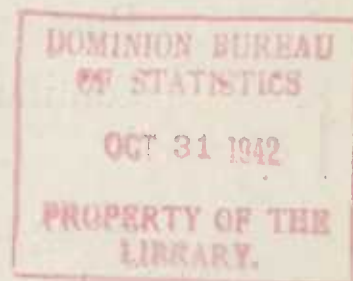


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Minister of Trade and Commerce.

CANADA
DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL & CHEMICAL BRANCH

SUMMARY REVIEW
OF
THE GOLD MINING INDUSTRY
IN
CANADA
1941



OTTAWA
1942

Price 50 cents

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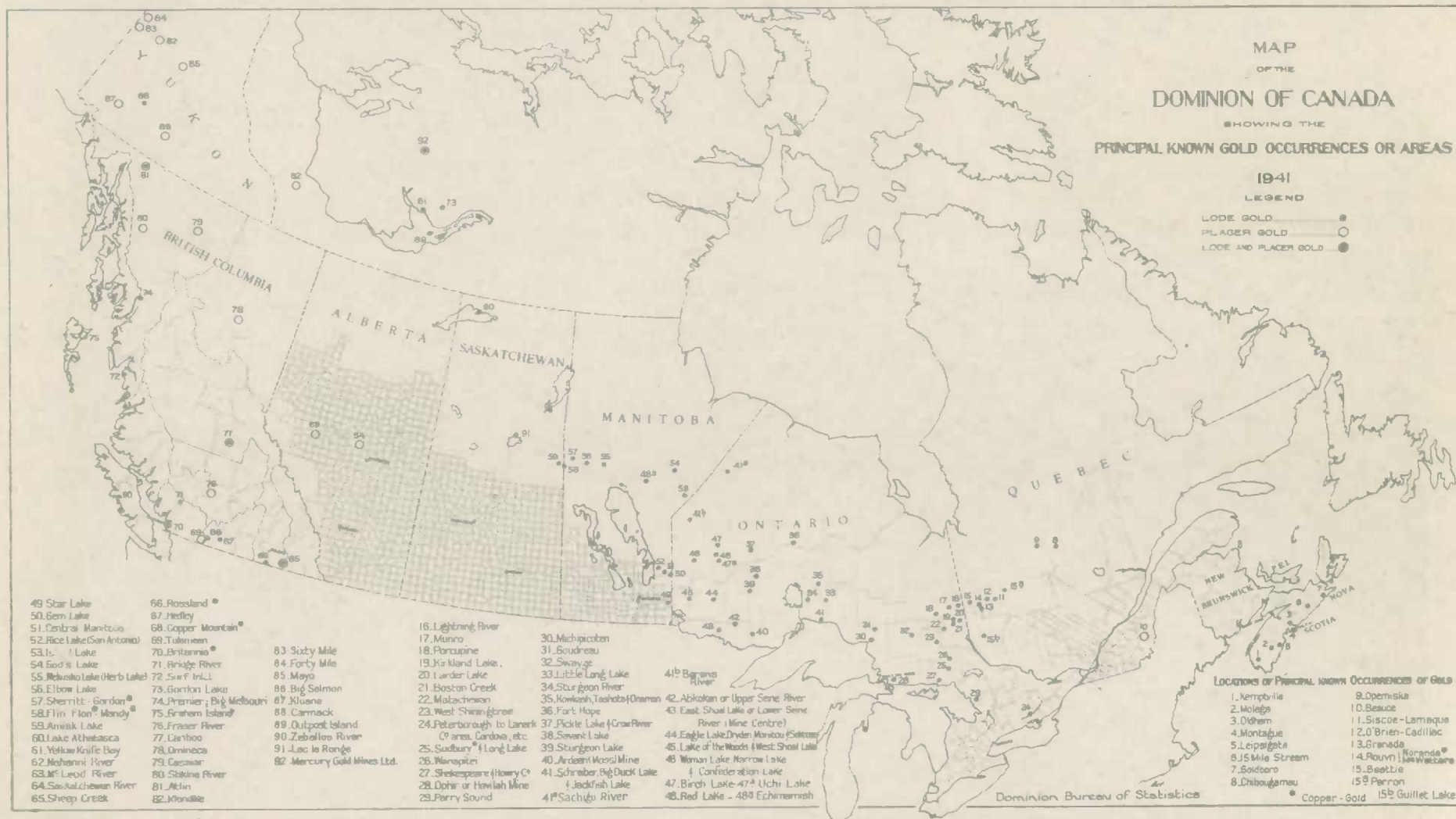
MAP OF THE DOMINION OF CANADA

SHOWING THE
PRINCIPAL KNOWN GOLD OCCURRENCES OR AREAS

1941

LEGEND

- LODE GOLD ●
- PLACER GOLD ○
- LODE AND PLACER GOLD ●



Dominion Statistician:
 Chief - Mining, Metallurgical and Chemical Branch:
 Mining Statistician:

S. A. Cudmore, M.A. (Oxon.), F.S.S., F.R.S.C.
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THE GOLD MINING INDUSTRY IN CANADA, 1941

- Including - (a) The Alluvial Gold Mining Industry
 (b) The Auriferous Quartz Mining Industry
 (c) The Copper-Gold-Silver Mining Industry
 (d) Miscellaneous Data on Monetary Gold and World Gold
 Production, Prices, Exchange, etc.
 (e) Notes on Gold Mining in Other Countries.

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

Canadian gold output, from all primary sources, totalled 5,345,179 fine ounces valued at \$205,799,392 in 1941. This was the greatest output of the metal ever recorded in the history of Canadian gold production and represented an increase of 34,034 fine ounces at \$1,310,309 over the previous high record of 5,311,145 fine ounces valued at \$204,479,083 in 1940. Increases in production over 1940 were attained only in Quebec, Saskatchewan and the Northwest Territories; however, these were sufficiently great to more than compensate the decline recorded in the other gold producing areas of the Dominion. Of the total output in 1941, the mines of Ontario contributed 3,194,308 fine ounces or 59.8 per cent; Quebec, 1,089,339 fine ounces or 20.6 per cent, and British Columbia, 608,203 fine ounces or 11.4 per cent. Production in the Northwest Territories totalling 74,417 fine ounces represents a 34.9 per cent increase over 1940 and reflects the recent mining development of the Yellowknife deposits; this area is Canada's newest and farthest north producing lode gold camp.

Exploration and development work conducted on several non-producing properties located in various parts of the pre-cambrian shield yielded encouraging results, but restrictions on certain materials and equipment considered necessary in a direct and total war effort retarded or prevented any extensive expansion in the industry. Labour troubles in the Kirkland Lake camp, Ontario, also resulted in a curtailment in output by some of the more important producers.

Production according to type of deposit or nature of recovery included 82.66 per cent from crude gold bullion bars produced at "gold mines"; 10.23 per cent from blister or anode copper; 4.63 per cent from copper-nickel matte, ores, slags, etc. exported; 1.39 per cent from alluvial deposits, and 0.39 per cent from base bullion made chiefly from silver-lead ores.

Reliable data relating to world gold production since the commencement of the war in 1939 have been increasingly difficult to obtain. From statistics made available, it is estimated that Canada, as a world gold producer, ranked probably second in the quantity of the precious metal produced. The Union of South Africa ranked a definite first, while production of the United States, including the output in the Philippine Islands, was estimated at approximately 5,980,746 fine ounces. Final figures of production in the Philippines will be difficult to obtain owing to the invasion of the Islands by Japan. Accurate data pertaining to gold production in Russia are unobtainable, but a conjectural total output of 4,000,000 fine ounces was reported for this country in 1940.

Table 1 - SUMMARY, BY NINE MAIN BRANCHES, OF THE NET VALUE OF COMMODITY PRODUCTION IN CANADA FOR 1938-1940*

	1938	1939	1940	Percentage of total net value, 1940
	\$	\$	\$	%
Agriculture	742,020,000	826,330,000	885,115,000	25.15
Forestry	244,564,571	271,723,416	370,121,275	9.69
Fisheries	35,593,009	34,378,681	38,106,690	1.00
Trapping	6,572,824	7,919,412	11,207,930	0.29
Mining (Total)	374,415,674	393,232,044	446,080,729	11.67
Auriferous quartz	114,472,106	129,633,245	146,713,744	3.84
Other mining	259,943,568	263,598,799	299,366,985	7.83
Electric power	142,320,725	149,863,892	163,780,757	4.28
Construction	176,661,077	183,706,338	206,893,992	5.41
Custom and repair	99,086,100	96,652,386	110,745,000	2.90
Manufactures, n.e.s.	1,153,439,474	1,277,265,130	1,591,625,600	41.62
GRAND TOTAL (a)	2,974,673,454	3,241,131,299	3,823,676,973	100.00
Manufactures, Total (a) ...	1,428,286,778	1,531,051,901	1,914,412,381	50.07

* Business Statistics Branch, Dominion Bureau of Statistics (1940 Survey of Production Report).

(a) The difference between "manufactures, total" and "manufactures, n.e.s." is the amount of the duplication between primary and secondary industries. The sum of "manufactures, n.e.s." and the eight other main branches is regarded as the grand total.

Table 2 - PROVINCIAL DISTRIBUTION OF THE NET VALUE OF COMMODITY PRODUCTION IN CANADA, 1938-1940 (A)

Province	1938	1939	1940	Percentage of total net value, 1940
	\$	\$	\$	%
Prince Edward Island	11,832,958	12,554,392	13,826,491	0.36
Nova Scotia	99,158,589	109,739,925	132,038,545	3.45
New Brunswick	70,047,728	77,156,799	90,119,421	2.36
Quebec	764,189,933	841,474,236	1,011,051,952	26.44
Ontario	1,292,574,329	1,365,101,538	1,642,788,599	42.97
Manitoba	145,101,719	156,371,495	176,734,411	4.62
Saskatchewan	136,980,819	212,101,124	219,966,345	5.75
Alberta	208,382,832	209,850,313	234,388,768	6.13
British Columbia - Yukon.	246,404,547	256,781,477	302,762,441	7.92
CANADA	2,974,673,454	3,241,131,299	3,823,676,973	100.00

(A) Business Statistics Branch, Dominion Bureau of Statistics (1940 Survey of Production Report)

Table 3 - PROPORTION CONTRIBUTED BY MINING TO TOTAL NET VALUE OF PRODUCTION IN EACH PROVINCE, 1938-1940

	1938		1939		1940		
Province	Mining Net	Percentage of Net Value provincial production	Mining Net	Percentage of Net Value provincial production	Mining Net	Percentage of Net Value pro- vincial production	
						: Auriferous	
						All : quartz mines: mines only	
	\$	%	\$	%	\$	%	%
Prince Edward Island ....	...	...	...	...	...	...	...
Nova Scotia	20,224,347	20.40	23,504,419	22.36	26,189,233	19.83	0.47
New Brunswick	3,508,250	5.01	3,600,454	4.74	3,024,317	3.58	...
Quebec	69,593,807	9.11	81,600,118	9.75	98,154,979	9.71	2.31
Ontario	181,897,886	14.07	188,867,969	13.69	209,277,055	12.74	6.20
Manitoba	15,144,672	10.44	12,401,404	8.29	14,065,270	7.96	1.32
Saskatchewan	7,029,842	5.13	6,391,404	2.82	8,652,006	3.93	0.23
Alberta	24,931,056	11.96	26,049,861	11.82	29,593,293	12.63	...
British Columbia, Yukon and Northwest Territories	52,087,814	21.14	50,816,415	15.74	57,144,576	18.87	5.96
CANADA	374,415,674	12.59	393,232,044	12.05	446,080,729	11.67	3.84

Table 4 - CERTAIN STATISTICS RELATING TO SPECIFIED CANADIAN INDUSTRIES, 1923, 1928, 1934 and 1939-1941

Industry	Electricity purchased \$	Employees Number	Salaries and Wages \$
TOTAL MINING INDUSTRY (c)			
1923	5,861,740	66,952	91,554,877
1928	9,072,073	89,448	115,954,022
1934	11,510,481	73,505	88,126,186
1939	18,749,417	107,941	152,353,208
1940	21,066,734	108,886	164,489,686
1941		(not yet complete)	
AURIFEROUS QUARTZ MINING INDUSTRY			
1923	922,258	5,524	8,961,454
1928	2,002,062	9,066	14,615,990
1934	3,091,147	17,762	27,156,887
1939	5,803,160	30,622	53,206,225
1940	5,893,562	31,405	55,205,096
1941	6,277,626	32,551	61,150,810
PULP AND PAPER INDUSTRY			
1923	4,270,911	29,234	38,582,845
1928	12,143,874	33,614	47,322,648
1934	15,229,289	26,993	33,507,043
1939	17,091,511	31,016	44,737,379
1940	17,345,301	34,719	56,073,812
1941		(not yet complete)	
AUTOMOBILE INDUSTRY			
1923	125,000	9,305	14,998,267
1928	244,807	16,749	29,548,114
1934	140,245	9,674	12,938,933
1939	264,989	14,427	20,573,714
1940	299,841	16,798	31,110,945
1941	306,572	19,597	44,783,064
CHEMICAL INDUSTRY (a)			
1923	1,439,909	15,149	18,433,679
1928	2,043,950	16,150	20,290,417
1934	2,145,533	17,150	20,919,740
1939	3,185,329	22,595	31,567,558
1940	4,316,291	27,682	38,640,990
1941		(not yet complete)	
PRIMARY IRON AND STEEL INDUSTRY (d)			
1923	722,770	6,049	10,816,201
1928	1,251,820	9,057	15,470,836
1934	1,148,554	7,400	9,009,512
1939	1,932,377	13,827	20,410,517
1940	3,397,820	17,774	29,207,036
1941		(not yet complete)	
TEXTILE INDUSTRY (b)			
1923	(data not available)	92,669	81,244,205
1928	2,188,544	113,724	103,451,525
1934	3,138,195	115,695	90,796,601
1939	3,724,916	121,022	107,117,035
1940	4,269,452	138,973	153,156,516
1941		(not yet complete)	

(a) Includes industries manufacturing coal tar, acids, alkalies and salts, compressed gases, explosives, and ammunition, fertilizers, pharmaceutical preparations, paints and varnishes, soaps and washing compounds, toilet preparations, inks, polishes, etc.

(b) Includes industries manufacturing hosiery and knitted goods, cottons, men's and women's factory clothing, silk, woollen cloth, also the dyeing, cleaning and laundry industries prior to 1936.

(c) 1923 figures partly estimated, also the values shown do not include the value of electricity generated by the specified industries, especially the pulp and paper industry.

(d) Operations of plants engaged chiefly in the manufacture of pig iron, ferro-alloys, steel ingots and castings, rolled and drawn iron and steel products, such as, bars, plates, etc.

(e) Includes non-ferrous smelters and refineries.

Table 5 - PRODUCTION OF NEW GOLD IN CANADA, BY PROVINCES AND SOURCES, 1940 and 1941
(Gold at \$20.671834 per fine ounce)

	1940		1941	
	Fine troy ounces	\$	Fine troy ounces	\$
NOVA SCOTIA -				
In gold bullion	22,219	459,307	19,170	396,279
Estimated exchange equalization on gold produced ....	...	396,125	...	341,766
Total Value - Canadian Funds .....	...	855,432	...	738,045
QUEBEC -				
In anode copper, in ores shipped and in gold bullion	1,019,175	21,063,216	1,089,373	22,513,634
Estimated exchange equalization on gold produced ....	...	18,170,022	...	19,420,917
Total Value - Canadian Funds .....	...	39,233,238	...	41,934,551
ONTARIO -				
*Porcupine Area - In gold bullion	1,425,711	29,472,061	1,489,149	29,740,849
*Kirkland Lake - In gold bullion (a)	1,024,105	21,170,129	745,616	15,371,907
*Other gold mines - In gold bullion	721,007	14,904,537	935,218	19,233,395
Copper-Nickel and other ores	90,865	1,873,546	78,225	1,617,054
Total	3,261,688	67,415,073	3,194,508	66,022,205
Estimated exchange equalization on gold produced ....	...	58,149,915	...	56,949,653
Total Value - Canadian Funds .....	...	125,564,988	...	122,971,858
MANITOBA -				
In gold bullion, ores shipped and in blister copper	152,295	3,143,217	150,553	3,112,207
Estimated exchange equalization on gold produced ....	...	2,715,140	...	2,684,082
Total Value - Canadian Funds .....	...	5,858,357	...	5,796,289
SASKATCHEWAN -				
In ores shipped to Canadian smelters, crude placer gold and gold bullion	102,925	2,127,649	138,015	2,855,023
Estimated exchange equalization on gold produced ....	...	1,834,964	...	2,460,555
Total Value - Canadian Funds .....	...	3,962,613	...	5,315,578
ALBERTA -				
In alluvial gold	215	4,444	215	4,444
Estimated exchange equalization on gold produced ....	...	3,833	...	3,833
Total Value - Canadian Funds .....	...	8,277	...	8,277
BRITISH COLUMBIA -				
In alluvial gold	32,128	664,145	35,020	723,928
In gold bullion	348,239	7,198,739	351,974	7,275,948
In base bullion and in slag and ores exported	236,644	4,891,865	221,109	4,572,795
Total	617,011	12,754,749	608,203	12,572,671
Estimated exchange equalization on gold produced ....	...	11,009,175	...	10,842,145
Total Value - Canadian Funds .....	...	23,763,924	...	23,414,816
YUKON -				
In alluvial gold	79,905	1,651,783	70,847	1,464,527
In ores shipped	553	11,431	112	2,315
Total	80,458	1,663,214	70,959	1,466,842
Estimated exchange equalization on gold produced ....	...	1,434,419	...	1,265,070
Total Value - Canadian Funds .....	...	3,097,633	...	2,731,912
NORTHWEST TERRITORIES -				
In ores shipped	280	5,788	421(c)	8,703
In gold bullion produced	54,879	1,134,450	73,996	1,529,623
Total	55,159	1,140,238	74,417	1,538,326
Estimated exchange equalization on gold produced ....	...	983,383	...	1,326,718
Total Value - Canadian Funds .....	...	2,123,621	...	2,865,044
Total for Canada	5,311,145	109,791,107	5,245,179	110,494,653
Total estimated exchange equalization on gold produced .....	...	94,687,976	...	95,294,739
GRAND TOTAL VALUE, INCLUDING EXCHANGE .....	...	204,479,083	...	205,789,392

NOTE: The estimated average price of a troy ounce of fine gold in Canadian funds was \$38.50 in both 1940 and 1941.

* Includes relatively small amounts of gold contained in slags, and ore shipped.

(a) Includes production in Larder Lake area.

(b) Includes a small quantity recovered as bullion.

(c) Includes a relatively small amount of placer gold.

Table 6 - TOTAL (CUMULATIVE) RECORDED PRODUCTION IN CANADA OF SPECIFIED METALS TO DECEMBER 31st, 1940

			Quantity	Value
Gold	(a)	fine ounces	80,882,238	2,244,890,559(x)
Silver	(b)	fine ounces	829,253,149	472,150,765(x)
Copper	(c)	pounds	6,697,548,813	814,155,248
Nickel	(d)	pounds	2,806,377,739	797,454,597
Lead	(b)	pounds	6,374,120,797	289,504,452
Zinc	(f)	...	...	180,684,662
Cobalt	(e)	pounds	55,063,655	51,921,838

NOTE: The total value of production by the entire Canadian mining industry from 1887 to the end of 1940 totalled \$8,624,972,304.

(a) Since 1858. (b) since 1887. (c) since 1886. (d) since 1889. (e) since 1904. (f) since 1898.

(x) To the end of 1941.

Note: DATA RELATING TO PRODUCTION OF NON-FERROUS METALS NOT PUBLISHED FOR 1940 or 1941.

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1941

Property and Province	Ore raised tons	Material sorted (discarded) tons	Ore treated tons	Gold production fine oz.	Mill capacity 24 hours tons	See foot- notes
NOVA SCOTIA						
Avon Gold Mines Ltd.	9,029	...	9,029	2,628	100	(a)
Consolidated Mining & Smelting Co. of Canada, Ltd.	11,846	...	11,846	(b)	40	(a)
Dickson, Aubrey	548	284	264	96	15	(a)
Forbes, R. G. (Country Harbour)	577	147	430	32	15	(a)
Guysborough Mines Ltd.	33,492	7,875	25,617	4,208	100	(a)(c)
Queens Mines Ltd.	3,207	...	3,207	1,201	15	(a)
Rehabilitation Project (15 Mile Stream) ..	(b)	...	359	161	15	(a)
Seal Harbour Gold Mines	(b)	(b)	(b)	(b)	(b)	
Victoria Gold Mines Ltd.	(b)	(b)	3,511	710	(b)	(a)
Other gold mines	(b)	(b)	(b)	10,154(d)	(b)	
TOTAL - NOVA SCOTIA .....	...	...	...	19,170(e)	...	

Footnotes -

(a) Amalgamation.

(b) Data not recorded or available for publication.

(c) Cyanidation.

(d) Includes Consolidated Mining & Smelting Co. of Canada, Ltd. and Seal Harbour mine.

(e) Receipts at Royal Canadian Mint, Ottawa.

QUEBEC

Amm Gold Mines (Quebec) Ltd. ....	...	...	...	...	...
Arntfield Gold Mines Ltd.	45,111	...	45,111	4,648	350	(c)
Beattie Gold Mines (Quebec) Ltd.	658,500	...	658,500	73,472	1,800	(c)(e)
Belleterre Quebec Mines Ltd.	130,663	4,715	125,948	45,905	350	(c)
Canadian Malartic Gold Mines Ltd. ...	293,252	...	293,011	33,645	1,000	(c)
Centrel Cadillac Mines Ltd.	57,425	1,497	56,074	8,867	200	(c)
Cournor Mining Co. Ltd.	90,254	22,351	67,903	15,637	200	(c)
East Malartic Mines Ltd.	537,828	...	537,828	73,863	1,800	(c)
Francoeur Gold Mines Ltd.	76,316	...	76,316	13,554	250	(c)
Lamaque Mining Co. Ltd.	448,934	...	448,934	128,451	1,000	(c)(d)
Lapa Cadillac Gold Mines Ltd.	78,267	...	78,067	8,586	300	(a)(c)
Malartic Gold Fields Ltd.	250,906	26,832	224,074	48,406	600	(c)
McWatters Gold Mines Ltd.	45,057	1,607	43,450	8,744	150	(c)
O'Brien Gold Mines Ltd.	70,172	...	70,448	25,781	200	(a)(c)(e)
Pandora Cadillac Gold Mines Ltd.	59,991	...	59,991	8,669	150	(a)(c)
Perron Gold Mines Ltd.	234,408	83,250	151,158	49,654	360	(c)
Pershing Manitou Gold Mines Ltd.	300	100	200	4	(b)	(a)
Powell Rouyn Gold Mines Ltd.	340,092	...	233,301	37,399	450	(c)(f)
Quebec Department of Mines	(b)	(b)	284	4	45	(a)
Senator-Rouyn Ltd.	98,521	...	98,521	19,418	300	(c)

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1941 (Continued)

Property and Province	Ore raised tons	Material sorted (discarded) tons	Ore treated tons	Gold produc- tion fine oz.	Mill capacity 24 hours tons	See foot- notes
<u>QUEBEC (Concluded)</u>						
Sigma Mines (Quebec) Ltd.	383,355	...	383,355	76,956	1,100	(c)
Siscoe Gold Mines Ltd.	256,477	26,539	230,059	44,460	600	(a) (c)
Sladen-Malartic Mines Ltd.	256,137	...	256,137	22,332	700	(c)
Stadacona Rouyn Mines, Ltd.	161,381	...	161,381	21,369	500	(c)
Sullivan Consolidated Mines Ltd.	182,432	48,717	133,715	35,348	475	(a) (c)
Wood Cadillac Mines Ltd.	79,341	6,490	72,763	9,523	225	(c)
Other gold mines (placer)	(b)	(b)	(b)	9	...	
Copper-gold-silver ores ....	...	...	...	276,635	...	
TOTAL - QUEBEC ....	...	...	...	1,089,339	...	

Footnotes -

- (a) Amalgamation.
 (b) Data not available.
 (c) Cyanidation.
 (d) Also shipped tungsten concentrates.
 (e) Also shipped arsenic concentrates.
 (f) Production represents bullion recovered plus gold in ore shipped to smelter.

ONTARIOPorcupine District -

Auror Gold Mines Ltd.	159,341	...	159,341	43,052	300	(c)
Broulan Porcupine Mines Ltd.	158,181	19,293	138,888	27,695	350	(c)
Buffalo Ankerite Gold Mines Ltd.	448,621	...	448,621	71,654	1,300	(c)
Coniaurum Mines Ltd.	186,885	...	186,885	48,576	600	(c)
Delnite Mines Ltd.	167,296	...	168,596	30,702	500	(c)
De Santis Porcupine Mines Ltd.	64,673	4,337	60,405	10,655	160	(c)
Dome Mines Ltd.	627,700	...	627,700	201,472	1,700	(a) (c)
Faymar Porcupine Gold Mines Ltd.	58,262	2,636	55,626	8,598	250	(c)
Hallnor Mines Ltd.	132,515	...	132,267	65,585	400	(c)
Hollinger Consolidated Gold Mines Ltd. (Ross)	100,487	...	100,787	24,360	300	(c)
Hollinger Consolidated Gold Mines Ltd. (Timmins)	1,760,025	...	1,756,923	425,633	5,700	(c)
Hoyle Gold Mines Ltd.	154,882	16,307	159,470	16,719	500	(a) (c) (f)
Mace Gold Mines Ltd. ....	...	...	(g)	1,300	...	
McIntyre Porcupine Mines Ltd.	874,035	...	865,670	238,118	2,500	(c)
Moneta Porcupine Mines Ltd.	61,416	...	61,416	30,480	175	(c)
Naybob Gold Mines Ltd.	54,030	...	53,807	13,783	200	(c)
Nakhodas Mining Co.	23,782	...	23,782	3,696	(h)	(c)
Bonetal Gold Mines	11,663	591	6,805	1,053	(e)	(c)
Pamour Porcupine Mines Ltd.	559,528	...	559,528	66,876	1,500	(c)
Paymaster Consolidated Mines Ltd.	209,288	1,660	215,113	46,878	600	(c)
Preston East Dome Mines, Ltd.	221,926	27,109	194,817	62,256	500	(a) (c) (i)

Kirkland Lake District -

Ridgood Kirkland Gold Mines, Ltd.	40,337	...	40,460	12,101	125	(c)
Golden Gate Mining Co. Ltd.	23,781	...	23,781	5,558	100	(a) (c)
Kirkland Lake Gold Mining Co. Ltd. ..	136,613	...	136,613	48,767	400	(c)
Lake Shore Mines Ltd.	530,368	...	530,368	205,334	2,300	(c) (j)
Macassa Mines Ltd.	142,712	...	142,532	65,375	400	(c)
Morris Kirkland Gold Mines Ltd.	25,700	...	25,645	3,111	100	(c) (k)
Sylvanite Gold Mines Ltd.	197,850	...	197,293	67,160	600	(c)
Teck-Hughes Gold Mines Ltd.	258,100	...	258,100	65,714	1,000	(c)
Toburn Gold Mines Ltd.	67,661	6,946	60,715	28,422	150	(c)
Upper Canada Mines Ltd.	73,414	...	73,414	32,553	225	(c)
Wright-Hargreaves Mines Ltd.	411,760	...	411,760	208,937	1,250	(c)

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1941 (Continued)

Property and Province	Ore raised tons	Material sorted (discarded) tons	Ore treated tons	Gold produc- tion fine oz.	Mill capacity 24 hours tons	See foot- notes
<u>ONTARIO (Continued)</u>						
<u>Larder Lake District -</u>						
Chesterville Larder Lake Gold Mines Ltd.	252,056	...	252,056	56,444	700	(c)
Kerr-Addison Gold Mines Ltd.	694,783	...	694,894	146,072	2,000	(c)
Omega Gold Mines Ltd.	173,688	...	173,688	22,664	500	(c)
Yama Gold Mines Ltd.	5,336	1,883	3,583	586	50	(c)
<u>Metachewan District -</u>						
Hollinger Consolidated Gold Mines, Ltd. (Young-Davidson)	346,765	...	346,715	55,654	1,050	(c)
Metachewan Consolidated Mines Ltd. ..	196,962	...	196,962	23,049	500	(c)
Tyrannite Mines Ltd.	76,800	...	76,800	11,187	200	(c)
<u>Sudbury District -</u>						
Consolidated Mining & Smelting Co. of Canada, Ltd. (Golden Rose)	11,978	...	12,495	3,440	100	(c)(l)
Jerome Gold Mines Ltd.	60,215	...	58,824	8,757	500	(c)(m)
<u>Algoma District -</u>						
Cline Lake Gold Mines Ltd.	85,163	...	85,513	10,730	250	(c)
Regener Metals	2,430	...	4,109	830	23	(a)(n)
<u>Thunder Bay District -</u>						
Barkfield Cons. Mines Ltd.	38,426	...	39,175	6,186	130	(a)(c)
Hard Rock Gold Mines Ltd.	192,660	57,283	135,337	30,504	450	(c)(p)
Jellicoe Mines Ltd. ....	...	...	1,591	518	...	(q)
Leitch Gold Mines Ltd.	(b)	7,284	30,493	23,228	75	(a)(c)
Little Long Lac Gold Mines Ltd.	133,355	15,023	118,332	42,427	300	(a)(c)
Magnet Cons. Mines Ltd.	47,731	2,182	45,609	25,345	175	(a)(c)
McLeod-Cockshutt Gold Mines Ltd.	338,391	101,315	237,076	60,362	650	(c)
Northern Empire Mines Co. Ltd.	37,306	2,449	39,015	10,890	180	(c)(r)
St. Anthony Gold Mines Ltd.	85,909	14,136	70,640	7,870	125	(c)
Sand River Gold Mining Co. Ltd.	27,895	6,843	21,052	7,195	75	(c)(s)
Sand River Gold Mining Co. Ltd.	14,806	4,034	10,772	2,751	75	(c)(t)
Sturgeon River Gold Mines Ltd.	40,816	14,947	25,869	11,887	75	(a)(c)
Tombill Gold Mines Ltd.	46,956	...	46,956	13,315	125	(a)(c)
<u>Kenora and Rainy River Areas -</u>						
Gold wood mine Ltd. (J. D. Shannon) ..	9,659	1,549	8,110	2,696	75	(a)
Oralia Mines Ltd.	29	...	28	27	10	(a)(u)
Sandybeach Lake Synd.	(b)	(b)	125	10	(b)	(v)
Straw Lake Beach Gold Mines Ltd.	8,596	961	6,759	3,106	60	(a)
Upper Seine Gold Mines Ltd.	1,880	...	1,880	163	50	(a)(w)
Wendigo Gold Mines Ltd.	46,392	10,107	36,285	12,021	80	(a)
<u>Patricia District -</u>						
Berens River Mines Ltd.	(b)	...	86,373	27,837	24	(x)
Central Patricia Gold Mines Ltd.	142,650	134	142,516	50,618	200	(c)
Cochennour Willans Gold Mines Ltd.	61,415	...	61,415	24,546	250	(a)(c)(y)
Gold Eagle Gold Mines Ltd.	46,552	8,357	38,195	7,449	125	(c)
Hasaga Gold Mines Ltd.	163,088	28,272	134,816	25,888	350	(c)
Howey Gold Mines Ltd.	481,746	96,137	385,609	22,005	1,250	(c)
Jason Mines Ltd.	55,734	7,372	48,362	19,951	125	(c)
Madsen Red Lake Gold Mines Ltd.	147,170	1,100	145,995	31,189	400	(a)(c)
McKenzie Red Lake Gold Mines Ltd.	103,800	19,654	84,146	25,933	250	(c)
McMarmac Red Lake Gold Mines Ltd.	29,794	...	29,794	15,223	75	(b)(z)
Pickle Crow Gold Mines Ltd.	175,284	29,294	146,375	70,990	400	(a)(c)
Sachigo River Exploration Co. Ltd. ..	31,145	14,587	16,603	14,144	25	(a)(c)
Uchi Gold Mines Ltd.	279,304	29,806	249,417	36,954	750	(a)(c)

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1941 (Continued)

Property and Province	Ore raised tons	Material sorted (discarded) tons	Ore treated tons	Gold produc- tion fine oz.	Mill capacity 24 hours tons	See foot- notes
ONTARIO (Concluded)						
Eastern Ontario						
Mayboro Milling Co. Ltd.	300	...	300	60	18	(a) (✓)
Other gold mines .....	...	...	...	...	...
Nickel-copper ores (including lead and cobalt ores) .....	...	...	...	78,005	...	
TOTAL - ONTARIO .....	...	...	...	3,194,308	...	

Footnotes -

- (a) Amalgamation.
 (b) Data not recorded.
 (c) Cyanidation.
 (d) Testing.
 (e) Milled by Broulan Porcupine Mines Ltd.
 (f) Milling commenced February 1.
 (g) Cleanup only.
 (h) Milled by Faymar Porcupine Mines.
 (i) Also shipped tungsten concentrates.
 (j) In addition treated 407,823 tons of tailings.
 (k) Operations ceased November 15.
 (l) Operations ceased September 30.
 (m) Milling commenced August 26.
 (n) In addition 54.6 tons of concentrates stored assaying 4.6 ounces per ton.
 (p) In addition 588 tons of tailings retreated.
 (q) Milled at Magnet Cons. Mines Ltd.
- (r) Milling ceased September 4.
 (s) Period January 1 to August 31.
 (t) Operated by Northern Empire Mines September 1 to December 31.
 (u) Milling June 5 to June 23.
 (v) Milled in Van Houten Gold Mines' mill.
 (w) Milling ceased September 24.
 (x) In ore and concentrates shipped to smelter and in addition 703 tons concentrates stored containing 126 ounces gold; shipments also included 1,194,730 ounces silver and 1,042,006 pounds lead.
 (y) In addition 305 tons concentrates stored assaying 3.275 ounces per ton.
 (z) In addition 48.58 tons of concentrates were stored assaying 5.67 ounces gold per ton; other concentrates shipped to smelter.
 (✓) In addition 6 tons concentrates stored assaying 1.5 ounces gold per ton.

MANITOBA

Elack Hawk (W. J. Richards)	200	...	58	119	...	(e)
Century Mining Corp. Ltd.	358	...	1,076	48	100	(a) (d)
God's Lake Gold Mines Ltd.	72,903	...	72,903	21,922	200	(a) (c)
Gunnar Gold Mines Ltd.	54,320	3,584	50,736	14,869	140	(c)
San Antonio Gold Mines Ltd.	158,097	...	137,415	43,121	550	(a) (c)
Other gold mines	(b)	(b)	(b)	251	(b)	
Copper-gold-silver ores .....	...	...	...	70,223	...	
TOTAL - MANITOBA .....	...	...	...	150,553	...	

Footnotes -

- (a) Amalgamation.
 (b) Data not available.
 (c) Cyanidation.
 (d) Milling commenced August 15.
 (e) Crude ore shipped to smelter.

SASKATCHEWAN

Consolidated Mining & Smelting Co. of Canada Limited (Box)	494,186	...	494,986	(b)	1,355	(c)
Pamour Gold Mines Ltd. (MacDonald & Co.)	2,497	...	2,497	2,750	...	(d)
Other lode gold mines	(b)	(b)	(b)	21,692(e)	...	
Alluvial deposits	(b)	(b)	(b)	57	...	
Copper-gold-silver ores .....	...	...	...	113,516	...	
TOTAL - SASKATCHEWAN .....	...	...	...	138,015	...	

Footnotes -

- (b) Data not recorded or available for publication.
 (c) Cyanidation.
 (d) Crude ore shipped to smelter.
 (e) Includes Box mine.

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1941 (Continued)

Property and Province	Ore raised tons	Material sorted (discarded) tons	Ore treated tons	Gold produc- tion fine oz.	Mill capacity 24 hours tons	See foot- notes
<u>ALBERTA</u>						
Placer gold	(x)	(x)	(x)	215	...	
(x) No record.						
<u>BRITISH COLUMBIA</u>						
Bayonne Cons. Mines Ltd.	20,224	...	20,224	9,274	50	(c)
Bralorne Mines Ltd.	(b)	...	191,970	101,063	500	(a)(d)
Buccaneer Mines Ltd.	(b)	400	1,947	517	25	(a)(e)
Buena Vista Mining Co. Ltd.	190,436	...	190,436	12,239	500	(c)
Cariboo Gold Quartz Mining Co. Ltd. .	129,256	...	129,256	48,527	350	(c)
Cons. Nicola Goldfields Ltd.	2,375	475	4,275	141	100	(d)
Gold Belt Mining Co. Ltd.	56,502	...	56,502	15,811	150	(c)
Hedley Mascot Gold Mines Ltd.	66,352	...	68,155	21,830	175	(c)(d)
Homeward Mines Ltd.	(b)	(b)	1,511	897	50	(a)(d)(f)
Island Mountain Mines Co. Ltd.	54,398	...	54,398	24,756	150	(c)
Kelowna Exploration Co. Ltd.	97,468	...	97,476	33,881	275	(c)(d)
Kootenay Belle Gold Mines Ltd.	34,644	...	34,644	9,684	150	(c)
Livingston Mining Co.	1,679	...	1,679	1,208	30	(d)
Mount Zeballos Gold Mines Ltd.	31,658	10,397	21,261	9,744	60	(a)(d)
Pioneer Gold Mines of B.C. Ltd.	92,456	16,018	109,311	53,645	350	(a)(c)
Polaris-Taku Mining Co. Ltd.	89,685	...	89,610	19,091	300	(d)(g)
Prident Gold Mines Ltd.	3,799	...	3,634	3,803	...	(h)
Privateer Mines Ltd.	(b)	24,299	31,354	24,328	90	(a)(c)
Relief Arlington Mines Ltd.	27,697	13,001	14,310	5,306	75	(c)(i)
Reno Gold Mines (Nelson)	15,074	...	13,595	6,706	120	(c)(d)
Reno Gold Mines (Central Zeballos) ..	20,119	5,797	14,322	6,568	45	(a)(d)
Sheep Creek Gold Mines Ltd.	55,052	...	55,052	26,083	150	(c)
Silbak Premier Mines Ltd.	170,504	...	170,504	39,044	500	(d)
Spud Valley Gold Mines Ltd.	72,943	38,394	34,549	14,031	100	(a)(d)(j)
Surf Inlet Cons. Gold Mines Ltd.	43,258	3,948	39,310	13,161	120	(d)
Vancouver Island Drilling & Exploration Co. Ltd.	855	...	855	333	...	(d)
Valvet Gold Leasers	(b)	1,000	8,432	1,515	100	(d)
White Star Mine Ltd.	(b)	...	400	1,531	...	(d)
Ymir Yankee Girl Gold Mines Ltd.	32,719	...	32,809	6,444	100	(d)(k)
Placer gold .....	...	...	(1)4,587,103	35,020	...	
Copper gold ores .....	...	...	...	35,010	...	
Silver Lead and other gold mines ....	...	...	...	28,012	...	
TOTAL - BRITISH COLUMBIA .....	...	...	...	608,203	...	

Footnotes -

- (1) Partly estimated—cubic yards handled.
 (a) Amalgamation.
 (b) Not recorded.
 (c) Cyanidation.
 (d) Ore or concentrates shipped to smelter.
 (e) In addition 12 tons concentrates stored assaying 6.14 ounces per ton; milling commenced September 1.

- (f) Milling commenced in June.
 (g) Concentrates on hand December 31, 3,742 tons, assay—3.3 ounces gold per ton.
 (h) Treated in Privateer mill.
 (i) Milling ceased June 28.
 (j) In addition 57 tons concentrates stored assaying 3.87 ounces per ton.
 (k) In addition 16,118 tons tailings retreated.

YUKON

Placers .....	...	...	(1)8,792,220	70,847	...	
Silver-lead ores	(x)	...	...	112	...	(b)
TOTAL - YUKON .....	...	...	...	70,959	...	

Footnotes -

- (x) No record.
 (1) Cubic yards handled, partly estimated.
 (b) In concentrates exported.

Table 7 - PRODUCTION OF GOLD IN CANADA, BY PRINCIPAL MINES, 1941 (Concluded)

Property and Province	Ore raised tons	Material sorted (discarded) tons	Ore treated tons	Gold produc- tion Fine oz.	Mill capacity 24 hours tons	See foot- notes
NORTHWEST TERRITORIES						
Consolidated Mining and Smelting Co. of Canada, Limited (Con)	47,223	...	47,223	(x)	175	(a)(c)
Consolidated Mining and Smelting Co. of Canada, Limited--Rycon Mine	12,597	...	12,597	(x)	...	(d)
Negus Mines Ltd.	(x)	4,349	22,310	18,349	60	(a)(c)
Ptarmigan Mines Ltd.	11,696	...	3,096	(x)	100	(a)(c)(e)
Thompson-Lundmark Gold Mines Ltd. ..	19,447	...	11,915	(x)	125	(a)(c)(f)
Slave Lake Gold Mines Ltd.	(x)	764	13,057	5,816	50	(a)(b)
Other gold mines .....	...	...	...	50,252(g)	...	
Silver ores .....	...	...	...	...	...
TOTAL - NORTHWEST TERRITORIES..	...	...	...	74,417	...	
GRAND TOTAL - CANADA .....	...	...	...	5,345,179	...	

Footnotes -

- (x) Not recorded or available for publication.
(a) Amalgamation.
(b) In ores smelted and refined.
(c) Cyanidation.
(d) Treated in Con mill.
(e) Milling commenced November 27th.
(f) Milling commenced August 19th
(g) Includes production of all mines marked (x).

Table 8 - SOURCE OF CANADIAN GOLD PRODUCTION, 1932 - 1941

Year	In alluvial gold %	In crude gold bullion produced at mines(a) %	In base bullion produced at lead smelters %	In blister copper pro- duced (f) %	In ores, matte, slags, etc., exported %	Total Gold Produced fine oz.
1932	1.8	79.3	1.0	15.1	2.8	3,044,387
1933	2.0	79.8	0.7	14.2	3.3	2,949,309
1934	2.0	78.7	1.1	13.4	4.8	2,972,074
1935	1.8	78.3	2.2	13.2	3.9	3,284,890
1936	2.2	77.4	1.6	13.8	5.0	3,748,028
1937	2.2	80.2	0.9	11.7	5.0	4,096,215
1938	2.5	80.8	0.9	11.2	4.5	4,725,117
1939	2.5	82.1	0.6	10.4	4.4	5,094,379
1940	2.1	82.7	0.6	10.0	4.6	5,311,145
1941	2.0	82.6	0.4	10.3	4.7	5,345,179

(a) Includes a relatively small quantity of gold contained in interprovincial shipments of gold ores, slags, etc., to Canadian smelters.

(f) Some blister copper is refined in the United States; also contains a relatively small quantity of gold recovered from auriferous quartz ores.

Table 9 - PRODUCTION OF GOLD IN CANADA, BY MONTHS(x), 1939, 1940 and 1941

Month	1939	1940	1941	Month	1939	1940	1941
	Fine ounces				Fine ounces		
January	411,328	425,034	435,664	July	440,065	457,330	458,055
February	390,963	405,982	414,135	August	449,207	466,946	468,629
March	414,217	430,519	447,934	September	421,485	441,145	446,490
April	406,795	419,282	440,961	October	432,678	468,170	462,573
May	432,559	443,199	450,590	November	423,358	450,712	444,247
June	436,783	451,964	455,392	December	432,896	450,862	420,509

(x) Compiled from monthly reports received from principal operators and the totals were adjusted to agree with the 12 months' total as compiled from final annual reports.

Table 10 - PRECIOUS METALS CONSUMED BY THE JEWELLERY AND SILVERWARE INDUSTRY IN CANADA, 1939 and 1940

Materials	Cost at works	
	1939	1940
	\$	\$
Precious metals -		
Fine gold	1,187,238	1,595,699
Gold alloys	94,683	230,108
Fine silver	644,750	680,650
Silver alloys	400,947	785,067
Platinum	160,688	148,748
Old gold, jewellers' findings, waste and scrap for refining ...	1,482,950	1,064,156
Gold-filled wire and stock	141,965	215,534
Precious and semi-precious stones	498,452	761,410

NOTE: Complete data for 1941 not yet available.

Table 11 - GOLD PRODUCTION OF THE WORLD(a) 1939 - 1941 (Taken from the Year Book of the American Bureau of Metal Statistics)

	(in fine ounces)		
Country	1939	1940	1941
NORTH AMERICA:			
United States	5,559,139	5,919,928	5,980,746
Canada	5,094,379	5,311,145	5,328,314
Mexico	841,623	883,096	799,956
Newfoundland	20,313	22,000	21,500
Total North America	11,515,454	12,136,169	12,130,516
CENTRAL AMERICA AND WEST INDIES	176,000	287,000	≈ 350,000
SOUTH AMERICA:			
Brazil	235,800	264,311	260,000
Chile	325,026	342,822	266,000
Colombia	570,017	631,926	656,019
Ecuador	85,352	85,000	90,000
Peru	272,562	281,248	255,000
Guiana - British	38,473	33,000	≈ 35,000
Dutch	12,000	12,000	≈ 12,000
French	37,606	40,000	≈ 35,000
Venezuela	146,607	146,800	145,000
Other South America	50,000	30,000	≈ 40,000
Total South America	1,771,243	1,867,107	1,794,019
EUROPE:			
Czechoslovakia	10,000	(e)	
France	≈ 85,000	(e)	
Yugoslavia	71,503	≈ 75,000	
Rumania	211,496	130,760	
Russia and Siberia	≈ 5,000,000	≈ 4,000,000	
Sweden	216,144	200,000	
Other Europe	50,000	(e)	
Total Europe	5,644,143	≈ 4,600,000	≈ 4,500,000
OCEANIA:			
New South Wales	87,188	100,255	90,000
Queensland	147,248	154,011	150,000
Victoria	156,522	162,567	150,000
Western Australia	1,214,237	1,191,481	1,109,313
Tasmania	19,982	21,390	≈ 20,000
New Guinea	246,214	294,795	235,000
New Zealand	178,955	185,665	190,000
Fiji	110,000	111,300	112,000
Other Oceania (c)	50,000	53,700	≈ 50,000
Total Oceania	2,210,346	2,275,164	2,106,313

Table 11 - GOLD PRODUCTION OF THE WORLD(a) 1939 - 1941 (Concluded) - (Taken from the Year Book of the American Bureau of Metal Statistics)

(in fine ounces)			
Country	1 9 3 9	1 9 4 0	1 9 4 1
ASIA:			
British India	316,604	289,357	285,945
China, including Manchuria	265,000	377,000	(e)
Chosen (Korea)	975,000	1,025,000	(e)
Netherland India	81,183	89,956	(e)
Formosa	* 60,000	* 50,000	(e)
Japan	* 850,000	* 900,000	(e)
Other Asia	110,000	115,000	* 110,000
Total Asia	2,657,687	2,846,313	*2,760,000
AFRICA:			
Belgian Congo	516,904	548,000	(e)
French West Africa	140,000	135,000	(e)
Kenya	77,444	77,243	70,000
Madagascar	14,000	14,000	15,000
Rhodesia	800,256	832,000	795,000
British West Africa (b)	839,900	959,223	930,000
Tanganyika	130,366	142,074	150,000
Transvaal, Cape Colony and Natal	12,821,507	14,037,741	14,386,361
Other Africa	170,000	170,000	170,000
Total Africa	15,510,877	16,895,261	17,186,361
TOTALS FOR WORLD	39,485,250	40,907,034	40,827,209

(a) The 1941 compilation contains some preliminary data and conjectural figures(*) have been inserted where necessary. Production of the Philippine Islands is included with the United States.

(b) Comprising Gold Coast, Sierra Leone and Nigeria.

(c) Includes Papua.

(d) Included in "Other Oceania".

(e) Not reported; estimate has been included in total.

The accounting for gold production in the Soviet Union, especially for recent years, are estimates derived from uncertain data, but they have to be made in order to arrive at world's totals, even if some error be introduced.

Table 12 - COMPARATIVE FIGURES OF GOLD PRODUCTION FOR THE WORLD SINCE THE DISCOVERY OF AMERICA, ALSO PRODUCTION FOR RUSSIA, TRANSVAAL, UNITED STATES AND CANADA

Year	Russia (a) fine ounces	Transvaal since the commencement of Fields(i) fine ounces	United States (f) (a) fine ounces	Canada since the recording of production in 1858 fine ounces	(a) World since the discovery of America fine ounces
1495 - 1600	24,266,820
1601 - 1700	29,330,445
1701 - 1800	61,088,215
1801 - 1840	20,488,552
1841 - 1850	1,187,170(c)	...	17,605,018
1851 - 1860	220,059	64,482,933
1861 - 1870	58,279,778(d)	1,477,999	61,098,343
1871 - 1880	15,281,264(e)	904,093	55,670,618
1881 - 1890	11,070,651	15,808,339	584,102	51,280,184
1891 - 1895	6,870,158	9,106,834	291,564	39,412,823
1896 - 1900	12,578,869	15,728,572	3,469,791	62,234,698
1901 - 1905	15,652,908	19,393,722	4,592,261	78,033,650

Table 12 - COMPARATIVE FIGURES OF GOLD PRODUCTION FOR THE WORLD SINCE THE DISCOVERY OF AMERICA, ALSO PRODUCTION FOR RUSSIA, TRANSVAAL, UNITED STATES AND CANADA (Concluded)

Year	Russia (a)	Transvaal since the commencement of Fields(1)	United States (f) (a)	Canada since the recording of production in 1858	(a) World since the discovery of America
	fine ounces	fine ounces	fine ounces	fine ounces	fine ounces
1906 .....	...	5,792,823	(	556,415	19,471,030
1907 .....	...	6,450,740	(	405,517	19,977,260
1908 .....	...	7,056,266	(22,993,218	476,112	21,422,244
1909 .....	...	7,295,108	(	453,865	21,965,111
1910 .....	...	7,527,108	(	493,707	22,022,180
1911 .....	...	8,249,461	4,687,053	473,159	22,397,136
1912	(g)	9,107,512	4,520,719	611,885	22,605,068
1913	1,583,677	8,798,336	4,299,784	802,973	22,556,347
1914	1,733,914	8,394,322	4,572,976	773,178	21,652,883
1915	1,382,450	9,093,902	4,887,604	918,056	22,846,608
1916	1,089,885	9,296,618	4,479,057	930,492	22,032,542
1917	871,265	9,018,084	4,051,440	738,831	20,346,043
1918	554,588	8,418,292	3,320,784	699,681	18,588,127
1919	173,610	8,331,294	2,918,628	766,764	17,339,679
1920	73,945	8,158,226	2,476,166	765,007	16,146,830
1921	65,907	8,128,681	2,422,006	926,329	15,997,692
1922	191,614	7,009,767	2,363,075	1,263,364	15,496,859
1923	305,425	9,148,771	2,502,632	1,233,341	17,845,349
1924	546,550	9,574,918	2,528,900	1,525,382	18,619,481
1925	632,390	9,597,573	2,411,987	1,735,735	18,673,178
1926	760,605	9,954,762	2,335,042	1,754,228	19,117,568
1927	688,492	10,122,459	2,197,125	1,852,785	19,058,736
1928	385,800	10,354,157	2,233,251	1,890,592	18,885,849
1929	707,300	10,412,326	2,208,386	1,928,308	19,207,452
1930	1,501,083	10,716,349	2,285,603	2,102,068	20,903,736
1931	1,655,725	10,877,708	2,395,878	2,693,892	22,284,290
1932	1,938,000	11,557,858	2,449,032	3,044,387	24,098,676
1933	2,700,000	11,012,340	2,556,246	2,949,309	25,400,295
1934	3,858,000	10,479,194	3,091,183	2,972,074	27,372,374
1935	4,784,030	10,773,041	3,609,283	3,284,890	29,999,245
1936	6,500,000(h)	11,335,092	4,357,394	3,748,028	32,930,554
1937	5,900,000(h)	11,734,553	4,804,540	4,096,213	35,118,298
1938	5,800,000(h)	12,161,375	5,089,811	4,725,117	37,703,334
1939	5,000,000(h)	12,821,061	5,611,171	5,094,379	39,534,430
1940	4,000,000(h)	14,037,741	6,003,105(j)	5,311,145	40,555,846
1941	(b)	14,386,361(h)	5,980,746(h)(1)	5,345,179	40,827,209(h)(k)
TOTAL ....	...	381,330,574	267,429,504	80,882,236	1,415,991,888

(a) Supplied by United States Mint.

(b) Not available.

(c) 1792-1847.

(d) 1848-1872.

(e) 1873-1880.

(f) Including Philippine Islands production received in United States. Data represent receipts at United States Mint's refineries assay offices.

(g) Data not available for preceding years. A revision by the United States Mint of estimated Russian gold production for the years 1913 to 1934 was made from United States consular reports, based principally on Soviet publications. While available data are quite indefinite and, in many instances, contradictory, it is believed that this revision more nearly represents actual production than data heretofore used. Figures for Russian production since 1937 supplied by American Bureau of Metal Statistics.

(h) Subject to revision. American Bureau of Metal Statistics.

(i) Annual Report - Department of Mines, Union of South Africa. 1941 figures, Transvaal Chamber of Mines.

(j) Includes 1,140,126 fine ounces received from Philippines.

(k) Includes conjectural data for Russia.

(1) A preliminary report issued by the United States Bureau of Mines records Philippine Islands production at 1,113,185 fine ounces in 1941.

SOME OUTSTANDING EVENTS IN HISTORY OF CANADIAN GOLD PRODUCTION TO 1939

<u>Year</u>	
1823	Placer gold discovered on Chaudière River, Quebec.
1852	Free gold discovered in quartz at Mitchell Harbour, Queen Charlotte Island, B.C. First gold rush in British Columbia.
1855	Placer gold found at mouth of Pend d'Oreille River, B.C.
1857	Placer gold reported at junction of Fraser and Thompson Rivers, B.C.
1858	Placer Gold rush by California miners to Yale, Hope and Canyon, B.C.
1859	Placer miners penetrate to Cariboo and Quesnel, B.C.
1860	John Pulsiver discovered gold in Tangier district, Halifax County, N.S. Pete Toy bar discovered at the Parsnip and Findlay Rivers, B.C.
1861	Gold discovered in Oldham district, Halifax County, N.S.
1862	Gold discovered in Lawrencetown, Isaacs Harbour and Renfrew districts, N.S.
1863	United States miners establish Wildhorse Creek diggings, B.C.
1865	Placer claims staked on Big Bend area of Columbia River, B.C. Gold discovered in Mount Uniacke district, N.S.
1866	First discovery of gold in Canadian Precambrian shield, near Madoc, Hastings County, Ont.—later known as the Richardson mine.
1869	Gold discovered in Fifteen Mile Stream district, N.S., and in Yukon River.
1871	Huronian Gold Mine (Moss), Thunder Bay district, Ontario, located by Peter McKellar.
1873	Dease Lake areas, B.C., staked for placer gold. First staker W. H. Smith. Omineca placer district, B.C. opened and Manson Creek settlement established.
1878	Gold discovered at Lake of Woods, Ontario.
1883	Copper-nickel ores discovered near Sudbury, Ont. (Murray mine). Mines located on Kootenay River and Kootenay Lake, B.C.
1885	Granite and Cayoosh Creek placers, B.C., staked.
1887	Discovery of cyanide process (in Scotland) for the extraction of gold.
1889	First stakings in the Rossland camp, B.C.
1891	Sultana mine opened in Lake of Woods district, Ontario.
1893	Mikado mine discovered in Lake of Woods district, Ontario.
1896	Discovery of placer gold in Klondike, Yukon Territory. Rossland, B.C., ores smelted.
1897	Pioneer mine, B.C., located by Wm. Allen.
1898	Atlin gold fields, B.C., located during Klondike rush. Britannia mine, B.C., discovered by O. Furry.
1900	Klondike gold production reaches its maximum.
1901	Britannia mine, B.C. came into production.
1903	St. Anthony mine—Sturgeon Lake, Ont.—commenced production. Mining commenced at Hedley, B.C.
1904	Copper-gold ores discovered in Chibougamou district, Quebec.

SOME OUTSTANDING EVENTS IN HISTORY OF CANADIAN GOLD PRODUCTION TO 1939 (Continued)

<u>Year</u>	
1906	Lake Fortune mine discovered by Ollier and Renault, northwestern Quebec. Gold discovered at Larder Lake, Ont. First electrical mining equipment in Canada installed at Creighton mine, Sudbury district.
1908	H. F. Hunter discovered gold in Porcupine area, Ontario.
1909	B. Hollinger discovered Hollinger gold mine veins, Porcupine district, Ontario. Alex. McIntyre discovered McIntyre gold mine veins, Porcupine district, Ontario. John Wilson and associates discovered Dome mine veins, Porcupine district, Ontario.
1910	Bunting Bros. and Wm. Dilworth discover Premier mine, B.C.
1911	W. H. Wright discovered gold in Kirkland Lake district (Wright-Hargreaves mine). Porcupine camp destroyed by fire. J. J. Sullivan and H. Authier discover gold in Dubuisson Tp., Quebec. Major E. A. Pelletier discovered gold at Rice Lake, Man.
1912	Hollinger mine, Timmins, Ont., commenced milling operations. Harry Oakes staked Lake Shore mine, Kirkland Lake, Ont.
1913	Tough-Oakes mine, Kirkland Lake, shipped high grade ore. Gold discovered on Kirkland Lake properties known later as Lake Shore, Teck Hughes, Kirkland Lake and Sylvanite mines.
1914	Cyanide first used in Kirkland Lake camp (Tough-Oakes).
1915	S. E. Siscoe staked the Siscoe mine claims, northwestern Quebec. Flin Flon deposits on Manitoba-Saskatchewan boundary discovered by Thos. Creighton.
1917	Teck Hughes mine, Kirkland Lake, Ont., commenced milling.
1918	Premier mine, B.C., came into production.
1919	Lake Shore, Wright Hargreaves, and Kirkland Lake mines commenced milling.
1921	Noranda ore deposits, Quebec, staked by Ed. Horne.
1922	McDonough Bros. staked Amulet mine claims, Quebec.
1923	Sherritt-Gordon ore deposit staked by Carl Sherritt and Philip Sherlett.
1925	Lorne Howey discovered gold in Red Lake district, Ontario—Howey mine. Waite-Ackerman-Montgomery claims, Quebec, staked by H. Montgomery. Allenby Copper Company took over Copper Mountain claims, B.C.; concentrates shipped to Trail.
1927	Noranda smelter operated for first time.
1928	Waite-Ackerman-Montgomery mine started shipping. Coniaurum mill, Porcupine district, came into production. Fire at Hollinger mine.
1929	Siscoe mine, Quebec, came into production. Dome mine mill—Porcupine—destroyed by fire. McIntyre mine, Porcupine, erected flotation plant.
1930	Flin Flon smelter came into production in Manitoba. Milling commenced at Howey mine, Red Lake district, Ontario. Granada mine, Quebec, came into production.
1931	Gold discovered at Island Lake, Man. Sherritt-Gordon mill, Manitoba, came into production. Equalization premiums paid by Dominion Government to gold mines. Exports, without license, of gold bullion prohibited by Dominion Government. Great Britain went off gold standard September 21st. Big Missouri mine, B.C., operated Pilot mill.
1932	O'Brien Cadillac mine, Quebec, commenced milling. San Antonio mine, Manitoba, came into production. Gold discovered at God's Lake, Man. Union of South Africa abandoned gold standard.
1933	Beattie gold mine, Quebec, came into production. Green Stabell mine, Quebec, commenced milling. Macassa mine, Kirkland Lake, Ont., commenced milling. United States went off gold standard April 19th. Cariboo Gold Quartz mine, B.C., came into production.

SOME OUTSTANDING EVENTS IN HISTORY OF CANADIAN GOLD PRODUCTION TO 1939 (Concluded)Year

- 1934** Gold weight of United States dollar reduced from 25.8 to 15 5/21 grains 0.9 fine. Dominion tax on gold came into effect April 19th. Perron Gold Mine, Quebec, commenced milling. McWatters mine, Quebec, came into production. Sullivan mine, Quebec, commenced milling. Little Long Lac mine, Ontario, commenced milling. Jackson Marion mine, Patricia district, Ontario, commenced milling. Northern Empire mine, Ontario, commenced milling. Matachewan Cons. mine, Matachewan, Ont., commenced milling. Young-Davidson mine, Matachewan, Ont., commenced milling. Central Patricia mine, Patricia district, Ontario, commenced milling. Gold discovered near Beaverlodge Lake, Sask.
- 1935** Pickle Crow mine, Patricia district, Ontario, commenced milling. Ross mine (Hollinger), Porcupine district, Ontario, commenced milling. McKenzie Red Lake mine, Patricia district, Ontario, commenced milling. Gold bullion tax discontinued after May 31st and depletion allowance revised for payments of gold mining dividends. Arntfield, Canadian Malartic and Lamaque mines, Quebec, came into production. Gold discovered at Sachigo River, Ont. Ymir Yankee Girl, Second Relief and Sheep Creek mines, B.C., came into production. Milling commenced at God's Lake mine, Manitoba. Milling suspended at Island Lake mine, Manitoba. Bralorne and Bradian mines, B.C., consolidated. Granby Cons. Mining, Smelting & Power Co. ceased operations at Anyox.
- 1936** Amendment to Income Tax Act exempted new or re-opened metal mines. Shawkey mine, Quebec, came into production. Perron mine, Quebec, came into production. Stadacona-Rouyn mine, Quebec, came into production. Pamour mine, Porcupine district, Ontario, came into production. Red Lake Gold Shore mine came into production. Argosy mine, Ontario, commenced milling. Gunnar gold mine, Manitoba, came into production. Thompson Cadillac mine, Quebec, commenced milling. Adolph Studer discovered gold at Sulphide Lake, Sask.
- 1937** Milling commenced at Delnite mine, Porcupine district, Ontario. Sand River mine, Ontario, came into production. Gurney mine, Manitoba, came into production. Production resumed at Sherritt-Gordon mine, Manitoba. Production resumed at Copper Mountain mine, B.C. Mill completed at Gold Eagle mine, Patricia district, Ontario. Bankfield mine, Ontario, commenced milling. Sigma mine, Quebec, commenced milling. Powell-Rouyn mine, Quebec, came into production. Normetal mine, Quebec, came into production. Central Manitoba mine, Manitoba, suspended operations. Nova Scotia Government reopened Lacey mine as a training project.
- 1938** Mesabi mine, Kirkland Lake, came into production. Vocational mine school organized by Quebec Bureau of Mines. Madsen Red Lake mine, Ontario, came into production. Sachigo River mine commenced milling. Consolidated Rycon mill came into production, Northwest Territories. Polaris-Taku mine, Atlin district, B.C., commenced milling. Moneta mine, Porcupine district, brought into production. Big Missouri mill, B.C., came into production. Cariboo-Hudson mine, B.C., commenced production. East Malartic, Francoeur, Halliwell, Lapa Cadillac, Lake Rose, Pan Canadian, Payone and Sladen Malartic mines in northwestern Quebec, commenced production. Privatear mine, B.C., commenced milling. Hallnor mine, Porcupine district, brought into production. Golden Gate mine, Kirkland Lake, Ont., commenced milling. Upper Canada mine, Kirkland Lake, came into production. Kerr Addison mine, Larder Lake, Ont., commenced milling. Cline mine, Algoma district, Ontario, commenced milling. McLeod-Cockshutt and Hardrock mines, Thunder Bay district, Ontario, commenced milling. Straw Lake Beach mine, Kenora district, Ontario, commenced milling. Tombill mine, Thunder Bay district, Ontario, came into production.
- 1939** New Gold Clauses Act passed. Negus mine, N.W.T., came into production. Canada declared war against Germany September 10th. Amm Gold mine, Quebec, came into production. Mooshla mine, Quebec, came into production. Malartic gold fields, Quebec, commenced milling. Chesterville mine, Larder Lake, came into production. Tyrant mine, Matachewan district, Ontario, came into production. Preston East Dome mine came into production. Magnet Cons. Mines, Thunder Bay district, Ontario, came into production. Uchi mine, Patricia district, Ontario, came into production. Cochenour-Willans mine, Patricia district, Ontario, came into production. Guysborough Mines Ltd. open new mine at Lake Charlotte, N.S. Wood Cadillac mine, Quebec, commenced milling. Central Cadillac mine, Quebec, commenced milling. Broulan mine, Porcupine district, Ontario, commenced milling. Jellicoe mine commenced shipment of ore, Thunder Bay, Ont. Berens River mine, Patricia district, Ontario, commenced milling. Cordova mine, Hastings County, Ontario, resumed production. Box mine, Goldfields, Sask., commenced operating.

Table 13 - ESTIMATED AVERAGE MONTHLY VALUE OF AN OUNCE OF FINE GOLD, EXPRESSED IN CANADIAN FUNDS, 1931-1941

Month	1931	1932	1933	1934	1935	1936	1937	1938	1939	(1940 (1941
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
January	20.71	24.24	23.64	33.05	34.95	35.06	35.01	34.99	35.30	38.50
February	20.67	23.67	24.74	35.29	35.05	35.18	35.01	35.00	35.19	38.50
March	20.67	23.11	24.78	35.08	35.40	35.11	34.98	35.05	35.13	38.50
April	20.68	22.98	25.33	34.93	35.18	35.15	34.95	35.15	35.15	38.50
May	20.68	23.38	27.75	34.94	34.95	35.00	34.94	35.22	35.13	38.50
June	20.73	23.83	28.24	34.73	35.05	35.09	35.02	35.36	35.07	38.50
July	20.74	23.73	30.58	34.59	35.08	34.91	35.05	35.24	35.06	38.50
August	20.73	23.61	30.09	34.19	35.09	35.00	35.00	35.12	35.01	38.50
September	21.55	22.88	31.79	34.18	35.28	34.99	35.00	35.12	37.21	38.50
October	23.22	22.65	31.48	34.27	35.49	34.99	34.99	35.32	38.43	38.50
November	23.22	23.73	32.68	34.16	35.37	34.95	34.98	35.25	38.50	38.50
December	25.01	23.85	32.14	34.57	35.33	34.98	34.93	35.28	38.50	38.50
YEARLY AVERAGE	21.55	23.47	28.60	34.50	35.19	35.03	34.99	35.17	36.14	38.50

NOTE: Procedure regarding the marketing of gold by the Department of Finance, Ottawa, is noted elsewhere in this report. At December 31st, 1941, the price paid by the United States Treasury for gold purchased by the Mint continued at \$35 per troy ounce of fine gold, less $\frac{1}{2}$ of 1 per cent. Actual payment by the United States Treasury for gold in imported and domestic ore or concentrate was at 99.75 per cent of the price quoted by the Treasury, which, at the close of 1941, was equal to \$34.9125 per ounce.

FOREIGN EXCHANGE, 1941
(Internal Trade Branch)

Chief developments of the year in the foreign exchange market were further decreases in the number of currencies quoted, and further application of controls to remaining currencies. Changes in methods used to maintain fixed rates, rather than the slight changes in quotations, have come to be the significant events in the foreign exchange market.

At the end of 1941, the pound sterling was the only European currency regularly quoted in New York. During the year the course of the war caused several additions to the sterling area. Iceland, the Faroe Islands, and the Free French Empire were included in March and April, Syria and Lebanon in September.

Both the United States and Great Britain maintained their support of the Chinese currency, and attempted to ease the strictures of war upon the economies of the South and Central American republics. In May, Britain included twelve Central American countries, and later added Colombia, in a special sterling account area. Stability of Latin-American exchanges was assisted also by a more favourable balance of trade, derived from an increase of raw material exports to the United States, and a decrease of imports because of exchange controls and priorities on materials and shipping. Repatriation of capital and an influx of American and refugee European capital were also of assistance.

At New York, the pound sterling and Canadian dollar sold in the unofficial market usually at a small discount on the official rate. At times they were at a premium, as improvement of controls reduced the unofficial supply of sterling area currency to a trickle. The pound sterling, the official rates for which are 4.02 $\frac{1}{2}$ - 4.03 $\frac{1}{2}$ at New York, sold unofficially during most of the year at 4.03 or better. On April 17-18 it touched 4.01, and during most of the latter half of April it stayed below 4.03; but from October 27 to the end of the year it was steady at 4.04. The Canadian dollar varied from a low of 82 5/8¢ on January 22 to a high of 89 9/16¢ on September 8. From the end of May to the middle of December, it never fell below 88¢, but just at the end of the year it dropped to 86¢. *The unofficial market is now so limited that little importance attaches to these movements.

Since September 16, 1939 Canadian (Montreal) quotations used are the average of the daily buying and selling rate set by the Canadian Foreign Exchange Control Board. The current buying and selling rates for sterling are \$4.43 and \$4.47 and for United States funds \$1.10 and \$1.11.

* Closing nominal quotations for sterling and Canadian funds at New York, from Montreal Gazette.

GOLD EXPORTS

(Order-in-Council P.C. 9131 - November 26, 1941)

WHEREAS by Order in Council, P.C. 1150, dated May 17, 1932, regulations respecting the export of gold, whether in the form of coin or bullion, from the Dominion of Canada, were made under the authority of The Gold Export Act;

AND WHEREAS the said regulations were by Order in Council, P.C. 7246, dated December 11, 1940, continued in force until December 31, 1941;

AND WHEREAS in the opinion of the Minister of Finance it is expedient that the said regulations be continued in force beyond December 31, 1941;

NOW, THEREFORE, His Excellency the Governor General in Council, on the recommendation of the Minister of Finance and under the provisions of the said "The Gold Export Act, is pleased to order that the provisions of the said Regulations be and they are hereby continued in force and effect until December 31, 1942, unless sooner rescinded by Order in Council.

NOTE: Order in Council P.C. 1150, reads, in part, as follows - "The export of gold, whether in the form of coin or bullion (including ore, etc), from the Dominion of Canada, is hereby prohibited, except in such cases as may be deemed advisable by the Minister of Finance, and under license to be issued by him"

CANADIAN GOLD METAL STOCKS

Data relating to Canadian gold stocks in 1940 and 1941 were not published. For information pertaining to these stocks prior to 1940, see previous annual gold mining reports as issued by the Bureau of Statistics.

GOLD IN CANADIAN EXPORT TRADE

Exports of gold in Canadian trade statistics were distinguished in previous reports as between monetary and non-monetary. Monetary gold exports were described as those which entailed a reduction in the Dominion's monetary gold stocks. All other gold exported (classed as non-monetary) were shown as merchandise, and included with the total merchandise exports.

The fact that gold is a money metal gives it peculiar attributes which distinguish it from other commodities in trade. In particular, the movement of gold in international trade is determined almost exclusively by monetary factors. The amount of exports may fluctuate widely from month to month owing to other than ordinary trade or commercial considerations. In addition, gold is generally acceptable. It does not have to surmount tariff barriers and is normally assured a market at a relatively fixed price. For these reasons provision was made in previous trade reports for a supplementary table showing exports from Canada excluding all gold.

It is further to be noted gold does not move in international trade in any direct or normal relation to sales and purchases. It may be bought or sold abroad without moving in or out across the frontier, the sales or purchases in such cases being recognized by simply setting aside or "earmarking" the gold in the vaults of the central bank. Trade statistics deal only with physical movements, sales or purchases of gold which do not involve an actual movement being more properly regarded as an "invisible item" and taken care of in the "International Balance of Payments" statements. Changes in the Bank of Canada's stock of gold under earmark do not enter, therefore, into the trade statistics.

The publication of statistics showing the gross imports and exports of gold has been temporarily suspended as from September, 1939. Statistics for periods prior to this time have been accordingly revised to exclude all gold formerly included in the total of merchandise exports.

Statistics showing the net exports of non-monetary gold, including changes in stocks held under earmark, are published as a supplement to the trade figures, and are given on Page 19.

NET EXPORTS OF NON-MONETARY GOLD

	1937	1938	1939	1940	1941	1942
	\$	\$	\$	\$	\$	\$
	000,000's omitted					
January	10.1	11.0	18.1	21.6	19.2	15.1
February	10.8	11.2	12.9	12.4	14.7	16.6
March	16.3	17.6	15.5	16.2	19.7	...
April	10.3	9.3	10.6	18.0	14.3	...
May	10.3	14.3	15.9	16.9	16.1	...
June	13.5	11.5	17.2	15.1	18.4	...
July	10.1	11.5	15.2	15.9	17.3	...
August	12.3	16.6	9.0	17.6	12.6	...
September	11.6	15.1	17.3	16.5	21.2	...
October	11.3	15.5	22.8	18.9	17.4	...
November	12.1	15.3	15.0	16.6	15.4	...
December	16.4	11.6	14.9	17.3	17.4	...
12 MONTHS DECEMBER	145.1	160.5	184.4	203.0	203.7	51.7

Table 14 - WORLD'S MONETARY STOCKS OF GOLD AT THE CLOSE OF 1938, 1939 and 1940 (Subject to revision)
(Compiled by the United States Mint from available data)
(Stated in United States money)

Country	Total		:	Total		:	Total	
	Gold Stock	Per		Gold Stock	Per		Gold Stock	Per
	Value, 1938(e)	capita	:	Value, 1939(e)	capita	:	Value, 1940(e)	capita
	\$	\$:	\$	\$:	\$	\$
United States (d)	14,511,124,000	111.04	:	17,643,577,000	133.17	:	21,991,102,000	165.98
Canada	193,088,000	17.23	:	206,223,000	18.55	:	7,251,000	0.63
Argentina	431,561,000	33.30	:	466,000,000	36.51	:	438,078,000	34.33
Belgium	728,104,000	86.82	:	607,140,000	72.85	:	736,000,000	88.03
Denmark	53,366,000	14.07	:	53,083,000	14.10	:	52,003,000	13.82
France	2,430,376,000	57.89	:	2,708,878,000	64.64	:	2,000,068,000	47.73
Germany	28,543,000	0.36	:	40,118,000	0.59	:	40,230,000	0.60
Great Britain	2,696,043,000	56.78	:	10,314,000	0.22	:	1,991,000	0.04
Italy	192,885,000	4.43	:	144,000,000	3.29	:	137,000,000	3.13
Netherlands	994,525,000	113.96	:	690,128,000	79.92	:	617,299,000	71.49
Norway	93,598,000	32.04	:	93,916,000	32.31	:	84,388,000	29.03
Poland	84,541,000	2.41	:	85,000,000	2.46	:	...	...
Portugal	68,759,000	9.22	:	68,900,000	9.47	:	92,284,000	12.69
Roumania	132,791,000	6.69	:	151,606,000	7.72	:	157,400,000	8.01
Russia (Soviet Union) ..	(a)	(a)	:	(a)	(a)	:	(a)	(a)
Spain	525,000,000	21.00	:	525,000,000	21.13	:	(a)	(a)
Sweden	321,119,000	50.89	:	308,117,000	49.02	:	304,955,000	48.52
Switzerland	699,095,000	166.06	:	548,580,000	131.43	:	502,115,000	120.29
British India	274,578,000	0.76	:	274,472,000	0.81	:	274,480,000	0.81
Japan (including Chosen, Taiwan, Kwantung)	163,476,000	1.59	:	163,570,000	1.61	:	163,570,000	1.61
Netherlands East Indies.	79,552,000	1.18	:	89,930,000	1.40	:	139,659,000	2.17
Egypt	52,229,000	3.26	:	52,500,000	3.30	:	52,000,000	3.10
Australia	3,435,000	0.50	:	4,200,000	0.61	:	16,683,000	2.43
New Zealand	23,086,000	14.39	:	23,086,000	12.04	:	23,087,000	14.41
Union of South Africa ..	229,357,000	23.19	:	250,451,000	2.13	:	352,713,000	36.00
Other countries	746,510,000	...	:	724,292,000	...	:	902,251,000	...
TOTAL	25,757,240,000	(b)12.46	:	25,933,081,000	(b)12.71	:	29,086,657,000	(b)14.23

(a) Data omitted because of indefiniteness or unavailability.

(b) Population figures are principally supplied by United States Department of Commerce, 1938-40.

(d) Includes Alaska, Hawaii and Puerto Rico.

(e) 1 ounce fine gold = \$35.

NOTE: It is understood that material amounts of gold are not reported by several countries, such as, amounts held in secret funds for stabilizing currencies and those hoarded or held outside of regularly reported stocks.

Table 15 - AVERAGE COMMERCIAL RATIO OF SILVER TO GOLD FOR EACH SPECIFIED YEAR SINCE 1700
(Supplied by United States Mint)

Year		Year		Year	
1700	14.81	1900	33.33	1933	59.06
1750	14.55	1905	33.87	1934	72.49
1800	15.68	1910	38.22	1935	54.19
1850	15.70	1915	40.48	1936	77.09
1875	16.64	1920	20.28	1937	77.44
1880	18.05	1925	29.78	1938	80.39
1885	19.41	1930	53.74	1939	88.84
1890	19.75	1931	71.25	1940	99.76
1895	31.60	1932	73.29	1941	100.62(x)

(x) Estimate based on Canadian prices.

Table 16 - CIRCULATING MEDIA IN HANDS OF CANADIAN PUBLIC FOR YEARS SPECIFIED (Business Statistics Branch)

Year	Dominion and Bank of Canada Notes /3	Circulation of Bank Notes /3	Total Notes in Hands of Public /1/3	Subsidiary Coin Out- standing	Subsidiary Coin in Hands of Public	Circulating Media in Hands of Public
(Millions of Dollars)						
1919	308.0	218.9	217.0	28.77	22.97	239.97
1923	240.9	170.4	160.1	30.23	24.43	184.53
1926	190.0	168.9	180.3	30.04	24.24	204.54
1929	204.4	178.3	191.5	32.26	26.46	217.96
1931	153.1	142.0	156.7	32.83	27.03	183.73
1933	179.2	130.4	149.8	33.27	27.47	177.27
1934	190.3	135.5	155.7	33.70	27.90	183.60
1935	127.3/2	125.6	165.9	33.67	27.87	193.77
1936	105.3	119.5	179.9	34.00	28.20	208.10
1937	141.1	110.3	199.1	35.29	29.49	228.58
1938	161.1	99.9	203.7	36.63	30.97	234.67
1939	184.9	94.1	218.1	38.87	33.18	251.28
1940	277.1	91.1	294.1	45.05	39.15	333.25
1941	406.4	81.6	399.7	49.46	42.16	341.86

/1 Holdings of chartered banks and of Central Gold Reserves are deducted from the sum of the first and second columns to give total notes in hands of public.

/2 The Bank of Canada notes first appeared in the last ten months of 1935.

/3 Average of monthly data.

Table 17 - DEPOSITS IN CANADA, AVERAGE OF MONTHLY DATA FOR YEARS SPECIFIED (Millions of Dollars)

Year	Notice Deposits	Demand Deposits	Dominion Government Deposits	Provincial Government Deposits	Sum of Deposits
1919	1,125.2	621.7	181.8	22.0	1,950.7
1923	1,197.3	523.2	50.6	34.2	1,805.3
1926	1,340.6	553.3	31.3	21.6	1,946.8
1929	1,479.9	696.4	77.8	24.5	2,278.6
1931	1,438.0	578.6	49.0	24.4	2,089.9
1933	1,378.5	486.5	38.8	23.2	1,929.0
1934	1,372.8	514.0	35.1	30.8	1,952.6
1935	1,445.3	568.6	25.5	39.3	2,078.7
1936	1,518.2	618.3	37.8	39.3	2,213.7
1937	1,573.7	691.3	47.2	42.7	2,354.9
1938	1,630.5	690.5	49.2	44.9	2,415.1
1939	1,699.2	741.7	92.3	53.5	2,586.7
1940	1,646.9	875.1	163.4	63.6	2,749.0
1941	1,616.1	1,088.2	254.3	67.3	3,025.9

NOTE: See Annual Report on Bank Debts and Equation of Exchange - Dominion Bureau of Statistics.

Table 18 - ANNUAL AVERAGE INDEXES OF FIVE CANADIAN ECONOMIC FACTORS, WITH SEASONAL ADJUSTMENT WHERE NECESSARY,
1934 - 1941
(1926 = 100)

Year	Bank Debits	Physical Volume of Business	Employment in Manufacturing	Wholesale Prices	Common Stock
1934	108.1	94.2	90.2	71.6	85.7
1935	103.9	102.4	97.1	72.1	93.7
1936	118.7	112.2	103.7	74.6	119.2
1937	117.5	122.7	119.3	84.5	127.0
1938	101.8	112.9	111.2	78.6	104.1
1939	104.0	122.4	112.3	75.4	100.5
1940	113.4	145.4	133.4	82.9	84.9
1941	129.3	162.8	172.3	89.9	74.0

PRICE MOVEMENTS, CANADA, 1941
(Internal Trade Branch - D.B.S.)

The wartime rate of increase in price levels accelerated during 1941. The general wholesale price index for Canada advanced 11.2 per cent from 84.2 in December, 1940 to 95.6 in December, 1941; and in the same period the cost of living index rose 7.2 per cent, from 108.0 to 115.8. The rise was general, and struck its most rapid pace during the summer months. The increase in area and intensity of the war caused many shortages of basic materials, and advances in shipping and insurance costs. The influence of these factors was clearly apparent in price levels of the United States and United Kingdom as well as Canada.

As the rise of prices gained momentum in the latter half of 1941, it became clear that controls established over a few key commodities would not check the general advance, and an over-all control of wages, rents, and commodity prices was imposed. On December 1 price movements in Canada were for the first time made subject to a general ceiling, under terms of Order-in-Council P.C. 8527, which, with amendments and additions, constitutes "The Maximum Prices Regulations." Under this Order, maximum prices were the highest prevailing between September 15, 1941, and October 11, 1941, inclusive. Wholesale and retail prices could not legally move above this level after December 1, but below it they could fluctuate freely. There were a few exceptions: for instance the ceiling did not apply to fresh fruits and vegetables; and there was still a minimum price for wheat. Provision was made for maintenance of the ceiling on necessary imported foods as well as on domestic foods and services.

Table 19 - WHOLESALE PRICE INDEX NUMBERS MARKING PEAKS AND DEPRESSIONS SINCE 1913
(1926 = 100)

	1913	1920	1922	1929	1932	Aug. 1939	Dec. 1941
General wholesale index	64.0	155.9	97.3	95.6	66.7	72.5	95.6
Raw and partly manufactured goods ..	63.8	154.1	94.7	97.5	55.0	62.8	85.5
Fully and chiefly manufactured goods	64.8	156.5	100.4	93.0	69.8	72.6	92.4
Producers' goods	67.7	164.3	98.8	96.1	62.4	66.7	85.8
Consumers' goods	62.0	136.1	96.9	94.7	71.3	72.7	95.5
Canadian farm products	64.1	160.6	88.0	100.8	48.4	58.4	74.6
Imports	73.0	158.8	100.4	94.2	70.5	80.5	108.8
Exports	64.7	158.1	94.7	92.2	54.9	59.9	78.9

INDEX NUMBER OF LIVING COSTS IN CANADA, FEBRUARY 2, 1942
(Calculations based on prices for the first business day of each month)
(Internal Trade Branch)

The Dominion Bureau of Statistics index number of living costs on the base 1935-1939-100, rose from 115.4 on January 2nd to 115.7 on February 2nd. A few increases among food prices and certain miscellaneous items, offset to some extent by a fractional decline in clothing, accounted for the advance. Living costs on February 2nd were 14.8 per cent above the August 1, 1939, level.

An index for 46 food items moved up from 122.3 to 123.1, influenced by increases for potatoes, onions, tea and meats. Eggs and oranges recorded moderate declines.

The miscellaneous index advanced from 106.8 to 107.1 following increases in health costs and life insurance premium rates.

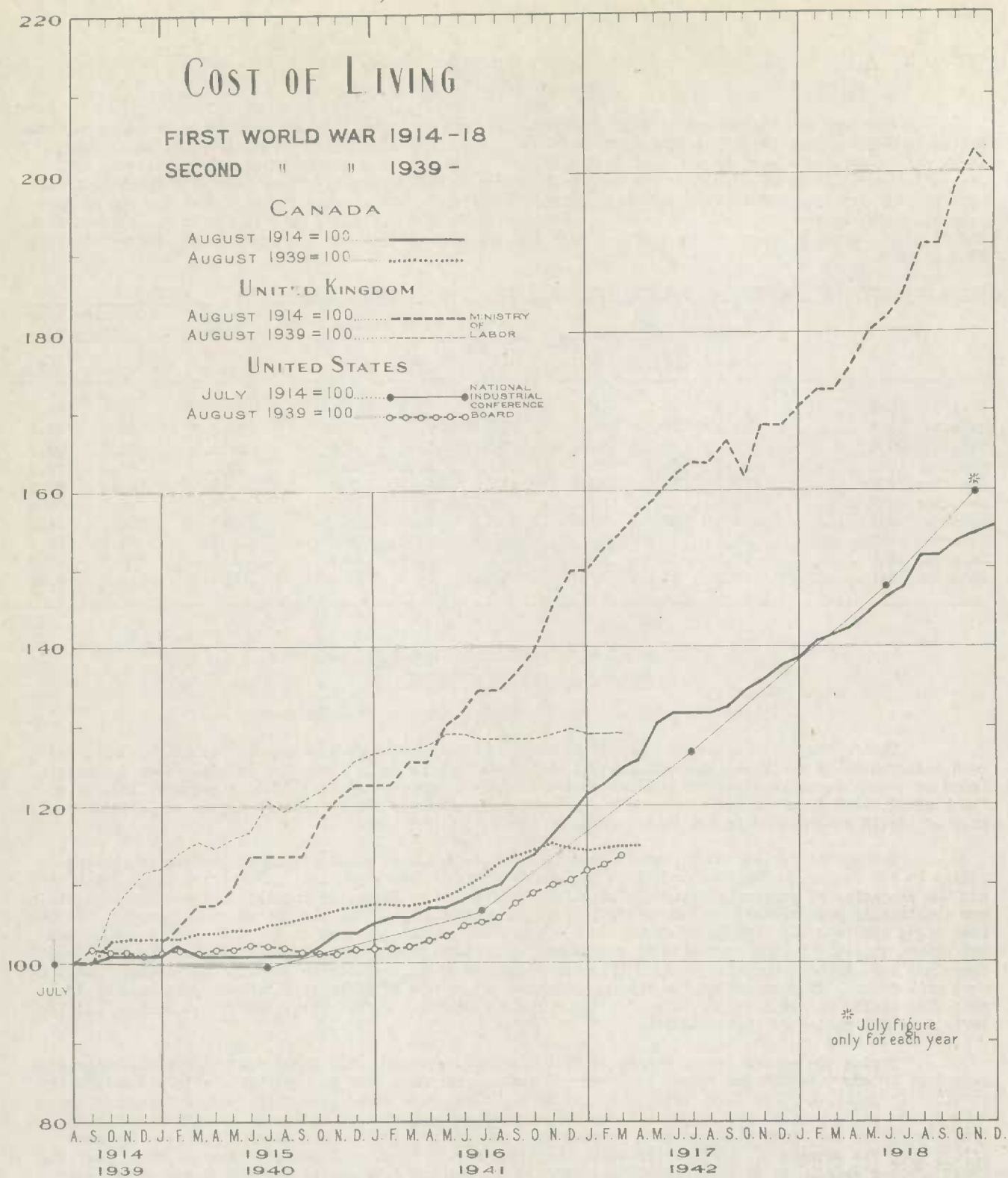
An index for retail prices excluding rents and services was 120.3 in February as compared with 119.9 in January.

Table 20 -

INDEX NUMBERS OF LIVING COSTS, 1913-FEBRUARY 2, 1942
(1935-1939=100)

		Total Index	Food Index	Rent Index	Fuel and Light- ing Index	Cloth- ing Index	Home Furnishings and Miscellaneous Index	Retail Prices Index (Commod- ities only)
1913		79.7	88.3	74.3	76.9	88.0	70.3	...
1914		80.0	91.9	72.1	75.4	88.9	70.3	...
1917		104.5	133.3	75.8	83.9	130.3	81.5	...
1918		118.3	152.8	80.2	92.2	152.3	91.4	...
1920		150.5	188.1	100.2	119.9	213.1	119.3	...
1926		121.8	133.3	115.9	116.3	139.1	106.1	...
1929		121.7	134.7	119.7	112.6	134.8	105.0	...
1930		120.8	131.5	122.7	111.8	130.6	105.4	...
1934		95.6	92.7	93.2	102.1	97.1	97.8	...
	Percentage Increase since Aug. 1, 1939						Home furnish- ings and Services Index	Miscell- aneous Index
1935		96.2	94.6	94.0	100.9	97.6	95.4	98.7
1936		98.1	97.8	96.1	101.5	99.3	97.2	99.1
1937		101.2	103.2	99.7	98.9	101.4	101.5	100.1
1938		102.2	103.8	103.1	97.7	100.9	102.4	101.2
1939		101.5	100.6	103.8	101.2	100.7	101.4	101.4
1940		105.6	105.6	106.3	107.1	109.2	107.2	102.3
1939 August 1		100.8	99.3	103.8	99.0	100.1	100.9	101.3
1940 November 1 ..	6.9	107.8	108.7	107.7	108.5	113.5	110.0	102.8
December 2 ..	7.1	108.0	109.1	107.7	108.5	113.5	110.7	102.8
1941 January 2 ...	7.4	108.3	109.7	107.7	108.6	113.7	110.8	103.1
February 1 ..	7.3	108.2	108.8	107.7	108.7	114.1	111.5	103.1
March 1	7.3	108.2	109.0	107.7	108.9	114.2	111.6	102.9
April 1	7.7	108.6	110.1	107.7	108.9	114.3	111.7	102.9
May 1	8.5	109.4	109.7	109.7	109.2	114.5	111.8	105.1
June 2	9.6	110.5	112.5	109.7	110.2	114.9	112.1	105.6
July 2	11.0	111.9	116.6	109.7	110.5	115.1	113.0	105.6
August 1	12.8	113.7	121.3	109.7	110.5	115.7	114.3	106.1
September 2..	13.8	114.7	123.3	109.7	110.9	117.4	115.8	106.4
October 1 ...	14.6	115.5	123.2	111.2	112.1	119.6	117.3	106.5
November 1...	15.4	116.3	125.4	111.2	112.7	120.0	117.9	106.7
December 1 ..	14.9	115.8	123.8	111.2	112.7	119.9	117.9	106.7
1942 January 2 ...	14.5	115.4	122.3	111.2	112.9	119.9	118.0	106.8
February 2 ..	14.3	115.7	123.1	111.2	112.9	119.8	118.0	107.1

Order-in-Council P.C. 8253 (October 27, 1941) provides for a cost-of-living bonus of 25 cents per week for each one per cent of increase in the official index number measured from August, 1939. For convenience the percentage increase each month as compared with August, 1939, is shown in the left-hand column.



SECURITY PRICES
(Internal Trade Branch)

The year saw improvements in bond prices, but both prices and volume were lower on stock markets. Volume at Montreal was less than 10 per cent of 1937 values, and the Bureau's investors' index of common stock prices dropped almost 10 per cent during 1941. Prices followed war fortunes. Low points in 1941 came after reverses in Greece and Crete, and peak losses in the Atlantic. Rises came with Russia's involvement in war; but the effect of the Russian counteroffensive and the Libyan offensive near the end of the year was overbalanced by initial Japanese successes and, in Canada, by the institution of the price ceiling. The index of Dominion long term bond prices rose from 100.5 to 102.0 over the year, while yields fell from 97.0 to 93.6.

Table 21 - CANADIAN SECURITY PRICE INDEX NUMBERS, 1932 - 1941 (1935-39=100)

	Industrial and Utility Common Stock Prices			Mining Stock Prices			Preferred Stock Prices	Dominion Long- Term Bonds	
	Total	Indus- tries	Utili- ties	Total	Gold	Base Metals		Prices	Yields
December 1932	47.6	32.4	90.7	44.0	53.3	...	60.6	87.6	139.8
December 1933	68.6	61.3	94.8	73.3	85.3	50.9	72.6	89.6	133.4
December 1934	78.6	69.1	94.2	87.1	105.9	51.9	86.1	99.9	103.7
December 1935	98.0	98.5	99.0	92.9	98.9	80.5	89.0	97.2	109.1
December 1936	117.7	117.0	124.6	117.0	111.5	127.2	113.3	102.4	93.3
December 1937	94.5	92.2	98.2	93.7	98.1	85.3	97.7	99.6	100.0
December 1938	97.3	98.7	87.3	110.9	103.3	125.3	104.8	102.1	94.0
December 1939	92.2	90.9	90.7	99.3	89.2	119.3	110.1	96.9	104.3
December 1940	70.3	65.9	76.4	80.2	74.9	90.0	101.7	100.5	97.0
December 1941	67.2	63.9	68.7	63.2	52.2	84.8	100.7	102.0	93.6

PRICE ACTION OF CANADIAN GOLD SHARES DURING 1941
AND THE FIRST FIVE MONTHS OF 1942

(By T.A. Richardson, President, The Toronto Stock Exchange)

During the past fifteen months Canadian Gold issues have been in a severe decline that has only been interrupted by small and short-lived rallies. This decline has carried the Toronto Stock Exchange index of twenty representative gold issues from a monthly average level of 107.30 in January, 1941 to a level of 62.84 in April of 1942. For further comparative purposes the April 1942 figure compares to the high of 168.59 established in the early months of 1937.

During the period under review the gold industry has been passing through the most turbulent period in its history. Various conditions imposed by the war have prevented the bringing in of new mines, and the expansion of presently existing operations having new or large ore bodies. Prospecting for gold is now practically non-existent and the production of gold has declined sharply rather than expanded. In the past eight months daily tonnage of ore mined in Canada has declined 17 per cent. This decrease has been due almost entirely to the cessation of operations by certain gold companies but since the first of 1942 there has been tonnage curtailment by going operations and it appears likely that further tonnage curtailment will occur. To some extent the dollar valuation may not be so severely affected, particularly if selective mining is put into practice, but the average operator does not favour selective mining, particularly during a period of high taxation.

During the entire twelve months of 1941 the decline in the gold index matched that of other stock groupings in chart action and seemed to be caused more by war news than by conditions within the industry itself. In April, May and June, 1941, the gold index, along with other groupings, passed through a low-volume, low-price period, during which time the majority of brokers were active in the organization and distribution of the first Victory Loan. During this period both the brokers and the public alike were intent upon the success of the campaign while the stock market received scant attention. During May, the index dropped sharply to 86.80 while monthly turnover in May and June was at the lowest ebb of the year. This was followed, after the successful conclusion of the first Victory Loan campaign, by a three month rally both in price and volume which carried the gold index back up to 101.12 in September.

From that period on, a shortage of labour, shortages of supplies, and inability to obtain certain types of machinery, began to have its effect upon the gold industry and upon the price levels of gold stocks.

This is seen in the decline of over 37 points in the index from September to the present time.

During the period of the second Victory Loan campaign in the early months of 1942 volume figures again lagged but the condition of the gold industry was so obscure that the conclusion of the campaign found the decline in gold issues accentuated.

During the last two or three weeks of May a rally both in volume and price occurred in the gold issues on the Toronto Stock Exchange--the buying coming almost entirely from New York. This was the first time that American buying has been apparent since the passage of the Foreign Exchange Control Act (and subsequent amendments), and was probably caused by Washington's action in amending priority regulations affecting gold mines operating in the U.S.A.

It is noteworthy that present low price levels are accompanied by ultra low volume levels. Average monthly turnover today is approximately equal to average daily turnover in 1936-7. Undoubtedly a contributing cause of the decline in volume is the absence of American traders from Canadian stock markets, particularly in the senior gold issues. In pre-war years American interest in Canadian markets did much to contribute and maintain volume in Canadian gold securities.

TORONTO STOCK EXCHANGE

(Miss C. S. Lyle)

In the following table is given the aggregate number of outstanding shares of all gold mining companies (seniors, juniors and prospects) listed on the Toronto Stock Exchange, together with the total market valuation at the end of each month. Total number of listed gold mining companies is also given and also the total number and valuation of all companies listed.

Table 22 -

	Total gold shares issued	Quoted market values \$	Number of issues	Total value of all stocks \$	Total number of all issues
<u>1942 -</u>					
April	320,256,842	268,022,539	111	3,226,499,977	532
March	324,566,842	278,904,220	112	3,281,323,082	528
February	324,432,642	315,057,770	112	3,369,025,432	527
January	329,935,215	345,746,073	114	3,530,414,948	530
<u>1941 -</u>					
December	337,247,131	365,588,042	116	3,605,718,755	530
November	336,897,131	393,569,804	116	3,684,607,200	530
October	339,261,741	406,923,087	117	3,676,416,469	531
September	338,759,607	459,174,172	117	3,843,144,083	529
August	343,913,636	456,112,977	117	3,724,152,468	526
July	347,016,031	461,315,477	117	3,707,360,757	528
June	346,398,881	436,673,570	117	3,542,543,146	527
May	341,912,113	436,292,696	118	3,476,317,367	534
April	345,981,649	453,437,387	117	3,536,711,993	533
March	343,262,307	467,260,612	116	3,672,749,488	530
February	345,267,707	468,503,517	116	3,595,573,831	529
January	341,970,802	485,611,851	115	3,785,363,418	528

TREND IN EMPLOYMENT

(Employment Statistics Branch - D.B.S.)

General Summary

Reflecting the gathering momentum of the war effort, and in response to the new stimulus provided by the growing threat in the Pacific, industrial employment in the Dominion showed extraordinary expansion during 1941. The only general decline in the twelve months was recorded at January 1, a movement which accorded with that invariably indicated at the first of the year in the period since 1920, but which was decidedly less extensive than usual. The series of eleven monthly advances in the year under review was without parallel, both in duration and also in the magnitude of the additions to the reported labour forces. The largest number of monthly gains recorded in any earlier year was nine, while in comparatively few years

has the general tendency been upward on so many as eight occasions; improvement had been reported in seven months of 1940.

The employees taken on by the cooperating establishments in the period of expansion in 1941 numbered nearly 350,000, a gain which exceeded that noted in any earlier year of the record. The index, based on the 1926 average as 100, rose from 134.2 at January 1, to 168.8 at December 1, or by 25.8 per cent. In 1940, the increase recorded from January 1 to December 1 had approximated 20 per cent, the index rising from 116.2 at the former, to 139.1 at the latter date. The average advance from January to December in the period, 1921-1940, was 9.2 per cent.

The unprecedented gains in industrial employment in 1941 were accompanied by important increases in the reported weekly earnings. As from the last pay periods in March, statistics of payrolls were collected to complement the data on employment. The information on earnings obtained in the first two monthly enquiries was incomplete and has been disregarded. Between June 1 and December 1, the weekly payrolls disbursed rose by 19.6 per cent, while the employees increased by 10.4 per cent. As a result of the dilution of labour (a feature of growing importance as the available supply of experienced workmen diminishes), the general increase in the per capita weekly earnings in the seven months was smaller than that shown in the aggregate payrolls. Nevertheless, the average rose from \$25.25 paid at June 1 for services rendered in the final week of May, to \$27.32 paid at December 1 for the preceding week, or by 8.2 per cent.

MINING

Mining in general showed eight monthly increases in 1941, resulting in the greatest volume of employment in the twenty-one years of the record; the annual index was 176.7, compared with 168.4 in the preceding year, previously the highest figure.

In coal mining, the index averaged 94.8, or a few points above the 1940 figure of 91.3. The labour force of the 105 cooperating operators included 26,056 workers in 1941, as against a mean of 25,064 employees in 105 mines in the preceding year.

Employment generally in the extraction of metallic ores reached a new high level in 1941, despite the existence of an industrial dispute in the latter part of the year which seriously affected employment and earnings. The annual index stood at 366.5, as compared with the average of 350.9 in the preceding twelve months. The index varied between 340.5 at January 1, and 378.9 at November 1. The staffs of the 200 reporting firms averaged 46,801 during the year under review, compared with 43,983 in 210 mines during 1940. War-time demand for both precious and base metals resulted in the maintenance of a high level of activity among producing mines; however, in a number of cases it was reported that prospecting and development operations were curtailed.

Non-metallic minerals, other than coal, provided more employment in 1941 than in any earlier year since 1920. The index averaged 150.5, or 5.5 per cent above the 1940 figure of 142.6. An average payroll of 10,119 persons was employed during 1941 by the 110 cooperating firms, while those reporting in the preceding year had a mean of 9,571. Quarries and other divisions coming under this heading recorded a rather better situation.

The extension of National Selective Service "To effect the orderly and efficient employment of the men and women of Canada for the varied purposes of war" was announced by the Prime Minister, Rt. Hon. W. L. Mackenzie King, in the House of Commons on March 24, 1942. Salient facts in the mobilization of the country's human resources include: Man power reserves for war services and industry will be increased by:

- (a) Accelerating the program of curtailing civilian production and the attendant shifting of labour into some form of war service.
- (b) Extending training, re-training and upgrading of working forces.
- (c) Re-conditioning the physically unfit.
- (d) Bringing women into industry.

By a scheme of training for personnel management, supervisors are to be made available to war industries. The age limit for compulsory service has been raised from 24 to 30 years for men unmarried as of July 15, 1940, selection to be by lot over the entire age range. There will be stabilization of employment in agriculture. There will be prohibition of entry into a schedule of restricted occupations and industries by physically fit men of military age. It was provided that, on and after March 23, 1942, no male person shall accept employment and no employer shall engage any male person in any of these restricted occupations, unless such person presents to the prospective employer a birth certificate or other incontrovertible evidence that his age is less than seventeen or more than forty-five years; or a certificate of

honourable discharge from the armed forces; or evidence of rejection on grounds of physical unfitness for active service in the armed forces during the present year; or a permit from a national selective officer authorizing him to accept such employment. A schedule of the restricted occupations can be obtained from the Department of Labour, Ottawa.

Table 23 - STRIKES AND LOCKOUTS IN CANADA, BY INDUSTRIES, 1940 and 1941 (Department of Labour)

1 9 4 0						1 9 4 1					
Number of dis- putes	Workers involved		Time lost		Number of dis- putes	Workers involved		Time lost			
	Number	Per cent of total	Man working days	Per cent of total		Number	Per cent of total	Man working days	Per cent of total		
Agriculture .....	...	...	...	...	...	...	...	...	...
Logging	1	50	0.1	200	0.1	1	300	0.3	4,000	0.9	
Fishing and trapping	5	1,855	3.1	12,070	4.5	...	...	...	...	...
Mining, etc. (1) ..	70	31,652	52.2	76,303	28.6	48	41,476	47.6	191,689	44.2	
Coal mining	(65)	(31,223)	(51.5)	(68,734)	(25.8)	(45)	(38,136)	(43.8)	(109,069)	(25.1)	
Manufacturing	56	16,118	26.6	148,631	55.8	127	36,730	42.2	205,845	47.4	
Construction	18	1,953	3.2	4,476	1.7	27	5,889	6.0	13,997	3.2	
Transportation and Public Utilities.	7	6,816	11.3	15,087	5.7	13	1,566	1.8	4,224	1.0	
Trade	4	1,404	2.3	6,668	2.5	4	193	0.2	760	0.2	
Service	7	771	1.2	2,883	1.1	11	937	1.1	13,399	3.1	
TOTAL	168	60,619	100.0	266,318	100.0	231	87,091	100.0	433,914	100.0	

(1) Non-ferrous smelting is included with mining.

Labour disputes in the mining industry during 1941 accounted for 48 out of the total of 231 during the year and involved nearly one half of the workers in all disputes but caused only 44 per cent of the time loss for the year. All of the mining disputes were in coal mines except one strike of gold miners at Kirkland Lake, Ontario for union recognition which involved 2,800 miners from November 18 and lasted until February 11, 1942 when it was called off. The time loss due to this strike during 1941 only was 78,000 days, 40 per cent of the total for all mining. Only one of the coal strikes caused great time loss, that of nearly 10,000 miners in Cape Breton Island, Nova Scotia, on April 14 for a week, against the wage scale in a new agreement. This was followed by a "slow down" to work by many of the miners until September when the cost of living bonus was increased. The loss in production from this is not reflected in the figures as to time loss.

TAX EXEMPTION TO NEW MINES

With a view to stimulating exploration and development of mineral resources in Canada, certain exemptions from income tax have been granted from time to time to new or re-opened mines coming into production. An amendment to the Income War Tax Act, made in May, 1936, provided that any metalliferous mine coming into production between May 1, 1936 and January 1, 1940 would be exempt from income tax for its first three fiscal periods following the commencement of production. The Minister of National Revenue, having regard to the production of ore in reasonable commercial quantities, determines which mines, whether new or old, qualify for this exemption, and a certificate is issued accordingly. In the 1939 session of Parliament an amendment to the Income Tax Act extended for a further three years the qualifying period for the above three-year exemption from January 1st, 1940 to January 1st, 1943.

In order to stimulate the production of wartime metals Parliament in the 1942 session provided a three-year exemption from the excess profits tax for the profits of any company derived from the operation of any base metal or strategic mineral mine coming into production in the three years following after January 1st, 1943. The Minister of National Revenue was given power to determine what mines, whether new or old, and what types of minerals would qualify for this exemption. Section 89 of the Income War Tax Act was not extended and will have application only to the period now mentioned in the statute.

Provision is made for an exemption from tax in respect of dividends paid to a company incorporated in Canada by a company which has never paid a tax by reason of the three-year exemption. It might be explained that under the Income Tax Act a corporation is exempt from tax on dividends received from another corporation if the paying corporation has already paid corporation income tax on its earnings. This is to avoid double taxation of corporate earnings. It is seen, therefore, that but for this provision a receiving corporation would automatically lose the exemption (which it would otherwise enjoy) through the fact that the paying corporation had received the three-year exemption accorded to new mines and thus the purpose of the Government in allowing the three-year exemption would be defeated.

General regulations covering depletion allowance to precious metal mines are unchanged from the previous year and remain on the basis of 33 1/3 per cent for mining companies, with the allowance in the case of dividends received by shareholders standing at 20 per cent.

A copy of Bill 104—The Excess Profits Tax Act, 1940—is contained in the Dominion Bureau of Statistics' Gold Mining Report for 1939. Bill 78, an Act to amend Bill 104 referred to above, was passed by the House of Commons on May 26, 1941, and is reprinted in the 1940 report. A copy of Bill 122, the 1942 amendment to the Act, is shown at the end of this report.

As a companion measure to the above-mentioned exemption from excess profits tax, an amendment was made to the Income War Tax Act, designed to encourage prospecting for strategic minerals. It provided that persons contributing in 1942 to prospecting syndicates, associations or mining partnerships registered or otherwise recognized under the laws of any of the provinces, will be allowed a deduction from their income tax otherwise payable, equal to forty per cent of such contributions, provided that the tax credit will apply only in respect of contributions up to \$500 in the case of any one syndicate, association or mining partnership, and only in respect of total contributions not exceeding \$5,000 in the case of any one taxpayer. Mining corporations and exploration companies will also be allowed a deduction from tax equal to forty per cent of amounts up to \$5,000 actually expended in sending out their own prospectors.

PROVINCIAL AGREEMENTS

The following is from the Budget Speech, House of Commons, Ottawa, of April 29th, 1941, by the Hon. J. L. Ilsley, Minister of Finance, and relates to the vacating of the income and corporation tax fields by the Provincial Governments:

"After the most careful consideration of all the questions involved we have reached the conclusion that the rates of personal and corporation income taxes should be raised by the Dominion to the maximum levels which would be reasonable at this time, if the provinces were not in those fields. Our plans are drawn, therefore, on that basis, and in due course I shall outline proposals to increase the minimum rates of corporation income tax to 40 per cent; to increase the rates of personal income taxes very considerably and to increase the national defence tax.

"But these increases if taken together with the existing provincial rates would result in too heavy a burden and it is proposed, therefore, as a temporary expedient for the duration of the war only, to ask the provinces to vacate these two tax fields.

"I am writing to the provincial premiers informing them that the Dominion will offer to pay each year for the duration of the war, to any province which, together with its municipalities, will temporarily vacate the personal income tax and corporation tax fields either

- (a) The revenues which the province and its municipalities actually obtained from these sources during the fiscal year ending nearest to December 31, 1940, or
- (b) The cost of the net debt service actually paid by the province during the fiscal year ending nearest to December 31, 1940 (not including contributions to sinking funds), less the revenue obtained from succession duties during that period.

"Such payments will be augmented by appropriate fiscal-need subsidies where it can be shown that these are necessary. At the same time, it is proposed to discontinue the present special grants which are voted annually by parliament.

"I should like to emphasize that this is not an attempt to get the provinces out of these tax fields permanently. While it is proposed that the Dominion should increase the tax on corporation incomes this will be done by raising the minimum rates under the Excess Profits Tax Act which is not and never was intended to be a permanent fixture in our tax structure. Furthermore, it will be noticed that succession duties are specifically excluded from the proposal which is being made to the provinces.

"It is not intended that the Dominion should interfere in any way with the royalties or special taxes which the provinces now levy upon timber limits, oil wells, mining or other natural resources. It is obvious that in war time as well as peace time the provinces have a special interest in the development of their natural resources and that they must be left in a position to raise the necessary revenues for this purpose."

Agreements were subsequently arrived at with each of the nine provinces giving effect to the above proposal. The detailed provisions of any agreements may be obtained from the Provincial Government concerned.

ROYAL CANADIAN MINT

The Ottawa Mint, established as a branch of the Royal Mint under the (Imperial) Coinage Act, 1870, and opened up on January 2, 1908, was by 21-22 Geo. V, C.48, constituted a branch of the Department of Finance and since December 1, 1931, has operated as the Royal Canadian Mint. The great development of the gold mining industry in Canada has resulted in gold refining becoming one of the principal activities of the Mint. Gold coins have never been a popular medium of exchange in Canada and have not been struck since 1919, most of the fine gold produced from the rough shipments from the mines being delivered to the Department of Finance in the form of bars, the rest being sold in convenient form to manufacturers.

The domestic gold currency of Canada, as at present authorized by the Currency Act, consists of \$20, \$10, \$5 and \$2- $\frac{1}{2}$ gold pieces, 900 millesimal fineness (only \$10 and \$5 have been issued). Gold was used only to an insignificant extent as a circulating medium in Canada, its monetary use being practically confined to reserves; \$5 and \$10 gold pieces weighing respectively 129 and 258 grains, $\frac{9}{10}$ ths pure gold by weight, have been coined, the Canadian gold dollar thus containing 23.22 grains of pure gold. The \$5, \$10 and \$20 gold coins of the United States, which contain exactly the same weight of gold as Canadian gold coins of these denominations, are legal tender for their face value only, as are the British sovereigns, which are legal tender for \$4.86 $\frac{2}{3}$, their equivalent in Canadian gold dollars.

The regulations in part for the receipt of gold bullion at the Royal Canadian Mint, Ottawa, are as follows: - Each parcel of bullion for which a separate assay is required shall be regarded as a separate deposit, and no ingot exceeding 1,500 ounces troy, gross weight, will be accepted. All deposits shall be dealt with in the order in which they are received. Deposits containing, by assay, less than 200 parts of gold in 1,000, or appearing, either before or after melting and assaying, to be unsuitable for treatment by the refining process in use, may be rejected. A deposit so rejected shall be returned to the depositor on payment by him of any costs incurred for melting and assaying.

The Mint charges, to be calculated on the gross weight of the deposit after melting, shall be as follows: -

- (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.
- (b) For refining - when the deposit contains not more than 5 per cent base metal, 3 cents the ounce.
Over 5 per cent but not over 10 per cent base metal, 3 $\frac{1}{2}$ cents the ounce.
Over 10 per cent but not over 15 per cent base metal, 4 $\frac{1}{4}$ cents the ounce.
Over 15 per cent but not over 20 per cent base metal, 5 cents the ounce.
On deposits which contain over 20 per cent base metal, or which require other treatment, a charge not exceeding 10 cents the ounce, to be determined by the cost of treatment.

The minimum charge for refining shall be two dollars for each deposit and the charge for refining shall apply to all deposits containing by assay less than 995 parts fine gold in 1,000.

An additional handling charge at the rate of 35 cents the ounce fine, to cover costs of realization in a market outside Canada, shall be made on all newly mined Canadian gold deposited with the Mint, and this charge shall be increased to \$1.00 the ounce fine on all other gold accepted as a deposit.

The gross value of gold deposited for sale with the Royal Canadian Mint or the Dominion of Canada Assay Office, Vancouver, shall be the market price of gold in the country to which the Government is at the time of the receipt of the deposit exporting gold, converted into Canadian funds at the average of the buying rates of exchange of that country reported to the Department of Finance by the Bank of Canada at 11 a.m. daily during the week in which the gold is deposited with the Mint or Assay Office.

In addition to newly-mined Canadian gold there may be accepted at the mint, gold (over 1 ounce troy—fine) in the following forms: old jewellery and dental scrap, provided it has not been melted or otherwise treated in any way to prevent its origin being readily recognized; scrap from manufacturers and refiners the result of processes carried out by them in the ordinary course of their business; gold coin which when of full weight and fineness, is not legal tender in Canada. Satisfactory evidence as to the origin of the gold shall be furnished by the depositor if required.

Delivery of deposits shall be accepted at the Mint counter only, free of all charges, and when bullion is forwarded by mail or express the original packages will not ordinarily be opened until an invoice of the description and weight of their several contents has been received. When there is a serious discrepancy between the actual and invoice weights of any deposit, further action in regard to it will be deferred pending communication with depositor.

The gross value of a deposit shall be calculated at a rate of one dollar for each 23.22 grains fine gold contained therein (equivalent to \$20.6718+ the ounce fine) and at a rate for all silver in excess of one per centum of the weight of the deposit after melting to be determined by the Minister of Finance. The rate to be paid, under Clause 4 of the regulations, for silver in excess of one per centum of the weight of deposits received in any week, shall be one cent below the average for that week of the daily New York quotation for fine silver, from Monday to Friday, inclusive, converted into the equivalent in Canadian funds at the average of the daily rate of exchange between Montreal and New York, calculated to the nearest one-eighth of a cent.

A comparative statement of the value of coin issued by the Royal Canadian Mint, by denomination in 1940 and 1941, is detailed below:

Table 24 -

Denomination	Coin issued in	
	1 9 4 0	1 9 4 1
	\$	\$
Silver coin -		
1 dollar	nil	nil
50 cents	968,000	842,000
25 cents	2,343,000	1,718,000
10 cents	1,534,000	974,000
	4,845,000	3,534,000
Nickel coin -		
5 cents	660,500	454,000
Bronze coin -		
1 cent	822,800	575,300
TOTAL	6,328,300	4,563,300
Representing	Number of Pieces	
	122,138,000	84,906,000

The distribution of the coin issued in 1941 to the Agents of the Bank of Canada, situated at the various Provincial centres, was as follows:

	S I L V E R			N I C K E L	B R O N Z E
	50 cents	25 cents	10 cents	5 cents	1 cent
Calgary	38,000	152,000	58,000	29,000	33,500
Charlottetown .....	...	12,000	6,000	3,500	1,300
Halifax	40,000	140,000	74,000	38,000	35,000
Montreal	126,000	430,000	250,000	110,000	115,000
Ottawa	62,000	122,000	90,000	24,500	13,500
Regina	8,000	120,000	30,000	14,000	25,000
St. John	14,000	92,000	46,000	15,000	18,500
Toronto	406,000	440,000	290,000	180,000	243,000
Vancouver	98,000	32,000	50,000	21,000	50,500
Winnipeg	50,000	178,000	80,000	19,000	40,000
TOTAL	842,000	1,718,000	974,000	454,000	575,300

In addition to the above coinages for domestic use, 1,923,933 pieces of 10 cents, 5 cents and 1 cent denominations were executed for the Government of Newfoundland.

GOLD BULLION

Seven thousand one hundred and forty-one deposits of gold bullion were received in 1941 at the Mint from Canadian mining companies and sundry persons, weighing 6,244,736 ounces, and 260 deposits from the Dominion of Canada Assay Office, Vancouver, B.C., weighing 199,315 ounces. The total gross weight, including mutilated gold coin, was 6,444,056 ounces, or 221 short tons, which contained by assay 5,092,609 ounces fine gold and 746,921 ounces fine silver. Compared with 1940, the number of deposits decreased by 123 but the gross weight of bullion received increased by 148,838 ounces.

The average price paid for gold was \$38.4827 per ounce fine, and for silver 37.1473 cents per ounce fine.

After deducting Mint and Handling Charges, also postage collected for the Postmaster-General, the net amount paid at Ottawa to depositors by cheque was \$187,899,335.03 (including premium on gold). In addition, there were issued to depositors 4,865,402 ounces of fine gold with a statutory value of \$100,577.20.

Postage collected for the Postmaster-General amounted to \$38,175.50.

There were 1,978 rough gold deposits received at Vancouver and 7,141 deposits at Ottawa in 1941. Details relating to the origin of these deposits are shown in the following statement:

Table 25 -

Source	Gross Weight	Fine Gold	Fine Silver
	Ozs.	Ozs.	Ozs.
From Canadian Mines	6,419,500.230	5,080,004.223	743,498.65
Jewellery and Scrap	27,038.535	12,227.477	3,433.51
Foreign Gold Coin	963.300	908.705	...
Mutilated Gold Coin	5.150	4.640	...
	6,447,507.215	5,093,145.045	746,932.16
From Mines in -			
Ontario	3,976,329.150	3,165,508.723	432,040.00
Quebec	1,529,243.000	1,242,037.652	154,626.55
British Columbia	569,040.160	409,932.765	108,543.29
Manitoba	109,824.225	79,766.876	11,307.80
Yukon	88,940.750	71,397.192	14,204.82
Nova Scotia	21,180.575	19,169.727	671.62
North West Territories	97,829.500	74,028.734	15,659.69
Alberta and Saskatchewan	27,112.870	18,162.554	6,444.88
	6,419,500.230	5,080,004.223	743,498.65

There were issued to the Bank of Canada 12,720 trade bars containing 5,077,230.825 ounces fine gold, which had been refined and cast in the Mint Refinery from the rough gold deposits received from the various sources mentioned.

The fine content of gold disposed of in the form of granulated, sweep, proof plates and medals is detailed below:

	Ounces Fine
To Depositors	4,865.402
Sales to Manufacturers	41,541.278
Proof Plate	8.000
Medals	4.558
Sweep	10,697.742
	57,116.980

The total gold issued amounted to 5,134,347.805 ounces fine, an increase over the year 1940 of 300,134 ounces fine.

DOMINION OF CANADA ASSAY OFFICE, VANCOUVER, B.C.

A total of \$6,216,906.58 was disbursed through this Office for gold purchased from various mines and sundry persons. Particulars of source and weights are as follows:

Source	Number of Deposits	Gross Weight	Fine Gold	Fine Silver
		Ozs.	Ozs.	Ozs.
Yukon Territory	387	88,873.55	71,340.341	14,198.83
British Columbia	1,246	106,713.16	88,353.480	13,228.74
Alberta and Saskatchewan	56	347.17	268.881	25.95
North West Territories	11	54.30	39.074	7.07
Jewellery and Dental Scrap	278	6,778.01	3,012.282	1,002.13
	1,978	202,766.19	163,014.058	28,462.72

Order in Council P.C. 1397 - February 23, 1942

WHEREAS subsection one of section twenty-five of the Bank of Canada Act, Chapter forty-three of the Statutes of Canada, 1934, provides that the Bank shall sell gold to any person who makes demand therefor at the head office of the Bank and tenders the purchase price in legal tender, but only in the form of bars containing approximately four hundred ounces of fine gold;

AND WHEREAS by Order in Council P.C. 1621 dated March 6, 1941, passed under the provisions of subsection two of said section twenty-five of the said Act, the operation of said subsection one of section twenty-five was suspended for a period of one year from and after March 10, 1941.

NOW, THEREFORE, His Excellency the Governor General in Council, on the recommendation of the Minister of Finance and under the provisions of said subsection two of section twenty-five of the Bank of Canada Act is pleased to order that the operation of said subsection one of section twenty-five be and it is hereby suspended for a further period of one year from and after the tenth day of March, 1942, unless sooner rescinded by Order in Council.

THE ALLUVIAL GOLD MINING INDUSTRY, 1941

In 1941, and for many years past, the greater part of the Canadian production of alluvial gold came from the Yukon Territory and British Columbia; relatively small quantities are also obtained in Alberta, Saskatchewan and Quebec.

It was estimated that 132,552 ounces of crude gold were recovered from Canadian alluvial deposits in 1941. Of this production, 65 ounces came from Saskatchewan, 220 ounces from Alberta, 43,775 ounces from British Columbia, 38,488 ounces from Yukon and 54 ounces from Northwest Territories. In addition to crude gold recovered, there were 60 ounces of platinum obtained in 1941 from alluvial deposits in British Columbia.

QUEBEC - During the year under review, the Appalachian Mining Syndicate operated in June and completed 163 feet of trenching between Lat. 8 and 7, Range 7, southwest Stratford township, Wolfe County. In Compton County, Wm. A. Davis recovered approximately four ounces of crude placer gold from workings on Lat. 11, Range 5, Westbury township, and on Big Hollow Brook in the same township, test drilling was conducted during May and June by R. E. Frasier. No other official reports of placer mining in 1941 were received from Quebec operators.

ONTARIO - Some development of placer claims in the Capreol district has been recorded during past years but no work of this nature was reported in 1941.

SASKATCHEWAN AND ALBERTA - Placer gold has been mined along the North Saskatchewan River at various points between Rocky Mountain House, Alberta, and Prince Albert, Saskatchewan, from about 1860. Most activity has, however, been confined to the Alberta region, particularly in the vicinity of Edmonton.

The returns of gold from the river for a period of thirty-two years, from 1887 to 1918, are given by the Department of Mines as 15,036 fine ounces valued at \$310,814. These figures were compiled by the Department from reports of local bank managers as a basis. In 1887 the first dredge was built on the river and from that time dredges have worked with varying success, though most of the gold has been obtained by miners working with shovel and grizzly collecting the gold on blankets, after which the blankets are washed and the gold separated from the tailings by means of mercury.

The gold is irregularly distributed in the gravels of the river and under bench gravels and is recovered when conditions are convenient to work such bars which move from point to point according to the vagaries of the stream. No individual reports are received from prospectors and production as credited to placer mining is obtained from Government mint statements which show total recoveries of fine gold in 1941 of 57 ounces from Saskatchewan deposits and 215 ounces from Alberta.

NORTHWEST TERRITORIES - No production of placer gold in the Territories was reported direct by miners in 1941; however, Liard-Nahanni Gold Placers Ltd. carried on prospecting in the Flat River area from June to December 26th. Relatively small quantities of gold received at the Vancouver Assay Office from the Northwest Territories represent metal obtained from alluvial deposits; particulars relating to these recoveries, totalling 39 fine ounces in 1941, are not available.

BRITISH COLUMBIA - It has been found impractical to obtain complete reports for each individual placer gold mining operation in British Columbia inasmuch as a considerable quantity of the crude placer gold is recovered annually by prospectors of no fixed abode who, in many instances, market their recoveries through local merchants and banks.

Recoveries in 1941 were made chiefly from deposits located in the Atlin, Quesnel, Cariboo and Omineca districts; production was also reported from the New Westminster, Cassiar, Greenwood, Similkameen, Fort Steele, Vernon, Kamloops, Stikine, Clinton, Nelson, Nanaimo and Revelstoke districts.

In 1941 official returns were made to the Dominion Bureau of Statistics by approximately 98 operators who reported 393 employees and the distribution of \$625,173 in salaries and wages. Consumption of fuel and process supplies amounted to \$101,411. The value of crude gold production was \$1,352,648 compared with \$1,191,543 in 1940. The quantity of sands and gravels, including overburden, moved during the year under review was estimated at 4,587,103 cubic yards; equipment employed in mining operations included hydraulic jets (monitors-giants), gasoline shovels, drag lines, steam shovels, tractors and dredges. Material worked included bench gravels, river gravels, pre-glacial deposits and tailings. Work was conducted both on the surface and underground.

Bulletin No. 15, "Hydraulic Mining Methods"--issued by the British Columbia Department of Mines, States: "When placer gold was first discovered in British Columbia much of the gravel was mined by methods other than hydraulicking. Subsequently, however, with the working out of rich shallow gravel, extensive yardages of lower grade gravels were left which, under favourable conditions, were mined by hydraulicking. This type of mining produces the largest proportion of placer gold at present.All the rich ground that is known has been, or is being worked. In the past, failure to sample and properly estimate the available yardage of placer deposits has resulted in a tremendous waste of money and effort.A placer deposit may be sampled by any one or a combination of methods; by panning gravel from natural exposures, by drifting, by test-pitting, by shaft sinking, or by Keystone-drilling. In every instance, in order to get reliable results, the work should be done carefully and systematically so that the information may be compiled to give as complete a picture of the deposit as it is possible or economical to obtain."

YUKON - The following is from the Annual Report of G. A. Jeckell, Controller of Yukon Territory, for the fiscal year ending March 31st, 1942.

"The amount of placer gold mined during the year in the Territory on which royalty export tax was paid was 87,442.60 ounces, produced as follows: Dawson District, 83,959.48 ounces; Mayo District, 2,550.75 ounces; and Whitehorse District, 932.37 ounces. The royalty collected was \$32,791.28. The gold production was 10,696.01 ounces less than for the previous year.

"In the Dawson District, fifty-two new placer location grants; forty-six relocation grants, and two thousand three hundred and thirty-two renewal grants were issued, representing two thousand four hundred and thirty claims in good standing. Three dredging leases were renewed covering twenty-three miles, and fees for renewal of four hydraulic leases were paid.

"In the Mayo District, thirty-one new placer location grants, ten relocation grants, and ninety-six renewal grants were issued, making one hundred and thirty-seven placer claims in good standing.

"In the Whitehorse District, fifteen new placer location grants were issued, one relocation grant, and thirty-seven renewal grants, making forty-nine claims in good standing.

"The total number of placer claims in good standing for the whole Territory was two thousand six hundred and sixteen.

"The Yukon Consolidated Gold Corporation Limited reported as follows: The company's hydro-electric power plant on the north fork of the Klondike River operated continuously during the year and a total of 32,989,200 kilowatt hours was generated, of which 88% was used by the company in connection with its mining operations and the balance sold to the Dawson City utility companies. Hydraulic muck stripping operations were continued during the summer season at eight large plants previously operated. Hydraulic gravel leveling on Lower Bonanza Creek was also continued. All plants were more or less seriously affected by water shortage during the summer. A total of \$197,830 was expended on stripping operations, an average of 7.35 cents per cubic yard stripped. Cold water thawing operations were continued at seven plants formerly operated and two new plants were started. A total of \$311,740.00 was expended on thawing operations during the year, an average of 4.38 cents per cubic yard and, in addition, \$25,620.00 was spent on thaw-drilling at Number 3 plant. Mine dredges were operated for the entire season and a tenth dredge, Number 4, was started on September 18th after completion of reconstruction. The first dredging commenced April 22nd and operations ceased November 29th. Cubic yards dredged totalled 8,205,270. Total gold production for the year from dredges was \$2,333,681.00, representing an average recovery of 28.43 cents per cubic yard dredged, at \$38.50 Canadian; 60,526.827 fine ounces of gold and 4,623.77 fine ounces of silver were produced. A total of \$1,163,000.00 was expended for salaries, wages and board and \$43,000 on prospect drilling; practically all roads in the district were open for automotive traffic during the entire winter of 1940-41, which is unusual, and until late in the fall of 1941.

"The Holbrook Dredging Company, in receivership, operated a dredge on the upper Sixtymile River commencing on April 30th and closing down on November 4th, 1941, producing 3,021.86 ounces, having a recovery value of \$88,839.00; the yardage dredged was approximately 290,000 cubic yards.

"Another mining operation was started in the Sixtymile District during the year—the Idaho Canadian Company—acquired ground on Glacier Creek, Big Creek and Sixtymile Creek; construction of a dredge by this company was postponed owing to the fact that the operations could not obtain a Diesel engine. Clear Creek Placers Limited, formerly known as Canadian Placers Limited, continued their operations; during the period 119,600 cubic yards of gravel was sluiced and \$77,470.60 was produced; 118,923 yards of muck was stripped from gravels to be mined in 1942. The Canadian Tungsten Limited acquired nine placer claims and two prospecting leases of three miles on Canadian Creek and its tributaries; a drag line and a caterpillar with hydraulic blade were operated; from August 10th to September 15th a total of 2,800 cubic yards of gravel was treated, and this resulted in a recovery in gold of an average of \$1.56 per yard in addition to the Ferberite recovery. Yukon Alluvial Golds Limited, an associate company to Clear Creek Placers Limited, completed drilling on Britannia Creek and Selwyn Creek. Messrs. Stewart and Campbell on Miller Creek confined their operations to early spring hydraulic work and drilling to bench ground on hydraulic lease No. 46. On Ballarat and Kirkman Creeks, E. P. Crawford prospected by shafts; on Last Chance Creek, Messrs. Bremner and Franich installed a diesel operated pump using water from the creek to hydraulic hill gravels.

"In the Mayo District, the most important placer operations were those of the Haggart Creek Company on Haggart Creek, Fred Taylor on Dublin Gulch and E. Middlecoff on Hight Creek; approximately 70,000 cubic yards of bench gravel and stream gravel was moved by the Haggart Creek Mining Company and 1,968.07 ounces of gold recovered. On Dublin Gulch, Fred Taylor made a very satisfactory recovery of gold and in addition shipped 1,764 pounds of scheelite concentrates to the Mines Branch, Ottawa. Other mining operations in the Mayo district were conducted on Duncan and Lightning Creeks, and on creeks flowing into Mayo Lake.

"In Whitehorse District, less gold was produced than in previous years, and no new operations were started.

"The summer of 1941 was free from early and late frosts, but it was extremely dry from early spring through the whole summer season, and due to this the hay and grain fodder crops, as well as vegetable crops, were light. Owing to the lack of rain, seeds for root crops did not germinate. In Dawson, production of tomatoes under glass was particularly good. During the year registrations under the Vital Statistics Ordinance were: Births, 93; marriages, 39, and deaths, 63. Government hospitals at Whitehorse and Mayo, and St. Mary's Hospital at Dawson, owned by the Sisters of St. Ann, were operated throughout the year and all received grants from the Territorial Government as follows: Whitehorse, \$6,000.00; Mayo, \$7,000.00; St. Mary's, \$36,000.00. The total number of adult indigents cared for in hospitals during the year was 63. Six schools were maintained during the year, as follows: Two at Dawson, one each at Whitehorse, Carcross and Mayo, and at the Elsa Camp on Galena Hill for the months of April to June, 1941, inclusive; the total enrolment of pupils at March 31st, 1942 was 251. The number of teachers employed during the year was 10.

"The Territorial Government was relieved during the year of any responsibility in connection with the Whitehorse airport. Expenditures were made on both this and the Mayo airport. An emergency field at Braeburn was enlarged, the work being done by the White Pass Company; brush was cut from the Flat Creek emergency field."

Table 27 - SUMMARY STATISTICS OF ALLUVIAL GOLD MINING IN CANADA, 1940 and 1941

	1 9 4 0			:	1 9 4 1		
	(d) British Columbia	(e) Yukon	(g) and Saskatchewan and Alberta	(f) Quebec	(d) British Columbia	(e) Yukon	(g) and Saskatchewan and Alberta
Number of firms and individual operators (A)	114	7	4	98	7	3	
Capital employed \$	1,562,172	8,359,707	12,015	2,137,519	8,568,187	...	
Number of employees	351	472	(g) 17	393	403	1	
Salaries and wages paid \$	557,685	1,104,145	18,949	625,173	1,328,995	110	
Electricity generated for own use	K.W.H. 1,300	32,899,706	...	560,670	29,267,200	...	
Electricity generated for sale .....	...	4,091,994	...	...	3,722,000	...	
Crude gold recovered—crude.ozs.	39,067	99,881	(a) 358	43,775	88,488	4	
Platinum recovered	24	...	...	60	...	...
Value of platinum recovered. \$	938	...	...	22,926	...	...
Quantity of material handled(h) cu. yds.	7,936,685	11,551,170	...	4,587,103	8,792,220	...	

Table 27 - SUMMARY STATISTICS OF ALLUVIAL GOLD MINING IN CANADA, 1940 and 1941 (Concluded)

	1 9 4 0			:	1 9 4 1		
	(d) British Columbia	Yukon(e)	(g)(f) Quebec Saskatchewan and Alberta	:	(d) British Columbia	Yukon(e)	(g)(f) Quebec Saskatchewan and Alberta
Length of ditches ... miles(b)	149	57	...		140	56	...
Total gross value of alluvial products	\$ 1,192,481	2,915,450	...		\$ 1,575,574	2,766,951	124
Fuel and electricity used (purchased)	\$ 43,284	92,050	654		\$ 46,439	109,079	...
Process supplies used	\$ 39,022	18,556	764		\$ 54,972	15,517	...
Cost of freight and express on dust, nuggets, bullion, etc., shipped (c)	\$ 1,887	40,741	...		\$ 2,947	42,942	...
Cost of smelter, refinery and mint treatment on material shipped (c)	\$ 5,448	56,294	...		\$ 6,510	55,955	...
Total Net Value of Alluvial Products	\$ 1,102,840	2,707,829	...		\$ 1,264,706	2,545,458	124

(A) In addition to the number shown in the table, there were numerous small operators from whom returns were not obtainable; subject to revision.

(a) Recoveries for Alberta and Saskatchewan represent receipts of crude gold from Alberta and Saskatchewan at the Royal Canadian Mint, Ottawa, and the Dominion Assay Office, Vancouver, B.C. No other statistics available.

(b) Includes flume; in use.

(c) Information not completely available.

(d) Value of crude gold in Canadian funds in 1941 was estimated to be \$30.95 per crude ounce. In 1940 it was \$30.50.

(e) Value of crude gold in Canadian funds in 1941 was estimated to be \$51.27 per crude ounce. In 1940 it was \$29.19.

(f) Value of crude gold in Canadian funds in 1941 was estimated to be \$51.00 per crude ounce. In 1940 it was \$30.50.

(g) Quebec only - data not available for Alberta and Saskatchewan.

(h) Probably includes some overburden.

Table 28 - ALLUVIAL GOLD RECOVERED AND QUANTITY OF MATERIAL HANDLED (A) 1925 - 1941

Year	BRITISH COLUMBIA				Y U K O N				Average value gold per fine oz.
	Material handled(x)	Gold recovered	Ounces per cu. yd.	Value per cu. yd.	Material handled	Gold recovered	Ounces per cu. yd.	Value per cu. yd.	
	cu.yds.	fine oz.	fine oz.	\$	cu.yds.	fine oz.	fine oz.	\$	
1925 ...	(a)	13,181	(a)	...	3,103,892	47,817	0.0154	0.518	20.67
1926 ...	1,237,090	16,730	0.0135	0.279	2,501,200	25,344	0.0101	0.208	20.67
1927 ...	2,470,552	7,353	0.0029	0.0599	2,421,489	30,778	0.0127	0.262	20.67
1928 ...	1,188,667	6,739	0.0057	0.1178	5,097,182	34,116	0.0067	0.1385	20.67
1929 ...	1,336,390	5,158	0.0039	0.0806	4,500,000	35,678	0.0079	0.1633	20.67
1930 ...	224,339	7,164	0.0319	0.6593	3,559,642	35,160	0.0099	0.2046	20.67
1931 ...	1,587,271	13,741	0.0086	0.1853	4,914,638	44,061	0.0090	0.1939	21.55
1932 ...	1,053,677	16,320	0.0155	0.3637	6,051,256	40,373	0.0067	0.1572	23.47
1933 ...	1,326,721	19,142	0.0144	0.4118	5,605,522	39,174	0.0070	0.2002	28.60
1934 ...	2,034,522	20,145	0.0099	0.3415	6,315,070	38,703	0.0061	0.2104	54.50
1935 ...	1,855,937	24,744	0.0133	0.4680	5,442,861	35,705	0.0066	0.2322	35.19
1936 ...	2,083,934	31,711	0.0166	0.5815	8,067,159	50,192	0.0062	0.2172	55.05
1937 ...	3,472,025	43,322	0.0125	0.4373	8,298,514	46,679	0.0056	0.1959	34.99
1938 ...	4,138,746	46,207	0.0112	0.3939	8,870,628	71,303	0.0080	0.2813	35.17
1939 ...	4,779,407	39,797	0.0083	0.2999	11,152,198	85,572	0.0077	0.2782	56.14
1940 ...	6,680,457	32,128	0.0048	0.1848	11,551,170	79,905	0.0069	0.2656	58.50
1941 ...	4,587,103	35,020	0.0076	0.2926	8,792,220	70,847	0.0081	0.3119	58.50

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

(x) Data partly conjectural and includes some overburden.

(a) Not available.

Table 29 - FUEL AND ELECTRICITY USED BY THE ALLUVIAL GOLD MINING INDUSTRY DURING 1941

Kind	Unit of measure	Quantity	Cost at plant
			\$
Bituminous coal (a) From Canadian mines	short tons	4	30
(b) Imported	short tons	2	115
Anthracite coal from United States	short tons	22	2,245
Lignite coal	short tons	1	14
Coke (for fuel only)	short tons	1	109
Gasoline	Imp. gals.	84,517	47,343
Kerosene or coal oil	Imp. gals.	3,402	3,307
Fuel oil and diesel oil	Imp. gals.	148,640	58,118
Wood (cords of 128 cubic feet of piled wood)	cords	3,555	43,759
Other fuel .....	...	...	478
TOTAL .....	...	...	155,518
Electricity generated (a) For own use	K.W.H.	29,827,870	...
(b) For sale	K.W.H.	3,722,000	25,408

Table 30 - POWER EQUIPMENT INSTALLATION, 1941

Description	Ordinarily in use		In reserve or idle	
	Number of units	Total horse power	Number of units	Total horse power
Steam engines and steam turbines	6	130	3	77
Diesel engines	41	2,498	3	111
Gasoline, gas and oil engines, other than Diesel engines	72	1,586	11	145
Hydraulic turbines or water wheels	8	16,252	3	30
Electric motors - (a) Operated by purchased power	1	12	...	...
TOTAL	128	20,478	20	363
(b) Operated by power generated by the establishment	308	15,821	52	4,300
Stationary boilers	6	88	4	71

THE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA

The great part of the gold of Canada comes from the Canadian Shield, an immense area of precambrian rocks extending from the Labrador Coast westward almost to the mouth of 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 Yukon Territory — the gold production from this section includes relatively large quantities obtained from alluvial deposits. The third principal area in which gold deposits occur is the Acadian region of Eastern Canada, the metal occurring principally in Nova Scotia where it has been mined since 1862.

The number of Canadian gold mining firms reporting mining operations in 1941 totalled 338 compared with 428 in 1940; 80 in 1929 and 65 in 1923. During the year under review, there were 357 properties in operation as against 436 in 1940; 255 mines reported production compared with 278 in the preceding year and 33 in 1923.

The gross value of output for the entire industry and including the value of all recoverable metals, gold, silver, etc., totalled \$179,103,182 in 1941 compared with \$178,790,485 in 1940. Of the 1941 total, \$120,703,979 represented recoveries from Ontario ores, \$31,386,312 from Quebec ores and \$19,378,045 from the gold mines of British Columbia.

Employees in the lode gold mining industry totalled 32,551 compared with 31,405 in 1940 and 5,524 in 1923. Salaries and wages paid amounted to \$62,150,810 as against \$55,205,096 in 1940, and fuel and purchased electricity consumed by the industry in 1941 totalled \$8,462,618. The cost of explosives, drill steel and other process supplies used in 1941 amounted to \$21,066,900.

Dividends paid during 1941, as computed from actual returns made by the lode gold mining industry, totalled \$48,563,187.

WARTIME MINE SHOP ASSOCIATION

Prepared by: Oliver Hall,
President, Ontario Mining Association
Edited by: C. B. Stenning,
Department of Munitions and Supply

Representatives of the mining industry were called to Ottawa in May, 1941 and told of the need for war equipment and urgently asked to start making war equipment in their shops. The industry agreed and the work was organized by the seven mining associations in the various provinces and by the Canadian Institute of Mining and Metallurgy.

In the early stages there were naturally many difficulties. The mines were exceedingly busy turning out essential metals and the men at the mines had been heavily drawn on by the active forces. The shops at the mines were repair shops and in distant areas far from manufacturing centres. There has always, however, been a determination at the mines to place all war needs first and the men in the shops at the mines, to a man, have pushed the war work in the shops. It is now on a very satisfactory basis.

The censor requests that direct references and specific mention of places and work be avoided and the most interesting data on this work cannot be given.

At one of the large mining centres in the west large marine engines were delivered at a rate that could not be exceeded in the largest shops of the central cities. At a second exceedingly busy metallurgical plant units of an important gun contract are going out. Large orders for engines and pumps for the merchant ships are underway in the gold centres. The important areas in the east are all busy.

Some of the contracts run to the end of the war, others are for specific quantities of engines or pumps with assurance that there will be repeat orders. All told, orders are well above two million dollars. The work is underway. The mining industry will do its utmost.

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NOVA SCOTIA GOLD MINING INDUSTRY, 1941
(J. P. Messervey, Inspector of Mines,
Nova Scotia Department of Mines)

Nine gold mining properties, four of them steady producers, and several small prospects were active during the year. The total production of gold was 18,810 fine ounces, slightly lower than the figure for last year.

Consolidated Mining & Smelting Company Limited continued successful operations at Caribou Mines during the whole of the year. Practically all the stoping was confined to the ore above the 500 foot level but a new ore body of extensive proportions was proven and developed to a depth of 700 feet. This company also resumed underground investigations at the Dufferin Mine in the Salmon River district.

Guysboro Mines Limited continued operations steadily throughout the year at Goldenville. Most of the ore was derived from the 500 and 600 foot levels. New development was also carried out on the 400, 500 and 600 foot levels.

Work at Avon Gold Mines Limited, which was resumed in the Dunbrack mine at Orléan, in October, 1940, was carried out steadily throughout the year. Under an agreement made at that time, the campaign of development was carried out under the direction and supervision of the Department of Mines. This consisted of development work on the 550, 675, 800 and 925 foot levels. The operation as a whole proved very successful.

Unfortunately, the operation of Seal Harbour Gold Mines Limited closed down the latter part of the season due to the tenor of ore becoming too low grade for profitable operation.

Queens Mines Limited continued underground operations during the whole of the year at Molega. Developments and work were confined to the 220 foot level. During the latter part of the year it was decided to increase the output of the mill and a larger ball mill unit with classifier, gold jig and wilfley table were added. This is expected to be in operation in February, 1942.

L. H. Douglas continued operations at Whiteburn during the year. Due to the shortage of labour and difficulty in getting supplies, he closed down the operation in December.

Goldbrook Limited unwatered and equipped the East Goldbrook mine in the Upper Seal Harbour district during the summer and commenced mining and milling operations in December.

A small amount of work was carried on at Country Harbor Mines and investigations were also continued during the summer months in the Miller Lake district.

The Rehabilitation Project at 15 Mile Stream operated jointly by the Federal and Provincial Departments of Labor, to rehabilitate coal miners from the Thorburn and other areas was carried on during the whole year. Underground work consisted in timbering the shaft to the 200 foot level and carrying out drifting and diamond drilling on the 200 foot level. During the latter part of the year a stamp mill was erected and several bulk tests taken from the ore shoots intersected and crushed with promising results.

Although the season's work proved satisfactory, it was decided to close down the operation late in December due to war conditions, shortage of trainees and experienced help.

The mine has been left fully equipped with a proper care-taker.

GOLD MINES OF ONTARIO, 1941
(Maurice Tremblay, Statistician,
Ontario Department of Mines)

Only one property, operated by the Mayboro Milling Company, Limited, was active in the southeastern section of Ontario during 1941.

East Kirkland and Larder Lake areas: Lakeside Kirkland Gold Mines, Limited, pumped out the No. 1 shaft in September, 1941, and, after having checked previous work on a 300 foot level, allowed the mine to fill up with water again. As the result of the strike which was general in the Kirkland Lake camp, Bldgood Kirkland was forced to curtail its operations in November. Morris Kirkland Gold Mines, Limited, closed in December and the mill was sold. Upper Canada Mines, Limited, stepped up its mill tonnage slightly by adding a re-grind mill to its machinery. The old Murphy property was included in a new company called Queenston Gold Mines, Limited, which adjoins and is managed by Upper Canada Mines. Work of an exploratory nature was done on this property. Development work was continued at Laguerre Gold Mines, Limited, and nothing could be reported by Omega Gold Mines, Limited. The ore picture at Kerr-Addison Gold Mines, Limited, steadily improved. The No. 3 shaft was deepened to 2,050 feet. The shaft at the Chesterville mine was also deepened during the year and this work was being continued in 1942. The Wolfe Lake Mines, Limited discontinued its operations in October. Golden Gate Mining Company, Limited, milled about 65 tons of ore daily, a small tonnage was being supplied from the Crescent section of the property. Some high-grade ore was shipped by Kiryan Gold Mines, Limited, formerly Kirkland Consolidated. Yama Gold Mines was the only property in operation in the Boston Creek area. This mine entered production in the course of the year and a fair amount of development was done.

Kirkland Lake area: Production in the Kirkland Lake Belt was severely affected by a strike of the mine workers towards the end of the year. At the Teck-Hughes property, tonnage was cut to 250 tons and mining was confined to levels from the 5th to the 8th. At the year end, preparations were under way at Macassa Mines, Limited, to sink No. 1 winze below the 4,250-foot level. There were no new additions to the plant of Kirkland Lake Gold Mining Company, Limited. Lake Shore Mines, Limited, averaged 1,450 tons per day for the year. Level development was carried out on practically all levels from 600 feet to 5,590 feet. There were plans at Wright-Hargreaves Mines, Limited, to sink a winze below the 6,150-foot level. The mill of Sylvanite Gold Mines, Limited, averaged 540 tons per day during the year, and Toburn Gold Mines, Limited, treated 166 tons per day.

Porcupine District: For the first time in a considerable number of years, development work in the district in 1941 did not give evidence that some new property would likely reach the production stage in the ensuing year. However, two new gold producers came in, one the Hoyle Gold Mines, Limited, a major operation, commenced milling in January, 1941. The other new property, Bonetal Gold Mines, Limited, shipped ore in November to Broulan Porcupine Mines at an average of 111 tons daily. There was considerable construction work and increase in mill capacities at some of the mines during 1941, but inability to procure materials and slow delivery retarded the program somewhat. Aunor made provisions to increase tonnage, but this was held up by the non-delivery of a ball mill. The Ross mine of Hollinger Consolidated increased its mill capacity. A new and larger headframe was erected and a new hoist and compressor was placed in service. In an effort to improve extraction, McIntyre made an addition to the mill, although this work was still incomplete at the end of the year. Naybob Gold Mines erected a new timer headframe, added to the hoist and compressor plant building and completed other construction. Expansion of milling capacity was noted at Pamour Porcupine Mines and Preston East Dome Mines.

Matachewan and West Shiningtree area: Matachewan Consolidated expanded their hoisting and milling capacity to 1,000 tons and the No. 5 shaft was deepened. On the surface a new hoistroom was erected along with other buildings. There was little change at the Young-Davidson mine. In the Elk Lake district a little work was done by Messrs. Judson and Lunge at the Symass, formerly the Mapes Johnson property, but work ceased in September. During the latter part of the year, the main shaft at Tyrannite Mines, Limited, was deepened. Milling averaged 200 tons daily.

Sudbury and Nipissing District: Operations ceased at the New Golden Rose property in September. Jerome Gold sunk their shaft an additional 515 feet and the 500-ton mill started to operate in August. Rundle Gold Mine did some shaft sinking and level development. Much work was accomplished underground at the Renabie. The Cline Lake mine in Algoma carried on its operations throughout the year and a small amount of work was done by Regnery Metals. Electric power was brought in to this property.

Thunder Bay District: An unsuccessful attempt to find new ore caused operations at the St. Anthony Gold Mine to cease in the last week of December. Mining operations during the year were carried out mainly in the form of salvage operations. Tombill Gold Mines carried out operations normally throughout the year. McLellan Gold Mines, Limited, which replaced McLellan Long Lac Gold Mines, Limited, was subjected to considerable development work, but, owing to disappointing results, operations were suspended in November. Continuation of shaft sinking and level development was done at the Magnet Consolidated property. The mill handled ore for several small shippers. Some 186 men were employed throughout the year. A fourth roasting unit was installed and in operation by the middle of March at the McLeod-Cockshutt mine. This property was hoisting ore at the rate of 1,000 tons daily and the mill treated roughly 680 tons per day. The mine employed 450 men throughout the year. Little Long Lac Gold Mines installed a new winze station and hoist room with rope raise. Sinking was commenced in August and was nearly completed by the end of the year. A new 75-ton milling unit was installed and operated at the Hard Rock mine. This was for the purpose of treating quartz ore as distinct from sulphide ore which was the only type handled previously. The quartz ore does not require roasting. Bankfield Consolidated Mines, Limited, continued production throughout the year averaging about 100 tons daily. Exploration by diamond drilling and development was continued on the 525- and 1,275-foot levels for Magnet and Tombill extensions, respectively, as well as for Bankfield ore from the winze levels. All these operations met with disappointing results. At Brengold, which had been inactive since early in 1937, a lease was granted to Mr. Elmer Bray who employed two men to sort the high-grade sections of the ore dump and to mine high-grade from sections of the vein on surface. These men, who worked intermittently until September, were able to truck some 21 tons of ore to Magnet Consolidated from which 57 ounces of gold were recovered. It was then planned to unwater the shaft to 100 feet and recover high-grade section of the vein on that level to be milled by Magnet also. Sturgeon River Gold Mines, Limited, operated continuously during the year and the mill treated 70 tons of sorted ore daily. A new sorting plant was erected in the fall of the year. It was proposed to sort out the gold-bearing quartz, rather than the waste rock as previously, in order to increase the amount of ore milled. The Northern Empire Mines, Limited, was another producing mine which ceased operations. At the Leitch property, production at the rate of 85 tons of sorted ore daily was continued. By October of 1941, Sand River Gold Mining Company, Limited, planned to deepen the shaft about 300 feet to the top of the diabase sill and establish two new levels. A financing agreement was made with Northern Empire Mines Company who would advance the funds necessary for this and to pay off the mine's existing note. Norex Mines, Limited, a company formed to take over the interests of Spooner Gold Mines, Limited, made an arrangement with the adjoining Northern Empire, late in 1940, whereby Northern Empire would drive into Spooner Gold Mines ground from their 1,725-foot level in order to prospect for ore at depth. Crosscutting and drifting, which had been inaugurated in 1940, was continued in 1941.

Rainy River area: There was little activity in this area. Operations at the Upper Seine Gold Mines, Limited, the old Sawbill property, were intermittent and finally ceased in September. At the Lower Seine Mining Company, which was formed in 1940 to erect a mill on the property of the Orelia Mines, Limited, which included the old Golden Star Mine, operations were suspended in August. These consisted of alterations to the plant and the assembling of a test mill. Goldorel Mining Company, Limited, incorporated in August, 1941, took over the idle Orelia property. The Olive mine, situated some four and a half miles west of Mine Centre, was also taken over. On October 23rd the mill and equipment were put in shape and dewatering the underground workings started on the 3rd of November. It was then proposed to start mining and milling as soon as possible.

Kenora District: Gold Eagle Gold Mines, Limited, operated continuously from January 1st to September 12th. All underground equipment was then hoisted to surface and the mine workings allowed to flood. Hovey Gold Mines operated continuously until November 3rd when the shaft pillar between the 625- and 750-foot levels caved. Since the cage compartment of the shaft was not affected, the major part of the underground equipment was salvaged. Supplies which had been purchased to keep the mill operating until July of 1942 were sold to the mines in Red Lake and MacKenzie Island. The mill operated continuously throughout the year and the average tons milled per day was 1,060. In the northwestern-most section of the province, Sachigo River Exploration Company, Limited, continued production throughout the year, treating an average of 45.5 tons of ore daily. For the extent of the underground workings at Sachigo, the amount of water that had to be pumped daily was high. In July, 1941, some 300-350 gallons of water per minute were handled by the pumps. Straw

Lake Beach Mines, Limited, continued operations until the middle of July with the mill treating about 60 tons of ore daily. During 1941, the Kenopo Mining and Milling Company, Limited, took an option on claims D-200 and D-148 on which the Mikado mine, Shoal Lake, is located. Construction was started on a concentrating plant to treat old tailings. Wampum Gold Mines, Limited, which is located 55 miles southeast of Kenora on Rowan Lake, erected building, collared the shaft, and completed 200 feet of sinking. The Goldwood Gold Mines, Limited was mined from January 19th to December 17th by J. D. Shannon, lessee of the property. The accumulation of some 40,000 tons of tailings which are supposed to contain about \$10 per ton were treated. McMarnac Red Lake Gold Mines, Limited, treated an average of 81.6 tons of ore daily. The surface ore dump was reclaimed in the course of the year. The new No. 2 shaft was deepened 300 feet and stations were cut at 600 and 750 feet. Development work at McKenzie Red Lake was most encouraging. Mining operations proper continued throughout the year, the mill treating an average of 230 tons of ore daily. The Uchi mine hoisted 279,223 tons of ore from all shafts, recovering therefrom 40,272 ounces of gold. As a result of unsatisfactory results the No. 3 shaft was closed down in September. Development and exploratory work featured operations of Gold Frontier Mines, Limited. Machinery for a 125-ton cyanide plant was purchased. The vertical, 3-compartment shaft at the Wendigo property was collared on the 1,100-foot level. Four shaft stations were cut and considerable drifting and crosscutting done. The mill at the Jason mine treated 48,562 tons of ore in 1941. Average recovery was \$15.89 per ton, the tailings averaging forty-six cents to show a production head of \$16.35, with a recovery of 97.2 per cent. Cochenour Willans Gold Mines, Limited, put into operation a sintering and smelting plant to treat the flotation concentrates. Otherwise, there was little new to report from this property. The No. 3 shaft of Hasaga Gold Mines, Limited, was collared on the 850-foot level and extended to a sump elevation of 1,675 feet. The No. 2 shaft of Madsen Red Lake Gold Mines, Limited, was extended 161 feet and a shaft station cut at an elevation of 1,250 feet. The mill of Central Patricia Gold Mines, Limited treated an average of 390 tons of ore daily. Exploration east and west of the main orebodies disclosed additional ore. Preparations were made for the sinking of a three-compartment internal shaft. The company presented its employees with a new club house. A new school building having hot-water heating and plumbing and accommodation for 40 pupils is now in use. At the Kenwest Gold Mines, operations centred on development and exploratory work.

THE GOLD INDUSTRY IN QUEBEC, 1941

(A. O. Dufresne, Deputy Minister of Mines)

In 1941, the production of gold from Quebec mines reached the new high figure of 1,084,432 ounces valued at \$41,750,632. Twenty-seven mines, all located in western Quebec, contributed to the output of the yellow metal. No new producers were brought into operation in 1941, but two mines, the Mic-Mac, in Bousquet Township, and the West Malartic in Cadillac township were being groomed for initial production in 1942.

Twenty-seven per cent of Quebec's total output of gold was produced from the so-called base metal mines, and was in the nature of a by-product from the refining of copper. The remainder was produced from the "straight gold" mines, where the precious metals occur in association with quartz veins or highly silicified zones, and where recovery is usually effected by simple cyanidation processes. There were twenty-three "straight gold" mines in operation in western Quebec during the calendar year under review.

Prospecting was at low ebb throughout 1941. The number of claims recorded totalled 5,077 as compared with 5,285 in 1940 and 8,781 in 1939. The all-time record for prospecting in the province was in 1937, when the record figure of 18,641 claims were recorded.

In the western part of the Rouyn-Harricana area, eight straight gold mines were in production in the year under review. During the first four months of 1941, the Arntfield mill was under lease to Senator Rouyn Limited, but in late April, Arntfield resumed the mining and milling of its own ores. Production was further increased at the Francoeur mine. Tonnage at the Powell Rouyn mine was increased, a part being sent to the Noranda smelter as gold-bearing flux and the remainder being treated in the Company's mill. Stadacona Rouyn Mines, Limited continued operations at a steady rate. The Senator Rouyn mill was completed in April, 1941, and for the remainder of the year was in continuous operation on a basis of 300 tons of ore per day. From October, 1940, when the mine was first brought into production, until April, 1941, Senator Rouyn ore was treated in the Arntfield mill. The Beattie mine and mill continued to operate on a basis of about 1,900 tons daily, and this Company extended its exploratory work to properties situated to the east of its holdings which included the Donchester and Central Duperquet groups. At the McWatters mine, a steady output was also maintained, and some promising new ore was found in the 702 zone on the 900-foot level to the east of the main workings. In Guillet township, seventy miles to the south of Rouyn, production at the Belleterre mine was increased to close to 350 tons per day.

The Bousquet-Cadillac area was active in 1941. Two new mines, the West Malartic and the Mic-Mac were equipped to commence production in 1942. The O'Brien mine was in continuous operation throughout the year, and the No. 4 internal shaft was deepened to 2,500 feet. Mining and milling operations were also carried out continuously at the Central Cadillac property, all ore being hauled to the Thompson Cadillac Mill for treatment. At the Wood Cadillac mine, there was a slight reduction in tonnage treated as compared

with the previous year. The Amm mill was in operation throughout 1941 on ore from the No. 2 and No. 3 shaft workings of Pandora, Limited. Production was slightly lower at Lapa Cadillac, where the new North ore zone is providing ore of good grade but not fully amenable to simple gold recovery methods.

The producing mines of the Fourniere-Malartic area continued to expand operations in 1941, but total gold output remained constant as grade, in general, was reduced. The new treatment plant was placed in operation early in October, at the Canadian Malartic Mine, and this resulted in an increase in tonnage treated of over 22 per cent for the remainder of the year. Tonnage treated per day at Sladen Malartic averaged 700 tons, recovery amounting to \$3.39 per ton. Operations at the East Malartic mine were continued on a basis of 1,474 tons of ore daily. A further substantial increase in tonnage milled and gold produced was recorded at Malartic Goldfields which now ranks sixth in the list of Quebec's straight-gold producers. The discovery of a new orebody, half a mile to the west of the present workings, was one of the most outstanding events in the year in the gold mining industry, as the new zone has an indicated reserve of 6,000 tons of \$10.00 ore per foot of depth.

In the Bourlamaque-Dubuisson area, Lamaque continued to hold its position as the leading straight-gold producer of Quebec by a wide margin. At the Sigma mine, an addition to the cyanide plant was erected and production was increased. The rated capacity of the Siscoe mill was increased from 550 to 900 tons, but at the end of the year, 1,000 tons per day was being handled satisfactorily. Tonnage was also increased at the Sullivan Consolidated mine, and from the middle of October to the end of the year, this averaged 453 tons per day.

The Pascalis-Louvicourt area was active in 1941. Tonnage treated by Perron Gold Mines, Limited was slightly increased as compared with the previous year; but total gold recovery remained about the same as grade was somewhat lower. The Cournor mill was in steady operation throughout the year, with two-thirds of the mill feed coming from the Beaufor section and the remainder from the Cournor workings. Cournor Mining Company suspended operations in early 1942.

A considerable amount of exploration and development work was carried out in 1941 on other gold properties in the Western Quebec district. In addition to the Mic Mac and West Malartic mines already mentioned, exploratory underground work was carried out at the Duquesne property in Destor township, where a shaft was sunk to a depth of 515 feet, and a program of lateral work was completed at the 375- and 500-foot horizons. Shafts were also sunk and lateral work carried out on the Rochette group in Launay township, the National Malartic mine in Fourniere township and the Pershing Manitou property in Courville township. The shaft at the Pascalis Gold Mines property was completed in February, 1941 to a depth of 1,565 feet, and over 5,000 feet of lateral work was accomplished on four levels. The Vicour group in Louvicourt township was further explored by drifting and an extensive diamond drilling campaign. Camp Bird Mines, formerly the Dorval-Siscoe property, carried out some exploratory underground work. Underground work was also carried out on the Gamma Mines (Quebec) group from the 350-foot level of the Sigma mine workings. All of these operations were suspended at the end of the year or in the early part of 1942, following the relegation of gold to a relatively unimportant place in the national war effort, and future trends in the production of gold from Quebec mines and in the development of new mines are dependent on the country's needs for the precious metal.

MANITOBA GOLD INDUSTRY, 1941

(F. D. Shepherd, Acting Director of Mines)

Gold production in Manitoba for the year 1941 totalled 150,553 ounces as compared with 152,375 ounces produced in 1940. Gold was produced by six gold-quartz mines or properties and from the base metal ores of the Sheritt Gordon Mines Limited and the Hudson Bay Mining and Smelting Company Limited, the latter being the largest individual gold producer in the province.

Gold output from the Hudson Bay Mining and Smelting Co. credited to Manitoba was lower than in preceding years owing to the fact that a larger proportion of the ore treated was drawn from sections of the inter-provincial boundary. This decrease was almost entirely offset by expanded production at the San Antonio mine, while the output of other gold mines was normal.

San Antonio reported one of the most successful years in the mine's history. Following the heavy and successful development campaign carried out in 1940, a major expansion of the plant was completed in 1941 and capacity was raised from 330 to 550 tons per day by November. During 1941, 45,121 ounces of gold were produced as compared with 36,745 ounces in the preceding year. Ore reserves were substantially increased, and dividends totalling \$478,631 were paid to shareholders.

Output of the Gunnar Gold Mines Limited in the Baresford-Rice Lakes area was somewhat reduced from preceding years and totalled 14,869 ounces of gold. During 1941 the company continued intensive exploration on its lower levels and also examined numerous properties in the vicinity of the mine. On one of these,

the Ogama property near Long Lake, the company completed a shaft to a depth of 125 feet and planned the mining of the small, high-grade body of ore indicated by diamond drilling. This ore will be treated at the Gunnar plant.

Exploratory work at the God's Lake Gold Mines Limited was concentrated in developing the area opened up by the new No. 2 shaft. Production was normal, and the year's gold output of the mine was 21,922 ounces.

During 1941 there was no marked increase in prospecting activity in Manitoba over the preceding year. There was, however, a trend toward greater diversification in prospecting, owing to the increasing demand for minerals of strategic importance. Interest was shown in discoveries of low-grade, nodular manganese occurrences in Porcupine Mountain area, and in tungsten occurrences in the Boundary area in southeastern Manitoba. Several promising discoveries of copper-zinc and copper-nickel were made, interest was revived in earlier known occurrences of base metals, and exploratory work is continuing on some of these properties. The outstanding new gold development of the year was that of Howe Sound Exploration Company in the Herb (Wekusko) Lake area. An intensive diamond drilling campaign was started at this property in 1941 and is being continued in the present year with encouraging results.

SASKATCHEWAN GOLD MINING INDUSTRY, 1941
(W. H. Hastings, Chief Inspector of Mines)

A preliminary estimate of Saskatchewan gold production for 1941 is 139,108 ounces valued at \$5,355,662 as against 103,754 ounces valued at \$3,994,516 for 1940, an increase of 34 per cent. Saskatchewan gold production is derived from three sources, straight gold producers of which there are three, a base metal mine with a high gold recovery, and a negligible production from placer mining operations.

Flin Flon-Amisk Lake Area - Hudson Bay Mining and Smelting Company at Flin Flon is the major gold producer in the province. Although a base metal mine, its complex ore carries values in gold and other precious metals. Tonnage increased during the year to 6,000 tons per day, an increase of approximately 1,000 tons over the rate at the beginning of the year. Numerous improvements to plant and equipment were made to take care of the increased tonnage. The outstanding improvements for the year included the completion of the new South main shaft to the 3,000 foot level, construction of a ten ton pilot plant for the re-treatment of an accumulated stock pile of zinc residues and the discontinuing of surface hauling of ore from the open pit. All ore from this source is now being recovered through the facilities of the underground workings.

Pamon Gold Mines Limited recorded a small but steady production throughout the year from their property on the west side of Amisk Lake. Exploitation to date is all in the form of development work.

Wampum Gold Mines Limited acquired the mining rights of Douglas Lake Gold Mines Limited and are preparing to reopen the old mine at Douglas Lake some four miles south and west of Flin Flon. The ore is an arsenical sulphide and in addition to gold, carries values in copper and zinc.

Athabaska Lake Area - The Box property of Consolidated Mining and Smelting Company at Goldfields operated to capacity throughout the year. The mill handles 1,300 tons of ore daily and development work is well ahead of production.

Lac la Ronge Area - Preview Mines Limited took in a small eight ton gold milling plant to its property near Sulphide Lake, six miles north of Lac la Ronge. The mill was established and commenced operation during the latter part of 1941. A test mill is being considered for the property of Adolph Studer, also located on Sulphide Lake.

BRITISH COLUMBIA GOLD MINING INDUSTRY, 1941
(Philip B. Freeland, Chief Mining Engineer,
British Columbia Department of Mines)

In the Atlin Mining Division the Polaris-Taku Mining Company continued operations during the year, and a total of 89,610 tons of ore was treated, and the concentrates shipped to Tacoma smelter. It is reported that this operation will close down about May of 1942, some of the contributing factors are reported shortage of labour due to war and difficulty in obtaining machinery. These, combined with high cost of supplies and lack of shipping facilities make the operation difficult.

The Portland Canal Division in 1941 was responsible for a tonnage output of 361,000 tons, of which the Silbak-Premier produced 170,504 tons of ore, containing 39,044 ounces of gold. The Big Missouri mill

treated 190,438 tons. In the Skeena Mining Division the Surf Inlet Consolidated Gold Mines, Ltd., was responsible for a production of 13,161 ounces of gold from 39,510 tons of ore treated.

In the Cariboo Mining Division a total of 183,655 tons was treated, the Cariboo Gold Quarts being credited with 129,257 tons and containing 48,528 ounces of gold. The Island Mountain treated 54,396 tons with a yield of 24,757 ounces of gold.

The Omineca Division is credited with a total tonnage of 550 tons, and in addition several small properties shipped a few tons to the British Columbia Government Sampling Plant at Prince Rupert.

In the Kamloops area, clean-up operations were carried on at the Windpass, now in voluntary liquidation. Small shipments were also made from the Homestake and Riverside. A small tonnage was also shipped from two properties in the Vernon Division, the Kalamalke and Skookum.

The Greenwood Division experienced a busy year, with Providence and Old Granby (Phoenix) being the heaviest shippers. The Providence Mining Syndicate shipped a total of 1,837 tons, and the Old Granby was credited with nearly 9,500 tons. The Division in 1941 had a total gold production of 5,300 ounces.

The Osoyoos Division again was a high producer of gold, with the old Nickel Plate mine, operated by the Kelowna Exploration Company being the leading producer, with 94,478 tons treated. Hedley Mascot ranked second with a production of 68,000 tons containing 21,850 ounces of gold. Other producers were the Grandoro, Gold Standard, Morning Star, and a few others to make a total tonnage for the division of 166,919, and total gold production of 56,228 ounces.

The Copper Mountain mine of the Granby Consolidated Mining, Smelting and Power Co. Ltd., was responsible for a fair production of gold, but detail cannot be given owing to war-time regulations. The Highland Surprise was again the main producer in the Ainsworth Division. Several leasing operations in the Lardeau Division were responsible for a small yield of gold.

The Nelson Mining Division again saw many properties shipping, among these being the Sheep Creek Gold Mines Ltd., with a yield of 26,083 ounces from 55,052 tons treated; next came the Gold Belt with 15,811 ounces from 56,502 tons; next came the Bayonne with a tonnage of 20,224 and 8,274 ounces of gold. The Kootenay Belle produced 9,684 ounces from a tonnage of 54,644. The Alpine is credited with treating 2,600 tons. The Relief-Arlington Mines Ltd., treated 14,510 tons for a yield of 5,306 ounces, and the company has now gone into voluntary liquidation. The total tonnage for the Division is 241,154 and 90,908 ounces of silver. Trail Creek Mining Division had a total tonnage output of 18,000 and gold ounces of 7,357. The bulk of the tonnage came from the Rossland properties of the Consolidated Company and worked by leasers. It is reported all leasers have been given notice of the terminating of the leases in May, 1942. The Midnight and I. X. L. continued shipments in 1941.

In the Alberni Division, the W. W. W. owned by K. J. Robinson, and the Thistle, financed by R. A. Petre, again shipped small tonnages.

The Clayoquot Division, in which is the now famous Zeballos area, contributed a total of 62,770 ounces of gold from a tonnage of 123,061. The Privateer, together with a small Prident output, totalled 28,131 ounces from 31,354 tons. Next came Spud Valley Gold with a yield of 14,051 ounces from 34,549 tons. Mount Zeballos came along with 9,744 ounces from 21,281 tons, followed by 6,568 ounces from Central Zeballos and a tonnage of 14,322. Buccaneer Mines Ltd., entered the shipping list with a total of 19,475 tons treated. Other shippers were the Homeward, White Star, Big Boy and C. D.

Lillooet Division provided a total tonnage of 501,281 and a yield of 154,708 ounces of gold. The Pioneer is credited with 109,311 tons and 53,645 ounces of gold.

Several properties in the Nanaimo and New Westminster Divisions shipped a small tonnage, the Dawson near Hope being the largest.

The Britannia in the Vancouver Division was responsible for the greater proportion in such area.

GOLD MINING IN NORTHWEST TERRITORIES, 1941

(C. S. Lord, Geological Survey,
Department of Mines and Resources)

Gold accounted for about 77 per cent of the value of all minerals produced in Northwest Territories in 1941. Gold produced was valued at nearly \$3,000,000, which is a marked increase over that produced in 1940, and about $1\frac{1}{2}$ per cent of the value of all gold produced in Canada in 1941. First continuous lode gold production started in 1938 and by the end of 1941 six gold mines, three of which started in 1941, were in production. Four of the producers, Con, Rycon, Negus and Ptarmigan mines are within six miles of Yellowknife, on the north shore of Great Slave Lake. About 84 per cent of all gold produced in Northwest Territories to the end of 1941 has come from Con and Negus mines. At the end of 1941 the combined milling rate of the six producers was about 450 tons a day and lateral workings in these mines aggregated about 50,600 feet. Mining operations had reached a depth of 1,053 feet and the deepest known gold ore was 675 feet below the surface. Practically all ore treated to date has come from depths of less than 500 feet. An average of 0.68 ounce of gold was recovered from each ton of ore milled during the year. A hydro-electric plant to develop not less than 4,200 horsepower, constructed by Consolidated Mining and Smelting Company of Canada, Limited, on Prosperous Lake, started delivering power early in the year. By the end of the year the plant was operating at about full load and supplying power to Con, Rycon, Negus, Ptarmigan, and Thompson-Lundmark mines, and to Yellowknife. Considerable construction was undertaken at several of the mines and at times the supply of local labour was inadequate. Fewer prospectors were in the field in 1941 than in 1940, and fewer claims were recorded. Most prospecting was done east of Yellowknife near Gilmour and Francois Lakes where many quartz veins have been found to contain gold and tungsten.

Con mine, owned by Consolidated Mining and Smelting Company of Canada, Limited, has produced more gold than any other mine in Northwest Territories and the value of this gold to the end of 1941 was about \$3,990,000. During the year the mill treated about 130 tons of ore daily from Con mine. The tonnage of ore mined was about the same as in 1940, but the gold content per ton was a little greater. Ore reserves are not available for publication. Considerable construction was done late in the year, including additions to the mill and camp and the erection of a steel headframe at C1 shaft. About 100 men were employed on this work from September to December, inclusive. The mine is serviced from C1 shaft with levels at depths of 125, 250, 375, 500, 650, 800 and 950 feet. Lateral work now totals about 22,450 feet and about 5,200 feet of this is below the 500-foot level. About 7,130 feet of lateral work was done during 1941, much of which was on the 950-foot level. Very little ore has been found below the 500-foot level. Considerable ore is reported to have been located on the 500-foot level. It is said to contain abundant sulphide minerals and to occur in bodies that are wider and of lower grade than the mine average. Electric locomotives and mucking machines are used in places. Current changes, and changes planned for the near future, include (1) installation of a new electric hoist and 4-ton skips at C1 shaft (2) deepening C1 shaft to about 1,500 feet (3) increasing capacity of the mill to about 350 tons a day with provision for treatment of sulphide-rich ore from the 500-foot level and (4) construction of ore passes to the 950-foot level to allow most hoisting to be done from that depth.

Rycon mine is operated by Consolidated Mining and Smelting Company of Canada, Limited, from the same camp, mining, and milling plant as Con mine. About 35 tons of ore from Rycon mine were treated daily at the Con mill. Lateral workings total about 4,700 feet, of which 565 feet were completed during 1941. The deepest workings are at a depth of 500 feet and the mine is served by a 1,950 foot crosscut at that level from C1 shaft of Con mine. A second crosscut is being driven from Con mine on the 950-foot level and a raise will connect this with the 500-foot level at Rycon mine. Most ore has come from between the 500- and 250-foot levels.

Negus mine treated about 61 tons of ore a day during the year. Since starting production, the mine has produced gold valued at about \$2,080,000. Ore reserves at July 31, 1941, as reported by Negus Mines, Limited, were 25,460 tons containing 0.68 ounces of gold a ton. The main (No. 2) shaft was deepened to 734 feet and lateral work on the 100-, 200-, 300-, 425-, 550- and 675-foot levels now totals 10,580 feet. About 3,090 feet of this work was done in 1941. Most work to date has been done near No. 2 shaft, where ore has been found as deep as 675 feet. A drift on the 300-foot level is the sole connection between the group of workings near No. 2 shaft and another group lying about 1,250 feet south-southeast of the shaft. Exploration at this place has been confined to the 300-foot level and a 140-foot sub-level, and ore was found there for the first time during 1941. Most ore mined has come from above the 425-foot level near No. 2 shaft. Scheelite (tungsten) was discovered in the veins in 1941. Shrinkage stopes have been replaced by open timbered sill stopes in some veins. Negus mine was the first mine in Northwest Territories to pay dividends and first payments were made in 1941. Current and proposed changes include (1) installation of a skip in No. 2 shaft (2) construction of ore and waste passes to the 675-foot level and construction of loading pockets there (3) use of a storage battery locomotive and mucking machines and (4) increase of mill capacity to about 80 tons a day.

Ptarmigan mine, operated by Consolidated Mining and Smelting Company of Canada, Limited, started milling on November 27, 1941 and the first brick was poured on January 3, 1942. About 91 tons of ore were

treated daily during December and gold was recovered by amalgamation and cyanidation. Ore reserves are not available for publication. All underground work has been done on a nearly vertical quartz vein that averages about 12 feet wide at the surface. The vertical shaft was deepened to 923 feet early in the year. At the end of the year lateral work on the six levels, which are spaced at 150-foot intervals, totalled about 5,760 feet, of which about 1,000 feet was completed during 1941. First ore mined came from above the 450-foot level.

A mill erected at the property of Thompson-Lundmark Gold Mines, Limited by Consolidated Mining and Smelting Company of Canada, Limited started operating on August 19, 1941. Ore milled to the end of the year amounted to 11,915 tons containing 0.703 ounces of gold a ton. The operating profit to the end of the year was \$165,181. Ore reserves at January 1, 1942, as reported by Thompson-Lundmark Gold Mines, Limited, were 63,639 tons containing 0.59 ounces of gold a ton. Most of this ore and most of the gold was in the Fraser vein. All work during the year was done on the Fraser vein where a shaft 834 feet deep, at an incline of 47 degrees, serves levels 150 feet, 300 feet, 450 feet, 600 feet and 750 feet (slope distance) from the collar. Lateral work from this shaft totalled 2,824 feet at the end of 1941, and 910 feet of this was done during the year. Ore has been found on all levels except the 750-foot level (September, 1941). At the end of the year the company announced that further underground work would be done on the Kin vein.

On the Ruth group, 4 miles west of Francois Lake, Consolidated Mining and Smelting Company of Canada, Limited, employed a crew of about 12 men during the summer. Three hundred feet of a quartz vein on Ruth 4 claim is reported to average one foot in width and to contain two ounces of gold a ton at the surface. A two-compartment inclined shaft was sunk to a depth of 100 feet and it is reported that a 20-ton mill will be installed during the winter of 1941-42.

The property of Slave Lake Gold Mines, Limited, on Outpost Islands, was re-opened in November, 1940 and continuous milling started in February, 1941. Ore reserves above the 200-foot level at June 30, as reported by Slave Lake Gold Mines, Limited, were 5,550 tons containing 0.69 ounces of gold a ton. At that date, 6,137 tons of tailings were estimated to contain 0.30 ounces of gold a ton. High-grade gold ore is reported to have been found east of No. 1 shaft on the 325-foot level later in the year. Former lateral work from this shaft on the 50-, 125-, 200-, 325-, and 425-foot levels totalled 1,825 feet and during 1941 some work was done on all levels and the total increased to about 2,990 feet. No. 2 shaft, about 2,000 feet west of No. 1 shaft, was started in October, and was 22 feet deep at the end of the year. The amalgamation-flotation mill treated about 43 tons daily and produced gold bullion, copper-gold concentrates, and tungsten-gold concentrates. Ore bodies are sheared and fractured quartzite, quartz-mica schist, and gneiss, cemented and partly replaced by quartz, chalcopyrite, pyrite, ferberite (a tungsten mineral), gold, and other minerals. Most gold is recovered by amalgamation. Mill operations to June 30 indicated that the fine grinding required to recover a reasonable proportion of the gold resulted in an excessive and unexpected loss of ferberite (tungsten) due to sliming.

Mercury Gold Mines, Limited continued surface work on the Dingo group, 150 miles north-northwest of Yellowknife. A steam mining plant was hauled to the property from Ft. Rae by tractor early in the year. Work done included 5,400 feet of diamond drilling, trenching and bulk sampling, and a survey of a hydro-electric power site on Emile River eight miles west-southwest of the property. About 12 men were employed until September when work stopped. Several interesting bodies of gold-bearing quartz were found on the surface but results from diamond drilling were less encouraging.

YUKON

Only the usual assessment work was performed on quartz properties in the Wheaton, Watson and Carcross areas of the Whitehorse Mining District. Active interest is being shown by a group of Juneau men in antimony claims in the Wheaton District, owned by W. McAllister. It was reported that development work would start early in 1942. In the Dawson District, the Pioneer Mining Co., Limited, of British Columbia secured an option on the property of the Lone Star Consolidated; a bulk sample of twenty to thirty tons was shipped outside for a mill test. Twenty quartz grants were issued in the Dawson District during the year.

Table 31 - PRINCIPAL STATISTICS OF THE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, FOR YEARS SPECIFIED

	No. of active opera- tors	(c) No. of opera- ting plants or mines	Capital employed	Number of em- ployees	Salaries and wages	Cost of fuel and electrici- ty	(b) Cost of process supplies used	Value of freight paid on shipments of ore, slag, etc.	Smelter and re- finery treat- ment costs	Gross value of bullion ore, concen- trates or residues shipped from mines(d)	Net value of bullion, ore, concentrates or residues shipped from mines(d)
			\$		\$	\$	\$	\$	\$	\$	\$
1923	65	65	77,574,976	5,524	8,961,434	1,497,197	Data not available			(a) 25,021,837	Data not available
1929	80	85	135,166,105	8,660	14,258,733	2,579,481	Data not available			(a) 37,275,986	Data not available
1940 -											
Nova Scotia	10	10	996,382	386	367,585	64,253	164,912	1,990	7,258	855,673	617,260
Quebec	107	110	45,519,219	5,946	9,825,625	1,645,241	3,390,156	73,888	503,277	29,003,738	23,391,196
Ontario	114	115	176,714,292	20,299	36,305,677	5,321,666	14,014,319	205,342	1,310,282	122,675,051	101,823,442
Manitoba	6	6	3,128,794	600	1,088,840	187,404	368,417	6,107	31,973	2,931,464	2,337,563
Saskatchewan ...	2	2	...	177	340,955	21,472	240,107	2,614	8,524	773,231	500,514
British Columbia	175	181	21,857,974	3,566	6,419,798	673,073	2,220,058	391,077	606,152	20,413,118	16,522,758
Northwest Terri- tories	13	13	2,702,499	431	856,616	234,195	353,252	10,631	19,121	2,126,968	1,509,569
Yukon	1	1	...	...	...	...	...	...	...	...	11,242
CANADA ...	428	438	250,919,160	31,405	55,205,096(e)	8,147,304	20,751,201	691,649	2,486,587	178,790,485	146,713,744
1941 -											
Nova Scotia	11	12	440,528	261	315,154	52,019	99,474	1,127	8,188	737,740	576,932
Quebec	88	95	42,741,363	6,386	11,502,849	1,854,389	3,877,009	87,177	474,890	31,386,312	25,092,847
Ontario	96	99	169,500,184	21,007	40,834,236	5,427,354	13,758,759	375,075	1,365,347	120,703,979	99,777,444
Manitoba	6	6	3,717,198	637	1,196,305	188,367	411,649	6,720	34,437	5,095,461	2,454,288
Saskatchewan ...	3	3	17,529	204	424,235	27,715	274,518	18,783	20,599	941,372	599,757
British Columbia	127	137	22,929,476	3,511	6,721,978	735,291	2,309,128	421,840	747,455	19,378,045	15,164,331
Northwest Terri- tories	7	7	3,792,586	545	1,156,053	177,483	336,363	5,601	27,592	2,860,273	2,313,234
Yukon .....	...	...	...	...	...	...	...	...	...	...	...
CANADA ...	338	357	243,138,864	32,551	62,150,810(e)	8,462,618	21,066,900	916,323	2,678,508	179,103,182	145,978,833

(a) Less freight and treatment charges.

(b) Explosives, chemicals, etc.

(c) Number of mines producing - 1923-35; 1929-38; 1937-189; 1958-226; 1939-232; 1940-278; 1941-255.

(d) Value of bullion produced plus value of ore, concentrates, etc. shipped.

(e) Includes \$7,415,094 in salaries in 1941 and \$6,794,255 in 1940.

NOTE: Net Value represents the gross value less the cost of fuel and electricity, process supplies and freight.

Table 31(a) - PRINCIPAL STATISTICS RELATING TO PRODUCERS ONLY IN THE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, 1941

	No. of produc- ing plants or mines	Capital employed	Number of em- ployees	Salaries and wages	Cost of fuel and elec- tricity	(a) Cost of process supplies used	Value of freight paid on shipments of ore, slag, etc.	(b) Smelter and re- finery treat- ment costs	Gross value of bullion, ore, concen- trates or residues shipped from mines(d)	Net value of bullion, ore, concentrates or residues shipped from mines(d)
		\$		\$	\$	\$	\$	\$	\$	\$
Nova Scotia	11	440,528	255	309,499	50,647	97,159	1,127	8,188	737,740	580,619
Quebec	26	37,610,922	5,962	10,881,794	1,767,892	3,606,400	87,177	474,890	31,386,312	25,449,953
Ontario	83	163,493,515	20,828	40,530,658	5,392,193	13,697,971	375,075	1,365,347	120,703,979	99,873,393
Manitoba	6	3,717,198	637	1,196,305	188,367	411,649	6,720	34,437	3,095,461	2,454,288
Saskatchewan ...	3	17,529	204	424,235	27,715	274,518	18,783	20,599	941,372	599,757
British Columbia	120	22,586,423	3,429	6,584,457	731,883	2,297,438	421,840	747,455	19,378,045	15,179,429
Northwest Terri- tories	6	3,769,758	535	1,136,087	177,483	336,363	5,601	27,592	2,860,273	2,313,234
Yukon .....	...	...	...	...	...	...	...	...	...	...
TOTAL CANADA 1941	255	231,635,873	31,850	61,063,035(e)	8,336,180	20,721,498	916,323	2,678,508	179,103,182	146,450,673
TOTAL CANADA 1940	278	230,719,341	30,353	53,560,938	7,935,193	20,390,784	691,649	2,486,587	178,794,078	147,289,865
TOTAL CANADA 1939	232	214,326,089	29,001	50,891,920(e)	7,701,026	19,001,782	694,165	2,249,312	160,014,172	130,367,887

(a) Explosives, etc.

(b) Includes handling charges.

(c) Not recorded separately - included with data relating to non-ferrous smelting industry in British Columbia.

(d) Value of bullion produced plus value of ore, concentrates, etc. shipped.

(e) Includes \$7,214,016 in salaries in 1941 and \$6,794,255 in 1940.

Table 32 - EMPLOYEES AND SALARIES AND WAGES PAID BY AURIFEROUS QUARTZ MINING INDUSTRY, 1925-1941

	Wage- earners	Salaried employees	Total employees	Wages paid	Salaries paid	Total salaries and wages
	No.	No.	No.	\$	\$	\$
1925	6,607	445	7,052	10,657,452	1,274,496	11,931,948
1926	7,159	504	7,663	10,941,722	1,398,901	12,340,623
1927	7,535	487	8,022	11,513,516	1,417,203	12,935,719
1928	8,458	608	9,066	12,978,628	1,637,362	14,615,990
1929	8,136	524	8,660	12,715,108	1,543,625	14,258,733
1930	7,935	466	8,401	12,490,362	1,544,258	14,034,620
1931	9,083	553	9,636	14,755,669	1,711,496	16,467,165
1932	9,809	633	10,442	15,803,139	1,883,445	17,686,584
1933	11,880	943	12,823	18,303,504	2,232,508	20,536,012
1934	16,139	1,623	17,762	24,017,667	3,139,220	27,156,387
1935	18,121	1,713	19,834	27,717,164	3,806,743	31,523,907
1936	22,662	2,435	25,097	35,049,354	4,777,388	39,826,742
1937	26,440	2,700	29,140	42,505,613	5,713,705	48,219,318
1938	26,938	2,709	29,647	44,302,484	6,159,608	50,462,092
1939	27,959	2,663	30,622	46,836,845	6,369,380	53,206,225
1940	28,747	2,658	31,405	48,410,841	6,794,255	55,205,096
1941	29,820	2,731	32,551	54,735,716	7,415,094	62,150,810

Table 33 - SALARIES AND WAGES PAID, FUEL AND ELECTRICITY USED AND PROCESS SUPPLIES CONSUMED BY THE AURIFEROUS QUARTZ MINING INDUSTRY, BY PROVINCES, 1929-1941

	NOVA SCOTIA		QUEBEC		ONTARIO		MANITOBA	
	Producing	Non-producing	Producing	Non-producing	Producing	Non-producing	Producing	Non-producing
	\$	\$	\$	\$	\$	\$	\$	\$
1929	59,892	12,376	224,091	186,836	13,641,012	1,052,884	343,248	90,233
1930	16,644	...	403,848	...	14,106,811	286,813	231,474	62,300
1931	5,409	3,988	573,192	48,115	16,543,014	448,768	256,743	62,231
1932	4,500	51,861	924,375	328,091	17,712,693	162,763	496,049	...
1933	17,612	28,090	1,544,880	744,382	18,123,149	590,012	588,125	154,194
1934	206,729	32,940	2,007,574	1,418,330	20,763,304	1,419,494	826,625	512,586
1935	408,422	57,353	4,165,141	1,754,595	30,809,094	1,966,010	1,659,407	312,556
1936	779,767	40,304	6,448,220	2,317,382	35,829,753	3,789,527	1,896,053	217,017
1937	815,398	43,912	8,956,849	3,104,728	41,230,811	5,897,085	2,043,151	121,042
1938	808,872	8,834	11,396,444	1,396,019	46,899,149	2,473,232	1,914,962	15,627
1939	329,631	4,681	12,604,061	940,207	52,470,713	1,321,013	1,621,765	190,753
1940	596,592	158	14,090,722	770,280	54,745,840	895,822	1,642,103	2,558
1941	457,305	9,342	16,256,036	978,161	59,620,822	399,527	1,796,321	...
GRAND TOTAL	4,986,773	293,839	79,595,483	13,987,126	422,501,765	20,602,940	15,316,026	1,741,097

	SASKATCHEWAN		BRITISH COLUMBIA		NORTHWEST TERRITORIES		C A N A D A	
	Producing	Non-producing	Producing	Non-producing	Producing	Non-producing	Producing	Non-producing
	\$	\$	\$	\$	\$	\$	\$	\$
1929 .....	...	...	1,018,499	229,143	...	...	15,266,742	1,571,472
1930 .....	...	...	1,273,757	17,078	...	...	16,032,534	366,191
1931 .....	...	...	1,210,309	15,722	...	...	18,588,667	578,824
1932 .....	...	3,350	1,027,168	7,228	...	...	20,164,785	553,293
1933 .....	...	...	1,736,556	334,149	...	...	22,015,322	1,850,827
1934 .....	...	8,367	3,396,918	810,726	...	...	27,203,750	4,202,433
1935 .....	...	94,162	6,312,731	678,467	...	...	43,354,795	4,763,143
1936	118,651	79,963	7,287,019	863,104	...	42,766	52,359,463	7,350,063
1937	62,429	391,097	7,836,968	970,666	...	321,305	60,945,606	10,849,835
1938 .....	...	519,791	9,526,363	338,303	531,534	442,035	71,077,324	5,193,841
1939	490,633	4,291	8,963,013	425,451	614,912	162,551	77,594,728	3,048,947
1940	602,534	...	9,094,704	218,225	1,114,420	329,643	81,886,915	2,216,686
1941	726,468	...	9,613,778	152,619	1,649,933	19,966	90,120,713	1,559,615
GRAND TOTAL	2,000,715	1,101,021	68,299,783	5,060,881	3,910,799	1,318,266	596,611,344	44,105,170

Table 34—FUEL AND ELECTRICITY USED BY ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, BY PROVINCES, 1941

Kind	Unit of measure	NOVA SCOTIA		QUEBEC	
		Quantity	Cost at plant	Quantity	Cost at plant
			\$		\$
Bituminous coal (a) From Canadian mines..	short ton	441	4,247	8,078	80,880
(b) Imported	short ton	...	...	5,558	62,545
Anthracite coal (a) From United States ..	short ton	...	...	47	756
(b) Other	short ton	...	...	152	2,445
Lignite coal	short ton	...	...	...	...
Coke (for fuel only)	short ton	...	...	1	15
Gasoline	Imp. gal.	10,386	3,008	118,215	41,097
Kerosene or coal oil	Imp. gal.	14	2	2,765	641
Fuel oil and diesel oil	Imp. gal.	7,437	1,007	946,309	128,861
Wood (cords of 128 cu.ft. piled wood) ...	cords	1,688	7,234	51,546	140,152
Other fuel .....	...	...	...	...	...
Electricity purchased for power and lighting (including service charges)	K. W. H.	2,376,573	36,521	211,837,517	1,397,036
Electricity purchased for other purposes (including service charges)	K. W. H.	...	...	...	...
TOTAL .....	\$	...	52,019	...	1,854,389
Electricity generated -					
(a) For own use	K. W. H.	1,950,000	...	10,180,320	...
(b) For sale	K. W. H.	...	...	167,072	1,415

		ONTARIO		MANITOBA	
		Quantity	Cost at plant	Quantity	Cost at plant
			\$		\$
Bituminous coal (a) From Canadian mines..	short ton	18,293	181,556	79	858
(b) Imported	short ton	19,128	187,120	...	...
Anthracite coal (a) From United States ..	short ton	1,289	14,983	...	...
(b) Other	short ton	458	9,307	...	...
Lignite coal	short ton	...	...	...	...
Coke (for fuel only)	short ton	101	2,539	...	...
Gasoline	Imp.gal.	249,256	84,345	71,421	24,537
Kerosene or coal oil	Imp.gal.	18,507	4,549	786	270
Fuel oil and diesel oil	Imp.gal.	2,054,419	374,981	61,546	18,527
Wood (cords of 128 cu.ft. piled wood) ...	cords	39,751	187,559	4,673	29,591
Other fuel .....	...	...	...	...	...
Electricity purchased for power and lighting (including service charges)	K. W. H.	671,532,373	4,379,606	13,000,000	107,786
Electricity purchased for other purposes (including service charges)	K. W. H.	116,390	829	4,532,250	6,796
TOTAL .....	\$	...	5,427,354	...	188,367
Electricity generated -					
(a) For own use	K. W. H.	6,380,422	...	8,442,850	...
(b) For sale	K. W. H.	...	...	...	...

Table 34 - FUEL AND ELECTRICITY USED BY ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, BY PROVINCES, 1941 (Continued)

Kind	Unit of measure	SASKATCHEWAN		BRITISH COLUMBIA	
		Quantity	Cost at plant \$	Quantity	Cost at plant \$
Bituminous coal (a) From Canadian mines..	short ton	74	2,249	1,670	17,079
(b) Imported	short ton	...	...	227	4,033
Anthracite coal (a) From United States ..	short ton	...	...	...	...
(b) Other	short ton	...	...	41	1,249
Lignite coal	short ton	...	...	187	936
Coke (for fuel only)	short ton	...	...	2	51
Gasoline	Imp.gal.	22,884	7,451	75,612	23,759
Kerosene or coal oil	Imp.gal.	265	70	6,399	1,435
Fuel oil and diesel oil	Imp.gal.	103,868	14,116	2,814,654	356,045
Wood (cords of 128 cu.ft. piled wood) ...	cords	495	3,829	5,114	27,629
Other fuel .....	...	...	...	...	11,936
Electricity purchased for power and lighting (including service charges)	K. W. H.	...	...	39,835,623	290,078
Electricity purchased for other purposes (including service charges)	K. W. H.	...	...	472,680	1,061
TOTAL .....	\$	...	27,715	...	735,291
Electricity generated -					
(a) For own use	K. W. H.	16,369,000	...	44,293,884	...
(b) For sale	K. W. H.	...	...	876,710	10,316
		NORTHWEST TERRITORIES		C A N A D A	
		Quantity	Cost at plant \$	Quantity	Cost at plant \$
Bituminous coal (a) From Canadian mines..	short ton	13	477	28,648	287,346
(b) Imported	short ton	...	...	24,911	253,698
Anthracite coal (a) From United States ..	short ton	...	...	1,336	15,719
(b) Other	short ton	...	...	651	13,001
Lignite coal	short ton	...	...	187	936
Coke (for fuel only)	short ton	...	...	104	2,603
Gasoline	Imp.gal.	25,401	11,948	573,175	196,145
Kerosene or coal oil	Imp.gal.	76	39	28,812	7,006
Fuel oil and diesel oil	Imp.gal.	189,389	46,759	6,177,622	940,296
Wood (cords of 128 cu.ft. piled wood) ...	cords	6,383	60,352	89,450	456,306
Other fuel .....	...	...	...	...	11,936
Electricity purchased for power and lighting (including service charges)	K. W. H.	3,856,490	57,848	942,438,376	6,268,878
Electricity purchased for other purposes (including service charges)	K. W. H.	4,000	60	5,125,320	8,748
TOTAL .....	\$	...	177,483	...	8,462,613
Electricity generated -					
(a) For own use	K. W. H.	13,823,079	...	101,439,755	...
(b) For sale	K. W. H.	3,865,921	137,758	4,909,703	149,489

Table 35 - POWER EQUIPMENT (including stand-by or emergency equipment) USED BY THE ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total horse power (x)	Number of units	Total horse power (x)
Steam engines and steam turbines	25	2,550	15	1,524
Diesel engines	104	19,698	71	8,601
Gasoline, gas and oil engines, other than diesel engines	112	5,244	116	8,159
Hydraulic turbines or water wheels	25	15,010	5	1,720
Electric motors - (a) Operated by purchased power ..	9,896	376,280	659	19,989
TOTAL	10,162	418,782	866	59,775
(b) Operated by power generated by the establishment	1,650	26,494	207	5,196
Stationary boilers	209	17,085	82	5,251

(x) According to manufacturers' rating.

Table 36 - WAGE-EARNERS, BY MONTHS, IN THE ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY, 1951, 1959 - 1941

Month	1951	1959	1940	1941
January	8,275	27,402	27,825	29,772
February	8,482	27,278	28,012	29,765
March	8,681	26,941	28,270	29,785
April	8,746	26,767	28,295	29,655
May	9,030	27,669	28,864	29,869
June	9,519	28,238	28,528	29,807
July	9,545	28,557	28,741	30,310
August	9,285	28,743	28,955	30,158
September	9,391	28,577	29,626	30,605
October	9,524	28,621	30,106	30,870
November	9,496	28,402	30,153	29,567
December	9,523	27,516	29,580	27,566

Table 37 - CLASSIFICATION OF WAGE-EARNERS EMPLOYED IN ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY, 1940 and 1941

Province	1 9 4 0			1 9 4 1		
	Number			Number		
	Mine			Mine		
	Surface	Underground	Mill	Surface	Underground	Mill
Nova Scotia	97	203	28	58	139	51
Quebec	1,574	3,515	455	1,484	3,794	461
Ontario	4,812	12,834	1,426	4,860	15,159	1,475
Manitoba	202	297	37	262	261	57
Saskatchewan	37	76	26	49	84	50
British Columbia	750	2,082	568	697	2,100	547
Northwest Territories	176	153	21	250	199	45
Yukon .....	...	...	...	...	...	...
CANADA	7,648	18,760	2,559	7,660	19,756	2,424

Table 38 - CERTAIN DATA RELATING TO THE PRODUCTION OF GOLD BY THE ENTIRE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, 1928 - 1941

Year	Ounces of gold produced per wage-earner year	Cost of fuel and electricity per ounce of gold produced	Cost of wages per ounce of gold produced	Cost of explosives and other process supplies used per ounce of gold produced	Cost of freight and smelter refinery treatment on ores and bullion shipped per ounce of gold produced	Total of specified costs
	Ounces	\$	\$	\$	\$	\$
1928	206	1.47	7.45	Information not available	Information not available	...
1929	218	1.46	7.18	Information not available	Information not available	...
1930	237	1.25	6.63	Information not available	Information not available	...
1931(a)	250	1.19	6.50	Information not available	Information not available	...
1932	255	1.21	6.31	Information not available	Information not available	...
1933(b)	207	1.36	7.45	Information not available	Information not available	...
1934(c)	154	1.71	9.64	Information not available	Information not available	...
1935	146	1.89	10.48	4.38	0.33(d)	16.75
1936	137	1.98	11.32	4.46	0.56	17.76
1937	132	2.10	12.18	4.65	0.67	19.26
1938	150	1.85	10.95	4.53	0.69	17.89
1939	157	1.81	10.69	4.45	0.67	17.62
1940	161	1.76	10.48	4.49	0.69	17.42
1941	155	1.82	11.56	4.53	0.77	17.91

(a) Equalization exchange premiums paid by the Dominion Government to gold miners (Great Britain goes off gold standard).

(b) United States goes off gold standard.

(c) United States gold dollar reduced in weight from 25.8 to 15 5/21 grains, 0.9 fine.

(d) Not including Mint charges and marketing prior to 1938.

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. This fact should be noted if the information is to be construed or employed as possible criteria for technological or other statistical study. The trends revealed are not to be interpreted as entirely reflecting "cause and effect" in the operation of producing mines only but rather as indices of change in the industry as a whole. For data relating to producers only, see following table.

Table 38(a) - CERTAIN DATA RELATING TO THE PRODUCTION OF GOLD BY PRODUCERS ONLY IN THE AURIFEROUS QUARTZ MINING INDUSTRY IN CANADA, 1931, 1939 - 1941

Year	Ounces of gold produced per wage-earner year	Cost of fuel and electricity per ounce of gold produced	Cost of wages per ounce of gold produced	Cost of explosives and other process supplies used per ounce of gold produced	Cost of freight and smelter-refinery treatment of ores and bullion shipped per ounce of gold produced	Total of specified costs
	Ounces	\$	\$	\$	\$	\$
1931	256	1.19	6.38	(a)	(a)	...
1939	164	1.76	10.25	4.33	0.67	17.01
1940	165	1.72	10.20	4.41	0.69	17.02
1941	158	1.79	11.37	4.46	0.77	18.39

(a) Data not available.

Table 39 - ORES MINED AND MILLED, CRUDE BULLION RECOVERED AND CRUDE BULLION AND CONCENTRATES SHIPPED IN THE AURIFEROUS QUARTZ MINING INDUSTRY, 1941

		Nova Scotia	Quebec	Ontario	Manitoba	Saskat- chewan	British Columbia	Northwest Terri- tories	CANADA
Number of producing mines		11	26	83	6	3	120	6	255
Ore mined	Tons	60,000	4,835,120	12,766,523	265,878	496,780	1,516,472	90,963	20,031,736
Material discarded (sorted)	Tons	25,098	222,098	565,391	3,584	...	114,719	5,113	936,003
Ore milled	Tons	60,000	4,434,507	12,227,706	262,188	494,186	1,437,589	110,097	19,026,273
Tailings retreated	Tons	40	...	464,037	...	...	16,212	...	480,289
Concentrates produced	Tons	234	4,289	110,151	10	...	43,662	2,210	160,556
Gold content of ores, slags, resi- dues and concentrates shipped -									
To Foreign smelters	fine oz.	...	...	37,253	...	...	152,389	382	190,024
Canadian smelters	fine oz.	...	21,181	3,438	119	2,821	22,707	...	50,316
Bullion bars shipped - Gold content	fine oz.	18,167	786,617	2,959,214	80,203	21,810	342,097	74,048	4,282,156
Silver content	fine oz.	529	153,625	531,467	11,299	8,088	106,630	15,480	827,118
Bullion produced by amalgamation ..	crude oz.	30,263	62,577	385,328	21,060	...	164,265	56,784	720,277
Bullion produced by cyanidation ...	crude oz.	435	983,417	3,508,620	92,282	33,103	292,862	40,124	4,950,843
Total Bullion Produced	crude oz.	30,698	1,045,994	3,893,948	113,342	33,103	457,127	96,908	5,671,120
Content of bullion bars produced -									
Gold	fine oz.	19,169	792,038	3,075,234	80,208	21,810	343,718	73,809	4,405,988
Silver	fine oz.	601	154,220	539,547	11,302	8,088	107,865	15,283	836,906
Gold value (standard)	\$	395,999	16,372,878	63,595,788	1,658,063	450,866	7,105,144	1,525,769	91,104,507
Silver value	\$	220	59,006	201,581	4,203	3,011	39,941	5,715	313,677
Exchange premium on bullion bars produced	\$	341,521	14,120,585	54,793,832	1,429,777	338,846	5,175,676	1,313,544	77,563,781
Value of ores, concentrates, slags and residues sold .....	\$	...	833,843	2,112,778	3,418	98,649	7,057,284	15,245	10,121,217
TOTAL GROSS VALUE OF PRODUCTION ...	\$	737,740	31,386,312	120,703,979	3,095,461	941,372	19,378,045	2,860,273	179,103,182
Value of fuel, electricity and pro- cess supplies used, also freight on shipments, marketing, smelter and refining charges	\$	160,808	6,293,465	20,926,535	641,173	341,615	4,213,714	547,039	33,124,349
NET VALUE OF PRODUCTION	\$	576,932	25,092,847	99,777,444	2,454,288	599,757	15,164,331	2,313,234	145,978,833

Table 40 - ORES, CONCENTRATES, SLAGS, ETC., SHIPPED TO SMELTERS FROM CANADIAN GOLD MINES, 1929 - 1941

	TO CANADIAN PLANTS						TO FOREIGN PLANTS					
	Ores		Concentrates		Slags, residues, precipitates		Ores		Concentrates		Slags, residues, precipitates	
	Tons	Gold content fine oz.	Tons	Gold content fine oz.	Tons	Gold content fine oz.	Tons	Gold content fine oz.	Tons	Gold content fine oz.	Tons	Gold content fine oz.
1929	27,278	14,327	263	305	1	24	90,871	82,996	2,370	3,638	6	304
1930	52,540	22,910	1,187	9,665	2	117	70,497	22,432	18,276	46,102	53	1,009
1931	51,579	21,756	3,120	16,805	12	1,505	24,244	11,870	20,271	48,743	47	1,306
1932	36,397	17,943	191	952	26	1,416	36,736	15,810	16,925	52,508	30	869
1933	30,096	14,882	490	1,349	55	6,279	3,292	2,203	29,111	76,601	34	1,392
1934	48,103	29,638	2,490	10,440	203	1,487	1,419	1,936	43,053	114,476	27	599
1935	18,239	7,008	7,045	35,958	58	6,231	1,242	2,840	46,050	90,167	25	11,310
1936	4,705	6,567	7,865	34,654	64	3,609	1,864	3,421	65,660	137,273	25	16,903
1937	37,126	9,649	6,981	21,865	130	2,060	2,516	8,108	62,987	163,781	74	912
1938	172,377	36,008	8,404	25,552	37	420	4,445	8,443	40,828	142,513	1,281	23,101
1939	271,666	47,114	7,747	24,184	797	4,507	3,853	8,930	39,530	112,126	235	26,631
1940	201,941	34,315	4,485	13,532	158	3,761	7,453	8,107	44,570	125,704	103	47,160
1941	202,943	38,380	1,628	7,492	369	4,444	7,453	11,222	43,855	122,619	115	56,183
GRAND TOTAL	1,154,993	300,547	51,901	202,753	1,912	35,860	255,865	188,318	473,486	1,236,251	2,055	187,679

Table 41 - PRINCIPAL STATISTICS RELATIVE TO ALL ONTARIO GOLD MINES BY AREAS(x), 1939 - 1941

Table 41 - PRINCIPAL STATISTICS RELATIVE TO ALL ONTARIO GOLD MINES OF METRIC TONS, 1939 - 1941										Cost of fuel, electricity and process supplies
Camp or district	Number of pro- ducers	Ore (x) treated	Total gold recovered	Average ounces per ton recovered	Employ- ees	Salaries and wages paid				
<u>1 3 3 9</u>										
Porcupine	19	5,133,254	1,512,702	.26	8,588	15,903,561	7,505,175			
Kirkland Lake	12	2,301,940	941,571	.41	5,031	9,192,857	4,698,044			
Larder Lake	5	556,390	93,396	.17	823	1,441,235	852,366			
Matatchewan	2	531,503	63,137	.12	642	1,046,464	707,847			
Sudbury	5	(b) 121,532	26,229	.22	228	401,654	125,945			
Algoma	5	109,169	24,708	.23	271	443,551	180,805			
Thunder Bay	12	714,446	242,395	.34	1,707	2,942,849	1,640,388			
Rainy River and Kenora	5	72,644	19,070	.26	258	431,907	148,457			
Patricia	13	1,168,168	287,921	.25	2,121	3,842,980	2,198,281			
Eastern Ontario	1	6,908	379	.05	48	65,094	22,268			
TOTAL	79	10,715,954	3,011,308	.28	19,717	35,712,152	18,079,574			
<u>1 9 4 0</u>										
Porcupine	21	5,647,114	1,426,173	.25	9,107	16,101,444	8,021,747			
Kirkland Lake	11	(c) 2,150,762	875,982	.41	4,719	8,665,327	4,072,510			
Larder Lake	3	839,275	148,106	.18	872	1,589,845	1,403,020			
Matatchewan	2	550,280	60,501	.11	510	915,210	639,670			
Sudbury	2	118,450	21,485	.11	290	505,040	197,197			
Algoma	2	83,564	16,111	.19	205	308,748	151,042			
Thunder Bay	12	825,012	266,946	.32	1,930	3,523,002	1,953,185			
Rainy River and Kenora	8	50,113	14,970	.30	202	272,592	102,454			
Patricia	14	(d) 1,477,078	337,175	.23	2,399	4,347,949	2,763,687			
Eastern Ontario	1	26,526	3,108	.12	65	76,520	32,473			
TOTAL	76	11,768,174	3,170,557	.27	20,299	36,305,677	19,335,985			

1 9 4 1

Porcupine	21	5,974,447	1,439,148	.24	9,746	19,230,445	8,860,778
Kirkland Lake	12	(c) 1,900,481	743,123	.39	4,359	8,235,004	4,161,044
Larder Lake	4	1,124,221	205,766	.18	1,135	2,347,675	1,310,202
Matatchewan	2	543,677	58,683	.11	521	939,239	694,546
Sudbury	4	148,119	23,420	.15	468	913,103	355,245
Algoma	3	89,432	11,565	.13	166	291,953	148,645
Thunder Bay	16	(a) 823,954	243,321	.29	1,883	3,611,904	2,041,551
Rainy River and Kenora	7	53,459	18,162	.34	231	381,904	198,133
Patricia	13	1,569,616	372,727	.24	2,490	4,799,957	3,173,160
Eastern Ontario	1	300	60	.20	8	5,052	3,421
TOTAL	83	12,237,706	3,115,975	.25	21,007	40,834,236	20,926,335

(a) In addition, 586 tons tailings were treated.

(b) In addition, 3,820 tons tailings were retreated.

(c) In addition, 143,168 tons tailings were retreated in 1940 and 407,823 tons in 1941.

(d) In addition, 36,794 tons tailings were retreated.

(x) Includes data for all active properties.

(x) Does not include low-grade discarded by sorting, but includes ore milled or smelted.

Table 42 - MILLING CAPACITY OF PRODUCING CANADIAN GOLD MINES, 1935-1941 (Tons of 2,000 pounds per 24 hours)

	Nova Scotia	Quebec	Ontario	Manitoba	Saskat- chewan	British Columbia	Northwest Territories
1935	292	3,368	20,921	1,465	...	2,990	...
1936	713	4,514	22,639	1,000	...	4,120	...
1937	565	6,090	25,249	975	30	3,915	...
1938	542	8,217	30,097	875	1,000	4,590	...
1939	562	9,380	35,324	865	1,000	4,417	...
1940	450	11,215	35,030	690	1,200	4,235	275
1941	319	12,654	37,416	990	1,335	4,510	510

Table 43 - ORES MINED AND TREATED BY AURIFEROUS QUARTZ MINING INDUSTRY, FOR YEARS SPECIFIED

Table 43 - ORES MINED AND TREATED BY MULTIPLE-USE QUARTZ MINING INDUSTRY, IN YEARS OF PEAK PRODUCTION									
Year	Ore hoisted tons	Ore milled(c) tons	Crude ore shipped to smelters(d) tons	Low grade out tons	Tailings retreated tons	Gold re-covered as bullion(b) fine oz.	Gold in crude ore shipped etc., shipped fine oz.	Gold in concentrates, slag, etc., shipped fine oz.	
1925 ...	5,646,460	5,527,021	119,436(f)	(a)	48,475	1,482,294	97,011	54,131	
1930 ...	4,472,805	4,306,869	123,037	(a)	57,095	1,732,556	45,342	56,993	
1935 ...	8,852,901	8,888,129	19,481	(a)	57,798	2,492,145	9,848	143,666	
1936 ...	10,694,208	10,504,181	6,569	(a)	33,814	2,903,063	9,988	192,439	
1937 ...	12,368,489	11,880,323	39,642	457,622	97,710	3,283,795	17,757	188,618	
1938 ...	14,749,649	14,158,555	176,822	528,696	64,926	3,810,642	44,451	191,586	
1939 ...	17,105,744	16,150,173	275,519	660,578	18,426	4,160,552	56,044	167,448	
1940 ...	18,986,306	18,083,459	209,394	757,538	180,211	4,386,673	42,422	190,157	
1941 ...	20,031,736	19,026,273	210,396	936,003	480,289	4,405,986	49,602	190,738(d)	

(a) Not available.

(b) Content of bullion shipped 1925-1935; 1936-1941 content of bullion produced.

(c) In addition, a relatively small tonnage of unclassified ores was shipped.

(c) + (d) = total crude ore treated (not including sorted material).

(d) Gold in material shipped by gold mines to other gold mines for treatment is included under bullion.

Table 44 - GOLD CONTENT OF BULLION, ORES, CONCENTRATES, ETC., SHIPPED AND ORE MILLED BY AURIFEROUS QUARTZ MINES IN CANADA, WITH AVERAGE PRICE OF GOLD IN CANADIAN FUNDS, 1929 - 1941

Year	Tonnage treated (x)	Gold content fine oz. (f)	Oz. of fine gold per ton	Average price of gold
1929	4,371,143	1,771,526	.41	\$ 20.67
1930	4,429,906	1,884,791	.43	\$ 20.67
1931	5,526,379	2,271,278	.41	\$ 21.55
1932	5,997,492	2,502,327	.42	\$ 22.47
1933	6,480,164	2,455,365	.38	\$ 23.60
1934	7,524,803	2,490,513	.33	\$ 34.50
1935	8,907,610	2,645,659	.30	\$ 35.19
1936	10,510,750	3,095,427	.29	\$ 35.03
1937	11,919,363(a)	3,490,170	.29	\$ 34.99
1938	14,335,377(a)	4,046,679	.26	\$ 35.17
1939	16,425,692(a)	4,383,844	.27	\$ 36.14
1940	18,292,833(a)	4,619,252	.25	\$ 38.50
1941	19,236,669(a)	4,646,326	.24	\$ 38.50

(x) Does not include tailings retreated, but includes ore milled plus crude ore shipped to smelters.

(f) Relatively small quantity of gold contained in concentrates, slags, etc., shipped and cyanide solution in circuit may have originated in ores treated during the previous year; from 1937 represents metal content of total bullion produced plus metal in ores or concentrates shipped to smelters.

(a) Material discarded by sorting not included.

Table 45 - SPECIFIED COSTS PER TON OF ORE MILLED AT CERTAIN OF THE PRINCIPAL AURIFEROUS QUARTZ MINES IN CANADA, 1941

Name of Mine	Development and exploration (a)		Mining	Milling	General (b)		Total cost per ton (c)
	\$	\$	\$	\$	\$	\$	\$
NOVA SCOTIA							
Avon Gold Mines Ltd.	3.85	4.39		0.86	(f)		9.09
Consolidated Mining & Smelting Company of Canada Ltd. (Holman)	2.92	5.39		1.82	...		10.13
Guyborough Mines Ltd.	1.559	1.955		0.995	1.261		5.768
QUEBEC							
Armfield Gold Mines Ltd.	1.093	3.019(x)		1.117(x)	0.975		6.204
Beattie Gold Mines Ltd.	0.241	0.674		1.087	0.332		2.334
Belleterre Quebec Mines Ltd.	1.702	2.843		1.222	2.058		7.825
Francœur Gold Mines Ltd.	0.386	1.515		1.121	0.864		3.886
Lamèque Mining Co. Ltd.	1.720	2.220		0.625	0.548		5.213

Table 45 - SPECIFIED COSTS PER TON OF ORE MILLED AT CERTAIN OF THE PRINCIPAL AURIFEROUS QUARTZ MINES IN CANADA, 1941 (Continued)

Name of Mine	Development and exploration tion (a) \$	Mining \$	Milling \$	General \$	Total cost per ton (c) \$
<u>QUEBEC (Concluded)</u>					
Lapa Cadillac Gold Mines Ltd.	0.579	1.865	1.175	0.651	4.266
Malartic Gold Fields Ltd.	1.030	2.170	0.698	0.647	4.545
McKethers Gold Mines Ltd.	2.390	1.949	1.357	0.950	6.646
O'Brien Gold Mines Ltd.	0.97	3.51	1.38	1.21	7.07
Pandora Cadillac Gold Mines Ltd.	0.995	3.077	0.909	0.531	5.012
Perron Gold Mines Ltd.	2.529	5.115	0.807	0.896	7.347
Powell Rouyn Gold Mines Ltd.	0.31	1.77	0.88	0.35(e)	3.31(1)
Senator-Rouyn Ltd.	1.041	1.542	1.455	1.602	5.640
Sigma Mines Ltd.	1.140	2.378	0.571	0.539	4.428
Sliscoe Gold Mines Ltd.	0.9803	1.9788	0.8196(j)	0.5964	4.3771
Sladen-Malartic Mines Ltd.	0.37	1.40	0.53	0.31	2.71
Wood Cadillac Mines Ltd.	1.53	2.47	1.05	0.51	5.56
<u>ONTARIO</u>					
<u>Porcupine District</u>					
Brouhan Porcupine Mines Ltd.	0.37	1.92	0.70	0.79	3.78
Conlaunum Mines Ltd.	2.00	3.35	0.68	1.27	7.30
De Saults Porcupine Mines Ltd.	2.02	2.49	1.17	0.68	6.36
Dome Mines Ltd.	0.946	1.728	0.979	3.540	7.195
Hollinger Consolidated Gold Mines Ltd. (Thimmins) ..	0.9803	2.8246	0.5822	2.1197	6.5168
Hollinger Consolidated Gold Mines Ltd. (Ross)	1.0471	2.0498	1.6126	1.6030	6.3125
McIntyre Porcupine Mines Ltd.	0.704	3.765	0.795	2.115	7.375
Pamour Porcupine Mines Ltd.	0.61	1.36	0.54	0.29	2.80
Paymaster Consolidated Mines Ltd.	1.95	2.98	1.14(e)	0.55	6.62
<u>Kirkland Lake District</u>					
Biggood Kirkland Gold Mines Ltd.	3.17	4.44	1.65	1.22	10.48
Golden Gate Mining Co. Ltd.	2.90	3.41	1.97	1.30	9.58
Kirkland Lake Gold Mining Co. Ltd.	1.39	3.69	1.22	2.10	8.40
Macassa Mines Ltd.	1.51	3.21	1.17	4.18	10.07
Toburn Gold Mines Ltd.	2.04	5.15	2.21	0.30	9.70
Teck-Hughes Mines Ltd.	(1)	4.02	1.01	2.50	7.53
Upper Canada Mines Ltd.	2.30	3.52	1.04	2.19	9.05
Wright-Hargreaves Mines Ltd.	(1)	4.507	1.128	5.096	10.731
<u>Larder Lake District</u>					
Chesterville Larder Lake Gold Mining Co. Ltd.	0.35	1.46	0.85	0.72	3.36
Kerr-Addison Gold Mines Ltd.	0.88	1.18	0.63	1.39	4.08
Omega Gold Mines Ltd.	0.654	2.390	1.147	0.100	4.291
Yama Gold Mines Ltd.	1.18	4.70	2.66	2.71	11.25
<u>Matamoras District</u>					
Hollinger Consolidated Gold Mines Ltd. (Young Davidson)	0.2214	1.5008	0.6940	0.6651	3.0813
Matamoras Consolidated Mines Ltd.	0.529	1.827	0.735	0.515	3.601
Jerome Gold Mines Ltd. (Stubbins District)	0.198	2.339	0.788	0.977	4.302(1)
<u>Thunder Bay and Kenora Districts</u>					
Bankfield Consolidated Mines Ltd.	0.9378	2.8136	1.6182	1.6496	7.0192
Leitch Gold Mines Ltd.	3.97	6.30	2.21	6.25	18.73
MacLeod-Cockshutt Gold Mines Ltd.	1.0920	2.7028	1.6199	1.4121	6.8268
Tendigo Gold Mines Ltd.	0.96	3.86	2.03	2.49	9.34
<u>Patricia District</u>					
Central Patricia Gold Mines Ltd.	1.42	3.04	1.28	2.77	8.51
Cochranour Millers Gold Mines Ltd.	2.112	2.192	2.902	2.225	9.43 (m)
Howey Gold Mines Ltd. ....	...	0.678	0.541	0.333	1.552(n)

Table 45 - SPECIFIED COSTS PER TON OF ORE MILLED AT CERTAIN OF THE PRINCIPAL AURIFEROUS QUARTZ MINES IN CANADA, 1941 (Concluded)

Name of Mine	Development and exploration (e)		Mining	Milling	General (b)	Total cost per ton (c)
	\$	\$	\$	\$	\$	\$
ONTARIO (Concluded)						
Patricia District (Con.)						
Jason Mines Ltd.	1.830	4.484	1.645	1.430	9.389	
McKenzie Red Lake Gold Mines Ltd.	1.49	3.00	1.15	1.13	6.77	
MANITOBA						
God's Lake Gold Mines Ltd.	2.91	2.86	1.55	1.89	9.21	
NORTHWEST TERRITORIES						
Con Mine	(h)	(h)	(h)	(h)	(h)	
Bygon Mine						
Negus Mines Ltd.						
Tompson-Lundmark						
BRITISH COLUMBIA						
Bayonne Cons. Mines Ltd.	1.23	6.14	3.27	1.63	12.27	
Brelorne Mines Ltd.	1.28	3.27	0.74	2.05	7.34	
Buccaneer Mines Ltd.	5.01	8.38	4.52	9.89	28.30	
Buena Vista Mining Co. Ltd.	0.16	1.07	1.05	...	2.23	
Ceriboo Gold Quartz Mining Co. Ltd.	2.041	5.673	1.255	0.382	9.351	
Cons. Nicola Goldfields Ltd.	1.07	2.30	1.48	1.04	5.89(d)	
Gold Belt Mining Co. Ltd.	2.02	4.35	1.26	0.67	8.30	
Healey Mascot Gold Mines Ltd.	1.26	2.36	2.03	2.09	7.74	
Island Mountain Mines Co. Ltd.	3.61	3.55	1.89	0.32	9.37	
Kootenay Belle Gold Mines Ltd.	2.58	6.13	1.65	1.33	11.69	
Livingsstone Mining Co. Ltd.	3.50	7.50	6.00(x)	2.50	19.50(d)	
Mount Zeballos Gold Mines Ltd.	2.430	6.484	2.099	2.512	13.525(1)	
Pioneer Gold Mines of B.C. Ltd.	0.888	3.335	1.156	4.840	10.817	
Privateer Mine Ltd.	2.92	5.38	2.09	8.28	19.17	
Relief Ailington Mines Ltd.	3.634	6.280	1.947	2.437	11.248	
Reno Gold Mines Ltd., Zeballos	3.759	4.895	3.046	3.310	15.011	
Sheep Creek Gold Mines Ltd.	1.674	3.102	1.572	1.086	7.434	
Spud Valley Gold Mines Ltd.	0.70	7.25	2.71	2.25	12.91(d)(1)	
Surf Inlet Cons. Gold Mines Ltd.	2.282	3.216	1.377	1.158	8.035(d)	
Tair Yankee Girl Gold Mines Ltd.	0.129	1.771	1.513	0.736	4.169(d)	

- (a) Exclusive of outside exploration.
 (b) Marketing, head office, taxes, etc.
 (c) Depreciation not included.
 (d) Shipped to smelter.
 (e) Includes crushing and conveying.
 (f) Included under mining.
 (g) Not including taxes.
 (h) Not available for publication.
 (i) Bullion made and crude ore shipped.
 (j) Includes sorting.
 (k) Includes smelting and freight.
 (l) Milling commenced August 26th.
 (m) Includes smelter costs.
 (n) Mining Ceased November 4th.
 (x) Includes Senator tonnage.

THE COPPER-GOLD-SILVER MINING INDUSTRY, 1941

The mining of "copper-gold-silver" ores in Canada during 1941 was confined to the provinces of Quebec, 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 and increasing quantity of the metal obtained in the smelting and refining of the copper-nickel ores mined in the Sudbury area of Ontario; increasing quantities of gold and silver are also being extracted from these copper-nickel ores. General statistics relating to labour, etc., in the nickel-copper industry are not included in this report.

Mining operations conducted on Canadian copper-gold-silver deposits during 1941 were reported by 21 firms compared with 25 in 1940. The gross value of crude ore, concentrates, etc., shipped in 1941 from the mines and mills to smelters was estimated at \$64,829,075; the cost of fuel, purchased electricity, process supplies, freight and smelter treatment totalled \$54,508,742 and the net value of shipments was estimated at \$50,230,351.

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

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

QUEBEC - Aldermac Copper Corporation Limited operated both its mine and mill continuously throughout 1941. The capacity of the Aldermac mill was 1,000 tons per twenty-four hours and the Company in 1941 produced both copper and iron pyrites concentrates from 315,529 tons of ore milled. The copper concentrates produced were shipped to the Noranda smelter while the iron pyrites was consigned to various industries in both the United States and Canada. During the year under review there were 10,642 feet of diamond drilling completed at the property.

Watte Amulet Mines Ltd. reported that mining operations were conducted during the entire year in both the Watte Amulet and Amulet Dufault sections of the ore body. Ore from all sections of the deposit was treated in the 1,200 ton Amulet mill. Most of the year's development in the Watte Amulet section was concentrated on the straight zinc orebody which bottoms on the 200 foot level. The main zinc circuit was started in March and first shipment of concentrates was made in April. A 500 ton mill extension for treatment of zinc ore from the Watte mine was erected and put into operation in the latter part of the year. In the Amulet Dufault section, two new stopes were brought into production and a third made ready during the year; the two stopes will make a large tonnage of high zinc, medium copper ore. All shipments of copper concentrates were treated in the Noranda smelter and zinc concentrates were exported to the United States.

The average daily tonnage treated by the Normetal Mining Corporation Ltd. was the highest since operations started. The improvement was due to increased power supply, largely from added Diesel installations. Concentrates were shipped as produced, the copper to Noranda smelter and the zinc to the United States. Following favourable ore disclosures on the lower horizons of the mine, and in view of the necessity for increased production of copper and maintenance of zinc production, preparations were made to increase the capacity of the plant by 150 tons per day. Operating cost in 1941 was \$4.132 per ton milled.

In 1941 Noranda Mines Ltd. completed 5,565 feet of drifting, 5,312 feet of raising and 56,785 feet of exploratory diamond drilling at the Horne mine. The use of diamond drills instead of percussion rock drills for breaking ore in stopes was increased about 32 per cent over that of the previous year, some 365,800 feet of diamond drilling having been done for that purpose. Exploration work carried out thus far below the 2,975 foot level has indicated a large mineralized body, containing about 50 per cent pyrite and low values in gold, copper and zinc, extending from about the 1,500 foot level to a depth of at least 5,000 feet.

MANITOBA AND SASKATCHEWAN - Approximately 97 per cent of the ore milled during 1941 by Hudson Bay Mining & Smelting Co. Ltd. was derived from underground mining operations and 3 per cent from the open pit, where regular operations were concluded in April. Production of copper, zinc, gold and silver was the highest on record for any year. The tonnage of ore mined from underground in 1941 was increased over any previous year. The tonnage of ore treated in the concentrator was again increased during the year under review. The cyanide plant treated a greater tonnage of flotation tailings than has been treated in any preceding year.

There was a considerable increase in the tonnage of zinc concentrates treated in 1941 which resulted in a greater production of slab zinc. The cadmium plant treated all the precipitate from the zinc purification plant and metallic cadmium production was increased. The copper smelter operated to capacity throughout the year.

At Sherridon, in Manitoba, both the mine and mill of Sherritt Gordon Mines Ltd. were in continuous operation during 1941. Copper concentrates were shipped to the Flin Flon smelter of the Hudson Bay Mining & Smelting Co. Ltd. It was reported early in 1942 that negotiations were completed for the production of zinc concentrates. This would be in addition to regular production of copper, with gold and silver as by-products. It would entail no increase in tonnage of ore mined but would mean that the zinc content formerly not concentrated would now be recovered and production of zinc concentrates was expected sometime early in 1942.

BRITISH COLUMBIA - At Copper Mountain, the Granby Consolidated Mining, Smelting and Power Company Ltd. operated its mine and 4,800-ton mill throughout the entire year. Copper concentrates were shipped to the Tacoma smelter, in the State of Washington. During the year the Company completed 27,820 feet of diamond drilling and considerable underground development work.

Britannia Mining & Smelting Co. Limited conducted mining and milling operations during the entire year ending December, 1941. Copper concentrates were exported to the United States and iron pyrites shipped to a Canadian chemical plant. The Company reported that a shortage of skilled labour continued; however, it was possible to continue the operation on a reasonable basis and to accomplish a large amount of exploration and development work. Encouraging results were obtained at a horizon 400 feet below the main haulage adit. During the year the haulage tunnel was connected with the Victoria shaft, giving it a total length of 20,127 feet. United States currency funds received on sales of Canadian production were sold to the Canadian Foreign Exchange Control Board, the equivalent proceeds in Canadian exchange being deposited with Canadian banks where the funds are available to meet all Canadian currency current earnings, as determined under the regulations of the Exchange Control Board. The capacity of the Britannia mill was reported at approximately 6,000 tons per twenty-four hours.

W. E. McArthur & Son operated the Granby mine in the Greenwood Mining Division during 1941. Copper concentrates obtained from this property were exported to the Tacoma smelter in the State of Washington.

Table 46 - PRINCIPAL STATISTICS (A) OF THE COPPER-GOLD-SILVER MINING INDUSTRY IN CANADA, FOR SPECIFIED YEARS

Year	No. of active opera- tors (x)	No. of operating plants or mines (x)	Capital employed (x) \$	Number of em- ployees (x)	Salaries and wages (x) \$	Cost of fuel and electricity (x) \$	Value of ores and concen- trates shipped by mines \$
1923	14	14	19,108,072	1,790	3,004,292	334,696	4,361,486
1929	144	152	52,546,697	5,243	8,499,755	1,035,133	21,859,907
1935	16	18	38,461,682	3,430	5,040,196	534,152	13,343,163
1936	19	21	40,732,717	3,738	5,473,325	495,843	15,619,897
1937	28	31	73,338,256	5,164	8,240,614	901,088	24,902,851
1938	37	39	65,416,729	5,577	8,921,465	1,100,284	28,795,492
1939	28	30	58,867,620	6,083	9,920,591	1,223,523	26,182,577
1940	25	26	60,446,948	6,115	10,777,827	1,297,454	25,804,419
1941	21	22	81,521,902	5,866	10,695,023	1,264,567	30,220,331

(x) Not including data relating to Rossland properties leased by Consolidated Mining and Smelting Co. of Canada, Ltd.

(A) Data relating to idle mines not included.

NOTE: The cost of fuel, purchased electricity and process supplies was deducted beginning 1935; however, values for all years are less freight and estimated treatment charges. Also, value of ores and concentrates shipped from mines to smelters operated by the same companies are often of a nominal or conjectural nature.

Table 47 - DETAILS OF FUEL AND ELECTRICITY USED IN THE COPPER-GOLD-SILVER MINING INDUSTRY, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at plant	Quantity	Cost at plant
Bituminous coal (a) From Canadian mines	short ton	11,762	103,915	13,275	123,399
(b) Imported	short ton	...	...	...	...
Anthracite coal (a) From United States	short ton	169	3,761	152	3,763
(b) Other	short ton	...	...	...	...
Lignite coal	short ton	93,347	184,511	92,445	176,155
Coke (for fuel only)	short ton	66	1,166	101	2,110
Gasoline	Imp. gal.	75,652	21,968	75,578	24,542
Kerosene or coal oil	Imp. gal.	5,307	1,573	7,141	1,799
Fuel oil and diesel oil	Imp. gal.	858,890	80,961	859,179	84,331
Wood (cords of 128 cu. ft. of piled wood) ..	cord	351	1,675	1,370	6,118
Other fuel .....		...	935	...	669
Electricity purchased, including service charges .....		...	...	...	...
	K. W. H.	270,601,445	896,989	251,488,789	841,681
TOTAL .....	\$	...	1,297,454	...	1,264,567
Electricity generated for own use	K. W. H.	94,081,911	...	115,245,642	...
Process supplies consumed (explosives, etc.)	\$	...	5,812,178	...	5,505,955
GRAND TOTAL VALUE OF FUEL AND PROCESS SUPPLIES CONSUMED .....	\$	...	7,109,632	...	6,770,522

Table 48 - POWER EQUIPMENT (including stand-by or emergency equipment) IN THE COPPER-GOLD-SILVER MINING INDUSTRY IN CANADA, 1941

Description	Ordinarily in use		In reserve or idle	
	Number of units	Total horse power (x)	Number of units	Total horse power (x)
Steam engines and steam turbines	2	17,333	7	12,708
Diesel engines	12	3,270	3	780
Gasoline, gas and oil engines, other than diesel engines	7	109	3	410
Hydraulic turbines or water wheels	8	10,520	...	...
Electric motors - (a) Operated by purchased power	2,236	81,030	155	3,756
Total	2,265	112,262	168	17,654
(b) Operated by power generated by the establishment	427	17,190	51	2,821
Stationary boilers	26	5,747	12	1,174

(x) According to manufacturers' rating.

Table 49 - WAGE-EARNERS, BY MONTHS, IN THE COPPER-GOLD-SILVER MINING INDUSTRY IN CANADA, 1931, 1939-1941

Month	1931	1939	1940	1941
January	3,198	5,279	5,681	5,280
February	3,098	5,307	5,639	5,307
March	3,142	5,290	5,537	5,311
April	3,063	5,489	5,616	5,548
May	3,089	5,652	5,742	5,468
June	3,139	5,625	5,808	5,375
July	3,099	5,727	5,825	5,552
August	3,139	5,683	5,633	5,266
September	3,094	5,711	5,605	5,300
October	3,123	5,744	5,536	5,303
November	3,139	5,905	5,460	5,569
December	3,106	5,679	5,555	5,353

Table 50 - CLASSIFICATION OF WAGE-EARNERS EMPLOYED IN THE COPPER-GOLD-SILVER MINING INDUSTRY (x), 1932-1941

Year	Surface	Underground	MAIL	TOTAL
1932	773	1,719	441	2,933
1933	613	1,671	401	2,685
1934	747	1,674	344	2,965
1935	939	1,721	474	3,134
1936	1,323	1,735	354	3,412
1937	1,517	2,417	768	4,702
1938	1,543	2,091	713	5,144
1939	1,763	2,075	749	5,587
1940	1,773	3,111	723	5,607
1941	1,760	2,864	712	5,336

(x) Smelter employees not included.

Table 51 - SHIPMENTS FROM COPPER-GOLD-SILVER MINES OF CANADA, 1940 and 1941

	Quantity tons	Value \$	Total Metal Content as determined by settlement assay-				
			Gold fine oz.	Silver fine oz.	Copper pounds	Sulphur tons	Zinc pounds
8 mines shipped to Canadian plants (a) -	1940						
Ores	860,237	9,647,143	156,857	372,408	35,648,576	...	...
(A) Copper concentrates	768,833	27,351,049	258,692	5,514,614	168,421,117	...	2,492,666
Zinc concentrates	108,328	2,847,070	5,250	185,406	954,803	...	102,169,600
Iron pyrites concentrates	36,308	76,218	...	...	...	17,619	...
Slags, residues and gold precipitates	566	935,461	23,739	120,970	530,712	...	...
10 mines shipped to foreign plants -							
Ores	11	984	11	949	2,234	...	...
Copper concentrates (d)	159,316	9,178,716	39,952	492,352	78,778,442	...	...
Zinc concentrates	30,389	530,018	456	45,552	444,808	...	32,558,961
Iron pyrites concentrates	91,457	608,117	...	...	...	147,432	...
TOTAL	2,055,445	51,174,776	404,957	4,732,351	304,780,692	165,031	137,321,227
Value of process supplies, etc. (b)	...	25,370,357	...	...	...	...	...
NET VALUE	...	25,804,419	...	...	...	...	...

1941

11 mines shipped to Canadian plants (a) -

Ores	865,921	8,451,805	159,647	320,994	22,516,954	...	...
(A) Copper concentrates	828,622	36,246,634	296,302	4,282,053	240,005,806	...	3,133,594
Zinc concentrates	135,582	5,611,904	6,263	212,115	1,246,645	...	125,006,638
Iron pyrites concentrates	94,818	184,020	...	...	...	45,446	...
Slags, residues and gold precipitates	189	1,158,147	28,893	113,239	162,553	...	68,337
10 mines shipped to foreign plants -							
Ores	21	234	5	72	865	...	...
Copper concentrates	145,549	9,564,563	49,802	430,563	68,513,890	...	...
Zinc concentrates	51,983	4,515,184	471	47,051	397,450	...	57,515,573
Iron pyrites concentrates	208,542	1,096,582	...	...	...	103,762	...
TOTAL	2,351,227	64,829,073	541,383	5,406,147	332,642,163	149,208	185,729,142
Value of process supplies, etc. (b)	...	34,608,742	...	...	...	...	...
NET VALUE	...	30,220,331	...	...	...	...	...

(A) Includes some cyanide precipitate and slags.

(a) Certain mines operated in the Rossland area by leasees in 1940 and 1941 treated, statistically, as one mine.

(b) Includes freight on ore shipments, smelter charges and fuel and purchased electricity.

(c) Gross value (See footnote to Table 46).

(d) One producer reported only net metal content of shipments.

Table 52 - PRODUCTION OF COPPER FROM CANADIAN ORES, 1927 - 1941

Year	Pounds	Year	Pounds
1927	140,147,440	1934	564,761,062
1928	202,696,046	1935	418,997,700
1929	249,120,760	1936	421,027,732
1930	303,478,356	1937	530,028,615
1931	392,304,390	1938	571,249,664
1932	247,679,070	1939	608,825,570
1933	299,982,448	1940 - 1941	(not published)

Table 53 - PRODUCTION OF REFINED COPPER (A) IN CANADA, 1931 - 1941

Year	Short tons	Year	Short tons
1931	92,185	1936	191,595
1932	90,077	1937	215,080
1933	112,245	1938	227,240
1934	149,261	1939	251,684
1935	173,230	1940 - 1941	(not published)

(A) In all forms and from all sources.

Table 54 - NON-FERROUS SMELTING AND REFINING INDUSTRY (A), 1937 - 1941

Year	Employees	Salaries and wages	Cost of ores fuel, process supplies, etc.	Value added by treatment
1937	No. 11,570	\$ 17,990,947	\$ 216,470,336	\$ 101,807,865
1938	12,788	19,549,965	200,204,359	87,081,574
1939	12,448	19,372,118	182,544,662	80,057,835
1940	13,466	21,766,197	207,501,259	98,059,288
1941	16,014	27,482,689	259,585,976	119,736,294

(A) Includes smelters and refiners of copper, nickel, lead, zinc, cobalt, radium and aluminium ores or metals.

GENERAL NOTES RELATING TO GOLD PRODUCTION IN CERTAIN OTHER COUNTRIES

UNION OF SOUTH AFRICA - The following information is from the 1941 annual report of the Transvaal Chamber of Mines:

"At the close of the year there were approximately 6,000 employees of the mining industry on full-time military service. Many employees are also undertaking part-time training.

"Calculated in working time which would normally have been available to the industry, the equivalent of several hundreds of employees was engaged on munition work.

"It was recommended to the mines that if an employee, other than an official, who had been on full-time military service for one year or more, reports for duty to the mine by which he is employed within thirty days of the date of his discharge from the Union Defence Force, or within sixty days if his service has been with the Imperial or Allied Forces, he shall be granted 24 working days leave: officials, including junior officials, shall be granted 30 days leave. For military service of less than a year, the leave of the returned soldier shall be granted pro rata to the above-mentioned leave periods.

"The mines Engineering Brigade continued with its training throughout the year. Towards the end of the year a company of the brigade was called up for full time military service.

"During the year the manufacture of munitions by mine workshops continued on a large scale. The Director-General of War Supplies placed orders through the committee for a large variety of war material.

"A cost of living allowance to mine employees was brought into effect in September; it is based on the retail price index number for food, fuel, light, rent and sundries for the Witwatersrand (based on the average of the nine principal urban areas of the Union) published by the Department of Census and Statistics.

Gold

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"The market price of gold throughout the year 1941 was 168s. per oz. fine. Gold was credited to revenue in mine accounts at the full price, and the charge equivalent to the war-time increase in realization costs was debited to working costs.

"The gold mines special contribution imposed by the Income Tax Act was increased by the budget of 1941 from 11 per cent to 16 per cent of taxable income before deduction of redemption allowance or tax loss brought forward.

"At the close of the year the position regarding mining supplies was generally satisfactory, despite shipping difficulties and the growing defence needs of Great Britain and the United States."

Crown Mines, Limited, Johannesburg, showed the following data in its 1941 annual report:

	Year ended 31st December 1939	Year ended 31st December 1941
Ore milled	4,029,000	4,151,000
Yield per ton milled	4.863	4.636
Revenue per ton milled	36s. 4d.	39s. 0d.
Working costs per ton milled	21s. 0d.	23s. 2d.
Working costs per ton milled excluding inclined shaft sinking	20s. 5d.	21s. 6d.
Working profit per ton milled	15s. 4d.	16s. 10d.
Development footage	£3,082,401	£2,484,967
Available ore reserve	131,738	116,060
Available ore reserve	21,340,000	19,518,500
Available ore reserve	5.0	4.8
Total ore reserve	26,123,500	24,350,700

A total of 116,060 feet was accomplished in development during 1941, being a decrease of 24,730 feet compared with the 1940 total; 46,910 feet were sampled, of which 53,620 feet were classed as payable with an average value of 22.8dwt. per ton over a reef width of 12 inches, equal to 274 inch-dwt.

AUSTRALIA - The Mining Journal, London, refers to gold mining in Australia in 1941 as follows:

"Gold mining has shown little change in the number of working mines, but the returns from all states record a decrease in output..... While the mining of lower grade ore and the closing down of a few producers have had some influence, the main contributing cause of the Commonwealth's decreased production of gold is shortage of labour. Enlistment of mine employees and transfer of men to munition manufacture have assumed serious proportions during the year, particularly in Western Australia. Not only were the larger mines affected, but the number of prospectors was so reduced that state batteries crushing ore from small producers were forced to close down from time to time. Purchase of stores and materials is becoming more difficult but is not, so far, a serious matter..... No gold discoveries of any importance were made during the year.

UNITED STATES - Total mine production of recoverable gold in the United States (Territories included) was 5,858,871 fine ounces in 1941, a decrease of 2 per cent from 5,984,163 ounces in 1940, according to preliminary figures of the Denver Office of the Bureau of Mines, United States Department of the Interior. The value of the gold, calculated at \$35 per fine ounce, was \$205,060,485 in 1941 and \$209,445,705 in 1940.

Of the total production in 1941 California contributed 24 per cent, Philippine Islands 19 per cent, Alaska 12 per cent, South Dakota 11 per cent, Colorado 6 per cent, Nevada 6 per cent, Utah 6 per cent, Arizona 5 per cent, Montana 4 per cent, Idaho 3 per cent, and other States and Territories 4 per cent.

ALASKA - The output of recoverable gold in the Territory of Alaska in 1941 was about 690,649 fine ounces, a decrease from the 1940 production of 755,970 ounces. The larger part of the Alaskan output (about 75 per cent) was produced by placer operators, including 50 floating connected-bucket dredges which alone yielded about 40 per cent of the total. The United States Smelting, Refining & Mining Co., largest single producer of gold, controlled 8 floating connected-bucket dredges and a hydraulicking operation in the Yukon River Basin region, 4 floating connected-bucket dredges (including 1 new dredge) in the Seward Peninsula region, and a lode mine in the Yukon River Basin region. The Alaska Jumbo Gold Mining Co., second-largest producer of gold, operated the largest lode mine in Alaska at Juneau in the Southeastern Alaska region; there was a slight decrease in its output. In order of importance, the major placer-mining regions were the Yukon River Basin, the Seward Peninsula, and the Kuskokwim. Large placer operators, in addition to the United States Smelting,

Refining & Mining Co., were Livengood Placers, Inc., Alluvial Golds, Inc., and Gold Placers, Inc., in the Yukon River Basin region; Arctic Circle Exploration, Inc., in the Seward Peninsula region; and the New York Alaska Gold Dredging Co. and Bristol Bay Mining Co. in the Kuskokwim region. In lode mining the principal regions in order of importance were the Southeastern Alaska, Cook Inlet-Sitka, and Yukon River Basin. The most important lode-gold producers were the Alaska-Juneau Gold Mining Co., Alaska-Pacific Consolidated Mining Co., First-Chitkenof Mining Co., Cleary Hill Mines Co., and Willow Creek Mines. The working season in most of the placer regions was somewhat longer than usual but many localities reported an unusually dry season which hampered work, particularly that of the smaller operators. Labour shortage and unrest due to abnormal rates of pay offered by emergency projects that demanded skilled workmen curtailed the activity of some of the larger operators. Most of the gold produced (about 92 per cent) was sent to the United States Assay Office at Seattle (Wash.); other major outlets were the American Smelting & Refining Co. smelters at Selby (Calif.) and Tacoma (Wash.) and the San Francisco Mint.

CALIFORNIA - California, again the leading gold-producing State, yielded 1,411,800 fine ounces of recoverable gold in 1941; the total was 43,871 ounces (about 3 per cent) less than in 1940. The Grass Valley-Nevada City district in Nevada County was again the principal source of gold, chiefly from gold lode-mining operations. Other of the more important counties producing gold included: Kern, Amador, Calaveras, Plumas, and Shasta Counties, with the bulk of the output coming from lode mining; and Sacramento, Yuba, Butte, Siskiyou, Merced, and Trinity Counties, with the bulk coming from placer mining. The Idaho Maryland Mines Corporation, working the Idaho Maryland-Brunswick group in the Grass Valley-Nevada City district, held first place as a gold producer in California; it was followed by the Empire Star Mines Co., Ltd. (Newmont affiliate), operator of the Empire, Pennsylvania, North Star, and Murchie (extensive development work at the Murchie mine during 1941 not encouraging enough to bring about resumption of activities) mines in the Grass Valley-Nevada City district in Nevada County, the Zebright mine near Escondido Gap in Nevada County, and the Pennsylvania mine (operations discontinued in 1941) at Browns Valley in Yuba County. Floating connected-bucket dredges yielded the bulk of the placer gold production in California in 1941. During 1940, 106 dragline dredges operated on 198 properties and produced a considerable quantity of gold; in 1941 there was very little change from 1940 in the number of dragline dredges in use in California, but the trend was toward larger units and more frequent moves. Yuba Consolidated Gold Fields, operating floating connected-bucket dredges, chiefly in Yuba County but also in Butte, Merced, and Siskiyou Counties, was one of the leading producers of gold in California.

COLORADO - The output of recoverable gold in Colorado in 1941 was 377,503 fine ounces, an increase of 10,187 ounces over 1940. Increased placer production in Park County was an important factor in bringing about the increase in gold production in the State. Placer operations, chiefly in Park, Clipin, Summit, Lake, and Clear Creek Counties, yielded 28,500 fine ounces of gold in 1941; the State total in 1940 was 17,000 ounces. Gold from lode-mining operations came chiefly from gold, gold-silver, and copper-silver-lead-gold ores. Mines in the Cripple Creek district, Teller County, were responsible for 35 per cent of the State total gold output in 1941. The Carlton drainage tunnel at Cripple Creek was officially completed July 25, 1941.

ARIZONA - The output of recoverable gold from ores and gravels in Arizona was 315,000 fine ounces in 1941, an increase of 20,193 ounces over 1940. Increased production of copper ores (from which gold is recovered as a byproduct), increased placer operations, and comparatively steady production from other sources account for the increased gold output of the State. Gold recovered from copper ores mined at Bisbee, Jerome, Ajo, and Superior represented 42 per cent of the State total. The remainder of the gold came largely from alluvial gold ore from mines in the San Francisco, Old Hat, Weaver, and Black Canyon districts. The more important gold-producing mines in Arizona in 1941 were the Copper Queen, New Cornelia, Mammoth-St. Anthony, Gold Road, and United Verde. Placer operations produced about 11,000 fine ounces of gold in 1941, compared with 6,241 ounces in 1940; about 90 per cent of the total in 1941 was recovered by dragline plants on Big Pug and Lynx Creeks in Yavapai County.

NEVADA - The production of recoverable gold in Nevada in 1941 was 372,500 fine ounces, a decrease of 11,383 ounces from 1940. The largest gold producer in the State was the Getchell mine in the Potosi district, Humboldt County, operated by Getchell Mine, Inc. Other large producers, in order of output were: The Nevada Consolidated Copper Corporation and Consolidated Coppermines Corporation, both in the Robinson district, White Pine County; the Manhattan Gold Dredging Co. in Nye County; and T. L. Cord, operating the Mary mine in the Silver Peak district, Esmeralda County. Shipments of siliceous ores from many small mines to the McGill smelter, primarily for use as a flux, were also an important source of gold.

SOUTH DAKOTA - Gold is the primary metal of value mined in South Dakota. In 1941 the production of recoverable gold was 610,233 fine ounces, an increase of 23,561 ounces over 1940. Gold is found in commercial quantities in South Dakota in the Black Hills area only. The Homestake mine at Lead, Lawrence County, continued to yield the bulk of the gold output of the State and was again the largest gold producer in the United States.

Utah - Gold production in Utah in 1941 was 347,784 fine ounces, a decrease of 7,710 ounces from 1940. Decreased output from several mines in the Tintic district more than offset increases in the Bingham district and the Park City region. Gold recovered from operations in the Bingham district, chiefly as a by-product of copper mining, represented the bulk of the State output. The largest gold producers in Utah in 1941 were: The Utah Copper Co., at Bingham; Snyder Mines, Inc., at Mercury; the United States Smelting, Refining & Mining Co. (United States & Lark), at Bingham; and the New Park Mining Co., in the Park City region.

Differences between gold production totals published by the United States Bureau of Mines, the United States Mint and American Bureau of Statistics result largely from different methods of compilation.

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NOTE: If information of a technical nature regarding Canadian gold mining is desired, please communicate with the Department of Mines and Resources, Ottawa, or the Departments of Mines of the various provincial governments.

Information utilized in the preparation of this bulletin, as supplied by the various Canadian mining companies, Provincial and Federal Departments of Mines, American Bureau of Metal Statistics, Royal Canadian Mint, the Bank of Canada, Department of Finance, Department of Labour, United States Bureau of Mines and Mint, the Technical Press, and various other contributors, is hereby gratefully acknowledged.

THE HOUSE OF COMMONS OF CANADA

BILL 122.

An Act to amend The Excess Profits Tax Act, 1940.

1940, c. 32;
1940-41, c. 15.

HIS Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

EXPLANATORY NOTES.

"Profits"
in the case
of a
corporation.

1. (1) Paragraph (f) of subsection one of section two of *The Excess Profits Tax Act, 1940*, chapter thirty-two of the statutes of 1940, as enacted by section one of chapter fifteen of the statutes of 1940-41, is amended by striking out the words "this Act" in the ninth line thereof and substituting therefor the words "the said tax".

(2) Paragraph (i) of subsection one of section two of the said act, as enacted by section three of chapter fifteen of the statutes of 1940-41, is repealed and the following substituted therefor:—

"standard
profits."

"(i) 'standard profits' means the average yearly profits of a taxpayer in the standard period in carrying on 15 what was in the opinion of the Minister the same class of business as the business of the taxpayer in the year of taxation or the standard profits ascertained in accordance with section five of this Act;

Provided.

R.S., c. 97,
Provided.

Provided that standard profits shall not include for 20 the purposes of this Act property in any form received by a taxpayer deemed to be the payment of a dividend under section nineteen of the *Income War Tax Act*; and

Provided.

Provided further that for the purpose of this section 25 profits shall be deemed to have accrued on an equal daily basis throughout any fiscal period or portion thereof of which is in question; and

Provided further that losses incurred by the taxpayer during the standard period shall not be deducted 30 from the profits in the standard period but the years of losses shall nevertheless be counted in determining the average yearly profits during the said standard period; and

1. (1) This amendment makes it clear that constructive dividends deemed to be received by a corporation under subsection two of section 19 of the *Income War Tax Act* shall be included in the definition of "profits" of the corporation for all purposes except the purpose of taxation under the Second Part of the Second Schedule (viz. the 100% tax), and then only if the corporation satisfies the carefully limited conditions outlined in paragraph (f) of subsection one of section two of *The Excess Profits Tax Act, 1940*.

1. (2) This amendment implements Resolution No. 7. The only change is the addition of the first proviso to paragraph (i).

Proviso.

Provided further that a taxpayer's standard profits shall not be deemed to be less than five thousand dollars before any adjustment is made in accordance with the provisions of this Act."

2. Section three of the said Act is repealed and the following substituted therefor:—

"**3.** (1) In addition to any other tax or duty payable under any other Act and as herein provided, there shall be assessed, levied and paid

Persons liable to tax.

(a) a tax in accordance with the rate set out in the Third Part of the Second Schedule to this Act, upon the profits during the taxation period; and

(b) a tax in accordance with the rates set out in the First Part of the Second Schedule or in the Second Part of the Second Schedule to this Act upon the profits or the excess profits respectively during the taxation period, whichever of such taxes is the greater in amount, of every person residing or ordinarily resident in Canada or who is carrying on business in Canada:

Proviso.

Provided that in the case of all persons other than corporations the tax as provided in the Third Part of the Second Schedule to this Act shall not apply.

Tax not to operate to reduce profits.

(2) The tax exigible under this section in accordance with the rates set out in the First Part of the Second Schedule to this Act shall in no case operate to reduce the profits of a taxpayer below the amount of five thousand dollars before providing for any payments to proprietors, partners or shareholders by way of salary, interest or otherwise."

3. Section five of the said Act, as enacted by section six of chapter fifteen of the statutes of 1940-41, is repealed and the following sections substituted therefor:—

Ascertainment of profits by Board of Referees.

Depressed businesses.

"**5.** (1) If a taxpayer is convinced that his standard profits were so low that it would not be just to determine his liability to tax under this Act by reference thereto because the business is either of a class which during the standard period was depressed or was for some reason peculiar to itself abnormally depressed during the standard period when compared with other businesses of the same class he may, subject as hereinafter provided, compute his standard profits at such greater amount as he thinks just, but not exceeding an amount equal to interest at ten per centum per annum on the amount of capital employed in the business at the commencement of the last year or fiscal period of the taxpayer in the standard period computed in accordance with the First Schedule to this Act:

2. This amendment provides the formal changes to the Charging Section three made necessary by the substantive changes in the Second Schedule to this Act. It also extends the Charging Section to take cognizance of dividends deemed to have been received under section nineteen of the *Income War Tax Act*.

3. This amendment—

(a) Implements Resolution No. 8;

(b) requires the Minister to assess a taxpayer upon his actual profits if he does not direct that the standard profits shall be determined by the Board of Referees;

(c) provides that the question of whether or not the business of one taxpayer was depressed during the standard period must be determined to the satisfaction of the Minister.

Provided.

Provided that if the Minister is not satisfied that the business of the taxpayer was depressed or that the standard profits as computed by the taxpayer are fair and reasonable, he may direct that the standard profits be ascertained by the Board of Referees and the Board shall thereupon, in its sole discretion, ascertain the standard profits at such an amount as the Board thinks just, being, however, an amount equal to the average yearly profits of the taxpayer during the standard period or to interest at the rate of not less than five nor more than ten per centum per annum on the amount of capital employed at the commencement of the last year or fiscal period of the taxpayer in the standard period as computed by the Board in its sole discretion in accordance with the First Schedule to this Act, or the Minister shall assess the taxpayer in accordance with the provisions of this Act other than as provided in this subsection.

(2) If on the application of a taxpayer the Minister is satisfied that the taxpayer was not carrying on business during the standard period or that the profits of the standard period were so low that it would not be just to determine the liability of the taxpayer under this Act by reference thereto because the actual date of commencement of business by the taxpayer or the date of commencement fixed by the Minister pursuant to paragraph (h) of subsection one of section two of this Act was subsequent to the thirty-first day of December, one thousand nine hundred and thirty-seven but before the first day of January, one thousand nine hundred and thirty-nine, he shall direct that the standard profits be ascertained by the Board, or (whether or not there has been an application by the taxpayer) in the case of any taxpayer who has not commenced business before the second day of January, one thousand nine hundred and thirty-nine, the Minister shall direct that the standard profits be ascertained by the Board and the Board in any such case shall in its sole discretion thereupon ascertain the standard profits at such an amount as the Board thinks just, being an amount equal to a return on the capital employed by the taxpayer at the commencement of the first year or fiscal period in respect of which he is subject to taxation under this Act at the rate earned by taxpayers during the standard period in similar circumstances engaged in the same or an analogous class of business, the capital of the taxpayer to be computed by the Board of Referees in its sole discretion in accordance with the First Schedule to this Act.

Standard
profits for
new business.

Standard
profits for
cases where
a capital
standard is
inapplicable.

(3) If on the application of a taxpayer the Minister is satisfied that the business either was depressed during the standard period or was not in operation prior to the first day of January, one thousand nine hundred and thirty-eight, and the Minister on the advice of the Board of Referees is satisfied that because,

- (a) the business is of such a nature that capital is not an important factor in the earning of profits, or
- (b) the capital has become abnormally impaired or due to other extraordinary circumstances is abnormally low

standard profits ascertained by reference to capital employed would result in the imposition of excessive taxation amounting to unjustifiable hardship or extreme discrimination or would jeopardize the continuation of the business of the taxpayer, the Minister shall direct that the standard profits be ascertained by the Board of Referees and the Board shall in its sole discretion thereupon ascertain the standard profits on such basis as the Board thinks just having regard to the standard profits of taxpayers in similar circumstances engaged in the same or an analogous class of business.

Decisions of
Board not
final.

(4) Notwithstanding anything contained in this section the decisions of the Board given under subsections one, two and three of this section shall not be operative until approved by the Minister whereupon the said decisions shall be final and conclusive:

Proviso.

Provided that if a decision is not approved by the Minister it shall be submitted to the Treasury Board who shall thereupon determine the standard profits and the decision of the Treasury Board shall be final and conclusive.

New gold
mines and
oil wells.

"5A. In the case of taxpayers engaged in the operation of gold mines or oil wells which have come into production after January first, one thousand nine hundred and thirty-eight, the amount of standard profits shall be ascertained on the basis of a presumed volume of production during the standard period equal to the volume of production of the taxpayer in the taxation year and a presumed selling price for the product during the standard period equal to the average selling price of the said product during the standard period."

Proportion
of income
tax and
tax under
3rd Part of
2nd Schedule.

4. Paragraph (a) of subsection one of section six of the said Act is repealed and the following substituted therefor: "(a) such proportion of the income tax payable under the *Income War Tax Act* (or payable under the said Act prior to the application of sections eight, eighty-nine or ninety thereof) and such proportion of the tax

4. This amendment implements Resolution No. 2. Its purpose is to clarify the right of corporations to deduct both the portion of the income tax and the portion of the tax under the Third Part of the Second Schedule (12% tax on total profits) payable on their excess profits before the 100% rate is imposed. That is, corporations will deduct from their excess profits the income tax of 18% and the 12% tax under this Act. The remainder of the excess profits is taxable at 100% unless the 10% tax on total profits exceeds it, in which case the latter is payable. No such provision is necessary for unincorporated taxpayers since they pay their excess profits tax first, and are allowed a deduction under the *Income War Tax Act* of the excess profits tax paid.

payable under the Third Part of the Second Schedule to this Act, for the same taxation period as the excess profits taxable under the Second Part of the Second Schedule to this Act bears to the total profits of the taxpayer;"

5

5. Paragraph (a) of subsection two of section six of the said Act is repealed and the following substituted therefor:—

"(a) the amounts allowed as deductions in paragraphs (a), (b) and (j) of subsection one of section five of the *Income War Tax Act*, and such amount for depreciation as the Minister in his discretion may allow under paragraph (n) of subsection one of section six of the said Act;"

6. Subsection two of section six of the said Act, as 15 amended by sections seven and eight of chapter fifteen of the statutes of 1940-41, is further amended by adding thereto the following paragraph:—

"(d) losses of the taxpayer in the immediately preceding year, as ascertained under the *Income War Tax Act*," 20

Depreciation
and depletion—
Inter-
ests—
Donations.

Revenue
losses.

Professional
activities.

Proviso.

7. Paragraph (b), paragraph (c) as enacted by section nine of chapter fifteen of the statutes of 1940-41, and paragraph (d) of section seven of the said Act are repealed and the following substituted therefor:—

"(b) the profits of a profession carried on by an individual or by individuals in partnership if the profits of the profession are dependent wholly or mainly upon his or their personal qualifications and if in the opinion of the Minister little or no capital is employed: Provided that this exemption shall not extend to the profits 30 of a commission agent or person any part of whose business consists in the making of contracts on behalf of others or the giving to other persons of advice of a

In addition this amendment ensures that the income tax deductions and exemptions under sections 8, 89 and 90 of the *Income War Tax Act* are not nullified under *The Excess Profits Tax Act*. For purposes of computing the 100 cent tax, a deduction is allowed of the income tax payable prior to the application of the aforementioned sections of the *Income War Tax Act*.

5. This amendment corrects the reference to the section of the *Income War Tax Act* under which the Minister may allow as a deduction from profits an amount for depreciation.

6. This amendment implements Resolution No. 9.

Since corporations are taxed for income tax first, there is no need to repeat in *The Excess Profits Tax Act* any provision for the deduction by corporations of losses of the previous year. The definition of profits for corporations under *The Excess Profits Tax Act* is "the amount of net taxable income . . . as determined under the provisions of the *Income War Tax Act* in respect of the same taxation period" (Section 2 (f)). Therefore the provision for the deduction of the previous year's losses which is to appear in this year's amendment to the *Income War Tax Act* will automatically provide the said deduction under *The Excess Profits Tax Act* as far as corporations are concerned.

In the case of unincorporated taxpayers, however, *The Excess Profits Tax* is imposed first, and does not utilize the concept of "net taxable income" as determined under the *Income War Tax Act*. Instead it uses gross income from which specifically stated deductions are allowed. Therefore there has to be a specific provision in *The Excess Profits Tax Act* to enable such taxpayers to deduct the losses of the previous year. Hence, the insertion of this provision as paragraph (d) to subsection (2) of section 6 of the said Act.

7. This amendment—

(a) clarifies the exemption accorded to the profits of a professional activity insofar as the profits of a commission agent or a person engaged in the business of making contracts on behalf of others are excluded from such exemption;

(b) takes formal cognizance of the exclusion of corporations from the benefit of the five thousand dollar exemption hitherto accorded to all taxpayers;

(c) provides that companies which qualify as personal corporations under the *Income War Tax Act* shall be accepted as being personal corporations for purposes of *The Excess Profits Tax Act*.

commercial nature in connection with the making of contracts unless the Minister is satisfied that such agent is virtually in the position of an employee of one employer in which case this exemption shall apply and in any case the decision of the Minister shall be final and conclusive; 5

Small business corporations.

"(c) the profits of taxpayers other than corporations or joint stock companies, if such profits do not in the taxation period exceed five thousand dollars before providing for any payment therefrom to proprietors or 10 partners by way of salary, interest or otherwise;

Personal corporations.

"(d) The profits of a corporation or joint stock company which is in the taxation period a personal corporation within the meaning of paragraph (i) of section two of the *Income War Tax Act*;" 15

Profits not liable to tax.

8. Section seven of the said Act, as amended by sections nine and ten of chapter fifteen of the statutes of 1940-41, is further amended by adding thereto the following paragraph:—

Base metal and strategic mineral mines.

"(g) The profits of any corporation or joint stock company derived from the operation of any base metal or strategic-mineral mine which comes into production in the three calendar years commencing the first day of January, one thousand nine hundred and forty-three, but this exemption shall extend only to the income of the first three fiscal periods of twelve months each commencing on or after the date of such mine coming into production. The Minister, having regard to the production of ore in reasonable commercial quantities, shall determine which mines, whether new or old, 30 qualify under this paragraph. The Minister shall issue a certificate stating the date upon which any mine is deemed to have come into production and establish such fiscal periods of twelve months each, during which the income derived from any such mine shall be exempt 35 hereunder.

The Minister may make any regulations deemed necessary for carrying this paragraph (g) into effect."

9. The said Act is further amended by adding the following section immediately after section seven thereof:— 40

"7A. The following profits shall not be liable to taxation under section three of this Act in accordance with the rates set out in the First and Second Parts of the Second Schedule to this Act:—

Small corporation profits.

The profits of a corporation or joint stock company 45 which, in the taxation year, do not exceed the sum of five thousand dollars, or, where the taxation year of any corporation or joint stock company is less than twelve months, do not exceed the proportion of five thousand dollars which

8. This amendment implements Resolution No. 10.

9. This amendment implements Resolution No. 3.

the number of days in the taxation year of such corporation or joint stock company, bears to three hundred and sixty-five days, before providing for any payments to shareholders by way of salary, interest, dividends or otherwise."

10. The said Act is further amended by adding thereto the following section immediately after section seventeen:—

Refundable
portion.

"**18.** (1) There shall be refunded to the taxpayer an amount equal to twenty per centum of the profits above the point at which the tax calculated under the First Part of the Second Schedule is equal to the tax calculated under the Second Part of the Second Schedule if such profits have been paid by way of taxes under the *Income War Tax Act* and this Act to the Receiver General of Canada.

R.S., c. 97.

Payments of
refundable
portion.

(2) The refundable portion shall be repaid to the taxpayer or to his legal representative after the cessation of hostilities between Canada and Germany, Italy and Japan, as follows:—

(a) as to any refundable portion referable to the profits of fiscal periods ending in the year one thousand nine hundred and forty-two, during the second fiscal period of the Government of Canada commencing after cessation of the said hostilities;

(b) as to any refundable portion referable to the profits of fiscal periods ending in the year one thousand nine hundred and forty-three, during the third fiscal period of the Government of Canada commencing after cessation of the said hostilities; and so on for successive fiscal periods;

or notwithstanding the provisions of paragraphs (a) and (b) hereof, at such earlier times and in such instalments as the Governor in Council may determine.

Date of
cessation of
hostilities.

(3) The date of cessation of hostilities shall be that date proclaimed by the Governor in Council that a state of war no longer exists, or such other date as he may determine for the purposes of refunds hereunder."

11. The Second Schedule to this Act, as amended by section seventeen of chapter fifteen of the statutes of 1940-41, is repealed and the following substituted therefor:—

"SECOND SCHEDULE

FIRST PART—

Rates of tax
on profits.

Ten per centum of the profits of corporations and joint stock companies and fifteen per centum of the profits of all persons other than corporations, before deduction therefrom of any tax paid thereon under the *Income War Tax Act*.

10. This amendment—

(a) implements Resolution No. 4;

(b) implements Resolution No. 5.

11. This amendment implements Resolution No. 1.

SECOND PART--

Rates of tax
on excess
profits.

One hundred per centum of the excess profits.

THIRD PART--

Twelve per centum of profits of corporations and joint stock companies, before deduction therefrom of any tax paid thereon under the *Income War Tax Act*."

Coming into
force.

12. (1) Sections one, three, five and paragraphs (b) and (d) of section seven of this Act shall be deemed to have come into force on and after the date of the commencement of *The Excess Profits Tax Act, 1940* 5

(2) Sections two and four, paragraph (c) of section seven, sections nine, ten, and eleven of this Act shall be deemed to have come into force on and after the first day of July, one thousand nine hundred and forty-two and shall be applicable to the profits of the taxation year one thousand nine hundred and forty-two and of fiscal periods ending therein subsequent to June thirtieth, and of subsequent years and fiscal periods, provided however that if any fiscal period ends between June thirtieth one thousand nine hundred and forty-two and July first one thousand nine hundred and forty-three, the provisions of the said sections shall apply to only that portion of the profits which the number of days of such fiscal period since June thirtieth one thousand nine hundred and forty-two bears to the total number of days in such fiscal period, and the provisions of the said Act prior to the enactment of the said sections shall apply to that portion of the profits of the said fiscal period which the number of days of such fiscal period occurring before July first one thousand nine hundred and forty-two bears to the total number of days of such fiscal period. 15

(3) Section six of this Act shall come into force on and after the first day of January, one thousand nine hundred and forty-three, and shall apply to the year one thousand nine hundred and forty-three, and fiscal periods ending therein. 20 25 30



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