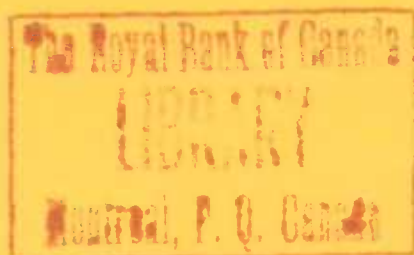




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DOMINION BUREAU OF STATISTICS,  
Industry and Merchandising Division  
Mining, Metallurgical and Chemical Section

# THE GOLD MINING INDUSTRY 1952

*Published by Authority of*  
The Right Honourable C. D. Howe, Minister of Trade and Commerce

6502-585  
26-2-54

Price 50 cents

Vol. 1—Part I—B-1

EDMOND CLOUTIER, C.M.G., O.A., D.S.P., Queen's Printer and Controller of Stationery, Ottawa, 1954.

## NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I – The Primary Industries**, including mining, forestry and fisheries; **Volume II – Manufacturing**; **Volume III – Merchandising and Services**. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume I consists of the following parts:

- Part I – Mineral Statistics
- Part II – Forestry Statistics—Operations in the Woods
- Part III – Fisheries Statistics

Part I includes the following reports which constitute the complete series on Mineral Statistics of Canada. Individual reports are issued as the information becomes available; they are arranged in a form suitable for binding.

- A – General Review of the Mining Industry, 50¢
- B – The Gold Mining Industry, 50¢
- C – The Silver-Lead-Zinc Mining Industry, 25¢
- D – The Nickel-Copper Mining, Smelting and Refining Industry, 25¢
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- S – The Sand and Gravel Industry, 25¢
- T – The Stone Industry, 25¢
- U – Contract Drilling in the Mining Industry, 25¢

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# THE GOLD MINING INDUSTRY

1952

Including: (a) The Alluvial Gold Mining Industry  
(b) The Auriferous Quartz Mining Industry  
(c) The Copper-Gold-Silver Mining Industry

**Definition of the Industry**—Gold mining in Canada is divided into three principal industries: (a) the recovery of gold from the gravels and sands of stream channels or beaches, described as "The Alluvial Gold Mining Industry"; (b) the recovery of lode gold, which is designated "The Auriferous Quartz Mining Industry", and in which industry gold is usually the most important economic constituent of the ores mined and quartz the predominant gangue mineral; (c) gold is often found in various other mineral deposits, more particularly in those of copper, and for this reason, the review of Canada's "Copper-Gold-Silver mining Industry" is included here to complete a comprehensive survey of Canadian gold production.

During 1952 the production of gold amounted to 4,471,725 fine troy ounces valued at \$153,246,016 compared with 4,392,751 ounces valued at \$161,872,873 in 1951. 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 56 per cent of the total. Quebec, in second position, produced 25 per cent, and British Columbia accounted for 6 per cent of the total. The other provinces ranked in the following order: Northwest Territories, Manitoba, Saskatchewan, Yukon, Newfoundland, Nova Scotia and Alberta.

Gold purchased by the Royal Canadian Mint was valued at \$35.00 in United States funds but the Canadian dollar went over par during the year. The price of gold in Canadian dollars was \$35.19 in January; it declined to \$33.59 in September and closed out the year at \$33.97. The average price for 1952 was \$34.27 per troy ounce in Canadian funds.

Some of the gold mines which had low cost production continued to sell gold on the "premium" market. The gold prices on this market continued to decline until they were only slightly higher than the price quoted by the Mint.

The total amount paid to the gold mines by the Emergency Gold Mining Assistance Act was approximately \$10,359,054 in 1952 compared with \$10,073,000 in 1951; \$8,953,000 in 1950; \$12,550,000 in 1949; and \$10,518,000 in 1948.



TABLE 1. Production of Gold, Fifty Years, 1903-1952

Year	Fine ounces	\$	Year	Fine ounces	\$
1903	911,559	18,843,590	1928	1,890,592	39,082,005
1904	796,374	16,462,517	1929	1,928,308	39,861,663
1905	684,951	14,159,195	1930	2,102,068	43,453,601
1906	556,415	11,502,120	1931	2,693,892	58,093,396
1907	405,517	8,382,780	1932	3,044,387	71,479,373
1908	476,112	9,842,105	1933	2,949,309	84,350,237
1909	453,865	9,382,230	1934	2,972,074	102,536,553
1910	493,707	10,205,835	1935	3,284,890	115,595,279
1911	473,159	9,781,077	1936	3,748,028	131,293,421
1912	611,885	12,648,794	1937	4,096,213	143,326,493
1913	802,973	16,598,923	1938	4,725,117	166,205,990
1914	773,178	15,983,007	1939	5,094,379	184,115,951
1915	918,056	18,977,901	1940	5,311,145	204,479,083
1916	930,492	19,234,976	1941	5,345,179	205,789,392
1917	738,831	15,272,992	1942	4,841,306	186,390,281
1918	699,681	14,463,689	1943	3,651,301	140,575,088
1919	766,764	15,850,423	1944	2,922,911	112,532,073
1920	765,007	15,814,098	1945	2,696,727	103,823,990
1921	926,329	19,148,920	1946	2,832,554	104,096,359
1922	1,263,364	26,116,050	1947	3,070,221	107,457,735
1923	1,233,341	25,495,421	1948	3,529,608	123,536,280
1924	1,525,382	31,532,443	1949	4,123,518	148,446,648
1925	1,735,735	35,880,826	1950	4,441,227	168,988,687
1926	1,754,228	36,263,110	1951	4,392,751	161,872,873
1927	1,852,785	38,300,464	1952	4,471,725	153,246,016

TABLE 2. Total (Cumulative) Recorded Production of Specified Metals to December 31, 1952

	Since		Quantity	Value
				\$
Gold	1858	fine ounces	121,856,085	3,755,856,569
Silver	1887	"	1,024,231,910	607,024,950
Copper	1886	tons	6,804,887	1,965,472,756
Nickel	1889	"	3,190,816	1,915,611,517
Lead	1887	"	5,615,410	725,496,046
Zinc	1898	—	--	901,929,973
Cobalt	1904	tons	20,090	43,761,975

TABLE 3. Production of Gold, by Months<sup>1</sup>, 1950-1952

Month	1950	1951	1952	Month	1950	1951	1952
	Fine ounces				Fine ounces		
January	353,615	376,874	353,573	July	367,766	346,690	374,037
February	349,291	349,484	351,926	August	375,924	347,383	371,826
March	382,624	374,774	364,973	September	364,361	361,386	382,177
April	369,070	365,806	363,375	October	376,315	380,827	403,532
May	373,124	371,585	366,169	November	378,294	374,888	388,546
June	368,347	364,910	359,812	December	382,496	378,144	391,779
				Total	4,441,518	4,392,751	4,471,725

1. Compiled from monthly reports received from principal operators but the amounts have been adjusted slightly to make the 12 months' total agree with the year's total as compiled from final annual reports; production includes recoveries from all types of ore.



TABLE 4. Production of Gold from Auriferous Quartz and Base Metal Mines, by Months, 1950-52

Month	Gold production from base metal mines			Gold production from auriferous quartz mines and placer deposits		
	1950	1951	1952	1950	1951	1952
	Fine ounces					
January.....	47,250	53,696	46,268	306,365	323,178	307,305
February.....	45,191	45,476	45,587	304,100	304,008	306,339
March.....	51,410	48,364	43,692	331,214	326,410	321,281
April.....	50,208	47,214	43,785	318,862	318,592	319,590
May.....	49,827	45,737	42,000	323,297	325,848	324,169
June.....	49,321	48,257	46,055	319,026	316,653	313,757
July.....	46,150	49,277	43,086	321,616	297,413	330,951
August.....	46,039	51,735	47,407	329,885	295,648	324,419
September.....	43,283	49,840	51,617	321,078	311,546	330,560
October.....	44,625	48,715	47,950	331,690	332,112	355,582
November.....	45,788	50,844	47,373	332,506	324,044	341,173
December.....	49,235	47,554	50,315	333,261	330,590	341,464
<b>Total.....</b>	<b>568,327</b>	<b>586,709</b>	<b>555,135</b>	<b>3,872,900</b>	<b>3,806,042</b>	<b>3,916,590</b>

TABLE 5. Production of Gold<sup>1</sup>, by Provinces, 1943-1952

Year	Nova Scotia		Quebec		Ontario		Manitoba	
	Fine ounces	\$	Fine ounces	\$	Fine ounces	\$	Fine ounces	\$
1943.....	4,129	158,967	922,533	35,517,521	2,117,215	81,512,777	91,775	3,533,337
1944.....	5,840	224,840	746,784	28,751,184	1,731,836	66,675,686	74,168	2,855,468
1945.....	3,291	126,704	661,608	25,471,908	1,625,368	62,576,668	70,655	2,720,218
1946.....	4,321	158,797	818,339	22,723,958	1,813,333	66,639,988	79,402	2,918,024
1947.....	1,271	44,485	598,127	20,934,445	1,944,819	68,068,665	72,906	2,551,710
1948.....	188	6,580	770,625	26,971,875	2,095,377	73,338,195	106,176	3,716,160
1949.....	64	2,304	964,184	34,710,624	2,354,509	84,762,324	137,399	4,946,364
1950.....	65	2,473	1,094,645	41,651,242	2,481,110	94,406,236	191,725	7,295,136
1951.....	17	626	1,067,306	39,330,226	2,463,179	90,768,146	163,914	6,040,231
1952.....	1,433	49,109	1,113,204	38,149,501	2,513,691	86,144,910	141,947	4,864,524
	Saskatchewan		British Columbia		Yukon		Northwest Territories	
1943.....	174,090	6,702,465	241,346	9,291,821	41,160	1,584,660	59,032	2,272,732
1944.....	122,782	4,727,107	196,857	7,578,994	23,818	916,993	20,775	799,838
1945.....	108,568	4,179,868	188,854	7,193,879	31,721	1,221,258	8,655	333,218
1946.....	112,101	4,119,712	136,242	5,006,893	45,286	1,664,260	23,420	860,685
1947.....	93,747	3,281,145	249,011	8,715,385	47,745	1,671,075	62,517	2,188,095
1948.....	87,927	3,077,445	306,998	10,744,930	60,614	2,121,490	101,625	3,556,875
1949.....	94,208	3,391,488	304,307	10,955,052	81,970	2,950,920	177,493	6,389,748
1950.....	79,784	3,035,781	290,490	11,053,144	93,339	3,551,549	200,663	7,635,227
1951.....	110,216	4,061,460	289,992	10,686,205	77,504	2,856,022	212,211	7,819,975
1952.....	93,585	3,207,158	273,059	9,357,732	78,519	2,690,840	247,581	8,484,601

1. From all sources.

Note: Annual Alberta production was less than 215 ounces for the years specified. Newfoundland production was 9,269 ounces in 1949, 9,254 ounces in 1950, 8,515 ounces in 1951 and 8,595 ounces in 1952.

TABLE 6. Production of Gold, by Provinces, According to Nature of Ores, 1951 and 1952

Year and province	Placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead and other ores	Total
Fine ounces						
1951						
Newfoundland .....	—	—	—	—	8,515	8,515
Nova Scotia .....	—	17	—	—	—	17
Quebec .....	38	724,878	316,849	—	25,541	1,067,306
Ontario .....	—	2,422,505	80	40,394	—	2,462,979
Manitoba .....	—	126,867	37,047	—	—	163,914
Saskatchewan .....	—	—	110,216	—	—	110,216
Alberta .....	97	—	—	—	—	97
British Columbia .....	18,802	223,142	20,488	—	27,560	289,992
Northwest Territories .....	—	212,192	19	—	—	212,211
Yukon .....	77,504	—	—	—	—	77,504
Canada .....	96,441	3,709,601	484,699	40,394	61,616	4,392,751
1952						
Newfoundland .....	—	—	—	—	8,595	8,595
Nova Scotia .....	—	1	—	—	1,432	1,433
Quebec .....	39	771,756	311,473	—	29,936	1,113,204
Ontario .....	—	2,469,786	105	43,689	111	2,513,691
Manitoba .....	—	118,214	23,733	—	—	141,947
Saskatchewan .....	2	—	93,583	—	—	93,585
Alberta .....	111	—	—	—	—	111
British Columbia .....	14,172	216,652	19,040	—	23,195	273,059
Northwest Territories .....	—	247,338	—	—	243	247,581
Yukon .....	78,519	—	—	—	—	78,519
Canada .....	92,843	3,823,747	447,934	43,689	63,512	4,471,725

TABLE 7. Gold Production by Provinces and Principal Areas, 1950-1952

Province and area	1950		1951		1952	
	Fine ounces	\$	Fine ounces	\$	Fine ounces	\$
Newfoundland .....	9,254	352,115	8,515	313,778	8,595	294,551
Nova Scotia .....	65	2,473	17	626	1,433	49,109
Quebec:						
Gold mines .....	743,241	28,280,320	724,878	26,711,754	771,795	26,449,415
Base metal mines .....	351,404	13,370,922	342,428	12,618,472	341,409	11,700,086
Total Quebec .....	1,094,645	41,651,242	1,067,306	39,330,226	1,113,204	38,149,501
Ontario:						
Gold mines:						
Porcupine .....	1,100,122	41,659,642	1,062,951	39,169,744	1,163,344	39,867,799
Kirkland Lake .....	448,391	17,061,278	454,986	16,766,234	417,382	14,303,681
Larder Lake .....	341,081	12,978,132	352,135	12,976,175	368,046	12,544,396
Matachewan .....	50,046	1,904,326	41,984	1,547,111	40,144	1,375,735
Sudbury .....	36,930	1,405,187	23,717	873,971	40,837	1,399,484
Thunder Bay .....	131,413	5,000,265	137,291	5,059,173	120,051	4,114,148
Patricia .....	336,854	12,817,295	349,404	12,875,538	321,763	11,026,818
Other mines .....	36,271	1,380,111	40,511	1,492,830	44,124	1,512,129
Total Ontario .....	2,481,110	94,406,236	2,462,979	90,760,776	2,513,691	86,144,190
Manitoba:						
Gold mines .....	137,020	5,213,611	126,867	4,675,049	118,214	4,051,194
Other mines .....	54,705	2,081,525	37,047	1,365,182	23,733	813,330
Total Manitoba .....	191,725	7,295,136	163,914	6,040,231	141,947	4,864,524
Saskatchewan:						
Gold mines .....	—	—	—	—	2	69
Other mines .....	79,784	3,035,781	110,216	4,061,460	93,583	3,207,089
Total Saskatchewan .....	79,784	3,035,781	110,216	4,061,460	93,585	3,207,158
Alberta (placer) .....	152	5,784	97	3,574	111	3,804
British Columbia:						
Gold mines (lode) .....	238,949	9,092,009	223,142	8,222,783	216,652	7,424,664
Gold mines (placer) .....	14,632	556,747	18,802	692,854	14,172	485,675
Other mines .....	36,909	1,404,387	48,048	1,770,568	42,235	1,447,393
Total British Columbia .....	290,490	11,053,144	289,992	10,686,205	273,059	9,357,732
Northwest Territories:						
Gold mines and placer .....	200,663	7,635,227	212,211	7,819,975	247,581	8,484,601
Yukon (chiefly placer) .....	93,339	3,551,549	77,504	2,656,022	78,519	2,690,846
Total Canada .....	4,441,227	168,988,687	4,392,751	161,872,873	4,471,725	153,246,016

TABLE 8. Production of Gold and Silver by Principal Mines, 1952

Mine and province	Ore hoisted	Material sorted (discarded)	Ore treated	Gold produced	Silver produced	Mill capacity — 24 hours	See foot-notes
	Tons			Fine ounces		Tons	
NEWFOUNDLAND:							
Base metal ores .....	—	—	—	8,595	638,524	—	
NOVA SCOTIA:							
Base metal ores and Mint receipts .....	—	—	—	1,433	91,886	—	
QUEBEC:							
Bellefleur .....	121,224	1,007	120,144	36,496	4,277	350	1
Bevcourt .....	98,725	—	87,395	13,861	6,191	600	1
Barnat .....	205,856	—	205,497	40,546	6,008	600	1
Canadian Malartic .....	469,478	—	469,478	37,443	18,947	1,300	1
Beattie — Duquesne .....	636,206	—	636,206	65,906	25,045	1,800	1,2
Donalda .....	139,722	25,101	114,704	19,373	16,875	300	1
East Malartic .....	470,462	—	470,462	76,295	14,001	1,500	1
Elder .....	139,752	—	—	22,030	—	—	3
Lamaque .....	687,980	—	687,980	134,021	23,033	2,000	1
Malartic Goldfields .....	635,691	—	635,691	112,870	4,814	1,500	1
O'Brien .....	68,355	—	68,403	24,334	1,659	200	1,4
Powell Rouyn .....	158,145	—	307	19,910	538	450	1
Heva .....	17,515	—	—	3,418	2,985	—	2
Quesabe .....	15,288	—	15,388	3,990	2,705	400	1
New Senator-Rouyn .....	164,846	—	164,846	14,073	8,038	600	1
Sigma .....	415,186	—	415,186	76,110	15,339	1,100	1
Stadacona .....	148,675	6,890	141,785	24,732	7,860	400	1
Sullivan Consolidated .....	220,539	40,980	179,559	45,567	11,217	500	1
Total for principal gold mines in Quebec .....	—	—	—	770,975	169,532	—	
Copper-gold and other ores .....	—	—	—	342,229	4,366,715	—	
Total Quebec .....	—	—	—	1,113,204	4,536,247	—	
ONTARIO:							
Porcupine District							
Aunor .....	178,827	—	178,827	74,347	5,426	300	1
Bonwhit .....	67,009	—	67,009	25,119	—	—	5
Broulan Reef .....	138,066	400	137,666	35,040	4,157	650	1
Buffalo-Ankerite .....	118,832	—	117,795	18,933	1,668	1,200	1
Coniaurum .....	129,325	—	129,325	29,669	5,088	500	1
Delnite .....	158,786	—	158,794	52,650	4,027	520	1
Dome .....	687,400	—	687,400	168,795	32,411	1,850	1,4
Hallnor .....	134,236	—	134,236	51,186	3,697	400	1
Hollinger-(Timmins) .....	1,070,722	—	1,068,778	302,421	58,805	3,900	1
Hollinger-(Ross) .....	110,421	—	110,331	21,860	33,913	300	1
Hugh-Pam .....	26,053	—	26,053	7,862	—	—	5
McIntyre .....	760,230	—	760,230	211,076	40,795	2,400	1
Pamour .....	611,270	—	611,270	56,430	5,458	1,600	1
Paymaster .....	173,773	—	174,454	39,509	10,524	600	1
Preston East Dome .....	239,549	—	239,500	68,341	7,599	800	1,4
Kirkland Lake District							
Kirkland Lake Gold .....	120,543	—	120,543	44,828	3,995	400	1
Lake Shore .....	263,595	—	263,595	89,887	25,495	1,500	1
Macassa .....	139,660	—	139,660	44,640	7,529	400	1
Sylvanite .....	171,745	—	171,868	54,250	13,523	600	1
Teck Hughes .....	218,879	—	218,930	40,359	9,963	600	1
Toburn .....	45,052	3,752	41,300	15,143	3,065	175	1
Upper Canada .....	177,458	—	177,468	49,021	21,280	475	1
Wright-Hargreaves .....	189,770	—	189,770	79,253	14,026	1,200	1
Larder Lake District							
Chesterville .....	179,209	—	179,209	17,579	969	900	1
Kerr Addison .....	1,649,794	—	1,649,836	348,113	18,038	4,000	1
Matachewan District							
Matachewan Consolidated .....	164,257	—	164,407	14,669	7,341	1,000	1
Young Davidson .....	286,677	—	287,265	25,475	5,091	1,050	1

1. Cyanidation
2. Shipped to Powell Rouyn mill.
3. Shipped to smelter.
4. Amalgamation process.
5. Shipped to Broulan Reef mill.



TABLE 8. Production of Gold and Silver by Principal Mines, 1952 - Concluded

Mine and province	Ore hoisted	Material sorted (discarded)	Ore treated	Gold produced	Silver produced	Mill capacity—24 hours	See foot-notes
	Tons			Fine ounces		Tons	
ONTARIO—concluded:							
Sudbury District							
Renable .....	169,899	—	169,674	40,818	11,225	450	1
Thunder Bay District							
Leitch .....	46,050	8,806	36,276	29,459	902	120	1,2
Little Long Lac .....	99,607	78	99,607	23,526	2,487	300	1,2
MacLeod-Cockshutt .....	410,837	—	411,777	65,049	6,171	1,200	1
Magnet Consolidated .....	—	—	—	82	9	150	1
Theresa .....	13,293	112	13,181	1,935	79	100	2
Patricia District							
Campbell Red Lake .....	178,930	—	178,930	78,043	5,389	400	1,2
Cochennour Willans .....	67,361	—	67,361	34,309	1,127	225	1,2
Hasaga .....	58,135	1,856	56,314	5,847	2,272	400	1,2
Madsen Red Lake .....	304,251	—	304,251	67,344	14,689	800	1,2
McKenzie Red Lake .....	94,731	11,443	83,288	21,460	5,436	240	1
New Dickenson .....	101,993	—	102,442	45,240	2,618	280	1,2
New Jason .....	5,431	—	6,821	2,126	239	150	1
Pickle Crow .....	113,741	5,399	108,275	41,030	5,782	400	1,2
Starratt Olsen .....	156,709	—	155,690	26,239	5,342	500	1
Total for principal gold mines in Ontario .....	—	—	—	2,468,962	407,650	—	
Nickel-copper and other mines .....	—	—	—	44,729	6,083,474	—	
Total Ontario .....	—	—	—	2,513,691	6,491,124	—	
MANITOBA:							
Howe Sound .....	540,000	40,175	540,000	65,891	4,884	2,000	1
San Antonio .....	194,619	—	194,619	52,323	8,739	550	1,2
Copper-gold and other ores .....	—	—	—	23,733	398,528	—	
Total Manitoba .....	—	—	—	141,947	412,149	—	
SASKATCHEWAN:							
Copper-gold and alluvial ores .....	—	—	—	93,585	1,179,514	—	
ALBERTA:							
Alluvial gold .....	—	—	—	111	10	—	
BRITISH COLUMBIA:							
Bralorne .....	175,005	—	175,005	74,415	17,992	500	2
Cariboo Gold Quartz .....	71,138	—	71,138	24,574	2,237	350	1
Island Mountain .....	45,274	—	45,274	18,098	2,523	150	1
Kelowna Mines Hedley .....	127,539	—	127,539	52,072	5,778	325	1,3
Pioneer .....	86,036	—	86,036	46,940	9,834	325	1
Total for principal gold mines in B.C. ....	—	—	—	216,099	38,364	—	
Placer gold .....	—	—	—	14,172	2,253	—	
Copper-gold and other ores .....	—	—	—	42,788	7,744,347	—	
Total British Columbia .....	—	—	—	273,059	7,784,964	—	
NORTHWEST TERRITORIES:							
Consolidated Mining & Smelting .....	128,824	—	128,824	67,040	19,232	355	1,2
Consolidated Discovery Yellowknife .....	33,282	—	33,282	36,292	3,395	100	1
Giant Yellowknife .....	204,639	—	204,032	133,146	33,342	700	1,2
Other ores .....	—	—	—	11,103	3,289	—	
Total Northwest Territories .....	—	—	—	247,581	59,258	—	
YUKON:							
Placer and silver-lead ores .....	—	—	—	76,519	4,028,551	—	
Total Canada .....	—	—	—	4,471,725	25,222,227	—	

1. Cyanidation.
2. Amalgamation process.
3. Flotation process, concentrates exported.

TABLE 9. Gold Production of the World<sup>1</sup> - (Omitting Russia) - 1948-1952 (Taken from the Annual Report of the American Bureau of Metal Statistics)

Country	1948	1949	1950	1951	1952
Fine ounces					
North America:					
United States .....	2,099,178	1,996,435	2,375,130	1,996,493	1,937,818
Canada .....	3,529,608	4,123,518	4,441,227	4,392,751	4,471,939
Newfoundland .....	12,252				
Mexico .....	339,183	405,540	408,112	393,420	459,391
<b>Total North America .....</b>	<b>5,980,221</b>	<b>6,525,493</b>	<b>7,224,469</b>	<b>6,782,664</b>	<b>6,869,148</b>
Central America and West Indies .....	270,000	242,000	180,000	150,000	125,000
South America:					
Brazil <sup>2</sup> .....	130,243	119,179	131,700	141,397	141,600
Chile .....	164,126	179,140	185,538	173,674	177,050
Colombia .....	335,260	359,475	379,412	430,723	422,240
Ecuador .....	70,196	80,982	83,071		
Peru .....	111,160	113,753	147,968	158,270	140,081
Gulana:					
British .....	16,518	21,098	13,740	14,689	24,223
Dutch .....	4,177	3,794	4,546	6,494	
French .....	13,625	14,757	12,249	12,056	7,234
Venezuela .....	49,730	61,377	34,462	2,861	4,797
Other South America .....	14,700	21,500	14,000	16,300	
<b>Total South America .....</b>	<b>909,735</b>	<b>975,055</b>	<b>1,006,686</b>	<b>956,464</b>	
Europe .....	300,000	400,000	400,000	400,000	
Australia:					
New South Wales .....	52,164	51,793	51,350	48,910	39,191
Queensland .....	69,646	76,282	88,249	78,580	85,591
Victoria .....	68,580	68,426	67,826	66,063	68,121
Western Australia .....	664,986	648,426	610,333	648,245	724,690
Tasmania .....	12,906	12,152	15,578	14,446	16,072
Other Australia .....	17,226	31,979	36,201	39,307	45,723
<b>Total Australia (Commonwealth) .....</b>	<b>885,507</b>	<b>889,058</b>	<b>869,537</b>	<b>895,551</b>	<b>979,388</b>
New Guinea .....	86,556	93,045	80,099	94,082	127,431
New Zealand .....	93,903	84,874	76,527	75,115	59,373
Fiji .....	98,000	104,036	103,421	94,000	
Asia:					
China .....	88,200	60,000	108,000	100,000	
India .....	180,852	164,151	196,848	226,233	252,902
Japan .....	69,060	84,492	132,332	189,000	
Korea <sup>3</sup> .....	3,466	3,418	5,144	1,000	
Philippines Republic .....	209,225	287,844	333,991	393,602	
Saudi Arabia .....	73,972	66,835	66,202	73,104	
Other Asia .....	235,700	123,200	104,800	128,700	
<b>Total Asia .....</b>	<b>860,475</b>	<b>789,940</b>	<b>947,317</b>	<b>1,111,639</b>	
Africa:					
Bechuanaland .....	1,507	256	261		
Belgian Congo .....	299,767	333,847	339,408	352,302	368,749
British West Africa <sup>4</sup> .....	677,480	681,721	695,457	697,434	715,036
Ethiopia .....	41,595	45,102	43,200	33,000	
French Cameroons .....	10,719	8,931	7,169	5,420	2,604
French Equatorial Africa .....	63,715	57,259	54,996	52,848	51,536
Kenya .....	23,429	20,072	24,402	19,765	14,800
Liberia .....	13,797	14,656	11,025	9,822	
Madagascar .....	2,095	2,508	1,935	1,961	2,604
Rhodesia .....	514,440	528,180	511,163	486,907	496,731
Tanganyika .....	57,557	68,989	65,127	65,583	64,693
Transvaal, Cape Colony, Natal .....	11,584,849	11,708,013	11,663,713	11,516,450	11,815,512
Agenda .....	921	871	586	223	201
Other Africa .....	21,900	23,800	19,800		
<b>Total Africa .....</b>	<b>13,313,771</b>	<b>13,494,205</b>	<b>13,438,242</b>		
Russia <sup>5</sup> .....	7,000,000	7,000,000	8,000,000	9,500,000	
<b>Total .....</b>	<b>29,798,168</b>	<b>30,597,706</b>	<b>32,326,298</b>		

1. In compiling this table, free use has been made of the reports of the United States Director of the Mint.

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

3. Beginning 1948 South Korea only.

4. Comprising Gold Coast, Sierra Leone and Nigeria.

5. As reported by Director of the Mint.

TABLE 10. Gold Production According to Method of Computation and Recovery, 1943-1952

Year	In alluvial gold	In crude gold bullion produced at mines <sup>1</sup>	In base bullion produced at lead smelters	In blister and anode copper produced <sup>2</sup>	In ores, matte, slags, etc., exported	Total gold produced
	%	%	%	%	%	Fine Ounces
1943 .....	1.45	78.71	0.19	15.61	4.04	3,651,301
1944 .....	1.14	78.98	0.12	15.41	4.35	2,922,911
1945 .....	1.55	76.77	0.09	15.30	6.29	2,696,727
1946 .....	2.15	80.91	0.16	13.48	3.30	2,832,554
1947 .....	1.74	84.4	0.15	9.41	4.3	3,070,221
1948 .....	2.23	83.19	0.22	10.01	4.35	3,529,608
1949 .....	2.35	83.94	0.23	9.71	3.77	4,123,518
1950 .....	2.43	81.51	0.38	12.26	3.42	4,441,227
1951 .....	2.19	81.86	0.33	12.20	3.42	4,392,751
1952 .....	2.08	83.22	0.39	11.37	2.94	4,471,725

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

TABLE 11. Estimated Average Monthly Value of an Ounce of Fine Gold, Expressed in Canadian Funds, 1939-1952

Month	1939	1940-1945	1946	1947-1948	1949 <sup>1</sup>	1950	1951	1952
	Dollars							
January .....	35.30	38.50	38.50	35.00	35.00	36.50	36.81	35.19
February .....	35.19	38.50	38.50	35.00	35.00	38.50	36.73	35.03
March .....	35.13	38.50	38.50	35.00	35.00	38.50	36.65	34.85
April .....	35.15	38.50	38.50	35.00	35.00	38.50	37.07	34.34
May .....	35.13	38.50	36.50	35.00	35.00	38.50	37.25	34.43
June .....	35.07	38.50	38.50	35.00	35.00	38.50	37.42	34.26
July .....	35.06	38.50	35.35	35.00	35.00	38.50	37.12	33.93
August .....	35.01	38.50	35.00	35.00	35.00	38.50	36.96	33.65
September .....	37.21	38.50	35.00	35.00	36.52	36.50	36.94	33.59
October .....	38.43	38.50	35.00	35.00	38.50	36.86	36.78	33.75
November .....	38.50	38.50	35.00	35.00	38.50	36.43	36.53	34.17
December .....	38.50	38.50	35.00	35.00	38.50	36.83	35.89	33.97
Yearly average .....	36.14	38.50	36.75	35.00	36.00	38.05	36.85	34.27

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

TABLE 12. Precious Metals Consumed by the Jewellery and Silverware Industry, 1949-1951

Material	Cost at works			
	1949	1950	1951	1952
	\$	\$	\$	\$
Fine gold .....	5,578,690	8,912,334	7,999,071	4,016,040
Gold alloys .....	917,037	1,112,829	724,585	1,117,633
Fine silver .....	4,618,640	4,403,015	4,222,994	2,966,857
Silver alloys and sterling .....	4,095,635	3,509,982	3,731,996	2,637,240
Platinum .....	434,730	523,275	909,699	710,611
Old gold, jewellers' findings, waste and scrap refining .....	2,327,295	2,023,129	2,475,768	1,910,567
Gold-filled wire and stock .....	235,667	210,835	152,601	310,413
Precious and semi-precious stones .....	2,623,763	2,372,374	2,155,727	2,478,179



## EMERGENCY GOLD MINING ASSISTANCE ACT

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

The Emergency Gold Mining Assistance Act of 1948 was primarily designed to assist the high cost or marginal gold mines to continue operations throughout the difficult post-war period. From mid-1946 onward the costs of production of the gold mining industry continued to increase although the industry, through technological advancements and greater efficiency, has attempted to keep these increases to a minimum. This industry was further handicapped in that the price received from the Royal Canadian Mint has remained unchanged at the equivalent in Canadian dollars of 35 United States dollars per ounce of gold produced. Owing, however, to the gradual appreciation of the Canadian dollar relative to the United States dollar the value received by the mines continued to decline until, during 1952, the average price received per ounce of gold was \$34.27.

## Method of Calculating Assistance Payments

This Act defines a gold mine as a mine whose value of gold production for a designated year is 70 per cent or more of the total value of the products derived therefrom. In addition a mine must produce at least 50 troy ounces of gold in the designated year. No working is deemed to be a gold mine until it has developed ore reserves of commercial significance and there is a possibility of attaining production of gold on a commercial basis within a reasonable time.

The assistance payable to a mine is the product of the "rate of assistance" and the "assistance ounces". The "rate of assistance" is defined as 50 per cent of the amount by which the average cost of producing an ounce of gold exceeds a constant factor. This factor for the designated years 1948, 1949, and 1950, was \$18, with the maximum "rate of assistance" for these years of \$16. For 1951 and 1952 the factor was changed to \$22 with a maximum rate of \$11.50. The factor for the calendar year 1953 will be \$18 with a maximum "rate of assistance" of \$13.50. It may readily be seen that the rate of assistance applicable to a mine increases as costs of production at the mine rise, and that the high cost or marginal mines benefit accordingly up to the maximum "rate of assistance".

During the designated years 1948, 1949, and 1950, the term "assistance ounces" was defined as the number of ounces by which the number produced from the mine and sold in the designated year exceeded two-thirds of the number of ounces produced from the mine in the base year, or to one-third of the number of ounces produced and sold in

designated year, whichever was the greater. For the designated year 1951 and subsequent years the number of assistance ounces was increased by substituting the expression "one-half" for the expressions "two-thirds" and "one-third" in the foregoing definition. In the case of a new mine the rate of assistance applies to each ounce produced and sold during the first year of production.

In the case of old producing mines the "base year" was the period of 12 months ended June 30, 1947, or if the mine was idle during that period the "base year" was the period of 12 months beginning on the day that production was resumed after June 30, 1947. Section 4(x), Income War Tax Act, or Section 74, Income Tax Act, determine when a new mine is deemed to come into production and the first year of production is the period of 12 months immediately following that date. In the case of new mines during the designated years 1948, 1949, and 1950, the "base year" was the first year of production. For the designated year 1951 and subsequent years, the expression "base year" in the case of mines whose first year of production commenced on or before January 1, 1950, means the calendar years 1948, 1949, or 1950, as the operator of the mine may elect, provided that in the year elected the mine was in production for at least 6 months, and where the mine was in production for less than 6 months in each of the said years, means the first period of 12 months following the first day of July, 1950, in which the mine was in production for more than 6 months. In the case of mines commencing production after January 1, 1950, the "base year" means the first year of production. For the purposes of the Act the cost of production of gold from a mine is the cost incurred by the operator properly attributable to the gold produced from the mine during the year. This includes mining, milling, smelting, refining, transportation, and administration costs; also amounts in respect of depreciation, amortization, and pre-production costs, deferred development expenses, and costs of exploration and development as determined in accordance with the regulations.

During the period September 20, 1949, at which time the Canadian dollar was devaluated, to September 29, 1950, when the dollar was freed from exchange control, the gold operators received \$38.50 per ounce of gold produced and sold to the Royal Canadian Mint, or \$3.50 per ounce more than when the Act came into force. To compensate for this increase, the assistance payable for the designated year 1950 was reduced by an amount equal to the product of \$3.50 and the assistance ounces that were deemed to have been produced during the first 9 months of 1950.

## Regulations Governing the Sale of Gold on the Premium Market

Order in Council, P.C. 5774, October 26, 1951, which prescribed the Mint Customs Refining and Storing Regulations, extended to the gold mines the right to sell gold on the premium market subject to the Gold Export Act. The election to sell on the premium market may be made by the mine at the commencement of any quarter of the calendar year.

However, after the election has been made the mine must continue on this market until the end of that calendar year. A mine is not eligible for assistance under The Emergency Gold Mining Assistance Act for any period of the calendar year during which it has elected to sell gold on the premium market.

TABLE 13. Emergency Gold Mining Assistance Act — Estimated Assistance Payable

Province	1948	1949	1950	1951	1952
	Dollars				
Quebec .....	2,898,388	3,470,791	2,593,399	2,625,836	2,630,877
Ontario .....	5,010,619	5,868,450	4,015,799	5,287,134	5,353,941
Manitoba .....	159,681	784,474	597,013	427,508	378,983
British Columbia .....	1,245,162	1,090,705	819,061	678,351	805,263
Northwest Territories .....	919,418	968,846	146,777	943,254	1,082,976
Yukon .....	285,327	366,693	181,505	111,824	107,014
Canada .....	10,518,595	12,549,959	8,953,554	10,073,907	10,359,054

## THE ALLUVIAL GOLD MINING INDUSTRY

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

In 1952 a total of 92,843 troy ounces of fine gold were recovered from crude gold obtained from Canadian alluvial deposits. This represented a decrease of 3.7 per cent from the preceding year. Reviewing the past twenty 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.

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

**British Columbia** — It has been found impractical to obtain complete reports for each individual placer mining operation in British Columbia inasmuch as a considerable quantity of the crude placer gold is recovered annually by prospectors of no fixed abode who, in many instances, market their recoveries through local merchants and banks. Recoveries in 1952 were made chiefly from deposits located in the Atlin and Cariboo districts. Output was estimated at 14,172 fine ounces.

**Yukon** — About 80 per cent of the placer gold recovered in Canada during 1952 was found in the creeks of the Yukon. Production in 1952 totalled 78,519 fine ounces.

About 361 persons were employed in this industry in 1952 and their earnings amounted to \$1,638,672. The total number of man-hours worked in 1952 was 1,071,381.



TABLE 14. Summary Statistics for Alluvial Gold Mining, 1951 and 1952

		1951			1952		
		British Columbia	Yukon	Alberta, Northwest Territories <sup>1</sup> and Quebec	British Columbia	Yukon	Alberta, Northwest Territories <sup>1</sup> and Quebec
Number of firms and individual operators <sup>2</sup> .....		28	18	—	22	16	—
Number of employees .....		69	293	—	58	302	—
Salaries and wages paid .....	\$	273,236	1,279,867	—	190,528	1,447,584	—
Electricity generated for own use .....	K.W.H.	120	1,517,100	—	1,555,223	—	—
Electricity generated for sale .....		—	—	—	—	—	—
Crude gold recovered <sup>3</sup> .....	ounces	18,802	77,504	135	7,950	92,789	—
Quantity of material handled .....	cu. yds.	335,487	7,266,422	—	270,656	6,727,353	—
<b>Total gross value of alluvial products</b> .....	<b>\$</b>	<b>695,719</b>	<b>2,871,860</b>	<b>4,937</b>	<b>485,674</b>	<b>2,690,846</b>	<b>5,210</b>
Fuel and electricity used .....	\$	33,641	11,037	—	22,574	10,724	—
Process supplies used .....	\$	84,320	423,510	—	13,931	403,222	—
Cost of freight and express on dust, nuggets, bullion, etc., shipped <sup>3</sup> .....	\$	1,662	15,349	—	492	48,540	—
Cost of smelter, refinery and mint treatment on material shipped <sup>3</sup> .....	\$	3,528	48,127	—	1,605	17,690	—
<b>Total net value of alluvial products</b> .....	<b>\$</b>	<b>572,568</b>	<b>2,373,837</b>	<b>4,937</b>	<b>447,072</b>	<b>2,210,670</b>	<b>5,210</b>

1. Represents receipts of fine gold at Dominion Assay Office, Vancouver, British Columbia, or Royal Canadian Mint, Ottawa, Ontario.

2. In addition to the number shown in the table, there are numerous small operators from whom returns were not obtainable.

3. Information not completely available.

TABLE 15. Alluvial Gold Recovered and Quantity of Material Handled<sup>1</sup>, 1943-1952

Year	British Columbia				Yukon			
	Material handled <sup>2</sup>	Gold recovered	Ounces per cu. yd.	Value per cu. yd.	Material handled <sup>2</sup>	Gold recovered	Ounces per cu. yd.	Value per cu. yd.
	cu. yds.	Fine ounces		\$	cu. yds.	Fine ounces		\$
1943 .....	754,202	11,680	0.0156	0.6006	8,028,117	41,157	0.0051	0.1964
1944 .....	531,737	9,402	0.0177	0.6815	4,687,174	23,816	0.0050	0.1956
1945 .....	263,527	10,071	0.0382	1.4707	2,981,599	31,721	0.0106	0.4081
1946 .....	428,603	15,530	0.0362	1.3303	5,917,740	45,283	0.0076	0.2793
1947 .....	478,667	5,732	0.0120	0.4191	7,054,753	47,679	0.0067	0.2365
1948 .....	1,692,585	18,133	0.0107	0.3750	7,813,449	60,606	0.0078	0.2715
1949 .....	1,696,363	14,497	0.0085	0.3074	9,263,700	81,970	0.0088	0.3185
1950 .....	494,066	14,632	0.0296	1.1263	7,860,497	93,339	0.0118	0.4490
1951 .....	335,487	18,802	0.0560	2.0636	7,266,422	77,504	0.0107	0.3942
1952 .....	270,656	7,950	0.0294	1.0075	6,727,353	92,789	0.0138	0.4729

1. In addition, relatively small amounts of alluvial gold have been recovered in Saskatchewan and Alberta but complete data are not available; also, data relating to material handled, particularly those pertaining to small operations, are not complete and necessitate estimates in order to obtain totals.

2. Data partly conjectural and include some overburden and barren material.

3. Fine gold received at Royal Canadian Mint (Vancouver Assay Office).

## THE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA

The gross value of output of the entire auriferous quartz mining industry, including the value of all recoverable metals, totalled \$134,996,056 in 1952 compared with \$136,703,452 in 1951. The major producing provinces were Ontario with \$86,349,951, Quebec with \$26,931,337 and British Columbia with \$9,030,553.

The industry employed 20,757 persons to whom \$69,004,828 were distributed in salaries and wages. Fuel cost \$1,946,677 and 1,016,464,868 k.w.h. of electricity were purchased for \$5,645,302. Process supplies, which included explosives, chemicals, drill steel, etc., cost \$49,356,348. Canadian gold mining companies paid \$4,839,953 in taxes, and spent \$2,566,981 in prospecting and preliminary exploration of new areas or deposits.

The greater part of Canada's gold comes from the Canadian Shield, an immense area of precambrian rocks extending from the Labrador Coast westward almost to the mouth of the MacKenzie River. The area of the shield is roughly 1,825,000 square miles, almost half of Canada. The deposits of the shield are of two main types, namely, quartz veins, from which most of the gold, up to the present time, has been won, and sulphide deposits which produce a smaller but very considerable proportion. The second great source of gold in Canada has been the Western or Cordilleran section, comprising British Columbia and the Yukon Territory, the gold production from this section including relatively large quantities obtained from alluvial deposits. In Nova Scotia, gold was mined as early as 1862 but in late years the production in this province has dwindled to a very small percentage of Canada's output.

TABLE 16. Principal Statistics for the Auriferous Quartz Mining Industry, 1951 and 1952

	Number of active operators <sup>1</sup>	Number of employees	Salaries and wages	Cost of fuel and purchased electricity	Cost of process supplies used <sup>2</sup>	Amount of freight, etc., paid on shipments of ore, slag, etc.	Smelter and refinery treatment costs	Gross value of bullion, ore, concentrates or residues shipped from mines <sup>3</sup>	Net <sup>4</sup> value of bullion, ore, concentrates or residues shipped from mines
						Dollars			
1951									
Nova Scotia .....	1	1	500	10	7	—	—	627	610
Quebec .....	100	4,902	14,385,596	1,774,022	6,440,390	253,718	691,344	26,433,685	17,274,211
Ontario .....	76	14,504	44,887,096	4,409,161	16,076,455	96,107	648,579	89,603,190	68,372,888
Manitoba .....	7	591	1,888,594	355,019	1,202,412	8,766	33,099	4,655,079	3,055,783
British Columbia .....	14	1,291	3,945,706	422,987	2,086,671	188,548	182,231	8,144,954	5,264,517
Northwest Territories .....	5	837	3,632,039	830,387	871,426	17,501	55,109	7,865,917	6,091,494
Canada .....	203	22,126	68,739,531	7,791,586	26,677,361	564,640	1,610,362	136,703,452	100,059,503
1952									
Nova Scotia .....	1	2	2,500	20	10	—	—	34	4
Quebec .....	114	4,753	15,031,273	1,724,866	5,214,289	224,166	564,570	26,931,337	19,203,446
Ontario .....	72	13,269	44,402,133	4,318,676	16,147,324	94,722	573,139	86,349,951	65,216,090
Manitoba .....	4	505	1,768,995	334,643	1,052,070	8,199	36,308	4,185,345	2,754,125
British Columbia .....	18	1,354	4,045,372	427,606	2,030,236	86,696	78,055	9,030,553	6,407,960
Northwest Territories .....	5	874	3,754,555	786,168	1,130,940	18,302	61,545	8,498,836	6,501,881
Canada .....	214	20,757	69,004,828	7,591,979	25,574,869	432,685	1,413,617	134,996,056	100,083,506

1. Producing mines only; in 1950—92, in 1951—84, in 1952—85.

2. Explosives, chemicals, etc.

3. Value of bullion produced plus value of ore, concentrates, etc., shipped.

4. Gross value less cost of supplies, fuel and electricity, treatment costs and freight.

TABLE 17. Principal Statistics Relating to Producers only in the Auriferous Quartz Mining Industry, 1952

Province	Number of producing plants or mines	Number of employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies used <sup>1</sup>	Value of freight paid on shipments of ore, slag, etc.	Smelter and refinery treatment costs <sup>2</sup>	Gross value of bullion, ore, concentrates or residues shipped from mines <sup>3</sup>	Net <sup>4</sup> value of bullion, ore, concentrates or residues shipped from mines
			\$	\$	\$	\$	\$	\$	\$
Quebec and Nova Scotia .....	20	4,491	14,264,510	1,644,949	5,153,208	224,166	564,570	26,931,371	19,344,448
Ontario .....	46	13,183	44,071,176	4,277,844	16,044,749	94,722	573,139	86,349,951	65,359,497
Manitoba .....	3	504	1,767,495	334,643	1,052,070	8,199	36,308	4,185,345	2,754,125
British Columbia .....	10	1,338	4,006,121	426,940	2,002,480	86,696	78,055	9,030,553	6,436,382
Northwest Territories .....	5	873	3,750,955	785,583	1,130,940	18,302	61,545	8,498,836	6,502,466
<b>Canada, 1952 .....</b>	<b>84</b>	<b>20,389</b>	<b>67,860,257</b>	<b>7,469,979</b>	<b>25,383,457</b>	<b>432,085</b>	<b>1,313,617</b>	<b>134,996,056</b>	<b>100,396,918</b>
<b>Canada, 1951 .....</b>	<b>84</b>	<b>21,681</b>	<b>67,370,948</b>	<b>7,658,723</b>	<b>26,477,278</b>	<b>564,640</b>	<b>1,610,362</b>	<b>136,703,452</b>	<b>100,392,449</b>
<b>Canada, 1950 .....</b>	<b>93</b>	<b>21,868</b>	<b>62,888,423</b>	<b>7,706,820</b>	<b>24,384,766</b>	<b>610,849</b>	<b>2,004,281</b>	<b>144,044,607</b>	<b>109,337,891</b>
<b>Canada, 1949 .....</b>	<b>103</b>	<b>21,985</b>	<b>60,296,116</b>	<b>7,219,282</b>	<b>22,997,149</b>	<b>728,210</b>	<b>1,682,920</b>	<b>129,550,461</b>	<b>96,922,900</b>

1. Explosives, etc.

2. Includes handling charges.

3. Value of bullion produced, plus value of ore, concentrates, etc., shipped.

4. Gross value less cost of fuel and electricity, process supplies, freight and treatment charges.

TABLE 18. Principal Statistics Relating to All<sup>1</sup> Gold Mines in Ontario, by Areas, 1950-1952

Camp or district	Number of producers	Ore treated <sup>2</sup>	Total gold recovered	Average ounces per ton recovered	Employees	Salaries and wages paid	Cost of fuel, electricity and process supplies
	No.	Tons	Fine ounces		No.	\$	\$
1950							
Porcupine.....	16	4,582,185	1,100,093	.24	7,063	20,714,637	10,013,774
Kirkland Lake.....	8	1,320,949	448,391	.34	2,948	8,169,677	3,210,275
Larder Lake.....	2	1,903,733	341,081	.18	1,069	3,039,920	1,653,243
Matachewan.....	2	564,816	50,048	.09	281	760,416	675,665
Sudbury.....	1	157,948	36,930	.23	249	672,983	407,284
Thunder Bay.....	6	627,771	131,413	.21	1,010	2,892,516	1,351,158
Rainy River and Kenora.....							
Patricia.....	10	1,144,500	336,793	.29	1,727	4,963,411	2,487,769
Total.....	45	10,301,902	2,444,754	.24	14,347	41,213,560	19,799,168
1951							
Porcupine.....	16	4,397,816	1,062,951	.24	7,472	22,839,455	10,352,507
Kirkland Lake.....	8	1,211,485	454,986	.38	3,150	9,657,297	3,250,365
Larder Lake.....	2	1,926,655	352,135	.18	1,041	3,306,150	1,766,519
Matachewan.....	2	566,346	41,984	.07	267	795,705	637,086
Sudbury.....	1	88,736	23,717	.27	191	573,300	376,557
Thunder Bay and Kenora.....	6	634,567	137,328	.22	767	2,493,313	1,360,678
Patricia.....	10	1,158,036	349,404	.30	1,616	5,221,876	2,741,904
Total.....	45	9,983,641	2,422,505	.24	14,504	44,887,096	20,485,616
1952							
Porcupine.....	15	4,601,668	1,163,344	.25	7,065	23,193,774	10,779,648
Kirkland Lake.....	8	1,323,134	417,382	.32	2,711	8,765,850	3,252,968
Larder Lake.....	2	1,829,045	366,046	.20	995	3,338,263	1,729,928
Matachewan.....	2	451,672	40,144	.09	274	958,415	753,366
Sudbury and Algoma.....	4	170,149	41,016	.24	163	489,940	547,187
Thunder Bay.....	5	560,853	120,091	.21	579	1,979,109	1,165,979
Rainy River and Kenora.....							
Patricia.....	10	996,011	321,763	.32	1,396	5,345,825	2,093,517
Total.....	46	9,932,532	2,469,786	.25	13,183	44,071,176	20,322,593

1. Includes employees, etc., for all active properties whether producing or not.

2. Does not include low-grade discarded by sorting, but includes crude ore milled and smelted.



TABLE 19. Ores Mined and Treated by Auriferous Quartz Mining Industry, 1943-1952

Year	Ore hoisted	Ore milled <sup>1</sup>	Crude ore shipped to smelters <sup>2</sup>	Low-grade sorted out	Tailings re-treated	Gold recovered as bullion	Gold in crude ore shipped	Gold in concentrates, slag, etc., shipped
	Tons					Fine ounces		
1943 .....	12,853,610	12,206,518	268,334	361,522	29,716	2,869,635	36,429	109,055
1944 .....	10,790,495	10,330,899	205,379	234,820	18,233	2,300,090	26,535	103,946
1945 .....	9,780,555	9,437,796	177,208	136,328	—	2,068,910	27,019	109,487
1946 .....	10,712,615	10,306,720	146,075	229,237	—	2,289,647	19,532	71,819
1947 .....	11,632,841	11,296,610	146,469	205,250	1,376	2,590,589	19,001	109,826
1948 .....	13,630,705	13,110,271	224,123	224,374	537	2,934,160	29,143	114,378
1949 .....	15,999,866	15,374,803	243,137	184,373	112	3,423,303	34,405	143,274
1950 .....	16,980,027	16,297,461	315,390	206,797	—	3,630,358	46,202	98,804
1951 .....	16,548,264	15,907,335	311,324	171,137	—	3,572,655	41,549	84,812
1952 .....	16,496,218	15,991,130	307,464	145,999	312	3,757,513	41,943	72,285

1 + 2 = Total crude ore treated.

TABLE 20. Ores Mined and Milled, Crude Bullion Recovered, and Crude Bullion and Concentrates Shipped in the Auriferous Quartz Mining Industry, 1952

	Nova Scotia	Quebec	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
Number of producing mines .....	1	19	46	3	11	5	85
Ore mined..... tons	—	4,813,647	10,032,125	738,681	505,020	406,745	16,496,218
Material discarded (sorted) .....	—	73,978	31,846	40,175	—	—	145,999
Ore milled (ground, etc.) .....	—	4,413,033	9,932,320	734,619	505,020	406,138	15,991,130
Tailings re-treated .....	—	—	312	—	—	—	312
Gold content of ores, slags, residues and concentrates shipped:							
To foreign smelters .....	—	—	—	—	67,652	—	67,652
To Canadian smelters .....	—	41,887	3,654	797	238	—	46,576
Bullion bars shipped:							
Gold content .....	1	730,345	2,581,364	118,214	195,625	247,160	3,872,709
Silver content .....	1	167,311	382,962	13,623	36,302	59,578	659,776
Content of bullion bars produced:							
Gold .....	1	730,868	2,465,467	118,214	195,625	247,338	3,757,513
Silver .....	1	167,034	406,504	13,623	36,302	59,191	682,654
Gold value .....	34	25,370,221	65,887,828	4,144,824	6,668,587	8,449,950	130,521,444
Silver value .....	1	128,700	335,204	11,295	30,184	48,886	564,269
Value of ores, concentrates, slags and residues sold (shipped) .....	—	1,422,416	126,919	29,226	2,331,782	—	3,910,343
Total gross value of production ....	34	26,931,337	86,349,951	4,185,345	9,030,553	8,498,836	134,996,056
Value of fuel, electricity and process supplies used, also freight on shipments, marketing, smelter and refinery charges .....	30	7,727,891	21,133,861	1,431,220	2,622,593	1,996,955	34,912,350
Net value of production .....	4	19,203,446	65,216,090	2,754,125	6,407,960	6,501,881	100,083,506

1. Not recorded.



TABLE 21. Ores, Concentrates, Slags, etc., Shipped to Smelters from Canadian Gold Mines, 1943-1952

Year	Ores		Concentrates		Slags, residues, precipitates	
	Tons	Gold content-fine ounces	Tons	Gold content-fine ounces	Tons	Gold content-fine ounces
<b>To CANADIAN PLANTS</b>						
1943.....	268,334	36,429	4,490	12,335	311	2,069
1944.....	205,379	26,535	4,835	11,900	143	1,858
1945.....	177,099	26,834	5,474	13,903	647	1,832
1946.....	146,075	19,532	5,155	10,646	314	2,359
1947.....	146,469	19,001	2,538	5,313	296	1,961
1948.....	223,834	28,997	630	2,192	248	2,860
1949.....	243,121	34,114	325	1,196	253	3,690
1950.....	294,387	45,215	—	—	153	5,220
1951.....	296,341	41,398	—	9	349	7,245
1952.....	298,207	41,908	20	241	91	4,427
<b>To FOREIGN PLANTS</b>						
1943.....	—	—	20,615	59,949	40	34,704
1944.....	—	—	20,755	54,233	73	35,955
1945.....	109	185	19,596	49,193	47	44,559
1946.....	—	—	11,969	49,164	25	9,650
1947.....	—	—	25,765	67,929	32	34,572
1948.....	289	6,400	24,446	64,531	36	44,795
1949.....	16	291	25,331	69,935	29	34,048
1950.....	51	987	20,471	53,811	15	39,773
1951.....	34	151	14,303	37,360	29	40,126
1952.....	1	35	9,125	24,085	20	43,532

TABLE 22. Shipments from Auriferous Quartz Mines, 1951 and 1952

	Quantity	Total gross metal content					
		Gold	Silver	Copper	Lead	Zinc	Other
	Tons	Ounces			Pounds		
<b>1951</b>							
<b>To Canadian smelters:</b>							
Gold ore.....	296,341	41,398	72	—	169	793	—
Gold concentrates.....	—	9	1	—	—	—	—
Slags, precipitates, residues.....	349	7,245	11,481	9,871	—	—	—
<b>To foreign smelters:</b>							
Gold ore.....	34	151	79	—	—	—	—
Gold concentrates.....	14,303	37,360	7,250	146,112	—	—	—
Slags, precipitates, etc.,.....	29	40,126	3,019	—	—	—	—
Arsenical material.....	268	72	—	—	—	—	225 <sup>1</sup>
<b>Total.....</b>	<b>311,324</b>	<b>126,361</b>	<b>21,902</b>	<b>155,983</b>	<b>169</b>	<b>793</b>	<b>—</b>
<b>1952</b>							
<b>To Canadian smelters:</b>							
Gold ore.....	298,207	41,908	45	386	—	111	—
Gold concentrates.....	20	241	373	—	—	—	—
Slags, precipitates, residues.....	90	3,545	5,875	1,322	8,231	—	—
<b>To foreign smelters:</b>							
Gold concentrates.....	9,125	24,085	6,230	192,252	—	—	—
Slags, preecipitates, residues.....	21	44,414	115	—	—	—	—
Gold ore.....	1	35	50	—	—	—	—
<b>Total.....</b>	<b>307,464</b>	<b>114,228</b>	<b>12,688</b>	<b>193,960</b>	<b>8,231</b>	<b>111</b>	<b>—</b>

1. Tons of arsenious oxide.

## MINERAL STATISTICS

**TABLE 23. Certain Data Relating to the Production of Gold by the Entire Auriferous Quartz Mining Industry, 1943-1952 (Averages)**

Year	Average ounces of gold produced per wage-earner	Cost of fuel and electricity per ounce of gold produced	Cost of wages per ounce of gold produced	Cost of explosives and other process supplies used, per ounce of gold produced	Cost of freight and smelter refinery treatment on ores and bullion shipped, per ounce of gold produced	Taxes per ounce of gold produced	Total of specified costs
	Ounces	\$	\$	\$	\$	\$	\$
1943.....	177	2.12	11.47	4.24	0.69	4.89	23.41
1944.....	159	2.43	12.81	4.60	0.81	4.15	24.80
1945.....	140	2.45	14.08	5.09	0.74	3.74	26.10
1946.....	122	2.63	16.77	6.05	0.59	3.08	29.12
1947.....	132	2.62	17.28	6.56	0.52	1.93	28.91
1948.....	151	2.27	16.82	6.35	0.57	1.47	27.48
1949.....	176	2.05	15.03	6.52	0.68	1.73	26.01
1950.....	186	2.08	14.83	6.55	0.69	2.08	26.23
1951.....	193	2.11	15.60	7.21	0.59	2.19	27.70
1952.....	209	1.96	15.19	6.60	0.45	1.84	26.05

Note. The data contained in the foregoing table have been compiled from reports received from both producing and non-producing (exploring and developing) operators in the auriferous quartz mining industry. The trends should not be interpreted as entirely reflecting operations of producing mines only, but rather as indices of change in the industry as a whole. For data relating to producers only, see Table 24.

**TABLE 24. Certain Data (Averages) Relating to the Total Production of Gold by Producers Only, in the Auriferous Quartz Mining Industry, 1943-1952**

Year	Average ounces of gold produced per wage-earner	Cost of fuel and electricity per ounce of gold produced	Cost of wages per ounce of gold produced	Cost of explosives and other process supplies used, per ounce of gold produced	Cost of freight and smelter refinery treatment on ores and bullion shipped, per ounce of gold produced	Taxes per ounce of gold produced	Total of specified costs
	Ounces	\$	\$	\$	\$	\$	\$
1943.....	177	2.12	11.42	4.23	0.69	4.89	23.35
1944.....	163	2.41	12.59	4.57	0.81	4.12	24.50
1945.....	151	2.34	13.17	4.97	0.74	3.68	24.90
1946.....	141	2.35	14.38	5.69	0.59	2.99	26.00
1947.....	148	2.29	15.20	6.10	0.52	1.86	25.97
1948.....	159	2.14	16.00	6.20	0.57	1.41	26.32
1949.....	179	2.02	14.83	6.45	0.68	1.71	25.69
1950.....	191	2.04	14.50	6.46	0.69	2.06	25.75
1951.....	197	2.07	15.31	7.16	0.59	2.17	27.30
1952.....	212	1.93	14.97	6.47	0.46	1.82	25.65

**TABLE 25. Gold and Silver Content of Bullion Produced and of Ores, Concentrates, etc., Shipped, With Average Grade of Ore Shipped and Ore Milled at Auriferous Quartz Mines, and the Average Price of Gold and Silver in Canadian Funds, 1943-1952**

Year	Tonnage treated <sup>1,3</sup>	Gold content <sup>2</sup>	Silver content <sup>2</sup>	Ounces of fine gold per ton	Ounces of fine silver per ton	Average price of gold	Average price of silver
		Fine ounces				\$ per oz.	
1943.....	12,474,852	3,015,119	1,399,778	.24	.11	38.50	0.452
1944.....	10,536,278	2,430,571	906,788	.23	.09	38.50	0.430
1945.....	9,615,004	2,205,416	1,205,147	.23	.13	38.50	0.47
1946.....	10,452,775	2,380,998	1,025,619	.23	.10	36.75	0.836
1947.....	11,443,079	2,719,416	845,749	.24	.07	35.00	0.72
1948.....	13,334,931	3,077,681	1,044,912	.23	.08	35.00	0.75
1949.....	15,617,940	3,566,577	682,569	.23	.04	36.00	0.743
1950.....	16,297,461	3,775,364	715,991	.23	.04	38.05	0.808
1951.....	15,907,335	3,699,016	658,719	.22	.04	36.85	0.945
1952.....	16,289,337	3,871,741	695,342	.24	.04	34.27	0.835

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

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

3. Material discarded by sorting not included.

TABLE 26. Specified Costs per Ton of Ore Milled at Certain of the Principal Auriferous Quartz Mines, 1952

Name of mine	Development and exploration <sup>1</sup>	Mining	Milling	General <sup>2</sup>	Total before depreciation and taxes	Depreciation	Taxes	Total costs
Dollars								
<b>QUEBEC:</b>								
Barnat Mines Ltd.	1.04	2.51	1.02	1.03	5.60	—	0.18	5.78
Bellevue Quebec Mines Ltd.	0.85	7.06	1.66	0.27	9.84	0.28	0.21	10.33
Beattie-Duquesne Mines Ltd.	0.132	2.329	0.972	0.451	3.884	—	0.020	3.904
Bevcourt Gold Mines Ltd.	0.574	1.586	1.099	1.168	4.427	—	—	4.427
Canadian Malartic Gold Mines Ltd.	0.443	1.398	0.712	0.372	2.925	0.178	0.062	3.165
Donald Mines Ltd.	0.636	3.882	1.732	0.656	6.897	0.968	0.976	8.841
East Malartic Mines Ltd.	0.582	2.966	0.778	0.448	4.774	0.920	0.115	5.809
Elder Mines Ltd.	0.089	2.666	1.289	0.635	4.679	0.678	—	5.357
Lamaque Mining Co. Ltd.	1.05	3.43	0.96	0.15	5.59	0.32	0.29	6.20
New Senator Rouyn Ltd.	0.52	2.97	0.89	0.13	4.51	0.29	0.04	4.84
O'Brien Gold Mines Ltd.	1.19	7.82	2.21	2.97	14.19	0.24	0.01	14.44
Sigma Mines (Quebec) Ltd.	1.117	3.012	0.790	0.494	5.413	0.160	0.248	5.821
Stadacona Mines (1944) Ltd.	1.07	1.97	0.94	1.05	5.03	0.68	0.05	5.76
<b>ONTARIO:</b>								
<i>Porcupine District</i>								
Aunor Gold Mines Ltd.	1.41	7.68	1.44	1.03	11.56	0.89	0.59	13.04
Bonwhit Mines Ltd.	0.91	2.61	1.05	1.25	5.82	—	—	5.82
Brouhan Reef Mines Ltd.	1.62	3.42	1.07	1.52	7.63	0.77	0.06	8.46
Buffalo Ankerite Gold Mines Ltd.	0.737	4.061	1.414	0.567	6.779	0.227	0.001	7.007
Coniarum Mines Ltd.	1.88	4.75	1.13	1.46	9.22	0.13	0.09	9.44
Hallnor Mines Ltd.	0.95	4.33	1.51	1.06	7.85	0.10	2.23	10.18
Hollinger Consolidated (Timmins)	0.599	5.481	1.030	1.481	8.591	0.276	0.471	9.338
Hollinger Consolidated (Ross)	0.772	2.982	2.141	0.999	6.894	0.143	0.018	7.055
McIntyre Porcupine Mines Ltd.	1.10	6.39	1.11	0.20	8.80	0.12	0.86	9.78
Pamour Porcupine Mines Ltd.	0.66	1.92	0.68	0.30	3.56	0.06	0.03	3.65
Preston East Dome Mines Ltd.	2.192	5.248	1.065	0.677	9.182	0.230	0.109	9.521
<i>Kirkland Lake District</i>								
Macassa Mines Ltd.	1.316	6.965	1.498	0.863	10.642	0.236	0.090	10.968
Tack-Hughes Gold Mines Ltd.	0.65	3.32	1.26	0.43	5.66	0.02	0.05	5.73
Toburn Gold Mines Ltd.	0.88	7.21	2.60	2.74	13.43	—	—	13.43
Upper Canada Mines Ltd.	2.14	3.92	1.22	1.03	8.31	0.49	0.06	8.86
Wright-Hargreaves Mines Ltd.	3	7.779	1.459	2.156	11.394	0.111	0.931	12.436
<i>Larder Lake District</i>								
Chesterville Mines Ltd.	—	1.84	1.11	0.40	3.35	—	—	—
Kerr Addison Gold Mines Ltd.	0.94	1.56	0.79	0.27	3.56	0.46	1.32	5.34
<i>Matatchewan District</i>								
Matchewan Consolidated Mines Ltd.	—	1.441	0.869	1.147	3.457	0.160	0.164	3.781
Hollinger Consolidated (Young Davidson)	0.065	1.926	0.800	0.385	3.176	0.025	0.071	3.130
<i>Thunder Bay District</i>								
Leitch Gold Mines Ltd.	3.09	12.46	4.41	0.26	20.22	1.48	—	—
Little Long Lac Gold Mines Ltd.	0.21	5.38	1.81	1.45	8.85	0.10	0.02	8.97
MacLeod-Cockshutt Gold Mines Ltd.	0.436	2.035	1.159	0.753	4.383	0.311	0.062	4.756
<i>Patricia District</i>								
Campbell Red Lake Mines Ltd.	1.881	3.054	2.250	0.970	8.155	2.427	0.235	10.817
Cochonour Willans Gold Mines Ltd.	5.686	8.885	4.528	3.011	22.110	3.527	0.946	26.583
Hasaga Gold Mines Ltd.	0.778	2.375	1.111	1.086	5.350	0.897	—	6.247
Madsen Red Lake Gold Mines Ltd.	1.961	2.593	1.148	0.74	6.442	0.59	0.30	7.332
McKenzie Red Lake Gold Mines Ltd.	1.884	4.440	1.662	1.393	9.560	0.803	—	10.363
New Dickenson Mines Ltd.	1.09	4.08	2.22	2.73	10.12	2.57	0.19	12.88
Pickle Crow Gold Mines Ltd.	1.146	6.092	1.725	1.357	10.32	0.592	0.712	11.624
Starratt Olsen Gold Mines Ltd.	0.812	2.273	1.390	0.280	4.755	2.110	—	6.865
<b>BRITISH COLUMBIA:</b>								
Bralorne Mines Ltd.	1.99	6.74	1.20	2.75	12.68	0.77	—	13.45
Cariboo Gold Quartz Mining Co. Ltd.	3.01	8.91	2.82	0.49	15.23	—	—	15.23
Island Mountain Mines Co. Ltd.	3.75	9.41	2.85	0.13	16.14	—	—	16.14
Pioneer Gold Mines of B.C. Ltd.	0.21	11.28	2.83	1.40	15.72	0.70	0.20	16.62
<b>NORTHWEST TERRITORIES:</b>								
Consolidated Mining & Smelting Co.	2.01	7.01	4.33	2.64	15.99	—	—	15.99
Consolidated Discovery Yellowknife Mines Ltd.	5.45	8.29	4.79	7.90	26.43	7.07	—	33.50
Giant Yellowknife Gold Mines Ltd.	3.22	4.09	4.28	3.37	14.96	7.81	—	22.77

1. Exclusive of outside exploration.

2. Marketing, head office, etc. (exclusive of taxes).

3. Included in mining costs.



TABLE 27. Milling Capacity of Operating Canadian Gold Mines, 1943-1952

Year	Nova Scotia	Quebec	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
Tons of 2,000 pounds per 24 hours							
1943	280	13,304	32,555	753	2,845	510	50,249
1944	180	13,059	30,710	550	2,650	66	47,215
1945	187	12,600	30,457	550	2,740	417	46,951
1946	172	12,035	30,370	550	3,052	417	46,596
1947	50	13,010	29,430	550	3,235	467	46,742
1948	—	12,395	29,990	700	2,550	1,150	46,785
1949	25	13,460	33,150	2,700	2,690	1,135	53,160
1950	—	12,400	33,175	2,700	2,125	785	51,185
1951	—	12,825	33,998	2,695	1,950	1,105	52,573
1952	—	13,600	33,099	2,550	1,650	1,380	52,279

TABLE 28. Employees and Earnings in the Entire Auriferous Quartz Mining Industry, 1951 and 1952

Province	Number of employees					Earnings		
	Administrative and office		Workmen		Total	Administrative and office	Workmen	Total
	Male	Female	Male	Female				
1951						\$	\$	\$
Nova Scotia .....	—	—	1	—	1	—	500	500
Quebec .....	482	34	4,364	22	4,902	1,962,981	12,422,615	14,385,596
Ontario .....	1,969	120	12,384	31	14,504	7,739,928	37,147,168	44,887,096
Manitoba .....	74	14	487	16	591	340,943	1,547,651	1,888,594
British Columbia .....	138	20	1,117	16	1,291	508,821	3,436,885	3,945,706
Northwest Territories .....	114	6	717	—	837	475,672	3,156,367	3,632,039
Canada .....	2,777	194	19,070	85	22,126	11,028,345	57,711,186	68,739,531
1952								
Nova Scotia .....	—	—	2	—	2	—	2,500	2,500
Quebec .....	484	37	4,209	23	4,753	2,098,295	12,932,978	15,031,273
Ontario .....	1,202	115	11,924	28	13,269	6,528,195	37,873,938	44,402,133
Manitoba .....	61	14	416	14	505	332,079	1,436,916	1,768,995
British Columbia .....	115	19	1,202	18	1,354	455,881	3,589,491	4,045,372
Northwest Territories .....	143	13	709	9	874	778,952	2,975,603	3,754,555
Canada .....	2,005	198	18,462	92	20,757	10,193,402	58,811,426	69,004,828
						1951		1952
Man-hours worked:								
Administration and office .....						7,214,356		5,004,901
Workmen .....						45,010,367		43,218,353
Total .....						52,224,723		48,223,254

Note. In addition to the above there were 162 in 1950 and 231 in 1951 administration and office employees at head offices or any other places in Canada, except at mines or mills; their salaries and wages totalled \$778,275 in 1950 and \$1,022,089 in 1951.

TABLE 29. Workmen, by Months, in the Entire Auriferous Quartz Mining Industry, 1948-1952

Month	1948	1949	1950	1951	1952
Number					
January	20,867	20,237	20,388	20,181	19,304
February	20,559	20,058	20,295	19,726	19,172
March	20,387	19,993	20,163	19,547	18,980
April	20,211	19,651	20,050	19,120	18,710
May	20,203	19,993	20,163	18,568	18,557
June	20,530	20,100	20,564	18,479	18,471
July	20,637	20,173	20,294	18,387	18,484
August	20,312	20,292	19,981	18,453	18,179
September	20,031	20,490	19,878	17,987	18,197
October	20,276	20,667	20,192	18,596	18,393
November	20,464	20,764	20,297	18,837	18,181
December	20,315	20,361	20,025	18,482	17,750

TABLE 30. Workmen in Producing Lode Gold Mines, by Provinces, 1951 and 1952

Month	Quebec		Ontario		British Columbia		Other districts and provinces		Canada	
	1951	1952	1951	1952	1951	1952	1951	1952	1951	1952
	Number									
January .....	4,344	4,219	12,954	12,278	1,227	1,283	1,275	1,287	19,800	19,067
February .....	4,304	4,211	12,817	12,212	1,173	1,247	1,256	1,240	19,350	18,910
March .....	4,212	4,186	12,642	12,124	1,133	1,233	1,193	1,177	19,180	18,720
April .....	4,106	4,131	12,464	12,028	1,011	1,168	1,171	1,131	18,752	18,458
May .....	3,993	3,958	11,923	11,930	1,049	1,194	1,160	1,130	18,125	18,212
June .....	3,957	3,928	11,886	11,902	1,040	1,189	1,165	1,129	18,048	18,148
July .....	4,027	3,897	11,655	11,860	1,098	1,252	1,208	1,138	17,988	18,147
August .....	4,112	3,917	11,646	11,617	1,146	1,222	1,195	1,085	18,099	17,841
September .....	3,993	3,948	11,397	11,640	1,130	1,193	1,164	1,108	17,684	17,889
October .....	4,198	3,996	11,761	11,687	1,144	1,194	1,230	1,170	18,333	18,047
November .....	4,342	4,018	11,830	11,658	1,152	1,174	1,277	1,103	18,601	17,953
December .....	4,203	3,882	11,648	11,547	1,175	1,209	1,279	1,065	18,305	17,703

TABLE 31. Classification of Workmen Employed in Entire Auriferous Quartz Mining Industry, 1951 and 1952

Province	1951				1952			
	Mine			Mill	Mine			Mill
	Surface		Under-ground		Surface		Under-ground	
	Male	Female	Male	Male	Male	Female	Male	Male
	Number							
Nova Scotia .....	1	—	—	—	2	—	—	—
Quebec .....	1,073	22	2,921	370	1,034	23	2,816	359
Ontario .....	3,159	31	8,158	1,067	3,023	28	7,864	1,037
Manitoba .....	137	16	297	53	117	14	250	49
British Columbia .....	243	16	745	129	245	18	827	130
Northwest Territories .....	254	—	383	80	239	9	389	81
Canada .....	4,867	85	12,504	1,699	4,660	92	12,146	1,656

TABLE 32. Cost of Prospecting Conducted by Canadian Auriferous Quartz Mining Companies, 1951 and 1952

Province in which prospecting was conducted <sup>1</sup>	By Nova Scotia and Quebec companies <sup>2</sup>	By Ontario companies <sup>2</sup>	By Manitoba companies <sup>2</sup>	By British Columbia companies <sup>2</sup>	By Yukon and Northwest Territories companies	Total
	Dollars					
1951						
Newfoundland .....	—	400	—	—	—	400
Nova Scotia .....	50	—	—	—	—	50
New Brunswick .....	33,307	1,366	—	—	—	34,673
Quebec .....	839,847	139,457	—	—	—	979,304
Ontario .....	409,274	575,664	—	500	—	985,868
Manitoba .....	2,013	—	430	—	—	30,507
Saskatchewan .....	77,453	47	28,494	—	—	77,500
British Columbia .....	74,564	600	—	217,280	—	292,424
Northwest Territories .....	739	—	—	—	12,539	13,278
Yukon .....	—	—	—	—	—	—
Total Canada .....	1,437,247	717,534	28,924	217,760	—	2,414,004
1952						
Newfoundland .....	125,010	498	—	—	—	125,508
Nova Scotia .....	310	2,893	—	—	—	3,203
New Brunswick .....	36,205	150	1,639	—	—	38,194
Quebec .....	774,980	186,130	—	—	—	961,110
Ontario .....	232,813	691,577	2,009	—	—	926,399
Manitoba .....	1,400	34,407	26,727	—	—	62,534
Saskatchewan .....	42,945	2,791	—	—	—	45,736
British Columbia .....	42,936	49,878	—	285,132	—	377,946
Northwest Territories .....	12,211	929	—	—	—	13,140
Yukon .....	8,861	3,350	—	—	—	13,211
Total Canada .....	1,278,671	972,603	30,573	285,132	—	2,566,981

1. Prospecting includes the search for new mineral deposits on the surface, and preliminary exploration.

2. Province in which the companies' principal operations are conducted.

TABLE 33. Drilling Completed on Auriferous Quartz Deposits, 1950-1952

	Footage drilled <sup>1</sup>		
	1950	1951	1952
Diamond drilling for exploration (testing):			
By companies with their own equipment and personnel .....	525,482	902,947	879,654
By contractors .....	2,261,988	1,405,308	1,299,238
Other drilling:			
Diamond drilling for breaking rock or ore:			
By companies with their own equipment and personnel .....	272,281	238,769	804,879
By contractors .....	580,514	378,230	342,951
Drilling by percussion and other machines <sup>2</sup> .....	36,580,081	32,746,954	35,750,544

1. Subject to revision as drilling was not reported by some new companies.

2. This is not complete as some companies do not compile these data.

Note. The value of diamonds in all forms (bits, etc.) purchased by gold mining companies in 1952 totalled \$407,119.

TABLE 34. Specified Taxes Paid by Active Canadian Auriferous Quartz Mines, 1951 and 1952, by Provinces <sup>1</sup>

Nature of tax	Nova Scotia	Quebec	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
	Dollars						
1951							
Dominion Income Tax, including tax on non-operating revenue .....	—	519,281	4,463,765	160,812	140,710	—	5,284,568
Provincial taxes .....	30	329,232	1,684,085	60,078	66,201	30,808	2,170,434
Municipal taxes .....	—	243,411	293,292	12,451	27,799	61,337	638,290
Total .....	30	1,091,924	6,441,142	233,341	234,710	92,145	8,093,292
1952							
Dominion Income Tax, including tax on non-operating revenue .....	—	389,295	4,340,801	106,986	2,871	—	4,839,953
Provincial taxes .....	20	268,237	1,280,042	30,909	28,815	18,006	1,626,029
Municipal taxes .....	—	266,133	294,490	12,451	31,622	48,821	653,517
Total .....	20	923,665	5,915,333	150,346	63,308	66,827	7,119,499

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

TABLE 35. Certain Specified Expenditures Made by Auriferous Quartz Mining Companies, 1950-1952

Province and year	Workmen's compensation	Silicosis assessment	Unemployment insurance	Aggregate cost of all supplies purchased	Aggregate cost of plant and equipment purchased	Cost of buildings, machinery and equipment, erected or installed
	Dollars					
Nova Scotia:						
1950 .....	—	—	—	—	—	—
1951 .....	—	—	—	—	—	—
1952 .....	—	—	—	—	—	20
Quebec:						
1950 .....	473,158	739	112,708	9,883,566	1,159,285	1,628,789
1951 .....	578,308	1,253	115,215	10,283,038	1,183,294	2,608,768
1952 .....	467,677	954	122,470	10,143,316	1,753,248	2,173,542



TABLE 35. Certain Specified Expenditures Made by Auriferous Quartz Mining Companies, 1950-1952 — Concluded

Province and year	Workmen's compensation	Silicosis assessment	Unemployment insurance	Aggregate cost of all supplies purchased	Aggregate cost of plant and equipment purchased	Cost of buildings, machinery and equipment, erected or installed
Dollars						
Ontario:						
1950 .....	1,217,855	620,405	319,773	25,488,447	2,229,828	3,793,710
1951 .....	1,144,597	884,409	348,625	26,136,870	1,798,247	3,069,373
1952 .....	1,113,969	884,000	339,057	24,654,788	1,492,149	3,100,314
Manitoba:						
1950 .....	52,749	3,604	15,063	1,990,148	24,668	335,312
1951 .....	48,799	—	14,325	1,804,342	28,026	134,376
1952 .....	38,561	—	12,716	1,523,533	18,255	105,326
Saskatchewan:						
1950 .....	—	—	—	—	—	—
1951 .....	—	—	—	—	—	—
1952 .....	—	—	—	—	—	—
British Columbia:						
1950 .....	176,912	81,040	25,611	1,829,916	716,721	375,176
1951 .....	145,224	80,140	31,391	478,964	2,177,309	206,269
1952 .....	143,554	78,320	26,806	2,148,516	120,273	197,974
Northwest Territories:						
1950 .....	55,575	200	11,729	3,032,541	1,068,383	1,569,871
1951 .....	61,842	200	14,155	3,240,175	1,031,743	1,742,468
1952 .....	70,576	—	11,691	3,228,871	950,196	988,933
Total Canada:						
1950 .....	1,976,249	705,988	484,884	42,224,618	5,198,885	7,702,852
1951 .....	1,978,770	766,002	523,711	41,943,389	6,218,619	7,761,269
1952 .....	1,834,337	763,274	512,740	41,699,024	4,334,301	6,566,109

## THE COPPER-GOLD-SILVER MINING INDUSTRY

The mining of "copper-gold-silver" ores in Canada during 1952 was confined to the provinces of Quebec, Ontario, Manitoba, Saskatchewan and British Columbia. It is to be noted that in addition to the copper recovered from ores of this type there is a very large quantity of the metal obtained in the smelting and refining of the copper-nickel ores mined in the Sudbury area of Ontario; important quantities of gold and silver are also being extracted from these copper-nickel ores. The lead-zinc-copper ores of Newfoundland also contribute to the production of copper, gold and silver. General statistics relating to labor, etc., in the nickel-copper or the silver-lead-zinc industry are not included in this report.

Some firms which were formerly included in this industry have been reclassified to the silver-lead-zinc mining industry. Their production of zinc had a greater value than the value of copper.

During 1952 the gross value of crude ore, concentrates, etc., shipped from the mines and mills in this industry to smelters was estimated at \$115,667,391. Fuel cost \$986,206 and 356,896,544 k.w.h. of electricity was purchased for \$1,372,714. Process supplies, freight and treatment charges

amounted to \$32,639,654. Employees numbered 7,210 to whom \$26,711,225 were distributed as salaries and wages.

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

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

TABLE 36. Principal Statistics<sup>1</sup> of the Copper-Gold-Silver Mining Industry 1943-1952

Year	No. of active operators <sup>2</sup>	No. of operating plants or mines <sup>2</sup>	Number of employees <sup>2</sup>	Salaries and wages <sup>2</sup>	Cost of fuel and electricity <sup>2</sup>	Value of ores and concentrates shipped by mines <sup>3</sup>
				\$	\$	\$
1943 .....	20	22	5,748	11,806,827	1,426,710	43,840,679
1944 .....	23	26	5,175	10,710,071	1,402,243	38,198,039
1945 .....	38	41	4,658	9,663,612	1,175,916	38,165,269
1946 .....	42	44	4,958	10,244,487	1,152,925	37,433,982
1947 .....	31	32	5,220	13,149,093	1,361,890	52,173,584
1948 .....	35	37	6,401	17,919,526	1,706,874	85,652,206
1949 .....	30	33	7,395	21,776,150	1,630,715	74,591,660
1950 .....	55	56	7,554	23,489,366	2,204,694	83,181,924
1951 .....	80	82	6,223	21,545,660	2,085,608	92,331,995
1952 .....	88	98	7,210	26,711,225	2,358,920	80,668,817

1. Data relating to idle mines and smelters not included.

2. Not including data relating to any Rossland properties leased by Consolidated Mining and Smelting Co. of Canada, Ltd.

3. The cost of fuel, purchased electricity and process supplies was deducted; however, values are less freight and estimated treatment charges. Also, value of ores and concentrates shipped from mines to smelters operated by the same companies are often of a nominal or conjectural nature.

TABLE 37. Shipments from Copper-Gold-Silver Mines, 1951 and 1952

	Quantity	Value	Total metal content as determined by settlement assay <sup>1</sup>				
			Gold	Silver	Copper	Sulphur	Zinc
	Tons	\$	Fine ounces		lb.	Tons	lb.
<b>1951</b>							
<b>TO CANADIAN PLANTS</b>							
Ores .....	558,976	11,265,005	103,701	241,118	26,209,129	—	—
Copper concentrates .....	730,058	66,972,614	332,682	3,260,539	202,632,950	—	2,374,988
Zinc concentrates .....	152,801	18,298,432	5,650	205,430	1,608,280	—	139,146,773
Iron pyrite concentrates .....	186,069	504,837	—	—	—	89,295	—
Slags, residues, bullion and gold precipitates .....	8,201	1,836,788	26,461	202,011	911,146	—	4,150,140
<b>TO FOREIGN PLANTS:</b>							
Ores .....	23,368	330,333	4,273	14,545	631,343	—	—
Copper concentrates .....	54,012	8,199,902	7,966	172,331	25,975,988	—	—
Zinc concentrates .....	77,639	15,363,901	—	—	—	—	79,825,445
Iron pyrite concentrates .....	148,931	390,416	—	—	—	72,194	—
Precipitates .....	—	—	—	—	—	—	—
<b>Total .....</b>	<b>1,940,053</b>	<b>123,162,228</b>	<b>480,733</b>	<b>4,095,974</b>	<b>257,968,836</b>	<b>161,489</b>	<b>225,497,346</b>
Value of process supplies, etc. <sup>2</sup> .....	—	30,830,233	—	—	—	—	—
<b>Net value .....</b>	<b>—</b>	<b>92,331,995</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>1952</b>							
<b>TO CANADIAN PLANTS:</b>							
Ores .....	609,046	11,301,425	106,581	255,501	29,611,656	—	796,202
Copper concentrates .....	560,642	53,248,184	286,268	2,034,205	154,090,061	—	27,928,017
Zinc concentrates .....	125,454	10,915,350	6,061	172,718	2,270,142	—	13,149,510
Iron pyrite concentrates .....	114,530	380,881	—	—	—	46,113	—
Lead concentrates .....	359	170,431	2,854	5,729	—	453,951 <sup>3</sup>	15,978
Slags, residues, bullion and gold precipitates .....	81,355	5,085,569	36,004	440,183	3,335,634	—	41,596,071
<b>TO FOREIGN PLANTS:</b>							
Ores .....	7,875	93,463	123	1,022	208,006	2,962	—
Copper concentrates .....	86,091	15,297,728	15,744	260,994	38,500,578	—	—
Zinc concentrates .....	108,209	17,472,467	—	—	—	—	112,893,648
Iron pyrite concentrates .....	394,164	1,527,633	—	—	—	188,718	—
Precipitates .....	458	174,260	—	—	528,212	—	—
<b>Total .....</b>	<b>2,088,183</b>	<b>115,667,391</b>	<b>453,635</b>	<b>3,170,352</b>	<b>228,544,289</b>	<b>237,793</b>	<b>196,379,426</b>
Value of process supplies, etc. <sup>2</sup> .....	—	34,998,574	—	—	—	—	—
<b>Net value .....</b>	<b>—</b>	<b>80,668,817</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

1. In addition, cadmium, tellurium and selenium are recovered from these ores.

2. Includes freight on ore shipments, smelter charges and purchased electricity.

3. Lead content.

TABLE 38. Ores Mined, Milled, and Concentrates Produced by the Copper-Gold-Silver Mining Industry, 1943-1952

Year	Ore mined	Ore milled	Copper concentrates produced <sup>1</sup>	Zinc concentrates produced	Iron pyrite concentrates produced	Net value of all estimated mine and mill shipments <sup>2,3</sup>
			Tons			\$
1943 .....	8,251,579	7,482,831	914,360	315,670	292,007	50,774,104
1944 .....	7,395,608	6,873,542	870,726	276,737	257,423	44,770,863
1945 .....	5,914,580	5,441,121	730,724	229,980	228,618	44,258,780
1946 .....	5,009,490	4,606,503	661,554	219,985	201,873	42,609,415
1947 .....	5,462,233	5,140,376	662,088	185,630	178,263	58,198,612
1948 .....	6,496,499	6,061,132	724,066	232,131	184,069	91,403,196
1949 .....	8,245,402	7,682,382	839,609	250,595	250,476	83,721,820
1950 .....	8,758,607	8,159,756	830,438	313,161	322,117	94,727,261
1951 .....	7,380,966	6,799,064	792,830	231,674	375,969	102,675,422
1952 .....	7,773,341	7,128,795	700,537	233,046	460,753	93,945,201

1. Exclusive of copper precipitate.

2. Gross value reported by operators less only freight and treatment costs deducted by Dominion Bureau of Statistics.

3. Includes the value of any cyanide precipitate shipped from mills to smelters.

TABLE 39. Employees and Their Earnings in the Copper-Gold-Silver Mining Industry, 1951 and 1952

Province	Number of employees					Earnings		
	Administrative and office		Workmen		Total	Administrative and office	Workmen	Total
	Male	Female	Male	Female				
1951						\$	\$	\$
Newfoundland .....	1	—	7	—	8	3,500	14,045	17,545
Quebec .....	254	36	2,530	10	2,830	1,082,799	7,249,770	8,332,569
Ontario .....	354	95	1,966	18	2,433	1,921,643	8,115,500	9,947,163
Manitoba .....								
Saskatchewan .....								
British Columbia .....	80	16	822	14	932	392,900	2,702,557	3,095,457
Northwest Territories .....	3	—	16	1	20	7,111	55,835	62,948
Canada .....	692	147	5,341	43	6,223	3,407,953	18,137,707	21,545,660
1952								
Newfoundland .....	2	1	12	—	15	11,381	19,965	31,346
Quebec .....	335	37	2,845	11	3,228	1,246,856	9,120,507	10,367,363
Ontario .....	358	92	1,700	10	2,160	2,033,674	7,205,566	9,239,240
Manitoba .....								
Saskatchewan .....								
British Columbia .....	174	30	1,550	53	1,807	1,073,451	5,999,825	7,073,276
Canada .....	869	160	6,107	74	7,210	4,365,362	22,345,863	26,711,225
						1951	1952	
Man-hours worked:								
Administrative and office .....						2,470,594	2,322,638	
Workmen .....						12,678,794	13,829,884	
Total .....						15,149,388	16,152,522	

Note. In addition to the above there were 156 in 1951 and 109 in 1952, administrative and office employees at head offices in other places in Canada than at mines or mills; their salaries and wages totalled \$665,397 in 1951 and \$476,275 in 1952.



TABLE 40. Classification of Workmen Employed in the Copper-Gold-Silver Mining Industry, by Provinces, 1950-1952

	Surface		Underground	Mill		Total	
	Male	Female	Male	Male	Female	Male	Female
	Number						
1952							
Quebec and Newfoundland .....	872	9	1,668	317	2	2,857	11
Ontario .....	14	—	21	6	—	41	—
Manitoba .....	510	6	471	120	—	1,101	6
Saskatchewan .....	280	4	223	55	—	558	4
British Columbia .....	266	30	879	405	23	1,550	53
Canada, 1952 .....	1,942	49	3,262	903	25	6,107	74
Canada, 1951 .....	1,721	42	2,875	745	1	5,341	43
Canada, 1950 .....	1,913	59	3,674	988	15	6,575	74

TABLE 41. Specified Expenditures by the Copper-Gold-Silver Mining Industry, 1950-1952

	1950	1951	1952
	Dollars		
workmen's compensation .....	841,003	780,576	928,403
Silicosis assessment .....	101,786	66,680	135,921
Unemployment insurance .....	193,554	194,210	217,979
Aggregate cost of all supplies purchased .....	17,074,795	19,015,080	25,371,497
Aggregate cost of plant and equipment purchased .....	4,900,575	4,685,169	4,039,615
Cost of buildings, machinery and equipment erected or installed during year .....	6,872,991	5,935,960	6,311,778

TABLE 42. Taxes Paid by the Copper-Gold-Silver Mining Industry, 1950-1952

	1950	1951	1952
	Dollars		
Dominion income tax, including tax on non-operating revenue .....	8,842,345	9,951,479	15,644,444
Provincial tax .....	3,690,872	4,730,728	4,668,117
Municipal tax .....	1,204,810	875,195	748,065
Grand total taxes paid .....	13,738,027	15,557,402	21,060,626

TABLE 43. Cost of Prospecting Conducted by the Copper-Gold-Silver Mining Industry, by Provinces, 1951 and 1952

Conducted in-	1951	1952	Conducted in-	1951	1952
	Dollars			Dollars	
Newfoundland .....	20,304	51,618	Saskatchewan .....	23,505	64,398
Nova Scotia .....	3,011	1,401	Alberta .....	—	598
New Brunswick .....	54,303	67,504	British Columbia.....	171,557	388,887
Quebec .....	670,597	752,793	Yukon .....	3,971	28,302
Ontario .....	194,597	375,990	Northwest Territories .....	207	8,280
Manitoba .....	52,494	436	<b>Total .....</b>	<b>1,194,546</b>	<b>1,740,207</b>

TABLE 44. Drilling Completed on Copper-Gold-Silver Deposits, 1950-1952

	Footage drilled		
	1950	1951	1952
Diamond drilling for exploration (testing only):			
By mining companies with their own personnel and equipment .....	170,307	143,477	257,170
By diamond drilling contractors .....	480,253	809,507	741,591
Other diamond drilling:			
Blast hole diamond drilling:			
By mining companies with their own personnel and equipment .....	1,922,830	1,465,673	1,282,144
By diamond drilling contractors .....	88,001	91,023	38,650
Drilling by percussion or other machines <sup>1</sup> .....	9,095,279	8,150,836	7,011,206

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

Value of diamonds, in all forms (stones, bits, etc.) purchased during the year, \$503,612.

TABLE 45. Copper Production (Recoverable) According to Nature of Ore, and by Provinces, 1950-1952

Province and year	From copper-gold-silver ores	From nickel-copper ores	From gold and other ores	Total
	Pounds			
1950:				
Newfoundland .....	—	—	6,442,825	6,442,825
Quebec .....	145,253,590	—	527,781	145,781,371
Ontario .....	—	234,394,012	26,532	234,420,544
Manitoba .....	41,634,697	—	—	41,634,697
Saskatchewan .....	57,963,500	—	—	57,963,500
British Columbia .....	40,289,361	—	1,885,998	42,175,359
<b>Total Canada .....</b>	<b>285,141,148</b>	<b>234,394,012</b>	<b>8,883,136</b>	<b>528,418,296</b>
1951:				
Newfoundland .....	—	—	5,798,674	5,798,674
Quebec .....	136,127,919	—	1,603,987	137,731,906
Ontario .....	—	257,279,486	337,320	257,616,806
Manitoba .....	31,677,863	—	—	31,677,863
Saskatchewan .....	63,250,444	—	—	63,250,444
British Columbia .....	26,573,735	—	17,290,227	43,863,962
Northwest Territories .....	—	—	1,934	1,934
<b>Total Canada .....</b>	<b>257,629,961</b>	<b>257,279,486</b>	<b>25,032,142</b>	<b>539,941,589</b>
1952:				
Newfoundland .....	—	—	5,918,288	5,918,288
Nova Scotia .....	—	—	766,165	766,165
Quebec .....	135,497,889	—	2,193,813	137,691,702
Ontario .....	428,625	250,200,034	56,516	250,685,175
Manitoba .....	18,748,439	—	—	18,748,439
Saskatchewan .....	60,687,296	—	—	60,687,296
British Columbia .....	38,274,883	—	3,296,249	41,571,132
Northwest Territories .....	—	—	6,900	6,900
<b>Total Canada .....</b>	<b>253,637,132</b>	<b>250,200,034</b>	<b>12,237,931</b>	<b>516,075,097</b>

TABLE 46. Production of Refined Copper<sup>1</sup>, 1943-1952

Year	Short tons	Year	Short tons
1943 .....	251,495	1948 .....	221,275
1944 .....	256,244	1949 .....	226,083
1945 .....	237,457	1950 .....	238,204
1946 .....	204,016	1951 .....	245,466
1947 .....	202,427	1952 .....	196,320

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

TABLE 47. Silver Production According to Nature of Ores, by Provinces, 1952

Province	Crude placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead-zinc ores	Silver-cobalt and other ores	Total
Ounces							
Newfoundland .....	—	—	—	—	638,524	—	638,524
Nova Scotia .....	—	7	—	—	91,879	—	91,886
Quebec .....	1	168,577	1,569,504	—	2,798,165	—	4,536,247
Ontario .....	—	408,731	2,917	1,231,047	3,348	4,845,081	6,491,124
Manitoba .....	—	13,623	398,526	—	—	—	412,149
Saskatchewan .....	—	—	1,179,514	—	—	—	1,179,514
Alberta .....	10	—	—	—	—	—	10
British Columbia .....	2,253	40,612	273,806	—	7,468,293	—	7,784,964
Northwest Territories .....	—	59,191	—	—	67	—	59,258
Yukon .....	16,315	—	—	—	4,012,236	—	4,028,551
Canada .....	18,579	690,741	3,424,267	1,231,047	15,012,512	4,845,081	25,222,227

TABLE 48. Selenium and Tellurium Recovered from Canadian Ores, 1943-1952

Year	From copper-gold-silver ores		From nickel-copper ores		Total	
	Selenium	Tellurium	Selenium	Tellurium	Selenium	Tellurium
Pounds						
1943 .....	292,013	—	82,000	8,600	374,013	8,600
1944 .....	233,592	761	65,000	9,900	298,592	10,661
1945 .....	211,187	484	168,000	—	379,187	484
1946 .....	251,261	1,648	270,606	14,200	521,867	15,848
1947 .....	354,684	3,025	146,406	6,169	501,090	9,194
1948 .....	281,905	2,686	108,989	8,739	390,894	11,425
1949 .....	231,383	2,966	86,842	8,726	318,225	11,692
1950 .....	198,264	4,065	63,709	6,010	261,973	10,075
1951 .....	300,194	2,612	82,409	6,301	382,603	8,913
1952 .....	160,452	325	81,578	5,710	242,030	6,035



TABLE 49. Zinc Production (Recoverable) According to Nature of Ore, and by Provinces, 1950-1952

Year and province	Recovered from copper-gold-silver ores	Recovered from silver-lead-zinc and other ores	Total
Pounds			
1950:			
Newfoundland .....	—	61,077,614	61,077,614
Quebec .....	117,275,049	54,363,269	171,638,318
Manitoba .....	42,905,613	—	42,905,613
Saskatchewan .....	54,981,653	—	54,981,653
British Columbia .....	18,473,209	271,871,018	290,344,227
Yukon .....	—	5,507,173	5,507,173
Canada .....	233,635,524	392,819,074	626,454,598
1951:			
Newfoundland .....	—	56,938,689	56,938,689
Quebec .....	67,403,205	105,322,618	172,725,823
Manitoba .....	30,221,016	—	30,221,016
Saskatchewan .....	79,148,484	—	79,148,484
British Columbia .....	—	337,511,324	337,511,324
Yukon .....	—	5,678,999	5,678,999
Canada .....	176,772,705	505,451,630	682,224,335
1952:			
Newfoundland .....	—	61,033,650	61,033,650
Nova Scotia .....	—	8,816,141	8,816,141
Quebec .....	71,247,048	118,550,013	189,797,061
Ontario .....	—	744,920	744,920
Manitoba .....	30,185,026	—	30,185,026
Saskatchewan .....	93,381,238	—	93,381,238
British Columbia .....	24,333,160	324,242,781	348,575,941
Yukon .....	—	11,070,178	11,070,178
Canada .....	219,146,472	524,457,683	743,604,155

TABLE 50. Refined Zinc Produced, from all Sources, 1943-1952

Year	Short tons	Year	Short tons
1943 .....	206,510	1948 .....	196,575
1944 .....	168,518	1949 .....	208,045
1945 .....	182,267	1950 .....	204,367
1946 .....	185,683	1951 .....	218,578
1947 .....	178,264	1952 .....	222,200

TABLE 51. Cadmium Recovered from Canadian Ores, 1943-1952

Year	From copper- gold-silver ores	From silver- lead-zinc ores	Total	Year	From copper- gold-silver ores	From silver- lead-zinc ores	Total
Pounds				Pounds			
1943 .....	187,938	598,673	786,611	1948 .....	148,864	617,226	786,090
1944 .....	140,560	386,410	526,970	1949 .....	181,092	665,449	846,541
1945 .....	135,632	510,432	846,064	1950 .....	141,456	706,950	848,406
1946 .....	166,333	636,315	802,648	1951 .....	147,168	1,179,752	1,326,220
1947 .....	172,896	545,838	718,534	1952 .....	205,911	742,676	948,587

TABLE 52. Average Annual Metal Prices, in Canadian Dollars, 1943-1952

Year	Gold	Silver	Copper	Lead	Zinc
	Per troy ounce	Per troy ounce	Per pound	Per pound	Per pound
Dollars					
1943 .....	38.50	0.4525	0.117	0.037	0.040
1944 .....	38.50	0.43	0.12	0.045	0.043
1945 .....	38.50	0.47	0.1255	0.05	0.0644
1946 .....	36.75	0.836	0.128	0.067	0.078
1947 .....	35.00	0.72	0.2039	0.1367	0.1123
1948 .....	35.00	0.75	0.2235	0.1804	0.1393
1949 .....	36.00	0.7425	0.1997	0.158	0.1325
1950 .....	38.05	0.8082	0.2342	0.1445	0.1565
1951 .....	36.85	0.9455	0.277	0.184	0.199
1952 .....	34.27	0.8352	0.2854	0.1619	0.1748

## TRANSACTIONS IN GOLD BULLION AT THE ROYAL CANADIAN MINT

(From the Annual Report of the Royal Canadian Mint)

Five thousand six hundred and two deposits of gold bullion were received at the Mint during the year from Canadian Mining Companies, the Assay Office, Royal Canadian Mint, Vancouver, B.C. and sundry persons. The gross weight of the deposits amounted to 4,981,971 ounces containing by assay 3,953,158 ounces fine gold and 625,601 ounces fine silver. (Note: The variation between these figures and those set out in the table of origin below is due to shipments from the Assay Office, Vancouver,

being received at the Royal Canadian Mint, Ottawa, the month following deposit and payment at Vancouver). The receipts show a decrease as compared with the year 1951 of 174 in the number of deposits, gross weight 264,788 ounces, gold content 216,322 ounces and fine silver 25,403 ounces.

The net value paid by cheque to depositors was \$94,319,844.64. In addition the amount of fine gold issued to depositors was 1,094,702.594 ounces.

Details of the origin of the bullion deposited at Vancouver and Ottawa during the year 1952 are shown in the following table:

From Canadian mines and refineries	Gross weight	Fine gold	Fine silver
	Ounces	Ounces	Ounces
Ontario .....	3,048,235.971	2,521,444.981	315,081.77
Quebec .....	1,074,289.075	765,409.648	189,304.70
British Columbia .....	229,291.835	181,147.784	29,815.04
Manitoba .....	161,409.000	132,566.983	13,816.21
Yukon Territory .....	97,952.780	78,518.648	16,315.01
Nova Scotia .....	8,850	1,308	6.65
North West Territories .....	328,367.535	243,038.999	58,632.34
Alberta .....	149,025	112,511	10.22
<b>Total from Canadian mines and refineries .....</b>	<b>4,939,704.071</b>	<b>3,922,240.862</b>	<b>622,981.94</b>
From jewellery and scrap .....	27,817.955	14,941.195	2,511.15
<b>Grand total .....</b>	<b>4,967,522.026</b>	<b>3,937,182.057</b>	<b>625,493.09</b>

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

	Ounces fine
7,249 Trade Bars transferred to Exchange Fund Account of Minister of Finance and held in safe-keeping by Bank of Canada .....	2,900,578.893
Depositors—granulated and bars .....	1,094,702.594
Sales to Manufacturers—granulated .....	26,352.213
Proof Plate for assay purposes .....	4.250
Medals, etc. ....	5.250
Sweep .....	9,420.115
<b>Total .....</b>	<b>4,031,063.315</b>

This total shows a decrease of 136,422.559 ounces fine as compared with the year 1951.

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, 1952

Year	Gold received		Gold issued	
	Gross weight	Fine gold	Coin	Bullion
	Ounces	Ounces	Ounces fine	Ounces fine
1908 to 1942 .....	89,153,382.588	71,957,169.906	383,319.096	71,487,749.974
1943 .....	4,456,437.559	3,616,958.628	—	3,645,739.964
1944 .....	3,537,734.636	2,862,048.659	—	2,829,755.000
1945 .....	3,102,991.020	2,503,416.913	—	2,499,163.674
1946 .....	3,271,246.445	2,652,244.865	—	2,665,964.763
1947 .....	3,559,496.703	2,868,469.014	—	2,859,084.218
1948 .....	4,252,389.454	3,401,991.441	—	3,405,073.335
1949 .....	4,941,749.248	3,925,617.709	—	3,865,296.377
1950 .....	5,485,956.751	4,422,968.129	—	4,347,961.898
1951 .....	5,246,758.942	4,169,479.513	—	4,167,485.874
1952 .....	4,848,048.381	3,953,158.154	—	4,031,068.071
<b>Total .....</b>	<b>131,856,191.727</b>	<b>106,333,522.931</b>	<b>383,319.096</b>	<b>105,804,343.148</b>



**Regulations Prescribing the Circumstances Under Which and the Conditions Upon Which Gold Will be Accepted at the Royal Canadian Mint for Custom Refining and Storing**

1. These Regulations may be cited as The Mint Custom Refining and Storing Regulations (1952).
2. (1) In these Regulations,
  - (a) "designated gold" means gold produced from the mine of a producer in the year 1952, on or after the elected date;
  - (b) "elected date" means, with respect to a producer, the first day of January, April, July or October in the year 1952, as the producer designates, with the approval of the Minister, in making his election in Form A;
  - (c) "Gold Bullion Regulations" means the Regulations for the Receipt of Gold Bullion at the Royal Canadian Mint, Ottawa, established by Order in Council P.C. 461 of March 7, 1934;
  - (d) "Minister" means the Minister of Finance;
  - (e) "Mint" means the Royal Canadian Mint;
  - (f) "producer" means a person or corporation engaged in producing gold from a mine who has made an election by instrument in Form A delivered to the Minister;
  - (g) "processor" means a person or corporation engaged in the business of processing gold in Canada who makes application and gives an undertaking in Form B, and whose application has been accepted by the Minister and who has not subsequently been disqualified under section eight.

(2) The Minister will not approve a date as the elected date in respect of a producer unless the producer has, before the expiry of thirty days from that date (or where the date to be elected is January 1, 1952, before the fifteenth day of February, 1952) delivered to the Minister an election in Form A designating that date as the elected date.
3. (1) Upon application by a producer in Form C the Minister may accept designated gold at the Mint for assaying, refining and storing on behalf of the producer.

(2) Where a producer, in accordance with a licence issued under the Gold Export Act,

  - (a) ships designated gold from Canada to be smelted or refined and subsequently sells the refined gold outside Canada, or
  - (b) sells designated gold to a smelter or refiner outside Canada,

at a price that, in the opinion of the Minister does not exceed the Mint price, the Minister may, upon being satisfied that the gold has been so sold, sell to the producer an amount of gold equivalent to the amount so sold and, subject to section four, store it at the Mint for the producer.
4. (1) Gold accepted at the Mint for assaying, refining or storing under these Regulations is so accepted subject to the condition that it will be released in the form of fine gold (.995 fine or better), only upon application in accordance with these Regulations made by or on behalf of the producer,
  - (a) for sale and delivery to a processor in granulated form, in an amount that, in the opinion of the Minister, does not exceed the normal requirements of the processor for the ensuing thirty days, and if, in the opinion of the Minister, it will be used for bona fide industrial purposes in Canada;
  - (b) for delivery to a processor to be processed and exported on behalf of the producer, in accordance with a licence issued under the Gold Export Act, in the form of gold of 22 karat or lower fineness, or
  - (c) for sale to His Majesty at the Mint at the official price for the purchase of gold by His Majesty at the Mint for the week in which the sale is made,

and for no other purpose.

(2) Where gold is released from the Mint to a producer, pursuant to these Regulations, it will be delivered, at the Mint Counter at Ottawa, to a consignee designated by the producer, or to a carrier or other agent acting on behalf of the consignee.

5. (1) An application by a producer for sale and delivery of gold in accordance with paragraph (a) of section four shall be in Form D, and shall be accompanied by an offer to purchase gold in Form E.

(2) An application by a producer for delivery of gold in accordance with paragraph (b) of section four shall be in Form F and shall be accompanied by a copy of the offer to purchase the gold and the original or a photostatic copy of the Import licence issued by the appropriate authority in the country of destination in respect of the proposed transaction, if such a licence is required.

6. The following Mint service charges are payable by a producer:

- (a) where gold is melted, assayed or refined for the producer at the Mint, an amount in respect of the melting, assaying or refining calculated at the rates then prescribed therefor by the Gold Bullion Regulations in respect of deposits of gold at the Mint, payable when billed;
- (b) one cent for every thirty days or fraction thereof (including the day on which the gold is received at the Mint but excluding the day on which it is shipped from the Mint) for each ounce of gold stored for the producer at the Mint, payable at the time of application for release of the gold or when billed, whichever is the earlier;
- (c) ten cents for each ounce of gold packed for shipment at the Mint on the direction of the producer, payable at the time of application for release of the gold; and
- (d) a handling charge of twenty cents for each ounce of gold sold to His Majesty, payable at the time of sale.

7. The silver content of the gold bullion delivered to the Mint by a producer under these Regulations may be purchased by His Majesty at the official price for the purchase of silver by His Majesty at the Mint for the week in which it is so purchased.

8. (1) Where a person or corporation engaged in the business of processing gold in Canada makes application and gives an undertaking in Form B, the Minister may accept the application if he is satisfied that the applicant is engaged in a *bona fide* enterprise for the processing of gold and will carry out the undertaking in good faith.

(2) Where the Minister has reason to believe that a processor has failed to carry out any part of the undertaking given by him in Form B, or that gold sold to a processor has been dealt with in a manner contrary to the undertaking, he may, by notice in writing delivered to the processor, disqualify the processor.

9. Notwithstanding anything in these Regulations,

- (a) the Minister may designate a corporation that has adequate facilities for refining and storing gold as his agent to perform the services that would otherwise be performed at the Mint for a producer under these Regulations, and may enter into such agreements as he deems necessary for the purpose; and
- (b) services will be performed by an agent designated under this section only upon such terms and conditions as the Minister prescribes and the Minister may, in his discretion, for the purposes of this section, fix such charges in lieu of those prescribed by section six and make such other financial arrangements as he deems advisable.

10. The Minister may, where he considers it necessary or advisable for the purpose of administering these Regulations, amend the forms and prescribe additional forms.



## Directory of Firms in the Gold Mining Industry, 1952

Name	Head or executive office address	Location
(a) Alluvial Gold Mining Industry		
<b>British Columbia:</b>		
Anderson, Adolf .....	Likely .....	Quesnel
Andersen, M.A. ....	Wells .....	Wells
Asserbind & Johnson .....	Keithley Creek .....	Quesnel
Baker, George S. ....	Keithley Creek .....	Quesnel
Bedrock Placers Ltd. ....	816 Northern Life Tower, Seattle, Washington, U.S.A. ....	Stanley
Bridge River Placers .....	Lillooet .....	Bridge River
Burrard Placers Ltd. (N.P.L.) .....	555 Burrard St., Vancouver I. ....	Quesnel
Enterprise Placers .....	Atlin .....	Atlin
Falconer, D.R. ....	Spruce Creek, Atlin .....	Atlin
Fredericks, F. ....	Likely .....	Quesnel
Hind, John .....	Vanwinkle .....	Cariboo
Ketch Placers .....	Wells .....	Cariboo
Holland, John .....	Wells .....	Cariboo
Holm & Petersen .....	Barkerville .....	Cariboo
Hougen, Dr. O.R. ....	601, Birks Bldg., Vancouver .....	Cariboo
Ivanic, S., & Partners .....	Atlin .....	Spruce Creek
Lahaye, Leo .....	Likely .....	Quesnel
Lawless Creek Mining Co. Ltd. ....	Likely .....	Quesnel
Loper, George H. ....	Germansen Landing .....	Omineca
Lowhee Gulch Placers .....	P.O. Box 6, Barkerville .....	Cariboo
Lyne, C.J. ....	Williams Lake .....	Quesnel
Mattson, T.R. ....	Atlin .....	Birch Creek
Noland Mines Ltd. ....	525 Seymour St., Vancouver .....	Atlin
Noland, J.W. ....	Atlin .....	Atlin
Piccolo Bros. ....	Atlin .....	Atlin
Quesnel Forks Placers Inc. ....	416 Virginia St., Seattle, Washington, U.S.A. ....	Quesnel
Sullivan, L.P. ....	300 Cranbrook St., Cranbrook .....	Fort Steele
Swanson & Watt .....	Atlin .....	Atlin
Zenda Gold Mining (Canada) Ltd. ....	P.O. Box 1340, Quesnel .....	Cariboo
<b>Yukon:</b>		
Ballarat Mines Ltd. ....	Dawson .....	Ballarat Creek
Boutillier, D.F. & H.C. ....	Dawson .....	Bonanza Creek
Boutillier, H. & H. ....	Box 437, Dawson .....	Bonanza Creek
Bratsberg, B. ....	1682 MacGowan Ave., N. Vancouver .....	Dawson
Bradbury & Cooper .....	Glacier .....	Dawson
Bromner, John .....	Dawson .....	Last Chance Creek
Clear Creek Placers Ltd. ....	Dawson .....	Clear Creek
Coulombe, A. & A. ....	Dawson .....	Ballarat Creek
Feichtinger, J. ....	Glacier Creek .....	Dawson
Gould, J.A. & R.S. ....	P.O. Box 328, Dawson .....	Dawson
Kluane Dredging Co. Ltd. ....	Box 762, Whitehorse .....	Burwash Creek
Lundin, John E. ....	Box 923, Dawson .....	Quartz Creek
Morgan, W.F. ....	Dawson .....	Caribou Creek
Pamuchina, P. ....	Bonanza Creek .....	Bonanza Creek
Pontaletta, P. ....	Dawson .....	Dawson
Strugar, J. ....	Dawson .....	Dawson
Troberg, R.E. ....	Dawson .....	Bonanza Creek
Yukon Consolidated Gold Corporation .....	1919, Marine Bldg., Vancouver, B.C. ....	Dawson
Yukon Gold Placers Ltd. ....	Dawson .....	Henderson Creek
Yukon Placer Mining Co. ....	535 Homer St., Vancouver, B.C. ....	Glacier Creek
<b>Quebec:</b>		
Winget, C.M., & Vernet, E. ....	75 Main St., Lennoxville .....	Ditton River
(b) Auriferous Quartz Mining Industry		
<b>Nova Scotia:</b>		
K.V. Mines .....	Liverpool .....	Liverpool
Smith, A.J. ....	East Chezzetcook .....	Lake Catcha
<b>Quebec:</b>		
Abex Mines Ltd. ....	330 Bay St., Toronto, Ontario .....	Duhamel Twp.
Abitibi Ventures Ltd. ....	506 est. rue Ste-Catherine, Montréal .....	Carpentier
Abitibi Metals Mines Ltd. ....	1197 Val d'Or, Quebec .....	Pascalis
Adnar Mines Ltd. ....	427 St. James St. W., Montreal .....	Gamache Twp.
Alta Mines Ltd. ....	132 ouest, rue St-Jacques, Montréal .....	Le Tac Twp.
Ausable Mines Ltd. ....	1434 ouest, rue Ste-Catherine Montréal .....	Lac-aux-Sables
Anglo-Rouyn Mines Ltd. ....	44 King St. W., Toronto, Ontario .....	Temiscamingue, Quebec
Aumaque Gold Mines Ltd. ....	307-100 Adelaide St. W., Toronto, Ontario .....	Bourlamaque Twp.
Barnat Mines Ltd. ....	56 Sparks St., Ottawa, Ontario .....	Malartic, Quebec
Barymin Company Ltd. ....	67 Yonge St., Toronto, Ontario .....	Waswanipi Lake
Belle-Chibougamau Mines, Ltd. ....	50 King St. W., Toronto, Ontario .....	Chibougamau
Bagamac Mines Ltd. ....	Oak Ridges, Ontario .....	Rouyn
Bellefleur Quebec Mines, Ltd. ....	25 King St. W., Toronto I, Ontario .....	Bellefleur
Bellefleur Mud Lake Mines Ltd. ....	11 Jordan St., Toronto, Ontario .....	Guillet Twp.
Beattie-Duquesne Mines Ltd. ....	Duparquet .....	Duparquet
Belmont Mining & Exploration Co., Ltd. ....	1121 Sherbrooke St. W., Montreal .....	McKenzie Twp.
Bordulac Mines Ltd. ....	11 King St. W., Toronto, Ontario .....	Labyrinth Lake
Bevcourt Gold Mines, Ltd. ....	360 St. James St. W., Montreal, Quebec .....	Bourlamaque
Canadian Malartic Gold Mines Ltd. ....	25 King St. W., Toronto I, Ontario .....	Malartic
Centremaque Gold Mines Ltd. ....	637 Craig St. W., Montreal .....	Bourlamaque Twp.
Commonwealth Exploration Ltd. ....	355 St. James St. W., Montreal .....	Hauy Twp.
Cropey-Gordon Mines Ltd. ....	145 Yonge St., Toronto, Ontario .....	Apalca Lake
Consolidated Astoria Mines Ltd. ....	62 Richmond St. W., Toronto, Ontario .....	Rouyn
Consolidated Central Cadillac Mines Ltd. ....	507 Place d'Armes, Montreal .....	Cadillac

## Directory of Firms in the Gold Mining Industry, 1952 - Continued

Name	Head or executive office address	Location
(b) Auriferous Quartz Mining Industry - Continued		
<b>Quebec - concluded:</b>		
D'Arçon Mines Ltd.	11 King St. W., Toronto, Ontario	Bourlamaque Twp.
Dome Exploration Company (Quebec) Ltd.	Bourlamaque, Quebec	Bourlamaque
Dominion Gulf Company	P.O. Drawer 2038, Pittsburgh 30, Pa., U.S.A.	Beauchastel Twp.
Donalda Mines Ltd.	625 Burnside St., Montreal, Quebec	Temiskaming, Quebec
Duvex Oils & Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Duvernay Twp.
East Dalquier Gold Mines Ltd.	637 Craig St. W., Montreal	Dalquier
East Malartic Mines Ltd.	355 St. James St. W., Montreal, Quebec	Fournière Twp.
Eider Mines, Ltd.	86 Bloor St. W., Toronto, Ontario	Noranda Twp.
Eldora Gold Mines Ltd.	62 Richmond St. W., Toronto, Ontario	Rouyn
Eplett, G.S., Mining & Development Co. Ltd.	New Liskeard, Ontario	Beauchastel
Payolle-Antoine	175, rue Noranda ouest, Rouyn, Quebec	Dasserat
Gothic Gold Miners Ltd.	80 Richmond St. W., Suite A, Toronto, Ontario	Duvernay Twp.
Hazeur Chibaugama Mines Ltd.	330 Bay St., Toronto, Ontario	Hazeur
Horne Fault Mines Ltd.	Duparquet	Beauchastel
Hosco Gold Mines Ltd.	357 Bay St., Toronto, Ontario	Joannes
Heva Gold Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Joannes Twp.
Inmont Copper Mines	330 Bay St., Toronto, Ontario	Monbray Twp.
Juno Metals Corp.	28 St. James St. W., Montreal	Privat Twp.
Keneco Explorations, (Canada) Ltd.	1010 Ste. Catherine St. W., Montreal 2	Guercheville Twp.
Keyboycon Mines Ltd.	330 Bay St., Toronto, Ontario	Vauquelin Twp.
La Flamme & La Haye	139, rue de Montmorency, Québec	Cranbourne
Lake Wasa Mining Corporation	Arntfield, Quebec	Beauchastel Twp.
Lamaque Mining Co., Ltd.	Bourlamaque, Quebec	Bourlamaque
Lavalie Mines Ltd.	24 King St. W., Toronto, Ontario	Bourlamaque
Lencourt Gold Mines Ltd.	360 James St. W., Montreal	Louvicoeur Twp.
Louvicoeur Goldfields Corporation	100 Adelaide St. W., Toronto, Ontario	Bourlamaque
Malartic Gold Fields Ltd.	355 St. James St. W., Montreal	Fournière Twp.
Marbenor Malartic Mines Ltd.	330 Bay St., Toronto, Ontario	Dubuisson Twp.
Marcotland Mines Ltd.	437 ouest, rue St-Jacques, Montréal	Landrienne
Mariette Mines Ltd.	Amos	Belcourt
McWatters Gold Mines	Halleybury, Ontario	Rouyn Twp.
McIntyre Porcupine Mines, Ltd.	25 King St. W., Toronto 1, Ontario	Lesueur Twp.
Mining Corporation of Canada, The, Ltd.	44 King St. W., Toronto 1, Ontario	Kreighoff Twp.
Montgomery Mining Co. Ltd.	132 St. James St. W., Montreal	Gamache
Nemrod Mining Co., Ltd.	4 East Notre Dame St., Montreal	Louvicoeur
New Goldvue Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Amos, Quebec
New Jersey Zinc Explorations Ltd.	80 St. Peter St., Quebec	Desjardins Twp.
New Sinatar-Rouyn Ltd.	Box 780, Noranda	Noranda
Nubar Mines Limited	330 Bay St., Toronto, Ontario	Souart Twp.
O'Brien Gold Mines, Ltd.	Kewagama, Quebec	Cadillac Twp.
Osisko Lake Mines Ltd.	25 King St. W., Toronto 1, Ontario	Rouyn Twp.
Perron Gold Mines Ltd.	Perron, Quebec	Senneville Twp.
Powell Rouyn Gold Mines Ltd.	Box 200, Noranda, Quebec	Noranda
Quartz Bleu du Saguenay Enrg., Le	B.P. 235, St-Joseph d'Alma	Labarre
Quebec Diversified Mining Corp. Ltd.	2006 Bleury St., Montreal	Barraute
Quebec Explorers	132 St. Jacques, Montreal	Vauquelin Twp.
Quemque Explorers Ltd.	619 St. James St. W., Montreal	Fancamp Twp.
Quesabe Mines Limited	320 Bay St., Toronto, Ontario	Quesabe
Randona Quebec Gold Mines Ltd.	330 Bay St., Toronto, Ontario	Dufresnoy Twp.
Rouandah Gold and Metals Ltd.	100 Adelaide St. W., Toronto, Ontario	Beauchastel Twp.
Royan Gold Fields Ltd.	215 St. James St. W., Montreal	Obalski Twp.
Sigma Mines (Quebec) Ltd.	Bourlamaque, Quebec	Bourlamaque
Siscoe Gold Mines Ltd.	907 Dominion Square Bldg., Montreal	Siscoe Island
South Dufault Mines Ltd.	302 Bay St., Toronto, Ontario	Rouyn Twp.
Stadacona Mines (1944) Ltd.	P.O. Box 390, Rouyn, Quebec	Rouyn
Sullivan Consolidated Mines Ltd.	1604-Aldred Building, Montreal	Dubuisson Twp.
Timmins, N.A. (1938) Ltd.	1010 Canada Cement Bldg., Montreal 2	Montalambert
Titanic Mine Holding Ltd.	215 St. James St. W., Montreal	Merrill Island
Wright-Hargreaves Mines, Ltd.	Canadian Bank of Commerce, Port Erie, Ontario	Gamache
<b>Ontario:</b>		
<b>Porcupine District</b>		
Aunor Gold Mines Ltd.	1600, Royal Bank Building, Toronto	Timmins
Bonwhit Mines Ltd.	1705, Sterling Tower Bldg., 372 Bay St., Toronto	Pamour
Broulan Reef Mines Ltd.	1705, Sterling Tower Bldg., 372 Bay St., Toronto	Whitney Twp.
Buffalo Ankerite Gold Mines Ltd.	Box 533, South Porcupine	Deloro Twp.
Carshaw Porcupine Gold Mines Ltd.	906, Canada Bldg., Windsor	Carman Twp.
Coniaurum Mines Ltd.	25 King St. W., Toronto	Tisdale Twp.
Delnite Mines Ltd.	Box 590, Timmins	Deloro Twp.
Dome Mines Ltd.	South Porcupine	Tisdale Twp.
Hallnor Mines Ltd.	1700 Bank of Nova Scotia Building, Toronto	Whitney Twp.
Hollinger Consolidated Gold Mines Ltd.	Timmins	Hislop Twp.
Hugh-Pam Porcupine Mines Ltd.	50 King St. W., Toronto	Cochrane District
McIntyre Porcupine Mines Ltd.	Schumacher	Schumacher
Midcamp Mines Ltd.	1600, Royal Bank Building, Toronto	Tisdale Twp.
Pamour Porcupine Mines Ltd.	Pamour	Whitney Twp.
Paymaster Consolidated Mines Ltd.	Box 100, South Porcupine	Deloro and Tisdale Twps.
Preston East Dome Mines Ltd.	Box 545, South Porcupine	South Porcupine
<b>Kirkland Lake District</b>		
Kirkland Lake Gold Mining Co. Ltd.	1314, Metropolitan Building, Toronto	Teck Twp.
Lake Shore Mines Ltd.	Kirkland Lake	Kirkland Lake
Macassa Mines Ltd.	85 Richmond St. W., Toronto	Kirkland Lake
Queenston Gold Mines Ltd.	1101 Federal Bldg., Toronto	Dobie
Sylvanite Gold Mines Ltd.	Box 670, Kirkland Lake	Teck Twp.
Teck-Hughes Gold Mines Ltd., The	14 Finkle St., Woodstock	Kirkland Lake
Toburn Gold Mines Ltd.	1809, Royal Bank Building, Toronto	Kirkland Lake
Upper Canada Mines Ltd.	1101, Federal Building, Toronto	Gauthier Twp.
Wright-Hargreaves Mines Ltd.	Port Erie	Kirkland Lake



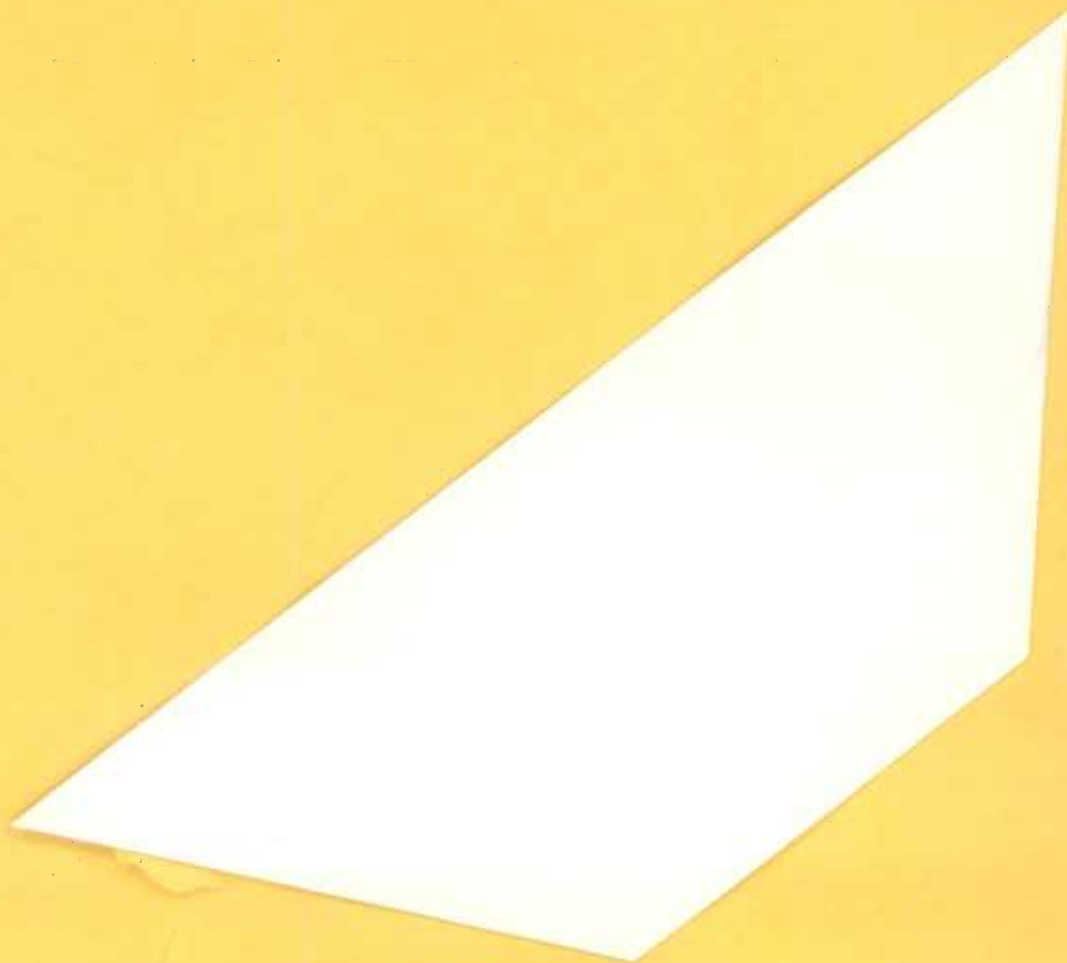
## Directory of Firms in the Gold Mining Industry, 1952 — Continued

Name	Head or executive office address	Location
(b) Auriferous Quartz Mining Industry — Concluded		
<b>Ontario—concluded:</b>		
<b>Larder Lake District</b>		
Cathroy Larder Mines Ltd. ....	171 Yonge St., Toronto .....	McElroy Twp.
Chesterville Mines Ltd. ....	330 Bay St., Toronto .....	McGarry Twp.
Kerr-Addison Gold Mines Ltd. ....	44 King St. W., Toronto .....	McGarry Twp.
<b>Matachewan District</b>		
Hollinger Consolidated Gold Mines Ltd. ....	Timmins .....	Powell Twp.
Matachewan Consolidated Mines Ltd. ....	25 King St. W., Toronto .....	Powell Twp.
<b>Sudbury District</b>		
Curtin Prospecting Syndicate .....	Box 626, Espanola .....	Curtin Twp.
Chelleu Gold Mines Ltd. ....	357 Bay St., Toronto .....	Esther Twp.
New Delhi Mines Ltd. ....	330 Bay St., Toronto, Ontario .....	Delhi Twp.
Ladulama Gold Mines Ltd. ....	330 Bay St., Toronto 1 .....	Leeson Twp.
Renabie Mines Ltd. ....	85 Richmond St. W., Toronto .....	Sudbury
<b>Thunder Bay District</b>		
Leitch Gold Mines Ltd. ....	Beardmore .....	Summers Twp.
Little Long Lac Gold Mines Ltd. ....	25 King St. W., Toronto .....	Errington Twp.
MacLeod-Cockshutt Gold Mines Ltd. ....	357 Bay St., Toronto .....	Geraldton
Magnet Consolidated Mines Ltd. ....	185 Bay St., Toronto .....	Geraldton
New Mosher Long Lac Mines Ltd. ....	67 Yonge St., Toronto .....	Long Lac
Roche Long Lac Gold Mines Ltd. ....	7 King St. W., Toronto .....	Long Lac
Theresa Gold Mines Ltd. ....	Long Lac .....	Theresa
Tombill Gold Mines Ltd. ....	217 Bay St., Toronto 1 .....	Geraldton
<b>Kenora District</b>		
Duport Mining Co. Ltd. ....	25 King St. W., Toronto .....	Shoal Lake
Cone, R.C. ....	Mine Centre .....	Shoal Lake
<b>Patricia District</b>		
Brewis Red Lake Mines Ltd. ....	40 Adelaide St. W., Toronto .....	Balmer Twp.
Campbell Red Lake Mines Ltd. ....	Balmerton .....	Balmer Twp.
Cochenour Willans Gold Mines Ltd. ....	801 Dominion Bank Bldg., Toronto .....	Dome Twp.
Concho Mines Ltd. ....	44 King St. W., Toronto .....	Echo Twp.
Delta Minerals Ltd. ....	145 Yonge St., Toronto .....	Red Lake
Hasaga Gold Mines Ltd. ....	25 King St. W., Toronto .....	Dome Twp.
Headway Red Lake Gold Mines Ltd. ....	67 Yonge St., Toronto .....	Heyson Twp.
Heath Gold Mines Ltd. ....	357 Bay St., Toronto .....	Todd Twp.
Lun-Echo Gold Mines ....	67 Yonge St., Toronto .....	Echo Twp.
McKenzie Red Lake Gold Mines Ltd. ....	McKenzie Island .....	McKenzie Island
Madsen Red Lake Gold Mines Ltd. ....	67 Yonge St., Toronto .....	Heyson Twp.
New Dickenson Mines Ltd. ....	145 Yonge St. W., Toronto .....	Balmer Twp.
New Jason Mines Ltd. ....	7 King St. W., Toronto .....	Casummit Lake
Newlund Mines Ltd. ....	80 King St. W., Toronto .....	Echo Twp.
Pickle Crow Gold Mines, Ltd. ....	Pickle Crow .....	Connell Twp.
Starratt Olsen Gold Mines Ltd. ....	25 King St. W., Toronto .....	Baird Twp.
Windward Gold Mines Ltd. ....	44 King St. W., Toronto .....	Echo Twp.
<b>Manitoba:</b>		
Central Manitoba Mines Ltd. ....	274 Fort St., Winnipeg .....	Hole River
Forty-Four Mines Ltd. ....	237, Curry Bldg., Winnipeg .....	Rice Lake
Howe Sound Exploration Co. Ltd. ....	Snow Lake .....	Snow Lake
Jeep Gold Mine Ltd. ....	237, Curry Bldg., Winnipeg .....	Rice Lake
San Antonio Gold Mines Ltd. ....	237, Curry Bldg., Winnipeg .....	Bissett
<b>British Columbia:</b>		
Alpine Gold Ltd. ....	Box 83, Nelson .....	Sitkum Creek
Bralorne Mines, Ltd. ....	555 Burrard St., Vancouver .....	Bralorne
Cariboo Gold Quartz Mining Co. Ltd. ....	675 W. Hastings St., Vancouver .....	Cariboo
Consolidated Mining & Smelting Co. Ltd. ....	Trail .....	Skeena
Deerhorn Mines Ltd. ....	44 King St. W., Toronto, Ontario .....	Burns Lake
Gem Gold Mines Ltd. ....	1604, Royal Bank Bldg., Vancouver .....	Nanaimo
Golden Contact Mines Ltd. ....	736 Granville St., Vancouver .....	Lillooet
Hovland, John .....	Stewart .....	Portland Canal
Island Mountain Mines Ltd. ....	Wells .....	Cariboo
Kelowna Mines Hedley Ltd. ....	Hedley .....	Osogogo & Slocan
Pioneer Gold Mines of B.C., Ltd. ....	711, Yorkshire Bldg., Vancouver .....	Lillooet
Polaris-Taku Mining Co., Ltd. ....	525 Seymour St., Vancouver .....	Atlin
Providence Mine .....	Greenwood .....	Greenwood
Privateer Mine Ltd. ....	208 Ford Building, Vancouver .....	Zeballos
Sheep Creek Gold Mines Ltd. ....	209, Williams Bldg., Vancouver .....	Nelson
Surf Inlet Consolidated Gold Mines Ltd. ....	615 W. Hastings St., Vancouver .....	Vancouver
Spud Valley Gold Mines .....	525 Seymour St., Vancouver .....	Alberni
Tide Lake Mines .....	Box 58, Stewart .....	Tide Lake
<b>Northwest Territories:</b>		
Akatcho Yellowknife Gold Mines Ltd. ....	25 King St. W., Toronto, Ontario .....	Yellowknife
Consolidated Mining & S. Co. of Canada, Ltd. ....	Trail, British Columbia .....	Yellowknife
Discovery Yellowknife Mines Ltd. ....	19 Richmond St. W., Toronto, Ontario .....	Yellowknife
Giant Yellowknife Gold Mines Ltd. ....	25 King St. W., Toronto, Ontario .....	Yellowknife
Negus Mines Ltd. ....	410, Royal Bank Bldg., Toronto, Ontario .....	Yellowknife

## Directory of Firms in the Gold Mining Industry, 1952 - Concluded

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mining Industry		
<b>Newfoundland:</b>		
Cape Copper Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Gregory River
Pilley's Island Copper-Pyrite Ltd.	38 King St. W., Toronto, Ontario	Pilley's Island
Gullbridge Mines Ltd.	44 King St. W., Toronto, Ontario	Gull Pond
Rambridge Mines Ltd.	44 King St. W., Toronto, Ontario	Baie Verte
<b>Quebec:</b>		
Antoinette Lake Mines Ltd.	11 King St. W., Toronto, Ontario	McCaskill Twp.
Area Mines Ltd.	44 King St. W., Toronto, Ontario	Holland Twp.
Bar-Lan Gold Mines Ltd.	215 St. James St. W., Montreal	
Brompton Corp. Ltd.	New Sherbrooke Hotel, Sherbrooke	Brompton Twp.
Buffalo Canadian Gold Mines Ltd.	44 King St. W., Toronto, Ontario	Rouyn Twp.
Campbell Chibougamau Mines Ltd.	625 Dorchester St. W., Montreal	Chibougamau
Carlson Mines Ltd.	90 Perreault St. E., Rouyn, Quebec	Dufay
Chibougamau Explorers Ltd.	620 Cathcart St. W., Montreal, Quebec	Senneterre
Citra-Lantic Mines Ltd. (N.P.L.)	22 King St., Toronto, Ontario	Barraute Twp.
Continental Copper Mines Ltd.	11 King St. W., Toronto, Ontario	Dufresnoy Twp.
Defor Chibougamau Mines Ltd.	477 St-François-Xavier, Montreal	Obalski
Despina Gold Mines Ltd. (N.P.L.)	79 Wall St., New York, N.Y., U.S.A.	Rouyn Twp.
East Sullivan Mines Ltd.	1604, Aldred Bldg., Montreal	Bourlamaque
Gaspe Copper Mines Ltd. (N.P.L.)	1709, Bank of Nova Scotia Bldg., Toronto, Ontario	Holland Twp.
Glencona Mining Co. Ltd.	132 St. James St. W., Montreal	Rouyn
Holland Gaspe Mines Ltd.	85 Richmond St. W., Toronto, Ontario	Holland Twp.
Inscoc Mines Ltd. (N.P.L.)	355 St. James St. W., Montreal	Dufresnoy
Jaculet Mines Ltd.	85 Richmond St. W., Toronto, Ontario	McKenzie Twp.
Joliet-Quebec Mines Ltd. (N.P.L.)	25 King St. W., Toronto 1, Ontario	Abitibi
Kayrand Mining & Development Co. Ltd.	215 St. James St. W., Montreal	McKenzie Twp.
Keuro Mines Ltd.	1114 Union Ave., Montreal	Cherbourg Twp.
Kerromac Mining Co. Ltd.	132 St. James St., Montreal	La Dauversiere
Lays Mining Corp. Ltd.	1456 St. Mark St., Montreal	Beauchastel
Laurentide (Chibougamau) Mines Ltd.	300 Craig St. W., Montreal	Ely Twp.
Lake Dufault Mines Ltd. (N.P.L.)	Noranda, Quebec	Dufresnoy Twp.
Lyndhurst Mining Co. Ltd.	360 St. James St. W., Montreal	Destor Twp.
Merrill Island Mining Corporation Ltd.	507, Place d'Armes, Montreal	Abitibi
Meston Lake Mines Ltd.	330 Bay St., Toronto, Ontario	Gamache
Miller Copper Mines Ltd.	414 St. James St. W., Montreal	Holland Twp.
New Metairie Mining Co. Ltd.	80 Richmond St. W., Toronto, Ontario	Perron
Noralmac Mines Limited	44 King St. W., Toronto 1, Ontario	Abitibi
Noranda Mines Ltd.	1709, Bank of Nova Scotia Bldg., Toronto, Ontario	Noranda
North Trinity Mining Corporation	P.O. Box 1197, Val d'Or, Quebec	Barraute
Pacemaker Petroleum Ltd.	85 Richmond St. W., Toronto, Ontario	Montgay Twp.
Pantan Mines Ltd.	200 Bay St., Toronto, Ontario	Rouyn Twp.
Opemiska Copper Mines (Quebec) Ltd.	25 King St. W., Toronto 1, Ontario	Chibougamau
Quebec Copper Corporation Ltd.	132 St. James St. W., Montreal	Bolton Twp.
Quebec Diversified Mining Corporation Limited	35 Notre Dame St. W., Montreal	Barraute
Quemont Mining Corporation Limited	44 King St. W., Toronto 1, Ontario	Rouyn Twp.
Rainville Copper Mines Ltd. (N.P.L.)	25 King St. W., Toronto 1, Ontario	Louvicoirt Twp.
Soma Duvernay Gold Mines Ltd.	507, Place d'Armes, Montreal	Canton Duvernay
Strathallan Enterprises Limited	56 Esplanade St., Toronto, Ontario	Inverness
Tache Lake Mines Ltd. (N.P.L.)	132 St. James St. W., Montreal, Quebec	Chibougamau
Touton Mining & Exploration Co.	507, Place d'Armes, Montreal, Quebec	Fabre Twp.
Uddlen Mines Ltd.	330 Bay St., Toronto, Ontario	Fancamp Twp.
Vauze Dufault Mines Ltd.	1112 Star Building, Toronto, Ontario	Dufresnoy Twp.
Waite Amulet Mines, Ltd.	Noranda, Quebec	Dufresnoy
Weedon Pyrite & Copper Corporation	507, Place d'Armes, Montreal, Quebec	Weedon
West Amulet Mines Ltd.	11 King St. W., Toronto, Ontario	Duprat Twp.
<b>Ontario:</b>		
Copper Prince Mines Limited	22 Toronto St., Toronto, Ontario	Falconbridge Twp.
Golden Arrow Mines Limited	67 Yonge St., Toronto, Ontario	Tenigani
Kristina Copper Mines Ltd.	Royal Bank Bldg., Toronto, Ontario	Algoma
Halkin Mines Limited	10 Adelaide St. E., Toronto, Ontario	Clement
New Ryan Lake Mines Limited	Matatchewan, Ontario	Matatchewan
Mining Corporation of Canada Ltd.	44 King St. W., Toronto, Ontario	
<b>Manitoba:</b>		
Cuprus Mines Limited	500, Royal Bank Bldg., Winnipeg, Manitoba	Flin Flon
Fairway Flin Flon Mines Limited	330 Bay St., Toronto, Ontario	Athapapuskow
Hudson Bay Mining & Smelting Company Ltd.	500, Royal Bank Bldg., Winnipeg	Flin Flon
Sherritt-Gordon Mines Ltd.	25 King St. W., Toronto 1, Ontario	Sherridon
Northern Metals Ltd.	217 St. Germaine Ave., Toronto, Ontario	Schist Lake
<b>Saskatchewan:</b>		
Hudson Bay Mining & Smelting Co., Limited	500, Royal Bank Bldg., Winnipeg, Manitoba	Flin Flon
<b>British Columbia:</b>		
Attwood Copper Mines Limited	844 West Hastings St., Vancouver	Greenwood
Britannia Mining & Smelting Co. Ltd.	Britannia Beach	Britannia Beach
Consolidated Mining & Smelting Co. Ltd.	Trail	Jordan River
Columbia Copperfield Mines Ltd.	100 Adelaide St., Toronto, Ontario	Phoenix
Chieftain Exploration Ltd.	441 Seymour St., Vancouver	Sechelt Peninsula
Dodge Copper Mines Ltd.	330 Bay St., Toronto, Ontario	Quadra Island
Granby Consolidated Mining, Smelting & Power Co. Ltd.	675 West Hastings St., Vancouver	Similkameen
Rico Copper Mines Ltd.	1155 W. Pender St., Vancouver	Laidlaw
Vanamo Mines (1948) Ltd.	413 Granville St., Vancouver	Nanaimo
Velvet Leasers	Rossland	Trail Creek
<b>Northwest Territories:</b>		
Tungsten Corporation of Canada Limited	50 King St. W., Toronto, Ontario	Outpost Island





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