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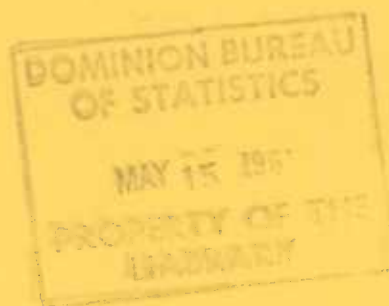
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ANNUAL



CANADA

THE GOLD MINING INDUSTRY 1959



DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division

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THE GOLD MINING INDUSTRY
1959

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SYMBOLS

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

.. figures not available.

... figures not appropriate or not applicable.

— nil or zero.

P preliminary figures.

THE GOLD MINING INDUSTRY

1959

Including: (a) The Placer Gold Mining Industry.
(b) The Gold 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 Placer Gold Mining Industry"; (b) the recovery of lode gold, which is designated "The Gold 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 1959 the production of gold amounted to 4,483,416 troy ounces valued at \$150,508,275 compared with 4,571,347 ounces valued at \$155,334,370 in 1958. 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 60 per cent of the total. Quebec, in second position, produced 22 per cent and Northwest Territories accounted for 9 per cent of the total. The other provinces ranked in the following order: British Columbia, Saskatchewan, Yukon, Manitoba, Newfoundland and Alberta.

The price of gold in Canadian funds averaged \$33.57 per troy ounce. It ranged from \$34.23 per troy ounce in February 1959 to \$33.13 per troy ounce in November. The fluctuations were due to foreign exchange rates. The Royal Canadian Mint purchased gold on the basis of \$(U.S.) 35.00 per troy ounce. The United States dollar was quoted at a discount, throughout the year.

TABLE 1. Production of Gold, Fifty Years, 1910-59

Year	Troy ounces	Value	Year	Troy ounces	Value
		\$			\$
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
1928	1,890,592	39,082,005	1953	4,055,723	139,597,985
1929	1,928,308	39,861,663	1954	4,366,440	148,764,611
1930	2,102,068	43,453,601	1955	4,541,962	156,788,528
1931	2,693,892	58,093,396	1956	4,383,863	151,024,080
1932	3,044,387	71,479,373	1957	4,433,894	148,757,143
1933	2,949,309	84,350,237	1958	4,571,347	155,334,370
1934	2,972,074	102,536,553	1959	4,483,416	150,508,275

TABLE 2. Total (Cumulative) Recorded Production of Specified Metals to December 31, 1959

	Since	Quantity	Value
			\$
Gold	1858	152,692,730	4,796,631,561
Silver	1887	1,201,975,982	787,140,026
Copper	1886	9,141,217	3,439,285,468
Nickel	1889	4,363,303	3,404,414,003
Lead	1887	6,974,088	1,083,421,897
Zinc	1898	...	1,621,469,146
Cobalt	1904	30,325	90,364,879

TABLE 3. Production of Gold from Auriferous Quartz and Base Metal Mines, by Months, 1957-59

	Gold production from base metal mines			Gold production from auriferous quartz mines and placer deposits			Gold production from all types of mines		
	1957	1958	1959	1957	1958	1959	1957	1958	1959
	troy ounces								
January	49,615	48,128	42,191	309,023	330,286	333,895	358,638	378,414	376,086
February	47,811	45,211	45,289	295,015	315,174	312,763	342,826	360,385	358,052
March	55,089	50,244	48,254	320,613	344,003	330,144	375,702	394,247	378,398
April	49,528	49,454	47,618	320,723	335,729	329,177	370,251	385,183	376,795
May	43,279	49,625	47,837	332,626	335,024	332,182	375,907	384,649	380,019
June	46,152	45,521	43,382	313,569	340,289	315,622	359,721	385,810	359,004
July	52,561	46,682	46,150	313,344	335,568	332,860	365,905	382,250	379,010
August	50,938	48,651	45,276	312,863	321,077	304,194	363,801	369,728	349,470
September	48,094	52,076	48,689	327,948	325,946	315,299	376,042	378,022	363,988
October	53,434	51,267	47,673	346,259	353,061	349,052	399,693	404,328	396,725
November	49,044	46,013	49,941	329,249	325,133	338,871	378,293	371,146	388,812
December	45,761	38,333	46,068	321,354	338,852	330,989	367,115	377,185	377,057
Totals	591,306	571,295	558,368	3,842,588	4,000,142	3,925,048	4,433,894	4,571,347	4,483,416

TABLE 4. Production of Gold,¹ by Provinces, 1950-59

Year	Newfoundland		Nova Scotia		Quebec		Ontario		Manitoba	
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
		\$		\$		\$		\$		\$
1950	9,254	352,115	65	2,473	1,094,645	41,651,242	2,481,110	94,406,236	191,725	7,295,136
1951	8,515	313,778	17	626	1,067,306	39,330,226	2,463,179	90,768,146	163,914	6,040,231
1952	8,595	294,551	1,433	49,109	1,113,204	38,149,501	2,513,691	86,144,910	141,947	4,864,524
1953	7,654	263,451	3,248	111,796	1,021,698	35,166,845	2,182,437	75,119,481	131,309	4,519,656
1954	6,528	222,409	3,754	127,899	1,098,570	37,428,280	2,361,385	80,452,387	134,944	4,597,542
1955	6,337	218,753	3,880	133,938	1,154,522	39,854,099	2,523,040	87,095,340	123,888	4,276,614
1956	8,213	282,938	1,279	44,061	1,036,059	35,692,233	2,513,912	86,604,268	120,232	4,141,992
1957	9,755	327,280	45	1,510	1,006,895	33,781,327	2,578,206	86,498,811	120,008	4,026,268
1958	13,381	454,686	131	4,451	1,044,846	35,503,867	2,716,514	92,307,146	87,356	2,968,357
1959	13,411	450,207	—	—	999,388	33,549,455	2,683,449	90,083,383	51,186	1,718,314
	Saskatchewan		Alberta		British Columbia		Northwest Territories		Yukon	
1950	79,784	3,035,781	152	5,784	290,490	11,053,144	200,663	7,635,227	93,339	3,551,549
1951	110,216	4,061,460	97	3,574	289,992	10,686,205	212,211	7,819,975	77,504	2,856,022
1952	93,585	3,207,158	111	3,804	273,059	9,357,732	247,581	8,484,601	78,519	2,690,648
1953	88,327	3,040,215	65	2,237	264,976	9,120,474	289,929	9,979,356	66,080	2,274,474
1954	101,785	3,467,815	195	6,644	268,508	9,148,068	308,563	10,512,741	82,208	2,800,826
1955	83,580	2,885,182	214	7,387	252,979	8,732,835	321,321	11,092,001	72,201	2,492,379
1956	82,687	2,648,567	119	4,100	196,692	6,776,040	352,669	12,149,447	72,001	2,480,434
1957	75,236	2,524,168	418	13,957	229,113	7,686,741	340,016	11,407,604	73,962	2,481,425
1958	86,590	2,942,328	282	9,582	210,612	7,156,596	343,838	11,663,615	67,745	2,301,975
1959	78,588	2,638,199	200	6,714	184,312	6,187,354	405,922	13,626,802	66,960	2,247,847

¹ From all sources.

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

TABLE 5. Production of Gold, by Provinces, according to Nature of Ores, 1958 and 1959

Year and province	Placer gold	Auriferous quartz ores	Copper-gold-silver ores	Nickel-copper ores	Silver-lead and other ores	Total
	troy ounces					
1958						
Newfoundland	—	—	3,942	—	9,439	13,381
Nova Scotia	—	131	—	—	—	131
New Brunswick	—	—	52	—	—	52
Quebec	—	662,910	366,894	—	15,042	1,044,846
Ontario	—	2,660,194	7,872	47,367	1,081	2,716,514
Manitoba	—	67,889	18,618	849	—	87,356
Saskatchewan	—	—	86,590	—	—	86,590
Alberta	282	—	—	—	—	282
British Columbia	3,928	193,225	3,969	33	9,457	210,612
Northwest Territories	—	343,838	—	—	—	343,838
Yukon	67,745	—	—	—	—	67,745
Canada	71,955	3,928,167	487,837	48,249	35,019	4,571,347
1959						
Newfoundland	—	—	4,875	—	8,536	13,411
Nova Scotia	—	—	—	—	—	—
New Brunswick	—	—	—	—	—	—
Quebec	—	620,111	367,324	—	11,953	999,388
Ontario	—	2,633,512	5,706	42,509	1,722	2,683,449
Manitoba	—	29,487	20,913	786	—	51,186
Saskatchewan	—	—	78,588	—	—	78,588
Alberta	200	—	—	—	—	200
British Columbia	5,814	183,042	7,948	—	7,506	184,312
Northwest Territories	—	405,922	—	—	—	405,922
Yukon	66,960	—	—	—	—	66,960
Canada	72,674	3,852,074	485,354	43,295	29,719	4,483,416

TABLE 6. Gold Production by Provinces and Principal Areas, 1957-59

Province and area	1957		1958		1959	
	Troy ounces	Value	Troy ounces	Value	Troy ounces	Value
		\$		\$		\$
Newfoundland.....	9,755	327,280	13,381	454,686	13,411	450,207
Nova Scotia	45	1,510	131	4,451	—	—
New Brunswick	240	8,052	52	1,767	—	—
Quebec:						
Gold mines	610,482	20,481,671	662,910	22,525,682	620,111	20,817,126
Base metal mines	396,413	13,299,656	381,936	12,978,185	379,277	12,732,329
Totals	1,006,895	33,781,327	1,044,846	35,503,867	999,388	33,549,455
Ontario:						
Gold mines:						
Porcupine	1,060,038	35,564,275	1,138,190	38,675,696	1,089,699	36,581,195
Kirkland Lake	361,284	12,121,078	362,168	12,306,469	352,250	11,825,033
Larder Lake	519,486	17,428,755	542,269	18,426,301	567,304	19,044,395
Matachewan	176	5,905	64	2,175	112	3,760
Sudbury	31,276	1,049,310	27,858	946,615	36,350	1,220,269
Thunder Bay	103,312	3,466,118	107,124	3,640,073	103,228	3,465,364
Patricia	456,571	15,317,957	482,476	16,394,534	484,552	16,266,411
Other mines	46,063	1,545,413	56,365	1,915,283	49,954	1,676,956
Totals	2,576,206	86,498,811	2,716,514	92,307,146	2,683,449	90,083,383
Manitoba:						
Gold mines	97,156	3,259,584	87,889	2,306,868	29,487	989,879
Other mines	22,652	766,684	19,467	661,489	21,699	728,435
Totals	120,008	4,026,268	87,356	2,968,357	51,186	1,718,314
Saskatchewan:						
Gold mines	—	—	—	—	—	—
Other mines	75,236	2,524,188	86,590	2,942,328	78,588	2,638,199
Totals	75,236	2,524,188	86,590	2,942,328	78,588	2,638,199
Alberta (placer)	416	13,957	282	9,582	200	6,714
British Columbia:						
Gold mines (lode)	186,495	6,256,907	193,225	6,565,786	163,042	5,473,320
Gold mines (placer)	2,105	70,623	3,928	133,473	5,814	195,176
Other mines	40,513	1,359,211	13,459	457,337	15,456	518,858
Totals	229,113	7,686,741	210,612	7,156,596	184,312	6,167,354
Northwest Territories:						
Gold mines and placer	340,018	11,407,604	343,838	11,683,615	405,922	13,626,802
Yukon (chiefly placer)	73,962	2,481,425	67,745	2,301,975	66,960	2,247,847
Totals, Canada	4,433,894	148,757,143	4,571,347	155,334,370	4,483,416	150,508,275

TABLE 7. Production of Gold and Silver by Principal Mines, 1959

Mine and province	Ore hoisted	Material sorted (discarded)	Ore treated	Gold produced	Silver produced	Mill capacity — 24 hours	See foot-notes
		tons		troy ounces		tons	
Newfoundland:							
Base metal mines .....	...	...	...	13,411	1,125,110	...	
Nova Scotia:							
Base metal mines and Mint receipts .....	...	...	...	—	—	...
New Brunswick:							
Base metal mines .....	...	...	...	—	—	...
Quebec:							
Anacon	100,801	2,693	98,108	17,537	12,062	500	1,2,3
Barnat	225,677	...	209,499	38,244	3,056	600	1
Belleville Quebec	14,071	...	14,289	3,909	4,304	300	1
Bevcon	241,772	...	243,788	29,420	11,182	800	1
Canadian Malartic	467,413	—	467,413	41,173	13,836	1,300	1
East Malartic	544,137	—	544,137	111,130	19,185	1,500	1
Elder	147,134	—	—	20,391	—	—	2
Eldrich	122,705	—	—	16,528	—	—	3
Lamaque	758,470	—	758,470	122,934	19,321	2,000	1
Malartic Goldfields	578,483	—	578,483	96,085	5,163	1,500	1
Norlatic	41,578	—	68,735	7,586	649	—	4
Sigma	410,112	—	410,112	73,646	15,080	1,100	1
Sullivan	208,667	29,725	178,942	41,048	9,447	500	1
Totals for principal gold mines in Quebec .....	...	...	...	619,633	113,285	...	
Copper-gold and other mines .....	...	...	...	379,755	3,994,956	...	
Totals, Quebec .....	...	...	...	999,388	4,108,241	...	

TABLE 7. Production of Gold and Silver by Principal Mines, 1959 - Concluded

Mine and province	Ore hoisted	Material sorted (discarded)	Ore treated	Gold produced	Silver produced	Mill capacity — 24 hours	See foot-notes
	tons			troy ounces		tons	
Ontario:							
Porcupine District							
Aunor	265,558	—	265,558	86,182	6,348	725	1
Broulan Reef	113,750	—	113,750	31,218	2,601	700	1
Coniaurum	120,345	—	120,345	27,595	5,245	500	1
Delnite	182,620	—	182,746	43,933	3,228	520	1
Dome	712,900	—	712,900	173,851	36,026	1,975	1,3
Hallnor	118,601	—	118,601	48,043	2,991	400	1
Hollinger (Timmins)	981,149	—	980,887	260,146	43,226	3,900	1
Hollinger (Ross)	121,422	—	121,217	18,654	51,360	360	1
Hugh-Pam	62,871	—	...	10,752	—	—	5
McIntyre Porcupine	773,980	—	773,980	226,373	37,364	2,400	1
Pamour	659,827	22,424	637,403	61,574	8,411	1,750	1
Paymaster	207,920	—	207,831	43,493	9,119	750	1
Preston East Dome	223,340	—	223,460	57,878	7,027	800	1,3
Kirkland Lake District							
Kirkland Minerals	69,624	—	69,624	30,594	2,515	400	1
Lake Shore	180,577	—	180,577	66,265	23,426	1,200	1
Macassa	158,130	—	158,130	69,668	10,702	500	1
Sylvanite	146,781	—	146,401	39,306	8,257	600	1
Teck Hughes	183,687	—	184,170	25,149	3,291	650	1
Upper Canada	200,773	—	200,773	52,264	29,663	525	1
Wright-Hargreaves	170,220	—	170,220	69,001	17,232	—	6
Larder Lake District							
Kerr-Addison	1,662,695	—	1,662,534	567,304	31,864	4,000	1
Sudbury District							
Renabie	195,628	—	195,898	36,350	10,579	550	1
Thunder Bay District							
Leitch	50,292	12,900	36,862	36,422	1,547	120	1,3
MacLeod-Cockshutt	692,307	—	693,322	66,616	6,383	1,900	1
Patricia District							
Campbell Red Lake	314,976	58,255	256,721	162,273	9,540	700	1,3
Cochencour Williams	84,004	—	84,004	67,614	2,372	200	1,3
Madsen Red Lake	302,120	—	301,999	118,796	20,401	800	1,3
McKenzie Red Lake	87,385	8,252	79,133	17,572	4,927	230	1
New Dickenson	171,302	—	171,227	85,851	8,126	470	1,3
Pickle Crow	112,310	—	112,045	32,432	4,316	400	1,3
Totals for principal gold mines in Ontario .....	...	...	...	2,633,169	408,087	...	
Nickel-copper and other mines .....	...	...	...	50,280	10,132,769	...	
Totals, Ontario .....	...	...	...	2,683,449	10,540,856	...	
Manitoba:							
Forty-Four Mines Ltd.	35,188	—	35,188	7,737	1,318	—	7
San Antonio	81,752	—	81,478	20,833	3,546	550	1,3
Copper-gold and other mines .....	...	...	...	22,616	368,963	...	
Totals, Manitoba .....	...	...	...	51,186	373,827	...	
Saskatchewan:							
Copper-Gold and alluvial ores .....	...	...	...	78,588	1,187,439	...	
Alberta:							
Alluvial gold .....	...	...	...	200	19	...	
British Columbia:							
Bralorne-Pioneer	140,972	—	140,972	103,267	20,686	500	1
Cariboo Gold Quartz	46,586	—	46,586	17,746	3,108	375	1
Pioneer Division Bralorne	80,428	776	79,652	33,630	6,955	350	1
Placer gold .....	...	...	...	5,814	943	...	
Copper-gold and other mines .....	...	...	...	23,855	7,431,593	...	
Totals, British Columbia .....	...	...	...	184,312	7,463,283	...	
Northwest Territories:							
Consolidated Mining and Smelting (Con Mine)	115,593	—	115,593	52,647	20,273	500	1,3
Consolidated Mining and Smelting (Rycon Mine)	75,706	—	75,706	40,271	15,508	—	6
Consolidated Discovery Yellowknife	51,709	—	51,709	83,988	8,812	150	1
Giant Yellowknife	413,226	53,968	360,994	228,618	25,897	1,000	1,3
Other mines .....	...	...	...	398	70	...	
Totals, Northwest Territories .....	...	...	...	405,922	70,560	...	
Yukon:							
Placer and silver-lead mines .....	...	...	...	66,960	7,054,632	...	
Totals, Canada .....	...	...	...	4,483,416	31,923,969	...	

¹ Cyanidation.² Shipped to smelter.³ Amalgamation process.⁴ Shipped to Malartic Gold fields mill.⁵ Shipped to Broulan Reef mill.⁶ Shipped to Lake Shore mill.⁷ Treated at San Antonio mill.⁸ Treated at Con mill.

TABLE 8. Gold Production of the World,¹ 1955-59

Country	1955	1956	1957	1958	1959
	fine ounces				
North America:					
United States	1,890,783	1,837,961	1,817,197	1,801,005	1,389,361
Canada	4,541,962	4,383,883	4,433,894	4,571,347	4,483,688
Mexico	382,874	350,242	346,320	332,238	313,655
Totals, North America	6,815,619	6,572,066	6,597,411	6,704,590	6,186,704
Central America and West Indies	244,000	223,600	210,300	249,500	
South America:					
Brazil ²	109,599	122,234	120,755	116,190	109,310
British Guiana	23,786	15,815	16,491	17,500	3,448
Chile	122,877	94,457	103,587	70,858	
Colombia	380,626	438,350	325,130	371,715	397,928
Ecuador	13,805	14,585	16,840	19,311	18,177
French Guiana	8,713	7,500	9,549	20,000	18,100
Peru	170,747	159,074	165,093	159,127	139,820
Surinam	7,210	6,700	6,526	4,244	5,819
Venezuela	61,140	69,811	75,976	89,654	53,740
Total South America, as reported	896,683	928,526	839,947	868,599	
Europe	400,000	400,000	400,000	400,000	
Australia:					
New South Wales	30,067	28,821	31,043	18,709	13,269
Queensland	64,322	56,022	63,363	70,987	93,136
Victoria	38,035	38,846	45,752	41,476	36,084
Western Australia	634,326	813,537	849,751	874,824	861,122
Tasmania	18,882	17,131	20,027	21,744	20,751
Other Australia	65,407	75,464	74,005	72,664	65,212
Total Australia (Commonwealth)	1,049,039	1,029,821	1,983,941	1,100,404	1,089,574
Oceania, other:					
New Guinea	74,853	67,282	76,807	81,827	72,566
New Zealand	28,443	79,476	89,030	43,812	46,820
Fiji	70,100	26,063	30,195	24,932	37,662
Total Oceania, other	171,396	172,821	176,032	150,571	157,048
Asia:					
India	211,461	209,253	179,198	170,109	165,380
Japan	288,707	295,334	302,706	308,450	328,193
Korea, Republic of	47,037	49,929	66,576	73,163	85,688
Malaya	22,838	20,253	11,157	22,484	28,739
Philippines Republic	419,112	406,163	379,982	422,633	402,615
Saudi Arabia .....	...	...	...	...	...
Taiwan (Formosa)	28,113	37,501	19,483	20,265	...
Total Asia, as reported	1,017,268	1,018,433	959,102	1,017,304	
Africa:					
Bechuanaland	560	590	190	215	
Belgian Congo	369,913	373,640	374,258	356,126	351,078
Ethiopia	22,058	25,700	25,000	36,369	
French Cameroons	518	463	10,899	2,009	971
French Equatorial Africa	46,553	40,712	30,780	23,704	
Gold Coast	681,206	620,194	788,151	851,433	591,622
Kenya	9,528	13,642	7,387	7,753	9,145
Liberia	672	160	381	400	1,355
Madagascar	961	903	842	547	
Nigeria	681	439	487	646	950
Sierra Leone	474	452	—	—	
Southern Rhodesia	524,701	536,392	536,849	554,838	566,882
Tanganyika (exports)	68,892	59,293	54,088	56,299	85,403
Uganda	450	271	243	292	384
Union of South Africa	14,601,395	15,896,693	17,031,690	17,656,442	20,064,105
Total Africa, as reported	16,328,534	17,569,944	18,961,245	19,547,073	
Russia³	9,000,000	10,000,000	10,000,000	10,000,000	
Total world, as reported	35,924,589	37,815,211	39,129,978	40,038,041	
Estimated world totals⁴	36,400,000	38,400,000	39,620,000	40,400,000	

¹ In compiling this table, free use has been made of the reports of the Director of the Mint, the U.S. Bureau of Mines and other publications.² Mined gold only; production of alluvial gold unknown.³ Conjectural.⁴ This estimate includes the following countries which also produce gold: Angola, Argentina, Austria, Bolivia, Bulgaria, Burma, China, Czechoslovakia, Egypt, Eritrea, French Morocco, French West Africa, Hungary, Mozambique, North Korea, Northern Rhodesia, Papua, Sarawak, South West Africa, Sudan and Thailand, from whom definitive figures are not available.

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

TABLE 9. Gold Production according to Method of Computation and Recovery, 1950-59

Year	In alluvial gold	In crude gold bullion produced at mines ¹	In base bullion produced at lead smelters	In blister and anode copper produced ²	In ores, matte, slags, etc., exported	Total gold produced
	per cent					fine ounces
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	2.06	83.22	0.39	11.37	2.94	4,471,725
1953	1.91	84.11	0.25	9.77	3.96	4,055,723
1954	2.05	83.14	0.34	11.18	3.29	4,366,440
1955	1.73	83.10	0.16	12.15	2.86	4,541,962
1956	1.71	83.66	0.17	12.88	1.58	4,383,863
1957	1.72	83.98	0.32	12.40	1.58	4,433,894
1958	1.57	84.06	0.20	12.64	1.53	4,571,347
1959	1.63	84.47	0.21	12.52	1.17	4,483,416

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 10. Estimated Average Monthly Value of an Ounce of Fine Gold, Expressed in Canadian Funds, 1940-59

Month	1940-45	1946	1947-48	1949 ¹	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
	dollars													
January	38.50	38.50	35.00	35.00	38.50	36.81	35.19	33.97	34.05	33.81	34.95	33.62	34.46	33.84
February	38.50	38.50	35.00	35.00	38.50	36.73	35.03	34.20	33.83	34.19	34.97	33.54	34.34	34.12
March	38.50	38.50	35.00	35.00	38.50	36.65	34.85	34.44	33.98	34.45	34.95	33.46	34.21	33.93
April	38.50	38.50	35.00	35.00	38.50	37.07	34.34	34.43	34.39	34.52	34.89	33.59	33.97	33.73
May	38.50	38.50	35.00	35.00	38.50	37.25	34.43	34.79	34.45	34.51	34.71	33.45	33.84	33.70
June	38.50	38.50	35.00	35.00	38.50	37.42	34.26	34.80	34.34	34.45	34.48	33.36	33.67	33.56
July	38.50	35.35	35.00	35.00	38.50	37.12	33.93	34.72	34.10	34.46	34.37	33.29	33.60	33.51
August	38.50	35.00	35.00	35.00	38.50	36.96	33.65	34.59	33.96	34.48	34.34	33.18	33.76	33.41
September	38.50	35.00	35.00	38.52	38.50	38.94	33.59	34.45	33.94	34.57	34.22	33.56	34.19	33.31
October	38.50	35.00	35.00	38.50	36.86	36.78	33.75	34.39	33.94	34.64	34.07	33.77	33.98	33.17
November	38.50	35.00	35.00	38.50	36.43	36.53	34.17	34.22	33.93	34.98	33.75	33.67	33.89	33.26
December	38.50	35.00	35.00	38.50	36.83	35.89	33.97	34.06	33.86	34.98	33.62	34.22	33.76	33.29
Yearly averages	36.50	36.75	35.00	36.00	38.05	36.85	34.27	34.42	34.07	34.52	34.45	33.55	33.98	33.57

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

TABLE 11. Precious Metals Consumed by the Jewellery and Silverware Industry, 1955-58

Material	Cost at works			
	1955	1956	1957	1958
	dollars			
Fine gold	4,152,488	5,444,312	4,585,764	5,044,225
Gold alloys	1,299,382	1,421,905	1,403,075	1,633,143
Fine silver	3,027,330	3,677,213	3,975,569	2,801,283
Silver alloys and sterling	2,802,742	2,620,971	2,554,281	2,354,492
Platinum	579,060	1,216,798	1,182,835	3,256,208
Old gold, jewellers' findings, waste and scrap refining	1,726,260	1,672,727	1,651,414	1,020,928
Gold-filled wire and stock	138,030	146,254	151,113	143,909
Precious and semi-precious stones	3,140,571	3,753,954	3,632,668	4,073,739

EMERGENCY GOLD MINING ASSISTANCE ACT

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

Summary of Operations for the Year 1958

The Emergency Gold Mining Assistance Act was amended by Chapter 28 of the Statutes of 1958. The amending act, which received Royal Assent on September 6, 1958, extended the application of the Act for two years to the end of 1960. It also increased by 25 per cent the amount of assistance payable, as calculated by the prescribed formula, to eligible gold mine operators for each of the three years 1958, 1959, and 1960.

Since the inception of The Emergency Gold Mining Assistance Act in 1948 the amount of assistance payable to the operators of a gold mine has been calculated by a formula consisting of two factors: the "rate of assistance" which is based on the cost per ounce of gold produced from the mine, and the "assistance ounces" which are a specified proportion of the total ounces of gold produced. Under the formula prescribed for the years 1955, 1956, and 1957, the rate of assistance factor was determined by taking two-thirds of the amount by which the cost per ounce exceeded \$26.50, with a maximum rate of \$12.33 per ounce. The number of assistance ounces was two-thirds of the total produced. The amount of assistance payable for the years 1955 to 1957 was the amount obtained by multiplying the rate of assistance by the number of assistance ounces. The amending act of 1958 did not alter this formula, but the amount of assistance payable to an operator for the years 1958, 1959, and 1960 is computed by adding 25 per cent to the amount obtained by application of the formula.

For the purposes of the Act the cost of production of gold from a mine is the cost properly attributable to the gold produced from the mine during the year and includes mining, milling, smelting, refining, transportation, and administration costs and amounts in respect of depreciation, amortization, pre-production costs, deferred development expenditures, and costs of exploration and development, as determined in accordance with the Regulations.

Applications for assistance have been received from 42 gold mines with respect to the calendar year 1958. These represent the bulk of the mines that will apply for assistance for that year; however, applications may be made up to six months after the year-end and it is anticipated that additional applications will be received, most of which will be from placer operations.

The estimated total assistance which will be payable in respect of gold produced and sold under the provisions of the Act in 1958 is now calculated to be \$11,700,000. Of this amount, \$2,340,000 is attributable to the increase of 25 per cent in the assistance payable. The actual assistance paid up to March 31, 1959, with respect to the year 1958 was \$6,884,065.61. This sum is 80 per cent of the assistance payable on the applications received to that date. The remaining 20 per cent is payable when the books of the companies have been audited by the Cost Inspection and Audit Division of the Office of the Comptroller of the Treasury.

The final audit for the calendar year 1957 has been completed with the exception of four applications. A total of \$9,324,446.70 has been actually paid with respect to this year and the payment of holdbacks will bring the final figure to approximately \$9,700,000.

Two mines, one in Manitoba and one in Quebec, ceased operations during the year. One auriferous quartz producer resumed operations following a suspension of 1956. One gold-copper producer also qualified for assistance during the year. Both mines are located in Quebec. Nine lode gold mines were in operation in Canada which were not eligible for assistance payments because their costs of production were below \$26.50 per ounce of gold produced.

The average price per ounce of gold paid by the Royal Canadian Mint in 1958 was \$33.98 compared with \$33.55 in 1957 and \$34.45 in 1956.

The prescribed forms, upon which application is made for assistance, were revised to accommodate the calculation required by the 1958 amendment to the Act and to increase the usefulness of the forms in eliciting the information required in the examination and auditing of applications.

Conditions Governing Eligibility of the Operator of a Gold Mine for Assistance Payments

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

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

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

- (1) Application in prescribed form for assistance payments with respect to a designated quarter or year must be received by the Department of Mines and Technical Surveys within six months after the end of the designated period. Advance payments may be made with respect to a calendar year or to quarterly periods beginning with the first day of the months of January, April, July, or October. Forms MREA 1 and MREA 2 are the forms to be used in making application for assistance.
- (2) The cost of production per ounce of gold, computed on all ounces of gold produced from the mine during the designated period, must exceed \$26.50.
- (3) Assistance payments are made only with respect to those ounces of gold produced from the mine during the designated period which are:
 - (a) sold in the form of bullion to the Royal Canadian Mint by the operator; or
 - (b) sold in the form of ore or concentrate to a domestic smelter which in turn sells an amount of gold to the Royal Canadian Mint equivalent to that separated from the ore as soon as is practical after the shipment of the ore; or
 - (c) exported and sold in the form of ore or concentrate to a foreign smelter.
- (4) The operator of a mine applying for assistance for the first time must submit a declaration of ownership of the mine on the prescribed form MREA 3.
- (5) A new mine which is operated by an incorporated company must be declared in production in accordance with Section 83(5) of the Income Tax Act. Status as a new mine may be obtained through application to the Taxation Division, Department of National Revenue, Ottawa.

The Gold Export Act and Disposal of Canadian Gold

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

issued by the Minister of Finance were revoked. Thus, since March 21, 1956, producers have been free to sell their gold wherever they desire.

Act and Regulations

- (1) The Act received Royal Assent on May 14, 1948, and came into force by proclamation on June 15, 1948.
- (2) The Regulations made by the Governor in Council under the authority of Section 6 of the Act were approved by Order in Council, P.C. 2664, June 11, 1948.

- (5) Chapter 25, 1 Elizabeth II, received Royal Assent, June 18, 1952.
- (6) Chapter 32, 2 Elizabeth II, received Royal Assent, May 14, 1953.
- (7) Chapter 26, 2-3 Elizabeth II, received Royal Assent, March 31, 1954.
- (8) Chapter 19, 3-4 Elizabeth II, received Royal Assent, May 26, 1955.
- (9) Chapter 20, 4-5 Elizabeth II, received Royal Assent, June 26, 1956.
- (10) Chapter 28, 7 Elizabeth II, received Royal Assent, September 6, 1958.

Amendments to the Act

- (3) Chapter 20, 13 George VI (Second Session), received Royal Assent, December 10, 1949.
- (4) Chapter 49, 15 George VI (First Session), received Royal Assent June 30, 1951.

Amendments to the Regulations

- (11) Order in Council, P.C. 1753, April 12, 1950.
- (12) Order in Council, P.C. 3925, July 31, 1951.
- (13) Order in Council, P.C. 1954-379, March 19, 1954.
- (14) Order in Council, P.C. 1954-863, June 10, 1954.
- (15) Order in Council, P.C. 1956-11, January 5, 1956.

TABLE 12. Emergency Gold Mining Assistance Act - Estimated Assistance Payable

Province	1952	1953	1954	1955	1956	1957	1958
	dollars						
Quebec	2,838,728	4,225,820	4,161,889	2,510,421	2,554,961	2,804,639	2,562,905
Ontario	5,579,649	7,154,496	8,700,203	4,532,956	4,569,086	5,430,897	4,945,446
Manitoba	379,003	454,694	580,741	654,801	722,087	712,029	390,276
British Columbia	782,155	1,046,076	1,036,678	600,710	605,950	391,877	246,257
Northwest Territories	1,011,211	1,409,761	1,411,829	330,532	14,013	284,030	460,198
Yukon	255,234	389,283	367,839	255,959	201,138	47,761	—
Canada	10,845,978	14,680,110	16,259,179	8,885,479	8,667,235	9,671,233	8,605,082

THE PLACER GOLD MINING INDUSTRY

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

In 1959 a total of 72,974 troy ounces of fine gold were recovered from crude gold obtained from Canadian alluvial deposits. This represented an increase of 1.4 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, none in 1953, 16 ounces in 1954 and nil in 1955-1959.

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

British Columbia—It has been found impractical to obtain complete reports for each individual placer mining operation in British Columbia inasmuch as a considerable quantity of the crude placer gold is recovered annually to prospectors of no fixed abode who, in many instances, market their recoveries through local merchants and banks. Recoveries in 1959 were made chiefly from deposits located in the Atlin and Cariboo districts. Output was estimated at 5,814 troy ounces.

Yukon—Over 90 per cent of the placer gold recovered in Canada during 1959 was found in the creeks of the Yukon. Production in 1959 totalled 66,960 troy ounces.

The placer gold industry employed an average of 239 persons to whom \$1,194,713 were paid in wages and salaries. Fuel and electricity cost \$74,536, electricity generated for own use was 18,586,304 kwh. and the electricity for sale was 6,626,700 kwh. Process supplies were valued at \$355,837. Freight and express on shipments amounted to \$12,370 and \$30,553 were paid for treatment and marketing.

TABLE 13. Principal Statistics for Placer Gold Mining, Significant Years, 1921-59

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Process supplies and containers	Gross value of products	Net value of production ¹
	number				dollars		
1921	197	428	671,783	..	..	1,576,222	..
1929	68	488	586,193	2,969	..	836,006	..
1931	109	337	682,935	41,745	..	1,226,541	..
1933	74	454	704,151	35,165	..	1,218,250	..
1937	109	1,069	1,689,911	99,072	77,488	3,243,196	3,066,636
1939	104	830	1,439,765	119,692	90,610	4,523,587	4,204,974
1941	110	797	1,954,278	155,518	68,489	4,132,503	3,800,142
1944	47	211	598,556	43,591	13,703	1,281,125	1,197,021
1946	39	340	1,112,984	84,206	46,870	1,849,511	1,693,568
1949	56	398	1,509,423	88,614	455,371	3,499,823	2,920,290
1951	47	362	1,553,103	44,678	507,830	3,572,516	2,951,342
1954	62	351	1,619,460	146,300	253,128	3,051,665	2,575,038
1955	64	345	1,480,868	122,882	98,278	2,728,106	2,443,595
1956	64	250	1,378,166	81,639	451,933	2,594,312	2,026,790
1957	57	243	1,180,225	55,472	353,186	2,573,853	2,116,716
1958	112	236	1,253,362	63,007	461,375	3,049,743	2,484,524
1959	112	239	1,194,713	74,536	355,837	2,462,727	1,989,431

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

TABLE 14. Alluvial Gold Recovered and Quantity of Material Handled,¹ 1950-59

Year	British Columbia				Yukon				Canada
	Material handled ²	Gold recovered ³	Ounces per cu. yd.	Value per cu. yd.	Material handled ²	Gold recovered ³	Ounces per cu. yd.	Value per cu. yd.	Gold recovered ³
	cu. yd.	fine ounces		\$	cu. yd.	fine ounces		\$	ounces
1950	494,066	14,632	0.0296	1.1263	7,860,497	93,339	0.0118	0.4490	108,143
1951	335,487	18,602	0.0560	2.0636	7,266,422	77,504	0.0107	0.3942	96,441
1952	270,656	7,950	0.0294	1.0075	6,727,353	92,789	0.0138	0.4729	92,843
1953	597,073	11,360	0.0199	0.6850	5,155,826	66,080	0.0140	0.4832	77,505
1954	233,114	7,105	0.0305	1.0390	6,889,820	82,208	0.0119	0.4065	89,571
1955	110,594	6,206	0.0561	1.9365	6,379,755	72,201	0.0113	0.3907	78,621
1956 .....	..	2,962	...	...	5,716,389	71,736	0.0125	0.4306	74,919
1957 .....	..	2,105	...	...	7,559,882	73,709	0.0097	0.3271	76,303
1958 .....	..	3,926	...	...	6,808,991	67,745	0.0099	0.3380	71,955
1959 .....	..	5,814	...	...	6,824,062	66,960	0.0098	0.3294	72,974

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).

TABLE 15. Employees and their Earnings in the Placer Gold Mining Industry, 1955-59

Year	Employees ¹					Man-hours worked	Earnings		
	Administration		Workmen		Total		Admin- istration	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1955	14	2	321	8	345	746,727	53,475	1,427,393	1,480,868
1956	13	—	227	10	250	688,681	58,860	1,319,306	1,378,166
1957	14	6	218	5	243	661,202	92,833	1,087,392	1,180,225
1958	16	5	212	5	236	659,577	123,329	1,130,033	1,253,362
1959	20	5	211	3	239	621,299	114,224	1,080,489	1,194,713

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

TABLE 16. Fuel and Electricity Used in the Placer Gold Mining Industry, 1959

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines short ton	30	988
(b) Imported	—	—
Sub-bituminous coal (from Alberta mines only)	—	—
Anthracite coal	—	—
Lignite coal	—	—
Coke (for fuel only)	—	—
Gasoline, (includes gasoline used in cars and trucks) Imp. gal.	59,210	29,455
Kerosene or coal oil	395	420
Fuel oil	79,443	25,757
Wood (cords of 128 cubic feet of piled wood) cord	806	17,877
Gas (a) Liquefied petroleum gases (propane, etc.)	—	—
(b) Other manufactured gas	—	—
(c) Natural gas	—	—
Other fuel	—	—
Electricity purchased for power and lighting kwh.	3,900	39
Electricity purchased for other purposes	—	—
Total (cost only) .....	...	74,536
Electricity generated (a) For own use kwh.	18,586,304	...
(b) For sale	6,626,700	114,987

THE GOLD QUARTZ MINING INDUSTRY IN CANADA

The gold quartz mining industry produced, during 1959 minerals valued at \$130,097,538 compared with \$133,998,004 in the preceding year. The total valuation included gold, silver, copper and other recoverable metals found in the gold ores.

The average number of employees was 16,777 whose earnings amounted to \$65,519,112. Fuel cost \$1,493,294 and 944,534,278 kwh. of electricity were purchased for \$5,667,760. Process supplies, which included explosives, chemicals, drill steel, etc., cost \$20,901,136. Electricity generated for own use was 41,350,126 kwh. and generated for sale was 4,483,444 kwh.

The greater part of Canada's gold comes from the Canadian Shield, an immense area of precambrian rocks, extending from

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

TABLE 17. Principal Statistics for the Gold Quartz Mining Industry, Significant Years, 1921-59

	Establish- ments	Employees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies	Gross value of products	Net value of production ¹
	number		dollars				
1921	59	3,889	6,072,318	1,154,606	..	16,689,784	..
1929	85	8,660	14,258,733	2,579,481	..	37,275,986	..
1931	69	9,636	16,467,165	2,700,326	..	49,144,578	..
1933	216	12,823	20,536,012	3,330,137	..	69,151,535	..
1937	689	29,140	48,219,318	7,345,401	16,230,722	122,876,103	97,961,278
1939	474	30,622	53,206,225	7,952,580	19,484,870	160,014,172	129,633,245
1941	357	32,551	62,150,810	8,462,618	21,066,900	179,103,182	145,978,833
1944	262	17,226	37,023,505	5,895,117	11,174,746	94,263,416	75,234,384
1946	686	21,973	47,211,062	6,259,876	14,401,904	88,422,683	66,342,152
1949	247	22,358	61,293,334	7,307,153	23,251,674	129,550,461	96,580,304
1951	211	22,126	66,739,531	7,791,566	26,877,361	136,703,452	100,059,503
1954	157	18,479	63,578,156	6,967,528	23,639,788	127,644,959	95,627,104
1955	136	18,032	83,961,744	7,080,925	24,496,662	134,476,377	101,362,077
1956	134	17,031	62,701,494	6,830,676	22,725,750	127,983,495	97,011,062
1957	147	16,911	63,706,608	6,771,866	22,705,425	127,055,902	95,991,241
1958	127	16,811	64,208,042	7,134,399	18,013,121	133,996,004	107,140,993
1959	139	16,777	65,519,112	7,161,054	20,901,136	130,097,538	100,519,397

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

MINERAL STATISTICS

TABLE 18. Principal Statistics for the Gold Quartz Mining Industry, 1958 and 1959

	Active operators ¹	Em- ployees	Salaries and wages	Cost of fuel and purchased electricity	Cost of process supplies used ²	Amount of freight etc., paid on ship- ments of ore, slag, etc.	Smelter and refinery treatment costs	Gross value of bullion, ore, concen- trates or residues shipped from mines ³	Net value of bullion, ore, concentrates or residues shipped from mines ⁴
1958	number		dollars						
Quebec and Nova Scotia	66	3,332	12,274,705	1,438,600	3,688,603	156,792	505,189	22,941,713	17,152,529
Ontario	41	11,626	43,192,830	4,289,200	11,917,107	110,543	654,888	90,657,790	73,686,052
Manitoba and Saskatchewan	5	331	1,278,354	264,053	455,775	2,501	8,840	2,313,109	1,581,940
British Columbia	8	851	3,786,513	291,016	901,432	82,699	95,272	6,351,710	4,981,291
Northwest Territories	7	671	3,675,640	851,530	1,050,204	20,976	71,791	11,733,682	9,739,181
Totals	127	16,811	64,208,042	7,134,399	18,013,121	373,511	1,335,980	133,998,004	107,140,983
1959									
Quebec and Nova Scotia	75	3,347	12,717,019	1,527,716	3,868,729	126,024	469,466	21,107,303	15,115,348
Ontario	46	11,732	44,783,710	4,307,333	15,376,966	108,653	613,840	88,864,666	68,457,874
Manitoba and Saskatchewan	3	218	781,900	126,920	170,637	2,805	9,590	990,891	680,939
British Columbia	7	771	3,284,383	301,199	215,398	78,113	84,428	5,420,911	4,741,773
Northwest Territories	8	709	3,952,100	897,886	1,269,406	9,232	13,780	13,713,767	11,523,463
Totals	139	16,777	65,519,112	7,161,054	20,901,136	324,827	1,191,124	130,097,538	100,519,397

¹ Producing mines; in 1956, 61; in 1957, 69; in 1958, 68; in 1959, 61.² 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 19. Ores Mined and Treated by the Gold Quartz Mining Industry, 1950-59

Year	Ore hoisted	Ore milled ¹	Crude ore shipped to smelters ²	Low-grade sorted out	Tailings re-treated	Gold in recovered as bullion	Gold in crude ore shipped	Gold in concentrates, slag, etc., shipped
			tons					
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	3,709,717	41,943	72,285
1953	15,247,337	14,842,517	198,535	233,813	800	3,412,964	28,105	76,422
1954	16,178,273	15,560,138	285,697	271,642	—	3,610,496	44,336	74,808
1955	16,404,660	15,660,528	333,783	221,077	634	3,764,817	50,516	58,343
1956	14,589,230	14,070,420	276,130	195,257	2,176	3,635,709	45,561	23,725
1957	14,354,879	13,894,311	253,607	215,397	1,212	3,695,666	43,601	26,712
1958	14,751,991	14,223,343	273,204	175,069	465	3,829,460	40,516	51,499
1959	14,246,860	13,732,277	347,203	188,996	329	3,763,954	46,812	40,391

¹ + ² = Total crude ore treated.

TABLE 20. Ores Mined and Milled, Crude Bullion Recovered and Crude Bullion and Concentrates Shipped, in the Gold Quartz Mining Industry, 1959

	Quebec, Nova Scotia	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
Number of producing mines	14	34	2	6	5	61
Ore mined	ton 3,861,020	9,327,102	116,940	285,564	656,234	14,246,860
Material discarded (sorted)	" 32,418	101,831	—	779	53,968	188,996
Ore milled (ground, etc.)	" 3,503,241	3,136,396	116,666	283,179	604,002	13,732,277
Tailings re-treated	" —	312	—	17	—	329
Gold content of ores, slags, residues and concentrates shipped:						
To foreign smelters	troy ounce —	—	—	21,183	—	21,183
To Canadian smelters or mills	" 55,730	7,477	917	52	1,844	66,020
Bullion bars shipped:						
Gold content	" 563,329	2,627,791	28,570	140,924	401,582	3,762,196
Silver content	" 105,245	404,274	4,864	25,917	69,661	609,961
Content of bullion bars produced:						
Gold	" 564,381	2,626,001	28,570	140,924	404,078	3,763,954
Silver	" 103,597	402,496	4,864	25,917	70,068	606,962
Gold value	\$ 16,941,260	88,258,758	959,016	4,730,724	13,585,153	126,474,911
Silver value	\$ 90,661	351,347	4,257	21,774	62,357	530,396
Value of ores, concentrates, slags and residues sold (shipped)	\$ 2,075,382	254,561	27,618	668,413	66,257	3,092,231
Total gross value of production	\$ 21,107,303	88,864,666	990,691	5,420,911	13,713,767	130,097,538
Value of fuel, electricity and process supplies used, also freight on shipments, marketing, smelter and refinery charges	\$ 5,991,955	20,406,792	309,952	679,138	2,190,304	29,578,141
Net value of production	\$ 15,115,348	68,457,874	680,939	4,741,773	11,523,463	100,519,397

TABLE 21. Ores, Concentrates, Slags, etc., Shipped to Smelters and Mills from Canadian Gold Mines, 1950-59

Year	Ores		Concentrates		Slags, residues, precipitates	
	Tons	Gold content-troy ounces	Tons	Gold content-troy ounces	Tons	Gold content-troy ounces
To Canadian plants						
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
1953	198,535	28,068	20	227	123	9,300
1954	282,331	44,276	—	—	404	8,647
1955	333,783	50,516	—	—	237	4,816
1956	276,130	45,561	28	379	294	8,566
1957	253,602	43,589	10	129	187	6,791
1958	267,309	40,516	2,583	18,883	290	9,109
1959	347,203	46,812	1,398	10,215	232	8,993
To foreign plants						
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
1953	3	37	143	16,468	20	50,427
1954	2	60	2,938	14,931	22	51,230
1955	—	—	2,807	14,676	17	38,651
1956	—	—	2,388	14,655	12	125
1957	5	12	2,636	19,792	—	—
1958	—	—	3,009	23,305	13	202
1959	—	—	2,668	21,183	—	—

TABLE 22. Shipments from Gold Quartz Mines, 1958 and 1959

	Quantity	Total gross metal content			
		Gold	Silver	Copper	Other ¹
	tons	ounces		pounds	
1958					
To Canadian smelters:					
Gold ore	267,309	40,516	234	—	2,982
Gold concentrates	5	416	50	—	—
Slags, precipitates, residues	290	9,109	10,358	3,859	—
Copper concentrates	2,578	18,467	19,324	1,485,757	—
To foreign smelters:					
Gold ore	—	—	—	—	—
Gold concentrates	3,009	23,305	6,475	—	—
Slags, precipitates, residues	13	202	52	—	—
Totals	273,204	92,015	36,493	—	...
1959					
To Canadian smelters:					
Gold ore	347,203	46,812	972	—	2,891
Gold concentrates	78	1,807	360	852	—
Slags, precipitates, residues	232	8,993	8,779	1,823	28
Copper concentrates	1,320	8,408	8,562	744,523	—
To foreign smelters:					
Gold ore	—	—	—	—	—
Gold concentrates	2,868	21,183	5,830	—	—
Slags, precipitates, residues	—	—	—	—	—
Totals	351,501	87,203	22,503	746,998	2,719

¹ Zinc.

TABLE 23. Certain Data Relating to the Production of Gold by the Entire Gold Quartz Mining Industry, 1950-59 (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 smelter refinery and treatment on ores and bullion shipped, per ounce of gold produced	Taxes per ounce of gold produced	Total of specified costs
	ounces				dollars		
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	0.46	1.84	26.05
1953	209	1.96	14.85	6.46	0.41	1.55	25.23
1954	225	1.87	14.70	6.34	0.37	1.57	24.85
1955	240	1.83	14.20	6.32	0.39	1.60	24.34
1956	244	1.84	14.43	6.13	0.38	1.66	24.44
1957	249	1.80	14.53	6.03	0.42	1.57	24.35
1958	261	1.82	13.99	4.59	0.44	1.55	22.39
1959	251	1.91	14.85	5.57	0.41	1.87	24.61

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.

TABLE 24. Gold and Silver Content of Bullion Produced, of Ores, Concentrates, etc., Shipped, with Average Grade of Ore Shipped and Ore Milled at Gold Quartz Mines and the Average Price of Gold and Silver in Canadian Funds, 1950-59

Year	Tonnage treated ^{1,2}	Gold content ²	Silver content ²	Ounces of fine gold per ton	Ounces of fine silver per ton	Average price of gold	Average price of silver
		fine ounces				\$ per oz.	
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	3,823,747	688,489	.23	.04	34.27	0.835
1953	15,041,261	3,509,527	620,146	.23	.04	34.42	0.840
1954	15,642,471	3,729,640	660,259	.24	.04	34.07	0.832
1955	15,997,372	3,873,676	652,589	.24	.04	34.52	0.882
1956	14,349,272	3,704,995	623,995	.26	.04	34.45	0.897
1957	14,147,918	3,766,124	643,146	.27	.05	33.55	0.874
1958	14,490,652	3,921,475	707,794	.27	.05	33.98	0.868
1959	14,079,480	3,751,157	629,465	.27	.04	33.57	0.878

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 25. Specified Costs per Ton of Ore Milled at Certain of the Principal Auriferous Quartz Mines, 1959

Name of mine	Development and exploration ¹	Mining	Milling	General ²	Total before depreciation and taxes	Depreciation	Taxes	Total costs specified
					dollars			
Quebec:								
Anacon Lead Mines Ltd.	1.90	3.61	2.79	2.55	10.85	..	..	16.79
Belleterre Quebec Mines Ltd.	3.01	..	1.23	0.96	..	8.16 ³	1.41	14.77
Barnat Mines Ltd.	0.79	4.60	1.20	1.36	7.95	1.02	0.12	9.09
Canadian Malartic Gold Mines Ltd.	0.597	1.596	0.786	0.582	3.561	0.079	0.002	3.642
Elder Mines & Developments Ltd.	0.203	2.930	0.956	0.878	4.967	0.196	0.015	5.178
Eldrich Mines Ltd.	0.680	2.086	1.796	0.899	5.461	—	0.024	5.485
Lamaque Mining Co. Ltd.	0.86	2.83	0.92	0.15	4.86	0.02	0.17	5.05
Sigma Mines (Quebec) Ltd.	1.40	2.92	0.90	0.49	5.71	0.26	0.04	6.01
Sullivan Consolidated Mines Ltd.	1.74	3.73	1.31	0.32	7.10	0.60	—	7.70

See footnotes at end of table.

TABLE 25. Specified Costs per Ton of Ore Milled at Certain of the Principal Auriferous Quartz Mines, 1959 - Concluded

Name of mine	Development and exploration ¹	Mining	Milling	General ²	Total before depreciation and taxes	Depreciation	Taxes	Total costs specified
dollars								
Ontario:								
Porcupine District								
Aunor Gold Mines Ltd.	0.73	6.80	1.10	1.56	10.19	0.60	0.13	10.92
Broulan Reef Mines Ltd.	1.73	3.92	1.32	1.40	8.37	—	—	—
Hallnor Mines Ltd.	1.52	5.77	1.57	1.47	10.33	0.09	2.17	12.59
Hollinger Consolidated (Timmins)	0.298	5.736	0.869	2.407	9.310	0.145	0.070	9.525
Hollinger Consolidated (Ross)	0.437	2.225	1.903	1.443	6.008	0.384	0.016	6.408
Hugh Pam Porcupine Mines Ltd.	0.72	4.16	1.32	2.30	8.50	...	...	...
McIntyre Porcupine Mines Ltd.	1.47	6.28	1.18	0.63	9.56	0.24	0.11	9.91
Preston East Dome Mines Ltd.	1.54	5.07	1.07	1.44	9.12	0.16	0.02	9.30
Pamour Porcupine Mines Ltd.	0.17	2.42	0.69	0.30	3.58	0.07	0.02	3.67
Paymaster Consolidated Mines Ltd.	1.07	5.52	1.69	0.83	9.11	0.35	0.02	9.48
Kirkland Lake District								
Kirkland Minerals Corp. Ltd.	2.165	8.528	2.545	1.406	14.644	0.434	2.205	17.283
Teck-Hughes Gold Mines Ltd.	0.65	3.31	1.44	0.38	5.78	0.01	0.04	5.83
Upper Canada Mines Ltd.	1.53	5.02	1.28	0.68	8.59	0.42	0.01	9.02
Larder Lake District								
Kerr Addison Gold Mines Ltd.	0.741	4.031	1.081	0.596	8.449	0.333	1.825	8.607
Sudbury District								
Renable Mines Ltd.	1.092	2.544	1.460	1.037	6.133	0.509	0.029	6.671
Thunder Bay District								
MacLeod-Cockshutt Gold Mines Ltd.	0.130	1.669	0.755	0.523	3.077	0.107	0.011	3.195
Patricia District								
Cochenour Williams Gold Mines Ltd.	5.031	6.379	3.394	2.716	17.520	1.968	—	19.488
Madsen Red Lake Gold Mines Ltd.	1.78	5.15	1.48	1.36	9.77	0.91	0.09	10.77
McKenzie Red Lake Gold Mines Ltd.	1.46	3.94	1.88	2.14	9.42	...	...	...
New Dickenson Mines Ltd.	2.65	3.95	2.39	2.13	11.12	2.79	0.23	14.14
Pickle Crow Gold Mines Ltd.	3.71	6.83	1.93	1.75	14.22	0.61	0.18	29.21
British Columbia:								
Bralorne-Pioneer Mines Ltd.	2.15	9.71	1.87	5.16	18.89	1.88	—	19.97
Cariboo Gold Quartz Mining Co. Ltd.	5.10	10.70	3.69	1.23	20.72	1.69	—	22.41
"Pioneer Division" Bralorne Pioneer Mines Ltd.	3.05	10.90	2.92	3.67	20.54	1.00	—	21.54
Northwest Territories:								
Consolidated Mining & Smelting Co. (Con)	0.89	6.02	4.28	2.24	13.43	...	...	...
Consolidated Discovery Yellowknife Mines Ltd.	9.07	9.19	5.09	1.27	24.62	3.02	7.19	34.83
Giant Yellowknife Gold Mines Ltd.	0.83	3.88	4.19	1.95	10.85	2.04	0.51	13.40

¹ Exclusive of outside exploration.² Marketing, head office, etc. (exclusive of taxes).³ Shutdown costs.

TABLE 26. Milling Capacity of Operating Canadian Gold Mines, 1950-59

Year	Nova Scotia	Quebec	Ontario	Manitoba	British Columbia	Northwest Territories	Canada
tons of 2,000 pounds per 24 hours							
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
1953	—	13,200	31,268	2,550	1,675	1,210	49,903
1954	—	12,650	29,168	2,550	1,700	1,375	47,443
1955	—	12,650	29,423	2,550	1,525	1,375	47,533
1956	48	12,000	27,778	2,550	1,200	1,500	45,076
1957	—	9,530	27,358	2,550	1,204	1,500	42,142
1958	—	10,500	27,292	2,550	1,284	1,500	43,106
1959	—	10,100	28,057	550	1,275	1,650	41,632

TABLE 27. Employees and Earnings in the Gold Quartz Mining Industry, 1955-59

Year	Employees					Man-hours worked (all employees)	Earnings		
	Administrative and office		Workmen		Total		Administrative and office	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1955	1,695	169	16,099	69	18,032	41,757,023	8,943,675	55,018,069	63,961,744
1956	1,894	172	15,091	74	17,031	38,888,232	9,226,125	53,475,389	62,701,494
1957	1,601	158	15,066	86	16,911	36,996,927	8,975,888	54,732,792	63,708,680
1958	1,623	153	14,952	83	16,811	36,846,723	9,362,346	54,845,696	64,208,042
1959	1,658	152	14,884	83	16,777	36,320,320	9,808,239	55,710,873	65,519,112

TABLE 28. Number of Workmen, by Months, in the Gold Mining Industry, 1958 and 1959

Month	1958	1959				
	Total	Mine			Mill	Total
		Surface		Underground	Male	
		Male	Female	Male		
January	15,251	3,583	82	10,036	1,322	15,023
February	15,163	3,566	81	9,998	1,314	14,959
March	15,011	3,563	81	9,837	1,312	14,793
April	14,905	3,554	79	9,729	1,284	14,646
May	15,089	3,625	83	9,863	1,316	14,887
June	15,170	3,755	85	9,914	1,328	15,082
July	15,382	3,796	86	9,868	1,332	15,082
August	15,219	3,752	86	9,863	1,323	15,024
September	15,227	3,624	84	9,934	1,293	14,935
October	15,169	3,573	82	10,131	1,300	15,086
November	15,095	3,551	82	10,129	1,290	15,052
December	14,920	3,531	81	10,109	1,287	15,008
Averages	15,035	3,631	83	9,946	1,307	14,967
Man-hours worked	32,999,835			32,426,483		

TABLE 29. Fuel and Electricity Used in the Gold Quartz Mining Industry, 1959

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines	short ton 2,272	36,473
(b) Imported	" 19,230	311,475
Sub-bituminous coal (from Alberta mines only)	" 13	644
Anthracite coal	" 1,208	20,824
Lignite coal	" -	-
Coke (for fuel only)	short ton 8	322
Gasoline, (includes gasoline used in cars and trucks)	Imp. gal. 347,473	152,906
Kerosene or coal oil	" 20,375	6,711
Fuel oil	" 3,365,108	682,264
Wood (cords of 128 cubic feet of piled wood)	cord 11,785	145,582
Gas (a) Liquefied petroleum gases (propane, etc.)	Imp. gal. 23,603	6,729
(b) Other manufactured gas	" -	-
(c) Natural gas	Mcf. 59,814	32,190
Other fuel (shavings, sawdust etc.)	" -	97,174
Electricity purchased for power and lighting	kwh. 929,951,854	5,627,611
Electricity purchased for other purposes	" 14,582,624	40,149
Total (cost only)	" -	7,161,054
Electricity generated (a) For own use	kwh. 41,350,126	-
(b) For sale	" 4,483,444	89,681

TABLE 30. Cost of Prospecting Conducted by Canadian Gold Quartz Mining Companies, 1958 and 1959

Province in which prospecting was conducted ¹	By Nova Scotia and Quebec companies ²	By Ontario companies ²	By Manitoba and Saskatchewan companies ²	By British Columbia companies ²	By Yukon and Northwest Territories companies	Total
dollars						
1958						
Newfoundland	51,330	—	—	—	—	51,330
Nova Scotia	3,405	20,660	—	—	—	24,065
New Brunswick	112,396	63,414	—	—	—	175,810
Quebec	234,019	417,055	148	10,150	10,151	671,523
Ontario	324,613	507,118	12,827	—	5,813	850,371
Manitoba	59,461	1,598	49,491	—	—	110,550
Saskatchewan	24,728	5,688	—	—	—	30,416
British Columbia	108,106	26,185	—	87,546	—	221,837
Northwest Territories	1,845	26,374	—	12,137	43,573	83,929
Yukon	6,682	19,847	—	—	—	26,529
Totals	926,585	1,087,939	62,466	109,833	59,537	2,246,360
1959						
Newfoundland	49,203	443	—	—	—	49,646
Nova Scotia	9,722	44,561	—	—	—	54,283
New Brunswick	157,339	118,254	—	—	—	275,593
Quebec	1,205,179	502,165	—	—	—	1,707,344
Ontario	461,233	702,798	11,289	28,146	—	1,203,466
Manitoba	80,522	867	45,494	—	—	126,883
Saskatchewan	20,000	8,211	—	—	—	28,211
British Columbia	7,479	27,314	—	39,152	3,000	76,945
Northwest Territories	—	22,657	—	—	89,834	112,491
Yukon	—	419	—	14,005	—	14,424
Totals	1,990,677	1,427,689	56,783	81,303	92,834	3,649,286

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 31. Drilling Completed on Gold Quartz Deposits, 1957-59

	Footage drilled ¹		
	1957	1958	1959
Diamond drilling for exploration (testing):			
By companies with their own equipment and personnel	497,076	455,666	524,701
By contractors	1,226,771	1,276,442	1,271,824
Other drilling:			
Diamond drilling for breaking rock or ore:			
By companies with their own equipment and personnel	569,628	53,981	22,570
By contractors	24,395	8,075	12,139
Drilling by percussion and other machines ²	35,652,622	37,885,485	35,508,818

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 1958 totalled \$163,988 and in 1959—\$130,736.

TABLE 32. Specified Taxes Paid by Active Canadian Gold Quartz Mines, 1958 and 1959 by Provinces¹

Nature of tax	Nova Scotia	Quebec	Ontario	Manitoba and Saskatchewan	British Columbia	Northwest Territories	Canada
dollars							
1958							
Dominion income tax, including tax on non-operating revenue	—	178,592	2,558,724	—	—	350,000	3,087,316
Provincial tax	20	202,347	1,920,862	2,036	37,590	86,312	2,251,167
Municipal tax	—	268,544	343,728	9,203	41,669	90,531	753,675
Totals	20	649,483	4,823,314	11,239	79,259	528,843	6,092,158
1959							
Dominion income tax, including tax on non-operating revenue	—	190,091	3,107,650	—	—	339,000	3,636,741
Provincial tax	30	280,421	2,147,885	—	49,832	132,129	2,610,297
Municipal tax	—	275,021	365,317	—	22,302	106,103	768,743
Totals	30	745,533	5,620,852	—	72,134	577,232	7,015,781

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

TABLE 33. Certain Specified Expenditures Made by Gold Quartz Mining Companies, 1957-59

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:						
1957	—	—	—	—	—	—
1958	—	—	40	—	—	—
1959	—	—	—	1,690	—	—
Quebec:						
1957	302,168	1,092	91,513	6,611,151	201,505	336,777
1958	389,815	11	95,809	7,351,220	310,454	476,182
1959	339,595	16,760	106,960	8,576,248	1,093,813	6,385,127
Ontario:						
1957	1,169,213	1,024,415	311,527	26,113,109	2,231,301	3,154,265
1958	1,301,357	1,309,340	324,767	24,458,823	1,226,059	2,096,059
1959	1,545,412	1,381,792	365,730	24,692,401	1,567,291	2,335,992
Manitoba:						
1957	28,274	—	12,478	1,167,550	5,339	6,892
1958	13,422	23	8,956	719,814	28,952	29,520
1959	5,597	—	6,651	315,649	50,584	55,890
British Columbia:						
1957	180,553	102,580	27,840	1,499,092	367,664	491,978
1958	98,498	75,869	12,848	902,194	127,793	153,343
1959	140,175	146,161	24,252	534,447	121,618	111,630
Northwest Territories:						
1957	103,820	—	13,462	3,242,120	262,384	721,814
1958	120,532	—	13,396	3,721,587	306,920	1,089,967
1959	114,412	—	13,923	2,620,001	425,840	581,110
Total Canada:						
1957	1,800,740	1,128,087	456,754	39,112,489	3,112,729	5,079,899
1958	1,923,507	1,385,283	454,192	36,993,391	2,431,522	2,806,970
1959	2,145,191	1,544,733	517,516	38,740,436	3,259,148	9,469,749

TABLE 34. Estimated Capital and Repair Expenditures, 1955-59

Year	Capital expenditures			Repair expenditures			Capital and repair expenditures		
	Con-struction	Machinery	Total	Con-struction	Machinery	Total	Con-struction	Machinery	Total
	thousands of dollars								
1955	5,472	4,311	9,783	1,299	7,691	8,990	6,771	12,002	18,773
1956	5,877	3,204	9,081	1,259	7,445	8,704	7,136	10,649	17,785
1957	5,206	4,173	9,379	1,360	7,241	8,601	6,566	11,414	17,980
1958	4,304	2,833	7,137	1,244	7,596	8,840	5,548	10,429	15,977
1959 ^p	3,868	3,224	7,090	1,434	7,217	8,651	5,300	10,441	15,741

THE COPPER-GOLD-SILVER MINING INDUSTRY

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

Some firms which were formerly classified in the silver-lead-zinc mining industry have been included in the copper-gold-silver mining industry. The value of their copper production exceeded that of zinc.

During 1959 the gross value of crude ore, concentrates, etc., shipped from the mines and mills in this industry to smelters was estimated at \$147,752,990. Fuel cost \$1,729,260 and 517,848,901 kwh. of electricity was purchased for \$3,219,223.

Process supplies, freight and treatment charges amounted to \$52,144,498. Employees numbered 9,682 to whom \$43,460,641 were distributed as salaries and wages. There were 28 producers or shippers in 1959.

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

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

TABLE 35. Principal Statistics¹ of the Copper-Gold-Silver Mining Industry, Significant Years, 1921-59

Year	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Process supplies and containers	Gross value of products	Net value added ²
	number				dollars		
1921	18	1,222	1,573,221	177,052	..	2,589,314	..
1929	152	5,243	8,498,755	1,035,133	..	21,859,907	..
1931	56	3,351	4,958,317	726,502	..	15,951,103	..
1933	29	2,841	3,938,778	404,625	..	7,707,270	..
1937	38	5,164	8,240,614	901,088	4,851,845	40,735,801	24,902,851
1939	30	6,083	9,920,591	1,223,523	5,585,616	51,161,468	26,182,577
1941	22	5,866	10,695,023	1,264,567	5,505,955	64,829,073	30,220,331
1944	26	5,175	10,710,071	1,402,243	5,170,581	62,369,815	38,198,039
1946	43	4,958	10,243,467	1,152,925	4,022,508	54,304,549	37,433,982
1949	33	7,395	21,776,150	1,630,715	7,499,445	105,994,498	74,591,660
1951	82	6,223	21,545,660	2,085,808	6,257,819	123,162,228	92,331,995
1954	116	7,837	29,791,332	3,148,808	10,232,701	105,893,976	70,814,052
1955	186	9,025	36,391,460	4,090,507	12,548,088	145,269,622	99,540,486
1956	314	10,533	43,929,096	4,620,541	15,594,327	147,187,431	96,941,696
1957	261	10,359	45,622,452	4,942,600	15,297,348	119,013,141	68,694,057
1958	244	6,875	39,745,243	4,428,653	15,968,381	133,778,148	77,993,264
1959	310	9,682	43,460,841	4,961,920	12,948,618	147,752,990	90,660,009

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

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

TABLE 36. Shipments from Copper-Gold-Silver Mines, 1958 and 1959

	Quantity	Value	Total metal content as determined by settlement assay ¹				
			Gold	Silver	Copper	Sulphur	Zinc
	tons	\$	fine ounces		lb.	tons	lb.
1958							
To Canadian plants:							
Ores	704,377	9,555,092	76,500	237,663	30,645,793	—	50,258
Copper concentrates	1,084,029	98,410,777	363,751	4,986,908	415,993,476	—	28,040,042
Zinc	95,933	4,922,137	4,261	106,466	1,929,079	—	85,618,058
Iron pyrite concentrates	322,257	1,079,720	—	—	—	150,273	—
Slags	10	10,246	185	3,936	176	—	—
Residues, bullion and gold precipitates ..	2	846,185	24,056	38,636	1,012	—	—
To foreign plants:							
Ores and tailings	108	16,525	441	154	8,483	—	—
Copper concentrates	19,958	2,618,447	3,258	75,151	9,759,116	—	—
Zinc concentrates	137,448	14,568,431	322	34,654	156,480	—	145,732,420
Iron pyrite concentrates	456,454	1,892,507	—	—	—	228,866	—
Precipitates	301	58,081	—	—	240,261	—	—
Totals	2,820,877	133,778,148	472,774	5,483,568	458,733,878	379,139	259,440,778
Value of process supplies, etc. ² .....	...	55,784,884	...	...	...	...	...
Net value added .....	...	77,993,264	...	...	...	...	...
1959							
To Canadian plants:							
Ores	693,211	10,673,257	69,199	221,849	31,206,859	—	74,297
Copper concentrates	1,097,563	109,483,063	363,358	4,903,125	413,965,412	—	27,871,897
Zinc concentrates	110,709	6,588,571	5,011	139,174	2,330,504	—	99,962,734
Iron pyrite concentrates	344,661	828,112	—	—	—	155,876	—
Slags, residues, bullion and gold precipitates ..	15	1,480,381	42,722	67,064	2,198	—	—
Tailings	35,488	19,565	—	—	—	—	—
To foreign plants:							
Ores and tailings	—	—	—	—	—	—	—
Copper concentrates	28,378	4,310,977	7,527	84,541	14,385,433	—	—
Zinc concentrates	112,829	13,180,554	390	2,598	—	—	119,336,577
Iron pyrite concentrates	326,384	1,081,538	—	—	—	162,984	—
Precipitates	473	106,972	—	—	389,656	—	—
Totals	2,749,711	147,752,990	488,207	5,408,351	462,280,062	318,860	247,245,505
Value of process supplies, etc. ² .....	...	57,092,981	...	...	...	...	...
Net value added .....	...	90,660,009	...	...	...	...	...

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

TABLE 37. Ores Mined, Milled, and Concentrates Produced, by the Copper-Gold-Silver Mining Industry, 1950-59

Year	Ore mined	Ore milled	Copper concentrates produced ¹	Zinc concentrates produced	Iron pyrite concentrates produced
			tons		
1950	8,758,607	8,159,756	830,438	313,161	322,117
1951	7,380,966	6,799,064	783,011	231,674	375,969
1952	7,773,341	7,128,795	701,725	233,046	460,753
1953	7,438,500	6,606,631	697,285	216,686	398,429
1954	6,501,589	7,982,320	806,157	234,364	505,504
1955	9,911,751	9,375,687	909,466	230,236	653,916
1956	10,422,648	10,442,164	931,328	230,220	578,923
1957	10,570,801	10,009,694	1,135,664	229,514	528,388
1958	11,484,960	11,274,297	1,106,733	229,962	782,828
1959	12,436,105	11,577,414	1,135,190	231,959	674,450

¹ Exclusive of copper precipitate.

TABLE 38. Employees and their Earnings in the Copper-Gold-Silver Mining Industry, 1955-59

Year	Employees					Man-hours worked (all employees)	Earnings		
	Administration		Workmen		Total		Administration	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1955	1,210	171	7,568	76	9,025	20,497,165	6,608,138	29,783,322	36,391,460
1956	1,403	233	6,813	84	10,533	23,919,073	7,912,036	36,017,060	43,929,096
1957	1,493	219	8,570	77	10,359	22,946,894	9,134,100	37,560,252	46,694,352
1958	1,327	184	7,329	35	8,875	18,958,827	7,723,473	32,021,770	39,745,243
1959	1,339	187	8,116	40	9,682	20,429,780	7,867,882	35,592,759	43,460,641

TABLE 39. Number of Workmen, by Months, 1958 and 1959

Month	1958	1959					
	Total	Mine			Mill		Total
		Surface		Underground	Male	Female	
		Male	Female	Male			
January	8, 121	2, 626	25	3, 783	893	9	7, 336
February	7, 826	2, 736	25	3, 927	904	10	7, 602
March	7, 306	2, 829	25	3, 990	906	10	7, 760
April	7, 121	2, 783	25	4, 085	929	10	7, 632
May	7, 256	2, 947	26	4, 196	977	9	8, 155
June	7, 266	3, 102	28	4, 296	1, 006	9	8, 441
July	7, 372	3, 224	28	4, 350	1, 025	9	8, 636
August	7, 294	3, 216	28	4, 379	1, 036	9	8, 668
September	7, 194	3, 038	26	4, 227	1, 129	9	8, 429
October	7, 209	2, 979	26	4, 242	1, 114	9	8, 370
November	7, 194	2, 894	29	4, 312	1, 101	9	8, 345
December	7, 061	2, 809	30	4, 156	1, 093	9	8, 097
Averages	7, 364	2, 944	30	4, 213	959	10	8, 156
Man-hours worked	15, 790, 429			17, 163, 481			

TABLE 40. Fuel and Electricity Used in the Copper-Gold-Silver Mining Industry, 1959

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines short ton	7,562	125,855
(b) Imported "	1,063	17,895
Sub-bituminous coal (from Alberta mines only) "	45	658
Anthracite coal "	462	5,334
Lignite coal "	—	—
Coke for fuel only short ton	154	4,403
Gasoline, (includes gasoline used in cars and trucks) Imp. gal.	396,758	149,201
Kerosene or coal oil "	12,506	3,557
Fuel oil "	6,732,769	1,347,070
Wood (cords of 128 cubic feet of piled wood) cord	40	387
Gas (a) Liquefied petroleum gases (propane, etc.) Imp. gal.	159,633	42,040
(b) Other manufactured gas "	—	—
(c) Natural gas "	—	—
Other fuel "	—	32,860
Electricity purchased for power and lighting kwh.	517,848,901	3,219,223
Electricity purchased for other purposes "	—	—
Total (cost only) "	...	4,948,483
Electricity generated (a) For own use kwh.	77,373,108	...
(b) For sale "	747,691	14,304

TABLE 41. Specified Expenditures by the Copper-Gold-Silver Mining Industry, 1957-59

	1957	1958	1959
	dollars		
Workmen's compensation	1,284,418	1,130,201	966,809
Silicosis assessment	228,428	187,145	298,498
Unemployment insurance	335,562	321,468	5,793,394
Aggregate cost of all supplies purchased	42,131,327	37,369,425	28,773,276
Aggregate cost of plant and equipment purchased	16,212,121	5,856,514	5,337,650
Cost of buildings, machinery and equipment erected or installed during year	32,111,633	8,533,819	10,862,865

TABLE 42. Taxes Paid by the Copper-Gold-Silver Mining Industry, 1957-59

	1957	1958	1959
	dollars		
Dominion income tax, including tax on non-operating revenue	13,411,009	3,884,364	7,121,825
Provincial tax	4,572,134	3,155,812	4,389,509
Municipal tax	1,198,828	1,515,048	1,462,807
Grand total taxes paid	19,181,971	8,555,223	12,974,141

TABLE 43. Estimated Capital and Repair Expenditures in the Copper-Gold-Silver Mining Industry, 1955-59

Year	Capital expenditures			Repair expenditures			Capital and repair expenditures		
	Con- struction	Machinery	Total	Con- struction	Machinery	Total	Con- struction	Machinery	Total
	thousands of dollars								
1955	7,811	5,622	13,433	3,117	3,298	6,417	10,928	8,920	19,848
1956	29,234	12,820	42,054	3,113	3,594	6,707	32,347	16,414	48,761
1957	26,546	11,337	37,883	3,579	4,275	7,854	30,125	15,612	45,737
1958	7,777	3,324	11,101	3,558	4,087	7,645	11,335	7,411	16,746
1959 ^P	8,458	3,878	12,336	3,341	4,012	7,353	11,799	7,890	19,689

TABLE 44. Cost of Prospecting Conducted by the Copper-Gold-Silver Mining Industry, by Provinces, 1958 and 1959

Conducted in	1958	1959	Conducted in	1958	1959
	dollars			dollars	
Newfoundland	19,786	33,117	Saskatchewan	454,615	468,794
Nova Scotia	33,563	90,232	Alberta	52	2,605
New Brunswick	299,803	310,385	British Columbia	1,965,080	1,436,089
Quebec	2,140,416	13,966,618	Northwest Territories	488,649	172,440
Ontario	1,616,780	3,184,028	Yukon	211,291	167,145
Manitoba	3,009,460	2,395,300	Totals	10,239,493	22,228,833

TABLE 45. Drilling Completed on Copper-Gold-Silver Deposits, 1958 and 1959

	Footage drilled	
	1958	1959
Diamond drilling for exploration (testing only):		
By mining companies with their own personnel and equipment	33,241	41,778
By diamond drilling contractors	1,211,722	1,527,265
Other diamond drilling:		
Blast hole diamond drilling:		
By mining companies with their own personnel and equipment	769,595	547,941
By diamond drilling contractors	338,423	486,223
Drilling by percussion or other machines ¹	16,451,323	20,355,229

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

Note: Value of diamonds in all forms (stones, bits, etc.) purchased during the year, \$95,909.

TABLE 46. Copper Production (Recoverable) according to Nature of Ore, and by Provinces, 1957-59

Province	From copper-gold-silver ores	From nickel-copper ores	From other ores	Total
tons				
1957				
Newfoundland	1,296	—	3,239	4,535
Nova Scotia	—	—	—	—
New Brunswick	5,738	—	—	5,738
Quebec	109,535	—	2,874	112,409
Ontario	9,644	160,786	1,273	171,703
Manitoba	13,747	4,804	—	18,551
Saskatchewan	30,597	—	—	30,597
British Columbia	12,657	—	2,754	15,411
Northwest Territories	—	165	—	165
Totals	183,214	165,755	10,140	359,109
1958				
Newfoundland	11,619	—	3,132	14,751
Nova Scotia	—	—	—	—
New Brunswick	328	—	—	328
Quebec	127,674	—	3,771	131,445
Ontario	31,839	106,923	3,273	142,035
Manitoba	7,945	4,656	—	12,601
Saskatchewan	37,510	—	—	37,510
British Columbia	4,575	340	1,095	6,010
Northwest Territories	—	434	—	434
Totals	221,490	112,353	11,271	345,114
1959				
Newfoundland	12,097	—	2,892	14,989
Nova Scotia	—	—	—	—
New Brunswick	—	—	—	—
Quebec	131,877	—	3,035	134,912
Ontario	28,328	157,187	2,778	188,293
Manitoba	8,365	4,580	—	12,945
Saskatchewan	35,536	—	—	35,536
British Columbia	6,781	249	1,091	8,121
Northwest Territories	—	493	—	493
Totals	222,964	162,489	9,796	395,269

TABLE 47. Production of Refined Copper,¹ 1950-59

Year	Short tons	Year	Short tons
1950	238,204	1955	288,997
1951	245,466	1956	326,458
1952	196,320	1957	323,540
1953	236,968	1958	329,239
1954	253,385	1959	365,366

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

TABLE 48. Silver Production according to Nature of Ore, by Provinces, 1959

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	—	—	—	—	1,125,110	—	1,125,110
Nova Scotia	—	—	—	—	—	—	—
New Brunswick	—	—	—	—	—	—	—
Quebec	—	113,543	2,918,566	—	1,078,132	—	4,108,241
Ontario	—	408,114	1,312,123	1,384,223	779,234	6,657,162	10,540,856
Manitoba	—	5,231	350,546	18,050	—	—	373,827
Saskatchewan	—	1,187,439	—	—	—	—	1,187,439
Alberta	19	—	—	—	—	—	19
British Columbia	943	32,133	83,382	—	7,346,827	—	7,463,285
Northwest Territories	—	70,560	—	—	—	—	70,560
Yukon	13,822	—	—	—	7,040,810	—	7,054,632
Totals	14,784	629,581	5,852,056	1,402,273	17,368,113	6,657,162	31,823,969

TABLE 49. Selenium and Tellurium Recoverable from Canadian Ores, 1950-59

Year	From copper-gold-silver ores		From nickel-copper ores		Total	
	Selenium	Tellurium	Selenium	Tellurium	Selenium	Tellurium
	pounds					
1950	198,264	4,065	63,709	6,010	261,973	10,075
1951	300,194	2,612	62,409	6,301	362,603	8,913
1952	160,452	325	81,578	5,710	242,030	6,035
1953	169,648	169	92,698	4,525	262,346	4,694
1954	228,703	976	94,826	7,195	323,529	8,171
1955	332,644	2,559	94,465	6,455	427,109	9,014
1956	221,233	1,562	109,156	6,305	330,389	7,867
1957	234,933	24,609	86,459	6,915	321,392	31,524
1958	216,695	31,558	90,295	8,692	306,990	38,250
1959	266,707	6,123	101,400	6,900	368,107	13,023

TABLE 50. Zinc Production (Recoverable) According to Nature of Ore, and by Provinces, 1958 and 1959

Year and province	Recoverable from copper-gold-silver ores	Recoverable from silver-lead-zinc and other ores	Total
	tons (2,000 pounds)		
1956			
Newfoundland	—	33,870	33,870
Nova Scotia	—	—	—
New Brunswick	3,162	—	3,162
Quebec	40,266	16,657	56,923
Ontario	16,938	29,301	46,239
Manitoba	11,512	—	11,512
Saskatchewan	48,328	—	48,328
British Columbia	1,504	215,800	217,304
Yukon	—	7,761	7,761
Totals	121,710	303,389	425,099
1959			
Newfoundland	—	31,674	31,674
Nova Scotia	—	—	—
New Brunswick	—	—	—
Quebec	31,515	15,543	47,058
Ontario	17,875	27,306	44,981
Manitoba	15,703	—	15,703
Saskatchewan	48,877	—	48,877
British Columbia	1,451	201,641	203,092
Yukon	—	6,823	6,823
Totals	113,221	282,787	396,008

TABLE 51. Refined Zinc Produced, from all Sources, 1950-59

Year	Short tons	Year	Short tons
1950	204,367	1955	256,542
1951	218,578	1956	255,564
1952	222,200	1957	247,316
1953	250,961	1958	252,093
1954	253,365	1959	255,306

TABLE 52. Cadmium Production (Recoverable) from Canadian Ores, 1950-59

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		
1950	141,456	706,950	848,406	1955	191,691	1,727,390	1,919,081
1951	147,168	1,179,752	1,326,220	1956	208,327	2,131,094	2,339,421
1952	205,911	742,676	948,587	1957	286,044	2,082,086	2,368,130
1953	157,997	960,288	1,118,285	1958	355,602	1,400,448	1,756,050
1954	154,596	932,184	1,086,780	1959	334,029	1,826,334	2,160,363

TABLE 53. Average Annual Metal Prices in Canadian Dollars, 1950-59

Year	Gold	Silver	Copper	Lead	Zinc
	Per troy ounce	Per troy ounce	Per pound	Per pound	Per pound
	dollars				
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	0.1746
1953.....	34.42	0.8401	0.299	0.1293	0.1196
1954.....	34.07	0.8326	0.2916	0.1333	0.1198
1955.....	34.52	0.8818	0.3687	0.1438	0.1365
1956.....	34.45	0.8968	0.4141	0.1551	0.1484
1957.....	33.55	0.8737	0.2895	0.1396	0.1209
1958.....	33.98	0.8681	0.2542	0.1136	0.1088
1959.....	33.57	0.8778	0.2961	0.1061	0.1224

TABLE 54. World Copper Production by Countries of Origin of Ore¹

Country	1955	1956	1957	1958	1959
	tons (2,000 pounds)				
United States.....	1,014,442	1,114,285	1,092,744	990,253	840,000
Mexico.....	60,269	60,478	66,799	71,609	63,133
Canada.....	325,994	354,860	359,109	345,114	399,362
Cuba.....	19,507	16,046	15,306	13,992	9,942
Bolivia ²	3,855	4,897	4,319	3,168	2,460
Chile.....	477,869	539,839	533,855	509,541	601,855
Peru.....	47,843	50,966	63,023	59,104	53,146
Ecuador.....	6	—	—	—	—
Totals, America	1,949,785	2,141,371	2,135,155	1,992,781	1,969,898
Austria.....	2,841	2,579	2,574	2,695	2,726
Finland.....	25,412	24,830	28,321	31,569	33,132
France.....	650	606	496	794	672
Germany, West.....	1,335	1,076	1,203	1,156	1,584
Italy.....	273	494	428	761	659
Norway.....	15,419	16,488	16,787	17,501	16,094
Spain ³	8,726	7,525	11,077	7,466	12,137
Sweden.....	17,275	18,436	19,914	20,453	19,079
Yugoslavia.....	32,098	35,087	36,883	38,840	38,141
Totals, Europe	102,029	107,121	117,683	121,235	124,224
Japan.....	80,466	85,458	90,066	89,836	92,911
India.....	8,155	8,543	8,790	8,782	8,459
Korea, Republic of.....	1,400	1,450	1,011	842	529
Turkey.....	26,313	27,101	23,716	24,676	27,385
Philippines.....	19,247	29,721	44,513	51,841	54,587
Cyprus ³	26,123	39,497	43,676	36,614	39,978
Totals, Asia	161,704	191,770	211,772	212,591	223,849
Belgian Congo.....	259,158	275,535	267,026	261,865	310,952
Northern Rhodesia.....	395,307	445,464	480,313	441,072	598,834
South West Africa.....	23,739	27,953	30,466	32,065	31,695
Uganda.....	—	168	8,360	12,130	13,362
Union of South Africa.....	47,484	48,474	47,752	53,375	53,575
Totals, Africa	725,688	797,594	833,917	800,507	1,008,418
Australia.....	46,675	54,723	58,465	76,867	101,062
Russia.....	372,500	417,000	465,000	510,000	510,000
Germany, East.....	25,300	27,500	27,500	27,500	27,500
China.....	9,900	11,000	13,000	13,000	16,500
Soviet Sphere totals⁴	407,700	455,500	505,500	550,500	554,000
World totals, as reported⁵	3,393,581	3,748,079	3,862,492	3,756,481	3,981,451

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

² Exports.

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

⁴ In addition there is production in Hungary and Poland: the total of which is estimated to be about 17,500 tons in 1959.

⁵ In addition there is production in Brazil, Ireland, Portugal, Burma, Taiwan, Algeria, Angola, Southern Zone Morocco, Southern Rhodesia and Tanganyika; the total of all these countries is estimated to be about 25,000 tons in 1959.

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

TRANSACTIONS IN GOLD BULLION AT THE ROYAL CANADIAN MINT

(From the Annual Report of the Royal Canadian Mint)

Six thousand one hundred and twenty-two deposits of gold bullion were received at the Mint during the year from Canadian Mining Companies and Sundry persons. The gross weight of the deposits amounted to 4,805,494 ounces containing by assay 3,908,640 ounces fine gold and 551,412 ounces fine silver. This includes bullion received under the heading of Gold Storage. The receipts show a decrease as compared with the year 1958 of 169 in the number of deposits, gross weight 62,572 ounces, gold content 49,819 ounces and fine silver 50,683 ounces and was composed of the following:

Fine Gold —

354 deposits weighing 337,286.221 ounces with a mean fineness of 997.388

Crude Bullion —

3,831 deposits weighing 3,017,914.049 ounces with an average fineness of 778.982 gold, 123.513 silver and containing 6.5142% base metal

Scrap (Jewellery and Dental) —

264 deposits, 14,981.070 ounces at an average fineness of 449.105 gold and 92.231 silver

Gold for Storage —

1,673 deposits weighing 1,435,312.180 ounces with an average fineness of 846.232

The net value paid to depositors was \$90,164,875.37. In addition the amount of fine gold issued to depositors was 1,175,087.932 ounces.

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

Ounces Fine

6,622 Trade bars transferred to Exchange Fund Account of Minister of Finance.....	2,647,047.089
Depositors — granulated and bars	1,175,087.932
Sales of fine gold	5,500.441
Trial Plate for assay purposes	4.000
Medals, etc.	14.316
Sweep	9,026.064

3,836,679.842

This total shows a decrease of 252,026.506 ounces fine issued as compared with the year 1958.

Details of origin of the bullion deposited for sale to Her Majesty and for gold storage during the year 1959 are shown in the following table:

From Canadian mines and refineries	Sale to Her Majesty		Gold storage		Total		Total fine silver
	Gross weight	Fine gold	Gross weight	Fine gold	Gross weight	Fine gold	
	ounces						
Ontario	1,899,171.560	1,555,989.187	1,155,625.660	1,020,740.184	3,054,797.420	2,576,729.371	297,259.25
Quebec	631,393.220	657,727.911	47,701.500	14,849.166	879,094.720	872,577.077	135,933.10
British Columbia	193,074.780	154,169.032			193,074.780	154,169.032	26,064.92
Manitoba	39,903.300	29,353.720			39,903.300	29,353.720	4,835.86
Yukon Territory	83,615.620	66,959.072			83,615.620	66,959.072	13,822.30
North West Territories	307,814.540	222,905.700	231,984.820	179,017.831	539,799.360	401,923.531	72,096.47
Alberta	227.050	200.314			227.050	200.314	18.83
Totals from Canadian mines and refineries	3,355,200.270	2,667,304.936	1,435,312.180	1,214,607.181	4,790,512.450	3,901,912.117	550,030.73
From jewellery and scrap	14,981.070	6,728.068			14,981.070	6,728.068	1,381.72
Grand totals	3,370,181.340	2,694,033.004	1,435,312.180	1,214,607.181	4,805,493.520	3,908,640.185	551,412.45

GOLD STORAGE

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

The fine gold content of the bullion deposited under this heading during 1959 amounted to 1,214,607.181 ounces. Fine

bullion amounting to 1,171,367.538 ounces was issued on behalf of the mines for export and to various processors for domestic use.

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

Receipts	Number of deposits	Fine gold	Fine silver
ounces			
Mines — Sale to Her Majesty	4,185	2,687,304.936	550,030.73
Gold storage	1,673	1,214,607.181	
Jewellery and scrap — Sale to Her Majesty	264	6,728.068	1,381.72

Produced	Number	Gross weight	Fine weight	Average assay
		ounces		
Fine gold bars	6,592	2,640,565.775	2,634,702.363	997.8
Granulated gold		9,725.160	9,722.579	999.7
Fine silver bars	516	579,113.29	578,968.72	999.8
Granulated silver		3,338.14	3,337.47	999.8
Gold trial plate			4.000	
Gold medals			0.282	
Silver medals			0.14	
Storage—Gold bars	3,119	1,249,964.247	1,247,644.380	998.1
Granulated gold		13,176.130	13,172.774	999.7

Special processes	Number	Gross weight
		ounces
Remelts	178	96,746.920
Toughenings	3	1,506.060
		pounds avoirdupois
Chloride reduction		86,803.00
Sweeps		131,343.50

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, 1959

Year	Gold received		Gold issued	
	Gross weight	Fine gold	Coin	Bullion
	ounces		ounces fine	
1908 to 1949	116,275,427.653	93,787,917.135	383,319.096	93,257,827.305
1950	5,485,956.751	4,422,968.129		4,347,961.898
1951	5,248,758.942	4,169,479.513		4,187,485.874
1952	4,848,048.381	3,953,158.154		4,031,068.071
1953	4,642,410.478	3,684,073.637		3,628,496.738
1954	4,768,451.365	3,829,430.609		3,998,835.566
1955	4,878,918.379	3,947,636.509		3,952,764.485
1956	4,693,484.529	3,801,788.815		3,774,599.457
1957	4,798,298.343	3,896,083.563		3,776,710.677
1958	4,868,066.405	3,958,458.747		4,086,706.348
1959	4,805,493.520	3,906,640.185		3,636,679.842
Totals	165,311,312.748	133,359,634.996	383,319.096	132,859,136.261

CURRENCY, MINT AND EXCHANGE FUND ACT

Gold Bullion Regulations, 1959

AT THE GOVERNMENT HOUSE AT OTTAWA

P.C. 1959-100

Thursday, the 29th day of January, 1959.

Present:

His Excellency the Governor General in Council

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

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

Short Title

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

Interpretation

2. In these Regulations,

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

Deposits

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

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

(2) The Master shall not accept

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mint Charges

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

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

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

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

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

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

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

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

- (b) ten cents for each fine ounce packed at the Mint for shipment, payable at the time of application for the release of the gold, and
- (c) a handling charge of twenty cents for each fine ounce of gold released from storage for sale to Her Majesty, payable at the time of sale.

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

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

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

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

Sale of Gold

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

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

General

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

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

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

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

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

Directory of Firms in the Gold Mining Industry, 1959

Name	Head or executive office address	Location
(a) Placer Gold Mining Industry		
Quebec:		
Beauce Placer Mining Co. Ltd.	330 Bay St., Toronto, Ontario	Beauceville
British Columbia:		
Ad Astra, Minerals	10201-104th St., Edmonton, Alta.	Atlin
Bates, Richard L.	Wells, B.C.	Wells
Bindschalter A.	Wells	Barkerville
Carboneau, Joseph	Kamloops, B.C.	Kamloops
Chouse John Stanley	Quesnel, B.C.	Cariboo
Chow Henry	Prince George, B.C.	Cariboo
Christensen, H.C.	Wells	Cariboo
Cosco, Nick	Kamloops, B.C.	Kamloops
Cresswell, R.	Quesnel, B.C.	Quesnel
Dahn, John	Quesnel, B.C.	Quesnel
Deziak, William	Williams Lake, B.C.	Cariboo
Feyer, J.H.	Gibson's, B.C.	Quesnel
Fisher Nolan	Wells	Valley Creek
Fosberg, H.V.	Lumby, B.C.	Harris Creek
Frederick, F.W.	Quesnel Forks'	Spring Creek
Gunn J.J.	Wells, B.C.	Cariboo
Hamilton, T.C.	Manion Creek, B.C.	Germanson River
Heal, John	Vernon, B.C.	
Holbrook, E.E.	Vancouver B.C.	
Hoy, C.D.	Quesnel, B.C.	Cariboo
Johansen, John	Canal Flats, B.C.	
Kinney, M.D.	Cranbrook, B.C.	Cranbrook
Kissick, E.	Cranbrook, B.C.	Cranbrook
Knudson, L.E. & Heinzelman, P.	Quesnel, B.C.	Cottonwood Canyon
Langevin, Dan	Atlin, B.C.	Atlin
Larsens Placer Mining Co.	Quesnel, B.C.	Atlin
MacDonald, Mrs. D.	Quesnel, B.C.	Lightning Lake
McHugh, Charles O.	Williams Lake, B.C.	Lillooet
McJana Placers	Quesnel, B.C.	Cariboo
Meagher, Thomas W.	Lillooet, B.C.	Lillooet
Mitchell, Garson C.	Burnaby, B.C.	
Montgomery, Anthony	Lillooet, B.C.	Lillooet
Morgan, Bud	Quesnel, B.C.	Cariboo
Nelson, John A.	Vancouver, B.C.	
O'Donnell, John P.	Trail, B.C.	
Ogden, P.	100 Mile House, B.C.	
Piccolo Luigi	Atlin, B.C.	Atlin
Presby, Thomas B.	Terrace, B.C.	
Reber, W.S.	Whitehorse N.W.T.	Atlin, B.C.
Roth, Mrs. Lurline B.	Quesnel, B.C.	Cariboo
Rollheiser, J.J.	Kimberley	Perry Creek
Speed, Len	Likely, B.C.	Likely
Stables, Geo. W.	Spences Bridge, B.C.	
Troutline Creek Gold Ltd.	Edmonton, Alta.	Laird Mining District, B.C.
Walters, Frank W.	Vernon, B.C.	
Williams, S.N.	Quesnel, B.C.	Cariboo
Weskey Creek Syndicate	Salmo	Nelson
Yukon:		
Action Mining Co.	Mile 1054 Alaska Highway Y.T.	Bullion Creek
Ballarat Mines Ltd.	Dawson, Yukon Territory	Dawson
Bleiler Placer Mining	Box 2102, Whitehorse	Mayo
Boutellier, H.C. & D.F.	Box 258 Dawson, Y.T.	Bonanza Creek
Bremner, John	Box 144 Dawson	Last Chance Creek
Burgelman, Mrs. Nellie	Box 197 Dawson, Y.T.	Cariboo Creek
Djukastein, Klaus	Mayo, Yukon Territory	Johnson Creek
Greig, Cliff W.	Mayo, Yukon Territory	Mayo
Lamontagne, J.A.	Dawson, Yukon Territory	Bedrock Creek
Le Saux, Eugene	Stewart River, Yukon Territory	Henderson Creek
Lunde, Ole	Box 4 Dawson, Y.T.	Dawson
Moen, Olaf	Dawson, Y.T.	Last Chance
Ross, Lorne M.	Box 1088 Whitehorse	Kirkman Creek
Spruce Creek Placers	Box 104 Atlin, B.C.	Atlin
Taylor, Fred	Mayo, Y.T.	Dublin Gulch
Yukon Consolidated Gold Corp. Ltd.	1919 Marine Bldg., Vancouver, B.C.	Dawson
Yukon Placer Mining Co.	1158 Melville St., Vancouver, B.C.	Glacier Creek
Alberta:		
Fester, Homer	12230-101 St. Edmonton, Alta.	North Saskatchewan River
(b) Gold Quartz Mining Industry		
Nova Scotia:		
Smith, A.J.	East Chezzetcook	Lake Catcha
Redden, Fred C.	Middle Musquodohit	Lindsay Lake
Silver, Chas. S.	Sheffield Mills	Stormont
MacMillan, MacKay	Issacs Harbour	Guy'sborough
Young, J. Oscar	The Oxen, R.R. # 1, Lunenburg	Lunenburg
East Hants Gold Mines Ltd.	Hants	Hants
Val Jon Exploration Ltd.	1910 Royal Bank Bldg, Toronto, Ontario	Chester Basin

Directory of Firms in the Gold Mining Industry, 1959 — Continued

Name	Head or executive office address	Location
(b) Gold Quartz Mining Industry — Continued		
Quebec:		
Akasaba Gold Mines Ltd.	199 Bay St., Toronto, Ontario	Louvencourt Twp.
Anacon Lead Mines Ltd.	330 Bay St., Toronto, Ontario	Rohault Twp.
Barnat Mines Ltd.	199 Bay St., Toronto, Ontario	Malartic, Quebec
Bargold Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Barraute Twp.
Belfast Mines Ltd.	44 King St. W., Toronto, Ontario	Protet Lake
Bellevue Quebec Mines, Ltd.	25 King St. W., Toronto 1, Ontario	Bellevue
Bevcon Gold Mines, Ltd.	199 Bay St., Toronto Ontario	Louvencourt
Bonnie Gold Mines Ltd.	100 Adelaide St. W., Toronto Ontario	Bruchesi Twp.
Britt-Malartic Gold Mines Ltd.	33 Melinda St., Toronto, Ontario	Malartic
Bourbeau Lake Mines, Ltd.	Noranda	McKenzie Twp.
Canadian Malartic Gold Mines Ltd.	25 King St. W., Toronto 1, Ontario	Malartic
Canadian Shield Mining Corp.	360 St. James St. W., Montreal	Barraute Twp.
Celta Development & Mining Co. Ltd.	465 St. John St., Montreal	Rouyn
Chimo Gold Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Vauquelin Twp.
Cournot Mining Co., Ltd.	1121 Sherbrooke St. W., Montreal	Louvencourt Twp.
Consolidated Central Cadillac Mines Ltd.	455 Craig, Montreal	Cadillac
Croitor Pershing Mines Ltd.	199 Bay St., Toronto, Ontario	Pershing Twp.
Dolsan Mines Ltd.	1374 Sherbrooke St. W., Montreal	Vassal Twp.
Donalda Mines Ltd.	62 Richmond St. W., Toronto	Noranda
Dupel Mines Ltd.	314 Bathurst St., Toronto, Ontario	Duprat Twp.
East Amphi Gold Mines Ltd.	80 Richmond St. W., Toronto, Ontario	Malartic Twp.
East Malartic Mines Ltd.	199 Bay St., Toronto, Ontario	Fourniere Twp.
Elder Mines & Developments Ltd.	44 King St. W., Toronto, Ontario	Noranda Twp.
Eldrich Mines Ltd.	44 King St. W., Toronto, Ontario	Duprat
Elvue Mines Ltd.	121 Richmond St. W., Toronto, Ontario	Duprat
Eplett G.S. Mining & Development Ltd.	New Liskeard, Ontario	Beauchastel Twp.
Franksin Mines Ltd.	159 Craig St. W., Montreal	Rat Lake
Fontana Mines (1945) Ltd.	222 Hospital St., Montreal	Beauchastel
Gamma Mines (Quebec) Ltd.	Bourlamaque	Bourlamaque
Gwillim Lake Gold Mines Ltd.	67 Yonge St., Toronto, Ontario	McKenzie Twp.
Kerromac Mining Co. Ltd.	132 St. James St., Montreal	La Sarre Twp.
Lake Expanse Gold Mines Ltd.	12 Richmond St. E., Toronto, Ontario	Sinerville Twp.
Lake Opawica Mines Ltd.	516 Canada Cement Bldg., Montreal	Parker Twp.
Lake Wasa Mining Corporation	Armfild	
Lamaque Mining Co. Ltd.	Bourlamaque	Bourlamaque
Leys, Wm., Mining Corp. Ltd.	486 St. John St., Montreal	Beauchastel
Louvencourt Goldfields Corporation	100 Adelaide St. W., Toronto, Ontario	Bourlamaque
Malartic Goldfields Ltd.	Halet	Fourniere Twp.
Mariette Mines Ltd.	1197 Phillips Square, Montreal	Fiedmont
Marban Gold Mines Ltd.	Halet	Dubuisson Twp.
Marcoland Mines Ltd.	201—2ème Avenue, Quebec	Landrienne Co.
McWatters Gold Mines	Halleybury, Ontario	Rouyn Twp.
Nemrod Mining Co., Ltd.	132 St. James St. W., Montreal	Louvencourt
New Goldvue Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Chibougamau
New Marlon Gold Mines Ltd.	7 King St. W., Toronto, Ontario	Rouyn
New Senator-Rouyn Ltd.	Box 428, Noranda	Noranda
New Vinray Mines Ltd.	67 Yonge St., Toronto, Ontario	Dufresnoy
Nickel Offsets Ltd.	80 Richmond St. W., Toronto, Ontario	Duprat Twp.
Norbeau Mines Ltd.	199 Bay St. Toronto, Ontario	McKenzie Twp.
Norlartic Mines Ltd.	Halet	Malartic
O'Brien Gold Mines, Ltd.	Cadillac	Cadillac Twp.
Orenada Gold Mines Ltd.	330 Bay St., Toronto, Ontario	Bourlamaque
Perron Gold Mines Ltd.	200 Bay St., Toronto, Ontario	Abitibi
Pitchvein Mines Ltd.	82 Government Road, Kirkland Lake	Dasserat
Porcupine Prime Mines Ltd.	62 Richmond St. W., Toronto, Ont.	Fourniere Twp.
Quebelle Mines Ltd.	357 Bay St. Toronto, Ontario	Cedar Rapids
Quebec Explorers	132 St. Jacques, Montreal	Vauquelin Twp.
Rand Malartic Mines Ltd.	44 King St. W., Toronto	Fourniere Twp.
Sigma Mines (Quebec) Ltd.	Bourlamaque	Bourlamaque
Stadacona Mines (1944) Ltd.	455 Craig St., Montreal	Rouyn
Sullivan Consolidated Mines Ltd.	1403—Aldred Building, Montreal	Dubuisson Twp.
Tib Exploration Ltd.	67 Yonge St., Toronto, Ontario	Malartic
Tribag Mining Co. Ltd.	44 King St. W., Toronto, Ontario	Rouyn
Valco Mines Co.	115 rue St. Pierre, Quebec	Malartic
Ontario:		
Porcupine District		
Aunor Gold Mines Ltd.	44 King St. W., Toronto	Timmins
Broulan Reef Mines Ltd.	80 Richmond St. W., Toronto	Whitney Twp.
Conlaum Mines Ltd.	25 King St. W., Toronto	Tisdale Twp.
Delnite Mines Ltd.	Box 590, Timmins	Deloro Twp.
Dome Mines Ltd.	South Porcupine	Tisdale Twp.
Halnor Mines Ltd.	1700 Bank of Nova Scotia Building, Toronto	Whitney Twp.
Hollinger Consolidated Gold Mines Ltd.	Timmins	Hilop Twp.
Hugh-Pam Porcupine Mines Ltd.	80 Richmond St. W., Toronto	Whitney Twp.
McIntyre Porcupine Mines Ltd.	Schumacher	Schumacher
Pamour Porcupine Mines Ltd.	Bank of Nova Scotia Bldg., Toronto	Whitney Twp.
Paymaster Consolidated Mines Ltd.	Box 100, South Porcupine	Doloro and Tisdale Twps.
Preston East Dome Mines Ltd.	335 Bay St., Toronto	South Porcupine
Buffalo Ankerite Gold Mines Ltd.	South Porcupine	Doloro Twp.
Central Porcupine Mines Ltd.	100 Adelaide St. W., Toronto	Tisdale Twp.

Directory of Firms in the Gold Mining Industry, 1959 - Continued

Name	Head or executive office address	Location
(b) Gold Quartz Mining Industry - Concluded		
Ontario - Concluded:		
Kirkland Lake District		
Kirkland Minerals Corp., Ltd.	160 Bay St., Toronto	Teck Twp.
Lake Shore Mines Ltd.	199 Bay St., Toronto	Kirkland Lake
Macassa Mines Ltd.	85 Richmond St. W., Toronto	Kirkland Lake
Sylvanite Gold Mines Ltd.	Box 670, Kirkland Lake	Teck Twp.
Teck-Hughes Gold Mine Ltd., The	14 Finkle St., Woodstock	Kirkland Lake
Upper Canada Mines Ltd.	250 University St., Toronto	Gauthier Twp.
Wright-Hargreaves Mines Ltd.	199 Bay St., Toronto	Kirkland Lake
Larder Lake District		
Kerr-Addison Gold Mines Ltd.	44 King St. W., Toronto	McGarry Twp.
Tresdor Larder Mines Ltd.	24 King St. W., Toronto	McGarry Twp.
Sudbury District		
Renable Mines Ltd.	85 Richmond St. W., Toronto	Sudbury
Thunder Bay Districts		
Leitch Gold Mines Ltd.	12 Richmond St. E., Toronto	Summers Twp.
Little Long Lac Gold Mines Ltd.	199 Bay St., Toronto	Errington Twp.
MacLeod-Cockshutt Gold Mines Ltd.	199 Bay St., Toronto	Geraldton
Consolidated Mosher Mines Ltd.	199 Bay St. W., Toronto	Long Lac
Kenora District		
Cone, R.C.	Mine Centre	Shoal Lake
Purdex Minerals Ltd.	25 Adelaide St. W., Toronto	Euart Twp.
Northgate Exploration Ltd.	44 Wellington St., Toronto	Uchi Twp.
Patricia District		
Ahino Gold Mines Ltd.	25 Adelaide St. W., Toronto	Balmer Twp.
Ava Gold Mining Co. Ltd.	320 Bay St., Toronto	Red Lake
Campbell Red Lake Mines Ltd.	50 King St. W., Toronto	Balmer Twp.
Cochenour Willans Gold Mines Ltd.	150 Eglinton Ave. E., Toronto	Dome Twp.
McKenzie Red Lake Gold Mines Ltd.	199 Bay St., Toronto	McKenzie Island
Madsen Red Lake Gold Mines Ltd.	55 Yonge St., Toronto	Heyson Twp.
New Dickenson Mines Ltd.	145 Yonge St. W., Toronto	Balmer Twp.
Pickle Crow Gold Mines, Ltd.	11 Adelaide St. W., Toronto	Connell Twp.
McFinley Red Lake Gold Mines Ltd.	199 Bay St., Toronto	McKenzie Island
Young, H.G., Mines Ltd.	80 Richmond St. W., Toronto	Balmer Twp.
Manitoba:		
Forty-Four Mines Ltd.	237 Curry Bldg., Winnipeg	Rice Lake
San Antonio Gold Mines Ltd.	237 Curry Bldg., Winnipeg	Bissett
Locwin Mining Co. Ltd.	102 Mercantile Bldg., Edmonton, Alberta	Lake Winnipeg
British Columbia:		
Bralorne - Pioneer Mines Ltd.	355 Burrard St., Vancouver	Bralorne
Burgess, A.	Ymir	Erie
Cariboo Gold Quartz Mining Co. Ltd.	675 W. Hastings St., Vancouver	Cariboo
Consolidated Mining & Smelting Co. Ltd.	Trail	Skeena
Cascade Lode Mines Ltd.	4181 Miller St., Vancouver	Alberni
French Mines Ltd.	675 W. Hastings St., Vancouver	Osoyoos
Graham, W.B.	Box 63, Hedley	Osoyoos
Kelowna Mines Hedley Ltd.	Hedley	Osoyoos & Slocan
Northern Gem Mining Corp.	510 Hastings St. W., Vancouver	Lillooet
Snowdrop Mining Co.	1735 Riverside Trail	Trail Creek
French Mines Ltd.	675 Hastings St., Vancouver	Hedley
W.D. Mining Claim	1360 McLean St., Trail	Trail
Tofino Mines Ltd.	320 Bay St. Toronto, Ontario	Alberni
Northwest Territories:		
Akaiicho Yellowknife Gold Mines Ltd.	25 King St. W., Toronto, Ontario	Yellowknife
Consolidated Mining & S. Co. of Canada, Ltd.	Trail, British Columbia	Yellowknife
Cons. Discovery Yellowknife Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Yellowknife
Giant Yellowknife Gold Mines Ltd.	25 King St. W., Toronto, Ontario	Yellowknife
Ormsby Mines Ltd.	25 Adelaide St. W., Toronto	Yellowknife
Tauranis Mines Ltd.	145 Yonge St., Toronto	Matthews Lake

Directory of Firms in the Gold Mining Industry, 1959 - Continued

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mining Industry		
Newfoundland:		
Atlantic Coast Copper Corp. Ltd.	900 Victoria Bldg., Ottawa, Ontario	Springdale
Maritimes Mining Corp., Ltd.	330 Bay St., Toronto, Ontario	Tilt Cove
Nova Scotia:		
King Copper Mining Corp.	1519 Pine Ave. W., Montreal, Quebec	Oxford
New Brunswick:		
Area Mines Ltd.	44 King St. W., Toronto, Ontario	Bathurst
Aumacho River Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Gloucester
Fab Metal Mines Ltd.	25 Adelaide St. W., Toronto, Ontario	Gloucester
Lencourt Gold Mines Ltd.	360 St. James St. W., Montreal, Quebec	Northumberland
Heath Steel Mines Ltd.	Box 280, Newcastle	Northumberland
Kennco Exploration (Canada) Ltd.	25 King St. W., Toronto, Ontario	Newcastle
Mogul Mining Corp., Ltd.	25 Adelaide St. W., Toronto, Ontario	Gloucester
New Alger Mines Ltd.	80 Richmond St. W., Toronto, Ontario	Northumberland
New Goldvue Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Miramichi
Newnorth Gold Mines Ltd.	100 Adelaide St. W., Toronto, Ontario	Newcastle
New Senator Rouyn Ltd.	Noranda, Quebec	Newcastle
Quebec Smelting & Refining Ltd.	215 St. James St. W., Montreal, Quebec	Gloucester
Roche Long Lac Gold Mines Ltd.	372 Bay St., Toronto, Ontario	Bathurst
Sladen (Quebec) Ltd.	44 King St. W., Toronto, Ontario	Bathurst
Timmins, N.A., (1938) Ltd.	1010 Canada Cement Bldg., Montreal, Quebec	Bathurst
Tribag Mining Co. Ltd.	44 King St. W., Toronto, Ontario	Gloucester
Quebec:		
Aicourt Mines Ltd.	1024-85 Richmond St. W., Toronto, Ontario	Cavalier Twp.
Alose Mining Co. Ltd.	605-137 Wellington W., Toronto, Ontario	Beauchastel Twp.
Amalgamated Larder Mines Ltd.	1616-44 King St. W., Toronto, Ontario	Garthby Twp.
Americ Mines	1255 Phillips Square, Montréal, Quebec	Guercheville Twp.
Anacanda Company (Canada) Ltd., The	8th. Street, New Toronto, Ontario	Eastern Quebec
Anchor Petroleum Limited	62 Richmond St. W., Toronto, Ontario	Daniel Twp.
Ansil Mines Limited	234-17 Queen St. E., Toronto, Ontario	Duprat Twp.
Area Mines Limited	44 King St. W., Toronto, Ontario	Aloegny Twp.
Augustus Exploration Limited	1600-100 Adelaide St. W., Toronto, Ontario	Duprat Twp.
Aumacho River Mines Limited	405-25 Adelaide St. W., Toronto, Ontario	Carpiguet Twp.
Aumaque Gold Mines Limited	1600-100 Adelaide St. W., Toronto, Ontario	Bourlamaque Twp.
Baska Uranium Mines Limited	2100 Montague St. Regina, Saskatchewan	Cavalier Twp.
Bateman Bay Mining Co.	100 Adelaide St. W., Toronto, Ontario	Chibougamau
Baycourse Mines Ltd.	1600-100 Adelaide St. W., Toronto, Ontario	La Pause Twp.
Beattie-Duquesne Mines Ltd.	406-320 Bay St. Toronto, Ontario	Duparquet Twp.
Big Town Copper Mines Ltd.	132 St. James St. W., Montréal, Quebec	Abitibi Territory
Bldcop Mines Ltd.	906-357 Bay St., Toronto, Ontario	Daniel Twp.
Bracemac Mines Ltd.	801-347 Bay St., Toronto, Ontario	Gallene Twp.
Broadback Mines Ltd.	804-8 King St. E., Toronto, Ontario	Abitibi Territory
Campbell Chibougamau Mines Ltd.	Box 134, Chibougamau, Quebec	Obalski Twp.
Canada Radium Corp. Ltd.	1024-85 Richmond St., Toronto, Ontario	Daniel Twp.
Candore Explorations Ltd.	145 Yonge St., Toronto, Ontario	Dussieux Twp.
Canperu Mining Corp. Ltd.	508-160 Bay St., Toronto, Ontario	La Motte Twp.
Carbec Mines Ltd.	711-637 Craig St. W., Montréal, Quebec	Mistassini Territory
Cartier Quebec Explorations Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Cavalier Twp.
Central Porcupine Mines Ltd.	302-100 Adelaide St. W., Toronto, Ontario	Daniel Twp.
Chesterville Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Frotet Lake
Chib-Kayrand Copper Mines Ltd.	1702 Richmond St. W., Toronto, Ontario	Obalski Twp.
Chiboug Copper Corp. Ltd.	302-215 St. James St. W., Montréal, Québec	Levy Twp.
Chibougamau Jaculet Mines Ltd.	1107-55 Yonge St., Toronto, Ontario	McKenzie Twp.
Chibougamau Mining & Smelting Co. Inc.	55 Yonge St., Toronto, Ontario	Chibougamau
Consolidated Bellekeno Mines Ltd.	1201-80 King St. W., Toronto, Ontario	La Gauchetière Twp.
Consolidated Mogul Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Broughton Twp.
Consolidated Vauze Mines Ltd.	1821-44 King St. W., Toronto, Ontario	Dufresnoy Twp.
Consolidated Zinc Corp. of Canada Ltd.	421 Dominion Square Bldg., Montréal, Québec	Noranda
Continental Copper Mines Ltd.	702-220 Bay St., Toronto 1, Ontario	Dufresnoy Twp.
Conwest Exploration Company Ltd.	Spencerville Ontario	Gaspé
Copper Rand Chibougamau Mines Ltd.	1107-55 Yonge St., Toronto, Ontario	McKenzie Twp.
Daniel Mining Co. Ltd.	392 Bay St., Toronto, Ontario	Daniel Twp.
D'Aragon Mines Ltd.	702-220 Bay St., Toronto, Ontario	Bourlamaque Twp.
Dauphin Iron Mines Ltd.	Box 237 Chibougamau, Quebec	Chibougamau
Deranco Mines Ltd.	911-25 Adelaide St. W., Toronto, Ontario	Abitibi
De Ville Copper Mines Ltd.	1024-85 Richmond St. W., Toronto, Ontario	Abitibi
Dome Exploration Company Ltd.	Bourlamaque, Quebec	Gallene Twp.
Dominion Explorers Ltd.	607-80 Richmond St. W., Toronto, Ontario	Abitibi
Dulac Chibougamau Mines Ltd.	Box 624, Place d'Armes, Montreal, Quebec	Canton Chavigny
Du Maurier Mines Ltd.	1024-85 Richmond St., Toronto, Ontario	Berthiaume Twp.
Duvan Copper Company Ltd.	295-265 Craig St. W., Montréal, Québec	Desmeloizes Twp.
Duvex Oils & Mines Ltd.	405-67 Yonge St., Toronto, Ontario	Gallene Twp.
Eastern Opemiska Mines	550 Sherbrooke St. W., Montréal, Quebec	Rohault Twp.
East Sullivan Mines Ltd.	507 Place d'Armes, Montréal, Québec	Val d'Or
East Trinity Mining Corp.	1024-85 Richmond St. W., Toronto, Ontario	Joutel Twp.
Elk Lake Mines Ltd.	1024-85 Richmond St. W., Toronto, Ontario	Destor Twp.
Fab Metal Mines Ltd.	405-25 Adelaide St. W., Toronto, Ontario	Urban Twp.
Foreign Exploration Corp. Ltd.	121 Richmond St. W., Toronto, Ontario	St. Helene Twp.
Fundy Bay Copper Mines Ltd.	607-320 Bay St., Toronto, Ontario	Frotet Lake
Gabbro Syndicate	25 Adelaide St. W., Toronto, Ontario	Frotet Lake
Gagnon Frère	1006-25th. St., Quebec	Châteaueu-Richer
Garon Lake Mines Ltd.	901 Victoria Square, Montréal, Quebec	Isle-Dieu Twp.
Gaspé Copper Mines Ltd.	44 King St. W., Toronto, Ontario	Mariochville

Directory of Firms in the Gold Mining Industry, 1959 - Continued

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mining Industry - Continued		
Quebec - Continued:		
Gibson Mines Ltd.	215 St. James St. W., Montreal, Que.	Barraute Twp.
Grandroy Mines Ltd.	908-330 Bay St. Toronto, Ont.	Roy Twp.
Grasset Lake Mines Ltd.	1013-25 Adelaide St. E., Toronto, Ont.	Subercase Twp.
Greek Canadian Mines Ltd.	740 Midland Ave., Scarboro, Ont.	Pascal's Twp.
Hastings Mining & Development Co. Ltd.	507 Place d'Armes, Montreal, Que.	Stratford Twp.
Hoyle Mining Company Ltd.	2200-25 King St. W., Toronto, Ont.	Levy Twp.
Hudson Bay Exploration & Development Co. Ltd.	500 Royal Bank Bldg., Winnipeg, Man.	Abitibi
Indian Mountain Metal Mines Ltd.	902-11 Adelaide St. W., Toronto, Ont.	Opemiska Twp.
Inmont Copper Mines Ltd.	1100-11 Adelaide St. W., Toronto, Ont.	Montbray Twp.
Inver Corporation Ltd.	24 King St. W., Toronto, Ont.	Rouyn Twp.
Iso Mines Ltd.	1403-100 Adelaide St. W., Toronto, Ont.	St. Helene Twp.
Jacobus Mining Corp. Ltd.	512-25 Adelaide St. W., Toronto, Ont.	Frotet Lake
Jaylac Mines Ltd.	1024-85 Richmond St. W., Toronto, Ont.	Berthiaume Twp.
Jellicoe Mines (1939) Ltd.	244 Bay St., Toronto, Ont.	Galinee Twp.
Joburke Gold Mines Ltd.	906-357 Bay St., Toronto, Ont.	Galinee Twp.
Jowsey, F. H.	324-12 Richmond St. E., Toronto, Ont.	Montviel Twp.
Kelly-Desmond Mining Corp. Ltd.	1910 Royal Bank Bldg., Toronto, Ont.	St. Helene Twp.
Kenneco Explorations (Canada) Ltd.	25 King St. W., Toronto, Ont.	Abitibi
Kimberly Copper Mines Ltd.	3799 Dundas St., Toronto, Ont.	Abitibi
Korich Mining Company	407-19 Melinda St., Toronto, Ont.	Galinee Twp.
La-Chib Mines Ltd.	302-215 St. James St. W., Montreal, Que.	Obalski Twp.
Lake Chibougamau Mines Ltd.	137 Radcliffe Rd., Montreal, Que.	Stratford Twp.
Lake Dufault Mines Ltd.	2200-25 King St. W., Toronto, Ont.	Dufresnoy Twp.
Lenmac Mines Ltd.	1024-85 Richmond St. W., Toronto, Ont.	Berthiaume Twp.
Lyndhurst Mining Company Ltd.	1700-360 St. James St. W., Montreal, Que.	Guercheville Twp.
Lynx Yellowknife Gold Mines Ltd.	906-11 Adelaide St. W., Toronto, Ont.	Galinee Twp.
Lynwallin Nickel Copper Ltd.	4 Richmond St. E., Toronto, Ont.	St. Helene Twp.
Macon Mining Company Ltd.	605-137 Wellington St. W., Toronto, Ont.	Beauchastel Twp.
Magnum Copper Ltd.	700 Burrard Bldg., Vancouver, B.C.	Opemiska Twp.
Maralco Mines Ltd.	906-11 Adelaide St. W., Toronto, Ont.	Gatineau
Marland Mines Ltd.	56-1610 Sherbrooke St. W., Montreal, Que.	Douay Twp.
Mattagami Explorers Corp.	260 Notre-Dame St. W., Montreal, Que.	Isle-Dieu Twp.
Maybrun Mines Ltd.	402-100 Adelaide St. W., Toronto, Ont.	Frotet Lake
McKenzie Chibougamau Mines Ltd.	750-630 Sherbrooke St. W., Montreal, Que.	McKenzie Twp.
Merrill Island Mining Corp.	700-455 Craig St. Montreal, Que.	Chibougamau Twp.
Mespi Mines Ltd.	1702-80 Richmond St. W., Toronto, Ont.	Dufresnoy Twp.
Mid Chibougamau Mines Ltd.	700-455 Craig St. W., Toronto, Ont.	Chibougamau
Miller Copper Mines Ltd.	56-1610 Sherbrooke St. W., Montreal, Que.	Holland Twp.
Mining Corporation of Canada Ltd.	1715-44 King St. W., Toronto, Ont.	Chibougamau
Min-Ore Mines Ltd.	605-62 Richmond St. W., Toronto, Ont.	Cavalier Twp.
Moneta Porcupine Mines Ltd.	1505-320 Bay St., Toronto, Ont.	Galinee Twp.
Monpre Mining Company Ltd.	705-62 Richmond St. W., Toronto, Ont.	La Martiniere Twp.
Murray Mining Corp. Ltd.	309-200 Bay St., Toronto, Ont.	Ungava District
Nealon Mines Ltd.	1201-80 King St. W., Toronto, Ont.	Hebecourt Twp.
Negor Mines Ltd.	1024-85 Richmond St. W., Toronto, Ont.	Daniel Twp.
New Consolidated Canadian Exploration Ltd.	1804-8 King St. E., Toronto, Ont.	Brongniart Twp.
New Faulkenham Mines Ltd.	145 Yonge St., Toronto, Ont.	Lozeau Twp.
New Hesco Mines Ltd.	906-357 Bay St., Toronto, Ont.	Daniel Twp.
New Jason Mines Ltd.	50-80 Richmond St. W., Toronto, Ont.	Galinee Twp.
Newlund Mines Ltd.	44 King St. W., Toronto, Ont.	Subercase Twp.
Newport Mining Corp. of Canada Ltd.	906-211 Portage Ave., Winnipeg, Man.	Mattagami Area
New West Amulet Mines Ltd.	244 Bay St., Toronto, Ont.	Duprat Twp.
Nicup Mines Ltd.	83W. - 1st Ave., Amos, Que.	Amos
Nightlen Mines Ltd.	405-25 Adelaide St. W., Toronto, Ont.	Carpiquet Twp.
Noranda Mines Ltd.	44 King St. W., Toronto, Ont.	Noranda
Normetal Mining Corp. Ltd.	1715-44 King St. W., Toronto, Ont.	Desmeloizes Twp.
Norque Copper Mines Ltd.	1702-80 Richmond St. W., Toronto, Ont.	Duprat Twp.
Norsyncomaue Mining Ltd.	132 St. James St. W., Montreal, Que.	Subercase Twp.
Northall Oils Ltd.	80 King St. W., Toronto, Ont.	La Gauchetiere Twp.
North Mattagami Mines Ltd.	56-1610 Sherbrooke St. W., Montreal, Que.	Isle-Dieu Twp.
Norvalie Mines Ltd.	505-80 Richmond St. W., Toronto, Ont.	Isle-Dieu Twp.
Obalski (1945) Ltd.	601-1117 St. Catherine St. W., Montreal, Que.	McCorkill Twp.
O'Leary Malartic Mines Ltd.	Box 54, Noranda, Que.	Malartic
Opemiska Copper Mines (Quebec) Ltd.	Box 280, Chapais, Que.	Levy Twp.
Orchan Mines Ltd.	1403-100 Adelaide St. W., Toronto, Ont.	Galinee Twp.
Osisko Lake Mines Ltd.	513-11 King St. W., Toronto, Ont.	Rouyn Twp.
Portage Island (Chibougamau) Mines Ltd.	1107-55 Yonge St. Toronto, Ont.	Roy Twp.
Prospectors Airways Company Ltd.	1616-44 King St. W., Toronto, Ont.	Abitibi
Quebec Manitou Mines Ltd.	202 Hope Chambers, Ottawa	Le Tardif Twp.
Quebelle Mines Ltd.	702-357 Bay St., Toronto, Ont.	Cedar Rapids
Quebec Smelting & Refining Ltd.	302-215 St. James St. W., Montreal, Que.	Lesperance Twp.
Quemont Mining Corp. Ltd.	1715-44 King St. W., Toronto, Ont.	Rouyn-Noranda
Radiore Uranium Mines Ltd.	509-25 Adelaide St. W., Toronto, Ont.	Isle-Dieu Twp.
Rainville Mines Ltd.	2200-25 King St. W., Toronto, Ont.	Boulamaque Twp.
Rio Tinto Canadian Exploration Ltd.	1000-335 Bay St., Toronto, Ont.	Gaspé
Rohault Mines Ltd.	360-355 St. James St. W., Montreal, Que.	Rohault Twp.
Rovanda Mining Company	360 St. James St. W., Montreal, Que.	Ligneris Twp.
Selco Exploration Company Ltd.	600-77 York St. Toronto, Ont.	St. Helene Twp.
Sogemines Development Co. Ltd.	1980 Sherbrooke St. W., Montreal, Que.	Marceau Twp.
South Dufault Mines Ltd.	1700-360 St. James St. W., Montreal, Que.	Rouyn Twp.
Southern Union Oils Ltd.	80 King St. W., Toronto, Ont.	La Gauchetiere Twp.
Southwest Potash Corporation	25 Adelaide St. W., Toronto, Ont.	Boivin Twp.
St. Helen Mining Exploration Ltd.	2075 Mansfield St., Montreal, Que.	St. Helene Twp.
St. Mary's Explorations Ltd.	4 Richmond St. E., Toronto, Ont.	St. Helene Twp.
Tache Lake Mines Ltd.	302-215 St. James St. W., Montreal, Que.	McKenzie Twp.
Tazin Mines Ltd.	700-455 Craig St. W., Montreal, Que.	Chibougamau
Terra Nova Explorations Ltd.	10-16 Blvd. Des Capucins, Quebec, Que.	Barraute Twp.
Three Brothers Mining Exploration Ltd.	360 Bay St., Toronto, Ont.	Comporte Twp.
Trade-Horn Limited	500-160 Bay St., Toronto, Ont.	Guyenne Twp.

Directory of Firms in the Gold Mining Industry, 1959 - Concluded

Name	Head or executive office address	Location
(c) Copper-Gold-Silver Mining Industry - Concluded		
Quebec - Concluded:		
Tri-Cor Mining Company Ltd.	608-80 Richmond St. W., Toronto, Ont.	Barraute Twp.
Tyrone Mines Ltd.	300 Park Ave., New York 22, N.Y.	Sakami Lake Area
Valray Explorations Ltd.	402-100 Adelaide St. W., Toronto, Ont.	Ducros Twp.
Ventures Limited	2200-25 King St. W., Toronto, Ont.	Mattagami
Voyager Explorations Ltd.	901-159 Bay St., Toronto, Ont.	Subercase Twp.
Waite Amulet Mines Ltd.	Noranda, Que.	Duprat Twp.
Waite Lake Mines Ltd.	421 Dominion Square Bldg., Montreal, Que.	Duprat Twp.
Watson Lake Mines Ltd.	225-12 Richmond St. E., Toronto, Ont.	Watson Lake
Weedon Mining Corporation	455 Craig St. W., Montreal, Que.	Fontainebleau
West Wassa Mines Ltd.	7 Adelaide St. E., Toronto, Ont.	Beauchastel Twp.
Ontario:		
Andover Mining & Explorations Ltd.	405-25 Adelaide St. W., Toronto, Ont.	Moss & Yates Twps.
Bruce-Presto Mines Ltd.	335 Bay St., Toronto, Ont.	Plummer Twp.
North Coldstream Copper Mines Ltd.	44 King St. W., Toronto, Ont.	Kashabowie
Consolidated Sudbury Basin Mines Ltd.	2810-25 King St. W., Toronto, Ont.	Balfour & Creighton Twps.
Dolmac Mines Ltd.	407-19 Melinda St., Toronto, Ont.	Rathburn Twp.
Dupel Mines Ltd.	41 King St. W., Toronto, Ont.	Hindon Twp.
Geco Mines Ltd.	1715-44 King St. W., Toronto, Ont.	Manitouwadge
Marago Mines Ltd.	906-11 Adelaide St. W., Toronto, Ont.	Strathy Twp.
Maybrun Mines Ltd.	402-100 Adelaide St. W., Toronto, Ont.	Kenora
Nama Creek Mines Ltd.	908-330 Bay St., Toronto, Ont.	Manitouwadge
Norstar Lake Mines Ltd.	103-160 Bay St., Toronto, Ont.	Davis Twp.
Poly Ores Mining Company Ltd.	62 Richmond St. W., Toronto, Ont.	Spanish
Roaring River Mines Ltd.	612-85 Richmond St. W., Toronto, Ont.	Bridgeland & Wells Twps.
Tarbutt Mines Ltd.	802-111 Richmond St. W., Toronto, Ont.	Horne Twp.
Temagami Mining Company Ltd.	1000-11 Adelaide St. W., Toronto, Ont.	Temagami
Welsh, G.S.	62 Richmond St. W., Toronto, Ont.	Matachewan
Manitoba:		
Canorama Explorations Ltd.	104-85 Richmond St. W., Toronto, Ont.	The Pas
Hudson Bay Mining & Smelting Company Ltd.	500 Royal Bank Bldg., Winnipeg, Man.	Flin Flon
Schist Lake Mine	500 Royal Bank Bldg., Winnipeg, Man.	Flin Flon
Saskatchewan:		
Hanson Mines Ltd.	2001-80 King St. W., Toronto, Ont.	Hanson Lake
Birch Lake Mine	500 Royal Bank Bldg., Winnipeg, Man.	Flin Flon
Hudson Bay Mining & Smelting Co. Ltd.	500 Royal Bank Bldg., Winnipeg, Man.	Flin Flon
British Columbia:		
Blrckett Creek Mine Operators Ltd.	700 Burrard Bldg., Vancouver, B.C.	Merritt
Cadamet Mines Ltd.	600-250 University Ave., Toronto, Ont.	Kamloops
Consolidated Mining & Smelting Co. of Canada Ltd.	Trail, B.C.	Hope & Nanaimo
Consolidated Woodgreen Mines Ltd.	204-569 Howe St., Vancouver, B.C.	Greenwood
Continental Consolidated Mines Ltd.	535 Howe St., Vancouver, B.C.	Greenwood
Cowichan Copper Co. Ltd.	620 Howe St., Vancouver, B.C.	Lake Cowichan
Granduc Mines Ltd.	507-1111 W. Georgia St., Vancouver, B.C.	Leduc Glacier
Howe Sound Company, Britannia Division	500 Fifth Ave. New York 36, N.Y.	Britannia Beach
Mid-West Copper & Uranium Mines Ltd.	535 Howe St., Vancouver, B.C.	Rossland
Phoenix Copper Company Ltd.	1111 W. Georgia St., Vancouver, B.C.	Grand Forks
Rio Tinto Canadian Exploration Ltd.	335 Bay St., Toronto, Ont.	Kamloops
Texada Mines Ltd.	Box 35, Vananda, B.C.	Nanaimo
The Granby Mining Company Ltd.	1111 W. Georgia St., Vancouver, B.C.	Allenby
Torwest Resources Ltd.	400-837 W. Hastings St., Vancouver, B.C.	Merritt

ERRATA

Gold Mining Industry, 1957
Page B-24 Table 36, and Table 37.

Gold Mining Industry, 1958.
Page B-24 Table 38, and Table 39.

REVISED DATA:

Shipments from Copper-Gold-Silver Mines

1957	Quantity	Value	Gold	Silver	Copper	Zinc
	tons	\$	oz.	oz.	lb.	•
Copper concentrates	883,814	75,668,126	355,103	3,617,116	317,595,817	-
Zinc concentrates	107,912	6,831,555	4,922	129,414	2,147,221	96,847,179

Table 37, 1957 issue, Table 39, 1958 issue, copper concentrates produced,
"972,399 tons" instead of "1,135,664 tons".

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