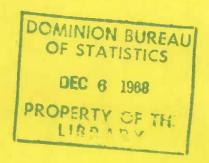
CATALOGUE No.

26-209 c-2

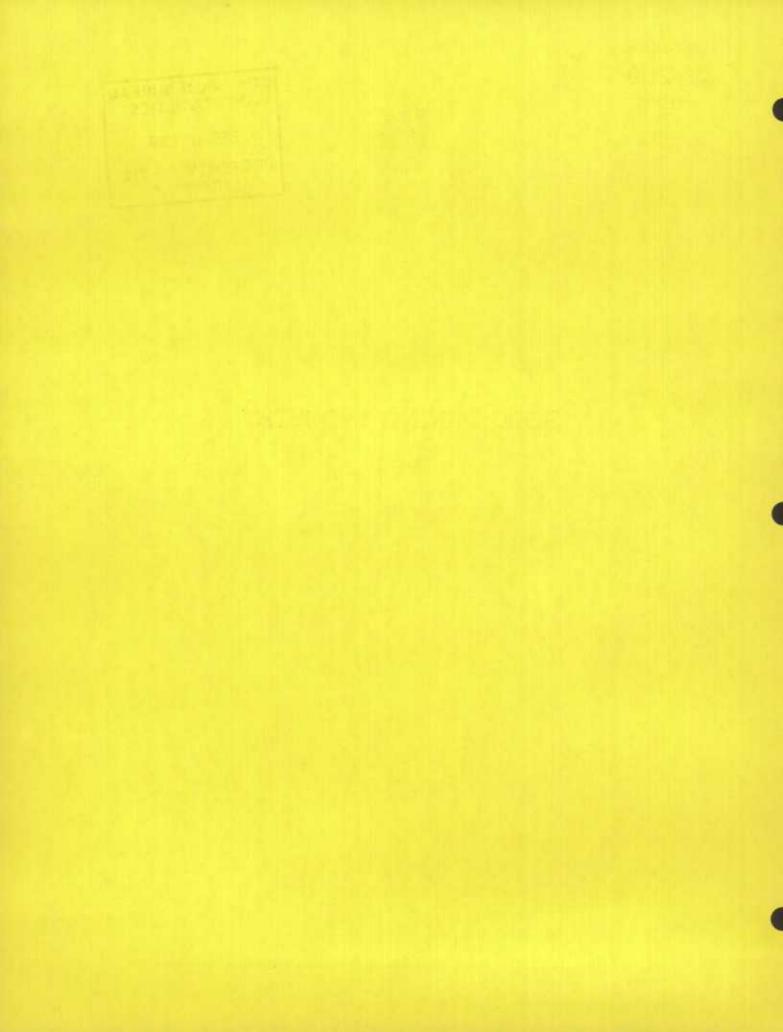
ANNUAL





GOLD MINING INDUSTRY 1965

DOMINION BUREAU OF STATISTICS



DOMINION BUREAU OF STATISTICS

Manufacturing and Primary Industries Division

GOLD MINING INDUSTRY 1965

Published by Authority of
The Minister of Trade and Commerce

November 1968 6503-524

Price: 75 cents

PUBLICATIONS ON MINERAL STATISTICS

Dominion Bureau of Statistics Ottawa, Canada

Catalogue number	Name of publication		Price
	Annual		
26 - 201	A - General Review of the Mineral Industries		\$.75
26 - 209	B-Gold Mining Industry		
26 - 216	C-Silver-Lead-Zinc Mines		
26-211	D-Nickel-Copper Mines		
26-210	E-Iron Mines		
26-219	F-Miscellaneous Metal Mines		
41-214	G-Smelting and Refining		
26 - 206	H-Coal Mines		
26 - 213	I - Crude Petroleum and Natural Gas Industry		
26 - 205	J – Asbestos Mines		
26 - 208	K-Feldspar and Quartz Mines		
26 - 221	L-Gypsum Mines		
26 - 212	M-Peat Industry		
26-214	N-Salt Mines		
26-218	O-Talc and Soapstone Mines	*****************	50
26 - 220	P-Miscellaneous Non-metal Mines		75
44 - 204	Q-Cement Manufacturers		50
44-215	R-Clay Products Manufacturers (from Domestic Clays)		50
44 - 209	S - Lime Manufacturers	******************	50
26 - 215	T-Sand and Gravel Pits		50
26 - 217	U - Stone Quarries		5()
26 - 207	V-Contract Drilling for the Mining Industry		
26 - 202	-Canada's Mineral Production (Preliminary Estimate)	,	
26 - 203	-Preliminary Report of Mineral Production		
26 - 204	- Mineral Industries: Principal Statistics		25
	Monthly		
	Monthly		
		Per copy	Per year
26 - 007	-Canada's Leading Minerals	10	\$1.00
26-001	- Asbestos		1.00
44 - 001	- Cement	10	1.00
44 - 005	-Products Made from Canadian Clays		1.00
45-002	-Coal and Coke Statistics		2.00
26 - 003	-Copper and Nickel Production		1.00
26-004	-Gold Production		1.00
26 - 005	-Iron Ore		1.00
26 - 006	-Crude Petroleum and Natural Gas Production		1.00
26 - 009	-Salt		1.00
26 - 008	-Silver, Lead and Zinc Production	10	1.00

A complete catalogue of publications of the Dominion Bureau of Statistics is available upon request.

INTRODUCTION

This report includes statistics for industries:

051 - Placer Gold Mines

052-Gold Quartz Mines

053 - Copper-Gold-Silver Mines

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

Definition of the Industry

Gold Mining in Canada is divided into three principal industries:

- (a) The recovery of gold from the gravels and sands of stream channels or beaches. For statistical purposes, this industry is defined as including establishments primarily engaged in mining gold by placer or hydraulic methods as well as the dressing and beneficiation of the ore and the production of bullion at the site of the mine. In the S.I.C. it corresponds to industry number 051— Placer Gold Mines (see above).
- The recovery of lode gold from ores in which gold is usually the most important economic constituent and quartz the predominant gangue mineral. For statistical purposes, this industry is defined as including establishments engaged in operating lode mines for gold as well as the dressing and beneficiating of the ore and the production of bullion at the site of the mine (see above).
- (c) Gold is often found in various other mineral deposits, more particularly in those of copper, and for this reason, the review of the Copper-Gold-Silver Mines industry is included here to complete a comprehensive survey of Canadian gold production. For statistical purposes, this industry is defined as including establishments primarily engaged in mining copper-gold-silver ores and in dressing and beneficiating such ores (see above).

Data presented in this report under the heading of Placer Gold Mines and Gold Quartz Mines (Tables 1-12) and under the heading of Copper-Gold-Silver Mines (Tables 30-36) reflect the full implementation

of the revised Standard Industrial Classification (S.I.C.) and the New Establishment Concept including an extension of the latter to cover total activities of mining establishments—see Explanatory Notes section of 1964 report. Commodity statistics, relevant technological details, etc. are presented along the same general lines as in earlier issues of this report.

The introduction of the final stage of the establishment concept in the annual Census of Mining resulted in many changes as evidenced in the comparative series of statistics shown in the tables for each industry (Tables 1 and 2, 5 and 6 and 30 and 31)—see Explanatory Notes and particularly the section dealing with Metal Mines. In addition, the tables reflect a reduction in the number of establishments because of the exclusion of non-producers. These latter are no longer being included as establishments under the new definition.

During 1965 the production of gold amounted to 3,606,031 troy ounces valued at \$136,051,943 compared with 3,835,454 ounces valued at \$144,788,388 in 1964. 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 54 per cent of the total. Quebec, in second position, produced 26 per cent and Northwest Territories accounted for 13 per cent of the total. The other provinces ranked in the following order: British Columbia, Manitoba, Yukon, Saskatchewan, Newfoundland, New Brunswick, Nova Scotia and Alberta.

The price of gold in Canadian funds averaged \$37.73 per troy ounce. It ranged from \$37.56 per troy ounce in January 1965 to \$37.96 per troy ounce in July. The fluctuations were due to foreign exchange rates. The Royal Canadian Mint purchased gold on the basis of \$(U.S.) 35.00 per troy ounce. The United States dollar rose above par value in June 1961. It had been discounted since March, 1952. In May 1962 the price of the Canadian dollar on foreign exchange was pegged.

SYMBOLS

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

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

PLACER GOLD MINES

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

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

In 1965 atotal of 44,598 troy ounces of fine gold were recovered from crude gold obtained from Canadian alluvial deposits. This represented a decrease from the preceding year. Reviewing the past thirty years, it is noted that the peak of production of placer gold occurred in 1939, and that the lowest annual output was in 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, 117 ounces in 1962, nil in 1963, 279 ounces in 1964 and 442 ounces in 1965.

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

British Columbia.—It has been found impractical to obtain complete reports for each individual placer mining operation in British Columbia inasmuch as a considerable quantity of the crude placer gold is recovered annually by prospectors of no fixed abode who, is many instances, market their recoveries through local merchants and banks. Recoveries in 1965 were made chiefly from deposits located in the Atlin and Cariboo districts. Output was estimated at 664 troy ounces.

Yukon.—About 97 per cent of the placer gold recovered in Canada during 1965 was found in the creeks of the Yukon. Production in 1964 totalled 43,292 troy ounces.

TABLE 1. Principal Statistics, Placer Gold Mines, 1961-65
Basls: Revised Standard Industrial Classification and New Establishment Concept

			Mining Activity								Total activity				
	Year	Estab- lish- ments	Production and related workers			Cost of		Value of		Working owners and partners		Employees			
			Number	Man- hours paid	Wages	fuel and elec- tricity	and supplies	produc- tion	Value added	Number	With- drawals	Number	Salaries and wages	Value added	
		No.		'000			\$'000				\$'000		\$10	000	
1961		19	184	501	1,015	95	417	2.378	1,865	14	36	206	1,176	1,946	
1962		24	190	518	1,097	108	402	2,324	1,814	16	58	214	1.273	1.904	
1963		24	204	510	1,101	112	508	2,558	1,946	18	75	231	1, 297	2,042	
1964	***************************************	22	177	495	1,078	111	521	2, 338	1,706	18	80	205	1.263	1,806	
1965	·····	21	152	380	889	101	407	1,863	i.355	17	60	176	1.075	1,447	

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

TABLE 2. Employment and Payroll, Placer Gold Mines, 1961-65
Basis: Revised Standard Industrial Classification and New Establishment Concept

		Employees										Salaries and wages				
		Production and related workers		Adminis- Sales					Producti	ion and	Admin-	Sales and distri-	Total			
Xe	Year		ing	Other		trative and office		and distribution		Total				related workers		istra- tive and
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Fema le	Mining	Other	office	bution	
		14			-7.7	numi	ber	1,0						\$'000		
1961		180	4	-	211-	17	5	-	-	197	9	1,015	-	161		1,176
1962	***************************************	186	4	-	-	18	6	-	-	204	10	1,097	-	177	-	1.273
1963		200	4	-	-	23	4	-	-	223	8	1,101	-	196	- 1	1, 297
1964		173	4	-	_	23	5	_		196	9	1.078	_	184	_	1,263
1965		150	2	_	_	18	6	_	_	168	8	889	_	186	_	1.075

See footnote Table 1.

GOLD QUARTZ MINES

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

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

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

TABLE 3. Principal Statistics, Gold Quartz Mines, 1961 - 65
Basis: Revised Standard Industrial Classification and New Establishment Concept

	Mil Page		Mining								Total activity				
	Year	Estab- lish- ments	Production and related workers		Cost of	Cost of	Value of	Value	Working owners and partners		Employees		Value		
			Number	Man- hours paid	Wages	elec- tricity	and supplies	production		Number	With- drawals	Number	Salaries and wages	added	
	HERSELEN S	No.		,000		444	\$'000				\$,000		\$10	000	
1961		53	13.711	29.818	53.582	7, 183	33,854	149,365	108.328	17-7	_	15.788	65.560	109.889	
1962		52	13, 114	28,800	52,663	6,851	37, 295	150,791	106,644	1 =	-(15,211	64,910	108, 242	
1963		51	12,456	27,961	50,986	6,639	34,728	145,622	104, 254	-	-	14,408	62,436	106, 156	
1964	***************************************	49	11,843	26, 990	51,096	6,868	35, 811	142,703	100,025	-	-	13,807	63,192	102,395	
1965		56	11,061	24, 329	49.183	6,914	36.501	137,943	94, 529		-	12.979	61,345	97.864	

TABLE 4. Employment and Payroll, Gold Quartz Mines, 1961-65 Basis: Revised Standard Industrial Classification and New Establishment Concept

					Employ	rees					Salaries and wages				
Year and province	Production and related workers Manufacturing Other		Adminis- trative and office		Sales and distribution		Total		Production and related workers		Admin- istra- tive and office	Sales and distri- bution	Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other	omce		
100000000000000000000000000000000000000			- 17		nun	ber							\$'000		
1961	13,647	64	H-1	= -	1,905	172	-	_	15, 552	236	53, 582	-	11, 978	-	65, 560
1962	13, 054	60	-	13.70	1,923	174	-		14,977	234	52,663		12, 247	-	64,910
1963	12,399	57		-	1,796	1 56	-	-	14, 195	213	50,986	_	11.449	-	62.436
1964	11.775	68	-	-	1,805	159	-	-	13,580	227	51,096	-	12,096	-	63,192
1965	10.989	72	16	_	1,743	159	-	-	12,748	231	49, 183	68	12,093	-	61,348

TABLE 5. Production and Related Workers, Gold Quartz Mines, 1964 and 1965

		Mine		Mil	1	
Year and month		Surface		Underground		
	Male	Female	Male	Male	Female	
1964			number			
anuary ebruary arch pril ay une uly ugust eptember ctober ovember ecember Averages	2,761 2,768 2,708 2,802 2,896 2,817 2,821 2,609 2,601 2,570 2,529	55 59 60 58 60 58 60 61 60 61 59	8,392 8,343 8,176 8,061 7,957 8,147 7,557 7,763 7,543 7,543 7,589 7,675 7,606	1,151 1,148 1,131 1,119 1,147 1,222 1,191 1,192 1,130 1,136 1,139 1,131		
1965						
enuary ebruary arch pril ay ay une uly ugust eptember ectober ovember	2,710 2,687 2,649 2,690 2,841 2,866 2,760 2,522 2,522 2,520 2,464 2,420	63 60 62 64 67 67 67 62 62 65 66	7,727 7,552 7,538 7,471 7,377 7,265 7,169 6,933 6,604 6,661 6,753 6,672	1,167 1,137 1,137 1,179 1,204 1,252 1,287 1,271 1,199 1,184 1,174	1 1	
Avenuer	0.050	64	7,144	1,195		

TABLE 6. Purchased Fuel and Electricity Used, Gold Quartz Mines, 1964 and 1965

Basis: Revised Standard Industrial Classification and New Establishment Concept.

Description	1	1964		1965	
Description		Quantity	Cost	Quantity	Cost
			\$'000		\$'000
. Large establishments reporting commodity detail:					
Bituminous coal:	POR SOLUTION OF		100000	14. 900	
(a) From Canadian mines		2,290	47	177	3
(b) Imported		6,747	117	7,438	131
Sub-bituminous coal (from Alberta mines only)					
Anthracite coal	ton	84	2	822	18
Lignite coal		_	-	21	
Coke		10	3	15	
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	341,952	143	331,490	137
Fuel oil including kerosene or coal oil		3,559,931	717	3,974,915	840
Wood	cord	1,867	25	1,463	18
Gas:		Lac Market			
(a) Liquefied petroleum gases	Imp. gal.	8,744	4	24,034	7
(b) Other manufactured gas	******	-	-	-	-
(c) Natural gas	M cu. ft.	249,948	154	248,572	147
Other fuel			83		83
Electricity purchased	kwh.	894, 174, 354	5, 575	848,382,374	5,528
Steam purchased			_		-
	0.7 %			-5-11 LSV110 G	
. Small establishments not reporting commodity detail:			The second second		
Estimate for fuel and electricity		***	_	***	
. All establishments:				THE LOT OF	
Total fuel and electricity used		* * *	6,868		6,914
Epericity generated: (a) For own use	kwh.	31,270,423		41, 137, 358	
(b) For sale		1,568,137	108	1,621,310	87

TABLE 7. Materials and Supplies' Cold Quartz Mines, 1964 and 1965 Basis: Revised Standard Industrial Classification and New Establishment Concept.

Description	C	Cost
Description	1964	1965
	\$'(000
ore or other semi-processed materials purchased and used in mine mill operations	15	11
Containers, shipping materials and supplies used	3	3
perating, maintenance and repair supplies used (excluding fuel)	26.786	25.975
mount paid out to others for work done on materials owned by establishments:		
To smelters and/or refineries	1,271	1,438
To others (mining, milling etc.)	7.736	9,073
Totals	35, 811	36, 500

Refer to Explanatory Notes in 1964 issue of this report for explanation of differences in Tables 11 and 12 with data published in earlier years.

TABLE 8. Value of Production, Gold Quartz Mines, 1964 and 1965
Basis: Revised Standard Industrial Classification and New Establishment Concept.

Description	Value			
	1964	1965		
Management of the contract of	\$'00	0		
alue of production	121,927	115.845		
nount received in payment for work done on materials and products owned by others	5,522	7,040		
osidies received	15,255	15.058		
Total value of production and work done	142, 703	137, 943		

TABLE 9. Ores Mined and Treated by the Gold Quartz Mines, 1956-65

Year	Ore hoisted	Ore milled ¹	Crude ore shipped to smelters ²	Low-grade sorted out	Taillings re-treated	Gold recovered as bullion	Gold in crude ore shipped	Gold in concentrates, slag, etc. shipped
			tons				troy ounces	
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	13.835,364	268, 690	270,098	332	3,692,596	40, 145	33,627
1962	13,659,916	13,217,174	230,946	204,809	30	3,436,481	27,893	25,793
1963	12,618,059	12,130,935	668,627	253,256	400	3, 203, 763	87,539	21,267
1964	12,757,627	12,468,340	105,730	176,342		3,111,651	13,156	28,603
1965	12,042,354	11,734,875	92,412	257,743	130,237	2,899,122	10,846	42,639

^{1+2 =} Total crude ore treated.

TABLE 10. Shipments from Gold Quartz Mines, 1964 and 1965

	Quantity		Total gross m	etal content	
	quantity	Gold	Silver	Copper	Other ¹
	tons	ounce	S	pounds	3
1964					
Fo smelters and mills:					
Gold ore	105,730	13,156	7, 385	_	E39/11
Concentrates	11,532	6,892	44.193	6.418,840	
Slags, precipitates, residues	205	21,711	39,365	8,404	1200-
Totals	117,467	41, 759	90, 943	6, 427, 244	
1965	Mary 1				
o smelters and mills:				22,198,41	
Gold ore	92.412	10,846			- 12 -
Concentrates	15,949	23,557	74,645	9, 647, 192	13,221
Slags, precipitates, residues	296	19,082	17.857	8,668	-
Totals	108, 657	53, 485	92, 502	9, 655, 860	13, 221

¹ Zinc.

TABLE 11. Gold and Silver Content, of Bullion Produced, of Ores, Concentrates, etc., Shipped, with Average Grade of Ore Shipped and Ore Milled at Gold Quartz Mines and the Average Price of Gold and Silver in Canadian Funds, 1956 - 65

Year	Tonnage treated ^{1,2}	Gold content ³	Silver content ³	Ounces of fine gold per ton	Ounces of fine silver per ton	Average price of gold	Average price of silver	
		fine ou	nces			\$ per oz.		
\$6	14,349,272	3,704,995	623,995	.26	. 04	34.45	0.897	
757	14.147.918	3,766,124	643,146	.27	. 05	33.55	0.874	
8	14,490,652	3.921.475	707,794	.27	. 05	33.98	0.868	
959	14,079,480	3,851,157	629,465	.27	. 04	33.57	0.878	
960	14,448,320	3,937,212	887,697	.27	.06	33.95	0.889	
961	14,104,054	3,766,368	643,931	.27	. 05	35.46	0.943	
962	13,448,120	3,490,167	597,778	.26	. 04	37.41	1.165	
963	12,799,562	3,312,569	572,501	.26	. 04	37.75	1.384	
964	12.514,070	3,153,410	598.229	.25	. 05	37.75	1.400	
965	11,827,287	2,952,607	550,717	. 25	. 05	37.73	1.400	

TABLE 12. Milling Capacity of Operating Capadian Gold Mines, 1956-65

Year	Nova	Oughan	Ontario	10-21-1	Brltish	Northwest		Te le l'el
1081	Scotia	Quebec	Ontario	Manitoba	Columbia	Territories	Yukon	Canada
			to	ns of 2,000 pou	nds per 24 how	rs	3. 1. 12	
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	4-1-1	42,142
1958	-	10,500	27, 292	2,550	1.264	1,500		43,106
959	-	10,100	28,057	550	1,275	1,650	Comment of the Commen	41,632
.960	-	9,650	28,035	550	1.229	1,661	_	41,125
961	-	10,150	27,602	550	850	1,681	-	40,833
962	_	10,150	27,386	550	850	1,691	_	40,627
903	-	10,530	25,870	550	850	1,750	-	39,550
964	-	9,400	26,500	550	920	1,880	_	39,250
365	-	11,050	25,345	550	900	1.950	125	39.920

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

Material discarded by sorting not included.

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.

TABLE 13. Drilling Completed on Gold Quartz Deposits, 1964 and 1965

	Footage	drilled
	1964	1965
plamond drilling for exploration (testing):		
By companies with their own equipment and personnel	223, 436	327, 049
By contractors	1,422,172	1,022,949
ther drilling:		
Diamond drilling for breaking rock or ore:		
By companies with their own equipment and personnel	54, 361	41,558
By contractors	29, 153	52, 081
Drilling by percussion and other machines?	35, 129, 303	30, 438, 098

 $^{^{\}rm I}$ Subject to revision as drilling was not reported by some new companies, $^{\rm 2}$ 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 1964 totalled \$53,306 and \$69,678 in 1965.

TABLE 14. Specified Taxes Paid by Companies engaged in Gold Quartz Mines Operations, 1963-65

Taxes paid	1963	1 96 4	1 965
Dominion income tax, including tax on non-operating revenue	3,291,944	2,234,928	1,769,344
Provincial tax	2,369,986	2,054,364	1,767,480
Municipal tax	869,795	893,124	903,339
Totals	6,531,725	5,182,416	4,440,163

¹ Includes related corporate activities associated with operations of Gold-Quartz mines.

TABLE 15. Miscellaneous Expenditures Made by Companies engaged in Gold Quartz Mines Operations, 1965

	Thousands of dollars
a) Workmen's compensation	2,344
b) Silocosls assessment	766
c) Unemployment insurance	539
d) Aggregate cost of structures, roads, machinery, equipment, etc., built by or purchased from outside contractors of suppliers and chargeable to Fixed Assets Account	4,091
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	1,723
f) Other capital expenditures not reported in (d) and (e)	523
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)	527
h) Cost of office supplies used during the year, not chargeable to Fixed Assets Account excludes cost of stamps and meter expenses	217

¹ Includes related corporate activities associated with Canadian operations of gold quartz mines not allocable separately elsewhere.

TABLE 16. Production of Gold in Canada, Fifty Years, 1916-65

Year	Troy ounces	Value	Year	Troy ounces	Value
		\$			\$
916	930.492	19,234,976	19 41	5,345,179	205, 789, 392
917	738,831	15, 272, 992	1942	4,841,306	186,390,28
918	699,681	14, 463, 689	1943	3,651,301	140,575,08
919	766,764	15,850,423	1944	2,922,911	112,532,073
920	765,007	15,814,098	1945	2, 696, 727	103,823,990
921	926,329	19,148,920	1946	2,832,554	104,096,359
)22	1, 263, 364	26,116,050	1947	3,070,221	107, 457, 73
023	1, 233, 341	25, 495, 421	1948	3,529,608	123, 536, 28
)24	1,525,382	31,532,443	1949	4,123,518	148, 446, 64
25	1,735,735	35, 880 , 826	1950	4, 441, 227	168,988,68
26	1,754,228	36, 263, 110	1951	4, 392, 751	161,872,87
27	1,852,785	38,300,464	1952	4,471.725	153,246,01
028	1,890,592	39, 082, 005	1953	4,055,723	139,597,98
29	1,928,308	39,861,663	1954	4,366,440	148, 764, 61
30	2,102.068	43, 453, 601	1955	4,541,962	156,788,52
31	2,693,892	58,093,396	1956	4,383,863	151,024,08
32	3, 044, 387	71,479,373	1957	4, 433, 894	148, 757, 14
33	2,949,309	84,350,237	1958	4,571,347	155,334,37
34	2,972,074	102, 536, 553	1959	4,483,416	150, 508, 27
935	3, 284, 890	115,595,279	19 60	4,628,911	157,151,52
36	3,748,028	131,293,421	1961	4,473,699	158,637,36
37	4,096,213	143, 326, 493	1962	4,178,396	156, 313, 79
38	4,725,117	166, 205, 990	1963	4,003,127	151,118,04
39	5,094,379	184, 115, 951	1964	3,835,454	144,788,38
140	5, 311, 145	204,479,083	1965	3,606,031	136,051,94

Note: The above and subsequent tables include data on commodities produced by operators, which are classified to other industries. As an example; gold is moduced by firms classified as, Placer Gold, Gold Quartz, Copper-Gold-Silver, Nickel-Copper, Silver-Lead-Zinc, and Other Metal Mines.

TABLE 17. Production of Gold from Auriferous Quartz and Base Metal Mines, by Months, 1963-1965

	Gold production from base metal mines				uction from a les and placer		Gold production from all types of mines					
	1963	1964	1965	1963	1964	1 965	1963	1964	1965			
	troy ounces											
Ja nuary	54,652	52, 192	50,100	285, 217	272, 102	259,942	339,869	324, 294	310,042			
February	46.916	46,764	47.056	268,096	252,217	233, 881	315,012	298, 981	280,937			
March	52, 367	51.755	54,015	279,302	267, 127	257, 399	331,669	318,882	311,414			
April	49,195	53,744	54,400	288, 484	280,667	271, 033	337, 679	334,411	325,433			
May	53,502	43,967	51,559	300,549	269,425	247,183	354,051	313,392	298,742			
June	51,066	52,178	48,179	280,077	259,785	260.551	331,143	311,963	308,730			
July	47, 413	50,084	48,778	264,463	275,059	238,107	311,876	325,143	286, 885			
August	53,613	56,152	51,524	288,713	268, 441	249,404	342,326	324,593	300,928			
September	54, 157	52,507	47, 471	280,690	260, 167	244,481	334,847	312,674	291,952			
October	52,709	56,916	50,389	299, 205	273, 232	251,497	351,914	330,148	3 01, 886			
November	52,031	53,545	50,925	284, 834	274, 799	246, 471	336,865	328, 344	297,396			
December	50,643	51,621	47,463	265,233	261,008	244, 223	315,876	312,629	291,686			
Totals	618, 264	621,425	601,859	3, 384, 863	3, 214, 029	3, 004, 172	4,003,127	3, 835, 454	3,606,031			

See Note under Table 16.

TABLE 18. Production of Gold, by Provinces, 1956-65

	Newfo	undland	Nova	Scotia	New Br	unswick		Quebec		O	ntario	Ma	nitoha
Year	Troy	Value	Troy ounces	Value	Troy ounces	Value	Troy	s Valu	e	Troy	Value	Troy	Value
		\$		\$		\$		\$			\$		\$
1956	8,213	282,938	1,279	44.061		_	1,036,0	59 35.692	233	2,513,912	86,604,268	120,232	4,141,992
1957		327,280	45	1.510	240	8.052	1,006,8			2,578,206			4,026,268
1958		454,686	131	4,451	52	1,767	1,044,8			2,716,514			2,968,357
1959		450,207	-	-	-	_	999,3		455	2,683,449	90,083,383	51, 186	1,718,314
1960		458,834	3	102	_	_	1,035,9	14 35,169	, 280	2,732,673	92,774,248	52,762	1,791,270
1961		511,652	-	_	_	-	1,054.0	29 37,375	, 868	2,637,720	93,533,551	57,747	2,047,709
1962		522,468	-	100	553	20,688	993,5	60 37,169	, 080	2,421,249	90,578,924	68, 259	2,553,569
1963		465,004	-	_	1,128	42,582	917,2	29 34,625	, 395	2,338,854	88,291,739	53,084	2,003,921
1964		631,067	63	2,378	1,623	61,268	934,7	69 35,287	,530	2,155,370	81,365,217	69,986	2,641,972
1965		892,555	_	_	1,659	62,592	905,3		,082	1,946,003	73,420,747	67,685	2,553,687
	Troy		alue	Troy	berta Valı		Troy	Columbia Value		Yukor Troy unces	Value	Troy	Territories Value
			\$		\$			\$			\$		\$
1956	82,6	887 2.8	18,567	119	4.	100	196,692	6,776,040		72,001 2	,480,434	352,669	12,149,447
1957			24, 168	416	13.	957	229,113	7,686,741		73,962 2	,481,425	340,018	11,407,604
1958			42,328	282	9,	582	210,612	7,156,596		67,745 2	,301,975	343,838	11,683,613
1959			38, 199	200	6.	714	184,312	6,187,354	1 -	66,960 2	,247,847	405,922	13,626,800
1960			78,111	191	6.	484	212,859	7,226,563		78,115 2	,652,004	418,104	14, 194, 63
1961			10,000	171			164,467	5,832,000		66,878 2	,371,494	407,474	14,449,028
1962			70.332	186	6,	958	159,492	5,966,596		54,805 2	,050,255	400,292	14,974,92
1963			46,691	132	4,	983	159,473	6,020,106		55,211 2	,084,215	400,885	15,133,409
1964			43,484	59	2,	227	139,959	5,283,452		57,844 2	, 183, 611	412,879	15,586,18
	46,1		42,061	200	7	546	117,764	4,443,118		45,031	.698,975	452,479	17,071,580

¹ From all sources in Canada.

TABLE 19. Production of Gold, by Provinces, according to Nature of Ores, 1965

Year and province	Placer gold	Auriferous quartz ores	Copper-gold- silver ores	Nickel-copper ores	Sliver-lead and other ores	Total
			troy o	unces		
1965				AT HOW		
Newfoundland	·		16,222	-	7,435	23,657
Nova Scotia	-	-	-	-		
New Brunswick		-	452	-	1,207	1,659
Quebec	442	526,636	354,764	4,229	19,309	905,380
Ontario		1,880,615	9,767	54,271	1,350	1,946,003
Manitoba		25, 132	37,946	4,607	-	67,685
Saskatchewan		-	46,173		witch	46,173
Alberta	200	Des 183-		_		200
British Columbia	664	73,756	38,075	-	5,269	117,764
Yukon	43,292	956	-	_	783	45,031
Northwest Territories	10 THE 1	452,479	-	_		452,479
Canada	44,598	2,959,574	503,399	63, 107	35,353	3,606,031

TABLE 20. Gold Production by Provinces and Principal Areas, 1963-65

	196	3	196	4	1965		
Province and area	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	
STATE OF THE PARTY		\$		\$		\$	
Newfoundland	12,318	465,004	16,717	631,067	23,657	892,55	
Nova Scotia	_		63	2,378			
New Brunswick	1,128	42,582	1,623	61,268	1,659	62,59	
Quebec:	518 200	10 520 505	510 017	10 505 040	500 000	10 000 45	
Gold mines Base metal mines	517,366 399,863	19,530,567 15,094,828	518,817 415,952	19,585,342 15,702,188	526,636 378,744	19,869,45 14,289,63	
Totals	917,229	34,625,395	934,769	35,287,530	905,380	34, 159, 08	
Ontario:					THE STATE OF		
Gold mines:							
Procupine		34,477,823	981,246	37,042,037	899,530	33,938,36	
Kirkland Lake		9,813,188 12,604,574	238,966 267,976	9,020,967	187,308 222,969	7,066,94 8,412,35	
Larder Lake		3,926	46	1.736	1,511	57.0	
MatachewanSudbury		1,307,169	32.035	1,209,321	36.642	1,382,4	
Thunder Bay		5,664,463	127,280	4,804,820	80.963	3.054.6	
Patricla		19, 156, 993	447,375	16,888,406	451,390	17,030,4	
Other mines		2,263,603	60,446	2,281,836	65,690	2,478.4	
Totals	2,338,854	88, 291, 739	2, 155, 370	81,365,217	1,946,003	73,420,74	
fanitoba:	24 015	000 040	00 770	1 000 101	35 120	040 00	
Gold mines		906,642	28,773	1,086,181	25,132 42,553	948,2	
Other mines	29,067	1,097,279	41,213	1,000,191	44, 500	1,003,4	
Totals	53,084	2,003,921	69,986	2,641,972	67,685	2,553,6	
askatchewan:		8 440 001	40 105	1 749 404	40 100	1.742.00	
Base metal mines	64,813	2,446,691	46,185	1,743,484	46,173	1,142,0	
nerta (placer)	132	4,983	59	2,227	200	7,54	
ish Columbia:		NEG TOUR				0 -00 -	
Gold mines (lode)	105,677	3,989,307	97,666	3,686,892 55,190	73,756	2,782,74	
Gold mines (placer)		135,485	1,462	1,541,370	43,344	1,635,3	
Other mines		1,895,314	40,831				
Totals	159,473	6,020,106	139,959	5,283,452	117,764	4,443,1	
ukon (chiefly placer)	55,211	2,084,215	57.844	2,183,611	45,031	1,698,9	
orthwest Territories:			4.7	45 400 100	450 400	10 001	
Gold mines	400,885	15,133,409	412,879	15,586,182	452,479	17,071,5	
Totals, Canada	4,003,127	151, 118, 045	3,835,454	144,788,388	3,606,031	136,051,9	

TABLE 21. Gold Production according to Method of Computation and Recovery, 1956-65

Year	in aliuvial gold	In crude gold bullion produced at mines ¹	In base bullion produced at lead smelters	In blister and anode copper produced ¹	In ores, matte, slags, etc., exported	Total gold produced		
	per cent							
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		
963	1.45	82.89	0.26	13.24	2.16	4,003,127		
20-4	1.53	81.16	0.13	14.93	2.25	3,835,454		
(58)	1.24	80.90	0,15	15.00	2.71	3,606,031		

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

TABLE 22. Estimated Average Monthly Value of an Ounce of Fine Gold, Expressed in Canadian Funds, 1951-65

Month	1951	1952	1953	1954	1	955	1956	1957	
			1	doll	ars			2-5-1	
January	36.81	35.19	33.9	7 34	. 05	33.81	34.95	33.6	
Pebruary	36.73	35.03	34.2		. 83	34.19	34.97	33.5	
farch	36.65	34.85	34.4		. 98	34.45	34.95	33.4	
pri)	37.07	34.34	34.4		.39	34.52	34.89	33.	
ay	37.25	34.43	34.7		. 45	34.51	34. 71	33.	
ine	37.42	34.26	34.8		.34	34.45	34.48	33.	
ıly	37.12	33.93	34.7		.10	34.46	34.37	33.	
ugust	36.96	33.65	34.5		.96	34.48	34.34	33.	
ptember	36.94	33.59	34.4		. 94	34.57	34.22	33.	
ctober	36.78	33.75	34.3		. 94	34.84	34.07	33.	
ovember	36.53	34.17	34.2		. 93	34.98	33.75	33.	
ecember	35.89	33.97	34.00		. 88	34.98	33.62	34.	
Yearly averages	36. 85	34.27	34.4	34	. 07	34.52	34.45	33.	
	1958	1959	1960	1961	1962	1963	1964	1965	
	dollars								
inuary	34.46	33.84	33.36	34.76	36.58	37.70	37.81	37.	
bruary	34.34	34-12	33.31	34.62	36.71	37.71	37.80	37.	
arch	34.21	33.93	33.28	34.56	36.73	37.73	37.82	37.	
ril	33.97	33.73	33.70	34.61	36.76	37.69	37.83	37.	
у	33.84	33.70	34.24	34.56	37.87	37.70	37.83	37.	
ne	33.67	33.56	34.39	35.19	38.06	37.74	37.81	37.	
ly	33.60	33.51	34.24	36.19	37.76	37.79	37.84	37.	
gust	33.76	33.41	33.95	36.10	37.72	37.90	37.75	37.	
ptember	34.19	33.31	34.03	36.08	37.69	37.80	37.66	37.	
ctober	33.98	33.17	34.24	36.07	37.66	37.73	37.63	37.	
ovember	33.89	33.26	34.19	36.26	37.69	37.72	37.59	37.	
						05 50	00 01	0.7	
ecember	33.76	33.29	34.43	36.49	37.66	37.78	37.61	37.	

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

TABLE 23. Precious Metals Consumed by the Jewellery and Silverware Industry, 1961-1965

Materia] —	Cost at works								
matera:	1961	1962	1963	1964	1965				
	\$'000								
Fine gold	6,318	6,176	6,197	7,229	8,324				
Gold alloys	1.396	1,610	1,928	2,341	2.723				
Fine silver	3,134	4,179	4,688	5, 268	6,275				
Silver alloys and sterling	1,896	2,867	2,853	2.402	2.519				
Platinum	668	715	2,564	969	1,190				
Palladium	475	703	965	1,045	942				
Old gold, jewellers' findings, waste and scrap refining	1,348	1.771	1,807	2,120	2,141				
Gold-filled wire and stock	312	270	172	336	297				
Precious and semi-precious stone	3,692	3,474	3,816	4,626	5,128				

TABLE 24. Gold Production of the World, 1961-65

Country	1961	1962	1963	1964	1965
			fine ounces		
North America:					
United States	1,566,800	1,556.000	1,468,750	1,469,000	1,675,500
Canada	4,473,699	4,178,396	3.972.047	3,810.738	3.587.168
Mexico	268,678	236, 753	237, 948	209,976	215,796
Totals, North America	6, 309, 177	5, 971, 149	5, 678, 745	5, 489, 714	5, 478, 464
Central America and West Indies	235.276	234.273	217,082	240.380	210,567
South America:					
Bolivia	80,184	35,052	153,033	50,053	84,927
Brazil²	118,634	130,000	136,000	145,000	162,000 2,077
British Guiana	56,488	62,500	52,400	65,620	73,818
Columbia	401,064	396,825 20,591	324,514	364,991	319,362 11,458
Ecuador French Guiana	15,210	5.273	21,041 6,993	16,905	
Peru	137.418	122,985	101,019	92,503	105,183
Surinam	4.019	2,604 28,774	3,537 26,946	8, 231 33, 536	6, 269 23, 660
Totals, South America	852, 734	806, 507	828, 331	783, 773	788, 754
Europe	700,000	700,000	700,000	800,000	800,000
Australia:	1 7 1				
New South Wales	12.034	11,234	11,395	10,569	9,640
Queensland Victoria	64,786 26,229	67, 729 28, 262	68,586 24,668	100.937	76,964 19,246
Western Australia	870,658	860,039	802,860	715.481	656,355
Tasmania	26,885 75,700	32,115 69,458	36,422 80,039	34,381 81,182	32,897 82,541
Other Australia	1, 076, 292	1, 068, 837	1, 023, 970	963, 834	877, 643
Totals, Australia (Commonwealth)	1,010,232	1,000,031	1,043,310	303, 63%	011,043
Oceania, other:	90 417	97 254	107, 262	100.493	109,095
Fiji	83,417	87,354 39,052	43,599	38, 978	32,494
New Zealand	28,294	21,742	14,206	8,948	12,136
Totals, Oceania, other	153, 531	148, 148	165, 067	148, 419	153, 725
Asia:					
India	156,538	163,290	138, 280	147,958	130,596
Japan Korea, Republic of	378, 913 84, 013	420,957 107,866	432,572 90,086	460,171	519,163 62,823
Malaya	12,486	6,924	9,116	7,295	3,982
Phillipines Republic	423,983	423,394	376,006	425,770	435,545
Taiwan (Formosa)	17,490	24,029	31,710	17,660	32.148
Totals, Asia	1, 073, 423	1, 146, 460	1,077,770	1,134,633	1, 184, 257
Africa:					
Bechwanaland	261	288	142	10	
Camerons	538 3,376	775 3.718	1.874 2.958	739 3.567	1,454 3,718
Congo, Republic		203,707	214.574	188,339	90,408
Ethiopia	41,500	25,700	25,000	25.000	24,236
Gabon, Republic of	15,304 852,619	16,300 888,038	35,719 921,255	42.760 864,917	37,134 755,191
Kenya	12,100	9,327	10, 193	12,480	11.420
Liberia	2.088	2, 184 325	1,960	1,824	1,701 598
Nigerla	676	384	316	244	80
Republic of South Africa	22, 946, 294 570, 095	25,491,993 554,647	27,431,573 566,277	29,111,524 575,386	30,553,874 544,100
Tanzania	99,574	101,972	102,917	93,040	90.810
Uganda		27, 299, 770	29, 315, 674	30, 920, 294	32, 114, 769
U.S.S.R. ³	4,400,000	4,800,000	5,100,000	5,600,000	6,100,000
World totals as reported		42, 175, 144	44, 106, 639	46, 081, 047	47, 708, 179
Estimated world totals	39, 700, 000	42,300,000	44, 200, 000	46,100,000	47, 800, 000

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. Mined gold only; production of alluvial gold unknown. Conjectural.

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

EMERGENCY GOLD MINING ASSISTANCE ACT

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

Summary of Operations for Year 1965

Since 1948 the Federal Government, under provisions of the *Emergency Gold Mining Assistance Act*, has given asststance to operators of marginal gold mines to meet increasing costs of production against a fixed selling price for gold. The assistance so provided has extended the operating life of many gold mines and has given the communities which are dependent upon them the opportunity to adjust gradually to diminishing economic support.

The act was last amended in 1963 at which time it was extended for four years to December 31, 1967.

The amending legislation introduced a restriction which affects lode gold mines coming into production after June 30, 1965. New lode gold mines commencing production after that date are eligible for assistance only if the mine provides direct economic support to an existing community. A gold mine is deemed to provide such support if most of the persons employed at the mine reside in one or more of the established communities which are specified in a schedule to the act. The restriction was adopted to deter the establishment of new gold mining communities supported by mines which would require governmental assistance from the outset of their operations. The restriction does not apply to lode gold mines which were in production prior to July 1, 1965, nor does it apply to placer gold mines.

The amount of assistance payable to an operator is determined by a formula based on the average cost of production per ounce and the number of ounces produced. The assistance on a per-ounce-produced basis ranges from zero to \$10.27. Gold mines having a cost of production of \$26.50 or less per ounce receive no assistance. Gold mines having a cost of production of \$45 or more per ounce receive the maximum rate of \$10.27 per ounce.

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

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

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

The amounts paid to gold mine operators to March 31, 1966 for the years 1948 to 1965 inclusive, totalled \$216,184,450.15 on a production of 51,306,777,412 fine ounces of gold produced and sold in accordance with the requirements of the act.

The total assistance payable for gold produced and sold under the act in the calendar year 1965 is estimated to be \$15,300,000. For the year 1965, the total assistance paid up to March 31, 1966 was \$12,053,385.67. This sum represents about 90 per cent of the assistance payable on the applications received to that date. The remaining 10 per cent holdback is payable after an audit has been completed on the accounts of the applicants.

Payments amounting to \$15,069,735.80 have been made to March 31, 1966 on gold produced in the calendar year 1964. The addition of holdback payments is expected to bring the total for the year approximately \$16.0 million.

Applications for assistance have been received from 41 lode gold mines for the valendar year 1965. In addition, applications from operators of placer gold mines in British Columbia and the Yukon Territory for 1965 will be received. In 1964, twenty-six operators of placer gold mines applied for assistance

Seven lode gold mines which were receiving assistance, and one which was not, ceased operations in 1965, Five new lode gold mines started production during the year. Seven lode gold mines operated in 1965 without assistance.

The annual average of the weekly buying prices in Canadian funds by the Royal Canadian Mint in 1965 was \$37,73 per ounce of fine gold. The price of gold in Canadian funds is governed by the fixed buying price of \$35 per fine ounce in United States funds by the United States Treasury and the exchange rate between the Canadian and United States dollars. Since May 1962 the value of the Canadian dollar has been set at \$0.925 United States funds. At parity the Mint buying price for gold is \$37.84 per ounce in Canadian funds. The market value of the Canadian dollar may he permitted to fluctuate by one per cent either side of parity. Thus the Mint buying price in Canadian funds may very between \$37.46 and \$38.22 per ounce.

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:

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

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

- 1. Application in prescribed form for assistance payments for a designated quarter or year must be received by the Department of 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.
- The average cost of production per ounce of gold, computed on all ounces of gold produced from the mine during the designated period, must exceed \$26.50.
- 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
 - exported and sold in the form of ore or concentrate to a foreign smelter.
- The operator of a mine applying for assistance for the first time must submit a declaration of ownership of the mine on Schedule III.
- 5. A new gold mine, which is operated by an incorporated company, must be declared in production in accordance with Section 83(5) of the Income Tax Act. Status as a new mine may be obtained through application to the Taxation Division, Department of National Revenue, Ottawa.

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 wish.

1954

Administration

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

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

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

Act and Amendments

- 1. The Act received Royal Assent on May 14, 1948, and came into force by proclamation on June 15, 1948.
- 2. Chapter 20, 13 George VI (second session), received Royal Assent, December 10,1949.

- Chapter 49, 15 George VI (first session), received Royal Assent, June 30, 1951.
- 4. Chapter 25, 1-2 Elizabeth II, received Royal Assent, June 18,
- 5. Chapter 32, 2 Elizabeth II, received Royal Assent, May 14, 1963. 6. Chapter 26, 2-3 Elizabeth II, received Royal Assent, March 31,
- 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 8, 1960.
- 11. Chapter 25, 12 Elizabeth II, received Royal Assent, December 12, 1963.

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 Authority of Section 6 of the Act were approved Council, P.C. 2664 June 11, 1948.

 2. Order in Council, P.C. 1753, April 12, 1950.

 3. Order in Council, P.C. 3925, July 31, 1951.

 4. Order in Council, P.C. 1954-379, March 19, 1954.

 5. Order in Council, P.C. 1954-863, June 10, 1954.

- 6. Order in Council, P.C. 1956-11, January 5, 1956.
- 7. Order in Council, P.C. 1960-1162, August 24, 1960.
- 8. Order in Council, P.C. 1965-1889, October 25, 1965.
- TABLE 25. Emergency Gold Mining Assistance Act Estimated Assistance Payable, 1958-65

Province	1958	1959	1960	1961	1962	1963	1964	1965
				dol	lars			
Nova Scotia Quebec Ontario Manitoba British Columbia Yukon Northwest Territories	1,085 3,111,036 6,565,596 463,210 658,035 185,982 435,520	3,027,080 7,814,793 217,106 718,641 186,477 37,656	3,025,354 8,713,404 209,027 360,557 54,176	2,917,683 9,105,418 250,232 319,395 73,931	3,454,353 9,903,925 164,268 417,290 245,649 169,528	3, 198, 240 9, 766, 710 246, 771 573, 070 276, 888 258, 078	3,349,643 10,629,950 295,642 750,554 201,829 456,093	3,615,822 10,257,827 256,559 726,637 216,659 557,977
Canada	11,420,464	12,001,753	12,362,518	12,666,659	14,355,013	14,319,757	15,683,711	15,631,480

COPPER-GOLD-SILVER MINES

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

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

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

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

TABLE 26. Principal Statistics, Copper-Gold-Silver Mines, 1961-65

Basis: Revised Standard Industrial Classification and New Establishment Concept

				Man	ufacturing	activity				-	Total acti	vity	
Year	Estab-		oduction ated work		Cost of	Cost of materials	Value of	Value		g owners artners	Emp	loyees	Value
	ments 1	Number	Man- hours paid	Wages	elec- tricity	and supplies	produc- tion	added	Number	With- drawals	Number	Salaries and wages	added
1961 1962 1963 1964 1965	No. 26 33 30 30 30 35	8,191 8,500 8,874 8,815 9,116	'000 17,145 18,058 18,658 18,478 19,458	38,758 40,835 43,627 44,671 48,157	5,600 6,621 7,118 7,384 8,373	\$'000 70,849 86,881 88,522 96,985 106,130	248,114 249,872	177,662		\$'000	9,729 10,189 10,754 10,716 11,086	\$10 47,240 50,726 55,128 56,534 61,049	125,924 156,957 159,315 181,773 211,433

TABLE 27. Employment and Payroll, Copper-Gold-Silver Mines, 1961-65

Basis: Revised Standard Industrial Classification and New Establishment Concept

					Empl	oyees						Salar	ies and v	vages	
Year		Producti related v				ninis- tive		ales	То	tal	Product		Admin-	Sales	
THE REAL PROPERTY.	Min	lng	0	ther		office	distr	ibution			related	workers	tive and office	and distri- bution	Total
DOMESTIC AND LOCATION	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Mining	Other	omce		
					nur	nber							\$'000		
1961	8,142	49	30	-	1,315	193	-	-	9,487	242	38,758	158	8,323	-	47,240
1962	8,454	46	30	-	1,465	194	_	-	9,949	240	40,835	165	9,727	-	50,726
1963	8,840	34	31	-	1,627	222	_	-	10,498	256	43,627	159	11,342	-	55, 128
1964	8,779	34	58	_	1,623	220	-	-	10,460	254	44,671	259	11,604	-	56,534
1965	9,073	43	25	-	1,727	218	_	-	10,825	261	48, 157	80	12,812	-	61,049

TABLE 28. Production and Related Workers, Copper-Gold-Silver Mines, 1964 and 1965

		Mine		Mill	
	Surfa	ce	Under ground	Male	Female
	Male	Female	Male		
			number		
1964					
	2.393	15	4,727	1.596	17
fanuary					18
'ebruary	2,357	15	4,769	1,593	18
larch	2,356	15	4,746	1,587	17
pril	2,362	15	4,761	1,607	17
ay	2,433	16	4,792	1,644	
une	2,609	15	4,861	1,686	19
uly	2,628	16	4,866	1,750	2
ugust	2,555	17	4,828	1,756	2
eptember	2,344	16	4,538	1,607	1
ctober	2,348	16	4,568	1,606	1
ovember	2,339	16	4,618	1,610	1
ecember	2,314	16	4,582	1,604	1
Averages	2,420	16	4,721	1,637	1
	10-14				
1965					
anuary	2,344	22	4,681	1,785	1
ebruary	2,350	22	4,699	1,790	1
arch	2,352	22	4,764	1,792	1
pril	2,398	22	4,688	1,814	1
ay	2,495	22	4,771	1,903	2
une	2,720	23	4.894	1.984	2
uly	2,790	24	4,826	2,045	2
ugust	2,726	24	4,809	2,019	2
eptember	2,536	22	4,713	1,866	1
	2,440	24	4.594	1.678	1
october	2,498	22	4.667	1,671	
ovember	2,418	24	4.685	1,692	400
December	4,910				
Averages	2,506	23	4,732	1,835	1

TABLE 29. Purchased Fuel and Electricity Used, Copper-Gold-Silver Mines, 1964 and 1965

Casacthrina		1964		1965	
2-4 servines		Quantity	Cost	Quantity	Cost
			\$'000		\$'000
arge establishments reporting commodity detail:					
Bituminous coal:	1000		305		
(a) From Canadian mines	ton	75	2	220	
(b) Imported	£ ¢	973	17	750	1
Sub-bituminous coal (from Alberta mines only)	400000040	-		-	
Anthracite coal	ton	43		40	
Lignite coal		43			
Coke	f 4	75	2	52	
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	528, 071	199	703,889	26
Fuel oil including kerosene or coal oil	6 6	7, 420, 529	1,382	8,897,451	1,74
Wood	*******	_		10-	
Gas:				513131	
(a) Liquefied petroleum gases	Imp. gal.	203,051	39	683, 814	10
(b) Other manufactured gas				35 to 10-10	THE STATE OF
(c) Natural gas	M cu. ft.	14,457	8	25,399	
Other fuel		4 4 9	52		
Electricity purchased	kwh.	792,088,795	5,682	883, 498, 081	6,11
The purchased			-		
Total fuel and electricity used			7,384		8, 37
equivalently generated:		Marin St. Co.			
(a) For own use	kwh.	95,353,309		101,844,539	
(b) For sale		1,281.879		1,122,394	

TABLE 30. Materials and Supplies, Copper-Gold-Silver Mines, 1964 and 1965

Basis: Revised standard industrial classification and new establishment concept

	Cost		
Description	1964	1965	
	\$'0	00	
Ore or other semi-processed materials purchased and used in mine/mill operations	74	547	
Containers, shipping materials and supplies used		9	
perating, maintenance and repair supplies used (excluding fuel)	27,976	35,022	
mount paid out to others for work done on materials owned by establishments:			
To smelters and/or refineries	57,215	56, 843	
To others (mining, milling, etc.)	11,719	13, 709	
Totals	96, 985	106, 130	

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

TABLE 31. Value of Production, Copper-Gold-Silver Mines, 1963 and 1964 Basis: Revised standard industrial classification and new establishment concept.

Description	Value			
2 Collegeton	1963	1964		
	\$*000			
alue of production	282,030	321,019		
mount received in payment for work done on materials and products owned by others	1	601		
Total value of production and work done	282,031	321,620		

TABLE 32. Shipments from Copper-Gold-Silver Mines, 1964 and 1965

			Total meta	l content as deter	mined by settle	ment assay¹	
	Quantity	Gold	Silver	Copper	Lead	Zinc	Sulphur
	tons	fine ou	nces		lb.		tons
1964		15.7				No.	
To Canadian plants:	TO THE						
Ores	636,906	70,391	162,563	17,781,724			-
Copper concentrates	1,253,345	374,489	5,707,312	482, 446, 859	***	19,062,177	_
Zinc concentrates	242,214	5,326	172,821	2,143,527		249, 266, 178	_
Lead concentrates	5,012	2,270	138, 789	318, 165	4,907,406	279, 761	-
Molybdenum concentrates	3	an an	-	-		-	3,3682
Pyrite concentrates	17,911	-	-	G 200 0-0		-	8,830
Residues, bullion and gold precipitates	6	28,224	104,018	-	-		
Tailings	32, 383	-	-	-	-	-	
To foreign plants:	Charles				WARE I	- L-	
Copper concentrates	221,873	37,690	367,363	127,665,274	-	TO NOT THE	
Zinc concentrates	88, 582	555	2,478	_	- 1	93,934,950	
Lead concentrates	4,074	_	177, 355	285, 335	3,490,899	_	
Molybdenum concentrates	437	-	- 1	-	_	-	466,9192
Pyrite concentrates	333, 489	_		-	-	_	202,902
Iron concentrates	50, 045	-		_	_		_
Precipitates	456		_	310, 484	_		-1
Tailings	14,693	-	T			-	-
Totals	2,901,429	518,945	6, 832, 699	630,951,368	8, 398, 305	362, 543, 066	211,732
1965			#1	atual in			
To Canadian plants:				5-536-56-7		AEN A	
Ores .,,,,	818,113	73, 839	205,003	22,694,800	-	-	= = =
Copper concentrates	1,271,193	346, 788	6,450,070	495, 379, 296	-	22, 256, 198	-
Zinc concentrates	83, 324	-	-	-	_	89,625,013	
Lead concentrates	6,022	2, 648	166,097	337, 809	5,863,303	1,033	-
Molybdenum concentrates	23		-	1-0		-	25, 213
Pyrite concentrates	4,192	-	-	-	_		1,963
Residues, bullion and gold precipitates	72	30,934	190,738	43,236	_	10,367	_
Tailings	45,807	-	7 - 1		MILL -	-	- 18
To foreign plants:				7 8 8			
Copper concentrates	201,257	45,230	1,207,819	105,647,253	1,227,194	2,032,776	-
Zinc concentrates	165, 410	_	_		****	171, 295, 586	-
Lead concentrates	2,127	_	119,978	126.874	2,127,229		_
Molybdenum concentrates	488	_	_			-	525, 855
Pyrite concentrates	378,568	-		_	100		184, 996
Iron concentrates	93,312	-	1 1 1	_			_
Silver concentrates	140	_	335, 221		_		_
Precipitates	200		_	152,953			
Totals	3, 070, 248	499, 439	8, 674, 926	624, 382, 221	9, 217, 726	285, 220, 973	186, 959
Totals	3,010,480	200, 200	0,017,540	ONT, JON, ANI	0, ~11, 140	au 0, 240, 513	200 ₀ 303

 $^{^{\}rm 1}$ ln addition cadmium, blsmuth, tellurium and selenium are recovered from these ores. $^{\rm 2}$ Pounds of molybdenum content.

TABLE 33. Ores Mined, Milled, and Concentrates Produced, by the Copper-Gold-Silver Mines, 1956-65

	Year	Ore mined	Ore milled	Copper concentrates produced ¹	Zinc concentrates produced	Iron pyrite concentrates produced	Lead concentrates produced
				to	ns		
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	100 de-
1959		12,436,105	11,577,414	1,135,190	231,959	674,450	~~
1960		13,973,786	13,316,340	1,266,757	270,705	573,340	2,040
1961	***************************************	15,008,993	14,411,758	1,259,871	299,806	508,854	6,762
1962	***************************************	17,744,713	16,980,625	1,433,264	343,922	322,636	12,438
1963	***************************************	19,640,423	18,745,756	1,389,336	317,923	476,899	16,535
1964		20, 196, 539	19,494,495	1,460,128	324,794	360,801	9,392
1965		20,016,849	19,586,915	1,470,264	360,073	461,410	7.619

¹ Exclusive of copper precipitates.

TABLE 34. Specified Expenditures by Companies engaged in Copper-Gold-Silver Operations, 1965

	Thousands of dollars
3) Workmen's compensation	1,717
b) Silicosis assessment	92
c) Unemployment Insurance	520
d) Aggregate cost of structures, roads, machinery, equipment, etc., built by or purchased from outside contractors or suppliers and chargeable to Fixed Assets Account	18,730
e) Book value of fixed assets (new structures, roads, machinery, equipment, etc., including major repairs and alter- ations) produced by own employees and chargeable to Fixed Assets Account	5,360
f) Other capital expenditures not reported in (d) and (e)	1,043
E) 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	2,717
h) Cost of office supplies used during the year, not chargeable to Fixed Assets Account. Excludes cost of stamps and meter expenses	293

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

TABLE 35. Taxes Paid by Companies engaged in Copper-Gold-Silver Operations, 1965

Taxes paid	Thousands of dollars
ominion income tax, including tax on non-operating revenue	21,562
ovincial tax	10,686
micipal tax	2,680
Grand total taxes paid	34,928

TABLE 36. Drilling Completed on Copper-Gold-Silver Deposits, 1964 and 1965

	Footage drilled	
	1964	1965
namond drilling for exploration (testing only):		
By mining companies with their own personnel and equipment	49,979	13,050
By diamond drilling contractors	1,023,969	1,173,531
ther diamond drilling:		
Blast hold diamond drilling:		
By mining companies with their own personnel and equipment	385,642	152,749
By diamond drilling contractors	AL PINE	
rilling by percussion or other machines ¹	25.852.751	25,711,543

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

TABLE 37. Copper Production (Recoverable) according to Nature of Ore, and by Provinces, 1964 and 1965

Province	From copper- gold-silver ores	From nickel- copper ores	From other ores	Total
1964	The shall be			
Newfoundland	10,738	_	2,877	13,645
Nova Scotia	- I		204	204
New Brunswick	8,713	4 4 4 4	583	9,296
Quebec	146,059	183	11,846	158,088
Ontario	46,522	142,947	8.448	197,917
Manitoba	19,975	9,802		29,777
Saskatchewan		-		20,442
British Columbia	55,040	830	1.691	57,561
Yukon		-	_	- 311
Northwest Territories		-		_
Canada	307,489	153,762	25,649	486,900
1965				
Newfoundland	11,981	NOTE -	2.842	14,823
Nova Scotia		-	187	187
New Brunswick	8,976		1,106	10,082
Quebec	157,939	2,050	13,949	173,938
Ontario	47,201	161,259	7,812	216,272
Manitoba	20,994	9,813	-	30,807
Saskatchewan	18,732	-	-	18,732
British Columbia	39,304	850	2,411	42, 565
Yukon		-	- 1	
Northwest Territories		HEAD -	471	471
Canada	305,127	173,972	28,778	507,877

TABLE 38. Production of Refined Copper, 1956-65

year	Short tons	Year	Short tons
	220 450	1001	400 350
956	328,458 323,540	1962	406,359 382,868
958	329, 239	1963	380,075
959	365,366	1964	407,942
960	417,029	1965	434,133

^{*} Small forms and from all sources, including scrap.

TABLE 39. Silver Production (Recoverable) according to Nature of Ore, by Provinces, 1965

Province	Crude placer gold	Auriferous quartz ores	Copper- gold-silver ores	Nickel- copper ores	Silver- lead-zlnc ores	Silver- cobalt and other ores	Total
	1100			troy ounces			
Newfoundland	-	400	79,679	_	1,007,299		1,086,978
Nova Scotia			(=)	-	443,630	-	443,630
New Brunswick	X 44 - 4		63,072	_	2,682,202	-	2,745,274
Quebec	56	91,651	3,543.529	24,891	1,494,376	_	5, 154, 403
Ontario	-1 7 3-	370.154	2,214,802	1,766,248	670,775	5,800,234	10,822,213
Manitoba	DEVIE	4,444	653,047	49,533	_	_	707,024
Suskatchewan	-	_	640,995	-	_	- 1	640,995
Alberta	19			- 1	100	-	19
British Columbia	113	28,818	380,034	_	4,582,144	-	4,991,109
Yukon	9,241	362		_	4,606,392	_	4,615,995
Northwest Territories		76,269	988,555	-	_	-	1,064,824
Canada	9,429	571,598	8,563,713	1,840,672	15,486,818	5,800,234	32,272,464

TABLE 40. Selenium and Tellurium Recoverable from Canadian Ores, 1956 - 1965

	From copper-g	From copper-gold-silver ores		From nickel-copper ores		al	
Year	Selenium	Tellurium	Selenium	Tellurium	Selenium	Tellurium	
		pounds					
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	
1963	272 672	69,137	95,100	7,705	468,772	76,842	
1964	360,841	69,882	104,905	7,900	465,746	77,782	
1965	388 002	60,479	123,175	9,315	512,077	69,794	

TABLE 41. Zinc Production (Recoverable) according to Nature of Ore, and by Provinces, 1964-1965

Year and province	Recoverable from copper-gold-silver ores	Recoverable from silver-lead-zinc and other ores	Total
	tons (2,000 pounds)		
1964			
Newfoundland		38,982	38,982
Nova Scotia		595	595
New Brunswick		54,372	54,372
Que bec	52,673	183,867	236,540
Ontario	58, 258	13,818	72,076
Manitoba	42,645	_	42,645
Saskatchewan	28,437	_	28,437
British Columbia	1,906	198, 492	200, 398
Zukon		6,547	6,547
Northwest Territories	_	3, 920	3,920
Canada	183, 919	500, 593	684, 512
1965			
Newfoundland	1,637	34,550	36, 187
Nova Scotia		299	299
New Brunswick	-	123, 595	123,595
Quebec	74, 353	198, 530	272, 883
Ontario	19,525	41,150	60,675
Aanitoba	40,763	-	40,763
Saskatchewan	27,983		27,983
British Columbia	311	158,025	158, 336
Zukon	-	6,624	6,624
Northwest Territories		94,690	94,690
Canada	164,572	657, 463	822, 035

TABLE 42. Refined Zinc Produced, from all Sources, 1956-1965

Year	Short tons	Year	Short tons
1956	255, 564	1961	268, 007
1957	247,316	1962	280, 159
958	252,093	1963,	284,020
959	255,306	1964	337, 734
1960	260,968	1965	358, 498

TABLE 43. World Copper Production by Countries of Origin of Ore¹

Country	1961	1962	1963	1964	1965
	1	to	ns (2,000 pounds)	1	
nited States. exico anada uba aiti caragua olivia² razil nile	1,159,556 54,359 439,088 5,500 3,832 6,919 2,292 1,900 603,424 218,313 2,495,183	1,223,978 51,945 465,446 6,100 6,738 8,016 2,646 1,800 646,064 183,853 2,596,586	1,208,197 61,576 461,823 6,600 6,553 8,028 3,300 1,700 662,126 195,608 2,615,511	1,251,216 57,877 486,900 6,600 6,208 10,185 5,160 3,100 685,259 192,328 2,704,833	1, 356, 27: 76, 23: 509, 79: 6, 60: 10, 88: 5, 21: 3, 10: 655, 85: 198, 78: 2, 829, 23:
astria	2, 105 35, 745 551 2, 389 691 15, 379 3, 351 20, 029 18, 629	2, 186 37, 657 441 2,202 973 17, 124 3, 742 20, 580 21, 034 57, 008	2,078 36,777 441 2,515 1,100 15,724 3,627 26,275 19,029 68,446	1, 725 34, 379 331 1, 759 887 16, 439 4, 812 28, 698 17, 846 69, 648	1,67 32,76 44 1,18 16,57 4,18 27,05 17,24 66,95

TABLE 43. World Copper Production by Countries of Origin of Ore1 - Concluded

Country	1961	1962	1963	1964	1965
		to	ns (2,000 pounds)		
Japan India Israel Communication Communicati	106, 272 9, 190 6, 969 584 20, 525 57, 182 31, 585	114, 198 10, 914 5, 768 473 28, 127 60, 327 27, 735	118, 185 11, 034 6, 087 542 32, 189 70, 201 29, 000	117,036 10,740 10,948 536 34,925 66,654 18,514	118,020 10,400 9.126 978 35,000 69,806 21,515
Totals, Asia	232, 307	247, 542	267, 238	259, 353	264, 845
Congo, Republic of the Rhodesia South West Africa Uganda South Africa, Republic of Zambia	325, 440 14, 979 23, 377 14, 720 57, 952 633, 534	322,974 15,146 25,873 17,173 51,115 619,856	297,537 18,489 30,709 17,875 60,792 648,238	304,877 18,341 35,887 20,129 65,579 709,754	318,128 19,800 32,007 18,894 66,640 766,976
Totals, Africa	1,070,002	1, 052, 137	1, 073, 640	1, 154, 567	1, 222, 445
Australia	96, 823	118, 646	119,470	110,350	95, 785
U.S.S.R.4	523,600 13,200 27,500 12,900 50,000	550,000 14,000 27,500 15,100 50,000	600,000 18,000 30,000 14,600 60,000	675,000 20,200 30,900 16,000 80,000	710,000 22,500 30,900 16,600 85,000
World totals, as reported ⁵	4, 662, 171	4, 834, 458	4, 974, 471	5, 227, 727	5, 448, 223

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

TABLE 44. Cadmium Production (Recoverable) from Canadian Ores, 1956-65

Year	From copper- gold-silver ores	From-silver- lead-zinc ores	Total
		pounds	
1956	208, 327	2, 131, 094	2, 339, 421
1957	286,044	2,082,086	2,368,130
1958	355, 602	1,400,448	1,756,050
1959	334,029	1,826,334	2,160,363
1960	466, 200	1,891,297	2,357,497
1961	307,757	1,914,193	2,221,950
1962	405, 317	2,199,656	2,604,973
1963	389, 185	2,086,300	2,475,485
964	673,317	2,099,667	2,772,984
1965	783, 132	972, 793	1,755,925

TABLE 45. Average Annual Metal Prices in Canadian Dollars, 1956-65

Year	Gold	Silver	Copper	Lead	Zinc
A CW1	Per troy ounce	Per troy ounce	Per pound	Per pound	Per pound
			dollars		
1956	34.45	0.8968	0.4141	0.1551	0.1484
I 957	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
1963	37.75	1.384	0.3150	0.1100	0.1278
1964	37, 75	1,400	0,3340	0,1344	0.1417
1965	37, 73	1.400	0.3760	0, 1550	0.1510

Includes copper contents of recoverance contents of smelting.

**Exports.

**Exports.

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

**Conjectural.

**In addition there is production in Ecuador, Burma, Taiwan, Algeria, Angola, Kenya and Morocco; the total of all these countries is estimated to be about tons in 1965.

Opening Matril Statestics, Yeart Back.

TRANSACTIONS IN GOLD BULLION AT THE ROYAL CANADIAN MINT

(From the Annual Report of the Royal Canadian Mint)

Four thousand six hundred and fifty-five deposits of gold bullion were received during the year from Canadian Mining Companies and Sundry Persons. In addition, six deposits of silver bullion and medals were received from the Department of Veterans Affairs and Crown Assets Disposal Corporation. The composition of the deposits was a follows:

Fine Gold -

253 deposits weighing 270,536,060 troy ounces with a of 996.435

Crude Bullion -

3,583 deposits weighing 2,868,747.679 troy ounces with an average fineness of 806,292 gold, 125.513 silver, and containing 6.819% base metal

Scrap (Jewellery and Dental) -

174 deposits weighing 12,584,282 troy ounces with an average fineness of 433,785 gold and 090.809 silver

Gold for Storage -

645 deposits weighing 531,858.431 troy ounces with an average fineness of 758.416 gold, 092.309 silver, and 14.927% base metal.

Gold Plating -

25 medals, 2 sets of Replicas, and 240 Governor General's Crests were gold plated. The Gold Trial Plate sold during the year amounted to .992 troy ounces.

The net value paid to depositors was 97,522,712.23, In addition the amount of fine gold issued to depositors was 398,043.816 ounces.

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

	Ounces fine
6,566 Trade bars transferred to Exchange Fund	
Account of Minister of Finance	2,621,106.234
Depositors-granulated and bars: Gold Purchase	
2,650.515, Gold Storage 395,393.301	398,043.816
Sales of fine gold	4,506
Trial Plate for assay purposes	692
Medals, etc.	19.093
Sweep	7,800.016

3,026,974.357

This total shows a decrease of 146,598.529 ounces fine issued as compared with the year 1964.

Comparative Statement Showing Details of Gold and Silver Deposits Received for 1964 and 1965

	Number of deposits received			Gross ounces				
	1964	1965	Increase	Decrease	1964	1965	Increase	Decreas
Sale to Her Majesty For storage Jewellery and miscellaneous	4,013 783 196	3, 836 645 174	_	177 138 22	3,270,054 677,019 11,948	3, 139, 284 531, 858 12, 584	_ 636	130,770 145,161
Totals	4,992	4,655	_	337	3,959,021	3,683,726	-	275, 295
Silver deposits from other government departments	-	6	6	-	-	31,109	31,109	-
Total received	4,992	4,661	-	331	3,959,021	3,714,835	-	244,186
	Fine gold ounces			Fine silver ounces				
	1964	1965	Increase	Decrease	1964	1965	Increase	Decrease
Sale to Her Majesty For storage Jewellery and miscellaneous	2,688,048 495,511 5,309	2,582,621 403,370 5,459	150	105, 427 92, 141	458, 026 	410,306	_	47,720
Totals	3, 188, 868	2,991,450		197, 418	458,026	410,306		47, 720
Silver deposits from other government departments	_			_		19,307	19,307	_
Total received	3, 188, 868	2,991,450	_	197,418	458,026	429,613	_	28, 413

Details of origin of the bullion deposited, for sale to Her Majesty, and for storing during the year 1965 are shown in the following table:

From Canadian mines and refineries	Sale to Her Majesty		Gold storage		Total		Total
From Canadian inmes and fermentes	Gross weight	Fine gold	Gross weight	Fine gold	Gross weight	Fine gold	fine silver
	ounces						
Ontario Quebec British Columbia Manitoba Yukon Territory Northwest Territories Alberta Nova Scotia	2, 032, 243, 409 660, 332, 250 94, 290, 560 34, 532, 870 54, 994, 420 262, 633, 930 245, 260 11, 040	1,709,297.784 531,381.129 75,983.463 25,132.448 43.564.495 197.054.381 199.729 7.658	185.171.081 20,525.180 326,162.170	156, 436, 477 4, 285, 647 242, 648, 261	2,217,414,490 680,857,430 94,290,560 34,532,870 54,994,420 588,796,100 245,260 11,040	1,865,734,261 535,666,776 75,983,463 25,132,448 43,564,495 439,702,642 199,729 7,658	205, 365, 7 102, 891, 4 14, 189, 0 4, 443, 6 9, 284, 3 72, 970, 3 18, 8
Total from Canadian mines and refineries	3, 139, 283, 739	2,582,621.087	531, 858, 431	403,370.385	3,671,142.170	2.985.991.472	409, 163, 4
From jewellery and miscellaneous	12,584.282	5,458.875			12,584.282		1,142.7
Totals	3, 151, 868. 021	2,588,079.962	531,858.431	403,370.385	3,683,726.452	2,991,450.347	410,306.2
From other government departments silver deposits	31, 109, 240	010404411111111111111111111111111111111		**************	31, 109, 240	***	19,306.9
Totals	3, 182, 977, 261	2,588,079.962	531,858.431	403,370.385	3,714,835.692	2,991,450.347	429, 613.1

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

Produced	Number	Gross weight	Fine weight	Average assay
		ound	ces	
Fine gold bars	6, 562	2, 626, 586, 450	2,619.813.375	997.4
Granulated gold		2,940.570	2, 940, 276	999.9
Fine stlver bars.	332	356,661.88	356,591.46	999.8
Granulated silver		65, 198. 48	65, 184. 97	999.8
Gold trial plate	-0.00		.692	-
Finishing and plating medals	-		. 298	_
Storage—Gold bars	764	305,905.343	305, 148. 657	997.5
Granulated gold	-	91,565.680	91,555.397	999.9
Sweeps sold-Gold	32		7,800.016	_
Sweeps sold-Silver	3	THE	49,380.87	EV I
Gold-Coin	-	_	1.053	-
Medal bar-Gold	_		198.191	_
Medal bar-Silver.	- I - I		290.68	-

Special processes	Number	Gross weight
		ounces
emelts	56	19,989.770
oughenings	5	2,066.530
		pounds avoir-du-pois
bioride reduction		66,457.0
velojis		75,874.5

GOLD STORAGE

During the year four mines deposited gold bullion at the Mint under the terms of the Regulations prescribing the circumstances under which 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 1965 amounted to 403,370.385 ounces. Fine bullion amounting to 395,393.301 ounces was issued on behalf of the mines for export and to various processors for domestic

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, 1965

Gross weight			
	Fine gold	Coin	Bullion
ounces		ounces fine	
146, 145, 971, 949	117,794,663.686	383, 319, 096	117, 382, 439, 937
4,693,484.529	3, 801, 788, 815	_	3,774,599.457
4,798,296.343	3,896,083,563		3, 776, 710, 677
4,868,066.405	3,958,458.747		4,088,706.348
4,805,493.520	3,908,640.185		3,836,679,842
4,970,726.079	4,024,625.964	-	4,014,771.105
4,745,639.352	3,800,137.419	_	3,812,054.286
4,363,972.339	3,488,974.332	-	3,520,405.598
4,319,975.360	3, 457, 091, 639	_	3,467,554.159
3,959,021.466	3, 188, 867, 542		3, 173, 572, 886
3, 683, 726, 452	2,991,450,347	-	3,026,974.357
191,354,373,794	154, 310, 782, 239	383,319,096	153, 874, 468, 652
	146, 145, 971. 949 4, 693, 484. 529 4, 798, 296. 343 4, 868, 066. 405 4, 805, 493. 520 4, 970, 726. 079 4, 745, 639. 352 4, 363, 972. 339 4, 319, 975. 360 3, 959, 021. 466 3, 683, 726. 452	146, 145, 971, 949 4, 693, 484, 529 4, 798, 296, 343 4, 868, 066, 405 4, 970, 726, 079 4, 745, 639, 352 4, 319, 975, 360 3, 958, 458, 747 4, 24, 625, 964 4, 745, 639, 352 3, 488, 974, 332 4, 319, 975, 360 3, 959, 021, 466 3, 188, 867, 542 3, 683, 726, 452 2, 991, 450, 347	146, 145, 971, 949 117, 794, 663, 686 383, 319, 096 4, 693, 484, 529 3, 801, 788, 815 — 4, 798, 296, 343 3, 896, 083, 563 — 4, 868, 066, 405 3, 958, 458, 747 — 4, 805, 493, 520 3, 908, 640, 185 — 4, 970, 726, 079 4, 024, 625, 964 — 4, 745, 639, 352 3, 800, 137, 419 — 4, 363, 972, 339 3, 488, 974, 332 — 4, 319, 975, 360 3, 457, 091, 639 — 3, 959, 021, 466 3, 188, 867, 542 — 3, 683, 726, 452 2, 991, 450, 347 —

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, 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 therefor.

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
- (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
- 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.
- 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
- April 11, 1956.

- (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 oneten-thousandth part (one-tenth millieme), and silver shall be reported to the one-thousandth part (1 millieme), but only that part of the silver content of the deposit that is in excess of one per cent of the weight of the deposit after melting shall be reported.
- (4) Where it is determined that a deposit contains less than two hundred parts of gold in one thousand by assay, or that a deposit is unsuitable for treatment by the refining process in use at the Mint, the Master shall, upon payment by the depositor of the Mint charges for melting and assaying, deliver the deposit at the Mint counter to the depositor.
- (5) On the completion of the valuation of a deposit the Master shall, unless the deposit is to be returned to the depositor in accordance with subsection (4), furnish the depositor with a memorandum in duplicate of the outturn of his deposit.
- (6) The memorandum mentioned in subsection (5) shall state
 - (a) the weight of the deposit before and after melting,
 - (b) the assay report,
 - (c) the fine gold and the fine silver content of the deposit,
 - (d) the gross value of the fine content at the price applicable to the deposit calculated in accordance with sections 6 and 7.
 - (e) the Mint charges applicable to the deposit,
 - (f) where the deposit was delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty, the net value of the fine gold and fine silver contents of the deposit, being the gross value minus the Mint charges, and
 - (g) where the deposit was delivered to the Mint for a purpose other than that of selling the gold content thereof to Her Majesty, the net value of the fine silver content of the deposit, being the gross value thereof minus the Mint charges.
- (7) Where a deposit was delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty, the Minister shall, at the same time as the memorandum mentioned in subsection (5) is furnished to the depositor, pay to the depositor as the full purchase price of the fine gold and fine silver contents of the deposit an amount equal to the net value of the fine contents of the deposit as stated in the memorandum.

- (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 depositis received, exporting gold, converted into Canadian funds at the average of the rates of exchange for the currency of that country, reported to the Minister by the Bank of Canada on the days Monday to Friday, inclusive, of the week in which the deposit is delivered to the Master such price hereinafter referred to as the "Mint buylng price".
- 7. The price payable by the Minister for the silver content of a deposit is the price that is one quarter of one cent below the average of the official New York daily quotation for fine silver for the days Monday to Friday, inclusive, of the week in which the deposit is delivered to the Master, converted into Canadian funds at the average of the rates of exchange for United States funds reported to the Minister by the Bank of Canada on the days Monday to Friday, inclusive, of that week.

Mint Charges

- 8. (1) The Mint charge payable by a depositor to the Master in respect of a deposit shall be calculated as follows on the gross weight of the deposit after melting:
 - (a) for melting and assaying, three dollars for the first one thousand ounces or part thereof and thirty cents for each additional one hundred punces or part thereof; and

to for refining,

- (i) when the deposit contains not more than five per cent base metal, nine cents per ounce,
- (ii) when the deposit contains over five per cent base metal but not over ten per cent base metal, ten cents per ounce,
- (iii) when the deposit contains over ten per cent base metal but not over fifteen per cent base metal, eleven cents per ounce,
- (iv) when the deposit contains over fifteen per cent base metal but not over twenty per cent base metal, twelve cents per ounce, and
- (v) when the deposit contains over twenty per cent base metal, or requires toughening or other special treatment in order to obtain concordant assays, such charge, not exceeding eighteen cents per ounce, as determined by the Master after taking into account the cost of treatment.
- (2) The charge for refining provided in paragraph (b) of subsection (1) applies in respect of all deposits containing, by assay, less than nine hundred and ninety-five parts fine gold in one thousand.
- (3) To cover the cost of marketing outside Canada a depositer shall pay to the Master a handling charge of eleven cents per fine ounce of gold for every deposit that is delivered to the Mint for the purpose of selling the gold content thereof to Her Majesty.
- (4) In respect of every deposit that is delivered to the Mint for the purpose of storing the gold content thereof, the depositor shall pay the following charges:
 - (a) a storage charge of five cents for each fine ounce of gold held in Mint storage for more than sixty days (Including the day on which the deposit is received at the Mint) in respect of each additional thirty days or fraction thereof (excluding the day on which it is shipped from the Mint) payable upon application for the release of the gold or when billed, whichever is the earlier,
 - a service charge of two cents for each fine ounce of gold shipped from the Mint, payable at the time of application for the release of the gold, and

- (c) a handling charge of eleven cents for each fine ounce of gold released from storage for sale to Her Majesty, payable at the time of sale.
- (5) In respect of every deposit that is delivered to the Mint for a purpose not described in subsection (3) or (4), and packing of fine gold is involved, the depositor shall pay at the time of shipment one dollar for the first fifty ounces of fine gold or part thereof, and two cents for each additional ounce or part thereof that is packed at the Mint for shipment.
- (6) It is a condition under which a deposit is accepted at the Mint that the Master may retain a portion of the fine gold content thereof in payment of the Mint charges in respect of that deposit.

Release of Gold

- 9. The fine gold content of a deposit held in storage at the Mint shall be released only upon application therefor in the form prescribed by the Minister.
- 10. Every deposit is accepted at the Mint subject to the condition that the fine gold content thereof shall be released in a form that is at least .995 fine.

Sale of Gold

- 11.(1) The Master may, with the approval of the Minister, sell fine gold from the Mint that belongs to Her Majesty.
- (2) The price at which each fine ounce of gold shall be sold is the Mint buying price per fine ounce for the week immediately preceding the week in which the gold is sold plus ten cents.

General

- 12.(1) Deposits may be delivered to the Mint on Monday to Friday, inclusive, between the hours of 9:30 a.m. and 4:30 p.m. unless such a day is a holiday mentioned in or authorized pursuant to the Civil Service Act.
- (2) Where a deposit is delivered to the Mint, it shall be withheld from treatment until an invoice setting out the description and weight of the contents thereof has been received by the Master, and where there is a discrepancy between the actual and invoice weights of a deposit, the deposit shall not be further dealt with until the Master has notified the depositor of the discrepancy and has received further instructions from the depositor.
- (3) All gold shipped from the Mint shall be delivered at the Mint counter to the purchaser of the gold, to the depositor or his authorized agent.
- 13. It is a condition under which newly mined gold is accepted at the Mint for storage that the depositor prepare and mall 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 begin-

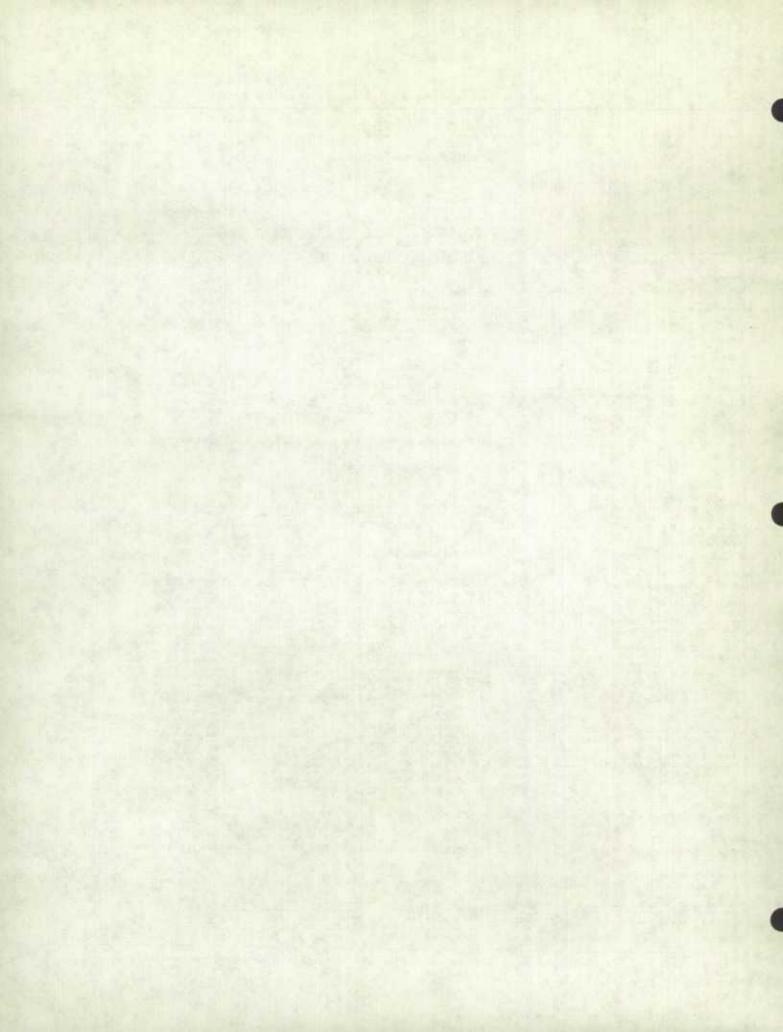
- ning of the month
- (i) at the Mint, and
- (ii) at places other than the Mint and the location of those places;
- (b) refined gold produced during the month;
- (c) sales made during the month indicating,
 - (i) the name and address of the purchaser,
 - (ii) the amount in ounces sold to each purchaser,(iii)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

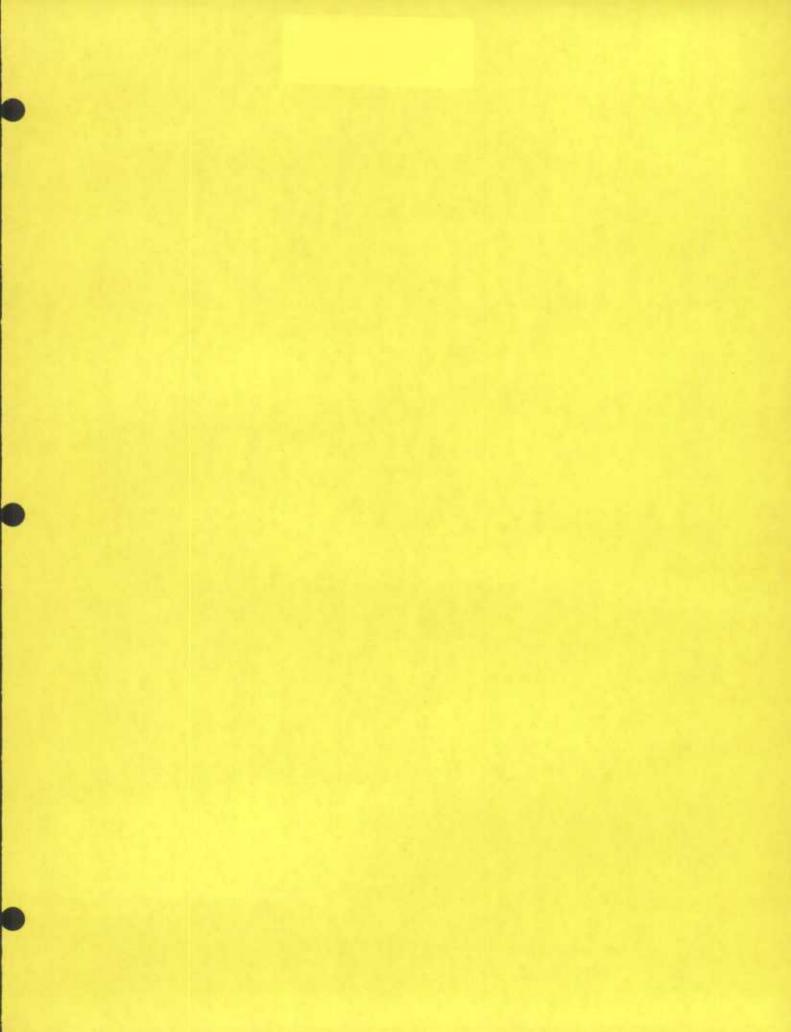
List of Establishments classified to This Industry, 1965
(Does not include establishments classified to other industries which recover Gold as a secondary nativity)

Name	Head or executive office address	i. mat les
	(a) Placer Gold Mines	
Quebec:	(a) I racel dota miles	1
Beauce Placer Mining Co. Ltd.	908-330 Bay St., Toronto, Ontario	Beauceville
	300 300 Bay St., Toronto, Ontario	BeanceAille
/ukon:	and the second second second second	
Ballarat Mines Ltd. Bardusan Placers Ltd.	Dawson	Dominion Creek and Eldorado Cree
Boutillier, H.C. & D.F.	Mayo	Mayo Bonanza Creek
Bremner, John	Dawson	Dago Hill
Burwash Mining Co.	Dawson	Cariboo Creek Burwash Creek
Djukastein Placers	Mayo	Mayo
Erl, Frank Fry, A.T.	Mayo	Highet Creek
Kinakin & Scott Placers	Box 19, Dawson Dawson	Bonanza Creek All Gold Creek
Lamontagne, J.A	Dawson	Bedrock Creek
Le Saux & Perret Lintick & Berg	Dawson	Victoria Gulch
Lunde, Ole	Dawson	Bonanza Creek Dawson
Medby, Ole	Dawson	Glacier Creek
Northern Yukon Services Ltd	Dawson	Eureka Creek Kirkman Creek
Spruce Creek Placers Ltd	Mayo	Mayo
Taylor, Fred W	Mayo	Dublin Gulch
Yukon Consolidated Gold Corp. Ltd.	Mayo	Mayo Dawson
	1	Danson
	(b) Gold Quartz Mines	
uebec:		
Barnat Mines Ltd.	112 Klng St. W., Toronto, Onlario	Malartic
Bevcon Mines, Ltd	112 King St. W., Toronto Ontario	Louvicourt
Camflo Mattagami Mines Ltd.	318 Stewart St., Ottawa 2, Ontario	Malartic
Canadian Malartic Gold Mines Ltd.	7 King St. E., Toronto 1, Ontario	Malartic Fournière Twp.
Lamaque Gold Mines Ltd	11 Adelaide St. W., Toronto, Ontario	Bourlamaque
Leitch Gold Mines Ltd.	12 Richmond St. E., Toronto, Ontario	Wawagosic
Little Long Lac Gold Mines Ltd. Malatric Goldfields Ltd.	400-112 King St. W., Toronto, Ontario	Dubuisson Twp. Fournière and Dubuisson Twps.
Marban Gold Mines Ltd	112 King St. W., Toronto, Ontario	Dubuisson and Fourmere Twie.
Norbeau Mines (Quebec) Ltd.	112 King St. W., Toronto, Ontario	McKenzie Twp.
Norlartic Mines Ltd.	112 King St. W., Toronto, Ontario	Malartic and Vassan Twps.
Sigma Mines (Quebec) Ltd.	360 Bay St., Toronto, Ontario	Noranda Bourlamaque
Sullivan Consolidated Mines Ltd.	507 Place d'Armes, Montreal	Dubuisson Twp.
Wasamac Mines Ltd.	112 King St. W., Toronto 1, Ontario	Arntfield
ntario:		
Porcupine District		
Aunor Gold Mines Ltd.	44 King St. W., Toronto	Timerina
Broulan Reef Mines Ltd.	Room 1702, 105 Adelaide St. W., Toronto	Timmins Whitney Twp.
Dome Mines Ltd.	South Porcupine	Tisdale Twp.
Hallnor Mines Ltd	44 King St. W., Toronto	Whitney Twp. Hislop and Tisdale Twps.
Hugh-Pam Porcupine Mines Ltd	105 Adelaide St. W., Toronto	Whitney Twp.
McIntyre Porcupine Mines Ltd.	25 King St. W., Toronto 1	Schumacher
Pamour Porcupine Mines Ltd	44 King St. W., Toronto	Whitney Twp. South Porcupine
Preston Mines Ltd.	335 Bay St., Toronto	South Porcupine
Wi-bland Into District		
Kirkland Lake District		
Lake Shore Mines Ltd.	112 King St. W., Toronto	Kirkland Lake
Lamaque Mining Co. Ltd. (Teck-Hughes Mining Division)	11 Adelaide St. W., Toronto 1	Teck Twp.
Macassa Gold Mines Ltd. (Macassa Division) Upper Beaver Mines Ltd.	112 King St. W., Toronto	Kirkland Lake Gauthier Twp.
Upper Canada Mines Ltd.	250 University St., Toronto	Gauthier Twp.
Wright-Hargreaves Mines Ltd.	112 King St. W., Toronto	Kirkland Lake
Larder Lake District		
Kerr-Addison Gold Mines Ltd.	44 King St. W., Toronto 1	McGarry Twp.
	TT THE DEC ATT THE OTHER I THE	medally 1 wp,
Matachewan District		
Stairs Exploration & Mining Co. Ltd.	Box 189, Matachewan	Matachewan
Sudbury District		
Renable Mines Ltd.	112 King St. W., Toronto	Sudbury
Thunder Bay District	THE SAME OF THE PARTY OF THE PA	
Consolidated Mosher Mines Ltd.	112 King St. W., Toronto	Long Lac
MacLeod-Cockshutt Gold Mines Ltd.	112 King St. W., Toronto	Geraldion
Vonora Diotnict		
Kenora District		
Sapawe Gold Mines Ltd.	1015 Beaver Hall Hill, Montreal Quebec	Rainy River

Establishments classified to This Industry - Concluded

Name	Head or executive office address	Location			
(b) Gold Quartz Mines - Concluded					
Ontario - Concluded:					
Patricia District		Carle 1200 Date			
Annco Mines Ltd, Campbell Red Lake Mines Ltd, Cochenour Willans Gold Mines Ltd, Dickenson Mines Ltd, McKenzie Red Lake Gold Mines Ltd, Madsen Red Lake Gold Mines Ltd, Pickle Crow Gold Mines, Ltd,	2200 Yonge St., Toronto 12 360 Bay St., Toronto 2200 Yonge St., Toronto 25 Adelaide St. W., Toronto 112 King St., Toronto 55 Yonge St., Toronto 11 Adelaide St. W., Toronto	Red Lake Baimer Twp. Dome Twp. Balmer Twp. McKenzie Island Heyson and Baird Twps. Conneil Twp.			
Manitoba:					
San Antonio Gold Mines Ltd. (Forty-Four Mines Ltd.)	67 Yonge St., Toronto	Bissett			
British Columbia: Bralorne Pioneer Mines Ltd. Cariboo Gold Quartz Mining Co. Ltd. Silbak Premier Mines Ltd.	320 - 355 Burrard St., Vancouver 675 W. Hastings St., Vancouver 355 Burrard St., Vancouver 1	Bralorne Carlboo Stewart			
Northwest Territories: Consolidated Mining & S. Co. of Canada Ltd. Discovery Mines Ltd. Giant Yellowknife Mines Ltd. Rycon Mines Ltd. (Consolidated Mining & Smelting Co. of Canada Ltd.) Tundra Gold Mines Ltd.	Trail, British Columbia 2200 Yonge St., Toronto 7, Ontario 7 King St. W., Toronto, Ontario Trail, British Columbia 2200 Yonge St., Toronto, Ontario	Yellowknife Discovery Yellowknife Yellowknife Matthews Lake			
Yukon: Discovery Mines Ltd.	2200 Yonge St., Toronto, Ontario	Carwacks			
	(a) Conney Cold Cityer Mires				
Newfoundland:	(c) Copper-Gold-Silver Mines				
etiantic Coast Copper Corp. Ltd. Stitish Newfoundland Exploration Ltd. Consolidated Rambler Mines Ltd. First Maritime Mining Corp., Ltd.	330 Bay St., Toronto, Ontario 1980 Sherbrooke St. W., Montreal 25, Quebec 908 - 330 Bay St., Toronto 1, Ontario 330 Bay St., Toronto, Ontario	Springdale Springdale Baie Verte Tilt Cove			
New Brunswick: Consolidated Mining & Smelting Co. Ltd.	Trail, British Columbia	Wedge Mine			
Quebec: Campbell Chibougamau Mines Ltd. Cupra Mines Ltd. Cupra Mines Ltd. Gaspé Copper Mines Ltd. Lake Dufault Mines Ltd. Merrill Island Mining Corporation Ltd. New Hosco Mines Ltd. Noranda Mines Ltd. Normetal Mining Corp. Ltd. Opemiska Copper Mines Ltd. Patino Mining Corp. Ltd. Quemont Mining Corp. Ltd. Solbec Copper Mines Ltd. Sulico Mines Ltd. Sulico Mines Ltd. United Obalski Mining Co. Ltd.	55 Yonge St. Toronto, Ontario 1403-507 Place d'Armes, Montréal 44 King St. W., Toronto, Ontario 7 King St. W., Toronto, Ontario 621 Craig St. W., Montréal 5 906-357 Bay St., Toronto, Ontario 44 King St. W., Toronto, Ontario 1715-44 King St. W., Toronto, Ontario 7 King St. E., Toronto, Ontario 7 King St. E., Toronto, Ontario 7 King St. E., Toronto, Ontario 1800-44 King St. W., Toronto, Ontario 1403-507 Place d'Armes, Montreal 1403-507 Place d'Armes, Montreal 911-1155 Dorchester Blvd, W., Montreal	Obalski Twp. Stratford Twp. Murdochville Dufresnoy Twp. McKenzie Twp. Daniel Twp. Noranda Desmeloizes Twp. Levy Twp. Chibougamau Rouyn-Noranda Stratford Twp. Val d'Or Obalski Twp.			
Ontario: Copperfields Mining Corp. Ltd. Geco Division (Noranda Mines Ltd.) Kam Kotta Mines Ltd. North Coldstream Copper Mines Ltd. Rio Algom Mines Ltd. (Pater Mine) Sheridan Geophysics Ltd. Texas Gulf Sulphur Co.	11 Adelaide St. W., Toronto 1715 - 44 King St. W., Toronto 25 Adelaide St. W., Toronto 44 King St. W., Toronto 335 Bay St., Toronto 1606 - 4 King St. W., Toronto 1 155 Pine St. S., Timmins	Algoma Manitouwadge Robb Twp. Burchell Lake Matachewan Ryan Twp. Porcupine			
Manitoba: Hudson Bay Mining & Smelting Company Ltd	4th Floor, 333 Broadway Ave., Winnipeg	Flin Flon, Snow Lake			
Saskatchewan: Hudson Bay Mining & Smelting Co. Ltd.	4th Floor, 333 Broadway Ave., Winnipeg, Manitoba	Flin Fion, Phii Lake			
British Columbia: Anaconda Company (Canada) Ltd. (The) (Britannia Mine) Bothlehem Copper Corp. Ltd. Coast Copper Company Limited Craigmont Mines Ltd. Granhy Mining Company Ltd. (The) (Phoenix Copper Div.) Mount Washington Milling Co. Ltd. Northwest Territories Echo Bay Mines Ltd.	8th Ave., New Toronto, Ontario 355 Burrard St., Vancouver Trail 700 Burrard Bldg., Vancouver ill I West Georgia St., Vancouver 204 -569 Howe St., Vancouver 1 8540 -109th St., Edmonton	Britannia Beach Highland Valley Port McNeili Merritt Phoenix Courtenay Port Radium			





STATISTICS CANADA LIBRARY
BIBLIOTHÉQUE STATISTIQUE CANADA
1010670709