	Similkameen
Gabbro Copper Mines Ltd.	2256 W. 12th Ave., Vancouver	Jordan River
General Resources Ltd.	213-678 Howe St., Vancouver	Merritt
Granby Mining Company Ltd. (The)	1111 West Georgia St., Vancouver	Allenby
Granduc Mines Ltd.	906-111 Portage Ave., Winnipeg Manitoba	Leduc Glacier
Geminder Wilbur W.	Keremos	Keremos
H. & G. Mining Co.	Princeton	Princeton

List of Operators of Gold Mines, 1962 — Concluded

Name	Head or executive office address	Location
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(c) Copper-Gold-Silver Mines — Concluded

British Columbia — Concluded:

Hanna Gold Mines Ltd.	401-470 Granville St., Vancouver	Cassiar
Holberg Mines Ltd.	103-709 Dunsmuir St., Vancouver	Holberg
Kennco Explorations (Western) Ltd.	1033 Georgia St. W., Vancouver	Skeena
Kie Mine Co. Ltd.	2412 Columbia St., Vancouver	Merritt
Johnsby Mines Ltd.	509-25 Adelaide St. W., Toronto, Ontario	Silverton
Kamloops Copper Co. Ltd.	105 Seymour St., Kamloops	Kamloops and Cariboo
Mid-West Copper & Uranium Mines Ltd.	535 Howe St., Vancouver, B.C.	Hope
Newmont Mining Corp. of Can. Ltd.	211 Portage Ave., Winnipeg, Man.	Skeena
Noranda Exploration Co. Ltd.	2256 West 12th Ave., Vancouver	Vancouver Island
Phelps Dodge Corp. of Canada Ltd.	55 Yonge St., Toronto	Taseko Lake
Phoenix Copper Company Ltd.	1111 W. Georgia St., Vancouver	Grand Forks
Rio Tinto Canadian Exploration Ltd.	335 Bay St., Toronto, Ontario	Kamloops
Texada Mines Ltd.	Box 35, Vananda	Nanaimo
Texas Gulf Sulphur Co.	230 Park Ave., New York 17, N.Y., U.S.A.	Skeena
Torment Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Nicola Mining District
Torwest Resources Ltd.	400-837 W. Hastings St., Vancouver	Merritt
Velvet Leasers	Rossland	Trail
Western Mines Ltd.	802-850 W. Hastings St., Vancouver	Buttle Lake

Northwest Territories:

Redstone Mines Ltd.	3100-25 King St. W., Toronto, Ontario	Redstone
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Yukon:

Dominion Explorers Ltd.	607-80 Richmond St. W., Toronto, Ontario	Kathleen Lake
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